Full wwPDB EM Validation Report (i)

Feb 22, 2024 – 11:57 AM EST

PDB ID	:	4V4N
EMDB ID	:	EMD-5691
Title	:	Structure of the Methanococcus jannaschii ribosome-SecYEBeta channel complex
Authors	:	Menetret, J.F.; Park, E.; Gumbart, J.C.; Ludtke, S.J.; Li, W.; Whynot, A.; Rapoport, T.A.; Akey, C.W.
Deposited on	:	2013-06-17
Resolution	:	9.00 Å(reported)
Based on initial models	:	3J20, 3J2L, 1RHZ, 3J21

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/EMValidationReportHelp
with specific help available everywhere you see the (i) symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

The following versions of software and data (see references (i)) were used in the production of this report:

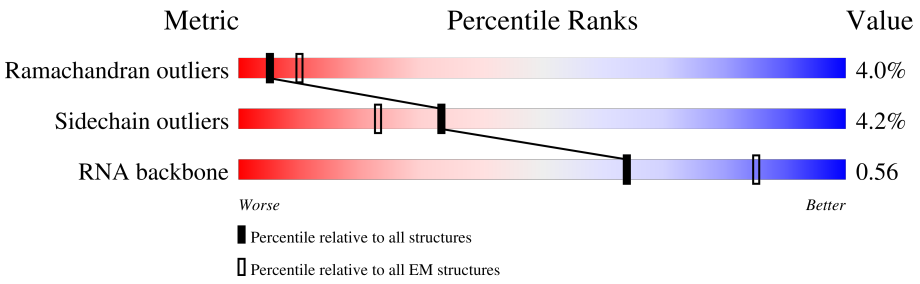
EMDB validation analysis	:	0.0.1.dev70
MolProbity	:	4.02b-467
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.36

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 9.00 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.



Metric	Whole archive (#Entries)	EM structures (#Entries)
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826
RNA backbone	4643	859

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions <=5% The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion < 40%). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A7	67	7%, 72%, 24%
2	A8	52	54%, 6%, 38%
3	Af	51	65%, 59%, 39%
4	AQ	150	17%, 73%, 25%
5	AS	150	16%, 73%, 22%
6	AT	84	17%, 75%, 24%
7	AU	121	14%, 74%, 24%
8	AW	72	6%, 78%, 14%, 8%

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Mol	Chain	Length	Quality of chain
9	AX	436	7% 72% 25%
10	B1	77	43% 43% 14%
11	B2	1495	41% 48% 10%
12	AG	123	8% 85% 11%
12	B3	123	36% 81% 17%
13	BA	190	64% 31% 6%
14	BB	202	11% 74% 25%
15	BC	186	16% 75% 21%
16	BD	172	16% 76% 20%
17	BE	241	20% 69% 27%
18	BF	217	12% 74% 20% 5%
19	BG	125	6% 77% 19%
20	BH	215	17% 66% 25% 8%
21	BI	129	12% 79% 18%
22	BJ	127	16% 67% 30%
23	BK	135	30% 71% 25%
24	BL	102	19% 66% 27% 7%
25	BM	133	15% 72% 24%
26	BN	145	14% 71% 26%
27	BO	148	9% 75% 22%
28	BP	56	18% 66% 27% 7%
29	BQ	158	12% 73% 21% 5%
30	BR	113	19% 72% 23% 5%
31	BS	67	31% 78% 21%
32	BT	111	13% 72% 23%

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Mol	Chain	Length	Quality of chain
33	BU	144	19% 72% 24% •
34	BV	99	13% 66% 25% 8% •
35	BW	63	17% 73% 25% •
36	BX	71	• 68% 27% 6%
37	BY	50	10% 74% 22% • •
38	A1	3049	• 40% 47% 11% •
39	A3	126	5% 42% 40% 18%
40	A5	81	15% 77% 21% •
40	AK	81	25% 68% 28% •
41	AA	216	22% 73% 23% •
42	Aa	92	17% 58% 29% • 11%
43	AB	239	21% 72% 25% •
44	Ab	127	23% 72% 21% 6% •
45	AC	365	19% 70% 20% • • 6%
46	AD	255	22% 72% 25% •
47	Ad	89	16% 65% 33% •
48	AE	186	6% 77% 18% 5%
49	Ae	62	23% 60% 32% 8%
50	AF	184	8% 79% 20% • •
51	Ag	45	53% 60% 27% 11% •
52	AH	134	7% 84% 14% •
53	Ah	24	38% 71% 21% 8%
54	AI	142	18% 70% 26% • •
55	Ai	78	14% 73% 24% • •
56	AJ	132	17% 75% 20% 5%

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Mol	Chain	Length	Quality of chain
57	Aj	94	11% 60% 33% 7%
58	Ak	212	17% 79% 17%
59	AL	147	28% 71% 20% 8%
60	AM	194	26% 68% 27% 5%
61	AN	168	22% 68% 26% 5%
62	AO	197	12% 71% 25%
63	AP	120	8% 74% 22%
64	AR	95	18% 72% 23%
65	AV	66	14% 68% 26% 6%
66	AY	155	12% 79% 19%
67	AZ	99	77% 19%

2 Entry composition (i)

There are 67 unique types of molecules in this entry. The entry contains 171094 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called Preprotein translocase subunit SecE.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	A7	65	525	348	85	91	1	0	0

- Molecule 2 is a protein called Preprotein translocase subunit SecG.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
2	A8	32	258	172	42	44	0	0

- Molecule 3 is a protein called 50S ribosomal protein L39E.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
3	Af	51	445	284	98	62	1	0	0

- Molecule 4 is a protein called 50S ribosomal protein L19E.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
4	AQ	150	1256	794	255	202	5	0	0

- Molecule 5 is a protein called 50S ribosomal protein L22P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
5	AS	150	1200	764	230	202	4	0	0

- Molecule 6 is a protein called 50S ribosomal protein L23P.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
6	AT	84	680	440	118	122	0	0

- Molecule 7 is a protein called 50S ribosomal protein L24P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
7	AU	121	1008	637	195	172	4	0	0

- Molecule 8 is a protein called 50S ribosomal protein L29P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
8	AW	66	546	338	105	99	4	0	0

- Molecule 9 is a protein called Protein translocase subunit SecY.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
9	AX	432	3309	2210	521	559	19	0	0

- Molecule 10 is a RNA chain called E-tRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
10	B1	77	1646	734	303	533	76	0	0

- Molecule 11 is a RNA chain called 16S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
11	B2	1495	32132	14297	5954	10387	1494	0	0

- Molecule 12 is a protein called 30S ribosomal protein L7AE.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
12	B3	123	939	599	155	181	4	0	0
12	AG	123	939	599	155	181	4	0	0

- Molecule 13 is a protein called 30S ribosomal protein S3AE.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
13	BA	190	1559	1007	273	274	5	0	0

- Molecule 14 is a protein called 30S ribosomal protein S2P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
14	BB	202	1623	1046	282	290	5	0	0

- Molecule 15 is a protein called 30S ribosomal protein S3P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
15	BC	186	1460	933	271	252	4	0	0

- Molecule 16 is a protein called 30S ribosomal protein S4P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
16	BD	172	1434	902	273	255	4	0	0

- Molecule 17 is a protein called 30S ribosomal protein S4E.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
17	BE	241	1976	1277	355	339	5	0	0

- Molecule 18 is a protein called 30S ribosomal protein S5P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
18	BF	217	1717	1084	319	306	8	0	0

- Molecule 19 is a protein called 30S ribosomal protein S6E.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
19	BG	125	984	623	180	179	2	0	0

- Molecule 20 is a protein called 30S ribosomal protein S7P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
20	BH	215	1736	1100	326	302	8	0	0

- Molecule 21 is a protein called 30S ribosomal protein S8P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
21	BI	129	1028	668	178	180	2	0	0

- Molecule 22 is a protein called 30S ribosomal protein S8E.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
22	BJ	127	1004	622	207	174	1	0	0

- Molecule 23 is a protein called 30S ribosomal protein S9P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
23	BK	135	1072	671	205	190	6	0	0

- Molecule 24 is a protein called 30S ribosomal protein S10P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
24	BL	102	822	507	159	152	4	0	0

- Molecule 25 is a protein called 30S ribosomal protein S11P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
25	BM	133	1004	623	200	179	2	0	0

- Molecule 26 is a protein called 30S ribosomal protein S12P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
26	BN	145	1141	722	223	193	3	0	0

- Molecule 27 is a protein called 30S ribosomal protein S13P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
27	BO	148	1189	746	237	200	6	0	0

- Molecule 28 is a protein called 30S ribosomal protein S14P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
28	BP	56	462	292	95	69	6	0	0

- Molecule 29 is a protein called 30S ribosomal protein S15P/S13E.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
29	BQ	158	1310	834	250	221	5	0	0

- Molecule 30 is a protein called 30S ribosomal protein S17P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
30	BR	113	934	592	177	160	5	0	0

- Molecule 31 is a protein called 30S ribosomal protein S17E.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
31	BS	67	556	353	105	95	3	0	0

- Molecule 32 is a protein called 30S ribosomal protein S19P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
32	BT	111	924	594	173	151	6	0	0

- Molecule 33 is a protein called 30S ribosomal protein S19E.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
33	BU	144	1176	758	212	205	1	0	0

- Molecule 34 is a protein called 30S ribosomal protein S24E.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
34	BV	99	823	532	134	154	3	0	0

- Molecule 35 is a protein called 30S ribosomal protein S27E.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
35	BW	63	478	306	85	81	6	0	0

- Molecule 36 is a protein called 30S ribosomal protein S28E.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
36	BX	71	568	345	115	107	1	0	0

- Molecule 37 is a protein called 30S ribosomal protein S27AE.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
37	BY	50	409	262	75	66	6	0	0

- Molecule 38 is a RNA chain called 23S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
38	A1	2969	63885	28427	11905	20589	2964	0	0

- Molecule 39 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
39	A3	126	2691	1199	492	875	125	0	0

- Molecule 40 is a protein called 50S ribosomal protein L14E.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
40	A5	81	614	386	119	108	1	0	0
40	AK	81	614	386	119	108	1	0	0

- Molecule 41 is a protein called 50S ribosomal protein L1P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
41	AA	216	1677	1068	300	304	5	0	0

- Molecule 42 is a protein called 50S ribosomal protein L31E.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
42	Aa	82	677	444	126	107	0	0

- Molecule 43 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
43	AB	239	1838	1169	347	317	5	0	0

- Molecule 44 is a protein called 50S ribosomal protein L32E.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
44	Ab	127	1075	689	217	168	1	0	0

- Molecule 45 is a protein called 50S ribosomal protein L3P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
45	AC	342	2717	1741	495	467	14	0	0

- Molecule 46 is a protein called 50S ribosomal protein L4P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
46	AD	255	2026	1288	391	342	5	0	0

- Molecule 47 is a protein called 50S ribosomal protein L34E.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
47	Ad	89	740	463	158	108	11	0	0

- Molecule 48 is a protein called 50S ribosomal protein L5P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
48	AE	186	1489	937	278	265	9	0	0

- Molecule 49 is a protein called 50S ribosomal protein L37E.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
49	Ae	62	506	312	111	78	5	0	0

- Molecule 50 is a protein called 50S ribosomal protein L6P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
50	AF	184	1476	956	252	266	2	0	0

- Molecule 51 is a protein called 50S ribosomal protein L40E.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
51	Ag	45	372	236	76	56	4	0	0

- Molecule 52 is a protein called 50S ribosomal protein L11P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
52	AH	134	989	635	164	184	6	0	0

- Molecule 53 is a protein called 50S ribosomal protein L41E.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
53	Ah	24	230	147	54	28	1	0	0

- Molecule 54 is a protein called 50S ribosomal protein L13P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
54	AI	142	1150	737	215	195	3	0	0

- Molecule 55 is a protein called 50S ribosomal protein L37AE.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
55	Ai	78	590	368	122	95	5	0	0

- Molecule 56 is a protein called 50S ribosomal protein L14P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
56	AJ	132	1014	631	204	176	3	0	0

- Molecule 57 is a protein called 50S ribosomal protein L44E.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
57	Aj	94	788	499	162	122	5	0	0

- Molecule 58 is a protein called 50S ribosomal protein P0/L10E.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
58	Ak	212	1633	1051	272	304	6	0	0

- Molecule 59 is a protein called 50S ribosomal protein L15P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
59	AL	147	1154	727	227	195	5	0	0

- Molecule 60 is a protein called 50S ribosomal protein L15E.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
60	AM	194	1595	1020	316	253	6	0	0

- Molecule 61 is a protein called 50S ribosomal protein L10E/L16.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
61	AN	168	1379	872	268	233	6	0	0

- Molecule 62 is a protein called 50S ribosomal protein L18P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
62	AO	197	1598	1021	299	275	3	0	0

- Molecule 63 is a protein called 50S ribosomal protein L18E.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
63	AP	120	966	606	186	171	3	0	0

- Molecule 64 is a protein called 50S ribosomal protein L21E.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
64	AR	95	787	501	160	125	1	0	0

- Molecule 65 is a protein called 50S ribosomal protein L24E.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
65	AV	66	555	351	106	91	7	0	0

- Molecule 66 is a protein called 50S ribosomal protein L30P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
66	AY	155	1243	788	235	213	7	0	0

- Molecule 67 is a protein called 50S ribosomal protein L30E.

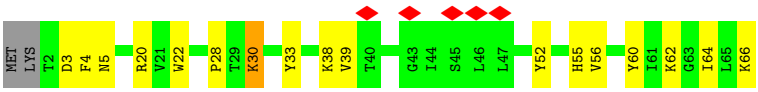
Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
67	AZ	99	754	489	121	142	2	0	0

3 Residue-property plots (i)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

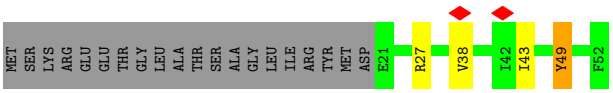
• Molecule 1: Preprotein translocase subunit SecE

Chain A7:



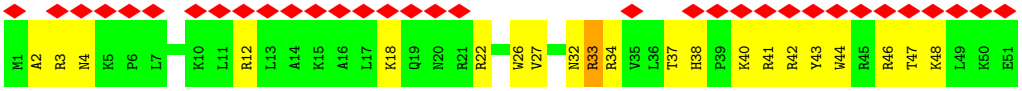
• Molecule 2: Preprotein translocase subunit SecG

Chain A8:



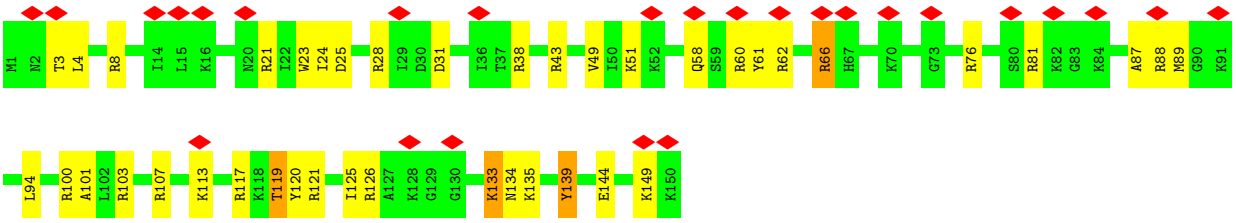
• Molecule 3: 50S ribosomal protein L39E

Chain Af:



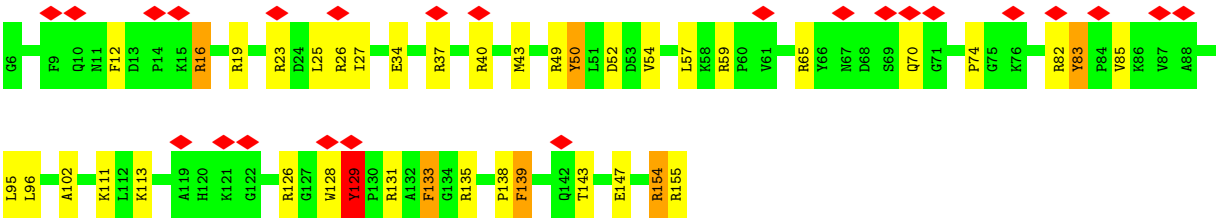
• Molecule 4: 50S ribosomal protein L19E

Chain AQ:



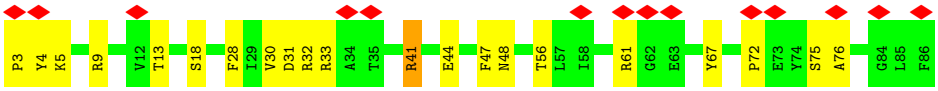
• Molecule 5: 50S ribosomal protein L22P

Chain AS:



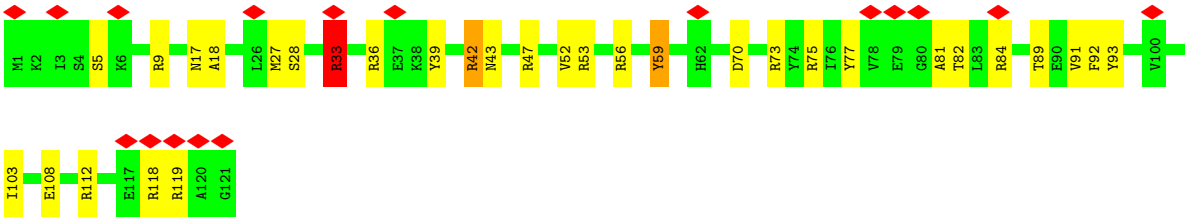
- Molecule 6: 50S ribosomal protein L23P

Chain AT:



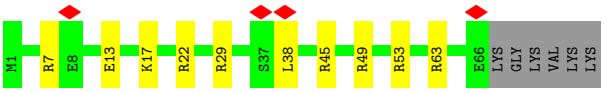
- Molecule 7: 50S ribosomal protein L24P

Chain AU:



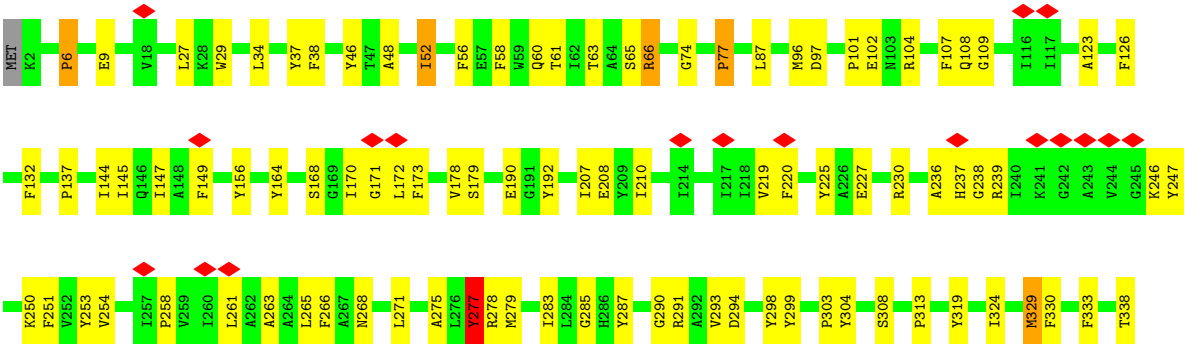
- Molecule 8: 50S ribosomal protein L29P

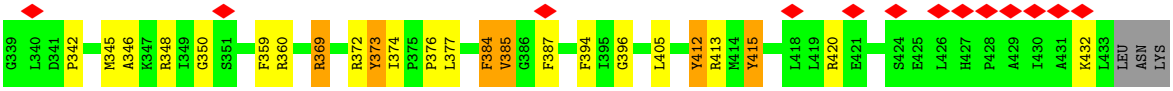
Chain AW:



- Molecule 9: Protein translocase subunit SecY

Chain AX:



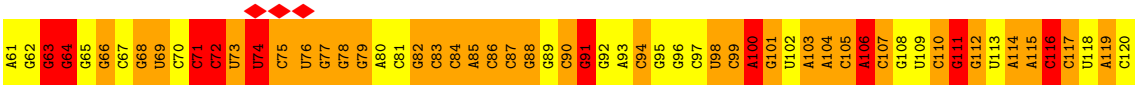


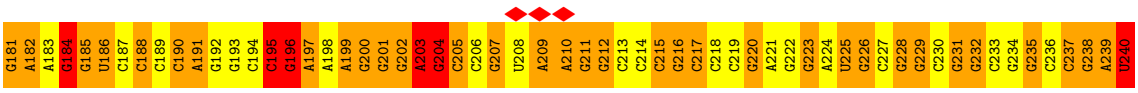
- Molecule 10: E-tRNA

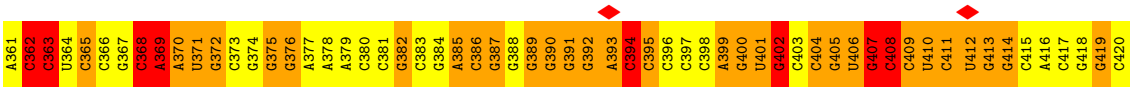
Chain B1:

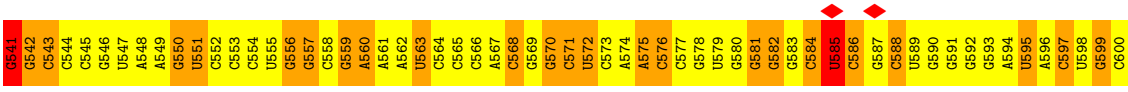
- Molecule 11: 16S ribosomal RNA

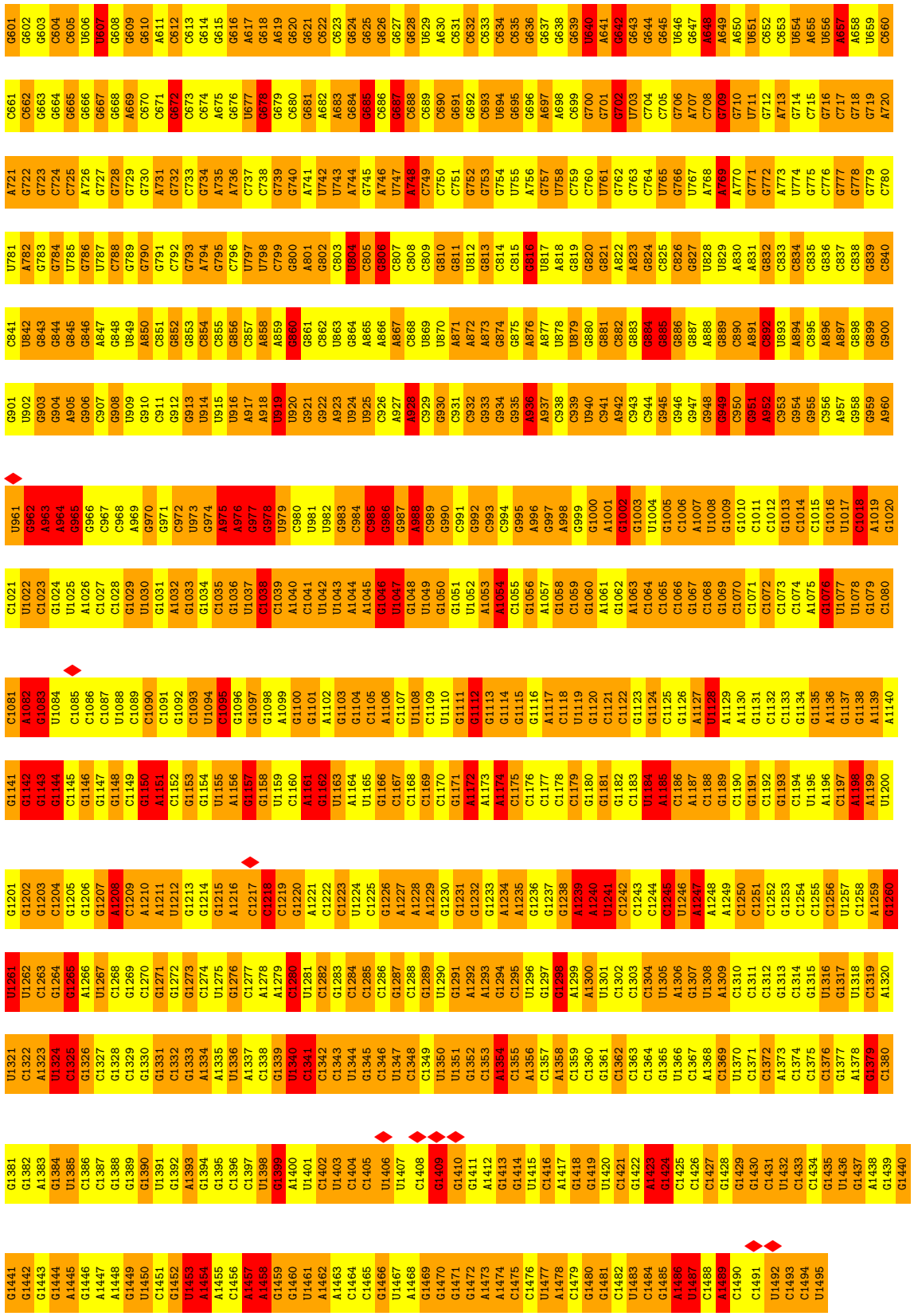
Chain B2:





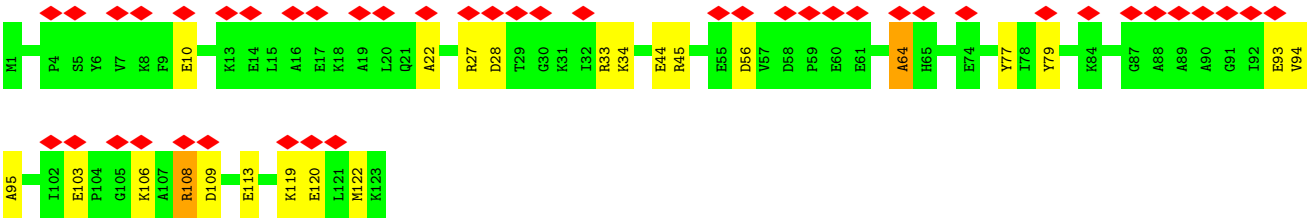






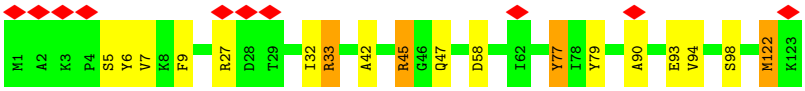
• Molecule 12: 30S ribosomal protein L7AE

Chain B3:



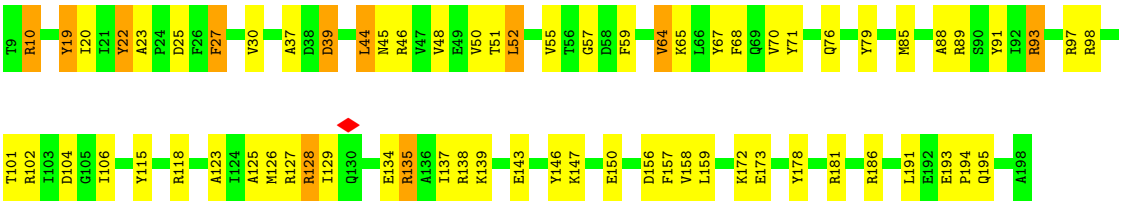
• Molecule 12: 30S ribosomal protein L7AE

Chain AG:



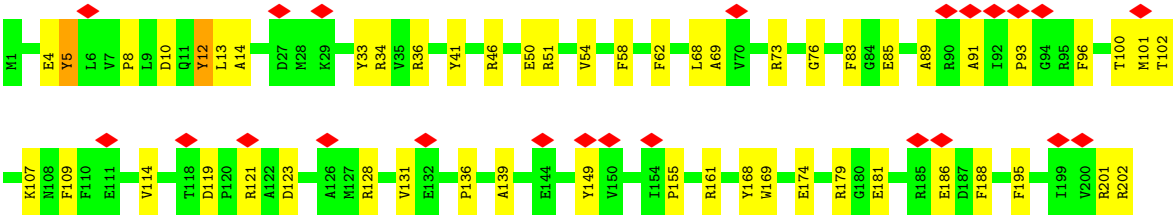
• Molecule 13: 30S ribosomal protein S3AE

Chain BA:



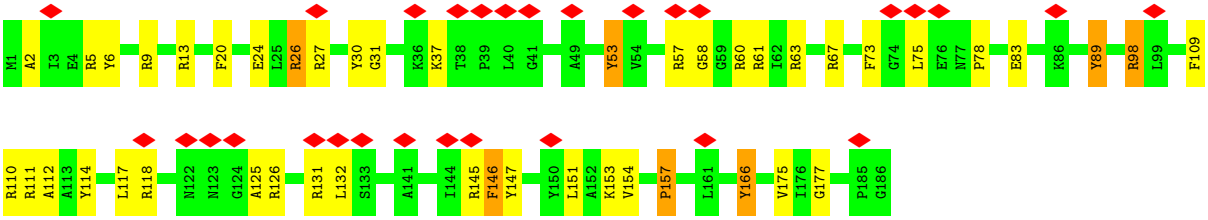
• Molecule 14: 30S ribosomal protein S2P

Chain BB:



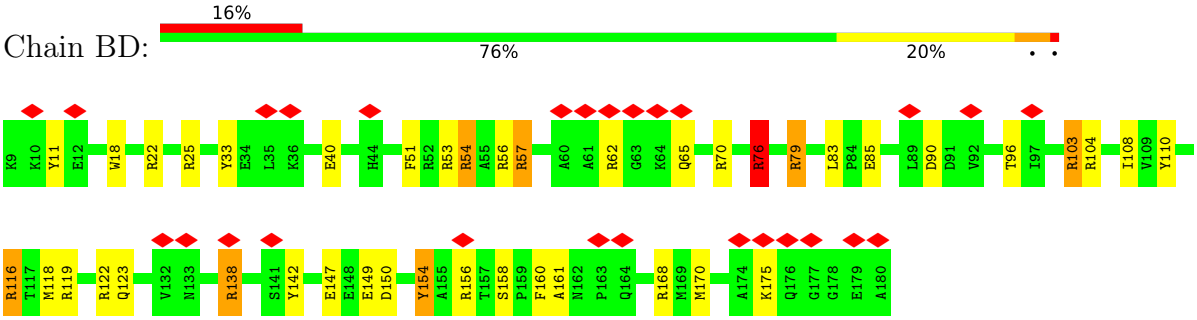
• Molecule 15: 30S ribosomal protein S3P

Chain BC:



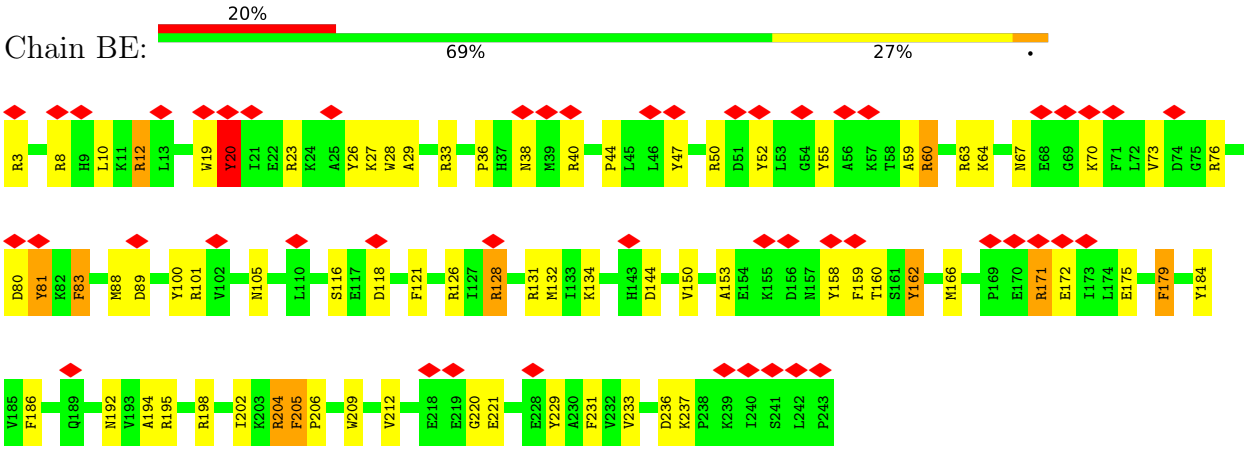
• Molecule 16: 30S ribosomal protein S4P

Chain BD:



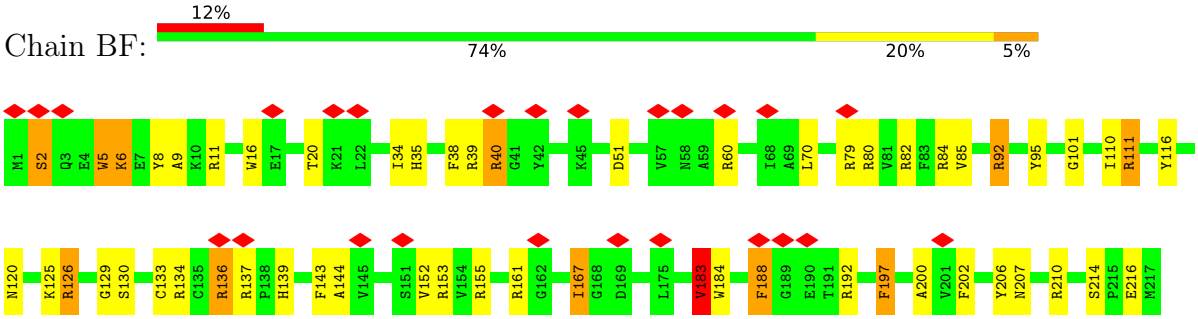
- Molecule 17: 30S ribosomal protein S4E

Chain BE:



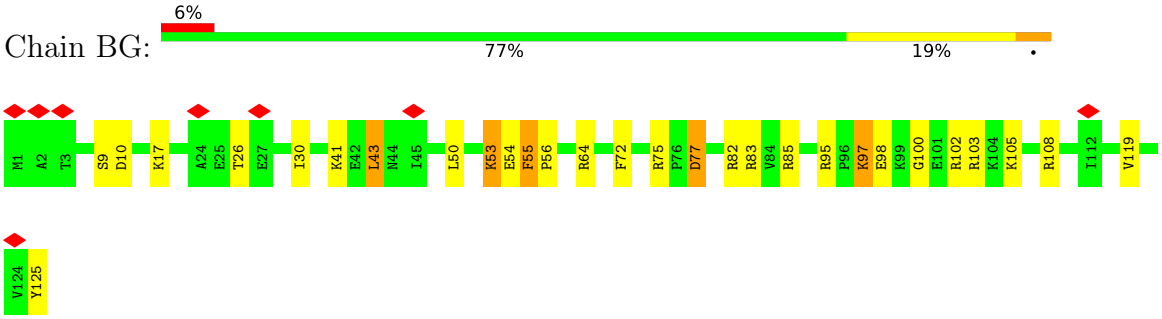
- Molecule 18: 30S ribosomal protein S5P

Chain BF:



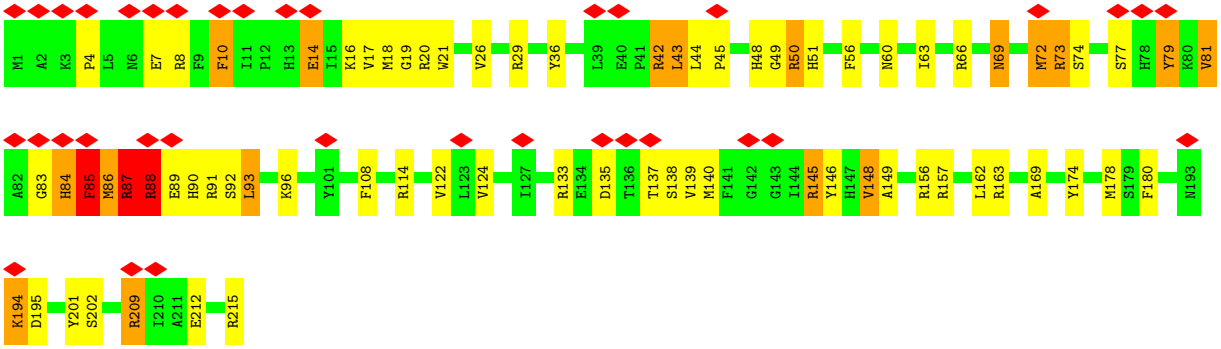
- Molecule 19: 30S ribosomal protein S6E

Chain BG:



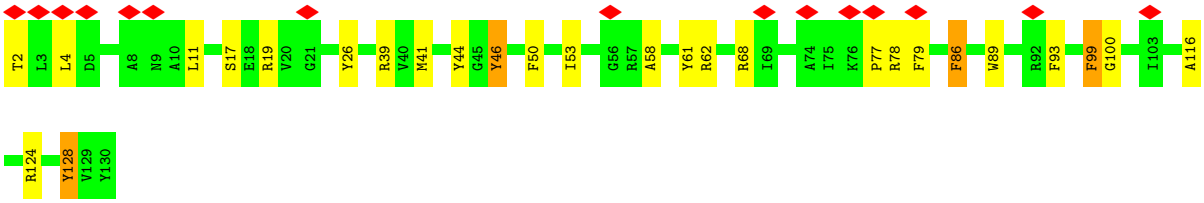
- Molecule 20: 30S ribosomal protein S7P

Chain BH:



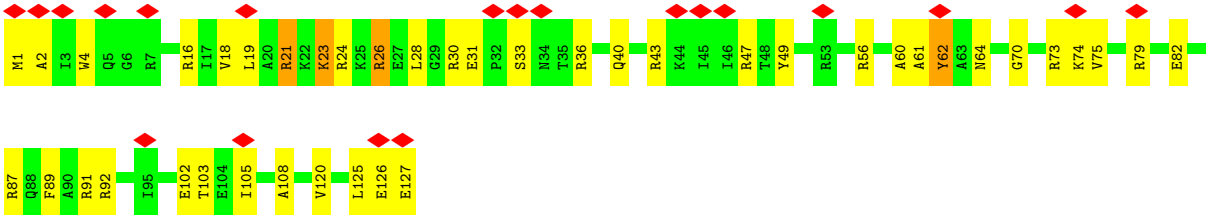
- Molecule 21: 30S ribosomal protein S8P

Chain BI:



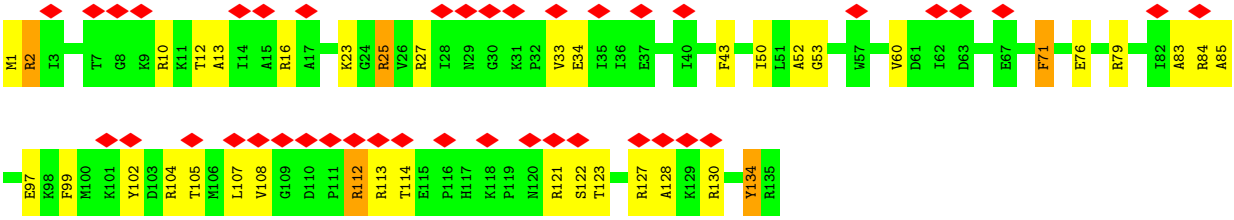
- Molecule 22: 30S ribosomal protein S8E

Chain BJ:



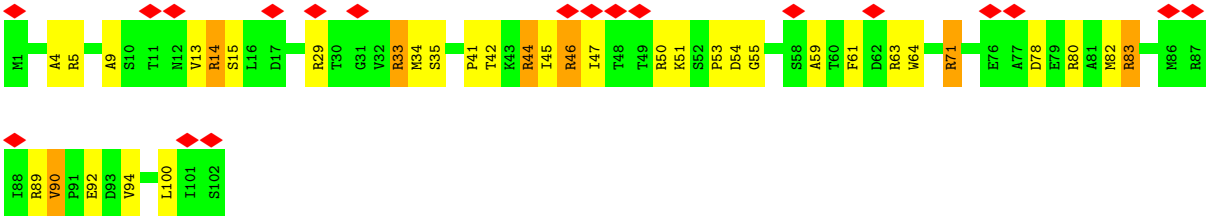
- Molecule 23: 30S ribosomal protein S9P

Chain BK:



- Molecule 24: 30S ribosomal protein S10P

Chain BL:

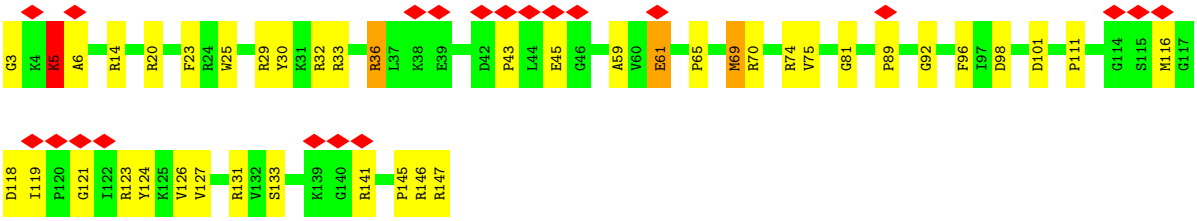


• Molecule 25: 30S ribosomal protein S11P

Chain BM:

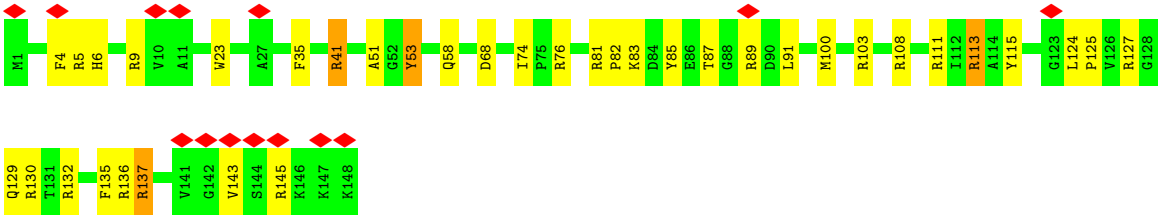
• Molecule 26: 30S ribosomal protein S12P

Chain BN:



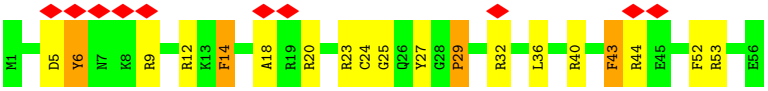
• Molecule 27: 30S ribosomal protein S13P

Chain BO:



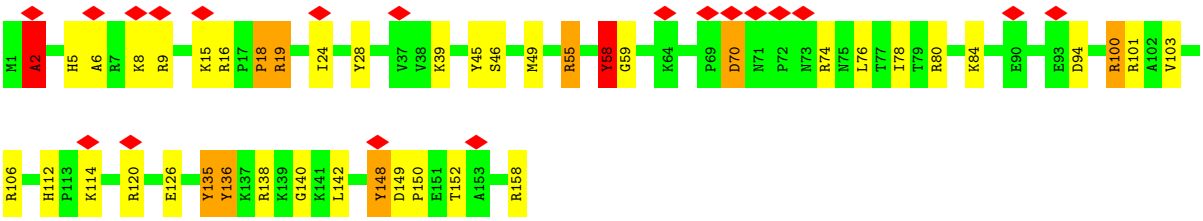
• Molecule 28: 30S ribosomal protein S14P

Chain BP:



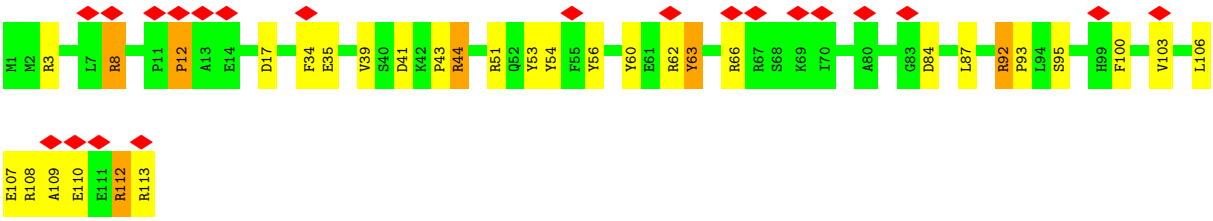
• Molecule 29: 30S ribosomal protein S15P/S13E

Chain BQ:



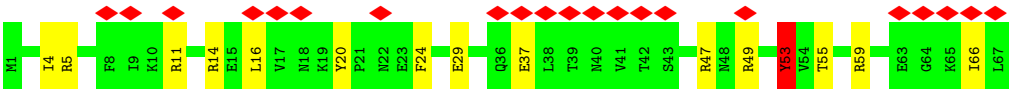
- Molecule 30: 30S ribosomal protein S17P

Chain BR:



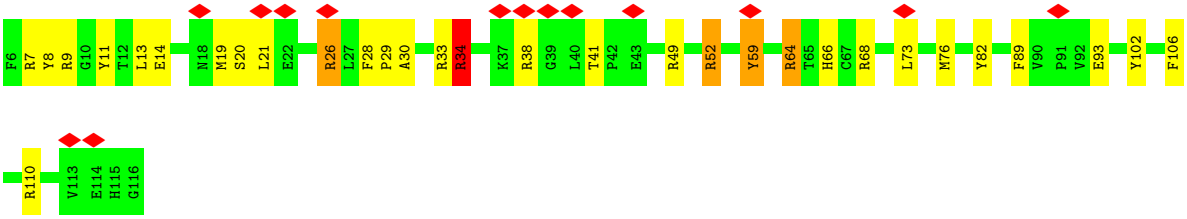
- Molecule 31: 30S ribosomal protein S17E

Chain BS:



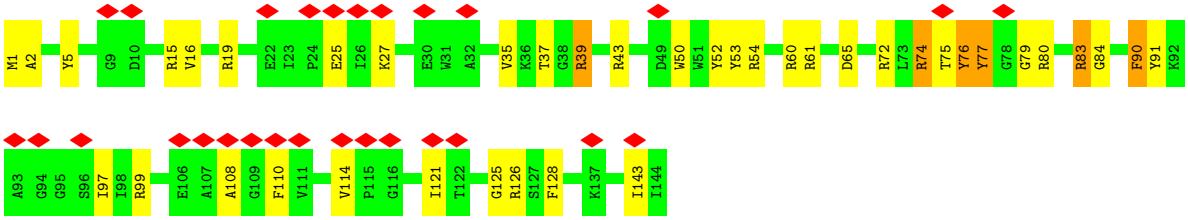
- Molecule 32: 30S ribosomal protein S19P

Chain BT:



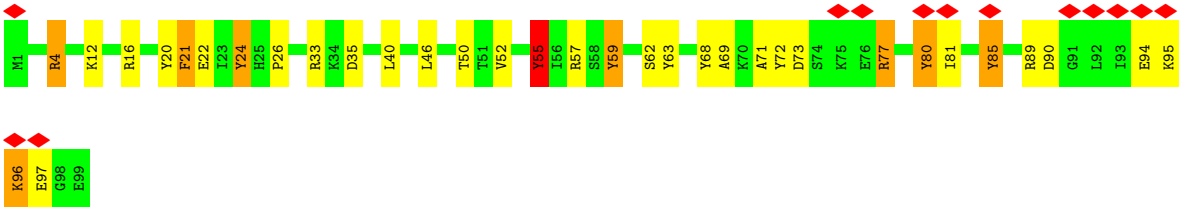
- Molecule 33: 30S ribosomal protein S19E

Chain BU:



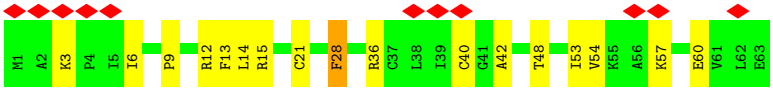
- Molecule 34: 30S ribosomal protein S24E

Chain BV:



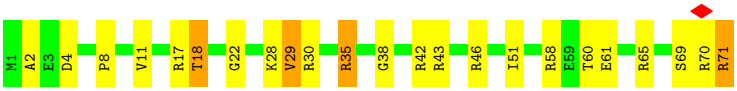
- Molecule 35: 30S ribosomal protein S27E

Chain BW:



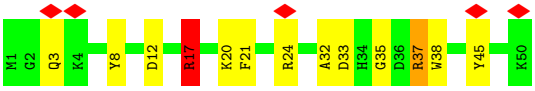
- Molecule 36: 30S ribosomal protein S28E

Chain BX:



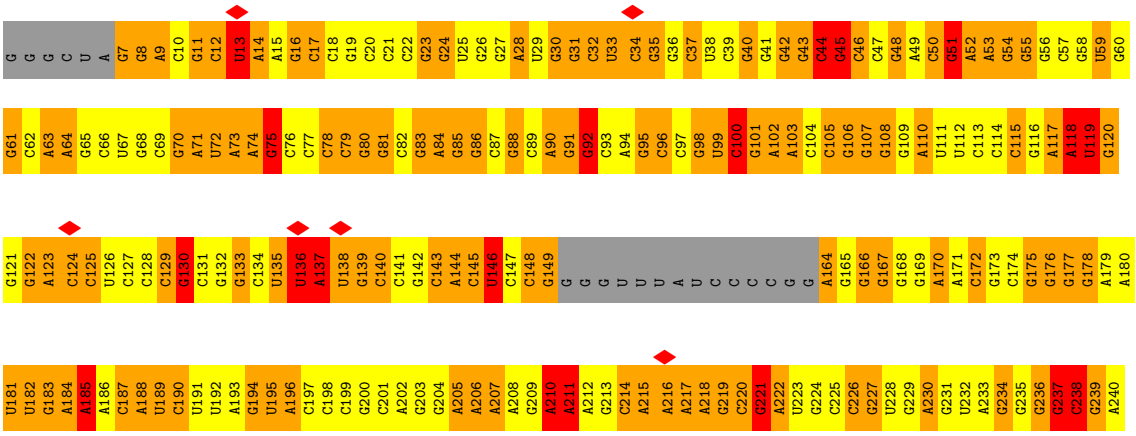
- Molecule 37: 30S ribosomal protein S27AE

Chain BY:



- Molecule 38: 23S ribosomal RNA

Chain A1:



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G301 U302 A303 G304 G305 G306 C307 C308 C309 C310 C311 G312 U313 A314 U315 G316 A317 G318 A319 C320 C321 C322 U323 C324 G325 C326 G327 G328 G329 U330 G331 A332 A333 G334 C335 G336 G337 A338 A339 G340 U341 C342 C343 G344 C345 U346 G347 G348 A349 A350 G351 G352 C353 G354 G355 C356 G357 C358 C359 G360
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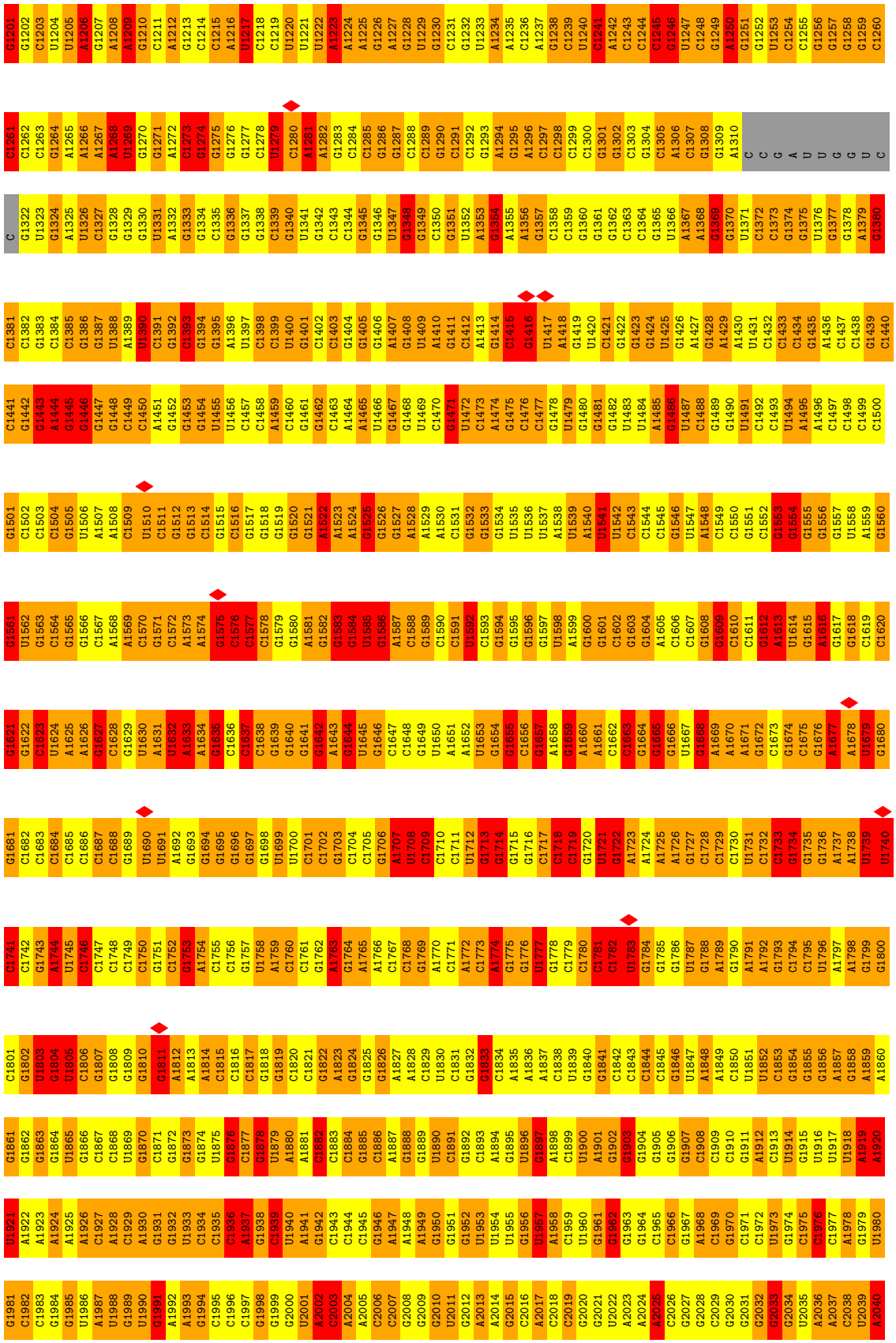
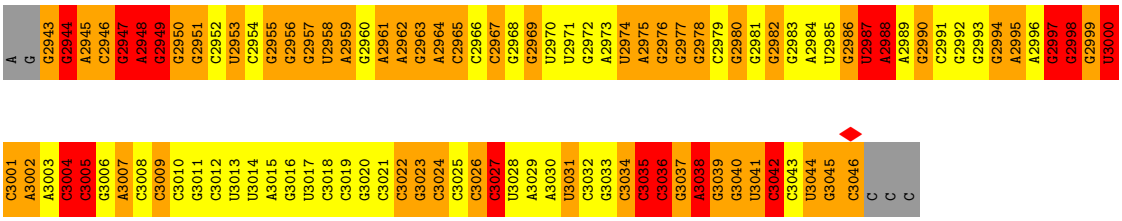
G1021 G1022 C1023 G1024 A1025 A1026 A1027 G1028 C1029 C1030 C1031 C1032 C1033 G1034 G1035 C1036 C1037 U1038 C1039 C1040 U1041 G1042 U1043 C1044 A1045 A1046 A1047 C1048 U1049 C1050 C1051 G1052 A1053 A1054 C1055 C1056 C1057 A1058 C1059 C1060 G1061 C1062 C1063 G1064 C1065 C1066 G1067 U1068 A1069 G1070 A1071 U1072 G1073 G1074 G1075 G1076 G1077 G1078 A1079 G1080
U1081 A1082 G1083 G1084 G1085 U1086 G1087 G1088 C1089 G1090 G1091 U1092 G1093 U1094 A1095 A1096 G1097 C1098 C1099 U1100 U1101 A1102 C1103 A1104 C1105 C1106 G1107 A1108 U1109 A1110 G1111 G1112 G1113 G1114 A1115 A1116 C1117 A1118 A1119 C1120 C1121 C1122 A1123 G1124 A1125 C1126 C1127 G1128 G1129 G1130 G1131 U1132 U1133 A1134 A1135 G1136 G1137 C1138 C1139 C1140
C1141 A1142 A1143 A1144 U1145 U1146 G1147 C1148 C1149 G1150 G1151 C1152 U1153 A1154 A1155 G1156 U1157 G1158 U1159 U1160 A1161 C1162 U1163 C1164 C1165 A1166 A1167 A1168 G1169 G1170 G1171 U1172 G1173 U1174 C1175 C1176 C1177 G1178 G1179 G1180 C1181 C1182 U1183 U1184 A1185 G1186 A1187 C1188 A1189 G1190 C1191 G1192 G1193 G1194 G1195 A1196 G1197 G1198 U1199 A1200

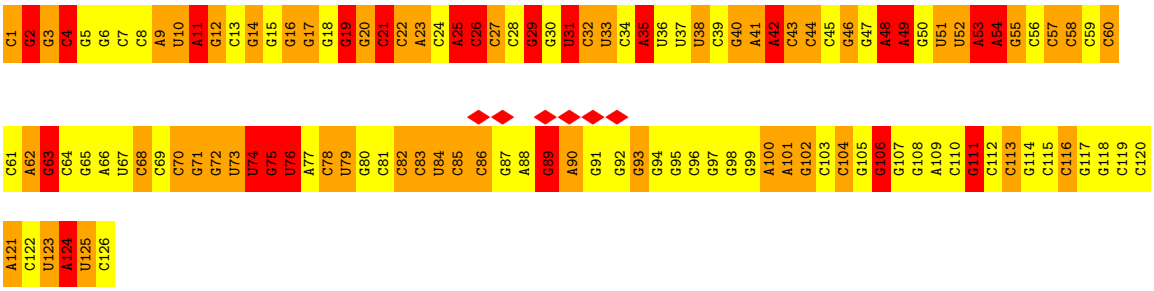


WORLDWIDE
PDB
PROTEIN DATA BANK



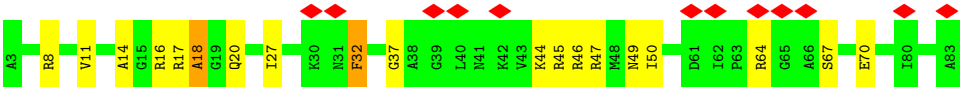
• Molecule 39: 5S ribosomal RNA

Chain A3:



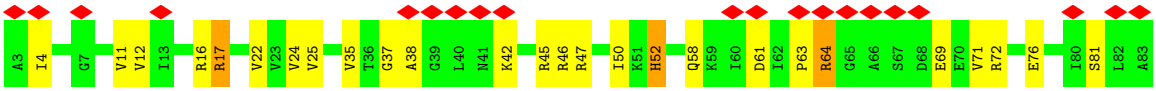
• Molecule 40: 50S ribosomal protein L14E

Chain A5:



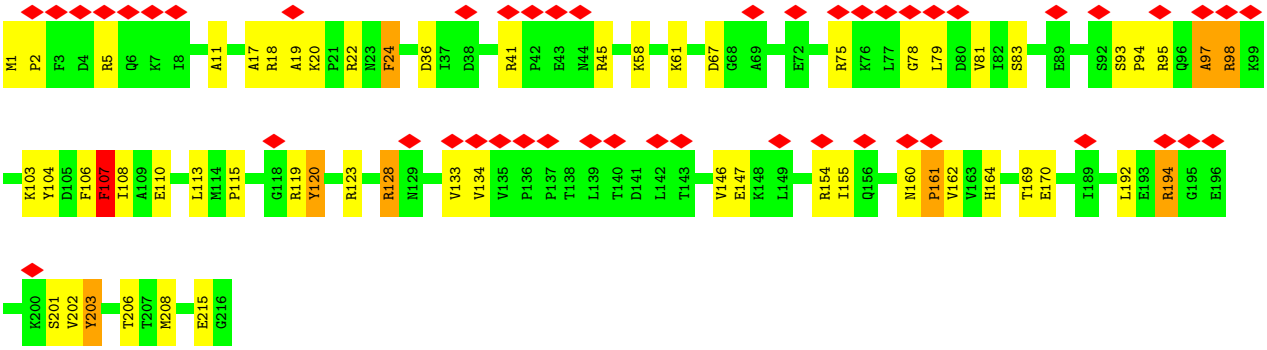
• Molecule 40: 50S ribosomal protein L14E

Chain AK:



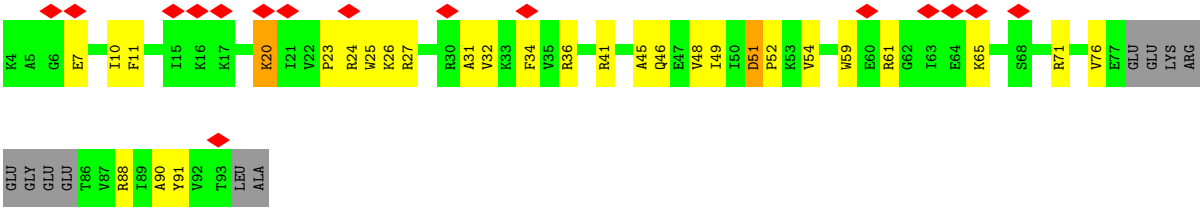
• Molecule 41: 50S ribosomal protein L1P

Chain AA:



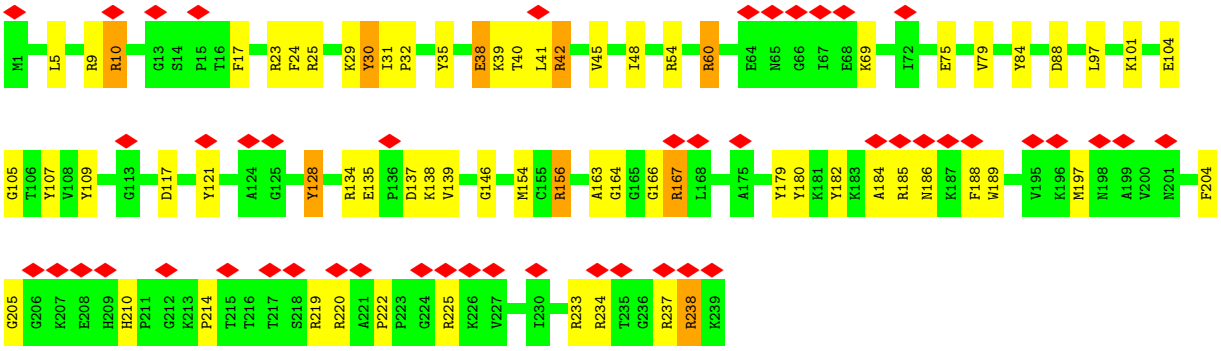
• Molecule 42: 50S ribosomal protein L31E

Chain Aa:



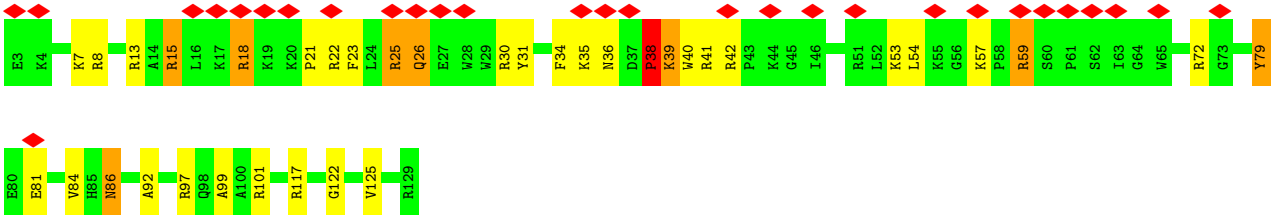
- Molecule 43: 50S ribosomal protein L2

Chain AB:



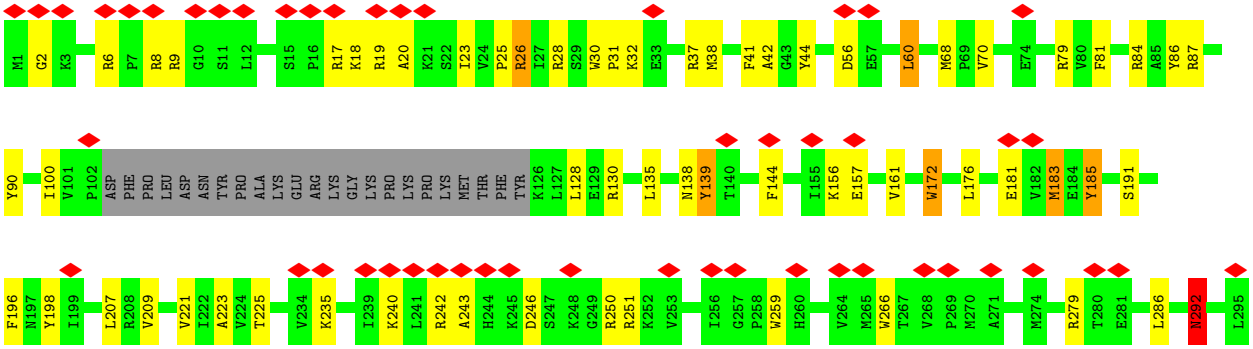
- Molecule 44: 50S ribosomal protein L32E

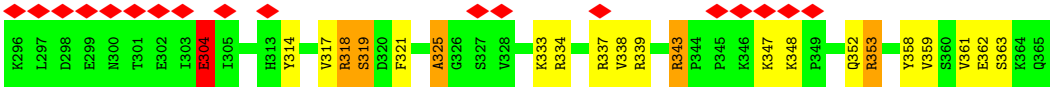
Chain Ab:



- Molecule 45: 50S ribosomal protein L3P

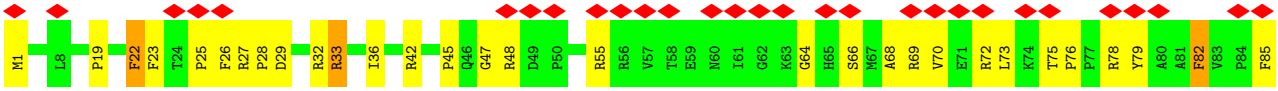
Chain AC:

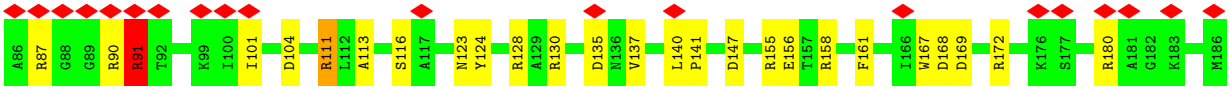




• Molecule 46: 50S ribosomal protein L4P

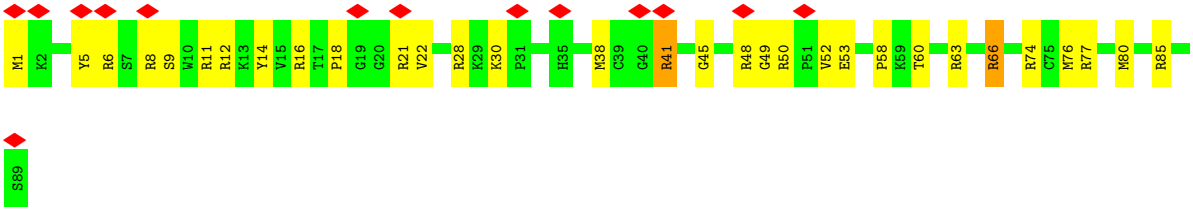
Chain AD:





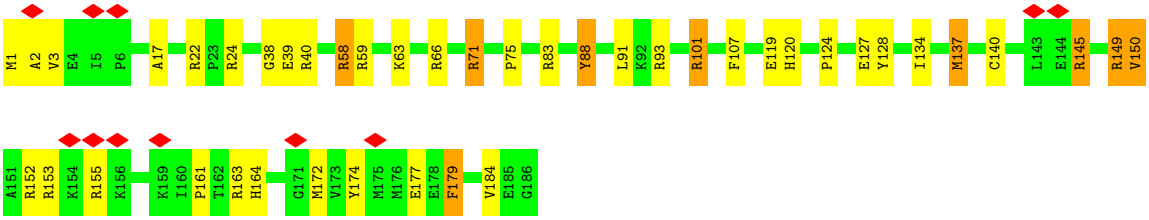
• Molecule 47: 50S ribosomal protein L34E

Chain Ad:



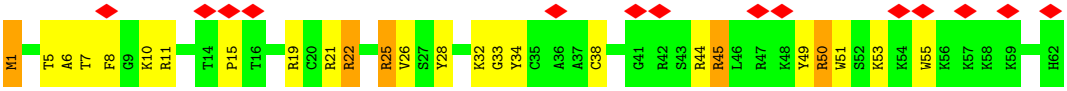
• Molecule 48: 50S ribosomal protein L5P

Chain AE:



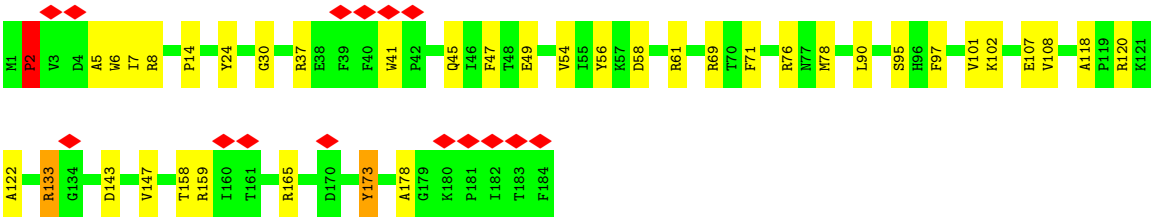
• Molecule 49: 50S ribosomal protein L37E

Chain Ae:



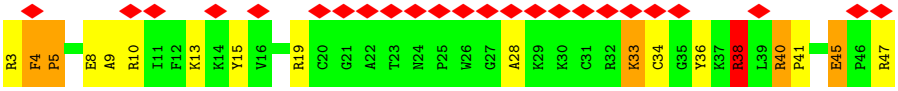
• Molecule 50: 50S ribosomal protein L6P

Chain AF: 8% 79% 20%



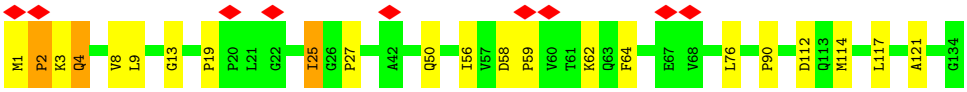
- Molecule 51: 50S ribosomal protein L40E

Chain Ag: 53% 60% 27% 11%



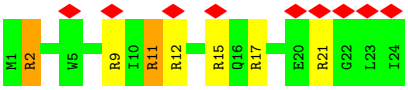
- Molecule 52: 50S ribosomal protein L11P

Chain AH: 7% 84% 14%



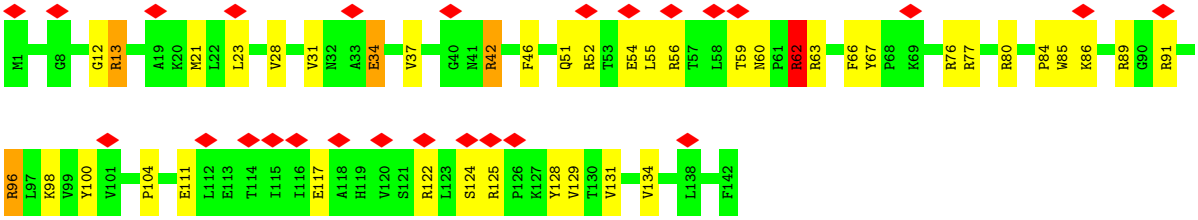
- Molecule 53: 50S ribosomal protein L41E

Chain Ah: 38% 71% 21% 8%



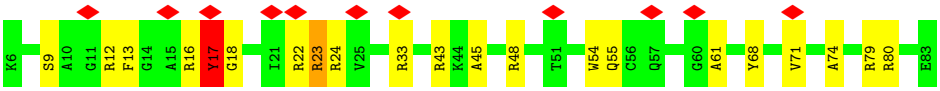
- Molecule 54: 50S ribosomal protein L13P

Chain AI: 18% 70% 26%



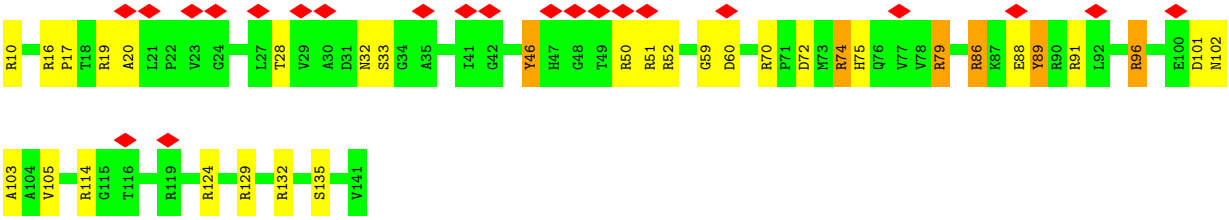
- Molecule 55: 50S ribosomal protein L37AE

Chain Ai: 14% 73% 24%



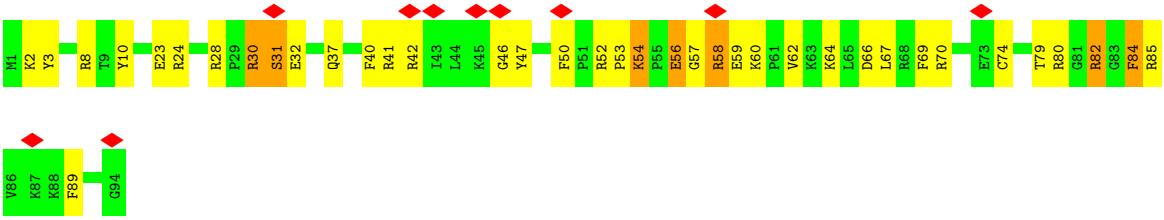
• Molecule 56: 50S ribosomal protein L14P

Chain AJ: 17% 75% 20% 5%



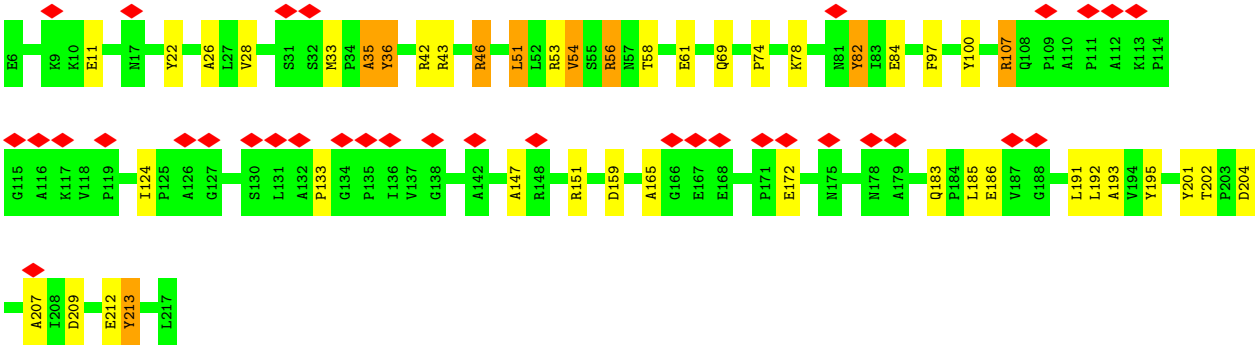
• Molecule 57: 50S ribosomal protein L44E

Chain Aj: 11% 60% 33% 7%



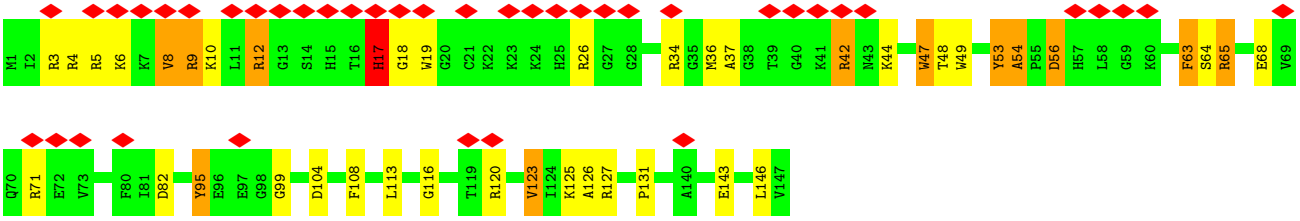
• Molecule 58: 50S ribosomal protein P0/L10E

Chain Ak: 17% 79% 17%



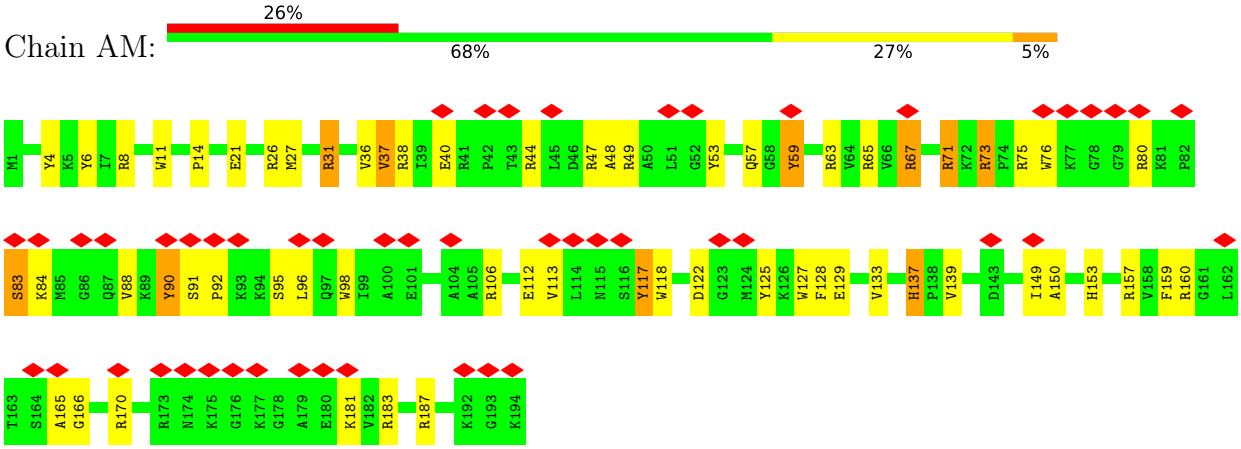
• Molecule 59: 50S ribosomal protein L15P

Chain AL: 28% 71% 20% 8%



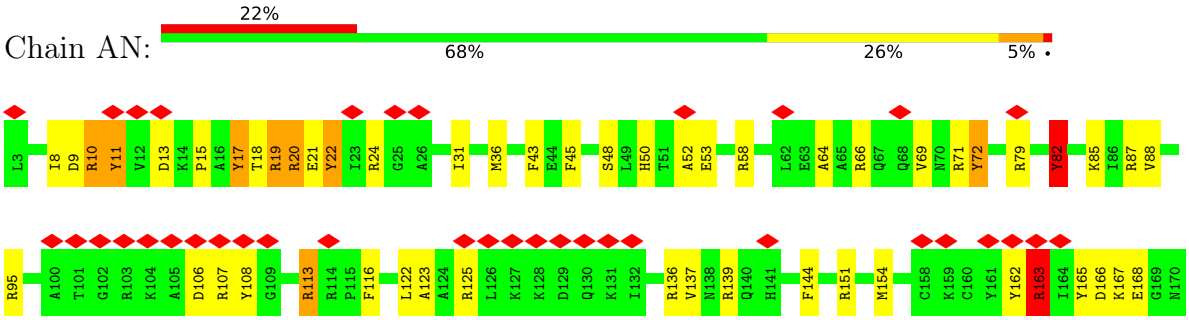
• Molecule 60: 50S ribosomal protein L15E

Chain AM:



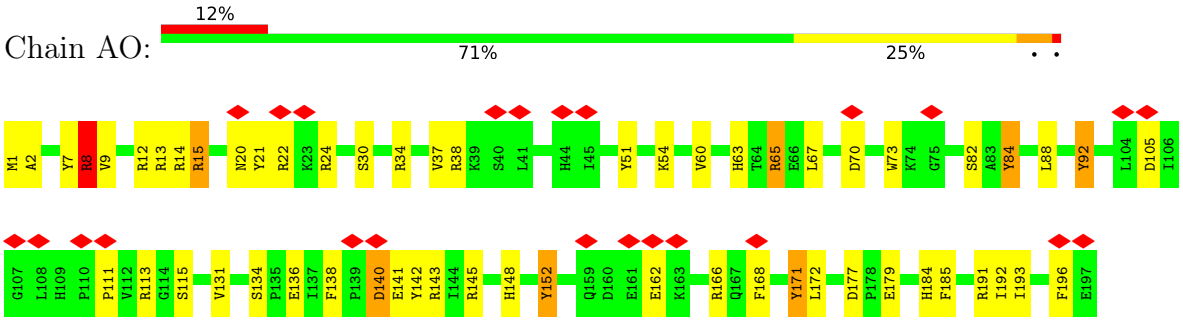
- Molecule 61: 50S ribosomal protein L10E/L16

Chain AN:



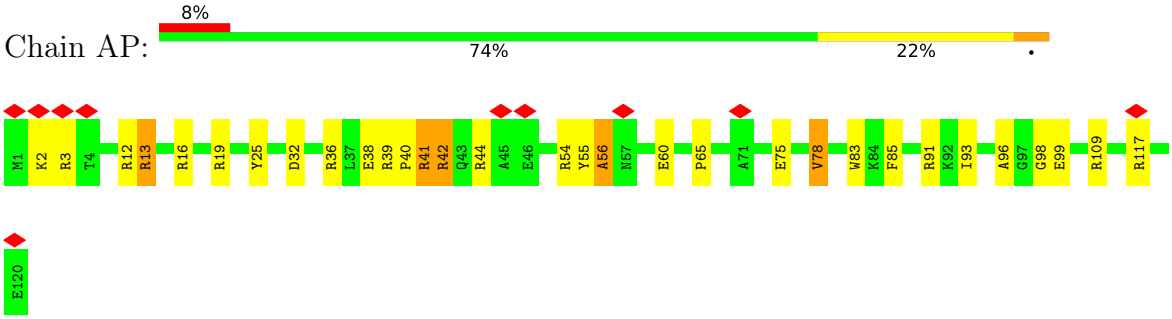
- Molecule 62: 50S ribosomal protein L18P

Chain AO:



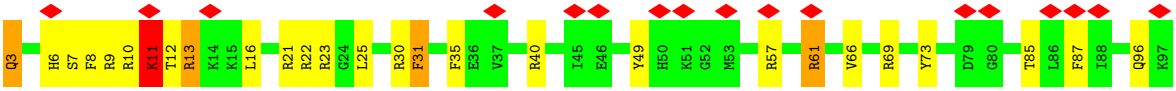
- Molecule 63: 50S ribosomal protein L18E

Chain AP:



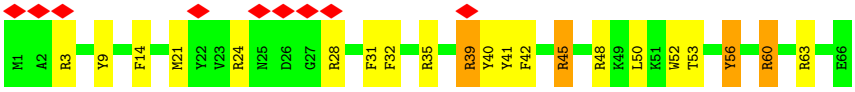
- Molecule 64: 50S ribosomal protein L21E

Chain AR:



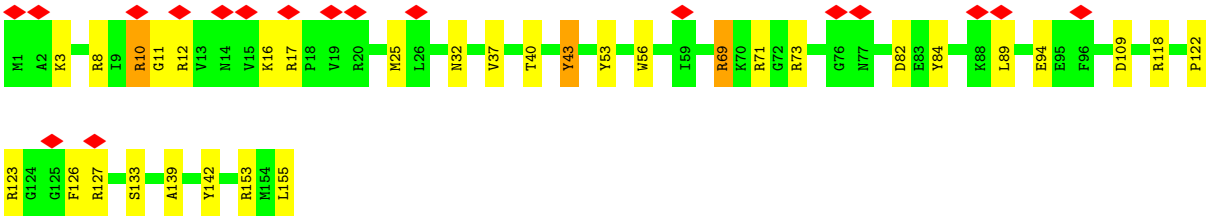
- Molecule 65: 50S ribosomal protein L24E

Chain AV:



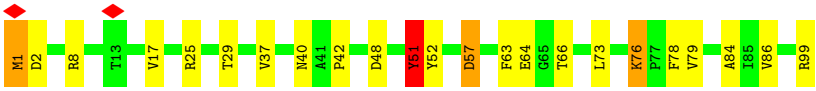
- Molecule 66: 50S ribosomal protein L30P

Chain AY:



- Molecule 67: 50S ribosomal protein L30E

Chain AZ:



4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	37000	Depositor
Resolution determination method	FSC 0.5 CUT-OFF	Depositor
CTF correction method	per micrograph	Depositor
Microscope	FEI TECNAI F20	Depositor
Voltage (kV)	200	Depositor
Electron dose ($e^-/Å^2$)	20	Depositor
Minimum defocus (nm)	1000	Depositor
Maximum defocus (nm)	2500	Depositor
Magnification	51000	Depositor
Image detector	KODAK SO-163 FILM	Depositor
Maximum map value	3.556	Depositor
Minimum map value	-0.752	Depositor
Average map value	0.060	Depositor
Map value standard deviation	0.270	Depositor
Recommended contour level	0.93	Depositor
Map size (Å)	444.99, 444.99, 442.26	wwPDB
Map dimensions	163, 163, 162	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	2.73, 2.73, 2.73	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
1	A7	1.64	2/534 (0.4%)	1.97	14/719 (1.9%)
2	A8	1.75	1/263 (0.4%)	1.81	4/354 (1.1%)
3	Af	1.83	4/453 (0.9%)	2.10	15/603 (2.5%)
4	AQ	1.80	16/1272 (1.3%)	2.05	35/1676 (2.1%)
5	AS	1.80	17/1226 (1.4%)	2.14	41/1649 (2.5%)
6	AT	1.69	6/689 (0.9%)	2.00	19/924 (2.1%)
7	AU	1.81	15/1024 (1.5%)	2.04	30/1365 (2.2%)
8	AW	1.76	5/547 (0.9%)	1.95	12/725 (1.7%)
9	AX	1.71	31/3383 (0.9%)	1.98	79/4593 (1.7%)
10	B1	3.41	257/1840 (14.0%)	3.87	460/2869 (16.0%)
11	B2	3.43	4996/35963 (13.9%)	3.79	8330/56134 (14.8%)
12	AG	1.71	4/951 (0.4%)	1.82	14/1281 (1.1%)
12	B3	1.62	3/951 (0.3%)	1.78	13/1281 (1.0%)
13	BA	1.74	21/1585 (1.3%)	2.02	45/2124 (2.1%)
14	BB	1.72	15/1654 (0.9%)	1.96	43/2233 (1.9%)
15	BC	1.82	18/1481 (1.2%)	2.03	41/1985 (2.1%)
16	BD	1.77	14/1457 (1.0%)	2.13	51/1953 (2.6%)
17	BE	1.76	25/2025 (1.2%)	2.01	58/2732 (2.1%)
18	BF	1.81	29/1746 (1.7%)	2.04	51/2350 (2.2%)
19	BG	1.72	9/999 (0.9%)	1.94	22/1337 (1.6%)
20	BH	1.79	22/1773 (1.2%)	2.00	62/2381 (2.6%)
21	BI	1.77	13/1049 (1.2%)	2.04	27/1408 (1.9%)
22	BJ	1.83	14/1013 (1.4%)	2.02	22/1349 (1.6%)
23	BK	1.76	10/1088 (0.9%)	1.96	31/1455 (2.1%)
24	BL	1.76	10/830 (1.2%)	2.00	26/1113 (2.3%)
25	BM	1.83	16/1022 (1.6%)	1.90	24/1375 (1.7%)
26	BN	1.74	8/1157 (0.7%)	2.06	37/1536 (2.4%)
27	BO	1.78	13/1208 (1.1%)	2.02	32/1619 (2.0%)
28	BP	1.94	12/471 (2.5%)	2.31	20/620 (3.2%)
29	BQ	1.75	14/1338 (1.0%)	1.95	34/1797 (1.9%)
30	BR	1.75	12/956 (1.3%)	2.06	24/1287 (1.9%)
31	BS	1.70	4/562 (0.7%)	1.95	10/744 (1.3%)
32	BT	1.78	11/943 (1.2%)	2.23	35/1257 (2.8%)
33	BU	1.80	13/1204 (1.1%)	2.01	30/1621 (1.9%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
34	BV	1.80	13/839 (1.5%)	2.13	29/1122 (2.6%)
35	BW	1.68	2/485 (0.4%)	1.93	11/651 (1.7%)
36	BX	1.84	7/570 (1.2%)	1.93	9/760 (1.2%)
37	BY	1.66	4/421 (1.0%)	2.22	16/558 (2.9%)
38	A1	3.42	9848/71524 (13.8%)	3.76	16432/111652 (14.7%)
39	A3	3.37	408/3007 (13.6%)	3.87	667/4689 (14.2%)
40	A5	1.85	11/618 (1.8%)	1.97	14/829 (1.7%)
40	AK	1.64	4/618 (0.6%)	1.97	16/829 (1.9%)
41	AA	1.71	17/1702 (1.0%)	2.12	52/2293 (2.3%)
42	Aa	1.72	11/690 (1.6%)	2.12	23/926 (2.5%)
43	AB	1.80	20/1883 (1.1%)	1.99	66/2540 (2.6%)
44	Ab	1.81	13/1100 (1.2%)	1.99	30/1466 (2.0%)
45	AC	1.73	29/2774 (1.0%)	1.98	77/3727 (2.1%)
46	AD	1.74	29/2068 (1.4%)	2.04	58/2787 (2.1%)
47	Ad	1.84	13/758 (1.7%)	2.12	28/1007 (2.8%)
48	AE	1.75	14/1513 (0.9%)	1.98	30/2026 (1.5%)
49	Ae	1.87	6/517 (1.2%)	2.04	15/681 (2.2%)
50	AF	1.71	18/1507 (1.2%)	1.89	24/2033 (1.2%)
51	Ag	1.89	5/381 (1.3%)	2.19	15/504 (3.0%)
52	AH	1.59	2/1002 (0.2%)	1.82	15/1351 (1.1%)
53	Ah	1.81	3/233 (1.3%)	2.32	10/301 (3.3%)
54	AI	1.81	11/1168 (0.9%)	1.94	31/1561 (2.0%)
55	Ai	1.86	10/599 (1.7%)	1.97	14/798 (1.8%)
56	AJ	1.86	13/1027 (1.3%)	1.92	17/1385 (1.2%)
57	Aj	1.85	12/806 (1.5%)	2.18	30/1065 (2.8%)
58	Ak	1.74	16/1660 (1.0%)	1.92	34/2253 (1.5%)
59	AL	1.82	14/1175 (1.2%)	2.03	34/1563 (2.2%)
60	AM	1.85	27/1634 (1.7%)	2.11	53/2179 (2.4%)
61	AN	1.85	24/1410 (1.7%)	2.05	43/1890 (2.3%)
62	AO	1.73	17/1636 (1.0%)	2.11	47/2196 (2.1%)
63	AP	1.82	12/980 (1.2%)	2.03	26/1313 (2.0%)
64	AR	1.74	10/808 (1.2%)	1.97	23/1080 (2.1%)
65	AV	1.91	9/570 (1.6%)	2.18	23/758 (3.0%)
66	AY	1.69	8/1262 (0.6%)	1.98	33/1687 (2.0%)
67	AZ	1.68	2/764 (0.3%)	1.94	21/1028 (2.0%)
All	All	2.89	16322/184366 (8.9%)	3.26	27857/271937 (10.2%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand.A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
2	A8	0	1
3	Af	0	6
4	AQ	0	5
5	AS	0	5
6	AT	0	2
7	AU	0	4
9	AX	0	9
10	B1	0	35
11	B2	0	725
12	AG	0	2
13	BA	0	11
14	BB	0	2
15	BC	0	8
16	BD	0	7
17	BE	0	9
18	BF	0	3
19	BG	1	4
20	BH	4	13
21	BI	0	3
22	BJ	0	6
23	BK	0	7
24	BL	0	8
25	BM	0	2
26	BN	0	4
27	BO	0	5
28	BP	0	1
29	BQ	0	7
30	BR	0	3
31	BS	0	2
32	BT	0	5
33	BU	0	4
34	BV	0	12
35	BW	0	1
36	BX	0	3
37	BY	0	3
38	A1	2	1412
39	A3	0	55
40	A5	0	2
40	AK	0	2
41	AA	0	4
42	Aa	0	2
43	AB	0	8
44	Ab	0	9

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Mol	Chain	#Chirality outliers	#Planarity outliers
45	AC	0	7
46	AD	0	9
47	Ad	0	1
48	AE	0	6
49	Ae	1	9
50	AF	0	3
51	Ag	1	5
52	AH	1	2
53	Ah	0	2
54	AI	0	7
55	Ai	0	2
56	AJ	0	4
57	Aj	0	7
58	Ak	0	4
59	AL	2	10
60	AM	0	4
61	AN	0	7
62	AO	0	10
63	AP	0	4
64	AR	0	1
65	AV	0	5
66	AY	0	2
67	AZ	0	1
All	All	12	2533

All (16322) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	770	A	N7-C5	-18.72	1.28	1.39
11	B2	470	G	N9-C8	18.32	1.50	1.37
38	A1	2257	A	N7-C5	-18.29	1.28	1.39
38	A1	910	G	N7-C5	-17.89	1.28	1.39
38	A1	2164	G	N7-C5	-17.73	1.28	1.39
38	A1	1754	A	N9-C4	17.48	1.48	1.37
38	A1	1090	G	N7-C5	-17.48	1.28	1.39
38	A1	474	G	C6-N1	17.23	1.51	1.39
38	A1	563	A	N3-C4	-17.23	1.24	1.34
11	B2	513	A	N9-C4	-17.21	1.27	1.37
38	A1	2134	G	C2-N3	17.14	1.46	1.32
38	A1	2945	A	N7-C5	-17.10	1.28	1.39
38	A1	2185	A	N7-C5	-16.83	1.29	1.39
10	B1	22	A	N9-C4	16.66	1.47	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
39	A3	102	G	N7-C5	-16.63	1.29	1.39
38	A1	1522	A	N7-C5	-16.62	1.29	1.39
39	A3	30	G	N7-C5	-16.49	1.29	1.39
38	A1	552	A	N7-C5	-16.13	1.29	1.39
38	A1	2266	C	N1-C6	16.06	1.46	1.37
38	A1	1901	A	N7-C5	-16.04	1.29	1.39
38	A1	483	C	N1-C6	15.99	1.46	1.37
11	B2	1227	A	N7-C5	-15.90	1.29	1.39
38	A1	733	A	C5-C4	15.89	1.49	1.38
11	B2	1079	G	N7-C5	-15.74	1.29	1.39
39	A3	84	U	C2-N3	15.73	1.48	1.37
38	A1	628	A	N9-C4	15.55	1.47	1.37
11	B2	191	A	N7-C5	-15.50	1.29	1.39
38	A1	2380	A	N7-C5	-15.47	1.29	1.39
38	A1	2469	G	N1-C2	15.43	1.50	1.37
38	A1	1296	A	N7-C5	-15.42	1.29	1.39
38	A1	2684	G	N3-C4	-15.41	1.24	1.35
38	A1	1085	G	N7-C5	-15.40	1.30	1.39
38	A1	2465	A	C6-N6	15.40	1.46	1.33
38	A1	2819	C	N1-C6	15.36	1.46	1.37
11	B2	1013	G	N7-C5	-15.32	1.30	1.39
38	A1	1135	A	N7-C5	-15.28	1.30	1.39
10	B1	70	C	N1-C6	15.23	1.46	1.37
38	A1	502	G	C2-N3	15.17	1.44	1.32
38	A1	279	G	C6-N1	15.16	1.50	1.39
38	A1	999	A	N7-C5	-15.11	1.30	1.39
11	B2	693	C	N1-C6	-15.07	1.28	1.37
38	A1	1335	C	N1-C6	15.03	1.46	1.37
11	B2	1137	G	C2-N3	15.01	1.44	1.32
11	B2	89	G	C2-N3	14.98	1.44	1.32
38	A1	2434	A	C6-N1	14.95	1.46	1.35
38	A1	203	G	C6-N1	14.86	1.50	1.39
11	B2	1462	A	C6-N1	14.86	1.46	1.35
11	B2	1183	C	N1-C6	14.85	1.46	1.37
38	A1	1280	C	C4-N4	14.84	1.47	1.33
38	A1	2747	C	N3-C4	14.82	1.44	1.33
39	A3	35	A	N7-C5	-14.76	1.30	1.39
38	A1	310	C	N1-C6	14.73	1.46	1.37
11	B2	1150	G	N7-C5	14.73	1.48	1.39
38	A1	255	G	N1-C2	14.68	1.49	1.37
38	A1	1780	C	N1-C6	14.68	1.46	1.37
38	A1	194	G	N7-C5	-14.66	1.30	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2682	G	N7-C5	-14.66	1.30	1.39
11	B2	323	A	N7-C5	-14.63	1.30	1.39
11	B2	287	G	N7-C5	-14.58	1.30	1.39
11	B2	824	G	N7-C5	-14.54	1.30	1.39
38	A1	2357	U	C2-N3	14.51	1.48	1.37
11	B2	801	A	N7-C5	-14.47	1.30	1.39
38	A1	761	U	N3-C4	14.47	1.51	1.38
11	B2	55	G	C2-N3	14.46	1.44	1.32
38	A1	467	U	C2-N3	14.46	1.47	1.37
38	A1	2254	U	C2-N3	14.44	1.47	1.37
11	B2	1400	A	N7-C5	-14.43	1.30	1.39
11	B2	729	G	C8-N7	14.43	1.39	1.30
38	A1	761	U	C2-N3	14.39	1.47	1.37
38	A1	2140	C	N1-C6	14.34	1.45	1.37
38	A1	428	A	C6-N1	14.31	1.45	1.35
11	B2	759	C	N1-C6	14.29	1.45	1.37
38	A1	1771	C	N3-C4	14.29	1.44	1.33
38	A1	2542	G	C2-N3	14.29	1.44	1.32
38	A1	1221	U	C2-N3	14.25	1.47	1.37
38	A1	1920	A	C5-C4	14.23	1.48	1.38
38	A1	283	U	C2-N3	14.23	1.47	1.37
38	A1	1030	C	N1-C6	14.22	1.45	1.37
11	B2	1402	C	N1-C6	14.19	1.45	1.37
38	A1	2279	G	C6-N1	14.17	1.49	1.39
11	B2	988	A	C6-N6	14.15	1.45	1.33
11	B2	593	G	N7-C5	-14.13	1.30	1.39
11	B2	1376	C	N1-C6	14.13	1.45	1.37
38	A1	2773	A	N9-C4	-14.11	1.29	1.37
11	B2	971	G	N7-C5	14.11	1.47	1.39
38	A1	743	A	N7-C5	-14.10	1.30	1.39
38	A1	1825	G	C2-N3	14.09	1.44	1.32
38	A1	2403	G	N7-C5	-14.01	1.30	1.39
38	A1	146	U	C2-N3	-13.99	1.27	1.37
38	A1	820	C	N1-C6	13.99	1.45	1.37
11	B2	530	G	N1-C2	13.96	1.49	1.37
38	A1	1012	G	N9-C8	13.95	1.47	1.37
38	A1	355	G	C2-N3	13.93	1.43	1.32
38	A1	2050	U	C2-N3	13.93	1.47	1.37
38	A1	405	G	C6-N1	13.89	1.49	1.39
38	A1	2374	C	N1-C6	13.89	1.45	1.37
11	B2	957	A	N9-C4	13.86	1.46	1.37
11	B2	1306	A	N7-C5	-13.86	1.30	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1248	A	N7-C5	-13.86	1.30	1.39
38	A1	2348	G	N1-C2	13.86	1.48	1.37
38	A1	273	G	C8-N7	13.85	1.39	1.30
38	A1	395	G	N3-C4	13.85	1.45	1.35
11	B2	1010	G	N7-C5	-13.84	1.30	1.39
11	B2	332	C	N3-C4	13.83	1.43	1.33
38	A1	573	G	N1-C2	13.81	1.48	1.37
38	A1	2049	U	C2-N3	13.80	1.47	1.37
38	A1	2001	U	C2-N3	13.78	1.47	1.37
38	A1	2404	G	N7-C5	-13.78	1.30	1.39
11	B2	67	C	C4-N4	13.75	1.46	1.33
11	B2	1397	C	N3-C4	13.73	1.43	1.33
38	A1	1680	G	C5-C4	13.72	1.48	1.38
38	A1	781	C	N3-C4	13.70	1.43	1.33
38	A1	217	A	C6-N1	13.70	1.45	1.35
38	A1	2441	A	N7-C5	-13.66	1.31	1.39
38	A1	2077	A	N3-C4	-13.64	1.26	1.34
38	A1	472	A	N9-C4	-13.63	1.29	1.37
38	A1	1145	G	N9-C8	13.62	1.47	1.37
38	A1	560	G	N7-C5	-13.61	1.31	1.39
38	A1	2780	G	C2-N3	13.61	1.43	1.32
38	A1	507	G	C6-N1	13.61	1.49	1.39
11	B2	1443	G	N1-C2	13.60	1.48	1.37
11	B2	1201	G	P-O5'	-13.58	1.46	1.59
11	B2	520	G	C5-C4	13.57	1.47	1.38
38	A1	367	G	C2-N3	13.56	1.43	1.32
38	A1	404	G	N1-C2	13.55	1.48	1.37
11	B2	1388	G	P-O5'	13.55	1.73	1.59
11	B2	1026	A	N7-C5	-13.54	1.31	1.39
38	A1	1573	A	N3-C4	-13.53	1.26	1.34
38	A1	1161	A	N7-C5	-13.52	1.31	1.39
38	A1	1754	A	C6-N6	13.51	1.44	1.33
11	B2	1334	A	N3-C4	13.50	1.43	1.34
11	B2	157	A	N3-C4	-13.48	1.26	1.34
11	B2	1196	A	N3-C4	-13.48	1.26	1.34
11	B2	426	C	N1-C6	13.48	1.45	1.37
11	B2	1440	G	N3-C4	-13.47	1.26	1.35
38	A1	2088	G	N1-C2	13.47	1.48	1.37
39	A3	71	G	N7-C5	13.47	1.47	1.39
11	B2	1382	G	N7-C5	-13.46	1.31	1.39
11	B2	164	A	C6-N6	13.46	1.44	1.33
38	A1	357	G	N7-C5	-13.42	1.31	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2659	G	N3-C4	-13.42	1.26	1.35
38	A1	1492	C	N3-C4	13.42	1.43	1.33
11	B2	415	C	N1-C6	13.41	1.45	1.37
10	B1	33	C	C4-N4	13.40	1.46	1.33
38	A1	1006	A	C6-N6	13.40	1.44	1.33
38	A1	354	G	N1-C2	13.39	1.48	1.37
11	B2	1390	G	C6-N1	13.39	1.49	1.39
38	A1	1215	C	N1-C6	13.36	1.45	1.37
38	A1	2062	A	C6-N6	13.36	1.44	1.33
38	A1	1936	C	N1-C6	13.33	1.45	1.37
11	B2	1352	G	N7-C5	-13.33	1.31	1.39
11	B2	1279	A	N9-C4	-13.32	1.29	1.37
38	A1	259	A	N7-C5	-13.31	1.31	1.39
38	A1	3015	A	C6-N6	13.31	1.44	1.33
38	A1	1449	C	N1-C6	13.30	1.45	1.37
38	A1	2995	A	C6-N1	13.30	1.44	1.35
38	A1	2754	A	N7-C5	-13.30	1.31	1.39
38	A1	3008	C	N1-C6	13.28	1.45	1.37
38	A1	2302	C	N1-C6	13.27	1.45	1.37
11	B2	1139	A	N7-C5	-13.27	1.31	1.39
11	B2	795	G	C6-N1	13.26	1.48	1.39
11	B2	1373	A	N9-C4	-13.26	1.29	1.37
11	B2	196	G	C6-N1	13.25	1.48	1.39
38	A1	1661	A	C5-C4	13.24	1.48	1.38
38	A1	2738	G	N7-C5	-13.22	1.31	1.39
38	A1	61	G	N7-C5	-13.22	1.31	1.39
38	A1	2873	G	C6-N1	13.22	1.48	1.39
11	B2	1251	C	N1-C6	-13.21	1.29	1.37
38	A1	1295	G	N7-C5	-13.20	1.31	1.39
11	B2	459	G	N1-C2	13.19	1.48	1.37
38	A1	2063	U	C5'-C4'	13.19	1.67	1.51
38	A1	2787	G	C2-N3	13.18	1.43	1.32
38	A1	1136	G	N1-C2	13.14	1.48	1.37
38	A1	1027	A	N7-C5	-13.13	1.31	1.39
38	A1	2408	G	C2-N3	13.12	1.43	1.32
38	A1	1717	C	N1-C6	13.09	1.45	1.37
38	A1	1976	C	N3-C4	13.09	1.43	1.33
38	A1	2383	A	C6-N1	13.08	1.44	1.35
38	A1	680	U	P-O5'	-13.07	1.46	1.59
39	A3	57	C	C4-N4	13.06	1.45	1.33
38	A1	63	A	C6-N6	13.05	1.44	1.33
38	A1	2239	C	C4-N4	13.05	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1146	G	C2-N3	13.04	1.43	1.32
38	A1	1849	A	C6-N1	13.03	1.44	1.35
11	B2	942	A	N7-C5	-13.02	1.31	1.39
11	B2	953	C	N1-C6	13.01	1.45	1.37
38	A1	1623	C	C4-N4	13.00	1.45	1.33
38	A1	1595	G	N7-C5	-13.00	1.31	1.39
38	A1	2981	G	C2-N3	12.98	1.43	1.32
11	B2	1111	G	C2-N3	12.98	1.43	1.32
11	B2	1159	U	C2-N3	12.98	1.46	1.37
39	A3	124	A	N7-C5	-12.97	1.31	1.39
38	A1	998	G	C8-N7	-12.94	1.23	1.30
11	B2	271	G	C8-N7	-12.93	1.23	1.30
38	A1	123	A	N9-C4	-12.93	1.30	1.37
38	A1	625	A	N3-C4	-12.91	1.27	1.34
38	A1	2240	G	C2-N3	12.90	1.43	1.32
38	A1	617	G	C6-N1	12.90	1.48	1.39
11	B2	1457	A	N9-C4	12.89	1.45	1.37
38	A1	1923	A	N7-C5	-12.87	1.31	1.39
11	B2	672	G	C8-N7	12.86	1.38	1.30
38	A1	563	A	C6-N1	12.85	1.44	1.35
38	A1	2506	G	N7-C5	-12.85	1.31	1.39
38	A1	2547	A	N3-C4	-12.83	1.27	1.34
11	B2	210	A	N9-C4	12.83	1.45	1.37
38	A1	940	G	N9-C4	12.82	1.48	1.38
38	A1	2032	G	C8-N7	-12.82	1.23	1.30
38	A1	2388	U	N3-C4	12.82	1.50	1.38
38	A1	3045	G	N7-C5	-12.81	1.31	1.39
38	A1	1275	G	C6-N1	12.80	1.48	1.39
38	A1	2714	G	C6-N1	12.80	1.48	1.39
38	A1	291	A	C5-C4	12.79	1.47	1.38
38	A1	544	A	N7-C5	-12.79	1.31	1.39
38	A1	1946	G	N7-C5	-12.79	1.31	1.39
11	B2	732	G	C2-N3	12.79	1.43	1.32
11	B2	35	G	N7-C5	-12.78	1.31	1.39
11	B2	266	A	N7-C5	-12.77	1.31	1.39
11	B2	1050	G	N3-C4	-12.74	1.26	1.35
38	A1	2759	A	C6-N6	12.73	1.44	1.33
38	A1	2571	G	C6-N1	12.72	1.48	1.39
11	B2	1024	G	C6-N1	12.72	1.48	1.39
11	B2	1379	G	C2-N3	12.71	1.43	1.32
38	A1	366	G	N1-C2	12.71	1.48	1.37
38	A1	450	G	N1-C2	12.71	1.48	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	971	G	C8-N7	12.70	1.38	1.30
38	A1	966	G	C8-N7	-12.69	1.23	1.30
38	A1	1593	C	N3-C4	12.68	1.42	1.33
11	B2	748	A	N3-C4	12.67	1.42	1.34
11	B2	166	A	N7-C5	-12.66	1.31	1.39
38	A1	1885	G	C2-N3	12.65	1.42	1.32
11	B2	369	A	C8-N7	-12.62	1.22	1.31
11	B2	602	G	N7-C5	-12.62	1.31	1.39
38	A1	1003	C	C4-N4	12.60	1.45	1.33
11	B2	507	G	N1-C2	12.60	1.47	1.37
11	B2	929	C	N1-C6	12.60	1.44	1.37
38	A1	184	A	N7-C5	-12.59	1.31	1.39
38	A1	446	G	C2-N3	12.59	1.42	1.32
38	A1	1723	A	N7-C5	-12.59	1.31	1.39
38	A1	2488	C	N3-C4	12.59	1.42	1.33
38	A1	537	U	C2-N3	12.58	1.46	1.37
38	A1	2682	G	C8-N7	-12.58	1.23	1.30
38	A1	1459	A	N9-C4	12.58	1.45	1.37
38	A1	1873	G	C2-N3	12.57	1.42	1.32
38	A1	2680	A	N7-C5	-12.57	1.31	1.39
38	A1	541	A	C6-N1	12.56	1.44	1.35
38	A1	149	G	N1-C2	12.55	1.47	1.37
38	A1	1465	A	C5-C4	12.55	1.47	1.38
11	B2	601	G	N7-C5	-12.54	1.31	1.39
38	A1	2212	C	C4-N4	12.54	1.45	1.33
38	A1	81	G	N7-C5	-12.53	1.31	1.39
38	A1	1652	A	N9-C4	-12.53	1.30	1.37
11	B2	1444	G	N7-C5	-12.53	1.31	1.39
38	A1	2773	A	N7-C5	-12.53	1.31	1.39
38	A1	2512	C	N1-C6	12.52	1.44	1.37
38	A1	117	A	N7-C5	-12.52	1.31	1.39
38	A1	2948	A	C5-C4	12.52	1.47	1.38
11	B2	1031	G	N7-C5	-12.52	1.31	1.39
38	A1	402	G	N1-C2	12.51	1.47	1.37
11	B2	1344	U	C2-N3	12.48	1.46	1.37
38	A1	125	C	C4-N4	12.46	1.45	1.33
38	A1	936	G	N1-C2	12.46	1.47	1.37
38	A1	1888	G	C6-N1	12.46	1.48	1.39
38	A1	643	G	C6-N1	12.46	1.48	1.39
38	A1	2272	G	C8-N7	12.46	1.38	1.30
11	B2	39	U	C2-N3	12.45	1.46	1.37
38	A1	1783	U	C2-N3	12.45	1.46	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
39	A3	38	U	C2-N3	12.45	1.46	1.37
38	A1	1238	G	C5-C6	-12.45	1.29	1.42
38	A1	2051	A	N7-C5	-12.45	1.31	1.39
11	B2	190	C	N1-C6	12.44	1.44	1.37
10	B1	38	G	C6-N1	12.44	1.48	1.39
38	A1	418	C	C4-N4	12.44	1.45	1.33
38	A1	1715	G	C6-N1	12.44	1.48	1.39
38	A1	1475	G	C6-N1	12.43	1.48	1.39
11	B2	412	U	C2-N3	12.42	1.46	1.37
38	A1	1334	G	C2-N3	12.42	1.42	1.32
39	A3	100	A	C6-N1	12.42	1.44	1.35
11	B2	937	A	C6-N1	12.41	1.44	1.35
38	A1	579	C	C4-C5	12.40	1.52	1.43
11	B2	506	G	N7-C5	-12.40	1.31	1.39
11	B2	560	A	C5-C4	12.40	1.47	1.38
11	B2	55	G	C8-N7	12.39	1.38	1.30
38	A1	1915	G	C2-N3	12.39	1.42	1.32
38	A1	2020	G	C6-N1	12.38	1.48	1.39
38	A1	1734	G	C6-N1	12.37	1.48	1.39
11	B2	1234	A	C5-C4	12.36	1.47	1.38
38	A1	983	G	N7-C5	-12.36	1.31	1.39
11	B2	428	G	N7-C5	-12.34	1.31	1.39
38	A1	123	A	N7-C5	-12.33	1.31	1.39
38	A1	516	A	C6-N1	12.33	1.44	1.35
38	A1	1589	G	N1-C2	12.31	1.47	1.37
11	B2	1260	G	C6-N1	12.30	1.48	1.39
38	A1	1818	G	C2-N3	12.29	1.42	1.32
38	A1	2493	A	N7-C5	-12.29	1.31	1.39
38	A1	1513	G	C6-N1	12.28	1.48	1.39
11	B2	682	A	C5-C4	12.27	1.47	1.38
38	A1	1984	G	N7-C5	-12.27	1.31	1.39
38	A1	2861	A	N3-C4	-12.26	1.27	1.34
38	A1	919	G	N7-C5	-12.25	1.31	1.39
38	A1	3046	C	C2-N3	12.25	1.45	1.35
38	A1	1564	C	N1-C6	-12.23	1.29	1.37
38	A1	2569	G	C2-N3	12.23	1.42	1.32
11	B2	1206	G	N9-C8	12.23	1.46	1.37
38	A1	1507	A	C6-N1	12.22	1.44	1.35
38	A1	1394	G	N7-C5	-12.22	1.31	1.39
38	A1	127	C	N1-C6	12.21	1.44	1.37
38	A1	252	A	N7-C5	-12.21	1.31	1.39
11	B2	1251	C	C4-N4	12.19	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1510	U	C2-N3	12.19	1.46	1.37
38	A1	208	A	C5-C4	12.17	1.47	1.38
38	A1	2246	G	C6-N1	12.17	1.48	1.39
38	A1	2279	G	C5-C4	12.17	1.46	1.38
38	A1	1238	G	C8-N7	12.17	1.38	1.30
11	B2	1407	U	C5'-C4'	12.16	1.66	1.51
38	A1	1333	G	N7-C5	12.16	1.46	1.39
38	A1	1975	C	N1-C6	12.16	1.44	1.37
38	A1	2945	A	N3-C4	12.14	1.42	1.34
38	A1	2505	A	N9-C4	12.13	1.45	1.37
38	A1	503	U	C2-N3	12.12	1.46	1.37
38	A1	2529	G	N7-C5	-12.12	1.31	1.39
11	B2	25	C	N3-C4	12.12	1.42	1.33
38	A1	1643	A	N9-C8	12.11	1.47	1.37
11	B2	105	C	C4-N4	12.11	1.44	1.33
38	A1	2946	C	N3-C4	12.10	1.42	1.33
38	A1	2259	G	N7-C5	12.10	1.46	1.39
38	A1	810	A	N7-C5	-12.09	1.31	1.39
11	B2	201	G	C6-N1	12.08	1.48	1.39
38	A1	1117	C	C2-N3	12.08	1.45	1.35
38	A1	2412	A	N3-C4	-12.07	1.27	1.34
38	A1	189	U	C4-C5	12.07	1.54	1.43
38	A1	1563	G	C2-N3	12.06	1.42	1.32
38	A1	1694	G	N1-C2	12.06	1.47	1.37
38	A1	1870	G	N9-C4	-12.05	1.28	1.38
38	A1	437	G	C4'-C3'	12.05	1.66	1.53
38	A1	540	A	C6-N6	12.05	1.43	1.33
39	A3	15	G	C6-N1	12.05	1.48	1.39
38	A1	2756	G	N1-C2	12.04	1.47	1.37
11	B2	61	A	C6-N6	12.04	1.43	1.33
38	A1	2171	G	N1-C2	12.03	1.47	1.37
38	A1	2794	G	N7-C5	-12.03	1.32	1.39
11	B2	1254	C	N3-C4	12.03	1.42	1.33
11	B2	1452	G	C2-N3	12.03	1.42	1.32
38	A1	816	C	N1-C6	12.02	1.44	1.37
38	A1	881	G	N9-C8	12.02	1.46	1.37
11	B2	959	G	N1-C2	12.02	1.47	1.37
11	B2	1390	G	N7-C5	-12.01	1.32	1.39
38	A1	731	C	N3-C4	12.01	1.42	1.33
11	B2	354	G	C6-N1	12.00	1.48	1.39
11	B2	11	A	N7-C5	-11.99	1.32	1.39
38	A1	929	G	N7-C5	-11.98	1.32	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	718	G	C2-N3	11.98	1.42	1.32
38	A1	2605	G	N7-C5	-11.98	1.32	1.39
11	B2	1494	C	C4-N4	11.98	1.44	1.33
38	A1	1707	A	N7-C5	-11.97	1.32	1.39
38	A1	307	C	C4-N4	11.97	1.44	1.33
11	B2	702	G	N1-C2	11.97	1.47	1.37
38	A1	1659	G	N7-C5	-11.97	1.32	1.39
11	B2	542	G	C2-N3	11.95	1.42	1.32
38	A1	474	G	N7-C5	-11.94	1.32	1.39
38	A1	2332	G	N7-C5	-11.95	1.32	1.39
38	A1	1297	C	N3-C4	11.94	1.42	1.33
38	A1	1290	G	C8-N7	-11.94	1.23	1.30
38	A1	317	A	N9-C4	11.93	1.45	1.37
38	A1	2371	A	C6-N1	11.93	1.43	1.35
38	A1	696	G	C6-N1	11.92	1.47	1.39
38	A1	905	G	C6-N1	11.92	1.47	1.39
38	A1	2013	A	N7-C5	-11.92	1.32	1.39
11	B2	1435	G	N9-C8	11.91	1.46	1.37
11	B2	784	G	N7-C5	-11.90	1.32	1.39
11	B2	779	G	N1-C2	11.90	1.47	1.37
38	A1	50	C	C4-N4	11.90	1.44	1.33
38	A1	1786	G	N7-C5	-11.90	1.32	1.39
11	B2	1119	U	C2-N3	11.89	1.46	1.37
38	A1	142	G	C8-N7	11.89	1.38	1.30
38	A1	2785	G	C6-N1	11.88	1.47	1.39
11	B2	963	A	C6-N6	11.87	1.43	1.33
11	B2	1441	G	N1-C2	11.87	1.47	1.37
11	B2	499	G	C2-N3	11.87	1.42	1.32
38	A1	2303	A	C6-N6	11.86	1.43	1.33
38	A1	1353	A	C6-N1	11.85	1.43	1.35
38	A1	2642	C	C2'-C1'	-11.85	1.40	1.53
11	B2	539	C	N1-C6	11.85	1.44	1.37
38	A1	403	G	C2-N3	11.84	1.42	1.32
38	A1	1469	U	N3-C4	11.83	1.49	1.38
38	A1	2023	A	N7-C5	-11.83	1.32	1.39
11	B2	393	A	C5'-C4'	11.82	1.65	1.51
11	B2	846	G	C2-N3	11.82	1.42	1.32
11	B2	1455	A	C6-N6	11.80	1.43	1.33
38	A1	26	G	C2-N3	11.80	1.42	1.32
38	A1	627	G	C6-N1	11.80	1.47	1.39
39	A3	12	G	C6-N1	11.79	1.47	1.39
11	B2	1113	G	C8-N7	11.77	1.38	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2008	G	N3-C4	11.77	1.43	1.35
38	A1	699	A	C5-C4	-11.75	1.30	1.38
38	A1	453	U	C2-N3	11.72	1.46	1.37
38	A1	1732	C	N3-C4	11.72	1.42	1.33
11	B2	542	G	N1-C2	11.72	1.47	1.37
38	A1	1181	C	C4-N4	11.72	1.44	1.33
38	A1	1379	A	N9-C4	11.71	1.44	1.37
11	B2	147	A	N7-C5	-11.71	1.32	1.39
38	A1	2303	A	C8-N7	-11.71	1.23	1.31
38	A1	1789	A	C2'-C1'	-11.71	1.40	1.53
11	B2	637	G	N3-C4	11.71	1.43	1.35
11	B2	260	C	N1-C6	11.70	1.44	1.37
38	A1	2989	A	N7-C5	-11.70	1.32	1.39
11	B2	119	A	N9-C4	11.70	1.44	1.37
38	A1	2137	A	N9-C4	-11.70	1.30	1.37
38	A1	1488	C	N3-C4	11.69	1.42	1.33
38	A1	1802	G	N1-C2	11.69	1.47	1.37
38	A1	2252	C	N1-C6	-11.69	1.30	1.37
38	A1	224	G	N1-C2	11.68	1.47	1.37
38	A1	2270	G	N9-C8	11.68	1.46	1.37
11	B2	164	A	C5-C4	11.67	1.47	1.38
11	B2	1142	G	N1-C2	11.67	1.47	1.37
38	A1	181	U	C2-N3	11.67	1.46	1.37
11	B2	1368	A	C6-N1	11.66	1.43	1.35
38	A1	1753	G	C2-N3	11.66	1.42	1.32
38	A1	1684	C	N1-C6	11.66	1.44	1.37
11	B2	772	G	C8-N7	11.66	1.38	1.30
38	A1	1524	A	N9-C4	-11.66	1.30	1.37
11	B2	910	G	C6-N1	11.65	1.47	1.39
11	B2	454	G	C6-N1	11.65	1.47	1.39
11	B2	1071	C	N3-C4	11.65	1.42	1.33
38	A1	2653	G	C8-N7	-11.65	1.24	1.30
38	A1	415	U	C2-N3	11.65	1.46	1.37
38	A1	1143	A	C8-N7	-11.65	1.23	1.31
38	A1	1059	C	N1-C6	11.65	1.44	1.37
10	B1	62	C	N1-C6	11.64	1.44	1.37
38	A1	1845	C	N1-C6	-11.64	1.30	1.37
38	A1	1208	A	C6-N1	11.62	1.43	1.35
39	A3	41	A	C5-C4	11.62	1.46	1.38
38	A1	2272	G	N1-C2	11.61	1.47	1.37
11	B2	581	G	N7-C5	-11.61	1.32	1.39
38	A1	1898	A	N3-C4	-11.61	1.27	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	633	A	N3-C4	-11.61	1.27	1.34
11	B2	436	A	N9-C4	-11.60	1.30	1.37
38	A1	1173	G	C8-N7	-11.59	1.24	1.30
38	A1	674	G	N7-C5	-11.59	1.32	1.39
38	A1	1270	G	P-O5'	-11.59	1.48	1.59
11	B2	1136	A	C6-N6	11.59	1.43	1.33
38	A1	1781	C	N1-C6	11.58	1.44	1.37
38	A1	2311	C	N1-C6	11.58	1.44	1.37
38	A1	695	G	N1-C2	11.57	1.47	1.37
11	B2	122	C	C4-N4	11.57	1.44	1.33
38	A1	2391	G	C6-N1	11.57	1.47	1.39
38	A1	2352	G	N1-C2	11.56	1.47	1.37
11	B2	90	C	N3-C4	11.56	1.42	1.33
10	B1	26	C	N3-C4	11.55	1.42	1.33
11	B2	145	A	C6-N6	11.55	1.43	1.33
38	A1	831	C	N3-C4	11.54	1.42	1.33
38	A1	1867	C	N1-C6	-11.54	1.30	1.37
38	A1	1978	A	N9-C4	-11.54	1.30	1.37
38	A1	1759	A	N7-C5	-11.54	1.32	1.39
38	A1	1170	G	C5-C4	11.54	1.46	1.38
38	A1	1406	G	C2-N3	11.54	1.42	1.32
38	A1	2190	A	N7-C5	-11.53	1.32	1.39
38	A1	2458	U	C2-N3	11.53	1.45	1.37
11	B2	1112	G	N7-C5	-11.52	1.32	1.39
38	A1	2391	G	C2'-C1'	-11.52	1.40	1.53
38	A1	2210	G	N9-C8	11.52	1.46	1.37
38	A1	1625	A	C6-N6	11.52	1.43	1.33
11	B2	771	G	C2-N2	11.51	1.46	1.34
38	A1	591	G	N9-C4	-11.49	1.28	1.38
38	A1	49	A	N3-C4	-11.49	1.27	1.34
11	B2	748	A	N7-C5	-11.48	1.32	1.39
38	A1	2659	G	N9-C8	11.48	1.45	1.37
38	A1	569	G	C2-N3	11.48	1.42	1.32
11	B2	1366	U	C2-N3	11.48	1.45	1.37
38	A1	1579	G	C2-N3	11.48	1.42	1.32
38	A1	1185	A	N9-C4	11.47	1.44	1.37
11	B2	1394	G	C4'-O4'	11.47	1.60	1.45
38	A1	440	A	C2-N3	11.47	1.43	1.33
38	A1	1230	G	C6-N1	11.47	1.47	1.39
11	B2	277	G	C6-N1	11.45	1.47	1.39
11	B2	1239	A	N7-C5	-11.43	1.32	1.39
38	A1	63	A	N7-C5	-11.43	1.32	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	261	A	C6-N6	11.43	1.43	1.33
38	A1	1511	C	N3-C4	11.43	1.42	1.33
38	A1	2651	G	C2-N3	11.43	1.41	1.32
38	A1	2610	C	C4-N4	11.43	1.44	1.33
11	B2	1150	G	P-O5'	-11.43	1.48	1.59
11	B2	1422	G	C2-N3	11.42	1.41	1.32
11	B2	880	G	N7-C5	-11.42	1.32	1.39
38	A1	1212	A	N9-C4	11.42	1.44	1.37
38	A1	715	G	C5-C4	-11.41	1.30	1.38
11	B2	967	C	C4-N4	11.41	1.44	1.33
38	A1	920	G	N7-C5	-11.40	1.32	1.39
38	A1	1776	G	C2-N3	11.40	1.41	1.32
11	B2	552	C	N1-C6	11.39	1.44	1.37
38	A1	2949	G	C2-N3	11.39	1.41	1.32
11	B2	630	A	N3-C4	-11.39	1.28	1.34
11	B2	37	G	C2-N3	11.38	1.41	1.32
38	A1	1264	G	C5'-C4'	11.38	1.65	1.51
38	A1	606	A	C6-N1	11.38	1.43	1.35
38	A1	1461	G	C5-C4	-11.38	1.30	1.38
11	B2	682	A	N7-C5	-11.38	1.32	1.39
11	B2	479	C	C4-N4	11.38	1.44	1.33
38	A1	526	C	N1-C6	11.38	1.44	1.37
38	A1	2012	G	C2-N3	11.37	1.41	1.32
11	B2	350	G	N7-C5	11.37	1.46	1.39
11	B2	666	G	N9-C8	11.36	1.45	1.37
38	A1	1802	G	C8-N7	-11.36	1.24	1.30
38	A1	2721	C	C4-C5	11.36	1.52	1.43
11	B2	487	U	C2-N3	11.35	1.45	1.37
38	A1	2825	A	C6-N6	11.35	1.43	1.33
38	A1	2053	G	C5-C4	11.35	1.46	1.38
11	B2	1104	G	N1-C2	11.35	1.46	1.37
11	B2	1236	G	C6-N1	11.34	1.47	1.39
38	A1	1442	G	N7-C5	-11.34	1.32	1.39
38	A1	1376	U	C2-N3	11.34	1.45	1.37
11	B2	772	G	C2-N3	11.33	1.41	1.32
11	B2	211	G	C2-N3	11.33	1.41	1.32
11	B2	627	G	N9-C8	11.33	1.45	1.37
38	A1	2538	G	N3-C4	-11.33	1.27	1.35
11	B2	153	G	N7-C5	-11.33	1.32	1.39
11	B2	1005	G	C6-N1	11.32	1.47	1.39
11	B2	1117	A	C8-N7	-11.32	1.23	1.31
38	A1	2554	A	C6-N1	11.31	1.43	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1361	G	C6-N1	11.29	1.47	1.39
38	A1	2247	G	N7-C5	-11.29	1.32	1.39
11	B2	1237	G	N3-C4	11.29	1.43	1.35
38	A1	1566	G	N7-C5	-11.28	1.32	1.39
38	A1	2585	G	N7-C5	-11.28	1.32	1.39
11	B2	226	G	N1-C2	11.28	1.46	1.37
11	B2	1377	G	O3'-P	-11.28	1.47	1.61
38	A1	2322	A	N3-C4	11.27	1.41	1.34
39	A3	72	G	C6-N1	11.27	1.47	1.39
38	A1	3002	A	C6-N6	11.26	1.43	1.33
11	B2	1307	G	N1-C2	11.26	1.46	1.37
38	A1	451	C	C4-N4	11.26	1.44	1.33
38	A1	364	A	C6-N6	11.25	1.43	1.33
38	A1	844	C	N3-C4	11.25	1.41	1.33
38	A1	2167	C	N3-C4	11.25	1.41	1.33
38	A1	2182	A	C6-N1	11.25	1.43	1.35
38	A1	2837	C	P-O5'	-11.25	1.48	1.59
11	B2	537	G	N7-C5	11.25	1.46	1.39
38	A1	3000	U	P-O5'	-11.25	1.48	1.59
11	B2	799	C	N1-C6	-11.24	1.30	1.37
38	A1	1104	A	N7-C5	-11.24	1.32	1.39
38	A1	1836	A	C6-N1	11.24	1.43	1.35
38	A1	2770	A	N7-C5	-11.24	1.32	1.39
11	B2	1191	G	C2-N3	11.24	1.41	1.32
38	A1	1287	G	N7-C5	-11.24	1.32	1.39
38	A1	1846	G	N9-C8	11.24	1.45	1.37
11	B2	1206	G	C6-N1	11.24	1.47	1.39
11	B2	402	G	N1-C2	11.24	1.46	1.37
38	A1	2023	A	C6-N1	11.23	1.43	1.35
38	A1	1161	A	C6-N6	11.23	1.43	1.33
11	B2	196	G	C2-N2	11.22	1.45	1.34
11	B2	1418	G	C2-N3	11.22	1.41	1.32
38	A1	1417	U	C4-C5	11.22	1.53	1.43
38	A1	2497	G	N7-C5	-11.22	1.32	1.39
11	B2	645	G	C6-N1	11.21	1.47	1.39
11	B2	523	C	N1-C6	11.21	1.43	1.37
11	B2	1211	A	C8-N7	-11.21	1.23	1.31
38	A1	2104	G	C2-N3	11.21	1.41	1.32
38	A1	317	A	C6-N6	11.20	1.43	1.33
38	A1	2509	A	N7-C5	-11.20	1.32	1.39
38	A1	2432	G	N7-C5	-11.19	1.32	1.39
11	B2	204	G	C2-N3	11.19	1.41	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	781	U	O3'-P	-11.19	1.47	1.61
38	A1	2496	G	N7-C5	-11.18	1.32	1.39
11	B2	1448	A	N7-C5	-11.18	1.32	1.39
11	B2	347	G	N7-C5	-11.18	1.32	1.39
11	B2	307	G	N9-C8	11.17	1.45	1.37
38	A1	2620	G	N7-C5	-11.17	1.32	1.39
38	A1	2548	A	C6-N1	11.16	1.43	1.35
38	A1	1122	C	N3-C4	11.15	1.41	1.33
38	A1	2096	G	C6-N1	11.15	1.47	1.39
11	B2	1240	A	C6-N1	11.15	1.43	1.35
38	A1	81	G	N1-C2	11.15	1.46	1.37
38	A1	438	G	N9-C8	11.14	1.45	1.37
38	A1	951	C	N3-C4	11.14	1.41	1.33
38	A1	2718	G	C8-N7	-11.14	1.24	1.30
11	B2	53	G	N9-C8	-11.14	1.30	1.37
11	B2	1040	A	N3-C4	11.14	1.41	1.34
38	A1	692	C	C4-N4	11.13	1.44	1.33
11	B2	501	G	N7-C5	-11.13	1.32	1.39
11	B2	1040	A	N9-C4	-11.13	1.31	1.37
38	A1	721	G	C2-N3	11.12	1.41	1.32
38	A1	2629	U	C2-N3	11.12	1.45	1.37
38	A1	2962	A	N3-C4	11.12	1.41	1.34
38	A1	496	A	C5-C4	-11.12	1.30	1.38
38	A1	2585	G	N9-C4	-11.12	1.29	1.38
38	A1	2707	G	C6-N1	11.12	1.47	1.39
11	B2	10	G	C2-N2	11.12	1.45	1.34
38	A1	803	A	C6-N6	11.12	1.42	1.33
38	A1	2653	G	N3-C4	11.11	1.43	1.35
38	A1	3010	C	N3-C4	11.11	1.41	1.33
39	A3	3	G	C8-N7	-11.10	1.24	1.30
38	A1	763	A	N7-C5	-11.10	1.32	1.39
38	A1	15	A	N3-C4	-11.09	1.28	1.34
38	A1	1174	U	C2-N3	11.09	1.45	1.37
38	A1	2975	A	N9-C4	11.09	1.44	1.37
38	A1	2652	G	C6-N1	11.09	1.47	1.39
11	B2	1013	G	C6-N1	11.08	1.47	1.39
38	A1	1386	G	P-O5'	-11.08	1.48	1.59
38	A1	828	G	N7-C5	-11.07	1.32	1.39
38	A1	2958	U	C5'-C4'	11.07	1.64	1.51
38	A1	541	A	C6-N6	11.06	1.42	1.33
38	A1	837	G	C6-N1	11.06	1.47	1.39
38	A1	2832	G	C6-N1	11.06	1.47	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	212	A	C5-C4	11.06	1.46	1.38
38	A1	1970	G	C6-N1	11.06	1.47	1.39
11	B2	714	G	C2-N3	11.05	1.41	1.32
11	B2	202	G	N9-C8	11.05	1.45	1.37
11	B2	1426	C	N1-C6	11.05	1.43	1.37
39	A3	77	A	N7-C5	-11.05	1.32	1.39
38	A1	1881	A	N3-C4	-11.04	1.28	1.34
11	B2	302	A	N7-C5	-11.04	1.32	1.39
38	A1	2734	C	N1-C6	11.04	1.43	1.37
11	B2	970	G	N1-C2	11.04	1.46	1.37
11	B2	626	G	C5-C4	11.04	1.46	1.38
38	A1	1136	G	N9-C8	-11.04	1.30	1.37
38	A1	2496	G	C6-N1	11.03	1.47	1.39
38	A1	2950	G	C5'-C4'	11.03	1.64	1.51
38	A1	170	A	N7-C5	-11.03	1.32	1.39
11	B2	55	G	N7-C5	-11.02	1.32	1.39
38	A1	368	U	O3'-P	-11.02	1.48	1.61
38	A1	780	G	C2-N3	11.01	1.41	1.32
38	A1	2269	C	N1-C6	11.01	1.43	1.37
38	A1	330	U	P-O5'	-11.01	1.48	1.59
38	A1	771	G	N9-C8	-11.01	1.30	1.37
11	B2	1409	G	N7-C5	-11.01	1.32	1.39
38	A1	2384	G	N7-C5	-11.01	1.32	1.39
38	A1	1267	A	N9-C4	-11.00	1.31	1.37
38	A1	2372	C	N3-C4	11.00	1.41	1.33
11	B2	975	A	C6-N6	11.00	1.42	1.33
38	A1	886	G	N1-C2	11.00	1.46	1.37
38	A1	2363	G	N9-C4	11.00	1.46	1.38
38	A1	808	A	N7-C5	-10.99	1.32	1.39
38	A1	2303	A	C5-C4	10.99	1.46	1.38
11	B2	1232	G	C6-N1	10.99	1.47	1.39
38	A1	859	G	C6-N1	10.99	1.47	1.39
38	A1	1013	G	C5-C4	10.97	1.46	1.38
38	A1	2304	C	N3-C4	10.97	1.41	1.33
38	A1	583	A	C6-N6	10.96	1.42	1.33
11	B2	1215	G	N9-C8	10.96	1.45	1.37
38	A1	2507	C	N1-C6	10.96	1.43	1.37
11	B2	167	G	N1-C2	10.96	1.46	1.37
38	A1	862	G	C8-N7	-10.95	1.24	1.30
38	A1	2463	G	C6-N1	10.96	1.47	1.39
11	B2	570	G	N1-C2	10.95	1.46	1.37
11	B2	1283	G	N7-C5	-10.95	1.32	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	368	C	C4-C5	10.95	1.51	1.43
38	A1	2042	A	C5-C4	10.95	1.46	1.38
38	A1	2393	G	N9-C4	-10.95	1.29	1.38
11	B2	24	C	P-O5'	-10.95	1.48	1.59
38	A1	103	A	N7-C5	-10.95	1.32	1.39
38	A1	733	A	C6-N6	10.95	1.42	1.33
39	A3	52	U	C2-N3	10.95	1.45	1.37
38	A1	402	G	C2-N2	10.94	1.45	1.34
38	A1	2195	G	C6-N1	10.94	1.47	1.39
38	A1	2314	U	N3-C4	10.94	1.48	1.38
38	A1	2862	A	C8-N7	-10.94	1.23	1.31
38	A1	1627	G	C8-N7	-10.94	1.24	1.30
11	B2	1393	A	N9-C4	10.94	1.44	1.37
11	B2	1024	G	N7-C5	-10.93	1.32	1.39
38	A1	954	A	N9-C4	10.93	1.44	1.37
11	B2	60	A	N7-C5	-10.93	1.32	1.39
11	B2	763	G	N7-C5	-10.93	1.32	1.39
11	B2	1429	G	N7-C5	-10.93	1.32	1.39
38	A1	1713	G	C6-N1	10.92	1.47	1.39
11	B2	372	G	N1-C2	10.91	1.46	1.37
38	A1	2869	U	C2-N3	10.91	1.45	1.37
38	A1	2097	G	N7-C5	-10.90	1.32	1.39
11	B2	911	C	N3-C4	10.90	1.41	1.33
38	A1	1584	G	C6-N1	10.90	1.47	1.39
11	B2	20	G	N9-C4	-10.90	1.29	1.38
32	BT	28	PHE	CG-CD2	10.89	1.55	1.38
11	B2	811	G	C6-N1	10.89	1.47	1.39
38	A1	2620	G	C6-N1	10.89	1.47	1.39
11	B2	1067	G	C2-N3	10.88	1.41	1.32
38	A1	1277	G	N1-C2	10.88	1.46	1.37
11	B2	1158	G	C8-N7	10.88	1.37	1.30
11	B2	1171	G	C5-C6	-10.88	1.31	1.42
11	B2	592	G	C2-N3	10.87	1.41	1.32
38	A1	2008	G	C6-N1	10.86	1.47	1.39
38	A1	2382	A	C6-N1	10.86	1.43	1.35
38	A1	2323	C	N3-C4	10.86	1.41	1.33
38	A1	1148	C	N3-C4	10.86	1.41	1.33
11	B2	1143	G	N7-C5	-10.85	1.32	1.39
11	B2	334	G	C6-N1	10.85	1.47	1.39
38	A1	2335	G	C5-C4	10.85	1.46	1.38
38	A1	840	G	C2-N3	10.84	1.41	1.32
10	B1	10	G	C2-N3	10.84	1.41	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	B1	53	G	N1-C2	10.83	1.46	1.37
11	B2	1356	A	C8-N7	-10.83	1.24	1.31
11	B2	1012	C	N3-C4	10.83	1.41	1.33
38	A1	394	A	N9-C4	10.83	1.44	1.37
11	B2	1218	C	N1-C6	10.83	1.43	1.37
38	A1	2685	G	N1-C2	10.82	1.46	1.37
38	A1	1723	A	N9-C4	-10.82	1.31	1.37
11	B2	283	U	C2-N3	10.82	1.45	1.37
38	A1	102	A	C2'-C1'	-10.82	1.41	1.53
11	B2	709	G	C6-N1	10.82	1.47	1.39
11	B2	772	G	C5-C4	10.82	1.46	1.38
11	B2	877	A	N9-C4	10.82	1.44	1.37
11	B2	1472	G	C2-N3	10.82	1.41	1.32
38	A1	2107	G	C6-N1	10.81	1.47	1.39
11	B2	1019	A	N3-C4	-10.81	1.28	1.34
11	B2	312	U	C2-N3	10.80	1.45	1.37
38	A1	19	G	N7-C5	-10.80	1.32	1.39
11	B2	1051	G	C6-N1	10.80	1.47	1.39
11	B2	288	G	C2-N3	10.80	1.41	1.32
11	B2	1055	C	C2'-C1'	-10.80	1.41	1.53
11	B2	492	G	N1-C2	10.79	1.46	1.37
38	A1	477	C	C4-N4	10.79	1.43	1.33
11	B2	665	G	C5-C4	10.79	1.46	1.38
11	B2	702	G	N7-C5	-10.79	1.32	1.39
11	B2	719	G	N9-C8	-10.79	1.30	1.37
38	A1	652	G	C8-N7	10.78	1.37	1.30
38	A1	866	G	N7-C5	-10.78	1.32	1.39
38	A1	2461	C	N1-C6	10.78	1.43	1.37
38	A1	372	A	C6-N1	10.77	1.43	1.35
11	B2	21	A	N9-C4	-10.77	1.31	1.37
38	A1	684	G	N7-C5	-10.77	1.32	1.39
38	A1	668	G	N7-C5	-10.77	1.32	1.39
38	A1	2090	A	N3-C4	-10.77	1.28	1.34
38	A1	1862	G	N9-C8	10.77	1.45	1.37
38	A1	1922	A	C6-N6	10.76	1.42	1.33
11	B2	1441	G	C8-N7	10.76	1.37	1.30
38	A1	2997	G	C6-N1	10.76	1.47	1.39
11	B2	399	A	C6-N6	10.75	1.42	1.33
38	A1	2029	C	N1-C6	10.75	1.43	1.37
11	B2	1032	A	N9-C4	-10.75	1.31	1.37
38	A1	1418	A	C6-N6	10.75	1.42	1.33
38	A1	1720	G	C2-N2	10.75	1.45	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1206	G	N3-C4	-10.74	1.27	1.35
11	B2	1301	U	C2-N3	10.74	1.45	1.37
11	B2	488	A	N9-C4	-10.73	1.31	1.37
38	A1	226	C	N3-C4	10.73	1.41	1.33
38	A1	2442	A	C2'-C1'	-10.73	1.41	1.53
11	B2	1372	C	N3-C4	10.73	1.41	1.33
38	A1	1398	C	N1-C6	10.73	1.43	1.37
11	B2	202	G	N1-C2	10.73	1.46	1.37
38	A1	2377	C	N1-C6	10.73	1.43	1.37
38	A1	397	G	C5-C4	-10.72	1.30	1.38
11	B2	850	A	N7-C5	-10.72	1.32	1.39
38	A1	601	A	N9-C4	-10.72	1.31	1.37
38	A1	803	A	N7-C5	-10.71	1.32	1.39
38	A1	1685	C	N1-C6	-10.72	1.30	1.37
11	B2	765	U	C2-N3	10.71	1.45	1.37
38	A1	116	G	C5'-C4'	10.71	1.64	1.51
38	A1	2184	G	O3'-P	-10.71	1.48	1.61
38	A1	563	A	C5-C4	10.70	1.46	1.38
38	A1	417	C	C4-N4	10.70	1.43	1.33
11	B2	1089	C	N3-C4	10.69	1.41	1.33
11	B2	874	G	N3-C4	-10.69	1.27	1.35
11	B2	1469	G	C2-N2	10.69	1.45	1.34
38	A1	2797	C	P-O5'	10.69	1.70	1.59
11	B2	365	C	N1-C2	10.68	1.50	1.40
38	A1	2175	G	N7-C5	-10.68	1.32	1.39
38	A1	2525	C	N3-C4	10.68	1.41	1.33
38	A1	2310	G	C8-N7	10.68	1.37	1.30
11	B2	1234	A	N7-C5	-10.68	1.32	1.39
11	B2	597	C	C4-C5	10.68	1.51	1.43
38	A1	13	U	C2-N3	10.67	1.45	1.37
38	A1	2109	C	C4-N4	10.67	1.43	1.33
38	A1	2811	U	N3-C4	10.67	1.48	1.38
38	A1	1352	U	C2-N3	10.66	1.45	1.37
38	A1	2028	G	C8-N7	-10.66	1.24	1.30
38	A1	1171	G	N7-C5	-10.65	1.32	1.39
38	A1	59	U	N1-C2	10.65	1.48	1.38
38	A1	2901	C	N1-C6	-10.65	1.30	1.37
38	A1	1591	C	N3-C4	10.64	1.41	1.33
11	B2	152	G	N3-C4	-10.64	1.28	1.35
38	A1	2994	G	C2-N3	10.64	1.41	1.32
38	A1	1578	C	N1-C6	10.64	1.43	1.37
38	A1	2589	C	C4-N4	10.63	1.43	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	81	G	C2-N3	10.63	1.41	1.32
11	B2	228	G	N1-C2	10.63	1.46	1.37
11	B2	217	C	N1-C6	10.62	1.43	1.37
11	B2	741	A	N9-C8	-10.62	1.29	1.37
38	A1	2745	G	C5'-C4'	10.62	1.64	1.51
38	A1	1220	U	C2-N3	10.62	1.45	1.37
38	A1	1932	G	N7-C5	10.62	1.45	1.39
38	A1	1309	G	N1-C2	10.62	1.46	1.37
11	B2	221	A	C6-N6	10.62	1.42	1.33
38	A1	1339	C	N1-C6	10.62	1.43	1.37
38	A1	266	A	N9-C4	10.62	1.44	1.37
11	B2	1203	G	N1-C2	10.61	1.46	1.37
38	A1	2785	G	C2'-C1'	-10.62	1.41	1.53
38	A1	2454	G	C8-N7	10.61	1.37	1.30
38	A1	2344	G	N1-C2	10.61	1.46	1.37
11	B2	830	A	N7-C5	-10.60	1.32	1.39
38	A1	497	G	N1-C2	10.60	1.46	1.37
38	A1	1995	C	C2-N3	10.60	1.44	1.35
11	B2	1086	C	N1-C6	10.60	1.43	1.37
38	A1	1021	G	C2-N3	10.60	1.41	1.32
11	B2	147	A	N9-C4	10.59	1.44	1.37
38	A1	1643	A	N7-C5	10.59	1.45	1.39
38	A1	586	A	N9-C4	10.58	1.44	1.37
38	A1	1293	G	C5'-C4'	10.58	1.64	1.51
38	A1	1692	A	N9-C4	10.58	1.44	1.37
38	A1	2021	G	C6-N1	10.58	1.47	1.39
10	B1	20	G	N1-C2	10.57	1.46	1.37
11	B2	1045	A	C6-N1	10.57	1.43	1.35
38	A1	1950	G	N1-C2	10.57	1.46	1.37
38	A1	627	G	C5'-C4'	-10.57	1.38	1.51
38	A1	208	A	N7-C5	-10.56	1.32	1.39
38	A1	343	C	N3-C4	10.56	1.41	1.33
38	A1	1018	G	N9-C8	10.56	1.45	1.37
38	A1	1277	G	N7-C5	-10.56	1.32	1.39
38	A1	2205	A	N7-C5	-10.56	1.32	1.39
11	B2	625	G	N7-C5	-10.56	1.32	1.39
38	A1	445	G	N9-C8	10.56	1.45	1.37
38	A1	2490	C	C5'-C4'	10.56	1.64	1.51
38	A1	2436	A	N3-C4	-10.55	1.28	1.34
38	A1	615	A	N7-C5	-10.55	1.32	1.39
38	A1	787	G	C2-N3	10.55	1.41	1.32
38	A1	502	G	C8-N7	-10.55	1.24	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1332	A	N7-C5	-10.54	1.32	1.39
11	B2	676	G	N3-C4	10.54	1.42	1.35
38	A1	1846	G	N7-C5	-10.54	1.32	1.39
39	A3	54	A	N7-C5	-10.54	1.32	1.39
39	A3	98	G	N1-C2	10.54	1.46	1.37
38	A1	2107	G	C2-N3	10.53	1.41	1.32
39	A3	11	A	C5'-C4'	10.54	1.64	1.51
38	A1	57	C	C4-N4	10.53	1.43	1.33
38	A1	1792	A	N7-C5	-10.53	1.32	1.39
38	A1	221	G	C5'-C4'	10.52	1.64	1.51
38	A1	2844	G	C8-N7	-10.52	1.24	1.30
38	A1	2877	A	N9-C4	10.52	1.44	1.37
38	A1	563	A	N7-C5	-10.52	1.32	1.39
38	A1	17	C	N3-C4	10.51	1.41	1.33
38	A1	2956	G	C6-N1	10.51	1.47	1.39
38	A1	468	A	N7-C5	-10.51	1.32	1.39
38	A1	695	G	C8-N7	10.51	1.37	1.30
11	B2	650	A	C8-N7	-10.51	1.24	1.31
38	A1	301	G	C6-N1	10.51	1.47	1.39
11	B2	566	C	C2-N3	10.50	1.44	1.35
11	B2	777	G	N9-C8	-10.50	1.30	1.37
11	B2	411	C	N3-C4	10.50	1.41	1.33
11	B2	1154	G	C2-N3	10.50	1.41	1.32
11	B2	1233	G	C6-N1	10.50	1.46	1.39
38	A1	557	G	C6-N1	10.49	1.46	1.39
38	A1	1116	A	C6-N1	10.49	1.42	1.35
11	B2	245	U	C2-N3	10.49	1.45	1.37
11	B2	951	G	C6-N1	10.48	1.46	1.39
38	A1	2554	A	N7-C5	-10.47	1.32	1.39
11	B2	448	A	C6-N1	10.47	1.42	1.35
39	A3	14	G	N1-C2	10.47	1.46	1.37
11	B2	1169	C	C4-C5	10.47	1.51	1.43
11	B2	390	G	O4'-C1'	10.46	1.55	1.41
38	A1	2451	G	N7-C5	-10.46	1.32	1.39
11	B2	666	G	C8-N7	-10.46	1.24	1.30
38	A1	936	G	C6-N1	10.46	1.46	1.39
38	A1	1021	G	N1-C2	10.45	1.46	1.37
11	B2	396	C	C5-C6	-10.45	1.25	1.34
38	A1	1450	C	N3-C4	10.45	1.41	1.33
38	A1	2944	G	N1-C2	10.45	1.46	1.37
38	A1	879	A	N7-C5	-10.45	1.32	1.39
38	A1	430	A	P-O5'	-10.45	1.49	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	551	A	N9-C4	10.45	1.44	1.37
38	A1	1622	G	C2-N3	10.45	1.41	1.32
38	A1	2835	A	N9-C4	-10.45	1.31	1.37
38	A1	3021	C	N3-C4	10.45	1.41	1.33
11	B2	182	A	C6-N6	10.44	1.42	1.33
38	A1	977	C	N1-C6	-10.44	1.30	1.37
11	B2	682	A	N3-C4	-10.44	1.28	1.34
38	A1	1994	G	N3-C4	10.44	1.42	1.35
11	B2	786	G	N1-C2	10.43	1.46	1.37
38	A1	1469	U	C2-N3	10.43	1.45	1.37
38	A1	2743	U	C2-N3	10.43	1.45	1.37
11	B2	842	U	C2-N3	10.43	1.45	1.37
11	B2	281	G	C4'-O4'	10.43	1.59	1.45
38	A1	1823	A	C6-N1	10.43	1.42	1.35
38	A1	1893	C	C4-N4	10.43	1.43	1.33
38	A1	801	A	C6-N6	10.42	1.42	1.33
11	B2	1479	C	N1-C6	10.42	1.43	1.37
39	A3	25	A	N7-C5	-10.42	1.32	1.39
11	B2	922	G	C6-N1	10.42	1.46	1.39
38	A1	1266	A	N3-C4	-10.42	1.28	1.34
38	A1	597	C	C4'-C3'	10.41	1.64	1.53
39	A3	53	A	N7-C5	-10.41	1.33	1.39
39	A3	94	G	N1-C2	10.41	1.46	1.37
11	B2	1098	G	C6-N1	10.41	1.46	1.39
38	A1	1485	A	N9-C4	10.41	1.44	1.37
38	A1	241	C	N1-C6	10.41	1.43	1.37
38	A1	860	A	N3-C4	10.41	1.41	1.34
11	B2	1396	C	N1-C6	10.40	1.43	1.37
38	A1	918	A	N7-C5	-10.40	1.33	1.39
38	A1	2860	G	N7-C5	-10.40	1.33	1.39
38	A1	1639	G	C8-N7	10.40	1.37	1.30
11	B2	321	A	C6-N1	10.40	1.42	1.35
11	B2	569	G	C5-C6	-10.40	1.31	1.42
11	B2	1094	U	C4-C5	10.40	1.52	1.43
38	A1	1553	G	N9-C4	-10.39	1.29	1.38
38	A1	1021	G	P-O5'	-10.39	1.49	1.59
11	B2	1193	G	C5-C4	10.39	1.45	1.38
38	A1	319	A	C4'-C3'	10.38	1.64	1.53
38	A1	890	G	N9-C8	10.38	1.45	1.37
38	A1	2756	G	C6-N1	10.38	1.46	1.39
11	B2	282	G	C5-C4	-10.38	1.31	1.38
38	A1	624	U	C3'-C2'	-10.38	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1863	G	N9-C8	10.38	1.45	1.37
11	B2	128	A	N7-C5	-10.37	1.33	1.39
11	B2	450	A	N7-C5	-10.37	1.33	1.39
38	A1	2707	G	C4'-C3'	10.37	1.64	1.53
38	A1	18	C	N1-C6	10.37	1.43	1.37
11	B2	1482	C	P-O5'	-10.37	1.49	1.59
38	A1	36	G	C8-N7	10.37	1.37	1.30
11	B2	207	G	C6-N1	10.36	1.46	1.39
11	B2	37	G	N1-C2	10.36	1.46	1.37
38	A1	436	C	C2-N3	10.36	1.44	1.35
10	B1	68	C	N1-C6	10.36	1.43	1.37
38	A1	417	C	N3-C4	10.36	1.41	1.33
38	A1	2896	G	C2-N3	10.36	1.41	1.32
38	A1	243	G	C2-N2	10.36	1.45	1.34
38	A1	447	G	N9-C8	10.36	1.45	1.37
38	A1	1511	C	N1-C6	10.36	1.43	1.37
38	A1	2600	C	C4-C5	10.35	1.51	1.43
38	A1	2820	C	N3-C4	10.35	1.41	1.33
11	B2	922	G	N7-C5	10.35	1.45	1.39
38	A1	1186	G	N3-C4	-10.35	1.28	1.35
38	A1	891	C	C4-C5	10.35	1.51	1.43
38	A1	2093	A	N3-C4	-10.35	1.28	1.34
38	A1	1613	A	C8-N7	-10.35	1.24	1.31
38	A1	2764	G	C6-N1	10.35	1.46	1.39
11	B2	277	G	N9-C8	10.34	1.45	1.37
38	A1	1302	G	N7-C5	-10.34	1.33	1.39
38	A1	1341	U	P-O5'	-10.34	1.49	1.59
38	A1	2221	A	C6-N1	10.34	1.42	1.35
38	A1	2870	A	N9-C4	-10.34	1.31	1.37
11	B2	79	G	N7-C5	-10.34	1.33	1.39
38	A1	1485	A	N7-C5	-10.34	1.33	1.39
11	B2	1124	G	C2-N3	10.34	1.41	1.32
38	A1	707	U	C2-N3	10.33	1.45	1.37
38	A1	1891	C	N3-C4	10.33	1.41	1.33
38	A1	2185	A	C5'-C4'	10.33	1.63	1.51
11	B2	1433	C	N1-C6	10.33	1.43	1.37
38	A1	2201	C	N1-C6	10.33	1.43	1.37
38	A1	2348	G	C2-N3	10.33	1.41	1.32
38	A1	1099	C	N1-C6	10.32	1.43	1.37
11	B2	416	A	N3-C4	-10.32	1.28	1.34
38	A1	1844	C	N1-C6	10.32	1.43	1.37
11	B2	1229	A	N7-C5	-10.32	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	878	G	N7-C5	-10.32	1.33	1.39
38	A1	1287	G	C6-N1	10.32	1.46	1.39
38	A1	2450	A	N7-C5	-10.32	1.33	1.39
39	A3	87	G	C6-N1	10.32	1.46	1.39
38	A1	1841	G	N3-C4	-10.31	1.28	1.35
38	A1	2653	G	C6-N1	10.31	1.46	1.39
38	A1	2366	G	N9-C8	10.31	1.45	1.37
38	A1	104	C	N1-C6	10.31	1.43	1.37
11	B2	341	C	C4-N4	10.30	1.43	1.33
11	B2	1351	U	C4-C5	10.30	1.52	1.43
38	A1	205	A	C6-N6	10.30	1.42	1.33
11	B2	62	G	N7-C5	-10.30	1.33	1.39
11	B2	1240	A	N7-C5	-10.30	1.33	1.39
10	B1	63	C	N3-C4	10.30	1.41	1.33
11	B2	517	U	C2-N3	10.29	1.45	1.37
38	A1	468	A	C6-N6	10.29	1.42	1.33
11	B2	407	G	C6-N1	10.29	1.46	1.39
38	A1	2118	C	N3-C4	10.29	1.41	1.33
38	A1	2695	U	C5'-C4'	10.29	1.63	1.51
38	A1	646	U	C2-N3	10.28	1.45	1.37
11	B2	1460	G	N9-C8	10.28	1.45	1.37
38	A1	1869	U	C2-N3	10.28	1.45	1.37
38	A1	2612	A	N9-C4	10.28	1.44	1.37
38	A1	66	C	N1-C6	10.27	1.43	1.37
38	A1	2988	A	N9-C8	10.27	1.46	1.37
38	A1	522	A	C6-N6	10.27	1.42	1.33
38	A1	2417	G	C2-N3	10.27	1.41	1.32
38	A1	2643	U	C2-N3	10.27	1.45	1.37
11	B2	1190	C	P-O5'	-10.26	1.49	1.59
38	A1	1392	G	C2-N3	10.26	1.41	1.32
38	A1	337	G	N3-C4	-10.26	1.28	1.35
38	A1	520	G	N3-C4	-10.26	1.28	1.35
38	A1	2900	C	C5'-C4'	10.26	1.63	1.51
11	B2	531	G	N7-C5	-10.26	1.33	1.39
38	A1	2149	G	C6-N1	10.26	1.46	1.39
38	A1	139	G	N9-C4	10.26	1.46	1.38
38	A1	1957	U	C2-N3	10.26	1.45	1.37
38	A1	1355	A	C6-N1	10.25	1.42	1.35
11	B2	826	C	N3-C4	10.25	1.41	1.33
38	A1	2083	G	N7-C5	-10.25	1.33	1.39
39	A3	40	G	C2-N3	10.25	1.41	1.32
38	A1	578	C	C2-N3	10.25	1.44	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2682	G	C6-N1	10.25	1.46	1.39
38	A1	2880	C	C5'-C4'	10.25	1.63	1.51
39	A3	13	C	N3-C4	10.25	1.41	1.33
11	B2	1035	C	N1-C6	10.24	1.43	1.37
38	A1	456	G	C8-N7	-10.24	1.24	1.30
38	A1	1861	G	N7-C5	10.24	1.45	1.39
38	A1	585	G	N1-C2	10.24	1.46	1.37
38	A1	2987	U	C2-N3	10.24	1.45	1.37
38	A1	2416	G	N1-C2	10.24	1.46	1.37
38	A1	1104	A	P-O5'	-10.24	1.49	1.59
38	A1	1645	U	C2-N3	10.24	1.45	1.37
38	A1	1449	C	C4-N4	10.23	1.43	1.33
38	A1	1590	C	N3-C4	10.23	1.41	1.33
38	A1	187	C	N3-C4	10.23	1.41	1.33
38	A1	236	G	C5-C4	10.23	1.45	1.38
39	A3	25	A	C2'-C1'	-10.23	1.42	1.53
38	A1	1275	G	N9-C8	10.23	1.45	1.37
38	A1	607	C	N3-C4	10.23	1.41	1.33
38	A1	1847	U	C2-N3	10.23	1.45	1.37
38	A1	1025	A	C6-N6	10.22	1.42	1.33
38	A1	1091	G	N7-C5	-10.22	1.33	1.39
10	B1	47	G	C8-N7	10.22	1.37	1.30
11	B2	228	G	C5'-C4'	10.22	1.63	1.51
11	B2	495	G	C5-C4	10.22	1.45	1.38
11	B2	1298	G	N9-C8	10.22	1.45	1.37
38	A1	2276	G	C6-N1	10.22	1.46	1.39
38	A1	803	A	C6-N1	10.22	1.42	1.35
38	A1	238	C	C2-N3	10.22	1.44	1.35
38	A1	137	A	C6-N1	10.21	1.42	1.35
38	A1	1301	G	N7-C5	10.22	1.45	1.39
11	B2	1032	A	C6-N1	10.21	1.42	1.35
38	A1	1617	G	N7-C5	-10.21	1.33	1.39
38	A1	534	G	P-O5'	-10.21	1.49	1.59
38	A1	772	G	C2-N3	10.21	1.41	1.32
38	A1	1527	G	N1-C2	10.21	1.46	1.37
11	B2	1100	G	C6-N1	10.20	1.46	1.39
38	A1	2981	G	N3-C4	-10.20	1.28	1.35
11	B2	847	A	N7-C5	-10.20	1.33	1.39
38	A1	1886	C	C4-N4	10.20	1.43	1.33
39	A3	6	G	N3-C4	-10.20	1.28	1.35
38	A1	2288	C	N1-C6	10.20	1.43	1.37
38	A1	36	G	C5-C6	-10.19	1.32	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	3001	C	C4'-C3'	10.19	1.64	1.53
38	A1	1515	G	N7-C5	-10.19	1.33	1.39
38	A1	1937	A	C8-N7	-10.19	1.24	1.31
11	B2	544	C	C2'-C1'	-10.19	1.42	1.53
38	A1	1634	A	C6-N6	10.19	1.42	1.33
38	A1	1746	C	N3-C4	10.19	1.41	1.33
38	A1	433	C	N3-C4	10.18	1.41	1.33
38	A1	1125	A	C5-C4	10.18	1.45	1.38
11	B2	493	C	N1-C6	10.18	1.43	1.37
11	B2	970	G	N7-C5	-10.18	1.33	1.39
38	A1	1651	A	N3-C4	-10.18	1.28	1.34
38	A1	1656	C	N1-C6	10.18	1.43	1.37
11	B2	766	G	C6-N1	10.17	1.46	1.39
38	A1	1428	G	N7-C5	-10.17	1.33	1.39
38	A1	1617	G	C2-N3	10.17	1.40	1.32
11	B2	274	G	N1-C2	10.17	1.45	1.37
11	B2	530	G	C2-N3	10.17	1.40	1.32
38	A1	2181	G	N1-C2	10.17	1.45	1.37
38	A1	983	G	N9-C8	10.16	1.45	1.37
38	A1	1454	G	C8-N7	-10.16	1.24	1.30
38	A1	1996	C	N3-C4	10.16	1.41	1.33
38	A1	2968	G	C6-N1	10.16	1.46	1.39
11	B2	143	G	C5'-C4'	10.16	1.63	1.51
11	B2	1473	A	C5'-C4'	10.16	1.63	1.51
38	A1	1778	G	N7-C5	-10.16	1.33	1.39
38	A1	194	G	C5'-C4'	10.15	1.63	1.51
38	A1	2521	U	C2-N3	10.15	1.44	1.37
11	B2	191	A	C6-N6	10.15	1.42	1.33
11	B2	748	A	C6-N1	10.15	1.42	1.35
38	A1	2658	G	N7-C5	-10.15	1.33	1.39
38	A1	1028	G	C2-N3	10.15	1.40	1.32
38	A1	2133	G	C2-N3	10.15	1.40	1.32
11	B2	1037	U	C4-C5	10.15	1.52	1.43
10	B1	16	C	C4-C5	-10.14	1.34	1.43
11	B2	1010	G	C6-N1	10.13	1.46	1.39
38	A1	3016	G	N1-C2	10.13	1.45	1.37
38	A1	683	C	P-O5'	10.13	1.69	1.59
11	B2	356	G	N7-C5	-10.13	1.33	1.39
38	A1	2681	A	C6-N6	10.13	1.42	1.33
38	A1	962	C	C4-N4	10.13	1.43	1.33
11	B2	1492	U	C2-N3	10.12	1.44	1.37
38	A1	1387	G	C2-N3	10.12	1.40	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	184	G	N9-C8	-10.12	1.30	1.37
38	A1	1418	A	N3-C4	-10.12	1.28	1.34
38	A1	289	G	C6-N1	10.12	1.46	1.39
10	B1	30	G	N1-C2	10.11	1.45	1.37
38	A1	1662	C	C5'-C4'	10.11	1.63	1.51
11	B2	667	G	C5-C4	10.11	1.45	1.38
38	A1	616	C	C4-N4	10.11	1.43	1.33
38	A1	2960	G	N1-C2	10.11	1.45	1.37
39	A3	65	G	C4'-C3'	10.11	1.64	1.53
38	A1	90	A	C6-N6	10.11	1.42	1.33
38	A1	943	G	N3-C4	-10.10	1.28	1.35
38	A1	1292	C	C2-N3	10.10	1.43	1.35
39	A3	30	G	C6-N1	10.10	1.46	1.39
11	B2	293	G	C6-N1	10.10	1.46	1.39
38	A1	312	G	C2'-C1'	-10.09	1.42	1.53
38	A1	2421	A	N7-C5	-10.09	1.33	1.39
38	A1	120	G	C2'-C1'	-10.09	1.42	1.53
38	A1	1322	G	C6-N1	10.09	1.46	1.39
38	A1	2966	C	N3-C4	10.09	1.41	1.33
11	B2	336	C	N3-C4	10.09	1.41	1.33
38	A1	45	G	N1-C2	10.09	1.45	1.37
38	A1	1356	A	N7-C5	-10.09	1.33	1.39
11	B2	1238	G	N9-C8	10.08	1.45	1.37
11	B2	1140	A	C6-N6	10.08	1.42	1.33
38	A1	463	A	N7-C5	-10.08	1.33	1.39
38	A1	2244	G	N9-C4	-10.08	1.29	1.38
38	A1	2373	G	C6-N1	10.08	1.46	1.39
38	A1	2566	A	N7-C5	-10.08	1.33	1.39
38	A1	2653	G	C2-N3	10.08	1.40	1.32
38	A1	371	U	C5'-C4'	10.07	1.63	1.51
11	B2	504	G	C8-N7	10.07	1.36	1.30
38	A1	2741	U	C2-N3	10.07	1.44	1.37
11	B2	151	G	C2-N2	10.07	1.44	1.34
38	A1	289	G	N7-C5	-10.07	1.33	1.39
11	B2	1041	C	N3-C4	10.06	1.41	1.33
38	A1	422	G	N1-C2	10.06	1.45	1.37
38	A1	216	A	N9-C8	10.06	1.45	1.37
38	A1	432	C	N3-C4	10.06	1.41	1.33
38	A1	507	G	C2-N3	10.06	1.40	1.32
38	A1	847	A	N7-C5	-10.06	1.33	1.39
38	A1	2897	C	N3-C4	10.06	1.41	1.33
38	A1	1618	G	C2'-C1'	-10.05	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2494	A	N9-C8	10.05	1.45	1.37
11	B2	933	G	N7-C5	-10.05	1.33	1.39
38	A1	585	G	P-O5'	-10.05	1.49	1.59
38	A1	2467	C	N1-C6	10.04	1.43	1.37
38	A1	1162	C	C2'-C1'	-10.04	1.42	1.53
38	A1	2709	C	N3-C4	10.04	1.41	1.33
39	A3	20	G	N7-C5	-10.04	1.33	1.39
11	B2	215	C	N3-C4	10.04	1.41	1.33
11	B2	976	A	C6-N1	10.04	1.42	1.35
11	B2	1313	G	C6-N1	10.04	1.46	1.39
38	A1	1434	C	P-O5'	-10.04	1.49	1.59
11	B2	307	G	N1-C2	10.03	1.45	1.37
11	B2	1096	G	C6-N1	10.03	1.46	1.39
11	B2	1220	G	C2-N3	10.04	1.40	1.32
38	A1	1841	G	N7-C5	10.04	1.45	1.39
11	B2	473	A	N9-C4	-10.03	1.31	1.37
11	B2	384	G	C2-N3	10.02	1.40	1.32
38	A1	1235	A	C6-N1	10.02	1.42	1.35
38	A1	64	A	N9-C4	10.02	1.43	1.37
39	A3	9	A	N7-C5	-10.02	1.33	1.39
38	A1	517	A	C3'-C2'	10.02	1.64	1.52
38	A1	1331	U	C2-N3	10.02	1.44	1.37
39	A3	102	G	C6-N1	10.02	1.46	1.39
38	A1	1723	A	C6-N6	10.02	1.42	1.33
11	B2	349	A	N9-C8	10.01	1.45	1.37
38	A1	396	G	N3-C4	-10.01	1.28	1.35
11	B2	665	G	N9-C4	-10.01	1.29	1.38
38	A1	365	G	N7-C5	-10.01	1.33	1.39
38	A1	1342	G	C2-N3	10.01	1.40	1.32
38	A1	1244	C	C4-N4	10.01	1.43	1.33
38	A1	1524	A	N7-C5	-10.01	1.33	1.39
38	A1	2885	C	C2-N3	10.01	1.43	1.35
11	B2	1457	A	N3-C4	-10.01	1.28	1.34
11	B2	222	G	N7-C5	-10.01	1.33	1.39
11	B2	528	G	N3-C4	10.00	1.42	1.35
11	B2	1173	A	C8-N7	-10.00	1.24	1.31
11	B2	1227	A	C5-C4	10.00	1.45	1.38
38	A1	2606	C	C5'-C4'	10.00	1.63	1.51
38	A1	447	G	N3-C4	-10.00	1.28	1.35
38	A1	907	C	C4-N4	10.00	1.43	1.33
38	A1	1082	A	O3'-P	-10.00	1.49	1.61
38	A1	3029	A	N9-C4	10.00	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	B1	39	A	C6-N6	10.00	1.42	1.33
38	A1	2053	G	C6-N1	10.00	1.46	1.39
38	A1	562	G	N9-C8	9.99	1.44	1.37
38	A1	1637	C	C2'-C1'	-9.99	1.42	1.53
11	B2	1410	G	N9-C8	-9.99	1.30	1.37
11	B2	1153	G	C2-N3	9.99	1.40	1.32
11	B2	1429	G	C6-N1	9.99	1.46	1.39
38	A1	2718	G	C2-N3	9.99	1.40	1.32
38	A1	1238	G	C6-N1	9.98	1.46	1.39
38	A1	1324	G	N1-C2	9.98	1.45	1.37
11	B2	556	G	C6-N1	9.98	1.46	1.39
11	B2	1470	G	N9-C8	9.98	1.44	1.37
38	A1	98	G	C5'-C4'	9.98	1.63	1.51
38	A1	982	G	C2-N3	9.98	1.40	1.32
38	A1	417	C	N1-C6	9.98	1.43	1.37
38	A1	663	A	C6-N6	9.98	1.42	1.33
38	A1	2549	A	C6-N1	9.98	1.42	1.35
38	A1	3045	G	N1-C2	9.98	1.45	1.37
39	A3	88	A	C6-N6	9.98	1.42	1.33
11	B2	388	G	N1-C2	9.97	1.45	1.37
11	B2	637	G	C6-N1	9.97	1.46	1.39
38	A1	1056	C	N3-C4	9.97	1.41	1.33
38	A1	1113	G	N9-C8	9.97	1.44	1.37
38	A1	2705	C	C4-N4	9.97	1.43	1.33
11	B2	129	G	C2-N3	9.97	1.40	1.32
11	B2	883	G	C6-N1	9.97	1.46	1.39
38	A1	86	G	C6-N1	9.97	1.46	1.39
11	B2	1133	C	N1-C6	9.97	1.43	1.37
38	A1	248	C	C4-C5	9.97	1.50	1.43
38	A1	410	C	N3-C4	9.97	1.41	1.33
11	B2	350	G	N1-C2	9.97	1.45	1.37
38	A1	983	G	C6-N1	9.97	1.46	1.39
38	A1	1964	G	N1-C2	9.97	1.45	1.37
10	B1	43	G	C6-N1	9.96	1.46	1.39
38	A1	1523	A	N3-C4	9.96	1.40	1.34
11	B2	536	A	C6-N6	9.96	1.42	1.33
11	B2	712	G	N7-C5	-9.96	1.33	1.39
11	B2	1076	G	C2-N3	9.96	1.40	1.32
38	A1	1095	A	C8-N7	-9.96	1.24	1.31
38	A1	1213	G	N7-C5	-9.96	1.33	1.39
10	B1	47	G	N9-C4	9.95	1.46	1.38
38	A1	78	C	C2-N3	9.95	1.43	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1494	U	C2-N3	9.95	1.44	1.37
38	A1	1837	A	N3-C4	-9.95	1.28	1.34
38	A1	1912	A	C5-C4	9.95	1.45	1.38
38	A1	1196	A	N9-C4	-9.95	1.31	1.37
11	B2	698	A	C6-N6	9.95	1.42	1.33
11	B2	981	U	N3-C4	9.95	1.47	1.38
11	B2	1216	A	N7-C5	-9.95	1.33	1.39
38	A1	1454	G	N9-C8	-9.95	1.30	1.37
38	A1	1781	C	C4-N4	9.95	1.43	1.33
38	A1	1849	A	N7-C5	-9.95	1.33	1.39
38	A1	2710	G	C2-N3	9.95	1.40	1.32
10	B1	24	A	C4'-C3'	9.94	1.64	1.53
38	A1	2753	G	C5-C4	-9.94	1.31	1.38
38	A1	2993	G	N7-C5	-9.94	1.33	1.39
38	A1	1609	G	C8-N7	9.94	1.36	1.30
38	A1	1769	G	C2-N3	9.94	1.40	1.32
38	A1	2566	A	C6-N1	9.94	1.42	1.35
38	A1	207	A	N3-C4	9.94	1.40	1.34
38	A1	760	G	N3-C4	-9.94	1.28	1.35
38	A1	1012	G	C5-C4	-9.94	1.31	1.38
11	B2	901	G	C8-N7	-9.93	1.25	1.30
38	A1	1032	C	N1-C6	9.93	1.43	1.37
38	A1	1456	U	C2-N3	9.93	1.44	1.37
38	A1	2178	A	C8-N7	-9.93	1.24	1.31
38	A1	1493	C	N1-C6	9.93	1.43	1.37
38	A1	1969	C	C4-N4	9.93	1.42	1.33
38	A1	1612	G	N9-C4	-9.93	1.30	1.38
38	A1	1954	U	N1-C2	9.92	1.47	1.38
11	B2	543	C	N3-C4	9.92	1.40	1.33
38	A1	136	U	C2-N3	9.92	1.44	1.37
38	A1	1717	C	N3-C4	9.92	1.40	1.33
38	A1	2888	G	N9-C8	9.92	1.44	1.37
38	A1	77	C	N1-C6	9.91	1.43	1.37
38	A1	164	A	C6-N6	9.91	1.41	1.33
38	A1	365	G	N1-C2	9.91	1.45	1.37
38	A1	1203	C	N1-C6	9.91	1.43	1.37
38	A1	964	C	N1-C6	9.91	1.43	1.37
11	B2	154	C	N3-C4	9.91	1.40	1.33
38	A1	856	A	N3-C4	-9.91	1.28	1.34
38	A1	1236	C	P-O5'	-9.91	1.49	1.59
39	A3	63	G	N9-C8	9.91	1.44	1.37
38	A1	1502	C	C5-C6	9.90	1.42	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	488	A	N7-C5	-9.90	1.33	1.39
10	B1	13	C	C4-N4	9.90	1.42	1.33
38	A1	2582	C	N3-C4	9.90	1.40	1.33
11	B2	40	C	C4-N4	9.90	1.42	1.33
38	A1	987	G	C2-N3	9.90	1.40	1.32
38	A1	1452	G	N3-C4	-9.89	1.28	1.35
38	A1	657	U	P-O5'	-9.89	1.49	1.59
11	B2	1221	A	C6-N6	9.89	1.41	1.33
38	A1	3043	C	C4-C5	9.89	1.50	1.43
11	B2	457	G	N9-C8	9.89	1.44	1.37
11	B2	976	A	C4'-C3'	9.89	1.64	1.53
11	B2	1188	C	O3'-P	-9.89	1.49	1.61
38	A1	1027	A	C6-N6	9.88	1.41	1.33
38	A1	2033	G	C2-N3	9.88	1.40	1.32
11	B2	820	G	C6-N1	9.88	1.46	1.39
11	B2	1140	A	N9-C4	-9.88	1.31	1.37
38	A1	693	G	N7-C5	-9.88	1.33	1.39
38	A1	826	C	N3-C4	9.88	1.40	1.33
38	A1	2698	G	C6-N1	9.87	1.46	1.39
38	A1	543	G	C2-N3	9.87	1.40	1.32
38	A1	2801	G	N9-C8	9.87	1.44	1.37
11	B2	1187	A	C8-N7	-9.87	1.24	1.31
38	A1	328	G	C6-N1	9.87	1.46	1.39
38	A1	954	A	N7-C5	-9.87	1.33	1.39
38	A1	1440	C	C2-N3	9.87	1.43	1.35
38	A1	2149	G	C2-N3	9.87	1.40	1.32
11	B2	1338	C	N3-C4	9.87	1.40	1.33
38	A1	331	G	N7-C5	-9.87	1.33	1.39
38	A1	2707	G	N7-C5	-9.87	1.33	1.39
38	A1	919	G	C6-N1	9.86	1.46	1.39
11	B2	1405	C	N3-C4	9.86	1.40	1.33
11	B2	271	G	N7-C5	-9.86	1.33	1.39
11	B2	1173	A	N7-C5	-9.86	1.33	1.39
38	A1	2772	U	N1-C6	9.86	1.46	1.38
38	A1	2139	A	C6-N6	9.85	1.41	1.33
11	B2	413	G	C6-N1	9.85	1.46	1.39
38	A1	697	U	C2-N3	9.85	1.44	1.37
11	B2	256	G	C6-N1	9.85	1.46	1.39
11	B2	706	G	N7-C5	-9.85	1.33	1.39
11	B2	620	G	N7-C5	-9.85	1.33	1.39
38	A1	1067	G	C6-N1	9.84	1.46	1.39
38	A1	1518	G	C8-N7	9.84	1.36	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1986	U	C2-N3	9.84	1.44	1.37
38	A1	87	C	C4-N4	9.84	1.42	1.33
11	B2	971	G	C2'-C1'	-9.84	1.42	1.53
38	A1	1616	A	N3-C4	-9.84	1.28	1.34
38	A1	1522	A	C6-N1	-9.84	1.28	1.35
38	A1	518	A	C6-N6	9.84	1.41	1.33
38	A1	895	C	C4-N4	9.84	1.42	1.33
38	A1	2614	C	C4-N4	9.84	1.42	1.33
11	B2	636	G	C8-N7	-9.83	1.25	1.30
38	A1	438	G	C6-N1	9.83	1.46	1.39
11	B2	56	A	O3'-P	-9.83	1.49	1.61
11	B2	388	G	C2-N3	9.83	1.40	1.32
11	B2	1168	C	N3-C4	9.83	1.40	1.33
38	A1	1820	C	C2-N3	9.83	1.43	1.35
11	B2	174	G	C2-N3	9.82	1.40	1.32
38	A1	1644	G	C6-N1	-9.82	1.32	1.39
38	A1	1860	A	N7-C5	-9.82	1.33	1.39
11	B2	642	G	C2-N3	9.82	1.40	1.32
11	B2	1410	G	N1-C2	9.82	1.45	1.37
38	A1	1846	G	C6-N1	9.82	1.46	1.39
38	A1	119	U	N1-C6	9.82	1.46	1.38
38	A1	1347	U	C2-N3	9.82	1.44	1.37
38	A1	628	A	C6-N6	9.82	1.41	1.33
38	A1	73	A	N9-C4	-9.81	1.31	1.37
38	A1	1068	U	N3-C4	9.81	1.47	1.38
38	A1	1435	G	N1-C2	9.81	1.45	1.37
38	A1	1288	C	N3-C4	9.81	1.40	1.33
38	A1	1337	G	N9-C4	-9.81	1.30	1.38
11	B2	70	C	N3-C4	9.81	1.40	1.33
38	A1	175	G	C2-N3	9.81	1.40	1.32
38	A1	1035	G	C2'-C1'	-9.81	1.42	1.53
38	A1	63	A	C2'-C1'	-9.81	1.42	1.53
11	B2	706	G	C8-N7	-9.80	1.25	1.30
11	B2	1016	G	C8-N7	-9.80	1.25	1.30
38	A1	577	C	N3-C4	9.80	1.40	1.33
38	A1	1384	C	N1-C6	9.80	1.43	1.37
11	B2	689	C	N3-C4	9.80	1.40	1.33
38	A1	2218	C	C2-N3	9.80	1.43	1.35
38	A1	317	A	N7-C5	-9.80	1.33	1.39
38	A1	1195	G	C2-N3	9.80	1.40	1.32
11	B2	210	A	C6-N6	9.79	1.41	1.33
11	B2	824	G	C6-N1	9.79	1.46	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1488	C	C2'-C1'	-9.80	1.42	1.53
11	B2	45	U	C2-N3	9.79	1.44	1.37
11	B2	1468	A	N3-C4	-9.79	1.28	1.34
38	A1	268	C	C2-N3	9.79	1.43	1.35
38	A1	1861	G	C6-N1	9.79	1.46	1.39
38	A1	964	C	C4-C5	9.79	1.50	1.43
38	A1	1979	G	C6-N1	9.79	1.46	1.39
38	A1	2350	G	N1-C2	9.79	1.45	1.37
38	A1	1666	G	C8-N7	-9.79	1.25	1.30
38	A1	1382	C	N3-C4	9.78	1.40	1.33
38	A1	1870	G	N7-C5	-9.78	1.33	1.39
38	A1	987	G	C2-N2	9.78	1.44	1.34
38	A1	1267	A	N9-C8	9.78	1.45	1.37
38	A1	2668	G	N3-C4	-9.77	1.28	1.35
38	A1	416	A	N7-C5	-9.77	1.33	1.39
11	B2	575	A	C5-C4	9.77	1.45	1.38
38	A1	1463	C	N3-C4	9.77	1.40	1.33
38	A1	1721	U	O3'-P	-9.77	1.49	1.61
38	A1	1722	G	C2-N2	9.77	1.44	1.34
38	A1	1351	G	C8-N7	9.77	1.36	1.30
38	A1	2533	G	C6-N1	9.77	1.46	1.39
38	A1	2851	A	N3-C4	-9.77	1.28	1.34
11	B2	746	A	N9-C4	9.76	1.43	1.37
38	A1	2487	G	C6-N1	9.76	1.46	1.39
38	A1	1971	C	C2-N3	9.76	1.43	1.35
38	A1	1457	C	C4-N4	9.76	1.42	1.33
38	A1	1601	G	C8-N7	9.76	1.36	1.30
38	A1	2750	C	N3-C4	9.76	1.40	1.33
38	A1	370	A	N7-C5	-9.75	1.33	1.39
38	A1	2044	C	N3-C4	9.75	1.40	1.33
11	B2	850	A	C8-N7	-9.75	1.24	1.31
38	A1	1370	G	P-O5'	-9.75	1.50	1.59
38	A1	1570	C	N1-C6	9.75	1.43	1.37
38	A1	1687	C	C4-N4	9.75	1.42	1.33
38	A1	433	C	P-O5'	-9.74	1.50	1.59
38	A1	965	A	N7-C5	-9.74	1.33	1.39
38	A1	2180	C	N3-C4	9.74	1.40	1.33
10	B1	5	C	N3-C4	9.74	1.40	1.33
38	A1	2264	G	C2-N3	9.74	1.40	1.32
39	A3	34	C	C4-N4	9.74	1.42	1.33
38	A1	218	A	C4'-C3'	9.74	1.63	1.53
11	B2	369	A	N9-C8	9.73	1.45	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1199	A	C5-C4	9.73	1.45	1.38
38	A1	35	G	C2-N3	9.73	1.40	1.32
38	A1	1009	G	N1-C2	9.73	1.45	1.37
11	B2	582	G	N7-C5	-9.73	1.33	1.39
38	A1	673	A	C3'-C2'	-9.73	1.42	1.52
38	A1	2879	G	C2-N3	9.73	1.40	1.32
38	A1	1233	U	N3-C4	9.73	1.47	1.38
38	A1	2477	G	N9-C8	-9.73	1.31	1.37
38	A1	1665	G	C5-C4	-9.72	1.31	1.38
11	B2	65	G	C2-N3	9.72	1.40	1.32
11	B2	1376	C	N3-C4	9.72	1.40	1.33
38	A1	2045	C	N3-C4	9.72	1.40	1.33
11	B2	480	G	N1-C2	9.72	1.45	1.37
11	B2	427	G	C3'-C2'	9.71	1.63	1.52
11	B2	816	G	N3-C4	-9.71	1.28	1.35
11	B2	1436	U	C5'-C4'	9.71	1.63	1.51
38	A1	2128	G	C2-N3	9.71	1.40	1.32
38	A1	329	G	C2-N3	9.71	1.40	1.32
38	A1	1118	A	N7-C5	-9.71	1.33	1.39
38	A1	2560	G	N7-C5	-9.71	1.33	1.39
38	A1	85	G	P-O5'	-9.71	1.50	1.59
38	A1	611	G	N9-C8	-9.71	1.31	1.37
38	A1	1205	U	N1-C2	9.71	1.47	1.38
38	A1	1396	A	N1-C2	-9.71	1.25	1.34
38	A1	2664	G	N7-C5	-9.71	1.33	1.39
38	A1	2193	G	C8-N7	9.71	1.36	1.30
11	B2	837	C	N1-C6	9.71	1.43	1.37
11	B2	242	A	O3'-P	-9.70	1.49	1.61
38	A1	429	U	C2-N3	9.70	1.44	1.37
38	A1	495	U	C2-N3	9.70	1.44	1.37
38	A1	2280	G	N9-C8	-9.70	1.31	1.37
38	A1	1508	A	C6-N1	9.70	1.42	1.35
38	A1	2213	G	C2-N3	9.70	1.40	1.32
38	A1	2736	G	C8-N7	9.70	1.36	1.30
11	B2	1466	G	C8-N7	9.69	1.36	1.30
38	A1	580	G	N3-C4	9.69	1.42	1.35
38	A1	830	G	P-O5'	-9.69	1.50	1.59
38	A1	2638	G	C2-N3	9.69	1.40	1.32
38	A1	641	G	N1-C2	9.68	1.45	1.37
11	B2	196	G	C2-N3	9.68	1.40	1.32
38	A1	807	G	N1-C2	9.68	1.45	1.37
38	A1	2718	G	C6-N1	9.68	1.46	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2745	G	C8-N7	9.68	1.36	1.30
11	B2	337	C	C4'-C3'	9.68	1.63	1.53
10	B1	32	A	P-O5'	-9.68	1.50	1.59
38	A1	2045	C	C2-N3	9.68	1.43	1.35
11	B2	1320	A	N3-C4	9.67	1.40	1.34
38	A1	1328	G	C2-N3	9.67	1.40	1.32
38	A1	2145	G	C2-N3	9.67	1.40	1.32
38	A1	2250	G	C2-N3	9.67	1.40	1.32
11	B2	1197	C	N1-C6	9.67	1.43	1.37
38	A1	98	G	C8-N7	-9.67	1.25	1.30
38	A1	386	A	C8-N7	9.67	1.38	1.31
38	A1	1036	C	C4-N4	9.67	1.42	1.33
38	A1	2178	A	N9-C8	9.66	1.45	1.37
38	A1	2259	G	N1-C2	9.66	1.45	1.37
38	A1	1525	G	C8-N7	-9.66	1.25	1.30
11	B2	282	G	N7-C5	-9.66	1.33	1.39
38	A1	2158	G	N7-C5	-9.66	1.33	1.39
38	A1	1572	C	N3-C4	9.66	1.40	1.33
38	A1	2762	G	C6-N1	9.65	1.46	1.39
11	B2	506	G	N1-C2	9.65	1.45	1.37
11	B2	1016	G	C5-C4	9.65	1.45	1.38
38	A1	2200	A	N9-C8	9.65	1.45	1.37
11	B2	1444	G	C6-N1	9.65	1.46	1.39
38	A1	1016	C	N3-C4	9.64	1.40	1.33
38	A1	2462	U	C2-N3	9.64	1.44	1.37
11	B2	281	G	C2-N3	9.64	1.40	1.32
38	A1	511	A	C6-N1	9.64	1.42	1.35
38	A1	286	G	C2-N3	9.64	1.40	1.32
38	A1	848	A	C6-N1	9.64	1.42	1.35
38	A1	873	G	C2-N3	9.64	1.40	1.32
38	A1	1775	G	C4'-C3'	9.64	1.63	1.53
38	A1	2615	U	N1-C2	9.64	1.47	1.38
38	A1	971	G	C2-N3	9.64	1.40	1.32
38	A1	1376	U	C4'-C3'	9.64	1.63	1.53
38	A1	980	G	N3-C4	9.63	1.42	1.35
38	A1	990	G	C6-N1	9.63	1.46	1.39
38	A1	2590	C	N1-C6	9.63	1.43	1.37
11	B2	1157	G	C6-N1	9.63	1.46	1.39
38	A1	1659	G	C6-N1	9.63	1.46	1.39
38	A1	1322	G	N1-C2	9.63	1.45	1.37
38	A1	2188	C	N1-C6	9.63	1.43	1.37
11	B2	141	C	N3-C4	9.63	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	927	A	N7-C5	-9.62	1.33	1.39
38	A1	909	A	C6-N6	9.62	1.41	1.33
38	A1	1515	G	C2-N3	9.62	1.40	1.32
38	A1	1913	C	N1-C6	9.62	1.43	1.37
38	A1	1230	G	C5-C4	9.62	1.45	1.38
38	A1	1608	G	N7-C5	-9.62	1.33	1.39
38	A1	2177	A	N7-C5	-9.62	1.33	1.39
38	A1	1675	C	N3-C4	9.62	1.40	1.33
38	A1	2881	G	C6-N1	9.62	1.46	1.39
11	B2	1462	A	C6-N6	9.62	1.41	1.33
11	B2	817	U	C2-N3	9.61	1.44	1.37
38	A1	311	C	N3-C4	9.61	1.40	1.33
38	A1	2099	G	C8-N7	-9.61	1.25	1.30
11	B2	1020	G	C5-C4	-9.61	1.31	1.38
38	A1	1289	C	C4-N4	9.61	1.42	1.33
11	B2	1480	G	C2'-C1'	-9.60	1.42	1.53
38	A1	1819	G	N7-C5	-9.60	1.33	1.39
38	A1	2163	G	N7-C5	9.60	1.45	1.39
11	B2	61	A	N9-C4	9.60	1.43	1.37
38	A1	706	U	C2-N3	9.59	1.44	1.37
11	B2	1463	A	C6-N1	9.59	1.42	1.35
38	A1	2624	G	C2'-C1'	-9.59	1.42	1.53
38	A1	2790	C	C4-N4	9.59	1.42	1.33
38	A1	284	U	C2-N3	9.59	1.44	1.37
11	B2	472	C	P-O5'	-9.58	1.50	1.59
38	A1	1722	G	N7-C5	-9.58	1.33	1.39
11	B2	757	G	N9-C8	-9.58	1.31	1.37
38	A1	309	C	N1-C6	9.58	1.42	1.37
38	A1	2787	G	C2'-C1'	-9.58	1.42	1.53
38	A1	3030	A	N3-C4	9.58	1.40	1.34
11	B2	819	G	C2-N3	9.57	1.40	1.32
38	A1	1743	G	N1-C2	9.57	1.45	1.37
38	A1	2446	C	N3-C4	9.57	1.40	1.33
10	B1	47	G	N3-C4	-9.57	1.28	1.35
11	B2	463	G	C5'-C4'	9.57	1.62	1.51
11	B2	1064	C	N3-C4	9.57	1.40	1.33
38	A1	1944	C	N1-C6	9.57	1.42	1.37
11	B2	1401	U	N3-C4	9.57	1.47	1.38
11	B2	72	C	N3-C4	9.56	1.40	1.33
38	A1	1626	A	C6-N6	9.56	1.41	1.33
11	B2	221	A	C5'-C4'	9.56	1.62	1.51
11	B2	1126	G	C8-N7	-9.56	1.25	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	649	A	C6-N1	9.56	1.42	1.35
38	A1	1527	G	N7-C5	-9.56	1.33	1.39
11	B2	1107	C	C4-N4	9.56	1.42	1.33
38	A1	1814	A	C6-N6	9.55	1.41	1.33
38	A1	1047	A	C6-N1	9.55	1.42	1.35
38	A1	1571	G	C8-N7	9.55	1.36	1.30
38	A1	1960	U	N1-C2	9.55	1.47	1.38
39	A3	12	G	N7-C5	-9.55	1.33	1.39
39	A3	6	G	C3'-O3'	9.55	1.55	1.42
38	A1	1385	C	C4-N4	9.55	1.42	1.33
11	B2	6	G	N7-C5	-9.55	1.33	1.39
11	B2	66	G	N1-C2	9.54	1.45	1.37
11	B2	574	A	N3-C4	-9.54	1.29	1.34
11	B2	1007	A	C8-N7	-9.54	1.24	1.31
11	B2	1158	G	C2-N3	9.54	1.40	1.32
11	B2	1276	G	N3-C4	-9.54	1.28	1.35
38	A1	1165	C	N1-C6	-9.54	1.31	1.37
38	A1	481	G	C6-N1	9.54	1.46	1.39
11	B2	23	G	N7-C5	-9.54	1.33	1.39
11	B2	927	A	N3-C4	-9.54	1.29	1.34
38	A1	658	C	O4'-C1'	9.54	1.54	1.41
38	A1	1156	G	C2-N2	9.54	1.44	1.34
38	A1	1768	C	P-O5'	-9.54	1.50	1.59
38	A1	2678	U	C4-C5	9.54	1.52	1.43
39	A3	1	C	C4-C5	-9.53	1.35	1.43
11	B2	455	C	N1-C6	9.53	1.42	1.37
11	B2	554	C	N3-C4	9.53	1.40	1.33
38	A1	688	G	N1-C2	9.53	1.45	1.37
38	A1	2529	G	N9-C8	-9.53	1.31	1.37
38	A1	2258	A	N3-C4	-9.53	1.29	1.34
38	A1	2953	U	C2-N3	9.53	1.44	1.37
10	B1	21	G	C6-N1	9.53	1.46	1.39
38	A1	1468	G	C2-N3	9.53	1.40	1.32
38	A1	1378	G	C2-N3	9.53	1.40	1.32
38	A1	2034	G	C5-C4	-9.53	1.31	1.38
38	A1	2859	U	N3-C4	9.53	1.47	1.38
38	A1	86	G	C5'-C4'	9.52	1.62	1.51
38	A1	556	G	C2-N3	9.52	1.40	1.32
38	A1	217	A	N7-C5	-9.52	1.33	1.39
38	A1	2971	U	N3-C4	9.52	1.47	1.38
38	A1	1587	A	C2'-C1'	-9.52	1.42	1.53
38	A1	2954	C	C4-N4	9.52	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	192	G	C2-N3	9.51	1.40	1.32
38	A1	513	C	N3-C4	9.51	1.40	1.33
38	A1	1538	A	C6-N1	9.51	1.42	1.35
38	A1	871	G	C2'-C1'	-9.51	1.42	1.53
38	A1	1533	G	C8-N7	-9.51	1.25	1.30
38	A1	2514	C	N1-C6	9.51	1.42	1.37
38	A1	1791	A	C5-C4	-9.51	1.32	1.38
11	B2	196	G	C5-C4	9.51	1.45	1.38
11	B2	434	A	N7-C5	-9.51	1.33	1.39
11	B2	992	G	C5-C4	9.51	1.45	1.38
38	A1	1689	G	C8-N7	-9.50	1.25	1.30
11	B2	1091	C	N3-C4	9.50	1.40	1.33
38	A1	194	G	C8-N7	-9.50	1.25	1.30
38	A1	2376	U	C4'-C3'	-9.50	1.42	1.53
38	A1	2874	C	N1-C6	9.50	1.42	1.37
11	B2	1294	G	C8-N7	-9.50	1.25	1.30
38	A1	1396	A	C8-N7	9.50	1.38	1.31
38	A1	2972	G	C5-C6	-9.50	1.32	1.42
38	A1	546	C	N3-C4	9.49	1.40	1.33
38	A1	1373	C	C4-N4	9.49	1.42	1.33
11	B2	1193	G	C6-N1	9.49	1.46	1.39
38	A1	70	G	C2-N2	9.49	1.44	1.34
11	B2	243	G	C6-N1	9.49	1.46	1.39
11	B2	448	A	N3-C4	-9.49	1.29	1.34
38	A1	2671	C	N3-C4	9.49	1.40	1.33
38	A1	1906	G	C2-N3	9.49	1.40	1.32
11	B2	279	U	C2-N3	9.48	1.44	1.37
11	B2	134	A	N1-C2	9.48	1.42	1.34
38	A1	2269	C	C3'-O3'	9.48	1.55	1.42
11	B2	520	G	N9-C4	-9.48	1.30	1.38
38	A1	943	G	C5-C4	9.48	1.45	1.38
38	A1	2432	G	N9-C4	-9.48	1.30	1.38
11	B2	714	G	N7-C5	9.48	1.45	1.39
38	A1	767	G	N7-C5	-9.48	1.33	1.39
38	A1	1712	U	N3-C4	9.48	1.47	1.38
38	A1	1745	U	N3-C4	9.48	1.47	1.38
38	A1	1831	C	N3-C4	9.48	1.40	1.33
38	A1	2642	C	N3-C4	9.48	1.40	1.33
38	A1	80	G	C2-N3	9.47	1.40	1.32
38	A1	989	G	N7-C5	-9.47	1.33	1.39
38	A1	1189	A	C6-N1	9.47	1.42	1.35
11	B2	1230	G	N3-C4	-9.47	1.28	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1466	G	C4'-O4'	-9.47	1.33	1.45
38	A1	794	G	C2-N3	9.47	1.40	1.32
38	A1	1664	G	N7-C5	-9.47	1.33	1.39
38	A1	2272	G	N9-C8	9.47	1.44	1.37
38	A1	2229	G	N7-C5	-9.47	1.33	1.39
38	A1	709	A	N9-C4	9.47	1.43	1.37
38	A1	2361	C	C2-N3	9.47	1.43	1.35
11	B2	700	G	N7-C5	-9.46	1.33	1.39
11	B2	1014	C	N3-C4	9.46	1.40	1.33
38	A1	1992	A	C6-N6	9.47	1.41	1.33
38	A1	2045	C	N1-C6	9.46	1.42	1.37
38	A1	729	A	C6-N6	9.46	1.41	1.33
11	B2	291	G	C3'-C2'	-9.46	1.42	1.52
38	A1	1112	G	N1-C2	9.46	1.45	1.37
38	A1	794	G	C2'-C1'	-9.46	1.43	1.53
38	A1	824	C	N1-C6	9.46	1.42	1.37
38	A1	1170	G	C8-N7	-9.46	1.25	1.30
11	B2	851	C	N1-C6	9.46	1.42	1.37
38	A1	319	A	N3-C4	-9.46	1.29	1.34
11	B2	1108	U	C4-C5	-9.46	1.35	1.43
11	B2	601	G	N1-C2	9.45	1.45	1.37
38	A1	1005	G	C5'-C4'	9.45	1.62	1.51
11	B2	372	G	N9-C4	-9.45	1.30	1.38
38	A1	2951	G	C6-N1	9.45	1.46	1.39
39	A3	18	G	N7-C5	-9.45	1.33	1.39
38	A1	1430	A	C6-N1	9.45	1.42	1.35
38	A1	2173	U	C2-N3	9.45	1.44	1.37
38	A1	2325	C	N3-C4	9.45	1.40	1.33
11	B2	1154	G	C2'-C1'	-9.44	1.43	1.53
38	A1	741	G	N7-C5	-9.44	1.33	1.39
38	A1	1652	A	C6-N1	9.44	1.42	1.35
38	A1	1695	G	N7-C5	-9.44	1.33	1.39
11	B2	1219	C	C5-C6	-9.44	1.26	1.34
38	A1	2478	G	C8-N7	-9.44	1.25	1.30
10	B1	54	G	P-O5'	9.44	1.69	1.59
38	A1	1522	A	N3-C4	-9.44	1.29	1.34
38	A1	3002	A	N9-C4	-9.44	1.32	1.37
38	A1	3040	G	N1-C2	9.44	1.45	1.37
11	B2	100	A	N7-C5	-9.43	1.33	1.39
11	B2	685	G	C2'-C1'	-9.43	1.43	1.53
38	A1	225	C	N1-C6	-9.43	1.31	1.37
38	A1	981	A	N3-C4	-9.43	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2703	G	N7-C5	9.43	1.45	1.39
38	A1	718	G	N9-C8	-9.43	1.31	1.37
38	A1	247	A	C6-N1	9.43	1.42	1.35
38	A1	1551	G	C2-N3	9.43	1.40	1.32
38	A1	2750	C	C2-N3	9.43	1.43	1.35
11	B2	737	C	C4-N4	9.42	1.42	1.33
38	A1	631	G	C2-N3	9.42	1.40	1.32
38	A1	2459	G	C8-N7	9.42	1.36	1.30
38	A1	2726	G	N1-C2	9.42	1.45	1.37
38	A1	68	G	N3-C4	9.42	1.42	1.35
38	A1	142	G	N9-C8	9.42	1.44	1.37
11	B2	235	G	C6-O6	-9.42	1.15	1.24
38	A1	222	A	N7-C5	-9.42	1.33	1.39
11	B2	185	G	N7-C5	-9.42	1.33	1.39
11	B2	1027	C	N3-C4	9.42	1.40	1.33
38	A1	734	C	N1-C6	-9.42	1.31	1.37
38	A1	2246	G	N1-C2	9.42	1.45	1.37
39	A3	94	G	C2-N3	9.42	1.40	1.32
11	B2	1131	G	C5-C4	9.41	1.45	1.38
38	A1	1201	G	C5-C4	9.41	1.45	1.38
38	A1	1437	C	N3-C4	9.41	1.40	1.33
38	A1	2133	G	C5-C4	9.41	1.45	1.38
38	A1	2853	A	N9-C4	9.41	1.43	1.37
38	A1	530	A	N7-C5	-9.40	1.33	1.39
11	B2	805	C	C4-N4	9.40	1.42	1.33
38	A1	2746	G	C2-N3	9.40	1.40	1.32
38	A1	176	G	N3-C4	-9.40	1.28	1.35
38	A1	582	A	N9-C4	-9.40	1.32	1.37
38	A1	744	G	C2'-C1'	-9.40	1.43	1.53
38	A1	2184	G	N9-C8	9.40	1.44	1.37
11	B2	814	C	N3-C4	9.40	1.40	1.33
11	B2	1057	A	N7-C5	-9.39	1.33	1.39
39	A3	118	G	C2-N3	9.39	1.40	1.32
11	B2	554	C	N1-C6	9.38	1.42	1.37
11	B2	1046	G	N9-C4	-9.38	1.30	1.38
11	B2	1049	U	C2-N3	9.38	1.44	1.37
11	B2	1378	A	C5-C4	9.39	1.45	1.38
38	A1	2051	A	N3-C4	9.38	1.40	1.34
38	A1	2398	C	N1-C6	-9.38	1.31	1.37
38	A1	1773	C	P-O5'	-9.38	1.50	1.59
38	A1	2737	G	C2-N3	9.38	1.40	1.32
11	B2	1321	U	C2-N3	9.38	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1862	G	N3-C4	-9.38	1.28	1.35
38	A1	2534	C	N1-C6	9.38	1.42	1.37
38	A1	2551	G	N3-C4	-9.38	1.28	1.35
11	B2	1209	C	N3-C4	9.38	1.40	1.33
38	A1	111	U	C2-N3	9.38	1.44	1.37
38	A1	2460	A	C6-N6	9.37	1.41	1.33
10	B1	43	G	N7-C5	-9.37	1.33	1.39
11	B2	560	A	C6-N6	9.37	1.41	1.33
11	B2	713	A	C8-N7	9.37	1.38	1.31
38	A1	1422	G	C6-N1	9.37	1.46	1.39
11	B2	488	A	C6-N6	9.37	1.41	1.33
11	B2	665	G	N9-C8	9.37	1.44	1.37
11	B2	1148	G	N7-C5	-9.37	1.33	1.39
38	A1	450	G	N7-C5	-9.37	1.33	1.39
38	A1	2544	C	C2'-C1'	-9.37	1.43	1.53
38	A1	333	A	C6-N1	9.36	1.42	1.35
38	A1	2220	C	C4-N4	9.36	1.42	1.33
38	A1	2014	A	N7-C5	-9.36	1.33	1.39
11	B2	920	U	C4-C5	9.36	1.51	1.43
38	A1	1267	A	N1-C2	-9.36	1.25	1.34
58	Ak	43	ARG	CD-NE	9.36	1.62	1.46
38	A1	1970	G	C2-N3	9.35	1.40	1.32
38	A1	2998	G	C6-N1	9.35	1.46	1.39
38	A1	173	G	N7-C5	9.35	1.44	1.39
38	A1	221	G	C2'-C1'	-9.35	1.43	1.53
38	A1	647	G	C2'-C1'	-9.35	1.43	1.53
11	B2	296	A	C6-N1	9.34	1.42	1.35
38	A1	365	G	N9-C4	-9.34	1.30	1.38
38	A1	2992	G	N7-C5	-9.34	1.33	1.39
38	A1	408	C	N1-C6	9.34	1.42	1.37
38	A1	817	G	N3-C4	-9.34	1.28	1.35
11	B2	1019	A	C6-N6	9.34	1.41	1.33
38	A1	446	G	N1-C2	9.34	1.45	1.37
38	A1	2377	C	N3-C4	9.34	1.40	1.33
11	B2	667	G	N9-C8	9.34	1.44	1.37
38	A1	696	G	N7-C5	-9.34	1.33	1.39
38	A1	1579	G	N1-C2	9.34	1.45	1.37
11	B2	342	G	C4'-C3'	9.34	1.63	1.53
11	B2	667	G	N9-C4	-9.34	1.30	1.38
11	B2	983	G	C5-C6	-9.34	1.33	1.42
11	B2	1115	G	C2'-C1'	-9.34	1.43	1.53
38	A1	1103	C	N3-C4	9.34	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1605	A	C5-C4	9.34	1.45	1.38
38	A1	747	G	C2-N3	9.33	1.40	1.32
38	A1	861	G	C2-N3	9.33	1.40	1.32
38	A1	1364	C	N3-C4	9.33	1.40	1.33
38	A1	2710	G	C2'-C1'	-9.33	1.43	1.53
38	A1	97	C	C4-N4	9.33	1.42	1.33
38	A1	2471	A	C6-N6	9.33	1.41	1.33
11	B2	1105	C	N3-C4	9.32	1.40	1.33
11	B2	1337	A	C6-N6	9.32	1.41	1.33
38	A1	207	A	C2'-C1'	-9.32	1.43	1.53
38	A1	481	G	N9-C8	9.32	1.44	1.37
38	A1	2066	C	C4-C5	9.32	1.50	1.43
38	A1	2887	C	C4-N4	9.32	1.42	1.33
11	B2	117	C	N1-C6	9.32	1.42	1.37
38	A1	1941	A	N9-C4	9.32	1.43	1.37
38	A1	2106	G	C2-N3	9.32	1.40	1.32
11	B2	1309	A	P-O5'	-9.31	1.50	1.59
11	B2	1345	G	C2-N2	9.31	1.43	1.34
38	A1	1640	G	C6-N1	9.31	1.46	1.39
38	A1	1914	U	C2-N3	9.31	1.44	1.37
38	A1	2364	G	N7-C5	-9.31	1.33	1.39
38	A1	2570	A	C5-C4	9.31	1.45	1.38
11	B2	1360	C	N3-C4	9.31	1.40	1.33
38	A1	2438	U	C2-N3	9.31	1.44	1.37
38	A1	1772	A	P-O5'	-9.31	1.50	1.59
11	B2	1194	C	O3'-P	-9.31	1.50	1.61
38	A1	905	G	N9-C8	9.31	1.44	1.37
38	A1	1635	G	C5-C6	-9.31	1.33	1.42
11	B2	251	G	C2-N3	9.30	1.40	1.32
11	B2	734	G	N1-C2	9.30	1.45	1.37
38	A1	1527	G	N3-C4	9.30	1.42	1.35
11	B2	1356	A	C6-N6	9.30	1.41	1.33
38	A1	1403	C	C2'-C1'	-9.30	1.43	1.53
38	A1	1654	G	C2-N3	9.30	1.40	1.32
11	B2	706	G	C5-C4	-9.29	1.31	1.38
38	A1	2870	A	C6-N1	9.30	1.42	1.35
38	A1	269	C	N3-C4	9.29	1.40	1.33
38	A1	361	G	C5-C4	9.29	1.44	1.38
38	A1	1777	U	N1-C6	9.29	1.46	1.38
38	A1	2876	G	C2-N3	9.29	1.40	1.32
39	A3	90	A	N9-C4	9.29	1.43	1.37
38	A1	2775	G	C6-N1	9.29	1.46	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2563	A	C6-N1	9.29	1.42	1.35
11	B2	881	G	N1-C2	9.29	1.45	1.37
38	A1	304	G	C2-N3	9.29	1.40	1.32
38	A1	225	C	C4-N4	9.28	1.42	1.33
38	A1	2321	A	C6-N1	9.28	1.42	1.35
38	A1	1158	G	C2-N3	9.28	1.40	1.32
38	A1	1791	A	N9-C4	9.28	1.43	1.37
11	B2	773	A	C8-N7	9.27	1.38	1.31
38	A1	506	G	N7-C5	-9.27	1.33	1.39
11	B2	1446	G	N9-C4	-9.27	1.30	1.38
11	B2	1081	C	C4'-C3'	9.27	1.63	1.53
38	A1	575	G	C2'-C1'	-9.27	1.43	1.53
38	A1	2016	C	C4-N4	9.27	1.42	1.33
38	A1	2196	C	N1-C6	9.27	1.42	1.37
38	A1	2863	A	N3-C4	9.27	1.40	1.34
10	B1	35	G	N1-C2	9.27	1.45	1.37
38	A1	17	C	C5'-C4'	9.27	1.62	1.51
38	A1	364	A	N7-C5	-9.27	1.33	1.39
38	A1	1359	C	N3-C4	9.27	1.40	1.33
38	A1	1566	G	C6-N1	9.27	1.46	1.39
38	A1	2331	A	N7-C5	-9.27	1.33	1.39
11	B2	622	C	C2-N3	9.26	1.43	1.35
38	A1	46	C	C4-N4	9.26	1.42	1.33
38	A1	527	G	N1-C2	9.26	1.45	1.37
38	A1	2997	G	N7-C5	-9.26	1.33	1.39
11	B2	287	G	N9-C4	-9.26	1.30	1.38
11	B2	663	G	C8-N7	-9.26	1.25	1.30
11	B2	668	G	C2'-C1'	-9.26	1.43	1.53
38	A1	454	C	N3-C4	9.26	1.40	1.33
38	A1	1442	G	N9-C8	9.26	1.44	1.37
11	B2	1021	C	O3'-P	-9.26	1.50	1.61
11	B2	851	C	N3-C4	9.26	1.40	1.33
11	B2	1154	G	C6-N1	9.25	1.46	1.39
38	A1	1089	C	N3-C4	9.25	1.40	1.33
38	A1	1642	G	N7-C5	-9.25	1.33	1.39
11	B2	1405	C	C4-N4	9.25	1.42	1.33
11	B2	1429	G	C2-N3	9.25	1.40	1.32
38	A1	36	G	N9-C8	-9.25	1.31	1.37
38	A1	1059	C	C4-N4	9.25	1.42	1.33
38	A1	1923	A	C8-N7	-9.25	1.25	1.31
38	A1	774	G	N3-C4	-9.25	1.28	1.35
38	A1	1715	G	P-O5'	-9.25	1.50	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	B1	13	C	N1-C6	9.24	1.42	1.37
11	B2	1324	U	C5'-C4'	9.24	1.62	1.51
38	A1	1415	C	C2'-C1'	-9.24	1.43	1.53
38	A1	1505	G	C6-N1	9.24	1.46	1.39
38	A1	187	C	N1-C6	-9.24	1.31	1.37
38	A1	1634	A	C5'-C4'	9.24	1.62	1.51
38	A1	2980	G	C5'-C4'	9.23	1.62	1.51
11	B2	516	A	O3'-P	-9.23	1.50	1.61
38	A1	2120	C	C4'-C3'	9.23	1.63	1.53
11	B2	1437	G	C3'-C2'	9.23	1.63	1.52
11	B2	243	G	N7-C5	-9.23	1.33	1.39
11	B2	261	G	N1-C2	9.23	1.45	1.37
38	A1	324	C	N3-C4	9.23	1.40	1.33
11	B2	901	G	N9-C4	9.22	1.45	1.38
38	A1	2846	A	C8-N7	-9.22	1.25	1.31
38	A1	2537	G	N9-C8	9.22	1.44	1.37
11	B2	912	G	C5-C6	-9.22	1.33	1.42
38	A1	857	U	N3-C4	9.22	1.46	1.38
38	A1	1381	C	N3-C4	9.22	1.40	1.33
11	B2	344	G	N1-C2	9.21	1.45	1.37
38	A1	445	G	N7-C5	-9.21	1.33	1.39
38	A1	780	G	N7-C5	-9.21	1.33	1.39
11	B2	893	U	C2'-C1'	-9.21	1.43	1.53
38	A1	181	U	C4-C5	-9.21	1.35	1.43
11	B2	633	C	N3-C4	9.21	1.40	1.33
38	A1	108	G	N7-C5	-9.21	1.33	1.39
38	A1	2017	A	C6-N6	9.21	1.41	1.33
38	A1	2167	C	C4-N4	9.21	1.42	1.33
11	B2	73	U	N3-C4	9.20	1.46	1.38
38	A1	1786	G	N3-C4	-9.20	1.29	1.35
38	A1	2887	C	N3-C4	9.20	1.40	1.33
11	B2	1045	A	N3-C4	-9.20	1.29	1.34
38	A1	330	U	C2-N3	9.20	1.44	1.37
38	A1	703	G	N1-C2	9.20	1.45	1.37
38	A1	1087	G	C2-N3	9.20	1.40	1.32
38	A1	2884	C	N3-C4	9.20	1.40	1.33
11	B2	522	C	C4-C5	9.20	1.50	1.43
38	A1	104	C	C4-C5	9.20	1.50	1.43
38	A1	271	G	C8-N7	-9.20	1.25	1.30
38	A1	2002	A	N9-C8	9.20	1.45	1.37
38	A1	2032	G	C5-C4	-9.19	1.31	1.38
38	A1	2574	G	N9-C8	9.19	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	307	G	O3'-P	-9.19	1.50	1.61
38	A1	339	A	P-O5'	9.19	1.69	1.59
11	B2	621	G	C5'-C4'	9.19	1.62	1.51
38	A1	1338	G	N1-C2	9.19	1.45	1.37
38	A1	1355	A	N3-C4	-9.19	1.29	1.34
38	A1	2858	C	N3-C4	9.19	1.40	1.33
11	B2	1207	G	N7-C5	-9.18	1.33	1.39
38	A1	120	G	C2-N2	9.18	1.43	1.34
11	B2	495	G	N7-C5	-9.18	1.33	1.39
11	B2	896	A	N9-C4	-9.18	1.32	1.37
38	A1	1673	C	C4-N4	9.18	1.42	1.33
11	B2	1026	A	N9-C4	-9.18	1.32	1.37
38	A1	1846	G	C2-N3	9.18	1.40	1.32
38	A1	2672	A	C8-N7	-9.18	1.25	1.31
38	A1	2805	U	P-O5'	-9.18	1.50	1.59
38	A1	2824	C	C4-N4	9.18	1.42	1.33
11	B2	204	G	P-O5'	-9.18	1.50	1.59
11	B2	1006	C	P-O5'	9.18	1.69	1.59
38	A1	2133	G	N3-C4	9.18	1.41	1.35
11	B2	952	A	N3-C4	-9.17	1.29	1.34
38	A1	54	G	N1-C2	9.17	1.45	1.37
38	A1	851	G	C6-N1	9.17	1.46	1.39
11	B2	350	G	C2-N3	9.17	1.40	1.32
11	B2	614	G	N1-C2	9.17	1.45	1.37
11	B2	966	G	N7-C5	9.17	1.44	1.39
38	A1	435	G	N7-C5	-9.17	1.33	1.39
11	B2	406	U	N1-C6	9.17	1.46	1.38
38	A1	604	A	C2'-C1'	-9.17	1.43	1.53
11	B2	1325	C	N3-C4	9.16	1.40	1.33
38	A1	1854	G	C5-C4	-9.16	1.31	1.38
38	A1	1956	G	C6-N1	9.16	1.46	1.39
38	A1	2714	G	N3-C4	9.16	1.41	1.35
38	A1	2717	A	N3-C4	-9.16	1.29	1.34
11	B2	641	A	N9-C4	9.16	1.43	1.37
38	A1	110	A	N9-C4	-9.16	1.32	1.37
38	A1	396	G	N7-C5	-9.16	1.33	1.39
38	A1	1878	G	N1-C2	9.16	1.45	1.37
11	B2	1042	U	C4-C5	9.16	1.51	1.43
11	B2	638	G	C6-N1	9.16	1.46	1.39
11	B2	704	C	C5'-C4'	9.16	1.62	1.51
38	A1	982	G	C6-N1	9.16	1.46	1.39
38	A1	2179	G	C2-N3	9.16	1.40	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	478	C	N3-C4	9.15	1.40	1.33
38	A1	2031	G	C2-N3	9.15	1.40	1.32
11	B2	895	C	C4-C5	9.15	1.50	1.43
38	A1	239	G	C6-N1	9.15	1.46	1.39
38	A1	1897	G	C5-C4	9.15	1.44	1.38
11	B2	1311	C	N3-C4	9.15	1.40	1.33
11	B2	1481	G	C2-N3	9.15	1.40	1.32
38	A1	2443	G	N7-C5	-9.15	1.33	1.39
38	A1	2868	C	N3-C4	9.15	1.40	1.33
38	A1	716	U	C2-N3	9.15	1.44	1.37
38	A1	2538	G	N9-C8	-9.15	1.31	1.37
38	A1	1940	U	P-O5'	9.14	1.68	1.59
11	B2	1488	C	N3-C4	9.14	1.40	1.33
11	B2	552	C	C3'-C2'	9.14	1.63	1.52
38	A1	372	A	C5'-C4'	9.14	1.62	1.51
38	A1	469	A	C6-N6	9.14	1.41	1.33
38	A1	1252	G	C8-N7	-9.14	1.25	1.30
38	A1	2058	C	C4-N4	9.14	1.42	1.33
38	A1	2710	G	C8-N7	-9.14	1.25	1.30
38	A1	73	A	C6-N1	9.13	1.42	1.35
55	Ai	43	ARG	CZ-NH2	9.14	1.45	1.33
38	A1	2662	G	C8-N7	-9.13	1.25	1.30
10	B1	56	U	C2-N3	9.13	1.44	1.37
11	B2	568	C	N1-C6	9.13	1.42	1.37
38	A1	2101	A	N3-C4	-9.13	1.29	1.34
38	A1	2962	A	C6-N1	-9.13	1.29	1.35
38	A1	3033	G	C4'-O4'	-9.13	1.33	1.45
11	B2	232	G	C6-N1	9.13	1.46	1.39
11	B2	735	A	N3-C4	-9.12	1.29	1.34
38	A1	544	A	N3-C4	-9.12	1.29	1.34
38	A1	1597	G	C6-N1	9.12	1.46	1.39
38	A1	126	U	N1-C6	9.12	1.46	1.38
38	A1	2755	G	C2-N3	9.12	1.40	1.32
11	B2	1359	C	N3-C4	9.11	1.40	1.33
38	A1	2516	G	C6-N1	9.11	1.46	1.39
38	A1	1456	U	N1-C2	9.11	1.46	1.38
38	A1	2850	G	C2'-C1'	-9.11	1.43	1.53
38	A1	749	G	N7-C5	-9.11	1.33	1.39
38	A1	2244	G	N9-C8	9.11	1.44	1.37
38	A1	2406	C	N3-C4	9.11	1.40	1.33
38	A1	2963	G	N9-C4	9.11	1.45	1.38
11	B2	978	G	N7-C5	-9.11	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	998	A	N9-C8	9.11	1.45	1.37
11	B2	1331	G	C2-N3	9.11	1.40	1.32
38	A1	22	C	C2'-C1'	-9.11	1.43	1.53
38	A1	989	G	C2-N3	9.11	1.40	1.32
11	B2	1400	A	C5-C4	9.11	1.45	1.38
11	B2	877	A	C2'-C1'	-9.10	1.43	1.53
11	B2	1020	G	C2-N3	9.10	1.40	1.32
38	A1	934	G	C2-N2	9.10	1.43	1.34
38	A1	2492	G	C2-N3	9.10	1.40	1.32
11	B2	771	G	C2-N3	9.10	1.40	1.32
11	B2	1438	A	C6-N6	9.10	1.41	1.33
38	A1	2655	C	C2'-C1'	-9.10	1.43	1.53
11	B2	500	A	O3'-P	-9.09	1.50	1.61
38	A1	305	G	C2-N3	9.09	1.40	1.32
38	A1	1259	G	N3-C4	-9.09	1.29	1.35
11	B2	1174	A	C2-N3	9.09	1.41	1.33
38	A1	2655	C	N3-C4	9.09	1.40	1.33
11	B2	156	A	C8-N7	-9.09	1.25	1.31
11	B2	234	G	C5'-C4'	9.09	1.62	1.51
38	A1	1674	G	C2-N3	9.09	1.40	1.32
11	B2	207	G	C2-N3	9.08	1.40	1.32
38	A1	539	A	N7-C5	-9.08	1.33	1.39
38	A1	854	G	N1-C2	9.08	1.45	1.37
11	B2	197	A	C2'-C1'	-9.08	1.43	1.53
38	A1	266	A	N7-C5	-9.08	1.33	1.39
38	A1	671	G	C8-N7	-9.08	1.25	1.30
11	B2	461	A	C4'-C3'	-9.08	1.43	1.53
11	B2	1017	U	C2-N3	9.08	1.44	1.37
38	A1	2063	U	O4'-C1'	9.08	1.53	1.41
11	B2	720	A	N7-C5	-9.08	1.33	1.39
11	B2	1364	C	C4-N4	9.08	1.42	1.33
38	A1	899	A	N9-C4	9.08	1.43	1.37
11	B2	1430	G	N9-C8	9.07	1.44	1.37
38	A1	101	G	C3'-C2'	-9.07	1.42	1.52
38	A1	975	C	C4-C5	-9.07	1.35	1.43
38	A1	1258	G	N9-C4	9.07	1.45	1.38
38	A1	1962	G	N1-C2	9.07	1.45	1.37
38	A1	137	A	C5-C4	9.07	1.45	1.38
38	A1	1087	G	N1-C2	9.07	1.45	1.37
38	A1	2042	A	C6-N6	9.07	1.41	1.33
38	A1	2278	U	C2-N3	9.07	1.44	1.37
11	B2	462	A	N9-C4	9.07	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	615	G	C6-N1	9.07	1.45	1.39
11	B2	472	C	N1-C6	-9.07	1.31	1.37
38	A1	3007	A	C6-N1	9.07	1.41	1.35
11	B2	556	G	N3-C4	9.06	1.41	1.35
38	A1	692	C	C2-N3	9.06	1.43	1.35
11	B2	1122	C	C4-C5	9.06	1.50	1.43
38	A1	233	A	P-O5'	9.06	1.68	1.59
38	A1	1903	G	C2-N3	9.06	1.40	1.32
38	A1	2853	A	C8-N7	-9.06	1.25	1.31
11	B2	1226	G	C6-N1	9.06	1.45	1.39
38	A1	2943	G	N1-C2	9.06	1.45	1.37
11	B2	723	G	N3-C4	-9.05	1.29	1.35
38	A1	802	G	P-O5'	-9.05	1.50	1.59
38	A1	866	G	C2-N3	9.05	1.40	1.32
38	A1	2713	A	N3-C4	9.05	1.40	1.34
11	B2	1366	U	N3-C4	9.05	1.46	1.38
38	A1	1668	G	C4'-C3'	9.05	1.63	1.53
38	A1	672	C	C2-N3	9.05	1.43	1.35
38	A1	2810	G	C2-N3	9.05	1.40	1.32
11	B2	126	G	C5-C4	9.05	1.44	1.38
11	B2	442	C	N1-C6	9.05	1.42	1.37
38	A1	779	A	C6-N6	9.05	1.41	1.33
38	A1	2014	A	N3-C4	-9.05	1.29	1.34
38	A1	2844	G	C2'-C1'	-9.05	1.43	1.53
38	A1	1726	A	P-O5'	-9.04	1.50	1.59
38	A1	1744	A	C6-N1	9.04	1.41	1.35
11	B2	1298	G	C5-C4	9.04	1.44	1.38
38	A1	507	G	N1-C2	9.04	1.45	1.37
38	A1	1201	G	C2-N3	9.04	1.40	1.32
38	A1	1810	G	C2'-C1'	-9.04	1.43	1.53
38	A1	2231	G	N1-C2	9.04	1.45	1.37
38	A1	2276	G	N1-C2	9.04	1.45	1.37
11	B2	1314	C	C2-N3	-9.04	1.28	1.35
38	A1	1479	U	C3'-C2'	-9.04	1.42	1.52
11	B2	51	A	N3-C4	-9.04	1.29	1.34
11	B2	54	C	O3'-P	-9.04	1.50	1.61
11	B2	286	G	C6-N1	9.04	1.45	1.39
38	A1	3037	G	C5-C6	-9.03	1.33	1.42
38	A1	1264	G	C2-N3	9.03	1.40	1.32
38	A1	1452	G	C2'-C1'	-9.03	1.43	1.53
38	A1	1633	A	C6-N6	9.03	1.41	1.33
38	A1	2291	G	C2-N3	9.03	1.40	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2755	G	C6-N1	-9.03	1.33	1.39
11	B2	710	G	C6-N1	9.03	1.45	1.39
38	A1	2254	U	C5'-C4'	9.03	1.62	1.51
11	B2	349	A	C6-N1	9.02	1.41	1.35
38	A1	1305	C	N1-C6	9.02	1.42	1.37
38	A1	2947	G	N9-C8	9.02	1.44	1.37
11	B2	284	A	C6-N1	9.02	1.41	1.35
11	B2	1036	G	C5-C4	9.02	1.44	1.38
38	A1	125	C	N3-C4	9.02	1.40	1.33
38	A1	653	U	N3-C4	9.02	1.46	1.38
38	A1	1570	C	C4-C5	9.02	1.50	1.43
38	A1	959	U	C2-N3	9.02	1.44	1.37
38	A1	1114	G	C6-N1	9.02	1.45	1.39
38	A1	2845	C	N1-C6	-9.02	1.31	1.37
38	A1	1384	C	C4-C5	-9.02	1.35	1.43
38	A1	193	A	N3-C4	-9.01	1.29	1.34
50	AF	120	ARG	NE-CZ	9.01	1.44	1.33
38	A1	1116	A	N9-C4	9.01	1.43	1.37
11	B2	43	A	N3-C4	9.01	1.40	1.34
11	B2	729	G	C5'-C4'	9.01	1.62	1.51
11	B2	1337	A	C4'-C3'	-9.01	1.43	1.53
38	A1	1657	G	C2'-C1'	-9.01	1.43	1.53
38	A1	1798	A	C5'-C4'	9.01	1.62	1.51
38	A1	2892	A	N7-C5	-9.01	1.33	1.39
11	B2	112	G	C2-N3	9.01	1.40	1.32
38	A1	513	C	C4-N4	9.01	1.42	1.33
38	A1	1446	G	N7-C5	-9.01	1.33	1.39
38	A1	2355	G	N1-C2	9.01	1.45	1.37
11	B2	726	A	N9-C4	9.01	1.43	1.37
11	B2	1190	C	N1-C6	9.01	1.42	1.37
38	A1	289	G	N1-C2	9.01	1.45	1.37
38	A1	1686	C	N1-C6	9.01	1.42	1.37
11	B2	258	A	C6-N1	9.00	1.41	1.35
11	B2	524	U	O3'-P	-9.00	1.50	1.61
38	A1	604	A	C6-N6	9.00	1.41	1.33
38	A1	2581	G	N7-C5	-9.00	1.33	1.39
38	A1	2888	G	N3-C4	9.00	1.41	1.35
11	B2	582	G	C6-N1	9.00	1.45	1.39
38	A1	1390	U	C2-N3	9.00	1.44	1.37
38	A1	872	G	C2-N3	9.00	1.40	1.32
38	A1	1569	A	N3-C4	-9.00	1.29	1.34
38	A1	1770	A	N9-C4	9.00	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2296	A	N7-C5	-9.00	1.33	1.39
38	A1	1490	G	C2-N3	9.00	1.40	1.32
11	B2	620	G	C8-N7	-9.00	1.25	1.30
38	A1	445	G	C6-N1	9.00	1.45	1.39
38	A1	1083	G	C5-C4	-9.00	1.32	1.38
38	A1	2766	C	P-O5'	9.00	1.68	1.59
38	A1	1375	G	C5-C6	-8.99	1.33	1.42
11	B2	1031	G	C2-N2	8.99	1.43	1.34
11	B2	1126	G	C3'-C2'	8.99	1.62	1.52
11	B2	1311	C	N1-C6	8.99	1.42	1.37
38	A1	175	G	C2'-C1'	-8.99	1.43	1.53
38	A1	1474	A	N7-C5	-8.99	1.33	1.39
38	A1	1157	U	C1'-N1	8.99	1.62	1.48
38	A1	1906	G	N7-C5	-8.99	1.33	1.39
38	A1	3023	G	C2-N3	8.99	1.40	1.32
11	B2	672	G	C2-N3	8.99	1.40	1.32
38	A1	2251	G	C6-N1	8.99	1.45	1.39
38	A1	2402	A	C4'-C3'	8.99	1.63	1.53
38	A1	1360	G	N1-C2	8.99	1.45	1.37
11	B2	209	A	N9-C4	8.99	1.43	1.37
10	B1	54	G	N7-C5	-8.98	1.33	1.39
11	B2	933	G	C5-C4	-8.98	1.32	1.38
11	B2	180	G	C2-N3	8.98	1.40	1.32
38	A1	2194	A	N9-C8	8.98	1.45	1.37
38	A1	906	G	N1-C2	8.98	1.45	1.37
10	B1	70	C	O4'-C1'	8.98	1.53	1.41
38	A1	165	G	C6-N1	8.98	1.45	1.39
38	A1	920	G	C2-N3	8.98	1.40	1.32
11	B2	177	A	O3'-P	-8.97	1.50	1.61
11	B2	1073	C	C4-N4	8.97	1.42	1.33
38	A1	587	A	N9-C4	8.97	1.43	1.37
38	A1	2154	G	N9-C8	-8.97	1.31	1.37
11	B2	1354	A	N7-C5	-8.97	1.33	1.39
10	B1	77	A	C6-N6	8.97	1.41	1.33
11	B2	144	G	C8-N7	8.97	1.36	1.30
38	A1	250	G	N9-C8	8.97	1.44	1.37
38	A1	2132	C	N3-C4	8.97	1.40	1.33
11	B2	133	G	C2-N3	8.97	1.40	1.32
11	B2	552	C	N3-C4	8.97	1.40	1.33
11	B2	381	C	C4-N4	8.96	1.42	1.33
38	A1	202	A	C6-N6	8.97	1.41	1.33
38	A1	1749	C	N3-C4	8.96	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2622	C	N3-C4	8.96	1.40	1.33
11	B2	360	A	C6-N6	8.96	1.41	1.33
38	A1	920	G	C5-C4	8.96	1.44	1.38
38	A1	1186	G	N1-C2	8.96	1.45	1.37
38	A1	2307	C	C2-N3	-8.96	1.28	1.35
11	B2	420	C	C4-C5	8.96	1.50	1.43
38	A1	62	C	N3-C4	8.96	1.40	1.33
38	A1	221	G	N9-C4	8.96	1.45	1.38
38	A1	1005	G	C2-N3	8.96	1.40	1.32
38	A1	2593	A	N9-C4	-8.96	1.32	1.37
11	B2	64	G	N9-C8	8.95	1.44	1.37
11	B2	1164	A	N7-C5	-8.96	1.33	1.39
11	B2	1233	G	N7-C5	-8.96	1.33	1.39
39	A3	105	G	N3-C4	8.96	1.41	1.35
38	A1	1536	U	N1-C2	8.95	1.46	1.38
11	B2	705	C	C2-N3	8.95	1.43	1.35
38	A1	2996	A	C6-N1	8.95	1.41	1.35
38	A1	2203	G	C6-N1	8.95	1.45	1.39
38	A1	2529	G	C2-N2	8.95	1.43	1.34
38	A1	536	G	C8-N7	-8.95	1.25	1.30
11	B2	912	G	N9-C8	8.95	1.44	1.37
38	A1	1056	C	N1-C6	8.95	1.42	1.37
38	A1	1811	G	N9-C8	-8.95	1.31	1.37
38	A1	2032	G	C5'-C4'	8.95	1.62	1.51
10	B1	27	A	N7-C5	-8.94	1.33	1.39
38	A1	483	C	N3-C4	8.94	1.40	1.33
38	A1	1470	C	C4'-C3'	8.94	1.62	1.53
38	A1	2624	G	N1-C2	8.94	1.45	1.37
11	B2	934	G	N7-C5	-8.94	1.33	1.39
11	B2	1040	A	P-O5'	-8.94	1.50	1.59
11	B2	183	A	C6-N6	8.94	1.41	1.33
38	A1	82	C	N3-C4	8.94	1.40	1.33
38	A1	407	A	N9-C4	8.94	1.43	1.37
11	B2	226	G	N7-C5	-8.93	1.33	1.39
38	A1	727	A	C6-N1	8.93	1.41	1.35
38	A1	2042	A	N7-C5	-8.93	1.33	1.39
11	B2	436	A	C8-N7	-8.93	1.25	1.31
11	B2	684	G	N9-C4	-8.93	1.30	1.38
38	A1	1587	A	N7-C5	-8.93	1.33	1.39
38	A1	2206	G	C6-N1	8.93	1.45	1.39
11	B2	886	G	N1-C2	8.92	1.44	1.37
38	A1	1888	G	N7-C5	-8.92	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2479	C	N1-C6	8.92	1.42	1.37
38	A1	2859	U	C2'-C1'	-8.92	1.43	1.53
11	B2	1012	C	C3'-C2'	-8.92	1.43	1.52
11	B2	990	G	N1-C2	8.92	1.44	1.37
38	A1	1013	G	C2-N3	8.92	1.39	1.32
38	A1	174	C	N1-C6	8.92	1.42	1.37
38	A1	1364	C	N1-C6	8.92	1.42	1.37
11	B2	435	A	N7-C5	-8.91	1.33	1.39
11	B2	1130	A	N9-C4	8.91	1.43	1.37
11	B2	1283	G	C8-N7	8.91	1.36	1.30
11	B2	1409	G	C8-N7	8.91	1.36	1.30
38	A1	589	G	N7-C5	-8.91	1.33	1.39
38	A1	1276	G	N7-C5	-8.91	1.33	1.39
38	A1	2645	C	N3-C4	8.91	1.40	1.33
38	A1	333	A	C6-N6	8.91	1.41	1.33
38	A1	574	C	C2-O2	8.91	1.32	1.24
38	A1	1194	G	N7-C5	8.91	1.44	1.39
38	A1	1966	C	C2-N3	8.91	1.42	1.35
38	A1	2061	A	C5-C4	8.91	1.45	1.38
38	A1	1480	G	C6-N1	8.91	1.45	1.39
38	A1	1915	G	C3'-C2'	-8.91	1.43	1.52
38	A1	2167	C	C2'-C1'	-8.91	1.43	1.53
11	B2	849	U	C2'-C1'	-8.90	1.43	1.53
38	A1	116	G	C2-N3	8.90	1.39	1.32
38	A1	1095	A	C6-N6	8.90	1.41	1.33
38	A1	1561	G	C5'-C4'	8.90	1.62	1.51
11	B2	51	A	C5-C6	8.90	1.49	1.41
38	A1	1130	G	N9-C8	8.90	1.44	1.37
38	A1	2441	A	C6-N1	8.90	1.41	1.35
38	A1	879	A	P-O5'	-8.90	1.50	1.59
38	A1	1217	U	C2-N3	8.90	1.44	1.37
38	A1	1716	G	N3-C4	8.90	1.41	1.35
38	A1	2790	C	C2-N3	8.90	1.42	1.35
38	A1	1758	U	C3'-C2'	8.89	1.62	1.52
38	A1	2612	A	P-O5'	-8.89	1.50	1.59
11	B2	115	A	P-O5'	8.89	1.68	1.59
38	A1	1138	C	N1-C6	-8.89	1.31	1.37
38	A1	2106	G	C6-N1	8.89	1.45	1.39
39	A3	15	G	N1-C2	8.89	1.44	1.37
11	B2	663	G	N7-C5	-8.89	1.33	1.39
38	A1	1554	G	C6-N1	8.89	1.45	1.39
10	B1	2	G	O3'-P	-8.88	1.50	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1066	C	N3-C4	8.89	1.40	1.33
11	B2	538	C	N1-C6	8.88	1.42	1.37
11	B2	84	C	O3'-P	-8.88	1.50	1.61
11	B2	1303	C	C5'-C4'	8.88	1.62	1.51
38	A1	521	C	N3-C4	8.88	1.40	1.33
38	A1	1444	A	C5-C4	8.88	1.45	1.38
38	A1	3011	G	C2'-C1'	-8.88	1.43	1.53
11	B2	1326	G	C6-N1	8.88	1.45	1.39
11	B2	578	G	C5-C6	8.88	1.51	1.42
11	B2	1450	U	C2-N3	8.88	1.44	1.37
38	A1	205	A	C8-N7	8.88	1.37	1.31
38	A1	272	G	C6-N1	8.88	1.45	1.39
38	A1	286	G	C6-N1	8.88	1.45	1.39
38	A1	2226	G	C6-N1	8.88	1.45	1.39
39	A3	88	A	N3-C4	8.88	1.40	1.34
11	B2	361	A	C5'-C4'	8.87	1.61	1.51
11	B2	889	G	C5-C6	-8.87	1.33	1.42
11	B2	1048	G	C6-N1	8.87	1.45	1.39
11	B2	1410	G	C5-C4	-8.87	1.32	1.38
38	A1	28	A	C6-N1	8.87	1.41	1.35
38	A1	2527	G	C2-N3	8.87	1.39	1.32
11	B2	1326	G	N7-C5	-8.87	1.33	1.39
38	A1	9	A	C6-N6	8.87	1.41	1.33
38	A1	1367	A	N7-C5	-8.87	1.33	1.39
38	A1	1707	A	C5-C4	8.87	1.45	1.38
38	A1	1825	G	N1-C2	8.87	1.44	1.37
38	A1	1688	C	C2'-C1'	-8.87	1.43	1.53
38	A1	2018	C	C4-N4	8.86	1.42	1.33
38	A1	301	G	N7-C5	8.86	1.44	1.39
38	A1	1294	A	N7-C5	-8.86	1.33	1.39
11	B2	98	U	N3-C4	8.86	1.46	1.38
11	B2	621	G	C2-N3	8.86	1.39	1.32
11	B2	745	G	N1-C2	8.86	1.44	1.37
11	B2	1481	G	N1-C2	8.86	1.44	1.37
11	B2	92	G	C6-N1	8.86	1.45	1.39
38	A1	193	A	C6-N1	8.86	1.41	1.35
38	A1	1903	G	N7-C5	-8.86	1.33	1.39
38	A1	2102	A	C2'-C1'	-8.86	1.43	1.53
38	A1	2379	G	N1-C2	8.86	1.44	1.37
38	A1	2477	G	C6-N1	8.86	1.45	1.39
11	B2	1325	C	N1-C6	8.85	1.42	1.37
38	A1	732	G	C5-C6	-8.85	1.33	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1182	G	N7-C5	-8.85	1.33	1.39
38	A1	232	U	P-O5'	-8.85	1.50	1.59
38	A1	508	G	C2-N3	8.85	1.39	1.32
38	A1	1193	G	N7-C5	-8.85	1.33	1.39
38	A1	1299	C	N3-C4	8.85	1.40	1.33
38	A1	1858	G	C5'-C4'	8.85	1.61	1.51
11	B2	698	A	N9-C4	8.84	1.43	1.37
11	B2	1236	G	C5-C4	8.84	1.44	1.38
11	B2	432	G	N9-C4	8.84	1.45	1.38
11	B2	1075	A	C6-N1	8.84	1.41	1.35
11	B2	311	A	N3-C4	-8.84	1.29	1.34
11	B2	567	A	C6-N1	8.84	1.41	1.35
38	A1	58	G	N9-C4	-8.84	1.30	1.38
38	A1	1581	A	N9-C4	8.84	1.43	1.37
11	B2	1283	G	C2'-C1'	-8.84	1.43	1.53
38	A1	2164	G	C4'-C3'	8.84	1.62	1.53
38	A1	2447	A	N7-C5	-8.84	1.33	1.39
38	A1	2595	C	N1-C6	8.84	1.42	1.37
38	A1	2845	C	N3-C4	8.84	1.40	1.33
38	A1	667	C	C4-C5	-8.84	1.35	1.43
38	A1	1697	G	N7-C5	-8.84	1.33	1.39
11	B2	1409	G	N1-C2	8.84	1.44	1.37
38	A1	1108	A	C5-C4	8.84	1.45	1.38
38	A1	1534	G	N3-C4	8.84	1.41	1.35
38	A1	1772	A	C6-N6	8.84	1.41	1.33
38	A1	2205	A	C8-N7	-8.84	1.25	1.31
38	A1	2241	U	C2-N3	8.84	1.44	1.37
11	B2	567	A	P-O5'	-8.83	1.50	1.59
39	A3	111	G	C8-N7	-8.83	1.25	1.30
11	B2	1402	C	N3-C4	8.83	1.40	1.33
38	A1	1751	G	N7-C5	-8.83	1.33	1.39
11	B2	1276	G	C2-N3	8.83	1.39	1.32
38	A1	2230	G	C2-N3	8.83	1.39	1.32
11	B2	987	G	C2-N3	8.83	1.39	1.32
38	A1	827	G	C2-N3	8.83	1.39	1.32
38	A1	1964	G	N3-C4	-8.82	1.29	1.35
38	A1	2490	C	N1-C6	8.82	1.42	1.37
38	A1	3038	A	C6-N6	8.82	1.41	1.33
39	A3	114	G	C6-N1	8.82	1.45	1.39
11	B2	357	C	N3-C4	8.82	1.40	1.33
11	B2	527	A	N9-C8	8.82	1.44	1.37
11	B2	623	C	C2-O2	8.82	1.32	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1226	G	N1-C2	8.82	1.44	1.37
38	A1	332	A	N7-C5	-8.82	1.33	1.39
38	A1	366	G	C8-N7	8.82	1.36	1.30
38	A1	1168	A	C2'-C1'	-8.82	1.43	1.53
38	A1	276	G	C2-N3	8.82	1.39	1.32
38	A1	1532	G	C6-N1	8.82	1.45	1.39
11	B2	766	G	N7-C5	-8.82	1.33	1.39
38	A1	83	G	N3-C4	-8.82	1.29	1.35
38	A1	743	A	N9-C4	8.82	1.43	1.37
11	B2	528	G	N9-C8	8.81	1.44	1.37
11	B2	562	A	C6-N6	8.81	1.41	1.33
38	A1	2354	A	O3'-P	-8.81	1.50	1.61
11	B2	879	U	C1'-N1	8.81	1.61	1.48
11	B2	1302	C	P-O5'	-8.81	1.50	1.59
11	B2	1454	A	N7-C5	-8.81	1.33	1.39
38	A1	507	G	C8-N7	8.81	1.36	1.30
38	A1	715	G	C2-N3	8.81	1.39	1.32
11	B2	868	C	C4-N4	8.81	1.41	1.33
38	A1	636	G	N9-C8	8.81	1.44	1.37
38	A1	712	C	N1-C6	8.81	1.42	1.37
11	B2	1485	G	N7-C5	-8.81	1.33	1.39
38	A1	769	G	N3-C4	8.81	1.41	1.35
11	B2	1373	A	C2-N3	8.80	1.41	1.33
38	A1	374	C	C2'-C1'	-8.80	1.43	1.53
38	A1	1231	C	C4-N4	8.80	1.41	1.33
38	A1	2029	C	N3-C4	8.81	1.40	1.33
38	A1	2754	A	C8-N7	8.81	1.37	1.31
38	A1	1264	G	N7-C5	-8.80	1.33	1.39
38	A1	1290	G	C2-N3	8.80	1.39	1.32
38	A1	2512	C	P-O5'	8.80	1.68	1.59
11	B2	922	G	C2'-C1'	-8.80	1.43	1.53
38	A1	809	A	C6-N6	8.80	1.41	1.33
38	A1	1034	G	N9-C4	8.80	1.45	1.38
38	A1	2416	G	C2-N3	8.80	1.39	1.32
11	B2	1328	G	C6-N1	8.79	1.45	1.39
11	B2	1234	A	C6-N6	8.79	1.41	1.33
38	A1	316	G	C2'-C1'	-8.79	1.43	1.53
38	A1	1602	C	O3'-P	-8.79	1.50	1.61
10	B1	65	C	C4-C5	8.79	1.50	1.43
11	B2	472	C	C2-N3	8.79	1.42	1.35
11	B2	1392	G	C2-N2	8.79	1.43	1.34
38	A1	408	C	O3'-P	-8.79	1.50	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2176	G	N9-C8	-8.79	1.31	1.37
38	A1	2359	G	N9-C8	8.79	1.44	1.37
38	A1	3002	A	C6-N1	8.79	1.41	1.35
38	A1	268	C	N3-C4	8.79	1.40	1.33
38	A1	301	G	C5'-C4'	8.79	1.61	1.51
11	B2	550	G	C6-N1	8.79	1.45	1.39
38	A1	826	C	N1-C6	8.79	1.42	1.37
11	B2	1020	G	C6-N1	8.78	1.45	1.39
11	B2	1180	G	C6-N1	8.79	1.45	1.39
38	A1	553	C	C2'-C1'	-8.78	1.43	1.53
38	A1	807	G	N7-C5	-8.78	1.33	1.39
38	A1	1090	G	C6-O6	-8.79	1.16	1.24
38	A1	1337	G	N1-C2	8.79	1.44	1.37
11	B2	300	G	N9-C4	8.78	1.45	1.38
11	B2	838	C	C4'-C3'	-8.78	1.43	1.53
38	A1	132	G	C6-N1	8.78	1.45	1.39
38	A1	141	C	N3-C4	8.78	1.40	1.33
38	A1	690	G	C5-C4	8.78	1.44	1.38
11	B2	950	C	C4-C5	8.78	1.50	1.43
38	A1	281	G	N7-C5	-8.78	1.33	1.39
38	A1	794	G	P-O5'	-8.78	1.50	1.59
11	B2	762	G	C8-N7	-8.78	1.25	1.30
38	A1	10	C	N3-C4	8.78	1.40	1.33
38	A1	1335	C	O3'-P	-8.78	1.50	1.61
38	A1	2302	C	C4-N4	8.78	1.41	1.33
11	B2	1289	G	C6-N1	8.77	1.45	1.39
38	A1	829	G	N1-C2	8.77	1.44	1.37
38	A1	2889	A	N3-C4	8.77	1.40	1.34
11	B2	610	G	C6-N1	8.77	1.45	1.39
38	A1	1393	C	C3'-C2'	-8.77	1.43	1.52
38	A1	2698	G	N9-C8	8.77	1.44	1.37
38	A1	3000	U	C5'-C4'	8.77	1.61	1.51
11	B2	277	G	C5-C4	8.77	1.44	1.38
11	B2	535	U	C4-C5	8.77	1.51	1.43
38	A1	26	G	N9-C8	8.77	1.44	1.37
11	B2	399	A	N7-C5	-8.76	1.33	1.39
38	A1	133	G	N7-C5	-8.76	1.33	1.39
38	A1	1665	G	C2-N3	8.76	1.39	1.32
11	B2	623	C	C2-N3	8.76	1.42	1.35
38	A1	116	G	C6-N1	8.76	1.45	1.39
38	A1	2984	A	C6-N6	8.76	1.41	1.33
11	B2	1482	C	N1-C6	8.76	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	199	C	N3-C4	8.76	1.40	1.33
38	A1	995	G	N3-C4	8.76	1.41	1.35
10	B1	48	U	N3-C4	8.76	1.46	1.38
11	B2	162	C	N3-C4	8.76	1.40	1.33
11	B2	700	G	C6-N1	8.76	1.45	1.39
11	B2	1149	C	C4-N4	8.76	1.41	1.33
11	B2	1402	C	C2-N3	-8.76	1.28	1.35
38	A1	76	C	N1-C6	8.76	1.42	1.37
38	A1	1280	C	N3-C4	8.76	1.40	1.33
38	A1	1602	C	P-O5'	-8.76	1.50	1.59
38	A1	2046	C	C4-N4	8.76	1.41	1.33
38	A1	2780	G	C6-N1	8.76	1.45	1.39
11	B2	191	A	C6-N1	8.75	1.41	1.35
38	A1	1652	A	C6-N6	8.75	1.41	1.33
38	A1	1841	G	C2-N3	8.75	1.39	1.32
11	B2	412	U	N3-C4	8.75	1.46	1.38
11	B2	782	A	P-O5'	8.75	1.68	1.59
38	A1	436	C	N1-C6	8.75	1.42	1.37
38	A1	921	C	N1-C6	8.75	1.42	1.37
38	A1	2294	A	N3-C4	8.75	1.40	1.34
38	A1	1738	A	N7-C5	-8.75	1.33	1.39
11	B2	541	G	N1-C2	8.75	1.44	1.37
11	B2	1474	A	C5-C4	8.75	1.44	1.38
38	A1	2333	G	C5-C4	8.75	1.44	1.38
38	A1	2552	C	C4-C5	-8.75	1.35	1.43
38	A1	2883	C	C4-N4	8.75	1.41	1.33
39	A3	79	U	C2-N3	8.75	1.43	1.37
11	B2	750	C	N3-C4	8.75	1.40	1.33
38	A1	1180	G	C6-N1	8.75	1.45	1.39
38	A1	1694	G	N3-C4	8.75	1.41	1.35
39	A3	89	G	C6-N1	8.75	1.45	1.39
11	B2	82	G	C8-N7	-8.74	1.25	1.30
38	A1	379	U	O3'-P	-8.74	1.50	1.61
38	A1	2015	G	C2-N3	8.74	1.39	1.32
38	A1	2051	A	N9-C4	8.74	1.43	1.37
38	A1	2624	G	C2-N3	8.74	1.39	1.32
11	B2	43	A	C4'-C3'	8.74	1.62	1.53
11	B2	932	C	C4'-C3'	8.74	1.62	1.53
38	A1	1609	G	C2-N3	8.74	1.39	1.32
38	A1	2238	G	N9-C4	8.74	1.45	1.38
39	A3	113	C	C5'-C4'	8.74	1.61	1.51
38	A1	108	G	N9-C8	-8.73	1.31	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2365	G	N7-C5	-8.73	1.34	1.39
38	A1	1994	G	N7-C5	-8.73	1.34	1.39
11	B2	394	C	P-O5'	-8.73	1.51	1.59
38	A1	2309	C	N1-C6	8.73	1.42	1.37
11	B2	923	A	N9-C4	-8.73	1.32	1.37
38	A1	30	G	N9-C4	-8.73	1.30	1.38
38	A1	2827	C	N1-C6	-8.73	1.31	1.37
38	A1	1143	A	N3-C4	-8.73	1.29	1.34
10	B1	50	G	C6-N1	8.72	1.45	1.39
11	B2	419	G	C6-N1	8.72	1.45	1.39
38	A1	555	G	N1-C2	8.72	1.44	1.37
38	A1	1165	C	N3-C4	8.72	1.40	1.33
38	A1	1282	A	C5-C4	8.72	1.44	1.38
38	A1	1337	G	C2-N2	8.72	1.43	1.34
38	A1	1342	G	N7-C5	-8.72	1.34	1.39
38	A1	1932	G	N3-C4	-8.72	1.29	1.35
11	B2	391	G	N9-C8	8.72	1.44	1.37
11	B2	556	G	N1-C2	8.72	1.44	1.37
11	B2	752	G	C2-N3	8.72	1.39	1.32
38	A1	2249	A	N9-C4	-8.72	1.32	1.37
38	A1	991	U	C2'-C1'	-8.72	1.43	1.53
38	A1	1215	C	C2-N3	8.72	1.42	1.35
38	A1	2477	G	N7-C5	-8.72	1.34	1.39
38	A1	1239	C	C4-C5	-8.72	1.35	1.43
11	B2	374	G	C8-N7	-8.72	1.25	1.30
38	A1	1658	A	C6-N6	8.72	1.41	1.33
38	A1	1725	A	N9-C4	8.72	1.43	1.37
38	A1	2000	G	N3-C4	-8.72	1.29	1.35
39	A3	12	G	C2'-C1'	-8.72	1.43	1.53
11	B2	247	G	N1-C2	8.72	1.44	1.37
11	B2	334	G	C2-N3	8.71	1.39	1.32
38	A1	295	G	P-O5'	-8.71	1.51	1.59
38	A1	298	G	C2-N3	8.71	1.39	1.32
38	A1	768	C	C2'-C1'	-8.71	1.43	1.53
38	A1	1525	G	C5'-C4'	8.71	1.61	1.51
38	A1	1555	G	N3-C4	-8.71	1.29	1.35
38	A1	1588	C	C2'-C1'	-8.72	1.43	1.53
38	A1	1807	G	N1-C2	8.72	1.44	1.37
38	A1	1949	A	C6-N6	8.71	1.41	1.33
38	A1	423	G	C6-N1	8.71	1.45	1.39
38	A1	1880	A	N9-C8	8.71	1.44	1.37
38	A1	2823	G	C2'-C1'	-8.71	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2276	G	N9-C8	8.71	1.44	1.37
11	B2	225	U	C2-N3	8.71	1.43	1.37
38	A1	524	C	N1-C6	8.71	1.42	1.37
11	B2	1487	U	C2-N3	8.71	1.43	1.37
38	A1	58	G	C6-N1	8.71	1.45	1.39
38	A1	957	C	N1-C6	8.71	1.42	1.37
38	A1	181	U	N3-C4	8.70	1.46	1.38
11	B2	1166	G	P-O5'	-8.70	1.51	1.59
38	A1	2028	G	C6-N1	8.70	1.45	1.39
38	A1	2340	A	C6-N1	8.70	1.41	1.35
12	AG	45	ARG	CZ-NH1	8.70	1.44	1.33
11	B2	1337	A	N7-C5	-8.70	1.34	1.39
38	A1	1773	C	N1-C6	8.70	1.42	1.37
11	B2	858	A	N7-C5	8.70	1.44	1.39
38	A1	219	G	C6-N1	8.70	1.45	1.39
38	A1	523	C	N1-C6	8.70	1.42	1.37
38	A1	2172	G	C6-N1	8.70	1.45	1.39
38	A1	2844	G	N1-C2	8.70	1.44	1.37
38	A1	141	C	C2'-C1'	-8.70	1.43	1.53
38	A1	1832	G	C6-N1	8.70	1.45	1.39
38	A1	2634	U	C5'-C4'	8.70	1.61	1.51
11	B2	321	A	C6-N6	8.69	1.41	1.33
11	B2	1306	A	C6-N1	8.69	1.41	1.35
38	A1	521	C	C2'-C1'	-8.69	1.43	1.53
38	A1	2500	G	N7-C5	-8.69	1.34	1.39
38	A1	2683	G	C2-N3	8.69	1.39	1.32
11	B2	675	A	C4'-C3'	-8.69	1.43	1.53
38	A1	2491	C	N1-C6	-8.69	1.31	1.37
38	A1	2778	A	N3-C4	-8.69	1.29	1.34
38	A1	1565	G	N7-C5	-8.68	1.34	1.39
38	A1	1682	C	C4-N4	8.68	1.41	1.33
38	A1	1736	G	C6-N1	8.68	1.45	1.39
38	A1	1942	G	N7-C5	-8.68	1.34	1.39
9	AX	168	SER	CA-CB	8.68	1.66	1.52
11	B2	243	G	N9-C8	8.68	1.44	1.37
11	B2	1215	G	C6-N1	8.68	1.45	1.39
38	A1	2448	A	N7-C5	-8.68	1.34	1.39
38	A1	2329	A	C6-N6	8.68	1.40	1.33
11	B2	592	G	C2-N2	8.68	1.43	1.34
38	A1	561	C	N1-C6	8.68	1.42	1.37
38	A1	927	G	N9-C8	8.68	1.44	1.37
38	A1	1393	C	C2-N3	8.67	1.42	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2105	A	N7-C5	-8.67	1.34	1.39
38	A1	2366	G	N1-C2	8.67	1.44	1.37
11	B2	1053	A	C8-N7	-8.67	1.25	1.31
38	A1	2088	G	C2-N3	8.67	1.39	1.32
38	A1	198	C	N3-C4	8.67	1.40	1.33
38	A1	1216	A	C6-N6	8.67	1.40	1.33
38	A1	770	G	C4'-C3'	8.66	1.62	1.53
38	A1	121	G	C2-N3	8.66	1.39	1.32
38	A1	666	A	N7-C5	-8.66	1.34	1.39
11	B2	34	G	N3-C4	8.66	1.41	1.35
38	A1	2002	A	N7-C5	-8.66	1.34	1.39
11	B2	426	C	N3-C4	8.66	1.40	1.33
11	B2	500	A	C6-N6	8.66	1.40	1.33
38	A1	671	G	N1-C2	8.66	1.44	1.37
38	A1	1407	A	O3'-P	-8.66	1.50	1.61
38	A1	2632	C	N3-C4	8.66	1.40	1.33
38	A1	2748	C	N3-C4	8.66	1.40	1.33
11	B2	13	C	C2-N3	8.65	1.42	1.35
11	B2	156	A	N7-C5	-8.65	1.34	1.39
38	A1	60	G	C6-N1	8.65	1.45	1.39
38	A1	562	G	C5'-C4'	8.65	1.61	1.51
38	A1	722	C	N3-C4	8.65	1.40	1.33
38	A1	772	G	C6-N1	8.65	1.45	1.39
38	A1	2026	C	C2'-C1'	-8.65	1.43	1.53
11	B2	844	G	P-O5'	-8.65	1.51	1.59
38	A1	1242	A	N3-C4	8.65	1.40	1.34
38	A1	1596	G	N7-C5	-8.65	1.34	1.39
11	B2	1006	C	C5'-C4'	8.65	1.61	1.51
11	B2	1273	G	N3-C4	-8.65	1.29	1.35
38	A1	1357	G	C6-N1	8.65	1.45	1.39
38	A1	2143	C	C4-N4	8.65	1.41	1.33
38	A1	2332	G	N1-C2	-8.65	1.30	1.37
10	B1	10	G	C6-N1	8.64	1.45	1.39
38	A1	423	G	C8-N7	-8.64	1.25	1.30
11	B2	754	G	C5'-C4'	8.64	1.61	1.51
38	A1	216	A	C6-N1	8.64	1.41	1.35
38	A1	456	G	C6-N1	8.64	1.45	1.39
38	A1	457	C	N1-C6	8.64	1.42	1.37
11	B2	532	C	C1'-N1	8.64	1.61	1.48
38	A1	2252	C	C2-N3	8.64	1.42	1.35
38	A1	323	U	C2-N3	8.64	1.43	1.37
38	A1	597	C	C5-C6	-8.64	1.27	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	B1	50	G	C8-N7	-8.64	1.25	1.30
11	B2	614	G	C5-C4	8.64	1.44	1.38
11	B2	809	C	N1-C6	8.64	1.42	1.37
11	B2	1029	G	N9-C4	-8.64	1.31	1.38
38	A1	130	G	C2-N3	8.64	1.39	1.32
38	A1	1391	C	C4-C5	-8.64	1.36	1.43
38	A1	2681	A	C4'-C3'	8.64	1.62	1.53
38	A1	386	A	N7-C5	-8.64	1.34	1.39
38	A1	2652	G	N1-C2	8.64	1.44	1.37
11	B2	22	G	C5'-C4'	8.63	1.61	1.51
38	A1	1778	G	C5-C4	8.63	1.44	1.38
11	B2	1286	C	C4-N4	8.63	1.41	1.33
38	A1	2972	G	N7-C5	-8.63	1.34	1.39
38	A1	384	G	N9-C8	8.63	1.43	1.37
38	A1	408	C	C4-C5	8.63	1.49	1.43
38	A1	1949	A	C5-C6	-8.63	1.33	1.41
39	A3	63	G	C6-N1	8.63	1.45	1.39
39	A3	109	A	P-O5'	-8.63	1.51	1.59
11	B2	273	C	C3'-C2'	-8.63	1.43	1.52
11	B2	1039	C	C4-N4	8.63	1.41	1.33
38	A1	559	G	C6-N1	8.63	1.45	1.39
38	A1	625	A	C6-N6	8.62	1.40	1.33
38	A1	104	C	O3'-P	-8.62	1.50	1.61
38	A1	454	C	C4-N4	8.62	1.41	1.33
38	A1	636	G	N7-C5	-8.62	1.34	1.39
38	A1	2412	A	C2-N3	8.62	1.41	1.33
38	A1	2618	C	C4-N4	8.62	1.41	1.33
38	A1	2898	G	C2-N3	8.62	1.39	1.32
38	A1	1129	G	N9-C4	-8.62	1.31	1.38
11	B2	407	G	C5'-C4'	8.62	1.61	1.51
11	B2	601	G	C5-C4	8.62	1.44	1.38
11	B2	1252	C	N3-C4	8.62	1.40	1.33
11	B2	1416	C	N3-C4	8.62	1.40	1.33
38	A1	2463	G	N7-C5	-8.62	1.34	1.39
38	A1	2610	C	N3-C4	8.62	1.40	1.33
11	B2	590	G	C2-N3	8.62	1.39	1.32
11	B2	1303	C	C4-N4	8.62	1.41	1.33
11	B2	1455	A	N1-C2	-8.61	1.26	1.34
38	A1	1512	G	N1-C2	8.62	1.44	1.37
38	A1	2038	C	N3-C4	8.61	1.40	1.33
11	B2	7	G	N1-C2	8.61	1.44	1.37
11	B2	1232	G	N9-C8	-8.61	1.31	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	501	G	C2-N3	8.61	1.39	1.32
38	A1	174	C	C4-N4	8.61	1.41	1.33
38	A1	916	A	C6-N1	-8.61	1.29	1.35
38	A1	2464	G	C2-N3	8.61	1.39	1.32
11	B2	980	C	N3-C4	8.60	1.40	1.33
38	A1	1326	U	N3-C4	8.60	1.46	1.38
11	B2	260	C	C4-N4	8.60	1.41	1.33
11	B2	774	U	C2-N3	8.60	1.43	1.37
38	A1	234	G	P-O5'	-8.60	1.51	1.59
38	A1	356	C	N3-C4	8.60	1.40	1.33
38	A1	2301	C	C4-C5	8.60	1.49	1.43
38	A1	39	C	C4-C5	-8.60	1.36	1.43
11	B2	885	G	C2-N2	8.60	1.43	1.34
38	A1	31	G	C2-N3	8.60	1.39	1.32
38	A1	344	G	N7-C5	-8.60	1.34	1.39
38	A1	1384	C	N3-C4	8.60	1.40	1.33
38	A1	1130	G	C6-N1	8.60	1.45	1.39
11	B2	1339	G	C8-N7	8.59	1.36	1.30
11	B2	1359	C	P-O5'	-8.59	1.51	1.59
38	A1	2248	G	C2-N3	8.59	1.39	1.32
38	A1	1780	C	C4'-C3'	8.59	1.62	1.53
11	B2	542	G	C6-N1	8.59	1.45	1.39
38	A1	2306	C	N3-C4	8.59	1.40	1.33
11	B2	649	A	N9-C4	8.59	1.43	1.37
11	B2	1414	G	C5'-C4'	8.59	1.61	1.51
38	A1	742	C	C4-C5	8.59	1.49	1.43
11	B2	351	C	O3'-P	8.59	1.71	1.61
11	B2	536	A	N3-C4	-8.59	1.29	1.34
11	B2	995	G	C2-N3	8.59	1.39	1.32
11	B2	996	A	C6-N6	8.59	1.40	1.33
38	A1	1405	G	C2-N3	8.59	1.39	1.32
38	A1	1565	G	C2-N3	8.59	1.39	1.32
11	B2	456	U	C2-N3	8.58	1.43	1.37
11	B2	1144	G	N9-C8	8.58	1.43	1.37
38	A1	133	G	N3-C4	8.58	1.41	1.35
38	A1	235	G	C6-N1	8.58	1.45	1.39
38	A1	317	A	N9-C8	8.58	1.44	1.37
38	A1	1386	G	N7-C5	-8.58	1.34	1.39
11	B2	359	A	N7-C5	-8.58	1.34	1.39
11	B2	587	G	C6-N1	8.58	1.45	1.39
38	A1	1212	A	N3-C4	-8.58	1.29	1.34
38	A1	1900	U	C2-N3	8.58	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2794	G	C6-N1	8.58	1.45	1.39
11	B2	751	C	C5-C6	8.58	1.41	1.34
38	A1	532	G	N7-C5	8.58	1.44	1.39
38	A1	885	A	C5-C4	-8.58	1.32	1.38
38	A1	2464	G	N9-C4	-8.58	1.31	1.38
38	A1	601	A	C5-C4	8.57	1.44	1.38
38	A1	732	G	C5-C4	-8.57	1.32	1.38
38	A1	1303	C	C4-C5	8.57	1.49	1.43
11	B2	1455	A	C5'-C4'	8.57	1.61	1.51
11	B2	1475	C	C4-C5	8.57	1.49	1.43
38	A1	2100	U	C5'-C4'	8.57	1.61	1.51
39	A3	89	G	N9-C4	-8.57	1.31	1.38
11	B2	1148	G	N1-C2	8.57	1.44	1.37
38	A1	778	A	N9-C8	-8.57	1.30	1.37
11	B2	1036	G	N7-C5	-8.56	1.34	1.39
11	B2	1433	C	C4-N4	8.56	1.41	1.33
38	A1	1485	A	C8-N7	8.56	1.37	1.31
38	A1	2471	A	N9-C4	-8.56	1.32	1.37
38	A1	2843	C	N3-C4	8.56	1.40	1.33
11	B2	550	G	N9-C8	8.56	1.43	1.37
38	A1	1766	A	C8-N7	-8.56	1.25	1.31
38	A1	2037	A	C6-N6	8.56	1.40	1.33
38	A1	2331	A	C8-N7	-8.56	1.25	1.31
11	B2	1051	G	N1-C2	8.56	1.44	1.37
38	A1	1899	C	N3-C4	8.56	1.40	1.33
38	A1	2335	G	C8-N7	8.56	1.36	1.30
38	A1	2474	A	N7-C5	-8.56	1.34	1.39
38	A1	518	A	C6-N1	8.55	1.41	1.35
38	A1	583	A	C6-N1	8.56	1.41	1.35
38	A1	2127	G	N9-C4	8.55	1.44	1.38
11	B2	250	G	C5-C4	8.55	1.44	1.38
11	B2	1292	A	C5-C4	8.55	1.44	1.38
38	A1	2360	G	C8-N7	8.55	1.36	1.30
11	B2	1046	G	P-O5'	8.55	1.68	1.59
11	B2	1439	G	N7-C5	-8.55	1.34	1.39
38	A1	369	G	C2-N3	8.55	1.39	1.32
38	A1	1111	G	C2-N3	8.55	1.39	1.32
11	B2	182	A	N7-C5	-8.54	1.34	1.39
38	A1	1649	G	N1-C2	8.54	1.44	1.37
38	A1	2354	A	C2'-C1'	-8.54	1.44	1.53
39	A3	40	G	C2-N2	8.54	1.43	1.34
11	B2	837	C	N3-C4	8.54	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	50	C	N1-C6	-8.54	1.32	1.37
38	A1	800	G	N1-C2	8.54	1.44	1.37
38	A1	1246	G	C5'-C4'	8.54	1.61	1.51
38	A1	1876	G	C6-N1	8.54	1.45	1.39
38	A1	832	A	N3-C4	-8.54	1.29	1.34
38	A1	865	C	C2-N3	8.54	1.42	1.35
38	A1	50	C	P-O5'	8.54	1.68	1.59
11	B2	1123	G	C5-C4	8.54	1.44	1.38
38	A1	2743	U	C2'-C1'	-8.53	1.44	1.53
11	B2	638	G	C5-C4	8.53	1.44	1.38
11	B2	546	G	C5-C4	8.53	1.44	1.38
11	B2	1323	A	N9-C8	8.53	1.44	1.37
38	A1	1884	C	C5-C6	-8.53	1.27	1.34
38	A1	2992	G	C2-N3	8.53	1.39	1.32
38	A1	1658	A	C6-N1	8.53	1.41	1.35
11	B2	250	G	C2-N3	8.53	1.39	1.32
38	A1	924	A	N7-C5	-8.53	1.34	1.39
39	A3	48	A	C6-N6	8.53	1.40	1.33
11	B2	1182	G	N1-C2	8.53	1.44	1.37
38	A1	937	A	C6-N6	8.53	1.40	1.33
38	A1	1210	G	C2-N3	8.53	1.39	1.32
38	A1	2032	G	N7-C5	8.53	1.44	1.39
38	A1	932	C	N3-C4	8.52	1.40	1.33
11	B2	69	U	C5'-C4'	8.52	1.61	1.51
38	A1	1298	C	N3-C4	8.52	1.40	1.33
38	A1	3016	G	C5-C6	-8.52	1.33	1.42
11	B2	728	G	C5-C4	8.52	1.44	1.38
38	A1	1768	C	N3-C4	8.52	1.40	1.33
11	B2	516	A	N3-C4	-8.52	1.29	1.34
11	B2	667	G	C2-N3	8.52	1.39	1.32
38	A1	1325	A	C6-N1	8.52	1.41	1.35
38	A1	426	G	C2-N3	8.51	1.39	1.32
38	A1	851	G	C2-N3	8.51	1.39	1.32
38	A1	1337	G	C5-C4	8.51	1.44	1.38
38	A1	2663	G	N1-C2	8.51	1.44	1.37
38	A1	871	G	N7-C5	-8.51	1.34	1.39
11	B2	736	A	P-O5'	8.50	1.68	1.59
38	A1	1846	G	C2'-C1'	-8.50	1.44	1.53
11	B2	415	C	C5'-C4'	8.50	1.61	1.51
11	B2	1009	G	N7-C5	-8.50	1.34	1.39
38	A1	1351	G	C2-N3	8.50	1.39	1.32
38	A1	1436	A	O4'-C1'	8.50	1.52	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	157	A	C6-N6	8.50	1.40	1.33
11	B2	159	C	N1-C6	8.50	1.42	1.37
38	A1	3026	C	C2-N3	8.50	1.42	1.35
11	B2	594	A	C8-N7	8.50	1.37	1.31
11	B2	1394	G	N1-C2	8.50	1.44	1.37
38	A1	915	G	C5-C4	8.50	1.44	1.38
38	A1	2453	C	C4-C5	8.50	1.49	1.43
38	A1	2548	A	O3'-P	-8.50	1.50	1.61
11	B2	196	G	O3'-P	-8.49	1.50	1.61
11	B2	237	C	P-O5'	8.49	1.68	1.59
11	B2	1316	U	C2-N3	8.49	1.43	1.37
38	A1	2165	A	C5-C4	8.49	1.44	1.38
38	A1	677	A	N7-C5	-8.49	1.34	1.39
39	A3	79	U	P-O5'	-8.49	1.51	1.59
11	B2	511	C	C4-N4	8.49	1.41	1.33
38	A1	619	G	C3'-C2'	8.49	1.62	1.52
38	A1	1025	A	N9-C4	8.49	1.43	1.37
38	A1	2870	A	C5-C4	8.49	1.44	1.38
38	A1	777	A	N7-C5	8.49	1.44	1.39
38	A1	1238	G	N1-C2	8.49	1.44	1.37
38	A1	338	A	P-O5'	-8.49	1.51	1.59
38	A1	2889	A	N7-C5	-8.49	1.34	1.39
11	B2	44	C	C4-N4	8.48	1.41	1.33
38	A1	1557	G	C6-N1	8.48	1.45	1.39
38	A1	2404	G	C3'-C2'	-8.48	1.43	1.52
38	A1	1070	G	N1-C2	8.48	1.44	1.37
11	B2	22	G	C3'-O3'	8.48	1.54	1.42
38	A1	2694	C	N3-C4	8.48	1.39	1.33
11	B2	737	C	N3-C4	8.48	1.39	1.33
38	A1	1113	G	C2-N3	8.48	1.39	1.32
38	A1	2834	C	N3-C4	8.48	1.39	1.33
11	B2	812	U	C4-O4	8.47	1.30	1.23
11	B2	1141	G	C4'-C3'	-8.47	1.43	1.53
11	B2	1018	C	O3'-P	-8.47	1.50	1.61
38	A1	1693	G	N1-C2	8.47	1.44	1.37
38	A1	12	C	C5'-C4'	8.47	1.61	1.51
38	A1	886	G	C2-N3	8.47	1.39	1.32
38	A1	1860	A	C6-N6	-8.47	1.27	1.33
38	A1	2893	U	N3-C4	8.47	1.46	1.38
10	B1	61	U	C5'-C4'	8.47	1.61	1.51
38	A1	60	G	N1-C2	8.47	1.44	1.37
39	A3	66	A	C5-C4	8.47	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	B1	15	G	O3'-P	-8.47	1.50	1.61
38	A1	1129	G	C2'-C1'	-8.46	1.44	1.53
11	B2	336	C	O3'-P	-8.46	1.50	1.61
38	A1	1031	C	C2-N3	-8.46	1.28	1.35
38	A1	107	G	C2-N2	8.46	1.43	1.34
38	A1	1765	A	N9-C4	8.46	1.43	1.37
38	A1	2096	G	C3'-C2'	8.46	1.62	1.52
11	B2	964	A	C6-N6	8.46	1.40	1.33
38	A1	475	U	C5'-C4'	8.46	1.61	1.51
38	A1	710	G	N1-C2	8.46	1.44	1.37
38	A1	731	C	C4'-C3'	8.46	1.62	1.53
5	AS	82	ARG	NE-CZ	8.46	1.44	1.33
11	B2	37	G	C5-C4	-8.45	1.32	1.38
11	B2	601	G	C2-N3	8.45	1.39	1.32
11	B2	754	G	N9-C8	8.45	1.43	1.37
11	B2	770	A	N9-C4	8.46	1.43	1.37
11	B2	1264	G	C2-N3	8.46	1.39	1.32
11	B2	174	G	C5-C6	-8.45	1.33	1.42
11	B2	945	G	N7-C5	8.45	1.44	1.39
38	A1	1372	C	C3'-C2'	8.45	1.62	1.52
38	A1	1472	U	C2-N3	8.45	1.43	1.37
38	A1	2901	C	N3-C4	8.45	1.39	1.33
38	A1	3020	G	C5-C4	8.45	1.44	1.38
38	A1	2953	U	P-O5'	-8.45	1.51	1.59
38	A1	2883	C	C2-N3	8.45	1.42	1.35
11	B2	693	C	N3-C4	8.45	1.39	1.33
11	B2	1136	A	C5-C4	8.45	1.44	1.38
38	A1	1952	G	C2-N3	8.45	1.39	1.32
38	A1	2390	G	C2'-C1'	-8.45	1.44	1.53
38	A1	2601	C	C2-N3	8.45	1.42	1.35
39	A3	50	G	C2-N3	8.45	1.39	1.32
24	BL	80	ARG	CZ-NH1	8.45	1.44	1.33
38	A1	1647	C	N1-C6	8.45	1.42	1.37
6	AT	9	ARG	NE-CZ	8.44	1.44	1.33
11	B2	215	C	C2'-C1'	-8.44	1.44	1.53
38	A1	554	C	P-O5'	-8.45	1.51	1.59
38	A1	811	C	N3-C4	8.44	1.39	1.33
38	A1	1730	C	N1-C6	8.44	1.42	1.37
38	A1	2508	G	N7-C5	-8.44	1.34	1.39
11	B2	862	C	O3'-P	-8.44	1.51	1.61
11	B2	194	C	N1-C6	8.44	1.42	1.37
11	B2	656	U	C2-N3	8.44	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1220	U	C2'-C1'	-8.44	1.44	1.53
38	A1	2204	C	N1-C6	8.44	1.42	1.37
38	A1	235	G	C2-N3	8.44	1.39	1.32
39	A3	82	C	C2'-C1'	-8.44	1.44	1.53
39	A3	123	U	C4'-C3'	8.44	1.62	1.53
11	B2	253	G	C6-N1	8.43	1.45	1.39
11	B2	642	G	C8-N7	-8.43	1.25	1.30
11	B2	721	A	N9-C8	8.43	1.44	1.37
38	A1	1551	G	N9-C4	8.43	1.44	1.38
38	A1	1333	G	C5-C4	8.43	1.44	1.38
38	A1	2147	C	N3-C4	8.43	1.39	1.33
11	B2	975	A	C2-N3	8.43	1.41	1.33
11	B2	1446	G	C2'-C1'	-8.43	1.44	1.53
38	A1	603	G	N7-C5	-8.43	1.34	1.39
38	A1	2282	G	C2-N3	8.43	1.39	1.32
38	A1	2368	G	N7-C5	8.43	1.44	1.39
11	B2	586	C	N3-C4	8.43	1.39	1.33
38	A1	3003	A	P-O5'	-8.43	1.51	1.59
38	A1	191	U	P-O5'	-8.42	1.51	1.59
11	B2	1074	C	C5'-C4'	8.42	1.61	1.51
38	A1	955	A	C6-N1	8.42	1.41	1.35
38	A1	1092	U	N3-C4	8.42	1.46	1.38
11	B2	1426	C	N3-C4	8.42	1.39	1.33
38	A1	1471	G	N7-C5	-8.42	1.34	1.39
38	A1	289	G	C2'-C1'	-8.42	1.44	1.53
38	A1	1868	C	C1'-N1	8.42	1.61	1.48
38	A1	2027	G	C3'-C2'	8.42	1.62	1.52
11	B2	770	A	C6-N1	8.41	1.41	1.35
11	B2	1428	G	N3-C4	-8.41	1.29	1.35
38	A1	453	U	C5-C6	8.41	1.41	1.34
38	A1	2053	G	N1-C2	8.41	1.44	1.37
11	B2	114	A	N9-C4	8.41	1.42	1.37
11	B2	124	C	C5'-C4'	8.41	1.61	1.51
11	B2	164	A	C5-C6	-8.41	1.33	1.41
11	B2	193	G	N9-C8	8.41	1.43	1.37
38	A1	569	G	C6-N1	8.41	1.45	1.39
38	A1	995	G	C5'-C4'	8.41	1.61	1.51
38	A1	1135	A	C6-N6	8.41	1.40	1.33
38	A1	2500	G	C8-N7	-8.41	1.25	1.30
38	A1	2619	U	C2-N3	8.41	1.43	1.37
11	B2	576	C	C5'-C4'	8.41	1.61	1.51
11	B2	1013	G	C2-N3	8.41	1.39	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1153	U	C4-C5	8.41	1.51	1.43
38	A1	2812	U	N3-C4	8.41	1.46	1.38
11	B2	244	G	C2-N3	8.41	1.39	1.32
11	B2	783	G	C2-N3	8.40	1.39	1.32
38	A1	817	G	C2-N3	8.40	1.39	1.32
38	A1	560	G	C2-N3	8.40	1.39	1.32
38	A1	1447	G	N7-C5	-8.40	1.34	1.39
38	A1	1641	G	C6-N1	8.40	1.45	1.39
38	A1	2061	A	C2-N3	8.40	1.41	1.33
38	A1	829	G	C4'-C3'	8.40	1.62	1.53
10	B1	54	G	C2-N3	8.40	1.39	1.32
38	A1	776	G	N1-C2	8.40	1.44	1.37
11	B2	948	G	C5-C6	-8.40	1.33	1.42
11	B2	974	G	O3'-P	-8.40	1.51	1.61
11	B2	1369	C	N1-C6	8.40	1.42	1.37
13	BA	98	ARG	CZ-NH1	8.40	1.44	1.33
38	A1	307	C	N3-C4	8.40	1.39	1.33
38	A1	2955	G	N3-C4	8.40	1.41	1.35
38	A1	1086	U	P-O5'	-8.39	1.51	1.59
11	B2	931	C	C4-N4	8.39	1.41	1.33
38	A1	1374	G	C2-N3	8.39	1.39	1.32
38	A1	2665	G	P-O5'	-8.39	1.51	1.59
11	B2	527	A	C6-N1	8.39	1.41	1.35
38	A1	1861	G	N1-C2	8.39	1.44	1.37
38	A1	2733	A	C6-N1	8.39	1.41	1.35
11	B2	349	A	C5-C4	8.39	1.44	1.38
38	A1	1712	U	C4-C5	8.39	1.51	1.43
39	A3	39	C	N3-C4	8.39	1.39	1.33
11	B2	293	G	C8-N7	-8.39	1.25	1.30
11	B2	800	G	C5'-C4'	8.39	1.61	1.51
38	A1	1772	A	N3-C4	-8.39	1.29	1.34
38	A1	2670	U	C4'-C3'	-8.39	1.44	1.53
38	A1	1124	G	C2-N3	8.39	1.39	1.32
38	A1	2866	A	N9-C4	8.39	1.42	1.37
38	A1	2883	C	N1-C6	8.39	1.42	1.37
11	B2	1114	G	C6-N1	8.38	1.45	1.39
11	B2	1133	C	C2'-C1'	-8.38	1.44	1.53
38	A1	191	U	N1-C2	8.38	1.46	1.38
39	A3	24	C	C4-N4	8.38	1.41	1.33
38	A1	872	G	C6-N1	8.38	1.45	1.39
38	A1	1620	C	C5'-C4'	8.38	1.61	1.51
38	A1	866	G	C8-N7	8.38	1.35	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	302	A	N9-C4	8.38	1.42	1.37
38	A1	566	G	C2-N2	8.38	1.43	1.34
5	AS	23	ARG	CZ-NH2	8.38	1.44	1.33
38	A1	1681	G	C6-N1	-8.38	1.33	1.39
38	A1	435	G	N1-C2	8.37	1.44	1.37
38	A1	1362	G	C8-N7	-8.38	1.25	1.30
38	A1	2891	A	N7-C5	-8.38	1.34	1.39
38	A1	2897	C	C4-N4	8.38	1.41	1.33
38	A1	2042	A	N3-C4	-8.37	1.29	1.34
11	B2	967	C	N3-C4	8.37	1.39	1.33
38	A1	57	C	C5-C6	8.37	1.41	1.34
10	B1	31	G	N1-C2	8.37	1.44	1.37
38	A1	840	G	N7-C5	-8.37	1.34	1.39
38	A1	2158	G	C8-N7	-8.37	1.25	1.30
38	A1	2649	A	C6-N6	8.37	1.40	1.33
60	AM	117	TYR	CE1-CZ	8.37	1.49	1.38
38	A1	705	G	N9-C4	8.37	1.44	1.38
38	A1	969	U	C2-N3	8.37	1.43	1.37
11	B2	1055	C	N3-C4	8.37	1.39	1.33
11	B2	1081	C	N1-C6	8.37	1.42	1.37
38	A1	362	A	C4'-C3'	8.37	1.62	1.53
38	A1	980	G	N7-C5	-8.36	1.34	1.39
38	A1	1118	A	C6-N6	8.37	1.40	1.33
38	A1	2339	C	N1-C6	8.37	1.42	1.37
11	B2	721	A	N7-C5	-8.36	1.34	1.39
11	B2	854	C	N1-C6	8.36	1.42	1.37
38	A1	829	G	N9-C8	8.36	1.43	1.37
38	A1	1535	U	C2-N3	8.36	1.43	1.37
38	A1	1746	C	C5'-C4'	8.36	1.61	1.51
11	B2	144	G	N7-C5	-8.36	1.34	1.39
11	B2	264	C	O3'-P	-8.36	1.51	1.61
11	B2	934	G	C6-N1	8.36	1.45	1.39
38	A1	183	G	C2-N3	8.36	1.39	1.32
11	B2	1384	G	N1-C2	8.36	1.44	1.37
38	A1	425	U	C4'-C3'	-8.36	1.44	1.53
38	A1	634	G	O3'-P	-8.36	1.51	1.61
10	B1	22	A	C6-N6	8.36	1.40	1.33
38	A1	1808	G	N9-C8	8.36	1.43	1.37
38	A1	331	G	C2-N3	8.35	1.39	1.32
38	A1	1609	G	C2'-C1'	-8.35	1.44	1.53
38	A1	2411	C	N1-C6	-8.35	1.32	1.37
11	B2	760	C	C4-C5	8.35	1.49	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	791	G	C6-N1	8.35	1.45	1.39
38	A1	2134	G	C5-C4	8.35	1.44	1.38
38	A1	2776	A	C6-N6	8.35	1.40	1.33
11	B2	1458	A	C5-C4	8.35	1.44	1.38
11	B2	495	G	C6-N1	8.35	1.45	1.39
38	A1	52	A	C6-N1	8.35	1.41	1.35
11	B2	403	C	N3-C4	8.35	1.39	1.33
11	B2	1003	G	C6-N1	8.35	1.45	1.39
38	A1	2660	G	N9-C4	-8.35	1.31	1.38
38	A1	2831	G	N1-C2	8.35	1.44	1.37
11	B2	1405	C	N1-C6	8.34	1.42	1.37
38	A1	2005	A	C4'-C3'	8.34	1.62	1.53
38	A1	2041	U	C5'-C4'	8.34	1.61	1.51
11	B2	368	C	N1-C6	8.34	1.42	1.37
11	B2	1279	A	N3-C4	8.34	1.39	1.34
38	A1	583	A	O3'-P	-8.34	1.51	1.61
11	B2	587	G	N9-C4	8.34	1.44	1.38
38	A1	1404	G	C2-N3	8.34	1.39	1.32
38	A1	1727	G	C2-N3	8.34	1.39	1.32
38	A1	2143	C	N1-C6	8.34	1.42	1.37
11	B2	472	C	C5-C6	-8.33	1.27	1.34
38	A1	1997	C	N3-C4	8.33	1.39	1.33
38	A1	2330	A	N7-C5	-8.33	1.34	1.39
11	B2	969	A	N7-C5	-8.33	1.34	1.39
11	B2	1033	G	C2'-C1'	-8.33	1.44	1.53
38	A1	531	G	C5-C4	-8.33	1.32	1.38
38	A1	1396	A	C5-C6	8.33	1.48	1.41
38	A1	1666	G	C2'-C1'	-8.33	1.44	1.53
38	A1	2703	G	C8-N7	-8.33	1.25	1.30
11	B2	5	C	N1-C6	8.33	1.42	1.37
11	B2	1264	G	N7-C5	-8.33	1.34	1.39
38	A1	574	C	O3'-P	-8.33	1.51	1.61
38	A1	1096	A	N7-C5	-8.33	1.34	1.39
11	B2	62	G	C8-N7	-8.33	1.25	1.30
11	B2	509	C	C4'-C3'	8.32	1.62	1.53
11	B2	694	U	N1-C2	-8.32	1.31	1.38
11	B2	1308	U	C2-N3	8.32	1.43	1.37
38	A1	608	C	N3-C4	8.32	1.39	1.33
38	A1	901	C	C4-N4	8.32	1.41	1.33
38	A1	960	C	C4-N4	8.32	1.41	1.33
11	B2	624	G	N1-C2	8.32	1.44	1.37
38	A1	1642	G	C5'-C4'	8.32	1.61	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	600	A	C6-N6	8.32	1.40	1.33
38	A1	2823	G	O3'-P	-8.32	1.51	1.61
11	B2	617	A	N9-C8	8.32	1.44	1.37
38	A1	52	A	N3-C4	-8.32	1.29	1.34
38	A1	1846	G	C8-N7	-8.32	1.25	1.30
38	A1	2510	A	C8-N7	8.32	1.37	1.31
11	B2	371	U	N1-C2	8.31	1.46	1.38
11	B2	770	A	N9-C8	-8.31	1.31	1.37
11	B2	1317	G	C2-N2	8.31	1.42	1.34
38	A1	1824	G	C2'-C1'	-8.31	1.44	1.53
38	A1	2722	G	C2-N3	8.31	1.39	1.32
38	A1	662	A	N9-C4	8.31	1.42	1.37
38	A1	994	G	C5-C4	8.31	1.44	1.38
38	A1	2787	G	N1-C2	8.31	1.44	1.37
11	B2	1349	C	C2-N3	8.31	1.42	1.35
38	A1	476	C	C2-N3	8.31	1.42	1.35
38	A1	1575	G	C2-N3	8.31	1.39	1.32
38	A1	1912	A	P-O5'	-8.31	1.51	1.59
39	A3	7	C	N1-C2	8.31	1.48	1.40
38	A1	702	G	N3-C4	8.31	1.41	1.35
11	B2	253	G	C2-N2	8.31	1.42	1.34
38	A1	363	G	C5'-C4'	8.31	1.61	1.51
38	A1	1704	C	C4'-C3'	8.31	1.62	1.53
38	A1	1967	G	N7-C5	-8.31	1.34	1.39
38	A1	2138	A	C5-C4	8.31	1.44	1.38
38	A1	2319	C	N1-C6	8.31	1.42	1.37
38	A1	319	A	C5-C6	-8.31	1.33	1.41
38	A1	637	G	C8-N7	8.31	1.35	1.30
38	A1	1147	G	N7-C5	8.30	1.44	1.39
11	B2	500	A	C4'-C3'	8.30	1.62	1.53
38	A1	1096	A	P-O5'	-8.30	1.51	1.59
38	A1	2514	C	C2'-C1'	-8.30	1.44	1.53
38	A1	2602	G	N9-C8	-8.30	1.32	1.37
38	A1	2696	G	C6-N1	8.30	1.45	1.39
38	A1	3034	C	N3-C4	8.30	1.39	1.33
38	A1	1574	A	C8-N7	-8.30	1.25	1.31
38	A1	2214	U	N3-C4	8.30	1.46	1.38
11	B2	622	C	N3-C4	8.30	1.39	1.33
38	A1	1247	U	N1-C2	8.30	1.46	1.38
38	A1	1692	A	C6-N6	8.30	1.40	1.33
38	A1	2742	G	N1-C2	8.30	1.44	1.37
38	A1	128	C	N3-C4	8.30	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1419	G	N1-C2	8.29	1.44	1.37
11	B2	62	G	N3-C4	-8.29	1.29	1.35
38	A1	234	G	N1-C2	8.29	1.44	1.37
38	A1	2212	C	C2-N3	-8.29	1.29	1.35
11	B2	362	C	N1-C6	8.29	1.42	1.37
11	B2	1469	G	N7-C5	-8.29	1.34	1.39
38	A1	964	C	N3-C4	8.29	1.39	1.33
38	A1	2484	C	C2-N3	-8.29	1.29	1.35
38	A1	2850	G	N3-C4	-8.29	1.29	1.35
11	B2	451	A	C6-N1	8.29	1.41	1.35
38	A1	200	G	N7-C5	8.29	1.44	1.39
38	A1	397	G	C5'-C4'	8.29	1.61	1.51
38	A1	464	C	C4-N4	8.29	1.41	1.33
38	A1	647	G	N9-C8	8.29	1.43	1.37
38	A1	1002	A	C6-N6	8.28	1.40	1.33
38	A1	1214	C	C2-N3	8.28	1.42	1.35
38	A1	2471	A	N7-C5	-8.28	1.34	1.39
11	B2	600	C	P-O5'	-8.28	1.51	1.59
38	A1	748	G	C2-N3	8.28	1.39	1.32
38	A1	1490	G	N7-C5	-8.28	1.34	1.39
11	B2	660	C	N1-C6	8.28	1.42	1.37
11	B2	1253	G	N1-C2	8.28	1.44	1.37
38	A1	2130	C	P-O5'	-8.28	1.51	1.59
38	A1	2490	C	N3-C4	8.28	1.39	1.33
38	A1	2591	A	N9-C8	-8.28	1.31	1.37
11	B2	387	G	C4'-C3'	8.28	1.62	1.53
11	B2	575	A	N7-C5	-8.28	1.34	1.39
38	A1	2493	A	N9-C4	8.28	1.42	1.37
11	B2	366	C	C2-N3	8.28	1.42	1.35
38	A1	1526	G	C2-N3	8.28	1.39	1.32
38	A1	2988	A	C8-N7	-8.28	1.25	1.31
38	A1	383	C	C4-C5	-8.27	1.36	1.43
38	A1	2669	U	N1-C2	8.27	1.46	1.38
38	A1	2474	A	C8-N7	8.27	1.37	1.31
11	B2	394	C	C2-N3	8.27	1.42	1.35
11	B2	802	G	C6-O6	-8.27	1.16	1.24
11	B2	1150	G	N9-C8	8.27	1.43	1.37
38	A1	1528	A	N9-C4	8.27	1.42	1.37
38	A1	2548	A	N9-C4	8.27	1.42	1.37
11	B2	499	G	C6-N1	8.27	1.45	1.39
11	B2	548	A	C2-N3	8.27	1.41	1.33
11	B2	1047	U	N3-C4	8.27	1.45	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1122	C	C2'-C1'	-8.27	1.44	1.53
38	A1	579	C	C2'-C1'	-8.27	1.44	1.53
38	A1	939	A	C6-N6	8.27	1.40	1.33
38	A1	1262	C	C2-N3	-8.27	1.29	1.35
39	A3	11	A	N7-C5	-8.27	1.34	1.39
11	B2	675	A	N9-C4	-8.26	1.32	1.37
38	A1	65	G	C6-N1	8.26	1.45	1.39
38	A1	418	C	C2'-C1'	-8.26	1.44	1.53
38	A1	2818	C	N1-C6	8.26	1.42	1.37
11	B2	111	G	P-O5'	8.26	1.68	1.59
23	BK	16	ARG	NE-CZ	8.26	1.43	1.33
38	A1	2867	U	C5-C6	-8.26	1.26	1.34
10	B1	54	G	C6-N1	8.26	1.45	1.39
10	B1	57	C	P-O5'	-8.26	1.51	1.59
11	B2	446	G	N9-C8	8.26	1.43	1.37
38	A1	2393	G	N7-C5	-8.26	1.34	1.39
11	B2	881	G	P-O5'	-8.26	1.51	1.59
38	A1	384	G	C6-N1	8.26	1.45	1.39
38	A1	735	A	C5'-C4'	8.26	1.61	1.51
38	A1	1060	C	O3'-P	-8.26	1.51	1.61
38	A1	1897	G	C8-N7	-8.26	1.25	1.30
38	A1	2171	G	C5-C4	8.26	1.44	1.38
11	B2	1358	A	C8-N7	-8.25	1.25	1.31
38	A1	53	A	C2'-C1'	-8.25	1.44	1.53
38	A1	1384	C	C4'-C3'	8.25	1.62	1.53
38	A1	2485	C	N3-C4	8.25	1.39	1.33
38	A1	46	C	N3-C4	8.25	1.39	1.33
38	A1	1207	G	C8-N7	-8.25	1.26	1.30
11	B2	1219	C	C5'-C4'	8.25	1.61	1.51
11	B2	727	G	N9-C8	8.25	1.43	1.37
11	B2	1413	G	C6-N1	8.25	1.45	1.39
38	A1	857	U	P-O5'	-8.25	1.51	1.59
38	A1	1276	G	C2-N2	8.25	1.42	1.34
11	B2	1067	G	C4'-C3'	8.24	1.62	1.53
38	A1	1048	C	N1-C6	8.24	1.42	1.37
11	B2	521	G	N7-C5	-8.24	1.34	1.39
38	A1	2742	G	C6-N1	8.24	1.45	1.39
38	A1	2989	A	C6-N6	8.24	1.40	1.33
11	B2	310	G	N1-C2	8.24	1.44	1.37
11	B2	645	G	N1-C2	8.24	1.44	1.37
38	A1	785	C	O4'-C1'	8.24	1.52	1.41
11	B2	1479	C	N3-C4	8.24	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	404	G	C2-N2	8.24	1.42	1.34
38	A1	783	C	C4-N4	8.24	1.41	1.33
38	A1	2867	U	O4'-C1'	8.24	1.52	1.41
11	B2	795	G	C2-N3	8.24	1.39	1.32
38	A1	1192	G	O3'-P	-8.24	1.51	1.61
38	A1	719	C	N3-C4	8.24	1.39	1.33
38	A1	817	G	N9-C8	8.24	1.43	1.37
38	A1	1021	G	N9-C8	8.24	1.43	1.37
39	A3	124	A	O3'-P	-8.24	1.51	1.61
38	A1	26	G	C8-N7	8.23	1.35	1.30
38	A1	443	C	N1-C6	8.23	1.42	1.37
38	A1	2016	C	C5'-C4'	8.23	1.61	1.51
38	A1	1619	C	N3-C4	8.23	1.39	1.33
11	B2	1470	G	N7-C5	-8.23	1.34	1.39
38	A1	2166	C	N3-C4	8.23	1.39	1.33
38	A1	2275	G	N1-C2	8.23	1.44	1.37
38	A1	829	G	C8-N7	-8.23	1.26	1.30
38	A1	1286	G	N9-C4	-8.23	1.31	1.38
38	A1	1334	G	C5-C6	-8.23	1.34	1.42
38	A1	1379	A	C6-N6	8.23	1.40	1.33
39	A3	48	A	O3'-P	-8.23	1.51	1.61
11	B2	159	C	N3-C4	8.22	1.39	1.33
11	B2	444	G	N1-C2	8.22	1.44	1.37
11	B2	727	G	N3-C4	-8.22	1.29	1.35
11	B2	1417	A	C2-N3	8.22	1.41	1.33
38	A1	1503	C	N1-C6	8.22	1.42	1.37
38	A1	2141	C	C4-N4	8.22	1.41	1.33
38	A1	2307	C	N3-C4	8.22	1.39	1.33
38	A1	2366	G	C5-C4	8.22	1.44	1.38
38	A1	2586	A	N9-C8	-8.22	1.31	1.37
11	B2	866	A	N7-C5	-8.22	1.34	1.39
11	B2	1492	U	N3-C4	8.22	1.45	1.38
38	A1	125	C	N1-C6	8.22	1.42	1.37
38	A1	388	G	C5'-C4'	8.22	1.61	1.51
38	A1	2660	G	C2-N3	8.22	1.39	1.32
38	A1	2886	C	N3-C4	8.22	1.39	1.33
38	A1	2133	G	P-O5'	-8.22	1.51	1.59
38	A1	113	C	N3-C4	8.22	1.39	1.33
38	A1	337	G	C6-N1	8.22	1.45	1.39
11	B2	708	C	C2'-C1'	-8.21	1.44	1.53
39	A3	100	A	C2'-C1'	-8.22	1.44	1.53
11	B2	903	G	C8-N7	8.21	1.35	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1267	U	C4'-C3'	8.21	1.62	1.53
38	A1	1185	A	N3-C4	8.21	1.39	1.34
38	A1	1333	G	C5'-C4'	8.21	1.61	1.51
38	A1	2886	C	N1-C6	8.21	1.42	1.37
11	B2	1382	G	C2-N2	8.21	1.42	1.34
38	A1	1540	A	C3'-C2'	8.21	1.61	1.52
38	A1	1804	G	C2-N3	8.21	1.39	1.32
38	A1	1856	G	N9-C8	8.21	1.43	1.37
38	A1	2495	A	N3-C4	-8.21	1.29	1.34
38	A1	247	A	C8-N7	-8.21	1.25	1.31
38	A1	1760	C	C5'-C4'	8.21	1.61	1.51
38	A1	1383	G	N3-C4	-8.20	1.29	1.35
11	B2	59	C	C4-N4	8.20	1.41	1.33
38	A1	560	G	C8-N7	8.20	1.35	1.30
38	A1	864	C	C3'-C2'	8.20	1.61	1.52
38	A1	1612	G	C2-N2	8.20	1.42	1.34
38	A1	2642	C	C2-N3	8.20	1.42	1.35
11	B2	327	G	C6-N1	8.20	1.45	1.39
38	A1	1353	A	P-O5'	-8.20	1.51	1.59
11	B2	918	A	N7-C5	-8.20	1.34	1.39
11	B2	1470	G	C6-N1	8.20	1.45	1.39
38	A1	932	C	N1-C6	8.20	1.42	1.37
38	A1	1053	A	C5-C4	8.20	1.44	1.38
11	B2	641	A	C5'-C4'	8.20	1.61	1.51
38	A1	335	C	C4-N4	8.20	1.41	1.33
38	A1	1655	G	N7-C5	-8.20	1.34	1.39
10	B1	6	G	N9-C8	-8.19	1.32	1.37
38	A1	1792	A	C5-C4	8.20	1.44	1.38
38	A1	2334	G	C6-N1	8.20	1.45	1.39
38	A1	2690	U	C2-N3	8.19	1.43	1.37
11	B2	1238	G	C6-N1	8.19	1.45	1.39
38	A1	2321	A	N3-C4	-8.19	1.29	1.34
11	B2	222	G	C2-N2	8.19	1.42	1.34
11	B2	506	G	C2-N3	8.19	1.39	1.32
38	A1	1047	A	C6-N6	8.19	1.40	1.33
38	A1	1502	C	C2-N3	8.19	1.42	1.35
38	A1	363	G	C8-N7	-8.19	1.26	1.30
39	A3	96	C	C5'-C4'	8.19	1.61	1.51
39	A3	111	G	C2-N3	8.19	1.39	1.32
38	A1	856	A	C5-C4	8.19	1.44	1.38
11	B2	77	G	C5'-C4'	8.19	1.61	1.51
11	B2	962	G	C4'-O4'	-8.19	1.34	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2564	U	C2-N3	8.19	1.43	1.37
11	B2	605	C	C4-N4	8.18	1.41	1.33
11	B2	786	G	C6-N1	8.18	1.45	1.39
11	B2	911	C	N1-C6	-8.18	1.32	1.37
38	A1	2276	G	C5'-C4'	8.18	1.61	1.51
11	B2	561	A	N7-C5	-8.18	1.34	1.39
11	B2	978	G	C6-N1	8.18	1.45	1.39
38	A1	1677	A	N9-C4	-8.18	1.32	1.37
38	A1	2162	G	C8-N7	-8.18	1.26	1.30
10	B1	38	G	N3-C4	-8.18	1.29	1.35
38	A1	184	A	N9-C4	8.18	1.42	1.37
38	A1	940	G	C5-C4	-8.18	1.32	1.38
38	A1	2093	A	C6-N1	8.18	1.41	1.35
38	A1	275	C	O3'-P	8.17	1.71	1.61
11	B2	823	A	N9-C4	8.17	1.42	1.37
38	A1	1804	G	C8-N7	-8.17	1.26	1.30
38	A1	2608	U	C2-N3	8.17	1.43	1.37
39	A3	99	G	C5-C6	-8.17	1.34	1.42
11	B2	46	A	N3-C4	8.17	1.39	1.34
11	B2	23	G	C6-N1	8.17	1.45	1.39
11	B2	128	A	C6-N6	8.17	1.40	1.33
11	B2	471	G	N7-C5	-8.17	1.34	1.39
38	A1	2198	U	P-O5'	-8.17	1.51	1.59
38	A1	2533	G	N9-C8	-8.17	1.32	1.37
11	B2	260	C	C2-N3	8.17	1.42	1.35
11	B2	616	G	C6-N1	8.17	1.45	1.39
38	A1	857	U	C2'-C1'	-8.17	1.44	1.53
11	B2	1339	G	C2'-C1'	-8.17	1.44	1.53
11	B2	1413	G	N1-C2	8.17	1.44	1.37
38	A1	349	A	C6-N6	8.17	1.40	1.33
38	A1	2614	C	N1-C6	-8.17	1.32	1.37
38	A1	2103	C	C2'-C1'	-8.16	1.44	1.53
10	B1	70	C	C4'-C3'	8.16	1.62	1.53
11	B2	170	C	C2-N3	8.16	1.42	1.35
11	B2	411	C	C4'-O4'	-8.16	1.34	1.45
38	A1	316	G	C6-N1	8.16	1.45	1.39
10	B1	59	A	O3'-P	-8.16	1.51	1.61
11	B2	1021	C	N1-C6	8.16	1.42	1.37
11	B2	1183	C	C4-C5	8.16	1.49	1.43
11	B2	1259	A	N9-C4	8.16	1.42	1.37
11	B2	1346	C	N1-C6	8.16	1.42	1.37
38	A1	1736	G	C2-N2	8.16	1.42	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1039	C	N3-C4	8.16	1.39	1.33
38	A1	1795	C	N1-C6	8.16	1.42	1.37
38	A1	1840	G	N1-C2	8.16	1.44	1.37
38	A1	2724	A	N3-C4	-8.16	1.29	1.34
11	B2	574	A	C5'-C4'	8.15	1.61	1.51
11	B2	1487	U	C5-C6	8.15	1.41	1.34
11	B2	350	G	N9-C8	8.15	1.43	1.37
11	B2	820	G	C2-N2	8.15	1.42	1.34
11	B2	920	U	C2-N3	8.15	1.43	1.37
38	A1	1720	G	C2'-C1'	-8.15	1.44	1.53
38	A1	1945	C	C4-C5	-8.15	1.36	1.43
38	A1	2262	C	N3-C4	8.15	1.39	1.33
38	A1	2809	G	P-O5'	-8.15	1.51	1.59
38	A1	2285	G	N1-C2	8.15	1.44	1.37
38	A1	2693	G	C2-N3	8.15	1.39	1.32
11	B2	291	G	C4'-C3'	8.15	1.62	1.53
38	A1	1010	G	N7-C5	-8.15	1.34	1.39
38	A1	1566	G	C2-N3	8.15	1.39	1.32
38	A1	2655	C	N1-C6	8.15	1.42	1.37
38	A1	85	G	C6-N1	8.14	1.45	1.39
11	B2	1384	G	N7-C5	-8.14	1.34	1.39
38	A1	2420	C	C4-C5	8.14	1.49	1.43
38	A1	2692	A	N3-C4	-8.14	1.29	1.34
10	B1	23	G	N9-C8	8.14	1.43	1.37
38	A1	564	U	C5'-C4'	8.14	1.61	1.51
38	A1	765	G	C2-N3	8.14	1.39	1.32
38	A1	918	A	C6-N6	8.14	1.40	1.33
38	A1	2700	U	C2-N3	8.14	1.43	1.37
11	B2	375	G	N9-C4	-8.14	1.31	1.38
11	B2	800	G	C6-N1	8.14	1.45	1.39
38	A1	471	U	O3'-P	-8.14	1.51	1.61
38	A1	1669	A	C4'-C3'	-8.14	1.44	1.53
38	A1	2057	G	C5-C4	8.14	1.44	1.38
38	A1	1083	G	N7-C5	-8.14	1.34	1.39
38	A1	1521	G	C6-N1	8.14	1.45	1.39
38	A1	2193	G	N7-C5	-8.14	1.34	1.39
38	A1	2621	U	N3-C4	8.14	1.45	1.38
38	A1	2992	G	C6-N1	8.14	1.45	1.39
67	AZ	25	ARG	CD-NE	8.14	1.60	1.46
11	B2	1118	C	N1-C6	-8.13	1.32	1.37
11	B2	1156	A	C6-N6	8.13	1.40	1.33
11	B2	1457	A	N7-C5	-8.13	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	887	U	C2-N3	8.13	1.43	1.37
38	A1	2032	G	N1-C2	8.13	1.44	1.37
38	A1	2657	A	C5-C4	8.13	1.44	1.38
11	B2	1002	G	N9-C8	8.13	1.43	1.37
38	A1	2313	G	N9-C8	-8.13	1.32	1.37
11	B2	1388	G	N1-C2	8.13	1.44	1.37
38	A1	534	G	C8-N7	-8.13	1.26	1.30
38	A1	841	U	C2-N3	8.13	1.43	1.37
38	A1	1284	C	N1-C6	8.13	1.42	1.37
11	B2	78	G	C2-N3	8.13	1.39	1.32
11	B2	933	G	N9-C8	-8.13	1.32	1.37
38	A1	1990	U	C5'-C4'	8.13	1.61	1.51
38	A1	2543	A	C8-N7	-8.13	1.25	1.31
38	A1	2900	C	C4-N4	8.13	1.41	1.33
11	B2	122	C	P-O5'	-8.12	1.51	1.59
11	B2	1175	C	C2-N3	8.13	1.42	1.35
38	A1	2266	C	C4-N4	8.13	1.41	1.33
38	A1	2558	U	O3'-P	-8.13	1.51	1.61
11	B2	223	G	N3-C4	-8.12	1.29	1.35
11	B2	544	C	N1-C6	-8.12	1.32	1.37
38	A1	1757	G	O3'-P	-8.12	1.51	1.61
11	B2	114	A	N7-C5	-8.12	1.34	1.39
11	B2	701	G	C6-N1	8.12	1.45	1.39
11	B2	15	U	O4'-C1'	-8.12	1.31	1.41
11	B2	357	C	N1-C6	-8.12	1.32	1.37
11	B2	1319	C	C2-N3	8.12	1.42	1.35
11	B2	1359	C	C2-N3	8.12	1.42	1.35
38	A1	650	C	C4'-C3'	-8.12	1.44	1.53
38	A1	1587	A	C6-N1	8.12	1.41	1.35
38	A1	2199	U	N1-C2	8.12	1.45	1.38
38	A1	2850	G	C6-N1	8.12	1.45	1.39
38	A1	2732	U	O4'-C1'	-8.12	1.31	1.41
11	B2	183	A	N7-C5	-8.12	1.34	1.39
11	B2	251	G	C2-N2	8.12	1.42	1.34
38	A1	285	C	C5-C6	8.12	1.40	1.34
38	A1	2129	G	C3'-C2'	-8.12	1.43	1.52
11	B2	737	C	P-O5'	-8.11	1.51	1.59
38	A1	2812	U	C5-C6	8.11	1.41	1.34
11	B2	239	A	N9-C4	8.11	1.42	1.37
11	B2	405	G	C2-N3	8.11	1.39	1.32
11	B2	789	G	C3'-C2'	-8.11	1.43	1.52
11	B2	977	G	O3'-P	-8.11	1.51	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	772	G	N3-C4	-8.11	1.29	1.35
38	A1	1258	G	C8-N7	8.11	1.35	1.30
38	A1	1442	G	C2-N3	8.11	1.39	1.32
11	B2	1120	G	C5-C4	8.11	1.44	1.38
38	A1	579	C	C5'-C4'	8.11	1.61	1.51
38	A1	2298	C	P-O5'	-8.11	1.51	1.59
11	B2	986	G	N9-C8	-8.11	1.32	1.37
38	A1	1967	G	C4'-C3'	8.11	1.62	1.53
11	B2	494	G	C3'-C2'	8.10	1.61	1.52
11	B2	586	C	P-O5'	-8.10	1.51	1.59
11	B2	740	G	N7-C5	8.10	1.44	1.39
34	BV	57	ARG	CZ-NH2	8.10	1.43	1.33
38	A1	189	U	P-O5'	-8.10	1.51	1.59
38	A1	1608	G	C2-N3	8.10	1.39	1.32
38	A1	1756	C	C2-N3	8.10	1.42	1.35
38	A1	1188	C	P-O5'	-8.10	1.51	1.59
38	A1	1600	G	C2-N3	8.10	1.39	1.32
11	B2	266	A	C6-N6	8.10	1.40	1.33
38	A1	1617	G	N3-C4	-8.10	1.29	1.35
11	B2	435	A	C5'-C4'	8.10	1.61	1.51
11	B2	437	A	N9-C8	8.10	1.44	1.37
11	B2	464	G	O4'-C1'	8.10	1.52	1.41
38	A1	851	G	N9-C4	-8.10	1.31	1.38
11	B2	1134	G	C2-N3	8.10	1.39	1.32
38	A1	72	U	C2-N3	8.10	1.43	1.37
38	A1	785	C	C4'-C3'	8.10	1.62	1.53
11	B2	37	G	C5'-C4'	8.09	1.61	1.51
11	B2	374	G	C6-N1	8.09	1.45	1.39
11	B2	467	G	P-O5'	-8.09	1.51	1.59
11	B2	1401	U	P-O5'	-8.09	1.51	1.59
38	A1	1644	G	N1-C2	8.09	1.44	1.37
38	A1	2017	A	C2'-C1'	-8.09	1.44	1.53
11	B2	994	C	C4-C5	8.09	1.49	1.43
38	A1	1516	C	N3-C4	8.09	1.39	1.33
11	B2	1233	G	N3-C4	8.09	1.41	1.35
38	A1	300	U	N3-C4	8.09	1.45	1.38
38	A1	499	A	N3-C4	-8.09	1.29	1.34
38	A1	2036	A	N9-C4	8.09	1.42	1.37
38	A1	362	A	N9-C8	8.09	1.44	1.37
38	A1	2379	G	N7-C5	-8.09	1.34	1.39
38	A1	2403	G	C2'-C1'	-8.09	1.44	1.53
11	B2	301	G	N7-C5	-8.09	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	655	A	C6-N1	8.09	1.41	1.35
11	B2	696	G	N9-C8	-8.09	1.32	1.37
11	B2	1166	G	N1-C2	8.09	1.44	1.37
11	B2	9	U	C2'-C1'	-8.08	1.44	1.53
11	B2	200	G	N1-C2	8.08	1.44	1.37
11	B2	464	G	N1-C2	8.08	1.44	1.37
38	A1	1663	C	C2-N3	8.08	1.42	1.35
38	A1	1864	G	C2-N3	8.08	1.39	1.32
38	A1	2295	C	C4'-O4'	-8.08	1.35	1.45
38	A1	406	G	N7-C5	-8.08	1.34	1.39
38	A1	2425	A	N7-C5	-8.08	1.34	1.39
38	A1	2988	A	N3-C4	-8.08	1.30	1.34
39	A3	7	C	N3-C4	8.08	1.39	1.33
11	B2	321	A	C8-N7	-8.08	1.25	1.31
11	B2	561	A	C5'-C4'	-8.08	1.41	1.51
38	A1	1790	G	C5-C4	8.08	1.44	1.38
38	A1	2124	C	C2-N3	8.08	1.42	1.35
38	A1	2880	C	C2'-C1'	-8.08	1.44	1.53
11	B2	620	G	N3-C4	8.07	1.41	1.35
11	B2	1195	U	N1-C2	8.07	1.45	1.38
38	A1	635	G	N7-C5	-8.07	1.34	1.39
38	A1	2297	C	N3-C4	8.07	1.39	1.33
11	B2	1380	C	C2'-C1'	-8.07	1.44	1.53
38	A1	1144	A	C8-N7	-8.07	1.25	1.31
11	B2	405	G	C5-C4	-8.07	1.32	1.38
11	B2	1357	C	C5'-C4'	8.07	1.61	1.51
38	A1	334	G	N7-C5	8.07	1.44	1.39
38	A1	1309	G	C6-N1	8.07	1.45	1.39
38	A1	1446	G	C5-C4	8.07	1.44	1.38
38	A1	2518	G	N1-C2	8.07	1.44	1.37
38	A1	2981	G	C2'-C1'	-8.07	1.44	1.53
11	B2	146	A	N3-C4	8.07	1.39	1.34
11	B2	468	G	C3'-C2'	8.07	1.61	1.52
11	B2	734	G	C2-N3	8.07	1.39	1.32
38	A1	489	G	C2-N3	8.07	1.39	1.32
38	A1	943	G	C2-N3	8.07	1.39	1.32
38	A1	1651	A	C6-N6	8.06	1.40	1.33
10	B1	72	C	C4-N4	8.06	1.41	1.33
11	B2	1033	G	O4'-C1'	8.06	1.52	1.41
11	B2	1403	U	C4'-C3'	8.06	1.62	1.53
38	A1	200	G	N9-C4	-8.06	1.31	1.38
38	A1	202	A	C5'-C4'	8.06	1.61	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2956	G	C2-N2	8.06	1.42	1.34
11	B2	150	G	O3'-P	-8.06	1.51	1.61
11	B2	749	C	C4-N4	8.06	1.41	1.33
38	A1	1206	A	P-O5'	-8.06	1.51	1.59
38	A1	2890	A	N7-C5	-8.06	1.34	1.39
39	A3	113	C	C4-N4	8.06	1.41	1.33
11	B2	1359	C	N1-C6	8.06	1.42	1.37
11	B2	250	G	N9-C4	8.06	1.44	1.38
11	B2	1150	G	C5'-C4'	8.06	1.61	1.51
11	B2	1174	A	C6-N6	8.06	1.40	1.33
11	B2	200	G	C2-N3	8.06	1.39	1.32
11	B2	510	A	N3-C4	-8.05	1.30	1.34
11	B2	1254	C	C4-C5	-8.05	1.36	1.43
38	A1	263	U	N3-C4	8.06	1.45	1.38
38	A1	1168	A	N9-C8	8.05	1.44	1.37
38	A1	2024	A	C5'-C4'	8.05	1.61	1.51
11	B2	12	U	P-O5'	-8.05	1.51	1.59
38	A1	1899	C	C1'-N1	8.05	1.60	1.48
39	A3	14	G	C2'-C1'	-8.05	1.44	1.53
11	B2	649	A	N7-C5	-8.05	1.34	1.39
11	B2	779	G	N7-C5	-8.05	1.34	1.39
11	B2	1459	G	N9-C4	-8.05	1.31	1.38
38	A1	243	G	C5'-C4'	8.05	1.61	1.51
38	A1	619	G	C6-O6	-8.05	1.17	1.24
38	A1	2338	A	N9-C4	8.05	1.42	1.37
38	A1	2878	A	C2'-C1'	-8.05	1.44	1.53
11	B2	464	G	N7-C5	-8.05	1.34	1.39
11	B2	757	G	C6-N1	8.05	1.45	1.39
38	A1	2371	A	C6-N6	8.05	1.40	1.33
38	A1	2468	C	C2-N3	8.05	1.42	1.35
11	B2	1135	G	N9-C8	-8.04	1.32	1.37
11	B2	1337	A	N9-C4	-8.05	1.33	1.37
38	A1	250	G	C6-N1	8.05	1.45	1.39
38	A1	582	A	C5-C4	-8.04	1.33	1.38
38	A1	1734	G	C5-C6	-8.04	1.34	1.42
11	B2	566	C	C2'-C1'	-8.04	1.44	1.53
11	B2	711	U	C4'-O4'	8.04	1.56	1.45
38	A1	1084	G	C8-N7	8.04	1.35	1.30
38	A1	2604	G	N7-C5	-8.04	1.34	1.39
45	AC	353	ARG	CD-NE	8.04	1.60	1.46
1	A7	20	ARG	NE-CZ	8.04	1.43	1.33
11	B2	702	G	C4'-C3'	-8.04	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1071	A	C6-N6	8.04	1.40	1.33
38	A1	1385	C	N3-C4	8.04	1.39	1.33
11	B2	5	C	P-O5'	8.04	1.67	1.59
38	A1	169	G	C6-N1	8.04	1.45	1.39
10	B1	25	G	C5-C6	-8.04	1.34	1.42
11	B2	58	U	C2-N3	8.04	1.43	1.37
11	B2	475	C	N3-C4	8.04	1.39	1.33
11	B2	859	A	C6-N1	8.04	1.41	1.35
11	B2	944	C	N3-C4	8.04	1.39	1.33
11	B2	1087	C	N1-C6	8.04	1.42	1.37
11	B2	1150	G	C8-N7	-8.04	1.26	1.30
38	A1	1557	G	C2-N2	8.04	1.42	1.34
39	A3	115	C	P-O5'	-8.04	1.51	1.59
38	A1	165	G	C2-N3	8.03	1.39	1.32
38	A1	913	G	C6-N1	8.03	1.45	1.39
38	A1	1713	G	N1-C2	8.04	1.44	1.37
38	A1	1984	G	C5-C4	8.03	1.44	1.38
10	B1	35	G	P-O5'	8.03	1.67	1.59
11	B2	270	A	P-O5'	-8.03	1.51	1.59
11	B2	1103	G	C6-N1	-8.03	1.33	1.39
11	B2	1398	U	C2-N3	8.03	1.43	1.37
11	B2	1415	U	N3-C4	8.03	1.45	1.38
38	A1	41	G	N9-C8	8.03	1.43	1.37
38	A1	1676	G	N1-C2	8.03	1.44	1.37
38	A1	3024	C	C2'-C1'	-8.03	1.44	1.53
38	A1	1885	G	P-O5'	8.03	1.67	1.59
38	A1	1949	A	O3'-P	-8.03	1.51	1.61
38	A1	2094	A	C8-N7	-8.03	1.25	1.31
11	B2	988	A	C6-N1	8.03	1.41	1.35
38	A1	350	A	C6-N1	8.03	1.41	1.35
38	A1	1860	A	C8-N7	8.03	1.37	1.31
38	A1	2000	G	C5-C4	8.03	1.44	1.38
38	A1	2132	C	C4'-C3'	8.03	1.61	1.53
38	A1	2889	A	C6-N1	8.03	1.41	1.35
11	B2	278	A	C6-N6	8.03	1.40	1.33
11	B2	657	A	N9-C8	-8.03	1.31	1.37
38	A1	2173	U	P-O5'	8.03	1.67	1.59
38	A1	2562	G	C2-N3	8.03	1.39	1.32
38	A1	363	G	C6-N1	8.03	1.45	1.39
38	A1	2517	U	C4-C5	8.03	1.50	1.43
38	A1	2697	G	C8-N7	8.03	1.35	1.30
11	B2	340	A	C3'-C2'	-8.02	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	648	C	C2-N3	8.02	1.42	1.35
38	A1	1734	G	C2-N2	8.02	1.42	1.34
11	B2	583	G	N1-C2	8.02	1.44	1.37
11	B2	1414	G	N1-C2	8.02	1.44	1.37
38	A1	518	A	N7-C5	-8.02	1.34	1.39
38	A1	772	G	N7-C5	8.02	1.44	1.39
11	B2	120	C	O4'-C1'	8.02	1.52	1.41
11	B2	460	C	C4-N4	8.02	1.41	1.33
11	B2	1155	U	N3-C4	8.02	1.45	1.38
38	A1	294	U	N3-C4	8.02	1.45	1.38
11	B2	440	C	O4'-C1'	8.02	1.52	1.41
11	B2	1123	G	N7-C5	-8.02	1.34	1.39
38	A1	513	C	C2'-C1'	-8.02	1.44	1.53
38	A1	576	G	C2-N3	8.02	1.39	1.32
38	A1	867	C	C2-N3	8.02	1.42	1.35
38	A1	1158	G	C6-N1	8.02	1.45	1.39
11	B2	306	C	O3'-P	-8.02	1.51	1.61
11	B2	542	G	C5-C4	8.02	1.44	1.38
18	BF	136	ARG	CZ-NH1	8.02	1.43	1.33
38	A1	1272	A	C5-C4	8.02	1.44	1.38
38	A1	376	C	N1-C6	8.02	1.42	1.37
38	A1	749	G	C8-N7	-8.02	1.26	1.30
38	A1	2818	C	N3-C4	8.02	1.39	1.33
38	A1	1736	G	N3-C4	8.02	1.41	1.35
11	B2	396	C	C4-C5	8.01	1.49	1.43
11	B2	789	G	N3-C4	8.01	1.41	1.35
11	B2	1206	G	N1-C2	8.01	1.44	1.37
33	BU	110	PHE	CG-CD1	8.01	1.50	1.38
38	A1	1403	C	C4-N4	8.01	1.41	1.33
38	A1	2499	U	C2-N3	8.01	1.43	1.37
38	A1	2244	G	C2-N3	8.01	1.39	1.32
38	A1	2816	C	N3-C4	-8.01	1.28	1.33
39	A3	77	A	N9-C4	-8.01	1.33	1.37
11	B2	1152	C	N3-C4	8.01	1.39	1.33
11	B2	1460	G	C2-N3	8.01	1.39	1.32
38	A1	242	C	O3'-P	-8.01	1.51	1.61
38	A1	399	C	C2-N3	8.01	1.42	1.35
38	A1	488	A	C5-C6	8.01	1.48	1.41
38	A1	2727	C	C4'-C3'	8.01	1.61	1.53
11	B2	152	G	P-O5'	8.01	1.67	1.59
11	B2	483	G	N1-C2	8.01	1.44	1.37
38	A1	68	G	N7-C5	-8.01	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	843	C	C4-N4	8.01	1.41	1.33
38	A1	2562	G	C3'-C2'	8.01	1.61	1.52
38	A1	3006	G	C8-N7	8.01	1.35	1.30
11	B2	1	A	C6-N6	8.00	1.40	1.33
38	A1	58	G	C5-C4	8.00	1.44	1.38
38	A1	594	U	N1-C2	8.00	1.45	1.38
11	B2	254	G	N9-C8	8.00	1.43	1.37
11	B2	1341	C	N3-C4	8.00	1.39	1.33
38	A1	413	A	C6-N6	8.00	1.40	1.33
38	A1	832	A	N9-C8	8.00	1.44	1.37
38	A1	2034	G	C8-N7	-8.00	1.26	1.30
39	A3	47	G	C2-N3	8.00	1.39	1.32
11	B2	503	G	C2-N2	-8.00	1.26	1.34
11	B2	1116	G	C2-N3	8.00	1.39	1.32
11	B2	1234	A	C6-N1	8.00	1.41	1.35
38	A1	2340	A	N3-C4	-8.00	1.30	1.34
39	A3	3	G	N1-C2	8.00	1.44	1.37
39	A3	108	G	N3-C4	8.00	1.41	1.35
11	B2	597	C	N1-C6	8.00	1.42	1.37
11	B2	856	G	N1-C2	8.00	1.44	1.37
11	B2	976	A	C5-C4	8.00	1.44	1.38
38	A1	406	G	C6-N1	8.00	1.45	1.39
38	A1	693	G	C6-N1	8.00	1.45	1.39
38	A1	2499	U	N3-C4	8.00	1.45	1.38
11	B2	649	A	C6-N1	7.99	1.41	1.35
11	B2	1259	A	C6-N6	7.99	1.40	1.33
11	B2	1280	C	C5'-C4'	7.99	1.60	1.51
11	B2	1457	A	C6-N6	7.99	1.40	1.33
38	A1	632	G	C6-N1	7.99	1.45	1.39
38	A1	727	A	C4'-C3'	7.99	1.61	1.53
38	A1	913	G	C2'-C1'	-7.99	1.44	1.53
38	A1	1080	G	N9-C8	7.99	1.43	1.37
38	A1	1530	A	N7-C5	-7.99	1.34	1.39
38	A1	2184	G	N1-C2	7.99	1.44	1.37
11	B2	516	A	C6-N1	7.99	1.41	1.35
11	B2	1041	C	N1-C6	7.99	1.42	1.37
11	B2	1428	G	C8-N7	-7.99	1.26	1.30
38	A1	556	G	C6-N1	7.99	1.45	1.39
11	B2	504	G	C6-N1	7.99	1.45	1.39
39	A3	106	G	N9-C8	-7.99	1.32	1.37
11	B2	203	A	C8-N7	-7.99	1.25	1.31
38	A1	1586	G	C5-C4	-7.99	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1139	A	C5'-C4'	7.99	1.60	1.51
11	B2	1434	C	C2'-C1'	-7.99	1.44	1.53
38	A1	1530	A	N9-C4	-7.99	1.33	1.37
38	A1	2801	G	N9-C4	-7.99	1.31	1.38
39	A3	111	G	C6-N1	7.99	1.45	1.39
27	BO	113	ARG	CZ-NH2	7.98	1.43	1.33
38	A1	118	A	N7-C5	-7.98	1.34	1.39
10	B1	60	A	N3-C4	7.98	1.39	1.34
11	B2	996	A	C6-N1	7.98	1.41	1.35
11	B2	1454	A	N3-C4	7.98	1.39	1.34
38	A1	60	G	C5'-C4'	7.98	1.60	1.51
38	A1	747	G	N7-C5	-7.98	1.34	1.39
38	A1	847	A	C6-N6	7.98	1.40	1.33
10	B1	17	C	N1-C6	7.98	1.42	1.37
11	B2	370	A	N9-C4	-7.98	1.33	1.37
11	B2	987	G	N7-C5	-7.98	1.34	1.39
11	B2	1271	G	C6-N1	7.98	1.45	1.39
38	A1	419	G	N7-C5	-7.98	1.34	1.39
38	A1	1491	U	N1-C6	7.98	1.45	1.38
21	BI	26	TYR	CE2-CZ	7.98	1.49	1.38
38	A1	1861	G	P-O5'	-7.98	1.51	1.59
38	A1	2587	G	C8-N7	-7.98	1.26	1.30
38	A1	2609	G	C2-N3	7.98	1.39	1.32
38	A1	2404	G	N1-C2	7.98	1.44	1.37
11	B2	1466	G	C5-C4	7.97	1.44	1.38
38	A1	2055	U	P-O5'	-7.97	1.51	1.59
38	A1	2685	G	C2-N3	7.97	1.39	1.32
38	A1	2775	G	N7-C5	-7.97	1.34	1.39
38	A1	2943	G	O3'-P	-7.97	1.51	1.61
39	A3	49	A	C2-N3	7.97	1.40	1.33
11	B2	1381	G	N7-C5	-7.97	1.34	1.39
38	A1	2715	A	C6-N6	7.97	1.40	1.33
38	A1	2270	G	C5'-C4'	7.97	1.60	1.51
40	A5	47	ARG	NE-CZ	7.97	1.43	1.33
38	A1	829	G	C6-N1	7.97	1.45	1.39
38	A1	2122	G	N9-C8	7.97	1.43	1.37
10	B1	58	A	C4'-C3'	7.97	1.61	1.53
11	B2	822	A	C6-N1	7.97	1.41	1.35
38	A1	1845	C	O3'-P	-7.97	1.51	1.61
38	A1	2330	A	C6-N1	7.97	1.41	1.35
10	B1	20	G	N9-C8	7.96	1.43	1.37
38	A1	884	C	N3-C4	7.96	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1534	G	N7-C5	-7.96	1.34	1.39
38	A1	1900	U	C4'-C3'	7.96	1.61	1.53
38	A1	264	G	C2-N3	7.96	1.39	1.32
11	B2	970	G	C6-N1	7.96	1.45	1.39
11	B2	1469	G	C6-N1	7.96	1.45	1.39
38	A1	486	A	N3-C4	7.96	1.39	1.34
38	A1	840	G	C8-N7	-7.96	1.26	1.30
38	A1	2043	A	N7-C5	-7.96	1.34	1.39
11	B2	239	A	N7-C5	-7.96	1.34	1.39
11	B2	88	G	C8-N7	7.96	1.35	1.30
38	A1	1278	C	C2-N3	7.96	1.42	1.35
38	A1	1847	U	C5'-C4'	7.96	1.60	1.51
38	A1	2127	G	C6-N1	7.96	1.45	1.39
38	A1	2303	A	N3-C4	-7.96	1.30	1.34
38	A1	2639	G	C8-N7	7.96	1.35	1.30
38	A1	307	C	O3'-P	-7.96	1.51	1.61
11	B2	1383	A	N9-C4	-7.96	1.33	1.37
38	A1	2772	U	C4-C5	7.96	1.50	1.43
11	B2	310	G	C2-N3	7.95	1.39	1.32
11	B2	974	G	N1-C2	7.95	1.44	1.37
38	A1	1557	G	O3'-P	-7.95	1.51	1.61
11	B2	54	C	N1-C6	7.95	1.42	1.37
11	B2	648	A	N3-C4	-7.95	1.30	1.34
38	A1	297	G	N7-C5	-7.95	1.34	1.39
38	A1	1548	A	N9-C4	7.95	1.42	1.37
38	A1	354	G	C3'-C2'	7.95	1.61	1.52
38	A1	1660	A	C6-N6	7.95	1.40	1.33
38	A1	2626	U	O3'-P	-7.95	1.51	1.61
39	A3	95	G	N7-C5	-7.95	1.34	1.39
11	B2	219	C	C2-N3	7.95	1.42	1.35
11	B2	837	C	C4-N4	7.95	1.41	1.33
11	B2	1399	G	C2-N2	7.95	1.42	1.34
38	A1	3026	C	C3'-C2'	7.95	1.61	1.52
11	B2	61	A	O3'-P	-7.95	1.51	1.61
11	B2	195	C	C4-N4	7.95	1.41	1.33
11	B2	1493	C	N3-C4	7.95	1.39	1.33
38	A1	1291	C	N3-C4	7.95	1.39	1.33
38	A1	1788	G	N9-C8	7.95	1.43	1.37
38	A1	2693	G	C8-N7	-7.95	1.26	1.30
38	A1	40	G	N7-C5	-7.94	1.34	1.39
11	B2	151	G	N1-C2	7.94	1.44	1.37
11	B2	899	G	N9-C8	-7.94	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1582	G	C6-N1	7.94	1.45	1.39
11	B2	803	C	C5'-C4'	7.94	1.60	1.51
11	B2	1134	G	C8-N7	7.94	1.35	1.30
38	A1	1944	C	N3-C4	7.94	1.39	1.33
38	A1	1782	C	N3-C4	7.94	1.39	1.33
38	A1	1932	G	C2'-C1'	-7.94	1.44	1.53
11	B2	119	A	C6-N1	7.94	1.41	1.35
38	A1	419	G	C6-N1	7.94	1.45	1.39
38	A1	893	C	C5'-C4'	7.94	1.60	1.51
38	A1	1663	C	C4'-C3'	-7.94	1.44	1.53
38	A1	2379	G	N9-C4	7.94	1.44	1.38
10	B1	26	C	N1-C6	-7.94	1.32	1.37
11	B2	753	G	C2-N3	7.93	1.39	1.32
38	A1	563	A	C5'-C4'	7.93	1.60	1.51
38	A1	1356	A	N3-C4	-7.93	1.30	1.34
38	A1	2529	G	C5'-C4'	7.93	1.60	1.51
38	A1	2839	A	N7-C5	-7.93	1.34	1.39
11	B2	954	G	N7-C5	-7.93	1.34	1.39
11	B2	1172	A	C6-N6	7.93	1.40	1.33
38	A1	172	C	C5'-C4'	7.93	1.60	1.51
38	A1	1142	A	C8-N7	-7.93	1.25	1.31
39	A3	48	A	C6-N1	7.93	1.41	1.35
11	B2	397	C	C2'-C1'	-7.93	1.44	1.53
11	B2	486	A	C2-N3	7.93	1.40	1.33
38	A1	699	A	N9-C4	7.93	1.42	1.37
38	A1	1703	G	C2-N3	7.93	1.39	1.32
38	A1	2612	A	N3-C4	-7.93	1.30	1.34
39	A3	24	C	N3-C4	7.93	1.39	1.33
11	B2	580	G	C2-N3	7.93	1.39	1.32
11	B2	641	A	N7-C5	-7.93	1.34	1.39
38	A1	2693	G	C4'-C3'	-7.93	1.44	1.53
38	A1	2750	C	P-O5'	-7.93	1.51	1.59
11	B2	1386	C	C2'-C1'	-7.93	1.44	1.53
38	A1	2864	G	C8-N7	-7.93	1.26	1.30
38	A1	1051	C	N3-C4	7.92	1.39	1.33
38	A1	70	G	C6-N1	7.92	1.45	1.39
38	A1	1477	C	N3-C4	7.92	1.39	1.33
38	A1	2206	G	N3-C4	-7.92	1.29	1.35
38	A1	1970	G	C3'-C2'	-7.92	1.44	1.52
38	A1	40	G	C5'-C4'	7.92	1.60	1.51
38	A1	2724	A	N7-C5	-7.92	1.34	1.39
39	A3	27	C	N1-C6	7.92	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	204	G	N1-C2	7.92	1.44	1.37
11	B2	808	C	N1-C6	7.92	1.42	1.37
11	B2	1112	G	N1-C2	7.92	1.44	1.37
11	B2	1131	G	N7-C5	-7.92	1.34	1.39
38	A1	1882	C	C4-N4	7.92	1.41	1.33
11	B2	95	G	C6-N1	7.91	1.45	1.39
11	B2	1252	C	C4-N4	7.91	1.41	1.33
38	A1	1721	U	C2'-C1'	-7.91	1.44	1.53
39	A3	44	C	C2-N3	7.91	1.42	1.35
11	B2	630	A	C6-N1	7.91	1.41	1.35
38	A1	1254	C	C5'-C4'	7.91	1.60	1.51
11	B2	1027	C	C4'-C3'	7.91	1.61	1.53
11	B2	1433	C	C4'-C3'	7.91	1.61	1.53
38	A1	635	G	N9-C8	7.91	1.43	1.37
38	A1	1021	G	C8-N7	-7.91	1.26	1.30
38	A1	2661	U	C2-N3	7.91	1.43	1.37
38	A1	2846	A	N7-C5	-7.91	1.34	1.39
39	A3	123	U	O3'-P	-7.91	1.51	1.61
11	B2	728	G	N9-C8	-7.91	1.32	1.37
11	B2	779	G	C2-N3	7.91	1.39	1.32
38	A1	619	G	N1-C2	7.91	1.44	1.37
38	A1	1050	C	N3-C4	7.91	1.39	1.33
38	A1	1218	C	C4'-C3'	7.91	1.61	1.53
38	A1	1949	A	N9-C8	7.91	1.44	1.37
38	A1	2826	U	C4-C5	7.91	1.50	1.43
38	A1	484	C	N3-C4	7.91	1.39	1.33
38	A1	1083	G	N9-C8	-7.91	1.32	1.37
38	A1	2793	C	C5-C6	-7.91	1.28	1.34
38	A1	2281	A	P-O5'	-7.91	1.51	1.59
38	A1	2382	A	N7-C5	-7.90	1.34	1.39
10	B1	17	C	C2-N3	7.90	1.42	1.35
11	B2	105	C	N1-C6	7.90	1.41	1.37
11	B2	718	G	N1-C2	7.90	1.44	1.37
11	B2	1041	C	C2'-C1'	-7.90	1.44	1.53
38	A1	502	G	C3'-C2'	7.90	1.61	1.52
38	A1	1224	A	C6-N6	7.90	1.40	1.33
11	B2	991	C	C4-N4	7.90	1.41	1.33
38	A1	508	G	N9-C4	-7.90	1.31	1.38
38	A1	920	G	N1-C2	7.90	1.44	1.37
38	A1	2476	A	C5-C4	-7.90	1.33	1.38
10	B1	35	G	C6-N1	-7.90	1.34	1.39
11	B2	1225	C	C5-C6	-7.90	1.28	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	147	C	N1-C6	7.90	1.41	1.37
11	B2	178	C	C3'-C2'	7.89	1.61	1.52
11	B2	298	C	O3'-P	-7.89	1.51	1.61
11	B2	728	G	C6-N1	7.89	1.45	1.39
11	B2	1131	G	N1-C2	7.89	1.44	1.37
38	A1	1039	C	N1-C6	7.89	1.41	1.37
38	A1	1460	C	C2-N3	7.89	1.42	1.35
11	B2	851	C	C2-N3	7.89	1.42	1.35
11	B2	1136	A	N3-C4	7.89	1.39	1.34
38	A1	434	G	N1-C2	7.89	1.44	1.37
38	A1	549	G	C2-N3	7.89	1.39	1.32
11	B2	1493	C	C4'-C3'	-7.89	1.44	1.53
38	A1	563	A	C6-N6	7.89	1.40	1.33
38	A1	1661	A	C6-N1	7.89	1.41	1.35
38	A1	1694	G	C6-N1	7.89	1.45	1.39
38	A1	169	G	C5-C4	7.89	1.43	1.38
38	A1	737	G	C5-C4	7.89	1.43	1.38
38	A1	1094	U	N1-C2	-7.89	1.31	1.38
38	A1	1401	G	C5-C6	-7.89	1.34	1.42
38	A1	1356	A	C6-N6	7.89	1.40	1.33
38	A1	875	G	C6-N1	7.89	1.45	1.39
38	A1	1454	G	N3-C4	7.89	1.41	1.35
38	A1	1607	C	N3-C4	7.89	1.39	1.33
38	A1	1874	G	N9-C8	7.89	1.43	1.37
11	B2	60	A	C6-N6	-7.88	1.27	1.33
11	B2	376	G	C5'-C4'	7.88	1.60	1.51
11	B2	1324	U	C2-N3	7.88	1.43	1.37
38	A1	785	C	C2'-C1'	-7.88	1.44	1.53
38	A1	1507	A	C5-C4	7.88	1.44	1.38
38	A1	1764	G	N9-C8	7.88	1.43	1.37
38	A1	2691	G	N1-C2	7.88	1.44	1.37
38	A1	2755	G	C2'-C1'	-7.88	1.44	1.53
11	B2	314	G	C3'-C2'	-7.88	1.44	1.52
11	B2	519	G	N1-C2	7.88	1.44	1.37
38	A1	1409	U	C5'-C4'	-7.88	1.41	1.51
11	B2	1443	G	C8-N7	7.88	1.35	1.30
38	A1	503	U	C4-C5	7.88	1.50	1.43
38	A1	2584	A	N9-C8	7.88	1.44	1.37
38	A1	2810	G	C8-N7	-7.88	1.26	1.30
38	A1	679	U	C2-N3	7.88	1.43	1.37
38	A1	2999	G	C5-C4	7.88	1.43	1.38
38	A1	1967	G	C6-N1	7.88	1.45	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2333	G	N7-C5	-7.88	1.34	1.39
38	A1	2899	G	N9-C8	7.88	1.43	1.37
10	B1	23	G	C6-N1	7.88	1.45	1.39
11	B2	343	G	C4'-C3'	7.88	1.61	1.53
11	B2	1315	G	C5'-C4'	7.88	1.60	1.51
38	A1	48	G	C6-N1	7.88	1.45	1.39
38	A1	1210	G	O4'-C1'	-7.88	1.31	1.41
38	A1	2475	G	N7-C5	7.88	1.44	1.39
38	A1	1948	A	C6-N6	7.88	1.40	1.33
38	A1	2872	G	N1-C2	7.88	1.44	1.37
11	B2	995	G	N9-C8	-7.87	1.32	1.37
38	A1	1916	U	P-O5'	-7.87	1.51	1.59
11	B2	847	A	C5-C6	7.87	1.48	1.41
11	B2	948	G	C8-N7	-7.87	1.26	1.30
11	B2	1297	G	C2-N3	7.87	1.39	1.32
38	A1	964	C	C4-N4	7.87	1.41	1.33
38	A1	1048	C	P-O5'	7.87	1.67	1.59
38	A1	1428	G	N9-C8	-7.87	1.32	1.37
38	A1	1654	G	C6-N1	7.87	1.45	1.39
11	B2	757	G	N7-C5	-7.87	1.34	1.39
38	A1	347	G	C2-N2	7.87	1.42	1.34
11	B2	1016	G	C2-N2	7.87	1.42	1.34
11	B2	1335	A	N7-C5	-7.87	1.34	1.39
38	A1	535	G	C4'-C3'	7.87	1.61	1.53
38	A1	1504	C	P-O5'	-7.87	1.51	1.59
38	A1	2043	A	C5-C4	7.87	1.44	1.38
38	A1	2635	C	N3-C4	7.87	1.39	1.33
11	B2	1280	C	N3-C4	7.87	1.39	1.33
38	A1	516	A	C5-C6	7.87	1.48	1.41
38	A1	1160	U	C4'-C3'	-7.87	1.44	1.53
38	A1	219	G	C2-N3	7.87	1.39	1.32
38	A1	933	G	C6-N1	7.87	1.45	1.39
38	A1	1445	G	C5'-C4'	7.87	1.60	1.51
11	B2	793	G	C2-N3	7.86	1.39	1.32
38	A1	170	A	C5-C6	7.86	1.48	1.41
38	A1	173	G	N1-C2	7.86	1.44	1.37
38	A1	632	G	N7-C5	7.86	1.44	1.39
38	A1	957	C	C2'-C1'	-7.86	1.44	1.53
38	A1	1304	G	C8-N7	-7.86	1.26	1.30
11	B2	1272	G	N9-C4	-7.86	1.31	1.38
11	B2	755	U	P-O5'	-7.86	1.51	1.59
11	B2	223	G	C2'-C1'	-7.86	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2871	A	P-O5'	-7.86	1.51	1.59
56	AJ	70	ARG	CZ-NH2	7.86	1.43	1.33
11	B2	864	G	N7-C5	-7.86	1.34	1.39
11	B2	883	G	C2-N3	7.86	1.39	1.32
11	B2	988	A	C4'-O4'	-7.86	1.35	1.45
11	B2	1492	U	C3'-O3'	7.86	1.53	1.42
38	A1	211	A	N9-C4	7.86	1.42	1.37
38	A1	2080	G	C6-N1	7.86	1.45	1.39
38	A1	2883	C	N1-C2	-7.86	1.32	1.40
38	A1	1766	A	C6-N1	7.85	1.41	1.35
11	B2	284	A	N9-C8	7.85	1.44	1.37
38	A1	337	G	C2-N2	7.85	1.42	1.34
38	A1	2084	A	C6-N6	7.85	1.40	1.33
38	A1	524	C	C4-N4	7.85	1.41	1.33
38	A1	2889	A	C8-N7	-7.85	1.26	1.31
38	A1	1559	A	N9-C8	-7.85	1.31	1.37
38	A1	1950	G	C8-N7	-7.85	1.26	1.30
38	A1	623	G	N1-C2	7.85	1.44	1.37
38	A1	46	C	C4-C5	-7.85	1.36	1.43
38	A1	196	A	N3-C4	7.85	1.39	1.34
38	A1	301	G	N9-C8	-7.85	1.32	1.37
38	A1	2256	G	C5'-C4'	7.85	1.60	1.51
38	A1	2096	G	N9-C4	-7.84	1.31	1.38
11	B2	213	C	N3-C4	7.84	1.39	1.33
38	A1	1261	C	C4'-C3'	7.84	1.61	1.53
10	B1	23	G	N3-C4	7.84	1.41	1.35
11	B2	360	A	N3-C4	-7.84	1.30	1.34
11	B2	446	G	N1-C2	7.84	1.44	1.37
11	B2	1237	G	C5-C6	7.84	1.50	1.42
20	BH	36	TYR	CG-CD2	7.84	1.49	1.39
38	A1	1058	A	C5-C4	7.84	1.44	1.38
38	A1	1512	G	N3-C4	7.84	1.41	1.35
39	A3	86	C	N1-C6	7.84	1.41	1.37
38	A1	40	G	N9-C4	7.84	1.44	1.38
38	A1	343	C	C4-N4	7.84	1.41	1.33
38	A1	1549	C	C5'-C4'	7.84	1.60	1.51
38	A1	2893	U	C2-N3	7.84	1.43	1.37
38	A1	1470	C	O3'-P	-7.84	1.51	1.61
39	A3	24	C	N1-C6	7.84	1.41	1.37
11	B2	556	G	C2-N2	7.84	1.42	1.34
11	B2	891	A	O3'-P	-7.84	1.51	1.61
11	B2	1072	C	N3-C4	7.84	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1348	C	C4-C5	7.84	1.49	1.43
38	A1	1140	C	N1-C6	-7.84	1.32	1.37
38	A1	1684	C	C5'-C4'	7.84	1.60	1.51
38	A1	3035	C	N1-C6	7.84	1.41	1.37
38	A1	1633	A	N3-C4	-7.83	1.30	1.34
38	A1	2604	G	C5'-C4'	7.83	1.60	1.51
11	B2	380	C	C5'-C4'	7.83	1.60	1.51
11	B2	584	C	N3-C4	7.83	1.39	1.33
11	B2	692	G	C4'-C3'	7.83	1.61	1.53
38	A1	785	C	C2-N3	7.83	1.42	1.35
38	A1	1845	C	P-O5'	-7.83	1.51	1.59
38	A1	2333	G	C6-N1	7.83	1.45	1.39
10	B1	44	G	C6-N1	7.83	1.45	1.39
11	B2	1202	G	N1-C2	7.83	1.44	1.37
38	A1	1828	A	N9-C4	7.83	1.42	1.37
39	A3	109	A	O3'-P	-7.83	1.51	1.61
10	B1	51	G	C6-N1	7.83	1.45	1.39
11	B2	54	C	C4'-C3'	7.83	1.61	1.53
38	A1	430	A	C5-C4	7.83	1.44	1.38
11	B2	1252	C	N1-C6	7.83	1.41	1.37
38	A1	1603	G	C5-C4	7.83	1.43	1.38
38	A1	2354	A	N9-C4	-7.83	1.33	1.37
38	A1	2717	A	C2'-C1'	-7.83	1.44	1.53
38	A1	3022	C	C5'-C4'	7.83	1.60	1.51
38	A1	2006	C	N1-C6	7.83	1.41	1.37
11	B2	19	G	N1-C2	7.83	1.44	1.37
38	A1	118	A	O3'-P	-7.83	1.51	1.61
38	A1	864	C	O4'-C1'	7.83	1.51	1.41
38	A1	1071	A	N9-C4	-7.83	1.33	1.37
38	A1	1265	A	C5-C6	-7.83	1.34	1.41
11	B2	1227	A	C6-N6	7.82	1.40	1.33
38	A1	455	G	C6-N1	7.82	1.45	1.39
38	A1	1474	A	N9-C8	-7.82	1.31	1.37
38	A1	1710	C	N3-C4	7.82	1.39	1.33
64	AR	30	ARG	NE-CZ	7.82	1.43	1.33
10	B1	55	U	C2-N3	7.82	1.43	1.37
11	B2	26	A	C8-N7	7.82	1.37	1.31
38	A1	2450	A	C6-N1	7.82	1.41	1.35
11	B2	699	C	C4-N4	7.82	1.41	1.33
38	A1	204	G	C2-N2	7.82	1.42	1.34
38	A1	258	C	N3-C4	7.82	1.39	1.33
38	A1	1744	A	N3-C4	-7.82	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1461	U	C3'-C2'	7.82	1.61	1.52
38	A1	85	G	N7-C5	-7.82	1.34	1.39
38	A1	281	G	N1-C2	7.82	1.44	1.37
38	A1	1582	G	C2-N3	7.82	1.39	1.32
38	A1	970	G	C6-N1	7.82	1.45	1.39
11	B2	108	G	C2-N3	7.82	1.39	1.32
11	B2	999	G	P-O5'	-7.82	1.51	1.59
38	A1	617	G	C8-N7	-7.82	1.26	1.30
38	A1	817	G	N1-C2	7.82	1.44	1.37
38	A1	1715	G	C2-N3	7.82	1.39	1.32
38	A1	2096	G	N3-C4	-7.82	1.29	1.35
11	B2	616	G	N1-C2	7.81	1.44	1.37
38	A1	235	G	C6-O6	-7.81	1.17	1.24
11	B2	131	G	N7-C5	-7.81	1.34	1.39
11	B2	305	C	C2-N3	7.81	1.42	1.35
38	A1	2056	A	C6-N1	7.81	1.41	1.35
38	A1	2266	C	C5'-C4'	7.81	1.60	1.51
38	A1	2719	G	N7-C5	7.81	1.44	1.39
38	A1	1683	C	N3-C4	7.81	1.39	1.33
38	A1	2359	G	C2-N2	7.81	1.42	1.34
38	A1	2664	G	C6-N1	7.81	1.45	1.39
10	B1	2	G	C5-C4	-7.81	1.32	1.38
38	A1	567	G	N9-C4	7.81	1.44	1.38
38	A1	2591	A	C6-N1	7.81	1.41	1.35
11	B2	906	G	N1-C2	7.81	1.44	1.37
11	B2	1274	C	C2-N3	7.81	1.42	1.35
38	A1	1685	C	C2'-C1'	-7.81	1.44	1.53
38	A1	1707	A	C4'-C3'	7.81	1.61	1.53
38	A1	2273	U	C2-N3	7.81	1.43	1.37
38	A1	2285	G	C5-C4	7.81	1.43	1.38
38	A1	2436	A	C5-C4	7.81	1.44	1.38
38	A1	428	A	N7-C5	-7.81	1.34	1.39
11	B2	1034	G	C2-N2	7.80	1.42	1.34
11	B2	1202	G	C8-N7	-7.80	1.26	1.30
11	B2	1250	C	C4-C5	-7.80	1.36	1.43
38	A1	971	G	N1-C2	7.80	1.44	1.37
38	A1	407	A	C2'-C1'	-7.80	1.44	1.53
38	A1	2576	C	O3'-P	-7.80	1.51	1.61
11	B2	1306	A	P-O5'	-7.80	1.51	1.59
38	A1	930	G	N1-C2	7.80	1.44	1.37
38	A1	1164	C	N3-C4	7.80	1.39	1.33
38	A1	1276	G	N1-C2	7.80	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2673	C	N1-C6	7.80	1.41	1.37
16	BD	79	ARG	CZ-NH1	7.80	1.43	1.33
38	A1	856	A	C8-N7	-7.80	1.26	1.31
38	A1	1399	C	N1-C6	7.80	1.41	1.37
38	A1	2723	G	C8-N7	-7.80	1.26	1.30
38	A1	3013	U	C2'-C1'	-7.80	1.44	1.53
39	A3	7	C	N1-C6	7.80	1.41	1.37
11	B2	1083	G	N9-C4	-7.80	1.31	1.38
11	B2	1192	C	C4-N4	7.80	1.41	1.33
38	A1	1552	C	N1-C6	7.80	1.41	1.37
38	A1	2383	A	N7-C5	-7.80	1.34	1.39
11	B2	29	G	C2-N3	7.80	1.39	1.32
11	B2	386	C	N1-C6	-7.80	1.32	1.37
38	A1	211	A	C5-C6	-7.80	1.34	1.41
38	A1	224	G	C8-N7	-7.80	1.26	1.30
38	A1	860	A	N9-C4	7.80	1.42	1.37
38	A1	1702	C	C4-N4	7.80	1.41	1.33
38	A1	1770	A	N7-C5	-7.80	1.34	1.39
43	AB	54	ARG	NE-CZ	7.80	1.43	1.33
11	B2	947	G	N9-C8	-7.79	1.32	1.37
38	A1	613	C	C4-C5	-7.79	1.36	1.43
38	A1	1910	C	N3-C4	7.79	1.39	1.33
38	A1	2121	C	N3-C4	7.79	1.39	1.33
11	B2	77	G	N1-C2	7.79	1.44	1.37
11	B2	312	U	C1'-N1	7.79	1.60	1.48
11	B2	723	G	C8-N7	-7.79	1.26	1.30
38	A1	575	G	N7-C5	-7.79	1.34	1.39
38	A1	2724	A	N9-C8	7.79	1.44	1.37
11	B2	1054	A	C6-N6	7.79	1.40	1.33
11	B2	445	G	C2-N3	7.79	1.39	1.32
38	A1	1108	A	C6-N1	7.79	1.41	1.35
11	B2	120	C	P-O5'	-7.79	1.51	1.59
38	A1	1342	G	C2-N2	7.79	1.42	1.34
38	A1	2562	G	C2'-C1'	-7.79	1.44	1.53
11	B2	690	C	N3-C4	7.79	1.39	1.33
38	A1	2308	C	N3-C4	7.79	1.39	1.33
38	A1	2709	C	O3'-P	-7.79	1.51	1.61
11	B2	769	A	N7-C5	-7.78	1.34	1.39
38	A1	547	C	C4-N4	7.78	1.41	1.33
38	A1	1072	U	C2'-C1'	7.78	1.61	1.53
38	A1	1331	U	N3-C4	7.78	1.45	1.38
38	A1	2740	G	C2-N3	7.78	1.39	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1863	G	C5'-C4'	7.78	1.60	1.51
11	B2	970	G	C2-N2	7.78	1.42	1.34
38	A1	2902	G	C2'-C1'	-7.78	1.44	1.53
11	B2	1335	A	C6-N6	7.78	1.40	1.33
38	A1	645	U	P-O5'	-7.78	1.51	1.59
11	B2	716	G	C2-N2	7.78	1.42	1.34
11	B2	1162	G	C5-C6	7.78	1.50	1.42
11	B2	1361	G	N7-C5	-7.78	1.34	1.39
38	A1	1333	G	N9-C8	7.78	1.43	1.37
38	A1	2368	G	C2-N2	7.78	1.42	1.34
11	B2	985	C	C2-N3	7.77	1.42	1.35
38	A1	2168	C	O4'-C1'	7.77	1.51	1.41
60	AM	91	SER	CA-CB	7.77	1.64	1.52
11	B2	546	G	C5-C6	-7.77	1.34	1.42
38	A1	2010	G	C2-N3	7.77	1.39	1.32
38	A1	109	G	N7-C5	-7.77	1.34	1.39
38	A1	356	C	N1-C6	7.77	1.41	1.37
11	B2	1099	A	N9-C4	-7.77	1.33	1.37
11	B2	1238	G	O3'-P	-7.77	1.51	1.61
38	A1	1397	U	C2-N3	7.77	1.43	1.37
11	B2	282	G	C8-N7	-7.77	1.26	1.30
38	A1	2720	U	N3-C4	7.77	1.45	1.38
11	B2	313	G	N7-C5	-7.76	1.34	1.39
38	A1	2777	G	C6-N1	7.76	1.45	1.39
11	B2	310	G	C5-C6	-7.76	1.34	1.42
11	B2	1315	G	P-O5'	-7.76	1.51	1.59
11	B2	1457	A	C8-N7	-7.76	1.26	1.31
38	A1	745	C	C5'-C4'	7.76	1.60	1.51
38	A1	796	C	C4-C5	7.76	1.49	1.43
38	A1	2408	G	C5-C4	-7.76	1.32	1.38
11	B2	901	G	C2-N3	7.76	1.39	1.32
38	A1	749	G	C5-C4	-7.76	1.32	1.38
38	A1	2542	G	N1-C2	7.76	1.44	1.37
11	B2	448	A	C2'-C1'	-7.76	1.44	1.53
11	B2	958	G	N7-C5	-7.76	1.34	1.39
11	B2	1414	G	N7-C5	-7.76	1.34	1.39
38	A1	1818	G	C2'-C1'	-7.76	1.44	1.53
38	A1	1820	C	N3-C4	7.76	1.39	1.33
38	A1	2897	C	C4-C5	7.76	1.49	1.43
11	B2	630	A	C5-C4	-7.76	1.33	1.38
38	A1	12	C	N3-C4	7.76	1.39	1.33
38	A1	1107	G	N9-C8	7.76	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1608	G	C4'-C3'	-7.76	1.44	1.53
38	A1	984	U	C5'-C4'	-7.75	1.42	1.51
38	A1	2109	C	N1-C2	7.75	1.48	1.40
38	A1	1079	A	C6-N1	7.75	1.41	1.35
38	A1	1567	C	C4-N4	7.75	1.41	1.33
38	A1	2258	A	C6-N1	7.75	1.41	1.35
11	B2	1370	U	C2'-C1'	-7.75	1.44	1.53
38	A1	626	C	N3-C4	7.75	1.39	1.33
38	A1	1695	G	N9-C8	-7.75	1.32	1.37
11	B2	722	G	N3-C4	-7.75	1.30	1.35
38	A1	809	A	N7-C5	-7.75	1.34	1.39
38	A1	2453	C	N1-C6	-7.75	1.32	1.37
38	A1	114	C	P-O5'	-7.75	1.52	1.59
38	A1	2840	C	N1-C6	7.75	1.41	1.37
11	B2	83	C	C2'-C1'	-7.75	1.44	1.53
11	B2	903	G	O3'-P	-7.75	1.51	1.61
38	A1	573	G	C5-C4	7.75	1.43	1.38
38	A1	1242	A	N7-C5	-7.75	1.34	1.39
38	A1	2316	U	C4-C5	7.75	1.50	1.43
38	A1	2655	C	C5'-C4'	7.75	1.60	1.51
38	A1	920	G	C5'-C4'	7.75	1.60	1.51
11	B2	141	C	C2-N3	7.74	1.42	1.35
11	B2	454	G	N7-C5	-7.74	1.34	1.39
11	B2	939	C	C4-N4	7.74	1.41	1.33
11	B2	990	G	C4'-C3'	7.74	1.61	1.53
11	B2	1111	G	C4'-C3'	7.74	1.61	1.53
38	A1	2785	G	C2-N3	7.74	1.39	1.32
38	A1	2821	G	C2-N2	7.74	1.42	1.34
38	A1	2770	A	N3-C4	-7.74	1.30	1.34
38	A1	2772	U	C2-N3	7.74	1.43	1.37
11	B2	38	G	N9-C8	-7.74	1.32	1.37
11	B2	133	G	N3-C4	-7.74	1.30	1.35
11	B2	447	A	C8-N7	7.74	1.36	1.31
11	B2	490	C	C4-C5	-7.74	1.36	1.43
38	A1	1755	C	C2-O2	-7.74	1.17	1.24
11	B2	70	C	P-O5'	7.74	1.67	1.59
11	B2	211	G	C2-N2	7.74	1.42	1.34
11	B2	932	C	C1'-N1	7.74	1.60	1.48
38	A1	1202	G	C6-N1	7.74	1.45	1.39
38	A1	1697	G	C8-N7	-7.74	1.26	1.30
38	A1	2222	C	C4'-C3'	7.74	1.61	1.53
38	A1	1147	G	C2-N3	7.74	1.39	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2489	C	N3-C4	7.74	1.39	1.33
11	B2	643	G	C6-N1	7.73	1.45	1.39
38	A1	771	G	N7-C5	-7.73	1.34	1.39
38	A1	1776	G	C6-N1	7.73	1.45	1.39
39	A3	83	C	C2-N3	7.73	1.42	1.35
11	B2	89	G	C6-N1	7.73	1.45	1.39
38	A1	485	G	N9-C4	-7.73	1.31	1.38
39	A3	21	C	C3'-O3'	-7.73	1.31	1.42
10	B1	50	G	C5-C4	7.73	1.43	1.38
11	B2	704	C	N1-C6	7.73	1.41	1.37
11	B2	1070	C	C4-C5	-7.73	1.36	1.43
11	B2	1266	A	C5-C4	7.73	1.44	1.38
38	A1	1097	G	N3-C4	-7.73	1.30	1.35
38	A1	1336	G	C2-N3	7.73	1.39	1.32
38	A1	1398	C	C4-N4	7.73	1.41	1.33
38	A1	1660	A	N1-C2	7.73	1.41	1.34
11	B2	693	C	C5'-C4'	7.72	1.60	1.51
11	B2	1046	G	C6-N1	7.72	1.45	1.39
11	B2	1137	G	C2-N2	7.72	1.42	1.34
11	B2	1383	A	C8-N7	-7.72	1.26	1.31
38	A1	1101	U	N3-C4	7.72	1.45	1.38
38	A1	2341	G	N9-C8	7.72	1.43	1.37
11	B2	887	G	N3-C4	-7.72	1.30	1.35
38	A1	722	C	N1-C6	7.72	1.41	1.37
38	A1	1335	C	C2-N3	7.72	1.42	1.35
38	A1	1659	G	C5-C4	7.72	1.43	1.38
38	A1	1916	U	O3'-P	-7.72	1.51	1.61
38	A1	2449	A	N3-C4	-7.72	1.30	1.34
38	A1	1626	A	N9-C4	7.72	1.42	1.37
38	A1	1713	G	C2-N3	7.72	1.39	1.32
38	A1	1197	G	C5-C4	-7.72	1.32	1.38
38	A1	1556	G	C6-N1	7.72	1.45	1.39
38	A1	327	G	P-O5'	-7.72	1.52	1.59
11	B2	1253	G	C5-C6	-7.71	1.34	1.42
38	A1	1622	G	C6-N1	7.71	1.45	1.39
38	A1	2495	A	C6-N1	7.71	1.41	1.35
11	B2	418	G	C4'-C3'	-7.71	1.44	1.53
38	A1	1264	G	C5-C4	7.71	1.43	1.38
11	B2	613	C	N3-C4	7.71	1.39	1.33
11	B2	645	G	C8-N7	-7.71	1.26	1.30
11	B2	1042	U	C2-N3	7.71	1.43	1.37
38	A1	480	A	C5'-C4'	7.71	1.60	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	687	C	C2-N3	7.71	1.42	1.35
39	A3	21	C	C2-N3	7.71	1.42	1.35
38	A1	1568	A	C6-N6	7.71	1.40	1.33
38	A1	2727	C	N3-C4	7.71	1.39	1.33
11	B2	79	G	N1-C2	7.70	1.44	1.37
11	B2	232	G	C8-N7	-7.70	1.26	1.30
11	B2	553	C	C4-N4	7.70	1.40	1.33
38	A1	244	A	C6-N6	7.70	1.40	1.33
38	A1	423	G	N7-C5	-7.70	1.34	1.39
38	A1	2362	U	C2-N3	7.70	1.43	1.37
38	A1	3030	A	N7-C5	-7.70	1.34	1.39
11	B2	114	A	C5-C4	7.70	1.44	1.38
38	A1	394	A	N3-C4	-7.70	1.30	1.34
38	A1	1613	A	C5-C4	7.70	1.44	1.38
38	A1	2736	G	C5'-C4'	7.70	1.60	1.51
11	B2	1249	A	N7-C5	-7.70	1.34	1.39
11	B2	1404	C	C4-N4	7.70	1.40	1.33
38	A1	265	A	N7-C5	-7.70	1.34	1.39
38	A1	1780	C	C4-C5	-7.70	1.36	1.43
38	A1	1801	C	N3-C4	7.70	1.39	1.33
38	A1	517	A	P-O5'	-7.70	1.52	1.59
38	A1	2818	C	C4-C5	7.70	1.49	1.43
11	B2	256	G	N7-C5	-7.70	1.34	1.39
11	B2	377	A	C6-N6	7.70	1.40	1.33
11	B2	635	C	N3-C4	7.70	1.39	1.33
11	B2	1111	G	C4'-O4'	-7.70	1.35	1.45
38	A1	120	G	N3-C4	-7.70	1.30	1.35
38	A1	1620	C	N3-C4	7.70	1.39	1.33
38	A1	350	A	C2'-C1'	-7.69	1.44	1.53
38	A1	2610	C	P-O5'	7.69	1.67	1.59
11	B2	199	A	C6-N6	7.69	1.40	1.33
38	A1	905	G	N1-C2	7.69	1.44	1.37
38	A1	1351	G	C6-N1	7.69	1.45	1.39
38	A1	1911	G	C5-C4	7.69	1.43	1.38
38	A1	268	C	N1-C6	7.69	1.41	1.37
38	A1	2665	G	C1'-N9	-7.69	1.36	1.46
11	B2	1425	C	P-O5'	7.69	1.67	1.59
38	A1	48	G	C8-N7	-7.69	1.26	1.30
38	A1	950	G	C8-N7	7.69	1.35	1.30
11	B2	733	C	C2-N3	7.69	1.41	1.35
38	A1	702	G	C8-N7	-7.69	1.26	1.30
38	A1	2293	G	N7-C5	-7.69	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
39	A3	33	U	C5'-C4'	7.69	1.60	1.51
11	B2	460	C	C2-N3	-7.69	1.29	1.35
38	A1	849	C	C4'-C3'	-7.69	1.44	1.53
11	B2	235	G	C2-N3	7.68	1.38	1.32
11	B2	389	G	N1-C2	7.68	1.43	1.37
11	B2	844	G	C6-N1	-7.68	1.34	1.39
11	B2	1466	G	C2-N2	7.68	1.42	1.34
38	A1	43	G	N9-C4	-7.68	1.31	1.38
38	A1	1027	A	N3-C4	7.68	1.39	1.34
38	A1	1207	G	N3-C4	-7.68	1.30	1.35
38	A1	1641	G	C2-N2	7.68	1.42	1.34
38	A1	1946	G	P-O5'	-7.68	1.52	1.59
38	A1	1985	G	N9-C8	7.68	1.43	1.37
38	A1	1976	C	C4-N4	7.68	1.40	1.33
11	B2	729	G	C2-N3	7.68	1.38	1.32
38	A1	542	A	O3'-P	-7.68	1.51	1.61
38	A1	2679	A	N7-C5	7.68	1.43	1.39
11	B2	537	G	N3-C4	7.68	1.40	1.35
11	B2	974	G	C2-N3	7.68	1.38	1.32
11	B2	1006	C	C4-N4	7.68	1.40	1.33
11	B2	1078	U	N3-C4	7.68	1.45	1.38
38	A1	2195	G	C2'-C1'	-7.68	1.45	1.53
38	A1	2459	G	C5'-C4'	7.68	1.60	1.51
38	A1	2685	G	C5-C4	7.68	1.43	1.38
11	B2	397	C	C4-N4	7.68	1.40	1.33
38	A1	2036	A	N9-C8	7.68	1.43	1.37
38	A1	2239	C	N3-C4	7.68	1.39	1.33
11	B2	283	U	N3-C4	7.67	1.45	1.38
11	B2	1146	G	C2-N2	7.67	1.42	1.34
38	A1	212	A	C6-N1	7.67	1.41	1.35
38	A1	1306	A	N1-C2	-7.67	1.27	1.34
38	A1	1351	G	N1-C2	7.67	1.43	1.37
38	A1	2599	C	C4-C5	7.67	1.49	1.43
38	A1	527	G	N9-C8	7.67	1.43	1.37
38	A1	2068	U	C2'-C1'	-7.67	1.45	1.53
11	B2	988	A	N9-C4	7.67	1.42	1.37
4	AQ	139	TYR	CE2-CZ	7.67	1.48	1.38
10	B1	53	G	C2-N3	7.67	1.38	1.32
11	B2	858	A	C6-N6	7.67	1.40	1.33
38	A1	905	G	O3'-P	-7.67	1.51	1.61
38	A1	1429	A	C6-N1	7.67	1.41	1.35
11	B2	150	G	C6-N1	7.67	1.45	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	387	G	N9-C8	7.67	1.43	1.37
11	B2	1242	C	C4-C5	-7.67	1.36	1.43
11	B2	1302	C	C2-N3	7.67	1.41	1.35
38	A1	736	U	O3'-P	-7.67	1.51	1.61
38	A1	1795	C	C5-C6	-7.67	1.28	1.34
38	A1	1903	G	P-O5'	-7.67	1.52	1.59
11	B2	289	C	N1-C6	7.67	1.41	1.37
11	B2	1099	A	C4'-C3'	7.67	1.61	1.53
38	A1	618	C	C4-N4	7.67	1.40	1.33
38	A1	1919	A	C4'-C3'	7.67	1.61	1.53
11	B2	242	A	C6-N1	7.67	1.41	1.35
11	B2	550	G	N1-C2	7.66	1.43	1.37
11	B2	728	G	C2-N3	7.66	1.38	1.32
11	B2	1162	G	N3-C4	-7.66	1.30	1.35
38	A1	400	U	N3-C4	7.66	1.45	1.38
38	A1	1410	A	N7-C5	-7.66	1.34	1.39
38	A1	2384	G	C6-N1	7.66	1.45	1.39
38	A1	2595	C	N3-C4	7.66	1.39	1.33
38	A1	970	G	N7-C5	-7.66	1.34	1.39
11	B2	1115	G	C2-N2	7.66	1.42	1.34
38	A1	1479	U	C2-N3	7.66	1.43	1.37
38	A1	1579	G	N7-C5	-7.66	1.34	1.39
38	A1	2482	G	C8-N7	-7.66	1.26	1.30
11	B2	106	A	N7-C5	-7.66	1.34	1.39
11	B2	1272	G	C5'-C4'	7.66	1.60	1.51
38	A1	350	A	N7-C5	-7.66	1.34	1.39
38	A1	1911	G	N9-C4	-7.66	1.31	1.38
11	B2	161	C	P-O5'	-7.66	1.52	1.59
11	B2	454	G	C5'-C4'	7.66	1.60	1.51
38	A1	715	G	N3-C4	-7.66	1.30	1.35
38	A1	986	G	C5-C4	7.66	1.43	1.38
38	A1	2186	C	N3-C4	7.66	1.39	1.33
38	A1	2862	A	C6-N6	7.66	1.40	1.33
11	B2	1045	A	O4'-C1'	7.66	1.51	1.41
38	A1	2213	G	N3-C4	-7.66	1.30	1.35
11	B2	416	A	C5-C4	7.65	1.44	1.38
38	A1	445	G	N1-C2	7.65	1.43	1.37
11	B2	1045	A	N9-C4	-7.65	1.33	1.37
38	A1	787	G	N3-C4	-7.65	1.30	1.35
38	A1	1169	G	N3-C4	-7.65	1.30	1.35
38	A1	2397	C	C2-N3	7.65	1.41	1.35
38	A1	3044	U	N1-C2	7.65	1.45	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
39	A3	67	U	N1-C6	7.65	1.44	1.38
11	B2	518	U	C4'-C3'	-7.65	1.44	1.53
38	A1	222	A	N9-C4	-7.65	1.33	1.37
38	A1	774	G	C6-N1	7.65	1.45	1.39
38	A1	836	U	C2-N3	7.65	1.43	1.37
38	A1	1782	C	N1-C6	7.65	1.41	1.37
38	A1	1840	G	C5'-C4'	7.65	1.60	1.51
38	A1	2948	A	N3-C4	-7.65	1.30	1.34
38	A1	3025	C	C2-N3	7.65	1.41	1.35
39	A3	30	G	O3'-P	-7.65	1.51	1.61
11	B2	955	G	C2-N3	7.65	1.38	1.32
38	A1	311	C	C2'-C1'	-7.65	1.45	1.53
11	B2	26	A	C2'-C1'	-7.64	1.45	1.53
38	A1	344	G	C2-N3	7.64	1.38	1.32
38	A1	1119	A	C6-N6	7.64	1.40	1.33
38	A1	1852	U	P-O5'	7.64	1.67	1.59
38	A1	1928	A	N9-C8	7.64	1.43	1.37
38	A1	2472	A	C5'-C4'	7.64	1.60	1.51
43	AB	25	ARG	NE-CZ	7.64	1.43	1.33
10	B1	14	A	N7-C5	-7.64	1.34	1.39
11	B2	398	C	C5-C6	7.64	1.40	1.34
38	A1	452	A	N7-C5	-7.64	1.34	1.39
38	A1	1968	A	P-O5'	-7.64	1.52	1.59
11	B2	192	G	C2'-C1'	-7.64	1.45	1.53
11	B2	910	G	C3'-C2'	7.64	1.61	1.52
11	B2	1396	C	C4-N4	7.64	1.40	1.33
38	A1	1461	G	P-O5'	-7.64	1.52	1.59
38	A1	2122	G	C8-N7	7.64	1.35	1.30
11	B2	492	G	N3-C4	-7.64	1.30	1.35
11	B2	493	C	N3-C4	7.64	1.39	1.33
11	B2	1223	C	P-O5'	-7.64	1.52	1.59
38	A1	146	U	C4'-C3'	7.64	1.61	1.53
38	A1	264	G	P-O5'	-7.64	1.52	1.59
38	A1	334	G	C2'-C1'	-7.64	1.45	1.53
38	A1	605	A	C8-N7	7.64	1.36	1.31
11	B2	1012	C	N1-C6	7.63	1.41	1.37
38	A1	535	G	N1-C2	7.63	1.43	1.37
38	A1	2062	A	C3'-C2'	7.63	1.61	1.52
38	A1	2750	C	O4'-C1'	7.63	1.51	1.41
11	B2	211	G	O3'-P	-7.63	1.51	1.61
11	B2	1455	A	C6-N1	7.63	1.40	1.35
38	A1	966	G	C5'-C4'	7.63	1.60	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2175	G	N9-C8	7.63	1.43	1.37
38	A1	1171	G	C6-N1	7.63	1.44	1.39
38	A1	2026	C	N3-C4	7.63	1.39	1.33
38	A1	883	G	C5-C4	7.63	1.43	1.38
38	A1	2877	A	N7-C5	-7.63	1.34	1.39
11	B2	381	C	C4-C5	7.63	1.49	1.43
11	B2	583	G	C2-N2	7.63	1.42	1.34
11	B2	1181	G	N1-C2	7.63	1.43	1.37
38	A1	401	C	O3'-P	-7.63	1.51	1.61
38	A1	1073	G	C6-N1	7.63	1.44	1.39
11	B2	453	G	N1-C2	7.63	1.43	1.37
38	A1	479	G	C6-N1	7.63	1.44	1.39
38	A1	494	C	N1-C6	-7.63	1.32	1.37
38	A1	537	U	C3'-C2'	-7.63	1.44	1.52
38	A1	835	G	N7-C5	7.63	1.43	1.39
38	A1	1226	G	O3'-P	-7.63	1.51	1.61
38	A1	2554	A	N3-C4	7.63	1.39	1.34
11	B2	79	G	C5'-C4'	7.62	1.60	1.51
38	A1	2101	A	C6-N1	7.62	1.40	1.35
38	A1	492	A	C6-N1	7.62	1.40	1.35
38	A1	1761	C	N3-C4	7.62	1.39	1.33
38	A1	554	C	N3-C4	7.62	1.39	1.33
38	A1	2037	A	C4'-C3'	7.62	1.61	1.53
38	A1	2710	G	N1-C2	7.62	1.43	1.37
11	B2	315	A	N9-C4	7.62	1.42	1.37
11	B2	701	G	C8-N7	7.62	1.35	1.30
11	B2	1328	G	C2-N3	7.62	1.38	1.32
38	A1	167	G	C2-N3	7.62	1.38	1.32
38	A1	650	C	N1-C6	7.62	1.41	1.37
38	A1	1088	G	N7-C5	-7.62	1.34	1.39
38	A1	1616	A	N7-C5	-7.62	1.34	1.39
38	A1	2803	U	N1-C2	-7.62	1.31	1.38
38	A1	167	G	C8-N7	-7.62	1.26	1.30
38	A1	986	G	C8-N7	7.62	1.35	1.30
11	B2	93	A	P-O5'	-7.62	1.52	1.59
11	B2	130	G	P-O5'	-7.62	1.52	1.59
11	B2	541	G	N3-C4	-7.62	1.30	1.35
23	BK	25	ARG	CZ-NH2	7.62	1.43	1.33
38	A1	1132	U	N3-C4	7.62	1.45	1.38
38	A1	1858	G	N1-C2	7.62	1.43	1.37
38	A1	2557	C	N3-C4	7.62	1.39	1.33
11	B2	826	C	C4-C5	7.61	1.49	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	95	G	N3-C4	-7.61	1.30	1.35
38	A1	2838	U	N1-C2	7.61	1.45	1.38
38	A1	234	G	N9-C4	-7.61	1.31	1.38
38	A1	318	G	N7-C5	-7.61	1.34	1.39
38	A1	1104	A	C6-N6	7.61	1.40	1.33
38	A1	1128	G	N3-C4	-7.61	1.30	1.35
38	A1	1600	G	N7-C5	-7.61	1.34	1.39
38	A1	1964	G	N7-C5	-7.61	1.34	1.39
11	B2	966	G	C6-N1	7.61	1.44	1.39
38	A1	166	G	C6-N1	7.61	1.44	1.39
38	A1	730	C	N3-C4	7.61	1.39	1.33
38	A1	766	G	C6-N1	7.61	1.44	1.39
11	B2	1419	G	N9-C8	7.61	1.43	1.37
11	B2	67	C	N3-C4	7.61	1.39	1.33
11	B2	564	C	O3'-P	-7.61	1.52	1.61
38	A1	596	C	P-O5'	-7.61	1.52	1.59
38	A1	865	C	N1-C6	7.61	1.41	1.37
38	A1	1044	C	N1-C6	-7.61	1.32	1.37
38	A1	2119	C	C4-N4	7.61	1.40	1.33
38	A1	2489	C	C2'-C1'	-7.61	1.45	1.53
11	B2	649	A	C5-C4	7.60	1.44	1.38
11	B2	356	G	N9-C8	-7.60	1.32	1.37
11	B2	1227	A	C6-N1	7.60	1.40	1.35
38	A1	257	G	C8-N7	-7.60	1.26	1.30
38	A1	1863	G	C4'-O4'	7.60	1.55	1.45
38	A1	1968	A	N3-C4	-7.60	1.30	1.34
38	A1	2558	U	P-O5'	7.60	1.67	1.59
38	A1	2976	G	C6-N1	7.60	1.44	1.39
11	B2	1304	C	N3-C4	7.60	1.39	1.33
11	B2	1228	A	C8-N7	-7.60	1.26	1.31
38	A1	846	C	N3-C4	7.60	1.39	1.33
38	A1	1693	G	C5-C4	7.60	1.43	1.38
11	B2	616	G	C4'-C3'	7.60	1.61	1.53
38	A1	466	C	C4-C5	-7.60	1.36	1.43
38	A1	2373	G	C5'-C4'	7.60	1.60	1.51
41	AA	215	GLU	CD-OE2	7.60	1.34	1.25
10	B1	49	C	N3-C4	7.60	1.39	1.33
11	B2	659	U	C2'-C1'	-7.60	1.45	1.53
11	B2	812	U	N3-C4	7.60	1.45	1.38
38	A1	1778	G	C6-N1	7.59	1.44	1.39
38	A1	2347	G	C5-C4	7.59	1.43	1.38
38	A1	2854	A	C2'-C1'	-7.59	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	2	U	N3-C4	7.59	1.45	1.38
11	B2	1136	A	N9-C4	-7.59	1.33	1.37
38	A1	265	A	C6-N6	7.59	1.40	1.33
38	A1	1528	A	N7-C5	-7.59	1.34	1.39
38	A1	1759	A	C6-N1	7.59	1.40	1.35
38	A1	2010	G	C6-N1	7.59	1.44	1.39
38	A1	2702	A	N9-C8	7.59	1.43	1.37
38	A1	2094	A	C6-N6	7.58	1.40	1.33
39	A3	100	A	N9-C8	7.58	1.43	1.37
38	A1	844	C	P-O5'	-7.58	1.52	1.59
38	A1	1534	G	P-O5'	7.58	1.67	1.59
38	A1	1751	G	C5-C6	7.58	1.50	1.42
11	B2	1481	G	C6-N1	7.58	1.44	1.39
38	A1	197	C	C2-N3	7.58	1.41	1.35
38	A1	342	C	N3-C4	7.58	1.39	1.33
39	A3	47	G	C4'-O4'	7.58	1.55	1.45
38	A1	1286	G	N7-C5	7.58	1.43	1.39
11	B2	797	U	C2-N3	7.58	1.43	1.37
11	B2	1475	C	N3-C4	7.58	1.39	1.33
38	A1	382	G	C2-N3	7.58	1.38	1.32
38	A1	1946	G	C2-N3	7.58	1.38	1.32
38	A1	1977	C	N3-C4	7.58	1.39	1.33
65	AV	52	TRP	CB-CG	7.58	1.63	1.50
38	A1	1401	G	C8-N7	7.58	1.35	1.30
38	A1	1699	U	P-O5'	-7.58	1.52	1.59
38	A1	2484	C	P-O5'	-7.58	1.52	1.59
11	B2	91	G	C4'-C3'	7.57	1.61	1.53
11	B2	912	G	C2'-C1'	-7.57	1.45	1.53
38	A1	75	G	N3-C4	7.57	1.40	1.35
38	A1	2238	G	C6-N1	7.57	1.44	1.39
11	B2	915	U	C2-N3	7.57	1.43	1.37
11	B2	1164	A	N9-C4	7.57	1.42	1.37
38	A1	2476	A	C6-N1	7.57	1.40	1.35
11	B2	387	G	C2'-C1'	-7.57	1.45	1.53
38	A1	656	G	N7-C5	-7.57	1.34	1.39
38	A1	771	G	N3-C4	-7.57	1.30	1.35
38	A1	802	G	C2-N3	7.57	1.38	1.32
38	A1	2417	G	C5-C4	-7.57	1.33	1.38
38	A1	2799	C	N3-C4	7.57	1.39	1.33
38	A1	1711	C	N1-C6	7.57	1.41	1.37
38	A1	1833	G	C2-N3	7.57	1.38	1.32
38	A1	2151	C	C4-N4	7.57	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1167	C	C4-C5	7.57	1.49	1.43
11	B2	1182	G	C4'-C3'	-7.57	1.44	1.53
38	A1	802	G	C8-N7	7.57	1.35	1.30
38	A1	1693	G	C8-N7	7.57	1.35	1.30
38	A1	2221	A	C5-C6	7.57	1.47	1.41
38	A1	2511	C	C5-C6	-7.57	1.28	1.34
11	B2	26	A	C6-N6	7.57	1.40	1.33
11	B2	75	C	N3-C4	7.57	1.39	1.33
11	B2	615	G	N1-C2	7.57	1.43	1.37
11	B2	1055	C	C4-N4	7.57	1.40	1.33
38	A1	1653	U	N1-C2	7.57	1.45	1.38
10	B1	19	G	N3-C4	7.56	1.40	1.35
11	B2	1481	G	C4'-C3'	7.56	1.61	1.53
38	A1	261	A	C8-N7	-7.56	1.26	1.31
38	A1	1446	G	N3-C4	-7.56	1.30	1.35
11	B2	1297	G	N9-C4	7.56	1.44	1.38
38	A1	1533	G	C2-N2	7.56	1.42	1.34
38	A1	1639	G	O3'-P	-7.56	1.52	1.61
38	A1	1788	G	C8-N7	7.56	1.35	1.30
38	A1	2579	G	N1-C2	7.56	1.43	1.37
11	B2	899	G	O4'-C1'	7.56	1.51	1.41
11	B2	1122	C	N3-C4	7.56	1.39	1.33
38	A1	337	G	N9-C4	-7.56	1.31	1.38
11	B2	110	C	N3-C4	7.56	1.39	1.33
11	B2	140	C	O3'-P	7.56	1.70	1.61
11	B2	173	G	C2-N3	7.56	1.38	1.32
11	B2	684	G	C2-N2	7.56	1.42	1.34
38	A1	141	C	C4-N4	7.56	1.40	1.33
38	A1	980	G	C5-C4	7.56	1.43	1.38
38	A1	1144	A	N1-C2	7.56	1.41	1.34
38	A1	1784	G	C8-N7	-7.56	1.26	1.30
38	A1	2159	C	P-O5'	-7.56	1.52	1.59
11	B2	166	A	C8-N7	-7.56	1.26	1.31
11	B2	367	G	C8-N7	-7.56	1.26	1.30
11	B2	419	G	N1-C2	7.56	1.43	1.37
11	B2	937	A	C4'-C3'	7.56	1.61	1.53
11	B2	1102	A	C2'-C1'	-7.56	1.45	1.53
38	A1	524	C	C2-N3	7.56	1.41	1.35
38	A1	636	G	C5'-C4'	7.56	1.60	1.51
38	A1	700	A	C2'-C1'	-7.56	1.45	1.53
38	A1	1577	C	N3-C4	7.56	1.39	1.33
38	A1	1775	G	C2-N3	7.56	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2133	G	C6-N1	7.56	1.44	1.39
38	A1	667	C	P-O5'	-7.56	1.52	1.59
38	A1	1279	U	C5-C6	-7.56	1.27	1.34
11	B2	95	G	C8-N7	-7.55	1.26	1.30
38	A1	1430	A	C6-N6	7.55	1.40	1.33
11	B2	16	G	N9-C8	7.55	1.43	1.37
11	B2	405	G	N1-C2	7.55	1.43	1.37
11	B2	829	U	C2-N3	7.55	1.43	1.37
11	B2	921	G	C5'-C4'	7.55	1.60	1.51
11	B2	1330	G	C6-N1	7.55	1.44	1.39
38	A1	9	A	N7-C5	-7.55	1.34	1.39
38	A1	1109	G	N9-C8	-7.55	1.32	1.37
38	A1	1114	G	C4'-C3'	7.55	1.61	1.53
38	A1	1351	G	C2-N2	7.55	1.42	1.34
38	A1	1470	C	C4-N4	7.55	1.40	1.33
38	A1	1275	G	C2'-C1'	-7.55	1.45	1.53
38	A1	2422	G	O3'-P	-7.55	1.52	1.61
46	AD	64	GLY	CA-C	-7.55	1.39	1.51
38	A1	2275	G	C5-C4	7.55	1.43	1.38
11	B2	446	G	C2'-C1'	-7.54	1.45	1.53
38	A1	1009	G	C6-N1	7.54	1.44	1.39
11	B2	1299	A	C5-C4	7.54	1.44	1.38
38	A1	2753	G	N9-C8	7.54	1.43	1.37
11	B2	1199	A	C8-N7	-7.54	1.26	1.31
38	A1	2494	A	C5'-C4'	7.54	1.60	1.51
38	A1	1199	U	C2'-C1'	-7.54	1.45	1.53
38	A1	2478	G	C5-C6	-7.54	1.34	1.42
38	A1	803	A	C5-C4	7.54	1.44	1.38
38	A1	916	A	C6-N6	7.54	1.40	1.33
38	A1	2396	G	C8-N7	-7.54	1.26	1.30
38	A1	256	G	O3'-P	-7.54	1.52	1.61
11	B2	1446	G	C6-N1	7.54	1.44	1.39
38	A1	179	A	N9-C8	7.54	1.43	1.37
38	A1	705	G	C6-N1	7.54	1.44	1.39
38	A1	1654	G	N1-C2	7.54	1.43	1.37
38	A1	2002	A	C3'-C2'	7.54	1.61	1.52
38	A1	2398	C	C2-N3	-7.54	1.29	1.35
11	B2	1157	G	N3-C4	7.53	1.40	1.35
11	B2	1480	G	N7-C5	-7.53	1.34	1.39
38	A1	132	G	N3-C4	-7.53	1.30	1.35
38	A1	348	G	C5-C4	7.53	1.43	1.38
38	A1	2508	G	C2-N2	7.53	1.42	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1937	A	N3-C4	-7.53	1.30	1.34
38	A1	42	G	N1-C2	7.53	1.43	1.37
38	A1	139	G	C2-N3	7.53	1.38	1.32
38	A1	1017	A	C6-N1	7.53	1.40	1.35
38	A1	2037	A	C8-N7	-7.53	1.26	1.31
38	A1	2299	G	P-O5'	-7.53	1.52	1.59
11	B2	726	A	C6-N6	7.53	1.40	1.33
11	B2	1014	C	C4-N4	7.53	1.40	1.33
18	BF	82	ARG	CZ-NH1	7.53	1.42	1.33
38	A1	989	G	N1-C2	7.53	1.43	1.37
38	A1	1618	G	N7-C5	-7.53	1.34	1.39
38	A1	1796	U	C2-N3	7.53	1.43	1.37
38	A1	2792	G	N3-C4	-7.53	1.30	1.35
11	B2	426	C	C2-O2	-7.53	1.17	1.24
38	A1	123	A	C6-N6	7.53	1.40	1.33
38	A1	1600	G	O3'-P	-7.53	1.52	1.61
38	A1	1972	C	C4-N4	7.53	1.40	1.33
38	A1	509	A	C6-N6	7.53	1.40	1.33
38	A1	597	C	N1-C6	7.53	1.41	1.37
11	B2	1153	G	P-O5'	-7.52	1.52	1.59
38	A1	2375	C	C2-N3	7.52	1.41	1.35
11	B2	16	G	N1-C2	7.52	1.43	1.37
11	B2	630	A	N9-C8	-7.52	1.31	1.37
38	A1	227	G	N9-C4	7.52	1.44	1.38
38	A1	1565	G	C5'-C4'	7.52	1.60	1.51
38	A1	2543	A	C6-N1	7.52	1.40	1.35
38	A1	2590	C	C5'-C4'	7.52	1.60	1.51
11	B2	1374	C	N1-C6	7.52	1.41	1.37
38	A1	292	U	C2-N3	7.52	1.43	1.37
38	A1	853	G	N7-C5	-7.52	1.34	1.39
38	A1	1112	G	N3-C4	7.52	1.40	1.35
38	A1	1984	G	N9-C4	-7.52	1.31	1.38
38	A1	1989	G	O3'-P	-7.52	1.52	1.61
39	A3	3	G	C5-C6	-7.52	1.34	1.42
11	B2	991	C	N1-C6	7.52	1.41	1.37
38	A1	359	C	C5'-C4'	7.52	1.60	1.51
38	A1	1061	G	C5'-C4'	7.52	1.60	1.51
38	A1	1305	C	C1'-N1	7.52	1.60	1.48
11	B2	722	G	C5-C4	7.52	1.43	1.38
11	B2	390	G	C2'-C1'	-7.51	1.45	1.53
11	B2	484	U	C2-N3	7.51	1.43	1.37
11	B2	1103	G	N1-C2	7.51	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1471	G	C2-N3	7.51	1.38	1.32
38	A1	2288	C	C4-N4	7.51	1.40	1.33
38	A1	1396	A	C6-N6	7.51	1.40	1.33
11	B2	587	G	C2-N3	7.51	1.38	1.32
11	B2	1315	G	C6-N1	-7.51	1.34	1.39
11	B2	1342	C	N1-C6	7.51	1.41	1.37
38	A1	165	G	N9-C4	7.51	1.44	1.38
11	B2	1153	G	C5-C4	7.51	1.43	1.38
38	A1	929	G	C5'-C4'	7.51	1.60	1.51
38	A1	2685	G	N9-C8	7.51	1.43	1.37
38	A1	1965	C	N1-C6	7.51	1.41	1.37
38	A1	2192	G	C6-N1	7.51	1.44	1.39
11	B2	1154	G	C5-C6	-7.51	1.34	1.42
11	B2	1486	A	N7-C5	-7.51	1.34	1.39
38	A1	2322	A	C6-N1	-7.51	1.30	1.35
39	A3	85	C	C4-C5	7.51	1.49	1.43
38	A1	1119	A	N9-C4	-7.50	1.33	1.37
38	A1	2310	G	C2-N3	7.50	1.38	1.32
11	B2	548	A	O4'-C1'	7.50	1.51	1.41
11	B2	752	G	N3-C4	-7.50	1.30	1.35
11	B2	1120	G	O3'-P	-7.50	1.52	1.61
11	B2	1419	G	N7-C5	-7.50	1.34	1.39
38	A1	885	A	N9-C4	7.50	1.42	1.37
38	A1	456	G	C2-N3	7.50	1.38	1.32
38	A1	1743	G	N7-C5	-7.50	1.34	1.39
11	B2	1037	U	C2-N3	7.50	1.43	1.37
38	A1	1228	G	C5'-C4'	7.50	1.60	1.51
38	A1	1873	G	N1-C2	7.50	1.43	1.37
38	A1	2299	G	C6-N1	7.50	1.44	1.39
50	AF	8	ARG	CZ-NH1	7.50	1.42	1.33
11	B2	384	G	C2'-C1'	-7.50	1.45	1.53
38	A1	235	G	C4'-C3'	-7.50	1.45	1.53
38	A1	703	G	C8-N7	-7.50	1.26	1.30
38	A1	2741	U	C2'-C1'	-7.50	1.45	1.53
39	A3	54	A	C5'-C4'	7.50	1.60	1.51
38	A1	261	A	N3-C4	-7.50	1.30	1.34
38	A1	1893	C	N1-C6	7.50	1.41	1.37
38	A1	2384	G	C8-N7	-7.50	1.26	1.30
38	A1	2761	G	C8-N7	-7.50	1.26	1.30
11	B2	145	A	C6-N1	7.50	1.40	1.35
38	A1	749	G	C6-N1	7.50	1.44	1.39
38	A1	857	U	O3'-P	-7.50	1.52	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	930	G	C2'-C1'	-7.50	1.45	1.53
38	A1	2009	G	N7-C5	-7.50	1.34	1.39
38	A1	2881	G	N1-C2	7.50	1.43	1.37
11	B2	351	C	C4-N4	7.49	1.40	1.33
38	A1	719	C	C4-C5	7.49	1.49	1.43
38	A1	1452	G	N9-C8	-7.49	1.32	1.37
38	A1	2054	G	C4'-C3'	7.49	1.61	1.53
38	A1	2222	C	N3-C4	7.49	1.39	1.33
38	A1	2252	C	C3'-C2'	7.49	1.61	1.52
38	A1	2365	G	C5-C4	7.49	1.43	1.38
38	A1	2413	G	C6-N1	7.49	1.44	1.39
38	A1	2572	U	C4-C5	7.49	1.50	1.43
11	B2	521	G	N1-C2	7.49	1.43	1.37
11	B2	1255	C	N1-C2	7.49	1.47	1.40
20	BH	202	SER	CA-CB	7.49	1.64	1.52
38	A1	1812	A	N9-C8	-7.49	1.31	1.37
39	A3	52	U	C5-C6	7.49	1.40	1.34
11	B2	203	A	N7-C5	-7.49	1.34	1.39
11	B2	946	G	C5-C6	-7.49	1.34	1.42
11	B2	1085	C	C1'-N1	7.49	1.59	1.48
11	B2	683	A	C8-N7	-7.49	1.26	1.31
11	B2	691	G	N9-C8	-7.49	1.32	1.37
38	A1	426	G	C6-N1	7.49	1.44	1.39
38	A1	902	C	N1-C6	7.49	1.41	1.37
38	A1	2795	G	N7-C5	-7.49	1.34	1.39
38	A1	62	C	N1-C6	7.49	1.41	1.37
38	A1	1551	G	C6-N1	7.49	1.44	1.39
11	B2	290	C	N1-C6	7.49	1.41	1.37
11	B2	1101	G	N1-C2	7.49	1.43	1.37
11	B2	1450	U	N1-C2	7.49	1.45	1.38
38	A1	512	G	C2-N3	7.49	1.38	1.32
38	A1	822	A	C3'-O3'	7.49	1.52	1.42
38	A1	1101	U	C2-N3	7.49	1.43	1.37
11	B2	267	C	C3'-C2'	7.48	1.61	1.52
38	A1	539	A	C6-N1	7.48	1.40	1.35
38	A1	1118	A	C3'-C2'	7.48	1.61	1.52
38	A1	2749	G	P-O5'	-7.48	1.52	1.59
11	B2	304	C	C5'-C4'	7.48	1.60	1.51
38	A1	1468	G	N1-C2	7.48	1.43	1.37
38	A1	775	C	C2-N3	7.48	1.41	1.35
38	A1	2633	A	C8-N7	-7.48	1.26	1.31
38	A1	2867	U	N1-C2	7.48	1.45	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	B1	20	G	C2-N3	7.48	1.38	1.32
10	B1	69	G	N3-C4	-7.48	1.30	1.35
10	B1	29	C	C4-N4	7.48	1.40	1.33
11	B2	878	U	P-O5'	-7.48	1.52	1.59
11	B2	986	G	N9-C4	7.48	1.44	1.38
11	B2	1143	G	N1-C2	7.48	1.43	1.37
38	A1	727	A	N3-C4	-7.48	1.30	1.34
38	A1	1165	C	C4'-O4'	-7.48	1.35	1.45
38	A1	1488	C	C2-O2	-7.48	1.17	1.24
38	A1	1875	U	N3-C4	7.48	1.45	1.38
39	A3	41	A	C6-N6	7.48	1.40	1.33
10	B1	32	A	C5-C6	-7.48	1.34	1.41
11	B2	1377	G	N1-C2	7.48	1.43	1.37
39	A3	76	U	C5'-C4'	7.48	1.60	1.51
11	B2	398	C	C2-N3	-7.47	1.29	1.35
38	A1	1537	U	C2-N3	7.47	1.43	1.37
38	A1	1735	G	C5-C6	-7.47	1.34	1.42
38	A1	2612	A	N9-C8	7.47	1.43	1.37
38	A1	2779	G	N3-C4	7.47	1.40	1.35
39	A3	117	G	C2-N3	7.47	1.38	1.32
11	B2	1083	G	N1-C2	7.47	1.43	1.37
38	A1	1275	G	C2-N3	7.47	1.38	1.32
38	A1	1386	G	C5'-C4'	7.47	1.60	1.51
38	A1	1470	C	N1-C6	7.47	1.41	1.37
39	A3	10	U	C4'-C3'	7.47	1.61	1.53
10	B1	27	A	N9-C4	7.47	1.42	1.37
11	B2	347	G	C2-N3	7.47	1.38	1.32
11	B2	966	G	N1-C2	7.47	1.43	1.37
11	B2	1177	C	C4-C5	7.47	1.49	1.43
13	BA	128	ARG	CD-NE	7.47	1.59	1.46
38	A1	907	C	N1-C6	-7.47	1.32	1.37
11	B2	310	G	N7-C5	-7.47	1.34	1.39
11	B2	466	C	N1-C2	7.47	1.47	1.40
11	B2	712	G	C2-N3	7.47	1.38	1.32
11	B2	892	C	N3-C4	7.47	1.39	1.33
38	A1	844	C	O4'-C1'	7.47	1.51	1.41
38	A1	287	G	C8-N7	-7.47	1.26	1.30
38	A1	482	A	N3-C4	-7.47	1.30	1.34
38	A1	1340	G	N7-C5	-7.47	1.34	1.39
38	A1	2763	U	P-O5'	-7.47	1.52	1.59
11	B2	126	G	C2'-C1'	-7.47	1.45	1.53
38	A1	115	C	N3-C4	7.47	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	167	G	C1'-N9	-7.47	1.36	1.46
38	A1	727	A	N9-C4	7.47	1.42	1.37
38	A1	884	C	C4-C5	7.47	1.49	1.43
38	A1	1021	G	O3'-P	-7.47	1.52	1.61
38	A1	1282	A	C6-N1	7.47	1.40	1.35
38	A1	1489	G	C2-N3	7.47	1.38	1.32
38	A1	2509	A	C3'-C2'	7.47	1.61	1.52
10	B1	6	G	C2-N3	7.46	1.38	1.32
11	B2	1122	C	C4'-C3'	7.46	1.61	1.53
38	A1	69	C	N1-C6	7.46	1.41	1.37
38	A1	3026	C	N3-C4	7.46	1.39	1.33
39	A3	100	A	O3'-P	-7.46	1.52	1.61
11	B2	871	A	N3-C4	-7.46	1.30	1.34
11	B2	1273	G	N7-C5	-7.46	1.34	1.39
38	A1	249	G	N1-C2	7.46	1.43	1.37
38	A1	1582	G	C5-C4	7.46	1.43	1.38
11	B2	90	C	O3'-P	-7.46	1.52	1.61
11	B2	816	G	C2-N3	7.46	1.38	1.32
11	B2	1131	G	C2-N3	7.46	1.38	1.32
11	B2	1198	A	C2'-C1'	-7.46	1.45	1.53
38	A1	64	A	C5-C6	-7.46	1.34	1.41
38	A1	625	A	C5-C4	7.46	1.44	1.38
11	B2	103	A	C2'-C1'	-7.46	1.45	1.53
22	BJ	62	TYR	CE1-CZ	7.46	1.48	1.38
38	A1	856	A	C2'-C1'	-7.46	1.45	1.53
38	A1	1163	U	N3-C4	7.46	1.45	1.38
38	A1	2270	G	C4'-C3'	7.46	1.61	1.53
38	A1	2308	C	N1-C6	7.46	1.41	1.37
38	A1	2955	G	N7-C5	7.46	1.43	1.39
39	A3	99	G	C4'-C3'	-7.46	1.45	1.53
11	B2	444	G	N3-C4	-7.46	1.30	1.35
11	B2	1208	A	P-O5'	-7.46	1.52	1.59
38	A1	1164	C	C4-C5	7.46	1.49	1.43
38	A1	1560	G	C6-N1	7.46	1.44	1.39
38	A1	1738	A	P-O5'	7.46	1.67	1.59
38	A1	2658	G	C5-C6	-7.46	1.34	1.42
38	A1	2798	U	N1-C2	-7.46	1.31	1.38
38	A1	529	G	O3'-P	-7.46	1.52	1.61
11	B2	623	C	C2'-C1'	-7.45	1.45	1.53
11	B2	836	G	N9-C8	7.45	1.43	1.37
38	A1	1391	C	O3'-P	-7.45	1.52	1.61
38	A1	1547	U	C5-C6	7.45	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	181	G	C5-C4	7.45	1.43	1.38
38	A1	1076	G	C2-N3	7.45	1.38	1.32
11	B2	139	C	N3-C4	7.45	1.39	1.33
11	B2	277	G	C2-N3	7.45	1.38	1.32
11	B2	396	C	C4-N4	7.45	1.40	1.33
11	B2	674	C	O4'-C1'	7.45	1.51	1.41
38	A1	449	G	C5-C4	7.45	1.43	1.38
38	A1	1190	G	N9-C4	7.45	1.44	1.38
38	A1	2537	G	C6-N1	7.45	1.44	1.39
38	A1	2834	C	C2-N3	7.45	1.41	1.35
11	B2	27	C	C5-C6	-7.45	1.28	1.34
11	B2	63	G	O3'-P	-7.45	1.52	1.61
11	B2	865	A	C6-N6	7.45	1.40	1.33
38	A1	326	C	C2-N3	7.45	1.41	1.35
38	A1	1130	G	P-O5'	-7.45	1.52	1.59
38	A1	2012	G	N7-C5	-7.45	1.34	1.39
38	A1	2157	U	C2-N3	7.45	1.43	1.37
38	A1	2243	G	N9-C8	7.45	1.43	1.37
38	A1	2480	G	N1-C2	7.45	1.43	1.37
38	A1	966	G	N3-C4	7.45	1.40	1.35
38	A1	1655	G	C2-N3	7.45	1.38	1.32
38	A1	2729	A	P-O5'	-7.45	1.52	1.59
11	B2	1481	G	N7-C5	-7.44	1.34	1.39
38	A1	1814	A	N9-C8	7.44	1.43	1.37
11	B2	500	A	C8-N7	-7.44	1.26	1.31
38	A1	940	G	C2-N3	7.44	1.38	1.32
38	A1	1418	A	N7-C5	-7.44	1.34	1.39
38	A1	1746	C	C3'-C2'	7.44	1.61	1.52
11	B2	896	A	N3-C4	7.44	1.39	1.34
11	B2	951	G	N9-C8	-7.44	1.32	1.37
38	A1	626	C	P-O5'	-7.44	1.52	1.59
38	A1	1595	G	C2-N2	7.44	1.42	1.34
38	A1	1615	G	C5'-C4'	7.44	1.60	1.51
38	A1	3022	C	C4-N4	7.44	1.40	1.33
56	AJ	74	ARG	CD-NE	7.44	1.59	1.46
11	B2	92	G	N3-C4	-7.44	1.30	1.35
11	B2	437	A	N3-C4	7.44	1.39	1.34
11	B2	534	G	N7-C5	-7.44	1.34	1.39
11	B2	1431	C	N3-C4	7.44	1.39	1.33
38	A1	9	A	C8-N7	-7.44	1.26	1.31
38	A1	1661	A	N7-C5	-7.44	1.34	1.39
38	A1	2583	G	C2-N2	7.44	1.42	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2699	U	C2-N3	7.44	1.43	1.37
11	B2	1387	C	O3'-P	-7.44	1.52	1.61
38	A1	109	G	C2'-C1'	-7.44	1.45	1.53
38	A1	1751	G	C2-N3	7.44	1.38	1.32
38	A1	100	C	O3'-P	-7.43	1.52	1.61
38	A1	577	C	N1-C6	7.43	1.41	1.37
38	A1	1022	G	N3-C4	-7.43	1.30	1.35
38	A1	1253	U	C2-N3	7.43	1.43	1.37
38	A1	1304	G	P-O5'	7.43	1.67	1.59
38	A1	1570	C	P-O5'	-7.43	1.52	1.59
39	A3	30	G	C2-N3	7.43	1.38	1.32
39	A3	40	G	N9-C8	-7.43	1.32	1.37
11	B2	12	U	C2-N3	7.43	1.43	1.37
11	B2	122	C	C4'-C3'	7.43	1.61	1.53
38	A1	18	C	C4-N4	7.43	1.40	1.33
38	A1	510	A	N7-C5	-7.43	1.34	1.39
11	B2	377	A	C2-N3	7.43	1.40	1.33
38	A1	1278	C	N1-C6	7.43	1.41	1.37
38	A1	1892	G	N1-C2	7.43	1.43	1.37
38	A1	867	C	C4-C5	7.43	1.48	1.43
11	B2	561	A	C8-N7	-7.43	1.26	1.31
11	B2	778	G	O3'-P	-7.43	1.52	1.61
38	A1	23	G	C2-N3	7.43	1.38	1.32
38	A1	374	C	N1-C6	7.43	1.41	1.37
38	A1	1657	G	N3-C4	7.43	1.40	1.35
38	A1	62	C	C5-C6	-7.43	1.28	1.34
38	A1	1251	G	C5'-C4'	7.43	1.60	1.51
38	A1	2168	C	P-O5'	-7.43	1.52	1.59
38	A1	2832	G	C5-C6	-7.43	1.34	1.42
38	A1	2991	C	N1-C6	7.43	1.41	1.37
11	B2	165	U	N3-C4	7.42	1.45	1.38
11	B2	899	G	C5'-C4'	7.42	1.60	1.51
38	A1	630	G	C2-N2	7.42	1.42	1.34
57	Aj	50	PHE	CG-CD1	7.42	1.49	1.38
11	B2	960	A	N3-C4	7.42	1.39	1.34
11	B2	1352	G	N3-C4	-7.42	1.30	1.35
38	A1	1214	C	N3-C4	7.42	1.39	1.33
11	B2	137	A	O4'-C1'	7.42	1.51	1.41
38	A1	203	G	C5-C4	7.42	1.43	1.38
38	A1	861	G	C4'-C3'	7.42	1.61	1.53
38	A1	912	G	C2-N3	7.42	1.38	1.32
38	A1	1454	G	O3'-P	-7.42	1.52	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2533	G	N9-C4	7.42	1.43	1.38
38	A1	2683	G	N7-C5	-7.42	1.34	1.39
38	A1	2766	C	N3-C4	7.42	1.39	1.33
11	B2	579	U	C2-N3	7.42	1.43	1.37
11	B2	1156	A	N3-C4	-7.42	1.30	1.34
38	A1	1987	A	C6-N6	7.42	1.39	1.33
11	B2	835	C	N3-C4	7.42	1.39	1.33
38	A1	545	G	N1-C2	7.42	1.43	1.37
38	A1	1477	C	O3'-P	7.42	1.70	1.61
38	A1	2334	G	C5-C4	-7.42	1.33	1.38
38	A1	239	G	N1-C2	7.42	1.43	1.37
38	A1	759	G	C4'-C3'	7.42	1.61	1.53
38	A1	107	G	P-O5'	7.42	1.67	1.59
38	A1	1293	G	O4'-C1'	-7.41	1.32	1.41
38	A1	1574	A	N3-C4	-7.41	1.30	1.34
38	A1	2662	G	P-O5'	-7.41	1.52	1.59
11	B2	16	G	C2-N3	7.41	1.38	1.32
11	B2	1024	G	N9-C8	7.41	1.43	1.37
38	A1	704	G	N1-C2	7.41	1.43	1.37
38	A1	1876	G	C5-C6	-7.41	1.34	1.42
38	A1	2889	A	C4'-C3'	7.41	1.61	1.53
51	Ag	10	ARG	CD-NE	7.41	1.59	1.46
11	B2	1495	U	C2-N3	7.41	1.43	1.37
38	A1	470	A	O3'-P	-7.41	1.52	1.61
38	A1	767	G	C5'-C4'	7.41	1.60	1.51
38	A1	1798	A	C5-C4	-7.41	1.33	1.38
38	A1	2863	A	C6-N6	7.41	1.39	1.33
11	B2	301	G	C2-N3	7.41	1.38	1.32
38	A1	725	G	N1-C2	7.41	1.43	1.37
38	A1	856	A	N7-C5	-7.41	1.34	1.39
38	A1	1003	C	O3'-P	-7.41	1.52	1.61
38	A1	2280	G	C2-N2	7.41	1.42	1.34
38	A1	2586	A	C6-N1	7.41	1.40	1.35
10	B1	21	G	P-O5'	-7.41	1.52	1.59
11	B2	598	U	P-O5'	-7.41	1.52	1.59
11	B2	872	A	N3-C4	7.41	1.39	1.34
38	A1	729	A	N1-C2	7.41	1.41	1.34
38	A1	1548	A	C6-N6	7.41	1.39	1.33
38	A1	1832	G	N9-C8	7.41	1.43	1.37
38	A1	2699	U	O3'-P	-7.41	1.52	1.61
11	B2	353	G	N9-C8	-7.40	1.32	1.37
38	A1	10	C	C4-N4	7.40	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	523	C	C4-C5	7.40	1.48	1.43
38	A1	626	C	C3'-O3'	7.40	1.52	1.42
38	A1	2539	G	C2'-C1'	-7.40	1.45	1.53
39	A3	52	U	O3'-P	-7.40	1.52	1.61
23	BK	134	TYR	CZ-OH	7.40	1.50	1.37
38	A1	482	A	C8-N7	-7.40	1.26	1.31
38	A1	790	U	N1-C2	7.40	1.45	1.38
38	A1	2609	G	C3'-O3'	7.40	1.52	1.42
39	A3	59	C	N3-C4	7.40	1.39	1.33
38	A1	1613	A	N9-C8	7.40	1.43	1.37
38	A1	3030	A	C5-C6	-7.40	1.34	1.41
11	B2	998	A	N9-C4	7.40	1.42	1.37
38	A1	1349	G	C5-C4	7.40	1.43	1.38
10	B1	30	G	N7-C5	7.40	1.43	1.39
11	B2	807	C	N3-C4	7.40	1.39	1.33
11	B2	1001	A	C8-N7	7.40	1.36	1.31
38	A1	95	G	C2'-C1'	-7.40	1.45	1.53
38	A1	1092	U	C2-N3	7.40	1.43	1.37
11	B2	388	G	C5-C4	7.40	1.43	1.38
38	A1	23	G	N7-C5	-7.40	1.34	1.39
38	A1	2128	G	N9-C8	7.40	1.43	1.37
11	B2	1235	A	P-O5'	-7.39	1.52	1.59
38	A1	144	A	N7-C5	-7.39	1.34	1.39
38	A1	1608	G	C2'-C1'	-7.39	1.45	1.53
11	B2	836	G	C2'-C1'	-7.39	1.45	1.53
38	A1	1130	G	C2'-C1'	-7.39	1.45	1.53
38	A1	1713	G	C8-N7	-7.39	1.26	1.30
38	A1	1904	G	N1-C2	7.39	1.43	1.37
38	A1	1997	C	N1-C6	-7.39	1.32	1.37
38	A1	2984	A	N7-C5	7.39	1.43	1.39
38	A1	1583	G	C4'-C3'	7.39	1.61	1.53
38	A1	1621	G	N1-C2	7.39	1.43	1.37
11	B2	271	G	N9-C4	-7.39	1.32	1.38
38	A1	905	G	C8-N7	7.39	1.35	1.30
38	A1	1618	G	C2-N3	7.39	1.38	1.32
38	A1	1737	A	C4'-C3'	7.39	1.61	1.53
39	A3	8	C	N3-C4	7.39	1.39	1.33
10	B1	77	A	N9-C4	7.39	1.42	1.37
11	B2	781	U	N3-C4	7.39	1.45	1.38
11	B2	147	A	C5-C4	7.39	1.44	1.38
38	A1	854	G	C6-N1	7.39	1.44	1.39
38	A1	1628	C	N3-C4	7.39	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2043	A	C5'-C4'	7.39	1.60	1.51
11	B2	389	G	N9-C8	7.38	1.43	1.37
11	B2	701	G	P-O5'	7.38	1.67	1.59
11	B2	1048	G	C2-N3	7.38	1.38	1.32
11	B2	1342	C	P-O5'	-7.38	1.52	1.59
18	BF	130	SER	CA-CB	7.38	1.64	1.52
38	A1	1785	G	C6-N1	7.38	1.44	1.39
38	A1	1924	A	P-O5'	-7.38	1.52	1.59
38	A1	2290	U	C2-N3	7.38	1.43	1.37
38	A1	2843	C	C2'-C1'	-7.38	1.45	1.53
11	B2	361	A	C6-N6	7.38	1.39	1.33
11	B2	1298	G	C6-N1	7.38	1.44	1.39
38	A1	1591	C	C2-N3	7.38	1.41	1.35
38	A1	2729	A	N3-C4	-7.38	1.30	1.34
38	A1	394	A	C2'-C1'	-7.38	1.45	1.53
38	A1	704	G	N9-C4	-7.38	1.32	1.38
38	A1	2176	G	N1-C2	7.38	1.43	1.37
38	A1	2736	G	C2-N3	7.38	1.38	1.32
11	B2	1199	A	C2-N3	7.38	1.40	1.33
38	A1	17	C	P-O5'	-7.38	1.52	1.59
38	A1	1667	U	N1-C2	7.38	1.45	1.38
38	A1	2272	G	C2'-C1'	-7.38	1.45	1.53
38	A1	2532	G	N9-C4	-7.38	1.32	1.38
11	B2	198	A	O3'-P	-7.38	1.52	1.61
38	A1	216	A	C6-N6	7.38	1.39	1.33
38	A1	996	U	C5'-C4'	7.38	1.60	1.51
38	A1	1326	U	O4'-C1'	7.38	1.51	1.41
38	A1	2788	U	C2-N3	7.38	1.43	1.37
11	B2	647	G	N7-C5	7.38	1.43	1.39
11	B2	1102	A	C8-N7	-7.38	1.26	1.31
38	A1	2457	C	N1-C6	7.38	1.41	1.37
11	B2	766	G	N9-C8	7.37	1.43	1.37
11	B2	1161	A	O3'-P	-7.37	1.52	1.61
38	A1	798	G	C2-N3	7.37	1.38	1.32
38	A1	2006	C	C4-N4	7.37	1.40	1.33
38	A1	1652	A	N7-C5	-7.37	1.34	1.39
38	A1	2298	C	N1-C6	7.37	1.41	1.37
38	A1	2568	A	C6-N1	7.37	1.40	1.35
38	A1	2612	A	C6-N1	7.37	1.40	1.35
11	B2	1458	A	P-O5'	-7.37	1.52	1.59
38	A1	3019	C	P-O5'	-7.37	1.52	1.59
38	A1	1406	G	O3'-P	-7.37	1.52	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2588	C	N3-C4	7.37	1.39	1.33
4	AQ	62	ARG	NE-CZ	7.37	1.42	1.33
10	B1	2	G	C5-C6	7.37	1.49	1.42
11	B2	995	G	C2-N2	7.37	1.42	1.34
38	A1	617	G	N7-C5	-7.37	1.34	1.39
38	A1	2069	G	N1-C2	7.37	1.43	1.37
38	A1	1133	U	C5'-C4'	7.36	1.60	1.51
38	A1	1620	C	C1'-N1	7.36	1.59	1.48
38	A1	1898	A	C8-N7	-7.36	1.26	1.31
64	AR	73	TYR	CE1-CZ	7.36	1.48	1.38
11	B2	390	G	N7-C5	-7.36	1.34	1.39
38	A1	1427	A	C5-C6	-7.36	1.34	1.41
38	A1	1521	G	C5-C4	7.36	1.43	1.38
38	A1	2794	G	C2'-C1'	-7.36	1.45	1.53
11	B2	3	U	C2'-C1'	-7.36	1.45	1.53
38	A1	2091	U	N1-C2	-7.36	1.31	1.38
38	A1	2280	G	C2-N3	7.36	1.38	1.32
11	B2	474	G	C2-N2	7.36	1.42	1.34
11	B2	890	C	N3-C4	7.36	1.39	1.33
11	B2	1357	C	C2-N3	7.36	1.41	1.35
11	B2	23	G	C8-N7	7.36	1.35	1.30
11	B2	169	C	C5-C6	-7.36	1.28	1.34
11	B2	415	C	P-O5'	-7.36	1.52	1.59
38	A1	243	G	N9-C8	-7.36	1.32	1.37
38	A1	1097	G	N1-C2	7.36	1.43	1.37
58	Ak	213	TYR	CE1-CZ	7.36	1.48	1.38
11	B2	923	A	C5'-C4'	7.36	1.60	1.51
11	B2	1316	U	N3-C4	7.36	1.45	1.38
15	BC	131	ARG	CZ-NH1	7.36	1.42	1.33
38	A1	213	G	N3-C4	-7.36	1.30	1.35
38	A1	1387	G	C8-N7	-7.36	1.26	1.30
38	A1	2688	C	C4-N4	7.36	1.40	1.33
11	B2	387	G	C6-N1	7.35	1.44	1.39
11	B2	1085	C	N3-C4	7.35	1.39	1.33
11	B2	1166	G	C2-N3	7.35	1.38	1.32
38	A1	481	G	C2'-C1'	-7.35	1.45	1.53
11	B2	159	C	C2-O2	-7.35	1.17	1.24
11	B2	1416	C	C2-N3	7.35	1.41	1.35
38	A1	911	G	C5-C4	7.35	1.43	1.38
38	A1	957	C	N3-C4	7.35	1.39	1.33
38	A1	1834	C	N1-C6	7.35	1.41	1.37
38	A1	2702	A	C8-N7	-7.35	1.26	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1400	U	N3-C4	7.35	1.45	1.38
38	A1	2346	A	C8-N7	7.35	1.36	1.31
11	B2	471	G	C5-C6	7.35	1.49	1.42
11	B2	790	G	O3'-P	-7.35	1.52	1.61
11	B2	1138	G	C6-N1	7.35	1.44	1.39
11	B2	1300	A	C8-N7	-7.35	1.26	1.31
38	A1	718	G	N9-C4	7.35	1.43	1.38
38	A1	1199	U	O4'-C1'	7.35	1.51	1.41
38	A1	1612	G	C5-C4	7.35	1.43	1.38
38	A1	2072	G	N7-C5	7.35	1.43	1.39
38	A1	2268	C	N3-C4	7.35	1.39	1.33
39	A3	49	A	C6-N1	7.35	1.40	1.35
11	B2	374	G	N9-C8	7.35	1.43	1.37
11	B2	746	A	C6-N6	7.35	1.39	1.33
11	B2	1097	G	C5-C6	-7.35	1.35	1.42
11	B2	1422	G	C2'-C1'	-7.35	1.45	1.53
38	A1	380	A	N7-C5	-7.35	1.34	1.39
38	A1	1677	A	C5-C4	7.35	1.43	1.38
38	A1	1966	C	C4-N4	7.35	1.40	1.33
38	A1	2355	G	O3'-P	-7.35	1.52	1.61
11	B2	244	G	C3'-C2'	-7.35	1.44	1.52
38	A1	2786	G	C5-C6	-7.35	1.35	1.42
11	B2	381	C	N3-C4	7.34	1.39	1.33
11	B2	591	G	C2-N3	7.34	1.38	1.32
11	B2	1048	G	N9-C4	7.34	1.43	1.38
28	BP	12	ARG	CZ-NH1	7.34	1.42	1.33
38	A1	2147	C	O4'-C1'	7.34	1.51	1.41
38	A1	2872	G	N7-C5	-7.34	1.34	1.39
38	A1	567	G	C4'-C3'	7.34	1.61	1.53
38	A1	1538	A	N3-C4	-7.34	1.30	1.34
39	A3	71	G	N3-C4	-7.34	1.30	1.35
11	B2	174	G	P-O5'	7.34	1.67	1.59
11	B2	1138	G	C5-C4	7.34	1.43	1.38
29	BQ	120	ARG	CZ-NH2	7.34	1.42	1.33
38	A1	1722	G	C5-C4	7.34	1.43	1.38
38	A1	2303	A	N9-C8	7.34	1.43	1.37
38	A1	2752	U	C5'-C4'	7.34	1.60	1.51
11	B2	728	G	N7-C5	-7.34	1.34	1.39
11	B2	1255	C	N3-C4	7.34	1.39	1.33
11	B2	1273	G	C2'-C1'	-7.34	1.45	1.53
38	A1	619	G	C2'-C1'	-7.34	1.45	1.53
38	A1	1470	C	P-O5'	7.34	1.67	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1827	A	C6-N6	7.34	1.39	1.33
38	A1	2276	G	N7-C5	-7.34	1.34	1.39
11	B2	227	C	C4-N4	7.34	1.40	1.33
11	B2	796	C	O3'-P	-7.34	1.52	1.61
38	A1	665	C	N3-C4	7.34	1.39	1.33
38	A1	1609	G	C4'-C3'	-7.34	1.45	1.53
38	A1	1905	G	C8-N7	7.34	1.35	1.30
38	A1	147	C	C4-C5	7.34	1.48	1.43
38	A1	174	C	N3-C4	7.34	1.39	1.33
38	A1	2830	C	N3-C4	7.34	1.39	1.33
4	AQ	28	ARG	NE-CZ	7.33	1.42	1.33
11	B2	696	G	C5-C4	7.33	1.43	1.38
11	B2	706	G	C5'-C4'	7.33	1.60	1.51
38	A1	687	C	P-O5'	-7.33	1.52	1.59
38	A1	1432	C	N3-C4	7.33	1.39	1.33
38	A1	1901	A	P-O5'	-7.33	1.52	1.59
38	A1	2300	C	C4-N4	7.33	1.40	1.33
38	A1	2416	G	C5-C4	7.33	1.43	1.38
10	B1	50	G	N7-C5	-7.33	1.34	1.39
11	B2	831	A	N7-C5	-7.33	1.34	1.39
38	A1	912	G	N9-C8	7.33	1.43	1.37
38	A1	1206	A	N7-C5	-7.33	1.34	1.39
38	A1	1236	C	N3-C4	7.33	1.39	1.33
38	A1	2689	G	N7-C5	-7.33	1.34	1.39
39	A3	21	C	C3'-C2'	7.33	1.61	1.52
38	A1	2802	G	C2'-C1'	-7.33	1.45	1.53
11	B2	438	A	N7-C5	-7.33	1.34	1.39
11	B2	701	G	N1-C2	7.33	1.43	1.37
38	A1	1083	G	C2'-C1'	-7.33	1.45	1.53
10	B1	30	G	N3-C4	-7.33	1.30	1.35
10	B1	32	A	N3-C4	-7.33	1.30	1.34
11	B2	905	A	C6-N6	7.33	1.39	1.33
11	B2	1199	A	N7-C5	-7.33	1.34	1.39
38	A1	1027	A	C2'-C1'	-7.33	1.45	1.53
38	A1	1340	G	N3-C4	-7.33	1.30	1.35
38	A1	1396	A	C1'-N9	7.33	1.59	1.48
38	A1	3002	A	N7-C5	-7.33	1.34	1.39
25	BM	23	PHE	CB-CG	7.32	1.63	1.51
38	A1	966	G	C2-N3	7.32	1.38	1.32
38	A1	1183	U	C4'-O4'	-7.32	1.36	1.45
38	A1	2352	G	C5-C6	-7.32	1.35	1.42
38	A1	2541	U	P-O5'	-7.32	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	966	G	C2-N3	7.32	1.38	1.32
38	A1	1121	C	N3-C4	7.32	1.39	1.33
38	A1	1880	A	C8-N7	-7.32	1.26	1.31
38	A1	1968	A	C5-C4	-7.32	1.33	1.38
11	B2	156	A	C6-N6	7.32	1.39	1.33
11	B2	995	G	C8-N7	7.32	1.35	1.30
38	A1	2649	A	N9-C4	7.32	1.42	1.37
38	A1	2980	G	C2'-C1'	-7.32	1.45	1.53
38	A1	2291	G	O3'-P	-7.32	1.52	1.61
11	B2	679	G	C6-N1	7.32	1.44	1.39
38	A1	1345	G	N9-C8	7.32	1.43	1.37
38	A1	2394	G	P-O5'	-7.32	1.52	1.59
38	A1	2449	A	C5-C6	-7.32	1.34	1.41
38	A1	2457	C	C5'-C4'	7.32	1.60	1.51
38	A1	1295	G	C6-N1	7.31	1.44	1.39
10	B1	51	G	C2-N3	7.31	1.38	1.32
11	B2	860	G	N3-C4	7.31	1.40	1.35
38	A1	474	G	C2'-C1'	-7.31	1.45	1.53
38	A1	662	A	N3-C4	-7.31	1.30	1.34
38	A1	764	G	N1-C2	7.31	1.43	1.37
38	A1	1861	G	C8-N7	-7.31	1.26	1.30
38	A1	3039	G	O3'-P	-7.31	1.52	1.61
11	B2	514	U	C3'-O3'	7.31	1.52	1.42
11	B2	1136	A	N7-C5	-7.31	1.34	1.39
38	A1	1531	C	C2-N3	7.31	1.41	1.35
11	B2	900	G	N3-C4	-7.31	1.30	1.35
11	B2	1160	C	N1-C6	7.31	1.41	1.37
11	B2	1247	A	C8-N7	-7.31	1.26	1.31
11	B2	1345	G	C6-N1	7.31	1.44	1.39
38	A1	1044	C	N3-C4	7.31	1.39	1.33
38	A1	1158	G	C2-N2	7.31	1.41	1.34
38	A1	1565	G	C4'-C3'	-7.31	1.45	1.53
38	A1	1669	A	C8-N7	-7.31	1.26	1.31
38	A1	1729	C	O4'-C1'	7.31	1.51	1.41
38	A1	1786	G	N9-C8	7.31	1.43	1.37
10	B1	10	G	C5-C4	-7.31	1.33	1.38
38	A1	82	C	C4-C5	7.31	1.48	1.43
38	A1	1089	C	N1-C6	7.31	1.41	1.37
38	A1	2471	A	C6-N1	7.31	1.40	1.35
38	A1	536	G	N7-C5	-7.31	1.34	1.39
38	A1	2769	U	C2-N3	7.31	1.42	1.37
11	B2	858	A	C5'-C4'	7.30	1.60	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1393	A	O3'-P	-7.30	1.52	1.61
38	A1	130	G	C4'-O4'	7.30	1.55	1.45
38	A1	1032	C	C4-N4	7.30	1.40	1.33
38	A1	2456	C	N1-C6	-7.30	1.32	1.37
38	A1	2814	U	C2'-C1'	-7.30	1.45	1.53
38	A1	2818	C	P-O5'	7.30	1.67	1.59
38	A1	239	G	C4'-C3'	7.30	1.61	1.53
38	A1	998	G	N9-C8	7.30	1.43	1.37
39	A3	119	C	C5'-C4'	-7.30	1.42	1.51
38	A1	1144	A	C5-C4	7.30	1.43	1.38
38	A1	1207	G	N7-C5	-7.30	1.34	1.39
38	A1	1416	G	C2-N3	7.30	1.38	1.32
10	B1	62	C	C1'-N1	7.30	1.59	1.48
11	B2	650	A	C6-N1	7.30	1.40	1.35
11	B2	876	A	N9-C4	-7.30	1.33	1.37
38	A1	474	G	C8-N7	7.30	1.35	1.30
38	A1	2372	C	C3'-C2'	7.30	1.60	1.52
11	B2	821	G	N1-C2	7.30	1.43	1.37
38	A1	858	G	C5-C4	-7.30	1.33	1.38
38	A1	2106	G	N7-C5	-7.30	1.34	1.39
38	A1	2501	G	C2'-C1'	-7.30	1.45	1.53
38	A1	2804	C	N1-C6	7.30	1.41	1.37
11	B2	107	C	C4-N4	7.30	1.40	1.33
38	A1	8	G	N9-C8	7.30	1.43	1.37
38	A1	375	C	C5-C6	7.30	1.40	1.34
38	A1	1084	G	C2-N3	7.30	1.38	1.32
38	A1	2527	G	N7-C5	-7.30	1.34	1.39
39	A3	35	A	C6-N6	7.30	1.39	1.33
38	A1	720	C	N1-C6	7.29	1.41	1.37
38	A1	1094	U	C2-N3	7.29	1.42	1.37
38	A1	2227	G	C6-N1	7.29	1.44	1.39
11	B2	559	G	P-O5'	-7.29	1.52	1.59
11	B2	174	G	N3-C4	7.29	1.40	1.35
11	B2	236	C	N1-C6	7.29	1.41	1.37
11	B2	1128	U	C2'-C1'	-7.29	1.45	1.53
38	A1	86	G	C5-C4	7.29	1.43	1.38
38	A1	480	A	C4'-C3'	7.29	1.61	1.53
38	A1	1712	U	O3'-P	7.29	1.69	1.61
38	A1	2663	G	N7-C5	-7.29	1.34	1.39
38	A1	2803	U	C2-N3	7.29	1.42	1.37
11	B2	978	G	C2-N3	7.29	1.38	1.32
11	B2	1106	A	C5'-C4'	7.29	1.60	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	247	A	O3'-P	-7.29	1.52	1.61
38	A1	1463	C	P-O5'	-7.29	1.52	1.59
38	A1	2104	G	C5-C6	-7.29	1.35	1.42
65	AV	41	TYR	CB-CG	7.29	1.62	1.51
11	B2	192	G	N9-C8	7.29	1.43	1.37
38	A1	1225	A	C6-N6	7.29	1.39	1.33
38	A1	1426	G	C8-N7	7.29	1.35	1.30
38	A1	1836	A	C8-N7	7.29	1.36	1.31
38	A1	1860	A	N1-C2	7.29	1.41	1.34
38	A1	2226	G	C2-N3	7.29	1.38	1.32
38	A1	2373	G	O3'-P	-7.29	1.52	1.61
11	B2	256	G	C4'-C3'	7.29	1.61	1.53
38	A1	1858	G	C6-N1	7.29	1.44	1.39
38	A1	2374	C	C4-C5	7.29	1.48	1.43
11	B2	137	A	C5-C4	7.29	1.43	1.38
11	B2	1461	U	C2-N3	7.29	1.42	1.37
38	A1	237	G	C6-N1	7.29	1.44	1.39
38	A1	996	U	O4'-C1'	7.29	1.51	1.41
38	A1	1076	G	N7-C5	-7.29	1.34	1.39
38	A1	1628	C	C2-N3	7.29	1.41	1.35
38	A1	2163	G	N3-C4	-7.29	1.30	1.35
38	A1	2279	G	C2-N3	7.29	1.38	1.32
38	A1	3009	C	N1-C2	7.29	1.47	1.40
11	B2	1242	C	N1-C6	7.28	1.41	1.37
11	B2	1423	A	N9-C4	7.28	1.42	1.37
38	A1	1485	A	N1-C2	7.28	1.41	1.34
11	B2	1422	G	N7-C5	-7.28	1.34	1.39
38	A1	304	G	C8-N7	7.28	1.35	1.30
38	A1	559	G	N9-C8	7.28	1.43	1.37
38	A1	1271	G	N1-C2	7.28	1.43	1.37
38	A1	2700	U	C2'-C1'	-7.28	1.45	1.53
11	B2	648	A	C6-N6	7.28	1.39	1.33
38	A1	1518	G	N9-C8	7.28	1.43	1.37
38	A1	1672	G	N1-C2	7.28	1.43	1.37
38	A1	2663	G	C2-N2	7.28	1.41	1.34
38	A1	2857	C	C4-N4	7.28	1.40	1.33
11	B2	253	G	P-O5'	-7.28	1.52	1.59
11	B2	416	A	N9-C8	-7.28	1.31	1.37
11	B2	1168	C	C1'-N1	7.28	1.59	1.48
38	A1	300	U	C2-N3	7.28	1.42	1.37
38	A1	312	G	C2-N3	7.28	1.38	1.32
11	B2	381	C	C5'-C4'	7.28	1.60	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	639	C	C4-N4	7.28	1.40	1.33
38	A1	676	G	C2-N2	7.28	1.41	1.34
38	A1	809	A	N1-C2	7.28	1.40	1.34
38	A1	1454	G	C5'-C4'	7.28	1.60	1.51
11	B2	709	G	C8-N7	7.27	1.35	1.30
11	B2	1018	C	N1-C6	-7.27	1.32	1.37
10	B1	19	G	N1-C2	7.27	1.43	1.37
11	B2	150	G	C5-C4	-7.27	1.33	1.38
11	B2	845	G	C5-C4	7.27	1.43	1.38
38	A1	669	G	C2-N3	7.27	1.38	1.32
38	A1	992	G	C5-C6	7.27	1.49	1.42
38	A1	1336	G	C5-C4	7.27	1.43	1.38
38	A1	2171	G	N7-C5	-7.27	1.34	1.39
38	A1	2681	A	N1-C2	-7.27	1.27	1.34
38	A1	2855	G	C6-N1	7.27	1.44	1.39
11	B2	503	G	C2'-O2'	7.27	1.51	1.41
11	B2	185	G	C3'-C2'	7.27	1.60	1.52
11	B2	934	G	O3'-P	-7.27	1.52	1.61
11	B2	1204	C	C2-N3	7.27	1.41	1.35
38	A1	264	G	N7-C5	-7.27	1.34	1.39
38	A1	1140	C	C2'-C1'	-7.27	1.45	1.53
38	A1	2253	G	N9-C4	7.27	1.43	1.38
38	A1	2664	G	P-O5'	-7.27	1.52	1.59
38	A1	2744	U	N3-C4	7.27	1.45	1.38
11	B2	338	C	C2-N3	7.27	1.41	1.35
11	B2	1247	A	O4'-C1'	-7.27	1.32	1.41
38	A1	409	C	N1-C6	-7.27	1.32	1.37
38	A1	693	G	N3-C4	7.27	1.40	1.35
38	A1	1408	G	C2-N2	7.27	1.41	1.34
38	A1	1756	C	N1-C6	7.27	1.41	1.37
38	A1	2249	A	C6-N6	7.27	1.39	1.33
38	A1	2651	G	C2'-C1'	-7.27	1.45	1.53
39	A3	49	A	C8-N7	-7.27	1.26	1.31
9	AX	319	TYR	CG-CD2	7.27	1.48	1.39
38	A1	2423	G	C5-C6	-7.26	1.35	1.42
38	A1	2556	C	N3-C4	7.26	1.39	1.33
10	B1	64	C	N1-C6	-7.26	1.32	1.37
38	A1	723	A	O3'-P	-7.26	1.52	1.61
11	B2	273	C	N3-C4	7.26	1.39	1.33
38	A1	993	G	C2-N2	7.26	1.41	1.34
38	A1	1422	G	N1-C2	7.26	1.43	1.37
38	A1	1575	G	N1-C2	7.26	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	576	C	P-O5'	-7.26	1.52	1.59
11	B2	700	G	P-O5'	-7.26	1.52	1.59
11	B2	858	A	N9-C4	7.26	1.42	1.37
11	B2	941	C	O3'-P	-7.26	1.52	1.61
11	B2	978	G	N9-C4	7.26	1.43	1.38
11	B2	1184	U	C1'-N1	7.26	1.59	1.48
38	A1	2482	G	N7-C5	-7.26	1.34	1.39
56	AJ	96	ARG	CD-NE	7.26	1.58	1.46
11	B2	669	A	N7-C5	-7.26	1.34	1.39
11	B2	1040	A	N7-C5	7.26	1.43	1.39
11	B2	1076	G	C4'-O4'	-7.26	1.36	1.45
38	A1	1789	A	N1-C2	7.26	1.40	1.34
38	A1	2718	G	C2'-C1'	-7.26	1.45	1.53
38	A1	2809	G	N1-C2	7.26	1.43	1.37
11	B2	75	C	C4-N4	7.26	1.40	1.33
11	B2	212	G	C8-N7	-7.26	1.26	1.30
38	A1	690	G	C2-N2	7.26	1.41	1.34
38	A1	2083	G	N1-C2	7.26	1.43	1.37
38	A1	2764	G	C5'-C4'	7.26	1.60	1.51
38	A1	350	A	P-O5'	-7.25	1.52	1.59
38	A1	1351	G	C2'-C1'	-7.25	1.45	1.53
38	A1	2542	G	C5-C4	-7.25	1.33	1.38
11	B2	1245	C	C4'-C3'	7.25	1.61	1.53
11	B2	978	G	N1-C2	7.25	1.43	1.37
38	A1	305	G	N9-C8	-7.25	1.32	1.37
38	A1	2220	C	P-O5'	-7.25	1.52	1.59
11	B2	502	U	C5'-C4'	7.25	1.60	1.51
11	B2	719	G	C6-N1	7.25	1.44	1.39
38	A1	43	G	N9-C8	7.25	1.43	1.37
38	A1	1138	C	N3-C4	7.25	1.39	1.33
38	A1	545	G	N7-C5	7.25	1.43	1.39
38	A1	1209	A	C5-C6	7.25	1.47	1.41
38	A1	2125	C	P-O5'	-7.25	1.52	1.59
38	A1	2617	G	C2-N3	7.25	1.38	1.32
11	B2	6	G	C2'-C1'	-7.25	1.45	1.53
11	B2	943	C	N3-C4	7.25	1.39	1.33
11	B2	1443	G	C2'-C1'	-7.25	1.45	1.53
38	A1	170	A	P-O5'	-7.25	1.52	1.59
38	A1	540	A	C3'-O3'	7.25	1.52	1.42
38	A1	886	G	C5-C4	7.25	1.43	1.38
38	A1	2847	G	N9-C8	7.25	1.43	1.37
11	B2	578	G	N9-C4	-7.25	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1411	G	N9-C8	-7.25	1.32	1.37
38	A1	2965	C	C2-N3	7.25	1.41	1.35
38	A1	558	C	C2'-C1'	-7.24	1.45	1.53
38	A1	930	G	C8-N7	-7.24	1.26	1.30
38	A1	2063	U	C2'-C1'	7.24	1.61	1.53
38	A1	256	G	C2-N2	7.24	1.41	1.34
38	A1	480	A	C6-N1	7.24	1.40	1.35
38	A1	1069	A	N7-C5	-7.24	1.34	1.39
38	A1	2952	C	N1-C6	7.24	1.41	1.37
11	B2	936	A	O4'-C1'	-7.24	1.32	1.41
11	B2	1256	C	C4-N4	7.24	1.40	1.33
38	A1	1032	C	C5-C6	-7.24	1.28	1.34
38	A1	2893	U	N1-C6	7.24	1.44	1.38
38	A1	3022	C	N3-C4	7.24	1.39	1.33
11	B2	729	G	P-O5'	-7.24	1.52	1.59
11	B2	730	G	C2-N3	7.24	1.38	1.32
11	B2	1373	A	C5-C4	7.24	1.43	1.38
38	A1	393	C	C4'-O4'	7.24	1.54	1.45
38	A1	977	C	C4-N4	7.24	1.40	1.33
38	A1	1185	A	C6-N1	7.24	1.40	1.35
38	A1	2806	A	C2'-C1'	-7.24	1.45	1.53
38	A1	2856	G	C4'-O4'	7.24	1.54	1.45
11	B2	552	C	N1-C2	-7.24	1.32	1.40
11	B2	1209	C	C3'-C2'	7.24	1.60	1.52
11	B2	1275	U	C3'-C2'	-7.24	1.44	1.52
38	A1	120	G	C8-N7	-7.24	1.26	1.30
38	A1	958	A	C5'-C4'	7.24	1.60	1.51
38	A1	2168	C	C5'-C4'	7.24	1.60	1.51
11	B2	852	G	N1-C2	7.23	1.43	1.37
38	A1	740	C	C3'-C2'	-7.23	1.44	1.52
38	A1	979	G	C8-N7	-7.23	1.26	1.30
38	A1	2163	G	C6-N1	7.23	1.44	1.39
38	A1	1651	A	N9-C4	-7.23	1.33	1.37
38	A1	1956	G	N7-C5	-7.23	1.34	1.39
11	B2	88	G	N7-C5	-7.23	1.34	1.39
11	B2	1132	C	C3'-C2'	7.23	1.60	1.52
38	A1	661	G	N9-C4	7.23	1.43	1.38
38	A1	2369	G	N7-C5	-7.23	1.34	1.39
38	A1	1119	A	C3'-C2'	7.23	1.60	1.52
33	BU	61	ARG	NE-CZ	7.23	1.42	1.33
38	A1	1734	G	P-O5'	-7.23	1.52	1.59
38	A1	2903	U	C4'-C3'	7.23	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
39	A3	8	C	C4-N4	7.23	1.40	1.33
11	B2	948	G	C5-C4	7.23	1.43	1.38
38	A1	1135	A	C5-C4	7.23	1.43	1.38
11	B2	289	C	C4-N4	7.22	1.40	1.33
11	B2	458	G	N9-C4	7.22	1.43	1.38
11	B2	869	U	C4'-C3'	-7.22	1.45	1.53
11	B2	977	G	C6-N1	7.22	1.44	1.39
38	A1	635	G	C6-N1	7.22	1.44	1.39
38	A1	1426	G	N9-C8	7.22	1.43	1.37
38	A1	1596	G	N1-C2	7.22	1.43	1.37
38	A1	2156	A	N7-C5	-7.22	1.34	1.39
38	A1	2876	G	C6-N1	7.22	1.44	1.39
12	AG	27	ARG	CZ-NH1	7.22	1.42	1.33
11	B2	1144	G	N7-C5	-7.22	1.34	1.39
11	B2	1398	U	N3-C4	7.22	1.45	1.38
38	A1	179	A	C6-N6	7.22	1.39	1.33
38	A1	633	A	N9-C8	7.22	1.43	1.37
38	A1	2078	A	C2'-C1'	-7.22	1.45	1.53
38	A1	2592	U	C2-N3	7.22	1.42	1.37
11	B2	638	G	C2-N3	7.22	1.38	1.32
11	B2	813	G	C5-C6	-7.22	1.35	1.42
38	A1	2714	G	C5-C4	-7.22	1.33	1.38
11	B2	668	G	N9-C8	-7.22	1.32	1.37
11	B2	1400	A	N3-C4	7.22	1.39	1.34
38	A1	892	U	C2-N3	7.22	1.42	1.37
11	B2	619	A	C5-C4	7.22	1.43	1.38
11	B2	1180	G	N1-C2	7.22	1.43	1.37
38	A1	1122	C	C2-N3	7.22	1.41	1.35
38	A1	1776	G	P-O5'	-7.22	1.52	1.59
38	A1	784	C	N1-C6	7.22	1.41	1.37
38	A1	1401	G	N3-C4	-7.22	1.30	1.35
38	A1	1858	G	C4'-C3'	7.22	1.61	1.53
38	A1	1881	A	N1-C2	7.22	1.40	1.34
39	A3	27	C	N3-C4	7.22	1.39	1.33
38	A1	204	G	N9-C8	7.21	1.42	1.37
11	B2	351	C	C4'-C3'	7.21	1.61	1.53
38	A1	834	G	C2'-C1'	-7.21	1.45	1.53
38	A1	1322	G	C5-C4	-7.21	1.33	1.38
38	A1	2223	G	N1-C2	7.21	1.43	1.37
38	A1	2230	G	C6-N1	7.21	1.44	1.39
38	A1	2410	U	C2-N3	7.21	1.42	1.37
11	B2	324	C	C4-C5	7.21	1.48	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1430	G	N9-C4	-7.21	1.32	1.38
11	B2	294	A	C6-N1	7.21	1.40	1.35
38	A1	777	A	N9-C8	7.21	1.43	1.37
38	A1	1037	C	C5-C6	7.21	1.40	1.34
38	A1	1086	U	C3'-C2'	-7.21	1.44	1.52
38	A1	1604	G	N1-C2	7.21	1.43	1.37
11	B2	211	G	N1-C2	7.21	1.43	1.37
11	B2	782	A	C6-N1	7.21	1.40	1.35
11	B2	1245	C	N3-C4	7.21	1.39	1.33
38	A1	1405	G	N1-C2	7.21	1.43	1.37
11	B2	466	C	C5-C6	-7.21	1.28	1.34
38	A1	403	G	N1-C2	7.21	1.43	1.37
38	A1	532	G	C2-N3	7.21	1.38	1.32
38	A1	1740	U	C2-N3	-7.21	1.32	1.37
38	A1	2437	G	C6-N1	7.21	1.44	1.39
11	B2	530	G	C5-C4	7.20	1.43	1.38
11	B2	546	G	N3-C4	-7.20	1.30	1.35
11	B2	555	U	C4'-O4'	-7.20	1.36	1.45
11	B2	647	G	C2-N3	7.20	1.38	1.32
11	B2	681	G	N1-C2	7.20	1.43	1.37
11	B2	684	G	C4'-C3'	-7.20	1.45	1.53
11	B2	1027	C	C2-N3	7.20	1.41	1.35
11	B2	1123	G	N9-C8	7.20	1.42	1.37
38	A1	1464	A	C5-C6	7.20	1.47	1.41
38	A1	2158	G	N1-C2	7.20	1.43	1.37
39	A3	46	G	C2-N3	7.20	1.38	1.32
39	A3	69	C	C2'-C1'	-7.20	1.45	1.53
11	B2	221	A	N9-C4	-7.20	1.33	1.37
38	A1	930	G	C6-N1	7.20	1.44	1.39
11	B2	177	A	C8-N7	-7.20	1.26	1.31
11	B2	756	A	C2'-C1'	-7.20	1.45	1.53
38	A1	89	C	N3-C4	7.20	1.39	1.33
38	A1	132	G	C2'-C1'	-7.20	1.45	1.53
38	A1	762	G	C5'-C4'	7.20	1.59	1.51
38	A1	2565	A	C2'-C1'	-7.20	1.45	1.53
11	B2	840	C	C2'-C1'	-7.20	1.45	1.53
38	A1	636	G	N1-C2	7.20	1.43	1.37
38	A1	2301	C	P-O5'	-7.20	1.52	1.59
39	A3	42	A	N3-C4	-7.20	1.30	1.34
11	B2	1015	C	C4-C5	7.20	1.48	1.43
38	A1	327	G	N3-C4	-7.20	1.30	1.35
11	B2	14	C	C2'-O2'	7.20	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	580	G	C4'-C3'	7.20	1.61	1.53
11	B2	648	A	C8-N7	-7.20	1.26	1.31
11	B2	763	G	O3'-P	-7.20	1.52	1.61
11	B2	1181	G	C4'-C3'	7.20	1.61	1.53
38	A1	953	G	C5'-C4'	7.20	1.59	1.51
38	A1	2391	G	N7-C5	-7.20	1.34	1.39
11	B2	88	G	N1-C2	7.19	1.43	1.37
11	B2	531	G	C6-N1	7.19	1.44	1.39
11	B2	732	G	C6-N1	7.19	1.44	1.39
11	B2	845	G	O3'-P	-7.19	1.52	1.61
38	A1	1491	U	C5'-C4'	7.19	1.59	1.51
11	B2	278	A	N7-C5	-7.19	1.34	1.39
38	A1	874	U	C4-C5	7.19	1.50	1.43
38	A1	1180	G	C2-N3	7.19	1.38	1.32
38	A1	1505	G	C2'-C1'	-7.19	1.45	1.53
38	A1	2373	G	N1-C2	7.19	1.43	1.37
11	B2	512	U	N3-C4	7.19	1.45	1.38
38	A1	228	U	C5'-C4'	7.19	1.59	1.51
38	A1	982	G	N7-C5	-7.19	1.34	1.39
38	A1	1006	A	N7-C5	7.19	1.43	1.39
38	A1	1025	A	C5'-C4'	7.19	1.59	1.51
38	A1	1336	G	C6-O6	-7.19	1.17	1.24
38	A1	1438	C	C2-N3	7.19	1.41	1.35
38	A1	1713	G	P-O5'	7.19	1.67	1.59
38	A1	2054	G	C2-N3	7.19	1.38	1.32
38	A1	2662	G	N9-C8	7.19	1.42	1.37
11	B2	259	A	N7-C5	-7.19	1.34	1.39
38	A1	1533	G	C5'-C4'	7.19	1.59	1.51
38	A1	1904	G	N7-C5	-7.19	1.34	1.39
38	A1	1323	U	C2-N3	7.19	1.42	1.37
38	A1	1624	U	C4'-O4'	7.19	1.54	1.45
38	A1	2251	G	C8-N7	-7.19	1.26	1.30
39	A3	15	G	C2'-C1'	-7.19	1.45	1.53
11	B2	460	C	O3'-P	-7.19	1.52	1.61
11	B2	846	G	N7-C5	-7.19	1.34	1.39
38	A1	2297	C	C4-C5	7.19	1.48	1.43
39	A3	4	C	C2-N3	7.19	1.41	1.35
11	B2	1340	U	N1-C2	7.18	1.45	1.38
38	A1	2065	C	C2-N3	7.18	1.41	1.35
38	A1	2220	C	N1-C6	7.18	1.41	1.37
39	A3	80	G	C5-C4	7.18	1.43	1.38
11	B2	228	G	C5-C6	-7.18	1.35	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1322	C	C5'-C4'	7.18	1.59	1.51
38	A1	1475	G	C2'-C1'	-7.18	1.45	1.53
38	A1	1548	A	C8-N7	-7.18	1.26	1.31
38	A1	1627	G	N1-C2	7.18	1.43	1.37
39	A3	16	G	C8-N7	7.18	1.35	1.30
11	B2	632	C	C5'-C4'	7.18	1.59	1.51
11	B2	1355	C	N1-C6	7.18	1.41	1.37
38	A1	1766	A	O3'-P	-7.18	1.52	1.61
38	A1	2347	G	N9-C4	7.18	1.43	1.38
11	B2	1127	A	N3-C4	-7.18	1.30	1.34
38	A1	830	G	C2-N3	7.18	1.38	1.32
38	A1	1000	G	N9-C8	7.18	1.42	1.37
39	A3	71	G	C2'-C1'	-7.18	1.45	1.53
10	B1	7	G	C8-N7	7.18	1.35	1.30
11	B2	356	G	P-O5'	-7.18	1.52	1.59
38	A1	1065	C	N1-C2	7.18	1.47	1.40
38	A1	1789	A	N9-C4	7.18	1.42	1.37
38	A1	2856	G	C2-N2	7.18	1.41	1.34
38	A1	2947	G	N7-C5	-7.18	1.34	1.39
38	A1	2966	C	P-O5'	-7.18	1.52	1.59
38	A1	2976	G	N1-C2	7.18	1.43	1.37
38	A1	2986	G	N3-C4	7.18	1.40	1.35
11	B2	352	A	N7-C5	-7.17	1.34	1.39
11	B2	520	G	C5-C6	-7.17	1.35	1.42
11	B2	1096	G	P-O5'	-7.17	1.52	1.59
38	A1	1167	A	N3-C4	-7.17	1.30	1.34
38	A1	1354	G	C6-N1	7.17	1.44	1.39
38	A1	1884	C	C2'-C1'	-7.17	1.45	1.53
11	B2	616	G	C5-C4	7.17	1.43	1.38
11	B2	1419	G	C2-N3	7.17	1.38	1.32
38	A1	180	A	C6-N6	7.17	1.39	1.33
38	A1	378	G	C5-C6	-7.17	1.35	1.42
38	A1	586	A	C5-C4	7.17	1.43	1.38
38	A1	879	A	C6-N6	7.17	1.39	1.33
38	A1	2057	G	C8-N7	-7.17	1.26	1.30
11	B2	172	G	C4'-C3'	7.17	1.61	1.53
38	A1	1468	G	C5-C4	7.17	1.43	1.38
11	B2	722	G	C2-N2	-7.17	1.27	1.34
38	A1	1586	G	O3'-P	-7.17	1.52	1.61
38	A1	1905	G	N7-C5	-7.17	1.34	1.39
38	A1	2785	G	O3'-P	-7.17	1.52	1.61
11	B2	199	A	N9-C8	7.17	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	202	G	C2-N2	7.17	1.41	1.34
11	B2	1428	G	C5-C6	-7.17	1.35	1.42
38	A1	221	G	C6-N1	7.17	1.44	1.39
38	A1	1564	C	P-O5'	7.17	1.67	1.59
38	A1	1659	G	C2-N2	7.17	1.41	1.34
38	A1	2332	G	C5-C4	-7.17	1.33	1.38
38	A1	2944	G	C2-N3	7.17	1.38	1.32
11	B2	11	A	C2'-C1'	-7.17	1.45	1.53
11	B2	1367	C	C4-C5	-7.17	1.37	1.43
38	A1	2149	G	N1-C2	7.17	1.43	1.37
38	A1	2739	G	C2'-C1'	-7.17	1.45	1.53
11	B2	662	C	C5'-C4'	7.16	1.59	1.51
11	B2	1212	U	N3-C4	7.16	1.44	1.38
11	B2	1443	G	C5-C4	7.16	1.43	1.38
38	A1	440	A	C6-N6	7.16	1.39	1.33
38	A1	1258	G	C2-N3	7.16	1.38	1.32
38	A1	2630	C	C4-C5	7.16	1.48	1.43
38	A1	2846	A	C3'-C2'	-7.16	1.44	1.52
38	A1	2855	G	N7-C5	-7.16	1.34	1.39
11	B2	720	A	C5-C4	-7.16	1.33	1.38
11	B2	1185	A	C6-N6	7.16	1.39	1.33
38	A1	1694	G	C2-N2	7.16	1.41	1.34
38	A1	90	A	O3'-P	-7.16	1.52	1.61
11	B2	133	G	C6-N1	7.16	1.44	1.39
11	B2	241	U	C2-N3	7.16	1.42	1.37
11	B2	1473	A	C5-C4	7.16	1.43	1.38
38	A1	184	A	C5-C6	7.16	1.47	1.41
38	A1	851	G	C2'-C1'	-7.16	1.45	1.53
38	A1	1181	C	O3'-P	-7.16	1.52	1.61
38	A1	1633	A	C6-N1	7.16	1.40	1.35
38	A1	1808	G	N9-C4	-7.16	1.32	1.38
11	B2	451	A	C5-C6	7.16	1.47	1.41
11	B2	1167	C	N3-C4	7.16	1.39	1.33
11	B2	305	C	N3-C4	7.16	1.39	1.33
11	B2	970	G	C1'-N9	7.16	1.59	1.48
11	B2	1273	G	C5-C4	-7.16	1.33	1.38
38	A1	114	C	N1-C2	-7.16	1.32	1.40
38	A1	241	C	C2'-C1'	-7.16	1.45	1.53
38	A1	618	C	C4-C5	7.16	1.48	1.43
38	A1	1460	C	C4-N4	7.16	1.40	1.33
38	A1	1633	A	C2'-C1'	-7.16	1.45	1.53
38	A1	1655	G	C8-N7	-7.16	1.26	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1688	C	C3'-C2'	-7.16	1.44	1.52
38	A1	1966	C	P-O5'	7.16	1.67	1.59
38	A1	2253	G	N7-C5	7.16	1.43	1.39
11	B2	1028	C	N3-C4	7.15	1.39	1.33
11	B2	1415	U	P-O5'	-7.15	1.52	1.59
38	A1	1467	G	N1-C2	7.15	1.43	1.37
10	B1	69	G	P-O5'	7.15	1.67	1.59
11	B2	498	C	C3'-C2'	7.15	1.60	1.52
11	B2	1108	U	N1-C2	-7.15	1.32	1.38
38	A1	131	C	O4'-C1'	7.15	1.50	1.41
38	A1	1109	G	C6-N1	7.15	1.44	1.39
11	B2	1036	G	N3-C4	7.15	1.40	1.35
21	BI	77	PRO	N-CD	-7.15	1.37	1.47
38	A1	923	A	O3'-P	-7.15	1.52	1.61
38	A1	1631	A	N3-C4	-7.15	1.30	1.34
38	A1	1787	U	N1-C2	-7.15	1.32	1.38
38	A1	2838	U	N3-C4	7.15	1.44	1.38
38	A1	1945	C	N3-C4	7.15	1.39	1.33
11	B2	371	U	C4-C5	7.15	1.50	1.43
17	BE	60	ARG	NE-CZ	7.15	1.42	1.33
38	A1	327	G	N9-C4	7.15	1.43	1.38
38	A1	474	G	C2-N3	7.15	1.38	1.32
38	A1	2023	A	C2-N3	7.15	1.40	1.33
11	B2	1429	G	C5-C6	-7.15	1.35	1.42
38	A1	122	G	C5-C6	-7.15	1.35	1.42
38	A1	2329	A	N3-C4	-7.15	1.30	1.34
11	B2	613	C	P-O5'	-7.14	1.52	1.59
38	A1	741	G	C2-N3	7.14	1.38	1.32
38	A1	1819	G	N9-C8	-7.14	1.32	1.37
11	B2	170	C	C4-N4	7.14	1.40	1.33
11	B2	349	A	C4'-O4'	-7.14	1.36	1.45
38	A1	146	U	C3'-C2'	7.14	1.60	1.52
38	A1	1030	C	C4'-C3'	7.14	1.61	1.53
38	A1	1942	G	N9-C4	7.14	1.43	1.38
38	A1	1137	G	C5-C6	-7.14	1.35	1.42
11	B2	164	A	P-O5'	-7.14	1.52	1.59
38	A1	244	A	C5-C6	7.14	1.47	1.41
38	A1	534	G	O3'-P	-7.14	1.52	1.61
38	A1	1271	G	C6-N1	7.14	1.44	1.39
38	A1	2269	C	C2-N3	7.14	1.41	1.35
38	A1	2481	G	N9-C8	-7.14	1.32	1.37
10	B1	68	C	C4-N4	7.14	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1662	C	N3-C4	7.14	1.39	1.33
45	AC	337	ARG	CD-NE	7.14	1.58	1.46
38	A1	904	G	N3-C4	-7.13	1.30	1.35
38	A1	2498	G	N1-C2	7.13	1.43	1.37
39	A3	73	U	C5'-C4'	7.13	1.59	1.51
38	A1	1126	C	C4-N4	7.13	1.40	1.33
11	B2	623	C	C4-C5	7.13	1.48	1.43
11	B2	1345	G	N9-C8	7.13	1.42	1.37
38	A1	656	G	C5-C4	7.13	1.43	1.38
38	A1	1117	C	O3'-P	-7.13	1.52	1.61
38	A1	1444	A	N9-C8	7.13	1.43	1.37
38	A1	1786	G	C6-O6	-7.13	1.17	1.24
38	A1	2161	A	N9-C4	7.13	1.42	1.37
38	A1	2261	C	C3'-C2'	7.13	1.60	1.52
39	A3	29	G	C2-N2	7.13	1.41	1.34
39	A3	111	G	N7-C5	-7.13	1.34	1.39
11	B2	732	G	N9-C8	7.13	1.42	1.37
38	A1	672	C	C2'-C1'	-7.13	1.45	1.53
38	A1	829	G	O3'-P	-7.13	1.52	1.61
38	A1	927	G	C6-N1	7.13	1.44	1.39
38	A1	1426	G	C2-N3	7.13	1.38	1.32
38	A1	2155	C	C2-O2	7.13	1.30	1.24
38	A1	2272	G	N9-C4	7.13	1.43	1.38
38	A1	2374	C	O3'-P	-7.13	1.52	1.61
38	A1	2425	A	C6-N1	7.13	1.40	1.35
38	A1	3044	U	P-O5'	-7.13	1.52	1.59
11	B2	80	A	C6-N6	7.13	1.39	1.33
11	B2	259	A	C5'-C4'	7.13	1.59	1.51
11	B2	367	G	C2-N2	7.13	1.41	1.34
11	B2	1332	C	C4-N4	7.13	1.40	1.33
38	A1	48	G	N7-C5	-7.13	1.34	1.39
38	A1	1013	G	C8-N7	7.13	1.35	1.30
38	A1	1330	G	P-O5'	7.13	1.66	1.59
38	A1	1808	G	C2-N3	7.13	1.38	1.32
38	A1	2681	A	N3-C4	-7.13	1.30	1.34
38	A1	1486	G	N1-C2	7.12	1.43	1.37
38	A1	2617	G	C8-N7	-7.12	1.26	1.30
11	B2	20	G	C2-N3	7.12	1.38	1.32
38	A1	1061	G	C4'-C3'	-7.12	1.45	1.53
38	A1	1508	A	C6-N6	7.12	1.39	1.33
11	B2	492	G	C5-C4	-7.12	1.33	1.38
38	A1	2691	G	O4'-C1'	7.12	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1492	C	O3'-P	-7.12	1.52	1.61
38	A1	2063	U	N1-C6	-7.12	1.31	1.38
11	B2	692	G	C5-C4	7.12	1.43	1.38
11	B2	808	C	C4-N4	7.12	1.40	1.33
11	B2	1192	C	N3-C4	7.12	1.39	1.33
11	B2	1254	C	C4-N4	7.12	1.40	1.33
24	BL	55	GLY	CA-C	-7.12	1.40	1.51
38	A1	1164	C	C2-N3	7.12	1.41	1.35
38	A1	1788	G	C2-N3	7.12	1.38	1.32
38	A1	2350	G	C2-N2	7.12	1.41	1.34
38	A1	2687	A	C4'-C3'	7.12	1.60	1.53
11	B2	683	A	N9-C8	-7.12	1.32	1.37
11	B2	785	U	C4-C5	7.12	1.50	1.43
11	B2	1319	C	N3-C4	7.12	1.39	1.33
38	A1	358	C	P-O5'	-7.12	1.52	1.59
11	B2	784	G	N9-C8	-7.12	1.32	1.37
11	B2	1233	G	C4'-C3'	7.12	1.60	1.53
11	B2	1240	A	C6-N6	7.12	1.39	1.33
38	A1	9	A	C5-C4	7.12	1.43	1.38
11	B2	279	U	C2'-C1'	-7.11	1.45	1.53
11	B2	735	A	C5'-C4'	7.11	1.59	1.51
38	A1	315	U	C2-N3	7.11	1.42	1.37
38	A1	1106	C	C4-N4	7.11	1.40	1.33
38	A1	2743	U	C3'-C2'	-7.11	1.45	1.52
38	A1	1332	A	C3'-O3'	7.11	1.52	1.42
11	B2	1000	G	C8-N7	-7.11	1.26	1.30
38	A1	866	G	C2'-C1'	-7.11	1.45	1.53
38	A1	1514	C	C5-C6	7.11	1.40	1.34
38	A1	1831	C	C2-N3	7.11	1.41	1.35
38	A1	2759	A	C2'-C1'	-7.11	1.45	1.53
11	B2	1007	A	P-O5'	7.11	1.66	1.59
11	B2	1099	A	C5'-C4'	7.11	1.59	1.51
38	A1	282	G	C6-O6	7.11	1.30	1.24
10	B1	72	C	C2-N3	7.11	1.41	1.35
11	B2	456	U	C4'-O4'	7.11	1.54	1.45
11	B2	839	G	O4'-C1'	7.11	1.50	1.41
18	BF	40	ARG	NE-CZ	7.11	1.42	1.33
38	A1	1527	G	C2'-C1'	-7.11	1.45	1.53
38	A1	1822	G	N1-C2	7.11	1.43	1.37
38	A1	2339	C	P-O5'	-7.11	1.52	1.59
11	B2	1237	G	C2-N3	7.11	1.38	1.32
11	B2	1418	G	N7-C5	-7.11	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1202	G	N7-C5	-7.11	1.34	1.39
38	A1	2761	G	C6-N1	7.11	1.44	1.39
39	A3	22	C	N1-C2	7.11	1.47	1.40
11	B2	19	G	C6-N1	7.10	1.44	1.39
38	A1	46	C	C2-N3	7.10	1.41	1.35
38	A1	800	G	C5-C6	-7.10	1.35	1.42
10	B1	60	A	C6-N1	7.10	1.40	1.35
11	B2	414	G	C5-C6	-7.10	1.35	1.42
11	B2	1136	A	C2'-C1'	-7.10	1.45	1.53
11	B2	1339	G	C6-N1	7.10	1.44	1.39
38	A1	468	A	C2'-C1'	-7.10	1.45	1.53
38	A1	1664	G	N9-C8	-7.10	1.32	1.37
38	A1	991	U	C4-C5	7.10	1.50	1.43
11	B2	618	G	C2-N3	7.10	1.38	1.32
11	B2	750	C	N1-C6	7.10	1.41	1.37
11	B2	1056	G	C2'-C1'	-7.10	1.45	1.53
11	B2	1232	G	C5-C6	7.10	1.49	1.42
38	A1	412	G	N3-C4	-7.10	1.30	1.35
38	A1	1074	G	C8-N7	7.10	1.35	1.30
38	A1	1391	C	P-O5'	-7.10	1.52	1.59
38	A1	2019	C	C2'-C1'	-7.10	1.45	1.53
38	A1	2647	G	C8-N7	-7.10	1.26	1.30
11	B2	57	G	O3'-P	-7.10	1.52	1.61
11	B2	424	U	C2-N3	7.10	1.42	1.37
11	B2	534	G	C6-N1	7.10	1.44	1.39
38	A1	649	A	N3-C4	-7.10	1.30	1.34
38	A1	1095	A	O3'-P	-7.10	1.52	1.61
38	A1	2424	A	C6-N1	7.10	1.40	1.35
11	B2	285	C	N1-C6	7.09	1.41	1.37
11	B2	545	C	O4'-C1'	7.09	1.50	1.41
38	A1	340	G	O3'-P	-7.09	1.52	1.61
38	A1	454	C	C5-C6	-7.09	1.28	1.34
38	A1	1437	C	P-O5'	-7.09	1.52	1.59
38	A1	1530	A	C6-N6	7.09	1.39	1.33
38	A1	2892	A	N3-C4	7.09	1.39	1.34
38	A1	2995	A	C5-C4	7.09	1.43	1.38
39	A3	78	C	C4'-C3'	7.09	1.60	1.53
11	B2	368	C	C4'-O4'	7.09	1.54	1.45
16	BD	53	ARG	CD-NE	7.09	1.58	1.46
11	B2	641	A	C6-N6	7.09	1.39	1.33
11	B2	1053	A	N9-C8	-7.09	1.32	1.37
11	B2	1335	A	N9-C4	-7.09	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	51	G	C4'-C3'	-7.09	1.45	1.53
38	A1	1180	G	C4'-C3'	7.09	1.60	1.53
38	A1	1293	G	C6-N1	7.09	1.44	1.39
38	A1	2340	A	N7-C5	-7.09	1.34	1.39
38	A1	2873	G	N3-C4	-7.09	1.30	1.35
38	A1	2985	U	N1-C2	7.09	1.45	1.38
11	B2	494	G	N9-C4	7.09	1.43	1.38
38	A1	658	C	C2'-C1'	-7.09	1.45	1.53
38	A1	738	C	C5-C6	-7.09	1.28	1.34
38	A1	1071	A	N1-C2	7.09	1.40	1.34
38	A1	1941	A	N1-C2	7.09	1.40	1.34
10	B1	77	A	N7-C5	-7.09	1.34	1.39
11	B2	131	G	C2-N3	7.09	1.38	1.32
13	BA	181	ARG	NE-CZ	7.09	1.42	1.33
38	A1	1170	G	N9-C8	7.09	1.42	1.37
38	A1	1475	G	C2-N3	7.09	1.38	1.32
38	A1	1780	C	O4'-C1'	7.09	1.50	1.41
38	A1	1992	A	O3'-P	-7.09	1.52	1.61
38	A1	2447	A	N9-C4	-7.09	1.33	1.37
38	A1	414	G	N7-C5	-7.09	1.34	1.39
38	A1	631	G	N9-C8	7.09	1.42	1.37
38	A1	827	G	O3'-P	-7.09	1.52	1.61
38	A1	966	G	C6-N1	7.09	1.44	1.39
38	A1	1496	A	N7-C5	-7.09	1.34	1.39
38	A1	2609	G	N7-C5	7.09	1.43	1.39
11	B2	274	G	C8-N7	7.08	1.35	1.30
38	A1	234	G	N3-C4	-7.08	1.30	1.35
38	A1	980	G	C6-N1	7.08	1.44	1.39
38	A1	1767	C	N3-C4	7.08	1.39	1.33
11	B2	559	G	C6-N1	7.08	1.44	1.39
11	B2	1036	G	C5'-C4'	7.08	1.59	1.51
38	A1	95	G	C6-O6	-7.08	1.17	1.24
38	A1	2020	G	N9-C8	7.08	1.42	1.37
38	A1	2590	C	C1'-N1	7.08	1.59	1.48
38	A1	2599	C	C2-N3	7.08	1.41	1.35
11	B2	219	C	C5'-C4'	7.08	1.59	1.51
11	B2	223	G	C3'-O3'	7.08	1.52	1.42
11	B2	339	U	N3-C4	7.08	1.44	1.38
11	B2	505	U	C4-C5	7.08	1.50	1.43
38	A1	733	A	C6-N1	7.08	1.40	1.35
38	A1	1927	C	P-O5'	-7.08	1.52	1.59
11	B2	355	C	C5-C6	-7.08	1.28	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2864	G	C2-N3	7.08	1.38	1.32
11	B2	791	G	C2'-C1'	-7.08	1.45	1.53
38	A1	258	C	C4-N4	7.08	1.40	1.33
38	A1	314	A	C6-N6	7.08	1.39	1.33
38	A1	723	A	N3-C4	-7.08	1.30	1.34
38	A1	2581	G	O3'-P	-7.08	1.52	1.61
38	A1	2586	A	C6-N6	7.08	1.39	1.33
39	A3	55	G	N9-C8	7.08	1.42	1.37
11	B2	665	G	N7-C5	-7.08	1.35	1.39
11	B2	708	C	C2-O2	-7.08	1.18	1.24
38	A1	917	A	N3-C4	-7.08	1.30	1.34
38	A1	2181	G	N7-C5	-7.08	1.35	1.39
39	A3	120	C	C4-N4	7.08	1.40	1.33
11	B2	48	G	N9-C4	-7.08	1.32	1.38
11	B2	444	G	N9-C8	-7.08	1.32	1.37
38	A1	2998	G	N3-C4	-7.08	1.30	1.35
38	A1	3024	C	C2-N3	-7.08	1.30	1.35
11	B2	884	G	P-O5'	7.07	1.66	1.59
11	B2	996	A	N9-C4	-7.07	1.33	1.37
38	A1	188	A	C4'-C3'	7.07	1.60	1.53
38	A1	880	U	C2-N3	-7.07	1.32	1.37
38	A1	1489	G	C3'-C2'	-7.07	1.45	1.52
38	A1	1578	C	N1-C2	7.07	1.47	1.40
38	A1	2315	G	C6-N1	7.07	1.44	1.39
38	A1	2386	U	C4-C5	7.07	1.50	1.43
38	A1	2498	G	N9-C8	7.07	1.42	1.37
38	A1	565	A	C8-N7	-7.07	1.26	1.31
38	A1	615	A	C8-N7	-7.07	1.26	1.31
38	A1	1392	G	C6-N1	7.07	1.44	1.39
38	A1	2200	A	C6-N6	7.07	1.39	1.33
11	B2	153	G	C6-N1	7.07	1.44	1.39
11	B2	207	G	N1-C2	7.07	1.43	1.37
11	B2	729	G	N9-C8	7.07	1.42	1.37
11	B2	933	G	C5-C6	7.07	1.49	1.42
38	A1	218	A	C6-N1	7.07	1.40	1.35
38	A1	2477	G	C2-N3	7.07	1.38	1.32
38	A1	2679	A	C6-N6	7.07	1.39	1.33
39	A3	122	C	C5-C6	7.07	1.40	1.34
11	B2	33	U	O4'-C1'	-7.07	1.32	1.41
11	B2	1152	C	N1-C6	7.07	1.41	1.37
38	A1	1465	A	N9-C8	-7.07	1.32	1.37
11	B2	583	G	C2'-C1'	-7.07	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	610	G	N9-C8	7.07	1.42	1.37
11	B2	1099	A	N9-C8	7.07	1.43	1.37
26	BN	20	ARG	CZ-NH2	7.07	1.42	1.33
38	A1	382	G	C4'-C3'	7.07	1.60	1.53
38	A1	1866	G	N1-C2	7.07	1.43	1.37
38	A1	2165	A	C4'-C3'	-7.07	1.45	1.53
38	A1	322	C	C2'-C1'	-7.07	1.45	1.53
38	A1	998	G	N3-C4	7.07	1.40	1.35
38	A1	1449	C	C2-N3	7.07	1.41	1.35
11	B2	418	G	C2-N2	7.06	1.41	1.34
38	A1	802	G	C4'-C3'	-7.06	1.45	1.53
38	A1	2162	G	N1-C2	7.06	1.43	1.37
38	A1	2321	A	C5'-C4'	7.06	1.59	1.51
43	AB	185	ARG	CZ-NH1	7.06	1.42	1.33
10	B1	28	C	C4-N4	7.06	1.40	1.33
38	A1	763	A	P-O5'	-7.06	1.52	1.59
38	A1	1080	G	C5-C6	7.06	1.49	1.42
38	A1	1485	A	N9-C8	7.06	1.43	1.37
38	A1	1704	C	N1-C6	7.06	1.41	1.37
38	A1	1938	G	C6-N1	7.06	1.44	1.39
38	A1	2200	A	N7-C5	-7.06	1.35	1.39
10	B1	43	G	N1-C2	7.06	1.43	1.37
38	A1	1255	C	C4-N4	7.06	1.40	1.33
38	A1	1419	G	C6-N1	7.06	1.44	1.39
38	A1	1422	G	C3'-O3'	7.06	1.52	1.42
38	A1	1856	G	N1-C2	7.06	1.43	1.37
38	A1	2488	C	N1-C6	7.06	1.41	1.37
11	B2	347	G	C4'-C3'	7.06	1.60	1.53
38	A1	69	C	P-O5'	-7.06	1.52	1.59
38	A1	678	G	C2-N3	7.06	1.38	1.32
38	A1	892	U	N3-C4	7.06	1.44	1.38
38	A1	1415	C	N3-C4	7.06	1.38	1.33
38	A1	2140	C	C4-C5	-7.06	1.37	1.43
38	A1	2993	G	C4'-C3'	7.06	1.60	1.53
11	B2	636	G	N9-C4	-7.06	1.32	1.38
11	B2	983	G	N9-C8	7.06	1.42	1.37
38	A1	222	A	C6-N6	7.06	1.39	1.33
38	A1	1865	U	C5-C6	-7.06	1.27	1.34
38	A1	2275	G	C6-N1	7.06	1.44	1.39
38	A1	2312	U	N1-C6	7.06	1.44	1.38
38	A1	3034	C	C4-N4	7.06	1.40	1.33
11	B2	347	G	C6-N1	7.06	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	760	C	C4-N4	7.06	1.40	1.33
11	B2	813	G	C5-C4	7.06	1.43	1.38
38	A1	1093	G	N9-C8	-7.06	1.32	1.37
38	A1	2026	C	C3'-C2'	-7.06	1.45	1.52
10	B1	37	A	N9-C4	7.05	1.42	1.37
11	B2	218	C	C2-N3	7.05	1.41	1.35
11	B2	255	G	N1-C2	7.05	1.43	1.37
11	B2	300	G	N9-C8	7.05	1.42	1.37
11	B2	352	A	P-O5'	-7.05	1.52	1.59
11	B2	662	C	C4-N4	-7.05	1.27	1.33
11	B2	918	A	C8-N7	-7.05	1.26	1.31
11	B2	1195	U	N3-C4	7.05	1.44	1.38
38	A1	570	G	N1-C2	7.05	1.43	1.37
38	A1	689	U	C5'-C4'	7.05	1.59	1.51
38	A1	2228	G	C2-N3	7.05	1.38	1.32
38	A1	2581	G	C5'-C4'	7.05	1.59	1.51
39	A3	68	C	N3-C4	7.05	1.38	1.33
11	B2	1115	G	N9-C8	7.05	1.42	1.37
38	A1	1026	A	C2'-C1'	7.05	1.61	1.53
38	A1	2680	A	N3-C4	-7.05	1.30	1.34
11	B2	300	G	C2-N2	7.05	1.41	1.34
11	B2	1059	C	N3-C4	7.05	1.38	1.33
11	B2	1294	G	N7-C5	-7.05	1.35	1.39
38	A1	366	G	C2'-C1'	-7.05	1.45	1.53
38	A1	385	U	C2-O2	7.05	1.28	1.22
38	A1	661	G	C3'-C2'	7.05	1.60	1.52
38	A1	1228	G	C6-N1	7.05	1.44	1.39
38	A1	875	G	C2'-C1'	-7.05	1.45	1.53
38	A1	1435	G	C2'-C1'	-7.05	1.45	1.53
38	A1	1581	A	P-O5'	-7.05	1.52	1.59
38	A1	2574	G	P-O5'	-7.05	1.52	1.59
11	B2	577	C	C4-N4	7.05	1.40	1.33
11	B2	353	G	C2'-C1'	-7.05	1.45	1.53
11	B2	881	G	O3'-P	-7.05	1.52	1.61
38	A1	557	G	C2'-C1'	-7.05	1.45	1.53
38	A1	1699	U	C4-C5	-7.05	1.37	1.43
38	A1	2099	G	C6-N1	7.05	1.44	1.39
38	A1	2373	G	C8-N7	-7.05	1.26	1.30
38	A1	2476	A	C8-N7	-7.05	1.26	1.31
11	B2	531	G	N9-C4	-7.04	1.32	1.38
11	B2	1018	C	C4'-C3'	-7.04	1.45	1.53
16	BD	138	ARG	CZ-NH1	7.04	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	B1	57	C	N3-C4	7.04	1.38	1.33
11	B2	208	U	N3-C4	7.04	1.44	1.38
11	B2	742	U	C2-N3	7.04	1.42	1.37
11	B2	1254	C	C2-N3	-7.04	1.30	1.35
11	B2	1345	G	C5-C4	-7.04	1.33	1.38
38	A1	2102	A	C3'-O3'	7.04	1.52	1.42
11	B2	67	C	C2-N3	7.04	1.41	1.35
11	B2	544	C	C2-N3	7.04	1.41	1.35
38	A1	210	A	O3'-P	-7.04	1.52	1.61
38	A1	1492	C	C2'-C1'	-7.04	1.45	1.53
11	B2	1413	G	C2-N3	7.04	1.38	1.32
38	A1	209	G	C5-C4	7.04	1.43	1.38
38	A1	2417	G	N1-C2	-7.04	1.32	1.37
11	B2	1243	C	C4'-O4'	7.04	1.54	1.45
38	A1	103	A	N3-C4	7.04	1.39	1.34
38	A1	946	U	N1-C6	7.04	1.44	1.38
38	A1	1665	G	C6-N1	7.04	1.44	1.39
38	A1	2890	A	N9-C8	-7.04	1.32	1.37
39	A3	42	A	N7-C5	-7.04	1.35	1.39
38	A1	137	A	C1'-N9	7.04	1.59	1.48
38	A1	1371	U	N1-C6	7.04	1.44	1.38
11	B2	237	C	C4'-C3'	7.03	1.60	1.53
30	BR	62	ARG	NE-CZ	7.03	1.42	1.33
38	A1	254	A	C4'-C3'	7.03	1.60	1.53
38	A1	278	C	C2-N3	7.03	1.41	1.35
38	A1	292	U	C4'-C3'	7.03	1.60	1.53
38	A1	479	G	C2-N3	7.03	1.38	1.32
38	A1	1333	G	C8-N7	7.03	1.35	1.30
38	A1	1812	A	C5'-C4'	7.03	1.59	1.51
38	A1	1175	C	N1-C6	7.03	1.41	1.37
38	A1	2983	G	N9-C8	-7.03	1.32	1.37
38	A1	1343	C	C2-N3	7.03	1.41	1.35
38	A1	673	A	C6-N6	7.03	1.39	1.33
38	A1	1745	U	C5'-C4'	7.03	1.59	1.51
38	A1	1811	G	C2-N3	7.03	1.38	1.32
38	A1	2869	U	C5'-C4'	7.03	1.59	1.51
11	B2	1354	A	O3'-P	7.03	1.69	1.61
38	A1	314	A	N7-C5	-7.03	1.35	1.39
38	A1	524	C	N3-C4	7.03	1.38	1.33
38	A1	1031	C	P-O5'	7.03	1.66	1.59
38	A1	2247	G	C2-N3	7.03	1.38	1.32
38	A1	2879	G	N1-C2	7.03	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	131	G	N3-C4	7.02	1.40	1.35
11	B2	629	U	O3'-P	-7.02	1.52	1.61
38	A1	2599	C	C5-C6	7.02	1.40	1.34
11	B2	489	C	N3-C4	7.02	1.38	1.33
38	A1	1150	G	N7-C5	-7.02	1.35	1.39
38	A1	1900	U	C2'-C1'	-7.02	1.45	1.53
38	A1	2122	G	C2-N3	7.02	1.38	1.32
38	A1	2297	C	C1'-N1	7.02	1.59	1.48
38	A1	2359	G	N7-C5	-7.02	1.35	1.39
38	A1	2518	G	C6-N1	7.02	1.44	1.39
38	A1	2787	G	C5-C4	7.02	1.43	1.38
39	A3	24	C	C2-N3	-7.02	1.30	1.35
11	B2	1416	C	C2'-C1'	-7.02	1.45	1.53
38	A1	974	U	C1'-N1	7.02	1.59	1.48
38	A1	2390	G	N1-C2	7.02	1.43	1.37
11	B2	1338	C	N1-C6	7.02	1.41	1.37
38	A1	123	A	C5'-C4'	7.02	1.59	1.51
38	A1	382	G	C8-N7	7.02	1.35	1.30
38	A1	1001	C	C5'-C4'	7.02	1.59	1.51
38	A1	1327	C	N1-C6	7.02	1.41	1.37
38	A1	2204	C	C5-C6	-7.02	1.28	1.34
38	A1	2422	G	C6-N1	7.02	1.44	1.39
38	A1	2466	C	C2'-C1'	7.02	1.61	1.53
38	A1	2949	G	N9-C4	7.02	1.43	1.38
11	B2	1383	A	N7-C5	-7.02	1.35	1.39
23	BK	84	ARG	NE-CZ	7.02	1.42	1.33
38	A1	678	G	N7-C5	-7.02	1.35	1.39
38	A1	2588	C	N1-C6	7.02	1.41	1.37
11	B2	894	A	O4'-C1'	7.02	1.50	1.41
38	A1	609	G	C3'-O3'	7.02	1.51	1.42
11	B2	212	G	N3-C4	-7.01	1.30	1.35
11	B2	253	G	C2-N3	7.01	1.38	1.32
11	B2	1181	G	C2-N3	7.01	1.38	1.32
38	A1	2084	A	C6-N1	7.01	1.40	1.35
38	A1	470	A	C6-N1	7.01	1.40	1.35
38	A1	1006	A	C3'-C2'	-7.01	1.45	1.52
38	A1	2409	C	C4-N4	7.01	1.40	1.33
11	B2	1448	A	C6-N1	7.01	1.40	1.35
38	A1	714	C	P-O5'	7.01	1.66	1.59
38	A1	1657	G	C8-N7	-7.01	1.26	1.30
38	A1	1825	G	C5-C4	-7.01	1.33	1.38
38	A1	2138	A	C6-N6	7.01	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	577	C	C5'-C4'	7.01	1.59	1.51
11	B2	681	G	C5-C6	-7.01	1.35	1.42
38	A1	38	U	C2-N3	7.01	1.42	1.37
38	A1	1028	G	N3-C4	-7.01	1.30	1.35
38	A1	1143	A	C6-N1	7.01	1.40	1.35
38	A1	1647	C	P-O5'	-7.01	1.52	1.59
38	A1	3009	C	N1-C6	-7.01	1.32	1.37
11	B2	393	A	C5-C4	7.01	1.43	1.38
38	A1	557	G	N9-C4	-7.01	1.32	1.38
38	A1	996	U	N3-C4	7.01	1.44	1.38
38	A1	1090	G	C2-N2	7.01	1.41	1.34
11	B2	791	G	C4'-O4'	-7.01	1.36	1.45
38	A1	2084	A	N9-C8	7.01	1.43	1.37
38	A1	2463	G	C5-C4	7.01	1.43	1.38
38	A1	2873	G	C2'-C1'	-7.00	1.45	1.53
57	Aj	46	GLY	CA-C	-7.00	1.40	1.51
11	B2	59	C	N1-C2	-7.00	1.33	1.40
11	B2	1052	U	N3-C4	7.00	1.44	1.38
30	BR	112	ARG	CZ-NH2	7.00	1.42	1.33
38	A1	638	A	N7-C5	-7.00	1.35	1.39
38	A1	1100	G	N7-C5	-7.00	1.35	1.39
38	A1	1358	C	N1-C6	7.00	1.41	1.37
38	A1	1659	G	N3-C4	-7.00	1.30	1.35
38	A1	1959	C	N1-C6	7.00	1.41	1.37
38	A1	2104	G	C8-N7	-7.00	1.26	1.30
38	A1	2725	U	C4-O4	-7.00	1.18	1.23
38	A1	2797	C	N1-C6	7.00	1.41	1.37
11	B2	1381	G	C6-N1	7.00	1.44	1.39
38	A1	880	U	N3-C4	7.00	1.44	1.38
38	A1	1239	C	C5'-C4'	7.00	1.59	1.51
38	A1	2675	C	C4-N4	7.00	1.40	1.33
38	A1	1393	C	C4-N4	7.00	1.40	1.33
38	A1	2196	C	C5'-C4'	7.00	1.59	1.51
38	A1	2354	A	C5-C4	-7.00	1.33	1.38
11	B2	271	G	C2'-C1'	-7.00	1.45	1.53
11	B2	359	A	N3-C4	-7.00	1.30	1.34
11	B2	364	U	C4-O4	-7.00	1.18	1.23
11	B2	1381	G	C8-N7	7.00	1.35	1.30
38	A1	303	A	N9-C4	7.00	1.42	1.37
38	A1	890	G	C6-N1	7.00	1.44	1.39
38	A1	1175	C	N3-C4	7.00	1.38	1.33
38	A1	1218	C	C4-N4	7.00	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1464	A	N7-C5	-7.00	1.35	1.39
38	A1	1631	A	C4'-C3'	7.00	1.60	1.53
38	A1	1723	A	P-O5'	7.00	1.66	1.59
11	B2	1310	C	N3-C4	7.00	1.38	1.33
38	A1	193	A	C5-C4	7.00	1.43	1.38
38	A1	571	G	C5-C4	-7.00	1.33	1.38
66	AY	133	SER	CA-CB	7.00	1.63	1.52
11	B2	965	G	C2-N3	7.00	1.38	1.32
11	B2	1477	U	N3-C4	7.00	1.44	1.38
11	B2	1335	A	N9-C8	-6.99	1.32	1.37
23	BK	27	ARG	CZ-NH1	6.99	1.42	1.33
38	A1	623	G	C2'-C1'	-6.99	1.45	1.53
38	A1	748	G	O4'-C1'	6.99	1.50	1.41
38	A1	813	G	C6-N1	6.99	1.44	1.39
38	A1	1341	U	N3-C4	6.99	1.44	1.38
38	A1	2352	G	O4'-C1'	6.99	1.50	1.41
11	B2	63	G	C8-N7	-6.99	1.26	1.30
38	A1	2220	C	N3-C4	6.99	1.38	1.33
38	A1	725	G	C2-N2	6.99	1.41	1.34
38	A1	2257	A	N3-C4	-6.99	1.30	1.34
38	A1	2335	G	N7-C5	-6.99	1.35	1.39
38	A1	2440	C	P-O5'	-6.99	1.52	1.59
38	A1	2452	C	C4-N4	6.99	1.40	1.33
38	A1	1173	G	C5-C4	-6.99	1.33	1.38
38	A1	1830	U	C4-C5	6.99	1.49	1.43
11	B2	431	U	C1'-N1	6.99	1.59	1.48
38	A1	1735	G	C5'-C4'	6.99	1.59	1.51
38	A1	2556	C	O3'-P	-6.99	1.52	1.61
11	B2	77	G	N7-C5	-6.99	1.35	1.39
38	A1	841	U	C4-C5	6.99	1.49	1.43
38	A1	1387	G	C5'-C4'	6.99	1.59	1.51
38	A1	1617	G	O4'-C1'	-6.99	1.32	1.41
38	A1	2105	A	C5'-C4'	6.99	1.59	1.51
38	A1	2753	G	C4'-C3'	6.99	1.60	1.53
11	B2	963	A	N9-C4	6.98	1.42	1.37
11	B2	1410	G	N9-C4	6.98	1.43	1.38
38	A1	1452	G	C5-C6	-6.98	1.35	1.42
39	A3	2	G	C5-C4	-6.98	1.33	1.38
11	B2	1220	G	C6-N1	6.98	1.44	1.39
38	A1	1445	G	C2-N2	6.98	1.41	1.34
38	A1	1637	C	O3'-P	6.98	1.69	1.61
38	A1	2602	G	N9-C4	6.98	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2779	G	N9-C8	6.98	1.42	1.37
10	B1	60	A	P-O5'	-6.98	1.52	1.59
11	B2	1383	A	C6-N6	6.98	1.39	1.33
38	A1	1058	A	N3-C4	-6.98	1.30	1.34
38	A1	236	G	C2-N3	6.98	1.38	1.32
11	B2	230	C	C5'-C4'	6.98	1.59	1.51
11	B2	744	A	N9-C4	6.98	1.42	1.37
11	B2	778	G	C6-O6	-6.98	1.17	1.24
11	B2	917	A	N7-C5	-6.98	1.35	1.39
27	BO	145	ARG	CA-CB	6.98	1.69	1.53
38	A1	349	A	N9-C4	6.98	1.42	1.37
11	B2	481	C	N1-C6	6.98	1.41	1.37
38	A1	1043	U	N1-C6	6.98	1.44	1.38
38	A1	1254	C	C2'-C1'	6.98	1.61	1.53
38	A1	1370	G	C8-N7	-6.98	1.26	1.30
38	A1	1993	A	O3'-P	-6.98	1.52	1.61
38	A1	2250	G	N7-C5	-6.98	1.35	1.39
11	B2	153	G	O3'-P	-6.97	1.52	1.61
11	B2	259	A	N9-C4	6.97	1.42	1.37
11	B2	979	U	C3'-C2'	-6.97	1.45	1.52
11	B2	1313	G	P-O5'	-6.97	1.52	1.59
38	A1	2019	C	N3-C4	6.97	1.38	1.33
11	B2	168	G	C5-C4	6.97	1.43	1.38
11	B2	470	G	C4'-C3'	6.97	1.60	1.53
11	B2	618	G	P-O5'	-6.97	1.52	1.59
16	BD	25	ARG	NE-CZ	6.97	1.42	1.33
38	A1	2011	U	N1-C2	-6.97	1.32	1.38
38	A1	2613	C	C2'-C1'	-6.97	1.45	1.53
38	A1	2986	G	C8-N7	-6.97	1.26	1.30
39	A3	5	G	C5-C6	6.97	1.49	1.42
39	A3	30	G	N3-C4	-6.97	1.30	1.35
38	A1	542	A	P-O5'	-6.97	1.52	1.59
38	A1	1405	G	C8-N7	6.97	1.35	1.30
11	B2	790	G	N9-C8	6.97	1.42	1.37
11	B2	825	C	C4'-O4'	6.97	1.54	1.45
38	A1	1117	C	N3-C4	6.97	1.38	1.33
38	A1	1199	U	N1-C2	6.97	1.44	1.38
38	A1	1706	G	N1-C2	6.97	1.43	1.37
38	A1	2165	A	C2'-C1'	-6.97	1.45	1.53
38	A1	2330	A	N9-C8	-6.97	1.32	1.37
38	A1	2446	C	C5-C6	-6.97	1.28	1.34
11	B2	199	A	C1'-N9	6.97	1.59	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	469	U	N1-C2	6.97	1.44	1.38
11	B2	582	G	C2-N3	6.97	1.38	1.32
11	B2	737	C	O3'-P	-6.97	1.52	1.61
11	B2	783	G	C2'-C1'	-6.97	1.45	1.53
38	A1	112	U	C2-N3	6.97	1.42	1.37
38	A1	585	G	C8-N7	-6.97	1.26	1.30
38	A1	2411	C	C3'-C2'	-6.97	1.45	1.52
38	A1	2617	G	C6-N1	6.97	1.44	1.39
11	B2	117	C	C4-N4	6.96	1.40	1.33
38	A1	792	A	N9-C4	-6.96	1.33	1.37
38	A1	1659	G	C2'-C1'	-6.96	1.45	1.53
39	A3	19	G	C5-C6	-6.96	1.35	1.42
38	A1	2380	A	N9-C4	-6.96	1.33	1.37
38	A1	399	C	N1-C6	6.96	1.41	1.37
38	A1	2272	G	P-O5'	-6.96	1.52	1.59
38	A1	2450	A	C6-N6	6.96	1.39	1.33
38	A1	2999	G	C5-C6	-6.96	1.35	1.42
58	Ak	172	GLU	CD-OE2	6.96	1.33	1.25
11	B2	46	A	C8-N7	6.96	1.36	1.31
38	A1	1804	G	C2'-C1'	-6.96	1.45	1.53
38	A1	2287	C	C2'-C1'	-6.96	1.45	1.53
38	A1	2366	G	N3-C4	6.96	1.40	1.35
11	B2	491	G	C5-C4	6.96	1.43	1.38
11	B2	924	U	C4-O4	6.96	1.29	1.23
38	A1	393	C	C4-N4	6.96	1.40	1.33
38	A1	2685	G	N7-C5	-6.96	1.35	1.39
11	B2	400	G	C8-N7	6.96	1.35	1.30
11	B2	1262	U	C5'-C4'	6.96	1.59	1.51
38	A1	122	G	C5-C4	6.96	1.43	1.38
38	A1	785	C	O3'-P	-6.96	1.52	1.61
38	A1	1119	A	O3'-P	-6.96	1.52	1.61
38	A1	1234	A	C8-N7	-6.96	1.26	1.31
38	A1	1558	U	C3'-C2'	-6.96	1.45	1.52
38	A1	2021	G	C2'-C1'	-6.96	1.45	1.53
38	A1	2289	A	O3'-P	-6.96	1.52	1.61
38	A1	2323	C	P-O5'	-6.96	1.52	1.59
38	A1	2331	A	C6-N6	6.96	1.39	1.33
38	A1	2545	A	N9-C4	6.96	1.42	1.37
8	AW	7	ARG	CD-NE	6.96	1.58	1.46
11	B2	575	A	C6-N6	6.96	1.39	1.33
11	B2	1260	G	C5'-C4'	6.96	1.59	1.51
11	B2	1403	U	C5'-C4'	6.96	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	451	A	C4'-C3'	6.95	1.60	1.53
11	B2	1026	A	C6-N6	6.95	1.39	1.33
38	A1	283	U	P-O5'	-6.95	1.52	1.59
38	A1	1911	G	N9-C8	6.95	1.42	1.37
38	A1	2096	G	C2-N3	6.95	1.38	1.32
38	A1	2131	C	C4-N4	6.95	1.40	1.33
38	A1	2356	U	C3'-O3'	6.95	1.51	1.42
11	B2	141	C	O4'-C1'	6.95	1.50	1.41
11	B2	521	G	C8-N7	-6.95	1.26	1.30
11	B2	690	C	N1-C2	6.95	1.47	1.40
38	A1	466	C	C2'-C1'	-6.95	1.45	1.53
38	A1	1071	A	N7-C5	-6.95	1.35	1.39
38	A1	2084	A	C2-N3	-6.95	1.27	1.33
11	B2	1144	G	C4'-O4'	-6.95	1.36	1.45
11	B2	1180	G	P-O5'	6.95	1.66	1.59
11	B2	1463	A	C2'-C1'	-6.95	1.45	1.53
38	A1	256	G	C2-N3	6.95	1.38	1.32
38	A1	351	C	C5'-C4'	6.95	1.59	1.51
38	A1	1609	G	C6-N1	6.95	1.44	1.39
38	A1	1911	G	N7-C5	-6.95	1.35	1.39
38	A1	2639	G	N9-C8	-6.95	1.32	1.37
11	B2	434	A	C3'-C2'	-6.95	1.45	1.52
11	B2	1439	G	C2'-C1'	-6.95	1.45	1.53
38	A1	541	A	N9-C4	6.95	1.42	1.37
38	A1	990	G	C2-N3	6.95	1.38	1.32
38	A1	1045	A	C8-N7	-6.95	1.26	1.31
38	A1	1227	A	N1-C2	6.95	1.40	1.34
38	A1	2377	C	C5'-C4'	6.95	1.59	1.51
38	A1	223	U	C3'-C2'	-6.94	1.45	1.52
38	A1	676	G	C5-C6	-6.94	1.35	1.42
38	A1	576	G	N3-C4	-6.94	1.30	1.35
38	A1	777	A	C6-N1	6.94	1.40	1.35
38	A1	942	U	C2'-C1'	-6.94	1.45	1.53
38	A1	2723	G	C6-N1	6.94	1.44	1.39
38	A1	3030	A	C6-N6	6.94	1.39	1.33
60	AM	183	ARG	NE-CZ	6.94	1.42	1.33
11	B2	264	C	P-O5'	-6.94	1.52	1.59
11	B2	1246	U	N3-C4	6.94	1.44	1.38
38	A1	379	U	C5'-C4'	6.94	1.59	1.51
38	A1	973	C	C5'-C4'	6.94	1.59	1.51
38	A1	1067	G	C8-N7	6.94	1.35	1.30
38	A1	1858	G	O3'-P	-6.94	1.52	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2032	G	C4'-C3'	6.94	1.60	1.53
38	A1	2170	C	C4-C5	-6.94	1.37	1.43
65	AV	28	ARG	CZ-NH1	6.94	1.42	1.33
11	B2	431	U	N1-C6	6.94	1.44	1.38
38	A1	1562	U	C1'-N1	6.94	1.59	1.48
38	A1	2676	A	C2'-C1'	-6.94	1.45	1.53
11	B2	559	G	C3'-C2'	-6.94	1.45	1.52
11	B2	886	G	C2-N3	6.94	1.38	1.32
38	A1	810	A	N3-C4	-6.94	1.30	1.34
38	A1	1609	G	C2-N2	6.94	1.41	1.34
38	A1	1653	U	N1-C6	-6.94	1.31	1.38
11	B2	1293	A	P-O5'	-6.94	1.52	1.59
38	A1	793	C	C2'-C1'	-6.94	1.45	1.53
38	A1	2294	A	N7-C5	-6.94	1.35	1.39
38	A1	2451	G	C5'-C4'	6.94	1.59	1.51
38	A1	2879	G	C2'-C1'	-6.94	1.45	1.53
11	B2	106	A	C2-N3	-6.93	1.27	1.33
38	A1	304	G	N7-C5	-6.93	1.35	1.39
38	A1	361	G	C4'-C3'	6.93	1.60	1.53
38	A1	858	G	C2-N3	6.93	1.38	1.32
38	A1	1171	G	C5-C4	6.93	1.43	1.38
38	A1	1659	G	N9-C8	6.93	1.42	1.37
38	A1	1940	U	C4-C5	6.93	1.49	1.43
38	A1	1974	G	N3-C4	6.93	1.40	1.35
38	A1	2404	G	C2'-C1'	-6.93	1.45	1.53
38	A1	2851	A	C8-N7	-6.93	1.26	1.31
11	B2	99	C	N1-C6	-6.93	1.32	1.37
11	B2	479	C	C3'-O3'	6.93	1.51	1.42
11	B2	810	G	N7-C5	-6.93	1.35	1.39
38	A1	9	A	P-O5'	6.93	1.66	1.59
38	A1	400	U	N1-C2	6.93	1.44	1.38
38	A1	1394	G	C5'-C4'	6.93	1.59	1.51
38	A1	1812	A	C4'-O4'	6.93	1.54	1.45
38	A1	1970	G	C5'-C4'	6.93	1.59	1.51
38	A1	2580	G	N9-C8	6.93	1.42	1.37
38	A1	1395	G	N1-C2	6.93	1.43	1.37
38	A1	2630	C	O4'-C1'	6.93	1.50	1.41
39	A3	37	U	C4-C5	6.93	1.49	1.43
39	A3	51	U	C2-N3	-6.93	1.32	1.37
10	B1	60	A	N9-C8	6.93	1.43	1.37
11	B2	250	G	N1-C2	6.93	1.43	1.37
11	B2	358	G	N9-C4	6.93	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	373	C	C5'-C4'	6.93	1.59	1.51
11	B2	622	C	C4'-C3'	-6.93	1.45	1.53
38	A1	2182	A	C6-N6	6.93	1.39	1.33
38	A1	2751	C	N3-C4	6.93	1.38	1.33
38	A1	2799	C	C3'-C2'	6.93	1.60	1.52
39	A3	90	A	N7-C5	6.93	1.43	1.39
9	AX	46	TYR	CG-CD1	6.93	1.48	1.39
38	A1	1435	G	N7-C5	-6.93	1.35	1.39
38	A1	2855	G	C3'-C2'	6.93	1.60	1.52
11	B2	740	G	N1-C2	6.93	1.43	1.37
38	A1	1527	G	C2-N3	6.93	1.38	1.32
38	A1	2002	A	C4'-C3'	6.93	1.60	1.53
11	B2	816	G	C6-N1	6.92	1.44	1.39
38	A1	516	A	C8-N7	-6.92	1.26	1.31
38	A1	1508	A	N7-C5	-6.92	1.35	1.39
38	A1	2629	U	N1-C6	-6.92	1.31	1.38
38	A1	2657	A	C2'-C1'	-6.92	1.45	1.53
38	A1	2960	G	O3'-P	-6.92	1.52	1.61
11	B2	270	A	C5-C4	6.92	1.43	1.38
38	A1	1043	U	C5-C6	-6.92	1.27	1.34
11	B2	214	C	C4-C5	6.92	1.48	1.43
11	B2	246	A	N3-C4	6.92	1.39	1.34
11	B2	926	C	C5'-C4'	6.92	1.59	1.51
11	B2	1005	G	C2'-C1'	-6.92	1.45	1.53
38	A1	870	G	O3'-P	-6.92	1.52	1.61
38	A1	1942	G	C5-C4	6.92	1.43	1.38
38	A1	2807	C	N3-C4	6.92	1.38	1.33
38	A1	3042	C	C2'-C1'	-6.92	1.45	1.53
11	B2	1386	C	C4-N4	6.92	1.40	1.33
38	A1	2050	U	O4'-C1'	6.92	1.50	1.41
11	B2	1419	G	C2-N2	6.92	1.41	1.34
38	A1	929	G	N9-C8	6.92	1.42	1.37
38	A1	1301	G	C2'-C1'	-6.92	1.45	1.53
38	A1	1525	G	C2-N3	6.92	1.38	1.32
38	A1	1944	C	C4-N4	6.92	1.40	1.33
38	A1	2455	G	N1-C2	6.92	1.43	1.37
60	AM	75	ARG	NE-CZ	6.92	1.42	1.33
11	B2	594	A	C6-N1	6.92	1.40	1.35
11	B2	716	G	N3-C4	-6.92	1.30	1.35
11	B2	716	G	N9-C4	6.92	1.43	1.38
11	B2	791	G	C1'-N9	6.92	1.59	1.48
11	B2	1394	G	C6-N1	6.92	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	355	G	N1-C2	6.92	1.43	1.37
38	A1	1213	G	C6-N1	6.92	1.44	1.39
38	A1	1351	G	C5-C4	6.92	1.43	1.38
38	A1	1378	G	N7-C5	-6.92	1.35	1.39
11	B2	357	C	C4-N4	6.92	1.40	1.33
11	B2	511	C	N3-C4	6.91	1.38	1.33
38	A1	1213	G	N1-C2	6.91	1.43	1.37
38	A1	1413	A	N9-C4	6.91	1.42	1.37
38	A1	2163	G	C5-C4	6.91	1.43	1.38
11	B2	1423	A	C6-N1	6.91	1.40	1.35
38	A1	481	G	C5'-C4'	6.91	1.59	1.51
38	A1	1727	G	N3-C4	-6.91	1.30	1.35
38	A1	382	G	C6-N1	6.91	1.44	1.39
38	A1	649	A	N9-C4	6.91	1.42	1.37
38	A1	1985	G	N1-C2	6.91	1.43	1.37
11	B2	34	G	C2-N2	6.91	1.41	1.34
11	B2	329	G	N3-C4	6.91	1.40	1.35
11	B2	692	G	N1-C2	6.91	1.43	1.37
38	A1	1428	G	C2-N2	6.91	1.41	1.34
38	A1	1566	G	C2'-C1'	-6.91	1.45	1.53
38	A1	2147	C	C5-C6	6.91	1.39	1.34
38	A1	2434	A	N7-C5	-6.91	1.35	1.39
38	A1	2853	A	C2-N3	-6.91	1.27	1.33
38	A1	446	G	C2'-C1'	-6.91	1.45	1.53
38	A1	2206	G	N9-C8	-6.91	1.33	1.37
38	A1	1302	G	C6-N1	6.91	1.44	1.39
38	A1	1754	A	N1-C2	6.91	1.40	1.34
30	BR	35	GLU	CD-OE2	6.90	1.33	1.25
38	A1	561	C	C4'-C3'	6.90	1.60	1.53
38	A1	633	A	C6-N6	6.90	1.39	1.33
38	A1	1984	G	C2'-C1'	-6.90	1.45	1.53
11	B2	702	G	C5-C4	6.90	1.43	1.38
38	A1	644	G	C8-N7	-6.90	1.26	1.30
38	A1	663	A	O3'-P	-6.90	1.52	1.61
38	A1	1027	A	C5'-C4'	6.90	1.59	1.51
38	A1	2162	G	C6-N1	6.90	1.44	1.39
38	A1	2343	G	P-O5'	-6.90	1.52	1.59
38	A1	2413	G	N1-C2	6.90	1.43	1.37
11	B2	664	G	C6-N1	6.90	1.44	1.39
38	A1	433	C	N1-C6	6.90	1.41	1.37
38	A1	1892	G	N7-C5	-6.90	1.35	1.39
38	A1	2448	A	O4'-C1'	-6.90	1.32	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	11	A	C4'-C3'	-6.90	1.45	1.53
38	A1	717	A	C6-N6	6.90	1.39	1.33
38	A1	2260	C	C2-N3	6.90	1.41	1.35
11	B2	379	A	N7-C5	-6.90	1.35	1.39
11	B2	394	C	N3-C4	6.90	1.38	1.33
11	B2	537	G	C2-N3	6.90	1.38	1.32
11	B2	666	G	C2-N3	6.90	1.38	1.32
11	B2	836	G	C3'-C2'	6.90	1.60	1.52
38	A1	481	G	N1-C2	6.90	1.43	1.37
38	A1	998	G	C2-N3	6.90	1.38	1.32
38	A1	1454	G	N7-C5	6.90	1.43	1.39
38	A1	1961	G	C5-C6	-6.90	1.35	1.42
38	A1	2967	C	P-O5'	-6.90	1.52	1.59
16	BD	160	PHE	CG-CD2	6.90	1.49	1.38
38	A1	325	G	C2'-C1'	-6.90	1.45	1.53
38	A1	1486	G	N3-C4	-6.90	1.30	1.35
38	A1	2083	G	C6-N1	-6.90	1.34	1.39
11	B2	320	G	C6-N1	6.89	1.44	1.39
11	B2	369	A	O3'-P	-6.89	1.52	1.61
11	B2	379	A	C5'-C4'	6.89	1.59	1.51
11	B2	1205	G	C8-N7	6.89	1.35	1.30
11	B2	188	C	P-O5'	-6.89	1.52	1.59
11	B2	1036	G	C5-C6	-6.89	1.35	1.42
11	B2	1072	C	C2'-C1'	-6.89	1.45	1.53
38	A1	1121	C	O3'-P	-6.89	1.52	1.61
38	A1	1806	C	O4'-C1'	6.89	1.50	1.41
38	A1	2464	G	C5-C4	6.89	1.43	1.38
38	A1	2832	G	P-O5'	-6.89	1.52	1.59
38	A1	2293	G	N1-C2	6.89	1.43	1.37
38	A1	3022	C	C4'-C3'	6.89	1.60	1.53
39	A3	63	G	C5'-C4'	6.89	1.59	1.51
11	B2	597	C	C4-N4	6.89	1.40	1.33
11	B2	844	G	N3-C4	-6.89	1.30	1.35
11	B2	1050	G	N1-C2	6.89	1.43	1.37
38	A1	171	A	C4'-C3'	6.89	1.60	1.53
38	A1	464	C	C4'-C3'	6.89	1.60	1.53
38	A1	735	A	C4'-C3'	-6.89	1.45	1.53
38	A1	2456	C	C2'-C1'	-6.89	1.45	1.53
11	B2	523	C	C2'-C1'	-6.89	1.45	1.53
38	A1	201	C	N3-C4	6.89	1.38	1.33
38	A1	2750	C	O3'-P	-6.89	1.52	1.61
11	B2	752	G	N1-C2	6.89	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1060	G	N1-C2	6.89	1.43	1.37
38	A1	581	A	N7-C5	-6.89	1.35	1.39
38	A1	869	A	N3-C4	-6.89	1.30	1.34
38	A1	1799	G	C4'-O4'	-6.89	1.36	1.45
38	A1	2329	A	N9-C8	-6.89	1.32	1.37
38	A1	3016	G	O3'-P	-6.89	1.52	1.61
50	AF	30	GLY	N-CA	-6.89	1.35	1.46
11	B2	798	U	C4-C5	6.88	1.49	1.43
38	A1	1032	C	N3-C4	6.88	1.38	1.33
38	A1	2443	G	N9-C8	-6.88	1.33	1.37
38	A1	2508	G	C2-N3	6.88	1.38	1.32
11	B2	52	U	N1-C6	-6.88	1.31	1.38
38	A1	19	G	C5-C6	-6.88	1.35	1.42
11	B2	791	G	N7-C5	-6.88	1.35	1.39
11	B2	1321	U	C2'-C1'	-6.88	1.45	1.53
38	A1	1202	G	N3-C4	-6.88	1.30	1.35
38	A1	1631	A	C3'-C2'	-6.88	1.45	1.52
38	A1	2238	G	N7-C5	-6.88	1.35	1.39
38	A1	2281	A	C6-N6	6.88	1.39	1.33
11	B2	969	A	C6-N6	6.88	1.39	1.33
11	B2	1365	G	C8-N7	6.88	1.35	1.30
38	A1	394	A	N7-C5	6.88	1.43	1.39
38	A1	404	G	C4'-O4'	-6.88	1.36	1.45
38	A1	2517	U	N1-C6	6.88	1.44	1.38
11	B2	678	G	N1-C2	6.88	1.43	1.37
11	B2	887	G	C6-N1	6.88	1.44	1.39
11	B2	1116	G	N7-C5	-6.88	1.35	1.39
38	A1	1394	G	C8-N7	-6.88	1.26	1.30
38	A1	1504	C	C2'-C1'	-6.88	1.45	1.53
38	A1	2565	A	C5'-C4'	6.88	1.59	1.51
41	AA	93	SER	CA-CB	6.88	1.63	1.52
11	B2	47	A	N9-C4	6.88	1.42	1.37
11	B2	366	C	C3'-C2'	-6.88	1.45	1.52
38	A1	293	G	C8-N7	-6.88	1.26	1.30
38	A1	404	G	C2-N3	6.88	1.38	1.32
38	A1	642	G	C3'-C2'	-6.88	1.45	1.52
38	A1	1678	A	C5-C4	6.88	1.43	1.38
38	A1	2214	U	C4'-O4'	-6.88	1.36	1.45
39	A3	90	A	C8-N7	6.88	1.36	1.31
43	AB	10	ARG	CZ-NH2	6.88	1.42	1.33
11	B2	32	A	C6-N6	6.88	1.39	1.33
38	A1	1419	G	C8-N7	6.88	1.35	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1560	G	N9-C8	-6.88	1.33	1.37
11	B2	491	G	N9-C4	-6.87	1.32	1.38
11	B2	933	G	C2-N3	6.87	1.38	1.32
38	A1	208	A	C6-N1	6.87	1.40	1.35
38	A1	926	C	C5'-C4'	6.87	1.59	1.51
38	A1	1528	A	C8-N7	6.87	1.36	1.31
38	A1	1990	U	P-O5'	-6.87	1.52	1.59
38	A1	2223	G	P-O5'	-6.87	1.52	1.59
38	A1	2813	G	C3'-O3'	6.87	1.51	1.42
38	A1	2876	G	N3-C4	-6.87	1.30	1.35
10	B1	32	A	N7-C5	-6.87	1.35	1.39
11	B2	1285	C	P-O5'	-6.87	1.52	1.59
38	A1	2248	G	N9-C8	6.87	1.42	1.37
11	B2	992	G	N1-C2	6.87	1.43	1.37
38	A1	1836	A	N7-C5	-6.87	1.35	1.39
38	A1	2949	G	P-O5'	-6.87	1.52	1.59
11	B2	137	A	N7-C5	-6.87	1.35	1.39
11	B2	822	A	N7-C5	-6.87	1.35	1.39
38	A1	1444	A	C5'-C4'	6.87	1.59	1.51
11	B2	1124	G	N3-C4	-6.87	1.30	1.35
38	A1	1891	C	C5'-C4'	6.87	1.59	1.51
11	B2	317	A	N7-C5	-6.87	1.35	1.39
11	B2	871	A	C6-N6	6.87	1.39	1.33
11	B2	949	G	C3'-O3'	6.87	1.51	1.42
11	B2	1009	G	C4'-C3'	6.87	1.60	1.53
38	A1	2306	C	N1-C6	6.87	1.41	1.37
38	A1	2416	G	N3-C4	-6.87	1.30	1.35
38	A1	2580	G	C4'-C3'	6.87	1.60	1.53
38	A1	2731	C	O3'-P	-6.87	1.52	1.61
46	AD	27	ARG	CZ-NH2	6.87	1.42	1.33
11	B2	621	G	C8-N7	6.86	1.35	1.30
11	B2	1130	A	N9-C8	-6.86	1.32	1.37
11	B2	1297	G	C2'-C1'	-6.86	1.45	1.53
38	A1	180	A	C5-C4	-6.86	1.33	1.38
38	A1	548	U	O3'-P	-6.86	1.52	1.61
38	A1	567	G	C2'-C1'	-6.86	1.45	1.53
38	A1	872	G	C8-N7	-6.86	1.26	1.30
38	A1	1944	C	N1-C2	-6.86	1.33	1.40
38	A1	2709	C	C2-N3	-6.86	1.30	1.35
51	Ag	8	GLU	CD-OE1	6.86	1.33	1.25
11	B2	655	A	N3-C4	6.86	1.39	1.34
11	B2	1477	U	C4'-C3'	6.86	1.60	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1186	G	C4'-C3'	-6.86	1.45	1.53
38	A1	2103	C	N3-C4	6.86	1.38	1.33
38	A1	2115	U	C4-C5	6.86	1.49	1.43
38	A1	2723	G	C2-N3	6.86	1.38	1.32
38	A1	2888	G	C6-N1	6.86	1.44	1.39
11	B2	284	A	N7-C5	-6.86	1.35	1.39
38	A1	698	U	C2-N3	6.86	1.42	1.37
38	A1	1083	G	C2-N3	6.86	1.38	1.32
38	A1	1354	G	C8-N7	6.86	1.35	1.30
38	A1	2250	G	N1-C2	6.86	1.43	1.37
38	A1	2379	G	O3'-P	-6.86	1.52	1.61
38	A1	2537	G	P-O5'	-6.86	1.52	1.59
38	A1	2859	U	P-O5'	6.86	1.66	1.59
38	A1	2998	G	C5'-C4'	6.86	1.59	1.51
10	B1	39	A	O3'-P	-6.86	1.52	1.61
38	A1	2134	G	N3-C4	-6.86	1.30	1.35
38	A1	1555	G	C2-N3	6.86	1.38	1.32
38	A1	1881	A	C6-N6	6.86	1.39	1.33
38	A1	2385	G	N3-C4	6.86	1.40	1.35
38	A1	2486	A	C8-N7	-6.86	1.26	1.31
38	A1	2512	C	C4-C5	-6.86	1.37	1.43
38	A1	2813	G	C2-N3	6.86	1.38	1.32
38	A1	3005	C	N3-C4	6.86	1.38	1.33
11	B2	127	G	N7-C5	-6.86	1.35	1.39
38	A1	410	C	C4-N4	6.86	1.40	1.33
38	A1	1278	C	C4-C5	6.86	1.48	1.43
39	A3	106	G	C6-N1	6.86	1.44	1.39
11	B2	818	A	C3'-C2'	6.85	1.60	1.52
38	A1	922	C	C2-N3	6.85	1.41	1.35
11	B2	211	G	C8-N7	-6.85	1.26	1.30
11	B2	1112	G	C5'-C4'	6.85	1.59	1.51
11	B2	1246	U	C4'-C3'	-6.85	1.45	1.53
38	A1	167	G	N7-C5	-6.85	1.35	1.39
38	A1	870	G	N7-C5	-6.85	1.35	1.39
38	A1	1075	G	C5-C4	-6.85	1.33	1.38
38	A1	1465	A	C2'-C1'	6.85	1.60	1.53
38	A1	264	G	N3-C4	-6.85	1.30	1.35
11	B2	851	C	P-O5'	-6.85	1.52	1.59
11	B2	1131	G	C8-N7	6.85	1.35	1.30
11	B2	1430	G	C3'-C2'	-6.85	1.45	1.52
38	A1	706	U	N1-C2	6.85	1.44	1.38
38	A1	792	A	C3'-C2'	-6.85	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1945	C	C2'-C1'	-6.85	1.45	1.53
11	B2	110	C	C4-N4	6.85	1.40	1.33
11	B2	273	C	C5'-C4'	6.85	1.59	1.51
38	A1	1250	A	N3-C4	6.85	1.39	1.34
38	A1	2396	G	O3'-P	-6.85	1.52	1.61
38	A1	2579	G	P-O5'	-6.85	1.52	1.59
38	A1	3032	C	N3-C4	6.85	1.38	1.33
11	B2	426	C	C2'-C1'	6.85	1.60	1.53
38	A1	206	A	C6-N6	6.85	1.39	1.33
38	A1	1103	C	C5'-C4'	6.85	1.59	1.51
38	A1	1477	C	P-O5'	-6.85	1.52	1.59
11	B2	397	C	O3'-P	-6.84	1.52	1.61
11	B2	908	G	C2-N2	6.84	1.41	1.34
11	B2	910	G	C8-N7	-6.84	1.26	1.30
38	A1	735	A	C8-N7	-6.84	1.26	1.31
38	A1	2367	C	O3'-P	-6.84	1.52	1.61
38	A1	3039	G	C6-N1	6.84	1.44	1.39
11	B2	581	G	C2-N3	6.84	1.38	1.32
11	B2	860	G	N1-C2	6.84	1.43	1.37
11	B2	1223	C	C4-N4	6.84	1.40	1.33
11	B2	1486	A	P-O5'	-6.84	1.52	1.59
38	A1	1693	G	C5'-C4'	6.84	1.59	1.51
38	A1	2145	G	N9-C8	6.84	1.42	1.37
38	A1	2256	G	C8-N7	6.84	1.35	1.30
11	B2	456	U	P-O5'	-6.84	1.52	1.59
11	B2	756	A	C6-N1	-6.84	1.30	1.35
11	B2	1328	G	N7-C5	-6.84	1.35	1.39
38	A1	1261	C	C4-N4	6.84	1.40	1.33
38	A1	2207	C	N3-C4	6.84	1.38	1.33
38	A1	2210	G	C2-N3	6.84	1.38	1.32
38	A1	2666	G	N3-C4	-6.84	1.30	1.35
11	B2	336	C	N1-C6	6.84	1.41	1.37
38	A1	466	C	N1-C6	6.84	1.41	1.37
38	A1	1797	A	C6-N6	6.84	1.39	1.33
38	A1	2762	G	N7-C5	-6.84	1.35	1.39
11	B2	146	A	C6-N1	6.84	1.40	1.35
38	A1	219	G	C5-C4	-6.84	1.33	1.38
38	A1	1334	G	N7-C5	-6.84	1.35	1.39
56	AJ	17	PRO	CA-C	-6.84	1.39	1.52
38	A1	10	C	P-O5'	-6.83	1.52	1.59
38	A1	1423	G	N1-C2	6.83	1.43	1.37
38	A1	2551	G	C2-N2	-6.83	1.27	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	B1	15	G	C5-C6	-6.83	1.35	1.42
11	B2	138	C	C2-N3	6.83	1.41	1.35
11	B2	609	G	P-O5'	6.83	1.66	1.59
11	B2	1209	C	C5-C6	6.83	1.39	1.34
38	A1	1245	C	O3'-P	-6.83	1.52	1.61
11	B2	216	G	N1-C2	6.83	1.43	1.37
11	B2	251	G	N1-C2	6.83	1.43	1.37
11	B2	558	C	N3-C4	6.83	1.38	1.33
38	A1	205	A	N7-C5	-6.83	1.35	1.39
38	A1	995	G	C5-C4	6.83	1.43	1.38
38	A1	1679	U	C2-N3	6.83	1.42	1.37
38	A1	1749	C	C2'-C1'	-6.83	1.45	1.53
38	A1	1950	G	C2-N2	6.83	1.41	1.34
38	A1	2073	G	C4'-O4'	6.83	1.54	1.45
38	A1	2235	G	N7-C5	-6.83	1.35	1.39
11	B2	61	A	C2-N3	6.83	1.39	1.33
38	A1	1050	C	C4-N4	6.83	1.40	1.33
38	A1	2587	G	C5'-C4'	6.83	1.59	1.51
11	B2	345	G	C6-O6	-6.83	1.18	1.24
11	B2	387	G	C5'-C4'	6.83	1.59	1.51
38	A1	505	A	N7-C5	-6.83	1.35	1.39
38	A1	1402	C	C4-N4	6.83	1.40	1.33
38	A1	1562	U	N1-C6	6.83	1.44	1.38
39	A3	45	C	C2-N3	6.83	1.41	1.35
38	A1	1404	G	P-O5'	6.83	1.66	1.59
11	B2	843	G	C2-N3	6.83	1.38	1.32
11	B2	1491	C	O3'-P	-6.83	1.52	1.61
29	BQ	59	GLY	CA-C	-6.83	1.41	1.51
38	A1	842	C	C3'-C2'	-6.83	1.45	1.52
11	B2	1320	A	N7-C5	-6.82	1.35	1.39
38	A1	1520	G	C4'-O4'	6.82	1.54	1.45
38	A1	2079	U	C4'-C3'	6.82	1.60	1.53
38	A1	2282	G	P-O5'	-6.82	1.52	1.59
38	A1	2633	A	C6-N6	6.82	1.39	1.33
11	B2	969	A	C6-N1	6.82	1.40	1.35
38	A1	257	G	N1-C2	6.82	1.43	1.37
38	A1	573	G	C8-N7	6.82	1.35	1.30
38	A1	1128	G	C4'-C3'	6.82	1.60	1.53
38	A1	1505	G	C2-N3	6.82	1.38	1.32
11	B2	246	A	C8-N7	-6.82	1.26	1.31
11	B2	389	G	C2-N2	6.82	1.41	1.34
11	B2	799	C	N3-C4	6.82	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	528	G	C2'-C1'	-6.82	1.45	1.53
38	A1	2202	U	N3-C4	6.82	1.44	1.38
10	B1	38	G	O3'-P	-6.82	1.52	1.61
11	B2	216	G	C6-N1	-6.82	1.34	1.39
11	B2	255	G	C5'-C4'	6.82	1.59	1.51
11	B2	696	G	N7-C5	-6.82	1.35	1.39
11	B2	839	G	C3'-C2'	6.82	1.60	1.52
11	B2	1021	C	C5-C6	6.82	1.39	1.34
16	BD	54	ARG	NE-CZ	6.82	1.42	1.33
38	A1	380	A	O3'-P	-6.82	1.52	1.61
38	A1	744	G	C2-N3	6.82	1.38	1.32
38	A1	1124	G	N7-C5	6.82	1.43	1.39
38	A1	1295	G	C2'-C1'	-6.82	1.45	1.53
38	A1	1638	C	O3'-P	-6.82	1.52	1.61
38	A1	2060	A	N9-C4	6.82	1.42	1.37
38	A1	2583	G	N9-C4	6.82	1.43	1.38
9	AX	348	ARG	CZ-NH2	6.82	1.42	1.33
10	B1	14	A	C5-C4	6.82	1.43	1.38
11	B2	191	A	C2'-C1'	-6.82	1.45	1.53
11	B2	569	G	C6-N1	6.82	1.44	1.39
11	B2	1452	G	C2'-C1'	-6.82	1.45	1.53
38	A1	711	C	N3-C4	6.82	1.38	1.33
38	A1	1136	G	C2'-C1'	-6.82	1.45	1.53
38	A1	3037	G	N3-C4	6.82	1.40	1.35
38	A1	3038	A	N7-C5	-6.82	1.35	1.39
38	A1	617	G	C2-N3	6.81	1.38	1.32
38	A1	735	A	P-O5'	-6.81	1.52	1.59
38	A1	1467	G	N9-C8	-6.81	1.33	1.37
38	A1	1650	U	C2-N3	6.81	1.42	1.37
38	A1	75	G	C4'-C3'	6.81	1.60	1.53
38	A1	107	G	N9-C8	6.81	1.42	1.37
38	A1	680	U	C2'-C1'	-6.81	1.45	1.53
38	A1	929	G	N3-C4	-6.81	1.30	1.35
38	A1	1028	G	C6-N1	6.81	1.44	1.39
38	A1	1991	G	N7-C5	-6.81	1.35	1.39
38	A1	2643	U	N1-C6	-6.81	1.31	1.38
11	B2	101	G	C2-N2	6.81	1.41	1.34
11	B2	512	U	P-O5'	6.81	1.66	1.59
38	A1	394	A	C6-N1	6.81	1.40	1.35
38	A1	408	C	C5-C6	6.81	1.39	1.34
38	A1	1357	G	N1-C2	6.81	1.43	1.37
38	A1	1584	G	C5'-C4'	6.81	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1683	C	C4-C5	6.81	1.48	1.43
38	A1	2338	A	O4'-C1'	6.81	1.50	1.41
38	A1	2636	C	N3-C4	6.81	1.38	1.33
11	B2	142	G	C2'-C1'	-6.81	1.45	1.53
11	B2	1417	A	N9-C4	6.81	1.42	1.37
38	A1	51	G	C8-N7	-6.81	1.26	1.30
38	A1	1634	A	C5-C4	-6.81	1.33	1.38
38	A1	1784	G	N9-C8	6.81	1.42	1.37
38	A1	1885	G	N9-C8	6.81	1.42	1.37
38	A1	1974	G	O3'-P	-6.81	1.52	1.61
38	A1	2529	G	O3'-P	-6.81	1.52	1.61
38	A1	2660	G	C6-N1	6.81	1.44	1.39
11	B2	300	G	C6-N1	6.81	1.44	1.39
38	A1	1354	G	P-O5'	6.81	1.66	1.59
11	B2	1114	G	C2-N3	6.80	1.38	1.32
38	A1	687	C	C4'-O4'	6.80	1.54	1.45
38	A1	919	G	C2'-C1'	-6.80	1.45	1.53
38	A1	2697	G	N1-C2	6.80	1.43	1.37
38	A1	570	G	C5-C4	6.80	1.43	1.38
38	A1	1164	C	N1-C6	6.80	1.41	1.37
38	A1	2466	C	C5'-C4'	6.80	1.59	1.51
45	AC	157	GLU	CG-CD	6.80	1.62	1.51
11	B2	403	C	C5-C6	-6.80	1.28	1.34
11	B2	1323	A	C8-N7	-6.80	1.26	1.31
38	A1	820	C	C5'-C4'	6.80	1.59	1.51
38	A1	1540	A	N7-C5	-6.80	1.35	1.39
38	A1	1728	C	N3-C4	6.80	1.38	1.33
38	A1	2109	C	P-O5'	-6.80	1.52	1.59
38	A1	2169	C	C4-N4	6.80	1.40	1.33
38	A1	2280	G	C2'-C1'	-6.80	1.45	1.53
38	A1	2994	G	C8-N7	-6.80	1.26	1.30
11	B2	1341	C	P-O5'	-6.80	1.52	1.59
38	A1	527	G	C5'-C4'	6.80	1.59	1.51
38	A1	575	G	C3'-C2'	6.80	1.60	1.52
38	A1	886	G	C5-C6	6.80	1.49	1.42
38	A1	2311	C	C4-N4	6.80	1.40	1.33
38	A1	2612	A	C6-N6	6.80	1.39	1.33
38	A1	2656	A	C5-C4	6.80	1.43	1.38
11	B2	365	C	N3-C4	6.80	1.38	1.33
11	B2	1280	C	P-O5'	-6.80	1.52	1.59
38	A1	861	G	C6-N1	6.80	1.44	1.39
38	A1	1906	G	C3'-C2'	-6.80	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	702	G	P-O5'	6.80	1.66	1.59
38	A1	113	C	C2-N3	6.80	1.41	1.35
38	A1	1677	A	P-O5'	6.80	1.66	1.59
11	B2	431	U	C2-N3	6.79	1.42	1.37
11	B2	1449	G	C5'-C4'	6.79	1.59	1.51
38	A1	1302	G	N9-C4	-6.79	1.32	1.38
38	A1	2313	G	C5'-C4'	6.79	1.59	1.51
11	B2	166	A	C2-N3	-6.79	1.27	1.33
11	B2	1410	G	C2-N3	6.79	1.38	1.32
38	A1	119	U	C4'-C3'	-6.79	1.45	1.53
38	A1	842	C	N3-C4	6.79	1.38	1.33
38	A1	1465	A	C4'-C3'	6.79	1.60	1.53
38	A1	1556	G	C8-N7	-6.79	1.26	1.30
38	A1	2215	U	C4-O4	-6.79	1.18	1.23
58	Ak	186	GLU	CD-OE2	6.79	1.33	1.25
38	A1	1161	A	C8-N7	6.79	1.36	1.31
38	A1	1889	G	C2-N3	6.79	1.38	1.32
38	A1	2336	G	N7-C5	-6.79	1.35	1.39
38	A1	2468	C	C5'-C4'	6.79	1.59	1.51
11	B2	425	C	O4'-C1'	6.79	1.50	1.41
11	B2	663	G	C2-N3	6.79	1.38	1.32
38	A1	1310	A	N3-C4	6.79	1.39	1.34
38	A1	1519	G	C4'-C3'	6.79	1.60	1.53
38	A1	1596	G	C3'-C2'	-6.79	1.45	1.52
38	A1	2042	A	N9-C8	6.79	1.43	1.37
38	A1	2375	C	N1-C6	6.79	1.41	1.37
10	B1	67	C	C2-N3	6.79	1.41	1.35
11	B2	152	G	N1-C2	6.79	1.43	1.37
11	B2	153	G	C5'-C4'	6.79	1.59	1.51
11	B2	206	C	O3'-P	-6.79	1.53	1.61
11	B2	233	C	N3-C4	6.79	1.38	1.33
11	B2	499	G	N1-C2	6.79	1.43	1.37
11	B2	1442	G	N7-C5	-6.79	1.35	1.39
38	A1	133	G	C2'-C1'	-6.79	1.45	1.53
38	A1	288	G	N9-C4	-6.79	1.32	1.38
38	A1	2483	U	O3'-P	-6.79	1.53	1.61
38	A1	2567	C	N1-C6	6.79	1.41	1.37
38	A1	621	G	C6-N1	6.79	1.44	1.39
38	A1	2139	A	C4'-C3'	6.79	1.60	1.53
51	Ag	38	ARG	CZ-NH1	6.79	1.41	1.33
11	B2	402	G	P-O5'	-6.79	1.52	1.59
11	B2	889	G	C2'-C1'	-6.79	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1001	A	C5'-C4'	6.79	1.59	1.51
11	B2	1210	A	C2'-C1'	-6.79	1.45	1.53
38	A1	3033	G	C4'-C3'	6.79	1.60	1.53
11	B2	525	A	N7-C5	-6.78	1.35	1.39
18	BF	192	ARG	CZ-NH2	6.78	1.41	1.33
38	A1	952	C	C3'-C2'	6.78	1.60	1.52
11	B2	513	A	C6-N6	6.78	1.39	1.33
38	A1	655	C	C5-C6	6.78	1.39	1.34
38	A1	1990	U	N3-C4	6.78	1.44	1.38
13	BA	91	TYR	CE1-CZ	6.78	1.47	1.38
38	A1	1738	A	C6-N1	6.78	1.40	1.35
38	A1	2039	U	N3-C4	6.78	1.44	1.38
38	A1	2195	G	C5-C6	-6.78	1.35	1.42
38	A1	2790	C	N1-C6	6.78	1.41	1.37
11	B2	1473	A	C2'-C1'	-6.78	1.45	1.53
38	A1	332	A	N3-C4	-6.78	1.30	1.34
11	B2	1107	C	N1-C6	6.78	1.41	1.37
15	BC	61	ARG	CZ-NH2	6.78	1.41	1.33
38	A1	42	G	C2'-C1'	-6.78	1.45	1.53
38	A1	172	C	P-O5'	6.78	1.66	1.59
38	A1	965	A	P-O5'	-6.78	1.52	1.59
38	A1	1079	A	N1-C2	-6.78	1.28	1.34
38	A1	1166	A	C2'-C1'	-6.78	1.45	1.53
38	A1	2977	G	C2-N2	6.78	1.41	1.34
7	AU	73	ARG	CZ-NH2	6.78	1.41	1.33
11	B2	1473	A	N9-C8	6.78	1.43	1.37
11	B2	1481	G	N9-C4	-6.78	1.32	1.38
38	A1	386	A	C6-N1	6.78	1.40	1.35
38	A1	895	C	C2-N3	6.78	1.41	1.35
38	A1	1014	U	C2'-C1'	-6.78	1.45	1.53
38	A1	1206	A	C5-C6	-6.78	1.34	1.41
38	A1	1428	G	O4'-C1'	6.78	1.50	1.41
38	A1	1647	C	C4-N4	6.78	1.40	1.33
38	A1	2847	G	C6-N1	6.78	1.44	1.39
38	A1	2880	C	P-O5'	-6.78	1.52	1.59
39	A3	80	G	N1-C2	6.78	1.43	1.37
11	B2	471	G	C5-C4	6.77	1.43	1.38
11	B2	780	C	P-O5'	-6.77	1.52	1.59
38	A1	1116	A	C2'-C1'	-6.77	1.45	1.53
38	A1	1724	A	N3-C4	6.77	1.39	1.34
38	A1	2868	C	C4'-C3'	-6.77	1.45	1.53
11	B2	520	G	C2-N3	6.77	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	698	A	C6-N1	6.77	1.40	1.35
11	B2	1156	A	C5-C6	6.77	1.47	1.41
11	B2	1157	G	C4'-C3'	6.77	1.60	1.53
38	A1	137	A	C6-N6	6.77	1.39	1.33
38	A1	309	C	C2'-C1'	-6.77	1.46	1.53
38	A1	463	A	P-O5'	6.77	1.66	1.59
38	A1	867	C	C3'-C2'	-6.77	1.45	1.52
38	A1	2684	G	C5-C4	6.77	1.43	1.38
38	A1	2706	C	N3-C4	6.77	1.38	1.33
38	A1	318	G	C5-C4	-6.77	1.33	1.38
38	A1	2328	G	N9-C4	-6.77	1.32	1.38
11	B2	209	A	C6-N1	6.77	1.40	1.35
11	B2	1152	C	O3'-P	-6.77	1.53	1.61
11	B2	1310	C	N1-C6	6.77	1.41	1.37
11	B2	1392	G	N3-C4	-6.77	1.30	1.35
38	A1	605	A	C6-N6	6.77	1.39	1.33
38	A1	1156	G	P-O5'	6.77	1.66	1.59
38	A1	1519	G	C2-N2	6.77	1.41	1.34
38	A1	1588	C	C4'-C3'	6.77	1.60	1.53
38	A1	1647	C	N3-C4	6.77	1.38	1.33
38	A1	1825	G	N3-C4	-6.77	1.30	1.35
38	A1	2439	G	C6-N1	6.77	1.44	1.39
38	A1	3015	A	C6-N1	6.77	1.40	1.35
11	B2	458	G	N1-C2	6.77	1.43	1.37
38	A1	209	G	N9-C4	-6.77	1.32	1.38
38	A1	737	G	C3'-C2'	-6.77	1.45	1.52
38	A1	959	U	C2'-C1'	-6.77	1.46	1.53
38	A1	1061	G	C5-C4	-6.77	1.33	1.38
38	A1	1185	A	C3'-O3'	6.77	1.51	1.42
38	A1	1227	A	C8-N7	-6.77	1.26	1.31
38	A1	2232	U	P-O5'	-6.77	1.52	1.59
38	A1	2860	G	C2-N3	6.77	1.38	1.32
39	A3	89	G	N3-C4	-6.77	1.30	1.35
61	AN	107	ARG	NE-CZ	6.77	1.41	1.33
11	B2	168	G	O3'-P	-6.76	1.53	1.61
11	B2	872	A	N9-C8	-6.76	1.32	1.37
11	B2	1088	U	C2-N3	6.76	1.42	1.37
38	A1	482	A	C6-N1	6.76	1.40	1.35
38	A1	1412	C	O3'-P	-6.76	1.53	1.61
38	A1	1744	A	C6-N6	6.76	1.39	1.33
38	A1	2794	G	O4'-C1'	6.76	1.50	1.41
11	B2	1212	U	C2-N3	6.76	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	BR	51	ARG	NE-CZ	6.76	1.41	1.33
38	A1	1940	U	C4'-C3'	6.76	1.60	1.53
38	A1	2584	A	P-O5'	-6.76	1.52	1.59
10	B1	7	G	C2-N2	6.76	1.41	1.34
11	B2	201	G	N1-C2	6.76	1.43	1.37
11	B2	281	G	N1-C2	6.76	1.43	1.37
11	B2	1039	C	C2-N3	6.76	1.41	1.35
11	B2	1247	A	N1-C2	-6.76	1.28	1.34
38	A1	22	C	C4-N4	6.76	1.40	1.33
38	A1	743	A	C2'-C1'	-6.76	1.46	1.53
38	A1	746	C	C1'-N1	6.76	1.58	1.48
38	A1	1151	G	N1-C2	6.76	1.43	1.37
38	A1	2244	G	P-O5'	-6.76	1.52	1.59
38	A1	3006	G	N1-C2	6.76	1.43	1.37
38	A1	36	G	C5-C4	-6.76	1.33	1.38
38	A1	833	G	N1-C2	6.76	1.43	1.37
60	AM	65	ARG	CZ-NH1	6.76	1.41	1.33
38	A1	368	U	C4-C5	6.76	1.49	1.43
38	A1	493	A	C6-N1	6.76	1.40	1.35
38	A1	1380	G	C2'-C1'	-6.76	1.46	1.53
38	A1	1515	G	P-O5'	-6.76	1.52	1.59
38	A1	1575	G	N7-C5	-6.76	1.35	1.39
38	A1	2789	G	C5'-C4'	6.76	1.59	1.51
55	Ai	18	GLY	N-CA	-6.76	1.35	1.46
11	B2	318	C	C4-N4	6.75	1.40	1.33
38	A1	1226	G	C2-N2	6.75	1.41	1.34
11	B2	544	C	C4-N4	6.75	1.40	1.33
11	B2	566	C	N3-C4	6.75	1.38	1.33
11	B2	625	G	C5-C4	6.75	1.43	1.38
11	B2	732	G	N1-C2	6.75	1.43	1.37
11	B2	757	G	C5-C6	-6.75	1.35	1.42
11	B2	776	C	N1-C6	6.75	1.41	1.37
11	B2	1058	G	C8-N7	-6.75	1.26	1.30
38	A1	347	G	C8-N7	6.75	1.35	1.30
38	A1	1125	A	N7-C5	-6.75	1.35	1.39
38	A1	1590	C	C5'-C4'	6.75	1.59	1.51
38	A1	2425	A	N3-C4	-6.75	1.30	1.34
49	Ae	22	ARG	CZ-NH2	6.75	1.41	1.33
11	B2	687	G	C3'-C2'	6.75	1.60	1.52
11	B2	740	G	C3'-C2'	-6.75	1.45	1.52
38	A1	168	G	C2'-C1'	-6.75	1.46	1.53
38	A1	715	G	P-O5'	6.75	1.66	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1308	G	C5-C6	6.75	1.49	1.42
38	A1	2227	G	C8-N7	-6.75	1.26	1.30
38	A1	2714	G	C2-N2	6.75	1.41	1.34
38	A1	2722	G	C6-N1	6.75	1.44	1.39
38	A1	624	U	O3'-P	-6.75	1.53	1.61
38	A1	1338	G	C4'-O4'	6.75	1.54	1.45
38	A1	1530	A	O3'-P	-6.75	1.53	1.61
38	A1	2364	G	C4'-C3'	-6.75	1.45	1.53
11	B2	432	G	C5'-C4'	6.75	1.59	1.51
11	B2	841	C	C4-N4	6.75	1.40	1.33
11	B2	947	G	C6-N1	6.75	1.44	1.39
11	B2	1042	U	N3-C4	6.75	1.44	1.38
38	A1	1530	A	C5-C4	6.75	1.43	1.38
38	A1	1534	G	N1-C2	6.75	1.43	1.37
38	A1	1624	U	N3-C4	6.75	1.44	1.38
38	A1	1660	A	C6-N1	6.75	1.40	1.35
11	B2	553	C	C2-N3	6.75	1.41	1.35
19	BG	98	GLU	CG-CD	6.75	1.62	1.51
38	A1	1586	G	O4'-C1'	6.75	1.50	1.41
38	A1	1444	A	N9-C4	-6.75	1.33	1.37
11	B2	223	G	C2-N3	6.74	1.38	1.32
11	B2	434	A	O3'-P	-6.74	1.53	1.61
11	B2	741	A	C6-N6	6.74	1.39	1.33
11	B2	927	A	C5-C4	6.74	1.43	1.38
11	B2	951	G	N7-C5	-6.74	1.35	1.39
38	A1	193	A	O3'-P	-6.74	1.53	1.61
38	A1	983	G	C8-N7	6.74	1.34	1.30
38	A1	170	A	C2'-C1'	-6.74	1.46	1.53
38	A1	367	G	C2-N2	6.74	1.41	1.34
38	A1	591	G	C4'-C3'	6.74	1.60	1.53
38	A1	1395	G	N9-C4	-6.74	1.32	1.38
38	A1	1429	A	N9-C8	6.74	1.43	1.37
10	B1	60	A	C8-N7	-6.74	1.26	1.31
11	B2	329	G	C6-N1	6.74	1.44	1.39
38	A1	186	A	C2'-C1'	6.74	1.60	1.53
38	A1	540	A	O3'-P	-6.74	1.53	1.61
38	A1	2009	G	C2-N3	6.74	1.38	1.32
39	A3	107	G	C2-N3	6.74	1.38	1.32
11	B2	1485	G	N1-C2	6.74	1.43	1.37
38	A1	1051	C	C5'-C4'	6.74	1.59	1.51
38	A1	1762	G	N7-C5	6.74	1.43	1.39
38	A1	1961	G	N1-C2	6.74	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1971	C	N1-C6	6.74	1.41	1.37
39	A3	60	C	C4-C5	6.74	1.48	1.43
11	B2	260	C	C4-C5	6.74	1.48	1.43
38	A1	798	G	C5-C4	6.74	1.43	1.38
44	Ab	72	ARG	NE-CZ	6.74	1.41	1.33
11	B2	691	G	N7-C5	-6.74	1.35	1.39
11	B2	1291	G	N9-C4	-6.74	1.32	1.38
38	A1	539	A	P-O5'	-6.74	1.53	1.59
38	A1	975	C	C3'-C2'	6.74	1.60	1.52
38	A1	2150	G	C3'-C2'	6.74	1.60	1.52
38	A1	2442	A	P-O5'	-6.74	1.53	1.59
11	B2	299	G	C6-N1	6.73	1.44	1.39
38	A1	1373	C	N1-C6	6.73	1.41	1.37
38	A1	1930	A	N9-C4	-6.73	1.33	1.37
10	B1	11	C	C2-O2	6.73	1.30	1.24
11	B2	401	U	P-O5'	-6.73	1.53	1.59
11	B2	874	G	C8-N7	-6.73	1.26	1.30
38	A1	512	G	C8-N7	-6.73	1.26	1.30
38	A1	1272	A	N9-C4	-6.73	1.33	1.37
38	A1	1453	G	C2-N3	6.73	1.38	1.32
38	A1	1701	C	C1'-N1	6.73	1.58	1.48
38	A1	2226	G	N9-C4	-6.73	1.32	1.38
11	B2	41	C	C4-C5	6.73	1.48	1.43
11	B2	148	C	C4-N4	6.73	1.40	1.33
11	B2	1000	G	N9-C4	-6.73	1.32	1.38
38	A1	123	A	C5-C6	6.73	1.47	1.41
38	A1	176	G	C4'-C3'	-6.73	1.45	1.53
38	A1	491	G	N7-C5	-6.73	1.35	1.39
38	A1	748	G	N7-C5	-6.73	1.35	1.39
38	A1	2648	C	C5'-C4'	6.73	1.59	1.51
38	A1	2684	G	C3'-O3'	6.73	1.51	1.42
38	A1	3003	A	C6-N1	6.73	1.40	1.35
38	A1	811	C	C4'-C3'	-6.73	1.45	1.53
11	B2	139	C	O4'-C1'	6.73	1.50	1.41
11	B2	295	G	C2-N2	6.73	1.41	1.34
11	B2	1115	G	C6-N1	6.73	1.44	1.39
11	B2	1241	U	C2-N3	6.73	1.42	1.37
38	A1	329	G	N9-C8	-6.73	1.33	1.37
38	A1	1370	G	O3'-P	-6.73	1.53	1.61
38	A1	1483	U	N1-C2	6.73	1.44	1.38
38	A1	2005	A	O3'-P	-6.73	1.53	1.61
10	B1	44	G	C5-C4	-6.72	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	69	U	C2'-C1'	-6.72	1.46	1.53
11	B2	806	G	N9-C4	-6.72	1.32	1.38
11	B2	864	G	N1-C2	6.72	1.43	1.37
38	A1	175	G	O3'-P	-6.72	1.53	1.61
38	A1	656	G	N3-C4	-6.72	1.30	1.35
38	A1	2253	G	C4'-O4'	-6.72	1.36	1.45
11	B2	1264	G	N9-C8	6.72	1.42	1.37
38	A1	1699	U	N1-C2	6.72	1.44	1.38
39	A3	64	C	C2-N3	6.72	1.41	1.35
61	AN	24	ARG	CD-NE	6.72	1.57	1.46
38	A1	356	C	C2-N3	6.72	1.41	1.35
38	A1	574	C	C2-N3	6.72	1.41	1.35
11	B2	306	C	C4'-C3'	-6.72	1.45	1.53
11	B2	796	C	C2-N3	6.72	1.41	1.35
11	B2	823	A	N3-C4	-6.72	1.30	1.34
38	A1	329	G	C2-N2	6.72	1.41	1.34
38	A1	1240	U	N3-C4	6.72	1.44	1.38
38	A1	1656	C	C2'-C1'	-6.72	1.46	1.53
38	A1	1980	U	C4-O4	6.72	1.29	1.23
38	A1	2063	U	C1'-N1	6.72	1.58	1.48
38	A1	2185	A	C6-N1	6.72	1.40	1.35
38	A1	2410	U	C2'-C1'	-6.72	1.46	1.53
38	A1	2968	G	C5-C4	6.72	1.43	1.38
11	B2	204	G	C3'-C2'	-6.72	1.45	1.52
11	B2	391	G	P-O5'	-6.72	1.53	1.59
11	B2	496	C	C5'-C4'	6.72	1.59	1.51
38	A1	1856	G	C6-N1	6.72	1.44	1.39
38	A1	2304	C	C4'-C3'	6.72	1.60	1.53
10	B1	7	G	P-O5'	-6.72	1.53	1.59
11	B2	666	G	N1-C2	6.72	1.43	1.37
11	B2	869	U	C2'-O2'	-6.72	1.32	1.41
11	B2	948	G	C2-N3	6.72	1.38	1.32
11	B2	1040	A	C3'-C2'	-6.72	1.45	1.52
38	A1	438	G	C4'-C3'	6.72	1.60	1.53
38	A1	528	G	N3-C4	-6.72	1.30	1.35
38	A1	735	A	C6-N1	6.72	1.40	1.35
38	A1	855	G	C5'-C4'	6.72	1.59	1.51
38	A1	1020	G	O4'-C1'	6.72	1.50	1.41
38	A1	2647	G	N1-C2	6.72	1.43	1.37
38	A1	2817	U	C2-N3	6.72	1.42	1.37
11	B2	255	G	C4'-C3'	6.71	1.60	1.53
11	B2	328	G	C8-N7	6.71	1.34	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	522	C	N1-C6	6.71	1.41	1.37
11	B2	1184	U	C2-N3	6.71	1.42	1.37
38	A1	383	C	O4'-C1'	6.71	1.50	1.41
38	A1	664	A	C6-N6	6.71	1.39	1.33
38	A1	1621	G	N7-C5	-6.71	1.35	1.39
38	A1	2671	C	C4-N4	6.71	1.40	1.33
38	A1	2802	G	C5-C6	6.71	1.49	1.42
32	BT	64	ARG	CZ-NH2	6.71	1.41	1.33
7	AU	36	ARG	NE-CZ	6.71	1.41	1.33
11	B2	674	C	C2'-C1'	6.71	1.60	1.53
11	B2	1392	G	C6-N1	6.71	1.44	1.39
38	A1	92	G	C4'-C3'	-6.71	1.45	1.53
38	A1	254	A	O4'-C1'	6.71	1.50	1.41
38	A1	510	A	C4'-C3'	6.71	1.60	1.53
38	A1	701	G	O3'-P	-6.71	1.53	1.61
38	A1	946	U	P-O5'	-6.71	1.53	1.59
38	A1	2368	G	C4'-C3'	6.71	1.60	1.53
41	AA	128	ARG	CZ-NH2	6.71	1.41	1.33
44	Ab	13	ARG	NE-CZ	6.71	1.41	1.33
11	B2	1245	C	C4-N4	6.71	1.40	1.33
38	A1	2108	U	C5'-C4'	6.71	1.59	1.51
38	A1	2326	C	C4-N4	6.71	1.40	1.33
38	A1	2647	G	C2-N3	6.71	1.38	1.32
11	B2	101	G	C2-N3	6.71	1.38	1.32
11	B2	567	A	N7-C5	-6.71	1.35	1.39
11	B2	923	A	C4'-C3'	-6.71	1.45	1.53
38	A1	348	G	C2-N2	6.71	1.41	1.34
38	A1	1790	G	C2-N2	6.71	1.41	1.34
38	A1	1964	G	C5'-C4'	6.71	1.59	1.51
38	A1	2469	G	C5'-C4'	6.71	1.59	1.51
38	A1	2488	C	O3'-P	-6.71	1.53	1.61
11	B2	328	G	N3-C4	-6.71	1.30	1.35
11	B2	329	G	C8-N7	-6.71	1.26	1.30
11	B2	922	G	C5-C4	-6.71	1.33	1.38
11	B2	1037	U	C4-O4	-6.71	1.18	1.23
38	A1	872	G	C3'-C2'	6.71	1.60	1.52
38	A1	1073	G	C5-C6	6.71	1.49	1.42
38	A1	1455	U	C4-C5	6.71	1.49	1.43
38	A1	1594	G	N9-C8	6.71	1.42	1.37
38	A1	2313	G	C6-N1	-6.71	1.34	1.39
38	A1	2459	G	N9-C8	6.71	1.42	1.37
38	A1	2587	G	C6-N1	6.71	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
45	AC	26	ARG	NE-CZ	6.71	1.41	1.33
10	B1	29	C	N1-C6	6.71	1.41	1.37
11	B2	63	G	C2'-C1'	-6.71	1.46	1.53
11	B2	354	G	C8-N7	-6.70	1.26	1.30
38	A1	63	A	C8-N7	-6.70	1.26	1.31
38	A1	323	U	C4-C5	6.70	1.49	1.43
11	B2	202	G	C8-N7	-6.70	1.26	1.30
11	B2	738	C	C4-C5	6.70	1.48	1.43
11	B2	798	U	N3-C4	6.70	1.44	1.38
38	A1	135	U	C2-N3	-6.70	1.33	1.37
38	A1	1085	G	C8-N7	-6.70	1.26	1.30
11	B2	964	A	O3'-P	-6.70	1.53	1.61
11	B2	1381	G	O3'-P	-6.70	1.53	1.61
38	A1	622	A	N9-C4	-6.70	1.33	1.37
10	B1	27	A	O3'-P	-6.70	1.53	1.61
11	B2	43	A	C6-N1	6.70	1.40	1.35
11	B2	625	G	C2-N3	6.70	1.38	1.32
38	A1	339	A	N9-C4	6.70	1.41	1.37
38	A1	604	A	C4'-O4'	-6.70	1.36	1.45
38	A1	1227	A	N9-C4	6.70	1.41	1.37
38	A1	1684	C	C2'-C1'	-6.70	1.46	1.53
38	A1	2291	G	N9-C4	6.70	1.43	1.38
38	A1	2792	G	N9-C8	6.70	1.42	1.37
38	A1	823	G	N7-C5	-6.70	1.35	1.39
38	A1	1393	C	N3-C4	6.70	1.38	1.33
43	AB	185	ARG	NE-CZ	6.70	1.41	1.33
11	B2	126	G	C2-N3	6.70	1.38	1.32
11	B2	601	G	C2'-C1'	-6.70	1.46	1.53
11	B2	638	G	N1-C2	6.70	1.43	1.37
24	BL	5	ARG	NE-CZ	6.70	1.41	1.33
38	A1	999	A	C2'-C1'	-6.70	1.46	1.53
38	A1	1113	G	N1-C2	6.70	1.43	1.37
38	A1	1738	A	C6-N6	6.70	1.39	1.33
38	A1	2346	A	C6-N6	6.70	1.39	1.33
38	A1	2868	C	C4-N4	6.70	1.40	1.33
39	A3	3	G	P-O5'	-6.70	1.53	1.59
11	B2	256	G	N3-C4	6.69	1.40	1.35
11	B2	439	G	N7-C5	-6.69	1.35	1.39
11	B2	666	G	C6-N1	6.69	1.44	1.39
11	B2	1349	C	C3'-O3'	6.69	1.51	1.42
38	A1	824	C	O3'-P	-6.69	1.53	1.61
38	A1	1277	G	N9-C8	6.69	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1403	C	N1-C6	-6.69	1.33	1.37
38	A1	2342	C	C4'-C3'	6.69	1.60	1.53
11	B2	177	A	C5-C4	-6.69	1.34	1.38
38	A1	223	U	C4'-O4'	6.69	1.54	1.45
38	A1	677	A	N3-C4	-6.69	1.30	1.34
38	A1	1449	C	P-O5'	-6.69	1.53	1.59
38	A1	1906	G	N9-C8	-6.69	1.33	1.37
38	A1	2712	G	C5-C4	-6.69	1.33	1.38
38	A1	2836	G	C5-C4	-6.69	1.33	1.38
11	B2	1417	A	N3-C4	6.69	1.38	1.34
38	A1	1905	G	P-O5'	-6.69	1.53	1.59
11	B2	246	A	C6-N6	6.69	1.39	1.33
11	B2	806	G	C3'-O3'	6.69	1.51	1.42
38	A1	968	A	C5'-C4'	6.69	1.59	1.51
38	A1	2813	G	C8-N7	6.69	1.34	1.30
10	B1	25	G	C6-N1	6.68	1.44	1.39
11	B2	418	G	N1-C2	6.68	1.43	1.37
11	B2	1025	U	P-O5'	6.68	1.66	1.59
38	A1	789	G	C8-N7	-6.68	1.26	1.30
39	A3	124	A	C8-N7	-6.68	1.26	1.31
57	Aj	47	TYR	CZ-OH	6.68	1.49	1.37
11	B2	18	C	C2-N3	6.68	1.41	1.35
38	A1	242	C	N1-C6	6.68	1.41	1.37
38	A1	437	G	N1-C2	6.68	1.43	1.37
38	A1	956	U	C3'-O3'	6.68	1.51	1.42
38	A1	2277	G	C5'-C4'	6.68	1.59	1.51
38	A1	2656	A	C2'-O2'	-6.68	1.32	1.41
11	B2	894	A	C5-C4	-6.68	1.34	1.38
11	B2	1315	G	N3-C4	-6.68	1.30	1.35
38	A1	98	G	N3-C4	-6.68	1.30	1.35
38	A1	576	G	N1-C2	6.68	1.43	1.37
38	A1	2356	U	N1-C6	6.68	1.44	1.38
11	B2	374	G	N3-C4	6.68	1.40	1.35
11	B2	1390	G	P-O5'	-6.68	1.53	1.59
38	A1	265	A	N9-C4	-6.68	1.33	1.37
38	A1	1671	A	C5'-C4'	6.68	1.59	1.51
38	A1	1734	G	N9-C8	-6.68	1.33	1.37
38	A1	2125	C	C5-C6	6.68	1.39	1.34
39	A3	19	G	C2-N3	6.68	1.38	1.32
11	B2	31	U	C2'-C1'	-6.68	1.46	1.53
11	B2	86	C	O3'-P	-6.68	1.53	1.61
38	A1	337	G	C5-C4	6.68	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	795	G	N1-C2	6.68	1.43	1.37
38	A1	2632	C	C4-N4	6.68	1.40	1.33
11	B2	575	A	P-O5'	-6.68	1.53	1.59
11	B2	1131	G	N9-C4	-6.68	1.32	1.38
11	B2	1188	C	C5'-C4'	6.68	1.59	1.51
38	A1	1093	G	N9-C4	-6.68	1.32	1.38
38	A1	1623	C	C2-N3	6.68	1.41	1.35
11	B2	1234	A	N3-C4	-6.67	1.30	1.34
38	A1	839	A	N7-C5	-6.67	1.35	1.39
11	B2	237	C	C4-N4	6.67	1.40	1.33
11	B2	1292	A	C6-N6	6.67	1.39	1.33
11	B2	1407	U	O3'-P	-6.67	1.53	1.61
38	A1	7	G	N9-C8	-6.67	1.33	1.37
38	A1	448	A	C2'-O2'	6.67	1.50	1.41
38	A1	830	G	C5-C4	6.67	1.43	1.38
38	A1	1269	U	C5'-C4'	6.67	1.59	1.51
11	B2	195	C	N3-C4	6.67	1.38	1.33
11	B2	1410	G	C4'-C3'	-6.67	1.45	1.53
38	A1	254	A	N7-C5	-6.67	1.35	1.39
38	A1	610	C	N1-C6	6.67	1.41	1.37
38	A1	1420	U	C2-N3	6.67	1.42	1.37
38	A1	1810	G	N1-C2	6.67	1.43	1.37
38	A1	1956	G	O3'-P	-6.67	1.53	1.61
38	A1	2357	U	C2'-C1'	-6.67	1.46	1.53
11	B2	997	G	C2-N2	6.67	1.41	1.34
38	A1	1156	G	C8-N7	6.67	1.34	1.30
38	A1	1379	A	N3-C4	6.67	1.38	1.34
38	A1	1443	G	C5'-C4'	6.67	1.59	1.51
11	B2	65	G	N7-C5	6.67	1.43	1.39
11	B2	786	G	C2-N3	6.67	1.38	1.32
11	B2	803	C	C5-C6	-6.67	1.29	1.34
11	B2	830	A	N3-C4	-6.67	1.30	1.34
11	B2	913	G	C8-N7	6.67	1.34	1.30
11	B2	982	U	O3'-P	-6.67	1.53	1.61
11	B2	1043	U	C2-N3	6.67	1.42	1.37
11	B2	1067	G	C5-C4	6.67	1.43	1.38
11	B2	1163	U	C2'-O2'	-6.67	1.32	1.41
38	A1	512	G	O3'-P	-6.67	1.53	1.61
38	A1	742	C	N3-C4	6.67	1.38	1.33
38	A1	887	U	C4-O4	6.67	1.28	1.23
38	A1	1815	C	C2'-C1'	-6.67	1.46	1.53
38	A1	471	U	P-O5'	-6.67	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	474	G	N1-C2	6.67	1.43	1.37
38	A1	1430	A	C8-N7	-6.67	1.26	1.31
38	A1	2188	C	C2-O2	-6.67	1.18	1.24
38	A1	2269	C	C4'-C3'	6.67	1.60	1.53
11	B2	736	A	N9-C8	-6.66	1.32	1.37
37	BY	17	ARG	CZ-NH2	6.66	1.41	1.33
38	A1	423	G	C2'-C1'	-6.66	1.46	1.53
38	A1	758	C	O3'-P	-6.66	1.53	1.61
38	A1	857	U	N1-C6	-6.66	1.31	1.38
38	A1	1158	G	C5-C6	-6.66	1.35	1.42
38	A1	1866	G	N9-C4	6.66	1.43	1.38
38	A1	2061	A	N9-C8	-6.66	1.32	1.37
38	A1	2360	G	C2-N2	6.66	1.41	1.34
45	AC	6	ARG	CD-NE	6.66	1.57	1.46
11	B2	940	U	C5'-C4'	6.66	1.59	1.51
38	A1	1259	G	N9-C8	6.66	1.42	1.37
10	B1	73	C	C2-N3	6.66	1.41	1.35
11	B2	1076	G	C2'-C1'	-6.66	1.46	1.53
22	BJ	24	ARG	NE-CZ	6.66	1.41	1.33
38	A1	381	G	C2-N3	6.66	1.38	1.32
38	A1	569	G	C2-N2	6.66	1.41	1.34
38	A1	986	G	N7-C5	-6.66	1.35	1.39
38	A1	1080	G	O3'-P	-6.66	1.53	1.61
38	A1	1436	A	N9-C8	6.66	1.43	1.37
38	A1	2476	A	C6-N6	6.66	1.39	1.33
38	A1	2551	G	N9-C4	6.66	1.43	1.38
11	B2	944	C	O4'-C1'	6.66	1.50	1.41
38	A1	36	G	N1-C2	6.66	1.43	1.37
38	A1	2052	A	N7-C5	-6.66	1.35	1.39
38	A1	2101	A	C4'-C3'	6.66	1.60	1.53
38	A1	2322	A	C6-N6	6.66	1.39	1.33
38	A1	2977	G	N9-C4	6.66	1.43	1.38
11	B2	66	G	P-O5'	-6.66	1.53	1.59
11	B2	1221	A	C6-N1	6.66	1.40	1.35
38	A1	678	G	N9-C4	6.66	1.43	1.38
38	A1	2131	C	N1-C6	-6.66	1.33	1.37
38	A1	2184	G	P-O5'	-6.66	1.53	1.59
10	B1	12	U	C3'-O3'	6.66	1.51	1.42
11	B2	175	G	N3-C4	-6.66	1.30	1.35
11	B2	1201	G	N3-C4	-6.66	1.30	1.35
38	A1	133	G	C4'-O4'	6.66	1.54	1.45
38	A1	497	G	C5'-C4'	6.66	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1794	C	N3-C4	6.66	1.38	1.33
38	A1	2891	A	C6-N6	6.66	1.39	1.33
11	B2	1428	G	N1-C2	6.65	1.43	1.37
38	A1	621	G	N7-C5	-6.65	1.35	1.39
38	A1	2215	U	C2'-C1'	-6.65	1.46	1.53
11	B2	20	G	C5'-C4'	6.65	1.59	1.51
11	B2	461	A	O3'-P	-6.65	1.53	1.61
11	B2	999	G	N1-C2	6.65	1.43	1.37
38	A1	178	G	N1-C2	6.65	1.43	1.37
38	A1	360	G	C5-C4	6.65	1.43	1.38
11	B2	299	G	N1-C2	6.65	1.43	1.37
11	B2	304	C	O4'-C1'	6.65	1.50	1.41
11	B2	789	G	N9-C4	-6.65	1.32	1.38
11	B2	1418	G	C8-N7	-6.65	1.26	1.30
38	A1	303	A	C4'-C3'	6.65	1.60	1.53
38	A1	437	G	C2-N2	6.65	1.41	1.34
38	A1	560	G	C5-C4	6.65	1.43	1.38
38	A1	814	G	C6-N1	6.65	1.44	1.39
38	A1	2282	G	C5'-C4'	6.65	1.59	1.51
11	B2	270	A	C2-N3	-6.65	1.27	1.33
38	A1	1964	G	C8-N7	6.65	1.34	1.30
11	B2	89	G	P-O5'	-6.65	1.53	1.59
11	B2	284	A	C2-N3	6.65	1.39	1.33
11	B2	492	G	N7-C5	-6.65	1.35	1.39
11	B2	671	C	C4'-O4'	6.65	1.54	1.45
11	B2	901	G	C5-C4	-6.65	1.33	1.38
11	B2	1158	G	C6-O6	6.65	1.30	1.24
11	B2	1426	C	C2'-O2'	6.65	1.50	1.41
38	A1	318	G	C6-N1	6.65	1.44	1.39
38	A1	2712	G	C3'-O3'	6.65	1.51	1.42
38	A1	2728	U	C4'-C3'	-6.65	1.45	1.53
11	B2	964	A	N7-C5	-6.65	1.35	1.39
38	A1	68	G	N9-C8	6.65	1.42	1.37
38	A1	1143	A	N7-C5	-6.65	1.35	1.39
38	A1	2427	C	C4-N4	6.65	1.40	1.33
11	B2	101	G	O4'-C1'	-6.64	1.33	1.41
11	B2	288	G	N7-C5	-6.64	1.35	1.39
11	B2	1471	G	P-O5'	-6.64	1.53	1.59
38	A1	75	G	C2-N2	6.64	1.41	1.34
38	A1	81	G	C6-N1	6.64	1.44	1.39
38	A1	192	U	N3-C4	6.64	1.44	1.38
38	A1	804	C	C2-N3	6.64	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1441	C	C5'-C4'	6.64	1.59	1.51
38	A1	1835	A	C4'-C3'	-6.64	1.45	1.53
38	A1	2483	U	C4'-C3'	6.64	1.60	1.53
38	A1	2601	C	C5-C6	6.64	1.39	1.34
38	A1	2703	G	C6-N1	-6.64	1.34	1.39
4	AQ	60	ARG	NE-CZ	6.64	1.41	1.33
38	A1	1109	G	C3'-C2'	6.64	1.60	1.52
38	A1	1459	A	C6-N1	6.64	1.40	1.35
38	A1	1938	G	C2-N3	6.64	1.38	1.32
38	A1	2315	G	C2-N3	6.64	1.38	1.32
11	B2	291	G	C6-N1	6.64	1.44	1.39
11	B2	362	C	C4-C5	6.64	1.48	1.43
11	B2	1216	A	C6-N1	6.64	1.40	1.35
38	A1	1276	G	C4'-C3'	6.64	1.60	1.53
38	A1	1816	C	N3-C4	6.64	1.38	1.33
38	A1	1979	G	N1-C2	6.64	1.43	1.37
11	B2	54	C	P-O5'	6.64	1.66	1.59
11	B2	577	C	C2'-C1'	-6.64	1.46	1.53
38	A1	2501	G	C4'-O4'	6.64	1.54	1.45
11	B2	382	G	N9-C8	6.64	1.42	1.37
11	B2	437	A	C2-N3	6.64	1.39	1.33
38	A1	444	U	O4'-C1'	-6.64	1.33	1.41
38	A1	671	G	N7-C5	6.64	1.43	1.39
38	A1	1478	G	C4'-C3'	6.64	1.60	1.53
38	A1	1604	G	C2-N2	6.64	1.41	1.34
38	A1	2454	G	C6-N1	6.64	1.44	1.39
38	A1	2784	A	N3-C4	-6.64	1.30	1.34
39	A3	106	G	N3-C4	6.64	1.40	1.35
11	B2	177	A	C6-N1	6.63	1.40	1.35
11	B2	426	C	C4-C5	-6.63	1.37	1.43
38	A1	596	C	C5'-C4'	6.63	1.59	1.51
38	A1	1385	C	P-O5'	-6.63	1.53	1.59
38	A1	2173	U	C1'-N1	6.63	1.58	1.48
38	A1	2630	C	C2'-C1'	-6.63	1.46	1.53
11	B2	775	G	N7-C5	-6.63	1.35	1.39
11	B2	1238	G	C2-N3	6.63	1.38	1.32
38	A1	479	G	N1-C2	6.63	1.43	1.37
38	A1	835	G	C5-C4	-6.63	1.33	1.38
38	A1	868	U	P-O5'	-6.63	1.53	1.59
38	A1	1256	G	C6-N1	6.63	1.44	1.39
38	A1	1359	C	N1-C6	-6.63	1.33	1.37
38	A1	1622	G	C6-O6	6.63	1.30	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2675	C	C4'-O4'	-6.63	1.36	1.45
39	A3	52	U	C3'-C2'	6.63	1.60	1.52
38	A1	761	U	C5'-C4'	6.63	1.59	1.51
38	A1	1476	C	C4-N4	6.63	1.40	1.33
11	B2	1399	G	C2-N3	6.63	1.38	1.32
11	B2	1486	A	C6-N6	6.63	1.39	1.33
38	A1	931	C	O4'-C1'	6.63	1.50	1.41
38	A1	2018	C	C2-N3	6.63	1.41	1.35
38	A1	2540	A	N9-C8	-6.63	1.32	1.37
38	A1	3005	C	C4-C5	6.63	1.48	1.43
39	A3	112	C	C4-C5	6.63	1.48	1.43
11	B2	795	G	O3'-P	-6.63	1.53	1.61
11	B2	888	A	P-O5'	-6.63	1.53	1.59
38	A1	919	G	N1-C2	6.63	1.43	1.37
38	A1	1070	G	C4'-O4'	-6.63	1.36	1.45
38	A1	1556	G	C2-N3	6.63	1.38	1.32
38	A1	1915	G	N9-C4	-6.63	1.32	1.38
38	A1	2103	C	N1-C6	6.63	1.41	1.37
38	A1	2149	G	P-O5'	-6.63	1.53	1.59
11	B2	56	A	N3-C4	6.62	1.38	1.34
11	B2	277	G	N1-C2	6.62	1.43	1.37
11	B2	644	G	C2-N2	6.62	1.41	1.34
11	B2	1144	G	C2'-C1'	-6.62	1.46	1.53
11	B2	1268	C	N3-C4	6.62	1.38	1.33
38	A1	604	A	N7-C5	-6.62	1.35	1.39
38	A1	617	G	N9-C8	-6.62	1.33	1.37
38	A1	923	A	C5'-C4'	6.62	1.59	1.51
10	B1	18	U	C2-N3	6.62	1.42	1.37
11	B2	1289	G	C3'-C2'	6.62	1.60	1.52
11	B2	1466	G	C4'-C3'	6.62	1.60	1.53
38	A1	130	G	N1-C2	6.62	1.43	1.37
38	A1	1523	A	N9-C8	-6.62	1.32	1.37
38	A1	1553	G	O3'-P	-6.62	1.53	1.61
38	A1	1644	G	P-O5'	-6.62	1.53	1.59
38	A1	1652	A	N3-C4	6.62	1.38	1.34
38	A1	2763	U	N1-C6	6.62	1.44	1.38
11	B2	308	G	C8-N7	6.62	1.34	1.30
11	B2	787	U	N1-C6	6.62	1.44	1.38
20	BH	50	ARG	NE-CZ	6.62	1.41	1.33
27	BO	136	ARG	CZ-NH2	6.62	1.41	1.33
38	A1	130	G	N3-C4	-6.62	1.30	1.35
38	A1	218	A	C6-N6	6.62	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	955	A	C5-C6	-6.62	1.35	1.41
38	A1	2008	G	P-O5'	6.62	1.66	1.59
38	A1	2015	G	C5-C4	6.62	1.43	1.38
38	A1	2600	C	C4-N4	6.62	1.40	1.33
38	A1	2842	C	N1-C6	6.62	1.41	1.37
38	A1	3003	A	C6-N6	6.62	1.39	1.33
11	B2	834	C	C4-N4	6.62	1.40	1.33
25	BM	133	ARG	CZ-NH2	6.62	1.41	1.33
38	A1	818	A	C5-C6	6.62	1.47	1.41
38	A1	2458	U	N1-C2	-6.62	1.32	1.38
39	A3	28	C	C2-N3	-6.62	1.30	1.35
11	B2	479	C	C5'-C4'	6.62	1.59	1.51
11	B2	928	A	C6-N1	6.62	1.40	1.35
38	A1	2301	C	C2'-C1'	6.62	1.60	1.53
11	B2	48	G	C2-N3	6.62	1.38	1.32
11	B2	958	G	C6-N1	6.62	1.44	1.39
11	B2	1001	A	C6-N1	6.62	1.40	1.35
11	B2	1074	C	N1-C6	-6.62	1.33	1.37
38	A1	217	A	N9-C8	6.62	1.43	1.37
38	A1	566	G	N1-C2	6.62	1.43	1.37
38	A1	714	C	N1-C6	-6.62	1.33	1.37
38	A1	1837	A	P-O5'	-6.62	1.53	1.59
38	A1	2403	G	C2-N3	6.62	1.38	1.32
38	A1	2808	C	C5'-C4'	6.62	1.59	1.51
38	A1	2959	A	N9-C4	-6.62	1.33	1.37
60	AM	63	ARG	CZ-NH2	6.62	1.41	1.33
10	B1	18	U	N1-C2	6.61	1.44	1.38
11	B2	977	G	N9-C8	6.61	1.42	1.37
11	B2	1112	G	C8-N7	6.61	1.34	1.30
38	A1	143	C	N3-C4	6.61	1.38	1.33
38	A1	431	U	N3-C4	6.61	1.44	1.38
38	A1	1195	G	N1-C2	6.61	1.43	1.37
38	A1	1631	A	C6-N6	6.61	1.39	1.33
38	A1	1917	U	C2'-C1'	-6.61	1.46	1.53
38	A1	1398	C	C4'-C3'	6.61	1.60	1.53
38	A1	1410	A	O3'-P	-6.61	1.53	1.61
10	B1	47	G	C5'-C4'	6.61	1.59	1.51
11	B2	697	A	C5-C4	-6.61	1.34	1.38
11	B2	1330	G	C8-N7	-6.61	1.26	1.30
28	BP	23	ARG	CD-NE	6.61	1.57	1.46
38	A1	126	U	P-O5'	-6.61	1.53	1.59
38	A1	437	G	C6-N1	6.61	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	811	C	C4-C5	6.61	1.48	1.43
38	A1	2029	C	O4'-C1'	6.61	1.50	1.41
38	A1	2157	U	N1-C2	6.61	1.44	1.38
39	A3	63	G	C5-C4	6.61	1.43	1.38
11	B2	208	U	P-O5'	-6.61	1.53	1.59
18	BF	184	TRP	CD2-CE2	-6.61	1.33	1.41
38	A1	191	U	O4'-C1'	6.61	1.50	1.41
38	A1	234	G	N7-C5	-6.61	1.35	1.39
38	A1	852	A	C8-N7	6.61	1.36	1.31
38	A1	955	A	C5'-C4'	6.61	1.59	1.51
11	B2	275	A	O3'-P	-6.61	1.53	1.61
11	B2	801	A	C6-N1	6.61	1.40	1.35
11	B2	809	C	O4'-C1'	6.61	1.50	1.41
11	B2	859	A	N9-C8	6.61	1.43	1.37
38	A1	15	A	N7-C5	-6.61	1.35	1.39
38	A1	788	A	P-O5'	-6.61	1.53	1.59
38	A1	2127	G	N1-C2	6.61	1.43	1.37
38	A1	2375	C	N3-C4	6.61	1.38	1.33
38	A1	2577	U	N3-C4	6.61	1.44	1.38
39	A3	2	G	C2'-C1'	-6.61	1.46	1.53
39	A3	100	A	N7-C5	-6.61	1.35	1.39
11	B2	49	C	P-O5'	-6.61	1.53	1.59
11	B2	695	G	N9-C4	6.61	1.43	1.38
38	A1	1196	A	C2'-C1'	-6.61	1.46	1.53
38	A1	1561	G	O4'-C1'	6.61	1.50	1.41
38	A1	2496	G	C8-N7	-6.61	1.26	1.30
38	A1	2699	U	P-O5'	6.61	1.66	1.59
11	B2	294	A	N7-C5	-6.60	1.35	1.39
11	B2	754	G	C6-N1	-6.60	1.34	1.39
11	B2	1411	G	C2'-C1'	-6.60	1.46	1.53
38	A1	353	C	C4-N4	6.60	1.39	1.33
38	A1	1352	U	N1-C2	6.60	1.44	1.38
38	A1	1560	G	C2-N3	6.60	1.38	1.32
38	A1	2302	C	C4-C5	6.60	1.48	1.43
38	A1	2563	A	C2'-O2'	-6.60	1.33	1.41
11	B2	221	A	C6-N1	6.60	1.40	1.35
11	B2	356	G	C6-N1	6.60	1.44	1.39
11	B2	669	A	N9-C4	6.60	1.41	1.37
11	B2	1121	C	C4-N4	6.60	1.39	1.33
38	A1	792	A	N7-C5	-6.60	1.35	1.39
38	A1	1655	G	N1-C2	6.60	1.43	1.37
38	A1	1844	C	N3-C4	6.60	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1228	A	C4'-O4'	-6.60	1.36	1.45
38	A1	930	G	N9-C4	-6.60	1.32	1.38
38	A1	1153	U	C5'-C4'	6.60	1.59	1.51
38	A1	2086	C	C4'-C3'	6.60	1.60	1.53
38	A1	2091	U	C2-N3	6.60	1.42	1.37
39	A3	107	G	C4'-C3'	-6.60	1.45	1.53
10	B1	73	C	N1-C6	-6.60	1.33	1.37
11	B2	663	G	N9-C8	-6.60	1.33	1.37
38	A1	450	G	C2-N2	6.60	1.41	1.34
38	A1	578	C	N3-C4	6.60	1.38	1.33
38	A1	799	C	C4-C5	6.60	1.48	1.43
38	A1	2131	C	C2'-C1'	-6.60	1.46	1.53
11	B2	292	U	C2'-C1'	-6.60	1.46	1.53
11	B2	527	A	C8-N7	6.60	1.36	1.31
11	B2	927	A	C5'-C4'	6.60	1.59	1.51
11	B2	1283	G	N9-C4	6.60	1.43	1.38
27	BO	137	ARG	CD-NE	6.60	1.57	1.46
38	A1	1871	C	C2-N3	6.60	1.41	1.35
60	AM	170	ARG	CZ-NH2	6.60	1.41	1.33
62	AO	15	ARG	NE-CZ	6.60	1.41	1.33
38	A1	852	A	C6-N1	6.60	1.40	1.35
11	B2	164	A	N9-C8	6.59	1.43	1.37
11	B2	790	G	C5-C4	6.59	1.43	1.38
11	B2	791	G	N9-C4	-6.59	1.32	1.38
11	B2	1114	G	C2-N2	6.59	1.41	1.34
17	BE	12	ARG	CZ-NH1	6.59	1.41	1.33
38	A1	1288	C	C2-N3	6.59	1.41	1.35
38	A1	1485	A	N3-C4	-6.59	1.30	1.34
38	A1	1753	G	N1-C2	6.59	1.43	1.37
38	A1	1874	G	C8-N7	6.59	1.34	1.30
38	A1	1922	A	C6-N1	6.59	1.40	1.35
39	A3	10	U	C2'-C1'	6.59	1.60	1.53
11	B2	768	A	N9-C4	6.59	1.41	1.37
38	A1	641	G	N9-C8	6.59	1.42	1.37
38	A1	1184	U	N1-C6	6.59	1.43	1.38
59	AL	12	ARG	C-N	6.59	1.45	1.33
9	AX	291	ARG	NE-CZ	6.59	1.41	1.33
11	B2	9	U	C4'-O4'	6.59	1.54	1.45
11	B2	100	A	C8-N7	-6.59	1.26	1.31
11	B2	662	C	C5-C6	6.59	1.39	1.34
38	A1	213	G	O3'-P	-6.59	1.53	1.61
38	A1	929	G	C6-N1	6.59	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1353	A	C2'-C1'	-6.59	1.46	1.53
38	A1	2097	G	N3-C4	-6.59	1.30	1.35
38	A1	2995	A	C8-N7	-6.59	1.26	1.31
11	B2	560	A	C2-N3	6.59	1.39	1.33
38	A1	2503	C	C5'-C4'	6.59	1.59	1.51
38	A1	2551	G	C4'-O4'	6.59	1.54	1.45
38	A1	2734	C	C2'-C1'	-6.59	1.46	1.53
7	AU	108	GLU	N-CA	-6.59	1.33	1.46
11	B2	114	A	C4'-O4'	-6.59	1.36	1.45
11	B2	765	U	C5'-C4'	6.59	1.59	1.51
11	B2	801	A	C6-N6	6.59	1.39	1.33
25	BM	114	ARG	NE-CZ	6.59	1.41	1.33
38	A1	424	U	C5'-C4'	6.59	1.59	1.51
38	A1	492	A	C5-C6	-6.59	1.35	1.41
38	A1	1418	A	C8-N7	-6.59	1.26	1.31
11	B2	906	G	N3-C4	6.59	1.40	1.35
38	A1	653	U	N1-C6	-6.59	1.32	1.38
38	A1	1010	G	C2-N2	6.59	1.41	1.34
38	A1	1354	G	N9-C8	6.59	1.42	1.37
38	A1	1501	G	C2'-C1'	-6.59	1.46	1.53
38	A1	1544	C	N1-C2	6.59	1.46	1.40
38	A1	1641	G	C8-N7	-6.59	1.26	1.30
38	A1	2148	U	C3'-C2'	6.59	1.60	1.52
39	A3	91	G	C2-N3	6.59	1.38	1.32
39	A3	123	U	C1'-N1	6.59	1.58	1.48
11	B2	447	A	C4'-O4'	6.58	1.54	1.45
11	B2	952	A	C8-N7	-6.58	1.26	1.31
11	B2	1229	A	C2'-C1'	-6.58	1.46	1.53
38	A1	130	G	O3'-P	-6.58	1.53	1.61
38	A1	1478	G	C5-C4	6.58	1.43	1.38
11	B2	180	G	P-O5'	-6.58	1.53	1.59
11	B2	1494	C	C2-N3	6.58	1.41	1.35
38	A1	1752	C	C4-N4	6.58	1.39	1.33
38	A1	2658	G	C2'-C1'	-6.58	1.46	1.53
38	A1	2972	G	C6-N1	6.58	1.44	1.39
11	B2	321	A	C5-C4	-6.58	1.34	1.38
11	B2	746	A	N1-C2	6.58	1.40	1.34
11	B2	1099	A	C6-N1	6.58	1.40	1.35
38	A1	259	A	C2-N3	6.58	1.39	1.33
38	A1	398	U	N1-C6	6.58	1.43	1.38
38	A1	1802	G	C5'-C4'	6.58	1.59	1.51
38	A1	2662	G	C2'-C1'	-6.58	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2899	G	C3'-C2'	-6.58	1.45	1.52
11	B2	356	G	N3-C4	6.58	1.40	1.35
38	A1	480	A	N3-C4	-6.58	1.30	1.34
38	A1	2129	G	C8-N7	6.58	1.34	1.30
38	A1	2599	C	C5'-C4'	6.58	1.59	1.51
11	B2	435	A	C3'-C2'	6.58	1.60	1.52
11	B2	813	G	O3'-P	-6.58	1.53	1.61
11	B2	1460	G	C4'-O4'	6.58	1.54	1.45
38	A1	355	G	C1'-N9	6.58	1.58	1.48
38	A1	664	A	N9-C4	-6.58	1.33	1.37
38	A1	724	G	C2'-C1'	-6.58	1.46	1.53
38	A1	922	C	N3-C4	6.58	1.38	1.33
38	A1	1725	A	N7-C5	-6.58	1.35	1.39
38	A1	2266	C	P-O5'	-6.58	1.53	1.59
38	A1	172	C	N3-C4	6.58	1.38	1.33
38	A1	1520	G	C2'-C1'	-6.58	1.46	1.53
38	A1	1877	C	C3'-C2'	6.58	1.60	1.52
38	A1	1937	A	C6-N1	6.58	1.40	1.35
38	A1	2299	G	C2-N3	6.58	1.38	1.32
38	A1	3029	A	C2'-C1'	6.58	1.60	1.53
39	A3	115	C	C3'-O3'	6.58	1.51	1.42
46	AD	47	GLY	CA-C	-6.58	1.41	1.51
60	AM	157	ARG	CZ-NH1	6.58	1.41	1.33
11	B2	1213	G	C2-N3	6.58	1.38	1.32
38	A1	2344	G	O4'-C1'	6.58	1.50	1.41
38	A1	2469	G	N9-C8	6.58	1.42	1.37
11	B2	228	G	C8-N7	-6.57	1.27	1.30
38	A1	544	A	C4'-O4'	6.57	1.54	1.45
38	A1	634	G	C2-N2	6.57	1.41	1.34
38	A1	2421	A	C6-N6	6.57	1.39	1.33
39	A3	107	G	C6-N1	6.57	1.44	1.39
38	A1	297	G	C6-N1	6.57	1.44	1.39
38	A1	1728	C	C4-N4	6.57	1.39	1.33
38	A1	1866	G	C2-N2	6.57	1.41	1.34
38	A1	1153	U	N3-C4	6.57	1.44	1.38
38	A1	1243	C	C4-C5	6.57	1.48	1.43
38	A1	1615	G	P-O5'	-6.57	1.53	1.59
38	A1	2259	G	C2'-C1'	-6.57	1.46	1.53
38	A1	2820	C	N1-C6	6.57	1.41	1.37
39	A3	124	A	C2-N3	6.57	1.39	1.33
38	A1	609	G	N1-C2	6.57	1.43	1.37
38	A1	668	G	N1-C2	-6.57	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2126	G	N9-C8	6.57	1.42	1.37
11	B2	251	G	C3'-C2'	-6.57	1.45	1.52
11	B2	676	G	N1-C2	6.57	1.43	1.37
38	A1	381	G	C6-N1	6.57	1.44	1.39
38	A1	588	U	C2'-C1'	-6.57	1.46	1.53
38	A1	883	G	N1-C2	6.57	1.43	1.37
38	A1	1874	G	C2-N3	6.57	1.38	1.32
11	B2	1083	G	N3-C4	6.57	1.40	1.35
38	A1	231	G	C6-N1	6.57	1.44	1.39
38	A1	771	G	C2-N3	6.57	1.38	1.32
38	A1	1992	A	N7-C5	-6.57	1.35	1.39
38	A1	2280	G	C5'-C4'	6.57	1.59	1.51
38	A1	2350	G	N9-C4	6.57	1.43	1.38
38	A1	2390	G	C2-N3	6.57	1.38	1.32
38	A1	95	G	N1-C2	6.56	1.43	1.37
38	A1	1417	U	C4'-C3'	6.56	1.60	1.53
38	A1	2281	A	O3'-P	-6.56	1.53	1.61
11	B2	222	G	C6-N1	6.56	1.44	1.39
11	B2	258	A	N7-C5	-6.56	1.35	1.39
11	B2	588	C	C2'-C1'	-6.56	1.46	1.53
11	B2	600	C	N1-C6	-6.56	1.33	1.37
38	A1	108	G	C2'-C1'	6.56	1.60	1.53
38	A1	230	A	C6-N6	6.56	1.39	1.33
38	A1	801	A	C5'-C4'	6.56	1.59	1.51
38	A1	908	U	C4'-C3'	6.56	1.60	1.53
38	A1	1438	C	N1-C6	6.56	1.41	1.37
38	A1	2689	G	C8-N7	6.56	1.34	1.30
38	A1	2717	A	C6-N1	6.56	1.40	1.35
38	A1	2735	C	C4-N4	6.56	1.39	1.33
11	B2	507	G	C6-N1	6.56	1.44	1.39
38	A1	215	A	C5'-C4'	6.56	1.59	1.51
38	A1	917	A	C6-N6	6.56	1.39	1.33
39	A3	34	C	N1-C2	-6.56	1.33	1.40
11	B2	1120	G	N1-C2	6.56	1.43	1.37
38	A1	169	G	N9-C4	6.56	1.43	1.38
38	A1	1387	G	N7-C5	-6.56	1.35	1.39
38	A1	2517	U	N1-C2	6.56	1.44	1.38
38	A1	2556	C	C4-N4	6.56	1.39	1.33
10	B1	55	U	C1'-N1	6.56	1.58	1.48
11	B2	266	A	C4'-O4'	6.56	1.54	1.45
11	B2	345	G	N1-C2	6.56	1.43	1.37
11	B2	1000	G	C2-N2	6.56	1.41	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	118	A	N3-C4	6.56	1.38	1.34
11	B2	1041	C	C4'-C3'	6.56	1.60	1.53
38	A1	630	G	C2'-C1'	-6.56	1.46	1.53
47	Ad	41	ARG	CD-NE	6.56	1.57	1.46
62	AO	34	ARG	NE-CZ	6.56	1.41	1.33
11	B2	639	G	N3-C4	6.55	1.40	1.35
11	B2	858	A	N3-C4	6.55	1.38	1.34
38	A1	299	U	C4'-C3'	6.55	1.60	1.53
38	A1	440	A	N7-C5	-6.55	1.35	1.39
38	A1	739	C	N3-C4	6.55	1.38	1.33
38	A1	909	A	C6-N1	6.55	1.40	1.35
38	A1	1995	C	N3-C4	6.55	1.38	1.33
38	A1	2540	A	C4'-C3'	6.55	1.60	1.53
11	B2	261	G	N9-C8	6.55	1.42	1.37
11	B2	502	U	N3-C4	6.55	1.44	1.38
11	B2	762	G	N1-C2	6.55	1.43	1.37
11	B2	900	G	N9-C4	6.55	1.43	1.38
38	A1	12	C	C2-N3	6.55	1.41	1.35
38	A1	619	G	N9-C8	6.55	1.42	1.37
38	A1	875	G	C4'-C3'	6.55	1.60	1.53
38	A1	1432	C	C4'-O4'	-6.55	1.37	1.45
38	A1	2476	A	N3-C4	6.55	1.38	1.34
38	A1	2857	C	C3'-C2'	6.55	1.60	1.52
11	B2	1257	U	N3-C4	6.55	1.44	1.38
13	BA	143	GLU	CD-OE1	6.55	1.32	1.25
18	BF	155	ARG	CD-NE	6.55	1.57	1.46
38	A1	1438	C	N3-C4	6.55	1.38	1.33
38	A1	1668	G	C5-C4	6.55	1.43	1.38
38	A1	2428	C	C2-N3	6.55	1.41	1.35
38	A1	3032	C	C5'-C4'	6.55	1.59	1.51
39	A3	75	G	P-O5'	-6.55	1.53	1.59
43	AB	233	ARG	NE-CZ	6.55	1.41	1.33
15	BC	126	ARG	CZ-NH1	6.55	1.41	1.33
38	A1	375	C	P-O5'	-6.55	1.53	1.59
38	A1	462	A	N1-C2	6.55	1.40	1.34
38	A1	1310	A	N7-C5	-6.55	1.35	1.39
38	A1	1750	C	P-O5'	-6.55	1.53	1.59
38	A1	60	G	N9-C8	-6.55	1.33	1.37
38	A1	1894	A	N9-C4	6.55	1.41	1.37
11	B2	46	A	C6-N6	6.55	1.39	1.33
11	B2	65	G	C6-N1	6.55	1.44	1.39
11	B2	393	A	N9-C8	-6.55	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	452	G	N9-C4	6.55	1.43	1.38
11	B2	1462	A	N9-C8	6.55	1.43	1.37
14	BB	33	TYR	CG-CD1	6.55	1.47	1.39
38	A1	169	G	C5'-C4'	6.55	1.59	1.51
38	A1	514	U	C2-N3	6.55	1.42	1.37
38	A1	533	G	C5'-C4'	6.55	1.59	1.51
38	A1	536	G	N9-C8	6.55	1.42	1.37
38	A1	2158	G	N9-C8	6.55	1.42	1.37
38	A1	2674	C	P-O5'	6.55	1.66	1.59
11	B2	29	G	N3-C4	6.54	1.40	1.35
38	A1	16	G	N1-C2	6.54	1.43	1.37
38	A1	205	A	C2'-C1'	-6.54	1.46	1.53
10	B1	62	C	C4-N4	6.54	1.39	1.33
11	B2	534	G	C2-N2	6.54	1.41	1.34
11	B2	1179	C	N3-C4	6.54	1.38	1.33
38	A1	455	G	N9-C8	6.54	1.42	1.37
38	A1	1188	C	C1'-N1	6.54	1.58	1.48
38	A1	1558	U	C2'-C1'	-6.54	1.46	1.53
38	A1	1978	A	N7-C5	-6.54	1.35	1.39
11	B2	155	U	N3-C4	6.54	1.44	1.38
11	B2	329	G	N9-C4	6.54	1.43	1.38
11	B2	356	G	C4'-O4'	6.54	1.54	1.45
11	B2	519	G	P-O5'	-6.54	1.53	1.59
11	B2	1150	G	N1-C2	6.54	1.43	1.37
38	A1	659	U	N3-C4	6.54	1.44	1.38
38	A1	937	A	N7-C5	-6.54	1.35	1.39
38	A1	1357	G	N3-C4	-6.54	1.30	1.35
38	A1	1705	C	P-O5'	-6.54	1.53	1.59
38	A1	2797	C	C5'-C4'	6.54	1.59	1.51
38	A1	3012	C	P-O5'	-6.54	1.53	1.59
39	A3	2	G	O3'-P	-6.54	1.53	1.61
11	B2	618	G	C3'-O3'	6.54	1.51	1.42
31	BS	24	PHE	CB-CG	-6.54	1.40	1.51
38	A1	773	U	N3-C4	6.54	1.44	1.38
38	A1	846	C	C2-N3	6.54	1.41	1.35
38	A1	1812	A	C4'-C3'	-6.54	1.46	1.53
11	B2	135	U	C3'-C2'	6.54	1.60	1.52
38	A1	281	G	C2'-C1'	-6.54	1.46	1.53
38	A1	1817	C	C2-O2	-6.54	1.18	1.24
38	A1	2419	U	N1-C6	6.54	1.43	1.38
39	A3	93	G	C4'-C3'	6.54	1.60	1.53
11	B2	326	C	O3'-P	-6.54	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	962	G	O3'-P	-6.54	1.53	1.61
11	B2	1217	C	C4'-C3'	6.54	1.60	1.53
11	B2	1443	G	N7-C5	-6.54	1.35	1.39
38	A1	690	G	C5-C6	-6.54	1.35	1.42
38	A1	1077	G	C2-N3	6.54	1.38	1.32
38	A1	2094	A	P-O5'	-6.54	1.53	1.59
38	A1	2790	C	C4-C5	-6.54	1.37	1.43
38	A1	2995	A	C6-N6	6.54	1.39	1.33
11	B2	58	U	O3'-P	-6.54	1.53	1.61
11	B2	388	G	N7-C5	-6.54	1.35	1.39
11	B2	1388	G	C6-N1	6.54	1.44	1.39
38	A1	650	C	C4'-O4'	6.54	1.54	1.45
38	A1	812	C	C4-C5	6.54	1.48	1.43
38	A1	1459	A	C5-C4	-6.54	1.34	1.38
38	A1	1997	C	C4-N4	6.54	1.39	1.33
11	B2	776	C	P-O5'	-6.53	1.53	1.59
11	B2	1171	G	N1-C2	6.53	1.43	1.37
12	B3	108	ARG	NE-CZ	6.53	1.41	1.33
38	A1	1187	A	N3-C4	6.53	1.38	1.34
38	A1	1591	C	O3'-P	-6.53	1.53	1.61
38	A1	1907	G	C2-N3	6.53	1.38	1.32
38	A1	2107	G	N1-C2	6.53	1.43	1.37
38	A1	2150	G	C2-N3	6.53	1.38	1.32
38	A1	2389	C	C4-N4	6.53	1.39	1.33
38	A1	2409	C	P-O5'	-6.53	1.53	1.59
11	B2	1012	C	C1'-N1	-6.53	1.37	1.46
38	A1	233	A	C2'-C1'	-6.53	1.46	1.53
38	A1	903	C	N3-C4	6.53	1.38	1.33
38	A1	1184	U	C2'-C1'	-6.53	1.46	1.53
38	A1	1422	G	N3-C4	-6.53	1.30	1.35
38	A1	2334	G	C2-N3	6.53	1.38	1.32
11	B2	734	G	C6-N1	6.53	1.44	1.39
11	B2	917	A	N3-C4	-6.53	1.30	1.34
38	A1	91	G	C8-N7	6.53	1.34	1.30
38	A1	518	A	N3-C4	-6.53	1.30	1.34
38	A1	890	G	C2-N2	6.53	1.41	1.34
38	A1	925	U	N1-C2	6.53	1.44	1.38
38	A1	1124	G	N1-C2	6.53	1.43	1.37
38	A1	1470	C	C4-C5	6.53	1.48	1.43
38	A1	1701	C	C5'-C4'	6.53	1.59	1.51
39	A3	49	A	O3'-P	-6.53	1.53	1.61
38	A1	2396	G	C2-N3	6.53	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	61	G	C2-N3	6.53	1.38	1.32
38	A1	896	G	C6-O6	-6.53	1.18	1.24
38	A1	1802	G	C2-N2	6.53	1.41	1.34
38	A1	2445	G	N7-C5	6.53	1.43	1.39
38	A1	2872	G	O4'-C1'	6.53	1.50	1.41
11	B2	280	C	N1-C6	6.53	1.41	1.37
11	B2	646	U	N3-C4	6.53	1.44	1.38
11	B2	1229	A	N1-C2	6.53	1.40	1.34
11	B2	1409	G	C2-N3	6.53	1.38	1.32
38	A1	916	A	C2'-C1'	-6.53	1.46	1.53
36	BX	71	ARG	CD-NE	6.52	1.57	1.46
38	A1	201	C	C4-N4	6.52	1.39	1.33
38	A1	592	C	N1-C6	6.52	1.41	1.37
11	B2	111	G	N1-C2	6.52	1.43	1.37
11	B2	824	G	C5-C4	6.52	1.43	1.38
11	B2	1069	G	C5-C4	-6.52	1.33	1.38
38	A1	93	C	N3-C4	6.52	1.38	1.33
38	A1	1228	G	C2-N3	6.52	1.38	1.32
38	A1	1525	G	C2'-C1'	-6.52	1.46	1.53
38	A1	2142	U	O4'-C1'	6.52	1.50	1.41
38	A1	2651	G	N7-C5	6.52	1.43	1.39
38	A1	2950	G	N9-C4	-6.52	1.32	1.38
61	AN	163	ARG	CD-NE	6.52	1.57	1.46
38	A1	636	G	C2-N3	6.52	1.38	1.32
38	A1	741	G	C2-N2	6.52	1.41	1.34
11	B2	590	G	N9-C8	-6.52	1.33	1.37
11	B2	1395	G	C2-N3	6.52	1.38	1.32
38	A1	774	G	N9-C8	6.52	1.42	1.37
38	A1	941	C	N1-C6	6.52	1.41	1.37
38	A1	1310	A	N9-C4	-6.52	1.33	1.37
38	A1	1604	G	C4'-C3'	6.52	1.60	1.53
38	A1	2823	G	P-O5'	-6.52	1.53	1.59
38	A1	170	A	C6-N1	6.52	1.40	1.35
38	A1	1693	G	C2-N3	6.52	1.38	1.32
38	A1	1811	G	N1-C2	6.52	1.43	1.37
11	B2	1337	A	C5-C6	6.52	1.47	1.41
38	A1	614	G	C5-C4	-6.52	1.33	1.38
63	AP	83	TRP	CD2-CE2	6.52	1.49	1.41
10	B1	7	G	N1-C2	6.51	1.43	1.37
11	B2	1182	G	C6-N1	6.51	1.44	1.39
11	B2	1241	U	N1-C6	6.51	1.43	1.38
38	A1	667	C	O3'-P	-6.51	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	919	G	N9-C4	6.51	1.43	1.38
38	A1	1930	A	C8-N7	-6.51	1.26	1.31
38	A1	2336	G	C5-C6	-6.51	1.35	1.42
38	A1	2581	G	C6-N1	6.51	1.44	1.39
11	B2	682	A	C8-N7	6.51	1.36	1.31
11	B2	832	G	C2-N2	6.51	1.41	1.34
38	A1	674	G	N3-C4	-6.51	1.30	1.35
38	A1	1440	C	N1-C6	6.51	1.41	1.37
38	A1	1630	U	C2'-C1'	-6.51	1.46	1.53
38	A1	2176	G	C5'-C4'	6.51	1.59	1.51
38	A1	2310	G	N1-C2	6.51	1.43	1.37
38	A1	2347	G	O3'-P	-6.51	1.53	1.61
11	B2	318	C	C2-N3	6.51	1.41	1.35
11	B2	1140	A	C5-C4	6.51	1.43	1.38
38	A1	2685	G	C2-N2	6.51	1.41	1.34
46	AD	238	ARG	CZ-NH1	6.51	1.41	1.33
11	B2	105	C	N3-C4	6.51	1.38	1.33
11	B2	197	A	N3-C4	6.51	1.38	1.34
11	B2	1199	A	C6-N1	6.51	1.40	1.35
11	B2	1298	G	C2-N3	6.51	1.38	1.32
11	B2	1377	G	C5-C6	-6.51	1.35	1.42
38	A1	52	A	C2'-C1'	-6.51	1.46	1.53
38	A1	1499	C	C4-N4	6.51	1.39	1.33
38	A1	1518	G	C6-N1	-6.51	1.34	1.39
38	A1	2253	G	C5-C6	-6.51	1.35	1.42
38	A1	2968	G	C2-N3	6.51	1.38	1.32
38	A1	881	G	O3'-P	-6.51	1.53	1.61
38	A1	2965	C	C4'-C3'	-6.51	1.46	1.53
11	B2	315	A	C4'-C3'	6.51	1.60	1.53
11	B2	578	G	N1-C2	6.51	1.43	1.37
11	B2	1255	C	C2'-C1'	-6.51	1.46	1.53
11	B2	1329	C	C4-N4	6.51	1.39	1.33
38	A1	300	U	C4'-C3'	6.51	1.60	1.53
38	A1	621	G	O3'-P	-6.51	1.53	1.61
38	A1	633	A	C8-N7	-6.51	1.26	1.31
38	A1	706	U	C2'-C1'	6.51	1.60	1.53
38	A1	990	G	N1-C2	6.51	1.43	1.37
38	A1	1669	A	C3'-C2'	6.51	1.60	1.52
38	A1	2455	G	P-O5'	-6.51	1.53	1.59
39	A3	63	G	N7-C5	-6.51	1.35	1.39
11	B2	1384	G	C2-N3	6.50	1.38	1.32
32	BT	102	TYR	CE2-CZ	6.50	1.47	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	82	C	C5'-C4'	6.50	1.59	1.51
38	A1	681	C	C2-N3	6.50	1.41	1.35
38	A1	777	A	C5'-C4'	6.50	1.59	1.51
38	A1	2903	U	N1-C6	6.50	1.43	1.38
11	B2	46	A	C2-N3	-6.50	1.27	1.33
11	B2	384	G	O4'-C1'	6.50	1.50	1.41
11	B2	818	A	P-O5'	6.50	1.66	1.59
38	A1	578	C	C5-C6	6.50	1.39	1.34
38	A1	1017	A	C5-C4	6.50	1.43	1.38
38	A1	1756	C	N3-C4	6.50	1.38	1.33
38	A1	2226	G	C5-C4	6.50	1.43	1.38
38	A1	2333	G	O3'-P	-6.50	1.53	1.61
38	A1	2515	U	C2-N3	6.50	1.42	1.37
39	A3	77	A	C4'-O4'	-6.50	1.37	1.45
11	B2	172	G	N1-C2	6.50	1.43	1.37
11	B2	301	G	P-O5'	6.50	1.66	1.59
11	B2	1248	A	N3-C4	6.50	1.38	1.34
38	A1	493	A	C5-C4	6.50	1.43	1.38
38	A1	1357	G	C5'-C4'	6.50	1.59	1.51
38	A1	2180	C	C2-N3	6.50	1.41	1.35
33	BU	125	GLY	N-CA	-6.50	1.36	1.46
38	A1	1260	C	N3-C4	6.50	1.38	1.33
38	A1	1445	G	C6-N1	6.50	1.44	1.39
38	A1	1601	G	C2-N3	6.50	1.38	1.32
38	A1	2085	C	C1'-N1	6.50	1.58	1.48
38	A1	2498	G	N7-C5	6.50	1.43	1.39
38	A1	396	G	C5-C6	-6.50	1.35	1.42
38	A1	641	G	C5-C4	6.50	1.42	1.38
38	A1	911	G	C5-C6	-6.50	1.35	1.42
38	A1	1406	G	C5'-C4'	6.50	1.59	1.51
38	A1	2506	G	C4'-O4'	6.50	1.53	1.45
38	A1	2785	G	C5-C4	6.50	1.42	1.38
11	B2	587	G	N9-C8	-6.50	1.33	1.37
11	B2	974	G	N9-C8	6.50	1.42	1.37
18	BF	92	ARG	CZ-NH2	6.50	1.41	1.33
38	A1	78	C	C4'-O4'	6.50	1.53	1.45
38	A1	314	A	N3-C4	6.50	1.38	1.34
38	A1	1349	G	N9-C4	6.50	1.43	1.38
20	BH	88	ARG	CZ-NH1	6.50	1.41	1.33
38	A1	205	A	C2-N3	6.50	1.39	1.33
38	A1	593	C	C2'-C1'	-6.50	1.46	1.53
38	A1	1596	G	N9-C4	6.50	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2090	A	N1-C2	6.50	1.40	1.34
38	A1	2789	G	P-O5'	6.50	1.66	1.59
11	B2	78	G	C2-N2	6.49	1.41	1.34
11	B2	1388	G	C8-N7	-6.49	1.27	1.30
38	A1	113	C	C4-N4	6.49	1.39	1.33
38	A1	461	C	N1-C6	-6.49	1.33	1.37
38	A1	506	G	C5-C4	6.49	1.42	1.38
38	A1	900	C	N1-C6	6.49	1.41	1.37
38	A1	1587	A	C2-N3	6.49	1.39	1.33
38	A1	2341	G	N9-C4	-6.49	1.32	1.38
11	B2	158	U	N1-C2	6.49	1.44	1.38
38	A1	1447	G	N9-C8	-6.49	1.33	1.37
10	B1	6	G	N7-C5	-6.49	1.35	1.39
11	B2	233	C	O4'-C1'	6.49	1.50	1.41
11	B2	248	U	C4'-C3'	-6.49	1.46	1.53
11	B2	1275	U	C2-N3	6.49	1.42	1.37
11	B2	1284	C	C5'-C4'	6.49	1.59	1.51
38	A1	241	C	C4-C5	6.49	1.48	1.43
38	A1	765	G	C3'-C2'	6.49	1.60	1.52
38	A1	963	G	N1-C2	6.49	1.43	1.37
11	B2	813	G	C6-N1	6.49	1.44	1.39
11	B2	1304	C	C1'-N1	6.49	1.58	1.48
38	A1	883	G	C2-N3	6.49	1.38	1.32
38	A1	1855	G	N1-C2	6.49	1.43	1.37
38	A1	1928	A	N3-C4	-6.49	1.30	1.34
38	A1	1998	G	C8-N7	-6.49	1.27	1.30
38	A1	2104	G	C2-N2	6.49	1.41	1.34
38	A1	2141	C	C1'-N1	6.49	1.58	1.48
38	A1	2168	C	C2-N3	6.49	1.41	1.35
38	A1	2398	C	C2'-C1'	-6.49	1.46	1.53
38	A1	2509	A	C1'-N9	-6.49	1.37	1.46
11	B2	736	A	C2-N3	6.49	1.39	1.33
11	B2	1321	U	C4-O4	-6.49	1.18	1.23
11	B2	1394	G	C2-N2	6.49	1.41	1.34
38	A1	139	G	N9-C8	6.49	1.42	1.37
38	A1	247	A	C6-N6	6.49	1.39	1.33
38	A1	2613	C	C5'-C4'	6.49	1.59	1.51
4	AQ	28	ARG	CZ-NH1	6.49	1.41	1.33
38	A1	402	G	C3'-C2'	-6.49	1.45	1.52
38	A1	1291	C	C4'-O4'	-6.49	1.37	1.45
38	A1	1511	C	C5'-C4'	6.49	1.59	1.51
38	A1	2229	G	C4'-C3'	6.49	1.60	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	637	G	N7-C5	-6.48	1.35	1.39
11	B2	879	U	C4'-O4'	6.48	1.53	1.45
32	BT	7	ARG	NE-CZ	6.48	1.41	1.33
35	BW	54	VAL	CB-CG1	6.48	1.66	1.52
38	A1	398	U	C5'-C4'	6.48	1.59	1.51
38	A1	2100	U	C3'-C2'	-6.48	1.45	1.52
11	B2	788	C	C4-C5	6.48	1.48	1.43
11	B2	1392	G	N7-C5	-6.48	1.35	1.39
38	A1	662	A	C3'-C2'	-6.48	1.45	1.52
38	A1	1301	G	C8-N7	6.48	1.34	1.30
38	A1	1423	G	N7-C5	-6.48	1.35	1.39
38	A1	2222	C	C4'-O4'	6.48	1.53	1.45
39	A3	97	G	N9-C4	-6.48	1.32	1.38
54	AI	96	ARG	CZ-NH1	6.48	1.41	1.33
11	B2	291	G	N9-C4	6.48	1.43	1.38
11	B2	335	G	N3-C4	6.48	1.40	1.35
11	B2	1034	G	N9-C8	6.48	1.42	1.37
11	B2	1315	G	C2-N2	6.48	1.41	1.34
11	B2	1322	C	P-O5'	6.48	1.66	1.59
38	A1	1044	C	C3'-O3'	6.48	1.51	1.42
38	A1	1689	G	N7-C5	6.48	1.43	1.39
38	A1	2124	C	C4-C5	-6.48	1.37	1.43
38	A1	2283	C	N1-C6	-6.48	1.33	1.37
38	A1	2456	C	C4'-C3'	6.48	1.60	1.53
38	A1	120	G	N7-C5	6.48	1.43	1.39
38	A1	2557	C	P-O5'	6.48	1.66	1.59
48	AE	93	ARG	CZ-NH1	6.48	1.41	1.33
11	B2	1123	G	N1-C2	6.48	1.43	1.37
11	B2	1323	A	N7-C5	-6.48	1.35	1.39
20	BH	73	ARG	NE-CZ	6.48	1.41	1.33
38	A1	953	G	C4'-O4'	-6.48	1.37	1.45
38	A1	998	G	C2'-C1'	-6.48	1.46	1.53
38	A1	1486	G	C5'-C4'	6.48	1.59	1.51
38	A1	2524	C	N3-C4	6.48	1.38	1.33
38	A1	2539	G	C3'-C2'	6.48	1.60	1.52
38	A1	2821	G	C6-N1	6.48	1.44	1.39
39	A3	124	A	N9-C4	6.48	1.41	1.37
11	B2	30	C	N3-C4	6.47	1.38	1.33
11	B2	585	U	C4-C5	6.47	1.49	1.43
11	B2	1079	G	C8-N7	6.47	1.34	1.30
11	B2	1394	G	P-O5'	-6.47	1.53	1.59
38	A1	397	G	C4'-O4'	6.47	1.53	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	466	C	C4-N4	6.47	1.39	1.33
38	A1	878	G	N1-C2	6.47	1.43	1.37
38	A1	1150	G	N9-C8	6.47	1.42	1.37
38	A1	1415	C	O3'-P	-6.47	1.53	1.61
38	A1	1633	A	C3'-C2'	-6.47	1.45	1.52
38	A1	2005	A	C2'-C1'	-6.47	1.46	1.53
10	B1	64	C	C4-N4	6.47	1.39	1.33
11	B2	376	G	N9-C4	6.47	1.43	1.38
11	B2	876	A	N7-C5	-6.47	1.35	1.39
11	B2	944	C	C4'-C3'	6.47	1.60	1.53
11	B2	1187	A	N7-C5	-6.47	1.35	1.39
38	A1	213	G	C1'-N9	6.47	1.58	1.48
38	A1	2047	U	C3'-C2'	-6.47	1.45	1.52
38	A1	2270	G	C2-N3	6.47	1.38	1.32
38	A1	2394	G	N1-C2	6.47	1.43	1.37
38	A1	2899	G	N3-C4	6.47	1.40	1.35
34	BV	16	ARG	NE-CZ	6.47	1.41	1.33
38	A1	1222	U	C4-C5	6.47	1.49	1.43
38	A1	2505	A	N7-C5	-6.47	1.35	1.39
10	B1	24	A	N9-C4	-6.47	1.33	1.37
11	B2	1107	C	N3-C4	6.47	1.38	1.33
38	A1	19	G	N9-C4	-6.47	1.32	1.38
38	A1	348	G	N9-C8	6.47	1.42	1.37
38	A1	1179	G	C5-C6	-6.47	1.35	1.42
38	A1	1640	G	C2-N2	6.47	1.41	1.34
38	A1	2036	A	P-O5'	6.47	1.66	1.59
11	B2	309	A	C6-N1	6.47	1.40	1.35
38	A1	2182	A	P-O5'	-6.47	1.53	1.59
38	A1	2216	G	P-O5'	-6.47	1.53	1.59
10	B1	30	G	C2-N2	6.47	1.41	1.34
11	B2	45	U	C4-O4	-6.47	1.18	1.23
11	B2	79	G	P-O5'	-6.47	1.53	1.59
11	B2	299	G	O4'-C1'	-6.47	1.33	1.41
11	B2	308	G	N7-C5	-6.47	1.35	1.39
11	B2	450	A	C6-N6	6.47	1.39	1.33
11	B2	520	G	N1-C2	6.47	1.43	1.37
11	B2	960	A	N7-C5	-6.47	1.35	1.39
38	A1	1736	G	O3'-P	-6.47	1.53	1.61
38	A1	2312	U	C2'-O2'	6.47	1.50	1.41
38	A1	2335	G	N9-C8	6.47	1.42	1.37
39	A3	113	C	P-O5'	-6.47	1.53	1.59
58	Ak	201	TYR	CE2-CZ	6.47	1.47	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1398	U	C2'-C1'	-6.46	1.46	1.53
38	A1	384	G	N3-C4	6.46	1.40	1.35
38	A1	482	A	C5-C4	6.46	1.43	1.38
38	A1	2235	G	N3-C4	-6.46	1.30	1.35
38	A1	2353	C	C5'-C4'	6.46	1.59	1.51
38	A1	2464	G	N7-C5	-6.46	1.35	1.39
38	A1	2646	A	C6-N6	6.46	1.39	1.33
11	B2	1102	A	C5-C4	6.46	1.43	1.38
38	A1	338	A	O3'-P	-6.46	1.53	1.61
38	A1	2129	G	C5-C4	6.46	1.42	1.38
38	A1	128	C	N1-C6	6.46	1.41	1.37
11	B2	1247	A	C6-N1	6.46	1.40	1.35
11	B2	1487	U	C1'-N1	6.46	1.58	1.48
38	A1	810	A	C8-N7	-6.46	1.27	1.31
38	A1	843	C	C4-C5	6.46	1.48	1.43
38	A1	1356	A	N1-C2	6.46	1.40	1.34
38	A1	1465	A	C8-N7	6.46	1.36	1.31
38	A1	2734	C	N3-C4	6.46	1.38	1.33
60	AM	4	TYR	CE2-CZ	6.46	1.47	1.38
10	B1	49	C	C2-N3	-6.46	1.30	1.35
11	B2	624	G	P-O5'	-6.46	1.53	1.59
11	B2	977	G	C2-N2	6.46	1.41	1.34
11	B2	1335	A	C5-C6	-6.46	1.35	1.41
11	B2	1390	G	C8-N7	6.46	1.34	1.30
38	A1	1502	C	O3'-P	-6.46	1.53	1.61
38	A1	1927	C	C4-N4	6.46	1.39	1.33
38	A1	2434	A	C5-C4	-6.46	1.34	1.38
38	A1	2704	A	C6-N1	6.46	1.40	1.35
11	B2	746	A	N3-C4	-6.46	1.30	1.34
11	B2	761	U	C2-N3	6.46	1.42	1.37
11	B2	821	G	N7-C5	-6.46	1.35	1.39
11	B2	1045	A	N7-C5	-6.46	1.35	1.39
38	A1	209	G	C6-N1	6.46	1.44	1.39
38	A1	733	A	P-O5'	-6.46	1.53	1.59
38	A1	1039	C	C4'-C3'	-6.46	1.46	1.53
38	A1	2688	C	C2-N3	6.46	1.41	1.35
38	A1	2801	G	C2-N3	6.46	1.38	1.32
39	A3	56	C	C2'-O2'	6.46	1.50	1.41
41	AA	119	ARG	NE-CZ	6.46	1.41	1.33
11	B2	302	A	N9-C8	6.46	1.43	1.37
11	B2	543	C	O4'-C1'	6.46	1.50	1.41
11	B2	872	A	O4'-C1'	-6.46	1.33	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1064	C	O3'-P	-6.46	1.53	1.61
38	A1	1735	G	N3-C4	6.46	1.40	1.35
38	A1	2706	C	C4-C5	6.46	1.48	1.43
11	B2	433	U	N1-C2	-6.45	1.32	1.38
11	B2	977	G	C2-N3	6.45	1.38	1.32
38	A1	57	C	C2-N3	6.45	1.41	1.35
38	A1	2508	G	C4'-C3'	6.45	1.60	1.53
38	A1	3038	A	C2'-C1'	-6.45	1.46	1.53
39	A3	61	C	C4-N4	6.45	1.39	1.33
10	B1	52	G	C2-N3	6.45	1.38	1.32
11	B2	576	C	C4'-O4'	6.45	1.53	1.45
11	B2	1077	U	C2-N3	6.45	1.42	1.37
38	A1	1047	A	O3'-P	-6.45	1.53	1.61
10	B1	69	G	C4'-C3'	6.45	1.60	1.53
11	B2	48	G	N1-C2	6.45	1.43	1.37
11	B2	176	U	C5-C6	6.45	1.40	1.34
11	B2	460	C	P-O5'	-6.45	1.53	1.59
38	A1	928	A	N3-C4	-6.45	1.30	1.34
38	A1	1097	G	C2-N3	6.45	1.38	1.32
38	A1	1495	A	C5-C4	6.45	1.43	1.38
38	A1	2248	G	N7-C5	6.45	1.43	1.39
38	A1	2492	G	C6-N1	6.45	1.44	1.39
38	A1	2689	G	C2'-C1'	-6.45	1.46	1.53
64	AR	69	ARG	NE-CZ	6.45	1.41	1.33
11	B2	28	U	N1-C6	-6.45	1.32	1.38
11	B2	1423	A	C4'-C3'	6.45	1.60	1.53
38	A1	406	G	C5'-C4'	6.45	1.59	1.51
38	A1	534	G	N1-C2	6.45	1.43	1.37
38	A1	1916	U	C2-N3	6.45	1.42	1.37
38	A1	2564	U	C2'-O2'	-6.45	1.33	1.41
11	B2	419	G	C8-N7	6.45	1.34	1.30
38	A1	944	G	C4'-C3'	6.45	1.60	1.53
11	B2	463	G	C2-N3	6.45	1.38	1.32
11	B2	824	G	N9-C4	6.45	1.43	1.38
11	B2	826	C	C2'-C1'	-6.45	1.46	1.53
11	B2	957	A	N7-C5	-6.45	1.35	1.39
11	B2	1398	U	N1-C2	6.45	1.44	1.38
38	A1	959	U	C4-C5	6.45	1.49	1.43
38	A1	1134	A	N9-C4	6.45	1.41	1.37
38	A1	1836	A	C6-N6	6.45	1.39	1.33
38	A1	2836	G	C5'-C4'	6.45	1.59	1.51
10	B1	37	A	C5'-C4'	6.44	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	391	G	C2-N3	6.44	1.38	1.32
38	A1	1191	C	C4-N4	6.44	1.39	1.33
38	A1	1371	U	N3-C4	6.44	1.44	1.38
11	B2	560	A	N7-C5	-6.44	1.35	1.39
38	A1	67	U	C2-N3	6.44	1.42	1.37
38	A1	1057	C	N3-C4	6.44	1.38	1.33
38	A1	1310	A	C2'-C1'	-6.44	1.46	1.53
38	A1	1834	C	C5'-C4'	6.44	1.59	1.51
39	A3	90	A	C3'-C2'	6.44	1.60	1.52
7	AU	42	ARG	CD-NE	6.44	1.57	1.46
11	B2	924	U	C2-N3	6.44	1.42	1.37
11	B2	1279	A	C3'-C2'	6.44	1.60	1.52
11	B2	1394	G	C8-N7	-6.44	1.27	1.30
38	A1	587	A	C2'-C1'	-6.44	1.46	1.53
38	A1	612	G	C8-N7	-6.44	1.27	1.30
38	A1	776	G	C2-N3	6.44	1.38	1.32
38	A1	1514	C	C4-N4	6.44	1.39	1.33
38	A1	1694	G	C2-N3	6.44	1.38	1.32
38	A1	1785	G	N1-C2	6.44	1.43	1.37
38	A1	1818	G	C8-N7	6.44	1.34	1.30
38	A1	2210	G	C4'-C3'	6.44	1.60	1.53
11	B2	989	C	C5-C6	6.44	1.39	1.34
15	BC	177	GLY	CA-C	-6.44	1.41	1.51
38	A1	619	G	C2-N3	6.44	1.38	1.32
38	A1	1559	A	N7-C5	-6.44	1.35	1.39
38	A1	1864	G	C6-N1	6.44	1.44	1.39
38	A1	2071	C	N3-C4	6.44	1.38	1.33
38	A1	2673	C	N1-C2	6.44	1.46	1.40
38	A1	2867	U	C2'-O2'	6.44	1.50	1.41
11	B2	164	A	N9-C4	6.44	1.41	1.37
11	B2	1147	G	C4'-C3'	-6.44	1.46	1.53
23	BK	130	ARG	CZ-NH2	6.44	1.41	1.33
38	A1	107	G	C4'-C3'	6.44	1.60	1.53
38	A1	389	C	N1-C6	-6.44	1.33	1.37
38	A1	547	C	C4'-O4'	6.44	1.53	1.45
38	A1	559	G	C2-N2	6.44	1.41	1.34
38	A1	1926	A	N7-C5	-6.44	1.35	1.39
38	A1	2011	U	C4-C5	6.44	1.49	1.43
38	A1	2293	G	C4'-C3'	6.44	1.60	1.53
38	A1	2842	C	N1-C2	-6.44	1.33	1.40
11	B2	855	C	C2-N3	6.44	1.40	1.35
11	B2	956	C	C2-N3	-6.44	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1332	A	N3-C4	-6.44	1.30	1.34
38	A1	2611	U	C2-N3	6.44	1.42	1.37
11	B2	442	C	P-O5'	-6.43	1.53	1.59
38	A1	71	A	P-O5'	-6.43	1.53	1.59
38	A1	444	U	C2-N3	6.43	1.42	1.37
38	A1	702	G	C6-N1	6.43	1.44	1.39
38	A1	803	A	C3'-O3'	6.43	1.51	1.42
38	A1	1049	U	C2-N3	6.43	1.42	1.37
38	A1	1125	A	C6-N6	6.43	1.39	1.33
38	A1	1330	G	C5-C6	6.43	1.48	1.42
38	A1	1668	G	C2-N3	6.43	1.37	1.32
38	A1	2054	G	N7-C5	6.43	1.43	1.39
38	A1	2227	G	C2-N3	6.43	1.37	1.32
38	A1	2421	A	C2'-C1'	-6.43	1.46	1.53
38	A1	2557	C	C4-N4	6.43	1.39	1.33
38	A1	2801	G	N1-C2	6.43	1.42	1.37
38	A1	2846	A	C5-C4	-6.43	1.34	1.38
11	B2	295	G	C2'-C1'	-6.43	1.46	1.53
11	B2	833	C	C2'-C1'	-6.43	1.46	1.53
38	A1	1272	A	N7-C5	-6.43	1.35	1.39
38	A1	2283	C	C4-N4	6.43	1.39	1.33
39	A3	69	C	P-O5'	6.43	1.66	1.59
11	B2	251	G	C5'-C4'	-6.43	1.43	1.51
11	B2	1298	G	C2-N2	6.43	1.41	1.34
38	A1	505	A	C6-N6	6.43	1.39	1.33
38	A1	1570	C	N3-C4	6.43	1.38	1.33
38	A1	1931	G	N1-C2	6.43	1.42	1.37
38	A1	2165	A	N7-C5	-6.43	1.35	1.39
38	A1	2606	C	C4-C5	6.43	1.48	1.43
38	A1	2775	G	C8-N7	-6.43	1.27	1.30
11	B2	833	C	C4-N4	6.43	1.39	1.33
38	A1	407	A	C5-C4	6.43	1.43	1.38
38	A1	1139	C	C4-N4	6.43	1.39	1.33
38	A1	1209	A	C6-N6	6.43	1.39	1.33
38	A1	1725	A	O3'-P	6.43	1.68	1.61
38	A1	1776	G	C3'-C2'	6.43	1.60	1.52
38	A1	1826	G	C6-N1	6.43	1.44	1.39
38	A1	2222	C	C4-N4	6.43	1.39	1.33
38	A1	2545	A	C4'-C3'	-6.43	1.46	1.53
38	A1	2702	A	C3'-O3'	6.43	1.51	1.42
38	A1	2801	G	C4'-C3'	6.43	1.60	1.53
10	B1	31	G	C5'-C4'	6.43	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	788	A	N1-C2	6.43	1.40	1.34
38	A1	2246	G	P-O5'	-6.43	1.53	1.59
11	B2	478	C	C4-N4	6.43	1.39	1.33
11	B2	546	G	C2-N3	6.43	1.37	1.32
11	B2	1060	G	N7-C5	6.43	1.43	1.39
11	B2	1173	A	N1-C2	-6.43	1.28	1.34
11	B2	1269	G	C5'-C4'	6.43	1.59	1.51
38	A1	129	C	O3'-P	-6.43	1.53	1.61
38	A1	721	G	C2-N2	6.43	1.41	1.34
38	A1	2664	G	N9-C8	6.43	1.42	1.37
11	B2	148	C	C5'-C4'	6.42	1.59	1.51
11	B2	331	C	P-O5'	-6.42	1.53	1.59
11	B2	786	G	C6-O6	6.42	1.29	1.24
11	B2	840	C	C4-N4	6.42	1.39	1.33
11	B2	875	G	C4'-C3'	6.42	1.60	1.53
11	B2	1124	G	C2'-C1'	-6.42	1.46	1.53
13	BA	37	ALA	N-CA	-6.42	1.33	1.46
38	A1	596	C	C2'-C1'	-6.42	1.46	1.53
38	A1	1791	A	C6-N6	6.42	1.39	1.33
38	A1	2142	U	N3-C4	6.42	1.44	1.38
38	A1	2454	G	C2'-C1'	-6.42	1.46	1.53
38	A1	2615	U	C5'-C4'	6.42	1.59	1.51
38	A1	2988	A	C2-N3	6.42	1.39	1.33
39	A3	45	C	C4-N4	6.42	1.39	1.33
58	Ak	42	ARG	NE-CZ	6.42	1.41	1.33
11	B2	639	G	C4'-C3'	-6.42	1.46	1.53
11	B2	1135	G	N1-C2	6.42	1.42	1.37
11	B2	1220	G	C5-C6	-6.42	1.35	1.42
38	A1	991	U	C4'-O4'	-6.42	1.37	1.45
38	A1	1725	A	P-O5'	-6.42	1.53	1.59
38	A1	1938	G	N1-C2	6.42	1.42	1.37
38	A1	1986	U	C4'-C3'	6.42	1.60	1.53
38	A1	2871	A	C6-N6	6.42	1.39	1.33
11	B2	561	A	C2'-C1'	-6.42	1.46	1.53
11	B2	1056	G	N1-C2	6.42	1.42	1.37
11	B2	1472	G	N9-C8	6.42	1.42	1.37
17	BE	198	ARG	CZ-NH2	6.42	1.41	1.33
38	A1	682	G	N7-C5	6.42	1.43	1.39
38	A1	976	C	C4-N4	6.42	1.39	1.33
38	A1	1505	G	C4'-C3'	6.42	1.60	1.53
38	A1	2762	G	N3-C4	6.42	1.40	1.35
38	A1	2982	G	C2'-C1'	-6.42	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	216	G	C4'-C3'	-6.42	1.46	1.53
11	B2	792	C	C5'-C4'	6.42	1.59	1.51
38	A1	1066	C	O3'-P	-6.42	1.53	1.61
38	A1	1875	U	C2-N3	6.42	1.42	1.37
10	B1	35	G	C2'-C1'	-6.42	1.46	1.53
11	B2	597	C	C4'-C3'	-6.42	1.46	1.53
14	BB	161	ARG	CZ-NH2	6.42	1.41	1.33
38	A1	95	G	C2-N3	6.42	1.37	1.32
38	A1	557	G	N1-C2	6.42	1.42	1.37
38	A1	1208	A	C5-C4	6.42	1.43	1.38
38	A1	2516	G	C2-N2	6.42	1.41	1.34
38	A1	2634	U	C4-C5	-6.42	1.37	1.43
11	B2	69	U	N1-C2	6.42	1.44	1.38
11	B2	405	G	C5'-C4'	6.42	1.59	1.51
11	B2	1484	C	N1-C6	6.42	1.41	1.37
38	A1	89	C	C4-C5	6.42	1.48	1.43
38	A1	214	C	N1-C6	6.42	1.41	1.37
38	A1	1141	C	N3-C4	6.42	1.38	1.33
38	A1	2083	G	O3'-P	-6.42	1.53	1.61
11	B2	207	G	N7-C5	-6.42	1.35	1.39
11	B2	370	A	C1'-N9	6.42	1.58	1.48
11	B2	954	G	N9-C8	6.42	1.42	1.37
38	A1	80	G	N3-C4	-6.42	1.30	1.35
38	A1	2855	G	C8-N7	-6.42	1.27	1.30
10	B1	35	G	N9-C4	6.41	1.43	1.38
11	B2	103	A	N7-C5	-6.41	1.35	1.39
11	B2	383	C	N3-C4	6.41	1.38	1.33
11	B2	756	A	C8-N7	-6.41	1.27	1.31
11	B2	811	G	P-O5'	6.41	1.66	1.59
11	B2	1350	U	C2-N3	6.41	1.42	1.37
38	A1	2469	G	C2-N3	6.41	1.37	1.32
38	A1	2654	C	C4-C5	-6.41	1.37	1.43
11	B2	7	G	C6-N1	6.41	1.44	1.39
11	B2	987	G	C8-N7	-6.41	1.27	1.30
38	A1	1388	U	C2'-C1'	-6.41	1.46	1.53
39	A3	35	A	N9-C4	-6.41	1.34	1.37
11	B2	556	G	O3'-P	6.41	1.68	1.61
11	B2	577	C	N1-C6	6.41	1.41	1.37
11	B2	764	C	C2-N3	6.41	1.40	1.35
11	B2	876	A	N9-C8	-6.41	1.32	1.37
11	B2	905	A	N7-C5	6.41	1.43	1.39
11	B2	1103	G	P-O5'	6.41	1.66	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1134	G	N3-C4	-6.41	1.30	1.35
38	A1	784	C	C2'-C1'	-6.41	1.46	1.53
38	A1	824	C	O4'-C1'	-6.41	1.33	1.41
38	A1	2506	G	N3-C4	6.41	1.40	1.35
38	A1	2568	A	N7-C5	-6.41	1.35	1.39
57	Aj	41	ARG	CZ-NH2	6.41	1.41	1.33
9	AX	171	GLY	CA-C	-6.41	1.41	1.51
10	B1	21	G	N7-C5	-6.41	1.35	1.39
11	B2	47	A	C5'-C4'	6.41	1.59	1.51
11	B2	738	C	C1'-N1	6.41	1.58	1.48
11	B2	1245	C	C1'-N1	6.41	1.58	1.48
38	A1	901	C	C2'-C1'	-6.41	1.46	1.53
38	A1	1630	U	C1'-N1	6.41	1.58	1.48
38	A1	1725	A	C2'-C1'	-6.41	1.46	1.53
11	B2	620	G	C2'-C1'	-6.41	1.46	1.53
38	A1	132	G	C8-N7	-6.41	1.27	1.30
38	A1	203	G	N7-C5	-6.41	1.35	1.39
38	A1	1137	G	P-O5'	6.41	1.66	1.59
38	A1	2526	G	N9-C8	-6.41	1.33	1.37
11	B2	1097	G	C2'-C1'	-6.41	1.46	1.53
11	B2	1202	G	C2-N2	6.41	1.41	1.34
25	BM	75	GLY	CA-C	6.41	1.62	1.51
34	BV	89	ARG	CZ-NH2	6.41	1.41	1.33
38	A1	359	C	C4-N4	6.41	1.39	1.33
38	A1	1301	G	C6-N1	6.41	1.44	1.39
38	A1	2421	A	C6-N1	6.41	1.40	1.35
11	B2	381	C	N1-C6	-6.40	1.33	1.37
38	A1	280	A	C5-C6	6.40	1.46	1.41
38	A1	576	G	C8-N7	-6.40	1.27	1.30
10	B1	66	C	C2-N3	6.40	1.40	1.35
11	B2	254	G	N7-C5	-6.40	1.35	1.39
11	B2	527	A	N3-C4	-6.40	1.31	1.34
38	A1	485	G	N9-C8	6.40	1.42	1.37
38	A1	1155	A	C5-C6	-6.40	1.35	1.41
38	A1	1942	G	C6-N1	-6.40	1.35	1.39
38	A1	1988	U	C4-O4	-6.40	1.18	1.23
38	A1	2717	A	N9-C4	6.40	1.41	1.37
11	B2	356	G	C8-N7	6.40	1.34	1.30
11	B2	518	U	P-O5'	6.40	1.66	1.59
11	B2	678	G	C2-N3	6.40	1.37	1.32
11	B2	1031	G	N1-C2	6.40	1.42	1.37
11	B2	1148	G	C8-N7	-6.40	1.27	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1230	G	C5'-C4'	6.40	1.59	1.51
11	B2	1246	U	O4'-C1'	6.40	1.50	1.41
38	A1	531	G	N3-C4	-6.40	1.30	1.35
38	A1	641	G	C4'-O4'	-6.40	1.37	1.45
38	A1	801	A	N9-C8	6.40	1.42	1.37
38	A1	928	A	O3'-P	-6.40	1.53	1.61
38	A1	1110	A	N3-C4	-6.40	1.31	1.34
38	A1	1837	A	N9-C4	6.40	1.41	1.37
11	B2	624	G	C2'-C1'	-6.40	1.46	1.53
11	B2	1157	G	C2-N2	6.40	1.41	1.34
38	A1	738	C	N3-C4	6.40	1.38	1.33
38	A1	1685	C	N3-C4	6.40	1.38	1.33
38	A1	2206	G	C2-N3	6.40	1.37	1.32
38	A1	2789	G	C2-N3	6.40	1.37	1.32
11	B2	294	A	C4'-C3'	6.40	1.60	1.53
11	B2	790	G	C4'-C3'	6.40	1.60	1.53
11	B2	1371	C	C4-C5	6.40	1.48	1.43
38	A1	295	G	C2-N2	6.40	1.41	1.34
38	A1	2223	G	N9-C8	6.40	1.42	1.37
38	A1	2410	U	C4'-C3'	6.40	1.60	1.53
38	A1	1115	A	C5-C4	-6.40	1.34	1.38
56	AJ	114	ARG	NE-CZ	6.40	1.41	1.33
11	B2	315	A	C8-N7	-6.39	1.27	1.31
38	A1	472	A	N9-C8	6.39	1.42	1.37
38	A1	1607	C	C2'-C1'	-6.39	1.46	1.53
38	A1	1612	G	C2'-C1'	-6.39	1.46	1.53
38	A1	2047	U	N3-C4	6.39	1.44	1.38
38	A1	2210	G	N9-C4	-6.39	1.32	1.38
38	A1	2861	A	N7-C5	-6.39	1.35	1.39
11	B2	10	G	N7-C5	-6.39	1.35	1.39
11	B2	843	G	C6-N1	6.39	1.44	1.39
11	B2	954	G	C2-N2	6.39	1.41	1.34
11	B2	1104	G	C2'-C1'	-6.39	1.46	1.53
11	B2	1395	G	N1-C2	6.39	1.42	1.37
11	B2	1466	G	C2-N3	6.39	1.37	1.32
38	A1	1290	G	N9-C8	6.39	1.42	1.37
38	A1	2038	C	C2'-O2'	-6.39	1.33	1.41
38	A1	2197	U	O3'-P	-6.39	1.53	1.61
38	A1	2655	C	C4-C5	6.39	1.48	1.43
38	A1	51	G	N3-C4	-6.39	1.30	1.35
38	A1	184	A	C2-N3	6.39	1.39	1.33
38	A1	1854	G	N3-C4	6.39	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2370	C	N1-C2	6.39	1.46	1.40
11	B2	146	A	C4'-C3'	6.39	1.60	1.53
11	B2	582	G	O3'-P	-6.39	1.53	1.61
11	B2	1097	G	C2-N3	6.39	1.37	1.32
11	B2	1236	G	C2-N2	6.39	1.41	1.34
25	BM	114	ARG	CD-NE	6.39	1.57	1.46
38	A1	285	C	C2'-C1'	-6.39	1.46	1.53
38	A1	1547	U	C2-N3	6.39	1.42	1.37
38	A1	1584	G	P-O5'	-6.39	1.53	1.59
38	A1	1857	A	N3-C4	6.39	1.38	1.34
38	A1	2327	C	N1-C6	6.39	1.41	1.37
38	A1	2581	G	C2-N3	6.39	1.37	1.32
38	A1	2651	G	N9-C8	6.39	1.42	1.37
39	A3	72	G	O4'-C1'	6.39	1.50	1.41
11	B2	492	G	C2-N3	6.39	1.37	1.32
11	B2	800	G	P-O5'	-6.39	1.53	1.59
38	A1	34	C	C4-N4	6.39	1.39	1.33
11	B2	129	G	C5'-C4'	6.39	1.59	1.51
38	A1	1210	G	N9-C4	6.39	1.43	1.38
43	AB	189	TRP	CB-CG	6.39	1.61	1.50
11	B2	3	U	C1'-N1	6.38	1.58	1.48
11	B2	346	C	C4-N4	6.38	1.39	1.33
11	B2	1073	C	C2-N3	6.38	1.40	1.35
11	B2	1258	C	O3'-P	-6.38	1.53	1.61
11	B2	1356	A	C6-N1	6.38	1.40	1.35
38	A1	218	A	N9-C4	6.38	1.41	1.37
38	A1	443	C	C2-N3	-6.38	1.30	1.35
38	A1	889	C	O3'-P	-6.38	1.53	1.61
38	A1	936	G	N3-C4	-6.38	1.30	1.35
38	A1	1120	C	C2-N3	6.38	1.40	1.35
38	A1	1987	A	C6-N1	6.38	1.40	1.35
38	A1	2767	C	C2'-C1'	-6.38	1.46	1.53
38	A1	2996	A	N7-C5	-6.38	1.35	1.39
11	B2	571	C	C3'-O3'	6.38	1.51	1.42
11	B2	895	C	N1-C2	6.38	1.46	1.40
38	A1	2647	G	C6-N1	6.38	1.44	1.39
11	B2	217	C	C4'-O4'	-6.38	1.37	1.45
11	B2	342	G	C5-C4	-6.38	1.33	1.38
11	B2	509	C	N3-C4	6.38	1.38	1.33
11	B2	1484	C	N3-C4	6.38	1.38	1.33
38	A1	491	G	N9-C8	6.38	1.42	1.37
38	A1	845	U	N1-C6	6.38	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	852	A	C2'-C1'	-6.38	1.46	1.53
38	A1	1725	A	C6-N6	6.38	1.39	1.33
38	A1	1875	U	C1'-N1	6.38	1.58	1.48
38	A1	2211	C	O4'-C1'	6.38	1.50	1.41
38	A1	2354	A	C3'-C2'	6.38	1.59	1.52
48	AE	177	GLU	CD-OE2	6.38	1.32	1.25
11	B2	1230	G	N7-C5	-6.38	1.35	1.39
38	A1	1408	G	C2-N3	6.38	1.37	1.32
11	B2	375	G	C2-N2	6.38	1.41	1.34
11	B2	863	U	N1-C6	-6.38	1.32	1.38
11	B2	1280	C	C3'-C2'	6.38	1.59	1.52
11	B2	1404	C	N3-C4	6.38	1.38	1.33
17	BE	195	ARG	CD-NE	6.38	1.57	1.46
38	A1	206	A	N3-C4	-6.38	1.31	1.34
38	A1	419	G	N1-C2	6.38	1.42	1.37
38	A1	733	A	N9-C4	-6.38	1.34	1.37
11	B2	1290	U	P-O5'	-6.38	1.53	1.59
38	A1	542	A	C5-C4	6.38	1.43	1.38
38	A1	1423	G	C6-N1	6.38	1.44	1.39
38	A1	2520	C	C2-N3	6.38	1.40	1.35
38	A1	340	G	C6-N1	6.38	1.44	1.39
38	A1	1281	A	O3'-P	-6.38	1.53	1.61
38	A1	1997	C	C3'-O3'	6.38	1.51	1.42
38	A1	2698	G	C5-C4	6.38	1.42	1.38
11	B2	428	G	C5-C6	-6.37	1.35	1.42
11	B2	1224	U	N1-C2	6.37	1.44	1.38
14	BB	50	GLU	CG-CD	6.37	1.61	1.51
38	A1	189	U	N1-C2	6.37	1.44	1.38
38	A1	1661	A	C2-N3	6.37	1.39	1.33
11	B2	166	A	N9-C4	-6.37	1.34	1.37
11	B2	395	C	C2-N3	-6.37	1.30	1.35
38	A1	673	A	C8-N7	6.37	1.36	1.31
38	A1	872	G	N7-C5	6.37	1.43	1.39
38	A1	1119	A	P-O5'	-6.37	1.53	1.59
38	A1	1537	U	N1-C2	6.37	1.44	1.38
38	A1	529	G	N9-C8	6.37	1.42	1.37
38	A1	1012	G	N1-C2	6.37	1.42	1.37
38	A1	1111	G	C8-N7	6.37	1.34	1.30
38	A1	1302	G	C8-N7	-6.37	1.27	1.30
11	B2	785	U	C2-N3	6.37	1.42	1.37
11	B2	1287	G	C2-N3	6.37	1.37	1.32
38	A1	130	G	C2-N2	6.37	1.41	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	178	G	N3-C4	6.37	1.40	1.35
38	A1	237	G	N1-C2	6.37	1.42	1.37
38	A1	325	G	N9-C4	6.37	1.43	1.38
38	A1	368	U	C4'-C3'	-6.37	1.46	1.53
38	A1	881	G	C3'-O3'	6.37	1.51	1.42
10	B1	14	A	C5-C6	-6.37	1.35	1.41
11	B2	100	A	C6-N6	6.37	1.39	1.33
11	B2	279	U	C4'-C3'	6.37	1.60	1.53
11	B2	673	C	N3-C4	6.37	1.38	1.33
38	A1	189	U	C3'-C2'	-6.37	1.45	1.52
38	A1	1813	A	N9-C4	6.37	1.41	1.37
11	B2	482	G	C1'-N9	6.37	1.58	1.48
11	B2	595	U	C4'-C3'	6.37	1.60	1.53
11	B2	623	C	C4-N4	6.37	1.39	1.33
11	B2	1318	U	C2-N3	6.37	1.42	1.37
11	B2	1437	G	P-O5'	6.37	1.66	1.59
38	A1	466	C	C2-N3	6.37	1.40	1.35
38	A1	1034	G	C8-N7	6.37	1.34	1.30
38	A1	1380	G	N9-C4	-6.37	1.32	1.38
38	A1	1807	G	C5-C6	-6.37	1.35	1.42
38	A1	2195	G	C8-N7	-6.37	1.27	1.30
38	A1	2321	A	N7-C5	-6.37	1.35	1.39
11	B2	62	G	C5-C4	6.36	1.42	1.38
11	B2	205	C	O4'-C1'	-6.36	1.33	1.41
38	A1	1368	A	C5-C4	6.36	1.43	1.38
38	A1	2223	G	C3'-O3'	6.36	1.51	1.42
38	A1	2243	G	C2-N3	6.36	1.37	1.32
38	A1	2547	A	N9-C8	6.36	1.42	1.37
38	A1	2601	C	N1-C6	6.36	1.41	1.37
38	A1	89	C	C2-O2	-6.36	1.18	1.24
38	A1	436	C	C4-N4	6.36	1.39	1.33
10	B1	42	C	C1'-N1	6.36	1.58	1.48
11	B2	123	U	O4'-C1'	6.36	1.50	1.41
11	B2	670	C	C4-N4	6.36	1.39	1.33
38	A1	1442	G	C3'-C2'	6.36	1.59	1.52
38	A1	1710	C	N1-C6	6.36	1.41	1.37
38	A1	2378	C	P-O5'	-6.36	1.53	1.59
38	A1	3030	A	N9-C8	-6.36	1.32	1.37
12	AG	33	ARG	NE-CZ	6.36	1.41	1.33
61	AN	168	GLU	CD-OE1	6.36	1.32	1.25
11	B2	744	A	O3'-P	-6.36	1.53	1.61
11	B2	1063	A	C5'-C4'	6.36	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1173	A	C6-N6	6.36	1.39	1.33
38	A1	740	C	C4'-C3'	6.36	1.60	1.53
38	A1	999	A	C5'-C4'	6.36	1.58	1.51
38	A1	1059	C	C2-N3	6.36	1.40	1.35
38	A1	2440	C	C4-N4	6.36	1.39	1.33
11	B2	311	A	C6-N6	6.36	1.39	1.33
11	B2	821	G	C2-N3	6.36	1.37	1.32
38	A1	720	C	N1-C2	-6.36	1.33	1.40
38	A1	1147	G	N3-C4	-6.36	1.30	1.35
38	A1	1633	A	C4'-C3'	6.36	1.60	1.53
38	A1	2441	A	C5'-C4'	6.36	1.58	1.51
38	A1	2532	G	C2-N3	6.36	1.37	1.32
5	AS	131	ARG	CZ-NH2	6.36	1.41	1.33
11	B2	395	C	C4'-C3'	6.36	1.60	1.53
11	B2	684	G	C6-N1	6.36	1.44	1.39
11	B2	887	G	N1-C2	6.36	1.42	1.37
11	B2	1048	G	C5-C4	6.36	1.42	1.38
11	B2	1169	C	C3'-C2'	-6.36	1.45	1.52
38	A1	762	G	C8-N7	6.36	1.34	1.30
38	A1	1494	U	C4-C5	6.36	1.49	1.43
38	A1	2300	C	C2'-C1'	-6.36	1.46	1.53
38	A1	2738	G	N1-C2	6.36	1.42	1.37
39	A3	13	C	C4'-O4'	6.36	1.53	1.45
49	Ae	19	ARG	CZ-NH1	6.36	1.41	1.33
11	B2	430	G	N1-C2	6.35	1.42	1.37
11	B2	642	G	O3'-P	6.35	1.68	1.61
38	A1	988	C	C5'-C4'	6.35	1.58	1.51
38	A1	2067	U	O4'-C1'	6.35	1.50	1.41
11	B2	522	C	O3'-P	-6.35	1.53	1.61
11	B2	949	G	C2'-C1'	-6.35	1.46	1.53
38	A1	779	A	P-O5'	-6.35	1.53	1.59
38	A1	2426	U	O3'-P	-6.35	1.53	1.61
11	B2	754	G	N7-C5	-6.35	1.35	1.39
11	B2	830	A	C5-C6	6.35	1.46	1.41
11	B2	1151	A	C4'-O4'	-6.35	1.37	1.45
38	A1	1408	G	N1-C2	6.35	1.42	1.37
38	A1	184	A	N3-C4	6.35	1.38	1.34
38	A1	591	G	C2-N3	6.35	1.37	1.32
38	A1	840	G	P-O5'	-6.35	1.53	1.59
38	A1	1774	A	N3-C4	-6.35	1.31	1.34
38	A1	1952	G	C2'-C1'	-6.35	1.46	1.53
38	A1	2055	U	C4'-O4'	6.35	1.53	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2465	A	O3'-P	-6.35	1.53	1.61
11	B2	318	C	C5'-C4'	6.35	1.58	1.51
11	B2	1067	G	N7-C5	-6.35	1.35	1.39
11	B2	1378	A	N9-C4	6.35	1.41	1.37
38	A1	201	C	C5'-C4'	6.35	1.58	1.51
38	A1	860	A	C5-C4	6.35	1.43	1.38
38	A1	2215	U	P-O5'	-6.35	1.53	1.59
38	A1	3040	G	O3'-P	-6.35	1.53	1.61
39	A3	77	A	C2-N3	6.35	1.39	1.33
11	B2	179	U	P-O5'	-6.35	1.53	1.59
11	B2	482	G	C6-N1	6.35	1.44	1.39
11	B2	1236	G	N9-C4	6.35	1.43	1.38
38	A1	1706	G	C4'-O4'	6.35	1.53	1.45
38	A1	2023	A	C2'-C1'	-6.35	1.46	1.53
38	A1	74	A	C6-N1	6.34	1.40	1.35
38	A1	550	A	N3-C4	6.34	1.38	1.34
38	A1	616	C	N3-C4	6.34	1.38	1.33
38	A1	1246	G	C6-N1	6.34	1.44	1.39
38	A1	2633	A	N3-C4	-6.34	1.31	1.34
39	A3	46	G	N1-C2	6.34	1.42	1.37
59	AL	64	SER	CB-OG	6.34	1.50	1.42
11	B2	98	U	C2-N3	6.34	1.42	1.37
11	B2	485	A	C5'-C4'	6.34	1.58	1.51
11	B2	899	G	C5-C4	-6.34	1.33	1.38
38	A1	971	G	C2'-C1'	-6.34	1.46	1.53
38	A1	1056	C	C4'-C3'	6.34	1.60	1.53
38	A1	1482	G	N7-C5	-6.34	1.35	1.39
38	A1	2344	G	C2'-C1'	-6.34	1.46	1.53
10	B1	74	A	C3'-C2'	6.34	1.59	1.52
11	B2	420	C	N1-C6	6.34	1.41	1.37
38	A1	525	C	N1-C2	-6.34	1.33	1.40
38	A1	661	G	N3-C4	6.34	1.39	1.35
38	A1	1446	G	C2'-O2'	-6.34	1.33	1.41
38	A1	1868	C	C4'-C3'	6.34	1.60	1.53
11	B2	244	G	C6-N1	6.34	1.44	1.39
38	A1	507	G	C5-C4	6.34	1.42	1.38
38	A1	1521	G	P-O5'	-6.34	1.53	1.59
38	A1	1618	G	N3-C4	-6.34	1.31	1.35
38	A1	2282	G	C6-O6	6.34	1.29	1.24
11	B2	919	U	C3'-C2'	6.34	1.59	1.52
11	B2	1180	G	N9-C4	-6.34	1.32	1.38
38	A1	228	U	C2'-C1'	-6.34	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	346	U	O4'-C1'	-6.34	1.33	1.41
38	A1	2676	A	N7-C5	6.34	1.43	1.39
11	B2	385	A	N3-C4	-6.34	1.31	1.34
11	B2	743	U	C2'-C1'	6.34	1.60	1.53
11	B2	1290	U	N3-C4	6.34	1.44	1.38
11	B2	1446	G	C2-N3	6.34	1.37	1.32
38	A1	243	G	N3-C4	6.34	1.39	1.35
38	A1	1519	G	O4'-C1'	6.34	1.49	1.41
38	A1	2076	A	N3-C4	-6.34	1.31	1.34
11	B2	784	G	C8-N7	6.33	1.34	1.30
38	A1	1899	C	O3'-P	-6.33	1.53	1.61
38	A1	2532	G	N7-C5	-6.33	1.35	1.39
39	A3	9	A	C6-N6	6.33	1.39	1.33
38	A1	1066	C	C3'-O3'	6.33	1.51	1.42
38	A1	1229	U	C4-C5	6.33	1.49	1.43
38	A1	1603	G	C6-N1	6.33	1.44	1.39
38	A1	1603	G	N1-C2	6.33	1.42	1.37
38	A1	1639	G	C2-N3	6.33	1.37	1.32
38	A1	1909	C	C2'-C1'	-6.33	1.46	1.53
59	AL	18	GLY	CA-C	-6.33	1.41	1.51
11	B2	807	C	O3'-P	-6.33	1.53	1.61
38	A1	539	A	C2-N3	6.33	1.39	1.33
38	A1	1095	A	C4'-O4'	-6.33	1.37	1.45
38	A1	1485	A	C2'-C1'	-6.33	1.46	1.53
38	A1	1673	C	C4-C5	6.33	1.48	1.43
38	A1	1878	G	C2'-C1'	6.33	1.60	1.53
11	B2	11	A	C6-N1	6.33	1.40	1.35
11	B2	1081	C	N1-C2	-6.33	1.33	1.40
11	B2	1397	C	O4'-C1'	6.33	1.49	1.41
38	A1	2495	A	C6-N6	6.33	1.39	1.33
39	A3	38	U	C4-C5	6.33	1.49	1.43
39	A3	80	G	N7-C5	-6.33	1.35	1.39
21	BI	39	ARG	CD-NE	6.33	1.57	1.46
38	A1	848	A	N9-C8	6.33	1.42	1.37
38	A1	1672	G	C3'-C2'	6.33	1.59	1.52
38	A1	2766	C	O4'-C1'	-6.33	1.33	1.41
39	A3	93	G	C8-N7	-6.33	1.27	1.30
11	B2	302	A	C6-N1	6.33	1.40	1.35
38	A1	413	A	C8-N7	-6.33	1.27	1.31
11	B2	166	A	C5'-C4'	6.33	1.58	1.51
11	B2	315	A	N9-C8	6.33	1.42	1.37
11	B2	966	G	O4'-C1'	6.33	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1358	A	C6-N6	6.33	1.39	1.33
11	B2	1459	G	C5'-C4'	6.33	1.58	1.51
38	A1	281	G	C2-N3	6.33	1.37	1.32
11	B2	429	A	C1'-N9	6.32	1.58	1.48
11	B2	1078	U	C1'-N1	6.32	1.58	1.48
11	B2	1325	C	O3'-P	-6.32	1.53	1.61
38	A1	2059	G	C2'-C1'	-6.32	1.46	1.53
39	A3	59	C	N1-C6	6.32	1.41	1.37
11	B2	495	G	C3'-C2'	-6.32	1.45	1.52
38	A1	1569	A	N9-C8	-6.32	1.32	1.37
38	A1	2270	G	N9-C4	-6.32	1.32	1.38
38	A1	2695	U	P-O5'	-6.32	1.53	1.59
11	B2	324	C	N3-C4	6.32	1.38	1.33
11	B2	1037	U	O3'-P	-6.32	1.53	1.61
29	BQ	148	TYR	CE1-CZ	6.32	1.46	1.38
38	A1	628	A	C6-N1	6.32	1.40	1.35
38	A1	1250	A	C2'-C1'	-6.32	1.46	1.53
38	A1	1612	G	C2'-O2'	-6.32	1.33	1.41
38	A1	2246	G	O3'-P	-6.32	1.53	1.61
11	B2	1475	C	C5'-C4'	6.32	1.58	1.51
38	A1	521	C	C4-N4	6.32	1.39	1.33
38	A1	777	A	C3'-O3'	6.32	1.50	1.42
38	A1	993	G	C3'-C2'	-6.32	1.45	1.52
11	B2	362	C	C4-N4	6.32	1.39	1.33
11	B2	489	C	C4-N4	6.32	1.39	1.33
11	B2	548	A	N9-C8	-6.32	1.32	1.37
11	B2	688	C	C5'-C4'	6.32	1.58	1.51
11	B2	845	G	C2-N3	6.32	1.37	1.32
26	BN	141	ARG	NE-CZ	6.32	1.41	1.33
38	A1	1218	C	N1-C6	-6.32	1.33	1.37
38	A1	1354	G	C5'-C4'	6.32	1.58	1.51
38	A1	1505	G	C8-N7	6.32	1.34	1.30
38	A1	2059	G	C8-N7	-6.32	1.27	1.30
38	A1	2630	C	P-O5'	-6.32	1.53	1.59
39	A3	125	U	C5-C6	-6.32	1.28	1.34
11	B2	290	C	O4'-C1'	6.32	1.49	1.41
11	B2	401	U	C1'-N1	6.32	1.58	1.48
11	B2	595	U	C5'-C4'	6.32	1.58	1.51
11	B2	619	A	N7-C5	-6.32	1.35	1.39
11	B2	713	A	N7-C5	-6.32	1.35	1.39
38	A1	256	G	C2'-C1'	-6.32	1.46	1.53
38	A1	928	A	C5-C6	-6.32	1.35	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1277	G	C5-C6	-6.32	1.36	1.42
38	A1	1386	G	C4'-C3'	6.32	1.60	1.53
38	A1	1542	U	C5-C6	6.32	1.39	1.34
38	A1	2616	C	C4-N4	6.32	1.39	1.33
38	A1	2674	C	N1-C6	6.32	1.41	1.37
39	A3	13	C	C3'-C2'	-6.32	1.45	1.52
38	A1	568	A	N9-C8	-6.31	1.32	1.37
38	A1	2359	G	N1-C2	6.31	1.42	1.37
38	A1	2982	G	C6-N1	6.31	1.44	1.39
63	AP	16	ARG	CZ-NH2	6.31	1.41	1.33
10	B1	36	A	C8-N7	-6.31	1.27	1.31
11	B2	948	G	N1-C2	6.31	1.42	1.37
25	BM	82	ARG	NE-CZ	6.31	1.41	1.33
25	BM	109	GLY	CA-C	-6.31	1.41	1.51
38	A1	100	C	C4'-C3'	6.31	1.60	1.53
38	A1	2366	G	C8-N7	-6.31	1.27	1.30
38	A1	2597	A	N3-C4	6.31	1.38	1.34
11	B2	657	A	C8-N7	-6.31	1.27	1.31
11	B2	1058	G	N1-C2	6.31	1.42	1.37
38	A1	572	U	C2-N3	6.31	1.42	1.37
38	A1	3016	G	C4'-O4'	6.31	1.53	1.45
11	B2	1148	G	C3'-O3'	6.31	1.50	1.42
38	A1	639	C	O3'-P	-6.31	1.53	1.61
38	A1	766	G	C3'-C2'	6.31	1.59	1.52
38	A1	838	A	N3-C4	6.31	1.38	1.34
38	A1	1745	U	O3'-P	-6.31	1.53	1.61
38	A1	1915	G	C2-N2	6.31	1.40	1.34
38	A1	1919	A	C5-C4	6.31	1.43	1.38
38	A1	2745	G	C2-N3	6.31	1.37	1.32
11	B2	216	G	N7-C5	-6.31	1.35	1.39
11	B2	846	G	N9-C8	-6.31	1.33	1.37
11	B2	1010	G	N1-C2	6.31	1.42	1.37
11	B2	1043	U	C1'-N1	6.31	1.58	1.48
11	B2	1257	U	C2-N3	-6.31	1.33	1.37
38	A1	214	C	C4-N4	6.31	1.39	1.33
38	A1	1330	G	C8-N7	-6.31	1.27	1.30
38	A1	1402	C	N1-C6	6.31	1.41	1.37
38	A1	2072	G	C5-C4	-6.31	1.33	1.38
38	A1	2658	G	C4'-O4'	-6.31	1.37	1.45
38	A1	2730	U	C2-N3	6.31	1.42	1.37
11	B2	60	A	N3-C4	-6.31	1.31	1.34
11	B2	934	G	N9-C8	6.31	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	25	U	C2-N3	6.31	1.42	1.37
38	A1	600	A	C6-N1	6.31	1.40	1.35
38	A1	1139	C	C2'-C1'	-6.31	1.46	1.53
11	B2	1055	C	P-O5'	-6.30	1.53	1.59
11	B2	1367	C	N3-C4	6.30	1.38	1.33
11	B2	1424	G	C2-N3	6.30	1.37	1.32
38	A1	200	G	C6-N1	6.30	1.44	1.39
38	A1	418	C	O3'-P	-6.30	1.53	1.61
38	A1	1045	A	N9-C8	6.30	1.42	1.37
38	A1	2169	C	C1'-N1	6.30	1.58	1.48
38	A1	2972	G	P-O5'	6.30	1.66	1.59
11	B2	346	C	O3'-P	-6.30	1.53	1.61
11	B2	921	G	C2-N3	6.30	1.37	1.32
38	A1	229	G	C6-N1	6.30	1.44	1.39
38	A1	2397	C	P-O5'	-6.30	1.53	1.59
38	A1	2702	A	C5-C4	6.30	1.43	1.38
56	AJ	50	ARG	CD-NE	6.30	1.57	1.46
11	B2	1129	A	C6-N6	6.30	1.39	1.33
11	B2	1279	A	C2-N3	-6.30	1.27	1.33
38	A1	208	A	O3'-P	-6.30	1.53	1.61
38	A1	678	G	C2'-C1'	-6.30	1.46	1.53
38	A1	1864	G	N7-C5	-6.30	1.35	1.39
38	A1	2021	G	N3-C4	-6.30	1.31	1.35
38	A1	2190	A	C6-N6	6.30	1.39	1.33
38	A1	2521	U	N3-C4	6.30	1.44	1.38
38	A1	3030	A	C4'-O4'	-6.30	1.37	1.45
58	Ak	46	ARG	NE-CZ	6.30	1.41	1.33
11	B2	143	G	N1-C2	6.30	1.42	1.37
11	B2	338	C	C5-C6	6.30	1.39	1.34
11	B2	696	G	O3'-P	-6.30	1.53	1.61
38	A1	184	A	C6-N6	6.30	1.39	1.33
38	A1	645	U	C4-C5	6.30	1.49	1.43
38	A1	842	C	C4-N4	6.30	1.39	1.33
11	B2	353	G	P-O5'	-6.30	1.53	1.59
11	B2	1286	C	C4'-C3'	-6.30	1.46	1.53
38	A1	674	G	P-O5'	-6.30	1.53	1.59
38	A1	1448	G	C5'-C4'	6.30	1.58	1.51
38	A1	2966	C	C4-N4	6.30	1.39	1.33
5	AS	135	ARG	CD-NE	6.30	1.57	1.46
7	AU	59	TYR	CE1-CZ	6.30	1.46	1.38
11	B2	402	G	C2-N3	6.30	1.37	1.32
11	B2	1291	G	N3-C4	6.30	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	511	A	P-O5'	-6.30	1.53	1.59
38	A1	671	G	C4'-C3'	6.30	1.60	1.53
38	A1	1189	A	N7-C5	-6.30	1.35	1.39
38	A1	2686	A	C6-N6	6.30	1.39	1.33
11	B2	473	A	C6-N1	6.29	1.40	1.35
11	B2	696	G	N1-C2	6.29	1.42	1.37
38	A1	1535	U	C2'-C1'	-6.29	1.46	1.53
38	A1	2761	G	C2-N3	6.29	1.37	1.32
11	B2	64	G	N1-C2	6.29	1.42	1.37
11	B2	158	U	O3'-P	-6.29	1.53	1.61
11	B2	911	C	C4'-C3'	6.29	1.60	1.53
38	A1	330	U	N1-C6	6.29	1.43	1.38
38	A1	630	G	N9-C4	6.29	1.43	1.38
38	A1	1744	A	C5-C6	6.29	1.46	1.41
38	A1	2420	C	C4'-C3'	-6.29	1.46	1.53
49	Ae	34	TYR	CG-CD2	6.29	1.47	1.39
11	B2	865	A	C4'-C3'	-6.29	1.46	1.53
11	B2	1186	C	O3'-P	-6.29	1.53	1.61
38	A1	113	C	C5-C6	-6.29	1.29	1.34
38	A1	134	C	C2-N3	6.29	1.40	1.35
38	A1	1244	C	N1-C2	-6.29	1.33	1.40
38	A1	1293	G	N1-C2	6.29	1.42	1.37
38	A1	1856	G	C2-N2	6.29	1.40	1.34
38	A1	1971	C	C4-N4	6.29	1.39	1.33
38	A1	2044	C	O4'-C1'	6.29	1.49	1.41
38	A1	2226	G	C8-N7	6.29	1.34	1.30
38	A1	2826	U	C5-C6	-6.29	1.28	1.34
38	A1	2858	C	C2-N3	6.29	1.40	1.35
39	A3	19	G	N7-C5	-6.29	1.35	1.39
11	B2	1444	G	C5'-C4'	6.29	1.58	1.51
38	A1	745	C	N3-C4	6.29	1.38	1.33
38	A1	1114	G	N7-C5	6.29	1.43	1.39
38	A1	3033	G	N9-C8	6.29	1.42	1.37
48	AE	161	PRO	N-CD	6.29	1.56	1.47
11	B2	139	C	C4'-C3'	6.29	1.60	1.53
11	B2	533	C	N1-C2	6.29	1.46	1.40
11	B2	541	G	N9-C8	6.29	1.42	1.37
11	B2	1319	C	C4'-O4'	-6.29	1.37	1.45
11	B2	1353	C	C5'-C4'	6.29	1.58	1.51
38	A1	75	G	C6-N1	6.29	1.44	1.39
38	A1	272	G	C2-N3	6.29	1.37	1.32
38	A1	302	U	C2'-C1'	-6.29	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2484	C	N1-C6	6.29	1.41	1.37
38	A1	2896	G	N1-C2	6.29	1.42	1.37
39	A3	74	U	O4'-C1'	6.29	1.49	1.41
10	B1	12	U	N1-C2	6.29	1.44	1.38
11	B2	332	C	N1-C6	6.29	1.41	1.37
11	B2	458	G	N3-C4	-6.29	1.31	1.35
11	B2	1155	U	C2'-C1'	-6.29	1.46	1.53
11	B2	184	G	N9-C4	-6.29	1.32	1.38
11	B2	885	G	N3-C4	6.29	1.39	1.35
38	A1	580	G	C2-N2	6.29	1.40	1.34
38	A1	1010	G	P-O5'	-6.29	1.53	1.59
38	A1	1519	G	N9-C8	6.29	1.42	1.37
38	A1	1878	G	N9-C4	6.29	1.43	1.38
38	A1	2770	A	N9-C8	6.29	1.42	1.37
11	B2	110	C	C2-O2	-6.28	1.18	1.24
11	B2	388	G	C5'-C4'	6.28	1.58	1.51
11	B2	1011	C	C5'-C4'	6.28	1.58	1.51
38	A1	590	A	N9-C4	6.28	1.41	1.37
38	A1	851	G	C2-N2	6.28	1.40	1.34
38	A1	1377	G	C5'-C4'	6.28	1.58	1.51
38	A1	1633	A	C1'-N9	6.28	1.58	1.48
11	B2	641	A	C6-N1	6.28	1.40	1.35
11	B2	1411	G	C6-N1	6.28	1.44	1.39
38	A1	1525	G	N7-C5	-6.28	1.35	1.39
11	B2	348	C	O3'-P	-6.28	1.53	1.61
11	B2	424	U	N1-C2	-6.28	1.32	1.38
11	B2	427	G	N1-C2	6.28	1.42	1.37
11	B2	982	U	C4'-O4'	6.28	1.53	1.45
38	A1	346	U	N1-C6	6.28	1.43	1.38
38	A1	414	G	C2-N3	6.28	1.37	1.32
38	A1	1097	G	C2'-C1'	-6.28	1.46	1.53
38	A1	1237	A	C6-N6	6.28	1.39	1.33
38	A1	1504	C	N3-C4	6.28	1.38	1.33
38	A1	1677	A	N7-C5	-6.28	1.35	1.39
38	A1	2090	A	N9-C4	-6.28	1.34	1.37
38	A1	2960	G	N3-C4	6.28	1.39	1.35
11	B2	262	G	N9-C8	6.28	1.42	1.37
11	B2	665	G	C5-C6	-6.28	1.36	1.42
11	B2	708	C	O4'-C1'	-6.28	1.33	1.41
38	A1	33	U	C3'-C2'	6.28	1.59	1.52
38	A1	1721	U	C4'-O4'	-6.28	1.37	1.45
38	A1	2684	G	P-O5'	-6.28	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	3040	G	N7-C5	6.28	1.43	1.39
10	B1	10	G	N3-C4	-6.28	1.31	1.35
11	B2	382	G	N7-C5	-6.28	1.35	1.39
11	B2	736	A	C4'-O4'	6.28	1.53	1.45
11	B2	875	G	C6-N1	6.28	1.44	1.39
38	A1	762	G	N3-C4	6.28	1.39	1.35
38	A1	846	C	N1-C6	6.28	1.41	1.37
38	A1	936	G	C6-O6	6.28	1.29	1.24
38	A1	1013	G	N1-C2	-6.28	1.32	1.37
38	A1	1097	G	P-O5'	6.28	1.66	1.59
38	A1	1166	A	N3-C4	-6.28	1.31	1.34
38	A1	1743	G	N9-C4	-6.28	1.32	1.38
38	A1	2568	A	C4'-C3'	-6.28	1.46	1.53
38	A1	2848	C	N3-C4	6.28	1.38	1.33
39	A3	93	G	C2-N3	6.28	1.37	1.32
11	B2	913	G	C5-C4	6.28	1.42	1.38
11	B2	1143	G	C2-N2	6.28	1.40	1.34
11	B2	1258	C	N3-C4	6.28	1.38	1.33
11	B2	1464	C	N3-C4	6.28	1.38	1.33
38	A1	1904	G	O3'-P	6.28	1.68	1.61
38	A1	2298	C	C5'-C4'	6.28	1.58	1.51
38	A1	2335	G	P-O5'	-6.28	1.53	1.59
64	AR	21	ARG	CZ-NH2	6.28	1.41	1.33
23	BK	25	ARG	NE-CZ	6.27	1.41	1.33
38	A1	517	A	C2'-C1'	-6.27	1.46	1.53
38	A1	1616	A	C5'-C4'	6.27	1.58	1.51
11	B2	5	C	C5'-C4'	6.27	1.58	1.51
38	A1	1655	G	O3'-P	-6.27	1.53	1.61
38	A1	1748	C	C5'-C4'	6.27	1.58	1.51
38	A1	2374	C	C4-N4	6.27	1.39	1.33
38	A1	2418	G	C6-N1	6.27	1.44	1.39
38	A1	2463	G	O3'-P	-6.27	1.53	1.61
39	A3	33	U	N1-C6	6.27	1.43	1.38
11	B2	1463	A	C6-N6	6.27	1.39	1.33
38	A1	120	G	C5-C4	6.27	1.42	1.38
38	A1	2832	G	C2'-C1'	-6.27	1.46	1.53
11	B2	164	A	C8-N7	-6.27	1.27	1.31
11	B2	262	G	O3'-P	-6.27	1.53	1.61
11	B2	777	G	P-O5'	-6.27	1.53	1.59
11	B2	832	G	C2-N3	6.27	1.37	1.32
11	B2	1173	A	C6-N1	6.27	1.40	1.35
11	B2	1198	A	C8-N7	6.27	1.35	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	BB	179	ARG	CZ-NH2	6.27	1.41	1.33
38	A1	149	G	O4'-C1'	-6.27	1.33	1.41
38	A1	258	C	C2-N3	6.27	1.40	1.35
38	A1	871	G	C5-C4	6.27	1.42	1.38
38	A1	1751	G	C2-N2	6.27	1.40	1.34
38	A1	2684	G	N1-C2	6.27	1.42	1.37
39	A3	79	U	C4-C5	6.27	1.49	1.43
58	Ak	107	ARG	NE-CZ	6.27	1.41	1.33
11	B2	674	C	N1-C6	6.27	1.41	1.37
38	A1	54	G	C6-N1	6.27	1.44	1.39
38	A1	1287	G	C4'-C3'	6.27	1.60	1.53
38	A1	1575	G	C5-C4	6.27	1.42	1.38
38	A1	1735	G	N7-C5	-6.27	1.35	1.39
38	A1	2097	G	C4'-C3'	6.27	1.60	1.53
38	A1	2381	A	C5-C4	6.27	1.43	1.38
38	A1	2845	C	C5-C6	6.27	1.39	1.34
39	A3	44	C	C1'-N1	6.27	1.58	1.48
11	B2	571	C	N1-C2	6.27	1.46	1.40
38	A1	716	U	C4'-C3'	-6.27	1.46	1.53
11	B2	934	G	C2-N2	6.26	1.40	1.34
11	B2	955	G	C5-C4	-6.26	1.33	1.38
15	BC	26	ARG	CZ-NH2	6.26	1.41	1.33
38	A1	8	G	N1-C2	6.26	1.42	1.37
38	A1	574	C	C4-C5	-6.26	1.38	1.43
38	A1	709	A	C2'-C1'	-6.26	1.46	1.53
38	A1	795	G	N7-C5	-6.26	1.35	1.39
38	A1	2346	A	C5-C4	6.26	1.43	1.38
38	A1	302	U	C4-C5	6.26	1.49	1.43
38	A1	430	A	C6-N6	6.26	1.39	1.33
38	A1	1458	C	C4-N4	6.26	1.39	1.33
38	A1	1559	A	C5-C4	6.26	1.43	1.38
38	A1	2111	C	N1-C6	6.26	1.41	1.37
38	A1	2371	A	C2-N3	6.26	1.39	1.33
11	B2	322	G	C2-N3	6.26	1.37	1.32
11	B2	945	G	N1-C2	6.26	1.42	1.37
38	A1	36	G	C2-N3	6.26	1.37	1.32
38	A1	440	A	C5-C4	6.26	1.43	1.38
38	A1	861	G	C2-N2	6.26	1.40	1.34
38	A1	1820	C	C4-N4	6.26	1.39	1.33
38	A1	2188	C	C4-N4	6.26	1.39	1.33
38	A1	2247	G	N1-C2	6.26	1.42	1.37
38	A1	2634	U	O3'-P	-6.26	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2995	A	P-O5'	-6.26	1.53	1.59
39	A3	17	G	N7-C5	6.26	1.43	1.39
39	A3	28	C	C5'-C4'	6.26	1.58	1.51
11	B2	9	U	N1-C2	-6.26	1.32	1.38
11	B2	57	G	C2'-C1'	-6.26	1.46	1.53
38	A1	18	C	P-O5'	-6.26	1.53	1.59
38	A1	34	C	N1-C6	6.26	1.41	1.37
38	A1	770	G	C2-N3	6.26	1.37	1.32
38	A1	788	A	C6-N1	6.26	1.40	1.35
38	A1	1569	A	C1'-N9	6.26	1.58	1.48
38	A1	1731	U	C5'-C4'	6.26	1.58	1.51
38	A1	1872	G	N7-C5	6.26	1.43	1.39
11	B2	264	C	C4-N4	6.26	1.39	1.33
38	A1	407	A	N3-C4	-6.26	1.31	1.34
38	A1	1078	G	N9-C4	6.26	1.43	1.38
38	A1	1623	C	C4'-C3'	6.26	1.60	1.53
38	A1	1688	C	C1'-N1	6.26	1.58	1.48
38	A1	2990	G	O3'-P	-6.26	1.53	1.61
11	B2	596	A	N7-C5	-6.26	1.35	1.39
11	B2	960	A	C2-N3	-6.26	1.27	1.33
11	B2	1072	C	C2-O2	6.26	1.30	1.24
11	B2	1302	C	C4-C5	6.26	1.48	1.43
38	A1	448	A	C5'-C4'	6.26	1.58	1.51
38	A1	1000	G	C8-N7	-6.26	1.27	1.30
38	A1	1045	A	C5'-C4'	6.26	1.58	1.51
38	A1	1091	G	C2-N3	6.26	1.37	1.32
38	A1	1091	G	C5'-C4'	6.26	1.58	1.51
38	A1	2582	C	C5-C6	6.26	1.39	1.34
11	B2	922	G	C5-C6	-6.25	1.36	1.42
11	B2	209	A	N3-C4	6.25	1.38	1.34
11	B2	454	G	C5-C6	-6.25	1.36	1.42
11	B2	1374	C	N3-C4	6.25	1.38	1.33
38	A1	80	G	N7-C5	-6.25	1.35	1.39
38	A1	482	A	N9-C4	6.25	1.41	1.37
38	A1	507	G	O4'-C1'	-6.25	1.33	1.41
38	A1	732	G	N1-C2	6.25	1.42	1.37
38	A1	937	A	C5-C4	-6.25	1.34	1.38
38	A1	1393	C	P-O5'	-6.25	1.53	1.59
38	A1	1492	C	C1'-N1	6.25	1.58	1.48
45	AC	84	ARG	CZ-NH2	6.25	1.41	1.33
11	B2	224	A	N3-C4	6.25	1.38	1.34
11	B2	292	U	C2-N3	6.25	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1401	U	C2'-C1'	-6.25	1.46	1.53
38	A1	278	C	N1-C2	-6.25	1.33	1.40
38	A1	1437	C	C3'-C2'	6.25	1.59	1.52
38	A1	2115	U	N1-C2	6.25	1.44	1.38
38	A1	2142	U	C5-C6	6.25	1.39	1.34
38	A1	2588	C	C1'-N1	6.25	1.58	1.48
11	B2	656	U	C2'-C1'	-6.25	1.46	1.53
11	B2	881	G	C4'-C3'	6.25	1.60	1.53
11	B2	921	G	C5-C4	6.25	1.42	1.38
11	B2	1331	G	C6-N1	6.25	1.44	1.39
38	A1	1144	A	N3-C4	-6.25	1.31	1.34
38	A1	1776	G	N9-C8	6.25	1.42	1.37
38	A1	2254	U	C5-C6	6.25	1.39	1.34
38	A1	2548	A	N1-C2	-6.25	1.28	1.34
11	B2	436	A	O3'-P	-6.25	1.53	1.61
38	A1	725	G	C5-C4	6.25	1.42	1.38
38	A1	1716	G	C6-N1	6.25	1.44	1.39
61	AN	125	ARG	CZ-NH1	6.25	1.41	1.33
21	BI	100	GLY	CA-C	-6.25	1.41	1.51
38	A1	1832	G	N7-C5	6.25	1.43	1.39
38	A1	1853	C	C5'-C4'	6.25	1.58	1.51
11	B2	403	C	C3'-C2'	6.24	1.59	1.52
11	B2	1252	C	C4-C5	6.24	1.48	1.43
18	BF	116	TYR	CE2-CZ	6.24	1.46	1.38
38	A1	114	C	N1-C6	6.24	1.40	1.37
38	A1	123	A	C1'-N9	6.24	1.58	1.48
38	A1	337	G	C2'-O2'	-6.24	1.33	1.41
38	A1	384	G	C2-N3	6.24	1.37	1.32
38	A1	1380	G	C6-O6	-6.24	1.18	1.24
38	A1	1701	C	O4'-C1'	6.24	1.49	1.41
38	A1	2401	A	N3-C4	6.24	1.38	1.34
38	A1	2709	C	C5'-C4'	6.24	1.58	1.51
38	A1	2739	G	P-O5'	-6.24	1.53	1.59
38	A1	2997	G	C5-C6	-6.24	1.36	1.42
11	B2	498	C	N3-C4	6.24	1.38	1.33
11	B2	954	G	C4'-C3'	6.24	1.60	1.53
11	B2	1472	G	C5-C4	-6.24	1.33	1.38
38	A1	1089	C	C1'-N1	6.24	1.58	1.48
38	A1	1401	G	C2'-C1'	-6.24	1.46	1.53
11	B2	177	A	C4'-C3'	-6.24	1.46	1.53
11	B2	380	C	N3-C4	6.24	1.38	1.33
11	B2	597	C	O4'-C1'	6.24	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	687	G	C8-N7	6.24	1.34	1.30
11	B2	991	C	C5'-C4'	6.24	1.58	1.51
11	B2	1063	A	C4'-O4'	-6.24	1.37	1.45
11	B2	1423	A	O3'-P	-6.24	1.53	1.61
18	BF	80	ARG	NE-CZ	6.24	1.41	1.33
38	A1	278	C	N1-C6	6.24	1.40	1.37
38	A1	807	G	C4'-C3'	6.24	1.60	1.53
38	A1	1648	C	C2'-C1'	-6.24	1.46	1.53
38	A1	2096	G	C5-C6	-6.24	1.36	1.42
39	A3	99	G	C6-N1	6.24	1.44	1.39
11	B2	194	C	N3-C4	6.24	1.38	1.33
11	B2	1305	U	C4-C5	6.24	1.49	1.43
32	BT	49	ARG	CZ-NH2	6.24	1.41	1.33
38	A1	1248	C	C4-N4	6.24	1.39	1.33
38	A1	2135	C	N1-C2	-6.24	1.33	1.40
38	A1	2347	G	C2'-C1'	-6.24	1.46	1.53
38	A1	2393	G	N1-C2	6.24	1.42	1.37
38	A1	2536	A	N3-C4	6.24	1.38	1.34
39	A3	43	C	N3-C4	6.24	1.38	1.33
39	A3	73	U	C3'-O3'	6.24	1.50	1.42
62	AO	34	ARG	CD-NE	6.24	1.57	1.46
11	B2	393	A	N3-C4	6.24	1.38	1.34
11	B2	1286	C	N1-C6	-6.24	1.33	1.37
38	A1	305	G	C6-N1	6.24	1.44	1.39
38	A1	803	A	C4'-C3'	6.24	1.60	1.53
38	A1	2194	A	N7-C5	-6.24	1.35	1.39
10	B1	50	G	C4'-C3'	6.24	1.60	1.53
11	B2	280	C	C2-N3	6.24	1.40	1.35
11	B2	379	A	C5-C6	6.24	1.46	1.41
11	B2	517	U	C2'-C1'	-6.24	1.46	1.53
38	A1	982	G	C2'-C1'	-6.24	1.46	1.53
38	A1	2393	G	C4'-C3'	6.24	1.60	1.53
38	A1	2488	C	C4'-C3'	-6.24	1.46	1.53
38	A1	2538	G	C2-N3	6.24	1.37	1.32
38	A1	2770	A	C8-N7	6.24	1.35	1.31
38	A1	3021	C	C5'-C4'	6.24	1.58	1.51
11	B2	1478	A	N9-C4	-6.23	1.34	1.37
38	A1	1072	U	N3-C4	6.23	1.44	1.38
38	A1	1281	A	C8-N7	6.23	1.35	1.31
38	A1	1569	A	C6-N6	6.23	1.39	1.33
38	A1	1887	A	N9-C4	-6.23	1.34	1.37
38	A1	1962	G	C3'-C2'	6.23	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2636	C	P-O5'	-6.23	1.53	1.59
11	B2	1145	C	N1-C6	6.23	1.40	1.37
38	A1	1660	A	C5-C6	-6.23	1.35	1.41
38	A1	2517	U	C2-N3	6.23	1.42	1.37
38	A1	2684	G	C6-N1	6.23	1.44	1.39
38	A1	2978	G	C1'-N9	6.23	1.58	1.48
11	B2	1098	G	C2-N3	6.23	1.37	1.32
11	B2	1127	A	N9-C8	6.23	1.42	1.37
38	A1	65	G	N1-C2	6.23	1.42	1.37
38	A1	592	C	N3-C4	6.23	1.38	1.33
38	A1	942	U	C2-N3	-6.23	1.33	1.37
38	A1	1056	C	C4-C5	6.23	1.48	1.43
38	A1	1126	C	O4'-C1'	6.23	1.49	1.41
38	A1	1891	C	C3'-C2'	6.23	1.59	1.52
38	A1	2049	U	C4-C5	-6.23	1.38	1.43
38	A1	2303	A	O3'-P	-6.23	1.53	1.61
38	A1	2477	G	C2'-C1'	-6.23	1.46	1.53
38	A1	2800	U	O3'-P	-6.23	1.53	1.61
11	B2	635	C	O4'-C1'	6.23	1.49	1.41
11	B2	1069	G	N9-C4	6.23	1.43	1.38
11	B2	1266	A	C4'-C3'	-6.23	1.46	1.53
11	B2	1270	C	C2'-C1'	-6.23	1.46	1.53
38	A1	1204	U	O4'-C1'	-6.23	1.33	1.41
38	A1	1334	G	C5-C4	-6.23	1.33	1.38
11	B2	816	G	C5'-C4'	6.23	1.58	1.51
38	A1	257	G	C2-N3	6.23	1.37	1.32
38	A1	472	A	C8-N7	-6.23	1.27	1.31
38	A1	968	A	C5-C4	6.23	1.43	1.38
38	A1	2021	G	N7-C5	-6.23	1.35	1.39
38	A1	2841	G	C8-N7	6.23	1.34	1.30
39	A3	111	G	N3-C4	6.23	1.39	1.35
9	AX	290	GLY	N-CA	-6.23	1.36	1.46
38	A1	540	A	C5'-C4'	6.23	1.58	1.51
38	A1	748	G	C6-N1	6.23	1.44	1.39
38	A1	1118	A	O4'-C1'	6.23	1.49	1.41
11	B2	120	C	C5'-C4'	6.22	1.58	1.51
11	B2	125	G	N1-C2	6.22	1.42	1.37
11	B2	308	G	C2'-C1'	-6.22	1.46	1.53
11	B2	763	G	N9-C8	-6.22	1.33	1.37
38	A1	63	A	C6-N1	6.22	1.40	1.35
38	A1	394	A	C5'-C4'	6.22	1.58	1.51
38	A1	628	A	C5'-C4'	6.22	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	743	A	C8-N7	-6.22	1.27	1.31
38	A1	746	C	N3-C4	6.22	1.38	1.33
38	A1	1082	A	O4'-C1'	6.22	1.49	1.41
38	A1	1130	G	N7-C5	-6.22	1.35	1.39
38	A1	1480	G	N3-C4	-6.22	1.31	1.35
38	A1	1966	C	O3'-P	-6.22	1.53	1.61
38	A1	2354	A	C2-N3	6.22	1.39	1.33
38	A1	2771	G	C8-N7	6.22	1.34	1.30
39	A3	126	C	N1-C2	-6.22	1.33	1.40
55	Ai	33	ARG	CD-NE	6.22	1.57	1.46
11	B2	902	U	C5'-C4'	6.22	1.58	1.51
38	A1	539	A	N1-C2	6.22	1.40	1.34
38	A1	558	C	C3'-C2'	6.22	1.59	1.52
38	A1	1421	C	C4-N4	6.22	1.39	1.33
38	A1	1942	G	N1-C2	6.22	1.42	1.37
38	A1	2385	G	C8-N7	6.22	1.34	1.30
38	A1	3013	U	C4-C5	-6.22	1.38	1.43
39	A3	64	C	C3'-C2'	-6.22	1.46	1.52
11	B2	515	U	N1-C2	6.22	1.44	1.38
38	A1	841	U	C4'-C3'	6.22	1.59	1.53
11	B2	22	G	C4'-O4'	6.22	1.53	1.45
11	B2	244	G	O3'-P	-6.22	1.53	1.61
11	B2	869	U	C4-C5	6.22	1.49	1.43
11	B2	990	G	P-O5'	-6.22	1.53	1.59
11	B2	1052	U	C4'-O4'	-6.22	1.37	1.45
11	B2	1472	G	C5'-C4'	6.22	1.58	1.51
38	A1	334	G	C6-N1	6.22	1.44	1.39
38	A1	1632	U	O4'-C1'	-6.22	1.33	1.41
38	A1	2423	G	N3-C4	-6.22	1.31	1.35
38	A1	2892	A	N9-C8	6.22	1.42	1.37
11	B2	256	G	C2'-C1'	-6.22	1.46	1.53
11	B2	778	G	C5'-C4'	6.22	1.58	1.51
11	B2	1411	G	C5'-C4'	6.22	1.58	1.51
38	A1	574	C	C4'-O4'	6.22	1.53	1.45
38	A1	592	C	C1'-N1	6.22	1.58	1.48
38	A1	1611	C	N3-C4	6.22	1.38	1.33
11	B2	497	C	P-O5'	-6.22	1.53	1.59
11	B2	852	G	O3'-P	-6.22	1.53	1.61
11	B2	1339	G	N3-C4	-6.22	1.31	1.35
38	A1	433	C	C4-N4	6.22	1.39	1.33
38	A1	884	C	C3'-O3'	6.22	1.50	1.42
38	A1	1206	A	C1'-N9	-6.22	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1307	C	N3-C4	6.22	1.38	1.33
38	A1	2767	C	N3-C4	6.22	1.38	1.33
59	AL	5	ARG	CD-NE	6.22	1.57	1.46
63	AP	91	ARG	NE-CZ	6.22	1.41	1.33
10	B1	33	C	C4'-C3'	6.21	1.59	1.53
11	B2	1101	G	N9-C4	6.21	1.43	1.38
11	B2	1466	G	C6-N1	6.21	1.44	1.39
38	A1	769	G	C2-N3	6.21	1.37	1.32
38	A1	1446	G	C2'-C1'	-6.21	1.46	1.53
38	A1	1749	C	C5'-C4'	6.21	1.58	1.51
38	A1	2355	G	N9-C4	6.21	1.43	1.38
38	A1	2416	G	C8-N7	-6.21	1.27	1.30
38	A1	3038	A	N9-C4	6.21	1.41	1.37
11	B2	273	C	C5-C6	6.21	1.39	1.34
11	B2	831	A	C6-N1	6.21	1.39	1.35
38	A1	628	A	C3'-C2'	-6.21	1.46	1.52
38	A1	2096	G	C3'-O3'	6.21	1.50	1.42
38	A1	2163	G	N1-C2	6.21	1.42	1.37
38	A1	2849	C	C4'-O4'	6.21	1.53	1.45
11	B2	739	G	N9-C8	6.21	1.42	1.37
11	B2	836	G	N9-C4	6.21	1.43	1.38
11	B2	856	G	C2-N3	6.21	1.37	1.32
11	B2	1254	C	C4'-O4'	6.21	1.53	1.45
11	B2	1412	A	N9-C4	-6.21	1.34	1.37
38	A1	1981	G	N9-C8	-6.21	1.33	1.37
38	A1	2052	A	C6-N6	6.21	1.39	1.33
38	A1	2188	C	P-O5'	-6.21	1.53	1.59
11	B2	123	U	C5-C6	6.21	1.39	1.34
11	B2	1038	C	N3-C4	6.21	1.38	1.33
38	A1	2263	G	C5'-C4'	6.21	1.58	1.51
38	A1	2729	A	C6-N6	6.21	1.39	1.33
11	B2	400	G	C6-N1	6.21	1.43	1.39
11	B2	590	G	N1-C2	6.21	1.42	1.37
11	B2	1058	G	N9-C4	-6.21	1.32	1.38
11	B2	1288	C	N3-C4	6.21	1.38	1.33
11	B2	1310	C	C2-N3	6.21	1.40	1.35
38	A1	597	C	P-O5'	-6.21	1.53	1.59
38	A1	714	C	C5'-C4'	6.21	1.58	1.51
38	A1	734	C	N3-C4	6.21	1.38	1.33
38	A1	1862	G	N1-C2	6.21	1.42	1.37
38	A1	1974	G	C6-N1	6.21	1.43	1.39
38	A1	2517	U	N3-C4	6.21	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2660	G	C4'-C3'	6.21	1.59	1.53
11	B2	768	A	C3'-C2'	-6.21	1.46	1.52
11	B2	1241	U	C4-O4	6.21	1.28	1.23
36	BX	58	ARG	NE-CZ	6.21	1.41	1.33
38	A1	598	C	N3-C4	6.21	1.38	1.33
38	A1	948	C	N3-C4	6.21	1.38	1.33
38	A1	966	G	N7-C5	6.21	1.43	1.39
38	A1	1511	C	C2'-C1'	-6.21	1.46	1.53
38	A1	1776	G	N9-C4	-6.21	1.32	1.38
38	A1	1788	G	N3-C4	-6.21	1.31	1.35
38	A1	1854	G	P-O5'	-6.21	1.53	1.59
38	A1	2346	A	P-O5'	-6.21	1.53	1.59
38	A1	2625	C	N3-C4	6.21	1.38	1.33
38	A1	2710	G	C6-N1	6.21	1.43	1.39
38	A1	2788	U	C4-C5	-6.21	1.38	1.43
11	B2	336	C	C4-N4	6.21	1.39	1.33
11	B2	1480	G	C2-N3	6.21	1.37	1.32
38	A1	441	A	C2-N3	6.21	1.39	1.33
38	A1	1255	C	N3-C4	6.21	1.38	1.33
38	A1	2573	C	C4-C5	6.21	1.48	1.43
38	A1	2760	A	C5'-C4'	6.21	1.58	1.51
10	B1	50	G	C2-N3	6.20	1.37	1.32
11	B2	33	U	N3-C4	6.20	1.44	1.38
11	B2	578	G	O4'-C1'	6.20	1.49	1.41
11	B2	1273	G	C2-N3	6.20	1.37	1.32
38	A1	483	C	C3'-C2'	-6.20	1.46	1.52
38	A1	733	A	C5'-C4'	6.20	1.58	1.51
38	A1	850	C	C5'-C4'	6.20	1.58	1.51
38	A1	851	G	N3-C4	-6.20	1.31	1.35
38	A1	1018	G	C6-O6	-6.20	1.18	1.24
38	A1	1684	C	O3'-P	-6.20	1.53	1.61
38	A1	2454	G	N1-C2	6.20	1.42	1.37
38	A1	2641	C	C5-C6	6.20	1.39	1.34
38	A1	3040	G	C5-C4	6.20	1.42	1.38
39	A3	120	C	C2'-C1'	-6.20	1.46	1.53
11	B2	619	A	C4'-O4'	-6.20	1.37	1.45
11	B2	1031	G	C6-N1	6.20	1.43	1.39
11	B2	623	C	C5'-C4'	6.20	1.58	1.51
11	B2	1035	C	N3-C4	6.20	1.38	1.33
11	B2	1361	G	O4'-C1'	6.20	1.49	1.41
38	A1	230	A	C6-N1	6.20	1.39	1.35
38	A1	907	C	C2'-O2'	6.20	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1201	G	C5-C6	-6.20	1.36	1.42
38	A1	1601	G	C4'-O4'	-6.20	1.37	1.45
38	A1	2508	G	N9-C8	-6.20	1.33	1.37
38	A1	2999	G	C2-N3	6.20	1.37	1.32
11	B2	644	G	C4'-O4'	6.20	1.53	1.45
11	B2	959	G	C2-N3	6.20	1.37	1.32
11	B2	1055	C	C3'-O3'	6.20	1.50	1.42
11	B2	1105	C	C3'-O3'	6.20	1.50	1.42
38	A1	442	G	C2-N3	6.20	1.37	1.32
38	A1	842	C	C4-C5	6.20	1.48	1.43
10	B1	4	G	C2'-C1'	-6.20	1.46	1.53
11	B2	1306	A	N9-C8	-6.20	1.32	1.37
38	A1	2878	A	C3'-O3'	6.20	1.50	1.42
38	A1	2944	G	C5'-C4'	6.20	1.58	1.51
11	B2	193	G	N7-C5	-6.20	1.35	1.39
11	B2	695	G	N7-C5	-6.20	1.35	1.39
38	A1	319	A	C4'-O4'	6.20	1.53	1.45
38	A1	558	C	N3-C4	6.20	1.38	1.33
38	A1	994	G	N3-C4	6.20	1.39	1.35
38	A1	2350	G	C2-N3	6.20	1.37	1.32
39	A3	124	A	C5'-C4'	6.20	1.58	1.51
11	B2	959	G	N3-C4	-6.19	1.31	1.35
38	A1	91	G	C6-N1	6.19	1.43	1.39
38	A1	858	G	O3'-P	-6.19	1.53	1.61
38	A1	1234	A	C2'-C1'	-6.19	1.46	1.53
11	B2	633	C	C2'-C1'	-6.19	1.46	1.53
11	B2	1074	C	C5-C6	6.19	1.39	1.34
11	B2	1196	A	N7-C5	6.19	1.43	1.39
11	B2	1265	G	C5-C4	6.19	1.42	1.38
11	B2	1267	U	C2'-O2'	6.19	1.49	1.41
11	B2	1298	G	C3'-C2'	6.19	1.59	1.52
38	A1	1169	G	O4'-C1'	6.19	1.49	1.41
38	A1	1196	A	O3'-P	-6.19	1.53	1.61
38	A1	1444	A	N7-C5	-6.19	1.35	1.39
38	A1	1733	C	N3-C4	6.19	1.38	1.33
38	A1	2366	G	C2-N3	6.19	1.37	1.32
11	B2	873	A	O3'-P	-6.19	1.53	1.61
11	B2	1177	C	C4'-C3'	6.19	1.59	1.53
11	B2	1184	U	C5'-C4'	6.19	1.58	1.51
17	BE	76	ARG	NE-CZ	6.19	1.41	1.33
38	A1	11	G	N7-C5	6.19	1.43	1.39
38	A1	149	G	C5-C4	-6.19	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	924	A	C6-N1	6.19	1.39	1.35
38	A1	1203	C	C4-C5	6.19	1.48	1.43
38	A1	1370	G	N7-C5	-6.19	1.35	1.39
38	A1	2179	G	N1-C2	6.19	1.42	1.37
38	A1	2556	C	N1-C6	6.19	1.40	1.37
44	Ab	42	ARG	CZ-NH1	6.19	1.41	1.33
11	B2	625	G	N1-C2	6.19	1.42	1.37
10	B1	18	U	C2'-C1'	-6.19	1.46	1.53
11	B2	150	G	N1-C2	6.19	1.42	1.37
11	B2	646	U	C1'-N1	6.19	1.58	1.48
38	A1	662	A	C6-N1	6.19	1.39	1.35
38	A1	965	A	N9-C8	-6.19	1.32	1.37
38	A1	1484	U	N3-C4	6.19	1.44	1.38
38	A1	1906	G	P-O5'	-6.19	1.53	1.59
38	A1	2115	U	C4'-C3'	6.19	1.59	1.53
38	A1	2566	A	C6-N6	6.19	1.39	1.33
38	A1	2803	U	C3'-O3'	6.19	1.50	1.42
38	A1	2959	A	C2-N3	6.19	1.39	1.33
13	BA	135	ARG	NE-CZ	6.19	1.41	1.33
39	A3	42	A	C2-N3	6.19	1.39	1.33
9	AX	65	SER	CA-C	-6.18	1.36	1.52
11	B2	526	A	N9-C4	-6.18	1.34	1.37
11	B2	652	C	P-O5'	-6.18	1.53	1.59
11	B2	1031	G	P-O5'	-6.18	1.53	1.59
11	B2	1321	U	C5-C6	6.18	1.39	1.34
38	A1	287	G	C4'-O4'	6.18	1.53	1.45
38	A1	389	C	C5'-C4'	6.18	1.58	1.51
38	A1	1034	G	C5-C6	-6.18	1.36	1.42
38	A1	1773	C	O3'-P	-6.18	1.53	1.61
38	A1	2412	A	C6-N1	6.18	1.39	1.35
38	A1	3037	G	C6-N1	6.18	1.43	1.39
10	B1	2	G	C2-N3	6.18	1.37	1.32
11	B2	107	C	C5'-C4'	6.18	1.58	1.51
11	B2	634	C	P-O5'	-6.18	1.53	1.59
11	B2	1411	G	C5-C4	6.18	1.42	1.38
11	B2	1490	C	C4-C5	6.18	1.47	1.43
38	A1	400	U	C2-N3	6.18	1.42	1.37
38	A1	878	G	C2-N3	6.18	1.37	1.32
38	A1	2531	G	C4'-O4'	6.18	1.53	1.45
38	A1	2582	C	O4'-C1'	6.18	1.49	1.41
11	B2	78	G	C5-C6	-6.18	1.36	1.42
11	B2	611	A	N7-C5	6.18	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1056	G	N7-C5	-6.18	1.35	1.39
11	B2	1090	C	C4-N4	6.18	1.39	1.33
38	A1	12	C	P-O5'	6.18	1.66	1.59
38	A1	34	C	C2'-C1'	-6.18	1.46	1.53
38	A1	439	G	C6-N1	6.18	1.43	1.39
38	A1	478	C	C4-C5	6.18	1.47	1.43
38	A1	1411	G	C2-N3	6.18	1.37	1.32
38	A1	2982	G	C5-C4	-6.18	1.34	1.38
38	A1	2994	G	N1-C2	6.18	1.42	1.37
60	AM	6	TYR	CG-CD1	6.18	1.47	1.39
11	B2	261	G	C3'-C2'	-6.18	1.46	1.52
11	B2	957	A	C4'-O4'	-6.18	1.37	1.45
29	BQ	46	SER	CB-OG	6.18	1.50	1.42
38	A1	172	C	C4-N4	6.18	1.39	1.33
38	A1	316	G	C8-N7	-6.18	1.27	1.30
38	A1	1853	C	N3-C4	6.18	1.38	1.33
38	A1	1889	G	C6-O6	6.18	1.29	1.24
38	A1	1905	G	N9-C4	-6.18	1.33	1.38
10	B1	50	G	N1-C2	6.18	1.42	1.37
11	B2	19	G	C2-N3	6.18	1.37	1.32
11	B2	250	G	C2'-C1'	-6.18	1.46	1.53
11	B2	1477	U	C4-C5	6.18	1.49	1.43
38	A1	13	U	N3-C4	6.18	1.44	1.38
38	A1	233	A	N3-C4	6.18	1.38	1.34
38	A1	898	G	N1-C2	6.18	1.42	1.37
38	A1	1348	G	C5'-C4'	6.18	1.58	1.51
10	B1	42	C	P-O5'	-6.18	1.53	1.59
11	B2	437	A	N7-C5	-6.18	1.35	1.39
11	B2	653	C	N1-C6	6.18	1.40	1.37
11	B2	784	G	C2'-C1'	-6.18	1.46	1.53
38	A1	29	U	O3'-P	-6.18	1.53	1.61
38	A1	791	C	N1-C6	6.18	1.40	1.37
38	A1	806	C	C5-C6	-6.18	1.29	1.34
38	A1	832	A	C5-C4	6.18	1.43	1.38
38	A1	2535	C	P-O5'	-6.18	1.53	1.59
11	B2	25	C	C2'-C1'	-6.17	1.46	1.53
11	B2	454	G	O3'-P	-6.17	1.53	1.61
11	B2	1326	G	C5-C6	-6.17	1.36	1.42
38	A1	234	G	C8-N7	-6.17	1.27	1.30
38	A1	378	G	C4'-C3'	6.17	1.59	1.53
38	A1	1108	A	N9-C4	6.17	1.41	1.37
38	A1	1284	C	N3-C4	6.17	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2445	G	C6-N1	6.17	1.43	1.39
38	A1	2994	G	N7-C5	6.17	1.43	1.39
11	B2	856	G	C5-C6	-6.17	1.36	1.42
11	B2	1438	A	C5'-C4'	6.17	1.58	1.51
38	A1	612	G	N3-C4	6.17	1.39	1.35
38	A1	1488	C	O4'-C1'	6.17	1.49	1.41
38	A1	2317	G	N7-C5	-6.17	1.35	1.39
38	A1	581	A	C8-N7	6.17	1.35	1.31
38	A1	1603	G	C5-C6	-6.17	1.36	1.42
38	A1	1793	G	C5-C4	-6.17	1.34	1.38
38	A1	2240	G	N7-C5	-6.17	1.35	1.39
38	A1	2435	G	C5'-C4'	6.17	1.58	1.51
38	A1	3038	A	C2-N3	6.17	1.39	1.33
39	A3	114	G	N3-C4	-6.17	1.31	1.35
38	A1	748	G	N1-C2	6.17	1.42	1.37
38	A1	1905	G	C6-N1	-6.17	1.35	1.39
11	B2	590	G	C2-N2	6.17	1.40	1.34
11	B2	977	G	C5-C6	-6.17	1.36	1.42
30	BR	43	PRO	CA-CB	6.17	1.65	1.53
38	A1	103	A	C5'-C4'	6.17	1.58	1.51
38	A1	115	C	C4-N4	6.17	1.39	1.33
38	A1	464	C	C2-N3	6.17	1.40	1.35
38	A1	529	G	C2-N3	6.17	1.37	1.32
38	A1	871	G	C2-N2	6.17	1.40	1.34
38	A1	1263	C	N1-C2	-6.17	1.33	1.40
38	A1	2283	C	C4'-C3'	6.17	1.59	1.53
47	Ad	21	ARG	CZ-NH1	6.17	1.41	1.33
38	A1	1546	G	C8-N7	-6.17	1.27	1.30
38	A1	2060	A	P-O5'	-6.17	1.53	1.59
38	A1	3015	A	C5'-C4'	6.17	1.58	1.51
11	B2	962	G	N3-C4	6.17	1.39	1.35
38	A1	1025	A	N7-C5	-6.17	1.35	1.39
39	A3	101	A	O3'-P	-6.17	1.53	1.61
11	B2	59	C	N1-C6	6.16	1.40	1.37
11	B2	627	G	P-O5'	-6.16	1.53	1.59
11	B2	1202	G	C4'-O4'	6.16	1.53	1.45
11	B2	1320	A	C6-N1	6.16	1.39	1.35
38	A1	1559	A	C2'-C1'	-6.16	1.46	1.53
38	A1	1823	A	N9-C8	-6.16	1.32	1.37
38	A1	2056	A	N7-C5	-6.16	1.35	1.39
38	A1	2076	A	C5-C6	6.16	1.46	1.41
38	A1	2195	G	C2-N3	6.16	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2258	A	C6-N6	6.16	1.38	1.33
38	A1	2604	G	N1-C2	6.16	1.42	1.37
38	A1	221	G	N1-C2	6.16	1.42	1.37
38	A1	470	A	C5-C4	6.16	1.43	1.38
38	A1	571	G	C2-N3	6.16	1.37	1.32
38	A1	2186	C	C5-C6	-6.16	1.29	1.34
38	A1	2821	G	N1-C2	6.16	1.42	1.37
11	B2	135	U	C4-O4	6.16	1.28	1.23
11	B2	275	A	C3'-C2'	6.16	1.59	1.52
11	B2	484	U	C4-O4	6.16	1.28	1.23
11	B2	590	G	C6-N1	6.16	1.43	1.39
11	B2	848	G	C5'-C4'	6.16	1.58	1.51
11	B2	1003	G	N7-C5	6.16	1.43	1.39
11	B2	1176	C	N1-C6	6.16	1.40	1.37
31	BS	14	ARG	CZ-NH1	6.16	1.41	1.33
38	A1	143	C	C2'-C1'	-6.16	1.46	1.53
38	A1	169	G	C2-N2	6.16	1.40	1.34
38	A1	262	C	C5-C6	-6.16	1.29	1.34
38	A1	1155	A	O4'-C1'	6.16	1.49	1.41
38	A1	1211	C	C5-C6	-6.16	1.29	1.34
38	A1	1266	A	C5-C4	6.16	1.43	1.38
38	A1	1388	U	N1-C6	6.16	1.43	1.38
38	A1	1395	G	C5-C6	6.16	1.48	1.42
38	A1	1686	C	O3'-P	-6.16	1.53	1.61
38	A1	2702	A	N7-C5	-6.16	1.35	1.39
38	A1	2943	G	N7-C5	6.16	1.43	1.39
11	B2	325	A	C4'-O4'	-6.16	1.37	1.45
11	B2	629	U	C5-C6	6.16	1.39	1.34
11	B2	822	A	N9-C4	-6.16	1.34	1.37
11	B2	1382	G	C5-C6	-6.16	1.36	1.42
15	BC	61	ARG	CD-NE	6.16	1.56	1.46
38	A1	470	A	C6-N6	6.16	1.38	1.33
38	A1	1145	G	N1-C2	6.16	1.42	1.37
38	A1	2342	C	C5'-C4'	6.16	1.58	1.51
38	A1	2500	G	C4'-C3'	-6.16	1.46	1.53
38	A1	2550	A	C3'-C2'	-6.16	1.46	1.52
11	B2	868	C	C4-C5	6.16	1.47	1.43
11	B2	1285	C	N1-C6	6.16	1.40	1.37
38	A1	274	C	N3-C4	6.16	1.38	1.33
38	A1	471	U	C1'-N1	6.16	1.57	1.48
38	A1	1450	C	C5-C6	-6.16	1.29	1.34
38	A1	1805	U	C5-C6	6.16	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2107	G	C2'-O2'	6.16	1.49	1.41
38	A1	2500	G	P-O5'	6.16	1.66	1.59
38	A1	2989	A	N9-C8	-6.16	1.32	1.37
10	B1	48	U	C5-C6	6.16	1.39	1.34
11	B2	244	G	N9-C8	-6.16	1.33	1.37
11	B2	626	G	C2-N2	6.16	1.40	1.34
11	B2	694	U	C2-N3	6.16	1.42	1.37
11	B2	738	C	C4-N4	6.16	1.39	1.33
11	B2	956	C	N3-C4	6.16	1.38	1.33
16	BD	56	ARG	CZ-NH2	6.16	1.41	1.33
38	A1	363	G	C4'-C3'	6.16	1.59	1.53
38	A1	682	G	C2-N3	6.16	1.37	1.32
38	A1	1859	A	C8-N7	-6.16	1.27	1.31
38	A1	2225	C	C5-C6	-6.16	1.29	1.34
38	A1	2712	G	N3-C4	6.16	1.39	1.35
38	A1	2950	G	N3-C4	-6.16	1.31	1.35
38	A1	311	C	C4-C5	6.15	1.47	1.43
38	A1	396	G	C8-N7	-6.15	1.27	1.30
38	A1	462	A	C6-N6	6.15	1.38	1.33
38	A1	469	A	C2-N3	6.15	1.39	1.33
38	A1	1142	A	C5'-C4'	6.15	1.58	1.51
11	B2	286	G	N9-C8	6.15	1.42	1.37
11	B2	981	U	N1-C2	6.15	1.44	1.38
11	B2	1191	G	C6-N1	6.15	1.43	1.39
38	A1	14	A	C2-N3	6.15	1.39	1.33
38	A1	497	G	C4'-C3'	6.15	1.59	1.53
38	A1	612	G	C2-N3	6.15	1.37	1.32
38	A1	1371	U	C5'-C4'	6.15	1.58	1.51
38	A1	2786	G	N9-C4	-6.15	1.33	1.38
50	AF	2	PRO	N-CA	-6.15	1.36	1.47
7	AU	118	ARG	NE-CZ	6.15	1.41	1.33
11	B2	919	U	C4'-C3'	6.15	1.59	1.53
11	B2	1044	A	C2-N3	6.15	1.39	1.33
11	B2	1078	U	N1-C6	-6.15	1.32	1.38
11	B2	1396	C	N3-C4	6.15	1.38	1.33
11	B2	1467	U	C2-N3	6.15	1.42	1.37
38	A1	353	C	C2'-C1'	-6.15	1.46	1.53
38	A1	1415	C	N1-C6	6.15	1.40	1.37
38	A1	1857	A	C6-N6	6.15	1.38	1.33
38	A1	2063	U	C2-N3	6.15	1.42	1.37
38	A1	2373	G	N3-C4	-6.15	1.31	1.35
38	A1	2659	G	C6-O6	6.15	1.29	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2815	C	C4-C5	-6.15	1.38	1.43
38	A1	2959	A	C5-C4	6.15	1.43	1.38
47	Ad	12	ARG	CZ-NH2	6.15	1.41	1.33
11	B2	1448	A	N3-C4	-6.15	1.31	1.34
38	A1	1479	U	O3'-P	-6.15	1.53	1.61
38	A1	1895	G	C2-N3	6.15	1.37	1.32
11	B2	179	U	C2-N3	6.15	1.42	1.37
11	B2	413	G	C3'-C2'	-6.15	1.46	1.52
11	B2	507	G	N7-C5	6.15	1.43	1.39
38	A1	521	C	C2-N3	6.15	1.40	1.35
38	A1	666	A	C2'-C1'	-6.15	1.46	1.53
38	A1	1577	C	N1-C2	-6.15	1.34	1.40
38	A1	1774	A	O3'-P	-6.15	1.53	1.61
65	AV	3	ARG	NE-CZ	6.15	1.41	1.33
11	B2	354	G	P-O5'	6.15	1.65	1.59
11	B2	1239	A	N9-C4	6.15	1.41	1.37
38	A1	448	A	C6-N1	6.15	1.39	1.35
38	A1	1757	G	C2-N3	6.15	1.37	1.32
38	A1	2012	G	N9-C8	-6.15	1.33	1.37
38	A1	2316	U	C2-N3	6.15	1.42	1.37
39	A3	77	A	C5-C6	-6.15	1.35	1.41
10	B1	7	G	N9-C4	6.14	1.42	1.38
11	B2	222	G	N1-C2	6.14	1.42	1.37
11	B2	313	G	C2-N3	6.14	1.37	1.32
11	B2	1032	A	N9-C8	-6.14	1.32	1.37
11	B2	1143	G	C6-N1	-6.14	1.35	1.39
38	A1	374	C	C5'-C4'	6.14	1.58	1.51
38	A1	590	A	C6-N1	-6.14	1.31	1.35
38	A1	805	C	N3-C4	6.14	1.38	1.33
38	A1	1027	A	C4'-O4'	6.14	1.53	1.45
38	A1	2157	U	N1-C6	6.14	1.43	1.38
38	A1	2597	A	N9-C4	-6.14	1.34	1.37
10	B1	28	C	O4'-C1'	6.14	1.49	1.41
11	B2	1120	G	C2-N3	6.14	1.37	1.32
38	A1	373	G	C2-N2	6.14	1.40	1.34
38	A1	556	G	P-O5'	-6.14	1.53	1.59
38	A1	1064	G	C2'-C1'	-6.14	1.46	1.53
11	B2	681	G	N3-C4	6.14	1.39	1.35
11	B2	820	G	C5-C4	6.14	1.42	1.38
11	B2	930	G	P-O5'	-6.14	1.53	1.59
38	A1	1963	G	C2-N2	6.14	1.40	1.34
11	B2	243	G	C5'-C4'	6.14	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	551	A	N3-C4	-6.14	1.31	1.34
38	A1	650	C	N3-C4	6.14	1.38	1.33
38	A1	1015	G	C2-N3	6.14	1.37	1.32
38	A1	2263	G	C8-N7	-6.14	1.27	1.30
39	A3	54	A	N3-C4	-6.14	1.31	1.34
56	AJ	19	ARG	CZ-NH1	6.14	1.41	1.33
11	B2	67	C	C4-C5	6.14	1.47	1.43
38	A1	1407	A	C2'-C1'	-6.14	1.46	1.53
10	B1	47	G	C2-N3	6.14	1.37	1.32
38	A1	303	A	C5-C4	-6.14	1.34	1.38
38	A1	1066	C	P-O5'	-6.14	1.53	1.59
38	A1	2302	C	O3'-P	6.14	1.68	1.61
11	B2	231	G	C5-C4	6.13	1.42	1.38
11	B2	1259	A	C5'-C4'	6.13	1.58	1.51
11	B2	1480	G	N1-C2	6.13	1.42	1.37
38	A1	111	U	C4'-C3'	6.13	1.59	1.53
38	A1	566	G	N7-C5	-6.13	1.35	1.39
38	A1	584	G	C2-N3	6.13	1.37	1.32
38	A1	872	G	N9-C8	-6.13	1.33	1.37
38	A1	1225	A	N7-C5	6.13	1.43	1.39
38	A1	1743	G	C5'-C4'	6.13	1.58	1.51
38	A1	2249	A	C8-N7	-6.13	1.27	1.31
38	A1	2726	G	C5'-C4'	6.13	1.58	1.51
11	B2	1240	A	C5'-C4'	6.13	1.58	1.51
38	A1	198	C	C2'-C1'	-6.13	1.46	1.53
38	A1	2947	G	N3-C4	-6.13	1.31	1.35
11	B2	296	A	C5'-C4'	-6.13	1.44	1.51
11	B2	593	G	N9-C4	-6.13	1.33	1.38
11	B2	1099	A	O4'-C1'	6.13	1.49	1.41
38	A1	94	A	C5-C4	6.13	1.43	1.38
38	A1	198	C	C1'-N1	6.13	1.57	1.48
38	A1	218	A	C4'-O4'	6.13	1.53	1.45
38	A1	782	G	C8-N7	-6.13	1.27	1.30
38	A1	1270	G	N3-C4	-6.13	1.31	1.35
38	A1	1599	A	P-O5'	6.13	1.65	1.59
38	A1	2644	G	N3-C4	-6.13	1.31	1.35
39	A3	47	G	N7-C5	6.13	1.43	1.39
43	AB	205	GLY	CA-C	-6.13	1.42	1.51
11	B2	643	G	N9-C4	6.13	1.42	1.38
38	A1	960	C	N3-C4	6.13	1.38	1.33
38	A1	1082	A	C6-N1	6.13	1.39	1.35
38	A1	1750	C	C5'-C4'	6.13	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1932	G	C3'-C2'	-6.13	1.46	1.52
38	A1	2156	A	C6-N6	6.13	1.38	1.33
43	AB	60	ARG	NE-CZ	6.13	1.41	1.33
46	AD	212	ARG	NE-CZ	6.13	1.41	1.33
10	B1	23	G	C2-N3	6.13	1.37	1.32
10	B1	39	A	C5'-C4'	6.13	1.58	1.51
11	B2	116	C	N1-C6	6.13	1.40	1.37
11	B2	1169	C	C4'-C3'	6.13	1.59	1.53
38	A1	548	U	C2-N3	6.13	1.42	1.37
38	A1	1708	U	C2-N3	6.13	1.42	1.37
38	A1	1842	C	C3'-O3'	6.13	1.50	1.42
38	A1	2162	G	C5'-C4'	6.13	1.58	1.51
38	A1	2425	A	C5-C4	6.13	1.43	1.38
11	B2	186	U	O4'-C1'	-6.13	1.33	1.41
11	B2	593	G	C2-N3	6.13	1.37	1.32
11	B2	621	G	N7-C5	-6.13	1.35	1.39
11	B2	1103	G	C4'-O4'	6.13	1.53	1.45
38	A1	134	C	N1-C2	6.13	1.46	1.40
38	A1	1771	C	C4-N4	6.13	1.39	1.33
11	B2	482	G	C8-N7	-6.12	1.27	1.30
11	B2	607	U	C4-O4	-6.12	1.18	1.23
11	B2	843	G	C8-N7	6.12	1.34	1.30
11	B2	1097	G	C5-C4	6.12	1.42	1.38
38	A1	97	C	C2-N3	6.12	1.40	1.35
38	A1	937	A	C5'-C4'	6.12	1.58	1.51
38	A1	1094	U	C1'-N1	6.12	1.57	1.48
38	A1	1256	G	N9-C8	-6.12	1.33	1.37
38	A1	1910	C	N1-C6	6.12	1.40	1.37
38	A1	2806	A	N9-C4	6.12	1.41	1.37
10	B1	31	G	C2-N3	6.12	1.37	1.32
11	B2	485	A	N1-C2	-6.12	1.28	1.34
11	B2	600	C	C2'-C1'	-6.12	1.46	1.53
11	B2	1091	C	C2-O2	-6.12	1.19	1.24
38	A1	17	C	N1-C6	-6.12	1.33	1.37
38	A1	703	G	C5'-C4'	6.12	1.58	1.51
38	A1	1380	G	C5-C6	-6.12	1.36	1.42
38	A1	1650	U	N3-C4	6.12	1.44	1.38
38	A1	2244	G	C5-C6	-6.12	1.36	1.42
38	A1	2579	G	C8-N7	-6.12	1.27	1.30
39	A3	115	C	N3-C4	6.12	1.38	1.33
45	AC	242	ARG	NE-CZ	6.12	1.41	1.33
11	B2	933	G	N1-C2	6.12	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1280	C	C4-N4	6.12	1.39	1.33
38	A1	139	G	O3'-P	-6.12	1.53	1.61
38	A1	1425	U	N3-C4	6.12	1.44	1.38
38	A1	2791	C	O4'-C1'	6.12	1.49	1.41
38	A1	2873	G	P-O5'	-6.12	1.53	1.59
10	B1	32	A	C4'-O4'	6.12	1.53	1.45
38	A1	229	G	C2-N3	6.12	1.37	1.32
38	A1	702	G	N9-C4	-6.12	1.33	1.38
38	A1	1891	C	C4-C5	6.12	1.47	1.43
38	A1	2419	U	C2-N3	6.12	1.42	1.37
38	A1	2707	G	O3'-P	-6.12	1.53	1.61
11	B2	463	G	C8-N7	-6.12	1.27	1.30
11	B2	621	G	C2'-C1'	-6.12	1.46	1.53
11	B2	995	G	C6-N1	6.12	1.43	1.39
11	B2	1093	C	C4-N4	6.12	1.39	1.33
11	B2	1326	G	C4'-C3'	6.12	1.59	1.53
38	A1	393	C	C4'-C3'	6.12	1.59	1.53
38	A1	706	U	C4-C5	6.12	1.49	1.43
38	A1	2484	C	C5'-C4'	6.12	1.58	1.51
46	AD	48	ARG	NE-CZ	6.12	1.41	1.33
11	B2	47	A	N3-C4	-6.12	1.31	1.34
11	B2	105	C	C3'-C2'	-6.12	1.46	1.52
11	B2	918	A	C5-C6	-6.12	1.35	1.41
11	B2	957	A	C5-C6	6.12	1.46	1.41
38	A1	624	U	C2'-C1'	-6.12	1.46	1.53
38	A1	1176	C	C4-N4	6.12	1.39	1.33
38	A1	1599	A	N3-C4	-6.12	1.31	1.34
38	A1	2230	G	C3'-O3'	6.12	1.50	1.42
38	A1	2505	A	C6-N6	6.12	1.38	1.33
11	B2	324	C	P-O5'	6.12	1.65	1.59
11	B2	1219	C	C4-N4	6.12	1.39	1.33
11	B2	1329	C	N1-C6	6.12	1.40	1.37
38	A1	17	C	C4-N4	6.12	1.39	1.33
38	A1	1711	C	C3'-C2'	6.12	1.59	1.52
38	A1	2010	G	O3'-P	-6.12	1.53	1.61
38	A1	2898	G	C3'-O3'	6.12	1.50	1.42
11	B2	589	U	C5'-C4'	6.11	1.58	1.51
11	B2	1181	G	C3'-C2'	6.11	1.59	1.52
11	B2	1331	G	C4'-O4'	-6.11	1.37	1.45
11	B2	1389	G	C5-C4	6.11	1.42	1.38
38	A1	297	G	C5-C6	-6.11	1.36	1.42
38	A1	446	G	O3'-P	-6.11	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	902	C	P-O5'	-6.11	1.53	1.59
38	A1	2028	G	C2-N3	6.11	1.37	1.32
38	A1	2647	G	C3'-C2'	-6.11	1.46	1.52
38	A1	2713	A	C6-N1	6.11	1.39	1.35
11	B2	661	C	N3-C4	6.11	1.38	1.33
11	B2	1006	C	C4'-O4'	6.11	1.53	1.45
38	A1	634	G	N1-C2	6.11	1.42	1.37
38	A1	1064	G	C6-N1	-6.11	1.35	1.39
38	A1	1829	C	N1-C6	6.11	1.40	1.37
38	A1	2479	C	C4-C5	-6.11	1.38	1.43
63	AP	109	ARG	CD-NE	6.11	1.56	1.46
11	B2	42	G	C5-C6	-6.11	1.36	1.42
11	B2	1096	G	N9-C8	6.11	1.42	1.37
38	A1	656	G	N1-C2	6.11	1.42	1.37
38	A1	1451	A	C3'-C2'	-6.11	1.46	1.52
38	A1	1970	G	C4'-C3'	6.11	1.59	1.53
38	A1	2299	G	C4'-C3'	6.11	1.59	1.53
38	A1	2721	C	C2-N3	6.11	1.40	1.35
40	A5	8	ARG	CD-NE	6.11	1.56	1.46
11	B2	692	G	N9-C4	6.11	1.42	1.38
38	A1	170	A	N9-C8	-6.11	1.32	1.37
38	A1	380	A	P-O5'	-6.11	1.53	1.59
38	A1	859	G	O3'-P	-6.11	1.53	1.61
38	A1	3019	C	O3'-P	-6.11	1.53	1.61
11	B2	229	G	C5-C6	-6.11	1.36	1.42
11	B2	231	G	C2'-C1'	-6.11	1.46	1.53
38	A1	2510	A	N9-C4	6.11	1.41	1.37
11	B2	749	C	C4'-C3'	6.11	1.59	1.53
11	B2	1017	U	C2'-O2'	-6.11	1.33	1.41
38	A1	234	G	C6-N1	6.11	1.43	1.39
38	A1	397	G	C2'-C1'	-6.11	1.46	1.53
38	A1	1053	A	N1-C2	6.11	1.39	1.34
38	A1	1882	C	C4'-C3'	-6.11	1.46	1.53
38	A1	2208	C	C3'-C2'	-6.11	1.46	1.52
38	A1	2335	G	C6-N1	6.11	1.43	1.39
11	B2	87	C	N3-C4	6.10	1.38	1.33
11	B2	694	U	C4-C5	6.10	1.49	1.43
38	A1	225	C	C5-C6	6.10	1.39	1.34
38	A1	2406	C	C2-N3	6.10	1.40	1.35
39	A3	29	G	N7-C5	-6.10	1.35	1.39
38	A1	140	C	N3-C4	6.10	1.38	1.33
38	A1	643	G	C5-C6	6.10	1.48	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1364	C	C2'-C1'	-6.10	1.46	1.53
38	A1	1371	U	C4-C5	6.10	1.49	1.43
38	A1	2051	A	P-O5'	-6.10	1.53	1.59
38	A1	2080	G	C3'-C2'	6.10	1.59	1.52
38	A1	2279	G	N7-C5	-6.10	1.35	1.39
38	A1	2466	C	P-O5'	-6.10	1.53	1.59
38	A1	2594	U	C4-O4	6.10	1.28	1.23
11	B2	134	A	C6-N6	6.10	1.38	1.33
11	B2	852	G	C2-N3	6.10	1.37	1.32
11	B2	1092	G	C2-N3	6.10	1.37	1.32
38	A1	86	G	N3-C4	-6.10	1.31	1.35
38	A1	127	C	O4'-C1'	-6.10	1.33	1.41
38	A1	2199	U	C4-C5	6.10	1.49	1.43
11	B2	564	C	C4-N4	6.10	1.39	1.33
11	B2	853	G	C6-O6	6.10	1.29	1.24
38	A1	661	G	C2-N2	6.10	1.40	1.34
38	A1	998	G	C2'-O2'	-6.10	1.33	1.41
38	A1	1167	A	C2-N3	6.10	1.39	1.33
39	A3	75	G	C6-N1	6.10	1.43	1.39
11	B2	551	U	C4-C5	-6.10	1.38	1.43
38	A1	71	A	N9-C4	6.10	1.41	1.37
38	A1	558	C	C2-O2	6.10	1.29	1.24
38	A1	926	C	C4-C5	-6.10	1.38	1.43
38	A1	1121	C	C2-O2	6.10	1.29	1.24
38	A1	1471	G	C2-N2	6.10	1.40	1.34
38	A1	461	C	C3'-C2'	6.10	1.59	1.52
38	A1	1326	U	C2-N3	6.10	1.42	1.37
38	A1	1365	G	N1-C2	6.10	1.42	1.37
39	A3	98	G	C2-N3	6.10	1.37	1.32
11	B2	429	A	C2'-C1'	-6.09	1.46	1.53
11	B2	522	C	C2'-O2'	-6.09	1.33	1.41
11	B2	618	G	C2-N2	6.09	1.40	1.34
38	A1	1113	G	N9-C4	-6.09	1.33	1.38
38	A1	2289	A	C8-N7	-6.09	1.27	1.31
38	A1	3035	C	C4'-C3'	6.09	1.59	1.53
39	A3	72	G	C5'-C4'	6.09	1.58	1.51
11	B2	38	G	C2-N3	6.09	1.37	1.32
11	B2	59	C	C2-N3	6.09	1.40	1.35
11	B2	942	A	P-O5'	-6.09	1.53	1.59
38	A1	517	A	N1-C2	-6.09	1.28	1.34
11	B2	581	G	C2'-C1'	-6.09	1.46	1.53
11	B2	1378	A	N7-C5	-6.09	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1399	G	C6-N1	6.09	1.43	1.39
38	A1	545	G	C6-N1	6.09	1.43	1.39
38	A1	1375	G	C6-N1	6.09	1.43	1.39
38	A1	2130	C	N3-C4	6.09	1.38	1.33
38	A1	2387	A	N7-C5	-6.09	1.35	1.39
38	A1	2560	G	N9-C4	-6.09	1.33	1.38
38	A1	2671	C	P-O5'	-6.09	1.53	1.59
38	A1	3033	G	C5-C4	6.09	1.42	1.38
60	AM	49	ARG	CD-NE	6.09	1.56	1.46
11	B2	698	A	N7-C5	-6.09	1.35	1.39
11	B2	1140	A	N7-C5	-6.09	1.35	1.39
38	A1	1091	G	C2-N2	6.09	1.40	1.34
38	A1	1246	G	C4'-C3'	6.09	1.59	1.53
38	A1	1480	G	O3'-P	6.09	1.68	1.61
38	A1	2347	G	C6-N1	6.09	1.43	1.39
38	A1	2773	A	O4'-C1'	-6.09	1.33	1.41
38	A1	3007	A	O4'-C1'	6.09	1.49	1.41
38	A1	3020	G	C5-C6	-6.09	1.36	1.42
61	AN	19	ARG	CD-NE	6.09	1.56	1.46
11	B2	1144	G	C8-N7	-6.09	1.27	1.30
38	A1	516	A	O3'-P	-6.09	1.53	1.61
38	A1	858	G	N9-C4	-6.09	1.33	1.38
39	A3	87	G	O4'-C1'	6.09	1.49	1.41
11	B2	310	G	C4'-C3'	6.09	1.59	1.53
11	B2	985	C	N1-C6	6.09	1.40	1.37
11	B2	1262	U	C2'-C1'	-6.09	1.46	1.53
11	B2	1269	G	C2'-C1'	6.09	1.60	1.53
38	A1	271	G	C5-C4	-6.09	1.34	1.38
38	A1	331	G	C5-C6	6.09	1.48	1.42
38	A1	348	G	C2-N3	6.09	1.37	1.32
38	A1	715	G	C8-N7	-6.09	1.27	1.30
38	A1	765	G	C5'-C4'	6.09	1.58	1.51
38	A1	1338	G	C3'-O3'	6.09	1.50	1.42
38	A1	1671	A	C8-N7	-6.09	1.27	1.31
38	A1	2961	A	N3-C4	-6.09	1.31	1.34
11	B2	1412	A	C2'-C1'	-6.08	1.46	1.53
38	A1	1608	G	C8-N7	-6.08	1.27	1.30
38	A1	2081	C	C4-N4	6.08	1.39	1.33
11	B2	903	G	C2-N2	6.08	1.40	1.34
38	A1	176	G	C5-C4	6.08	1.42	1.38
38	A1	261	A	C5-C4	6.08	1.43	1.38
38	A1	1405	G	C2-N2	6.08	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1411	G	C6-N1	6.08	1.43	1.39
38	A1	2231	G	C5-C4	6.08	1.42	1.38
38	A1	2246	G	N7-C5	-6.08	1.35	1.39
11	B2	48	G	C2-N2	6.08	1.40	1.34
11	B2	461	A	N7-C5	-6.08	1.35	1.39
11	B2	958	G	N9-C8	6.08	1.42	1.37
38	A1	717	A	N3-C4	6.08	1.38	1.34
38	A1	2149	G	C5'-C4'	-6.08	1.44	1.51
38	A1	2770	A	C4'-C3'	6.08	1.59	1.53
60	AM	31	ARG	CZ-NH1	6.08	1.41	1.33
11	B2	1357	C	C4-N4	6.08	1.39	1.33
38	A1	1169	G	C5-C4	6.08	1.42	1.38
60	AM	157	ARG	CZ-NH2	6.08	1.41	1.33
11	B2	258	A	C6-N6	6.08	1.38	1.33
11	B2	281	G	C1'-N9	6.08	1.57	1.48
11	B2	309	A	C6-N6	6.08	1.38	1.33
11	B2	596	A	N3-C4	-6.08	1.31	1.34
11	B2	730	G	C5-C4	-6.08	1.34	1.38
11	B2	1087	C	N3-C4	6.08	1.38	1.33
11	B2	1181	G	N9-C8	6.08	1.42	1.37
11	B2	1392	G	C2-N3	6.08	1.37	1.32
38	A1	181	U	C1'-N1	6.08	1.57	1.48
38	A1	374	C	C2-N3	6.08	1.40	1.35
38	A1	1421	C	C4'-C3'	6.08	1.59	1.53
11	B2	148	C	C4-C5	6.08	1.47	1.43
11	B2	404	C	N3-C4	6.08	1.38	1.33
11	B2	794	A	C6-N6	6.08	1.38	1.33
11	B2	1411	G	C4'-O4'	6.08	1.53	1.45
38	A1	424	U	N1-C2	6.08	1.44	1.38
38	A1	1989	G	N3-C4	-6.08	1.31	1.35
56	AJ	59	GLY	N-CA	-6.08	1.36	1.46
11	B2	126	G	N9-C4	-6.08	1.33	1.38
11	B2	676	G	N9-C4	6.08	1.42	1.38
11	B2	1242	C	C2'-C1'	-6.08	1.46	1.53
11	B2	1412	A	C6-N1	6.08	1.39	1.35
38	A1	1117	C	N1-C6	-6.08	1.33	1.37
38	A1	1290	G	N1-C2	6.08	1.42	1.37
38	A1	1735	G	C4'-C3'	6.08	1.59	1.53
38	A1	2410	U	C5'-C4'	6.08	1.58	1.51
11	B2	983	G	N7-C5	6.07	1.42	1.39
11	B2	1227	A	C2-N3	6.07	1.39	1.33
28	BP	32	ARG	CZ-NH2	6.07	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	556	G	O3'-P	-6.07	1.53	1.61
38	A1	1904	G	P-O5'	-6.07	1.53	1.59
13	BA	97	ARG	CZ-NH2	6.07	1.41	1.33
22	BJ	125	LEU	N-CA	-6.07	1.34	1.46
38	A1	324	C	C2-O2	6.07	1.29	1.24
38	A1	1125	A	N1-C2	6.07	1.39	1.34
38	A1	2950	G	C2-N3	6.07	1.37	1.32
11	B2	266	A	C1'-N9	6.07	1.57	1.48
11	B2	625	G	C5'-C4'	6.07	1.58	1.51
11	B2	977	G	C3'-C2'	6.07	1.59	1.52
11	B2	1304	C	C4-N4	6.07	1.39	1.33
13	BA	146	TYR	CZ-OH	6.07	1.48	1.37
38	A1	1123	A	C4'-C3'	6.07	1.59	1.53
38	A1	1815	C	N1-C2	6.07	1.46	1.40
38	A1	1941	A	N3-C4	-6.07	1.31	1.34
38	A1	2083	G	O4'-C1'	6.07	1.49	1.41
38	A1	2829	C	C2-N3	6.07	1.40	1.35
38	A1	1576	C	C5'-C4'	6.07	1.58	1.51
38	A1	2032	G	C3'-C2'	-6.07	1.46	1.52
38	A1	2688	C	N3-C4	6.07	1.38	1.33
8	AW	13	GLU	CB-CG	6.07	1.63	1.52
11	B2	109	U	C5'-C4'	6.07	1.58	1.51
11	B2	606	U	P-O5'	-6.07	1.53	1.59
11	B2	844	G	N9-C4	-6.07	1.33	1.38
11	B2	1170	C	C2-N3	6.07	1.40	1.35
11	B2	1188	C	P-O5'	-6.07	1.53	1.59
11	B2	1494	C	C4-C5	-6.07	1.38	1.43
38	A1	286	G	N3-C4	-6.07	1.31	1.35
38	A1	799	C	P-O5'	-6.07	1.53	1.59
38	A1	914	U	C2-N3	6.07	1.42	1.37
38	A1	1035	G	O3'-P	-6.07	1.53	1.61
38	A1	1502	C	C2-O2	6.07	1.29	1.24
38	A1	1574	A	N7-C5	-6.07	1.35	1.39
38	A1	2303	A	C6-N1	6.07	1.39	1.35
38	A1	2830	C	N1-C6	6.07	1.40	1.37
38	A1	2870	A	P-O5'	6.07	1.65	1.59
11	B2	927	A	C6-N6	6.07	1.38	1.33
38	A1	77	C	C4-C5	6.07	1.47	1.43
38	A1	78	C	O4'-C1'	6.07	1.49	1.41
38	A1	1098	C	C4-C5	6.07	1.47	1.43
38	A1	1823	A	C4'-C3'	-6.07	1.46	1.53
38	A1	2703	G	C2'-C1'	-6.07	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	635	C	C4'-C3'	6.06	1.59	1.53
11	B2	1319	C	P-O5'	-6.06	1.53	1.59
38	A1	410	C	C2'-C1'	-6.06	1.46	1.53
38	A1	1041	U	C4-O4	6.06	1.28	1.23
38	A1	1328	G	C8-N7	-6.06	1.27	1.30
38	A1	1529	A	C8-N7	6.06	1.35	1.31
38	A1	1970	G	C2-N2	6.06	1.40	1.34
38	A1	2735	C	C2'-O2'	-6.06	1.33	1.41
38	A1	2786	G	C5'-C4'	6.06	1.58	1.51
38	A1	2791	C	O3'-P	-6.06	1.53	1.61
38	A1	3039	G	C5'-C4'	6.06	1.58	1.51
39	A3	71	G	N1-C2	6.06	1.42	1.37
62	AO	166	ARG	CD-NE	6.06	1.56	1.46
11	B2	46	A	N7-C5	-6.06	1.35	1.39
11	B2	1490	C	C5'-C4'	6.06	1.58	1.51
38	A1	814	G	N1-C2	6.06	1.42	1.37
38	A1	917	A	N9-C4	6.06	1.41	1.37
38	A1	1609	G	N9-C4	-6.06	1.33	1.38
38	A1	2137	A	P-O5'	6.06	1.65	1.59
38	A1	2354	A	C5'-C4'	6.06	1.58	1.51
11	B2	1432	U	C4'-C3'	6.06	1.59	1.53
38	A1	2088	G	C5-C6	6.06	1.48	1.42
11	B2	647	G	O3'-P	-6.06	1.53	1.61
11	B2	1271	G	N1-C2	6.06	1.42	1.37
38	A1	697	U	N1-C6	6.06	1.43	1.38
38	A1	1332	A	N9-C4	6.06	1.41	1.37
38	A1	1519	G	N7-C5	-6.06	1.35	1.39
38	A1	1705	C	C4'-C3'	6.06	1.59	1.53
38	A1	1787	U	C4-C5	6.06	1.49	1.43
38	A1	1873	G	C8-N7	6.06	1.34	1.30
38	A1	1913	C	C4-N4	6.06	1.39	1.33
38	A1	2226	G	C2-N2	6.06	1.40	1.34
11	B2	219	C	C3'-O3'	6.06	1.50	1.42
11	B2	325	A	N1-C2	-6.06	1.28	1.34
11	B2	415	C	P-OP1	-6.06	1.38	1.49
38	A1	393	C	C5-C6	6.06	1.39	1.34
38	A1	800	G	C2-N3	6.06	1.37	1.32
38	A1	1274	G	C2-N3	6.06	1.37	1.32
38	A1	1766	A	C6-N6	6.06	1.38	1.33
38	A1	1773	C	N3-C4	6.06	1.38	1.33
38	A1	1989	G	C2-N3	6.06	1.37	1.32
38	A1	2245	C	O4'-C1'	6.06	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
39	A3	80	G	N3-C4	-6.06	1.31	1.35
11	B2	364	U	C3'-C2'	6.06	1.59	1.52
11	B2	542	G	C4'-C3'	6.06	1.59	1.53
11	B2	1062	G	C6-N1	6.06	1.43	1.39
11	B2	1285	C	C4-N4	6.06	1.39	1.33
38	A1	1925	A	O4'-C1'	-6.06	1.33	1.41
11	B2	1174	A	C6-N1	6.05	1.39	1.35
11	B2	1244	C	N3-C4	6.05	1.38	1.33
11	B2	1316	U	O3'-P	-6.05	1.53	1.61
11	B2	1333	G	N3-C4	-6.05	1.31	1.35
38	A1	383	C	C4-N4	6.05	1.39	1.33
38	A1	1146	U	C2-N3	6.05	1.42	1.37
38	A1	1232	G	C2-N3	6.05	1.37	1.32
38	A1	1524	A	C6-N1	6.05	1.39	1.35
11	B2	1339	G	N7-C5	-6.05	1.35	1.39
38	A1	2704	A	C5-C4	6.05	1.43	1.38
11	B2	906	G	C8-N7	6.05	1.34	1.30
11	B2	1052	U	C5'-C4'	6.05	1.58	1.51
38	A1	853	G	C2'-C1'	-6.05	1.46	1.53
38	A1	940	G	C2-N2	6.05	1.40	1.34
38	A1	1199	U	C4'-C3'	6.05	1.59	1.53
38	A1	1896	U	N3-C4	6.05	1.43	1.38
38	A1	2387	A	C5'-C4'	6.05	1.58	1.51
38	A1	2444	G	O4'-C1'	6.05	1.49	1.41
38	A1	2777	G	N1-C2	6.05	1.42	1.37
50	AF	159	ARG	CZ-NH2	6.05	1.41	1.33
7	AU	75	ARG	CZ-NH2	6.05	1.41	1.33
11	B2	199	A	C5'-C4'	6.05	1.58	1.51
11	B2	223	G	C6-N1	6.05	1.43	1.39
11	B2	244	G	N1-C2	6.05	1.42	1.37
11	B2	1340	U	O3'-P	-6.05	1.53	1.61
38	A1	578	C	N1-C6	-6.05	1.33	1.37
38	A1	675	G	N9-C8	6.05	1.42	1.37
38	A1	775	C	C2-O2	6.05	1.29	1.24
38	A1	1292	C	C4'-O4'	6.05	1.53	1.45
38	A1	1303	C	C5'-C4'	6.05	1.58	1.51
38	A1	2015	G	C2-N2	6.05	1.40	1.34
38	A1	2116	G	N1-C2	6.05	1.42	1.37
38	A1	2540	A	N7-C5	-6.05	1.35	1.39
38	A1	2831	G	C6-N1	6.05	1.43	1.39
11	B2	1129	A	C5-C4	6.05	1.43	1.38
11	B2	1385	U	O3'-P	-6.05	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	46	C	N1-C6	6.05	1.40	1.37
38	A1	365	G	C8-N7	6.05	1.34	1.30
38	A1	826	C	C5-C6	-6.05	1.29	1.34
38	A1	2134	G	N1-C2	6.05	1.42	1.37
9	AX	46	TYR	CG-CD2	6.05	1.47	1.39
11	B2	540	G	C6-N1	6.05	1.43	1.39
11	B2	1299	A	C6-N6	6.05	1.38	1.33
11	B2	1323	A	C4'-C3'	6.05	1.59	1.53
16	BD	154	TYR	CG-CD1	6.05	1.47	1.39
37	BY	8	TYR	CE1-CZ	6.05	1.46	1.38
38	A1	99	U	C4'-O4'	6.05	1.53	1.45
38	A1	175	G	N9-C4	-6.05	1.33	1.38
38	A1	258	C	C5'-C4'	6.05	1.58	1.51
38	A1	1046	A	C5'-C4'	6.05	1.58	1.51
38	A1	1699	U	N1-C6	6.05	1.43	1.38
38	A1	1802	G	O3'-P	-6.05	1.53	1.61
38	A1	1968	A	N7-C5	-6.05	1.35	1.39
38	A1	2267	U	O4'-C1'	6.05	1.49	1.41
39	A3	117	G	C8-N7	6.05	1.34	1.30
56	AJ	79	ARG	NE-CZ	6.05	1.41	1.33
38	A1	15	A	N9-C4	6.04	1.41	1.37
38	A1	136	U	C3'-O3'	6.04	1.50	1.42
38	A1	2610	C	C5'-C4'	6.04	1.58	1.51
48	AE	145	ARG	CZ-NH2	6.04	1.41	1.33
11	B2	1	A	O3'-P	-6.04	1.53	1.61
11	B2	774	U	C3'-C2'	-6.04	1.46	1.52
11	B2	1174	A	C8-N7	6.04	1.35	1.31
38	A1	181	U	C4'-C3'	6.04	1.59	1.53
38	A1	795	G	C8-N7	6.04	1.34	1.30
38	A1	1362	G	C5-C4	-6.04	1.34	1.38
38	A1	1616	A	C4'-C3'	6.04	1.59	1.53
38	A1	1647	C	C1'-N1	6.04	1.57	1.48
38	A1	2536	A	N7-C5	-6.04	1.35	1.39
58	Ak	100	TYR	CG-CD1	6.04	1.47	1.39
64	AR	30	ARG	C-N	6.04	1.48	1.34
11	B2	501	G	C5'-C4'	6.04	1.58	1.51
11	B2	747	U	N1-C2	6.04	1.44	1.38
38	A1	213	G	N7-C5	-6.04	1.35	1.39
38	A1	866	G	C3'-C2'	6.04	1.59	1.52
38	A1	1828	A	C5-C4	6.04	1.43	1.38
38	A1	1913	C	C5'-C4'	6.04	1.58	1.51
38	A1	2223	G	N7-C5	-6.04	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2478	G	C5'-C4'	6.04	1.58	1.51
38	A1	2527	G	C2-N2	6.04	1.40	1.34
61	AN	151	ARG	CZ-NH1	6.04	1.41	1.33
11	B2	111	G	O3'-P	-6.04	1.53	1.61
38	A1	728	A	N9-C4	6.04	1.41	1.37
38	A1	1295	G	O3'-P	-6.04	1.53	1.61
11	B2	200	G	C2'-C1'	-6.04	1.46	1.53
11	B2	439	G	C6-N1	6.04	1.43	1.39
11	B2	997	G	P-O5'	-6.04	1.53	1.59
38	A1	646	U	C5'-C4'	6.04	1.58	1.51
38	A1	851	G	P-O5'	-6.04	1.53	1.59
38	A1	1147	G	C5'-C4'	-6.04	1.44	1.51
38	A1	1506	U	C3'-O3'	6.04	1.50	1.42
38	A1	2734	C	C4-N4	6.04	1.39	1.33
11	B2	890	C	C2-N3	6.04	1.40	1.35
38	A1	48	G	N1-C2	6.04	1.42	1.37
38	A1	2611	U	C2'-C1'	6.04	1.59	1.53
11	B2	99	C	N3-C4	6.04	1.38	1.33
11	B2	140	C	C2'-C1'	-6.04	1.46	1.53
11	B2	410	U	C4'-C3'	6.04	1.59	1.53
11	B2	884	G	N1-C2	6.04	1.42	1.37
11	B2	1308	U	O3'-P	-6.04	1.53	1.61
27	BO	5	ARG	CZ-NH1	6.04	1.40	1.33
38	A1	1268	A	N1-C2	6.04	1.39	1.34
38	A1	1740	U	C3'-C2'	6.04	1.59	1.52
38	A1	2516	G	N9-C4	6.04	1.42	1.38
38	A1	2738	G	C5'-C4'	6.04	1.58	1.51
42	Aa	65	LYS	CA-CB	6.04	1.67	1.53
48	AE	83	ARG	CZ-NH2	6.04	1.40	1.33
11	B2	243	G	O3'-P	-6.03	1.53	1.61
38	A1	61	G	C8-N7	-6.03	1.27	1.30
38	A1	200	G	C2-N2	6.03	1.40	1.34
38	A1	287	G	C5-C4	-6.03	1.34	1.38
38	A1	437	G	C2-N3	6.03	1.37	1.32
38	A1	498	U	N3-C4	6.03	1.43	1.38
38	A1	542	A	C6-N1	6.03	1.39	1.35
38	A1	1347	U	C4-C5	6.03	1.49	1.43
38	A1	1583	G	C2-N2	6.03	1.40	1.34
38	A1	1923	A	C6-N6	6.03	1.38	1.33
38	A1	2442	A	C6-N1	6.03	1.39	1.35
48	AE	40	ARG	CZ-NH2	6.03	1.40	1.33
11	B2	774	U	C4'-C3'	6.03	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	634	G	C6-N1	6.03	1.43	1.39
38	A1	1009	G	C2'-C1'	-6.03	1.46	1.53
38	A1	1428	G	C5'-C4'	6.03	1.58	1.51
11	B2	1106	A	O4'-C1'	6.03	1.49	1.41
22	BJ	2	ALA	CA-CB	6.03	1.65	1.52
38	A1	14	A	N9-C8	6.03	1.42	1.37
38	A1	1368	A	C8-N7	6.03	1.35	1.31
38	A1	1424	G	C2-N3	6.03	1.37	1.32
38	A1	1538	A	C5-C4	6.03	1.43	1.38
38	A1	1640	G	C2'-C1'	-6.03	1.46	1.53
38	A1	1908	C	N3-C4	6.03	1.38	1.33
38	A1	2502	C	C5'-C4'	6.03	1.58	1.51
11	B2	865	A	O3'-P	-6.03	1.53	1.61
23	BK	121	ARG	CD-NE	6.03	1.56	1.46
38	A1	2631	C	C2-N3	6.03	1.40	1.35
38	A1	2634	U	N1-C6	6.03	1.43	1.38
38	A1	2747	C	C4'-C3'	6.03	1.59	1.53
11	B2	189	C	C2-N3	6.03	1.40	1.35
11	B2	390	G	C3'-C2'	6.03	1.59	1.52
11	B2	460	C	N3-C4	6.03	1.38	1.33
38	A1	1652	A	C2-N3	6.03	1.39	1.33
38	A1	1824	G	N9-C8	6.03	1.42	1.37
38	A1	1838	C	C4-C5	6.03	1.47	1.43
38	A1	1981	G	C2-N3	6.03	1.37	1.32
38	A1	2446	C	N1-C6	-6.03	1.33	1.37
38	A1	2592	U	N1-C6	6.03	1.43	1.38
11	B2	242	A	N7-C5	-6.03	1.35	1.39
11	B2	505	U	C2-N3	6.03	1.42	1.37
11	B2	1480	G	N9-C8	-6.03	1.33	1.37
38	A1	58	G	C8-N7	-6.03	1.27	1.30
38	A1	314	A	C2-N3	6.03	1.39	1.33
38	A1	320	C	C4-C5	-6.03	1.38	1.43
38	A1	836	U	O3'-P	-6.03	1.53	1.61
38	A1	837	G	N3-C4	-6.03	1.31	1.35
38	A1	1784	G	C2-N3	6.03	1.37	1.32
38	A1	2517	U	C5'-C4'	6.03	1.58	1.51
39	A3	52	U	N1-C6	6.03	1.43	1.38
11	B2	143	G	C2'-C1'	-6.02	1.46	1.53
11	B2	1290	U	C4'-C3'	6.02	1.59	1.53
11	B2	1439	G	O4'-C1'	6.02	1.49	1.41
13	BA	138	ARG	CD-NE	6.02	1.56	1.46
38	A1	1626	A	C8-N7	-6.02	1.27	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2306	C	C2-N3	6.02	1.40	1.35
38	A1	2473	C	C5-C6	-6.02	1.29	1.34
38	A1	2815	C	C4-N4	6.02	1.39	1.33
11	B2	402	G	C4'-C3'	6.02	1.59	1.53
11	B2	769	A	C2-N3	6.02	1.39	1.33
38	A1	310	C	C5-C6	-6.02	1.29	1.34
38	A1	661	G	C5-C6	6.02	1.48	1.42
38	A1	876	C	C4-N4	6.02	1.39	1.33
38	A1	1076	G	O4'-C1'	6.02	1.49	1.41
38	A1	1545	C	O4'-C1'	6.02	1.49	1.41
38	A1	1909	C	C2-O2	-6.02	1.19	1.24
38	A1	1951	G	C2-N3	6.02	1.37	1.32
38	A1	2214	U	C3'-C2'	-6.02	1.46	1.52
38	A1	2363	G	C2-N3	6.02	1.37	1.32
11	B2	1058	G	C4'-C3'	6.02	1.59	1.53
38	A1	1337	G	C2-N3	6.02	1.37	1.32
38	A1	1606	C	C2-N3	6.02	1.40	1.35
10	B1	22	A	C8-N7	-6.02	1.27	1.31
11	B2	98	U	C5'-C4'	6.02	1.58	1.51
11	B2	378	A	N9-C4	6.02	1.41	1.37
11	B2	828	U	N1-C2	6.02	1.44	1.38
11	B2	1153	G	C6-N1	6.02	1.43	1.39
11	B2	1197	C	N3-C4	6.02	1.38	1.33
38	A1	201	C	P-O5'	-6.02	1.53	1.59
38	A1	326	C	C4'-C3'	6.02	1.59	1.53
38	A1	1585	U	P-O5'	-6.02	1.53	1.59
38	A1	2526	G	C2'-C1'	-6.02	1.46	1.53
11	B2	34	G	C5-C4	6.02	1.42	1.38
11	B2	393	A	C8-N7	-6.02	1.27	1.31
11	B2	841	C	N1-C6	6.02	1.40	1.37
11	B2	889	G	C2-N3	-6.02	1.27	1.32
38	A1	36	G	O3'-P	-6.02	1.53	1.61
38	A1	873	G	C5-C4	6.02	1.42	1.38
38	A1	1194	G	C2-N2	6.02	1.40	1.34
38	A1	1841	G	N9-C4	6.02	1.42	1.38
38	A1	1982	C	C5-C6	-6.02	1.29	1.34
38	A1	2040	A	C5'-C4'	6.02	1.58	1.51
11	B2	56	A	C6-N6	6.02	1.38	1.33
11	B2	195	C	O3'-P	-6.02	1.53	1.61
11	B2	653	C	N3-C4	6.02	1.38	1.33
38	A1	923	A	C6-N6	6.02	1.38	1.33
55	Ai	23	ARG	CZ-NH2	6.02	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	308	G	C5-C4	6.01	1.42	1.38
11	B2	1162	G	C8-N7	6.01	1.34	1.30
38	A1	107	G	C6-N1	6.01	1.43	1.39
38	A1	277	A	N3-C4	-6.01	1.31	1.34
38	A1	787	G	N7-C5	-6.01	1.35	1.39
38	A1	1526	G	C8-N7	6.01	1.34	1.30
38	A1	2424	A	N9-C4	-6.01	1.34	1.37
38	A1	2558	U	C3'-C2'	-6.01	1.46	1.52
38	A1	2817	U	C2'-C1'	-6.01	1.46	1.53
39	A3	6	G	C2-N2	6.01	1.40	1.34
11	B2	523	C	C5'-C4'	6.01	1.58	1.51
38	A1	225	C	C3'-C2'	-6.01	1.46	1.52
38	A1	2819	C	N1-C2	6.01	1.46	1.40
11	B2	229	G	C6-N1	6.01	1.43	1.39
11	B2	798	U	N1-C6	6.01	1.43	1.38
11	B2	948	G	C3'-C2'	6.01	1.59	1.52
11	B2	1297	G	N3-C4	-6.01	1.31	1.35
38	A1	1545	C	C4-N4	6.01	1.39	1.33
38	A1	1700	U	C5'-C4'	-6.01	1.44	1.51
39	A3	73	U	N3-C4	6.01	1.43	1.38
45	AC	304	GLU	CD-OE1	6.01	1.32	1.25
11	B2	407	G	C2-N3	6.01	1.37	1.32
11	B2	993	C	C4-C5	-6.01	1.38	1.43
11	B2	1159	U	N1-C6	6.01	1.43	1.38
38	A1	233	A	C5'-C4'	6.01	1.58	1.51
38	A1	377	C	C4'-O4'	6.01	1.53	1.45
38	A1	603	G	C6-N1	6.01	1.43	1.39
38	A1	633	A	N7-C5	-6.01	1.35	1.39
38	A1	791	C	C4-C5	-6.01	1.38	1.43
38	A1	1032	C	C5'-C4'	6.01	1.58	1.51
38	A1	1176	C	N3-C4	6.01	1.38	1.33
38	A1	1366	U	O3'-P	-6.01	1.53	1.61
38	A1	1404	G	N1-C2	6.01	1.42	1.37
38	A1	1410	A	C2'-C1'	-6.01	1.46	1.53
38	A1	1720	G	N7-C5	-6.01	1.35	1.39
38	A1	1816	C	C4-N4	6.01	1.39	1.33
38	A1	1990	U	O3'-P	-6.01	1.53	1.61
38	A1	2000	G	C6-N1	6.01	1.43	1.39
38	A1	2004	A	N7-C5	-6.01	1.35	1.39
38	A1	2198	U	C4-O4	-6.01	1.18	1.23
38	A1	2773	A	C2-N3	6.01	1.39	1.33
38	A1	3002	A	C2'-O2'	-6.01	1.33	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
39	A3	38	U	P-O5'	-6.01	1.53	1.59
38	A1	465	C	P-O5'	6.01	1.65	1.59
38	A1	1196	A	C5'-C4'	6.01	1.58	1.51
38	A1	1378	G	N3-C4	6.01	1.39	1.35
11	B2	867	A	C2'-C1'	-6.01	1.46	1.53
11	B2	1307	G	C5-C4	6.01	1.42	1.38
11	B2	1405	C	P-O5'	-6.01	1.53	1.59
38	A1	1106	C	N3-C4	6.01	1.38	1.33
38	A1	1826	G	C4'-C3'	-6.01	1.46	1.52
38	A1	2112	C	C4-C5	6.01	1.47	1.43
38	A1	2856	G	C2-N3	6.01	1.37	1.32
11	B2	284	A	N3-C4	-6.00	1.31	1.34
11	B2	883	G	N7-C5	-6.00	1.35	1.39
38	A1	124	C	O3'-P	-6.00	1.53	1.61
38	A1	512	G	C6-N1	6.00	1.43	1.39
38	A1	878	G	C5-C6	6.00	1.48	1.42
38	A1	994	G	C5-C6	-6.00	1.36	1.42
38	A1	1544	C	N1-C6	6.00	1.40	1.37
38	A1	1573	A	N9-C8	6.00	1.42	1.37
38	A1	1999	G	C1'-N9	6.00	1.57	1.48
38	A1	2546	G	N1-C2	6.00	1.42	1.37
44	Ab	101	ARG	CZ-NH2	6.00	1.40	1.33
11	B2	470	G	C8-N7	-6.00	1.27	1.30
11	B2	539	C	N3-C4	6.00	1.38	1.33
11	B2	1058	G	C6-N1	6.00	1.43	1.39
11	B2	1064	C	C4'-C3'	6.00	1.59	1.53
11	B2	1460	G	O3'-P	-6.00	1.53	1.61
38	A1	145	C	C5'-C4'	6.00	1.58	1.51
38	A1	1503	C	C2'-C1'	-6.00	1.46	1.53
38	A1	2513	C	N1-C6	6.00	1.40	1.37
11	B2	52	U	C3'-C2'	-6.00	1.46	1.52
11	B2	345	G	O3'-P	-6.00	1.53	1.61
11	B2	426	C	O3'-P	-6.00	1.53	1.61
11	B2	568	C	C2'-C1'	-6.00	1.46	1.53
11	B2	570	G	O3'-P	-6.00	1.53	1.61
11	B2	1476	C	C4-C5	6.00	1.47	1.43
38	A1	78	C	C5'-C4'	6.00	1.58	1.51
38	A1	129	C	C4-N4	6.00	1.39	1.33
11	B2	103	A	C6-N6	6.00	1.38	1.33
11	B2	1029	G	C6-N1	6.00	1.43	1.39
11	B2	1170	C	P-O5'	-6.00	1.53	1.59
38	A1	1372	C	C2'-C1'	-6.00	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1995	C	C4-N4	6.00	1.39	1.33
11	B2	527	A	C6-N6	6.00	1.38	1.33
11	B2	540	G	N7-C5	-6.00	1.35	1.39
11	B2	1434	C	O3'-P	-6.00	1.53	1.61
11	B2	1449	G	C2-N2	6.00	1.40	1.34
38	A1	661	G	N7-C5	-6.00	1.35	1.39
38	A1	1848	A	C6-N1	6.00	1.39	1.35
38	A1	2248	G	O3'-P	-6.00	1.53	1.61
45	AC	87	ARG	NE-CZ	6.00	1.40	1.33
11	B2	563	U	C2-N3	6.00	1.42	1.37
11	B2	1361	G	N3-C4	-6.00	1.31	1.35
11	B2	1441	G	C5-C4	6.00	1.42	1.38
38	A1	659	U	C2-N3	6.00	1.42	1.37
38	A1	1101	U	C1'-N1	6.00	1.57	1.48
38	A1	1981	G	C2-N2	6.00	1.40	1.34
38	A1	816	C	O3'-P	-6.00	1.53	1.61
38	A1	1035	G	P-O5'	-6.00	1.53	1.59
38	A1	2691	G	P-O5'	-6.00	1.53	1.59
11	B2	510	A	C3'-C2'	-5.99	1.46	1.52
11	B2	621	G	C5-C4	-5.99	1.34	1.38
11	B2	644	G	N3-C4	-5.99	1.31	1.35
11	B2	965	G	C5-C6	-5.99	1.36	1.42
38	A1	463	A	C3'-C2'	-5.99	1.46	1.52
38	A1	838	A	O3'-P	-5.99	1.53	1.61
38	A1	1296	A	C6-N1	5.99	1.39	1.35
38	A1	1902	G	C5-C4	5.99	1.42	1.38
38	A1	2627	C	N1-C6	-5.99	1.33	1.37
39	A3	117	G	C5-C4	5.99	1.42	1.38
11	B2	521	G	N3-C4	5.99	1.39	1.35
38	A1	2075	U	C2-N3	5.99	1.42	1.37
38	A1	2603	A	C6-N6	5.99	1.38	1.33
11	B2	647	G	O4'-C1'	-5.99	1.33	1.41
11	B2	667	G	C5-C6	5.99	1.48	1.42
11	B2	688	C	N3-C4	5.99	1.38	1.33
38	A1	627	G	N3-C4	5.99	1.39	1.35
38	A1	1651	A	N9-C8	5.99	1.42	1.37
38	A1	1793	G	N9-C8	5.99	1.42	1.37
38	A1	2741	U	N1-C2	5.99	1.44	1.38
11	B2	239	A	C5-C4	5.99	1.43	1.38
11	B2	699	C	N1-C6	5.99	1.40	1.37
38	A1	250	G	C8-N7	-5.99	1.27	1.30
38	A1	377	C	N3-C4	5.99	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	745	C	O4'-C1'	-5.99	1.33	1.41
38	A1	782	G	O3'-P	-5.99	1.53	1.61
38	A1	1562	U	C5'-C4'	5.99	1.58	1.51
38	A1	1859	A	C2-N3	5.99	1.39	1.33
38	A1	2230	G	N7-C5	5.99	1.42	1.39
38	A1	2446	C	C4-C5	5.99	1.47	1.43
38	A1	2635	C	C4'-O4'	-5.99	1.37	1.45
11	B2	128	A	C2-N3	5.99	1.39	1.33
38	A1	354	G	C2-N2	5.99	1.40	1.34
38	A1	605	A	O3'-P	-5.99	1.53	1.61
38	A1	1739	U	P-O5'	5.99	1.65	1.59
38	A1	1842	C	C4'-O4'	-5.99	1.37	1.45
38	A1	2456	C	N1-C2	5.99	1.46	1.40
11	B2	962	G	C5-C4	5.99	1.42	1.38
11	B2	1198	A	C3'-C2'	5.99	1.59	1.52
38	A1	1374	G	C6-N1	-5.99	1.35	1.39
11	B2	578	G	C4'-C3'	-5.98	1.46	1.52
11	B2	1164	A	C5'-C4'	5.98	1.58	1.51
11	B2	20	G	N1-C2	5.98	1.42	1.37
11	B2	89	G	C6-O6	5.98	1.29	1.24
11	B2	789	G	C8-N7	5.98	1.34	1.30
11	B2	984	C	N1-C6	5.98	1.40	1.37
19	BG	85	ARG	NE-CZ	5.98	1.40	1.33
29	BQ	58	TYR	CZ-OH	5.98	1.48	1.37
38	A1	803	A	N3-C4	-5.98	1.31	1.34
38	A1	950	G	N9-C4	-5.98	1.33	1.38
38	A1	1332	A	C6-N6	5.98	1.38	1.33
38	A1	1916	U	C3'-O3'	5.98	1.50	1.42
38	A1	2233	G	C1'-N9	5.98	1.57	1.48
38	A1	2431	C	N1-C6	5.98	1.40	1.37
38	A1	2474	A	C6-N6	5.98	1.38	1.33
38	A1	2522	C	N3-C4	5.98	1.38	1.33
11	B2	20	G	C2-N2	5.98	1.40	1.34
11	B2	52	U	N1-C2	5.98	1.44	1.38
11	B2	598	U	N3-C4	5.98	1.43	1.38
11	B2	796	C	P-O5'	-5.98	1.53	1.59
11	B2	1363	C	C4-N4	5.98	1.39	1.33
38	A1	768	C	N1-C6	-5.98	1.33	1.37
38	A1	1132	U	C2-N3	5.98	1.42	1.37
38	A1	1222	U	C2'-C1'	-5.98	1.46	1.53
38	A1	1611	C	N1-C6	5.98	1.40	1.37
38	A1	1691	U	P-O5'	5.98	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2356	U	C2'-C1'	-5.98	1.46	1.53
38	A1	2631	C	C5'-C4'	-5.98	1.44	1.51
38	A1	2800	U	N1-C6	5.98	1.43	1.38
11	B2	33	U	C2-N3	5.98	1.42	1.37
11	B2	804	U	C5'-C4'	5.98	1.58	1.51
11	B2	1111	G	N1-C2	5.98	1.42	1.37
38	A1	453	U	C5'-C4'	5.98	1.58	1.51
38	A1	796	C	C5-C6	5.98	1.39	1.34
46	AD	22	PHE	CG-CD1	5.98	1.47	1.38
9	AX	126	PHE	CG-CD1	5.98	1.47	1.38
11	B2	533	C	C4'-O4'	5.98	1.53	1.45
38	A1	259	A	C6-N6	5.98	1.38	1.33
38	A1	281	G	O4'-C1'	5.98	1.49	1.41
38	A1	2202	U	P-O5'	5.98	1.65	1.59
38	A1	2511	C	C4-N4	5.98	1.39	1.33
38	A1	2998	G	C2'-C1'	-5.98	1.46	1.53
11	B2	92	G	C4'-C3'	-5.98	1.46	1.52
11	B2	474	G	N1-C2	5.98	1.42	1.37
11	B2	650	A	C3'-O3'	-5.98	1.33	1.42
11	B2	1109	C	C2'-C1'	-5.98	1.46	1.53
38	A1	406	G	C8-N7	5.98	1.34	1.30
38	A1	35	G	C4'-C3'	5.97	1.59	1.53
38	A1	939	A	N3-C4	-5.97	1.31	1.34
38	A1	973	C	C4-C5	5.97	1.47	1.43
38	A1	1688	C	C2'-O2'	5.97	1.49	1.41
38	A1	2224	G	P-O5'	-5.97	1.53	1.59
11	B2	1104	G	C3'-C2'	5.97	1.59	1.52
38	A1	908	U	C5'-C4'	5.97	1.58	1.51
38	A1	1408	G	N3-C4	-5.97	1.31	1.35
38	A1	2687	A	N9-C4	5.97	1.41	1.37
39	A3	5	G	C4'-C3'	-5.97	1.46	1.52
16	BD	168	ARG	CZ-NH1	5.97	1.40	1.33
38	A1	1254	C	C4-N4	5.97	1.39	1.33
38	A1	2058	C	N3-C4	5.97	1.38	1.33
38	A1	2501	G	C6-N1	5.97	1.43	1.39
38	A1	2692	A	O3'-P	-5.97	1.53	1.61
10	B1	43	G	C8-N7	-5.97	1.27	1.30
11	B2	574	A	C8-N7	-5.97	1.27	1.31
11	B2	846	G	C4'-O4'	5.97	1.53	1.45
11	B2	1188	C	C2-N3	5.97	1.40	1.35
38	A1	91	G	N3-C4	5.97	1.39	1.35
38	A1	292	U	C5'-C4'	5.97	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	883	G	N7-C5	-5.97	1.35	1.39
38	A1	1145	G	C6-N1	5.97	1.43	1.39
38	A1	1556	G	N1-C2	5.97	1.42	1.37
38	A1	1858	G	C2'-C1'	-5.97	1.46	1.53
38	A1	2158	G	N9-C4	-5.97	1.33	1.38
38	A1	2206	G	C2-N2	5.97	1.40	1.34
39	A3	14	G	C6-N1	-5.97	1.35	1.39
11	B2	1047	U	C3'-C2'	-5.97	1.46	1.52
38	A1	85	G	N9-C4	-5.97	1.33	1.38
38	A1	235	G	N3-C4	-5.97	1.31	1.35
38	A1	323	U	O4'-C1'	5.97	1.49	1.41
38	A1	454	C	C4-C5	5.97	1.47	1.43
38	A1	635	G	N3-C4	5.97	1.39	1.35
38	A1	699	A	C6-N6	5.97	1.38	1.33
38	A1	842	C	N1-C6	-5.97	1.33	1.37
38	A1	1590	C	O3'-P	-5.97	1.53	1.61
38	A1	1899	C	C5-C6	5.97	1.39	1.34
41	AA	98	ARG	CZ-NH2	5.97	1.40	1.33
11	B2	124	C	C2'-C1'	-5.97	1.46	1.53
11	B2	289	C	C4-C5	-5.97	1.38	1.43
38	A1	60	G	N7-C5	-5.97	1.35	1.39
38	A1	173	G	C2-N2	5.97	1.40	1.34
38	A1	1747	C	C4-N4	5.97	1.39	1.33
38	A1	1798	A	N3-C4	-5.97	1.31	1.34
38	A1	1813	A	C5'-C4'	5.97	1.58	1.51
38	A1	2315	G	C2-N2	5.97	1.40	1.34
38	A1	2406	C	C5-C6	5.97	1.39	1.34
38	A1	2444	G	C3'-C2'	-5.97	1.46	1.52
38	A1	2846	A	N9-C4	-5.97	1.34	1.37
50	AF	37	ARG	NE-CZ	5.97	1.40	1.33
11	B2	141	C	C4'-C3'	5.96	1.59	1.53
11	B2	585	U	C2'-C1'	5.96	1.59	1.53
11	B2	1123	G	C2-N2	5.96	1.40	1.34
38	A1	697	U	N3-C4	5.96	1.43	1.38
38	A1	1206	A	C6-N1	5.96	1.39	1.35
38	A1	1228	G	N1-C2	5.96	1.42	1.37
38	A1	2061	A	C6-N6	5.96	1.38	1.33
38	A1	2481	G	N3-C4	5.96	1.39	1.35
38	A1	2793	C	N1-C6	5.96	1.40	1.37
53	Ah	2	ARG	NE-CZ	5.96	1.40	1.33
60	AM	112	GLU	CG-CD	-5.96	1.43	1.51
65	AV	24	ARG	CZ-NH2	5.96	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	716	G	C5-C4	5.96	1.42	1.38
38	A1	28	A	N7-C5	-5.96	1.35	1.39
38	A1	637	G	P-O5'	5.96	1.65	1.59
38	A1	2110	C	C2'-C1'	-5.96	1.46	1.53
38	A1	2401	A	C2-N3	-5.96	1.28	1.33
11	B2	152	G	N9-C8	5.96	1.42	1.37
11	B2	345	G	C4'-O4'	5.96	1.53	1.45
11	B2	402	G	C2-N2	5.96	1.40	1.34
11	B2	929	C	C3'-C2'	-5.96	1.46	1.52
11	B2	1133	C	C4-N4	5.96	1.39	1.33
38	A1	828	G	C4'-C3'	-5.96	1.46	1.52
38	A1	869	A	N7-C5	-5.96	1.35	1.39
38	A1	950	G	N7-C5	5.96	1.42	1.39
38	A1	1479	U	C5'-C4'	5.96	1.58	1.51
39	A3	111	G	C2'-C1'	-5.96	1.46	1.53
11	B2	791	G	C5-C4	-5.96	1.34	1.38
39	A3	116	C	C4'-C3'	5.96	1.59	1.53
11	B2	96	G	C4'-O4'	5.96	1.53	1.45
11	B2	377	A	C2'-C1'	-5.96	1.46	1.53
11	B2	962	G	N1-C2	5.96	1.42	1.37
11	B2	1353	C	C2-O2	5.96	1.29	1.24
38	A1	56	G	N1-C2	5.96	1.42	1.37
38	A1	304	G	N9-C4	5.96	1.42	1.38
38	A1	1071	A	N3-C4	5.96	1.38	1.34
38	A1	1904	G	C5-C6	-5.96	1.36	1.42
38	A1	2166	C	C4'-O4'	5.96	1.53	1.45
38	A1	2899	G	P-O5'	-5.96	1.53	1.59
54	AI	54	GLU	CG-CD	5.96	1.60	1.51
11	B2	570	G	C6-N1	5.96	1.43	1.39
11	B2	590	G	C5-C4	-5.96	1.34	1.38
34	BV	63	TYR	CD2-CE2	5.96	1.48	1.39
38	A1	825	C	C2-N3	5.96	1.40	1.35
38	A1	1053	A	C6-N1	5.96	1.39	1.35
38	A1	1468	G	N3-C4	-5.96	1.31	1.35
63	AP	25	TYR	CD2-CE2	5.96	1.48	1.39
10	B1	54	G	N1-C2	5.96	1.42	1.37
11	B2	571	C	C5-C6	5.96	1.39	1.34
11	B2	996	A	C8-N7	-5.96	1.27	1.31
38	A1	247	A	N3-C4	-5.96	1.31	1.34
38	A1	307	C	P-O5'	-5.96	1.53	1.59
38	A1	976	C	N3-C4	5.96	1.38	1.33
38	A1	1102	C	C5-C6	-5.96	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	3015	A	O3'-P	-5.96	1.54	1.61
11	B2	139	C	O3'-P	-5.95	1.54	1.61
11	B2	150	G	N9-C8	5.95	1.42	1.37
35	BW	40	CYS	CB-SG	5.95	1.92	1.82
38	A1	35	G	N1-C2	5.95	1.42	1.37
38	A1	1209	A	N7-C5	5.95	1.42	1.39
38	A1	2469	G	C2'-C1'	-5.95	1.46	1.53
38	A1	2480	G	N7-C5	5.95	1.42	1.39
10	B1	35	G	C5-C6	5.95	1.48	1.42
11	B2	618	G	N9-C4	-5.95	1.33	1.38
38	A1	559	G	C2'-C1'	-5.95	1.46	1.53
38	A1	943	G	C6-N1	5.95	1.43	1.39
38	A1	1443	G	C4'-C3'	5.95	1.59	1.53
38	A1	1829	C	C2-N3	5.95	1.40	1.35
38	A1	2153	C	P-O5'	-5.95	1.53	1.59
11	B2	296	A	N1-C2	-5.95	1.28	1.34
11	B2	722	G	C2'-C1'	-5.95	1.46	1.53
38	A1	684	G	C2'-C1'	-5.95	1.46	1.53
38	A1	983	G	C2-N3	5.95	1.37	1.32
38	A1	2875	C	C2-N3	5.95	1.40	1.35
38	A1	3002	A	C5-C4	5.95	1.43	1.38
11	B2	852	G	N9-C4	-5.95	1.33	1.38
11	B2	1358	A	C5'-C4'	5.95	1.58	1.51
11	B2	1463	A	C5-C4	5.95	1.43	1.38
38	A1	361	G	N7-C5	-5.95	1.35	1.39
38	A1	1000	G	C2-N2	-5.95	1.28	1.34
38	A1	2186	C	C4-C5	5.95	1.47	1.43
38	A1	2571	G	C2'-C1'	-5.95	1.46	1.53
38	A1	2979	C	N3-C4	5.95	1.38	1.33
38	A1	2647	G	C2'-C1'	-5.95	1.46	1.53
11	B2	64	G	C2'-C1'	-5.95	1.46	1.53
11	B2	865	A	N7-C5	-5.95	1.35	1.39
11	B2	1108	U	C5-C6	5.95	1.39	1.34
11	B2	1394	G	C2-N3	5.95	1.37	1.32
38	A1	945	U	C5'-C4'	5.95	1.58	1.51
38	A1	1234	A	C6-N1	5.95	1.39	1.35
38	A1	1476	C	C5-C6	-5.95	1.29	1.34
38	A1	1633	A	C5-C4	-5.95	1.34	1.38
38	A1	1817	C	C2'-C1'	5.95	1.59	1.53
38	A1	1899	C	C2'-C1'	-5.95	1.46	1.53
38	A1	2296	A	C6-N1	5.95	1.39	1.35
11	B2	388	G	C2-N2	5.94	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1339	G	N9-C8	5.94	1.42	1.37
38	A1	3006	G	N9-C4	5.94	1.42	1.38
11	B2	914	U	C3'-O3'	5.94	1.50	1.42
38	A1	353	C	P-O5'	-5.94	1.53	1.59
38	A1	551	A	C5'-C4'	5.94	1.58	1.51
38	A1	770	G	P-O5'	-5.94	1.53	1.59
38	A1	889	C	C1'-N1	5.94	1.57	1.48
38	A1	1691	U	N3-C4	5.94	1.43	1.38
38	A1	2440	C	N3-C4	5.94	1.38	1.33
38	A1	2811	U	P-O5'	-5.94	1.53	1.59
38	A1	3010	C	C4'-O4'	-5.94	1.37	1.45
11	B2	166	A	C6-N6	5.94	1.38	1.33
11	B2	645	G	P-O5'	5.94	1.65	1.59
34	BV	33	ARG	CZ-NH2	5.94	1.40	1.33
38	A1	315	U	N3-C4	5.94	1.43	1.38
38	A1	869	A	C5'-C4'	5.94	1.58	1.51
38	A1	869	A	C6-N6	5.94	1.38	1.33
38	A1	1686	C	P-O5'	5.94	1.65	1.59
38	A1	2525	C	C2-N3	5.94	1.40	1.35
38	A1	2784	A	C8-N7	-5.94	1.27	1.31
11	B2	373	C	C4-C5	5.94	1.47	1.43
11	B2	1032	A	C5-C4	5.94	1.43	1.38
38	A1	1656	C	C4-N4	5.94	1.39	1.33
11	B2	562	A	C5-C6	5.94	1.46	1.41
11	B2	720	A	C8-N7	-5.94	1.27	1.31
11	B2	994	C	C3'-C2'	5.94	1.59	1.52
38	A1	576	G	C4'-C3'	5.94	1.59	1.53
38	A1	726	G	C2-N3	5.94	1.37	1.32
38	A1	1636	C	C4-N4	5.94	1.39	1.33
38	A1	2191	U	C5'-C4'	5.94	1.58	1.51
38	A1	2355	G	C2'-O2'	-5.94	1.33	1.41
38	A1	2545	A	C1'-N9	5.94	1.57	1.48
38	A1	2882	G	C2-N2	5.94	1.40	1.34
38	A1	2999	G	C6-N1	5.94	1.43	1.39
39	A3	16	G	C2-N2	5.94	1.40	1.34
61	AN	66	ARG	CZ-NH1	5.94	1.40	1.33
33	BU	126	ARG	CD-NE	5.94	1.56	1.46
38	A1	2866	A	P-O5'	-5.94	1.53	1.59
11	B2	238	G	C3'-C2'	5.93	1.59	1.52
11	B2	377	A	C3'-C2'	5.93	1.59	1.52
11	B2	1147	G	C8-N7	-5.93	1.27	1.30
38	A1	299	U	N1-C2	5.93	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2164	G	N1-C2	5.93	1.42	1.37
38	A1	2310	G	N9-C8	5.93	1.42	1.37
38	A1	2425	A	C8-N7	5.93	1.35	1.31
11	B2	88	G	O3'-P	-5.93	1.54	1.61
11	B2	664	G	N3-C4	-5.93	1.31	1.35
11	B2	1056	G	C4'-O4'	-5.93	1.37	1.45
11	B2	1445	A	C6-N1	5.93	1.39	1.35
38	A1	50	C	N3-C4	5.93	1.38	1.33
38	A1	196	A	N9-C8	5.93	1.42	1.37
38	A1	337	G	C2-N3	5.93	1.37	1.32
38	A1	1496	A	N9-C4	5.93	1.41	1.37
38	A1	2546	G	C5-C4	-5.93	1.34	1.38
38	A1	2619	U	C5'-C4'	5.93	1.58	1.51
58	Ak	84	GLU	CD-OE2	5.93	1.32	1.25
2	A8	27	ARG	CD-NE	5.93	1.56	1.46
38	A1	211	A	C5'-C4'	5.93	1.58	1.51
38	A1	453	U	C4'-O4'	-5.93	1.37	1.45
38	A1	2854	A	N7-C5	-5.93	1.35	1.39
10	B1	71	C	P-O5'	5.93	1.65	1.59
11	B2	374	G	N1-C2	5.93	1.42	1.37
11	B2	461	A	C6-N1	5.93	1.39	1.35
11	B2	519	G	O3'-P	-5.93	1.54	1.61
11	B2	994	C	N1-C2	5.93	1.46	1.40
38	A1	1617	G	C5-C6	-5.93	1.36	1.42
38	A1	1942	G	N9-C8	5.93	1.42	1.37
38	A1	2256	G	N1-C2	5.93	1.42	1.37
61	AN	17	TYR	CZ-OH	5.93	1.48	1.37
11	B2	406	U	O4'-C1'	5.93	1.49	1.41
38	A1	884	C	N1-C6	-5.93	1.33	1.37
38	A1	960	C	C4-C5	-5.93	1.38	1.43
38	A1	1290	G	C2-N2	-5.93	1.28	1.34
38	A1	1361	G	C2-N3	5.93	1.37	1.32
38	A1	2240	G	C5'-C4'	5.93	1.58	1.51
38	A1	2739	G	C5-C4	-5.93	1.34	1.38
4	AQ	76	ARG	CD-NE	5.93	1.56	1.46
11	B2	214	C	C5-C6	-5.93	1.29	1.34
11	B2	231	G	N3-C4	-5.93	1.31	1.35
11	B2	317	A	C2-N3	5.93	1.38	1.33
11	B2	419	G	C2-N2	5.93	1.40	1.34
11	B2	420	C	N3-C4	5.93	1.38	1.33
11	B2	757	G	C5'-C4'	5.93	1.58	1.51
38	A1	259	A	C5-C6	-5.93	1.35	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1199	U	N3-C4	5.93	1.43	1.38
38	A1	1345	G	C5-C4	5.93	1.42	1.38
38	A1	1883	C	C4'-C3'	5.93	1.59	1.53
38	A1	2532	G	N1-C2	5.93	1.42	1.37
39	A3	4	C	C4-N4	5.93	1.39	1.33
11	B2	594	A	N9-C4	5.92	1.41	1.37
11	B2	925	U	C3'-C2'	5.92	1.59	1.52
11	B2	1383	A	C6-N1	5.92	1.39	1.35
38	A1	522	A	N7-C5	5.92	1.42	1.39
38	A1	1051	C	O3'-P	-5.92	1.54	1.61
38	A1	1753	G	P-O5'	-5.92	1.53	1.59
38	A1	2605	G	P-O5'	-5.92	1.53	1.59
11	B2	844	G	C4'-C3'	-5.92	1.46	1.52
11	B2	876	A	C8-N7	-5.92	1.27	1.31
38	A1	820	C	C4'-O4'	-5.92	1.37	1.45
38	A1	1802	G	N3-C4	-5.92	1.31	1.35
38	A1	1942	G	C8-N7	-5.92	1.27	1.30
38	A1	2603	A	C8-N7	5.92	1.35	1.31
38	A1	2858	C	P-O5'	-5.92	1.53	1.59
39	A3	54	A	N9-C8	-5.92	1.33	1.37
11	B2	388	G	C8-N7	-5.92	1.27	1.30
11	B2	848	G	C2-N3	5.92	1.37	1.32
11	B2	1419	G	C8-N7	5.92	1.34	1.30
38	A1	128	C	P-O5'	-5.92	1.53	1.59
38	A1	662	A	N7-C5	-5.92	1.35	1.39
38	A1	697	U	C2'-C1'	5.92	1.59	1.53
38	A1	2013	A	C2-N3	-5.92	1.28	1.33
38	A1	321	C	C2'-C1'	-5.92	1.46	1.53
38	A1	2184	G	N7-C5	-5.92	1.35	1.39
38	A1	2755	G	N1-C2	5.92	1.42	1.37
11	B2	169	C	C2-O2	-5.92	1.19	1.24
38	A1	1188	C	C2'-C1'	-5.92	1.46	1.53
38	A1	2070	U	C4'-C3'	5.92	1.59	1.53
38	A1	2441	A	C6-N6	5.92	1.38	1.33
38	A1	2557	C	C3'-O3'	5.92	1.50	1.42
38	A1	2982	G	N1-C2	5.92	1.42	1.37
39	A3	119	C	C4-N4	5.92	1.39	1.33
61	AN	22	TYR	CG-CD1	5.92	1.46	1.39
63	AP	91	ARG	CD-NE	5.92	1.56	1.46
11	B2	1141	G	C6-O6	-5.92	1.18	1.24
11	B2	1321	U	C4'-O4'	-5.92	1.37	1.45
30	BR	3	ARG	CD-NE	5.92	1.56	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	21	C	C5-C6	5.92	1.39	1.34
38	A1	919	G	C2-N3	5.92	1.37	1.32
38	A1	1803	U	C4'-C3'	5.92	1.59	1.53
38	A1	2681	A	C6-N1	5.92	1.39	1.35
38	A1	2975	A	C8-N7	-5.92	1.27	1.31
11	B2	442	C	C2-N3	5.92	1.40	1.35
38	A1	821	U	O4'-C1'	5.92	1.49	1.41
38	A1	3034	C	C4'-C3'	5.92	1.59	1.53
39	A3	42	A	C6-N1	5.92	1.39	1.35
11	B2	615	G	C2-N2	5.91	1.40	1.34
11	B2	845	G	C5-C6	5.91	1.48	1.42
11	B2	1210	A	C6-N1	5.91	1.39	1.35
11	B2	1292	A	C4'-O4'	-5.91	1.37	1.45
38	A1	1580	G	O3'-P	5.91	1.68	1.61
38	A1	1876	G	P-O5'	-5.91	1.53	1.59
38	A1	1913	C	N3-C4	5.91	1.38	1.33
38	A1	2172	G	N9-C4	5.91	1.42	1.38
11	B2	911	C	C4-C5	-5.91	1.38	1.43
11	B2	956	C	C4-C5	5.91	1.47	1.43
11	B2	1356	A	C2-N3	5.91	1.38	1.33
11	B2	1422	G	C8-N7	-5.91	1.27	1.30
38	A1	969	U	C2'-C1'	-5.91	1.46	1.53
38	A1	1307	C	C2-N3	-5.91	1.31	1.35
38	A1	1684	C	P-O5'	-5.91	1.53	1.59
38	A1	1755	C	N3-C4	5.91	1.38	1.33
38	A1	2201	C	C4'-C3'	5.91	1.59	1.53
38	A1	2268	C	C5'-C4'	5.91	1.58	1.51
38	A1	2347	G	N9-C8	5.91	1.42	1.37
11	B2	814	C	C2'-C1'	-5.91	1.46	1.53
11	B2	1472	G	C2-N2	5.91	1.40	1.34
38	A1	26	G	C2'-C1'	-5.91	1.46	1.53
38	A1	275	C	N3-C4	5.91	1.38	1.33
38	A1	1345	G	N1-C2	5.91	1.42	1.37
38	A1	1485	A	C5-C4	5.91	1.42	1.38
38	A1	1602	C	C3'-C2'	-5.91	1.46	1.52
38	A1	2406	C	O3'-P	-5.91	1.54	1.61
38	A1	2860	G	N1-C2	5.91	1.42	1.37
39	A3	82	C	P-O5'	5.91	1.65	1.59
11	B2	584	C	C4'-C3'	5.91	1.59	1.53
11	B2	702	G	O3'-P	-5.91	1.54	1.61
11	B2	792	C	P-O5'	-5.91	1.53	1.59
11	B2	1361	G	C2'-C1'	-5.91	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	67	U	C5'-C4'	5.91	1.58	1.51
38	A1	888	U	N1-C6	-5.91	1.32	1.38
38	A1	1279	U	P-O5'	-5.91	1.53	1.59
38	A1	2265	C	N3-C4	5.91	1.38	1.33
38	A1	2304	C	C4-N4	5.91	1.39	1.33
38	A1	2419	U	O4'-C1'	5.91	1.49	1.41
38	A1	2445	G	C5-C4	5.91	1.42	1.38
38	A1	2708	U	C3'-C2'	5.91	1.59	1.52
38	A1	2844	G	N9-C4	-5.91	1.33	1.38
39	A3	94	G	C8-N7	-5.91	1.27	1.30
11	B2	763	G	C6-N1	5.91	1.43	1.39
38	A1	233	A	C6-N1	5.91	1.39	1.35
66	AY	142	TYR	CZ-OH	5.91	1.47	1.37
11	B2	146	A	O4'-C1'	5.91	1.49	1.41
11	B2	177	A	N7-C5	-5.91	1.35	1.39
11	B2	790	G	N1-C2	5.91	1.42	1.37
11	B2	1392	G	C8-N7	-5.91	1.27	1.30
11	B2	1449	G	C5-C4	5.91	1.42	1.38
38	A1	269	C	C4-N4	5.91	1.39	1.33
38	A1	665	C	C2-N3	-5.91	1.31	1.35
38	A1	1455	U	C2-N3	5.91	1.41	1.37
38	A1	1852	U	N3-C4	5.91	1.43	1.38
38	A1	2610	C	N1-C6	5.91	1.40	1.37
38	A1	2656	A	C8-N7	-5.91	1.27	1.31
38	A1	2746	G	C4'-O4'	5.91	1.53	1.45
38	A1	2823	G	N7-C5	-5.91	1.35	1.39
11	B2	1286	C	O3'-P	-5.90	1.54	1.61
11	B2	1415	U	C2'-C1'	-5.90	1.46	1.53
38	A1	600	A	O3'-P	-5.90	1.54	1.61
38	A1	660	U	C4-O4	5.90	1.28	1.23
38	A1	1325	A	C4'-C3'	-5.90	1.46	1.52
38	A1	1870	G	C2'-C1'	-5.90	1.46	1.53
38	A1	1998	G	P-O5'	-5.90	1.53	1.59
38	A1	2872	G	C5-C6	5.90	1.48	1.42
38	A1	2945	A	C5-C6	5.90	1.46	1.41
11	B2	549	A	C5-C4	-5.90	1.34	1.38
11	B2	642	G	N3-C4	-5.90	1.31	1.35
11	B2	768	A	C5-C6	-5.90	1.35	1.41
11	B2	1013	G	N3-C4	5.90	1.39	1.35
11	B2	1260	G	N9-C4	5.90	1.42	1.38
11	B2	1333	G	C2-N2	5.90	1.40	1.34
38	A1	137	A	N3-C4	5.90	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	301	G	N9-C4	5.90	1.42	1.38
38	A1	405	G	N9-C4	5.90	1.42	1.38
38	A1	964	C	C4'-C3'	5.90	1.59	1.53
38	A1	1912	A	C8-N7	5.90	1.35	1.31
38	A1	2455	G	N9-C8	-5.90	1.33	1.37
11	B2	532	C	C2-N3	5.90	1.40	1.35
11	B2	682	A	C1'-N9	5.90	1.57	1.48
11	B2	820	G	C5-C6	-5.90	1.36	1.42
11	B2	1230	G	N9-C8	-5.90	1.33	1.37
11	B2	1286	C	C2-N3	5.90	1.40	1.35
11	B2	1494	C	C5-C6	5.90	1.39	1.34
18	BF	11	ARG	CB-CG	5.90	1.68	1.52
38	A1	230	A	N7-C5	5.90	1.42	1.39
38	A1	239	G	C5-C4	5.90	1.42	1.38
38	A1	1095	A	N3-C4	-5.90	1.31	1.34
38	A1	1121	C	N1-C6	5.90	1.40	1.37
38	A1	1365	G	P-O5'	-5.90	1.53	1.59
38	A1	1901	A	C5-C4	-5.90	1.34	1.38
38	A1	2324	C	P-O5'	5.90	1.65	1.59
38	A1	2506	G	C6-N1	-5.90	1.35	1.39
38	A1	3044	U	C3'-C2'	-5.90	1.46	1.52
60	AM	40	GLU	CG-CD	5.90	1.60	1.51
11	B2	947	G	C2-N3	5.90	1.37	1.32
38	A1	1976	C	C2'-C1'	-5.90	1.46	1.53
38	A1	2214	U	N1-C2	-5.90	1.33	1.38
38	A1	2845	C	C4-N4	5.90	1.39	1.33
10	B1	74	A	C5'-C4'	5.90	1.58	1.51
11	B2	148	C	C3'-O3'	5.90	1.50	1.42
11	B2	323	A	C5-C4	-5.90	1.34	1.38
11	B2	900	G	C2-N3	5.90	1.37	1.32
11	B2	1231	G	N9-C4	-5.90	1.33	1.38
38	A1	1085	G	O3'-P	-5.90	1.54	1.61
38	A1	1469	U	C5'-C4'	5.90	1.58	1.51
38	A1	1560	G	P-O5'	5.90	1.65	1.59
38	A1	1668	G	C4'-O4'	-5.90	1.37	1.45
38	A1	1786	G	C4'-O4'	5.90	1.53	1.45
38	A1	1852	U	C1'-N1	5.90	1.57	1.48
38	A1	2468	C	O3'-P	-5.90	1.54	1.61
38	A1	2835	A	C6-N1	5.90	1.39	1.35
42	Aa	25	TRP	CE3-CZ3	5.90	1.48	1.38
19	BG	82	ARG	CZ-NH2	5.90	1.40	1.33
38	A1	34	C	P-O5'	-5.90	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1337	G	N7-C5	-5.90	1.35	1.39
11	B2	1438	A	C3'-C2'	5.89	1.59	1.52
38	A1	165	G	C5'-C4'	5.89	1.58	1.51
38	A1	389	C	N3-C4	5.89	1.38	1.33
38	A1	590	A	N7-C5	-5.89	1.35	1.39
38	A1	1923	A	C3'-C2'	-5.89	1.46	1.52
38	A1	2036	A	N3-C4	5.89	1.38	1.34
38	A1	2633	A	O3'-P	-5.89	1.54	1.61
38	A1	2822	G	C6-N1	5.89	1.43	1.39
11	B2	583	G	N9-C4	5.89	1.42	1.38
11	B2	869	U	C2'-C1'	-5.89	1.46	1.53
11	B2	1086	C	N3-C4	5.89	1.38	1.33
38	A1	41	G	P-O5'	5.89	1.65	1.59
38	A1	902	C	N3-C4	5.89	1.38	1.33
38	A1	1686	C	C2-N3	5.89	1.40	1.35
39	A3	19	G	P-O5'	-5.89	1.53	1.59
11	B2	128	A	N3-C4	-5.89	1.31	1.34
11	B2	705	C	N3-C4	5.89	1.38	1.33
11	B2	1346	C	C2-N3	5.89	1.40	1.35
11	B2	1369	C	N3-C4	5.89	1.38	1.33
38	A1	1404	G	N9-C8	-5.89	1.33	1.37
38	A1	1717	C	C2'-C1'	-5.89	1.46	1.53
38	A1	1785	G	C1'-N9	5.89	1.57	1.48
38	A1	1818	G	C6-N1	5.89	1.43	1.39
38	A1	1822	G	C4'-C3'	5.89	1.59	1.53
38	A1	2324	C	C2'-O2'	-5.89	1.33	1.41
11	B2	883	G	C4'-C3'	5.89	1.59	1.53
11	B2	925	U	C2'-O2'	5.89	1.49	1.41
38	A1	288	G	N1-C2	5.89	1.42	1.37
38	A1	935	A	C2'-C1'	-5.89	1.46	1.53
38	A1	1622	G	P-O5'	5.89	1.65	1.59
38	A1	1627	G	C6-N1	5.89	1.43	1.39
38	A1	2159	C	O4'-C1'	5.89	1.49	1.41
38	A1	2214	U	C5'-C4'	5.89	1.58	1.51
48	AE	38	GLY	CA-C	5.89	1.61	1.51
11	B2	341	C	C5-C6	5.89	1.39	1.34
11	B2	1408	C	O4'-C1'	5.89	1.49	1.41
29	BQ	9	ARG	CZ-NH1	5.89	1.40	1.33
38	A1	24	G	C4'-C3'	5.89	1.59	1.53
38	A1	645	U	N1-C2	-5.89	1.33	1.38
38	A1	1723	A	C1'-N9	5.89	1.57	1.48
38	A1	2064	U	C2'-O2'	-5.89	1.33	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2731	C	N1-C6	5.89	1.40	1.37
38	A1	2775	G	C3'-C2'	5.89	1.59	1.52
10	B1	68	C	N3-C4	5.89	1.38	1.33
11	B2	507	G	N9-C4	-5.89	1.33	1.38
11	B2	1073	C	P-O5'	-5.89	1.53	1.59
38	A1	110	A	C2-N3	5.89	1.38	1.33
38	A1	130	G	N9-C4	5.89	1.42	1.38
38	A1	1476	C	N1-C6	-5.89	1.33	1.37
38	A1	2257	A	C6-N6	5.89	1.38	1.33
38	A1	2957	G	C8-N7	5.89	1.34	1.30
10	B1	38	G	C8-N7	-5.88	1.27	1.30
11	B2	475	C	C2'-C1'	-5.88	1.46	1.53
38	A1	703	G	N7-C5	-5.88	1.35	1.39
38	A1	2379	G	C8-N7	5.88	1.34	1.30
39	A3	38	U	C4'-O4'	-5.88	1.38	1.45
11	B2	177	A	P-O5'	5.88	1.65	1.59
11	B2	358	G	N7-C5	-5.88	1.35	1.39
11	B2	727	G	C4'-O4'	5.88	1.53	1.45
38	A1	733	A	N3-C4	-5.88	1.31	1.34
38	A1	1299	C	C4'-O4'	-5.88	1.38	1.45
11	B2	259	A	N3-C4	-5.88	1.31	1.34
11	B2	541	G	C2-N3	-5.88	1.28	1.32
38	A1	106	G	C5'-C4'	5.88	1.58	1.51
38	A1	1322	G	C2-N3	5.88	1.37	1.32
38	A1	1329	G	C2-N2	5.88	1.40	1.34
38	A1	1606	C	C4'-C3'	5.88	1.59	1.53
38	A1	1996	C	C4'-C3'	-5.88	1.46	1.52
38	A1	2151	C	N1-C6	-5.88	1.33	1.37
38	A1	2296	A	C8-N7	-5.88	1.27	1.31
38	A1	2392	A	C2-N3	-5.88	1.28	1.33
39	A3	104	C	P-O5'	-5.88	1.53	1.59
10	B1	32	A	N9-C4	5.88	1.41	1.37
11	B2	340	A	C6-N1	5.88	1.39	1.35
38	A1	468	A	C6-N1	5.88	1.39	1.35
38	A1	1981	G	N3-C4	-5.88	1.31	1.35
38	A1	2155	C	N3-C4	5.88	1.38	1.33
5	AS	83	TYR	CG-CD1	5.88	1.46	1.39
11	B2	29	G	N9-C4	-5.88	1.33	1.38
11	B2	213	C	C1'-N1	5.88	1.57	1.48
20	BH	7	GLU	CD-OE1	5.88	1.32	1.25
28	BP	53	ARG	CZ-NH1	5.88	1.40	1.33
38	A1	396	G	C6-N1	5.88	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	571	G	C8-N7	5.88	1.34	1.30
38	A1	1297	C	P-O5'	-5.88	1.53	1.59
38	A1	2302	C	N3-C4	5.88	1.38	1.33
38	A1	2644	G	C5'-C4'	5.88	1.58	1.51
38	A1	2666	G	C3'-O3'	5.88	1.50	1.42
50	AF	41	TRP	CG-CD1	5.88	1.45	1.36
9	AX	385	VAL	CA-CB	-5.88	1.42	1.54
38	A1	384	G	N7-C5	-5.88	1.35	1.39
38	A1	702	G	C2'-C1'	-5.88	1.46	1.53
38	A1	1226	G	N7-C5	-5.88	1.35	1.39
38	A1	1309	G	C1'-N9	5.88	1.57	1.48
38	A1	1793	G	C4'-O4'	5.88	1.53	1.45
38	A1	2003	C	P-O5'	-5.88	1.53	1.59
38	A1	2171	G	N3-C4	-5.88	1.31	1.35
39	A3	59	C	C5'-C4'	5.88	1.58	1.51
11	B2	363	C	C3'-O3'	5.88	1.50	1.42
11	B2	1260	G	N3-C4	-5.88	1.31	1.35
11	B2	830	A	N9-C4	-5.87	1.34	1.37
11	B2	1026	A	C5-C4	5.87	1.42	1.38
11	B2	1334	A	C6-N6	5.87	1.38	1.33
17	BE	184	TYR	CE1-CZ	5.87	1.46	1.38
38	A1	512	G	C2'-C1'	-5.87	1.46	1.53
38	A1	1013	G	C6-N1	5.87	1.43	1.39
38	A1	1024	G	C4'-C3'	5.87	1.59	1.53
38	A1	1335	C	O4'-C1'	-5.87	1.34	1.41
38	A1	1474	A	C2-N3	5.87	1.38	1.33
38	A1	1698	G	C5-C4	-5.87	1.34	1.38
38	A1	2278	U	C4'-C3'	5.87	1.59	1.53
38	A1	2628	U	C4-C5	5.87	1.48	1.43
38	A1	2779	G	P-O5'	-5.87	1.53	1.59
10	B1	4	G	C8-N7	-5.87	1.27	1.30
38	A1	231	G	N9-C4	5.87	1.42	1.38
38	A1	365	G	N9-C8	-5.87	1.33	1.37
38	A1	903	C	C4-N4	5.87	1.39	1.33
38	A1	1904	G	N9-C4	5.87	1.42	1.38
38	A1	2560	G	O4'-C1'	-5.87	1.34	1.41
38	A1	2601	C	C5'-C4'	5.87	1.58	1.51
38	A1	2602	G	N7-C5	-5.87	1.35	1.39
38	A1	3017	U	C4-O4	-5.87	1.19	1.23
56	AJ	124	ARG	NE-CZ	5.87	1.40	1.33
10	B1	2	G	C4'-O4'	5.87	1.53	1.45
10	B1	45	G	N9-C4	5.87	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	142	G	N7-C5	-5.87	1.35	1.39
11	B2	695	G	C4'-C3'	5.87	1.59	1.53
11	B2	1347	U	N1-C6	5.87	1.43	1.38
11	B2	1413	G	C5-C4	5.87	1.42	1.38
38	A1	1889	G	C2'-C1'	-5.87	1.46	1.53
38	A1	2208	C	N1-C6	5.87	1.40	1.37
11	B2	317	A	C5-C4	-5.87	1.34	1.38
11	B2	508	C	C2-N3	5.87	1.40	1.35
11	B2	838	C	C2'-C1'	-5.87	1.46	1.53
11	B2	920	U	C3'-C2'	-5.87	1.46	1.52
11	B2	1043	U	N3-C4	5.87	1.43	1.38
11	B2	1222	C	C2-O2	-5.87	1.19	1.24
11	B2	1448	A	C8-N7	-5.87	1.27	1.31
38	A1	1543	C	C2-N3	-5.87	1.31	1.35
38	A1	1969	C	C4'-O4'	5.87	1.53	1.45
38	A1	2171	G	N9-C8	5.87	1.42	1.37
38	A1	2985	U	N3-C4	5.87	1.43	1.38
44	Ab	25	ARG	CZ-NH1	5.87	1.40	1.33
11	B2	612	C	C4-N4	5.87	1.39	1.33
38	A1	969	U	N3-C4	5.87	1.43	1.38
38	A1	2380	A	C5-C4	5.87	1.42	1.38
11	B2	345	G	N9-C8	-5.87	1.33	1.37
11	B2	990	G	C6-N1	5.87	1.43	1.39
11	B2	1172	A	C3'-C2'	5.87	1.59	1.52
11	B2	1312	C	N1-C2	5.87	1.46	1.40
11	B2	1481	G	P-O5'	-5.87	1.53	1.59
20	BH	74	SER	CA-CB	5.87	1.61	1.52
38	A1	35	G	N9-C8	5.87	1.42	1.37
38	A1	881	G	C1'-N9	5.87	1.57	1.48
38	A1	1252	G	C2-N2	5.87	1.40	1.34
38	A1	1989	G	C2-N2	5.87	1.40	1.34
38	A1	2062	A	N9-C8	5.87	1.42	1.37
38	A1	2077	A	C4'-O4'	5.87	1.53	1.45
38	A1	2563	A	C5-C4	5.87	1.42	1.38
38	A1	2646	A	N3-C4	-5.87	1.31	1.34
39	A3	46	G	C4'-C3'	5.87	1.59	1.53
39	A3	105	G	C5-C4	-5.87	1.34	1.38
47	Ad	14	TYR	CE2-CZ	5.87	1.46	1.38
11	B2	1284	C	C3'-C2'	-5.86	1.46	1.52
38	A1	38	U	N3-C4	5.86	1.43	1.38
38	A1	516	A	N3-C4	5.86	1.38	1.34
38	A1	871	G	N1-C2	5.86	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	88	G	C2-N3	5.86	1.37	1.32
11	B2	786	G	N9-C4	5.86	1.42	1.38
38	A1	1277	G	C6-N1	5.86	1.43	1.39
38	A1	2867	U	C3'-O3'	5.86	1.50	1.42
10	B1	21	G	C2'-C1'	-5.86	1.47	1.53
11	B2	269	A	C2'-C1'	-5.86	1.47	1.53
11	B2	769	A	C5-C6	5.86	1.46	1.41
38	A1	122	G	C2'-C1'	5.86	1.59	1.53
38	A1	168	G	N3-C4	-5.86	1.31	1.35
38	A1	527	G	C8-N7	-5.86	1.27	1.30
38	A1	1110	A	C6-N1	5.86	1.39	1.35
38	A1	1666	G	N9-C8	5.86	1.42	1.37
38	A1	2581	G	C8-N7	5.86	1.34	1.30
38	A1	2725	U	C2'-C1'	-5.86	1.47	1.53
38	A1	2795	G	N9-C4	-5.86	1.33	1.38
38	A1	1076	G	N9-C4	-5.86	1.33	1.38
38	A1	1369	G	N3-C4	5.86	1.39	1.35
38	A1	2513	C	C5'-C4'	5.86	1.58	1.51
11	B2	1227	A	C5'-C4'	5.86	1.58	1.51
38	A1	519	A	P-O5'	-5.86	1.53	1.59
38	A1	667	C	N1-C2	5.86	1.46	1.40
38	A1	1863	G	C2'-C1'	-5.86	1.47	1.53
38	A1	1985	G	N9-C4	5.86	1.42	1.38
38	A1	2210	G	C6-N1	5.86	1.43	1.39
38	A1	2282	G	C2'-C1'	5.86	1.59	1.53
38	A1	2413	G	C8-N7	-5.86	1.27	1.30
38	A1	2622	C	N1-C2	-5.86	1.34	1.40
38	A1	2837	C	C1'-N1	5.86	1.57	1.48
18	BF	11	ARG	NE-CZ	5.86	1.40	1.33
38	A1	1133	U	C2-N3	5.86	1.41	1.37
38	A1	2704	A	C6-N6	5.86	1.38	1.33
38	A1	2826	U	N3-C4	5.86	1.43	1.38
38	A1	2959	A	C4'-C3'	5.86	1.59	1.53
38	A1	3014	U	C1'-N1	5.86	1.57	1.48
38	A1	42	G	C6-N1	5.85	1.43	1.39
38	A1	1746	C	C2-O2	5.85	1.29	1.24
38	A1	2619	U	N1-C6	5.85	1.43	1.38
11	B2	72	C	C2-N3	5.85	1.40	1.35
11	B2	467	G	N7-C5	-5.85	1.35	1.39
11	B2	903	G	N1-C2	5.85	1.42	1.37
11	B2	1442	G	C5'-C4'	5.85	1.58	1.51
38	A1	20	C	C4'-C3'	5.85	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	114	C	C2'-C1'	-5.85	1.47	1.53
38	A1	235	G	C2'-C1'	-5.85	1.47	1.53
38	A1	625	A	C2-N3	5.85	1.38	1.33
38	A1	1009	G	N9-C8	5.85	1.42	1.37
38	A1	1118	A	O3'-P	-5.85	1.54	1.61
38	A1	1546	G	O3'-P	-5.85	1.54	1.61
38	A1	1606	C	P-O5'	-5.85	1.53	1.59
11	B2	1269	G	C3'-O3'	5.85	1.50	1.42
38	A1	220	C	C2-N3	5.85	1.40	1.35
38	A1	1557	G	N1-C2	5.85	1.42	1.37
38	A1	2175	G	C4'-C3'	5.85	1.59	1.53
11	B2	8	U	C2'-C1'	-5.85	1.47	1.53
11	B2	173	G	O3'-P	5.85	1.68	1.61
11	B2	269	A	C3'-C2'	-5.85	1.46	1.52
11	B2	298	C	C4-N4	5.85	1.39	1.33
11	B2	761	U	N1-C6	5.85	1.43	1.38
11	B2	1182	G	C5-C4	5.85	1.42	1.38
36	BX	61	GLU	CD-OE2	5.85	1.32	1.25
38	A1	99	U	N1-C2	5.85	1.43	1.38
38	A1	210	A	C6-N1	5.85	1.39	1.35
38	A1	1163	U	C2-N3	5.85	1.41	1.37
38	A1	1427	A	N7-C5	5.85	1.42	1.39
38	A1	2042	A	C2'-C1'	-5.85	1.47	1.53
38	A1	2583	G	N1-C2	5.85	1.42	1.37
38	A1	2602	G	C5-C6	-5.85	1.36	1.42
61	AN	139	ARG	CZ-NH1	5.85	1.40	1.33
11	B2	699	C	N3-C4	5.85	1.38	1.33
11	B2	804	U	P-O5'	-5.85	1.53	1.59
14	BB	51	ARG	CZ-NH2	5.85	1.40	1.33
38	A1	109	G	N1-C2	5.85	1.42	1.37
38	A1	300	U	C5'-C4'	5.85	1.58	1.51
38	A1	312	G	C5-C4	5.85	1.42	1.38
38	A1	494	C	C5'-C4'	5.85	1.58	1.51
38	A1	973	C	N3-C4	5.85	1.38	1.33
38	A1	1426	G	N3-C4	5.85	1.39	1.35
38	A1	1771	C	N1-C2	5.85	1.46	1.40
38	A1	1934	C	C2'-C1'	-5.85	1.47	1.53
38	A1	2580	G	C2-N3	5.85	1.37	1.32
38	A1	2621	U	C2-N3	5.85	1.41	1.37
38	A1	1099	C	C2-N3	-5.85	1.31	1.35
38	A1	2399	C	C4-N4	5.85	1.39	1.33
38	A1	2606	C	N1-C6	5.85	1.40	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2953	U	N1-C6	5.85	1.43	1.38
39	A3	107	G	N9-C8	5.85	1.42	1.37
11	B2	520	G	C8-N7	-5.84	1.27	1.30
11	B2	1259	A	N7-C5	5.84	1.42	1.39
38	A1	290	G	N9-C4	-5.84	1.33	1.38
38	A1	1288	C	C4'-O4'	5.84	1.53	1.45
38	A1	1781	C	C2-O2	5.84	1.29	1.24
38	A1	2148	U	N1-C6	5.84	1.43	1.38
38	A1	2318	G	C2'-C1'	-5.84	1.47	1.53
40	A5	64	ARG	CD-NE	5.84	1.56	1.46
11	B2	19	G	C5-C4	5.84	1.42	1.38
11	B2	228	G	C4'-C3'	-5.84	1.46	1.52
11	B2	349	A	C6-N6	5.84	1.38	1.33
38	A1	392	G	C2-N3	5.84	1.37	1.32
38	A1	926	C	C2-N3	5.84	1.40	1.35
38	A1	3037	G	C5-C4	-5.84	1.34	1.38
38	A1	1671	A	C3'-O3'	5.84	1.50	1.42
38	A1	2369	G	N1-C2	5.84	1.42	1.37
38	A1	2987	U	N1-C6	5.84	1.43	1.38
11	B2	408	C	C4'-O4'	5.84	1.53	1.45
11	B2	494	G	C5-C4	5.84	1.42	1.38
11	B2	535	U	C4'-C3'	5.84	1.59	1.53
11	B2	1107	C	C2-N3	5.84	1.40	1.35
38	A1	57	C	C2-O2	5.84	1.29	1.24
38	A1	584	G	N1-C2	5.84	1.42	1.37
38	A1	1565	G	C4'-O4'	-5.84	1.38	1.45
38	A1	1862	G	C8-N7	-5.84	1.27	1.30
38	A1	2337	G	C8-N7	-5.84	1.27	1.30
38	A1	2401	A	O4'-C1'	5.84	1.49	1.41
38	A1	2579	G	N7-C5	-5.84	1.35	1.39
38	A1	2638	G	C6-N1	5.84	1.43	1.39
11	B2	730	G	C6-N1	5.84	1.43	1.39
38	A1	57	C	O3'-P	5.84	1.68	1.61
38	A1	1420	U	C2'-C1'	-5.84	1.47	1.53
38	A1	2107	G	C5-C6	-5.84	1.36	1.42
38	A1	2596	G	C8-N7	-5.84	1.27	1.30
38	A1	2666	G	C5-C4	5.84	1.42	1.38
11	B2	558	C	O3'-P	-5.84	1.54	1.61
11	B2	684	G	O3'-P	5.84	1.68	1.61
11	B2	1127	A	N9-C4	-5.84	1.34	1.37
30	BR	54	TYR	CG-CD1	5.84	1.46	1.39
38	A1	486	A	P-O5'	-5.84	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2273	U	C3'-C2'	-5.84	1.46	1.52
47	Ad	45	GLY	CA-C	-5.84	1.42	1.51
54	AI	12	GLY	N-CA	-5.84	1.37	1.46
62	AO	8	ARG	NE-CZ	5.84	1.40	1.33
11	B2	342	G	C6-N1	5.83	1.43	1.39
11	B2	827	G	C5'-C4'	5.83	1.58	1.51
22	BJ	47	ARG	CZ-NH1	5.83	1.40	1.33
38	A1	1427	A	N3-C4	-5.83	1.31	1.34
38	A1	1573	A	O3'-P	-5.83	1.54	1.61
38	A1	1918	U	C5'-C4'	5.83	1.58	1.51
11	B2	536	A	C3'-C2'	-5.83	1.46	1.52
11	B2	1207	G	C5-C6	5.83	1.48	1.42
14	BB	34	ARG	CZ-NH2	5.83	1.40	1.33
38	A1	242	C	C2'-C1'	-5.83	1.47	1.53
38	A1	270	C	C4-N4	5.83	1.39	1.33
38	A1	1708	U	O3'-P	5.83	1.68	1.61
11	B2	884	G	N3-C4	5.83	1.39	1.35
11	B2	1439	G	C2-N3	5.83	1.37	1.32
15	BC	118	ARG	CZ-NH1	5.83	1.40	1.33
38	A1	423	G	N3-C4	-5.83	1.31	1.35
38	A1	828	G	C8-N7	5.83	1.34	1.30
38	A1	863	C	C4'-C3'	5.83	1.59	1.53
38	A1	1105	C	C4-C5	-5.83	1.38	1.43
38	A1	1885	G	N3-C4	5.83	1.39	1.35
38	A1	2214	U	C4'-C3'	5.83	1.59	1.53
38	A1	2587	G	N7-C5	-5.83	1.35	1.39
11	B2	471	G	C4'-C3'	5.83	1.59	1.53
38	A1	2160	C	N1-C6	5.83	1.40	1.37
38	A1	2340	A	C5-C4	-5.83	1.34	1.38
38	A1	2754	A	C5-C4	5.83	1.42	1.38
11	B2	124	C	N1-C6	5.83	1.40	1.37
11	B2	531	G	C2-N3	5.83	1.37	1.32
11	B2	630	A	C5'-C4'	5.83	1.58	1.51
11	B2	957	A	C6-N1	-5.83	1.31	1.35
11	B2	1297	G	N9-C8	5.83	1.42	1.37
11	B2	1323	A	P-O5'	5.83	1.65	1.59
38	A1	1116	A	C2-N3	-5.83	1.28	1.33
38	A1	1134	A	C6-N1	5.83	1.39	1.35
38	A1	1322	G	C3'-C2'	-5.83	1.46	1.52
38	A1	2479	C	C2-O2	5.83	1.29	1.24
38	A1	2858	C	C4-N4	5.83	1.39	1.33
39	A3	86	C	N3-C4	5.83	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	229	G	N1-C2	5.83	1.42	1.37
11	B2	1290	U	C2-N3	5.83	1.41	1.37
38	A1	246	A	C5-C6	5.83	1.46	1.41
38	A1	590	A	C6-N6	5.83	1.38	1.33
11	B2	687	G	C2-N2	5.83	1.40	1.34
11	B2	768	A	C4'-C3'	5.83	1.59	1.53
11	B2	1062	G	N9-C4	5.83	1.42	1.38
27	BO	115	TYR	CE2-CZ	5.83	1.46	1.38
38	A1	532	G	C2-N2	5.83	1.40	1.34
38	A1	2553	U	O3'-P	-5.83	1.54	1.61
39	A3	102	G	C5-C6	-5.83	1.36	1.42
52	AH	27	PRO	N-CD	-5.83	1.39	1.47
11	B2	544	C	O3'-P	-5.82	1.54	1.61
11	B2	773	A	C6-N1	5.82	1.39	1.35
11	B2	827	G	N1-C2	5.82	1.42	1.37
11	B2	1160	C	C5'-C4'	5.82	1.58	1.51
38	A1	342	C	C4-C5	-5.82	1.38	1.43
38	A1	390	C	C2-N3	5.82	1.40	1.35
38	A1	615	A	C2'-C1'	-5.82	1.47	1.53
38	A1	942	U	C5-C6	5.82	1.39	1.34
38	A1	1229	U	C3'-C2'	-5.82	1.46	1.52
38	A1	1972	C	N1-C6	5.82	1.40	1.37
38	A1	2010	G	C8-N7	-5.82	1.27	1.30
38	A1	2083	G	C2-N3	5.82	1.37	1.32
38	A1	2688	C	O4'-C1'	5.82	1.49	1.41
11	B2	149	U	O3'-P	-5.82	1.54	1.61
11	B2	321	A	P-O5'	-5.82	1.53	1.59
38	A1	1130	G	N9-C4	5.82	1.42	1.38
38	A1	2991	C	C3'-O3'	5.82	1.50	1.42
11	B2	37	G	O3'-P	-5.82	1.54	1.61
11	B2	81	C	C4-N4	-5.82	1.28	1.33
11	B2	190	C	C4'-C3'	5.82	1.59	1.53
11	B2	536	A	C2'-C1'	-5.82	1.47	1.53
11	B2	793	G	C5-C6	-5.82	1.36	1.42
11	B2	852	G	N9-C8	5.82	1.42	1.37
38	A1	26	G	O3'-P	-5.82	1.54	1.61
38	A1	311	C	C5-C6	-5.82	1.29	1.34
38	A1	1208	A	C2'-C1'	-5.82	1.47	1.53
38	A1	1280	C	C2'-C1'	-5.82	1.47	1.53
38	A1	2419	U	C4-C5	-5.82	1.38	1.43
38	A1	2615	U	C1'-N1	5.82	1.57	1.48
38	A1	2987	U	O4'-C1'	-5.82	1.34	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	562	A	C6-N1	5.82	1.39	1.35
38	A1	338	A	N9-C8	5.82	1.42	1.37
38	A1	2384	G	P-O5'	5.82	1.65	1.59
11	B2	215	C	C4-N4	5.82	1.39	1.33
11	B2	232	G	C2-N3	5.82	1.37	1.32
11	B2	615	G	O4'-C1'	-5.82	1.34	1.41
11	B2	936	A	C2'-C1'	-5.82	1.47	1.53
11	B2	1321	U	C1'-N1	5.82	1.57	1.48
11	B2	1359	C	C1'-N1	5.82	1.57	1.48
38	A1	122	G	N3-C4	-5.82	1.31	1.35
38	A1	379	U	C4-C5	-5.82	1.38	1.43
38	A1	567	G	C2-N3	5.82	1.37	1.32
38	A1	954	A	C6-N1	5.82	1.39	1.35
38	A1	1247	U	C4-O4	-5.82	1.19	1.23
38	A1	1281	A	P-O5'	5.82	1.65	1.59
38	A1	1287	G	C8-N7	-5.82	1.27	1.30
38	A1	1302	G	N9-C8	5.82	1.42	1.37
38	A1	1589	G	C2-N3	5.82	1.37	1.32
38	A1	2593	A	C6-N6	5.82	1.38	1.33
8	AW	22	ARG	CD-NE	5.82	1.56	1.46
11	B2	120	C	C4-N4	5.82	1.39	1.33
11	B2	525	A	C6-N6	5.82	1.38	1.33
11	B2	1122	C	N1-C6	5.82	1.40	1.37
11	B2	1213	G	N7-C5	-5.82	1.35	1.39
38	A1	31	G	C6-N1	5.82	1.43	1.39
38	A1	1233	U	C4-C5	-5.82	1.38	1.43
38	A1	1616	A	C6-N6	5.82	1.38	1.33
38	A1	1662	C	N1-C6	5.82	1.40	1.37
38	A1	1800	G	N7-C5	-5.82	1.35	1.39
38	A1	2114	C	C5-C6	5.82	1.39	1.34
38	A1	2745	G	C3'-C2'	-5.82	1.46	1.52
38	A1	338	A	C6-N6	5.81	1.38	1.33
38	A1	2988	A	N9-C4	5.81	1.41	1.37
11	B2	115	A	C6-N6	5.81	1.38	1.33
11	B2	133	G	C5'-C4'	5.81	1.58	1.51
11	B2	230	C	C4-N4	5.81	1.39	1.33
11	B2	671	C	C5-C6	5.81	1.39	1.34
38	A1	178	G	C6-O6	5.81	1.29	1.24
38	A1	1205	U	P-O5'	-5.81	1.53	1.59
38	A1	1927	C	N3-C4	5.81	1.38	1.33
38	A1	2209	U	C4'-C3'	5.81	1.59	1.53
38	A1	2651	G	C5'-C4'	5.81	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2694	C	C1'-N1	5.81	1.57	1.48
38	A1	2817	U	N3-C4	5.81	1.43	1.38
38	A1	3019	C	N3-C4	5.81	1.38	1.33
46	AD	124	TYR	CD2-CE2	5.81	1.48	1.39
66	AY	71	ARG	CD-NE	5.81	1.56	1.46
4	AQ	117	ARG	CZ-NH2	5.81	1.40	1.33
11	B2	1064	C	C4-C5	-5.81	1.38	1.43
11	B2	1118	C	N3-C4	5.81	1.38	1.33
11	B2	1127	A	C6-N1	5.81	1.39	1.35
38	A1	217	A	C6-N6	5.81	1.38	1.33
38	A1	389	C	C5-C6	-5.81	1.29	1.34
38	A1	630	G	N7-C5	-5.81	1.35	1.39
38	A1	2363	G	C2-N2	5.81	1.40	1.34
11	B2	846	G	O3'-P	-5.81	1.54	1.61
38	A1	29	U	N3-C4	5.81	1.43	1.38
38	A1	290	G	N7-C5	-5.81	1.35	1.39
38	A1	378	G	C5-C4	5.81	1.42	1.38
38	A1	390	C	C4-C5	5.81	1.47	1.43
38	A1	818	A	N3-C4	-5.81	1.31	1.34
38	A1	895	C	N1-C6	5.81	1.40	1.37
38	A1	1263	C	C5-C6	5.81	1.39	1.34
38	A1	1351	G	C1'-N9	5.81	1.57	1.48
38	A1	1353	A	C4'-C3'	5.81	1.59	1.53
38	A1	1926	A	N9-C8	-5.81	1.33	1.37
38	A1	2423	G	C2-N2	5.81	1.40	1.34
43	AB	5	LEU	N-CA	-5.81	1.34	1.46
45	AC	28	ARG	NE-CZ	5.81	1.40	1.33
9	AX	413	ARG	CZ-NH2	5.81	1.40	1.33
11	B2	199	A	C6-N1	5.81	1.39	1.35
38	A1	185	A	C6-N1	5.81	1.39	1.35
38	A1	744	G	N9-C8	5.81	1.42	1.37
38	A1	772	G	C8-N7	-5.81	1.27	1.30
38	A1	1943	C	N3-C4	5.81	1.38	1.33
38	A1	1983	C	C2-N3	5.81	1.40	1.35
38	A1	2048	C	N3-C4	5.81	1.38	1.33
39	A3	97	G	C8-N7	5.81	1.34	1.30
11	B2	715	C	C4-C5	-5.81	1.38	1.43
11	B2	992	G	C5-C6	-5.81	1.36	1.42
38	A1	662	A	P-O5'	5.81	1.65	1.59
38	A1	721	G	O4'-C1'	5.81	1.49	1.41
38	A1	1360	G	C4'-O4'	5.81	1.53	1.45
38	A1	2087	U	O3'-P	-5.81	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2089	C	C4'-C3'	-5.81	1.46	1.52
38	A1	2526	G	C6-N1	5.81	1.43	1.39
11	B2	23	G	P-O5'	5.80	1.65	1.59
11	B2	683	A	C4'-C3'	5.80	1.59	1.53
11	B2	1302	C	C5'-C4'	5.80	1.58	1.51
38	A1	373	G	C5-C6	5.80	1.48	1.42
38	A1	1300	C	P-O5'	-5.80	1.53	1.59
38	A1	2177	A	O3'-P	-5.80	1.54	1.61
38	A1	2374	C	C2'-C1'	-5.80	1.47	1.53
38	A1	2449	A	O3'-P	-5.80	1.54	1.61
11	B2	680	C	C2'-O2'	-5.80	1.34	1.41
11	B2	834	C	C2-O2	5.80	1.29	1.24
38	A1	1082	A	C2'-C1'	-5.80	1.47	1.53
38	A1	1465	A	N3-C4	-5.80	1.31	1.34
40	A5	45	ARG	CZ-NH2	5.80	1.40	1.33
11	B2	710	G	N9-C4	5.80	1.42	1.38
11	B2	949	G	C5'-C4'	5.80	1.58	1.51
11	B2	1058	G	C5-C4	-5.80	1.34	1.38
11	B2	1069	G	C6-N1	5.80	1.43	1.39
11	B2	1431	C	C5'-C4'	5.80	1.58	1.51
38	A1	323	U	N1-C2	5.80	1.43	1.38
38	A1	1016	C	O3'-P	-5.80	1.54	1.61
38	A1	1575	G	N9-C8	-5.80	1.33	1.37
38	A1	2262	C	C4'-O4'	-5.80	1.38	1.45
39	A3	26	C	O3'-P	-5.80	1.54	1.61
39	A3	41	A	N7-C5	-5.80	1.35	1.39
62	AO	30	SER	C-N	5.80	1.43	1.33
11	B2	278	A	C3'-C2'	5.80	1.59	1.52
11	B2	526	A	C8-N7	-5.80	1.27	1.31
11	B2	950	C	N1-C6	5.80	1.40	1.37
11	B2	996	A	C5-C4	5.80	1.42	1.38
11	B2	1185	A	C5'-C4'	5.80	1.58	1.51
11	B2	1493	C	C4-N4	5.80	1.39	1.33
38	A1	766	G	O3'-P	-5.80	1.54	1.61
38	A1	1470	C	C3'-O3'	-5.80	1.34	1.42
38	A1	1655	G	C5'-C4'	5.80	1.58	1.51
38	A1	1825	G	C2-N2	5.80	1.40	1.34
38	A1	3012	C	O3'-P	-5.80	1.54	1.61
38	A1	373	G	C2'-C1'	-5.80	1.47	1.53
38	A1	378	G	N9-C8	-5.80	1.33	1.37
38	A1	610	C	C4'-C3'	5.80	1.59	1.53
38	A1	1525	G	N3-C4	-5.80	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2052	A	N9-C4	-5.80	1.34	1.37
11	B2	108	G	C2'-O2'	-5.80	1.34	1.41
11	B2	204	G	N7-C5	-5.80	1.35	1.39
11	B2	834	C	C2'-O2'	5.80	1.49	1.41
11	B2	836	G	C2-N3	5.80	1.37	1.32
11	B2	1166	G	C3'-C2'	-5.80	1.46	1.52
11	B2	1272	G	N7-C5	-5.80	1.35	1.39
38	A1	38	U	C2'-C1'	-5.80	1.47	1.53
38	A1	555	G	N9-C4	-5.80	1.33	1.38
38	A1	1451	A	C2'-C1'	-5.80	1.47	1.53
38	A1	1463	C	C4-N4	5.80	1.39	1.33
38	A1	1933	U	P-O5'	-5.80	1.53	1.59
38	A1	2282	G	N7-C5	-5.80	1.35	1.39
47	Ad	85	ARG	CD-NE	5.80	1.56	1.46
38	A1	1426	G	N7-C5	-5.79	1.35	1.39
11	B2	96	G	C2-N3	5.79	1.37	1.32
11	B2	632	C	N3-C4	5.79	1.38	1.33
11	B2	688	C	P-O5'	-5.79	1.53	1.59
11	B2	1130	A	N7-C5	5.79	1.42	1.39
38	A1	107	G	C5-C6	-5.79	1.36	1.42
38	A1	126	U	C2-O2	5.79	1.27	1.22
38	A1	172	C	C3'-O3'	5.79	1.50	1.42
38	A1	328	G	C2-N3	5.79	1.37	1.32
38	A1	651	C	C2'-C1'	-5.79	1.47	1.53
38	A1	990	G	C3'-C2'	5.79	1.59	1.52
38	A1	1170	G	C2-N3	5.79	1.37	1.32
38	A1	1651	A	N1-C2	-5.79	1.29	1.34
38	A1	1695	G	C2-N3	5.79	1.37	1.32
38	A1	2319	C	C2-N3	5.79	1.40	1.35
38	A1	2651	G	C5-C4	5.79	1.42	1.38
38	A1	2839	A	C6-N6	-5.79	1.29	1.33
38	A1	2877	A	C5-C6	-5.79	1.35	1.41
38	A1	2951	G	O3'-P	-5.79	1.54	1.61
46	AD	91	ARG	CZ-NH1	5.79	1.40	1.33
7	AU	28	SER	CA-CB	5.79	1.61	1.52
11	B2	7	G	C2-N3	5.79	1.37	1.32
11	B2	640	U	N1-C6	5.79	1.43	1.38
11	B2	1133	C	C5'-C4'	5.79	1.58	1.51
11	B2	1352	G	C8-N7	5.79	1.34	1.30
11	B2	1441	G	C2-N3	5.79	1.37	1.32
30	BR	113	ARG	NE-CZ	5.79	1.40	1.33
38	A1	363	G	C5-C4	5.79	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	977	C	N3-C4	5.79	1.38	1.33
38	A1	1469	U	C1'-N1	5.79	1.57	1.48
38	A1	1638	C	O4'-C1'	5.79	1.49	1.41
38	A1	2576	C	C3'-C2'	-5.79	1.46	1.52
38	A1	2761	G	C2-N2	5.79	1.40	1.34
46	AD	111	ARG	CZ-NH2	5.79	1.40	1.33
12	AG	77	TYR	CG-CD1	5.79	1.46	1.39
58	Ak	151	ARG	NE-CZ	5.79	1.40	1.33
28	BP	9	ARG	CZ-NH2	5.79	1.40	1.33
38	A1	128	C	C4'-C3'	5.79	1.59	1.53
38	A1	271	G	C1'-N9	-5.79	1.38	1.46
38	A1	1402	C	P-O5'	5.79	1.65	1.59
38	A1	2424	A	N1-C2	5.79	1.39	1.34
10	B1	3	G	C5'-C4'	5.79	1.58	1.51
11	B2	55	G	C5-C4	5.79	1.42	1.38
11	B2	593	G	N1-C2	5.79	1.42	1.37
38	A1	95	G	N9-C8	5.79	1.42	1.37
38	A1	328	G	N9-C8	5.79	1.42	1.37
38	A1	383	C	N3-C4	5.79	1.38	1.33
38	A1	1296	A	N9-C8	-5.79	1.33	1.37
38	A1	1753	G	C5-C4	5.79	1.42	1.38
38	A1	1987	A	P-O5'	-5.79	1.53	1.59
38	A1	1999	G	N1-C2	5.79	1.42	1.37
38	A1	2316	U	C2-O2	5.79	1.27	1.22
38	A1	2331	A	C2-N3	5.79	1.38	1.33
38	A1	2467	C	N3-C4	5.79	1.38	1.33
38	A1	2648	C	C4-N4	5.79	1.39	1.33
11	B2	682	A	C2-N3	5.79	1.38	1.33
11	B2	1121	C	C5-C6	-5.79	1.29	1.34
24	BL	44	ARG	CZ-NH1	5.79	1.40	1.33
38	A1	13	U	C4-C5	-5.79	1.38	1.43
38	A1	1329	G	C4'-O4'	5.79	1.53	1.45
38	A1	1807	G	C2-N3	5.79	1.37	1.32
39	A3	28	C	N3-C4	5.79	1.38	1.33
5	AS	65	ARG	NE-CZ	5.79	1.40	1.33
11	B2	322	G	C2-N2	5.79	1.40	1.34
11	B2	582	G	C8-N7	-5.79	1.27	1.30
11	B2	1004	U	C5-C6	-5.79	1.28	1.34
11	B2	1332	C	O3'-P	-5.79	1.54	1.61
11	B2	1371	C	O4'-C1'	5.79	1.49	1.41
38	A1	43	G	C8-N7	-5.79	1.27	1.30
38	A1	860	A	C2'-C1'	-5.79	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1246	G	C8-N7	-5.79	1.27	1.30
38	A1	1478	G	C2'-C1'	-5.79	1.47	1.53
38	A1	1985	G	C4'-O4'	5.79	1.53	1.45
38	A1	2055	U	O4'-C1'	5.79	1.49	1.41
38	A1	2615	U	C2'-C1'	-5.79	1.47	1.53
11	B2	1291	G	N7-C5	-5.78	1.35	1.39
38	A1	107	G	O3'-P	-5.78	1.54	1.61
38	A1	507	G	O3'-P	-5.78	1.54	1.61
38	A1	741	G	C4'-C3'	5.78	1.59	1.53
38	A1	942	U	C1'-N1	5.78	1.57	1.48
38	A1	1592	U	C4-C5	5.78	1.48	1.43
38	A1	1612	G	C5-C6	5.78	1.48	1.42
38	A1	2126	G	C8-N7	-5.78	1.27	1.30
38	A1	2341	G	C2'-C1'	-5.78	1.47	1.53
38	A1	2502	C	C4'-O4'	5.78	1.53	1.45
38	A1	2998	G	C6-O6	-5.78	1.19	1.24
38	A1	3032	C	P-O5'	-5.78	1.53	1.59
11	B2	76	U	N3-C4	5.78	1.43	1.38
11	B2	355	C	O3'-P	-5.78	1.54	1.61
11	B2	399	A	C5-C4	5.78	1.42	1.38
11	B2	863	U	P-O5'	-5.78	1.53	1.59
38	A1	232	U	C2'-C1'	5.78	1.59	1.53
38	A1	301	G	N1-C2	5.78	1.42	1.37
38	A1	403	G	C5'-C4'	5.78	1.58	1.51
38	A1	598	C	C5-C6	-5.78	1.29	1.34
38	A1	1394	G	C5-C4	5.78	1.42	1.38
41	AA	5	ARG	CZ-NH2	5.78	1.40	1.33
10	B1	29	C	C4'-O4'	5.78	1.53	1.45
11	B2	258	A	C3'-C2'	5.78	1.59	1.52
11	B2	946	G	C2-N2	5.78	1.40	1.34
11	B2	1474	A	N7-C5	-5.78	1.35	1.39
27	BO	76	ARG	CZ-NH2	5.78	1.40	1.33
38	A1	566	G	C5-C4	5.78	1.42	1.38
38	A1	1501	G	C5-C6	-5.78	1.36	1.42
38	A1	1542	U	N3-C4	5.78	1.43	1.38
38	A1	2105	A	N3-C4	5.78	1.38	1.34
38	A1	2949	G	C6-N1	5.78	1.43	1.39
11	B2	460	C	N1-C6	-5.78	1.33	1.37
11	B2	710	G	C2-N2	5.78	1.40	1.34
38	A1	276	G	C3'-C2'	5.78	1.59	1.52
38	A1	638	A	C5'-C4'	5.78	1.58	1.51
38	A1	1011	A	C6-N6	5.78	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1090	G	C5-C6	-5.78	1.36	1.42
38	A1	1180	G	P-O5'	-5.78	1.53	1.59
38	A1	1653	U	C3'-C2'	-5.78	1.46	1.52
38	A1	2679	A	P-O5'	-5.78	1.53	1.59
10	B1	35	G	N9-C8	-5.78	1.33	1.37
11	B2	68	G	N1-C2	5.78	1.42	1.37
11	B2	1015	C	C5-C6	-5.78	1.29	1.34
38	A1	312	G	N3-C4	-5.78	1.31	1.35
38	A1	1227	A	C2'-C1'	-5.78	1.47	1.53
38	A1	1273	C	O3'-P	-5.78	1.54	1.61
38	A1	1273	C	N1-C6	-5.78	1.33	1.37
38	A1	1276	G	N9-C8	5.78	1.41	1.37
38	A1	1359	C	P-O5'	-5.78	1.53	1.59
38	A1	1698	G	C2-N3	5.78	1.37	1.32
38	A1	2101	A	C6-N6	5.78	1.38	1.33
38	A1	2132	C	C3'-O3'	5.78	1.50	1.42
38	A1	2267	U	C2-N3	5.78	1.41	1.37
11	B2	132	G	N1-C2	5.78	1.42	1.37
11	B2	864	G	N9-C8	5.78	1.41	1.37
38	A1	647	G	O4'-C1'	5.78	1.49	1.41
38	A1	738	C	C4'-C3'	5.78	1.59	1.53
38	A1	1613	A	C6-N1	5.78	1.39	1.35
38	A1	1912	A	N9-C8	5.78	1.42	1.37
38	A1	2808	C	N3-C4	5.78	1.38	1.33
38	A1	2975	A	C6-N1	5.78	1.39	1.35
11	B2	1258	C	N1-C2	5.77	1.46	1.40
19	BG	108	ARG	CZ-NH2	5.77	1.40	1.33
38	A1	708	A	C2-N3	5.77	1.38	1.33
38	A1	942	U	N1-C2	5.77	1.43	1.38
38	A1	1870	G	C8-N7	-5.77	1.27	1.30
4	AQ	60	ARG	CD-NE	5.77	1.56	1.46
11	B2	801	A	C2-N3	5.77	1.38	1.33
11	B2	1058	G	P-O5'	-5.77	1.53	1.59
11	B2	1377	G	C2-N2	-5.77	1.28	1.34
43	AB	25	ARG	CZ-NH2	5.77	1.40	1.33
11	B2	1195	U	C4-O4	5.77	1.28	1.23
11	B2	1426	C	N1-C2	5.77	1.46	1.40
38	A1	392	G	N1-C2	5.77	1.42	1.37
38	A1	2882	G	N7-C5	-5.77	1.35	1.39
11	B2	168	G	N7-C5	5.77	1.42	1.39
11	B2	567	A	C5-C6	-5.77	1.35	1.41
11	B2	627	G	O5'-C5'	5.77	1.53	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	942	A	C5-C4	5.77	1.42	1.38
38	A1	192	U	C2'-C1'	-5.77	1.47	1.53
38	A1	804	C	O3'-P	-5.77	1.54	1.61
38	A1	1419	G	C2-N3	5.77	1.37	1.32
38	A1	1952	G	O4'-C1'	-5.77	1.34	1.41
38	A1	2333	G	C2'-C1'	-5.77	1.47	1.53
38	A1	2612	A	C5-C4	5.77	1.42	1.38
38	A1	2715	A	C6-N1	5.77	1.39	1.35
38	A1	2761	G	C3'-O3'	5.77	1.50	1.42
38	A1	2945	A	C6-N1	5.77	1.39	1.35
38	A1	3026	C	C4-C5	5.77	1.47	1.43
9	AX	9	GLU	CG-CD	5.77	1.60	1.51
11	B2	433	U	N3-C4	5.77	1.43	1.38
11	B2	852	G	C6-N1	5.77	1.43	1.39
11	B2	985	C	C4-C5	-5.77	1.38	1.43
11	B2	1108	U	C2-N3	5.77	1.41	1.37
38	A1	394	A	P-O5'	5.77	1.65	1.59
38	A1	773	U	O4'-C1'	-5.77	1.34	1.41
38	A1	946	U	C4'-C3'	5.77	1.59	1.53
38	A1	1111	G	C6-N1	5.77	1.43	1.39
38	A1	1212	A	C6-N1	5.77	1.39	1.35
38	A1	2111	C	N3-C4	5.77	1.38	1.33
38	A1	2234	C	O4'-C1'	5.77	1.49	1.41
38	A1	2663	G	O3'-P	-5.77	1.54	1.61
38	A1	2736	G	C2'-C1'	-5.77	1.47	1.53
38	A1	3012	C	C2-O2	5.77	1.29	1.24
11	B2	354	G	C2-N3	5.77	1.37	1.32
38	A1	785	C	C4-N4	5.76	1.39	1.33
38	A1	1039	C	C4-N4	5.76	1.39	1.33
38	A1	1213	G	C8-N7	-5.76	1.27	1.30
38	A1	1918	U	C2-N3	5.76	1.41	1.37
38	A1	2447	A	C6-N1	5.76	1.39	1.35
39	A3	25	A	N9-C8	-5.76	1.33	1.37
39	A3	89	G	C8-N7	5.76	1.34	1.30
11	B2	596	A	C2-N3	5.76	1.38	1.33
11	B2	739	G	C3'-O3'	5.76	1.50	1.42
11	B2	775	G	N9-C8	5.76	1.41	1.37
11	B2	1456	C	C5'-C4'	5.76	1.58	1.51
38	A1	1537	U	P-O5'	-5.76	1.53	1.59
38	A1	2292	A	C2-N3	5.76	1.38	1.33
39	A3	92	G	N9-C8	5.76	1.41	1.37
11	B2	608	G	C1'-N9	5.76	1.57	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	636	G	C2'-C1'	-5.76	1.47	1.53
11	B2	1058	G	C2-N2	5.76	1.40	1.34
38	A1	81	G	C5'-C4'	5.76	1.58	1.51
38	A1	637	G	N1-C2	5.76	1.42	1.37
38	A1	1243	C	C4-N4	5.76	1.39	1.33
38	A1	1775	G	N1-C2	5.76	1.42	1.37
38	A1	1873	G	N3-C4	-5.76	1.31	1.35
38	A1	1911	G	O4'-C1'	5.76	1.49	1.41
38	A1	2152	G	C6-N1	5.76	1.43	1.39
38	A1	2615	U	C2-N3	5.76	1.41	1.37
11	B2	34	G	C2-N3	5.76	1.37	1.32
11	B2	51	A	N9-C8	5.76	1.42	1.37
38	A1	362	A	C6-N6	5.76	1.38	1.33
38	A1	1746	C	C1'-N1	5.76	1.57	1.48
38	A1	1769	G	C4'-O4'	-5.76	1.38	1.45
38	A1	2340	A	C8-N7	-5.76	1.27	1.31
38	A1	2439	G	C5-C4	5.76	1.42	1.38
38	A1	2459	G	C2-N2	5.76	1.40	1.34
11	B2	1200	U	O3'-P	-5.76	1.54	1.61
38	A1	16	G	N3-C4	-5.76	1.31	1.35
38	A1	585	G	C3'-C2'	-5.76	1.46	1.52
38	A1	1285	C	C4-N4	5.76	1.39	1.33
38	A1	1673	C	N1-C6	5.76	1.40	1.37
5	AS	131	ARG	NE-CZ	5.76	1.40	1.33
38	A1	256	G	N9-C8	5.76	1.41	1.37
38	A1	495	U	N1-C2	5.76	1.43	1.38
38	A1	848	A	N3-C4	-5.76	1.31	1.34
38	A1	1062	C	N3-C4	5.76	1.38	1.33
38	A1	1304	G	N9-C4	-5.76	1.33	1.38
38	A1	1788	G	C5-C4	5.76	1.42	1.38
38	A1	1851	U	C5'-C4'	5.76	1.58	1.51
38	A1	2098	C	C5'-C4'	5.76	1.58	1.51
38	A1	2451	G	N1-C2	5.76	1.42	1.37
38	A1	2750	C	C3'-O3'	5.76	1.50	1.42
63	AP	99	GLU	CB-CG	5.76	1.63	1.52
11	B2	741	A	N9-C4	-5.75	1.34	1.37
11	B2	1199	A	C6-N6	5.75	1.38	1.33
38	A1	314	A	C8-N7	5.75	1.35	1.31
38	A1	1145	G	N3-C4	5.75	1.39	1.35
38	A1	2670	U	C5'-C4'	5.75	1.58	1.51
11	B2	364	U	C2'-C1'	-5.75	1.47	1.53
11	B2	684	G	C3'-C2'	5.75	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	730	G	O3'-P	-5.75	1.54	1.61
11	B2	875	G	P-O5'	-5.75	1.53	1.59
11	B2	903	G	C2-N3	5.75	1.37	1.32
11	B2	951	G	C2-N3	5.75	1.37	1.32
11	B2	1039	C	C4-C5	-5.75	1.38	1.43
38	A1	45	G	C6-N1	5.75	1.43	1.39
38	A1	413	A	C4'-O4'	-5.75	1.38	1.45
38	A1	762	G	C3'-O3'	-5.75	1.34	1.42
38	A1	905	G	N7-C5	-5.75	1.35	1.39
38	A1	1056	C	C5'-C4'	5.75	1.58	1.51
38	A1	1061	G	C5-C6	-5.75	1.36	1.42
38	A1	1725	A	C8-N7	5.75	1.35	1.31
38	A1	2019	C	O3'-P	-5.75	1.54	1.61
38	A1	2537	G	N1-C2	5.75	1.42	1.37
38	A1	2674	C	O4'-C1'	5.75	1.49	1.41
10	B1	74	A	N1-C2	-5.75	1.29	1.34
11	B2	162	C	P-O5'	-5.75	1.53	1.59
11	B2	239	A	C6-N6	-5.75	1.29	1.33
11	B2	482	G	C5-C4	-5.75	1.34	1.38
11	B2	885	G	P-O5'	-5.75	1.53	1.59
11	B2	1151	A	C6-N6	5.75	1.38	1.33
11	B2	1328	G	C2'-C1'	-5.75	1.47	1.53
11	B2	1366	U	O3'-P	-5.75	1.54	1.61
38	A1	528	G	N1-C2	5.75	1.42	1.37
38	A1	620	G	N3-C4	-5.75	1.31	1.35
38	A1	1017	A	C2'-C1'	-5.75	1.47	1.53
38	A1	1291	C	C1'-N1	5.75	1.57	1.48
38	A1	1301	G	O3'-P	-5.75	1.54	1.61
38	A1	1824	G	C2-N3	5.75	1.37	1.32
38	A1	2249	A	N1-C2	5.75	1.39	1.34
38	A1	2760	A	C3'-C2'	5.75	1.59	1.52
38	A1	2854	A	C8-N7	-5.75	1.27	1.31
51	Ag	3	ARG	CZ-NH1	5.75	1.40	1.33
11	B2	427	G	C2'-C1'	-5.75	1.47	1.53
11	B2	935	G	N1-C2	5.75	1.42	1.37
11	B2	812	U	N1-C6	5.75	1.43	1.38
11	B2	869	U	C3'-O3'	5.75	1.50	1.42
11	B2	1080	C	C2-O2	-5.75	1.19	1.24
11	B2	1335	A	P-O5'	5.75	1.65	1.59
38	A1	213	G	C2-N3	5.75	1.37	1.32
38	A1	382	G	N7-C5	-5.75	1.35	1.39
38	A1	571	G	O3'-P	-5.75	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	892	U	C2'-C1'	-5.75	1.47	1.53
38	A1	1670	A	C6-N6	5.75	1.38	1.33
38	A1	2069	G	C3'-C2'	-5.75	1.46	1.52
38	A1	2224	G	C6-N1	5.75	1.43	1.39
38	A1	2361	C	C4-C5	5.75	1.47	1.43
38	A1	3002	A	N9-C8	5.75	1.42	1.37
11	B2	625	G	C3'-O3'	5.75	1.50	1.42
11	B2	669	A	N1-C2	5.75	1.39	1.34
11	B2	773	A	C3'-O3'	5.75	1.50	1.42
38	A1	193	A	N7-C5	-5.75	1.35	1.39
38	A1	294	U	C2'-C1'	-5.75	1.47	1.53
38	A1	2158	G	N3-C4	5.75	1.39	1.35
9	AX	107	PHE	CE2-CZ	5.75	1.48	1.37
11	B2	594	A	C3'-C2'	-5.75	1.46	1.52
11	B2	1203	G	C3'-O3'	5.75	1.50	1.42
38	A1	65	G	C8-N7	-5.75	1.27	1.30
38	A1	1283	G	C2-N3	5.75	1.37	1.32
38	A1	1661	A	N9-C8	5.75	1.42	1.37
38	A1	2440	C	C4-C5	5.75	1.47	1.43
38	A1	2520	C	N3-C4	5.75	1.38	1.33
11	B2	100	A	C3'-C2'	-5.74	1.46	1.52
11	B2	121	C	C5'-C4'	5.74	1.58	1.51
11	B2	314	G	P-O5'	-5.74	1.54	1.59
11	B2	351	C	C4'-O4'	5.74	1.53	1.45
11	B2	787	U	N3-C4	5.74	1.43	1.38
11	B2	1273	G	N1-C2	5.74	1.42	1.37
20	BH	145	ARG	CZ-NH2	5.74	1.40	1.33
21	BI	128	TYR	CG-CD1	5.74	1.46	1.39
38	A1	443	C	N3-C4	5.74	1.38	1.33
38	A1	1112	G	O3'-P	-5.74	1.54	1.61
38	A1	1250	A	C5-C4	5.74	1.42	1.38
38	A1	2037	A	C6-N1	5.74	1.39	1.35
38	A1	2176	G	C4'-O4'	5.74	1.53	1.45
38	A1	2864	G	C6-N1	5.74	1.43	1.39
38	A1	2968	G	C3'-O3'	5.74	1.50	1.42
38	A1	3005	C	N1-C6	5.74	1.40	1.37
39	A3	43	C	C1'-N1	5.74	1.57	1.48
39	A3	96	C	O4'-C1'	5.74	1.49	1.41
11	B2	11	A	N3-C4	-5.74	1.31	1.34
11	B2	921	G	C2'-C1'	-5.74	1.47	1.53
38	A1	1445	G	N9-C4	5.74	1.42	1.38
38	A1	2570	A	C6-N6	5.74	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2965	C	N1-C6	5.74	1.40	1.37
10	B1	32	A	C2-N3	5.74	1.38	1.33
11	B2	363	C	N1-C6	-5.74	1.33	1.37
11	B2	594	A	O4'-C1'	5.74	1.49	1.41
11	B2	733	C	C4'-C3'	5.74	1.59	1.53
11	B2	793	G	N7-C5	5.74	1.42	1.39
11	B2	829	U	P-O5'	-5.74	1.54	1.59
38	A1	26	G	P-O5'	5.74	1.65	1.59
38	A1	914	U	P-O5'	-5.74	1.54	1.59
38	A1	1123	A	C6-N6	5.74	1.38	1.33
38	A1	1612	G	N7-C5	-5.74	1.35	1.39
38	A1	2706	C	C1'-N1	5.74	1.57	1.48
11	B2	193	G	N3-C4	-5.74	1.31	1.35
11	B2	534	G	C3'-C2'	-5.74	1.46	1.52
11	B2	811	G	N3-C4	5.74	1.39	1.35
11	B2	1133	C	C4'-O4'	5.74	1.53	1.45
11	B2	1141	G	C5-C4	-5.74	1.34	1.38
11	B2	1409	G	C5-C6	5.74	1.48	1.42
12	B3	108	ARG	CZ-NH2	5.74	1.40	1.33
38	A1	266	A	N3-C4	-5.74	1.31	1.34
38	A1	1671	A	C5-C4	-5.74	1.34	1.38
38	A1	1774	A	C6-N1	-5.74	1.31	1.35
38	A1	1912	A	N3-C4	-5.74	1.31	1.34
38	A1	2026	C	N1-C6	5.74	1.40	1.37
38	A1	2173	U	C4'-O4'	5.74	1.53	1.45
38	A1	2806	A	C6-N1	5.74	1.39	1.35
3	Af	33	ARG	CD-NE	5.74	1.56	1.46
11	B2	854	C	C5'-C4'	5.74	1.58	1.51
11	B2	966	G	N9-C4	-5.74	1.33	1.38
11	B2	1142	G	C8-N7	5.74	1.34	1.30
38	A1	679	U	N3-C4	5.74	1.43	1.38
38	A1	1018	G	C4'-O4'	-5.74	1.38	1.45
38	A1	2976	G	C5-C4	5.74	1.42	1.38
38	A1	2986	G	C2-N3	5.74	1.37	1.32
10	B1	34	U	C2-N3	5.74	1.41	1.37
10	B1	40	U	N1-C6	5.74	1.43	1.38
11	B2	205	C	C2-N3	5.74	1.40	1.35
11	B2	328	G	N9-C8	-5.74	1.33	1.37
11	B2	1013	G	C8-N7	-5.74	1.27	1.30
38	A1	109	G	C5-C6	5.74	1.48	1.42
38	A1	1460	C	O3'-P	-5.74	1.54	1.61
38	A1	1637	C	C4-N4	5.74	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1655	G	C4'-C3'	5.74	1.59	1.53
39	A3	106	G	C2'-C1'	-5.73	1.47	1.53
11	B2	215	C	C4'-C3'	-5.73	1.46	1.52
11	B2	420	C	C2-N3	5.73	1.40	1.35
11	B2	558	C	C4'-C3'	-5.73	1.46	1.52
11	B2	960	A	C6-N1	5.73	1.39	1.35
38	A1	16	G	N7-C5	5.73	1.42	1.39
38	A1	834	G	C6-N1	5.73	1.43	1.39
38	A1	1380	G	C6-N1	-5.73	1.35	1.39
38	A1	1427	A	C5-C4	5.73	1.42	1.38
38	A1	1533	G	N9-C4	5.73	1.42	1.38
38	A1	2109	C	C2-N3	5.73	1.40	1.35
38	A1	2122	G	C4'-C3'	5.73	1.59	1.53
38	A1	2305	U	C2-N3	5.73	1.41	1.37
38	A1	2358	U	C4-O4	-5.73	1.19	1.23
38	A1	2481	G	C2-N3	5.73	1.37	1.32
38	A1	2493	A	C3'-C2'	5.73	1.59	1.52
38	A1	2497	G	P-O5'	5.73	1.65	1.59
38	A1	2549	A	C2-N3	5.73	1.38	1.33
38	A1	2983	G	N9-C4	5.73	1.42	1.38
11	B2	209	A	C5-C6	-5.73	1.35	1.41
11	B2	806	G	O5'-C5'	-5.73	1.33	1.42
38	A1	448	A	P-O5'	-5.73	1.54	1.59
38	A1	906	G	C5'-C4'	5.73	1.58	1.51
38	A1	2456	C	N3-C4	5.73	1.38	1.33
11	B2	25	C	P-O5'	-5.73	1.54	1.59
38	A1	340	G	C4'-C3'	-5.73	1.46	1.52
38	A1	2477	G	C8-N7	5.73	1.34	1.30
38	A1	2881	G	C4'-C3'	-5.73	1.46	1.52
11	B2	428	G	N9-C8	5.73	1.41	1.37
11	B2	874	G	N1-C2	5.73	1.42	1.37
38	A1	270	C	N3-C4	5.73	1.38	1.33
38	A1	723	A	C2'-C1'	-5.73	1.47	1.53
38	A1	934	G	N9-C4	-5.73	1.33	1.38
38	A1	1821	C	C2-N3	5.73	1.40	1.35
53	Ah	17	ARG	NE-CZ	5.73	1.40	1.33
11	B2	382	G	C2-N2	5.73	1.40	1.34
11	B2	1449	G	C2-N3	5.73	1.37	1.32
14	BB	51	ARG	CD-NE	5.73	1.56	1.46
10	B1	23	G	O3'-P	5.72	1.68	1.61
11	B2	1425	C	N3-C4	5.72	1.38	1.33
38	A1	781	C	N1-C6	5.72	1.40	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1127	C	C1'-N1	5.72	1.57	1.48
38	A1	2854	A	N9-C4	5.72	1.41	1.37
38	A1	2994	G	N9-C8	5.72	1.41	1.37
11	B2	242	A	C5-C4	5.72	1.42	1.38
11	B2	385	A	N9-C4	-5.72	1.34	1.37
11	B2	396	C	C2'-C1'	-5.72	1.47	1.53
11	B2	998	A	N3-C4	-5.72	1.31	1.34
38	A1	374	C	N3-C4	5.72	1.38	1.33
38	A1	984	U	C2-N3	-5.72	1.33	1.37
38	A1	1182	C	C4'-O4'	-5.72	1.38	1.45
38	A1	1228	G	N7-C5	-5.72	1.35	1.39
38	A1	1512	G	C8-N7	-5.72	1.27	1.30
38	A1	1816	C	C2-N3	5.72	1.40	1.35
38	A1	2347	G	N7-C5	5.72	1.42	1.39
38	A1	2959	A	C6-N1	5.72	1.39	1.35
50	AF	165	ARG	CZ-NH2	5.72	1.40	1.33
11	B2	1471	G	N9-C8	5.72	1.41	1.37
38	A1	1791	A	C4'-C3'	-5.72	1.46	1.52
38	A1	2736	G	O5'-C5'	-5.72	1.33	1.42
9	AX	372	ARG	NE-CZ	5.72	1.40	1.33
11	B2	35	G	N1-C2	5.72	1.42	1.37
11	B2	704	C	N1-C2	5.72	1.45	1.40
17	BE	105	ASN	CA-CB	5.72	1.68	1.53
38	A1	1110	A	C6-N6	5.72	1.38	1.33
38	A1	1134	A	O3'-P	-5.72	1.54	1.61
38	A1	1269	U	N3-C4	5.72	1.43	1.38
38	A1	1539	U	C2'-C1'	-5.72	1.47	1.53
38	A1	1780	C	N3-C4	5.72	1.38	1.33
38	A1	2013	A	C6-N6	5.72	1.38	1.33
38	A1	2607	U	O4'-C1'	-5.72	1.34	1.41
38	A1	2611	U	O4'-C1'	5.72	1.49	1.41
39	A3	14	G	C4'-O4'	5.72	1.52	1.45
41	AA	110	GLU	CG-CD	-5.72	1.43	1.51
11	B2	284	A	C6-N6	5.72	1.38	1.33
38	A1	90	A	C5'-C4'	5.72	1.58	1.51
38	A1	593	C	C5'-C4'	5.72	1.58	1.51
38	A1	2100	U	N1-C6	5.72	1.43	1.38
11	B2	30	C	C2-N3	5.72	1.40	1.35
11	B2	84	C	C4-C5	-5.72	1.38	1.43
11	B2	311	A	C5'-C4'	5.72	1.58	1.51
11	B2	966	G	C2-N2	5.72	1.40	1.34
11	B2	1396	C	C4'-C3'	-5.72	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	80	G	N9-C8	5.72	1.41	1.37
38	A1	813	G	P-O5'	5.72	1.65	1.59
38	A1	1169	G	C5'-C4'	5.72	1.58	1.51
38	A1	2228	G	N9-C4	5.72	1.42	1.38
11	B2	767	U	C2'-C1'	-5.71	1.47	1.53
11	B2	792	C	N1-C6	5.71	1.40	1.37
11	B2	889	G	N1-C2	5.71	1.42	1.37
11	B2	1105	C	O3'-P	-5.71	1.54	1.61
38	A1	247	A	C2'-C1'	-5.71	1.47	1.53
38	A1	574	C	C4-N4	5.71	1.39	1.33
38	A1	920	G	N3-C4	-5.71	1.31	1.35
38	A1	1101	U	N1-C6	5.71	1.43	1.38
38	A1	1116	A	C8-N7	5.71	1.35	1.31
38	A1	1246	G	C3'-C2'	-5.71	1.46	1.52
38	A1	1364	C	C4-C5	-5.71	1.38	1.43
38	A1	1785	G	C4'-O4'	5.71	1.52	1.45
38	A1	2236	C	N3-C4	5.71	1.38	1.33
38	A1	2363	G	N1-C2	5.71	1.42	1.37
38	A1	2812	U	C5'-C4'	5.71	1.58	1.51
39	A3	115	C	C5-C6	5.71	1.39	1.34
11	B2	299	G	C2-N3	5.71	1.37	1.32
38	A1	834	G	C2-N3	5.71	1.37	1.32
38	A1	866	G	C5-C4	5.71	1.42	1.38
38	A1	1087	G	C6-N1	5.71	1.43	1.39
38	A1	1102	C	C1'-N1	5.71	1.57	1.48
11	B2	87	C	C5'-C4'	5.71	1.58	1.51
11	B2	283	U	C4'-C3'	5.71	1.59	1.53
11	B2	478	C	C4-C5	5.71	1.47	1.43
11	B2	875	G	C1'-N9	5.71	1.57	1.48
38	A1	560	G	C4'-O4'	-5.71	1.38	1.45
38	A1	610	C	C4-C5	5.71	1.47	1.43
38	A1	695	G	N9-C4	5.71	1.42	1.38
38	A1	1668	G	O3'-P	5.71	1.68	1.61
38	A1	1982	C	N1-C6	5.71	1.40	1.37
38	A1	1995	C	C4'-C3'	-5.71	1.46	1.52
38	A1	2234	C	C2-O2	-5.71	1.19	1.24
11	B2	734	G	C2-N2	5.71	1.40	1.34
11	B2	1180	G	N9-C8	-5.71	1.33	1.37
11	B2	1284	C	N1-C6	5.71	1.40	1.37
38	A1	746	C	C2-N3	5.71	1.40	1.35
38	A1	1454	G	N1-C2	5.71	1.42	1.37
38	A1	1711	C	O5'-C5'	-5.71	1.33	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1736	G	N9-C8	-5.71	1.33	1.37
38	A1	2202	U	C1'-N1	5.71	1.57	1.48
38	A1	2788	U	C3'-C2'	5.71	1.59	1.52
11	B2	330	U	C2-N3	5.71	1.41	1.37
11	B2	406	U	C2-N3	5.71	1.41	1.37
11	B2	744	A	C6-N1	-5.71	1.31	1.35
11	B2	1363	C	O4'-C1'	5.71	1.49	1.41
38	A1	499	A	C6-N6	-5.71	1.29	1.33
38	A1	662	A	C4'-C3'	-5.71	1.46	1.52
38	A1	1044	C	C2-N3	5.71	1.40	1.35
38	A1	1100	G	C8-N7	-5.71	1.27	1.30
38	A1	1125	A	N9-C4	-5.71	1.34	1.37
38	A1	1537	U	C4'-O4'	-5.71	1.38	1.45
38	A1	2513	C	N1-C2	5.71	1.45	1.40
38	A1	2758	G	C8-N7	-5.71	1.27	1.30
38	A1	2861	A	N9-C4	5.71	1.41	1.37
38	A1	2945	A	P-O5'	-5.71	1.54	1.59
11	B2	866	A	N3-C4	5.71	1.38	1.34
11	B2	954	G	C6-N1	5.71	1.43	1.39
38	A1	213	G	C2'-C1'	-5.71	1.47	1.53
38	A1	1262	C	C2'-C1'	-5.71	1.47	1.53
38	A1	1506	U	C5'-C4'	5.71	1.58	1.51
38	A1	1565	G	C5-C6	-5.71	1.36	1.42
38	A1	2510	A	C5-C6	5.71	1.46	1.41
38	A1	2559	G	N7-C5	-5.71	1.35	1.39
38	A1	2712	G	C2-N3	5.71	1.37	1.32
38	A1	2799	C	C4-N4	5.71	1.39	1.33
40	A5	8	ARG	CZ-NH2	5.71	1.40	1.33
11	B2	493	C	C2'-C1'	-5.71	1.47	1.53
29	BQ	28	TYR	CE1-CZ	5.71	1.46	1.38
38	A1	2477	G	C5'-C4'	5.71	1.58	1.51
11	B2	1206	G	O3'-P	5.70	1.68	1.61
11	B2	1219	C	O3'-P	-5.70	1.54	1.61
38	A1	92	G	N1-C2	5.70	1.42	1.37
38	A1	244	A	C3'-C2'	-5.70	1.46	1.52
38	A1	456	G	C2-N2	5.70	1.40	1.34
38	A1	714	C	C2-O2	5.70	1.29	1.24
38	A1	739	C	C2'-C1'	-5.70	1.47	1.53
38	A1	1140	C	C3'-O3'	5.70	1.50	1.42
38	A1	1302	G	N1-C2	5.70	1.42	1.37
38	A1	1394	G	C5-C6	-5.70	1.36	1.42
38	A1	1506	U	C2'-C1'	-5.70	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1609	G	N7-C5	-5.70	1.35	1.39
38	A1	2330	A	C6-N6	5.70	1.38	1.33
38	A1	2445	G	N1-C2	5.70	1.42	1.37
39	A3	24	C	C5'-C4'	5.70	1.58	1.51
11	B2	968	C	O4'-C1'	5.70	1.49	1.41
38	A1	247	A	N9-C4	-5.70	1.34	1.37
38	A1	272	G	C4'-C3'	5.70	1.59	1.53
38	A1	1131	G	N7-C5	-5.70	1.35	1.39
38	A1	1192	G	C4'-O4'	-5.70	1.38	1.45
38	A1	1494	U	C4'-C3'	-5.70	1.46	1.52
38	A1	2005	A	C6-N6	5.70	1.38	1.33
11	B2	107	C	O3'-P	-5.70	1.54	1.61
11	B2	265	C	C2'-C1'	-5.70	1.47	1.53
11	B2	1354	A	N3-C4	-5.70	1.31	1.34
38	A1	478	C	C4-N4	5.70	1.39	1.33
38	A1	816	C	C4'-C3'	5.70	1.59	1.53
38	A1	1235	A	O3'-P	-5.70	1.54	1.61
38	A1	1526	G	C5-C4	5.70	1.42	1.38
38	A1	1655	G	N9-C8	5.70	1.41	1.37
38	A1	1879	U	C5-C6	5.70	1.39	1.34
38	A1	1887	A	C4'-C3'	5.70	1.59	1.53
38	A1	1891	C	C2-O2	-5.70	1.19	1.24
38	A1	1943	C	C5'-C4'	5.70	1.58	1.51
39	A3	62	A	N9-C4	-5.70	1.34	1.37
10	B1	14	A	C2-N3	5.70	1.38	1.33
10	B1	21	G	N1-C2	5.70	1.42	1.37
11	B2	467	G	C5-C4	-5.70	1.34	1.38
11	B2	905	A	C5-C6	-5.70	1.35	1.41
11	B2	999	G	O4'-C1'	5.70	1.49	1.41
11	B2	1139	A	C6-N1	5.70	1.39	1.35
26	BN	23	PHE	CG-CD1	5.70	1.47	1.38
29	BQ	158	ARG	CA-CB	5.70	1.66	1.53
33	BU	99	ARG	CD-NE	5.70	1.56	1.46
38	A1	47	C	C4'-C3'	-5.70	1.46	1.52
38	A1	1911	G	O3'-P	-5.70	1.54	1.61
38	A1	1930	A	C6-N6	5.70	1.38	1.33
38	A1	2039	U	C4'-O4'	-5.70	1.38	1.45
38	A1	2502	C	C4-N4	5.70	1.39	1.33
38	A1	2583	G	C8-N7	5.70	1.34	1.30
38	A1	2623	G	N9-C4	-5.70	1.33	1.38
38	A1	2692	A	N7-C5	-5.70	1.35	1.39
59	AL	3	ARG	CD-NE	5.70	1.56	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	B1	9	A	N9-C4	5.70	1.41	1.37
10	B1	24	A	P-O5'	-5.70	1.54	1.59
11	B2	320	G	C8-N7	-5.70	1.27	1.30
25	BM	132	ARG	NE-CZ	5.70	1.40	1.33
11	B2	47	A	C6-N1	5.70	1.39	1.35
11	B2	965	G	O4'-C1'	5.70	1.49	1.41
11	B2	1459	G	C2'-C1'	-5.70	1.47	1.53
38	A1	586	A	N3-C4	5.70	1.38	1.34
38	A1	841	U	N3-C4	5.70	1.43	1.38
38	A1	1004	U	O3'-P	-5.70	1.54	1.61
38	A1	1164	C	C4'-O4'	5.70	1.52	1.45
38	A1	1210	G	C2-N2	5.70	1.40	1.34
38	A1	1446	G	N1-C2	5.70	1.42	1.37
38	A1	2264	G	C3'-C2'	5.70	1.59	1.52
38	A1	2473	C	P-O5'	5.70	1.65	1.59
38	A1	2482	G	C2'-C1'	-5.70	1.47	1.53
39	A3	41	A	C2-N3	5.70	1.38	1.33
39	A3	58	C	C2'-C1'	-5.70	1.47	1.53
5	AS	139	PHE	CE1-CZ	5.69	1.48	1.37
11	B2	767	U	P-O5'	5.69	1.65	1.59
11	B2	897	A	C5'-C4'	5.69	1.58	1.51
11	B2	1230	G	C8-N7	-5.69	1.27	1.30
38	A1	746	C	C4-C5	-5.69	1.38	1.43
38	A1	1553	G	N9-C8	5.69	1.41	1.37
38	A1	2479	C	C4-N4	5.69	1.39	1.33
38	A1	2997	G	P-O5'	-5.69	1.54	1.59
9	AX	396	GLY	N-CA	-5.69	1.37	1.46
11	B2	998	A	C6-N6	5.69	1.38	1.33
34	BV	21	PHE	CG-CD2	5.69	1.47	1.38
38	A1	342	C	C5-C6	5.69	1.39	1.34
38	A1	472	A	C2-N3	5.69	1.38	1.33
38	A1	712	C	C5'-C4'	5.69	1.58	1.51
38	A1	992	G	C5'-C4'	5.69	1.58	1.51
38	A1	1613	A	C6-N6	5.69	1.38	1.33
38	A1	1930	A	P-O5'	5.69	1.65	1.59
42	Aa	25	TRP	NE1-CE2	5.69	1.45	1.37
43	AB	233	ARG	CZ-NH1	5.69	1.40	1.33
11	B2	725	C	C2'-C1'	-5.69	1.47	1.53
11	B2	756	A	C5'-C4'	5.69	1.58	1.51
11	B2	995	G	C5-C6	-5.69	1.36	1.42
11	B2	1005	G	N1-C2	5.69	1.42	1.37
12	B3	44	GLU	CD-OE1	5.69	1.31	1.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	282	G	C2'-C1'	-5.69	1.47	1.53
38	A1	492	A	N3-C4	-5.69	1.31	1.34
38	A1	1424	G	N1-C2	5.69	1.42	1.37
38	A1	1582	G	N1-C2	5.69	1.42	1.37
38	A1	1873	G	C2'-C1'	-5.69	1.47	1.53
39	A3	39	C	C4-N4	5.69	1.39	1.33
55	Ai	12	ARG	CZ-NH2	5.69	1.40	1.33
11	B2	1058	G	C2-N3	5.69	1.37	1.32
38	A1	2025	A	C5'-C4'	5.69	1.58	1.51
38	A1	2151	C	N3-C4	5.69	1.38	1.33
11	B2	1300	A	N7-C5	-5.69	1.35	1.39
38	A1	143	C	C4'-C3'	-5.69	1.46	1.52
38	A1	188	A	N3-C4	5.69	1.38	1.34
38	A1	280	A	O4'-C1'	-5.69	1.34	1.41
38	A1	784	C	C5-C6	-5.69	1.29	1.34
38	A1	864	C	C2'-C1'	-5.69	1.47	1.53
38	A1	1354	G	N9-C4	5.69	1.42	1.38
38	A1	1884	C	C4'-O4'	5.69	1.52	1.45
38	A1	2888	G	C5'-C4'	5.69	1.58	1.51
11	B2	259	A	C5-C6	5.69	1.46	1.41
11	B2	518	U	C2'-C1'	-5.69	1.47	1.53
38	A1	228	U	C5-C6	5.69	1.39	1.34
38	A1	1059	C	C4-C5	5.69	1.47	1.43
38	A1	1493	C	C4-N4	5.69	1.39	1.33
38	A1	1552	C	C4'-C3'	5.69	1.59	1.53
38	A1	1897	G	C2-N3	5.69	1.37	1.32
38	A1	2072	G	N3-C4	5.69	1.39	1.35
38	A1	2426	U	C5-C6	5.69	1.39	1.34
43	AB	214	PRO	N-CD	5.69	1.55	1.47
11	B2	309	A	N1-C2	-5.68	1.29	1.34
11	B2	405	G	N9-C4	-5.68	1.33	1.38
11	B2	1009	G	C5'-C4'	5.68	1.58	1.51
38	A1	95	G	C2-N2	5.68	1.40	1.34
38	A1	340	G	C4'-O4'	5.68	1.52	1.45
38	A1	376	C	C4-C5	5.68	1.47	1.43
38	A1	889	C	C4'-C3'	5.68	1.59	1.53
38	A1	1718	C	C4-C5	-5.68	1.38	1.43
38	A1	2336	G	N3-C4	5.68	1.39	1.35
38	A1	2482	G	C3'-C2'	-5.68	1.46	1.52
38	A1	2696	G	O3'-P	-5.68	1.54	1.61
4	AQ	103	ARG	CZ-NH1	5.68	1.40	1.33
11	B2	727	G	C2'-C1'	5.68	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	93	C	C4-C5	-5.68	1.38	1.43
38	A1	685	G	P-O5'	5.68	1.65	1.59
38	A1	857	U	C2-N3	5.68	1.41	1.37
38	A1	1405	G	O3'-P	-5.68	1.54	1.61
38	A1	2382	A	N9-C8	-5.68	1.33	1.37
38	A1	2570	A	N7-C5	-5.68	1.35	1.39
39	A3	30	G	C8-N7	-5.68	1.27	1.30
61	AN	82	TYR	CE1-CZ	5.68	1.46	1.38
11	B2	701	G	C2-N3	5.68	1.37	1.32
38	A1	915	G	N9-C8	5.68	1.41	1.37
38	A1	1411	G	C2'-C1'	-5.68	1.47	1.53
11	B2	489	C	C5'-C4'	-5.68	1.44	1.51
11	B2	682	A	C2'-C1'	-5.68	1.47	1.53
11	B2	936	A	C5-C4	5.68	1.42	1.38
11	B2	1027	C	O4'-C1'	5.68	1.49	1.41
28	BP	40	ARG	NE-CZ	5.68	1.40	1.33
38	A1	49	A	C3'-C2'	-5.68	1.46	1.52
38	A1	82	C	C3'-C2'	5.68	1.59	1.52
38	A1	486	A	C6-N6	5.68	1.38	1.33
38	A1	676	G	C6-N1	5.68	1.43	1.39
38	A1	2056	A	C1'-N9	5.68	1.57	1.48
38	A1	2115	U	C2-N3	5.68	1.41	1.37
38	A1	2400	U	C2-N3	5.68	1.41	1.37
38	A1	2684	G	C5-C6	-5.68	1.36	1.42
38	A1	2751	C	C2'-C1'	-5.68	1.47	1.53
38	A1	2962	A	C8-N7	-5.68	1.27	1.31
11	B2	239	A	C8-N7	5.68	1.35	1.31
11	B2	887	G	C5'-C4'	5.68	1.58	1.51
11	B2	888	A	C5-C4	5.68	1.42	1.38
11	B2	1099	A	C3'-C2'	5.68	1.59	1.52
11	B2	1232	G	O3'-P	-5.68	1.54	1.61
38	A1	798	G	C5'-C4'	5.68	1.58	1.51
38	A1	1152	C	P-O5'	-5.68	1.54	1.59
38	A1	2090	A	C4'-O4'	5.68	1.52	1.45
11	B2	81	C	N3-C4	5.68	1.38	1.33
11	B2	87	C	C2-N3	5.68	1.40	1.35
11	B2	338	C	C3'-C2'	5.68	1.59	1.52
11	B2	604	C	C4'-O4'	-5.68	1.38	1.45
11	B2	1003	G	N1-C2	-5.68	1.33	1.37
38	A1	1378	G	N9-C8	-5.68	1.33	1.37
38	A1	2016	C	C2'-C1'	-5.68	1.47	1.53
38	A1	2502	C	C2-N3	5.68	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2655	C	O4'-C1'	5.68	1.49	1.41
38	A1	2717	A	C6-N6	5.68	1.38	1.33
39	A3	41	A	C4'-C3'	-5.68	1.46	1.52
41	AA	194	ARG	CZ-NH2	5.68	1.40	1.33
46	AD	167	TRP	CE3-CZ3	5.68	1.48	1.38
11	B2	107	C	N1-C6	5.67	1.40	1.37
11	B2	355	C	N1-C6	5.67	1.40	1.37
11	B2	498	C	N1-C6	5.67	1.40	1.37
11	B2	1310	C	C4'-C3'	5.67	1.59	1.53
11	B2	1381	G	C2-N2	5.67	1.40	1.34
18	BF	137	ARG	CZ-NH1	5.67	1.40	1.33
20	BH	114	ARG	CZ-NH1	5.67	1.40	1.33
29	BQ	140	GLY	CA-C	-5.67	1.42	1.51
34	BV	4	ARG	NE-CZ	5.67	1.40	1.33
38	A1	17	C	O3'-P	-5.67	1.54	1.61
38	A1	2183	A	C6-N1	5.67	1.39	1.35
38	A1	2836	G	N7-C5	-5.67	1.35	1.39
38	A1	1086	U	C4-C5	5.67	1.48	1.43
38	A1	2002	A	C4'-O4'	5.67	1.52	1.45
38	A1	2191	U	C2-N3	5.67	1.41	1.37
38	A1	3041	U	P-O5'	-5.67	1.54	1.59
11	B2	1344	U	N3-C4	5.67	1.43	1.38
38	A1	121	G	C5-C4	-5.67	1.34	1.38
38	A1	1499	C	C5'-C4'	5.67	1.58	1.51
38	A1	1933	U	N1-C2	5.67	1.43	1.38
38	A1	2307	C	C2'-O2'	-5.67	1.34	1.41
38	A1	2791	C	C2'-C1'	-5.67	1.47	1.53
39	A3	82	C	C5-C6	5.67	1.38	1.34
11	B2	457	G	C2-N2	5.67	1.40	1.34
11	B2	942	A	C3'-O3'	5.67	1.50	1.42
38	A1	447	G	C5-C4	5.67	1.42	1.38
38	A1	975	C	N1-C6	5.67	1.40	1.37
11	B2	99	C	C4-N4	5.67	1.39	1.33
11	B2	101	G	C3'-O3'	5.67	1.50	1.42
11	B2	617	A	C8-N7	5.67	1.35	1.31
11	B2	678	G	N3-C4	-5.67	1.31	1.35
11	B2	1238	G	P-O5'	5.67	1.65	1.59
11	B2	1430	G	C5-C6	-5.67	1.36	1.42
22	BJ	21	ARG	CD-NE	5.67	1.56	1.46
38	A1	436	C	C5'-C4'	5.67	1.58	1.51
38	A1	501	C	O3'-P	-5.67	1.54	1.61
38	A1	819	U	C2'-C1'	-5.67	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1571	G	C4'-C3'	-5.67	1.46	1.52
38	A1	1958	A	C2'-C1'	-5.67	1.47	1.53
38	A1	2321	A	C6-N6	5.67	1.38	1.33
38	A1	2329	A	N9-C4	5.67	1.41	1.37
38	A1	2413	G	C2-N3	5.67	1.37	1.32
38	A1	2455	G	C2-N2	5.67	1.40	1.34
38	A1	2888	G	N7-C5	-5.67	1.35	1.39
38	A1	3015	A	C2'-C1'	-5.67	1.47	1.53
39	A3	47	G	C2'-C1'	-5.67	1.47	1.53
9	AX	246	LYS	CD-CE	5.67	1.65	1.51
20	BH	174	TYR	CG-CD1	5.67	1.46	1.39
38	A1	288	G	N7-C5	-5.67	1.35	1.39
38	A1	683	C	N1-C2	5.67	1.45	1.40
38	A1	1413	A	P-O5'	-5.67	1.54	1.59
38	A1	2221	A	C3'-C2'	-5.67	1.46	1.52
38	A1	2228	G	O3'-P	-5.67	1.54	1.61
38	A1	2396	G	N3-C4	-5.67	1.31	1.35
40	A5	8	ARG	NE-CZ	5.67	1.40	1.33
50	AF	159	ARG	CZ-NH1	5.67	1.40	1.33
11	B2	457	G	N3-C4	5.67	1.39	1.35
38	A1	280	A	C5'-C4'	5.67	1.58	1.51
38	A1	290	G	O3'-P	-5.67	1.54	1.61
38	A1	850	C	N1-C2	5.67	1.45	1.40
38	A1	949	C	N1-C2	-5.67	1.34	1.40
38	A1	970	G	C6-O6	-5.67	1.19	1.24
11	B2	84	C	N3-C4	5.66	1.38	1.33
11	B2	119	A	C4'-O4'	-5.66	1.38	1.45
11	B2	253	G	C2'-C1'	-5.66	1.47	1.53
11	B2	428	G	N1-C2	5.66	1.42	1.37
11	B2	516	A	N1-C2	-5.66	1.29	1.34
38	A1	23	G	P-O5'	5.66	1.65	1.59
38	A1	654	C	N1-C6	5.66	1.40	1.37
38	A1	1495	A	N3-C4	-5.66	1.31	1.34
38	A1	2305	U	C5'-C4'	5.66	1.58	1.51
38	A1	2340	A	N9-C4	-5.66	1.34	1.37
38	A1	2594	U	C5'-C4'	5.66	1.58	1.51
38	A1	2817	U	C4-C5	-5.66	1.38	1.43
59	AL	34	ARG	CZ-NH2	5.66	1.40	1.33
11	B2	8	U	O3'-P	-5.66	1.54	1.61
11	B2	1161	A	C6-N6	5.66	1.38	1.33
38	A1	491	G	C2'-C1'	-5.66	1.47	1.53
38	A1	785	C	N1-C2	5.66	1.45	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1260	C	N1-C6	-5.66	1.33	1.37
38	A1	1591	C	P-O5'	-5.66	1.54	1.59
38	A1	1795	C	C2-N3	5.66	1.40	1.35
38	A1	2739	G	C5-C6	-5.66	1.36	1.42
11	B2	79	G	O4'-C1'	5.66	1.49	1.41
11	B2	1199	A	N9-C4	-5.66	1.34	1.37
38	A1	352	G	C8-N7	-5.66	1.27	1.30
38	A1	387	A	C2'-C1'	-5.66	1.47	1.53
38	A1	595	C	N3-C4	5.66	1.38	1.33
38	A1	794	G	N9-C8	-5.66	1.33	1.37
38	A1	2227	G	N9-C8	5.66	1.41	1.37
38	A1	3003	A	C5-C4	5.66	1.42	1.38
39	A3	42	A	C5-C4	5.66	1.42	1.38
39	A3	99	G	N9-C4	-5.66	1.33	1.38
11	B2	767	U	N3-C4	5.66	1.43	1.38
38	A1	1692	A	N1-C2	5.66	1.39	1.34
38	A1	2617	G	N7-C5	5.66	1.42	1.39
38	A1	2821	G	C2-N3	5.66	1.37	1.32
38	A1	240	A	N1-C2	-5.66	1.29	1.34
38	A1	1945	C	N1-C6	5.66	1.40	1.37
11	B2	155	U	C3'-C2'	5.66	1.59	1.52
11	B2	412	U	N1-C6	5.66	1.43	1.38
11	B2	413	G	C5'-C4'	5.66	1.58	1.51
11	B2	994	C	C2-N3	5.66	1.40	1.35
13	BA	128	ARG	CZ-NH1	5.66	1.40	1.33
38	A1	235	G	O4'-C1'	5.66	1.49	1.41
38	A1	253	G	C6-N1	5.66	1.43	1.39
38	A1	1123	A	N9-C4	5.66	1.41	1.37
38	A1	1131	G	C5-C4	5.66	1.42	1.38
38	A1	1420	U	C5'-C4'	5.66	1.58	1.51
38	A1	1639	G	C5-C6	-5.66	1.36	1.42
38	A1	1814	A	C6-N1	5.66	1.39	1.35
38	A1	1858	G	O4'-C1'	5.66	1.49	1.41
38	A1	1926	A	N9-C4	-5.66	1.34	1.37
38	A1	2215	U	N1-C2	-5.66	1.33	1.38
38	A1	2639	G	O3'-P	-5.66	1.54	1.61
38	A1	2662	G	O3'-P	-5.66	1.54	1.61
62	AO	134	SER	CA-CB	5.66	1.61	1.52
11	B2	473	A	C5'-C4'	5.65	1.58	1.51
11	B2	626	G	C5-C6	-5.65	1.36	1.42
38	A1	2432	G	C2-N3	-5.65	1.28	1.32
9	AX	230	ARG	NE-CZ	5.65	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	811	G	O3'-P	-5.65	1.54	1.61
11	B2	1100	G	O3'-P	-5.65	1.54	1.61
11	B2	1375	C	O4'-C1'	5.65	1.49	1.41
11	B2	1495	U	C3'-O3'	5.65	1.50	1.42
38	A1	1293	G	C2-N3	5.65	1.37	1.32
38	A1	1734	G	C2-N3	5.65	1.37	1.32
38	A1	2297	C	C4'-C3'	-5.65	1.46	1.52
38	A1	2513	C	N3-C4	-5.65	1.29	1.33
38	A1	2585	G	N1-C2	5.65	1.42	1.37
59	AL	54	ALA	CA-CB	5.65	1.64	1.52
10	B1	39	A	N9-C4	5.65	1.41	1.37
11	B2	307	G	C6-N1	5.65	1.43	1.39
11	B2	732	G	C2-N2	5.65	1.40	1.34
11	B2	740	G	C3'-O3'	5.65	1.50	1.42
38	A1	682	G	C8-N7	-5.65	1.27	1.30
38	A1	699	A	C6-N1	5.65	1.39	1.35
38	A1	1146	U	C4-C5	5.65	1.48	1.43
38	A1	1298	C	O3'-P	-5.65	1.54	1.61
38	A1	1331	U	C3'-O3'	5.65	1.50	1.42
38	A1	2098	C	C1'-N1	5.65	1.57	1.48
38	A1	2721	C	C2-O2	-5.65	1.19	1.24
39	A3	5	G	C2'-C1'	-5.65	1.47	1.53
11	B2	323	A	N9-C8	-5.65	1.33	1.37
11	B2	830	A	C5'-C4'	5.65	1.58	1.51
11	B2	861	G	N1-C2	5.65	1.42	1.37
16	BD	40	GLU	CD-OE1	5.65	1.31	1.25
38	A1	143	C	C2-N3	-5.65	1.31	1.35
38	A1	1757	G	C4'-O4'	-5.65	1.38	1.45
38	A1	2141	C	C5'-C4'	5.65	1.58	1.51
11	B2	833	C	C4-C5	5.65	1.47	1.43
11	B2	926	C	N1-C2	5.65	1.45	1.40
11	B2	1048	G	P-O5'	5.65	1.65	1.59
11	B2	1174	A	C3'-C2'	-5.65	1.46	1.52
11	B2	1255	C	C2-O2	5.65	1.29	1.24
38	A1	271	G	C2-N2	5.65	1.40	1.34
38	A1	361	G	N1-C2	5.65	1.42	1.37
38	A1	732	G	C5'-C4'	5.65	1.58	1.51
38	A1	772	G	C5'-C4'	5.65	1.58	1.51
38	A1	974	U	N1-C6	-5.65	1.32	1.38
38	A1	1482	G	C8-N7	-5.65	1.27	1.30
38	A1	1585	U	C2'-C1'	-5.65	1.47	1.53
38	A1	2120	C	N3-C4	5.65	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2144	U	C3'-C2'	-5.65	1.46	1.52
38	A1	2248	G	C2-N2	5.65	1.40	1.34
38	A1	2681	A	C5-C4	-5.65	1.34	1.38
38	A1	436	C	N3-C4	5.65	1.38	1.33
38	A1	1080	G	N7-C5	-5.65	1.35	1.39
38	A1	1211	C	C5'-C4'	5.65	1.58	1.51
38	A1	1978	A	C6-N1	5.65	1.39	1.35
38	A1	2676	A	N3-C4	-5.65	1.31	1.34
11	B2	165	U	P-O5'	-5.64	1.54	1.59
11	B2	171	U	C4'-C3'	-5.64	1.47	1.52
38	A1	652	G	C5'-C4'	5.64	1.58	1.51
38	A1	994	G	C5'-C4'	5.64	1.58	1.51
38	A1	1252	G	N9-C8	5.64	1.41	1.37
38	A1	2386	U	C2-N3	5.64	1.41	1.37
9	AX	253	TYR	CB-CG	-5.64	1.43	1.51
11	B2	450	A	C1'-N9	-5.64	1.39	1.46
11	B2	450	A	N3-C4	-5.64	1.31	1.34
11	B2	977	G	N1-C2	5.64	1.42	1.37
15	BC	67	ARG	CZ-NH1	5.64	1.40	1.33
38	A1	74	A	N7-C5	-5.64	1.35	1.39
38	A1	117	A	O3'-P	-5.64	1.54	1.61
38	A1	493	A	C6-N6	5.64	1.38	1.33
38	A1	551	A	C6-N1	-5.64	1.31	1.35
38	A1	672	C	N1-C2	-5.64	1.34	1.40
38	A1	1151	G	C2-N2	5.64	1.40	1.34
38	A1	1661	A	N9-C4	-5.64	1.34	1.37
38	A1	2047	U	C3'-O3'	-5.64	1.34	1.42
38	A1	2406	C	C2'-C1'	-5.64	1.47	1.53
38	A1	2860	G	N9-C8	-5.64	1.33	1.37
39	A3	25	A	C8-N7	5.64	1.35	1.31
45	AC	185	TYR	CG-CD1	5.64	1.46	1.39
11	B2	537	G	C5'-C4'	5.64	1.58	1.51
11	B2	557	G	C2-N2	5.64	1.40	1.34
11	B2	1392	G	N1-C2	5.64	1.42	1.37
38	A1	1402	C	C2'-O2'	5.64	1.49	1.41
38	A1	1554	G	C5'-C4'	5.64	1.58	1.51
38	A1	1738	A	C5'-C4'	5.64	1.58	1.51
38	A1	1822	G	C2-N3	5.64	1.37	1.32
38	A1	2470	U	C4-C5	-5.64	1.38	1.43
10	B1	43	G	C5-C4	5.64	1.42	1.38
11	B2	23	G	C5'-C4'	5.64	1.58	1.51
11	B2	319	U	C4-O4	5.64	1.28	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	453	G	N7-C5	5.64	1.42	1.39
14	BB	128	ARG	CZ-NH2	5.64	1.40	1.33
25	BM	41	ARG	CD-NE	5.64	1.56	1.46
38	A1	405	G	P-O5'	-5.64	1.54	1.59
38	A1	646	U	N1-C2	-5.64	1.33	1.38
38	A1	656	G	C8-N7	5.64	1.34	1.30
38	A1	787	G	N1-C2	5.64	1.42	1.37
38	A1	1235	A	P-O5'	-5.64	1.54	1.59
64	AR	61	ARG	NE-CZ	5.64	1.40	1.33
11	B2	832	G	C5'-C4'	5.64	1.58	1.51
11	B2	849	U	C4'-C3'	-5.64	1.47	1.52
38	A1	540	A	C2'-C1'	-5.64	1.47	1.53
38	A1	651	C	O4'-C1'	5.64	1.49	1.41
38	A1	778	A	N3-C4	5.64	1.38	1.34
38	A1	1369	G	C5'-C4'	5.64	1.58	1.51
38	A1	2836	G	C6-N1	5.64	1.43	1.39
11	B2	328	G	N9-C4	5.64	1.42	1.38
11	B2	740	G	C8-N7	5.64	1.34	1.30
15	BC	83	GLU	CB-CG	5.64	1.62	1.52
38	A1	361	G	O3'-P	-5.64	1.54	1.61
38	A1	820	C	C2'-C1'	-5.64	1.47	1.53
38	A1	2524	C	N1-C6	5.64	1.40	1.37
38	A1	2840	C	C4-C5	-5.64	1.38	1.43
38	A1	2901	C	C2-N3	5.64	1.40	1.35
39	A3	37	U	O4'-C1'	5.64	1.49	1.41
11	B2	872	A	P-O5'	5.63	1.65	1.59
11	B2	1253	G	N9-C4	5.63	1.42	1.38
11	B2	1300	A	C4'-O4'	5.63	1.52	1.45
18	BF	60	ARG	NE-CZ	5.63	1.40	1.33
38	A1	1000	G	N3-C4	-5.63	1.31	1.35
38	A1	1048	C	C2-O2	5.63	1.29	1.24
38	A1	1230	G	N1-C2	-5.63	1.33	1.37
38	A1	2496	G	C5-C6	-5.63	1.36	1.42
38	A1	2880	C	C2-N3	5.63	1.40	1.35
11	B2	600	C	C2-N3	5.63	1.40	1.35
38	A1	643	G	C5'-C4'	5.63	1.58	1.51
38	A1	1011	A	C8-N7	-5.63	1.27	1.31
38	A1	1332	A	C2-N3	5.63	1.38	1.33
38	A1	2108	U	N1-C6	5.63	1.43	1.38
38	A1	2119	C	O3'-P	-5.63	1.54	1.61
11	B2	769	A	N9-C4	-5.63	1.34	1.37
11	B2	1042	U	C1'-N1	5.63	1.57	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1321	U	N1-C6	5.63	1.43	1.38
38	A1	329	G	C5-C6	-5.63	1.36	1.42
38	A1	697	U	P-O5'	-5.63	1.54	1.59
38	A1	1225	A	C2'-C1'	-5.63	1.47	1.53
38	A1	1434	C	C4'-C3'	-5.63	1.47	1.52
38	A1	1610	C	C5'-C4'	5.63	1.58	1.51
38	A1	2330	A	C2-N3	5.63	1.38	1.33
38	A1	2373	G	C2-N2	5.63	1.40	1.34
38	A1	2669	U	N1-C6	-5.63	1.32	1.38
11	B2	268	C	C2'-C1'	-5.63	1.47	1.53
11	B2	1110	U	C2'-C1'	-5.63	1.47	1.53
11	B2	1210	A	C8-N7	-5.63	1.27	1.31
38	A1	518	A	C5'-C4'	5.63	1.58	1.51
38	A1	589	G	C6-N1	5.63	1.43	1.39
38	A1	805	C	C5-C6	5.63	1.38	1.34
38	A1	1582	G	C3'-O3'	5.63	1.50	1.42
38	A1	2352	G	C2-N3	5.63	1.37	1.32
39	A3	17	G	N9-C8	5.63	1.41	1.37
11	B2	202	G	C2-N3	5.63	1.37	1.32
20	BH	124	VAL	CB-CG1	5.63	1.64	1.52
38	A1	77	C	N3-C4	5.63	1.37	1.33
38	A1	402	G	C5-C4	5.63	1.42	1.38
38	A1	1067	G	C5'-C4'	5.63	1.58	1.51
38	A1	1694	G	C2'-C1'	-5.63	1.47	1.53
38	A1	2531	G	C6-N1	5.63	1.43	1.39
39	A3	15	G	C2-N2	5.63	1.40	1.34
11	B2	190	C	N3-C4	5.63	1.37	1.33
11	B2	262	G	C2-N3	5.63	1.37	1.32
11	B2	405	G	P-O5'	-5.63	1.54	1.59
11	B2	855	C	C3'-C2'	5.63	1.59	1.52
38	A1	298	G	N9-C8	-5.63	1.33	1.37
38	A1	449	G	C6-N1	5.63	1.43	1.39
38	A1	818	A	N7-C5	-5.63	1.35	1.39
38	A1	1242	A	C3'-C2'	-5.63	1.46	1.52
38	A1	2184	G	C2-N3	5.63	1.37	1.32
11	B2	34	G	C4'-C3'	5.62	1.59	1.53
11	B2	679	G	O4'-C1'	5.62	1.49	1.41
11	B2	882	C	C3'-O3'	5.62	1.50	1.42
11	B2	1394	G	C5-C6	-5.62	1.36	1.42
38	A1	1561	G	C6-N1	5.62	1.43	1.39
43	AB	134	ARG	NE-CZ	5.62	1.40	1.33
10	B1	30	G	C4'-C3'	5.62	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	289	C	C2'-C1'	-5.62	1.47	1.53
11	B2	1206	G	C8-N7	5.62	1.34	1.30
11	B2	1448	A	C5'-C4'	5.62	1.58	1.51
38	A1	331	G	N9-C4	-5.62	1.33	1.38
38	A1	551	A	N7-C5	-5.62	1.35	1.39
38	A1	786	G	C6-N1	5.62	1.43	1.39
38	A1	962	C	C2-N3	5.62	1.40	1.35
38	A1	1381	C	O3'-P	-5.62	1.54	1.61
38	A1	1902	G	N9-C8	-5.62	1.33	1.37
38	A1	1973	U	N1-C2	5.62	1.43	1.38
38	A1	2029	C	C2-N3	5.62	1.40	1.35
38	A1	2821	G	C2'-C1'	-5.62	1.47	1.53
38	A1	2998	G	C5-C6	5.62	1.48	1.42
57	Aj	58	ARG	CD-NE	5.62	1.56	1.46
11	B2	32	A	C3'-C2'	5.62	1.59	1.52
11	B2	565	C	C2'-C1'	-5.62	1.47	1.53
11	B2	812	U	C4-C5	5.62	1.48	1.43
11	B2	862	C	P-O5'	-5.62	1.54	1.59
11	B2	908	G	N7-C5	-5.62	1.35	1.39
38	A1	92	G	N9-C4	5.62	1.42	1.38
38	A1	533	G	O3'-P	-5.62	1.54	1.61
38	A1	1376	U	C4-C5	5.62	1.48	1.43
38	A1	2236	C	C2-O2	5.62	1.29	1.24
39	A3	74	U	C3'-C2'	5.62	1.59	1.52
63	AP	60	GLU	CB-CG	5.62	1.62	1.52
11	B2	399	A	N9-C4	5.62	1.41	1.37
38	A1	616	C	P-O5'	-5.62	1.54	1.59
38	A1	2546	G	C4'-C3'	-5.62	1.47	1.52
66	AY	12	ARG	CZ-NH2	5.62	1.40	1.33
11	B2	57	G	N3-C4	-5.62	1.31	1.35
11	B2	648	A	N9-C4	5.62	1.41	1.37
11	B2	1137	G	N1-C2	5.62	1.42	1.37
11	B2	1399	G	N3-C4	-5.62	1.31	1.35
14	BB	186	GLU	CD-OE1	-5.62	1.19	1.25
38	A1	15	A	C6-N1	5.62	1.39	1.35
38	A1	59	U	C4-C5	-5.62	1.38	1.43
38	A1	347	G	C2-N3	5.62	1.37	1.32
38	A1	362	A	N9-C4	5.62	1.41	1.37
38	A1	500	C	C2-N3	5.62	1.40	1.35
38	A1	1034	G	O4'-C1'	-5.62	1.34	1.41
38	A1	1259	G	N9-C4	-5.62	1.33	1.38
38	A1	1598	U	N3-C4	5.62	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1832	G	C5'-C4'	5.62	1.58	1.51
38	A1	1963	G	C8-N7	5.62	1.34	1.30
39	A3	101	A	C5-C6	5.62	1.46	1.41
48	AE	59	ARG	CZ-NH1	5.62	1.40	1.33
61	AN	24	ARG	NE-CZ	5.62	1.40	1.33
11	B2	777	G	C2-N2	5.62	1.40	1.34
38	A1	223	U	C2-N3	5.62	1.41	1.37
11	B2	42	G	O3'-P	-5.62	1.54	1.61
11	B2	552	C	C4-N4	-5.62	1.28	1.33
11	B2	813	G	C2-N2	5.62	1.40	1.34
11	B2	1451	C	C2-N3	-5.62	1.31	1.35
38	A1	120	G	N1-C2	5.62	1.42	1.37
38	A1	406	G	C4'-O4'	5.62	1.52	1.45
38	A1	1006	A	C3'-O3'	5.62	1.50	1.42
38	A1	1168	A	C6-N6	5.62	1.38	1.33
38	A1	1664	G	N1-C2	5.62	1.42	1.37
38	A1	1668	G	C8-N7	-5.62	1.27	1.30
38	A1	2208	C	N3-C4	5.62	1.37	1.33
11	B2	54	C	N3-C4	5.61	1.37	1.33
11	B2	417	C	C4-N4	5.61	1.39	1.33
11	B2	464	G	C4'-C3'	5.61	1.59	1.53
20	BH	146	TYR	CE2-CZ	5.61	1.45	1.38
38	A1	1107	G	N7-C5	-5.61	1.35	1.39
38	A1	1569	A	O3'-P	-5.61	1.54	1.61
38	A1	1580	G	P-O5'	5.61	1.65	1.59
38	A1	1707	A	C6-N1	5.61	1.39	1.35
38	A1	2367	C	N3-C4	-5.61	1.30	1.33
38	A1	2822	G	P-O5'	-5.61	1.54	1.59
11	B2	772	G	C2-N2	5.61	1.40	1.34
38	A1	171	A	C6-N1	-5.61	1.31	1.35
38	A1	291	A	C6-N1	5.61	1.39	1.35
38	A1	778	A	N9-C4	5.61	1.41	1.37
11	B2	1194	C	C4-N4	5.61	1.39	1.33
11	B2	1438	A	C6-N1	5.61	1.39	1.35
26	BN	147	ARG	CZ-NH2	5.61	1.40	1.33
38	A1	378	G	N7-C5	-5.61	1.35	1.39
38	A1	970	G	P-O5'	-5.61	1.54	1.59
38	A1	1083	G	C5-C6	-5.61	1.36	1.42
38	A1	1137	G	C5-C4	5.61	1.42	1.38
38	A1	1541	U	C2-O2	5.61	1.27	1.22
38	A1	2025	A	P-O5'	5.61	1.65	1.59
38	A1	2716	C	C4'-C3'	5.61	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2807	C	N1-C6	5.61	1.40	1.37
38	A1	2902	G	N9-C4	5.61	1.42	1.38
39	A3	12	G	C5'-C4'	5.61	1.58	1.51
11	B2	509	C	C5'-C4'	5.61	1.58	1.51
11	B2	1262	U	C1'-N1	5.61	1.57	1.48
11	B2	1411	G	C2-N3	5.61	1.37	1.32
38	A1	934	G	N9-C8	5.61	1.41	1.37
38	A1	1116	A	C5-C4	5.61	1.42	1.38
38	A1	2489	C	C5'-C4'	5.61	1.58	1.51
39	A3	58	C	P-O5'	5.61	1.65	1.59
43	AB	109	TYR	CZ-OH	5.61	1.47	1.37
59	AL	65	ARG	CZ-NH2	5.61	1.40	1.33
11	B2	398	C	N3-C4	5.61	1.37	1.33
11	B2	425	C	C2'-C1'	-5.61	1.47	1.53
11	B2	1412	A	C2-N3	-5.61	1.28	1.33
21	BI	26	TYR	CG-CD2	5.61	1.46	1.39
38	A1	175	G	N3-C4	-5.61	1.31	1.35
38	A1	385	U	C2'-C1'	-5.61	1.47	1.53
38	A1	684	G	C6-N1	5.61	1.43	1.39
38	A1	950	G	N3-C4	-5.61	1.31	1.35
38	A1	1013	G	C5'-C4'	5.61	1.58	1.51
38	A1	1667	U	C5'-C4'	5.61	1.58	1.51
38	A1	2495	A	C5'-C4'	5.61	1.58	1.51
48	AE	149	ARG	CZ-NH1	5.61	1.40	1.33
10	B1	58	A	N9-C4	-5.61	1.34	1.37
11	B2	89	G	N9-C8	5.61	1.41	1.37
11	B2	581	G	P-O5'	-5.61	1.54	1.59
11	B2	1310	C	C4-C5	-5.61	1.38	1.43
11	B2	1380	C	O4'-C1'	5.61	1.49	1.41
38	A1	775	C	O4'-C1'	5.61	1.49	1.41
38	A1	1105	C	N3-C4	5.61	1.37	1.33
38	A1	1322	G	C5'-C4'	5.61	1.58	1.51
38	A1	1778	G	C2-N3	5.61	1.37	1.32
38	A1	2310	G	C2'-C1'	5.61	1.59	1.53
39	A3	92	G	C4'-C3'	5.61	1.59	1.53
11	B2	896	A	C6-N6	5.60	1.38	1.33
11	B2	1094	U	N3-C4	5.60	1.43	1.38
11	B2	1459	G	O3'-P	-5.60	1.54	1.61
38	A1	1086	U	N1-C2	5.60	1.43	1.38
11	B2	48	G	N9-C8	-5.60	1.33	1.37
11	B2	373	C	C4'-O4'	5.60	1.52	1.45
38	A1	77	C	C4'-O4'	-5.60	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	802	G	C5'-C4'	5.60	1.58	1.51
38	A1	1198	G	N1-C2	5.60	1.42	1.37
38	A1	1407	A	N7-C5	-5.60	1.35	1.39
38	A1	1875	U	C5'-C4'	5.60	1.58	1.51
38	A1	2389	C	C5'-C4'	5.60	1.58	1.51
38	A1	2700	U	C3'-O3'	5.60	1.50	1.42
39	A3	15	G	N7-C5	-5.60	1.35	1.39
39	A3	116	C	C3'-O3'	5.60	1.50	1.42
11	B2	997	G	C8-N7	-5.60	1.27	1.30
11	B2	1362	C	C5'-C4'	5.60	1.58	1.51
38	A1	419	G	C5'-C4'	5.60	1.58	1.51
38	A1	860	A	N9-C8	-5.60	1.33	1.37
38	A1	1230	G	C2-N3	5.60	1.37	1.32
38	A1	1838	C	C2-N3	5.60	1.40	1.35
42	Aa	36	ARG	CD-NE	5.60	1.55	1.46
11	B2	877	A	C6-N6	-5.60	1.29	1.33
38	A1	32	C	O4'-C1'	5.60	1.49	1.41
38	A1	745	C	C2-N3	5.60	1.40	1.35
38	A1	1114	G	C2-N2	-5.60	1.28	1.34
38	A1	1840	G	N3-C4	-5.60	1.31	1.35
38	A1	2611	U	O3'-P	-5.60	1.54	1.61
11	B2	6	G	C5-C6	-5.60	1.36	1.42
11	B2	192	G	C5-C4	5.60	1.42	1.38
11	B2	329	G	C5'-C4'	5.60	1.58	1.51
11	B2	692	G	C6-O6	-5.60	1.19	1.24
11	B2	1022	U	O4'-C1'	5.60	1.49	1.41
11	B2	1096	G	N9-C4	5.60	1.42	1.38
18	BF	133	CYS	CB-SG	-5.60	1.72	1.81
38	A1	387	A	C6-N6	5.60	1.38	1.33
38	A1	762	G	C5-C4	5.60	1.42	1.38
38	A1	777	A	C5-C4	5.60	1.42	1.38
38	A1	1158	G	C2'-C1'	-5.60	1.47	1.53
38	A1	1240	U	C3'-O3'	5.60	1.50	1.42
38	A1	1981	G	C8-N7	5.60	1.34	1.30
38	A1	2363	G	C5-C4	5.60	1.42	1.38
38	A1	2460	A	N7-C5	-5.60	1.35	1.39
38	A1	2787	G	C8-N7	5.60	1.34	1.30
39	A3	59	C	C2-N3	-5.60	1.31	1.35
54	AI	122	ARG	NE-CZ	5.60	1.40	1.33
11	B2	110	C	C3'-C2'	5.60	1.59	1.52
11	B2	347	G	C5'-C4'	5.60	1.58	1.51
11	B2	363	C	C4-C5	5.60	1.47	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	471	G	O3'-P	-5.60	1.54	1.61
20	BH	212	GLU	CG-CD	5.60	1.60	1.51
38	A1	471	U	C4'-C3'	5.60	1.59	1.53
38	A1	882	U	C2'-C1'	-5.60	1.47	1.53
38	A1	1055	C	N1-C6	5.60	1.40	1.37
38	A1	1216	A	N9-C8	5.60	1.42	1.37
38	A1	1638	C	C4-N4	5.60	1.39	1.33
46	AD	69	ARG	NE-CZ	5.60	1.40	1.33
11	B2	395	C	C2-O2	5.59	1.29	1.24
11	B2	670	C	C1'-N1	5.59	1.57	1.48
11	B2	1083	G	C4'-C3'	5.59	1.59	1.53
18	BF	134	ARG	CZ-NH2	5.59	1.40	1.33
23	BK	97	GLU	CD-OE1	5.59	1.31	1.25
38	A1	1225	A	O3'-P	-5.59	1.54	1.61
38	A1	1338	G	C8-N7	5.59	1.34	1.30
38	A1	1350	C	C4-N4	5.59	1.39	1.33
38	A1	3028	U	P-O5'	-5.59	1.54	1.59
38	A1	1891	C	C3'-O3'	5.59	1.50	1.42
38	A1	2632	C	C5'-C4'	5.59	1.58	1.51
38	A1	2975	A	C2'-C1'	-5.59	1.47	1.53
11	B2	2	U	C4-C5	5.59	1.48	1.43
11	B2	400	G	O5'-C5'	-5.59	1.33	1.42
11	B2	628	G	C5-C4	5.59	1.42	1.38
11	B2	907	C	C2'-C1'	-5.59	1.47	1.53
11	B2	1221	A	O3'-P	-5.59	1.54	1.61
11	B2	1411	G	C5-C6	-5.59	1.36	1.42
38	A1	262	C	C3'-O3'	5.59	1.50	1.42
38	A1	412	G	N9-C4	5.59	1.42	1.38
38	A1	591	G	O3'-P	-5.59	1.54	1.61
38	A1	1014	U	C1'-N1	5.59	1.57	1.48
38	A1	2716	C	C3'-O3'	5.59	1.50	1.42
11	B2	472	C	C4'-O4'	-5.59	1.38	1.45
38	A1	347	G	C5'-C4'	5.59	1.58	1.51
38	A1	385	U	N1-C6	5.59	1.43	1.38
38	A1	457	C	C5'-C4'	5.59	1.58	1.51
38	A1	710	G	C5-C6	-5.59	1.36	1.42
38	A1	913	G	C4'-O4'	-5.59	1.38	1.45
38	A1	1551	G	C3'-C2'	5.59	1.59	1.52
38	A1	2256	G	O4'-C1'	-5.59	1.34	1.41
38	A1	2275	G	C5-C6	5.59	1.48	1.42
38	A1	2359	G	C6-N1	5.59	1.43	1.39
38	A1	2765	C	P-O5'	-5.59	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2977	G	C2-N3	5.59	1.37	1.32
38	A1	3002	A	C4'-C3'	5.59	1.59	1.53
46	AD	128	ARG	CD-NE	5.59	1.55	1.46
11	B2	584	C	C5'-C4'	5.59	1.58	1.51
38	A1	933	G	N7-C5	-5.59	1.35	1.39
38	A1	1083	G	C6-N1	-5.59	1.35	1.39
11	B2	132	G	C5'-C4'	5.59	1.58	1.51
11	B2	492	G	N9-C4	-5.59	1.33	1.38
11	B2	713	A	C5-C4	5.59	1.42	1.38
11	B2	993	C	C5'-C4'	5.59	1.58	1.51
38	A1	166	G	N1-C2	5.59	1.42	1.37
38	A1	234	G	C2-N2	5.59	1.40	1.34
38	A1	287	G	C6-N1	5.59	1.43	1.39
38	A1	703	G	P-O5'	-5.59	1.54	1.59
38	A1	705	G	N3-C4	5.59	1.39	1.35
38	A1	1026	A	C6-N6	5.59	1.38	1.33
38	A1	2186	C	P-O5'	-5.59	1.54	1.59
38	A1	3009	C	N3-C4	5.59	1.37	1.33
11	B2	55	G	C5'-C4'	5.58	1.58	1.51
11	B2	340	A	N9-C4	-5.58	1.34	1.37
38	A1	688	G	N9-C4	-5.58	1.33	1.38
38	A1	1744	A	N9-C8	5.58	1.42	1.37
38	A1	2831	G	C4'-C3'	5.58	1.59	1.53
11	B2	705	C	N1-C6	5.58	1.40	1.37
38	A1	91	G	O3'-P	-5.58	1.54	1.61
38	A1	548	U	C2'-C1'	-5.58	1.47	1.53
38	A1	845	U	C3'-O3'	5.58	1.50	1.42
38	A1	1074	G	C5-C4	-5.58	1.34	1.38
38	A1	1361	G	N7-C5	-5.58	1.35	1.39
38	A1	1390	U	C4-C5	5.58	1.48	1.43
38	A1	1445	G	C5-C6	-5.58	1.36	1.42
38	A1	1513	G	C2'-C1'	-5.58	1.47	1.53
38	A1	1584	G	N1-C2	5.58	1.42	1.37
38	A1	1705	C	O3'-P	-5.58	1.54	1.61
38	A1	2965	C	C4-C5	5.58	1.47	1.43
39	A3	9	A	C4'-C3'	5.58	1.59	1.53
47	Ad	11	ARG	CZ-NH1	5.58	1.40	1.33
11	B2	436	A	C1'-N9	5.58	1.57	1.48
11	B2	973	U	C5'-C4'	5.58	1.58	1.51
11	B2	1050	G	C5-C4	5.58	1.42	1.38
11	B2	1174	A	C4'-C3'	5.58	1.59	1.53
32	BT	82	TYR	CE2-CZ	5.58	1.45	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	37	C	N1-C6	5.58	1.40	1.37
38	A1	339	A	N9-C8	5.58	1.42	1.37
38	A1	1983	C	C4-C5	5.58	1.47	1.43
11	B2	1407	U	N3-C4	5.58	1.43	1.38
38	A1	1586	G	C8-N7	5.58	1.34	1.30
11	B2	167	G	N9-C8	5.58	1.41	1.37
11	B2	1424	G	N1-C2	5.58	1.42	1.37
38	A1	627	G	C2-N2	5.58	1.40	1.34
38	A1	1445	G	C2-N3	5.58	1.37	1.32
38	A1	2728	U	C2-N3	5.58	1.41	1.37
38	A1	2801	G	C2-N2	5.58	1.40	1.34
45	AC	17	ARG	NE-CZ	5.58	1.40	1.33
11	B2	21	A	C5'-C4'	5.58	1.58	1.51
11	B2	1034	G	P-O5'	-5.58	1.54	1.59
33	BU	52	TYR	CG-CD2	5.58	1.46	1.39
38	A1	1254	C	N3-C4	5.58	1.37	1.33
38	A1	1394	G	C2'-C1'	-5.58	1.47	1.53
38	A1	1431	U	P-OP1	-5.58	1.39	1.49
38	A1	2130	C	C4-N4	5.58	1.39	1.33
38	A1	2878	A	C6-N1	5.58	1.39	1.35
11	B2	511	C	C2-N3	5.58	1.40	1.35
11	B2	931	C	C4'-O4'	-5.58	1.38	1.45
11	B2	1416	C	C4-N4	5.58	1.39	1.33
38	A1	1362	G	C5'-C4'	-5.58	1.44	1.51
38	A1	1520	G	O3'-P	-5.58	1.54	1.61
38	A1	1901	A	C6-N6	5.58	1.38	1.33
38	A1	1915	G	C5-C4	-5.58	1.34	1.38
38	A1	2278	U	O3'-P	-5.58	1.54	1.61
38	A1	2856	G	C8-N7	-5.58	1.27	1.30
50	AF	118	ALA	CA-CB	5.58	1.64	1.52
10	B1	69	G	N7-C5	-5.57	1.35	1.39
11	B2	480	G	C3'-O3'	5.57	1.50	1.42
11	B2	764	C	C2'-C1'	5.57	1.59	1.53
11	B2	1028	C	C2'-C1'	5.57	1.59	1.53
11	B2	1036	G	N1-C2	5.57	1.42	1.37
38	A1	439	G	C8-N7	-5.57	1.27	1.30
38	A1	691	G	O3'-P	-5.57	1.54	1.61
38	A1	848	A	C2'-O2'	5.57	1.48	1.41
38	A1	1112	G	C1'-N9	5.57	1.57	1.48
38	A1	2184	G	C6-O6	5.57	1.29	1.24
38	A1	2347	G	N3-C4	-5.57	1.31	1.35
38	A1	2687	A	N9-C8	-5.57	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2718	G	N9-C8	5.57	1.41	1.37
11	B2	42	G	C5'-C4'	5.57	1.58	1.51
11	B2	569	G	N9-C8	5.57	1.41	1.37
30	BR	44	ARG	NE-CZ	5.57	1.40	1.33
38	A1	401	C	C4-N4	5.57	1.39	1.33
38	A1	689	U	C4'-O4'	5.57	1.52	1.45
11	B2	932	C	N3-C4	5.57	1.37	1.33
11	B2	998	A	N1-C2	5.57	1.39	1.34
21	BI	86	PHE	CA-CB	5.57	1.66	1.53
38	A1	505	A	C5'-C4'	5.57	1.58	1.51
38	A1	506	G	C5'-C4'	5.57	1.58	1.51
38	A1	644	G	C2-N3	5.57	1.37	1.32
38	A1	995	G	N1-C2	5.57	1.42	1.37
38	A1	1265	A	C2-N3	5.57	1.38	1.33
38	A1	1571	G	C5-C4	5.57	1.42	1.38
38	A1	2211	C	C5'-C4'	5.57	1.58	1.51
38	A1	2264	G	N1-C2	5.57	1.42	1.37
38	A1	2501	G	P-O5'	-5.57	1.54	1.59
39	A3	19	G	C5-C4	5.57	1.42	1.38
46	AD	42	ARG	CZ-NH1	5.57	1.40	1.33
11	B2	3	U	C5'-C4'	5.57	1.58	1.51
11	B2	198	A	C8-N7	5.57	1.35	1.31
11	B2	287	G	C6-N1	5.57	1.43	1.39
11	B2	887	G	C5-C4	-5.57	1.34	1.38
11	B2	998	A	C5'-C4'	5.57	1.58	1.51
38	A1	424	U	C4-C5	5.57	1.48	1.43
38	A1	1897	G	N9-C8	5.57	1.41	1.37
38	A1	2498	G	C2'-C1'	-5.57	1.47	1.53
39	A3	63	G	C2-N3	5.57	1.37	1.32
10	B1	4	G	N1-C2	5.57	1.42	1.37
11	B2	86	C	N1-C6	-5.57	1.33	1.37
11	B2	434	A	N9-C4	5.57	1.41	1.37
11	B2	510	A	O4'-C1'	5.57	1.48	1.41
11	B2	1169	C	C2'-C1'	-5.57	1.47	1.53
11	B2	1412	A	N1-C2	-5.57	1.29	1.34
13	BA	150	GLU	CD-OE2	5.57	1.31	1.25
38	A1	142	G	C2-N3	5.57	1.37	1.32
38	A1	700	A	P-O5'	5.57	1.65	1.59
38	A1	927	G	C3'-O3'	5.57	1.50	1.42
38	A1	2016	C	C3'-O3'	5.57	1.50	1.42
38	A1	2118	C	O3'-P	-5.57	1.54	1.61
39	A3	89	G	P-O5'	-5.57	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	AU	91	VAL	CB-CG2	5.57	1.64	1.52
11	B2	459	G	N9-C8	5.57	1.41	1.37
38	A1	303	A	C5'-C4'	5.57	1.58	1.51
38	A1	468	A	C2'-O2'	5.57	1.48	1.41
38	A1	491	G	N1-C2	-5.57	1.33	1.37
38	A1	722	C	O3'-P	-5.57	1.54	1.61
38	A1	855	G	P-O5'	-5.57	1.54	1.59
38	A1	881	G	C2-N3	5.57	1.37	1.32
38	A1	971	G	C3'-C2'	-5.57	1.46	1.52
38	A1	1191	C	C2'-C1'	-5.57	1.47	1.53
38	A1	2415	C	N1-C6	-5.57	1.33	1.37
38	A1	2424	A	C2-N3	-5.57	1.28	1.33
38	A1	2472	A	N7-C5	-5.57	1.35	1.39
11	B2	746	A	C3'-O3'	5.56	1.50	1.42
38	A1	1495	A	C4'-O4'	-5.56	1.38	1.45
38	A1	2312	U	C3'-C2'	-5.56	1.46	1.52
39	A3	59	C	O3'-P	-5.56	1.54	1.61
11	B2	1393	A	C5'-C4'	5.56	1.58	1.51
38	A1	1181	C	P-O5'	-5.56	1.54	1.59
38	A1	1554	G	N7-C5	5.56	1.42	1.39
38	A1	1559	A	N3-C4	5.56	1.38	1.34
38	A1	1827	A	C5-C4	5.56	1.42	1.38
38	A1	2018	C	N1-C2	5.56	1.45	1.40
38	A1	2235	G	C5'-C4'	5.56	1.58	1.51
38	A1	2593	A	N7-C5	-5.56	1.35	1.39
38	A1	2630	C	C5'-C4'	5.56	1.58	1.51
54	AI	80	ARG	CZ-NH1	5.56	1.40	1.33
11	B2	1042	U	C2'-C1'	5.56	1.59	1.53
38	A1	911	G	O3'-P	-5.56	1.54	1.61
5	AS	49	ARG	CD-NE	5.56	1.55	1.46
11	B2	288	G	N9-C8	-5.56	1.33	1.37
11	B2	431	U	P-O5'	-5.56	1.54	1.59
11	B2	787	U	C5'-C4'	5.56	1.58	1.51
11	B2	1219	C	N3-C4	5.56	1.37	1.33
38	A1	528	G	C5'-C4'	5.56	1.58	1.51
38	A1	1218	C	C1'-N1	5.56	1.57	1.48
38	A1	1981	G	N1-C2	5.56	1.42	1.37
38	A1	2048	C	C3'-C2'	5.56	1.59	1.52
38	A1	2453	C	N1-C2	5.56	1.45	1.40
38	A1	2626	U	C4-C5	5.56	1.48	1.43
38	A1	2860	G	N9-C4	-5.56	1.33	1.38
38	A1	2956	G	N1-C2	5.56	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	458	G	O3'-P	-5.56	1.54	1.61
11	B2	663	G	C6-N1	5.56	1.43	1.39
19	BG	125	TYR	CD1-CE1	5.56	1.47	1.39
38	A1	98	G	C2-N3	5.56	1.37	1.32
38	A1	182	U	C5'-C4'	5.56	1.58	1.51
38	A1	277	A	C6-N1	5.56	1.39	1.35
38	A1	347	G	N3-C4	-5.56	1.31	1.35
38	A1	841	U	N1-C6	5.56	1.43	1.38
38	A1	2545	A	N7-C5	-5.56	1.35	1.39
54	AI	46	PHE	CE2-CZ	5.56	1.48	1.37
11	B2	1448	A	C3'-C2'	-5.56	1.46	1.52
38	A1	758	C	C4-C5	-5.56	1.38	1.43
38	A1	1593	C	C2'-C1'	5.56	1.59	1.53
38	A1	2543	A	N7-C5	-5.56	1.35	1.39
38	A1	2843	C	N1-C6	-5.56	1.33	1.37
38	A1	2951	G	N1-C2	5.56	1.42	1.37
38	A1	2989	A	C2-N3	5.56	1.38	1.33
39	A3	119	C	C2'-C1'	-5.56	1.47	1.53
11	B2	14	C	C2'-C1'	-5.55	1.47	1.53
11	B2	371	U	O4'-C1'	5.55	1.48	1.41
11	B2	810	G	C6-N1	5.55	1.43	1.39
11	B2	1418	G	C5-C4	5.55	1.42	1.38
38	A1	708	A	N7-C5	-5.55	1.35	1.39
38	A1	831	C	C3'-C2'	-5.55	1.46	1.52
38	A1	833	G	C5'-C4'	5.55	1.58	1.51
38	A1	873	G	N3-C4	-5.55	1.31	1.35
38	A1	1082	A	N3-C4	-5.55	1.31	1.34
38	A1	1591	C	C4-C5	5.55	1.47	1.43
38	A1	1951	G	C6-N1	5.55	1.43	1.39
38	A1	2712	G	C2-N2	5.55	1.40	1.34
38	A1	2800	U	C4-C5	5.55	1.48	1.43
38	A1	2835	A	C5-C6	5.55	1.46	1.41
39	A3	66	A	C6-N6	5.55	1.38	1.33
9	AX	412	TYR	CE2-CZ	5.55	1.45	1.38
38	A1	774	G	O3'-P	-5.55	1.54	1.61
38	A1	1350	C	N3-C4	5.55	1.37	1.33
38	A1	2783	C	C2-N3	5.55	1.40	1.35
38	A1	716	U	N1-C2	5.55	1.43	1.38
38	A1	1200	A	N7-C5	-5.55	1.35	1.39
38	A1	1767	C	C4-C5	5.55	1.47	1.43
38	A1	2083	G	C2'-O2'	-5.55	1.34	1.41
38	A1	2264	G	P-O5'	-5.55	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2726	G	C3'-O3'	5.55	1.50	1.42
39	A3	25	A	C6-N1	5.55	1.39	1.35
64	AR	61	ARG	CD-NE	5.55	1.55	1.46
11	B2	456	U	C4-C5	5.55	1.48	1.43
11	B2	504	G	N7-C5	-5.55	1.35	1.39
11	B2	839	G	N9-C8	5.55	1.41	1.37
11	B2	1007	A	C6-N6	5.55	1.38	1.33
13	BA	134	GLU	CB-CG	5.55	1.62	1.52
38	A1	358	C	N3-C4	5.55	1.37	1.33
38	A1	458	U	C2-N3	5.55	1.41	1.37
38	A1	497	G	C3'-C2'	5.55	1.59	1.52
38	A1	819	U	N1-C2	-5.55	1.33	1.38
38	A1	1054	A	C8-N7	-5.55	1.27	1.31
38	A1	2154	G	N9-C4	5.55	1.42	1.38
38	A1	2179	G	C6-N1	5.55	1.43	1.39
38	A1	2272	G	N7-C5	-5.55	1.35	1.39
38	A1	2394	G	O3'-P	-5.55	1.54	1.61
38	A1	2394	G	C8-N7	5.55	1.34	1.30
38	A1	2419	U	C5'-C4'	5.55	1.58	1.51
38	A1	2746	G	O3'-P	-5.55	1.54	1.61
38	A1	2779	G	N1-C2	5.55	1.42	1.37
39	A3	116	C	C5'-C4'	5.55	1.58	1.51
42	Aa	45	ALA	N-CA	-5.55	1.35	1.46
62	AO	141	GLU	CB-CG	5.55	1.62	1.52
9	AX	230	ARG	CZ-NH1	5.55	1.40	1.33
11	B2	24	C	C4-C5	5.55	1.47	1.43
11	B2	690	C	C5'-C4'	5.55	1.58	1.51
38	A1	1333	G	C2-N3	5.55	1.37	1.32
38	A1	1417	U	C2-N3	5.55	1.41	1.37
39	A3	106	G	C2-N3	5.55	1.37	1.32
39	A3	118	G	N1-C2	5.55	1.42	1.37
45	AC	9	ARG	CZ-NH1	5.55	1.40	1.33
11	B2	918	A	C2-N3	5.55	1.38	1.33
11	B2	1411	G	N1-C2	5.55	1.42	1.37
17	BE	19	TRP	CB-CG	5.55	1.60	1.50
38	A1	76	C	C1'-N1	5.55	1.57	1.48
38	A1	557	G	O3'-P	-5.55	1.54	1.61
38	A1	884	C	C4-N4	5.55	1.39	1.33
38	A1	1917	U	N1-C6	5.55	1.43	1.38
38	A1	2193	G	C3'-C2'	-5.55	1.46	1.52
38	A1	2256	G	P-O5'	-5.55	1.54	1.59
41	AA	45	ARG	CZ-NH2	5.55	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	973	U	C3'-C2'	5.54	1.59	1.52
38	A1	877	U	C4-O4	5.54	1.28	1.23
38	A1	1592	U	O4'-C1'	5.54	1.48	1.41
38	A1	2231	G	P-O5'	-5.54	1.54	1.59
38	A1	2734	C	C1'-N1	5.54	1.57	1.48
11	B2	467	G	C2-N3	5.54	1.37	1.32
11	B2	556	G	C1'-N9	5.54	1.57	1.48
11	B2	766	G	O4'-C1'	-5.54	1.34	1.41
11	B2	1204	C	C4'-C3'	-5.54	1.47	1.52
11	B2	1270	C	C1'-N1	5.54	1.57	1.48
11	B2	1438	A	C5-C4	5.54	1.42	1.38
38	A1	67	U	C2-O2	5.54	1.27	1.22
38	A1	514	U	O4'-C1'	5.54	1.48	1.41
38	A1	913	G	N9-C4	5.54	1.42	1.38
38	A1	1489	G	C2'-C1'	-5.54	1.47	1.53
38	A1	1642	G	C6-N1	5.54	1.43	1.39
38	A1	2290	U	P-O5'	-5.54	1.54	1.59
38	A1	2627	C	C2-N3	-5.54	1.31	1.35
11	B2	246	A	C2'-C1'	-5.54	1.47	1.53
11	B2	1441	G	O3'-P	5.54	1.67	1.61
38	A1	497	G	C5-C4	-5.54	1.34	1.38
38	A1	1054	A	N1-C2	-5.54	1.29	1.34
46	AD	251	ARG	CZ-NH1	5.54	1.40	1.33
38	A1	480	A	N7-C5	-5.54	1.35	1.39
38	A1	545	G	C8-N7	5.54	1.34	1.30
38	A1	1905	G	C5'-C4'	5.54	1.57	1.51
38	A1	1934	C	C2-N3	-5.54	1.31	1.35
38	A1	2482	G	C4'-C3'	5.54	1.59	1.53
38	A1	2874	C	O4'-C1'	-5.54	1.34	1.41
11	B2	381	C	C4'-C3'	-5.54	1.47	1.52
11	B2	556	G	N7-C5	-5.54	1.35	1.39
11	B2	821	G	C5-C4	5.54	1.42	1.38
11	B2	1375	C	P-O5'	5.54	1.65	1.59
11	B2	1420	U	C2'-C1'	-5.54	1.47	1.53
38	A1	362	A	C6-N1	5.54	1.39	1.35
38	A1	911	G	C2-N3	5.54	1.37	1.32
38	A1	1038	U	N3-C4	5.54	1.43	1.38
38	A1	1294	A	C1'-N9	-5.54	1.39	1.46
38	A1	1521	G	C4'-O4'	5.54	1.52	1.45
38	A1	2048	C	C4-N4	5.54	1.39	1.33
38	A1	2092	G	C1'-N9	5.54	1.57	1.48
38	A1	2659	G	C2-N2	5.54	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2697	G	P-O5'	5.54	1.65	1.59
10	B1	47	G	C6-O6	-5.54	1.19	1.24
11	B2	432	G	N1-C2	5.54	1.42	1.37
11	B2	458	G	C3'-C2'	5.54	1.59	1.52
38	A1	1007	U	C4'-C3'	-5.54	1.47	1.52
38	A1	1037	C	C2-N3	-5.54	1.31	1.35
38	A1	2310	G	C4'-C3'	5.54	1.59	1.53
57	Aj	58	ARG	NE-CZ	5.54	1.40	1.33
10	B1	23	G	C2'-C1'	-5.54	1.47	1.53
11	B2	18	C	C1'-N1	5.54	1.57	1.48
11	B2	243	G	C8-N7	5.54	1.34	1.30
11	B2	765	U	C5-C6	5.54	1.39	1.34
11	B2	826	C	P-O5'	-5.54	1.54	1.59
11	B2	1185	A	C2'-C1'	-5.54	1.47	1.53
11	B2	1402	C	O4'-C1'	5.54	1.48	1.41
11	B2	1474	A	P-O5'	-5.54	1.54	1.59
22	BJ	92	ARG	NE-CZ	5.54	1.40	1.33
38	A1	44	C	C2-O2	5.54	1.29	1.24
38	A1	364	A	C4'-C3'	5.54	1.59	1.53
38	A1	367	G	N9-C4	5.54	1.42	1.38
38	A1	463	A	C6-N6	5.54	1.38	1.33
38	A1	625	A	C8-N7	-5.54	1.27	1.31
38	A1	654	C	N3-C4	5.54	1.37	1.33
38	A1	936	G	O3'-P	-5.54	1.54	1.61
38	A1	2876	G	C4'-C3'	5.54	1.59	1.53
47	Ad	41	ARG	NE-CZ	5.54	1.40	1.33
11	B2	31	U	P-O5'	-5.53	1.54	1.59
11	B2	131	G	C2'-C1'	-5.53	1.47	1.53
11	B2	167	G	C2-N2	5.53	1.40	1.34
11	B2	691	G	C5-C6	-5.53	1.36	1.42
11	B2	989	C	C2-O2	5.53	1.29	1.24
26	BN	33	ARG	CD-NE	5.53	1.55	1.46
38	A1	766	G	C4'-C3'	-5.53	1.47	1.52
38	A1	835	G	C2-N2	5.53	1.40	1.34
38	A1	1087	G	N7-C5	-5.53	1.35	1.39
38	A1	1130	G	C4'-O4'	5.53	1.52	1.45
38	A1	1272	A	N1-C2	5.53	1.39	1.34
38	A1	1431	U	C2-N3	5.53	1.41	1.37
38	A1	1562	U	O4'-C1'	5.53	1.48	1.41
38	A1	1683	C	C3'-C2'	5.53	1.59	1.52
38	A1	1869	U	C2'-O2'	-5.53	1.34	1.41
38	A1	1994	G	C5-C4	-5.53	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2733	A	N7-C5	-5.53	1.35	1.39
38	A1	2829	C	C5'-C4'	5.53	1.57	1.51
45	AC	79	ARG	NE-CZ	5.53	1.40	1.33
11	B2	636	G	N7-C5	-5.53	1.35	1.39
11	B2	1132	C	N3-C4	5.53	1.37	1.33
36	BX	17	ARG	CD-NE	5.53	1.55	1.46
38	A1	252	A	C6-N6	5.53	1.38	1.33
38	A1	2237	A	C6-N6	5.53	1.38	1.33
38	A1	2425	A	C3'-O3'	5.53	1.49	1.42
38	A1	2602	G	C8-N7	-5.53	1.27	1.30
10	B1	3	G	C1'-N9	5.53	1.57	1.48
11	B2	285	C	C4-N4	5.53	1.39	1.33
11	B2	444	G	C2-N2	5.53	1.40	1.34
11	B2	765	U	C4'-C3'	-5.53	1.47	1.52
11	B2	1433	C	N3-C4	5.53	1.37	1.33
38	A1	220	C	C2-O2	-5.53	1.19	1.24
38	A1	344	G	C6-N1	5.53	1.43	1.39
38	A1	374	C	O3'-P	-5.53	1.54	1.61
38	A1	496	A	N9-C4	5.53	1.41	1.37
38	A1	668	G	C5'-C4'	5.53	1.57	1.51
38	A1	701	G	P-O5'	5.53	1.65	1.59
38	A1	747	G	N1-C2	5.53	1.42	1.37
38	A1	1842	C	N3-C4	5.53	1.37	1.33
38	A1	2011	U	P-O5'	5.53	1.65	1.59
38	A1	2163	G	C2-N3	5.53	1.37	1.32
38	A1	2172	G	N1-C2	5.53	1.42	1.37
38	A1	2232	U	O3'-P	5.53	1.67	1.61
38	A1	2644	G	C5-C4	5.53	1.42	1.38
39	A3	17	G	P-O5'	5.53	1.65	1.59
11	B2	304	C	O3'-P	-5.53	1.54	1.61
11	B2	1141	G	C2-N3	5.53	1.37	1.32
11	B2	1158	G	N7-C5	-5.53	1.35	1.39
38	A1	1290	G	N7-C5	-5.53	1.35	1.39
38	A1	1502	C	C4'-C3'	5.53	1.59	1.53
38	A1	1599	A	C2-N3	-5.53	1.28	1.33
38	A1	2287	C	N3-C4	5.53	1.37	1.33
10	B1	61	U	C4-O4	5.53	1.28	1.23
11	B2	177	A	C2'-C1'	-5.53	1.47	1.53
11	B2	825	C	C4-N4	5.53	1.39	1.33
38	A1	24	G	C2-N2	5.53	1.40	1.34
38	A1	73	A	C5'-C4'	5.53	1.57	1.51
38	A1	1987	A	O3'-P	-5.53	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2083	G	C3'-C2'	-5.53	1.46	1.52
38	A1	3042	C	P-O5'	-5.53	1.54	1.59
4	AQ	88	ARG	CZ-NH1	5.53	1.40	1.33
11	B2	528	G	O3'-P	-5.53	1.54	1.61
11	B2	1224	U	C4-O4	-5.53	1.19	1.23
11	B2	1240	A	O3'-P	-5.53	1.54	1.61
38	A1	180	A	C6-N1	5.53	1.39	1.35
38	A1	689	U	C5-C6	-5.53	1.29	1.34
38	A1	726	G	C2'-C1'	-5.53	1.47	1.53
38	A1	1648	C	C1'-N1	5.53	1.57	1.48
38	A1	3023	G	C6-N1	5.53	1.43	1.39
11	B2	773	A	P-O5'	-5.52	1.54	1.59
28	BP	23	ARG	NE-CZ	5.52	1.40	1.33
38	A1	456	G	O3'-P	-5.52	1.54	1.61
38	A1	838	A	C6-N6	5.52	1.38	1.33
38	A1	1334	G	N9-C4	-5.52	1.33	1.38
38	A1	1805	U	C5'-C4'	5.52	1.57	1.51
38	A1	2183	A	N9-C4	-5.52	1.34	1.37
11	B2	510	A	C5-C6	-5.52	1.36	1.41
38	A1	199	C	N1-C6	5.52	1.40	1.37
38	A1	577	C	C4-N4	5.52	1.39	1.33
38	A1	1166	A	N1-C2	5.52	1.39	1.34
38	A1	1421	C	N3-C4	5.52	1.37	1.33
39	A3	17	G	N1-C2	5.52	1.42	1.37
53	Ah	12	ARG	CZ-NH2	5.52	1.40	1.33
11	B2	681	G	C6-N1	5.52	1.43	1.39
11	B2	762	G	C2'-C1'	-5.52	1.47	1.53
38	A1	543	G	C3'-C2'	5.52	1.59	1.52
38	A1	1684	C	C3'-O3'	5.52	1.49	1.42
38	A1	2320	U	P-O5'	-5.52	1.54	1.59
11	B2	104	A	C8-N7	-5.52	1.27	1.31
11	B2	237	C	C4-C5	5.52	1.47	1.43
11	B2	904	G	C8-N7	-5.52	1.27	1.30
11	B2	976	A	C6-N6	5.52	1.38	1.33
11	B2	1338	C	C4-C5	5.52	1.47	1.43
11	B2	1444	G	P-O5'	-5.52	1.54	1.59
38	A1	137	A	P-O5'	-5.52	1.54	1.59
38	A1	249	G	C5-C6	5.52	1.47	1.42
38	A1	987	G	N7-C5	-5.52	1.35	1.39
38	A1	1341	U	C3'-O3'	5.52	1.49	1.42
38	A1	1780	C	C4-N4	5.52	1.39	1.33
38	A1	1867	C	N3-C4	5.52	1.37	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1982	C	C4-C5	-5.52	1.38	1.43
38	A1	2493	A	N3-C4	-5.52	1.31	1.34
11	B2	32	A	C5-C4	-5.52	1.34	1.38
11	B2	627	G	C2-N3	5.52	1.37	1.32
38	A1	847	A	C3'-C2'	5.52	1.59	1.52
38	A1	1234	A	C6-N6	5.52	1.38	1.33
38	A1	1656	C	P-O5'	-5.52	1.54	1.59
38	A1	1972	C	C4-C5	5.52	1.47	1.43
38	A1	2016	C	O3'-P	-5.52	1.54	1.61
38	A1	481	G	O4'-C1'	5.52	1.48	1.41
38	A1	1632	U	C4'-C3'	5.52	1.59	1.53
11	B2	557	G	C6-N1	-5.51	1.35	1.39
11	B2	812	U	C4'-O4'	5.51	1.52	1.45
11	B2	815	C	O4'-C1'	-5.51	1.34	1.41
11	B2	1071	C	C2-N3	5.51	1.40	1.35
17	BE	28	TRP	CD2-CE3	-5.51	1.32	1.40
38	A1	14	A	C6-N1	5.51	1.39	1.35
38	A1	367	G	C6-O6	-5.51	1.19	1.24
38	A1	627	G	O3'-P	-5.51	1.54	1.61
38	A1	987	G	C4'-C3'	5.51	1.59	1.53
38	A1	1129	G	N1-C2	5.51	1.42	1.37
38	A1	1643	A	C8-N7	-5.51	1.27	1.31
38	A1	1896	U	C2-N3	5.51	1.41	1.37
38	A1	1946	G	C8-N7	-5.51	1.27	1.30
38	A1	2213	G	N1-C2	5.51	1.42	1.37
38	A1	2244	G	O3'-P	-5.51	1.54	1.61
38	A1	2313	G	C8-N7	-5.51	1.27	1.30
38	A1	2348	G	N7-C5	5.51	1.42	1.39
39	A3	29	G	C2-N3	5.51	1.37	1.32
49	Ae	28	TYR	CZ-OH	5.51	1.47	1.37
55	Ai	79	ARG	NE-CZ	5.51	1.40	1.33
11	B2	584	C	O3'-P	-5.51	1.54	1.61
38	A1	224	G	C5-C6	-5.51	1.36	1.42
38	A1	941	C	C4-N4	5.51	1.39	1.33
38	A1	1287	G	N1-C2	5.51	1.42	1.37
38	A1	1919	A	P-O5'	-5.51	1.54	1.59
38	A1	2667	U	O5'-C5'	-5.51	1.34	1.42
11	B2	182	A	C2'-C1'	-5.51	1.47	1.53
11	B2	693	C	C2-O2	5.51	1.29	1.24
38	A1	277	A	C3'-C2'	-5.51	1.46	1.52
38	A1	351	C	O3'-P	5.51	1.67	1.61
38	A1	403	G	N7-C5	-5.51	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	769	G	C5-C6	-5.51	1.36	1.42
38	A1	1356	A	O4'-C1'	5.51	1.48	1.41
38	A1	1813	A	C5-C4	5.51	1.42	1.38
38	A1	1850	C	N1-C6	5.51	1.40	1.37
38	A1	2486	A	N7-C5	-5.51	1.35	1.39
38	A1	2880	C	N3-C4	5.51	1.37	1.33
38	A1	3014	U	N3-C4	5.51	1.43	1.38
59	AL	131	PRO	CA-C	-5.51	1.41	1.52
62	AO	13	ARG	CZ-NH1	5.51	1.40	1.33
11	B2	27	C	N3-C4	5.51	1.37	1.33
11	B2	362	C	C5-C6	-5.51	1.29	1.34
11	B2	1036	G	C1'-N9	-5.51	1.39	1.46
11	B2	1208	A	C6-N6	5.51	1.38	1.33
11	B2	1280	C	C5-C6	5.51	1.38	1.34
38	A1	121	G	C2'-C1'	-5.51	1.47	1.53
38	A1	587	A	N7-C5	-5.51	1.35	1.39
38	A1	1235	A	N7-C5	-5.51	1.35	1.39
38	A1	1729	C	N3-C4	5.51	1.37	1.33
38	A1	1781	C	P-O5'	-5.51	1.54	1.59
38	A1	2325	C	C2'-C1'	-5.51	1.47	1.53
38	A1	2364	G	N1-C2	5.51	1.42	1.37
38	A1	2501	G	C3'-C2'	5.51	1.59	1.52
38	A1	2609	G	N3-C4	5.51	1.39	1.35
39	A3	116	C	C2-N3	5.51	1.40	1.35
11	B2	1483	U	C4-C5	5.51	1.48	1.43
38	A1	307	C	C4'-C3'	5.51	1.59	1.53
38	A1	395	G	N9-C8	-5.51	1.33	1.37
38	A1	470	A	N7-C5	-5.51	1.35	1.39
38	A1	562	G	C2-N3	5.51	1.37	1.32
38	A1	1286	G	C4'-C3'	5.51	1.59	1.53
38	A1	2663	G	N3-C4	-5.51	1.31	1.35
11	B2	153	G	C8-N7	-5.51	1.27	1.30
11	B2	312	U	N1-C6	5.51	1.43	1.38
11	B2	319	U	C2-N3	-5.51	1.33	1.37
11	B2	354	G	N7-C5	5.51	1.42	1.39
11	B2	906	G	N7-C5	5.51	1.42	1.39
38	A1	1283	G	C2'-C1'	5.51	1.59	1.53
38	A1	1300	C	C2'-C1'	-5.51	1.47	1.53
38	A1	1806	C	C2'-C1'	-5.51	1.47	1.53
38	A1	2428	C	C5'-C4'	5.51	1.57	1.51
38	A1	2596	G	C6-N1	5.51	1.43	1.39
11	B2	434	A	N9-C8	-5.50	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	643	G	C2'-C1'	-5.50	1.47	1.53
11	B2	1445	A	C5'-C4'	5.50	1.57	1.51
10	B1	2	G	N7-C5	5.50	1.42	1.39
11	B2	147	A	P-O5'	5.50	1.65	1.59
11	B2	506	G	C2'-C1'	-5.50	1.47	1.53
38	A1	1843	C	C3'-C2'	5.50	1.59	1.52
38	A1	2059	G	N9-C8	5.50	1.41	1.37
38	A1	2998	G	C5-C4	5.50	1.42	1.38
39	A3	50	G	N7-C5	-5.50	1.35	1.39
39	A3	122	C	N1-C6	-5.50	1.33	1.37
11	B2	286	G	C4'-C3'	-5.50	1.47	1.52
11	B2	313	G	C6-O6	-5.50	1.19	1.24
11	B2	397	C	N3-C4	5.50	1.37	1.33
11	B2	740	G	C5'-C4'	5.50	1.57	1.51
11	B2	1140	A	C3'-C2'	5.50	1.59	1.52
11	B2	1261	U	C2-N3	5.50	1.41	1.37
38	A1	644	G	C2'-O2'	5.50	1.48	1.41
38	A1	832	A	N1-C2	5.50	1.39	1.34
38	A1	1291	C	C4'-C3'	5.50	1.59	1.53
38	A1	1627	G	O3'-P	-5.50	1.54	1.61
38	A1	1643	A	C6-N1	5.50	1.39	1.35
38	A1	2002	A	C2-N3	-5.50	1.28	1.33
38	A1	2041	U	C2'-C1'	-5.50	1.47	1.53
38	A1	2409	C	C4'-C3'	-5.50	1.47	1.52
38	A1	2727	C	P-O5'	-5.50	1.54	1.59
11	B2	886	G	N3-C4	-5.50	1.31	1.35
33	BU	50	TRP	CD2-CE3	-5.50	1.32	1.40
38	A1	289	G	C2-N3	5.50	1.37	1.32
38	A1	368	U	C2-N3	-5.50	1.33	1.37
38	A1	1374	G	N9-C8	5.50	1.41	1.37
38	A1	1676	G	C2'-C1'	-5.50	1.47	1.53
38	A1	1704	C	N3-C4	5.50	1.37	1.33
38	A1	1732	C	C4-C5	-5.50	1.38	1.43
38	A1	2209	U	C2-N3	-5.50	1.33	1.37
38	A1	2223	G	C6-N1	5.50	1.43	1.39
38	A1	2729	A	N7-C5	-5.50	1.35	1.39
39	A3	61	C	C1'-N1	5.50	1.57	1.48
62	AO	7	TYR	CG-CD2	5.50	1.46	1.39
9	AX	37	TYR	CZ-OH	5.50	1.47	1.37
11	B2	92	G	N9-C4	5.50	1.42	1.38
11	B2	355	C	C4-C5	5.50	1.47	1.43
11	B2	385	A	C6-N1	-5.50	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	480	G	C8-N7	-5.50	1.27	1.30
11	B2	1470	G	C2-N3	5.50	1.37	1.32
38	A1	809	A	N9-C4	5.50	1.41	1.37
38	A1	2176	G	N3-C4	-5.50	1.31	1.35
38	A1	2689	G	C6-N1	5.50	1.43	1.39
10	B1	21	G	C2-N3	5.50	1.37	1.32
11	B2	57	G	C8-N7	-5.50	1.27	1.30
11	B2	1040	A	C4'-C3'	5.50	1.59	1.53
11	B2	1223	C	C1'-N1	5.50	1.56	1.48
38	A1	302	U	N3-C4	5.50	1.43	1.38
38	A1	1748	C	N3-C4	-5.50	1.30	1.33
38	A1	2105	A	C4'-C3'	5.50	1.59	1.53
38	A1	2747	C	C4-N4	5.50	1.38	1.33
38	A1	2959	A	O3'-P	-5.50	1.54	1.61
11	B2	361	A	O4'-C1'	-5.50	1.34	1.41
11	B2	812	U	C5-C6	-5.50	1.29	1.34
11	B2	1238	G	C2'-C1'	-5.50	1.47	1.53
39	A3	114	G	C5'-C4'	5.50	1.57	1.51
10	B1	5	C	C4-N4	5.49	1.38	1.33
11	B2	407	G	N3-C4	5.49	1.39	1.35
11	B2	527	A	C5-C4	5.49	1.42	1.38
11	B2	675	A	P-O5'	-5.49	1.54	1.59
38	A1	374	C	C4'-C3'	-5.49	1.47	1.52
38	A1	524	C	C2'-C1'	-5.49	1.47	1.53
38	A1	1233	U	C2'-O2'	-5.49	1.34	1.41
38	A1	1265	A	N3-C4	-5.49	1.31	1.34
38	A1	1463	C	O4'-C1'	5.49	1.48	1.41
38	A1	1592	U	N1-C2	5.49	1.43	1.38
38	A1	1604	G	C2-N3	5.49	1.37	1.32
38	A1	2013	A	C5-C6	-5.49	1.36	1.41
38	A1	2144	U	C2'-C1'	-5.49	1.47	1.53
38	A1	2507	C	C5-C6	-5.49	1.29	1.34
38	A1	2859	U	C4-C5	-5.49	1.38	1.43
10	B1	7	G	C2-N3	5.49	1.37	1.32
11	B2	114	A	P-O5'	-5.49	1.54	1.59
11	B2	454	G	C3'-O3'	5.49	1.49	1.42
38	A1	332	A	N9-C4	-5.49	1.34	1.37
38	A1	1586	G	N3-C4	-5.49	1.31	1.35
38	A1	1649	G	N9-C8	5.49	1.41	1.37
38	A1	2765	C	N3-C4	5.49	1.37	1.33
38	A1	2802	G	N7-C5	-5.49	1.35	1.39
10	B1	47	G	C5-C4	-5.49	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	300	G	O3'-P	-5.49	1.54	1.61
11	B2	789	G	N9-C8	5.49	1.41	1.37
11	B2	984	C	C4'-C3'	-5.49	1.47	1.52
38	A1	317	A	P-O5'	5.49	1.65	1.59
38	A1	552	A	N9-C8	5.49	1.42	1.37
38	A1	730	C	O3'-P	-5.49	1.54	1.61
38	A1	1378	G	C2'-C1'	-5.49	1.47	1.53
38	A1	1482	G	C2-N3	5.49	1.37	1.32
38	A1	2092	G	C5-C4	5.49	1.42	1.38
38	A1	2368	G	C5-C4	5.49	1.42	1.38
38	A1	2583	G	C5-C6	-5.49	1.36	1.42
38	A1	2791	C	N3-C4	5.49	1.37	1.33
38	A1	2970	U	N3-C4	5.49	1.43	1.38
11	B2	973	U	P-O5'	-5.49	1.54	1.59
11	B2	1489	A	P-O5'	-5.49	1.54	1.59
18	BF	39	ARG	CZ-NH2	5.49	1.40	1.33
38	A1	195	U	N3-C4	5.49	1.43	1.38
38	A1	333	A	C8-N7	-5.49	1.27	1.31
38	A1	917	A	C4'-C3'	5.49	1.59	1.53
38	A1	1009	G	N7-C5	-5.49	1.35	1.39
38	A1	1031	C	C5'-C4'	5.49	1.57	1.51
38	A1	1244	C	N3-C4	5.49	1.37	1.33
38	A1	1766	A	N9-C8	5.49	1.42	1.37
38	A1	1994	G	C8-N7	-5.49	1.27	1.30
38	A1	2015	G	C5-C6	-5.49	1.36	1.42
38	A1	2213	G	C6-N1	5.49	1.43	1.39
11	B2	1326	G	N1-C2	5.49	1.42	1.37
38	A1	1425	U	O4'-C1'	5.49	1.48	1.41
38	A1	1555	G	N1-C2	5.49	1.42	1.37
38	A1	2159	C	N1-C6	5.49	1.40	1.37
38	A1	2423	G	C2'-C1'	-5.49	1.47	1.53
11	B2	15	U	C2-N3	5.49	1.41	1.37
11	B2	132	G	C6-N1	5.49	1.43	1.39
11	B2	334	G	C8-N7	-5.49	1.27	1.30
11	B2	381	C	C2'-C1'	-5.49	1.47	1.53
11	B2	1212	U	C5-C6	5.49	1.39	1.34
24	BL	89	ARG	CD-NE	5.49	1.55	1.46
38	A1	416	A	N3-C4	5.49	1.38	1.34
38	A1	471	U	C5-C6	-5.49	1.29	1.34
38	A1	490	C	O4'-C1'	5.49	1.48	1.41
38	A1	586	A	C5-C6	5.49	1.46	1.41
38	A1	612	G	N7-C5	-5.49	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1209	A	C8-N7	5.49	1.35	1.31
38	A1	1226	G	C5'-C4'	5.49	1.57	1.51
38	A1	1581	A	N9-C8	5.49	1.42	1.37
38	A1	1631	A	N7-C5	-5.49	1.35	1.39
38	A1	1789	A	C2-N3	5.49	1.38	1.33
38	A1	2274	C	C4'-C3'	-5.49	1.47	1.52
38	A1	2770	A	N9-C4	-5.49	1.34	1.37
60	AM	73	ARG	NE-CZ	5.49	1.40	1.33
11	B2	334	G	C3'-C2'	-5.48	1.46	1.52
11	B2	949	G	C2-N2	5.48	1.40	1.34
17	BE	40	ARG	CZ-NH2	5.48	1.40	1.33
38	A1	1054	A	N7-C5	-5.48	1.35	1.39
38	A1	1076	G	C2-N2	-5.48	1.29	1.34
38	A1	2398	C	C4'-C3'	5.48	1.59	1.53
11	B2	57	G	N1-C2	5.48	1.42	1.37
11	B2	444	G	N7-C5	-5.48	1.35	1.39
11	B2	977	G	C2'-O2'	-5.48	1.34	1.41
11	B2	1260	G	C3'-O3'	5.48	1.49	1.42
38	A1	1223	A	C6-N6	5.48	1.38	1.33
38	A1	1388	U	O3'-P	-5.48	1.54	1.61
38	A1	1501	G	C5'-C4'	5.48	1.57	1.51
38	A1	1651	A	C5-C4	5.48	1.42	1.38
38	A1	2047	U	O3'-P	-5.48	1.54	1.61
38	A1	2048	C	O3'-P	-5.48	1.54	1.61
38	A1	2258	A	C8-N7	-5.48	1.27	1.31
40	A5	18	ALA	C-N	5.48	1.43	1.33
10	B1	70	C	P-O5'	-5.48	1.54	1.59
11	B2	446	G	C5'-C4'	5.48	1.57	1.51
11	B2	785	U	C4'-C3'	-5.48	1.47	1.52
11	B2	1464	C	C2'-C1'	-5.48	1.47	1.53
38	A1	64	A	C5'-C4'	5.48	1.57	1.51
38	A1	97	C	C5'-C4'	5.48	1.57	1.51
38	A1	1328	G	C2'-C1'	-5.48	1.47	1.53
38	A1	1379	A	N1-C2	-5.48	1.29	1.34
38	A1	2163	G	C5'-C4'	5.48	1.57	1.51
38	A1	3008	C	C3'-C2'	5.48	1.58	1.52
39	A3	21	C	N3-C4	5.48	1.37	1.33
39	A3	43	C	C2'-C1'	-5.48	1.47	1.53
45	AC	181	GLU	CD-OE2	5.48	1.31	1.25
11	B2	186	U	C1'-N1	5.48	1.56	1.48
11	B2	1483	U	P-O5'	-5.48	1.54	1.59
38	A1	371	U	N3-C4	5.48	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	564	U	C2-N3	5.48	1.41	1.37
38	A1	885	A	C4'-C3'	-5.48	1.47	1.52
38	A1	1920	A	N7-C5	-5.48	1.35	1.39
11	B2	4	C	C2-O2	-5.48	1.19	1.24
11	B2	1137	G	C8-N7	-5.48	1.27	1.30
11	B2	1353	C	P-O5'	-5.48	1.54	1.59
11	B2	1377	G	C4'-O4'	5.48	1.52	1.45
11	B2	1484	C	C2-O2	-5.48	1.19	1.24
20	BH	69	ASN	CB-CG	5.48	1.63	1.51
38	A1	181	U	C2'-C1'	5.48	1.59	1.53
38	A1	681	C	N1-C6	5.48	1.40	1.37
38	A1	1020	G	C5-C6	-5.48	1.36	1.42
38	A1	1182	C	C5-C6	-5.48	1.29	1.34
38	A1	1437	C	N1-C2	-5.48	1.34	1.40
38	A1	1942	G	C2'-C1'	-5.48	1.47	1.53
38	A1	2059	G	C5-C4	-5.48	1.34	1.38
38	A1	18	C	C4'-C3'	-5.48	1.47	1.52
38	A1	791	C	O3'-P	5.48	1.67	1.61
38	A1	1065	C	P-O5'	-5.48	1.54	1.59
38	A1	1723	A	C2'-C1'	-5.48	1.47	1.53
39	A3	94	G	O3'-P	-5.48	1.54	1.61
39	A3	103	C	P-O5'	5.48	1.65	1.59
11	B2	120	C	N3-C4	5.47	1.37	1.33
11	B2	245	U	C4-O4	-5.47	1.19	1.23
11	B2	459	G	C2-N3	-5.47	1.28	1.32
11	B2	530	G	C8-N7	-5.47	1.27	1.30
15	BC	78	PRO	CA-C	-5.47	1.42	1.52
22	BJ	26	ARG	CZ-NH1	5.47	1.40	1.33
38	A1	838	A	C6-N1	5.47	1.39	1.35
38	A1	928	A	C3'-C2'	-5.47	1.46	1.52
38	A1	1807	G	C8-N7	5.47	1.34	1.30
38	A1	2650	G	N9-C8	5.47	1.41	1.37
49	Ae	45	ARG	CZ-NH1	5.47	1.40	1.33
11	B2	167	G	C2-N3	5.47	1.37	1.32
11	B2	365	C	N1-C6	5.47	1.40	1.37
11	B2	414	G	C5'-C4'	5.47	1.57	1.51
11	B2	1029	G	C2-N2	-5.47	1.29	1.34
38	A1	671	G	C5'-C4'	5.47	1.57	1.51
38	A1	1304	G	C2'-C1'	-5.47	1.47	1.53
38	A1	1813	A	C6-N1	5.47	1.39	1.35
38	A1	2596	G	C2-N3	5.47	1.37	1.32
38	A1	2788	U	C5'-C4'	5.47	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2993	G	N9-C8	5.47	1.41	1.37
11	B2	1199	A	C3'-C2'	5.47	1.58	1.52
38	A1	633	A	C2'-O2'	5.47	1.48	1.41
38	A1	1865	U	C2-N3	-5.47	1.33	1.37
11	B2	210	A	N1-C2	5.47	1.39	1.34
11	B2	923	A	C6-N1	5.47	1.39	1.35
11	B2	990	G	N3-C4	5.47	1.39	1.35
11	B2	1010	G	O3'-P	-5.47	1.54	1.61
11	B2	1065	C	P-O5'	-5.47	1.54	1.59
11	B2	1249	A	C8-N7	5.47	1.35	1.31
38	A1	51	G	N9-C4	5.47	1.42	1.38
38	A1	215	A	C6-N6	5.47	1.38	1.33
38	A1	357	G	C2-N3	5.47	1.37	1.32
38	A1	1138	C	O4'-C1'	5.47	1.48	1.41
38	A1	1607	C	O4'-C1'	5.47	1.48	1.41
38	A1	1821	C	C5'-C4'	5.47	1.57	1.51
38	A1	2050	U	O3'-P	-5.47	1.54	1.61
38	A1	2665	G	C5'-C4'	5.47	1.57	1.51
38	A1	2696	G	C2-N3	5.47	1.37	1.32
38	A1	2887	C	C2-O2	5.47	1.29	1.24
57	Aj	30	ARG	CZ-NH2	5.47	1.40	1.33
38	A1	632	G	N9-C4	5.47	1.42	1.38
38	A1	2311	C	O3'-P	-5.47	1.54	1.61
38	A1	2342	C	C4-N4	5.47	1.38	1.33
5	AS	83	TYR	CE2-CZ	5.47	1.45	1.38
11	B2	15	U	C3'-C2'	-5.47	1.46	1.52
11	B2	499	G	C2-N2	5.47	1.40	1.34
11	B2	1315	G	N7-C5	5.47	1.42	1.39
11	B2	1448	A	C2-N3	5.47	1.38	1.33
38	A1	463	A	C8-N7	-5.47	1.27	1.31
38	A1	576	G	C2'-C1'	-5.47	1.47	1.53
38	A1	591	G	C5-C4	5.47	1.42	1.38
38	A1	851	G	O3'-P	-5.47	1.54	1.61
38	A1	909	A	N9-C8	5.47	1.42	1.37
38	A1	1505	G	N9-C8	-5.47	1.34	1.37
38	A1	1645	U	C4-O4	-5.47	1.19	1.23
38	A1	1883	C	O3'-P	-5.47	1.54	1.61
38	A1	1920	A	N3-C4	-5.47	1.31	1.34
38	A1	2177	A	C2-N3	-5.47	1.28	1.33
38	A1	2217	C	C5'-C4'	5.47	1.57	1.51
38	A1	2227	G	N9-C4	5.47	1.42	1.38
38	A1	2336	G	P-O5'	5.47	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	27	C	O4'-C1'	5.46	1.48	1.41
11	B2	87	C	C4-N4	5.46	1.38	1.33
11	B2	172	G	C8-N7	5.46	1.34	1.30
11	B2	1182	G	N3-C4	-5.46	1.31	1.35
11	B2	1241	U	C2'-C1'	-5.46	1.47	1.53
38	A1	354	G	C6-N1	5.46	1.43	1.39
38	A1	408	C	C2'-C1'	-5.46	1.47	1.53
38	A1	1187	A	C3'-C2'	-5.46	1.46	1.52
38	A1	2089	C	O3'-P	-5.46	1.54	1.61
3	Af	22	ARG	NE-CZ	5.46	1.40	1.33
11	B2	101	G	N9-C4	5.46	1.42	1.38
11	B2	233	C	P-O5'	5.46	1.65	1.59
11	B2	1197	C	O3'-P	-5.46	1.54	1.61
38	A1	1145	G	N9-C4	5.46	1.42	1.38
38	A1	1939	C	N3-C4	5.46	1.37	1.33
38	A1	2514	C	C4-N4	5.46	1.38	1.33
38	A1	3045	G	C2-N3	5.46	1.37	1.32
11	B2	146	A	C5-C4	5.46	1.42	1.38
11	B2	170	C	C3'-O3'	5.46	1.49	1.42
11	B2	233	C	C4-C5	5.46	1.47	1.43
11	B2	530	G	O3'-P	-5.46	1.54	1.61
11	B2	707	A	N3-C4	-5.46	1.31	1.34
11	B2	975	A	N9-C4	5.46	1.41	1.37
18	BF	82	ARG	CZ-NH2	5.46	1.40	1.33
23	BK	121	ARG	NE-CZ	5.46	1.40	1.33
38	A1	149	G	N9-C8	5.46	1.41	1.37
38	A1	196	A	N7-C5	-5.46	1.35	1.39
38	A1	243	G	C4'-C3'	5.46	1.59	1.53
38	A1	1975	C	C2-N3	5.46	1.40	1.35
38	A1	2480	G	N9-C4	-5.46	1.33	1.38
38	A1	2857	C	C2'-C1'	-5.46	1.47	1.53
11	B2	80	A	N9-C4	-5.46	1.34	1.37
11	B2	126	G	C8-N7	-5.46	1.27	1.30
11	B2	167	G	C5-C4	5.46	1.42	1.38
27	BO	111	ARG	NE-CZ	5.46	1.40	1.33
38	A1	259	A	C6-N1	5.46	1.39	1.35
38	A1	357	G	C8-N7	-5.46	1.27	1.30
38	A1	552	A	P-O5'	-5.46	1.54	1.59
38	A1	1254	C	C5-C6	-5.46	1.29	1.34
38	A1	1993	A	C3'-O3'	5.46	1.49	1.42
38	A1	2421	A	P-O5'	5.46	1.65	1.59
38	A1	3011	G	P-O5'	5.46	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	B1	4	G	C5-C6	5.46	1.47	1.42
11	B2	136	A	C4'-C3'	5.46	1.59	1.53
11	B2	335	G	C3'-C2'	-5.46	1.46	1.52
11	B2	420	C	O4'-C1'	5.46	1.48	1.41
11	B2	762	G	C6-N1	5.46	1.43	1.39
11	B2	984	C	C4-N4	-5.46	1.29	1.33
11	B2	1008	U	C5-C6	5.46	1.39	1.34
11	B2	1054	A	O3'-P	-5.46	1.54	1.61
11	B2	1097	G	C6-N1	5.46	1.43	1.39
38	A1	613	C	P-O5'	-5.46	1.54	1.59
38	A1	717	A	N1-C2	-5.46	1.29	1.34
38	A1	1025	A	C2-N3	5.46	1.38	1.33
38	A1	1037	C	C5'-C4'	5.46	1.57	1.51
38	A1	1713	G	N3-C4	-5.46	1.31	1.35
38	A1	2008	G	C4'-C3'	5.46	1.59	1.53
38	A1	2013	A	C5'-C4'	5.46	1.57	1.51
38	A1	2348	G	C8-N7	5.46	1.34	1.30
38	A1	2759	A	C5-C4	-5.46	1.34	1.38
11	B2	1025	U	C2-N3	-5.46	1.33	1.37
32	BT	26	ARG	NE-CZ	5.46	1.40	1.33
38	A1	449	G	C6-O6	5.46	1.29	1.24
38	A1	578	C	O4'-C1'	5.46	1.48	1.41
38	A1	858	G	N7-C5	-5.46	1.35	1.39
38	A1	1342	G	N9-C8	-5.46	1.34	1.37
38	A1	1725	A	N1-C2	5.46	1.39	1.34
38	A1	2066	C	N1-C6	5.46	1.40	1.37
38	A1	2217	C	C4-N4	5.46	1.38	1.33
38	A1	2239	C	C4-C5	5.46	1.47	1.43
38	A1	2305	U	N1-C6	-5.46	1.33	1.38
38	A1	2692	A	O4'-C1'	-5.46	1.34	1.41
38	A1	2866	A	C5-C4	5.46	1.42	1.38
11	B2	781	U	C3'-O3'	5.46	1.49	1.42
11	B2	901	G	C5-C6	5.46	1.47	1.42
38	A1	306	G	C4'-O4'	-5.46	1.38	1.45
38	A1	2204	C	C2-N3	5.46	1.40	1.35
39	A3	2	G	N3-C4	-5.46	1.31	1.35
10	B1	73	C	O4'-C1'	5.45	1.48	1.41
11	B2	135	U	O4'-C1'	-5.45	1.34	1.41
11	B2	386	C	N3-C4	5.45	1.37	1.33
11	B2	667	G	N1-C2	5.45	1.42	1.37
11	B2	1054	A	O4'-C1'	5.45	1.48	1.41
11	B2	1469	G	C2'-C1'	-5.45	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	BC	111	ARG	CZ-NH2	5.45	1.40	1.33
38	A1	106	G	C3'-C2'	-5.45	1.46	1.52
38	A1	149	G	C2-N2	-5.45	1.29	1.34
38	A1	1156	G	N7-C5	-5.45	1.35	1.39
38	A1	2258	A	C2'-C1'	-5.45	1.47	1.53
38	A1	2879	G	C6-N1	5.45	1.43	1.39
38	A1	2898	G	C5-C4	5.45	1.42	1.38
50	AF	95	SER	CA-CB	5.45	1.61	1.52
11	B2	234	G	C2-N2	5.45	1.40	1.34
11	B2	387	G	C2-N3	5.45	1.37	1.32
11	B2	752	G	N9-C4	5.45	1.42	1.38
18	BF	11	ARG	CD-NE	5.45	1.55	1.46
38	A1	732	G	C6-N1	5.45	1.43	1.39
38	A1	1751	G	N3-C4	-5.45	1.31	1.35
38	A1	2028	G	C5'-C4'	5.45	1.57	1.51
38	A1	2438	U	N1-C2	-5.45	1.33	1.38
38	A1	2767	C	C4-C5	5.45	1.47	1.43
11	B2	617	A	C6-N1	5.45	1.39	1.35
11	B2	1082	A	C6-N1	5.45	1.39	1.35
11	B2	1184	U	C4-C5	5.45	1.48	1.43
11	B2	1290	U	O3'-P	-5.45	1.54	1.61
22	BJ	43	ARG	NE-CZ	5.45	1.40	1.33
38	A1	231	G	C5-C4	-5.45	1.34	1.38
38	A1	544	A	C5-C4	5.45	1.42	1.38
38	A1	567	G	C2-N2	5.45	1.40	1.34
38	A1	609	G	C8-N7	-5.45	1.27	1.30
38	A1	835	G	N1-C2	5.45	1.42	1.37
38	A1	987	G	O4'-C1'	5.45	1.48	1.41
38	A1	1535	U	C1'-N1	5.45	1.56	1.48
38	A1	1921	U	C2'-C1'	-5.45	1.47	1.53
38	A1	2051	A	C6-N6	5.45	1.38	1.33
38	A1	2812	U	C4'-O4'	5.45	1.52	1.45
39	A3	118	G	C3'-C2'	-5.45	1.46	1.52
11	B2	407	G	P-O5'	-5.45	1.54	1.59
38	A1	522	A	N1-C2	5.45	1.39	1.34
38	A1	815	U	C4'-C3'	-5.45	1.47	1.52
38	A1	848	A	C4'-O4'	-5.45	1.38	1.45
38	A1	1631	A	C5'-C4'	5.45	1.57	1.51
39	A3	75	G	C2-N3	5.45	1.37	1.32
60	AM	71	ARG	NE-CZ	5.45	1.40	1.33
11	B2	1243	C	C2-N3	5.45	1.40	1.35
38	A1	438	G	C5-C6	-5.45	1.36	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	444	U	P-O5'	5.45	1.65	1.59
38	A1	994	G	C6-N1	5.45	1.43	1.39
38	A1	1629	G	N3-C4	5.45	1.39	1.35
38	A1	1849	A	C5'-C4'	5.45	1.57	1.51
38	A1	2213	G	C3'-C2'	-5.45	1.46	1.52
38	A1	2346	A	O3'-P	-5.45	1.54	1.61
38	A1	2522	C	P-O5'	-5.45	1.54	1.59
38	A1	2789	G	N3-C4	-5.45	1.31	1.35
66	AY	17	ARG	CZ-NH1	5.45	1.40	1.33
5	AS	113	LYS	N-CA	-5.45	1.35	1.46
11	B2	38	G	N7-C5	-5.45	1.35	1.39
11	B2	846	G	N1-C2	5.45	1.42	1.37
38	A1	854	G	N9-C8	-5.45	1.34	1.37
38	A1	1896	U	O3'-P	-5.45	1.54	1.61
38	A1	2157	U	P-O5'	-5.45	1.54	1.59
38	A1	3014	U	N1-C2	5.45	1.43	1.38
39	A3	72	G	C2'-C1'	-5.45	1.47	1.53
40	A5	17	ARG	CZ-NH2	5.45	1.40	1.33
11	B2	1185	A	C3'-C2'	5.44	1.58	1.52
38	A1	1204	U	N3-C4	5.44	1.43	1.38
38	A1	1786	G	C2-N3	5.44	1.37	1.32
38	A1	2010	G	C2'-C1'	-5.44	1.47	1.53
38	A1	2519	C	N3-C4	5.44	1.37	1.33
11	B2	354	G	C2'-C1'	-5.44	1.47	1.53
11	B2	1318	U	C5'-C4'	5.44	1.57	1.51
37	BY	17	ARG	N-CA	-5.44	1.35	1.46
38	A1	183	G	O4'-C1'	-5.44	1.34	1.41
38	A1	1710	C	C2'-C1'	-5.44	1.47	1.53
38	A1	1801	C	C4-N4	5.44	1.38	1.33
38	A1	2240	G	C4'-C3'	5.44	1.59	1.53
38	A1	2272	G	C2-N3	5.44	1.37	1.32
38	A1	2836	G	C2'-C1'	-5.44	1.47	1.53
39	A3	4	C	N3-C4	5.44	1.37	1.33
46	AD	23	PHE	CG-CD2	5.44	1.47	1.38
66	AY	73	ARG	CZ-NH1	5.44	1.40	1.33
38	A1	168	G	N7-C5	-5.44	1.35	1.39
38	A1	232	U	C2-O2	5.44	1.27	1.22
38	A1	423	G	C2-N3	5.44	1.37	1.32
38	A1	428	A	C8-N7	5.44	1.35	1.31
38	A1	759	G	N9-C8	-5.44	1.34	1.37
38	A1	910	G	N1-C2	5.44	1.42	1.37
38	A1	1184	U	C3'-C2'	-5.44	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1271	G	C2-N2	5.44	1.40	1.34
38	A1	1655	G	C5-C4	5.44	1.42	1.38
38	A1	1757	G	N1-C2	5.44	1.42	1.37
38	A1	1856	G	C5-C6	-5.44	1.36	1.42
38	A1	2312	U	C3'-O3'	5.44	1.49	1.42
38	A1	2561	G	C5-C6	-5.44	1.36	1.42
38	A1	2719	G	C6-N1	5.44	1.43	1.39
38	A1	2868	C	C2-O2	-5.44	1.19	1.24
39	A3	50	G	C5-C6	5.44	1.47	1.42
40	A5	37	GLY	N-CA	-5.44	1.37	1.46
9	AX	291	ARG	CD-NE	5.44	1.55	1.46
11	B2	1060	G	C2'-C1'	5.44	1.59	1.53
11	B2	1435	G	C5-C6	5.44	1.47	1.42
28	BP	6	TYR	CZ-OH	5.44	1.47	1.37
38	A1	57	C	N1-C6	-5.44	1.33	1.37
38	A1	562	G	C5-C4	5.44	1.42	1.38
38	A1	1897	G	N1-C2	5.44	1.42	1.37
38	A1	2027	G	O3'-P	-5.44	1.54	1.61
11	B2	81	C	O3'-P	-5.44	1.54	1.61
11	B2	335	G	C2-N2	5.44	1.40	1.34
11	B2	814	C	N1-C6	5.44	1.40	1.37
11	B2	848	G	N9-C4	5.44	1.42	1.38
11	B2	1281	U	C5'-C4'	5.44	1.57	1.51
11	B2	1377	G	C2'-C1'	-5.44	1.47	1.53
38	A1	1209	A	C2-N3	-5.44	1.28	1.33
38	A1	1302	G	C2-N3	5.44	1.37	1.32
38	A1	1762	G	C6-N1	5.44	1.43	1.39
38	A1	1906	G	C2-N2	5.44	1.40	1.34
38	A1	2115	U	P-O5'	-5.44	1.54	1.59
38	A1	2133	G	C8-N7	-5.44	1.27	1.30
38	A1	2139	A	P-O5'	5.44	1.65	1.59
38	A1	2164	G	P-O5'	5.44	1.65	1.59
38	A1	2349	U	C3'-C2'	-5.44	1.46	1.52
38	A1	2403	G	N1-C2	5.44	1.42	1.37
38	A1	2406	C	C4-N4	5.44	1.38	1.33
39	A3	125	U	C2-N3	5.44	1.41	1.37
11	B2	373	C	C2-N3	5.44	1.40	1.35
11	B2	376	G	N3-C4	5.44	1.39	1.35
11	B2	1323	A	C2'-C1'	-5.44	1.47	1.53
15	BC	24	GLU	CG-CD	5.44	1.60	1.51
38	A1	832	A	P-O5'	-5.44	1.54	1.59
38	A1	2021	G	C5-C4	5.44	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2682	G	N1-C2	5.44	1.42	1.37
38	A1	2964	A	C6-N1	5.44	1.39	1.35
11	B2	377	A	N3-C4	5.43	1.38	1.34
11	B2	542	G	C2'-C1'	-5.43	1.47	1.53
11	B2	939	C	O3'-P	-5.43	1.54	1.61
11	B2	1495	U	C2'-C1'	5.43	1.59	1.53
38	A1	371	U	O3'-P	-5.43	1.54	1.61
38	A1	460	C	C4-C5	5.43	1.47	1.43
38	A1	599	G	C5-C6	-5.43	1.36	1.42
38	A1	946	U	N3-C4	5.43	1.43	1.38
38	A1	1858	G	C8-N7	5.43	1.34	1.30
38	A1	2026	C	O3'-P	-5.43	1.54	1.61
38	A1	2288	C	N3-C4	5.43	1.37	1.33
38	A1	2441	A	N3-C4	-5.43	1.31	1.34
38	A1	2727	C	C3'-O3'	5.43	1.49	1.42
38	A1	3032	C	C4-N4	5.43	1.38	1.33
62	AO	168	PHE	CG-CD2	5.43	1.47	1.38
38	A1	29	U	C4-O4	5.43	1.27	1.23
38	A1	34	C	C4'-C3'	-5.43	1.47	1.52
38	A1	170	A	C4'-O4'	-5.43	1.38	1.45
38	A1	344	G	N3-C4	-5.43	1.31	1.35
38	A1	463	A	N3-C4	-5.43	1.31	1.34
38	A1	1013	G	N9-C8	5.43	1.41	1.37
38	A1	1026	A	C6-N1	-5.43	1.31	1.35
38	A1	1165	C	P-O5'	-5.43	1.54	1.59
38	A1	1364	C	C5'-C4'	-5.43	1.44	1.51
38	A1	2014	A	C2'-O2'	5.43	1.48	1.41
38	A1	2519	C	C2'-O2'	5.43	1.48	1.41
61	AN	113	ARG	CZ-NH2	5.43	1.40	1.33
11	B2	1100	G	N7-C5	5.43	1.42	1.39
11	B2	1237	G	P-O5'	-5.43	1.54	1.59
38	A1	1128	G	C8-N7	-5.43	1.27	1.30
38	A1	1426	G	O3'-P	-5.43	1.54	1.61
38	A1	1951	G	C5'-C4'	5.43	1.57	1.51
38	A1	2163	G	N9-C8	5.43	1.41	1.37
38	A1	2450	A	C5'-C4'	5.43	1.57	1.51
10	B1	27	A	C6-N6	5.43	1.38	1.33
11	B2	599	G	C3'-O3'	5.43	1.49	1.42
11	B2	618	G	N7-C5	-5.43	1.35	1.39
11	B2	717	C	N1-C6	5.43	1.40	1.37
11	B2	772	G	N9-C8	5.43	1.41	1.37
17	BE	159	PHE	CD1-CE1	5.43	1.50	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	415	U	C2'-C1'	5.43	1.59	1.53
38	A1	985	A	N7-C5	-5.43	1.35	1.39
38	A1	1176	C	O3'-P	-5.43	1.54	1.61
38	A1	1190	G	N9-C8	5.43	1.41	1.37
38	A1	1803	U	C2-N3	5.43	1.41	1.37
38	A1	1844	C	C4-C5	-5.43	1.38	1.43
38	A1	1891	C	C2'-C1'	-5.43	1.47	1.53
38	A1	2549	A	C1'-N9	5.43	1.56	1.48
38	A1	2652	G	O3'-P	-5.43	1.54	1.61
38	A1	2727	C	N1-C6	5.43	1.40	1.37
39	A3	31	U	C3'-C2'	-5.43	1.46	1.52
42	Aa	41	ARG	NE-CZ	5.43	1.40	1.33
61	AN	82	TYR	CG-CD1	5.43	1.46	1.39
11	B2	967	C	C4-C5	-5.43	1.38	1.43
38	A1	1112	G	N9-C8	-5.43	1.34	1.37
38	A1	1644	G	C2'-C1'	-5.43	1.47	1.53
38	A1	1845	C	C1'-N1	5.43	1.56	1.48
38	A1	2043	A	C6-N1	5.43	1.39	1.35
38	A1	2400	U	P-O5'	-5.43	1.54	1.59
38	A1	2647	G	N7-C5	5.43	1.42	1.39
11	B2	129	G	N7-C5	-5.43	1.35	1.39
11	B2	188	C	N3-C4	5.43	1.37	1.33
11	B2	780	C	O4'-C1'	5.43	1.48	1.41
11	B2	868	C	C5'-C4'	5.43	1.57	1.51
11	B2	936	A	N3-C4	-5.43	1.31	1.34
11	B2	1395	G	C5-C4	5.43	1.42	1.38
11	B2	1480	G	C3'-C2'	-5.43	1.46	1.52
38	A1	446	G	C5-C4	5.43	1.42	1.38
38	A1	1040	C	C2'-O2'	5.43	1.48	1.41
38	A1	1600	G	C2-N2	5.43	1.40	1.34
38	A1	2372	C	C4-N4	5.43	1.38	1.33
38	A1	2475	G	C2-N3	5.43	1.37	1.32
39	A3	47	G	O3'-P	-5.43	1.54	1.61
39	A3	68	C	N1-C6	5.43	1.40	1.37
59	AL	68	GLU	CD-OE2	5.43	1.31	1.25
11	B2	486	A	C1'-N9	-5.42	1.39	1.46
11	B2	839	G	N1-C2	5.42	1.42	1.37
11	B2	1095	C	C2-N3	5.42	1.40	1.35
38	A1	121	G	C1'-N9	5.42	1.56	1.48
38	A1	556	G	N9-C8	5.42	1.41	1.37
38	A1	723	A	C8-N7	5.42	1.35	1.31
38	A1	769	G	C8-N7	-5.42	1.27	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1832	G	C8-N7	5.42	1.34	1.30
38	A1	1934	C	C5'-C4'	5.42	1.57	1.51
38	A1	2439	G	N7-C5	-5.42	1.35	1.39
39	A3	67	U	C5'-C4'	5.42	1.57	1.51
43	AB	146	GLY	CA-C	-5.42	1.43	1.51
10	B1	72	C	C5'-C4'	5.42	1.57	1.51
38	A1	1223	A	N9-C4	-5.42	1.34	1.37
38	A1	1591	C	C2'-C1'	-5.42	1.47	1.53
38	A1	2051	A	C6-N1	5.42	1.39	1.35
11	B2	48	G	C6-N1	5.42	1.43	1.39
11	B2	656	U	N1-C2	5.42	1.43	1.38
11	B2	925	U	C2'-C1'	5.42	1.59	1.53
24	BL	33	ARG	NE-CZ	5.42	1.40	1.33
25	BM	84	ARG	CZ-NH1	5.42	1.40	1.33
38	A1	369	G	C3'-C2'	5.42	1.58	1.52
38	A1	672	C	C4'-C3'	5.42	1.59	1.53
38	A1	854	G	C2'-C1'	-5.42	1.47	1.53
38	A1	1472	U	C4'-C3'	5.42	1.59	1.53
38	A1	1944	C	C2-N3	-5.42	1.31	1.35
38	A1	2401	A	C4'-O4'	-5.42	1.38	1.45
38	A1	2707	G	N3-C4	5.42	1.39	1.35
11	B2	484	U	C2'-C1'	-5.42	1.47	1.53
11	B2	687	G	O3'-P	-5.42	1.54	1.61
38	A1	422	G	C6-N1	5.42	1.43	1.39
38	A1	454	C	P-O5'	-5.42	1.54	1.59
38	A1	2108	U	C2-N3	5.42	1.41	1.37
38	A1	2141	C	C5-C6	-5.42	1.30	1.34
41	AA	83	SER	CA-CB	5.42	1.61	1.52
11	B2	392	G	N1-C2	5.42	1.42	1.37
11	B2	398	C	O3'-P	-5.42	1.54	1.61
11	B2	402	G	C2'-C1'	-5.42	1.47	1.53
11	B2	822	A	C6-N6	5.42	1.38	1.33
11	B2	1325	C	C4-N4	5.42	1.38	1.33
38	A1	103	A	C8-N7	5.42	1.35	1.31
38	A1	352	G	C2'-C1'	-5.42	1.47	1.53
38	A1	661	G	N1-C2	5.42	1.42	1.37
38	A1	693	G	C8-N7	-5.42	1.27	1.30
38	A1	855	G	N7-C5	5.42	1.42	1.39
38	A1	1039	C	C2'-C1'	-5.42	1.47	1.53
38	A1	1173	G	C5-C6	-5.42	1.36	1.42
38	A1	1178	G	O5'-C5'	5.42	1.53	1.44
38	A1	2261	C	P-O5'	-5.42	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
39	A3	11	A	C5-C4	5.42	1.42	1.38
61	AN	10	ARG	NE-CZ	5.42	1.40	1.33
11	B2	120	C	C2-N3	5.42	1.40	1.35
11	B2	283	U	O4'-C1'	-5.42	1.34	1.41
11	B2	297	G	C3'-C2'	5.42	1.58	1.52
11	B2	929	C	C5'-C4'	5.42	1.57	1.51
30	BR	100	PHE	CG-CD1	5.42	1.46	1.38
38	A1	272	G	N9-C8	5.42	1.41	1.37
38	A1	316	G	C2-N2	5.42	1.40	1.34
38	A1	1223	A	C3'-C2'	5.42	1.58	1.52
38	A1	1259	G	C2'-C1'	-5.42	1.47	1.53
38	A1	1307	C	C4-C5	5.42	1.47	1.43
38	A1	1362	G	C2-N3	5.42	1.37	1.32
38	A1	1663	C	C1'-N1	5.42	1.56	1.48
38	A1	2211	C	N3-C4	5.42	1.37	1.33
38	A1	2666	G	C2'-C1'	-5.42	1.47	1.53
38	A1	2973	A	N9-C8	5.42	1.42	1.37
11	B2	264	C	C2'-C1'	-5.42	1.47	1.53
11	B2	1415	U	C4-O4	5.42	1.27	1.23
38	A1	1545	C	N1-C2	-5.42	1.34	1.40
38	A1	1703	G	N1-C2	5.42	1.42	1.37
60	AM	8	ARG	CD-NE	5.42	1.55	1.46
10	B1	69	G	N9-C4	-5.41	1.33	1.38
22	BJ	43	ARG	CD-NE	5.41	1.55	1.46
38	A1	597	C	C2-N3	5.41	1.40	1.35
38	A1	1459	A	N7-C5	-5.41	1.36	1.39
38	A1	1732	C	C4-N4	-5.41	1.29	1.33
38	A1	2063	U	C5-C6	5.41	1.39	1.34
38	A1	2285	G	C2'-C1'	-5.41	1.47	1.53
38	A1	2703	G	N9-C8	5.41	1.41	1.37
11	B2	266	A	O4'-C1'	5.41	1.48	1.41
38	A1	33	U	C3'-O3'	5.41	1.49	1.42
38	A1	307	C	C2-O2	-5.41	1.19	1.24
38	A1	1010	G	C5-C4	-5.41	1.34	1.38
38	A1	1234	A	C4'-C3'	-5.41	1.47	1.52
38	A1	1666	G	N3-C4	5.41	1.39	1.35
38	A1	2150	G	C5-C4	5.41	1.42	1.38
38	A1	2986	G	O3'-P	-5.41	1.54	1.61
11	B2	176	U	C2'-C1'	-5.41	1.47	1.53
11	B2	972	C	N1-C6	5.41	1.40	1.37
11	B2	1241	U	C2-O2	5.41	1.27	1.22
11	B2	1319	C	C4-C5	5.41	1.47	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	237	G	C2-N2	5.41	1.40	1.34
38	A1	450	G	N3-C4	5.41	1.39	1.35
38	A1	501	C	C2-N3	5.41	1.40	1.35
38	A1	661	G	C4'-O4'	5.41	1.52	1.45
38	A1	794	G	O3'-P	-5.41	1.54	1.61
38	A1	841	U	C3'-O3'	5.41	1.49	1.42
38	A1	1078	G	C8-N7	-5.41	1.27	1.30
38	A1	1214	C	C2'-C1'	-5.41	1.47	1.53
38	A1	1560	G	C2'-C1'	-5.41	1.47	1.53
38	A1	1759	A	N3-C4	5.41	1.38	1.34
38	A1	1943	C	C2'-C1'	-5.41	1.47	1.53
38	A1	2545	A	C5-C4	5.41	1.42	1.38
39	A3	104	C	N1-C2	5.41	1.45	1.40
11	B2	99	C	C4-C5	5.41	1.47	1.43
11	B2	284	A	O3'-P	-5.41	1.54	1.61
11	B2	491	G	N7-C5	-5.41	1.36	1.39
11	B2	576	C	N1-C6	-5.41	1.33	1.37
11	B2	1220	G	O3'-P	-5.41	1.54	1.61
11	B2	1320	A	C8-N7	5.41	1.35	1.31
20	BH	42	ARG	NE-CZ	5.41	1.40	1.33
38	A1	83	G	C5'-C4'	-5.41	1.44	1.51
38	A1	207	A	C6-N6	5.41	1.38	1.33
38	A1	378	G	N3-C4	-5.41	1.31	1.35
38	A1	930	G	C5-C6	-5.41	1.36	1.42
38	A1	964	C	C5-C6	-5.41	1.30	1.34
38	A1	1176	C	C2-N3	5.41	1.40	1.35
38	A1	1250	A	C5'-C4'	5.41	1.57	1.51
38	A1	2038	C	C4-N4	5.41	1.38	1.33
38	A1	2307	C	C4-N4	5.41	1.38	1.33
38	A1	2815	C	C2'-C1'	-5.41	1.47	1.53
38	A1	2828	G	O3'-P	-5.41	1.54	1.61
45	AC	84	ARG	NE-CZ	5.41	1.40	1.33
11	B2	580	G	C6-N1	5.41	1.43	1.39
11	B2	964	A	C1'-N9	5.41	1.56	1.48
38	A1	1563	G	N1-C2	5.41	1.42	1.37
38	A1	2356	U	C4-C5	5.41	1.48	1.43
11	B2	90	C	C2-N3	5.41	1.40	1.35
11	B2	206	C	N1-C6	-5.41	1.33	1.37
11	B2	411	C	C4-N4	5.41	1.38	1.33
11	B2	1055	C	C5'-C4'	5.41	1.57	1.51
11	B2	1421	C	P-O5'	-5.41	1.54	1.59
38	A1	132	G	N7-C5	-5.41	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1208	A	N7-C5	-5.41	1.36	1.39
38	A1	1328	G	C3'-O3'	5.41	1.49	1.42
38	A1	2116	G	C6-N1	5.41	1.43	1.39
38	A1	2550	A	C6-N1	5.41	1.39	1.35
38	A1	2786	G	N9-C8	5.41	1.41	1.37
38	A1	3018	C	C3'-C2'	5.41	1.58	1.52
11	B2	198	A	C5'-C4'	5.40	1.57	1.51
11	B2	887	G	N7-C5	5.40	1.42	1.39
38	A1	1267	A	P-O5'	5.40	1.65	1.59
38	A1	1427	A	C6-N6	5.40	1.38	1.33
38	A1	2525	C	P-O5'	-5.40	1.54	1.59
11	B2	509	C	C4'-O4'	5.40	1.52	1.45
11	B2	791	G	N1-C2	5.40	1.42	1.37
38	A1	672	C	C4-N4	5.40	1.38	1.33
38	A1	792	A	N9-C8	5.40	1.42	1.37
38	A1	922	C	C2'-C1'	-5.40	1.47	1.53
38	A1	964	C	C4'-O4'	-5.40	1.38	1.45
38	A1	1701	C	C4'-O4'	-5.40	1.38	1.45
38	A1	2208	C	P-O5'	5.40	1.65	1.59
38	A1	2291	G	C8-N7	-5.40	1.27	1.30
5	AS	50	TYR	CE2-CZ	5.40	1.45	1.38
5	AS	135	ARG	CZ-NH1	5.40	1.40	1.33
10	B1	43	G	N3-C4	-5.40	1.31	1.35
11	B2	234	G	N1-C2	5.40	1.42	1.37
11	B2	711	U	C4-C5	-5.40	1.38	1.43
11	B2	787	U	C1'-N1	-5.40	1.39	1.46
11	B2	965	G	N9-C8	5.40	1.41	1.37
11	B2	1172	A	C5'-C4'	5.40	1.57	1.51
11	B2	1271	G	N9-C4	5.40	1.42	1.38
36	BX	35	ARG	NE-CZ	5.40	1.40	1.33
38	A1	122	G	N1-C2	5.40	1.42	1.37
38	A1	318	G	C2-N2	5.40	1.40	1.34
38	A1	511	A	C5'-C4'	5.40	1.57	1.51
38	A1	573	G	C2'-C1'	-5.40	1.47	1.53
38	A1	933	G	C5-C6	-5.40	1.36	1.42
38	A1	1811	G	O3'-P	5.40	1.67	1.61
38	A1	1994	G	N9-C8	-5.40	1.34	1.37
38	A1	2347	G	C2-N2	5.40	1.40	1.34
38	A1	2502	C	N3-C4	5.40	1.37	1.33
38	A1	2955	G	C8-N7	-5.40	1.27	1.30
39	A3	9	A	C5-C6	-5.40	1.36	1.41
39	A3	93	G	N1-C2	5.40	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
47	Ad	6	ARG	CD-NE	5.40	1.55	1.46
11	B2	1004	U	P-O5'	-5.40	1.54	1.59
11	B2	1354	A	P-O5'	-5.40	1.54	1.59
38	A1	386	A	P-O5'	-5.40	1.54	1.59
38	A1	1470	C	C5-C6	5.40	1.38	1.34
38	A1	2872	G	C8-N7	5.40	1.34	1.30
11	B2	63	G	N9-C4	-5.40	1.33	1.38
11	B2	90	C	N1-C6	5.40	1.40	1.37
11	B2	168	G	N9-C8	5.40	1.41	1.37
11	B2	476	C	C4-N4	5.40	1.38	1.33
38	A1	32	C	C2-O2	5.40	1.29	1.24
38	A1	429	U	C3'-O3'	5.40	1.49	1.42
38	A1	694	A	N9-C4	-5.40	1.34	1.37
38	A1	1012	G	C2-N3	5.40	1.37	1.32
38	A1	1234	A	O4'-C1'	5.40	1.48	1.41
38	A1	1447	G	C6-N1	5.40	1.43	1.39
38	A1	1825	G	C2'-C1'	-5.40	1.47	1.53
38	A1	1849	A	N9-C8	-5.40	1.33	1.37
38	A1	2226	G	O3'-P	-5.40	1.54	1.61
46	AD	78	ARG	CD-NE	5.40	1.55	1.46
55	Ai	80	ARG	NE-CZ	5.40	1.40	1.33
56	AJ	51	ARG	CZ-NH1	5.40	1.40	1.33
11	B2	287	G	C5'-C4'	5.40	1.57	1.51
11	B2	958	G	N1-C2	5.40	1.42	1.37
11	B2	1324	U	C4'-O4'	-5.40	1.38	1.45
38	A1	2331	A	C3'-C2'	-5.40	1.46	1.52
38	A1	2646	A	N1-C2	-5.40	1.29	1.34
11	B2	210	A	N7-C5	-5.39	1.36	1.39
11	B2	542	G	C3'-O3'	5.39	1.49	1.42
11	B2	1370	U	C2-N3	5.39	1.41	1.37
11	B2	1421	C	N1-C6	-5.39	1.33	1.37
38	A1	75	G	O4'-C1'	-5.39	1.34	1.41
38	A1	88	G	C6-N1	5.39	1.43	1.39
38	A1	328	G	N7-C5	5.39	1.42	1.39
38	A1	361	G	C2-N2	5.39	1.40	1.34
38	A1	686	C	C2-N3	5.39	1.40	1.35
38	A1	1935	C	C2-O2	5.39	1.29	1.24
38	A1	2066	C	C4'-C3'	-5.39	1.47	1.52
38	A1	2539	G	C6-N1	5.39	1.43	1.39
38	A1	2982	G	C3'-O3'	5.39	1.49	1.42
48	AE	71	ARG	NE-CZ	5.39	1.40	1.33
10	B1	61	U	C3'-C2'	-5.39	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	396	C	N3-C4	5.39	1.37	1.33
11	B2	534	G	N9-C8	5.39	1.41	1.37
11	B2	952	A	C5'-C4'	5.39	1.57	1.51
11	B2	1223	C	C5'-C4'	5.39	1.57	1.51
38	A1	279	G	C2-N2	5.39	1.40	1.34
38	A1	330	U	C2'-C1'	-5.39	1.47	1.53
38	A1	909	A	N1-C2	5.39	1.39	1.34
38	A1	952	C	C4'-C3'	-5.39	1.47	1.52
38	A1	1298	C	C4-C5	5.39	1.47	1.43
38	A1	1369	G	C8-N7	5.39	1.34	1.30
38	A1	1603	G	N7-C5	5.39	1.42	1.39
38	A1	2022	U	C4-C5	-5.39	1.38	1.43
38	A1	2188	C	C5-C6	-5.39	1.30	1.34
39	A3	85	C	C5-C6	5.39	1.38	1.34
44	Ab	84	VAL	N-CA	-5.39	1.35	1.46
11	B2	204	G	C2'-C1'	-5.39	1.47	1.53
11	B2	723	G	C4'-O4'	-5.39	1.38	1.45
11	B2	934	G	C5-C4	5.39	1.42	1.38
11	B2	1056	G	C6-N1	5.39	1.43	1.39
38	A1	347	G	C4'-C3'	5.39	1.59	1.53
38	A1	1074	G	N9-C8	5.39	1.41	1.37
38	A1	1519	G	C2-N3	5.39	1.37	1.32
38	A1	2187	C	O4'-C1'	5.39	1.48	1.41
11	B2	264	C	N1-C2	5.39	1.45	1.40
11	B2	1139	A	C2'-C1'	-5.39	1.47	1.53
38	A1	648	C	C4-N4	5.39	1.38	1.33
38	A1	723	A	C6-N6	5.39	1.38	1.33
38	A1	983	G	N1-C2	5.39	1.42	1.37
38	A1	1492	C	C5'-C4'	5.39	1.57	1.51
38	A1	1810	G	C6-N1	5.39	1.43	1.39
38	A1	2360	G	N7-C5	-5.39	1.36	1.39
65	AV	48	ARG	CZ-NH2	5.39	1.40	1.33
11	B2	1237	G	N7-C5	-5.39	1.36	1.39
11	B2	1333	G	C2'-C1'	-5.39	1.47	1.53
29	BQ	135	TYR	CG-CD1	5.39	1.46	1.39
38	A1	582	A	C6-N1	5.39	1.39	1.35
38	A1	1996	C	P-O5'	-5.39	1.54	1.59
38	A1	2482	G	P-O5'	5.39	1.65	1.59
38	A1	2531	G	C8-N7	-5.39	1.27	1.30
11	B2	106	A	O3'-P	-5.39	1.54	1.61
11	B2	707	A	C8-N7	-5.39	1.27	1.31
11	B2	1109	C	N1-C6	5.39	1.40	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1142	G	C2'-C1'	-5.39	1.47	1.53
38	A1	314	A	N1-C2	5.39	1.39	1.34
38	A1	1544	C	P-O5'	-5.39	1.54	1.59
38	A1	1833	G	N7-C5	-5.39	1.36	1.39
38	A1	2448	A	N9-C8	5.39	1.42	1.37
38	A1	2629	U	C4'-O4'	-5.39	1.38	1.45
40	A5	16	ARG	CZ-NH1	5.39	1.40	1.33
10	B1	35	G	C3'-C2'	5.38	1.58	1.52
11	B2	652	C	C4-N4	5.38	1.38	1.33
11	B2	656	U	N3-C4	-5.38	1.33	1.38
11	B2	1437	G	N7-C5	-5.38	1.36	1.39
33	BU	19	ARG	CZ-NH2	5.38	1.40	1.33
38	A1	7	G	N3-C4	5.38	1.39	1.35
38	A1	763	A	C6-N6	5.38	1.38	1.33
38	A1	2740	G	O4'-C1'	5.38	1.48	1.41
38	A1	2966	C	C4'-C3'	5.38	1.59	1.53
38	A1	3011	G	N7-C5	-5.38	1.36	1.39
40	A5	64	ARG	CZ-NH2	5.38	1.40	1.33
43	AB	189	TRP	NE1-CE2	-5.38	1.30	1.37
48	AE	119	GLU	CB-CG	5.38	1.62	1.52
11	B2	576	C	C2-N3	-5.38	1.31	1.35
24	BL	35	SER	CA-CB	5.38	1.61	1.52
38	A1	579	C	N3-C4	5.38	1.37	1.33
38	A1	963	G	C6-N1	5.38	1.43	1.39
38	A1	2420	C	C5-C6	-5.38	1.30	1.34
38	A1	2500	G	C2-N3	5.38	1.37	1.32
39	A3	52	U	C1'-N1	5.38	1.56	1.48
60	AM	187	ARG	CZ-NH2	5.38	1.40	1.33
11	B2	100	A	O3'-P	-5.38	1.54	1.61
11	B2	450	A	N1-C2	5.38	1.39	1.34
11	B2	822	A	C2'-C1'	-5.38	1.47	1.53
11	B2	1030	U	C4-C5	5.38	1.48	1.43
11	B2	1209	C	C4-N4	5.38	1.38	1.33
11	B2	1474	A	C8-N7	5.38	1.35	1.31
38	A1	1039	C	C1'-N1	5.38	1.56	1.48
38	A1	1472	U	N1-C2	5.38	1.43	1.38
38	A1	1763	A	O3'-P	-5.38	1.54	1.61
38	A1	2658	G	C2-N3	5.38	1.37	1.32
11	B2	44	C	O4'-C1'	-5.38	1.34	1.41
11	B2	1089	C	C3'-O3'	5.38	1.49	1.42
38	A1	1415	C	C4-C5	5.38	1.47	1.43
38	A1	1758	U	N1-C6	5.38	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1999	G	C6-O6	-5.38	1.19	1.24
38	A1	2414	G	C4'-O4'	5.38	1.52	1.45
38	A1	2815	C	C4'-O4'	-5.38	1.38	1.45
39	A3	18	G	O3'-P	-5.38	1.54	1.61
10	B1	10	G	C4'-O4'	-5.38	1.38	1.45
11	B2	6	G	C6-N1	5.38	1.43	1.39
11	B2	1126	G	N9-C4	5.38	1.42	1.38
38	A1	191	U	N1-C6	5.38	1.42	1.38
38	A1	483	C	C4-C5	5.38	1.47	1.43
38	A1	641	G	C2-N2	-5.38	1.29	1.34
38	A1	1006	A	C2'-C1'	-5.38	1.47	1.53
38	A1	1024	G	C2-N3	5.38	1.37	1.32
38	A1	1484	U	C4-C5	5.38	1.48	1.43
38	A1	2586	A	N7-C5	-5.38	1.36	1.39
11	B2	92	G	C2-N3	5.38	1.37	1.32
11	B2	389	G	N7-C5	-5.38	1.36	1.39
11	B2	644	G	C5'-C4'	5.38	1.57	1.51
11	B2	900	G	C6-N1	5.38	1.43	1.39
11	B2	978	G	C5'-C4'	5.38	1.57	1.51
11	B2	983	G	C6-O6	-5.38	1.19	1.24
38	A1	224	G	C4'-O4'	5.38	1.52	1.45
38	A1	1296	A	C6-N6	5.38	1.38	1.33
38	A1	1623	C	C4'-O4'	-5.38	1.38	1.45
38	A1	1856	G	C5'-C4'	5.38	1.57	1.51
38	A1	2151	C	C4-C5	-5.38	1.38	1.43
38	A1	2659	G	C2-N3	5.38	1.37	1.32
38	A1	2881	G	C2'-C1'	-5.38	1.47	1.53
38	A1	2963	G	C2-N3	5.38	1.37	1.32
7	AU	77	TYR	CG-CD1	5.38	1.46	1.39
11	B2	231	G	C4'-C3'	5.38	1.59	1.53
11	B2	262	G	C2'-C1'	-5.38	1.47	1.53
11	B2	365	C	C2'-C1'	-5.38	1.47	1.53
11	B2	584	C	C2-O2	5.38	1.29	1.24
11	B2	727	G	C2-N3	5.38	1.37	1.32
11	B2	754	G	N1-C2	5.38	1.42	1.37
18	BF	92	ARG	CZ-NH1	5.38	1.40	1.33
38	A1	142	G	N3-C4	-5.38	1.31	1.35
38	A1	982	G	C5-C6	-5.38	1.36	1.42
38	A1	1794	C	N1-C6	5.38	1.40	1.37
38	A1	1948	A	O3'-P	-5.38	1.54	1.61
38	A1	2634	U	C4-O4	5.38	1.27	1.23
60	AM	166	GLY	CA-C	-5.38	1.43	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	206	C	C4'-O4'	-5.37	1.38	1.45
11	B2	516	A	N9-C8	5.37	1.42	1.37
11	B2	947	G	C8-N7	-5.37	1.27	1.30
11	B2	1105	C	C4'-C3'	-5.37	1.47	1.52
14	BB	85	GLU	CD-OE1	5.37	1.31	1.25
38	A1	355	G	N3-C4	-5.37	1.31	1.35
38	A1	488	A	N3-C4	5.37	1.38	1.34
38	A1	652	G	N9-C8	5.37	1.41	1.37
38	A1	1187	A	N7-C5	-5.37	1.36	1.39
38	A1	1672	G	C6-N1	-5.37	1.35	1.39
38	A1	1966	C	N1-C6	5.37	1.40	1.37
38	A1	2033	G	C3'-C2'	-5.37	1.46	1.52
38	A1	2177	A	C5-C4	5.37	1.42	1.38
38	A1	2197	U	C2-N3	-5.37	1.33	1.37
38	A1	2377	C	C4'-C3'	5.37	1.59	1.53
38	A1	2604	G	N9-C4	-5.37	1.33	1.38
38	A1	2975	A	C2-N3	5.37	1.38	1.33
44	Ab	122	GLY	C-N	5.37	1.46	1.34
10	B1	31	G	N7-C5	-5.37	1.36	1.39
11	B2	501	G	C4'-O4'	-5.37	1.38	1.45
11	B2	642	G	N1-C2	5.37	1.42	1.37
11	B2	986	G	C3'-O3'	5.37	1.49	1.42
38	A1	506	G	N9-C8	5.37	1.41	1.37
38	A1	540	A	C6-N1	-5.37	1.31	1.35
38	A1	582	A	C6-N6	5.37	1.38	1.33
38	A1	663	A	C4'-O4'	5.37	1.52	1.45
38	A1	2198	U	C4-C5	5.37	1.48	1.43
38	A1	2595	C	C3'-O3'	5.37	1.49	1.42
38	A1	2785	G	C5'-C4'	-5.37	1.45	1.51
10	B1	25	G	N1-C2	5.37	1.42	1.37
11	B2	292	U	N3-C4	5.37	1.43	1.38
11	B2	376	G	N7-C5	5.37	1.42	1.39
11	B2	588	C	O4'-C1'	-5.37	1.34	1.41
38	A1	1157	U	C2'-C1'	-5.37	1.47	1.53
38	A1	1541	U	N1-C2	5.37	1.43	1.38
56	AJ	16	ARG	CZ-NH2	5.37	1.40	1.33
11	B2	518	U	C2-N3	5.37	1.41	1.37
11	B2	614	G	O3'-P	-5.37	1.54	1.61
11	B2	979	U	C2-N3	5.37	1.41	1.37
11	B2	1265	G	C1'-N9	5.37	1.56	1.48
11	B2	1395	G	C6-N1	5.37	1.43	1.39
38	A1	36	G	N3-C4	5.37	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	252	A	C2-N3	5.37	1.38	1.33
38	A1	311	C	N1-C6	5.37	1.40	1.37
38	A1	899	A	C6-N6	5.37	1.38	1.33
38	A1	1347	U	C1'-N1	5.37	1.56	1.48
38	A1	1566	G	C5-C4	5.37	1.42	1.38
38	A1	1604	G	N7-C5	-5.37	1.36	1.39
38	A1	1736	G	N9-C4	5.37	1.42	1.38
38	A1	1993	A	C6-N6	5.37	1.38	1.33
38	A1	2359	G	C2'-C1'	-5.37	1.47	1.53
38	A1	2595	C	C2-N3	5.37	1.40	1.35
38	A1	2667	U	C4-C5	5.37	1.48	1.43
38	A1	231	G	N3-C4	-5.37	1.31	1.35
38	A1	565	A	C2'-C1'	-5.37	1.47	1.53
38	A1	1413	A	C2-N3	5.37	1.38	1.33
38	A1	1884	C	N1-C6	5.37	1.40	1.37
38	A1	2057	G	P-O5'	-5.37	1.54	1.59
38	A1	2225	C	C2'-C1'	-5.37	1.47	1.53
38	A1	2557	C	C4'-C3'	-5.37	1.47	1.52
11	B2	195	C	P-O5'	-5.37	1.54	1.59
11	B2	338	C	C2'-C1'	-5.37	1.47	1.53
11	B2	893	U	N3-C4	5.37	1.43	1.38
38	A1	68	G	C2-N3	5.37	1.37	1.32
38	A1	110	A	N7-C5	-5.37	1.36	1.39
38	A1	301	G	C3'-C2'	-5.37	1.46	1.52
38	A1	571	G	C3'-O3'	5.37	1.49	1.42
38	A1	587	A	C6-N6	5.37	1.38	1.33
38	A1	1158	G	N7-C5	-5.37	1.36	1.39
38	A1	1281	A	C6-N6	5.37	1.38	1.33
38	A1	1802	G	N7-C5	-5.37	1.36	1.39
38	A1	2255	C	N1-C6	5.37	1.40	1.37
38	A1	2256	G	N3-C4	5.37	1.39	1.35
38	A1	2657	A	N9-C8	5.37	1.42	1.37
38	A1	2865	C	O3'-P	5.37	1.67	1.61
38	A1	2988	A	C6-N6	5.37	1.38	1.33
39	A3	75	G	N3-C4	-5.37	1.31	1.35
11	B2	202	G	N3-C4	5.36	1.39	1.35
11	B2	213	C	C2-N3	5.36	1.40	1.35
11	B2	461	A	C6-N6	5.36	1.38	1.33
11	B2	1170	C	C5'-C4'	5.36	1.57	1.51
11	B2	1207	G	N1-C2	5.36	1.42	1.37
11	B2	1258	C	C3'-C2'	5.36	1.58	1.52
38	A1	379	U	C4'-O4'	5.36	1.52	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	426	G	C8-N7	5.36	1.34	1.30
38	A1	545	G	C3'-C2'	5.36	1.58	1.52
38	A1	1324	G	C6-N1	5.36	1.43	1.39
38	A1	1380	G	N1-C2	5.36	1.42	1.37
38	A1	1689	G	C2-N3	-5.36	1.28	1.32
38	A1	2775	G	N9-C4	-5.36	1.33	1.38
38	A1	2838	U	C3'-C2'	-5.36	1.46	1.52
38	A1	2948	A	N9-C8	5.36	1.42	1.37
39	A3	98	G	N3-C4	-5.36	1.31	1.35
55	Ai	48	ARG	NE-CZ	5.36	1.40	1.33
11	B2	6	G	C8-N7	5.36	1.34	1.30
11	B2	1005	G	C2-N2	5.36	1.40	1.34
11	B2	1140	A	C6-N1	5.36	1.39	1.35
38	A1	332	A	C5-C6	5.36	1.45	1.41
38	A1	716	U	C4'-O4'	-5.36	1.38	1.45
38	A1	1209	A	C2'-C1'	-5.36	1.47	1.53
38	A1	1693	G	C2'-C1'	-5.36	1.47	1.53
38	A1	2018	C	P-O5'	-5.36	1.54	1.59
11	B2	406	U	C4-C5	5.36	1.48	1.43
11	B2	940	U	N3-C4	5.36	1.43	1.38
11	B2	1216	A	N3-C4	-5.36	1.31	1.34
11	B2	1326	G	C2-N3	5.36	1.37	1.32
11	B2	1369	C	C1'-N1	5.36	1.56	1.48
38	A1	517	A	N7-C5	-5.36	1.36	1.39
38	A1	1131	G	N9-C8	5.36	1.41	1.37
38	A1	1262	C	C5-C6	-5.36	1.30	1.34
38	A1	1397	U	N1-C2	5.36	1.43	1.38
38	A1	1608	G	C3'-O3'	5.36	1.49	1.42
38	A1	2023	A	C4'-C3'	5.36	1.59	1.53
38	A1	2062	A	C6-N1	5.36	1.39	1.35
38	A1	2225	C	C2-N3	5.36	1.40	1.35
38	A1	2320	U	C2-N3	5.36	1.41	1.37
38	A1	2547	A	C5-C6	5.36	1.45	1.41
38	A1	2705	C	N1-C6	5.36	1.40	1.37
44	Ab	59	ARG	CZ-NH2	5.36	1.40	1.33
45	AC	139	TYR	CZ-OH	5.36	1.47	1.37
11	B2	672	G	C2-N2	5.36	1.40	1.34
11	B2	1020	G	N9-C8	-5.36	1.34	1.37
11	B2	1095	C	C3'-C2'	5.36	1.58	1.52
11	B2	1287	G	N9-C8	-5.36	1.34	1.37
29	BQ	80	ARG	CZ-NH2	5.36	1.40	1.33
38	A1	84	A	N7-C5	-5.36	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	304	G	N1-C2	5.36	1.42	1.37
38	A1	366	G	C6-N1	-5.36	1.35	1.39
38	A1	793	C	C2'-O2'	-5.36	1.34	1.41
38	A1	1065	C	C4-N4	5.36	1.38	1.33
39	A3	11	A	C6-N6	5.36	1.38	1.33
11	B2	186	U	C2-N3	5.36	1.41	1.37
11	B2	219	C	C4-C5	5.36	1.47	1.43
11	B2	254	G	N1-C2	5.36	1.42	1.37
11	B2	314	G	C5'-C4'	-5.36	1.45	1.51
11	B2	561	A	P-O5'	5.36	1.65	1.59
11	B2	977	G	C8-N7	5.36	1.34	1.30
11	B2	1225	C	N1-C2	5.36	1.45	1.40
38	A1	86	G	C8-N7	-5.36	1.27	1.30
38	A1	90	A	N7-C5	-5.36	1.36	1.39
38	A1	148	C	C2-N3	5.36	1.40	1.35
38	A1	261	A	C5-C6	5.36	1.45	1.41
38	A1	849	C	C4-N4	5.36	1.38	1.33
38	A1	1759	A	C1'-N9	5.36	1.56	1.48
38	A1	2528	U	N1-C2	5.36	1.43	1.38
38	A1	2701	U	C4'-C3'	5.36	1.59	1.53
38	A1	3006	G	C2'-C1'	-5.36	1.47	1.53
38	A1	3006	G	C5-C6	-5.36	1.36	1.42
11	B2	33	U	C3'-O3'	5.36	1.49	1.42
11	B2	180	G	N3-C4	5.36	1.39	1.35
11	B2	184	G	C3'-C2'	5.36	1.58	1.52
11	B2	254	G	C2-N3	5.36	1.37	1.32
11	B2	436	A	C6-N6	5.36	1.38	1.33
11	B2	714	G	C5-C4	-5.36	1.34	1.38
11	B2	799	C	C4-N4	5.36	1.38	1.33
11	B2	1094	U	N1-C2	5.36	1.43	1.38
38	A1	137	A	N7-C5	-5.36	1.36	1.39
38	A1	254	A	C5-C4	5.36	1.42	1.38
38	A1	623	G	N7-C5	-5.36	1.36	1.39
38	A1	766	G	C5-C6	-5.36	1.36	1.42
38	A1	1654	G	C5-C4	5.36	1.42	1.38
38	A1	1685	C	P-O5'	-5.36	1.54	1.59
38	A1	1893	C	O4'-C1'	5.36	1.48	1.41
38	A1	2279	G	N9-C8	5.36	1.41	1.37
38	A1	2602	G	O4'-C1'	5.36	1.48	1.41
38	A1	2651	G	N3-C4	-5.36	1.31	1.35
11	B2	790	G	P-O5'	-5.35	1.54	1.59
11	B2	869	U	P-O5'	-5.35	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1300	A	N1-C2	-5.35	1.29	1.34
11	B2	1399	G	N9-C8	5.35	1.41	1.37
38	A1	618	C	N1-C6	5.35	1.40	1.37
38	A1	2301	C	C1'-N1	5.35	1.56	1.48
38	A1	2531	G	N7-C5	-5.35	1.36	1.39
38	A1	2862	A	O3'-P	-5.35	1.54	1.61
10	B1	52	G	C1'-N9	5.35	1.56	1.48
11	B2	509	C	C2-N3	5.35	1.40	1.35
11	B2	651	U	P-O5'	5.35	1.65	1.59
38	A1	1569	A	N9-C4	-5.35	1.34	1.37
38	A1	1671	A	C6-N1	5.35	1.39	1.35
38	A1	1833	G	N3-C4	-5.35	1.31	1.35
38	A1	2783	C	C4-N4	5.35	1.38	1.33
38	A1	2817	U	N1-C2	5.35	1.43	1.38
60	AM	21	GLU	CB-CG	5.35	1.62	1.52
61	AN	79	ARG	CZ-NH2	5.35	1.40	1.33
34	BV	85	TYR	CE2-CZ	5.35	1.45	1.38
38	A1	971	G	C5-C6	-5.35	1.36	1.42
38	A1	1441	C	N3-C4	5.35	1.37	1.33
38	A1	2192	G	C8-N7	5.35	1.34	1.30
38	A1	3029	A	C5-C4	5.35	1.42	1.38
11	B2	211	G	C3'-O3'	5.35	1.49	1.42
11	B2	653	C	O4'-C1'	5.35	1.48	1.41
11	B2	729	G	C2-N2	-5.35	1.29	1.34
38	A1	244	A	N3-C4	5.35	1.38	1.34
38	A1	407	A	N7-C5	-5.35	1.36	1.39
38	A1	862	G	C5'-C4'	5.35	1.57	1.51
38	A1	1762	G	N1-C2	5.35	1.42	1.37
38	A1	1908	C	C4-N4	5.35	1.38	1.33
38	A1	2139	A	N9-C4	5.35	1.41	1.37
38	A1	2349	U	N3-C4	5.35	1.43	1.38
38	A1	2436	A	C3'-C2'	-5.35	1.46	1.52
38	A1	2600	C	N1-C6	5.35	1.40	1.37
38	A1	2777	G	P-O5'	5.35	1.65	1.59
38	A1	2952	C	C3'-C2'	-5.35	1.46	1.52
45	AC	144	PHE	CG-CD1	5.35	1.46	1.38
11	B2	339	U	P-O5'	-5.35	1.54	1.59
11	B2	786	G	C4'-C3'	5.35	1.59	1.53
38	A1	26	G	N3-C4	5.35	1.39	1.35
38	A1	1097	G	C5'-C4'	5.35	1.57	1.51
38	A1	1516	C	C4-C5	5.35	1.47	1.43
38	A1	1521	G	C2'-C1'	-5.35	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1535	U	C4-O4	5.35	1.27	1.23
38	A1	1826	G	C5-C4	5.35	1.42	1.38
38	A1	1837	A	C6-N6	5.35	1.38	1.33
38	A1	2146	C	O4'-C1'	5.35	1.48	1.41
38	A1	2398	C	N3-C4	5.35	1.37	1.33
38	A1	2972	G	N9-C8	5.35	1.41	1.37
11	B2	89	G	N3-C4	-5.35	1.31	1.35
11	B2	146	A	N9-C4	5.35	1.41	1.37
11	B2	321	A	O3'-P	-5.35	1.54	1.61
11	B2	807	C	N1-C2	5.35	1.45	1.40
33	BU	84	GLY	CA-C	-5.35	1.43	1.51
38	A1	649	A	P-O5'	-5.35	1.54	1.59
38	A1	798	G	C4'-O4'	-5.35	1.38	1.45
38	A1	1109	G	N1-C2	5.35	1.42	1.37
38	A1	2804	C	C2-N3	5.35	1.40	1.35
39	A3	120	C	C2-N3	5.35	1.40	1.35
10	B1	29	C	P-O5'	-5.34	1.54	1.59
10	B1	73	C	O3'-P	-5.34	1.54	1.61
11	B2	416	A	N7-C5	5.34	1.42	1.39
11	B2	488	A	C8-N7	-5.34	1.27	1.31
11	B2	530	G	C2-N2	5.34	1.39	1.34
11	B2	721	A	C8-N7	-5.34	1.27	1.31
38	A1	807	G	N9-C4	5.34	1.42	1.38
38	A1	1089	C	O4'-C1'	5.34	1.48	1.41
38	A1	1236	C	O4'-C1'	5.34	1.48	1.41
38	A1	1571	G	N9-C4	5.34	1.42	1.38
38	A1	1644	G	C2-N2	5.34	1.39	1.34
38	A1	1735	G	C2-N3	5.34	1.37	1.32
38	A1	1766	A	N7-C5	-5.34	1.36	1.39
38	A1	1942	G	C2-N2	5.34	1.39	1.34
38	A1	1989	G	C8-N7	5.34	1.34	1.30
38	A1	2025	A	C2-N3	5.34	1.38	1.33
38	A1	2391	G	O4'-C1'	5.34	1.48	1.41
38	A1	2474	A	C2-N3	-5.34	1.28	1.33
11	B2	605	C	C5'-C4'	5.34	1.57	1.51
11	B2	1479	C	C4-C5	5.34	1.47	1.43
38	A1	378	G	C6-N1	5.34	1.43	1.39
38	A1	568	A	C2'-O2'	5.34	1.48	1.41
38	A1	1112	G	N7-C5	-5.34	1.36	1.39
38	A1	1406	G	C4'-C3'	5.34	1.59	1.53
38	A1	2231	G	N3-C4	-5.34	1.31	1.35
38	A1	2551	G	C5'-C4'	-5.34	1.45	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2974	U	C2-N3	5.34	1.41	1.37
11	B2	3	U	C2-O2	5.34	1.27	1.22
11	B2	318	C	O3'-P	-5.34	1.54	1.61
11	B2	783	G	C8-N7	-5.34	1.27	1.30
11	B2	830	A	C2'-C1'	-5.34	1.47	1.53
11	B2	1099	A	N7-C5	-5.34	1.36	1.39
11	B2	1231	G	C1'-N9	5.34	1.56	1.48
11	B2	1236	G	P-O5'	-5.34	1.54	1.59
32	BT	8	TYR	CB-CG	5.34	1.59	1.51
38	A1	324	C	O3'-P	-5.34	1.54	1.61
38	A1	443	C	O3'-P	-5.34	1.54	1.61
38	A1	1585	U	C4'-O4'	5.34	1.52	1.45
38	A1	2219	A	C6-N6	5.34	1.38	1.33
38	A1	2946	C	C2-N3	-5.34	1.31	1.35
39	A3	66	A	N1-C2	5.34	1.39	1.34
11	B2	90	C	P-O5'	-5.34	1.54	1.59
11	B2	126	G	C5'-C4'	5.34	1.57	1.51
11	B2	476	C	C4-C5	5.34	1.47	1.43
11	B2	585	U	N1-C6	-5.34	1.33	1.38
11	B2	780	C	N3-C4	5.34	1.37	1.33
11	B2	921	G	N7-C5	-5.34	1.36	1.39
11	B2	1216	A	C5'-C4'	5.34	1.57	1.51
11	B2	1342	C	C5'-C4'	-5.34	1.45	1.51
11	B2	1446	G	C5-C6	-5.34	1.37	1.42
38	A1	728	A	N7-C5	-5.34	1.36	1.39
38	A1	1163	U	C2'-C1'	-5.34	1.47	1.53
38	A1	1172	U	N1-C2	5.34	1.43	1.38
38	A1	1416	G	P-O5'	5.34	1.65	1.59
38	A1	1691	U	C2-N3	5.34	1.41	1.37
38	A1	2696	G	N9-C4	5.34	1.42	1.38
61	AN	53	GLU	CD-OE1	5.34	1.31	1.25
11	B2	38	G	O5'-C5'	-5.34	1.34	1.42
11	B2	278	A	N9-C8	-5.34	1.33	1.37
11	B2	763	G	N1-C2	5.34	1.42	1.37
11	B2	1102	A	N9-C4	-5.34	1.34	1.37
38	A1	358	C	C4-N4	5.34	1.38	1.33
38	A1	851	G	C5'-C4'	5.34	1.57	1.51
38	A1	1835	A	C6-N1	5.34	1.39	1.35
11	B2	175	G	C3'-O3'	5.34	1.49	1.42
11	B2	493	C	C1'-N1	5.34	1.56	1.48
11	B2	1082	A	C2-N3	5.34	1.38	1.33
11	B2	1180	G	N7-C5	-5.34	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1339	G	C2-N3	5.34	1.37	1.32
32	BT	68	ARG	CZ-NH1	5.34	1.40	1.33
38	A1	20	C	C5'-C4'	5.34	1.57	1.51
38	A1	277	A	C5'-C4'	5.34	1.57	1.51
38	A1	1040	C	C2'-C1'	5.34	1.59	1.53
38	A1	2136	G	C6-O6	-5.34	1.19	1.24
38	A1	2162	G	N9-C8	5.34	1.41	1.37
38	A1	2706	C	C2-N3	5.34	1.40	1.35
38	A1	2820	C	C5-C6	-5.34	1.30	1.34
40	AK	37	GLY	N-CA	-5.34	1.38	1.46
11	B2	244	G	C5-C4	5.33	1.42	1.38
38	A1	366	G	C5-C4	-5.33	1.34	1.38
38	A1	1298	C	C4'-O4'	-5.33	1.38	1.45
38	A1	1569	A	N7-C5	-5.33	1.36	1.39
5	AS	126	ARG	CZ-NH1	5.33	1.40	1.33
11	B2	189	C	C1'-N1	5.33	1.56	1.48
11	B2	602	G	N9-C8	5.33	1.41	1.37
11	B2	741	A	C6-N1	-5.33	1.31	1.35
11	B2	786	G	N9-C8	5.33	1.41	1.37
11	B2	800	G	N3-C4	5.33	1.39	1.35
11	B2	867	A	O3'-P	5.33	1.67	1.61
11	B2	943	C	C2'-C1'	-5.33	1.47	1.53
11	B2	1232	G	N1-C2	5.33	1.42	1.37
11	B2	1467	U	C4-C5	-5.33	1.38	1.43
29	BQ	16	ARG	CZ-NH1	5.33	1.40	1.33
38	A1	606	A	C8-N7	-5.33	1.27	1.31
38	A1	829	G	O4'-C1'	5.33	1.48	1.41
38	A1	1044	C	C1'-N1	5.33	1.56	1.48
38	A1	1690	U	N1-C6	5.33	1.42	1.38
38	A1	1728	C	C1'-N1	5.33	1.56	1.48
39	A3	29	G	C5-C6	-5.33	1.37	1.42
39	A3	79	U	C5'-C4'	5.33	1.57	1.51
8	AW	29	ARG	NE-CZ	5.33	1.40	1.33
10	B1	57	C	C4'-C3'	5.33	1.59	1.53
11	B2	343	G	C4'-O4'	-5.33	1.38	1.45
11	B2	731	A	N9-C8	-5.33	1.33	1.37
11	B2	750	C	C4-N4	5.33	1.38	1.33
11	B2	804	U	C1'-N1	5.33	1.56	1.48
11	B2	890	C	P-O5'	5.33	1.65	1.59
11	B2	1069	G	N1-C2	5.33	1.42	1.37
11	B2	1153	G	C8-N7	5.33	1.34	1.30
38	A1	1229	U	C1'-N1	5.33	1.56	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1288	C	C4-N4	5.33	1.38	1.33
38	A1	1896	U	C5-C6	5.33	1.39	1.34
38	A1	2594	U	N1-C6	5.33	1.42	1.38
63	AP	98	GLY	N-CA	-5.33	1.38	1.46
11	B2	615	G	C8-N7	5.33	1.34	1.30
38	A1	336	C	C5'-C4'	5.33	1.57	1.51
38	A1	395	G	C6-N1	5.33	1.43	1.39
38	A1	1195	G	C8-N7	-5.33	1.27	1.30
38	A1	1376	U	C1'-N1	5.33	1.56	1.48
11	B2	195	C	C5-C6	5.33	1.38	1.34
11	B2	304	C	N1-C6	5.33	1.40	1.37
11	B2	432	G	C6-N1	5.33	1.43	1.39
11	B2	889	G	N9-C8	5.33	1.41	1.37
11	B2	1291	G	C3'-O3'	5.33	1.49	1.42
11	B2	1312	C	C4-C5	-5.33	1.38	1.43
11	B2	1323	A	O4'-C1'	5.33	1.48	1.41
19	BG	103	ARG	CZ-NH1	5.33	1.40	1.33
38	A1	88	G	C2-N2	5.33	1.39	1.34
38	A1	880	U	C4-O4	-5.33	1.19	1.23
38	A1	1047	A	N1-C2	5.33	1.39	1.34
38	A1	1096	A	C5-C6	-5.33	1.36	1.41
38	A1	2568	A	C2-N3	-5.33	1.28	1.33
47	Ad	50	ARG	NE-CZ	5.33	1.40	1.33
66	AY	8	ARG	CZ-NH1	5.33	1.40	1.33
11	B2	1254	C	C1'-N1	5.33	1.56	1.48
38	A1	630	G	C4'-O4'	5.33	1.52	1.45
38	A1	1518	G	C2-N3	5.33	1.37	1.32
38	A1	2250	G	C5-C4	5.33	1.42	1.38
38	A1	2670	U	C2-O2	5.33	1.27	1.22
38	A1	2947	G	C2-N2	5.33	1.39	1.34
10	B1	46	U	P-O5'	-5.33	1.54	1.59
11	B2	302	A	C4'-C3'	5.33	1.59	1.53
11	B2	648	A	C6-N1	5.33	1.39	1.35
11	B2	1116	G	C6-N1	5.33	1.43	1.39
11	B2	1124	G	C5-C4	5.33	1.42	1.38
38	A1	407	A	P-O5'	5.33	1.65	1.59
38	A1	422	G	C2-N3	5.33	1.37	1.32
38	A1	462	A	C4'-C3'	5.33	1.59	1.53
38	A1	632	G	P-O5'	-5.33	1.54	1.59
38	A1	657	U	C2'-C1'	-5.33	1.47	1.53
38	A1	1107	G	C5'-C4'	5.33	1.57	1.51
38	A1	1386	G	O3'-P	-5.33	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1392	G	N7-C5	-5.33	1.36	1.39
38	A1	1591	C	C4'-O4'	5.33	1.52	1.45
38	A1	1732	C	P-O5'	-5.33	1.54	1.59
38	A1	1769	G	N9-C8	-5.33	1.34	1.37
38	A1	1881	A	C6-N1	5.33	1.39	1.35
38	A1	2373	G	C4'-C3'	5.33	1.59	1.53
38	A1	2479	C	N3-C4	5.33	1.37	1.33
42	Aa	91	TYR	CZ-OH	5.33	1.47	1.37
11	B2	91	G	C5-C6	-5.32	1.37	1.42
11	B2	158	U	C3'-O3'	5.32	1.49	1.42
11	B2	780	C	C5-C6	-5.32	1.30	1.34
11	B2	978	G	O5'-C5'	5.32	1.52	1.44
22	BJ	26	ARG	CD-NE	5.32	1.55	1.46
38	A1	2586	A	N1-C2	-5.32	1.29	1.34
39	A3	44	C	C4-N4	5.32	1.38	1.33
50	AF	97	PHE	CE1-CZ	5.32	1.47	1.37
11	B2	446	G	C4'-C3'	-5.32	1.47	1.52
11	B2	1243	C	C4-N4	5.32	1.38	1.33
38	A1	565	A	C4'-C3'	5.32	1.59	1.53
38	A1	1406	G	C5-C4	-5.32	1.34	1.38
11	B2	488	A	O4'-C1'	-5.32	1.34	1.41
11	B2	521	G	C2-N3	5.32	1.37	1.32
11	B2	832	G	N1-C2	5.32	1.42	1.37
11	B2	845	G	C2'-C1'	-5.32	1.47	1.53
11	B2	986	G	N1-C2	5.32	1.42	1.37
11	B2	1248	A	O3'-P	-5.32	1.54	1.61
11	B2	1414	G	P-O5'	-5.32	1.54	1.59
38	A1	239	G	N9-C4	5.32	1.42	1.38
38	A1	562	G	C8-N7	-5.32	1.27	1.30
38	A1	727	A	N9-C8	5.32	1.42	1.37
38	A1	1956	G	N9-C8	5.32	1.41	1.37
42	Aa	91	TYR	CE1-CZ	5.32	1.45	1.38
11	B2	216	G	N9-C8	5.32	1.41	1.37
11	B2	559	G	N9-C8	5.32	1.41	1.37
11	B2	802	G	O3'-P	5.32	1.67	1.61
11	B2	946	G	C5'-C4'	5.32	1.57	1.51
13	BA	157	PHE	CG-CD1	5.32	1.46	1.38
38	A1	576	G	C1'-N9	5.32	1.56	1.48
38	A1	1737	A	C5-C4	-5.32	1.35	1.38
38	A1	1771	C	P-O5'	5.32	1.65	1.59
46	AD	33	ARG	NE-CZ	5.32	1.40	1.33
10	B1	10	G	C5'-C4'	5.32	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	438	A	C3'-C2'	5.32	1.58	1.52
11	B2	976	A	N1-C2	5.32	1.39	1.34
11	B2	1069	G	C6-O6	5.32	1.28	1.24
11	B2	1150	G	N3-C4	-5.32	1.31	1.35
11	B2	1435	G	O3'-P	-5.32	1.54	1.61
11	B2	1487	U	C5'-C4'	5.32	1.57	1.51
38	A1	50	C	C1'-N1	5.32	1.56	1.48
38	A1	83	G	O3'-P	-5.32	1.54	1.61
38	A1	221	G	C2-N3	5.32	1.37	1.32
38	A1	374	C	C3'-C2'	5.32	1.58	1.52
38	A1	599	G	C2-N2	5.32	1.39	1.34
38	A1	684	G	N9-C4	5.32	1.42	1.38
38	A1	1338	G	C2-N2	5.32	1.39	1.34
38	A1	2012	G	C2'-C1'	-5.32	1.47	1.53
38	A1	2020	G	N1-C2	5.32	1.42	1.37
38	A1	2053	G	C3'-C2'	-5.32	1.47	1.52
39	A3	64	C	C5'-C4'	5.32	1.57	1.51
11	B2	480	G	C5'-C4'	5.32	1.57	1.51
11	B2	568	C	O4'-C1'	5.32	1.48	1.41
11	B2	612	C	N1-C6	5.32	1.40	1.37
11	B2	712	G	N9-C4	5.32	1.42	1.38
11	B2	729	G	N7-C5	-5.32	1.36	1.39
11	B2	1009	G	C6-N1	5.32	1.43	1.39
11	B2	1050	G	C2-N3	5.32	1.37	1.32
11	B2	1163	U	O4'-C1'	5.32	1.48	1.41
11	B2	1239	A	N9-C8	-5.32	1.33	1.37
11	B2	1437	G	C6-N1	5.32	1.43	1.39
13	BA	46	ARG	CZ-NH1	5.32	1.40	1.33
38	A1	383	C	C5-C6	-5.32	1.30	1.34
38	A1	477	C	P-O5'	5.32	1.65	1.59
38	A1	1854	G	C3'-C2'	5.32	1.58	1.52
38	A1	1866	G	N3-C4	5.32	1.39	1.35
38	A1	2012	G	C2-N2	5.32	1.39	1.34
38	A1	2371	A	C5-C4	5.32	1.42	1.38
38	A1	2727	C	O3'-P	-5.32	1.54	1.61
38	A1	2771	G	P-O5'	-5.32	1.54	1.59
38	A1	2873	G	O3'-P	5.32	1.67	1.61
11	B2	958	G	C4'-C3'	-5.31	1.47	1.52
38	A1	140	C	O3'-P	-5.31	1.54	1.61
38	A1	485	G	N3-C4	-5.31	1.31	1.35
38	A1	1104	A	C6-N1	5.31	1.39	1.35
38	A1	1862	G	C2-N2	5.31	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2539	G	P-O5'	-5.31	1.54	1.59
38	A1	2668	G	C2-N3	5.31	1.37	1.32
38	A1	2872	G	N9-C8	-5.31	1.34	1.37
38	A1	3018	C	N3-C4	5.31	1.37	1.33
11	B2	67	C	N1-C6	5.31	1.40	1.37
11	B2	189	C	C2-O2	5.31	1.29	1.24
11	B2	560	A	C5-C6	-5.31	1.36	1.41
11	B2	767	U	O3'-P	-5.31	1.54	1.61
22	BJ	102	GLU	CD-OE2	5.31	1.31	1.25
38	A1	203	G	C2'-C1'	-5.31	1.47	1.53
38	A1	1668	G	C2'-C1'	-5.31	1.47	1.53
38	A1	1817	C	O3'-P	-5.31	1.54	1.61
38	A1	1843	C	C4'-O4'	5.31	1.52	1.45
38	A1	1874	G	N7-C5	-5.31	1.36	1.39
38	A1	2462	U	C4'-O4'	-5.31	1.38	1.45
38	A1	2641	C	N1-C6	5.31	1.40	1.37
38	A1	2817	U	C5'-C4'	5.31	1.57	1.51
38	A1	2819	C	C2-N3	5.31	1.40	1.35
38	A1	2889	A	C6-N6	5.31	1.38	1.33
41	AA	146	VAL	CB-CG1	5.31	1.64	1.52
11	B2	553	C	P-O5'	-5.31	1.54	1.59
38	A1	390	C	N3-C4	5.31	1.37	1.33
38	A1	2274	C	C4-C5	5.31	1.47	1.43
11	B2	611	A	C5'-C4'	5.31	1.57	1.51
11	B2	732	G	N9-C4	-5.31	1.33	1.38
11	B2	1213	G	C6-N1	5.31	1.43	1.39
38	A1	848	A	C4'-C3'	5.31	1.58	1.53
38	A1	1165	C	C1'-N1	5.31	1.56	1.48
38	A1	1184	U	N1-C2	5.31	1.43	1.38
38	A1	1956	G	C2-N3	5.31	1.36	1.32
38	A1	2139	A	C3'-O3'	5.31	1.49	1.42
38	A1	2343	G	N7-C5	-5.31	1.36	1.39
39	A3	1	C	N3-C4	5.31	1.37	1.33
11	B2	64	G	N7-C5	5.31	1.42	1.39
11	B2	540	G	C3'-O3'	5.31	1.49	1.42
11	B2	897	A	N1-C2	-5.31	1.29	1.34
11	B2	1183	C	C4'-O4'	5.31	1.52	1.45
33	BU	108	ALA	N-CA	-5.31	1.35	1.46
38	A1	37	C	C2'-C1'	-5.31	1.47	1.53
38	A1	298	G	C4'-C3'	5.31	1.58	1.53
38	A1	1028	G	C4'-C3'	5.31	1.58	1.53
38	A1	1301	G	N9-C4	5.31	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1841	G	C8-N7	-5.31	1.27	1.30
11	B2	645	G	C2-N2	5.31	1.39	1.34
38	A1	1672	G	N9-C8	5.31	1.41	1.37
38	A1	1783	U	N1-C6	-5.31	1.33	1.38
38	A1	1872	G	O3'-P	-5.31	1.54	1.61
38	A1	2265	C	N1-C6	5.31	1.40	1.37
38	A1	3034	C	C2'-C1'	5.31	1.59	1.53
10	B1	34	U	C2'-C1'	-5.30	1.47	1.53
11	B2	189	C	C2'-C1'	-5.30	1.47	1.53
11	B2	398	C	N1-C2	5.30	1.45	1.40
11	B2	416	A	N9-C4	5.30	1.41	1.37
11	B2	946	G	C1'-N9	-5.30	1.39	1.46
11	B2	1066	C	C2'-C1'	-5.30	1.47	1.53
11	B2	1154	G	N1-C2	5.30	1.42	1.37
11	B2	1205	G	O4'-C1'	5.30	1.48	1.41
17	BE	126	ARG	CD-NE	5.30	1.55	1.46
38	A1	882	U	C4-C5	5.30	1.48	1.43
38	A1	1160	U	C2-N3	5.30	1.41	1.37
38	A1	1329	G	N9-C4	5.30	1.42	1.38
38	A1	1584	G	N7-C5	5.30	1.42	1.39
38	A1	1829	C	C5-C6	5.30	1.38	1.34
38	A1	2137	A	C5-C4	-5.30	1.35	1.38
11	B2	1063	A	C8-N7	-5.30	1.27	1.31
11	B2	1434	C	C4-N4	5.30	1.38	1.33
38	A1	1514	C	C4'-C3'	5.30	1.58	1.53
38	A1	2407	G	N1-C2	5.30	1.42	1.37
38	A1	2864	G	N1-C2	5.30	1.42	1.37
57	Aj	52	ARG	CZ-NH2	5.30	1.40	1.33
11	B2	84	C	C4'-O4'	-5.30	1.38	1.45
11	B2	508	C	C5'-C4'	5.30	1.57	1.51
11	B2	687	G	C5-C4	5.30	1.42	1.38
11	B2	745	G	C2-N3	5.30	1.36	1.32
11	B2	1395	G	N7-C5	5.30	1.42	1.39
15	BC	53	TYR	CZ-OH	5.30	1.46	1.37
17	BE	220	GLY	CA-C	-5.30	1.43	1.51
38	A1	30	G	P-O5'	5.30	1.65	1.59
38	A1	244	A	N7-C5	-5.30	1.36	1.39
38	A1	246	A	N3-C4	5.30	1.38	1.34
38	A1	714	C	C2'-C1'	-5.30	1.47	1.53
38	A1	1862	G	C6-N1	-5.30	1.35	1.39
38	A1	2577	U	C2'-O2'	5.30	1.48	1.41
38	A1	2714	G	C5'-C4'	5.30	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	158	U	O4'-C1'	5.30	1.48	1.41
11	B2	744	A	N9-C8	5.30	1.42	1.37
11	B2	1085	C	C4-N4	5.30	1.38	1.33
11	B2	1250	C	C3'-O3'	5.30	1.49	1.42
38	A1	217	A	C2-N3	5.30	1.38	1.33
38	A1	505	A	C3'-C2'	5.30	1.58	1.52
38	A1	568	A	N9-C4	-5.30	1.34	1.37
38	A1	1295	G	N1-C2	5.30	1.42	1.37
38	A1	1753	G	O3'-P	-5.30	1.54	1.61
38	A1	2259	G	C2-N2	5.30	1.39	1.34
39	A3	126	C	N1-C6	5.30	1.40	1.37
3	Af	12	ARG	NE-CZ	5.30	1.40	1.33
11	B2	469	U	C5'-C4'	5.30	1.57	1.51
38	A1	51	G	N7-C5	-5.30	1.36	1.39
38	A1	1114	G	C8-N7	5.30	1.34	1.30
38	A1	2504	U	C5'-C4'	5.30	1.57	1.51
38	A1	2655	C	C3'-C2'	5.30	1.58	1.52
6	AT	18	SER	CA-CB	5.30	1.60	1.52
11	B2	4	C	O3'-P	-5.30	1.54	1.61
11	B2	89	G	O4'-C1'	5.30	1.48	1.41
11	B2	196	G	N9-C8	5.30	1.41	1.37
11	B2	198	A	N9-C4	-5.30	1.34	1.37
11	B2	462	A	O3'-P	-5.30	1.54	1.61
33	BU	39	ARG	CZ-NH2	5.30	1.40	1.33
38	A1	35	G	C5-C4	5.30	1.42	1.38
38	A1	907	C	N3-C4	5.30	1.37	1.33
38	A1	1119	A	O4'-C1'	5.30	1.48	1.41
38	A1	1792	A	N1-C2	5.30	1.39	1.34
38	A1	2822	G	C2-N3	5.30	1.36	1.32
7	AU	47	ARG	CZ-NH1	5.29	1.40	1.33
11	B2	408	C	O3'-P	-5.29	1.54	1.61
11	B2	1004	U	C5'-C4'	5.29	1.57	1.51
38	A1	1991	G	P-O5'	-5.29	1.54	1.59
38	A1	2054	G	C5-C6	-5.29	1.37	1.42
38	A1	2183	A	N1-C2	5.29	1.39	1.34
38	A1	2194	A	N9-C4	-5.29	1.34	1.37
39	A3	6	G	C2-N3	5.29	1.36	1.32
11	B2	686	C	C5'-C4'	5.29	1.57	1.51
11	B2	888	A	C6-N6	5.29	1.38	1.33
38	A1	188	A	C2-N3	5.29	1.38	1.33
38	A1	253	G	N9-C8	5.29	1.41	1.37
38	A1	349	A	C5-C4	5.29	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	931	C	N1-C6	-5.29	1.33	1.37
38	A1	1109	G	N9-C4	-5.29	1.33	1.38
38	A1	1837	A	C5'-C4'	-5.29	1.45	1.51
38	A1	2009	G	C4'-C3'	5.29	1.58	1.53
6	AT	44	GLU	CD-OE1	5.29	1.31	1.25
9	AX	278	ARG	NE-CZ	5.29	1.40	1.33
11	B2	110	C	N1-C6	5.29	1.40	1.37
11	B2	819	G	C8-N7	5.29	1.34	1.30
11	B2	868	C	O4'-C1'	5.29	1.48	1.41
11	B2	1265	G	C8-N7	-5.29	1.27	1.30
11	B2	1376	C	O3'-P	-5.29	1.54	1.61
27	BO	53	TYR	CE2-CZ	5.29	1.45	1.38
38	A1	574	C	P-O5'	-5.29	1.54	1.59
38	A1	1700	U	C3'-C2'	5.29	1.58	1.52
38	A1	1747	C	O4'-C1'	5.29	1.48	1.41
38	A1	2038	C	N1-C6	-5.29	1.33	1.37
38	A1	2547	A	N1-C2	5.29	1.39	1.34
38	A1	2639	G	C4'-O4'	-5.29	1.38	1.45
38	A1	2732	U	P-O5'	-5.29	1.54	1.59
38	A1	2841	G	C2-N3	5.29	1.36	1.32
38	A1	3033	G	N1-C2	5.29	1.42	1.37
62	AO	63	HIS	CB-CG	5.29	1.59	1.50
38	A1	70	G	O3'-P	-5.29	1.54	1.61
38	A1	105	C	N3-C4	5.29	1.37	1.33
38	A1	1959	C	C5'-C4'	5.29	1.57	1.51
11	B2	110	C	C2'-O2'	-5.29	1.34	1.41
11	B2	222	G	C3'-C2'	5.29	1.58	1.52
11	B2	224	A	C5'-C4'	5.29	1.57	1.51
11	B2	501	G	N9-C4	-5.29	1.33	1.38
11	B2	973	U	O3'-P	-5.29	1.54	1.61
11	B2	1040	A	C6-N6	5.29	1.38	1.33
11	B2	1450	U	C4'-O4'	5.29	1.52	1.45
38	A1	204	G	N3-C4	-5.29	1.31	1.35
38	A1	726	G	N7-C5	-5.29	1.36	1.39
38	A1	958	A	C6-N6	5.29	1.38	1.33
38	A1	1048	C	C2'-C1'	-5.29	1.47	1.53
38	A1	1083	G	C5'-C4'	5.29	1.57	1.51
38	A1	2080	G	C2-N3	5.29	1.36	1.32
38	A1	2205	A	P-O5'	-5.29	1.54	1.59
57	Aj	85	ARG	CZ-NH2	5.29	1.40	1.33
11	B2	96	G	C5-C4	-5.29	1.34	1.38
38	A1	664	A	P-O5'	-5.29	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2590	C	C2'-C1'	-5.29	1.47	1.53
11	B2	307	G	O4'-C1'	5.29	1.48	1.41
11	B2	320	G	N3-C4	-5.29	1.31	1.35
11	B2	413	G	N1-C2	5.29	1.42	1.37
11	B2	485	A	C8-N7	-5.29	1.27	1.31
11	B2	547	U	C3'-O3'	5.29	1.49	1.42
11	B2	599	G	N1-C2	5.29	1.42	1.37
11	B2	1014	C	C5'-C4'	5.29	1.57	1.51
13	BA	173	GLU	CD-OE1	5.29	1.31	1.25
38	A1	219	G	N9-C4	-5.29	1.33	1.38
38	A1	617	G	N3-C4	5.29	1.39	1.35
38	A1	705	G	C5-C6	-5.29	1.37	1.42
38	A1	793	C	C3'-C2'	5.29	1.58	1.52
38	A1	811	C	O3'-P	-5.29	1.54	1.61
38	A1	1142	A	N7-C5	-5.29	1.36	1.39
38	A1	2493	A	C3'-O3'	5.29	1.49	1.42
38	A1	2834	C	N1-C6	5.29	1.40	1.37
39	A3	94	G	O4'-C1'	5.29	1.48	1.41
51	Ag	15	TYR	CE1-CZ	5.29	1.45	1.38
11	B2	84	C	C5'-C4'	5.28	1.57	1.51
11	B2	645	G	O3'-P	-5.28	1.54	1.61
11	B2	778	G	C4'-O4'	-5.28	1.38	1.45
11	B2	864	G	C5-C4	5.28	1.42	1.38
11	B2	1358	A	N9-C4	-5.28	1.34	1.37
38	A1	271	G	C4'-C3'	5.28	1.58	1.53
38	A1	947	C	N3-C4	5.28	1.37	1.33
38	A1	1329	G	C5-C4	-5.28	1.34	1.38
38	A1	1760	C	C2-N3	-5.28	1.31	1.35
38	A1	2059	G	O3'-P	-5.28	1.54	1.61
38	A1	2280	G	C8-N7	5.28	1.34	1.30
38	A1	2360	G	N9-C4	-5.28	1.33	1.38
38	A1	2427	C	C4-C5	-5.28	1.38	1.43
38	A1	2768	C	N3-C4	5.28	1.37	1.33
38	A1	3040	G	C5'-C4'	5.28	1.57	1.51
46	AD	155	ARG	CA-CB	5.28	1.65	1.53
63	AP	42	ARG	CZ-NH1	5.28	1.40	1.33
11	B2	282	G	C5'-C4'	5.28	1.57	1.51
11	B2	1150	G	C5-C4	-5.28	1.34	1.38
14	BB	174	GLU	CG-CD	5.28	1.59	1.51
17	BE	162	TYR	CG-CD2	5.28	1.46	1.39
38	A1	65	G	C2'-C1'	-5.28	1.47	1.53
38	A1	219	G	C4'-O4'	5.28	1.52	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1578	C	C3'-O3'	5.28	1.49	1.42
38	A1	1674	G	C5-C4	5.28	1.42	1.38
38	A1	1726	A	N7-C5	-5.28	1.36	1.39
38	A1	2481	G	C3'-O3'	5.28	1.49	1.42
39	A3	81	C	C2-O2	5.28	1.29	1.24
47	Ad	14	TYR	CG-CD1	5.28	1.46	1.39
11	B2	58	U	N1-C2	5.28	1.43	1.38
11	B2	461	A	C5'-C4'	5.28	1.57	1.51
11	B2	669	A	O3'-P	-5.28	1.54	1.61
11	B2	858	A	O3'-P	-5.28	1.54	1.61
11	B2	1441	G	C2'-C1'	-5.28	1.47	1.53
38	A1	173	G	N9-C8	5.28	1.41	1.37
38	A1	1385	C	C2-N3	5.28	1.40	1.35
38	A1	1774	A	N9-C4	-5.28	1.34	1.37
38	A1	2150	G	C5'-C4'	5.28	1.57	1.51
44	Ab	38	PRO	N-CD	-5.28	1.40	1.47
11	B2	1458	A	C6-N6	5.28	1.38	1.33
38	A1	632	G	N1-C2	5.28	1.42	1.37
38	A1	796	C	C5'-C4'	5.28	1.57	1.51
38	A1	2209	U	C3'-C2'	-5.28	1.47	1.52
38	A1	2283	C	C5-C6	5.28	1.38	1.34
47	Ad	9	SER	CB-OG	-5.28	1.35	1.42
8	AW	63	ARG	CZ-NH1	5.28	1.40	1.33
11	B2	87	C	P-O5'	5.28	1.65	1.59
11	B2	331	C	C3'-C2'	-5.28	1.47	1.52
11	B2	426	C	C5-C6	5.28	1.38	1.34
11	B2	766	G	N1-C2	5.28	1.42	1.37
11	B2	1207	G	C2-N3	5.28	1.36	1.32
38	A1	602	G	C2'-C1'	-5.28	1.47	1.53
38	A1	778	A	N7-C5	5.28	1.42	1.39
38	A1	1576	C	C4-N4	5.28	1.38	1.33
38	A1	2667	U	C2-N3	5.28	1.41	1.37
38	A1	2840	C	C1'-N1	5.28	1.56	1.48
39	A3	89	G	N1-C2	5.28	1.42	1.37
11	B2	214	C	P-O5'	-5.28	1.54	1.59
11	B2	262	G	C8-N7	-5.28	1.27	1.30
28	BP	24	CYS	C-N	5.28	1.42	1.33
38	A1	985	A	C3'-O3'	5.28	1.49	1.42
38	A1	1193	G	C2'-C1'	-5.28	1.47	1.53
38	A1	1258	G	N1-C2	5.28	1.42	1.37
38	A1	1533	G	N9-C8	5.28	1.41	1.37
38	A1	1952	G	C3'-C2'	5.28	1.58	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2484	C	C4-N4	5.28	1.38	1.33
39	A3	16	G	C2-N3	5.28	1.36	1.32
39	A3	52	U	C4-C5	-5.28	1.38	1.43
62	AO	8	ARG	CZ-NH1	5.28	1.40	1.33
11	B2	514	U	C2-N3	5.27	1.41	1.37
11	B2	1336	U	C4'-O4'	5.27	1.52	1.45
15	BC	89	TYR	CE1-CZ	5.27	1.45	1.38
38	A1	231	G	C2'-C1'	-5.27	1.47	1.53
38	A1	290	G	C5-C6	-5.27	1.37	1.42
38	A1	1334	G	C6-N1	5.27	1.43	1.39
38	A1	1410	A	C8-N7	-5.27	1.27	1.31
38	A1	1714	G	C8-N7	-5.27	1.27	1.30
38	A1	2428	C	C4-C5	5.27	1.47	1.43
9	AX	299	TYR	CE2-CZ	5.27	1.45	1.38
11	B2	222	G	N9-C4	-5.27	1.33	1.38
11	B2	875	G	O3'-P	-5.27	1.54	1.61
11	B2	1086	C	C4-N4	5.27	1.38	1.33
11	B2	1165	U	C3'-O3'	5.27	1.49	1.42
11	B2	1222	C	C2'-O2'	-5.27	1.34	1.41
38	A1	825	C	C2'-O2'	5.27	1.48	1.41
38	A1	967	G	C8-N7	5.27	1.34	1.30
38	A1	1213	G	C4'-C3'	5.27	1.58	1.53
38	A1	1466	U	C3'-C2'	-5.27	1.47	1.52
38	A1	1467	G	C2-N3	5.27	1.36	1.32
38	A1	2542	G	N9-C4	-5.27	1.33	1.38
39	A3	30	G	C5'-C4'	5.27	1.57	1.51
38	A1	821	U	C2'-C1'	-5.27	1.47	1.53
38	A1	979	G	P-O5'	-5.27	1.54	1.59
38	A1	2861	A	C6-N6	5.27	1.38	1.33
5	AS	16	ARG	NE-CZ	5.27	1.40	1.33
11	B2	100	A	N3-C4	5.27	1.38	1.34
11	B2	503	G	C6-O6	-5.27	1.19	1.24
11	B2	585	U	P-O5'	-5.27	1.54	1.59
11	B2	604	C	C3'-C2'	-5.27	1.47	1.52
11	B2	623	C	N1-C2	-5.27	1.34	1.40
11	B2	668	G	C2-N3	5.27	1.36	1.32
11	B2	905	A	C3'-O3'	5.27	1.49	1.42
11	B2	970	G	C5-C4	5.27	1.42	1.38
11	B2	1281	U	C5-C6	5.27	1.38	1.34
38	A1	572	U	N1-C6	-5.27	1.33	1.38
38	A1	1128	G	P-O5'	5.27	1.65	1.59
38	A1	1275	G	C5-C4	-5.27	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1862	G	C5-C4	5.27	1.42	1.38
38	A1	2743	U	O4'-C1'	-5.27	1.34	1.41
11	B2	63	G	N1-C2	5.27	1.42	1.37
11	B2	257	U	C4'-C3'	5.27	1.58	1.53
11	B2	632	C	C2-O2	5.27	1.29	1.24
11	B2	950	C	C2-N3	5.27	1.40	1.35
11	B2	1198	A	C6-N1	5.27	1.39	1.35
11	B2	1233	G	N9-C4	-5.27	1.33	1.38
11	B2	1399	G	N1-C2	5.27	1.42	1.37
32	BT	14	GLU	CD-OE1	-5.27	1.19	1.25
38	A1	261	A	C6-N1	5.27	1.39	1.35
38	A1	297	G	C8-N7	5.27	1.34	1.30
38	A1	404	G	N7-C5	-5.27	1.36	1.39
38	A1	934	G	O3'-P	-5.27	1.54	1.61
38	A1	1033	C	C4-C5	5.27	1.47	1.43
38	A1	2199	U	P-O5'	-5.27	1.54	1.59
38	A1	2284	C	C4-N4	5.27	1.38	1.33
38	A1	2774	C	C4-C5	-5.27	1.38	1.43
38	A1	2786	G	P-O5'	-5.27	1.54	1.59
39	A3	123	U	N1-C2	5.27	1.43	1.38
11	B2	35	G	C3'-C2'	5.27	1.58	1.52
11	B2	532	C	C4-N4	-5.27	1.29	1.33
38	A1	100	C	N1-C6	5.27	1.40	1.37
38	A1	178	G	C5-C6	-5.27	1.37	1.42
38	A1	733	A	C2-N3	5.27	1.38	1.33
38	A1	1961	G	C5-C4	5.27	1.42	1.38
38	A1	2587	G	C5-C6	-5.27	1.37	1.42
38	A1	2973	A	C5-C6	-5.27	1.36	1.41
46	AD	190	ARG	CD-NE	5.27	1.55	1.46
11	B2	370	A	C8-N7	-5.26	1.27	1.31
11	B2	603	G	C2'-C1'	-5.26	1.47	1.53
11	B2	1200	U	P-O5'	-5.26	1.54	1.59
11	B2	1490	C	C2-N3	5.26	1.40	1.35
38	A1	244	A	C6-N1	5.26	1.39	1.35
38	A1	542	A	N9-C8	5.26	1.42	1.37
38	A1	813	G	N3-C4	-5.26	1.31	1.35
38	A1	892	U	C5-C6	-5.26	1.29	1.34
38	A1	1562	U	C4-C5	-5.26	1.38	1.43
38	A1	1736	G	C4'-C3'	5.26	1.58	1.53
38	A1	2138	A	N1-C2	5.26	1.39	1.34
38	A1	2218	C	C5'-C4'	5.26	1.57	1.51
38	A1	2322	A	N7-C5	-5.26	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2667	U	C1'-N1	5.26	1.56	1.48
58	Ak	159	ASP	N-CA	-5.26	1.35	1.46
11	B2	122	C	C5-C6	5.26	1.38	1.34
11	B2	703	U	C4-C5	-5.26	1.38	1.43
11	B2	1227	A	N9-C4	5.26	1.41	1.37
38	A1	918	A	O4'-C1'	5.26	1.48	1.41
11	B2	160	C	C4'-C3'	5.26	1.58	1.53
11	B2	783	G	C2-N2	5.26	1.39	1.34
11	B2	801	A	C8-N7	5.26	1.35	1.31
38	A1	87	C	O3'-P	-5.26	1.54	1.61
38	A1	133	G	P-O5'	-5.26	1.54	1.59
38	A1	195	U	C2-N3	-5.26	1.34	1.37
38	A1	354	G	N7-C5	-5.26	1.36	1.39
38	A1	426	G	O3'-P	-5.26	1.54	1.61
38	A1	737	G	C2'-C1'	-5.26	1.47	1.53
38	A1	933	G	C3'-C2'	5.26	1.58	1.52
38	A1	2084	A	N7-C5	-5.26	1.36	1.39
38	A1	2094	A	C6-N1	5.26	1.39	1.35
38	A1	2368	G	C2-N3	5.26	1.36	1.32
38	A1	2401	A	C6-N6	5.26	1.38	1.33
38	A1	2651	G	C6-O6	-5.26	1.19	1.24
39	A3	110	C	N3-C4	5.26	1.37	1.33
44	Ab	117	ARG	CD-NE	5.26	1.55	1.46
11	B2	821	G	N3-C4	5.26	1.39	1.35
38	A1	230	A	P-O5'	-5.26	1.54	1.59
38	A1	614	G	C2-N3	5.26	1.36	1.32
38	A1	911	G	C2-N2	5.26	1.39	1.34
38	A1	1451	A	N7-C5	-5.26	1.36	1.39
38	A1	2312	U	C2'-C1'	-5.26	1.47	1.53
39	A3	73	U	C2-N3	-5.26	1.34	1.37
62	AO	13	ARG	NE-CZ	5.26	1.39	1.33
11	B2	437	A	C5-C6	5.26	1.45	1.41
11	B2	862	C	C4'-O4'	5.26	1.52	1.45
11	B2	1182	G	O4'-C1'	-5.26	1.34	1.41
11	B2	1274	C	N1-C2	5.26	1.45	1.40
38	A1	1088	G	N1-C2	5.26	1.42	1.37
38	A1	2125	C	C4'-O4'	-5.26	1.38	1.45
38	A1	2572	U	N3-C4	5.26	1.43	1.38
38	A1	2639	G	N7-C5	5.26	1.42	1.39
38	A1	2960	G	C2-N2	5.26	1.39	1.34
10	B1	76	C	O4'-C1'	5.26	1.48	1.41
38	A1	1297	C	C4-C5	-5.26	1.38	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1698	G	N7-C5	5.26	1.42	1.39
38	A1	2178	A	C5-C4	-5.26	1.35	1.38
38	A1	2579	G	N9-C4	-5.26	1.33	1.38
39	A3	126	C	N3-C4	5.26	1.37	1.33
50	AF	49	GLU	CD-OE1	5.26	1.31	1.25
38	A1	440	A	C4'-O4'	-5.25	1.38	1.45
38	A1	585	G	O3'-P	5.25	1.67	1.61
38	A1	1048	C	N3-C4	5.25	1.37	1.33
38	A1	2876	G	C5'-C4'	5.25	1.57	1.51
39	A3	96	C	C2-O2	5.25	1.29	1.24
4	AQ	94	LEU	CA-CB	5.25	1.65	1.53
11	B2	367	G	O4'-C1'	5.25	1.48	1.41
11	B2	389	G	C4'-O4'	5.25	1.52	1.45
11	B2	533	C	C3'-O3'	5.25	1.49	1.42
11	B2	691	G	C2-N3	5.25	1.36	1.32
11	B2	749	C	O3'-P	-5.25	1.54	1.61
11	B2	1126	G	C2'-C1'	-5.25	1.47	1.53
11	B2	1371	C	P-O5'	-5.25	1.54	1.59
38	A1	31	G	C4'-C3'	5.25	1.58	1.53
38	A1	93	C	C4-N4	5.25	1.38	1.33
38	A1	650	C	P-O5'	5.25	1.65	1.59
38	A1	958	A	N3-C4	-5.25	1.31	1.34
38	A1	1008	U	O3'-P	-5.25	1.54	1.61
38	A1	1241	C	N1-C6	5.25	1.40	1.37
38	A1	1660	A	C5-C4	-5.25	1.35	1.38
38	A1	2579	G	C2-N3	5.25	1.36	1.32
38	A1	2872	G	C2-N2	5.25	1.39	1.34
39	A3	14	G	C2-N2	5.25	1.39	1.34
39	A3	61	C	N3-C4	5.25	1.37	1.33
45	AC	333	LYS	N-CA	5.25	1.56	1.46
11	B2	106	A	C5'-C4'	5.25	1.57	1.51
11	B2	477	G	N9-C4	5.25	1.42	1.38
11	B2	795	G	C8-N7	-5.25	1.27	1.30
11	B2	979	U	O3'-P	-5.25	1.54	1.61
34	BV	24	TYR	CG-CD1	5.25	1.46	1.39
38	A1	117	A	N9-C8	5.25	1.42	1.37
38	A1	958	A	C4'-C3'	5.25	1.58	1.53
38	A1	1178	G	C2'-C1'	-5.25	1.47	1.53
38	A1	1181	C	C4-C5	5.25	1.47	1.43
38	A1	2010	G	C5'-C4'	5.25	1.57	1.51
38	A1	2326	C	P-O5'	-5.25	1.54	1.59
38	A1	2436	A	N9-C4	5.25	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2517	U	C4'-O4'	-5.25	1.38	1.45
38	A1	2796	C	N1-C6	5.25	1.40	1.37
38	A1	2850	G	N9-C4	-5.25	1.33	1.38
38	A1	2981	G	O4'-C1'	5.25	1.48	1.41
39	A3	126	C	C5-C6	-5.25	1.30	1.34
63	AP	13	ARG	NE-CZ	5.25	1.39	1.33
11	B2	315	A	C6-N1	5.25	1.39	1.35
11	B2	937	A	N7-C5	-5.25	1.36	1.39
38	A1	533	G	C4'-O4'	5.25	1.52	1.45
11	B2	24	C	O4'-C1'	5.25	1.48	1.41
11	B2	184	G	O3'-P	-5.25	1.54	1.61
11	B2	375	G	C2-N3	5.25	1.36	1.32
11	B2	418	G	C5'-C4'	5.25	1.57	1.51
11	B2	930	G	C5-C4	-5.25	1.34	1.38
11	B2	1427	C	C1'-N1	5.25	1.56	1.48
38	A1	279	G	C3'-C2'	5.25	1.58	1.52
38	A1	1421	C	P-O5'	5.25	1.65	1.59
38	A1	1776	G	N7-C5	5.25	1.42	1.39
38	A1	1843	C	N3-C4	5.25	1.37	1.33
38	A1	2183	A	N7-C5	-5.25	1.36	1.39
38	A1	2739	G	C2-N3	5.25	1.36	1.32
38	A1	2816	C	P-O5'	-5.25	1.54	1.59
38	A1	2851	A	C6-N6	5.25	1.38	1.33
39	A3	80	G	N9-C8	-5.25	1.34	1.37
11	B2	38	G	N1-C2	5.25	1.42	1.37
38	A1	56	G	C2-N3	5.25	1.36	1.32
38	A1	450	G	C2'-C1'	-5.25	1.47	1.53
38	A1	730	C	C2'-C1'	-5.25	1.47	1.53
38	A1	1112	G	O4'-C1'	-5.25	1.34	1.41
38	A1	1612	G	O3'-P	-5.25	1.54	1.61
38	A1	1883	C	C2-N3	5.25	1.40	1.35
38	A1	1898	A	P-O5'	-5.25	1.54	1.59
38	A1	2863	A	N9-C4	5.25	1.41	1.37
38	A1	18	C	C1'-N1	5.25	1.56	1.48
38	A1	934	G	C5-C6	5.25	1.47	1.42
38	A1	1046	A	C3'-C2'	5.25	1.58	1.52
38	A1	1436	A	C5-C4	-5.25	1.35	1.38
38	A1	2257	A	N9-C8	5.25	1.42	1.37
38	A1	2302	C	O4'-C1'	5.25	1.48	1.41
9	AX	291	ARG	CZ-NH1	5.24	1.39	1.33
11	B2	750	C	C2'-C1'	-5.24	1.47	1.53
11	B2	824	G	N9-C8	-5.24	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	992	G	O3'-P	-5.24	1.54	1.61
11	B2	1016	G	N7-C5	-5.24	1.36	1.39
38	A1	407	A	C6-N1	5.24	1.39	1.35
38	A1	784	C	C2-N3	5.24	1.40	1.35
38	A1	1237	A	O3'-P	5.24	1.67	1.61
38	A1	1369	G	C3'-C2'	-5.24	1.47	1.52
38	A1	2381	A	N9-C8	5.24	1.42	1.37
10	B1	25	G	C2-N3	5.24	1.36	1.32
38	A1	323	U	N3-C4	5.24	1.43	1.38
38	A1	655	C	N3-C4	-5.24	1.30	1.33
38	A1	993	G	N9-C8	5.24	1.41	1.37
38	A1	998	G	O4'-C1'	-5.24	1.34	1.41
38	A1	1559	A	N9-C4	5.24	1.41	1.37
61	AN	144	PHE	CB-CG	5.24	1.60	1.51
4	AQ	107	ARG	CZ-NH2	5.24	1.39	1.33
5	AS	65	ARG	CZ-NH2	5.24	1.39	1.33
10	B1	68	C	C4-C5	5.24	1.47	1.43
11	B2	106	A	C2'-C1'	-5.24	1.47	1.53
11	B2	391	G	C8-N7	-5.24	1.27	1.30
11	B2	854	C	C3'-C2'	-5.24	1.47	1.52
17	BE	195	ARG	NE-CZ	5.24	1.39	1.33
27	BO	132	ARG	CZ-NH2	5.24	1.39	1.33
38	A1	448	A	C4'-O4'	5.24	1.52	1.45
38	A1	451	C	P-O5'	-5.24	1.54	1.59
38	A1	596	C	C4-N4	5.24	1.38	1.33
38	A1	872	G	N3-C4	-5.24	1.31	1.35
38	A1	1242	A	O3'-P	-5.24	1.54	1.61
38	A1	2372	C	C2-N3	-5.24	1.31	1.35
38	A1	2818	C	C2-N3	5.24	1.40	1.35
38	A1	2888	G	N1-C2	-5.24	1.33	1.37
39	A3	16	G	P-O5'	-5.24	1.54	1.59
45	AC	318	ARG	CZ-NH2	5.24	1.39	1.33
52	AH	112	ASP	CA-CB	5.24	1.65	1.53
11	B2	183	A	N1-C2	-5.24	1.29	1.34
11	B2	500	A	C3'-C2'	5.24	1.58	1.52
11	B2	667	G	C5'-C4'	5.24	1.57	1.51
11	B2	782	A	N9-C8	-5.24	1.33	1.37
11	B2	996	A	C5'-C4'	5.24	1.57	1.51
11	B2	1096	G	C5'-C4'	5.24	1.57	1.51
11	B2	1143	G	P-O5'	-5.24	1.54	1.59
38	A1	624	U	C4-C5	-5.24	1.38	1.43
38	A1	737	G	N9-C8	5.24	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	774	G	C2-N3	5.24	1.36	1.32
38	A1	874	U	N1-C6	5.24	1.42	1.38
38	A1	991	U	C2-N3	5.24	1.41	1.37
38	A1	1182	C	C4-N4	5.24	1.38	1.33
38	A1	1200	A	C5-C4	5.24	1.42	1.38
38	A1	2430	C	C4'-C3'	5.24	1.58	1.53
60	AM	57	GLN	C-N	5.24	1.42	1.33
38	A1	908	U	O3'-P	-5.24	1.54	1.61
38	A1	1907	G	O3'-P	-5.24	1.54	1.61
38	A1	2399	C	N3-C4	5.24	1.37	1.33
41	AA	164	HIS	N-CA	-5.24	1.35	1.46
11	B2	72	C	C4-C5	-5.24	1.38	1.43
11	B2	105	C	C4-C5	5.24	1.47	1.43
11	B2	393	A	O4'-C1'	-5.24	1.34	1.41
11	B2	400	G	C5-C4	5.24	1.42	1.38
11	B2	406	U	C4'-C3'	5.24	1.58	1.53
11	B2	1181	G	C8-N7	-5.24	1.27	1.30
18	BF	35	HIS	CB-CG	-5.24	1.40	1.50
26	BN	61	GLU	C-N	5.24	1.46	1.34
38	A1	142	G	C4'-O4'	5.24	1.52	1.45
38	A1	623	G	C5-C6	-5.24	1.37	1.42
38	A1	683	C	C2'-O2'	-5.24	1.34	1.41
38	A1	1066	C	C1'-N1	5.24	1.56	1.48
38	A1	1271	G	P-O5'	-5.24	1.54	1.59
38	A1	1554	G	C5-C6	-5.24	1.37	1.42
38	A1	1631	A	P-O5'	-5.24	1.54	1.59
38	A1	2470	U	C4'-C3'	5.24	1.58	1.53
38	A1	2710	G	C5'-C4'	5.24	1.57	1.51
38	A1	2764	G	C8-N7	5.24	1.34	1.30
10	B1	29	C	C2'-O2'	-5.23	1.34	1.41
11	B2	984	C	C2'-C1'	-5.23	1.47	1.53
11	B2	1427	C	C2'-C1'	-5.23	1.47	1.53
38	A1	620	G	N9-C4	-5.23	1.33	1.38
38	A1	1645	U	C3'-C2'	5.23	1.58	1.52
38	A1	2960	G	C8-N7	-5.23	1.27	1.30
11	B2	104	A	C5-C6	-5.23	1.36	1.41
11	B2	380	C	C2-N3	5.23	1.40	1.35
11	B2	406	U	C4'-O4'	5.23	1.52	1.45
38	A1	458	U	C3'-O3'	5.23	1.49	1.42
38	A1	493	A	C2'-O2'	5.23	1.48	1.41
38	A1	514	U	C3'-O3'	5.23	1.49	1.42
38	A1	518	A	C2'-C1'	-5.23	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1018	G	C2-N3	5.23	1.36	1.32
38	A1	1019	G	N7-C5	-5.23	1.36	1.39
38	A1	1462	G	C2-N3	5.23	1.36	1.32
38	A1	1499	C	C4'-O4'	5.23	1.52	1.45
38	A1	1880	A	P-O5'	-5.23	1.54	1.59
38	A1	2150	G	N3-C4	-5.23	1.31	1.35
38	A1	2182	A	N7-C5	-5.23	1.36	1.39
38	A1	2376	U	C2-O2	5.23	1.27	1.22
38	A1	2414	G	C4'-C3'	5.23	1.58	1.53
38	A1	2535	C	C5'-C4'	5.23	1.57	1.51
38	A1	2551	G	C2'-C1'	5.23	1.59	1.53
38	A1	2761	G	N9-C4	-5.23	1.33	1.38
38	A1	2822	G	C5-C4	-5.23	1.34	1.38
39	A3	47	G	O4'-C1'	5.23	1.48	1.41
57	Aj	56	GLU	C-N	5.23	1.42	1.33
11	B2	977	G	N3-C4	5.23	1.39	1.35
11	B2	1053	A	C6-N1	5.23	1.39	1.35
11	B2	1466	G	N3-C4	-5.23	1.31	1.35
38	A1	395	G	C2-N2	-5.23	1.29	1.34
38	A1	651	C	C3'-O3'	5.23	1.49	1.42
38	A1	1055	C	C2'-C1'	-5.23	1.47	1.53
38	A1	1374	G	P-O5'	-5.23	1.54	1.59
38	A1	2978	G	C4'-O4'	5.23	1.52	1.45
39	A3	58	C	C4-N4	5.23	1.38	1.33
11	B2	752	G	P-O5'	-5.23	1.54	1.59
34	BV	22	GLU	CD-OE2	5.23	1.31	1.25
38	A1	2646	A	C3'-C2'	5.23	1.58	1.52
39	A3	4	C	C5-C6	-5.23	1.30	1.34
39	A3	33	U	C4-O4	-5.23	1.19	1.23
39	A3	75	G	C8-N7	-5.23	1.27	1.30
41	AA	147	GLU	CA-CB	5.23	1.65	1.53
11	B2	315	A	C6-N6	5.23	1.38	1.33
13	BA	146	TYR	CE1-CZ	5.23	1.45	1.38
33	BU	77	TYR	CG-CD2	5.23	1.46	1.39
38	A1	430	A	C5-C6	5.23	1.45	1.41
38	A1	1052	G	C5-C4	5.23	1.42	1.38
38	A1	1287	G	N9-C8	5.23	1.41	1.37
38	A1	1302	G	N3-C4	5.23	1.39	1.35
38	A1	2158	G	O3'-P	-5.23	1.54	1.61
38	A1	2427	C	N3-C4	5.23	1.37	1.33
38	A1	723	A	C3'-C2'	5.23	1.58	1.52
38	A1	1303	C	C4'-O4'	-5.23	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1862	G	C4'-C3'	5.23	1.58	1.53
38	A1	2722	G	C5'-C4'	5.23	1.57	1.51
39	A3	29	G	C4'-C3'	5.23	1.58	1.53
11	B2	143	G	N9-C8	5.22	1.41	1.37
11	B2	144	G	P-O5'	-5.22	1.54	1.59
11	B2	406	U	O3'-P	-5.22	1.54	1.61
38	A1	91	G	C4'-O4'	-5.22	1.38	1.45
38	A1	328	G	C2'-C1'	-5.22	1.47	1.53
38	A1	368	U	N1-C6	-5.22	1.33	1.38
38	A1	765	G	N3-C4	5.22	1.39	1.35
38	A1	1287	G	C2-N3	5.22	1.36	1.32
38	A1	1700	U	C4-C5	-5.22	1.38	1.43
38	A1	2349	U	C2'-C1'	-5.22	1.47	1.53
38	A1	2811	U	C4'-O4'	5.22	1.52	1.45
4	AQ	8	ARG	CZ-NH1	5.22	1.39	1.33
11	B2	199	A	O3'-P	-5.22	1.54	1.61
11	B2	435	A	C6-N1	5.22	1.39	1.35
11	B2	468	G	N1-C2	5.22	1.42	1.37
11	B2	963	A	P-O5'	-5.22	1.54	1.59
11	B2	1374	C	C5'-C4'	5.22	1.57	1.51
20	BH	215	ARG	CD-NE	5.22	1.55	1.46
38	A1	91	G	N9-C8	-5.22	1.34	1.37
38	A1	134	C	C4'-O4'	5.22	1.52	1.45
38	A1	398	U	C4-O4	-5.22	1.19	1.23
38	A1	1241	C	C2-O2	5.22	1.29	1.24
38	A1	1275	G	C5'-C4'	5.22	1.57	1.51
38	A1	1302	G	C5-C6	5.22	1.47	1.42
38	A1	1676	G	N7-C5	-5.22	1.36	1.39
38	A1	1984	G	C2-N3	5.22	1.36	1.32
38	A1	2562	G	N7-C5	5.22	1.42	1.39
38	A1	2678	U	C2-N3	5.22	1.41	1.37
39	A3	122	C	N3-C4	5.22	1.37	1.33
48	AE	140	CYS	CB-SG	-5.22	1.73	1.81
50	AF	147	VAL	CB-CG1	5.22	1.63	1.52
11	B2	930	G	C6-O6	-5.22	1.19	1.24
11	B2	1474	A	N3-C4	-5.22	1.31	1.34
26	BN	45	GLU	N-CA	-5.22	1.35	1.46
38	A1	234	G	C2'-C1'	-5.22	1.47	1.53
38	A1	462	A	C1'-N9	-5.22	1.39	1.46
38	A1	819	U	C5'-C4'	5.22	1.57	1.51
38	A1	837	G	N1-C2	5.22	1.42	1.37
38	A1	1644	G	C8-N7	5.22	1.34	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2221	A	N3-C4	5.22	1.38	1.34
41	AA	75	ARG	NE-CZ	5.22	1.39	1.33
10	B1	46	U	C4'-C3'	5.22	1.58	1.53
10	B1	66	C	N1-C6	5.22	1.40	1.37
11	B2	620	G	O4'-C1'	5.22	1.48	1.41
11	B2	781	U	C4-C5	5.22	1.48	1.43
11	B2	1341	C	C4-C5	5.22	1.47	1.43
11	B2	1471	G	N9-C4	-5.22	1.33	1.38
14	BB	121	ARG	CD-NE	5.22	1.55	1.46
38	A1	138	U	C5'-C4'	5.22	1.57	1.51
38	A1	1249	G	N7-C5	-5.22	1.36	1.39
38	A1	1564	C	C3'-O3'	5.22	1.49	1.42
38	A1	1684	C	C2-N3	5.22	1.40	1.35
38	A1	2446	C	C5'-C4'	5.22	1.57	1.51
38	A1	2708	U	O4'-C1'	5.22	1.48	1.41
39	A3	105	G	C4'-O4'	5.22	1.52	1.45
11	B2	1134	G	N9-C8	5.22	1.41	1.37
38	A1	746	C	N1-C6	5.22	1.40	1.37
38	A1	1799	G	N1-C2	5.22	1.42	1.37
38	A1	2646	A	N7-C5	-5.22	1.36	1.39
38	A1	2871	A	C6-N1	5.22	1.39	1.35
38	A1	3007	A	C5-C4	5.22	1.42	1.38
4	AQ	144	GLU	CG-CD	5.22	1.59	1.51
10	B1	25	G	C8-N7	-5.22	1.27	1.30
11	B2	417	C	C2-O2	5.22	1.29	1.24
29	BQ	120	ARG	NE-CZ	5.22	1.39	1.33
38	A1	74	A	P-O5'	5.22	1.65	1.59
38	A1	440	A	C3'-O3'	5.22	1.49	1.42
38	A1	827	G	C2-N2	5.22	1.39	1.34
38	A1	1160	U	P-O5'	-5.22	1.54	1.59
38	A1	1952	G	N1-C2	5.22	1.42	1.37
10	B1	45	G	N1-C2	5.21	1.42	1.37
11	B2	201	G	O3'-P	-5.21	1.54	1.61
11	B2	342	G	C2-N3	5.21	1.36	1.32
11	B2	569	G	C2'-C1'	-5.21	1.47	1.53
11	B2	1035	C	C4-C5	5.21	1.47	1.43
11	B2	1094	U	P-O5'	-5.21	1.54	1.59
38	A1	329	G	C4'-C3'	5.21	1.58	1.53
38	A1	507	G	N3-C4	-5.21	1.31	1.35
38	A1	627	G	C2-N3	5.21	1.36	1.32
38	A1	1136	G	C3'-C2'	-5.21	1.47	1.52
38	A1	1417	U	N3-C4	5.21	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1723	A	C8-N7	5.21	1.35	1.31
38	A1	2598	C	O3'-P	-5.21	1.54	1.61
38	A1	2892	A	C2'-O2'	5.21	1.48	1.41
38	A1	3013	U	C5-C6	5.21	1.38	1.34
11	B2	542	G	N3-C4	-5.21	1.31	1.35
38	A1	360	G	P-O5'	5.21	1.65	1.59
38	A1	847	A	N3-C4	-5.21	1.31	1.34
38	A1	1359	C	C3'-C2'	5.21	1.58	1.52
38	A1	1912	A	N9-C4	-5.21	1.34	1.37
38	A1	2124	C	C2'-C1'	5.21	1.59	1.53
38	A1	2334	G	O4'-C1'	5.21	1.48	1.41
38	A1	2554	A	C2-N3	5.21	1.38	1.33
38	A1	2651	G	O4'-C1'	5.21	1.48	1.41
38	A1	3021	C	C5-C6	5.21	1.38	1.34
11	B2	844	G	N7-C5	-5.21	1.36	1.39
11	B2	1287	G	C4'-C3'	5.21	1.58	1.53
17	BE	172	GLU	CG-CD	5.21	1.59	1.51
21	BI	2	THR	N-CA	5.21	1.56	1.46
29	BQ	138	ARG	CD-NE	5.21	1.55	1.46
38	A1	59	U	C5-C6	5.21	1.38	1.34
38	A1	1473	C	C5-C6	5.21	1.38	1.34
38	A1	1963	G	P-O5'	-5.21	1.54	1.59
38	A1	2407	G	N9-C8	5.21	1.41	1.37
39	A3	105	G	P-O5'	5.21	1.65	1.59
60	AM	44	ARG	CZ-NH2	5.21	1.39	1.33
38	A1	402	G	N9-C8	5.21	1.41	1.37
38	A1	2193	G	O3'-P	-5.21	1.54	1.61
11	B2	154	C	N1-C6	5.21	1.40	1.37
11	B2	434	A	C4'-C3'	-5.21	1.47	1.52
11	B2	640	U	O3'-P	-5.21	1.54	1.61
11	B2	675	A	C6-N6	5.21	1.38	1.33
11	B2	1003	G	C4'-C3'	5.21	1.58	1.53
11	B2	1168	C	C4'-C3'	-5.21	1.47	1.52
11	B2	1292	A	O3'-P	-5.21	1.54	1.61
38	A1	24	G	C3'-C2'	-5.21	1.47	1.52
38	A1	466	C	C1'-N1	5.21	1.56	1.48
38	A1	880	U	C2'-C1'	-5.21	1.47	1.53
38	A1	1058	A	N9-C4	-5.21	1.34	1.37
38	A1	1406	G	N1-C2	5.21	1.42	1.37
38	A1	1759	A	N9-C8	5.21	1.42	1.37
38	A1	2090	A	C4'-C3'	5.21	1.58	1.53
38	A1	2667	U	P-O5'	-5.21	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
45	AC	30	TRP	CD2-CE2	-5.21	1.35	1.41
9	AX	350	GLY	N-CA	-5.21	1.38	1.46
10	B1	58	A	C5-C6	-5.21	1.36	1.41
11	B2	251	G	C3'-O3'	5.21	1.49	1.42
11	B2	472	C	C4-C5	5.21	1.47	1.43
11	B2	1180	G	C2'-C1'	-5.21	1.47	1.53
11	B2	1404	C	C3'-C2'	5.21	1.58	1.52
11	B2	1447	A	C6-N1	5.21	1.39	1.35
38	A1	251	C	C2-N3	5.21	1.40	1.35
38	A1	589	G	N1-C2	5.21	1.42	1.37
38	A1	1091	G	C8-N7	-5.21	1.27	1.30
38	A1	1358	C	N3-C4	5.21	1.37	1.33
38	A1	1450	C	C4-C5	5.21	1.47	1.43
38	A1	1451	A	O4'-C1'	5.21	1.48	1.41
38	A1	1641	G	C5'-C4'	5.21	1.57	1.51
38	A1	2814	U	N3-C4	5.21	1.43	1.38
38	A1	2840	C	N1-C2	-5.21	1.34	1.40
44	Ab	41	ARG	NE-CZ	5.21	1.39	1.33
38	A1	1435	G	C5-C4	5.21	1.42	1.38
38	A1	2348	G	C3'-C2'	5.21	1.58	1.52
9	AX	104	ARG	CZ-NH2	5.20	1.39	1.33
11	B2	415	C	C2'-C1'	-5.20	1.47	1.53
11	B2	665	G	C4'-O4'	5.20	1.52	1.45
11	B2	1120	G	N9-C4	-5.20	1.33	1.38
11	B2	1460	G	C6-N1	5.20	1.43	1.39
11	B2	1476	C	C2'-C1'	-5.20	1.47	1.53
11	B2	1488	C	O3'-P	-5.20	1.54	1.61
38	A1	816	C	C1'-N1	5.20	1.56	1.48
38	A1	915	G	O4'-C1'	-5.20	1.34	1.41
38	A1	974	U	N3-C4	5.20	1.43	1.38
38	A1	1907	G	C5'-C4'	5.20	1.57	1.51
38	A1	1952	G	N7-C5	-5.20	1.36	1.39
38	A1	2077	A	C5-C4	5.20	1.42	1.38
38	A1	2397	C	C5'-C4'	5.20	1.57	1.51
38	A1	2617	G	C5-C4	-5.20	1.34	1.38
39	A3	118	G	C6-N1	5.20	1.43	1.39
46	AD	128	ARG	CZ-NH1	5.20	1.39	1.33
24	BL	83	ARG	CD-NE	5.20	1.55	1.46
38	A1	673	A	C2'-C1'	-5.20	1.47	1.53
38	A1	745	C	C5-C6	-5.20	1.30	1.34
38	A1	919	G	N9-C8	5.20	1.41	1.37
38	A1	931	C	C4'-C3'	5.20	1.58	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1122	C	O3'-P	-5.20	1.54	1.61
38	A1	1464	A	C6-N6	5.20	1.38	1.33
10	B1	8	U	N3-C4	5.20	1.43	1.38
11	B2	288	G	N1-C2	5.20	1.42	1.37
11	B2	545	C	C1'-N1	5.20	1.56	1.48
11	B2	691	G	N9-C4	5.20	1.42	1.38
11	B2	746	A	C3'-C2'	-5.20	1.47	1.52
11	B2	768	A	C6-N6	5.20	1.38	1.33
11	B2	1359	C	N1-C2	-5.20	1.34	1.40
38	A1	82	C	P-O5'	-5.20	1.54	1.59
38	A1	319	A	N9-C8	-5.20	1.33	1.37
38	A1	549	G	C2'-C1'	-5.20	1.47	1.53
38	A1	658	C	C4-C5	-5.20	1.38	1.43
38	A1	731	C	C3'-C2'	5.20	1.58	1.52
38	A1	1382	C	C4'-O4'	-5.20	1.38	1.45
38	A1	1887	A	C6-N6	5.20	1.38	1.33
38	A1	2404	G	C5-C6	5.20	1.47	1.42
38	A1	2554	A	C5-C6	5.20	1.45	1.41
38	A1	2778	A	O4'-C1'	5.20	1.48	1.41
38	A1	2827	C	O3'-P	-5.20	1.54	1.61
38	A1	2843	C	C4-N4	-5.20	1.29	1.33
38	A1	3019	C	C2-O2	5.20	1.29	1.24
11	B2	247	G	C8-N7	5.20	1.34	1.30
11	B2	635	C	C3'-O3'	5.20	1.49	1.42
11	B2	921	G	N1-C2	5.20	1.42	1.37
11	B2	1116	G	C4'-C3'	5.20	1.58	1.53
38	A1	129	C	C4'-C3'	-5.20	1.47	1.52
38	A1	227	G	O3'-P	-5.20	1.54	1.61
38	A1	600	A	C4'-C3'	5.20	1.58	1.53
38	A1	984	U	N1-C2	5.20	1.43	1.38
38	A1	993	G	C8-N7	-5.20	1.27	1.30
38	A1	1040	C	N1-C6	5.20	1.40	1.37
38	A1	1246	G	N3-C4	5.20	1.39	1.35
38	A1	1647	C	C4-C5	-5.20	1.38	1.43
38	A1	1722	G	N1-C2	5.20	1.42	1.37
38	A1	2014	A	C5-C4	5.20	1.42	1.38
38	A1	2434	A	C2'-C1'	-5.20	1.47	1.53
38	A1	2496	G	N3-C4	-5.20	1.31	1.35
38	A1	2590	C	C4-N4	5.20	1.38	1.33
38	A1	2668	G	C1'-N9	5.20	1.56	1.48
38	A1	3000	U	C2'-C1'	5.20	1.59	1.53
11	B2	30	C	O4'-C1'	5.20	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1413	A	C2'-O2'	-5.20	1.34	1.41
38	A1	1607	C	P-O5'	-5.20	1.54	1.59
38	A1	1794	C	C4'-O4'	5.20	1.52	1.45
38	A1	2280	G	P-O5'	5.20	1.65	1.59
38	A1	2691	G	C5'-C4'	-5.20	1.45	1.51
11	B2	82	G	C3'-C2'	5.20	1.58	1.52
11	B2	322	G	N9-C8	-5.20	1.34	1.37
11	B2	649	A	N1-C2	5.20	1.39	1.34
11	B2	712	G	O3'-P	-5.20	1.54	1.61
11	B2	793	G	O4'-C1'	5.20	1.48	1.41
38	A1	84	A	C3'-O3'	5.20	1.49	1.42
38	A1	281	G	C8-N7	5.20	1.34	1.30
38	A1	1369	G	C2-N3	-5.20	1.28	1.32
38	A1	1928	A	N1-C2	-5.20	1.29	1.34
10	B1	69	G	N1-C2	5.19	1.42	1.37
11	B2	1306	A	N1-C2	5.19	1.39	1.34
38	A1	664	A	C3'-O3'	5.19	1.49	1.42
38	A1	823	G	C4'-C3'	5.19	1.58	1.53
38	A1	1163	U	O4'-C1'	5.19	1.48	1.41
61	AN	71	ARG	CZ-NH1	5.19	1.39	1.33
9	AX	66	ARG	CZ-NH2	5.19	1.39	1.33
11	B2	53	G	C2-N3	5.19	1.36	1.32
11	B2	320	G	N7-C5	-5.19	1.36	1.39
11	B2	332	C	C4-N4	5.19	1.38	1.33
11	B2	501	G	C2'-C1'	-5.19	1.47	1.53
11	B2	525	A	C2'-C1'	5.19	1.59	1.53
11	B2	809	C	N3-C4	5.19	1.37	1.33
11	B2	866	A	C6-N1	5.19	1.39	1.35
11	B2	894	A	N9-C8	5.19	1.42	1.37
11	B2	993	C	O4'-C1'	5.19	1.48	1.41
11	B2	1000	G	C2'-O2'	-5.19	1.34	1.41
11	B2	1269	G	C2-N2	5.19	1.39	1.34
11	B2	1438	A	N9-C8	5.19	1.42	1.37
38	A1	382	G	N1-C2	5.19	1.42	1.37
38	A1	856	A	N9-C4	5.19	1.41	1.37
38	A1	1000	G	N9-C4	-5.19	1.33	1.38
38	A1	1360	G	C2'-C1'	-5.19	1.47	1.53
38	A1	1589	G	N7-C5	5.19	1.42	1.39
38	A1	1678	A	N9-C8	5.19	1.42	1.37
38	A1	1899	C	C3'-O3'	5.19	1.49	1.42
38	A1	2088	G	C3'-C2'	-5.19	1.47	1.52
38	A1	2102	A	C5-C6	5.19	1.45	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2522	C	C4-N4	5.19	1.38	1.33
38	A1	2828	G	C6-N1	5.19	1.43	1.39
39	A3	116	C	C4-N4	5.19	1.38	1.33
11	B2	100	A	N1-C2	-5.19	1.29	1.34
11	B2	192	G	C4'-C3'	5.19	1.58	1.53
11	B2	619	A	C6-N6	5.19	1.38	1.33
11	B2	620	G	C5'-C4'	5.19	1.57	1.51
11	B2	1090	C	C2-O2	5.19	1.29	1.24
11	B2	1312	C	C5'-C4'	5.19	1.57	1.51
20	BH	8	ARG	CZ-NH2	5.19	1.39	1.33
38	A1	296	G	C6-N1	5.19	1.43	1.39
38	A1	439	G	C2-N3	5.19	1.36	1.32
38	A1	606	A	N1-C2	5.19	1.39	1.34
38	A1	932	C	C4'-C3'	-5.19	1.47	1.52
38	A1	991	U	N1-C6	5.19	1.42	1.38
38	A1	1172	U	C2-N3	5.19	1.41	1.37
38	A1	1644	G	C5'-C4'	5.19	1.57	1.51
38	A1	1681	G	C2-N3	5.19	1.36	1.32
38	A1	1964	G	C5-C4	-5.19	1.34	1.38
38	A1	2003	C	C3'-C2'	-5.19	1.47	1.52
38	A1	2372	C	C4-C5	5.19	1.47	1.43
38	A1	2431	C	C5-C6	5.19	1.38	1.34
38	A1	2549	A	N9-C8	5.19	1.42	1.37
11	B2	1024	G	O3'-P	-5.19	1.54	1.61
38	A1	1864	G	C2'-C1'	-5.19	1.47	1.53
11	B2	420	C	P-O5'	-5.19	1.54	1.59
11	B2	1199	A	P-O5'	-5.19	1.54	1.59
21	BI	93	PHE	CG-CD2	5.19	1.46	1.38
22	BJ	61	ALA	CA-CB	5.19	1.63	1.52
38	A1	63	A	C5-C4	5.19	1.42	1.38
38	A1	195	U	N1-C2	-5.19	1.33	1.38
38	A1	1180	G	C3'-C2'	-5.19	1.47	1.52
38	A1	1524	A	C6-N6	5.19	1.38	1.33
38	A1	1878	G	N3-C4	-5.19	1.31	1.35
38	A1	1881	A	N7-C5	5.19	1.42	1.39
38	A1	2293	G	C2'-C1'	5.19	1.59	1.53
38	A1	2704	A	C4'-C3'	5.19	1.58	1.53
38	A1	2732	U	C2-N3	5.19	1.41	1.37
38	A1	2747	C	C3'-O3'	5.19	1.49	1.42
39	A3	95	G	C4'-C3'	5.19	1.58	1.53
55	Ai	16	ARG	CZ-NH2	5.19	1.39	1.33
10	B1	11	C	O3'-P	5.19	1.67	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	300	G	N7-C5	-5.19	1.36	1.39
11	B2	1446	G	C3'-C2'	5.19	1.58	1.52
38	A1	27	G	C5'-C4'	5.19	1.57	1.51
38	A1	269	C	C3'-C2'	-5.19	1.47	1.52
38	A1	871	G	C6-O6	5.19	1.28	1.24
54	AI	124	SER	CA-CB	5.19	1.60	1.52
11	B2	66	G	P-OP2	-5.18	1.40	1.49
11	B2	1339	G	O3'-P	-5.18	1.54	1.61
38	A1	80	G	C2'-C1'	-5.18	1.47	1.53
38	A1	1132	U	C5'-C4'	5.18	1.57	1.51
38	A1	1193	G	O4'-C1'	5.18	1.48	1.41
38	A1	1380	G	C2-N3	5.18	1.36	1.32
38	A1	2073	G	C2-N3	5.18	1.36	1.32
38	A1	2988	A	O3'-P	-5.18	1.54	1.61
61	AN	136	ARG	NE-CZ	5.18	1.39	1.33
62	AO	65	ARG	NE-CZ	5.18	1.39	1.33
65	AV	63	ARG	CZ-NH1	5.18	1.39	1.33
11	B2	200	G	N9-C8	-5.18	1.34	1.37
11	B2	609	G	C5-C6	-5.18	1.37	1.42
11	B2	872	A	N1-C2	-5.18	1.29	1.34
11	B2	1055	C	N1-C6	-5.18	1.34	1.37
11	B2	1057	A	N9-C4	5.18	1.41	1.37
38	A1	146	U	N3-C4	5.18	1.43	1.38
38	A1	231	G	C5'-C4'	5.18	1.57	1.51
38	A1	523	C	P-O5'	-5.18	1.54	1.59
38	A1	670	G	P-O5'	-5.18	1.54	1.59
38	A1	1354	G	C5-C4	5.18	1.42	1.38
38	A1	1485	A	C4'-C3'	5.18	1.58	1.53
38	A1	1941	A	C6-N6	5.18	1.38	1.33
39	A3	76	U	C2-O2	5.18	1.27	1.22
41	AA	107	PHE	CG-CD1	5.18	1.46	1.38
67	AZ	8	ARG	CZ-NH2	5.18	1.39	1.33
11	B2	499	G	O3'-P	-5.18	1.54	1.61
11	B2	847	A	C8-N7	-5.18	1.27	1.31
38	A1	299	U	C4-C5	5.18	1.48	1.43
38	A1	644	G	C5'-C4'	5.18	1.57	1.51
38	A1	2330	A	N9-C4	5.18	1.41	1.37
38	A1	2368	G	N9-C8	5.18	1.41	1.37
10	B1	17	C	C3'-C2'	5.18	1.58	1.52
11	B2	415	C	C2-N3	5.18	1.39	1.35
11	B2	1479	C	P-O5'	-5.18	1.54	1.59
21	BI	62	ARG	CD-NE	5.18	1.55	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	53	A	N7-C5	-5.18	1.36	1.39
38	A1	303	A	P-O5'	-5.18	1.54	1.59
38	A1	1377	G	C8-N7	5.18	1.34	1.30
38	A1	1501	G	C3'-O3'	5.18	1.49	1.42
38	A1	1657	G	C2-N2	5.18	1.39	1.34
38	A1	2052	A	N9-C8	5.18	1.41	1.37
38	A1	2214	U	C5-C6	5.18	1.38	1.34
38	A1	2234	C	C2-N3	5.18	1.39	1.35
38	A1	2888	G	C3'-C2'	5.18	1.58	1.52
39	A3	106	G	N1-C2	5.18	1.41	1.37
38	A1	555	G	N7-C5	5.18	1.42	1.39
38	A1	1623	C	C5'-C4'	5.18	1.57	1.51
38	A1	1680	G	N1-C2	5.18	1.41	1.37
38	A1	1685	C	C4'-O4'	5.18	1.52	1.45
38	A1	2464	G	N1-C2	5.18	1.41	1.37
38	A1	2751	C	P-O5'	-5.18	1.54	1.59
54	AI	52	ARG	CZ-NH2	5.18	1.39	1.33
59	AL	116	GLY	CA-C	-5.18	1.43	1.51
11	B2	344	G	N9-C8	5.18	1.41	1.37
38	A1	255	G	C4'-C3'	5.18	1.58	1.53
38	A1	381	G	C2-N2	5.18	1.39	1.34
38	A1	1063	C	O5'-C5'	5.18	1.52	1.44
38	A1	1235	A	C4'-O4'	5.18	1.52	1.45
38	A1	1726	A	C5'-C4'	5.18	1.57	1.51
38	A1	2079	U	C4-C5	5.18	1.48	1.43
38	A1	2451	G	C5-C6	-5.18	1.37	1.42
11	B2	41	C	C2-N3	5.17	1.39	1.35
11	B2	613	C	C5'-C4'	5.17	1.57	1.51
11	B2	656	U	C4'-C3'	5.17	1.58	1.53
11	B2	892	C	O4'-C1'	5.17	1.48	1.41
34	BV	59	TYR	CD1-CE1	-5.17	1.31	1.39
38	A1	227	G	P-O5'	5.17	1.65	1.59
38	A1	374	C	P-O5'	-5.17	1.54	1.59
38	A1	495	U	N1-C6	-5.17	1.33	1.38
38	A1	671	G	C4'-O4'	5.17	1.52	1.45
38	A1	1474	A	C5'-C4'	5.17	1.57	1.51
38	A1	1625	A	C5-C4	-5.17	1.35	1.38
38	A1	2170	C	P-O5'	-5.17	1.54	1.59
38	A1	2276	G	C2-N3	5.17	1.36	1.32
38	A1	2981	G	C2-N2	5.17	1.39	1.34
39	A3	74	U	O3'-P	-5.17	1.54	1.61
38	A1	505	A	C2-N3	5.17	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	634	G	C5-C4	5.17	1.42	1.38
38	A1	688	G	C5-C4	5.17	1.42	1.38
38	A1	870	G	C6-N1	5.17	1.43	1.39
38	A1	912	G	C6-N1	-5.17	1.35	1.39
45	AC	6	ARG	NE-CZ	5.17	1.39	1.33
40	AK	46	ARG	NE-CZ	5.17	1.39	1.33
11	B2	250	G	P-O5'	5.17	1.65	1.59
11	B2	993	C	C2-O2	5.17	1.29	1.24
11	B2	1063	A	N1-C2	5.17	1.39	1.34
11	B2	1167	C	C4-N4	5.17	1.38	1.33
11	B2	1177	C	C2'-C1'	-5.17	1.47	1.53
11	B2	1250	C	N1-C6	5.17	1.40	1.37
25	BM	135	ARG	CD-NE	5.17	1.55	1.46
38	A1	499	A	C2-N3	5.17	1.38	1.33
38	A1	795	G	N9-C4	-5.17	1.33	1.38
38	A1	1021	G	C2'-C1'	-5.17	1.47	1.53
38	A1	1247	U	C2'-C1'	-5.17	1.47	1.53
38	A1	1360	G	C4'-C3'	5.17	1.58	1.53
38	A1	1687	C	C3'-C2'	5.17	1.58	1.52
38	A1	2307	C	O3'-P	-5.17	1.54	1.61
38	A1	2313	G	C2-N3	5.17	1.36	1.32
38	A1	2318	G	C5-C6	-5.17	1.37	1.42
38	A1	2518	G	C2-N3	5.17	1.36	1.32
38	A1	2951	G	C2-N3	5.17	1.36	1.32
25	BM	133	ARG	CD-NE	5.17	1.55	1.46
38	A1	425	U	C2-O2	5.17	1.27	1.22
38	A1	629	G	N9-C4	-5.17	1.33	1.38
38	A1	997	A	N1-C2	5.17	1.39	1.34
38	A1	1054	A	C2-N3	-5.17	1.28	1.33
38	A1	1607	C	N1-C2	5.17	1.45	1.40
45	AC	90	TYR	CE1-CZ	5.17	1.45	1.38
11	B2	521	G	P-O5'	5.17	1.65	1.59
11	B2	1151	A	N9-C4	5.17	1.41	1.37
11	B2	1428	G	N9-C8	5.17	1.41	1.37
21	BI	89	TRP	CD1-NE1	-5.17	1.29	1.38
30	BR	106	LEU	CA-CB	5.17	1.65	1.53
38	A1	77	C	P-O5'	-5.17	1.54	1.59
38	A1	296	G	C2-N3	5.17	1.36	1.32
38	A1	527	G	N9-C4	5.17	1.42	1.38
38	A1	881	G	C5'-C4'	5.17	1.57	1.51
38	A1	1200	A	O4'-C1'	-5.17	1.34	1.41
38	A1	1249	G	C2-N2	5.17	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2054	G	C2'-C1'	-5.17	1.47	1.53
38	A1	2215	U	N1-C6	5.17	1.42	1.38
61	AN	107	ARG	CZ-NH1	5.17	1.39	1.33
10	B1	37	A	N3-C4	-5.17	1.31	1.34
11	B2	621	G	N3-C4	5.17	1.39	1.35
11	B2	835	C	C3'-O3'	5.17	1.49	1.42
11	B2	883	G	C5-C6	-5.17	1.37	1.42
11	B2	1278	A	C5-C4	5.17	1.42	1.38
11	B2	1342	C	C4'-C3'	5.17	1.58	1.53
38	A1	84	A	C6-N6	5.17	1.38	1.33
38	A1	234	G	C1'-N9	5.17	1.56	1.48
38	A1	296	G	C4'-C3'	5.17	1.58	1.53
38	A1	657	U	C4-C5	5.17	1.48	1.43
38	A1	1610	C	N1-C2	5.17	1.45	1.40
38	A1	1823	A	C3'-C2'	-5.17	1.47	1.52
38	A1	2121	C	N1-C6	5.17	1.40	1.37
38	A1	2462	U	C1'-N1	5.17	1.56	1.48
38	A1	2542	G	C6-N1	5.17	1.43	1.39
38	A1	2762	G	C4'-C3'	-5.17	1.47	1.52
40	AK	58	GLN	CA-CB	5.17	1.65	1.53
17	BE	121	PHE	CB-CG	5.17	1.60	1.51
38	A1	438	G	P-O5'	-5.17	1.54	1.59
38	A1	1010	G	N1-C2	5.17	1.41	1.37
38	A1	1024	G	N3-C4	-5.17	1.31	1.35
38	A1	1644	G	N9-C8	5.17	1.41	1.37
38	A1	1789	A	C8-N7	-5.17	1.27	1.31
50	AF	133	ARG	CZ-NH2	5.17	1.39	1.33
11	B2	189	C	C4'-O4'	5.16	1.52	1.45
11	B2	944	C	C5'-C4'	5.16	1.57	1.51
38	A1	683	C	C2'-C1'	-5.16	1.47	1.53
38	A1	1642	G	C5-C4	5.16	1.42	1.38
38	A1	1688	C	C4-N4	5.16	1.38	1.33
38	A1	2650	G	C4'-C3'	-5.16	1.47	1.52
38	A1	2781	A	C4'-C3'	5.16	1.58	1.53
38	A1	694	A	C2-N3	5.16	1.38	1.33
38	A1	1642	G	N1-C2	5.16	1.41	1.37
38	A1	2877	A	C5'-C4'	5.16	1.57	1.51
38	A1	2966	C	C2-N3	-5.16	1.31	1.35
54	AI	125	ARG	CD-NE	5.16	1.55	1.46
11	B2	221	A	C2'-C1'	-5.16	1.47	1.53
11	B2	524	U	C1'-N1	5.16	1.56	1.48
11	B2	907	C	C4-C5	5.16	1.47	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1384	G	C8-N7	-5.16	1.27	1.30
38	A1	131	C	C2-N3	5.16	1.39	1.35
38	A1	1176	C	C2'-C1'	5.16	1.59	1.53
38	A1	1492	C	C3'-C2'	5.16	1.58	1.52
38	A1	1654	G	C5-C6	-5.16	1.37	1.42
38	A1	1747	C	N1-C2	5.16	1.45	1.40
38	A1	2695	U	O3'-P	-5.16	1.54	1.61
38	A1	2834	C	C5'-C4'	5.16	1.57	1.51
38	A1	2835	A	O4'-C1'	5.16	1.48	1.41
38	A1	3035	C	C5'-C4'	5.16	1.57	1.51
50	AF	107	GLU	CD-OE2	5.16	1.31	1.25
10	B1	29	C	C2'-C1'	-5.16	1.47	1.53
11	B2	82	G	C5'-C4'	-5.16	1.45	1.51
11	B2	510	A	C8-N7	-5.16	1.27	1.31
11	B2	885	G	C2-N3	5.16	1.36	1.32
11	B2	1102	A	C2-N3	5.16	1.38	1.33
17	BE	23	ARG	CD-NE	5.16	1.55	1.46
38	A1	620	G	C2'-C1'	-5.16	1.47	1.53
38	A1	729	A	N9-C4	-5.16	1.34	1.37
38	A1	947	C	N1-C6	5.16	1.40	1.37
38	A1	1526	G	O4'-C1'	5.16	1.48	1.41
38	A1	1612	G	C2-N3	-5.16	1.28	1.32
38	A1	2001	U	C4-C5	5.16	1.48	1.43
38	A1	2357	U	C4'-C3'	-5.16	1.47	1.52
38	A1	2465	A	N3-C4	5.16	1.38	1.34
38	A1	2673	C	C4-N4	5.16	1.38	1.33
39	A3	65	G	O3'-P	-5.16	1.54	1.61
11	B2	75	C	C5'-C4'	5.16	1.57	1.51
11	B2	271	G	C6-N1	5.16	1.43	1.39
11	B2	1137	G	N9-C8	5.16	1.41	1.37
38	A1	654	C	C4'-C3'	-5.16	1.47	1.52
38	A1	805	C	P-O5'	5.16	1.65	1.59
38	A1	1006	A	N1-C2	-5.16	1.29	1.34
38	A1	1040	C	P-O5'	-5.16	1.54	1.59
38	A1	1640	G	N7-C5	-5.16	1.36	1.39
38	A1	2106	G	C4'-O4'	5.16	1.52	1.45
38	A1	2528	U	C4-C5	5.16	1.48	1.43
59	AL	71	ARG	NE-CZ	5.16	1.39	1.33
10	B1	14	A	N3-C4	-5.16	1.31	1.34
11	B2	1	A	C6-N1	-5.16	1.31	1.35
11	B2	133	G	C2'-C1'	-5.16	1.47	1.53
11	B2	827	G	C8-N7	-5.16	1.27	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1079	G	O3'-P	-5.16	1.54	1.61
18	BF	111	ARG	CD-NE	5.16	1.55	1.46
38	A1	193	A	C4'-C3'	5.16	1.58	1.53
38	A1	550	A	N7-C5	-5.16	1.36	1.39
38	A1	794	G	C2'-O2'	-5.16	1.34	1.41
38	A1	1793	G	N9-C4	5.16	1.42	1.38
38	A1	1849	A	P-O5'	-5.16	1.54	1.59
38	A1	2187	C	C4-N4	5.16	1.38	1.33
38	A1	2316	U	N1-C6	5.16	1.42	1.38
38	A1	2874	C	C4'-O4'	5.16	1.52	1.45
11	B2	717	C	O3'-P	-5.15	1.54	1.61
11	B2	921	G	P-O5'	-5.15	1.54	1.59
38	A1	1216	A	O3'-P	-5.15	1.54	1.61
38	A1	1851	U	C1'-N1	5.15	1.56	1.48
11	B2	407	G	C8-N7	-5.15	1.27	1.30
11	B2	993	C	N1-C6	5.15	1.40	1.37
11	B2	1069	G	C2-N3	5.15	1.36	1.32
17	BE	186	PHE	CG-CD1	5.15	1.46	1.38
25	BM	84	ARG	CZ-NH2	5.15	1.39	1.33
38	A1	10	C	C4'-O4'	-5.15	1.38	1.45
38	A1	53	A	C5-C6	-5.15	1.36	1.41
38	A1	54	G	C5'-C4'	5.15	1.57	1.51
38	A1	205	A	N1-C2	5.15	1.39	1.34
38	A1	207	A	C5-C4	5.15	1.42	1.38
38	A1	614	G	C3'-O3'	5.15	1.49	1.42
38	A1	2066	C	C5'-C4'	5.15	1.57	1.51
38	A1	2651	G	P-O5'	-5.15	1.54	1.59
38	A1	2660	G	C8-N7	-5.15	1.27	1.30
38	A1	2696	G	C2-N2	5.15	1.39	1.34
38	A1	2725	U	C4-C5	5.15	1.48	1.43
49	Ae	21	ARG	CD-NE	5.15	1.55	1.46
10	B1	29	C	N3-C4	5.15	1.37	1.33
11	B2	676	G	C2-N3	5.15	1.36	1.32
26	BN	3	GLY	N-CA	5.15	1.53	1.46
38	A1	803	A	N9-C8	-5.15	1.33	1.37
38	A1	1257	G	C4'-O4'	5.15	1.52	1.45
38	A1	1440	C	C3'-C2'	-5.15	1.47	1.52
38	A1	2255	C	C4'-C3'	-5.15	1.47	1.52
38	A1	2603	A	N9-C4	-5.15	1.34	1.37
38	A1	2958	U	C4'-O4'	-5.15	1.38	1.45
38	A1	2981	G	C5'-C4'	5.15	1.57	1.51
39	A3	1	C	C4-N4	5.15	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
39	A3	103	C	C5'-C4'	5.15	1.57	1.51
18	BF	38	PHE	CG-CD1	5.15	1.46	1.38
38	A1	1768	C	C2'-C1'	-5.15	1.47	1.53
38	A1	1790	G	C2'-C1'	-5.15	1.47	1.53
38	A1	2123	G	C6-N1	5.15	1.43	1.39
38	A1	2603	A	C6-N1	-5.15	1.31	1.35
11	B2	534	G	C8-N7	-5.15	1.27	1.30
11	B2	591	G	N1-C2	5.15	1.41	1.37
11	B2	733	C	C4-C5	5.15	1.47	1.43
11	B2	1305	U	C4'-C3'	5.15	1.58	1.53
17	BE	204	ARG	CD-NE	5.15	1.55	1.46
38	A1	265	A	C2'-C1'	-5.15	1.47	1.53
38	A1	910	G	N9-C4	-5.15	1.33	1.38
38	A1	1733	C	C4-N4	5.15	1.38	1.33
38	A1	2007	C	N1-C6	-5.15	1.34	1.37
38	A1	2313	G	C2'-C1'	-5.15	1.47	1.53
45	AC	8	ARG	CD-NE	5.15	1.55	1.46
62	AO	84	TYR	CG-CD2	5.15	1.45	1.39
11	B2	884	G	C8-N7	-5.15	1.27	1.30
14	BB	179	ARG	NE-CZ	5.15	1.39	1.33
38	A1	124	C	N1-C2	5.15	1.45	1.40
38	A1	514	U	C2'-C1'	-5.15	1.47	1.53
38	A1	544	A	C5-C6	-5.15	1.36	1.41
38	A1	1462	G	C5-C4	5.15	1.42	1.38
38	A1	2092	G	C8-N7	5.15	1.34	1.30
64	AR	21	ARG	CD-NE	5.15	1.55	1.46
11	B2	11	A	N9-C4	-5.14	1.34	1.37
11	B2	35	G	C4'-C3'	5.14	1.58	1.53
11	B2	66	G	C2-N3	-5.14	1.28	1.32
11	B2	212	G	C3'-C2'	5.14	1.58	1.52
11	B2	259	A	C5-C4	-5.14	1.35	1.38
11	B2	813	G	C3'-C2'	-5.14	1.47	1.52
11	B2	877	A	C8-N7	-5.14	1.27	1.31
11	B2	910	G	N1-C2	5.14	1.41	1.37
11	B2	990	G	C4'-O4'	-5.14	1.38	1.45
11	B2	1363	C	C5'-C4'	5.14	1.57	1.51
15	BC	109	PHE	CB-CG	5.14	1.60	1.51
38	A1	263	U	C4-O4	5.14	1.27	1.23
38	A1	317	A	O3'-P	-5.14	1.54	1.61
38	A1	867	C	N1-C6	5.14	1.40	1.37
38	A1	1097	G	C8-N7	-5.14	1.27	1.30
38	A1	1193	G	N3-C4	5.14	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1284	C	C2-O2	-5.14	1.19	1.24
38	A1	2680	A	C5-C4	5.14	1.42	1.38
38	A1	2840	C	C5-C6	-5.14	1.30	1.34
39	A3	49	A	C3'-O3'	5.14	1.49	1.42
11	B2	49	C	C4'-C3'	5.14	1.58	1.53
11	B2	485	A	C2-N3	5.14	1.38	1.33
11	B2	737	C	C5'-C4'	5.14	1.57	1.51
11	B2	838	C	N1-C6	5.14	1.40	1.37
11	B2	1452	G	C3'-O3'	-5.14	1.34	1.42
38	A1	594	U	C4-C5	-5.14	1.39	1.43
38	A1	1661	A	P-O5'	-5.14	1.54	1.59
38	A1	1796	U	C4-C5	5.14	1.48	1.43
38	A1	1886	C	C2-N3	5.14	1.39	1.35
38	A1	2044	C	P-O5'	-5.14	1.54	1.59
38	A1	2746	G	N1-C2	5.14	1.41	1.37
38	A1	2782	A	C6-N1	5.14	1.39	1.35
57	Aj	47	TYR	CE1-CZ	5.14	1.45	1.38
60	AM	128	PHE	CG-CD2	5.14	1.46	1.38
11	B2	506	G	C3'-C2'	-5.14	1.47	1.52
11	B2	1002	G	P-O5'	5.14	1.64	1.59
11	B2	1157	G	C5'-C4'	5.14	1.57	1.51
11	B2	1314	C	C2-O2	5.14	1.29	1.24
38	A1	421	C	N1-C6	-5.14	1.34	1.37
61	AN	20	ARG	NE-CZ	5.14	1.39	1.33
6	AT	67	TYR	CG-CD2	5.14	1.45	1.39
11	B2	873	A	C2-N3	-5.14	1.28	1.33
18	BF	84	ARG	NE-CZ	5.14	1.39	1.33
38	A1	36	G	O4'-C1'	-5.14	1.34	1.41
38	A1	372	A	N7-C5	-5.14	1.36	1.39
38	A1	1095	A	C6-N1	5.14	1.39	1.35
38	A1	1380	G	C3'-O3'	5.14	1.49	1.42
38	A1	1420	U	C5-C6	-5.14	1.29	1.34
38	A1	1810	G	N9-C8	-5.14	1.34	1.37
38	A1	2194	A	N1-C2	-5.14	1.29	1.34
38	A1	2274	C	N1-C6	5.14	1.40	1.37
38	A1	2781	A	C8-N7	5.14	1.35	1.31
38	A1	2851	A	O3'-P	-5.14	1.54	1.61
39	A3	67	U	N1-C2	-5.14	1.33	1.38
11	B2	1013	G	C6-O6	-5.14	1.19	1.24
11	B2	1127	A	N7-C5	5.14	1.42	1.39
13	BA	102	ARG	CZ-NH1	5.14	1.39	1.33
38	A1	303	A	C6-N1	5.14	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1692	A	C4'-O4'	5.14	1.52	1.45
38	A1	1850	C	N3-C4	5.14	1.37	1.33
38	A1	2420	C	P-O5'	-5.14	1.54	1.59
46	AD	70	VAL	N-CA	-5.14	1.36	1.46
11	B2	208	U	C4'-C3'	5.14	1.58	1.53
11	B2	267	C	C2'-C1'	-5.14	1.47	1.53
11	B2	281	G	N7-C5	-5.14	1.36	1.39
11	B2	374	G	C2-N2	5.14	1.39	1.34
11	B2	668	G	C5'-C4'	-5.14	1.45	1.51
11	B2	971	G	C6-N1	5.14	1.43	1.39
11	B2	1111	G	C2'-C1'	-5.14	1.47	1.53
11	B2	1384	G	N3-C4	-5.14	1.31	1.35
16	BD	154	TYR	CZ-OH	5.14	1.46	1.37
38	A1	405	G	N9-C8	-5.14	1.34	1.37
38	A1	426	G	N9-C8	5.14	1.41	1.37
38	A1	864	C	N1-C6	5.14	1.40	1.37
38	A1	1004	U	C1'-N1	5.14	1.56	1.48
38	A1	1790	G	P-O5'	-5.14	1.54	1.59
38	A1	2287	C	O3'-P	-5.14	1.54	1.61
44	Ab	18	ARG	CZ-NH2	5.14	1.39	1.33
11	B2	39	U	C4-O4	-5.13	1.19	1.23
11	B2	115	A	N7-C5	-5.13	1.36	1.39
11	B2	612	C	C2-N3	5.13	1.39	1.35
11	B2	769	A	C6-N6	5.13	1.38	1.33
11	B2	1120	G	N3-C4	5.13	1.39	1.35
11	B2	1233	G	N9-C8	5.13	1.41	1.37
11	B2	1256	C	N1-C6	-5.13	1.34	1.37
19	BG	102	ARG	NE-CZ	5.13	1.39	1.33
27	BO	111	ARG	CD-NE	5.13	1.55	1.46
38	A1	529	G	C5'-C4'	5.13	1.57	1.51
38	A1	593	C	N3-C4	5.13	1.37	1.33
38	A1	808	A	C2-N3	5.13	1.38	1.33
38	A1	1503	C	C4-N4	5.13	1.38	1.33
38	A1	1583	G	C5-C4	-5.13	1.34	1.38
38	A1	1603	G	O3'-P	-5.13	1.54	1.61
38	A1	1779	C	P-O5'	-5.13	1.54	1.59
38	A1	2067	U	C2'-C1'	-5.13	1.47	1.53
38	A1	2229	G	P-O5'	-5.13	1.54	1.59
38	A1	2241	U	C2-O2	5.13	1.26	1.22
38	A1	2333	G	C3'-O3'	5.13	1.49	1.42
38	A1	2666	G	C6-N1	5.13	1.43	1.39
38	A1	2811	U	C2-N3	5.13	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2982	G	P-O5'	-5.13	1.54	1.59
46	AD	187	ARG	CD-NE	5.13	1.55	1.46
50	AF	69	ARG	NE-CZ	5.13	1.39	1.33
11	B2	291	G	C5'-C4'	5.13	1.57	1.51
11	B2	737	C	C2-O2	5.13	1.29	1.24
11	B2	1338	C	O3'-P	-5.13	1.54	1.61
38	A1	479	G	C5-C6	-5.13	1.37	1.42
38	A1	735	A	C4'-O4'	-5.13	1.38	1.45
38	A1	947	C	C2-N3	-5.13	1.31	1.35
38	A1	1021	G	C5-C6	-5.13	1.37	1.42
38	A1	1213	G	O3'-P	-5.13	1.54	1.61
38	A1	2007	C	C4'-C3'	5.13	1.58	1.53
38	A1	2060	A	C2'-C1'	-5.13	1.47	1.53
38	A1	2142	U	C3'-C2'	5.13	1.58	1.52
38	A1	2827	C	C1'-N1	5.13	1.56	1.48
46	AD	187	ARG	CZ-NH1	5.13	1.39	1.33
50	AF	37	ARG	CZ-NH1	5.13	1.39	1.33
11	B2	235	G	C3'-C2'	5.13	1.58	1.52
11	B2	266	A	P-O5'	-5.13	1.54	1.59
11	B2	336	C	C2-O2	5.13	1.29	1.24
11	B2	895	C	C4-N4	5.13	1.38	1.33
38	A1	137	A	C4'-C3'	5.13	1.58	1.53
38	A1	825	C	P-O5'	5.13	1.64	1.59
38	A1	1501	G	N7-C5	5.13	1.42	1.39
38	A1	1613	A	C1'-N9	5.13	1.56	1.48
38	A1	1716	G	C4'-O4'	-5.13	1.38	1.45
38	A1	2025	A	N3-C4	5.13	1.38	1.34
38	A1	2351	G	C2-N2	5.13	1.39	1.34
38	A1	3032	C	C5-C6	5.13	1.38	1.34
11	B2	152	G	C5'-C4'	-5.13	1.45	1.51
38	A1	993	G	C5-C4	5.13	1.42	1.38
38	A1	1434	C	O4'-C1'	-5.13	1.34	1.41
38	A1	495	U	P-O5'	5.13	1.64	1.59
38	A1	890	G	N7-C5	-5.13	1.36	1.39
38	A1	1007	U	C5'-C4'	5.13	1.57	1.51
38	A1	1408	G	N9-C4	5.13	1.42	1.38
38	A1	2231	G	C2-N3	5.13	1.36	1.32
38	A1	2310	G	O3'-P	-5.13	1.54	1.61
38	A1	2474	A	C6-N1	5.13	1.39	1.35
39	A3	40	G	C8-N7	-5.13	1.27	1.30
39	A3	126	C	C4'-C3'	5.13	1.58	1.53
62	AO	115	SER	CA-C	-5.13	1.39	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	72	C	C2'-O2'	5.13	1.48	1.41
11	B2	479	C	N3-C4	5.13	1.37	1.33
30	BR	107	GLU	CD-OE2	-5.13	1.20	1.25
38	A1	484	C	N1-C6	5.13	1.40	1.37
38	A1	939	A	C5-C4	5.13	1.42	1.38
38	A1	1434	C	C2'-C1'	-5.13	1.47	1.53
38	A1	1912	A	C1'-N9	5.13	1.56	1.48
38	A1	2099	G	C5'-C4'	5.13	1.57	1.51
38	A1	2137	A	C8-N7	-5.13	1.27	1.31
38	A1	2645	C	C3'-C2'	5.13	1.58	1.52
11	B2	1404	C	N1-C6	5.12	1.40	1.37
38	A1	102	A	C5'-C4'	5.12	1.57	1.51
38	A1	538	G	C4'-C3'	5.12	1.58	1.53
38	A1	1649	G	C2-N3	5.12	1.36	1.32
38	A1	2089	C	C4-N4	5.12	1.38	1.33
38	A1	2494	A	C6-N6	5.12	1.38	1.33
38	A1	2681	A	C5'-C4'	5.12	1.57	1.51
38	A1	3042	C	O3'-P	-5.12	1.55	1.61
60	AM	38	ARG	CD-NE	5.12	1.55	1.46
11	B2	64	G	C8-N7	-5.12	1.27	1.30
11	B2	185	G	N1-C2	5.12	1.41	1.37
11	B2	533	C	C2-N3	-5.12	1.31	1.35
11	B2	567	A	N3-C4	-5.12	1.31	1.34
11	B2	942	A	C4'-O4'	5.12	1.52	1.45
11	B2	1239	A	P-O5'	-5.12	1.54	1.59
15	BC	27	ARG	NE-CZ	5.12	1.39	1.33
38	A1	1293	G	C8-N7	5.12	1.34	1.30
38	A1	1451	A	C5-C6	5.12	1.45	1.41
38	A1	2787	G	N7-C5	-5.12	1.36	1.39
38	A1	2946	C	N1-C6	5.12	1.40	1.37
11	B2	459	G	C6-N1	5.12	1.43	1.39
11	B2	477	G	P-O5'	-5.12	1.54	1.59
11	B2	1309	A	C8-N7	-5.12	1.27	1.31
38	A1	401	C	N1-C6	5.12	1.40	1.37
38	A1	597	C	C5'-C4'	-5.12	1.45	1.51
38	A1	675	G	C3'-C2'	5.12	1.58	1.52
38	A1	953	G	C3'-C2'	-5.12	1.47	1.52
38	A1	1291	C	C2-O2	5.12	1.29	1.24
38	A1	1500	C	C2-N3	5.12	1.39	1.35
38	A1	1858	G	C5-C4	5.12	1.42	1.38
38	A1	2289	A	C4'-C3'	5.12	1.58	1.53
38	A1	2788	U	C4'-C3'	-5.12	1.47	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
45	AC	28	ARG	CZ-NH2	5.12	1.39	1.33
11	B2	147	A	C6-N1	5.12	1.39	1.35
11	B2	211	G	C4'-C3'	-5.12	1.47	1.52
11	B2	542	G	N9-C8	-5.12	1.34	1.37
11	B2	1210	A	N9-C4	5.12	1.41	1.37
38	A1	176	G	N7-C5	-5.12	1.36	1.39
38	A1	967	G	C2'-C1'	-5.12	1.47	1.53
38	A1	1084	G	N9-C4	-5.12	1.33	1.38
38	A1	1451	A	C3'-O3'	5.12	1.49	1.42
39	A3	3	G	C3'-C2'	5.12	1.58	1.52
39	A3	121	A	O4'-C1'	-5.12	1.34	1.41
11	B2	238	G	C5-C4	-5.12	1.34	1.38
11	B2	1461	U	C2'-C1'	-5.12	1.47	1.53
38	A1	38	U	P-O5'	-5.12	1.54	1.59
38	A1	144	A	C2'-C1'	-5.12	1.47	1.53
38	A1	282	G	C1'-N9	5.12	1.56	1.48
38	A1	287	G	C2-N3	5.12	1.36	1.32
38	A1	431	U	C4'-C3'	5.12	1.58	1.53
38	A1	462	A	C8-N7	-5.12	1.27	1.31
38	A1	990	G	N9-C8	5.12	1.41	1.37
38	A1	1215	C	C4-N4	5.12	1.38	1.33
38	A1	1266	A	N7-C5	-5.12	1.36	1.39
38	A1	1732	C	O3'-P	-5.12	1.55	1.61
38	A1	2493	A	C6-N1	5.12	1.39	1.35
38	A1	3027	C	N3-C4	5.12	1.37	1.33
39	A3	2	G	N1-C2	5.12	1.41	1.37
39	A3	93	G	N9-C8	-5.12	1.34	1.37
58	Ak	11	GLU	N-CA	-5.12	1.36	1.46
65	AV	35	ARG	NE-CZ	5.12	1.39	1.33
10	B1	65	C	N3-C4	5.12	1.37	1.33
11	B2	426	C	C4'-O4'	5.12	1.52	1.45
11	B2	1115	G	C5-C6	-5.12	1.37	1.42
11	B2	1147	G	C5-C6	5.12	1.47	1.42
38	A1	302	U	C2'-O2'	5.12	1.48	1.41
38	A1	688	G	N3-C4	-5.12	1.31	1.35
38	A1	1188	C	C4'-C3'	-5.12	1.47	1.52
57	Aj	84	PHE	CG-CD1	5.12	1.46	1.38
10	B1	69	G	O3'-P	-5.12	1.55	1.61
11	B2	248	U	C3'-O3'	-5.12	1.34	1.42
11	B2	772	G	C4'-C3'	5.12	1.58	1.53
11	B2	841	C	N3-C4	5.12	1.37	1.33
27	BO	135	PHE	CG-CD2	5.12	1.46	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	BS	29	GLU	CD-OE2	5.12	1.31	1.25
37	BY	20	LYS	CA-CB	5.12	1.65	1.53
38	A1	7	G	N1-C2	5.12	1.41	1.37
38	A1	195	U	P-O5'	-5.12	1.54	1.59
38	A1	431	U	C5'-C4'	5.12	1.57	1.51
38	A1	508	G	P-O5'	5.12	1.64	1.59
38	A1	921	C	C3'-O3'	5.12	1.49	1.42
38	A1	1586	G	N1-C2	5.12	1.41	1.37
38	A1	1817	C	C4-C5	5.12	1.47	1.43
38	A1	1981	G	C6-N1	5.12	1.43	1.39
38	A1	2138	A	C8-N7	5.12	1.35	1.31
38	A1	2284	C	C2'-O2'	-5.12	1.34	1.41
38	A1	2362	U	C5'-C4'	5.12	1.57	1.51
38	A1	3026	C	O3'-P	-5.12	1.55	1.61
56	AJ	74	ARG	CZ-NH1	5.12	1.39	1.33
11	B2	467	G	C2'-C1'	-5.11	1.47	1.53
24	BL	14	ARG	CD-NE	5.11	1.55	1.46
38	A1	610	C	C5-C6	-5.11	1.30	1.34
38	A1	862	G	C5-C6	-5.11	1.37	1.42
38	A1	1095	A	P-O5'	-5.11	1.54	1.59
38	A1	1872	G	N3-C4	-5.11	1.31	1.35
38	A1	2118	C	N1-C6	5.11	1.40	1.37
38	A1	2225	C	C4-N4	5.11	1.38	1.33
38	A1	2957	G	C2'-C1'	-5.11	1.47	1.53
11	B2	49	C	O3'-P	5.11	1.67	1.61
11	B2	462	A	C6-N6	5.11	1.38	1.33
11	B2	949	G	C4'-C3'	5.11	1.58	1.53
19	BG	75	ARG	NE-CZ	5.11	1.39	1.33
38	A1	322	C	N1-C6	5.11	1.40	1.37
38	A1	470	A	N3-C4	-5.11	1.31	1.34
7	AU	56	ARG	CZ-NH2	5.11	1.39	1.33
10	B1	33	C	N3-C4	5.11	1.37	1.33
11	B2	563	U	C5'-C4'	5.11	1.57	1.51
11	B2	569	G	C5'-C4'	5.11	1.57	1.51
11	B2	609	G	C6-N1	5.11	1.43	1.39
11	B2	1082	A	C2'-C1'	-5.11	1.47	1.53
38	A1	434	G	C6-N1	5.11	1.43	1.39
38	A1	508	G	C6-N1	-5.11	1.35	1.39
38	A1	1057	C	C4-N4	5.11	1.38	1.33
38	A1	1161	A	C2-N3	5.11	1.38	1.33
38	A1	2156	A	C5-C6	-5.11	1.36	1.41
38	A1	2168	C	C4-N4	5.11	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2171	G	O3'-P	-5.11	1.55	1.61
38	A1	2338	A	N1-C2	5.11	1.39	1.34
38	A1	2465	A	C8-N7	5.11	1.35	1.31
39	A3	51	U	P-O5'	-5.11	1.54	1.59
42	Aa	25	TRP	CB-CG	5.11	1.59	1.50
11	B2	1061	A	C3'-C2'	-5.11	1.47	1.52
32	BT	93	GLU	CD-OE1	5.11	1.31	1.25
38	A1	816	C	P-O5'	5.11	1.64	1.59
38	A1	859	G	N3-C4	5.11	1.39	1.35
38	A1	961	C	O3'-P	-5.11	1.55	1.61
38	A1	1011	A	N3-C4	5.11	1.38	1.34
38	A1	2717	A	C2-N3	5.11	1.38	1.33
38	A1	2745	G	N3-C4	-5.11	1.31	1.35
38	A1	2956	G	C5-C6	-5.11	1.37	1.42
11	B2	177	A	C5'-C4'	5.11	1.57	1.51
11	B2	293	G	N7-C5	-5.11	1.36	1.39
11	B2	321	A	N7-C5	5.11	1.42	1.39
11	B2	353	G	C4'-O4'	5.11	1.52	1.45
11	B2	636	G	N1-C2	5.11	1.41	1.37
11	B2	720	A	C6-N6	5.11	1.38	1.33
11	B2	781	U	C1'-N1	5.11	1.56	1.48
11	B2	848	G	N7-C5	-5.11	1.36	1.39
11	B2	872	A	C2-N3	-5.11	1.28	1.33
11	B2	1094	U	C2'-C1'	5.11	1.58	1.53
14	BB	131	VAL	CA-CB	-5.11	1.44	1.54
18	BF	92	ARG	NE-CZ	5.11	1.39	1.33
20	BH	148	VAL	CA-CB	5.11	1.65	1.54
38	A1	1557	G	N9-C4	5.11	1.42	1.38
38	A1	1635	G	C2-N3	5.11	1.36	1.32
38	A1	2090	A	C5'-C4'	5.11	1.57	1.51
38	A1	2647	G	C5-C4	5.11	1.42	1.38
38	A1	2750	C	C5'-C4'	5.11	1.57	1.51
11	B2	258	A	N3-C4	5.11	1.38	1.34
11	B2	1385	U	C2-N3	5.11	1.41	1.37
38	A1	28	A	C1'-N9	5.11	1.56	1.48
38	A1	513	C	C4'-C3'	-5.11	1.47	1.52
38	A1	791	C	C2-N3	5.11	1.39	1.35
38	A1	1695	G	C6-O6	5.11	1.28	1.24
38	A1	2082	C	P-O5'	5.11	1.64	1.59
38	A1	2407	G	C2-N3	5.11	1.36	1.32
38	A1	2414	G	P-O5'	-5.11	1.54	1.59
38	A1	2802	G	C2-N3	5.11	1.36	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2964	A	C4'-C3'	-5.11	1.47	1.52
54	AI	56	ARG	CZ-NH2	5.11	1.39	1.33
11	B2	7	G	N7-C5	-5.10	1.36	1.39
11	B2	539	C	C5-C6	-5.10	1.30	1.34
11	B2	878	U	C5-C6	5.10	1.38	1.34
38	A1	1759	A	C4'-O4'	5.10	1.52	1.45
38	A1	2396	G	C6-N1	5.10	1.43	1.39
64	AR	13	ARG	NE-CZ	5.10	1.39	1.33
3	Af	33	ARG	CZ-NH1	5.10	1.39	1.33
6	AT	28	PHE	N-CA	-5.10	1.36	1.46
10	B1	77	A	C6-N1	5.10	1.39	1.35
11	B2	212	G	C5-C4	-5.10	1.34	1.38
11	B2	823	A	C6-N1	5.10	1.39	1.35
11	B2	1098	G	C4'-C3'	5.10	1.58	1.53
11	B2	1102	A	C5'-C4'	5.10	1.57	1.51
11	B2	1185	A	C4'-O4'	-5.10	1.39	1.45
19	BG	95	ARG	CZ-NH1	5.10	1.39	1.33
25	BM	132	ARG	CA-C	-5.10	1.39	1.52
38	A1	106	G	C6-N1	5.10	1.43	1.39
38	A1	146	U	N1-C2	5.10	1.43	1.38
38	A1	291	A	N9-C4	5.10	1.41	1.37
38	A1	1205	U	P-OP2	-5.10	1.40	1.49
38	A1	1403	C	C2-O2	5.10	1.29	1.24
38	A1	1404	G	C3'-C2'	-5.10	1.47	1.52
38	A1	1410	A	C5-C6	5.10	1.45	1.41
38	A1	1606	C	C5-C6	-5.10	1.30	1.34
38	A1	2004	A	N1-C2	-5.10	1.29	1.34
38	A1	2097	G	C5-C4	5.10	1.42	1.38
38	A1	2472	A	C5-C4	5.10	1.42	1.38
38	A1	2826	U	C3'-C2'	5.10	1.58	1.52
38	A1	3031	U	C3'-O3'	5.10	1.49	1.42
43	AB	225	ARG	CZ-NH2	5.10	1.39	1.33
11	B2	232	G	C2-N2	-5.10	1.29	1.34
11	B2	261	G	C6-N1	5.10	1.43	1.39
11	B2	460	C	C3'-C2'	5.10	1.58	1.52
11	B2	810	G	C6-O6	-5.10	1.19	1.24
11	B2	971	G	C4'-O4'	5.10	1.52	1.45
11	B2	1226	G	C5-C4	-5.10	1.34	1.38
38	A1	1355	A	C2-N3	5.10	1.38	1.33
38	A1	1577	C	P-O5'	-5.10	1.54	1.59
38	A1	2987	U	C4-O4	-5.10	1.19	1.23
11	B2	349	A	O4'-C1'	5.10	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1311	C	O5'-C5'	5.10	1.52	1.44
11	B2	1366	U	C4'-C3'	5.10	1.58	1.53
38	A1	235	G	N1-C2	5.10	1.41	1.37
38	A1	1565	G	N1-C2	5.10	1.41	1.37
38	A1	1588	C	C4'-O4'	-5.10	1.39	1.45
38	A1	1745	U	C2-N3	5.10	1.41	1.37
38	A1	1779	C	C4-N4	5.10	1.38	1.33
38	A1	1994	G	C2'-C1'	-5.10	1.47	1.53
38	A1	2153	C	C4-C5	5.10	1.47	1.43
38	A1	2427	C	N1-C2	-5.10	1.35	1.40
38	A1	2978	G	C5-C6	-5.10	1.37	1.42
11	B2	246	A	O3'-P	-5.10	1.55	1.61
11	B2	451	A	C4'-O4'	-5.10	1.39	1.45
11	B2	768	A	C2-N3	5.10	1.38	1.33
38	A1	573	G	C4'-O4'	5.10	1.52	1.45
38	A1	986	G	N1-C2	5.10	1.41	1.37
38	A1	1015	G	N7-C5	5.10	1.42	1.39
38	A1	1436	A	C8-N7	-5.10	1.27	1.31
38	A1	1580	G	C2-N3	5.10	1.36	1.32
38	A1	1638	C	C5'-C4'	5.10	1.57	1.51
38	A1	1661	A	O5'-C5'	5.10	1.52	1.44
38	A1	2173	U	O3'-P	-5.10	1.55	1.61
38	A1	2175	G	C5'-C4'	5.10	1.57	1.51
38	A1	2231	G	O3'-P	-5.10	1.55	1.61
38	A1	2265	C	C3'-O3'	5.10	1.49	1.42
38	A1	2278	U	C5'-C4'	5.10	1.57	1.51
38	A1	2507	C	N3-C4	5.10	1.37	1.33
38	A1	2979	C	C2-O2	-5.10	1.19	1.24
39	A3	13	C	C4'-C3'	5.10	1.58	1.53
63	AP	38	GLU	CD-OE2	5.10	1.31	1.25
9	AX	6	PRO	N-CD	-5.10	1.40	1.47
10	B1	72	C	N3-C4	5.10	1.37	1.33
11	B2	1074	C	C2-N3	5.10	1.39	1.35
38	A1	475	U	C2'-C1'	-5.10	1.47	1.53
38	A1	558	C	C4-C5	-5.10	1.38	1.43
38	A1	1931	G	C2'-C1'	-5.10	1.47	1.53
38	A1	2534	C	C2-N3	5.10	1.39	1.35
38	A1	2650	G	C3'-C2'	-5.10	1.47	1.52
46	AD	32	ARG	CZ-NH1	5.10	1.39	1.33
11	B2	264	C	C3'-O3'	5.09	1.49	1.42
11	B2	488	A	N3-C4	5.09	1.38	1.34
11	B2	1063	A	P-O5'	-5.09	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	338	A	N3-C4	5.09	1.38	1.34
38	A1	736	U	N3-C4	5.09	1.43	1.38
38	A1	2664	G	O3'-P	-5.09	1.55	1.61
39	A3	107	G	C3'-C2'	-5.09	1.47	1.52
11	B2	1258	C	C4-N4	5.09	1.38	1.33
11	B2	1447	A	N3-C4	-5.09	1.31	1.34
38	A1	964	C	C2'-C1'	-5.09	1.47	1.53
38	A1	1384	C	C5-C6	-5.09	1.30	1.34
38	A1	1882	C	C2'-C1'	-5.09	1.47	1.53
10	B1	56	U	N3-C4	5.09	1.43	1.38
11	B2	305	C	N1-C6	5.09	1.40	1.37
11	B2	319	U	C4-C5	5.09	1.48	1.43
11	B2	520	G	C6-O6	-5.09	1.19	1.24
11	B2	783	G	C3'-O3'	5.09	1.49	1.42
18	BF	92	ARG	CD-NE	5.09	1.55	1.46
21	BI	116	ALA	CA-CB	5.09	1.63	1.52
38	A1	263	U	N1-C2	5.09	1.43	1.38
38	A1	327	G	N1-C2	5.09	1.41	1.37
38	A1	396	G	N9-C8	-5.09	1.34	1.37
38	A1	1889	G	N1-C2	5.09	1.41	1.37
38	A1	2397	C	C4'-O4'	5.09	1.52	1.45
38	A1	2663	G	C6-N1	5.09	1.43	1.39
38	A1	2966	C	N1-C6	-5.09	1.34	1.37
11	B2	237	C	O3'-P	5.09	1.67	1.61
11	B2	647	G	C5-C6	-5.09	1.37	1.42
11	B2	683	A	N7-C5	-5.09	1.36	1.39
11	B2	1019	A	P-O5'	-5.09	1.54	1.59
17	BE	128	ARG	CZ-NH2	5.09	1.39	1.33
38	A1	643	G	N3-C4	-5.09	1.31	1.35
38	A1	658	C	C2'-O2'	5.09	1.48	1.41
38	A1	2023	A	N3-C4	-5.09	1.31	1.34
38	A1	2076	A	O4'-C1'	-5.09	1.35	1.41
38	A1	2423	G	N1-C2	5.09	1.41	1.37
38	A1	2432	G	C6-N1	5.09	1.43	1.39
38	A1	2615	U	C4'-C3'	5.09	1.58	1.53
58	Ak	11	GLU	CD-OE2	-5.09	1.20	1.25
11	B2	105	C	C2'-C1'	-5.09	1.47	1.53
11	B2	1287	G	N3-C4	5.09	1.39	1.35
11	B2	1390	G	C2-N3	5.09	1.36	1.32
38	A1	1222	U	C4'-C3'	5.09	1.58	1.53
38	A1	1784	G	N9-C4	5.09	1.42	1.38
38	A1	2239	C	O3'-P	-5.09	1.55	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2667	U	N1-C6	-5.09	1.33	1.38
38	A1	2823	G	C3'-C2'	-5.09	1.47	1.52
64	AR	40	ARG	CZ-NH1	5.09	1.39	1.33
4	AQ	126	ARG	CZ-NH2	5.09	1.39	1.33
11	B2	259	A	C6-N6	5.09	1.38	1.33
11	B2	567	A	C2'-C1'	-5.09	1.47	1.53
11	B2	776	C	C5-C6	-5.09	1.30	1.34
11	B2	1261	U	N3-C4	-5.09	1.33	1.38
11	B2	1317	G	N1-C2	5.09	1.41	1.37
38	A1	148	C	C1'-N1	5.09	1.56	1.48
38	A1	254	A	C3'-O3'	5.09	1.49	1.42
38	A1	465	C	C2-N3	5.09	1.39	1.35
38	A1	614	G	C8-N7	-5.09	1.27	1.30
38	A1	836	U	C4-O4	-5.09	1.19	1.23
38	A1	1016	C	C2-N3	5.09	1.39	1.35
38	A1	2074	U	C4'-C3'	5.09	1.58	1.53
38	A1	2343	G	C5'-C4'	5.09	1.57	1.51
38	A1	2756	G	C5-C4	5.09	1.42	1.38
11	B2	29	G	C4'-C3'	-5.08	1.47	1.52
38	A1	744	G	N1-C2	5.08	1.41	1.37
38	A1	1627	G	C2'-C1'	-5.08	1.47	1.53
38	A1	1661	A	O3'-P	-5.08	1.55	1.61
38	A1	1924	A	C5-C4	5.08	1.42	1.38
38	A1	2418	G	C2-N3	5.08	1.36	1.32
38	A1	2768	C	C5'-C4'	5.08	1.57	1.51
9	AX	298	TYR	CZ-OH	5.08	1.46	1.37
10	B1	69	G	C2-N3	5.08	1.36	1.32
11	B2	7	G	C4'-C3'	-5.08	1.47	1.52
11	B2	219	C	C2-O2	5.08	1.29	1.24
11	B2	442	C	N1-C2	-5.08	1.35	1.40
38	A1	314	A	C5-C4	-5.08	1.35	1.38
38	A1	834	G	P-O5'	5.08	1.64	1.59
38	A1	1183	U	O3'-P	-5.08	1.55	1.61
38	A1	1628	C	C4'-O4'	5.08	1.52	1.45
38	A1	1935	C	C4-N4	5.08	1.38	1.33
38	A1	2333	G	C6-O6	-5.08	1.19	1.24
10	B1	36	A	N9-C4	5.08	1.40	1.37
11	B2	102	U	O5'-C5'	-5.08	1.34	1.42
11	B2	384	G	C6-N1	5.08	1.43	1.39
11	B2	855	C	C5'-C4'	5.08	1.57	1.51
11	B2	1411	G	N9-C8	5.08	1.41	1.37
38	A1	81	G	C5-C4	5.08	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	98	G	O5'-C5'	-5.08	1.34	1.42
38	A1	179	A	C1'-N9	5.08	1.56	1.48
38	A1	953	G	N3-C4	-5.08	1.31	1.35
38	A1	1681	G	C2-N2	5.08	1.39	1.34
38	A1	1781	C	C2'-O2'	-5.08	1.35	1.41
38	A1	1789	A	C4'-O4'	-5.08	1.39	1.45
38	A1	1857	A	C5-C6	5.08	1.45	1.41
38	A1	1921	U	O4'-C1'	5.08	1.48	1.41
38	A1	2178	A	C5'-C4'	5.08	1.57	1.51
38	A1	2252	C	C4'-C3'	5.08	1.58	1.53
38	A1	2299	G	N1-C2	5.08	1.41	1.37
39	A3	98	G	N7-C5	-5.08	1.36	1.39
59	AL	3	ARG	NE-CZ	5.08	1.39	1.33
11	B2	137	A	C2'-C1'	-5.08	1.47	1.53
11	B2	248	U	C4-O4	5.08	1.27	1.23
11	B2	1146	G	C6-N1	5.08	1.43	1.39
38	A1	79	C	C3'-C2'	5.08	1.58	1.52
38	A1	1196	A	C4'-C3'	5.08	1.58	1.53
38	A1	1694	G	N7-C5	-5.08	1.36	1.39
38	A1	1808	G	O3'-P	-5.08	1.55	1.61
10	B1	15	G	C2-N2	5.08	1.39	1.34
11	B2	481	C	N1-C2	5.08	1.45	1.40
11	B2	1491	C	C4'-C3'	5.08	1.58	1.53
18	BF	216	GLU	CD-OE2	5.08	1.31	1.25
38	A1	328	G	C5-C4	-5.08	1.34	1.38
38	A1	555	G	C2-N3	5.08	1.36	1.32
38	A1	663	A	C6-N1	5.08	1.39	1.35
38	A1	1193	G	C3'-O3'	5.08	1.49	1.42
38	A1	1544	C	N3-C4	5.08	1.37	1.33
38	A1	1607	C	C2'-O2'	5.08	1.48	1.41
38	A1	1967	G	N3-C4	-5.08	1.31	1.35
38	A1	2336	G	N1-C2	5.08	1.41	1.37
38	A1	2513	C	C4-C5	5.08	1.47	1.43
38	A1	2551	G	C2-N3	5.08	1.36	1.32
38	A1	2867	U	C2-N3	5.08	1.41	1.37
38	A1	2901	C	C1'-N1	-5.08	1.39	1.46
38	A1	2944	G	C5-C4	5.08	1.42	1.38
11	B2	535	U	C2-N3	5.08	1.41	1.37
18	BF	216	GLU	CD-OE1	5.08	1.31	1.25
27	BO	23	TRP	NE1-CE2	5.08	1.44	1.37
38	A1	319	A	C6-N6	5.08	1.38	1.33
38	A1	628	A	N9-C8	5.08	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	879	A	N3-C4	5.08	1.37	1.34
38	A1	1507	A	O3'-P	-5.08	1.55	1.61
38	A1	2076	A	C6-N1	5.08	1.39	1.35
38	A1	2213	G	C2'-C1'	-5.08	1.47	1.53
38	A1	2265	C	C1'-N1	5.08	1.56	1.48
10	B1	52	G	N9-C4	-5.08	1.33	1.38
10	B1	70	C	C2'-C1'	-5.08	1.47	1.53
11	B2	125	G	C8-N7	-5.08	1.27	1.30
11	B2	402	G	N7-C5	-5.08	1.36	1.39
11	B2	419	G	O4'-C1'	5.08	1.48	1.41
16	BD	116	ARG	NE-CZ	5.08	1.39	1.33
38	A1	779	A	C5'-C4'	5.08	1.57	1.51
38	A1	809	A	N3-C4	5.08	1.37	1.34
38	A1	828	G	C2-N2	5.08	1.39	1.34
38	A1	929	G	C5-C4	-5.08	1.34	1.38
38	A1	1077	G	N7-C5	5.08	1.42	1.39
38	A1	1127	C	C4-N4	5.08	1.38	1.33
38	A1	1417	U	C4-O4	5.08	1.27	1.23
38	A1	1488	C	N1-C6	-5.08	1.34	1.37
38	A1	1773	C	C5-C6	-5.08	1.30	1.34
38	A1	1809	G	C5-C6	-5.08	1.37	1.42
38	A1	1946	G	C2'-O2'	-5.08	1.35	1.41
38	A1	2220	C	C2-N3	5.08	1.39	1.35
38	A1	2382	A	C2'-O2'	-5.08	1.35	1.41
38	A1	2439	G	C2'-C1'	-5.08	1.47	1.53
38	A1	2982	G	C2-N2	5.08	1.39	1.34
10	B1	30	G	C5-C4	5.07	1.42	1.38
11	B2	510	A	C6-N6	5.07	1.38	1.33
11	B2	822	A	N3-C4	-5.07	1.31	1.34
11	B2	934	G	P-O5'	-5.07	1.54	1.59
11	B2	968	C	C5'-C4'	5.07	1.57	1.51
11	B2	1206	G	N7-C5	5.07	1.42	1.39
11	B2	1241	U	C5-C6	5.07	1.38	1.34
11	B2	1256	C	C2-N3	5.07	1.39	1.35
38	A1	478	C	C2'-C1'	-5.07	1.47	1.53
38	A1	867	C	C4'-O4'	-5.07	1.39	1.45
38	A1	1493	C	C3'-C2'	-5.07	1.47	1.52
38	A1	1646	G	C4'-O4'	-5.07	1.39	1.45
38	A1	1657	G	N7-C5	-5.07	1.36	1.39
38	A1	1908	C	P-O5'	-5.07	1.54	1.59
38	A1	2823	G	C4'-O4'	-5.07	1.39	1.45
39	A3	18	G	O4'-C1'	-5.07	1.35	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
46	AD	111	ARG	CA-CB	5.07	1.65	1.53
47	Ad	28	ARG	CZ-NH1	5.07	1.39	1.33
38	A1	132	G	N1-C2	5.07	1.41	1.37
38	A1	822	A	C6-N1	5.07	1.39	1.35
11	B2	860	G	C6-N1	5.07	1.43	1.39
11	B2	1144	G	C3'-O3'	5.07	1.49	1.42
11	B2	1417	A	O3'-P	-5.07	1.55	1.61
11	B2	1465	C	C5'-C4'	5.07	1.57	1.51
16	BD	156	ARG	CD-NE	5.07	1.55	1.46
24	BL	63	ARG	NE-CZ	5.07	1.39	1.33
38	A1	642	G	C8-N7	5.07	1.33	1.30
38	A1	900	C	C3'-O3'	5.07	1.49	1.42
38	A1	969	U	C4-O4	5.07	1.27	1.23
38	A1	2163	G	C4'-C3'	5.07	1.58	1.53
38	A1	2641	C	C3'-C2'	-5.07	1.47	1.52
39	A3	91	G	N1-C2	5.07	1.41	1.37
11	B2	580	G	N7-C5	-5.07	1.36	1.39
11	B2	1464	C	O3'-P	-5.07	1.55	1.61
38	A1	453	U	O4'-C1'	5.07	1.48	1.41
38	A1	978	C	C4-C5	5.07	1.47	1.43
38	A1	1049	U	P-O5'	5.07	1.64	1.59
38	A1	1239	C	C4-N4	5.07	1.38	1.33
38	A1	1730	C	C4-C5	5.07	1.47	1.43
38	A1	1822	G	C2'-O2'	-5.07	1.35	1.41
11	B2	15	U	C2-O2	5.07	1.26	1.22
11	B2	713	A	N9-C4	-5.07	1.34	1.37
11	B2	1103	G	N9-C4	5.07	1.42	1.38
11	B2	1347	U	C2-N3	5.07	1.41	1.37
31	BS	37	GLU	CD-OE1	5.07	1.31	1.25
38	A1	188	A	C2'-C1'	-5.07	1.47	1.53
38	A1	485	G	C4'-O4'	5.07	1.52	1.45
38	A1	576	G	C5-C6	-5.07	1.37	1.42
38	A1	740	C	C2-N3	-5.07	1.31	1.35
38	A1	983	G	C5-C4	5.07	1.41	1.38
38	A1	1743	G	C2-N3	5.07	1.36	1.32
38	A1	1814	A	C5-C4	-5.07	1.35	1.38
38	A1	1819	G	C2-N3	5.07	1.36	1.32
38	A1	2346	A	N9-C8	5.07	1.41	1.37
38	A1	2387	A	C3'-O3'	-5.07	1.35	1.42
42	Aa	52	PRO	CA-C	-5.07	1.42	1.52
40	AK	17	ARG	CZ-NH1	5.07	1.39	1.33
11	B2	77	G	C4'-O4'	5.07	1.52	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	206	C	P-O5'	-5.07	1.54	1.59
11	B2	333	A	C6-N1	5.07	1.39	1.35
11	B2	962	G	C8-N7	5.07	1.33	1.30
11	B2	1445	A	N7-C5	-5.07	1.36	1.39
38	A1	66	C	C2'-C1'	-5.07	1.47	1.53
38	A1	98	G	O3'-P	-5.07	1.55	1.61
38	A1	612	G	O4'-C1'	5.07	1.48	1.41
38	A1	717	A	C2'-C1'	-5.07	1.47	1.53
38	A1	1709	C	C4-C5	5.07	1.47	1.43
38	A1	1713	G	O4'-C1'	5.07	1.48	1.41
38	A1	1952	G	O3'-P	-5.07	1.55	1.61
38	A1	2443	G	C4'-O4'	5.07	1.52	1.45
38	A1	2732	U	N3-C4	5.07	1.43	1.38
38	A1	2798	U	C2-N3	5.07	1.41	1.37
38	A1	2800	U	C2'-C1'	-5.07	1.47	1.53
38	A1	2947	G	C8-N7	5.07	1.33	1.30
38	A1	2950	G	C4'-C3'	-5.07	1.47	1.52
11	B2	582	G	C5-C4	5.06	1.41	1.38
11	B2	1156	A	C5'-C4'	5.06	1.57	1.51
11	B2	1475	C	C2'-C1'	-5.06	1.47	1.53
28	BP	20	ARG	CZ-NH1	5.06	1.39	1.33
38	A1	364	A	N9-C8	-5.06	1.33	1.37
38	A1	1329	G	C5-C6	5.06	1.47	1.42
38	A1	1520	G	N9-C4	-5.06	1.33	1.38
38	A1	2009	G	C5-C4	5.06	1.41	1.38
38	A1	2794	G	N9-C4	-5.06	1.33	1.38
38	A1	2968	G	N3-C4	-5.06	1.31	1.35
58	Ak	84	GLU	CB-CG	5.06	1.61	1.52
11	B2	612	C	C1'-N1	5.06	1.56	1.48
11	B2	660	C	N3-C4	5.06	1.37	1.33
11	B2	795	G	C2'-C1'	-5.06	1.47	1.53
11	B2	831	A	C3'-O3'	5.06	1.49	1.42
11	B2	1372	C	N1-C6	5.06	1.40	1.37
11	B2	1392	G	N9-C8	-5.06	1.34	1.37
11	B2	1426	C	O4'-C1'	5.06	1.48	1.41
13	BA	67	TYR	N-CA	-5.06	1.36	1.46
38	A1	22	C	N3-C4	5.06	1.37	1.33
38	A1	286	G	C4'-C3'	5.06	1.58	1.53
38	A1	428	A	C5-C4	5.06	1.42	1.38
38	A1	536	G	N9-C4	5.06	1.42	1.38
38	A1	1089	C	C5-C6	-5.06	1.30	1.34
38	A1	1132	U	N1-C2	-5.06	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2247	G	C2'-C1'	-5.06	1.47	1.53
38	A1	2258	A	C2-N3	-5.06	1.28	1.33
38	A1	2656	A	N9-C4	5.06	1.40	1.37
38	A1	2863	A	N7-C5	-5.06	1.36	1.39
39	A3	86	C	C4-N4	5.06	1.38	1.33
45	AC	325	ALA	N-CA	-5.06	1.36	1.46
45	AC	363	SER	CA-CB	5.06	1.60	1.52
48	AE	153	ARG	CZ-NH2	5.06	1.39	1.33
11	B2	897	A	C3'-C2'	-5.06	1.47	1.52
17	BE	55	TYR	CG-CD1	5.06	1.45	1.39
38	A1	495	U	C2'-C1'	-5.06	1.47	1.53
38	A1	1967	G	C2-N3	5.06	1.36	1.32
38	A1	2069	G	C2-N3	5.06	1.36	1.32
38	A1	2233	G	C5-C6	5.06	1.47	1.42
38	A1	2691	G	C2'-C1'	-5.06	1.47	1.53
38	A1	2778	A	C8-N7	5.06	1.35	1.31
38	A1	2889	A	N1-C2	5.06	1.39	1.34
6	AT	9	ARG	CZ-NH1	5.06	1.39	1.33
11	B2	541	G	C2-N2	5.06	1.39	1.34
11	B2	864	G	C5-C6	-5.06	1.37	1.42
11	B2	1062	G	C2'-O2'	-5.06	1.35	1.41
11	B2	1270	C	C2'-O2'	5.06	1.48	1.41
38	A1	200	G	N9-C8	5.06	1.41	1.37
38	A1	582	A	P-O5'	-5.06	1.54	1.59
38	A1	2112	C	C2-N3	-5.06	1.31	1.35
38	A1	2149	G	N3-C4	-5.06	1.31	1.35
38	A1	2425	A	C4'-O4'	-5.06	1.39	1.45
38	A1	2569	G	C3'-C2'	-5.06	1.47	1.52
38	A1	2584	A	C2-N3	-5.06	1.28	1.33
38	A1	2958	U	N1-C2	5.06	1.43	1.38
11	B2	154	C	N1-C2	-5.06	1.35	1.40
11	B2	609	G	N9-C8	5.06	1.41	1.37
11	B2	1045	A	C6-N6	5.06	1.38	1.33
11	B2	1243	C	C4-C5	5.06	1.47	1.43
11	B2	1435	G	P-O5'	5.06	1.64	1.59
11	B2	1484	C	C4-N4	5.06	1.38	1.33
38	A1	110	A	C2'-C1'	-5.06	1.47	1.53
38	A1	231	G	C6-O6	-5.06	1.19	1.24
38	A1	376	C	C3'-O3'	5.06	1.49	1.42
38	A1	861	G	C2'-C1'	-5.06	1.47	1.53
38	A1	970	G	C2'-C1'	-5.06	1.47	1.53
38	A1	997	A	O4'-C1'	5.06	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1239	C	N3-C4	5.06	1.37	1.33
38	A1	1869	U	N3-C4	5.06	1.43	1.38
38	A1	2124	C	N1-C6	5.06	1.40	1.37
38	A1	2133	G	C5-C6	-5.06	1.37	1.42
38	A1	2745	G	C1'-N9	5.06	1.56	1.48
38	A1	2822	G	N9-C8	-5.06	1.34	1.37
60	AM	129	GLU	CG-CD	5.06	1.59	1.51
11	B2	1299	A	C6-N1	-5.06	1.32	1.35
11	B2	1380	C	C3'-C2'	5.06	1.58	1.52
20	BH	20	ARG	CD-NE	5.06	1.55	1.46
38	A1	1101	U	C2'-C1'	-5.06	1.47	1.53
38	A1	1292	C	N1-C6	5.06	1.40	1.37
38	A1	1630	U	C4'-C3'	5.06	1.58	1.53
38	A1	2171	G	C8-N7	5.06	1.33	1.30
38	A1	3029	A	N7-C5	5.06	1.42	1.39
45	AC	198	TYR	CG-CD2	5.06	1.45	1.39
5	AS	50	TYR	CB-CG	-5.05	1.44	1.51
11	B2	311	A	C6-N1	5.05	1.39	1.35
11	B2	684	G	N1-C2	5.05	1.41	1.37
11	B2	773	A	N9-C4	5.05	1.40	1.37
11	B2	780	C	C5'-C4'	5.05	1.57	1.51
11	B2	1185	A	N9-C4	5.05	1.40	1.37
11	B2	1453	U	C4'-C3'	5.05	1.58	1.53
38	A1	207	A	P-O5'	-5.05	1.54	1.59
38	A1	338	A	N1-C2	-5.05	1.29	1.34
38	A1	554	C	N1-C6	-5.05	1.34	1.37
38	A1	708	A	N9-C8	-5.05	1.33	1.37
38	A1	1007	U	C2'-C1'	-5.05	1.47	1.53
38	A1	1402	C	C2'-C1'	-5.05	1.47	1.53
38	A1	2086	C	P-O5'	-5.05	1.54	1.59
38	A1	2552	C	N3-C4	5.05	1.37	1.33
39	A3	83	C	O3'-P	-5.05	1.55	1.61
10	B1	2	G	C8-N7	5.05	1.33	1.30
11	B2	750	C	C5-C6	5.05	1.38	1.34
11	B2	1165	U	C5'-C4'	5.05	1.57	1.51
38	A1	345	C	C2'-C1'	-5.05	1.47	1.53
38	A1	1465	A	N1-C2	-5.05	1.29	1.34
38	A1	1784	G	C5-C4	-5.05	1.34	1.38
39	A3	123	U	N1-C6	-5.05	1.33	1.38
10	B1	31	G	O3'-P	-5.05	1.55	1.61
11	B2	33	U	N1-C2	5.05	1.43	1.38
11	B2	103	A	N3-C4	5.05	1.37	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	805	C	O3'-P	5.05	1.67	1.61
11	B2	1484	C	C3'-O3'	5.05	1.49	1.42
38	A1	49	A	C6-N1	-5.05	1.32	1.35
38	A1	123	A	C5-C4	5.05	1.42	1.38
38	A1	635	G	C5-C6	-5.05	1.37	1.42
38	A1	643	G	N1-C2	5.05	1.41	1.37
38	A1	771	G	N9-C4	-5.05	1.33	1.38
38	A1	929	G	C2-N2	5.05	1.39	1.34
38	A1	1443	G	C6-N1	5.05	1.43	1.39
38	A1	1661	A	C5'-C4'	5.05	1.57	1.51
38	A1	1787	U	O5'-C5'	-5.05	1.34	1.42
38	A1	1961	G	N7-C5	-5.05	1.36	1.39
38	A1	2365	G	C6-N1	5.05	1.43	1.39
38	A1	2375	C	C5-C6	-5.05	1.30	1.34
11	B2	833	C	C5'-C4'	5.05	1.57	1.51
11	B2	1336	U	O3'-P	-5.05	1.55	1.61
25	BM	136	ARG	CD-NE	5.05	1.55	1.46
38	A1	45	G	N9-C4	-5.05	1.33	1.38
38	A1	83	G	C3'-C2'	-5.05	1.47	1.52
38	A1	699	A	N7-C5	-5.05	1.36	1.39
38	A1	818	A	N9-C4	5.05	1.40	1.37
38	A1	934	G	C2-N3	5.05	1.36	1.32
38	A1	1282	A	N9-C4	-5.05	1.34	1.37
38	A1	1391	C	N3-C4	5.05	1.37	1.33
38	A1	1421	C	N1-C2	5.05	1.45	1.40
38	A1	1512	G	C5-C4	-5.05	1.34	1.38
38	A1	1516	C	C5'-C4'	5.05	1.57	1.51
38	A1	2267	U	N3-C4	5.05	1.43	1.38
38	A1	2314	U	C5'-C4'	5.05	1.57	1.51
38	A1	2442	A	N1-C2	5.05	1.38	1.34
38	A1	2493	A	C2-N3	5.05	1.38	1.33
38	A1	2809	G	O4'-C1'	-5.05	1.35	1.41
46	AD	212	ARG	CZ-NH2	5.05	1.39	1.33
11	B2	1122	C	P-O5'	-5.05	1.54	1.59
18	BF	5	TRP	CB-CG	5.05	1.59	1.50
34	BV	24	TYR	CE1-CZ	5.05	1.45	1.38
38	A1	90	A	C2'-C1'	-5.05	1.47	1.53
38	A1	573	G	N7-C5	-5.05	1.36	1.39
39	A3	41	A	N9-C4	-5.05	1.34	1.37
1	A7	22	TRP	NE1-CE2	-5.05	1.30	1.37
4	AQ	144	GLU	CA-CB	5.05	1.65	1.53
11	B2	326	C	C2-N3	5.05	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	459	G	C8-N7	5.05	1.33	1.30
11	B2	1168	C	C2-N3	5.05	1.39	1.35
11	B2	1304	C	C2-N3	5.05	1.39	1.35
11	B2	1317	G	C2'-C1'	-5.05	1.47	1.53
36	BX	8	PRO	N-CD	-5.05	1.40	1.47
38	A1	667	C	C3'-O3'	5.05	1.49	1.42
38	A1	725	G	C4'-C3'	-5.05	1.47	1.52
38	A1	782	G	N1-C2	5.05	1.41	1.37
38	A1	938	U	P-O5'	-5.05	1.54	1.59
38	A1	952	C	P-O5'	-5.05	1.54	1.59
38	A1	1264	G	C8-N7	5.05	1.33	1.30
38	A1	2073	G	C3'-O3'	-5.05	1.35	1.42
38	A1	2194	A	C5'-C4'	5.05	1.57	1.51
41	AA	128	ARG	NE-CZ	5.05	1.39	1.33
38	A1	13	U	O4'-C1'	5.04	1.48	1.41
38	A1	571	G	N1-C2	5.04	1.41	1.37
38	A1	1385	C	O3'-P	-5.04	1.55	1.61
38	A1	1601	G	N7-C5	-5.04	1.36	1.39
38	A1	2414	G	N1-C2	5.04	1.41	1.37
38	A1	2584	A	N9-C4	5.04	1.40	1.37
10	B1	31	G	C2-N2	5.04	1.39	1.34
11	B2	186	U	C3'-O3'	5.04	1.49	1.42
11	B2	327	G	O4'-C1'	5.04	1.48	1.41
11	B2	797	U	O4'-C1'	5.04	1.48	1.41
11	B2	898	G	C2'-O2'	5.04	1.48	1.41
11	B2	1266	A	C2'-C1'	-5.04	1.47	1.53
15	BC	6	TYR	CG-CD1	5.04	1.45	1.39
20	BH	66	ARG	N-CA	-5.04	1.36	1.46
38	A1	786	G	N1-C2	5.04	1.41	1.37
38	A1	1401	G	C6-N1	5.04	1.43	1.39
38	A1	1672	G	C2'-C1'	-5.04	1.47	1.53
38	A1	1985	G	C5-C4	5.04	1.41	1.38
61	AN	69	VAL	CB-CG1	5.04	1.63	1.52
10	B1	19	G	C2'-O2'	-5.04	1.35	1.41
11	B2	794	A	N7-C5	5.04	1.42	1.39
20	BH	10	PHE	CG-CD2	5.04	1.46	1.38
28	BP	53	ARG	NE-CZ	5.04	1.39	1.33
38	A1	340	G	N7-C5	-5.04	1.36	1.39
38	A1	464	C	N3-C4	5.04	1.37	1.33
38	A1	821	U	C1'-N1	5.04	1.56	1.48
38	A1	1104	A	N3-C4	5.04	1.37	1.34
38	A1	1248	C	C2-N3	-5.04	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1723	A	O3'-P	-5.04	1.55	1.61
38	A1	2079	U	C3'-C2'	-5.04	1.47	1.52
38	A1	2384	G	C3'-C2'	5.04	1.58	1.52
38	A1	2466	C	O3'-P	-5.04	1.55	1.61
11	B2	235	G	C4'-O4'	-5.04	1.39	1.45
11	B2	1092	G	C8-N7	-5.04	1.27	1.30
11	B2	1492	U	C2'-C1'	-5.04	1.47	1.53
13	BA	39	ASP	CA-CB	5.04	1.65	1.53
28	BP	25	GLY	CA-C	-5.04	1.43	1.51
38	A1	2513	C	C2-O2	5.04	1.28	1.24
38	A1	2826	U	C4-O4	-5.04	1.19	1.23
11	B2	263	C	C2-O2	5.04	1.28	1.24
11	B2	379	A	C2'-C1'	-5.04	1.47	1.53
11	B2	432	G	O3'-P	-5.04	1.55	1.61
11	B2	682	A	O4'-C1'	5.04	1.48	1.41
11	B2	802	G	C2'-O2'	-5.04	1.35	1.41
38	A1	593	C	C2-N3	5.04	1.39	1.35
38	A1	731	C	C2-N3	5.04	1.39	1.35
38	A1	1081	U	O3'-P	-5.04	1.55	1.61
38	A1	1131	G	C8-N7	-5.04	1.27	1.30
38	A1	1561	G	O3'-P	-5.04	1.55	1.61
38	A1	1598	U	C4-C5	5.04	1.48	1.43
38	A1	1646	G	N7-C5	-5.04	1.36	1.39
38	A1	1745	U	C2-O2	5.04	1.26	1.22
38	A1	1823	A	N3-C4	5.04	1.37	1.34
38	A1	2145	G	C8-N7	5.04	1.33	1.30
38	A1	2501	G	N7-C5	-5.04	1.36	1.39
38	A1	2898	G	N1-C2	5.04	1.41	1.37
38	A1	2976	G	C5'-C4'	5.04	1.57	1.51
11	B2	794	A	N3-C4	5.04	1.37	1.34
38	A1	111	U	C5'-C4'	5.04	1.57	1.51
38	A1	861	G	C8-N7	-5.04	1.27	1.30
38	A1	1766	A	N9-C4	-5.04	1.34	1.37
38	A1	2165	A	C2-N3	-5.04	1.29	1.33
38	A1	3042	C	N1-C6	5.04	1.40	1.37
41	AA	75	ARG	CZ-NH2	5.04	1.39	1.33
7	AU	17	ASN	CB-CG	5.04	1.62	1.51
11	B2	93	A	N1-C2	5.04	1.38	1.34
11	B2	589	U	N1-C2	5.04	1.43	1.38
11	B2	734	G	C5'-C4'	5.04	1.57	1.51
38	A1	1045	A	C6-N6	5.04	1.38	1.33
38	A1	1079	A	C1'-N9	-5.04	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1478	G	C2-N3	5.04	1.36	1.32
38	A1	1556	G	N3-C4	-5.04	1.31	1.35
38	A1	1783	U	C2'-C1'	-5.04	1.47	1.53
38	A1	2074	U	N3-C4	5.04	1.43	1.38
38	A1	2136	G	C3'-C2'	-5.04	1.47	1.52
38	A1	2698	G	N1-C2	5.04	1.41	1.37
38	A1	3045	G	N3-C4	5.04	1.39	1.35
46	AD	254	TYR	CE2-CZ	5.04	1.45	1.38
11	B2	193	G	N9-C4	5.03	1.42	1.38
11	B2	241	U	P-O5'	-5.03	1.54	1.59
11	B2	479	C	P-O5'	-5.03	1.54	1.59
11	B2	692	G	C2-N3	5.03	1.36	1.32
11	B2	1130	A	C4'-C3'	5.03	1.58	1.53
11	B2	1262	U	C5-C6	5.03	1.38	1.34
11	B2	1283	G	C1'-N9	5.03	1.56	1.48
11	B2	1332	C	P-O5'	-5.03	1.54	1.59
38	A1	744	G	C8-N7	-5.03	1.27	1.30
38	A1	1177	C	C2-O2	5.03	1.28	1.24
38	A1	1350	C	C2-N3	5.03	1.39	1.35
38	A1	1878	G	C2-N3	5.03	1.36	1.32
38	A1	2209	U	N3-C4	5.03	1.43	1.38
38	A1	2572	U	C5'-C4'	5.03	1.57	1.51
11	B2	43	A	N7-C5	-5.03	1.36	1.39
11	B2	215	C	C3'-C2'	5.03	1.58	1.52
38	A1	44	C	C4'-C3'	5.03	1.58	1.53
38	A1	1484	U	C2-N3	5.03	1.41	1.37
38	A1	1687	C	N1-C6	5.03	1.40	1.37
10	B1	54	G	C1'-N9	-5.03	1.39	1.46
11	B2	217	C	N3-C4	5.03	1.37	1.33
11	B2	947	G	C3'-C2'	-5.03	1.47	1.52
11	B2	989	C	C4-N4	5.03	1.38	1.33
22	BJ	126	GLU	CD-OE1	-5.03	1.20	1.25
36	BX	70	ARG	CZ-NH1	5.03	1.39	1.33
38	A1	145	C	O4'-C1'	-5.03	1.35	1.41
38	A1	343	C	C4-C5	5.03	1.47	1.43
38	A1	427	G	C8-N7	-5.03	1.27	1.30
38	A1	625	A	N9-C4	-5.03	1.34	1.37
38	A1	868	U	C4-O4	-5.03	1.19	1.23
38	A1	1124	G	O4'-C1'	5.03	1.48	1.41
38	A1	1365	G	C6-N1	5.03	1.43	1.39
38	A1	1382	C	C4'-C3'	-5.03	1.47	1.52
38	A1	1683	C	C2'-C1'	5.03	1.58	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2076	A	N9-C4	5.03	1.40	1.37
38	A1	2334	G	N7-C5	-5.03	1.36	1.39
38	A1	2454	G	C2-N3	-5.03	1.28	1.32
38	A1	2465	A	C4'-C3'	5.03	1.58	1.53
38	A1	2625	C	N1-C6	5.03	1.40	1.37
38	A1	2773	A	C3'-C2'	-5.03	1.47	1.52
38	A1	2963	G	N3-C4	-5.03	1.31	1.35
42	Aa	71	ARG	CD-NE	5.03	1.55	1.46
44	Ab	15	ARG	CD-NE	5.03	1.55	1.46
59	AL	99	GLY	N-CA	-5.03	1.38	1.46
11	B2	1371	C	C4-N4	5.03	1.38	1.33
38	A1	143	C	C4'-O4'	-5.03	1.39	1.45
38	A1	1759	A	C5-C6	5.03	1.45	1.41
38	A1	1851	U	C3'-C2'	-5.03	1.47	1.52
38	A1	2380	A	C2'-C1'	-5.03	1.47	1.53
11	B2	146	A	C8-N7	-5.03	1.28	1.31
11	B2	328	G	C5-C6	-5.03	1.37	1.42
11	B2	406	U	C2'-C1'	5.03	1.58	1.53
11	B2	731	A	C6-N6	5.03	1.38	1.33
11	B2	1061	A	C6-N6	5.03	1.38	1.33
11	B2	1325	C	O4'-C1'	5.03	1.48	1.41
11	B2	1388	G	N7-C5	-5.03	1.36	1.39
13	BA	135	ARG	CZ-NH1	5.03	1.39	1.33
38	A1	30	G	C2'-C1'	-5.03	1.47	1.53
38	A1	506	G	N3-C4	-5.03	1.31	1.35
38	A1	607	C	P-O5'	-5.03	1.54	1.59
38	A1	1838	C	N1-C2	5.03	1.45	1.40
38	A1	2157	U	C5'-C4'	5.03	1.57	1.51
38	A1	2371	A	C4'-O4'	5.03	1.52	1.45
38	A1	2467	C	C4'-O4'	-5.03	1.39	1.45
38	A1	2963	G	C8-N7	5.03	1.33	1.30
11	B2	1185	A	N7-C5	-5.03	1.36	1.39
11	B2	1473	A	C6-N1	5.03	1.39	1.35
34	BV	80	TYR	CZ-OH	5.03	1.46	1.37
38	A1	83	G	C2-N3	5.03	1.36	1.32
38	A1	406	G	N9-C4	5.03	1.42	1.38
38	A1	677	A	N9-C4	-5.03	1.34	1.37
38	A1	984	U	C2'-C1'	-5.03	1.47	1.53
38	A1	1195	G	O3'-P	-5.03	1.55	1.61
38	A1	1212	A	C4'-C3'	5.03	1.58	1.53
38	A1	1673	C	N3-C4	5.03	1.37	1.33
38	A1	1739	U	N1-C6	-5.03	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	2492	G	C2'-C1'	-5.03	1.47	1.53
38	A1	2757	G	N9-C8	5.03	1.41	1.37
38	A1	2947	G	C6-N1	5.03	1.43	1.39
46	AD	116	SER	CA-CB	5.03	1.60	1.52
48	AE	101	ARG	CZ-NH2	5.03	1.39	1.33
11	B2	592	G	C3'-C2'	-5.02	1.47	1.52
11	B2	1240	A	C5-C6	-5.02	1.36	1.41
38	A1	50	C	O3'-P	-5.02	1.55	1.61
38	A1	54	G	N3-C4	5.02	1.39	1.35
38	A1	86	G	N7-C5	5.02	1.42	1.39
38	A1	732	G	C2-N2	5.02	1.39	1.34
38	A1	1257	G	N9-C4	-5.02	1.33	1.38
38	A1	1462	G	O5'-C5'	-5.02	1.34	1.42
38	A1	1858	G	N3-C4	5.02	1.39	1.35
38	A1	2084	A	C3'-C2'	-5.02	1.47	1.52
39	A3	103	C	N3-C4	5.02	1.37	1.33
43	AB	42	ARG	NE-CZ	5.02	1.39	1.33
58	Ak	53	ARG	N-CA	-5.02	1.36	1.46
11	B2	129	G	O3'-P	5.02	1.67	1.61
11	B2	186	U	O3'-P	-5.02	1.55	1.61
11	B2	249	U	C4'-C3'	-5.02	1.47	1.52
11	B2	282	G	C2-N2	5.02	1.39	1.34
11	B2	751	C	C4-C5	5.02	1.47	1.43
11	B2	917	A	C6-N6	5.02	1.38	1.33
11	B2	1130	A	C6-N6	5.02	1.38	1.33
11	B2	1379	G	C8-N7	-5.02	1.27	1.30
38	A1	792	A	C6-N6	5.02	1.38	1.33
38	A1	1369	G	N7-C5	-5.02	1.36	1.39
38	A1	1416	G	C8-N7	-5.02	1.27	1.30
38	A1	1442	G	N1-C2	5.02	1.41	1.37
38	A1	1580	G	C2'-C1'	-5.02	1.47	1.53
38	A1	1658	A	C5'-C4'	5.02	1.57	1.51
38	A1	1674	G	C3'-C2'	-5.02	1.47	1.52
38	A1	2889	A	C5-C6	-5.02	1.36	1.41
39	A3	79	U	C4'-O4'	-5.02	1.39	1.45
54	AI	31	VAL	CA-CB	-5.02	1.44	1.54
60	AM	47	ARG	CZ-NH2	5.02	1.39	1.33
10	B1	60	A	C6-N6	5.02	1.38	1.33
11	B2	566	C	C4-C5	5.02	1.47	1.43
11	B2	1473	A	C8-N7	5.02	1.35	1.31
38	A1	204	G	C5-C4	5.02	1.41	1.38
38	A1	765	G	O3'-P	-5.02	1.55	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1863	G	C8-N7	-5.02	1.27	1.30
38	A1	2644	G	N9-C4	-5.02	1.33	1.38
38	A1	2709	C	C2'-C1'	-5.02	1.47	1.53
10	B1	60	A	N9-C4	-5.02	1.34	1.37
11	B2	19	G	N9-C4	-5.02	1.33	1.38
11	B2	118	U	C4-O4	-5.02	1.19	1.23
11	B2	128	A	C4'-C3'	5.02	1.58	1.53
11	B2	556	G	C2-N3	5.02	1.36	1.32
11	B2	752	G	C8-N7	5.02	1.33	1.30
11	B2	1053	A	C6-N6	5.02	1.38	1.33
11	B2	1382	G	N1-C2	5.02	1.41	1.37
17	BE	101	ARG	NE-CZ	5.02	1.39	1.33
20	BH	66	ARG	NE-CZ	5.02	1.39	1.33
38	A1	498	U	C2-N3	5.02	1.41	1.37
38	A1	647	G	C2-N2	5.02	1.39	1.34
38	A1	863	C	C2-N3	5.02	1.39	1.35
38	A1	919	G	C5'-C4'	5.02	1.57	1.51
38	A1	1277	G	C2-N3	5.02	1.36	1.32
38	A1	1422	G	C2'-C1'	-5.02	1.47	1.53
38	A1	2103	C	N1-C2	-5.02	1.35	1.40
38	A1	2403	G	N9-C8	-5.02	1.34	1.37
38	A1	2798	U	C5'-C4'	5.02	1.57	1.51
38	A1	2799	C	C2-N3	5.02	1.39	1.35
39	A3	17	G	O3'-P	-5.02	1.55	1.61
43	AB	166	GLY	N-CA	5.02	1.53	1.46
7	AU	118	ARG	CZ-NH1	5.02	1.39	1.33
11	B2	34	G	N9-C8	5.02	1.41	1.37
11	B2	64	G	C6-N1	-5.02	1.36	1.39
11	B2	255	G	C5-C6	-5.02	1.37	1.42
11	B2	543	C	N1-C2	-5.02	1.35	1.40
11	B2	560	A	C5'-C4'	5.02	1.57	1.51
11	B2	569	G	C5-C4	5.02	1.41	1.38
11	B2	747	U	C4-C5	5.02	1.48	1.43
11	B2	798	U	C2-N3	5.02	1.41	1.37
11	B2	913	G	C6-N1	5.02	1.43	1.39
14	BB	201	ARG	CD-NE	5.02	1.54	1.46
38	A1	216	A	C4'-C3'	5.02	1.58	1.53
38	A1	644	G	N7-C5	-5.02	1.36	1.39
38	A1	655	C	C5'-C4'	5.02	1.57	1.51
38	A1	660	U	P-O5'	-5.02	1.54	1.59
38	A1	769	G	C6-N1	5.02	1.43	1.39
38	A1	890	G	N9-C4	-5.02	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	1034	G	N1-C2	5.02	1.41	1.37
38	A1	1131	G	C5-C6	-5.02	1.37	1.42
38	A1	1491	U	P-O5'	-5.02	1.54	1.59
38	A1	1855	G	C5-C4	5.02	1.41	1.38
38	A1	1882	C	C5'-C4'	5.02	1.57	1.51
38	A1	2233	G	C4'-O4'	5.02	1.52	1.45
38	A1	2386	U	C4'-C3'	5.02	1.58	1.53
38	A1	2578	C	C3'-C2'	5.02	1.58	1.52
38	A1	2594	U	N3-C4	5.02	1.43	1.38
38	A1	2747	C	C5'-C4'	5.02	1.57	1.51
39	A3	99	G	C5'-C4'	5.02	1.57	1.51
11	B2	182	A	C4'-O4'	-5.02	1.39	1.45
11	B2	381	C	C3'-O3'	5.02	1.49	1.42
11	B2	557	G	N3-C4	5.02	1.39	1.35
11	B2	1169	C	C5'-C4'	5.02	1.57	1.51
11	B2	1215	G	P-O5'	5.02	1.64	1.59
11	B2	1218	C	C2-N3	5.02	1.39	1.35
38	A1	144	A	C5-C6	5.02	1.45	1.41
38	A1	798	G	O3'-P	-5.02	1.55	1.61
38	A1	1017	A	N9-C4	-5.02	1.34	1.37
38	A1	1249	G	C6-N1	5.02	1.43	1.39
38	A1	1797	A	N7-C5	-5.02	1.36	1.39
38	A1	2887	C	C5-C6	-5.02	1.30	1.34
38	A1	2966	C	C3'-O3'	-5.02	1.35	1.42
11	B2	226	G	N9-C8	5.01	1.41	1.37
25	BM	107	ARG	CZ-NH2	5.01	1.39	1.33
38	A1	77	C	C2-N3	5.01	1.39	1.35
38	A1	1008	U	C4-O4	5.01	1.27	1.23
38	A1	1232	G	C4'-O4'	5.01	1.52	1.45
38	A1	1556	G	N7-C5	-5.01	1.36	1.39
38	A1	2040	A	C5-C4	-5.01	1.35	1.38
38	A1	2251	G	N1-C2	5.01	1.41	1.37
38	A1	2539	G	C8-N7	-5.01	1.27	1.30
38	A1	2644	G	C5-C6	5.01	1.47	1.42
38	A1	2823	G	C8-N7	5.01	1.33	1.30
38	A1	2832	G	C8-N7	5.01	1.33	1.30
38	A1	2972	G	C8-N7	5.01	1.33	1.30
10	B1	6	G	N3-C4	5.01	1.39	1.35
11	B2	698	A	N3-C4	-5.01	1.31	1.34
38	A1	2986	G	C2-N2	5.01	1.39	1.34
10	B1	10	G	N7-C5	5.01	1.42	1.39
11	B2	962	G	C6-N1	-5.01	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	1270	C	C5'-C4'	5.01	1.57	1.51
11	B2	1395	G	C5-C6	-5.01	1.37	1.42
16	BD	149	GLU	CG-CD	5.01	1.59	1.51
38	A1	494	C	O4'-C1'	5.01	1.48	1.41
38	A1	999	A	C5-C6	5.01	1.45	1.41
38	A1	1418	A	O4'-C1'	5.01	1.48	1.41
38	A1	1495	A	C8-N7	5.01	1.35	1.31
38	A1	1684	C	C4-C5	-5.01	1.39	1.43
38	A1	2191	U	N1-C6	5.01	1.42	1.38
38	A1	2412	A	C6-N6	5.01	1.38	1.33
38	A1	3000	U	C4-O4	-5.01	1.19	1.23
39	A3	38	U	C2-O2	5.01	1.26	1.22
65	AV	45	ARG	CZ-NH1	5.01	1.39	1.33
10	B1	4	G	C6-N1	5.01	1.43	1.39
11	B2	80	A	N1-C2	-5.01	1.29	1.34
11	B2	884	G	C4'-O4'	5.01	1.52	1.45
11	B2	997	G	C5-C4	-5.01	1.34	1.38
38	A1	26	G	C6-O6	5.01	1.28	1.24
38	A1	472	A	C1'-N9	-5.01	1.39	1.46
38	A1	766	G	C2-N3	5.01	1.36	1.32
38	A1	937	A	C2'-C1'	-5.01	1.47	1.53
38	A1	1184	U	O3'-P	-5.01	1.55	1.61
38	A1	1798	A	C6-N6	5.01	1.38	1.33
38	A1	2125	C	N1-C6	5.01	1.40	1.37
38	A1	2366	G	C2'-C1'	-5.01	1.47	1.53
38	A1	2428	C	C4-N4	5.01	1.38	1.33
38	A1	2473	C	C5'-C4'	5.01	1.57	1.51
38	A1	2475	G	C8-N7	-5.01	1.27	1.30
38	A1	2575	U	N3-C4	-5.01	1.33	1.38
38	A1	2655	C	C2-O2	5.01	1.28	1.24
39	A3	63	G	O4'-C1'	5.01	1.48	1.41
45	AC	19	ARG	CZ-NH1	5.01	1.39	1.33
11	B2	775	G	C2-N2	5.01	1.39	1.34
38	A1	1008	U	O4'-C1'	5.01	1.48	1.41
11	B2	175	G	C2'-O2'	-5.01	1.35	1.41
11	B2	175	G	C3'-C2'	5.01	1.58	1.52
11	B2	720	A	N9-C4	-5.01	1.34	1.37
11	B2	777	G	N9-C4	-5.01	1.33	1.38
11	B2	986	G	N7-C5	-5.01	1.36	1.39
11	B2	1231	G	O3'-P	-5.01	1.55	1.61
11	B2	1239	A	C5'-C4'	5.01	1.57	1.51
11	B2	1254	C	P-O5'	-5.01	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	A1	261	A	O3'-P	-5.01	1.55	1.61
38	A1	709	A	O3'-P	5.01	1.67	1.61
38	A1	804	C	C4'-O4'	5.01	1.52	1.45
38	A1	1365	G	N9-C4	-5.01	1.33	1.38
38	A1	1497	C	C5-C6	5.01	1.38	1.34
38	A1	2234	C	O3'-P	-5.01	1.55	1.61
38	A1	2450	A	C8-N7	-5.01	1.28	1.31
38	A1	2601	C	C2-O2	5.01	1.28	1.24
38	A1	2663	G	C6-O6	5.01	1.28	1.24
38	A1	2669	U	N3-C4	5.01	1.43	1.38
39	A3	47	G	C2-N2	-5.01	1.29	1.34
11	B2	49	C	C4-N4	5.00	1.38	1.33
11	B2	54	C	O4'-C1'	5.00	1.48	1.41
11	B2	200	G	C2-N2	5.00	1.39	1.34
11	B2	341	C	P-O5'	5.00	1.64	1.59
17	BE	3	ARG	NE-CZ	5.00	1.39	1.33
33	BU	15	ARG	CZ-NH1	5.00	1.39	1.33
38	A1	977	C	N1-C2	5.00	1.45	1.40
38	A1	1958	A	C5-C6	-5.00	1.36	1.41
38	A1	2302	C	C2'-C1'	-5.00	1.47	1.53
38	A1	2792	G	C8-N7	-5.00	1.27	1.30
39	A3	102	G	C2'-C1'	-5.00	1.47	1.53
66	AY	153	ARG	NE-CZ	5.00	1.39	1.33
11	B2	148	C	C5-C6	5.00	1.38	1.34
11	B2	532	C	O3'-P	-5.00	1.55	1.61
11	B2	831	A	N9-C4	-5.00	1.34	1.37
11	B2	1083	G	C2-N2	5.00	1.39	1.34
11	B2	1416	C	O4'-C1'	5.00	1.48	1.41
17	BE	221	GLU	CB-CG	5.00	1.61	1.52
21	BI	44	TYR	CE2-CZ	5.00	1.45	1.38
38	A1	116	G	P-O5'	-5.00	1.54	1.59
38	A1	704	G	C8-N7	5.00	1.33	1.30
38	A1	1034	G	O5'-C5'	-5.00	1.34	1.42
38	A1	1405	G	N3-C4	-5.00	1.31	1.35
38	A1	1469	U	P-O5'	-5.00	1.54	1.59
38	A1	1857	A	O4'-C1'	5.00	1.48	1.41
38	A1	2117	U	C4-C5	5.00	1.48	1.43
38	A1	2128	G	N3-C4	5.00	1.39	1.35
38	A1	2301	C	N3-C4	5.00	1.37	1.33
55	Ai	17	TYR	CD2-CE2	5.00	1.46	1.39
7	AU	53	ARG	NE-CZ	5.00	1.39	1.33
11	B2	991	C	C5-C6	-5.00	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	B2	992	G	C2'-C1'	-5.00	1.47	1.53
11	B2	1092	G	C3'-C2'	5.00	1.58	1.52
15	BC	26	ARG	NE-CZ	5.00	1.39	1.33
38	A1	52	A	C6-N6	5.00	1.38	1.33
38	A1	215	A	C8-N7	5.00	1.35	1.31
38	A1	387	A	P-O5'	-5.00	1.54	1.59
38	A1	596	C	P-OP2	-5.00	1.40	1.49
38	A1	791	C	P-O5'	-5.00	1.54	1.59
38	A1	841	U	P-O5'	-5.00	1.54	1.59
38	A1	979	G	C1'-N9	-5.00	1.39	1.46
38	A1	1723	A	O4'-C1'	5.00	1.48	1.41
38	A1	2778	A	C2-N3	5.00	1.38	1.33

All (27857) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1445	A	N1-C6-N6	27.58	135.15	118.60
38	A1	277	A	N1-C6-N6	27.04	134.82	118.60
38	A1	2347	G	N1-C6-O6	26.94	136.06	119.90
38	A1	1281	A	N1-C6-N6	26.62	134.57	118.60
38	A1	2540	A	N1-C6-N6	26.19	134.31	118.60
38	A1	1726	A	N1-C6-N6	25.96	134.18	118.60
11	B2	309	A	N1-C6-N6	24.87	133.52	118.60
38	A1	1789	A	N1-C6-N6	24.72	133.43	118.60
38	A1	129	C	P-O3'-C3'	24.61	149.23	119.70
38	A1	2258	A	N1-C6-N6	24.60	133.36	118.60
38	A1	244	A	N1-C6-N6	24.59	133.35	118.60
38	A1	1226	G	P-O3'-C3'	24.43	149.01	119.70
38	A1	729	A	N1-C6-N6	24.31	133.19	118.60
38	A1	1200	A	P-O3'-C3'	24.07	148.58	119.70
11	B2	451	A	N1-C6-N6	24.05	133.03	118.60
38	A1	2681	A	N1-C6-N6	23.86	132.91	118.60
39	A3	52	U	P-O3'-C3'	23.68	148.12	119.70
38	A1	144	A	N1-C6-N6	23.61	132.77	118.60
38	A1	1643	A	N1-C6-N6	23.53	132.72	118.60
39	A3	19	G	P-O3'-C3'	23.50	147.89	119.70
11	B2	56	A	P-O3'-C3'	23.47	147.86	119.70
38	A1	2709	C	N3-C4-C5	-23.42	112.53	121.90
38	A1	2498	G	C5-C6-O6	-23.24	114.66	128.60
38	A1	1931	G	N1-C6-O6	23.20	133.82	119.90
38	A1	2538	G	N1-C6-O6	23.15	133.79	119.90
38	A1	3035	C	P-O3'-C3'	23.04	147.34	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2101	A	N1-C6-N6	23.03	132.42	118.60
10	B1	38	G	N1-C6-O6	22.75	133.55	119.90
38	A1	2275	G	N1-C6-O6	22.73	133.54	119.90
38	A1	2806	A	N1-C6-N6	22.73	132.24	118.60
11	B2	1292	A	N1-C6-N6	22.69	132.22	118.60
38	A1	1096	A	P-O3'-C3'	22.64	146.87	119.70
39	A3	97	G	N1-C6-O6	22.63	133.47	119.90
11	B2	291	G	N1-C6-O6	22.56	133.44	119.90
11	B2	630	A	N1-C6-N6	22.56	132.13	118.60
38	A1	663	A	N1-C6-N6	22.55	132.13	118.60
11	B2	1266	A	N1-C6-N6	22.39	132.03	118.60
11	B2	427	G	C5-C6-O6	-22.27	115.24	128.60
38	A1	1037	C	P-O3'-C3'	22.21	146.35	119.70
38	A1	2447	A	N1-C6-N6	22.13	131.88	118.60
38	A1	261	A	N1-C6-N6	22.07	131.84	118.60
11	B2	427	G	N1-C6-O6	22.01	133.10	119.90
38	A1	1322	G	N1-C6-O6	21.99	133.10	119.90
38	A1	1156	G	N1-C6-O6	21.96	133.08	119.90
38	A1	2106	G	N1-C6-O6	21.74	132.94	119.90
38	A1	662	A	N1-C6-N6	21.66	131.60	118.60
38	A1	1196	A	N1-C6-N6	21.58	131.55	118.60
10	B1	76	C	N3-C4-C5	-21.51	113.30	121.90
38	A1	2785	G	C5-C6-O6	-21.45	115.73	128.60
39	A3	101	A	N1-C6-N6	21.42	131.45	118.60
38	A1	196	A	N1-C6-N6	21.37	131.42	118.60
11	B2	530	G	N1-C6-O6	21.36	132.72	119.90
11	B2	847	A	N1-C6-N6	21.34	131.40	118.60
11	B2	114	A	N1-C6-N6	21.27	131.36	118.60
38	A1	782	G	N1-C6-O6	21.19	132.62	119.90
38	A1	2543	A	P-O3'-C3'	21.15	145.08	119.70
38	A1	1837	A	N1-C6-N6	21.13	131.28	118.60
10	B1	24	A	N1-C6-N6	21.07	131.24	118.60
38	A1	236	G	N1-C6-O6	21.04	132.53	119.90
38	A1	129	C	N3-C4-C5	-21.02	113.49	121.90
39	A3	50	G	C5-C6-O6	-21.02	115.99	128.60
11	B2	392	G	P-O3'-C3'	21.00	144.90	119.70
38	A1	2064	U	P-O3'-C3'	20.99	144.89	119.70
11	B2	1423	A	N1-C6-N6	20.97	131.18	118.60
38	A1	236	G	C5-C6-O6	-20.97	116.02	128.60
11	B2	1447	A	N1-C6-N6	20.90	131.14	118.60
38	A1	838	A	N1-C6-N6	20.82	131.09	118.60
39	A3	97	G	C5-C6-O6	-20.79	116.13	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1407	A	P-O3'-C3'	20.78	144.63	119.70
38	A1	2891	A	P-O3'-C3'	20.78	144.63	119.70
11	B2	1069	G	N1-C6-O6	20.73	132.34	119.90
11	B2	19	G	C5-C6-O6	-20.69	116.19	128.60
38	A1	2995	A	N1-C6-N6	20.66	131.00	118.60
11	B2	924	U	P-O3'-C3'	20.64	144.46	119.70
38	A1	848	A	N1-C6-N6	20.63	130.98	118.60
38	A1	2078	A	N1-C6-N6	20.62	130.97	118.60
11	B2	291	G	C5-C6-O6	-20.59	116.25	128.60
38	A1	858	G	C5-C6-O6	-20.58	116.25	128.60
38	A1	1658	A	N1-C6-N6	20.55	130.93	118.60
38	A1	2383	A	N1-C6-N6	20.53	130.92	118.60
38	A1	171	A	N1-C6-N6	20.52	130.91	118.60
38	A1	1754	A	N1-C6-N6	20.52	130.91	118.60
38	A1	337	G	N1-C6-O6	20.48	132.19	119.90
38	A1	42	G	N1-C6-O6	20.45	132.17	119.90
11	B2	468	G	N1-C6-O6	20.45	132.17	119.90
38	A1	455	G	N1-C6-O6	20.44	132.16	119.90
38	A1	1605	A	N1-C6-N6	20.44	130.86	118.60
38	A1	2425	A	N1-C6-N6	20.39	130.83	118.60
38	A1	437	G	N1-C6-O6	20.38	132.13	119.90
38	A1	1870	G	N1-C6-O6	20.37	132.12	119.90
38	A1	430	A	N1-C6-N6	20.35	130.81	118.60
11	B2	194	C	P-O3'-C3'	20.34	144.10	119.70
11	B2	1050	G	N1-C6-O6	20.33	132.10	119.90
11	B2	710	G	N1-C6-O6	20.31	132.09	119.90
11	B2	399	A	N1-C6-N6	20.30	130.78	118.60
38	A1	2160	C	N3-C4-C5	-20.28	113.79	121.90
39	A3	98	G	N1-C6-O6	20.22	132.03	119.90
38	A1	1198	G	N1-C6-O6	20.06	131.94	119.90
11	B2	786	G	N1-C6-O6	20.04	131.93	119.90
11	B2	710	G	C5-C6-O6	-20.03	116.58	128.60
38	A1	1678	A	N1-C6-N6	19.97	130.58	118.60
11	B2	202	G	C5-C6-O6	-19.92	116.65	128.60
11	B2	578	G	N1-C6-O6	19.91	131.84	119.90
38	A1	250	G	N1-C6-O6	19.91	131.84	119.90
38	A1	2347	G	C5-C6-O6	-19.91	116.65	128.60
11	B2	1189	G	C5-C6-O6	-19.90	116.66	128.60
38	A1	1351	G	N1-C6-O6	19.89	131.83	119.90
38	A1	3011	G	C5-C6-O6	-19.89	116.67	128.60
11	B2	379	A	N1-C6-N6	19.88	130.53	118.60
11	B2	1261	U	P-O3'-C3'	19.82	143.49	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	530	G	C5-C6-O6	-19.82	116.71	128.60
38	A1	1005	G	N1-C6-O6	19.81	131.79	119.90
11	B2	960	A	N1-C6-N6	19.81	130.49	118.60
38	A1	88	G	N1-C6-O6	19.80	131.78	119.90
11	B2	949	G	C5-C6-O6	-19.78	116.73	128.60
39	A3	25	A	N1-C6-N6	19.77	130.46	118.60
11	B2	698	A	N1-C6-N6	19.76	130.46	118.60
11	B2	945	G	N1-C6-O6	19.75	131.75	119.90
38	A1	1582	G	N1-C6-O6	19.71	131.72	119.90
38	A1	15	A	N1-C6-N6	19.70	130.42	118.60
38	A1	520	G	N1-C6-O6	19.70	131.72	119.90
38	A1	869	A	N1-C6-N6	19.70	130.42	118.60
38	A1	1262	C	C6-N1-C2	-19.65	112.44	120.30
38	A1	586	A	N1-C6-N6	19.65	130.39	118.60
38	A1	605	A	N1-C6-N6	19.65	130.39	118.60
38	A1	858	G	N1-C6-O6	19.65	131.69	119.90
38	A1	1766	A	N1-C6-N6	19.64	130.38	118.60
11	B2	1307	G	N1-C6-O6	19.61	131.66	119.90
38	A1	2056	A	N1-C6-N6	19.59	130.35	118.60
11	B2	413	G	N1-C6-O6	19.57	131.64	119.90
38	A1	2795	G	N1-C6-O6	19.57	131.64	119.90
38	A1	2703	G	N1-C6-O6	19.56	131.63	119.90
38	A1	186	A	N1-C6-N6	19.53	130.32	118.60
38	A1	1351	G	C5-C6-O6	-19.53	116.88	128.60
11	B2	1462	A	N1-C6-N6	19.51	130.31	118.60
38	A1	122	G	N1-C6-O6	19.51	131.61	119.90
11	B2	176	U	P-O3'-C3'	19.51	143.11	119.70
38	A1	88	G	C5-C6-O6	-19.51	116.89	128.60
39	A3	48	A	P-O3'-C3'	19.50	143.10	119.70
11	B2	617	A	N1-C6-N6	19.49	130.29	118.60
38	A1	1418	A	N1-C6-N6	19.47	130.28	118.60
11	B2	1292	A	C5-C6-N1	-19.46	107.97	117.70
11	B2	997	G	C8-N9-C4	-19.45	98.62	106.40
39	A3	19	G	C5-C6-O6	-19.45	116.93	128.60
38	A1	447	G	N1-C6-O6	19.45	131.57	119.90
38	A1	1974	G	C5-C6-O6	-19.44	116.93	128.60
38	A1	379	U	P-O3'-C3'	19.43	143.02	119.70
38	A1	1184	U	O4'-C1'-N1	19.41	123.72	108.20
39	A3	50	G	N1-C6-O6	19.40	131.54	119.90
38	A1	827	G	N1-C6-O6	19.40	131.54	119.90
38	A1	1714	G	N1-C6-O6	19.40	131.54	119.90
38	A1	2398	C	N3-C4-C5	-19.38	114.15	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	542	G	N1-C6-O6	19.37	131.52	119.90
11	B2	591	G	N1-C6-O6	19.34	131.50	119.90
11	B2	810	G	N1-C6-O6	19.33	131.50	119.90
38	A1	1898	A	N1-C6-N6	19.32	130.19	118.60
38	A1	851	G	N1-C6-O6	19.31	131.49	119.90
11	B2	1239	A	N1-C6-N6	19.31	130.19	118.60
38	A1	1180	G	P-O3'-C3'	19.28	142.84	119.70
39	A3	113	C	C6-N1-C2	-19.28	112.59	120.30
38	A1	2005	A	N1-C6-N6	19.24	130.15	118.60
11	B2	1473	A	N1-C6-N6	19.24	130.14	118.60
38	A1	2472	A	N1-C6-N6	19.23	130.13	118.60
38	A1	455	G	C5-C6-O6	-19.22	117.07	128.60
38	A1	2950	G	N1-C6-O6	19.20	131.42	119.90
38	A1	2600	C	N3-C4-C5	-19.20	114.22	121.90
38	A1	638	A	N1-C6-N6	19.18	130.11	118.60
38	A1	1516	C	N3-C4-C5	-19.18	114.23	121.90
38	A1	1476	C	C6-N1-C2	-19.17	112.63	120.30
11	B2	349	A	N1-C6-N6	19.14	130.08	118.60
38	A1	851	G	C5-C6-O6	-19.14	117.12	128.60
38	A1	2802	G	N1-C6-O6	19.12	131.37	119.90
11	B2	356	G	N1-C6-O6	19.12	131.37	119.90
10	B1	74	A	N1-C6-N6	19.11	130.07	118.60
11	B2	591	G	C5-C6-O6	-19.11	117.13	128.60
38	A1	1918	U	P-O3'-C3'	19.08	142.59	119.70
11	B2	1050	G	C5-C6-O6	-19.06	117.17	128.60
38	A1	1154	A	N1-C6-N6	19.05	130.03	118.60
38	A1	1020	G	N1-C6-O6	19.05	131.33	119.90
38	A1	2759	A	N1-C6-N6	19.00	130.00	118.60
11	B2	1032	A	N1-C6-N6	18.99	129.99	118.60
11	B2	300	G	N1-C6-O6	18.98	131.29	119.90
11	B2	166	A	N1-C6-N6	18.98	129.99	118.60
38	A1	2493	A	N1-C6-N6	18.97	129.98	118.60
11	B2	730	G	N1-C6-O6	18.97	131.28	119.90
11	B2	978	G	N1-C6-O6	18.97	131.28	119.90
38	A1	405	G	N1-C6-O6	18.97	131.28	119.90
11	B2	497	C	C5-C6-N1	18.95	130.48	121.00
38	A1	2032	G	N1-C6-O6	18.95	131.27	119.90
38	A1	1495	A	N1-C6-N6	18.94	129.96	118.60
38	A1	2554	A	N1-C6-N6	18.93	129.96	118.60
38	A1	2459	G	N1-C6-O6	18.92	131.25	119.90
11	B2	1299	A	N1-C6-N6	18.90	129.94	118.60
38	A1	1465	A	N1-C6-N6	18.89	129.94	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	12	C	P-O3'-C3'	18.88	142.35	119.70
38	A1	9	A	N1-C6-N6	18.88	129.93	118.60
11	B2	1453	U	P-O3'-C3'	18.87	142.35	119.70
11	B2	804	U	P-O3'-C3'	18.86	142.33	119.70
38	A1	452	A	N1-C6-N6	18.85	129.91	118.60
38	A1	2778	A	N1-C6-N6	18.85	129.91	118.60
38	A1	2365	G	N1-C6-O6	18.84	131.20	119.90
38	A1	1974	G	N1-C6-O6	18.76	131.16	119.90
11	B2	1245	C	P-O3'-C3'	18.74	142.19	119.70
41	AA	120	TYR	CB-CG-CD1	-18.70	109.78	121.00
38	A1	3004	C	P-O3'-C3'	18.70	142.14	119.70
11	B2	952	A	N1-C6-N6	18.70	129.82	118.60
38	A1	319	A	N1-C6-N6	18.69	129.81	118.60
11	B2	868	C	C6-N1-C2	-18.68	112.83	120.30
11	B2	752	G	N1-C6-O6	18.68	131.10	119.90
11	B2	1439	G	C5-C6-O6	-18.66	117.40	128.60
11	B2	1368	A	N1-C6-N6	18.66	129.79	118.60
11	B2	85	A	N1-C6-N6	18.65	129.79	118.60
28	BP	9	ARG	NE-CZ-NH2	-18.65	110.97	120.30
11	B2	975	A	P-O3'-C3'	18.64	142.07	119.70
38	A1	2063	U	C6-N1-C2	-18.63	109.82	121.00
38	A1	2832	G	N1-C6-O6	18.62	131.07	119.90
38	A1	1112	G	N1-C6-O6	18.61	131.07	119.90
11	B2	921	G	N1-C6-O6	18.60	131.06	119.90
38	A1	2548	A	N1-C6-N6	18.60	129.76	118.60
11	B2	1382	G	N1-C6-O6	18.59	131.06	119.90
38	A1	394	A	N1-C6-N6	18.58	129.75	118.60
38	A1	2015	G	N1-C6-O6	18.57	131.04	119.90
11	B2	687	G	N1-C6-O6	18.57	131.04	119.90
38	A1	1582	G	C5-C6-O6	-18.55	117.47	128.60
38	A1	483	C	N3-C4-C5	-18.53	114.49	121.90
38	A1	166	G	N1-C6-O6	18.52	131.01	119.90
38	A1	1752	C	P-O3'-C3'	18.52	141.92	119.70
39	A3	74	U	P-O3'-C3'	18.51	141.91	119.70
38	A1	1816	C	N3-C4-C5	-18.51	114.50	121.90
38	A1	981	A	N1-C6-N6	18.47	129.68	118.60
38	A1	837	G	N1-C6-O6	18.47	130.98	119.90
38	A1	1942	G	C5-C6-O6	-18.46	117.53	128.60
62	AO	21	TYR	CB-CG-CD2	18.43	132.06	121.00
39	A3	40	G	P-O3'-C3'	18.43	141.81	119.70
38	A1	860	A	N1-C6-N6	18.40	129.64	118.60
38	A1	2547	A	N1-C6-N6	18.38	129.63	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	173	G	C5-C6-O6	-18.37	117.58	128.60
38	A1	256	G	N1-C6-O6	18.37	130.92	119.90
11	B2	1244	C	N3-C4-N4	18.37	130.86	118.00
38	A1	2382	A	N1-C6-N6	18.36	129.62	118.60
11	B2	997	G	N1-C6-O6	18.35	130.91	119.90
11	B2	1057	A	N1-C6-N6	18.35	129.61	118.60
38	A1	1931	G	C5-C6-O6	-18.34	117.60	128.60
38	A1	2562	G	P-O3'-C3'	18.32	141.68	119.70
11	B2	356	G	C5-C6-O6	-18.32	117.61	128.60
11	B2	722	G	N1-C6-O6	18.32	130.89	119.90
38	A1	567	G	N1-C6-O6	18.32	130.89	119.90
38	A1	1634	A	N1-C6-N6	18.31	129.59	118.60
10	B1	51	G	C5-C6-O6	-18.30	117.62	128.60
38	A1	1429	A	N1-C6-N6	18.30	129.58	118.60
11	B2	810	G	C5-C6-O6	-18.29	117.63	128.60
38	A1	2437	G	N1-C6-O6	18.29	130.87	119.90
38	A1	347	G	N1-C6-O6	18.28	130.87	119.90
38	A1	1989	G	N1-C6-O6	18.27	130.87	119.90
38	A1	2785	G	N1-C6-O6	18.27	130.86	119.90
11	B2	181	G	N1-C6-O6	18.25	130.85	119.90
38	A1	1017	A	N1-C6-N6	18.22	129.53	118.60
11	B2	103	A	N1-C6-N6	18.22	129.53	118.60
8	AW	53	ARG	NE-CZ-NH2	18.22	129.41	120.30
11	B2	1140	A	N1-C6-N6	18.22	129.53	118.60
38	A1	1267	A	N1-C6-N6	18.21	129.53	118.60
11	B2	728	G	N1-C6-O6	18.19	130.81	119.90
38	A1	1848	A	N1-C6-N6	18.18	129.51	118.60
38	A1	147	C	C6-N1-C2	-18.18	113.03	120.30
38	A1	511	A	N1-C6-N6	18.16	129.50	118.60
38	A1	927	G	C5-C6-O6	-18.15	117.71	128.60
38	A1	343	C	N3-C4-C5	-18.15	114.64	121.90
38	A1	3023	G	N1-C6-O6	18.11	130.77	119.90
39	A3	30	G	N1-C6-O6	18.11	130.77	119.90
38	A1	2545	A	P-O3'-C3'	18.07	141.38	119.70
38	A1	1716	G	N1-C6-O6	18.06	130.74	119.90
38	A1	1989	G	C5-C6-O6	-18.05	117.77	128.60
38	A1	2336	G	N1-C2-N3	-18.04	113.07	123.90
38	A1	2329	A	N1-C6-N6	18.04	129.42	118.60
38	A1	510	A	N1-C6-N6	18.02	129.41	118.60
38	A1	2782	A	N1-C6-N6	18.02	129.41	118.60
38	A1	2498	G	N1-C6-O6	18.02	130.71	119.90
38	A1	2795	G	C5-C6-O6	-18.01	117.79	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1026	A	N1-C6-N6	18.01	129.41	118.60
11	B2	1127	A	N1-C6-N6	18.01	129.41	118.60
38	A1	519	A	N1-C6-N6	18.01	129.41	118.60
38	A1	708	A	N1-C6-N6	18.01	129.40	118.60
38	A1	839	A	N1-C6-N6	18.00	129.40	118.60
11	B2	1307	G	C5-C6-O6	-18.00	117.80	128.60
38	A1	173	G	N1-C6-O6	17.98	130.69	119.90
38	A1	918	A	N1-C6-N6	17.98	129.39	118.60
38	A1	2250	G	N1-C6-O6	17.97	130.68	119.90
11	B2	32	A	N1-C6-N6	17.95	129.37	118.60
38	A1	579	C	P-O3'-C3'	17.92	141.21	119.70
38	A1	2182	A	N1-C6-N6	17.92	129.35	118.60
38	A1	1912	A	N1-C6-N6	17.91	129.34	118.60
38	A1	1942	G	N1-C6-O6	17.90	130.64	119.90
11	B2	63	G	P-O3'-C3'	17.90	141.18	119.70
38	A1	1870	G	C5-C6-O6	-17.88	117.87	128.60
38	A1	1288	C	N3-C4-C5	-17.86	114.75	121.90
38	A1	927	G	N1-C6-O6	17.86	130.62	119.90
38	A1	1020	G	C5-C6-O6	-17.82	117.91	128.60
38	A1	2784	A	N1-C6-N6	17.81	129.28	118.60
11	B2	1463	A	N1-C6-N6	17.80	129.28	118.60
38	A1	349	A	N1-C6-N6	17.80	129.28	118.60
11	B2	242	A	N1-C6-N6	17.80	129.28	118.60
11	B2	296	A	N1-C6-N6	17.78	129.27	118.60
39	A3	21	C	P-O3'-C3'	17.77	141.02	119.70
11	B2	416	A	N1-C6-N6	17.73	129.24	118.60
11	B2	311	A	N1-C6-N6	17.72	129.23	118.60
38	A1	1975	C	C6-N1-C2	-17.72	113.21	120.30
38	A1	2096	G	N1-C6-O6	17.71	130.53	119.90
38	A1	2106	G	C5-C6-O6	-17.71	117.97	128.60
39	A3	40	G	C5-C6-O6	-17.71	117.97	128.60
11	B2	428	G	C5-C6-O6	-17.70	117.98	128.60
38	A1	2010	G	N1-C6-O6	17.70	130.52	119.90
11	B2	271	G	N1-C6-O6	17.70	130.52	119.90
39	A3	65	G	N1-C6-O6	17.69	130.51	119.90
38	A1	2394	G	C5-C6-O6	-17.69	117.98	128.60
38	A1	2476	A	C4-C5-C6	17.68	125.84	117.00
38	A1	1283	G	N1-C6-O6	17.68	130.51	119.90
38	A1	772	G	C5-C6-O6	-17.67	118.00	128.60
11	B2	845	G	N1-C6-O6	17.66	130.50	119.90
38	A1	2334	G	N1-C6-O6	17.66	130.50	119.90
38	A1	1627	G	N1-C6-O6	17.65	130.49	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1643	A	P-O3'-C3'	17.64	140.87	119.70
38	A1	899	A	N1-C6-N6	17.64	129.18	118.60
11	B2	1459	G	N1-C6-O6	17.62	130.47	119.90
39	A3	30	G	C5-C6-O6	-17.62	118.03	128.60
38	A1	2537	G	N1-C6-O6	17.62	130.47	119.90
38	A1	206	A	N1-C6-N6	17.61	129.17	118.60
39	A3	98	G	C5-C6-O6	-17.61	118.03	128.60
38	A1	1759	A	N1-C6-N6	17.60	129.16	118.60
11	B2	65	G	N1-C6-O6	17.57	130.44	119.90
11	B2	1117	A	N1-C6-N6	17.57	129.15	118.60
38	A1	2686	A	N1-C6-N6	17.57	129.14	118.60
39	A3	40	G	N1-C6-O6	17.57	130.44	119.90
11	B2	370	A	N1-C6-N6	17.57	129.14	118.60
38	A1	1080	G	N1-C6-O6	17.56	130.44	119.90
11	B2	730	G	C5-C6-O6	-17.53	118.08	128.60
1	A7	52	TYR	CB-CG-CD2	-17.53	110.48	121.00
11	B2	685	G	N1-C6-O6	17.52	130.41	119.90
11	B2	723	G	C5-C6-O6	-17.52	118.08	128.60
11	B2	63	G	N1-C6-O6	17.52	130.41	119.90
11	B2	1379	G	N1-C6-O6	17.52	130.41	119.90
11	B2	945	G	C5-C6-O6	-17.51	118.09	128.60
11	B2	1	A	N1-C6-N6	17.51	129.10	118.60
39	A3	63	G	C5-C6-O6	-17.51	118.09	128.60
38	A1	772	G	N1-C6-O6	17.50	130.40	119.90
11	B2	1196	A	N1-C6-N6	17.49	129.09	118.60
38	A1	1395	G	N1-C6-O6	17.48	130.39	119.90
38	A1	266	A	N1-C6-N6	17.47	129.09	118.60
11	B2	1373	A	N1-C6-N6	17.46	129.08	118.60
10	B1	20	G	N1-C6-O6	17.45	130.37	119.90
10	B1	3	G	C5-C6-O6	-17.44	118.14	128.60
39	A3	63	G	N1-C6-O6	17.43	130.36	119.90
10	B1	35	G	N1-C6-O6	17.43	130.36	119.90
38	A1	2568	A	N1-C6-N6	17.42	129.05	118.60
11	B2	641	A	P-O3'-C3'	17.42	140.60	119.70
38	A1	319	A	C4-C5-C6	17.42	125.71	117.00
11	B2	99	C	P-O3'-C3'	17.39	140.57	119.70
38	A1	1272	A	N1-C6-N6	17.39	129.03	118.60
39	A3	54	A	N1-C6-N6	17.38	129.03	118.60
38	A1	2394	G	N1-C6-O6	17.38	130.33	119.90
10	B1	2	G	C5-C6-O6	-17.38	118.17	128.60
38	A1	684	G	N1-C6-O6	17.37	130.32	119.90
38	A1	567	G	C5-C6-O6	-17.36	118.18	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2703	G	C5-C6-O6	-17.36	118.18	128.60
11	B2	603	G	N1-C6-O6	17.35	130.31	119.90
38	A1	2043	A	N1-C6-N6	17.35	129.01	118.60
11	B2	37	G	N1-C6-O6	17.34	130.30	119.90
38	A1	1561	G	P-O3'-C3'	17.33	140.50	119.70
11	B2	949	G	N1-C6-O6	17.33	130.30	119.90
38	A1	1904	G	C5-C6-O6	-17.33	118.20	128.60
38	A1	1306	A	N1-C6-N6	17.31	128.99	118.60
39	A3	85	C	N3-C4-C5	-17.31	114.98	121.90
38	A1	744	G	N1-C2-N3	-17.30	113.52	123.90
38	A1	905	G	C5-C6-O6	-17.30	118.22	128.60
38	A1	2437	G	C5-C6-O6	-17.30	118.22	128.60
38	A1	1952	G	C5-C6-O6	-17.29	118.22	128.60
38	A1	2861	A	N1-C6-N6	17.29	128.97	118.60
11	B2	26	A	N1-C6-N6	17.29	128.97	118.60
38	A1	520	G	C5-C6-O6	-17.29	118.23	128.60
11	B2	931	C	N3-C4-C5	-17.28	114.99	121.90
38	A1	2015	G	C5-C6-O6	-17.27	118.24	128.60
11	B2	309	A	C5-C6-N6	-17.26	109.89	123.70
38	A1	2223	G	C5-C6-O6	-17.26	118.24	128.60
11	B2	698	A	C8-N9-C4	-17.25	98.90	105.80
38	A1	2223	G	N1-C6-O6	17.25	130.25	119.90
11	B2	1176	C	N3-C4-N4	17.24	130.07	118.00
38	A1	1118	A	N1-C6-N6	17.24	128.94	118.60
38	A1	577	C	O4'-C1'-N1	17.23	121.99	108.20
11	B2	387	G	N1-C6-O6	17.21	130.23	119.90
38	A1	2406	C	N3-C4-C5	-17.21	115.02	121.90
38	A1	1378	G	C5-C6-O6	-17.20	118.28	128.60
38	A1	3003	A	N1-C6-N6	17.20	128.92	118.60
38	A1	231	G	N1-C6-O6	17.19	130.22	119.90
11	B2	262	G	P-O3'-C3'	17.18	140.31	119.70
38	A1	3038	A	N1-C6-N6	17.18	128.91	118.60
11	B2	1172	A	N1-C6-N6	17.17	128.90	118.60
38	A1	1084	G	P-O3'-C3'	17.17	140.30	119.70
38	A1	2500	G	N1-C6-O6	17.17	130.20	119.90
38	A1	2622	C	N3-C4-C5	-17.17	115.03	121.90
11	B2	183	A	N1-C6-N6	17.15	128.89	118.60
38	A1	2459	G	C5-C6-O6	-17.15	118.31	128.60
11	B2	1483	U	P-O3'-C3'	17.14	140.26	119.70
38	A1	702	G	N1-C6-O6	17.11	130.16	119.90
38	A1	664	A	N1-C6-N6	17.10	128.86	118.60
11	B2	1213	G	N1-C6-O6	17.08	130.15	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	259	A	N1-C6-N6	17.07	128.84	118.60
11	B2	649	A	N1-C6-N6	17.07	128.84	118.60
38	A1	1991	G	N1-C6-O6	17.07	130.14	119.90
38	A1	2032	G	C5-C6-O6	-17.06	118.36	128.60
38	A1	1824	G	C5-C6-O6	-17.06	118.36	128.60
38	A1	42	G	C5-C6-O6	-17.05	118.37	128.60
38	A1	2211	C	N3-C4-C5	-17.05	115.08	121.90
38	A1	2203	G	N1-C6-O6	17.03	130.12	119.90
11	B2	382	G	C5-C6-O6	-17.03	118.38	128.60
11	B2	269	A	N1-C6-N6	17.03	128.82	118.60
11	B2	1000	G	C5-C6-O6	-17.02	118.39	128.60
11	B2	352	A	N1-C6-N6	17.01	128.81	118.60
39	A3	2	G	N1-C6-O6	17.01	130.11	119.90
11	B2	872	A	N1-C6-N6	17.01	128.81	118.60
39	A3	17	G	C5-C6-O6	-17.01	118.39	128.60
38	A1	2258	A	C5-C6-N6	-17.01	110.09	123.70
38	A1	2440	C	N3-C4-C5	-17.00	115.10	121.90
11	B2	578	G	C5-C6-O6	-17.00	118.40	128.60
11	B2	643	G	N1-C6-O6	16.99	130.10	119.90
38	A1	1053	A	N1-C6-N6	16.99	128.79	118.60
11	B2	1002	G	N1-C6-O6	16.93	130.06	119.90
10	B1	2	G	N1-C6-O6	16.91	130.05	119.90
38	A1	2301	C	P-O3'-C3'	16.90	139.99	119.70
11	B2	435	A	N1-C6-N6	16.90	128.74	118.60
11	B2	119	A	C5-N7-C8	16.89	112.34	103.90
38	A1	1651	A	N1-C6-N6	16.88	128.73	118.60
38	A1	2853	A	N1-C6-N6	16.86	128.72	118.60
38	A1	74	A	N1-C6-N6	16.86	128.72	118.60
38	A1	771	G	N1-C6-O6	16.85	130.01	119.90
11	B2	1262	U	O4'-C1'-N1	16.85	121.68	108.20
38	A1	2864	G	N1-C6-O6	16.80	129.98	119.90
38	A1	1751	G	N1-C6-O6	16.80	129.98	119.90
11	B2	1131	G	N1-C6-O6	16.80	129.98	119.90
11	B2	163	C	O4'-C1'-N1	16.79	121.63	108.20
11	B2	37	G	C5-C6-O6	-16.77	118.54	128.60
38	A1	2285	G	N1-C6-O6	16.77	129.96	119.90
11	B2	1345	G	N1-C6-O6	16.76	129.96	119.90
11	B2	529	C	N3-C4-C5	-16.76	115.20	121.90
10	B1	25	G	N1-C6-O6	16.74	129.94	119.90
11	B2	728	G	C5-C6-O6	-16.74	118.55	128.60
11	B2	762	G	C5-C6-O6	-16.74	118.56	128.60
38	A1	1411	G	N1-C6-O6	16.74	129.94	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	31	G	N1-C6-O6	16.71	129.93	119.90
38	A1	1198	G	C5-C6-O6	-16.70	118.58	128.60
38	A1	1697	G	N1-C6-O6	16.70	129.92	119.90
38	A1	2194	A	N1-C6-N6	16.69	128.62	118.60
39	A3	75	G	N1-C6-O6	16.69	129.92	119.90
38	A1	1228	G	N3-C2-N2	16.69	131.58	119.90
38	A1	2465	A	N1-C6-N6	16.69	128.61	118.60
11	B2	1161	A	N1-C6-N6	16.68	128.61	118.60
11	B2	713	A	N1-C6-N6	16.68	128.60	118.60
38	A1	1643	A	C4-C5-C6	16.67	125.34	117.00
38	A1	1055	C	C2-N3-C4	16.65	128.23	119.90
38	A1	2020	G	N1-C6-O6	16.65	129.89	119.90
38	A1	2966	C	N3-C4-N4	16.65	129.66	118.00
11	B2	910	G	C5-C6-O6	-16.64	118.62	128.60
38	A1	522	A	N1-C6-N6	16.62	128.57	118.60
38	A1	1071	A	N1-C6-N6	16.61	128.57	118.60
38	A1	1333	G	C5-C6-O6	-16.61	118.63	128.60
10	B1	42	C	N3-C4-C5	-16.59	115.26	121.90
38	A1	2863	A	N1-C6-N6	16.58	128.55	118.60
38	A1	2987	U	P-O3'-C3'	16.58	139.60	119.70
11	B2	561	A	N1-C6-N6	16.57	128.54	118.60
38	A1	306	G	N1-C6-O6	16.57	129.84	119.90
38	A1	1601	G	N1-C6-O6	16.55	129.83	119.90
11	B2	1430	G	N1-C6-O6	16.54	129.83	119.90
11	B2	1412	A	N1-C6-N6	16.53	128.52	118.60
11	B2	1354	A	N1-C6-N6	16.51	128.50	118.60
11	B2	462	A	P-O3'-C3'	16.50	139.50	119.70
38	A1	369	G	N1-C6-O6	16.47	129.78	119.90
11	B2	271	G	C5-C6-O6	-16.46	118.72	128.60
38	A1	1486	G	N1-C6-O6	16.46	129.78	119.90
38	A1	2363	G	P-O3'-C3'	16.46	139.46	119.70
11	B2	717	C	N3-C4-N4	16.46	129.52	118.00
38	A1	1125	A	N1-C6-N6	16.46	128.48	118.60
11	B2	486	A	P-O3'-C3'	16.43	139.42	119.70
38	A1	2551	G	N1-C6-O6	16.43	129.76	119.90
38	A1	2664	G	C5-C6-O6	-16.42	118.75	128.60
38	A1	530	A	N1-C6-N6	16.42	128.45	118.60
38	A1	2292	A	N1-C6-N6	16.41	128.45	118.60
39	A3	124	A	N1-C6-N6	16.41	128.44	118.60
38	A1	2420	C	N3-C4-C5	-16.41	115.34	121.90
38	A1	2232	U	O4'-C1'-N1	16.40	121.32	108.20
11	B2	727	G	C5-C6-O6	-16.40	118.76	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1464	A	N1-C6-N6	16.39	128.43	118.60
38	A1	2900	C	N3-C4-C5	-16.39	115.34	121.90
38	A1	2332	G	N1-C6-O6	16.37	129.72	119.90
38	A1	1906	G	O4'-C1'-N9	16.37	121.30	108.20
10	B1	77	A	N1-C6-N6	16.37	128.42	118.60
38	A1	1557	G	C5-C6-O6	-16.37	118.78	128.60
38	A1	2331	A	N1-C6-N6	16.37	128.42	118.60
38	A1	1956	G	C5-C6-O6	-16.37	118.78	128.60
38	A1	1228	G	N1-C6-O6	16.36	129.72	119.90
38	A1	2821	G	N1-C6-O6	16.36	129.72	119.90
11	B2	1014	C	N3-C4-C5	-16.35	115.36	121.90
11	B2	126	G	P-O3'-C3'	16.35	139.32	119.70
38	A1	2239	C	N3-C4-C5	-16.35	115.36	121.90
11	B2	1015	C	N3-C4-C5	-16.33	115.37	121.90
38	A1	1701	C	C6-N1-C2	-16.33	113.77	120.30
38	A1	825	C	N3-C4-C5	-16.32	115.37	121.90
11	B2	1459	G	C5-C6-O6	-16.31	118.81	128.60
38	A1	1059	C	N3-C4-N4	16.30	129.41	118.00
38	A1	1790	G	N1-C6-O6	16.28	129.67	119.90
38	A1	579	C	N3-C4-C5	-16.28	115.39	121.90
38	A1	1792	A	N1-C6-N6	16.28	128.37	118.60
38	A1	2455	G	C5-C6-O6	-16.27	118.84	128.60
38	A1	48	G	N1-C6-O6	16.27	129.66	119.90
38	A1	1693	G	N1-C6-O6	16.26	129.66	119.90
11	B2	428	G	N1-C6-O6	16.26	129.66	119.90
41	AA	120	TYR	CB-CG-CD2	16.25	130.75	121.00
11	B2	1293	A	N1-C6-N6	16.25	128.35	118.60
11	B2	1439	G	O4'-C1'-N9	16.25	121.20	108.20
38	A1	2839	A	N1-C6-N6	16.24	128.35	118.60
11	B2	451	A	C5-C6-N6	-16.23	110.71	123.70
38	A1	2116	G	N1-C6-O6	16.22	129.63	119.90
38	A1	2315	G	N1-C6-O6	16.20	129.62	119.90
38	A1	2566	A	N1-C6-N6	16.18	128.31	118.60
38	A1	302	U	P-O3'-C3'	16.18	139.11	119.70
38	A1	2190	A	N1-C6-N6	16.17	128.30	118.60
38	A1	1283	G	C5-C6-O6	-16.16	118.90	128.60
11	B2	1189	G	N1-C6-O6	16.16	129.60	119.90
38	A1	123	A	N1-C6-N6	16.15	128.29	118.60
38	A1	256	G	C5-C6-O6	-16.15	118.91	128.60
38	A1	317	A	N1-C6-N6	16.13	128.28	118.60
11	B2	389	G	N1-C6-O6	16.13	129.58	119.90
11	B2	239	A	P-O3'-C3'	16.13	139.06	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	378	A	N1-C6-N6	16.12	128.27	118.60
38	A1	2480	G	N1-C6-O6	16.12	129.57	119.90
38	A1	271	G	N1-C6-O6	16.11	129.57	119.90
11	B2	130	G	N1-C6-O6	16.11	129.57	119.90
38	A1	2398	C	C2-N3-C4	16.11	127.95	119.90
38	A1	2281	A	N1-C6-N6	16.10	128.26	118.60
38	A1	2898	G	N1-C6-O6	16.10	129.56	119.90
39	A3	17	G	N1-C6-O6	16.10	129.56	119.90
11	B2	19	G	N1-C6-O6	16.09	129.56	119.90
38	A1	2036	A	N1-C6-N6	16.09	128.25	118.60
38	A1	2111	C	C6-N1-C2	-16.09	113.86	120.30
38	A1	2299	G	N1-C6-O6	16.07	129.54	119.90
11	B2	1231	G	N1-C6-O6	16.07	129.54	119.90
11	B2	921	G	C5-C6-O6	-16.05	118.97	128.60
38	A1	1818	G	C6-C5-N7	-16.03	120.78	130.40
11	B2	202	G	N1-C6-O6	16.03	129.52	119.90
11	B2	389	G	C5-C6-O6	-16.03	118.98	128.60
38	A1	1407	A	N1-C6-N6	16.02	128.21	118.60
38	A1	2539	G	N1-C6-O6	16.02	129.51	119.90
38	A1	1246	G	N1-C6-O6	16.01	129.51	119.90
38	A1	2250	G	C5-C6-O6	-16.00	119.00	128.60
38	A1	2861	A	C5-C6-N1	-16.00	109.70	117.70
38	A1	1625	A	C4-C5-C6	16.00	125.00	117.00
11	B2	270	A	N1-C6-N6	15.99	128.19	118.60
11	B2	1053	A	P-O3'-C3'	15.99	138.89	119.70
11	B2	1207	G	N1-C6-O6	15.99	129.49	119.90
38	A1	1646	G	N1-C6-O6	15.99	129.49	119.90
11	B2	300	G	C5-C6-O6	-15.98	119.01	128.60
11	B2	340	A	N1-C6-N6	15.98	128.19	118.60
38	A1	1260	C	N3-C4-N4	15.98	129.19	118.00
11	B2	885	G	C5-C6-O6	-15.98	119.01	128.60
11	B2	344	G	C5-C6-O6	-15.98	119.01	128.60
11	B2	1143	G	N1-C6-O6	15.98	129.49	119.90
11	B2	1104	G	C5-C6-O6	-15.97	119.02	128.60
38	A1	786	G	N1-C6-O6	15.97	129.48	119.90
11	B2	461	A	N1-C6-N6	15.96	128.18	118.60
11	B2	722	G	C5-C6-O6	-15.96	119.02	128.60
11	B2	846	G	C5-C6-O6	-15.95	119.03	128.60
11	B2	1475	C	N3-C4-C5	-15.95	115.52	121.90
11	B2	301	G	N1-C6-O6	15.94	129.47	119.90
38	A1	1778	G	N1-C6-O6	15.94	129.46	119.90
11	B2	1436	U	P-O3'-C3'	15.93	138.82	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2873	G	N1-C6-O6	15.93	129.46	119.90
9	AX	156	TYR	CB-CG-CD2	-15.92	111.45	121.00
11	B2	978	G	C5-C6-O6	-15.91	119.05	128.60
38	A1	1015	G	C5-C6-O6	-15.91	119.05	128.60
38	A1	879	A	N1-C6-N6	15.91	128.15	118.60
38	A1	2762	G	C5-C6-O6	-15.91	119.06	128.60
11	B2	258	A	N1-C6-N6	15.90	128.14	118.60
11	B2	1146	G	C5-C6-O6	-15.90	119.06	128.60
11	B2	1455	A	N1-C6-N6	15.90	128.14	118.60
38	A1	322	C	O4'-C1'-N1	15.89	120.92	108.20
11	B2	199	A	N1-C6-N6	15.89	128.14	118.60
11	B2	955	G	N1-C6-O6	15.89	129.44	119.90
11	B2	1439	G	N1-C6-O6	15.88	129.43	119.90
38	A1	2666	G	C5-C6-O6	-15.88	119.07	128.60
38	A1	2348	G	N1-C6-O6	15.88	129.43	119.90
11	B2	754	G	N1-C6-O6	15.88	129.43	119.90
38	A1	439	G	C5-C6-O6	-15.88	119.07	128.60
38	A1	1580	G	O4'-C1'-N9	15.88	120.90	108.20
38	A1	1704	C	P-O3'-C3'	15.86	138.73	119.70
38	A1	1471	G	C5-C6-O6	-15.85	119.09	128.60
38	A1	791	C	C6-N1-C2	-15.85	113.96	120.30
11	B2	1430	G	C5-C6-O6	-15.83	119.10	128.60
38	A1	2436	A	N1-C6-N6	15.83	128.10	118.60
11	B2	822	A	N1-C6-N6	15.83	128.10	118.60
11	B2	885	G	N1-C6-O6	15.82	129.40	119.90
38	A1	506	G	N1-C6-O6	15.82	129.40	119.90
38	A1	1744	A	N1-C6-N6	15.82	128.09	118.60
38	A1	1631	A	N1-C6-N6	15.82	128.09	118.60
11	B2	1426	C	C6-N1-C2	-15.81	113.98	120.30
11	B2	1196	A	C8-N9-C4	15.79	112.11	105.80
38	A1	1627	G	C5-C6-O6	-15.78	119.13	128.60
38	A1	2719	G	C5-C6-O6	-15.78	119.13	128.60
38	A1	2408	G	O4'-C1'-N9	15.78	120.82	108.20
51	Ag	47	ARG	NE-CZ-NH2	15.77	128.18	120.30
10	B1	50	G	N1-C6-O6	15.76	129.36	119.90
38	A1	2998	G	N1-C6-O6	15.76	129.35	119.90
38	A1	1816	C	N3-C4-N4	15.75	129.03	118.00
11	B2	16	G	C8-N9-C4	-15.75	100.10	106.40
38	A1	516	A	N1-C6-N6	15.74	128.04	118.60
38	A1	2178	A	N1-C6-N6	15.73	128.04	118.60
11	B2	866	A	N1-C6-N6	15.73	128.04	118.60
38	A1	584	G	P-O3'-C3'	15.72	138.57	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1080	G	C5-C6-O6	-15.72	119.17	128.60
39	A3	108	G	N1-C6-O6	15.72	129.33	119.90
38	A1	1603	G	N1-C6-O6	15.72	129.33	119.90
38	A1	2037	A	N1-C6-N6	15.71	128.03	118.60
38	A1	709	A	N1-C6-N6	15.71	128.03	118.60
11	B2	685	G	C5-C6-O6	-15.70	119.18	128.60
38	A1	677	A	N1-C6-N6	15.70	128.02	118.60
38	A1	1055	C	N3-C4-C5	-15.70	115.62	121.90
11	B2	197	A	N1-C6-N6	15.69	128.01	118.60
11	B2	400	G	N1-C6-O6	15.69	129.31	119.90
38	A1	2646	A	N1-C6-N6	15.68	128.00	118.60
11	B2	313	G	N1-C6-O6	15.67	129.30	119.90
38	A1	123	A	C5-C6-N6	-15.67	111.16	123.70
11	B2	185	G	N1-C6-O6	15.67	129.30	119.90
38	A1	2860	G	N1-C6-O6	15.67	129.30	119.90
38	A1	966	G	N3-C2-N2	15.67	130.87	119.90
38	A1	1245	C	P-O3'-C3'	15.66	138.50	119.70
39	A3	116	C	N3-C4-N4	15.66	128.97	118.00
38	A1	247	A	N1-C6-N6	15.66	128.00	118.60
38	A1	1762	G	N1-C6-O6	15.65	129.29	119.90
38	A1	2899	G	C5-C6-O6	-15.65	119.21	128.60
38	A1	2007	C	O4'-C1'-N1	15.65	120.72	108.20
38	A1	1835	A	N1-C6-N6	15.64	127.99	118.60
11	B2	408	C	P-O3'-C3'	15.64	138.47	119.70
38	A1	606	A	N1-C6-N6	15.63	127.98	118.60
38	A1	2383	A	C5-C6-N1	-15.63	109.88	117.70
38	A1	584	G	C8-N9-C4	15.63	112.65	106.40
38	A1	2019	C	N3-C4-C5	-15.62	115.65	121.90
38	A1	2794	G	N1-C6-O6	15.62	129.27	119.90
11	B2	132	G	N1-C6-O6	15.62	129.27	119.90
38	A1	2140	C	C6-N1-C2	-15.62	114.05	120.30
38	A1	2693	G	C5-C6-O6	-15.61	119.23	128.60
38	A1	2638	G	N1-C6-O6	15.60	129.26	119.90
38	A1	2289	A	N1-C6-N6	15.60	127.96	118.60
38	A1	206	A	C5-C6-N6	-15.60	111.22	123.70
38	A1	2324	C	P-O3'-C3'	15.58	138.40	119.70
38	A1	664	A	C5-C6-N1	-15.58	109.91	117.70
38	A1	1568	A	N1-C6-N6	15.57	127.94	118.60
38	A1	2045	C	O4'-C1'-N1	15.56	120.65	108.20
11	B2	310	G	C5-C6-O6	-15.56	119.26	128.60
11	B2	958	G	C5-C6-O6	-15.56	119.27	128.60
11	B2	1164	A	C8-N9-C4	-15.55	99.58	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1234	A	C5-C6-N1	-15.55	109.92	117.70
38	A1	2944	G	N1-C6-O6	15.54	129.22	119.90
38	A1	1486	G	C5-C6-O6	-15.54	119.28	128.60
38	A1	2338	A	P-O3'-C3'	15.54	138.34	119.70
38	A1	2526	G	N1-C6-O6	15.54	129.22	119.90
11	B2	717	C	C5-C4-N4	-15.53	109.33	120.20
38	A1	68	G	N1-C6-O6	15.53	129.22	119.90
10	B1	29	C	N3-C4-C5	-15.52	115.69	121.90
11	B2	762	G	N1-C6-O6	15.52	129.21	119.90
38	A1	2454	G	N1-C6-O6	15.51	129.21	119.90
11	B2	344	G	N1-C6-O6	15.51	129.20	119.90
38	A1	98	G	N1-C6-O6	15.50	129.20	119.90
38	A1	1005	G	C5-C6-O6	-15.50	119.30	128.60
38	A1	2841	G	N1-C6-O6	15.50	129.20	119.90
38	A1	448	A	N1-C6-N6	15.50	127.90	118.60
38	A1	2603	A	N1-C6-N6	15.50	127.90	118.60
38	A1	1585	U	O4'-C1'-N1	15.49	120.60	108.20
38	A1	2348	G	C5-C6-O6	-15.49	119.31	128.60
10	B1	36	A	N1-C6-N6	15.48	127.89	118.60
11	B2	27	C	N3-C4-N4	15.47	128.83	118.00
38	A1	1249	G	N1-C6-O6	15.47	129.18	119.90
11	B2	717	C	C6-N1-C2	-15.46	114.11	120.30
38	A1	2242	A	N1-C6-N6	15.46	127.88	118.60
38	A1	2474	A	C2-N3-C4	15.46	118.33	110.60
38	A1	848	A	C5-C6-N1	-15.45	109.97	117.70
38	A1	117	A	N1-C6-N6	15.45	127.87	118.60
38	A1	1470	C	N3-C4-C5	-15.45	115.72	121.90
9	AX	156	TYR	CB-CG-CD1	15.45	130.27	121.00
11	B2	1452	G	C5-C6-O6	-15.45	119.33	128.60
38	A1	2957	G	N1-C6-O6	15.45	129.17	119.90
38	A1	1863	G	C5-C6-O6	-15.45	119.33	128.60
11	B2	860	G	N1-C6-O6	15.43	129.16	119.90
38	A1	295	G	N1-C6-O6	15.42	129.15	119.90
38	A1	1208	A	N1-C2-N3	15.42	137.01	129.30
38	A1	1256	G	N1-C6-O6	15.42	129.15	119.90
11	B2	1146	G	N1-C6-O6	15.41	129.15	119.90
38	A1	405	G	C5-C6-N1	-15.41	103.80	111.50
38	A1	870	G	N1-C6-O6	15.40	129.14	119.90
38	A1	1228	G	C5-C6-O6	-15.39	119.37	128.60
3	Af	42	ARG	NE-CZ-NH2	-15.38	112.61	120.30
38	A1	1045	A	N1-C6-N6	15.38	127.83	118.60
10	B1	38	G	C5-C6-O6	-15.38	119.37	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2643	U	O4'-C1'-N1	15.38	120.50	108.20
38	A1	905	G	N1-C6-O6	15.37	129.12	119.90
38	A1	1095	A	N1-C6-N6	15.37	127.82	118.60
11	B2	623	C	N3-C4-N4	15.37	128.76	118.00
11	B2	969	A	N1-C6-N6	15.36	127.82	118.60
38	A1	1096	A	O4'-C1'-N9	15.37	120.49	108.20
38	A1	2363	G	O4'-C1'-N9	15.37	120.49	108.20
38	A1	1392	G	N1-C6-O6	15.36	129.12	119.90
38	A1	1530	A	N1-C6-N6	15.35	127.81	118.60
11	B2	29	G	C5-C6-O6	-15.34	119.39	128.60
11	B2	185	G	C5-C6-O6	-15.34	119.40	128.60
11	B2	608	G	C5-C6-O6	-15.34	119.40	128.60
38	A1	1737	A	N1-C6-N6	15.33	127.80	118.60
38	A1	2434	A	N1-C6-N6	15.33	127.80	118.60
38	A1	1296	A	N1-C2-N3	15.33	136.96	129.30
11	B2	836	G	N1-C6-O6	15.32	129.09	119.90
38	A1	729	A	C4-C5-C6	15.32	124.66	117.00
11	B2	1211	A	N1-C6-N6	15.29	127.78	118.60
38	A1	735	A	O4'-C1'-N9	15.29	120.44	108.20
38	A1	2002	A	N1-C6-N6	15.30	127.78	118.60
11	B2	1238	G	C4-C5-N7	15.29	116.92	110.80
11	B2	1445	A	C5-C6-N6	-15.29	111.47	123.70
38	A1	1136	G	N1-C6-O6	15.29	129.07	119.90
11	B2	229	G	N1-C6-O6	15.29	129.07	119.90
10	B1	47	G	O4'-C1'-N9	15.29	120.43	108.20
11	B2	996	A	N1-C6-N6	15.29	127.77	118.60
38	A1	2257	A	O4'-C1'-N9	15.28	120.43	108.20
38	A1	1296	A	N1-C6-N6	15.28	127.77	118.60
38	A1	122	G	C5-C6-O6	-15.27	119.44	128.60
11	B2	141	C	O4'-C1'-N1	15.27	120.42	108.20
38	A1	2222	C	N3-C4-C5	-15.27	115.79	121.90
38	A1	314	A	O4'-C1'-N9	15.26	120.41	108.20
38	A1	2780	G	N1-C6-O6	15.26	129.06	119.90
11	B2	1240	A	N1-C6-N6	15.26	127.76	118.60
38	A1	2171	G	N1-C6-O6	15.26	129.05	119.90
38	A1	2423	G	O4'-C1'-N9	15.25	120.40	108.20
11	B2	1428	G	C5-C6-O6	-15.25	119.45	128.60
38	A1	1998	G	N1-C6-O6	15.25	129.05	119.90
11	B2	780	C	N3-C4-C5	-15.24	115.80	121.90
39	A3	124	A	P-O3'-C3'	15.24	137.99	119.70
39	A3	88	A	N1-C6-N6	15.24	127.74	118.60
38	A1	2666	G	N1-C6-O6	15.23	129.04	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	159	C	N3-C4-C5	-15.23	115.81	121.90
11	B2	1013	G	N3-C2-N2	15.22	130.56	119.90
38	A1	196	A	C5-C6-N6	-15.22	111.52	123.70
38	A1	306	G	C5-C6-O6	-15.22	119.47	128.60
38	A1	2402	A	N1-C2-N3	15.21	136.90	129.30
38	A1	1859	A	N1-C6-N6	15.20	127.72	118.60
38	A1	1109	G	N1-C6-O6	15.20	129.02	119.90
38	A1	2948	A	P-O3'-C3'	15.20	137.94	119.70
38	A1	43	G	P-O3'-C3'	15.20	137.94	119.70
38	A1	619	G	N1-C6-O6	15.20	129.02	119.90
38	A1	2719	G	N1-C6-O6	15.20	129.02	119.90
11	B2	358	G	C2-N3-C4	15.19	119.50	111.90
38	A1	1295	G	C5-N7-C8	15.19	111.90	104.30
38	A1	1393	C	O4'-C1'-N1	15.19	120.35	108.20
38	A1	19	G	C8-N9-C4	-15.18	100.33	106.40
38	A1	2365	G	C5-C6-O6	-15.18	119.49	128.60
11	B2	1066	C	N3-C4-C5	-15.18	115.83	121.90
38	A1	3011	G	N1-C6-O6	15.18	129.01	119.90
38	A1	793	C	N3-C4-C5	-15.18	115.83	121.90
38	A1	406	G	O4'-C1'-N9	15.18	120.34	108.20
38	A1	2042	A	N1-C6-N6	15.18	127.71	118.60
38	A1	2677	U	O4'-C1'-N1	15.17	120.33	108.20
38	A1	2957	G	C5-C6-O6	-15.17	119.50	128.60
11	B2	434	A	N1-C6-N6	15.17	127.70	118.60
38	A1	890	G	O4'-C1'-N9	15.16	120.33	108.20
38	A1	1085	G	P-O3'-C3'	15.16	137.90	119.70
38	A1	565	A	N1-C6-N6	15.16	127.70	118.60
38	A1	2430	C	N3-C4-N4	15.15	128.61	118.00
38	A1	1216	A	N1-C6-N6	15.15	127.69	118.60
38	A1	2624	G	N1-C6-O6	15.15	128.99	119.90
38	A1	909	A	N1-C6-N6	15.14	127.68	118.60
11	B2	1198	A	N1-C6-N6	15.13	127.68	118.60
38	A1	649	A	N1-C6-N6	15.12	127.67	118.60
11	B2	320	G	N1-C6-O6	15.12	128.97	119.90
38	A1	595	C	O4'-C1'-N1	15.12	120.29	108.20
38	A1	1082	A	N1-C6-N6	15.12	127.67	118.60
38	A1	1137	G	N1-C6-O6	15.12	128.97	119.90
38	A1	2883	C	O4'-C1'-N1	15.12	120.29	108.20
11	B2	1093	C	C6-N1-C2	-15.11	114.25	120.30
11	B2	662	C	N3-C4-N4	15.11	128.58	118.00
38	A1	1676	G	N1-C6-O6	15.10	128.96	119.90
38	A1	1791	A	N1-C6-N6	15.10	127.66	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2281	A	C5-C6-N6	-15.10	111.62	123.70
11	B2	294	A	N1-C6-N6	15.10	127.66	118.60
39	A3	47	G	N1-C6-O6	15.10	128.96	119.90
11	B2	1134	G	N9-C4-C5	15.09	111.44	105.40
38	A1	694	A	N1-C6-N6	15.09	127.65	118.60
38	A1	3015	A	N1-C6-N6	15.08	127.65	118.60
11	B2	1176	C	C5-C4-N4	-15.08	109.65	120.20
38	A1	1586	G	N1-C6-O6	15.07	128.94	119.90
38	A1	852	A	N1-C6-N6	15.07	127.64	118.60
11	B2	697	A	N1-C6-N6	15.07	127.64	118.60
38	A1	985	A	N1-C6-N6	15.07	127.64	118.60
45	AC	9	ARG	NE-CZ-NH2	-15.06	112.77	120.30
38	A1	83	G	P-O3'-C3'	15.06	137.77	119.70
38	A1	1549	C	N3-C4-C5	-15.06	115.88	121.90
11	B2	335	G	N1-C6-O6	15.05	128.93	119.90
38	A1	1513	G	N1-C6-O6	15.05	128.93	119.90
11	B2	438	A	N1-C6-N6	15.04	127.63	118.60
11	B2	1157	G	N1-C6-O6	15.03	128.92	119.90
38	A1	3029	A	N1-C6-N6	15.03	127.62	118.60
11	B2	1227	A	N1-C6-N6	15.02	127.61	118.60
11	B2	628	G	C5-C6-O6	-15.02	119.59	128.60
11	B2	628	G	N1-C6-O6	15.02	128.91	119.90
38	A1	277	A	C5-C6-N6	-15.02	111.69	123.70
11	B2	211	G	N1-C6-O6	15.01	128.91	119.90
38	A1	777	A	N1-C6-N6	15.01	127.61	118.60
39	A3	65	G	C5-C6-O6	-15.01	119.59	128.60
38	A1	2650	G	N1-C6-O6	15.01	128.91	119.90
38	A1	2738	G	N1-C6-O6	15.01	128.91	119.90
38	A1	1858	G	C5-C6-O6	-15.01	119.60	128.60
11	B2	1236	G	N1-C6-O6	15.00	128.90	119.90
38	A1	2986	G	C8-N9-C4	-15.00	100.40	106.40
38	A1	166	G	C5-C6-O6	-15.00	119.60	128.60
11	B2	1392	G	N1-C6-O6	14.99	128.90	119.90
11	B2	25	C	N3-C4-C5	-14.99	115.91	121.90
11	B2	923	A	N1-C6-N6	14.99	127.59	118.60
11	B2	596	A	N1-C6-N6	14.98	127.59	118.60
38	A1	233	A	N1-C6-N6	14.98	127.59	118.60
38	A1	17	C	N3-C4-N4	14.98	128.49	118.00
38	A1	2586	A	N1-C6-N6	14.98	127.59	118.60
38	A1	2950	G	C5-C6-O6	-14.97	119.62	128.60
38	A1	702	G	C5-C6-O6	-14.96	119.62	128.60
38	A1	365	G	C5-C6-O6	-14.95	119.63	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	626	C	N3-C4-C5	-14.94	115.92	121.90
38	A1	522	A	C4-C5-C6	14.93	124.47	117.00
9	AX	348	ARG	NE-CZ-NH1	14.93	127.77	120.30
38	A1	1503	C	N3-C4-C5	-14.93	115.93	121.90
38	A1	347	G	C5-C6-O6	-14.93	119.64	128.60
38	A1	1894	A	N1-C6-N6	14.91	127.55	118.60
38	A1	1078	G	N1-C6-O6	14.90	128.84	119.90
38	A1	2056	A	C5-C6-N1	-14.90	110.25	117.70
38	A1	2878	A	O4'-C1'-N9	14.90	120.12	108.20
38	A1	639	C	P-O3'-C3'	14.89	137.57	119.70
38	A1	1117	C	N3-C4-C5	-14.89	115.94	121.90
11	B2	1053	A	N1-C6-N6	14.88	127.53	118.60
38	A1	2418	G	N1-C6-O6	14.88	128.83	119.90
38	A1	367	G	C5-C6-O6	-14.88	119.67	128.60
11	B2	958	G	N1-C6-O6	14.87	128.82	119.90
38	A1	374	C	N3-C4-C5	-14.87	115.95	121.90
11	B2	196	G	C5-N7-C8	14.86	111.73	104.30
38	A1	2211	C	O4'-C1'-N1	14.86	120.09	108.20
38	A1	842	C	C6-N1-C2	14.86	126.24	120.30
18	BF	95	TYR	CB-CG-CD2	14.85	129.91	121.00
38	A1	2359	G	N1-C6-O6	14.85	128.81	119.90
32	BT	59	TYR	CB-CG-CD1	-14.85	112.09	121.00
11	B2	199	A	P-O3'-C3'	14.85	137.52	119.70
11	B2	1233	G	C8-N9-C4	-14.85	100.46	106.40
11	B2	1294	G	N1-C6-O6	14.85	128.81	119.90
38	A1	1649	G	N1-C6-O6	14.85	128.81	119.90
11	B2	1345	G	C5-C6-O6	-14.84	119.70	128.60
11	B2	1361	G	C5-C6-O6	-14.84	119.70	128.60
11	B2	432	G	N1-C6-O6	14.84	128.80	119.90
38	A1	1915	G	N1-C6-O6	14.84	128.80	119.90
11	B2	430	G	C5-C6-O6	-14.83	119.70	128.60
38	A1	1059	C	C5-C4-N4	-14.83	109.82	120.20
11	B2	695	G	N1-C6-O6	14.82	128.79	119.90
38	A1	372	A	N1-C6-N6	14.82	127.49	118.60
11	B2	1061	A	N1-C6-N6	14.82	127.49	118.60
38	A1	1168	A	N1-C6-N6	14.82	127.49	118.60
39	A3	7	C	C6-N1-C2	-14.82	114.37	120.30
38	A1	1064	G	O4'-C1'-N9	14.82	120.05	108.20
38	A1	55	G	C5-C6-O6	-14.81	119.71	128.60
38	A1	1858	G	N1-C6-O6	14.81	128.79	119.90
38	A1	1280	C	N3-C4-C5	-14.81	115.98	121.90
11	B2	1306	A	P-O3'-C3'	14.81	137.47	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2871	A	O4'-C1'-N9	14.81	120.05	108.20
38	A1	90	A	N1-C6-N6	14.81	127.48	118.60
38	A1	1385	C	N3-C4-C5	-14.80	115.98	121.90
11	B2	682	A	N1-C6-N6	14.80	127.48	118.60
38	A1	2432	G	N1-C6-O6	14.80	128.78	119.90
39	A3	12	G	C5-C6-O6	-14.79	119.72	128.60
11	B2	307	G	C5-C6-O6	-14.79	119.72	128.60
38	A1	319	A	C4-C5-N7	-14.79	103.30	110.70
38	A1	2063	U	O4'-C1'-N1	14.79	120.03	108.20
38	A1	486	A	N1-C6-N6	14.79	127.47	118.60
11	B2	1235	A	N1-C6-N6	14.78	127.47	118.60
38	A1	364	A	P-O3'-C3'	14.78	137.44	119.70
11	B2	1054	A	N1-C6-N6	14.78	127.47	118.60
38	A1	838	A	C5-C6-N6	-14.78	111.88	123.70
38	A1	1130	G	C8-N9-C4	-14.78	100.49	106.40
38	A1	1156	G	C5-C6-O6	-14.77	119.73	128.60
11	B2	891	A	P-O3'-C3'	14.77	137.43	119.70
38	A1	1411	G	C5-C6-O6	-14.77	119.74	128.60
38	A1	2372	C	N3-C4-C5	-14.77	115.99	121.90
11	B2	806	G	P-O5'-C5'	14.76	144.52	120.90
38	A1	2497	G	C5-C6-O6	-14.76	119.74	128.60
11	B2	430	G	N1-C6-O6	14.75	128.75	119.90
11	B2	1380	C	O4'-C1'-N1	14.75	120.00	108.20
11	B2	1460	G	P-O3'-C3'	14.74	137.39	119.70
38	A1	271	G	C5-C6-O6	-14.74	119.76	128.60
38	A1	392	G	C5-C6-O6	-14.74	119.75	128.60
38	A1	2370	C	P-O3'-C3'	14.74	137.38	119.70
38	A1	2284	C	N3-C4-N4	14.73	128.31	118.00
11	B2	898	G	C5-C6-O6	-14.72	119.77	128.60
11	B2	712	G	N3-C2-N2	14.72	130.20	119.90
38	A1	325	G	C5-C6-O6	-14.72	119.77	128.60
38	A1	878	G	N1-C6-O6	14.72	128.73	119.90
38	A1	1608	G	N1-C6-O6	14.71	128.73	119.90
42	Aa	71	ARG	NE-CZ-NH2	-14.71	112.94	120.30
60	AM	59	TYR	CB-CG-CD1	-14.71	112.18	121.00
11	B2	662	C	N3-C4-C5	-14.70	116.02	121.90
38	A1	935	A	N1-C6-N6	14.70	127.42	118.60
11	B2	237	C	N3-C4-C5	-14.70	116.02	121.90
38	A1	1390	U	P-O3'-C3'	14.70	137.34	119.70
11	B2	1002	G	C5-C6-O6	-14.69	119.79	128.60
11	B2	1182	G	N1-C6-O6	14.69	128.71	119.90
38	A1	1256	G	C5-C6-O6	-14.69	119.79	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1968	A	N1-C6-N6	14.69	127.41	118.60
11	B2	229	G	C5-C6-O6	-14.68	119.79	128.60
38	A1	1603	G	C5-C6-O6	-14.68	119.79	128.60
38	A1	817	G	C4-C5-N7	14.67	116.67	110.80
38	A1	823	G	N1-C6-O6	14.67	128.70	119.90
11	B2	1059	C	N3-C4-N4	14.67	128.27	118.00
38	A1	422	G	N1-C2-N3	-14.67	115.10	123.90
57	Aj	82	ARG	NE-CZ-NH2	-14.66	112.97	120.30
11	B2	136	A	C4-C5-C6	14.65	124.33	117.00
38	A1	1901	A	C8-N9-C4	-14.65	99.94	105.80
11	B2	545	C	N3-C4-C5	-14.65	116.04	121.90
38	A1	953	G	N1-C6-O6	14.65	128.69	119.90
6	AT	32	ARG	NE-CZ-NH2	-14.64	112.98	120.30
38	A1	129	C	N3-C4-N4	14.64	128.25	118.00
11	B2	790	G	N1-C6-O6	14.64	128.68	119.90
38	A1	336	C	N3-C4-C5	-14.64	116.04	121.90
38	A1	1676	G	C5-C6-O6	-14.63	119.82	128.60
38	A1	932	C	N3-C4-C5	-14.62	116.05	121.90
39	A3	19	G	N1-C6-O6	14.61	128.67	119.90
38	A1	1601	G	C5-C6-O6	-14.61	119.83	128.60
11	B2	769	A	N1-C6-N6	14.61	127.36	118.60
38	A1	2171	G	C5-C6-O6	-14.61	119.84	128.60
38	A1	2540	A	C5-C6-N6	-14.61	112.02	123.70
11	B2	1092	G	N1-C6-O6	14.60	128.66	119.90
38	A1	434	G	N1-C6-O6	14.60	128.66	119.90
38	A1	2679	A	C4-C5-N7	-14.60	103.40	110.70
11	B2	1452	G	N1-C6-O6	14.60	128.66	119.90
38	A1	2291	G	C5-C6-O6	-14.60	119.84	128.60
38	A1	1443	G	P-O3'-C3'	14.60	137.22	119.70
11	B2	1458	A	N1-C6-N6	14.59	127.36	118.60
38	A1	2099	G	N1-C6-O6	14.59	128.66	119.90
38	A1	2252	C	O4'-C1'-N1	14.59	119.87	108.20
38	A1	2718	G	N1-C6-O6	14.59	128.65	119.90
11	B2	953	C	C6-N1-C2	-14.59	114.47	120.30
38	A1	2062	A	N9-C4-C5	14.59	111.63	105.80
38	A1	2705	C	C5-C4-N4	-14.58	109.99	120.20
38	A1	2649	A	N1-C6-N6	14.58	127.35	118.60
38	A1	2543	A	N1-C6-N6	14.57	127.34	118.60
38	A1	2596	G	N1-C6-O6	14.57	128.64	119.90
11	B2	246	A	P-O3'-C3'	14.56	137.18	119.70
38	A1	674	G	N1-C6-O6	14.56	128.64	119.90
11	B2	971	G	N1-C6-O6	14.56	128.63	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1203	G	C5-C6-O6	-14.56	119.86	128.60
11	B2	1019	A	P-O3'-C3'	14.56	137.17	119.70
38	A1	2988	A	O4'-C1'-N9	14.55	119.84	108.20
38	A1	22	C	N3-C4-N4	14.54	128.18	118.00
38	A1	460	C	N3-C4-C5	-14.54	116.08	121.90
11	B2	1306	A	C5-N7-C8	14.54	111.17	103.90
38	A1	854	G	N1-C6-O6	14.54	128.62	119.90
38	A1	2344	G	N1-C6-O6	14.54	128.62	119.90
11	B2	488	A	N1-C6-N6	14.54	127.32	118.60
38	A1	221	G	N1-C6-O6	14.54	128.62	119.90
38	A1	2237	A	N1-C6-N6	14.53	127.31	118.60
11	B2	1292	A	C4-C5-C6	14.52	124.26	117.00
38	A1	366	G	C6-C5-N7	-14.52	121.69	130.40
38	A1	1885	G	C2-N3-C4	-14.52	104.64	111.90
11	B2	548	A	N1-C6-N6	14.52	127.31	118.60
38	A1	1290	G	N1-C6-O6	14.51	128.61	119.90
11	B2	503	G	N1-C6-O6	14.51	128.61	119.90
38	A1	2997	G	C5-C6-O6	-14.51	119.89	128.60
11	B2	235	G	N1-C2-N3	-14.50	115.20	123.90
38	A1	948	C	N3-C4-C5	-14.50	116.10	121.90
38	A1	1696	G	N1-C6-O6	14.50	128.60	119.90
38	A1	734	C	P-O3'-C3'	14.49	137.09	119.70
38	A1	644	G	N1-C6-O6	14.49	128.59	119.90
11	B2	38	G	N1-C6-O6	14.48	128.59	119.90
39	A3	49	A	N1-C6-N6	14.48	127.29	118.60
11	B2	375	G	N1-C6-O6	14.48	128.59	119.90
11	B2	444	G	N1-C6-O6	14.48	128.59	119.90
38	A1	2657	A	N1-C6-N6	14.47	127.28	118.60
38	A1	55	G	N1-C6-O6	14.47	128.58	119.90
38	A1	1602	C	P-O3'-C3'	14.47	137.06	119.70
10	B1	47	G	C5-C6-O6	-14.47	119.92	128.60
11	B2	1131	G	C4-C5-N7	-14.46	105.01	110.80
11	B2	1162	G	N1-C6-O6	14.46	128.58	119.90
11	B2	1196	A	C5-C6-N1	-14.46	110.47	117.70
38	A1	2479	C	C2-N3-C4	14.46	127.13	119.90
38	A1	1046	A	N1-C2-N3	14.46	136.53	129.30
38	A1	710	G	N1-C6-O6	14.46	128.57	119.90
11	B2	295	G	N1-C6-O6	14.45	128.57	119.90
38	A1	668	G	C4-C5-N7	14.44	116.58	110.80
11	B2	871	A	P-O3'-C3'	14.44	137.03	119.70
38	A1	2093	A	C4-C5-C6	14.44	124.22	117.00
38	A1	2257	A	N1-C6-N6	14.44	127.27	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2244	G	P-O5'-C5'	14.43	144.00	120.90
38	A1	1753	G	N1-C6-O6	14.43	128.56	119.90
38	A1	2412	A	C4-C5-C6	14.43	124.22	117.00
11	B2	1466	G	C5-C6-O6	-14.43	119.94	128.60
38	A1	1533	G	C8-N9-C4	-14.43	100.63	106.40
38	A1	2696	G	C5-C6-O6	-14.43	119.94	128.60
11	B2	347	G	N1-C6-O6	14.43	128.56	119.90
38	A1	883	G	C5-C6-O6	-14.42	119.95	128.60
11	B2	1065	C	N3-C4-N4	14.42	128.09	118.00
11	B2	1001	A	N1-C6-N6	14.42	127.25	118.60
11	B2	731	A	N1-C6-N6	14.42	127.25	118.60
38	A1	1952	G	N1-C6-O6	14.41	128.55	119.90
38	A1	378	G	N1-C6-O6	14.41	128.55	119.90
38	A1	2294	A	C4-C5-C6	14.41	124.20	117.00
38	A1	1763	A	N1-C6-N6	14.40	127.24	118.60
11	B2	27	C	C5-C4-N4	-14.40	110.12	120.20
11	B2	360	A	N1-C6-N6	14.40	127.24	118.60
11	B2	910	G	N1-C6-O6	14.40	128.54	119.90
38	A1	2275	G	C5-C6-O6	-14.40	119.96	128.60
38	A1	2263	G	N1-C6-O6	14.39	128.54	119.90
10	B1	3	G	N1-C6-O6	14.39	128.54	119.90
38	A1	1726	A	C4-C5-C6	14.39	124.20	117.00
38	A1	924	A	N1-C6-N6	14.39	127.23	118.60
38	A1	1019	G	N1-C6-O6	14.39	128.53	119.90
38	A1	1749	C	N3-C4-C5	-14.39	116.14	121.90
11	B2	65	G	C4-C5-C6	14.38	127.43	118.80
11	B2	992	G	C5-C6-O6	-14.38	119.97	128.60
11	B2	1251	C	N3-C4-C5	-14.38	116.15	121.90
11	B2	93	A	O4'-C1'-N9	14.38	119.70	108.20
26	BN	20	ARG	NE-CZ-NH2	-14.38	113.11	120.30
38	A1	17	C	N3-C4-C5	-14.37	116.15	121.90
38	A1	994	G	N1-C6-O6	14.37	128.52	119.90
38	A1	485	G	N1-C6-O6	14.36	128.52	119.90
38	A1	553	C	N3-C4-N4	14.36	128.06	118.00
38	A1	859	G	P-O3'-C3'	14.36	136.94	119.70
39	A3	25	A	P-O3'-C3'	14.37	136.94	119.70
38	A1	708	A	C4-C5-C6	14.36	124.18	117.00
11	B2	201	G	P-O3'-C3'	14.36	136.93	119.70
38	A1	2474	A	N1-C6-N6	14.36	127.21	118.60
11	B2	988	A	N1-C6-N6	14.35	127.21	118.60
11	B2	1352	G	N1-C6-O6	14.35	128.51	119.90
11	B2	784	G	N1-C6-O6	14.35	128.51	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	845	G	C6-N1-C2	14.35	133.71	125.10
38	A1	1275	G	N1-C6-O6	14.34	128.51	119.90
39	A3	39	C	N3-C4-C5	-14.34	116.16	121.90
38	A1	2538	G	C5-C6-O6	-14.34	120.00	128.60
38	A1	2890	A	N1-C6-N6	14.33	127.20	118.60
11	B2	226	G	N1-C6-O6	14.33	128.50	119.90
38	A1	2770	A	N1-C6-N6	14.32	127.19	118.60
11	B2	1400	A	N1-C6-N6	14.32	127.19	118.60
38	A1	493	A	N1-C6-N6	14.32	127.19	118.60
10	B1	33	C	C6-N1-C2	-14.31	114.58	120.30
38	A1	1963	G	N1-C6-O6	14.30	128.48	119.90
38	A1	2120	C	N3-C4-C5	-14.30	116.18	121.90
38	A1	1212	A	C5-C6-N1	-14.30	110.55	117.70
38	A1	2806	A	C5-C6-N6	-14.30	112.26	123.70
38	A1	14	A	N1-C6-N6	14.30	127.18	118.60
38	A1	2514	C	C6-N1-C2	-14.30	114.58	120.30
11	B2	354	G	O4'-C1'-N9	14.29	119.64	108.20
11	B2	1470	G	N1-C6-O6	14.29	128.48	119.90
38	A1	331	G	C5-C6-N1	-14.29	104.35	111.50
38	A1	1570	C	N3-C4-N4	14.29	128.00	118.00
11	B2	55	G	C5-C6-O6	-14.29	120.03	128.60
11	B2	1283	G	C5-C6-O6	-14.29	120.03	128.60
38	A1	200	G	N1-C6-O6	14.29	128.47	119.90
38	A1	227	G	N1-C6-O6	14.29	128.47	119.90
11	B2	748	A	N1-C6-N6	14.29	127.17	118.60
41	AA	41	ARG	NE-CZ-NH2	14.29	127.44	120.30
38	A1	1538	A	C5-C6-N1	-14.28	110.56	117.70
38	A1	1241	C	C6-N1-C2	-14.28	114.59	120.30
38	A1	2718	G	C5-C6-O6	-14.28	120.03	128.60
38	A1	1845	C	O4'-C1'-N1	14.27	119.62	108.20
38	A1	1279	U	O4'-C1'-N1	14.26	119.61	108.20
11	B2	1079	G	C5-C6-O6	-14.26	120.05	128.60
38	A1	2179	G	C5-C6-O6	-14.26	120.05	128.60
11	B2	867	A	N1-C6-N6	14.26	127.16	118.60
38	A1	317	A	C5-N7-C8	14.26	111.03	103.90
38	A1	1260	C	P-O3'-C3'	14.25	136.80	119.70
38	A1	2604	G	C5-C6-O6	-14.25	120.05	128.60
38	A1	1374	G	N1-C6-O6	14.25	128.45	119.90
11	B2	1293	A	C5-C6-N1	-14.25	110.58	117.70
38	A1	2332	G	C5-C6-O6	-14.24	120.05	128.60
11	B2	1194	C	O4'-C1'-N1	14.24	119.59	108.20
11	B2	66	G	C5-C6-O6	-14.24	120.06	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1340	U	P-O3'-C3'	14.24	136.78	119.70
11	B2	63	G	C5-C6-O6	-14.23	120.06	128.60
11	B2	1331	G	N1-C6-O6	14.23	128.44	119.90
38	A1	2871	A	C5-C6-N1	-14.23	110.58	117.70
11	B2	962	G	N1-C6-O6	14.23	128.44	119.90
38	A1	1849	A	N1-C6-N6	14.23	127.14	118.60
38	A1	1985	G	C5-C6-O6	-14.23	120.06	128.60
39	A3	78	C	N3-C4-C5	-14.23	116.21	121.90
38	A1	1261	C	C6-N1-C2	-14.23	114.61	120.30
11	B2	432	G	C5-C6-O6	-14.22	120.07	128.60
38	A1	2303	A	C8-N9-C4	-14.21	100.11	105.80
38	A1	2338	A	N1-C6-N6	14.21	127.13	118.60
38	A1	1909	C	N3-C4-C5	-14.21	116.22	121.90
38	A1	2020	G	C5-C6-O6	-14.21	120.08	128.60
59	AL	127	ARG	NE-CZ-NH2	-14.21	113.20	120.30
38	A1	541	A	N1-C6-N6	14.21	127.12	118.60
38	A1	2693	G	N1-C6-O6	14.20	128.42	119.90
11	B2	844	G	C5-C6-O6	-14.20	120.08	128.60
38	A1	1517	G	C5-C6-O6	-14.20	120.08	128.60
11	B2	813	G	O4'-C1'-N9	14.20	119.56	108.20
38	A1	230	A	C5-C6-N1	-14.20	110.60	117.70
11	B2	485	A	N1-C6-N6	14.19	127.11	118.60
38	A1	389	C	N3-C4-C5	-14.18	116.23	121.90
38	A1	765	G	C5-C6-O6	-14.18	120.09	128.60
38	A1	2077	A	N1-C6-N6	14.18	127.11	118.60
38	A1	492	A	C4-C5-C6	14.18	124.09	117.00
38	A1	2539	G	C5-C6-O6	-14.17	120.10	128.60
11	B2	1244	C	O4'-C1'-N1	14.17	119.54	108.20
11	B2	100	A	N1-C6-N6	14.17	127.10	118.60
38	A1	850	C	C6-N1-C2	-14.16	114.64	120.30
11	B2	177	A	N1-C6-N6	14.15	127.09	118.60
11	B2	130	G	C5-C6-O6	-14.15	120.11	128.60
38	A1	2179	G	N1-C6-O6	14.15	128.39	119.90
38	A1	2760	A	N1-C6-N6	14.15	127.09	118.60
38	A1	735	A	N1-C6-N6	14.15	127.09	118.60
38	A1	947	C	N3-C4-C5	-14.15	116.24	121.90
38	A1	1779	C	N3-C4-C5	-14.14	116.24	121.90
38	A1	1578	C	C4-C5-C6	14.14	124.47	117.40
38	A1	866	G	N1-C6-O6	14.14	128.38	119.90
38	A1	1322	G	C5-C6-O6	-14.13	120.12	128.60
38	A1	1395	G	C5-C6-O6	-14.13	120.12	128.60
38	A1	2596	G	C8-N9-C4	-14.13	100.75	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2321	A	N1-C6-N6	14.12	127.08	118.60
38	A1	2705	C	N3-C4-N4	14.12	127.89	118.00
11	B2	85	A	C5-C6-N6	-14.12	112.41	123.70
11	B2	595	U	C5-C4-O4	-14.12	117.43	125.90
38	A1	1234	A	N1-C6-N6	14.12	127.07	118.60
11	B2	853	G	C2-N3-C4	14.12	118.96	111.90
38	A1	1422	G	N1-C6-O6	14.12	128.37	119.90
38	A1	1882	C	C6-N1-C2	-14.12	114.65	120.30
11	B2	1207	G	C5-C6-O6	-14.11	120.13	128.60
11	B2	663	G	O4'-C1'-N9	14.11	119.49	108.20
11	B2	845	G	C5-C6-N1	-14.11	104.45	111.50
11	B2	946	G	C5-C6-O6	-14.11	120.14	128.60
38	A1	1802	G	C4-C5-N7	-14.11	105.16	110.80
11	B2	159	C	N3-C4-N4	14.10	127.87	118.00
10	B1	32	A	N1-C6-N6	14.10	127.06	118.60
38	A1	1802	G	C5-N7-C8	14.10	111.35	104.30
38	A1	2154	G	N1-C6-O6	14.10	128.36	119.90
38	A1	2510	A	N1-C6-N6	14.09	127.06	118.60
38	A1	1813	A	C4-C5-C6	14.09	124.04	117.00
38	A1	906	G	N1-C6-O6	14.08	128.35	119.90
11	B2	1485	G	N1-C6-O6	14.08	128.35	119.90
38	A1	202	A	N1-C6-N6	14.08	127.05	118.60
10	B1	76	C	C2-N3-C4	14.07	126.94	119.90
38	A1	249	G	N1-C2-N3	-14.07	115.45	123.90
38	A1	365	G	N1-C6-O6	14.07	128.34	119.90
11	B2	233	C	C6-N1-C2	14.06	125.92	120.30
11	B2	1417	A	N1-C6-N6	14.06	127.04	118.60
38	A1	2832	G	C5-C6-O6	-14.06	120.16	128.60
38	A1	2023	A	N1-C6-N6	14.06	127.04	118.60
11	B2	375	G	C5-C6-O6	-14.05	120.17	128.60
38	A1	2175	G	C5-C6-O6	-14.05	120.17	128.60
38	A1	765	G	O4'-C1'-N9	14.04	119.44	108.20
38	A1	1129	G	N1-C6-O6	14.04	128.32	119.90
39	A3	118	G	N1-C6-O6	14.04	128.32	119.90
11	B2	1161	A	P-O3'-C3'	14.04	136.55	119.70
38	A1	1864	G	N1-C6-O6	14.04	128.32	119.90
38	A1	1107	G	N1-C6-O6	14.04	128.32	119.90
38	A1	2843	C	N3-C4-C5	-14.03	116.29	121.90
11	B2	56	A	C8-N9-C4	-14.03	100.19	105.80
11	B2	617	A	C5-C6-N1	-14.02	110.69	117.70
38	A1	2393	G	N1-C6-O6	14.02	128.31	119.90
38	A1	2680	A	N1-C6-N6	14.01	127.01	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1387	G	C5-C6-O6	-14.01	120.19	128.60
38	A1	1064	G	N1-C6-O6	14.00	128.30	119.90
38	A1	1634	A	C4-C5-C6	14.00	124.00	117.00
11	B2	623	C	C5-C4-N4	-13.99	110.41	120.20
11	B2	1244	C	C5-C4-N4	-13.99	110.41	120.20
38	A1	266	A	C5-C6-N1	-13.99	110.71	117.70
38	A1	1743	G	O4'-C1'-N9	13.98	119.39	108.20
11	B2	406	U	P-O3'-C3'	13.98	136.48	119.70
38	A1	2953	U	O4'-C1'-N1	13.98	119.38	108.20
38	A1	2334	G	C5-C6-O6	-13.98	120.21	128.60
38	A1	2664	G	N1-C6-O6	13.97	128.28	119.90
38	A1	555	G	N1-C6-O6	13.97	128.28	119.90
38	A1	522	A	C5-C6-N1	-13.96	110.72	117.70
11	B2	62	G	C5-C6-O6	-13.96	120.22	128.60
38	A1	979	G	C2-N3-C4	-13.96	104.92	111.90
38	A1	1529	A	N1-C6-N6	13.95	126.97	118.60
38	A1	2871	A	N1-C6-N6	13.95	126.97	118.60
11	B2	1451	C	C5-C6-N1	-13.94	114.03	121.00
38	A1	2841	G	C5-C6-O6	-13.93	120.24	128.60
11	B2	1026	A	C5-C6-N6	-13.93	112.56	123.70
38	A1	2780	G	C5-C6-O6	-13.93	120.24	128.60
11	B2	1204	C	N3-C4-C5	-13.92	116.33	121.90
38	A1	2521	U	C5-C6-N1	13.92	129.66	122.70
48	AE	149	ARG	NE-CZ-NH1	-13.92	113.34	120.30
11	B2	108	G	N1-C6-O6	13.92	128.25	119.90
11	B2	376	G	N1-C6-O6	13.92	128.25	119.90
38	A1	583	A	C5-C6-N1	-13.92	110.74	117.70
38	A1	2604	G	O4'-C1'-N9	13.92	119.34	108.20
11	B2	592	G	N1-C6-O6	13.91	128.25	119.90
38	A1	1809	G	C5-C6-O6	-13.91	120.25	128.60
11	B2	936	A	N1-C6-N6	13.91	126.95	118.60
38	A1	1296	A	C2-N3-C4	-13.91	103.64	110.60
10	B1	43	G	N1-C6-O6	13.91	128.25	119.90
11	B2	507	G	N1-C6-O6	13.91	128.25	119.90
11	B2	865	A	N1-C6-N6	13.91	126.94	118.60
19	BG	82	ARG	NE-CZ-NH2	-13.91	113.35	120.30
11	B2	11	A	N1-C6-N6	13.90	126.94	118.60
11	B2	582	G	N1-C6-O6	13.90	128.24	119.90
38	A1	1335	C	N3-C4-N4	13.90	127.73	118.00
11	B2	713	A	C8-N9-C4	13.90	111.36	105.80
11	B2	1021	C	C2-N3-C4	13.90	126.85	119.90
38	A1	596	C	C6-N1-C2	-13.90	114.74	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1372	C	C2-N3-C4	13.90	126.85	119.90
28	BP	9	ARG	NE-CZ-NH1	13.89	127.25	120.30
11	B2	1337	A	N1-C6-N6	13.89	126.94	118.60
38	A1	767	G	O4'-C1'-N9	13.89	119.31	108.20
38	A1	375	C	N3-C4-C5	-13.88	116.35	121.90
38	A1	2072	G	N1-C6-O6	13.88	128.23	119.90
10	B1	20	G	C5-C6-O6	-13.88	120.27	128.60
11	B2	1271	G	N1-C6-O6	13.87	128.22	119.90
38	A1	2343	G	C5-C6-O6	-13.87	120.28	128.60
38	A1	2749	G	O4'-C1'-N9	13.88	119.30	108.20
11	B2	1091	C	N3-C4-C5	-13.87	116.35	121.90
11	B2	1309	A	N1-C6-N6	13.87	126.92	118.60
48	AE	128	TYR	CB-CG-CD1	-13.87	112.68	121.00
38	A1	2037	A	C4-C5-C6	13.87	123.93	117.00
38	A1	2056	A	C4-C5-C6	13.87	123.93	117.00
38	A1	147	C	C5-C6-N1	13.87	127.93	121.00
11	B2	920	U	O4'-C1'-N1	13.86	119.29	108.20
38	A1	470	A	N1-C6-N6	13.86	126.92	118.60
38	A1	535	G	N1-C6-O6	13.85	128.21	119.90
11	B2	977	G	P-O3'-C3'	13.85	136.32	119.70
11	B2	965	G	N7-C8-N9	-13.85	106.18	113.10
38	A1	1036	C	C6-N1-C2	-13.85	114.76	120.30
32	BT	34	ARG	NE-CZ-NH2	-13.84	113.38	120.30
38	A1	84	A	N1-C6-N6	13.84	126.90	118.60
38	A1	2231	G	N1-C6-O6	13.84	128.20	119.90
10	B1	58	A	N1-C6-N6	13.83	126.90	118.60
11	B2	203	A	N1-C6-N6	13.83	126.89	118.60
11	B2	413	G	C5-C6-O6	-13.83	120.30	128.60
38	A1	430	A	C5-C6-N1	-13.83	110.79	117.70
11	B2	1331	G	C5-C6-O6	-13.82	120.31	128.60
11	B2	868	C	N3-C4-C5	-13.82	116.37	121.90
38	A1	235	G	C5-C6-O6	-13.82	120.31	128.60
11	B2	196	G	P-O3'-C3'	13.82	136.28	119.70
38	A1	119	U	P-O3'-C3'	13.82	136.28	119.70
38	A1	839	A	C5-C6-N6	-13.82	112.64	123.70
38	A1	201	C	N3-C4-N4	13.81	127.67	118.00
38	A1	789	G	N1-C6-O6	13.81	128.19	119.90
38	A1	1343	C	O4'-C1'-N1	13.81	119.25	108.20
38	A1	1949	A	N1-C6-N6	13.81	126.88	118.60
38	A1	1507	A	N1-C6-N6	13.80	126.88	118.60
11	B2	289	C	N3-C4-N4	13.80	127.66	118.00
38	A1	533	G	N1-C6-O6	13.80	128.18	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1965	C	C6-N1-C2	-13.79	114.78	120.30
38	A1	1723	A	N1-C6-N6	13.79	126.88	118.60
39	A3	12	G	N1-C6-O6	13.79	128.17	119.90
38	A1	1551	G	N1-C6-O6	13.78	128.17	119.90
38	A1	1932	G	N1-C6-O6	13.78	128.16	119.90
11	B2	1354	A	C5-N7-C8	13.77	110.79	103.90
39	A3	91	G	N1-C6-O6	13.77	128.16	119.90
38	A1	2471	A	N1-C6-N6	13.77	126.86	118.60
11	B2	664	G	C5-C6-O6	-13.77	120.34	128.60
38	A1	1436	A	N1-C6-N6	13.77	126.86	118.60
11	B2	682	A	C5-C6-N1	-13.76	110.82	117.70
11	B2	526	A	N1-C6-N6	13.76	126.86	118.60
15	BC	61	ARG	NE-CZ-NH2	-13.76	113.42	120.30
11	B2	399	A	C5-C6-N6	-13.76	112.70	123.70
38	A1	2899	G	N1-C6-O6	13.75	128.15	119.90
38	A1	2305	U	O4'-C1'-N1	13.75	119.20	108.20
38	A1	2274	C	O4'-C1'-N1	13.74	119.20	108.20
11	B2	136	A	N1-C6-N6	13.74	126.84	118.60
38	A1	1902	G	C5-C6-O6	-13.74	120.35	128.60
38	A1	1761	C	O4'-C1'-N1	13.74	119.19	108.20
11	B2	699	C	N3-C4-C5	-13.73	116.41	121.90
38	A1	2113	G	N1-C6-O6	13.73	128.14	119.90
38	A1	244	A	C5-C6-N6	-13.73	112.72	123.70
38	A1	2187	C	N3-C4-C5	-13.73	116.41	121.90
38	A1	536	G	N1-C6-O6	13.73	128.13	119.90
38	A1	662	A	C5-C6-N1	-13.72	110.84	117.70
38	A1	1091	G	C4-C5-N7	13.72	116.29	110.80
11	B2	1131	G	C4-C5-C6	13.72	127.03	118.80
38	A1	1377	G	N1-C6-O6	13.72	128.13	119.90
7	AU	77	TYR	CB-CG-CD1	13.71	129.23	121.00
11	B2	1404	C	O4'-C1'-N1	13.71	119.16	108.20
38	A1	1643	A	C5-C6-N1	-13.71	110.85	117.70
38	A1	2183	A	N1-C6-N6	13.70	126.82	118.60
11	B2	1229	A	N1-C6-N6	13.70	126.82	118.60
38	A1	780	G	O4'-C1'-N9	13.70	119.16	108.20
38	A1	1150	G	N1-C6-O6	13.70	128.12	119.90
45	AC	198	TYR	CB-CG-CD1	-13.70	112.78	121.00
38	A1	2526	G	C5-C6-O6	-13.70	120.38	128.60
11	B2	739	G	N1-C6-O6	13.69	128.12	119.90
38	A1	508	G	N1-C6-O6	13.69	128.11	119.90
38	A1	995	G	C5-C6-O6	-13.69	120.39	128.60
38	A1	2721	C	N3-C4-C5	-13.69	116.42	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	519	G	N1-C2-N3	-13.68	115.69	123.90
11	B2	243	G	C8-N9-C4	-13.68	100.93	106.40
11	B2	92	G	O4'-C1'-N9	13.68	119.14	108.20
11	B2	1093	C	C5-C6-N1	13.67	127.84	121.00
38	A1	1840	G	N1-C6-O6	13.67	128.10	119.90
38	A1	2431	C	N3-C4-C5	-13.67	116.43	121.90
38	A1	1696	G	C5-C6-O6	-13.67	120.40	128.60
38	A1	2429	G	N1-C6-O6	13.67	128.10	119.90
38	A1	2126	G	N1-C6-O6	13.67	128.10	119.90
38	A1	1034	G	O4'-C1'-N9	13.67	119.13	108.20
38	A1	1324	G	C6-C5-N7	-13.66	122.20	130.40
38	A1	1885	G	N1-C6-O6	13.66	128.10	119.90
11	B2	282	G	C5-C6-O6	-13.66	120.41	128.60
11	B2	334	G	N1-C6-O6	13.66	128.09	119.90
11	B2	1249	A	N1-C6-N6	13.65	126.79	118.60
11	B2	985	C	P-O3'-C3'	13.64	136.07	119.70
11	B2	1065	C	N3-C4-C5	-13.64	116.44	121.90
38	A1	2960	G	N1-C6-O6	13.64	128.09	119.90
5	AS	131	ARG	NE-CZ-NH2	-13.64	113.48	120.30
38	A1	2955	G	N1-C6-O6	13.64	128.08	119.90
38	A1	2691	G	N1-C6-O6	13.64	128.08	119.90
38	A1	910	G	N1-C6-O6	13.64	128.08	119.90
38	A1	1814	A	C4-C5-C6	13.64	123.82	117.00
38	A1	579	C	N3-C4-N4	13.63	127.54	118.00
38	A1	684	G	C5-C6-O6	-13.63	120.42	128.60
38	A1	1103	C	N3-C4-C5	-13.63	116.45	121.90
11	B2	7	G	N1-C6-O6	13.62	128.07	119.90
11	B2	382	G	N1-C6-O6	13.62	128.07	119.90
11	B2	1117	A	C5-C6-N1	-13.62	110.89	117.70
18	BF	95	TYR	CB-CG-CD1	-13.62	112.83	121.00
38	A1	1501	G	N1-C6-O6	13.62	128.07	119.90
38	A1	8	G	N1-C6-O6	13.61	128.07	119.90
41	AA	75	ARG	NE-CZ-NH1	13.62	127.11	120.30
38	A1	2982	G	C2-N3-C4	13.61	118.71	111.90
38	A1	2513	C	N3-C4-N4	13.61	127.53	118.00
11	B2	1283	G	N1-C6-O6	13.61	128.06	119.90
11	B2	727	G	N3-C2-N2	13.61	129.42	119.90
39	A3	47	G	C5-C6-O6	-13.61	120.44	128.60
38	A1	3000	U	O4'-C1'-N1	13.60	119.08	108.20
38	A1	1281	A	C5-C6-N6	-13.60	112.82	123.70
38	A1	598	C	C5-C6-N1	13.60	127.80	121.00
38	A1	1655	G	N1-C6-O6	13.60	128.06	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	516	A	N1-C6-N6	13.59	126.75	118.60
38	A1	305	G	N1-C6-O6	13.59	128.05	119.90
38	A1	1337	G	O4'-C1'-N9	13.59	119.07	108.20
38	A1	3004	C	N3-C4-N4	13.59	127.51	118.00
38	A1	1478	G	C5-C6-O6	-13.58	120.45	128.60
62	AO	51	TYR	CB-CG-CD2	-13.58	112.85	121.00
10	B1	25	G	C5-C6-O6	-13.58	120.45	128.60
11	B2	946	G	N1-C6-O6	13.57	128.04	119.90
11	B2	299	G	C6-C5-N7	-13.57	122.26	130.40
38	A1	1192	G	N3-C2-N2	13.57	129.40	119.90
38	A1	1525	G	N1-C6-O6	13.57	128.04	119.90
38	A1	171	A	C5-C6-N6	-13.57	112.85	123.70
27	BO	5	ARG	NE-CZ-NH2	-13.56	113.52	120.30
38	A1	848	A	C4-C5-C6	13.56	123.78	117.00
38	A1	699	A	C4-C5-C6	13.56	123.78	117.00
38	A1	2336	G	C2-N3-C4	13.56	118.68	111.90
11	B2	957	A	C8-N9-C4	-13.55	100.38	105.80
38	A1	860	A	C5-C6-N1	-13.55	110.92	117.70
38	A1	2455	G	N1-C6-O6	13.55	128.03	119.90
38	A1	981	A	P-O3'-C3'	13.55	135.96	119.70
38	A1	2500	G	C5-C6-O6	-13.55	120.47	128.60
11	B2	497	C	C6-N1-C2	-13.55	114.88	120.30
4	AQ	120	TYR	CB-CG-CD2	-13.54	112.87	121.00
11	B2	388	G	O4'-C1'-N9	13.54	119.04	108.20
11	B2	239	A	N1-C6-N6	13.54	126.72	118.60
38	A1	709	A	C5-C6-N1	-13.54	110.93	117.70
38	A1	1109	G	P-O3'-C3'	13.54	135.95	119.70
38	A1	1733	C	N3-C4-N4	13.54	127.48	118.00
38	A1	2963	G	O4'-C1'-N9	13.54	119.03	108.20
39	A3	80	G	N1-C6-O6	13.54	128.02	119.90
38	A1	1177	C	N3-C4-N4	13.53	127.47	118.00
38	A1	1433	C	C6-N1-C2	-13.53	114.89	120.30
38	A1	2346	A	N1-C6-N6	13.53	126.72	118.60
38	A1	2966	C	C5-C4-N4	-13.52	110.73	120.20
11	B2	1383	A	N1-C6-N6	13.52	126.71	118.60
38	A1	1137	G	C5-C6-O6	-13.52	120.49	128.60
38	A1	1357	G	O4'-C1'-N9	13.52	119.02	108.20
11	B2	860	G	C5-C6-O6	-13.52	120.49	128.60
38	A1	615	A	N1-C6-N6	13.51	126.71	118.60
38	A1	505	A	N1-C6-N6	13.51	126.70	118.60
38	A1	2126	G	C8-N9-C4	-13.51	101.00	106.40
38	A1	2173	U	C5-C4-O4	-13.51	117.80	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
60	AM	65	ARG	NE-CZ-NH1	13.50	127.05	120.30
38	A1	375	C	C2-N3-C4	13.50	126.65	119.90
63	AP	91	ARG	NE-CZ-NH1	13.50	127.05	120.30
39	A3	88	A	C4-C5-C6	13.49	123.75	117.00
38	A1	737	G	N1-C6-O6	13.49	127.99	119.90
38	A1	2217	C	N3-C4-C5	-13.49	116.50	121.90
38	A1	978	C	O4'-C1'-N1	13.49	118.99	108.20
11	B2	1379	G	C5-C6-O6	-13.48	120.51	128.60
38	A1	2418	G	C5-C6-O6	-13.48	120.51	128.60
38	A1	168	G	C5-C6-O6	-13.48	120.51	128.60
38	A1	1765	A	N1-C6-N6	13.48	126.69	118.60
11	B2	6	G	C5-C6-O6	-13.48	120.52	128.60
38	A1	2393	G	C5-C6-O6	-13.47	120.52	128.60
38	A1	1176	C	N1-C2-N3	-13.47	109.77	119.20
38	A1	2398	C	N3-C4-N4	13.47	127.43	118.00
38	A1	468	A	N1-C6-N6	13.47	126.68	118.60
5	AS	59	ARG	NE-CZ-NH2	-13.47	113.57	120.30
11	B2	784	G	C5-C6-O6	-13.47	120.52	128.60
11	B2	906	G	O4'-C1'-N9	13.47	118.97	108.20
38	A1	792	A	N1-C6-N6	13.47	126.68	118.60
38	A1	2063	U	N1-C2-N3	-13.47	106.82	114.90
67	AZ	25	ARG	NE-CZ-NH2	13.47	127.03	120.30
38	A1	1789	A	C5-C6-N6	-13.47	112.93	123.70
11	B2	952	A	C4-C5-C6	13.46	123.73	117.00
11	B2	435	A	C5-C6-N1	-13.46	110.97	117.70
38	A1	1946	G	C8-N9-C4	-13.46	101.02	106.40
38	A1	2898	G	C5-C6-O6	-13.45	120.53	128.60
38	A1	1260	C	N3-C4-C5	-13.45	116.52	121.90
38	A1	1438	C	N3-C4-C5	-13.45	116.52	121.90
38	A1	2315	G	C5-C6-O6	-13.45	120.53	128.60
38	A1	1107	G	C5-C6-O6	-13.44	120.53	128.60
11	B2	1438	A	N1-C6-N6	13.44	126.67	118.60
38	A1	892	U	N3-C4-O4	13.44	128.81	119.40
38	A1	1197	G	N1-C6-O6	13.44	127.96	119.90
38	A1	1861	G	N1-C6-O6	13.44	127.96	119.90
11	B2	1423	A	C5-C6-N6	-13.44	112.95	123.70
38	A1	494	C	C5-C6-N1	13.44	127.72	121.00
38	A1	2862	A	N1-C6-N6	13.44	126.66	118.60
10	B1	64	C	C6-N1-C2	-13.43	114.93	120.30
38	A1	56	G	N1-C6-O6	13.42	127.95	119.90
38	A1	2562	G	N1-C6-O6	13.42	127.95	119.90
11	B2	712	G	N1-C2-N3	-13.42	115.85	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	529	C	C2-N3-C4	13.42	126.61	119.90
38	A1	2426	U	O4'-C1'-N1	13.41	118.93	108.20
11	B2	29	G	N1-C6-O6	13.41	127.95	119.90
38	A1	2172	G	P-O3'-C3'	13.41	135.79	119.70
11	B2	36	G	O4'-C1'-N9	13.40	118.92	108.20
11	B2	652	C	O4'-C1'-N1	13.40	118.92	108.20
38	A1	920	G	N1-C6-O6	13.40	127.94	119.90
38	A1	928	A	N1-C6-N6	13.40	126.64	118.60
38	A1	1750	C	N3-C4-N4	13.39	127.38	118.00
38	A1	2737	G	N1-C6-O6	13.39	127.93	119.90
38	A1	1035	G	O4'-C1'-N9	13.39	118.91	108.20
38	A1	2861	A	C4-C5-C6	13.38	123.69	117.00
38	A1	3041	U	P-O3'-C3'	13.39	135.76	119.70
38	A1	386	A	N1-C6-N6	13.38	126.63	118.60
11	B2	220	G	C5-C6-O6	-13.38	120.57	128.60
38	A1	111	U	O4'-C1'-N1	13.38	118.90	108.20
38	A1	2835	A	N1-C6-N6	13.38	126.63	118.60
38	A1	577	C	N3-C4-N4	13.37	127.36	118.00
38	A1	699	A	N1-C6-N6	13.37	126.62	118.60
38	A1	1104	A	N1-C6-N6	13.37	126.62	118.60
38	A1	2340	A	N1-C6-N6	13.37	126.62	118.60
11	B2	1237	G	N1-C6-O6	13.37	127.92	119.90
38	A1	652	G	C5-C6-O6	-13.36	120.58	128.60
38	A1	1553	G	P-O3'-C3'	13.36	135.73	119.70
11	B2	934	G	C5-C6-O6	-13.36	120.58	128.60
38	A1	1248	C	N3-C4-C5	-13.36	116.56	121.90
16	BD	154	TYR	CB-CG-CD1	-13.35	112.99	121.00
38	A1	871	G	N1-C6-O6	13.35	127.91	119.90
38	A1	2139	A	N1-C6-N6	13.35	126.61	118.60
38	A1	936	G	P-O3'-C3'	13.35	135.71	119.70
38	A1	1681	G	N1-C6-O6	13.35	127.91	119.90
38	A1	552	A	N1-C6-N6	13.34	126.60	118.60
38	A1	1194	G	N1-C6-O6	13.34	127.90	119.90
11	B2	350	G	C5-C6-O6	-13.34	120.60	128.60
11	B2	1361	G	N1-C6-O6	13.34	127.90	119.90
39	A3	102	G	N1-C6-O6	13.34	127.90	119.90
38	A1	2761	G	C5-C6-O6	-13.33	120.60	128.60
11	B2	1151	A	N1-C6-N6	13.33	126.60	118.60
38	A1	1276	G	N1-C6-O6	13.32	127.89	119.90
11	B2	985	C	N3-C4-N4	13.32	127.33	118.00
38	A1	1119	A	N1-C6-N6	13.32	126.59	118.60
39	A3	35	A	C8-N9-C4	-13.32	100.47	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	439	G	N1-C6-O6	13.32	127.89	119.90
38	A1	914	U	O4'-C1'-N1	13.32	118.85	108.20
11	B2	361	A	N1-C2-N3	13.31	135.96	129.30
11	B2	66	G	N1-C6-O6	13.31	127.89	119.90
38	A1	208	A	N1-C6-N6	13.31	126.59	118.60
38	A1	701	G	C5-C6-O6	-13.31	120.61	128.60
10	B1	60	A	O4'-C1'-N9	13.31	118.85	108.20
38	A1	202	A	O4'-C1'-N9	13.31	118.85	108.20
16	BD	156	ARG	NE-CZ-NH1	-13.31	113.65	120.30
38	A1	744	G	C2-N3-C4	13.31	118.55	111.90
38	A1	1741	C	N3-C4-N4	13.31	127.32	118.00
11	B2	551	U	C5-C4-O4	-13.31	117.92	125.90
11	B2	648	A	N1-C6-N6	13.30	126.58	118.60
60	AM	26	ARG	NE-CZ-NH2	-13.30	113.65	120.30
11	B2	376	G	C5-C6-O6	-13.30	120.62	128.60
11	B2	698	A	N9-C4-C5	13.30	111.12	105.80
38	A1	2764	G	C5-C6-O6	-13.30	120.62	128.60
11	B2	477	G	C5-C6-O6	-13.30	120.62	128.60
38	A1	2127	G	C8-N9-C4	-13.30	101.08	106.40
11	B2	599	G	C5-C6-O6	-13.30	120.62	128.60
38	A1	485	G	C6-C5-N7	-13.29	122.42	130.40
38	A1	1116	A	N1-C6-N6	13.29	126.58	118.60
11	B2	169	C	O4'-C1'-N1	13.29	118.83	108.20
38	A1	2240	G	C5-C6-O6	-13.29	120.62	128.60
38	A1	2251	G	N9-C4-C5	-13.29	100.08	105.40
38	A1	586	A	C8-N9-C4	-13.29	100.48	105.80
11	B2	1356	A	C5-N7-C8	13.28	110.54	103.90
38	A1	395	G	C5-C6-O6	-13.28	120.63	128.60
38	A1	720	C	N3-C4-C5	-13.28	116.59	121.90
11	B2	1273	G	C5-C6-O6	-13.28	120.63	128.60
38	A1	587	A	C5-N7-C8	13.27	110.54	103.90
38	A1	1024	G	O4'-C1'-N9	13.27	118.82	108.20
38	A1	2454	G	C5-C6-O6	-13.27	120.64	128.60
38	A1	3002	A	N1-C6-N6	13.27	126.56	118.60
11	B2	926	C	C6-N1-C2	-13.27	114.99	120.30
38	A1	483	C	O4'-C1'-N1	13.27	118.82	108.20
38	A1	2443	G	C5-C6-O6	-13.27	120.64	128.60
38	A1	979	G	N1-C6-O6	13.27	127.86	119.90
38	A1	1840	G	N3-C4-C5	13.27	135.24	128.60
11	B2	713	A	N7-C8-N9	-13.27	107.17	113.80
11	B2	1384	G	N1-C6-O6	13.26	127.86	119.90
11	B2	733	C	N3-C4-C5	-13.26	116.60	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1059	C	C5-C4-N4	-13.26	110.92	120.20
38	A1	518	A	P-O3'-C3'	13.26	135.61	119.70
38	A1	2900	C	C2-N3-C4	13.26	126.53	119.90
11	B2	1306	A	N7-C8-N9	-13.26	107.17	113.80
38	A1	121	G	N1-C6-O6	13.26	127.85	119.90
38	A1	1668	G	N1-C6-O6	13.26	127.85	119.90
38	A1	1517	G	N1-C6-O6	13.25	127.85	119.90
11	B2	302	A	C8-N9-C4	-13.24	100.50	105.80
11	B2	213	C	N3-C4-N4	13.24	127.27	118.00
38	A1	1827	A	N1-C6-N6	13.24	126.54	118.60
38	A1	1968	A	C4-C5-C6	13.24	123.62	117.00
38	A1	2694	C	N3-C4-N4	13.24	127.27	118.00
38	A1	2403	G	N1-C6-O6	13.24	127.84	119.90
38	A1	184	A	N1-C6-N6	13.23	126.54	118.60
38	A1	506	G	O4'-C1'-N9	13.23	118.79	108.20
38	A1	1387	G	N1-C6-O6	13.23	127.84	119.90
38	A1	2672	A	N1-C6-N6	13.23	126.54	118.60
11	B2	92	G	N1-C6-O6	13.23	127.84	119.90
11	B2	618	G	O4'-C1'-N9	13.23	118.78	108.20
46	AD	251	ARG	NE-CZ-NH1	13.23	126.92	120.30
38	A1	273	G	C6-C5-N7	-13.23	122.46	130.40
38	A1	883	G	N1-C6-O6	13.23	127.84	119.90
38	A1	2102	A	N1-C6-N6	13.23	126.54	118.60
38	A1	1874	G	C4-C5-N7	13.22	116.09	110.80
38	A1	2529	G	N1-C6-O6	13.22	127.83	119.90
10	B1	30	G	C8-N9-C4	13.22	111.69	106.40
11	B2	546	G	N1-C6-O6	13.22	127.83	119.90
38	A1	1415	C	O4'-C1'-N1	13.22	118.78	108.20
38	A1	2014	A	N1-C6-N6	13.22	126.53	118.60
38	A1	211	A	N1-C6-N6	13.21	126.53	118.60
38	A1	2096	G	C5-C6-O6	-13.21	120.67	128.60
11	B2	1161	A	C5-C6-N6	-13.20	113.14	123.70
38	A1	1429	A	C5-N7-C8	13.20	110.50	103.90
38	A1	584	G	N9-C4-C5	-13.20	100.12	105.40
11	B2	723	G	N1-C6-O6	13.20	127.82	119.90
11	B2	955	G	C5-C6-O6	-13.20	120.68	128.60
11	B2	1231	G	C5-C6-O6	-13.20	120.68	128.60
38	A1	506	G	C5-C6-O6	-13.20	120.68	128.60
11	B2	1237	G	C5-C6-O6	-13.19	120.68	128.60
38	A1	1292	C	C6-N1-C2	-13.19	115.02	120.30
38	A1	1767	C	N3-C4-N4	13.19	127.24	118.00
11	B2	136	A	C5-C6-N1	-13.19	111.10	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1324	G	N1-C6-O6	13.19	127.82	119.90
38	A1	1612	G	N1-C6-O6	13.19	127.82	119.90
11	B2	349	A	C5-C6-N1	-13.19	111.11	117.70
38	A1	3036	C	P-O3'-C3'	13.19	135.52	119.70
11	B2	146	A	N1-C6-N6	13.18	126.51	118.60
11	B2	351	C	O4'-C1'-N1	13.18	118.75	108.20
11	B2	1041	C	C2-N3-C4	13.18	126.49	119.90
38	A1	2873	G	C5-C6-O6	-13.18	120.69	128.60
11	B2	997	G	N9-C4-C5	13.18	110.67	105.40
30	BR	63	TYR	CB-CG-CD2	-13.18	113.09	121.00
38	A1	488	A	N1-C6-N6	13.18	126.50	118.60
38	A1	1147	G	N1-C6-O6	13.18	127.81	119.90
38	A1	937	A	N1-C6-N6	13.17	126.50	118.60
38	A1	1970	G	N1-C6-O6	13.17	127.80	119.90
11	B2	447	A	N9-C4-C5	13.17	111.07	105.80
11	B2	1015	C	N3-C4-N4	13.17	127.22	118.00
32	BT	33	ARG	NE-CZ-NH1	13.17	126.89	120.30
38	A1	1726	A	C5-C6-N6	-13.17	113.16	123.70
11	B2	1165	U	O4'-C1'-N1	13.17	118.73	108.20
38	A1	611	G	N7-C8-N9	13.17	119.68	113.10
38	A1	576	G	C5-C6-O6	-13.16	120.70	128.60
38	A1	705	G	N1-C6-O6	13.16	127.80	119.90
38	A1	2889	A	N1-C6-N6	13.16	126.50	118.60
38	A1	2005	A	C5-C6-N6	-13.16	113.17	123.70
38	A1	382	G	N1-C2-N3	-13.16	116.01	123.90
4	AQ	43	ARG	NE-CZ-NH2	-13.15	113.72	120.30
38	A1	966	G	N1-C6-O6	13.15	127.79	119.90
38	A1	1574	A	N1-C6-N6	13.15	126.49	118.60
11	B2	266	A	C5-N7-C8	13.15	110.48	103.90
38	A1	1732	C	P-O3'-C3'	13.15	135.48	119.70
38	A1	376	C	O4'-C1'-N1	13.14	118.72	108.20
38	A1	803	A	C5-C6-N1	-13.14	111.13	117.70
66	AY	118	ARG	NE-CZ-NH2	13.14	126.87	120.30
11	B2	398	C	C6-N1-C2	-13.14	115.04	120.30
38	A1	1993	A	N1-C6-N6	13.14	126.48	118.60
38	A1	3004	C	C5-C4-N4	-13.14	111.00	120.20
39	A3	64	C	N3-C4-C5	-13.14	116.65	121.90
38	A1	84	A	N7-C8-N9	-13.13	107.23	113.80
47	Ad	66	ARG	NE-CZ-NH2	-13.13	113.73	120.30
11	B2	624	G	N1-C6-O6	13.12	127.78	119.90
11	B2	631	C	N3-C4-C5	-13.12	116.65	121.90
38	A1	628	A	C8-N9-C4	-13.12	100.55	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1176	C	C6-N1-C2	13.12	125.55	120.30
38	A1	2842	C	N3-C4-C5	-13.12	116.65	121.90
39	A3	1	C	N3-C4-C5	-13.12	116.65	121.90
39	A3	15	G	N3-C2-N2	13.12	129.09	119.90
38	A1	1573	A	N1-C6-N6	13.12	126.47	118.60
38	A1	1912	A	C5-C6-N1	-13.12	111.14	117.70
38	A1	1571	G	C5-C6-O6	-13.12	120.73	128.60
38	A1	2944	G	C5-C6-O6	-13.12	120.73	128.60
38	A1	918	A	C5-C6-N6	-13.11	113.21	123.70
38	A1	1145	G	N1-C6-O6	13.11	127.77	119.90
39	A3	13	C	N3-C4-C5	-13.11	116.66	121.90
11	B2	649	A	C5-C6-N1	-13.11	111.14	117.70
38	A1	866	G	C5-C6-O6	-13.10	120.74	128.60
38	A1	1302	G	N1-C6-O6	13.10	127.76	119.90
11	B2	1378	A	N1-C6-N6	13.10	126.46	118.60
38	A1	1268	A	N1-C6-N6	13.10	126.46	118.60
38	A1	856	A	N1-C6-N6	13.10	126.46	118.60
38	A1	1292	C	C5-C6-N1	13.10	127.55	121.00
38	A1	481	G	C5-N7-C8	13.09	110.85	104.30
38	A1	1121	C	N3-C4-C5	-13.09	116.66	121.90
38	A1	2323	C	N3-C4-C5	-13.09	116.66	121.90
38	A1	994	G	P-O3'-C3'	13.09	135.41	119.70
38	A1	1623	C	C5-C4-N4	-13.09	111.04	120.20
37	BY	17	ARG	NE-CZ-NH1	13.08	126.84	120.30
11	B2	65	G	C5-C6-N1	-13.08	104.96	111.50
11	B2	311	A	C2-N3-C4	13.08	117.14	110.60
38	A1	1501	G	C5-C6-O6	-13.08	120.75	128.60
11	B2	823	A	C4-C5-C6	13.08	123.54	117.00
38	A1	527	G	N1-C6-O6	13.08	127.75	119.90
38	A1	1788	G	N1-C6-O6	13.07	127.74	119.90
38	A1	1956	G	N1-C6-O6	13.07	127.74	119.90
38	A1	2109	C	C6-N1-C2	-13.07	115.07	120.30
38	A1	2350	G	N1-C6-O6	13.07	127.74	119.90
38	A1	457	C	N3-C4-N4	13.07	127.15	118.00
11	B2	827	G	N1-C6-O6	13.07	127.74	119.90
38	A1	217	A	N1-C6-N6	13.06	126.44	118.60
38	A1	267	C	O4'-C1'-N1	13.06	118.65	108.20
10	B1	59	A	P-O3'-C3'	13.06	135.37	119.70
11	B2	560	A	N1-C6-N6	13.05	126.43	118.60
38	A1	1368	A	N1-C6-N6	13.05	126.43	118.60
48	AE	58	ARG	NE-CZ-NH1	13.06	126.83	120.30
11	B2	1462	A	C4-C5-C6	13.05	123.53	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	168	G	N1-C6-O6	13.05	127.73	119.90
11	B2	1024	G	C8-N9-C4	-13.05	101.18	106.40
38	A1	729	A	C5-C6-N1	-13.05	111.17	117.70
38	A1	227	G	C5-C6-O6	-13.05	120.77	128.60
11	B2	1213	G	C6-C5-N7	-13.05	122.57	130.40
38	A1	1684	C	C6-N1-C2	-13.04	115.08	120.30
11	B2	338	C	N1-C2-O2	-13.04	111.07	118.90
11	B2	931	C	N3-C4-N4	13.04	127.13	118.00
38	A1	2548	A	P-O3'-C3'	13.04	135.35	119.70
38	A1	1557	G	N1-C6-O6	13.04	127.72	119.90
38	A1	1751	G	C5-C6-O6	-13.04	120.78	128.60
38	A1	1470	C	P-O3'-C3'	13.04	135.34	119.70
11	B2	698	A	C4-C5-C6	13.03	123.52	117.00
11	B2	992	G	N1-C6-O6	13.03	127.72	119.90
38	A1	1219	C	O4'-C1'-N1	13.03	118.62	108.20
39	A3	111	G	N1-C6-O6	13.03	127.72	119.90
11	B2	975	A	N1-C6-N6	13.02	126.41	118.60
38	A1	1513	G	O4'-C1'-N9	13.02	118.62	108.20
11	B2	387	G	C5-C6-O6	-13.02	120.79	128.60
38	A1	1369	G	N1-C6-O6	13.02	127.71	119.90
38	A1	666	A	N1-C6-N6	13.02	126.41	118.60
11	B2	1013	G	O4'-C1'-N9	13.01	118.61	108.20
38	A1	902	C	N3-C4-C5	-13.01	116.69	121.90
11	B2	603	G	C5-C6-N1	-13.01	105.00	111.50
38	A1	681	C	N3-C4-C5	-13.01	116.70	121.90
38	A1	1414	G	N1-C2-N3	-13.01	116.09	123.90
11	B2	468	G	C5-C6-O6	-13.01	120.80	128.60
11	B2	1035	C	N3-C4-C5	-13.01	116.70	121.90
38	A1	1605	A	C5-C6-N6	-13.01	113.30	123.70
38	A1	1730	C	C6-N1-C2	13.01	125.50	120.30
38	A1	2447	A	C5-C6-N1	-13.01	111.20	117.70
11	B2	608	G	N1-C6-O6	13.00	127.70	119.90
11	B2	976	A	O4'-C1'-N9	13.00	118.60	108.20
38	A1	1036	C	N3-C4-N4	13.00	127.10	118.00
11	B2	184	G	N3-C2-N2	13.00	129.00	119.90
11	B2	610	G	C8-N9-C4	-13.00	101.20	106.40
11	B2	1266	A	C5-C6-N6	-13.00	113.30	123.70
38	A1	481	G	N1-C6-O6	13.00	127.70	119.90
38	A1	1176	C	C2-N3-C4	13.00	126.40	119.90
38	A1	280	A	N1-C6-N6	13.00	126.40	118.60
11	B2	335	G	C5-C6-O6	-12.99	120.80	128.60
38	A1	1445	G	P-O3'-C3'	12.99	135.29	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1824	G	N1-C6-O6	12.99	127.70	119.90
10	B1	35	G	C5-C6-O6	-12.99	120.81	128.60
38	A1	2606	C	O4'-C1'-N1	12.99	118.59	108.20
38	A1	3010	C	N3-C4-C5	-12.99	116.70	121.90
38	A1	580	G	N1-C6-O6	12.99	127.69	119.90
38	A1	1701	C	C5-C6-N1	12.99	127.49	121.00
11	B2	1444	G	N1-C6-O6	12.98	127.69	119.90
39	A3	48	A	N1-C6-N6	12.98	126.39	118.60
11	B2	907	C	N3-C4-C5	-12.98	116.71	121.90
11	B2	266	A	N1-C6-N6	12.97	126.38	118.60
11	B2	42	G	P-O3'-C3'	12.97	135.26	119.70
38	A1	822	A	N1-C6-N6	12.97	126.38	118.60
11	B2	694	U	O4'-C1'-N1	12.97	118.57	108.20
38	A1	1224	A	N1-C6-N6	12.97	126.38	118.60
38	A1	573	G	N1-C6-O6	12.96	127.68	119.90
38	A1	2192	G	N1-C6-O6	12.96	127.68	119.90
38	A1	2956	G	N1-C6-O6	12.97	127.68	119.90
11	B2	396	C	O4'-C1'-N1	12.96	118.57	108.20
11	B2	1109	C	N3-C4-C5	-12.96	116.72	121.90
11	B2	772	G	N1-C6-O6	12.96	127.68	119.90
38	A1	1712	U	P-O3'-C3'	-12.96	104.15	119.70
38	A1	2797	C	O4'-C1'-N1	12.96	118.57	108.20
39	A3	91	G	C5-C6-O6	-12.96	120.83	128.60
11	B2	1380	C	C6-N1-C2	-12.96	115.12	120.30
11	B2	1293	A	C4-C5-C6	12.95	123.47	117.00
38	A1	642	G	N1-C6-O6	12.95	127.67	119.90
11	B2	1045	A	O4'-C1'-N9	12.95	118.56	108.20
38	A1	993	G	C5-C6-O6	-12.95	120.83	128.60
38	A1	2096	G	O4'-C1'-N9	12.95	118.56	108.20
38	A1	1635	G	N1-C2-N3	-12.94	116.13	123.90
38	A1	2792	G	N1-C6-O6	12.94	127.67	119.90
9	AX	369	ARG	NE-CZ-NH2	-12.94	113.83	120.30
38	A1	654	C	C6-N1-C2	-12.94	115.12	120.30
11	B2	1352	G	N3-C4-C5	-12.94	122.13	128.60
38	A1	583	A	C4-C5-C6	12.94	123.47	117.00
38	A1	2164	G	C8-N9-C4	-12.94	101.22	106.40
38	A1	2046	C	N3-C4-C5	-12.94	116.73	121.90
39	A3	94	G	N1-C2-N3	-12.94	116.14	123.90
11	B2	546	G	C5-C6-O6	-12.93	120.84	128.60
11	B2	1481	G	C5-C6-O6	-12.93	120.84	128.60
38	A1	1937	A	N1-C6-N6	12.93	126.36	118.60
11	B2	764	C	N3-C4-C5	-12.93	116.73	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
39	A3	45	C	N3-C4-N4	12.93	127.05	118.00
38	A1	803	A	N1-C6-N6	12.93	126.36	118.60
38	A1	2225	C	N3-C4-C5	-12.93	116.73	121.90
11	B2	422	U	P-O3'-C3'	12.92	135.21	119.70
38	A1	1263	C	O4'-C1'-N1	12.92	118.54	108.20
38	A1	2245	C	N3-C4-C5	-12.92	116.73	121.90
62	AO	84	TYR	CB-CG-CD2	-12.92	113.25	121.00
11	B2	601	G	C5-C6-O6	-12.92	120.85	128.60
38	A1	392	G	N1-C6-O6	12.92	127.65	119.90
38	A1	960	C	N3-C4-C5	-12.92	116.73	121.90
38	A1	1928	A	N1-C6-N6	12.92	126.35	118.60
11	B2	268	C	N3-C4-C5	-12.91	116.73	121.90
38	A1	295	G	C5-C6-O6	-12.91	120.85	128.60
38	A1	2781	A	O4'-C1'-N9	12.91	118.53	108.20
38	A1	859	G	O4'-C1'-N9	12.91	118.53	108.20
38	A1	3033	G	N1-C6-O6	12.91	127.65	119.90
11	B2	367	G	N1-C6-O6	12.91	127.65	119.90
11	B2	666	G	C5-C6-O6	-12.91	120.86	128.60
38	A1	1601	G	N3-C2-N2	12.91	128.94	119.90
11	B2	961	U	C5-C4-O4	-12.90	118.16	125.90
38	A1	1429	A	C5-C6-N1	-12.90	111.25	117.70
38	A1	2484	C	N3-C4-N4	12.90	127.03	118.00
39	A3	28	C	C6-N1-C2	-12.90	115.14	120.30
11	B2	994	C	N3-C4-C5	-12.90	116.74	121.90
11	B2	1005	G	C5-C6-O6	-12.90	120.86	128.60
38	A1	972	C	N3-C4-C5	-12.90	116.74	121.90
38	A1	2870	A	N1-C6-N6	12.89	126.33	118.60
38	A1	2973	A	C4-C5-C6	12.89	123.45	117.00
38	A1	694	A	O4'-C1'-N9	12.89	118.51	108.20
38	A1	231	G	C5-C6-O6	-12.89	120.87	128.60
11	B2	7	G	C5-C6-O6	-12.88	120.87	128.60
11	B2	77	G	N1-C6-O6	12.89	127.63	119.90
11	B2	153	G	C5-C6-O6	-12.89	120.87	128.60
11	B2	952	A	C5-C6-N1	-12.88	111.26	117.70
38	A1	1080	G	P-O3'-C3'	12.88	135.16	119.70
38	A1	2799	C	N3-C4-N4	12.88	127.02	118.00
11	B2	238	G	C5-C6-N1	12.88	117.94	111.50
38	A1	2063	U	C3'-C2'-C1'	-12.88	91.20	101.50
38	A1	2755	G	N3-C2-N2	12.88	128.91	119.90
38	A1	529	G	P-O3'-C3'	12.87	135.15	119.70
38	A1	2303	A	N1-C6-N6	12.87	126.32	118.60
38	A1	2724	A	N1-C6-N6	12.87	126.32	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	923	A	C5-C6-N6	-12.87	113.41	123.70
38	A1	743	A	N1-C6-N6	12.86	126.32	118.60
11	B2	232	G	N1-C6-O6	12.86	127.61	119.90
11	B2	1354	A	N7-C8-N9	-12.85	107.38	113.80
11	B2	1014	C	N3-C4-N4	12.85	126.99	118.00
38	A1	1280	C	C6-N1-C2	-12.85	115.16	120.30
38	A1	2387	A	N1-C6-N6	12.85	126.31	118.60
38	A1	1355	A	C4-C5-C6	12.85	123.42	117.00
38	A1	362	A	N1-C6-N6	12.85	126.31	118.60
11	B2	231	G	N1-C6-O6	12.84	127.61	119.90
38	A1	2674	C	C6-N1-C2	-12.84	115.16	120.30
11	B2	562	A	C8-N9-C4	-12.84	100.66	105.80
38	A1	1538	A	N1-C6-N6	12.84	126.30	118.60
11	B2	297	G	C5-C6-O6	-12.84	120.90	128.60
38	A1	2495	A	N1-C6-N6	12.84	126.30	118.60
11	B2	1252	C	O4'-C1'-N1	12.84	118.47	108.20
11	B2	44	C	N3-C4-C5	-12.83	116.77	121.90
11	B2	744	A	N1-C6-N6	12.83	126.30	118.60
38	A1	1990	U	P-O3'-C3'	12.83	135.10	119.70
38	A1	2094	A	N1-C6-N6	12.83	126.30	118.60
38	A1	3004	C	O4'-C1'-N1	12.83	118.47	108.20
39	A3	64	C	C2-N3-C4	12.83	126.32	119.90
38	A1	1263	C	C4-C5-C6	-12.83	110.98	117.40
38	A1	1332	A	C5-N7-C8	12.83	110.31	103.90
38	A1	1680	G	C4-C5-N7	-12.82	105.67	110.80
38	A1	2113	G	C5-C6-O6	-12.82	120.91	128.60
38	A1	2679	A	N1-C2-N3	12.82	135.71	129.30
11	B2	594	A	N1-C6-N6	12.82	126.29	118.60
11	B2	1478	A	N1-C6-N6	12.82	126.29	118.60
38	A1	889	C	N3-C4-N4	12.82	126.97	118.00
38	A1	1333	G	N1-C6-O6	12.82	127.59	119.90
11	B2	1393	A	N1-C6-N6	12.81	126.29	118.60
11	B2	1395	G	N1-C6-O6	12.81	127.59	119.90
38	A1	1811	G	O4'-C1'-N9	12.81	118.45	108.20
38	A1	3006	G	N1-C6-O6	12.81	127.59	119.90
38	A1	132	G	O4'-C1'-N9	12.81	118.45	108.20
38	A1	2709	C	N3-C4-N4	12.81	126.97	118.00
11	B2	1009	G	N1-C6-O6	12.81	127.58	119.90
38	A1	1999	G	N1-C6-O6	12.81	127.58	119.90
38	A1	597	C	C5-C4-N4	-12.81	111.24	120.20
38	A1	1553	G	C5-C6-O6	-12.81	120.92	128.60
11	B2	806	G	N1-C6-O6	12.80	127.58	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	B1	8	U	P-O3'-C3'	12.80	135.06	119.70
38	A1	758	C	P-O3'-C3'	12.80	135.06	119.70
38	A1	1082	A	P-O3'-C3'	12.80	135.06	119.70
38	A1	1003	C	P-O3'-C3'	12.79	135.05	119.70
38	A1	1523	A	N1-C6-N6	12.79	126.28	118.60
38	A1	3023	G	C5-C6-O6	-12.79	120.92	128.60
11	B2	553	C	N3-C4-C5	-12.79	116.78	121.90
11	B2	934	G	N1-C6-O6	12.79	127.57	119.90
38	A1	117	A	C5-N7-C8	12.79	110.29	103.90
38	A1	253	G	N1-C6-O6	12.79	127.57	119.90
38	A1	452	A	C5-N7-C8	12.79	110.29	103.90
38	A1	2094	A	C4-C5-C6	12.79	123.39	117.00
38	A1	897	U	P-O3'-C3'	12.79	135.04	119.70
38	A1	2060	A	N1-C6-N6	12.79	126.27	118.60
11	B2	55	G	N1-C6-O6	12.78	127.57	119.90
38	A1	2153	C	N3-C4-C5	-12.78	116.79	121.90
38	A1	2381	A	N1-C6-N6	12.78	126.27	118.60
38	A1	116	G	C2-N3-C4	12.78	118.29	111.90
38	A1	576	G	N3-C2-N2	12.78	128.84	119.90
38	A1	2263	G	C5-C6-O6	-12.78	120.93	128.60
38	A1	1347	U	P-O3'-C3'	12.78	135.03	119.70
38	A1	2012	G	O4'-C1'-N9	12.78	118.42	108.20
39	A3	33	U	O4'-C1'-N1	12.78	118.42	108.20
11	B2	602	G	C5-C6-O6	-12.77	120.94	128.60
38	A1	784	C	O4'-C1'-N1	12.77	118.42	108.20
38	A1	2697	G	N1-C6-O6	12.77	127.56	119.90
62	AO	21	TYR	CB-CG-CD1	-12.77	113.34	121.00
38	A1	210	A	P-O3'-C3'	12.77	135.02	119.70
38	A1	2563	A	N1-C6-N6	12.77	126.26	118.60
11	B2	181	G	C5-C6-O6	-12.77	120.94	128.60
46	AD	180	ARG	NE-CZ-NH2	-12.77	113.92	120.30
11	B2	776	C	C6-N1-C2	-12.76	115.19	120.30
38	A1	2759	A	C5-C6-N6	-12.76	113.49	123.70
39	A3	6	G	N1-C6-O6	12.76	127.56	119.90
11	B2	584	C	O4'-C1'-N1	12.76	118.41	108.20
38	A1	1212	A	C4-C5-C6	12.76	123.38	117.00
38	A1	472	A	N1-C6-N6	12.76	126.25	118.60
38	A1	2303	A	C5-C6-N1	-12.76	111.32	117.70
38	A1	2604	G	N1-C6-O6	12.76	127.55	119.90
38	A1	350	A	N1-C6-N6	12.75	126.25	118.60
38	A1	870	G	C5-C6-O6	-12.75	120.95	128.60
38	A1	2991	C	O4'-C1'-N1	12.75	118.40	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	824	G	N1-C6-O6	12.75	127.55	119.90
11	B2	688	C	N3-C4-N4	12.75	126.92	118.00
11	B2	746	A	P-O3'-C3'	12.75	135.00	119.70
39	A3	84	U	O4'-C1'-N1	12.75	118.40	108.20
11	B2	830	A	N1-C6-N6	12.74	126.25	118.60
38	A1	1042	G	P-O3'-C3'	12.74	134.99	119.70
38	A1	1060	C	N3-C4-C5	-12.74	116.80	121.90
11	B2	503	G	C5-C6-O6	-12.74	120.96	128.60
38	A1	273	G	N1-C6-O6	12.74	127.54	119.90
11	B2	965	G	C4-C5-N7	-12.74	105.71	110.80
38	A1	910	G	C5-C6-O6	-12.74	120.96	128.60
11	B2	100	A	C5-N7-C8	12.73	110.27	103.90
38	A1	210	A	N1-C6-N6	12.73	126.24	118.60
38	A1	2404	G	C2-N3-C4	12.73	118.27	111.90
38	A1	266	A	C8-N9-C4	-12.73	100.71	105.80
11	B2	1158	G	O4'-C1'-N9	12.73	118.38	108.20
38	A1	287	G	N1-C6-O6	12.73	127.54	119.90
38	A1	1825	G	N3-C2-N2	12.73	128.81	119.90
11	B2	1031	G	N3-C2-N2	12.73	128.81	119.90
38	A1	749	G	N1-C6-O6	12.73	127.54	119.90
38	A1	1476	C	C5-C6-N1	12.73	127.36	121.00
11	B2	1031	G	N1-C6-O6	12.72	127.53	119.90
38	A1	1384	C	N3-C4-N4	12.72	126.91	118.00
38	A1	1561	G	N1-C6-O6	12.72	127.53	119.90
38	A1	2286	U	C2-N3-C4	12.72	134.63	127.00
38	A1	831	C	C6-N1-C2	12.72	125.39	120.30
11	B2	400	G	C5-C6-O6	-12.72	120.97	128.60
11	B2	1303	C	O4'-C1'-N1	12.72	118.37	108.20
38	A1	1530	A	O4'-C1'-N9	12.72	118.37	108.20
11	B2	1389	G	N1-C6-O6	12.71	127.53	119.90
38	A1	2803	U	O4'-C1'-N1	12.71	118.37	108.20
38	A1	2962	A	N1-C6-N6	12.71	126.23	118.60
38	A1	842	C	N3-C4-N4	12.71	126.89	118.00
38	A1	1624	U	O4'-C1'-N1	12.71	118.36	108.20
11	B2	638	G	N1-C6-O6	12.70	127.52	119.90
10	B1	50	G	C5-C6-O6	-12.70	120.98	128.60
38	A1	205	A	N1-C6-N6	12.70	126.22	118.60
38	A1	2126	G	C5-C6-O6	-12.70	120.98	128.60
9	AX	56	PHE	CB-CG-CD2	-12.70	111.91	120.80
11	B2	1123	G	N1-C6-O6	12.69	127.52	119.90
11	B2	1474	A	N1-C6-N6	12.69	126.22	118.60
34	BV	59	TYR	CB-CG-CD1	12.69	128.62	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	995	G	N1-C6-O6	12.69	127.52	119.90
38	A1	958	A	C4-C5-C6	12.69	123.34	117.00
11	B2	610	G	N9-C4-C5	12.69	110.48	105.40
50	AF	71	PHE	CB-CG-CD1	12.69	129.68	120.80
38	A1	2771	G	O4'-C1'-N9	12.69	118.35	108.20
38	A1	219	G	P-O5'-C5'	12.69	141.20	120.90
38	A1	1779	C	N3-C4-N4	12.69	126.88	118.00
11	B2	306	C	C5-C6-N1	12.68	127.34	121.00
11	B2	1307	G	P-O3'-C3'	12.68	134.92	119.70
11	B2	1369	C	N3-C4-C5	-12.68	116.83	121.90
38	A1	1720	G	N1-C6-O6	12.68	127.51	119.90
38	A1	1967	G	N1-C6-O6	12.68	127.51	119.90
38	A1	584	G	N1-C6-O6	12.68	127.51	119.90
38	A1	2975	A	N1-C6-N6	12.68	126.21	118.60
39	A3	102	G	C5-C6-O6	-12.68	121.00	128.60
38	A1	2847	G	N1-C6-O6	12.67	127.50	119.90
38	A1	2152	G	N1-C6-O6	12.67	127.50	119.90
10	B1	63	C	N3-C4-N4	12.67	126.87	118.00
38	A1	1015	G	N1-C6-O6	12.67	127.50	119.90
38	A1	1150	G	C5-C6-O6	-12.67	121.00	128.60
38	A1	1649	G	O4'-C1'-N9	12.67	118.33	108.20
38	A1	2428	C	N3-C4-C5	-12.67	116.83	121.90
11	B2	1209	C	N3-C4-C5	-12.66	116.84	121.90
38	A1	702	G	O4'-C1'-N9	12.66	118.33	108.20
38	A1	1872	G	N1-C6-O6	12.66	127.50	119.90
38	A1	2986	G	N7-C8-N9	12.66	119.43	113.10
11	B2	1002	G	O4'-C1'-N9	12.66	118.32	108.20
38	A1	827	G	C5-C6-O6	-12.66	121.01	128.60
38	A1	175	G	O4'-C1'-N9	12.65	118.32	108.20
18	BF	161	ARG	NE-CZ-NH2	-12.65	113.97	120.30
38	A1	685	G	N1-C6-O6	12.65	127.49	119.90
11	B2	434	A	P-O3'-C3'	12.65	134.88	119.70
11	B2	944	C	N3-C4-C5	-12.65	116.84	121.90
38	A1	1649	G	C5-C6-O6	-12.65	121.01	128.60
38	A1	301	G	P-O3'-C3'	12.65	134.88	119.70
38	A1	2211	C	C2-N3-C4	12.65	126.22	119.90
38	A1	1595	G	N1-C6-O6	12.64	127.49	119.90
38	A1	777	A	C5-C6-N1	-12.64	111.38	117.70
38	A1	2231	G	C5-C6-O6	-12.64	121.02	128.60
11	B2	106	A	C8-N9-C4	-12.64	100.74	105.80
38	A1	681	C	C6-N1-C2	-12.64	115.25	120.30
11	B2	1382	G	C5-C6-O6	-12.63	121.02	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	868	C	N3-C4-N4	12.63	126.84	118.00
38	A1	967	G	N1-C6-O6	12.63	127.48	119.90
38	A1	2300	C	C6-N1-C2	-12.63	115.25	120.30
38	A1	2568	A	C5-C6-N6	-12.63	113.60	123.70
7	AU	56	ARG	NE-CZ-NH2	-12.62	113.99	120.30
38	A1	1508	A	O4'-C1'-N9	12.62	118.30	108.20
11	B2	219	C	N3-C4-N4	12.62	126.84	118.00
11	B2	602	G	C4-C5-N7	12.62	115.85	110.80
11	B2	1049	U	O4'-C1'-N1	12.62	118.30	108.20
38	A1	1227	A	N1-C6-N6	12.62	126.17	118.60
38	A1	2901	C	O4'-C1'-N1	12.62	118.30	108.20
11	B2	426	C	N3-C4-N4	12.62	126.83	118.00
11	B2	1141	G	O4'-C1'-N9	12.62	118.29	108.20
11	B2	299	G	C4-C5-C6	12.61	126.37	118.80
11	B2	505	U	O4'-C1'-N1	12.61	118.29	108.20
38	A1	2885	C	O4'-C1'-N1	12.62	118.29	108.20
11	B2	549	A	N9-C4-C5	12.61	110.84	105.80
39	A3	15	G	N1-C6-O6	12.61	127.47	119.90
38	A1	548	U	O4'-C1'-N1	12.61	118.29	108.20
38	A1	1452	G	N1-C6-O6	12.61	127.47	119.90
38	A1	2554	A	C5-C6-N6	-12.61	113.61	123.70
11	B2	411	C	C5-C6-N1	12.60	127.30	121.00
11	B2	958	G	C8-N9-C4	-12.60	101.36	106.40
38	A1	297	G	C8-N9-C4	-12.60	101.36	106.40
38	A1	1548	A	N1-C6-N6	12.60	126.16	118.60
38	A1	2747	C	P-O3'-C3'	12.60	134.82	119.70
38	A1	2446	C	C5-C6-N1	12.60	127.30	121.00
7	AU	47	ARG	NE-CZ-NH1	-12.60	114.00	120.30
38	A1	849	C	N3-C4-C5	-12.60	116.86	121.90
38	A1	1642	G	N1-C6-O6	12.60	127.46	119.90
5	AS	23	ARG	NE-CZ-NH1	12.60	126.60	120.30
38	A1	1515	G	N1-C6-O6	12.60	127.46	119.90
11	B2	358	G	C8-N9-C4	-12.60	101.36	106.40
11	B2	602	G	N1-C6-O6	12.60	127.46	119.90
7	AU	33	ARG	NE-CZ-NH2	12.59	126.60	120.30
9	AX	373	TYR	CB-CG-CD1	12.59	128.56	121.00
11	B2	1221	A	C8-N9-C4	-12.59	100.76	105.80
38	A1	482	A	N1-C6-N6	12.59	126.16	118.60
38	A1	1471	G	C8-N9-C4	-12.59	101.36	106.40
38	A1	2852	U	O4'-C1'-N1	12.59	118.27	108.20
11	B2	365	C	C6-N1-C2	-12.59	115.26	120.30
38	A1	73	A	N1-C6-N6	12.59	126.15	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1256	G	O4'-C1'-N9	12.59	118.27	108.20
32	BT	34	ARG	NE-CZ-NH1	12.58	126.59	120.30
39	A3	90	A	N9-C4-C5	12.58	110.83	105.80
38	A1	7	G	N1-C6-O6	12.58	127.45	119.90
38	A1	1499	C	N3-C4-C5	-12.57	116.87	121.90
38	A1	1044	C	C6-N1-C2	12.57	125.33	120.30
38	A1	2064	U	C1'-O4'-C4'	-12.57	99.84	109.90
10	B1	37	A	N1-C6-N6	12.57	126.14	118.60
11	B2	1011	C	O4'-C1'-N1	12.57	118.26	108.20
38	A1	2025	A	C2-N3-C4	-12.57	104.31	110.60
11	B2	613	C	N3-C4-C5	-12.57	116.87	121.90
38	A1	1648	C	N3-C4-N4	12.56	126.80	118.00
38	A1	180	A	C4-C5-C6	12.56	123.28	117.00
38	A1	2982	G	N1-C2-N3	-12.56	116.36	123.90
38	A1	188	A	N1-C6-N6	12.56	126.13	118.60
38	A1	2686	A	C4-C5-C6	12.56	123.28	117.00
38	A1	360	G	N1-C6-O6	12.55	127.43	119.90
38	A1	2879	G	N1-C6-O6	12.55	127.43	119.90
11	B2	545	C	N3-C4-N4	12.55	126.78	118.00
38	A1	1085	G	N1-C6-O6	12.55	127.43	119.90
38	A1	1657	G	N1-C6-O6	12.55	127.43	119.90
38	A1	2847	G	C5-C6-O6	-12.55	121.07	128.60
38	A1	1936	C	P-O3'-C3'	12.54	134.75	119.70
11	B2	1127	A	C5-C6-N1	-12.54	111.43	117.70
38	A1	437	G	C5-C6-O6	-12.54	121.08	128.60
38	A1	1134	A	C5-N7-C8	12.54	110.17	103.90
11	B2	1109	C	C4-C5-C6	12.54	123.67	117.40
38	A1	30	G	N1-C6-O6	12.54	127.42	119.90
38	A1	1518	G	N7-C8-N9	-12.53	106.83	113.10
38	A1	294	U	O4'-C1'-N1	12.53	118.22	108.20
38	A1	2833	G	N1-C6-O6	12.53	127.42	119.90
38	A1	1519	G	N1-C6-O6	12.52	127.42	119.90
38	A1	1669	A	O4'-C1'-N9	12.52	118.22	108.20
11	B2	138	C	N3-C4-N4	12.52	126.77	118.00
38	A1	690	G	N1-C6-O6	12.52	127.41	119.90
38	A1	1267	A	C5-C6-N6	-12.52	113.69	123.70
38	A1	1001	C	N3-C4-C5	-12.51	116.89	121.90
38	A1	1669	A	C5-N7-C8	12.51	110.16	103.90
11	B2	313	G	C5-C6-O6	-12.51	121.09	128.60
38	A1	1489	G	O4'-C1'-N9	12.51	118.21	108.20
11	B2	246	A	C4-C5-C6	12.50	123.25	117.00
14	BB	149	TYR	CB-CG-CD1	-12.50	113.50	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1000	G	N1-C6-O6	12.50	127.40	119.90
11	B2	1213	G	C5-C6-O6	-12.50	121.10	128.60
11	B2	16	G	N1-C2-N3	-12.49	116.41	123.90
38	A1	1687	C	N3-C4-N4	12.49	126.75	118.00
11	B2	126	G	O4'-C1'-N9	12.49	118.19	108.20
11	B2	786	G	C5-C6-O6	-12.49	121.11	128.60
38	A1	511	A	C5-C6-N6	-12.49	113.71	123.70
11	B2	1315	G	C5-C6-O6	-12.48	121.11	128.60
38	A1	1430	A	N1-C6-N6	12.48	126.09	118.60
38	A1	1879	U	P-O3'-C3'	12.48	134.68	119.70
11	B2	704	C	C6-N1-C2	-12.48	115.31	120.30
11	B2	1245	C	N3-C4-C5	-12.48	116.91	121.90
38	A1	570	G	N1-C6-O6	12.48	127.39	119.90
38	A1	1259	G	C8-N9-C4	-12.48	101.41	106.40
47	Ad	63	ARG	NE-CZ-NH2	-12.48	114.06	120.30
38	A1	1006	A	N1-C6-N6	12.48	126.08	118.60
11	B2	219	C	N3-C4-C5	-12.47	116.91	121.90
39	A3	118	G	O4'-C1'-N9	12.47	118.18	108.20
11	B2	314	G	O4'-C1'-N9	12.47	118.18	108.20
38	A1	1325	A	N1-C6-N6	12.47	126.08	118.60
38	A1	1372	C	N3-C4-C5	-12.47	116.91	121.90
38	A1	1485	A	P-O3'-C3'	12.47	134.66	119.70
38	A1	2291	G	N1-C6-O6	12.47	127.38	119.90
11	B2	1389	G	O4'-C1'-N9	12.47	118.18	108.20
11	B2	134	A	N1-C6-N6	12.47	126.08	118.60
38	A1	1454	G	C5-C6-O6	-12.47	121.12	128.60
38	A1	1693	G	C5-C6-O6	-12.47	121.12	128.60
11	B2	145	A	N1-C6-N6	12.47	126.08	118.60
38	A1	363	G	N1-C6-O6	12.46	127.38	119.90
11	B2	13	C	O4'-C1'-N1	12.46	118.17	108.20
38	A1	1387	G	C2-N3-C4	-12.46	105.67	111.90
11	B2	168	G	C5-C6-O6	-12.46	121.13	128.60
38	A1	1353	A	C4-C5-C6	12.46	123.23	117.00
38	A1	1970	G	C5-C6-O6	-12.46	121.12	128.60
11	B2	358	G	C5-C6-O6	-12.46	121.13	128.60
11	B2	741	A	N1-C6-N6	12.46	126.07	118.60
38	A1	1550	C	O4'-C1'-N1	12.46	118.17	108.20
11	B2	226	G	C5-C6-O6	-12.45	121.13	128.60
11	B2	407	G	N1-C6-O6	12.45	127.37	119.90
38	A1	531	G	C5-C6-O6	-12.45	121.13	128.60
38	A1	2056	A	C8-N9-C4	-12.45	100.82	105.80
11	B2	108	G	C5-C6-O6	-12.45	121.13	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	996	A	C5-C6-N1	-12.45	111.48	117.70
38	A1	648	C	N3-C4-C5	-12.45	116.92	121.90
38	A1	2080	G	C5-C6-N1	-12.45	105.28	111.50
38	A1	2812	U	N3-C4-C5	-12.45	107.13	114.60
11	B2	20	G	O4'-C1'-N9	12.44	118.16	108.20
11	B2	755	U	O4'-C1'-N1	12.44	118.15	108.20
38	A1	381	G	O4'-C1'-N9	12.44	118.15	108.20
11	B2	390	G	N1-C6-O6	12.44	127.36	119.90
11	B2	403	C	O4'-C1'-N1	12.44	118.15	108.20
11	B2	857	C	O4'-C1'-N1	12.44	118.15	108.20
11	B2	1212	U	C5-C4-O4	-12.44	118.44	125.90
38	A1	2382	A	C5-C6-N6	-12.44	113.75	123.70
38	A1	1753	G	P-O3'-C3'	12.43	134.62	119.70
11	B2	1234	A	N1-C6-N6	12.43	126.06	118.60
11	B2	1396	C	O4'-C1'-N1	12.43	118.14	108.20
38	A1	710	G	C5-C6-O6	-12.43	121.14	128.60
38	A1	1449	C	O4'-C1'-N1	12.43	118.14	108.20
10	B1	22	A	N1-C6-N6	12.43	126.06	118.60
38	A1	1764	G	P-O3'-C3'	12.43	134.61	119.70
11	B2	1462	A	N1-C2-N3	12.42	135.51	129.30
11	B2	393	A	N1-C6-N6	12.42	126.05	118.60
38	A1	2872	G	O4'-C1'-N9	12.42	118.14	108.20
38	A1	2397	C	N3-C4-N4	12.42	126.69	118.00
11	B2	119	A	N7-C8-N9	-12.42	107.59	113.80
38	A1	1545	C	O4'-C1'-N1	12.42	118.14	108.20
38	A1	1762	G	C5-C6-N1	-12.41	105.29	111.50
38	A1	2864	G	C5-C6-O6	-12.41	121.15	128.60
38	A1	1885	G	C5-C6-O6	-12.41	121.15	128.60
38	A1	2826	U	C5-C6-N1	12.41	128.91	122.70
10	B1	48	U	N1-C2-O2	-12.41	114.11	122.80
38	A1	71	A	N1-C6-N6	12.41	126.05	118.60
38	A1	562	G	N9-C4-C5	-12.41	100.44	105.40
38	A1	1290	G	C5-N7-C8	12.41	110.50	104.30
11	B2	658	A	N1-C6-N6	12.41	126.05	118.60
38	A1	896	G	C5-C6-O6	-12.41	121.16	128.60
38	A1	2726	G	C5-C6-O6	-12.41	121.16	128.60
11	B2	491	G	C5-C6-O6	-12.41	121.16	128.60
38	A1	1571	G	N1-C6-O6	12.41	127.34	119.90
38	A1	86	G	N7-C8-N9	12.40	119.30	113.10
38	A1	1973	U	O4'-C1'-N1	12.40	118.12	108.20
11	B2	44	C	C6-N1-C2	-12.40	115.34	120.30
11	B2	1072	C	C6-N1-C2	-12.40	115.34	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1233	G	N9-C4-C5	12.40	110.36	105.40
11	B2	1469	G	N1-C6-O6	12.40	127.34	119.90
11	B2	416	A	C5-C6-N6	-12.39	113.79	123.70
38	A1	934	G	C4-C5-N7	12.39	115.76	110.80
38	A1	1192	G	N1-C6-O6	12.39	127.34	119.90
38	A1	2027	G	N1-C6-O6	12.39	127.34	119.90
10	B1	11	C	N3-C4-C5	-12.39	116.94	121.90
11	B2	773	A	N1-C6-N6	12.39	126.03	118.60
38	A1	64	A	C8-N9-C4	-12.39	100.84	105.80
38	A1	1367	A	C4-C5-C6	12.39	123.19	117.00
38	A1	1608	G	C5-C6-O6	-12.39	121.17	128.60
38	A1	1846	G	C8-N9-C4	-12.39	101.44	106.40
11	B2	1373	A	C2-N3-C4	-12.39	104.41	110.60
38	A1	1555	G	N1-C6-O6	12.39	127.33	119.90
11	B2	832	G	C5-C6-O6	-12.38	121.17	128.60
11	B2	1181	G	C4-C5-C6	12.38	126.23	118.80
38	A1	679	U	O4'-C1'-N1	12.38	118.11	108.20
38	A1	1484	U	C5-C6-N1	12.38	128.89	122.70
38	A1	1551	G	C5-C6-O6	-12.38	121.17	128.60
38	A1	2045	C	C6-N1-C2	12.38	125.25	120.30
11	B2	1166	G	C5-C6-O6	-12.38	121.17	128.60
38	A1	936	G	N1-C6-O6	12.38	127.33	119.90
38	A1	1024	G	P-O3'-C3'	12.38	134.56	119.70
11	B2	354	G	N1-C6-O6	12.38	127.33	119.90
38	A1	2883	C	P-O5'-C5'	12.37	140.70	120.90
38	A1	2548	A	C5-C6-N1	-12.37	111.52	117.70
11	B2	41	C	N3-C4-C5	-12.37	116.95	121.90
39	A3	5	G	N1-C6-O6	12.37	127.32	119.90
38	A1	2383	A	C4-C5-C6	12.36	123.18	117.00
38	A1	1730	C	C5-C6-N1	-12.36	114.82	121.00
38	A1	479	G	N1-C6-O6	12.36	127.32	119.90
11	B2	10	G	N1-C6-O6	12.36	127.32	119.90
11	B2	225	U	C2-N3-C4	12.36	134.41	127.00
38	A1	1231	C	C6-N1-C2	-12.36	115.36	120.30
26	BN	146	ARG	NE-CZ-NH2	-12.36	114.12	120.30
38	A1	533	G	C5-C6-O6	-12.36	121.19	128.60
38	A1	418	C	N3-C4-N4	12.35	126.65	118.00
11	B2	846	G	N3-C2-N2	12.35	128.54	119.90
11	B2	866	A	C4-C5-C6	12.35	123.17	117.00
38	A1	1731	U	O4'-C1'-N1	12.35	118.08	108.20
38	A1	2897	C	N3-C4-C5	-12.35	116.96	121.90
38	A1	1368	A	C2-N3-C4	-12.35	104.43	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1200	A	C8-N9-C4	-12.35	100.86	105.80
38	A1	2848	C	N3-C4-C5	-12.35	116.96	121.90
11	B2	471	G	C5-C6-N1	-12.34	105.33	111.50
38	A1	807	G	C5-C6-O6	-12.34	121.19	128.60
38	A1	1751	G	C4-C5-N7	12.34	115.74	110.80
11	B2	732	G	C6-C5-N7	-12.34	123.00	130.40
11	B2	1423	A	P-O3'-C3'	12.34	134.51	119.70
38	A1	452	A	C5-C6-N6	-12.34	113.83	123.70
38	A1	1529	A	C4-C5-C6	12.34	123.17	117.00
11	B2	791	G	C6-C5-N7	-12.34	123.00	130.40
11	B2	1480	G	N1-C6-O6	12.34	127.30	119.90
39	A3	19	G	O4'-C1'-N9	12.34	118.07	108.20
38	A1	19	G	C5-C6-O6	-12.33	121.20	128.60
38	A1	1923	A	N1-C6-N6	12.33	126.00	118.60
38	A1	1276	G	C6-C5-N7	-12.33	123.00	130.40
38	A1	2508	G	N1-C2-N3	-12.32	116.50	123.90
38	A1	2339	C	N3-C4-C5	-12.32	116.97	121.90
11	B2	996	A	C4-C5-C6	12.32	123.16	117.00
38	A1	765	G	N1-C6-O6	12.32	127.29	119.90
38	A1	2657	A	C5-C6-N6	-12.32	113.84	123.70
11	B2	25	C	O4'-C1'-N1	12.32	118.05	108.20
11	B2	99	C	N3-C4-C5	-12.32	116.97	121.90
38	A1	349	A	C8-N9-C4	-12.32	100.87	105.80
38	A1	2856	G	N1-C2-N3	-12.32	116.51	123.90
11	B2	868	C	C5-C6-N1	12.31	127.16	121.00
11	B2	943	C	N3-C4-C5	-12.31	116.97	121.90
48	AE	128	TYR	CB-CG-CD2	12.31	128.39	121.00
11	B2	221	A	C5-C6-N1	-12.31	111.54	117.70
11	B2	500	A	C8-N9-C4	-12.31	100.88	105.80
38	A1	728	A	N1-C6-N6	12.31	125.99	118.60
38	A1	2110	C	O4'-C1'-N1	12.31	118.05	108.20
38	A1	319	A	N9-C4-C5	12.31	110.72	105.80
11	B2	622	C	N3-C4-C5	-12.30	116.98	121.90
11	B2	864	G	N1-C6-O6	12.30	127.28	119.90
38	A1	582	A	C4-C5-C6	12.31	123.15	117.00
38	A1	1812	A	N1-C6-N6	12.30	125.98	118.60
38	A1	1027	A	N1-C6-N6	12.30	125.98	118.60
11	B2	301	G	C5-C6-O6	-12.30	121.22	128.60
38	A1	563	A	C5-C6-N1	-12.30	111.55	117.70
38	A1	2680	A	C8-N9-C4	-12.30	100.88	105.80
38	A1	2754	A	N1-C6-N6	12.30	125.98	118.60
38	A1	1253	U	N3-C2-O2	12.30	130.81	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2872	G	C5-C6-O6	-12.30	121.22	128.60
38	A1	831	C	N3-C4-C5	-12.30	116.98	121.90
38	A1	1428	G	C8-N9-C4	-12.30	101.48	106.40
38	A1	2317	G	C5-C6-O6	-12.30	121.22	128.60
38	A1	1166	A	N1-C6-N6	12.30	125.98	118.60
38	A1	2680	A	C5-C6-N1	-12.30	111.55	117.70
11	B2	846	G	N1-C6-O6	12.29	127.28	119.90
38	A1	1190	G	C5-C6-O6	-12.30	121.22	128.60
11	B2	1040	A	C5-C6-N6	-12.29	113.87	123.70
38	A1	764	G	N3-C2-N2	12.29	128.50	119.90
38	A1	1617	G	O4'-C1'-N9	12.29	118.03	108.20
38	A1	1915	G	C5-C6-O6	-12.29	121.22	128.60
39	A3	75	G	C5-C6-O6	-12.29	121.23	128.60
38	A1	2848	C	O4'-C1'-N1	12.29	118.03	108.20
11	B2	488	A	C5-C6-N1	-12.28	111.56	117.70
20	BH	163	ARG	NE-CZ-NH1	12.28	126.44	120.30
38	A1	1461	G	N1-C2-N3	-12.28	116.53	123.90
38	A1	1542	U	P-O3'-C3'	12.28	134.43	119.70
38	A1	704	G	O4'-C1'-N9	12.28	118.02	108.20
11	B2	655	A	P-O3'-C3'	12.27	134.43	119.70
11	B2	898	G	N1-C6-O6	12.27	127.26	119.90
11	B2	1109	C	O4'-C1'-N1	12.27	118.02	108.20
11	B2	576	C	N3-C4-N4	12.27	126.59	118.00
38	A1	1143	A	N1-C2-N3	-12.27	123.17	129.30
38	A1	2802	G	C5-C6-O6	-12.27	121.24	128.60
39	A3	106	G	O4'-C1'-N9	12.26	118.01	108.20
11	B2	1349	C	C6-N1-C2	-12.26	115.40	120.30
38	A1	1138	C	O4'-C1'-N1	12.26	118.01	108.20
11	B2	696	G	N1-C6-O6	12.26	127.25	119.90
11	B2	1109	C	N3-C4-N4	12.26	126.58	118.00
11	B2	1425	C	C5-C6-N1	12.26	127.13	121.00
38	A1	1164	C	N3-C4-N4	12.26	126.58	118.00
11	B2	1235	A	C5-C6-N6	-12.26	113.90	123.70
38	A1	2821	G	C5-C6-O6	-12.26	121.25	128.60
38	A1	344	G	N1-C6-O6	12.25	127.25	119.90
11	B2	1013	G	N9-C4-C5	-12.25	100.50	105.40
11	B2	1177	C	N3-C4-N4	12.25	126.58	118.00
11	B2	1223	C	N3-C4-C5	-12.25	117.00	121.90
38	A1	621	G	C8-N9-C4	-12.25	101.50	106.40
38	A1	1590	C	O4'-C1'-N1	12.25	118.00	108.20
59	AL	71	ARG	NE-CZ-NH1	-12.25	114.18	120.30
11	B2	466	C	C5-C6-N1	12.24	127.12	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	550	A	N1-C6-N6	12.24	125.94	118.60
38	A1	349	A	C4-C5-N7	-12.24	104.58	110.70
38	A1	597	C	N3-C4-N4	12.24	126.57	118.00
38	A1	2623	G	C8-N9-C4	12.24	111.30	106.40
11	B2	876	A	C5-C6-N1	-12.24	111.58	117.70
11	B2	1003	G	O4'-C1'-N9	12.24	117.99	108.20
38	A1	685	G	C5-C6-O6	-12.24	121.26	128.60
11	B2	727	G	N1-C6-O6	12.23	127.24	119.90
38	A1	1583	G	N1-C6-O6	12.23	127.24	119.90
38	A1	725	G	N1-C6-O6	12.23	127.24	119.90
11	B2	950	C	N3-C4-C5	-12.23	117.01	121.90
11	B2	1216	A	N1-C6-N6	12.23	125.94	118.60
38	A1	144	A	C5-C6-N6	-12.23	113.92	123.70
39	A3	28	C	O4'-C1'-N1	12.23	117.98	108.20
11	B2	634	C	O4'-C1'-N1	12.22	117.98	108.20
11	B2	1253	G	N3-C2-N2	12.22	128.46	119.90
11	B2	1394	G	N1-C6-O6	12.22	127.23	119.90
38	A1	2355	G	C8-N9-C4	-12.22	101.51	106.40
11	B2	114	A	C5-C6-N6	-12.22	113.92	123.70
38	A1	443	C	N3-C4-N4	12.22	126.56	118.00
11	B2	880	G	N1-C6-O6	12.22	127.23	119.90
11	B2	1021	C	O4'-C1'-N1	12.22	117.98	108.20
53	Ah	2	ARG	NE-CZ-NH2	-12.22	114.19	120.30
38	A1	1864	G	C5-C6-O6	-12.22	121.27	128.60
38	A1	1458	C	O4'-C1'-N1	12.22	117.97	108.20
11	B2	729	G	N1-C6-O6	12.21	127.23	119.90
38	A1	1260	C	O4'-C1'-N1	12.21	117.97	108.20
11	B2	1007	A	N1-C6-N6	12.21	125.93	118.60
11	B2	1469	G	C5-C6-O6	-12.21	121.27	128.60
11	B2	908	G	O4'-C1'-N9	12.21	117.97	108.20
11	B2	997	G	C5-C6-O6	-12.21	121.28	128.60
37	BY	17	ARG	NE-CZ-NH2	-12.21	114.20	120.30
38	A1	1268	A	C4-C5-C6	12.21	123.10	117.00
38	A1	1631	A	N7-C8-N9	-12.21	107.70	113.80
38	A1	3021	C	O4'-C1'-N1	12.21	117.97	108.20
7	AU	56	ARG	NE-CZ-NH1	12.20	126.40	120.30
38	A1	2130	C	N3-C4-C5	-12.20	117.02	121.90
38	A1	3045	G	N1-C6-O6	12.20	127.22	119.90
11	B2	495	G	N9-C4-C5	-12.20	100.52	105.40
11	B2	827	G	N3-C2-N2	12.20	128.44	119.90
38	A1	1437	C	O4'-C1'-N1	12.20	117.96	108.20
38	A1	211	A	C4-C5-C6	12.20	123.10	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1999	G	C5-C6-O6	-12.20	121.28	128.60
38	A1	747	G	N1-C6-O6	12.20	127.22	119.90
38	A1	1078	G	C5-C6-O6	-12.20	121.28	128.60
38	A1	1323	U	N3-C4-O4	12.19	127.94	119.40
38	A1	2609	G	O4'-C1'-N9	12.20	117.96	108.20
11	B2	106	A	N9-C4-C5	12.19	110.68	105.80
11	B2	817	U	O4'-C1'-N1	12.19	117.95	108.20
38	A1	2403	G	C5-C6-O6	-12.19	121.28	128.60
11	B2	48	G	O4'-C1'-N9	12.19	117.95	108.20
11	B2	1392	G	O4'-C1'-N9	12.19	117.95	108.20
38	A1	979	G	C5-C6-O6	-12.19	121.29	128.60
38	A1	2300	C	N3-C4-C5	-12.19	117.02	121.90
38	A1	611	G	N1-C6-O6	12.18	127.21	119.90
11	B2	1348	C	C2-N3-C4	12.18	125.99	119.90
38	A1	185	A	N1-C6-N6	12.18	125.91	118.60
11	B2	1219	C	N3-C4-N4	12.18	126.53	118.00
38	A1	2116	G	C5-C6-O6	-12.18	121.29	128.60
38	A1	2653	G	O4'-C1'-N9	12.18	117.94	108.20
11	B2	207	G	N1-C6-O6	12.18	127.20	119.90
38	A1	1386	G	C5-C6-O6	-12.18	121.30	128.60
38	A1	2290	U	O4'-C1'-N1	12.18	117.94	108.20
38	A1	2192	G	C5-C6-O6	-12.17	121.30	128.60
11	B2	639	G	N1-C6-O6	12.17	127.20	119.90
38	A1	2871	A	C4-C5-C6	12.17	123.08	117.00
38	A1	329	G	N1-C6-O6	12.17	127.20	119.90
11	B2	1079	G	N1-C6-O6	12.16	127.20	119.90
38	A1	742	C	O4'-C1'-N1	12.16	117.93	108.20
38	A1	2479	C	C5-C6-N1	12.16	127.08	121.00
38	A1	1271	G	N1-C6-O6	12.16	127.20	119.90
11	B2	56	A	N1-C6-N6	12.16	125.90	118.60
38	A1	61	G	N1-C6-O6	12.16	127.19	119.90
38	A1	2059	G	O4'-C1'-N9	12.16	117.93	108.20
11	B2	1260	G	N1-C6-O6	12.16	127.19	119.90
11	B2	1326	G	C5-C6-O6	-12.16	121.31	128.60
38	A1	3038	A	P-O3'-C3'	12.16	134.29	119.70
38	A1	2134	G	N1-C6-O6	12.15	127.19	119.90
38	A1	2600	C	N3-C4-N4	12.15	126.51	118.00
38	A1	231	G	C2-N3-C4	12.15	117.98	111.90
5	AS	129	TYR	CB-CG-CD1	-12.15	113.71	121.00
11	B2	120	C	N3-C4-C5	-12.15	117.04	121.90
38	A1	245	A	O4'-C1'-N9	12.15	117.92	108.20
38	A1	837	G	C5-C6-O6	-12.15	121.31	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
39	A3	108	G	C5-C6-O6	-12.15	121.31	128.60
11	B2	315	A	N1-C6-N6	12.15	125.89	118.60
11	B2	671	C	N3-C4-C5	-12.15	117.04	121.90
38	A1	655	C	N3-C4-N4	12.15	126.50	118.00
11	B2	207	G	C6-C5-N7	-12.14	123.11	130.40
38	A1	1440	C	N3-C4-C5	12.14	126.76	121.90
38	A1	2264	G	C5-C6-O6	-12.14	121.32	128.60
11	B2	1051	G	N1-C6-O6	12.14	127.18	119.90
11	B2	1264	G	C5-C6-O6	-12.14	121.32	128.60
38	A1	602	G	O4'-C1'-N9	12.14	117.91	108.20
38	A1	2713	A	N1-C6-N6	12.14	125.88	118.60
11	B2	1098	G	N1-C6-O6	12.13	127.18	119.90
11	B2	1105	C	P-O3'-C3'	12.13	134.26	119.70
21	BI	86	PHE	CB-CG-CD2	-12.13	112.31	120.80
38	A1	1082	A	N1-C2-N3	12.13	135.37	129.30
11	B2	1021	C	N3-C4-C5	-12.13	117.05	121.90
38	A1	1400	U	O4'-C1'-N1	12.13	117.90	108.20
11	B2	1295	C	N3-C4-C5	-12.13	117.05	121.90
38	A1	1415	C	N3-C4-C5	-12.13	117.05	121.90
38	A1	1595	G	C5-C6-O6	-12.13	121.32	128.60
38	A1	1349	G	C5-C6-N1	-12.13	105.44	111.50
38	A1	2181	G	N1-C6-O6	12.13	127.18	119.90
38	A1	1413	A	C4-C5-C6	12.12	123.06	117.00
38	A1	1500	C	N3-C4-N4	12.12	126.49	118.00
11	B2	471	G	C6-N1-C2	12.12	132.37	125.10
38	A1	2707	G	N1-C6-O6	12.12	127.17	119.90
11	B2	1369	C	O4'-C1'-N1	12.12	117.89	108.20
16	BD	168	ARG	NE-CZ-NH1	12.12	126.36	120.30
38	A1	2855	G	N1-C6-O6	12.12	127.17	119.90
38	A1	1743	G	N1-C6-O6	12.12	127.17	119.90
38	A1	2886	C	C6-N1-C2	-12.12	115.45	120.30
38	A1	2995	A	C5-C6-N6	-12.12	114.01	123.70
38	A1	1778	G	C5-C6-O6	-12.12	121.33	128.60
38	A1	1268	A	C5-C6-N1	-12.11	111.64	117.70
11	B2	288	G	O4'-C1'-N9	12.11	117.89	108.20
38	A1	1112	G	C5-C6-O6	-12.11	121.33	128.60
11	B2	1356	A	C4-C5-N7	-12.11	104.65	110.70
38	A1	892	U	O4'-C1'-N1	12.11	117.89	108.20
10	B1	64	C	O4'-C1'-N1	12.11	117.88	108.20
38	A1	581	A	N1-C6-N6	12.11	125.86	118.60
38	A1	2551	G	O4'-C1'-N9	12.11	117.89	108.20
11	B2	1314	C	N3-C4-C5	-12.10	117.06	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	788	A	N1-C6-N6	12.10	125.86	118.60
38	A1	908	U	C5-C4-O4	-12.10	118.64	125.90
38	A1	1302	G	C5-C6-O6	-12.10	121.34	128.60
38	A1	1785	G	N3-C2-N2	12.10	128.37	119.90
38	A1	896	G	N1-C6-O6	12.10	127.16	119.90
38	A1	1862	G	C8-N9-C4	-12.10	101.56	106.40
11	B2	957	A	N1-C6-N6	12.10	125.86	118.60
11	B2	1489	A	N1-C6-N6	12.10	125.86	118.60
38	A1	329	G	C5-C6-O6	-12.10	121.34	128.60
38	A1	2449	A	N1-C6-N6	12.10	125.86	118.60
38	A1	2186	C	O4'-C1'-N1	12.10	117.88	108.20
11	B2	1444	G	O4'-C1'-N9	12.10	117.88	108.20
38	A1	245	A	C5-C6-N1	-12.10	111.65	117.70
39	A3	12	G	O4'-C1'-N9	12.10	117.88	108.20
10	B1	27	A	N1-C6-N6	12.09	125.86	118.60
38	A1	2863	A	C4-C5-C6	12.09	123.05	117.00
11	B2	278	A	N1-C6-N6	12.09	125.85	118.60
11	B2	1233	G	N3-C4-N9	-12.09	118.75	126.00
38	A1	2396	G	N1-C6-O6	12.09	127.15	119.90
38	A1	1438	C	C4-C5-C6	12.09	123.44	117.40
11	B2	493	C	N3-C4-N4	12.09	126.46	118.00
38	A1	848	A	C5-N7-C8	12.09	109.94	103.90
10	B1	39	A	C8-N9-C4	-12.08	100.97	105.80
11	B2	1069	G	C5-C6-N1	-12.08	105.46	111.50
66	AY	118	ARG	NE-CZ-NH1	-12.08	114.26	120.30
11	B2	62	G	N1-C6-O6	12.08	127.15	119.90
11	B2	850	A	N1-C6-N6	12.08	125.85	118.60
11	B2	1139	A	N1-C2-N3	12.08	135.34	129.30
11	B2	144	G	C5-C6-O6	-12.08	121.35	128.60
38	A1	3002	A	C2-N3-C4	12.08	116.64	110.60
11	B2	858	A	C4-C5-C6	12.08	123.04	117.00
38	A1	1191	C	N3-C4-N4	12.08	126.46	118.00
11	B2	906	G	N1-C6-O6	12.08	127.15	119.90
11	B2	971	G	C5-C6-O6	-12.08	121.35	128.60
38	A1	631	G	N1-C2-N3	-12.08	116.65	123.90
11	B2	627	G	C5-C6-O6	-12.07	121.36	128.60
38	A1	291	A	N1-C6-N6	12.07	125.84	118.60
38	A1	427	G	P-O3'-C3'	12.07	134.19	119.70
11	B2	111	G	P-O3'-C3'	12.07	134.18	119.70
38	A1	468	A	C5-C6-N1	-12.07	111.67	117.70
38	A1	528	G	N1-C6-O6	12.07	127.14	119.90
38	A1	825	C	C2-N3-C4	12.07	125.93	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1259	G	N9-C4-C5	12.07	110.23	105.40
38	A1	1772	A	N1-C6-N6	12.07	125.84	118.60
39	A3	113	C	O4'-C1'-N1	12.07	117.85	108.20
11	B2	1341	C	N3-C4-C5	-12.06	117.07	121.90
38	A1	1154	A	C5-C6-N6	-12.06	114.05	123.70
38	A1	588	U	P-O3'-C3'	12.06	134.17	119.70
38	A1	1964	G	N1-C6-O6	12.06	127.14	119.90
16	BD	154	TYR	CB-CG-CD2	12.06	128.24	121.00
38	A1	551	A	O4'-C1'-N9	12.06	117.85	108.20
38	A1	2210	G	N1-C6-O6	12.06	127.14	119.90
38	A1	3034	C	O4'-C1'-N1	12.06	117.85	108.20
38	A1	191	U	O4'-C1'-N1	12.06	117.85	108.20
38	A1	2374	C	N3-C4-C5	-12.06	117.08	121.90
20	BH	87	ARG	NE-CZ-NH1	-12.06	114.27	120.30
38	A1	2112	C	O4'-C1'-N1	12.05	117.84	108.20
38	A1	1792	A	C4-C5-C6	12.05	123.03	117.00
11	B2	770	A	N1-C6-N6	12.05	125.83	118.60
38	A1	1056	C	N3-C4-N4	12.05	126.44	118.00
38	A1	333	A	O4'-C1'-N9	12.05	117.84	108.20
38	A1	1992	A	N1-C6-N6	12.05	125.83	118.60
39	A3	21	C	C2-N3-C4	-12.05	113.88	119.90
11	B2	1072	C	N3-C4-C5	-12.04	117.08	121.90
38	A1	1617	G	N1-C2-N3	-12.04	116.67	123.90
38	A1	253	G	C5-C6-O6	-12.04	121.38	128.60
38	A1	2054	G	C5-C6-O6	-12.04	121.38	128.60
11	B2	216	G	C5-C6-O6	-12.04	121.38	128.60
38	A1	130	G	N1-C6-O6	12.03	127.12	119.90
11	B2	1248	A	C5-C6-N1	-12.03	111.69	117.70
11	B2	1490	C	N3-C4-N4	12.03	126.42	118.00
38	A1	1379	A	C5-C6-N1	-12.03	111.69	117.70
49	Ae	21	ARG	NE-CZ-NH2	-12.03	114.28	120.30
38	A1	2350	G	C5-C6-O6	-12.03	121.38	128.60
38	A1	2733	A	C4-C5-C6	12.03	123.01	117.00
11	B2	1380	C	C5-C6-N1	12.02	127.01	121.00
11	B2	55	G	O4'-C1'-N9	12.02	117.82	108.20
11	B2	253	G	N1-C2-N3	-12.02	116.69	123.90
11	B2	983	G	N1-C2-N3	-12.02	116.69	123.90
11	B2	1153	G	C5-C6-O6	-12.02	121.39	128.60
11	B2	434	A	C5-C6-N6	-12.02	114.08	123.70
10	B1	38	G	N7-C8-N9	-12.02	107.09	113.10
38	A1	1618	G	O4'-C1'-N9	12.02	117.81	108.20
11	B2	329	G	C8-N9-C4	-12.02	101.59	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	464	C	C5-C4-N4	-12.02	111.79	120.20
38	A1	1586	G	P-O3'-C3'	12.01	134.11	119.70
38	A1	1813	A	N1-C6-N6	12.01	125.81	118.60
38	A1	2640	C	N3-C4-C5	-12.01	117.09	121.90
38	A1	41	G	N1-C6-O6	12.01	127.11	119.90
38	A1	510	A	C5-C6-N1	-12.01	111.69	117.70
38	A1	2472	A	C5-C6-N1	-12.01	111.69	117.70
38	A1	1355	A	N1-C6-N6	12.01	125.81	118.60
38	A1	2481	G	C4-C5-N7	-12.01	106.00	110.80
11	B2	432	G	P-O3'-C3'	12.01	134.11	119.70
4	AQ	126	ARG	NE-CZ-NH1	12.01	126.30	120.30
38	A1	1769	G	O4'-C1'-N9	12.01	117.81	108.20
38	A1	2369	G	N3-C2-N2	12.01	128.30	119.90
38	A1	2446	C	N3-C4-C5	-12.00	117.10	121.90
38	A1	1136	G	O4'-C1'-N9	12.00	117.80	108.20
11	B2	393	A	C4-C5-N7	-12.00	104.70	110.70
11	B2	756	A	C4-C5-C6	12.00	123.00	117.00
11	B2	248	U	O4'-C1'-N1	11.99	117.80	108.20
38	A1	2638	G	C5-C6-O6	-11.99	121.40	128.60
11	B2	299	G	C5-C6-N1	-11.99	105.50	111.50
38	A1	352	G	N1-C6-O6	11.99	127.10	119.90
38	A1	2051	A	C8-N9-C4	-11.99	101.00	105.80
11	B2	624	G	C5-C6-O6	-11.99	121.41	128.60
38	A1	2982	G	C5-C6-O6	-11.99	121.41	128.60
11	B2	1032	A	C4-C5-C6	11.99	122.99	117.00
38	A1	175	G	N1-C6-O6	11.99	127.09	119.90
38	A1	1289	C	O4'-C1'-N1	11.99	117.79	108.20
11	B2	364	U	N3-C2-O2	11.98	130.59	122.20
11	B2	1060	G	N1-C6-O6	11.98	127.09	119.90
11	B2	1185	A	N1-C6-N6	11.98	125.79	118.60
38	A1	878	G	O4'-C1'-N9	11.98	117.79	108.20
38	A1	2287	C	N3-C4-C5	-11.98	117.11	121.90
38	A1	2389	C	N3-C4-C5	-11.98	117.11	121.90
11	B2	153	G	N1-C6-O6	11.98	127.09	119.90
38	A1	3045	G	C5-C6-O6	-11.98	121.41	128.60
11	B2	19	G	N1-C2-N3	-11.97	116.72	123.90
11	B2	375	G	O4'-C1'-N9	11.97	117.78	108.20
11	B2	835	C	N3-C4-C5	-11.97	117.11	121.90
38	A1	2988	A	C8-N9-C4	-11.97	101.01	105.80
11	B2	1200	U	P-O3'-C3'	11.97	134.06	119.70
27	BO	111	ARG	NE-CZ-NH2	-11.97	114.32	120.30
38	A1	125	C	C6-N1-C2	-11.97	115.51	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	590	G	N1-C6-O6	11.96	127.08	119.90
38	A1	958	A	C2-N3-C4	-11.96	104.62	110.60
38	A1	1147	G	C5-C6-O6	-11.96	121.42	128.60
38	A1	2292	A	C5-C6-N6	-11.96	114.13	123.70
11	B2	1291	G	N9-C4-C5	11.96	110.18	105.40
11	B2	904	G	N1-C6-O6	11.96	127.07	119.90
11	B2	1392	G	C5-C6-O6	-11.96	121.42	128.60
38	A1	2484	C	C2-N3-C4	11.96	125.88	119.90
10	B1	22	A	C5-C6-N1	-11.96	111.72	117.70
38	A1	1176	C	N1-C2-O2	11.95	126.07	118.90
38	A1	2392	A	N1-C6-N6	11.95	125.77	118.60
11	B2	959	G	P-O3'-C3'	11.95	134.04	119.70
38	A1	1117	C	P-O3'-C3'	11.95	134.04	119.70
11	B2	616	G	N1-C6-O6	11.95	127.07	119.90
38	A1	785	C	O4'-C1'-N1	11.95	117.76	108.20
38	A1	1750	C	C5-C4-N4	-11.95	111.84	120.20
38	A1	373	G	N3-C2-N2	11.95	128.26	119.90
38	A1	647	G	N1-C6-O6	11.94	127.07	119.90
38	A1	1367	A	N1-C6-N6	11.95	125.77	118.60
11	B2	1345	G	C8-N9-C4	-11.94	101.62	106.40
38	A1	962	C	N3-C4-N4	11.94	126.36	118.00
39	A3	109	A	N1-C6-N6	11.94	125.76	118.60
11	B2	132	G	C5-C6-O6	-11.93	121.44	128.60
38	A1	1168	A	C4-C5-C6	11.93	122.97	117.00
38	A1	1175	C	N3-C4-N4	11.93	126.35	118.00
38	A1	2492	G	N3-C2-N2	11.93	128.25	119.90
38	A1	2653	G	N1-C6-O6	11.93	127.06	119.90
41	AA	75	ARG	NE-CZ-NH2	-11.93	114.33	120.30
10	B1	65	C	O4'-C1'-N1	11.93	117.75	108.20
11	B2	88	G	C6-C5-N7	-11.93	123.24	130.40
11	B2	379	A	C4-C5-C6	11.93	122.97	117.00
38	A1	1301	G	O4'-C1'-N9	11.93	117.74	108.20
38	A1	2043	A	N1-C2-N3	11.93	135.26	129.30
38	A1	2090	A	N1-C6-N6	11.93	125.76	118.60
38	A1	1678	A	C5-C6-N6	-11.93	114.16	123.70
11	B2	1480	G	N1-C2-N3	-11.92	116.75	123.90
38	A1	369	G	C5-C6-O6	-11.92	121.45	128.60
38	A1	1697	G	C5-C6-O6	-11.92	121.45	128.60
38	A1	2122	G	N7-C8-N9	-11.92	107.14	113.10
11	B2	1169	C	O4'-C1'-N1	11.92	117.74	108.20
38	A1	1963	G	C5-C6-O6	-11.92	121.45	128.60
11	B2	605	C	N3-C4-C5	-11.91	117.13	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2900	C	C6-N1-C2	-11.91	115.53	120.30
28	BP	14	PHE	CB-CG-CD1	-11.91	112.46	120.80
11	B2	1315	G	N1-C6-O6	11.91	127.05	119.90
38	A1	1248	C	C2-N3-C4	11.91	125.86	119.90
38	A1	2845	C	C6-N1-C2	11.91	125.06	120.30
38	A1	1409	U	O4'-C1'-N1	11.91	117.73	108.20
39	A3	46	G	O4'-C1'-N9	11.91	117.73	108.20
38	A1	1578	C	N3-C4-C5	-11.91	117.14	121.90
38	A1	682	G	N1-C6-O6	11.90	127.04	119.90
38	A1	1452	G	O4'-C1'-N9	11.90	117.72	108.20
11	B2	494	G	N1-C6-O6	11.90	127.04	119.90
38	A1	784	C	N3-C4-C5	-11.90	117.14	121.90
38	A1	1079	A	N1-C6-N6	11.90	125.74	118.60
11	B2	515	U	O4'-C1'-N1	11.90	117.72	108.20
38	A1	842	C	N3-C4-C5	-11.90	117.14	121.90
38	A1	2868	C	N3-C4-C5	-11.90	117.14	121.90
39	A3	5	G	C4-C5-N7	11.90	115.56	110.80
38	A1	568	A	N1-C6-N6	11.89	125.74	118.60
38	A1	1613	A	N1-C6-N6	11.89	125.74	118.60
38	A1	2156	A	N1-C6-N6	11.89	125.74	118.60
11	B2	905	A	C4-C5-C6	11.89	122.95	117.00
27	BO	41	ARG	NE-CZ-NH2	-11.89	114.36	120.30
38	A1	2673	C	N3-C4-N4	11.88	126.32	118.00
11	B2	27	C	O4'-C1'-N1	11.88	117.70	108.20
11	B2	405	G	N1-C6-O6	11.88	127.03	119.90
38	A1	2685	G	N1-C6-O6	11.88	127.03	119.90
38	A1	1526	G	N1-C6-O6	11.88	127.03	119.90
11	B2	565	C	N3-C4-C5	-11.88	117.15	121.90
11	B2	625	G	N1-C6-O6	11.88	127.03	119.90
38	A1	422	G	N3-C2-N2	11.88	128.21	119.90
38	A1	2624	G	N1-C2-N3	-11.87	116.78	123.90
38	A1	2568	A	C8-N9-C4	-11.87	101.05	105.80
10	B1	53	G	N1-C6-O6	11.87	127.02	119.90
10	B1	59	A	O4'-C1'-N9	11.87	117.69	108.20
38	A1	121	G	C5-C6-O6	-11.87	121.48	128.60
38	A1	1793	G	C5-C6-O6	-11.87	121.48	128.60
38	A1	2300	C	N3-C4-N4	11.87	126.31	118.00
38	A1	2649	A	C5-C6-N6	-11.87	114.20	123.70
11	B2	1182	G	C5-C6-O6	-11.87	121.48	128.60
11	B2	605	C	C2-N3-C4	11.86	125.83	119.90
11	B2	615	G	C5-C6-O6	-11.86	121.48	128.60
38	A1	1047	A	N1-C6-N6	11.86	125.72	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
39	A3	107	G	O4'-C1'-N9	11.86	117.69	108.20
11	B2	958	G	C2-N3-C4	11.86	117.83	111.90
11	B2	92	G	C5-C6-O6	-11.85	121.49	128.60
11	B2	509	C	N3-C4-N4	11.85	126.30	118.00
11	B2	760	C	N3-C4-C5	-11.85	117.16	121.90
11	B2	1021	C	N3-C4-N4	11.85	126.30	118.00
38	A1	625	A	C2-N3-C4	11.85	116.53	110.60
38	A1	2052	A	N1-C6-N6	11.85	125.71	118.60
11	B2	1355	C	C5-C6-N1	-11.85	115.08	121.00
11	B2	237	C	C2-N3-C4	11.85	125.82	119.90
38	A1	847	A	C4-C5-C6	11.84	122.92	117.00
38	A1	1055	C	N3-C4-N4	11.84	126.29	118.00
38	A1	2154	G	C5-C6-O6	-11.84	121.50	128.60
38	A1	1658	A	C5-C6-N6	-11.84	114.23	123.70
11	B2	83	C	N3-C4-C5	-11.84	117.17	121.90
11	B2	369	A	P-O3'-C3'	11.84	133.91	119.70
11	B2	1046	G	C5-C6-O6	-11.84	121.50	128.60
38	A1	1215	C	O4'-C1'-N1	11.84	117.67	108.20
11	B2	1443	G	C5-C6-O6	-11.84	121.50	128.60
38	A1	508	G	C5-C6-O6	-11.84	121.50	128.60
38	A1	2962	A	O4'-C1'-N9	11.84	117.67	108.20
33	BU	15	ARG	NE-CZ-NH2	-11.83	114.38	120.30
11	B2	949	G	O4'-C1'-N9	11.83	117.67	108.20
11	B2	1205	G	O4'-C1'-N9	11.83	117.67	108.20
38	A1	1121	C	C6-N1-C2	-11.83	115.57	120.30
38	A1	1570	C	N3-C4-C5	-11.83	117.17	121.90
38	A1	2416	G	O4'-C1'-N9	11.83	117.66	108.20
38	A1	514	U	O4'-C1'-N1	11.83	117.66	108.20
11	B2	299	G	N1-C6-O6	11.83	127.00	119.90
38	A1	1497	C	C5-C6-N1	-11.83	115.09	121.00
38	A1	2160	C	C2-N3-C4	11.83	125.81	119.90
38	A1	2477	G	N1-C6-O6	11.83	127.00	119.90
38	A1	2771	G	N1-C6-O6	11.83	127.00	119.90
39	A3	115	C	N3-C4-N4	11.83	126.28	118.00
11	B2	962	G	C5-C6-O6	-11.82	121.51	128.60
38	A1	98	G	C5-C6-O6	-11.82	121.50	128.60
38	A1	847	A	N7-C8-N9	-11.82	107.89	113.80
38	A1	852	A	C5-C6-N6	-11.82	114.24	123.70
38	A1	2789	G	N1-C6-O6	11.82	126.99	119.90
38	A1	116	G	C5-C6-O6	-11.82	121.51	128.60
38	A1	1462	G	C5-C6-O6	-11.82	121.51	128.60
11	B2	612	C	C4-C5-C6	11.82	123.31	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	864	G	C5-C6-O6	-11.82	121.51	128.60
11	B2	310	G	N1-C6-O6	11.82	126.99	119.90
38	A1	2448	A	N1-C6-N6	11.82	125.69	118.60
5	AS	133	PHE	CB-CG-CD1	-11.81	112.53	120.80
47	Ad	85	ARG	NE-CZ-NH2	-11.81	114.39	120.30
11	B2	448	A	C5-C6-N1	-11.81	111.79	117.70
11	B2	1061	A	C5-C6-N1	-11.81	111.79	117.70
38	A1	350	A	C5-C6-N1	-11.81	111.79	117.70
10	B1	20	G	C8-N9-C4	-11.81	101.68	106.40
11	B2	78	G	C8-N9-C4	-11.81	101.68	106.40
11	B2	79	G	O4'-C1'-N9	11.81	117.65	108.20
39	A3	109	A	C4-C5-C6	11.81	122.91	117.00
38	A1	2892	A	C5-C6-N6	-11.81	114.25	123.70
38	A1	1640	G	C5-C6-O6	-11.81	121.52	128.60
11	B2	495	G	N1-C6-O6	11.81	126.98	119.90
38	A1	966	G	N1-C2-N3	-11.80	116.82	123.90
11	B2	965	G	C5-N7-C8	11.80	110.20	104.30
11	B2	1005	G	N1-C6-O6	11.80	126.98	119.90
38	A1	1628	C	O4'-C1'-N1	11.80	117.64	108.20
38	A1	1968	A	C5-C6-N1	-11.80	111.80	117.70
39	A3	71	G	C8-N9-C4	11.80	111.12	106.40
11	B2	247	G	N1-C2-N3	-11.80	116.82	123.90
38	A1	1633	A	C4-C5-C6	11.80	122.90	117.00
38	A1	2133	G	C6-C5-N7	-11.80	123.32	130.40
11	B2	1062	G	N1-C6-O6	11.79	126.98	119.90
25	BM	41	ARG	NE-CZ-NH2	-11.79	114.40	120.30
10	B1	51	G	N1-C6-O6	11.79	126.97	119.90
38	A1	496	A	O4'-C1'-N9	11.79	117.63	108.20
38	A1	1113	G	C4-C5-N7	11.79	115.52	110.80
11	B2	1218	C	O4'-C1'-N1	11.79	117.63	108.20
11	B2	1234	A	C4-C5-C6	11.79	122.89	117.00
11	B2	991	C	O4'-C1'-N1	11.78	117.62	108.20
11	B2	1102	A	N1-C6-N6	11.78	125.67	118.60
38	A1	2591	A	C4-C5-C6	11.78	122.89	117.00
11	B2	847	A	C5-C6-N1	-11.78	111.81	117.70
38	A1	85	G	O4'-C1'-N9	11.78	117.62	108.20
38	A1	699	A	O4'-C1'-N9	11.78	117.62	108.20
38	A1	2194	A	N1-C2-N3	11.78	135.19	129.30
38	A1	325	G	N1-C6-O6	11.78	126.97	119.90
38	A1	360	G	C5-C6-O6	-11.78	121.53	128.60
38	A1	1490	G	N1-C6-O6	11.78	126.97	119.90
38	A1	79	C	N3-C4-C5	-11.77	117.19	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1987	A	N1-C6-N6	11.77	125.66	118.60
38	A1	877	U	O4'-C1'-N1	11.77	117.62	108.20
38	A1	2425	A	C5-C6-N1	-11.77	111.81	117.70
38	A1	1478	G	N1-C6-O6	11.77	126.96	119.90
38	A1	1876	G	C5-C6-O6	-11.77	121.54	128.60
38	A1	827	G	C6-C5-N7	-11.77	123.34	130.40
4	AQ	28	ARG	NE-CZ-NH1	-11.77	114.42	120.30
38	A1	2600	C	C2-N3-C4	11.76	125.78	119.90
4	AQ	120	TYR	CB-CG-CD1	11.76	128.06	121.00
38	A1	655	C	C6-N1-C2	-11.76	115.59	120.30
11	B2	442	C	C6-N1-C2	-11.76	115.60	120.30
38	A1	2691	G	C5-C6-O6	-11.76	121.54	128.60
11	B2	1212	U	O4'-C1'-N1	11.76	117.61	108.20
38	A1	471	U	P-O3'-C3'	11.76	133.81	119.70
38	A1	726	G	N1-C6-O6	11.76	126.95	119.90
38	A1	637	G	N1-C6-O6	11.76	126.95	119.90
38	A1	782	G	C5-C6-O6	-11.76	121.55	128.60
11	B2	934	G	P-O3'-C3'	11.75	133.80	119.70
38	A1	230	A	C4-C5-C6	11.75	122.88	117.00
38	A1	1631	A	C5-C6-N6	-11.75	114.30	123.70
38	A1	1635	G	N3-C2-N2	11.75	128.13	119.90
38	A1	2872	G	N1-C6-O6	11.75	126.95	119.90
38	A1	61	G	C5-C6-O6	-11.75	121.55	128.60
11	B2	80	A	N1-C2-N3	11.75	135.18	129.30
11	B2	1060	G	C5-C6-O6	-11.75	121.55	128.60
11	B2	853	G	N1-C2-N3	-11.75	116.85	123.90
11	B2	1143	G	C5-C6-O6	-11.75	121.55	128.60
38	A1	1180	G	N1-C6-O6	11.75	126.95	119.90
47	Ad	63	ARG	NE-CZ-NH1	11.75	126.17	120.30
11	B2	1273	G	C8-N9-C4	-11.74	101.70	106.40
38	A1	1814	A	C6-C5-N7	-11.74	124.08	132.30
11	B2	567	A	C4-C5-C6	11.74	122.87	117.00
38	A1	50	C	P-O3'-C3'	11.74	133.79	119.70
38	A1	447	G	C5-C6-N1	-11.74	105.63	111.50
38	A1	1237	A	C8-N9-C4	-11.74	101.10	105.80
38	A1	964	C	N3-C4-N4	11.74	126.22	118.00
11	B2	192	G	O4'-C1'-C2'	11.74	118.16	107.60
11	B2	1468	A	N1-C6-N6	11.74	125.64	118.60
38	A1	2739	G	O4'-C1'-N9	11.74	117.59	108.20
38	A1	1971	C	N3-C4-N4	11.73	126.21	118.00
38	A1	1132	U	O4'-C1'-N1	11.73	117.58	108.20
30	BR	92	ARG	NE-CZ-NH1	-11.73	114.44	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	3040	G	N1-C6-O6	11.73	126.94	119.90
11	B2	446	G	N1-C6-O6	11.72	126.94	119.90
38	A1	95	G	C5-C6-O6	-11.72	121.56	128.60
11	B2	1418	G	C5-C6-O6	-11.72	121.57	128.60
38	A1	201	C	C5-C4-N4	-11.72	111.99	120.20
11	B2	631	C	N3-C4-N4	11.72	126.20	118.00
11	B2	1304	C	C5-C6-N1	11.72	126.86	121.00
11	B2	1441	G	C5-C6-N1	-11.72	105.64	111.50
19	BG	82	ARG	NE-CZ-NH1	11.72	126.16	120.30
38	A1	480	A	N1-C6-N6	11.72	125.63	118.60
38	A1	1262	C	C5-C6-N1	11.72	126.86	121.00
38	A1	583	A	N1-C6-N6	11.72	125.63	118.60
38	A1	2303	A	C4-C5-C6	11.72	122.86	117.00
39	A3	101	A	C5-C6-N6	-11.72	114.33	123.70
11	B2	959	G	C5-C6-O6	-11.71	121.57	128.60
38	A1	296	G	N1-C6-O6	11.71	126.93	119.90
38	A1	847	A	C5-N7-C8	11.71	109.76	103.90
38	A1	228	U	O4'-C1'-N1	11.71	117.57	108.20
38	A1	273	G	P-O3'-C3'	11.71	133.75	119.70
38	A1	648	C	N3-C4-N4	11.71	126.20	118.00
38	A1	590	A	N1-C6-N6	11.71	125.62	118.60
38	A1	881	G	N1-C6-O6	11.71	126.92	119.90
38	A1	1611	C	O4'-C1'-N1	11.71	117.56	108.20
38	A1	1810	G	O4'-C1'-N9	11.70	117.56	108.20
38	A1	2771	G	C5-C6-O6	-11.71	121.58	128.60
11	B2	78	G	O4'-C1'-N9	11.70	117.56	108.20
11	B2	1377	G	O4'-C1'-N9	11.70	117.56	108.20
38	A1	941	C	C5-C6-N1	-11.70	115.15	121.00
38	A1	1997	C	N3-C4-C5	-11.70	117.22	121.90
11	B2	228	G	C4-C5-N7	-11.70	106.12	110.80
38	A1	350	A	C4-C5-C6	11.70	122.85	117.00
11	B2	220	G	N1-C6-O6	11.70	126.92	119.90
38	A1	261	A	C5-C6-N6	-11.70	114.34	123.70
38	A1	337	G	C5-C6-O6	-11.70	121.58	128.60
38	A1	326	C	N3-C4-N4	11.69	126.19	118.00
38	A1	823	G	C5-C6-O6	-11.69	121.58	128.60
38	A1	1843	C	O4'-C1'-N1	11.69	117.56	108.20
11	B2	954	G	C8-N9-C4	-11.69	101.72	106.40
38	A1	1485	A	C8-N9-C4	-11.69	101.12	105.80
38	A1	782	G	C5-C6-N1	-11.69	105.66	111.50
11	B2	1186	C	P-O3'-C3'	11.69	133.72	119.70
38	A1	722	C	N3-C4-N4	11.69	126.18	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	967	G	C5-C6-O6	-11.69	121.59	128.60
38	A1	464	C	N3-C4-N4	11.68	126.18	118.00
38	A1	250	G	C5-C6-O6	-11.68	121.59	128.60
38	A1	968	A	N1-C6-N6	11.68	125.61	118.60
38	A1	2282	G	C5-C6-O6	-11.68	121.59	128.60
11	B2	1153	G	N1-C6-O6	11.68	126.91	119.90
38	A1	1903	G	N1-C6-O6	11.68	126.91	119.90
22	BJ	79	ARG	NE-CZ-NH1	-11.68	114.46	120.30
11	B2	985	C	N3-C4-C5	-11.68	117.23	121.90
38	A1	231	G	N1-C2-N3	-11.68	116.89	123.90
38	A1	642	G	C5-C6-O6	-11.68	121.59	128.60
38	A1	2788	U	O4'-C1'-N1	11.68	117.54	108.20
28	BP	6	TYR	CB-CG-CD2	-11.67	114.00	121.00
38	A1	611	G	C8-N9-C4	-11.67	101.73	106.40
38	A1	1677	A	N1-C6-N6	11.67	125.60	118.60
38	A1	1930	A	C4-C5-C6	11.67	122.83	117.00
39	A3	2	G	C5-C6-O6	-11.67	121.60	128.60
11	B2	381	C	O4'-C1'-N1	11.67	117.53	108.20
11	B2	496	C	O4'-C1'-N1	11.67	117.54	108.20
38	A1	90	A	C8-N9-C4	-11.67	101.13	105.80
38	A1	584	G	C5-C6-O6	-11.67	121.60	128.60
38	A1	1563	G	N1-C6-O6	11.67	126.90	119.90
38	A1	1766	A	C5-C6-N6	-11.67	114.36	123.70
38	A1	2158	G	P-O3'-C3'	11.67	133.70	119.70
11	B2	90	C	C5-C6-N1	11.66	126.83	121.00
38	A1	1263	C	C5-C6-N1	11.66	126.83	121.00
11	B2	183	A	O4'-C1'-N9	11.66	117.53	108.20
11	B2	1200	U	C2-N1-C1'	11.66	131.69	117.70
38	A1	704	G	C5-C6-O6	-11.66	121.60	128.60
38	A1	704	G	N1-C6-O6	11.66	126.89	119.90
38	A1	1513	G	C5-C6-O6	-11.66	121.61	128.60
11	B2	1352	G	C2-N3-C4	11.65	117.73	111.90
38	A1	2534	C	C2-N3-C4	11.65	125.73	119.90
38	A1	2717	A	N1-C6-N6	11.65	125.59	118.60
11	B2	58	U	O4'-C1'-N1	11.65	117.52	108.20
11	B2	1158	G	N1-C6-O6	11.65	126.89	119.90
11	B2	1469	G	C4-C5-N7	11.65	115.46	110.80
11	B2	1394	G	O4'-C1'-N9	11.64	117.52	108.20
38	A1	723	A	C8-N9-C4	11.64	110.46	105.80
38	A1	885	A	N1-C6-N6	11.64	125.59	118.60
10	B1	77	A	O4'-C1'-N9	11.64	117.51	108.20
11	B2	444	G	C5-C6-O6	-11.64	121.61	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	810	A	C5-C6-N1	-11.64	111.88	117.70
38	A1	1182	C	C4-C5-C6	11.64	123.22	117.40
38	A1	2195	G	N1-C6-O6	11.64	126.88	119.90
38	A1	2779	G	C5-C6-O6	-11.64	121.62	128.60
9	AX	373	TYR	CB-CG-CD2	-11.63	114.02	121.00
11	B2	1100	G	N7-C8-N9	11.64	118.92	113.10
38	A1	830	G	N1-C6-O6	11.64	126.88	119.90
38	A1	1193	G	N1-C6-O6	11.64	126.88	119.90
62	AO	196	PHE	CB-CG-CD1	11.64	128.94	120.80
8	AW	45	ARG	NE-CZ-NH1	11.63	126.12	120.30
11	B2	831	A	N1-C6-N6	11.63	125.58	118.60
11	B2	607	U	O4'-C1'-N1	11.63	117.50	108.20
38	A1	208	A	C5-N7-C8	11.63	109.72	103.90
38	A1	646	U	O4'-C1'-N1	11.63	117.50	108.20
39	A3	26	C	C6-N1-C2	-11.63	115.65	120.30
38	A1	939	A	N1-C6-N6	11.63	125.58	118.60
38	A1	1470	C	C2-N3-C4	11.63	125.71	119.90
11	B2	306	C	N3-C4-C5	-11.63	117.25	121.90
16	BD	168	ARG	NE-CZ-NH2	-11.63	114.49	120.30
38	A1	2776	A	N1-C2-N3	11.62	135.11	129.30
38	A1	2048	C	N3-C4-C5	-11.62	117.25	121.90
11	B2	589	U	C5-C4-O4	-11.62	118.93	125.90
38	A1	1648	C	C5-C4-N4	-11.62	112.07	120.20
11	B2	321	A	O4'-C1'-N9	11.62	117.49	108.20
38	A1	730	C	N3-C4-N4	11.61	126.13	118.00
11	B2	1011	C	C2-N3-C4	11.61	125.70	119.90
38	A1	2747	C	N3-C4-C5	-11.61	117.26	121.90
11	B2	1020	G	N3-C2-N2	11.61	128.02	119.90
38	A1	81	G	N3-C2-N2	11.61	128.02	119.90
38	A1	481	G	C5-C6-O6	-11.61	121.64	128.60
38	A1	2025	A	N1-C6-N6	11.61	125.56	118.60
38	A1	1037	C	N3-C4-C5	-11.60	117.26	121.90
38	A1	2798	U	O4'-C1'-N1	11.60	117.48	108.20
38	A1	883	G	C8-N9-C4	-11.60	101.76	106.40
38	A1	2215	U	P-O3'-C3'	11.60	133.62	119.70
38	A1	344	G	C6-C5-N7	-11.60	123.44	130.40
38	A1	1982	C	N3-C4-N4	11.60	126.12	118.00
38	A1	2415	C	N3-C4-N4	11.60	126.12	118.00
38	A1	2889	A	C4-C5-C6	11.60	122.80	117.00
38	A1	2970	U	O4'-C1'-N1	11.60	117.48	108.20
11	B2	1003	G	C5-C6-O6	-11.59	121.64	128.60
11	B2	1351	U	O4'-C1'-N1	11.59	117.47	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1359	C	C6-N1-C2	11.59	124.94	120.30
38	A1	2366	G	N3-C2-N2	11.59	128.02	119.90
38	A1	2472	A	N9-C4-C5	11.59	110.44	105.80
11	B2	1	A	C5-C6-N1	-11.59	111.91	117.70
11	B2	1230	G	N9-C4-C5	-11.59	100.76	105.40
38	A1	532	G	N1-C6-O6	11.59	126.86	119.90
38	A1	2737	G	C5-C6-O6	-11.59	121.65	128.60
38	A1	2862	A	N1-C2-N3	11.59	135.09	129.30
11	B2	722	G	O4'-C1'-N9	11.59	117.47	108.20
38	A1	997	A	N1-C6-N6	11.59	125.55	118.60
38	A1	2493	A	C5-C6-N6	-11.59	114.43	123.70
38	A1	81	G	C2-N3-C4	11.59	117.69	111.90
38	A1	972	C	C6-N1-C2	-11.58	115.67	120.30
11	B2	772	G	C5-C6-O6	-11.58	121.65	128.60
38	A1	611	G	C5-C6-N1	-11.58	105.71	111.50
38	A1	663	A	N9-C4-C5	11.58	110.43	105.80
38	A1	1278	C	N3-C4-C5	-11.58	117.27	121.90
38	A1	1602	C	C6-N1-C2	11.58	124.93	120.30
11	B2	942	A	N1-C6-N6	11.57	125.54	118.60
11	B2	1365	G	O4'-C1'-N9	11.57	117.46	108.20
11	B2	379	A	O4'-C1'-N9	11.57	117.46	108.20
38	A1	1810	G	C2-N3-C4	11.57	117.69	111.90
38	A1	2628	U	O4'-C1'-N1	11.57	117.45	108.20
11	B2	51	A	N1-C6-N6	11.57	125.54	118.60
11	B2	160	C	C5-C4-N4	-11.57	112.10	120.20
11	B2	1131	G	C5-C6-N1	-11.57	105.72	111.50
38	A1	2432	G	C5-C6-O6	-11.57	121.66	128.60
5	AS	37	ARG	NE-CZ-NH1	11.56	126.08	120.30
11	B2	625	G	C5-C6-O6	-11.56	121.66	128.60
11	B2	1166	G	N1-C6-O6	11.56	126.84	119.90
11	B2	1363	C	C6-N1-C2	-11.56	115.68	120.30
38	A1	319	A	C2-N3-C4	11.56	116.38	110.60
38	A1	770	G	O4'-C1'-N9	11.56	117.45	108.20
11	B2	295	G	C5-C6-O6	-11.55	121.67	128.60
38	A1	96	C	N3-C4-N4	11.55	126.09	118.00
38	A1	245	A	N1-C6-N6	11.56	125.53	118.60
38	A1	2117	U	O4'-C1'-N1	11.55	117.44	108.20
38	A1	1554	G	N1-C6-O6	11.55	126.83	119.90
11	B2	1041	C	N3-C4-C5	-11.55	117.28	121.90
38	A1	396	G	C5-C6-O6	-11.55	121.67	128.60
38	A1	515	G	N1-C6-O6	11.55	126.83	119.90
38	A1	1518	G	C5-C6-O6	-11.55	121.67	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1613	A	C5-N7-C8	11.55	109.67	103.90
38	A1	526	C	N3-C4-C5	-11.55	117.28	121.90
11	B2	1010	G	N1-C6-O6	11.54	126.83	119.90
38	A1	103	A	N1-C6-N6	11.54	125.53	118.60
38	A1	1322	G	C6-C5-N7	-11.54	123.47	130.40
38	A1	1381	C	O4'-C1'-N1	11.54	117.44	108.20
38	A1	1413	A	C5-N7-C8	11.54	109.67	103.90
38	A1	2509	A	N1-C6-N6	11.54	125.53	118.60
38	A1	2409	C	N3-C4-N4	11.54	126.08	118.00
38	A1	2543	A	O4'-C1'-N9	11.54	117.43	108.20
39	A3	37	U	O4'-C1'-N1	11.54	117.43	108.20
38	A1	278	C	O4'-C1'-N1	11.54	117.43	108.20
38	A1	802	G	N3-C2-N2	11.54	127.98	119.90
38	A1	1194	G	C5-C6-O6	-11.54	121.68	128.60
38	A1	1467	G	C8-N9-C4	11.53	111.01	106.40
38	A1	413	A	N1-C6-N6	11.53	125.52	118.60
38	A1	551	A	N1-C6-N6	11.53	125.52	118.60
38	A1	1136	G	C5-C6-O6	-11.53	121.68	128.60
38	A1	1760	C	N3-C4-N4	11.53	126.07	118.00
11	B2	546	G	N3-C2-N2	11.53	127.97	119.90
38	A1	1716	G	C5-C6-O6	-11.53	121.68	128.60
38	A1	1379	A	N1-C6-N6	11.52	125.51	118.60
11	B2	1068	C	O4'-C1'-N1	11.52	117.42	108.20
11	B2	1164	A	N1-C6-N6	11.52	125.51	118.60
11	B2	689	C	N3-C4-C5	-11.52	117.29	121.90
38	A1	1179	G	C5-C6-O6	-11.52	121.69	128.60
38	A1	2377	C	N3-C4-C5	-11.52	117.29	121.90
38	A1	2990	G	N1-C6-O6	11.52	126.81	119.90
38	A1	1134	A	C5-C6-N1	-11.52	111.94	117.70
38	A1	286	G	C8-N9-C4	11.51	111.00	106.40
11	B2	1481	G	N1-C6-O6	11.51	126.81	119.90
38	A1	215	A	N1-C6-N6	11.51	125.51	118.60
38	A1	1671	A	C6-C5-N7	-11.51	124.24	132.30
38	A1	319	A	N3-C4-C5	-11.51	118.74	126.80
38	A1	1819	G	C5-C6-O6	-11.51	121.69	128.60
38	A1	2810	G	N1-C2-N3	-11.51	116.99	123.90
57	Aj	30	ARG	NE-CZ-NH1	11.51	126.06	120.30
10	B1	43	G	C5-C6-O6	-11.51	121.70	128.60
11	B2	1221	A	N1-C6-N6	11.51	125.50	118.60
38	A1	606	A	C5-C6-N1	-11.51	111.95	117.70
38	A1	905	G	C2-N3-C4	11.51	117.65	111.90
11	B2	452	G	N1-C6-O6	11.51	126.80	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1346	G	O4'-C1'-N9	11.51	117.41	108.20
38	A1	2235	G	C8-N9-C4	-11.51	101.80	106.40
38	A1	1288	C	C2-N3-C4	11.50	125.65	119.90
38	A1	2630	C	N3-C4-C5	-11.50	117.30	121.90
11	B2	160	C	N3-C4-N4	11.50	126.05	118.00
11	B2	1011	C	N3-C4-C5	-11.50	117.30	121.90
11	B2	310	G	C4-C5-N7	-11.50	106.20	110.80
11	B2	1448	A	C8-N9-C4	-11.50	101.20	105.80
11	B2	990	G	C5-C6-O6	-11.50	121.70	128.60
38	A1	418	C	C4-C5-C6	11.49	123.15	117.40
11	B2	1314	C	O4'-C1'-N1	11.49	117.39	108.20
38	A1	1039	C	N3-C4-C5	-11.49	117.30	121.90
11	B2	1356	A	N1-C6-N6	11.49	125.49	118.60
38	A1	924	A	C4-C5-C6	11.49	122.75	117.00
11	B2	917	A	C5-N7-C8	11.49	109.64	103.90
11	B2	321	A	N1-C6-N6	11.49	125.49	118.60
38	A1	614	G	N1-C2-N3	-11.49	117.01	123.90
38	A1	632	G	O4'-C1'-N9	11.49	117.39	108.20
38	A1	800	G	N1-C6-O6	11.49	126.79	119.90
11	B2	1469	G	N9-C4-C5	-11.48	100.81	105.40
38	A1	1759	A	C5-C6-N6	-11.48	114.51	123.70
11	B2	47	A	N1-C6-N6	11.48	125.49	118.60
38	A1	2599	C	N3-C4-N4	11.48	126.04	118.00
38	A1	2975	A	N9-C4-C5	-11.48	101.21	105.80
38	A1	558	C	C2-N3-C4	11.48	125.64	119.90
38	A1	1904	G	N1-C6-O6	11.48	126.79	119.90
11	B2	821	G	N1-C6-O6	11.48	126.79	119.90
11	B2	990	G	N3-C2-N2	11.48	127.93	119.90
38	A1	507	G	C4-C5-C6	11.48	125.69	118.80
11	B2	1335	A	N1-C6-N6	11.47	125.48	118.60
39	A3	18	G	C8-N9-C4	-11.47	101.81	106.40
11	B2	791	G	N1-C6-O6	11.47	126.78	119.90
29	BQ	100	ARG	NE-CZ-NH1	11.47	126.04	120.30
38	A1	2781	A	C4-C5-C6	11.47	122.73	117.00
11	B2	166	A	C5-C6-N6	-11.47	114.53	123.70
38	A1	337	G	C5-C6-N1	-11.47	105.77	111.50
11	B2	71	C	N3-C4-N4	11.46	126.03	118.00
11	B2	847	A	C5-N7-C8	11.46	109.63	103.90
11	B2	963	A	P-O3'-C3'	11.46	133.46	119.70
38	A1	1415	C	N3-C4-N4	11.46	126.03	118.00
38	A1	1935	C	N3-C4-N4	11.46	126.03	118.00
38	A1	835	G	N1-C6-O6	11.46	126.78	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2547	A	C5-C6-N1	-11.46	111.97	117.70
11	B2	377	A	N1-C2-N3	11.46	135.03	129.30
38	A1	2237	A	C5-C6-N6	-11.46	114.53	123.70
11	B2	797	U	C6-N1-C2	-11.46	114.13	121.00
38	A1	2370	C	C5-C4-N4	-11.46	112.18	120.20
62	AO	84	TYR	CB-CG-CD1	11.46	127.88	121.00
11	B2	1193	G	C5-C6-O6	-11.46	121.73	128.60
38	A1	2222	C	O4'-C1'-N1	11.46	117.36	108.20
38	A1	170	A	N1-C2-N3	11.45	135.03	129.30
38	A1	1375	G	N3-C2-N2	11.45	127.92	119.90
38	A1	1225	A	C4-C5-C6	11.45	122.73	117.00
38	A1	1046	A	C6-N1-C2	-11.45	111.73	118.60
38	A1	1407	A	C8-N9-C4	-11.45	101.22	105.80
38	A1	1554	G	C5-C6-O6	-11.45	121.73	128.60
38	A1	362	A	N1-C2-N3	11.45	135.02	129.30
11	B2	283	U	N3-C4-C5	-11.44	107.73	114.60
38	A1	712	C	C2-N3-C4	11.44	125.62	119.90
11	B2	460	C	N3-C4-C5	-11.44	117.33	121.90
38	A1	8	G	C5-C6-O6	-11.44	121.74	128.60
38	A1	235	G	N1-C6-O6	11.44	126.76	119.90
38	A1	449	G	N1-C6-O6	11.44	126.76	119.90
38	A1	474	G	N1-C2-N3	-11.44	117.04	123.90
17	BE	8	ARG	NE-CZ-NH1	11.44	126.02	120.30
11	B2	1404	C	N3-C4-N4	11.44	126.00	118.00
11	B2	404	C	O4'-C1'-N1	11.43	117.35	108.20
11	B2	1435	G	O4'-C1'-N9	11.43	117.35	108.20
38	A1	1283	G	O4'-C1'-N9	11.43	117.35	108.20
11	B2	280	C	O4'-C1'-N1	11.43	117.34	108.20
38	A1	2111	C	N1-C2-O2	-11.43	112.04	118.90
11	B2	671	C	N3-C4-N4	11.43	126.00	118.00
11	B2	1104	G	C6-N1-C2	-11.43	118.24	125.10
38	A1	403	G	N1-C6-O6	11.43	126.76	119.90
60	AM	8	ARG	NE-CZ-NH2	11.43	126.01	120.30
10	B1	20	G	N1-C2-N3	-11.42	117.05	123.90
11	B2	1104	G	N1-C6-O6	11.42	126.75	119.90
38	A1	1023	C	O4'-C1'-N1	11.42	117.34	108.20
11	B2	1173	A	N1-C6-N6	11.42	125.45	118.60
38	A1	801	A	N1-C6-N6	11.42	125.45	118.60
11	B2	903	G	N3-C2-N2	11.42	127.89	119.90
38	A1	1698	G	C5-C6-O6	-11.42	121.75	128.60
11	B2	120	C	C6-N1-C2	-11.41	115.73	120.30
11	B2	519	G	C2-N3-C4	11.41	117.61	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	593	G	N1-C6-O6	11.41	126.75	119.90
16	BD	57	ARG	NE-CZ-NH2	-11.41	114.59	120.30
11	B2	1374	C	C6-N1-C2	-11.41	115.74	120.30
38	A1	273	G	C4-C5-C6	11.41	125.64	118.80
38	A1	1368	A	C5-C6-N1	-11.41	112.00	117.70
38	A1	1360	G	N1-C6-O6	11.40	126.74	119.90
38	A1	1629	G	C5-C6-O6	-11.40	121.76	128.60
38	A1	1861	G	O4'-C1'-N9	11.40	117.32	108.20
38	A1	2206	G	C5-C6-O6	-11.40	121.76	128.60
11	B2	937	A	N1-C6-N6	11.40	125.44	118.60
38	A1	2810	G	O4'-C1'-N9	11.40	117.32	108.20
11	B2	251	G	C5-C6-O6	-11.40	121.76	128.60
11	B2	645	G	N1-C6-O6	11.40	126.74	119.90
11	B2	977	G	C6-C5-N7	-11.40	123.56	130.40
11	B2	1110	U	C5-C6-N1	11.40	128.40	122.70
38	A1	1471	G	N1-C6-O6	11.40	126.74	119.90
11	B2	91	G	O4'-C1'-N9	11.39	117.32	108.20
38	A1	539	A	N1-C6-N6	11.39	125.44	118.60
11	B2	1436	U	O4'-C1'-N1	11.39	117.31	108.20
38	A1	1280	C	C5-C6-N1	11.39	126.70	121.00
38	A1	1521	G	N1-C6-O6	11.39	126.74	119.90
38	A1	1246	G	C5-C6-O6	-11.39	121.77	128.60
38	A1	1964	G	C5-C6-O6	-11.39	121.77	128.60
11	B2	823	A	C5-C6-N1	-11.39	112.00	117.70
38	A1	2185	A	N1-C6-N6	11.39	125.43	118.60
38	A1	2543	A	C5-C6-N6	-11.39	114.59	123.70
11	B2	276	A	C4-C5-C6	11.39	122.69	117.00
38	A1	1406	G	C4-C5-C6	11.39	125.63	118.80
38	A1	1116	A	C8-N9-C4	-11.39	101.25	105.80
11	B2	760	C	N3-C4-N4	11.38	125.97	118.00
11	B2	1447	A	C5-C6-N1	-11.38	112.01	117.70
38	A1	2323	C	N3-C4-N4	11.38	125.97	118.00
38	A1	2702	A	N1-C6-N6	11.38	125.43	118.60
38	A1	1706	G	O4'-C1'-N9	11.38	117.31	108.20
11	B2	911	C	O4'-C1'-N1	11.38	117.30	108.20
38	A1	826	C	N3-C4-C5	-11.38	117.35	121.90
38	A1	859	G	N1-C6-O6	11.38	126.73	119.90
38	A1	1893	C	C2-N3-C4	11.38	125.59	119.90
38	A1	2249	A	C5-N7-C8	11.38	109.59	103.90
7	AU	84	ARG	NE-CZ-NH2	-11.38	114.61	120.30
38	A1	32	C	N3-C4-N4	11.38	125.96	118.00
38	A1	985	A	C8-N9-C4	-11.38	101.25	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2134	G	C5-C6-O6	-11.38	121.77	128.60
57	Aj	69	PHE	CB-CG-CD1	-11.38	112.84	120.80
10	B1	30	G	N9-C4-C5	-11.37	100.85	105.40
38	A1	659	U	O4'-C1'-N1	11.37	117.30	108.20
38	A1	2694	C	C5-C4-N4	-11.37	112.24	120.20
11	B2	886	G	N1-C6-O6	11.37	126.72	119.90
39	A3	16	G	C5-N7-C8	-11.37	98.62	104.30
11	B2	1366	U	C5-C6-N1	11.37	128.38	122.70
38	A1	333	A	N1-C6-N6	11.37	125.42	118.60
11	B2	149	U	O4'-C1'-N1	11.36	117.29	108.20
11	B2	1473	A	N1-C2-N3	11.36	134.98	129.30
11	B2	1203	G	N1-C6-O6	11.36	126.72	119.90
38	A1	1517	G	O4'-C1'-N9	11.36	117.29	108.20
39	A3	45	C	C5-C4-N4	-11.36	112.25	120.20
38	A1	1708	U	C5-C4-O4	-11.36	119.08	125.90
65	AV	31	PHE	CB-CG-CD1	-11.36	112.85	120.80
11	B2	495	G	C5-C6-N1	-11.36	105.82	111.50
11	B2	1417	A	C5-C6-N6	-11.36	114.61	123.70
38	A1	2784	A	C5-C6-N1	-11.36	112.02	117.70
11	B2	752	G	C5-C6-O6	-11.36	121.79	128.60
11	B2	1259	A	N1-C6-N6	11.36	125.41	118.60
38	A1	1052	G	N1-C6-O6	11.36	126.71	119.90
32	BT	11	TYR	CB-CG-CD1	11.35	127.81	121.00
11	B2	570	G	N1-C6-O6	11.35	126.71	119.90
5	AS	65	ARG	NE-CZ-NH2	-11.35	114.62	120.30
38	A1	799	C	N3-C4-C5	-11.35	117.36	121.90
11	B2	402	G	C4-C5-C6	11.35	125.61	118.80
38	A1	906	G	C5-C6-O6	-11.35	121.79	128.60
38	A1	2757	G	C5-C6-O6	-11.35	121.79	128.60
38	A1	559	G	N1-C6-O6	11.34	126.71	119.90
38	A1	1177	C	C5-C4-N4	-11.34	112.26	120.20
38	A1	1416	G	N1-C6-O6	11.34	126.71	119.90
38	A1	2224	G	N1-C6-O6	11.34	126.71	119.90
38	A1	2266	C	N3-C4-N4	11.34	125.94	118.00
11	B2	890	C	N3-C4-C5	-11.34	117.36	121.90
38	A1	2569	G	N1-C6-O6	11.34	126.70	119.90
38	A1	535	G	C5-C6-O6	-11.34	121.80	128.60
38	A1	1792	A	C8-N9-C4	-11.34	101.26	105.80
38	A1	1997	C	O4'-C1'-N1	11.34	117.27	108.20
30	BR	63	TYR	CB-CG-CD1	11.34	127.80	121.00
38	A1	577	C	N3-C4-C5	-11.34	117.37	121.90
38	A1	647	G	C5-C6-O6	-11.34	121.80	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1281	A	C5-C6-N1	-11.34	112.03	117.70
10	B1	24	A	C5-C6-N6	-11.33	114.63	123.70
38	A1	2040	A	O4'-C1'-N9	11.33	117.27	108.20
38	A1	2658	G	N1-C6-O6	11.33	126.70	119.90
38	A1	1119	A	N9-C4-C5	11.33	110.33	105.80
11	B2	353	G	N1-C6-O6	11.33	126.70	119.90
11	B2	1046	G	C5-N7-C8	-11.33	98.63	104.30
38	A1	2008	G	O4'-C1'-N9	11.33	117.26	108.20
11	B2	1220	G	C8-N9-C4	-11.33	101.87	106.40
38	A1	570	G	C5-C6-O6	-11.33	121.80	128.60
11	B2	599	G	N1-C6-O6	11.32	126.69	119.90
38	A1	847	A	C5-C6-N1	-11.32	112.04	117.70
38	A1	1452	G	C5-C6-O6	-11.32	121.81	128.60
38	A1	1789	A	C5-N7-C8	11.32	109.56	103.90
11	B2	668	G	O4'-C1'-N9	11.32	117.26	108.20
11	B2	1260	G	O4'-C1'-N9	11.32	117.26	108.20
38	A1	408	C	P-O3'-C3'	11.32	133.28	119.70
38	A1	1412	C	C2-N3-C4	11.32	125.56	119.90
38	A1	2396	G	P-O3'-C3'	11.32	133.28	119.70
11	B2	790	G	C5-C6-O6	-11.32	121.81	128.60
38	A1	258	C	N3-C4-C5	-11.32	117.37	121.90
38	A1	1977	C	C6-N1-C2	-11.32	115.77	120.30
11	B2	283	U	C5-C4-O4	11.31	132.69	125.90
11	B2	270	A	O4'-C1'-N9	11.31	117.25	108.20
38	A1	1428	G	C4-C5-C6	11.31	125.59	118.80
11	B2	160	C	O4'-C1'-N1	11.31	117.25	108.20
38	A1	1027	A	C8-N9-C4	-11.31	101.28	105.80
11	B2	187	C	C4-C5-C6	11.31	123.05	117.40
11	B2	553	C	N3-C4-N4	11.31	125.92	118.00
38	A1	1842	C	O4'-C1'-N1	11.31	117.25	108.20
38	A1	1906	G	N1-C6-O6	11.31	126.69	119.90
11	B2	436	A	N1-C6-N6	11.30	125.38	118.60
11	B2	1204	C	C2-N3-C4	11.30	125.55	119.90
16	BD	76	ARG	NE-CZ-NH2	-11.30	114.65	120.30
38	A1	456	G	N1-C6-O6	11.30	126.68	119.90
38	A1	1764	G	N1-C6-O6	11.30	126.68	119.90
39	A3	89	G	P-O3'-C3'	11.30	133.26	119.70
38	A1	1331	U	O4'-C1'-N1	11.30	117.24	108.20
38	A1	56	G	C5-C6-O6	-11.30	121.82	128.60
38	A1	852	A	C8-N9-C4	-11.30	101.28	105.80
38	A1	3020	G	O4'-C1'-N9	11.30	117.24	108.20
11	B2	416	A	C8-N9-C4	11.29	110.32	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1268	C	O4'-C1'-N1	11.29	117.24	108.20
38	A1	380	A	C5-C6-N6	-11.29	114.66	123.70
38	A1	1335	C	C5-C4-N4	-11.30	112.29	120.20
38	A1	1732	C	N3-C4-C5	-11.30	117.38	121.90
38	A1	2375	C	N3-C4-N4	11.30	125.91	118.00
38	A1	2782	A	C5-C6-N6	-11.30	114.66	123.70
11	B2	223	G	N1-C6-O6	11.29	126.67	119.90
38	A1	493	A	C5-C6-N1	-11.29	112.05	117.70
38	A1	1813	A	C5-C6-N1	-11.29	112.05	117.70
38	A1	2282	G	N1-C6-O6	11.29	126.67	119.90
11	B2	192	G	O4'-C1'-N9	11.29	117.23	108.20
38	A1	924	A	C5-C6-N1	-11.29	112.06	117.70
38	A1	1225	A	C6-C5-N7	-11.29	124.40	132.30
11	B2	369	A	O4'-C1'-N9	11.29	117.23	108.20
39	A3	92	G	N1-C6-O6	11.29	126.67	119.90
38	A1	631	G	O4'-C1'-N9	11.29	117.23	108.20
38	A1	1433	C	N3-C4-C5	-11.29	117.39	121.90
38	A1	2211	C	N3-C4-N4	11.29	125.90	118.00
10	B1	53	G	C5-C6-O6	-11.28	121.83	128.60
11	B2	777	G	C2-N3-C4	11.28	117.54	111.90
11	B2	1281	U	O4'-C1'-N1	11.28	117.23	108.20
38	A1	55	G	O4'-C1'-N9	11.28	117.23	108.20
38	A1	408	C	C6-N1-C2	-11.28	115.79	120.30
11	B2	756	A	N1-C6-N6	11.28	125.37	118.60
38	A1	1539	U	N3-C4-O4	11.28	127.30	119.40
38	A1	1690	U	C2-N1-C1'	11.28	131.23	117.70
11	B2	824	G	C5-C6-O6	-11.28	121.83	128.60
38	A1	2681	A	C5-C6-N6	-11.28	114.68	123.70
11	B2	545	C	C2-N3-C4	11.28	125.54	119.90
11	B2	684	G	O4'-C1'-N9	11.28	117.22	108.20
11	B2	1472	G	C6-C5-N7	-11.28	123.64	130.40
38	A1	2101	A	C5-C6-N1	-11.28	112.06	117.70
38	A1	1374	G	C6-N1-C2	11.27	131.86	125.10
38	A1	333	A	C5-C6-N1	-11.27	112.06	117.70
38	A1	1426	G	N1-C6-O6	11.27	126.66	119.90
11	B2	245	U	C4-C5-C6	11.27	126.46	119.70
18	BF	188	PHE	CB-CG-CD2	-11.27	112.91	120.80
38	A1	277	A	C2-N3-C4	11.27	116.23	110.60
38	A1	2107	G	N1-C2-N3	-11.27	117.14	123.90
11	B2	1162	G	C5-C6-O6	-11.27	121.84	128.60
38	A1	340	G	C5-C6-O6	-11.27	121.84	128.60
38	A1	654	C	C5-C6-N1	11.26	126.63	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	811	C	N3-C4-C5	-11.26	117.39	121.90
11	B2	1466	G	N1-C6-O6	11.26	126.66	119.90
38	A1	597	C	C4-C5-C6	11.26	123.03	117.40
38	A1	662	A	N1-C2-N3	-11.26	123.67	129.30
46	AD	69	ARG	NE-CZ-NH2	-11.26	114.67	120.30
11	B2	155	U	N1-C2-N3	11.26	121.65	114.90
11	B2	197	A	C4-C5-C6	11.26	122.63	117.00
38	A1	1334	G	N9-C4-C5	11.26	109.90	105.40
11	B2	1006	C	N3-C4-C5	-11.26	117.40	121.90
38	A1	1347	U	N3-C4-O4	11.26	127.28	119.40
38	A1	1818	G	C4-C5-C6	11.26	125.55	118.80
38	A1	1422	G	C5-C6-O6	-11.26	121.85	128.60
38	A1	2599	C	N3-C4-C5	-11.26	117.40	121.90
38	A1	2842	C	N3-C4-N4	11.26	125.88	118.00
11	B2	435	A	C5-N7-C8	11.25	109.53	103.90
21	BI	46	TYR	CB-CG-CD2	-11.25	114.25	121.00
38	A1	640	C	N3-C4-N4	11.25	125.88	118.00
38	A1	2980	G	O4'-C1'-N9	11.25	117.20	108.20
11	B2	1058	G	C5-C6-O6	-11.25	121.85	128.60
38	A1	1287	G	C5-C6-O6	-11.25	121.85	128.60
38	A1	1985	G	N1-C6-O6	11.25	126.65	119.90
11	B2	851	C	O4'-C1'-N1	11.25	117.20	108.20
11	B2	988	A	P-O3'-C3'	11.25	133.20	119.70
38	A1	355	G	C5-C6-O6	-11.25	121.85	128.60
38	A1	1688	C	N3-C4-N4	11.25	125.87	118.00
11	B2	318	C	N3-C4-N4	11.24	125.87	118.00
11	B2	1429	G	C5-C6-O6	-11.24	121.85	128.60
38	A1	961	C	N3-C4-C5	-11.24	117.40	121.90
38	A1	2285	G	O4'-C1'-N9	11.24	117.19	108.20
38	A1	2697	G	O4'-C1'-N9	11.24	117.19	108.20
39	A3	88	A	N1-C2-N3	11.24	134.92	129.30
11	B2	390	G	C5-C6-N1	-11.24	105.88	111.50
39	A3	29	G	C5-C6-O6	-11.24	121.86	128.60
11	B2	1055	C	N3-C2-O2	11.24	129.77	121.90
11	B2	152	G	C4-C5-N7	11.24	115.30	110.80
11	B2	852	G	N1-C6-O6	11.24	126.64	119.90
38	A1	179	A	N1-C6-N6	11.24	125.34	118.60
38	A1	678	G	C5-N7-C8	11.24	109.92	104.30
11	B2	296	A	C5-C6-N6	-11.23	114.71	123.70
11	B2	778	G	C5-C6-O6	-11.23	121.86	128.60
13	BA	115	TYR	CB-CG-CD2	-11.23	114.26	121.00
38	A1	2181	G	C5-C6-O6	-11.23	121.86	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	103	A	C2-N3-C4	-11.23	104.98	110.60
38	A1	1902	G	N1-C6-O6	11.23	126.64	119.90
38	A1	2624	G	C5-C6-O6	-11.23	121.86	128.60
38	A1	106	G	C5-C6-O6	-11.23	121.86	128.60
38	A1	224	G	N1-C6-O6	11.23	126.64	119.90
38	A1	477	C	O4'-C1'-N1	11.23	117.18	108.20
38	A1	1386	G	N1-C2-N3	-11.23	117.16	123.90
38	A1	3016	G	N1-C2-N3	-11.23	117.16	123.90
11	B2	911	C	N3-C4-C5	-11.22	117.41	121.90
38	A1	1372	C	N3-C4-N4	11.22	125.86	118.00
38	A1	3021	C	C6-N1-C2	11.22	124.79	120.30
38	A1	2477	G	N3-C2-N2	11.22	127.76	119.90
34	BV	16	ARG	NE-CZ-NH2	-11.22	114.69	120.30
38	A1	342	C	N3-C4-C5	-11.22	117.41	121.90
38	A1	1930	A	N1-C6-N6	11.22	125.33	118.60
38	A1	186	A	C5-C6-N6	-11.22	114.73	123.70
38	A1	1353	A	C5-C6-N1	-11.22	112.09	117.70
38	A1	165	G	C8-N9-C4	-11.21	101.91	106.40
11	B2	243	G	C2-N3-C4	11.21	117.51	111.90
11	B2	1491	C	N3-C4-C5	-11.21	117.42	121.90
38	A1	1706	G	N1-C6-O6	11.21	126.63	119.90
38	A1	374	C	C4-C5-C6	11.21	123.00	117.40
38	A1	2354	A	O4'-C1'-N9	11.21	117.17	108.20
11	B2	764	C	O4'-C1'-N1	11.21	117.16	108.20
11	B2	789	G	O4'-C1'-N9	11.21	117.17	108.20
38	A1	2574	G	C5-C6-O6	-11.21	121.88	128.60
11	B2	138	C	N3-C4-C5	-11.20	117.42	121.90
11	B2	324	C	P-O3'-C3'	11.20	133.14	119.70
11	B2	960	A	C5-C6-N1	-11.20	112.10	117.70
38	A1	2109	C	O4'-C1'-N1	11.20	117.16	108.20
11	B2	1069	G	C4-C5-C6	11.20	125.52	118.80
38	A1	427	G	N1-C6-O6	11.20	126.62	119.90
38	A1	129	C	O4'-C1'-N1	11.20	117.16	108.20
38	A1	2437	G	C4-C5-N7	11.20	115.28	110.80
11	B2	939	C	O4'-C1'-N1	11.19	117.15	108.20
11	B2	1298	G	N1-C6-O6	11.19	126.61	119.90
11	B2	323	A	C5-C6-N1	-11.19	112.11	117.70
11	B2	520	G	C4-C5-N7	-11.19	106.33	110.80
11	B2	1425	C	O4'-C1'-N1	11.19	117.15	108.20
38	A1	1272	A	C4-C5-N7	-11.19	105.11	110.70
38	A1	199	C	C5-C6-N1	11.19	126.59	121.00
38	A1	1406	G	N1-C6-O6	11.19	126.61	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1893	C	O4'-C1'-N1	11.19	117.15	108.20
11	B2	355	C	O4'-C1'-N1	11.19	117.15	108.20
38	A1	1142	A	N1-C6-N6	11.19	125.31	118.60
38	A1	2084	A	C5-C6-N1	-11.19	112.11	117.70
38	A1	1809	G	N3-C2-N2	11.19	127.73	119.90
11	B2	545	C	O4'-C1'-N1	11.18	117.15	108.20
38	A1	94	A	N1-C6-N6	11.18	125.31	118.60
38	A1	500	C	O4'-C1'-N1	11.18	117.14	108.20
38	A1	810	A	O4'-C1'-N9	11.18	117.14	108.20
38	A1	2416	G	N1-C6-O6	11.18	126.61	119.90
38	A1	2815	C	C6-N1-C2	-11.18	115.83	120.30
38	A1	663	A	C5-C6-N1	-11.18	112.11	117.70
38	A1	738	C	N3-C4-C5	-11.18	117.43	121.90
38	A1	388	G	C5-C6-O6	-11.18	121.89	128.60
38	A1	1502	C	N3-C4-N4	11.18	125.82	118.00
38	A1	1840	G	C5-C6-O6	-11.18	121.89	128.60
38	A1	2216	G	N7-C8-N9	11.18	118.69	113.10
11	B2	1006	C	N3-C4-N4	11.17	125.82	118.00
11	B2	1210	A	C4-C5-C6	11.17	122.59	117.00
38	A1	586	A	N7-C8-N9	11.17	119.39	113.80
38	A1	1711	C	O4'-C1'-N1	11.17	117.14	108.20
38	A1	2038	C	C5-C6-N1	11.17	126.59	121.00
38	A1	2494	A	N1-C6-N6	11.17	125.30	118.60
5	AS	12	PHE	CB-CG-CD2	11.17	128.62	120.80
11	B2	251	G	N3-C2-N2	11.17	127.72	119.90
38	A1	1075	G	N1-C6-O6	11.17	126.60	119.90
38	A1	1895	G	C5-C6-N1	-11.17	105.92	111.50
38	A1	2010	G	C5-C6-O6	-11.17	121.90	128.60
38	A1	1464	A	C5-C6-N1	-11.17	112.12	117.70
38	A1	1949	A	C5-C6-N6	-11.17	114.77	123.70
38	A1	823	G	O4'-C1'-N9	11.16	117.13	108.20
11	B2	30	C	C6-N1-C2	-11.16	115.83	120.30
11	B2	154	C	N3-C4-N4	11.16	125.81	118.00
38	A1	720	C	N3-C4-N4	11.16	125.82	118.00
38	A1	1572	C	P-O3'-C3'	11.16	133.10	119.70
11	B2	164	A	C4-C5-C6	11.16	122.58	117.00
11	B2	358	G	N1-C6-O6	11.16	126.60	119.90
11	B2	549	A	C8-N9-C4	-11.16	101.33	105.80
38	A1	1363	C	C5-C4-N4	-11.16	112.39	120.20
38	A1	1896	U	P-O3'-C3'	11.16	133.09	119.70
38	A1	1923	A	C5-C6-N6	-11.16	114.77	123.70
38	A1	2176	G	N1-C2-N3	-11.16	117.20	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
39	A3	104	C	O4'-C1'-N1	11.16	117.13	108.20
38	A1	2696	G	N1-C6-O6	11.16	126.60	119.90
42	Aa	71	ARG	NE-CZ-NH1	11.16	125.88	120.30
38	A1	2435	G	N1-C6-O6	11.16	126.59	119.90
38	A1	2235	G	N1-C6-O6	11.16	126.59	119.90
39	A3	106	G	C8-N9-C4	11.16	110.86	106.40
11	B2	1018	C	N3-C4-C5	-11.15	117.44	121.90
11	B2	1299	A	C5-C6-N6	-11.15	114.78	123.70
11	B2	276	A	N1-C6-N6	11.15	125.29	118.60
38	A1	1074	G	N1-C6-O6	11.15	126.59	119.90
38	A1	2681	A	C5-C6-N1	-11.15	112.12	117.70
38	A1	1868	C	N3-C4-N4	11.15	125.81	118.00
38	A1	2162	G	C8-N9-C4	-11.15	101.94	106.40
38	A1	331	G	N3-C2-N2	11.15	127.70	119.90
38	A1	1862	G	C5-C6-O6	-11.15	121.91	128.60
38	A1	2485	C	N3-C4-C5	-11.15	117.44	121.90
38	A1	862	G	C2-N3-C4	11.14	117.47	111.90
38	A1	381	G	C5-C6-O6	-11.14	121.92	128.60
38	A1	657	U	O4'-C1'-N1	11.14	117.11	108.20
38	A1	2040	A	N1-C6-N6	11.14	125.28	118.60
38	A1	977	C	O4'-C1'-N1	11.14	117.11	108.20
38	A1	1075	G	C5-C6-O6	-11.14	121.92	128.60
38	A1	1605	A	N1-C2-N3	11.14	134.87	129.30
38	A1	1180	G	N9-C4-C5	-11.14	100.94	105.40
63	AP	41	ARG	NE-CZ-NH1	11.14	125.87	120.30
38	A1	2687	A	N1-C6-N6	11.14	125.28	118.60
11	B2	1196	A	N7-C8-N9	-11.13	108.23	113.80
38	A1	2441	A	C5-C6-N1	-11.13	112.13	117.70
10	B1	77	A	C8-N9-C4	-11.13	101.35	105.80
11	B2	630	A	C5-C6-N6	-11.13	114.79	123.70
38	A1	364	A	N1-C6-N6	11.13	125.28	118.60
11	B2	576	C	O4'-C1'-N1	11.13	117.10	108.20
38	A1	614	G	C5-C6-N1	11.13	117.06	111.50
11	B2	1056	G	O4'-C1'-N9	11.13	117.10	108.20
38	A1	771	G	C5-C6-O6	-11.13	121.92	128.60
11	B2	342	G	C2-N3-C4	11.12	117.46	111.90
11	B2	909	U	O4'-C1'-N1	11.12	117.10	108.20
38	A1	321	C	O4'-C1'-N1	11.13	117.10	108.20
38	A1	2028	G	C4-C5-N7	-11.12	106.35	110.80
11	B2	620	G	N1-C6-O6	11.12	126.57	119.90
11	B2	961	U	O4'-C1'-N1	11.12	117.10	108.20
38	A1	372	A	C5-C6-N1	-11.12	112.14	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	701	G	C2-N3-C4	11.12	117.46	111.90
38	A1	954	A	N1-C6-N6	11.12	125.27	118.60
38	A1	1274	G	O4'-C1'-N9	11.12	117.10	108.20
38	A1	1966	C	N3-C4-N4	11.12	125.78	118.00
11	B2	399	A	C5-N7-C8	11.12	109.46	103.90
11	B2	326	C	C4-C5-C6	-11.12	111.84	117.40
27	BO	108	ARG	NE-CZ-NH1	11.11	125.86	120.30
38	A1	1935	C	C5-C4-N4	-11.12	112.42	120.20
11	B2	985	C	O4'-C1'-N1	11.11	117.09	108.20
38	A1	2391	G	N1-C6-O6	11.11	126.57	119.90
46	AD	111	ARG	NE-CZ-NH2	-11.11	114.74	120.30
11	B2	1084	U	O4'-C1'-N1	11.11	117.09	108.20
11	B2	732	G	N1-C6-O6	11.11	126.56	119.90
11	B2	1349	C	N3-C4-C5	-11.11	117.46	121.90
38	A1	2094	A	C5-C6-N1	-11.11	112.15	117.70
38	A1	2646	A	C5-C6-N6	-11.11	114.82	123.70
11	B2	611	A	N1-C6-N6	11.10	125.26	118.60
38	A1	947	C	N3-C4-N4	11.10	125.77	118.00
11	B2	488	A	O4'-C1'-C2'	-11.10	94.70	105.80
11	B2	827	G	C5-C6-O6	-11.10	121.94	128.60
38	A1	2797	C	C5-C6-N1	-11.10	115.45	121.00
38	A1	70	G	N1-C6-O6	11.10	126.56	119.90
38	A1	528	G	C5-C6-O6	-11.10	121.94	128.60
11	B2	528	G	P-O3'-C3'	11.10	133.01	119.70
11	B2	1199	A	N9-C4-C5	-11.10	101.36	105.80
38	A1	309	C	N3-C4-N4	11.10	125.77	118.00
38	A1	1384	C	C5-C4-N4	-11.10	112.43	120.20
38	A1	116	G	N1-C2-N3	-11.09	117.25	123.90
45	AC	9	ARG	NE-CZ-NH1	11.09	125.85	120.30
38	A1	464	C	O4'-C1'-N1	11.09	117.07	108.20
38	A1	361	G	O4'-C1'-N9	11.09	117.07	108.20
38	A1	1017	A	C2-N3-C4	-11.09	105.06	110.60
38	A1	1161	A	C8-N9-C4	-11.09	101.36	105.80
38	A1	1304	G	N7-C8-N9	11.09	118.64	113.10
38	A1	1379	A	C8-N9-C4	-11.09	101.36	105.80
38	A1	2656	A	N1-C6-N6	11.09	125.25	118.60
38	A1	353	C	N3-C4-C5	-11.09	117.47	121.90
38	A1	2863	A	C5-C6-N1	-11.09	112.16	117.70
38	A1	2726	G	N1-C6-O6	11.09	126.55	119.90
5	AS	131	ARG	NE-CZ-NH1	11.08	125.84	120.30
38	A1	1197	G	N1-C2-N3	-11.08	117.25	123.90
38	A1	2120	C	C6-N1-C2	-11.08	115.87	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	311	A	C5-C6-N6	-11.08	114.83	123.70
38	A1	856	A	C5-C6-N1	-11.08	112.16	117.70
38	A1	1623	C	N3-C4-N4	11.08	125.76	118.00
38	A1	2476	A	C6-C5-N7	-11.08	124.54	132.30
65	AV	31	PHE	CB-CG-CD2	11.08	128.56	120.80
11	B2	155	U	P-O3'-C3'	11.08	133.00	119.70
11	B2	405	G	C5-C6-O6	-11.08	121.95	128.60
11	B2	1211	A	C5-C6-N1	-11.08	112.16	117.70
38	A1	349	A	C5-C6-N6	-11.08	114.84	123.70
38	A1	770	G	N1-C6-O6	11.08	126.55	119.90
38	A1	800	G	C5-C6-O6	-11.08	121.95	128.60
38	A1	282	G	N1-C6-O6	11.08	126.55	119.90
38	A1	1548	A	C5-C6-N1	-11.08	112.16	117.70
11	B2	150	G	O4'-C1'-N9	11.07	117.06	108.20
38	A1	1961	G	N3-C2-N2	11.07	127.65	119.90
11	B2	1395	G	C5-C6-O6	-11.07	121.96	128.60
38	A1	1476	C	N3-C4-C5	-11.07	117.47	121.90
38	A1	2013	A	N1-C6-N6	11.07	125.24	118.60
38	A1	2534	C	N1-C2-O2	11.07	125.54	118.90
38	A1	2692	A	O4'-C1'-N9	11.07	117.06	108.20
4	AQ	61	TYR	CB-CG-CD2	11.07	127.64	121.00
11	B2	1023	C	N3-C4-C5	-11.07	117.47	121.90
11	B2	1090	C	C5-C6-N1	-11.07	115.47	121.00
38	A1	344	G	O4'-C1'-N9	11.07	117.06	108.20
38	A1	875	G	C5-C6-O6	-11.07	121.96	128.60
11	B2	222	G	C5-C6-O6	-11.07	121.96	128.60
11	B2	515	U	N1-C2-N3	-11.07	108.26	114.90
11	B2	683	A	N1-C6-N6	11.07	125.24	118.60
38	A1	1363	C	N3-C4-N4	11.07	125.75	118.00
11	B2	668	G	N1-C6-O6	11.06	126.54	119.90
11	B2	357	C	N3-C4-N4	11.06	125.74	118.00
11	B2	922	G	C5-C6-O6	-11.06	121.96	128.60
38	A1	319	A	C5-C6-N6	-11.06	114.85	123.70
38	A1	2804	C	C6-N1-C2	-11.06	115.88	120.30
38	A1	1100	G	N1-C6-O6	11.06	126.54	119.90
38	A1	2633	A	N1-C6-N6	11.06	125.24	118.60
10	B1	65	C	N3-C4-C5	-11.06	117.48	121.90
11	B2	616	G	N9-C4-C5	-11.06	100.98	105.40
38	A1	1746	C	N3-C4-C5	-11.06	117.48	121.90
11	B2	973	U	N3-C4-O4	11.06	127.14	119.40
38	A1	2254	U	C5-C6-N1	11.06	128.23	122.70
11	B2	1357	C	O4'-C1'-N1	11.06	117.05	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	BI	46	TYR	CB-CG-CD1	11.06	127.63	121.00
23	BK	104	ARG	NE-CZ-NH2	11.05	125.83	120.30
38	A1	641	G	P-O3'-C3'	11.05	132.97	119.70
38	A1	1425	U	C5-C4-O4	-11.05	119.27	125.90
38	A1	920	G	C5-C6-O6	-11.05	121.97	128.60
38	A1	2372	C	C2-N3-C4	11.05	125.43	119.90
11	B2	97	C	N3-C4-N4	11.05	125.74	118.00
11	B2	224	A	N1-C6-N6	11.05	125.23	118.60
11	B2	1060	G	O4'-C1'-N9	11.05	117.04	108.20
38	A1	1963	G	C8-N9-C4	11.05	110.82	106.40
38	A1	2445	G	N1-C6-O6	11.05	126.53	119.90
11	B2	1249	A	C4-C5-C6	11.05	122.52	117.00
46	AD	69	ARG	NE-CZ-NH1	11.05	125.82	120.30
11	B2	1448	A	O4'-C1'-N9	11.05	117.04	108.20
38	A1	2331	A	C5-C6-N1	-11.05	112.18	117.70
11	B2	726	A	N1-C6-N6	11.04	125.22	118.60
11	B2	1212	U	N3-C4-O4	11.04	127.13	119.40
38	A1	47	C	C6-N1-C2	-11.04	115.88	120.30
38	A1	1736	G	C4-C5-N7	-11.04	106.38	110.80
11	B2	1399	G	C8-N9-C4	-11.04	101.98	106.40
38	A1	1005	G	N3-C2-N2	11.04	127.63	119.90
38	A1	982	G	N1-C6-O6	11.04	126.52	119.90
38	A1	1175	C	N3-C4-C5	-11.04	117.48	121.90
38	A1	485	G	C5-C6-N1	-11.04	105.98	111.50
38	A1	673	A	N1-C6-N6	11.04	125.22	118.60
38	A1	2537	G	C5-C6-N1	-11.04	105.98	111.50
60	AM	80	ARG	NE-CZ-NH1	11.04	125.82	120.30
11	B2	1239	A	C5-C6-N6	-11.03	114.87	123.70
38	A1	526	C	C2-N3-C4	11.03	125.42	119.90
38	A1	2494	A	C4-C5-C6	11.03	122.52	117.00
38	A1	1816	C	O4'-C1'-N1	11.03	117.03	108.20
10	B1	19	G	O4'-C1'-N9	11.03	117.02	108.20
11	B2	558	C	C5-C6-N1	11.03	126.51	121.00
38	A1	207	A	C4-C5-N7	-11.03	105.19	110.70
38	A1	1837	A	C5-C6-N1	-11.03	112.19	117.70
11	B2	41	C	O4'-C1'-N1	11.03	117.02	108.20
38	A1	1334	G	C4-C5-C6	11.03	125.42	118.80
38	A1	2334	G	C6-C5-N7	-11.03	123.78	130.40
11	B2	812	U	C5-C4-O4	11.02	132.51	125.90
11	B2	867	A	O4'-C1'-N9	11.02	117.02	108.20
38	A1	297	G	N1-C2-N3	-11.02	117.29	123.90
38	A1	2123	G	C5-C6-O6	-11.02	121.99	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1206	G	O4'-C1'-N9	11.02	117.02	108.20
38	A1	2680	A	C4-C5-C6	11.02	122.51	117.00
39	A3	30	G	C8-N9-C4	-11.02	101.99	106.40
38	A1	1079	A	O4'-C1'-N9	11.02	117.02	108.20
38	A1	2063	U	C1'-O4'-C4'	-11.02	101.08	109.90
11	B2	433	U	N3-C2-O2	-11.02	114.49	122.20
11	B2	1100	G	N1-C6-O6	11.02	126.51	119.90
38	A1	2892	A	N1-C6-N6	11.02	125.21	118.60
11	B2	795	G	N1-C6-O6	11.02	126.51	119.90
11	B2	514	U	O4'-C1'-N1	11.01	117.01	108.20
38	A1	479	G	C5-C6-O6	-11.01	121.99	128.60
38	A1	950	G	N1-C6-O6	11.01	126.51	119.90
38	A1	1798	A	C5-C6-N1	-11.01	112.19	117.70
38	A1	2286	U	N1-C2-N3	-11.01	108.29	114.90
38	A1	2821	G	O4'-C1'-N9	11.01	117.01	108.20
11	B2	532	C	C6-N1-C2	-11.01	115.90	120.30
11	B2	1248	A	C4-C5-C6	11.01	122.50	117.00
38	A1	1019	G	C5-C6-O6	-11.01	121.99	128.60
38	A1	1911	G	C5-N7-C8	11.01	109.81	104.30
38	A1	1238	G	C6-N1-C2	-11.01	118.50	125.10
11	B2	951	G	O4'-C1'-N9	11.01	117.00	108.20
38	A1	975	C	C2-N3-C4	11.01	125.40	119.90
38	A1	3027	C	N3-C4-N4	11.01	125.71	118.00
11	B2	1490	C	N3-C4-C5	-11.00	117.50	121.90
11	B2	567	A	N1-C6-N6	11.00	125.20	118.60
38	A1	407	A	O4'-C1'-N9	11.00	117.00	108.20
38	A1	2046	C	C4-C5-C6	11.00	122.90	117.40
38	A1	2672	A	N1-C2-N3	11.00	134.80	129.30
38	A1	2858	C	C5-C6-N1	11.00	126.50	121.00
11	B2	325	A	N1-C2-N3	11.00	134.80	129.30
11	B2	1156	A	N1-C6-N6	11.00	125.20	118.60
38	A1	616	C	O4'-C1'-N1	11.00	117.00	108.20
38	A1	1123	A	N1-C6-N6	11.00	125.20	118.60
38	A1	1540	A	N1-C6-N6	11.00	125.20	118.60
38	A1	2646	A	N1-C2-N3	11.00	134.80	129.30
38	A1	2712	G	C8-N9-C4	-11.00	102.00	106.40
11	B2	452	G	C5-C6-O6	-10.99	122.00	128.60
11	B2	1443	G	N1-C6-O6	10.99	126.50	119.90
38	A1	1584	G	N1-C6-O6	10.99	126.50	119.90
11	B2	581	G	C5-C6-O6	-10.99	122.00	128.60
38	A1	899	A	P-O3'-C3'	10.99	132.89	119.70
38	A1	1596	G	C5-C6-O6	-10.99	122.00	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	909	A	C4-C5-C6	10.99	122.49	117.00
38	A1	2591	A	N1-C6-N6	10.99	125.19	118.60
11	B2	549	A	N1-C6-N6	10.99	125.19	118.60
38	A1	1654	G	C5-C6-O6	-10.99	122.01	128.60
38	A1	1057	C	C6-N1-C2	-10.98	115.91	120.30
39	A3	45	C	O4'-C1'-N1	10.98	116.99	108.20
11	B2	814	C	N3-C4-C5	-10.98	117.51	121.90
38	A1	1613	A	O4'-C1'-N9	10.98	116.99	108.20
11	B2	285	C	O4'-C1'-N1	10.98	116.98	108.20
38	A1	2636	C	N3-C4-C5	-10.98	117.51	121.90
38	A1	2983	G	O4'-C1'-N9	10.98	116.98	108.20
38	A1	701	G	N1-C6-O6	10.98	126.49	119.90
38	A1	929	G	N1-C6-O6	10.98	126.49	119.90
38	A1	1091	G	C6-C5-N7	-10.98	123.81	130.40
38	A1	2037	A	C5-C6-N1	-10.97	112.21	117.70
39	A3	88	A	N9-C4-C5	10.97	110.19	105.80
38	A1	177	G	C5-C6-N1	-10.97	106.01	111.50
38	A1	2285	G	C5-C6-N1	-10.97	106.01	111.50
60	AM	106	ARG	NE-CZ-NH1	10.97	125.79	120.30
38	A1	1429	A	N7-C8-N9	-10.97	108.31	113.80
38	A1	1894	A	C4-C5-C6	10.97	122.49	117.00
38	A1	1413	A	N1-C6-N6	10.97	125.18	118.60
38	A1	1863	G	N1-C6-O6	10.97	126.48	119.90
11	B2	687	G	C5-C6-O6	-10.96	122.02	128.60
10	B1	7	G	P-O3'-C3'	10.96	132.86	119.70
11	B2	236	C	N3-C4-C5	-10.96	117.52	121.90
11	B2	1022	U	O4'-C1'-N1	10.96	116.97	108.20
38	A1	2889	A	C5-C6-N1	-10.96	112.22	117.70
38	A1	2591	A	C4-C5-N7	-10.96	105.22	110.70
11	B2	175	G	O4'-C1'-N9	10.96	116.97	108.20
11	B2	177	A	O4'-C1'-N9	10.96	116.97	108.20
11	B2	966	G	C5-N7-C8	-10.96	98.82	104.30
38	A1	1354	G	N1-C6-O6	10.96	126.47	119.90
38	A1	1609	G	O4'-C1'-N9	10.95	116.96	108.20
38	A1	2355	G	N7-C8-N9	10.95	118.58	113.10
10	B1	66	C	O4'-C1'-N1	10.95	116.96	108.20
38	A1	1088	G	O4'-C1'-N9	10.95	116.96	108.20
38	A1	1675	C	O4'-C1'-N1	10.95	116.96	108.20
38	A1	2851	A	N1-C6-N6	10.95	125.17	118.60
11	B2	1046	G	N1-C6-O6	10.95	126.47	119.90
21	BI	124	ARG	NE-CZ-NH1	10.95	125.78	120.30
34	BV	59	TYR	CB-CG-CD2	-10.95	114.43	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	89	C	N3-C4-C5	-10.95	117.52	121.90
38	A1	333	A	C4-C5-C6	10.94	122.47	117.00
38	A1	745	C	C6-N1-C2	-10.94	115.92	120.30
38	A1	1308	G	P-O3'-C3'	10.94	132.83	119.70
38	A1	2274	C	C6-N1-C2	-10.94	115.92	120.30
38	A1	1464	A	C5-N7-C8	10.94	109.37	103.90
38	A1	1511	C	N3-C4-C5	-10.94	117.52	121.90
11	B2	1230	G	C5-C6-N1	-10.94	106.03	111.50
38	A1	683	C	O4'-C1'-N1	10.94	116.95	108.20
11	B2	334	G	C5-C6-N1	-10.94	106.03	111.50
38	A1	2774	C	O4'-C1'-N1	10.94	116.95	108.20
11	B2	193	G	N1-C6-O6	10.94	126.46	119.90
11	B2	1111	G	N3-C2-N2	10.94	127.55	119.90
38	A1	136	U	O4'-C1'-N1	10.94	116.95	108.20
38	A1	663	A	C5-C6-N6	-10.94	114.95	123.70
38	A1	1629	G	N1-C6-O6	10.94	126.46	119.90
38	A1	2370	C	N3-C4-N4	10.94	125.66	118.00
11	B2	553	C	C4-C5-C6	10.93	122.87	117.40
39	A3	25	A	C5-C6-N1	-10.93	112.23	117.70
39	A3	116	C	O4'-C1'-N1	10.93	116.94	108.20
11	B2	32	A	C5-C6-N1	-10.93	112.23	117.70
11	B2	196	G	N1-C6-O6	10.93	126.46	119.90
11	B2	740	G	N1-C6-O6	10.93	126.46	119.90
38	A1	899	A	C5-C6-N6	-10.93	114.96	123.70
38	A1	1152	C	O4'-C1'-N1	10.93	116.94	108.20
39	A3	105	G	N1-C2-N3	-10.93	117.34	123.90
38	A1	1185	A	N1-C6-N6	10.93	125.16	118.60
38	A1	134	C	O4'-C1'-N1	10.93	116.94	108.20
11	B2	1058	G	N1-C6-O6	10.93	126.45	119.90
15	BC	111	ARG	NE-CZ-NH1	10.93	125.76	120.30
38	A1	2480	G	C5-C6-O6	-10.93	122.04	128.60
39	A3	42	A	P-O3'-C3'	10.92	132.81	119.70
38	A1	2389	C	C2-N3-C4	10.92	125.36	119.90
38	A1	3020	G	C5-C6-O6	-10.92	122.05	128.60
38	A1	1612	G	P-O3'-C3'	10.92	132.81	119.70
38	A1	1862	G	C2-N3-C4	10.92	117.36	111.90
38	A1	2333	G	N1-C6-O6	10.92	126.45	119.90
11	B2	480	G	P-O3'-C3'	-10.92	106.60	119.70
38	A1	2158	G	N1-C6-O6	10.92	126.45	119.90
38	A1	2704	A	C5-C6-N1	-10.92	112.24	117.70
38	A1	180	A	N1-C6-N6	10.91	125.15	118.60
38	A1	981	A	O4'-C1'-N9	10.91	116.93	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	480	A	P-O3'-C3'	10.91	132.79	119.70
38	A1	1134	A	N1-C6-N6	10.91	125.15	118.60
38	A1	1200	A	N1-C6-N6	10.91	125.15	118.60
38	A1	2270	G	C5-C6-O6	-10.91	122.05	128.60
38	A1	2339	C	N3-C4-N4	10.91	125.64	118.00
38	A1	2589	C	O4'-C1'-N1	10.91	116.93	108.20
38	A1	354	G	C4-C5-C6	10.91	125.35	118.80
38	A1	1071	A	C5-C6-N6	-10.91	114.97	123.70
38	A1	1919	A	P-O3'-C3'	-10.91	106.61	119.70
38	A1	2484	C	N3-C4-C5	-10.91	117.53	121.90
11	B2	391	G	N1-C6-O6	10.91	126.44	119.90
38	A1	2032	G	C6-C5-N7	-10.91	123.86	130.40
11	B2	187	C	N3-C4-C5	-10.90	117.54	121.90
38	A1	1100	G	C5-C6-O6	-10.90	122.06	128.60
38	A1	2301	C	C5-C4-N4	10.90	127.83	120.20
64	AR	21	ARG	NE-CZ-NH1	10.90	125.75	120.30
11	B2	183	A	C5-C6-N6	-10.90	114.98	123.70
38	A1	2479	C	C6-N1-C2	-10.90	115.94	120.30
11	B2	1195	U	O4'-C1'-N1	10.90	116.92	108.20
38	A1	352	G	N9-C4-C5	-10.90	101.04	105.40
38	A1	703	G	C6-C5-N7	-10.90	123.86	130.40
61	AN	136	ARG	NE-CZ-NH1	10.90	125.75	120.30
11	B2	456	U	O4'-C1'-N1	10.89	116.91	108.20
11	B2	1469	G	O4'-C1'-N9	10.89	116.92	108.20
38	A1	2178	A	C4-C5-C6	10.89	122.45	117.00
38	A1	2945	A	N1-C6-N6	10.89	125.14	118.60
38	A1	1378	G	N1-C6-O6	10.89	126.44	119.90
11	B2	1035	C	O4'-C1'-N1	10.89	116.91	108.20
11	B2	1124	G	O4'-C1'-N9	10.89	116.91	108.20
11	B2	1235	A	N7-C8-N9	10.89	119.25	113.80
38	A1	2973	A	C5-C6-N1	-10.89	112.25	117.70
11	B2	408	C	O4'-C1'-N1	10.89	116.91	108.20
11	B2	620	G	C5-N7-C8	10.89	109.74	104.30
11	B2	1480	G	N3-C2-N2	10.89	127.52	119.90
15	BC	73	PHE	CB-CG-CD2	10.89	128.42	120.80
38	A1	234	G	N1-C6-O6	10.89	126.43	119.90
38	A1	1669	A	N1-C6-N6	10.89	125.13	118.60
38	A1	2639	G	N1-C2-N3	-10.89	117.37	123.90
38	A1	2822	G	N1-C6-O6	10.89	126.43	119.90
38	A1	2955	G	C5-C6-O6	-10.89	122.07	128.60
11	B2	250	G	C5-C6-O6	-10.89	122.07	128.60
11	B2	305	C	O4'-C1'-N1	10.89	116.91	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1015	C	O4'-C1'-N1	10.89	116.91	108.20
38	A1	454	C	N3-C4-N4	10.88	125.62	118.00
38	A1	794	G	C5-C6-O6	-10.88	122.07	128.60
38	A1	1480	G	C5-C6-O6	-10.88	122.07	128.60
38	A1	767	G	N3-C4-C5	-10.88	123.16	128.60
38	A1	1619	C	C6-N1-C2	-10.88	115.95	120.30
38	A1	2221	A	N1-C6-N6	10.88	125.13	118.60
11	B2	415	C	N3-C4-N4	10.88	125.61	118.00
11	B2	583	G	O4'-C1'-N9	10.88	116.90	108.20
38	A1	434	G	C5-C6-O6	-10.88	122.07	128.60
38	A1	1889	G	C6-C5-N7	-10.88	123.87	130.40
38	A1	799	C	N3-C4-N4	10.87	125.61	118.00
38	A1	2175	G	C8-N9-C4	-10.88	102.05	106.40
38	A1	2230	G	N1-C6-O6	10.88	126.42	119.90
12	AG	79	TYR	CB-CG-CD1	-10.87	114.47	121.00
38	A1	622	A	N1-C6-N6	10.87	125.12	118.60
38	A1	2194	A	C4-C5-C6	10.87	122.44	117.00
38	A1	2505	A	C4-C5-C6	10.87	122.44	117.00
38	A1	2775	G	N1-C6-O6	10.87	126.42	119.90
11	B2	1358	A	C5-C6-N1	-10.87	112.27	117.70
11	B2	251	G	N1-C6-O6	10.87	126.42	119.90
38	A1	867	C	N3-C4-N4	10.87	125.61	118.00
38	A1	1107	G	C8-N9-C4	-10.87	102.05	106.40
39	A3	34	C	N3-C4-C5	-10.87	117.55	121.90
38	A1	2217	C	O4'-C1'-N1	10.87	116.89	108.20
38	A1	2401	A	P-O3'-C3'	10.87	132.74	119.70
38	A1	2975	A	C2-N3-C4	-10.87	105.17	110.60
59	AL	42	ARG	NE-CZ-NH2	-10.87	114.87	120.30
11	B2	1138	G	C8-N9-C4	-10.86	102.06	106.40
11	B2	1313	G	N1-C6-O6	10.86	126.42	119.90
39	A3	2	G	N1-C2-N3	-10.86	117.38	123.90
21	BI	86	PHE	CB-CG-CD1	10.86	128.40	120.80
38	A1	2784	A	C4-C5-C6	10.86	122.43	117.00
38	A1	1498	C	O4'-C1'-N1	10.86	116.89	108.20
38	A1	2715	A	N1-C2-N3	10.86	134.73	129.30
38	A1	2993	G	C4-C5-N7	10.86	115.14	110.80
38	A1	249	G	N1-C6-O6	10.86	126.41	119.90
38	A1	950	G	N3-C4-N9	-10.86	119.49	126.00
11	B2	1251	C	N3-C4-N4	10.85	125.60	118.00
38	A1	621	G	C5-C6-O6	-10.85	122.09	128.60
38	A1	434	G	O4'-C1'-N9	10.85	116.88	108.20
38	A1	1447	G	C5-C6-O6	-10.85	122.09	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1834	C	N3-C4-C5	-10.85	117.56	121.90
38	A1	2207	C	O4'-C1'-N1	10.85	116.88	108.20
11	B2	57	G	C5-C6-O6	-10.85	122.09	128.60
11	B2	381	C	N3-C4-N4	10.85	125.59	118.00
11	B2	890	C	O4'-C1'-N1	10.85	116.88	108.20
11	B2	988	A	C5-C6-N6	-10.85	115.02	123.70
11	B2	1272	G	C5-C6-O6	-10.85	122.09	128.60
38	A1	769	G	N1-C2-N3	-10.85	117.39	123.90
38	A1	952	C	C5-C6-N1	10.85	126.42	121.00
38	A1	1111	G	C2-N3-C4	-10.85	106.48	111.90
38	A1	2310	G	C5-C6-N1	10.85	116.92	111.50
38	A1	2336	G	O4'-C1'-N9	10.85	116.88	108.20
38	A1	2392	A	O4'-C1'-N9	10.85	116.88	108.20
11	B2	1409	G	C4-C5-N7	10.84	115.14	110.80
11	B2	1495	U	C3'-C2'-C1'	10.84	110.17	101.50
11	B2	140	C	O4'-C1'-N1	10.84	116.87	108.20
11	B2	1076	G	C5-C6-N1	-10.84	106.08	111.50
38	A1	2794	G	O4'-C1'-N9	10.84	116.87	108.20
11	B2	347	G	C6-C5-N7	-10.84	123.90	130.40
11	B2	581	G	N1-C6-O6	10.84	126.40	119.90
11	B2	987	G	C8-N9-C4	-10.84	102.07	106.40
38	A1	582	A	N1-C6-N6	10.84	125.10	118.60
38	A1	1423	G	N1-C6-O6	10.84	126.40	119.90
38	A1	2098	C	N3-C4-C5	-10.84	117.57	121.90
38	A1	2214	U	C5-C6-N1	10.84	128.12	122.70
38	A1	2408	G	C8-N9-C4	-10.84	102.06	106.40
43	AB	25	ARG	NE-CZ-NH1	10.84	125.72	120.30
9	AX	291	ARG	NE-CZ-NH1	-10.83	114.88	120.30
38	A1	361	G	C5-N7-C8	10.83	109.72	104.30
38	A1	701	G	N3-C4-C5	-10.83	123.18	128.60
38	A1	2275	G	C5-C6-N1	-10.83	106.08	111.50
38	A1	10	C	N3-C4-C5	-10.83	117.57	121.90
38	A1	2552	C	N3-C4-N4	10.83	125.58	118.00
38	A1	366	G	N1-C6-O6	10.83	126.40	119.90
38	A1	794	G	N1-C6-O6	10.83	126.40	119.90
39	A3	102	G	C8-N9-C4	-10.83	102.07	106.40
11	B2	1107	C	N3-C4-N4	10.83	125.58	118.00
38	A1	989	G	N1-C6-O6	10.83	126.40	119.90
38	A1	1819	G	C1'-O4'-C4'	-10.83	101.24	109.90
38	A1	1901	A	N9-C4-C5	10.83	110.13	105.80
10	B1	38	G	C8-N9-C4	10.82	110.73	106.40
38	A1	2672	A	C5-C6-N1	-10.82	112.29	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	124	C	N3-C4-C5	-10.82	117.57	121.90
38	A1	1077	G	N1-C6-O6	10.82	126.39	119.90
11	B2	400	G	N9-C4-C5	10.82	109.73	105.40
11	B2	653	C	O4'-C1'-N1	10.82	116.86	108.20
38	A1	684	G	C8-N9-C4	-10.82	102.07	106.40
38	A1	690	G	C4-C5-N7	-10.82	106.47	110.80
38	A1	1343	C	N3-C4-C5	-10.82	117.57	121.90
38	A1	2280	G	P-O3'-C3'	10.82	132.69	119.70
38	A1	2976	G	O4'-C1'-N9	10.82	116.86	108.20
38	A1	2853	A	C5-C6-N6	-10.82	115.04	123.70
38	A1	2988	A	N1-C6-N6	10.82	125.09	118.60
38	A1	1141	C	N3-C4-N4	10.82	125.57	118.00
11	B2	84	C	O4'-C1'-N1	10.82	116.85	108.20
11	B2	1457	A	N9-C4-C5	-10.82	101.47	105.80
38	A1	2722	G	N1-C6-O6	10.82	126.39	119.90
11	B2	1035	C	C2-N3-C4	10.81	125.31	119.90
38	A1	615	A	C5-C6-N6	-10.81	115.05	123.70
38	A1	994	G	C5-C6-O6	-10.81	122.11	128.60
41	AA	154	ARG	NE-CZ-NH1	-10.81	114.89	120.30
38	A1	1786	G	C8-N9-C4	-10.81	102.08	106.40
11	B2	874	G	N1-C6-O6	10.81	126.39	119.90
38	A1	166	G	O4'-C1'-N9	10.81	116.85	108.20
38	A1	729	A	C6-C5-N7	-10.81	124.73	132.30
11	B2	1100	G	C8-N9-C4	-10.81	102.08	106.40
38	A1	954	A	C4-C5-C6	10.81	122.40	117.00
38	A1	3017	U	O4'-C1'-N1	10.81	116.85	108.20
11	B2	372	G	N1-C6-O6	10.81	126.38	119.90
38	A1	2056	A	O4'-C1'-N9	10.81	116.84	108.20
38	A1	2368	G	C4-C5-C6	10.80	125.28	118.80
11	B2	285	C	C5-C4-N4	-10.80	112.64	120.20
38	A1	809	A	N1-C6-N6	10.80	125.08	118.60
38	A1	353	C	N3-C4-N4	10.80	125.56	118.00
38	A1	776	G	C4-C5-N7	-10.80	106.48	110.80
38	A1	979	G	O4'-C1'-N9	10.80	116.84	108.20
38	A1	2391	G	C5-C6-O6	-10.80	122.12	128.60
11	B2	331	C	O4'-C1'-N1	10.80	116.84	108.20
11	B2	1321	U	C5-C4-O4	-10.79	119.42	125.90
38	A1	587	A	N7-C8-N9	-10.79	108.40	113.80
38	A1	699	A	C5-N7-C8	10.79	109.30	103.90
38	A1	1035	G	P-O3'-C3'	10.79	132.65	119.70
38	A1	2469	G	C5-C6-O6	-10.80	122.12	128.60
38	A1	1848	A	C5-C6-N6	-10.79	115.06	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2762	G	N1-C6-O6	10.79	126.38	119.90
11	B2	262	G	N1-C6-O6	10.79	126.38	119.90
11	B2	550	G	N7-C8-N9	-10.79	107.70	113.10
38	A1	1179	G	N1-C6-O6	10.79	126.38	119.90
38	A1	1714	G	C5-C6-O6	-10.79	122.12	128.60
38	A1	1725	A	N1-C6-N6	10.79	125.07	118.60
38	A1	2266	C	N3-C4-C5	-10.79	117.58	121.90
11	B2	1150	G	N1-C6-O6	10.79	126.37	119.90
11	B2	1416	C	O4'-C1'-N1	10.79	116.83	108.20
11	B2	542	G	C5-C6-N1	-10.79	106.11	111.50
38	A1	2872	G	N7-C8-N9	-10.79	107.71	113.10
60	AM	117	TYR	CB-CG-CD2	-10.79	114.53	121.00
11	B2	402	G	N1-C6-O6	10.79	126.37	119.90
38	A1	562	G	O4'-C1'-N9	10.79	116.83	108.20
38	A1	573	G	N3-C2-N2	10.79	127.45	119.90
38	A1	3038	A	C2-N3-C4	-10.79	105.21	110.60
11	B2	975	A	N1-C2-N3	-10.78	123.91	129.30
11	B2	1479	C	N3-C4-N4	10.78	125.55	118.00
38	A1	545	G	P-O3'-C3'	10.78	132.64	119.70
38	A1	1397	U	O4'-C1'-N1	10.78	116.83	108.20
11	B2	168	G	O4'-C1'-N9	10.78	116.82	108.20
11	B2	254	G	O4'-C1'-N9	10.78	116.82	108.20
11	B2	982	U	O4'-C1'-N1	10.78	116.82	108.20
38	A1	307	C	C5-C6-N1	10.78	126.39	121.00
38	A1	2251	G	C8-N9-C4	10.78	110.71	106.40
38	A1	2536	A	N1-C6-N6	10.78	125.07	118.60
38	A1	2602	G	N9-C4-C5	-10.78	101.09	105.40
11	B2	54	C	C4-C5-C6	10.78	122.79	117.40
11	B2	1236	G	C5-C6-O6	-10.78	122.13	128.60
38	A1	1083	G	N3-C4-C5	-10.78	123.21	128.60
38	A1	2860	G	C5-C6-O6	-10.78	122.13	128.60
11	B2	1465	C	C6-N1-C2	-10.77	115.99	120.30
38	A1	60	G	N1-C6-O6	10.77	126.36	119.90
38	A1	559	G	C5-C6-O6	-10.77	122.14	128.60
38	A1	585	G	C5-C6-O6	-10.77	122.14	128.60
38	A1	2568	A	N9-C4-C5	10.77	110.11	105.80
38	A1	2660	G	O4'-C1'-N9	10.77	116.82	108.20
11	B2	30	C	C5-C6-N1	10.77	126.39	121.00
38	A1	2411	C	O4'-C1'-N1	10.77	116.82	108.20
11	B2	1008	U	O4'-C1'-N1	10.77	116.81	108.20
11	B2	1123	G	C5-C6-O6	-10.77	122.14	128.60
39	A3	71	G	N1-C2-N3	-10.77	117.44	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	433	C	N3-C4-C5	-10.77	117.59	121.90
38	A1	930	G	C5-C6-N1	-10.77	106.12	111.50
38	A1	1523	A	C5-C6-N6	-10.77	115.09	123.70
38	A1	1829	C	C6-N1-C2	-10.77	115.99	120.30
11	B2	93	A	N1-C6-N6	10.76	125.06	118.60
38	A1	12	C	C6-N1-C2	-10.76	116.00	120.30
38	A1	214	C	O4'-C1'-N1	10.76	116.81	108.20
38	A1	2902	G	C5-C6-N1	-10.76	106.12	111.50
11	B2	1169	C	N3-C4-C5	-10.76	117.60	121.90
38	A1	169	G	O4'-C1'-N9	10.76	116.81	108.20
38	A1	488	A	C5-C6-N1	-10.76	112.32	117.70
38	A1	536	G	O4'-C1'-N9	10.76	116.81	108.20
38	A1	708	A	C5-C6-N6	-10.76	115.09	123.70
38	A1	1057	C	N3-C4-N4	10.76	125.53	118.00
38	A1	2757	G	N1-C6-O6	10.76	126.36	119.90
11	B2	1292	A	C6-N1-C2	10.76	125.05	118.60
38	A1	841	U	O4'-C1'-N1	10.76	116.81	108.20
38	A1	2342	C	N3-C4-N4	10.76	125.53	118.00
38	A1	2469	G	N1-C6-O6	10.76	126.35	119.90
38	A1	854	G	N1-C2-N3	-10.76	117.45	123.90
38	A1	1788	G	C5-N7-C8	-10.76	98.92	104.30
11	B2	1001	A	P-O3'-C3'	10.75	132.60	119.70
38	A1	1705	C	O4'-C1'-N1	10.75	116.80	108.20
38	A1	2130	C	O4'-C1'-N1	10.75	116.80	108.20
38	A1	2563	A	N1-C2-N3	10.75	134.68	129.30
38	A1	1386	G	N1-C6-O6	10.75	126.35	119.90
38	A1	2592	U	O4'-C1'-N1	10.75	116.80	108.20
11	B2	1053	A	C5-C6-N6	-10.75	115.10	123.70
38	A1	19	G	N9-C4-C5	10.75	109.70	105.40
38	A1	2388	U	O4'-C1'-N1	10.75	116.80	108.20
11	B2	526	A	C5-C6-N1	-10.74	112.33	117.70
38	A1	68	G	C5-C6-O6	-10.74	122.15	128.60
38	A1	843	C	N3-C4-N4	10.74	125.52	118.00
38	A1	1529	A	O4'-C1'-N9	10.74	116.79	108.20
38	A1	1261	C	C5-C4-N4	-10.74	112.68	120.20
38	A1	1640	G	N1-C6-O6	10.74	126.34	119.90
11	B2	351	C	N3-C4-C5	-10.74	117.61	121.90
11	B2	1414	G	N9-C4-C5	-10.74	101.11	105.40
38	A1	1809	G	N1-C6-O6	10.74	126.34	119.90
11	B2	1273	G	N1-C6-O6	10.74	126.34	119.90
11	B2	1305	U	C6-N1-C2	-10.74	114.56	121.00
11	B2	1418	G	N1-C6-O6	10.74	126.34	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1901	A	N1-C6-N6	10.74	125.04	118.60
38	A1	2160	C	C6-N1-C2	-10.74	116.00	120.30
11	B2	133	G	C5-C6-O6	-10.73	122.16	128.60
38	A1	443	C	N3-C4-C5	-10.73	117.61	121.90
11	B2	666	G	C4-C5-N7	10.73	115.09	110.80
38	A1	104	C	C2-N3-C4	10.73	125.27	119.90
38	A1	2706	C	N3-C4-C5	-10.73	117.61	121.90
38	A1	1416	G	C5-C6-O6	-10.73	122.16	128.60
11	B2	1	A	C4-C5-C6	10.73	122.36	117.00
38	A1	2947	G	C4-C5-N7	10.73	115.09	110.80
11	B2	483	G	O4'-C1'-N9	10.73	116.78	108.20
11	B2	1125	C	C6-N1-C2	-10.73	116.01	120.30
38	A1	507	G	C5-C6-N1	-10.73	106.14	111.50
11	B2	1402	C	C2-N3-C4	10.73	125.26	119.90
38	A1	1808	G	N1-C6-O6	10.73	126.34	119.90
39	A3	112	C	N3-C4-C5	-10.73	117.61	121.90
11	B2	969	A	C4-C5-C6	10.72	122.36	117.00
11	B2	1384	G	O4'-C1'-N9	10.72	116.78	108.20
38	A1	1291	C	O4'-C1'-N1	10.72	116.78	108.20
38	A1	2843	C	O4'-C1'-N1	10.72	116.78	108.20
38	A1	555	G	C5-C6-N1	-10.72	106.14	111.50
38	A1	607	C	N3-C4-N4	10.72	125.51	118.00
38	A1	1026	A	C5-C6-N1	-10.72	112.34	117.70
38	A1	1407	A	C5-C6-N1	-10.72	112.34	117.70
38	A1	2516	G	C4-C5-N7	-10.72	106.51	110.80
11	B2	1185	A	C5-N7-C8	10.72	109.26	103.90
11	B2	192	G	C4-C5-N7	10.72	115.09	110.80
11	B2	559	G	C5-C6-O6	-10.72	122.17	128.60
11	B2	1428	G	O4'-C1'-N9	10.72	116.78	108.20
38	A1	1109	G	C5-C6-O6	-10.72	122.17	128.60
11	B2	727	G	N1-C2-N3	-10.72	117.47	123.90
11	B2	995	G	O4'-C1'-N9	10.72	116.78	108.20
26	BN	36	ARG	NE-CZ-NH2	-10.72	114.94	120.30
26	BN	123	ARG	NE-CZ-NH1	10.72	125.66	120.30
27	BO	76	ARG	NE-CZ-NH1	10.72	125.66	120.30
38	A1	556	G	O4'-C1'-N9	10.72	116.78	108.20
11	B2	1264	G	N1-C6-O6	10.71	126.33	119.90
11	B2	1458	A	C4-C5-C6	10.72	122.36	117.00
38	A1	1369	G	C5-C6-O6	-10.71	122.17	128.60
38	A1	2992	G	N1-C2-N3	-10.71	117.47	123.90
11	B2	112	G	N3-C2-N2	10.71	127.40	119.90
11	B2	455	C	O4'-C1'-N1	10.71	116.77	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	668	G	N3-C2-N2	10.71	127.40	119.90
38	A1	1285	C	N3-C4-C5	-10.71	117.62	121.90
38	A1	2276	G	N1-C6-O6	10.71	126.33	119.90
38	A1	1916	U	O4'-C1'-N1	10.71	116.77	108.20
38	A1	1971	C	C5-C4-N4	-10.71	112.70	120.20
10	B1	15	G	N1-C2-N3	-10.70	117.48	123.90
11	B2	1054	A	C5-C6-N6	-10.70	115.14	123.70
38	A1	252	A	C8-N9-C4	-10.70	101.52	105.80
38	A1	2538	G	C5-C6-N1	-10.71	106.15	111.50
38	A1	2650	G	C5-C6-N1	-10.70	106.15	111.50
38	A1	450	G	C6-C5-N7	-10.70	123.98	130.40
11	B2	379	A	C5-C6-N1	-10.70	112.35	117.70
38	A1	1298	C	N3-C4-N4	10.70	125.49	118.00
38	A1	1401	G	N3-C2-N2	10.70	127.39	119.90
38	A1	2412	A	C5-C6-N1	-10.70	112.35	117.70
11	B2	189	C	C6-N1-C2	10.69	124.58	120.30
38	A1	80	G	C5-C6-O6	-10.69	122.18	128.60
38	A1	572	U	O4'-C1'-N1	10.70	116.76	108.20
38	A1	788	A	C4-C5-C6	10.69	122.35	117.00
38	A1	2421	A	C5-C6-N1	-10.69	112.35	117.70
38	A1	1247	U	O4'-C1'-N1	10.69	116.75	108.20
11	B2	928	A	N1-C2-N3	10.69	134.65	129.30
38	A1	730	C	O4'-C1'-N1	10.69	116.75	108.20
38	A1	2952	C	C4-C5-C6	10.69	122.75	117.40
38	A1	1835	A	C4-C5-C6	10.69	122.34	117.00
11	B2	1098	G	O4'-C1'-N9	10.69	116.75	108.20
11	B2	1248	A	C6-N1-C2	10.69	125.01	118.60
38	A1	2902	G	O4'-C1'-N9	10.69	116.75	108.20
11	B2	1375	C	O4'-C1'-N1	10.69	116.75	108.20
11	B2	1026	A	C4-C5-N7	-10.68	105.36	110.70
38	A1	1418	A	C5-C6-N6	-10.68	115.15	123.70
11	B2	863	U	O4'-C1'-N1	10.68	116.75	108.20
1	A7	20	ARG	NE-CZ-NH2	-10.68	114.96	120.30
11	B2	74	U	N3-C4-C5	-10.68	108.19	114.60
11	B2	441	U	O4'-C1'-N1	10.68	116.75	108.20
38	A1	232	U	C5-C4-O4	-10.68	119.49	125.90
38	A1	1757	G	N1-C6-O6	10.68	126.31	119.90
38	A1	2109	C	C4-C5-C6	10.68	122.74	117.40
38	A1	146	U	O4'-C1'-N1	10.68	116.74	108.20
38	A1	1789	A	C4-C5-C6	10.68	122.34	117.00
38	A1	2481	G	N1-C2-N3	-10.68	117.50	123.90
38	A1	2623	G	C5-C6-O6	-10.68	122.19	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
39	A3	16	G	C5-C6-O6	-10.68	122.19	128.60
38	A1	2089	C	N3-C4-N4	10.67	125.47	118.00
39	A3	75	G	N3-C2-N2	10.67	127.37	119.90
11	B2	1215	G	C2-N3-C4	10.67	117.23	111.90
38	A1	692	C	C6-N1-C2	-10.67	116.03	120.30
11	B2	671	C	C6-N1-C2	-10.67	116.03	120.30
38	A1	875	G	C4-C5-N7	-10.67	106.53	110.80
38	A1	1065	C	C2-N3-C4	10.67	125.23	119.90
11	B2	370	A	P-O5'-C5'	10.67	137.97	120.90
11	B2	1348	C	N3-C4-C5	-10.67	117.63	121.90
38	A1	2149	G	C5-C6-O6	-10.67	122.20	128.60
38	A1	2631	C	O4'-C1'-N1	10.67	116.73	108.20
39	A3	115	C	C2-N3-C4	10.67	125.23	119.90
11	B2	213	C	N3-C4-C5	-10.66	117.63	121.90
38	A1	1132	U	P-O3'-C3'	10.66	132.50	119.70
38	A1	2536	A	C2-N3-C4	-10.66	105.27	110.60
38	A1	2954	C	N3-C4-C5	-10.66	117.63	121.90
11	B2	616	G	C5-C6-O6	-10.66	122.20	128.60
11	B2	1069	G	C5-C6-O6	-10.66	122.20	128.60
30	BR	3	ARG	NE-CZ-NH2	-10.66	114.97	120.30
11	B2	1358	A	C4-C5-C6	10.66	122.33	117.00
38	A1	1196	A	C5-C6-N1	-10.66	112.37	117.70
38	A1	2972	G	C5-C6-O6	-10.66	122.20	128.60
38	A1	397	G	N1-C6-O6	10.66	126.30	119.90
38	A1	717	A	N1-C6-N6	10.66	125.00	118.60
11	B2	225	U	N3-C4-C5	-10.66	108.21	114.60
11	B2	472	C	N3-C4-C5	-10.66	117.64	121.90
38	A1	3015	A	C5-C6-N6	-10.66	115.17	123.70
11	B2	673	C	O4'-C1'-N1	10.66	116.72	108.20
11	B2	1218	C	N3-C4-C5	-10.66	117.64	121.90
38	A1	2681	A	C5-N7-C8	10.66	109.23	103.90
38	A1	2721	C	C6-N1-C2	-10.66	116.04	120.30
38	A1	194	G	N1-C6-O6	10.65	126.29	119.90
38	A1	2379	G	C8-N9-C4	-10.65	102.14	106.40
38	A1	1519	G	C5-C6-O6	-10.65	122.21	128.60
11	B2	616	G	O4'-C1'-N9	10.65	116.72	108.20
38	A1	1744	A	C2-N3-C4	10.65	115.93	110.60
11	B2	26	A	C4-C5-C6	10.65	122.33	117.00
38	A1	338	A	N1-C6-N6	10.65	124.99	118.60
11	B2	947	G	N1-C6-O6	10.65	126.29	119.90
38	A1	2346	A	C4-C5-C6	10.65	122.32	117.00
11	B2	523	C	N3-C4-N4	10.65	125.45	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	419	G	N1-C6-O6	10.65	126.29	119.90
38	A1	1188	C	O4'-C1'-N1	10.65	116.72	108.20
45	AC	251	ARG	NE-CZ-NH2	-10.65	114.98	120.30
11	B2	1448	A	N1-C6-N6	10.64	124.99	118.60
38	A1	1426	G	C6-C5-N7	-10.64	124.01	130.40
11	B2	943	C	O4'-C1'-N1	10.64	116.71	108.20
11	B2	1153	G	O4'-C1'-N9	10.64	116.71	108.20
38	A1	1069	A	N1-C6-N6	10.64	124.98	118.60
38	A1	2964	A	N1-C6-N6	10.64	124.98	118.60
38	A1	1445	G	N1-C6-O6	10.64	126.28	119.90
11	B2	75	C	C6-N1-C1'	-10.64	108.03	120.80
11	B2	228	G	N1-C6-O6	10.64	126.28	119.90
38	A1	258	C	O4'-C1'-N1	10.64	116.71	108.20
38	A1	586	A	C5-C6-N6	-10.64	115.19	123.70
38	A1	1213	G	C5-C6-O6	-10.64	122.22	128.60
38	A1	403	G	C5-C6-O6	-10.64	122.22	128.60
38	A1	1463	C	N3-C4-C5	-10.64	117.65	121.90
11	B2	927	A	C5-C6-N1	-10.63	112.38	117.70
38	A1	323	U	C5-C6-N1	10.63	128.02	122.70
38	A1	1462	G	N1-C6-O6	10.63	126.28	119.90
10	B1	71	C	N3-C4-C5	-10.63	117.65	121.90
11	B2	872	A	C5-C6-N6	-10.63	115.19	123.70
38	A1	352	G	O4'-C1'-N9	10.63	116.70	108.20
38	A1	1082	A	C4-C5-C6	10.63	122.32	117.00
38	A1	3020	G	N1-C6-O6	10.63	126.28	119.90
53	Ah	17	ARG	NE-CZ-NH2	-10.63	114.98	120.30
48	AE	174	TYR	CB-CG-CD1	10.63	127.38	121.00
11	B2	643	G	C5-C6-O6	-10.63	122.22	128.60
38	A1	98	G	N9-C4-C5	-10.63	101.15	105.40
38	A1	482	A	C5-C6-N1	-10.63	112.39	117.70
11	B2	507	G	C5-C6-O6	-10.62	122.23	128.60
11	B2	664	G	N1-C6-O6	10.62	126.28	119.90
38	A1	1420	U	O4'-C1'-N1	10.63	116.70	108.20
11	B2	1179	C	C6-N1-C2	-10.62	116.05	120.30
38	A1	2249	A	N1-C6-N6	10.62	124.97	118.60
38	A1	2440	C	C4-C5-C6	10.62	122.71	117.40
38	A1	1022	G	N1-C6-O6	10.62	126.27	119.90
11	B2	124	C	C2-N3-C4	10.62	125.21	119.90
38	A1	922	C	N3-C4-N4	10.62	125.43	118.00
11	B2	1023	C	O4'-C1'-N1	10.62	116.69	108.20
38	A1	1054	A	N1-C2-N3	10.62	134.61	129.30
38	A1	2463	G	N1-C6-O6	10.62	126.27	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1265	G	N1-C6-O6	10.62	126.27	119.90
38	A1	1698	G	N1-C6-O6	10.62	126.27	119.90
38	A1	1788	G	C6-C5-N7	-10.62	124.03	130.40
38	A1	2274	C	N3-C4-C5	-10.62	117.65	121.90
10	B1	62	C	N3-C4-C5	-10.61	117.66	121.90
38	A1	456	G	C8-N9-C4	-10.61	102.16	106.40
9	AX	278	ARG	NE-CZ-NH2	-10.61	115.00	120.30
11	B2	100	A	C8-N9-C4	-10.61	101.56	105.80
17	BE	101	ARG	NE-CZ-NH2	-10.61	115.00	120.30
38	A1	1228	G	C8-N9-C4	-10.61	102.16	106.40
38	A1	1976	C	O4'-C1'-N1	10.61	116.69	108.20
11	B2	358	G	N1-C2-N3	-10.61	117.54	123.90
38	A1	1846	G	N1-C2-N3	-10.61	117.54	123.90
62	AO	38	ARG	NE-CZ-NH2	-10.61	115.00	120.30
11	B2	1162	G	O4'-C1'-N9	10.60	116.68	108.20
38	A1	989	G	C5-C6-O6	-10.60	122.24	128.60
38	A1	1053	A	C4-C5-C6	10.60	122.30	117.00
38	A1	1481	G	C5-C6-O6	-10.60	122.24	128.60
38	A1	1775	G	C8-N9-C4	-10.60	102.16	106.40
38	A1	2344	G	C5-C6-O6	-10.60	122.24	128.60
11	B2	390	G	C6-C5-N7	-10.60	124.04	130.40
39	A3	56	C	N3-C4-C5	-10.60	117.66	121.90
41	AA	95	ARG	NE-CZ-NH1	10.60	125.60	120.30
38	A1	2584	A	N1-C6-N6	10.60	124.96	118.60
11	B2	1255	C	C5-C4-N4	-10.59	112.78	120.20
38	A1	2799	C	N3-C4-C5	-10.59	117.66	121.90
11	B2	413	G	N3-C2-N2	10.59	127.31	119.90
38	A1	587	A	N1-C6-N6	10.59	124.95	118.60
38	A1	818	A	N1-C6-N6	10.59	124.95	118.60
38	A1	1556	G	C4-C5-N7	10.59	115.04	110.80
38	A1	2218	C	O4'-C1'-N1	10.59	116.67	108.20
11	B2	172	G	N1-C2-N3	-10.59	117.55	123.90
38	A1	1903	G	C5-C6-O6	-10.59	122.25	128.60
38	A1	2943	G	N1-C2-N3	-10.59	117.55	123.90
11	B2	188	C	N3-C4-C5	-10.59	117.67	121.90
38	A1	179	A	C8-N9-C4	-10.59	101.56	105.80
38	A1	1654	G	N3-C2-N2	10.59	127.31	119.90
38	A1	1714	G	C5-C6-N1	-10.59	106.21	111.50
11	B2	209	A	C4-C5-C6	10.58	122.29	117.00
11	B2	677	U	O4'-C1'-N1	10.58	116.67	108.20
38	A1	379	U	O4'-C1'-N1	10.58	116.67	108.20
38	A1	1065	C	C6-N1-C2	-10.58	116.07	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1074	G	C5-C6-O6	-10.58	122.25	128.60
38	A1	175	G	C5-C6-O6	-10.58	122.25	128.60
11	B2	503	G	O4'-C1'-N9	10.58	116.66	108.20
11	B2	738	C	N3-C4-N4	10.58	125.40	118.00
38	A1	880	U	O4'-C1'-N1	10.58	116.66	108.20
39	A3	23	A	C2-N3-C4	-10.58	105.31	110.60
11	B2	1134	G	N1-C6-O6	10.58	126.25	119.90
38	A1	2491	C	N3-C4-N4	10.58	125.40	118.00
39	A3	55	G	N1-C6-O6	10.58	126.25	119.90
11	B2	796	C	N3-C4-N4	10.57	125.40	118.00
38	A1	2446	C	N3-C4-N4	10.57	125.40	118.00
46	AD	72	ARG	NE-CZ-NH2	-10.57	115.01	120.30
11	B2	845	G	O4'-C1'-N9	10.57	116.66	108.20
38	A1	442	G	N1-C6-O6	10.57	126.24	119.90
38	A1	621	G	N3-C4-C5	-10.57	123.32	128.60
38	A1	1236	C	N3-C4-C5	-10.57	117.67	121.90
38	A1	1310	A	O4'-C1'-N9	10.57	116.66	108.20
38	A1	1543	C	N3-C4-N4	10.57	125.40	118.00
38	A1	1580	G	C5-C6-O6	-10.57	122.26	128.60
38	A1	2525	C	O4'-C1'-N1	10.57	116.66	108.20
38	A1	66	C	N3-C4-N4	10.57	125.40	118.00
38	A1	1298	C	C5-C4-N4	-10.57	112.80	120.20
38	A1	1700	U	O4'-C1'-N1	10.57	116.65	108.20
11	B2	351	C	P-O3'-C3'	-10.56	107.03	119.70
11	B2	1359	C	C4-C5-C6	10.56	122.68	117.40
38	A1	738	C	O4'-C1'-N1	10.56	116.65	108.20
38	A1	2421	A	N1-C6-N6	10.56	124.94	118.60
11	B2	570	G	C5-C6-O6	-10.56	122.27	128.60
11	B2	230	C	C5-C6-N1	10.56	126.28	121.00
38	A1	198	C	N3-C4-N4	10.56	125.39	118.00
38	A1	2591	A	N9-C4-C5	10.56	110.02	105.80
38	A1	2794	G	N9-C4-C5	10.56	109.62	105.40
39	A3	36	U	P-O3'-C3'	10.56	132.37	119.70
11	B2	1353	C	C6-N1-C2	-10.56	116.08	120.30
38	A1	1427	A	O4'-C1'-N9	10.56	116.64	108.20
38	A1	544	A	C5-N7-C8	10.55	109.18	103.90
38	A1	2581	G	C8-N9-C4	-10.55	102.18	106.40
38	A1	9	A	C5-C6-N6	-10.55	115.26	123.70
38	A1	225	C	O4'-C1'-N1	10.55	116.64	108.20
38	A1	457	C	O4'-C1'-N1	10.55	116.64	108.20
38	A1	783	C	N3-C4-C5	-10.55	117.68	121.90
38	A1	1769	G	N1-C6-O6	10.55	126.23	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1514	C	C6-N1-C2	-10.55	116.08	120.30
38	A1	2302	C	C2-N3-C4	10.55	125.17	119.90
11	B2	601	G	N1-C6-O6	10.55	126.23	119.90
11	B2	735	A	C4-C5-C6	10.55	122.27	117.00
38	A1	482	A	C4-C5-C6	10.55	122.27	117.00
38	A1	513	C	P-O3'-C3'	10.55	132.36	119.70
38	A1	862	G	N3-C4-C5	-10.55	123.33	128.60
38	A1	2570	A	N7-C8-N9	10.55	119.07	113.80
38	A1	2888	G	N1-C6-O6	10.55	126.23	119.90
11	B2	962	G	C4-C5-N7	-10.54	106.58	110.80
11	B2	1196	A	C4-C5-C6	10.54	122.27	117.00
38	A1	1654	G	C4-C5-N7	-10.55	106.58	110.80
64	AR	30	ARG	NE-CZ-NH1	-10.55	115.03	120.30
27	BO	76	ARG	NE-CZ-NH2	-10.54	115.03	120.30
38	A1	327	G	C5-C6-O6	-10.54	122.28	128.60
38	A1	1855	G	O4'-C1'-N9	10.54	116.63	108.20
38	A1	1975	C	O4'-C1'-N1	10.54	116.63	108.20
38	A1	2945	A	P-O5'-C5'	10.54	137.76	120.90
39	A3	71	G	N1-C6-O6	10.54	126.22	119.90
56	AJ	129	ARG	NE-CZ-NH1	-10.54	115.03	120.30
11	B2	904	G	C5-C6-O6	-10.54	122.28	128.60
38	A1	1733	C	O4'-C1'-N1	10.54	116.63	108.20
38	A1	1850	C	C5-C4-N4	-10.54	112.82	120.20
38	A1	2181	G	O4'-C1'-N9	10.54	116.63	108.20
38	A1	2698	G	O4'-C1'-N9	10.54	116.63	108.20
38	A1	423	G	N1-C6-O6	10.54	126.22	119.90
11	B2	249	U	O4'-C1'-N1	10.53	116.63	108.20
11	B2	1483	U	C1'-O4'-C4'	10.53	118.33	109.90
38	A1	43	G	O4'-C1'-N9	10.53	116.63	108.20
38	A1	1888	G	C5-C6-N1	-10.54	106.23	111.50
38	A1	2549	A	N1-C6-N6	10.53	124.92	118.60
38	A1	2666	G	C2-N3-C4	10.54	117.17	111.90
38	A1	2755	G	N1-C6-O6	10.53	126.22	119.90
11	B2	997	G	N3-C4-N9	-10.53	119.68	126.00
11	B2	637	G	N3-C2-N2	-10.53	112.53	119.90
11	B2	648	A	C5-C6-N1	-10.52	112.44	117.70
11	B2	824	G	N9-C4-C5	-10.52	101.19	105.40
38	A1	856	A	C5-N7-C8	10.52	109.16	103.90
38	A1	1510	U	C5-C6-N1	10.52	127.96	122.70
38	A1	73	A	C5-C6-N1	-10.52	112.44	117.70
38	A1	1639	G	N1-C6-O6	10.52	126.21	119.90
38	A1	1903	G	C6-C5-N7	-10.52	124.09	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
17	BE	23	ARG	NE-CZ-NH1	10.52	125.56	120.30
29	BQ	106	ARG	NE-CZ-NH2	-10.52	115.04	120.30
38	A1	197	C	N3-C4-C5	-10.52	117.69	121.90
38	A1	937	A	O4'-C1'-N9	10.52	116.62	108.20
11	B2	221	A	C8-N9-C4	10.52	110.01	105.80
38	A1	1895	G	N1-C6-O6	10.52	126.21	119.90
38	A1	2793	C	O4'-C1'-N1	10.52	116.61	108.20
38	A1	2836	G	C6-C5-N7	-10.52	124.09	130.40
11	B2	975	A	C5-C6-N6	-10.52	115.29	123.70
21	BI	62	ARG	NE-CZ-NH2	-10.52	115.04	120.30
38	A1	2075	U	C6-N1-C2	-10.52	114.69	121.00
38	A1	2417	G	C5-C6-O6	-10.52	122.29	128.60
11	B2	392	G	O4'-C1'-N9	10.51	116.61	108.20
11	B2	410	U	O4'-C1'-N1	10.51	116.61	108.20
38	A1	480	A	O4'-C1'-N9	10.51	116.61	108.20
38	A1	1091	G	N9-C4-C5	-10.51	101.20	105.40
11	B2	144	G	N1-C6-O6	10.51	126.20	119.90
27	BO	5	ARG	NE-CZ-NH1	10.51	125.55	120.30
38	A1	387	A	C4-C5-C6	10.51	122.25	117.00
38	A1	1968	A	N1-C2-N3	-10.51	124.05	129.30
38	A1	2160	C	C4-C5-C6	10.51	122.65	117.40
38	A1	1157	U	O4'-C1'-N1	10.51	116.60	108.20
38	A1	2222	C	N3-C4-N4	10.51	125.35	118.00
11	B2	791	G	C4-C5-N7	10.50	115.00	110.80
38	A1	2978	G	N1-C6-O6	10.50	126.20	119.90
11	B2	837	C	C5-C4-N4	-10.50	112.85	120.20
11	B2	1368	A	C5-C6-N1	-10.50	112.45	117.70
38	A1	229	G	N1-C2-N3	-10.50	117.60	123.90
38	A1	554	C	N3-C4-C5	-10.50	117.70	121.90
38	A1	2099	G	C5-C6-O6	-10.50	122.30	128.60
38	A1	2472	A	C8-N9-C4	-10.50	101.60	105.80
38	A1	512	G	C5-C6-O6	-10.50	122.30	128.60
38	A1	1561	G	O4'-C1'-N9	10.50	116.60	108.20
11	B2	391	G	O4'-C1'-N9	10.49	116.59	108.20
11	B2	399	A	N1-C2-N3	-10.49	124.05	129.30
38	A1	239	G	N1-C6-O6	10.49	126.20	119.90
38	A1	2243	G	N1-C2-N3	-10.49	117.60	123.90
39	A3	116	C	C5-C4-N4	-10.49	112.85	120.20
38	A1	862	G	N3-C4-N9	10.49	132.29	126.00
11	B2	1223	C	C6-N1-C2	-10.49	116.10	120.30
11	B2	416	A	N9-C4-C5	-10.49	101.61	105.80
11	B2	1233	G	O4'-C1'-N9	10.49	116.59	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1291	G	N1-C6-O6	10.49	126.19	119.90
38	A1	1421	C	N3-C4-N4	10.49	125.34	118.00
38	A1	1828	A	C8-N9-C4	-10.49	101.61	105.80
11	B2	491	G	N1-C6-O6	10.48	126.19	119.90
11	B2	750	C	C2-N3-C4	10.48	125.14	119.90
38	A1	115	C	O4'-C1'-N1	10.48	116.59	108.20
38	A1	525	C	N3-C4-C5	-10.48	117.71	121.90
38	A1	1571	G	N3-C4-C5	-10.48	123.36	128.60
11	B2	1495	U	O4'-C1'-N1	10.48	116.58	108.20
11	B2	211	G	C5-C6-O6	-10.48	122.31	128.60
38	A1	847	A	O4'-C1'-N9	10.48	116.58	108.20
38	A1	857	U	O4'-C1'-N1	10.48	116.58	108.20
38	A1	2367	C	N3-C4-N4	10.48	125.34	118.00
38	A1	2745	G	N1-C6-O6	10.48	126.19	119.90
38	A1	1767	C	C5-C6-N1	10.48	126.24	121.00
11	B2	205	C	C4-C5-C6	10.48	122.64	117.40
11	B2	1313	G	N3-C2-N2	10.48	127.24	119.90
38	A1	164	A	N1-C6-N6	10.48	124.89	118.60
38	A1	2496	G	C5-C6-O6	-10.48	122.31	128.60
38	A1	556	G	C6-C5-N7	-10.47	124.11	130.40
38	A1	829	G	C5-C6-O6	-10.47	122.32	128.60
38	A1	1115	A	N1-C6-N6	10.47	124.88	118.60
38	A1	1448	G	N1-C6-O6	10.47	126.19	119.90
11	B2	56	A	N7-C8-N9	10.47	119.03	113.80
38	A1	2145	G	C5-C6-O6	-10.47	122.32	128.60
11	B2	405	G	O4'-C1'-N9	10.47	116.58	108.20
11	B2	541	G	N1-C6-O6	10.47	126.18	119.90
38	A1	24	G	N1-C6-O6	10.47	126.18	119.90
38	A1	74	A	C5-C6-N1	-10.47	112.47	117.70
38	A1	2326	C	N3-C4-C5	-10.47	117.71	121.90
11	B2	1090	C	O4'-C1'-N1	10.46	116.57	108.20
38	A1	1259	G	C2-N3-C4	10.46	117.13	111.90
11	B2	322	G	C5-C6-N1	-10.46	106.27	111.50
11	B2	1013	G	N1-C2-N2	-10.46	106.78	116.20
11	B2	657	A	N1-C6-N6	10.46	124.88	118.60
11	B2	1066	C	N3-C4-N4	10.46	125.32	118.00
11	B2	1329	C	O4'-C1'-N1	10.46	116.57	108.20
38	A1	796	C	C4-C5-C6	-10.46	112.17	117.40
38	A1	1529	A	C5-C6-N1	-10.46	112.47	117.70
38	A1	2946	C	O4'-C1'-N1	10.46	116.57	108.20
15	BC	26	ARG	NE-CZ-NH2	-10.46	115.07	120.30
38	A1	705	G	C5-C6-O6	-10.46	122.33	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	990	G	O4'-C1'-N9	10.46	116.57	108.20
38	A1	1272	A	C5-C6-N1	-10.46	112.47	117.70
38	A1	1798	A	C4-C5-C6	10.46	122.23	117.00
38	A1	1881	A	N1-C6-N6	10.46	124.87	118.60
11	B2	650	A	N1-C6-N6	10.46	124.87	118.60
38	A1	1500	C	C5-C4-N4	-10.46	112.88	120.20
38	A1	2505	A	C6-C5-N7	-10.46	124.98	132.30
38	A1	304	G	C4-C5-N7	10.45	114.98	110.80
38	A1	2128	G	C6-C5-N7	-10.45	124.13	130.40
11	B2	780	C	C2-N3-C4	10.45	125.12	119.90
38	A1	936	G	C5-C6-N1	-10.45	106.28	111.50
38	A1	2474	A	N1-C2-N3	-10.45	124.08	129.30
11	B2	776	C	C5-C6-N1	10.45	126.22	121.00
11	B2	1441	G	C4-C5-C6	10.45	125.07	118.80
38	A1	593	C	O4'-C1'-N1	10.45	116.56	108.20
38	A1	725	G	N9-C4-C5	-10.45	101.22	105.40
38	A1	2496	G	C5-N7-C8	10.45	109.52	104.30
38	A1	729	A	C5-C6-N6	-10.44	115.35	123.70
38	A1	962	C	O4'-C1'-N1	10.44	116.55	108.20
62	AO	24	ARG	NE-CZ-NH1	10.44	125.52	120.30
11	B2	781	U	O4'-C1'-N1	10.44	116.55	108.20
11	B2	1201	G	C2-N3-C4	10.44	117.12	111.90
38	A1	1957	U	O4'-C1'-N1	10.44	116.55	108.20
38	A1	2809	G	N1-C6-O6	10.44	126.16	119.90
61	AN	19	ARG	NE-CZ-NH2	-10.44	115.08	120.30
38	A1	84	A	C8-N9-C4	10.44	109.97	105.80
38	A1	953	G	C5-C6-O6	-10.44	122.34	128.60
38	A1	1359	C	O4'-C1'-N1	10.44	116.55	108.20
38	A1	1757	G	O4'-C1'-N9	10.44	116.55	108.20
38	A1	1849	A	N1-C2-N3	10.43	134.52	129.30
38	A1	250	G	C5-C6-N1	-10.43	106.28	111.50
38	A1	1226	G	O4'-C1'-N9	10.43	116.55	108.20
38	A1	2971	U	O4'-C1'-N1	10.43	116.55	108.20
11	B2	1319	C	N3-C4-N4	10.43	125.30	118.00
38	A1	100	C	N3-C4-N4	10.43	125.30	118.00
38	A1	129	C	C2-N3-C4	10.43	125.11	119.90
38	A1	699	A	N7-C8-N9	-10.43	108.59	113.80
33	BU	83	ARG	NE-CZ-NH1	10.43	125.51	120.30
38	A1	1358	C	N3-C4-N4	10.43	125.30	118.00
38	A1	1744	A	N9-C4-C5	10.43	109.97	105.80
11	B2	1100	G	C5-C6-N1	-10.42	106.29	111.50
38	A1	331	G	C6-N1-C2	10.42	131.35	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1864	G	C4-C5-C6	10.42	125.05	118.80
38	A1	2669	U	O4'-C1'-N1	10.42	116.54	108.20
10	B1	9	A	C2-N3-C4	-10.42	105.39	110.60
11	B2	1172	A	C4-C5-C6	10.42	122.21	117.00
11	B2	1065	C	C6-N1-C2	-10.42	116.13	120.30
21	BI	39	ARG	NE-CZ-NH1	10.42	125.51	120.30
43	AB	225	ARG	NE-CZ-NH2	-10.42	115.09	120.30
38	A1	2966	C	O4'-C1'-N1	10.42	116.53	108.20
10	B1	71	C	N3-C4-N4	10.41	125.29	118.00
10	B1	21	G	C6-C5-N7	-10.41	124.15	130.40
38	A1	602	G	C5-C6-O6	-10.41	122.35	128.60
38	A1	2300	C	O4'-C1'-N1	10.41	116.53	108.20
33	BU	99	ARG	NE-CZ-NH2	-10.41	115.09	120.30
38	A1	270	C	N3-C4-N4	10.41	125.29	118.00
38	A1	715	G	P-O3'-C3'	10.41	132.19	119.70
38	A1	715	G	N3-C2-N2	10.41	127.19	119.90
38	A1	733	A	N1-C6-N6	10.41	124.85	118.60
38	A1	1008	U	N3-C4-O4	10.41	126.69	119.40
38	A1	31	G	C5-C6-O6	-10.41	122.36	128.60
38	A1	219	G	O4'-C1'-N9	10.41	116.53	108.20
38	A1	2571	G	N1-C6-O6	10.41	126.14	119.90
11	B2	1433	C	C2-N3-C4	10.41	125.10	119.90
11	B2	954	G	N1-C6-O6	10.40	126.14	119.90
11	B2	1079	G	C8-N9-C4	-10.40	102.24	106.40
11	B2	1293	A	N9-C4-C5	10.40	109.96	105.80
38	A1	358	C	C6-N1-C2	-10.40	116.14	120.30
38	A1	2083	G	O4'-C1'-N9	10.40	116.52	108.20
38	A1	2416	G	C5-C6-O6	-10.40	122.36	128.60
11	B2	1063	A	C5-N7-C8	10.40	109.10	103.90
11	B2	342	G	N1-C2-N3	-10.40	117.66	123.90
38	A1	367	G	N1-C6-O6	10.40	126.14	119.90
38	A1	662	A	C6-C5-N7	-10.40	125.02	132.30
38	A1	1324	G	C4-C5-C6	10.40	125.04	118.80
38	A1	1659	G	C8-N9-C4	-10.40	102.24	106.40
38	A1	1905	G	C6-C5-N7	-10.40	124.16	130.40
11	B2	130	G	O4'-C1'-N9	10.39	116.52	108.20
38	A1	1596	G	N1-C6-O6	10.39	126.14	119.90
38	A1	310	C	P-O3'-C3'	10.39	132.17	119.70
39	A3	16	G	O4'-C1'-N9	10.39	116.51	108.20
38	A1	1516	C	O4'-C1'-N1	10.39	116.51	108.20
38	A1	1966	C	O4'-C1'-N1	10.39	116.51	108.20
38	A1	2142	U	N1-C2-O2	10.39	130.07	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	615	A	C5-N7-C8	10.39	109.09	103.90
11	B2	289	C	C5-C4-N4	-10.38	112.93	120.20
11	B2	1093	C	C2-N3-C4	10.38	125.09	119.90
38	A1	91	G	C5-C6-O6	-10.38	122.37	128.60
38	A1	993	G	N1-C6-O6	10.38	126.13	119.90
38	A1	2753	G	C5-C6-O6	-10.38	122.37	128.60
38	A1	2779	G	N1-C6-O6	10.38	126.13	119.90
11	B2	196	G	C5-C6-O6	-10.38	122.37	128.60
11	B2	696	G	N3-C2-N2	10.38	127.17	119.90
38	A1	618	C	N3-C4-C5	-10.38	117.75	121.90
38	A1	1208	A	N1-C6-N6	10.38	124.83	118.60
38	A1	2146	C	N3-C4-C5	-10.38	117.75	121.90
38	A1	2488	C	N3-C4-C5	-10.38	117.75	121.90
10	B1	76	C	P-O3'-C3'	10.38	132.15	119.70
11	B2	542	G	C5-C6-O6	-10.38	122.37	128.60
11	B2	446	G	C5-C6-O6	-10.38	122.37	128.60
11	B2	897	A	C8-N9-C4	-10.38	101.65	105.80
38	A1	1004	U	O4'-C1'-N1	10.38	116.50	108.20
38	A1	2444	G	C2-N3-C4	10.38	117.09	111.90
38	A1	2888	G	C5-C6-O6	-10.38	122.37	128.60
11	B2	167	G	C5-C6-O6	-10.38	122.38	128.60
11	B2	372	G	C5-C6-O6	-10.38	122.37	128.60
11	B2	930	G	N1-C6-O6	10.38	126.12	119.90
38	A1	404	G	C5-C6-O6	-10.38	122.37	128.60
38	A1	40	G	C8-N9-C4	-10.37	102.25	106.40
38	A1	449	G	C5-C6-O6	-10.37	122.38	128.60
38	A1	1639	G	C5-C6-O6	-10.37	122.38	128.60
11	B2	1334	A	N1-C2-N3	10.37	134.48	129.30
38	A1	784	C	C2-N3-C4	10.37	125.08	119.90
38	A1	2076	A	N1-C6-N6	10.37	124.82	118.60
38	A1	2302	C	N1-C2-O2	10.37	125.12	118.90
38	A1	1583	G	N1-C2-N3	-10.37	117.68	123.90
10	B1	38	G	C5-N7-C8	10.37	109.48	104.30
11	B2	1367	C	C4-C5-C6	10.37	122.58	117.40
38	A1	949	C	O4'-C1'-N1	10.37	116.49	108.20
38	A1	1674	G	N1-C6-O6	10.36	126.12	119.90
11	B2	352	A	C5-C6-N6	-10.36	115.41	123.70
38	A1	1192	G	N1-C2-N2	-10.36	106.87	116.20
38	A1	1753	G	C5-C6-O6	-10.36	122.38	128.60
38	A1	2078	A	C5-C6-N6	-10.36	115.41	123.70
39	A3	118	G	C5-C6-O6	-10.36	122.38	128.60
11	B2	603	G	O4'-C1'-N9	10.36	116.49	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	BC	110	ARG	NE-CZ-NH1	10.36	125.48	120.30
38	A1	1573	A	C5-C6-N1	-10.36	112.52	117.70
11	B2	1092	G	C5-C6-O6	-10.36	122.38	128.60
38	A1	84	A	C5-N7-C8	10.36	109.08	103.90
38	A1	1886	C	C6-N1-C2	10.36	124.44	120.30
38	A1	2042	A	C5-C6-N6	-10.36	115.41	123.70
38	A1	491	G	N3-C4-N9	10.36	132.22	126.00
38	A1	1717	C	C6-N1-C2	-10.36	116.16	120.30
11	B2	143	G	N1-C6-O6	10.36	126.11	119.90
11	B2	679	G	C8-N9-C4	-10.36	102.26	106.40
11	B2	695	G	O4'-C1'-N9	10.36	116.48	108.20
38	A1	621	G	N1-C6-O6	10.36	126.11	119.90
38	A1	2059	G	C6-C5-N7	-10.36	124.19	130.40
39	A3	39	C	O4'-C1'-N1	10.36	116.48	108.20
38	A1	1252	G	C5-C6-O6	-10.35	122.39	128.60
11	B2	767	U	O4'-C1'-N1	10.35	116.48	108.20
38	A1	2796	C	C6-N1-C2	-10.35	116.16	120.30
11	B2	1115	G	C5-C6-O6	-10.35	122.39	128.60
38	A1	2889	A	C5-N7-C8	10.35	109.08	103.90
11	B2	137	A	C5-N7-C8	10.35	109.07	103.90
11	B2	392	G	N1-C6-O6	10.35	126.11	119.90
11	B2	698	A	C5-C6-N6	-10.35	115.42	123.70
38	A1	600	A	N1-C6-N6	10.35	124.81	118.60
38	A1	1398	C	N3-C4-C5	-10.35	117.76	121.90
38	A1	1859	A	C5-C6-N6	-10.35	115.42	123.70
38	A1	2072	G	C5-C6-O6	-10.35	122.39	128.60
38	A1	2165	A	C5-N7-C8	10.35	109.07	103.90
38	A1	3003	A	C5-C6-N6	-10.35	115.42	123.70
39	A3	90	A	C4-C5-N7	-10.35	105.53	110.70
11	B2	161	C	C4-C5-C6	10.34	122.57	117.40
11	B2	894	A	N1-C6-N6	10.34	124.80	118.60
50	AF	133	ARG	NE-CZ-NH1	10.34	125.47	120.30
38	A1	1212	A	N1-C6-N6	10.34	124.80	118.60
38	A1	1340	G	C6-C5-N7	-10.34	124.20	130.40
38	A1	2415	C	C5-C4-N4	-10.34	112.97	120.20
11	B2	101	G	N1-C6-O6	10.33	126.10	119.90
11	B2	582	G	C5-C6-O6	-10.33	122.40	128.60
11	B2	802	G	C5-C6-O6	-10.33	122.40	128.60
38	A1	197	C	O4'-C1'-N1	10.33	116.47	108.20
11	B2	1406	U	O4'-C1'-N1	10.33	116.47	108.20
38	A1	430	A	C4-C5-C6	10.33	122.17	117.00
38	A1	2501	G	N1-C6-O6	10.33	126.10	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
9	AX	56	PHE	CB-CG-CD1	10.33	128.03	120.80
38	A1	445	G	O4'-C1'-N9	10.33	116.46	108.20
11	B2	985	C	C6-N1-C2	-10.33	116.17	120.30
10	B1	23	G	C5-C6-O6	-10.32	122.41	128.60
11	B2	342	G	O4'-C1'-N9	10.32	116.46	108.20
11	B2	1075	A	N1-C2-N3	10.32	134.46	129.30
11	B2	1341	C	O4'-C1'-N1	10.32	116.46	108.20
11	B2	1354	A	C4-C5-C6	10.32	122.16	117.00
38	A1	388	G	N1-C6-O6	10.32	126.09	119.90
38	A1	1022	G	O4'-C1'-N9	10.32	116.46	108.20
11	B2	1047	U	O4'-C1'-N1	10.32	116.46	108.20
11	B2	1098	G	C5-C6-O6	-10.32	122.41	128.60
38	A1	445	G	C8-N9-C4	-10.32	102.27	106.40
38	A1	2279	G	O4'-C1'-C2'	10.32	116.89	107.60
38	A1	2761	G	N1-C6-O6	10.32	126.09	119.90
38	A1	747	G	O4'-C1'-N9	10.32	116.45	108.20
38	A1	2430	C	C5-C4-N4	-10.32	112.98	120.20
11	B2	417	C	O4'-C1'-N1	10.32	116.45	108.20
38	A1	1327	C	C2-N3-C4	10.32	125.06	119.90
38	A1	1666	G	P-O3'-C3'	10.32	132.08	119.70
11	B2	967	C	N3-C4-C5	-10.31	117.77	121.90
11	B2	1215	G	C8-N9-C4	-10.31	102.28	106.40
38	A1	1490	G	C5-C6-O6	-10.31	122.41	128.60
38	A1	1405	G	N7-C8-N9	-10.31	107.94	113.10
39	A3	82	C	C2-N3-C4	10.31	125.06	119.90
38	A1	891	C	N3-C4-N4	10.31	125.22	118.00
38	A1	2056	A	N9-C4-C5	10.31	109.92	105.80
38	A1	1393	C	C6-N1-C2	-10.31	116.18	120.30
11	B2	227	C	C6-N1-C2	-10.31	116.18	120.30
38	A1	387	A	N1-C6-N6	10.31	124.78	118.60
38	A1	672	C	N3-C4-C5	-10.31	117.78	121.90
38	A1	981	A	C5-C6-N6	-10.31	115.45	123.70
38	A1	1277	G	C6-C5-N7	-10.31	124.22	130.40
38	A1	1573	A	C4-C5-C6	10.31	122.15	117.00
38	A1	2495	A	O4'-C1'-N9	10.31	116.45	108.20
39	A3	69	C	O4'-C1'-N1	10.31	116.45	108.20
11	B2	627	G	N1-C6-O6	10.31	126.08	119.90
11	B2	122	C	N3-C4-C5	-10.30	117.78	121.90
11	B2	343	G	O4'-C1'-N9	10.30	116.44	108.20
38	A1	854	G	C5-C6-O6	-10.30	122.42	128.60
38	A1	57	C	N3-C4-C5	-10.30	117.78	121.90
38	A1	331	G	C4-C5-C6	10.30	124.98	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	983	G	C8-N9-C4	-10.30	102.28	106.40
38	A1	1276	G	C5-C6-O6	-10.30	122.42	128.60
38	A1	1525	G	C5-C6-N1	-10.30	106.35	111.50
38	A1	2259	G	C5-N7-C8	-10.30	99.15	104.30
41	AA	36	ASP	CB-CG-OD1	-10.30	109.03	118.30
38	A1	1748	C	O4'-C1'-N1	10.30	116.44	108.20
11	B2	33	U	C6-N1-C2	-10.29	114.82	121.00
11	B2	648	A	N9-C4-C5	-10.29	101.68	105.80
38	A1	1719	C	N3-C4-C5	-10.29	117.78	121.90
38	A1	1838	C	N3-C4-C5	-10.29	117.78	121.90
11	B2	1355	C	C6-N1-C2	10.29	124.42	120.30
11	B2	1403	U	O4'-C1'-N1	10.29	116.43	108.20
38	A1	1005	G	N1-C2-N3	-10.29	117.72	123.90
38	A1	1581	A	C8-N9-C4	-10.29	101.68	105.80
11	B2	193	G	C5-C6-O6	-10.29	122.43	128.60
38	A1	1736	G	C4-C5-C6	10.29	124.97	118.80
38	A1	2738	G	C5-C6-O6	-10.29	122.43	128.60
11	B2	532	C	C5-C4-N4	-10.29	113.00	120.20
38	A1	975	C	C6-N1-C2	-10.29	116.19	120.30
11	B2	1484	C	O4'-C1'-N1	10.28	116.43	108.20
38	A1	134	C	P-O3'-C3'	10.28	132.04	119.70
11	B2	734	G	C6-C5-N7	-10.28	124.23	130.40
38	A1	968	A	C2-N3-C4	-10.28	105.46	110.60
11	B2	106	A	O4'-C1'-N9	10.28	116.42	108.20
14	BB	46	ARG	NE-CZ-NH2	-10.28	115.16	120.30
38	A1	1482	G	O4'-C1'-N9	10.28	116.42	108.20
11	B2	235	G	C6-C5-N7	-10.28	124.23	130.40
11	B2	726	A	C8-N9-C4	-10.28	101.69	105.80
38	A1	674	G	C5-C6-O6	-10.27	122.44	128.60
11	B2	464	G	C4-C5-N7	10.27	114.91	110.80
11	B2	619	A	C4-C5-C6	10.27	122.14	117.00
11	B2	908	G	N9-C4-C5	10.27	109.51	105.40
38	A1	544	A	C5-C6-N1	-10.27	112.56	117.70
38	A1	613	C	O4'-C1'-N1	10.27	116.42	108.20
38	A1	885	A	N1-C2-N3	-10.27	124.16	129.30
38	A1	1963	G	N9-C4-C5	-10.27	101.29	105.40
38	A1	2356	U	O4'-C1'-N1	10.27	116.42	108.20
11	B2	340	A	C4-C5-C6	10.27	122.14	117.00
38	A1	1392	G	C5-C6-O6	-10.27	122.44	128.60
10	B1	14	A	C8-N9-C4	-10.26	101.69	105.80
38	A1	221	G	C5-N7-C8	10.26	109.43	104.30
38	A1	866	G	N3-C4-C5	-10.26	123.47	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	931	C	N3-C4-N4	10.26	125.18	118.00
45	AC	339	ARG	NE-CZ-NH1	10.26	125.43	120.30
38	A1	1509	C	C6-N1-C2	-10.26	116.19	120.30
11	B2	611	A	N9-C4-C5	10.26	109.90	105.80
38	A1	312	G	N1-C6-O6	10.26	126.06	119.90
38	A1	867	C	C6-N1-C1'	-10.26	108.49	120.80
39	A3	8	C	N3-C4-N4	10.26	125.18	118.00
38	A1	1943	C	O4'-C1'-N1	10.26	116.41	108.20
11	B2	1409	G	O4'-C1'-N9	10.26	116.41	108.20
38	A1	982	G	N1-C2-N3	-10.26	117.75	123.90
38	A1	2386	U	N3-C4-O4	10.26	126.58	119.40
38	A1	2681	A	C4-C5-C6	10.26	122.13	117.00
11	B2	977	G	O4'-C1'-N9	10.25	116.40	108.20
24	BL	83	ARG	NE-CZ-NH1	10.25	125.43	120.30
38	A1	492	A	C6-C5-N7	-10.25	125.12	132.30
38	A1	1775	G	N1-C6-O6	10.25	126.05	119.90
38	A1	1874	G	O4'-C1'-N9	10.25	116.40	108.20
38	A1	1956	G	P-O3'-C3'	10.25	132.00	119.70
11	B2	211	G	N1-C2-N3	-10.25	117.75	123.90
11	B2	805	C	N3-C4-N4	10.25	125.17	118.00
11	B2	1395	G	C8-N9-C4	10.25	110.50	106.40
38	A1	265	A	N1-C2-N3	10.25	134.43	129.30
38	A1	331	G	C6-C5-N7	-10.25	124.25	130.40
38	A1	1334	G	N1-C6-O6	10.25	126.05	119.90
38	A1	1655	G	C5-C6-O6	-10.25	122.45	128.60
38	A1	2038	C	C6-N1-C2	-10.25	116.20	120.30
38	A1	2161	A	C5-N7-C8	10.25	109.02	103.90
38	A1	2435	G	O4'-C1'-N9	10.25	116.40	108.20
11	B2	62	G	C8-N9-C4	-10.24	102.30	106.40
11	B2	65	G	N9-C4-C5	10.24	109.50	105.40
38	A1	929	G	C6-C5-N7	-10.24	124.25	130.40
38	A1	1017	A	C5-C6-N1	-10.24	112.58	117.70
39	A3	53	A	C5-C6-N1	-10.24	112.58	117.70
38	A1	2027	G	C5-C6-O6	-10.24	122.45	128.60
38	A1	2505	A	N1-C6-N6	10.24	124.75	118.60
38	A1	2828	G	N1-C6-O6	10.24	126.05	119.90
11	B2	541	G	C5-C6-N1	-10.24	106.38	111.50
16	BD	57	ARG	NE-CZ-NH1	10.24	125.42	120.30
38	A1	844	C	O4'-C1'-N1	10.24	116.39	108.20
11	B2	337	C	N3-C4-C5	-10.24	117.81	121.90
11	B2	1485	G	C5-C6-N1	-10.23	106.38	111.50
38	A1	551	A	C5-C6-N6	-10.23	115.51	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1018	G	N1-C6-O6	10.23	126.04	119.90
6	AT	32	ARG	NE-CZ-NH1	10.23	125.42	120.30
38	A1	131	C	C5-C6-N1	10.23	126.12	121.00
38	A1	476	C	C5-C6-N1	10.23	126.11	121.00
10	B1	42	C	O4'-C1'-N1	10.23	116.38	108.20
38	A1	1111	G	C5-C6-N1	-10.23	106.39	111.50
38	A1	1465	A	N1-C2-N3	10.23	134.41	129.30
38	A1	1998	G	C5-C6-O6	-10.23	122.46	128.60
38	A1	2606	C	P-O3'-C3'	10.23	131.97	119.70
38	A1	621	G	C2-N3-C4	10.23	117.01	111.90
38	A1	2450	A	N1-C6-N6	10.23	124.74	118.60
11	B2	26	A	P-O5'-C5'	10.22	137.26	120.90
11	B2	164	A	C8-N9-C4	-10.22	101.71	105.80
38	A1	2101	A	C5-C6-N6	-10.22	115.52	123.70
38	A1	480	A	C5-C6-N1	-10.22	112.59	117.70
38	A1	1806	C	C6-N1-C2	-10.22	116.21	120.30
38	A1	2404	G	N1-C6-O6	10.22	126.03	119.90
38	A1	2594	U	O4'-C1'-N1	10.22	116.38	108.20
38	A1	246	A	C4-C5-C6	10.22	122.11	117.00
38	A1	523	C	N3-C4-N4	10.22	125.15	118.00
11	B2	522	C	N3-C4-C5	-10.22	117.81	121.90
38	A1	948	C	C6-N1-C2	-10.22	116.21	120.30
38	A1	1452	G	N7-C8-N9	10.22	118.21	113.10
38	A1	1655	G	C6-C5-N7	-10.22	124.27	130.40
50	AF	71	PHE	CB-CG-CD2	-10.22	113.65	120.80
38	A1	1358	C	N3-C4-C5	-10.21	117.81	121.90
38	A1	2640	C	O4'-C1'-N1	10.21	116.37	108.20
11	B2	463	G	N1-C2-N3	-10.21	117.77	123.90
11	B2	906	G	C5-C6-O6	-10.21	122.47	128.60
11	B2	1438	A	C8-N9-C4	-10.21	101.72	105.80
38	A1	256	G	N3-C2-N2	10.21	127.05	119.90
4	AQ	107	ARG	NE-CZ-NH1	10.21	125.40	120.30
11	B2	768	A	C4-C5-C6	10.21	122.10	117.00
38	A1	516	A	C5-C6-N1	-10.21	112.59	117.70
38	A1	934	G	C6-C5-N7	-10.21	124.27	130.40
38	A1	249	G	C2-N3-C4	10.21	117.00	111.90
38	A1	2768	C	N3-C4-N4	10.21	125.14	118.00
11	B2	834	C	O4'-C1'-N1	10.21	116.36	108.20
38	A1	2723	G	N1-C6-O6	10.21	126.02	119.90
38	A1	802	G	N1-C6-O6	10.20	126.02	119.90
11	B2	243	G	N9-C4-C5	10.20	109.48	105.40
38	A1	331	G	C5-C6-O6	10.20	134.72	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1195	G	C4-C5-C6	10.20	124.92	118.80
38	A1	1280	C	N3-C4-N4	10.20	125.14	118.00
38	A1	2605	G	C5-C6-O6	-10.20	122.48	128.60
38	A1	2504	U	O4'-C1'-N1	10.20	116.36	108.20
6	AT	9	ARG	NE-CZ-NH1	-10.20	115.20	120.30
38	A1	447	G	C5-C6-O6	-10.20	122.48	128.60
11	B2	875	G	C5-C6-O6	-10.20	122.48	128.60
38	A1	1129	G	C5-N7-C8	-10.20	99.20	104.30
11	B2	1344	U	O4'-C1'-N1	10.20	116.36	108.20
38	A1	294	U	C5-C4-O4	10.20	132.02	125.90
38	A1	2701	U	O4'-C1'-N1	10.19	116.36	108.20
57	Aj	80	ARG	NE-CZ-NH1	10.19	125.40	120.30
38	A1	452	A	N7-C8-N9	-10.19	108.70	113.80
38	A1	807	G	N1-C6-O6	10.19	126.02	119.90
38	A1	1186	G	N1-C6-O6	10.19	126.02	119.90
38	A1	2030	G	C2-N3-C4	10.19	117.00	111.90
39	A3	42	A	C4-C5-C6	10.19	122.10	117.00
38	A1	1646	G	C5-C6-N1	-10.19	106.41	111.50
11	B2	759	C	C6-N1-C2	-10.19	116.22	120.30
37	BY	8	TYR	CB-CG-CD2	-10.19	114.89	121.00
38	A1	2985	U	O4'-C1'-N1	10.19	116.35	108.20
38	A1	82	C	N3-C4-C5	-10.19	117.83	121.90
10	B1	22	A	C5-N7-C8	10.19	108.99	103.90
11	B2	568	C	C6-N1-C2	-10.19	116.22	120.30
38	A1	233	A	C5-C6-N1	-10.19	112.61	117.70
38	A1	266	A	C4-C5-C6	10.19	122.09	117.00
38	A1	1258	G	O4'-C1'-N9	10.19	116.35	108.20
38	A1	1651	A	C5-C6-N1	-10.19	112.61	117.70
39	A3	59	C	O4'-C1'-N1	10.19	116.35	108.20
38	A1	2395	C	C6-N1-C2	-10.19	116.23	120.30
11	B2	38	G	C5-C6-O6	-10.18	122.49	128.60
11	B2	212	G	C5-C6-N1	-10.18	106.41	111.50
38	A1	2773	A	N1-C6-N6	10.18	124.71	118.60
11	B2	745	G	C8-N9-C4	-10.18	102.33	106.40
54	AI	52	ARG	NE-CZ-NH1	10.18	125.39	120.30
11	B2	282	G	N1-C6-O6	10.18	126.01	119.90
38	A1	1066	C	O4'-C1'-N1	10.18	116.34	108.20
38	A1	2529	G	N9-C4-C5	-10.18	101.33	105.40
11	B2	40	C	C5-C4-N4	-10.18	113.08	120.20
38	A1	2466	C	N3-C4-N4	10.18	125.12	118.00
11	B2	463	G	N3-C2-N2	10.18	127.02	119.90
11	B2	1115	G	N1-C6-O6	10.18	126.00	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2343	G	N1-C6-O6	10.18	126.00	119.90
11	B2	575	A	N1-C6-N6	10.17	124.70	118.60
11	B2	976	A	N1-C6-N6	10.17	124.70	118.60
38	A1	36	G	C4-C5-C6	10.17	124.90	118.80
38	A1	107	G	N3-C2-N2	10.17	127.02	119.90
38	A1	737	G	C5-C6-O6	-10.17	122.50	128.60
38	A1	1200	A	O4'-C1'-N9	10.17	116.34	108.20
38	A1	2839	A	C5-C6-N6	-10.17	115.56	123.70
11	B2	538	C	N3-C4-N4	10.17	125.12	118.00
11	B2	678	G	N1-C6-O6	10.17	126.00	119.90
11	B2	831	A	C5-C6-N1	-10.17	112.61	117.70
38	A1	281	G	N1-C6-O6	10.17	126.00	119.90
38	A1	396	G	N1-C6-O6	10.17	126.00	119.90
38	A1	867	C	C2-N3-C4	10.17	124.98	119.90
38	A1	895	C	O4'-C1'-N1	10.17	116.33	108.20
38	A1	2273	U	C5-C6-N1	10.17	127.78	122.70
38	A1	2201	C	O4'-C1'-N1	10.17	116.33	108.20
10	B1	54	G	N3-C2-N2	10.17	127.02	119.90
11	B2	974	G	C5-C6-O6	-10.17	122.50	128.60
11	B2	1037	U	P-O3'-C3'	10.17	131.90	119.70
38	A1	1670	A	O4'-C1'-N9	10.17	116.33	108.20
38	A1	1271	G	C5-C6-O6	-10.17	122.50	128.60
38	A1	1539	U	C5-C4-O4	-10.17	119.80	125.90
38	A1	1902	G	O4'-C1'-N9	10.17	116.33	108.20
11	B2	642	G	C5-C6-O6	-10.16	122.50	128.60
38	A1	515	G	C5-C6-O6	-10.16	122.50	128.60
11	B2	1219	C	C5-C4-N4	-10.16	113.09	120.20
38	A1	2361	C	C6-N1-C2	10.16	124.36	120.30
11	B2	286	G	N1-C6-O6	10.16	126.00	119.90
11	B2	850	A	C5-C6-N6	-10.16	115.57	123.70
38	A1	198	C	C5-C4-N4	-10.16	113.09	120.20
11	B2	1117	A	C6-N1-C2	10.16	124.69	118.60
38	A1	1461	G	C2-N3-C4	10.16	116.98	111.90
38	A1	2648	C	C4-C5-C6	10.16	122.48	117.40
11	B2	80	A	C4-C5-C6	10.16	122.08	117.00
11	B2	1373	A	C5-C6-N6	-10.16	115.58	123.70
38	A1	2488	C	N3-C4-N4	10.16	125.11	118.00
38	A1	3035	C	C6-N1-C2	-10.16	116.24	120.30
11	B2	1143	G	O4'-C1'-N9	10.15	116.32	108.20
38	A1	1810	G	C5-C6-O6	-10.15	122.51	128.60
38	A1	2354	A	N7-C8-N9	-10.15	108.72	113.80
11	B2	1227	A	C5-C6-N6	-10.15	115.58	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1190	G	N1-C6-O6	10.15	125.99	119.90
38	A1	2650	G	C4-C5-C6	10.15	124.89	118.80
38	A1	2679	A	C5-N7-C8	10.15	108.98	103.90
11	B2	1465	C	C5-C6-N1	10.15	126.08	121.00
11	B2	300	G	C4-C5-N7	10.15	114.86	110.80
38	A1	397	G	C5-C6-O6	-10.15	122.51	128.60
38	A1	1519	G	O4'-C1'-N9	10.15	116.32	108.20
11	B2	744	A	N9-C4-C5	10.15	109.86	105.80
11	B2	1174	A	P-O3'-C3'	10.15	131.88	119.70
38	A1	418	C	N3-C4-C5	-10.15	117.84	121.90
38	A1	1012	G	N1-C6-O6	10.15	125.99	119.90
39	A3	54	A	C5-C6-N6	-10.15	115.58	123.70
11	B2	439	G	P-O3'-C3'	10.14	131.87	119.70
38	A1	847	A	N1-C6-N6	10.14	124.69	118.60
39	A3	34	C	O4'-C1'-N1	10.14	116.32	108.20
29	BQ	16	ARG	NE-CZ-NH2	-10.14	115.23	120.30
38	A1	2328	G	O4'-C1'-N9	10.14	116.31	108.20
11	B2	1063	A	N1-C6-N6	10.14	124.68	118.60
38	A1	116	G	N1-C6-O6	10.14	125.98	119.90
38	A1	1289	C	C5-C6-N1	10.14	126.07	121.00
11	B2	1353	C	N3-C4-N4	10.13	125.09	118.00
38	A1	1606	C	O4'-C1'-N1	10.13	116.31	108.20
38	A1	2342	C	C5-C4-N4	-10.13	113.11	120.20
38	A1	3037	G	N3-C2-N2	10.13	126.99	119.90
11	B2	917	A	N7-C8-N9	-10.13	108.73	113.80
11	B2	1013	G	C4-C5-N7	10.13	114.85	110.80
38	A1	105	C	O4'-C1'-N1	10.13	116.31	108.20
38	A1	632	G	N9-C4-C5	-10.13	101.35	105.40
38	A1	1025	A	C4-C5-C6	10.13	122.07	117.00
38	A1	2032	G	O4'-C1'-N9	10.13	116.31	108.20
11	B2	323	A	C4-C5-C6	10.13	122.06	117.00
38	A1	861	G	N1-C6-O6	10.13	125.98	119.90
38	A1	1370	G	C8-N9-C4	-10.13	102.35	106.40
11	B2	520	G	N1-C2-N3	-10.13	117.82	123.90
38	A1	1310	A	C4-C5-C6	10.13	122.06	117.00
38	A1	2360	G	O4'-C1'-N9	10.13	116.30	108.20
38	A1	2605	G	N3-C2-N2	10.13	126.99	119.90
39	A3	2	G	C6-C5-N7	-10.13	124.32	130.40
11	B2	1157	G	N9-C4-C5	10.12	109.45	105.40
38	A1	1342	G	C5-C6-O6	-10.12	122.53	128.60
38	A1	1198	G	C4-C5-N7	10.12	114.85	110.80
38	A1	2052	A	C4-C5-C6	10.12	122.06	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	592	C	O4'-C1'-N1	10.12	116.30	108.20
5	AS	155	ARG	NE-CZ-NH1	-10.12	115.24	120.30
11	B2	51	A	O4'-C1'-N9	10.12	116.30	108.20
23	BK	25	ARG	NE-CZ-NH2	-10.12	115.24	120.30
38	A1	2163	G	O4'-C1'-N9	10.12	116.30	108.20
11	B2	950	C	N3-C4-N4	10.12	125.08	118.00
38	A1	1534	G	C5-C6-O6	-10.12	122.53	128.60
38	A1	2239	C	N3-C4-N4	10.12	125.08	118.00
38	A1	2299	G	C4-C5-C6	10.12	124.87	118.80
38	A1	805	C	C2-N3-C4	10.12	124.96	119.90
38	A1	1785	G	C5-N7-C8	10.12	109.36	104.30
38	A1	2240	G	O4'-C1'-N9	10.12	116.29	108.20
11	B2	1459	G	P-O3'-C3'	10.11	131.84	119.70
38	A1	1308	G	N1-C6-O6	10.11	125.97	119.90
38	A1	1534	G	N1-C6-O6	10.11	125.97	119.90
38	A1	1779	C	O4'-C1'-N1	10.11	116.29	108.20
11	B2	303	G	N1-C6-O6	10.11	125.97	119.90
38	A1	194	G	C6-C5-N7	-10.11	124.33	130.40
38	A1	442	G	P-O3'-C3'	10.11	131.84	119.70
38	A1	846	C	O4'-C1'-N1	10.11	116.29	108.20
11	B2	210	A	C8-N9-C4	-10.11	101.76	105.80
38	A1	179	A	C4-C5-C6	10.11	122.06	117.00
38	A1	2011	U	C5-C4-O4	-10.11	119.83	125.90
38	A1	2429	G	C5-C6-O6	-10.11	122.53	128.60
38	A1	2527	G	N1-C6-O6	10.11	125.97	119.90
38	A1	1267	A	O4'-C1'-N9	10.11	116.29	108.20
38	A1	3027	C	O4'-C1'-N1	10.11	116.29	108.20
11	B2	99	C	N3-C4-N4	10.11	125.08	118.00
38	A1	2770	A	C5-C6-N6	-10.11	115.61	123.70
11	B2	48	G	N1-C2-N3	-10.10	117.84	123.90
38	A1	177	G	N1-C2-N3	-10.10	117.84	123.90
38	A1	16	G	N1-C6-O6	10.10	125.96	119.90
38	A1	1821	C	C6-N1-C2	-10.10	116.26	120.30
38	A1	575	G	C4-C5-N7	10.10	114.84	110.80
38	A1	626	C	C2-N3-C4	10.10	124.95	119.90
38	A1	644	G	C5-C6-O6	-10.10	122.54	128.60
38	A1	2289	A	C4-C5-N7	-10.10	105.65	110.70
38	A1	2972	G	N1-C2-N3	-10.10	117.84	123.90
38	A1	1754	A	C5-C6-N1	-10.10	112.65	117.70
11	B2	266	A	N7-C8-N9	-10.10	108.75	113.80
11	B2	797	U	C5-C6-N1	10.10	127.75	122.70
11	B2	1317	G	N1-C6-O6	10.10	125.96	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	221	G	C5-C6-O6	-10.10	122.54	128.60
11	B2	649	A	C4-C5-C6	10.10	122.05	117.00
11	B2	1312	C	C6-N1-C2	-10.10	116.26	120.30
38	A1	1162	C	N3-C4-C5	-10.10	117.86	121.90
38	A1	1201	G	N1-C6-O6	10.10	125.96	119.90
38	A1	237	G	C5-C6-O6	-10.10	122.54	128.60
38	A1	530	A	C5-C6-N6	-10.10	115.62	123.70
38	A1	1726	A	C5-C6-N1	-10.10	112.65	117.70
39	A3	35	A	N9-C4-C5	10.10	109.84	105.80
11	B2	8	U	C2-N3-C4	-10.09	120.94	127.00
11	B2	734	G	O4'-C1'-N9	10.09	116.27	108.20
11	B2	1203	G	N3-C2-N2	10.09	126.97	119.90
38	A1	848	A	N9-C4-C5	10.09	109.84	105.80
38	A1	2063	U	C2-N3-C4	-10.09	120.94	127.00
38	A1	2177	A	C5-C6-N1	-10.09	112.65	117.70
38	A1	2302	C	P-O3'-C3'	-10.09	107.59	119.70
38	A1	47	C	N3-C4-N4	10.09	125.06	118.00
38	A1	816	C	O4'-C1'-N1	10.09	116.27	108.20
38	A1	2716	C	N3-C4-N4	10.09	125.06	118.00
38	A1	734	C	N3-C4-C5	-10.09	117.86	121.90
38	A1	2573	C	N3-C4-C5	-10.09	117.86	121.90
11	B2	337	C	N3-C4-N4	10.09	125.06	118.00
11	B2	1154	G	O4'-C1'-N9	10.09	116.27	108.20
11	B2	1132	C	N3-C4-C5	-10.09	117.87	121.90
38	A1	1499	C	O4'-C1'-N1	10.09	116.27	108.20
38	A1	2142	U	C2-N3-C4	10.09	133.05	127.00
38	A1	2673	C	C5-C4-N4	-10.09	113.14	120.20
10	B1	44	G	N3-C2-N2	10.08	126.96	119.90
38	A1	687	C	O4'-C1'-N1	10.08	116.27	108.20
38	A1	1249	G	C5'-C4'-O4'	10.08	121.20	109.10
11	B2	193	G	O4'-C1'-N9	10.08	116.27	108.20
38	A1	829	G	N1-C6-O6	10.08	125.95	119.90
38	A1	930	G	N9-C4-C5	10.08	109.43	105.40
11	B2	1024	G	P-O3'-C3'	10.08	131.80	119.70
38	A1	844	C	N3-C4-C5	-10.08	117.87	121.90
38	A1	2640	C	C6-N1-C2	-10.08	116.27	120.30
39	A3	117	G	N1-C6-O6	10.08	125.95	119.90
10	B1	47	G	N1-C6-O6	10.08	125.95	119.90
11	B2	133	G	N1-C2-N3	-10.08	117.85	123.90
11	B2	437	A	P-O3'-C3'	10.08	131.79	119.70
38	A1	1346	G	C5-C6-O6	-10.08	122.55	128.60
38	A1	1641	G	N7-C8-N9	10.08	118.14	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2028	G	N1-C6-O6	10.08	125.95	119.90
11	B2	246	A	N1-C6-N6	10.07	124.64	118.60
38	A1	16	G	C5-C6-O6	-10.07	122.56	128.60
38	A1	2151	C	O4'-C1'-N1	10.07	116.26	108.20
11	B2	1075	A	C4-C5-C6	10.07	122.04	117.00
38	A1	86	G	N1-C6-O6	10.07	125.94	119.90
38	A1	387	A	N1-C2-N3	-10.07	124.26	129.30
38	A1	1471	G	N3-C4-N9	-10.07	119.96	126.00
38	A1	2092	G	O4'-C1'-N9	10.07	116.26	108.20
38	A1	2619	U	C4-C5-C6	10.07	125.74	119.70
38	A1	176	G	C5-C6-O6	-10.07	122.56	128.60
38	A1	414	G	N1-C6-O6	10.07	125.94	119.90
10	B1	36	A	C5-N7-C8	10.07	108.93	103.90
10	B1	74	A	C5-C6-N1	-10.07	112.67	117.70
11	B2	195	C	O4'-C1'-N1	10.07	116.25	108.20
11	B2	1131	G	O4'-C1'-N9	10.07	116.25	108.20
38	A1	682	G	C5-C6-O6	-10.07	122.56	128.60
38	A1	635	G	C6-C5-N7	-10.07	124.36	130.40
11	B2	290	C	C2-N3-C4	10.06	124.93	119.90
38	A1	1930	A	N1-C2-N3	10.06	134.33	129.30
38	A1	1991	G	C5-C6-N1	-10.06	106.47	111.50
38	A1	2090	A	C4-C5-C6	10.06	122.03	117.00
38	A1	2105	A	C1'-O4'-C4'	10.06	117.95	109.90
38	A1	2683	G	N1-C6-O6	10.06	125.94	119.90
11	B2	326	C	C5-C6-N1	10.06	126.03	121.00
11	B2	532	C	N3-C4-N4	10.06	125.04	118.00
11	B2	619	A	C4-C5-N7	-10.06	105.67	110.70
11	B2	970	G	N1-C6-O6	10.06	125.94	119.90
38	A1	694	A	C5-C6-N6	-10.06	115.65	123.70
38	A1	1515	G	C4-C5-C6	10.06	124.84	118.80
38	A1	2471	A	C4-C5-C6	10.06	122.03	117.00
38	A1	2710	G	C5-C6-O6	-10.06	122.56	128.60
38	A1	476	C	O4'-C1'-N1	10.06	116.25	108.20
11	B2	744	A	C8-N9-C4	-10.06	101.78	105.80
38	A1	576	G	N1-C2-N3	-10.06	117.87	123.90
38	A1	1488	C	O4'-C1'-N1	10.06	116.25	108.20
38	A1	2545	A	C5-C6-N1	-10.06	112.67	117.70
53	Ah	15	ARG	NE-CZ-NH1	10.06	125.33	120.30
11	B2	370	A	C5-C6-N6	-10.05	115.66	123.70
38	A1	336	C	O4'-C1'-N1	10.05	116.24	108.20
38	A1	3005	C	O4'-C1'-N1	10.06	116.25	108.20
38	A1	342	C	C2-N3-C4	10.05	124.93	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	930	G	N1-C2-N3	-10.05	117.87	123.90
38	A1	1619	C	C5-C6-N1	10.05	126.03	121.00
38	A1	2303	A	C4-C5-N7	-10.05	105.67	110.70
11	B2	915	U	C2-N3-C4	10.05	133.03	127.00
61	AN	72	TYR	CB-CG-CD1	-10.05	114.97	121.00
11	B2	1442	G	O4'-C1'-N9	10.05	116.24	108.20
38	A1	928	A	C4-C5-C6	10.05	122.02	117.00
38	A1	1694	G	O4'-C1'-N9	10.05	116.24	108.20
38	A1	1711	C	N3-C4-C5	-10.05	117.88	121.90
11	B2	1220	G	C6-N1-C2	-10.05	119.07	125.10
38	A1	74	A	C4-C5-C6	10.05	122.02	117.00
38	A1	663	A	C8-N9-C4	-10.05	101.78	105.80
38	A1	2556	C	N3-C4-N4	10.05	125.03	118.00
38	A1	3029	A	C5-C6-N6	-10.04	115.66	123.70
38	A1	37	C	N3-C4-C5	-10.04	117.88	121.90
38	A1	2492	G	N1-C2-N3	-10.04	117.87	123.90
38	A1	457	C	C2-N3-C4	10.04	124.92	119.90
11	B2	241	U	O4'-C1'-N1	10.04	116.23	108.20
11	B2	1472	G	C4'-C3'-C2'	-10.04	92.56	102.60
38	A1	298	G	C1'-O4'-C4'	10.04	117.93	109.90
38	A1	726	G	C4-C5-N7	10.04	114.82	110.80
38	A1	2449	A	C5-N7-C8	10.04	108.92	103.90
11	B2	256	G	C5-C6-O6	-10.04	122.58	128.60
66	AY	127	ARG	NE-CZ-NH1	-10.04	115.28	120.30
11	B2	1147	G	N1-C6-O6	10.04	125.92	119.90
11	B2	914	U	O4'-C1'-N1	10.03	116.23	108.20
38	A1	934	G	O4'-C1'-N9	10.04	116.23	108.20
38	A1	1071	A	C4-C5-C6	10.04	122.02	117.00
38	A1	1448	G	C5-C6-O6	-10.04	122.58	128.60
38	A1	2809	G	C5-C6-N1	-10.03	106.48	111.50
11	B2	589	U	O4'-C1'-N1	10.03	116.22	108.20
38	A1	246	A	N1-C6-N6	10.03	124.62	118.60
11	B2	714	G	C5-C6-O6	-10.03	122.58	128.60
38	A1	921	C	O4'-C1'-N1	10.03	116.22	108.20
38	A1	1171	G	C4-C5-N7	-10.03	106.79	110.80
38	A1	1429	A	C4-C5-C6	10.03	122.01	117.00
38	A1	1596	G	N3-C2-N2	10.03	126.92	119.90
38	A1	2482	G	C6-N1-C2	10.03	131.12	125.10
38	A1	489	G	C8-N9-C4	-10.03	102.39	106.40
11	B2	934	G	N3-C2-N2	10.03	126.92	119.90
11	B2	1354	A	C5-C6-N1	-10.03	112.69	117.70
32	BT	38	ARG	NE-CZ-NH1	-10.03	115.29	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
39	A3	15	G	N1-C2-N3	-10.03	117.88	123.90
11	B2	16	G	N3-C2-N2	10.02	126.92	119.90
11	B2	447	A	C8-N9-C4	-10.02	101.79	105.80
11	B2	901	G	O4'-C1'-N9	10.02	116.22	108.20
11	B2	1326	G	C8-N9-C4	-10.02	102.39	106.40
38	A1	177	G	O4'-C1'-N9	10.02	116.22	108.20
38	A1	1467	G	N3-C2-N2	10.02	126.92	119.90
41	AA	106	PHE	CB-CG-CD1	-10.02	113.78	120.80
11	B2	675	A	C4-C5-C6	10.02	122.01	117.00
42	Aa	34	PHE	CB-CG-CD2	10.02	127.81	120.80
38	A1	27	G	C5-C6-O6	-10.02	122.59	128.60
38	A1	70	G	C2-N3-C4	10.02	116.91	111.90
38	A1	782	G	C6-N1-C2	10.02	131.11	125.10
38	A1	1687	C	C5-C4-N4	-10.02	113.19	120.20
63	AP	42	ARG	NE-CZ-NH2	10.02	125.31	120.30
17	BE	204	ARG	NE-CZ-NH1	10.02	125.31	120.30
38	A1	605	A	N9-C4-C5	10.02	109.81	105.80
38	A1	2505	A	C5-C6-N1	-10.02	112.69	117.70
11	B2	429	A	N1-C6-N6	10.02	124.61	118.60
38	A1	1200	A	N7-C8-N9	10.02	118.81	113.80
39	A3	124	A	C5-C6-N6	-10.02	115.69	123.70
10	B1	10	G	N1-C6-O6	10.01	125.91	119.90
11	B2	1115	G	O4'-C1'-N9	10.01	116.21	108.20
38	A1	849	C	C2-N3-C4	10.01	124.91	119.90
38	A1	2291	G	C5-N7-C8	10.01	109.31	104.30
66	AY	53	TYR	CB-CG-CD2	-10.01	114.99	121.00
11	B2	1051	G	C2-N3-C4	10.01	116.91	111.90
38	A1	1781	C	N3-C4-N4	10.01	125.01	118.00
38	A1	1249	G	C5-C6-O6	-10.01	122.59	128.60
38	A1	2632	C	N3-C4-N4	10.01	125.01	118.00
39	A3	25	A	C4-C5-C6	10.01	122.00	117.00
38	A1	2672	A	C4-C5-C6	10.01	122.00	117.00
11	B2	1177	C	N3-C4-C5	-10.01	117.90	121.90
38	A1	479	G	O4'-C1'-N9	10.01	116.20	108.20
38	A1	2050	U	O4'-C1'-N1	10.01	116.20	108.20
38	A1	798	G	C5-C6-O6	-10.01	122.60	128.60
38	A1	840	G	C5-C6-O6	-10.01	122.60	128.60
38	A1	1628	C	N3-C4-C5	-10.01	117.90	121.90
38	A1	1885	G	N3-C4-C5	10.01	133.60	128.60
38	A1	2534	C	N3-C4-C5	-10.01	117.90	121.90
38	A1	288	G	C5-C6-O6	-10.00	122.60	128.60
11	B2	1191	G	O4'-C1'-N9	10.00	116.20	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	599	G	C5-C6-O6	-10.00	122.60	128.60
38	A1	2662	G	O4'-C1'-N9	10.00	116.20	108.20
38	A1	2665	G	C5-C6-O6	-10.00	122.60	128.60
39	A3	25	A	O4'-C1'-N9	10.00	116.20	108.20
38	A1	1593	C	O4'-C1'-N1	10.00	116.20	108.20
38	A1	2108	U	O4'-C1'-N1	10.00	116.20	108.20
11	B2	196	G	N7-C8-N9	-9.99	108.10	113.10
38	A1	254	A	C5-N7-C8	9.99	108.90	103.90
38	A1	355	G	N3-C4-C5	9.99	133.60	128.60
38	A1	1702	C	N3-C4-N4	9.99	125.00	118.00
11	B2	621	G	N7-C8-N9	-9.99	108.10	113.10
38	A1	2377	C	C6-N1-C2	-9.99	116.30	120.30
11	B2	1012	C	O4'-C1'-N1	9.99	116.19	108.20
38	A1	1861	G	C4-C5-C6	9.99	124.80	118.80
31	BS	5	ARG	NE-CZ-NH2	-9.99	115.31	120.30
38	A1	117	A	C5-C6-N6	-9.99	115.71	123.70
38	A1	308	C	N3-C4-C5	-9.99	117.90	121.90
38	A1	1168	A	C5-C6-N1	-9.99	112.71	117.70
38	A1	1345	G	C4-C5-N7	9.99	114.80	110.80
11	B2	1156	A	O4'-C1'-N9	9.99	116.19	108.20
38	A1	1823	A	C5-C6-N1	-9.99	112.71	117.70
61	AN	45	PHE	CB-CG-CD1	9.99	127.79	120.80
11	B2	770	A	C5-C6-N1	-9.98	112.71	117.70
11	B2	1371	C	N3-C4-C5	9.98	125.89	121.90
29	BQ	55	ARG	NE-CZ-NH2	-9.98	115.31	120.30
11	B2	1364	C	N3-C4-N4	9.98	124.99	118.00
39	A3	66	A	N1-C6-N6	9.98	124.59	118.60
11	B2	77	G	C5-C6-O6	-9.98	122.61	128.60
11	B2	574	A	N1-C6-N6	9.98	124.59	118.60
38	A1	1353	A	C3'-C2'-C1'	9.98	109.48	101.50
38	A1	2195	G	C5-C6-O6	-9.98	122.61	128.60
11	B2	407	G	C5-C6-O6	-9.98	122.61	128.60
11	B2	801	A	N1-C6-N6	9.98	124.59	118.60
11	B2	984	C	N3-C4-N4	9.98	124.99	118.00
11	B2	1062	G	C5-N7-C8	9.98	109.29	104.30
38	A1	1040	C	C2-N3-C4	9.98	124.89	119.90
38	A1	1306	A	C5-C6-N6	-9.98	115.72	123.70
38	A1	2194	A	C5-C6-N1	-9.98	112.71	117.70
38	A1	2264	G	N1-C6-O6	9.98	125.89	119.90
38	A1	2540	A	C5-C6-N1	-9.98	112.71	117.70
45	AC	337	ARG	NE-CZ-NH2	9.98	125.29	120.30
38	A1	982	G	C5-C6-O6	-9.98	122.61	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	B1	62	C	C2-N3-C4	9.97	124.89	119.90
38	A1	35	G	O4'-C1'-N9	9.97	116.18	108.20
38	A1	1755	C	C2-N3-C4	9.97	124.89	119.90
38	A1	2745	G	C5-C6-O6	-9.97	122.62	128.60
38	A1	53	A	N1-C6-N6	9.97	124.58	118.60
38	A1	544	A	N1-C6-N6	9.97	124.58	118.60
38	A1	1852	U	N3-C4-O4	9.97	126.38	119.40
38	A1	3036	C	C4-C5-C6	9.97	122.39	117.40
65	AV	14	PHE	CB-CG-CD1	9.97	127.78	120.80
38	A1	1737	A	C4-C5-C6	9.97	121.98	117.00
38	A1	1862	G	N9-C4-C5	9.97	109.39	105.40
66	AY	71	ARG	NE-CZ-NH1	9.97	125.28	120.30
11	B2	133	G	P-O3'-C3'	9.96	131.66	119.70
38	A1	2057	G	N7-C8-N9	9.97	118.08	113.10
38	A1	2357	U	N1-C2-O2	9.97	129.78	122.80
38	A1	1472	U	N1-C2-N3	-9.96	108.92	114.90
38	A1	1613	A	C4-C5-C6	9.96	121.98	117.00
10	B1	29	C	N3-C4-N4	9.96	124.97	118.00
11	B2	1172	A	C5-C6-N6	-9.96	115.73	123.70
38	A1	871	G	C5-C6-O6	-9.96	122.62	128.60
10	B1	57	C	C4-C5-C6	9.96	122.38	117.40
11	B2	908	G	C4-C5-N7	-9.96	106.82	110.80
38	A1	24	G	C5-C6-O6	-9.96	122.62	128.60
38	A1	194	G	N9-C4-C5	-9.96	101.42	105.40
38	A1	372	A	N9-C4-C5	9.96	109.78	105.80
38	A1	840	G	N1-C6-O6	9.96	125.88	119.90
38	A1	1374	G	C5-C6-O6	-9.96	122.62	128.60
38	A1	2284	C	P-O3'-C3'	9.96	131.65	119.70
11	B2	116	C	N3-C4-C5	-9.96	117.92	121.90
11	B2	1234	A	O4'-C1'-N9	9.96	116.17	108.20
38	A1	671	G	O4'-C1'-N9	9.96	116.17	108.20
38	A1	890	G	C2-N3-C4	9.96	116.88	111.90
38	A1	2034	G	N3-C2-N2	9.96	126.87	119.90
11	B2	270	A	C5-C6-N1	-9.96	112.72	117.70
11	B2	983	G	N3-C2-N2	9.95	126.87	119.90
11	B2	387	G	C5-N7-C8	9.95	109.28	104.30
11	B2	824	G	N3-C4-N9	9.95	131.97	126.00
38	A1	51	G	N1-C6-O6	9.95	125.87	119.90
38	A1	483	C	C4-C5-C6	9.95	122.38	117.40
38	A1	557	G	O4'-C1'-N9	9.95	116.16	108.20
17	BE	12	ARG	NE-CZ-NH1	-9.95	115.33	120.30
38	A1	962	C	N3-C4-C5	-9.95	117.92	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	241	C	O4'-C1'-N1	9.95	116.16	108.20
46	AD	42	ARG	NE-CZ-NH2	-9.95	115.33	120.30
11	B2	739	G	C5-C6-O6	-9.95	122.63	128.60
38	A1	979	G	N3-C4-C5	9.95	133.57	128.60
11	B2	805	C	C6-N1-C2	-9.94	116.32	120.30
38	A1	2134	G	O4'-C1'-N9	9.94	116.16	108.20
62	AO	143	ARG	NE-CZ-NH2	-9.95	115.33	120.30
11	B2	467	G	O4'-C1'-N9	9.94	116.15	108.20
11	B2	1157	G	C4-C5-C6	9.94	124.77	118.80
38	A1	1674	G	O4'-C1'-N9	9.94	116.15	108.20
11	B2	1294	G	C6-C5-N7	-9.94	124.44	130.40
38	A1	1923	A	C8-N9-C4	-9.94	101.82	105.80
11	B2	1023	C	C6-N1-C2	-9.94	116.32	120.30
11	B2	908	G	C4-C5-C6	9.94	124.76	118.80
38	A1	2831	G	N1-C6-O6	9.94	125.86	119.90
50	AF	76	ARG	NE-CZ-NH2	9.94	125.27	120.30
11	B2	964	A	N1-C6-N6	9.94	124.56	118.60
11	B2	1010	G	C6-C5-N7	-9.94	124.44	130.40
11	B2	1359	C	C5-C6-N1	-9.94	116.03	121.00
38	A1	796	C	O4'-C1'-N1	9.94	116.15	108.20
38	A1	1617	G	N3-C2-N2	9.94	126.86	119.90
38	A1	2874	C	N3-C4-C5	-9.94	117.93	121.90
11	B2	311	A	C4-C5-C6	9.93	121.97	117.00
11	B2	496	C	C5-C4-N4	-9.93	113.25	120.20
11	B2	1090	C	C6-N1-C2	9.93	124.27	120.30
38	A1	2620	G	N1-C6-O6	9.93	125.86	119.90
38	A1	732	G	C6-C5-N7	-9.93	124.44	130.40
38	A1	2054	G	N1-C6-O6	9.93	125.86	119.90
11	B2	576	C	C5-C4-N4	-9.93	113.25	120.20
38	A1	362	A	P-O3'-C3'	-9.93	107.78	119.70
38	A1	1090	G	C8-N9-C4	-9.93	102.43	106.40
11	B2	130	G	C8-N9-C4	-9.93	102.43	106.40
38	A1	149	G	N3-C2-N2	9.93	126.85	119.90
38	A1	305	G	C4-C5-N7	-9.93	106.83	110.80
38	A1	1983	C	O4'-C1'-N1	9.93	116.14	108.20
11	B2	610	G	C4-C5-N7	-9.93	106.83	110.80
11	B2	950	C	O5'-P-OP1	-9.93	96.77	105.70
11	B2	980	C	N3-C4-C5	-9.93	117.93	121.90
38	A1	501	C	O4'-C1'-N1	9.93	116.14	108.20
11	B2	210	A	C4-C5-C6	9.92	121.96	117.00
11	B2	1474	A	O4'-C1'-N9	9.92	116.14	108.20
11	B2	264	C	O4'-C1'-N1	9.92	116.14	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	898	G	C2-N3-C4	9.92	116.86	111.90
11	B2	1228	A	C8-N9-C4	-9.92	101.83	105.80
38	A1	712	C	O4'-C1'-N1	9.92	116.14	108.20
38	A1	2420	C	N3-C4-N4	9.92	124.95	118.00
11	B2	567	A	C5-C6-N1	-9.92	112.74	117.70
38	A1	703	G	C4-C5-C6	9.92	124.75	118.80
18	BF	8	TYR	CB-CG-CD1	-9.92	115.05	121.00
38	A1	2333	G	O4'-C1'-N9	9.92	116.13	108.20
10	B1	46	U	N1-C2-N3	9.92	120.85	114.90
38	A1	403	G	C8-N9-C4	-9.92	102.43	106.40
38	A1	633	A	N1-C6-N6	9.92	124.55	118.60
38	A1	2016	C	N3-C4-N4	9.92	124.94	118.00
38	A1	1474	A	N1-C6-N6	9.92	124.55	118.60
38	A1	1898	A	C5-C6-N1	-9.92	112.74	117.70
38	A1	529	G	O4'-C1'-N9	9.91	116.13	108.20
38	A1	2811	U	O4'-C1'-N1	9.91	116.13	108.20
11	B2	91	G	C5-C6-O6	-9.91	122.65	128.60
11	B2	865	A	C2-N3-C4	-9.91	105.64	110.60
38	A1	2984	A	C8-N9-C4	9.91	109.77	105.80
38	A1	619	G	C5-C6-O6	-9.91	122.65	128.60
38	A1	1257	G	N1-C6-O6	9.91	125.85	119.90
38	A1	1295	G	N1-C6-O6	9.91	125.85	119.90
38	A1	2619	U	C5-C6-N1	-9.91	117.74	122.70
11	B2	940	U	O4'-C1'-N1	9.91	116.13	108.20
38	A1	1058	A	N1-C6-N6	9.91	124.55	118.60
38	A1	2011	U	N3-C4-O4	9.91	126.34	119.40
38	A1	2612	A	N1-C6-N6	9.91	124.55	118.60
11	B2	1040	A	N1-C6-N6	9.91	124.55	118.60
38	A1	270	C	C5-C4-N4	-9.91	113.26	120.20
38	A1	746	C	N3-C4-C5	-9.91	117.94	121.90
48	AE	88	TYR	CB-CG-CD2	9.91	126.95	121.00
11	B2	426	C	N3-C4-C5	-9.91	117.94	121.90
11	B2	1075	A	N1-C6-N6	9.91	124.55	118.60
38	A1	531	G	N1-C6-O6	9.91	125.84	119.90
38	A1	879	A	C4-C5-C6	9.91	121.95	117.00
38	A1	1355	A	C5-C6-N1	-9.91	112.75	117.70
38	A1	2698	G	N1-C2-N3	-9.91	117.95	123.90
39	A3	113	C	C5-C6-N1	9.91	125.95	121.00
43	AB	179	TYR	CB-CG-CD1	9.91	126.94	121.00
11	B2	136	A	N9-C4-C5	9.90	109.76	105.80
11	B2	184	G	C5-C6-O6	-9.90	122.66	128.60
11	B2	1207	G	P-O3'-C3'	-9.90	107.81	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2223	G	O4'-C1'-N9	9.90	116.12	108.20
39	A3	63	G	C8-N9-C4	-9.90	102.44	106.40
45	AC	321	PHE	CB-CG-CD2	-9.90	113.87	120.80
11	B2	377	A	C2-N3-C4	-9.90	105.65	110.60
11	B2	1449	G	N7-C8-N9	9.90	118.05	113.10
11	B2	991	C	N3-C4-C5	-9.90	117.94	121.90
38	A1	617	G	O4'-C1'-N9	9.90	116.12	108.20
38	A1	793	C	C2-N3-C4	9.90	124.85	119.90
38	A1	1363	C	O4'-C1'-N1	9.90	116.12	108.20
38	A1	1946	G	C5-C6-O6	-9.90	122.66	128.60
38	A1	1534	G	O4'-C1'-N9	9.90	116.12	108.20
11	B2	35	G	C5-C6-O6	-9.90	122.66	128.60
38	A1	1221	U	O4'-C1'-N1	9.90	116.12	108.20
38	A1	2374	C	N3-C4-N4	9.90	124.93	118.00
38	A1	2722	G	O4'-C1'-N9	9.90	116.12	108.20
11	B2	42	G	C5-N7-C8	-9.90	99.35	104.30
11	B2	993	C	O4'-C1'-N1	9.90	116.12	108.20
38	A1	2435	G	C5-C6-O6	-9.90	122.66	128.60
44	Ab	97	ARG	NE-CZ-NH1	9.90	125.25	120.30
11	B2	135	U	O4'-C1'-N1	9.90	116.12	108.20
38	A1	1008	U	N3-C4-C5	-9.90	108.66	114.60
11	B2	155	U	C6-N1-C2	-9.89	115.06	121.00
11	B2	247	G	C2-N3-C4	9.89	116.85	111.90
11	B2	688	C	N3-C4-C5	-9.89	117.94	121.90
11	B2	731	A	C4-C5-C6	9.89	121.95	117.00
38	A1	529	G	C5-N7-C8	9.89	109.25	104.30
38	A1	1760	C	C6-N1-C2	-9.89	116.34	120.30
38	A1	2881	G	N1-C6-O6	9.89	125.84	119.90
38	A1	817	G	C5-C6-O6	-9.89	122.67	128.60
38	A1	1602	C	O4'-C1'-N1	9.89	116.11	108.20
38	A1	1769	G	C8-N9-C4	9.89	110.36	106.40
38	A1	2685	G	C5-C6-O6	-9.89	122.67	128.60
38	A1	1760	C	N3-C4-C5	-9.89	117.94	121.90
11	B2	307	G	N3-C4-C5	9.89	133.54	128.60
38	A1	2034	G	C5-C6-O6	-9.89	122.67	128.60
38	A1	2420	C	C2-N3-C4	9.89	124.84	119.90
29	BQ	9	ARG	NE-CZ-NH1	-9.89	115.36	120.30
38	A1	1681	G	C5-C6-O6	-9.89	122.67	128.60
38	A1	1889	G	N1-C2-N3	-9.89	117.97	123.90
38	A1	252	A	N1-C6-N6	9.88	124.53	118.60
38	A1	446	G	N1-C6-O6	9.88	125.83	119.90
38	A1	1515	G	C6-C5-N7	-9.88	124.47	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2059	G	C4-C5-N7	9.88	114.75	110.80
38	A1	2951	G	N1-C6-O6	9.88	125.83	119.90
11	B2	304	C	C6-N1-C2	-9.88	116.35	120.30
11	B2	318	C	C5-C4-N4	-9.88	113.28	120.20
38	A1	1234	A	C5-C6-N1	-9.88	112.76	117.70
38	A1	2465	A	C5-C6-N1	-9.88	112.76	117.70
11	B2	32	A	C4-C5-C6	9.88	121.94	117.00
11	B2	428	G	N1-C2-N3	-9.88	117.97	123.90
11	B2	525	A	N1-C6-N6	9.88	124.53	118.60
11	B2	741	A	C4-C5-C6	9.88	121.94	117.00
11	B2	1249	A	C6-C5-N7	-9.88	125.38	132.30
11	B2	1278	A	N1-C6-N6	9.88	124.53	118.60
11	B2	1358	A	N1-C6-N6	9.88	124.53	118.60
38	A1	1297	C	N3-C4-N4	9.88	124.92	118.00
38	A1	2402	A	N1-C6-N6	9.88	124.53	118.60
11	B2	486	A	N1-C6-N6	9.88	124.53	118.60
38	A1	1981	G	O4'-C1'-N9	9.88	116.10	108.20
38	A1	2366	G	C5-C6-O6	-9.88	122.67	128.60
38	A1	2597	A	N1-C6-N6	9.88	124.53	118.60
11	B2	119	A	C4-C5-N7	-9.88	105.76	110.70
38	A1	1507	A	N1-C2-N3	9.88	134.24	129.30
38	A1	2063	U	C2'-C3'-O3'	9.88	131.23	109.50
38	A1	2487	G	C5-C6-O6	-9.88	122.67	128.60
38	A1	1668	G	N7-C8-N9	9.87	118.04	113.10
38	A1	2225	C	N3-C4-N4	9.87	124.91	118.00
38	A1	2341	G	C5-C6-O6	-9.88	122.67	128.60
39	A3	7	C	C5-C6-N1	9.87	125.94	121.00
39	A3	8	C	N3-C4-C5	-9.87	117.95	121.90
11	B2	956	C	C2-N3-C4	9.87	124.84	119.90
38	A1	31	G	C6-C5-N7	-9.87	124.48	130.40
38	A1	91	G	O4'-C1'-N9	9.87	116.10	108.20
38	A1	1932	G	C5-C6-O6	-9.87	122.68	128.60
38	A1	862	G	P-O3'-C3'	9.87	131.54	119.70
38	A1	997	A	C5-C6-N6	-9.87	115.81	123.70
38	A1	1398	C	C6-N1-C2	-9.87	116.35	120.30
38	A1	1406	G	C6-C5-N7	-9.87	124.48	130.40
54	AI	63	ARG	NE-CZ-NH1	9.87	125.23	120.30
11	B2	478	C	O4'-C1'-N1	9.87	116.09	108.20
11	B2	805	C	O4'-C1'-N1	9.87	116.09	108.20
11	B2	1042	U	O4'-C1'-N1	9.87	116.09	108.20
38	A1	2372	C	N3-C4-N4	9.87	124.91	118.00
38	A1	2951	G	C5-C6-O6	-9.87	122.68	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	156	A	C5-C6-N1	-9.87	112.77	117.70
11	B2	1016	G	N1-C6-O6	9.86	125.82	119.90
38	A1	603	G	N3-C2-N2	9.86	126.81	119.90
38	A1	917	A	N1-C6-N6	9.87	124.52	118.60
38	A1	1633	A	N1-C6-N6	9.86	124.52	118.60
38	A1	1663	C	O4'-C1'-N1	9.87	116.09	108.20
11	B2	195	C	N3-C4-N4	9.86	124.90	118.00
11	B2	966	G	C6-C5-N7	-9.86	124.48	130.40
38	A1	1208	A	C4-C5-C6	9.86	121.93	117.00
38	A1	1723	A	C5-C6-N6	-9.86	115.81	123.70
11	B2	350	G	N1-C6-O6	9.86	125.81	119.90
11	B2	1265	G	N3-C2-N2	9.86	126.80	119.90
38	A1	614	G	C5-C6-O6	-9.86	122.68	128.60
38	A1	937	A	C8-N9-C4	-9.86	101.86	105.80
38	A1	1833	G	N1-C6-O6	9.86	125.81	119.90
11	B2	1367	C	N3-C4-N4	9.86	124.90	118.00
38	A1	14	A	C8-N9-C4	-9.86	101.86	105.80
38	A1	103	A	C5-C6-N6	-9.86	115.82	123.70
38	A1	852	A	N9-C4-C5	9.86	109.74	105.80
38	A1	86	G	C8-N9-C4	-9.85	102.46	106.40
38	A1	236	G	N3-C2-N2	9.85	126.80	119.90
38	A1	1791	A	C5-C6-N6	-9.85	115.82	123.70
38	A1	2167	C	N3-C4-N4	9.85	124.90	118.00
38	A1	559	G	C4-C5-N7	9.85	114.74	110.80
38	A1	859	G	C6-C5-N7	-9.85	124.49	130.40
11	B2	736	A	O4'-C1'-N9	9.85	116.08	108.20
11	B2	850	A	C5-N7-C8	9.85	108.83	103.90
11	B2	1224	U	O4'-C1'-N1	9.85	116.08	108.20
38	A1	81	G	C8-N9-C4	-9.85	102.46	106.40
38	A1	2441	A	O4'-C1'-N9	9.85	116.08	108.20
38	A1	2603	A	N9-C4-C5	9.85	109.74	105.80
10	B1	58	A	C5-C6-N6	-9.85	115.82	123.70
30	BR	92	ARG	NE-CZ-NH2	9.85	125.22	120.30
38	A1	581	A	C5-C6-N6	-9.85	115.82	123.70
38	A1	1882	C	N3-C4-C5	-9.85	117.96	121.90
66	AY	126	PHE	CB-CG-CD1	-9.85	113.91	120.80
15	BC	27	ARG	NE-CZ-NH2	-9.84	115.38	120.30
38	A1	46	C	C6-N1-C2	-9.84	116.36	120.30
38	A1	2519	C	O4'-C1'-N1	9.84	116.07	108.20
38	A1	2789	G	C8-N9-C4	-9.84	102.46	106.40
32	BT	64	ARG	NE-CZ-NH2	-9.84	115.38	120.30
38	A1	2118	C	O4'-C1'-N1	9.84	116.07	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2714	G	N1-C2-N3	-9.84	118.00	123.90
38	A1	22	C	N3-C4-C5	-9.84	117.96	121.90
38	A1	304	G	N1-C2-N3	-9.84	118.00	123.90
38	A1	2414	G	O4'-C1'-N9	9.84	116.07	108.20
11	B2	596	A	C5-C6-N6	-9.84	115.83	123.70
11	B2	1144	G	C5-N7-C8	9.84	109.22	104.30
11	B2	996	A	C4-C5-N7	-9.84	105.78	110.70
11	B2	1293	A	C5-N7-C8	9.84	108.82	103.90
13	BA	181	ARG	NE-CZ-NH2	-9.84	115.38	120.30
38	A1	1232	G	N1-C6-O6	9.84	125.80	119.90
38	A1	1528	A	C5-N7-C8	9.84	108.82	103.90
62	AO	138	PHE	CB-CG-CD2	-9.84	113.92	120.80
11	B2	1291	G	P-O3'-C3'	9.83	131.50	119.70
11	B2	377	A	N1-C6-N6	9.83	124.50	118.60
11	B2	757	G	O4'-C1'-N9	9.83	116.07	108.20
38	A1	1024	G	C5-C6-O6	-9.83	122.70	128.60
38	A1	672	C	C5-C6-N1	9.83	125.92	121.00
38	A1	2412	A	N1-C6-N6	9.83	124.50	118.60
38	A1	286	G	N7-C8-N9	-9.83	108.19	113.10
38	A1	1261	C	N3-C4-N4	9.83	124.88	118.00
11	B2	442	C	O4'-C1'-N1	9.83	116.06	108.20
11	B2	448	A	N1-C6-N6	9.83	124.50	118.60
11	B2	713	A	C5-C6-N6	-9.83	115.84	123.70
38	A1	1093	G	O4'-C1'-N9	9.83	116.06	108.20
38	A1	3026	C	O4'-C1'-N1	9.83	116.06	108.20
38	A1	494	C	C6-N1-C2	-9.83	116.37	120.30
38	A1	1866	G	C4-C5-C6	9.83	124.69	118.80
11	B2	151	G	O4'-C1'-N9	9.82	116.06	108.20
11	B2	1360	C	N3-C4-C5	-9.82	117.97	121.90
11	B2	881	G	C6-C5-N7	-9.82	124.51	130.40
38	A1	1014	U	O4'-C1'-N1	9.82	116.06	108.20
38	A1	2036	A	O4'-C1'-N9	9.82	116.06	108.20
39	A3	102	G	O4'-C1'-N9	9.82	116.06	108.20
38	A1	287	G	O4'-C1'-N9	9.82	116.06	108.20
38	A1	2547	A	C5-C6-N6	-9.82	115.84	123.70
11	B2	765	U	O4'-C1'-N1	9.82	116.06	108.20
11	B2	1101	G	O4'-C1'-N9	9.82	116.06	108.20
38	A1	1092	U	O4'-C1'-N1	9.82	116.06	108.20
38	A1	2409	C	C5-C4-N4	-9.82	113.33	120.20
11	B2	131	G	C5-C6-O6	-9.82	122.71	128.60
11	B2	954	G	C4-C5-N7	9.82	114.73	110.80
11	B2	1367	C	C6-N1-C2	9.82	124.23	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	A1	1045	A	C5-C6-N6	-9.82	115.84	123.70
11	B2	522	C	N3-C4-N4	9.82	124.87	118.00
11	B2	1083	G	N7-C8-N9	-9.81	108.19	113.10
39	A3	106	G	C5-C6-O6	-9.81	122.71	128.60
11	B2	1272	G	N1-C6-O6	9.81	125.79	119.90
39	A3	73	U	N1-C2-O2	-9.81	115.93	122.80
20	BH	209	ARG	NE-CZ-NH2	-9.81	115.39	120.30
38	A1	417	C	N3-C2-O2	9.81	128.77	121.90
38	A1	1667	U	O4'-C1'-N1	9.81	116.05	108.20
38	A1	971	G	C5-C6-O6	-9.81	122.71	128.60
38	A1	2665	G	O4'-C1'-N9	9.81	116.05	108.20
38	A1	2962	A	C4-C5-C6	9.81	121.91	117.00
11	B2	1319	C	N3-C4-C5	-9.81	117.98	121.90
38	A1	562	G	N1-C6-O6	9.81	125.78	119.90
38	A1	1125	A	C5-C6-N6	-9.81	115.85	123.70
38	A1	1612	G	C5-C6-N1	-9.81	106.60	111.50
38	A1	892	U	C5-C4-O4	-9.80	120.02	125.90
38	A1	1775	G	C5-C6-O6	-9.80	122.72	128.60
38	A1	850	C	N3-C4-N4	9.80	124.86	118.00
38	A1	1097	G	O4'-C1'-N9	9.80	116.04	108.20
38	A1	1794	C	C5-C4-N4	-9.80	113.34	120.20
38	A1	2862	A	C5-C6-N1	-9.80	112.80	117.70
11	B2	1064	C	C6-N1-C2	-9.80	116.38	120.30
38	A1	19	G	O4'-C1'-N9	9.80	116.04	108.20
11	B2	307	G	N1-C6-O6	9.80	125.78	119.90
11	B2	443	C	N3-C4-N4	9.80	124.86	118.00
11	B2	463	G	N3-C4-C5	9.80	133.50	128.60
38	A1	297	G	N3-C4-C5	-9.80	123.70	128.60
38	A1	722	C	O4'-C1'-N1	9.80	116.04	108.20
38	A1	1011	A	N1-C6-N6	9.80	124.48	118.60
38	A1	1038	U	O4'-C1'-N1	9.80	116.04	108.20
38	A1	2971	U	P-O3'-C3'	9.80	131.46	119.70
11	B2	792	C	O4'-C1'-N1	9.80	116.04	108.20
14	BB	46	ARG	NE-CZ-NH1	9.80	125.20	120.30
38	A1	273	G	N3-C4-C5	-9.80	123.70	128.60
38	A1	1897	G	O4'-C1'-N9	9.80	116.04	108.20
38	A1	324	C	O4'-C1'-N1	9.80	116.04	108.20
38	A1	366	G	C4-C5-C6	9.80	124.68	118.80
38	A1	394	A	C5-C6-N6	-9.80	115.86	123.70
38	A1	1251	G	N3-C2-N2	9.80	126.76	119.90
11	B2	60	A	O4'-C1'-N9	9.80	116.04	108.20
38	A1	569	G	N9-C4-C5	9.80	109.32	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	831	C	N1-C2-N3	-9.80	112.34	119.20
38	A1	3019	C	N3-C4-N4	9.80	124.86	118.00
11	B2	64	G	N3-C4-C5	-9.79	123.70	128.60
38	A1	638	A	C5-C6-N6	-9.79	115.86	123.70
38	A1	1063	C	N3-C4-C5	-9.79	117.98	121.90
38	A1	1854	G	C4-C5-N7	9.80	114.72	110.80
38	A1	1242	A	O4'-C1'-N9	9.79	116.03	108.20
38	A1	536	G	C5-N7-C8	9.79	109.20	104.30
38	A1	2760	A	C5-C6-N1	-9.79	112.80	117.70
38	A1	588	U	O4'-C1'-N1	9.79	116.03	108.20
38	A1	2806	A	C2-N3-C4	9.79	115.50	110.60
10	B1	9	A	C5-N7-C8	9.79	108.80	103.90
11	B2	900	G	N1-C6-O6	9.79	125.77	119.90
38	A1	1334	G	C5-C6-O6	-9.79	122.73	128.60
38	A1	2149	G	N1-C6-O6	9.79	125.77	119.90
11	B2	253	G	C2-N3-C4	9.79	116.79	111.90
33	BU	99	ARG	NE-CZ-NH1	9.79	125.19	120.30
38	A1	1134	A	C4-C5-N7	-9.79	105.81	110.70
45	AC	17	ARG	NE-CZ-NH2	-9.79	115.41	120.30
38	A1	1730	C	N3-C4-C5	-9.79	117.98	121.90
38	A1	2600	C	O4'-C1'-N1	9.79	116.03	108.20
11	B2	73	U	O4'-C1'-N1	9.79	116.03	108.20
11	B2	838	C	O4'-C1'-N1	9.78	116.03	108.20
38	A1	781	C	N3-C4-C5	-9.79	117.99	121.90
38	A1	1967	G	C5-C6-O6	-9.79	122.73	128.60
38	A1	339	A	N1-C6-N6	9.78	124.47	118.60
11	B2	1381	G	N1-C6-O6	9.78	125.77	119.90
11	B2	1443	G	O4'-C1'-N9	9.78	116.03	108.20
38	A1	519	A	C5-C6-N1	-9.78	112.81	117.70
38	A1	576	G	N1-C6-O6	9.78	125.77	119.90
38	A1	1107	G	C2-N3-C4	9.78	116.79	111.90
38	A1	1612	G	C6-N1-C2	9.78	130.97	125.10
38	A1	2016	C	O4'-C1'-N1	9.78	116.03	108.20
10	B1	54	G	N1-C6-O6	9.78	125.77	119.90
11	B2	344	G	C8-N9-C4	-9.78	102.49	106.40
38	A1	90	A	C5-C6-N6	-9.78	115.88	123.70
38	A1	117	A	N7-C8-N9	-9.78	108.91	113.80
38	A1	2100	U	O4'-C1'-N1	9.78	116.02	108.20
38	A1	713	C	C4-C5-C6	9.78	122.29	117.40
38	A1	1813	A	N3-C4-C5	-9.78	119.96	126.80
39	A3	75	G	P-O3'-C3'	9.78	131.43	119.70
11	B2	831	A	C5-N7-C8	9.78	108.79	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	BN	101	ASP	CB-CG-OD2	-9.78	109.50	118.30
38	A1	427	G	O4'-C1'-N9	9.78	116.02	108.20
38	A1	2538	G	O4'-C1'-N9	9.78	116.02	108.20
38	A1	2887	C	C5-C6-N1	9.78	125.89	121.00
11	B2	10	G	N7-C8-N9	-9.77	108.21	113.10
11	B2	1256	C	O4'-C1'-N1	9.77	116.02	108.20
38	A1	1538	A	C4-C5-C6	9.77	121.89	117.00
11	B2	348	C	O4'-C1'-N1	9.77	116.02	108.20
11	B2	1404	C	C5-C4-N4	-9.77	113.36	120.20
38	A1	1993	A	C5-N7-C8	9.77	108.79	103.90
38	A1	2187	C	C2-N3-C4	9.77	124.79	119.90
38	A1	1668	G	C8-N9-C4	-9.77	102.49	106.40
11	B2	543	C	N3-C4-C5	-9.77	117.99	121.90
38	A1	779	A	N1-C6-N6	9.77	124.46	118.60
38	A1	2571	G	C5-C6-O6	-9.77	122.74	128.60
38	A1	2746	G	N1-C6-O6	9.77	125.76	119.90
38	A1	2707	G	C5-C6-O6	-9.77	122.74	128.60
11	B2	306	C	C6-N1-C2	-9.77	116.39	120.30
38	A1	1322	G	C5-C6-N1	-9.77	106.62	111.50
38	A1	1421	C	C5-C4-N4	-9.77	113.36	120.20
38	A1	1837	A	C5-C6-N6	-9.77	115.89	123.70
38	A1	2604	G	C5-N7-C8	-9.77	99.42	104.30
11	B2	1445	A	C5-C6-N1	-9.76	112.82	117.70
38	A1	375	C	N3-C4-N4	9.76	124.83	118.00
38	A1	416	A	O4'-C1'-N9	9.76	116.01	108.20
38	A1	616	C	N3-C4-C5	-9.76	117.99	121.90
38	A1	1340	G	O4'-C1'-N9	9.76	116.01	108.20
38	A1	1400	U	C5-C6-N1	9.76	127.58	122.70
38	A1	2613	C	O4'-C1'-N1	9.76	116.01	108.20
44	Ab	42	ARG	NE-CZ-NH1	9.76	125.18	120.30
11	B2	253	G	N3-C2-N2	9.76	126.73	119.90
38	A1	1124	G	N1-C6-O6	9.76	125.76	119.90
38	A1	1337	G	C5-C6-O6	-9.76	122.74	128.60
38	A1	2886	C	O4'-C1'-N1	9.76	116.01	108.20
11	B2	477	G	N1-C6-O6	9.76	125.75	119.90
38	A1	1213	G	N1-C6-O6	9.76	125.75	119.90
38	A1	1791	A	C4-C5-C6	9.76	121.88	117.00
38	A1	460	C	O4'-C1'-N1	9.76	116.00	108.20
38	A1	783	C	C2-N3-C4	9.76	124.78	119.90
38	A1	867	C	C2-N1-C1'	9.76	129.53	118.80
38	A1	1286	G	C4-C5-N7	-9.76	106.90	110.80
11	B2	827	G	C4-C5-N7	-9.75	106.90	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	183	G	C5-C6-O6	-9.75	122.75	128.60
38	A1	1976	C	N3-C4-C5	-9.75	118.00	121.90
11	B2	65	G	C6-C5-N7	-9.75	124.55	130.40
11	B2	497	C	C4-C5-C6	-9.75	112.53	117.40
38	A1	200	G	C5-C6-O6	-9.75	122.75	128.60
38	A1	980	G	C6-N1-C2	9.75	130.95	125.10
38	A1	1989	G	C8-N9-C4	9.75	110.30	106.40
11	B2	586	C	C4-C5-C6	-9.75	112.53	117.40
38	A1	1482	G	N1-C6-O6	9.75	125.75	119.90
11	B2	47	A	C5-C6-N6	-9.75	115.90	123.70
11	B2	70	C	O4'-C1'-N1	9.75	116.00	108.20
38	A1	2660	G	C2-N3-C4	9.75	116.77	111.90
40	AK	45	ARG	NE-CZ-NH1	9.75	125.17	120.30
11	B2	853	G	O4'-C1'-N9	9.74	116.00	108.20
11	B2	1426	C	O4'-C1'-N1	9.74	116.00	108.20
39	A3	116	C	N3-C4-C5	-9.74	118.00	121.90
38	A1	85	G	N1-C6-O6	9.74	125.75	119.90
38	A1	577	C	C4-C5-C6	9.74	122.27	117.40
38	A1	745	C	C5-C6-N1	9.74	125.87	121.00
38	A1	1030	C	C6-N1-C2	-9.74	116.40	120.30
38	A1	2255	C	N1-C2-O2	9.74	124.75	118.90
38	A1	1515	G	C5-C6-N1	-9.74	106.63	111.50
39	A3	124	A	C5-N7-C8	9.74	108.77	103.90
11	B2	686	C	N3-C4-N4	9.74	124.82	118.00
11	B2	858	A	N1-C6-N6	9.74	124.44	118.60
11	B2	965	G	C5-C6-O6	-9.74	122.76	128.60
38	A1	366	G	C5-C6-N1	-9.74	106.63	111.50
38	A1	863	C	O4'-C1'-N1	9.74	115.99	108.20
11	B2	544	C	C5-C6-N1	9.74	125.87	121.00
38	A1	621	G	N9-C4-C5	9.74	109.30	105.40
38	A1	958	A	N1-C2-N3	9.74	134.17	129.30
38	A1	1818	G	N1-C6-O6	9.74	125.74	119.90
38	A1	2557	C	N3-C4-C5	-9.74	118.01	121.90
11	B2	1305	U	C5-C6-N1	9.73	127.57	122.70
38	A1	1343	C	N3-C4-N4	9.73	124.81	118.00
38	A1	982	G	C8-N9-C4	-9.73	102.51	106.40
38	A1	1332	A	C4-C5-C6	9.73	121.87	117.00
38	A1	2584	A	C8-N9-C4	-9.73	101.91	105.80
38	A1	2889	A	P-O3'-C3'	9.73	131.38	119.70
39	A3	74	U	C5-C4-O4	9.73	131.74	125.90
38	A1	2093	A	C5-C6-N1	-9.73	112.83	117.70
38	A1	2128	G	C4-C5-N7	9.73	114.69	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	536	A	N1-C6-N6	9.73	124.44	118.60
38	A1	2145	G	C6-C5-N7	-9.73	124.56	130.40
11	B2	310	G	C5-N7-C8	9.72	109.16	104.30
38	A1	2007	C	N3-C4-N4	9.72	124.81	118.00
11	B2	768	A	N1-C6-N6	9.72	124.43	118.60
38	A1	1259	G	N3-C4-C5	-9.72	123.74	128.60
10	B1	12	U	O4'-C1'-N1	9.72	115.98	108.20
11	B2	329	G	N1-C6-O6	9.72	125.73	119.90
11	B2	1134	G	C4-C5-N7	-9.72	106.91	110.80
11	B2	1463	A	C5-C6-N1	-9.72	112.84	117.70
38	A1	2191	U	C5-C6-N1	-9.72	117.84	122.70
38	A1	17	C	C6-N1-C2	-9.72	116.41	120.30
38	A1	2235	G	C5-C6-N1	-9.72	106.64	111.50
11	B2	207	G	C5-C6-N1	-9.72	106.64	111.50
11	B2	653	C	N3-C2-O2	9.72	128.70	121.90
11	B2	925	U	N3-C4-C5	-9.71	108.77	114.60
38	A1	2335	G	N1-C6-O6	9.71	125.73	119.90
38	A1	2355	G	N1-C6-O6	9.71	125.73	119.90
11	B2	550	G	O4'-C1'-N9	9.71	115.97	108.20
17	BE	33	ARG	NE-CZ-NH2	-9.71	115.44	120.30
38	A1	798	G	N1-C6-O6	9.71	125.73	119.90
38	A1	2191	U	P-O3'-C3'	9.71	131.35	119.70
38	A1	2978	G	C5-C6-O6	-9.71	122.77	128.60
39	A3	70	C	C6-N1-C2	9.71	124.18	120.30
11	B2	244	G	N1-C6-O6	9.71	125.72	119.90
38	A1	79	C	C2-N3-C4	9.71	124.75	119.90
22	BJ	91	ARG	NE-CZ-NH1	9.71	125.15	120.30
38	A1	2438	U	O4'-C1'-N1	9.71	115.97	108.20
11	B2	170	C	N1-C2-O2	9.71	124.72	118.90
11	B2	537	G	N1-C2-N3	-9.71	118.08	123.90
11	B2	590	G	C5-C6-O6	-9.71	122.78	128.60
38	A1	296	G	C5-C6-O6	-9.71	122.78	128.60
38	A1	1405	G	N1-C6-O6	9.71	125.72	119.90
11	B2	936	A	C5-N7-C8	9.70	108.75	103.90
38	A1	665	C	C2-N3-C4	9.70	124.75	119.90
38	A1	942	U	O4'-C1'-N1	9.71	115.96	108.20
38	A1	1182	C	N3-C4-C5	-9.70	118.02	121.90
11	B2	822	A	C5-C6-N1	-9.70	112.85	117.70
38	A1	1284	C	N3-C4-C5	-9.70	118.02	121.90
11	B2	490	C	C5-C4-N4	-9.70	113.41	120.20
11	B2	1355	C	O4'-C1'-N1	9.70	115.96	108.20
38	A1	885	A	C5-C6-N6	-9.70	115.94	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
39	A3	54	A	O4'-C1'-N9	9.70	115.96	108.20
38	A1	937	A	N9-C4-C5	9.70	109.68	105.80
38	A1	966	G	C4-C5-N7	-9.70	106.92	110.80
38	A1	2161	A	C4-C5-N7	-9.70	105.85	110.70
38	A1	584	G	O4'-C1'-N9	9.70	115.96	108.20
10	B1	46	U	N1-C2-O2	-9.70	116.01	122.80
11	B2	353	G	O4'-C1'-N9	9.70	115.96	108.20
11	B2	415	C	O4'-C1'-N1	9.70	115.96	108.20
11	B2	934	G	O4'-C1'-N9	9.70	115.96	108.20
11	B2	981	U	C4-C5-C6	-9.70	113.88	119.70
39	A3	82	C	O4'-C1'-N1	9.70	115.96	108.20
11	B2	835	C	O4'-C1'-N1	9.69	115.95	108.20
38	A1	15	A	C5-C6-N6	-9.69	115.94	123.70
38	A1	594	U	O4'-C1'-N1	9.69	115.95	108.20
38	A1	961	C	N3-C4-N4	9.69	124.79	118.00
38	A1	1095	A	O4'-C1'-N9	9.69	115.95	108.20
38	A1	1356	A	N1-C6-N6	9.69	124.42	118.60
38	A1	2250	G	N1-C2-N3	-9.70	118.08	123.90
39	A3	103	C	O4'-C1'-N1	9.69	115.95	108.20
10	B1	68	C	C6-N1-C2	-9.69	116.42	120.30
11	B2	165	U	N3-C4-O4	9.69	126.18	119.40
11	B2	660	C	O4'-C1'-N1	9.69	115.95	108.20
11	B2	1051	G	C5-C6-O6	-9.69	122.79	128.60
38	A1	1522	A	N1-C6-N6	9.69	124.42	118.60
38	A1	1564	C	N3-C4-N4	9.69	124.78	118.00
38	A1	1863	G	N1-C2-N3	-9.69	118.09	123.90
38	A1	2495	A	C4-C5-C6	9.69	121.85	117.00
11	B2	676	G	C5-C6-O6	-9.69	122.79	128.60
38	A1	48	G	C5-C6-O6	-9.69	122.79	128.60
38	A1	249	G	N3-C2-N2	9.69	126.68	119.90
38	A1	422	G	C2-N3-C4	9.69	116.74	111.90
38	A1	1454	G	O4'-C1'-N9	9.69	115.95	108.20
38	A1	2062	A	C8-N9-C4	-9.69	101.92	105.80
38	A1	1242	A	N1-C2-N3	9.69	134.14	129.30
38	A1	1735	G	N3-C2-N2	9.69	126.68	119.90
38	A1	2363	G	N3-C2-N2	9.69	126.68	119.90
11	B2	1412	A	C5-C6-N1	-9.69	112.86	117.70
38	A1	652	G	N1-C6-O6	9.69	125.71	119.90
38	A1	2437	G	N9-C4-C5	-9.69	101.53	105.40
38	A1	2509	A	O4'-C1'-N9	9.69	115.95	108.20
38	A1	1729	C	N3-C4-C5	-9.69	118.03	121.90
38	A1	2133	G	C4-C5-C6	9.69	124.61	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2444	G	N1-C6-O6	9.69	125.71	119.90
11	B2	1134	G	C8-N9-C4	-9.68	102.53	106.40
38	A1	1130	G	N1-C6-O6	9.68	125.71	119.90
38	A1	1216	A	C5-C6-N1	-9.68	112.86	117.70
38	A1	2495	A	C5-C6-N1	-9.68	112.86	117.70
38	A1	2513	C	C5-C4-N4	-9.68	113.42	120.20
38	A1	2681	A	N7-C8-N9	-9.68	108.96	113.80
39	A3	115	C	C6-N1-C2	9.68	124.17	120.30
11	B2	1202	G	C3'-C2'-C1'	9.68	109.25	101.50
38	A1	1738	A	N1-C6-N6	9.68	124.41	118.60
11	B2	228	G	N1-C2-N3	-9.68	118.09	123.90
11	B2	349	A	N1-C2-N3	9.68	134.14	129.30
38	A1	1793	G	N1-C6-O6	9.68	125.71	119.90
38	A1	1977	C	N3-C4-N4	9.68	124.78	118.00
38	A1	2249	A	N7-C8-N9	-9.68	108.96	113.80
46	AD	180	ARG	NE-CZ-NH1	9.68	125.14	120.30
38	A1	1120	C	O4'-C1'-N1	9.68	115.94	108.20
44	Ab	72	ARG	NE-CZ-NH2	-9.68	115.46	120.30
38	A1	1345	G	N9-C4-C5	-9.68	101.53	105.40
38	A1	2238	G	N1-C6-O6	9.68	125.71	119.90
38	A1	2981	G	N1-C2-N3	-9.68	118.09	123.90
11	B2	613	C	N3-C4-N4	9.67	124.77	118.00
38	A1	903	C	N3-C4-N4	9.67	124.77	118.00
11	B2	755	U	C5-C6-N1	9.67	127.53	122.70
38	A1	64	A	N9-C4-C5	9.67	109.67	105.80
38	A1	779	A	O4'-C1'-N9	9.67	115.94	108.20
38	A1	1322	G	N1-C2-N3	-9.67	118.10	123.90
38	A1	2360	G	N7-C8-N9	-9.67	108.27	113.10
38	A1	2378	C	O4'-C1'-N1	9.67	115.94	108.20
38	A1	2668	G	C5-C6-N1	-9.67	106.67	111.50
38	A1	2707	G	C8-N9-C4	-9.67	102.53	106.40
11	B2	927	A	N1-C6-N6	9.67	124.40	118.60
11	B2	1070	C	O4'-C1'-N1	9.67	115.93	108.20
38	A1	2146	C	C6-N1-C2	-9.67	116.43	120.30
38	A1	2559	G	N1-C6-O6	9.67	125.70	119.90
11	B2	520	G	N1-C6-O6	9.66	125.70	119.90
11	B2	1257	U	N3-C4-O4	9.66	126.17	119.40
11	B2	1451	C	C6-N1-C2	9.66	124.17	120.30
38	A1	8	G	C8-N9-C4	-9.66	102.53	106.40
38	A1	993	G	C2-N3-C4	9.66	116.73	111.90
38	A1	1295	G	C5-C6-N1	-9.66	106.67	111.50
38	A1	1821	C	O4'-C1'-N1	9.66	115.93	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
16	BD	116	ARG	NE-CZ-NH2	9.66	125.13	120.30
10	B1	9	A	N1-C2-N3	9.66	134.13	129.30
11	B2	969	A	C6-C5-N7	-9.66	125.54	132.30
11	B2	738	C	C2-N3-C4	9.66	124.73	119.90
38	A1	1631	A	C5-N7-C8	9.66	108.73	103.90
38	A1	2216	G	C8-N9-C4	-9.66	102.54	106.40
38	A1	2242	A	C5-C6-N6	-9.66	115.97	123.70
38	A1	2267	U	N3-C4-C5	-9.66	108.80	114.60
11	B2	589	U	N3-C4-O4	9.66	126.16	119.40
11	B2	1069	G	C6-C5-N7	-9.66	124.61	130.40
38	A1	72	U	C4-C5-C6	9.66	125.50	119.70
38	A1	1207	G	O4'-C1'-N9	9.66	115.93	108.20
38	A1	1376	U	O4'-C1'-N1	9.66	115.93	108.20
38	A1	2052	A	C5-N7-C8	9.66	108.73	103.90
38	A1	2764	G	N1-C6-O6	9.66	125.69	119.90
61	AN	87	ARG	NE-CZ-NH1	9.66	125.13	120.30
11	B2	104	A	P-O3'-C3'	9.65	131.28	119.70
11	B2	349	A	O4'-C1'-N9	9.65	115.92	108.20
11	B2	353	G	N1-C2-N3	-9.65	118.11	123.90
38	A1	613	C	C6-N1-C2	-9.65	116.44	120.30
11	B2	392	G	C5-C6-N1	-9.65	106.67	111.50
11	B2	639	G	C5-C6-O6	-9.65	122.81	128.60
11	B2	1136	A	N1-C6-N6	9.65	124.39	118.60
38	A1	352	G	C5-C6-O6	-9.65	122.81	128.60
38	A1	2632	C	C6-N1-C2	9.65	124.16	120.30
38	A1	1894	A	N1-C2-N3	9.65	134.13	129.30
38	A1	2754	A	C2-N3-C4	-9.65	105.77	110.60
11	B2	524	U	C5-C4-O4	-9.65	120.11	125.90
16	BD	22	ARG	NE-CZ-NH1	9.65	125.13	120.30
38	A1	184	A	C8-N9-C4	-9.65	101.94	105.80
38	A1	1352	U	O4'-C1'-N1	9.65	115.92	108.20
38	A1	1615	G	O4'-C1'-N9	9.65	115.92	108.20
38	A1	2257	A	C5-C6-N6	-9.65	115.98	123.70
38	A1	2264	G	N3-C2-N2	9.65	126.66	119.90
11	B2	780	C	C4-C5-C6	9.65	122.22	117.40
38	A1	682	G	N3-C2-N2	9.65	126.65	119.90
38	A1	924	A	N9-C4-C5	9.65	109.66	105.80
38	A1	1622	G	C6-C5-N7	-9.65	124.61	130.40
38	A1	2626	U	O4'-C1'-N1	9.65	115.92	108.20
11	B2	911	C	C6-N1-C2	-9.65	116.44	120.30
11	B2	1057	A	C5-C6-N1	-9.65	112.88	117.70
38	A1	552	A	C5-C6-N6	-9.65	115.98	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	B1	42	C	N3-C4-N4	9.64	124.75	118.00
38	A1	1196	A	C5-C6-N6	-9.64	115.98	123.70
38	A1	1779	C	C2-N3-C4	9.64	124.72	119.90
38	A1	1838	C	O4'-C1'-N1	9.64	115.92	108.20
38	A1	2049	U	O4'-C1'-N1	9.64	115.92	108.20
38	A1	2284	C	N3-C4-C5	-9.64	118.04	121.90
11	B2	228	G	C5-N7-C8	9.64	109.12	104.30
38	A1	947	C	C2-N3-C4	9.64	124.72	119.90
38	A1	1088	G	C6-C5-N7	-9.64	124.62	130.40
38	A1	2686	A	C5-C6-N1	-9.64	112.88	117.70
38	A1	2692	A	C6-N1-C2	-9.64	112.81	118.60
42	Aa	91	TYR	CB-CG-CD1	-9.64	115.22	121.00
11	B2	432	G	N1-C2-N3	-9.64	118.12	123.90
11	B2	1160	C	C6-N1-C2	-9.64	116.44	120.30
38	A1	1595	G	N3-C2-N2	9.64	126.65	119.90
38	A1	2074	U	O4'-C1'-N1	9.64	115.91	108.20
38	A1	2954	C	O4'-C1'-N1	9.64	115.91	108.20
38	A1	2257	A	C5-N7-C8	9.64	108.72	103.90
38	A1	1355	A	C8-N9-C4	-9.63	101.95	105.80
38	A1	3022	C	O4'-C1'-N1	9.63	115.91	108.20
11	B2	517	U	O4'-C1'-N1	9.63	115.91	108.20
11	B2	638	G	C5-C6-N1	-9.63	106.68	111.50
11	B2	1462	A	C5-C6-N6	-9.63	115.99	123.70
38	A1	484	C	N3-C4-C5	-9.63	118.05	121.90
38	A1	505	A	C5-C6-N1	-9.63	112.88	117.70
38	A1	1304	G	O4'-C1'-N9	9.63	115.91	108.20
38	A1	1876	G	O4'-C1'-N9	9.63	115.91	108.20
11	B2	1112	G	N7-C8-N9	-9.63	108.28	113.10
38	A1	626	C	O4'-C1'-N1	9.63	115.90	108.20
38	A1	637	G	N3-C2-N2	9.63	126.64	119.90
38	A1	988	C	N3-C4-C5	-9.63	118.05	121.90
38	A1	1600	G	N3-C2-N2	9.63	126.64	119.90
11	B2	1120	G	O4'-C1'-N9	9.63	115.90	108.20
11	B2	1131	G	C5-N7-C8	9.63	109.11	104.30
38	A1	462	A	O4'-C1'-N9	9.63	115.90	108.20
38	A1	1380	G	N1-C2-N3	-9.63	118.12	123.90
11	B2	157	A	C4-C5-C6	9.63	121.81	117.00
11	B2	1140	A	C5-C6-N6	-9.63	116.00	123.70
38	A1	2486	A	C8-N9-C4	-9.62	101.95	105.80
38	A1	2617	G	N1-C2-N3	-9.63	118.12	123.90
38	A1	2766	C	O4'-C1'-N1	9.62	115.90	108.20
11	B2	509	C	C6-N1-C2	9.62	124.15	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	913	G	C5-C6-N1	-9.62	106.69	111.50
38	A1	1111	G	C4-C5-N7	9.62	114.65	110.80
11	B2	670	C	O4'-C1'-N1	9.62	115.90	108.20
11	B2	978	G	C8-N9-C4	-9.62	102.55	106.40
38	A1	109	G	C5-C6-O6	-9.62	122.83	128.60
38	A1	1328	G	N3-C2-N2	9.62	126.63	119.90
38	A1	1583	G	C5-C6-N1	-9.62	106.69	111.50
38	A1	2025	A	O4'-C1'-N9	9.62	115.90	108.20
38	A1	2314	U	O4'-C1'-N1	9.62	115.90	108.20
48	AE	174	TYR	CB-CG-CD2	-9.62	115.23	121.00
11	B2	1099	A	N1-C6-N6	9.62	124.37	118.60
38	A1	600	A	C4-C5-C6	9.62	121.81	117.00
38	A1	1851	U	O4'-C1'-N1	9.62	115.90	108.20
38	A1	1653	U	O4'-C1'-N1	9.62	115.89	108.20
38	A1	1923	A	C6-N1-C2	-9.62	112.83	118.60
11	B2	1210	A	C8-N9-C4	-9.62	101.95	105.80
11	B2	889	G	C4-C5-N7	-9.61	106.95	110.80
38	A1	355	G	N1-C6-O6	9.62	125.67	119.90
38	A1	1193	G	C5-C6-O6	-9.62	122.83	128.60
38	A1	1239	C	N3-C4-C5	-9.61	118.05	121.90
38	A1	2438	U	N3-C4-O4	9.61	126.13	119.40
38	A1	2535	C	C1'-O4'-C4'	9.61	117.59	109.90
44	Ab	8	ARG	NE-CZ-NH2	-9.61	115.49	120.30
9	AX	330	PHE	CB-CG-CD2	9.61	127.53	120.80
11	B2	34	G	C5-C6-O6	-9.61	122.83	128.60
11	B2	832	G	N3-C2-N2	9.61	126.63	119.90
38	A1	1857	A	C4-C5-N7	-9.61	105.89	110.70
38	A1	1884	C	N3-C4-N4	9.61	124.73	118.00
38	A1	2317	G	N1-C6-O6	9.61	125.67	119.90
38	A1	2551	G	C5-C6-O6	-9.61	122.83	128.60
11	B2	230	C	N3-C4-C5	-9.61	118.06	121.90
38	A1	2431	C	C2-N3-C4	9.61	124.70	119.90
10	B1	54	G	C4-C5-C6	9.61	124.56	118.80
11	B2	35	G	O4'-C1'-N9	9.61	115.88	108.20
11	B2	579	U	O4'-C1'-N1	9.61	115.88	108.20
38	A1	835	G	O4'-C1'-N9	9.61	115.89	108.20
38	A1	1051	C	N3-C4-C5	-9.61	118.06	121.90
38	A1	1923	A	C4-C5-C6	9.61	121.80	117.00
38	A1	2276	G	C6-C5-N7	-9.61	124.64	130.40
38	A1	2559	G	N3-C2-N2	9.61	126.62	119.90
38	A1	2993	G	N1-C2-N3	-9.61	118.14	123.90
39	A3	71	G	O4'-C1'-N9	9.61	115.88	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	164	A	N1-C6-N6	9.60	124.36	118.60
38	A1	2070	U	N1-C2-O2	9.60	129.52	122.80
38	A1	2179	G	N1-C2-N3	-9.60	118.14	123.90
11	B2	400	G	C2-N3-C4	9.60	116.70	111.90
20	BH	156	ARG	NE-CZ-NH1	9.60	125.10	120.30
38	A1	1817	C	N3-C4-C5	-9.60	118.06	121.90
11	B2	886	G	C4-C5-N7	-9.60	106.96	110.80
16	BD	138	ARG	NE-CZ-NH2	-9.60	115.50	120.30
38	A1	1642	G	C5-C6-O6	-9.60	122.84	128.60
38	A1	1780	C	C4-C5-C6	9.60	122.20	117.40
11	B2	1058	G	C2-N3-C4	9.60	116.70	111.90
38	A1	41	G	O4'-C1'-N9	9.60	115.88	108.20
38	A1	588	U	N1-C2-N3	9.60	120.66	114.90
38	A1	934	G	C5-N7-C8	-9.60	99.50	104.30
11	B2	834	C	N3-C4-N4	9.60	124.72	118.00
11	B2	837	C	N3-C4-N4	9.60	124.72	118.00
17	BE	131	ARG	NE-CZ-NH1	9.60	125.10	120.30
38	A1	239	G	C5-C6-N1	-9.60	106.70	111.50
11	B2	34	G	O4'-C1'-N9	9.59	115.88	108.20
21	BI	68	ARG	NE-CZ-NH1	9.59	125.10	120.30
11	B2	632	C	O4'-C1'-N1	9.59	115.87	108.20
11	B2	711	U	O4'-C1'-N1	9.59	115.87	108.20
38	A1	445	G	N1-C6-O6	9.59	125.66	119.90
38	A1	1788	G	C4-C5-N7	9.59	114.64	110.80
38	A1	1820	C	C6-N1-C2	-9.59	116.46	120.30
38	A1	2269	C	C6-N1-C2	-9.59	116.46	120.30
11	B2	161	C	N3-C4-C5	-9.59	118.06	121.90
11	B2	570	G	C6-C5-N7	-9.59	124.65	130.40
38	A1	841	U	N1-C2-O2	-9.59	116.09	122.80
11	B2	786	G	C6-C5-N7	-9.59	124.65	130.40
38	A1	66	C	C5-C4-N4	-9.59	113.49	120.20
38	A1	553	C	C5-C4-N4	-9.59	113.49	120.20
38	A1	2076	A	C5-C6-N1	-9.59	112.91	117.70
38	A1	2676	A	N7-C8-N9	9.59	118.59	113.80
39	A3	26	C	C5-C6-N1	9.59	125.80	121.00
11	B2	119	A	N1-C6-N6	9.59	124.35	118.60
11	B2	344	G	C2-N3-C4	9.59	116.69	111.90
38	A1	2629	U	C5-C6-N1	9.59	127.49	122.70
38	A1	774	G	O4'-C1'-N9	9.59	115.87	108.20
38	A1	1410	A	N1-C6-N6	9.59	124.35	118.60
38	A1	1593	C	N3-C4-C5	-9.59	118.07	121.90
11	B2	205	C	N3-C4-C5	-9.58	118.07	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1093	C	N3-C4-C5	-9.58	118.07	121.90
38	A1	451	C	N3-C4-N4	9.58	124.71	118.00
38	A1	2180	C	N3-C4-N4	9.58	124.71	118.00
38	A1	242	C	O4'-C1'-N1	9.58	115.86	108.20
38	A1	393	C	N3-C4-N4	9.58	124.71	118.00
38	A1	1098	C	C5-C6-N1	9.58	125.79	121.00
38	A1	2188	C	N3-C4-C5	-9.58	118.07	121.90
38	A1	1547	U	O4'-C1'-N1	9.58	115.87	108.20
38	A1	2034	G	N1-C6-O6	9.58	125.65	119.90
39	A3	110	C	N3-C4-C5	-9.58	118.07	121.90
11	B2	865	A	N1-C2-N3	9.58	134.09	129.30
38	A1	1084	G	O4'-C1'-N9	9.58	115.86	108.20
38	A1	1589	G	N1-C6-O6	9.58	125.65	119.90
11	B2	539	C	N3-C4-C5	-9.58	118.07	121.90
38	A1	1238	G	C5-C6-O6	-9.58	122.85	128.60
11	B2	313	G	C5-N7-C8	9.57	109.09	104.30
11	B2	601	G	N3-C2-N2	9.57	126.60	119.90
38	A1	483	C	N3-C4-N4	9.57	124.70	118.00
11	B2	643	G	O4'-C1'-N9	9.57	115.86	108.20
38	A1	1572	C	P-O5'-C5'	9.57	136.22	120.90
38	A1	2733	A	C8-N9-C4	-9.57	101.97	105.80
38	A1	2832	G	N3-C4-C5	-9.57	123.81	128.60
38	A1	2961	A	C5-C6-N1	-9.57	112.91	117.70
38	A1	905	G	N1-C2-N3	-9.57	118.16	123.90
39	A3	93	G	N1-C6-O6	9.57	125.64	119.90
40	AK	17	ARG	NE-CZ-NH1	-9.57	115.51	120.30
11	B2	226	G	C6-C5-N7	-9.57	124.66	130.40
38	A1	293	G	P-O5'-C5'	9.57	136.21	120.90
38	A1	1843	C	C2-N3-C4	9.57	124.68	119.90
39	A3	117	G	C5-C6-O6	-9.57	122.86	128.60
38	A1	218	A	N1-C6-N6	9.56	124.34	118.60
38	A1	529	G	N7-C8-N9	-9.56	108.32	113.10
38	A1	700	A	C4-C5-C6	9.56	121.78	117.00
38	A1	165	G	C6-C5-N7	-9.56	124.66	130.40
38	A1	930	G	C4-C5-N7	-9.56	106.97	110.80
38	A1	1201	G	C5-C6-O6	-9.56	122.86	128.60
38	A1	2287	C	O4'-C1'-N1	9.56	115.85	108.20
38	A1	243	G	C6-C5-N7	-9.56	124.66	130.40
38	A1	1460	C	N3-C4-N4	9.56	124.69	118.00
38	A1	2235	G	C6-C5-N7	-9.56	124.66	130.40
11	B2	373	C	O4'-C1'-N1	9.56	115.85	108.20
11	B2	1107	C	N3-C4-C5	-9.56	118.08	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	291	A	C4-C5-C6	9.56	121.78	117.00
38	A1	972	C	O4'-C1'-N1	9.56	115.85	108.20
38	A1	1294	A	N9-C4-C5	9.56	109.62	105.80
38	A1	2063	U	C5'-C4'-C3'	9.56	131.29	116.00
39	A3	15	G	O4'-C1'-N9	9.56	115.84	108.20
38	A1	2832	G	C4-C5-C6	9.56	124.53	118.80
11	B2	1320	A	N1-C6-N6	9.55	124.33	118.60
11	B2	1462	A	C6-C5-N7	-9.55	125.61	132.30
23	BK	16	ARG	NE-CZ-NH1	-9.55	115.52	120.30
38	A1	2161	A	N1-C6-N6	9.55	124.33	118.60
38	A1	2184	G	C6-C5-N7	-9.55	124.67	130.40
11	B2	201	G	C8-N9-C4	-9.55	102.58	106.40
11	B2	636	G	C4-C5-N7	-9.55	106.98	110.80
38	A1	1265	A	N1-C6-N6	9.55	124.33	118.60
38	A1	2639	G	N3-C4-C5	-9.55	123.82	128.60
38	A1	482	A	C5-N7-C8	9.55	108.67	103.90
11	B2	537	G	O4'-C1'-N9	9.55	115.84	108.20
11	B2	1389	G	C5-C6-O6	-9.55	122.87	128.60
38	A1	1819	G	O4'-C1'-N9	9.55	115.84	108.20
38	A1	2755	G	C5-C6-O6	-9.55	122.87	128.60
11	B2	884	G	N3-C2-N2	9.55	126.58	119.90
38	A1	2601	C	C5-C4-N4	-9.55	113.52	120.20
38	A1	2758	G	N3-C2-N2	9.55	126.58	119.90
11	B2	150	G	P-O3'-C3'	9.54	131.15	119.70
11	B2	476	C	N3-C4-C5	-9.54	118.08	121.90
11	B2	918	A	C4-C5-C6	9.54	121.77	117.00
38	A1	2063	U	C6-N1-C1'	-9.54	107.84	121.20
38	A1	2503	C	N3-C4-C5	-9.54	118.08	121.90
38	A1	2709	C	C2-N3-C4	9.54	124.67	119.90
61	AN	162	TYR	CB-CG-CD1	9.54	126.73	121.00
11	B2	1199	A	C8-N9-C4	9.54	109.62	105.80
38	A1	348	G	C8-N9-C4	-9.54	102.58	106.40
38	A1	999	A	O4'-C1'-N9	9.54	115.83	108.20
38	A1	673	A	C5-C6-N6	-9.54	116.07	123.70
38	A1	1102	C	O4'-C1'-N1	9.54	115.83	108.20
38	A1	1294	A	C8-N9-C4	-9.54	101.98	105.80
38	A1	1736	G	C5-C6-N1	-9.54	106.73	111.50
38	A1	2742	G	O4'-C1'-N9	9.54	115.83	108.20
38	A1	2756	G	C5-C6-N1	-9.54	106.73	111.50
10	B1	10	G	C5-C6-O6	-9.54	122.88	128.60
11	B2	177	A	C4-C5-C6	9.54	121.77	117.00
11	B2	832	G	C5-C6-N1	9.54	116.27	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	285	C	C5-C6-N1	9.54	125.77	121.00
38	A1	2203	G	C5-C6-O6	-9.54	122.88	128.60
38	A1	1884	C	O4'-C1'-N1	9.54	115.83	108.20
38	A1	2069	G	C5-C6-O6	-9.54	122.88	128.60
11	B2	184	G	P-O3'-C3'	9.53	131.14	119.70
38	A1	582	A	C6-C5-N7	-9.53	125.63	132.30
11	B2	1377	G	N3-C2-N2	9.53	126.57	119.90
38	A1	1586	G	C5-C6-O6	-9.53	122.88	128.60
38	A1	1610	C	C1'-O4'-C4'	9.53	117.53	109.90
38	A1	2124	C	C6-N1-C2	-9.53	116.49	120.30
11	B2	520	G	O4'-C1'-N9	9.53	115.82	108.20
38	A1	1476	C	C2-N1-C1'	9.53	129.28	118.80
11	B2	928	A	N1-C6-N6	9.53	124.32	118.60
11	B2	1221	A	N7-C8-N9	9.53	118.56	113.80
11	B2	1307	G	N1-C2-N3	-9.53	118.18	123.90
38	A1	304	G	N1-C6-O6	9.53	125.62	119.90
38	A1	1379	A	N9-C4-C5	9.53	109.61	105.80
38	A1	1816	C	C4-C5-C6	9.53	122.16	117.40
38	A1	2129	G	C5-C6-N1	-9.53	106.74	111.50
11	B2	212	G	C4-C5-C6	9.53	124.52	118.80
38	A1	799	C	O4'-C1'-N1	9.53	115.82	108.20
38	A1	1051	C	N3-C4-N4	9.53	124.67	118.00
11	B2	297	G	N1-C6-O6	9.53	125.61	119.90
11	B2	967	C	C4-C5-C6	9.53	122.16	117.40
38	A1	854	G	C2-N3-C4	9.53	116.66	111.90
38	A1	1873	G	O4'-C1'-N9	9.53	115.82	108.20
38	A1	2238	G	C2-N3-C4	9.53	116.66	111.90
38	A1	2988	A	C5-C6-N6	-9.53	116.08	123.70
11	B2	900	G	C8-N9-C4	-9.52	102.59	106.40
11	B2	1209	C	N3-C4-N4	9.52	124.67	118.00
38	A1	208	A	C4-C5-N7	-9.52	105.94	110.70
11	B2	354	G	C5-C6-O6	-9.52	122.89	128.60
38	A1	446	G	N3-C2-N2	9.52	126.57	119.90
38	A1	1243	C	C6-N1-C2	9.52	124.11	120.30
38	A1	1909	C	N3-C4-N4	9.52	124.67	118.00
38	A1	904	G	N1-C6-O6	9.52	125.61	119.90
38	A1	1436	A	O4'-C1'-N9	9.52	115.82	108.20
38	A1	2323	C	C2-N3-C4	9.52	124.66	119.90
11	B2	617	A	C8-N9-C4	-9.52	101.99	105.80
38	A1	649	A	C5-C6-N6	-9.52	116.09	123.70
38	A1	744	G	N1-C2-N2	9.52	124.77	116.20
38	A1	1427	A	N1-C6-N6	9.52	124.31	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2125	C	O4'-C1'-N1	9.52	115.82	108.20
11	B2	8	U	N1-C2-N3	9.52	120.61	114.90
11	B2	1135	G	C5-C6-O6	-9.52	122.89	128.60
38	A1	905	G	C4-C5-N7	9.52	114.61	110.80
38	A1	1793	G	C8-N9-C4	-9.52	102.59	106.40
38	A1	1652	A	C8-N9-C4	9.52	109.61	105.80
38	A1	285	C	O4'-C1'-N1	9.51	115.81	108.20
38	A1	1270	G	C6-C5-N7	-9.51	124.69	130.40
38	A1	2347	G	C5-C6-N1	-9.51	106.74	111.50
38	A1	3023	G	C4-C5-C6	9.51	124.51	118.80
9	AX	420	ARG	NE-CZ-NH1	9.51	125.06	120.30
11	B2	6	G	C4-C5-N7	9.51	114.61	110.80
11	B2	184	G	N1-C2-N3	-9.51	118.19	123.90
11	B2	699	C	C2-N3-C4	9.51	124.66	119.90
11	B2	1207	G	C2-N3-C4	-9.51	107.14	111.90
38	A1	93	C	O4'-C1'-N1	9.51	115.81	108.20
38	A1	1186	G	N3-C2-N2	9.51	126.56	119.90
38	A1	118	A	P-O3'-C3'	9.51	131.11	119.70
39	A3	93	G	N1-C2-N3	-9.51	118.19	123.90
11	B2	225	U	N1-C2-N3	-9.51	109.19	114.90
11	B2	450	A	N1-C6-N6	9.51	124.31	118.60
17	BE	81	TYR	CB-CG-CD1	9.51	126.70	121.00
38	A1	81	G	N1-C2-N3	-9.51	118.20	123.90
38	A1	1593	C	C6-N1-C2	9.51	124.10	120.30
38	A1	1747	C	N3-C4-C5	-9.51	118.10	121.90
38	A1	1901	A	C4-C5-C6	9.51	121.75	117.00
5	AS	12	PHE	CB-CG-CD1	-9.50	114.15	120.80
11	B2	573	C	N3-C4-N4	9.50	124.65	118.00
11	B2	933	G	C6-C5-N7	-9.50	124.70	130.40
11	B2	1150	G	C5-C6-O6	-9.50	122.90	128.60
38	A1	1228	G	C6-C5-N7	-9.50	124.70	130.40
38	A1	2753	G	O4'-C1'-N9	9.50	115.80	108.20
38	A1	2854	A	C4-C5-C6	9.50	121.75	117.00
65	AV	39	ARG	NE-CZ-NH1	9.50	125.05	120.30
11	B2	281	G	N7-C8-N9	9.50	117.85	113.10
38	A1	677	A	C5-C6-N1	-9.50	112.95	117.70
11	B2	1099	A	O4'-C1'-N9	9.50	115.80	108.20
38	A1	872	G	N1-C6-O6	9.50	125.60	119.90
38	A1	952	C	C6-N1-C2	-9.50	116.50	120.30
38	A1	1202	G	C5-C6-N1	-9.50	106.75	111.50
38	A1	2463	G	C5-C6-O6	-9.50	122.90	128.60
11	B2	1250	C	C6-N1-C2	-9.50	116.50	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	295	G	N1-C2-N3	-9.50	118.20	123.90
38	A1	342	C	O4'-C1'-N1	9.50	115.80	108.20
38	A1	2197	U	O4'-C1'-N1	9.50	115.80	108.20
38	A1	2728	U	N3-C2-O2	9.50	128.85	122.20
11	B2	763	G	N1-C6-O6	9.49	125.60	119.90
11	B2	981	U	N1-C2-N3	-9.49	109.20	114.90
11	B2	1087	C	C5-C4-N4	-9.49	113.55	120.20
11	B2	1118	C	O4'-C1'-N1	9.49	115.80	108.20
15	BC	5	ARG	NE-CZ-NH2	-9.49	115.55	120.30
38	A1	1911	G	C4-C5-N7	-9.49	107.00	110.80
38	A1	2296	A	C4-C5-C6	9.49	121.75	117.00
38	A1	2392	A	N9-C4-C5	-9.49	102.00	105.80
38	A1	854	G	O4'-C1'-N9	9.49	115.79	108.20
38	A1	1196	A	C4-C5-C6	9.49	121.75	117.00
38	A1	1335	C	P-O3'-C3'	9.49	131.09	119.70
38	A1	2225	C	C6-N1-C2	-9.49	116.50	120.30
38	A1	2655	C	N1-C2-O2	-9.49	113.20	118.90
39	A3	64	C	N3-C4-N4	9.49	124.64	118.00
11	B2	1168	C	N3-C4-C5	-9.49	118.10	121.90
38	A1	467	U	C5-C6-N1	9.49	127.44	122.70
38	A1	555	G	O4'-C1'-N9	9.49	115.79	108.20
38	A1	982	G	N3-C2-N2	9.49	126.54	119.90
38	A1	1015	G	N1-C2-N3	-9.49	118.21	123.90
38	A1	1240	U	O4'-C1'-N1	9.49	115.79	108.20
38	A1	1370	G	N1-C2-N3	-9.49	118.21	123.90
38	A1	1570	C	O4'-C1'-N1	9.49	115.79	108.20
47	Ad	85	ARG	NE-CZ-NH1	9.49	125.05	120.30
11	B2	235	G	C6-N1-C2	9.49	130.79	125.10
38	A1	331	G	P-O3'-C3'	9.49	131.08	119.70
38	A1	507	G	C4-C5-N7	-9.49	107.00	110.80
38	A1	1155	A	C4'-C3'-C2'	9.49	112.09	102.60
38	A1	1171	G	C8-N9-C4	-9.49	102.61	106.40
38	A1	1584	G	C5-C6-O6	-9.49	122.91	128.60
11	B2	18	C	C5-C4-N4	-9.48	113.56	120.20
11	B2	75	C	C2-N1-C1'	9.48	129.23	118.80
11	B2	1317	G	O4'-C1'-N9	9.48	115.79	108.20
24	BL	71	ARG	NE-CZ-NH2	-9.48	115.56	120.30
38	A1	177	G	C6-N1-C2	9.48	130.79	125.10
38	A1	1950	G	C5-C6-O6	-9.48	122.91	128.60
38	A1	2522	C	N3-C4-N4	9.48	124.64	118.00
11	B2	1209	C	P-O3'-C3'	9.48	131.08	119.70
38	A1	1148	C	N3-C4-C5	-9.48	118.11	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2190	A	O4'-C1'-N9	9.48	115.79	108.20
38	A1	2698	G	N3-C2-N2	9.48	126.54	119.90
39	A3	122	C	O4'-C1'-N1	9.48	115.78	108.20
11	B2	296	A	N1-C2-N3	9.48	134.04	129.30
38	A1	726	G	N1-C2-N3	-9.48	118.21	123.90
6	AT	4	TYR	CB-CG-CD2	9.48	126.69	121.00
38	A1	1185	A	C5-C6-N1	-9.48	112.96	117.70
38	A1	2356	U	C2-N3-C4	9.48	132.69	127.00
11	B2	476	C	N3-C4-N4	9.48	124.63	118.00
11	B2	617	A	C6-C5-N7	-9.48	125.67	132.30
11	B2	889	G	N9-C4-C5	9.48	109.19	105.40
11	B2	1470	G	C5-C6-O6	-9.48	122.91	128.60
24	BL	33	ARG	NE-CZ-NH2	9.48	125.04	120.30
38	A1	1084	G	N1-C6-O6	9.48	125.59	119.90
38	A1	2359	G	C6-C5-N7	-9.48	124.72	130.40
11	B2	852	G	C5-C6-O6	-9.47	122.92	128.60
11	B2	163	C	C6-N1-C2	-9.47	116.51	120.30
38	A1	618	C	C2-N3-C4	9.47	124.64	119.90
38	A1	966	G	C6-N1-C2	9.47	130.78	125.10
38	A1	1419	G	N1-C2-N3	-9.47	118.22	123.90
11	B2	1032	A	C5-C6-N6	-9.47	116.12	123.70
38	A1	674	G	O4'-C1'-N9	9.47	115.78	108.20
11	B2	1106	A	C5-C6-N6	-9.47	116.12	123.70
38	A1	1836	A	C6-C5-N7	-9.47	125.67	132.30
38	A1	2177	A	C4-C5-N7	-9.47	105.97	110.70
10	B1	39	A	N1-C2-N3	9.47	134.03	129.30
38	A1	80	G	N1-C6-O6	9.47	125.58	119.90
38	A1	291	A	C5-C6-N1	-9.47	112.97	117.70
38	A1	625	A	N1-C2-N3	-9.47	124.57	129.30
61	AN	151	ARG	NE-CZ-NH2	9.47	125.03	120.30
11	B2	522	C	C6-N1-C2	-9.47	116.51	120.30
38	A1	219	G	N9-C1'-C2'	-9.47	101.59	112.00
38	A1	931	C	O4'-C1'-N1	9.46	115.77	108.20
38	A1	1005	G	C6-N1-C2	9.46	130.78	125.10
38	A1	2206	G	N1-C6-O6	9.46	125.58	119.90
10	B1	4	G	N9-C4-C5	-9.46	101.61	105.40
11	B2	788	C	N3-C4-C5	-9.46	118.12	121.90
11	B2	1345	G	C4-C5-N7	9.46	114.58	110.80
38	A1	213	G	C2-N3-C4	9.46	116.63	111.90
38	A1	1556	G	C5-N7-C8	-9.46	99.57	104.30
38	A1	2957	G	P-O3'-C3'	9.46	131.05	119.70
11	B2	449	U	O4'-C1'-N1	9.46	115.77	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	109	G	N1-C6-O6	9.46	125.57	119.90
38	A1	518	A	N1-C6-N6	9.46	124.28	118.60
38	A1	640	C	N3-C4-C5	-9.46	118.12	121.90
38	A1	985	A	N9-C4-C5	9.46	109.58	105.80
38	A1	1956	G	N1-C2-N3	-9.46	118.23	123.90
39	A3	61	C	O4'-C1'-N1	9.46	115.77	108.20
11	B2	1083	G	C8-N9-C4	9.46	110.18	106.40
11	B2	1359	C	N3-C4-C5	-9.46	118.12	121.90
38	A1	808	A	C8-N9-C4	-9.46	102.02	105.80
38	A1	1575	G	C5-C6-N1	9.46	116.23	111.50
38	A1	2254	U	N3-C2-O2	9.46	128.82	122.20
38	A1	2650	G	C6-C5-N7	-9.46	124.73	130.40
38	A1	2563	A	C4-C5-C6	9.45	121.73	117.00
11	B2	709	G	N1-C6-O6	9.45	125.57	119.90
38	A1	848	A	C4-C5-N7	-9.45	105.97	110.70
38	A1	2108	U	C5-C4-O4	-9.45	120.23	125.90
11	B2	836	G	C5-C6-N1	-9.45	106.78	111.50
38	A1	1226	G	C5-C6-O6	-9.45	122.93	128.60
38	A1	2858	C	N1-C2-O2	9.45	124.57	118.90
39	A3	95	G	C5-C6-O6	-9.45	122.93	128.60
11	B2	504	G	C5-C6-O6	-9.45	122.93	128.60
38	A1	1843	C	N3-C4-N4	9.45	124.61	118.00
11	B2	269	A	C5-C6-N1	-9.45	112.98	117.70
11	B2	347	G	C5-C6-N1	-9.45	106.78	111.50
45	AC	84	ARG	NE-CZ-NH2	-9.45	115.58	120.30
11	B2	474	G	C5-C6-O6	-9.44	122.93	128.60
38	A1	1543	C	C5-C4-N4	-9.44	113.59	120.20
38	A1	1592	U	N3-C2-O2	9.45	128.81	122.20
11	B2	1475	C	N3-C4-N4	9.44	124.61	118.00
38	A1	1252	G	N1-C6-O6	9.44	125.57	119.90
38	A1	1202	G	N9-C4-C5	-9.44	101.62	105.40
38	A1	2381	A	C5-C6-N6	-9.44	116.15	123.70
38	A1	437	G	C5-C6-N1	-9.44	106.78	111.50
11	B2	285	C	N3-C4-N4	9.44	124.61	118.00
11	B2	1154	G	C5-C6-O6	-9.44	122.94	128.60
38	A1	305	G	O4'-C1'-N9	9.44	115.75	108.20
38	A1	1670	A	N1-C6-N6	9.44	124.26	118.60
38	A1	2187	C	O4'-C1'-N1	9.44	115.75	108.20
38	A1	658	C	N3-C4-N4	9.44	124.61	118.00
38	A1	859	G	C5-C6-N1	-9.44	106.78	111.50
38	A1	2508	G	N3-C2-N2	9.44	126.51	119.90
38	A1	954	A	O4'-C1'-N9	9.44	115.75	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1166	A	O4'-C1'-N9	9.44	115.75	108.20
38	A1	2203	G	C5-C6-N1	-9.44	106.78	111.50
38	A1	2293	G	N1-C2-N3	-9.44	118.24	123.90
38	A1	2406	C	P-O3'-C3'	-9.44	108.38	119.70
38	A1	522	A	C6-C5-N7	-9.43	125.70	132.30
38	A1	2751	C	C4-C5-C6	9.43	122.12	117.40
11	B2	678	G	C4-C5-N7	-9.43	107.03	110.80
11	B2	650	A	C5-N7-C8	9.43	108.61	103.90
11	B2	802	G	N1-C6-O6	9.43	125.56	119.90
11	B2	1099	A	C5-C6-N1	-9.43	112.98	117.70
38	A1	1790	G	C5-C6-O6	-9.43	122.94	128.60
38	A1	2701	U	C4'-C3'-C2'	-9.43	93.17	102.60
11	B2	914	U	N3-C4-C5	-9.43	108.94	114.60
16	BD	138	ARG	NE-CZ-NH1	9.43	125.01	120.30
38	A1	1115	A	C5-C6-N6	-9.43	116.16	123.70
38	A1	1574	A	C5-N7-C8	9.43	108.61	103.90
38	A1	2428	C	C6-N1-C2	-9.43	116.53	120.30
38	A1	2500	G	N9-C4-C5	-9.43	101.63	105.40
9	AX	333	PHE	CB-CG-CD1	9.43	127.40	120.80
10	B1	10	G	C2-N3-C4	9.43	116.61	111.90
11	B2	1067	G	C5-C6-O6	-9.43	122.94	128.60
38	A1	2733	A	N3-C4-C5	-9.43	120.20	126.80
60	AM	67	ARG	NE-CZ-NH2	-9.43	115.59	120.30
38	A1	1064	G	C6-N1-C2	9.42	130.75	125.10
38	A1	1296	A	C5-C6-N1	-9.42	112.99	117.70
38	A1	1679	U	C5-C6-N1	9.42	127.41	122.70
38	A1	2123	G	N1-C6-O6	9.42	125.55	119.90
38	A1	2556	C	C5-C4-N4	-9.42	113.60	120.20
11	B2	187	C	N3-C4-N4	9.42	124.59	118.00
11	B2	319	U	N3-C4-O4	9.42	125.99	119.40
11	B2	1364	C	N1-C2-O2	-9.42	113.25	118.90
38	A1	390	C	O4'-C1'-N1	9.42	115.74	108.20
38	A1	637	G	O4'-C1'-N9	9.42	115.74	108.20
38	A1	694	A	C2-N3-C4	-9.42	105.89	110.60
11	B2	45	U	O4'-C1'-N1	9.42	115.73	108.20
11	B2	78	G	C5-C6-O6	-9.42	122.95	128.60
11	B2	630	A	O4'-C1'-N9	9.42	115.73	108.20
11	B2	919	U	P-O3'-C3'	9.42	131.00	119.70
38	A1	709	A	C4-C5-C6	9.42	121.71	117.00
38	A1	1401	G	C5-C6-O6	-9.42	122.95	128.60
38	A1	2076	A	C5-N7-C8	9.42	108.61	103.90
38	A1	1255	C	O4'-C1'-N1	9.42	115.73	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	871	G	C8-N9-C4	-9.41	102.63	106.40
11	B2	494	G	C5-C6-O6	-9.41	122.95	128.60
38	A1	724	G	C5-C6-O6	-9.41	122.95	128.60
38	A1	546	C	N3-C4-N4	9.41	124.59	118.00
38	A1	943	G	C6-C5-N7	-9.41	124.75	130.40
38	A1	1607	C	N3-C4-N4	9.41	124.59	118.00
38	A1	1988	U	C4-C5-C6	-9.41	114.06	119.70
38	A1	2343	G	C8-N9-C4	-9.41	102.64	106.40
38	A1	2816	C	C2-N3-C4	9.41	124.61	119.90
11	B2	925	U	C2-N3-C4	9.41	132.64	127.00
38	A1	72	U	N3-C4-C5	-9.41	108.95	114.60
38	A1	304	G	C5-C6-O6	-9.41	122.96	128.60
38	A1	690	G	O4'-C1'-N9	9.41	115.72	108.20
38	A1	735	A	N9-C4-C5	-9.41	102.04	105.80
38	A1	786	G	N3-C2-N2	9.41	126.48	119.90
38	A1	1890	U	C5-C4-O4	-9.41	120.26	125.90
38	A1	2113	G	N1-C2-N3	-9.41	118.26	123.90
11	B2	700	G	N1-C6-O6	9.40	125.54	119.90
38	A1	406	G	C8-N9-C4	-9.40	102.64	106.40
38	A1	573	G	C5-C6-O6	-9.40	122.96	128.60
38	A1	1026	A	C4-C5-C6	9.40	121.70	117.00
38	A1	2571	G	O4'-C1'-N9	9.40	115.72	108.20
38	A1	1481	G	C4-C5-N7	9.40	114.56	110.80
38	A1	1393	C	N3-C4-C5	-9.40	118.14	121.90
38	A1	2214	U	O4'-C1'-N1	9.40	115.72	108.20
11	B2	1202	G	N3-C2-N2	9.40	126.48	119.90
38	A1	2479	C	N3-C4-C5	-9.40	118.14	121.90
11	B2	622	C	C6-N1-C2	-9.40	116.54	120.30
38	A1	2523	C	N3-C4-N4	9.40	124.58	118.00
26	BN	32	ARG	NE-CZ-NH1	9.40	125.00	120.30
39	A3	118	G	N1-C2-N3	-9.40	118.26	123.90
11	B2	67	C	C5-C6-N1	9.39	125.70	121.00
26	BN	33	ARG	NE-CZ-NH1	9.39	125.00	120.30
38	A1	2034	G	C2-N3-C4	9.39	116.60	111.90
38	A1	2172	G	N1-C2-N3	-9.39	118.26	123.90
11	B2	133	G	N1-C6-O6	9.39	125.53	119.90
11	B2	269	A	N1-C2-N3	-9.39	124.61	129.30
11	B2	620	G	C6-N1-C2	9.39	130.73	125.10
29	BQ	19	ARG	NE-CZ-NH2	9.39	125.00	120.30
38	A1	460	C	C2-N3-C4	9.39	124.60	119.90
38	A1	1104	A	O4'-C1'-N9	9.39	115.71	108.20
38	A1	1711	C	P-O5'-C5'	9.39	135.93	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	866	A	N3-C4-C5	-9.39	120.23	126.80
38	A1	126	U	C5-C6-N1	-9.39	118.01	122.70
38	A1	1120	C	C5-C6-N1	9.39	125.69	121.00
11	B2	1414	G	C6-C5-N7	-9.39	124.77	130.40
38	A1	1771	C	C5-C4-N4	-9.39	113.63	120.20
38	A1	2706	C	N1-C2-O2	9.39	124.53	118.90
11	B2	1426	C	N3-C4-C5	-9.39	118.14	121.90
38	A1	1168	A	N9-C4-C5	9.38	109.55	105.80
38	A1	1296	A	C4-C5-C6	9.38	121.69	117.00
11	B2	961	U	N3-C4-O4	9.38	125.97	119.40
11	B2	1479	C	O4'-C1'-N1	9.38	115.71	108.20
38	A1	120	G	C5-C6-O6	-9.38	122.97	128.60
38	A1	995	G	N1-C2-N3	-9.38	118.27	123.90
38	A1	1666	G	C5-C6-O6	-9.38	122.97	128.60
38	A1	295	G	O4'-C1'-N9	9.38	115.70	108.20
38	A1	1751	G	C6-C5-N7	-9.38	124.77	130.40
38	A1	2310	G	C5-C6-O6	-9.38	122.97	128.60
38	A1	2329	A	C5-C6-N6	-9.38	116.19	123.70
38	A1	2960	G	C5-C6-O6	-9.38	122.97	128.60
39	A3	121	A	N1-C6-N6	9.38	124.23	118.60
59	AL	53	TYR	CB-CG-CD1	-9.38	115.37	121.00
11	B2	453	G	N1-C6-O6	9.38	125.53	119.90
38	A1	813	G	O4'-C1'-N9	9.38	115.70	108.20
11	B2	72	C	C5-C6-N1	9.38	125.69	121.00
11	B2	120	C	C5-C4-N4	9.38	126.76	120.20
38	A1	862	G	N1-C2-N3	-9.38	118.27	123.90
38	A1	1828	A	N7-C8-N9	9.38	118.49	113.80
38	A1	1846	G	C4-C5-N7	9.38	114.55	110.80
38	A1	1295	G	N7-C8-N9	-9.38	108.41	113.10
38	A1	1878	G	N1-C6-O6	9.38	125.53	119.90
38	A1	850	C	C5-C4-N4	-9.38	113.64	120.20
38	A1	1751	G	N9-C4-C5	-9.38	101.65	105.40
11	B2	727	G	C2-N3-C4	9.37	116.59	111.90
11	B2	1182	G	C2-N3-C4	-9.37	107.21	111.90
38	A1	312	G	C5-C6-O6	-9.37	122.98	128.60
38	A1	1646	G	N3-C2-N2	9.37	126.46	119.90
11	B2	644	G	C2-N3-C4	9.37	116.59	111.90
38	A1	423	G	C5-C6-O6	-9.37	122.98	128.60
38	A1	1164	C	C5-C4-N4	-9.37	113.64	120.20
38	A1	1212	A	O4'-C1'-N9	9.37	115.70	108.20
38	A1	2107	G	C4-C5-C6	9.37	124.42	118.80
38	A1	2492	G	N1-C6-O6	9.37	125.52	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2566	A	C5-C6-N1	-9.37	113.01	117.70
11	B2	1042	U	C5-C4-O4	-9.37	120.28	125.90
15	BC	126	ARG	NE-CZ-NH1	9.37	124.98	120.30
38	A1	168	G	N9-C4-C5	-9.37	101.65	105.40
38	A1	276	G	N3-C2-N2	9.37	126.46	119.90
38	A1	1968	A	C6-C5-N7	-9.37	125.74	132.30
11	B2	520	G	N7-C8-N9	9.37	117.78	113.10
11	B2	953	C	N3-C4-N4	9.37	124.56	118.00
38	A1	318	G	O4'-C1'-N9	9.37	115.69	108.20
38	A1	2284	C	C5-C4-N4	-9.37	113.64	120.20
29	BQ	9	ARG	NE-CZ-NH2	9.36	124.98	120.30
38	A1	84	A	C5-C6-N6	-9.37	116.21	123.70
38	A1	860	A	C2-N3-C4	-9.36	105.92	110.60
38	A1	2025	A	C6-C5-N7	-9.37	125.74	132.30
38	A1	2903	U	N3-C4-C5	-9.37	108.98	114.60
11	B2	33	U	C5-C6-N1	9.36	127.38	122.70
11	B2	251	G	C5-N7-C8	9.36	108.98	104.30
11	B2	380	C	C5-C6-N1	9.36	125.68	121.00
11	B2	398	C	O4'-C1'-N1	9.36	115.69	108.20
11	B2	975	A	O4'-C1'-N9	9.36	115.69	108.20
38	A1	2380	A	N1-C6-N6	9.36	124.22	118.60
38	A1	2877	A	C5-N7-C8	9.36	108.58	103.90
38	A1	1393	C	P-O3'-C3'	9.36	130.93	119.70
38	A1	1910	C	O4'-C1'-N1	9.36	115.69	108.20
38	A1	985	A	N1-C2-N3	-9.36	124.62	129.30
38	A1	2430	C	P-O5'-C5'	9.36	135.87	120.90
39	A3	43	C	C6-N1-C2	9.36	124.04	120.30
11	B2	221	A	N7-C8-N9	-9.36	109.12	113.80
11	B2	294	A	C5-N7-C8	9.36	108.58	103.90
11	B2	461	A	C5-C6-N1	-9.36	113.02	117.70
11	B2	612	C	C5-C6-N1	-9.36	116.32	121.00
38	A1	427	G	C5-C6-O6	-9.36	122.99	128.60
38	A1	1117	C	N3-C4-N4	9.36	124.55	118.00
11	B2	1136	A	C4-C5-C6	9.36	121.68	117.00
38	A1	23	G	N3-C2-N2	9.36	126.45	119.90
38	A1	1193	G	C8-N9-C4	-9.36	102.66	106.40
38	A1	2152	G	C6-C5-N7	-9.36	124.79	130.40
38	A1	2197	U	C2-N3-C4	9.36	132.61	127.00
38	A1	2200	A	N1-C6-N6	9.36	124.21	118.60
38	A1	2238	G	C5-C6-O6	-9.36	122.99	128.60
38	A1	2425	A	C5'-C4'-O4'	9.36	120.33	109.10
11	B2	314	G	N1-C6-O6	9.35	125.51	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1364	C	C6-N1-C2	-9.35	116.56	120.30
38	A1	453	U	C5-C4-O4	-9.35	120.29	125.90
11	B2	1367	C	C5-C6-N1	-9.35	116.32	121.00
38	A1	2616	C	O4'-C1'-N1	9.35	115.68	108.20
11	B2	893	U	N3-C2-O2	9.35	128.74	122.20
38	A1	1272	A	C4-C5-C6	9.35	121.67	117.00
11	B2	1129	A	N1-C6-N6	9.35	124.21	118.60
38	A1	426	G	O4'-C1'-N9	9.35	115.68	108.20
38	A1	591	G	N9-C4-C5	9.35	109.14	105.40
38	A1	961	C	O4'-C1'-N1	9.35	115.68	108.20
39	A3	41	A	N7-C8-N9	9.35	118.47	113.80
38	A1	2053	G	N1-C2-N2	-9.35	107.79	116.20
11	B2	956	C	N3-C4-C5	-9.35	118.16	121.90
38	A1	440	A	C4-C5-C6	9.35	121.67	117.00
38	A1	2408	G	N9-C4-C5	9.35	109.14	105.40
11	B2	5	C	C2-N3-C4	9.35	124.57	119.90
11	B2	1252	C	N3-C4-C5	-9.35	118.16	121.90
38	A1	194	G	C5-C6-N1	-9.35	106.83	111.50
38	A1	202	A	C5-C6-N6	-9.35	116.22	123.70
11	B2	542	G	C4-C5-N7	-9.34	107.06	110.80
11	B2	752	G	C6-C5-N7	-9.34	124.79	130.40
38	A1	1139	C	O4'-C1'-N1	9.34	115.67	108.20
38	A1	1633	A	C6-C5-N7	-9.34	125.76	132.30
38	A1	1965	C	O4'-C1'-N1	9.34	115.67	108.20
38	A1	2645	C	O4'-C1'-N1	9.34	115.67	108.20
38	A1	2434	A	C4-C5-C6	9.34	121.67	117.00
11	B2	538	C	N3-C4-C5	-9.34	118.16	121.90
38	A1	926	C	C6-N1-C2	-9.34	116.56	120.30
38	A1	217	A	P-O3'-C3'	9.34	130.91	119.70
38	A1	1860	A	C2-N3-C4	9.34	115.27	110.60
11	B2	1273	G	N3-C4-N9	-9.34	120.40	126.00
11	B2	192	G	N1-C6-O6	9.34	125.50	119.90
38	A1	365	G	O4'-C1'-N9	9.34	115.67	108.20
38	A1	1755	C	N3-C4-C5	-9.34	118.17	121.90
11	B2	1419	G	O4'-C1'-N9	9.34	115.67	108.20
38	A1	170	A	N1-C6-N6	9.34	124.20	118.60
38	A1	1346	G	N1-C6-O6	9.34	125.50	119.90
38	A1	2789	G	C5-C6-O6	-9.34	123.00	128.60
38	A1	2843	C	N3-C4-N4	9.34	124.53	118.00
11	B2	335	G	O4'-C1'-N9	9.33	115.67	108.20
38	A1	52	A	C2-N3-C4	9.33	115.27	110.60
38	A1	185	A	C5-C6-N1	-9.33	113.03	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	575	G	C5-C6-O6	-9.33	123.00	128.60
38	A1	937	A	C2-N3-C4	9.33	115.27	110.60
38	A1	1377	G	C5-C6-N1	-9.33	106.83	111.50
38	A1	2040	A	C2-N3-C4	9.33	115.27	110.60
38	A1	2424	A	N1-C6-N6	9.33	124.20	118.60
38	A1	2524	C	C5-C6-N1	9.33	125.67	121.00
11	B2	873	A	N1-C6-N6	9.33	124.20	118.60
38	A1	879	A	C5-C6-N1	-9.33	113.03	117.70
38	A1	1186	G	C2-N3-C4	9.33	116.57	111.90
10	B1	27	A	P-O3'-C3'	9.33	130.89	119.70
38	A1	249	G	C5-C6-O6	-9.33	123.00	128.60
38	A1	1109	G	O4'-C1'-N9	9.33	115.66	108.20
38	A1	1406	G	C5-C6-N1	-9.33	106.83	111.50
38	A1	2566	A	O4'-C1'-N9	9.33	115.66	108.20
38	A1	2220	C	O4'-C1'-N1	9.33	115.66	108.20
11	B2	713	A	N1-C2-N3	9.33	133.96	129.30
11	B2	1383	A	C5-C6-N6	-9.33	116.24	123.70
38	A1	42	G	C6-C5-N7	-9.33	124.80	130.40
38	A1	218	A	N1-C2-N3	9.33	133.96	129.30
38	A1	1810	G	C4-C5-N7	-9.33	107.07	110.80
38	A1	2765	C	N3-C4-C5	-9.33	118.17	121.90
11	B2	10	G	C5-C6-O6	-9.32	123.01	128.60
11	B2	315	A	C5-C6-N6	-9.32	116.24	123.70
11	B2	994	C	C6-N1-C2	-9.32	116.57	120.30
38	A1	665	C	N3-C4-C5	-9.32	118.17	121.90
38	A1	2002	A	N1-C2-N3	9.32	133.96	129.30
38	A1	2103	C	O4'-C1'-N1	9.32	115.66	108.20
38	A1	2477	G	O4'-C1'-N9	9.32	115.66	108.20
38	A1	2898	G	C8-N9-C4	9.32	110.13	106.40
38	A1	2139	A	C4-C5-C6	9.32	121.66	117.00
11	B2	772	G	N3-C2-N2	9.32	126.42	119.90
38	A1	493	A	C4-C5-C6	9.32	121.66	117.00
38	A1	1111	G	C6-C5-N7	-9.32	124.81	130.40
38	A1	1886	C	O4'-C1'-N1	9.32	115.66	108.20
38	A1	1939	C	P-O3'-C3'	9.32	130.89	119.70
45	AC	318	ARG	NE-CZ-NH1	9.32	124.96	120.30
11	B2	1087	C	N1-C2-O2	-9.32	113.31	118.90
38	A1	100	C	P-O3'-C3'	9.32	130.88	119.70
38	A1	118	A	O4'-C1'-N9	9.32	115.66	108.20
38	A1	550	A	C5-C6-N6	-9.32	116.24	123.70
38	A1	2441	A	C8-N9-C4	-9.32	102.07	105.80
38	A1	2565	A	N1-C6-N6	9.32	124.19	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1081	C	C6-N1-C2	-9.32	116.57	120.30
11	B2	363	C	C5-C6-N1	9.32	125.66	121.00
11	B2	1031	G	C5-C6-O6	-9.32	123.01	128.60
38	A1	387	A	C2-N3-C4	9.32	115.26	110.60
38	A1	1091	G	C2-N3-C4	-9.32	107.24	111.90
11	B2	226	G	O4'-C1'-N9	9.31	115.65	108.20
11	B2	732	G	C5-C6-N1	-9.31	106.84	111.50
38	A1	605	A	C5-C6-N1	-9.31	113.04	117.70
38	A1	2362	U	P-O3'-C3'	9.31	130.88	119.70
11	B2	1229	A	C5-N7-C8	9.31	108.56	103.90
38	A1	2138	A	N1-C6-N6	9.31	124.19	118.60
39	A3	71	G	C5-C6-O6	-9.31	123.01	128.60
11	B2	438	A	C5-C6-N6	-9.31	116.25	123.70
11	B2	1096	G	N1-C6-O6	9.31	125.49	119.90
11	B2	1190	C	N3-C4-C5	-9.31	118.17	121.90
38	A1	738	C	N3-C4-N4	9.31	124.52	118.00
38	A1	2182	A	C5-C6-N6	-9.31	116.25	123.70
38	A1	2753	G	N3-C2-N2	9.31	126.42	119.90
38	A1	2775	G	C2-N3-C4	9.31	116.56	111.90
38	A1	276	G	N1-C2-N3	-9.31	118.31	123.90
38	A1	442	G	C5-C6-O6	-9.31	123.02	128.60
38	A1	1118	A	C4-C5-C6	9.31	121.65	117.00
38	A1	2325	C	O4'-C1'-N1	9.31	115.65	108.20
38	A1	1212	A	C6-C5-N7	-9.31	125.78	132.30
11	B2	427	G	O4'-C1'-N9	9.30	115.64	108.20
11	B2	1220	G	O4'-C1'-N9	9.31	115.64	108.20
38	A1	432	C	O4'-C1'-N1	9.31	115.64	108.20
38	A1	1742	C	O4'-C1'-N1	9.31	115.64	108.20
38	A1	94	A	C8-N9-C4	-9.30	102.08	105.80
46	AD	48	ARG	NE-CZ-NH2	-9.30	115.65	120.30
11	B2	1066	C	C6-N1-C2	-9.30	116.58	120.30
11	B2	1306	A	C4-C5-C6	9.30	121.65	117.00
27	BO	68	ASP	CB-CG-OD2	-9.30	109.93	118.30
38	A1	497	G	N7-C8-N9	-9.30	108.45	113.10
38	A1	1138	C	C6-N1-C2	9.30	124.02	120.30
44	Ab	8	ARG	NE-CZ-NH1	9.30	124.95	120.30
11	B2	497	C	C2-N3-C4	9.30	124.55	119.90
38	A1	2847	G	O4'-C1'-N9	9.30	115.64	108.20
11	B2	687	G	C5-C6-N1	-9.30	106.85	111.50
11	B2	1363	C	N3-C4-C5	-9.30	118.18	121.90
11	B2	1419	G	C8-N9-C4	-9.30	102.68	106.40
38	A1	1261	C	N1-C2-O2	-9.30	113.32	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
61	AN	43	PHE	CB-CG-CD2	-9.30	114.29	120.80
62	AO	8	ARG	NE-CZ-NH2	-9.30	115.65	120.30
11	B2	1185	A	C5-C6-N6	-9.30	116.26	123.70
11	B2	1365	G	N1-C6-O6	9.30	125.48	119.90
38	A1	1069	A	P-O3'-C3'	9.30	130.85	119.70
38	A1	1742	C	N1-C2-O2	9.29	124.48	118.90
38	A1	1984	G	C5-C6-O6	-9.29	123.02	128.60
46	AD	55	ARG	NE-CZ-NH1	9.29	124.95	120.30
11	B2	66	G	C5-N7-C8	-9.29	99.65	104.30
11	B2	678	G	C5-C6-O6	-9.29	123.03	128.60
11	B2	721	A	C1'-O4'-C4'	9.29	117.33	109.90
11	B2	1393	A	C5-N7-C8	9.29	108.55	103.90
38	A1	486	A	C5-C6-N6	-9.29	116.27	123.70
38	A1	1733	C	C5-C4-N4	-9.29	113.70	120.20
38	A1	2040	A	C5-C6-N6	-9.29	116.27	123.70
11	B2	709	G	C5-C6-O6	-9.29	123.03	128.60
18	BF	136	ARG	NE-CZ-NH1	9.29	124.94	120.30
38	A1	627	G	N1-C6-O6	9.29	125.47	119.90
11	B2	803	C	N3-C4-C5	-9.29	118.19	121.90
38	A1	1746	C	C4'-C3'-C2'	-9.29	93.31	102.60
38	A1	2008	G	N1-C6-O6	9.29	125.47	119.90
39	A3	41	A	N1-C6-N6	9.29	124.17	118.60
38	A1	1460	C	O4'-C1'-N1	9.29	115.63	108.20
38	A1	716	U	C5-C4-O4	-9.29	120.33	125.90
38	A1	1428	G	C5-C6-N1	-9.29	106.86	111.50
66	AY	8	ARG	NE-CZ-NH1	-9.29	115.66	120.30
11	B2	1157	G	O4'-C1'-N9	9.28	115.63	108.20
38	A1	380	A	N1-C6-N6	9.28	124.17	118.60
38	A1	1604	G	P-O5'-C5'	9.28	135.75	120.90
11	B2	787	U	O4'-C1'-N1	9.28	115.63	108.20
11	B2	979	U	C6-N1-C2	-9.28	115.43	121.00
11	B2	1235	A	C5-N7-C8	-9.28	99.26	103.90
38	A1	975	C	C5-C6-N1	9.28	125.64	121.00
38	A1	1076	G	N3-C2-N2	9.28	126.40	119.90
38	A1	1548	A	O4'-C1'-N9	9.28	115.62	108.20
38	A1	2753	G	P-O3'-C3'	9.28	130.84	119.70
41	AA	107	PHE	CB-CG-CD1	9.28	127.30	120.80
38	A1	1776	G	O4'-C1'-N9	9.28	115.62	108.20
38	A1	2250	G	P-O3'-C3'	9.28	130.84	119.70
38	A1	2516	G	C5-N7-C8	9.28	108.94	104.30
7	AU	73	ARG	NE-CZ-NH1	9.28	124.94	120.30
11	B2	595	U	C5-C6-N1	9.28	127.34	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	A1	70	G	C5-C6-O6	-9.28	123.03	128.60
38	A1	3028	U	N3-C2-O2	9.28	128.70	122.20
11	B2	42	G	C6-C5-N7	-9.28	124.83	130.40
11	B2	122	C	O4'-C1'-N1	9.28	115.62	108.20
38	A1	288	G	N1-C6-O6	9.28	125.47	119.90
39	A3	122	C	N3-C4-C5	-9.28	118.19	121.90
1	A7	52	TYR	CB-CG-CD1	9.28	126.57	121.00
11	B2	682	A	C4-C5-C6	9.28	121.64	117.00
38	A1	1308	G	O4'-C1'-N9	9.28	115.62	108.20
39	A3	49	A	C5-C6-N6	-9.28	116.28	123.70
38	A1	1342	G	O4'-C1'-N9	9.28	115.62	108.20
41	AA	98	ARG	NE-CZ-NH2	-9.28	115.66	120.30
11	B2	186	U	O4'-C1'-N1	9.27	115.62	108.20
11	B2	1081	C	N3-C4-C5	-9.27	118.19	121.90
11	B2	1334	A	C4-C5-N7	-9.27	106.06	110.70
38	A1	1196	A	N9-C4-C5	9.27	109.51	105.80
38	A1	1825	G	O4'-C1'-N9	9.27	115.62	108.20
38	A1	1784	G	O4'-C1'-N9	9.27	115.62	108.20
38	A1	2660	G	C5-C6-O6	-9.27	123.04	128.60
38	A1	2244	G	N1-C6-O6	9.27	125.46	119.90
38	A1	2417	G	O4'-C1'-N9	9.27	115.62	108.20
11	B2	634	C	C6-N1-C2	-9.27	116.59	120.30
38	A1	2180	C	O4'-C1'-N1	9.27	115.61	108.20
39	A3	29	G	N1-C2-N3	-9.27	118.34	123.90
11	B2	64	G	C8-N9-C4	-9.27	102.69	106.40
11	B2	696	G	C5-C6-O6	-9.27	123.04	128.60
38	A1	245	A	C4-C5-C6	9.27	121.63	117.00
38	A1	664	A	C4-C5-C6	9.27	121.63	117.00
38	A1	1237	A	N1-C6-N6	9.27	124.16	118.60
38	A1	2511	C	N3-C4-N4	9.27	124.49	118.00
38	A1	2679	A	N9-C4-C5	9.27	109.51	105.80
38	A1	2680	A	C1'-O4'-C4'	9.27	117.31	109.90
38	A1	2726	G	O4'-C1'-N9	9.27	115.61	108.20
11	B2	389	G	O4'-C1'-N9	9.26	115.61	108.20
38	A1	748	G	C5-C6-O6	-9.26	123.04	128.60
38	A1	2057	G	C4-C5-C6	9.26	124.36	118.80
11	B2	630	A	C5-C6-N1	-9.26	113.07	117.70
38	A1	1957	U	C4'-C3'-C2'	-9.26	93.34	102.60
38	A1	2469	G	O4'-C1'-N9	9.26	115.61	108.20
38	A1	2481	G	N9-C4-C5	9.26	109.11	105.40
11	B2	68	G	C5-C6-O6	-9.26	123.04	128.60
11	B2	1193	G	N1-C6-O6	9.26	125.46	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	216	G	N1-C6-O6	9.26	125.45	119.90
11	B2	311	A	N3-C4-C5	-9.26	120.32	126.80
38	A1	989	G	N1-C2-N3	-9.26	118.35	123.90
38	A1	1993	A	N7-C8-N9	-9.26	109.17	113.80
38	A1	255	G	O4'-C1'-N9	9.25	115.60	108.20
11	B2	44	C	C5-C6-N1	9.25	125.62	121.00
38	A1	740	C	C6-N1-C2	-9.25	116.60	120.30
38	A1	809	A	C4-C5-C6	9.25	121.62	117.00
38	A1	1657	G	C5-C6-O6	-9.25	123.05	128.60
38	A1	2570	A	C4-C5-C6	9.25	121.62	117.00
38	A1	2672	A	C2-N3-C4	-9.25	105.97	110.60
11	B2	735	A	N1-C6-N6	9.25	124.15	118.60
11	B2	175	G	N3-C2-N2	9.25	126.37	119.90
11	B2	983	G	C6-N1-C2	9.25	130.65	125.10
38	A1	1736	G	C5-N7-C8	9.25	108.92	104.30
38	A1	2547	A	C4-C5-C6	9.25	121.62	117.00
11	B2	1154	G	C8-N9-C4	-9.25	102.70	106.40
38	A1	1019	G	O4'-C1'-N9	9.25	115.60	108.20
38	A1	1195	G	C6-C5-N7	-9.25	124.85	130.40
38	A1	2292	A	N3-C4-N9	9.25	134.80	127.40
38	A1	1594	G	O4'-C1'-N9	9.24	115.60	108.20
11	B2	40	C	N3-C4-N4	9.24	124.47	118.00
11	B2	263	C	N3-C4-N4	9.24	124.47	118.00
38	A1	922	C	O4'-C1'-N1	9.24	115.59	108.20
38	A1	1638	C	C4-C5-C6	9.24	122.02	117.40
38	A1	2137	A	O4'-C1'-N9	9.24	115.60	108.20
11	B2	621	G	N9-C4-C5	9.24	109.10	105.40
11	B2	857	C	N3-C4-N4	9.24	124.47	118.00
38	A1	485	G	P-O3'-C3'	9.24	130.79	119.70
38	A1	619	G	C6-C5-N7	-9.24	124.86	130.40
38	A1	3027	C	C5-C4-N4	-9.24	113.73	120.20
39	A3	5	G	N9-C4-C5	-9.24	101.70	105.40
39	A3	109	A	C6-C5-N7	-9.24	125.83	132.30
38	A1	1634	A	N7-C8-N9	-9.24	109.18	113.80
38	A1	2078	A	C4-C5-C6	9.24	121.62	117.00
38	A1	2733	A	N9-C4-C5	9.24	109.50	105.80
38	A1	2791	C	N3-C4-C5	-9.24	118.21	121.90
11	B2	261	G	C5-C6-N1	-9.23	106.88	111.50
11	B2	418	G	N3-C2-N2	9.23	126.36	119.90
38	A1	523	C	C5-C4-N4	-9.23	113.74	120.20
38	A1	1429	A	C2-N3-C4	-9.23	105.98	110.60
38	A1	2552	C	C5-C4-N4	-9.23	113.74	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2567	C	N3-C4-C5	-9.23	118.21	121.90
38	A1	2760	A	P-O3'-C3'	9.23	130.78	119.70
38	A1	2837	C	N3-C4-N4	9.23	124.47	118.00
38	A1	2846	A	O4'-C1'-N9	9.23	115.59	108.20
11	B2	310	G	N9-C4-C5	9.23	109.09	105.40
11	B2	895	C	N3-C4-C5	-9.23	118.21	121.90
11	B2	944	C	O4'-C1'-N1	9.23	115.58	108.20
38	A1	768	C	N3-C4-C5	-9.23	118.21	121.90
38	A1	1118	A	C5-C6-N6	-9.23	116.32	123.70
38	A1	1338	G	N3-C2-N2	9.23	126.36	119.90
38	A1	1983	C	N3-C4-C5	-9.23	118.21	121.90
39	A3	40	G	O4'-C1'-N9	9.23	115.58	108.20
11	B2	364	U	O4'-C1'-N1	9.23	115.58	108.20
11	B2	658	A	C5-C6-N6	-9.23	116.32	123.70
11	B2	862	C	C6-N1-C2	9.23	123.99	120.30
38	A1	2354	A	C5-C6-N6	-9.23	116.32	123.70
11	B2	899	G	O4'-C1'-N9	9.23	115.58	108.20
38	A1	1734	G	O4'-C1'-N9	9.23	115.58	108.20
38	A1	2250	G	C8-N9-C4	-9.23	102.71	106.40
38	A1	2336	G	C6-N1-C2	9.23	130.64	125.10
39	A3	33	U	N3-C4-O4	9.23	125.86	119.40
38	A1	2477	G	C5-C6-O6	-9.23	123.06	128.60
11	B2	400	G	C8-N9-C4	-9.22	102.71	106.40
18	BF	79	ARG	NE-CZ-NH1	9.22	124.91	120.30
38	A1	952	C	O4'-C1'-N1	9.22	115.58	108.20
38	A1	1495	A	C5-C6-N6	-9.22	116.32	123.70
39	A3	2	G	C4-C5-N7	9.22	114.49	110.80
46	AD	172	ARG	NE-CZ-NH2	-9.22	115.69	120.30
38	A1	328	G	C6-C5-N7	-9.22	124.87	130.40
11	B2	1211	A	C4-C5-C6	9.22	121.61	117.00
11	B2	267	C	O4'-C1'-N1	9.22	115.57	108.20
38	A1	78	C	O4'-C1'-N1	9.22	115.57	108.20
38	A1	1443	G	N1-C2-N3	-9.22	118.37	123.90
38	A1	1641	G	C5-C6-O6	-9.22	123.07	128.60
38	A1	1751	G	O4'-C1'-N9	9.22	115.57	108.20
38	A1	2300	C	P-O3'-C3'	9.22	130.76	119.70
54	AI	62	ARG	NE-CZ-NH1	-9.22	115.69	120.30
11	B2	1051	G	N1-C2-N3	-9.21	118.37	123.90
11	B2	1142	G	P-O3'-C3'	9.21	130.76	119.70
11	B2	1333	G	N1-C6-O6	9.21	125.43	119.90
11	B2	1389	G	N1-C2-N3	-9.22	118.37	123.90
38	A1	698	U	O4'-C1'-N1	9.21	115.57	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	513	A	P-O3'-C3'	9.21	130.76	119.70
11	B2	59	C	N3-C4-C5	-9.21	118.22	121.90
38	A1	1446	G	O4'-C1'-N9	9.21	115.57	108.20
38	A1	2993	G	C4'-C3'-C2'	-9.21	93.39	102.60
11	B2	486	A	C5-C6-N6	-9.21	116.33	123.70
38	A1	547	C	O4'-C1'-N1	9.21	115.57	108.20
38	A1	2188	C	O4'-C1'-N1	9.21	115.57	108.20
11	B2	1345	G	C6-C5-N7	-9.21	124.87	130.40
38	A1	1741	C	C5-C4-N4	-9.21	113.75	120.20
11	B2	893	U	C5-C6-N1	-9.21	118.10	122.70
38	A1	11	G	C5-C6-N1	-9.21	106.90	111.50
38	A1	973	C	N3-C4-C5	-9.21	118.22	121.90
38	A1	1085	G	C8-N9-C4	-9.21	102.72	106.40
38	A1	2194	A	C8-N9-C4	-9.21	102.12	105.80
11	B2	203	A	C5-N7-C8	9.21	108.50	103.90
38	A1	862	G	C6-C5-N7	-9.21	124.88	130.40
38	A1	2368	G	C4-C5-N7	-9.21	107.12	110.80
38	A1	372	A	C2-N3-C4	-9.20	106.00	110.60
38	A1	2637	U	C6-N1-C2	9.20	126.52	121.00
11	B2	377	A	C8-N9-C4	-9.20	102.12	105.80
38	A1	1056	C	C5-C4-N4	-9.20	113.76	120.20
11	B2	696	G	O4'-C1'-N9	9.20	115.56	108.20
11	B2	934	G	N1-C2-N2	-9.20	107.92	116.20
38	A1	1393	C	C2-N1-C1'	9.20	128.92	118.80
38	A1	1453	G	O4'-C1'-N9	9.20	115.56	108.20
38	A1	2257	A	N1-C2-N3	9.20	133.90	129.30
38	A1	2766	C	C5-C6-N1	9.20	125.60	121.00
11	B2	87	C	O4'-C1'-N1	9.20	115.56	108.20
11	B2	516	A	C5-C6-N1	-9.20	113.10	117.70
38	A1	1656	C	N3-C4-N4	9.20	124.44	118.00
38	A1	1518	G	N1-C6-O6	9.20	125.42	119.90
20	BH	87	ARG	NE-CZ-NH2	9.20	124.90	120.30
10	B1	63	C	N3-C4-C5	-9.20	118.22	121.90
38	A1	222	A	N1-C6-N6	9.20	124.12	118.60
38	A1	2122	G	N1-C2-N3	-9.20	118.38	123.90
38	A1	380	A	N1-C2-N3	9.19	133.90	129.30
38	A1	640	C	C4-C5-C6	9.19	122.00	117.40
38	A1	1036	C	N1-C2-O2	-9.19	113.38	118.90
38	A1	2393	G	N9-C4-C5	9.20	109.08	105.40
38	A1	2855	G	C5-C6-O6	-9.19	123.08	128.60
59	AL	127	ARG	NE-CZ-NH1	9.19	124.90	120.30
11	B2	1150	G	C5-C6-N1	-9.19	106.90	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	BB	201	ARG	NE-CZ-NH2	9.19	124.89	120.30
38	A1	1285	C	O4'-C1'-N1	9.19	115.55	108.20
38	A1	2140	C	O4'-C1'-N1	9.19	115.55	108.20
38	A1	144	A	O4'-C1'-N9	9.19	115.55	108.20
38	A1	722	C	C5-C4-N4	-9.19	113.77	120.20
38	A1	991	U	N1-C2-O2	-9.19	116.37	122.80
38	A1	2464	G	C5-C6-O6	-9.19	123.09	128.60
11	B2	615	G	O4'-C1'-N9	9.19	115.55	108.20
38	A1	1344	C	P-O3'-C3'	-9.19	108.67	119.70
38	A1	2259	G	C5-C6-O6	-9.19	123.09	128.60
11	B2	382	G	O4'-C1'-N9	9.19	115.55	108.20
11	B2	243	G	O4'-C1'-N9	9.19	115.55	108.20
11	B2	453	G	N9-C4-C5	-9.19	101.73	105.40
38	A1	120	G	N7-C8-N9	9.19	117.69	113.10
38	A1	1132	U	N1-C2-N3	-9.19	109.39	114.90
11	B2	325	A	N1-C6-N6	9.18	124.11	118.60
38	A1	130	G	C5-C6-O6	-9.18	123.09	128.60
38	A1	1836	A	N7-C8-N9	-9.18	109.21	113.80
39	A3	85	C	O4'-C1'-N1	9.18	115.55	108.20
38	A1	578	C	O4'-C1'-N1	9.18	115.55	108.20
38	A1	2895	G	N1-C6-O6	9.18	125.41	119.90
38	A1	84	A	O4'-C1'-N9	9.18	115.55	108.20
38	A1	1417	U	C6-N1-C2	9.18	126.51	121.00
38	A1	1083	G	O4'-C1'-N9	9.18	115.54	108.20
38	A1	1601	G	P-O3'-C3'	9.18	130.71	119.70
38	A1	1857	A	C5-C6-N1	-9.18	113.11	117.70
38	A1	2612	A	C5-C6-N1	-9.18	113.11	117.70
11	B2	363	C	N3-C4-N4	9.18	124.42	118.00
11	B2	990	G	N1-C2-N3	-9.18	118.39	123.90
38	A1	1979	G	C8-N9-C4	-9.18	102.73	106.40
11	B2	539	C	O4'-C1'-N1	9.18	115.54	108.20
38	A1	2683	G	O4'-C1'-N9	9.18	115.54	108.20
11	B2	609	G	N1-C6-O6	9.17	125.40	119.90
11	B2	1333	G	C5-C6-O6	-9.17	123.09	128.60
38	A1	316	G	N9-C4-C5	-9.17	101.73	105.40
38	A1	2129	G	C4-C5-N7	-9.17	107.13	110.80
11	B2	1451	C	C4-C5-C6	9.17	121.98	117.40
38	A1	2128	G	N9-C4-C5	-9.17	101.73	105.40
11	B2	229	G	P-O5'-C5'	-9.17	106.23	120.90
11	B2	1006	C	C2-N1-C1'	9.17	128.89	118.80
38	A1	140	C	C2-N3-C4	-9.17	115.31	119.90
38	A1	1982	C	C5-C4-N4	-9.17	113.78	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1942	G	C5-N7-C8	9.17	108.89	104.30
38	A1	2013	A	C5-N7-C8	9.17	108.48	103.90
38	A1	2083	G	C8-N9-C4	-9.17	102.73	106.40
38	A1	2293	G	C5-C6-O6	-9.17	123.10	128.60
61	AN	163	ARG	NE-CZ-NH2	-9.17	115.72	120.30
11	B2	1298	G	C5-C6-O6	-9.17	123.10	128.60
38	A1	224	G	N1-C2-N3	-9.17	118.40	123.90
38	A1	919	G	C8-N9-C4	-9.17	102.73	106.40
38	A1	2243	G	C2-N3-C4	9.17	116.48	111.90
38	A1	2596	G	C5-C6-O6	-9.17	123.10	128.60
38	A1	1559	A	N9-C4-C5	-9.17	102.13	105.80
38	A1	2741	U	N3-C2-O2	9.17	128.62	122.20
14	BB	62	PHE	CB-CG-CD2	9.16	127.22	120.80
38	A1	472	A	C5-C6-N6	-9.16	116.37	123.70
11	B2	500	A	N1-C6-N6	9.16	124.10	118.60
38	A1	699	A	C5-C6-N1	-9.16	113.12	117.70
38	A1	1004	U	C5-C4-O4	-9.16	120.40	125.90
38	A1	1214	C	C6-N1-C2	-9.16	116.63	120.30
38	A1	1841	G	N1-C2-N3	-9.16	118.40	123.90
38	A1	2143	C	C2-N3-C4	9.16	124.48	119.90
38	A1	2267	U	C4-C5-C6	9.16	125.20	119.70
38	A1	2947	G	C6-C5-N7	-9.16	124.90	130.40
39	A3	82	C	N3-C4-C5	-9.16	118.23	121.90
11	B2	874	G	C5-C6-O6	-9.16	123.10	128.60
38	A1	539	A	C5-C6-N6	-9.16	116.37	123.70
11	B2	416	A	O4'-C1'-N9	9.16	115.53	108.20
38	A1	875	G	N1-C6-O6	9.16	125.40	119.90
38	A1	1043	U	O4'-C1'-N1	9.16	115.53	108.20
38	A1	1705	C	N3-C4-C5	-9.16	118.24	121.90
38	A1	2494	A	N9-C4-C5	9.16	109.47	105.80
38	A1	1235	A	N1-C6-N6	9.16	124.10	118.60
11	B2	66	G	C4-C5-N7	9.16	114.46	110.80
11	B2	729	G	N1-C2-N3	-9.16	118.41	123.90
11	B2	1413	G	C3'-C2'-C1'	-9.16	94.17	101.50
38	A1	2736	G	C5-C6-O6	-9.16	123.11	128.60
11	B2	795	G	C5-C6-O6	-9.16	123.11	128.60
11	B2	819	G	C5-C6-O6	-9.16	123.11	128.60
11	B2	866	A	C8-N9-C4	-9.16	102.14	105.80
38	A1	1961	G	C5-N7-C8	9.16	108.88	104.30
38	A1	2450	A	P-O3'-C3'	9.16	130.69	119.70
29	BQ	55	ARG	NE-CZ-NH1	9.15	124.88	120.30
38	A1	1875	U	O4'-C1'-N1	9.15	115.52	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	883	G	N1-C6-O6	9.15	125.39	119.90
38	A1	491	G	C4-C5-N7	9.15	114.46	110.80
38	A1	1554	G	P-O5'-C5'	9.15	135.54	120.90
38	A1	2578	C	O4'-C1'-N1	9.15	115.52	108.20
38	A1	2977	G	C5-C6-O6	-9.15	123.11	128.60
11	B2	1429	G	N1-C6-O6	9.15	125.39	119.90
38	A1	599	G	P-O3'-C3'	9.15	130.68	119.70
38	A1	869	A	C5-C6-N6	-9.15	116.38	123.70
38	A1	1643	A	C5-C6-N6	-9.15	116.38	123.70
38	A1	1089	C	O4'-C1'-N1	9.15	115.52	108.20
38	A1	1881	A	C4-C5-C6	9.15	121.58	117.00
38	A1	2206	G	N3-C2-N2	9.15	126.31	119.90
38	A1	2512	C	N3-C4-N4	9.15	124.41	118.00
11	B2	122	C	C4-C5-C6	9.15	121.97	117.40
11	B2	344	G	N1-C2-N3	-9.15	118.41	123.90
11	B2	720	A	N1-C2-N3	-9.15	124.73	129.30
11	B2	965	G	N1-C6-O6	9.15	125.39	119.90
38	A1	1053	A	C5-C6-N1	-9.15	113.13	117.70
38	A1	1347	U	C5-C4-O4	-9.15	120.41	125.90
11	B2	1200	U	O4'-C1'-N1	9.15	115.52	108.20
38	A1	1367	A	C8-N9-C4	-9.15	102.14	105.80
38	A1	1979	G	N1-C6-O6	9.15	125.39	119.90
11	B2	639	G	C2-N3-C4	-9.14	107.33	111.90
11	B2	595	U	N3-C4-O4	9.14	125.80	119.40
38	A1	363	G	P-O5'-C5'	9.14	135.53	120.90
38	A1	457	C	C5-C4-N4	-9.14	113.80	120.20
38	A1	1113	G	C5-C6-N1	9.14	116.07	111.50
38	A1	1165	C	O4'-C1'-N1	9.14	115.52	108.20
38	A1	2525	C	N3-C4-C5	-9.14	118.24	121.90
11	B2	258	A	C5-C6-N6	-9.14	116.39	123.70
11	B2	332	C	C6-N1-C2	9.14	123.96	120.30
11	B2	1304	C	N3-C4-N4	9.14	124.40	118.00
11	B2	1473	A	C5-C6-N6	-9.14	116.39	123.70
38	A1	63	A	N1-C6-N6	9.14	124.08	118.60
38	A1	135	U	C5-C6-N1	9.14	127.27	122.70
38	A1	221	G	N7-C8-N9	-9.14	108.53	113.10
38	A1	2537	G	C5-C6-O6	-9.14	123.12	128.60
11	B2	688	C	O4'-C1'-N1	9.14	115.51	108.20
11	B2	1265	G	C5-C6-O6	-9.14	123.12	128.60
38	A1	1868	C	N3-C2-O2	9.14	128.30	121.90
11	B2	1069	G	C2-N3-C4	-9.14	107.33	111.90
38	A1	133	G	O4'-C1'-N9	9.14	115.51	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	A1	1134	A	N7-C8-N9	-9.14	109.23	113.80
38	A1	1310	A	N9-C4-C5	9.14	109.45	105.80
38	A1	2260	C	N3-C4-C5	-9.14	118.25	121.90
38	A1	2596	G	N7-C8-N9	9.14	117.67	113.10
38	A1	2861	A	O4'-C1'-N9	9.14	115.51	108.20
11	B2	671	C	P-O3'-C3'	9.14	130.66	119.70
11	B2	22	G	N1-C6-O6	9.13	125.38	119.90
11	B2	551	U	N3-C2-O2	9.13	128.59	122.20
38	A1	27	G	N1-C6-O6	9.13	125.38	119.90
38	A1	83	G	N1-C6-O6	9.13	125.38	119.90
38	A1	617	G	N1-C2-N3	-9.13	118.42	123.90
38	A1	766	G	N9-C4-C5	9.13	109.05	105.40
38	A1	2793	C	P-O3'-C3'	9.13	130.66	119.70
11	B2	34	G	N1-C6-O6	9.13	125.38	119.90
11	B2	805	C	N3-C4-C5	-9.13	118.25	121.90
11	B2	1174	A	C5-C6-N6	-9.13	116.39	123.70
38	A1	37	C	O4'-C1'-N1	9.13	115.50	108.20
38	A1	1078	G	P-O3'-C3'	-9.13	108.74	119.70
38	A1	1228	G	N1-C2-N2	-9.13	107.98	116.20
38	A1	1257	G	O4'-C1'-N9	9.13	115.51	108.20
43	AB	238	ARG	NE-CZ-NH1	9.13	124.87	120.30
11	B2	447	A	C4-C5-C6	9.13	121.56	117.00
11	B2	468	G	C5-C6-N1	-9.13	106.94	111.50
11	B2	561	A	C5-C6-N6	-9.13	116.40	123.70
11	B2	649	A	C2-N3-C4	-9.13	106.04	110.60
38	A1	103	A	O4'-C1'-N9	9.13	115.50	108.20
38	A1	144	A	C5-C6-N1	-9.13	113.14	117.70
38	A1	944	G	O4'-C1'-N9	9.13	115.50	108.20
38	A1	1012	G	C5-C6-O6	-9.13	123.12	128.60
38	A1	1763	A	N7-C8-N9	-9.13	109.24	113.80
38	A1	2244	G	C5-C6-O6	-9.13	123.12	128.60
11	B2	385	A	O4'-C1'-N9	9.13	115.50	108.20
38	A1	1843	C	C5-C6-N1	9.12	125.56	121.00
38	A1	1945	C	N3-C4-N4	9.12	124.39	118.00
38	A1	2296	A	N3-C4-C5	-9.13	120.41	126.80
38	A1	2310	G	C4-C5-N7	9.13	114.45	110.80
38	A1	2472	A	C4-C5-C6	9.12	121.56	117.00
11	B2	54	C	N3-C4-C5	-9.12	118.25	121.90
38	A1	1655	G	N9-C4-C5	-9.12	101.75	105.40
38	A1	1801	C	N3-C4-C5	-9.12	118.25	121.90
38	A1	2537	G	C6-C5-N7	-9.12	124.93	130.40
11	B2	602	G	C6-C5-N7	-9.12	124.93	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1111	G	N1-C2-N3	-9.12	118.43	123.90
38	A1	422	G	N1-C6-O6	9.12	125.37	119.90
38	A1	2289	A	C5-N7-C8	9.12	108.46	103.90
38	A1	2650	G	O4'-C1'-N9	9.12	115.50	108.20
11	B2	1467	U	O4'-C1'-N1	9.12	115.50	108.20
13	BA	98	ARG	NE-CZ-NH2	9.12	124.86	120.30
38	A1	1108	A	N1-C6-N6	9.12	124.07	118.60
38	A1	1908	C	O4'-C1'-N1	9.12	115.50	108.20
11	B2	1420	U	N1-C2-N3	9.12	120.37	114.90
38	A1	442	G	N1-C2-N3	-9.12	118.43	123.90
38	A1	1650	U	O4'-C1'-N1	9.12	115.49	108.20
38	A1	1754	A	C5-C6-N6	-9.12	116.41	123.70
38	A1	2400	U	N3-C4-O4	9.12	125.78	119.40
67	AZ	25	ARG	NE-CZ-NH1	-9.12	115.74	120.30
38	A1	1845	C	N3-C4-C5	-9.12	118.25	121.90
11	B2	582	G	O4'-C1'-N9	9.11	115.49	108.20
38	A1	196	A	O4'-C1'-N9	9.12	115.49	108.20
38	A1	258	C	C5-C6-N1	9.11	125.56	121.00
38	A1	776	G	N9-C4-C5	9.12	109.05	105.40
38	A1	855	G	O4'-C1'-N9	9.12	115.49	108.20
38	A1	1381	C	C6-N1-C2	9.12	123.95	120.30
38	A1	1145	G	P-O3'-C3'	9.11	130.64	119.70
38	A1	1836	A	O4'-C1'-N9	9.11	115.49	108.20
38	A1	2720	U	N1-C2-O2	-9.12	116.42	122.80
38	A1	2533	G	O4'-C1'-N9	9.11	115.49	108.20
11	B2	588	C	O4'-C1'-N1	9.11	115.49	108.20
11	B2	1066	C	C4-C5-C6	9.11	121.96	117.40
38	A1	224	G	C5-C6-O6	-9.11	123.13	128.60
38	A1	749	G	O4'-C1'-N9	9.11	115.49	108.20
38	A1	978	C	C6-N1-C2	9.11	123.94	120.30
38	A1	2692	A	N1-C6-N6	9.11	124.07	118.60
41	AA	95	ARG	NE-CZ-NH2	-9.11	115.74	120.30
61	AN	22	TYR	CB-CG-CD2	-9.11	115.53	121.00
39	A3	61	C	N1-C2-O2	-9.11	113.43	118.90
10	B1	54	G	C5-C6-N1	-9.11	106.95	111.50
11	B2	636	G	C4-C5-C6	9.11	124.27	118.80
11	B2	1310	C	C5-C6-N1	9.11	125.55	121.00
38	A1	355	G	C4-C5-N7	9.11	114.44	110.80
38	A1	879	A	C2-N3-C4	-9.11	106.05	110.60
11	B2	261	G	N1-C2-N3	-9.11	118.44	123.90
11	B2	294	A	C5-C6-N1	-9.11	113.15	117.70
11	B2	323	A	C8-N9-C4	-9.11	102.16	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	800	G	C5-C6-O6	-9.11	123.14	128.60
11	B2	834	C	N3-C4-C5	-9.11	118.26	121.90
38	A1	437	G	C4-C5-N7	-9.11	107.16	110.80
38	A1	448	A	C5-C6-N1	-9.11	113.15	117.70
38	A1	1625	A	N1-C6-N6	9.11	124.06	118.60
38	A1	2879	G	C5-C6-O6	-9.11	123.14	128.60
11	B2	100	A	C4-C5-N7	-9.10	106.15	110.70
11	B2	593	G	N1-C2-N3	-9.10	118.44	123.90
11	B2	666	G	N1-C6-O6	9.10	125.36	119.90
38	A1	456	G	C5-C6-O6	-9.10	123.14	128.60
38	A1	560	G	C8-N9-C4	-9.10	102.76	106.40
11	B2	902	U	O4'-C1'-N1	9.10	115.48	108.20
11	B2	956	C	N1-C2-O2	9.10	124.36	118.90
38	A1	652	G	C2-N3-C4	9.10	116.45	111.90
11	B2	395	C	C6-N1-C2	-9.10	116.66	120.30
11	B2	535	U	O4'-C1'-N1	9.10	115.48	108.20
38	A1	472	A	N9-C4-C5	9.10	109.44	105.80
38	A1	2043	A	C5-C6-N1	-9.10	113.15	117.70
38	A1	2513	C	O4'-C1'-N1	9.10	115.48	108.20
11	B2	786	G	C5-C6-N1	-9.10	106.95	111.50
11	B2	1103	G	C8-N9-C4	9.10	110.04	106.40
38	A1	692	C	O4'-C1'-N1	9.10	115.48	108.20
38	A1	2118	C	N3-C4-C5	-9.10	118.26	121.90
38	A1	2768	C	N3-C4-C5	-9.10	118.26	121.90
38	A1	2787	G	O4'-C1'-N9	9.10	115.48	108.20
11	B2	611	A	O4'-C1'-N9	9.10	115.48	108.20
11	B2	712	G	C2-N3-C4	9.10	116.45	111.90
11	B2	712	G	C8-N9-C4	-9.10	102.76	106.40
38	A1	30	G	C5-C6-O6	-9.10	123.14	128.60
38	A1	2474	A	N3-C4-C5	-9.10	120.43	126.80
38	A1	2569	G	N3-C2-N2	9.10	126.27	119.90
38	A1	783	C	O4'-C1'-N1	9.09	115.48	108.20
11	B2	497	C	C2-N1-C1'	9.09	128.80	118.80
38	A1	380	A	O4'-C1'-N9	9.09	115.47	108.20
38	A1	1593	C	N3-C4-N4	9.09	124.36	118.00
38	A1	2301	C	C4'-C3'-C2'	-9.09	93.51	102.60
11	B2	1111	G	N1-C6-O6	9.09	125.35	119.90
38	A1	2128	G	C2-N3-C4	-9.09	107.36	111.90
28	BP	27	TYR	CB-CG-CD1	-9.09	115.55	121.00
38	A1	998	G	C5-C6-O6	-9.09	123.15	128.60
38	A1	2285	G	P-O3'-C3'	9.09	130.61	119.70
38	A1	869	A	C5-C6-N1	-9.09	113.16	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1186	G	P-O3'-C3'	9.09	130.60	119.70
38	A1	1336	G	O4'-C1'-N9	9.09	115.47	108.20
38	A1	2445	G	N7-C8-N9	9.09	117.64	113.10
11	B2	510	A	C4-C5-C6	9.09	121.54	117.00
20	BH	174	TYR	CB-CG-CD1	9.09	126.45	121.00
38	A1	1797	A	N1-C6-N6	9.09	124.05	118.60
38	A1	1872	G	C5-C6-O6	-9.09	123.15	128.60
39	A3	84	U	P-O5'-C5'	9.09	135.44	120.90
11	B2	562	A	N9-C4-C5	9.08	109.43	105.80
38	A1	363	G	C5-C6-O6	-9.08	123.15	128.60
38	A1	1516	C	C4-C5-C6	9.08	121.94	117.40
38	A1	1668	G	N1-C2-N3	-9.08	118.45	123.90
11	B2	601	G	N1-C2-N3	-9.08	118.45	123.90
11	B2	1102	A	C5-C6-N1	-9.08	113.16	117.70
38	A1	2429	G	N1-C2-N3	-9.08	118.45	123.90
11	B2	327	G	C6-C5-N7	-9.08	124.95	130.40
11	B2	418	G	N1-C2-N3	-9.08	118.45	123.90
11	B2	453	G	C4-C5-N7	9.08	114.43	110.80
11	B2	612	C	N3-C4-C5	-9.08	118.27	121.90
11	B2	913	G	C8-N9-C4	-9.08	102.77	106.40
11	B2	954	G	C6-C5-N7	-9.08	124.95	130.40
38	A1	19	G	C5-C6-N1	9.08	116.04	111.50
38	A1	1042	G	C5-C6-N1	-9.08	106.96	111.50
38	A1	1734	G	N3-C2-N2	9.08	126.25	119.90
38	A1	2493	A	C5-N7-C8	9.08	108.44	103.90
38	A1	2740	G	N3-C2-N2	9.08	126.26	119.90
38	A1	2812	U	C5-C4-O4	9.08	131.35	125.90
51	Ag	13	LYS	N-CA-CB	9.08	126.94	110.60
11	B2	1063	A	C4-C5-N7	-9.08	106.16	110.70
11	B2	1388	G	N1-C2-N3	-9.08	118.45	123.90
38	A1	33	U	P-O3'-C3'	-9.08	108.81	119.70
38	A1	199	C	C6-N1-C2	-9.08	116.67	120.30
38	A1	515	G	C8-N9-C4	-9.08	102.77	106.40
11	B2	136	A	C8-N9-C4	-9.08	102.17	105.80
11	B2	1207	G	N3-C4-C5	9.08	133.14	128.60
38	A1	2854	A	C5-N7-C8	9.08	108.44	103.90
38	A1	2943	G	C5-C6-O6	-9.08	123.16	128.60
10	B1	17	C	N3-C4-N4	9.07	124.35	118.00
11	B2	239	A	C5-C6-N6	-9.07	116.44	123.70
11	B2	322	G	N1-C6-O6	9.07	125.34	119.90
38	A1	21	C	C5-C6-N1	9.07	125.54	121.00
38	A1	250	G	O4'-C1'-N9	9.07	115.46	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1202	G	O4'-C1'-N9	9.07	115.46	108.20
38	A1	1325	A	C5-C6-N1	-9.07	113.16	117.70
38	A1	1662	C	N3-C4-C5	-9.07	118.27	121.90
38	A1	2605	G	N1-C6-O6	9.07	125.34	119.90
38	A1	1876	G	N1-C6-O6	9.07	125.34	119.90
38	A1	2998	G	P-O3'-C3'	9.07	130.59	119.70
11	B2	592	G	N1-C2-N3	-9.07	118.46	123.90
11	B2	681	G	O4'-C1'-N9	9.07	115.46	108.20
11	B2	1251	C	O4'-C1'-N1	9.07	115.46	108.20
38	A1	209	G	N1-C6-O6	9.07	125.34	119.90
38	A1	222	A	O4'-C1'-N9	9.07	115.46	108.20
38	A1	909	A	C5-C6-N6	-9.07	116.44	123.70
38	A1	1840	G	N3-C2-N2	9.07	126.25	119.90
38	A1	437	G	C5-N7-C8	9.07	108.83	104.30
38	A1	2089	C	N3-C4-C5	-9.07	118.27	121.90
11	B2	1114	G	N7-C8-N9	9.07	117.63	113.10
11	B2	1417	A	C2-N3-C4	-9.07	106.07	110.60
11	B2	1480	G	C5-C6-O6	-9.07	123.16	128.60
38	A1	664	A	C6-N1-C2	9.07	124.04	118.60
38	A1	1275	G	C5-C6-N1	-9.07	106.97	111.50
38	A1	1446	G	N9-C4-C5	-9.07	101.77	105.40
38	A1	2434	A	C8-N9-C4	-9.07	102.17	105.80
38	A1	889	C	N3-C4-C5	-9.07	118.27	121.90
38	A1	1711	C	C2-N3-C4	9.07	124.43	119.90
38	A1	1878	G	N1-C2-N3	-9.07	118.46	123.90
38	A1	2898	G	C4-C5-N7	-9.07	107.17	110.80
45	AC	250	ARG	NE-CZ-NH2	9.07	124.83	120.30
13	BA	115	TYR	CB-CG-CD1	9.06	126.44	121.00
38	A1	1712	U	O4'-C1'-N1	9.06	115.45	108.20
11	B2	133	G	O4'-C1'-N9	9.06	115.45	108.20
16	BD	122	ARG	NE-CZ-NH2	-9.06	115.77	120.30
38	A1	22	C	C5-C4-N4	-9.06	113.86	120.20
38	A1	254	A	C4-C5-N7	-9.06	106.17	110.70
38	A1	1951	G	N3-C4-C5	-9.06	124.07	128.60
38	A1	2385	G	C5-C6-O6	-9.06	123.16	128.60
11	B2	210	A	C5-C6-N1	-9.06	113.17	117.70
38	A1	2238	G	O4'-C1'-N9	9.06	115.45	108.20
11	B2	353	G	C5-C6-O6	-9.06	123.17	128.60
38	A1	248	C	N3-C4-C5	-9.06	118.28	121.90
38	A1	701	G	C8-N9-C4	-9.06	102.78	106.40
38	A1	1209	A	P-O3'-C3'	9.06	130.57	119.70
38	A1	1275	G	C6-C5-N7	-9.06	124.97	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2192	G	O4'-C1'-N9	9.06	115.45	108.20
11	B2	400	G	C4-C5-N7	-9.05	107.18	110.80
11	B2	1402	C	N3-C4-N4	9.06	124.34	118.00
11	B2	1464	C	C6-N1-C2	-9.06	116.68	120.30
11	B2	729	G	C6-C5-N7	-9.05	124.97	130.40
38	A1	83	G	O3'-P-O5'	-9.05	86.80	104.00
38	A1	563	A	C4-C5-N7	-9.05	106.17	110.70
38	A1	1714	G	C6-N1-C2	9.05	130.53	125.10
38	A1	2235	G	C4-C5-C6	9.05	124.23	118.80
38	A1	2299	G	C5-C6-N1	-9.05	106.97	111.50
38	A1	2679	A	O4'-C1'-N9	9.05	115.44	108.20
49	Ae	25	ARG	NE-CZ-NH2	-9.05	115.77	120.30
11	B2	213	C	O4'-C1'-N1	9.05	115.44	108.20
11	B2	619	A	O4'-C1'-N9	9.05	115.44	108.20
11	B2	1095	C	O4'-C1'-N1	9.05	115.44	108.20
11	B2	1461	U	C3'-C2'-C1'	9.05	108.74	101.50
38	A1	1701	C	O4'-C1'-N1	9.05	115.44	108.20
10	B1	73	C	N3-C4-N4	9.05	124.33	118.00
38	A1	2834	C	O4'-C1'-N1	9.05	115.44	108.20
10	B1	55	U	C5-C4-O4	9.05	131.33	125.90
11	B2	506	G	C6-C5-N7	-9.05	124.97	130.40
11	B2	558	C	O4'-C1'-N1	9.05	115.44	108.20
11	B2	1074	C	C5-C4-N4	-9.05	113.87	120.20
11	B2	1413	G	N1-C6-O6	9.05	125.33	119.90
38	A1	304	G	O4'-C1'-N9	9.05	115.44	108.20
38	A1	723	A	N7-C8-N9	-9.05	109.28	113.80
11	B2	792	C	C2-N3-C4	9.05	124.42	119.90
38	A1	42	G	O4'-C1'-N9	9.05	115.44	108.20
38	A1	680	U	O4'-C1'-N1	9.05	115.44	108.20
38	A1	2831	G	C5-C6-N1	-9.05	106.98	111.50
11	B2	74	U	N3-C4-O4	9.05	125.73	119.40
38	A1	741	G	N3-C2-N2	9.05	126.23	119.90
11	B2	314	G	C5-C6-O6	-9.04	123.17	128.60
11	B2	320	G	C5-C6-N1	-9.04	106.98	111.50
11	B2	352	A	N9-C4-C5	9.04	109.42	105.80
11	B2	357	C	C5-C4-N4	-9.04	113.87	120.20
38	A1	2359	G	C5-C6-O6	-9.05	123.17	128.60
38	A1	542	A	N1-C2-N3	9.04	133.82	129.30
38	A1	2452	C	C5-C4-N4	-9.04	113.87	120.20
11	B2	198	A	N1-C6-N6	9.04	124.03	118.60
11	B2	468	G	C2-N3-C4	-9.04	107.38	111.90
35	BW	15	ARG	NE-CZ-NH2	-9.04	115.78	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	324	C	P-O3'-C3'	9.04	130.55	119.70
38	A1	939	A	N1-C2-N3	9.04	133.82	129.30
38	A1	2593	A	O4'-C1'-N9	9.04	115.44	108.20
38	A1	2717	A	C5'-C4'-O4'	9.04	119.95	109.10
38	A1	961	C	C4-C5-C6	9.04	121.92	117.40
11	B2	1161	A	C8-N9-C4	-9.04	102.19	105.80
38	A1	1530	A	C2-N3-C4	-9.04	106.08	110.60
38	A1	2034	G	C4-C5-N7	9.04	114.42	110.80
34	BV	77	ARG	NE-CZ-NH2	-9.04	115.78	120.30
38	A1	584	G	N7-C8-N9	-9.04	108.58	113.10
38	A1	2721	C	O4'-C1'-N1	9.04	115.43	108.20
38	A1	2792	G	O4'-C1'-N9	9.04	115.43	108.20
38	A1	2146	C	N3-C4-N4	9.04	124.33	118.00
38	A1	2494	A	C8-N9-C4	-9.04	102.19	105.80
38	A1	2781	A	N1-C6-N6	9.04	124.02	118.60
39	A3	5	G	C5-N7-C8	-9.04	99.78	104.30
11	B2	813	G	C5-C6-O6	-9.04	123.18	128.60
38	A1	195	U	C2-N3-C4	9.04	132.42	127.00
38	A1	1502	C	C5-C4-N4	-9.04	113.88	120.20
38	A1	176	G	O4'-C1'-N9	9.03	115.43	108.20
38	A1	802	G	C4-C5-C6	9.04	124.22	118.80
38	A1	1170	G	N1-C6-O6	9.04	125.32	119.90
38	A1	2257	A	C8-N9-C4	-9.03	102.19	105.80
11	B2	1045	A	C6-N1-C2	-9.03	113.18	118.60
38	A1	483	C	C6-N1-C2	-9.03	116.69	120.30
38	A1	1037	C	N3-C4-N4	9.03	124.32	118.00
38	A1	1134	A	C4-C5-C6	9.03	121.52	117.00
38	A1	2467	C	N3-C4-C5	-9.03	118.29	121.90
63	AP	117	ARG	NE-CZ-NH1	9.03	124.82	120.30
38	A1	2835	A	C8-N9-C4	9.03	109.41	105.80
39	A3	111	G	C4-C5-C6	9.03	124.22	118.80
59	AL	95	TYR	CB-CG-CD2	9.03	126.42	121.00
10	B1	42	C	C4-C5-C6	9.03	121.92	117.40
11	B2	280	C	C5-C4-N4	-9.03	113.88	120.20
11	B2	733	C	C2-N3-C4	9.03	124.42	119.90
38	A1	611	G	C4-C5-C6	9.03	124.22	118.80
11	B2	117	C	N3-C4-N4	9.03	124.32	118.00
11	B2	738	C	N3-C4-C5	-9.03	118.29	121.90
38	A1	1194	G	N3-C2-N2	9.03	126.22	119.90
38	A1	1480	G	N1-C6-O6	9.03	125.32	119.90
38	A1	2293	G	N1-C6-O6	9.03	125.32	119.90
38	A1	2969	G	N1-C6-O6	9.03	125.32	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	773	A	C5-C6-N6	-9.03	116.48	123.70
38	A1	981	A	C4-C5-C6	9.03	121.51	117.00
38	A1	1605	A	O4'-C1'-N9	9.03	115.42	108.20
38	A1	1842	C	N3-C4-N4	9.03	124.32	118.00
38	A1	2055	U	O4'-C1'-N1	9.03	115.42	108.20
38	A1	2668	G	C6-C5-N7	-9.03	124.98	130.40
38	A1	2722	G	C5-C6-O6	-9.03	123.19	128.60
11	B2	372	G	C2-N3-C4	9.02	116.41	111.90
11	B2	765	U	N3-C4-C5	-9.02	109.19	114.60
38	A1	84	A	P-O3'-C3'	9.02	130.53	119.70
38	A1	87	C	C6-N1-C2	-9.02	116.69	120.30
38	A1	165	G	O4'-C1'-N9	9.02	115.42	108.20
38	A1	664	A	C6-C5-N7	-9.02	125.98	132.30
38	A1	1342	G	N1-C6-O6	9.02	125.31	119.90
38	A1	875	G	N1-C2-N3	-9.02	118.49	123.90
38	A1	2083	G	N1-C6-O6	9.02	125.31	119.90
38	A1	2548	A	C4-C5-C6	9.02	121.51	117.00
38	A1	2878	A	N1-C6-N6	9.02	124.01	118.60
38	A1	1176	C	O4'-C1'-N1	9.02	115.42	108.20
38	A1	1521	G	C5-C6-O6	-9.02	123.19	128.60
64	AR	73	TYR	CB-CG-CD2	-9.02	115.59	121.00
11	B2	426	C	O4'-C1'-N1	9.02	115.42	108.20
11	B2	1061	A	C4-C5-C6	9.02	121.51	117.00
38	A1	1589	G	C5-C6-O6	-9.02	123.19	128.60
11	B2	591	G	N1-C2-N3	-9.02	118.49	123.90
11	B2	1152	C	N3-C4-C5	-9.02	118.29	121.90
11	B2	1215	G	N3-C4-C5	-9.02	124.09	128.60
38	A1	41	G	C5-C6-O6	-9.02	123.19	128.60
38	A1	238	C	C6-N1-C2	9.02	123.91	120.30
38	A1	786	G	C5-C6-O6	-9.02	123.19	128.60
38	A1	1908	C	N3-C4-N4	9.02	124.31	118.00
38	A1	2897	C	C2-N3-C4	9.02	124.41	119.90
38	A1	2299	G	C8-N9-C4	-9.02	102.79	106.40
61	AN	36	MET	CG-SD-CE	9.02	114.63	100.20
10	B1	40	U	O4'-C1'-N1	9.02	115.41	108.20
11	B2	266	A	C4-C5-C6	9.02	121.51	117.00
38	A1	2860	G	O4'-C1'-N9	9.02	115.41	108.20
38	A1	1634	A	C5-C6-N1	-9.02	113.19	117.70
11	B2	645	G	C5-C6-O6	-9.01	123.19	128.60
11	B2	752	G	C5-C6-N1	-9.01	106.99	111.50
38	A1	349	A	N9-C4-C5	9.01	109.41	105.80
38	A1	620	G	N1-C6-O6	9.01	125.31	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1728	C	N3-C4-C5	-9.01	118.30	121.90
38	A1	1782	C	N3-C4-C5	-9.01	118.30	121.90
38	A1	2048	C	N3-C4-N4	9.01	124.31	118.00
38	A1	2402	A	C6-N1-C2	-9.01	113.19	118.60
38	A1	2877	A	P-O3'-C3'	9.01	130.51	119.70
11	B2	1300	A	O4'-C1'-N9	9.01	115.41	108.20
38	A1	789	G	C5-C6-O6	-9.01	123.19	128.60
38	A1	2658	G	C5-C6-O6	-9.01	123.19	128.60
38	A1	2827	C	O4'-C1'-N1	9.01	115.41	108.20
11	B2	371	U	C5-C6-N1	9.01	127.20	122.70
11	B2	754	G	C5-C6-O6	-9.01	123.19	128.60
38	A1	1465	A	C5-C6-N6	-9.01	116.49	123.70
38	A1	2009	G	C2-N3-C4	-9.01	107.39	111.90
11	B2	534	G	N3-C2-N2	9.01	126.20	119.90
11	B2	625	G	C5-N7-C8	9.01	108.80	104.30
11	B2	1233	G	C6-N1-C2	9.01	130.50	125.10
11	B2	1410	G	O4'-C1'-N9	9.01	115.41	108.20
38	A1	476	C	C2-N3-C4	9.01	124.40	119.90
38	A1	1375	G	N1-C6-O6	9.01	125.31	119.90
38	A1	1499	C	C2-N3-C4	9.01	124.40	119.90
38	A1	2597	A	C4-C5-C6	9.01	121.50	117.00
38	A1	3009	C	C4'-C3'-C2'	-9.01	93.59	102.60
11	B2	793	G	O4'-C1'-N9	9.01	115.40	108.20
10	B1	28	C	N3-C4-N4	9.00	124.30	118.00
11	B2	511	C	N3-C4-C5	-9.00	118.30	121.90
11	B2	666	G	N9-C4-C5	-9.00	101.80	105.40
38	A1	1009	G	O4'-C1'-N9	9.00	115.40	108.20
38	A1	1054	A	N1-C6-N6	9.00	124.00	118.60
38	A1	1248	C	O4'-C1'-N1	9.00	115.40	108.20
38	A1	2550	A	O4'-C1'-N9	9.00	115.40	108.20
11	B2	945	G	C4-C5-N7	-9.00	107.20	110.80
38	A1	399	C	O4'-C1'-N1	9.00	115.40	108.20
38	A1	1412	C	N1-C2-N3	-9.00	112.90	119.20
38	A1	2369	G	C5-C6-O6	-9.00	123.20	128.60
11	B2	400	G	O4'-C1'-N9	9.00	115.40	108.20
11	B2	1106	A	N1-C6-N6	9.00	124.00	118.60
38	A1	221	G	C6-C5-N7	-9.00	125.00	130.40
38	A1	243	G	N7-C8-N9	9.00	117.60	113.10
38	A1	614	G	C2-N3-C4	9.00	116.40	111.90
38	A1	1052	G	N3-C2-N2	9.00	126.20	119.90
11	B2	474	G	N1-C6-O6	8.99	125.30	119.90
11	B2	1414	G	C1'-O4'-C4'	8.99	117.10	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	939	A	C2-N3-C4	-8.99	106.10	110.60
38	A1	1983	C	C2-N3-C4	8.99	124.40	119.90
11	B2	485	A	C5-C6-N6	-8.99	116.51	123.70
11	B2	850	A	N9-C4-C5	-8.99	102.20	105.80
38	A1	485	G	C4-C5-C6	8.99	124.20	118.80
38	A1	1964	G	C6-C5-N7	-8.99	125.00	130.40
38	A1	120	G	N1-C6-O6	8.99	125.30	119.90
38	A1	220	C	O4'-C1'-N1	8.99	115.39	108.20
38	A1	405	G	C4-C5-C6	8.99	124.19	118.80
38	A1	588	U	C6-N1-C2	-8.99	115.60	121.00
38	A1	988	C	N3-C4-N4	8.99	124.30	118.00
38	A1	1374	G	N3-C2-N2	8.99	126.19	119.90
38	A1	2058	C	O4'-C1'-N1	8.99	115.39	108.20
10	B1	7	G	N1-C2-N3	-8.99	118.51	123.90
38	A1	1386	G	C2-N3-C4	8.99	116.39	111.90
38	A1	1495	A	C5-C6-N1	-8.99	113.21	117.70
38	A1	2175	G	N1-C6-O6	8.99	125.29	119.90
11	B2	1086	C	P-O3'-C3'	-8.99	108.91	119.70
11	B2	1222	C	O4'-C1'-N1	8.99	115.39	108.20
38	A1	224	G	C4-C5-C6	8.99	124.19	118.80
38	A1	1626	A	C8-N9-C4	-8.99	102.20	105.80
38	A1	1198	G	O4'-C1'-N9	8.99	115.39	108.20
38	A1	1335	C	O4'-C1'-N1	8.99	115.39	108.20
38	A1	1375	G	N1-C2-N3	-8.99	118.51	123.90
38	A1	2610	C	C5-C4-N4	-8.99	113.91	120.20
11	B2	92	G	C6-C5-N7	-8.98	125.01	130.40
11	B2	973	U	P-O3'-C3'	8.98	130.48	119.70
11	B2	592	G	C5-C6-O6	-8.98	123.21	128.60
38	A1	454	C	C5-C6-N1	8.98	125.49	121.00
38	A1	563	A	N1-C6-N6	8.98	123.99	118.60
38	A1	769	G	N3-C2-N2	8.98	126.19	119.90
11	B2	143	G	C5-C6-O6	-8.98	123.21	128.60
38	A1	175	G	N1-C2-N3	-8.98	118.51	123.90
38	A1	519	A	C4-C5-C6	8.98	121.49	117.00
38	A1	67	U	C5-C6-N1	8.98	127.19	122.70
11	B2	102	U	C5-C6-N1	8.98	127.19	122.70
38	A1	335	C	C2-N3-C4	8.98	124.39	119.90
38	A1	1671	A	C4-C5-C6	8.98	121.49	117.00
38	A1	1132	U	C6-N1-C2	8.98	126.39	121.00
38	A1	2679	A	C4-C5-C6	8.98	121.49	117.00
38	A1	2710	G	N1-C6-O6	8.98	125.29	119.90
38	A1	2599	C	O4'-C1'-N1	8.97	115.38	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2744	U	C5-C6-N1	8.97	127.19	122.70
11	B2	695	G	C5-N7-C8	8.97	108.79	104.30
11	B2	1246	U	O4'-C1'-N1	8.97	115.38	108.20
38	A1	901	C	O4'-C1'-N1	8.97	115.38	108.20
38	A1	1165	C	N3-C4-C5	-8.97	118.31	121.90
38	A1	1555	G	C5-C6-O6	-8.97	123.22	128.60
38	A1	2967	C	N3-C4-N4	8.97	124.28	118.00
11	B2	134	A	C5-C6-N6	-8.97	116.52	123.70
11	B2	180	G	C5-C6-O6	-8.97	123.22	128.60
11	B2	560	A	C2-N3-C4	-8.97	106.11	110.60
11	B2	814	C	C6-N1-C2	8.97	123.89	120.30
11	B2	1098	G	N3-C2-N2	8.97	126.18	119.90
38	A1	72	U	O4'-C1'-N1	8.97	115.38	108.20
38	A1	1767	C	C5-C4-N4	-8.97	113.92	120.20
38	A1	1906	G	C5-C6-N1	-8.97	107.01	111.50
38	A1	2324	C	O4'-C1'-N1	8.97	115.38	108.20
38	A1	1922	A	N1-C6-N6	8.97	123.98	118.60
38	A1	2951	G	O4'-C1'-N9	8.97	115.38	108.20
11	B2	78	G	N3-C4-N9	-8.97	120.62	126.00
11	B2	170	C	O4'-C1'-N1	8.97	115.37	108.20
38	A1	443	C	C6-N1-C1'	-8.97	110.04	120.80
11	B2	322	G	N3-C2-N2	8.97	126.18	119.90
24	BL	59	ALA	N-CA-CB	8.97	122.66	110.10
38	A1	272	G	N3-C2-N2	8.97	126.18	119.90
38	A1	372	A	C4-C5-C6	8.97	121.48	117.00
38	A1	853	G	C4-C5-N7	8.97	114.39	110.80
11	B2	454	G	N1-C6-O6	8.97	125.28	119.90
38	A1	998	G	C8-N9-C4	-8.97	102.81	106.40
11	B2	893	U	C4-C5-C6	8.96	125.08	119.70
38	A1	355	G	N1-C2-N3	-8.96	118.52	123.90
38	A1	993	G	N3-C4-C5	-8.96	124.12	128.60
38	A1	2253	G	N1-C2-N3	-8.97	118.52	123.90
11	B2	242	A	C5-C6-N6	-8.96	116.53	123.70
38	A1	1095	A	C4-C5-C6	8.96	121.48	117.00
38	A1	1104	A	C5-N7-C8	8.96	108.38	103.90
38	A1	2310	G	C5-N7-C8	-8.96	99.82	104.30
38	A1	2406	C	C4-C5-C6	8.96	121.88	117.40
38	A1	2454	G	C2-N3-C4	8.96	116.38	111.90
5	AS	52	ASP	CB-CG-OD2	-8.96	110.24	118.30
38	A1	2998	G	C5-C6-O6	-8.96	123.22	128.60
11	B2	1264	G	C8-N9-C4	-8.96	102.82	106.40
38	A1	691	G	N1-C6-O6	8.96	125.28	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	804	C	N3-C4-N4	8.96	124.27	118.00
58	Ak	56	ARG	NE-CZ-NH1	8.96	124.78	120.30
38	A1	830	G	C5-C6-N1	-8.96	107.02	111.50
38	A1	1673	C	N3-C4-N4	8.96	124.27	118.00
38	A1	3006	G	O4'-C1'-N9	8.95	115.36	108.20
11	B2	844	G	N1-C6-O6	8.95	125.27	119.90
38	A1	2363	G	C4-C5-C6	8.95	124.17	118.80
38	A1	2823	G	N1-C6-O6	8.95	125.27	119.90
34	BV	33	ARG	NE-CZ-NH1	-8.95	115.82	120.30
38	A1	446	G	C5-C6-O6	-8.95	123.23	128.60
38	A1	643	G	C5-C6-N1	-8.95	107.02	111.50
38	A1	301	G	N9-C4-C5	-8.95	101.82	105.40
11	B2	1386	C	N3-C4-N4	8.95	124.26	118.00
17	BE	60	ARG	NE-CZ-NH2	-8.95	115.83	120.30
38	A1	263	U	C2-N3-C4	-8.95	121.63	127.00
38	A1	2139	A	O4'-C1'-N9	8.95	115.36	108.20
38	A1	2168	C	O4'-C1'-N1	8.95	115.36	108.20
38	A1	861	G	C5-C6-O6	-8.95	123.23	128.60
11	B2	111	G	N3-C4-C5	-8.95	124.13	128.60
11	B2	412	U	O4'-C1'-N1	8.95	115.36	108.20
11	B2	753	G	C5-C6-O6	-8.95	123.23	128.60
38	A1	2761	G	N7-C8-N9	8.95	117.57	113.10
38	A1	70	G	N3-C4-N9	8.94	131.37	126.00
38	A1	1742	C	N3-C4-N4	8.94	124.26	118.00
38	A1	1959	C	C5-C6-N1	8.95	125.47	121.00
38	A1	2062	A	N1-C6-N6	8.95	123.97	118.60
11	B2	361	A	N1-C6-N6	8.94	123.97	118.60
38	A1	51	G	P-O3'-C3'	8.94	130.43	119.70
38	A1	975	C	N3-C4-N4	8.94	124.26	118.00
38	A1	2892	A	P-O3'-C3'	8.94	130.43	119.70
39	A3	53	A	C6-C5-N7	-8.94	126.04	132.30
11	B2	326	C	O4'-C1'-N1	8.94	115.35	108.20
38	A1	276	G	O4'-C1'-N9	8.94	115.35	108.20
38	A1	902	C	C2-N3-C4	8.94	124.37	119.90
38	A1	1227	A	C4-C5-C6	8.94	121.47	117.00
10	B1	73	C	P-O3'-C3'	8.94	130.43	119.70
11	B2	1334	A	C2-N3-C4	-8.94	106.13	110.60
38	A1	510	A	N9-C4-C5	8.94	109.38	105.80
38	A1	1228	G	C2-N3-C4	8.94	116.37	111.90
38	A1	2190	A	C5-N7-C8	8.94	108.37	103.90
38	A1	2887	C	O4'-C1'-N1	8.94	115.35	108.20
58	Ak	97	PHE	CB-CG-CD2	8.94	127.06	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	619	A	N3-C4-C5	-8.94	120.55	126.80
11	B2	1332	C	C5-C4-N4	-8.94	113.94	120.20
11	B2	1038	C	C6-N1-C2	8.94	123.87	120.30
38	A1	620	G	O4'-C1'-N9	8.94	115.35	108.20
38	A1	1036	C	N3-C4-C5	-8.94	118.33	121.90
38	A1	2444	G	N1-C2-N3	-8.94	118.54	123.90
11	B2	207	G	N1-C2-N3	-8.93	118.54	123.90
11	B2	933	G	N1-C6-O6	8.93	125.26	119.90
38	A1	100	C	C5-C4-N4	-8.93	113.95	120.20
38	A1	1334	G	C6-C5-N7	-8.93	125.04	130.40
38	A1	2165	A	N3-C4-N9	8.93	134.55	127.40
39	A3	126	C	N3-C4-C5	-8.93	118.33	121.90
39	A3	24	C	N3-C4-C5	-8.93	118.33	121.90
11	B2	1075	A	C8-N9-C4	-8.93	102.23	105.80
29	BQ	101	ARG	NE-CZ-NH2	-8.93	115.83	120.30
38	A1	10	C	N3-C4-N4	8.93	124.25	118.00
38	A1	565	A	C4-C5-C6	8.93	121.47	117.00
38	A1	626	C	C4-C5-C6	8.93	121.86	117.40
38	A1	907	C	O4'-C1'-N1	8.93	115.34	108.20
38	A1	1362	G	N1-C6-O6	8.93	125.26	119.90
38	A1	553	C	C2-N3-C4	8.93	124.36	119.90
38	A1	3036	C	O4'-C1'-N1	8.93	115.34	108.20
11	B2	286	G	C5-C6-O6	-8.93	123.25	128.60
11	B2	1410	G	C4-C5-C6	8.93	124.16	118.80
38	A1	1036	C	O4'-C1'-N1	8.93	115.34	108.20
28	BP	14	PHE	CB-CG-CD2	8.93	127.05	120.80
38	A1	1559	A	C2-N3-C4	-8.93	106.14	110.60
38	A1	2240	G	N7-C8-N9	-8.93	108.64	113.10
11	B2	393	A	O4'-C1'-N9	8.92	115.34	108.20
11	B2	778	G	N1-C6-O6	8.92	125.25	119.90
11	B2	984	C	N3-C4-C5	-8.92	118.33	121.90
38	A1	1504	C	C2-N3-C4	8.92	124.36	119.90
11	B2	956	C	C6-N1-C2	8.92	123.87	120.30
38	A1	460	C	C5-C6-N1	8.92	125.46	121.00
38	A1	605	A	C5-C6-N6	-8.92	116.56	123.70
38	A1	1619	C	N3-C4-C5	-8.92	118.33	121.90
38	A1	1512	G	C6-C5-N7	-8.92	125.05	130.40
38	A1	2019	C	N3-C4-N4	8.92	124.25	118.00
38	A1	2401	A	N1-C6-N6	8.92	123.95	118.60
38	A1	2672	A	O4'-C1'-N9	8.92	115.34	108.20
38	A1	2709	C	O4'-C1'-N1	8.92	115.34	108.20
11	B2	137	A	N7-C8-N9	-8.92	109.34	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	262	G	C5-C6-O6	-8.92	123.25	128.60
11	B2	435	A	C6-N1-C2	8.92	123.95	118.60
11	B2	732	G	C4-C5-C6	8.92	124.15	118.80
11	B2	1441	G	O4'-C1'-N9	8.92	115.33	108.20
11	B2	1462	A	C5-C6-N1	-8.92	113.24	117.70
14	BB	201	ARG	NE-CZ-NH1	-8.92	115.84	120.30
38	A1	1001	C	N3-C4-N4	8.92	124.24	118.00
38	A1	2102	A	O4'-C1'-N9	8.92	115.34	108.20
38	A1	2487	G	N1-C6-O6	8.92	125.25	119.90
38	A1	2502	C	C6-N1-C2	8.92	123.87	120.30
10	B1	77	A	C2-N3-C4	-8.92	106.14	110.60
11	B2	1455	A	C5-C6-N6	-8.92	116.56	123.70
38	A1	608	C	N3-C4-N4	8.92	124.24	118.00
38	A1	721	G	N1-C2-N3	-8.92	118.55	123.90
38	A1	829	G	C8-N9-C4	-8.92	102.83	106.40
38	A1	1871	C	N3-C4-C5	-8.92	118.33	121.90
11	B2	965	G	N9-C4-C5	8.92	108.97	105.40
38	A1	1736	G	C5'-C4'-C3'	-8.92	101.73	116.00
11	B2	179	U	O4'-C1'-N1	8.91	115.33	108.20
11	B2	847	A	N7-C8-N9	-8.91	109.34	113.80
11	B2	910	G	N1-C2-N3	-8.91	118.55	123.90
11	B2	1139	A	C2-N3-C4	-8.91	106.14	110.60
38	A1	388	G	C8-N9-C4	8.91	109.97	106.40
38	A1	2186	C	N3-C4-C5	-8.91	118.33	121.90
11	B2	472	C	C4-C5-C6	8.91	121.86	117.40
11	B2	1292	A	C4-C5-N7	-8.91	106.24	110.70
11	B2	1329	C	C5-C4-N4	-8.91	113.96	120.20
38	A1	178	G	C8-N9-C4	-8.91	102.83	106.40
38	A1	767	G	N1-C6-O6	8.91	125.25	119.90
38	A1	2142	U	O4'-C1'-N1	8.91	115.33	108.20
38	A1	2977	G	N3-C2-N2	8.91	126.14	119.90
38	A1	3040	G	C4-C5-C6	8.91	124.15	118.80
10	B1	15	G	O4'-C1'-N9	8.91	115.33	108.20
38	A1	1780	C	N3-C4-N4	8.91	124.24	118.00
38	A1	2236	C	P-O3'-C3'	-8.91	109.01	119.70
38	A1	2409	C	O4'-C1'-N1	8.91	115.33	108.20
11	B2	277	G	P-O3'-C3'	8.91	130.39	119.70
38	A1	635	G	O4'-C1'-N9	8.91	115.33	108.20
38	A1	1493	C	N1-C2-O2	-8.91	113.56	118.90
11	B2	478	C	C4-C5-C6	8.91	121.85	117.40
11	B2	1002	G	N7-C8-N9	-8.91	108.65	113.10
38	A1	1063	C	O4'-C1'-N1	8.91	115.32	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1163	U	O4'-C1'-N1	8.91	115.33	108.20
38	A1	1894	A	C5-C6-N6	-8.91	116.58	123.70
38	A1	2408	G	N9-C1'-C2'	-8.91	102.20	112.00
11	B2	986	G	N9-C4-C5	-8.90	101.84	105.40
38	A1	1563	G	C5-C6-O6	-8.90	123.26	128.60
38	A1	495	U	O4'-C1'-N1	8.90	115.32	108.20
39	A3	83	C	N3-C4-N4	8.90	124.23	118.00
38	A1	2859	U	N3-C4-O4	8.90	125.63	119.40
38	A1	2863	A	C8-N9-C4	-8.90	102.24	105.80
11	B2	1364	C	N3-C4-C5	-8.90	118.34	121.90
38	A1	1853	C	N3-C4-C5	-8.90	118.34	121.90
11	B2	315	A	O4'-C1'-N9	8.90	115.32	108.20
28	BP	44	ARG	NE-CZ-NH1	8.90	124.75	120.30
38	A1	850	C	C5-C6-N1	8.90	125.45	121.00
38	A1	951	C	O4'-C1'-N1	8.90	115.32	108.20
38	A1	1805	U	O4'-C1'-N1	8.90	115.32	108.20
38	A1	1959	C	C6-N1-C2	-8.90	116.74	120.30
39	A3	62	A	C8-N9-C4	8.90	109.36	105.80
11	B2	259	A	C5-C6-N6	-8.89	116.58	123.70
11	B2	1441	G	C6-C5-N7	-8.89	125.06	130.40
11	B2	1363	C	N3-C4-N4	8.89	124.22	118.00
11	B2	1489	A	C5-C6-N1	-8.89	113.25	117.70
38	A1	350	A	O4'-C1'-N9	8.89	115.31	108.20
38	A1	608	C	C6-N1-C2	-8.89	116.74	120.30
38	A1	1653	U	C6-N1-C2	-8.89	115.66	121.00
38	A1	1383	G	N9-C4-C5	8.89	108.96	105.40
38	A1	1905	G	N1-C6-O6	8.89	125.24	119.90
38	A1	3016	G	O4'-C1'-N9	8.89	115.31	108.20
9	AX	46	TYR	CG-CD1-CE1	-8.89	114.19	121.30
38	A1	1414	G	N3-C2-N2	8.89	126.12	119.90
10	B1	10	G	C4-C5-C6	8.89	124.13	118.80
11	B2	1199	A	C2-N3-C4	-8.89	106.16	110.60
38	A1	463	A	O4'-C1'-N9	8.89	115.31	108.20
38	A1	2418	G	N9-C4-C5	-8.89	101.84	105.40
39	A3	73	U	N3-C2-O2	8.89	128.42	122.20
11	B2	145	A	C8-N9-C4	-8.88	102.25	105.80
11	B2	506	G	O4'-C1'-N9	8.89	115.31	108.20
11	B2	899	G	N3-C2-N2	8.89	126.12	119.90
11	B2	350	G	N3-C2-N2	8.88	126.12	119.90
11	B2	614	G	N1-C6-O6	8.88	125.23	119.90
11	B2	663	G	C2-N3-C4	8.88	116.34	111.90
11	B2	1097	G	N1-C6-O6	8.88	125.23	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1352	G	C8-N9-C4	-8.88	102.85	106.40
38	A1	468	A	C8-N9-C4	-8.88	102.25	105.80
38	A1	623	G	C5-C6-O6	-8.89	123.27	128.60
38	A1	1094	U	N3-C4-O4	8.88	125.62	119.40
38	A1	2944	G	N3-C2-N2	8.88	126.12	119.90
38	A1	10	C	C2-N3-C4	8.88	124.34	119.90
38	A1	1339	C	O4'-C1'-C2'	8.88	115.59	107.60
38	A1	2080	G	C6-C5-N7	-8.88	125.07	130.40
38	A1	2756	G	N1-C2-N3	-8.88	118.57	123.90
38	A1	1253	U	N1-C2-N3	-8.88	109.57	114.90
38	A1	2776	A	N1-C6-N6	8.88	123.93	118.60
11	B2	140	C	N3-C4-C5	-8.88	118.35	121.90
11	B2	777	G	N1-C2-N3	-8.88	118.57	123.90
11	B2	1157	G	C5-C6-O6	-8.88	123.27	128.60
11	B2	1291	G	C8-N9-C4	-8.88	102.85	106.40
38	A1	1302	G	C2-N3-C4	-8.88	107.46	111.90
38	A1	445	G	C6-C5-N7	-8.88	125.07	130.40
38	A1	2496	G	N1-C6-O6	8.88	125.23	119.90
38	A1	3026	C	N3-C4-C5	-8.88	118.35	121.90
43	AB	30	TYR	CB-CG-CD2	-8.88	115.67	121.00
60	AM	117	TYR	CB-CG-CD1	8.88	126.33	121.00
11	B2	819	G	O4'-C1'-N9	8.88	115.30	108.20
38	A1	1830	U	O4'-C1'-N1	8.88	115.30	108.20
38	A1	2778	A	C5-C6-N6	-8.88	116.60	123.70
38	A1	3025	C	C5-C4-N4	-8.88	113.99	120.20
38	A1	813	G	N1-C6-O6	8.87	125.22	119.90
38	A1	1857	A	N9-C4-C5	8.87	109.35	105.80
10	B1	15	G	C5-C6-O6	-8.87	123.28	128.60
38	A1	601	A	N7-C8-N9	8.87	118.24	113.80
38	A1	1191	C	N3-C4-C5	-8.87	118.35	121.90
38	A1	1669	A	N7-C8-N9	-8.87	109.36	113.80
38	A1	1991	G	C8-N9-C4	-8.87	102.85	106.40
11	B2	7	G	N7-C8-N9	-8.87	108.67	113.10
38	A1	639	C	N3-C4-N4	8.87	124.21	118.00
38	A1	1095	A	C5-C6-N1	-8.87	113.27	117.70
38	A1	1407	A	C6-C5-N7	-8.87	126.09	132.30
38	A1	1703	G	C5-C6-O6	-8.87	123.28	128.60
38	A1	2292	A	C6-C5-N7	-8.87	126.09	132.30
39	A3	37	U	N3-C4-O4	8.87	125.61	119.40
11	B2	627	G	N3-C2-N2	8.87	126.11	119.90
11	B2	850	A	N7-C8-N9	-8.87	109.37	113.80
11	B2	998	A	N1-C6-N6	8.87	123.92	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1009	G	O4'-C1'-N9	8.87	115.30	108.20
38	A1	1522	A	C5-C6-N1	-8.87	113.27	117.70
38	A1	1919	A	N1-C6-N6	8.87	123.92	118.60
38	A1	2739	G	C5-C6-O6	-8.87	123.28	128.60
38	A1	2755	G	O4'-C1'-N9	8.87	115.30	108.20
11	B2	1009	G	C4-C5-C6	8.87	124.12	118.80
11	B2	1473	A	C6-C5-N7	-8.87	126.09	132.30
38	A1	96	C	C5-C4-N4	-8.87	113.99	120.20
38	A1	1629	G	N3-C4-C5	-8.87	124.17	128.60
38	A1	2344	G	C6-C5-N7	-8.87	125.08	130.40
38	A1	1284	C	O4'-C1'-N1	8.86	115.29	108.20
38	A1	3032	C	C6-N1-C2	-8.86	116.75	120.30
11	B2	485	A	P-O3'-C3'	8.86	130.34	119.70
11	B2	717	C	O4'-C1'-N1	8.86	115.29	108.20
38	A1	1895	G	C6-N1-C2	8.86	130.42	125.10
38	A1	2598	C	O4'-C1'-N1	8.86	115.29	108.20
45	AC	81	PHE	CB-CG-CD2	8.86	127.00	120.80
38	A1	582	A	C5-C6-N1	-8.86	113.27	117.70
38	A1	12	C	C5-C6-N1	8.86	125.43	121.00
38	A1	950	G	N9-C4-C5	8.86	108.94	105.40
38	A1	2172	G	N1-C6-O6	8.86	125.22	119.90
38	A1	1290	G	C5-C6-O6	-8.86	123.28	128.60
38	A1	2024	A	N1-C6-N6	8.86	123.92	118.60
39	A3	13	C	O4'-C1'-N1	8.86	115.29	108.20
11	B2	60	A	C5-N7-C8	8.86	108.33	103.90
11	B2	787	U	N3-C4-O4	8.86	125.60	119.40
33	BU	1	MET	CG-SD-CE	-8.86	86.03	100.20
38	A1	142	G	C6-C5-N7	-8.86	125.09	130.40
38	A1	175	G	C2-N3-C4	8.86	116.33	111.90
38	A1	1520	G	N1-C6-O6	8.86	125.21	119.90
38	A1	2289	A	C5-C6-N6	-8.86	116.61	123.70
38	A1	2346	A	N3-C4-C5	-8.86	120.60	126.80
38	A1	2655	C	C6-N1-C2	-8.86	116.76	120.30
45	AC	28	ARG	NE-CZ-NH1	8.86	124.73	120.30
54	AI	56	ARG	NE-CZ-NH2	-8.86	115.87	120.30
11	B2	654	U	C6-N1-C2	-8.85	115.69	121.00
11	B2	1049	U	C1'-O4'-C4'	8.85	116.98	109.90
38	A1	2168	C	N3-C4-C5	-8.85	118.36	121.90
11	B2	532	C	C5-C6-N1	8.85	125.43	121.00
11	B2	915	U	N1-C2-N3	-8.85	109.59	114.90
11	B2	1294	G	C4-C5-C6	8.85	124.11	118.80
38	A1	2876	G	N3-C2-N2	8.85	126.10	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
60	AM	159	PHE	CB-CG-CD2	8.85	127.00	120.80
15	BC	131	ARG	NE-CZ-NH1	-8.85	115.88	120.30
38	A1	445	G	C5-C6-O6	-8.85	123.29	128.60
11	B2	1174	A	N1-C6-N6	8.85	123.91	118.60
10	B1	38	G	C5-C6-N1	-8.85	107.08	111.50
11	B2	7	G	P-O3'-C3'	8.85	130.31	119.70
11	B2	642	G	O4'-C1'-N9	8.85	115.28	108.20
11	B2	150	G	N1-C6-O6	8.85	125.21	119.90
11	B2	224	A	C8-N9-C4	8.85	109.34	105.80
11	B2	604	C	O4'-C1'-N1	8.85	115.28	108.20
11	B2	892	C	O4'-C1'-N1	8.85	115.28	108.20
11	B2	1053	A	N1-C2-N3	8.85	133.72	129.30
38	A1	726	G	C6-C5-N7	-8.85	125.09	130.40
38	A1	780	G	C8-N9-C4	-8.85	102.86	106.40
38	A1	1541	U	N3-C4-C5	-8.85	109.29	114.60
38	A1	2198	U	N3-C4-C5	-8.85	109.29	114.60
38	A1	1882	C	N3-C4-N4	8.85	124.19	118.00
38	A1	2549	A	C5-C6-N6	-8.85	116.62	123.70
61	AN	116	PHE	CB-CG-CD2	8.85	126.99	120.80
10	B1	24	A	N1-C2-N3	-8.84	124.88	129.30
11	B2	325	A	P-O5'-C5'	8.84	135.05	120.90
11	B2	475	C	N3-C4-C5	-8.84	118.36	121.90
11	B2	913	G	N3-C4-C5	-8.84	124.18	128.60
38	A1	2165	A	P-O3'-C3'	8.84	130.31	119.70
38	A1	2979	C	C4'-C3'-C2'	-8.84	93.76	102.60
10	B1	21	G	C4-C5-C6	8.84	124.10	118.80
38	A1	9	A	C8-N9-C4	-8.84	102.26	105.80
38	A1	1057	C	C3'-C2'-C1'	-8.84	94.43	101.50
38	A1	1222	U	N3-C4-C5	-8.84	109.30	114.60
38	A1	1571	G	C8-N9-C1'	8.84	138.49	127.00
38	A1	2177	A	N9-C4-C5	8.84	109.34	105.80
40	A5	47	ARG	NE-CZ-NH1	-8.84	115.88	120.30
38	A1	1398	C	N3-C4-N4	8.84	124.19	118.00
38	A1	2391	G	C5-N7-C8	8.84	108.72	104.30
38	A1	2641	C	C6-N1-C2	-8.84	116.76	120.30
38	A1	2833	G	C5-C6-O6	-8.84	123.30	128.60
11	B2	292	U	O4'-C1'-N1	8.84	115.27	108.20
11	B2	678	G	C5-N7-C8	8.84	108.72	104.30
38	A1	1408	G	P-O5'-C5'	8.84	135.04	120.90
38	A1	1735	G	N1-C2-N3	-8.84	118.60	123.90
11	B2	1472	G	C4-C5-N7	8.84	114.33	110.80
11	B2	91	G	N1-C6-O6	8.83	125.20	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1361	G	C2-N3-C4	8.83	116.32	111.90
17	BE	80	ASP	CB-CG-OD1	8.83	126.25	118.30
38	A1	740	C	N3-C4-C5	-8.83	118.37	121.90
38	A1	2317	G	N3-C2-N2	8.83	126.08	119.90
27	BO	136	ARG	NE-CZ-NH1	8.83	124.72	120.30
38	A1	358	C	C5-C6-N1	8.83	125.42	121.00
38	A1	788	A	C5-C6-N1	-8.83	113.28	117.70
38	A1	1849	A	C5-C6-N1	-8.83	113.28	117.70
39	A3	88	A	C2-N3-C4	-8.83	106.18	110.60
4	AQ	107	ARG	NE-CZ-NH2	-8.83	115.89	120.30
11	B2	211	G	C6-N1-C2	8.83	130.40	125.10
11	B2	622	C	O4'-C1'-N1	8.83	115.27	108.20
11	B2	1137	G	C8-N9-C4	-8.83	102.87	106.40
11	B2	1280	C	C5-C6-N1	8.83	125.41	121.00
11	B2	1356	A	C4-C5-C6	8.83	121.42	117.00
38	A1	731	C	C4-C5-C6	8.83	121.81	117.40
38	A1	1000	G	C2-N3-C4	8.83	116.31	111.90
38	A1	1533	G	O4'-C1'-N9	8.83	115.27	108.20
38	A1	2229	G	P-O3'-C3'	8.83	130.30	119.70
5	AS	135	ARG	NE-CZ-NH2	8.83	124.71	120.30
38	A1	2160	C	N3-C4-N4	8.83	124.18	118.00
11	B2	265	C	N3-C4-N4	8.83	124.18	118.00
11	B2	654	U	C5-C6-N1	8.83	127.11	122.70
11	B2	1133	C	N3-C4-C5	-8.83	118.37	121.90
11	B2	1288	C	N1-C2-N3	-8.83	113.02	119.20
11	B2	1432	U	C5-C4-O4	-8.83	120.61	125.90
38	A1	13	U	N3-C4-O4	8.83	125.58	119.40
38	A1	184	A	C5-C6-N1	-8.83	113.29	117.70
38	A1	476	C	N3-C4-C5	-8.83	118.37	121.90
38	A1	676	G	O4'-C1'-N9	8.83	115.26	108.20
38	A1	771	G	C5-C6-N1	-8.83	107.09	111.50
38	A1	1161	A	N1-C6-N6	8.83	123.90	118.60
38	A1	1481	G	C6-C5-N7	-8.83	125.10	130.40
38	A1	1747	C	C4-C5-C6	8.83	121.81	117.40
38	A1	2222	C	C2-N3-C4	8.83	124.31	119.90
38	A1	1147	G	C4-C5-N7	8.82	114.33	110.80
38	A1	1173	G	N1-C6-O6	8.82	125.19	119.90
38	A1	1938	G	C5-C6-O6	-8.82	123.31	128.60
11	B2	1176	C	O4'-C1'-N1	8.82	115.26	108.20
38	A1	578	C	C6-N1-C2	8.82	123.83	120.30
38	A1	1634	A	C5-N7-C8	8.82	108.31	103.90
11	B2	1164	A	N7-C8-N9	8.82	118.21	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1233	G	C5-C6-N1	-8.82	107.09	111.50
11	B2	395	C	N3-C4-N4	8.82	124.17	118.00
11	B2	468	G	O4'-C1'-N9	8.82	115.26	108.20
11	B2	734	G	N3-C2-N2	8.82	126.08	119.90
11	B2	1056	G	N1-C6-O6	8.82	125.19	119.90
38	A1	598	C	C4-C5-C6	-8.82	112.99	117.40
38	A1	1586	G	C6-C5-N7	-8.82	125.11	130.40
38	A1	2213	G	C6-C5-N7	-8.82	125.11	130.40
38	A1	58	G	N9-C4-C5	-8.82	101.87	105.40
38	A1	1025	A	C6-C5-N7	-8.82	126.13	132.30
38	A1	2593	A	C4-C5-C6	8.82	121.41	117.00
38	A1	2971	U	N3-C4-O4	8.82	125.57	119.40
49	Ae	22	ARG	NE-CZ-NH2	-8.82	115.89	120.30
11	B2	196	G	C4-C5-N7	-8.82	107.27	110.80
11	B2	281	G	C8-N9-C4	-8.82	102.87	106.40
38	A1	275	C	O4'-C1'-N1	8.82	115.25	108.20
38	A1	1641	G	P-O3'-C3'	8.82	130.28	119.70
38	A1	1791	A	C6-C5-N7	-8.82	126.13	132.30
38	A1	2220	C	N3-C4-N4	8.82	124.17	118.00
38	A1	2351	G	C5-C6-O6	-8.82	123.31	128.60
38	A1	2956	G	C4-C5-C6	8.82	124.09	118.80
38	A1	3002	A	C5-C6-N6	-8.82	116.65	123.70
11	B2	135	U	C5-C6-N1	8.81	127.11	122.70
11	B2	199	A	C4-C5-C6	8.81	121.41	117.00
11	B2	244	G	N3-C2-N2	8.81	126.07	119.90
11	B2	808	C	C2-N3-C4	8.81	124.31	119.90
11	B2	404	C	C2-N3-C4	8.81	124.31	119.90
11	B2	584	C	N3-C4-N4	8.81	124.17	118.00
38	A1	585	G	N1-C6-O6	8.81	125.19	119.90
38	A1	830	G	C4-C5-C6	8.81	124.09	118.80
38	A1	846	C	N3-C4-C5	-8.81	118.37	121.90
38	A1	1282	A	C8-N9-C4	8.81	109.33	105.80
38	A1	1127	C	C5-C6-N1	8.81	125.41	121.00
38	A1	1208	A	C5-C6-N1	-8.81	113.29	117.70
38	A1	1835	A	C5-C6-N6	-8.81	116.65	123.70
10	B1	37	A	C5-C6-N6	-8.81	116.65	123.70
11	B2	442	C	N3-C4-C5	-8.81	118.38	121.90
38	A1	233	A	C2-N3-C4	-8.81	106.19	110.60
38	A1	802	G	N1-C2-N3	-8.81	118.61	123.90
38	A1	2473	C	C5-C4-N4	-8.81	114.03	120.20
38	A1	2579	G	C8-N9-C4	8.81	109.92	106.40
38	A1	2883	C	N3-C4-C5	-8.81	118.38	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	233	C	C5-C6-N1	-8.81	116.60	121.00
11	B2	1428	G	N1-C6-O6	8.81	125.19	119.90
32	BT	64	ARG	NE-CZ-NH1	8.81	124.70	120.30
38	A1	1423	G	C5-C6-O6	-8.81	123.31	128.60
38	A1	1556	G	N9-C4-C5	-8.81	101.88	105.40
38	A1	1671	A	O4'-C1'-N9	8.81	115.25	108.20
38	A1	2036	A	C5-C6-N1	-8.81	113.30	117.70
39	A3	95	G	N1-C6-O6	8.81	125.19	119.90
38	A1	1991	G	C5-C6-O6	-8.81	123.32	128.60
38	A1	3010	C	O4'-C1'-N1	8.81	115.25	108.20
11	B2	494	G	O4'-C1'-N9	8.80	115.24	108.20
11	B2	859	A	C5-C6-N1	-8.80	113.30	117.70
38	A1	725	G	C5-C6-O6	-8.81	123.32	128.60
38	A1	532	G	C5-C6-O6	-8.80	123.32	128.60
38	A1	2336	G	C8-N9-C4	-8.80	102.88	106.40
38	A1	2379	G	N1-C6-O6	8.80	125.18	119.90
38	A1	813	G	C5-C6-O6	-8.80	123.32	128.60
38	A1	827	G	C5-C6-N1	-8.80	107.10	111.50
38	A1	2485	C	N3-C4-N4	8.80	124.16	118.00
11	B2	460	C	C2-N3-C4	8.80	124.30	119.90
11	B2	636	G	C5-C6-N1	-8.80	107.10	111.50
11	B2	916	U	C4-C5-C6	8.80	124.98	119.70
38	A1	257	G	N1-C6-O6	8.80	125.18	119.90
38	A1	632	G	C5-C6-N1	-8.80	107.10	111.50
38	A1	1216	A	C8-N9-C4	-8.80	102.28	105.80
38	A1	1272	A	N9-C4-C5	8.80	109.32	105.80
38	A1	2041	U	C3'-C2'-C1'	8.80	108.54	101.50
38	A1	1342	G	N1-C2-N3	-8.80	118.62	123.90
38	A1	1620	C	N3-C4-C5	-8.80	118.38	121.90
38	A1	1652	A	C4-C5-C6	8.80	121.40	117.00
38	A1	1785	G	N7-C8-N9	-8.80	108.70	113.10
38	A1	2415	C	O4'-C1'-N1	8.80	115.24	108.20
38	A1	994	G	C3'-C2'-C1'	8.80	108.54	101.50
38	A1	1734	G	N1-C2-N2	-8.80	108.28	116.20
11	B2	1238	G	C5-N7-C8	-8.79	99.90	104.30
11	B2	1420	U	C2-N3-C4	-8.79	121.72	127.00
11	B2	1431	C	O4'-C1'-N1	8.79	115.23	108.20
38	A1	48	G	C5-C6-N1	-8.79	107.10	111.50
38	A1	273	G	C5-C6-N1	-8.79	107.10	111.50
38	A1	1098	C	C2-N3-C4	8.79	124.30	119.90
38	A1	1924	A	N1-C6-N6	8.79	123.88	118.60
11	B2	255	G	O4'-C1'-N9	8.79	115.23	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	95	G	N1-C6-O6	8.79	125.17	119.90
38	A1	1724	A	C5-C6-N6	-8.79	116.67	123.70
38	A1	2085	C	O4'-C1'-N1	8.79	115.23	108.20
38	A1	2178	A	C6-C5-N7	-8.79	126.15	132.30
38	A1	2723	G	N3-C2-N2	8.79	126.05	119.90
11	B2	573	C	N3-C4-C5	-8.79	118.39	121.90
11	B2	656	U	O4'-C1'-N1	8.79	115.23	108.20
38	A1	142	G	O4'-C1'-N9	8.79	115.23	108.20
38	A1	904	G	O4'-C1'-N9	8.79	115.23	108.20
11	B2	821	G	C5-C6-O6	-8.79	123.33	128.60
38	A1	451	C	N3-C4-C5	-8.79	118.39	121.90
38	A1	624	U	O4'-C1'-N1	8.79	115.23	108.20
38	A1	2580	G	C6-C5-N7	-8.79	125.13	130.40
38	A1	805	C	N3-C4-C5	-8.79	118.39	121.90
38	A1	2392	A	C5-C6-N1	-8.79	113.31	117.70
38	A1	2737	G	C8-N9-C4	8.79	109.92	106.40
38	A1	3018	C	O4'-C1'-N1	8.79	115.23	108.20
38	A1	1485	A	C4-C5-C6	8.79	121.39	117.00
38	A1	1737	A	N9-C4-C5	8.79	109.31	105.80
38	A1	2690	U	N3-C4-O4	8.79	125.55	119.40
11	B2	1401	U	O4'-C1'-N1	8.78	115.23	108.20
38	A1	2824	C	C5-C4-N4	-8.79	114.05	120.20
38	A1	210	A	P-O5'-C5'	8.78	134.95	120.90
38	A1	45	G	N1-C2-N3	-8.78	118.63	123.90
38	A1	287	G	C5-C6-O6	-8.78	123.33	128.60
38	A1	487	U	C2-N1-C1'	8.78	128.24	117.70
38	A1	1300	C	O4'-C1'-N1	8.78	115.22	108.20
38	A1	1967	G	P-O3'-C3'	8.78	130.24	119.70
38	A1	2596	G	O4'-C1'-N9	8.78	115.23	108.20
38	A1	2874	C	C4-C5-C6	8.78	121.79	117.40
38	A1	2943	G	N1-C6-O6	8.78	125.17	119.90
38	A1	2593	A	N9-C4-C5	8.78	109.31	105.80
11	B2	691	G	C5-C6-O6	-8.78	123.33	128.60
11	B2	823	A	N7-C8-N9	-8.78	109.41	113.80
38	A1	512	G	N1-C6-O6	8.78	125.17	119.90
38	A1	557	G	N1-C2-N3	-8.78	118.63	123.90
38	A1	646	U	N3-C2-O2	8.78	128.35	122.20
38	A1	1192	G	C5-C6-O6	-8.78	123.33	128.60
38	A1	2210	G	C5-C6-O6	-8.78	123.33	128.60
11	B2	772	G	N1-C2-N2	-8.78	108.30	116.20
11	B2	1327	C	N1-C2-O2	-8.78	113.63	118.90
38	A1	595	C	N1-C2-O2	8.78	124.17	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	717	A	C5-C6-N1	-8.78	113.31	117.70
38	A1	1379	A	C4-C5-C6	8.78	121.39	117.00
11	B2	306	C	N3-C4-N4	8.77	124.14	118.00
11	B2	1088	U	C5-C4-O4	-8.77	120.64	125.90
11	B2	1134	G	C5-C6-N1	-8.77	107.11	111.50
38	A1	972	C	C4-C5-C6	8.77	121.79	117.40
38	A1	1085	G	C5-C6-O6	-8.77	123.34	128.60
38	A1	1911	G	N3-C2-N2	8.77	126.04	119.90
38	A1	2397	C	N3-C4-C5	-8.77	118.39	121.90
11	B2	446	G	C4-C5-N7	-8.77	107.29	110.80
38	A1	1938	G	N7-C8-N9	-8.77	108.71	113.10
39	A3	11	A	O4'-C1'-N9	8.77	115.22	108.20
38	A1	2034	G	N1-C2-N3	-8.77	118.64	123.90
11	B2	1	A	N3-C4-C5	-8.77	120.66	126.80
11	B2	165	U	O3'-P-O5'	-8.77	87.34	104.00
11	B2	410	U	N3-C4-O4	8.77	125.54	119.40
11	B2	657	A	N7-C8-N9	8.77	118.19	113.80
38	A1	2189	C	O4'-C1'-N1	8.77	115.22	108.20
38	A1	318	G	N3-C2-N2	8.77	126.04	119.90
38	A1	1652	A	O4'-C1'-N9	8.77	115.22	108.20
39	A3	11	A	N1-C2-N3	8.77	133.69	129.30
39	A3	108	G	N3-C2-N2	8.77	126.04	119.90
58	Ak	209	ASP	N-CA-CB	8.77	126.38	110.60
10	B1	77	A	C5-C6-N6	-8.77	116.69	123.70
38	A1	2817	U	O4'-C1'-N1	8.77	115.21	108.20
11	B2	249	U	N3-C2-O2	8.77	128.34	122.20
38	A1	904	G	C5-C6-O6	-8.77	123.34	128.60
38	A1	2708	U	O4'-C1'-N1	8.77	115.21	108.20
11	B2	225	U	N3-C4-O4	8.76	125.53	119.40
38	A1	1158	G	C4-C5-C6	8.76	124.06	118.80
38	A1	836	U	N3-C4-C5	-8.76	109.34	114.60
38	A1	1652	A	N1-C6-N6	8.76	123.86	118.60
11	B2	281	G	N3-C2-N2	8.76	126.03	119.90
11	B2	1437	G	P-O5'-C5'	-8.76	106.88	120.90
38	A1	926	C	C5-C6-N1	8.76	125.38	121.00
38	A1	1395	G	O4'-C1'-C2'	-8.76	97.04	105.80
38	A1	459	C	O4'-C1'-N1	8.76	115.21	108.20
38	A1	1575	G	C5-C6-O6	-8.76	123.34	128.60
38	A1	1691	U	O4'-C1'-N1	8.76	115.21	108.20
38	A1	35	G	N9-C4-C5	-8.76	101.90	105.40
38	A1	402	G	P-O3'-C3'	-8.76	109.19	119.70
38	A1	602	G	N1-C6-O6	8.76	125.15	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1431	U	O4'-C1'-N1	8.76	115.20	108.20
38	A1	1594	G	C5-C6-O6	-8.76	123.35	128.60
38	A1	2620	G	C5-C6-O6	-8.76	123.35	128.60
7	AU	59	TYR	CB-CG-CD2	8.75	126.25	121.00
11	B2	515	U	C2-N3-C4	8.75	132.25	127.00
11	B2	1349	C	C5-C6-N1	8.75	125.38	121.00
38	A1	824	C	N3-C4-N4	8.75	124.13	118.00
38	A1	1850	C	N3-C2-O2	8.75	128.03	121.90
38	A1	2604	G	N7-C8-N9	8.75	117.48	113.10
57	Aj	31	SER	N-CA-CB	8.75	123.63	110.50
11	B2	507	G	N1-C2-N3	-8.75	118.65	123.90
38	A1	944	G	C2-N3-C4	8.75	116.28	111.90
38	A1	2230	G	C4-C5-C6	8.75	124.05	118.80
38	A1	2289	A	C8-N9-C4	-8.75	102.30	105.80
39	A3	69	C	C6-N1-C2	-8.75	116.80	120.30
11	B2	1050	G	O4'-C1'-N9	8.75	115.20	108.20
38	A1	827	G	N7-C8-N9	8.75	117.47	113.10
38	A1	2844	G	C5-C6-N1	-8.75	107.13	111.50
11	B2	665	G	O4'-C1'-N9	8.75	115.20	108.20
11	B2	990	G	C1'-O4'-C4'	8.75	116.90	109.90
11	B2	1247	A	O4'-C1'-N9	8.75	115.20	108.20
64	AR	13	ARG	NE-CZ-NH1	8.75	124.67	120.30
29	BQ	2	ALA	N-CA-CB	8.74	122.34	110.10
38	A1	168	G	N3-C2-N2	8.74	126.02	119.90
38	A1	687	C	C5-C6-N1	8.74	125.37	121.00
38	A1	1828	A	N1-C6-N6	8.74	123.85	118.60
38	A1	2166	C	O4'-C1'-N1	8.74	115.19	108.20
39	A3	105	G	C6-N1-C2	8.74	130.35	125.10
11	B2	47	A	C2-N3-C4	8.74	114.97	110.60
38	A1	128	C	N3-C4-N4	8.74	124.12	118.00
38	A1	338	A	P-O5'-C5'	8.74	134.89	120.90
38	A1	817	G	N3-C4-C5	8.74	132.97	128.60
38	A1	1103	C	C2-N3-C4	8.74	124.27	119.90
38	A1	1636	C	C5-C6-N1	8.74	125.37	121.00
38	A1	1669	A	C5-C6-N1	-8.74	113.33	117.70
38	A1	2400	U	O4'-C1'-N1	8.74	115.19	108.20
38	A1	2430	C	N3-C4-C5	-8.74	118.40	121.90
38	A1	2757	G	O4'-C1'-N9	8.74	115.20	108.20
38	A1	2997	G	N1-C6-O6	8.74	125.14	119.90
62	AO	177	ASP	CB-CG-OD2	-8.74	110.43	118.30
11	B2	625	G	N7-C8-N9	-8.74	108.73	113.10
38	A1	1012	G	N1-C2-N3	-8.74	118.66	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2070	U	N3-C2-O2	-8.74	116.08	122.20
11	B2	741	A	C5-C6-N1	-8.74	113.33	117.70
11	B2	763	G	O4'-C1'-N9	8.74	115.19	108.20
11	B2	1036	G	O4'-C1'-N9	8.74	115.19	108.20
38	A1	1076	G	O4'-C1'-N9	8.74	115.19	108.20
38	A1	1357	G	C1'-O4'-C4'	8.74	116.89	109.90
11	B2	1472	G	C5-C6-O6	-8.74	123.36	128.60
38	A1	52	A	C5-C6-N1	-8.74	113.33	117.70
38	A1	2501	G	P-O3'-C3'	8.74	130.19	119.70
11	B2	1332	C	N3-C4-N4	8.74	124.12	118.00
11	B2	1393	A	C5-C6-N6	-8.74	116.71	123.70
38	A1	990	G	N3-C2-N2	8.74	126.02	119.90
38	A1	1556	G	P-O5'-C5'	8.74	134.88	120.90
38	A1	2497	G	C5-C6-N1	8.74	115.87	111.50
38	A1	2692	A	C5-C6-N6	-8.74	116.71	123.70
58	Ak	201	TYR	CB-CG-CD1	-8.74	115.76	121.00
11	B2	1116	G	C6-C5-N7	-8.73	125.16	130.40
11	B2	1361	G	N9-C4-C5	-8.73	101.91	105.40
38	A1	1528	A	N7-C8-N9	-8.73	109.43	113.80
38	A1	1850	C	O4'-C1'-N1	8.73	115.19	108.20
38	A1	1987	A	C2-N3-C4	-8.73	106.23	110.60
38	A1	1629	G	O4'-C1'-N9	8.73	115.19	108.20
38	A1	1919	A	O4'-C1'-N9	8.73	115.19	108.20
38	A1	2450	A	C2'-C3'-O3'	8.73	128.71	109.50
38	A1	2529	G	C5-C6-O6	-8.73	123.36	128.60
39	A3	35	A	N1-C2-N3	8.73	133.67	129.30
39	A3	85	C	C4-C5-C6	8.73	121.77	117.40
11	B2	501	G	N1-C6-O6	8.73	125.14	119.90
11	B2	942	A	O4'-C1'-N9	8.73	115.18	108.20
11	B2	1198	A	C5-C6-N1	-8.73	113.33	117.70
20	BH	50	ARG	NE-CZ-NH1	-8.73	115.94	120.30
38	A1	355	G	O4'-C1'-N9	8.73	115.18	108.20
38	A1	916	A	C8-N9-C4	-8.73	102.31	105.80
11	B2	154	C	N3-C4-C5	-8.73	118.41	121.90
11	B2	266	A	C5-C6-N1	-8.73	113.34	117.70
38	A1	1743	G	C5-C6-O6	-8.73	123.36	128.60
38	A1	1769	G	C6-C5-N7	-8.73	125.16	130.40
10	B1	36	A	C5-C6-N1	-8.72	113.34	117.70
11	B2	1361	G	N3-C2-N2	8.72	126.01	119.90
38	A1	1784	G	N3-C4-C5	8.72	132.96	128.60
10	B1	73	C	N3-C4-C5	-8.72	118.41	121.90
11	B2	197	A	C5-C6-N1	-8.72	113.34	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	866	A	C5-C6-N1	-8.72	113.34	117.70
38	A1	286	G	N9-C4-C5	-8.72	101.91	105.40
38	A1	627	G	C5-C6-O6	-8.72	123.37	128.60
11	B2	591	G	O4'-C1'-N9	8.72	115.18	108.20
11	B2	1151	A	O4'-C1'-N9	8.72	115.18	108.20
38	A1	1180	G	C5-C6-O6	-8.72	123.37	128.60
38	A1	2595	C	N3-C4-C5	-8.72	118.41	121.90
11	B2	644	G	N3-C2-N2	8.72	126.00	119.90
11	B2	1227	A	C5-N7-C8	8.72	108.26	103.90
11	B2	1291	G	N3-C4-C5	-8.72	124.24	128.60
38	A1	281	G	O4'-C1'-N9	8.72	115.17	108.20
38	A1	1708	U	O4'-C1'-N1	8.72	115.17	108.20
11	B2	665	G	N1-C6-O6	8.71	125.13	119.90
11	B2	1271	G	C5-C6-N1	-8.72	107.14	111.50
38	A1	351	C	C5-C4-N4	-8.72	114.10	120.20
38	A1	948	C	N3-C4-N4	8.71	124.10	118.00
38	A1	1293	G	O4'-C1'-N9	8.71	115.17	108.20
38	A1	2173	U	N3-C4-O4	8.71	125.50	119.40
38	A1	2199	U	O4'-C1'-N1	8.72	115.17	108.20
38	A1	2270	G	N1-C6-O6	8.71	125.13	119.90
38	A1	2997	G	P-O3'-C3'	8.71	130.16	119.70
11	B2	451	A	N1-C2-N3	8.71	133.66	129.30
38	A1	553	C	N3-C4-C5	-8.71	118.42	121.90
38	A1	3030	A	O4'-C1'-N9	8.71	115.17	108.20
43	AB	54	ARG	NE-CZ-NH1	-8.71	115.94	120.30
11	B2	537	G	C5-C6-O6	-8.71	123.37	128.60
11	B2	1302	C	O4'-C1'-N1	8.71	115.17	108.20
11	B2	428	G	N3-C2-N2	8.71	126.00	119.90
11	B2	581	G	O4'-C1'-N9	8.71	115.17	108.20
11	B2	865	A	C5-C6-N1	-8.71	113.35	117.70
38	A1	2053	G	N3-C2-N2	8.71	126.00	119.90
11	B2	1451	C	O4'-C1'-N1	8.71	115.17	108.20
38	A1	672	C	N1-C2-O2	8.71	124.12	118.90
44	Ab	117	ARG	NE-CZ-NH1	8.71	124.65	120.30
11	B2	1100	G	N9-C4-C5	8.71	108.88	105.40
24	BL	63	ARG	NE-CZ-NH2	-8.71	115.95	120.30
38	A1	24	G	N9-C4-C5	8.71	108.88	105.40
38	A1	305	G	N3-C2-N2	8.71	125.99	119.90
38	A1	397	G	C8-N9-C4	-8.71	102.92	106.40
38	A1	1444	A	N1-C6-N6	8.71	123.82	118.60
38	A1	1178	G	N3-C4-C5	-8.70	124.25	128.60
38	A1	1209	A	N1-C6-N6	8.70	123.82	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1557	G	O4'-C1'-N9	8.71	115.16	108.20
11	B2	235	G	C4-C5-N7	8.70	114.28	110.80
11	B2	43	A	C5-C6-N1	-8.70	113.35	117.70
11	B2	612	C	C6-N1-C2	8.70	123.78	120.30
11	B2	1308	U	O4'-C1'-N1	8.70	115.16	108.20
38	A1	434	G	C4-C5-C6	8.70	124.02	118.80
38	A1	703	G	N3-C4-C5	-8.70	124.25	128.60
38	A1	1862	G	C5-C6-N1	8.70	115.85	111.50
38	A1	1895	G	C4-C5-C6	8.70	124.02	118.80
38	A1	2641	C	O4'-C1'-N1	8.70	115.16	108.20
46	AD	26	PHE	CB-CG-CD2	-8.70	114.71	120.80
11	B2	377	A	C5-C6-N6	-8.70	116.74	123.70
11	B2	581	G	N3-C2-N2	8.70	125.99	119.90
11	B2	1131	G	N9-C4-C5	8.70	108.88	105.40
11	B2	1179	C	N3-C4-C5	-8.70	118.42	121.90
11	B2	1491	C	N1-C2-O2	8.70	124.12	118.90
30	BR	56	TYR	CB-CG-CD2	8.70	126.22	121.00
38	A1	794	G	O4'-C1'-N9	8.70	115.16	108.20
38	A1	1583	G	C6-N1-C2	8.70	130.32	125.10
48	AE	40	ARG	NE-CZ-NH2	8.70	124.65	120.30
38	A1	1819	G	N9-C4-C5	-8.70	101.92	105.40
38	A1	1985	G	O4'-C1'-N9	8.70	115.16	108.20
11	B2	867	A	C5-C6-N1	-8.70	113.35	117.70
11	B2	1291	G	C4-C5-N7	-8.70	107.32	110.80
11	B2	1183	C	P-O5'-C5'	8.69	134.81	120.90
37	BY	24	ARG	NE-CZ-NH2	-8.70	115.95	120.30
38	A1	626	C	N3-C4-N4	8.70	124.09	118.00
38	A1	999	A	C5-C6-N1	-8.70	113.35	117.70
38	A1	2775	G	C5-C6-O6	-8.70	123.38	128.60
38	A1	1755	C	O4'-C1'-N1	8.69	115.16	108.20
38	A1	2258	A	C2-N3-C4	8.69	114.95	110.60
38	A1	2562	G	C5-C6-O6	-8.70	123.38	128.60
43	AB	237	ARG	NE-CZ-NH2	8.69	124.65	120.30
11	B2	7	G	O4'-C1'-N9	8.69	115.15	108.20
11	B2	700	G	C8-N9-C4	-8.69	102.92	106.40
11	B2	1048	G	N1-C6-O6	8.69	125.12	119.90
38	A1	317	A	O4'-C1'-N9	8.69	115.15	108.20
38	A1	2990	G	C8-N9-C4	-8.69	102.92	106.40
39	A3	117	G	O4'-C1'-N9	8.69	115.15	108.20
11	B2	71	C	N3-C4-C5	-8.69	118.42	121.90
11	B2	723	G	C1'-O4'-C4'	8.69	116.85	109.90
11	B2	840	C	O4'-C1'-N1	8.69	115.15	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	BH	85	PHE	CB-CG-CD2	8.69	126.88	120.80
38	A1	709	A	C5-N7-C8	8.69	108.24	103.90
38	A1	1653	U	C2-N3-C4	-8.69	121.79	127.00
38	A1	2174	G	C5-C6-O6	-8.69	123.39	128.60
38	A1	2998	G	C5-C6-N1	-8.69	107.16	111.50
11	B2	261	G	N1-C6-O6	8.69	125.11	119.90
11	B2	397	C	C6-N1-C2	-8.69	116.83	120.30
11	B2	559	G	N1-C6-O6	8.69	125.11	119.90
11	B2	769	A	C5-C6-N6	-8.69	116.75	123.70
11	B2	1210	A	N1-C6-N6	8.69	123.81	118.60
11	B2	1321	U	O4'-C1'-N1	8.69	115.15	108.20
38	A1	257	G	N9-C4-C5	-8.69	101.92	105.40
38	A1	491	G	N9-C4-C5	-8.69	101.93	105.40
38	A1	1471	G	C4-C5-N7	8.69	114.27	110.80
38	A1	2965	C	O4'-C1'-N1	8.69	115.15	108.20
39	A3	125	U	O4'-C1'-N1	8.69	115.15	108.20
11	B2	26	A	C5-C6-N1	-8.68	113.36	117.70
11	B2	123	U	O4'-C1'-N1	8.68	115.15	108.20
11	B2	453	G	C5-C6-O6	-8.68	123.39	128.60
38	A1	286	G	N3-C2-N2	8.68	125.98	119.90
38	A1	822	A	N9-C4-C5	8.68	109.27	105.80
38	A1	1296	A	C6-C5-N7	-8.68	126.22	132.30
38	A1	1404	G	O4'-C1'-N9	8.68	115.15	108.20
38	A1	1467	G	N7-C8-N9	-8.68	108.76	113.10
38	A1	1980	U	O4'-C1'-N1	8.68	115.15	108.20
47	Ad	12	ARG	NE-CZ-NH2	8.68	124.64	120.30
11	B2	1017	U	P-O3'-C3'	8.68	130.12	119.70
11	B2	1313	G	N1-C2-N3	-8.68	118.69	123.90
38	A1	3031	U	O4'-C1'-N1	8.68	115.14	108.20
11	B2	213	C	C4-C5-C6	8.68	121.74	117.40
11	B2	641	A	N1-C2-N3	8.68	133.64	129.30
38	A1	423	G	O4'-C1'-N9	8.68	115.14	108.20
38	A1	2338	A	C5-C6-N6	-8.68	116.76	123.70
39	A3	92	G	C5-C6-N1	-8.68	107.16	111.50
38	A1	740	C	N3-C4-N4	8.68	124.07	118.00
11	B2	636	G	O4'-C1'-N9	8.67	115.14	108.20
11	B2	664	G	C8-N9-C4	-8.67	102.93	106.40
11	B2	807	C	N3-C4-C5	-8.67	118.43	121.90
38	A1	107	G	N1-C2-N3	-8.67	118.70	123.90
38	A1	1527	G	C5-C6-O6	-8.67	123.39	128.60
38	A1	2095	U	O4'-C1'-N1	8.67	115.14	108.20
4	AQ	61	TYR	CB-CG-CD1	-8.67	115.80	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	303	G	C8-N9-C4	-8.67	102.93	106.40
39	A3	68	C	O4'-C1'-N1	8.67	115.14	108.20
38	A1	1895	G	C6-C5-N7	-8.67	125.20	130.40
38	A1	1993	A	N3-C4-C5	-8.67	120.73	126.80
38	A1	2249	A	C4-C5-N7	-8.67	106.36	110.70
38	A1	2447	A	C5-C6-N6	-8.67	116.76	123.70
5	AS	102	ALA	N-CA-CB	8.67	122.23	110.10
11	B2	947	G	N9-C4-C5	-8.67	101.93	105.40
38	A1	2697	G	C5-C6-O6	-8.67	123.40	128.60
66	AY	17	ARG	NE-CZ-NH2	8.67	124.63	120.30
11	B2	1230	G	N1-C6-O6	8.67	125.10	119.90
38	A1	18	C	N3-C4-N4	8.67	124.07	118.00
38	A1	2188	C	C6-N1-C2	-8.67	116.83	120.30
38	A1	381	G	N1-C2-N3	-8.67	118.70	123.90
38	A1	730	C	C5-C4-N4	-8.67	114.13	120.20
38	A1	878	G	C5-C6-O6	-8.67	123.40	128.60
38	A1	1556	G	C5-C6-O6	-8.67	123.40	128.60
38	A1	2045	C	N1-C2-N3	-8.67	113.13	119.20
11	B2	847	A	C5-C6-N6	-8.66	116.77	123.70
38	A1	1123	A	C4-C5-C6	8.66	121.33	117.00
38	A1	2841	G	N1-C2-N3	-8.66	118.70	123.90
38	A1	492	A	C5-C6-N1	-8.66	113.37	117.70
38	A1	943	G	N3-C4-N9	8.66	131.20	126.00
38	A1	1354	G	N3-C4-C5	-8.66	124.27	128.60
38	A1	2056	A	C6-C5-N7	-8.66	126.24	132.30
60	AM	49	ARG	NE-CZ-NH1	8.66	124.63	120.30
11	B2	714	G	N1-C6-O6	8.66	125.09	119.90
11	B2	1158	G	C6-C5-N7	-8.66	125.20	130.40
38	A1	891	C	C5-C4-N4	-8.66	114.14	120.20
38	A1	1076	G	C5-C6-O6	-8.66	123.40	128.60
38	A1	2293	G	O4'-C1'-C2'	-8.66	97.14	105.80
38	A1	1642	G	C5-N7-C8	8.66	108.63	104.30
11	B2	1076	G	N1-C6-O6	8.66	125.09	119.90
38	A1	2377	C	C4-C5-C6	8.66	121.73	117.40
11	B2	1293	A	C4-C5-N7	-8.66	106.37	110.70
38	A1	1759	A	N1-C2-N3	8.66	133.63	129.30
11	B2	656	U	P-O3'-C3'	8.65	130.09	119.70
11	B2	885	G	N1-C2-N3	-8.65	118.71	123.90
11	B2	929	C	N3-C4-N4	8.65	124.06	118.00
38	A1	480	A	C4-C5-C6	8.65	121.33	117.00
38	A1	694	A	C8-N9-C4	8.65	109.26	105.80
38	A1	3040	G	C5-C6-N1	-8.65	107.17	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1252	G	O4'-C1'-N9	8.65	115.12	108.20
38	A1	1419	G	C5-C6-O6	-8.65	123.41	128.60
38	A1	1608	G	N1-C2-N3	-8.65	118.71	123.90
38	A1	2591	A	C5-C6-N1	-8.65	113.37	117.70
38	A1	1834	C	C4-C5-C6	8.65	121.73	117.40
11	B2	520	G	C6-N1-C2	8.65	130.29	125.10
38	A1	1766	A	N1-C2-N3	8.65	133.63	129.30
38	A1	2580	G	O4'-C1'-N9	8.65	115.12	108.20
38	A1	658	C	C6-N1-C2	-8.65	116.84	120.30
38	A1	1350	C	O4'-C1'-N1	8.65	115.12	108.20
38	A1	1430	A	C5-C6-N1	-8.65	113.38	117.70
38	A1	2592	U	C5-C6-N1	-8.65	118.38	122.70
38	A1	2792	G	N1-C2-N3	-8.65	118.71	123.90
38	A1	524	C	N3-C2-O2	8.65	127.95	121.90
10	B1	48	U	O4'-C1'-N1	8.65	115.12	108.20
38	A1	277	A	C5-C6-N1	-8.65	113.38	117.70
38	A1	839	A	N9-C4-C5	8.65	109.26	105.80
11	B2	1379	G	O4'-C1'-N9	8.65	115.12	108.20
38	A1	498	U	N3-C4-O4	8.65	125.45	119.40
38	A1	1372	C	C6-N1-C2	8.65	123.76	120.30
38	A1	1522	A	C4-C5-C6	8.65	121.32	117.00
38	A1	1683	C	O4'-C1'-N1	8.65	115.12	108.20
38	A1	1801	C	N3-C4-N4	8.65	124.05	118.00
38	A1	1863	G	O4'-C1'-N9	8.65	115.12	108.20
38	A1	2667	U	O4'-C1'-N1	8.65	115.12	108.20
11	B2	445	G	N1-C2-N3	-8.64	118.71	123.90
11	B2	503	G	C4-C5-N7	-8.64	107.34	110.80
11	B2	689	C	C6-N1-C2	8.64	123.76	120.30
11	B2	792	C	N3-C4-C5	-8.64	118.44	121.90
11	B2	1376	C	C6-N1-C2	-8.64	116.84	120.30
11	B2	1384	G	C8-N9-C4	-8.64	102.94	106.40
38	A1	667	C	C6-N1-C2	-8.64	116.84	120.30
38	A1	1128	G	N1-C2-N3	-8.64	118.71	123.90
38	A1	2363	G	C8-N9-C4	-8.64	102.94	106.40
49	Ae	21	ARG	NE-CZ-NH1	8.64	124.62	120.30
38	A1	1156	G	C5-C6-N1	-8.64	107.18	111.50
11	B2	731	A	N3-C4-N9	8.64	134.31	127.40
11	B2	831	A	C4-C5-C6	8.64	121.32	117.00
38	A1	1426	G	C5-C6-O6	-8.64	123.42	128.60
38	A1	1760	C	O4'-C1'-N1	8.64	115.11	108.20
11	B2	121	C	C6-N1-C2	-8.64	116.84	120.30
11	B2	858	A	O4'-C1'-N9	8.64	115.11	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	79	C	N3-C4-N4	8.64	124.05	118.00
38	A1	646	U	C5-C6-N1	8.64	127.02	122.70
38	A1	1753	G	N1-C2-N3	-8.64	118.72	123.90
38	A1	1119	A	C5-C6-N6	-8.64	116.79	123.70
38	A1	1143	A	C2-N3-C4	8.64	114.92	110.60
38	A1	1377	G	C5-C6-O6	-8.64	123.42	128.60
38	A1	1722	G	C8-N9-C4	-8.64	102.94	106.40
38	A1	2514	C	O4'-C1'-N1	8.64	115.11	108.20
38	A1	2778	A	C5-C6-N1	-8.64	113.38	117.70
38	A1	2892	A	N1-C2-N3	8.64	133.62	129.30
10	B1	41	C	N3-C4-N4	8.63	124.04	118.00
38	A1	2071	C	O4'-C1'-N1	8.64	115.11	108.20
11	B2	234	G	N1-C6-O6	8.63	125.08	119.90
11	B2	1338	C	C4-C5-C6	8.63	121.72	117.40
38	A1	1140	C	N3-C4-C5	-8.64	118.45	121.90
38	A1	2877	A	O4'-C1'-N9	8.64	115.11	108.20
38	A1	1168	A	C5-N7-C8	8.63	108.22	103.90
38	A1	1854	G	O4'-C1'-N9	8.63	115.11	108.20
38	A1	1112	G	O4'-C1'-N9	8.63	115.11	108.20
38	A1	2551	G	N3-C4-C5	8.63	132.92	128.60
11	B2	176	U	P-O5'-C5'	8.63	134.71	120.90
11	B2	744	A	C5-C6-N6	-8.63	116.80	123.70
11	B2	1425	C	N1-C1'-C2'	-8.63	102.51	112.00
26	BN	133	SER	N-CA-CB	8.63	123.45	110.50
38	A1	2294	A	N1-C6-N6	8.63	123.78	118.60
38	A1	2757	G	N1-C2-N3	-8.63	118.72	123.90
38	A1	387	A	N3-C4-C5	-8.63	120.76	126.80
38	A1	1827	A	C4-C5-C6	8.63	121.31	117.00
38	A1	2639	G	N9-C4-C5	8.63	108.85	105.40
38	A1	2794	G	C5-C6-O6	-8.63	123.42	128.60
11	B2	871	A	N1-C6-N6	8.63	123.78	118.60
38	A1	842	C	O4'-C1'-N1	8.63	115.10	108.20
38	A1	358	C	N3-C4-N4	8.63	124.04	118.00
38	A1	1890	U	O4'-C1'-N1	8.63	115.10	108.20
38	A1	2045	C	N3-C4-C5	-8.63	118.45	121.90
38	A1	2441	A	N1-C2-N3	8.63	133.61	129.30
38	A1	2509	A	C5-C6-N6	-8.63	116.80	123.70
11	B2	161	C	O4'-C1'-N1	8.62	115.10	108.20
11	B2	715	C	N1-C2-O2	-8.63	113.72	118.90
11	B2	898	G	N1-C2-N3	-8.63	118.72	123.90
11	B2	1016	G	C5-C6-O6	-8.62	123.42	128.60
38	A1	2506	G	N1-C6-O6	8.63	125.08	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	BK	134	TYR	CB-CG-CD1	8.62	126.17	121.00
38	A1	362	A	N9-C4-C5	-8.62	102.35	105.80
38	A1	670	G	N1-C6-O6	8.62	125.07	119.90
38	A1	922	C	C1'-O4'-C4'	-8.62	103.00	109.90
38	A1	1850	C	N1-C2-O2	-8.63	113.72	118.90
38	A1	2767	C	N3-C4-C5	-8.62	118.45	121.90
11	B2	890	C	C2-N3-C4	8.62	124.21	119.90
11	B2	754	G	C6-C5-N7	-8.62	125.23	130.40
11	B2	1345	G	N3-C2-N2	8.62	125.94	119.90
38	A1	2338	A	C4-C5-C6	8.62	121.31	117.00
38	A1	2772	U	N3-C4-O4	8.62	125.44	119.40
62	AO	38	ARG	NE-CZ-NH1	8.62	124.61	120.30
11	B2	524	U	N3-C4-O4	8.62	125.43	119.40
11	B2	597	C	N3-C4-N4	8.62	124.03	118.00
11	B2	958	G	O4'-C1'-N9	8.62	115.10	108.20
54	AI	100	TYR	CB-CG-CD2	8.62	126.17	121.00
11	B2	210	A	C5-N7-C8	8.62	108.21	103.90
11	B2	1399	G	N1-C6-O6	8.62	125.07	119.90
11	B2	1444	G	C5-C6-O6	-8.62	123.43	128.60
13	BA	27	PHE	CB-CG-CD2	8.62	126.83	120.80
38	A1	1161	A	N9-C4-C5	8.62	109.25	105.80
38	A1	1296	A	O4'-C1'-N9	8.62	115.09	108.20
11	B2	576	C	C3'-C2'-C1'	8.62	108.39	101.50
38	A1	668	G	C6-C5-N7	-8.62	125.23	130.40
38	A1	900	C	N3-C4-C5	-8.62	118.45	121.90
11	B2	1294	G	C5-C6-O6	-8.61	123.43	128.60
25	BM	20	TYR	CB-CG-CD2	-8.61	115.83	121.00
38	A1	456	G	N9-C4-C5	8.62	108.85	105.40
38	A1	551	A	C5-N7-C8	8.61	108.21	103.90
38	A1	2480	G	C8-N9-C4	8.62	109.85	106.40
11	B2	325	A	C1'-O4'-C4'	8.61	116.79	109.90
38	A1	1764	G	C5-C6-N1	-8.61	107.19	111.50
38	A1	2818	C	O4'-C1'-N1	8.61	115.09	108.20
11	B2	16	G	N7-C8-N9	8.61	117.41	113.10
11	B2	427	G	N3-C4-N9	8.61	131.17	126.00
11	B2	826	C	O4'-C1'-N1	8.61	115.09	108.20
11	B2	928	A	C2-N3-C4	-8.61	106.30	110.60
38	A1	194	G	C4-C5-N7	8.61	114.25	110.80
38	A1	770	G	C5-C6-N1	-8.61	107.19	111.50
38	A1	1621	G	O4'-C1'-N9	8.61	115.09	108.20
38	A1	1794	C	N3-C4-C5	8.61	125.34	121.90
38	A1	1838	C	C2-N3-C4	8.61	124.21	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
63	AP	19	ARG	NE-CZ-NH2	-8.61	115.99	120.30
38	A1	422	G	C5-C6-O6	-8.61	123.43	128.60
38	A1	236	G	O4'-C1'-N9	8.61	115.09	108.20
38	A1	518	A	C5-C6-N1	-8.61	113.39	117.70
38	A1	1877	C	N3-C4-N4	8.61	124.03	118.00
38	A1	2773	A	C4-C5-N7	-8.61	106.40	110.70
11	B2	1096	G	P-O5'-C5'	8.61	134.67	120.90
38	A1	269	C	N3-C4-N4	8.61	124.02	118.00
38	A1	1306	A	O4'-C1'-N9	8.61	115.09	108.20
38	A1	1430	A	C4-C5-C6	8.61	121.30	117.00
38	A1	2403	G	C6-C5-N7	-8.61	125.24	130.40
39	A3	62	A	O4'-C1'-N9	8.61	115.08	108.20
38	A1	1573	A	C6-C5-N7	-8.61	126.28	132.30
38	A1	2797	C	C5-C4-N4	-8.61	114.18	120.20
11	B2	936	A	C4-C5-C6	8.60	121.30	117.00
11	B2	1380	C	N3-C4-C5	-8.60	118.46	121.90
11	B2	1424	G	C5-C6-O6	8.60	133.76	128.60
39	A3	6	G	O4'-C1'-N9	8.60	115.08	108.20
11	B2	1031	G	O4'-C1'-N9	8.60	115.08	108.20
23	BK	127	ARG	NE-CZ-NH1	8.60	124.60	120.30
27	BO	111	ARG	NE-CZ-NH1	8.60	124.60	120.30
38	A1	1956	G	C2-N3-C4	8.60	116.20	111.90
38	A1	229	G	O4'-C1'-N9	8.60	115.08	108.20
38	A1	1790	G	C5-C6-N1	-8.60	107.20	111.50
11	B2	61	A	N1-C6-N6	8.60	123.76	118.60
38	A1	815	U	N3-C4-O4	8.60	125.42	119.40
11	B2	1358	A	C4-C5-N7	-8.60	106.40	110.70
38	A1	695	G	N3-C4-C5	8.60	132.90	128.60
38	A1	1493	C	C6-N1-C2	-8.60	116.86	120.30
38	A1	2776	A	C2-N3-C4	-8.60	106.30	110.60
38	A1	2749	G	N1-C6-O6	8.60	125.06	119.90
38	A1	2763	U	O4'-C1'-N1	8.60	115.08	108.20
39	A3	111	G	O4'-C1'-N9	8.60	115.08	108.20
11	B2	1	A	C6-N1-C2	8.60	123.76	118.60
11	B2	313	G	N1-C2-N3	-8.60	118.74	123.90
11	B2	1314	C	C2-N3-C4	8.60	124.20	119.90
11	B2	1457	A	C5-N7-C8	8.60	108.20	103.90
38	A1	384	G	O4'-C1'-N9	8.60	115.08	108.20
38	A1	2253	G	C6-C5-N7	-8.60	125.24	130.40
38	A1	402	G	C5-C6-N1	-8.60	107.20	111.50
38	A1	1193	G	N1-C2-N3	-8.60	118.74	123.90
38	A1	1416	G	O4'-C1'-N9	8.60	115.08	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2405	U	P-O3'-C3'	-8.60	109.39	119.70
11	B2	688	C	N1-C2-O2	-8.59	113.74	118.90
32	BT	49	ARG	NE-CZ-NH1	8.59	124.60	120.30
38	A1	191	U	N1-C2-N3	-8.59	109.75	114.90
38	A1	382	G	N3-C2-N2	8.59	125.92	119.90
38	A1	1124	G	C8-N9-C4	8.59	109.84	106.40
38	A1	491	G	C6-C5-N7	-8.59	125.25	130.40
38	A1	1782	C	P-O3'-C3'	8.59	130.01	119.70
38	A1	1811	G	N1-C2-N3	-8.59	118.75	123.90
38	A1	2690	U	C5-C4-O4	-8.59	120.74	125.90
38	A1	2761	G	C2-N3-C4	8.59	116.20	111.90
11	B2	611	A	C5-C6-N6	-8.59	116.83	123.70
11	B2	1367	C	C5-C4-N4	-8.59	114.19	120.20
11	B2	21	A	O4'-C1'-N9	8.59	115.07	108.20
38	A1	673	A	O4'-C1'-N9	8.59	115.07	108.20
38	A1	1911	G	C5-C6-N1	-8.59	107.20	111.50
38	A1	2856	G	N1-C6-O6	8.59	125.06	119.90
38	A1	1703	G	C4-C5-C6	8.59	123.95	118.80
38	A1	2570	A	C8-N9-C4	-8.59	102.36	105.80
11	B2	526	A	C8-N9-C4	8.59	109.23	105.80
38	A1	327	G	C6-N1-C2	-8.59	119.95	125.10
38	A1	1242	A	C2-N3-C4	-8.59	106.31	110.60
38	A1	317	A	N7-C8-N9	-8.59	109.51	113.80
38	A1	1123	A	C8-N9-C4	-8.59	102.36	105.80
38	A1	1799	G	N1-C6-O6	8.59	125.05	119.90
38	A1	2386	U	N3-C4-C5	-8.59	109.45	114.60
38	A1	2136	G	O4'-C1'-N9	8.59	115.07	108.20
38	A1	2287	C	C6-N1-C2	-8.59	116.87	120.30
39	A3	105	G	O4'-C1'-N9	8.59	115.07	108.20
11	B2	1208	A	C5'-C4'-O4'	8.58	119.40	109.10
38	A1	2338	A	C5-N7-C8	8.58	108.19	103.90
38	A1	2470	U	C6-N1-C2	-8.58	115.85	121.00
38	A1	2522	C	O4'-C1'-N1	8.58	115.06	108.20
38	A1	2713	A	N9-C4-C5	8.58	109.23	105.80
38	A1	3020	G	C4-C5-N7	-8.58	107.37	110.80
11	B2	1174	A	C8-N9-C4	-8.58	102.37	105.80
11	B2	1287	G	O4'-C1'-N9	8.58	115.06	108.20
38	A1	1338	G	N1-C6-O6	8.58	125.05	119.90
38	A1	1861	G	C5-C6-O6	-8.58	123.45	128.60
38	A1	3033	G	C5-C6-N1	-8.58	107.21	111.50
11	B2	1408	C	N3-C4-C5	-8.58	118.47	121.90
11	B2	362	C	N3-C4-N4	8.58	124.00	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	419	G	O4'-C1'-N9	8.58	115.06	108.20
11	B2	835	C	N3-C4-N4	8.58	124.00	118.00
11	B2	1103	G	N3-C2-N2	8.58	125.90	119.90
38	A1	496	A	N7-C8-N9	-8.58	109.51	113.80
38	A1	982	G	N9-C4-C5	8.58	108.83	105.40
38	A1	2070	U	O4'-C1'-N1	8.58	115.06	108.20
38	A1	2181	G	C6-C5-N7	-8.58	125.25	130.40
38	A1	913	G	C6-C5-N7	-8.57	125.25	130.40
11	B2	100	A	C5-C6-N6	-8.57	116.84	123.70
11	B2	212	G	N1-C2-N3	-8.57	118.75	123.90
33	BU	53	TYR	CB-CG-CD1	8.57	126.14	121.00
38	A1	678	G	N1-C2-N3	-8.57	118.75	123.90
38	A1	1824	G	N1-C2-N3	-8.57	118.75	123.90
38	A1	2296	A	C2-N3-C4	8.57	114.89	110.60
38	A1	394	A	C4-C5-C6	8.57	121.29	117.00
38	A1	470	A	C8-N9-C4	-8.57	102.37	105.80
38	A1	797	C	C5-C6-N1	8.57	125.29	121.00
38	A1	2250	G	N7-C8-N9	8.57	117.39	113.10
38	A1	2351	G	N1-C2-N3	-8.57	118.76	123.90
11	B2	248	U	P-O3'-C3'	8.57	129.99	119.70
38	A1	604	A	N1-C6-N6	8.57	123.74	118.60
38	A1	2300	C	C4'-C3'-C2'	-8.57	94.03	102.60
38	A1	724	G	N1-C6-O6	8.57	125.04	119.90
38	A1	1083	G	C4-C5-C6	8.57	123.94	118.80
38	A1	1153	U	N1-C2-O2	-8.57	116.80	122.80
38	A1	2086	C	N3-C4-C5	-8.57	118.47	121.90
38	A1	2220	C	N3-C4-C5	-8.57	118.47	121.90
38	A1	2299	G	C5-C6-O6	-8.57	123.46	128.60
38	A1	2302	C	N3-C4-C5	-8.57	118.47	121.90
38	A1	2825	A	N1-C6-N6	8.57	123.74	118.60
38	A1	1237	A	N1-C2-N3	8.57	133.58	129.30
38	A1	2393	G	N3-C4-N9	-8.57	120.86	126.00
38	A1	2809	G	O4'-C1'-N9	8.57	115.06	108.20
38	A1	509	A	C4-C5-C6	8.57	121.28	117.00
11	B2	80	A	C6-C5-N7	-8.56	126.31	132.30
11	B2	554	C	O4'-C1'-N1	8.56	115.05	108.20
11	B2	603	G	C4-C5-C6	8.56	123.94	118.80
11	B2	1447	A	C5-C6-N6	-8.56	116.85	123.70
38	A1	223	U	O4'-C1'-N1	8.56	115.05	108.20
38	A1	305	G	C5-C6-O6	-8.56	123.46	128.60
38	A1	1784	G	C5-C6-O6	-8.56	123.46	128.60
38	A1	1834	C	C4'-C3'-C2'	-8.56	94.03	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1894	A	C5-N7-C8	8.56	108.18	103.90
38	A1	2395	C	C5-C4-N4	-8.56	114.21	120.20
38	A1	2724	A	C8-N9-C4	-8.56	102.37	105.80
11	B2	104	A	C4-C5-C6	8.56	121.28	117.00
11	B2	832	G	N1-C2-N3	-8.56	118.76	123.90
38	A1	346	U	N3-C4-O4	8.56	125.39	119.40
11	B2	530	G	C8-N9-C4	8.56	109.82	106.40
11	B2	1157	G	N3-C4-C5	-8.56	124.32	128.60
11	B2	1174	A	N7-C8-N9	8.56	118.08	113.80
38	A1	165	G	N3-C2-N2	8.56	125.89	119.90
38	A1	327	G	N1-C6-O6	8.56	125.04	119.90
38	A1	359	C	C5-C6-N1	8.56	125.28	121.00
11	B2	372	G	C5-N7-C8	-8.56	100.02	104.30
11	B2	1100	G	C4-C5-C6	8.56	123.94	118.80
10	B1	45	G	O4'-C1'-N9	8.56	115.05	108.20
11	B2	624	G	N9-C4-C5	8.56	108.82	105.40
11	B2	1334	A	N9-C4-C5	8.56	109.22	105.80
38	A1	667	C	N1-C2-O2	-8.56	113.77	118.90
38	A1	2226	G	N1-C6-O6	8.56	125.03	119.90
38	A1	3018	C	N3-C4-C5	-8.56	118.48	121.90
11	B2	97	C	C5-C4-N4	-8.55	114.21	120.20
11	B2	270	A	N1-C2-N3	8.56	133.58	129.30
38	A1	903	C	C6-N1-C2	-8.56	116.88	120.30
11	B2	729	G	C5-C6-O6	-8.55	123.47	128.60
38	A1	630	G	O4'-C1'-N9	8.55	115.04	108.20
11	B2	353	G	N7-C8-N9	8.55	117.38	113.10
23	BK	43	PHE	CB-CG-CD2	8.55	126.79	120.80
11	B2	65	G	N3-C4-C5	-8.55	124.33	128.60
11	B2	103	A	C5-C6-N6	-8.55	116.86	123.70
11	B2	247	G	N3-C2-N2	8.55	125.89	119.90
38	A1	1855	G	N1-C6-O6	8.55	125.03	119.90
38	A1	2052	A	N7-C8-N9	-8.55	109.52	113.80
38	A1	2145	G	C4-C5-N7	8.55	114.22	110.80
38	A1	2683	G	C8-N9-C4	-8.55	102.98	106.40
39	A3	47	G	O4'-C1'-N9	8.55	115.04	108.20
10	B1	63	C	P-O5'-C5'	8.55	134.58	120.90
38	A1	990	G	C8-N9-C4	-8.55	102.98	106.40
38	A1	1039	C	C4-C5-C6	8.55	121.67	117.40
38	A1	1229	U	C2-N3-C4	-8.55	121.87	127.00
38	A1	1917	U	N3-C4-O4	8.55	125.38	119.40
63	AP	109	ARG	NE-CZ-NH2	-8.55	116.03	120.30
11	B2	306	C	O4'-C1'-N1	8.54	115.03	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	336	C	O4'-C1'-N1	8.54	115.03	108.20
11	B2	1138	G	N7-C8-N9	8.54	117.37	113.10
38	A1	275	C	C5-C6-N1	8.54	125.27	121.00
38	A1	307	C	N3-C4-N4	8.54	123.98	118.00
38	A1	818	A	C5-N7-C8	8.54	108.17	103.90
38	A1	903	C	C5-C4-N4	-8.54	114.22	120.20
5	AS	23	ARG	NE-CZ-NH2	-8.54	116.03	120.30
11	B2	1156	A	N1-C2-N3	8.54	133.57	129.30
11	B2	1399	G	C6-N1-C2	-8.54	119.97	125.10
38	A1	38	U	N3-C2-O2	8.54	128.18	122.20
38	A1	1695	G	N9-C4-C5	-8.54	101.98	105.40
38	A1	1772	A	P-O5'-C5'	8.54	134.57	120.90
11	B2	1244	C	C6-N1-C2	8.54	123.72	120.30
15	BC	154	VAL	CA-CB-CG2	-8.54	98.09	110.90
11	B2	1001	A	C4-C5-C6	8.54	121.27	117.00
38	A1	224	G	C8-N9-C4	-8.54	102.98	106.40
38	A1	492	A	N1-C6-N6	8.54	123.72	118.60
38	A1	2078	A	C4-C5-N7	-8.54	106.43	110.70
38	A1	834	G	N3-C2-N2	8.54	125.88	119.90
38	A1	1165	C	P-O3'-C3'	8.54	129.94	119.70
38	A1	2474	A	C4-C5-C6	8.54	121.27	117.00
38	A1	1477	C	O4'-C1'-N1	8.54	115.03	108.20
38	A1	1668	G	C6-N1-C2	8.54	130.22	125.10
38	A1	2129	G	N9-C4-C5	8.54	108.81	105.40
38	A1	2151	C	N3-C4-C5	-8.53	118.49	121.90
38	A1	964	C	C5-C4-N4	-8.53	114.23	120.20
38	A1	1710	C	C4-C5-C6	-8.53	113.13	117.40
38	A1	1840	G	C2-N3-C4	-8.53	107.63	111.90
38	A1	2705	C	C6-N1-C2	8.53	123.71	120.30
11	B2	172	G	N3-C2-N2	8.53	125.87	119.90
11	B2	978	G	C5-N7-C8	8.53	108.56	104.30
38	A1	1933	U	O4'-C1'-N1	8.53	115.03	108.20
38	A1	2593	A	N1-C6-N6	8.53	123.72	118.60
11	B2	963	A	O4'-C4'-C3'	-8.53	95.47	104.00
11	B2	1394	G	C5-C6-O6	-8.53	123.48	128.60
38	A1	352	G	C8-N9-C4	8.53	109.81	106.40
38	A1	2871	A	N9-C4-C5	8.53	109.21	105.80
38	A1	3006	G	C5-C6-O6	-8.53	123.48	128.60
11	B2	80	A	C2-N3-C4	-8.52	106.34	110.60
38	A1	777	A	O4'-C1'-N9	8.52	115.02	108.20
38	A1	1260	C	C5-C4-N4	-8.52	114.23	120.20
38	A1	1404	G	C8-N9-C4	8.52	109.81	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	562	A	C2-N3-C4	8.52	114.86	110.60
11	B2	1220	G	C5-C6-O6	-8.52	123.49	128.60
38	A1	542	A	C5-N7-C8	8.52	108.16	103.90
38	A1	905	G	N7-C8-N9	-8.52	108.84	113.10
38	A1	1476	C	N3-C4-N4	8.52	123.97	118.00
5	AS	19	ARG	NE-CZ-NH1	8.52	124.56	120.30
11	B2	104	A	N1-C6-N6	8.52	123.71	118.60
11	B2	364	U	N3-C4-O4	8.52	125.36	119.40
11	B2	959	G	N1-C6-O6	8.52	125.01	119.90
11	B2	26	A	N9-C4-C5	8.52	109.21	105.80
11	B2	30	C	N3-C4-C5	-8.52	118.49	121.90
11	B2	1083	G	C4-C5-N7	-8.52	107.39	110.80
38	A1	463	A	N1-C6-N6	8.52	123.71	118.60
38	A1	788	A	O4'-C1'-N9	8.52	115.01	108.20
11	B2	184	G	N1-C6-O6	8.51	125.01	119.90
38	A1	757	C	C5-C6-N1	8.51	125.26	121.00
10	B1	49	C	N1-C2-O2	8.51	124.01	118.90
11	B2	1427	C	C5-C4-N4	-8.51	114.24	120.20
38	A1	2267	U	O4'-C1'-N1	8.51	115.01	108.20
38	A1	2495	A	N1-C2-N3	8.51	133.56	129.30
38	A1	2520	C	O4'-C1'-N1	8.51	115.01	108.20
11	B2	457	G	C4-C5-N7	8.51	114.20	110.80
38	A1	545	G	C4-C5-N7	8.51	114.20	110.80
11	B2	269	A	C6-N1-C2	8.51	123.70	118.60
11	B2	715	C	N3-C2-O2	8.51	127.86	121.90
11	B2	872	A	N9-C4-C5	8.51	109.20	105.80
11	B2	1351	U	C2-N3-C4	8.51	132.11	127.00
38	A1	291	A	N9-C4-C5	-8.51	102.40	105.80
38	A1	1065	C	O4'-C1'-N1	8.51	115.01	108.20
38	A1	1503	C	C4-C5-C6	8.51	121.66	117.40
38	A1	2275	G	C4'-C3'-C2'	-8.51	94.09	102.60
11	B2	1100	G	C4-N9-C1'	8.51	137.56	126.50
11	B2	1352	G	C4-C5-C6	8.51	123.91	118.80
38	A1	176	G	N1-C6-O6	8.51	125.01	119.90
38	A1	505	A	C4-C5-C6	8.51	121.25	117.00
38	A1	1268	A	C6-C5-N7	-8.51	126.34	132.30
38	A1	1304	G	C5-N7-C8	-8.51	100.05	104.30
38	A1	2582	C	N3-C4-N4	8.51	123.96	118.00
54	AI	89	ARG	NE-CZ-NH1	8.51	124.56	120.30
11	B2	1018	C	O4'-C1'-N1	8.51	115.01	108.20
11	B2	209	A	N1-C6-N6	8.51	123.70	118.60
11	B2	920	U	C5-C6-N1	8.51	126.95	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1020	G	C5-C6-O6	-8.51	123.50	128.60
11	B2	1144	G	C5-C6-O6	-8.51	123.50	128.60
38	A1	732	G	O4'-C1'-N9	8.51	115.00	108.20
38	A1	1113	G	O4'-C1'-N9	8.50	115.00	108.20
38	A1	2313	G	C5-C6-O6	-8.50	123.50	128.60
55	Ai	79	ARG	NE-CZ-NH2	8.50	124.55	120.30
11	B2	323	A	C6-C5-N7	-8.50	126.35	132.30
11	B2	826	C	N3-C4-C5	-8.50	118.50	121.90
38	A1	47	C	O4'-C1'-N1	8.50	115.00	108.20
38	A1	1465	A	C5-C6-N1	-8.50	113.45	117.70
38	A1	2135	C	O4'-C1'-N1	8.50	115.00	108.20
39	A3	125	U	C4-C5-C6	8.50	124.80	119.70
10	B1	44	G	C6-C5-N7	-8.50	125.30	130.40
11	B2	812	U	N3-C4-O4	-8.50	113.45	119.40
38	A1	2126	G	N9-C4-C5	8.50	108.80	105.40
11	B2	808	C	O4'-C1'-N1	8.50	115.00	108.20
38	A1	310	C	O4'-C1'-N1	8.50	115.00	108.20
38	A1	1048	C	N3-C4-C5	-8.50	118.50	121.90
38	A1	2955	G	C4-C5-N7	-8.50	107.40	110.80
39	A3	53	A	C4-C5-C6	8.50	121.25	117.00
10	B1	29	C	C2-N3-C4	8.50	124.15	119.90
11	B2	48	G	N3-C2-N2	8.50	125.85	119.90
11	B2	402	G	C5-N7-C8	8.50	108.55	104.30
38	A1	886	G	C3'-C2'-C1'	-8.50	94.70	101.50
38	A1	994	G	C4-C5-N7	-8.50	107.40	110.80
11	B2	631	C	C6-N1-C2	-8.50	116.90	120.30
38	A1	260	A	N1-C6-N6	8.50	123.70	118.60
38	A1	474	G	N1-C6-O6	8.50	125.00	119.90
38	A1	2890	A	C4-C5-C6	8.50	121.25	117.00
11	B2	136	A	C4-C5-N7	-8.49	106.45	110.70
11	B2	1261	U	N3-C4-C5	-8.49	109.50	114.60
38	A1	88	G	O4'-C1'-N9	8.49	115.00	108.20
38	A1	802	G	C6-N1-C2	8.49	130.20	125.10
39	A3	112	C	O4'-C1'-N1	8.49	115.00	108.20
11	B2	332	C	N3-C4-N4	8.49	123.94	118.00
38	A1	438	G	C5-C6-O6	-8.49	123.50	128.60
38	A1	1894	A	C4-C5-N7	-8.49	106.45	110.70
38	A1	1961	G	N1-C6-O6	8.49	125.00	119.90
38	A1	2057	G	N3-C4-C5	-8.49	124.35	128.60
39	A3	11	A	N1-C6-N6	8.49	123.70	118.60
11	B2	214	C	N3-C4-N4	8.49	123.94	118.00
11	B2	355	C	C5-C4-N4	-8.49	114.26	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	443	C	C6-N1-C2	-8.49	116.91	120.30
38	A1	328	G	C5-C6-N1	-8.49	107.25	111.50
38	A1	980	G	N1-C2-N3	-8.49	118.81	123.90
38	A1	1273	C	O4'-C1'-N1	8.49	114.99	108.20
11	B2	534	G	C5-C6-O6	-8.49	123.51	128.60
11	B2	905	A	C5-C6-N1	-8.49	113.46	117.70
38	A1	2830	C	O4'-C1'-N1	8.49	114.99	108.20
38	A1	1278	C	N3-C4-N4	8.48	123.94	118.00
11	B2	311	A	O4'-C1'-N9	8.48	114.99	108.20
11	B2	740	G	C5-C6-O6	-8.48	123.51	128.60
38	A1	1568	A	C5-C6-N1	-8.48	113.46	117.70
38	A1	873	G	P-O3'-C3'	8.48	129.88	119.70
38	A1	1561	G	C5-C6-N1	-8.48	107.26	111.50
38	A1	2176	G	N3-C2-N2	8.48	125.84	119.90
38	A1	2298	C	C3'-C2'-C1'	8.48	108.29	101.50
11	B2	414	G	O4'-C1'-N9	8.48	114.99	108.20
11	B2	1288	C	C6-N1-C2	8.48	123.69	120.30
38	A1	313	U	C5'-C4'-O4'	8.48	119.28	109.10
38	A1	314	A	N1-C6-N6	8.48	123.69	118.60
38	A1	2648	C	N3-C4-N4	8.48	123.94	118.00
11	B2	939	C	N3-C4-N4	8.48	123.94	118.00
11	B2	543	C	O4'-C1'-N1	8.48	114.98	108.20
38	A1	72	U	N3-C4-O4	8.48	125.33	119.40
38	A1	309	C	C5-C4-N4	-8.48	114.27	120.20
38	A1	328	G	C4-C5-C6	8.48	123.89	118.80
38	A1	2035	U	O4'-C1'-N1	8.48	114.98	108.20
38	A1	2214	U	N1-C2-N3	8.48	119.99	114.90
38	A1	389	C	C5-C6-N1	8.48	125.24	121.00
38	A1	771	G	P-O5'-C5'	8.48	134.46	120.90
38	A1	2315	G	N1-C2-N3	-8.48	118.81	123.90
38	A1	21	C	N3-C4-N4	8.47	123.93	118.00
38	A1	324	C	C6-N1-C2	-8.47	116.91	120.30
38	A1	1987	A	C8-N9-C4	8.47	109.19	105.80
11	B2	370	A	C4-C5-C6	8.47	121.24	117.00
11	B2	462	A	N1-C6-N6	8.47	123.68	118.60
11	B2	1128	U	C2-N1-C1'	8.47	127.87	117.70
11	B2	1473	A	C5-C6-N1	-8.47	113.46	117.70
38	A1	334	G	N1-C6-O6	8.47	124.98	119.90
38	A1	1156	G	C4-C5-C6	8.47	123.88	118.80
38	A1	1673	C	C5-C6-N1	8.47	125.24	121.00
38	A1	1716	G	O4'-C1'-N9	8.47	114.98	108.20
38	A1	1986	U	O4'-C1'-N1	8.47	114.98	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	152	G	O4'-C1'-N9	8.47	114.98	108.20
11	B2	399	A	O4'-C1'-N9	8.47	114.98	108.20
38	A1	1582	G	N9-C4-C5	-8.47	102.01	105.40
11	B2	362	C	P-O3'-C3'	8.47	129.86	119.70
38	A1	48	G	C6-C5-N7	-8.47	125.32	130.40
38	A1	983	G	P-O3'-C3'	8.47	129.87	119.70
38	A1	1720	G	C5-C6-N1	-8.47	107.26	111.50
38	A1	1840	G	N3-C4-N9	-8.47	120.92	126.00
48	AE	58	ARG	NE-CZ-NH2	-8.47	116.06	120.30
38	A1	2575	U	C5-C4-O4	-8.47	120.82	125.90
39	A3	74	U	C4-C5-C6	8.47	124.78	119.70
62	AO	15	ARG	NE-CZ-NH1	8.47	124.53	120.30
32	BT	106	PHE	CB-CG-CD1	-8.47	114.87	120.80
38	A1	2979	C	O4'-C1'-N1	8.47	114.97	108.20
38	A1	16	G	C2-N3-C4	8.47	116.13	111.90
38	A1	1507	A	C5-C6-N1	-8.47	113.47	117.70
38	A1	1775	G	N9-C4-C5	8.47	108.79	105.40
38	A1	2724	A	C5-C6-N6	-8.47	116.93	123.70
11	B2	567	A	C5-N7-C8	8.47	108.13	103.90
20	BH	88	ARG	N-CA-CB	8.47	125.84	110.60
11	B2	25	C	N3-C4-N4	8.46	123.92	118.00
11	B2	279	U	P-O3'-C3'	-8.46	109.54	119.70
11	B2	1125	C	O4'-C1'-N1	8.47	114.97	108.20
11	B2	872	A	C4-C5-N7	-8.46	106.47	110.70
38	A1	188	A	C5-C6-N6	-8.46	116.93	123.70
38	A1	571	G	C6-C5-N7	-8.47	125.32	130.40
38	A1	48	G	O4'-C1'-N9	8.46	114.97	108.20
38	A1	112	U	O4'-C1'-N1	8.46	114.97	108.20
38	A1	1213	G	C5-N7-C8	8.46	108.53	104.30
38	A1	1447	G	N1-C6-O6	8.46	124.98	119.90
38	A1	2857	C	O4'-C1'-N1	8.46	114.97	108.20
38	A1	2982	G	N1-C6-O6	8.46	124.98	119.90
11	B2	1306	A	O4'-C1'-N9	8.46	114.97	108.20
38	A1	855	G	N1-C6-O6	8.46	124.98	119.90
38	A1	1889	G	C2-N3-C4	8.46	116.13	111.90
38	A1	2440	C	N3-C4-N4	8.46	123.92	118.00
11	B2	317	A	C6-C5-N7	-8.46	126.38	132.30
11	B2	791	G	C2-N3-C4	8.46	116.13	111.90
11	B2	813	G	C4-C5-N7	8.46	114.18	110.80
38	A1	180	A	C6-C5-N7	-8.46	126.38	132.30
38	A1	1103	C	P-O5'-C5'	8.46	134.43	120.90
38	A1	1716	G	C5-C6-N1	-8.46	107.27	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1932	G	C5-N7-C8	-8.46	100.07	104.30
38	A1	2097	G	N3-C4-N9	8.46	131.07	126.00
38	A1	2441	A	N9-C4-C5	8.46	109.18	105.80
38	A1	2640	C	N3-C4-N4	8.46	123.92	118.00
11	B2	1004	U	C5-C6-N1	8.46	126.93	122.70
38	A1	1509	C	N3-C4-N4	8.46	123.92	118.00
38	A1	11	G	C4-C5-C6	8.45	123.87	118.80
38	A1	719	C	N3-C4-N4	8.46	123.92	118.00
38	A1	2357	U	N1-C2-N3	-8.46	109.83	114.90
38	A1	2398	C	O4'-C1'-N1	8.45	114.96	108.20
38	A1	402	G	O4'-C1'-N9	8.45	114.96	108.20
38	A1	871	G	N3-C4-N9	-8.45	120.93	126.00
38	A1	983	G	N1-C6-O6	8.45	124.97	119.90
38	A1	2254	U	N1-C2-O2	-8.45	116.89	122.80
38	A1	2335	G	O4'-C1'-N9	8.45	114.96	108.20
38	A1	2443	G	N1-C6-O6	8.45	124.97	119.90
39	A3	102	G	N3-C4-C5	-8.45	124.37	128.60
11	B2	872	A	N3-C4-C5	-8.45	120.89	126.80
38	A1	354	G	C6-C5-N7	-8.45	125.33	130.40
38	A1	655	C	N3-C4-C5	-8.45	118.52	121.90
38	A1	1048	C	N3-C4-N4	8.45	123.91	118.00
39	A3	77	A	C2-N3-C4	-8.45	106.38	110.60
3	Af	46	ARG	NE-CZ-NH2	-8.45	116.08	120.30
11	B2	991	C	C2-N3-C4	8.45	124.12	119.90
38	A1	110	A	N1-C6-N6	8.45	123.67	118.60
38	A1	268	C	N3-C4-C5	-8.45	118.52	121.90
11	B2	1441	G	N1-C6-O6	8.45	124.97	119.90
38	A1	1144	A	N7-C8-N9	8.45	118.02	113.80
38	A1	1566	G	C6-C5-N7	-8.45	125.33	130.40
38	A1	1703	G	O4'-C1'-N9	8.45	114.96	108.20
38	A1	2787	G	N3-C2-N2	8.45	125.81	119.90
38	A1	2819	C	P-O3'-C3'	8.45	129.84	119.70
39	A3	124	A	N9-C4-C5	-8.45	102.42	105.80
38	A1	40	G	C4-C5-N7	8.44	114.18	110.80
11	B2	465	C	N3-C4-C5	-8.44	118.52	121.90
38	A1	2527	G	C8-N9-C4	-8.44	103.02	106.40
38	A1	2872	G	C5-N7-C8	8.44	108.52	104.30
39	A3	48	A	C4-C5-C6	8.44	121.22	117.00
59	AL	26	ARG	NE-CZ-NH2	-8.44	116.08	120.30
11	B2	697	A	O4'-C1'-N9	8.44	114.95	108.20
11	B2	1405	C	C6-N1-C2	-8.44	116.92	120.30
38	A1	2850	G	N1-C6-O6	8.44	124.96	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2865	C	C4-C5-C6	8.44	121.62	117.40
11	B2	632	C	N3-C4-N4	8.44	123.91	118.00
11	B2	1067	G	P-O3'-C3'	8.44	129.83	119.70
22	BJ	1	MET	CG-SD-CE	-8.44	86.70	100.20
38	A1	1817	C	C2-N3-C4	8.44	124.12	119.90
38	A1	2377	C	N1-C2-O2	-8.44	113.84	118.90
38	A1	2990	G	N7-C8-N9	8.44	117.32	113.10
11	B2	114	A	C8-N9-C4	-8.44	102.43	105.80
11	B2	538	C	C2-N3-C4	8.44	124.12	119.90
38	A1	1158	G	N1-C6-O6	8.44	124.96	119.90
11	B2	641	A	C2-N3-C4	-8.44	106.38	110.60
11	B2	893	U	N3-C4-C5	-8.44	109.54	114.60
38	A1	948	C	C5-C6-N1	8.44	125.22	121.00
38	A1	1471	G	N3-C4-C5	8.44	132.82	128.60
38	A1	2083	G	C5-C6-O6	-8.44	123.54	128.60
39	A3	52	U	O4'-C1'-N1	8.44	114.95	108.20
38	A1	2277	G	C2-N3-C4	-8.44	107.68	111.90
11	B2	1170	C	N1-C2-O2	-8.43	113.84	118.90
38	A1	263	U	C5-C4-O4	-8.43	120.84	125.90
38	A1	969	U	O4'-C1'-N1	8.43	114.95	108.20
38	A1	1426	G	C4-C5-N7	8.43	114.17	110.80
38	A1	2794	G	C5-C6-N1	-8.43	107.28	111.50
39	A3	47	G	C3'-C2'-C1'	8.43	108.25	101.50
10	B1	74	A	O4'-C1'-N9	8.43	114.94	108.20
11	B2	324	C	N3-C4-N4	8.43	123.90	118.00
11	B2	714	G	C4-C5-C6	8.43	123.86	118.80
11	B2	1247	A	C5-C6-N6	-8.43	116.95	123.70
11	B2	1263	C	O4'-C1'-N1	8.43	114.94	108.20
16	BD	56	ARG	NE-CZ-NH2	-8.43	116.08	120.30
38	A1	421	C	C5-C4-N4	-8.43	114.30	120.20
38	A1	2455	G	N1-C2-N3	-8.43	118.84	123.90
38	A1	2616	C	C6-N1-C2	-8.43	116.93	120.30
11	B2	1495	U	C2-N3-C4	-8.43	121.94	127.00
38	A1	187	C	N3-C4-N4	8.43	123.90	118.00
38	A1	573	G	C8-N9-C4	8.43	109.77	106.40
38	A1	1162	C	C5'-C4'-O4'	8.43	119.22	109.10
38	A1	2155	C	C5'-C4'-C3'	-8.43	102.51	116.00
38	A1	2536	A	C4'-C3'-C2'	-8.43	94.17	102.60
38	A1	2972	G	N3-C2-N2	8.43	125.80	119.90
38	A1	1630	U	C6-N1-C2	8.43	126.06	121.00
11	B2	788	C	C2-N3-C4	8.43	124.11	119.90
38	A1	778	A	N1-C2-N3	8.43	133.51	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2463	G	C8-N9-C4	-8.43	103.03	106.40
11	B2	413	G	C5-N7-C8	8.42	108.51	104.30
11	B2	1071	C	O4'-C1'-N1	8.42	114.94	108.20
11	B2	1213	G	C4-C5-C6	8.42	123.85	118.80
11	B2	1439	G	C4-C5-N7	8.42	114.17	110.80
38	A1	1341	U	O4'-C1'-N1	8.42	114.94	108.20
38	A1	179	A	N9-C4-C5	8.42	109.17	105.80
38	A1	635	G	N1-C6-O6	8.42	124.95	119.90
38	A1	831	C	C2-N3-C4	8.42	124.11	119.90
43	AB	179	TYR	CB-CG-CD2	-8.42	115.95	121.00
10	B1	38	G	O4'-C1'-N9	8.42	114.94	108.20
11	B2	95	G	N3-C2-N2	8.42	125.80	119.90
11	B2	349	A	C2-N3-C4	-8.42	106.39	110.60
11	B2	1278	A	P-O3'-C3'	8.42	129.81	119.70
38	A1	1330	G	C2-N3-C4	8.42	116.11	111.90
38	A1	1761	C	N3-C4-C5	-8.42	118.53	121.90
38	A1	2593	A	C5-C6-N1	-8.42	113.49	117.70
39	A3	33	U	C5-C4-O4	-8.42	120.85	125.90
38	A1	1950	G	N1-C6-O6	8.42	124.95	119.90
38	A1	2091	U	O4'-C1'-N1	8.42	114.94	108.20
38	A1	2476	A	N1-C6-N6	8.42	123.65	118.60
9	AX	413	ARG	NE-CZ-NH1	8.42	124.51	120.30
11	B2	167	G	N1-C6-O6	8.42	124.95	119.90
38	A1	123	A	P-O3'-C3'	8.42	129.80	119.70
38	A1	985	A	C5-C6-N6	-8.42	116.97	123.70
38	A1	2417	G	N1-C6-O6	8.42	124.95	119.90
39	A3	11	A	C5-C6-N6	-8.42	116.97	123.70
39	A3	15	G	C4-C5-C6	8.42	123.85	118.80
38	A1	2179	G	N9-C4-C5	-8.41	102.03	105.40
10	B1	58	A	O4'-C1'-N9	8.41	114.93	108.20
38	A1	963	G	C2-N3-C4	8.41	116.11	111.90
11	B2	860	G	N9-C4-C5	8.41	108.77	105.40
11	B2	960	A	C4-C5-C6	8.41	121.21	117.00
38	A1	10	C	O4'-C1'-N1	8.41	114.93	108.20
38	A1	747	G	C5-C6-O6	-8.41	123.55	128.60
38	A1	2317	G	C4-C5-N7	8.41	114.17	110.80
39	A3	56	C	C2-N3-C4	8.41	124.11	119.90
58	Ak	209	ASP	CB-CG-OD2	-8.41	110.73	118.30
11	B2	120	C	C5-C6-N1	8.41	125.20	121.00
11	B2	450	A	C8-N9-C4	-8.41	102.44	105.80
11	B2	1398	U	O4'-C1'-N1	8.41	114.93	108.20
11	B2	1491	C	C2-N1-C1'	8.41	128.05	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	203	G	N1-C6-O6	8.41	124.95	119.90
38	A1	2390	G	N1-C6-O6	8.41	124.95	119.90
47	Ad	6	ARG	NE-CZ-NH2	-8.41	116.09	120.30
38	A1	17	C	O4'-C1'-N1	8.41	114.93	108.20
38	A1	460	C	N3-C4-N4	8.41	123.89	118.00
38	A1	528	G	N1-C2-N3	-8.41	118.85	123.90
38	A1	1106	C	C5-C6-N1	8.41	125.20	121.00
38	A1	1260	C	C4-C5-C6	8.41	121.61	117.40
38	A1	2104	G	C5-C6-O6	-8.41	123.55	128.60
11	B2	1019	A	N1-C6-N6	8.41	123.64	118.60
25	BM	114	ARG	NE-CZ-NH1	-8.41	116.10	120.30
38	A1	683	C	C6-N1-C2	-8.41	116.94	120.30
38	A1	1788	G	C5-C6-O6	-8.41	123.56	128.60
11	B2	663	G	N1-C6-O6	8.40	124.94	119.90
38	A1	1197	G	C8-N9-C4	-8.40	103.04	106.40
38	A1	1771	C	N3-C4-N4	8.40	123.88	118.00
38	A1	112	U	N3-C2-O2	8.40	128.08	122.20
38	A1	334	G	C5-C6-O6	-8.40	123.56	128.60
38	A1	357	G	O4'-C1'-N9	8.40	114.92	108.20
38	A1	793	C	O4'-C1'-N1	8.40	114.92	108.20
38	A1	1389	A	N1-C6-N6	8.40	123.64	118.60
38	A1	2520	C	N3-C2-O2	8.40	127.78	121.90
38	A1	2504	U	N1-C2-O2	-8.40	116.92	122.80
51	Ag	3	ARG	NE-CZ-NH1	-8.40	116.10	120.30
11	B2	394	C	C6-N1-C2	8.40	123.66	120.30
10	B1	76	C	O4'-C1'-N1	8.40	114.92	108.20
11	B2	163	C	C5-C6-N1	8.40	125.20	121.00
11	B2	1399	G	C5-C6-O6	-8.40	123.56	128.60
38	A1	643	G	N1-C6-O6	8.40	124.94	119.90
38	A1	1031	C	N3-C4-N4	8.40	123.88	118.00
38	A1	1129	G	C5-C6-O6	-8.40	123.56	128.60
38	A1	1270	G	C4-C5-N7	8.40	114.16	110.80
38	A1	1428	G	N9-C4-C5	8.40	108.76	105.40
38	A1	2846	A	N1-C6-N6	8.40	123.64	118.60
4	AQ	38	ARG	NE-CZ-NH1	-8.40	116.10	120.30
11	B2	352	A	C4-C5-C6	8.40	121.20	117.00
11	B2	816	G	C6-C5-N7	-8.40	125.36	130.40
11	B2	848	G	C5-C6-O6	-8.40	123.56	128.60
11	B2	1055	C	O4'-C1'-N1	8.40	114.92	108.20
38	A1	1445	G	O4'-C1'-N9	8.40	114.92	108.20
38	A1	1945	C	O4'-C1'-N1	8.40	114.92	108.20
11	B2	853	G	N3-C4-C5	-8.40	124.40	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1311	C	O4'-C1'-N1	8.40	114.92	108.20
38	A1	50	C	N3-C4-C5	-8.40	118.54	121.90
38	A1	70	G	C6-C5-N7	-8.40	125.36	130.40
38	A1	338	A	C8-N9-C4	-8.40	102.44	105.80
38	A1	955	A	C4-C5-C6	8.40	121.20	117.00
38	A1	2103	C	N3-C4-C5	-8.40	118.54	121.90
38	A1	2864	G	N1-C2-N3	-8.40	118.86	123.90
11	B2	232	G	O4'-C1'-N9	8.39	114.92	108.20
11	B2	303	G	C5-C6-O6	-8.39	123.56	128.60
38	A1	227	G	C8-N9-C4	-8.39	103.04	106.40
38	A1	692	C	C5-C6-N1	8.39	125.20	121.00
38	A1	747	G	C6-C5-N7	-8.39	125.36	130.40
38	A1	890	G	N3-C4-C5	-8.39	124.40	128.60
38	A1	2377	C	N3-C4-N4	8.39	123.88	118.00
38	A1	1070	G	N1-C6-O6	8.39	124.94	119.90
38	A1	1664	G	N1-C6-O6	8.39	124.94	119.90
11	B2	914	U	C4-C5-C6	8.39	124.73	119.70
11	B2	1458	A	P-O3'-C3'	8.39	129.77	119.70
38	A1	31	G	C4-C5-C6	8.39	123.83	118.80
38	A1	571	G	O4'-C1'-N9	8.39	114.91	108.20
38	A1	1027	A	N9-C4-C5	8.39	109.16	105.80
38	A1	1401	G	N1-C6-O6	8.39	124.93	119.90
38	A1	1530	A	N1-C2-N3	8.39	133.50	129.30
38	A1	2608	U	C2-N3-C4	8.39	132.03	127.00
11	B2	192	G	C5-N7-C8	-8.39	100.11	104.30
5	AS	133	PHE	CB-CG-CD2	8.39	126.67	120.80
11	B2	94	C	N3-C4-N4	8.39	123.87	118.00
11	B2	564	C	N3-C4-N4	8.39	123.87	118.00
11	B2	665	G	C5-C6-O6	-8.39	123.57	128.60
38	A1	75	G	O4'-C1'-N9	8.39	114.91	108.20
38	A1	124	C	N3-C4-N4	8.39	123.87	118.00
38	A1	818	A	C5-C6-N1	-8.39	113.51	117.70
38	A1	2060	A	C5-C6-N6	-8.39	116.99	123.70
39	A3	35	A	C5-C6-N1	-8.39	113.51	117.70
11	B2	112	G	P-O3'-C3'	8.39	129.76	119.70
11	B2	766	G	C6-C5-N7	-8.39	125.37	130.40
10	B1	40	U	N3-C2-O2	8.38	128.07	122.20
11	B2	1221	A	C5-C6-N6	-8.38	116.99	123.70
38	A1	1553	G	C5-N7-C8	-8.39	100.11	104.30
38	A1	2545	A	N9-C4-C5	-8.38	102.45	105.80
38	A1	2654	C	C6-N1-C2	-8.38	116.95	120.30
38	A1	2996	A	C8-N9-C4	-8.38	102.45	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	383	C	N3-C4-C5	-8.38	118.55	121.90
11	B2	1232	G	C5-C6-O6	-8.38	123.57	128.60
11	B2	1286	C	O4'-C1'-N1	8.38	114.91	108.20
38	A1	2216	G	N1-C6-O6	8.38	124.93	119.90
11	B2	103	A	C5-C6-N1	-8.38	113.51	117.70
11	B2	317	A	N1-C6-N6	8.38	123.63	118.60
38	A1	326	C	C5-C4-N4	-8.38	114.33	120.20
11	B2	362	C	C6-N1-C2	-8.38	116.95	120.30
11	B2	1414	G	C4-C5-N7	8.38	114.15	110.80
38	A1	247	A	C5-C6-N6	-8.38	117.00	123.70
38	A1	895	C	C2-N3-C4	8.38	124.09	119.90
38	A1	933	G	O4'-C1'-N9	8.38	114.91	108.20
38	A1	2009	G	N3-C4-C5	8.38	132.79	128.60
38	A1	2567	C	C6-N1-C2	-8.38	116.95	120.30
38	A1	2733	A	P-O3'-C3'	8.38	129.76	119.70
11	B2	209	A	C6-C5-N7	-8.38	126.44	132.30
11	B2	261	G	C2-N3-C4	8.38	116.09	111.90
38	A1	1081	U	O4'-C1'-N1	8.38	114.90	108.20
38	A1	2199	U	C5-C6-N1	8.38	126.89	122.70
11	B2	762	G	N3-C2-N2	8.38	125.76	119.90
11	B2	1092	G	O4'-C1'-N9	8.38	114.90	108.20
38	A1	410	C	N3-C4-C5	-8.38	118.55	121.90
38	A1	650	C	C6-N1-C2	-8.38	116.95	120.30
38	A1	1503	C	C5'-C4'-C3'	8.38	129.40	116.00
11	B2	372	G	C6-C5-N7	-8.37	125.38	130.40
11	B2	481	C	C2-N3-C4	8.38	124.09	119.90
38	A1	2986	G	N1-C6-O6	8.38	124.93	119.90
39	A3	75	G	C5-N7-C8	8.38	108.49	104.30
11	B2	212	G	N3-C4-C5	-8.37	124.41	128.60
38	A1	1083	G	N1-C2-N2	8.37	123.74	116.20
38	A1	2481	G	N3-C4-C5	-8.37	124.41	128.60
11	B2	619	A	C5-N7-C8	8.37	108.08	103.90
11	B2	1240	A	C5-C6-N6	-8.37	117.00	123.70
38	A1	234	G	C6-C5-N7	-8.37	125.38	130.40
38	A1	790	U	C5-C4-O4	-8.37	120.88	125.90
38	A1	1185	A	C8-N9-C4	-8.37	102.45	105.80
38	A1	2157	U	C6-N1-C2	-8.37	115.98	121.00
11	B2	31	U	C6-N1-C2	-8.37	115.98	121.00
38	A1	365	G	N3-C2-N2	8.37	125.76	119.90
38	A1	532	G	C4-C5-N7	-8.37	107.45	110.80
38	A1	824	C	C5-C4-N4	-8.37	114.34	120.20
38	A1	2947	G	C5-C6-N1	-8.37	107.32	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
62	AO	65	ARG	NE-CZ-NH2	-8.37	116.11	120.30
11	B2	1099	A	P-O3'-C3'	8.37	129.74	119.70
11	B2	1181	G	C4-C5-N7	-8.37	107.45	110.80
11	B2	1209	C	C2-N3-C4	8.37	124.08	119.90
38	A1	2835	A	N7-C8-N9	-8.37	109.62	113.80
38	A1	28	A	C5-C6-N1	-8.36	113.52	117.70
38	A1	1377	G	N3-C2-N2	8.37	125.76	119.90
38	A1	2948	A	C5-C6-N1	-8.37	113.52	117.70
38	A1	1380	G	C5-C6-O6	-8.36	123.58	128.60
11	B2	1005	G	O4'-C1'-N9	8.36	114.89	108.20
11	B2	641	A	N1-C6-N6	8.36	123.62	118.60
11	B2	1114	G	C5-N7-C8	-8.36	100.12	104.30
38	A1	289	G	N1-C2-N3	-8.36	118.88	123.90
38	A1	904	G	N7-C8-N9	-8.36	108.92	113.10
38	A1	333	A	C8-N9-C4	-8.36	102.45	105.80
38	A1	556	G	N3-C2-N2	-8.36	114.05	119.90
38	A1	786	G	C5-C6-N1	-8.36	107.32	111.50
38	A1	2658	G	N7-C8-N9	-8.36	108.92	113.10
58	Ak	82	TYR	CB-CG-CD1	-8.36	115.98	121.00
11	B2	544	C	O4'-C1'-N1	8.36	114.89	108.20
11	B2	1205	G	N9-C4-C5	8.36	108.74	105.40
11	B2	369	A	N1-C6-N6	8.36	123.61	118.60
11	B2	526	A	N7-C8-N9	-8.36	109.62	113.80
38	A1	48	G	C4-C5-C6	8.36	123.82	118.80
38	A1	617	G	N3-C2-N2	8.36	125.75	119.90
38	A1	814	G	N3-C2-N2	8.36	125.75	119.90
11	B2	1202	G	C6-C5-N7	-8.36	125.39	130.40
38	A1	447	G	O4'-C1'-N9	8.36	114.88	108.20
38	A1	804	C	O4'-C1'-N1	8.36	114.89	108.20
38	A1	932	C	C2-N3-C4	8.36	124.08	119.90
38	A1	504	G	C4-C5-C6	8.36	123.81	118.80
38	A1	717	A	C2-N3-C4	-8.36	106.42	110.60
38	A1	2221	A	N7-C8-N9	-8.36	109.62	113.80
10	B1	55	U	P-O5'-C5'	8.35	134.27	120.90
11	B2	610	G	C5-N7-C8	8.35	108.48	104.30
11	B2	1090	C	C3'-C2'-C1'	8.35	108.18	101.50
38	A1	843	C	C5-C4-N4	-8.35	114.35	120.20
38	A1	1750	C	N3-C2-O2	-8.35	116.05	121.90
38	A1	2960	G	N1-C2-N3	-8.35	118.89	123.90
11	B2	1123	G	C5-N7-C8	8.35	108.48	104.30
11	B2	1181	G	C5-C6-N1	-8.35	107.32	111.50
38	A1	2478	G	C5-C6-O6	-8.35	123.59	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1388	G	C2-N3-C4	8.35	116.08	111.90
38	A1	1408	G	O4'-C1'-C2'	-8.35	97.45	105.80
38	A1	1656	C	N3-C4-C5	-8.35	118.56	121.90
38	A1	1704	C	O5'-P-OP2	-8.35	98.18	105.70
11	B2	38	G	O4'-C1'-N9	8.35	114.88	108.20
38	A1	1198	G	N9-C4-C5	-8.35	102.06	105.40
10	B1	68	C	N3-C4-C5	-8.35	118.56	121.90
10	B1	74	A	C5-C6-N6	-8.35	117.02	123.70
11	B2	222	G	C2-N3-C4	8.35	116.08	111.90
11	B2	695	G	C5-C6-O6	-8.35	123.59	128.60
11	B2	516	A	C4-C5-C6	8.35	121.17	117.00
38	A1	115	C	C6-N1-C2	-8.35	116.96	120.30
38	A1	1510	U	C5-C4-O4	-8.35	120.89	125.90
38	A1	1869	U	O4'-C1'-N1	8.35	114.88	108.20
38	A1	2355	G	C5-C6-O6	-8.35	123.59	128.60
38	A1	1804	G	N1-C6-O6	8.35	124.91	119.90
11	B2	369	A	C8-N9-C4	-8.35	102.46	105.80
11	B2	676	G	N9-C4-C5	-8.35	102.06	105.40
38	A1	627	G	C8-N9-C4	-8.35	103.06	106.40
38	A1	909	A	N9-C4-C5	8.35	109.14	105.80
38	A1	1913	C	C2-N3-C4	8.35	124.07	119.90
38	A1	2856	G	C6-N1-C2	8.35	130.11	125.10
11	B2	936	A	C5-C6-N6	-8.34	117.03	123.70
11	B2	1486	A	P-O3'-C3'	8.34	129.71	119.70
38	A1	1485	A	C5-C6-N1	-8.34	113.53	117.70
38	A1	1707	A	O4'-C1'-N9	8.34	114.88	108.20
38	A1	631	G	N3-C2-N2	8.34	125.74	119.90
11	B2	631	C	C2-N3-C4	8.34	124.07	119.90
11	B2	731	A	C6-C5-N7	-8.34	126.46	132.30
38	A1	836	U	O4'-C1'-N1	8.34	114.87	108.20
38	A1	913	G	O4'-C1'-N9	8.34	114.87	108.20
11	B2	1055	C	N1-C2-O2	-8.34	113.90	118.90
11	B2	1470	G	C8-N9-C4	-8.34	103.06	106.40
38	A1	1056	C	C3'-C2'-C1'	8.34	108.17	101.50
38	A1	1088	G	C8-N9-C4	-8.34	103.06	106.40
38	A1	1516	C	N3-C4-N4	8.34	123.84	118.00
38	A1	2622	C	N3-C4-N4	8.34	123.84	118.00
38	A1	1819	G	N1-C6-O6	8.34	124.90	119.90
11	B2	31	U	N3-C2-O2	-8.34	116.36	122.20
11	B2	364	U	N1-C2-O2	-8.34	116.96	122.80
11	B2	1213	G	P-O3'-C3'	8.34	129.71	119.70
38	A1	2272	G	N7-C8-N9	-8.34	108.93	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	693	C	N3-C4-N4	8.34	123.83	118.00
11	B2	1116	G	N3-C2-N2	8.34	125.73	119.90
38	A1	405	G	C5-C6-O6	-8.34	123.60	128.60
38	A1	2346	A	C5-C6-N6	-8.34	117.03	123.70
38	A1	381	G	N1-C6-O6	8.34	124.90	119.90
38	A1	1135	A	N1-C2-N3	8.34	133.47	129.30
38	A1	2178	A	C5-C6-N6	-8.34	117.03	123.70
38	A1	2481	G	N1-C6-O6	8.34	124.90	119.90
38	A1	47	C	C5-C4-N4	-8.33	114.37	120.20
38	A1	504	G	N9-C4-C5	8.33	108.73	105.40
38	A1	1264	G	C8-N9-C4	-8.33	103.07	106.40
38	A1	2487	G	N3-C4-C5	-8.33	124.43	128.60
38	A1	2551	G	C5-C6-N1	-8.33	107.33	111.50
45	AC	353	ARG	NE-CZ-NH2	-8.33	116.13	120.30
10	B1	58	A	C8-N9-C4	8.33	109.13	105.80
11	B2	49	C	N3-C4-N4	8.33	123.83	118.00
11	B2	652	C	N3-C4-C5	-8.33	118.57	121.90
11	B2	1220	G	C5-C6-N1	8.33	115.67	111.50
11	B2	1395	G	N9-C4-C5	-8.33	102.07	105.40
38	A1	367	G	OP1-P-OP2	-8.33	107.11	119.60
58	Ak	36	TYR	CB-CG-CD1	8.33	126.00	121.00
38	A1	1190	G	C4-C5-N7	8.33	114.13	110.80
38	A1	1993	A	C4-C5-C6	8.33	121.17	117.00
38	A1	2217	C	C2-N3-C4	8.33	124.06	119.90
46	AD	161	PHE	CB-CG-CD2	-8.33	114.97	120.80
11	B2	899	G	C4-C5-C6	8.33	123.80	118.80
11	B2	1201	G	C5-C6-O6	-8.33	123.60	128.60
11	B2	1422	G	C8-N9-C4	-8.33	103.07	106.40
38	A1	44	C	N1-C2-O2	-8.33	113.90	118.90
38	A1	794	G	N1-C2-N3	-8.33	118.91	123.90
38	A1	1062	C	N3-C4-C5	-8.33	118.57	121.90
38	A1	1726	A	N3-C4-C5	-8.33	120.97	126.80
38	A1	1880	A	N1-C6-N6	8.33	123.60	118.60
38	A1	1063	C	N3-C4-N4	8.33	123.83	118.00
38	A1	2561	G	C1'-O4'-C4'	8.33	116.56	109.90
39	A3	31	U	O4'-C1'-N1	8.33	114.86	108.20
11	B2	462	A	O4'-C1'-N9	8.32	114.86	108.20
11	B2	1006	C	C6-N1-C2	-8.32	116.97	120.30
38	A1	46	C	C5-C6-N1	8.32	125.16	121.00
38	A1	243	G	N3-C4-C5	-8.32	124.44	128.60
38	A1	591	G	C4-C5-C6	8.32	123.80	118.80
38	A1	1744	A	O4'-C1'-N9	8.32	114.86	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2348	G	N1-C2-N3	-8.32	118.91	123.90
10	B1	22	A	C4-C5-C6	8.32	121.16	117.00
11	B2	290	C	N3-C4-C5	-8.32	118.57	121.90
38	A1	1171	G	C5-N7-C8	8.32	108.46	104.30
38	A1	1878	G	C5-C6-O6	-8.32	123.61	128.60
38	A1	1968	A	C2-N3-C4	8.32	114.76	110.60
38	A1	2351	G	O4'-C1'-N9	8.32	114.86	108.20
11	B2	636	G	N1-C6-O6	8.32	124.89	119.90
38	A1	827	G	O4'-C1'-N9	8.32	114.86	108.20
38	A1	1143	A	N1-C6-N6	8.32	123.59	118.60
38	A1	1197	G	C6-C5-N7	-8.32	125.41	130.40
38	A1	2399	C	N3-C4-N4	8.32	123.82	118.00
38	A1	2785	G	O4'-C1'-N9	8.32	114.86	108.20
38	A1	717	A	N1-C2-N3	8.32	133.46	129.30
38	A1	1207	G	N1-C6-O6	8.32	124.89	119.90
6	AT	9	ARG	NE-CZ-NH2	8.32	124.46	120.30
38	A1	469	A	N1-C6-N6	8.32	123.59	118.60
38	A1	2037	A	C2-N3-C4	-8.32	106.44	110.60
38	A1	2430	C	N1-C2-O2	8.32	123.89	118.90
38	A1	2595	C	N3-C4-N4	8.32	123.82	118.00
38	A1	2903	U	C5-C6-N1	-8.32	118.54	122.70
11	B2	1058	G	N1-C2-N3	-8.31	118.91	123.90
11	B2	200	G	C5-C6-O6	-8.31	123.61	128.60
11	B2	1001	A	C5-C6-N6	-8.31	117.05	123.70
38	A1	64	A	C4-C5-C6	8.31	121.16	117.00
38	A1	117	A	C2-N3-C4	8.31	114.76	110.60
38	A1	1613	A	C5-C6-N1	-8.31	113.54	117.70
38	A1	3007	A	C5-C6-N6	-8.31	117.05	123.70
39	A3	15	G	C5-C6-N1	-8.31	107.34	111.50
39	A3	48	A	C5-C6-N1	-8.31	113.54	117.70
11	B2	448	A	C4-C5-C6	8.31	121.16	117.00
11	B2	1460	G	C2'-C3'-O3'	8.31	127.79	109.50
38	A1	923	A	C4-C5-C6	8.31	121.16	117.00
11	B2	1352	G	C5-C6-O6	-8.31	123.61	128.60
38	A1	400	U	C2-N3-C4	-8.31	122.01	127.00
38	A1	865	C	C2-N3-C4	8.31	124.06	119.90
38	A1	1941	A	N1-C6-N6	8.31	123.59	118.60
42	Aa	27	ARG	NE-CZ-NH2	-8.31	116.14	120.30
11	B2	587	G	N3-C4-C5	8.31	132.75	128.60
11	B2	813	G	C6-C5-N7	-8.31	125.42	130.40
38	A1	312	G	O5'-P-OP1	8.31	120.67	110.70
38	A1	3038	A	C5-N7-C8	8.31	108.05	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	114	A	P-O3'-C3'	8.31	129.67	119.70
38	A1	204	G	N1-C6-O6	8.31	124.88	119.90
38	A1	1938	G	N1-C2-N3	-8.31	118.92	123.90
38	A1	2423	G	N9-C4-C5	-8.31	102.08	105.40
10	B1	63	C	C5-C4-N4	-8.30	114.39	120.20
11	B2	361	A	C6-N1-C2	-8.31	113.62	118.60
11	B2	565	C	N3-C4-N4	8.31	123.81	118.00
11	B2	1065	C	O4'-C1'-N1	8.31	114.84	108.20
38	A1	3010	C	C6-N1-C2	-8.31	116.98	120.30
11	B2	299	G	O4'-C1'-N9	8.30	114.84	108.20
11	B2	379	A	C5-C6-N6	-8.30	117.06	123.70
11	B2	1004	U	C5-C4-O4	-8.30	120.92	125.90
11	B2	1369	C	C6-N1-C2	-8.30	116.98	120.30
38	A1	913	G	N1-C6-O6	8.30	124.88	119.90
38	A1	1898	A	C5-C6-N6	-8.30	117.06	123.70
38	A1	1995	C	C5-C6-N1	8.30	125.15	121.00
38	A1	2676	A	C8-N9-C4	-8.30	102.48	105.80
38	A1	2802	G	C5-C6-N1	-8.30	107.35	111.50
4	AQ	28	ARG	NE-CZ-NH2	8.30	124.45	120.30
11	B2	265	C	C5-C4-N4	-8.30	114.39	120.20
11	B2	290	C	N3-C2-O2	8.30	127.71	121.90
38	A1	443	C	C2-N3-C4	8.30	124.05	119.90
11	B2	323	A	N1-C6-N6	8.30	123.58	118.60
38	A1	2080	G	C4-C5-C6	8.30	123.78	118.80
38	A1	2871	A	C5-N7-C8	8.30	108.05	103.90
11	B2	384	G	N1-C2-N3	-8.30	118.92	123.90
11	B2	794	A	C5-C6-N6	-8.30	117.06	123.70
11	B2	1337	A	C5-C6-N1	-8.30	113.55	117.70
45	AC	130	ARG	NE-CZ-NH1	-8.30	116.15	120.30
11	B2	1479	C	C5-C4-N4	-8.30	114.39	120.20
38	A1	631	G	C2-N3-C4	8.30	116.05	111.90
38	A1	633	A	O4'-C1'-N9	8.30	114.84	108.20
38	A1	1685	C	C5-C6-N1	8.30	125.15	121.00
38	A1	2159	C	O4'-C1'-N1	8.30	114.84	108.20
38	A1	1803	U	C4-C5-C6	8.30	124.68	119.70
38	A1	2427	C	N3-C4-N4	8.30	123.81	118.00
66	AY	73	ARG	NE-CZ-NH1	8.30	124.45	120.30
11	B2	843	G	C6-C5-N7	-8.30	125.42	130.40
40	AK	17	ARG	N-CA-CB	8.30	125.53	110.60
11	B2	131	G	N1-C6-O6	8.29	124.88	119.90
11	B2	1228	A	C4-C5-N7	-8.29	106.55	110.70
11	B2	1366	U	O4'-C1'-N1	8.29	114.84	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	281	G	N1-C2-N3	-8.29	118.92	123.90
38	A1	1938	G	C5'-C4'-O4'	8.30	119.06	109.10
38	A1	1060	C	O4'-C1'-N1	8.29	114.83	108.20
38	A1	2619	U	O4'-C1'-N1	8.29	114.83	108.20
38	A1	2045	C	C4-C5-C6	8.29	121.55	117.40
10	B1	29	C	C6-N1-C2	-8.29	116.98	120.30
38	A1	1251	G	O4'-C1'-N9	8.29	114.83	108.20
38	A1	2044	C	C2-N3-C4	-8.29	115.75	119.90
38	A1	2586	A	C5-C6-N6	-8.29	117.07	123.70
11	B2	152	G	N9-C4-C5	-8.29	102.08	105.40
38	A1	527	G	C5-C6-O6	-8.29	123.63	128.60
38	A1	2129	G	C8-N9-C4	-8.29	103.08	106.40
38	A1	2170	C	C4-C5-C6	8.29	121.55	117.40
38	A1	2679	A	C6-N1-C2	-8.29	113.63	118.60
38	A1	2501	G	C5-C6-O6	-8.29	123.63	128.60
11	B2	754	G	N7-C8-N9	-8.28	108.96	113.10
11	B2	1323	A	O4'-C1'-N9	8.28	114.83	108.20
11	B2	1389	G	C6-N1-C2	8.28	130.07	125.10
38	A1	1067	G	N1-C6-O6	8.29	124.87	119.90
38	A1	1594	G	C8-N9-C4	-8.29	103.09	106.40
38	A1	2597	A	N9-C4-C5	8.29	109.11	105.80
11	B2	1354	A	P-O3'-C3'	-8.28	109.76	119.70
11	B2	690	C	O4'-C1'-N1	8.28	114.83	108.20
11	B2	977	G	N1-C2-N3	-8.28	118.93	123.90
11	B2	1079	G	N3-C4-N9	-8.28	121.03	126.00
38	A1	1810	G	N3-C2-N2	8.28	125.70	119.90
38	A1	2280	G	C1'-O4'-C4'	8.28	116.53	109.90
38	A1	2330	A	N1-C6-N6	8.28	123.57	118.60
38	A1	2406	C	C2-N3-C4	8.28	124.04	119.90
39	A3	49	A	N1-C2-N3	-8.28	125.16	129.30
11	B2	516	A	C2-N3-C4	8.28	114.74	110.60
11	B2	886	G	C5-N7-C8	8.28	108.44	104.30
38	A1	878	G	N9-C4-C5	-8.28	102.09	105.40
38	A1	1495	A	O4'-C1'-N9	8.28	114.82	108.20
38	A1	2046	C	C2-N1-C1'	8.28	127.91	118.80
10	B1	11	C	C5-C6-N1	8.28	125.14	121.00
11	B2	459	G	N1-C2-N3	-8.28	118.94	123.90
11	B2	859	A	N1-C6-N6	8.28	123.56	118.60
38	A1	121	G	N3-C2-N2	8.28	125.69	119.90
38	A1	2301	C	P-O5'-C5'	8.28	134.14	120.90
11	B2	663	G	N1-C2-N3	-8.27	118.94	123.90
11	B2	952	A	C5-N7-C8	8.27	108.04	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1020	G	C6-C5-N7	-8.27	125.44	130.40
11	B2	1130	A	N1-C6-N6	8.27	123.56	118.60
38	A1	132	G	N1-C2-N3	-8.27	118.94	123.90
38	A1	555	G	C4-C5-C6	8.27	123.76	118.80
38	A1	1865	U	O4'-C1'-N1	8.27	114.82	108.20
38	A1	2947	G	N1-C6-O6	8.27	124.86	119.90
11	B2	996	A	N9-C4-C5	8.27	109.11	105.80
38	A1	3038	A	C5-C6-N1	-8.27	113.56	117.70
39	A3	83	C	C5-C4-N4	-8.27	114.41	120.20
39	A3	88	A	C5-C6-N1	-8.27	113.56	117.70
11	B2	479	C	O4'-C1'-N1	8.27	114.81	108.20
11	B2	829	U	N1-C2-N3	-8.27	109.94	114.90
11	B2	1228	A	C2-N3-C4	8.27	114.73	110.60
11	B2	1268	C	C3'-C2'-C1'	8.27	108.11	101.50
38	A1	213	G	N1-C2-N3	-8.27	118.94	123.90
38	A1	281	G	C6-C5-N7	-8.27	125.44	130.40
38	A1	2067	U	C2-N3-C4	-8.27	122.04	127.00
38	A1	2432	G	C2-N3-C4	8.27	116.03	111.90
38	A1	2753	G	N1-C6-O6	8.27	124.86	119.90
11	B2	374	G	C5-N7-C8	8.27	108.43	104.30
38	A1	954	A	C6-C5-N7	-8.27	126.52	132.30
10	B1	33	C	C5-C6-N1	8.26	125.13	121.00
11	B2	584	C	N3-C4-C5	-8.26	118.59	121.90
38	A1	1003	C	C6-N1-C2	-8.26	116.99	120.30
38	A1	1558	U	N3-C4-O4	8.26	125.19	119.40
11	B2	1485	G	C4-C5-C6	8.26	123.76	118.80
38	A1	59	U	N3-C2-O2	8.26	127.98	122.20
38	A1	200	G	O4'-C1'-N9	8.26	114.81	108.20
38	A1	658	C	C5-C4-N4	-8.26	114.42	120.20
38	A1	1181	C	C5-C6-N1	-8.26	116.87	121.00
11	B2	1483	U	C5-C6-N1	8.26	126.83	122.70
38	A1	989	G	N3-C2-N2	8.26	125.68	119.90
11	B2	1144	G	N1-C6-O6	8.26	124.86	119.90
38	A1	1004	U	N3-C4-O4	8.26	125.18	119.40
38	A1	1052	G	C5-C6-O6	-8.26	123.64	128.60
38	A1	2844	G	O4'-C1'-N9	8.26	114.81	108.20
11	B2	19	G	C2-N3-C4	8.26	116.03	111.90
11	B2	417	C	N3-C4-N4	8.26	123.78	118.00
11	B2	899	G	C6-C5-N7	-8.26	125.45	130.40
38	A1	953	G	C1'-O4'-C4'	8.26	116.51	109.90
38	A1	2720	U	O4'-C1'-N1	8.26	114.81	108.20
10	B1	54	G	C6-C5-N7	-8.26	125.45	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	313	G	N7-C8-N9	-8.26	108.97	113.10
38	A1	596	C	N1-C2-N3	8.26	124.98	119.20
38	A1	1162	C	C6-N1-C2	-8.26	117.00	120.30
38	A1	1767	C	N3-C4-C5	-8.26	118.60	121.90
38	A1	2127	G	N1-C6-O6	8.26	124.86	119.90
38	A1	2587	G	C6-C5-N7	-8.26	125.45	130.40
38	A1	2794	G	C8-N9-C4	-8.26	103.10	106.40
11	B2	754	G	C5-C6-N1	-8.26	107.37	111.50
11	B2	1349	C	O4'-C1'-N1	8.26	114.80	108.20
11	B2	1393	A	C4-C5-N7	-8.26	106.57	110.70
38	A1	183	G	N3-C2-N2	8.26	125.68	119.90
38	A1	805	C	N3-C4-N4	8.26	123.78	118.00
38	A1	883	G	C1'-O4'-C4'	-8.26	103.30	109.90
38	A1	2432	G	N3-C2-N2	8.26	125.68	119.90
11	B2	131	G	C1'-O4'-C4'	-8.25	103.30	109.90
11	B2	425	C	P-O3'-C3'	-8.25	109.80	119.70
11	B2	1279	A	N1-C6-N6	8.25	123.55	118.60
38	A1	803	A	C4-C5-C6	8.25	121.13	117.00
38	A1	1099	C	O4'-C1'-N1	8.25	114.80	108.20
38	A1	1707	A	C4'-C3'-C2'	-8.25	94.35	102.60
38	A1	2654	C	C4-C5-C6	8.25	121.53	117.40
11	B2	887	G	C2-N3-C4	8.25	116.03	111.90
11	B2	523	C	C2-N3-C4	8.25	124.03	119.90
11	B2	1408	C	O4'-C1'-N1	8.25	114.80	108.20
15	BC	145	ARG	NE-CZ-NH1	8.25	124.42	120.30
38	A1	234	G	C5-C6-N1	-8.25	107.38	111.50
38	A1	612	G	C6-N1-C2	8.25	130.05	125.10
38	A1	617	G	N7-C8-N9	8.25	117.22	113.10
38	A1	1866	G	C6-C5-N7	-8.25	125.45	130.40
38	A1	1910	C	N3-C4-N4	8.25	123.77	118.00
38	A1	2224	G	C8-N9-C4	-8.25	103.10	106.40
38	A1	2536	A	O4'-C1'-N9	8.25	114.80	108.20
39	A3	68	C	N3-C4-C5	-8.25	118.60	121.90
24	BL	71	ARG	NE-CZ-NH1	8.25	124.42	120.30
38	A1	304	G	C6-C5-N7	-8.25	125.45	130.40
38	A1	748	G	N1-C6-O6	8.25	124.85	119.90
38	A1	935	A	C5-C6-N1	-8.25	113.58	117.70
38	A1	1019	G	N1-C2-N3	-8.25	118.95	123.90
38	A1	1374	G	N1-C2-N3	-8.25	118.95	123.90
38	A1	2036	A	N9-C4-C5	-8.25	102.50	105.80
38	A1	2212	C	C2-N3-C4	8.25	124.02	119.90
10	B1	26	C	O4'-C1'-N1	8.24	114.80	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1117	A	C8-N9-C4	-8.24	102.50	105.80
38	A1	414	G	C5-C6-O6	-8.24	123.65	128.60
10	B1	24	A	C8-N9-C4	8.24	109.10	105.80
11	B2	1055	C	N3-C4-N4	8.24	123.77	118.00
38	A1	908	U	C4-C5-C6	-8.24	114.75	119.70
38	A1	1422	G	C2-N3-C4	8.24	116.02	111.90
38	A1	1724	A	N1-C6-N6	8.24	123.55	118.60
38	A1	1835	A	C6-C5-N7	-8.24	126.53	132.30
38	A1	2954	C	N3-C4-N4	8.24	123.77	118.00
60	AM	118	TRP	CA-CB-CG	8.24	129.36	113.70
11	B2	11	A	C6-C5-N7	-8.24	126.53	132.30
11	B2	242	A	C4-C5-N7	-8.24	106.58	110.70
11	B2	479	C	N3-C4-C5	-8.24	118.60	121.90
11	B2	1482	C	O4'-C1'-N1	8.24	114.79	108.20
11	B2	300	G	N1-C2-N2	8.24	123.61	116.20
11	B2	562	A	C5-C6-N1	-8.24	113.58	117.70
11	B2	920	U	O5'-P-OP2	-8.24	98.28	105.70
11	B2	832	G	C2-N3-C4	8.24	116.02	111.90
11	B2	1012	C	N3-C4-N4	8.24	123.77	118.00
11	B2	1234	A	C8-N9-C4	-8.24	102.50	105.80
38	A1	41	G	N9-C4-C5	8.24	108.70	105.40
38	A1	102	A	N1-C6-N6	8.24	123.54	118.60
38	A1	210	A	C4-C5-C6	8.24	121.12	117.00
38	A1	703	G	P-O3'-C3'	-8.24	109.81	119.70
38	A1	1125	A	C4-C5-C6	8.24	121.12	117.00
38	A1	2194	A	N9-C4-C5	8.24	109.10	105.80
40	A5	16	ARG	NE-CZ-NH1	8.24	124.42	120.30
10	B1	68	C	O4'-C1'-N1	8.24	114.79	108.20
11	B2	307	G	N3-C4-N9	-8.24	121.06	126.00
38	A1	404	G	N1-C6-O6	8.24	124.84	119.90
38	A1	580	G	C6-C5-N7	-8.24	125.46	130.40
38	A1	911	G	C8-N9-C4	-8.24	103.11	106.40
38	A1	2829	C	N3-C4-C5	-8.24	118.61	121.90
38	A1	1131	G	C2-N3-C4	-8.24	107.78	111.90
38	A1	1183	U	P-O3'-C3'	8.24	129.58	119.70
38	A1	1207	G	C5-C6-O6	-8.24	123.66	128.60
38	A1	2184	G	C8-N9-C4	-8.24	103.11	106.40
38	A1	2785	G	N1-C2-N3	-8.24	118.96	123.90
41	AA	123	ARG	NE-CZ-NH1	8.24	124.42	120.30
11	B2	116	C	C4-C5-C6	8.23	121.52	117.40
11	B2	178	C	C4'-C3'-C2'	-8.23	94.37	102.60
11	B2	479	C	N3-C4-N4	8.23	123.76	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	567	A	C8-N9-C4	-8.23	102.51	105.80
18	BF	184	TRP	CG-CD2-CE3	-8.23	126.49	133.90
38	A1	130	G	P-O3'-C3'	8.23	129.58	119.70
38	A1	979	G	N9-C4-C5	-8.23	102.11	105.40
38	A1	1128	G	N1-C6-O6	8.23	124.84	119.90
38	A1	1734	G	P-O3'-C3'	8.23	129.58	119.70
38	A1	1807	G	N1-C6-O6	8.23	124.84	119.90
38	A1	2287	C	C1'-O4'-C4'	-8.23	103.31	109.90
38	A1	552	A	N7-C8-N9	-8.23	109.69	113.80
9	AX	384	PHE	CB-CG-CD2	-8.23	115.04	120.80
11	B2	463	G	N3-C4-N9	-8.23	121.06	126.00
38	A1	207	A	C5-C6-N6	-8.23	117.12	123.70
11	B2	856	G	N1-C6-O6	8.23	124.84	119.90
38	A1	100	C	C6-N1-C2	-8.23	117.01	120.30
38	A1	173	G	C6-C5-N7	-8.23	125.46	130.40
38	A1	575	G	N1-C6-O6	8.23	124.84	119.90
38	A1	291	A	N3-C4-N9	8.23	133.98	127.40
38	A1	2354	A	N1-C6-N6	8.23	123.54	118.60
38	A1	2508	G	C6-N1-C2	8.23	130.04	125.10
38	A1	2546	G	N3-C4-N9	-8.23	121.06	126.00
38	A1	2540	A	O4'-C1'-N9	8.23	114.78	108.20
11	B2	309	A	O4'-C1'-N9	8.22	114.78	108.20
11	B2	886	G	C5-C6-O6	-8.22	123.67	128.60
38	A1	1226	G	N3-C2-N2	8.22	125.66	119.90
38	A1	1505	G	C2-N3-C4	8.22	116.01	111.90
38	A1	2738	G	C6-C5-N7	-8.22	125.47	130.40
38	A1	1564	C	N3-C4-C5	-8.22	118.61	121.90
38	A1	792	A	C5'-C4'-O4'	8.22	118.97	109.10
38	A1	2029	C	C2-N3-C4	8.22	124.01	119.90
11	B2	202	G	C2-N3-C4	8.22	116.01	111.90
38	A1	168	G	O4'-C1'-N9	8.22	114.78	108.20
38	A1	1555	G	N3-C4-C5	8.22	132.71	128.60
43	AB	23	ARG	NE-CZ-NH1	8.22	124.41	120.30
11	B2	560	A	C5-C6-N1	-8.22	113.59	117.70
11	B2	686	C	C5-C4-N4	-8.22	114.45	120.20
11	B2	787	U	C5-C4-O4	-8.22	120.97	125.90
11	B2	1024	G	C5-C6-O6	8.22	133.53	128.60
11	B2	1083	G	N1-C6-O6	8.22	124.83	119.90
11	B2	1485	G	C6-C5-N7	-8.22	125.47	130.40
38	A1	845	U	C6-N1-C2	-8.22	116.07	121.00
38	A1	1476	C	N3-C2-O2	-8.22	116.15	121.90
11	B2	1326	G	N3-C2-N2	8.22	125.65	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1217	C	P-O3'-C3'	8.21	129.56	119.70
14	BB	96	PHE	CB-CG-CD1	-8.21	115.05	120.80
38	A1	355	G	N9-C4-C5	-8.21	102.11	105.40
38	A1	766	G	N1-C2-N3	-8.21	118.97	123.90
38	A1	878	G	C5-C6-N1	-8.21	107.39	111.50
38	A1	954	A	C8-N9-C4	-8.21	102.51	105.80
38	A1	2477	G	C6-C5-N7	-8.22	125.47	130.40
38	A1	1231	C	N3-C4-C5	-8.21	118.61	121.90
38	A1	2712	G	N9-C4-C5	8.21	108.69	105.40
10	B1	77	A	C5-C6-N1	-8.21	113.59	117.70
14	BB	14	ALA	N-CA-CB	8.21	121.60	110.10
38	A1	590	A	C4-C5-C6	8.21	121.11	117.00
38	A1	1064	G	C5-C6-N1	-8.21	107.39	111.50
11	B2	463	G	N1-C6-O6	8.21	124.83	119.90
38	A1	110	A	C4-C5-C6	8.21	121.11	117.00
38	A1	2404	G	N3-C2-N2	8.21	125.65	119.90
38	A1	2586	A	O4'-C1'-N9	8.21	114.77	108.20
38	A1	2973	A	C5-N7-C8	8.21	108.01	103.90
11	B2	765	U	N1-C2-O2	-8.21	117.05	122.80
11	B2	1281	U	N1-C2-O2	-8.21	117.05	122.80
11	B2	1395	G	N1-C2-N3	-8.21	118.97	123.90
38	A1	855	G	C5-C6-O6	-8.21	123.67	128.60
38	A1	1440	C	C2-N3-C4	-8.21	115.80	119.90
38	A1	2992	G	N3-C2-N2	8.21	125.65	119.90
38	A1	1323	U	C2-N3-C4	8.21	131.92	127.00
38	A1	1730	C	C4-C5-C6	8.21	121.50	117.40
3	Af	12	ARG	NE-CZ-NH2	-8.21	116.20	120.30
11	B2	340	A	C5-C6-N1	-8.21	113.60	117.70
38	A1	84	A	O3'-P-O5'	8.21	119.59	104.00
38	A1	97	C	O4'-C1'-N1	8.21	114.77	108.20
38	A1	530	A	C6-C5-N7	-8.21	126.56	132.30
11	B2	662	C	C2-N3-C4	8.20	124.00	119.90
11	B2	1096	G	O4'-C1'-N9	8.21	114.76	108.20
11	B2	1331	G	C8-N9-C4	-8.20	103.12	106.40
38	A1	115	C	N3-C4-C5	-8.20	118.62	121.90
38	A1	2024	A	C5-C6-N1	-8.21	113.60	117.70
38	A1	2972	G	C2-N3-C4	8.20	116.00	111.90
11	B2	602	G	O4'-C1'-N9	8.20	114.76	108.20
11	B2	851	C	N3-C4-C5	-8.20	118.62	121.90
38	A1	1050	C	N3-C4-C5	-8.20	118.62	121.90
38	A1	1407	A	C4-C5-C6	8.20	121.10	117.00
38	A1	1726	A	O4'-C1'-N9	8.20	114.76	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2190	A	C5-C6-N6	-8.20	117.14	123.70
38	A1	15	A	C5-C6-N1	-8.20	113.60	117.70
38	A1	74	A	C5-N7-C8	8.20	108.00	103.90
38	A1	999	A	N1-C6-N6	8.20	123.52	118.60
38	A1	1789	A	C4-C5-N7	-8.20	106.60	110.70
38	A1	2265	C	N3-C4-C5	-8.20	118.62	121.90
10	B1	65	C	N1-C2-O2	-8.20	113.98	118.90
11	B2	251	G	N3-C4-C5	-8.20	124.50	128.60
11	B2	1260	G	C5-C6-N1	-8.20	107.40	111.50
11	B2	357	C	O4'-C1'-N1	8.20	114.76	108.20
11	B2	693	C	N3-C4-C5	-8.20	118.62	121.90
38	A1	1679	U	O4'-C1'-N1	8.20	114.76	108.20
11	B2	1157	G	C4-C5-N7	-8.20	107.52	110.80
38	A1	2241	U	N3-C2-O2	8.20	127.94	122.20
38	A1	2851	A	N9-C4-C5	8.20	109.08	105.80
38	A1	2973	A	O4'-C1'-N9	8.20	114.76	108.20
11	B2	1248	A	N1-C6-N6	8.20	123.52	118.60
38	A1	1743	G	C6-C5-N7	-8.20	125.48	130.40
38	A1	2837	C	C5-C4-N4	-8.20	114.46	120.20
11	B2	310	G	N1-C2-N3	-8.19	118.98	123.90
11	B2	559	G	N3-C2-N2	8.19	125.64	119.90
11	B2	1266	A	O4'-C1'-N9	8.20	114.76	108.20
11	B2	1411	G	N1-C6-O6	8.19	124.82	119.90
38	A1	836	U	N3-C4-O4	8.19	125.14	119.40
38	A1	1432	C	O4'-C1'-N1	8.20	114.76	108.20
38	A1	2425	A	C4-C5-C6	8.19	121.10	117.00
10	B1	36	A	C4-C5-C6	8.19	121.10	117.00
11	B2	597	C	C5-C4-N4	-8.19	114.47	120.20
11	B2	1126	G	N9-C4-C5	-8.19	102.12	105.40
11	B2	1157	G	C8-N9-C4	-8.19	103.12	106.40
38	A1	35	G	N1-C6-O6	8.19	124.81	119.90
38	A1	607	C	C5-C6-N1	8.19	125.10	121.00
38	A1	1125	A	P-O3'-C3'	8.19	129.53	119.70
38	A1	2091	U	N3-C2-O2	8.19	127.94	122.20
38	A1	2278	U	O4'-C1'-N1	8.19	114.75	108.20
38	A1	2790	C	C6-N1-C2	-8.19	117.02	120.30
39	A3	60	C	O4'-C1'-N1	8.19	114.75	108.20
38	A1	1412	C	N3-C4-C5	-8.19	118.62	121.90
38	A1	1962	G	O4'-C1'-N9	8.19	114.75	108.20
54	AI	66	PHE	CB-CG-CD1	-8.19	115.07	120.80
11	B2	100	A	N9-C4-C5	8.19	109.08	105.80
38	A1	2784	A	N1-C2-N3	8.19	133.40	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1097	G	O4'-C1'-N9	8.19	114.75	108.20
38	A1	10	C	C5-C6-N1	8.19	125.09	121.00
38	A1	936	G	N1-C2-N3	-8.19	118.99	123.90
38	A1	1518	G	O4'-C1'-N9	8.19	114.75	108.20
38	A1	2870	A	C5-C6-N6	-8.19	117.15	123.70
11	B2	199	A	C5-C6-N6	-8.19	117.15	123.70
11	B2	501	G	C5-C6-O6	-8.19	123.69	128.60
11	B2	786	G	N1-C2-N3	-8.19	118.99	123.90
11	B2	943	C	N3-C4-N4	8.19	123.73	118.00
11	B2	1267	U	O4'-C1'-N1	8.19	114.75	108.20
11	B2	1376	C	C4-C5-C6	8.19	121.49	117.40
27	BO	137	ARG	N-CA-CB	8.19	125.33	110.60
38	A1	2594	U	N3-C4-C5	-8.19	109.69	114.60
38	A1	396	G	O4'-C1'-N9	8.19	114.75	108.20
38	A1	1576	C	O4'-C1'-N1	8.19	114.75	108.20
38	A1	2538	G	C4-C5-C6	8.19	123.71	118.80
10	B1	17	C	N3-C4-C5	-8.18	118.63	121.90
10	B1	64	C	N3-C4-C5	-8.18	118.63	121.90
11	B2	436	A	P-O3'-C3'	8.18	129.52	119.70
11	B2	728	G	O4'-C1'-N9	8.18	114.75	108.20
38	A1	1622	G	N1-C6-O6	8.18	124.81	119.90
13	BA	97	ARG	NE-CZ-NH1	8.18	124.39	120.30
38	A1	1323	U	N3-C4-C5	-8.18	109.69	114.60
38	A1	190	C	O4'-C1'-N1	8.18	114.75	108.20
17	BE	3	ARG	NE-CZ-NH2	-8.18	116.21	120.30
38	A1	222	A	C4-C5-C6	8.18	121.09	117.00
38	A1	398	U	N3-C2-O2	8.18	127.93	122.20
38	A1	1008	U	O4'-C1'-N1	8.18	114.74	108.20
38	A1	1187	A	C4-C5-C6	8.18	121.09	117.00
38	A1	2728	U	C2-N3-C4	8.18	131.91	127.00
38	A1	1109	G	C4-C5-C6	8.18	123.71	118.80
38	A1	1850	C	N3-C4-N4	8.18	123.72	118.00
11	B2	248	U	O4'-C4'-C3'	-8.18	95.82	104.00
38	A1	487	U	O4'-C1'-N1	8.18	114.74	108.20
39	A3	101	A	C5-C6-N1	-8.18	113.61	117.70
24	BL	46	ARG	NE-CZ-NH1	8.18	124.39	120.30
38	A1	207	A	N3-C4-C5	-8.18	121.08	126.80
38	A1	483	C	C2-N3-C4	8.18	123.99	119.90
38	A1	1549	C	C4-C5-C6	8.18	121.49	117.40
38	A1	1738	A	N1-C2-N3	8.18	133.39	129.30
38	A1	2400	U	C5-C4-O4	-8.18	120.99	125.90
38	A1	2782	A	C4-C5-C6	8.18	121.09	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
39	A3	81	C	N3-C4-N4	8.18	123.72	118.00
11	B2	65	G	C4-C5-N7	-8.17	107.53	110.80
11	B2	1192	C	N3-C4-N4	8.17	123.72	118.00
10	B1	61	U	C5-C6-N1	8.17	126.79	122.70
10	B1	65	C	N3-C4-N4	8.17	123.72	118.00
11	B2	301	G	O4'-C1'-N9	8.17	114.74	108.20
11	B2	1207	G	C5-N7-C8	8.17	108.39	104.30
38	A1	466	C	C5-C4-N4	-8.17	114.48	120.20
38	A1	3021	C	N1-C2-O2	8.17	123.80	118.90
11	B2	239	A	C2'-C3'-O3'	8.17	127.48	109.50
11	B2	521	G	N9-C4-C5	-8.17	102.13	105.40
11	B2	867	A	N9-C4-C5	-8.17	102.53	105.80
11	B2	1382	G	C6-C5-N7	-8.17	125.50	130.40
38	A1	23	G	C6-N1-C2	8.17	130.00	125.10
38	A1	1592	U	P-O5'-C5'	8.17	133.97	120.90
38	A1	696	G	N1-C6-O6	8.17	124.80	119.90
38	A1	1145	G	C5-C6-O6	-8.17	123.70	128.60
38	A1	1419	G	N1-C6-O6	8.17	124.80	119.90
38	A1	1485	A	N1-C6-N6	8.17	123.50	118.60
38	A1	2795	G	O4'-C1'-N9	8.17	114.73	108.20
39	A3	6	G	C5-C6-O6	-8.17	123.70	128.60
11	B2	1221	A	P-O3'-C3'	8.17	129.50	119.70
11	B2	114	A	C5-N7-C8	8.17	107.98	103.90
11	B2	415	C	C5-C4-N4	-8.17	114.48	120.20
11	B2	965	G	C4-C5-C6	8.17	123.70	118.80
11	B2	1087	C	N3-C2-O2	8.17	127.62	121.90
11	B2	1247	A	N1-C6-N6	8.17	123.50	118.60
11	B2	1248	A	C8-N9-C4	-8.17	102.53	105.80
11	B2	1447	A	C2-N3-C4	-8.17	106.52	110.60
15	BC	73	PHE	CB-CG-CD1	-8.17	115.08	120.80
38	A1	184	A	O4'-C1'-N9	8.17	114.73	108.20
38	A1	2602	G	N3-C4-N9	8.17	130.90	126.00
38	A1	208	A	C5-C6-N6	-8.17	117.17	123.70
38	A1	2420	C	C6-N1-C2	-8.17	117.03	120.30
38	A1	2648	C	C6-N1-C2	-8.17	117.03	120.30
38	A1	2857	C	N3-C4-C5	-8.17	118.63	121.90
38	A1	2998	G	C2-N3-C4	8.17	115.98	111.90
39	A3	69	C	C5-C6-N1	8.17	125.08	121.00
38	A1	1601	G	N1-C2-N3	-8.16	119.00	123.90
11	B2	776	C	P-O5'-C5'	8.16	133.96	120.90
11	B2	936	A	C4-C5-N7	-8.16	106.62	110.70
11	B2	1291	G	C4-C5-C6	8.16	123.70	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	627	G	N3-C2-N2	8.16	125.61	119.90
38	A1	2639	G	O4'-C1'-N9	8.16	114.73	108.20
38	A1	2073	G	N1-C6-O6	8.16	124.80	119.90
38	A1	2240	G	N1-C6-O6	8.16	124.80	119.90
38	A1	2756	G	N1-C6-O6	8.16	124.80	119.90
11	B2	205	C	N3-C4-N4	8.16	123.71	118.00
11	B2	363	C	C6-N1-C2	-8.16	117.04	120.30
11	B2	809	C	O4'-C1'-N1	8.16	114.73	108.20
11	B2	893	U	N1-C2-N3	-8.16	110.00	114.90
38	A1	399	C	N3-C4-C5	-8.16	118.64	121.90
38	A1	1293	G	N3-C2-N2	8.16	125.61	119.90
38	A1	2078	A	C5-C6-N1	-8.16	113.62	117.70
38	A1	2250	G	C6-N1-C2	8.16	130.00	125.10
10	B1	25	G	C4-C5-N7	-8.16	107.54	110.80
11	B2	319	U	C2-N3-C4	8.16	131.89	127.00
11	B2	671	C	C5-C6-N1	8.16	125.08	121.00
11	B2	962	G	C5-N7-C8	8.16	108.38	104.30
14	BB	58	PHE	CB-CG-CD2	-8.16	115.09	120.80
38	A1	1419	G	C2-N3-C4	8.16	115.98	111.90
38	A1	1800	G	N1-C6-O6	8.16	124.79	119.90
38	A1	2538	G	C4'-C3'-C2'	-8.16	94.44	102.60
11	B2	1020	G	N1-C2-N3	-8.15	119.01	123.90
38	A1	541	A	O4'-C1'-N9	8.15	114.72	108.20
38	A1	860	A	C6-N1-C2	8.15	123.49	118.60
38	A1	2607	U	O4'-C1'-N1	8.15	114.72	108.20
38	A1	1806	C	N3-C4-N4	8.15	123.71	118.00
38	A1	2086	C	C4-C5-C6	8.15	121.48	117.40
38	A1	2623	G	N1-C6-O6	8.15	124.79	119.90
11	B2	1468	A	O4'-C1'-N9	8.15	114.72	108.20
38	A1	132	G	C2-N3-C4	8.15	115.97	111.90
38	A1	2242	A	C2-N3-C4	-8.15	106.52	110.60
38	A1	2449	A	C5-C6-N6	-8.15	117.18	123.70
39	A3	89	G	C5-N7-C8	-8.15	100.22	104.30
10	B1	73	C	O4'-C1'-N1	8.15	114.72	108.20
11	B2	442	C	C5-C6-N1	8.15	125.07	121.00
11	B2	681	G	N7-C8-N9	-8.15	109.03	113.10
11	B2	1335	A	O4'-C1'-N9	8.15	114.72	108.20
33	BU	5	TYR	CG-CD2-CE2	-8.15	114.78	121.30
38	A1	1170	G	C5-N7-C8	8.15	108.37	104.30
38	A1	1504	C	O4'-C1'-N1	8.15	114.72	108.20
39	A3	20	G	N1-C6-O6	8.15	124.79	119.90
39	A3	30	G	C5-N7-C8	8.15	108.38	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
45	AC	37	ARG	NE-CZ-NH2	-8.15	116.23	120.30
11	B2	744	A	N1-C2-N3	8.15	133.37	129.30
38	A1	906	G	C4-C5-N7	-8.15	107.54	110.80
38	A1	1876	G	C6-N1-C2	-8.15	120.21	125.10
38	A1	1566	G	N9-C4-C5	-8.15	102.14	105.40
38	A1	2169	C	C5-C4-N4	-8.15	114.50	120.20
38	A1	2326	C	C6-N1-C2	-8.15	117.04	120.30
39	A3	86	C	O4'-C1'-N1	8.15	114.72	108.20
11	B2	1170	C	N3-C4-N4	8.14	123.70	118.00
11	B2	379	A	C5-N7-C8	8.14	107.97	103.90
38	A1	127	C	O4'-C1'-N1	8.14	114.72	108.20
38	A1	558	C	N3-C4-C5	-8.14	118.64	121.90
38	A1	853	G	O4'-C1'-N9	8.14	114.72	108.20
38	A1	1497	C	C6-N1-C2	8.14	123.56	120.30
38	A1	1571	G	N9-C4-C5	8.14	108.66	105.40
38	A1	1634	A	C5-C6-N6	-8.14	117.19	123.70
38	A1	1703	G	C6-C5-N7	-8.14	125.51	130.40
38	A1	1949	A	C4-C5-C6	8.14	121.07	117.00
38	A1	2625	C	N3-C4-C5	-8.14	118.64	121.90
11	B2	482	G	C5-C6-O6	-8.14	123.72	128.60
11	B2	308	G	C5-C6-O6	-8.14	123.72	128.60
11	B2	1232	G	N1-C6-O6	8.14	124.78	119.90
38	A1	2556	C	O4'-C1'-N1	8.14	114.71	108.20
11	B2	192	G	C5-C6-O6	-8.14	123.72	128.60
11	B2	894	A	C6-C5-N7	-8.14	126.60	132.30
11	B2	926	C	C5-C6-N1	8.14	125.07	121.00
11	B2	1078	U	O4'-C1'-N1	8.14	114.71	108.20
11	B2	1136	A	C5-C6-N1	-8.14	113.63	117.70
38	A1	207	A	N1-C6-N6	8.14	123.48	118.60
38	A1	285	C	C2-N3-C4	8.14	123.97	119.90
38	A1	481	G	N7-C8-N9	-8.14	109.03	113.10
38	A1	759	G	C4'-C3'-C2'	-8.14	94.46	102.60
38	A1	1104	A	C1'-O4'-C4'	8.14	116.41	109.90
38	A1	2129	G	N1-C6-O6	8.14	124.78	119.90
38	A1	2294	A	C6-C5-N7	-8.14	126.60	132.30
38	A1	2308	C	N3-C4-N4	8.14	123.70	118.00
38	A1	2463	G	C8-N9-C1'	8.14	137.58	127.00
38	A1	2567	C	N3-C4-N4	8.14	123.70	118.00
62	AO	13	ARG	NE-CZ-NH2	8.14	124.37	120.30
11	B2	470	G	C5-C6-O6	-8.13	123.72	128.60
38	A1	550	A	C5-N7-C8	8.14	107.97	103.90
38	A1	2369	G	C6-C5-N7	-8.14	125.52	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1135	G	N3-C2-N2	8.13	125.59	119.90
38	A1	1570	C	C5-C4-N4	-8.13	114.51	120.20
11	B2	76	U	O4'-C1'-N1	8.13	114.71	108.20
38	A1	1834	C	C2-N3-C4	8.13	123.97	119.90
11	B2	343	G	C4'-C3'-C2'	-8.13	94.47	102.60
11	B2	717	C	N1-C2-O2	-8.13	114.02	118.90
11	B2	861	G	N1-C2-N3	-8.13	119.02	123.90
38	A1	168	G	C4-C5-N7	8.13	114.05	110.80
38	A1	1694	G	N1-C6-O6	8.13	124.78	119.90
38	A1	2405	U	O4'-C1'-N1	8.13	114.70	108.20
39	A3	76	U	O4'-C1'-N1	8.13	114.70	108.20
11	B2	57	G	C8-N9-C4	-8.13	103.15	106.40
11	B2	1202	G	O4'-C1'-N9	8.13	114.70	108.20
33	BU	53	TYR	CB-CG-CD2	-8.13	116.12	121.00
38	A1	1769	G	C4-C5-C6	8.13	123.68	118.80
38	A1	2356	U	N3-C4-C5	-8.13	109.72	114.60
11	B2	775	G	O4'-C1'-N9	8.13	114.70	108.20
13	BA	89	ARG	NE-CZ-NH2	8.13	124.36	120.30
38	A1	2487	G	C6-N1-C2	-8.13	120.22	125.10
38	A1	296	G	C6-C5-N7	-8.13	125.52	130.40
38	A1	349	A	C4-C5-C6	8.13	121.06	117.00
38	A1	940	G	N1-C6-O6	-8.13	115.02	119.90
38	A1	1090	G	C5-C6-O6	-8.13	123.72	128.60
38	A1	1626	A	O4'-C1'-N9	8.13	114.70	108.20
38	A1	2317	G	N9-C4-C5	-8.13	102.15	105.40
38	A1	2365	G	N3-C4-C5	8.13	132.66	128.60
38	A1	2503	C	N3-C4-N4	8.13	123.69	118.00
59	AL	26	ARG	NE-CZ-NH1	8.13	124.36	120.30
60	AM	106	ARG	NE-CZ-NH2	-8.13	116.24	120.30
11	B2	509	C	C5-C4-N4	-8.12	114.51	120.20
11	B2	1012	C	C5-C6-N1	8.12	125.06	121.00
11	B2	1279	A	P-O3'-C3'	8.12	129.45	119.70
11	B2	1319	C	O4'-C1'-N1	8.12	114.70	108.20
38	A1	211	A	C5-C6-N1	-8.12	113.64	117.70
38	A1	327	G	O4'-C1'-N9	8.12	114.70	108.20
38	A1	596	C	O4'-C1'-N1	8.13	114.70	108.20
38	A1	2427	C	C5-C4-N4	-8.13	114.51	120.20
38	A1	2194	A	N3-C4-C5	-8.12	121.11	126.80
61	AN	165	TYR	CB-CG-CD1	-8.12	116.12	121.00
11	B2	83	C	C3'-C2'-C1'	8.12	108.00	101.50
11	B2	391	G	C2-N3-C4	-8.12	107.84	111.90
11	B2	981	U	N3-C4-C5	8.12	119.47	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1328	G	N9-C4-C5	-8.12	102.15	105.40
38	A1	2057	G	C6-C5-N7	-8.12	125.53	130.40
38	A1	2176	G	C4-C5-N7	-8.12	107.55	110.80
43	AB	182	TYR	CB-CG-CD1	-8.12	116.13	121.00
11	B2	26	A	C5-C6-N6	-8.12	117.20	123.70
11	B2	527	A	C5-C6-N1	-8.12	113.64	117.70
11	B2	700	G	N7-C8-N9	8.12	117.16	113.10
11	B2	1050	G	C8-N9-C4	-8.12	103.15	106.40
11	B2	1102	A	C4-C5-C6	8.12	121.06	117.00
38	A1	558	C	N3-C4-N4	8.12	123.69	118.00
38	A1	1789	A	C5-C6-N1	-8.12	113.64	117.70
39	A3	62	A	P-O3'-C3'	8.12	129.45	119.70
65	AV	14	PHE	CB-CG-CD2	-8.12	115.11	120.80
11	B2	4	C	O4'-C1'-N1	8.12	114.70	108.20
11	B2	65	G	C5-C6-O6	-8.12	123.73	128.60
38	A1	562	G	C5-C6-O6	-8.12	123.73	128.60
38	A1	1782	C	C4-C5-C6	8.12	121.46	117.40
38	A1	2473	C	N3-C4-N4	8.12	123.68	118.00
10	B1	5	C	O4'-C1'-N1	8.12	114.69	108.20
11	B2	372	G	N1-C2-N3	-8.12	119.03	123.90
11	B2	520	G	N3-C2-N2	8.12	125.58	119.90
11	B2	1448	A	C4-C5-C6	8.12	121.06	117.00
27	BO	53	TYR	CB-CG-CD2	8.12	125.87	121.00
38	A1	352	G	N3-C2-N2	8.12	125.58	119.90
38	A1	451	C	C2-N3-C4	8.12	123.96	119.90
38	A1	1024	G	N1-C6-O6	8.12	124.77	119.90
38	A1	2711	U	O4'-C1'-N1	8.12	114.69	108.20
10	B1	40	U	N1-C2-O2	-8.12	117.12	122.80
11	B2	976	A	C4-C5-N7	-8.12	106.64	110.70
11	B2	1340	U	O4'-C1'-N1	8.12	114.69	108.20
38	A1	2321	A	C5-C6-N1	-8.12	113.64	117.70
11	B2	157	A	C6-C5-N7	-8.11	126.62	132.30
11	B2	1377	G	N1-C2-N3	-8.12	119.03	123.90
11	B2	1388	G	O4'-C1'-N9	8.11	114.69	108.20
38	A1	1112	G	C6-N1-C2	8.12	129.97	125.10
38	A1	2230	G	N9-C4-C5	8.12	108.65	105.40
38	A1	1322	G	C4-C5-N7	8.11	114.05	110.80
38	A1	2335	G	C5-C6-O6	-8.11	123.73	128.60
38	A1	2374	C	C2-N3-C4	8.12	123.96	119.90
38	A1	2375	C	N3-C4-C5	-8.11	118.66	121.90
38	A1	2703	G	O4'-C4'-C3'	-8.12	95.89	104.00
24	BL	61	PHE	CB-CG-CD2	-8.11	115.12	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	35	G	N1-C6-O6	8.11	124.77	119.90
11	B2	351	C	C4-C5-C6	8.11	121.46	117.40
11	B2	378	A	C5-C6-N1	-8.11	113.64	117.70
11	B2	458	G	C8-N9-C4	-8.11	103.16	106.40
11	B2	566	C	N3-C4-N4	8.11	123.68	118.00
11	B2	688	C	C6-N1-C2	-8.11	117.06	120.30
11	B2	1394	G	N1-C2-N3	-8.11	119.03	123.90
38	A1	424	U	O4'-C1'-N1	8.11	114.69	108.20
38	A1	1082	A	C6-C5-N7	-8.11	126.62	132.30
38	A1	1622	G	C4-C5-C6	8.11	123.67	118.80
38	A1	2010	G	C4-C5-C6	8.11	123.67	118.80
38	A1	2060	A	C8-N9-C4	-8.11	102.56	105.80
38	A1	2753	G	N7-C8-N9	-8.11	109.04	113.10
39	A3	80	G	O4'-C4'-C3'	-8.11	95.89	104.00
62	AO	145	ARG	NE-CZ-NH1	8.11	124.36	120.30
11	B2	56	A	O4'-C1'-N9	8.11	114.69	108.20
11	B2	352	A	C5-N7-C8	8.11	107.95	103.90
11	B2	764	C	C4-C5-C6	8.11	121.45	117.40
11	B2	869	U	O4'-C1'-N1	8.11	114.69	108.20
38	A1	271	G	C6-C5-N7	-8.11	125.53	130.40
38	A1	1359	C	N3-C4-C5	-8.11	118.66	121.90
38	A1	2466	C	N3-C4-C5	-8.11	118.66	121.90
11	B2	966	G	C6-N1-C2	-8.11	120.24	125.10
11	B2	987	G	N1-C6-O6	8.11	124.76	119.90
11	B2	1069	G	O4'-C1'-N9	8.11	114.69	108.20
31	BS	47	ARG	NE-CZ-NH1	-8.11	116.25	120.30
21	BI	50	PHE	CB-CG-CD2	8.11	126.47	120.80
38	A1	432	C	C5-C4-N4	-8.11	114.53	120.20
38	A1	443	C	C2-N1-C1'	8.11	127.72	118.80
38	A1	662	A	C6-N1-C2	8.11	123.46	118.60
38	A1	1636	C	C6-N1-C2	-8.11	117.06	120.30
38	A1	1951	G	N9-C4-C5	8.11	108.64	105.40
38	A1	2440	C	O4'-C1'-N1	8.11	114.68	108.20
38	A1	2747	C	N3-C4-N4	8.11	123.67	118.00
11	B2	78	G	N7-C8-N9	8.10	117.15	113.10
11	B2	95	G	N1-C6-O6	8.10	124.76	119.90
38	A1	38	U	O4'-C1'-N1	8.10	114.68	108.20
38	A1	40	G	C6-C5-N7	-8.10	125.54	130.40
38	A1	556	G	N1-C2-N2	8.10	123.49	116.20
38	A1	784	C	C4-C5-C6	8.10	121.45	117.40
38	A1	1020	G	N1-C2-N3	-8.10	119.04	123.90
11	B2	614	G	O4'-C1'-N9	8.10	114.68	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	937	A	C5-C6-N1	-8.10	113.65	117.70
38	A1	2380	A	C8-N9-C4	-8.10	102.56	105.80
38	A1	2396	G	C4-C5-C6	8.10	123.66	118.80
38	A1	2736	G	N7-C8-N9	-8.10	109.05	113.10
38	A1	2778	A	C4-C5-C6	8.10	121.05	117.00
11	B2	643	G	C5-C6-N1	-8.10	107.45	111.50
11	B2	716	G	C5-N7-C8	8.10	108.35	104.30
38	A1	1428	G	C4-C5-N7	-8.10	107.56	110.80
38	A1	319	A	C5-N7-C8	8.10	107.95	103.90
38	A1	3043	C	O4'-C1'-N1	8.10	114.68	108.20
38	A1	2862	A	C4-C5-C6	8.10	121.05	117.00
11	B2	1486	A	C4-C5-C6	8.10	121.05	117.00
38	A1	1303	C	N3-C4-C5	-8.10	118.66	121.90
39	A3	115	C	N3-C4-C5	-8.10	118.66	121.90
38	A1	353	C	C6-N1-C2	-8.09	117.06	120.30
38	A1	1461	G	C8-N9-C4	-8.09	103.16	106.40
38	A1	2612	A	C4-C5-C6	8.09	121.05	117.00
11	B2	163	C	N3-C4-N4	8.09	123.66	118.00
11	B2	251	G	O4'-C1'-N9	8.09	114.67	108.20
11	B2	604	C	N3-C4-C5	-8.09	118.66	121.90
11	B2	1114	G	C6-C5-N7	-8.09	125.55	130.40
11	B2	1482	C	C5-C4-N4	-8.09	114.54	120.20
26	BN	123	ARG	NE-CZ-NH2	-8.09	116.25	120.30
37	BY	38	TRP	CB-CG-CD2	-8.09	116.08	126.60
38	A1	366	G	P-O3'-C3'	-8.09	109.99	119.70
38	A1	382	G	C6-N1-C2	8.09	129.95	125.10
38	A1	605	A	C4-C5-C6	8.09	121.05	117.00
38	A1	1079	A	C5-C6-N6	-8.09	117.23	123.70
38	A1	2629	U	O4'-C1'-N1	8.09	114.67	108.20
38	A1	2136	G	N1-C6-O6	8.09	124.75	119.90
38	A1	2648	C	N3-C4-C5	-8.09	118.66	121.90
10	B1	32	A	C5-C6-N6	-8.09	117.23	123.70
11	B2	668	G	N1-C2-N3	-8.09	119.05	123.90
11	B2	1288	C	C5'-C4'-O4'	8.09	118.81	109.10
38	A1	1652	A	C6-C5-N7	-8.09	126.64	132.30
10	B1	62	C	N3-C4-N4	8.09	123.66	118.00
11	B2	1082	A	N1-C2-N3	8.09	133.34	129.30
38	A1	595	C	C5-C6-N1	8.09	125.04	121.00
38	A1	1688	C	N3-C4-C5	-8.09	118.67	121.90
38	A1	243	G	C4-C5-C6	8.09	123.65	118.80
38	A1	1797	A	C8-N9-C4	-8.09	102.57	105.80
38	A1	2138	A	C5-C6-N6	-8.09	117.23	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2994	G	N7-C8-N9	8.09	117.14	113.10
10	B1	4	G	C5-C6-N1	-8.08	107.46	111.50
11	B2	238	G	N1-C6-O6	-8.08	115.05	119.90
11	B2	962	G	C2-N3-C4	-8.08	107.86	111.90
20	BH	108	PHE	CB-CG-CD1	8.08	126.46	120.80
38	A1	118	A	N1-C6-N6	8.08	123.45	118.60
38	A1	930	G	C6-N1-C2	8.08	129.95	125.10
38	A1	1049	U	C5-C4-O4	-8.08	121.05	125.90
38	A1	1617	G	N9-C4-C5	-8.08	102.17	105.40
38	A1	1167	A	C8-N9-C4	-8.08	102.57	105.80
38	A1	1213	G	O4'-C1'-N9	8.08	114.67	108.20
38	A1	2301	C	O4'-C1'-C2'	-8.08	97.72	105.80
38	A1	1498	C	C6-N1-C2	-8.08	117.07	120.30
11	B2	772	G	O4'-C1'-N9	8.08	114.66	108.20
11	B2	811	G	N7-C8-N9	8.08	117.14	113.10
11	B2	942	A	C5-N7-C8	8.08	107.94	103.90
11	B2	1009	G	C5-C6-N1	-8.08	107.46	111.50
11	B2	1168	C	O4'-C1'-N1	8.08	114.66	108.20
38	A1	295	G	N3-C2-N2	8.08	125.56	119.90
38	A1	381	G	C8-N9-C4	-8.08	103.17	106.40
38	A1	1324	G	C5-C6-N1	-8.08	107.46	111.50
38	A1	1362	G	C5-C6-O6	-8.08	123.75	128.60
11	B2	516	A	O3'-P-O5'	-8.08	88.66	104.00
11	B2	615	G	N1-C6-O6	8.08	124.75	119.90
11	B2	1243	C	N3-C4-N4	8.08	123.65	118.00
38	A1	1518	G	C5-N7-C8	8.08	108.34	104.30
11	B2	1379	G	C4-C5-C6	8.08	123.64	118.80
11	B2	623	C	O4'-C1'-N1	8.07	114.66	108.20
11	B2	1046	G	N7-C8-N9	8.07	117.14	113.10
11	B2	1225	C	O4'-C1'-N1	8.07	114.66	108.20
11	B2	1381	G	C5-C6-O6	-8.07	123.76	128.60
38	A1	354	G	N1-C6-O6	8.07	124.75	119.90
38	A1	129	C	C4-C5-C6	8.07	121.44	117.40
38	A1	402	G	N1-C6-O6	8.07	124.75	119.90
38	A1	765	G	C1'-O4'-C4'	8.07	116.36	109.90
38	A1	1406	G	N3-C2-N2	8.07	125.55	119.90
38	A1	1477	C	N3-C4-N4	8.07	123.65	118.00
38	A1	2206	G	P-O3'-C3'	-8.07	110.01	119.70
38	A1	2664	G	O4'-C1'-N9	8.07	114.66	108.20
39	A3	109	A	C5-C6-N1	-8.07	113.66	117.70
11	B2	533	C	N3-C4-N4	8.07	123.65	118.00
11	B2	1014	C	C6-N1-C2	-8.07	117.07	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	B1	67	C	C5-C6-N1	8.07	125.03	121.00
11	B2	1430	G	N7-C8-N9	-8.07	109.06	113.10
38	A1	217	A	C5-C6-N6	-8.07	117.24	123.70
38	A1	814	G	C6-C5-N7	-8.07	125.56	130.40
38	A1	1879	U	N1-C2-N3	8.07	119.74	114.90
38	A1	2077	A	C5-C6-N6	-8.07	117.24	123.70
38	A1	2298	C	N3-C4-N4	8.07	123.65	118.00
38	A1	232	U	N3-C4-O4	8.07	125.05	119.40
38	A1	1012	G	O4'-C1'-N9	8.07	114.66	108.20
38	A1	1802	G	O4'-C1'-N9	8.07	114.66	108.20
38	A1	2436	A	C5-C6-N6	-8.07	117.24	123.70
38	A1	2779	G	C8-N9-C4	-8.07	103.17	106.40
8	AW	7	ARG	NE-CZ-NH1	8.07	124.33	120.30
38	A1	2499	U	N1-C2-O2	8.07	128.45	122.80
10	B1	26	C	P-O5'-C5'	8.07	133.81	120.90
11	B2	152	G	N3-C4-C5	8.07	132.63	128.60
11	B2	713	A	C2-N3-C4	-8.07	106.57	110.60
38	A1	1407	A	C6-N1-C2	8.07	123.44	118.60
38	A1	1515	G	N3-C4-N9	8.07	130.84	126.00
38	A1	1634	A	C6-C5-N7	-8.07	126.65	132.30
38	A1	1954	U	O4'-C1'-N1	8.07	114.65	108.20
42	Aa	36	ARG	NE-CZ-NH2	-8.07	116.27	120.30
11	B2	255	G	N1-C2-N3	-8.07	119.06	123.90
11	B2	346	C	O4'-C1'-N1	8.07	114.65	108.20
30	BR	54	TYR	CB-CG-CD2	-8.07	116.16	121.00
38	A1	1549	C	N3-C4-N4	8.07	123.65	118.00
38	A1	2026	C	N3-C4-C5	-8.07	118.67	121.90
38	A1	2237	A	O4'-C1'-N9	8.07	114.65	108.20
11	B2	188	C	C2-N3-C4	8.06	123.93	119.90
11	B2	1103	G	N9-C4-C5	-8.06	102.17	105.40
38	A1	1911	G	N7-C8-N9	-8.06	109.07	113.10
39	A3	117	G	N3-C2-N2	8.06	125.55	119.90
10	B1	63	C	O4'-C1'-N1	8.06	114.65	108.20
11	B2	1201	G	O4'-C1'-N9	8.06	114.65	108.20
15	BC	60	ARG	NE-CZ-NH1	8.06	124.33	120.30
38	A1	105	C	N3-C4-N4	8.06	123.64	118.00
38	A1	390	C	C5-C6-N1	8.06	125.03	121.00
38	A1	507	G	N3-C4-N9	-8.06	121.16	126.00
44	Ab	79	TYR	CB-CG-CD1	8.06	125.84	121.00
38	A1	293	G	N1-C6-O6	8.06	124.74	119.90
38	A1	361	G	C6-N1-C2	8.06	129.94	125.10
38	A1	1214	C	C5-C6-N1	8.06	125.03	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1238	G	C5-C6-N1	8.06	115.53	111.50
38	A1	2620	G	N1-C2-N3	-8.06	119.06	123.90
38	A1	2647	G	C4-C5-N7	-8.06	107.58	110.80
38	A1	3008	C	C5-C4-N4	-8.06	114.56	120.20
39	A3	79	U	N3-C4-O4	8.06	125.04	119.40
11	B2	37	G	C4-C5-C6	8.06	123.64	118.80
11	B2	119	A	C4-C5-C6	8.06	121.03	117.00
38	A1	474	G	C6-C5-N7	-8.06	125.56	130.40
38	A1	1864	G	N7-C8-N9	-8.06	109.07	113.10
38	A1	1889	G	N7-C8-N9	8.06	117.13	113.10
38	A1	2025	A	N1-C2-N3	8.06	133.33	129.30
11	B2	674	C	N3-C4-C5	-8.05	118.68	121.90
11	B2	720	A	O4'-C1'-N9	8.05	114.64	108.20
38	A1	470	A	C5-C6-N6	-8.06	117.25	123.70
38	A1	548	U	P-O3'-C3'	8.06	129.37	119.70
38	A1	2474	A	C5-C6-N1	-8.06	113.67	117.70
11	B2	896	A	N7-C8-N9	8.05	117.83	113.80
38	A1	800	G	C6-C5-N7	-8.05	125.57	130.40
38	A1	1384	C	N3-C2-O2	8.05	127.54	121.90
38	A1	1770	A	P-O3'-C3'	8.05	129.37	119.70
38	A1	2203	G	N1-C2-N2	-8.05	108.95	116.20
11	B2	777	G	N3-C4-N9	8.05	130.83	126.00
11	B2	1389	G	C4-C5-N7	-8.05	107.58	110.80
15	BC	53	TYR	CG-CD1-CE1	-8.05	114.86	121.30
38	A1	1662	C	N3-C4-N4	8.05	123.64	118.00
38	A1	2180	C	C5-C4-N4	-8.05	114.56	120.20
38	A1	2202	U	OP1-P-OP2	-8.05	107.52	119.60
38	A1	2675	C	O4'-C1'-N1	8.05	114.64	108.20
11	B2	406	U	P-O5'-C5'	8.05	133.78	120.90
11	B2	616	G	N3-C4-C5	8.05	132.62	128.60
38	A1	749	G	C5-N7-C8	8.05	108.32	104.30
38	A1	1433	C	N3-C4-N4	8.05	123.63	118.00
38	A1	2099	G	C6-C5-N7	-8.05	125.57	130.40
38	A1	2218	C	P-O3'-C3'	8.05	129.36	119.70
38	A1	3016	G	N9-C4-C5	8.05	108.62	105.40
39	A3	55	G	C6-C5-N7	-8.05	125.57	130.40
38	A1	2521	U	C6-N1-C2	-8.05	116.17	121.00
38	A1	2844	G	N1-C2-N3	-8.05	119.07	123.90
38	A1	2982	G	N3-C2-N2	8.05	125.53	119.90
38	A1	500	C	N3-C4-N4	8.05	123.63	118.00
11	B2	418	G	C2-N3-C4	8.04	115.92	111.90
11	B2	1075	A	N9-C4-C5	8.04	109.02	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1235	A	P-O3'-C3'	-8.04	110.05	119.70
38	A1	138	U	C2-N3-C4	-8.04	122.17	127.00
38	A1	317	A	C5-C6-N1	-8.04	113.68	117.70
38	A1	461	C	O4'-C1'-N1	8.04	114.64	108.20
3	Af	27	VAL	CA-CB-CG2	-8.04	98.84	110.90
11	B2	151	G	N1-C2-N3	-8.04	119.07	123.90
11	B2	432	G	O4'-C1'-N9	8.04	114.63	108.20
11	B2	684	G	C2-N3-C4	8.04	115.92	111.90
11	B2	1271	G	C6-C5-N7	-8.04	125.57	130.40
38	A1	1036	C	C5-C4-N4	-8.04	114.57	120.20
11	B2	972	C	O4'-C1'-N1	8.04	114.63	108.20
11	B2	1257	U	O4'-C1'-N1	8.04	114.63	108.20
32	BT	89	PHE	CB-CG-CD1	8.04	126.43	120.80
38	A1	342	C	N3-C2-O2	8.04	127.53	121.90
38	A1	872	G	C6-C5-N7	-8.04	125.58	130.40
38	A1	2348	G	C1'-O4'-C4'	8.04	116.33	109.90
11	B2	1048	G	C5-C6-O6	-8.04	123.78	128.60
38	A1	285	C	P-O3'-C3'	8.04	129.35	119.70
38	A1	650	C	N3-C4-C5	-8.04	118.68	121.90
38	A1	1114	G	C5'-C4'-O4'	8.04	118.75	109.10
38	A1	1322	G	N3-C2-N2	8.04	125.53	119.90
38	A1	2872	G	C8-N9-C4	8.04	109.62	106.40
38	A1	53	A	C4-C5-C6	8.04	121.02	117.00
38	A1	1018	G	O4'-C1'-N9	8.04	114.63	108.20
38	A1	1590	C	N3-C4-C5	-8.04	118.69	121.90
46	AD	79	TYR	CD1-CE1-CZ	-8.04	112.57	119.80
38	A1	2603	A	C5-C6-N6	-8.04	117.27	123.70
11	B2	647	G	N1-C6-O6	8.03	124.72	119.90
11	B2	1432	U	P-O5'-C5'	8.03	133.75	120.90
38	A1	1647	C	O4'-C1'-N1	8.04	114.63	108.20
38	A1	1752	C	N3-C4-C5	-8.04	118.69	121.90
11	B2	447	A	C5-C6-N1	-8.03	113.68	117.70
11	B2	758	U	N3-C4-O4	8.03	125.02	119.40
38	A1	2476	A	C8-N9-C4	-8.03	102.59	105.80
11	B2	1381	G	N3-C2-N2	8.03	125.52	119.90
38	A1	2064	U	O4'-C1'-N1	8.03	114.62	108.20
11	B2	62	G	N7-C8-N9	8.03	117.11	113.10
11	B2	216	G	C8-N9-C4	-8.03	103.19	106.40
11	B2	550	G	N1-C6-O6	8.03	124.72	119.90
11	B2	757	G	C4-C5-N7	-8.03	107.59	110.80
11	B2	1431	C	N3-C4-N4	8.03	123.62	118.00
38	A1	378	G	C5-C6-O6	-8.03	123.78	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1275	G	N1-C2-N3	-8.03	119.08	123.90
38	A1	1445	G	C4-C5-N7	-8.03	107.59	110.80
38	A1	2111	C	N3-C4-C5	-8.03	118.69	121.90
38	A1	2896	G	C4-C5-C6	8.03	123.61	118.80
11	B2	212	G	C2-N3-C4	8.02	115.91	111.90
11	B2	388	G	C8-N9-C1'	8.02	137.43	127.00
11	B2	459	G	C2-N3-C4	8.02	115.91	111.90
11	B2	756	A	C4-C5-N7	-8.02	106.69	110.70
11	B2	1118	C	C2-N1-C1'	8.02	127.62	118.80
38	A1	11	G	N1-C6-O6	8.02	124.71	119.90
38	A1	977	C	N3-C4-N4	8.02	123.62	118.00
38	A1	1355	A	N9-C4-C5	8.02	109.01	105.80
38	A1	1496	A	C4-C5-C6	8.02	121.01	117.00
38	A1	2283	C	N3-C4-N4	8.02	123.62	118.00
39	A3	39	C	C2-N3-C4	8.02	123.91	119.90
11	B2	855	C	O4'-C1'-N1	8.02	114.62	108.20
38	A1	614	G	N3-C2-N2	8.02	125.52	119.90
38	A1	619	G	C4-C5-C6	8.02	123.61	118.80
38	A1	709	A	O4'-C1'-N9	8.02	114.62	108.20
38	A1	1096	A	C4-C5-C6	8.02	121.01	117.00
38	A1	1524	A	C5-C6-N1	-8.02	113.69	117.70
38	A1	1731	U	N3-C4-C5	-8.02	109.79	114.60
38	A1	2013	A	O4'-C1'-N9	8.02	114.62	108.20
38	A1	2028	G	C5-C6-O6	-8.02	123.79	128.60
10	B1	44	G	O4'-C1'-N9	8.02	114.61	108.20
11	B2	624	G	C4-C5-N7	-8.02	107.59	110.80
11	B2	1473	A	C2-N3-C4	-8.02	106.59	110.60
38	A1	1386	G	N3-C2-N2	8.02	125.51	119.90
38	A1	1437	C	P-O3'-C3'	-8.02	110.08	119.70
38	A1	2882	G	N7-C8-N9	-8.02	109.09	113.10
66	AY	126	PHE	CB-CG-CD2	8.02	126.41	120.80
11	B2	698	A	N3-C4-C5	-8.02	121.19	126.80
11	B2	1287	G	N3-C2-N2	8.02	125.51	119.90
38	A1	635	G	C6-N1-C2	8.02	129.91	125.10
38	A1	802	G	C5-C6-N1	-8.02	107.49	111.50
38	A1	1572	C	C5-C6-N1	8.02	125.01	121.00
38	A1	2536	A	C5-C6-N1	-8.02	113.69	117.70
39	A3	43	C	N1-C2-O2	8.02	123.71	118.90
5	AS	43	MET	N-CA-CB	8.02	125.03	110.60
11	B2	248	U	O4'-C1'-C2'	-8.02	97.78	105.80
11	B2	394	C	O4'-C1'-N1	8.02	114.61	108.20
11	B2	846	G	N9-C4-C5	-8.02	102.19	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1415	U	N3-C4-O4	8.02	125.01	119.40
38	A1	1288	C	O4'-C1'-N1	8.02	114.61	108.20
38	A1	1937	A	C5-C6-N6	-8.02	117.29	123.70
38	A1	2721	C	N3-C4-N4	8.02	123.61	118.00
38	A1	585	G	N9-C4-C5	-8.01	102.19	105.40
38	A1	1892	G	N3-C2-N2	-8.01	114.29	119.90
38	A1	2527	G	C5-C6-O6	-8.01	123.79	128.60
53	Ah	2	ARG	NH1-CZ-NH2	8.01	128.21	119.40
11	B2	220	G	C8-N9-C4	8.01	109.60	106.40
11	B2	603	G	C6-N1-C2	8.01	129.91	125.10
11	B2	896	A	C8-N9-C4	-8.01	102.60	105.80
14	BB	5	TYR	CG-CD1-CE1	-8.01	114.89	121.30
38	A1	110	A	C5-C6-N1	-8.01	113.69	117.70
38	A1	668	G	C5-N7-C8	-8.01	100.30	104.30
38	A1	1103	C	N3-C4-N4	8.01	123.61	118.00
38	A1	1304	G	C5-C6-N1	8.01	115.50	111.50
38	A1	1672	G	C5-C6-O6	-8.01	123.79	128.60
38	A1	1706	G	C5-C6-O6	-8.01	123.79	128.60
38	A1	1759	A	O4'-C1'-N9	8.01	114.61	108.20
38	A1	1868	C	C5-C4-N4	-8.01	114.59	120.20
61	AN	139	ARG	NE-CZ-NH2	8.01	124.31	120.30
38	A1	1873	G	N3-C4-C5	8.01	132.60	128.60
38	A1	2856	G	N7-C8-N9	8.01	117.10	113.10
11	B2	47	A	C3'-C2'-C1'	8.01	107.91	101.50
38	A1	1035	G	C6-C5-N7	-8.01	125.59	130.40
38	A1	2565	A	C5-N7-C8	8.01	107.90	103.90
11	B2	542	G	O4'-C1'-N9	8.01	114.61	108.20
38	A1	560	G	O4'-C1'-N9	8.01	114.60	108.20
38	A1	687	C	C6-N1-C2	-8.01	117.10	120.30
38	A1	884	C	C5-C6-N1	8.01	125.00	121.00
38	A1	1337	G	N1-C6-O6	8.01	124.70	119.90
38	A1	372	A	C4-C5-N7	-8.00	106.70	110.70
11	B2	729	G	N3-C2-N2	8.00	125.50	119.90
38	A1	971	G	O4'-C1'-N9	8.00	114.60	108.20
38	A1	1302	G	O4'-C1'-N9	8.00	114.60	108.20
38	A1	2110	C	N3-C4-C5	-8.00	118.70	121.90
38	A1	2716	C	C2-N1-C1'	8.00	127.60	118.80
38	A1	2890	A	C5-C6-N6	-8.00	117.30	123.70
39	A3	25	A	C5-C6-N6	-8.00	117.30	123.70
54	AI	80	ARG	NE-CZ-NH2	-8.00	116.30	120.30
11	B2	1088	U	N3-C4-O4	8.00	125.00	119.40
38	A1	672	C	N3-C4-N4	8.00	123.60	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1236	C	N3-C4-N4	8.00	123.60	118.00
38	A1	2086	C	O4'-C1'-N1	8.00	114.60	108.20
11	B2	1400	A	C5-C6-N6	-8.00	117.30	123.70
11	B2	1489	A	C4-C5-C6	8.00	121.00	117.00
38	A1	1111	G	N3-C4-C5	8.00	132.60	128.60
38	A1	1361	G	C6-C5-N7	-8.00	125.60	130.40
38	A1	2029	C	N1-C2-N3	-8.00	113.60	119.20
38	A1	2318	G	O4'-C1'-N9	8.00	114.60	108.20
39	A3	62	A	C6-C5-N7	-8.00	126.70	132.30
38	A1	294	U	C5-C6-N1	8.00	126.70	122.70
38	A1	324	C	C5-C6-N1	8.00	125.00	121.00
38	A1	745	C	C2-N3-C4	-8.00	115.90	119.90
38	A1	994	G	C2'-C3'-O3'	8.00	127.09	109.50
38	A1	1224	A	C3'-C2'-C1'	8.00	107.90	101.50
39	A3	16	G	N7-C8-N9	8.00	117.10	113.10
11	B2	67	C	N3-C4-N4	7.99	123.60	118.00
11	B2	278	A	C5-C6-N6	-7.99	117.31	123.70
11	B2	821	G	C1'-O4'-C4'	7.99	116.30	109.90
11	B2	1337	A	O4'-C1'-N9	7.99	114.59	108.20
38	A1	727	A	C3'-C2'-C1'	7.99	107.90	101.50
38	A1	912	G	C8-N9-C4	-7.99	103.20	106.40
38	A1	1107	G	O4'-C1'-N9	7.99	114.59	108.20
38	A1	1383	G	N1-C6-O6	7.99	124.70	119.90
38	A1	86	G	P-O5'-C5'	7.99	133.69	120.90
38	A1	1429	A	N1-C2-N3	7.99	133.30	129.30
38	A1	1953	U	O4'-C1'-N1	7.99	114.59	108.20
11	B2	269	A	O4'-C1'-N9	7.99	114.59	108.20
11	B2	325	A	P-O3'-C3'	7.99	129.29	119.70
11	B2	888	A	C5-C6-N1	-7.99	113.70	117.70
38	A1	827	G	C8-N9-C4	-7.99	103.20	106.40
38	A1	1084	G	C5-C6-O6	-7.99	123.81	128.60
38	A1	1355	A	C6-C5-N7	-7.99	126.71	132.30
38	A1	1763	A	C5-N7-C8	7.99	107.89	103.90
38	A1	1814	A	C5-C6-N1	-7.99	113.70	117.70
38	A1	2731	C	O4'-C1'-N1	7.99	114.59	108.20
38	A1	3012	C	N3-C4-C5	-7.99	118.70	121.90
48	AE	155	ARG	NE-CZ-NH2	-7.99	116.31	120.30
11	B2	655	A	N1-C6-N6	7.99	123.39	118.60
11	B2	757	G	C5-C6-O6	-7.99	123.81	128.60
38	A1	717	A	C4-C5-C6	7.99	120.99	117.00
11	B2	1435	G	N9-C4-C5	7.99	108.59	105.40
39	A3	60	C	N3-C4-C5	-7.99	118.70	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	969	A	C5-C6-N1	-7.99	113.71	117.70
38	A1	130	G	N1-C2-N3	-7.99	119.11	123.90
38	A1	1329	G	C4-C5-N7	7.99	113.99	110.80
38	A1	1665	G	C6-C5-N7	-7.99	125.61	130.40
38	A1	1985	G	C8-N9-C4	-7.99	103.21	106.40
38	A1	2149	G	O4'-C1'-N9	7.99	114.59	108.20
38	A1	2849	C	O4'-C1'-N1	7.99	114.59	108.20
9	AX	97	ASP	CB-CG-OD1	-7.98	111.11	118.30
38	A1	60	G	C4-C5-C6	7.98	123.59	118.80
38	A1	425	U	O4'-C1'-N1	7.98	114.59	108.20
38	A1	1565	G	N1-C2-N3	-7.98	119.11	123.90
38	A1	1684	C	C3'-C2'-C1'	7.98	107.89	101.50
11	B2	215	C	O4'-C1'-N1	7.98	114.58	108.20
11	B2	478	C	N3-C4-C5	-7.98	118.71	121.90
38	A1	121	G	O4'-C4'-C3'	-7.98	96.02	104.00
38	A1	864	C	N3-C4-N4	7.98	123.59	118.00
38	A1	1001	C	C2-N3-C4	7.98	123.89	119.90
38	A1	1456	U	O4'-C1'-N1	7.98	114.59	108.20
38	A1	1553	G	C4-C5-N7	7.98	113.99	110.80
38	A1	2380	A	C4-C5-C6	7.98	120.99	117.00
38	A1	2559	G	N1-C2-N3	-7.98	119.11	123.90
38	A1	1117	C	C6-N1-C2	-7.98	117.11	120.30
38	A1	1942	G	O4'-C1'-N9	7.98	114.58	108.20
38	A1	2464	G	N1-C6-O6	7.98	124.69	119.90
38	A1	2880	C	C2-N3-C4	7.98	123.89	119.90
39	A3	6	G	N3-C2-N2	7.98	125.49	119.90
11	B2	228	G	C4-C5-C6	7.98	123.59	118.80
38	A1	2742	G	C4-C5-C6	7.98	123.59	118.80
38	A1	2950	G	O4'-C1'-N9	7.98	114.58	108.20
4	AQ	81	ARG	NE-CZ-NH2	7.98	124.29	120.30
11	B2	688	C	C5-C4-N4	-7.98	114.61	120.20
11	B2	1327	C	C5-C4-N4	-7.98	114.62	120.20
38	A1	1436	A	C8-N9-C4	-7.98	102.61	105.80
38	A1	1866	G	C5-C6-N1	-7.98	107.51	111.50
38	A1	1972	C	C4-C5-C6	-7.98	113.41	117.40
6	AT	47	PHE	CB-CG-CD1	-7.98	115.22	120.80
11	B2	1139	A	C5-C6-N1	-7.98	113.71	117.70
11	B2	1192	C	O4'-C1'-N1	7.98	114.58	108.20
38	A1	1450	C	C5'-C4'-O4'	7.98	118.67	109.10
38	A1	1866	G	N3-C4-N9	7.98	130.79	126.00
11	B2	1146	G	O4'-C1'-N9	7.97	114.58	108.20
38	A1	147	C	N3-C4-C5	-7.97	118.71	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	210	A	C2'-C3'-O3'	7.97	127.04	109.50
38	A1	690	G	C6-N1-C2	7.97	129.88	125.10
38	A1	2111	C	N1-C2-N3	7.97	124.78	119.20
38	A1	2636	C	C2-N3-C4	7.97	123.89	119.90
38	A1	2636	C	N3-C4-N4	7.97	123.58	118.00
39	A3	37	U	N3-C2-O2	7.97	127.78	122.20
10	B1	43	G	C5-N7-C8	7.97	108.29	104.30
11	B2	504	G	N1-C6-O6	7.97	124.68	119.90
11	B2	1074	C	O4'-C1'-N1	7.97	114.58	108.20
11	B2	1125	C	C5-C6-N1	7.97	124.99	121.00
38	A1	311	C	N3-C4-N4	7.97	123.58	118.00
38	A1	475	U	P-O3'-C3'	7.97	129.27	119.70
38	A1	924	A	C4-C5-N7	-7.97	106.71	110.70
38	A1	1966	C	C5-C4-N4	-7.97	114.62	120.20
38	A1	2174	G	C2-N3-C4	7.97	115.89	111.90
38	A1	2853	A	C5-N7-C8	7.97	107.89	103.90
38	A1	763	A	C5-N7-C8	7.97	107.89	103.90
38	A1	1518	G	N1-C2-N3	-7.97	119.12	123.90
38	A1	1938	G	O4'-C1'-N9	7.97	114.58	108.20
38	A1	2373	G	C4'-C3'-C2'	-7.97	94.63	102.60
11	B2	322	G	C4-C5-C6	7.97	123.58	118.80
38	A1	2133	G	C5-C6-N1	-7.97	107.52	111.50
38	A1	2356	U	C5-C6-N1	7.97	126.68	122.70
38	A1	2671	C	N1-C2-O2	7.97	123.68	118.90
38	A1	2988	A	C5-N7-C8	7.97	107.88	103.90
38	A1	70	G	O4'-C1'-N9	7.97	114.57	108.20
38	A1	359	C	N3-C4-N4	7.97	123.58	118.00
38	A1	1181	C	O4'-C1'-N1	7.97	114.57	108.20
38	A1	1854	G	C6-C5-N7	-7.97	125.62	130.40
11	B2	210	A	P-O3'-C3'	7.96	129.26	119.70
38	A1	42	G	C4-C5-C6	7.96	123.58	118.80
38	A1	2128	G	C5-C6-N1	-7.96	107.52	111.50
38	A1	2425	A	C5-C6-N6	-7.96	117.33	123.70
38	A1	2448	A	C5-C6-N6	-7.96	117.33	123.70
11	B2	149	U	C6-N1-C2	-7.96	116.22	121.00
38	A1	835	G	C5-C6-N1	-7.96	107.52	111.50
38	A1	1414	G	N1-C6-O6	7.96	124.68	119.90
38	A1	2086	C	C6-N1-C2	-7.96	117.11	120.30
38	A1	2203	G	O4'-C1'-N9	7.96	114.57	108.20
11	B2	313	G	C6-N1-C2	7.96	129.88	125.10
38	A1	257	G	N3-C4-C5	7.96	132.58	128.60
38	A1	470	A	C6-C5-N7	7.96	137.87	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	726	G	N3-C4-C5	7.96	132.58	128.60
38	A1	959	U	O4'-C1'-N1	7.96	114.57	108.20
38	A1	1354	G	O4'-C1'-N9	7.96	114.57	108.20
38	A1	1734	G	N1-C6-O6	7.96	124.68	119.90
38	A1	1083	G	N1-C2-N3	-7.96	119.12	123.90
38	A1	2402	A	C1'-O4'-C4'	7.96	116.27	109.90
11	B2	46	A	C4-C5-C6	7.96	120.98	117.00
11	B2	233	C	O4'-C1'-N1	7.96	114.57	108.20
11	B2	294	A	N1-C2-N3	-7.96	125.32	129.30
38	A1	21	C	C2-N3-C4	7.96	123.88	119.90
38	A1	817	G	C5-C6-N1	7.96	115.48	111.50
38	A1	828	G	C8-N9-C4	-7.96	103.22	106.40
38	A1	1913	C	N3-C4-C5	-7.96	118.72	121.90
38	A1	2057	G	C5-C6-N1	-7.96	107.52	111.50
38	A1	2136	G	C5'-C4'-O4'	7.96	118.65	109.10
38	A1	2472	A	C4-C5-N7	-7.96	106.72	110.70
38	A1	2694	C	O4'-C1'-N1	7.96	114.57	108.20
39	A3	53	A	C2-N3-C4	-7.96	106.62	110.60
11	B2	273	C	O4'-C1'-N1	7.96	114.57	108.20
38	A1	288	G	C6-C5-N7	-7.96	125.63	130.40
38	A1	817	G	C6-C5-N7	-7.96	125.63	130.40
38	A1	2094	A	C6-C5-N7	-7.96	126.73	132.30
38	A1	2137	A	P-O3'-C3'	-7.96	110.15	119.70
12	AG	33	ARG	NE-CZ-NH2	-7.96	116.32	120.30
11	B2	347	G	N9-C4-C5	-7.96	102.22	105.40
11	B2	1259	A	N7-C8-N9	7.95	117.78	113.80
38	A1	349	A	N7-C8-N9	7.95	117.78	113.80
38	A1	574	C	C5-C6-N1	7.95	124.98	121.00
38	A1	981	A	C5-N7-C8	7.95	107.88	103.90
38	A1	1068	U	N3-C4-C5	-7.95	109.83	114.60
38	A1	1706	G	P-O3'-C3'	7.95	129.24	119.70
38	A1	1915	G	O4'-C1'-N9	7.95	114.56	108.20
38	A1	2288	C	C5-C6-N1	-7.95	117.02	121.00
11	B2	1331	G	N3-C2-N2	7.95	125.47	119.90
38	A1	865	C	N3-C4-N4	7.95	123.57	118.00
38	A1	1830	U	N1-C2-O2	7.95	128.37	122.80
11	B2	1476	C	N3-C4-C5	-7.95	118.72	121.90
38	A1	184	A	C4-C5-C6	7.95	120.97	117.00
38	A1	1660	A	C4-C5-C6	7.95	120.97	117.00
38	A1	1808	G	O4'-C1'-N9	7.95	114.56	108.20
38	A1	2453	C	O4'-C1'-N1	7.95	114.56	108.20
38	A1	2461	C	C2-N3-C4	7.95	123.88	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
39	A3	78	C	O4'-C1'-N1	7.95	114.56	108.20
11	B2	576	C	C5-C6-N1	7.95	124.97	121.00
11	B2	654	U	P-O3'-C3'	7.95	129.24	119.70
11	B2	928	A	O4'-C1'-N9	7.95	114.56	108.20
11	B2	1244	C	N3-C4-C5	-7.95	118.72	121.90
11	B2	1393	A	P-O5'-C5'	-7.95	108.18	120.90
11	B2	1491	C	N3-C2-O2	-7.95	116.34	121.90
38	A1	894	C	C6-N1-C2	-7.95	117.12	120.30
38	A1	2844	G	C6-N1-C2	7.95	129.87	125.10
38	A1	2943	G	O4'-C1'-N9	7.95	114.56	108.20
39	A3	45	C	C4'-C3'-C2'	-7.95	94.65	102.60
46	AD	78	ARG	NE-CZ-NH2	-7.95	116.33	120.30
11	B2	900	G	C5-C6-O6	-7.95	123.83	128.60
38	A1	1367	A	P-O3'-C3'	7.95	129.24	119.70
38	A1	2345	U	N3-C4-C5	-7.95	109.83	114.60
11	B2	897	A	N9-C4-C5	7.95	108.98	105.80
38	A1	383	C	O4'-C1'-N1	7.95	114.56	108.20
38	A1	607	C	N3-C4-C5	-7.95	118.72	121.90
62	AO	152	TYR	CB-CG-CD2	7.95	125.77	121.00
11	B2	1052	U	O4'-C1'-N1	7.94	114.56	108.20
38	A1	2292	A	N3-C4-C5	-7.94	121.24	126.80
38	A1	2683	G	C4-C5-C6	7.94	123.57	118.80
11	B2	484	U	C5-C4-O4	-7.94	121.14	125.90
11	B2	578	G	O4'-C1'-N9	7.94	114.55	108.20
11	B2	1090	C	C4'-C3'-C2'	-7.94	94.66	102.60
38	A1	457	C	N3-C4-C5	-7.94	118.72	121.90
38	A1	1927	C	N1-C2-O2	7.94	123.67	118.90
38	A1	2425	A	C6-C5-N7	-7.94	126.74	132.30
10	B1	76	C	C2-N1-C1'	7.94	127.53	118.80
11	B2	393	A	C4-C5-C6	7.94	120.97	117.00
11	B2	620	G	N1-C2-N3	-7.94	119.14	123.90
11	B2	967	C	O4'-C1'-N1	7.94	114.55	108.20
11	B2	1239	A	O4'-C1'-N9	7.94	114.55	108.20
11	B2	1433	C	N3-C4-C5	-7.94	118.72	121.90
38	A1	757	C	N3-C4-N4	7.94	123.56	118.00
38	A1	1224	A	C4-C5-C6	7.94	120.97	117.00
38	A1	1520	G	O4'-C1'-N9	7.94	114.55	108.20
11	B2	403	C	N3-C4-N4	7.94	123.56	118.00
11	B2	743	U	O4'-C1'-N1	7.94	114.55	108.20
11	B2	1115	G	C8-N9-C4	-7.94	103.22	106.40
38	A1	85	G	N1-C2-N3	-7.94	119.14	123.90
38	A1	715	G	C5-C6-O6	-7.94	123.84	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2745	G	N1-C2-N3	-7.94	119.14	123.90
39	A3	121	A	C4-C5-C6	7.94	120.97	117.00
11	B2	706	G	N1-C6-O6	7.94	124.66	119.90
11	B2	987	G	C5-C6-O6	-7.94	123.84	128.60
11	B2	1154	G	N7-C8-N9	7.94	117.07	113.10
38	A1	84	A	C4-C5-C6	7.94	120.97	117.00
62	AO	191	ARG	NE-CZ-NH1	-7.94	116.33	120.30
10	B1	1	G	O4'-C1'-N9	7.94	114.55	108.20
11	B2	818	A	N1-C6-N6	7.94	123.36	118.60
38	A1	1095	A	C8-N9-C4	-7.94	102.63	105.80
38	A1	2053	G	O4'-C1'-N9	7.94	114.55	108.20
17	BE	184	TYR	CB-CG-CD1	-7.93	116.24	121.00
38	A1	202	A	P-O3'-C3'	-7.93	110.18	119.70
38	A1	438	G	N7-C8-N9	-7.93	109.13	113.10
38	A1	713	C	N1-C2-O2	-7.93	114.14	118.90
38	A1	951	C	N3-C4-C5	-7.93	118.73	121.90
38	A1	992	G	N1-C6-O6	7.93	124.66	119.90
38	A1	1197	G	C5-C6-O6	-7.93	123.84	128.60
38	A1	1287	G	C4-C5-N7	7.93	113.97	110.80
38	A1	1712	U	C5-C6-N1	7.93	126.67	122.70
38	A1	2243	G	N1-C6-O6	7.93	124.66	119.90
38	A1	78	C	C5-C6-N1	7.93	124.97	121.00
38	A1	1230	G	N1-C6-O6	7.93	124.66	119.90
41	AA	24	PHE	CB-CG-CD1	-7.93	115.25	120.80
43	AB	134	ARG	NE-CZ-NH2	-7.93	116.33	120.30
38	A1	2998	G	O4'-C1'-N9	7.93	114.55	108.20
39	A3	122	C	C4-C5-C6	7.93	121.37	117.40
11	B2	165	U	C5-C4-O4	-7.93	121.14	125.90
11	B2	411	C	C4-C5-C6	-7.93	113.44	117.40
11	B2	1035	C	N3-C4-N4	7.93	123.55	118.00
38	A1	195	U	N3-C4-C5	-7.93	109.84	114.60
38	A1	1160	U	O4'-C1'-N1	7.93	114.54	108.20
38	A1	1666	G	C2-N3-C4	7.93	115.86	111.90
38	A1	2686	A	C5-C6-N6	-7.93	117.36	123.70
39	A3	27	C	C2-N3-C4	7.93	123.86	119.90
11	B2	960	A	C5-C6-N6	-7.93	117.36	123.70
11	B2	1369	C	C2-N3-C4	7.93	123.86	119.90
38	A1	2196	C	O4'-C1'-N1	7.93	114.54	108.20
38	A1	556	G	C5-C6-O6	-7.92	123.84	128.60
38	A1	730	C	N1-C2-O2	7.92	123.66	118.90
38	A1	1007	U	N3-C4-O4	7.92	124.95	119.40
38	A1	1142	A	C5-N7-C8	7.92	107.86	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1641	G	N1-C6-O6	7.92	124.66	119.90
38	A1	451	C	O4'-C1'-N1	7.92	114.54	108.20
38	A1	1174	U	C5-C4-O4	7.92	130.65	125.90
38	A1	2689	G	C6-C5-N7	-7.92	125.65	130.40
11	B2	367	G	C5-C6-O6	-7.92	123.85	128.60
11	B2	779	G	N3-C4-C5	7.92	132.56	128.60
11	B2	883	G	C6-C5-N7	-7.92	125.65	130.40
11	B2	1174	A	C5-N7-C8	-7.92	99.94	103.90
11	B2	1428	G	C4-C5-N7	-7.92	107.63	110.80
38	A1	1940	U	N3-C4-O4	7.92	124.95	119.40
38	A1	395	G	N1-C6-O6	7.92	124.65	119.90
38	A1	524	C	N1-C2-O2	-7.92	114.15	118.90
38	A1	1737	A	C4-C5-N7	-7.92	106.74	110.70
38	A1	2961	A	C4-C5-C6	7.92	120.96	117.00
11	B2	270	A	C6-C5-N7	-7.92	126.76	132.30
11	B2	493	C	C5-C4-N4	-7.92	114.66	120.20
11	B2	675	A	C5-C6-N1	-7.92	113.74	117.70
11	B2	1476	C	C6-N1-C2	-7.92	117.13	120.30
5	AS	16	ARG	NE-CZ-NH1	-7.92	116.34	120.30
11	B2	483	G	N1-C2-N3	-7.92	119.15	123.90
11	B2	1492	U	O4'-C1'-N1	7.92	114.53	108.20
38	A1	243	G	C5-N7-C8	-7.92	100.34	104.30
38	A1	1584	G	O4'-C1'-N9	7.92	114.53	108.20
38	A1	2266	C	C2-N3-C4	7.92	123.86	119.90
38	A1	2277	G	C6-C5-N7	-7.92	125.65	130.40
38	A1	2286	U	N3-C4-O4	7.92	124.94	119.40
11	B2	300	G	C6-C5-N7	-7.92	125.65	130.40
38	A1	685	G	N3-C4-C5	-7.92	124.64	128.60
38	A1	929	G	C8-N9-C4	-7.92	103.23	106.40
38	A1	1085	G	O4'-C1'-N9	7.92	114.53	108.20
11	B2	679	G	C5-C6-N1	-7.91	107.54	111.50
11	B2	1042	U	C5-C6-N1	7.91	126.66	122.70
11	B2	1202	G	N1-C2-N3	-7.91	119.15	123.90
31	BS	14	ARG	NE-CZ-NH1	7.91	124.26	120.30
38	A1	2476	A	N9-C4-C5	7.91	108.97	105.80
8	AW	63	ARG	NE-CZ-NH2	-7.91	116.34	120.30
38	A1	916	A	N7-C8-N9	7.91	117.76	113.80
38	A1	1856	G	C8-N9-C4	-7.91	103.23	106.40
38	A1	2227	G	C4-C5-N7	7.91	113.97	110.80
38	A1	2291	G	N9-C4-C5	-7.91	102.23	105.40
38	A1	2368	G	N1-C2-N3	7.91	128.65	123.90
38	A1	2522	C	C6-N1-C2	-7.91	117.14	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1438	A	C5-C6-N1	-7.91	113.75	117.70
38	A1	94	A	C4-C5-C6	7.91	120.95	117.00
38	A1	406	G	N3-C2-N2	7.91	125.44	119.90
38	A1	1525	G	C4-C5-C6	7.91	123.55	118.80
11	B2	929	C	C5-C4-N4	-7.91	114.66	120.20
38	A1	799	C	C2-N3-C4	7.91	123.85	119.90
38	A1	1021	G	C6-C5-N7	-7.91	125.65	130.40
38	A1	1159	U	O4'-C1'-N1	7.91	114.53	108.20
38	A1	1423	G	N1-C2-N3	-7.91	119.15	123.90
38	A1	1526	G	C4-C5-C6	7.91	123.55	118.80
38	A1	1944	C	N3-C4-C5	-7.91	118.74	121.90
38	A1	2519	C	N1-C2-O2	-7.91	114.16	118.90
39	A3	16	G	N1-C6-O6	7.91	124.64	119.90
11	B2	941	C	P-O3'-C3'	7.91	129.19	119.70
11	B2	1072	C	O4'-C1'-N1	7.91	114.53	108.20
11	B2	1148	G	C5-N7-C8	7.91	108.25	104.30
11	B2	1307	G	C2-N3-C4	7.91	115.85	111.90
38	A1	1027	A	C4-C5-C6	7.91	120.95	117.00
38	A1	1646	G	N1-C2-N3	-7.91	119.16	123.90
11	B2	817	U	C2-N3-C4	-7.90	122.26	127.00
11	B2	988	A	C5-N7-C8	7.90	107.85	103.90
11	B2	1213	G	C5-C6-N1	-7.90	107.55	111.50
11	B2	1390	G	N3-C2-N2	7.90	125.43	119.90
38	A1	1730	C	N3-C4-N4	7.90	123.53	118.00
11	B2	603	G	C8-N9-C4	-7.90	103.24	106.40
11	B2	1306	A	C8-N9-C4	7.90	108.96	105.80
38	A1	98	G	P-O5'-C5'	7.90	133.54	120.90
38	A1	826	C	C4-C5-C6	7.90	121.35	117.40
38	A1	1074	G	P-O3'-C3'	-7.90	110.22	119.70
38	A1	2231	G	O4'-C1'-N9	7.90	114.52	108.20
11	B2	423	U	O4'-C1'-N1	7.90	114.52	108.20
11	B2	882	C	O4'-C1'-N1	7.90	114.52	108.20
38	A1	507	G	N9-C4-C5	7.90	108.56	105.40
38	A1	711	C	O4'-C1'-N1	7.90	114.52	108.20
38	A1	1633	A	C5-C6-N1	-7.90	113.75	117.70
38	A1	2221	A	O4'-C1'-N9	7.90	114.52	108.20
38	A1	2797	C	C4-C5-C6	7.90	121.35	117.40
11	B2	1042	U	C4-C5-C6	-7.90	114.96	119.70
38	A1	348	G	O4'-C1'-N9	7.90	114.52	108.20
38	A1	504	G	N3-C4-C5	-7.90	124.65	128.60
11	B2	530	G	N1-C2-N3	-7.90	119.16	123.90
11	B2	1069	G	N7-C8-N9	-7.90	109.15	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	207	A	N9-C4-C5	7.90	108.96	105.80
38	A1	1396	A	N1-C6-N6	7.90	123.34	118.60
11	B2	877	A	N1-C6-N6	7.90	123.34	118.60
11	B2	1426	C	C4-C5-C6	7.90	121.35	117.40
38	A1	2840	C	P-O3'-C3'	7.90	129.18	119.70
11	B2	235	G	N3-C2-N2	7.89	125.43	119.90
11	B2	446	G	N1-C2-N3	-7.89	119.16	123.90
11	B2	1310	C	C6-N1-C2	-7.89	117.14	120.30
38	A1	117	A	N3-C4-C5	-7.89	121.27	126.80
38	A1	840	G	O4'-C1'-N9	7.89	114.52	108.20
38	A1	922	C	P-O5'-C5'	7.89	133.53	120.90
38	A1	954	A	C5-C6-N1	-7.89	113.75	117.70
38	A1	1057	C	N3-C4-C5	-7.89	118.74	121.90
38	A1	1438	C	C5-C6-N1	-7.89	117.05	121.00
11	B2	482	G	N1-C6-O6	7.89	124.64	119.90
38	A1	721	G	C5-C6-O6	-7.89	123.86	128.60
38	A1	929	G	C5-C6-O6	-7.89	123.86	128.60
38	A1	1359	C	N3-C4-N4	7.89	123.53	118.00
38	A1	137	A	C4'-C3'-C2'	-7.89	94.71	102.60
38	A1	356	C	N1-C2-O2	7.89	123.64	118.90
38	A1	2502	C	O4'-C1'-N1	7.89	114.51	108.20
11	B2	353	G	C6-N1-C2	7.89	129.83	125.10
11	B2	1384	G	C5-C6-N1	-7.89	107.56	111.50
11	B2	1481	G	N1-C2-N2	7.89	123.30	116.20
38	A1	628	A	N1-C6-N6	7.89	123.33	118.60
38	A1	723	A	C5-C6-N1	-7.89	113.75	117.70
38	A1	1658	A	N9-C4-C5	7.89	108.96	105.80
38	A1	2350	G	N3-C2-N2	7.89	125.42	119.90
38	A1	2822	G	O4'-C1'-N9	7.89	114.51	108.20
46	AD	158	ARG	NE-CZ-NH2	-7.89	116.36	120.30
11	B2	167	G	O4'-C1'-N9	7.89	114.51	108.20
11	B2	463	G	C8-N9-C4	-7.89	103.25	106.40
38	A1	646	U	N1-C2-O2	-7.89	117.28	122.80
38	A1	1823	A	O4'-C1'-N9	7.89	114.51	108.20
38	A1	2991	C	C2-N3-C4	7.89	123.84	119.90
11	B2	628	G	C2-N3-C4	7.89	115.84	111.90
38	A1	296	G	N1-C2-N3	-7.89	119.17	123.90
38	A1	488	A	C4-C5-C6	7.89	120.94	117.00
38	A1	566	G	O4'-C1'-N9	7.89	114.51	108.20
38	A1	568	A	C5-C6-N6	-7.89	117.39	123.70
38	A1	703	G	C2-N3-C4	7.89	115.84	111.90
38	A1	977	C	N3-C4-C5	-7.89	118.75	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1103	C	C4-C5-C6	7.89	121.34	117.40
38	A1	1225	A	N3-C4-N9	7.89	133.71	127.40
38	A1	2584	A	N9-C4-C5	7.89	108.95	105.80
38	A1	2689	G	N3-C2-N2	7.89	125.42	119.90
38	A1	2797	C	N3-C4-N4	7.89	123.52	118.00
11	B2	118	U	N3-C4-C5	-7.88	109.87	114.60
11	B2	1164	A	C5-C6-N6	-7.88	117.39	123.70
11	B2	1404	C	P-O3'-C3'	7.88	129.16	119.70
38	A1	580	G	C5-C6-O6	-7.88	123.87	128.60
38	A1	2195	G	C8-N9-C4	-7.88	103.25	106.40
38	A1	639	C	C3'-C2'-C1'	7.88	107.81	101.50
38	A1	1360	G	O4'-C1'-N9	7.88	114.51	108.20
38	A1	1655	G	N3-C2-N2	7.88	125.42	119.90
38	A1	2267	U	C5-C6-N1	-7.88	118.76	122.70
11	B2	311	A	C4-C5-N7	-7.88	106.76	110.70
11	B2	731	A	O4'-C1'-N9	7.88	114.51	108.20
11	B2	796	C	N3-C4-C5	-7.88	118.75	121.90
38	A1	53	A	O4'-C1'-N9	7.88	114.50	108.20
38	A1	85	G	C5'-C4'-O4'	-7.88	99.64	109.10
38	A1	571	G	C4-C5-N7	7.88	113.95	110.80
38	A1	889	C	C5-C4-N4	-7.88	114.68	120.20
38	A1	958	A	C6-C5-N7	-7.88	126.78	132.30
38	A1	982	G	P-O5'-C5'	7.88	133.51	120.90
38	A1	1008	U	C2-N3-C4	7.88	131.73	127.00
38	A1	2137	A	N1-C6-N6	7.88	123.33	118.60
11	B2	238	G	C6-N1-C2	-7.88	120.37	125.10
38	A1	95	G	N1-C2-N3	-7.88	119.17	123.90
38	A1	1018	G	C6-C5-N7	-7.88	125.67	130.40
38	A1	1653	U	C5-C4-O4	-7.88	121.17	125.90
38	A1	1964	G	C4-C5-N7	7.88	113.95	110.80
11	B2	941	C	C5-C6-N1	7.88	124.94	121.00
38	A1	1604	G	C5-C6-N1	-7.88	107.56	111.50
38	A1	2287	C	O4'-C1'-C2'	7.88	114.69	107.60
38	A1	2316	U	O4'-C1'-N1	7.88	114.50	108.20
38	A1	2715	A	C6-N1-C2	-7.88	113.87	118.60
58	Ak	195	TYR	CB-CG-CD1	-7.88	116.27	121.00
11	B2	513	A	N1-C6-N6	7.88	123.33	118.60
11	B2	669	A	N1-C2-N3	-7.88	125.36	129.30
11	B2	822	A	C4-C5-C6	7.88	120.94	117.00
38	A1	31	G	C5-C6-N1	-7.88	107.56	111.50
38	A1	111	U	P-O3'-C3'	-7.88	110.25	119.70
38	A1	1453	G	C4-C5-N7	7.88	113.95	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1565	G	N9-C4-C5	-7.88	102.25	105.40
38	A1	2698	G	N1-C6-O6	7.88	124.62	119.90
38	A1	2833	G	N3-C2-N2	7.88	125.41	119.90
39	A3	59	C	C2-N3-C4	7.88	123.84	119.90
11	B2	287	G	C3'-C2'-C1'	-7.88	95.20	101.50
38	A1	526	C	N3-C4-N4	7.88	123.51	118.00
38	A1	2382	A	O4'-C1'-N9	7.88	114.50	108.20
10	B1	57	C	N3-C4-C5	-7.87	118.75	121.90
11	B2	33	U	O4'-C1'-N1	7.87	114.50	108.20
11	B2	609	G	C5-C6-O6	-7.87	123.88	128.60
11	B2	1037	U	C4'-C3'-C2'	7.87	110.47	102.60
11	B2	1285	C	O4'-C1'-N1	7.87	114.50	108.20
38	A1	865	C	N3-C4-C5	-7.87	118.75	121.90
38	A1	865	C	O4'-C1'-N1	7.87	114.50	108.20
38	A1	1647	C	C4-C5-C6	7.87	121.34	117.40
38	A1	1981	G	C5-C6-O6	-7.87	123.88	128.60
38	A1	2545	A	C6-C5-N7	-7.87	126.79	132.30
38	A1	2793	C	C5'-C4'-O4'	7.87	118.55	109.10
10	B1	43	G	N3-C2-N2	7.87	125.41	119.90
11	B2	566	C	C5-C6-N1	7.87	124.94	121.00
11	B2	695	G	C5-C6-N1	-7.87	107.56	111.50
38	A1	710	G	N7-C8-N9	7.87	117.04	113.10
38	A1	948	C	O4'-C1'-N1	7.87	114.50	108.20
38	A1	2395	C	N3-C4-N4	7.87	123.51	118.00
38	A1	1800	G	N3-C2-N2	7.87	125.41	119.90
38	A1	508	G	C2-N3-C4	-7.87	107.97	111.90
38	A1	668	G	N9-C4-C5	-7.87	102.25	105.40
38	A1	890	G	N7-C8-N9	-7.87	109.17	113.10
38	A1	1031	C	C5-C4-N4	-7.87	114.69	120.20
38	A1	2853	A	N1-C2-N3	7.87	133.24	129.30
38	A1	2994	G	C6-C5-N7	-7.87	125.68	130.40
11	B2	1045	A	N7-C8-N9	-7.87	109.87	113.80
11	B2	568	C	C5-C4-N4	-7.87	114.69	120.20
11	B2	716	G	O4'-C1'-N9	7.87	114.49	108.20
11	B2	951	G	P-O3'-C3'	7.87	129.14	119.70
11	B2	1132	C	O4'-C1'-N1	7.87	114.49	108.20
38	A1	144	A	N1-C2-N3	7.87	133.23	129.30
38	A1	1765	A	P-O3'-C3'	7.87	129.14	119.70
38	A1	2490	C	N3-C4-N4	7.87	123.51	118.00
38	A1	2688	C	C5-C6-N1	7.87	124.93	121.00
39	A3	6	G	N3-C4-C5	7.87	132.53	128.60
39	A3	112	C	N3-C4-N4	7.87	123.51	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	B1	50	G	N1-C2-N3	-7.86	119.18	123.90
11	B2	1242	C	C6-N1-C2	-7.86	117.15	120.30
11	B2	1491	C	N3-C4-N4	7.86	123.50	118.00
38	A1	1691	U	C3'-C2'-C1'	7.86	107.79	101.50
38	A1	2010	G	C5-C6-N1	-7.86	107.57	111.50
38	A1	3019	C	C4-C5-C6	7.86	121.33	117.40
11	B2	54	C	C5-C6-N1	-7.86	117.07	121.00
15	BC	166	TYR	CD1-CE1-CZ	-7.86	112.72	119.80
38	A1	1455	U	N3-C4-C5	-7.86	109.88	114.60
38	A1	2512	C	O4'-C1'-N1	7.86	114.49	108.20
38	A1	2729	A	C2-N3-C4	7.86	114.53	110.60
11	B2	496	C	N3-C4-N4	7.86	123.50	118.00
38	A1	1573	A	C2-N3-C4	7.86	114.53	110.60
38	A1	1893	C	N3-C4-C5	-7.86	118.76	121.90
39	A3	5	G	N3-C4-C5	7.86	132.53	128.60
38	A1	169	G	N1-C6-O6	7.86	124.62	119.90
38	A1	1474	A	C2-N3-C4	-7.86	106.67	110.60
38	A1	2090	A	C3'-C2'-C1'	7.86	107.79	101.50
38	A1	2631	C	N3-C4-C5	-7.86	118.76	121.90
11	B2	1378	A	O4'-C1'-N9	7.86	114.49	108.20
38	A1	411	U	O4'-C1'-N1	7.86	114.49	108.20
38	A1	1113	G	C5-C6-O6	-7.86	123.89	128.60
38	A1	2148	U	C4'-C3'-C2'	-7.86	94.74	102.60
38	A1	2262	C	C5-C6-N1	-7.86	117.07	121.00
11	B2	1210	A	C5-C6-N1	-7.86	113.77	117.70
38	A1	700	A	N7-C8-N9	-7.86	109.87	113.80
38	A1	1941	A	O4'-C1'-N9	7.86	114.48	108.20
38	A1	2182	A	C4-C5-C6	7.86	120.93	117.00
38	A1	2960	G	C3'-C2'-C1'	7.86	107.78	101.50
39	A3	5	G	C5-C6-O6	-7.86	123.89	128.60
11	B2	269	A	C5-C6-N6	-7.85	117.42	123.70
38	A1	40	G	C5-C6-O6	-7.85	123.89	128.60
38	A1	1487	U	P-O3'-C3'	7.85	129.12	119.70
38	A1	1553	G	N1-C6-O6	7.85	124.61	119.90
38	A1	1604	G	C4-C5-C6	7.85	123.51	118.80
38	A1	2099	G	O4'-C1'-N9	7.85	114.48	108.20
11	B2	182	A	O4'-C1'-N9	7.85	114.48	108.20
11	B2	261	G	N3-C2-N2	7.85	125.40	119.90
11	B2	376	G	O4'-C1'-N9	7.85	114.48	108.20
11	B2	617	A	C4-C5-C6	7.85	120.93	117.00
11	B2	1341	C	N3-C4-N4	7.85	123.50	118.00
26	BN	32	ARG	NE-CZ-NH2	-7.85	116.37	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1616	A	C5-C6-N6	-7.85	117.42	123.70
38	A1	2525	C	N3-C4-N4	7.85	123.50	118.00
38	A1	2779	G	N3-C2-N2	7.85	125.40	119.90
11	B2	232	G	N3-C2-N2	7.85	125.39	119.90
11	B2	343	G	N1-C6-O6	7.85	124.61	119.90
11	B2	813	G	N7-C8-N9	7.85	117.03	113.10
38	A1	511	A	O4'-C1'-N9	7.85	114.48	108.20
38	A1	2313	G	N1-C6-O6	7.85	124.61	119.90
38	A1	2445	G	C5-C6-O6	-7.85	123.89	128.60
38	A1	2696	G	C4'-C3'-C2'	7.85	110.45	102.60
11	B2	223	G	O4'-C1'-N9	7.85	114.48	108.20
11	B2	673	C	N3-C4-N4	7.85	123.49	118.00
11	B2	931	C	C2-N3-C4	7.85	123.82	119.90
11	B2	1449	G	C8-N9-C4	-7.85	103.26	106.40
38	A1	940	G	C8-N9-C4	-7.85	103.26	106.40
38	A1	1989	G	N7-C8-N9	-7.85	109.18	113.10
38	A1	2309	C	C6-N1-C2	-7.85	117.16	120.30
39	A3	23	A	O4'-C1'-N9	7.85	114.48	108.20
49	Ae	26	VAL	CA-CB-CG1	7.85	122.67	110.90
12	AG	122	MET	N-CA-CB	7.85	124.72	110.60
38	A1	405	G	C4-C5-N7	-7.85	107.66	110.80
38	A1	606	A	C8-N9-C4	-7.85	102.66	105.80
11	B2	1057	A	C8-N9-C4	-7.84	102.66	105.80
38	A1	631	G	N1-C6-O6	7.84	124.61	119.90
38	A1	2345	U	O4'-C1'-N1	7.84	114.48	108.20
38	A1	2361	C	N3-C4-N4	7.84	123.49	118.00
55	Ai	17	TYR	N-CA-CB	7.84	124.72	110.60
11	B2	806	G	C3'-C2'-C1'	7.84	107.77	101.50
38	A1	365	G	P-O3'-C3'	-7.84	110.29	119.70
38	A1	1042	G	C4-C5-C6	7.84	123.51	118.80
38	A1	2777	G	N3-C4-C5	-7.84	124.68	128.60
9	AX	38	PHE	CB-CG-CD1	-7.84	115.31	120.80
11	B2	925	U	O4'-C1'-N1	7.84	114.47	108.20
11	B2	1154	G	N1-C2-N3	-7.84	119.19	123.90
38	A1	1131	G	O4'-C1'-N9	7.84	114.47	108.20
38	A1	1208	A	O4'-C1'-N9	7.84	114.47	108.20
38	A1	2002	A	C5-C6-N6	-7.84	117.43	123.70
38	A1	2175	G	O4'-C4'-C3'	-7.84	96.16	104.00
38	A1	2777	G	C4-C5-C6	7.84	123.50	118.80
39	A3	4	C	N3-C4-N4	7.84	123.49	118.00
11	B2	67	C	N3-C4-C5	-7.84	118.77	121.90
38	A1	579	C	C2-N3-C4	7.84	123.82	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1821	C	N3-C4-C5	-7.84	118.77	121.90
38	A1	2114	C	O4'-C1'-N1	7.84	114.47	108.20
11	B2	131	G	N3-C2-N2	7.84	125.39	119.90
11	B2	1113	G	O4'-C1'-N9	7.84	114.47	108.20
38	A1	1596	G	C8-N9-C4	-7.84	103.27	106.40
38	A1	2408	G	C6-C5-N7	-7.84	125.70	130.40
11	B2	203	A	C4-C5-C6	7.84	120.92	117.00
11	B2	669	A	C6-C5-N7	-7.84	126.81	132.30
11	B2	1043	U	O4'-C1'-N1	7.84	114.47	108.20
38	A1	2069	G	N1-C6-O6	7.84	124.60	119.90
32	BT	82	TYR	CB-CG-CD2	7.83	125.70	121.00
38	A1	1068	U	C6-N1-C2	7.83	125.70	121.00
38	A1	2162	G	N1-C6-O6	7.83	124.60	119.90
38	A1	2854	A	C5-C6-N1	-7.83	113.78	117.70
11	B2	185	G	C6-C5-N7	-7.83	125.70	130.40
11	B2	242	A	C5-N7-C8	7.83	107.82	103.90
11	B2	339	U	N3-C4-C5	-7.83	109.90	114.60
11	B2	1112	G	N3-C2-N2	7.83	125.38	119.90
38	A1	476	C	N3-C4-N4	7.83	123.48	118.00
38	A1	837	G	C5-C6-N1	-7.83	107.58	111.50
38	A1	2200	A	C8-N9-C4	-7.83	102.67	105.80
38	A1	2515	U	O4'-C1'-N1	7.83	114.47	108.20
11	B2	31	U	N3-C4-O4	7.83	124.88	119.40
11	B2	148	C	O4'-C1'-N1	7.83	114.46	108.20
11	B2	494	G	C6-N1-C2	7.83	129.80	125.10
11	B2	997	G	C5-C6-N1	-7.83	107.58	111.50
11	B2	1009	G	N1-C2-N3	-7.83	119.20	123.90
11	B2	1445	A	C8-N9-C4	-7.83	102.67	105.80
38	A1	192	U	O4'-C1'-N1	7.83	114.46	108.20
38	A1	1393	C	C5-C6-N1	7.83	124.92	121.00
39	A3	74	U	C2'-C3'-O3'	7.83	126.73	109.50
11	B2	290	C	N3-C4-N4	7.83	123.48	118.00
11	B2	546	G	O4'-C1'-N9	7.83	114.46	108.20
11	B2	603	G	C6-C5-N7	-7.83	125.70	130.40
11	B2	1229	A	C5-C6-N1	-7.83	113.79	117.70
38	A1	130	G	C6-C5-N7	-7.83	125.70	130.40
38	A1	744	G	C6-N1-C2	7.83	129.80	125.10
38	A1	815	U	O4'-C1'-N1	7.83	114.46	108.20
38	A1	1232	G	C5-C6-N1	-7.83	107.59	111.50
38	A1	2142	U	N1-C2-N3	-7.83	110.20	114.90
38	A1	2192	G	C6-C5-N7	-7.83	125.70	130.40
11	B2	480	G	N9-C4-C5	-7.83	102.27	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	361	G	C4'-C3'-C2'	-7.83	94.77	102.60
38	A1	792	A	C5-C6-N6	-7.83	117.44	123.70
38	A1	1533	G	N7-C8-N9	7.83	117.01	113.10
38	A1	1868	C	N1-C2-O2	-7.83	114.20	118.90
46	AD	82	PHE	CB-CG-CD1	-7.83	115.32	120.80
11	B2	1317	G	N3-C2-N2	7.83	125.38	119.90
38	A1	1413	A	N7-C8-N9	-7.83	109.89	113.80
10	B1	16	C	P-O3'-C3'	7.82	129.09	119.70
11	B2	1100	G	C5-N7-C8	-7.82	100.39	104.30
13	BA	93	ARG	NE-CZ-NH1	-7.82	116.39	120.30
38	A1	770	G	C4-C5-N7	-7.82	107.67	110.80
38	A1	1944	C	N3-C4-N4	7.82	123.48	118.00
38	A1	2416	G	N7-C8-N9	7.82	117.01	113.10
38	A1	2500	G	C4-C5-N7	7.82	113.93	110.80
38	A1	2535	C	O4'-C4'-C3'	-7.82	96.18	104.00
38	A1	2894	A	C3'-C2'-C1'	-7.82	95.24	101.50
11	B2	106	A	C5-C6-N6	-7.82	117.44	123.70
38	A1	1098	C	N3-C4-N4	7.82	123.48	118.00
38	A1	1112	G	C5-C6-N1	-7.82	107.59	111.50
11	B2	163	C	P-O5'-C5'	7.82	133.41	120.90
11	B2	287	G	O4'-C1'-N9	7.82	114.46	108.20
11	B2	933	G	C5-C6-N1	-7.82	107.59	111.50
11	B2	955	G	C8-N9-C4	-7.82	103.27	106.40
11	B2	1231	G	C4'-C3'-C2'	-7.82	94.78	102.60
38	A1	140	C	C4-C5-C6	7.82	121.31	117.40
38	A1	289	G	C5-C6-O6	-7.82	123.91	128.60
38	A1	1383	G	C8-N9-C4	-7.82	103.27	106.40
38	A1	2397	C	N3-C2-O2	7.82	127.38	121.90
38	A1	2582	C	O4'-C1'-N1	7.82	114.46	108.20
39	A3	64	C	C5-C6-N1	7.82	124.91	121.00
11	B2	812	U	C6-N1-C2	-7.82	116.31	121.00
24	BL	29	ARG	NE-CZ-NH2	-7.82	116.39	120.30
38	A1	1465	A	O4'-C1'-N9	7.82	114.45	108.20
38	A1	2417	G	C3'-C2'-C1'	7.82	107.75	101.50
11	B2	384	G	N1-C6-O6	-7.82	115.21	119.90
38	A1	407	A	P-O3'-C3'	7.82	129.08	119.70
38	A1	1522	A	P-O5'-C5'	-7.82	108.39	120.90
38	A1	2843	C	C6-N1-C2	7.82	123.43	120.30
38	A1	2903	U	C2-N3-C4	7.82	131.69	127.00
10	B1	33	C	O4'-C1'-N1	7.82	114.45	108.20
11	B2	1374	C	O4'-C1'-N1	7.82	114.45	108.20
21	BI	62	ARG	NE-CZ-NH1	7.82	124.21	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1898	A	C8-N9-C4	-7.82	102.67	105.80
39	A3	46	G	C5-C6-O6	-7.82	123.91	128.60
60	AM	65	ARG	NE-CZ-NH2	-7.82	116.39	120.30
38	A1	246	A	C5-C6-N1	-7.81	113.79	117.70
38	A1	591	G	P-O3'-C3'	7.81	129.08	119.70
38	A1	781	C	O4'-C1'-N1	7.81	114.45	108.20
38	A1	1024	G	N9-C4-C5	-7.81	102.27	105.40
38	A1	1143	A	C5-C6-N1	-7.81	113.79	117.70
11	B2	174	G	C5-C6-O6	-7.81	123.91	128.60
11	B2	478	C	C2-N1-C1'	7.81	127.39	118.80
11	B2	748	A	O4'-C1'-N9	7.81	114.45	108.20
11	B2	1089	C	O4'-C1'-N1	7.81	114.45	108.20
11	B2	1107	C	C4-C5-C6	7.81	121.31	117.40
38	A1	307	C	C6-N1-C2	-7.81	117.17	120.30
38	A1	608	C	C5-C6-N1	7.81	124.91	121.00
38	A1	2579	G	N9-C4-C5	-7.81	102.28	105.40
38	A1	2645	C	N3-C4-N4	7.81	123.47	118.00
38	A1	1310	A	C8-N9-C4	-7.81	102.68	105.80
39	A3	88	A	C8-N9-C4	-7.81	102.67	105.80
10	B1	52	G	O4'-C1'-N9	7.81	114.45	108.20
11	B2	63	G	O4'-C1'-N9	7.81	114.45	108.20
11	B2	1238	G	N3-C2-N2	7.81	125.37	119.90
33	BU	91	TYR	CB-CG-CD1	-7.81	116.31	121.00
38	A1	735	A	C5-C6-N6	-7.81	117.45	123.70
38	A1	1411	G	N3-C4-C5	7.81	132.50	128.60
38	A1	1930	A	N3-C4-C5	-7.81	121.33	126.80
11	B2	358	G	N3-C2-N2	7.81	125.36	119.90
11	B2	718	G	O4'-C1'-N9	7.81	114.45	108.20
11	B2	742	U	O4'-C1'-N1	7.81	114.45	108.20
11	B2	803	C	C2-N3-C4	7.81	123.80	119.90
11	B2	989	C	O4'-C1'-N1	7.81	114.45	108.20
38	A1	2154	G	O4'-C1'-N9	7.81	114.45	108.20
38	A1	2174	G	N1-C6-O6	7.81	124.58	119.90
38	A1	2517	U	N3-C4-C5	-7.81	109.92	114.60
38	A1	1907	G	O4'-C1'-N9	7.81	114.44	108.20
39	A3	57	C	C2-N3-C4	7.81	123.80	119.90
11	B2	915	U	O4'-C1'-N1	7.80	114.44	108.20
11	B2	1446	G	C5-C6-O6	-7.80	123.92	128.60
38	A1	393	C	C5-C4-N4	-7.80	114.74	120.20
38	A1	2160	C	C3'-C2'-C1'	-7.80	95.26	101.50
38	A1	2190	A	C5-C6-N1	-7.80	113.80	117.70
10	B1	19	G	N1-C6-O6	7.80	124.58	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	B1	71	C	O4'-C1'-N1	7.80	114.44	108.20
11	B2	64	G	C5-C6-N1	-7.80	107.60	111.50
11	B2	694	U	N3-C2-O2	7.80	127.66	122.20
26	BN	101	ASP	CB-CG-OD1	7.80	125.32	118.30
38	A1	1803	U	O4'-C1'-N1	7.80	114.44	108.20
38	A1	2801	G	N1-C2-N3	-7.80	119.22	123.90
11	B2	200	G	N1-C6-O6	7.80	124.58	119.90
11	B2	1373	A	N3-C4-N9	-7.80	121.16	127.40
38	A1	781	C	C5-C6-N1	7.80	124.90	121.00
38	A1	1077	G	C4-C5-C6	7.80	123.48	118.80
38	A1	1575	G	N3-C4-C5	-7.80	124.70	128.60
11	B2	531	G	O4'-C1'-N9	7.80	114.44	108.20
11	B2	764	C	N3-C4-N4	7.80	123.46	118.00
38	A1	827	G	N1-C2-N3	-7.80	119.22	123.90
38	A1	1531	C	C5-C6-N1	7.80	124.90	121.00
38	A1	2778	A	C6-C5-N7	-7.80	126.84	132.30
11	B2	106	A	C6-N1-C2	-7.80	113.92	118.60
11	B2	421	U	O4'-C1'-N1	7.80	114.44	108.20
11	B2	1309	A	C4-C5-C6	7.80	120.90	117.00
11	B2	1399	G	N7-C8-N9	7.80	117.00	113.10
38	A1	712	C	N3-C4-C5	-7.80	118.78	121.90
38	A1	2098	C	C2-N3-C4	7.80	123.80	119.90
38	A1	2301	C	N3-C4-C5	-7.80	118.78	121.90
38	A1	2668	G	N1-C6-O6	7.80	124.58	119.90
11	B2	79	G	N3-C2-N2	7.79	125.36	119.90
38	A1	1374	G	C8-N9-C4	-7.79	103.28	106.40
11	B2	913	G	O4'-C1'-N9	7.79	114.44	108.20
11	B2	1133	C	C6-N1-C2	-7.79	117.18	120.30
11	B2	1358	A	N9-C4-C5	7.79	108.92	105.80
36	BX	30	ARG	NE-CZ-NH1	-7.79	116.40	120.30
38	A1	1009	G	N1-C2-N3	-7.79	119.22	123.90
38	A1	2439	G	N3-C2-N2	7.79	125.36	119.90
38	A1	2607	U	N3-C4-O4	7.79	124.86	119.40
11	B2	671	C	C2-N3-C4	7.79	123.80	119.90
11	B2	927	A	C5-N7-C8	7.79	107.80	103.90
38	A1	895	C	N1-C2-N3	-7.79	113.75	119.20
38	A1	998	G	O4'-C1'-N9	7.79	114.43	108.20
38	A1	1095	A	C4-C5-N7	-7.79	106.80	110.70
11	B2	697	A	C5-C6-N6	-7.79	117.47	123.70
23	BK	99	PHE	CB-CG-CD1	7.79	126.25	120.80
38	A1	430	A	C5-C6-N6	-7.79	117.47	123.70
38	A1	506	G	C8-N9-C4	-7.79	103.28	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1443	G	O4'-C1'-N9	7.79	114.43	108.20
38	A1	1857	A	C5-N7-C8	7.79	107.80	103.90
11	B2	239	A	C5-N7-C8	7.79	107.79	103.90
11	B2	756	A	N3-C4-C5	-7.79	121.35	126.80
38	A1	1017	A	C5-C6-N6	-7.79	117.47	123.70
38	A1	1202	G	N1-C6-O6	7.79	124.57	119.90
38	A1	2451	G	N1-C2-N3	-7.79	119.23	123.90
38	A1	2609	G	N1-C2-N3	-7.79	119.23	123.90
38	A1	2828	G	O4'-C1'-N9	7.79	114.43	108.20
11	B2	256	G	O4'-C1'-N9	7.79	114.43	108.20
11	B2	733	C	C5-C6-N1	7.79	124.89	121.00
11	B2	830	A	C5-C6-N1	-7.79	113.81	117.70
16	BD	62	ARG	NE-CZ-NH1	7.79	124.19	120.30
38	A1	955	A	C5-N7-C8	7.79	107.79	103.90
38	A1	2467	C	C2-N3-C4	7.79	123.79	119.90
38	A1	3019	C	N3-C4-C5	-7.79	118.79	121.90
10	B1	14	A	N7-C8-N9	7.78	117.69	113.80
11	B2	400	G	N3-C4-C5	-7.78	124.71	128.60
38	A1	211	A	O4'-C1'-N9	7.78	114.43	108.20
38	A1	610	C	N3-C4-N4	7.78	123.45	118.00
38	A1	678	G	C2-N3-C4	7.78	115.79	111.90
11	B2	41	C	N1-C2-O2	-7.78	114.23	118.90
38	A1	216	A	P-O3'-C3'	7.78	129.04	119.70
38	A1	1694	G	C5-N7-C8	7.78	108.19	104.30
38	A1	2221	A	C5-C6-N1	-7.78	113.81	117.70
10	B1	44	G	C4-C5-N7	7.78	113.91	110.80
11	B2	57	G	N7-C8-N9	7.78	116.99	113.10
11	B2	247	G	C5-C6-O6	-7.78	123.93	128.60
11	B2	544	C	N3-C4-C5	-7.78	118.79	121.90
11	B2	1193	G	O4'-C1'-N9	7.78	114.42	108.20
38	A1	312	G	N3-C2-N2	7.78	125.34	119.90
38	A1	2757	G	C2-N3-C4	7.78	115.79	111.90
11	B2	44	C	O4'-C1'-N1	7.78	114.42	108.20
11	B2	488	A	C4-C5-C6	7.78	120.89	117.00
11	B2	758	U	C5-C4-O4	-7.78	121.23	125.90
11	B2	1128	U	N3-C4-O4	7.78	124.84	119.40
11	B2	1326	G	N1-C6-O6	7.78	124.57	119.90
38	A1	108	G	O4'-C1'-N9	7.78	114.42	108.20
38	A1	2110	C	C2-N3-C4	7.78	123.79	119.90
11	B2	44	C	C2-N3-C4	7.78	123.79	119.90
11	B2	500	A	N7-C8-N9	7.78	117.69	113.80
11	B2	892	C	N3-C4-N4	7.78	123.44	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1151	A	C5-C6-N6	-7.78	117.48	123.70
11	B2	1465	C	C5-C4-N4	-7.78	114.76	120.20
38	A1	261	A	C5-C6-N1	-7.78	113.81	117.70
38	A1	384	G	N1-C2-N3	-7.78	119.23	123.90
38	A1	720	C	C2-N3-C4	7.78	123.79	119.90
38	A1	1117	C	C4-C5-C6	7.78	121.29	117.40
38	A1	1169	G	N9-C4-C5	-7.78	102.29	105.40
38	A1	1740	U	C4-C5-C6	-7.78	115.03	119.70
38	A1	1901	A	C5-C6-N1	-7.78	113.81	117.70
11	B2	832	G	N3-C4-C5	-7.77	124.71	128.60
38	A1	454	C	C5-C4-N4	-7.77	114.76	120.20
38	A1	822	A	C8-N9-C4	-7.77	102.69	105.80
38	A1	1218	C	C2-N3-C4	7.77	123.79	119.90
38	A1	2263	G	O4'-C1'-N9	7.77	114.42	108.20
11	B2	375	G	N1-C2-N3	-7.77	119.24	123.90
11	B2	588	C	C6-N1-C2	-7.77	117.19	120.30
11	B2	870	U	O4'-C1'-N1	7.77	114.42	108.20
38	A1	473	C	C5-C4-N4	-7.77	114.76	120.20
38	A1	541	A	C5-C6-N6	-7.77	117.48	123.70
38	A1	978	C	C4-C5-C6	-7.77	113.51	117.40
38	A1	1932	G	N1-C2-N3	-7.77	119.24	123.90
38	A1	2735	C	C2-N3-C4	7.77	123.79	119.90
38	A1	724	G	O4'-C1'-N9	7.77	114.42	108.20
38	A1	1189	A	N1-C6-N6	7.77	123.26	118.60
38	A1	1357	G	C6-N1-C2	-7.77	120.44	125.10
38	A1	1769	G	N3-C2-N2	7.77	125.34	119.90
38	A1	2107	G	C6-C5-N7	-7.77	125.74	130.40
38	A1	2148	U	N3-C4-O4	7.77	124.84	119.40
38	A1	2779	G	N1-C2-N3	-7.77	119.24	123.90
39	A3	106	G	N1-C6-O6	7.77	124.56	119.90
11	B2	624	G	N1-C2-N3	-7.77	119.24	123.90
11	B2	872	A	C4-C5-C6	7.77	120.88	117.00
38	A1	182	U	O4'-C1'-N1	7.77	114.42	108.20
38	A1	735	A	C8-N9-C4	7.77	108.91	105.80
38	A1	778	A	C4-C5-N7	-7.77	106.81	110.70
38	A1	1365	G	C5-C6-N1	-7.77	107.61	111.50
38	A1	1376	U	C5-C6-N1	7.77	126.58	122.70
11	B2	507	G	C4-C5-C6	7.77	123.46	118.80
11	B2	1098	G	N1-C2-N2	-7.77	109.21	116.20
11	B2	1138	G	N1-C6-O6	7.77	124.56	119.90
23	BK	127	ARG	NE-CZ-NH2	-7.77	116.42	120.30
38	A1	450	G	C4-C5-N7	7.77	113.91	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	950	G	C2-N3-C4	-7.77	108.02	111.90
38	A1	1170	G	P-O3'-C3'	-7.77	110.38	119.70
38	A1	1666	G	C8-N9-C4	-7.77	103.29	106.40
11	B2	593	G	C6-N1-C2	7.77	129.76	125.10
38	A1	557	G	C5-C6-O6	-7.77	123.94	128.60
9	AX	46	TYR	CD1-CE1-CZ	7.76	126.79	119.80
11	B2	56	A	N9-C4-C5	7.76	108.91	105.80
11	B2	257	U	N1-C2-O2	-7.76	117.36	122.80
11	B2	976	A	C5-C6-N6	-7.76	117.49	123.70
38	A1	32	C	C5-C4-N4	-7.76	114.76	120.20
38	A1	268	C	C4-C5-C6	7.76	121.28	117.40
38	A1	627	G	O4'-C1'-N9	7.76	114.41	108.20
39	A3	98	G	O4'-C1'-N9	7.76	114.41	108.20
39	A3	1	C	N3-C4-N4	7.76	123.43	118.00
11	B2	627	G	N1-C2-N3	-7.76	119.24	123.90
11	B2	772	G	C6-C5-N7	-7.76	125.74	130.40
11	B2	1040	A	C5-C6-N1	7.76	121.58	117.70
32	BT	59	TYR	CB-CG-CD2	7.76	125.66	121.00
38	A1	203	G	O4'-C1'-N9	7.76	114.41	108.20
38	A1	990	G	C2-N3-C4	7.76	115.78	111.90
10	B1	1	G	N3-C2-N2	-7.76	114.47	119.90
11	B2	22	G	C5-C6-O6	-7.76	123.94	128.60
11	B2	997	G	C4-C5-N7	-7.76	107.70	110.80
11	B2	1139	A	C5-N7-C8	7.76	107.78	103.90
38	A1	556	G	N1-C6-O6	7.76	124.56	119.90
38	A1	761	U	N3-C4-C5	-7.76	109.94	114.60
38	A1	1082	A	C5-C6-N1	-7.76	113.82	117.70
38	A1	1173	G	C5-C6-O6	-7.76	123.94	128.60
38	A1	1643	A	C6-C5-N7	-7.76	126.87	132.30
38	A1	2521	U	O4'-C1'-N1	7.76	114.41	108.20
38	A1	1676	G	C2-N3-C4	7.76	115.78	111.90
38	A1	2071	C	N3-C4-C5	-7.76	118.80	121.90
11	B2	865	A	C4-C5-C6	7.76	120.88	117.00
11	B2	984	C	O4'-C1'-N1	7.76	114.41	108.20
11	B2	1057	A	C5-C6-N6	-7.76	117.50	123.70
38	A1	7	G	C5-C6-O6	-7.76	123.95	128.60
38	A1	560	G	N9-C4-C5	7.76	108.50	105.40
38	A1	1349	G	O4'-C1'-N9	7.76	114.41	108.20
38	A1	1373	C	O4'-C1'-N1	7.76	114.41	108.20
38	A1	2368	G	N1-C2-N2	-7.76	109.22	116.20
38	A1	2397	C	C5-C4-N4	-7.76	114.77	120.20
38	A1	2728	U	N3-C4-C5	-7.76	109.95	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2814	U	C1'-O4'-C4'	-7.76	103.69	109.90
39	A3	8	C	C6-N1-C2	-7.76	117.20	120.30
62	AO	152	TYR	CB-CG-CD1	-7.76	116.35	121.00
11	B2	246	A	C5-C6-N1	-7.75	113.82	117.70
11	B2	362	C	O4'-C1'-N1	7.75	114.40	108.20
11	B2	819	G	N1-C6-O6	7.75	124.55	119.90
38	A1	1874	G	C5-C6-N1	7.75	115.38	111.50
38	A1	2992	G	O4'-C1'-N9	7.75	114.40	108.20
11	B2	214	C	N3-C4-C5	-7.75	118.80	121.90
11	B2	516	A	C8-N9-C4	-7.75	102.70	105.80
11	B2	827	G	N1-C2-N3	-7.75	119.25	123.90
24	BL	83	ARG	NE-CZ-NH2	-7.75	116.42	120.30
38	A1	2283	C	C4'-C3'-C2'	-7.75	94.85	102.60
38	A1	2476	A	C5-C6-N1	-7.75	113.82	117.70
38	A1	2478	G	N9-C4-C5	-7.75	102.30	105.40
38	A1	443	C	O4'-C1'-N1	7.75	114.40	108.20
38	A1	2388	U	C3'-C2'-C1'	7.75	107.70	101.50
11	B2	415	C	C2-N3-C4	7.75	123.78	119.90
38	A1	1841	G	N3-C2-N2	7.75	125.33	119.90
38	A1	2170	C	N3-C4-N4	7.75	123.42	118.00
11	B2	1365	G	C8-N9-C4	7.75	109.50	106.40
31	BS	59	ARG	NE-CZ-NH1	7.75	124.17	120.30
38	A1	931	C	C5-C4-N4	-7.75	114.78	120.20
38	A1	1372	C	N1-C2-N3	-7.75	113.78	119.20
38	A1	2745	G	P-O3'-C3'	-7.75	110.40	119.70
64	AR	87	PHE	CB-CG-CD1	-7.75	115.38	120.80
11	B2	13	C	C6-N1-C2	7.75	123.40	120.30
11	B2	371	U	O4'-C1'-N1	7.75	114.40	108.20
11	B2	883	G	C5-C6-N1	-7.75	107.63	111.50
23	BK	128	ALA	CB-CA-C	-7.75	98.48	110.10
38	A1	996	U	C2-N3-C4	-7.75	122.35	127.00
11	B2	621	G	C5-N7-C8	7.75	108.17	104.30
11	B2	794	A	N1-C6-N6	7.75	123.25	118.60
11	B2	1197	C	N3-C4-C5	-7.75	118.80	121.90
38	A1	1483	U	O4'-C1'-N1	7.75	114.40	108.20
38	A1	1785	G	C1'-O4'-C4'	-7.75	103.70	109.90
38	A1	2019	C	C6-N1-C2	-7.75	117.20	120.30
38	A1	2361	C	N1-C2-N3	-7.75	113.78	119.20
11	B2	32	A	C5-C6-N6	-7.74	117.50	123.70
11	B2	169	C	C5-C6-N1	7.74	124.87	121.00
11	B2	863	U	C5-C6-N1	7.74	126.57	122.70
11	B2	1026	A	N9-C4-C5	7.74	108.90	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	512	G	N3-C2-N2	7.74	125.32	119.90
38	A1	771	G	O4'-C1'-N9	7.74	114.39	108.20
38	A1	2165	A	N3-C4-C5	-7.74	121.38	126.80
38	A1	2789	G	O4'-C1'-N9	7.74	114.39	108.20
38	A1	3038	A	C5-C6-N6	-7.74	117.50	123.70
39	A3	24	C	C5'-C4'-C3'	-7.74	103.61	116.00
39	A3	123	U	O4'-C1'-N1	7.74	114.39	108.20
11	B2	506	G	C4-C5-C6	7.74	123.44	118.80
11	B2	1089	C	N3-C4-N4	7.74	123.42	118.00
38	A1	1064	G	C5-C6-O6	-7.74	123.95	128.60
38	A1	2362	U	N1-C2-O2	-7.74	117.38	122.80
38	A1	2716	C	N3-C4-C5	-7.74	118.80	121.90
38	A1	831	C	O4'-C1'-N1	7.74	114.39	108.20
38	A1	1106	C	C2-N3-C4	7.74	123.77	119.90
38	A1	1470	C	N3-C4-N4	7.74	123.42	118.00
38	A1	2588	C	O4'-C1'-N1	7.74	114.39	108.20
11	B2	443	C	OP1-P-OP2	-7.74	107.99	119.60
38	A1	180	A	C5-C6-N1	-7.74	113.83	117.70
38	A1	638	A	C5-C6-N1	-7.74	113.83	117.70
38	A1	1185	A	C4-C5-C6	7.74	120.87	117.00
11	B2	505	U	C5-C6-N1	7.74	126.57	122.70
11	B2	748	A	C5-C6-N6	-7.74	117.51	123.70
38	A1	707	U	C5-C4-O4	-7.74	121.26	125.90
38	A1	766	G	C4-C5-N7	-7.74	107.70	110.80
38	A1	1625	A	C5-C6-N1	-7.74	113.83	117.70
38	A1	2365	G	N9-C4-C5	-7.74	102.31	105.40
11	B2	1439	G	N9-C4-C5	-7.74	102.31	105.40
22	BJ	73	ARG	NE-CZ-NH2	-7.74	116.43	120.30
38	A1	921	C	C5-C4-N4	-7.74	114.79	120.20
38	A1	946	U	P-O3'-C3'	7.74	128.98	119.70
38	A1	1406	G	N1-C2-N3	-7.74	119.26	123.90
38	A1	2630	C	O4'-C1'-N1	7.74	114.39	108.20
38	A1	2680	A	N9-C4-C5	7.74	108.89	105.80
38	A1	1232	G	N9-C4-C5	7.73	108.49	105.40
38	A1	2318	G	C5-C6-O6	-7.73	123.96	128.60
38	A1	2595	C	O4'-C1'-N1	7.73	114.39	108.20
11	B2	403	C	C5-C6-N1	7.73	124.87	121.00
11	B2	777	G	N3-C2-N2	7.73	125.31	119.90
11	B2	884	G	N3-C4-N9	7.73	130.64	126.00
11	B2	1156	A	P-O3'-C3'	7.73	128.98	119.70
11	B2	1424	G	N1-C2-N3	-7.73	119.26	123.90
38	A1	499	A	N1-C6-N6	7.73	123.24	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1073	G	C2-N3-C4	7.73	115.77	111.90
38	A1	1249	G	C5-C6-N1	-7.73	107.63	111.50
38	A1	1588	C	N3-C4-N4	7.73	123.41	118.00
38	A1	2412	A	C6-C5-N7	-7.73	126.89	132.30
38	A1	2946	C	N3-C4-C5	-7.73	118.81	121.90
38	A1	3021	C	N3-C4-N4	7.73	123.41	118.00
11	B2	913	G	N9-C4-C5	7.73	108.49	105.40
11	B2	1225	C	N3-C4-N4	7.73	123.41	118.00
38	A1	787	G	O4'-C1'-N9	7.73	114.39	108.20
38	A1	1332	A	C8-N9-C4	-7.73	102.71	105.80
11	B2	61	A	C6-N1-C2	-7.73	113.96	118.60
11	B2	78	G	N1-C6-O6	7.73	124.54	119.90
38	A1	1555	G	C4-C5-N7	7.73	113.89	110.80
38	A1	966	G	C5-C6-N1	-7.73	107.64	111.50
38	A1	1571	G	C4-C5-N7	-7.73	107.71	110.80
38	A1	2184	G	O4'-C1'-N9	7.73	114.38	108.20
38	A1	2596	G	C5-C6-N1	-7.73	107.64	111.50
38	A1	2950	G	N1-C2-N3	-7.73	119.27	123.90
11	B2	433	U	N1-C2-O2	7.72	128.21	122.80
11	B2	1464	C	O4'-C1'-N1	7.72	114.38	108.20
38	A1	296	G	N3-C4-C5	-7.72	124.74	128.60
38	A1	435	G	O4'-C1'-N9	7.72	114.38	108.20
38	A1	469	A	N7-C8-N9	7.72	117.66	113.80
38	A1	958	A	N1-C6-N6	7.72	123.23	118.60
38	A1	1949	A	C5-N7-C8	7.72	107.76	103.90
38	A1	2794	G	C4-C5-C6	7.72	123.44	118.80
39	A3	86	C	N1-C1'-C2'	-7.72	103.50	112.00
58	Ak	97	PHE	CB-CG-CD1	-7.72	115.39	120.80
11	B2	674	C	C4-C5-C6	7.72	121.26	117.40
38	A1	213	G	O4'-C1'-N9	7.72	114.38	108.20
38	A1	272	G	N1-C2-N3	-7.72	119.27	123.90
38	A1	533	G	C5-N7-C8	-7.72	100.44	104.30
38	A1	794	G	C6-N1-C2	7.72	129.73	125.10
38	A1	1542	U	O4'-C1'-N1	7.72	114.38	108.20
38	A1	1963	G	N7-C8-N9	-7.72	109.24	113.10
38	A1	2231	G	C8-N9-C1'	-7.72	116.96	127.00
38	A1	2718	G	N1-C2-N3	-7.72	119.27	123.90
38	A1	2877	A	C8-N9-C4	-7.72	102.71	105.80
38	A1	390	C	C4-C5-C6	-7.72	113.54	117.40
11	B2	571	C	N3-C4-C5	-7.72	118.81	121.90
11	B2	690	C	N3-C4-C5	-7.72	118.81	121.90
11	B2	852	G	N1-C2-N3	-7.72	119.27	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	538	G	O4'-C1'-N9	7.72	114.38	108.20
38	A1	2031	G	C5-C6-O6	-7.72	123.97	128.60
38	A1	2471	A	C5-C6-N1	-7.72	113.84	117.70
39	A3	11	A	C6-N1-C2	-7.72	113.97	118.60
11	B2	192	G	C1'-O4'-C4'	-7.72	103.72	109.90
11	B2	1129	A	C4'-C3'-C2'	-7.72	94.88	102.60
11	B2	1280	C	N3-C4-N4	7.72	123.40	118.00
38	A1	256	G	O4'-C1'-N9	7.72	114.38	108.20
38	A1	2493	A	C4-C5-C6	7.72	120.86	117.00
11	B2	1024	G	C5-C6-N1	-7.72	107.64	111.50
11	B2	1452	G	N1-C2-N3	-7.72	119.27	123.90
38	A1	1025	A	C5-N7-C8	7.72	107.76	103.90
38	A1	2055	U	P-O5'-C5'	7.72	133.25	120.90
38	A1	2451	G	N1-C6-O6	7.72	124.53	119.90
38	A1	2512	C	C5-C4-N4	-7.72	114.80	120.20
38	A1	2640	C	N1-C2-O2	-7.72	114.27	118.90
11	B2	28	U	N3-C4-O4	7.71	124.80	119.40
11	B2	726	A	C4-C5-C6	7.71	120.86	117.00
38	A1	246	A	C6-C5-N7	-7.71	126.90	132.30
38	A1	1909	C	C6-N1-C2	-7.71	117.21	120.30
38	A1	2872	G	N9-C1'-C2'	-7.71	103.51	112.00
38	A1	710	G	C8-N9-C4	-7.71	103.31	106.40
38	A1	1390	U	O4'-C1'-N1	7.71	114.37	108.20
11	B2	168	G	C4-C5-N7	-7.71	107.72	110.80
11	B2	603	G	N3-C4-C5	-7.71	124.74	128.60
11	B2	751	C	N3-C4-C5	-7.71	118.82	121.90
11	B2	1180	G	C2-N3-C4	7.71	115.76	111.90
38	A1	319	A	N1-C2-N3	-7.71	125.44	129.30
38	A1	536	G	C5-C6-O6	-7.71	123.97	128.60
38	A1	937	A	C5-C6-N6	-7.71	117.53	123.70
38	A1	1733	C	N3-C4-C5	-7.71	118.81	121.90
38	A1	1806	C	N3-C4-C5	-7.71	118.81	121.90
38	A1	2458	U	C2-N3-C4	-7.71	122.37	127.00
63	AP	13	ARG	NE-CZ-NH2	7.71	124.16	120.30
66	AY	8	ARG	NE-CZ-NH2	7.71	124.16	120.30
11	B2	363	C	N3-C4-C5	-7.71	118.82	121.90
11	B2	1193	G	C2-N3-C4	7.71	115.75	111.90
38	A1	1086	U	O4'-C1'-N1	7.71	114.37	108.20
38	A1	1281	A	P-O3'-C3'	7.71	128.95	119.70
38	A1	2614	C	C4-C5-C6	-7.71	113.55	117.40
38	A1	101	G	C1'-O4'-C4'	-7.71	103.73	109.90
38	A1	316	G	N3-C4-C5	7.71	132.46	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1526	G	C5-C6-N1	-7.71	107.65	111.50
38	A1	1558	U	O4'-C1'-N1	7.71	114.37	108.20
38	A1	1570	C	C2-N3-C4	7.71	123.75	119.90
38	A1	2294	A	C5-C6-N1	-7.71	113.85	117.70
38	A1	2359	G	N1-C2-N3	-7.71	119.28	123.90
24	BL	4	ALA	N-CA-CB	7.71	120.89	110.10
38	A1	229	G	C6-N1-C2	7.71	129.72	125.10
38	A1	555	G	C2-N3-C4	-7.71	108.05	111.90
38	A1	688	G	N1-C6-O6	7.71	124.52	119.90
38	A1	1218	C	O4'-C1'-N1	7.71	114.37	108.20
38	A1	2445	G	C4-C5-N7	-7.71	107.72	110.80
11	B2	521	G	C6-C5-N7	-7.71	125.78	130.40
18	BF	183	VAL	CA-CB-CG1	7.71	122.46	110.90
38	A1	528	G	C2-N3-C4	7.70	115.75	111.90
38	A1	1244	C	N1-C2-O2	-7.70	114.28	118.90
38	A1	2748	C	O4'-C1'-N1	7.70	114.36	108.20
39	A3	71	G	N1-C2-N2	7.70	123.13	116.20
11	B2	698	A	C4-C5-N7	-7.70	106.85	110.70
38	A1	205	A	C5-C6-N6	-7.70	117.54	123.70
38	A1	300	U	N3-C4-C5	-7.70	109.98	114.60
38	A1	777	A	N1-C2-N3	7.70	133.15	129.30
38	A1	1135	A	C5-N7-C8	7.70	107.75	103.90
38	A1	1263	C	N3-C4-N4	7.70	123.39	118.00
38	A1	2141	C	O4'-C1'-N1	7.70	114.36	108.20
39	A3	103	C	N3-C4-N4	7.70	123.39	118.00
15	BC	147	TYR	CB-CG-CD1	7.70	125.62	121.00
38	A1	2105	A	C8-N9-C4	-7.70	102.72	105.80
62	AO	34	ARG	NE-CZ-NH1	7.70	124.15	120.30
11	B2	694	U	C4-C5-C6	-7.70	115.08	119.70
11	B2	889	G	C8-N9-C4	-7.70	103.32	106.40
11	B2	957	A	C5-C6-N6	-7.70	117.54	123.70
11	B2	1291	G	C5-C6-O6	-7.70	123.98	128.60
38	A1	20	C	C6-N1-C2	-7.70	117.22	120.30
38	A1	1220	U	C5-C4-O4	-7.70	121.28	125.90
38	A1	2500	G	N3-C4-C5	7.70	132.45	128.60
38	A1	2753	G	C2-N3-C4	7.70	115.75	111.90
11	B2	11	A	C5-C6-N1	-7.70	113.85	117.70
11	B2	1394	G	C6-C5-N7	-7.70	125.78	130.40
38	A1	2746	G	C5-C6-O6	-7.70	123.98	128.60
11	B2	294	A	C4-C5-N7	-7.70	106.85	110.70
11	B2	889	G	O4'-C1'-N9	7.70	114.36	108.20
11	B2	1331	G	O4'-C1'-N9	7.70	114.36	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	BW	13	PHE	CB-CG-CD1	-7.70	115.41	120.80
38	A1	550	A	O4'-C1'-N9	7.70	114.36	108.20
38	A1	892	U	C6-N1-C2	-7.70	116.38	121.00
38	A1	930	G	N1-C6-O6	7.70	124.52	119.90
38	A1	1389	A	C4-C5-C6	7.70	120.85	117.00
38	A1	1434	C	C6-N1-C2	-7.70	117.22	120.30
38	A1	1951	G	C4-C5-C6	7.70	123.42	118.80
38	A1	2784	A	C2-N3-C4	-7.70	106.75	110.60
38	A1	2848	C	C4-C5-C6	7.70	121.25	117.40
38	A1	2861	A	C8-N9-C4	-7.70	102.72	105.80
38	A1	789	G	O4'-C1'-N9	7.69	114.36	108.20
38	A1	1048	C	O4'-C1'-N1	7.69	114.36	108.20
38	A1	2255	C	C5-C4-N4	-7.69	114.81	120.20
38	A1	2322	A	C2-N3-C4	-7.69	106.75	110.60
38	A1	2601	C	O4'-C1'-N1	7.69	114.36	108.20
11	B2	147	A	N9-C4-C5	-7.69	102.72	105.80
11	B2	508	C	O4'-C1'-N1	7.69	114.36	108.20
11	B2	636	G	N3-C2-N2	7.69	125.28	119.90
11	B2	1491	C	C6-N1-C1'	-7.69	111.57	120.80
21	BI	19	ARG	NE-CZ-NH1	-7.69	116.45	120.30
37	BY	21	PHE	CB-CG-CD2	7.69	126.19	120.80
38	A1	690	G	C5-N7-C8	7.69	108.15	104.30
38	A1	992	G	C4-C5-N7	7.69	113.88	110.80
38	A1	1924	A	C5-C6-N6	-7.69	117.55	123.70
53	Ah	15	ARG	NE-CZ-NH2	-7.69	116.45	120.30
10	B1	41	C	C5-C4-N4	-7.69	114.82	120.20
38	A1	213	G	C5-C6-O6	-7.69	123.99	128.60
38	A1	530	A	N7-C8-N9	-7.69	109.95	113.80
38	A1	1074	G	N7-C8-N9	-7.69	109.25	113.10
11	B2	1216	A	N1-C2-N3	7.69	133.14	129.30
13	BA	138	ARG	NE-CZ-NH2	7.69	124.14	120.30
38	A1	2073	G	C5-C6-N1	-7.69	107.66	111.50
39	A3	78	C	N3-C4-N4	7.69	123.38	118.00
11	B2	506	G	C4'-C3'-C2'	-7.69	94.91	102.60
11	B2	677	U	N3-C4-O4	7.69	124.78	119.40
11	B2	1270	C	C6-N1-C2	-7.69	117.22	120.30
15	BC	125	ALA	N-CA-CB	7.69	120.86	110.10
38	A1	207	A	C5-N7-C8	7.69	107.74	103.90
38	A1	567	G	C8-N9-C4	-7.69	103.33	106.40
38	A1	1075	G	C6-C5-N7	-7.69	125.79	130.40
38	A1	1545	C	N3-C4-C5	-7.69	118.83	121.90
38	A1	2570	A	N1-C6-N6	7.69	123.21	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	374	G	O4'-C1'-N9	7.69	114.35	108.20
11	B2	584	C	P-O3'-C3'	7.69	128.92	119.70
38	A1	900	C	C4-C5-C6	7.69	121.24	117.40
38	A1	2078	A	C3'-C2'-C1'	7.69	107.65	101.50
38	A1	2253	G	C2-N3-C4	7.69	115.74	111.90
48	AE	149	ARG	NE-CZ-NH2	7.69	124.14	120.30
11	B2	923	A	N7-C8-N9	7.68	117.64	113.80
11	B2	1062	G	C5-C6-N1	-7.68	107.66	111.50
11	B2	1237	G	C6-C5-N7	-7.68	125.79	130.40
11	B2	1342	C	O4'-C1'-N1	7.68	114.35	108.20
21	BI	26	TYR	CZ-CE2-CD2	-7.68	112.88	119.80
38	A1	436	C	N3-C2-O2	7.68	127.28	121.90
38	A1	867	C	N3-C4-C5	-7.68	118.83	121.90
38	A1	1888	G	N1-C6-O6	7.68	124.51	119.90
38	A1	1550	C	C5-C4-N4	-7.68	114.82	120.20
38	A1	2524	C	N3-C4-C5	7.68	124.97	121.90
38	A1	2740	G	C6-C5-N7	-7.68	125.79	130.40
61	AN	82	TYR	CB-CG-CD1	-7.68	116.39	121.00
11	B2	507	G	C6-C5-N7	-7.68	125.79	130.40
38	A1	344	G	C5-C6-O6	-7.68	123.99	128.60
11	B2	881	G	N1-C2-N3	-7.68	119.29	123.90
38	A1	1716	G	C6-N1-C2	7.68	129.71	125.10
38	A1	2783	C	C1'-O4'-C4'	7.68	116.04	109.90
11	B2	533	C	O4'-C1'-N1	7.68	114.34	108.20
11	B2	779	G	C6-N1-C2	-7.68	120.49	125.10
11	B2	922	G	C5-C6-N1	7.68	115.34	111.50
38	A1	838	A	O4'-C1'-N9	7.68	114.34	108.20
38	A1	1591	C	O4'-C1'-N1	7.68	114.34	108.20
11	B2	791	G	C5-N7-C8	-7.68	100.46	104.30
11	B2	1065	C	C5-C4-N4	-7.68	114.83	120.20
11	B2	1253	G	C6-C5-N7	-7.68	125.79	130.40
11	B2	1271	G	N1-C2-N3	-7.68	119.30	123.90
38	A1	65	G	O4'-C1'-N9	7.68	114.34	108.20
38	A1	378	G	C5-C6-N1	-7.68	107.66	111.50
38	A1	699	A	C6-C5-N7	-7.68	126.93	132.30
38	A1	973	C	O4'-C1'-N1	7.68	114.34	108.20
38	A1	1070	G	C5-C6-O6	-7.68	123.99	128.60
38	A1	1819	G	C4-C5-N7	7.68	113.87	110.80
38	A1	2329	A	O4'-C1'-N9	7.68	114.34	108.20
11	B2	645	G	P-O5'-C5'	7.67	133.18	120.90
11	B2	706	G	C4-C5-N7	7.67	113.87	110.80
11	B2	1335	A	C6-C5-N7	-7.67	126.93	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1444	G	N1-C2-N3	-7.67	119.30	123.90
38	A1	512	G	O4'-C1'-N9	7.67	114.34	108.20
38	A1	1339	C	O4'-C1'-N1	7.67	114.34	108.20
38	A1	2043	A	C5-C6-N6	-7.67	117.56	123.70
38	A1	2450	A	C4-C5-C6	7.67	120.84	117.00
38	A1	2650	G	N3-C4-C5	-7.67	124.76	128.60
38	A1	194	G	N3-C2-N2	7.67	125.27	119.90
38	A1	1405	G	O4'-C1'-N9	7.67	114.34	108.20
38	A1	1586	G	N3-C4-N9	-7.67	121.40	126.00
38	A1	1937	A	N7-C8-N9	7.67	117.64	113.80
38	A1	2307	C	O4'-C1'-N1	7.67	114.34	108.20
38	A1	2384	G	C3'-C2'-C1'	-7.67	95.36	101.50
11	B2	495	G	C6-C5-N7	-7.67	125.80	130.40
11	B2	530	G	N9-C4-C5	-7.67	102.33	105.40
11	B2	1050	G	N7-C8-N9	7.67	116.94	113.10
38	A1	1036	C	C2-N1-C1'	7.67	127.24	118.80
38	A1	2093	A	C6-C5-N7	-7.67	126.93	132.30
11	B2	1154	G	N3-C4-N9	-7.67	121.40	126.00
16	BD	104	ARG	NE-CZ-NH1	7.67	124.14	120.30
38	A1	473	C	N3-C4-N4	7.67	123.37	118.00
38	A1	2843	C	C2-N3-C4	7.67	123.73	119.90
11	B2	250	G	N9-C4-C5	-7.67	102.33	105.40
38	A1	612	G	O4'-C1'-N9	7.67	114.33	108.20
38	A1	662	A	C5-C6-N6	-7.67	117.56	123.70
38	A1	958	A	C5-C6-N1	-7.67	113.86	117.70
38	A1	1620	C	C5-C6-N1	7.67	124.83	121.00
38	A1	2366	G	N1-C6-O6	7.67	124.50	119.90
38	A1	2751	C	N3-C4-C5	-7.67	118.83	121.90
38	A1	2899	G	C4-C5-C6	-7.67	114.20	118.80
38	A1	3029	A	N1-C2-N3	7.67	133.13	129.30
11	B2	107	C	O4'-C1'-N1	7.67	114.33	108.20
11	B2	233	C	N3-C4-N4	7.67	123.37	118.00
38	A1	771	G	C6-C5-N7	-7.67	125.80	130.40
38	A1	849	C	O4'-C1'-N1	7.67	114.33	108.20
38	A1	1084	G	N1-C2-N3	-7.67	119.30	123.90
38	A1	1517	G	C8-N9-C4	7.67	109.47	106.40
38	A1	2000	G	C8-N9-C4	7.67	109.47	106.40
38	A1	2241	U	N1-C2-O2	-7.67	117.43	122.80
38	A1	2795	G	N3-C4-N9	-7.67	121.40	126.00
46	AD	190	ARG	NE-CZ-NH2	-7.67	116.47	120.30
50	AF	8	ARG	NE-CZ-NH2	7.67	124.13	120.30
11	B2	384	G	N9-C4-C5	-7.67	102.33	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1201	G	P-O5'-C5'	7.66	133.16	120.90
38	A1	1276	G	C4-C5-C6	7.66	123.40	118.80
38	A1	2322	A	C8-N9-C4	-7.66	102.73	105.80
38	A1	2486	A	N7-C8-N9	7.66	117.63	113.80
38	A1	2898	G	O4'-C1'-N9	7.66	114.33	108.20
11	B2	51	A	C5-C6-N1	-7.66	113.87	117.70
11	B2	1457	A	C5-C6-N1	-7.66	113.87	117.70
38	A1	2462	U	O4'-C1'-N1	7.66	114.33	108.20
38	A1	2491	C	C5-C4-N4	-7.66	114.84	120.20
38	A1	2827	C	N3-C4-N4	7.66	123.36	118.00
11	B2	460	C	C6-N1-C1'	-7.66	111.61	120.80
38	A1	1784	G	N1-C6-O6	7.66	124.50	119.90
38	A1	2343	G	N7-C8-N9	7.66	116.93	113.10
39	A3	93	G	N7-C8-N9	7.66	116.93	113.10
11	B2	676	G	N1-C2-N3	-7.66	119.31	123.90
11	B2	1304	C	C6-N1-C2	-7.66	117.24	120.30
38	A1	271	G	O4'-C1'-N9	7.66	114.33	108.20
38	A1	864	C	O4'-C1'-N1	7.66	114.33	108.20
38	A1	1307	C	O4'-C1'-N1	7.66	114.33	108.20
38	A1	1461	G	N9-C4-C5	7.66	108.46	105.40
38	A1	1688	C	C2-N3-C4	7.66	123.73	119.90
38	A1	2322	A	N1-C6-N6	7.66	123.20	118.60
11	B2	1428	G	C5-C6-N1	7.66	115.33	111.50
38	A1	1432	C	N3-C4-C5	-7.66	118.84	121.90
38	A1	192	U	N3-C4-O4	7.66	124.76	119.40
38	A1	297	G	C2-N3-C4	7.66	115.73	111.90
38	A1	1893	C	N3-C4-N4	7.66	123.36	118.00
38	A1	2340	A	N3-C4-N9	-7.66	121.28	127.40
11	B2	198	A	C5-C6-N6	-7.65	117.58	123.70
11	B2	243	G	N1-C6-O6	7.65	124.49	119.90
11	B2	1093	C	P-O3'-C3'	7.65	128.88	119.70
11	B2	1134	G	C4-C5-C6	7.65	123.39	118.80
38	A1	505	A	O4'-C1'-N9	7.65	114.32	108.20
38	A1	1354	G	C4-C5-C6	7.65	123.39	118.80
38	A1	1757	G	C5-C6-O6	-7.65	124.01	128.60
38	A1	2214	U	C6-N1-C2	-7.65	116.41	121.00
38	A1	2573	C	N3-C4-N4	7.65	123.36	118.00
38	A1	2697	G	C4-C5-C6	7.65	123.39	118.80
38	A1	2830	C	C5-C4-N4	-7.65	114.84	120.20
38	A1	2838	U	N3-C2-O2	7.65	127.56	122.20
39	A3	85	C	C2-N3-C4	7.65	123.73	119.90
11	B2	1044	A	C8-N9-C4	-7.65	102.74	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	92	G	N1-C6-O6	7.65	124.49	119.90
38	A1	386	A	C5-C6-N6	-7.65	117.58	123.70
38	A1	2309	C	C5-C6-N1	7.65	124.83	121.00
38	A1	141	C	O4'-C4'-C3'	-7.65	96.35	104.00
38	A1	1741	C	N3-C4-C5	-7.65	118.84	121.90
38	A1	1834	C	O4'-C1'-N1	7.65	114.32	108.20
11	B2	406	U	O4'-C1'-N1	7.65	114.32	108.20
16	BD	79	ARG	NE-CZ-NH1	7.65	124.12	120.30
38	A1	367	G	C8-N9-C4	-7.65	103.34	106.40
38	A1	668	G	N1-C6-O6	7.65	124.49	119.90
38	A1	1623	C	O4'-C1'-N1	7.65	114.32	108.20
38	A1	1768	C	C6-N1-C2	-7.65	117.24	120.30
38	A1	2627	C	O4'-C1'-N1	7.65	114.32	108.20
39	A3	56	C	N3-C4-N4	7.65	123.35	118.00
11	B2	699	C	N3-C4-N4	7.65	123.35	118.00
38	A1	2075	U	N3-C4-C5	-7.65	110.01	114.60
38	A1	2617	G	N3-C2-N2	7.65	125.25	119.90
38	A1	2810	G	N1-C6-O6	7.65	124.49	119.90
11	B2	940	U	C5-C6-N1	7.64	126.52	122.70
38	A1	120	G	O4'-C1'-N9	7.64	114.32	108.20
38	A1	682	G	N1-C2-N2	-7.64	109.32	116.20
38	A1	788	A	N7-C8-N9	-7.64	109.98	113.80
38	A1	1096	A	C4'-C3'-C2'	-7.64	94.96	102.60
38	A1	2622	C	C6-N1-C2	-7.64	117.24	120.30
38	A1	2764	G	C8-N9-C4	7.64	109.46	106.40
39	A3	97	G	O4'-C1'-N9	7.64	114.32	108.20
43	AB	180	TYR	CB-CG-CD1	-7.64	116.41	121.00
11	B2	381	C	C6-N1-C2	7.64	123.36	120.30
11	B2	426	C	C5-C4-N4	-7.64	114.85	120.20
11	B2	708	C	O4'-C1'-N1	7.64	114.31	108.20
38	A1	976	C	O4'-C1'-N1	7.64	114.31	108.20
38	A1	2896	G	C8-N9-C4	7.64	109.46	106.40
38	A1	1817	C	P-O5'-C5'	7.64	133.12	120.90
38	A1	1873	G	N1-C2-N3	-7.64	119.31	123.90
38	A1	1908	C	N3-C4-C5	-7.64	118.84	121.90
11	B2	231	G	C5-C6-O6	-7.64	124.02	128.60
38	A1	216	A	C6-C5-N7	-7.64	126.95	132.30
38	A1	1590	C	P-O3'-C3'	7.64	128.87	119.70
38	A1	2344	G	C4-C5-C6	7.64	123.38	118.80
38	A1	2473	C	O4'-C1'-N1	7.64	114.31	108.20
11	B2	390	G	C4-C5-C6	7.64	123.38	118.80
38	A1	2174	G	N1-C2-N3	-7.64	119.32	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	87	C	C5-C6-N1	7.64	124.82	121.00
11	B2	1032	A	C5-C6-N1	-7.64	113.88	117.70
11	B2	1326	G	O4'-C1'-N9	7.64	114.31	108.20
11	B2	1417	A	N1-C2-N3	7.64	133.12	129.30
38	A1	1166	A	C1'-O4'-C4'	7.64	116.01	109.90
38	A1	1743	G	N1-C2-N3	-7.64	119.32	123.90
38	A1	2097	G	N3-C4-C5	-7.64	124.78	128.60
53	Ah	21	ARG	NE-CZ-NH2	-7.64	116.48	120.30
11	B2	426	C	C2-N3-C4	7.63	123.72	119.90
11	B2	565	C	C2-N3-C4	7.63	123.72	119.90
11	B2	1382	G	C5-C6-N1	-7.63	107.68	111.50
38	A1	435	G	C5-C6-O6	-7.63	124.02	128.60
38	A1	1277	G	O4'-C1'-N9	7.63	114.31	108.20
38	A1	1744	A	C5-C6-N6	-7.63	117.59	123.70
38	A1	2244	G	C6-C5-N7	-7.63	125.82	130.40
38	A1	2373	G	O4'-C1'-N9	7.63	114.31	108.20
38	A1	2629	U	N3-C2-O2	-7.63	116.86	122.20
38	A1	2726	G	N3-C2-N2	7.63	125.24	119.90
38	A1	2853	A	C4-C5-C6	7.63	120.82	117.00
11	B2	399	A	N7-C8-N9	-7.63	109.98	113.80
38	A1	860	A	C4-C5-C6	7.63	120.82	117.00
38	A1	976	C	N3-C4-C5	-7.63	118.85	121.90
10	B1	31	G	C5-C6-O6	-7.63	124.02	128.60
11	B2	428	G	C2-N3-C4	7.63	115.72	111.90
38	A1	1025	A	N1-C6-N6	7.63	123.18	118.60
38	A1	1752	C	C2-N3-C4	7.63	123.72	119.90
38	A1	2061	A	C4-C5-C6	7.63	120.82	117.00
38	A1	2218	C	N3-C4-N4	7.63	123.34	118.00
5	AS	154	ARG	NE-CZ-NH2	-7.63	116.48	120.30
11	B2	1261	U	C5-C6-N1	-7.63	118.89	122.70
11	B2	130	G	N3-C2-N2	7.63	125.24	119.90
11	B2	404	C	N3-C4-N4	7.63	123.34	118.00
11	B2	854	C	C6-N1-C2	7.63	123.35	120.30
11	B2	889	G	C4'-C3'-C2'	-7.63	94.97	102.60
11	B2	1313	G	O4'-C1'-N9	7.63	114.30	108.20
38	A1	394	A	P-O5'-C5'	-7.63	108.69	120.90
38	A1	471	U	C2'-C3'-O3'	7.63	126.28	109.50
38	A1	1789	A	C2-N3-C4	-7.63	106.79	110.60
38	A1	1853	C	N3-C4-N4	7.63	123.34	118.00
38	A1	2203	G	C4-C5-C6	7.63	123.38	118.80
38	A1	2285	G	C5-C6-O6	-7.63	124.02	128.60
38	A1	2574	G	N1-C6-O6	7.63	124.48	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	381	C	N3-C4-C5	-7.63	118.85	121.90
11	B2	755	U	C4-C5-C6	-7.63	115.12	119.70
11	B2	1469	G	C6-C5-N7	-7.63	125.82	130.40
38	A1	54	G	O4'-C1'-N9	7.63	114.30	108.20
38	A1	1537	U	C5-C4-O4	-7.63	121.32	125.90
38	A1	1589	G	N3-C2-N2	7.63	125.24	119.90
38	A1	1835	A	C8-N9-C4	-7.63	102.75	105.80
38	A1	2113	G	C2-N3-C4	7.63	115.71	111.90
38	A1	2865	C	N3-C4-N4	7.63	123.34	118.00
11	B2	9	U	O4'-C1'-N1	7.62	114.30	108.20
11	B2	49	C	C2-N3-C4	7.62	123.71	119.90
11	B2	848	G	N1-C6-O6	7.62	124.47	119.90
38	A1	894	C	N3-C4-C5	-7.62	118.85	121.90
38	A1	1792	A	C5-C6-N6	-7.62	117.60	123.70
11	B2	1486	A	N1-C6-N6	7.62	123.17	118.60
38	A1	609	G	N1-C2-N3	-7.62	119.33	123.90
38	A1	1770	A	N1-C6-N6	7.62	123.17	118.60
38	A1	2627	C	N3-C4-C5	-7.62	118.85	121.90
38	A1	2876	G	N1-C2-N3	-7.62	119.33	123.90
38	A1	3012	C	C2-N3-C4	7.62	123.71	119.90
11	B2	99	C	C2'-C3'-O3'	7.62	126.27	109.50
11	B2	272	C	O4'-C1'-N1	7.62	114.30	108.20
11	B2	282	G	N1-C2-N3	-7.62	119.33	123.90
11	B2	461	A	C4-C5-C6	7.62	120.81	117.00
38	A1	279	G	C8-N9-C4	-7.62	103.35	106.40
38	A1	349	A	N3-C4-C5	-7.62	121.47	126.80
38	A1	760	G	C2-N3-C4	7.62	115.71	111.90
38	A1	884	C	P-O3'-C3'	-7.62	110.55	119.70
38	A1	1436	A	C5-C6-N6	-7.62	117.60	123.70
38	A1	1660	A	C6-C5-N7	-7.62	126.97	132.30
38	A1	1782	C	O4'-C1'-N1	7.62	114.30	108.20
38	A1	2875	C	C6-N1-C2	-7.62	117.25	120.30
11	B2	1131	G	C5-C6-O6	-7.62	124.03	128.60
38	A1	2530	G	N1-C2-N2	7.62	123.06	116.20
38	A1	2663	G	N3-C4-C5	7.62	132.41	128.60
38	A1	742	C	N3-C4-C5	-7.62	118.85	121.90
38	A1	935	A	O4'-C1'-N9	7.62	114.30	108.20
38	A1	2245	C	N3-C4-N4	7.62	123.33	118.00
38	A1	2307	C	N3-C4-N4	7.62	123.33	118.00
38	A1	3031	U	C6-N1-C2	-7.62	116.43	121.00
11	B2	809	C	C2-N3-C4	7.62	123.71	119.90
38	A1	213	G	C6-C5-N7	-7.62	125.83	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	271	G	C4-C5-C6	7.62	123.37	118.80
38	A1	370	A	C5-N7-C8	7.62	107.71	103.90
38	A1	399	C	C6-N1-C2	-7.62	117.25	120.30
38	A1	533	G	N7-C8-N9	7.62	116.91	113.10
38	A1	1087	G	N3-C2-N2	7.62	125.23	119.90
38	A1	2024	A	C4-C5-C6	7.62	120.81	117.00
38	A1	2830	C	N3-C4-N4	7.62	123.33	118.00
38	A1	2859	U	C5-C4-O4	-7.62	121.33	125.90
38	A1	3033	G	C4-C5-C6	7.62	123.37	118.80
9	AX	359	PHE	CB-CG-CD1	-7.61	115.47	120.80
11	B2	192	G	N9-C4-C5	-7.61	102.35	105.40
11	B2	493	C	N3-C4-C5	-7.61	118.86	121.90
11	B2	523	C	C5-C4-N4	-7.61	114.87	120.20
11	B2	800	G	O4'-C1'-N9	7.61	114.29	108.20
11	B2	1365	G	N3-C2-N2	7.61	125.23	119.90
38	A1	683	C	N3-C4-N4	7.61	123.33	118.00
38	A1	1005	G	P-O3'-C3'	7.61	128.84	119.70
38	A1	1509	C	N3-C4-C5	-7.61	118.86	121.90
38	A1	1641	G	C8-N9-C4	-7.61	103.36	106.40
38	A1	2209	U	O4'-C1'-N1	7.61	114.29	108.20
38	A1	2356	U	C6-N1-C2	-7.61	116.43	121.00
38	A1	2960	G	O4'-C1'-N9	7.61	114.29	108.20
38	A1	1815	C	O4'-C1'-N1	7.61	114.29	108.20
11	B2	575	A	C5-C6-N6	-7.61	117.61	123.70
11	B2	1276	G	N3-C2-N2	7.61	125.23	119.90
38	A1	182	U	C5-C6-N1	7.61	126.50	122.70
38	A1	1556	G	N3-C2-N2	7.61	125.23	119.90
38	A1	1860	A	O4'-C1'-N9	7.61	114.29	108.20
38	A1	2444	G	C5-C6-O6	-7.61	124.03	128.60
38	A1	1446	G	N3-C4-C5	7.61	132.41	128.60
38	A1	1480	G	N3-C4-C5	7.61	132.41	128.60
38	A1	1857	A	O4'-C1'-N9	7.61	114.29	108.20
38	A1	2815	C	N3-C4-C5	-7.61	118.86	121.90
38	A1	2856	G	C5-C6-O6	-7.61	124.03	128.60
11	B2	402	G	N3-C4-C5	-7.61	124.80	128.60
38	A1	1439	G	C5-C6-O6	-7.61	124.04	128.60
38	A1	1846	G	N3-C2-N2	7.61	125.22	119.90
11	B2	1030	U	N3-C4-O4	7.61	124.72	119.40
11	B2	1394	G	C4-C5-C6	7.61	123.36	118.80
38	A1	917	A	C5-C6-N6	-7.61	117.62	123.70
59	AL	120	ARG	NE-CZ-NH2	-7.61	116.50	120.30
10	B1	71	C	C2-N3-C4	7.60	123.70	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	808	C	N3-C4-N4	7.60	123.32	118.00
38	A1	250	G	N3-C4-C5	7.60	132.40	128.60
11	B2	425	C	O4'-C1'-N1	7.60	114.28	108.20
11	B2	519	G	N3-C2-N2	7.60	125.22	119.90
11	B2	734	G	N1-C6-O6	7.60	124.46	119.90
11	B2	813	G	C5-N7-C8	-7.60	100.50	104.30
11	B2	1156	A	C5-C6-N6	-7.60	117.62	123.70
38	A1	219	G	N9-C4-C5	7.60	108.44	105.40
38	A1	555	G	C6-C5-N7	-7.60	125.84	130.40
38	A1	787	G	C6-C5-N7	-7.60	125.84	130.40
38	A1	1692	A	P-O3'-C3'	7.60	128.82	119.70
38	A1	2452	C	O4'-C1'-N1	7.60	114.28	108.20
38	A1	3044	U	N3-C4-C5	-7.60	110.04	114.60
11	B2	885	G	N3-C4-N9	7.60	130.56	126.00
38	A1	773	U	N3-C4-C5	-7.60	110.04	114.60
38	A1	1084	G	N3-C4-C5	-7.60	124.80	128.60
11	B2	126	G	C2-N3-C4	7.60	115.70	111.90
11	B2	320	G	C5-C6-O6	-7.60	124.04	128.60
38	A1	168	G	N1-C2-N3	-7.60	119.34	123.90
38	A1	825	C	N1-C2-N3	-7.60	113.88	119.20
38	A1	1206	A	N1-C6-N6	7.60	123.16	118.60
38	A1	1503	C	C2-N3-C4	7.60	123.70	119.90
38	A1	1803	U	N3-C4-C5	-7.60	110.04	114.60
38	A1	2130	C	C2-N3-C4	7.60	123.70	119.90
38	A1	2864	G	C4-C5-N7	-7.60	107.76	110.80
38	A1	2975	A	C5-C6-N1	-7.60	113.90	117.70
39	A3	110	C	C2-N3-C4	7.60	123.70	119.90
8	AW	53	ARG	NE-CZ-NH1	-7.60	116.50	120.30
38	A1	147	C	C2-N3-C4	7.60	123.70	119.90
38	A1	570	G	O4'-C1'-N9	7.60	114.28	108.20
38	A1	1652	A	C5-C6-N6	-7.60	117.62	123.70
11	B2	621	G	C4-C5-C6	7.60	123.36	118.80
38	A1	448	A	C8-N9-C4	-7.60	102.76	105.80
38	A1	812	C	C6-N1-C2	-7.60	117.26	120.30
38	A1	2943	G	C2-N3-C4	7.60	115.70	111.90
11	B2	173	G	C4-C5-N7	-7.59	107.76	110.80
11	B2	644	G	N3-C4-C5	-7.59	124.80	128.60
38	A1	950	G	C5-C6-N1	-7.59	107.70	111.50
38	A1	1384	C	N1-C2-N3	-7.59	113.88	119.20
38	A1	1800	G	C5-C6-O6	-7.59	124.04	128.60
38	A1	795	G	C5-C6-O6	-7.59	124.04	128.60
38	A1	1087	G	C5-C6-O6	-7.59	124.04	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2403	G	N3-C2-N2	7.59	125.21	119.90
38	A1	2967	C	C5-C4-N4	-7.59	114.89	120.20
11	B2	453	G	C8-N9-C4	7.59	109.44	106.40
11	B2	499	G	N3-C4-C5	7.59	132.40	128.60
11	B2	1007	A	P-O5'-C5'	-7.59	108.76	120.90
11	B2	1409	G	C6-C5-N7	-7.59	125.85	130.40
38	A1	191	U	C2-N3-C4	7.59	131.55	127.00
38	A1	304	G	N3-C2-N2	7.59	125.21	119.90
38	A1	566	G	O4'-C1'-C2'	-7.59	98.21	105.80
11	B2	555	U	O4'-C1'-N1	7.59	114.27	108.20
38	A1	1907	G	C5-C6-O6	-7.59	124.05	128.60
11	B2	690	C	C2-N3-C4	7.59	123.69	119.90
38	A1	1638	C	P-O3'-C3'	7.59	128.80	119.70
38	A1	1849	A	C5-N7-C8	7.59	107.69	103.90
38	A1	2224	G	O4'-C1'-N9	7.59	114.27	108.20
38	A1	2483	U	C5-C4-O4	7.59	130.45	125.90
11	B2	997	G	O4'-C1'-N9	7.58	114.27	108.20
38	A1	1445	G	C5-C6-N1	-7.58	107.71	111.50
38	A1	1713	G	N3-C2-N2	7.58	125.21	119.90
38	A1	1860	A	N1-C2-N3	-7.58	125.51	129.30
10	B1	38	G	C4-C5-N7	-7.58	107.77	110.80
11	B2	11	A	N7-C8-N9	-7.58	110.01	113.80
11	B2	364	U	C5-C4-O4	-7.58	121.35	125.90
11	B2	844	G	C8-N9-C4	-7.58	103.37	106.40
38	A1	278	C	C2-N3-C4	7.58	123.69	119.90
38	A1	962	C	C3'-C2'-C1'	7.58	107.57	101.50
38	A1	1162	C	N1-C2-O2	-7.58	114.35	118.90
38	A1	1330	G	C5-C6-O6	7.58	133.15	128.60
11	B2	464	G	N9-C4-C5	-7.58	102.37	105.40
11	B2	800	G	C8-N9-C4	-7.58	103.37	106.40
18	BF	188	PHE	CB-CG-CD1	7.58	126.11	120.80
38	A1	636	G	C6-C5-N7	-7.58	125.85	130.40
38	A1	728	A	C5-C6-N6	-7.58	117.64	123.70
38	A1	848	A	C2-N3-C4	-7.58	106.81	110.60
38	A1	1546	G	N9-C4-C5	7.58	108.43	105.40
38	A1	3000	U	N1-C2-N3	-7.58	110.35	114.90
42	Aa	61	ARG	NE-CZ-NH2	-7.58	116.51	120.30
11	B2	593	G	C6-C5-N7	-7.58	125.85	130.40
11	B2	1009	G	N3-C2-N2	7.58	125.21	119.90
38	A1	244	A	C5-C6-N1	-7.58	113.91	117.70
38	A1	2014	A	C5-C6-N6	-7.58	117.64	123.70
38	A1	2866	A	N1-C2-N3	7.58	133.09	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	AQ	101	ALA	N-CA-CB	7.58	120.71	110.10
11	B2	340	A	C5-C6-N6	-7.58	117.64	123.70
11	B2	845	G	N1-C2-N3	-7.58	119.35	123.90
11	B2	957	A	C2-N3-C4	-7.58	106.81	110.60
38	A1	2251	G	N1-C6-O6	7.58	124.45	119.90
38	A1	2532	G	O4'-C1'-N9	7.58	114.26	108.20
10	B1	24	A	P-O5'-C5'	7.58	133.02	120.90
11	B2	1179	C	N3-C4-N4	7.58	123.30	118.00
38	A1	1272	A	C5-C6-N6	-7.58	117.64	123.70
38	A1	1427	A	C4-C5-C6	7.58	120.79	117.00
11	B2	437	A	O4'-C1'-N9	7.58	114.26	108.20
11	B2	650	A	O4'-C1'-N9	7.58	114.26	108.20
11	B2	1270	C	N3-C4-C5	-7.58	118.87	121.90
38	A1	2334	G	C4-C5-N7	7.58	113.83	110.80
38	A1	3034	C	N3-C4-N4	7.58	123.30	118.00
39	A3	78	C	C4-C5-C6	7.58	121.19	117.40
38	A1	386	A	C4-C5-C6	7.57	120.79	117.00
38	A1	557	G	C2-N3-C4	7.57	115.69	111.90
38	A1	606	A	C4-C5-C6	7.57	120.79	117.00
38	A1	743	A	C8-N9-C4	-7.57	102.77	105.80
38	A1	875	G	C5-N7-C8	7.57	108.09	104.30
38	A1	2689	G	O4'-C1'-N9	7.57	114.26	108.20
11	B2	1218	C	C6-N1-C2	-7.57	117.27	120.30
38	A1	1228	G	N1-C2-N3	-7.57	119.36	123.90
38	A1	1362	G	C6-C5-N7	-7.57	125.86	130.40
38	A1	1560	G	C5-C6-O6	-7.57	124.06	128.60
38	A1	2546	G	N3-C2-N2	7.57	125.20	119.90
38	A1	2604	G	C4-C5-N7	7.57	113.83	110.80
11	B2	78	G	N3-C4-C5	7.57	132.38	128.60
11	B2	201	G	C4-C5-N7	-7.57	107.77	110.80
11	B2	458	G	C5-C6-N1	-7.57	107.72	111.50
11	B2	897	A	N1-C2-N3	7.57	133.09	129.30
38	A1	888	U	O4'-C1'-N1	7.57	114.26	108.20
38	A1	943	G	N9-C4-C5	-7.57	102.37	105.40
38	A1	1622	G	C5-C6-N1	-7.57	107.72	111.50
38	A1	2007	C	N3-C4-C5	-7.57	118.87	121.90
38	A1	2141	C	C6-N1-C2	-7.57	117.27	120.30
38	A1	2478	G	P-O3'-C3'	7.57	128.78	119.70
11	B2	753	G	N1-C6-O6	7.57	124.44	119.90
38	A1	992	G	N9-C4-C5	-7.57	102.37	105.40
38	A1	2161	A	O4'-C1'-N9	7.57	114.25	108.20
38	A1	2300	C	C2-N3-C4	7.57	123.68	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	B2	583	G	N1-C2-N3	-7.57	119.36	123.90
11	B2	875	G	N1-C6-O6	7.57	124.44	119.90
11	B2	911	C	C5-C6-N1	7.57	124.78	121.00
11	B2	1249	A	O4'-C1'-N9	7.57	114.25	108.20
11	B2	1294	G	C5-C6-N1	-7.57	107.72	111.50
38	A1	1557	G	N1-C2-N3	-7.57	119.36	123.90
38	A1	1810	G	N1-C6-O6	7.57	124.44	119.90
38	A1	1991	G	C6-C5-N7	-7.57	125.86	130.40
38	A1	2005	A	O4'-C1'-N9	7.57	114.25	108.20
38	A1	2336	G	N1-C2-N2	7.57	123.01	116.20
38	A1	2844	G	N1-C6-O6	7.57	124.44	119.90
10	B1	59	A	N1-C6-N6	7.56	123.14	118.60
38	A1	35	G	C6-C5-N7	-7.56	125.86	130.40
38	A1	1093	G	N7-C8-N9	7.56	116.88	113.10
39	A3	80	G	C5-C6-N1	-7.56	107.72	111.50
63	AP	109	ARG	NE-CZ-NH1	7.56	124.08	120.30
11	B2	304	C	C5-C6-N1	7.56	124.78	121.00
11	B2	516	A	C6-C5-N7	-7.56	127.01	132.30
11	B2	918	A	O4'-C1'-N9	7.56	114.25	108.20
11	B2	1489	A	O4'-C1'-N9	7.56	114.25	108.20
15	BC	147	TYR	CB-CG-CD2	-7.56	116.46	121.00
38	A1	52	A	C4-C5-C6	7.56	120.78	117.00
38	A1	350	A	C5-N7-C8	7.56	107.68	103.90
38	A1	922	C	C5-C4-N4	-7.56	114.91	120.20
38	A1	1248	C	C6-N1-C1'	-7.56	111.72	120.80
38	A1	1727	G	C2-N3-C4	-7.56	108.12	111.90
38	A1	2090	A	C5-C6-N1	-7.56	113.92	117.70
38	A1	2125	C	C6-N1-C2	-7.56	117.28	120.30
38	A1	2352	G	N1-C2-N3	-7.56	119.36	123.90
38	A1	2682	G	N1-C2-N3	-7.56	119.36	123.90
59	AL	146	LEU	CB-CG-CD2	7.56	123.86	111.00
38	A1	277	A	C5-N7-C8	7.56	107.68	103.90
38	A1	2768	C	O4'-C1'-N1	7.56	114.25	108.20
5	AS	59	ARG	NE-CZ-NH1	7.56	124.08	120.30
11	B2	207	G	C4-C5-C6	7.56	123.34	118.80
11	B2	232	G	C5-C6-O6	-7.56	124.06	128.60
11	B2	734	G	C4-C5-C6	7.56	123.34	118.80
38	A1	685	G	N9-C4-C5	7.56	108.42	105.40
38	A1	2281	A	P-O3'-C3'	7.56	128.77	119.70
38	A1	2671	C	N3-C4-C5	-7.56	118.88	121.90
38	A1	2884	C	N3-C4-N4	7.56	123.29	118.00
11	B2	213	C	C5-C4-N4	-7.56	114.91	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1368	A	C4-C5-C6	7.56	120.78	117.00
38	A1	936	G	O4'-C1'-C2'	-7.56	98.24	105.80
38	A1	2195	G	O4'-C1'-N9	7.56	114.25	108.20
38	A1	2754	A	C5-C6-N1	-7.56	113.92	117.70
38	A1	2832	G	C2-N3-C4	7.56	115.68	111.90
39	A3	114	G	O4'-C1'-N9	7.56	114.25	108.20
10	B1	6	G	P-O3'-C3'	7.56	128.77	119.70
38	A1	448	A	N7-C8-N9	7.56	117.58	113.80
38	A1	2371	A	O4'-C1'-N9	7.56	114.25	108.20
10	B1	23	G	N1-C2-N3	-7.55	119.37	123.90
11	B2	10	G	C6-C5-N7	-7.55	125.87	130.40
11	B2	933	G	C8-N9-C4	-7.55	103.38	106.40
11	B2	1338	C	C5-C6-N1	-7.55	117.22	121.00
38	A1	87	C	C5-C6-N1	7.55	124.78	121.00
38	A1	265	A	C2-N3-C4	-7.55	106.82	110.60
38	A1	1673	C	C5-C4-N4	-7.55	114.91	120.20
38	A1	2478	G	C4'-C3'-C2'	-7.55	95.05	102.60
38	A1	2792	G	C5-C6-O6	-7.55	124.07	128.60
48	AE	107	PHE	CB-CG-CD2	-7.55	115.51	120.80
11	B2	180	G	C5-C6-N1	7.55	115.28	111.50
11	B2	1249	A	C8-N9-C4	-7.55	102.78	105.80
11	B2	1413	G	N7-C8-N9	7.55	116.88	113.10
38	A1	817	G	C6-N1-C2	-7.55	120.57	125.10
38	A1	1624	U	N3-C4-O4	7.55	124.69	119.40
38	A1	1630	U	O4'-C1'-N1	7.55	114.24	108.20
38	A1	1652	A	N7-C8-N9	-7.55	110.02	113.80
11	B2	126	G	N1-C2-N3	-7.55	119.37	123.90
38	A1	195	U	N3-C4-O4	7.55	124.69	119.40
38	A1	224	G	C6-C5-N7	-7.55	125.87	130.40
38	A1	318	G	N1-C2-N3	-7.55	119.37	123.90
38	A1	531	G	C2-N3-C4	7.55	115.67	111.90
38	A1	1001	C	P-O3'-C3'	7.55	128.76	119.70
38	A1	1762	G	C8-N9-C4	7.55	109.42	106.40
38	A1	2062	A	C6-N1-C2	-7.55	114.07	118.60
38	A1	2315	G	C4-C5-N7	-7.55	107.78	110.80
38	A1	2450	A	C5-C6-N6	-7.55	117.66	123.70
38	A1	2972	G	C8-N9-C4	-7.55	103.38	106.40
60	AM	125	TYR	CD1-CE1-CZ	7.55	126.60	119.80
7	AU	77	TYR	CG-CD2-CE2	7.55	127.34	121.30
11	B2	136	A	N3-C4-C5	-7.55	121.52	126.80
11	B2	877	A	C5-N7-C8	7.55	107.67	103.90
38	A1	714	C	P-O3'-C3'	7.55	128.76	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1616	A	N1-C6-N6	7.55	123.13	118.60
38	A1	1984	G	N1-C6-O6	7.55	124.43	119.90
38	A1	2391	G	N3-C2-N2	7.55	125.18	119.90
38	A1	2434	A	C5-C6-N1	-7.55	113.93	117.70
39	A3	115	C	C5-C4-N4	-7.55	114.92	120.20
38	A1	107	G	C2-N3-C4	7.55	115.67	111.90
38	A1	1121	C	C2-N3-C4	7.55	123.67	119.90
38	A1	1428	G	N1-C6-O6	7.55	124.43	119.90
38	A1	2042	A	N1-C2-N3	7.55	133.07	129.30
38	A1	2302	C	N3-C2-O2	-7.55	116.62	121.90
10	B1	46	U	C2-N3-C4	-7.55	122.47	127.00
11	B2	239	A	O4'-C1'-N9	-7.55	102.16	108.20
11	B2	861	G	C2-N3-C4	7.55	115.67	111.90
11	B2	1044	A	N1-C6-N6	7.55	123.13	118.60
38	A1	318	G	N9-C4-C5	7.55	108.42	105.40
38	A1	1338	G	N9-C4-C5	7.55	108.42	105.40
38	A1	1993	A	C2-N3-C4	7.55	114.37	110.60
11	B2	247	G	N1-C6-O6	7.54	124.43	119.90
11	B2	823	A	C6-C5-N7	-7.54	127.02	132.30
11	B2	1210	A	N3-C4-C5	-7.54	121.52	126.80
38	A1	1553	G	O4'-C1'-N9	7.54	114.24	108.20
38	A1	2434	A	C6-C5-N7	-7.54	127.02	132.30
38	A1	2836	G	C2-N3-C4	-7.54	108.13	111.90
10	B1	70	C	C6-N1-C2	-7.54	117.28	120.30
11	B2	678	G	O4'-C1'-N9	7.54	114.23	108.20
11	B2	737	C	C6-N1-C2	7.54	123.32	120.30
11	B2	1459	G	P-O5'-C5'	7.54	132.97	120.90
16	BD	156	ARG	NE-CZ-NH2	7.54	124.07	120.30
38	A1	484	C	C2-N3-C4	7.54	123.67	119.90
38	A1	635	G	C5-C6-N1	-7.54	107.73	111.50
38	A1	1354	G	C5-C6-O6	-7.54	124.07	128.60
38	A1	1597	G	N1-C6-O6	7.54	124.43	119.90
38	A1	2880	C	N3-C4-C5	-7.54	118.88	121.90
11	B2	875	G	N1-C2-N3	-7.54	119.38	123.90
11	B2	1056	G	C5-C6-O6	-7.54	124.08	128.60
36	BX	43	ARG	NE-CZ-NH1	7.54	124.07	120.30
38	A1	1690	U	C6-N1-C1'	-7.54	110.64	121.20
38	A1	1999	G	P-O3'-C3'	7.54	128.75	119.70
11	B2	1105	C	N3-C4-C5	-7.54	118.88	121.90
38	A1	2142	U	N3-C4-C5	-7.54	110.08	114.60
38	A1	2309	C	C2-N3-C4	7.54	123.67	119.90
38	A1	2826	U	P-O3'-C3'	7.54	128.75	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
62	AO	185	PHE	CB-CG-CD2	-7.54	115.52	120.80
11	B2	922	G	C2-N3-C4	7.54	115.67	111.90
11	B2	1309	A	C5-C6-N1	-7.54	113.93	117.70
38	A1	404	G	P-O3'-C3'	7.54	128.75	119.70
38	A1	640	C	O4'-C1'-N1	7.54	114.23	108.20
38	A1	1541	U	O4'-C1'-N1	7.54	114.23	108.20
38	A1	2356	U	C5-C4-O4	7.54	130.42	125.90
11	B2	325	A	C5-N7-C8	7.54	107.67	103.90
11	B2	860	G	C4-C5-N7	-7.54	107.78	110.80
38	A1	421	C	N3-C4-N4	7.54	123.28	118.00
38	A1	1730	C	C2-N3-C4	7.54	123.67	119.90
38	A1	3007	A	N1-C6-N6	7.54	123.12	118.60
11	B2	368	C	C4-C5-C6	-7.54	113.63	117.40
11	B2	444	G	O4'-C1'-N9	7.54	114.23	108.20
11	B2	971	G	C4-C5-N7	-7.54	107.79	110.80
38	A1	1367	A	C2'-C3'-O3'	7.54	126.08	109.50
38	A1	2213	G	C4-C5-N7	7.54	113.81	110.80
38	A1	2289	A	N9-C4-C5	7.54	108.81	105.80
38	A1	2328	G	N1-C6-O6	7.54	124.42	119.90
38	A1	2448	A	P-O3'-C3'	7.54	128.74	119.70
38	A1	2770	A	N9-C4-C5	7.54	108.81	105.80
11	B2	131	G	N1-C2-N3	-7.53	119.38	123.90
11	B2	1141	G	N3-C2-N2	7.53	125.17	119.90
18	BF	134	ARG	NE-CZ-NH1	7.53	124.07	120.30
38	A1	675	G	O4'-C1'-N9	7.53	114.23	108.20
38	A1	836	U	C4-C5-C6	7.53	124.22	119.70
38	A1	2236	C	O4'-C1'-N1	7.53	114.23	108.20
38	A1	2359	G	C4-C5-C6	7.53	123.32	118.80
38	A1	2418	G	C8-N9-C4	7.53	109.41	106.40
38	A1	2614	C	C5-C6-N1	7.53	124.77	121.00
39	A3	27	C	N3-C4-C5	-7.53	118.89	121.90
11	B2	990	G	C5-C6-N1	7.53	115.27	111.50
11	B2	1407	U	C2-N3-C4	-7.53	122.48	127.00
38	A1	1108	A	N1-C2-N3	7.53	133.07	129.30
38	A1	1560	G	O4'-C1'-N9	7.53	114.23	108.20
38	A1	1646	G	C4-C5-C6	7.53	123.32	118.80
11	B2	303	G	N1-C2-N2	-7.53	109.42	116.20
11	B2	836	G	C5-C6-O6	-7.53	124.08	128.60
38	A1	188	A	C4-C5-C6	7.53	120.77	117.00
38	A1	932	C	C4-C5-C6	7.53	121.17	117.40
38	A1	1172	U	C1'-O4'-C4'	-7.53	103.88	109.90
38	A1	2063	U	C4-C5-C6	-7.53	115.18	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2623	G	N3-C2-N2	7.53	125.17	119.90
39	A3	43	C	C5-C4-N4	-7.53	114.93	120.20
11	B2	100	A	N1-C2-N3	7.53	133.06	129.30
11	B2	765	U	C3'-C2'-C1'	7.53	107.52	101.50
38	A1	707	U	C6-N1-C1'	-7.53	110.66	121.20
38	A1	1526	G	C6-C5-N7	-7.53	125.88	130.40
38	A1	2579	G	N1-C2-N3	-7.53	119.38	123.90
11	B2	907	C	N3-C4-N4	7.53	123.27	118.00
38	A1	505	A	C6-C5-N7	-7.53	127.03	132.30
38	A1	802	G	C6-C5-N7	-7.53	125.88	130.40
38	A1	901	C	C6-N1-C2	-7.53	117.29	120.30
38	A1	951	C	C6-N1-C1'	-7.53	111.77	120.80
38	A1	1098	C	N3-C4-C5	-7.53	118.89	121.90
38	A1	2224	G	C5-C6-O6	-7.53	124.08	128.60
38	A1	2283	C	C5-C4-N4	-7.53	114.93	120.20
11	B2	471	G	N1-C6-O6	7.53	124.42	119.90
11	B2	573	C	C5-C4-N4	-7.53	114.93	120.20
38	A1	70	G	N3-C4-C5	-7.53	124.84	128.60
38	A1	821	U	N1-C2-O2	7.53	128.07	122.80
38	A1	1127	C	C3'-C2'-C1'	-7.53	95.48	101.50
38	A1	1214	C	O4'-C1'-N1	7.53	114.22	108.20
38	A1	1674	G	C8-N9-C4	-7.53	103.39	106.40
38	A1	2314	U	C5-C4-O4	-7.53	121.39	125.90
57	Aj	66	ASP	CB-CG-OD2	-7.53	111.53	118.30
38	A1	832	A	C8-N9-C4	-7.52	102.79	105.80
56	AJ	72	ASP	CB-CG-OD1	-7.52	111.53	118.30
10	B1	39	A	O4'-C1'-N9	7.52	114.22	108.20
11	B2	527	A	C6-C5-N7	-7.52	127.03	132.30
11	B2	559	G	C2-N3-C4	7.52	115.66	111.90
38	A1	1111	G	O4'-C1'-N9	7.52	114.22	108.20
38	A1	1147	G	C5-N7-C8	-7.52	100.54	104.30
38	A1	2062	A	C5-C6-N6	-7.52	117.68	123.70
41	AA	97	ALA	N-CA-CB	7.52	120.63	110.10
11	B2	478	C	C2-N3-C4	-7.52	116.14	119.90
11	B2	1241	U	P-O3'-C3'	7.52	128.72	119.70
38	A1	311	C	N3-C4-C5	-7.52	118.89	121.90
38	A1	2639	G	C4-C5-C6	7.52	123.31	118.80
38	A1	2653	G	C5-C6-O6	-7.52	124.09	128.60
38	A1	2836	G	N3-C2-N2	7.52	125.17	119.90
38	A1	2851	A	O4'-C1'-N9	7.52	114.22	108.20
38	A1	2945	A	C2-N3-C4	7.52	114.36	110.60
11	B2	149	U	C5-C6-N1	7.52	126.46	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	971	G	N3-C2-N2	7.52	125.16	119.90
33	BU	126	ARG	NE-CZ-NH1	7.52	124.06	120.30
38	A1	472	A	O4'-C1'-N9	7.52	114.22	108.20
38	A1	1250	A	O4'-C1'-N9	7.52	114.22	108.20
38	A1	1745	U	C1'-O4'-C4'	7.52	115.92	109.90
38	A1	1820	C	C2-N1-C1'	7.52	127.07	118.80
11	B2	375	G	C5-N7-C8	-7.52	100.54	104.30
38	A1	693	G	O4'-C1'-N9	7.52	114.21	108.20
38	A1	1005	G	O4'-C1'-N9	7.52	114.21	108.20
38	A1	1384	C	C2-N3-C4	7.52	123.66	119.90
46	AD	29	ASP	CB-CG-OD2	-7.52	111.53	118.30
11	B2	1024	G	C6-C5-N7	-7.52	125.89	130.40
38	A1	1607	C	C6-N1-C2	-7.52	117.29	120.30
11	B2	109	U	C3'-C2'-C1'	7.51	107.51	101.50
11	B2	641	A	C5-N7-C8	7.51	107.66	103.90
38	A1	434	G	C5-C6-N1	-7.51	107.74	111.50
38	A1	1141	C	N3-C4-C5	-7.51	118.89	121.90
38	A1	1442	G	N3-C2-N2	7.51	125.16	119.90
38	A1	2516	G	P-O3'-C3'	-7.51	110.68	119.70
11	B2	1358	A	C4'-C3'-C2'	-7.51	95.09	102.60
38	A1	1453	G	O4'-C1'-C2'	7.51	114.36	107.60
38	A1	1512	G	C4-C5-N7	7.51	113.81	110.80
38	A1	1799	G	C2-N3-C4	7.51	115.66	111.90
10	B1	54	G	N1-C2-N3	-7.51	119.39	123.90
11	B2	403	C	N3-C4-C5	-7.51	118.90	121.90
11	B2	889	G	N3-C4-C5	-7.51	124.84	128.60
11	B2	908	G	C5-N7-C8	7.51	108.06	104.30
11	B2	1020	G	N1-C6-O6	7.51	124.41	119.90
11	B2	1304	C	C5-C4-N4	-7.51	114.94	120.20
38	A1	54	G	C6-C5-N7	-7.51	125.89	130.40
38	A1	116	G	N3-C4-C5	-7.51	124.84	128.60
38	A1	1201	G	C8-N9-C4	-7.51	103.40	106.40
38	A1	2631	C	C6-N1-C2	-7.51	117.30	120.30
38	A1	2754	A	O4'-C1'-N9	7.51	114.21	108.20
39	A3	15	G	C2-N3-C4	7.51	115.66	111.90
48	AE	93	ARG	NE-CZ-NH2	-7.51	116.54	120.30
38	A1	51	G	C5-C6-O6	-7.51	124.09	128.60
38	A1	349	A	C4'-C3'-C2'	7.51	110.11	102.60
38	A1	963	G	N3-C2-N2	7.51	125.16	119.90
38	A1	974	U	C3'-C2'-C1'	7.51	107.51	101.50
38	A1	1762	G	C6-N1-C2	7.51	129.61	125.10
38	A1	1844	C	N3-C4-N4	7.51	123.26	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2987	U	N3-C2-O2	7.51	127.46	122.20
39	A3	117	G	N3-C4-C5	-7.51	124.84	128.60
44	Ab	101	ARG	NE-CZ-NH1	7.51	124.05	120.30
38	A1	884	C	N3-C2-O2	-7.51	116.64	121.90
38	A1	2655	C	N3-C4-C5	-7.51	118.90	121.90
10	B1	14	A	C4-C5-N7	-7.51	106.95	110.70
11	B2	1	A	P-O3'-C3'	7.51	128.71	119.70
11	B2	1049	U	C5-C6-N1	7.51	126.45	122.70
38	A1	372	A	N3-C4-N9	-7.51	121.39	127.40
38	A1	781	C	N3-C4-N4	7.51	123.25	118.00
38	A1	784	C	N1-C2-O2	7.51	123.40	118.90
38	A1	1680	G	C5-N7-C8	7.51	108.05	104.30
38	A1	1803	U	N1-C2-O2	7.51	128.06	122.80
38	A1	2307	C	P-O3'-C3'	7.51	128.71	119.70
10	B1	11	C	C6-N1-C2	-7.50	117.30	120.30
11	B2	21	A	N1-C2-N3	7.50	133.05	129.30
11	B2	733	C	N3-C4-N4	7.50	123.25	118.00
11	B2	1201	G	N1-C2-N3	-7.50	119.40	123.90
11	B2	1217	C	C6-N1-C2	-7.50	117.30	120.30
20	BH	156	ARG	NE-CZ-NH2	-7.50	116.55	120.30
33	BU	72	ARG	NE-CZ-NH2	-7.50	116.55	120.30
38	A1	525	C	O4'-C1'-N1	7.50	114.20	108.20
38	A1	935	A	P-O3'-C3'	7.50	128.70	119.70
38	A1	1898	A	N1-C2-N3	-7.50	125.55	129.30
38	A1	2289	A	C4-C5-C6	7.50	120.75	117.00
38	A1	1769	G	N7-C8-N9	-7.50	109.35	113.10
38	A1	2680	A	O4'-C1'-N9	7.50	114.20	108.20
38	A1	2723	G	C5-C6-O6	-7.50	124.10	128.60
11	B2	737	C	O4'-C1'-N1	7.50	114.20	108.20
38	A1	1603	G	N3-C2-N2	7.50	125.15	119.90
38	A1	1719	C	C2-N3-C4	7.50	123.65	119.90
38	A1	2352	G	C5-C6-O6	-7.50	124.10	128.60
38	A1	2441	A	N3-C4-N9	-7.50	121.40	127.40
39	A3	22	C	C5-C4-N4	-7.50	114.95	120.20
11	B2	515	U	N3-C2-O2	7.50	127.45	122.20
11	B2	780	C	O4'-C1'-N1	7.50	114.20	108.20
11	B2	970	G	C5-C6-O6	-7.50	124.10	128.60
11	B2	1411	G	O4'-C1'-N9	7.50	114.20	108.20
38	A1	596	C	N1-C2-O2	-7.50	114.40	118.90
38	A1	1642	G	P-O3'-C3'	7.50	128.70	119.70
38	A1	2501	G	N3-C4-C5	7.50	132.35	128.60
38	A1	2693	G	C6-C5-N7	-7.50	125.90	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
46	AD	55	ARG	NE-CZ-NH2	-7.50	116.55	120.30
10	B1	4	G	C4-C5-N7	7.50	113.80	110.80
11	B2	143	G	O4'-C1'-N9	7.50	114.20	108.20
11	B2	169	C	C5-C4-N4	-7.50	114.95	120.20
11	B2	1051	G	N3-C2-N2	7.50	125.15	119.90
38	A1	217	A	C5'-C4'-C3'	7.50	127.99	116.00
38	A1	825	C	N3-C4-N4	7.50	123.25	118.00
38	A1	1646	G	C5-C6-O6	-7.50	124.10	128.60
38	A1	1989	G	O4'-C1'-N9	7.50	114.20	108.20
11	B2	54	C	O4'-C1'-N1	7.49	114.19	108.20
11	B2	472	C	O4'-C1'-N1	7.49	114.19	108.20
11	B2	959	G	C5-N7-C8	-7.49	100.55	104.30
11	B2	1208	A	C2'-C3'-O3'	7.49	125.99	109.50
14	BB	5	TYR	CB-CG-CD2	-7.49	116.50	121.00
38	A1	363	G	N3-C2-N2	-7.49	114.65	119.90
38	A1	1375	G	C4-C5-C6	7.49	123.30	118.80
38	A1	2367	C	C5-C4-N4	-7.49	114.95	120.20
54	AI	37	VAL	CA-CB-CG1	7.49	122.14	110.90
11	B2	963	A	N1-C6-N6	7.49	123.09	118.60
38	A1	1284	C	N3-C4-N4	7.49	123.25	118.00
11	B2	245	U	O4'-C1'-N1	7.49	114.19	108.20
11	B2	958	G	N9-C4-C5	7.49	108.40	105.40
11	B2	1169	C	N3-C4-N4	7.49	123.24	118.00
11	B2	1211	A	C5-N7-C8	7.49	107.64	103.90
38	A1	24	G	N3-C2-N2	7.49	125.14	119.90
38	A1	827	G	C4-C5-C6	7.49	123.29	118.80
38	A1	2093	A	C5-N7-C8	7.49	107.64	103.90
38	A1	2287	C	N3-C4-N4	7.49	123.24	118.00
38	A1	2614	C	O4'-C1'-N1	7.49	114.19	108.20
11	B2	402	G	C5-C6-N1	-7.49	107.76	111.50
11	B2	786	G	N3-C4-C5	7.49	132.34	128.60
11	B2	1150	G	P-O3'-C3'	7.49	128.69	119.70
11	B2	1158	G	C4-C5-N7	7.49	113.80	110.80
11	B2	1185	A	C4-C5-C6	7.49	120.75	117.00
11	B2	1208	A	P-O3'-C3'	7.49	128.69	119.70
11	B2	1250	C	O4'-C1'-N1	7.49	114.19	108.20
38	A1	1027	A	C5'-C4'-O4'	-7.49	100.11	109.10
38	A1	1077	G	O4'-C1'-N9	7.49	114.19	108.20
38	A1	1343	C	C4-C5-C6	7.49	121.14	117.40
38	A1	1473	C	O4'-C1'-N1	7.49	114.19	108.20
38	A1	2305	U	C5-C6-N1	7.49	126.44	122.70
38	A1	2443	G	C8-N9-C4	-7.49	103.40	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	861	G	O4'-C1'-N9	7.49	114.19	108.20
11	B2	1128	U	C1'-O4'-C4'	-7.49	103.91	109.90
22	BJ	108	ALA	N-CA-CB	7.49	120.58	110.10
38	A1	74	A	C4-C5-N7	-7.49	106.96	110.70
38	A1	2122	G	N3-C2-N2	7.49	125.14	119.90
38	A1	2156	A	C5-C6-N1	-7.49	113.96	117.70
39	A3	47	G	C1'-O4'-C4'	-7.49	103.91	109.90
10	B1	47	G	N1-C2-N3	-7.48	119.41	123.90
38	A1	924	A	C5-N7-C8	7.48	107.64	103.90
38	A1	1083	G	C6-C5-N7	-7.48	125.91	130.40
38	A1	1543	C	C3'-C2'-C1'	7.48	107.49	101.50
38	A1	1642	G	N1-C2-N3	-7.48	119.41	123.90
38	A1	1825	G	C5-C6-O6	-7.48	124.11	128.60
38	A1	2046	C	C6-N1-C2	-7.48	117.31	120.30
11	B2	17	C	C4'-C3'-C2'	-7.48	95.12	102.60
11	B2	693	C	C5'-C4'-O4'	7.48	118.08	109.10
11	B2	815	C	O4'-C1'-N1	7.48	114.19	108.20
38	A1	364	A	O4'-C1'-N9	7.48	114.19	108.20
38	A1	600	A	P-O3'-C3'	7.48	128.68	119.70
38	A1	1625	A	C6-C5-N7	-7.48	127.06	132.30
38	A1	1773	C	C6-N1-C2	-7.48	117.31	120.30
38	A1	2298	C	C5-C4-N4	-7.48	114.96	120.20
11	B2	417	C	C4'-C3'-C2'	-7.48	95.12	102.60
38	A1	1822	G	O4'-C1'-N9	7.48	114.18	108.20
38	A1	2022	U	O4'-C1'-N1	7.48	114.18	108.20
38	A1	2329	A	C5-C6-N1	-7.48	113.96	117.70
38	A1	718	G	C5-N7-C8	7.48	108.04	104.30
38	A1	1502	C	O4'-C1'-N1	7.48	114.18	108.20
38	A1	1672	G	N1-C6-O6	7.48	124.39	119.90
38	A1	2832	G	C6-C5-N7	-7.48	125.92	130.40
11	B2	194	C	O4'-C1'-N1	7.47	114.18	108.20
11	B2	244	G	C5-C6-O6	-7.47	124.11	128.60
11	B2	319	U	N3-C4-C5	-7.47	110.12	114.60
11	B2	747	U	C2-N3-C4	7.47	131.48	127.00
11	B2	908	G	C8-N9-C4	-7.47	103.41	106.40
11	B2	1200	U	C6-N1-C1'	-7.47	110.74	121.20
11	B2	1374	C	C5-C6-N1	7.47	124.74	121.00
38	A1	635	G	C4-C5-N7	7.47	113.79	110.80
38	A1	911	G	N7-C8-N9	7.47	116.84	113.10
38	A1	2624	G	C6-N1-C2	7.47	129.59	125.10
38	A1	2984	A	N9-C4-C5	-7.47	102.81	105.80
11	B2	991	C	N3-C4-N4	7.47	123.23	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	315	U	C5-C4-O4	7.47	130.38	125.90
38	A1	2124	C	N1-C2-O2	-7.47	114.42	118.90
11	B2	806	G	C5-C6-O6	-7.47	124.12	128.60
38	A1	398	U	N1-C2-O2	-7.47	117.57	122.80
38	A1	1288	C	C4-C5-C6	7.47	121.14	117.40
38	A1	1407	A	N1-C2-N3	-7.47	125.56	129.30
11	B2	247	G	N7-C8-N9	-7.47	109.37	113.10
11	B2	398	C	N3-C4-N4	7.47	123.23	118.00
11	B2	585	U	P-O3'-C3'	7.47	128.66	119.70
13	BA	104	ASP	CB-CG-OD2	7.47	125.02	118.30
38	A1	36	G	C2-N3-C4	-7.47	108.17	111.90
38	A1	1676	G	N7-C8-N9	-7.47	109.36	113.10
38	A1	1741	C	O4'-C1'-N1	7.47	114.17	108.20
39	A3	29	G	C5-C6-N1	7.47	115.23	111.50
38	A1	1044	C	O4'-C1'-N1	7.47	114.17	108.20
38	A1	1047	A	C5-C6-N1	-7.47	113.97	117.70
38	A1	1844	C	C5-C4-N4	-7.47	114.97	120.20
38	A1	2292	A	C4-C5-C6	7.47	120.73	117.00
11	B2	1095	C	C2-N1-C1'	7.47	127.01	118.80
11	B2	1316	U	N3-C4-C5	-7.47	110.12	114.60
38	A1	655	C	C5-C4-N4	-7.47	114.97	120.20
38	A1	1342	G	C6-N1-C2	7.47	129.58	125.10
38	A1	1754	A	O4'-C1'-N9	7.47	114.17	108.20
38	A1	2826	U	N3-C4-C5	-7.47	110.12	114.60
32	BT	49	ARG	NE-CZ-NH2	-7.46	116.57	120.30
38	A1	489	G	N9-C4-C5	7.46	108.39	105.40
38	A1	645	U	N1-C2-N3	7.46	119.38	114.90
38	A1	1515	G	N1-C2-N3	-7.46	119.42	123.90
38	A1	2497	G	C8-N9-C4	-7.46	103.41	106.40
38	A1	2641	C	N3-C4-C5	7.46	124.89	121.90
38	A1	2706	C	C4-C5-C6	7.46	121.13	117.40
11	B2	202	G	N1-C2-N3	-7.46	119.42	123.90
11	B2	1463	A	C5-C6-N6	-7.46	117.73	123.70
38	A1	496	A	P-O3'-C3'	7.46	128.66	119.70
38	A1	2773	A	C5-N7-C8	7.46	107.63	103.90
39	A3	8	C	O4'-C1'-N1	7.46	114.17	108.20
11	B2	561	A	C4-C5-C6	7.46	120.73	117.00
11	B2	1056	G	N1-C2-N3	-7.46	119.42	123.90
30	BR	62	ARG	NE-CZ-NH1	-7.46	116.57	120.30
38	A1	128	C	C2-N1-C1'	7.46	127.01	118.80
38	A1	715	G	C6-C5-N7	-7.46	125.92	130.40
38	A1	1299	C	O4'-C1'-N1	7.46	114.17	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1387	G	C8-N9-C4	-7.46	103.42	106.40
39	A3	119	C	O4'-C1'-N1	7.46	114.17	108.20
63	AP	42	ARG	NE-CZ-NH1	-7.46	116.57	120.30
38	A1	217	A	P-O5'-C5'	7.46	132.84	120.90
38	A1	1763	A	C5-C6-N1	-7.46	113.97	117.70
10	B1	39	A	N7-C8-N9	7.46	117.53	113.80
11	B2	702	G	P-O3'-C3'	7.46	128.65	119.70
11	B2	1415	U	C4'-C3'-C2'	-7.46	95.14	102.60
38	A1	380	A	C6-N1-C2	-7.46	114.12	118.60
38	A1	709	A	O4'-C4'-C3'	-7.46	96.54	104.00
38	A1	1565	G	C8-N9-C4	7.46	109.38	106.40
38	A1	1669	A	C4-C5-C6	7.46	120.73	117.00
38	A1	1885	G	N3-C4-N9	-7.46	121.53	126.00
38	A1	1901	A	C5-N7-C8	7.46	107.63	103.90
38	A1	2024	A	O4'-C1'-N9	7.46	114.17	108.20
38	A1	2139	A	C5-N7-C8	7.46	107.63	103.90
45	AC	304	GLU	N-CA-CB	7.46	124.03	110.60
11	B2	877	A	N9-C4-C5	-7.46	102.82	105.80
38	A1	1189	A	C8-N9-C4	-7.46	102.82	105.80
11	B2	958	G	N3-C4-C5	-7.46	124.87	128.60
38	A1	493	A	C6-C5-N7	-7.46	127.08	132.30
38	A1	770	G	C4-C5-C6	7.46	123.27	118.80
38	A1	2977	G	N1-C6-O6	7.46	124.37	119.90
33	BU	83	ARG	NE-CZ-NH2	-7.45	116.57	120.30
38	A1	235	G	C6-N1-C2	-7.45	120.63	125.10
38	A1	401	C	C5'-C4'-O4'	7.45	118.04	109.10
38	A1	1533	G	C6-C5-N7	-7.45	125.93	130.40
38	A1	1700	U	N3-C4-O4	7.45	124.62	119.40
38	A1	1728	C	N1-C2-O2	7.45	123.37	118.90
11	B2	531	G	C5-C6-N1	-7.45	107.77	111.50
11	B2	1257	U	C5-C4-O4	-7.45	121.43	125.90
38	A1	1042	G	C8-N9-C4	-7.45	103.42	106.40
38	A1	1263	C	C6-N1-C2	-7.45	117.32	120.30
11	B2	556	G	N3-C2-N2	7.45	125.12	119.90
38	A1	429	U	N3-C2-O2	7.45	127.42	122.20
38	A1	1266	A	N1-C2-N3	7.45	133.03	129.30
38	A1	2688	C	C5'-C4'-O4'	7.45	118.04	109.10
38	A1	2991	C	N3-C4-N4	7.45	123.22	118.00
10	B1	7	G	C2-N3-C4	7.45	115.62	111.90
11	B2	474	G	O4'-C1'-N9	7.45	114.16	108.20
11	B2	511	C	O4'-C1'-N1	7.45	114.16	108.20
11	B2	887	G	O4'-C1'-N9	7.45	114.16	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1368	A	C5-C6-N6	-7.45	117.74	123.70
38	A1	94	A	N9-C4-C5	7.45	108.78	105.80
38	A1	859	G	C4-C5-C6	7.45	123.27	118.80
38	A1	1606	C	N3-C4-C5	-7.45	118.92	121.90
10	B1	40	U	C5'-C4'-C3'	7.45	127.92	116.00
11	B2	159	C	C3'-C2'-C1'	7.45	107.46	101.50
11	B2	806	G	C4'-C3'-C2'	-7.45	95.15	102.60
38	A1	1792	A	C5-C6-N1	-7.45	113.98	117.70
11	B2	668	G	C6-N1-C2	7.45	129.57	125.10
11	B2	1466	G	O4'-C1'-N9	7.45	114.16	108.20
38	A1	1451	A	C6-N1-C2	-7.45	114.13	118.60
38	A1	1865	U	C5-C6-N1	7.45	126.42	122.70
38	A1	2111	C	O4'-C1'-N1	7.45	114.16	108.20
38	A1	2427	C	O4'-C1'-N1	7.45	114.16	108.20
39	A3	85	C	C5'-C4'-C3'	-7.45	104.09	116.00
11	B2	202	G	N3-C4-C5	-7.44	124.88	128.60
38	A1	624	U	C3'-C2'-C1'	7.44	107.46	101.50
38	A1	1425	U	N3-C4-O4	7.44	124.61	119.40
38	A1	2439	G	N9-C4-C5	-7.44	102.42	105.40
38	A1	2450	A	O4'-C1'-N9	7.44	114.16	108.20
38	A1	2717	A	C5-C6-N6	-7.44	117.75	123.70
11	B2	147	A	C5-N7-C8	7.44	107.62	103.90
11	B2	794	A	N9-C4-C5	7.44	108.78	105.80
11	B2	1159	U	C5-C4-O4	-7.44	121.44	125.90
38	A1	1359	C	C6-N1-C2	7.44	123.28	120.30
38	A1	1948	A	N1-C6-N6	7.44	123.07	118.60
38	A1	2673	C	C6-N1-C2	-7.44	117.32	120.30
11	B2	380	C	O4'-C1'-N1	7.44	114.15	108.20
11	B2	697	A	N1-C2-N3	-7.44	125.58	129.30
11	B2	876	A	C4-C5-C6	7.44	120.72	117.00
38	A1	414	G	O4'-C1'-N9	-7.44	102.25	108.20
38	A1	930	G	C8-N9-C4	-7.44	103.42	106.40
38	A1	2372	C	C5-C6-N1	7.44	124.72	121.00
11	B2	691	G	O4'-C1'-N9	7.44	114.15	108.20
38	A1	462	A	N1-C2-N3	-7.44	125.58	129.30
38	A1	2402	A	C5-C6-N6	-7.44	117.75	123.70
11	B2	92	G	C4-C5-N7	7.44	113.78	110.80
11	B2	94	C	C5-C4-N4	-7.44	114.99	120.20
11	B2	308	G	C3'-C2'-C1'	7.44	107.45	101.50
38	A1	2769	U	O4'-C1'-N1	7.44	114.15	108.20
11	B2	531	G	N1-C6-O6	7.44	124.36	119.90
10	B1	10	G	N3-C4-C5	-7.43	124.88	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	746	A	C4-C5-C6	7.43	120.72	117.00
11	B2	887	G	C5-C6-O6	-7.43	124.14	128.60
38	A1	2072	G	C5'-C4'-C3'	7.43	127.89	116.00
38	A1	2105	A	N1-C6-N6	7.43	123.06	118.60
38	A1	2461	C	O4'-C1'-N1	7.43	114.15	108.20
48	AE	71	ARG	NE-CZ-NH1	7.43	124.02	120.30
58	Ak	46	ARG	NE-CZ-NH2	-7.43	116.58	120.30
65	AV	21	MET	CG-SD-CE	7.43	112.09	100.20
38	A1	685	G	C4-C5-N7	-7.43	107.83	110.80
38	A1	1084	G	N3-C2-N2	7.43	125.10	119.90
38	A1	1535	U	O4'-C1'-N1	7.43	114.15	108.20
38	A1	2362	U	N3-C2-O2	7.43	127.40	122.20
11	B2	268	C	C2-N3-C4	7.43	123.62	119.90
38	A1	2390	G	C5-C6-O6	-7.43	124.14	128.60
11	B2	704	C	N3-C4-C5	7.43	124.87	121.90
11	B2	998	A	C8-N9-C4	-7.43	102.83	105.80
11	B2	1075	A	C5-C6-N1	-7.43	113.98	117.70
38	A1	69	C	N3-C4-C5	-7.43	118.93	121.90
38	A1	286	G	O4'-C1'-N9	7.43	114.14	108.20
38	A1	1158	G	N3-C2-N2	7.43	125.10	119.90
38	A1	1711	C	N3-C4-N4	7.43	123.20	118.00
38	A1	1734	G	C8-N9-C4	7.43	109.37	106.40
41	AA	106	PHE	CB-CG-CD2	7.43	126.00	120.80
38	A1	895	C	N3-C4-N4	7.43	123.20	118.00
38	A1	2645	C	C5-C4-N4	-7.43	115.00	120.20
11	B2	1203	G	N1-C2-N3	-7.43	119.44	123.90
11	B2	1224	U	N3-C4-O4	7.43	124.60	119.40
38	A1	291	A	C6-C5-N7	-7.43	127.10	132.30
38	A1	703	G	N3-C4-N9	7.43	130.46	126.00
38	A1	1931	G	C4-C5-N7	-7.43	107.83	110.80
38	A1	2850	G	C4-C5-N7	-7.43	107.83	110.80
11	B2	1475	C	C6-N1-C2	-7.42	117.33	120.30
38	A1	519	A	C5-C6-N6	-7.42	117.76	123.70
38	A1	1184	U	C5-C4-O4	-7.42	121.45	125.90
38	A1	1228	G	O4'-C1'-N9	7.42	114.14	108.20
38	A1	1609	G	N9-C1'-C2'	-7.42	103.83	112.00
38	A1	2127	G	N3-C2-N2	7.42	125.10	119.90
38	A1	2236	C	C6-N1-C2	-7.42	117.33	120.30
38	A1	2576	C	O4'-C1'-N1	7.42	114.14	108.20
58	Ak	22	TYR	CA-CB-CG	-7.42	99.30	113.40
38	A1	496	A	C5-N7-C8	7.42	107.61	103.90
38	A1	847	A	C4'-C3'-C2'	-7.42	95.18	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1218	C	N3-C4-C5	-7.42	118.93	121.90
38	A1	1451	A	C5-C6-N6	-7.42	117.76	123.70
38	A1	2481	G	C2-N3-C4	7.42	115.61	111.90
64	AR	12	THR	C-N-CA	7.42	140.25	121.70
38	A1	274	C	C5-C6-N1	-7.42	117.29	121.00
13	BA	186	ARG	NE-CZ-NH1	7.42	124.01	120.30
38	A1	404	G	C6-C5-N7	-7.42	125.95	130.40
38	A1	1530	A	C5-C6-N6	-7.42	117.77	123.70
38	A1	1897	G	N1-C6-O6	7.42	124.35	119.90
38	A1	2465	A	C6-C5-N7	-7.42	127.11	132.30
38	A1	2748	C	N1-C2-O2	7.42	123.35	118.90
11	B2	300	G	N3-C2-N2	-7.42	114.71	119.90
11	B2	757	G	N1-C6-O6	7.42	124.35	119.90
38	A1	21	C	N3-C4-C5	-7.42	118.93	121.90
38	A1	389	C	C6-N1-C2	-7.42	117.33	120.30
38	A1	1191	C	C5-C4-N4	-7.42	115.01	120.20
38	A1	1550	C	N3-C4-N4	7.42	123.19	118.00
38	A1	1902	G	N3-C2-N2	7.42	125.09	119.90
38	A1	2275	G	C6-N1-C2	7.42	129.55	125.10
38	A1	2380	A	C5-C6-N1	-7.42	113.99	117.70
38	A1	2423	G	C8-N9-C4	7.42	109.37	106.40
9	AX	333	PHE	CB-CG-CD2	-7.42	115.61	120.80
11	B2	277	G	N3-C2-N2	7.42	125.09	119.90
11	B2	517	U	C6-N1-C2	-7.42	116.55	121.00
38	A1	73	A	C4-C5-C6	7.42	120.71	117.00
38	A1	944	G	N7-C8-N9	-7.42	109.39	113.10
38	A1	33	U	C5-C4-O4	7.41	130.35	125.90
38	A1	811	C	O4'-C1'-N1	7.41	114.13	108.20
38	A1	1912	A	C5-C6-N6	-7.41	117.77	123.70
38	A1	1942	G	C3'-C2'-C1'	-7.41	95.57	101.50
38	A1	2299	G	C3'-C2'-C1'	-7.41	95.57	101.50
4	AQ	119	THR	CA-CB-CG2	-7.41	102.02	112.40
11	B2	212	G	O4'-C1'-N9	7.41	114.13	108.20
38	A1	44	C	P-O3'-C3'	7.41	128.59	119.70
38	A1	1299	C	N3-C4-C5	-7.41	118.94	121.90
38	A1	2285	G	C6-N1-C2	7.41	129.55	125.10
38	A1	2359	G	C5-C6-N1	-7.41	107.79	111.50
38	A1	2823	G	C5-C6-O6	-7.41	124.15	128.60
9	AX	254	VAL	CG1-CB-CG2	7.41	122.76	110.90
11	B2	16	G	C6-N1-C2	7.41	129.55	125.10
11	B2	336	C	C3'-C2'-C1'	7.41	107.43	101.50
11	B2	562	A	O4'-C1'-N9	7.41	114.13	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	BG	125	TYR	CB-CG-CD1	-7.41	116.55	121.00
38	A1	378	G	C4-C5-C6	7.41	123.25	118.80
38	A1	1073	G	N1-C6-O6	7.41	124.35	119.90
38	A1	1441	C	C6-N1-C2	-7.41	117.34	120.30
38	A1	2163	G	C5-C6-O6	7.41	133.05	128.60
38	A1	2290	U	P-O5'-C5'	7.41	132.76	120.90
38	A1	3023	G	C6-C5-N7	-7.41	125.95	130.40
10	B1	30	G	C5-C6-O6	-7.41	124.16	128.60
10	B1	71	C	C6-N1-C2	-7.41	117.34	120.30
11	B2	157	A	C5-C6-N1	-7.41	114.00	117.70
11	B2	161	C	N3-C4-N4	7.41	123.19	118.00
38	A1	144	A	C4-C5-C6	7.41	120.70	117.00
38	A1	628	A	C5-N7-C8	7.41	107.60	103.90
38	A1	879	A	C6-C5-N7	-7.41	127.11	132.30
38	A1	1411	G	OP1-P-OP2	-7.41	108.49	119.60
38	A1	1813	A	N3-C4-N9	7.41	133.33	127.40
38	A1	2711	U	N3-C4-O4	7.41	124.58	119.40
45	AC	198	TYR	CG-CD2-CE2	-7.41	115.37	121.30
11	B2	806	G	C5-C6-N1	-7.41	107.80	111.50
11	B2	1276	G	C6-C5-N7	-7.41	125.96	130.40
54	AI	62	ARG	NE-CZ-NH2	7.41	124.00	120.30
54	AI	66	PHE	CB-CG-CD2	7.41	125.98	120.80
11	B2	91	G	N3-C2-N2	7.41	125.08	119.90
11	B2	378	A	C5-C6-N6	-7.41	117.78	123.70
11	B2	1131	G	N3-C4-C5	-7.41	124.90	128.60
11	B2	1136	A	C4-C5-N7	-7.41	107.00	110.70
38	A1	114	C	C2-N3-C4	7.41	123.60	119.90
38	A1	2241	U	O4'-C1'-N1	7.41	114.12	108.20
38	A1	2518	G	N3-C4-N9	-7.41	121.56	126.00
38	A1	590	A	C5-N7-C8	7.40	107.60	103.90
38	A1	1862	G	N3-C4-C5	-7.40	124.90	128.60
38	A1	2609	G	C4'-C3'-C2'	-7.40	95.20	102.60
11	B2	360	A	C5-C6-N1	-7.40	114.00	117.70
38	A1	1287	G	N1-C6-O6	7.40	124.34	119.90
38	A1	1677	A	C4-C5-C6	7.40	120.70	117.00
38	A1	2054	G	O4'-C1'-N9	7.40	114.12	108.20
38	A1	2886	C	C2-N1-C1'	7.40	126.94	118.80
11	B2	159	C	O3'-P-O5'	-7.40	89.94	104.00
11	B2	230	C	C2-N3-C4	7.40	123.60	119.90
11	B2	393	A	N1-C2-N3	7.40	133.00	129.30
11	B2	825	C	O4'-C1'-N1	7.40	114.12	108.20
11	B2	1114	G	N1-C2-N3	-7.40	119.46	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1416	C	N3-C4-C5	-7.40	118.94	121.90
29	BQ	45	TYR	CG-CD2-CE2	-7.40	115.38	121.30
38	A1	71	A	C5-C6-N6	-7.40	117.78	123.70
38	A1	817	G	N9-C4-C5	-7.40	102.44	105.40
38	A1	828	G	N9-C4-C5	7.40	108.36	105.40
38	A1	1019	G	C6-N1-C2	7.40	129.54	125.10
38	A1	1105	C	N3-C4-C5	-7.40	118.94	121.90
38	A1	1463	C	N3-C4-N4	7.40	123.18	118.00
38	A1	1578	C	C6-N1-C2	-7.40	117.34	120.30
38	A1	2384	G	C6-C5-N7	-7.40	125.96	130.40
38	A1	2956	G	C6-C5-N7	-7.40	125.96	130.40
11	B2	650	A	C4-C5-C6	7.40	120.70	117.00
11	B2	694	U	N1-C2-O2	-7.40	117.62	122.80
38	A1	415	U	O4'-C1'-N1	7.40	114.12	108.20
38	A1	1867	C	C5-C6-N1	7.40	124.70	121.00
38	A1	2524	C	C4-C5-C6	-7.40	113.70	117.40
11	B2	80	A	C5-C6-N1	-7.40	114.00	117.70
11	B2	265	C	O4'-C1'-N1	7.40	114.12	108.20
11	B2	1248	A	N3-C4-C5	-7.40	121.62	126.80
32	BT	68	ARG	NE-CZ-NH2	-7.40	116.60	120.30
38	A1	639	C	N3-C2-O2	7.40	127.08	121.90
38	A1	861	G	N1-C2-N3	-7.40	119.46	123.90
38	A1	1408	G	C4'-C3'-C2'	-7.40	95.20	102.60
38	A1	1589	G	C2-N3-C4	-7.40	108.20	111.90
38	A1	1653	U	N1-C2-N3	7.40	119.34	114.90
38	A1	2553	U	O4'-C1'-N1	7.40	114.12	108.20
39	A3	54	A	C4-C5-N7	-7.40	107.00	110.70
11	B2	1157	G	C5-C6-N1	-7.40	107.80	111.50
11	B2	568	C	N3-C4-N4	7.39	123.18	118.00
11	B2	1099	A	N3-C4-N9	-7.39	121.48	127.40
38	A1	922	C	C6-N1-C2	7.39	123.26	120.30
38	A1	1796	U	O4'-C1'-N1	7.39	114.11	108.20
38	A1	2596	G	C4-C5-N7	-7.39	107.84	110.80
38	A1	2989	A	C4-C5-C6	7.39	120.70	117.00
54	AI	89	ARG	NE-CZ-NH2	-7.39	116.60	120.30
11	B2	220	G	N7-C8-N9	-7.39	109.40	113.10
11	B2	974	G	N1-C6-O6	7.39	124.34	119.90
38	A1	831	C	N3-C4-N4	7.39	123.17	118.00
38	A1	1375	G	C6-C5-N7	-7.39	125.96	130.40
38	A1	1583	G	P-O3'-C3'	-7.39	110.83	119.70
38	A1	1893	C	C6-N1-C2	-7.39	117.34	120.30
58	Ak	165	ALA	CB-CA-C	-7.39	99.01	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	957	A	N7-C8-N9	7.39	117.50	113.80
38	A1	44	C	C5-C6-N1	-7.39	117.31	121.00
38	A1	47	C	N1-C2-O2	-7.39	114.47	118.90
38	A1	230	A	N1-C6-N6	7.39	123.03	118.60
38	A1	1424	G	O4'-C1'-N9	7.39	114.11	108.20
38	A1	1434	C	N3-C4-N4	7.39	123.17	118.00
38	A1	1714	G	N3-C2-N2	7.39	125.07	119.90
38	A1	2179	G	N3-C4-N9	7.39	130.44	126.00
11	B2	600	C	N3-C4-C5	-7.39	118.94	121.90
11	B2	1006	C	C2-N3-C4	7.39	123.59	119.90
38	A1	488	A	P-O3'-C3'	7.39	128.57	119.70
38	A1	1287	G	C8-N9-C4	-7.39	103.44	106.40
38	A1	2861	A	C6-C5-N7	-7.39	127.13	132.30
38	A1	3023	G	C3'-C2'-C1'	7.39	107.41	101.50
38	A1	3038	A	C4-C5-N7	-7.39	107.00	110.70
39	A3	28	C	C5-C6-N1	7.39	124.69	121.00
38	A1	134	C	N3-C4-N4	7.39	123.17	118.00
38	A1	2831	G	C8-N9-C4	7.39	109.36	106.40
11	B2	358	G	C1'-O4'-C4'	-7.39	103.99	109.90
11	B2	551	U	N3-C4-C5	7.39	119.03	114.60
11	B2	580	G	N1-C2-N3	-7.39	119.47	123.90
11	B2	779	G	C4-C5-N7	7.39	113.75	110.80
11	B2	1102	A	C2-N3-C4	-7.39	106.91	110.60
18	BF	197	PHE	CB-CG-CD2	7.39	125.97	120.80
30	BR	53	TYR	CD1-CE1-CZ	-7.39	113.15	119.80
38	A1	130	G	C4-C5-C6	7.39	123.23	118.80
38	A1	430	A	C6-C5-N7	-7.39	127.13	132.30
38	A1	476	C	N3-C2-O2	7.39	127.07	121.90
38	A1	999	A	C5-N7-C8	7.39	107.59	103.90
38	A1	2480	G	N1-C2-N3	-7.39	119.47	123.90
10	B1	76	C	C6-N1-C1'	-7.38	111.94	120.80
11	B2	192	G	C6-C5-N7	-7.38	125.97	130.40
11	B2	493	C	O4'-C1'-N1	7.38	114.11	108.20
11	B2	662	C	O4'-C1'-N1	7.38	114.11	108.20
21	BI	78	ARG	NE-CZ-NH2	-7.38	116.61	120.30
38	A1	97	C	C4-C5-C6	7.38	121.09	117.40
38	A1	213	G	N1-C6-O6	7.38	124.33	119.90
38	A1	2823	G	P-O3'-C3'	7.38	128.56	119.70
38	A1	1889	G	C4-C5-C6	7.38	123.23	118.80
38	A1	2596	G	N9-C4-C5	7.38	108.35	105.40
11	B2	386	C	N3-C4-N4	7.38	123.17	118.00
11	B2	478	C	C6-N1-C1'	-7.38	111.94	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1238	G	N3-C4-C5	7.38	132.29	128.60
38	A1	1580	G	N1-C6-O6	7.38	124.33	119.90
11	B2	1183	C	C3'-C2'-C1'	7.38	107.40	101.50
38	A1	805	C	O4'-C4'-C3'	-7.38	96.62	104.00
38	A1	833	G	N3-C2-N2	7.38	125.07	119.90
38	A1	2578	C	C6-N1-C2	-7.38	117.35	120.30
11	B2	180	G	N3-C2-N2	7.38	125.06	119.90
38	A1	16	G	O4'-C1'-N9	7.38	114.10	108.20
38	A1	405	G	C1'-O4'-C4'	-7.38	104.00	109.90
38	A1	899	A	C5-N7-C8	7.38	107.59	103.90
38	A1	960	C	N3-C4-N4	7.38	123.17	118.00
38	A1	1054	A	C8-N9-C4	-7.38	102.85	105.80
38	A1	1481	G	O4'-C1'-N9	7.38	114.10	108.20
38	A1	1930	A	C5-N7-C8	7.38	107.59	103.90
11	B2	307	G	C5-N7-C8	7.38	107.99	104.30
11	B2	1263	C	C5'-C4'-O4'	7.38	117.95	109.10
11	B2	1452	G	N3-C2-N2	7.38	125.06	119.90
38	A1	1239	C	N3-C4-N4	7.38	123.16	118.00
38	A1	2647	G	C5-N7-C8	7.38	107.99	104.30
38	A1	403	G	C6-C5-N7	-7.38	125.97	130.40
38	A1	2227	G	N9-C4-C5	-7.38	102.45	105.40
39	A3	110	C	C5-C6-N1	7.38	124.69	121.00
45	AC	185	TYR	CG-CD1-CE1	-7.38	115.40	121.30
11	B2	71	C	C5-C4-N4	-7.37	115.04	120.20
11	B2	236	C	N1-C2-O2	-7.37	114.48	118.90
11	B2	420	C	N1-C2-O2	7.37	123.32	118.90
21	BI	68	ARG	NE-CZ-NH2	-7.37	116.61	120.30
38	A1	249	G	C6-N1-C2	7.37	129.52	125.10
38	A1	326	C	O4'-C1'-N1	7.37	114.10	108.20
38	A1	596	C	N3-C4-N4	7.37	123.16	118.00
38	A1	1432	C	C6-N1-C2	-7.37	117.35	120.30
38	A1	1827	A	C4-C5-N7	-7.37	107.01	110.70
38	A1	2078	A	O4'-C1'-N9	7.37	114.10	108.20
38	A1	2328	G	C5-C6-O6	-7.37	124.18	128.60
38	A1	2341	G	N1-C6-O6	7.37	124.32	119.90
38	A1	2579	G	N7-C8-N9	-7.37	109.41	113.10
45	AC	17	ARG	NE-CZ-NH1	7.37	123.99	120.30
11	B2	1287	G	C5-C6-O6	-7.37	124.18	128.60
38	A1	681	C	C3'-C2'-C1'	-7.37	95.60	101.50
38	A1	1845	C	C4-C5-C6	7.37	121.09	117.40
38	A1	2063	U	P-O3'-C3'	-7.37	110.85	119.70
38	A1	2138	A	C4'-C3'-C2'	-7.37	95.23	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2709	C	C4-C5-C6	7.37	121.08	117.40
11	B2	123	U	C5-C6-N1	-7.37	119.02	122.70
11	B2	587	G	N9-C4-C5	-7.37	102.45	105.40
38	A1	1126	C	O4'-C1'-N1	7.37	114.10	108.20
38	A1	1579	G	C6-C5-N7	-7.37	125.98	130.40
38	A1	2053	G	N1-C6-O6	7.37	124.32	119.90
38	A1	2121	C	O4'-C1'-N1	7.37	114.10	108.20
10	B1	64	C	C5-C6-N1	7.37	124.68	121.00
11	B2	157	A	N1-C6-N6	7.37	123.02	118.60
11	B2	282	G	C3'-C2'-C1'	-7.37	95.61	101.50
11	B2	286	G	N7-C8-N9	-7.37	109.42	113.10
38	A1	712	C	N3-C2-O2	7.37	127.06	121.90
38	A1	1513	G	C5-N7-C8	7.37	107.98	104.30
38	A1	1722	G	P-O3'-C3'	7.37	128.54	119.70
38	A1	2562	G	C5-N7-C8	-7.37	100.61	104.30
39	A3	14	G	O4'-C4'-C3'	-7.37	96.63	104.00
39	A3	80	G	C5-C6-O6	-7.37	124.18	128.60
11	B2	155	U	C2-N3-C4	-7.37	122.58	127.00
11	B2	896	A	P-O3'-C3'	7.37	128.54	119.70
38	A1	1182	C	O4'-C1'-N1	7.37	114.09	108.20
11	B2	844	G	N9-C1'-C2'	-7.37	103.90	112.00
11	B2	846	G	C5-N7-C8	7.37	107.98	104.30
38	A1	307	C	N3-C4-C5	-7.37	118.95	121.90
38	A1	637	G	P-O5'-C5'	-7.37	109.12	120.90
38	A1	875	G	C2-N3-C4	7.37	115.58	111.90
38	A1	1232	G	C6-N1-C2	7.37	129.52	125.10
38	A1	1299	C	P-O3'-C3'	-7.37	110.86	119.70
38	A1	1555	G	C5-N7-C8	-7.37	100.62	104.30
38	A1	1764	G	N9-C4-C5	7.37	108.35	105.40
38	A1	1820	C	C5-C6-N1	7.37	124.68	121.00
38	A1	1836	A	N1-C6-N6	7.37	123.02	118.60
38	A1	2366	G	N1-C2-N3	-7.37	119.48	123.90
38	A1	2742	G	C6-C5-N7	-7.37	125.98	130.40
11	B2	181	G	C6-N1-C2	7.36	129.52	125.10
11	B2	245	U	N3-C4-C5	-7.36	110.18	114.60
11	B2	767	U	N3-C4-C5	-7.36	110.18	114.60
11	B2	1167	C	N3-C4-N4	7.36	123.15	118.00
38	A1	1788	G	N9-C1'-C2'	-7.36	103.90	112.00
38	A1	2293	G	N9-C4-C5	-7.36	102.45	105.40
38	A1	2721	C	C5-C6-N1	7.36	124.68	121.00
38	A1	1002	A	O4'-C1'-N9	7.36	114.09	108.20
38	A1	1237	A	N7-C8-N9	7.36	117.48	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1457	C	N1-C2-O2	7.36	123.32	118.90
38	A1	2866	A	C4-C5-N7	-7.36	107.02	110.70
51	Ag	38	ARG	CD-NE-CZ	-7.36	113.29	123.60
10	B1	72	C	C5-C6-N1	7.36	124.68	121.00
11	B2	176	U	O4'-C1'-N1	7.36	114.09	108.20
11	B2	564	C	O4'-C1'-N1	7.36	114.09	108.20
11	B2	729	G	O4'-C1'-N9	7.36	114.09	108.20
38	A1	340	G	N1-C6-O6	7.36	124.32	119.90
38	A1	1129	G	C5-C6-N1	-7.36	107.82	111.50
38	A1	1267	A	N9-C4-C5	7.36	108.74	105.80
38	A1	1404	G	C1'-O4'-C4'	-7.36	104.01	109.90
38	A1	1856	G	C5-C6-O6	-7.36	124.18	128.60
38	A1	1969	C	C5-C4-N4	-7.36	115.05	120.20
38	A1	2638	G	N1-C2-N3	-7.36	119.48	123.90
38	A1	2812	U	C6-N1-C2	-7.36	116.58	121.00
11	B2	210	A	N1-C6-N6	7.36	123.02	118.60
38	A1	2249	A	N1-C2-N3	-7.36	125.62	129.30
39	A3	24	C	C2-N3-C4	7.36	123.58	119.90
11	B2	128	A	P-O3'-C3'	-7.36	110.87	119.70
11	B2	234	G	C5-C6-O6	-7.36	124.19	128.60
11	B2	942	A	N7-C8-N9	-7.36	110.12	113.80
38	A1	762	G	N1-C6-O6	7.36	124.31	119.90
38	A1	993	G	C4-C5-N7	-7.36	107.86	110.80
38	A1	1557	G	C2-N3-C4	7.36	115.58	111.90
38	A1	2790	C	O4'-C1'-N1	7.36	114.09	108.20
11	B2	302	A	C2-N3-C4	7.36	114.28	110.60
11	B2	1432	U	C5'-C4'-C3'	-7.36	104.23	116.00
38	A1	251	C	O4'-C1'-N1	7.36	114.08	108.20
38	A1	633	A	N9-C4-C5	-7.36	102.86	105.80
38	A1	1119	A	C8-N9-C4	-7.36	102.86	105.80
38	A1	2537	G	C4-C5-C6	7.36	123.21	118.80
11	B2	90	C	C4-C5-C6	-7.35	113.72	117.40
38	A1	2002	A	C5-N7-C8	7.35	107.58	103.90
38	A1	2620	G	O4'-C1'-N9	7.35	114.08	108.20
11	B2	154	C	C5-C4-N4	-7.35	115.05	120.20
11	B2	177	A	C5-C6-N6	-7.35	117.82	123.70
11	B2	952	A	C5-C6-N6	-7.35	117.82	123.70
11	B2	1211	A	O4'-C1'-N9	7.35	114.08	108.20
38	A1	1556	G	N7-C8-N9	7.35	116.78	113.10
38	A1	1956	G	C8-N9-C4	-7.35	103.46	106.40
38	A1	2391	G	C4-C5-N7	-7.35	107.86	110.80
38	A1	2396	G	C5-C6-N1	-7.35	107.82	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2422	G	N1-C2-N3	-7.35	119.49	123.90
38	A1	2552	C	O4'-C1'-N1	7.35	114.08	108.20
39	A3	23	A	N1-C6-N6	7.35	123.01	118.60
39	A3	99	G	N1-C2-N3	-7.35	119.49	123.90
62	AO	148	HIS	O-C-N	7.35	134.47	122.70
11	B2	1280	C	C5-C4-N4	-7.35	115.05	120.20
38	A1	114	C	N3-C4-N4	7.35	123.15	118.00
38	A1	398	U	P-O3'-C3'	7.35	128.52	119.70
38	A1	829	G	N7-C8-N9	7.35	116.78	113.10
38	A1	1470	C	O4'-C1'-N1	7.35	114.08	108.20
38	A1	1723	A	P-O3'-C3'	7.35	128.52	119.70
38	A1	1836	A	C4-C5-C6	7.35	120.67	117.00
38	A1	1857	A	C8-N9-C4	-7.35	102.86	105.80
11	B2	235	G	C5-N7-C8	-7.35	100.62	104.30
11	B2	1126	G	N3-C4-C5	7.35	132.28	128.60
38	A1	126	U	O4'-C1'-N1	7.35	114.08	108.20
38	A1	708	A	N9-C4-C5	7.35	108.74	105.80
38	A1	1642	G	N7-C8-N9	-7.35	109.42	113.10
38	A1	2358	U	C6-N1-C2	-7.35	116.59	121.00
38	A1	2455	G	N3-C2-N2	7.35	125.05	119.90
38	A1	2748	C	N3-C4-N4	7.35	123.14	118.00
38	A1	2946	C	P-O3'-C3'	7.35	128.52	119.70
11	B2	259	A	C5-C6-N1	-7.35	114.03	117.70
11	B2	813	G	N1-C6-O6	7.35	124.31	119.90
11	B2	880	G	C5-C6-O6	-7.35	124.19	128.60
11	B2	1287	G	N1-C6-O6	7.35	124.31	119.90
38	A1	943	G	C2-N3-C4	7.35	115.57	111.90
38	A1	1773	C	N3-C4-C5	-7.35	118.96	121.90
38	A1	2484	C	C5-C4-N4	-7.35	115.06	120.20
38	A1	2815	C	C5-C6-N1	7.35	124.67	121.00
38	A1	2946	C	C2-N3-C4	7.35	123.57	119.90
62	AO	143	ARG	NE-CZ-NH1	7.35	123.97	120.30
38	A1	709	A	C4-C5-N7	-7.35	107.03	110.70
38	A1	1863	G	N1-C2-N2	7.35	122.81	116.20
38	A1	2852	U	C5-C6-N1	-7.35	119.03	122.70
11	B2	578	G	N9-C4-C5	7.34	108.34	105.40
11	B2	908	G	N3-C4-C5	-7.34	124.93	128.60
11	B2	986	G	C8-N9-C1'	-7.34	117.45	127.00
11	B2	1284	C	N1-C2-O2	7.34	123.31	118.90
38	A1	669	G	O4'-C1'-N9	7.34	114.08	108.20
38	A1	1743	G	C8-N9-C4	-7.34	103.46	106.40
38	A1	2986	G	N9-C4-C5	7.34	108.34	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
62	AO	140	ASP	CB-CG-OD2	7.34	124.91	118.30
11	B2	409	C	O4'-C1'-N1	7.34	114.07	108.20
38	A1	797	C	N3-C4-N4	7.34	123.14	118.00
38	A1	1391	C	O4'-C1'-N1	7.34	114.07	108.20
38	A1	2343	G	O4'-C1'-N9	7.34	114.07	108.20
11	B2	1	A	C6-C5-N7	-7.34	127.16	132.30
11	B2	1262	U	N3-C4-O4	7.34	124.54	119.40
38	A1	723	A	P-O3'-C3'	7.34	128.51	119.70
38	A1	879	A	C5-C6-N6	-7.34	117.83	123.70
38	A1	2201	C	C5'-C4'-C3'	-7.34	104.25	116.00
38	A1	2263	G	C5-N7-C8	7.34	107.97	104.30
65	AV	35	ARG	NE-CZ-NH2	-7.34	116.63	120.30
11	B2	267	C	N3-C4-C5	-7.34	118.96	121.90
11	B2	698	A	C2-N3-C4	7.34	114.27	110.60
11	B2	856	G	C6-C5-N7	-7.34	126.00	130.40
11	B2	951	G	N3-C2-N2	7.34	125.04	119.90
38	A1	231	G	C6-C5-N7	-7.34	126.00	130.40
11	B2	824	G	O4'-C1'-N9	7.34	114.07	108.20
38	A1	65	G	C8-N9-C4	7.34	109.33	106.40
10	B1	60	A	N1-C6-N6	7.34	123.00	118.60
11	B2	877	A	O4'-C1'-N9	7.34	114.07	108.20
38	A1	629	G	N1-C2-N3	-7.34	119.50	123.90
38	A1	740	C	O4'-C1'-N1	7.34	114.07	108.20
39	A3	5	G	C6-C5-N7	-7.34	126.00	130.40
11	B2	18	C	N3-C4-N4	7.33	123.14	118.00
38	A1	1045	A	C5-N7-C8	7.33	107.57	103.90
38	A1	1939	C	N3-C4-C5	-7.33	118.97	121.90
11	B2	1	A	O4'-C1'-N9	7.33	114.07	108.20
11	B2	197	A	C5-C6-N6	-7.33	117.83	123.70
11	B2	413	G	N7-C8-N9	-7.33	109.43	113.10
11	B2	823	A	C5-N7-C8	7.33	107.57	103.90
35	BW	42	ALA	N-CA-CB	7.33	120.37	110.10
38	A1	187	C	N3-C4-C5	-7.33	118.97	121.90
38	A1	1979	G	C4-C5-C6	7.33	123.20	118.80
38	A1	2822	G	C6-C5-N7	-7.33	126.00	130.40
11	B2	223	G	C5-C6-O6	-7.33	124.20	128.60
11	B2	469	U	O4'-C1'-N1	7.33	114.06	108.20
11	B2	590	G	C4-C5-C6	7.33	123.20	118.80
38	A1	11	G	C4-C5-N7	-7.33	107.87	110.80
38	A1	634	G	C4'-C3'-C2'	-7.33	95.27	102.60
38	A1	896	G	N3-C2-N2	7.33	125.03	119.90
38	A1	1846	G	C6-C5-N7	-7.33	126.00	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2127	G	O4'-C1'-N9	7.33	114.06	108.20
38	A1	2203	G	N3-C2-N2	7.33	125.03	119.90
38	A1	2368	G	N3-C4-C5	-7.33	124.93	128.60
44	Ab	23	PHE	CB-CG-CD2	-7.33	115.67	120.80
38	A1	1385	C	N3-C4-N4	7.33	123.13	118.00
11	B2	772	G	N3-C4-N9	7.33	130.40	126.00
38	A1	165	G	N1-C2-N3	-7.33	119.50	123.90
38	A1	475	U	C1'-O4'-C4'	7.33	115.76	109.90
38	A1	830	G	C6-C5-N7	-7.33	126.00	130.40
38	A1	1737	A	C5-C6-N6	-7.33	117.84	123.70
38	A1	2670	U	C4'-C3'-C2'	7.33	109.93	102.60
38	A1	3003	A	N1-C2-N3	7.33	132.96	129.30
11	B2	1088	U	P-O3'-C3'	-7.33	110.91	119.70
38	A1	957	C	C6-N1-C2	7.33	123.23	120.30
38	A1	2610	C	N3-C4-C5	7.33	124.83	121.90
11	B2	151	G	C5-C6-O6	-7.33	124.20	128.60
11	B2	1458	A	C5-C6-N6	-7.33	117.84	123.70
38	A1	334	G	O4'-C1'-N9	7.33	114.06	108.20
38	A1	394	A	C5-C6-N1	-7.33	114.04	117.70
38	A1	583	A	P-O3'-C3'	7.33	128.49	119.70
38	A1	1106	C	N3-C4-N4	7.33	123.13	118.00
38	A1	2304	C	C4-C5-C6	7.33	121.06	117.40
11	B2	714	G	N9-C4-C5	7.32	108.33	105.40
11	B2	1133	C	N3-C4-N4	7.32	123.13	118.00
11	B2	1191	G	N1-C2-N3	-7.32	119.51	123.90
38	A1	350	A	N7-C8-N9	-7.32	110.14	113.80
38	A1	1863	G	C4-C5-N7	7.32	113.73	110.80
38	A1	2703	G	N7-C8-N9	7.32	116.76	113.10
54	AI	37	VAL	CA-CB-CG2	-7.32	99.91	110.90
11	B2	379	A	N9-C4-C5	7.32	108.73	105.80
11	B2	429	A	C5-C6-N6	-7.32	117.84	123.70
11	B2	771	G	C5-C6-N1	-7.32	107.84	111.50
38	A1	347	G	O4'-C1'-N9	7.32	114.06	108.20
38	A1	801	A	O4'-C1'-N9	7.32	114.06	108.20
11	B2	359	A	C5-C6-N1	-7.32	114.04	117.70
11	B2	661	C	P-O3'-C3'	7.32	128.49	119.70
11	B2	705	C	O4'-C1'-N1	7.32	114.06	108.20
38	A1	661	G	N1-C6-O6	7.32	124.29	119.90
38	A1	1178	G	C8-N9-C4	-7.32	103.47	106.40
38	A1	1915	G	C6-C5-N7	-7.32	126.01	130.40
38	A1	2253	G	C4-C5-N7	7.32	113.73	110.80
38	A1	2272	G	N3-C4-N9	-7.32	121.61	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2865	C	O4'-C1'-N1	7.32	114.06	108.20
60	AM	49	ARG	NE-CZ-NH2	-7.32	116.64	120.30
63	AP	56	ALA	N-CA-CB	7.32	120.35	110.10
10	B1	11	C	N3-C2-O2	7.32	127.02	121.90
39	A3	72	G	C6-N1-C2	-7.32	120.71	125.10
11	B2	859	A	C8-N9-C4	-7.32	102.87	105.80
11	B2	1027	C	N3-C4-C5	-7.32	118.97	121.90
11	B2	1129	A	C3'-C2'-C1'	7.32	107.35	101.50
11	B2	1271	G	C6-N1-C2	7.32	129.49	125.10
11	B2	1389	G	C2-N3-C4	7.32	115.56	111.90
11	B2	526	A	C4-C5-C6	7.32	120.66	117.00
11	B2	992	G	O4'-C1'-N9	7.32	114.05	108.20
11	B2	1369	C	N3-C4-N4	7.32	123.12	118.00
11	B2	1438	A	C4-C5-C6	7.32	120.66	117.00
38	A1	23	G	N1-C6-O6	7.32	124.29	119.90
38	A1	165	G	N7-C8-N9	7.32	116.76	113.10
38	A1	733	A	N1-C2-N3	-7.32	125.64	129.30
38	A1	929	G	C5-C6-N1	-7.32	107.84	111.50
38	A1	2881	G	C5-C6-O6	-7.32	124.21	128.60
11	B2	349	A	C6-C5-N7	-7.31	127.18	132.30
11	B2	831	A	N7-C8-N9	-7.31	110.14	113.80
11	B2	993	C	C6-N1-C2	-7.31	117.38	120.30
11	B2	1101	G	C5-C6-N1	-7.31	107.84	111.50
11	B2	1118	C	C6-N1-C1'	-7.31	112.02	120.80
38	A1	222	A	C5-C6-N1	-7.31	114.04	117.70
38	A1	821	U	O4'-C1'-N1	7.31	114.05	108.20
38	A1	1788	G	P-O5'-C5'	7.31	132.60	120.90
38	A1	1851	U	N1-C2-O2	-7.31	117.68	122.80
38	A1	2564	U	C5-C4-O4	-7.31	121.51	125.90
39	A3	80	G	C4-C5-C6	7.31	123.19	118.80
46	AD	147	ASP	CB-CG-OD1	-7.31	111.72	118.30
11	B2	221	A	C4-C5-C6	7.31	120.66	117.00
11	B2	353	G	C2-N3-C4	7.31	115.56	111.90
11	B2	472	C	N3-C4-N4	7.31	123.12	118.00
11	B2	1005	G	N3-C4-C5	7.31	132.26	128.60
38	A1	384	G	C8-N9-C4	-7.31	103.47	106.40
11	B2	1141	G	N7-C8-N9	-7.31	109.44	113.10
38	A1	168	G	C5-C6-N1	7.31	115.16	111.50
38	A1	1062	C	C2-N3-C4	7.31	123.56	119.90
38	A1	1148	C	C5-C6-N1	7.31	124.66	121.00
38	A1	1633	A	O4'-C1'-N9	7.31	114.05	108.20
38	A1	2179	G	C6-C5-N7	-7.31	126.01	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
67	AZ	2	ASP	CB-CG-OD1	-7.31	111.72	118.30
11	B2	277	G	C5-C6-N1	-7.31	107.84	111.50
11	B2	799	C	O4'-C1'-N1	7.31	114.05	108.20
38	A1	1057	C	C5-C6-N1	7.31	124.66	121.00
38	A1	1526	G	O4'-C1'-N9	7.31	114.05	108.20
38	A1	1782	C	N1-C2-O2	7.31	123.29	118.90
38	A1	1833	G	C4-C5-C6	7.31	123.19	118.80
38	A1	2052	A	C5-C6-N1	-7.31	114.05	117.70
38	A1	2875	C	N3-C4-C5	-7.31	118.98	121.90
41	AA	203	TYR	CB-CG-CD2	7.31	125.39	121.00
11	B2	39	U	O4'-C1'-N1	7.31	114.05	108.20
38	A1	607	C	O4'-C1'-N1	7.31	114.05	108.20
38	A1	1128	G	C2-N3-C4	7.31	115.55	111.90
38	A1	2540	A	P-O3'-C3'	7.31	128.47	119.70
11	B2	1029	G	N1-C6-O6	7.31	124.28	119.90
11	B2	1097	G	C5-C6-O6	-7.31	124.22	128.60
38	A1	1110	A	C2-N3-C4	7.31	114.25	110.60
38	A1	2657	A	N3-C4-C5	-7.31	121.69	126.80
11	B2	71	C	O4'-C1'-N1	7.30	114.04	108.20
11	B2	106	A	C4-C5-N7	-7.30	107.05	110.70
11	B2	492	G	N9-C4-C5	7.30	108.32	105.40
11	B2	496	C	C1'-O4'-C4'	7.30	115.74	109.90
17	BE	118	ASP	CB-CG-OD2	7.30	124.88	118.30
38	A1	970	G	C8-N9-C4	-7.30	103.48	106.40
38	A1	1717	C	N1-C2-N3	7.30	124.31	119.20
38	A1	2033	G	N1-C2-N3	-7.30	119.52	123.90
38	A1	2120	C	C2-N1-C1'	7.30	126.83	118.80
38	A1	2302	C	O4'-C1'-N1	7.30	114.04	108.20
38	A1	2464	G	C2-N3-C4	-7.30	108.25	111.90
38	A1	2787	G	N1-C2-N3	-7.30	119.52	123.90
38	A1	2850	G	N3-C2-N2	7.30	125.01	119.90
38	A1	3003	A	C2-N3-C4	-7.30	106.95	110.60
11	B2	254	G	N7-C8-N9	-7.30	109.45	113.10
11	B2	1216	A	C5-C6-N1	-7.30	114.05	117.70
11	B2	1404	C	N3-C2-O2	7.30	127.01	121.90
38	A1	295	G	C4-C5-N7	-7.30	107.88	110.80
38	A1	2820	C	C6-N1-C2	-7.30	117.38	120.30
46	AD	72	ARG	NE-CZ-NH1	7.30	123.95	120.30
11	B2	40	C	C3'-C2'-C1'	7.30	107.34	101.50
11	B2	735	A	C4-C5-N7	-7.30	107.05	110.70
38	A1	561	C	C6-N1-C2	-7.30	117.38	120.30
38	A1	690	G	C5-C6-O6	-7.30	124.22	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1166	A	C5-C6-N6	-7.30	117.86	123.70
38	A1	1690	U	O4'-C1'-N1	7.30	114.04	108.20
38	A1	1733	C	C4-C5-C6	7.30	121.05	117.40
38	A1	2486	A	N1-C6-N6	7.30	122.98	118.60
38	A1	2731	C	C2-N3-C4	-7.30	116.25	119.90
38	A1	2956	G	C5-C6-N1	-7.30	107.85	111.50
39	A3	123	U	P-O3'-C3'	7.30	128.46	119.70
11	B2	392	G	C6-N1-C2	7.30	129.48	125.10
38	A1	108	G	N9-C4-C5	-7.30	102.48	105.40
38	A1	912	G	N1-C6-O6	7.30	124.28	119.90
38	A1	1294	A	C5-C6-N1	-7.30	114.05	117.70
38	A1	1561	G	C4-C5-C6	7.30	123.18	118.80
38	A1	1582	G	C8-N9-C4	7.30	109.32	106.40
38	A1	2520	C	N3-C4-N4	7.30	123.11	118.00
11	B2	692	G	N1-C6-O6	7.30	124.28	119.90
28	BP	18	ALA	CB-CA-C	-7.30	99.15	110.10
38	A1	11	G	C4-N9-C1'	7.30	135.99	126.50
38	A1	957	C	C5-C6-N1	-7.30	117.35	121.00
38	A1	1206	A	C6-C5-N7	-7.30	127.19	132.30
38	A1	2709	C	C6-N1-C2	-7.30	117.38	120.30
11	B2	119	A	C5-C6-N1	-7.30	114.05	117.70
11	B2	487	U	O4'-C1'-N1	7.30	114.04	108.20
11	B2	503	G	N1-C2-N2	-7.30	109.63	116.20
11	B2	1203	G	O4'-C1'-N9	7.30	114.04	108.20
38	A1	300	U	N3-C4-O4	7.30	124.51	119.40
38	A1	543	G	N1-C6-O6	7.30	124.28	119.90
38	A1	545	G	C5-C6-O6	-7.30	124.22	128.60
38	A1	630	G	N3-C2-N2	7.30	125.01	119.90
38	A1	1038	U	P-O5'-C5'	7.30	132.58	120.90
38	A1	2706	C	N3-C2-O2	-7.30	116.79	121.90
11	B2	359	A	N1-C6-N6	7.29	122.98	118.60
38	A1	1046	A	C5-C6-N6	-7.29	117.86	123.70
38	A1	1911	G	O4'-C1'-N9	7.29	114.04	108.20
38	A1	2052	A	N9-C4-C5	7.29	108.72	105.80
38	A1	2540	A	C4-C5-C6	7.29	120.65	117.00
38	A1	2751	C	O4'-C1'-N1	7.29	114.04	108.20
11	B2	308	G	N1-C6-O6	7.29	124.28	119.90
11	B2	521	G	N3-C4-N9	7.29	130.38	126.00
11	B2	1121	C	C6-N1-C2	-7.29	117.38	120.30
38	A1	116	G	N3-C2-N2	7.29	125.01	119.90
38	A1	777	A	C1'-O4'-C4'	7.29	115.73	109.90
38	A1	839	A	C8-N9-C4	-7.29	102.88	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1642	G	N3-C4-C5	7.29	132.25	128.60
38	A1	2522	C	N3-C4-C5	-7.29	118.98	121.90
38	A1	2870	A	N7-C8-N9	7.29	117.45	113.80
38	A1	3010	C	N3-C4-N4	7.29	123.11	118.00
11	B2	1252	C	C2-N1-C1'	7.29	126.82	118.80
38	A1	1026	A	C6-C5-N7	-7.29	127.20	132.30
38	A1	1250	A	N1-C6-N6	7.29	122.97	118.60
38	A1	2295	C	O4'-C1'-N1	7.29	114.03	108.20
38	A1	2520	C	N1-C2-O2	-7.29	114.53	118.90
39	A3	45	C	O4'-C1'-C2'	-7.29	98.51	105.80
11	B2	363	C	N1-C2-O2	-7.29	114.53	118.90
11	B2	378	A	C4-C5-C6	7.29	120.64	117.00
11	B2	521	G	C5-C6-O6	-7.29	124.23	128.60
11	B2	1084	U	C5'-C4'-O4'	7.29	117.85	109.10
38	A1	2251	G	C5-C6-O6	-7.29	124.23	128.60
38	A1	2348	G	C4-C5-C6	7.29	123.17	118.80
12	AG	9	PHE	CB-CG-CD1	7.29	125.90	120.80
11	B2	493	C	C2-N3-C4	7.29	123.55	119.90
11	B2	751	C	C2-N3-C4	7.29	123.54	119.90
11	B2	756	A	C5-N7-C8	7.29	107.54	103.90
11	B2	1277	C	O4'-C1'-N1	7.29	114.03	108.20
38	A1	1673	C	C4-C5-C6	-7.29	113.76	117.40
39	A3	46	G	N1-C6-O6	7.29	124.27	119.90
1	A7	52	TYR	CG-CD1-CE1	-7.29	115.47	121.30
11	B2	39	U	C5-C4-O4	-7.29	121.53	125.90
11	B2	1010	G	C5-C6-N1	-7.29	107.86	111.50
38	A1	852	A	C4'-C3'-C2'	-7.29	95.31	102.60
38	A1	1855	G	P-O5'-C5'	7.29	132.56	120.90
38	A1	2291	G	N7-C8-N9	-7.29	109.46	113.10
38	A1	2988	A	C6-N1-C2	-7.29	114.23	118.60
11	B2	783	G	P-O3'-C3'	-7.29	110.96	119.70
11	B2	970	G	O4'-C1'-N9	7.29	114.03	108.20
11	B2	1471	G	O4'-C1'-N9	7.29	114.03	108.20
38	A1	1206	A	C4-C5-C6	7.29	120.64	117.00
38	A1	1856	G	N3-C2-N2	7.29	125.00	119.90
38	A1	2257	A	C6-N1-C2	-7.29	114.23	118.60
39	A3	101	A	O4'-C1'-N9	7.29	114.03	108.20
11	B2	43	A	C4-C5-C6	7.28	120.64	117.00
33	BU	80	ARG	NE-CZ-NH2	-7.28	116.66	120.30
38	A1	285	C	C6-N1-C2	-7.28	117.39	120.30
38	A1	745	C	N1-C2-O2	-7.28	114.53	118.90
38	A1	841	U	N3-C4-C5	-7.28	110.23	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1012	G	N9-C4-C5	7.28	108.31	105.40
38	A1	1042	G	P-O5'-C5'	7.28	132.56	120.90
38	A1	1184	U	C6-N1-C2	-7.28	116.63	121.00
38	A1	2027	G	O4'-C1'-N9	7.28	114.03	108.20
38	A1	2592	U	C4-C5-C6	7.28	124.07	119.70
38	A1	2748	C	C5-C4-N4	-7.28	115.10	120.20
38	A1	2812	U	C2-N3-C4	7.28	131.37	127.00
38	A1	2888	G	C1'-O4'-C4'	7.28	115.73	109.90
39	A3	62	A	C4-C5-C6	7.28	120.64	117.00
38	A1	743	A	N9-C4-C5	-7.28	102.89	105.80
11	B2	228	G	C5'-C4'-O4'	-7.28	100.36	109.10
11	B2	577	C	O4'-C1'-N1	7.28	114.02	108.20
11	B2	896	A	C5-N7-C8	-7.28	100.26	103.90
11	B2	920	U	C4-C5-C6	-7.28	115.33	119.70
11	B2	1300	A	C2-N3-C4	-7.28	106.96	110.60
11	B2	1441	G	C8-N9-C4	7.28	109.31	106.40
17	BE	229	TYR	CB-CG-CD2	-7.28	116.63	121.00
38	A1	335	C	O4'-C1'-N1	7.28	114.02	108.20
38	A1	1072	U	O4'-C1'-N1	7.28	114.02	108.20
11	B2	1057	A	C4-C5-C6	7.28	120.64	117.00
38	A1	2612	A	C8-N9-C4	-7.28	102.89	105.80
4	AQ	60	ARG	NE-CZ-NH1	7.28	123.94	120.30
11	B2	222	G	N1-C6-O6	7.28	124.27	119.90
11	B2	717	C	N1-C2-N3	7.28	124.30	119.20
11	B2	1056	G	C6-C5-N7	-7.28	126.03	130.40
11	B2	1185	A	C4-C5-N7	-7.28	107.06	110.70
11	B2	1218	C	C2-N3-C4	7.28	123.54	119.90
11	B2	1468	A	N9-C4-C5	-7.28	102.89	105.80
22	BJ	47	ARG	N-CA-C	-7.28	91.35	111.00
32	BT	28	PHE	CB-CG-CD1	-7.28	115.71	120.80
38	A1	536	G	C5-C6-N1	-7.28	107.86	111.50
38	A1	1108	A	N9-C4-C5	-7.28	102.89	105.80
38	A1	1951	G	O4'-C1'-N9	7.28	114.02	108.20
39	A3	111	G	C5-N7-C8	7.28	107.94	104.30
10	B1	50	G	N9-C4-C5	-7.28	102.49	105.40
11	B2	7	G	C8-N9-C4	7.28	109.31	106.40
38	A1	41	G	C5-N7-C8	7.28	107.94	104.30
38	A1	298	G	O4'-C1'-N9	7.28	114.02	108.20
38	A1	1035	G	C5-C6-O6	-7.28	124.23	128.60
38	A1	1064	G	N1-C2-N3	-7.28	119.53	123.90
38	A1	1368	A	C6-N1-C2	7.28	122.97	118.60
38	A1	1625	A	N7-C8-N9	-7.28	110.16	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2010	G	C6-C5-N7	-7.28	126.03	130.40
38	A1	2346	A	N1-C2-N3	7.28	132.94	129.30
38	A1	2891	A	C5-C6-N6	-7.28	117.88	123.70
67	AZ	8	ARG	NE-CZ-NH2	-7.28	116.66	120.30
38	A1	619	G	C4'-C3'-C2'	-7.27	95.33	102.60
11	B2	477	G	C2-N3-C4	7.27	115.54	111.90
11	B2	923	A	C8-N9-C4	-7.27	102.89	105.80
11	B2	1346	C	O4'-C1'-N1	7.27	114.02	108.20
38	A1	1229	U	C4'-C3'-C2'	-7.27	95.33	102.60
38	A1	1812	A	C5-C6-N6	-7.27	117.88	123.70
38	A1	1842	C	C5-C4-N4	-7.27	115.11	120.20
38	A1	2340	A	C2-N3-C4	-7.27	106.96	110.60
11	B2	419	G	N1-C6-O6	7.27	124.26	119.90
38	A1	1065	C	N3-C4-C5	-7.27	118.99	121.90
38	A1	1848	A	C4-C5-C6	7.27	120.64	117.00
38	A1	2966	C	N3-C4-C5	-7.27	118.99	121.90
10	B1	15	G	C2-N3-C4	7.27	115.53	111.90
11	B2	508	C	C5-C4-N4	-7.27	115.11	120.20
11	B2	622	C	C5-C6-N1	7.27	124.64	121.00
11	B2	1219	C	O4'-C1'-N1	7.27	114.02	108.20
11	B2	1227	A	N1-C2-N3	-7.27	125.67	129.30
11	B2	1470	G	C6-C5-N7	-7.27	126.04	130.40
38	A1	14	A	C5-C6-N6	-7.27	117.88	123.70
38	A1	334	G	C3'-C2'-C1'	7.27	107.31	101.50
38	A1	1872	G	O4'-C1'-N9	7.27	114.02	108.20
38	A1	2037	A	C3'-C2'-C1'	-7.27	95.68	101.50
38	A1	2322	A	O4'-C1'-N9	7.27	114.02	108.20
10	B1	76	C	C5-C6-N1	7.27	124.63	121.00
11	B2	80	A	N1-C6-N6	7.27	122.96	118.60
11	B2	850	A	O4'-C1'-N9	7.27	114.02	108.20
11	B2	1229	A	N7-C8-N9	-7.27	110.17	113.80
38	A1	712	C	N3-C4-N4	7.27	123.09	118.00
38	A1	1394	G	N1-C6-O6	7.27	124.26	119.90
38	A1	2866	A	C5-N7-C8	7.27	107.53	103.90
11	B2	391	G	C5-C6-O6	-7.27	124.24	128.60
38	A1	1508	A	C6-C5-N7	-7.27	127.21	132.30
38	A1	2169	C	C6-N1-C2	7.27	123.21	120.30
38	A1	2753	G	C6-C5-N7	-7.27	126.04	130.40
11	B2	171	U	O4'-C1'-N1	7.26	114.01	108.20
11	B2	1138	G	C4-C5-N7	-7.26	107.89	110.80
11	B2	1329	C	N3-C4-N4	7.26	123.08	118.00
11	B2	1339	G	O4'-C1'-N9	7.26	114.01	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	BC	145	ARG	NE-CZ-NH2	-7.26	116.67	120.30
38	A1	168	G	N1-C6-O6	7.26	124.26	119.90
38	A1	374	C	C4'-C3'-C2'	-7.26	95.34	102.60
38	A1	644	G	N9-C4-C5	-7.26	102.49	105.40
38	A1	2434	A	C5-C6-N6	-7.26	117.89	123.70
11	B2	825	C	C2-N3-C4	-7.26	116.27	119.90
11	B2	1440	G	N1-C2-N3	-7.26	119.54	123.90
38	A1	688	G	N9-C1'-C2'	-7.26	104.01	112.00
4	AQ	49	VAL	CA-CB-CG2	-7.26	100.01	110.90
11	B2	42	G	N1-C2-N3	-7.26	119.54	123.90
11	B2	597	C	O4'-C1'-N1	7.26	114.01	108.20
11	B2	625	G	N1-C2-N3	-7.26	119.54	123.90
11	B2	1026	A	C5-N7-C8	7.26	107.53	103.90
30	BR	44	ARG	NE-CZ-NH1	7.26	123.93	120.30
38	A1	235	G	C4'-C3'-C2'	7.26	109.86	102.60
38	A1	1073	G	C6-N1-C2	7.26	129.46	125.10
42	Aa	88	ARG	NE-CZ-NH2	-7.26	116.67	120.30
11	B2	1352	G	C5-C6-N1	-7.26	107.87	111.50
38	A1	779	A	C5-C6-N6	-7.26	117.89	123.70
38	A1	809	A	C5-N7-C8	7.26	107.53	103.90
38	A1	641	G	O4'-C1'-N9	7.26	114.01	108.20
38	A1	929	G	C4-C5-N7	7.26	113.70	110.80
38	A1	1170	G	C6-N1-C2	7.26	129.46	125.10
38	A1	2442	A	C5-C6-N1	-7.26	114.07	117.70
38	A1	71	A	P-O3'-C3'	7.26	128.41	119.70
38	A1	664	A	N7-C8-N9	7.26	117.43	113.80
38	A1	2139	A	C4-C5-N7	-7.26	107.07	110.70
38	A1	2380	A	N9-C4-C5	7.26	108.70	105.80
38	A1	3017	U	C4-C5-C6	7.26	124.05	119.70
11	B2	1067	G	C5-C6-N1	7.25	115.13	111.50
11	B2	1459	G	C2-N3-C4	7.25	115.53	111.90
38	A1	504	G	C8-N9-C4	-7.25	103.50	106.40
38	A1	788	A	C5-N7-C8	7.25	107.53	103.90
38	A1	1832	G	N1-C6-O6	7.25	124.25	119.90
39	A3	102	G	C4-C5-C6	7.25	123.15	118.80
11	B2	220	G	O4'-C1'-N9	7.25	114.00	108.20
38	A1	1109	G	C3'-C2'-C1'	7.25	107.30	101.50
38	A1	2445	G	O4'-C1'-N9	7.25	114.00	108.20
38	A1	2681	A	C4-C5-N7	-7.25	107.07	110.70
38	A1	2714	G	C8-N9-C4	-7.25	103.50	106.40
38	A1	3030	A	N1-C6-N6	7.25	122.95	118.60
11	B2	302	A	P-O3'-C3'	-7.25	111.00	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	846	G	C8-N9-C4	7.25	109.30	106.40
11	B2	1238	G	C6-C5-N7	-7.25	126.05	130.40
38	A1	248	C	N3-C4-N4	7.25	123.08	118.00
38	A1	362	A	C5-C6-N6	-7.25	117.90	123.70
38	A1	527	G	N1-C2-N3	-7.25	119.55	123.90
38	A1	540	A	C4'-C3'-C2'	-7.25	95.35	102.60
38	A1	673	A	N9-C4-C5	7.25	108.70	105.80
38	A1	850	C	O4'-C1'-N1	7.25	114.00	108.20
38	A1	1068	U	P-O5'-C5'	-7.25	109.30	120.90
38	A1	1156	G	C6-C5-N7	-7.25	126.05	130.40
38	A1	1785	G	O4'-C1'-N9	7.25	114.00	108.20
11	B2	174	G	O4'-C1'-N9	7.25	114.00	108.20
11	B2	337	C	C4-C5-C6	7.25	121.03	117.40
11	B2	1384	G	C4-C5-C6	7.25	123.15	118.80
38	A1	296	G	N1-C2-N2	7.25	122.72	116.20
38	A1	1645	U	N1-C2-O2	-7.25	117.72	122.80
38	A1	1840	G	N1-C2-N2	-7.25	109.67	116.20
38	A1	1962	G	N1-C2-N3	-7.25	119.55	123.90
38	A1	2639	G	C5-C6-N1	-7.25	107.88	111.50
11	B2	900	G	O4'-C1'-N9	7.25	114.00	108.20
38	A1	565	A	C5-C6-N6	-7.25	117.90	123.70
38	A1	921	C	N3-C4-N4	7.25	123.07	118.00
38	A1	1070	G	C4-C5-C6	7.25	123.15	118.80
38	A1	1942	G	N9-C4-C5	-7.25	102.50	105.40
38	A1	2116	G	N3-C4-C5	7.25	132.22	128.60
38	A1	2569	G	C6-N1-C2	7.25	129.45	125.10
38	A1	2647	G	N1-C2-N3	-7.25	119.55	123.90
38	A1	3025	C	N3-C4-N4	7.25	123.07	118.00
11	B2	385	A	C5-C6-N1	-7.25	114.08	117.70
11	B2	1063	A	C2-N3-C4	-7.25	106.98	110.60
11	B2	1084	U	N3-C2-O2	7.25	127.27	122.20
11	B2	1299	A	N1-C2-N3	-7.25	125.68	129.30
38	A1	343	C	O4'-C1'-N1	7.25	114.00	108.20
38	A1	808	A	C3'-C2'-C1'	-7.25	95.70	101.50
38	A1	1494	U	C5-C4-O4	7.25	130.25	125.90
38	A1	1780	C	C5-C6-N1	-7.25	117.38	121.00
38	A1	3006	G	C2-N3-C4	-7.25	108.28	111.90
11	B2	235	G	N1-C6-O6	7.25	124.25	119.90
11	B2	585	U	N3-C4-O4	7.25	124.47	119.40
11	B2	628	G	N3-C4-C5	-7.25	124.98	128.60
38	A1	70	G	C3'-C2'-C1'	-7.25	95.70	101.50
38	A1	601	A	C5-N7-C8	-7.25	100.28	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2201	C	N3-C4-N4	7.25	123.07	118.00
38	A1	481	G	C4-C5-C6	7.24	123.15	118.80
38	A1	917	A	C5'-C4'-O4'	7.24	117.79	109.10
38	A1	981	A	N1-C2-N3	7.24	132.92	129.30
38	A1	1720	G	P-O3'-C3'	7.24	128.39	119.70
38	A1	2180	C	N1-C2-O2	7.24	123.25	118.90
38	A1	2363	G	N7-C8-N9	7.24	116.72	113.10
38	A1	3045	G	C8-N9-C4	-7.24	103.50	106.40
39	A3	91	G	O4'-C1'-N9	7.24	114.00	108.20
38	A1	1668	G	C5-C6-N1	-7.24	107.88	111.50
38	A1	2272	G	N1-C6-O6	7.24	124.25	119.90
11	B2	405	G	N3-C2-N2	7.24	124.97	119.90
11	B2	1481	G	C1'-O4'-C4'	7.24	115.69	109.90
38	A1	175	G	N1-C2-N2	7.24	122.72	116.20
38	A1	634	G	N9-C1'-C2'	-7.24	104.04	112.00
38	A1	727	A	O4'-C1'-N9	7.24	113.99	108.20
38	A1	1975	C	N3-C4-N4	7.24	123.07	118.00
38	A1	2694	C	C6-N1-C2	-7.24	117.40	120.30
38	A1	2719	G	C4-C5-N7	-7.24	107.90	110.80
43	AB	23	ARG	NE-CZ-NH2	-7.24	116.68	120.30
38	A1	216	A	N1-C6-N6	7.24	122.94	118.60
38	A1	807	G	C8-N9-C4	-7.24	103.50	106.40
38	A1	866	G	C6-C5-N7	-7.24	126.06	130.40
38	A1	1454	G	N1-C6-O6	7.24	124.24	119.90
38	A1	1944	C	C6-N1-C2	7.24	123.20	120.30
38	A1	1968	A	O4'-C1'-N9	7.24	113.99	108.20
38	A1	2168	C	C6-N1-C2	-7.24	117.41	120.30
38	A1	1237	A	N9-C4-C5	7.24	108.69	105.80
38	A1	2183	A	C4-C5-C6	7.24	120.62	117.00
38	A1	2475	G	C4-C5-C6	7.24	123.14	118.80
39	A3	1	C	C4-C5-C6	7.24	121.02	117.40
11	B2	573	C	C6-N1-C2	7.24	123.19	120.30
11	B2	1339	G	N1-C6-O6	7.24	124.24	119.90
18	BF	39	ARG	NE-CZ-NH2	-7.24	116.68	120.30
38	A1	47	C	P-O5'-C5'	-7.24	109.32	120.90
38	A1	1003	C	N3-C4-N4	7.24	123.06	118.00
38	A1	1547	U	C1'-O4'-C4'	7.24	115.69	109.90
38	A1	3023	G	N3-C4-C5	-7.24	124.98	128.60
31	BS	53	TYR	CB-CG-CD2	-7.23	116.66	121.00
38	A1	1680	G	O4'-C1'-N9	7.23	113.99	108.20
11	B2	429	A	C4-C5-C6	7.23	120.62	117.00
11	B2	795	G	C6-C5-N7	-7.23	126.06	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1433	C	C5-C6-N1	7.23	124.62	121.00
38	A1	1813	A	C6-C5-N7	-7.23	127.24	132.30
38	A1	2076	A	N7-C8-N9	-7.23	110.18	113.80
38	A1	2311	C	O4'-C1'-N1	7.23	113.98	108.20
38	A1	2623	G	N7-C8-N9	-7.23	109.48	113.10
38	A1	2745	G	C2-N3-C4	7.23	115.52	111.90
11	B2	112	G	C4-C5-C6	7.23	123.14	118.80
11	B2	722	G	N1-C2-N3	-7.23	119.56	123.90
38	A1	173	G	P-O3'-C3'	7.23	128.38	119.70
38	A1	499	A	C4-C5-N7	-7.23	107.08	110.70
38	A1	504	G	O4'-C1'-N9	7.23	113.98	108.20
38	A1	801	A	C5-C6-N6	-7.23	117.92	123.70
38	A1	1297	C	C5-C4-N4	-7.23	115.14	120.20
38	A1	1507	A	C2-N3-C4	-7.23	106.98	110.60
38	A1	1668	G	C5-C6-O6	-7.23	124.26	128.60
38	A1	1694	G	C5-C6-O6	-7.23	124.26	128.60
38	A1	1798	A	C6-C5-N7	-7.23	127.24	132.30
38	A1	1826	G	N1-C2-N3	-7.23	119.56	123.90
38	A1	2262	C	C5'-C4'-O4'	7.23	117.78	109.10
38	A1	2796	C	C4'-C3'-C2'	-7.23	95.37	102.60
38	A1	727	A	C8-N9-C4	-7.23	102.91	105.80
10	B1	34	U	N3-C4-O4	7.23	124.46	119.40
10	B1	63	C	C5-C6-N1	7.23	124.61	121.00
11	B2	668	G	C5-C6-O6	-7.23	124.26	128.60
11	B2	793	G	N1-C6-O6	7.23	124.24	119.90
38	A1	85	G	C5-C6-O6	-7.23	124.26	128.60
38	A1	128	C	O4'-C1'-N1	7.23	113.98	108.20
38	A1	681	C	C2-N3-C4	7.23	123.51	119.90
38	A1	1213	G	C4-C5-N7	-7.23	107.91	110.80
38	A1	1768	C	O4'-C1'-N1	7.23	113.98	108.20
38	A1	2452	C	N3-C4-N4	7.23	123.06	118.00
47	Ad	80	MET	N-CA-CB	7.23	123.61	110.60
11	B2	5	C	O4'-C1'-N1	7.23	113.98	108.20
11	B2	608	G	C4-C5-N7	-7.23	107.91	110.80
11	B2	1092	G	C4-C5-C6	7.23	123.14	118.80
11	B2	1434	C	C6-N1-C2	-7.23	117.41	120.30
14	BB	51	ARG	NE-CZ-NH2	-7.23	116.69	120.30
38	A1	1046	A	N1-C6-N6	7.23	122.94	118.60
38	A1	1322	G	N3-C4-C5	7.23	132.21	128.60
38	A1	1834	C	N3-C4-N4	7.23	123.06	118.00
38	A1	1905	G	N3-C4-C5	-7.23	124.99	128.60
38	A1	2675	C	N3-C4-C5	-7.23	119.01	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
41	AA	41	ARG	NE-CZ-NH1	-7.23	116.69	120.30
11	B2	10	G	N9-C4-C5	-7.22	102.51	105.40
11	B2	192	G	N3-C4-C5	7.22	132.21	128.60
11	B2	856	G	C4-C5-C6	7.22	123.14	118.80
11	B2	1358	A	C8-N9-C4	-7.22	102.91	105.80
38	A1	142	G	P-O3'-C3'	7.22	128.37	119.70
38	A1	144	A	C8-N9-C4	-7.22	102.91	105.80
38	A1	202	A	C5-N7-C8	7.22	107.51	103.90
38	A1	359	C	C6-N1-C2	-7.22	117.41	120.30
38	A1	1117	C	O4'-C1'-N1	7.22	113.98	108.20
38	A1	1282	A	N1-C6-N6	7.22	122.94	118.60
38	A1	1561	G	N9-C1'-C2'	-7.22	104.05	112.00
38	A1	2031	G	N9-C4-C5	7.22	108.29	105.40
38	A1	2993	G	C5-C6-O6	-7.22	124.27	128.60
11	B2	118	U	N3-C4-O4	7.22	124.46	119.40
11	B2	888	A	C4-C5-C6	7.22	120.61	117.00
11	B2	1055	C	N3-C4-C5	-7.22	119.01	121.90
34	BV	73	ASP	CB-CG-OD1	-7.22	111.80	118.30
38	A1	691	G	N1-C2-N3	-7.22	119.57	123.90
38	A1	1163	U	N1-C2-N3	-7.22	110.57	114.90
38	A1	1521	G	C4-C5-N7	-7.22	107.91	110.80
65	AV	42	PHE	CB-CG-CD2	-7.22	115.74	120.80
11	B2	229	G	O4'-C1'-N9	7.22	113.98	108.20
11	B2	448	A	C4'-C3'-C2'	-7.22	95.38	102.60
38	A1	1040	C	N3-C4-C5	-7.22	119.01	121.90
38	A1	2588	C	C4-C5-C6	-7.22	113.79	117.40
11	B2	537	G	C8-N9-C4	7.22	109.29	106.40
11	B2	1205	G	C6-N1-C2	-7.22	120.77	125.10
11	B2	1238	G	C5'-C4'-O4'	7.22	117.76	109.10
38	A1	201	C	C6-N1-C2	-7.22	117.41	120.30
38	A1	488	A	N9-C4-C5	7.22	108.69	105.80
38	A1	593	C	C5-C6-N1	7.22	124.61	121.00
38	A1	726	G	C5-C6-O6	-7.22	124.27	128.60
38	A1	2208	C	C6-N1-C2	-7.22	117.41	120.30
38	A1	2262	C	C6-N1-C2	7.22	123.19	120.30
38	A1	2418	G	N3-C2-N2	7.22	124.95	119.90
38	A1	2993	G	C8-N9-C4	-7.22	103.51	106.40
11	B2	74	U	C2-N3-C4	7.22	131.33	127.00
11	B2	1428	G	C5-N7-C8	7.22	107.91	104.30
38	A1	237	G	P-O3'-C3'	7.22	128.36	119.70
38	A1	686	C	O4'-C1'-N1	7.22	113.97	108.20
38	A1	1738	A	C5-N7-C8	7.22	107.51	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2128	G	N1-C6-O6	7.22	124.23	119.90
38	A1	2152	G	C5-C6-O6	-7.22	124.27	128.60
11	B2	1226	G	C6-C5-N7	-7.22	126.07	130.40
11	B2	1387	C	N3-C4-N4	7.22	123.05	118.00
38	A1	463	A	C5-C6-N6	-7.22	117.93	123.70
38	A1	757	C	C2-N3-C4	7.22	123.51	119.90
38	A1	767	G	C4-C5-C6	7.22	123.13	118.80
38	A1	2246	G	N3-C4-C5	7.22	132.21	128.60
38	A1	2489	C	N3-C4-N4	7.22	123.05	118.00
11	B2	54	C	N3-C4-N4	7.21	123.05	118.00
38	A1	1889	G	O4'-C1'-N9	7.21	113.97	108.20
38	A1	2032	G	N7-C8-N9	7.21	116.71	113.10
38	A1	2375	C	C4-C5-C6	7.21	121.01	117.40
39	A3	123	U	N3-C4-O4	7.21	124.45	119.40
11	B2	525	A	C2-N3-C4	-7.21	106.99	110.60
11	B2	947	G	O4'-C1'-N9	7.21	113.97	108.20
38	A1	232	U	N3-C2-O2	-7.21	117.15	122.20
38	A1	643	G	C6-C5-N7	-7.21	126.07	130.40
38	A1	968	A	C5-C6-N6	-7.21	117.93	123.70
11	B2	775	G	C5-C6-O6	-7.21	124.27	128.60
11	B2	1344	U	C2-N3-C4	-7.21	122.67	127.00
11	B2	1462	A	C6-N1-C2	-7.21	114.27	118.60
38	A1	183	G	O4'-C1'-N9	7.21	113.97	108.20
38	A1	221	G	O4'-C1'-N9	7.21	113.97	108.20
38	A1	1330	G	N1-C2-N3	-7.21	119.57	123.90
38	A1	1654	G	C5-N7-C8	7.21	107.91	104.30
38	A1	1857	A	C4-C5-C6	7.21	120.61	117.00
11	B2	548	A	C5-C6-N6	-7.21	117.93	123.70
38	A1	2530	G	N3-C4-N9	7.21	130.33	126.00
11	B2	580	G	O4'-C1'-N9	7.21	113.97	108.20
11	B2	968	C	O4'-C1'-N1	7.21	113.97	108.20
11	B2	1248	A	C6-C5-N7	-7.21	127.25	132.30
38	A1	612	G	C5-C6-N1	-7.21	107.90	111.50
38	A1	1016	C	O4'-C1'-N1	7.21	113.97	108.20
38	A1	2779	G	C2-N3-C4	7.21	115.50	111.90
38	A1	2814	U	C6-N1-C2	-7.21	116.67	121.00
11	B2	317	A	C4-C5-N7	7.21	114.30	110.70
11	B2	319	U	C5-C4-O4	-7.21	121.58	125.90
11	B2	925	U	C5-C4-O4	7.21	130.22	125.90
11	B2	972	C	P-O5'-C5'	7.21	132.43	120.90
11	B2	1075	A	O4'-C1'-N9	7.21	113.97	108.20
11	B2	1076	G	C6-N1-C2	7.21	129.42	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1142	G	C5-C6-O6	-7.21	124.28	128.60
38	A1	1070	G	N3-C4-C5	-7.21	125.00	128.60
38	A1	2032	G	C5-N7-C8	-7.21	100.70	104.30
38	A1	2901	C	C5-C6-N1	7.21	124.60	121.00
39	A3	111	G	C5-C6-N1	-7.21	107.90	111.50
50	AF	61	ARG	NE-CZ-NH2	-7.21	116.70	120.30
11	B2	203	A	C5-C6-N6	-7.21	117.94	123.70
11	B2	839	G	N1-C6-O6	7.21	124.22	119.90
11	B2	1381	G	P-O3'-C3'	7.21	128.35	119.70
11	B2	1434	C	N1-C2-O2	-7.21	114.58	118.90
38	A1	465	C	O4'-C1'-N1	7.21	113.96	108.20
38	A1	733	A	C5-C6-N6	-7.21	117.94	123.70
38	A1	1514	C	N1-C2-O2	-7.21	114.58	118.90
38	A1	1780	C	P-O3'-C3'	7.21	128.35	119.70
38	A1	3028	U	N1-C2-O2	-7.21	117.76	122.80
38	A1	3035	C	C5-C6-N1	7.21	124.60	121.00
38	A1	3044	U	C4-C5-C6	7.21	124.02	119.70
10	B1	58	A	C4-C5-C6	7.20	120.60	117.00
11	B2	658	A	C4-C5-C6	7.20	120.60	117.00
11	B2	770	A	C5-N7-C8	7.20	107.50	103.90
38	A1	577	C	C6-N1-C2	-7.20	117.42	120.30
38	A1	812	C	O4'-C1'-N1	7.20	113.96	108.20
38	A1	821	U	N3-C2-O2	-7.20	117.16	122.20
38	A1	1185	A	C4'-C3'-C2'	-7.20	95.40	102.60
38	A1	3006	G	C4-C5-N7	-7.20	107.92	110.80
10	B1	73	C	O4'-C1'-C2'	-7.20	98.60	105.80
11	B2	41	C	C6-N1-C2	-7.20	117.42	120.30
11	B2	1313	G	C6-C5-N7	-7.20	126.08	130.40
11	B2	1327	C	N3-C2-O2	7.20	126.94	121.90
11	B2	1452	G	C5'-C4'-O4'	7.20	117.74	109.10
38	A1	1334	G	C8-N9-C4	-7.20	103.52	106.40
38	A1	1604	G	C6-C5-N7	-7.20	126.08	130.40
38	A1	1873	G	N3-C4-N9	-7.20	121.68	126.00
11	B2	466	C	N1-C2-O2	7.20	123.22	118.90
11	B2	718	G	C5-C6-O6	-7.20	124.28	128.60
11	B2	894	A	C4-C5-N7	7.20	114.30	110.70
11	B2	901	G	C5-C6-O6	-7.20	124.28	128.60
11	B2	1082	A	C4-C5-C6	7.20	120.60	117.00
11	B2	1261	U	C4-C5-C6	7.20	124.02	119.70
11	B2	1279	A	C5-N7-C8	-7.20	100.30	103.90
38	A1	364	A	C5-C6-N6	-7.20	117.94	123.70
38	A1	1785	G	N1-C2-N2	-7.20	109.72	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2644	G	N1-C6-O6	7.20	124.22	119.90
38	A1	2646	A	O4'-C1'-N9	7.20	113.96	108.20
38	A1	2661	U	C5-C4-O4	-7.20	121.58	125.90
38	A1	2754	A	C8-N9-C4	-7.20	102.92	105.80
11	B2	782	A	C4'-C3'-C2'	-7.20	95.40	102.60
11	B2	916	U	N3-C4-C5	-7.20	110.28	114.60
11	B2	1187	A	N1-C6-N6	7.20	122.92	118.60
38	A1	1013	G	O4'-C1'-N9	7.20	113.96	108.20
11	B2	327	G	N9-C4-C5	-7.20	102.52	105.40
11	B2	575	A	C8-N9-C4	-7.20	102.92	105.80
11	B2	1223	C	O4'-C1'-N1	7.20	113.96	108.20
34	BV	80	TYR	CB-CG-CD1	-7.20	116.68	121.00
38	A1	697	U	C5-C4-O4	-7.20	121.58	125.90
38	A1	1345	G	C5-C6-O6	-7.20	124.28	128.60
39	A3	77	A	C5-C6-N6	-7.20	117.94	123.70
11	B2	53	G	N9-C4-C5	-7.20	102.52	105.40
11	B2	334	G	N3-C2-N2	7.20	124.94	119.90
11	B2	887	G	C6-N1-C2	-7.20	120.78	125.10
38	A1	921	C	P-O3'-C3'	-7.20	111.07	119.70
38	A1	1257	G	N3-C2-N2	7.20	124.94	119.90
38	A1	1414	G	C2-N3-C4	7.20	115.50	111.90
38	A1	1894	A	P-O3'-C3'	7.20	128.34	119.70
38	A1	2247	G	N1-C6-O6	7.20	124.22	119.90
38	A1	2956	G	C5-C6-O6	-7.20	124.28	128.60
38	A1	1710	C	C6-N1-C2	-7.19	117.42	120.30
38	A1	2162	G	O4'-C1'-N9	7.19	113.95	108.20
11	B2	163	C	C2-N1-C1'	7.19	126.71	118.80
11	B2	402	G	O4'-C1'-N9	7.19	113.95	108.20
11	B2	513	A	C5-C6-N6	-7.19	117.94	123.70
11	B2	843	G	N3-C4-C5	-7.19	125.00	128.60
11	B2	856	G	C2-N3-C4	-7.19	108.30	111.90
11	B2	1018	C	N3-C4-N4	7.19	123.03	118.00
38	A1	676	G	C4-C5-N7	7.19	113.68	110.80
38	A1	1202	G	C8-N9-C4	7.19	109.28	106.40
38	A1	1827	A	C5-C6-N1	-7.19	114.10	117.70
38	A1	2036	A	C6-C5-N7	-7.19	127.27	132.30
38	A1	2190	A	N7-C8-N9	-7.19	110.20	113.80
38	A1	2527	G	O4'-C1'-N9	7.19	113.95	108.20
11	B2	8	U	C6-N1-C2	-7.19	116.69	121.00
11	B2	103	A	C8-N9-C4	-7.19	102.92	105.80
11	B2	842	U	C3'-C2'-C1'	7.19	107.25	101.50
11	B2	935	G	C8-N9-C4	-7.19	103.52	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1265	G	N1-C2-N3	-7.19	119.59	123.90
11	B2	1335	A	C4-C5-C6	7.19	120.59	117.00
38	A1	49	A	C6-C5-N7	-7.19	127.27	132.30
38	A1	639	C	O4'-C1'-N1	7.19	113.95	108.20
38	A1	661	G	C5-C6-O6	-7.19	124.28	128.60
38	A1	1112	G	N3-C2-N2	7.19	124.93	119.90
38	A1	1378	G	C5-C6-N1	7.19	115.09	111.50
38	A1	1521	G	N3-C2-N2	7.19	124.93	119.90
38	A1	1798	A	N1-C6-N6	7.19	122.91	118.60
38	A1	2145	G	N3-C2-N2	7.19	124.93	119.90
38	A1	2276	G	C5-C6-N1	-7.19	107.91	111.50
11	B2	228	G	C5-C6-O6	-7.19	124.29	128.60
38	A1	318	G	N3-C4-N9	-7.19	121.69	126.00
38	A1	860	A	N9-C4-C5	-7.19	102.92	105.80
10	B1	32	A	C2-N3-C4	-7.19	107.01	110.60
38	A1	1440	C	C6-N1-C2	7.19	123.17	120.30
38	A1	1442	G	N1-C2-N3	-7.19	119.59	123.90
38	A1	1589	G	N7-C8-N9	-7.19	109.51	113.10
38	A1	2304	C	N3-C2-O2	-7.19	116.87	121.90
38	A1	2658	G	C1'-O4'-C4'	7.19	115.65	109.90
38	A1	2753	G	N1-C2-N3	-7.19	119.59	123.90
56	AJ	46	TYR	CB-CG-CD1	7.19	125.31	121.00
11	B2	540	G	C8-N9-C4	-7.19	103.53	106.40
11	B2	657	A	C8-N9-C4	-7.19	102.93	105.80
11	B2	821	G	C4-C5-C6	7.19	123.11	118.80
11	B2	928	A	C6-N1-C2	-7.19	114.29	118.60
38	A1	245	A	C6-C5-N7	-7.19	127.27	132.30
38	A1	609	G	C2-N3-C4	7.19	115.49	111.90
38	A1	2660	G	N3-C2-N2	7.19	124.93	119.90
38	A1	480	A	C2-N3-C4	-7.18	107.01	110.60
38	A1	632	G	C2-N3-C4	-7.18	108.31	111.90
38	A1	1190	G	C2-N3-C4	7.18	115.49	111.90
38	A1	2176	G	C5-C6-N1	-7.18	107.91	111.50
38	A1	2494	A	C6-C5-N7	-7.18	127.27	132.30
38	A1	2862	A	C6-C5-N7	-7.18	127.27	132.30
62	AO	8	ARG	N-CA-CB	7.18	123.53	110.60
11	B2	157	A	C8-N9-C4	-7.18	102.93	105.80
11	B2	793	G	C5-C6-O6	-7.18	124.29	128.60
11	B2	903	G	N9-C4-C5	7.18	108.27	105.40
11	B2	930	G	C6-C5-N7	-7.18	126.09	130.40
11	B2	1199	A	C5-N7-C8	7.18	107.49	103.90
38	A1	393	C	C2-N3-C4	7.18	123.49	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	442	G	C2-N3-C4	7.18	115.49	111.90
38	A1	674	G	N3-C2-N2	7.18	124.93	119.90
38	A1	881	G	C5-C6-N1	-7.18	107.91	111.50
38	A1	1861	G	C6-C5-N7	-7.18	126.09	130.40
38	A1	2404	G	C5-C6-O6	-7.18	124.29	128.60
11	B2	735	A	C5-C6-N1	-7.18	114.11	117.70
11	B2	369	A	O4'-C4'-C3'	-7.18	96.82	104.00
11	B2	860	G	O4'-C1'-N9	7.18	113.94	108.20
11	B2	888	A	O4'-C1'-N9	7.18	113.94	108.20
11	B2	1063	A	N7-C8-N9	-7.18	110.21	113.80
11	B2	1091	C	O4'-C1'-N1	7.18	113.94	108.20
38	A1	960	C	C2-N3-C4	7.18	123.49	119.90
38	A1	1504	C	C5-C6-N1	7.18	124.59	121.00
38	A1	1625	A	N3-C4-C5	-7.18	121.77	126.80
38	A1	2156	A	O4'-C1'-N9	7.18	113.94	108.20
38	A1	2404	G	C4-C5-N7	-7.18	107.93	110.80
11	B2	72	C	C6-N1-C2	-7.18	117.43	120.30
11	B2	1352	G	N1-C2-N3	-7.18	119.59	123.90
38	A1	355	G	N3-C2-N2	7.18	124.92	119.90
38	A1	2607	U	C2-N3-C4	7.18	131.31	127.00
38	A1	2611	U	O4'-C1'-N1	7.18	113.94	108.20
39	A3	77	A	N1-C6-N6	7.18	122.91	118.60
11	B2	8	U	C5'-C4'-C3'	-7.18	104.52	116.00
11	B2	36	G	N3-C4-N9	-7.18	121.69	126.00
11	B2	965	G	C4'-C3'-C2'	-7.18	95.42	102.60
11	B2	1049	U	P-O3'-C3'	7.18	128.31	119.70
38	A1	96	C	O4'-C1'-N1	7.18	113.94	108.20
38	A1	137	A	C5-C6-N1	-7.18	114.11	117.70
38	A1	317	A	C5-C6-N6	-7.18	117.96	123.70
38	A1	460	C	C6-N1-C2	-7.18	117.43	120.30
38	A1	1864	G	C6-C5-N7	-7.18	126.09	130.40
38	A1	1899	C	O4'-C1'-N1	7.18	113.94	108.20
38	A1	2152	G	O4'-C1'-N9	7.18	113.94	108.20
38	A1	2368	G	C2-N3-C4	-7.18	108.31	111.90
38	A1	1376	U	C5-C4-O4	-7.17	121.60	125.90
38	A1	2480	G	N1-C2-N2	7.17	122.66	116.20
38	A1	2865	C	N1-C2-O2	-7.17	114.59	118.90
52	AH	121	ALA	CB-CA-C	-7.17	99.34	110.10
11	B2	858	A	N1-C2-N3	7.17	132.89	129.30
11	B2	1226	G	O4'-C1'-N9	7.17	113.94	108.20
38	A1	474	G	C8-N9-C4	-7.17	103.53	106.40
38	A1	2795	G	N3-C4-C5	7.17	132.19	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	244	G	N1-C2-N3	-7.17	119.60	123.90
11	B2	698	A	C5-C6-N1	-7.17	114.11	117.70
11	B2	977	G	C5-N7-C8	-7.17	100.71	104.30
11	B2	1221	A	C6-C5-N7	-7.17	127.28	132.30
11	B2	1295	C	N1-C2-O2	-7.17	114.60	118.90
38	A1	1255	C	N3-C4-N4	7.17	123.02	118.00
38	A1	1259	G	N7-C8-N9	7.17	116.69	113.10
38	A1	2210	G	N7-C8-N9	-7.17	109.51	113.10
39	A3	5	G	N3-C2-N2	-7.17	114.88	119.90
38	A1	1644	G	C5-C6-O6	-7.17	124.30	128.60
11	B2	334	G	O4'-C1'-N9	7.17	113.93	108.20
11	B2	959	G	N1-C2-N3	-7.17	119.60	123.90
11	B2	1186	C	N3-C4-N4	7.17	123.02	118.00
11	B2	1429	G	N1-C2-N3	-7.17	119.60	123.90
38	A1	598	C	C6-N1-C2	-7.17	117.43	120.30
38	A1	906	G	N9-C4-C5	7.17	108.27	105.40
38	A1	2629	U	N1-C2-O2	7.17	127.82	122.80
26	BN	23	PHE	CB-CG-CD1	-7.17	115.78	120.80
38	A1	30	G	N7-C8-N9	-7.17	109.52	113.10
38	A1	809	A	C2-N3-C4	-7.17	107.02	110.60
38	A1	1570	C	P-O5'-C5'	7.17	132.37	120.90
38	A1	2187	C	C6-N1-C2	7.17	123.17	120.30
39	A3	48	A	C4-C5-N7	-7.17	107.12	110.70
38	A1	65	G	N9-C4-C5	-7.17	102.53	105.40
38	A1	2028	G	C4-C5-C6	7.17	123.10	118.80
38	A1	50	C	C2-N3-C4	7.16	123.48	119.90
38	A1	309	C	C4-C5-C6	7.16	120.98	117.40
38	A1	401	C	O4'-C1'-N1	7.16	113.93	108.20
38	A1	1141	C	C5-C6-N1	7.16	124.58	121.00
38	A1	2972	G	N9-C4-C5	7.16	108.27	105.40
11	B2	731	A	C5-C6-N1	-7.16	114.12	117.70
38	A1	2401	A	O4'-C1'-N9	7.16	113.93	108.20
43	AB	128	TYR	CG-CD2-CE2	-7.16	115.57	121.30
51	Ag	47	ARG	NE-CZ-NH1	-7.16	116.72	120.30
60	AM	80	ARG	NE-CZ-NH2	-7.16	116.72	120.30
38	A1	738	C	C2-N3-C4	7.16	123.48	119.90
38	A1	1451	A	C3'-C2'-C1'	7.16	107.23	101.50
38	A1	1702	C	C4-C5-C6	7.16	120.98	117.40
38	A1	1885	G	O4'-C1'-N9	7.16	113.93	108.20
39	A3	106	G	C4'-C3'-C2'	-7.16	95.44	102.60
11	B2	23	G	C5-C6-O6	-7.16	124.31	128.60
11	B2	1016	G	C5-N7-C8	7.16	107.88	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1307	G	N3-C2-N2	7.16	124.91	119.90
38	A1	293	G	O4'-C1'-N9	7.16	113.93	108.20
38	A1	617	G	N1-C6-O6	7.16	124.19	119.90
38	A1	2566	A	O5'-P-OP1	-7.16	99.26	105.70
38	A1	2574	G	C8-N9-C4	-7.16	103.54	106.40
39	A3	76	U	C5-C6-N1	-7.16	119.12	122.70
38	A1	468	A	C4-C5-C6	7.16	120.58	117.00
38	A1	1442	G	C8-N9-C4	-7.16	103.54	106.40
10	B1	23	G	P-O3'-C3'	-7.16	111.11	119.70
11	B2	1152	C	O4'-C1'-N1	7.16	113.92	108.20
38	A1	71	A	C2-N3-C4	7.16	114.18	110.60
38	A1	184	A	C5-N7-C8	7.16	107.48	103.90
38	A1	269	C	O4'-C1'-N1	7.16	113.92	108.20
38	A1	1044	C	N3-C4-C5	-7.16	119.04	121.90
38	A1	1417	U	C6-N1-C1'	-7.16	111.18	121.20
38	A1	1845	C	C6-N1-C2	7.16	123.16	120.30
38	A1	2292	A	N9-C4-C5	-7.16	102.94	105.80
38	A1	2293	G	O4'-C1'-N9	7.16	113.92	108.20
38	A1	2542	G	O4'-C1'-N9	7.16	113.92	108.20
38	A1	2877	A	C4-C5-C6	7.16	120.58	117.00
44	Ab	23	PHE	CB-CG-CD1	7.16	125.81	120.80
11	B2	54	C	P-O3'-C3'	7.15	128.28	119.70
38	A1	1792	A	C6-C5-N7	-7.15	127.29	132.30
43	AB	184	ALA	N-CA-CB	7.15	120.11	110.10
10	B1	75	C	O4'-C1'-N1	7.15	113.92	108.20
11	B2	355	C	C2-N3-C4	-7.15	116.32	119.90
11	B2	649	A	C6-C5-N7	-7.15	127.29	132.30
11	B2	1076	G	C4-C5-C6	7.15	123.09	118.80
11	B2	1082	A	C6-N1-C2	-7.15	114.31	118.60
38	A1	374	C	N3-C4-N4	7.15	123.01	118.00
38	A1	565	A	C4-C5-N7	-7.15	107.12	110.70
38	A1	870	G	C6-C5-N7	-7.15	126.11	130.40
38	A1	2177	A	N1-C2-N3	7.15	132.88	129.30
39	A3	53	A	N1-C6-N6	7.15	122.89	118.60
9	AX	38	PHE	CB-CG-CD2	7.15	125.81	120.80
11	B2	585	U	N3-C2-O2	-7.15	117.19	122.20
11	B2	662	C	C5-C4-N4	-7.15	115.19	120.20
11	B2	862	C	N3-C4-N4	7.15	123.00	118.00
38	A1	963	G	C5-C6-O6	-7.15	124.31	128.60
38	A1	1656	C	C2-N3-C4	7.15	123.47	119.90
38	A1	1830	U	N3-C2-O2	-7.15	117.19	122.20
38	A1	1987	A	N9-C4-C5	-7.15	102.94	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2158	G	C4'-C3'-C2'	7.15	109.75	102.60
38	A1	2542	G	C4-C5-C6	7.15	123.09	118.80
38	A1	2733	A	C2-N3-C4	7.15	114.17	110.60
39	A3	5	G	N7-C8-N9	7.15	116.67	113.10
11	B2	207	G	N3-C2-N2	7.15	124.90	119.90
11	B2	1388	G	N9-C4-C5	-7.15	102.54	105.40
38	A1	104	C	C6-N1-C2	7.15	123.16	120.30
11	B2	1290	U	C4'-C3'-C2'	-7.15	95.45	102.60
11	B2	1367	C	C4'-C3'-C2'	-7.15	95.45	102.60
38	A1	862	G	N3-C2-N2	7.15	124.90	119.90
38	A1	1207	G	OP1-P-OP2	-7.15	108.88	119.60
11	B2	59	C	N3-C4-N4	7.15	123.00	118.00
24	BL	33	ARG	NE-CZ-NH1	-7.15	116.73	120.30
38	A1	419	G	N7-C8-N9	-7.15	109.53	113.10
38	A1	1574	A	C5-C6-N6	-7.15	117.98	123.70
38	A1	1977	C	C5-C4-N4	-7.15	115.20	120.20
10	B1	24	A	C5-C6-N1	-7.14	114.13	117.70
11	B2	118	U	C2-N3-C4	7.14	131.29	127.00
11	B2	388	G	C4-N9-C1'	-7.14	117.21	126.50
11	B2	620	G	N3-C4-N9	7.14	130.29	126.00
11	B2	1488	C	C5-C6-N1	7.14	124.57	121.00
38	A1	418	C	C5-C4-N4	-7.14	115.20	120.20
38	A1	507	G	N3-C2-N2	-7.14	114.90	119.90
38	A1	611	G	N9-C4-C5	7.14	108.26	105.40
38	A1	1082	A	C2-N3-C4	-7.14	107.03	110.60
38	A1	1153	U	C4'-C3'-C2'	7.14	109.74	102.60
38	A1	1586	G	C5-C6-N1	-7.14	107.93	111.50
38	A1	2618	C	N3-C4-C5	-7.14	119.04	121.90
38	A1	2796	C	N3-C4-N4	7.14	123.00	118.00
11	B2	49	C	N3-C4-C5	-7.14	119.04	121.90
11	B2	527	A	N1-C6-N6	7.14	122.89	118.60
11	B2	754	G	P-O5'-C5'	7.14	132.33	120.90
11	B2	1253	G	N9-C4-C5	-7.14	102.54	105.40
11	B2	1434	C	C5-C6-N1	7.14	124.57	121.00
18	BF	111	ARG	NE-CZ-NH1	7.14	123.87	120.30
38	A1	132	G	N1-C6-O6	7.14	124.19	119.90
38	A1	385	U	N3-C4-C5	-7.14	110.31	114.60
38	A1	635	G	N1-C2-N3	-7.14	119.61	123.90
38	A1	2051	A	C5-C6-N6	-7.14	117.99	123.70
38	A1	2803	U	C1'-O4'-C4'	7.14	115.61	109.90
11	B2	801	A	P-O3'-C3'	7.14	128.27	119.70
11	B2	1378	A	C5-C6-N6	-7.14	117.99	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	604	A	C3'-C2'-C1'	-7.14	95.79	101.50
38	A1	1213	G	N3-C2-N2	7.14	124.90	119.90
38	A1	1767	C	C6-N1-C2	-7.14	117.44	120.30
11	B2	42	G	C2-N3-C4	7.14	115.47	111.90
11	B2	573	C	O4'-C1'-N1	7.14	113.91	108.20
11	B2	812	U	N1-C2-N3	7.14	119.18	114.90
16	BD	62	ARG	NE-CZ-NH2	-7.14	116.73	120.30
38	A1	165	G	N1-C6-O6	7.14	124.18	119.90
38	A1	565	A	C5-N7-C8	7.14	107.47	103.90
38	A1	685	G	C2-N3-C4	7.14	115.47	111.90
38	A1	767	G	N9-C4-C5	7.14	108.26	105.40
38	A1	1818	G	C4-C5-N7	7.14	113.66	110.80
38	A1	1986	U	C2-N3-C4	-7.14	122.72	127.00
38	A1	2449	A	N7-C8-N9	-7.14	110.23	113.80
45	AC	348	LYS	N-CA-CB	7.14	123.45	110.60
11	B2	645	G	N1-C2-N2	-7.14	109.78	116.20
38	A1	448	A	O4'-C1'-N9	7.14	113.91	108.20
38	A1	1038	U	C5'-C4'-O4'	-7.14	100.53	109.10
11	B2	324	C	N3-C4-C5	-7.14	119.05	121.90
11	B2	964	A	C5-C6-N6	-7.14	117.99	123.70
11	B2	1353	C	N1-C2-O2	-7.14	114.62	118.90
38	A1	302	U	C3'-C2'-C1'	7.14	107.21	101.50
38	A1	573	G	N1-C2-N2	-7.14	109.78	116.20
38	A1	577	C	C5-C4-N4	-7.14	115.20	120.20
38	A1	586	A	C5-C6-N1	-7.14	114.13	117.70
38	A1	994	G	C8-N9-C4	7.14	109.25	106.40
38	A1	1769	G	C5-C6-O6	-7.14	124.32	128.60
38	A1	2294	A	N3-C4-C5	-7.14	121.80	126.80
38	A1	2487	G	C4-C5-C6	7.14	123.08	118.80
38	A1	2693	G	C4-C5-C6	7.14	123.08	118.80
46	AD	87	ARG	NE-CZ-NH2	-7.14	116.73	120.30
9	AX	298	TYR	CB-CG-CD1	7.13	125.28	121.00
11	B2	910	G	N3-C2-N2	7.13	124.89	119.90
11	B2	1136	A	C5-N7-C8	7.13	107.47	103.90
11	B2	1292	A	C2-N3-C4	-7.13	107.03	110.60
38	A1	474	G	N3-C4-N9	-7.13	121.72	126.00
38	A1	922	C	N1-C2-N3	-7.13	114.20	119.20
38	A1	1646	G	C6-N1-C2	7.13	129.38	125.10
38	A1	2107	G	C5-C6-N1	-7.13	107.93	111.50
38	A1	2135	C	P-O3'-C3'	7.13	128.26	119.70
38	A1	2393	G	C8-N9-C4	-7.13	103.55	106.40
38	A1	2582	C	C5-C4-N4	-7.13	115.21	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	984	C	C2-N3-C4	7.13	123.47	119.90
11	B2	1476	C	C5-C6-N1	7.13	124.57	121.00
11	B2	1480	G	O4'-C1'-N9	7.13	113.91	108.20
18	BF	153	ARG	NE-CZ-NH2	-7.13	116.73	120.30
38	A1	1708	U	C4'-C3'-C2'	-7.13	95.47	102.60
38	A1	2432	G	O4'-C1'-N9	7.13	113.91	108.20
11	B2	747	U	N1-C2-N3	-7.13	110.62	114.90
38	A1	343	C	C4-C5-C6	7.13	120.97	117.40
38	A1	497	G	N3-C2-N2	7.13	124.89	119.90
38	A1	814	G	N1-C2-N3	-7.13	119.62	123.90
38	A1	979	G	C4'-C3'-C2'	-7.13	95.47	102.60
38	A1	2198	U	C6-N1-C2	-7.13	116.72	121.00
38	A1	2801	G	O4'-C1'-N9	7.13	113.91	108.20
11	B2	169	C	N3-C4-N4	7.13	122.99	118.00
11	B2	1225	C	O4'-C4'-C3'	-7.13	96.87	104.00
31	BS	53	TYR	CG-CD1-CE1	-7.13	115.60	121.30
38	A1	1901	A	N3-C4-C5	-7.13	121.81	126.80
38	A1	2404	G	N1-C2-N3	-7.13	119.62	123.90
38	A1	2601	C	N3-C4-N4	7.13	122.99	118.00
11	B2	402	G	N1-C2-N3	-7.13	119.62	123.90
11	B2	1144	G	P-O3'-C3'	-7.13	111.14	119.70
38	A1	241	C	C5-C4-N4	-7.13	115.21	120.20
38	A1	246	A	O4'-C1'-N9	7.13	113.90	108.20
38	A1	513	C	N3-C4-N4	7.13	122.99	118.00
38	A1	578	C	N3-C4-C5	-7.13	119.05	121.90
38	A1	1876	G	N7-C8-N9	7.13	116.66	113.10
11	B2	1004	U	O4'-C1'-N1	7.13	113.90	108.20
38	A1	2396	G	C5-C6-O6	-7.13	124.32	128.60
38	A1	2545	A	N1-C6-N6	7.13	122.88	118.60
38	A1	2831	G	C6-C5-N7	-7.13	126.12	130.40
57	Aj	89	PHE	CB-CG-CD2	-7.13	115.81	120.80
10	B1	20	G	C6-C5-N7	-7.12	126.12	130.40
38	A1	44	C	N3-C2-O2	7.12	126.89	121.90
38	A1	412	G	O4'-C1'-N9	-7.12	102.50	108.20
38	A1	488	A	C8-N9-C4	-7.12	102.95	105.80
38	A1	2850	G	O4'-C1'-N9	7.12	113.90	108.20
38	A1	2882	G	N1-C6-O6	7.12	124.17	119.90
11	B2	285	C	C6-N1-C2	-7.12	117.45	120.30
38	A1	1121	C	N1-C2-O2	-7.12	114.63	118.90
38	A1	1366	U	C5-C4-O4	-7.12	121.63	125.90
38	A1	2513	C	N3-C4-C5	-7.12	119.05	121.90
39	A3	87	G	P-O3'-C3'	-7.12	111.15	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
44	Ab	99	ALA	CB-CA-C	7.12	120.78	110.10
11	B2	726	A	C5-C6-N6	-7.12	118.00	123.70
38	A1	357	G	C5-N7-C8	7.12	107.86	104.30
38	A1	1118	A	N3-C4-N9	7.12	133.10	127.40
38	A1	1123	A	N9-C4-C5	7.12	108.65	105.80
38	A1	1877	C	N3-C4-C5	-7.12	119.05	121.90
38	A1	2031	G	C8-N9-C4	-7.12	103.55	106.40
38	A1	2187	C	P-O5'-C5'	-7.12	109.51	120.90
39	A3	60	C	C2-N3-C4	7.12	123.46	119.90
11	B2	760	C	C6-N1-C2	-7.12	117.45	120.30
38	A1	318	G	C4'-C3'-C2'	-7.12	95.48	102.60
38	A1	1638	C	N3-C4-N4	7.12	122.98	118.00
49	Ae	19	ARG	NE-CZ-NH2	-7.12	116.74	120.30
11	B2	789	G	C6-C5-N7	-7.12	126.13	130.40
38	A1	67	U	N3-C2-O2	-7.12	117.22	122.20
38	A1	200	G	N9-C4-C5	7.12	108.25	105.40
38	A1	1914	U	O4'-C1'-N1	7.12	113.89	108.20
38	A1	2658	G	O4'-C1'-N9	7.12	113.89	108.20
11	B2	503	G	C5-N7-C8	7.12	107.86	104.30
38	A1	2182	A	C5-C6-N1	-7.12	114.14	117.70
11	B2	504	G	P-O5'-C5'	7.12	132.28	120.90
11	B2	889	G	C4-C5-C6	7.12	123.07	118.80
11	B2	936	A	N7-C8-N9	-7.12	110.24	113.80
38	A1	371	U	O4'-C1'-N1	7.12	113.89	108.20
38	A1	1006	A	P-O3'-C3'	7.12	128.24	119.70
38	A1	1108	A	C5-C6-N1	-7.12	114.14	117.70
38	A1	2653	G	N1-C2-N3	-7.12	119.63	123.90
38	A1	2662	G	N1-C6-O6	7.12	124.17	119.90
11	B2	33	U	P-O3'-C3'	7.11	128.24	119.70
11	B2	278	A	C1'-O4'-C4'	7.11	115.59	109.90
11	B2	1054	A	N1-C2-N3	7.11	132.86	129.30
11	B2	1244	C	C4-C5-C6	7.11	120.96	117.40
38	A1	182	U	N3-C2-O2	7.11	127.18	122.20
38	A1	821	U	N3-C4-O4	7.11	124.38	119.40
38	A1	2534	C	N3-C4-N4	7.11	122.98	118.00
38	A1	2566	A	C4-C5-C6	7.11	120.56	117.00
11	B2	402	G	C4-C5-N7	-7.11	107.95	110.80
11	B2	1177	C	O4'-C1'-N1	7.11	113.89	108.20
38	A1	629	G	N3-C2-N2	7.11	124.88	119.90
38	A1	1396	A	N1-C2-N3	7.11	132.86	129.30
38	A1	2243	G	C6-N1-C2	7.11	129.37	125.10
50	AF	58	ASP	CB-CG-OD2	-7.11	111.90	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	905	A	C4-C5-N7	-7.11	107.14	110.70
11	B2	914	U	C6-N1-C2	-7.11	116.73	121.00
11	B2	1422	G	O4'-C1'-N9	7.11	113.89	108.20
38	A1	34	C	C5-C6-N1	-7.11	117.44	121.00
38	A1	305	G	C5-N7-C8	7.11	107.86	104.30
38	A1	971	G	N9-C4-C5	7.11	108.24	105.40
38	A1	1083	G	C2-N3-C4	7.11	115.45	111.90
38	A1	1150	G	O4'-C1'-N9	7.11	113.89	108.20
38	A1	1827	A	O4'-C1'-N9	7.11	113.89	108.20
38	A1	2720	U	C5-C4-O4	-7.11	121.63	125.90
66	AY	109	ASP	CB-CG-OD2	-7.11	111.90	118.30
11	B2	1276	G	N1-C6-O6	7.11	124.17	119.90
38	A1	510	A	C8-N9-C4	-7.11	102.96	105.80
38	A1	1413	A	C4-C5-N7	-7.11	107.14	110.70
38	A1	2399	C	O4'-C1'-N1	7.11	113.89	108.20
11	B2	61	A	C5-C6-N6	-7.11	118.01	123.70
11	B2	1253	G	N1-C2-N2	-7.11	109.80	116.20
38	A1	370	A	C4-C5-N7	-7.11	107.15	110.70
38	A1	647	G	N3-C2-N2	7.11	124.88	119.90
38	A1	749	G	C5-C6-O6	-7.11	124.34	128.60
38	A1	1442	G	C6-C5-N7	-7.11	126.14	130.40
38	A1	1496	A	N3-C4-C5	-7.11	121.83	126.80
38	A1	3033	G	C6-C5-N7	-7.11	126.14	130.40
11	B2	308	G	O4'-C1'-N9	7.11	113.88	108.20
11	B2	607	U	C6-N1-C2	-7.11	116.74	121.00
38	A1	124	C	O4'-C1'-N1	7.11	113.88	108.20
38	A1	390	C	N1-C2-O2	-7.11	114.64	118.90
38	A1	1046	A	N9-C4-C5	7.11	108.64	105.80
38	A1	1916	U	C1'-O4'-C4'	7.11	115.58	109.90
38	A1	2880	C	C5-C6-N1	7.11	124.55	121.00
38	A1	1208	A	C5-N7-C8	7.10	107.45	103.90
38	A1	1289	C	C3'-C2'-C1'	-7.10	95.82	101.50
38	A1	2299	G	O4'-C1'-N9	7.10	113.88	108.20
11	B2	573	C	C4-C5-C6	7.10	120.95	117.40
11	B2	1458	A	C5-C6-N1	-7.10	114.15	117.70
38	A1	912	G	C6-C5-N7	-7.10	126.14	130.40
38	A1	1074	G	N3-C4-N9	-7.10	121.74	126.00
38	A1	1180	G	C4-C5-N7	7.10	113.64	110.80
38	A1	1688	C	C5-C4-N4	-7.10	115.23	120.20
38	A1	1892	G	C6-C5-N7	-7.10	126.14	130.40
38	A1	2156	A	N1-C2-N3	-7.10	125.75	129.30
38	A1	2498	G	N1-C2-N2	-7.10	109.81	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2851	A	C8-N9-C4	-7.10	102.96	105.80
39	A3	25	A	C6-C5-N7	-7.10	127.33	132.30
38	A1	71	A	C4-C5-C6	7.10	120.55	117.00
38	A1	546	C	O4'-C1'-N1	7.10	113.88	108.20
38	A1	804	C	N3-C4-C5	-7.10	119.06	121.90
38	A1	1275	G	C5-C6-O6	-7.10	124.34	128.60
38	A1	1525	G	C4-C5-N7	-7.10	107.96	110.80
38	A1	2160	C	O4'-C1'-N1	7.10	113.88	108.20
38	A1	2623	G	N1-C2-N3	-7.10	119.64	123.90
39	A3	44	C	O4'-C1'-N1	7.10	113.88	108.20
3	Af	22	ARG	NE-CZ-NH2	-7.10	116.75	120.30
10	B1	51	G	C5-C6-N1	7.10	115.05	111.50
11	B2	1386	C	C5-C4-N4	-7.10	115.23	120.20
38	A1	296	G	C2-N3-C4	7.10	115.45	111.90
38	A1	1628	C	P-O3'-C3'	7.10	128.22	119.70
38	A1	1822	G	C5-C6-O6	7.10	132.86	128.60
38	A1	2008	G	C6-C5-N7	-7.10	126.14	130.40
11	B2	883	G	C2-N3-C4	-7.10	108.35	111.90
11	B2	1004	U	N3-C4-O4	7.10	124.37	119.40
38	A1	2002	A	P-O5'-C5'	7.10	132.26	120.90
39	A3	120	C	O4'-C1'-N1	7.10	113.88	108.20
11	B2	824	G	C2-N3-C4	7.10	115.45	111.90
11	B2	1236	G	O4'-C1'-N9	7.10	113.88	108.20
38	A1	2429	G	O4'-C1'-N9	7.10	113.88	108.20
11	B2	1264	G	C6-C5-N7	-7.09	126.14	130.40
11	B2	1407	U	O4'-C1'-N1	7.09	113.88	108.20
38	A1	2461	C	N3-C2-O2	7.09	126.87	121.90
38	A1	2515	U	P-O5'-C5'	7.09	132.25	120.90
11	B2	1296	U	C3'-C2'-C1'	-7.09	95.83	101.50
38	A1	1676	G	C5-N7-C8	7.09	107.85	104.30
11	B2	542	G	C4-C5-C6	7.09	123.06	118.80
11	B2	726	A	O4'-C1'-N9	7.09	113.87	108.20
11	B2	937	A	C4-C5-C6	7.09	120.55	117.00
11	B2	1396	C	C6-N1-C1'	-7.09	112.29	120.80
38	A1	776	G	C5-N7-C8	7.09	107.85	104.30
38	A1	1511	C	C2-N3-C4	7.09	123.45	119.90
38	A1	1780	C	N3-C2-O2	-7.09	116.94	121.90
38	A1	2379	G	C2-N3-C4	7.09	115.44	111.90
38	A1	2564	U	C2-N3-C4	-7.09	122.75	127.00
38	A1	2665	G	C4-C5-N7	7.09	113.64	110.80
11	B2	511	C	P-O5'-C5'	-7.09	109.56	120.90
11	B2	1126	G	N1-C2-N3	-7.09	119.65	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	820	C	C2-N3-C4	7.09	123.44	119.90
39	A3	75	G	C5-C6-N1	-7.09	107.95	111.50
11	B2	470	G	N7-C8-N9	-7.09	109.56	113.10
11	B2	1074	C	N3-C4-N4	7.09	122.96	118.00
38	A1	435	G	C5-N7-C8	7.09	107.84	104.30
38	A1	770	G	C6-N1-C2	7.09	129.35	125.10
38	A1	1577	C	N3-C4-C5	-7.09	119.06	121.90
38	A1	2877	A	N1-C6-N6	7.09	122.85	118.60
11	B2	214	C	P-O3'-C3'	-7.09	111.20	119.70
11	B2	771	G	C6-N1-C2	7.09	129.35	125.10
23	BK	79	ARG	NE-CZ-NH2	7.09	123.84	120.30
38	A1	676	G	N3-C2-N2	7.09	124.86	119.90
38	A1	757	C	C6-N1-C2	-7.09	117.47	120.30
38	A1	2462	U	N3-C2-O2	7.09	127.16	122.20
38	A1	2641	C	N1-C2-N3	7.09	124.16	119.20
66	AY	56	TRP	CB-CG-CD2	-7.09	117.39	126.60
10	B1	37	A	C8-N9-C4	-7.08	102.97	105.80
11	B2	145	A	C4-C5-C6	7.08	120.54	117.00
11	B2	170	C	C5-C6-N1	7.08	124.54	121.00
11	B2	751	C	O4'-C1'-N1	7.08	113.87	108.20
20	BH	66	ARG	NE-CZ-NH1	7.08	123.84	120.30
38	A1	26	G	N7-C8-N9	-7.08	109.56	113.10
38	A1	337	G	C4-C5-C6	7.08	123.05	118.80
38	A1	2973	A	N7-C8-N9	-7.08	110.26	113.80
38	A1	3016	G	C2-N3-C4	7.08	115.44	111.90
11	B2	152	G	P-O5'-C5'	-7.08	109.57	120.90
38	A1	324	C	C3'-C2'-C1'	7.08	107.17	101.50
38	A1	360	G	C5-N7-C8	7.08	107.84	104.30
38	A1	939	A	C4-C5-C6	7.08	120.54	117.00
11	B2	85	A	N9-C4-C5	7.08	108.63	105.80
11	B2	1477	U	N3-C4-C5	-7.08	110.35	114.60
38	A1	2986	G	C5-C6-N1	-7.08	107.96	111.50
10	B1	53	G	C4-C5-C6	7.08	123.05	118.80
11	B2	404	C	N3-C2-O2	7.08	126.86	121.90
11	B2	750	C	N3-C2-O2	7.08	126.86	121.90
11	B2	994	C	C2-N3-C4	7.08	123.44	119.90
11	B2	1288	C	N1-C2-O2	7.08	123.15	118.90
38	A1	1253	U	O4'-C1'-N1	7.08	113.86	108.20
38	A1	2023	A	C5-C6-N6	-7.08	118.04	123.70
38	A1	2413	G	N9-C4-C5	-7.08	102.57	105.40
11	B2	904	G	C2-N3-C4	7.08	115.44	111.90
11	B2	1255	C	N3-C4-C5	7.08	124.73	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1424	G	C5-C6-N1	-7.08	107.96	111.50
33	BU	43	ARG	NE-CZ-NH1	-7.08	116.76	120.30
38	A1	533	G	C8-N9-C4	-7.08	103.57	106.40
38	A1	994	G	C5-N7-C8	7.08	107.84	104.30
38	A1	1225	A	N3-C4-C5	-7.08	121.85	126.80
11	B2	4	C	N3-C4-C5	-7.08	119.07	121.90
11	B2	858	A	C6-C5-N7	-7.08	127.35	132.30
11	B2	1059	C	O4'-C1'-N1	7.08	113.86	108.20
16	BD	22	ARG	NE-CZ-NH2	-7.08	116.76	120.30
38	A1	396	G	C5-N7-C8	7.08	107.84	104.30
38	A1	2546	G	C8-N9-C4	-7.08	103.57	106.40
38	A1	2986	G	C4-C5-C6	7.08	123.05	118.80
39	A3	100	A	O4'-C1'-N9	7.08	113.86	108.20
11	B2	439	G	N3-C2-N2	7.07	124.85	119.90
11	B2	442	C	C2-N3-C4	7.07	123.44	119.90
21	BI	26	TYR	CG-CD2-CE2	7.07	126.96	121.30
38	A1	609	G	C4-C5-C6	7.07	123.04	118.80
38	A1	1180	G	C6-C5-N7	-7.07	126.16	130.40
38	A1	1237	A	C5-C6-N1	-7.07	114.16	117.70
38	A1	1716	G	N3-C2-N2	7.07	124.85	119.90
38	A1	2191	U	C6-N1-C2	7.07	125.24	121.00
38	A1	2648	C	O4'-C1'-N1	7.07	113.86	108.20
38	A1	2777	G	N3-C4-N9	7.07	130.24	126.00
38	A1	2333	G	C5-C6-O6	-7.07	124.36	128.60
38	A1	2861	A	C5-N7-C8	7.07	107.44	103.90
11	B2	1010	G	N1-C2-N3	-7.07	119.66	123.90
11	B2	1017	U	C2-N3-C4	-7.07	122.76	127.00
11	B2	1466	G	N9-C4-C5	-7.07	102.57	105.40
38	A1	418	C	O4'-C1'-N1	7.07	113.86	108.20
38	A1	3043	C	C6-N1-C2	7.07	123.13	120.30
39	A3	90	A	C8-N9-C4	-7.07	102.97	105.80
10	B1	28	C	C5-C4-N4	-7.07	115.25	120.20
11	B2	849	U	P-O3'-C3'	7.07	128.18	119.70
60	AM	170	ARG	NE-CZ-NH1	7.07	123.83	120.30
10	B1	14	A	N1-C6-N6	7.07	122.84	118.60
11	B2	242	A	O4'-C1'-N9	7.07	113.86	108.20
11	B2	574	A	C5-C6-N6	-7.07	118.05	123.70
11	B2	646	U	C6-N1-C2	7.07	125.24	121.00
11	B2	800	G	C4-N9-C1'	7.07	135.69	126.50
11	B2	937	A	C3'-C2'-C1'	7.07	107.16	101.50
11	B2	1023	C	C5-C6-N1	7.07	124.53	121.00
38	A1	369	G	N1-C2-N3	-7.07	119.66	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1242	A	P-O3'-C3'	7.07	128.18	119.70
38	A1	1340	G	N1-C2-N3	-7.07	119.66	123.90
38	A1	1624	U	C5-C4-O4	-7.07	121.66	125.90
38	A1	1955	U	P-O3'-C3'	7.07	128.18	119.70
38	A1	2686	A	O4'-C1'-N9	7.07	113.85	108.20
11	B2	493	C	P-O3'-C3'	7.07	128.18	119.70
11	B2	881	G	N1-C6-O6	7.07	124.14	119.90
38	A1	2016	C	C4'-C3'-C2'	-7.07	95.53	102.60
11	B2	395	C	N3-C4-C5	-7.06	119.08	121.90
38	A1	1493	C	O4'-C1'-N1	7.06	113.85	108.20
38	A1	1810	G	N9-C4-C5	7.06	108.23	105.40
38	A1	2239	C	C4-C5-C6	7.06	120.93	117.40
38	A1	2698	G	N9-C4-C5	-7.06	102.57	105.40
39	A3	65	G	O4'-C1'-N9	7.06	113.85	108.20
11	B2	289	C	N3-C4-C5	-7.06	119.08	121.90
11	B2	625	G	C8-N9-C4	7.06	109.22	106.40
11	B2	1093	C	O4'-C1'-N1	7.06	113.85	108.20
11	B2	1429	G	C6-C5-N7	-7.06	126.16	130.40
38	A1	903	C	O4'-C1'-N1	7.06	113.85	108.20
38	A1	965	A	N1-C6-N6	7.06	122.84	118.60
38	A1	1151	G	N7-C8-N9	-7.06	109.57	113.10
38	A1	2674	C	N1-C2-O2	7.06	123.14	118.90
38	A1	2948	A	O4'-C1'-N9	7.06	113.85	108.20
39	A3	120	C	N3-C4-C5	-7.06	119.08	121.90
11	B2	497	C	O4'-C1'-N1	7.06	113.85	108.20
11	B2	931	C	C4-C5-C6	7.06	120.93	117.40
11	B2	1411	G	C8-N9-C4	-7.06	103.58	106.40
38	A1	568	A	N1-C2-N3	7.06	132.83	129.30
38	A1	1562	U	C6-N1-C2	-7.06	116.76	121.00
38	A1	1734	G	C4-C5-C6	7.06	123.04	118.80
38	A1	2029	C	C6-N1-C2	7.06	123.12	120.30
38	A1	2750	C	N3-C4-C5	-7.06	119.08	121.90
10	B1	48	U	N1-C2-N3	7.06	119.14	114.90
11	B2	259	A	C5-N7-C8	7.06	107.43	103.90
11	B2	1427	C	N3-C4-N4	7.06	122.94	118.00
32	BT	26	ARG	NE-CZ-NH1	7.06	123.83	120.30
38	A1	201	C	O4'-C1'-N1	7.06	113.85	108.20
38	A1	554	C	O4'-C1'-N1	7.06	113.85	108.20
38	A1	916	A	C2-N3-C4	-7.06	107.07	110.60
38	A1	1145	G	OP1-P-O3'	7.06	120.73	105.20
38	A1	1841	G	O4'-C1'-N9	7.06	113.85	108.20
38	A1	792	A	O4'-C1'-N9	7.06	113.85	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	961	C	C2-N3-C4	7.06	123.43	119.90
38	A1	1749	C	O4'-C1'-N1	7.06	113.85	108.20
38	A1	2968	G	O4'-C1'-N9	7.06	113.85	108.20
11	B2	770	A	C8-N9-C4	-7.06	102.98	105.80
11	B2	1037	U	C1'-O4'-C4'	7.06	115.55	109.90
11	B2	1116	G	N1-C6-O6	7.06	124.13	119.90
38	A1	1780	C	C6-N1-C2	-7.06	117.48	120.30
11	B2	485	A	C4-C5-N7	-7.05	107.17	110.70
11	B2	559	G	N1-C2-N3	-7.05	119.67	123.90
11	B2	1027	C	O4'-C1'-N1	7.05	113.84	108.20
38	A1	14	A	C4-C5-C6	7.05	120.53	117.00
38	A1	169	G	C4-C5-N7	-7.05	107.98	110.80
38	A1	334	G	C4'-C3'-C2'	-7.05	95.55	102.60
38	A1	787	G	N1-C2-N3	-7.05	119.67	123.90
38	A1	1545	C	N3-C4-N4	7.05	122.94	118.00
38	A1	1794	C	C6-N1-C2	7.05	123.12	120.30
38	A1	1961	G	N1-C2-N3	-7.05	119.67	123.90
38	A1	2029	C	N1-C2-O2	7.05	123.13	118.90
38	A1	2687	A	O4'-C1'-N9	7.05	113.84	108.20
38	A1	2892	A	N7-C8-N9	-7.05	110.27	113.80
39	A3	20	G	N1-C2-N3	-7.05	119.67	123.90
11	B2	113	U	O4'-C1'-N1	7.05	113.84	108.20
11	B2	933	G	N3-C2-N2	7.05	124.84	119.90
11	B2	1076	G	C4-C5-N7	-7.05	107.98	110.80
38	A1	88	G	C2-N3-C4	7.05	115.43	111.90
38	A1	851	G	C6-C5-N7	-7.05	126.17	130.40
38	A1	876	C	C5-C6-N1	7.05	124.53	121.00
38	A1	1864	G	C5-N7-C8	7.05	107.83	104.30
38	A1	2833	G	C6-C5-N7	-7.05	126.17	130.40
9	AX	275	ALA	N-CA-CB	7.05	119.97	110.10
10	B1	11	C	N1-C2-O2	-7.05	114.67	118.90
11	B2	1197	C	P-O3'-C3'	7.05	128.16	119.70
11	B2	1386	C	N1-C2-O2	-7.05	114.67	118.90
38	A1	2247	G	C5-C6-O6	-7.05	124.37	128.60
38	A1	2460	A	C2-N3-C4	7.05	114.12	110.60
38	A1	2707	G	C4-C5-C6	7.05	123.03	118.80
39	A3	24	C	C4'-C3'-C2'	-7.05	95.55	102.60
38	A1	702	G	N1-C2-N3	-7.05	119.67	123.90
38	A1	1208	A	C6-N1-C2	-7.05	114.37	118.60
38	A1	1488	C	P-O3'-C3'	7.05	128.16	119.70
38	A1	1588	C	C2-N3-C4	7.05	123.42	119.90
38	A1	2214	U	N1-C2-O2	-7.05	117.86	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2233	G	C5-C6-N1	-7.05	107.97	111.50
38	A1	122	G	O4'-C1'-N9	7.05	113.84	108.20
38	A1	2945	A	N7-C8-N9	-7.05	110.28	113.80
11	B2	562	A	N7-C8-N9	7.05	117.32	113.80
11	B2	981	U	C6-N1-C2	7.05	125.23	121.00
11	B2	1197	C	O4'-C1'-N1	7.05	113.84	108.20
11	B2	1228	A	N3-C4-C5	-7.05	121.87	126.80
11	B2	1452	G	C3'-C2'-C1'	7.05	107.14	101.50
38	A1	42	G	N3-C4-N9	7.05	130.23	126.00
38	A1	46	C	C3'-C2'-C1'	7.05	107.14	101.50
38	A1	216	A	C4-C5-C6	7.05	120.52	117.00
38	A1	289	G	C2-N3-C4	7.05	115.42	111.90
38	A1	822	A	C4-C5-N7	-7.05	107.18	110.70
38	A1	1067	G	C5-C6-N1	-7.05	107.98	111.50
38	A1	1349	G	N1-C6-O6	7.05	124.13	119.90
38	A1	1470	C	C4-C5-C6	7.05	120.92	117.40
38	A1	2062	A	C4-C5-C6	7.05	120.52	117.00
38	A1	2165	A	C4-C5-N7	-7.05	107.18	110.70
38	A1	2819	C	C6-N1-C2	-7.05	117.48	120.30
11	B2	684	G	N1-C2-N3	-7.04	119.67	123.90
11	B2	1196	A	N9-C4-C5	-7.04	102.98	105.80
38	A1	1011	A	C4-C5-C6	7.04	120.52	117.00
38	A1	2176	G	O4'-C1'-N9	7.04	113.84	108.20
60	AM	125	TYR	CB-CG-CD2	-7.04	116.77	121.00
29	BQ	80	ARG	NE-CZ-NH2	-7.04	116.78	120.30
38	A1	1032	C	O4'-C1'-N1	7.04	113.83	108.20
38	A1	1392	G	C6-C5-N7	-7.04	126.17	130.40
38	A1	2701	U	C6-N1-C2	-7.04	116.77	121.00
38	A1	2751	C	N3-C4-N4	7.04	122.93	118.00
11	B2	413	G	C5-C6-N1	-7.04	107.98	111.50
11	B2	432	G	C2-N3-C4	7.04	115.42	111.90
11	B2	745	G	N7-C8-N9	7.04	116.62	113.10
11	B2	953	C	C5-C4-N4	-7.04	115.27	120.20
11	B2	1095	C	C1'-O4'-C4'	-7.04	104.27	109.90
38	A1	22	C	C4-C5-C6	7.04	120.92	117.40
38	A1	73	A	C4-C5-N7	-7.04	107.18	110.70
38	A1	254	A	N7-C8-N9	-7.04	110.28	113.80
38	A1	272	G	N1-C6-O6	7.04	124.12	119.90
38	A1	846	C	C4-C5-C6	7.04	120.92	117.40
38	A1	962	C	C5-C6-N1	7.04	124.52	121.00
38	A1	1407	A	N7-C8-N9	7.04	117.32	113.80
38	A1	1676	G	O4'-C1'-N9	7.04	113.83	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2262	C	N1-C2-O2	7.04	123.12	118.90
38	A1	2389	C	C4-C5-C6	7.04	120.92	117.40
38	A1	2544	C	O4'-C1'-N1	7.04	113.83	108.20
38	A1	2758	G	N1-C2-N3	-7.04	119.67	123.90
38	A1	2822	G	C5-C6-O6	-7.04	124.38	128.60
11	B2	324	C	O4'-C1'-N1	7.04	113.83	108.20
11	B2	933	G	C4-C5-C6	7.04	123.02	118.80
11	B2	1449	G	C6-N1-C2	7.04	129.32	125.10
15	BC	63	ARG	NE-CZ-NH2	-7.04	116.78	120.30
38	A1	168	G	C2-N3-C4	7.04	115.42	111.90
38	A1	413	A	C5-C6-N6	-7.04	118.07	123.70
38	A1	420	U	O4'-C1'-N1	7.04	113.83	108.20
38	A1	1053	A	C5-C6-N6	-7.04	118.07	123.70
38	A1	1874	G	C6-C5-N7	-7.04	126.18	130.40
38	A1	2235	G	C5-C6-O6	-7.04	124.38	128.60
38	A1	2987	U	C2'-C3'-O3'	7.04	124.98	109.50
11	B2	1145	C	N3-C2-O2	7.04	126.83	121.90
11	B2	1249	A	C5-C6-N6	-7.04	118.07	123.70
38	A1	49	A	N1-C6-N6	7.04	122.82	118.60
10	B1	46	U	C6-N1-C2	-7.04	116.78	121.00
11	B2	46	A	C6-C5-N7	-7.04	127.38	132.30
11	B2	102	U	O4'-C1'-N1	7.04	113.83	108.20
11	B2	541	G	C4-C5-C6	7.04	123.02	118.80
38	A1	282	G	C5-C6-O6	-7.04	124.38	128.60
38	A1	881	G	C5-C6-O6	-7.04	124.38	128.60
38	A1	1022	G	C5-C6-N1	-7.04	107.98	111.50
38	A1	1711	C	P-O3'-C3'	7.04	128.14	119.70
38	A1	2365	G	C2-N3-C4	-7.04	108.38	111.90
11	B2	10	G	C8-N9-C4	7.03	109.21	106.40
11	B2	173	G	C4-C5-C6	7.03	123.02	118.80
11	B2	728	G	C4-C5-N7	-7.03	107.99	110.80
11	B2	927	A	C4-C5-C6	7.03	120.52	117.00
11	B2	1025	U	O4'-C1'-N1	7.03	113.83	108.20
38	A1	1336	G	C5-C6-O6	-7.03	124.38	128.60
38	A1	1949	A	O4'-C1'-N9	7.03	113.83	108.20
38	A1	2061	A	C5-C6-N1	-7.03	114.18	117.70
38	A1	2410	U	C5-C6-N1	7.03	126.22	122.70
38	A1	2858	C	N3-C4-C5	-7.03	119.09	121.90
23	BK	102	TYR	CB-CG-CD1	-7.03	116.78	121.00
38	A1	712	C	C6-N1-C2	-7.03	117.49	120.30
38	A1	1594	G	N3-C2-N2	7.03	124.82	119.90
38	A1	1952	G	N1-C2-N3	-7.03	119.68	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	B1	10	G	C4-C5-N7	-7.03	107.99	110.80
11	B2	93	A	N7-C8-N9	-7.03	110.28	113.80
11	B2	985	C	C5-C4-N4	-7.03	115.28	120.20
38	A1	50	C	C5-C6-N1	7.03	124.52	121.00
38	A1	383	C	C5-C6-N1	7.03	124.52	121.00
38	A1	1035	G	N9-C4-C5	-7.03	102.59	105.40
38	A1	1358	C	N1-C2-O2	-7.03	114.68	118.90
38	A1	1971	C	O4'-C1'-N1	7.03	113.82	108.20
38	A1	2244	G	O4'-C1'-N9	7.03	113.82	108.20
40	A5	17	ARG	NE-CZ-NH2	-7.03	116.78	120.30
7	AU	39	TYR	CB-CG-CD2	-7.03	116.78	121.00
10	B1	59	A	C6-C5-N7	-7.03	127.38	132.30
38	A1	1002	A	N1-C2-N3	7.03	132.81	129.30
11	B2	350	G	N1-C2-N3	-7.03	119.68	123.90
11	B2	762	G	O4'-C1'-N9	7.03	113.82	108.20
11	B2	833	C	P-O3'-C3'	-7.03	111.27	119.70
38	A1	306	G	C6-C5-N7	-7.03	126.18	130.40
38	A1	377	C	O4'-C1'-N1	7.03	113.82	108.20
38	A1	766	G	N3-C2-N2	7.03	124.82	119.90
38	A1	2193	G	N3-C4-C5	-7.03	125.09	128.60
38	A1	2255	C	O4'-C1'-N1	7.03	113.82	108.20
39	A3	111	G	C5-C6-O6	-7.03	124.38	128.60
11	B2	1351	U	N3-C4-C5	-7.03	110.39	114.60
38	A1	138	U	C5-C4-O4	-7.03	121.69	125.90
38	A1	450	G	N1-C2-N3	-7.03	119.68	123.90
38	A1	480	A	N1-C2-N3	7.03	132.81	129.30
38	A1	827	G	C6-N1-C2	7.03	129.32	125.10
38	A1	1036	C	C5-C6-N1	7.03	124.51	121.00
38	A1	1330	G	N3-C2-N2	7.03	124.82	119.90
38	A1	1362	G	O4'-C1'-N9	7.03	113.82	108.20
38	A1	1959	C	C2-N3-C4	7.03	123.41	119.90
38	A1	2737	G	N1-C2-N3	-7.03	119.69	123.90
39	A3	20	G	C6-N1-C2	7.03	129.31	125.10
62	AO	2	ALA	CB-CA-C	7.03	120.64	110.10
11	B2	867	A	C6-C5-N7	-7.02	127.38	132.30
38	A1	365	G	C2-N3-C4	7.02	115.41	111.90
38	A1	517	A	C8-N9-C4	7.02	108.61	105.80
38	A1	527	G	C5-N7-C8	7.02	107.81	104.30
38	A1	1006	A	C2-N3-C4	7.02	114.11	110.60
38	A1	1571	G	C4-N9-C1'	-7.02	117.37	126.50
7	AU	33	ARG	NH1-CZ-NH2	-7.02	111.68	119.40
11	B2	52	U	O4'-C1'-N1	7.02	113.82	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	126	G	N3-C4-N9	7.02	130.21	126.00
11	B2	242	A	C5-C6-N1	-7.02	114.19	117.70
11	B2	546	G	C6-N1-C2	7.02	129.31	125.10
11	B2	1202	G	C4-C5-N7	7.02	113.61	110.80
38	A1	972	C	N1-C2-N3	7.02	124.12	119.20
38	A1	1833	G	C5-C6-O6	-7.02	124.39	128.60
38	A1	2760	A	C4-C5-C6	7.02	120.51	117.00
11	B2	300	G	O4'-C4'-C3'	-7.02	96.98	104.00
38	A1	1961	G	O4'-C1'-N9	7.02	113.82	108.20
38	A1	3033	G	C4'-C3'-C2'	-7.02	95.58	102.60
11	B2	487	U	C5-C6-N1	7.02	126.21	122.70
11	B2	530	G	O4'-C1'-N9	7.02	113.81	108.20
11	B2	1371	C	C2-N3-C4	-7.02	116.39	119.90
38	A1	332	A	C5-C6-N1	-7.02	114.19	117.70
38	A1	336	C	C2-N3-C4	7.02	123.41	119.90
38	A1	1018	G	P-O3'-C3'	7.02	128.12	119.70
38	A1	2443	G	N7-C8-N9	7.02	116.61	113.10
11	B2	94	C	O4'-C1'-N1	7.02	113.81	108.20
33	BU	90	PHE	CB-CG-CD2	-7.02	115.89	120.80
38	A1	1284	C	OP1-P-OP2	-7.02	109.08	119.60
38	A1	1501	G	N1-C2-N3	-7.02	119.69	123.90
38	A1	1804	G	C4-C5-N7	-7.02	107.99	110.80
38	A1	1930	A	N3-C4-N9	7.02	133.01	127.40
38	A1	2417	G	C4'-C3'-C2'	-7.02	95.58	102.60
11	B2	471	G	N1-C2-N3	-7.02	119.69	123.90
11	B2	962	G	N9-C4-C5	7.02	108.21	105.40
11	B2	1226	G	C8-N9-C4	7.02	109.21	106.40
38	A1	135	U	C6-N1-C2	-7.02	116.79	121.00
38	A1	518	A	C4-C5-C6	7.02	120.51	117.00
38	A1	1580	G	C1'-O4'-C4'	7.02	115.51	109.90
38	A1	2303	A	N7-C8-N9	7.02	117.31	113.80
11	B2	571	C	O4'-C1'-N1	7.01	113.81	108.20
37	BY	12	ASP	CB-CG-OD2	-7.01	111.99	118.30
38	A1	2603	A	O4'-C1'-N9	7.01	113.81	108.20
38	A1	85	G	P-O5'-C5'	7.01	132.12	120.90
38	A1	1113	G	P-O3'-C3'	-7.01	111.28	119.70
38	A1	1372	C	N3-C2-O2	7.01	126.81	121.90
38	A1	2339	C	C6-N1-C2	-7.01	117.50	120.30
38	A1	2710	G	N1-C2-N3	-7.01	119.69	123.90
11	B2	1252	C	N1-C2-O2	-7.01	114.69	118.90
11	B2	1255	C	O4'-C1'-N1	7.01	113.81	108.20
11	B2	1446	G	N1-C6-O6	7.01	124.11	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	408	C	P-O5'-C5'	7.01	132.12	120.90
38	A1	590	A	C5-C6-N6	-7.01	118.09	123.70
38	A1	2375	C	C5-C4-N4	-7.01	115.29	120.20
38	A1	2893	U	N3-C4-C5	-7.01	110.39	114.60
11	B2	563	U	O4'-C1'-N1	7.01	113.81	108.20
11	B2	940	U	C1'-O4'-C4'	7.01	115.51	109.90
11	B2	942	A	P-O3'-C3'	-7.01	111.29	119.70
38	A1	36	G	N7-C8-N9	-7.01	109.60	113.10
38	A1	780	G	N1-C6-O6	7.01	124.11	119.90
38	A1	1282	A	C4-C5-N7	-7.01	107.19	110.70
38	A1	1571	G	C4-C5-C6	7.01	123.01	118.80
38	A1	1654	G	P-O5'-C5'	-7.01	109.69	120.90
11	B2	716	G	C4-C5-C6	7.01	123.00	118.80
38	A1	480	A	C4'-C3'-C2'	-7.01	95.59	102.60
38	A1	814	G	O4'-C1'-N9	7.01	113.81	108.20
38	A1	1698	G	P-O3'-C3'	-7.01	111.29	119.70
9	AX	278	ARG	NE-CZ-NH1	7.01	123.80	120.30
11	B2	50	C	C6-N1-C2	-7.01	117.50	120.30
11	B2	811	G	C8-N9-C4	-7.01	103.60	106.40
11	B2	1000	G	O4'-C1'-N9	7.01	113.81	108.20
11	B2	1099	A	C8-N9-C4	-7.01	103.00	105.80
11	B2	1196	A	C5-N7-C8	7.01	107.40	103.90
38	A1	369	G	C6-N1-C2	7.01	129.30	125.10
38	A1	562	G	C4-C5-N7	7.01	113.60	110.80
38	A1	728	A	O4'-C1'-N9	7.01	113.81	108.20
38	A1	931	C	C2-N3-C4	7.01	123.40	119.90
38	A1	1334	G	O4'-C1'-N9	7.01	113.81	108.20
38	A1	1447	G	C5-N7-C8	7.01	107.80	104.30
38	A1	1876	G	P-O3'-C3'	7.01	128.11	119.70
38	A1	2476	A	N3-C4-C5	-7.01	121.89	126.80
38	A1	2682	G	O4'-C1'-N9	7.01	113.81	108.20
38	A1	2801	G	C6-C5-N7	-7.01	126.20	130.40
38	A1	2188	C	C5'-C4'-O4'	7.00	117.50	109.10
38	A1	2586	A	C4-C5-N7	-7.00	107.20	110.70
11	B2	691	G	C5-C6-N1	7.00	115.00	111.50
11	B2	1106	A	N1-C2-N3	-7.00	125.80	129.30
11	B2	1444	G	C5-N7-C8	7.00	107.80	104.30
38	A1	767	G	C8-N9-C4	-7.00	103.60	106.40
38	A1	1574	A	N9-C4-C5	-7.00	103.00	105.80
38	A1	1651	A	C5-C6-N6	-7.00	118.10	123.70
38	A1	2061	A	C5'-C4'-O4'	7.00	117.50	109.10
38	A1	2183	A	C5-C6-N1	-7.00	114.20	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
41	AA	11	ALA	N-CA-CB	7.00	119.90	110.10
47	Ad	41	ARG	NE-CZ-NH2	7.00	123.80	120.30
11	B2	1228	A	N1-C6-N6	7.00	122.80	118.60
13	BA	19	TYR	CG-CD1-CE1	7.00	126.90	121.30
38	A1	24	G	C8-N9-C4	-7.00	103.60	106.40
38	A1	135	U	C4-C5-C6	-7.00	115.50	119.70
38	A1	628	A	N9-C4-C5	7.00	108.60	105.80
38	A1	1060	C	C4-C5-C6	7.00	120.90	117.40
38	A1	1903	G	C2-N3-C4	-7.00	108.40	111.90
38	A1	2030	G	N1-C2-N3	-7.00	119.70	123.90
39	A3	3	G	O4'-C4'-C3'	-7.00	97.00	104.00
39	A3	15	G	C6-C5-N7	-7.00	126.20	130.40
39	A3	68	C	C2-N3-C4	7.00	123.40	119.90
40	AK	47	ARG	NE-CZ-NH1	-7.00	116.80	120.30
11	B2	826	C	N3-C4-N4	7.00	122.90	118.00
38	A1	183	G	N1-C6-O6	7.00	124.10	119.90
38	A1	205	A	N7-C8-N9	-7.00	110.30	113.80
38	A1	319	A	C8-N9-C4	-7.00	103.00	105.80
38	A1	424	U	C2-N3-C4	7.00	131.20	127.00
38	A1	1358	C	C6-N1-C2	-7.00	117.50	120.30
38	A1	1541	U	C2-N3-C4	7.00	131.20	127.00
38	A1	2475	G	N1-C6-O6	7.00	124.10	119.90
39	A3	102	G	C6-C5-N7	-7.00	126.20	130.40
11	B2	401	U	O5'-P-OP1	-7.00	99.40	105.70
11	B2	427	G	C2-N3-C4	7.00	115.40	111.90
11	B2	461	A	C5-N7-C8	7.00	107.40	103.90
11	B2	470	G	O4'-C1'-N9	7.00	113.80	108.20
38	A1	78	C	N3-C4-C5	-7.00	119.10	121.90
38	A1	382	G	C2-N3-C4	7.00	115.40	111.90
38	A1	429	U	C5-C4-O4	-7.00	121.70	125.90
38	A1	787	G	C4-C5-C6	7.00	123.00	118.80
38	A1	820	C	O4'-C1'-N1	7.00	113.80	108.20
38	A1	1961	G	C4-C5-N7	-7.00	108.00	110.80
38	A1	2403	G	OP1-P-OP2	-7.00	109.10	119.60
38	A1	2698	G	C6-N1-C2	7.00	129.30	125.10
39	A3	90	A	C4-C5-C6	7.00	120.50	117.00
4	AQ	103	ARG	NE-CZ-NH1	-7.00	116.80	120.30
11	B2	883	G	O4'-C1'-N9	7.00	113.80	108.20
12	B3	79	TYR	CB-CG-CD2	7.00	125.20	121.00
38	A1	635	G	C8-N9-C4	-7.00	103.60	106.40
38	A1	808	A	C5-C6-N6	-7.00	118.10	123.70
38	A1	1875	U	N3-C4-O4	7.00	124.30	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
39	A3	94	G	C6-C5-N7	-7.00	126.20	130.40
59	AL	108	PHE	CB-CG-CD2	7.00	125.70	120.80
38	A1	1872	G	N3-C2-N2	7.00	124.80	119.90
38	A1	1991	G	O4'-C1'-N9	7.00	113.80	108.20
11	B2	55	G	C5'-C4'-O4'	6.99	117.49	109.10
11	B2	645	G	N3-C2-N2	6.99	124.80	119.90
38	A1	258	C	N3-C4-N4	6.99	122.90	118.00
38	A1	345	C	O4'-C1'-N1	6.99	113.80	108.20
38	A1	1138	C	C1'-O4'-C4'	-6.99	104.30	109.90
38	A1	1305	C	P-O5'-C5'	6.99	132.09	120.90
38	A1	1440	C	C5-C4-N4	-6.99	115.30	120.20
38	A1	2067	U	N1-C2-N3	6.99	119.10	114.90
10	B1	11	C	N3-C4-N4	6.99	122.89	118.00
11	B2	455	C	P-O3'-C3'	-6.99	111.31	119.70
11	B2	533	C	C5-C4-N4	-6.99	115.31	120.20
11	B2	783	G	C5-N7-C8	6.99	107.80	104.30
11	B2	965	G	N3-C4-C5	-6.99	125.10	128.60
11	B2	1119	U	OP1-P-OP2	-6.99	109.11	119.60
38	A1	213	G	N7-C8-N9	6.99	116.60	113.10
38	A1	393	C	C5'-C4'-C3'	6.99	127.19	116.00
38	A1	1504	C	O4'-C4'-C3'	-6.99	97.01	104.00
38	A1	2854	A	O4'-C1'-N9	6.99	113.79	108.20
59	AL	17	HIS	N-CA-CB	6.99	123.19	110.60
11	B2	400	G	N7-C8-N9	6.99	116.59	113.10
11	B2	744	A	C4-C5-N7	-6.99	107.20	110.70
11	B2	1294	G	N3-C4-C5	-6.99	125.11	128.60
38	A1	366	G	C4-C5-N7	6.99	113.60	110.80
38	A1	913	G	C4-C5-C6	6.99	122.99	118.80
38	A1	1173	G	O4'-C1'-N9	6.99	113.79	108.20
38	A1	1417	U	O4'-C1'-N1	6.99	113.79	108.20
38	A1	1513	G	N7-C8-N9	-6.99	109.61	113.10
38	A1	1591	C	C5-C6-N1	6.99	124.50	121.00
38	A1	2266	C	C6-N1-C2	-6.99	117.50	120.30
66	AY	43	TYR	CB-CG-CD2	6.99	125.19	121.00
11	B2	39	U	N3-C4-O4	6.99	124.29	119.40
20	BH	162	LEU	CB-CG-CD2	6.99	122.88	111.00
38	A1	8	G	N9-C4-C5	6.99	108.19	105.40
38	A1	14	A	C6-C5-N7	-6.99	127.41	132.30
38	A1	433	C	C2-N3-C4	6.99	123.39	119.90
38	A1	1573	A	N3-C4-N9	6.99	132.99	127.40
38	A1	2171	G	C4-C5-N7	6.99	113.59	110.80
38	A1	2525	C	N1-C2-O2	6.99	123.09	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2799	C	C5-C4-N4	-6.99	115.31	120.20
38	A1	2896	G	O4'-C1'-N9	6.99	113.79	108.20
38	A1	2897	C	N3-C4-N4	6.99	122.89	118.00
11	B2	30	C	N3-C4-N4	6.99	122.89	118.00
11	B2	274	G	O4'-C1'-N9	6.99	113.79	108.20
11	B2	347	G	C5-C6-O6	-6.99	124.41	128.60
38	A1	2973	A	C6-C5-N7	-6.99	127.41	132.30
11	B2	232	G	C5-C6-N1	-6.99	108.01	111.50
11	B2	593	G	N7-C8-N9	-6.99	109.61	113.10
11	B2	1429	G	C4-C5-N7	6.99	113.59	110.80
38	A1	134	C	C5-C4-N4	-6.99	115.31	120.20
38	A1	224	G	N3-C4-C5	-6.99	125.11	128.60
38	A1	533	G	O4'-C1'-N9	6.99	113.79	108.20
38	A1	852	A	O4'-C1'-N9	6.99	113.79	108.20
38	A1	898	G	C6-C5-N7	-6.99	126.21	130.40
38	A1	1068	U	N3-C4-O4	6.99	124.29	119.40
38	A1	1167	A	C4-C5-C6	6.99	120.49	117.00
38	A1	2227	G	N3-C4-C5	6.99	132.09	128.60
38	A1	2799	C	C5-C6-N1	6.99	124.49	121.00
11	B2	567	A	N9-C4-C5	6.98	108.59	105.80
38	A1	739	C	N3-C4-N4	6.98	122.89	118.00
38	A1	1281	A	N7-C8-N9	-6.98	110.31	113.80
38	A1	2575	U	O4'-C1'-N1	6.98	113.79	108.20
11	B2	777	G	C5-N7-C8	-6.98	100.81	104.30
11	B2	1088	U	O4'-C1'-N1	6.98	113.79	108.20
11	B2	1413	G	C6-C5-N7	-6.98	126.21	130.40
21	BI	79	PHE	CB-CG-CD2	6.98	125.69	120.80
38	A1	166	G	N3-C2-N2	6.98	124.79	119.90
38	A1	245	A	C6-N1-C2	6.98	122.79	118.60
38	A1	1111	G	N1-C6-O6	6.98	124.09	119.90
38	A1	1209	A	N9-C4-C5	6.98	108.59	105.80
38	A1	1435	G	C4'-C3'-C2'	-6.98	95.62	102.60
38	A1	2012	G	N9-C4-C5	-6.98	102.61	105.40
38	A1	2691	G	O4'-C1'-C2'	6.98	113.88	107.60
10	B1	23	G	N1-C6-O6	6.98	124.09	119.90
16	BD	56	ARG	NE-CZ-NH1	6.98	123.79	120.30
18	BF	206	TYR	CG-CD1-CE1	-6.98	115.72	121.30
38	A1	109	G	O4'-C1'-N9	6.98	113.78	108.20
38	A1	1162	C	C2-N1-C1'	6.98	126.48	118.80
38	A1	1206	A	C2-N3-C4	-6.98	107.11	110.60
38	A1	1515	G	P-O3'-C3'	-6.98	111.32	119.70
38	A1	2869	U	P-O3'-C3'	6.98	128.08	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2962	A	N3-C4-C5	-6.98	121.91	126.80
39	A3	47	G	N3-C2-N2	6.98	124.79	119.90
40	A5	45	ARG	NE-CZ-NH1	6.98	123.79	120.30
11	B2	214	C	O4'-C1'-N1	6.98	113.78	108.20
11	B2	1031	G	N1-C2-N2	-6.98	109.92	116.20
38	A1	387	A	C4-C5-N7	-6.98	107.21	110.70
38	A1	432	C	N3-C4-N4	6.98	122.89	118.00
38	A1	591	G	N1-C6-O6	6.98	124.09	119.90
38	A1	1529	A	C6-C5-N7	-6.98	127.42	132.30
38	A1	2732	U	C6-N1-C2	-6.98	116.81	121.00
11	B2	350	G	O4'-C1'-N9	6.98	113.78	108.20
11	B2	1094	U	C2-N3-C4	6.98	131.19	127.00
11	B2	1412	A	O4'-C4'-C3'	-6.98	97.02	104.00
38	A1	282	G	C4-C5-C6	6.98	122.99	118.80
38	A1	891	C	C6-N1-C2	6.98	123.09	120.30
38	A1	1685	C	N3-C4-C5	-6.98	119.11	121.90
38	A1	1726	A	C5-N7-C8	6.98	107.39	103.90
38	A1	2607	U	N3-C4-C5	-6.98	110.41	114.60
11	B2	1105	C	C6-N1-C2	-6.98	117.51	120.30
11	B2	1197	C	C4-C5-C6	6.98	120.89	117.40
38	A1	1534	G	N3-C2-N2	6.98	124.78	119.90
38	A1	1774	A	O4'-C1'-N9	6.98	113.78	108.20
40	AK	17	ARG	NE-CZ-NH2	6.98	123.79	120.30
11	B2	146	A	C5-C6-N1	-6.97	114.21	117.70
11	B2	934	G	C4-C5-N7	6.97	113.59	110.80
38	A1	707	U	O4'-C1'-N1	6.97	113.78	108.20
38	A1	848	A	N1-C2-N3	6.97	132.79	129.30
38	A1	872	G	C5-C6-O6	-6.97	124.42	128.60
38	A1	1433	C	N3-C2-O2	-6.97	117.02	121.90
38	A1	1684	C	C4'-C3'-C2'	-6.97	95.63	102.60
38	A1	1963	G	O4'-C1'-N9	6.97	113.78	108.20
38	A1	2424	A	C4-C5-C6	6.97	120.49	117.00
38	A1	2450	A	C5-N7-C8	6.97	107.39	103.90
38	A1	2587	G	O4'-C4'-C3'	-6.97	97.03	104.00
10	B1	10	G	N9-C4-C5	6.97	108.19	105.40
11	B2	178	C	N3-C4-N4	6.97	122.88	118.00
11	B2	1172	A	C5'-C4'-O4'	6.97	117.47	109.10
18	BF	2	SER	N-CA-CB	6.97	120.96	110.50
38	A1	368	U	C5-C4-O4	6.97	130.08	125.90
38	A1	782	G	C2-N3-C4	-6.97	108.41	111.90
38	A1	1753	G	C8-N9-C4	-6.97	103.61	106.40
38	A1	1771	C	C6-N1-C2	6.97	123.09	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1880	A	C2-N3-C4	-6.97	107.11	110.60
38	A1	1966	C	N3-C2-O2	6.97	126.78	121.90
38	A1	2144	U	O4'-C1'-N1	6.97	113.78	108.20
38	A1	2495	A	C5-N7-C8	6.97	107.39	103.90
11	B2	1317	G	C5-C6-O6	-6.97	124.42	128.60
38	A1	544	A	C4-C5-C6	6.97	120.48	117.00
38	A1	1237	A	C4-C5-C6	6.97	120.49	117.00
38	A1	1534	G	C8-N9-C4	-6.97	103.61	106.40
38	A1	1540	A	N1-C2-N3	6.97	132.79	129.30
38	A1	1605	A	N7-C8-N9	6.97	117.29	113.80
11	B2	477	G	N9-C4-C5	-6.97	102.61	105.40
11	B2	766	G	N1-C6-O6	6.97	124.08	119.90
11	B2	1444	G	P-O3'-C3'	6.97	128.06	119.70
38	A1	513	C	C2'-C3'-O3'	6.97	124.85	113.70
38	A1	645	U	O4'-C1'-N1	6.97	113.78	108.20
38	A1	1143	A	C8-N9-C4	-6.97	103.01	105.80
38	A1	1360	G	C5-C6-O6	-6.97	124.42	128.60
38	A1	2070	U	O4'-C1'-C2'	6.97	113.87	107.60
38	A1	2415	C	P-O5'-C5'	6.97	132.05	120.90
38	A1	2500	G	C6-N1-C2	6.97	129.28	125.10
38	A1	2702	A	C8-N9-C4	-6.97	103.01	105.80
38	A1	2875	C	O4'-C1'-C2'	6.97	113.87	107.60
48	AE	22	ARG	NE-CZ-NH2	-6.97	116.81	120.30
11	B2	547	U	O4'-C1'-N1	6.97	113.77	108.20
38	A1	2058	C	N3-C4-C5	-6.97	119.11	121.90
38	A1	2075	U	C6-N1-C1'	6.97	130.96	121.20
38	A1	2364	G	N1-C6-O6	6.97	124.08	119.90
38	A1	2851	A	C4-C5-N7	-6.97	107.22	110.70
11	B2	731	A	N3-C4-C5	-6.97	121.92	126.80
11	B2	967	C	N3-C4-N4	6.97	122.88	118.00
11	B2	990	G	C4'-C3'-C2'	-6.97	95.63	102.60
38	A1	98	G	N1-C2-N3	-6.97	119.72	123.90
38	A1	381	G	N9-C4-C5	6.97	108.19	105.40
38	A1	822	A	C5-C6-N1	-6.97	114.22	117.70
38	A1	988	C	O4'-C1'-N1	6.97	113.77	108.20
38	A1	1100	G	N1-C2-N3	-6.97	119.72	123.90
38	A1	2129	G	C4-C5-C6	6.97	122.98	118.80
11	B2	500	A	C5-C6-N6	-6.96	118.13	123.70
11	B2	642	G	N1-C2-N3	-6.96	119.72	123.90
13	BA	85	MET	CG-SD-CE	-6.96	89.06	100.20
38	A1	1730	C	N1-C2-N3	-6.96	114.33	119.20
38	A1	2078	A	N9-C4-C5	6.96	108.59	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	599	G	O4'-C1'-N9	6.96	113.77	108.20
11	B2	679	G	N7-C8-N9	6.96	116.58	113.10
11	B2	989	C	C5'-C4'-C3'	6.96	127.14	116.00
38	A1	995	G	C6-N1-C2	6.96	129.28	125.10
11	B2	310	G	N3-C4-N9	-6.96	121.82	126.00
11	B2	1139	A	O4'-C1'-N9	6.96	113.77	108.20
38	A1	372	A	O4'-C1'-C2'	-6.96	98.84	105.80
38	A1	1248	C	N3-C4-N4	6.96	122.87	118.00
38	A1	1903	G	N9-C4-C5	-6.96	102.61	105.40
11	B2	834	C	N1-C2-O2	-6.96	114.72	118.90
11	B2	1097	G	N3-C4-N9	6.96	130.18	126.00
38	A1	190	C	C4-C5-C6	-6.96	113.92	117.40
38	A1	1815	C	N3-C2-O2	6.96	126.77	121.90
11	B2	447	A	N3-C4-C5	-6.96	121.93	126.80
11	B2	894	A	C5-C6-N6	-6.96	118.13	123.70
11	B2	1097	G	C4-C5-C6	6.96	122.97	118.80
38	A1	383	C	C6-N1-C2	-6.96	117.52	120.30
38	A1	1407	A	C2'-C3'-O3'	6.96	124.83	113.70
38	A1	2227	G	O4'-C1'-N9	6.96	113.77	108.20
57	Aj	28	ARG	NE-CZ-NH1	6.96	123.78	120.30
10	B1	58	A	N3-C4-N9	6.96	132.97	127.40
11	B2	720	A	N7-C8-N9	-6.96	110.32	113.80
11	B2	1097	G	C6-C5-N7	-6.96	126.23	130.40
11	B2	1275	U	N3-C4-C5	-6.96	110.43	114.60
11	B2	1371	C	C5-C4-N4	-6.96	115.33	120.20
38	A1	592	C	C5-C4-N4	-6.96	115.33	120.20
38	A1	1781	C	C5-C4-N4	-6.96	115.33	120.20
38	A1	2218	C	N1-C2-O2	6.96	123.07	118.90
38	A1	2328	G	C5'-C4'-O4'	6.96	117.45	109.10
11	B2	1349	C	C2-N3-C4	6.96	123.38	119.90
38	A1	229	G	N3-C2-N2	6.96	124.77	119.90
38	A1	2026	C	O5'-P-OP2	-6.96	99.44	105.70
41	AA	36	ASP	CB-CG-OD2	6.96	124.56	118.30
10	B1	75	C	C2-N1-C1'	6.95	126.45	118.80
11	B2	517	U	C5-C6-N1	6.95	126.18	122.70
11	B2	528	G	C6-N1-C2	6.95	129.27	125.10
11	B2	1158	G	N3-C4-N9	-6.95	121.83	126.00
11	B2	1482	C	N3-C4-N4	6.95	122.87	118.00
38	A1	13	U	C5'-C4'-C3'	6.95	127.12	116.00
38	A1	408	C	O4'-C1'-N1	6.95	113.76	108.20
38	A1	619	G	C5-C6-N1	-6.95	108.02	111.50
38	A1	655	C	O4'-C1'-N1	6.95	113.76	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1327	C	N1-C2-N3	-6.95	114.33	119.20
38	A1	2682	G	C3'-C2'-C1'	-6.95	95.94	101.50
38	A1	2846	A	C8-N9-C4	-6.95	103.02	105.80
55	Ai	43	ARG	NE-CZ-NH2	-6.95	116.82	120.30
11	B2	243	G	N1-C2-N3	-6.95	119.73	123.90
38	A1	261	A	N9-C4-C5	-6.95	103.02	105.80
38	A1	2378	C	C4'-C3'-C2'	-6.95	95.65	102.60
38	A1	2547	A	N9-C4-C5	6.95	108.58	105.80
10	B1	53	G	N9-C4-C5	6.95	108.18	105.40
11	B2	141	C	C5-C6-N1	6.95	124.47	121.00
38	A1	205	A	C4-C5-C6	6.95	120.47	117.00
38	A1	417	C	N1-C2-O2	-6.95	114.73	118.90
38	A1	462	A	C5-N7-C8	6.95	107.38	103.90
38	A1	595	C	N3-C2-O2	-6.95	117.03	121.90
38	A1	1821	C	C5-C6-N1	6.95	124.47	121.00
38	A1	2212	C	N3-C4-N4	6.95	122.86	118.00
38	A1	2714	G	C5-C6-O6	-6.95	124.43	128.60
38	A1	2851	A	C5-C6-N6	-6.95	118.14	123.70
11	B2	172	G	C6-N1-C2	6.95	129.27	125.10
11	B2	301	G	C4-C5-N7	6.95	113.58	110.80
15	BC	98	ARG	NE-CZ-NH2	-6.95	116.83	120.30
38	A1	404	G	P-O5'-C5'	6.95	132.02	120.90
38	A1	715	G	C4-C5-N7	6.95	113.58	110.80
38	A1	1277	G	C4-C5-N7	6.95	113.58	110.80
38	A1	1992	A	C4-C5-C6	6.95	120.47	117.00
38	A1	2093	A	O4'-C1'-N9	6.95	113.76	108.20
38	A1	2497	G	O4'-C1'-N9	6.95	113.76	108.20
11	B2	930	G	C5-C6-O6	-6.95	124.43	128.60
38	A1	331	G	N3-C4-C5	-6.95	125.13	128.60
38	A1	2394	G	N3-C2-N2	6.95	124.76	119.90
38	A1	2771	G	C8-N9-C4	-6.95	103.62	106.40
3	Af	12	ARG	NE-CZ-NH1	6.95	123.77	120.30
11	B2	1287	G	N1-C2-N3	-6.95	119.73	123.90
33	BU	54	ARG	NE-CZ-NH1	6.95	123.77	120.30
38	A1	63	A	C2-N3-C4	6.95	114.07	110.60
38	A1	1510	U	C6-N1-C2	-6.95	116.83	121.00
38	A1	1703	G	N1-C6-O6	6.95	124.07	119.90
38	A1	1783	U	N3-C4-C5	-6.95	110.43	114.60
38	A1	2036	A	C2-N3-C4	-6.95	107.13	110.60
38	A1	2224	G	C3'-C2'-C1'	-6.95	95.94	101.50
38	A1	2291	G	C3'-C2'-C1'	-6.95	95.94	101.50
38	A1	2638	G	O4'-C1'-N9	6.95	113.76	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2761	G	N3-C4-C5	-6.95	125.13	128.60
10	B1	25	G	C8-N9-C4	6.94	109.18	106.40
38	A1	806	C	N3-C4-C5	-6.94	119.12	121.90
38	A1	1244	C	C1'-O4'-C4'	6.94	115.45	109.90
38	A1	1727	G	C6-C5-N7	-6.94	126.23	130.40
38	A1	3042	C	N3-C4-C5	-6.94	119.12	121.90
11	B2	145	A	C4-C5-N7	-6.94	107.23	110.70
11	B2	177	A	C1'-O4'-C4'	6.94	115.45	109.90
11	B2	1193	G	N1-C2-N3	-6.94	119.73	123.90
38	A1	491	G	N1-C6-O6	6.94	124.06	119.90
38	A1	793	C	N3-C4-N4	6.94	122.86	118.00
11	B2	117	C	C5-C4-N4	-6.94	115.34	120.20
11	B2	361	A	C5-C6-N6	-6.94	118.15	123.70
11	B2	440	C	N3-C4-N4	6.94	122.86	118.00
11	B2	492	G	N1-C2-N3	-6.94	119.73	123.90
11	B2	982	U	C5-C4-O4	6.94	130.06	125.90
38	A1	634	G	P-O3'-C3'	6.94	128.03	119.70
38	A1	791	C	N3-C2-O2	-6.94	117.04	121.90
38	A1	970	G	C6-C5-N7	-6.94	126.24	130.40
38	A1	2594	U	C4-C5-C6	6.94	123.86	119.70
38	A1	2808	C	C5-C6-N1	6.94	124.47	121.00
39	A3	106	G	N1-C2-N3	-6.94	119.74	123.90
61	AN	165	TYR	CB-CG-CD2	6.94	125.16	121.00
11	B2	119	A	C4'-C3'-C2'	-6.94	95.66	102.60
11	B2	356	G	P-O3'-C3'	6.94	128.03	119.70
11	B2	1073	C	OP1-P-OP2	-6.94	109.19	119.60
38	A1	389	C	N3-C4-N4	6.94	122.86	118.00
38	A1	428	A	N1-C2-N3	6.94	132.77	129.30
38	A1	1119	A	O4'-C1'-N9	6.94	113.75	108.20
38	A1	1574	A	P-O3'-C3'	6.94	128.03	119.70
11	B2	51	A	C2-N3-C4	6.94	114.07	110.60
11	B2	110	C	O4'-C1'-N1	6.94	113.75	108.20
38	A1	299	U	O4'-C1'-N1	6.94	113.75	108.20
38	A1	674	G	N1-C2-N2	-6.94	109.96	116.20
38	A1	2368	G	N9-C4-C5	6.94	108.17	105.40
38	A1	2761	G	N1-C2-N3	-6.94	119.74	123.90
38	A1	2886	C	N3-C4-C5	-6.94	119.12	121.90
39	A3	88	A	P-O3'-C3'	6.94	128.03	119.70
11	B2	374	G	N1-C6-O6	6.94	124.06	119.90
11	B2	729	G	C2-N3-C4	6.94	115.37	111.90
11	B2	922	G	N1-C2-N3	-6.94	119.74	123.90
11	B2	96	G	N1-C6-O6	6.93	124.06	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1182	G	N1-C2-N3	6.93	128.06	123.90
32	BT	8	TYR	CB-CG-CD1	6.93	125.16	121.00
38	A1	633	A	C5-C6-N1	-6.93	114.23	117.70
38	A1	721	G	N3-C2-N2	6.93	124.75	119.90
38	A1	731	C	C5-C6-N1	-6.93	117.53	121.00
38	A1	800	G	C4-C5-C6	6.93	122.96	118.80
38	A1	2284	C	P-O5'-C5'	6.93	132.00	120.90
38	A1	2748	C	N3-C4-C5	-6.93	119.13	121.90
45	AC	318	ARG	NE-CZ-NH2	-6.93	116.83	120.30
46	AD	27	ARG	NE-CZ-NH1	6.93	123.77	120.30
11	B2	238	G	C5-N7-C8	-6.93	100.83	104.30
11	B2	789	G	C5-N7-C8	-6.93	100.83	104.30
38	A1	556	G	OP1-P-OP2	-6.93	109.20	119.60
38	A1	1487	U	C5-C6-N1	-6.93	119.23	122.70
38	A1	2796	C	O4'-C1'-N1	6.93	113.75	108.20
38	A1	2948	A	N1-C6-N6	6.93	122.76	118.60
11	B2	1070	C	C4-C5-C6	6.93	120.86	117.40
38	A1	246	A	N1-C2-N3	6.93	132.77	129.30
38	A1	258	C	C2-N3-C4	6.93	123.37	119.90
38	A1	1738	A	C2-N3-C4	-6.93	107.13	110.60
11	B2	883	G	C4-C5-C6	6.93	122.96	118.80
38	A1	305	G	C4-C5-C6	6.93	122.96	118.80
38	A1	1975	C	C5-C6-N1	6.93	124.46	121.00
38	A1	2139	A	C5-C6-N1	-6.93	114.23	117.70
38	A1	2423	G	N1-C2-N3	-6.93	119.74	123.90
38	A1	2787	G	N3-C4-C5	-6.93	125.14	128.60
11	B2	1081	C	C1'-O4'-C4'	-6.93	104.36	109.90
11	B2	1102	A	C6-C5-N7	-6.93	127.45	132.30
38	A1	13	U	P-O3'-C3'	6.93	128.01	119.70
38	A1	601	A	N9-C4-C5	6.93	108.57	105.80
38	A1	1653	U	N3-C4-O4	6.93	124.25	119.40
38	A1	2152	G	C4-C5-C6	6.93	122.96	118.80
38	A1	621	G	P-O3'-C3'	6.93	128.01	119.70
38	A1	2353	C	N3-C4-N4	6.93	122.85	118.00
38	A1	2896	G	N1-C6-O6	6.93	124.06	119.90
11	B2	582	G	N1-C2-N3	-6.92	119.75	123.90
11	B2	614	G	N7-C8-N9	6.92	116.56	113.10
15	BC	111	ARG	NE-CZ-NH2	-6.92	116.84	120.30
38	A1	141	C	C2-N3-C4	-6.92	116.44	119.90
38	A1	1699	U	C6-N1-C2	-6.92	116.84	121.00
38	A1	1948	A	C5-C6-N1	-6.92	114.24	117.70
38	A1	2891	A	N1-C6-N6	6.92	122.75	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2892	A	C5-N7-C8	6.92	107.36	103.90
11	B2	485	A	O4'-C1'-N9	6.92	113.74	108.20
38	A1	725	G	C3'-C2'-C1'	-6.92	95.96	101.50
38	A1	1039	C	C6-N1-C2	-6.92	117.53	120.30
38	A1	1610	C	O4'-C1'-N1	6.92	113.74	108.20
11	B2	31	U	C5-C6-N1	6.92	126.16	122.70
11	B2	626	G	N3-C2-N2	6.92	124.75	119.90
11	B2	1260	G	N3-C4-C5	6.92	132.06	128.60
38	A1	629	G	C5-C6-O6	-6.92	124.45	128.60
38	A1	640	C	C5'-C4'-C3'	6.92	127.07	116.00
38	A1	931	C	P-O3'-C3'	6.92	128.01	119.70
38	A1	1403	C	N3-C4-C5	-6.92	119.13	121.90
38	A1	1975	C	C5-C4-N4	-6.92	115.36	120.20
11	B2	443	C	C5-C4-N4	-6.92	115.36	120.20
11	B2	1052	U	C5-C6-N1	6.92	126.16	122.70
25	BM	20	TYR	CZ-CE2-CD2	-6.92	113.57	119.80
38	A1	178	G	C6-C5-N7	-6.92	126.25	130.40
38	A1	916	A	N1-C6-N6	6.92	122.75	118.60
38	A1	1183	U	C1'-O4'-C4'	6.92	115.44	109.90
38	A1	2116	G	N3-C4-N9	-6.92	121.85	126.00
39	A3	55	G	C5-C6-N1	-6.92	108.04	111.50
11	B2	428	G	N7-C8-N9	-6.92	109.64	113.10
38	A1	274	C	C6-N1-C2	6.92	123.07	120.30
38	A1	1450	C	C2-N3-C4	-6.92	116.44	119.90
38	A1	1521	G	C5-N7-C8	6.92	107.76	104.30
38	A1	1575	G	N3-C4-N9	6.92	130.15	126.00
38	A1	2225	C	C4-C5-C6	6.92	120.86	117.40
6	AT	28	PHE	N-CA-CB	6.92	123.05	110.60
11	B2	711	U	C3'-C2'-C1'	6.92	107.03	101.50
25	BM	108	ALA	CB-CA-C	-6.92	99.73	110.10
38	A1	1186	G	C5-C6-O6	-6.92	124.45	128.60
38	A1	2277	G	C5-C6-N1	-6.92	108.04	111.50
38	A1	2427	C	C2-N3-C4	-6.92	116.44	119.90
38	A1	2516	G	O4'-C1'-N9	6.92	113.73	108.20
38	A1	2873	G	O4'-C1'-N9	6.92	113.73	108.20
38	A1	2895	G	N3-C4-N9	-6.92	121.85	126.00
39	A3	91	G	N3-C2-N2	6.92	124.74	119.90
8	AW	45	ARG	NE-CZ-NH2	-6.92	116.84	120.30
11	B2	1143	G	C2-N3-C4	-6.92	108.44	111.90
11	B2	1341	C	C2-N3-C4	6.92	123.36	119.90
38	A1	371	U	C3'-C2'-C1'	6.92	107.03	101.50
38	A1	472	A	C4-C5-C6	6.92	120.46	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	980	G	P-O5'-C5'	6.92	131.96	120.90
38	A1	1568	A	O4'-C1'-N9	6.92	113.73	108.20
38	A1	2633	A	C5-C6-N6	-6.92	118.17	123.70
38	A1	2688	C	C2-N3-C4	-6.92	116.44	119.90
39	A3	44	C	C4-C5-C6	6.92	120.86	117.40
63	AP	19	ARG	NE-CZ-NH1	6.92	123.76	120.30
11	B2	203	A	C5'-C4'-O4'	6.91	117.40	109.10
11	B2	317	A	C5-C6-N6	-6.91	118.17	123.70
11	B2	638	G	C4-C5-C6	6.91	122.95	118.80
14	BB	10	ASP	CB-CG-OD1	6.91	124.52	118.30
38	A1	436	C	P-O3'-C3'	-6.91	111.41	119.70
38	A1	478	C	C2-N1-C1'	-6.91	111.20	118.80
38	A1	938	U	N3-C4-O4	6.91	124.24	119.40
38	A1	1075	G	C4-C5-N7	6.91	113.56	110.80
38	A1	1383	G	N1-C2-N3	-6.91	119.75	123.90
38	A1	1464	A	N7-C8-N9	-6.91	110.34	113.80
38	A1	2042	A	C8-N9-C4	-6.91	103.03	105.80
38	A1	2084	A	N1-C6-N6	6.91	122.75	118.60
38	A1	2193	G	O4'-C1'-N9	6.91	113.73	108.20
38	A1	2235	G	N3-C4-C5	-6.91	125.14	128.60
38	A1	2674	C	C2-N3-C4	6.91	123.36	119.90
38	A1	2749	G	C6-C5-N7	-6.91	126.25	130.40
11	B2	560	A	C6-N1-C2	6.91	122.75	118.60
38	A1	324	C	C4'-C3'-C2'	-6.91	95.69	102.60
38	A1	510	A	C4-C5-C6	6.91	120.46	117.00
38	A1	1567	C	C4-C5-C6	6.91	120.86	117.40
38	A1	2197	U	N3-C4-O4	6.91	124.24	119.40
38	A1	2472	A	C5-C6-N6	-6.91	118.17	123.70
11	B2	1006	C	C1'-O4'-C4'	-6.91	104.37	109.90
38	A1	17	C	C5-C4-N4	-6.91	115.36	120.20
38	A1	348	G	N7-C8-N9	6.91	116.56	113.10
38	A1	435	G	N7-C8-N9	-6.91	109.64	113.10
38	A1	837	G	C4-C5-C6	6.91	122.95	118.80
38	A1	917	A	N9-C4-C5	-6.91	103.04	105.80
38	A1	2467	C	N3-C2-O2	6.91	126.74	121.90
38	A1	2943	G	N3-C2-N2	6.91	124.74	119.90
39	A3	123	U	N3-C4-C5	-6.91	110.45	114.60
11	B2	546	G	N1-C2-N3	-6.91	119.75	123.90
11	B2	567	A	N1-C2-N3	6.91	132.75	129.30
11	B2	873	A	C5-C6-N1	-6.91	114.25	117.70
11	B2	904	G	N1-C2-N3	-6.91	119.75	123.90
11	B2	1089	C	C5-C6-N1	6.91	124.45	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	19	G	N7-C8-N9	6.91	116.55	113.10
38	A1	252	A	C5-C6-N6	-6.91	118.17	123.70
38	A1	518	A	C6-C5-N7	-6.91	127.46	132.30
38	A1	1515	G	N3-C2-N2	6.91	124.74	119.90
38	A1	2269	C	C5-C4-N4	-6.91	115.36	120.20
38	A1	2418	G	N3-C4-C5	6.91	132.05	128.60
45	AC	292	ASN	N-CA-CB	6.91	123.04	110.60
38	A1	744	G	O4'-C1'-N9	6.91	113.72	108.20
38	A1	868	U	N3-C4-O4	6.91	124.23	119.40
38	A1	2617	G	C6-N1-C2	6.91	129.24	125.10
39	A3	67	U	O4'-C1'-N1	6.91	113.72	108.20
11	B2	53	G	O4'-C1'-N9	6.91	113.72	108.20
11	B2	377	A	C6-N1-C2	-6.91	114.46	118.60
20	BH	91	ARG	NE-CZ-NH2	6.91	123.75	120.30
24	BL	13	VAL	CA-CB-CG2	-6.91	100.54	110.90
38	A1	2124	C	C2-N1-C1'	6.91	126.40	118.80
39	A3	94	G	N1-C6-O6	6.91	124.04	119.90
11	B2	661	C	C6-N1-C2	-6.90	117.54	120.30
38	A1	257	G	C5-C6-O6	-6.90	124.46	128.60
38	A1	946	U	C5-C6-N1	6.90	126.15	122.70
38	A1	963	G	O4'-C1'-N9	6.90	113.72	108.20
11	B2	756	A	C8-N9-C4	-6.90	103.04	105.80
38	A1	235	G	N3-C2-N2	6.90	124.73	119.90
38	A1	1171	G	P-O5'-C5'	6.90	131.94	120.90
38	A1	2178	A	C4-N9-C1'	6.90	138.73	126.30
38	A1	2383	A	C5-N7-C8	6.90	107.35	103.90
42	Aa	27	ARG	NE-CZ-NH1	6.90	123.75	120.30
42	Aa	51	ASP	CB-CG-OD1	-6.90	112.09	118.30
46	AD	135	ASP	CB-CG-OD1	-6.90	112.09	118.30
11	B2	1181	G	C6-C5-N7	-6.90	126.26	130.40
38	A1	344	G	C4-C5-N7	6.90	113.56	110.80
38	A1	599	G	N1-C6-O6	6.90	124.04	119.90
38	A1	1471	G	O4'-C1'-N9	6.90	113.72	108.20
38	A1	1536	U	C6-N1-C2	-6.90	116.86	121.00
38	A1	1612	G	N3-C2-N2	6.90	124.73	119.90
38	A1	1858	G	N7-C8-N9	-6.90	109.65	113.10
38	A1	2072	G	C4-C5-C6	6.90	122.94	118.80
38	A1	2474	A	C6-C5-N7	-6.90	127.47	132.30
38	A1	2541	U	N3-C4-C5	-6.90	110.46	114.60
38	A1	2992	G	C6-C5-N7	-6.90	126.26	130.40
38	A1	3038	A	C4-C5-C6	6.90	120.45	117.00
66	AY	84	TYR	CB-CG-CD1	6.90	125.14	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	71	C	P-O5'-C5'	6.90	131.94	120.90
11	B2	1278	A	C4-C5-N7	-6.90	107.25	110.70
14	BB	62	PHE	CB-CG-CD1	-6.90	115.97	120.80
38	A1	201	C	C5-C6-N1	6.90	124.45	121.00
38	A1	374	C	O4'-C1'-N1	6.90	113.72	108.20
38	A1	1552	C	O4'-C4'-C3'	-6.90	97.10	104.00
45	AC	198	TYR	CB-CG-CD2	6.90	125.14	121.00
11	B2	253	G	C3'-C2'-C1'	6.90	107.02	101.50
11	B2	970	G	C4-C5-C6	6.90	122.94	118.80
11	B2	1128	U	O4'-C1'-N1	6.90	113.72	108.20
38	A1	1117	C	C5-C6-N1	6.90	124.45	121.00
38	A1	1247	U	C1'-O4'-C4'	-6.90	104.38	109.90
38	A1	2053	G	N7-C8-N9	6.90	116.55	113.10
38	A1	2492	G	C6-N1-C2	6.90	129.24	125.10
11	B2	101	G	O4'-C1'-N9	6.90	113.72	108.20
11	B2	721	A	C5-N7-C8	6.90	107.35	103.90
38	A1	1158	G	C6-C5-N7	-6.90	126.26	130.40
38	A1	1578	C	N1-C2-O2	6.90	123.04	118.90
38	A1	1996	C	O4'-C1'-N1	6.90	113.72	108.20
38	A1	2674	C	O4'-C1'-N1	6.90	113.72	108.20
38	A1	2758	G	N1-C6-O6	6.90	124.04	119.90
38	A1	2835	A	C5-C6-N6	-6.90	118.18	123.70
11	B2	51	A	N9-C4-C5	6.89	108.56	105.80
11	B2	324	C	C1'-O4'-C4'	-6.89	104.39	109.90
11	B2	377	A	N9-C4-C5	6.89	108.56	105.80
11	B2	1475	C	C5-C6-N1	6.89	124.45	121.00
38	A1	168	G	C4-C5-C6	-6.89	114.66	118.80
38	A1	978	C	N1-C2-O2	6.89	123.04	118.90
38	A1	1481	G	N1-C6-O6	6.89	124.04	119.90
38	A1	1836	A	C5'-C4'-O4'	6.89	117.37	109.10
38	A1	2960	G	C6-N1-C2	6.89	129.24	125.10
48	AE	184	VAL	CA-CB-CG1	-6.89	100.56	110.90
66	AY	123	ARG	NE-CZ-NH2	-6.89	116.85	120.30
11	B2	735	A	C8-N9-C4	-6.89	103.04	105.80
38	A1	2836	G	C8-N9-C4	-6.89	103.64	106.40
11	B2	28	U	P-O3'-C3'	-6.89	111.43	119.70
11	B2	238	G	C4-C5-N7	6.89	113.56	110.80
11	B2	463	G	C6-N1-C2	6.89	129.23	125.10
11	B2	948	G	O4'-C1'-N9	6.89	113.71	108.20
11	B2	966	G	C4-C5-C6	6.89	122.94	118.80
38	A1	2113	G	O4'-C1'-N9	6.89	113.71	108.20
38	A1	2439	G	C4-C5-N7	6.89	113.56	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	549	A	C4-C5-C6	6.89	120.44	117.00
11	B2	636	G	C5-N7-C8	6.89	107.74	104.30
11	B2	1405	C	P-O3'-C3'	-6.89	111.43	119.70
38	A1	421	C	C5-C6-N1	6.89	124.44	121.00
38	A1	535	G	C4-C5-N7	-6.89	108.04	110.80
38	A1	784	C	N1-C2-N3	-6.89	114.38	119.20
38	A1	840	G	N3-C2-N2	6.89	124.72	119.90
38	A1	899	A	C2'-C3'-O3'	6.89	124.72	113.70
38	A1	1324	G	C5-C6-O6	-6.89	124.47	128.60
38	A1	1911	G	N9-C1'-C2'	-6.89	104.42	112.00
38	A1	2330	A	O4'-C1'-N9	6.89	113.71	108.20
11	B2	947	G	C5-C6-N1	-6.89	108.06	111.50
38	A1	401	C	N3-C4-C5	-6.89	119.14	121.90
38	A1	709	A	C6-N1-C2	6.89	122.73	118.60
38	A1	1387	G	N3-C4-C5	6.89	132.04	128.60
38	A1	3030	A	C2-N3-C4	-6.89	107.16	110.60
11	B2	548	A	C5-C6-N1	-6.89	114.26	117.70
11	B2	699	C	O4'-C1'-N1	6.89	113.71	108.20
11	B2	1100	G	C6-C5-N7	-6.89	126.27	130.40
11	B2	1187	A	C5-N7-C8	6.89	107.34	103.90
11	B2	1333	G	C2-N3-C4	6.89	115.34	111.90
38	A1	344	G	C4-C5-C6	6.89	122.93	118.80
38	A1	650	C	C4-C5-C6	6.89	120.84	117.40
38	A1	2032	G	C4-C5-C6	6.89	122.93	118.80
38	A1	2363	G	C1'-O4'-C4'	-6.89	104.39	109.90
38	A1	2511	C	C5-C4-N4	-6.89	115.38	120.20
38	A1	2856	G	C5-N7-C8	-6.89	100.86	104.30
56	AJ	10	ARG	NE-CZ-NH1	6.89	123.74	120.30
56	AJ	28	THR	CA-CB-CG2	-6.89	102.76	112.40
11	B2	719	G	N7-C8-N9	6.88	116.54	113.10
11	B2	734	G	N1-C2-N3	-6.88	119.77	123.90
11	B2	1156	A	C6-N1-C2	-6.88	114.47	118.60
38	A1	34	C	N3-C4-N4	6.88	122.82	118.00
38	A1	324	C	O3'-P-O5'	6.88	117.08	104.00
38	A1	372	A	C5-N7-C8	6.88	107.34	103.90
38	A1	1094	U	C6-N1-C2	-6.88	116.87	121.00
38	A1	2030	G	N3-C2-N2	6.88	124.72	119.90
38	A1	2142	U	N3-C4-O4	6.88	124.22	119.40
38	A1	2273	U	C3'-C2'-C1'	6.88	107.01	101.50
38	A1	2336	G	N9-C4-C5	6.88	108.15	105.40
38	A1	2621	U	O4'-C1'-N1	6.88	113.71	108.20
38	A1	84	A	P-O5'-C5'	-6.88	109.89	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1232	G	C4-C5-C6	6.88	122.93	118.80
38	A1	1293	G	C4-C5-C6	6.88	122.93	118.80
11	B2	454	G	C5-C6-N1	-6.88	108.06	111.50
11	B2	498	C	N3-C4-C5	-6.88	119.15	121.90
11	B2	1149	C	N3-C4-N4	6.88	122.82	118.00
11	B2	1201	G	N1-C6-O6	6.88	124.03	119.90
38	A1	333	A	C6-C5-N7	-6.88	127.48	132.30
38	A1	1408	G	C4-C5-C6	6.88	122.93	118.80
38	A1	1731	U	C1'-O4'-C4'	6.88	115.41	109.90
38	A1	2168	C	N3-C4-N4	6.88	122.82	118.00
46	AD	85	PHE	N-CA-CB	6.88	122.99	110.60
9	AX	304	TYR	CB-CG-CD1	-6.88	116.87	121.00
11	B2	534	G	O4'-C1'-N9	6.88	113.70	108.20
11	B2	1305	U	N3-C2-O2	-6.88	117.38	122.20
11	B2	1398	U	N1-C2-N3	-6.88	110.77	114.90
38	A1	2414	G	N1-C2-N3	-6.88	119.77	123.90
9	AX	164	TYR	CB-CG-CD2	-6.88	116.87	121.00
11	B2	68	G	N1-C6-O6	6.88	124.03	119.90
11	B2	380	C	C6-N1-C2	-6.88	117.55	120.30
11	B2	542	G	N3-C2-N2	6.88	124.72	119.90
11	B2	1279	A	O4'-C1'-N9	6.88	113.70	108.20
38	A1	53	A	C5-N7-C8	6.88	107.34	103.90
38	A1	115	C	N3-C2-O2	-6.88	117.08	121.90
38	A1	966	G	C4-C5-C6	6.88	122.93	118.80
38	A1	997	A	O4'-C1'-N9	6.88	113.70	108.20
38	A1	1097	G	N1-C6-O6	6.88	124.03	119.90
38	A1	1747	C	N3-C4-N4	6.88	122.81	118.00
38	A1	1880	A	C3'-C2'-C1'	-6.88	96.00	101.50
38	A1	2161	A	C4-C5-C6	6.88	120.44	117.00
38	A1	2702	A	C5-C6-N6	-6.88	118.20	123.70
38	A1	2795	G	C2-N3-C4	-6.88	108.46	111.90
38	A1	2990	G	C5-C6-O6	-6.88	124.47	128.60
11	B2	195	C	C5-C4-N4	-6.88	115.39	120.20
11	B2	212	G	C6-C5-N7	-6.88	126.27	130.40
11	B2	869	U	N3-C4-O4	6.88	124.21	119.40
17	BE	171	ARG	NE-CZ-NH1	-6.88	116.86	120.30
18	BF	80	ARG	NE-CZ-NH2	-6.88	116.86	120.30
38	A1	45	G	O4'-C1'-N9	6.88	113.70	108.20
38	A1	130	G	N3-C4-N9	6.88	130.13	126.00
38	A1	252	A	C8-N9-C1'	6.88	140.08	127.70
38	A1	538	G	N1-C6-O6	6.88	124.03	119.90
38	A1	1469	U	C2-N3-C4	-6.88	122.87	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1615	G	P-O3'-C3'	6.88	127.95	119.70
38	A1	1717	C	N3-C4-N4	6.88	122.81	118.00
38	A1	2230	G	C6-C5-N7	-6.88	126.27	130.40
11	B2	724	C	N3-C4-C5	-6.88	119.15	121.90
14	BB	73	ARG	NE-CZ-NH1	6.88	123.74	120.30
38	A1	1049	U	O4'-C1'-N1	6.88	113.70	108.20
38	A1	1129	G	C6-C5-N7	-6.88	126.28	130.40
38	A1	1546	G	C4-C5-N7	-6.88	108.05	110.80
38	A1	2097	G	O4'-C1'-N9	6.88	113.70	108.20
38	A1	2194	A	C5-C6-N6	-6.88	118.20	123.70
38	A1	2481	G	C6-N1-C2	6.88	129.22	125.10
10	B1	15	G	N1-C6-O6	6.87	124.02	119.90
11	B2	492	G	C8-N9-C4	-6.87	103.65	106.40
11	B2	723	G	N3-C4-C5	6.87	132.04	128.60
11	B2	1126	G	O4'-C1'-N9	6.87	113.70	108.20
11	B2	1135	G	N1-C6-O6	6.87	124.02	119.90
16	BD	110	TYR	CB-CG-CD2	-6.87	116.88	121.00
38	A1	609	G	N3-C4-C5	-6.87	125.16	128.60
38	A1	866	G	O4'-C1'-C2'	6.87	113.79	107.60
38	A1	2144	U	C5-C4-O4	-6.87	121.78	125.90
38	A1	3045	G	N9-C1'-C2'	-6.87	104.44	112.00
48	AE	1	MET	CG-SD-CE	6.87	111.20	100.20
11	B2	7	G	C5-N7-C8	6.87	107.74	104.30
11	B2	77	G	C5-N7-C8	6.87	107.73	104.30
11	B2	593	G	N3-C2-N2	6.87	124.71	119.90
25	BM	32	ASP	CB-CG-OD1	6.87	124.48	118.30
38	A1	391	C	C5-C6-N1	6.87	124.44	121.00
38	A1	875	G	C6-C5-N7	6.87	134.52	130.40
42	Aa	36	ARG	NE-CZ-NH1	6.87	123.74	120.30
38	A1	510	A	C6-N1-C2	6.87	122.72	118.60
38	A1	1027	A	N3-C4-C5	-6.87	121.99	126.80
38	A1	1087	G	N1-C6-O6	6.87	124.02	119.90
38	A1	1695	G	C2-N3-C4	-6.87	108.47	111.90
38	A1	2177	A	C4-C5-C6	6.87	120.44	117.00
46	AD	137	VAL	CA-CB-CG2	-6.87	100.59	110.90
50	AF	76	ARG	NE-CZ-NH1	-6.87	116.86	120.30
11	B2	37	G	N7-C8-N9	-6.87	109.67	113.10
11	B2	961	U	C4-C5-C6	-6.87	115.58	119.70
11	B2	1338	C	O4'-C1'-N1	6.87	113.69	108.20
38	A1	210	A	C5-C6-N1	-6.87	114.27	117.70
38	A1	314	A	C5-C6-N6	-6.87	118.20	123.70
38	A1	743	A	C5-C6-N6	-6.87	118.20	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	A1	1482	G	C5-C6-N1	-6.87	108.07	111.50
38	A1	1838	C	C4-C5-C6	6.87	120.83	117.40
38	A1	1897	G	C6-N1-C2	6.87	129.22	125.10
9	AX	225	TYR	CB-CG-CD1	6.87	125.12	121.00
11	B2	286	G	C2-N3-C4	6.87	115.33	111.90
38	A1	609	G	N9-C4-C5	6.87	108.15	105.40
38	A1	708	A	N1-C2-N3	6.87	132.73	129.30
38	A1	1245	C	C5-C6-N1	6.87	124.43	121.00
38	A1	1859	A	C5-N7-C8	6.87	107.33	103.90
38	A1	2320	U	C5'-C4'-C3'	-6.87	105.01	116.00
38	A1	2397	C	N1-C2-O2	-6.87	114.78	118.90
11	B2	222	G	C8-N9-C4	-6.87	103.65	106.40
11	B2	1018	C	C4-C5-C6	6.87	120.83	117.40
38	A1	332	A	C1'-O4'-C4'	-6.87	104.41	109.90
38	A1	1503	C	N3-C4-N4	6.87	122.81	118.00
38	A1	1508	A	C4-C5-C6	6.87	120.43	117.00
38	A1	2420	C	C5-C6-N1	6.87	124.43	121.00
67	AZ	84	ALA	N-CA-CB	6.87	119.71	110.10
11	B2	151	G	C4-C5-N7	-6.86	108.06	110.80
11	B2	797	U	C2-N1-C1'	6.86	125.94	117.70
11	B2	956	C	N3-C4-N4	6.86	122.81	118.00
38	A1	1411	G	N1-C2-N3	-6.86	119.78	123.90
38	A1	1555	G	C6-C5-N7	-6.86	126.28	130.40
38	A1	1578	C	N3-C4-N4	6.86	122.80	118.00
38	A1	1658	A	C8-N9-C4	-6.86	103.05	105.80
38	A1	1771	C	N1-C2-N3	-6.86	114.39	119.20
38	A1	2595	C	C2-N3-C4	6.86	123.33	119.90
11	B2	293	G	O4'-C1'-N9	6.86	113.69	108.20
38	A1	198	C	C4'-C3'-C2'	6.86	109.46	102.60
38	A1	336	C	N3-C4-N4	6.86	122.80	118.00
11	B2	112	G	C6-C5-N7	-6.86	126.28	130.40
11	B2	1259	A	C4-N9-C1'	6.86	138.65	126.30
38	A1	41	G	C4-C5-N7	-6.86	108.06	110.80
38	A1	2148	U	C5-C4-O4	-6.86	121.78	125.90
11	B2	194	C	C5-C4-N4	-6.86	115.40	120.20
38	A1	2554	A	C4-C5-C6	6.86	120.43	117.00
11	B2	1096	G	C5-C6-O6	-6.86	124.48	128.60
29	BQ	16	ARG	NH1-CZ-NH2	6.86	126.94	119.40
38	A1	597	C	C2-N3-C4	-6.86	116.47	119.90
38	A1	2379	G	C5-C6-O6	-6.86	124.49	128.60
38	A1	2812	U	C4-C5-C6	6.86	123.81	119.70
38	A1	2893	U	C4-C5-C6	6.86	123.81	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2981	G	N1-C2-N2	6.86	122.37	116.20
11	B2	218	C	N3-C4-C5	-6.86	119.16	121.90
11	B2	389	G	C4-C5-N7	6.86	113.54	110.80
11	B2	1234	A	C4-C5-N7	-6.86	107.27	110.70
11	B2	1362	C	N3-C4-C5	-6.86	119.16	121.90
11	B2	1435	G	N1-C6-O6	6.86	124.01	119.90
38	A1	402	G	N9-C1'-C2'	-6.86	104.46	112.00
38	A1	784	C	OP1-P-OP2	-6.86	109.32	119.60
38	A1	1158	G	C8-N9-C4	-6.86	103.66	106.40
38	A1	1550	C	N3-C2-O2	-6.86	117.10	121.90
38	A1	2313	G	N7-C8-N9	6.86	116.53	113.10
11	B2	1430	G	C2-N3-C4	-6.85	108.47	111.90
38	A1	2352	G	N9-C4-C5	-6.85	102.66	105.40
38	A1	2777	G	O4'-C1'-N9	6.85	113.68	108.20
11	B2	730	G	N1-C2-N3	-6.85	119.79	123.90
11	B2	753	G	C8-N9-C4	6.85	109.14	106.40
11	B2	1138	G	N9-C4-C5	6.85	108.14	105.40
38	A1	355	G	C8-N9-C4	6.85	109.14	106.40
38	A1	394	A	O4'-C1'-N9	6.85	113.68	108.20
38	A1	694	A	N1-C2-N3	6.85	132.73	129.30
38	A1	789	G	N1-C2-N3	-6.85	119.79	123.90
38	A1	943	G	C5-C6-N1	-6.85	108.07	111.50
38	A1	2045	C	C5-C6-N1	-6.85	117.57	121.00
38	A1	2545	A	C4-C5-C6	6.85	120.43	117.00
38	A1	42	G	N3-C4-C5	-6.85	125.17	128.60
38	A1	2249	A	C4-C5-C6	6.85	120.42	117.00
11	B2	447	A	C2-N3-C4	6.85	114.03	110.60
11	B2	470	G	N1-C2-N3	-6.85	119.79	123.90
11	B2	681	G	N1-C2-N3	-6.85	119.79	123.90
11	B2	698	A	O4'-C1'-N9	6.85	113.68	108.20
11	B2	1221	A	C5-N7-C8	-6.85	100.47	103.90
38	A1	954	A	C5-N7-C8	6.85	107.33	103.90
38	A1	971	G	C5-N7-C8	-6.85	100.88	104.30
38	A1	1465	A	C4-C5-C6	6.85	120.42	117.00
38	A1	1467	G	C5-N7-C8	6.85	107.72	104.30
6	AT	76	ALA	N-CA-CB	6.85	119.69	110.10
11	B2	465	C	N3-C4-N4	6.85	122.79	118.00
11	B2	873	A	C6-C5-N7	-6.85	127.51	132.30
11	B2	1140	A	C4-C5-C6	6.85	120.42	117.00
11	B2	1355	C	C4-C5-C6	6.85	120.82	117.40
38	A1	132	G	O4'-C4'-C3'	-6.85	97.15	104.00
38	A1	294	U	N3-C4-O4	-6.85	114.61	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1088	G	N7-C8-N9	6.85	116.52	113.10
38	A1	1224	A	C4-C5-N7	-6.85	107.28	110.70
38	A1	1565	G	C6-C5-N7	-6.85	126.29	130.40
38	A1	1787	U	O4'-C1'-N1	6.85	113.68	108.20
38	A1	2373	G	C5-C6-N1	-6.85	108.08	111.50
38	A1	2591	A	O4'-C1'-N9	6.85	113.68	108.20
38	A1	2878	A	C5-C6-N1	-6.85	114.28	117.70
38	A1	2999	G	P-O3'-C3'	6.85	127.92	119.70
11	B2	860	G	C8-N9-C4	-6.85	103.66	106.40
38	A1	545	G	O4'-C1'-N9	6.85	113.68	108.20
38	A1	562	G	P-O3'-C3'	-6.85	111.48	119.70
38	A1	1830	U	C3'-C2'-C1'	-6.85	96.02	101.50
11	B2	292	U	C5-C6-N1	6.84	126.12	122.70
11	B2	821	G	C2-N3-C4	-6.84	108.48	111.90
11	B2	993	C	N3-C4-N4	6.84	122.79	118.00
24	BL	61	PHE	CB-CG-CD1	6.84	125.59	120.80
38	A1	532	G	N9-C4-C5	6.84	108.14	105.40
38	A1	557	G	N1-C6-O6	6.84	124.01	119.90
38	A1	1664	G	C4-C5-C6	6.84	122.91	118.80
38	A1	1712	U	N1-C2-O2	-6.84	118.01	122.80
38	A1	1799	G	C5-C6-O6	-6.84	124.49	128.60
11	B2	669	A	O4'-C1'-N9	6.84	113.67	108.20
11	B2	836	G	C4-C5-C6	6.84	122.91	118.80
11	B2	948	G	N3-C2-N2	6.84	124.69	119.90
38	A1	51	G	N3-C2-N2	6.84	124.69	119.90
38	A1	120	G	C5-N7-C8	-6.84	100.88	104.30
38	A1	1036	C	C2-N3-C4	6.84	123.32	119.90
38	A1	1251	G	N1-C2-N2	-6.84	110.04	116.20
10	B1	76	C	N3-C2-O2	6.84	126.69	121.90
11	B2	148	C	N1-C1'-C2'	-6.84	104.47	112.00
11	B2	235	G	C2-N3-C4	6.84	115.32	111.90
11	B2	1178	C	N3-C4-C5	-6.84	119.16	121.90
11	B2	1203	G	C2-N3-C4	6.84	115.32	111.90
38	A1	216	A	N1-C2-N3	6.84	132.72	129.30
38	A1	289	G	C5-N7-C8	6.84	107.72	104.30
38	A1	767	G	C5-C6-O6	-6.84	124.50	128.60
38	A1	1409	U	P-O3'-C3'	-6.84	111.49	119.70
38	A1	1655	G	C5-C6-N1	-6.84	108.08	111.50
38	A1	1868	C	C6-N1-C2	-6.84	117.56	120.30
38	A1	2164	G	C2-N3-C4	-6.84	108.48	111.90
38	A1	2206	G	C8-N9-C4	6.84	109.14	106.40
38	A1	2310	G	C6-N1-C2	-6.84	121.00	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
39	A3	9	A	C4-C5-C6	6.84	120.42	117.00
11	B2	149	U	N1-C2-O2	-6.84	118.01	122.80
11	B2	1375	C	C5-C6-N1	6.84	124.42	121.00
11	B2	1424	G	C6-N1-C2	6.84	129.20	125.10
11	B2	1493	C	P-O3'-C3'	-6.84	111.49	119.70
38	A1	226	C	C5-C4-N4	-6.84	115.41	120.20
38	A1	690	G	N1-C2-N3	-6.84	119.80	123.90
38	A1	944	G	N3-C4-N9	6.84	130.10	126.00
38	A1	975	C	C5-C4-N4	-6.84	115.41	120.20
38	A1	1340	G	N1-C6-O6	6.84	124.00	119.90
38	A1	2781	A	C6-C5-N7	-6.84	127.51	132.30
38	A1	2871	A	C4-C5-N7	-6.84	107.28	110.70
38	A1	2972	G	O4'-C1'-N9	6.84	113.67	108.20
12	AG	42	ALA	N-CA-CB	6.84	119.67	110.10
11	B2	427	G	N3-C4-C5	-6.84	125.18	128.60
11	B2	1465	C	O4'-C1'-N1	6.84	113.67	108.20
38	A1	215	A	C5-C6-N1	-6.84	114.28	117.70
38	A1	558	C	O4'-C1'-N1	6.84	113.67	108.20
38	A1	1197	G	C5-C6-N1	-6.84	108.08	111.50
38	A1	1865	U	N1-C2-N3	-6.84	110.80	114.90
39	A3	19	G	N3-C2-N2	6.84	124.69	119.90
10	B1	44	G	C2-N3-C4	6.84	115.32	111.90
10	B1	58	A	N3-C4-C5	-6.84	122.02	126.80
11	B2	151	G	N3-C2-N2	6.84	124.69	119.90
11	B2	586	C	C5-C6-N1	6.84	124.42	121.00
11	B2	593	G	C4-C5-C6	6.84	122.90	118.80
11	B2	681	G	N3-C2-N2	6.84	124.69	119.90
11	B2	736	A	C4-C5-C6	6.84	120.42	117.00
11	B2	1064	C	P-O3'-C3'	6.84	127.90	119.70
11	B2	1271	G	C5-C6-O6	-6.84	124.50	128.60
38	A1	893	C	C4-C5-C6	6.84	120.82	117.40
63	AP	39	ARG	NE-CZ-NH1	6.84	123.72	120.30
11	B2	862	C	O4'-C1'-N1	6.83	113.67	108.20
38	A1	965	A	P-O3'-C3'	6.83	127.90	119.70
38	A1	1930	A	C5-C6-N6	-6.83	118.23	123.70
38	A1	1949	A	C4-C5-N7	-6.83	107.28	110.70
38	A1	2276	G	C4-C5-C6	6.83	122.90	118.80
38	A1	2801	G	N1-C6-O6	6.83	124.00	119.90
5	AS	26	ARG	NE-CZ-NH1	-6.83	116.88	120.30
11	B2	918	A	P-O3'-C3'	6.83	127.90	119.70
11	B2	1233	G	N1-C6-O6	6.83	124.00	119.90
11	B2	1356	A	O4'-C1'-N9	6.83	113.67	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	BT	33	ARG	NE-CZ-NH2	-6.83	116.88	120.30
38	A1	19	G	C6-N1-C2	-6.83	121.00	125.10
38	A1	574	C	P-O5'-C5'	6.83	131.83	120.90
38	A1	936	G	N3-C4-C5	6.83	132.02	128.60
38	A1	1047	A	C4-C5-C6	6.83	120.42	117.00
38	A1	1697	G	N3-C2-N2	6.83	124.68	119.90
38	A1	2501	G	C2-N3-C4	-6.83	108.48	111.90
39	A3	70	C	N1-C2-N3	-6.83	114.42	119.20
10	B1	20	G	N3-C2-N2	6.83	124.68	119.90
38	A1	609	G	P-O5'-C5'	-6.83	109.97	120.90
38	A1	635	G	C5'-C4'-C3'	-6.83	105.07	116.00
38	A1	713	C	N3-C4-C5	-6.83	119.17	121.90
38	A1	1082	A	N7-C8-N9	6.83	117.22	113.80
38	A1	1960	U	N1-C2-O2	6.83	127.58	122.80
38	A1	2063	U	O4'-C1'-C2'	6.83	113.75	107.60
38	A1	2655	C	O4'-C1'-N1	6.83	113.67	108.20
38	A1	1394	G	C6-C5-N7	-6.83	126.30	130.40
38	A1	2051	A	N1-C6-N6	6.83	122.70	118.60
38	A1	2319	C	C3'-C2'-C1'	6.83	106.96	101.50
61	AN	136	ARG	NE-CZ-NH2	-6.83	116.89	120.30
10	B1	25	G	C5-N7-C8	6.83	107.71	104.30
11	B2	393	A	C5'-C4'-O4'	6.83	117.29	109.10
11	B2	549	A	C5-C6-N1	-6.83	114.29	117.70
19	BG	9	SER	N-CA-CB	6.83	120.74	110.50
38	A1	21	C	C6-N1-C2	-6.83	117.57	120.30
38	A1	360	G	P-O5'-C5'	-6.83	109.97	120.90
38	A1	864	C	C5-C4-N4	-6.83	115.42	120.20
38	A1	2330	A	C5-N7-C8	6.83	107.31	103.90
38	A1	2424	A	C1'-O4'-C4'	-6.83	104.44	109.90
38	A1	2506	G	C5-C6-N1	-6.83	108.09	111.50
38	A1	456	G	C4-C5-C6	6.83	122.90	118.80
38	A1	762	G	O4'-C1'-N9	6.83	113.66	108.20
10	B1	42	C	C2-N3-C4	6.83	123.31	119.90
11	B2	105	C	O4'-C1'-C2'	-6.83	98.97	105.80
11	B2	125	G	N9-C4-C5	-6.83	102.67	105.40
11	B2	408	C	C5-C4-N4	6.83	124.98	120.20
11	B2	610	G	N3-C4-N9	-6.83	121.90	126.00
11	B2	1104	G	O4'-C1'-N9	6.83	113.66	108.20
38	A1	1804	G	C5-C6-O6	-6.83	124.50	128.60
38	A1	1810	G	N1-C2-N3	-6.83	119.81	123.90
38	A1	1861	G	C5-C6-N1	-6.83	108.09	111.50
38	A1	2052	A	O4'-C1'-N9	6.83	113.66	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2338	A	C4-C5-N7	-6.83	107.29	110.70
43	AB	180	TYR	CB-CG-CD2	6.83	125.10	121.00
11	B2	59	C	C6-N1-C2	-6.82	117.57	120.30
11	B2	381	C	C5-C4-N4	-6.82	115.42	120.20
11	B2	1437	G	C4'-C3'-C2'	-6.82	95.78	102.60
23	BK	130	ARG	NE-CZ-NH2	6.82	123.71	120.30
38	A1	1637	C	C6-N1-C2	-6.82	117.57	120.30
38	A1	1762	G	C4-C5-C6	6.82	122.89	118.80
38	A1	2676	A	C5-N7-C8	-6.82	100.49	103.90
38	A1	63	A	C5-C6-N6	-6.82	118.24	123.70
38	A1	1379	A	C6-N1-C2	6.82	122.69	118.60
38	A1	1735	G	C4-C5-N7	6.82	113.53	110.80
7	AU	93	TYR	CG-CD1-CE1	-6.82	115.84	121.30
11	B2	115	A	P-O5'-C5'	-6.82	109.99	120.90
11	B2	646	U	N3-C4-C5	-6.82	110.51	114.60
11	B2	1045	A	C5-N7-C8	6.82	107.31	103.90
11	B2	1414	G	C5-C6-O6	-6.82	124.51	128.60
38	A1	749	G	C5-C6-N1	-6.82	108.09	111.50
38	A1	1784	G	C2-N3-C4	-6.82	108.49	111.90
38	A1	2499	U	C2-N1-C1'	-6.82	109.52	117.70
38	A1	2645	C	N3-C4-C5	-6.82	119.17	121.90
38	A1	2758	G	C5-C6-O6	-6.82	124.51	128.60
38	A1	2899	G	N1-C2-N3	-6.82	119.81	123.90
38	A1	2980	G	N1-C6-O6	6.82	123.99	119.90
11	B2	89	G	N3-C2-N2	6.82	124.67	119.90
11	B2	626	G	C1'-O4'-C4'	6.82	115.36	109.90
11	B2	688	C	C4-C5-C6	6.82	120.81	117.40
11	B2	1410	G	C4-C5-N7	-6.82	108.07	110.80
38	A1	2718	G	C2-N3-C4	6.82	115.31	111.90
10	B1	76	C	N1-C2-N3	-6.82	114.43	119.20
11	B2	13	C	N1-C2-N3	-6.82	114.43	119.20
38	A1	935	A	C5-N7-C8	6.82	107.31	103.90
38	A1	983	G	C5-C6-O6	-6.82	124.51	128.60
38	A1	2039	U	O4'-C1'-N1	6.82	113.65	108.20
38	A1	2044	C	C5-C4-N4	-6.82	115.43	120.20
11	B2	340	A	O4'-C1'-N9	6.82	113.65	108.20
11	B2	553	C	C2-N3-C4	6.82	123.31	119.90
11	B2	616	G	N7-C8-N9	6.82	116.51	113.10
11	B2	1158	G	C6-N1-C2	6.82	129.19	125.10
11	B2	1224	U	N3-C4-C5	-6.82	110.51	114.60
13	BA	88	ALA	N-CA-CB	6.82	119.64	110.10
38	A1	543	G	O4'-C1'-N9	6.82	113.65	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	887	U	O4'-C1'-N1	6.82	113.65	108.20
38	A1	1290	G	C5-C6-N1	-6.82	108.09	111.50
38	A1	1559	A	P-O3'-C3'	-6.82	111.52	119.70
38	A1	2002	A	C5-C6-N1	-6.82	114.29	117.70
38	A1	2009	G	N3-C4-N9	-6.82	121.91	126.00
38	A1	2286	U	N3-C4-C5	-6.82	110.51	114.60
38	A1	2482	G	C5-C6-N1	-6.82	108.09	111.50
16	BD	142	TYR	CG-CD2-CE2	-6.81	115.85	121.30
38	A1	1280	C	C2-N3-C4	6.81	123.31	119.90
38	A1	2162	G	N7-C8-N9	6.81	116.51	113.10
10	B1	38	G	C4-C5-C6	6.81	122.89	118.80
11	B2	594	A	C5-C6-N1	-6.81	114.29	117.70
11	B2	678	G	N3-C2-N2	6.81	124.67	119.90
11	B2	905	A	N9-C4-C5	6.81	108.53	105.80
11	B2	966	G	O4'-C1'-N9	6.81	113.65	108.20
11	B2	1137	G	P-O5'-C5'	6.81	131.80	120.90
11	B2	1225	C	C4-C5-C6	6.81	120.81	117.40
11	B2	1259	A	C5-C6-N6	-6.81	118.25	123.70
33	BU	76	TYR	CB-CG-CD2	-6.81	116.91	121.00
38	A1	1702	C	C5-C4-N4	-6.81	115.43	120.20
39	A3	14	G	C5-C6-O6	-6.81	124.51	128.60
11	B2	355	C	N3-C4-N4	6.81	122.77	118.00
38	A1	580	G	C6-N1-C2	6.81	129.19	125.10
38	A1	1497	C	C4-C5-C6	6.81	120.81	117.40
38	A1	2968	G	N7-C8-N9	6.81	116.50	113.10
58	Ak	192	LEU	CB-CG-CD1	6.81	122.58	111.00
11	B2	174	G	C6-C5-N7	-6.81	126.31	130.40
11	B2	257	U	N3-C2-O2	6.81	126.97	122.20
11	B2	431	U	O4'-C1'-N1	6.81	113.65	108.20
11	B2	1000	G	N1-C2-N3	-6.81	119.81	123.90
11	B2	1042	U	C2-N3-C4	-6.81	122.92	127.00
11	B2	1091	C	C4'-C3'-C2'	-6.81	95.79	102.60
38	A1	88	G	N1-C2-N3	-6.81	119.81	123.90
38	A1	323	U	N1-C2-O2	6.81	127.57	122.80
38	A1	663	A	C4-C5-C6	6.81	120.41	117.00
38	A1	1917	U	C5-C4-O4	-6.81	121.81	125.90
38	A1	2737	G	O4'-C1'-N9	6.81	113.65	108.20
6	AT	75	SER	CB-CA-C	-6.81	97.17	110.10
11	B2	93	A	C5-C6-N6	-6.81	118.25	123.70
20	BH	79	TYR	CB-CG-CD2	6.81	125.08	121.00
38	A1	789	G	OP1-P-OP2	-6.81	109.39	119.60
38	A1	1573	A	N7-C8-N9	-6.81	110.40	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
66	AY	56	TRP	CB-CG-CD1	6.81	135.85	127.00
11	B2	355	C	N1-C2-O2	-6.81	114.82	118.90
38	A1	653	U	P-O3'-C3'	6.81	127.87	119.70
38	A1	916	A	O4'-C1'-N9	6.81	113.64	108.20
38	A1	1594	G	N1-C2-N3	-6.81	119.82	123.90
38	A1	1607	C	C5-C4-N4	-6.81	115.44	120.20
38	A1	2071	C	N3-C2-O2	6.81	126.66	121.90
5	AS	19	ARG	NE-CZ-NH2	-6.80	116.90	120.30
11	B2	1195	U	C5-C6-N1	6.80	126.10	122.70
11	B2	1237	G	C4-C5-N7	6.80	113.52	110.80
34	BV	35	ASP	CB-CG-OD1	-6.80	112.18	118.30
37	BY	32	ALA	N-CA-CB	6.80	119.63	110.10
38	A1	81	G	N9-C4-C5	6.80	108.12	105.40
38	A1	1401	G	O4'-C1'-N9	6.80	113.64	108.20
38	A1	1759	A	N7-C8-N9	-6.80	110.40	113.80
38	A1	2656	A	C5-N7-C8	6.80	107.30	103.90
38	A1	2442	A	C4-C5-C6	6.80	120.40	117.00
38	A1	2672	A	C3'-C2'-C1'	6.80	106.94	101.50
11	B2	205	C	C4'-C3'-C2'	-6.80	95.80	102.60
11	B2	294	A	C2-N3-C4	6.80	114.00	110.60
11	B2	746	A	O4'-C1'-N9	6.80	113.64	108.20
11	B2	1043	U	N1-C2-O2	6.80	127.56	122.80
11	B2	1254	C	C5'-C4'-C3'	6.80	126.88	116.00
11	B2	1380	C	N3-C4-N4	6.80	122.76	118.00
38	A1	787	G	C5-C6-N1	-6.80	108.10	111.50
38	A1	1073	G	C5-C6-N1	-6.80	108.10	111.50
38	A1	2061	A	C6-N1-C2	6.80	122.68	118.60
38	A1	2954	C	C6-N1-C2	-6.80	117.58	120.30
39	A3	56	C	O4'-C1'-N1	6.80	113.64	108.20
62	AO	7	TYR	CB-CG-CD2	-6.80	116.92	121.00
11	B2	400	G	O3'-P-O5'	6.80	116.92	104.00
11	B2	1019	A	O4'-C1'-N9	6.80	113.64	108.20
38	A1	382	G	C4'-C3'-C2'	-6.80	95.80	102.60
38	A1	385	U	O4'-C1'-N1	6.80	113.64	108.20
38	A1	2012	G	C5-C6-N1	6.80	114.90	111.50
38	A1	2713	A	C5-C6-N6	-6.80	118.26	123.70
39	A3	92	G	C6-N1-C2	6.80	129.18	125.10
39	A3	98	G	C4-C5-C6	6.80	122.88	118.80
11	B2	458	G	O4'-C1'-N9	6.80	113.64	108.20
27	BO	9	ARG	NE-CZ-NH1	6.80	123.70	120.30
38	A1	1169	G	C5-C6-O6	-6.80	124.52	128.60
38	A1	1339	C	C1'-O4'-C4'	-6.80	104.46	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2416	G	C4'-C3'-C2'	-6.80	95.80	102.60
38	A1	2562	G	C2'-C3'-O3'	6.80	124.58	113.70
38	A1	2779	G	C8-N9-C1'	6.80	135.84	127.00
10	B1	46	U	O4'-C4'-C3'	-6.80	97.20	104.00
11	B2	6	G	O4'-C1'-N9	6.80	113.64	108.20
11	B2	409	C	P-O5'-C5'	6.80	131.77	120.90
38	A1	58	G	O4'-C1'-N9	6.80	113.64	108.20
38	A1	1936	C	C6-N1-C2	-6.80	117.58	120.30
38	A1	2791	C	C4-C5-C6	6.80	120.80	117.40
11	B2	1197	C	N1-C2-O2	6.79	122.98	118.90
38	A1	9	A	C3'-C2'-C1'	-6.79	96.06	101.50
38	A1	881	G	C8-N9-C4	-6.79	103.68	106.40
38	A1	1811	G	N1-C2-N2	6.79	122.32	116.20
38	A1	1967	G	C5-N7-C8	6.79	107.70	104.30
39	A3	28	C	N3-C4-C5	-6.79	119.18	121.90
45	AC	139	TYR	CB-CG-CD2	-6.79	116.92	121.00
38	A1	180	A	N1-C2-N3	6.79	132.70	129.30
38	A1	608	C	C5-C4-N4	-6.79	115.44	120.20
38	A1	623	G	N1-C2-N2	-6.79	110.09	116.20
38	A1	2560	G	C5-C6-O6	-6.79	124.52	128.60
43	AB	97	LEU	CB-CG-CD2	6.79	122.55	111.00
2	A8	27	ARG	NE-CZ-NH2	-6.79	116.91	120.30
11	B2	275	A	N1-C6-N6	6.79	122.67	118.60
11	B2	656	U	N1-C2-N3	-6.79	110.83	114.90
11	B2	853	G	N1-C6-O6	6.79	123.97	119.90
34	BV	16	ARG	NE-CZ-NH1	6.79	123.69	120.30
38	A1	318	G	C8-N9-C4	-6.79	103.68	106.40
38	A1	1124	G	C4-C5-N7	-6.79	108.08	110.80
38	A1	1561	G	C5-C6-O6	-6.79	124.53	128.60
38	A1	1884	C	N3-C4-C5	-6.79	119.18	121.90
38	A1	1887	A	C5-C6-N1	-6.79	114.30	117.70
11	B2	454	G	N7-C8-N9	-6.79	109.70	113.10
38	A1	795	G	O4'-C1'-N9	6.79	113.63	108.20
38	A1	1400	U	C4-C5-C6	-6.79	115.63	119.70
38	A1	2670	U	P-O5'-C5'	-6.79	110.04	120.90
63	AP	55	TYR	CB-CG-CD1	-6.79	116.93	121.00
10	B1	72	C	C6-N1-C2	-6.79	117.58	120.30
11	B2	2	U	O4'-C1'-N1	6.79	113.63	108.20
38	A1	90	A	N9-C4-C5	6.79	108.52	105.80
38	A1	1095	A	C5-N7-C8	6.79	107.29	103.90
38	A1	2015	G	C5'-C4'-O4'	6.79	117.25	109.10
38	A1	2037	A	C6-C5-N7	-6.79	127.55	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2849	C	C2-N3-C4	6.79	123.29	119.90
9	AX	329	MET	CG-SD-CE	6.79	111.06	100.20
11	B2	1090	C	C2-N3-C4	-6.79	116.51	119.90
38	A1	474	G	C5-N7-C8	-6.79	100.91	104.30
38	A1	1586	G	C4-C5-N7	6.79	113.52	110.80
11	B2	520	G	C5-C6-O6	-6.79	124.53	128.60
11	B2	520	G	N9-C4-C5	6.79	108.11	105.40
11	B2	1127	A	C4-C5-C6	6.79	120.39	117.00
11	B2	1180	G	N1-C2-N3	-6.79	119.83	123.90
17	BE	229	TYR	CB-CG-CD1	6.79	125.07	121.00
38	A1	391	C	C5-C4-N4	-6.79	115.45	120.20
38	A1	808	A	N1-C6-N6	6.79	122.67	118.60
38	A1	1489	G	C5-N7-C8	6.79	107.69	104.30
38	A1	1583	G	C4-N9-C1'	-6.79	117.68	126.50
38	A1	1678	A	C1'-O4'-C4'	-6.79	104.47	109.90
38	A1	2165	A	N7-C8-N9	-6.79	110.41	113.80
38	A1	2391	G	N7-C8-N9	-6.79	109.71	113.10
38	A1	2761	G	C8-N9-C4	-6.79	103.69	106.40
39	A3	121	A	C5-C6-N1	-6.79	114.31	117.70
8	AW	49	ARG	NE-CZ-NH2	-6.78	116.91	120.30
10	B1	74	A	N7-C8-N9	-6.78	110.41	113.80
11	B2	789	G	C4-C5-N7	6.78	113.51	110.80
38	A1	1734	G	C5-C6-O6	-6.78	124.53	128.60
38	A1	2420	C	C4'-C3'-C2'	6.78	109.38	102.60
38	A1	2438	U	C5-C4-O4	-6.78	121.83	125.90
38	A1	2479	C	N1-C2-N3	-6.78	114.45	119.20
38	A1	2492	G	O4'-C1'-N9	6.78	113.63	108.20
38	A1	2527	G	C6-C5-N7	-6.78	126.33	130.40
11	B2	109	U	C2-N3-C4	6.78	131.07	127.00
11	B2	337	C	C2-N3-C4	6.78	123.29	119.90
11	B2	509	C	N3-C4-C5	-6.78	119.19	121.90
38	A1	26	G	C6-C5-N7	-6.78	126.33	130.40
38	A1	1660	A	C6-N1-C2	-6.78	114.53	118.60
38	A1	2683	G	O5'-P-OP2	-6.78	99.60	105.70
10	B1	75	C	C6-N1-C1'	-6.78	112.66	120.80
11	B2	541	G	C6-C5-N7	-6.78	126.33	130.40
11	B2	727	G	O4'-C1'-N9	6.78	113.62	108.20
11	B2	751	C	N1-C2-O2	-6.78	114.83	118.90
11	B2	996	A	N7-C8-N9	6.78	117.19	113.80
14	BB	36	ARG	NE-CZ-NH2	-6.78	116.91	120.30
38	A1	746	C	C4-C5-C6	6.78	120.79	117.40
38	A1	780	G	N7-C8-N9	6.78	116.49	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1367	A	C5-C6-N1	-6.78	114.31	117.70
41	AA	17	ALA	N-CA-CB	6.78	119.59	110.10
11	B2	683	A	N9-C4-C5	-6.78	103.09	105.80
38	A1	560	G	C4-C5-N7	-6.78	108.09	110.80
38	A1	623	G	N3-C2-N2	6.78	124.64	119.90
38	A1	2089	C	O4'-C1'-N1	6.78	113.62	108.20
38	A1	2392	A	C4-C5-N7	6.78	114.09	110.70
38	A1	2616	C	N3-C4-C5	-6.78	119.19	121.90
11	B2	413	G	C4-C5-N7	-6.78	108.09	110.80
25	BM	133	ARG	NE-CZ-NH1	6.78	123.69	120.30
38	A1	204	G	O4'-C1'-N9	6.78	113.62	108.20
38	A1	255	G	C4-C5-C6	6.78	122.87	118.80
38	A1	935	A	C2-N3-C4	-6.78	107.21	110.60
38	A1	1744	A	C5-C6-N1	-6.78	114.31	117.70
38	A1	1923	A	N3-C4-C5	-6.78	122.06	126.80
38	A1	1943	C	C1'-O4'-C4'	6.78	115.32	109.90
38	A1	1988	U	C5-C4-O4	-6.78	121.83	125.90
38	A1	2394	G	C2-N3-C4	6.78	115.29	111.90
11	B2	159	C	C2-N3-C4	6.78	123.29	119.90
11	B2	178	C	C5-C4-N4	-6.78	115.46	120.20
11	B2	1295	C	N3-C4-N4	6.78	122.74	118.00
38	A1	391	C	C6-N1-C2	-6.78	117.59	120.30
38	A1	597	C	C5-C6-N1	-6.78	117.61	121.00
38	A1	667	C	C4-C5-C6	6.78	120.79	117.40
38	A1	815	U	P-O3'-C3'	6.78	127.83	119.70
38	A1	876	C	C6-N1-C2	-6.78	117.59	120.30
38	A1	1028	G	C8-N9-C4	-6.78	103.69	106.40
38	A1	1383	G	N3-C4-N9	-6.78	121.94	126.00
38	A1	1511	C	O4'-C1'-N1	6.78	113.62	108.20
38	A1	1643	A	C5-N7-C8	6.78	107.29	103.90
38	A1	1979	G	N3-C2-N2	6.78	124.64	119.90
38	A1	2111	C	C4-C5-C6	6.78	120.79	117.40
38	A1	2572	U	O4'-C1'-N1	6.78	113.62	108.20
15	BC	53	TYR	CB-CG-CD2	-6.77	116.94	121.00
38	A1	9	A	O4'-C1'-N9	6.77	113.62	108.20
38	A1	67	U	O4'-C1'-N1	6.77	113.62	108.20
38	A1	1078	G	O4'-C1'-N9	6.77	113.62	108.20
11	B2	64	G	C4-C5-C6	6.77	122.86	118.80
11	B2	147	A	P-O5'-C5'	-6.77	110.06	120.90
11	B2	261	G	C8-N9-C4	-6.77	103.69	106.40
11	B2	448	A	P-O3'-C3'	6.77	127.83	119.70
11	B2	777	G	N3-C4-C5	-6.77	125.21	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	954	G	C5-C6-O6	-6.77	124.54	128.60
38	A1	581	A	C6-N1-C2	-6.77	114.54	118.60
38	A1	1808	G	C6-C5-N7	-6.77	126.34	130.40
38	A1	2689	G	C4-C5-N7	6.77	113.51	110.80
11	B2	454	G	C4-C5-C6	6.77	122.86	118.80
20	BH	72	MET	CA-CB-CG	6.77	124.81	113.30
21	BI	50	PHE	CB-CG-CD1	-6.77	116.06	120.80
38	A1	617	G	C5-C6-O6	-6.77	124.54	128.60
38	A1	890	G	C4-N9-C1'	6.77	135.30	126.50
38	A1	957	C	N3-C4-N4	6.77	122.74	118.00
10	B1	24	A	C6-N1-C2	6.77	122.66	118.60
11	B2	1262	U	C2-N3-C4	6.77	131.06	127.00
17	BE	40	ARG	NE-CZ-NH2	6.77	123.69	120.30
38	A1	20	C	N3-C4-N4	6.77	122.74	118.00
38	A1	620	G	C4-C5-C6	6.77	122.86	118.80
38	A1	700	A	C5-C6-N1	-6.77	114.32	117.70
38	A1	2104	G	C6-N1-C2	-6.77	121.04	125.10
39	A3	39	C	C5-C6-N1	6.77	124.38	121.00
11	B2	137	A	C8-N9-C4	6.77	108.51	105.80
11	B2	753	G	N7-C8-N9	-6.77	109.72	113.10
11	B2	1087	C	O4'-C1'-N1	6.77	113.61	108.20
11	B2	1322	C	C1'-O4'-C4'	-6.77	104.48	109.90
26	BN	74	ARG	NE-CZ-NH2	-6.77	116.92	120.30
38	A1	68	G	C5-N7-C8	6.77	107.68	104.30
38	A1	1446	G	C5-C6-O6	-6.77	124.54	128.60
38	A1	2874	C	C5-C6-N1	-6.77	117.62	121.00
65	AV	3	ARG	NE-CZ-NH1	-6.77	116.92	120.30
11	B2	986	G	P-O5'-C5'	-6.77	110.08	120.90
38	A1	1674	G	C5-C6-O6	-6.77	124.54	128.60
38	A1	1905	G	C4-C5-C6	6.77	122.86	118.80
38	A1	2236	C	N3-C2-O2	-6.77	117.16	121.90
38	A1	2657	A	N3-C4-N9	6.77	132.81	127.40
38	A1	2903	U	C4-C5-C6	6.77	123.76	119.70
10	B1	37	A	O4'-C1'-N9	6.76	113.61	108.20
11	B2	216	G	O4'-C1'-N9	6.76	113.61	108.20
11	B2	762	G	C8-N9-C1'	6.76	135.79	127.00
38	A1	74	A	C5-C6-N6	-6.76	118.29	123.70
38	A1	122	G	C1'-O4'-C4'	6.76	115.31	109.90
38	A1	373	G	O4'-C1'-N9	6.76	113.61	108.20
38	A1	601	A	N1-C6-N6	6.76	122.66	118.60
38	A1	641	G	C5-C6-O6	-6.76	124.54	128.60
38	A1	1693	G	N3-C2-N2	6.76	124.64	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2514	C	N3-C2-O2	-6.76	117.16	121.90
38	A1	2542	G	N7-C8-N9	-6.76	109.72	113.10
38	A1	2809	G	C4-C5-C6	6.76	122.86	118.80
39	A3	114	G	N3-C2-N2	-6.76	115.17	119.90
56	AJ	89	TYR	CA-CB-CG	-6.76	100.55	113.40
38	A1	965	A	O4'-C1'-N9	6.76	113.61	108.20
38	A1	1310	A	N1-C2-N3	6.76	132.68	129.30
38	A1	2272	G	O4'-C1'-N9	6.76	113.61	108.20
11	B2	89	G	N1-C2-N3	-6.76	119.84	123.90
11	B2	466	C	C5-C4-N4	-6.76	115.47	120.20
11	B2	653	C	N1-C2-O2	-6.76	114.84	118.90
11	B2	953	C	C5-C6-N1	6.76	124.38	121.00
16	BD	33	TYR	CB-CG-CD1	-6.76	116.94	121.00
38	A1	306	G	N3-C2-N2	6.76	124.63	119.90
38	A1	408	C	C5-C6-N1	6.76	124.38	121.00
38	A1	467	U	N1-C2-N3	-6.76	110.84	114.90
38	A1	502	G	N1-C2-N3	-6.76	119.84	123.90
38	A1	1053	A	C1'-O4'-C4'	6.76	115.31	109.90
38	A1	2299	G	C4-C5-N7	-6.76	108.09	110.80
11	B2	415	C	P-O3'-C3'	-6.76	111.59	119.70
11	B2	771	G	C4-C5-C6	6.76	122.86	118.80
11	B2	1032	A	N1-C2-N3	6.76	132.68	129.30
11	B2	1372	C	C5-C6-N1	6.76	124.38	121.00
38	A1	473	C	C3'-C2'-C1'	6.76	106.91	101.50
38	A1	1273	C	C3'-C2'-C1'	6.76	106.91	101.50
38	A1	1480	G	N3-C4-N9	-6.76	121.94	126.00
38	A1	1849	A	C5-C6-N6	-6.76	118.29	123.70
40	A5	17	ARG	N-CA-CB	6.76	122.77	110.60
62	AO	70	ASP	CB-CG-OD1	-6.76	112.22	118.30
11	B2	1125	C	N3-C4-C5	-6.76	119.20	121.90
11	B2	1212	U	C5-C6-N1	6.76	126.08	122.70
38	A1	388	G	N9-C4-C5	-6.76	102.70	105.40
38	A1	593	C	N1-C2-O2	-6.76	114.84	118.90
38	A1	911	G	C2-N3-C4	-6.76	108.52	111.90
38	A1	1645	U	N3-C2-O2	6.76	126.93	122.20
38	A1	2390	G	C4'-C3'-C2'	-6.76	95.84	102.60
11	B2	111	G	O4'-C1'-N9	6.76	113.61	108.20
11	B2	143	G	C4-C5-C6	6.76	122.85	118.80
11	B2	813	G	N9-C4-C5	-6.76	102.70	105.40
11	B2	978	G	C4-C5-C6	6.76	122.85	118.80
11	B2	1327	C	N3-C4-N4	6.76	122.73	118.00
24	BL	92	GLU	C-N-CA	6.76	138.59	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	308	C	C1'-O4'-C4'	6.76	115.31	109.90
38	A1	542	A	O4'-C1'-N9	6.76	113.61	108.20
38	A1	1568	A	C5-C6-N6	-6.76	118.30	123.70
38	A1	1929	C	N3-C4-N4	-6.76	113.27	118.00
38	A1	2104	G	C8-N9-C4	-6.76	103.70	106.40
38	A1	2429	G	C5-N7-C8	-6.76	100.92	104.30
38	A1	2639	G	C4-C5-N7	-6.76	108.10	110.80
39	A3	38	U	OP1-P-OP2	-6.76	109.46	119.60
11	B2	1076	G	C8-N9-C4	-6.75	103.70	106.40
11	B2	1111	G	C5-C6-O6	-6.75	124.55	128.60
11	B2	1157	G	N1-C2-N3	-6.75	119.85	123.90
38	A1	988	C	C5'-C4'-O4'	-6.75	100.99	109.10
38	A1	2562	G	N7-C8-N9	6.75	116.48	113.10
11	B2	8	U	C5-C4-O4	-6.75	121.85	125.90
11	B2	93	A	C8-N9-C4	6.75	108.50	105.80
11	B2	182	A	N1-C6-N6	6.75	122.65	118.60
11	B2	448	A	C5-N7-C8	6.75	107.28	103.90
11	B2	716	G	C4-C5-N7	-6.75	108.10	110.80
11	B2	884	G	C6-C5-N7	-6.75	126.35	130.40
11	B2	889	G	C1'-O4'-C4'	-6.75	104.50	109.90
11	B2	977	G	C8-N9-C4	-6.75	103.70	106.40
11	B2	1187	A	N9-C4-C5	-6.75	103.10	105.80
38	A1	710	G	C4-C5-C6	6.75	122.85	118.80
38	A1	966	G	C5-C6-O6	-6.75	124.55	128.60
38	A1	1072	U	C5-C4-O4	-6.75	121.85	125.90
38	A1	1094	U	P-O5'-C5'	-6.75	110.09	120.90
38	A1	1114	G	C6-C5-N7	-6.75	126.35	130.40
38	A1	1655	G	C4-C5-N7	6.75	113.50	110.80
11	B2	791	G	C5-C6-O6	-6.75	124.55	128.60
11	B2	1015	C	C2-N3-C4	6.75	123.28	119.90
38	A1	95	G	C4-C5-N7	6.75	113.50	110.80
38	A1	240	A	C4-C5-N7	6.75	114.08	110.70
38	A1	438	G	N1-C6-O6	6.75	123.95	119.90
38	A1	1425	U	C6-N1-C2	6.75	125.05	121.00
38	A1	1906	G	C1'-O4'-C4'	-6.75	104.50	109.90
11	B2	234	G	N9-C4-C5	6.75	108.10	105.40
38	A1	1420	U	C5-C6-N1	6.75	126.08	122.70
38	A1	1537	U	O4'-C1'-N1	6.75	113.60	108.20
38	A1	1912	A	C2-N3-C4	-6.75	107.22	110.60
38	A1	1927	C	C5-C6-N1	6.75	124.38	121.00
38	A1	2672	A	P-O3'-C3'	6.75	127.80	119.70
38	A1	2902	G	C4-C5-C6	6.75	122.85	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2969	G	C4-C5-N7	-6.75	108.10	110.80
39	A3	16	G	N1-C2-N2	6.75	122.28	116.20
44	Ab	79	TYR	CB-CG-CD2	-6.75	116.95	121.00
11	B2	388	G	N1-C6-O6	6.75	123.95	119.90
11	B2	704	C	C5-C4-N4	-6.75	115.48	120.20
19	BG	64	ARG	NE-CZ-NH1	6.75	123.67	120.30
38	A1	523	C	P-O5'-C5'	6.75	131.70	120.90
38	A1	672	C	C2-N3-C4	6.75	123.27	119.90
38	A1	1003	C	C5-C4-N4	-6.75	115.48	120.20
38	A1	2398	C	N1-C2-N3	-6.75	114.48	119.20
38	A1	2669	U	P-O5'-C5'	-6.75	110.10	120.90
51	Ag	19	ARG	NE-CZ-NH1	-6.75	116.93	120.30
61	AN	19	ARG	N-CA-CB	6.75	122.75	110.60
11	B2	601	G	C8-N9-C4	-6.75	103.70	106.40
11	B2	642	G	C8-N9-C1'	6.75	135.77	127.00
11	B2	1051	G	O4'-C1'-N9	6.75	113.60	108.20
11	B2	1338	C	N1-C2-N3	6.75	123.92	119.20
16	BD	142	TYR	CB-CG-CD2	-6.75	116.95	121.00
38	A1	397	G	O4'-C1'-N9	6.75	113.60	108.20
38	A1	416	A	C8-N9-C4	-6.75	103.10	105.80
38	A1	1135	A	C4-C5-C6	6.75	120.37	117.00
38	A1	1153	U	N3-C4-C5	-6.75	110.55	114.60
38	A1	1945	C	C2-N3-C4	6.75	123.27	119.90
38	A1	2044	C	C6-N1-C2	-6.75	117.60	120.30
38	A1	2250	G	O4'-C1'-N9	6.75	113.60	108.20
38	A1	3016	G	N1-C2-N2	6.75	122.27	116.20
11	B2	60	A	C6-N1-C2	-6.75	114.55	118.60
38	A1	94	A	N7-C8-N9	6.75	117.17	113.80
38	A1	439	G	P-O5'-C5'	6.75	131.69	120.90
38	A1	1267	A	P-O5'-C5'	-6.75	110.11	120.90
11	B2	15	U	C5-C4-O4	-6.74	121.85	125.90
11	B2	1267	U	C4-C5-C6	6.74	123.75	119.70
38	A1	909	A	N7-C8-N9	-6.74	110.43	113.80
38	A1	1182	C	C2-N3-C4	6.74	123.27	119.90
38	A1	1197	G	C6-N1-C2	6.74	129.15	125.10
38	A1	1485	A	C6-C5-N7	-6.74	127.58	132.30
38	A1	2052	A	C4-C5-N7	-6.74	107.33	110.70
38	A1	2259	G	N1-C6-O6	6.74	123.95	119.90
38	A1	2304	C	N1-C2-O2	6.74	122.95	118.90
38	A1	2346	A	C6-N1-C2	-6.74	114.55	118.60
38	A1	2356	U	C2-N1-C1'	6.74	125.79	117.70
38	A1	2408	G	C5-C6-O6	-6.74	124.55	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2644	G	C6-N1-C2	6.74	129.15	125.10
38	A1	623	G	N3-C4-C5	-6.74	125.23	128.60
38	A1	2518	G	O4'-C1'-N9	6.74	113.59	108.20
39	A3	16	G	N1-C2-N3	-6.74	119.86	123.90
39	A3	54	A	C5-N7-C8	6.74	107.27	103.90
11	B2	242	A	C4-C5-C6	6.74	120.37	117.00
11	B2	536	A	N7-C8-N9	6.74	117.17	113.80
11	B2	988	A	N1-C2-N3	6.74	132.67	129.30
11	B2	1102	A	O4'-C1'-N9	6.74	113.59	108.20
11	B2	1227	A	P-O3'-C3'	6.74	127.79	119.70
38	A1	663	A	O4'-C1'-N9	6.74	113.59	108.20
38	A1	1151	G	N3-C4-C5	-6.74	125.23	128.60
38	A1	1601	G	C6-C5-N7	-6.74	126.36	130.40
38	A1	1980	U	N3-C4-O4	6.74	124.12	119.40
38	A1	2127	G	C4-C5-C6	6.74	122.84	118.80
38	A1	2782	A	C5-N7-C8	6.74	107.27	103.90
44	Ab	18	ARG	NE-CZ-NH1	6.74	123.67	120.30
64	AR	31	PHE	CB-CG-CD2	6.74	125.52	120.80
11	B2	1024	G	N3-C4-N9	-6.74	121.96	126.00
11	B2	1050	G	N3-C2-N2	6.74	124.62	119.90
11	B2	1090	C	C4-C5-C6	6.74	120.77	117.40
38	A1	689	U	O4'-C1'-N1	6.74	113.59	108.20
38	A1	1288	C	N3-C4-N4	6.74	122.72	118.00
38	A1	1558	U	C4-C5-C6	6.74	123.74	119.70
11	B2	1044	A	C5-C6-N6	-6.74	118.31	123.70
38	A1	45	G	C2-N3-C4	6.74	115.27	111.90
38	A1	1470	C	C5-C6-N1	-6.74	117.63	121.00
38	A1	1537	U	C5-C6-N1	6.74	126.07	122.70
11	B2	22	G	N9-C1'-C2'	-6.74	104.59	112.00
11	B2	387	G	C4-C5-N7	-6.74	108.11	110.80
11	B2	833	C	N3-C4-N4	6.74	122.71	118.00
11	B2	916	U	O4'-C1'-N1	6.74	113.59	108.20
38	A1	238	C	C5'-C4'-C3'	-6.74	105.22	116.00
38	A1	327	G	C5-N7-C8	6.74	107.67	104.30
38	A1	1012	G	N3-C4-N9	-6.74	121.96	126.00
38	A1	1185	A	P-O3'-C3'	-6.74	111.62	119.70
38	A1	1218	C	P-O5'-C5'	-6.74	110.12	120.90
38	A1	1492	C	C5-C6-N1	6.74	124.37	121.00
38	A1	1737	A	C5-C6-N1	-6.74	114.33	117.70
38	A1	2569	G	C5-C6-O6	-6.74	124.56	128.60
38	A1	2704	A	C4-C5-C6	6.74	120.37	117.00
38	A1	2735	C	N3-C4-C5	-6.74	119.21	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	B1	39	A	P-O3'-C3'	6.73	127.78	119.70
11	B2	352	A	C4-C5-N7	-6.73	107.33	110.70
11	B2	1447	A	C8-N9-C4	6.73	108.49	105.80
17	BE	179	PHE	CB-CG-CD1	6.73	125.51	120.80
11	B2	625	G	C2-N3-C4	6.73	115.27	111.90
11	B2	1217	C	C5-C6-N1	6.73	124.37	121.00
11	B2	1236	G	C5-C6-N1	-6.73	108.13	111.50
38	A1	52	A	N1-C6-N6	6.73	122.64	118.60
38	A1	198	C	O4'-C1'-N1	6.73	113.59	108.20
38	A1	239	G	C6-C5-N7	-6.73	126.36	130.40
38	A1	403	G	N7-C8-N9	6.73	116.47	113.10
38	A1	993	G	N1-C2-N3	-6.73	119.86	123.90
38	A1	1071	A	N7-C8-N9	-6.73	110.43	113.80
38	A1	1094	U	N1-C2-N3	6.73	118.94	114.90
38	A1	1575	G	C5-N7-C8	6.73	107.67	104.30
38	A1	1597	G	C1'-O4'-C4'	6.73	115.28	109.90
38	A1	1650	U	P-O5'-C5'	-6.73	110.13	120.90
38	A1	1871	C	C4-C5-C6	6.73	120.77	117.40
38	A1	1923	A	N1-C2-N3	6.73	132.67	129.30
38	A1	2777	G	N1-C6-O6	6.73	123.94	119.90
11	B2	1	A	C8-N9-C4	-6.73	103.11	105.80
11	B2	640	U	C6-N1-C1'	-6.73	111.78	121.20
11	B2	922	G	C8-N9-C4	6.73	109.09	106.40
38	A1	15	A	O4'-C1'-N9	6.73	113.58	108.20
38	A1	1753	G	N3-C2-N2	6.73	124.61	119.90
38	A1	1843	C	C4'-C3'-C2'	-6.73	95.87	102.60
38	A1	2026	C	O4'-C1'-N1	6.73	113.58	108.20
39	A3	94	G	C2-N3-C4	6.73	115.27	111.90
63	AP	54	ARG	NE-CZ-NH2	6.73	123.67	120.30
10	B1	60	A	C5'-C4'-O4'	6.73	117.17	109.10
11	B2	506	G	N7-C8-N9	-6.73	109.73	113.10
33	BU	114	VAL	CG1-CB-CG2	6.73	121.67	110.90
38	A1	652	G	C4-C5-N7	6.73	113.49	110.80
46	AD	155	ARG	NE-CZ-NH2	-6.73	116.94	120.30
11	B2	375	G	OP1-P-OP2	-6.73	109.51	119.60
11	B2	620	G	P-O5'-C5'	6.73	131.66	120.90
11	B2	795	G	N7-C8-N9	6.73	116.46	113.10
11	B2	1063	A	N1-C2-N3	6.73	132.66	129.30
11	B2	1131	G	P-O3'-C3'	6.73	127.77	119.70
11	B2	1339	G	C2-N3-C4	6.73	115.26	111.90
11	B2	1435	G	C8-N9-C4	-6.73	103.71	106.40
38	A1	113	C	N3-C4-N4	6.73	122.71	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	167	G	C6-C5-N7	-6.73	126.36	130.40
38	A1	975	C	N1-C2-N3	-6.73	114.49	119.20
38	A1	1328	G	N1-C6-O6	6.73	123.94	119.90
38	A1	1388	U	O4'-C1'-N1	6.73	113.58	108.20
38	A1	2277	G	N1-C6-O6	6.73	123.94	119.90
38	A1	2626	U	C5-C6-N1	6.73	126.06	122.70
38	A1	2637	U	N1-C2-N3	-6.73	110.86	114.90
11	B2	243	G	C5-C6-O6	-6.73	124.56	128.60
11	B2	1184	U	O4'-C1'-N1	6.73	113.58	108.20
11	B2	1238	G	N9-C4-C5	-6.73	102.71	105.40
11	B2	1239	A	C2-N3-C4	-6.73	107.24	110.60
38	A1	206	A	C1'-O4'-C4'	6.73	115.28	109.90
38	A1	866	G	P-O3'-C3'	6.73	127.77	119.70
38	A1	1126	C	C2-N3-C4	6.73	123.26	119.90
38	A1	1460	C	C5-C4-N4	-6.73	115.49	120.20
38	A1	1724	A	O4'-C1'-N9	6.73	113.58	108.20
38	A1	2759	A	O4'-C1'-N9	6.73	113.58	108.20
39	A3	90	A	N1-C2-N3	6.73	132.66	129.30
11	B2	1021	C	C4-C5-C6	6.72	120.76	117.40
11	B2	1321	U	N1-C2-N3	-6.72	110.86	114.90
11	B2	1325	C	N3-C4-C5	-6.72	119.21	121.90
38	A1	51	G	N9-C4-C5	-6.72	102.71	105.40
38	A1	1289	C	C4-C5-C6	-6.72	114.04	117.40
38	A1	1308	G	C5-C6-O6	-6.72	124.57	128.60
38	A1	2178	A	C8-N9-C1'	-6.72	115.60	127.70
38	A1	2308	C	C5-C4-N4	-6.72	115.49	120.20
38	A1	2558	U	N3-C4-C5	-6.72	110.56	114.60
11	B2	866	A	N9-C4-C5	6.72	108.49	105.80
11	B2	1127	A	O4'-C1'-N9	6.72	113.58	108.20
38	A1	65	G	N1-C6-O6	6.72	123.93	119.90
38	A1	491	G	N3-C4-C5	-6.72	125.24	128.60
38	A1	583	A	C2-N3-C4	-6.72	107.24	110.60
38	A1	1310	A	C2-N3-C4	-6.72	107.24	110.60
38	A1	1808	G	N1-C2-N3	-6.72	119.87	123.90
38	A1	2190	A	C4-C5-C6	6.72	120.36	117.00
38	A1	2252	C	P-O5'-C5'	6.72	131.66	120.90
11	B2	85	A	C6-N1-C2	-6.72	114.57	118.60
11	B2	329	G	O4'-C1'-N9	6.72	113.58	108.20
11	B2	503	G	C2-N3-C4	-6.72	108.54	111.90
11	B2	615	G	C5-N7-C8	-6.72	100.94	104.30
11	B2	729	G	C6-N1-C2	6.72	129.13	125.10
38	A1	1094	U	N3-C4-C5	-6.72	110.57	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2110	C	N3-C2-O2	6.72	126.61	121.90
38	A1	2510	A	C5-C6-N6	-6.72	118.32	123.70
38	A1	2710	G	C5-N7-C8	6.72	107.66	104.30
11	B2	375	G	C4'-C3'-C2'	-6.72	95.88	102.60
11	B2	650	A	P-O3'-C3'	6.72	127.77	119.70
38	A1	170	A	C4-C5-C6	6.72	120.36	117.00
38	A1	1561	G	C6-C5-N7	-6.72	126.37	130.40
38	A1	1665	G	C4-C5-N7	6.72	113.49	110.80
38	A1	1979	G	C6-C5-N7	-6.72	126.37	130.40
38	A1	2187	C	C6-N1-C1'	-6.72	112.74	120.80
38	A1	2518	G	C4-C5-N7	-6.72	108.11	110.80
38	A1	2979	C	C5-C4-N4	-6.72	115.50	120.20
11	B2	568	C	O4'-C1'-N1	6.72	113.58	108.20
11	B2	1386	C	N3-C2-O2	6.72	126.60	121.90
63	AP	25	TYR	CG-CD2-CE2	-6.72	115.93	121.30
10	B1	54	G	N9-C4-C5	6.72	108.09	105.40
11	B2	376	G	C6-C5-N7	-6.72	126.37	130.40
11	B2	1350	U	C5-C6-N1	-6.72	119.34	122.70
38	A1	36	G	C6-C5-N7	-6.72	126.37	130.40
38	A1	2125	C	N3-C2-O2	-6.72	117.20	121.90
61	AN	123	ALA	N-CA-CB	6.72	119.50	110.10
11	B2	332	C	O4'-C1'-N1	6.71	113.57	108.20
11	B2	488	A	C1'-O4'-C4'	6.71	115.27	109.90
11	B2	667	G	O4'-C1'-N9	6.71	113.57	108.20
11	B2	846	G	N1-C2-N2	-6.71	110.16	116.20
11	B2	1062	G	N7-C8-N9	-6.71	109.74	113.10
38	A1	488	A	N1-C2-N3	-6.71	125.94	129.30
38	A1	1111	G	C5-N7-C8	-6.71	100.94	104.30
38	A1	1141	C	C2-N3-C4	6.71	123.26	119.90
38	A1	1198	G	C5-N7-C8	-6.71	100.94	104.30
38	A1	1746	C	C4-C5-C6	6.71	120.76	117.40
38	A1	2080	G	C8-N9-C4	-6.71	103.71	106.40
38	A1	2547	A	C6-C5-N7	-6.71	127.60	132.30
11	B2	372	G	N7-C8-N9	6.71	116.46	113.10
38	A1	632	G	N3-C4-C5	6.71	131.96	128.60
38	A1	1570	C	C6-N1-C2	-6.71	117.61	120.30
38	A1	2468	C	C4-C5-C6	6.71	120.76	117.40
38	A1	2631	C	C5-C6-N1	6.71	124.36	121.00
5	AS	50	TYR	CB-CG-CD1	-6.71	116.97	121.00
11	B2	22	G	C8-N9-C1'	6.71	135.73	127.00
11	B2	614	G	C5-C6-O6	-6.71	124.57	128.60
11	B2	919	U	C2-N1-C1'	6.71	125.75	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	B2	952	A	C4-C5-N7	-6.71	107.34	110.70
11	B2	1269	G	O4'-C1'-N9	6.71	113.57	108.20
11	B2	1353	C	C5-C4-N4	-6.71	115.50	120.20
22	BJ	79	ARG	NE-CZ-NH2	6.71	123.66	120.30
38	A1	25	U	N1-C2-O2	-6.71	118.10	122.80
38	A1	429	U	O4'-C1'-N1	6.71	113.57	108.20
38	A1	2329	A	P-O3'-C3'	6.71	127.75	119.70
38	A1	2664	G	N7-C8-N9	-6.71	109.74	113.10
38	A1	2716	C	C6-N1-C1'	-6.71	112.75	120.80
38	A1	2723	G	N1-C2-N3	-6.71	119.87	123.90
11	B2	251	G	C4-C5-N7	-6.71	108.12	110.80
11	B2	1142	G	N1-C6-O6	6.71	123.93	119.90
11	B2	1205	G	C8-N9-C1'	6.71	135.72	127.00
11	B2	1480	G	C6-N1-C2	6.71	129.13	125.10
38	A1	2977	G	C4-C5-N7	6.71	113.48	110.80
43	AB	42	ARG	NE-CZ-NH1	6.71	123.66	120.30
11	B2	822	A	C6-C5-N7	-6.71	127.60	132.30
38	A1	896	G	C8-N9-C4	-6.71	103.72	106.40
38	A1	1116	A	C5-C6-N1	-6.71	114.34	117.70
38	A1	1998	G	C5-C6-N1	-6.71	108.15	111.50
11	B2	358	G	N7-C8-N9	6.71	116.45	113.10
11	B2	1384	G	C5-C6-O6	-6.71	124.58	128.60
34	BV	73	ASP	CB-CG-OD2	6.71	124.33	118.30
38	A1	48	G	N3-C2-N2	6.71	124.59	119.90
38	A1	204	G	C5-C6-O6	-6.71	124.58	128.60
38	A1	305	G	C5-C6-N1	-6.71	108.15	111.50
38	A1	768	C	C5'-C4'-C3'	-6.71	105.27	116.00
38	A1	874	U	C4-C5-C6	-6.71	115.68	119.70
38	A1	1364	C	N1-C2-O2	6.71	122.92	118.90
38	A1	1703	G	N3-C4-C5	-6.71	125.25	128.60
38	A1	2245	C	C2-N3-C4	6.71	123.25	119.90
38	A1	2514	C	N1-C2-N3	6.71	123.89	119.20
38	A1	2805	U	C3'-C2'-C1'	6.71	106.87	101.50
58	Ak	165	ALA	N-CA-CB	6.71	119.49	110.10
10	B1	6	G	C4'-C3'-C2'	-6.71	95.89	102.60
38	A1	1163	U	C6-N1-C1'	-6.71	111.81	121.20
38	A1	2776	A	C5-C6-N6	-6.71	118.34	123.70
39	A3	81	C	O4'-C1'-N1	6.71	113.56	108.20
11	B2	210	A	N1-C2-N3	-6.70	125.95	129.30
11	B2	502	U	C1'-O4'-C4'	6.70	115.26	109.90
11	B2	520	G	C8-N9-C4	-6.70	103.72	106.40
11	B2	847	A	C4-C5-C6	6.70	120.35	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BM	132	ARG	NE-CZ-NH1	-6.70	116.95	120.30
38	A1	604	A	O4'-C4'-C3'	-6.70	97.30	104.00
38	A1	1994	G	C2-N3-C4	-6.70	108.55	111.90
38	A1	2629	U	C5-C4-O4	-6.70	121.88	125.90
38	A1	2725	U	P-O5'-C5'	-6.70	110.17	120.90
38	A1	1950	G	C4-N9-C1'	-6.70	117.79	126.50
43	AB	24	PHE	CB-CG-CD2	6.70	125.49	120.80
11	B2	418	G	C5-C6-N1	-6.70	108.15	111.50
38	A1	922	C	N1-C2-O2	6.70	122.92	118.90
38	A1	1035	G	N3-C4-N9	6.70	130.02	126.00
38	A1	1868	C	C5-C6-N1	6.70	124.35	121.00
38	A1	1903	G	O4'-C1'-N9	6.70	113.56	108.20
38	A1	2547	A	P-O3'-C3'	6.70	127.74	119.70
11	B2	433	U	O4'-C1'-N1	6.70	113.56	108.20
11	B2	1177	C	C5-C4-N4	-6.70	115.51	120.20
11	B2	1179	C	C5-C6-N1	6.70	124.35	121.00
11	B2	1195	U	C5-C4-O4	-6.70	121.88	125.90
38	A1	546	C	C5-C4-N4	-6.70	115.51	120.20
38	A1	607	C	C5-C4-N4	-6.70	115.51	120.20
38	A1	852	A	C2-N3-C4	6.70	113.95	110.60
38	A1	1109	G	N3-C4-C5	-6.70	125.25	128.60
38	A1	1263	C	C5-C4-N4	-6.70	115.51	120.20
38	A1	1401	G	C8-N9-C4	6.70	109.08	106.40
38	A1	1809	G	O4'-C1'-N9	6.70	113.56	108.20
11	B2	207	G	C4-C5-N7	6.70	113.48	110.80
11	B2	933	G	N1-C2-N3	-6.70	119.88	123.90
21	BI	78	ARG	NE-CZ-NH1	6.70	123.65	120.30
24	BL	78	ASP	CB-CG-OD2	-6.70	112.27	118.30
38	A1	627	G	N7-C8-N9	6.70	116.45	113.10
38	A1	2231	G	C4-N9-C1'	6.70	135.21	126.50
38	A1	2415	C	C4'-C3'-C2'	-6.70	95.90	102.60
39	A3	27	C	N1-C2-N3	-6.70	114.51	119.20
11	B2	146	A	N9-C4-C5	-6.70	103.12	105.80
38	A1	118	A	C4-C5-C6	6.70	120.35	117.00
38	A1	131	C	O4'-C1'-C2'	-6.70	99.11	105.80
38	A1	414	G	O4'-C1'-C2'	-6.70	99.11	105.80
38	A1	697	U	O4'-C1'-N1	6.70	113.56	108.20
38	A1	1243	C	P-O3'-C3'	-6.70	111.67	119.70
38	A1	1835	A	N7-C8-N9	6.70	117.15	113.80
38	A1	2013	A	C5-C6-N6	-6.70	118.34	123.70
38	A1	2244	G	C4-C5-N7	6.70	113.48	110.80
38	A1	2412	A	C5-N7-C8	6.70	107.25	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2974	U	C5-C6-N1	-6.70	119.35	122.70
67	AZ	40	ASN	N-CA-C	-6.70	92.92	111.00
10	B1	23	G	C2-N3-C4	6.69	115.25	111.90
11	B2	681	G	C6-C5-N7	-6.69	126.38	130.40
38	A1	943	G	N1-C6-O6	6.69	123.92	119.90
38	A1	1971	C	N1-C2-N3	-6.69	114.51	119.20
38	A1	2001	U	C2-N3-C4	-6.69	122.98	127.00
11	B2	347	G	C4-C5-C6	6.69	122.81	118.80
11	B2	485	A	C4-C5-C6	6.69	120.35	117.00
11	B2	1026	A	C8-N9-C4	-6.69	103.12	105.80
38	A1	562	G	N7-C8-N9	-6.69	109.75	113.10
38	A1	648	C	C4-C5-C6	6.69	120.75	117.40
38	A1	1216	A	N9-C4-C5	6.69	108.48	105.80
38	A1	1408	G	C6-C5-N7	-6.69	126.39	130.40
38	A1	1517	G	C6-N1-C2	-6.69	121.08	125.10
38	A1	2370	C	C4-C5-C6	6.69	120.75	117.40
38	A1	2439	G	C5-C6-N1	6.69	114.85	111.50
38	A1	2740	G	O4'-C1'-N9	6.69	113.55	108.20
38	A1	2883	C	C4-C5-C6	6.69	120.75	117.40
39	A3	67	U	N3-C4-O4	6.69	124.08	119.40
9	AX	298	TYR	CB-CG-CD2	-6.69	116.98	121.00
11	B2	286	G	O4'-C1'-N9	6.69	113.55	108.20
11	B2	752	G	N3-C2-N2	6.69	124.58	119.90
11	B2	1185	A	N3-C4-C5	-6.69	122.12	126.80
11	B2	1217	C	N3-C4-N4	6.69	122.68	118.00
30	BR	34	PHE	CZ-CE2-CD2	-6.69	112.07	120.10
38	A1	1099	C	C5-C4-N4	-6.69	115.52	120.20
38	A1	1406	G	C6-N1-C2	6.69	129.12	125.10
38	A1	1576	C	C4'-C3'-C2'	-6.69	95.91	102.60
38	A1	1637	C	N3-C4-N4	6.69	122.68	118.00
38	A1	2235	G	O4'-C1'-N9	6.69	113.55	108.20
38	A1	2238	G	C4'-C3'-C2'	-6.69	95.91	102.60
38	A1	2808	C	N3-C4-N4	6.69	122.68	118.00
38	A1	1089	C	N3-C4-N4	6.69	122.68	118.00
38	A1	2288	C	C6-N1-C2	6.69	122.98	120.30
38	A1	2437	G	N3-C4-C5	6.69	131.94	128.60
38	A1	2633	A	N9-C4-C5	-6.69	103.12	105.80
38	A1	2718	G	O4'-C1'-N9	6.69	113.55	108.20
10	B1	72	C	N3-C4-N4	6.69	122.68	118.00
11	B2	1219	C	N3-C2-O2	6.69	126.58	121.90
11	B2	1458	A	N3-C4-C5	-6.69	122.12	126.80
38	A1	1093	G	N1-C2-N3	-6.69	119.89	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1904	G	C5-C6-N1	6.69	114.84	111.50
38	A1	2036	A	C4-C5-C6	6.69	120.34	117.00
38	A1	2340	A	C5-C6-N6	-6.69	118.35	123.70
38	A1	2823	G	N7-C8-N9	-6.69	109.76	113.10
38	A1	2902	G	C6-C5-N7	-6.69	126.39	130.40
41	AA	201	SER	CB-CA-C	-6.69	97.39	110.10
11	B2	141	C	C3'-C2'-C1'	6.69	106.85	101.50
11	B2	322	G	C6-N1-C2	6.69	129.11	125.10
11	B2	1448	A	N7-C8-N9	6.69	117.14	113.80
38	A1	513	C	C2-N1-C1'	6.69	126.16	118.80
38	A1	717	A	N9-C4-C5	6.69	108.47	105.80
38	A1	1858	G	O4'-C1'-N9	6.69	113.55	108.20
38	A1	2082	C	C2-N3-C4	6.69	123.24	119.90
38	A1	2379	G	N1-C2-N3	-6.69	119.89	123.90
38	A1	2531	G	C6-C5-N7	-6.69	126.39	130.40
10	B1	9	A	C4-C5-N7	-6.68	107.36	110.70
11	B2	65	G	O4'-C1'-N9	6.68	113.55	108.20
11	B2	129	G	O4'-C1'-N9	6.68	113.55	108.20
11	B2	338	C	C6-N1-C2	-6.68	117.63	120.30
11	B2	420	C	N3-C4-N4	6.68	122.68	118.00
38	A1	1224	A	C5-C6-N1	-6.68	114.36	117.70
38	A1	2244	G	N1-C2-N3	-6.68	119.89	123.90
38	A1	2995	A	O4'-C1'-N9	6.68	113.55	108.20
39	A3	102	G	C2-N3-C4	6.68	115.24	111.90
11	B2	681	G	C8-N9-C4	6.68	109.07	106.40
11	B2	1271	G	N9-C4-C5	-6.68	102.73	105.40
38	A1	404	G	C4'-C3'-C2'	-6.68	95.92	102.60
38	A1	774	G	N3-C2-N2	-6.68	115.22	119.90
38	A1	1012	G	C8-N9-C4	-6.68	103.73	106.40
38	A1	1205	U	C6-N1-C2	-6.68	116.99	121.00
38	A1	1587	A	C2-N3-C4	6.68	113.94	110.60
38	A1	2301	C	N3-C4-N4	-6.68	113.32	118.00
38	A1	2323	C	O4'-C1'-N1	6.68	113.55	108.20
38	A1	2844	G	P-O3'-C3'	-6.68	111.68	119.70
38	A1	543	G	C4'-C3'-C2'	-6.68	95.92	102.60
38	A1	969	U	N3-C2-O2	-6.68	117.52	122.20
38	A1	1234	A	C8-N9-C4	-6.68	103.13	105.80
38	A1	1695	G	N1-C6-O6	6.68	123.91	119.90
38	A1	2022	U	C6-N1-C2	-6.68	116.99	121.00
39	A3	31	U	C3'-C2'-C1'	6.68	106.84	101.50
39	A3	37	U	C5-C4-O4	-6.68	121.89	125.90
11	B2	128	A	N9-C4-C5	-6.68	103.13	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	237	C	N3-C4-N4	6.68	122.67	118.00
11	B2	558	C	C6-N1-C2	-6.68	117.63	120.30
11	B2	561	A	C5-N7-C8	6.68	107.24	103.90
11	B2	593	G	C5-C6-O6	-6.68	124.59	128.60
11	B2	1455	A	O4'-C1'-N9	6.68	113.54	108.20
38	A1	1035	G	N1-C6-O6	6.68	123.91	119.90
38	A1	1900	U	N3-C4-O4	6.68	124.08	119.40
38	A1	1914	U	C5-C6-N1	6.68	126.04	122.70
39	A3	50	G	N1-C2-N3	-6.68	119.89	123.90
11	B2	38	G	N1-C2-N3	-6.68	119.89	123.90
11	B2	503	G	C3'-C2'-C1'	-6.68	96.16	101.50
19	BG	53	LYS	C-N-CA	6.68	138.39	121.70
38	A1	462	A	C4'-C3'-C2'	-6.68	95.92	102.60
38	A1	2314	U	C2-N3-C4	-6.68	122.99	127.00
11	B2	216	G	N9-C1'-C2'	-6.68	104.66	112.00
11	B2	322	G	C6-C5-N7	-6.68	126.39	130.40
20	BH	16	LYS	N-CA-CB	6.68	122.62	110.60
38	A1	81	G	N3-C4-C5	-6.68	125.26	128.60
38	A1	1671	A	N3-C4-N9	6.68	132.74	127.40
38	A1	2130	C	C4-C5-C6	6.68	120.74	117.40
38	A1	2656	A	P-O3'-C3'	6.68	127.71	119.70
39	A3	85	C	N3-C4-N4	6.68	122.67	118.00
10	B1	14	A	C5-C6-N6	-6.67	118.36	123.70
11	B2	217	C	N1-C2-O2	6.67	122.91	118.90
11	B2	235	G	N3-C4-N9	6.67	130.00	126.00
11	B2	873	A	N1-C2-N3	6.67	132.64	129.30
11	B2	1128	U	C5-C4-O4	-6.67	121.90	125.90
38	A1	770	G	N9-C4-C5	6.67	108.07	105.40
38	A1	853	G	N1-C2-N3	-6.67	119.89	123.90
38	A1	1396	A	C5-C6-N1	-6.67	114.36	117.70
38	A1	1552	C	N1-C2-O2	-6.67	114.89	118.90
38	A1	1785	G	C4-C5-N7	-6.67	108.13	110.80
38	A1	2363	G	N1-C6-O6	6.67	123.91	119.90
38	A1	2455	G	C2-N3-C4	6.67	115.24	111.90
38	A1	2953	U	C3'-C2'-C1'	6.67	106.84	101.50
38	A1	3008	C	C2-N3-C4	6.67	123.24	119.90
38	A1	667	C	N3-C2-O2	6.67	126.57	121.90
38	A1	2078	A	C5-N7-C8	6.67	107.24	103.90
38	A1	2881	G	O4'-C1'-N9	6.67	113.54	108.20
11	B2	31	U	O4'-C4'-C3'	-6.67	97.33	104.00
11	B2	217	C	C1'-O4'-C4'	6.67	115.24	109.90
11	B2	236	C	O4'-C1'-N1	6.67	113.54	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	583	G	N9-C4-C5	-6.67	102.73	105.40
11	B2	831	A	C4-C5-N7	-6.67	107.36	110.70
11	B2	986	G	C4-N9-C1'	6.67	135.17	126.50
11	B2	1288	C	O4'-C1'-N1	6.67	113.54	108.20
38	A1	340	G	N7-C8-N9	-6.67	109.76	113.10
38	A1	1442	G	C5-N7-C8	6.67	107.64	104.30
38	A1	1536	U	C5-C6-N1	6.67	126.03	122.70
38	A1	2390	G	O4'-C1'-N9	6.67	113.54	108.20
38	A1	2524	C	C6-N1-C2	-6.67	117.63	120.30
38	A1	2768	C	P-O5'-C5'	6.67	131.57	120.90
39	A3	17	G	N1-C2-N3	-6.67	119.90	123.90
65	AV	48	ARG	NE-CZ-NH2	-6.67	116.96	120.30
11	B2	140	C	C5-C4-N4	6.67	124.87	120.20
11	B2	460	C	O4'-C1'-N1	6.67	113.54	108.20
11	B2	844	G	N7-C8-N9	6.67	116.44	113.10
11	B2	1464	C	N3-C2-O2	-6.67	117.23	121.90
38	A1	280	A	C5-C6-N6	-6.67	118.36	123.70
38	A1	691	G	C5-C6-O6	-6.67	124.60	128.60
38	A1	841	U	N1-C2-N3	6.67	118.90	114.90
38	A1	974	U	O4'-C1'-N1	6.67	113.54	108.20
38	A1	2335	G	C6-C5-N7	-6.67	126.40	130.40
62	AO	113	ARG	NE-CZ-NH1	6.67	123.64	120.30
10	B1	9	A	N9-C4-C5	6.67	108.47	105.80
11	B2	1128	U	C6-N1-C1'	-6.67	111.86	121.20
11	B2	1294	G	C2-N3-C4	6.67	115.23	111.90
38	A1	636	G	C5-N7-C8	6.67	107.64	104.30
38	A1	1102	C	N1-C2-O2	6.67	122.90	118.90
38	A1	2489	C	C5-C4-N4	-6.67	115.53	120.20
12	AG	27	ARG	NE-CZ-NH2	-6.67	116.97	120.30
11	B2	562	A	C4-C5-C6	6.67	120.33	117.00
11	B2	1003	G	N1-C6-O6	6.67	123.90	119.90
38	A1	318	G	C5'-C4'-C3'	-6.67	105.33	116.00
38	A1	1113	G	N3-C4-C5	6.67	131.93	128.60
38	A1	1141	C	C5-C4-N4	-6.67	115.53	120.20
38	A1	1729	C	C2-N3-C4	6.67	123.23	119.90
38	A1	1982	C	C4-C5-C6	6.67	120.73	117.40
38	A1	2321	A	C4-C5-C6	6.67	120.33	117.00
38	A1	2457	C	O4'-C1'-N1	6.67	113.53	108.20
11	B2	1141	G	N1-C2-N3	-6.67	119.90	123.90
38	A1	409	C	O4'-C1'-N1	6.67	113.53	108.20
38	A1	1224	A	P-O3'-C3'	6.67	127.70	119.70
58	Ak	213	TYR	CB-CG-CD1	-6.67	117.00	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
9	AX	277	TYR	CB-CG-CD2	6.66	125.00	121.00
11	B2	543	C	C6-N1-C2	6.66	122.97	120.30
38	A1	843	C	O4'-C1'-N1	6.66	113.53	108.20
38	A1	1168	A	C1'-O4'-C4'	6.66	115.23	109.90
38	A1	1500	C	C5'-C4'-C3'	6.66	126.66	116.00
38	A1	1641	G	C5-N7-C8	-6.66	100.97	104.30
38	A1	1728	C	C2-N3-C4	6.66	123.23	119.90
38	A1	1760	C	N3-C2-O2	-6.66	117.24	121.90
38	A1	2034	G	N9-C4-C5	-6.66	102.73	105.40
38	A1	2036	A	C5-C6-N6	-6.66	118.37	123.70
38	A1	2188	C	N3-C4-N4	6.66	122.66	118.00
38	A1	1028	G	N1-C2-N3	-6.66	119.90	123.90
38	A1	1402	C	C2-N3-C4	6.66	123.23	119.90
38	A1	2281	A	C5-N7-C8	6.66	107.23	103.90
11	B2	1313	G	C5-C6-O6	-6.66	124.60	128.60
11	B2	1338	C	C2-N3-C4	-6.66	116.57	119.90
38	A1	283	U	C5-C4-O4	-6.66	121.90	125.90
38	A1	928	A	C5-C6-N1	-6.66	114.37	117.70
38	A1	1178	G	C4-N9-C1'	6.66	135.16	126.50
38	A1	1381	C	N1-C2-N3	-6.66	114.54	119.20
38	A1	1392	G	N3-C2-N2	6.66	124.56	119.90
38	A1	1427	A	P-O3'-C3'	6.66	127.69	119.70
38	A1	1770	A	C5'-C4'-O4'	6.66	117.09	109.10
38	A1	2204	C	N3-C4-N4	6.66	122.66	118.00
38	A1	3000	U	C6-N1-C2	-6.66	117.00	121.00
10	B1	25	G	N1-C2-N3	-6.66	119.91	123.90
10	B1	45	G	C6-N1-C2	-6.66	121.11	125.10
11	B2	266	A	C2-N3-C4	-6.66	107.27	110.60
11	B2	567	A	C4-C5-N7	-6.66	107.37	110.70
11	B2	700	G	C5-C6-O6	-6.66	124.61	128.60
11	B2	884	G	N3-C4-C5	-6.66	125.27	128.60
38	A1	314	A	C4-C5-C6	6.66	120.33	117.00
38	A1	389	C	O4'-C1'-N1	6.66	113.53	108.20
38	A1	478	C	N3-C4-C5	-6.66	119.24	121.90
38	A1	1161	A	C5-C6-N6	-6.66	118.37	123.70
38	A1	2163	G	N3-C4-C5	6.66	131.93	128.60
38	A1	2380	A	N3-C4-C5	-6.66	122.14	126.80
38	A1	2665	G	C5-C6-N1	6.66	114.83	111.50
38	A1	2728	U	O4'-C1'-N1	6.66	113.53	108.20
44	Ab	59	ARG	NE-CZ-NH1	6.66	123.63	120.30
10	B1	5	C	N1-C2-O2	-6.66	114.91	118.90
11	B2	1079	G	N3-C2-N2	6.66	124.56	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1228	A	N9-C4-C5	6.66	108.46	105.80
38	A1	647	G	C8-N9-C4	-6.66	103.74	106.40
38	A1	662	A	O4'-C1'-N9	6.66	113.53	108.20
38	A1	1527	G	C8-N9-C4	-6.66	103.74	106.40
38	A1	2993	G	C2-N3-C4	6.66	115.23	111.90
42	Aa	32	VAL	CA-CB-CG1	6.66	120.89	110.90
11	B2	23	G	C8-N9-C4	6.66	109.06	106.40
11	B2	527	A	C4-C5-C6	6.66	120.33	117.00
11	B2	756	A	C5-C6-N6	-6.66	118.38	123.70
38	A1	449	G	N1-C2-N2	-6.66	110.21	116.20
38	A1	848	A	C8-N9-C4	-6.66	103.14	105.80
38	A1	1274	G	C5-C6-N1	6.66	114.83	111.50
38	A1	1676	G	N3-C2-N2	6.66	124.56	119.90
38	A1	2136	G	C4-C5-N7	6.66	113.46	110.80
38	A1	2227	G	C6-C5-N7	-6.66	126.41	130.40
38	A1	2627	C	N3-C4-N4	6.66	122.66	118.00
43	AB	35	TYR	CG-CD1-CE1	-6.66	115.98	121.30
11	B2	284	A	C6-C5-N7	-6.65	127.64	132.30
11	B2	1006	C	C4'-C3'-C2'	-6.65	95.95	102.60
38	A1	275	C	N3-C4-C5	-6.65	119.24	121.90
38	A1	358	C	N3-C4-C5	-6.65	119.24	121.90
38	A1	1642	G	O4'-C1'-N9	6.65	113.52	108.20
38	A1	2067	U	O4'-C1'-N1	6.65	113.52	108.20
38	A1	2497	G	N1-C6-O6	6.65	123.89	119.90
11	B2	651	U	C3'-C2'-C1'	-6.65	96.18	101.50
11	B2	835	C	C4-C5-C6	6.65	120.73	117.40
11	B2	883	G	C4'-C3'-C2'	-6.65	95.95	102.60
11	B2	992	G	N1-C2-N3	-6.65	119.91	123.90
23	BK	2	ARG	NE-CZ-NH2	-6.65	116.97	120.30
38	A1	147	C	C4-C5-C6	-6.65	114.07	117.40
38	A1	191	U	C4-C5-C6	6.65	123.69	119.70
38	A1	1004	U	C3'-C2'-C1'	-6.65	96.18	101.50
38	A1	1027	A	C1'-O4'-C4'	-6.65	104.58	109.90
38	A1	1276	G	C4-C5-N7	6.65	113.46	110.80
38	A1	1759	A	C2-N3-C4	-6.65	107.27	110.60
38	A1	2512	C	C2-N3-C4	6.65	123.23	119.90
38	A1	2691	G	O4'-C1'-N9	6.65	113.52	108.20
38	A1	2729	A	C5-N7-C8	6.65	107.23	103.90
11	B2	286	G	N1-C2-N3	-6.65	119.91	123.90
11	B2	479	C	C6-N1-C2	-6.65	117.64	120.30
11	B2	878	U	O4'-C1'-N1	6.65	113.52	108.20
11	B2	1143	G	C6-C5-N7	-6.65	126.41	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	130	G	N3-C4-C5	-6.65	125.28	128.60
38	A1	1205	U	O4'-C1'-N1	6.65	113.52	108.20
38	A1	1444	A	O4'-C1'-N9	6.65	113.52	108.20
38	A1	1977	C	N3-C2-O2	-6.65	117.24	121.90
38	A1	2037	A	P-O3'-C3'	6.65	127.68	119.70
38	A1	1882	C	C5-C6-N1	6.65	124.32	121.00
38	A1	2480	G	C2-N3-C4	6.65	115.22	111.90
38	A1	2583	G	C2-N3-C4	-6.65	108.58	111.90
11	B2	565	C	C5'-C4'-C3'	6.65	126.64	116.00
11	B2	971	G	O4'-C1'-N9	6.65	113.52	108.20
11	B2	1136	A	N3-C4-C5	-6.65	122.15	126.80
28	BP	27	TYR	CB-CG-CD2	6.65	124.99	121.00
38	A1	449	G	C4-C5-N7	-6.65	108.14	110.80
38	A1	642	G	O4'-C1'-N9	6.65	113.52	108.20
38	A1	1791	A	C6-N1-C2	-6.65	114.61	118.60
38	A1	1977	C	N1-C2-N3	6.65	123.85	119.20
38	A1	2080	G	N1-C6-O6	6.65	123.89	119.90
38	A1	2695	U	O4'-C1'-N1	6.65	113.52	108.20
38	A1	2772	U	C5-C4-O4	-6.65	121.91	125.90
39	A3	114	G	C6-N1-C2	-6.65	121.11	125.10
10	B1	53	G	C6-C5-N7	-6.65	126.41	130.40
38	A1	1475	G	C6-C5-N7	-6.65	126.41	130.40
38	A1	2716	C	P-O3'-C3'	-6.65	111.72	119.70
11	B2	162	C	N3-C4-N4	6.64	122.65	118.00
11	B2	399	A	C6-N1-C2	6.64	122.59	118.60
38	A1	324	C	N3-C4-C5	-6.64	119.24	121.90
38	A1	527	G	N3-C2-N2	6.64	124.55	119.90
38	A1	1309	G	C5-C6-O6	-6.64	124.61	128.60
38	A1	2107	G	N3-C2-N2	6.64	124.55	119.90
38	A1	2679	A	N3-C4-C5	-6.64	122.15	126.80
10	B1	41	C	C5-C6-N1	6.64	124.32	121.00
11	B2	234	G	N3-C4-C5	-6.64	125.28	128.60
38	A1	637	G	C5-C6-O6	-6.64	124.61	128.60
38	A1	672	C	C4'-C3'-C2'	-6.64	95.96	102.60
38	A1	1490	G	N3-C4-C5	6.64	131.92	128.60
38	A1	2952	C	O4'-C1'-N1	6.64	113.52	108.20
38	A1	1293	G	P-O3'-C3'	6.64	127.67	119.70
38	A1	1808	G	C5-C6-O6	-6.64	124.61	128.60
38	A1	1949	A	C2-N3-C4	-6.64	107.28	110.60
38	A1	2399	C	C5-C4-N4	-6.64	115.55	120.20
11	B2	316	C	N1-C2-N3	-6.64	114.55	119.20
11	B2	510	A	O4'-C1'-N9	6.64	113.51	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	BK	112	ARG	NE-CZ-NH2	6.64	123.62	120.30
30	BR	87	LEU	CB-CG-CD1	6.64	122.29	111.00
38	A1	402	G	C6-C5-N7	-6.64	126.42	130.40
38	A1	901	C	C2-N3-C4	6.64	123.22	119.90
38	A1	1281	A	C4-C5-C6	6.64	120.32	117.00
38	A1	2229	G	C5-N7-C8	6.64	107.62	104.30
38	A1	2289	A	P-O3'-C3'	6.64	127.67	119.70
38	A1	2384	G	N3-C2-N2	6.64	124.55	119.90
38	A1	2396	G	C4-C5-N7	-6.64	108.14	110.80
38	A1	2451	G	C5'-C4'-C3'	-6.64	105.38	116.00
27	BO	127	ARG	NE-CZ-NH1	-6.64	116.98	120.30
38	A1	302	U	O4'-C1'-N1	6.64	113.51	108.20
38	A1	340	G	C6-N1-C2	-6.64	121.12	125.10
38	A1	1530	A	C5-C6-N1	-6.64	114.38	117.70
38	A1	2181	G	C2-N3-C4	-6.64	108.58	111.90
38	A1	2367	C	O4'-C1'-N1	6.64	113.51	108.20
38	A1	2791	C	C2-N3-C4	6.64	123.22	119.90
9	AX	279	MET	CG-SD-CE	-6.64	89.58	100.20
11	B2	376	G	C4-C5-N7	6.64	113.45	110.80
11	B2	1309	A	C5-C6-N6	-6.64	118.39	123.70
11	B2	1391	U	C5'-C4'-C3'	6.64	126.62	116.00
11	B2	1478	A	N9-C4-C5	6.64	108.45	105.80
38	A1	549	G	C4-C5-C6	6.64	122.78	118.80
38	A1	884	C	N3-C4-N4	6.64	122.64	118.00
38	A1	1067	G	N9-C4-C5	6.64	108.06	105.40
38	A1	1290	G	C4-C5-N7	-6.64	108.15	110.80
38	A1	1451	A	N7-C8-N9	-6.64	110.48	113.80
11	B2	66	G	N7-C8-N9	6.63	116.42	113.10
11	B2	132	G	O4'-C1'-N9	6.63	113.51	108.20
11	B2	392	G	C4-C5-C6	6.63	122.78	118.80
11	B2	394	C	N3-C4-C5	-6.63	119.25	121.90
11	B2	1429	G	C4'-C3'-C2'	-6.63	95.97	102.60
38	A1	43	G	N1-C2-N2	-6.63	110.23	116.20
38	A1	393	C	O4'-C1'-N1	6.63	113.51	108.20
38	A1	1023	C	N3-C4-C5	-6.63	119.25	121.90
38	A1	1391	C	N3-C4-C5	-6.63	119.25	121.90
38	A1	1471	G	P-O3'-C3'	6.63	127.66	119.70
38	A1	1658	A	C4-C5-C6	6.63	120.32	117.00
38	A1	2057	G	N1-C6-O6	6.63	123.88	119.90
38	A1	1981	G	C6-N1-C2	-6.63	121.12	125.10
38	A1	2265	C	O4'-C1'-N1	6.63	113.51	108.20
38	A1	2526	G	O4'-C1'-N9	6.63	113.51	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2742	G	P-O3'-C3'	6.63	127.66	119.70
11	B2	300	G	O4'-C1'-N9	6.63	113.50	108.20
11	B2	482	G	N9-C4-C5	-6.63	102.75	105.40
11	B2	628	G	N3-C4-N9	6.63	129.98	126.00
11	B2	843	G	C4-C5-C6	6.63	122.78	118.80
11	B2	903	G	N1-C2-N2	-6.63	110.23	116.20
11	B2	1182	G	C6-N1-C2	-6.63	121.12	125.10
38	A1	867	C	N1-C2-N3	-6.63	114.56	119.20
38	A1	1642	G	O3'-P-O5'	-6.63	91.40	104.00
38	A1	2033	G	C4-C5-N7	-6.63	108.15	110.80
38	A1	2143	C	N3-C2-O2	6.63	126.54	121.90
38	A1	3009	C	N3-C4-C5	-6.63	119.25	121.90
41	AA	123	ARG	NE-CZ-NH2	-6.63	116.98	120.30
62	AO	51	TYR	CB-CG-CD1	6.63	124.98	121.00
11	B2	615	G	C2-N3-C4	6.63	115.22	111.90
11	B2	732	G	C5'-C4'-C3'	6.63	126.61	116.00
11	B2	1271	G	N3-C2-N2	6.63	124.54	119.90
26	BN	23	PHE	CB-CG-CD2	6.63	125.44	120.80
38	A1	174	C	O4'-C1'-N1	6.63	113.50	108.20
38	A1	585	G	N3-C2-N2	6.63	124.54	119.90
38	A1	1005	G	N9-C4-C5	-6.63	102.75	105.40
38	A1	2102	A	C5-C6-N6	-6.63	118.40	123.70
38	A1	2827	C	N3-C4-C5	-6.63	119.25	121.90
11	B2	175	G	C6-C5-N7	-6.63	126.42	130.40
11	B2	359	A	O4'-C1'-N9	6.63	113.50	108.20
11	B2	882	C	C2-N3-C4	-6.63	116.59	119.90
38	A1	206	A	N1-C2-N3	-6.63	125.98	129.30
38	A1	466	C	C6-N1-C2	-6.63	117.65	120.30
38	A1	792	A	C5-C6-N1	-6.63	114.39	117.70
38	A1	1666	G	N1-C2-N3	-6.63	119.92	123.90
38	A1	2156	A	C6-N1-C2	6.63	122.58	118.60
38	A1	2163	G	N9-C4-C5	-6.63	102.75	105.40
38	A1	2299	G	N7-C8-N9	6.63	116.41	113.10
38	A1	2363	G	C6-C5-N7	-6.63	126.42	130.40
38	A1	2404	G	C5-N7-C8	6.63	107.61	104.30
38	A1	2562	G	C6-C5-N7	-6.63	126.42	130.40
11	B2	75	C	OP1-P-OP2	-6.63	109.66	119.60
11	B2	277	G	C6-C5-N7	-6.63	126.42	130.40
11	B2	544	C	N3-C4-N4	6.63	122.64	118.00
11	B2	948	G	C5-C6-O6	-6.63	124.62	128.60
11	B2	1303	C	C4-C5-C6	6.63	120.71	117.40
38	A1	567	G	N3-C2-N2	6.63	124.54	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1014	U	P-O3'-C3'	6.63	127.65	119.70
38	A1	1511	C	C6-N1-C2	6.63	122.95	120.30
38	A1	1808	G	C6-N1-C2	6.63	129.07	125.10
38	A1	1967	G	O4'-C1'-N9	6.63	113.50	108.20
38	A1	2318	G	N3-C2-N2	6.63	124.54	119.90
11	B2	104	A	O4'-C1'-N9	6.62	113.50	108.20
11	B2	1489	A	C6-C5-N7	-6.62	127.66	132.30
38	A1	2960	G	C4-C5-N7	-6.62	108.15	110.80
11	B2	293	G	N1-C6-O6	6.62	123.87	119.90
11	B2	402	G	C6-C5-N7	-6.62	126.43	130.40
38	A1	890	G	N3-C2-N2	6.62	124.54	119.90
38	A1	1060	C	N3-C4-N4	6.62	122.64	118.00
38	A1	1145	G	C5-C6-N1	-6.62	108.19	111.50
38	A1	1226	G	N1-C6-O6	6.62	123.87	119.90
38	A1	1257	G	C5-C6-O6	-6.62	124.63	128.60
11	B2	423	U	N3-C4-C5	-6.62	110.63	114.60
11	B2	1004	U	C1'-O4'-C4'	6.62	115.20	109.90
38	A1	47	C	C5-C6-N1	6.62	124.31	121.00
38	A1	1508	A	C5-C6-N1	-6.62	114.39	117.70
41	AA	162	VAL	CA-CB-CG1	-6.62	100.97	110.90
11	B2	82	G	N9-C4-C5	-6.62	102.75	105.40
38	A1	106	G	N1-C6-O6	6.62	123.87	119.90
38	A1	867	C	C5-C4-N4	-6.62	115.57	120.20
38	A1	1428	G	N3-C4-C5	-6.62	125.29	128.60
38	A1	1483	U	C3'-C2'-C1'	6.62	106.80	101.50
38	A1	2636	C	C1'-O4'-C4'	6.62	115.20	109.90
38	A1	3039	G	C3'-C2'-C1'	6.62	106.80	101.50
11	B2	273	C	C4-C5-C6	-6.62	114.09	117.40
11	B2	468	G	N3-C4-C5	6.62	131.91	128.60
11	B2	669	A	N1-C6-N6	6.62	122.57	118.60
11	B2	1012	C	C5-C4-N4	-6.62	115.57	120.20
11	B2	1090	C	C6-N1-C1'	-6.62	112.86	120.80
11	B2	1412	A	C5-C6-N6	-6.62	118.40	123.70
15	BC	110	ARG	NE-CZ-NH2	-6.62	116.99	120.30
38	A1	541	A	N1-C2-N3	6.62	132.61	129.30
38	A1	590	A	N3-C4-C5	-6.62	122.17	126.80
38	A1	593	C	N3-C4-C5	-6.62	119.25	121.90
38	A1	1666	G	O4'-C1'-N9	6.62	113.49	108.20
44	Ab	18	ARG	NE-CZ-NH2	-6.62	116.99	120.30
6	AT	31	ASP	CB-CG-OD2	-6.62	112.34	118.30
11	B2	859	A	P-O3'-C3'	6.62	127.64	119.70
38	A1	565	A	C5-C6-N1	-6.62	114.39	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	757	C	O4'-C1'-N1	6.62	113.49	108.20
38	A1	1392	G	C4-C5-C6	6.62	122.77	118.80
38	A1	2162	G	N9-C4-C5	6.62	108.05	105.40
38	A1	2487	G	O4'-C1'-N9	6.62	113.49	108.20
38	A1	2495	A	C2-N3-C4	-6.62	107.29	110.60
45	AC	86	TYR	CZ-CE2-CD2	-6.62	113.84	119.80
11	B2	61	A	C5-N7-C8	6.62	107.21	103.90
11	B2	1007	A	O4'-C1'-N9	6.62	113.49	108.20
11	B2	1358	A	C5-N7-C8	6.62	107.21	103.90
25	BM	50	ALA	N-CA-CB	6.62	119.36	110.10
38	A1	26	G	N9-C4-C5	6.62	108.05	105.40
38	A1	98	G	N3-C2-N2	6.62	124.53	119.90
38	A1	265	A	N1-C6-N6	6.62	122.57	118.60
38	A1	1275	G	C4-C5-C6	6.62	122.77	118.80
38	A1	1453	G	N1-C2-N3	-6.62	119.93	123.90
38	A1	1541	U	N1-C2-N3	-6.62	110.93	114.90
38	A1	2126	G	N9-C1'-C2'	-6.62	104.72	112.00
38	A1	3036	C	C5-C6-N1	-6.62	117.69	121.00
39	A3	70	C	C5-C4-N4	-6.62	115.57	120.20
11	B2	334	G	N9-C1'-C2'	-6.61	104.72	112.00
38	A1	918	A	C5'-C4'-C3'	6.61	126.58	116.00
38	A1	1153	U	P-O3'-C3'	6.61	127.64	119.70
38	A1	1556	G	C5-C6-N1	6.61	114.81	111.50
38	A1	1685	C	C5'-C4'-O4'	-6.61	101.16	109.10
38	A1	1699	U	C5-C4-O4	-6.61	121.93	125.90
38	A1	1880	A	C5-C6-N6	-6.61	118.41	123.70
38	A1	2086	C	C1'-O4'-C4'	6.61	115.19	109.90
38	A1	2122	G	C4-C5-N7	6.61	113.45	110.80
38	A1	2203	G	C4-C5-N7	-6.61	108.16	110.80
38	A1	2309	C	C4-C5-C6	-6.61	114.09	117.40
38	A1	2510	A	O4'-C1'-N9	6.61	113.49	108.20
11	B2	620	G	N7-C8-N9	-6.61	109.79	113.10
11	B2	821	G	O4'-C4'-C3'	-6.61	97.39	104.00
11	B2	1381	G	C2-N3-C4	6.61	115.21	111.90
38	A1	115	C	OP1-P-OP2	-6.61	109.68	119.60
38	A1	1604	G	C1'-O4'-C4'	-6.61	104.61	109.90
38	A1	1825	G	N1-C2-N2	-6.61	110.25	116.20
38	A1	2339	C	C4-C5-C6	6.61	120.71	117.40
38	A1	2894	A	N1-C6-N6	6.61	122.57	118.60
11	B2	537	G	C1'-O4'-C4'	6.61	115.19	109.90
11	B2	857	C	C5-C4-N4	-6.61	115.57	120.20
11	B2	943	C	C2-N3-C4	6.61	123.21	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	866	G	C8-N9-C4	-6.61	103.76	106.40
38	A1	1672	G	N1-C2-N3	-6.61	119.93	123.90
38	A1	2584	A	N1-C2-N3	6.61	132.61	129.30
38	A1	2695	U	C1'-O4'-C4'	6.61	115.19	109.90
38	A1	2758	G	C8-N9-C1'	6.61	135.59	127.00
11	B2	32	A	O4'-C1'-N9	6.61	113.49	108.20
11	B2	1204	C	O4'-C1'-N1	6.61	113.49	108.20
11	B2	97	C	O4'-C1'-N1	6.61	113.48	108.20
11	B2	168	G	C5-N7-C8	6.61	107.60	104.30
11	B2	301	G	C6-C5-N7	-6.61	126.44	130.40
38	A1	407	A	O3'-P-O5'	6.61	116.56	104.00
38	A1	591	G	C5-C6-N1	-6.61	108.20	111.50
38	A1	680	U	P-O5'-C5'	6.61	131.47	120.90
38	A1	1109	G	C6-C5-N7	-6.61	126.44	130.40
38	A1	1356	A	C8-N9-C4	-6.61	103.16	105.80
38	A1	1454	G	C4-C5-N7	-6.61	108.16	110.80
38	A1	1502	C	C5-C6-N1	6.61	124.30	121.00
38	A1	1945	C	C5-C4-N4	-6.61	115.58	120.20
38	A1	3046	C	O4'-C1'-N1	6.61	113.49	108.20
11	B2	111	G	C6-N1-C2	-6.61	121.14	125.10
11	B2	564	C	C5-C4-N4	-6.61	115.58	120.20
11	B2	938	C	N3-C4-C5	-6.61	119.26	121.90
11	B2	1234	A	N7-C8-N9	6.61	117.10	113.80
38	A1	715	G	N1-C6-O6	6.61	123.86	119.90
38	A1	848	A	C5'-C4'-O4'	6.61	117.03	109.10
38	A1	1464	A	C6-N1-C2	6.61	122.56	118.60
38	A1	1543	C	P-O5'-C5'	-6.61	110.33	120.90
38	A1	2021	G	O4'-C1'-N9	6.61	113.48	108.20
38	A1	2434	A	N1-C2-N3	6.61	132.60	129.30
38	A1	2509	A	C6-N1-C2	-6.61	114.64	118.60
60	AM	53	TYR	CB-CG-CD2	-6.61	117.04	121.00
11	B2	229	G	N3-C2-N2	6.60	124.52	119.90
11	B2	453	G	P-O3'-C3'	6.60	127.62	119.70
38	A1	1241	C	C5-C6-N1	6.60	124.30	121.00
38	A1	1475	G	C2-N3-C4	-6.60	108.60	111.90
38	A1	2349	U	O4'-C1'-N1	6.60	113.48	108.20
38	A1	2707	G	N9-C4-C5	6.60	108.04	105.40
11	B2	289	C	C2-N3-C4	6.60	123.20	119.90
11	B2	499	G	O4'-C1'-N9	6.60	113.48	108.20
11	B2	646	U	C5-C6-N1	-6.60	119.40	122.70
11	B2	989	C	C3'-C2'-C1'	6.60	106.78	101.50
38	A1	105	C	C6-N1-C2	6.60	122.94	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1037	C	C2-N1-C1'	6.60	126.06	118.80
38	A1	1166	A	O4'-C4'-C3'	-6.60	97.40	104.00
38	A1	1265	A	C5-C6-N6	-6.60	118.42	123.70
38	A1	1823	A	P-O3'-C3'	6.60	127.62	119.70
38	A1	2369	G	O4'-C1'-N9	6.60	113.48	108.20
11	B2	368	C	C2-N3-C4	6.60	123.20	119.90
11	B2	682	A	O4'-C1'-N9	6.60	113.48	108.20
38	A1	470	A	C5-C6-N1	-6.60	114.40	117.70
38	A1	1854	G	C3'-C2'-C1'	6.60	106.78	101.50
11	B2	876	A	N1-C6-N6	6.60	122.56	118.60
11	B2	1272	G	P-O3'-C3'	-6.60	111.78	119.70
32	BT	106	PHE	CB-CG-CD2	6.60	125.42	120.80
34	BV	85	TYR	CB-CG-CD1	6.60	124.96	121.00
38	A1	60	G	C1'-O4'-C4'	6.60	115.18	109.90
38	A1	435	G	C4-C5-C6	6.60	122.76	118.80
38	A1	702	G	N1-C2-N2	6.60	122.14	116.20
38	A1	1077	G	C5-C6-O6	-6.60	124.64	128.60
38	A1	1498	C	C5-C6-N1	6.60	124.30	121.00
38	A1	2073	G	C4-C5-C6	6.60	122.76	118.80
38	A1	2079	U	P-O3'-C3'	-6.60	111.78	119.70
38	A1	2317	G	C6-C5-N7	-6.60	126.44	130.40
38	A1	2846	A	C4-C5-C6	6.60	120.30	117.00
11	B2	22	G	C4-N9-C1'	-6.60	117.92	126.50
11	B2	237	C	O4'-C1'-N1	6.60	113.48	108.20
11	B2	785	U	N1-C2-O2	-6.60	118.18	122.80
11	B2	878	U	C5-C6-N1	-6.60	119.40	122.70
11	B2	1460	G	C6-C5-N7	-6.60	126.44	130.40
38	A1	580	G	O4'-C4'-C3'	-6.60	97.40	104.00
38	A1	959	U	N3-C2-O2	-6.60	117.58	122.20
38	A1	1012	G	C1'-O4'-C4'	6.60	115.18	109.90
38	A1	2369	G	N1-C6-O6	6.60	123.86	119.90
38	A1	2459	G	C6-C5-N7	-6.60	126.44	130.40
11	B2	486	A	C3'-C2'-C1'	6.60	106.78	101.50
11	B2	927	A	N1-C2-N3	6.60	132.60	129.30
11	B2	969	A	C5-C6-N6	-6.60	118.42	123.70
11	B2	1414	G	O4'-C1'-N9	6.60	113.48	108.20
38	A1	36	G	C6-N1-C2	-6.60	121.14	125.10
38	A1	623	G	C3'-C2'-C1'	-6.60	96.22	101.50
38	A1	1215	C	C5-C4-N4	-6.60	115.58	120.20
57	Aj	42	ARG	NE-CZ-NH2	-6.60	117.00	120.30
11	B2	1309	A	N9-C4-C5	-6.59	103.16	105.80
38	A1	832	A	N9-C4-C5	6.59	108.44	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1105	C	C4-C5-C6	6.59	120.70	117.40
38	A1	1781	C	O4'-C1'-N1	6.59	113.48	108.20
38	A1	1892	G	C2-N3-C4	-6.59	108.60	111.90
38	A1	2133	G	N3-C4-N9	6.59	129.96	126.00
38	A1	2488	C	P-O3'-C3'	6.59	127.61	119.70
38	A1	2542	G	N1-C2-N3	-6.59	119.94	123.90
38	A1	2557	C	P-O3'-C3'	-6.59	111.79	119.70
11	B2	194	C	C6-N1-C2	-6.59	117.66	120.30
11	B2	1196	A	C5'-C4'-O4'	6.59	117.01	109.10
32	BT	82	TYR	CB-CG-CD1	-6.59	117.04	121.00
38	A1	1069	A	O4'-C1'-N9	6.59	113.47	108.20
38	A1	1629	G	C2-N3-C4	6.59	115.20	111.90
38	A1	2462	U	N3-C4-O4	6.59	124.02	119.40
38	A1	2477	G	N1-C2-N2	-6.59	110.27	116.20
38	A1	2833	G	N7-C8-N9	-6.59	109.80	113.10
11	B2	81	C	N3-C4-N4	6.59	122.61	118.00
11	B2	181	G	C5-C6-N1	-6.59	108.20	111.50
11	B2	254	G	C5-N7-C8	6.59	107.60	104.30
11	B2	287	G	N1-C6-O6	6.59	123.86	119.90
11	B2	1250	C	N3-C4-N4	6.59	122.61	118.00
38	A1	22	C	O4'-C4'-C3'	-6.59	97.41	104.00
38	A1	286	G	N1-C2-N2	-6.59	110.27	116.20
38	A1	732	G	C4-C5-C6	6.59	122.75	118.80
38	A1	1454	G	C8-N9-C4	6.59	109.04	106.40
38	A1	1569	A	N1-C6-N6	6.59	122.56	118.60
38	A1	2152	G	C5-C6-N1	-6.59	108.20	111.50
38	A1	2169	C	N3-C4-N4	6.59	122.61	118.00
38	A1	2280	G	O4'-C4'-C3'	-6.59	97.41	104.00
11	B2	423	U	C4-C5-C6	6.59	123.65	119.70
11	B2	1010	G	C4-C5-C6	6.59	122.75	118.80
16	BD	11	TYR	CB-CG-CD1	-6.59	117.05	121.00
38	A1	381	G	N3-C2-N2	6.59	124.51	119.90
38	A1	662	A	C4-C5-C6	6.59	120.29	117.00
38	A1	1992	A	P-O3'-C3'	6.59	127.61	119.70
38	A1	2000	G	C5-N7-C8	6.59	107.59	104.30
38	A1	2167	C	C5-C4-N4	-6.59	115.59	120.20
38	A1	2240	G	C8-N9-C4	6.59	109.04	106.40
38	A1	2498	G	C6-N1-C2	-6.59	121.15	125.10
10	B1	76	C	C5-C4-N4	6.59	124.81	120.20
11	B2	942	A	C5-C6-N6	-6.59	118.43	123.70
11	B2	1243	C	C4'-C3'-C2'	-6.59	96.01	102.60
38	A1	186	A	O4'-C1'-C2'	-6.59	99.21	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	233	A	C6-N1-C2	6.59	122.55	118.60
38	A1	516	A	N9-C4-C5	-6.59	103.17	105.80
38	A1	837	G	C6-C5-N7	-6.59	126.45	130.40
38	A1	1732	C	OP1-P-OP2	-6.59	109.72	119.60
38	A1	2791	C	O4'-C1'-N1	6.59	113.47	108.20
11	B2	266	A	C1'-O4'-C4'	-6.59	104.63	109.90
11	B2	846	G	N7-C8-N9	-6.59	109.81	113.10
11	B2	1181	G	C8-N9-C4	-6.59	103.77	106.40
38	A1	68	G	N3-C2-N2	6.59	124.51	119.90
38	A1	2312	U	N1-C2-O2	-6.59	118.19	122.80
38	A1	2649	A	O4'-C1'-N9	6.59	113.47	108.20
38	A1	1326	U	C4'-C3'-C2'	6.58	109.19	102.60
11	B2	204	G	C4-C5-N7	6.58	113.43	110.80
11	B2	268	C	C6-N1-C2	-6.58	117.67	120.30
11	B2	310	G	C8-N9-C4	-6.58	103.77	106.40
11	B2	453	G	C6-C5-N7	-6.58	126.45	130.40
11	B2	608	G	C5-N7-C8	6.58	107.59	104.30
11	B2	1063	A	C5-C6-N6	-6.58	118.43	123.70
17	BE	184	TYR	CB-CG-CD2	6.58	124.95	121.00
38	A1	428	A	C8-N9-C4	-6.58	103.17	105.80
38	A1	1202	G	N3-C2-N2	6.58	124.51	119.90
38	A1	1447	G	C6-C5-N7	6.58	134.35	130.40
38	A1	2064	U	C2'-C3'-O3'	6.58	124.23	113.70
38	A1	2994	G	C8-N9-C4	-6.58	103.77	106.40
39	A3	50	G	N3-C2-N2	6.58	124.51	119.90
11	B2	637	G	C6-C5-N7	-6.58	126.45	130.40
11	B2	1207	G	N3-C4-N9	-6.58	122.05	126.00
27	BO	130	ARG	NE-CZ-NH2	6.58	123.59	120.30
38	A1	90	A	N1-C2-N3	-6.58	126.01	129.30
38	A1	1155	A	P-O5'-C5'	-6.58	110.37	120.90
38	A1	2416	G	C8-N9-C4	-6.58	103.77	106.40
38	A1	2870	A	O4'-C1'-N9	6.58	113.47	108.20
11	B2	76	U	N3-C4-O4	6.58	124.01	119.40
11	B2	398	C	C5-C6-N1	6.58	124.29	121.00
11	B2	556	G	O4'-C1'-N9	6.58	113.46	108.20
11	B2	1146	G	C1'-O4'-C4'	6.58	115.16	109.90
38	A1	506	G	C6-C5-N7	-6.58	126.45	130.40
39	A3	111	G	C4-C5-N7	-6.58	108.17	110.80
10	B1	6	G	N1-C6-O6	6.58	123.85	119.90
11	B2	1025	U	C2-N3-C4	6.58	130.95	127.00
11	B2	1325	C	O4'-C1'-N1	6.58	113.46	108.20
17	BE	212	VAL	CA-CB-CG2	6.58	120.77	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	388	G	O4'-C1'-N9	6.58	113.46	108.20
38	A1	1114	G	N3-C2-N2	6.58	124.50	119.90
38	A1	1860	A	C5-C6-N6	-6.58	118.44	123.70
38	A1	2216	G	C5-C6-O6	-6.58	124.65	128.60
38	A1	2837	C	C2-N3-C4	6.58	123.19	119.90
38	A1	690	G	C5-C6-N1	-6.58	108.21	111.50
39	A3	99	G	C6-C5-N7	-6.58	126.45	130.40
39	A3	108	G	O4'-C1'-N9	6.58	113.46	108.20
38	A1	24	G	N1-C2-N3	-6.58	119.95	123.90
38	A1	575	G	C6-C5-N7	-6.58	126.45	130.40
38	A1	773	U	C5-C6-N1	6.58	125.99	122.70
38	A1	1634	A	P-O3'-C3'	6.58	127.59	119.70
38	A1	1859	A	C4-C5-C6	6.58	120.29	117.00
38	A1	2326	C	C4'-C3'-C2'	-6.58	96.02	102.60
38	A1	2332	G	C8-N9-C4	-6.58	103.77	106.40
38	A1	2900	C	C5'-C4'-O4'	6.58	116.99	109.10
39	A3	24	C	O4'-C1'-N1	6.58	113.46	108.20
6	AT	4	TYR	CB-CG-CD1	-6.57	117.06	121.00
11	B2	6	G	N1-C6-O6	6.57	123.84	119.90
11	B2	400	G	N9-C1'-C2'	-6.57	104.77	112.00
11	B2	569	G	O4'-C1'-N9	6.57	113.46	108.20
11	B2	914	U	N3-C4-O4	6.57	124.00	119.40
17	BE	89	ASP	CB-CG-OD2	6.57	124.22	118.30
38	A1	32	C	N3-C4-C5	-6.57	119.27	121.90
38	A1	1751	G	N3-C2-N2	6.57	124.50	119.90
38	A1	1780	C	C5-C4-N4	-6.57	115.60	120.20
38	A1	2306	C	N3-C4-N4	6.57	122.60	118.00
38	A1	2403	G	P-O3'-C3'	6.57	127.59	119.70
38	A1	2554	A	C8-N9-C4	-6.57	103.17	105.80
11	B2	1268	C	C5-C6-N1	-6.57	117.71	121.00
38	A1	724	G	C5-N7-C8	6.57	107.59	104.30
38	A1	981	A	N9-C1'-C2'	-6.57	104.77	112.00
38	A1	1061	G	C5-C6-O6	-6.57	124.66	128.60
38	A1	1827	A	N1-C2-N3	6.57	132.59	129.30
38	A1	2761	G	C4-C5-N7	-6.57	108.17	110.80
11	B2	144	G	C2-N3-C4	6.57	115.19	111.90
11	B2	162	C	C5-C6-N1	6.57	124.29	121.00
11	B2	730	G	C6-C5-N7	-6.57	126.46	130.40
11	B2	1001	A	N1-C2-N3	6.57	132.59	129.30
11	B2	1050	G	N1-C2-N3	-6.57	119.96	123.90
38	A1	49	A	C4-C5-N7	6.57	113.98	110.70
38	A1	212	A	C5-N7-C8	6.57	107.19	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	328	G	N1-C6-O6	6.57	123.84	119.90
38	A1	559	G	N9-C4-C5	-6.57	102.77	105.40
38	A1	575	G	N9-C4-C5	-6.57	102.77	105.40
38	A1	1040	C	O4'-C1'-N1	6.57	113.46	108.20
38	A1	1175	C	C5-C4-N4	-6.57	115.60	120.20
38	A1	1905	G	O4'-C1'-N9	6.57	113.46	108.20
38	A1	2229	G	O4'-C1'-N9	6.57	113.46	108.20
38	A1	2650	G	N9-C4-C5	6.57	108.03	105.40
38	A1	2755	G	N1-C2-N2	-6.57	110.29	116.20
11	B2	872	A	C8-N9-C4	-6.57	103.17	105.80
16	BD	70	ARG	NE-CZ-NH1	6.57	123.58	120.30
38	A1	1354	G	N3-C2-N2	6.57	124.50	119.90
38	A1	1634	A	O4'-C1'-N9	6.57	113.45	108.20
38	A1	2413	G	N3-C4-C5	6.57	131.88	128.60
59	AL	47	TRP	N-CA-CB	6.57	122.42	110.60
11	B2	113	U	C5-C6-N1	6.57	125.98	122.70
11	B2	222	G	C6-N1-C2	-6.57	121.16	125.10
11	B2	325	A	O4'-C1'-N9	6.57	113.45	108.20
11	B2	1214	G	C8-N9-C4	-6.57	103.77	106.40
11	B2	1495	U	N1-C2-O2	-6.57	118.20	122.80
38	A1	912	G	N3-C2-N2	6.57	124.50	119.90
38	A1	1055	C	N1-C2-N3	-6.57	114.60	119.20
38	A1	1136	G	C1'-O4'-C4'	-6.57	104.64	109.90
38	A1	1772	A	C5-C6-N6	-6.57	118.44	123.70
38	A1	2123	G	O4'-C1'-N9	6.57	113.45	108.20
38	A1	2593	A	C4-C5-N7	-6.57	107.42	110.70
38	A1	2874	C	N3-C4-N4	6.57	122.60	118.00
11	B2	165	U	C6-N1-C2	6.57	124.94	121.00
11	B2	629	U	C6-N1-C2	-6.57	117.06	121.00
11	B2	843	G	C2-N3-C4	6.57	115.18	111.90
11	B2	922	G	O4'-C1'-N9	6.57	113.45	108.20
11	B2	1067	G	P-O5'-C5'	-6.57	110.39	120.90
11	B2	1160	C	P-O3'-C3'	6.57	127.58	119.70
11	B2	1467	U	C5-C4-O4	-6.57	121.96	125.90
38	A1	99	U	P-O3'-C3'	6.57	127.58	119.70
38	A1	544	A	N7-C8-N9	-6.57	110.52	113.80
38	A1	1540	A	C2-N3-C4	-6.57	107.32	110.60
38	A1	2646	A	C6-N1-C2	-6.57	114.66	118.60
38	A1	3020	G	C1'-O4'-C4'	-6.57	104.65	109.90
39	A3	66	A	C4-C5-C6	6.57	120.28	117.00
11	B2	699	C	C4-C5-C6	6.56	120.68	117.40
11	B2	840	C	N3-C4-N4	6.56	122.59	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1054	A	O5'-P-OP2	-6.56	99.79	105.70
17	BE	126	ARG	NE-CZ-NH1	-6.56	117.02	120.30
38	A1	1080	G	N7-C8-N9	-6.56	109.82	113.10
38	A1	2196	C	C4'-C3'-C2'	-6.56	96.04	102.60
38	A1	2811	U	N3-C4-O4	6.56	124.00	119.40
38	A1	3030	A	C4-C5-C6	6.56	120.28	117.00
10	B1	26	C	N3-C4-C5	-6.56	119.28	121.90
11	B2	106	A	P-O3'-C3'	6.56	127.58	119.70
11	B2	432	G	C8-N9-C4	-6.56	103.78	106.40
11	B2	647	G	C5-N7-C8	-6.56	101.02	104.30
38	A1	449	G	O4'-C4'-C3'	-6.56	97.44	104.00
38	A1	789	G	C5-C6-N1	-6.56	108.22	111.50
38	A1	1104	A	C5-C6-N1	-6.56	114.42	117.70
38	A1	1353	A	N1-C6-N6	6.56	122.54	118.60
38	A1	1377	G	N1-C2-N2	-6.56	110.29	116.20
38	A1	1903	G	N3-C4-N9	6.56	129.94	126.00
38	A1	2031	G	C4-C5-N7	-6.56	108.17	110.80
38	A1	2722	G	C6-C5-N7	-6.56	126.46	130.40
38	A1	2748	C	N3-C2-O2	-6.56	117.31	121.90
38	A1	2791	C	N3-C2-O2	6.56	126.49	121.90
38	A1	2979	C	C5-C6-N1	6.56	124.28	121.00
39	A3	91	G	N1-C2-N2	-6.56	110.30	116.20
11	B2	125	G	C6-C5-N7	-6.56	126.46	130.40
11	B2	168	G	N9-C1'-C2'	-6.56	104.78	112.00
11	B2	596	A	C8-N9-C4	-6.56	103.18	105.80
11	B2	645	G	C6-C5-N7	-6.56	126.46	130.40
11	B2	670	C	C2-N3-C4	-6.56	116.62	119.90
38	A1	830	G	O4'-C1'-N9	6.56	113.45	108.20
38	A1	1352	U	N3-C4-O4	6.56	123.99	119.40
38	A1	1947	A	N1-C6-N6	6.56	122.54	118.60
38	A1	2369	G	N3-C4-C5	-6.56	125.32	128.60
60	AM	90	TYR	CB-CG-CD2	6.56	124.94	121.00
10	B1	35	G	C5-C6-N1	-6.56	108.22	111.50
11	B2	752	G	C6-N1-C2	6.56	129.03	125.10
11	B2	1071	C	N3-C4-N4	6.56	122.59	118.00
11	B2	1238	G	N1-C2-N3	-6.56	119.97	123.90
11	B2	1334	A	N1-C6-N6	6.56	122.53	118.60
38	A1	95	G	N9-C4-C5	-6.56	102.78	105.40
38	A1	149	G	N1-C6-O6	6.56	123.83	119.90
38	A1	1050	C	N3-C4-N4	6.56	122.59	118.00
38	A1	1905	G	C6-N1-C2	6.56	129.03	125.10
38	A1	2089	C	C3'-C2'-C1'	6.56	106.75	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2158	G	C5-C6-N1	-6.56	108.22	111.50
38	A1	2288	C	C4-C5-C6	6.56	120.68	117.40
39	A3	16	G	C4-C5-N7	6.56	113.42	110.80
38	A1	1463	C	N3-C2-O2	-6.56	117.31	121.90
11	B2	203	A	C8-N9-C4	-6.55	103.18	105.80
11	B2	358	G	N3-C4-C5	-6.55	125.32	128.60
11	B2	461	A	C5-C6-N6	-6.55	118.46	123.70
11	B2	670	C	C5-C4-N4	-6.55	115.61	120.20
38	A1	303	A	N1-C6-N6	6.55	122.53	118.60
38	A1	306	G	O4'-C1'-N9	6.55	113.44	108.20
38	A1	1190	G	N1-C2-N3	-6.55	119.97	123.90
38	A1	2723	G	C8-N9-C4	-6.55	103.78	106.40
38	A1	2813	G	C2-N3-C4	-6.55	108.62	111.90
38	A1	3007	A	O4'-C1'-N9	6.55	113.44	108.20
11	B2	815	C	C6-N1-C2	-6.55	117.68	120.30
38	A1	1167	A	P-O3'-C3'	6.55	127.56	119.70
38	A1	2096	G	P-O3'-C3'	-6.55	111.84	119.70
11	B2	153	G	N9-C4-C5	-6.55	102.78	105.40
11	B2	471	G	P-O3'-C3'	6.55	127.56	119.70
11	B2	1299	A	C4-C5-C6	6.55	120.28	117.00
12	B3	22	ALA	CB-CA-C	-6.55	100.27	110.10
38	A1	66	C	N3-C2-O2	6.55	126.49	121.90
38	A1	473	C	C6-N1-C2	-6.55	117.68	120.30
38	A1	676	G	C6-C5-N7	-6.55	126.47	130.40
38	A1	1201	G	C4-C5-N7	-6.55	108.18	110.80
38	A1	2339	C	C2-N3-C4	6.55	123.18	119.90
38	A1	2589	C	C5-C4-N4	-6.55	115.61	120.20
38	A1	3035	C	C2-N3-C4	6.55	123.18	119.90
12	AG	98	SER	N-CA-CB	6.55	120.33	110.50
10	B1	20	G	C6-N1-C2	6.55	129.03	125.10
11	B2	900	G	N9-C4-C5	6.55	108.02	105.40
14	BB	12	TYR	CG-CD2-CE2	-6.55	116.06	121.30
38	A1	738	C	N1-C2-N3	-6.55	114.61	119.20
38	A1	1394	G	N3-C4-N9	6.55	129.93	126.00
38	A1	2632	C	C5-C4-N4	-6.55	115.62	120.20
38	A1	2719	G	O4'-C1'-N9	6.55	113.44	108.20
38	A1	2821	G	N7-C8-N9	-6.55	109.83	113.10
38	A1	2875	C	C1'-O4'-C4'	-6.55	104.66	109.90
39	A3	74	U	N3-C2-O2	-6.55	117.61	122.20
11	B2	702	G	C5'-C4'-O4'	6.55	116.96	109.10
11	B2	892	C	C5-C4-N4	-6.55	115.62	120.20
11	B2	1230	G	C8-N9-C4	6.55	109.02	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	872	G	C2-N3-C4	-6.55	108.63	111.90
38	A1	2331	A	C5-C6-N6	-6.55	118.46	123.70
38	A1	2443	G	N3-C2-N2	6.55	124.48	119.90
38	A1	2465	A	C5-C6-N6	-6.55	118.46	123.70
38	A1	2542	G	C6-C5-N7	-6.55	126.47	130.40
62	AO	171	TYR	CA-CB-CG	6.55	125.84	113.40
11	B2	210	A	C4-C5-N7	-6.55	107.43	110.70
11	B2	377	A	O4'-C4'-C3'	-6.55	97.45	104.00
11	B2	610	G	N1-C6-O6	6.55	123.83	119.90
38	A1	736	U	C1'-O4'-C4'	-6.55	104.66	109.90
38	A1	1716	G	N9-C1'-C2'	-6.55	104.80	112.00
38	A1	1790	G	C6-N1-C2	6.55	129.03	125.10
38	A1	2892	A	C6-N1-C2	-6.55	114.67	118.60
11	B2	88	G	N1-C6-O6	6.54	123.83	119.90
11	B2	146	A	C2-N3-C4	-6.54	107.33	110.60
38	A1	300	U	P-O3'-C3'	6.54	127.55	119.70
38	A1	1340	G	C5-C6-N1	-6.54	108.23	111.50
38	A1	2635	C	C5-C6-N1	6.54	124.27	121.00
39	A3	17	G	N7-C8-N9	-6.54	109.83	113.10
11	B2	793	G	C8-N9-C4	6.54	109.02	106.40
38	A1	128	C	N1-C2-O2	-6.54	114.97	118.90
38	A1	394	A	C5'-C4'-C3'	6.54	126.47	116.00
38	A1	404	G	N1-C2-N3	-6.54	119.97	123.90
38	A1	440	A	C6-C5-N7	-6.54	127.72	132.30
38	A1	940	G	N1-C2-N3	-6.54	119.97	123.90
38	A1	1736	G	C5'-C4'-O4'	6.54	116.95	109.10
38	A1	1743	G	N3-C2-N2	6.54	124.48	119.90
38	A1	1943	C	N3-C4-C5	-6.54	119.28	121.90
38	A1	2107	G	N1-C6-O6	6.54	123.83	119.90
38	A1	2284	C	C4-C5-C6	6.54	120.67	117.40
38	A1	2590	C	C2-N3-C4	-6.54	116.63	119.90
10	B1	6	G	O4'-C1'-N9	6.54	113.43	108.20
11	B2	853	G	C3'-C2'-C1'	-6.54	96.27	101.50
11	B2	1138	G	C5-C6-O6	-6.54	124.67	128.60
38	A1	1609	G	N1-C6-O6	6.54	123.83	119.90
38	A1	2559	G	C5-C6-O6	-6.54	124.67	128.60
38	A1	2749	G	C5-C6-O6	-6.54	124.68	128.60
38	A1	2807	C	C5-C6-N1	6.54	124.27	121.00
38	A1	3000	U	N3-C4-C5	-6.54	110.67	114.60
38	A1	1915	G	C5-N7-C8	-6.54	101.03	104.30
38	A1	2111	C	C5-C4-N4	6.54	124.78	120.20
11	B2	349	A	C5-C6-N6	-6.54	118.47	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	384	G	C4-C5-N7	6.54	113.42	110.80
11	B2	406	U	C4-C5-C6	6.54	123.62	119.70
11	B2	482	G	O4'-C1'-N9	6.54	113.43	108.20
11	B2	1033	G	P-O3'-C3'	-6.54	111.86	119.70
11	B2	1330	G	P-O3'-C3'	6.54	127.55	119.70
11	B2	1466	G	C8-N9-C4	6.54	109.02	106.40
38	A1	656	G	N1-C6-O6	6.54	123.82	119.90
38	A1	1749	C	N3-C4-N4	6.54	122.58	118.00
38	A1	2641	C	C4-C5-C6	-6.54	114.13	117.40
38	A1	2831	G	O4'-C1'-N9	6.54	113.43	108.20
11	B2	106	A	C4-N9-C1'	6.54	138.07	126.30
11	B2	388	G	C5-C6-O6	-6.54	124.68	128.60
11	B2	628	G	N1-C2-N2	6.54	122.08	116.20
38	A1	1107	G	N9-C4-C5	6.54	108.02	105.40
38	A1	1293	G	C5-C6-N1	-6.54	108.23	111.50
38	A1	3008	C	C4-C5-C6	-6.54	114.13	117.40
11	B2	269	A	N9-C4-C5	-6.54	103.19	105.80
11	B2	601	G	N7-C8-N9	6.54	116.37	113.10
11	B2	750	C	N3-C4-N4	6.54	122.57	118.00
11	B2	1016	G	C2-N3-C4	-6.54	108.63	111.90
11	B2	1176	C	C5-C6-N1	6.54	124.27	121.00
11	B2	1262	U	N1-C2-O2	-6.54	118.23	122.80
11	B2	1273	G	N3-C4-C5	6.54	131.87	128.60
11	B2	1449	G	N1-C2-N3	-6.54	119.98	123.90
38	A1	32	C	C5-C6-N1	6.54	124.27	121.00
38	A1	430	A	P-O3'-C3'	6.54	127.54	119.70
38	A1	487	U	C6-N1-C1'	-6.54	112.05	121.20
38	A1	683	C	C5-C4-N4	-6.54	115.63	120.20
38	A1	1136	G	N3-C2-N2	-6.54	115.33	119.90
38	A1	1445	G	O4'-C4'-C3'	-6.54	97.46	104.00
38	A1	1579	G	N1-C2-N3	-6.54	119.98	123.90
38	A1	1979	G	C5-C6-O6	-6.54	124.68	128.60
38	A1	2962	A	C5-C6-N6	-6.54	118.47	123.70
38	A1	3006	G	N3-C4-N9	-6.54	122.08	126.00
11	B2	603	G	C5-C6-O6	-6.53	124.68	128.60
11	B2	759	C	P-O5'-C5'	6.53	131.35	120.90
11	B2	1140	A	C5-C6-N1	-6.53	114.43	117.70
28	BP	32	ARG	NE-CZ-NH2	-6.53	117.03	120.30
38	A1	82	C	C5-C6-N1	6.53	124.27	121.00
38	A1	631	G	C5-C6-O6	-6.53	124.68	128.60
38	A1	666	A	C5-C6-N6	-6.53	118.47	123.70
38	A1	1713	G	N1-C2-N3	-6.53	119.98	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1798	A	N9-C4-C5	6.53	108.41	105.80
38	A1	2204	C	C5-C4-N4	-6.53	115.63	120.20
38	A1	2351	G	N1-C6-O6	6.53	123.82	119.90
38	A1	2891	A	N3-C4-N9	6.53	132.63	127.40
55	Ai	13	PHE	CB-CG-CD2	6.53	125.37	120.80
11	B2	71	C	C2-N3-C4	6.53	123.17	119.90
11	B2	321	A	C5-C6-N1	-6.53	114.43	117.70
11	B2	1461	U	C4'-C3'-C2'	-6.53	96.07	102.60
38	A1	60	G	C6-C5-N7	-6.53	126.48	130.40
38	A1	1905	G	C5-C6-N1	-6.53	108.23	111.50
39	A3	119	C	N1-C2-O2	6.53	122.82	118.90
11	B2	66	G	C4'-C3'-C2'	-6.53	96.07	102.60
11	B2	253	G	N1-C6-O6	6.53	123.82	119.90
11	B2	535	U	C5-C6-N1	6.53	125.97	122.70
11	B2	736	A	C6-N1-C2	-6.53	114.68	118.60
11	B2	1224	U	C2-N3-C4	6.53	130.92	127.00
38	A1	281	G	C5-C6-O6	-6.53	124.68	128.60
38	A1	526	C	O4'-C1'-N1	6.53	113.42	108.20
38	A1	1255	C	N3-C4-C5	-6.53	119.29	121.90
38	A1	1630	U	N1-C2-N3	-6.53	110.98	114.90
38	A1	1874	G	C5-C6-O6	-6.53	124.68	128.60
9	AX	266	PHE	CB-CG-CD2	-6.53	116.23	120.80
24	BL	89	ARG	NE-CZ-NH2	6.53	123.56	120.30
38	A1	721	G	N1-C6-O6	6.53	123.82	119.90
38	A1	1426	G	C2-N3-C4	-6.53	108.64	111.90
38	A1	1602	C	N1-C2-N3	-6.53	114.63	119.20
38	A1	2131	C	C5-C6-N1	-6.53	117.73	121.00
38	A1	2968	G	C3'-C2'-C1'	-6.53	96.28	101.50
10	B1	8	U	O4'-C1'-N1	6.53	113.42	108.20
11	B2	201	G	C1'-O4'-C4'	6.53	115.12	109.90
11	B2	667	G	C4'-C3'-C2'	-6.53	96.07	102.60
11	B2	1014	C	P-O3'-C3'	6.53	127.53	119.70
11	B2	1198	A	OP2-P-O3'	6.53	119.56	105.20
11	B2	1322	C	C5'-C4'-O4'	6.53	116.93	109.10
11	B2	1396	C	C6-N1-C2	6.53	122.91	120.30
38	A1	365	G	C5-N7-C8	-6.53	101.04	104.30
38	A1	406	G	C4'-C3'-C2'	-6.53	96.07	102.60
38	A1	435	G	N1-C6-O6	6.53	123.82	119.90
38	A1	1741	C	C5'-C4'-C3'	-6.53	105.56	116.00
38	A1	2348	G	C4-C5-N7	-6.53	108.19	110.80
11	B2	24	C	O4'-C1'-N1	6.53	113.42	108.20
11	B2	1087	C	N3-C4-N4	6.53	122.57	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
17	BE	8	ARG	NE-CZ-NH2	-6.53	117.04	120.30
38	A1	749	G	N7-C8-N9	-6.53	109.84	113.10
38	A1	1178	G	C5-C6-N1	6.53	114.76	111.50
38	A1	1322	G	C6-N1-C2	6.53	129.01	125.10
38	A1	2016	C	N3-C4-C5	-6.53	119.29	121.90
38	A1	2025	A	C5-C6-N6	-6.53	118.48	123.70
38	A1	2352	G	O4'-C1'-N9	6.53	113.42	108.20
38	A1	2482	G	N9-C4-C5	-6.53	102.79	105.40
59	AL	63	PHE	CB-CG-CD1	6.53	125.37	120.80
11	B2	65	G	C8-N9-C4	-6.52	103.79	106.40
11	B2	231	G	C5-C6-N1	-6.52	108.24	111.50
11	B2	411	C	C1'-O4'-C4'	6.52	115.12	109.90
38	A1	2856	G	O4'-C1'-N9	6.52	113.42	108.20
9	AX	56	PHE	N-CA-CB	6.52	122.34	110.60
11	B2	85	A	C4-C5-C6	6.52	120.26	117.00
11	B2	446	G	C5-N7-C8	6.52	107.56	104.30
11	B2	1304	C	C4-C5-C6	-6.52	114.14	117.40
11	B2	1485	G	O4'-C1'-N9	6.52	113.42	108.20
38	A1	873	G	N3-C2-N2	6.52	124.47	119.90
38	A1	1360	G	C4-C5-C6	6.52	122.71	118.80
38	A1	2107	G	O4'-C1'-N9	6.52	113.42	108.20
38	A1	2392	A	C6-N1-C2	6.52	122.51	118.60
38	A1	2466	C	O4'-C1'-N1	6.52	113.42	108.20
38	A1	2732	U	C5-C6-N1	6.52	125.96	122.70
38	A1	2827	C	C5'-C4'-C3'	-6.52	105.56	116.00
43	AB	121	TYR	CB-CA-C	-6.52	97.36	110.40
38	A1	406	G	P-O3'-C3'	6.52	127.53	119.70
38	A1	408	C	C2-N3-C4	6.52	123.16	119.90
38	A1	759	G	O4'-C1'-N9	6.52	113.42	108.20
38	A1	777	A	N9-C4-C5	6.52	108.41	105.80
38	A1	2851	A	C4-C5-C6	6.52	120.26	117.00
11	B2	359	A	C4-C5-C6	6.52	120.26	117.00
11	B2	905	A	N1-C6-N6	6.52	122.51	118.60
38	A1	1223	A	C8-N9-C4	-6.52	103.19	105.80
38	A1	2255	C	C5'-C4'-O4'	6.52	116.92	109.10
38	A1	2486	A	O4'-C1'-N9	6.52	113.42	108.20
38	A1	2624	G	C6-C5-N7	-6.52	126.49	130.40
11	B2	152	G	C8-N9-C4	6.52	109.01	106.40
11	B2	1151	A	N1-C2-N3	6.52	132.56	129.30
38	A1	377	C	C6-N1-C2	6.52	122.91	120.30
38	A1	559	G	C6-C5-N7	-6.52	126.49	130.40
38	A1	971	G	C6-C5-N7	-6.52	126.49	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1493	C	C1'-O4'-C4'	-6.52	104.69	109.90
38	A1	1919	A	C5-C6-N6	-6.52	118.49	123.70
38	A1	2216	G	O4'-C1'-N9	6.52	113.41	108.20
39	A3	27	C	C6-N1-C2	6.52	122.91	120.30
43	AB	180	TYR	CG-CD2-CE2	-6.52	116.09	121.30
11	B2	79	G	C4'-C3'-C2'	-6.52	96.08	102.60
38	A1	1664	G	C4-C5-N7	-6.52	108.19	110.80
38	A1	1700	U	N3-C2-O2	6.52	126.76	122.20
38	A1	2162	G	C4-C5-C6	6.52	122.71	118.80
38	A1	2210	G	P-O5'-C5'	6.52	131.33	120.90
11	B2	17	C	C2-N3-C4	6.51	123.16	119.90
11	B2	772	G	C8-N9-C1'	-6.51	118.53	127.00
11	B2	881	G	C4-C5-C6	6.51	122.71	118.80
11	B2	972	C	C1'-O4'-C4'	6.51	115.11	109.90
11	B2	1224	U	N1-C2-O2	6.51	127.36	122.80
11	B2	1406	U	P-O3'-C3'	6.51	127.52	119.70
38	A1	634	G	O4'-C1'-N9	6.51	113.41	108.20
38	A1	1121	C	N3-C4-N4	6.51	122.56	118.00
38	A1	1671	A	N1-C6-N6	6.51	122.51	118.60
38	A1	1788	G	N7-C8-N9	6.51	116.36	113.10
38	A1	1791	A	C5-N7-C8	6.51	107.16	103.90
38	A1	2707	G	C6-C5-N7	-6.51	126.49	130.40
11	B2	217	C	C5-C4-N4	-6.51	115.64	120.20
11	B2	278	A	C8-N9-C4	6.51	108.41	105.80
11	B2	812	U	N1-C2-O2	-6.51	118.24	122.80
38	A1	886	G	N1-C2-N3	-6.51	119.99	123.90
38	A1	1187	A	N1-C6-N6	6.51	122.51	118.60
38	A1	1471	G	N7-C8-N9	6.51	116.36	113.10
11	B2	174	G	C2-N3-C4	-6.51	108.64	111.90
11	B2	1483	U	C4'-C3'-C2'	6.51	109.11	102.60
38	A1	549	G	C6-C5-N7	-6.51	126.49	130.40
38	A1	1202	G	C5-N7-C8	6.51	107.56	104.30
38	A1	1414	G	C5-C6-O6	-6.51	124.69	128.60
38	A1	1671	A	C5-C6-N1	-6.51	114.44	117.70
38	A1	1683	C	P-O3'-C3'	6.51	127.51	119.70
38	A1	1702	C	N3-C4-C5	-6.51	119.30	121.90
11	B2	1072	C	C5-C4-N4	6.51	124.76	120.20
38	A1	556	G	C8-N9-C4	-6.51	103.80	106.40
38	A1	1118	A	C5-C6-N1	-6.51	114.44	117.70
38	A1	1697	G	C6-C5-N7	-6.51	126.49	130.40
38	A1	2143	C	N3-C4-C5	-6.51	119.30	121.90
38	A1	2501	G	N7-C8-N9	-6.51	109.84	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2944	G	C2-N3-C4	-6.51	108.65	111.90
38	A1	1270	G	C3'-C2'-C1'	6.51	106.71	101.50
38	A1	1641	G	O4'-C1'-N9	6.51	113.41	108.20
10	B1	21	G	N1-C6-O6	6.51	123.80	119.90
11	B2	1248	A	N1-C2-N3	-6.51	126.05	129.30
24	BL	45	ILE	N-CA-CB	6.51	125.76	110.80
26	BN	30	TYR	CB-CG-CD2	6.51	124.90	121.00
38	A1	66	C	O4'-C1'-N1	6.51	113.41	108.20
38	A1	1429	A	C4-C5-N7	-6.51	107.45	110.70
38	A1	351	C	N3-C4-N4	6.50	122.55	118.00
38	A1	987	G	C6-C5-N7	-6.50	126.50	130.40
38	A1	1939	C	C2'-C3'-O3'	6.50	124.11	113.70
38	A1	2585	G	O4'-C1'-N9	6.50	113.40	108.20
11	B2	211	G	N3-C4-C5	6.50	131.85	128.60
11	B2	959	G	N7-C8-N9	6.50	116.35	113.10
11	B2	1298	G	C3'-C2'-C1'	-6.50	96.30	101.50
38	A1	229	G	C6-C5-N7	-6.50	126.50	130.40
38	A1	255	G	C4'-C3'-C2'	-6.50	96.10	102.60
38	A1	930	G	C4-C5-C6	6.50	122.70	118.80
38	A1	1334	G	N3-C2-N2	6.50	124.45	119.90
38	A1	1766	A	C8-N9-C4	-6.50	103.20	105.80
38	A1	1898	A	N7-C8-N9	6.50	117.05	113.80
38	A1	1954	U	C4-C5-C6	6.50	123.60	119.70
38	A1	2720	U	N3-C2-O2	6.50	126.75	122.20
38	A1	2856	G	C8-N9-C4	-6.50	103.80	106.40
11	B2	35	G	P-O3'-C3'	-6.50	111.90	119.70
11	B2	611	A	C8-N9-C4	-6.50	103.20	105.80
11	B2	1319	C	C5-C4-N4	-6.50	115.65	120.20
11	B2	1362	C	OP1-P-OP2	-6.50	109.85	119.60
38	A1	17	C	N1-C2-O2	-6.50	115.00	118.90
38	A1	145	C	C6-N1-C2	-6.50	117.70	120.30
38	A1	287	G	N7-C8-N9	-6.50	109.85	113.10
38	A1	639	C	C4'-C3'-C2'	-6.50	96.10	102.60
38	A1	1246	G	C5-N7-C8	6.50	107.55	104.30
38	A1	1418	A	C2-N3-C4	-6.50	107.35	110.60
38	A1	1753	G	C1'-O4'-C4'	6.50	115.10	109.90
38	A1	1843	C	C4-C5-C6	-6.50	114.15	117.40
38	A1	2256	G	O5'-P-OP2	6.50	118.50	110.70
38	A1	2357	U	O4'-C1'-N1	6.50	113.40	108.20
38	A1	2369	G	N1-C2-N2	-6.50	110.35	116.20
38	A1	2406	C	O4'-C1'-N1	6.50	113.40	108.20
38	A1	3023	G	C5-C6-N1	-6.50	108.25	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	B1	33	C	C5'-C4'-C3'	6.50	126.40	116.00
11	B2	797	U	P-O3'-C3'	6.50	127.50	119.70
38	A1	165	G	C5-C6-O6	-6.50	124.70	128.60
38	A1	610	C	P-O3'-C3'	-6.50	111.90	119.70
38	A1	918	A	N9-C4-C5	-6.50	103.20	105.80
38	A1	1609	G	O5'-C5'-C4'	6.50	124.05	111.70
38	A1	2644	G	C5-C6-N1	-6.50	108.25	111.50
39	A3	44	C	N3-C4-C5	-6.50	119.30	121.90
11	B2	448	A	C4-C5-N7	-6.50	107.45	110.70
11	B2	844	G	N9-C4-C5	6.50	108.00	105.40
38	A1	107	G	O4'-C1'-N9	6.50	113.40	108.20
38	A1	1809	G	C8-N9-C4	6.50	109.00	106.40
38	A1	2262	C	C5'-C4'-C3'	-6.50	105.60	116.00
38	A1	2413	G	O4'-C1'-N9	6.50	113.40	108.20
38	A1	2557	C	C4-C5-C6	6.50	120.65	117.40
38	A1	2557	C	O4'-C1'-N1	6.50	113.40	108.20
38	A1	3036	C	N3-C4-C5	-6.50	119.30	121.90
10	B1	23	G	C6-C5-N7	-6.50	126.50	130.40
11	B2	752	G	N1-C2-N3	-6.50	120.00	123.90
11	B2	950	C	C6-N1-C2	-6.50	117.70	120.30
11	B2	973	U	N3-C4-C5	-6.50	110.70	114.60
11	B2	983	G	O4'-C4'-C3'	-6.50	97.50	104.00
11	B2	1007	A	C5-C6-N6	-6.50	118.50	123.70
11	B2	1232	G	C8-N9-C4	6.50	109.00	106.40
38	A1	357	G	N1-C6-O6	6.50	123.80	119.90
38	A1	1106	C	N1-C2-N3	-6.50	114.65	119.20
38	A1	1266	A	N1-C6-N6	6.50	122.50	118.60
38	A1	1303	C	N3-C4-N4	6.50	122.55	118.00
38	A1	1586	G	O4'-C1'-N9	6.50	113.40	108.20
38	A1	1938	G	C2-N3-C4	6.50	115.15	111.90
38	A1	1954	U	C1'-O4'-C4'	6.50	115.10	109.90
38	A1	2152	G	N3-C4-N9	6.50	129.90	126.00
38	A1	2214	U	C5-C4-O4	6.50	129.80	125.90
38	A1	2699	U	O4'-C1'-N1	6.50	113.40	108.20
38	A1	2883	C	C1'-O4'-C4'	6.50	115.10	109.90
39	A3	104	C	C6-N1-C2	-6.50	117.70	120.30
11	B2	467	G	N1-C2-N3	-6.50	120.00	123.90
11	B2	876	A	C4-C5-N7	-6.50	107.45	110.70
38	A1	1579	G	O4'-C1'-N9	6.50	113.40	108.20
38	A1	1739	U	N3-C4-O4	6.50	123.95	119.40
38	A1	2562	G	O4'-C1'-C2'	-6.50	99.31	105.80
38	A1	2610	C	C5'-C4'-O4'	-6.50	101.31	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
9	AX	230	ARG	NE-CZ-NH1	-6.49	117.05	120.30
10	B1	19	G	C4'-C3'-C2'	6.49	109.09	102.60
11	B2	673	C	N3-C4-C5	-6.49	119.30	121.90
11	B2	824	G	N1-C2-N3	-6.49	120.00	123.90
38	A1	995	G	C5'-C4'-C3'	-6.49	105.61	116.00
38	A1	1020	G	N3-C2-N2	6.49	124.44	119.90
38	A1	1469	U	O4'-C1'-N1	6.49	113.39	108.20
38	A1	1843	C	C5-C4-N4	-6.49	115.66	120.20
38	A1	2459	G	O4'-C1'-N9	6.49	113.39	108.20
38	A1	2548	A	C5-C6-N6	-6.49	118.50	123.70
38	A1	2792	G	C5-C6-N1	-6.49	108.25	111.50
38	A1	2848	C	C2-N1-C1'	6.49	125.94	118.80
10	B1	19	G	C4-C5-C6	6.49	122.69	118.80
11	B2	720	A	N1-C6-N6	6.49	122.50	118.60
11	B2	1177	C	C2-N3-C4	6.49	123.15	119.90
11	B2	1459	G	C4'-C3'-C2'	6.49	109.09	102.60
38	A1	2730	U	N3-C4-C5	-6.49	110.70	114.60
38	A1	2969	G	O4'-C1'-N9	6.49	113.39	108.20
11	B2	387	G	N7-C8-N9	-6.49	109.86	113.10
11	B2	834	C	N3-C2-O2	6.49	126.44	121.90
11	B2	898	G	N1-C2-N2	6.49	122.04	116.20
11	B2	1299	A	C6-N1-C2	6.49	122.50	118.60
11	B2	1387	C	C5-C4-N4	-6.49	115.66	120.20
34	BV	69	ALA	N-CA-CB	6.49	119.19	110.10
38	A1	168	G	C3'-C2'-C1'	-6.49	96.31	101.50
38	A1	1482	G	C6-C5-N7	-6.49	126.51	130.40
38	A1	1871	C	N3-C4-N4	6.49	122.54	118.00
38	A1	2296	A	N3-C4-N9	6.49	132.59	127.40
38	A1	2723	G	C6-C5-N7	-6.49	126.51	130.40
38	A1	2805	U	O4'-C1'-N1	6.49	113.39	108.20
65	AV	41	TYR	CD1-CE1-CZ	6.49	125.64	119.80
11	B2	811	G	C5-N7-C8	-6.49	101.06	104.30
11	B2	1266	A	C5-C6-N1	-6.49	114.46	117.70
38	A1	234	G	P-O3'-C3'	-6.49	111.91	119.70
38	A1	365	G	C6-C5-N7	-6.49	126.51	130.40
38	A1	572	U	C5-C6-N1	6.49	125.94	122.70
38	A1	1082	A	C5-C6-N6	-6.49	118.51	123.70
38	A1	2363	G	C4-N9-C1'	6.49	134.94	126.50
38	A1	2371	A	N1-C6-N6	6.49	122.49	118.60
38	A1	2642	C	O4'-C1'-N1	6.49	113.39	108.20
39	A3	29	G	N3-C2-N2	6.49	124.44	119.90
39	A3	101	A	N1-C2-N3	6.49	132.54	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	AG	58	ASP	CB-CG-OD1	-6.49	112.46	118.30
11	B2	203	A	C4-C5-N7	-6.49	107.46	110.70
11	B2	850	A	C2-N3-C4	-6.49	107.36	110.60
11	B2	1232	G	N9-C4-C5	-6.49	102.81	105.40
38	A1	1760	C	C2-N3-C4	6.49	123.14	119.90
38	A1	1938	G	N1-C6-O6	6.49	123.79	119.90
38	A1	1948	A	P-O3'-C3'	6.49	127.48	119.70
38	A1	2832	G	N9-C4-C5	6.49	108.00	105.40
39	A3	62	A	N9-C4-C5	-6.49	103.20	105.80
39	A3	97	G	N1-C2-N2	-6.49	110.36	116.20
50	AF	47	PHE	N-CA-CB	6.49	122.28	110.60
11	B2	108	G	C4-C5-N7	6.49	113.39	110.80
11	B2	164	A	O4'-C1'-N9	6.49	113.39	108.20
38	A1	928	A	C8-N9-C4	-6.49	103.21	105.80
38	A1	1889	G	C8-N9-C4	-6.49	103.81	106.40
11	B2	114	A	C4-C5-N7	-6.48	107.46	110.70
38	A1	691	G	N3-C2-N2	6.48	124.44	119.90
38	A1	993	G	C8-N9-C4	-6.48	103.81	106.40
38	A1	2658	G	C6-C5-N7	-6.48	126.51	130.40
11	B2	402	G	P-O3'-C3'	6.48	127.48	119.70
11	B2	482	G	N1-C2-N2	-6.48	110.37	116.20
11	B2	551	U	O4'-C1'-N1	6.48	113.39	108.20
11	B2	864	G	O4'-C1'-N9	6.48	113.39	108.20
11	B2	1304	C	C2-N1-C1'	6.48	125.93	118.80
38	A1	125	C	C5-C6-N1	6.48	124.24	121.00
38	A1	573	G	N7-C8-N9	-6.48	109.86	113.10
38	A1	1140	C	N3-C4-N4	6.48	122.54	118.00
38	A1	2179	G	C2-N3-C4	6.48	115.14	111.90
38	A1	2179	G	C4-C5-N7	6.48	113.39	110.80
38	A1	2377	C	N1-C2-N3	6.48	123.74	119.20
38	A1	2451	G	C5-C6-O6	-6.48	124.71	128.60
38	A1	2698	G	C4-C5-N7	6.48	113.39	110.80
26	BN	14	ARG	NE-CZ-NH1	6.48	123.54	120.30
27	BO	115	TYR	CD1-CE1-CZ	6.48	125.63	119.80
38	A1	89	C	O4'-C1'-N1	6.48	113.38	108.20
38	A1	170	A	C2-N3-C4	-6.48	107.36	110.60
38	A1	529	G	C5-C6-O6	-6.48	124.71	128.60
38	A1	589	G	C5-C6-N1	-6.48	108.26	111.50
38	A1	1290	G	C8-N9-C4	-6.48	103.81	106.40
38	A1	2696	G	C2'-C3'-O3'	6.48	124.07	113.70
38	A1	2799	C	O4'-C1'-N1	6.48	113.38	108.20
56	AJ	103	ALA	N-CA-CB	6.48	119.17	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1083	G	OP1-P-OP2	-6.48	109.88	119.60
38	A1	1241	C	C1'-O4'-C4'	6.48	115.08	109.90
38	A1	1523	A	O4'-C1'-N9	6.48	113.38	108.20
38	A1	1597	G	N9-C4-C5	6.48	107.99	105.40
38	A1	3023	G	C8-N9-C1'	6.48	135.42	127.00
10	B1	48	U	N3-C2-O2	6.48	126.73	122.20
11	B2	263	C	N3-C4-C5	-6.48	119.31	121.90
11	B2	279	U	O5'-P-OP2	-6.48	99.87	105.70
11	B2	471	G	C5-N7-C8	6.48	107.54	104.30
11	B2	477	G	N1-C2-N3	-6.48	120.01	123.90
11	B2	620	G	C5-C6-N1	-6.48	108.26	111.50
11	B2	766	G	O4'-C1'-N9	6.48	113.38	108.20
11	B2	1029	G	C2-N3-C4	6.48	115.14	111.90
11	B2	1233	G	N1-C2-N3	-6.48	120.01	123.90
20	BH	79	TYR	CD1-CE1-CZ	-6.48	113.97	119.80
38	A1	996	U	O4'-C1'-N1	6.48	113.38	108.20
38	A1	1236	C	C2-N3-C4	6.48	123.14	119.90
38	A1	1370	G	C2-N3-C4	6.48	115.14	111.90
38	A1	1677	A	C6-C5-N7	-6.48	127.77	132.30
38	A1	1697	G	N9-C4-C5	-6.48	102.81	105.40
38	A1	1841	G	N1-C6-O6	6.48	123.79	119.90
38	A1	1951	G	C8-N9-C4	-6.48	103.81	106.40
38	A1	2073	G	C6-C5-N7	-6.48	126.51	130.40
38	A1	2291	G	C8-N9-C1'	-6.48	118.58	127.00
38	A1	2587	G	C4-C5-C6	6.48	122.69	118.80
38	A1	2684	G	C4-C5-C6	6.48	122.69	118.80
11	B2	417	C	N3-C4-C5	-6.48	119.31	121.90
11	B2	933	G	P-O3'-C3'	6.48	127.47	119.70
11	B2	1190	C	C4-C5-C6	6.48	120.64	117.40
11	B2	1350	U	C5-C4-O4	6.48	129.79	125.90
38	A1	1672	G	P-O3'-C3'	6.48	127.47	119.70
38	A1	2028	G	C5-N7-C8	6.48	107.54	104.30
38	A1	2259	G	C5'-C4'-O4'	6.48	116.87	109.10
11	B2	138	C	C5-C4-N4	-6.47	115.67	120.20
11	B2	201	G	C5-N7-C8	6.47	107.54	104.30
11	B2	227	C	O4'-C1'-N1	6.47	113.38	108.20
11	B2	1202	G	N7-C8-N9	6.47	116.34	113.10
11	B2	1396	C	N3-C4-N4	6.47	122.53	118.00
38	A1	40	G	O4'-C4'-C3'	-6.47	97.53	104.00
38	A1	450	G	O4'-C1'-N9	6.47	113.38	108.20
38	A1	725	G	C8-N9-C4	6.47	108.99	106.40
38	A1	741	G	C8-N9-C4	-6.47	103.81	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1052	G	O4'-C1'-N9	6.47	113.38	108.20
38	A1	2291	G	C8-N9-C4	6.47	108.99	106.40
38	A1	2322	A	N1-C2-N3	6.47	132.54	129.30
38	A1	2505	A	N3-C4-N9	6.47	132.58	127.40
38	A1	2772	U	C2-N3-C4	6.47	130.88	127.00
38	A1	2775	G	N1-C2-N3	-6.47	120.02	123.90
46	AD	27	ARG	NE-CZ-NH2	-6.47	117.06	120.30
11	B2	111	G	C4-C5-C6	6.47	122.68	118.80
11	B2	526	A	C5-N7-C8	6.47	107.14	103.90
38	A1	1008	U	C4-C5-C6	6.47	123.58	119.70
38	A1	1540	A	O4'-C4'-C3'	-6.47	97.53	104.00
38	A1	1562	U	C5-C6-N1	6.47	125.94	122.70
38	A1	1765	A	C5-C6-N6	-6.47	118.52	123.70
38	A1	1924	A	O4'-C1'-N9	6.47	113.38	108.20
11	B2	209	A	P-O3'-C3'	6.47	127.47	119.70
11	B2	220	G	C4'-C3'-C2'	-6.47	96.13	102.60
11	B2	514	U	N3-C2-O2	6.47	126.73	122.20
11	B2	830	A	C2-N3-C4	6.47	113.84	110.60
11	B2	1465	C	N3-C4-N4	6.47	122.53	118.00
12	B3	27	ARG	NE-CZ-NH2	-6.47	117.06	120.30
38	A1	60	G	C5-C6-N1	-6.47	108.26	111.50
38	A1	1217	U	N3-C2-O2	6.47	126.73	122.20
38	A1	1604	G	O5'-P-OP1	-6.47	99.88	105.70
38	A1	2165	A	C4-C5-C6	6.47	120.24	117.00
38	A1	2624	G	O4'-C1'-N9	6.47	113.38	108.20
11	B2	811	G	C6-C5-N7	-6.47	126.52	130.40
11	B2	1083	G	C5-N7-C8	6.47	107.53	104.30
11	B2	1083	G	N3-C2-N2	6.47	124.43	119.90
27	BO	81	ARG	NE-CZ-NH1	6.47	123.53	120.30
38	A1	25	U	N3-C2-O2	6.47	126.73	122.20
38	A1	226	C	N3-C4-N4	6.47	122.53	118.00
38	A1	466	C	N3-C4-N4	6.47	122.53	118.00
38	A1	1613	A	N7-C8-N9	-6.47	110.57	113.80
38	A1	1673	C	C6-N1-C2	-6.47	117.71	120.30
38	A1	1694	G	N3-C4-N9	-6.47	122.12	126.00
38	A1	1857	A	N1-C6-N6	6.47	122.48	118.60
38	A1	2205	A	N1-C6-N6	6.47	122.48	118.60
38	A1	2278	U	N3-C4-O4	6.47	123.93	119.40
38	A1	2447	A	C6-N1-C2	6.47	122.48	118.60
38	A1	2832	G	C5-C6-N1	-6.47	108.27	111.50
11	B2	870	U	C5-C4-O4	-6.47	122.02	125.90
38	A1	1285	C	C5-C6-N1	6.47	124.23	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2384	G	N1-C2-N2	-6.47	110.38	116.20
7	AU	47	ARG	NE-CZ-NH2	6.47	123.53	120.30
11	B2	752	G	O5'-P-OP2	-6.47	99.88	105.70
11	B2	1195	U	N3-C2-O2	-6.47	117.67	122.20
11	B2	1450	U	N3-C4-O4	-6.47	114.87	119.40
38	A1	600	A	N1-C2-N3	6.47	132.53	129.30
38	A1	1019	G	C8-N9-C4	-6.47	103.81	106.40
38	A1	1055	C	O4'-C1'-N1	6.47	113.37	108.20
38	A1	1268	A	C8-N9-C4	-6.47	103.21	105.80
38	A1	1670	A	C5-C6-N6	-6.47	118.53	123.70
38	A1	1762	G	C4-C5-N7	-6.47	108.21	110.80
38	A1	2000	G	O4'-C1'-N9	6.47	113.37	108.20
38	A1	2224	G	P-O3'-C3'	6.47	127.46	119.70
39	A3	1	C	C2-N3-C4	6.47	123.13	119.90
49	Ae	55	TRP	CB-CG-CD2	-6.47	118.19	126.60
11	B2	1079	G	N9-C4-C5	6.46	107.99	105.40
38	A1	609	G	C8-N9-C4	-6.46	103.81	106.40
38	A1	775	C	O4'-C1'-N1	6.46	113.37	108.20
38	A1	1145	G	C8-N9-C4	-6.46	103.81	106.40
38	A1	1284	C	C2-N3-C4	6.46	123.13	119.90
38	A1	1888	G	C4-C5-C6	6.46	122.68	118.80
38	A1	2527	G	C4-C5-C6	6.46	122.68	118.80
38	A1	2652	G	C2-N3-C4	6.46	115.13	111.90
38	A1	2680	A	C4-C5-N7	-6.46	107.47	110.70
57	Aj	50	PHE	CB-CG-CD1	6.46	125.33	120.80
11	B2	934	G	C5'-C4'-C3'	6.46	126.34	116.00
38	A1	1435	G	N1-C6-O6	6.46	123.78	119.90
38	A1	2722	G	C4-C5-C6	6.46	122.68	118.80
10	B1	53	G	C4-C5-N7	-6.46	108.22	110.80
11	B2	162	C	C6-N1-C2	-6.46	117.72	120.30
11	B2	301	G	C1'-O4'-C4'	-6.46	104.73	109.90
11	B2	858	A	C6-N1-C2	-6.46	114.72	118.60
11	B2	973	U	C5-C4-O4	-6.46	122.02	125.90
11	B2	1260	G	P-O3'-C3'	6.46	127.45	119.70
38	A1	183	G	C4'-C3'-C2'	-6.46	96.14	102.60
38	A1	1440	C	N1-C2-O2	6.46	122.78	118.90
38	A1	1522	A	C5-N7-C8	6.46	107.13	103.90
38	A1	2299	G	N1-C2-N3	-6.46	120.02	123.90
48	AE	155	ARG	N-CA-C	-6.46	93.55	111.00
58	Ak	78	LYS	N-CA-CB	6.46	122.23	110.60
38	A1	1017	A	C4-C5-N7	-6.46	107.47	110.70
38	A1	3002	A	N1-C2-N3	-6.46	126.07	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	B1	23	G	C8-N9-C4	-6.46	103.82	106.40
10	B1	52	G	N1-C6-O6	6.46	123.78	119.90
11	B2	249	U	N1-C2-O2	-6.46	118.28	122.80
11	B2	627	G	O4'-C1'-N9	6.46	113.37	108.20
11	B2	708	C	C6-N1-C1'	-6.46	113.05	120.80
11	B2	1372	C	O4'-C1'-N1	6.46	113.37	108.20
38	A1	123	A	C6-N1-C2	-6.46	114.72	118.60
38	A1	865	C	C3'-C2'-C1'	6.46	106.67	101.50
38	A1	1177	C	C1'-O4'-C4'	6.46	115.07	109.90
38	A1	1253	U	P-O3'-C3'	6.46	127.45	119.70
38	A1	1332	A	C5-C6-N1	-6.46	114.47	117.70
38	A1	1361	G	C4-C5-N7	6.46	113.38	110.80
38	A1	1898	A	O4'-C1'-N9	6.46	113.37	108.20
38	A1	2186	C	P-O3'-C3'	6.46	127.45	119.70
38	A1	2214	U	C4'-C3'-C2'	-6.46	96.14	102.60
67	AZ	37	VAL	CA-CB-CG1	6.46	120.59	110.90
11	B2	106	A	N1-C6-N6	6.46	122.47	118.60
11	B2	209	A	O4'-C1'-N9	6.46	113.36	108.20
11	B2	1425	C	C4-C5-C6	-6.46	114.17	117.40
11	B2	1465	C	P-O3'-C3'	6.46	127.45	119.70
38	A1	99	U	C6-N1-C2	-6.46	117.13	121.00
38	A1	436	C	N1-C2-O2	-6.46	115.03	118.90
38	A1	1110	A	N1-C2-N3	-6.46	126.07	129.30
38	A1	1201	G	N7-C8-N9	6.46	116.33	113.10
38	A1	1337	G	N1-C2-N3	-6.46	120.03	123.90
38	A1	2133	G	N3-C2-N2	6.46	124.42	119.90
38	A1	2177	A	C8-N9-C4	-6.46	103.22	105.80
38	A1	2836	G	N1-C2-N2	-6.46	110.39	116.20
11	B2	560	A	C4-C5-C6	6.46	120.23	117.00
26	BN	141	ARG	NE-CZ-NH1	6.46	123.53	120.30
38	A1	319	A	C5-C6-N1	-6.46	114.47	117.70
38	A1	361	G	C4-C5-N7	-6.46	108.22	110.80
38	A1	2874	C	C6-N1-C2	-6.46	117.72	120.30
11	B2	123	U	N3-C4-C5	-6.45	110.73	114.60
11	B2	291	G	O4'-C1'-N9	6.45	113.36	108.20
11	B2	439	G	C4-C5-N7	6.45	113.38	110.80
11	B2	850	A	C8-N9-C4	6.45	108.38	105.80
11	B2	1078	U	C2-N3-C4	-6.45	123.13	127.00
18	BF	137	ARG	NE-CZ-NH2	-6.45	117.07	120.30
28	BP	32	ARG	NE-CZ-NH1	6.45	123.53	120.30
38	A1	369	G	P-O5'-C5'	6.45	131.22	120.90
38	A1	485	G	C5-C6-O6	-6.45	124.73	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	612	G	P-O3'-C3'	-6.45	111.95	119.70
38	A1	638	A	C5'-C4'-O4'	6.45	116.84	109.10
38	A1	883	G	N7-C8-N9	6.45	116.33	113.10
38	A1	1815	C	N3-C4-N4	6.45	122.52	118.00
38	A1	2765	C	C4-C5-C6	6.45	120.63	117.40
46	AD	161	PHE	CB-CG-CD1	6.45	125.32	120.80
11	B2	93	A	C5'-C4'-C3'	-6.45	105.68	116.00
11	B2	924	U	C6-N1-C2	-6.45	117.13	121.00
38	A1	543	G	C5-C6-O6	-6.45	124.73	128.60
38	A1	951	C	C4-C5-C6	6.45	120.63	117.40
11	B2	20	G	P-O3'-C3'	-6.45	111.96	119.70
11	B2	1391	U	C5-C6-N1	6.45	125.92	122.70
11	B2	1414	G	N3-C4-N9	6.45	129.87	126.00
38	A1	250	G	C6-C5-N7	-6.45	126.53	130.40
38	A1	563	A	C4-C5-C6	6.45	120.22	117.00
38	A1	569	G	N1-C6-O6	6.45	123.77	119.90
38	A1	589	G	C4-C5-C6	6.45	122.67	118.80
38	A1	810	A	C8-N9-C4	-6.45	103.22	105.80
38	A1	842	C	N1-C2-N3	-6.45	114.68	119.20
38	A1	1056	C	N3-C4-C5	-6.45	119.32	121.90
38	A1	1664	G	P-O5'-C5'	6.45	131.22	120.90
38	A1	2057	G	C8-N9-C4	-6.45	103.82	106.40
38	A1	2178	A	P-O3'-C3'	6.45	127.44	119.70
38	A1	2282	G	OP1-P-OP2	-6.45	109.92	119.60
38	A1	2751	C	C5-C6-N1	-6.45	117.78	121.00
11	B2	250	G	N7-C8-N9	6.45	116.32	113.10
11	B2	385	A	C6-N1-C2	6.45	122.47	118.60
11	B2	593	G	C5-C6-N1	-6.45	108.28	111.50
11	B2	823	A	O4'-C1'-N9	6.45	113.36	108.20
11	B2	1136	A	N9-C4-C5	6.45	108.38	105.80
11	B2	1474	A	C5-C6-N6	-6.45	118.54	123.70
38	A1	103	A	C3'-C2'-C1'	-6.45	96.34	101.50
38	A1	419	G	C5-C6-O6	-6.45	124.73	128.60
38	A1	439	G	N3-C2-N2	6.45	124.42	119.90
38	A1	1052	G	P-O3'-C3'	6.45	127.44	119.70
39	A3	46	G	N1-C2-N3	-6.45	120.03	123.90
11	B2	150	G	C5-C6-O6	-6.45	124.73	128.60
11	B2	1072	C	C5-C6-N1	6.45	124.22	121.00
11	B2	1111	G	C6-N1-C2	6.45	128.97	125.10
38	A1	449	G	N3-C4-C5	-6.45	125.38	128.60
38	A1	1242	A	N1-C6-N6	6.45	122.47	118.60
38	A1	1731	U	C4-C5-C6	6.45	123.57	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	B1	36	A	C5'-C4'-O4'	6.45	116.83	109.10
11	B2	927	A	C2-N3-C4	-6.45	107.38	110.60
11	B2	1198	A	C8-N9-C4	6.45	108.38	105.80
11	B2	1207	G	N7-C8-N9	-6.45	109.88	113.10
38	A1	879	A	O4'-C1'-N9	6.45	113.36	108.20
38	A1	1233	U	O4'-C1'-N1	6.45	113.36	108.20
38	A1	1276	G	N1-C2-N2	-6.45	110.40	116.20
38	A1	1430	A	O4'-C1'-N9	6.45	113.36	108.20
38	A1	1575	G	C4-C5-N7	-6.45	108.22	110.80
38	A1	1731	U	C5-C6-N1	-6.45	119.48	122.70
38	A1	2089	C	C5-C4-N4	-6.45	115.69	120.20
38	A1	2348	G	N9-C4-C5	6.45	107.98	105.40
39	A3	59	C	N3-C4-N4	6.45	122.51	118.00
11	B2	294	A	O4'-C1'-N9	6.44	113.36	108.20
38	A1	2043	A	C4-C5-C6	6.44	120.22	117.00
38	A1	2597	A	C8-N9-C4	-6.44	103.22	105.80
38	A1	2713	A	C8-N9-C4	-6.44	103.22	105.80
11	B2	210	A	N9-C4-C5	6.44	108.38	105.80
11	B2	350	G	C6-C5-N7	-6.44	126.53	130.40
11	B2	1064	C	N1-C2-O2	-6.44	115.03	118.90
38	A1	79	C	O4'-C1'-N1	6.44	113.35	108.20
38	A1	593	C	C3'-C2'-C1'	6.44	106.65	101.50
38	A1	1025	A	N7-C8-N9	-6.44	110.58	113.80
38	A1	1286	G	C8-N9-C4	6.44	108.98	106.40
38	A1	1749	C	C5-C6-N1	6.44	124.22	121.00
38	A1	1805	U	N3-C4-O4	-6.44	114.89	119.40
38	A1	1890	U	N3-C4-O4	6.44	123.91	119.40
38	A1	2802	G	C6-N1-C2	6.44	128.97	125.10
45	AC	56	ASP	N-CA-CB	6.44	122.19	110.60
10	B1	16	C	C5-C4-N4	-6.44	115.69	120.20
11	B2	155	U	C3'-C2'-C1'	-6.44	96.35	101.50
11	B2	184	G	C8-N9-C4	6.44	108.98	106.40
11	B2	207	G	O4'-C1'-N9	6.44	113.35	108.20
11	B2	222	G	C1'-O4'-C4'	6.44	115.05	109.90
11	B2	349	A	P-O5'-C5'	-6.44	110.59	120.90
11	B2	678	G	C1'-O4'-C4'	-6.44	104.75	109.90
11	B2	812	U	C5-C6-N1	6.44	125.92	122.70
11	B2	839	G	C5-N7-C8	6.44	107.52	104.30
11	B2	1092	G	C8-N9-C4	-6.44	103.82	106.40
38	A1	248	C	C5'-C4'-O4'	6.44	116.83	109.10
38	A1	757	C	N3-C4-C5	-6.44	119.32	121.90
38	A1	990	G	C6-C5-N7	-6.44	126.54	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1290	G	O4'-C1'-N9	6.44	113.35	108.20
38	A1	1338	G	C4-C5-C6	6.44	122.67	118.80
38	A1	2124	C	N3-C2-O2	6.44	126.41	121.90
38	A1	2145	G	N1-C6-O6	6.44	123.76	119.90
38	A1	2238	G	N1-C2-N2	6.44	122.00	116.20
45	AC	196	PHE	CB-CG-CD1	-6.44	116.29	120.80
11	B2	881	G	C5-C6-O6	-6.44	124.74	128.60
38	A1	962	C	C5-C4-N4	-6.44	115.69	120.20
38	A1	1042	G	N1-C6-O6	6.44	123.76	119.90
38	A1	1200	A	C3'-C2'-C1'	6.44	106.65	101.50
38	A1	1681	G	O4'-C1'-N9	6.44	113.35	108.20
11	B2	1	A	C2-N3-C4	6.44	113.82	110.60
11	B2	230	C	C6-N1-C2	-6.44	117.72	120.30
11	B2	276	A	N9-C4-C5	6.44	108.38	105.80
11	B2	798	U	O4'-C1'-N1	6.44	113.35	108.20
11	B2	864	G	OP1-P-OP2	-6.44	109.94	119.60
11	B2	918	A	C6-C5-N7	-6.44	127.79	132.30
11	B2	1158	G	C5-C6-N1	-6.44	108.28	111.50
27	BO	53	TYR	CZ-CE2-CD2	-6.44	114.01	119.80
38	A1	124	C	C5-C4-N4	-6.44	115.69	120.20
38	A1	301	G	O4'-C4'-C3'	-6.44	97.56	104.00
38	A1	568	A	P-O5'-C5'	6.44	131.20	120.90
38	A1	707	U	C2-N3-C4	-6.44	123.14	127.00
38	A1	1834	C	C5-C6-N1	-6.44	117.78	121.00
38	A1	2171	G	C4'-C3'-C2'	-6.44	96.16	102.60
38	A1	2994	G	O4'-C1'-N9	6.44	113.35	108.20
11	B2	1139	A	C4-C5-C6	6.44	120.22	117.00
11	B2	1454	A	N1-C6-N6	6.44	122.46	118.60
38	A1	1281	A	O4'-C1'-N9	6.44	113.35	108.20
38	A1	2608	U	O4'-C1'-N1	6.44	113.35	108.20
38	A1	2784	A	C5-C6-N6	-6.44	118.55	123.70
11	B2	25	C	C2-N3-C4	6.43	123.12	119.90
11	B2	287	G	N3-C2-N2	6.43	124.41	119.90
11	B2	662	C	C6-N1-C2	-6.43	117.73	120.30
11	B2	779	G	N9-C4-C5	-6.43	102.83	105.40
11	B2	795	G	C1'-O4'-C4'	-6.43	104.75	109.90
11	B2	801	A	C5-N7-C8	6.43	107.12	103.90
38	A1	259	A	O4'-C4'-C3'	-6.43	97.57	104.00
38	A1	488	A	C6-N1-C2	6.43	122.46	118.60
38	A1	1006	A	C5-C6-N6	-6.43	118.55	123.70
38	A1	1073	G	C8-N9-C4	6.43	108.97	106.40
38	A1	1438	C	N3-C4-N4	6.43	122.50	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1771	C	C1'-O4'-C4'	6.43	115.05	109.90
38	A1	2379	G	O4'-C1'-N9	6.43	113.35	108.20
38	A1	2881	G	OP1-P-OP2	-6.43	109.95	119.60
39	A3	68	C	N1-C2-O2	6.43	122.76	118.90
39	A3	122	C	C5-C6-N1	-6.43	117.78	121.00
11	B2	143	G	N3-C4-C5	-6.43	125.38	128.60
11	B2	387	G	N1-C2-N3	-6.43	120.04	123.90
11	B2	1425	C	C2-N1-C1'	6.43	125.88	118.80
16	BD	51	PHE	CB-CG-CD2	6.43	125.30	120.80
38	A1	580	G	O4'-C1'-N9	6.43	113.35	108.20
38	A1	1167	A	C6-C5-N7	-6.43	127.80	132.30
38	A1	1414	G	C6-N1-C2	6.43	128.96	125.10
38	A1	1937	A	O4'-C1'-N9	6.43	113.35	108.20
38	A1	2330	A	C5-C6-N6	-6.43	118.55	123.70
38	A1	2724	A	C4-C5-C6	6.43	120.22	117.00
38	A1	2825	A	C2-N3-C4	-6.43	107.38	110.60
11	B2	1325	C	C2-N3-C4	6.43	123.11	119.90
26	BN	96	PHE	CB-CG-CD2	-6.43	116.30	120.80
38	A1	237	G	C8-N9-C4	6.43	108.97	106.40
38	A1	281	G	C5-C6-N1	-6.43	108.28	111.50
38	A1	546	C	C5'-C4'-C3'	-6.43	105.71	116.00
38	A1	777	A	C8-N9-C4	-6.43	103.23	105.80
38	A1	2760	A	C6-C5-N7	-6.43	127.80	132.30
11	B2	36	G	N1-C6-O6	6.43	123.76	119.90
11	B2	445	G	C5-C6-O6	-6.43	124.74	128.60
38	A1	166	G	N1-C2-N2	-6.43	110.41	116.20
38	A1	907	C	N3-C4-C5	-6.43	119.33	121.90
38	A1	1228	G	N3-C4-C5	-6.43	125.39	128.60
38	A1	1649	G	C5'-C4'-O4'	6.43	116.81	109.10
38	A1	1985	G	N1-C2-N3	-6.43	120.04	123.90
38	A1	2194	A	C6-C5-N7	-6.43	127.80	132.30
38	A1	2513	C	C4-C5-C6	6.43	120.61	117.40
38	A1	2625	C	N3-C4-N4	6.43	122.50	118.00
38	A1	2648	C	P-O3'-C3'	6.43	127.42	119.70
38	A1	3011	G	C8-N9-C4	-6.43	103.83	106.40
11	B2	389	G	N3-C4-C5	6.43	131.81	128.60
11	B2	669	A	C4-C5-C6	6.43	120.21	117.00
11	B2	893	U	C6-N1-C2	6.43	124.86	121.00
38	A1	108	G	N1-C6-O6	6.43	123.76	119.90
38	A1	393	C	O4'-C4'-C3'	-6.43	97.57	104.00
38	A1	474	G	C2-N3-C4	6.43	115.11	111.90
38	A1	634	G	C6-C5-N7	-6.43	126.54	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2204	C	N3-C2-O2	6.43	126.40	121.90
15	BC	89	TYR	CB-CG-CD1	6.43	124.86	121.00
38	A1	70	G	C4-C5-N7	6.43	113.37	110.80
38	A1	198	C	O4'-C4'-C3'	-6.43	97.57	104.00
38	A1	243	G	N3-C2-N2	6.43	124.40	119.90
38	A1	1021	G	N3-C2-N2	6.43	124.40	119.90
38	A1	1737	A	C2-N3-C4	6.43	113.81	110.60
39	A3	53	A	N1-C2-N3	6.43	132.51	129.30
48	AE	172	MET	CG-SD-CE	-6.43	89.92	100.20
11	B2	535	U	N3-C4-C5	-6.42	110.75	114.60
11	B2	868	C	N1-C2-O2	-6.42	115.05	118.90
11	B2	976	A	C6-N1-C2	-6.42	114.75	118.60
11	B2	1009	G	C6-C5-N7	-6.42	126.55	130.40
11	B2	1010	G	C4'-C3'-C2'	-6.42	96.17	102.60
11	B2	1200	U	N1-C2-N3	6.42	118.75	114.90
14	BB	12	TYR	CD1-CE1-CZ	-6.42	114.02	119.80
38	A1	94	A	N3-C4-C5	-6.42	122.30	126.80
38	A1	872	G	N3-C4-C5	6.42	131.81	128.60
38	A1	921	C	C6-N1-C2	-6.42	117.73	120.30
38	A1	1329	G	N7-C8-N9	6.42	116.31	113.10
38	A1	2053	G	C4-C5-N7	-6.42	108.23	110.80
38	A1	2293	G	C6-C5-N7	-6.42	126.55	130.40
38	A1	2611	U	C4'-C3'-C2'	6.42	109.02	102.60
38	A1	2728	U	N1-C2-N3	-6.42	111.05	114.90
11	B2	107	C	C6-N1-C2	-6.42	117.73	120.30
11	B2	207	G	C6-N1-C2	6.42	128.95	125.10
11	B2	537	G	N3-C2-N2	6.42	124.40	119.90
11	B2	566	C	C6-N1-C2	-6.42	117.73	120.30
19	BG	72	PHE	CB-CG-CD1	-6.42	116.30	120.80
38	A1	846	C	N3-C4-N4	6.42	122.50	118.00
38	A1	1852	U	C5-C4-O4	-6.42	122.05	125.90
38	A1	2880	C	N1-C2-O2	6.42	122.75	118.90
11	B2	406	U	N3-C4-C5	-6.42	110.75	114.60
11	B2	591	G	C2-N3-C4	6.42	115.11	111.90
11	B2	768	A	N3-C4-C5	-6.42	122.30	126.80
11	B2	817	U	C5-C4-O4	-6.42	122.05	125.90
11	B2	995	G	C6-C5-N7	-6.42	126.55	130.40
11	B2	1148	G	N1-C2-N3	-6.42	120.05	123.90
38	A1	217	A	N1-C2-N3	-6.42	126.09	129.30
38	A1	1073	G	N1-C2-N3	-6.42	120.05	123.90
38	A1	2436	A	C2-N3-C4	-6.42	107.39	110.60
38	A1	2595	C	C6-N1-C2	-6.42	117.73	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2714	G	C2-N3-C4	6.42	115.11	111.90
38	A1	2945	A	C6-C5-N7	-6.42	127.80	132.30
11	B2	171	U	N1-C2-O2	-6.42	118.31	122.80
11	B2	657	A	C5-C6-N6	-6.42	118.56	123.70
11	B2	1287	G	C4-C5-N7	-6.42	108.23	110.80
38	A1	338	A	C5-C6-N6	-6.42	118.56	123.70
38	A1	2810	G	C6-C5-N7	-6.42	126.55	130.40
11	B2	32	A	N1-C2-N3	-6.42	126.09	129.30
11	B2	676	G	N1-C6-O6	6.42	123.75	119.90
27	BO	53	TYR	CB-CG-CD1	-6.42	117.15	121.00
38	A1	74	A	C4'-C3'-C2'	-6.42	96.18	102.60
38	A1	491	G	C2-N3-C4	6.42	115.11	111.90
38	A1	612	G	C4-C5-C6	6.42	122.65	118.80
38	A1	622	A	C5-C6-N6	-6.42	118.57	123.70
38	A1	652	G	N3-C4-C5	-6.42	125.39	128.60
38	A1	654	C	C5-C4-N4	-6.42	115.71	120.20
38	A1	839	A	C4-C5-N7	-6.42	107.49	110.70
38	A1	866	G	N3-C4-N9	6.42	129.85	126.00
38	A1	1726	A	C4-C5-N7	-6.42	107.49	110.70
38	A1	2352	G	N3-C4-N9	6.42	129.85	126.00
38	A1	2410	U	O4'-C1'-N1	6.42	113.33	108.20
38	A1	2539	G	C4'-C3'-C2'	-6.42	96.18	102.60
10	B1	73	C	C2-N1-C1'	-6.42	111.74	118.80
11	B2	64	G	O4'-C1'-N9	6.42	113.33	108.20
11	B2	860	G	N9-C1'-C2'	-6.42	104.94	112.00
16	BD	83	LEU	CB-CG-CD1	6.42	121.91	111.00
38	A1	91	G	P-O3'-C3'	6.42	127.40	119.70
38	A1	316	G	C8-N9-C4	6.42	108.97	106.40
38	A1	1261	C	C3'-C2'-C1'	6.42	106.63	101.50
38	A1	1497	C	C3'-C2'-C1'	6.42	106.63	101.50
38	A1	1592	U	N1-C2-O2	-6.42	118.31	122.80
38	A1	1743	G	C4-C5-C6	6.42	122.65	118.80
38	A1	1848	A	C5-C6-N1	-6.42	114.49	117.70
38	A1	1979	G	N9-C4-C5	6.42	107.97	105.40
38	A1	2389	C	O4'-C1'-N1	6.42	113.33	108.20
38	A1	2391	G	C2-N3-C4	6.42	115.11	111.90
38	A1	2429	G	N1-C2-N2	6.42	121.97	116.20
11	B2	450	A	C5-C6-N6	-6.42	118.57	123.70
20	BH	180	PHE	CB-CG-CD1	-6.42	116.31	120.80
30	BR	51	ARG	NE-CZ-NH2	-6.42	117.09	120.30
38	A1	339	A	N9-C4-C5	-6.42	103.23	105.80
38	A1	986	G	O4'-C1'-N9	6.42	113.33	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2897	C	C6-N1-C2	6.42	122.87	120.30
39	A3	35	A	C2-N3-C4	-6.42	107.39	110.60
45	AC	334	ARG	NE-CZ-NH1	-6.42	117.09	120.30
11	B2	271	G	C8-N9-C4	-6.41	103.83	106.40
38	A1	1147	G	N1-C2-N3	-6.41	120.05	123.90
38	A1	1262	C	N1-C2-N3	6.41	123.69	119.20
38	A1	1455	U	P-O5'-C5'	-6.41	110.64	120.90
38	A1	1518	G	C2-N3-C4	6.41	115.11	111.90
38	A1	1924	A	N9-C4-C5	-6.41	103.23	105.80
38	A1	1940	U	O4'-C1'-N1	6.41	113.33	108.20
38	A1	2023	A	C6-C5-N7	-6.41	127.81	132.30
38	A1	2242	A	O4'-C1'-N9	6.41	113.33	108.20
39	A3	2	G	C5-C6-N1	-6.41	108.29	111.50
11	B2	251	G	C4-C5-C6	6.41	122.65	118.80
11	B2	291	G	N3-C2-N2	6.41	124.39	119.90
11	B2	609	G	O4'-C1'-N9	6.41	113.33	108.20
20	BH	81	VAL	CA-CB-CG2	6.41	120.52	110.90
38	A1	1193	G	C6-N1-C2	6.41	128.95	125.10
38	A1	2124	C	N3-C4-N4	6.41	122.49	118.00
11	B2	23	G	C4-C5-N7	6.41	113.36	110.80
11	B2	411	C	C5-C4-N4	-6.41	115.71	120.20
11	B2	538	C	P-O5'-C5'	6.41	131.16	120.90
11	B2	642	G	C5-N7-C8	6.41	107.50	104.30
11	B2	885	G	C6-N1-C2	6.41	128.95	125.10
11	B2	1268	C	C4-C5-C6	6.41	120.61	117.40
11	B2	1402	C	C5-C4-N4	-6.41	115.71	120.20
13	BA	159	LEU	CB-CG-CD1	6.41	121.90	111.00
38	A1	142	G	C4-C5-N7	6.41	113.36	110.80
38	A1	165	G	C2-N3-C4	6.41	115.11	111.90
38	A1	772	G	N1-C2-N3	-6.41	120.05	123.90
38	A1	858	G	N3-C2-N2	6.41	124.39	119.90
38	A1	1180	G	C8-N9-C4	6.41	108.96	106.40
38	A1	1907	G	N1-C6-O6	6.41	123.75	119.90
38	A1	1921	U	O4'-C1'-N1	6.41	113.33	108.20
38	A1	1964	G	O4'-C1'-N9	6.41	113.33	108.20
38	A1	2104	G	C2-N3-C4	-6.41	108.69	111.90
38	A1	2469	G	C6-C5-N7	-6.41	126.55	130.40
38	A1	2641	C	C1'-O4'-C4'	6.41	115.03	109.90
38	A1	2648	C	N1-C2-O2	-6.41	115.05	118.90
38	A1	2853	A	C6-N1-C2	-6.41	114.75	118.60
10	B1	20	G	C4-C5-C6	6.41	122.65	118.80
11	B2	228	G	C8-N9-C1'	6.41	135.33	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1438	A	N7-C8-N9	6.41	117.00	113.80
38	A1	881	G	C4-C5-C6	6.41	122.64	118.80
38	A1	1028	G	N1-C6-O6	6.41	123.75	119.90
38	A1	1396	A	N7-C8-N9	-6.41	110.60	113.80
38	A1	1918	U	N1-C2-N3	6.41	118.75	114.90
38	A1	2393	G	N1-C2-N3	-6.41	120.06	123.90
38	A1	2504	U	N3-C2-O2	6.41	126.69	122.20
38	A1	2752	U	N3-C4-O4	6.41	123.89	119.40
11	B2	706	G	N1-C2-N3	-6.41	120.06	123.90
11	B2	977	G	N1-C6-O6	6.41	123.74	119.90
11	B2	1287	G	C4'-C3'-C2'	-6.41	96.19	102.60
11	B2	1320	A	O4'-C1'-N9	6.41	113.33	108.20
38	A1	1504	C	N3-C4-C5	-6.41	119.34	121.90
38	A1	2048	C	C4-C5-C6	6.41	120.60	117.40
38	A1	2162	G	N3-C4-C5	-6.41	125.40	128.60
39	A3	69	C	N3-C4-N4	6.41	122.48	118.00
11	B2	529	C	N3-C4-N4	6.41	122.48	118.00
38	A1	305	G	P-O3'-C3'	6.41	127.39	119.70
38	A1	580	G	C5-C6-N1	-6.41	108.30	111.50
38	A1	887	U	N3-C2-O2	6.41	126.68	122.20
38	A1	1021	G	C5-C6-O6	-6.41	124.76	128.60
38	A1	1118	A	N3-C4-C5	-6.41	122.32	126.80
38	A1	1562	U	C2-N3-C4	6.41	130.84	127.00
38	A1	1892	G	C3'-C2'-C1'	-6.41	96.38	101.50
38	A1	2004	A	N1-C6-N6	6.41	122.44	118.60
38	A1	2213	G	N9-C4-C5	-6.41	102.84	105.40
38	A1	2428	C	N3-C4-N4	6.41	122.48	118.00
11	B2	302	A	O4'-C1'-N9	6.40	113.32	108.20
11	B2	985	C	C2-N3-C4	6.40	123.10	119.90
11	B2	1365	G	N7-C8-N9	-6.40	109.90	113.10
38	A1	440	A	C5-C6-N1	-6.40	114.50	117.70
38	A1	791	C	C2-N3-C4	-6.40	116.70	119.90
38	A1	1045	A	C4-C5-C6	6.40	120.20	117.00
38	A1	1546	G	C5-C6-O6	-6.40	124.76	128.60
38	A1	1678	A	C5-N7-C8	6.40	107.10	103.90
38	A1	1883	C	O4'-C1'-N1	6.40	113.32	108.20
38	A1	2403	G	C8-N9-C1'	6.40	135.32	127.00
38	A1	2668	G	C4-C5-C6	6.40	122.64	118.80
52	AH	62	LYS	N-CA-CB	6.40	122.13	110.60
7	AU	75	ARG	NE-CZ-NH2	-6.40	117.10	120.30
11	B2	219	C	C2-N3-C4	6.40	123.10	119.90
11	B2	1411	G	C5-C6-O6	-6.40	124.76	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	399	C	P-O3'-C3'	6.40	127.38	119.70
38	A1	649	A	C5-N7-C8	6.40	107.10	103.90
38	A1	800	G	P-O3'-C3'	6.40	127.38	119.70
62	AO	113	ARG	NE-CZ-NH2	-6.40	117.10	120.30
10	B1	25	G	N7-C8-N9	-6.40	109.90	113.10
11	B2	1148	G	O4'-C1'-N9	6.40	113.32	108.20
11	B2	1353	C	N3-C4-C5	-6.40	119.34	121.90
11	B2	1414	G	P-O5'-C5'	6.40	131.14	120.90
38	A1	57	C	O4'-C1'-N1	6.40	113.32	108.20
38	A1	1452	G	N3-C2-N2	6.40	124.38	119.90
38	A1	1465	A	N7-C8-N9	6.40	117.00	113.80
38	A1	1642	G	C6-C5-N7	6.40	134.24	130.40
38	A1	2381	A	P-O3'-C3'	6.40	127.38	119.70
57	Aj	84	PHE	CB-CG-CD2	-6.40	116.32	120.80
11	B2	164	A	C1'-O4'-C4'	6.40	115.02	109.90
11	B2	246	A	C8-N9-C4	-6.40	103.24	105.80
11	B2	1413	G	C5-C6-O6	-6.40	124.76	128.60
38	A1	1705	C	P-O3'-C3'	6.40	127.38	119.70
46	AD	90	ARG	NE-CZ-NH2	6.40	123.50	120.30
11	B2	40	C	C4-C5-C6	-6.40	114.20	117.40
11	B2	126	G	N3-C4-C5	-6.40	125.40	128.60
11	B2	201	G	C8-N9-C1'	6.40	135.32	127.00
11	B2	362	C	C5-C4-N4	-6.40	115.72	120.20
11	B2	1303	C	C5-C6-N1	-6.40	117.80	121.00
11	B2	1390	G	C5-C6-N1	-6.40	108.30	111.50
38	A1	430	A	O4'-C1'-N9	6.40	113.32	108.20
38	A1	906	G	C2-N3-C4	6.40	115.10	111.90
38	A1	1085	G	O3'-P-O5'	-6.40	91.85	104.00
38	A1	1596	G	C4-C5-N7	6.40	113.36	110.80
38	A1	1966	C	N3-C4-C5	-6.40	119.34	121.90
38	A1	2794	G	C4-C5-N7	-6.40	108.24	110.80
39	A3	21	C	O4'-C1'-N1	6.40	113.32	108.20
11	B2	655	A	C8-N9-C4	-6.40	103.24	105.80
11	B2	757	G	C5-N7-C8	6.40	107.50	104.30
12	B3	64	ALA	CB-CA-C	-6.40	100.51	110.10
15	BC	57	ARG	NE-CZ-NH1	6.40	123.50	120.30
38	A1	40	G	N1-C6-O6	6.40	123.74	119.90
38	A1	1127	C	C6-N1-C2	-6.40	117.74	120.30
38	A1	1912	A	C6-N1-C2	6.40	122.44	118.60
38	A1	2869	U	C5-C4-O4	-6.40	122.06	125.90
38	A1	2895	G	C4-N9-C1'	6.40	134.81	126.50
7	AU	81	ALA	N-CA-CB	6.39	119.05	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	134	A	O4'-C1'-N9	6.39	113.31	108.20
11	B2	152	G	N7-C8-N9	-6.39	109.90	113.10
20	BH	180	PHE	CB-CG-CD2	6.39	125.28	120.80
28	BP	43	PHE	CB-CG-CD2	6.39	125.28	120.80
38	A1	406	G	C3'-C2'-C1'	6.39	106.62	101.50
38	A1	788	A	C6-C5-N7	-6.39	127.82	132.30
38	A1	891	C	C4-C5-C6	-6.39	114.20	117.40
38	A1	1003	C	O4'-C1'-N1	6.39	113.31	108.20
38	A1	2770	A	C8-N9-C4	-6.39	103.24	105.80
11	B2	58	U	C6-N1-C2	-6.39	117.16	121.00
11	B2	785	U	N3-C2-O2	6.39	126.67	122.20
38	A1	358	C	O4'-C1'-N1	6.39	113.31	108.20
38	A1	531	G	N9-C4-C5	6.39	107.96	105.40
38	A1	1057	C	C5-C4-N4	-6.39	115.73	120.20
38	A1	1931	G	C5-C6-N1	-6.39	108.30	111.50
38	A1	1986	U	C5-C4-O4	-6.39	122.06	125.90
39	A3	71	G	C2-N3-C4	6.39	115.10	111.90
39	A3	106	G	N9-C4-C5	-6.39	102.84	105.40
11	B2	145	A	N9-C4-C5	6.39	108.36	105.80
11	B2	300	G	N1-C2-N3	-6.39	120.07	123.90
11	B2	612	C	C2-N1-C1'	-6.39	111.77	118.80
38	A1	941	C	C2-N3-C4	-6.39	116.70	119.90
39	A3	59	C	N3-C2-O2	6.39	126.37	121.90
3	Af	41	ARG	NE-CZ-NH2	-6.39	117.11	120.30
9	AX	179	SER	N-CA-CB	6.39	120.08	110.50
11	B2	99	C	O4'-C1'-N1	6.39	113.31	108.20
11	B2	1392	G	C6-C5-N7	-6.39	126.57	130.40
38	A1	41	G	C6-N1-C2	6.39	128.93	125.10
38	A1	637	G	C4-C5-C6	6.39	122.63	118.80
38	A1	810	A	N1-C2-N3	-6.39	126.11	129.30
38	A1	952	C	N3-C4-N4	6.39	122.47	118.00
38	A1	1272	A	P-O5'-C5'	-6.39	110.67	120.90
38	A1	1635	G	C5-C6-O6	-6.39	124.77	128.60
38	A1	2000	G	C4-C5-N7	-6.39	108.24	110.80
38	A1	2717	A	C5-N7-C8	6.39	107.09	103.90
39	A3	88	A	C4-C5-N7	-6.39	107.50	110.70
11	B2	963	A	O4'-C1'-N9	6.39	113.31	108.20
11	B2	1481	G	O4'-C4'-C3'	-6.39	97.61	104.00
38	A1	814	G	C4-C5-N7	6.39	113.36	110.80
38	A1	833	G	P-O3'-C3'	-6.39	112.03	119.70
38	A1	1046	A	N3-C4-C5	-6.39	122.33	126.80
38	A1	1361	G	C5-C6-O6	-6.39	124.77	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	A1	1445	G	C5-C6-O6	-6.39	124.77	128.60
38	A1	1450	C	OP1-P-OP2	-6.39	110.02	119.60
38	A1	2299	G	O4'-C1'-C2'	6.39	113.35	107.60
40	AK	38	ALA	C-N-CA	6.39	135.72	122.30
11	B2	1223	C	C4-C5-C6	6.39	120.59	117.40
38	A1	71	A	N1-C2-N3	-6.39	126.11	129.30
38	A1	589	G	O4'-C1'-N9	6.39	113.31	108.20
38	A1	594	U	N1-C2-N3	-6.39	111.07	114.90
38	A1	1848	A	C5-N7-C8	6.39	107.09	103.90
38	A1	1932	G	C5-C6-N1	-6.39	108.31	111.50
38	A1	2261	C	C6-N1-C2	-6.39	117.75	120.30
38	A1	2298	C	C2-N3-C4	6.39	123.09	119.90
38	A1	2804	C	C2-N1-C1'	6.39	125.83	118.80
39	A3	97	G	C2-N3-C4	-6.39	108.71	111.90
11	B2	625	G	C5'-C4'-O4'	6.38	116.76	109.10
38	A1	239	G	C4-C5-C6	6.38	122.63	118.80
38	A1	386	A	C1'-O4'-C4'	-6.38	104.79	109.90
38	A1	1596	G	P-O3'-C3'	-6.38	112.04	119.70
38	A1	1762	G	P-O3'-C3'	6.38	127.36	119.70
38	A1	2272	G	N3-C4-C5	6.38	131.79	128.60
38	A1	2570	A	N3-C4-C5	-6.38	122.33	126.80
54	AI	42	ARG	NE-CZ-NH1	6.38	123.49	120.30
57	Aj	32	GLU	CB-CA-C	6.38	123.17	110.40
9	AX	348	ARG	NH1-CZ-NH2	-6.38	112.38	119.40
11	B2	470	G	N1-C6-O6	6.38	123.73	119.90
11	B2	697	A	N9-C4-C5	6.38	108.35	105.80
11	B2	745	G	N9-C4-C5	6.38	107.95	105.40
38	A1	562	G	C8-N9-C4	6.38	108.95	106.40
38	A1	1127	C	C2-N3-C4	6.38	123.09	119.90
11	B2	959	G	C2-N3-C4	6.38	115.09	111.90
30	BR	112	ARG	NE-CZ-NH1	6.38	123.49	120.30
38	A1	62	C	N1-C2-O2	-6.38	115.07	118.90
38	A1	283	U	P-O3'-C3'	-6.38	112.04	119.70
38	A1	298	G	N1-C6-O6	6.38	123.73	119.90
38	A1	414	G	C4'-C3'-C2'	-6.38	96.22	102.60
38	A1	1258	G	N1-C6-O6	6.38	123.73	119.90
38	A1	1832	G	N9-C4-C5	6.38	107.95	105.40
38	A1	2447	A	C5-N7-C8	6.38	107.09	103.90
52	AH	4	GLN	N-CA-CB	6.38	122.09	110.60
11	B2	343	G	C5-C6-N1	-6.38	108.31	111.50
11	B2	573	C	C2-N3-C4	6.38	123.09	119.90
38	A1	574	C	C5-C4-N4	-6.38	115.73	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	656	G	O4'-C1'-N9	6.38	113.30	108.20
38	A1	1146	U	C2-N1-C1'	6.38	125.36	117.70
38	A1	1354	G	P-O3'-C3'	-6.38	112.04	119.70
38	A1	1866	G	N3-C4-C5	-6.38	125.41	128.60
38	A1	2159	C	P-O5'-C5'	6.38	131.11	120.90
38	A1	2565	A	C5-C6-N1	-6.38	114.51	117.70
38	A1	2662	G	C5-N7-C8	6.38	107.49	104.30
38	A1	2671	C	C3'-C2'-C1'	6.38	106.60	101.50
38	A1	2694	C	N3-C2-O2	6.38	126.37	121.90
9	AX	123	ALA	N-CA-CB	6.38	119.03	110.10
11	B2	1021	C	P-O3'-C3'	6.38	127.35	119.70
11	B2	1376	C	N3-C4-C5	-6.38	119.35	121.90
38	A1	286	G	N3-C4-C5	6.38	131.79	128.60
38	A1	748	G	N3-C2-N2	6.38	124.36	119.90
38	A1	1764	G	N3-C4-N9	-6.38	122.17	126.00
38	A1	2154	G	C8-N9-C4	6.38	108.95	106.40
38	A1	2269	C	P-O5'-C5'	-6.38	110.69	120.90
38	A1	2273	U	P-O5'-C5'	6.38	131.11	120.90
38	A1	2454	G	O4'-C1'-N9	6.38	113.30	108.20
38	A1	2814	U	C4-C5-C6	6.38	123.53	119.70
39	A3	70	C	O4'-C1'-N1	6.38	113.30	108.20
11	B2	55	G	N7-C8-N9	-6.38	109.91	113.10
11	B2	134	A	N1-C2-N3	-6.38	126.11	129.30
11	B2	440	C	N3-C4-C5	-6.38	119.35	121.90
11	B2	745	G	C4-C5-C6	6.38	122.63	118.80
11	B2	1318	U	C3'-C2'-C1'	6.38	106.60	101.50
34	BV	80	TYR	CG-CD2-CE2	-6.38	116.20	121.30
38	A1	170	A	C5-C6-N1	-6.38	114.51	117.70
38	A1	207	A	P-O3'-C3'	6.38	127.35	119.70
38	A1	297	G	C1'-O4'-C4'	6.38	115.00	109.90
38	A1	402	G	N1-C2-N3	-6.38	120.08	123.90
38	A1	675	G	N1-C6-O6	6.38	123.73	119.90
38	A1	781	C	C6-N1-C2	-6.38	117.75	120.30
38	A1	1243	C	O4'-C1'-N1	6.38	113.30	108.20
38	A1	1329	G	C8-N9-C4	-6.38	103.85	106.40
38	A1	1917	U	C4-C5-C6	6.38	123.53	119.70
38	A1	2730	U	C5'-C4'-C3'	-6.38	105.80	116.00
11	B2	143	G	N7-C8-N9	-6.38	109.91	113.10
11	B2	762	G	P-O5'-C5'	-6.38	110.70	120.90
11	B2	774	U	O4'-C1'-C2'	-6.38	99.42	105.80
38	A1	313	U	O4'-C1'-N1	6.38	113.30	108.20
38	A1	1107	G	N3-C2-N2	6.38	124.36	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1574	A	C2'-C3'-O3'	6.38	123.90	113.70
38	A1	2217	C	C1'-O4'-C4'	6.38	115.00	109.90
11	B2	127	G	N3-C2-N2	6.37	124.36	119.90
11	B2	391	G	C3'-C2'-C1'	-6.37	96.40	101.50
11	B2	779	G	O4'-C1'-N9	6.37	113.30	108.20
38	A1	173	G	C4-C5-C6	6.37	122.62	118.80
38	A1	387	A	P-O5'-C5'	6.37	131.10	120.90
38	A1	434	G	C6-C5-N7	-6.37	126.58	130.40
38	A1	444	U	P-O5'-C5'	-6.37	110.70	120.90
38	A1	793	C	P-O3'-C3'	-6.37	112.05	119.70
38	A1	1100	G	O4'-C1'-N9	6.37	113.30	108.20
38	A1	1418	A	C5-C6-N1	-6.37	114.51	117.70
38	A1	2112	C	C4-C5-C6	-6.37	114.21	117.40
38	A1	2766	C	C4'-C3'-C2'	-6.37	96.23	102.60
38	A1	2963	G	N1-C2-N3	-6.37	120.08	123.90
65	AV	50	LEU	CB-CG-CD2	6.37	121.83	111.00
11	B2	27	C	C6-N1-C2	-6.37	117.75	120.30
11	B2	979	U	P-O3'-C3'	6.37	127.35	119.70
11	B2	1199	A	O4'-C1'-N9	6.37	113.30	108.20
11	B2	1365	G	C5-C6-N1	-6.37	108.31	111.50
11	B2	1414	G	P-O3'-C3'	6.37	127.35	119.70
38	A1	41	G	N1-C2-N3	-6.37	120.08	123.90
38	A1	731	C	N3-C4-N4	6.37	122.46	118.00
38	A1	2394	G	N1-C2-N3	-6.37	120.08	123.90
38	A1	2523	C	C5-C4-N4	-6.37	115.74	120.20
39	A3	113	C	N1-C2-O2	-6.37	115.08	118.90
39	A3	114	G	C8-N9-C4	-6.37	103.85	106.40
64	AR	21	ARG	NE-CZ-NH2	-6.37	117.11	120.30
11	B2	277	G	C2'-C3'-O3'	6.37	123.89	113.70
11	B2	435	A	C4-C5-C6	6.37	120.19	117.00
11	B2	853	G	N7-C8-N9	6.37	116.28	113.10
11	B2	854	C	O4'-C4'-C3'	-6.37	97.63	104.00
11	B2	1487	U	C4'-C3'-C2'	-6.37	96.23	102.60
38	A1	395	G	O4'-C1'-N9	6.37	113.30	108.20
38	A1	639	C	N1-C2-O2	-6.37	115.08	118.90
38	A1	1370	G	N7-C8-N9	6.37	116.28	113.10
38	A1	1734	G	C6-N1-C2	-6.37	121.28	125.10
38	A1	2769	U	C2-N3-C4	-6.37	123.18	127.00
39	A3	105	G	N7-C8-N9	-6.37	109.92	113.10
11	B2	247	G	O4'-C1'-N9	6.37	113.29	108.20
11	B2	566	C	N3-C4-C5	-6.37	119.35	121.90
19	BG	83	ARG	NE-CZ-NH1	6.37	123.48	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	BY	12	ASP	CB-CG-OD1	6.37	124.03	118.30
38	A1	620	G	C6-C5-N7	-6.37	126.58	130.40
38	A1	764	G	N1-C2-N2	-6.37	110.47	116.20
38	A1	1331	U	P-O3'-C3'	-6.37	112.06	119.70
38	A1	1663	C	N3-C4-C5	-6.37	119.35	121.90
38	A1	1985	G	C4-C5-N7	6.37	113.35	110.80
38	A1	2369	G	N3-C4-N9	6.37	129.82	126.00
11	B2	1311	C	N1-C2-O2	-6.37	115.08	118.90
38	A1	359	C	C2-N3-C4	6.37	123.08	119.90
38	A1	387	A	N9-C4-C5	6.37	108.35	105.80
41	AA	203	TYR	CB-CG-CD1	-6.37	117.18	121.00
10	B1	23	G	C4-C5-N7	6.37	113.35	110.80
10	B1	59	A	C2'-C3'-O3'	6.37	123.89	113.70
11	B2	290	C	O4'-C1'-N1	6.37	113.29	108.20
38	A1	99	U	N1-C2-O2	-6.37	118.34	122.80
38	A1	181	U	C5-C6-N1	6.37	125.88	122.70
38	A1	586	A	C6-N1-C2	6.37	122.42	118.60
38	A1	992	G	N3-C2-N2	6.37	124.36	119.90
38	A1	1027	A	C5-C6-N6	-6.37	118.61	123.70
38	A1	1372	C	C5-C6-N1	-6.37	117.82	121.00
38	A1	1581	A	N3-C4-C5	-6.37	122.34	126.80
38	A1	1932	G	C6-N1-C2	6.37	128.92	125.10
38	A1	2071	C	N3-C4-N4	6.37	122.46	118.00
38	A1	2180	C	N1-C2-N3	-6.37	114.75	119.20
38	A1	2274	C	N3-C4-N4	6.37	122.46	118.00
38	A1	2659	G	O4'-C1'-N9	6.37	113.29	108.20
38	A1	2707	G	C5-N7-C8	6.37	107.48	104.30
11	B2	281	G	N3-C4-C5	6.36	131.78	128.60
11	B2	454	G	O4'-C1'-N9	6.36	113.29	108.20
11	B2	638	G	C6-C5-N7	-6.36	126.58	130.40
11	B2	1420	U	O4'-C1'-N1	6.36	113.29	108.20
38	A1	188	A	O4'-C1'-C2'	-6.36	99.44	105.80
38	A1	481	G	N3-C2-N2	6.36	124.36	119.90
38	A1	1858	G	C5-N7-C8	6.36	107.48	104.30
45	AC	246	ASP	N-CA-CB	6.36	122.05	110.60
38	A1	1197	G	O4'-C1'-N9	6.36	113.29	108.20
38	A1	1745	U	O4'-C1'-C2'	-6.36	99.44	105.80
38	A1	2171	G	C6-C5-N7	-6.36	126.58	130.40
38	A1	2512	C	C6-N1-C2	-6.36	117.75	120.30
38	A1	2717	A	O4'-C1'-N9	6.36	113.29	108.20
39	A3	38	U	C1'-O4'-C4'	6.36	114.99	109.90
66	AY	84	TYR	CB-CG-CD2	-6.36	117.18	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	676	G	O4'-C1'-N9	6.36	113.29	108.20
11	B2	706	G	C8-N9-C4	-6.36	103.86	106.40
20	BH	36	TYR	CG-CD1-CE1	6.36	126.39	121.30
38	A1	470	A	N3-C4-N9	-6.36	122.31	127.40
38	A1	676	G	N9-C4-C5	-6.36	102.86	105.40
38	A1	688	G	C5-C6-O6	-6.36	124.78	128.60
38	A1	881	G	C3'-C2'-C1'	6.36	106.59	101.50
38	A1	1161	A	O4'-C1'-N9	6.36	113.29	108.20
38	A1	1370	G	O4'-C1'-N9	6.36	113.29	108.20
38	A1	1521	G	O4'-C1'-N9	6.36	113.29	108.20
38	A1	2969	G	C5-C6-N1	-6.36	108.32	111.50
57	Aj	30	ARG	NE-CZ-NH2	-6.36	117.12	120.30
11	B2	593	G	C3'-C2'-C1'	-6.36	96.41	101.50
11	B2	871	A	C5-C6-N1	-6.36	114.52	117.70
38	A1	1904	G	N3-C4-C5	6.36	131.78	128.60
38	A1	2378	C	N3-C4-C5	-6.36	119.36	121.90
38	A1	2742	G	C5-C6-N1	-6.36	108.32	111.50
39	A3	81	C	N3-C4-C5	-6.36	119.36	121.90
11	B2	158	U	N3-C2-O2	6.36	126.65	122.20
11	B2	631	C	C5-C6-N1	6.36	124.18	121.00
11	B2	754	G	C2-N3-C4	-6.36	108.72	111.90
11	B2	866	A	C5-C6-N6	-6.36	118.61	123.70
11	B2	1032	A	C8-N9-C4	6.36	108.34	105.80
11	B2	1251	C	C6-N1-C2	-6.36	117.76	120.30
11	B2	1361	G	C4-C5-N7	6.36	113.34	110.80
38	A1	7	G	N9-C4-C5	-6.36	102.86	105.40
38	A1	211	A	C5-N7-C8	6.36	107.08	103.90
38	A1	339	A	C4-C5-N7	6.36	113.88	110.70
38	A1	362	A	C2-N3-C4	-6.36	107.42	110.60
38	A1	1528	A	N9-C1'-C2'	-6.36	105.01	112.00
38	A1	1627	G	N1-C2-N3	-6.36	120.09	123.90
38	A1	1744	A	C8-N9-C4	-6.36	103.26	105.80
38	A1	2097	G	C6-C5-N7	-6.36	126.59	130.40
38	A1	2581	G	C5-C6-O6	-6.36	124.78	128.60
38	A1	2750	C	C4-C5-C6	6.36	120.58	117.40
38	A1	2949	G	N1-C6-O6	6.36	123.71	119.90
38	A1	2958	U	C5-C4-O4	-6.36	122.09	125.90
10	B1	73	C	C6-N1-C2	6.36	122.84	120.30
11	B2	107	C	C5-C4-N4	-6.36	115.75	120.20
11	B2	315	A	C2-N3-C4	6.36	113.78	110.60
11	B2	587	G	C2-N3-C4	-6.36	108.72	111.90
35	BW	57	LYS	N-CA-CB	6.36	122.04	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	231	G	N3-C2-N2	6.36	124.35	119.90
38	A1	443	C	C5-C4-N4	-6.36	115.75	120.20
38	A1	1756	C	N3-C2-O2	6.36	126.35	121.90
38	A1	2639	G	C2-N3-C4	6.36	115.08	111.90
38	A1	2639	G	C6-N1-C2	6.36	128.91	125.10
47	Ad	16	ARG	NE-CZ-NH2	-6.36	117.12	120.30
8	AW	38	LEU	CB-CA-C	6.35	122.27	110.20
11	B2	1	A	N7-C8-N9	6.35	116.98	113.80
11	B2	858	A	N3-C4-C5	-6.35	122.35	126.80
38	A1	1245	C	C6-N1-C2	-6.35	117.76	120.30
38	A1	1548	A	N9-C4-C5	-6.35	103.26	105.80
38	A1	1695	G	N3-C4-C5	6.35	131.78	128.60
38	A1	1739	U	P-O3'-C3'	6.35	127.32	119.70
38	A1	1996	C	N3-C4-C5	-6.35	119.36	121.90
52	AH	56	ILE	CB-CA-C	6.35	124.31	111.60
10	B1	4	G	C6-C5-N7	-6.35	126.59	130.40
11	B2	518	U	N1-C2-O2	-6.35	118.35	122.80
11	B2	545	C	N1-C1'-C2'	-6.35	105.01	112.00
11	B2	672	G	C6-C5-N7	-6.35	126.59	130.40
11	B2	795	G	C5-N7-C8	-6.35	101.12	104.30
11	B2	1039	C	C5-C6-N1	6.35	124.18	121.00
11	B2	1346	C	C6-N1-C2	-6.35	117.76	120.30
12	B3	79	TYR	CB-CG-CD1	-6.35	117.19	121.00
18	BF	153	ARG	NE-CZ-NH1	6.35	123.48	120.30
37	BY	8	TYR	CG-CD1-CE1	-6.35	116.22	121.30
38	A1	11	G	N9-C4-C5	6.35	107.94	105.40
38	A1	722	C	C5-C6-N1	6.35	124.18	121.00
38	A1	2088	G	C4-C5-N7	-6.35	108.26	110.80
38	A1	2461	C	C5-C6-N1	6.35	124.18	121.00
38	A1	2803	U	N3-C4-O4	6.35	123.85	119.40
52	AH	114	MET	CG-SD-CE	-6.35	90.03	100.20
11	B2	628	G	O4'-C1'-N9	6.35	113.28	108.20
11	B2	650	A	C4-C5-N7	-6.35	107.53	110.70
11	B2	752	G	O4'-C1'-N9	6.35	113.28	108.20
11	B2	791	G	C5-C6-N1	-6.35	108.33	111.50
38	A1	436	C	O4'-C1'-N1	6.35	113.28	108.20
38	A1	1443	G	N1-C6-O6	6.35	123.71	119.90
38	A1	2951	G	N3-C4-C5	6.35	131.78	128.60
60	AM	26	ARG	CB-CA-C	-6.35	97.70	110.40
7	AU	39	TYR	CD1-CG-CD2	6.35	124.88	117.90
10	B1	74	A	C3'-C2'-C1'	-6.35	96.42	101.50
25	BM	127	ARG	NE-CZ-NH2	-6.35	117.13	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1142	A	C5-C6-N1	-6.35	114.53	117.70
38	A1	1297	C	N3-C2-O2	6.35	126.34	121.90
38	A1	1626	A	C1'-O4'-C4'	6.35	114.98	109.90
38	A1	2336	G	P-O5'-C5'	-6.35	110.74	120.90
38	A1	2481	G	C5-C6-O6	-6.35	124.79	128.60
11	B2	634	C	C2-N1-C1'	6.35	125.78	118.80
11	B2	685	G	C6-C5-N7	-6.35	126.59	130.40
11	B2	792	C	C6-N1-C2	-6.35	117.76	120.30
11	B2	1160	C	P-O5'-C5'	-6.35	110.74	120.90
38	A1	112	U	O5'-P-OP1	-6.35	99.99	105.70
38	A1	1204	U	N3-C2-O2	6.35	126.64	122.20
38	A1	1277	G	N9-C4-C5	-6.35	102.86	105.40
38	A1	1301	G	N1-C6-O6	6.35	123.71	119.90
38	A1	1446	G	N3-C2-N2	6.35	124.34	119.90
38	A1	1848	A	C4-C5-N7	-6.35	107.53	110.70
38	A1	1993	A	C5-C6-N1	-6.35	114.53	117.70
38	A1	2319	C	C5-C4-N4	-6.35	115.76	120.20
38	A1	2530	G	O4'-C1'-N9	6.35	113.28	108.20
38	A1	3001	C	C5'-C4'-O4'	-6.35	101.48	109.10
11	B2	1057	A	C5-N7-C8	6.35	107.07	103.90
38	A1	2128	G	C6-N1-C2	6.35	128.91	125.10
38	A1	2685	G	N1-C2-N3	-6.35	120.09	123.90
11	B2	815	C	C5-C6-N1	6.34	124.17	121.00
32	BT	8	TYR	CB-CG-CD2	-6.34	117.19	121.00
38	A1	2738	G	O4'-C1'-N9	6.34	113.28	108.20
11	B2	1210	A	C5-N7-C8	6.34	107.07	103.90
38	A1	1258	G	C5-C6-O6	-6.34	124.79	128.60
38	A1	1949	A	N9-C4-C5	6.34	108.34	105.80
39	A3	17	G	N3-C2-N2	6.34	124.34	119.90
11	B2	360	A	C5-C6-N6	-6.34	118.63	123.70
11	B2	582	G	N3-C2-N2	6.34	124.34	119.90
11	B2	803	C	N3-C2-O2	6.34	126.34	121.90
38	A1	233	A	P-O3'-C3'	6.34	127.31	119.70
38	A1	427	G	C5-N7-C8	6.34	107.47	104.30
38	A1	858	G	C6-C5-N7	-6.34	126.59	130.40
38	A1	867	C	O4'-C1'-N1	6.34	113.27	108.20
38	A1	1333	G	C8-N9-C4	6.34	108.94	106.40
38	A1	1842	C	C6-N1-C1'	-6.34	113.19	120.80
38	A1	1909	C	O4'-C4'-C3'	-6.34	97.66	104.00
38	A1	2043	A	C8-N9-C4	-6.34	103.26	105.80
38	A1	2383	A	C6-C5-N7	-6.34	127.86	132.30
11	B2	39	U	N1-C1'-C2'	-6.34	105.03	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	133	G	N3-C2-N2	6.34	124.34	119.90
11	B2	862	C	C5-C6-N1	-6.34	117.83	121.00
11	B2	1100	G	O4'-C1'-N9	6.34	113.27	108.20
11	B2	1134	G	N3-C4-N9	-6.34	122.20	126.00
38	A1	10	C	C6-N1-C1'	-6.34	113.19	120.80
38	A1	247	A	C5-C6-N1	-6.34	114.53	117.70
38	A1	295	G	C5-N7-C8	6.34	107.47	104.30
38	A1	521	C	N3-C4-C5	-6.34	119.36	121.90
38	A1	664	A	O4'-C1'-N9	6.34	113.27	108.20
38	A1	1047	A	N1-C2-N3	-6.34	126.13	129.30
38	A1	1113	G	C4-C5-C6	-6.34	115.00	118.80
38	A1	1471	G	C2-N3-C4	-6.34	108.73	111.90
38	A1	1884	C	N1-C2-N3	-6.34	114.76	119.20
38	A1	2536	A	C5'-C4'-C3'	-6.34	105.86	116.00
38	A1	2822	G	N3-C2-N2	6.34	124.34	119.90
38	A1	2889	A	C6-N1-C2	6.34	122.40	118.60
49	Ae	44	ARG	NE-CZ-NH1	-6.34	117.13	120.30
11	B2	1474	A	C5-C6-N1	-6.34	114.53	117.70
38	A1	1764	G	C2-N3-C4	-6.34	108.73	111.90
38	A1	2228	G	C5-C6-O6	-6.34	124.80	128.60
11	B2	85	A	C4-C5-N7	-6.34	107.53	110.70
11	B2	731	A	C5-C6-N6	-6.34	118.63	123.70
11	B2	991	C	N3-C2-O2	6.34	126.34	121.90
11	B2	1125	C	N3-C2-O2	-6.34	117.46	121.90
18	BF	144	ALA	N-CA-CB	6.34	118.97	110.10
38	A1	240	A	N1-C6-N6	6.34	122.40	118.60
38	A1	378	G	C6-C5-N7	-6.34	126.60	130.40
38	A1	418	C	C5-C6-N1	-6.34	117.83	121.00
38	A1	633	A	C5-N7-C8	6.34	107.07	103.90
38	A1	644	G	C6-N1-C2	6.34	128.90	125.10
38	A1	1453	G	C5-N7-C8	-6.34	101.13	104.30
38	A1	1552	C	C2-N1-C1'	6.34	125.77	118.80
38	A1	1817	C	N3-C4-N4	6.34	122.44	118.00
38	A1	2099	G	N3-C4-N9	6.34	129.80	126.00
38	A1	2195	G	C4-C5-N7	-6.34	108.27	110.80
38	A1	3027	C	N3-C2-O2	6.34	126.34	121.90
46	AD	113	ALA	CB-CA-C	-6.34	100.60	110.10
11	B2	642	G	N1-C6-O6	6.33	123.70	119.90
11	B2	1025	U	N3-C2-O2	6.33	126.63	122.20
38	A1	896	G	C6-C5-N7	-6.33	126.60	130.40
38	A1	1499	C	N3-C4-N4	6.33	122.43	118.00
38	A1	3031	U	N3-C4-O4	6.33	123.83	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
39	A3	3	G	N3-C2-N2	6.33	124.33	119.90
11	B2	11	A	N9-C4-C5	-6.33	103.27	105.80
11	B2	161	C	C5-C6-N1	-6.33	117.83	121.00
11	B2	650	A	C5-C6-N6	-6.33	118.63	123.70
11	B2	891	A	N1-C6-N6	6.33	122.40	118.60
11	B2	1178	C	O4'-C1'-N1	6.33	113.27	108.20
38	A1	244	A	C6-N1-C2	6.33	122.40	118.60
38	A1	1019	G	N9-C1'-C2'	-6.33	105.03	112.00
38	A1	1930	A	N7-C8-N9	-6.33	110.63	113.80
38	A1	2016	C	C5-C4-N4	-6.33	115.77	120.20
38	A1	2240	G	O5'-C5'-C4'	6.33	123.73	111.70
38	A1	2397	C	OP1-P-OP2	-6.33	110.10	119.60
38	A1	2850	G	C5-C6-O6	-6.33	124.80	128.60
11	B2	85	A	N1-C2-N3	6.33	132.47	129.30
20	BH	169	ALA	C-N-CA	6.33	137.53	121.70
38	A1	187	C	O4'-C1'-N1	6.33	113.27	108.20
38	A1	1243	C	C5-C6-N1	-6.33	117.83	121.00
38	A1	1244	C	C3'-C2'-C1'	6.33	106.57	101.50
38	A1	1847	U	O4'-C1'-N1	6.33	113.27	108.20
64	AR	6	HIS	N-CA-CB	6.33	122.00	110.60
11	B2	126	G	C6-N1-C2	6.33	128.90	125.10
11	B2	593	G	C5-N7-C8	6.33	107.47	104.30
11	B2	971	G	O4'-C4'-C3'	-6.33	97.67	104.00
38	A1	140	C	C4'-C3'-C2'	-6.33	96.27	102.60
38	A1	1715	G	C8-N9-C4	-6.33	103.87	106.40
38	A1	2394	G	O4'-C1'-N9	6.33	113.26	108.20
38	A1	2618	C	N3-C4-N4	6.33	122.43	118.00
45	AC	8	ARG	NE-CZ-NH2	6.33	123.47	120.30
11	B2	41	C	N3-C4-N4	6.33	122.43	118.00
11	B2	142	G	C3'-C2'-C1'	-6.33	96.44	101.50
11	B2	322	G	C8-N9-C4	6.33	108.93	106.40
11	B2	424	U	N3-C4-C5	-6.33	110.80	114.60
11	B2	464	G	O4'-C1'-N9	6.33	113.26	108.20
11	B2	924	U	C4-C5-C6	6.33	123.50	119.70
11	B2	1097	G	N9-C4-C5	-6.33	102.87	105.40
11	B2	1252	C	N3-C2-O2	6.33	126.33	121.90
11	B2	1388	G	C5-C6-O6	-6.33	124.80	128.60
20	BH	66	ARG	NE-CZ-NH2	-6.33	117.14	120.30
29	BQ	135	TYR	CG-CD1-CE1	-6.33	116.24	121.30
38	A1	506	G	N1-C2-N3	-6.33	120.10	123.90
38	A1	604	A	N9-C4-C5	-6.33	103.27	105.80
38	A1	632	G	C6-C5-N7	-6.33	126.60	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	783	C	N3-C4-N4	6.33	122.43	118.00
38	A1	1418	A	N9-C4-C5	-6.33	103.27	105.80
38	A1	1972	C	O4'-C1'-N1	6.33	113.26	108.20
38	A1	2040	A	N1-C2-N3	-6.33	126.14	129.30
38	A1	2226	G	N1-C2-N3	-6.33	120.10	123.90
38	A1	2312	U	N1-C2-N3	6.33	118.70	114.90
11	B2	595	U	C6-N1-C2	-6.33	117.20	121.00
38	A1	856	A	C4-C5-C6	6.33	120.16	117.00
38	A1	1005	G	C6-C5-N7	-6.33	126.60	130.40
38	A1	1906	G	C4-C5-C6	6.33	122.60	118.80
38	A1	2517	U	O4'-C1'-N1	6.33	113.26	108.20
53	Ah	9	ARG	NE-CZ-NH2	-6.33	117.14	120.30
11	B2	248	U	O3'-P-O5'	-6.33	91.98	104.00
11	B2	516	A	N3-C4-C5	-6.33	122.37	126.80
11	B2	1373	A	C5-N7-C8	-6.33	100.74	103.90
38	A1	69	C	N3-C4-N4	6.33	122.43	118.00
38	A1	213	G	C8-N9-C4	-6.33	103.87	106.40
38	A1	583	A	O4'-C1'-N9	6.33	113.26	108.20
38	A1	797	C	C5-C4-N4	-6.33	115.77	120.20
38	A1	933	G	C4-C5-C6	6.33	122.60	118.80
38	A1	1389	A	C6-C5-N7	-6.33	127.87	132.30
38	A1	1422	G	C6-C5-N7	-6.33	126.61	130.40
38	A1	1918	U	C3'-C2'-C1'	6.33	106.56	101.50
38	A1	2174	G	C5-N7-C8	-6.33	101.14	104.30
10	B1	20	G	N7-C8-N9	6.32	116.26	113.10
11	B2	436	A	C4-C5-C6	6.32	120.16	117.00
11	B2	1375	C	C4-C5-C6	-6.32	114.24	117.40
11	B2	1399	G	OP1-P-OP2	-6.32	110.11	119.60
38	A1	182	U	C4-C5-C6	-6.32	115.91	119.70
38	A1	660	U	O4'-C1'-N1	6.32	113.26	108.20
38	A1	1835	A	N9-C1'-C2'	-6.32	105.04	112.00
38	A1	2632	C	N3-C4-C5	-6.32	119.37	121.90
38	A1	2842	C	O5'-P-OP1	6.32	118.29	110.70
11	B2	660	C	O3'-P-O5'	-6.32	91.99	104.00
13	BA	27	PHE	CB-CG-CD1	-6.32	116.38	120.80
38	A1	2626	U	C4-C5-C6	-6.32	115.91	119.70
38	A1	2783	C	O4'-C4'-C3'	-6.32	97.68	104.00
38	A1	2832	G	O4'-C1'-N9	6.32	113.26	108.20
38	A1	2948	A	C2-N3-C4	-6.32	107.44	110.60
11	B2	407	G	P-O5'-C5'	6.32	131.01	120.90
22	BJ	74	LYS	N-CA-C	-6.32	93.93	111.00
23	BK	83	ALA	N-CA-CB	6.32	118.95	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	801	A	C5-N7-C8	6.32	107.06	103.90
38	A1	832	A	C4'-C3'-C2'	-6.32	96.28	102.60
38	A1	1457	C	N3-C2-O2	-6.32	117.48	121.90
38	A1	1831	C	O4'-C1'-N1	6.32	113.26	108.20
38	A1	2218	C	C5-C6-N1	6.32	124.16	121.00
38	A1	2339	C	O4'-C1'-N1	6.32	113.26	108.20
38	A1	2536	A	C6-N1-C2	6.32	122.39	118.60
38	A1	2763	U	N3-C4-C5	6.32	118.39	114.60
38	A1	2821	G	N3-C2-N2	6.32	124.32	119.90
59	AL	8	VAL	CA-CB-CG2	-6.32	101.42	110.90
11	B2	695	G	N7-C8-N9	-6.32	109.94	113.10
11	B2	1098	G	C6-C5-N7	-6.32	126.61	130.40
34	BV	55	TYR	CB-CG-CD2	6.32	124.79	121.00
38	A1	1458	C	N3-C4-N4	6.32	122.42	118.00
38	A1	1921	U	C5-C6-N1	6.32	125.86	122.70
11	B2	77	G	O4'-C1'-N9	6.32	113.25	108.20
11	B2	818	A	O4'-C1'-N9	6.32	113.25	108.20
11	B2	853	G	N1-C2-N2	6.32	121.89	116.20
11	B2	1005	G	N3-C4-N9	-6.32	122.21	126.00
11	B2	1066	C	O4'-C1'-N1	6.32	113.25	108.20
11	B2	1170	C	C6-N1-C2	-6.32	117.77	120.30
11	B2	1358	A	C6-N1-C2	6.32	122.39	118.60
17	BE	205	PHE	CB-CG-CD1	-6.32	116.38	120.80
38	A1	517	A	N9-C4-C5	-6.32	103.27	105.80
38	A1	823	G	N3-C4-C5	-6.32	125.44	128.60
38	A1	1031	C	O4'-C1'-N1	6.32	113.25	108.20
38	A1	1936	C	N3-C4-C5	-6.32	119.37	121.90
38	A1	2540	A	P-O5'-C5'	-6.32	110.79	120.90
38	A1	2840	C	C4'-C3'-C2'	6.32	108.92	102.60
11	B2	301	G	C8-N9-C4	-6.32	103.87	106.40
11	B2	393	A	C5-C6-N6	-6.32	118.65	123.70
11	B2	975	A	C6-N1-C2	6.32	122.39	118.60
11	B2	1478	A	C4-C5-N7	-6.32	107.54	110.70
18	BF	167	ILE	C-N-CA	6.32	135.56	122.30
38	A1	149	G	C6-C5-N7	-6.32	126.61	130.40
38	A1	1069	A	C5-C6-N6	-6.32	118.65	123.70
38	A1	1709	C	N3-C2-O2	6.32	126.32	121.90
38	A1	1727	G	C8-N9-C4	6.32	108.93	106.40
38	A1	1753	G	C6-N1-C2	6.32	128.89	125.10
38	A1	2435	G	C6-C5-N7	-6.32	126.61	130.40
38	A1	2792	G	C6-N1-C2	6.32	128.89	125.10
11	B2	332	C	C5-C4-N4	-6.31	115.78	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	422	U	C5-C4-O4	-6.31	122.11	125.90
38	A1	2038	C	N3-C4-C5	-6.31	119.37	121.90
38	A1	2824	C	N3-C4-N4	6.31	122.42	118.00
11	B2	393	A	N7-C8-N9	6.31	116.96	113.80
27	BO	100	MET	CG-SD-CE	-6.31	90.10	100.20
38	A1	49	A	C2-N3-C4	-6.31	107.44	110.60
38	A1	530	A	N3-C4-N9	6.31	132.45	127.40
38	A1	544	A	C4-C5-N7	-6.31	107.54	110.70
38	A1	1353	A	C6-C5-N7	-6.31	127.88	132.30
38	A1	1644	G	N7-C8-N9	-6.31	109.94	113.10
38	A1	1742	C	C5-C4-N4	-6.31	115.78	120.20
38	A1	2524	C	C2-N3-C4	-6.31	116.74	119.90
38	A1	2960	G	C4-C5-C6	6.31	122.59	118.80
11	B2	231	G	O4'-C4'-C3'	-6.31	97.69	104.00
11	B2	1137	G	C4-C5-C6	6.31	122.59	118.80
29	BQ	106	ARG	NE-CZ-NH1	6.31	123.45	120.30
38	A1	691	G	O4'-C1'-N9	6.31	113.25	108.20
38	A1	1016	C	C6-N1-C2	6.31	122.82	120.30
38	A1	1156	G	N3-C4-C5	-6.31	125.44	128.60
38	A1	1529	A	N9-C4-C5	6.31	108.32	105.80
38	A1	2358	U	N1-C2-N3	6.31	118.69	114.90
38	A1	2359	G	N3-C2-N2	6.31	124.32	119.90
38	A1	2831	G	N9-C4-C5	-6.31	102.88	105.40
38	A1	3008	C	C6-N1-C2	-6.31	117.78	120.30
11	B2	31	U	N1-C2-N3	6.31	118.69	114.90
11	B2	344	G	N3-C4-C5	-6.31	125.44	128.60
11	B2	521	G	C4-C5-N7	6.31	113.32	110.80
38	A1	373	G	N1-C2-N2	-6.31	110.52	116.20
38	A1	382	G	N9-C4-C5	6.31	107.92	105.40
38	A1	513	C	C4'-C3'-C2'	6.31	108.91	102.60
38	A1	571	G	N3-C4-N9	-6.31	122.22	126.00
38	A1	1528	A	N1-C6-N6	6.31	122.39	118.60
38	A1	1632	U	C6-N1-C2	-6.31	117.21	121.00
38	A1	1693	G	O4'-C4'-C3'	-6.31	97.69	104.00
38	A1	1793	G	P-O3'-C3'	6.31	127.27	119.70
38	A1	2869	U	C2-N3-C4	-6.31	123.21	127.00
11	B2	886	G	N1-C2-N3	-6.31	120.12	123.90
11	B2	1061	A	C6-N1-C2	6.31	122.38	118.60
11	B2	1089	C	C2-N3-C4	6.31	123.05	119.90
11	B2	1446	G	O4'-C1'-N9	6.31	113.25	108.20
18	BF	210	ARG	NE-CZ-NH2	-6.31	117.15	120.30
38	A1	199	C	O4'-C1'-N1	6.31	113.25	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	240	A	C5-N7-C8	-6.31	100.75	103.90
38	A1	679	U	C5-C6-N1	6.31	125.85	122.70
38	A1	694	A	N9-C4-C5	-6.31	103.28	105.80
38	A1	715	G	N1-C2-N3	-6.31	120.12	123.90
38	A1	717	A	C4-C5-N7	-6.31	107.55	110.70
38	A1	777	A	C4-C5-C6	6.31	120.15	117.00
38	A1	1292	C	N3-C4-N4	6.31	122.42	118.00
38	A1	1364	C	C4-C5-C6	6.31	120.55	117.40
38	A1	1415	C	C3'-C2'-C1'	6.31	106.55	101.50
38	A1	1515	G	C6-N1-C2	6.31	128.88	125.10
38	A1	2666	G	N3-C4-N9	6.31	129.78	126.00
39	A3	97	G	N3-C2-N2	6.31	124.31	119.90
11	B2	40	C	C5-C6-N1	6.31	124.15	121.00
11	B2	375	G	C6-C5-N7	-6.31	126.62	130.40
11	B2	1296	U	N1-C2-O2	6.31	127.21	122.80
38	A1	637	G	C5-C6-N1	-6.31	108.35	111.50
38	A1	695	G	N1-C6-O6	6.31	123.68	119.90
38	A1	1582	G	N1-C2-N3	-6.31	120.12	123.90
38	A1	2571	G	N9-C4-C5	-6.31	102.88	105.40
38	A1	2814	U	N3-C4-C5	-6.31	110.82	114.60
11	B2	327	G	C4-C5-N7	6.30	113.32	110.80
11	B2	412	U	C4-C5-C6	6.30	123.48	119.70
11	B2	1025	U	C5-C6-N1	6.30	125.85	122.70
11	B2	1206	G	C6-C5-N7	-6.30	126.62	130.40
11	B2	1312	C	N3-C4-N4	6.30	122.41	118.00
11	B2	1320	A	C5-C6-N6	-6.30	118.66	123.70
38	A1	959	U	N1-C2-O2	6.30	127.21	122.80
38	A1	1143	A	C6-N1-C2	6.30	122.38	118.60
38	A1	1825	G	N1-C2-N3	-6.30	120.12	123.90
38	A1	2249	A	C5-C6-N1	-6.30	114.55	117.70
38	A1	2266	C	C4-C5-C6	6.30	120.55	117.40
39	A3	88	A	C5-C6-N6	-6.30	118.66	123.70
45	AC	42	ALA	CB-CA-C	-6.30	100.64	110.10
16	BD	103	ARG	NE-CZ-NH2	-6.30	117.15	120.30
38	A1	995	G	N3-C2-N2	6.30	124.31	119.90
38	A1	1059	C	C6-N1-C2	-6.30	117.78	120.30
38	A1	1547	U	N3-C2-O2	6.30	126.61	122.20
38	A1	1573	A	N3-C4-C5	-6.30	122.39	126.80
38	A1	2764	G	N3-C4-C5	6.30	131.75	128.60
11	B2	550	G	C5-C6-N1	-6.30	108.35	111.50
11	B2	893	U	C6-N1-C1'	-6.30	112.38	121.20
11	B2	910	G	N7-C8-N9	6.30	116.25	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	459	C	C6-N1-C2	-6.30	117.78	120.30
38	A1	486	A	O4'-C1'-N9	6.30	113.24	108.20
38	A1	1337	G	C5-N7-C8	-6.30	101.15	104.30
38	A1	1727	G	C4-C5-C6	6.30	122.58	118.80
38	A1	2386	U	O4'-C1'-N1	6.30	113.24	108.20
38	A1	3005	C	C4-C5-C6	-6.30	114.25	117.40
51	Ag	45	GLU	CB-CA-C	6.30	123.00	110.40
11	B2	122	C	C5-C6-N1	-6.30	117.85	121.00
11	B2	169	C	C6-N1-C2	-6.30	117.78	120.30
11	B2	1089	C	N3-C4-C5	-6.30	119.38	121.90
38	A1	101	G	N1-C2-N3	-6.30	120.12	123.90
38	A1	239	G	C6-N1-C2	6.30	128.88	125.10
38	A1	697	U	N3-C4-O4	6.30	123.81	119.40
38	A1	735	A	OP1-P-OP2	-6.30	110.15	119.60
38	A1	1519	G	P-O5'-C5'	-6.30	110.82	120.90
38	A1	2031	G	N1-C6-O6	6.30	123.68	119.90
38	A1	2566	A	C5-C6-N6	-6.30	118.66	123.70
38	A1	2823	G	O4'-C1'-N9	6.30	113.24	108.20
41	AA	133	VAL	CG1-CB-CG2	6.30	120.98	110.90
11	B2	1068	C	OP1-P-OP2	-6.30	110.15	119.60
38	A1	1664	G	O4'-C1'-N9	6.30	113.24	108.20
38	A1	1707	A	C8-N9-C4	-6.30	103.28	105.80
38	A1	1892	G	C1'-O4'-C4'	-6.30	104.86	109.90
38	A1	2261	C	P-O3'-C3'	-6.30	112.14	119.70
38	A1	2603	A	C8-N9-C4	-6.30	103.28	105.80
48	AE	137	MET	CA-CB-CG	6.30	124.01	113.30
11	B2	1069	G	C5-N7-C8	6.30	107.45	104.30
11	B2	1364	C	C4'-C3'-C2'	-6.30	96.30	102.60
38	A1	523	C	O4'-C1'-N1	6.30	113.24	108.20
38	A1	912	G	N1-C2-N3	-6.30	120.12	123.90
38	A1	1671	A	N9-C4-C5	-6.30	103.28	105.80
38	A1	2262	C	C4'-C3'-C2'	-6.30	96.30	102.60
38	A1	2429	G	C4-C5-N7	6.30	113.32	110.80
38	A1	2706	C	N3-C4-N4	6.30	122.41	118.00
38	A1	2869	U	C5-C6-N1	6.30	125.85	122.70
38	A1	2887	C	P-O5'-C5'	6.30	130.98	120.90
60	AM	75	ARG	NE-CZ-NH1	6.30	123.45	120.30
11	B2	198	A	O4'-C1'-N9	6.29	113.24	108.20
11	B2	501	G	O4'-C1'-N9	6.29	113.24	108.20
11	B2	1046	G	C4-C5-N7	6.29	113.32	110.80
38	A1	227	G	O4'-C1'-N9	6.29	113.24	108.20
38	A1	1889	G	N3-C4-C5	-6.29	125.45	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2852	U	C5'-C4'-O4'	6.29	116.65	109.10
10	B1	22	A	C8-N9-C4	-6.29	103.28	105.80
10	B1	49	C	N3-C4-C5	-6.29	119.38	121.90
11	B2	220	G	C5'-C4'-C3'	-6.29	105.93	116.00
11	B2	236	C	C2-N3-C4	6.29	123.05	119.90
11	B2	572	U	OP1-P-OP2	-6.29	110.16	119.60
11	B2	839	G	C6-C5-N7	-6.29	126.62	130.40
11	B2	924	U	N1-C2-O2	-6.29	118.39	122.80
11	B2	1158	G	C5-C6-O6	-6.29	124.82	128.60
38	A1	1036	C	P-O3'-C3'	6.29	127.25	119.70
38	A1	1106	C	C5-C4-N4	-6.29	115.80	120.20
38	A1	1171	G	C5-C6-O6	-6.29	124.82	128.60
38	A1	1254	C	C1'-O4'-C4'	6.29	114.94	109.90
38	A1	1633	A	C2-N3-C4	6.29	113.75	110.60
38	A1	1811	G	C3'-C2'-C1'	-6.29	96.47	101.50
38	A1	1986	U	P-O3'-C3'	6.29	127.25	119.70
38	A1	2881	G	N3-C2-N2	6.29	124.31	119.90
38	A1	2890	A	C5-N7-C8	6.29	107.05	103.90
38	A1	3013	U	O5'-P-OP1	-6.29	100.04	105.70
39	A3	6	G	C5-C6-N1	-6.29	108.35	111.50
39	A3	117	G	N7-C8-N9	6.29	116.25	113.10
57	Aj	80	ARG	NH1-CZ-NH2	-6.29	112.48	119.40
11	B2	295	G	C4-C5-N7	-6.29	108.28	110.80
11	B2	322	G	P-O3'-C3'	6.29	127.25	119.70
11	B2	1110	U	C4-C5-C6	-6.29	115.92	119.70
11	B2	1189	G	O4'-C1'-N9	6.29	113.23	108.20
38	A1	9	A	N7-C8-N9	6.29	116.94	113.80
38	A1	50	C	O4'-C1'-N1	6.29	113.23	108.20
38	A1	77	C	C5-C6-N1	6.29	124.15	121.00
38	A1	230	A	C6-C5-N7	-6.29	127.90	132.30
38	A1	255	G	C6-C5-N7	-6.29	126.62	130.40
38	A1	1597	G	C8-N9-C4	-6.29	103.88	106.40
38	A1	2156	A	C4-C5-C6	6.29	120.15	117.00
38	A1	2505	A	C5-N7-C8	6.29	107.05	103.90
38	A1	2609	G	N3-C4-C5	-6.29	125.45	128.60
38	A1	2684	G	C8-N9-C4	-6.29	103.88	106.40
38	A1	2979	C	N3-C2-O2	-6.29	117.50	121.90
40	A5	18	ALA	C-N-CA	6.29	135.51	122.30
11	B2	108	G	C6-C5-N7	-6.29	126.63	130.40
11	B2	720	A	C5-N7-C8	6.29	107.05	103.90
11	B2	1305	U	N1-C2-N3	6.29	118.67	114.90
38	A1	955	A	C4-C5-N7	-6.29	107.56	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1388	U	N1-C2-O2	-6.29	118.40	122.80
11	B2	61	A	C4-C5-C6	6.29	120.14	117.00
11	B2	402	G	N7-C8-N9	-6.29	109.96	113.10
11	B2	576	C	C4'-C3'-C2'	-6.29	96.31	102.60
11	B2	803	C	N3-C4-N4	6.29	122.40	118.00
38	A1	238	C	N3-C2-O2	6.29	126.30	121.90
38	A1	293	G	C2-N3-C4	6.29	115.05	111.90
38	A1	507	G	O4'-C1'-N9	6.29	113.23	108.20
38	A1	1238	G	C5-N7-C8	-6.29	101.16	104.30
38	A1	2879	G	N1-C2-N3	-6.29	120.13	123.90
10	B1	19	G	C8-N9-C1'	-6.29	118.83	127.00
11	B2	722	G	C6-N1-C2	6.29	128.87	125.10
38	A1	143	C	N3-C4-N4	6.29	122.40	118.00
38	A1	1358	C	C2-N3-C4	6.29	123.04	119.90
38	A1	2115	U	P-O3'-C3'	6.29	127.24	119.70
38	A1	2205	A	C5'-C4'-C3'	-6.29	105.94	116.00
38	A1	2396	G	N7-C8-N9	6.29	116.24	113.10
38	A1	2542	G	C6-N1-C2	-6.29	121.33	125.10
38	A1	2681	A	O4'-C1'-N9	6.29	113.23	108.20
11	B2	111	G	C5-C6-O6	-6.29	124.83	128.60
13	BA	89	ARG	NE-CZ-NH1	-6.29	117.16	120.30
38	A1	297	G	C6-C5-N7	-6.29	126.63	130.40
38	A1	421	C	O4'-C1'-N1	6.29	113.23	108.20
38	A1	497	G	C4-C5-C6	6.29	122.57	118.80
38	A1	668	G	O4'-C1'-N9	6.29	113.23	108.20
38	A1	768	C	O4'-C1'-N1	6.29	113.23	108.20
38	A1	890	G	C5-N7-C8	6.29	107.44	104.30
38	A1	1592	U	N3-C4-C5	-6.29	110.83	114.60
38	A1	2096	G	C8-N9-C4	6.29	108.91	106.40
38	A1	2100	U	C5-C4-O4	-6.29	122.13	125.90
38	A1	2387	A	C5-C6-N6	-6.29	118.67	123.70
38	A1	2750	C	O4'-C1'-N1	6.29	113.23	108.20
67	AZ	57	ASP	CB-CG-OD2	6.29	123.96	118.30
11	B2	449	U	C6-N1-C2	-6.28	117.23	121.00
11	B2	600	C	N3-C4-N4	6.28	122.40	118.00
38	A1	56	G	N7-C8-N9	-6.28	109.96	113.10
38	A1	335	C	N1-C2-N3	-6.28	114.80	119.20
38	A1	507	G	C4'-C3'-C2'	-6.28	96.32	102.60
38	A1	611	G	C5-N7-C8	-6.28	101.16	104.30
38	A1	912	G	C6-N1-C2	6.28	128.87	125.10
38	A1	1389	A	C5-C6-N1	-6.28	114.56	117.70
38	A1	1489	G	C4-C5-N7	-6.28	108.29	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1580	G	N3-C4-C5	6.28	131.74	128.60
38	A1	1757	G	C6-C5-N7	-6.28	126.63	130.40
38	A1	1913	C	O4'-C1'-N1	6.28	113.23	108.20
38	A1	2270	G	C6-C5-N7	-6.28	126.63	130.40
38	A1	2426	U	P-O5'-C5'	6.28	130.96	120.90
61	AN	151	ARG	NH1-CZ-NH2	-6.28	112.49	119.40
38	A1	392	G	C5-N7-C8	6.28	107.44	104.30
38	A1	633	A	C6-C5-N7	-6.28	127.90	132.30
61	AN	116	PHE	CB-CG-CD1	-6.28	116.40	120.80
11	B2	345	G	P-O3'-C3'	6.28	127.24	119.70
13	BA	156	ASP	CB-CG-OD2	6.28	123.95	118.30
38	A1	172	C	C5-C6-N1	6.28	124.14	121.00
38	A1	257	G	C2-N3-C4	-6.28	108.76	111.90
38	A1	349	A	C5-N7-C8	6.28	107.04	103.90
38	A1	573	G	N9-C4-C5	-6.28	102.89	105.40
38	A1	734	C	N3-C2-O2	-6.28	117.50	121.90
38	A1	1253	U	C6-N1-C2	6.28	124.77	121.00
38	A1	1277	G	C1'-O4'-C4'	-6.28	104.88	109.90
38	A1	1392	G	O4'-C1'-N9	6.28	113.22	108.20
38	A1	1424	G	N9-C4-C5	-6.28	102.89	105.40
38	A1	2167	C	O4'-C1'-N1	6.28	113.22	108.20
38	A1	2414	G	C6-N1-C2	6.28	128.87	125.10
11	B2	503	G	N9-C4-C5	6.28	107.91	105.40
11	B2	568	C	N1-C1'-C2'	-6.28	105.09	112.00
11	B2	846	G	N3-C4-C5	6.28	131.74	128.60
11	B2	1447	A	N9-C4-C5	-6.28	103.29	105.80
38	A1	1398	C	C2-N3-C4	6.28	123.04	119.90
10	B1	57	C	N3-C4-N4	6.28	122.39	118.00
11	B2	11	A	C5-C6-N6	-6.28	118.68	123.70
11	B2	959	G	O4'-C1'-N9	6.28	113.22	108.20
11	B2	1053	A	C6-N1-C2	-6.28	114.83	118.60
11	B2	1120	G	N7-C8-N9	6.28	116.24	113.10
11	B2	1478	A	C5-C6-N6	-6.28	118.68	123.70
38	A1	743	A	C4-C5-N7	6.28	113.84	110.70
38	A1	1275	G	C8-N9-C4	-6.28	103.89	106.40
38	A1	1570	C	C2-N1-C1'	6.28	125.70	118.80
38	A1	1944	C	C5-C6-N1	-6.28	117.86	121.00
38	A1	2353	C	N3-C4-C5	-6.28	119.39	121.90
38	A1	2536	A	C4-C5-C6	6.28	120.14	117.00
39	A3	3	G	N1-C2-N3	-6.28	120.13	123.90
39	A3	56	C	P-O5'-C5'	6.28	130.94	120.90
39	A3	68	C	O5'-P-OP1	-6.28	100.05	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	313	G	O4'-C1'-N9	6.28	113.22	108.20
11	B2	729	G	C4'-C3'-C2'	-6.28	96.32	102.60
11	B2	1135	G	O4'-C1'-N9	6.28	113.22	108.20
11	B2	1475	C	C2-N3-C4	6.28	123.04	119.90
38	A1	316	G	C3'-C2'-C1'	6.28	106.52	101.50
38	A1	438	G	C5-N7-C8	6.28	107.44	104.30
38	A1	759	G	N1-C6-O6	6.28	123.67	119.90
38	A1	2226	G	O4'-C4'-C3'	-6.28	97.72	104.00
39	A3	96	C	P-O5'-C5'	6.28	130.94	120.90
47	Ad	48	ARG	NE-CZ-NH2	-6.28	117.16	120.30
38	A1	137	A	C5-N7-C8	6.27	107.04	103.90
38	A1	189	U	O4'-C1'-N1	6.27	113.22	108.20
38	A1	1608	G	N3-C2-N2	6.27	124.29	119.90
38	A1	2073	G	C5-N7-C8	-6.27	101.16	104.30
38	A1	2179	G	N1-C2-N2	6.27	121.85	116.20
61	AN	95	ARG	NE-CZ-NH2	-6.27	117.16	120.30
11	B2	1244	C	C6-N1-C1'	-6.27	113.27	120.80
38	A1	19	G	N9-C1'-C2'	-6.27	105.10	112.00
38	A1	541	A	N7-C8-N9	-6.27	110.66	113.80
38	A1	876	C	P-O3'-C3'	6.27	127.23	119.70
38	A1	1562	U	C1'-O4'-C4'	-6.27	104.88	109.90
38	A1	1831	C	N1-C2-O2	-6.27	115.14	118.90
38	A1	2321	A	O4'-C1'-N9	6.27	113.22	108.20
38	A1	2403	G	C8-N9-C4	-6.27	103.89	106.40
38	A1	2466	C	C1'-O4'-C4'	6.27	114.92	109.90
38	A1	2678	U	C3'-C2'-C1'	6.27	106.52	101.50
38	A1	2736	G	C2-N3-C4	-6.27	108.76	111.90
65	AV	32	PHE	CZ-CE2-CD2	-6.27	112.57	120.10
11	B2	473	A	C5-N7-C8	-6.27	100.76	103.90
13	BA	67	TYR	CG-CD1-CE1	-6.27	116.28	121.30
29	BQ	84	LYS	CB-CA-C	-6.27	97.86	110.40
38	A1	402	G	C6-N1-C2	6.27	128.86	125.10
38	A1	935	A	C1'-O4'-C4'	6.27	114.92	109.90
38	A1	2003	C	C5-C4-N4	-6.27	115.81	120.20
38	A1	2131	C	C6-N1-C2	6.27	122.81	120.30
38	A1	2430	C	N3-C2-O2	-6.27	117.51	121.90
11	B2	1060	G	C2-N3-C4	6.27	115.03	111.90
11	B2	1463	A	C1'-O4'-C4'	6.27	114.92	109.90
38	A1	274	C	O4'-C1'-N1	6.27	113.22	108.20
38	A1	564	U	N1-C2-N3	6.27	118.66	114.90
38	A1	1377	G	O4'-C1'-N9	6.27	113.22	108.20
38	A1	2211	C	C2-N1-C1'	6.27	125.70	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	21	A	C2-N3-C4	-6.27	107.47	110.60
11	B2	26	A	N3-C4-C5	-6.27	122.41	126.80
11	B2	109	U	N1-C2-N3	-6.27	111.14	114.90
11	B2	453	G	C2-N3-C4	6.27	115.03	111.90
11	B2	838	C	C2-N1-C1'	6.27	125.69	118.80
11	B2	1430	G	C5-N7-C8	6.27	107.43	104.30
18	BF	152	VAL	CA-CB-CG2	-6.27	101.50	110.90
38	A1	285	C	C4'-C3'-C2'	-6.27	96.33	102.60
38	A1	701	G	N9-C4-C5	6.27	107.91	105.40
38	A1	714	C	C5-C6-N1	6.27	124.13	121.00
38	A1	898	G	C4-C5-C6	6.27	122.56	118.80
38	A1	898	G	C8-N9-C4	-6.27	103.89	106.40
38	A1	1123	A	C5-C6-N6	-6.27	118.69	123.70
38	A1	1698	G	O4'-C1'-N9	6.27	113.21	108.20
38	A1	1841	G	C5-C6-O6	-6.27	124.84	128.60
38	A1	2893	U	O4'-C1'-N1	6.27	113.21	108.20
39	A3	9	A	C4'-C3'-C2'	-6.27	96.33	102.60
11	B2	1474	A	C8-N9-C4	-6.27	103.29	105.80
38	A1	209	G	C6-N1-C2	6.27	128.86	125.10
38	A1	1783	U	C5-C6-N1	6.27	125.83	122.70
10	B1	56	U	OP2-P-O3'	6.26	118.98	105.20
11	B2	294	A	C8-N9-C4	-6.26	103.29	105.80
11	B2	370	A	C6-C5-N7	-6.26	127.91	132.30
11	B2	638	G	C6-N1-C2	6.26	128.86	125.10
11	B2	731	A	C5-N7-C8	-6.26	100.77	103.90
11	B2	976	A	C8-N9-C4	-6.26	103.29	105.80
38	A1	45	G	N1-C6-O6	6.26	123.66	119.90
38	A1	415	U	C5-C6-N1	6.26	125.83	122.70
38	A1	1111	G	C6-N1-C2	6.26	128.86	125.10
38	A1	1259	G	O4'-C1'-N9	6.26	113.21	108.20
38	A1	1878	G	O4'-C1'-N9	6.26	113.21	108.20
63	AP	25	TYR	CZ-CE2-CD2	6.26	125.44	119.80
38	A1	355	G	C4'-C3'-C2'	-6.26	96.34	102.60
38	A1	2664	G	C4-C5-N7	6.26	113.31	110.80
38	A1	2673	C	C4-C5-C6	6.26	120.53	117.40
11	B2	424	U	N3-C4-O4	6.26	123.78	119.40
11	B2	642	G	C8-N9-C4	-6.26	103.89	106.40
11	B2	802	G	C1'-O4'-C4'	-6.26	104.89	109.90
11	B2	859	A	N1-C2-N3	6.26	132.43	129.30
11	B2	880	G	O4'-C1'-N9	6.26	113.21	108.20
38	A1	1572	C	C4-C5-C6	-6.26	114.27	117.40
38	A1	1705	C	C4-C5-C6	6.26	120.53	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2671	C	C6-N1-C1'	-6.26	113.28	120.80
39	A3	74	U	N1-C2-N3	6.26	118.66	114.90
11	B2	492	G	C4-C5-C6	6.26	122.56	118.80
11	B2	1135	G	N1-C2-N3	-6.26	120.14	123.90
11	B2	1349	C	C1'-O4'-C4'	6.26	114.91	109.90
38	A1	522	A	C6-N1-C2	6.26	122.36	118.60
38	A1	928	A	C3'-C2'-C1'	6.26	106.51	101.50
38	A1	1200	A	N9-C4-C5	6.26	108.30	105.80
38	A1	1892	G	N7-C8-N9	6.26	116.23	113.10
38	A1	2583	G	C3'-C2'-C1'	-6.26	96.49	101.50
38	A1	2736	G	N3-C4-C5	6.26	131.73	128.60
11	B2	156	A	N9-C4-C5	-6.26	103.30	105.80
11	B2	710	G	N9-C4-C5	-6.26	102.90	105.40
38	A1	355	G	C2-N3-C4	-6.26	108.77	111.90
38	A1	866	G	C4-C5-C6	6.26	122.56	118.80
38	A1	2721	C	N1-C2-N3	6.26	123.58	119.20
11	B2	269	A	P-O5'-C5'	-6.26	110.89	120.90
11	B2	669	A	C3'-C2'-C1'	6.26	106.50	101.50
11	B2	1408	C	C2-N3-C4	6.26	123.03	119.90
38	A1	1067	G	O4'-C1'-N9	6.26	113.20	108.20
38	A1	1166	A	C2-N3-C4	6.26	113.73	110.60
38	A1	1390	U	N1-C2-N3	-6.26	111.15	114.90
38	A1	2637	U	O4'-C1'-N1	6.26	113.21	108.20
38	A1	2827	C	C2-N1-C1'	6.26	125.68	118.80
38	A1	2983	G	N9-C4-C5	-6.26	102.90	105.40
38	A1	3044	U	O4'-C1'-N1	6.26	113.20	108.20
41	AA	162	VAL	CA-CB-CG2	6.26	120.28	110.90
49	Ae	7	THR	CA-CB-CG2	-6.26	103.64	112.40
11	B2	617	A	O4'-C1'-N9	6.25	113.20	108.20
11	B2	1005	G	N1-C2-N3	-6.25	120.15	123.90
38	A1	1199	U	C5-C4-O4	-6.25	122.15	125.90
38	A1	1542	U	C5-C6-N1	6.25	125.83	122.70
38	A1	2099	G	N1-C2-N3	-6.25	120.15	123.90
38	A1	2865	C	N3-C4-C5	-6.25	119.40	121.90
39	A3	72	G	C6-C5-N7	-6.25	126.65	130.40
63	AP	32	ASP	CB-CG-OD2	-6.25	112.67	118.30
10	B1	1	G	C5-C6-O6	-6.25	124.85	128.60
11	B2	996	A	C8-N9-C4	-6.25	103.30	105.80
11	B2	1087	C	C4'-C3'-C2'	-6.25	96.35	102.60
11	B2	1255	C	C4'-C3'-C2'	-6.25	96.35	102.60
38	A1	110	A	O4'-C1'-N9	6.25	113.20	108.20
38	A1	472	A	C8-N9-C4	-6.25	103.30	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	616	C	N1-C2-N3	6.25	123.58	119.20
38	A1	780	G	C6-C5-N7	-6.25	126.65	130.40
38	A1	814	G	N9-C4-C5	-6.25	102.90	105.40
38	A1	1288	C	C2-N1-C1'	6.25	125.68	118.80
38	A1	1435	G	O4'-C1'-N9	6.25	113.20	108.20
38	A1	1584	G	C2-N3-C4	6.25	115.03	111.90
38	A1	1915	G	N1-C2-N3	-6.25	120.15	123.90
38	A1	2773	A	N9-C4-C5	6.25	108.30	105.80
38	A1	2970	U	N1-C2-O2	-6.25	118.42	122.80
11	B2	300	G	P-O3'-C3'	6.25	127.20	119.70
11	B2	543	C	N3-C4-N4	6.25	122.38	118.00
11	B2	727	G	N7-C8-N9	-6.25	109.97	113.10
11	B2	810	G	N3-C2-N2	6.25	124.28	119.90
11	B2	885	G	C8-N9-C4	6.25	108.90	106.40
11	B2	1212	U	N3-C2-O2	-6.25	117.82	122.20
33	BU	74	ARG	NE-CZ-NH1	6.25	123.43	120.30
38	A1	7	G	C1'-O4'-C4'	-6.25	104.90	109.90
38	A1	394	A	C8-N9-C4	-6.25	103.30	105.80
38	A1	1163	U	C5-C6-N1	6.25	125.83	122.70
38	A1	2012	G	N1-C2-N3	-6.25	120.15	123.90
38	A1	2820	C	C5-C6-N1	6.25	124.13	121.00
38	A1	2966	C	C3'-C2'-C1'	6.25	106.50	101.50
38	A1	3008	C	O4'-C1'-N1	6.25	113.20	108.20
10	B1	49	C	C5'-C4'-O4'	6.25	116.60	109.10
11	B2	838	C	C5-C6-N1	6.25	124.12	121.00
11	B2	1293	A	N7-C8-N9	-6.25	110.67	113.80
19	BG	10	ASP	CB-CG-OD2	-6.25	112.67	118.30
38	A1	274	C	C4'-C3'-C2'	-6.25	96.35	102.60
38	A1	1667	U	C5-C4-O4	-6.25	122.15	125.90
38	A1	2028	G	N3-C2-N2	6.25	124.28	119.90
11	B2	881	G	C5-N7-C8	-6.25	101.18	104.30
38	A1	1015	G	N3-C2-N2	6.25	124.27	119.90
38	A1	1058	A	C8-N9-C4	6.25	108.30	105.80
38	A1	1963	G	C4-C5-N7	6.25	113.30	110.80
38	A1	1972	C	C5-C6-N1	6.25	124.12	121.00
62	AO	1	MET	CG-SD-CE	6.25	110.20	100.20
11	B2	416	A	N3-C4-N9	6.25	132.40	127.40
11	B2	1230	G	C1'-O4'-C4'	-6.25	104.90	109.90
11	B2	1450	U	N3-C4-C5	6.25	118.35	114.60
38	A1	871	G	N9-C1'-C2'	-6.25	105.13	112.00
38	A1	1357	G	O4'-C1'-C2'	-6.25	99.55	105.80
38	A1	1424	G	C8-N9-C4	6.25	108.90	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1524	A	O4'-C1'-N9	6.25	113.20	108.20
38	A1	1797	A	C5-C6-N6	-6.25	118.70	123.70
38	A1	2243	G	O4'-C1'-N9	6.25	113.20	108.20
38	A1	2519	C	P-O5'-C5'	6.25	130.90	120.90
11	B2	791	G	N1-C2-N3	-6.25	120.15	123.90
38	A1	166	G	N7-C8-N9	6.25	116.22	113.10
38	A1	691	G	C2-N3-C4	6.25	115.02	111.90
38	A1	1867	C	N3-C4-C5	-6.25	119.40	121.90
38	A1	2370	C	C6-N1-C2	-6.25	117.80	120.30
38	A1	2996	A	N1-C6-N6	6.25	122.35	118.60
10	B1	36	A	C5-C6-N6	-6.24	118.70	123.70
11	B2	142	G	C6-N1-C2	-6.24	121.35	125.10
11	B2	704	C	O4'-C1'-N1	6.24	113.19	108.20
11	B2	844	G	C5-C6-N1	6.24	114.62	111.50
11	B2	992	G	P-O3'-C3'	6.24	127.19	119.70
11	B2	1002	G	C4'-C3'-C2'	-6.24	96.36	102.60
24	BL	54	ASP	CB-CG-OD2	-6.24	112.68	118.30
38	A1	167	G	C5-N7-C8	6.24	107.42	104.30
38	A1	747	G	C4-C5-C6	6.24	122.55	118.80
38	A1	997	A	C4-C5-N7	-6.24	107.58	110.70
38	A1	1329	G	O4'-C1'-N9	6.24	113.20	108.20
38	A1	1932	G	N7-C8-N9	6.24	116.22	113.10
38	A1	2015	G	C4-C5-C6	6.24	122.55	118.80
38	A1	2599	C	C2-N3-C4	6.24	123.02	119.90
11	B2	90	C	N3-C2-O2	6.24	126.27	121.90
11	B2	108	G	N9-C4-C5	-6.24	102.90	105.40
11	B2	532	C	O4'-C1'-N1	6.24	113.19	108.20
11	B2	1437	G	N3-C2-N2	6.24	124.27	119.90
11	B2	1462	A	C8-N9-C4	-6.24	103.30	105.80
38	A1	1180	G	N1-C2-N3	-6.24	120.16	123.90
38	A1	1928	A	C5-C6-N6	-6.24	118.71	123.70
38	A1	2602	G	O4'-C1'-N9	6.24	113.19	108.20
54	AI	34	GLU	O-C-N	-6.24	112.71	122.70
61	AN	166	ASP	CB-CG-OD2	6.24	123.92	118.30
11	B2	250	G	O4'-C1'-N9	6.24	113.19	108.20
11	B2	1260	G	C3'-C2'-C1'	6.24	106.49	101.50
38	A1	873	G	N1-C2-N3	-6.24	120.16	123.90
38	A1	1386	G	O4'-C1'-N9	6.24	113.19	108.20
38	A1	2376	U	O4'-C1'-N1	6.24	113.19	108.20
38	A1	2743	U	P-O3'-C3'	6.24	127.19	119.70
38	A1	2795	G	N7-C8-N9	-6.24	109.98	113.10
11	B2	181	G	P-O3'-C3'	6.24	127.19	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	349	A	C4-C5-C6	6.24	120.12	117.00
11	B2	869	U	N1-C2-O2	-6.24	118.43	122.80
11	B2	1331	G	N3-C4-N9	-6.24	122.26	126.00
38	A1	219	G	C6-C5-N7	-6.24	126.66	130.40
38	A1	476	C	N1-C2-N3	-6.24	114.83	119.20
38	A1	1641	G	C4-C5-N7	6.24	113.30	110.80
38	A1	1807	G	N1-C2-N3	-6.24	120.16	123.90
38	A1	2395	C	C5-C6-N1	6.24	124.12	121.00
38	A1	2466	C	C5-C4-N4	-6.24	115.83	120.20
38	A1	2498	G	C5-C6-N1	6.24	114.62	111.50
39	A3	108	G	N1-C2-N2	-6.24	110.59	116.20
45	AC	32	LYS	N-CA-CB	6.24	121.83	110.60
11	B2	192	G	C3'-C2'-C1'	-6.24	96.51	101.50
11	B2	1283	G	O4'-C1'-N9	6.24	113.19	108.20
38	A1	740	C	C2'-C3'-O3'	6.24	123.68	113.70
38	A1	1150	G	C8-N9-C4	-6.24	103.91	106.40
38	A1	1938	G	P-O3'-C3'	6.24	127.19	119.70
38	A1	2577	U	N1-C1'-C2'	-6.24	105.14	112.00
38	A1	2595	C	C5-C6-N1	6.24	124.12	121.00
38	A1	2795	G	N3-C2-N2	6.24	124.27	119.90
11	B2	462	A	C1'-O4'-C4'	-6.24	104.91	109.90
11	B2	1131	G	N7-C8-N9	-6.24	109.98	113.10
11	B2	1319	C	C6-N1-C2	-6.24	117.81	120.30
13	BA	37	ALA	N-CA-CB	6.24	118.83	110.10
38	A1	107	G	C5-C6-N1	-6.24	108.38	111.50
38	A1	395	G	C5-C6-N1	6.24	114.62	111.50
38	A1	474	G	C4-C5-N7	6.24	113.29	110.80
38	A1	887	U	N1-C2-N3	-6.24	111.16	114.90
38	A1	1052	G	N1-C2-N2	-6.24	110.59	116.20
38	A1	1407	A	P-O5'-C5'	6.24	130.88	120.90
38	A1	1772	A	C2-N3-C4	6.24	113.72	110.60
38	A1	2133	G	C6-N1-C2	6.24	128.84	125.10
38	A1	2488	C	C5'-C4'-O4'	6.24	116.58	109.10
38	A1	3016	G	C4-C5-C6	6.24	122.54	118.80
11	B2	194	C	P-O5'-C5'	-6.23	110.93	120.90
11	B2	304	C	C4-C5-C6	-6.23	114.28	117.40
11	B2	1487	U	P-O3'-C3'	-6.23	112.22	119.70
38	A1	78	C	N3-C4-N4	6.23	122.36	118.00
38	A1	514	U	N1-C2-N3	-6.23	111.16	114.90
38	A1	1571	G	C2-N3-C4	6.23	115.02	111.90
38	A1	2252	C	N3-C2-O2	6.23	126.26	121.90
38	A1	2316	U	N1-C2-N3	6.23	118.64	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	B1	32	A	C8-N9-C4	-6.23	103.31	105.80
11	B2	40	C	P-O3'-C3'	6.23	127.18	119.70
11	B2	243	G	C4'-C3'-C2'	-6.23	96.37	102.60
11	B2	438	A	C5-N7-C8	6.23	107.02	103.90
11	B2	530	G	N3-C2-N2	6.23	124.26	119.90
11	B2	839	G	C8-N9-C4	-6.23	103.91	106.40
38	A1	85	G	O5'-C5'-C4'	-6.23	99.86	111.70
38	A1	146	U	N3-C2-O2	-6.23	117.84	122.20
38	A1	426	G	C1'-O4'-C4'	-6.23	104.91	109.90
38	A1	485	G	C4-C5-N7	6.23	113.29	110.80
38	A1	901	C	C5-C6-N1	6.23	124.12	121.00
38	A1	1012	G	N7-C8-N9	-6.23	109.98	113.10
38	A1	1147	G	C6-C5-N7	-6.23	126.66	130.40
38	A1	2158	G	C5-C6-O6	-6.23	124.86	128.60
38	A1	2480	G	C5-C6-N1	-6.23	108.38	111.50
38	A1	2636	C	C5-C6-N1	6.23	124.12	121.00
38	A1	2802	G	C8-N9-C4	-6.23	103.91	106.40
38	A1	2850	G	C2-N3-C4	6.23	115.02	111.90
43	AB	30	TYR	CB-CG-CD1	6.23	124.74	121.00
10	B1	53	G	N1-C2-N3	-6.23	120.16	123.90
11	B2	427	G	C4'-C3'-C2'	-6.23	96.37	102.60
38	A1	10	C	C2-N1-C1'	6.23	125.65	118.80
38	A1	80	G	C4-C5-N7	6.23	113.29	110.80
38	A1	1891	C	N3-C4-N4	6.23	122.36	118.00
38	A1	2473	C	C2-N3-C4	-6.23	116.78	119.90
38	A1	2650	G	C5-C6-O6	-6.23	124.86	128.60
38	A1	2815	C	O4'-C1'-N1	6.23	113.19	108.20
11	B2	1356	A	C5-C6-N6	-6.23	118.72	123.70
38	A1	91	G	N1-C6-O6	6.23	123.64	119.90
38	A1	411	U	O4'-C4'-C3'	-6.23	97.77	104.00
10	B1	44	G	C5-N7-C8	-6.23	101.19	104.30
10	B1	49	C	N3-C2-O2	-6.23	117.54	121.90
11	B2	107	C	C5-C6-N1	6.23	124.11	121.00
11	B2	564	C	P-O3'-C3'	6.23	127.17	119.70
11	B2	718	G	N1-C6-O6	6.23	123.64	119.90
11	B2	1171	G	C3'-C2'-C1'	6.23	106.48	101.50
38	A1	1345	G	C4'-C3'-C2'	-6.23	96.37	102.60
38	A1	1481	G	C6-N1-C2	-6.23	121.36	125.10
38	A1	1708	U	N3-C4-O4	6.23	123.76	119.40
38	A1	1814	A	P-O3'-C3'	6.23	127.17	119.70
38	A1	1994	G	N1-C6-O6	6.23	123.64	119.90
38	A1	2135	C	N1-C2-O2	6.23	122.64	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2289	A	N1-C2-N3	6.23	132.41	129.30
38	A1	2366	G	C8-N9-C1'	6.23	135.09	127.00
38	A1	2658	G	C8-N9-C4	6.23	108.89	106.40
38	A1	2746	G	C5-N7-C8	6.23	107.41	104.30
45	AC	359	VAL	CA-CB-CG1	-6.23	101.56	110.90
38	A1	1669	A	C4-C5-N7	-6.23	107.59	110.70
38	A1	1991	G	C4-C5-C6	6.23	122.54	118.80
38	A1	2039	U	C4'-C3'-C2'	-6.23	96.37	102.60
38	A1	2418	G	O4'-C1'-N9	6.23	113.18	108.20
38	A1	2622	C	C2-N3-C4	6.23	123.01	119.90
38	A1	2818	C	P-O3'-C3'	6.23	127.17	119.70
11	B2	42	G	N7-C8-N9	6.22	116.21	113.10
38	A1	173	G	C6-N1-C2	-6.22	121.37	125.10
38	A1	215	A	C2-N3-C4	6.22	113.71	110.60
38	A1	230	A	C2-N3-C4	-6.22	107.49	110.60
38	A1	500	C	C5-C4-N4	-6.22	115.84	120.20
38	A1	722	C	C4'-C3'-C2'	-6.22	96.38	102.60
38	A1	835	G	C4-C5-C6	6.22	122.53	118.80
38	A1	847	A	P-O3'-C3'	-6.22	112.23	119.70
38	A1	1077	G	C4-C5-N7	-6.22	108.31	110.80
38	A1	1295	G	P-O5'-C5'	-6.22	110.94	120.90
38	A1	1461	G	N3-C2-N2	6.22	124.26	119.90
38	A1	1504	C	N3-C4-N4	6.22	122.36	118.00
38	A1	1870	G	N1-C2-N3	-6.22	120.17	123.90
38	A1	1974	G	O4'-C1'-N9	6.22	113.18	108.20
38	A1	2146	C	C2-N3-C4	6.22	123.01	119.90
38	A1	2608	U	C5-C6-N1	6.22	125.81	122.70
38	A1	2700	U	N3-C2-O2	6.22	126.56	122.20
11	B2	212	G	C5-C6-O6	6.22	132.33	128.60
11	B2	359	A	C3'-C2'-C1'	-6.22	96.52	101.50
11	B2	454	G	C5-N7-C8	6.22	107.41	104.30
11	B2	616	G	C5-N7-C8	-6.22	101.19	104.30
11	B2	807	C	C2-N3-C4	6.22	123.01	119.90
11	B2	968	C	N3-C4-C5	-6.22	119.41	121.90
11	B2	1418	G	N1-C2-N3	-6.22	120.17	123.90
38	A1	815	U	N3-C4-C5	-6.22	110.87	114.60
38	A1	1725	A	O4'-C4'-C3'	-6.22	97.78	104.00
38	A1	1824	G	C4-C5-C6	-6.22	115.07	118.80
38	A1	1831	C	P-O3'-C3'	-6.22	112.23	119.70
38	A1	1866	G	C6-N1-C2	6.22	128.83	125.10
38	A1	2265	C	C5'-C4'-O4'	6.22	116.57	109.10
38	A1	2494	A	C5-C6-N6	-6.22	118.72	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	417	C	C4-C5-C6	-6.22	114.29	117.40
38	A1	1200	A	C5-C6-N1	-6.22	114.59	117.70
38	A1	1259	G	C4-C5-C6	6.22	122.53	118.80
38	A1	2480	G	C6-C5-N7	-6.22	126.67	130.40
38	A1	2961	A	N1-C6-N6	6.22	122.33	118.60
10	B1	30	G	O4'-C1'-N9	6.22	113.18	108.20
38	A1	177	G	C4'-C3'-C2'	-6.22	96.38	102.60
38	A1	1965	C	C5-C6-N1	6.22	124.11	121.00
38	A1	2193	G	P-O3'-C3'	6.22	127.16	119.70
38	A1	2782	A	N3-C4-C5	-6.22	122.45	126.80
38	A1	3045	G	N1-C2-N3	-6.22	120.17	123.90
43	AB	41	LEU	CB-CG-CD1	6.22	121.57	111.00
57	Aj	70	ARG	NE-CZ-NH1	6.22	123.41	120.30
62	AO	82	SER	N-CA-CB	6.22	119.83	110.50
11	B2	808	C	N3-C4-C5	-6.22	119.41	121.90
38	A1	419	G	C5-N7-C8	6.22	107.41	104.30
38	A1	543	G	C2-N3-C4	-6.22	108.79	111.90
38	A1	2720	U	C5-C6-N1	6.22	125.81	122.70
11	B2	114	A	C4-C5-C6	6.22	120.11	117.00
11	B2	265	C	N3-C2-O2	-6.22	117.55	121.90
11	B2	361	A	C2-N3-C4	-6.22	107.49	110.60
11	B2	1130	A	C4-C5-N7	-6.22	107.59	110.70
38	A1	198	C	C1'-O4'-C4'	6.22	114.87	109.90
38	A1	243	G	C5-C6-N1	-6.22	108.39	111.50
38	A1	639	C	C5-C4-N4	-6.22	115.85	120.20
38	A1	909	A	C5-N7-C8	6.22	107.01	103.90
38	A1	1328	G	C6-C5-N7	-6.22	126.67	130.40
38	A1	1835	A	C5-C6-N1	-6.22	114.59	117.70
38	A1	2230	G	C5-C6-N1	-6.22	108.39	111.50
38	A1	2672	A	P-O5'-C5'	-6.22	110.95	120.90
38	A1	2879	G	C6-C5-N7	-6.22	126.67	130.40
39	A3	75	G	N9-C4-C5	-6.22	102.91	105.40
11	B2	23	G	N3-C2-N2	6.21	124.25	119.90
11	B2	454	G	C6-C5-N7	-6.21	126.67	130.40
11	B2	796	C	C5-C4-N4	-6.21	115.85	120.20
11	B2	1210	A	C2-N3-C4	6.21	113.71	110.60
11	B2	1328	G	C6-C5-N7	-6.21	126.67	130.40
38	A1	630	G	N9-C4-C5	-6.21	102.91	105.40
38	A1	666	A	C4-C5-C6	6.21	120.11	117.00
38	A1	973	C	N3-C4-N4	6.21	122.35	118.00
38	A1	1290	G	C4-C5-C6	6.21	122.53	118.80
38	A1	1776	G	P-O5'-C5'	6.21	130.84	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2682	G	N3-C4-C5	6.21	131.71	128.60
38	A1	2687	A	C4-C5-C6	6.21	120.11	117.00
65	AV	41	TYR	CG-CD1-CE1	-6.21	116.33	121.30
11	B2	708	C	C5-C4-N4	-6.21	115.85	120.20
11	B2	1483	U	C4-C5-C6	-6.21	115.97	119.70
38	A1	2469	G	C2-N3-C4	-6.21	108.79	111.90
38	A1	2787	G	C4-C5-C6	6.21	122.53	118.80
64	AR	49	TYR	CG-CD2-CE2	-6.21	116.33	121.30
11	B2	603	G	N7-C8-N9	6.21	116.21	113.10
11	B2	624	G	C2-N3-C4	6.21	115.01	111.90
11	B2	894	A	O4'-C1'-N9	6.21	113.17	108.20
11	B2	1076	G	N9-C4-C5	6.21	107.88	105.40
11	B2	1490	C	C5-C4-N4	-6.21	115.85	120.20
38	A1	105	C	N3-C4-C5	-6.21	119.42	121.90
38	A1	555	G	C4-C5-N7	-6.21	108.31	110.80
38	A1	892	U	N1-C2-N3	6.21	118.63	114.90
38	A1	1049	U	C2-N3-C4	-6.21	123.27	127.00
38	A1	1324	G	N1-C2-N3	-6.21	120.17	123.90
38	A1	1454	G	C5-C6-N1	6.21	114.61	111.50
38	A1	1751	G	N3-C4-C5	6.21	131.71	128.60
38	A1	2326	C	N3-C4-N4	6.21	122.35	118.00
38	A1	2420	C	O4'-C1'-N1	6.21	113.17	108.20
39	A3	43	C	P-O5'-C5'	6.21	130.84	120.90
11	B2	1075	A	C6-N1-C2	-6.21	114.87	118.60
11	B2	1476	C	C5-C4-N4	6.21	124.55	120.20
21	BI	61	TYR	CD1-CE1-CZ	-6.21	114.21	119.80
38	A1	260	A	O4'-C1'-N9	6.21	113.17	108.20
38	A1	599	G	O4'-C1'-N9	6.21	113.17	108.20
38	A1	983	G	O4'-C1'-N9	6.21	113.17	108.20
38	A1	1448	G	N3-C4-C5	-6.21	125.50	128.60
38	A1	2516	G	C5-C6-N1	-6.21	108.39	111.50
38	A1	2629	U	N3-C4-O4	6.21	123.75	119.40
11	B2	205	C	C6-N1-C2	-6.21	117.82	120.30
11	B2	788	C	O4'-C1'-N1	6.21	113.17	108.20
17	BE	55	TYR	CB-CG-CD2	-6.21	117.28	121.00
38	A1	856	A	C4-C5-N7	-6.21	107.60	110.70
38	A1	2389	C	N1-C2-O2	6.21	122.62	118.90
38	A1	2434	A	N9-C4-C5	6.21	108.28	105.80
38	A1	2436	A	C5-C6-N1	-6.21	114.60	117.70
38	A1	2900	C	N3-C4-N4	6.21	122.35	118.00
60	AM	48	ALA	N-CA-CB	6.21	118.79	110.10
11	B2	612	C	N1-C2-N3	-6.21	114.86	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	977	G	C4-C5-C6	6.21	122.52	118.80
11	B2	1306	A	C4-C5-N7	-6.21	107.60	110.70
11	B2	1330	G	O4'-C1'-N9	6.21	113.17	108.20
38	A1	219	G	OP1-P-OP2	-6.21	110.29	119.60
38	A1	247	A	O4'-C1'-N9	6.21	113.17	108.20
38	A1	757	C	N3-C2-O2	6.21	126.25	121.90
38	A1	912	G	C5-C6-N1	-6.21	108.40	111.50
38	A1	2072	G	O4'-C1'-N9	6.21	113.17	108.20
38	A1	2239	C	C2-N3-C4	6.21	123.00	119.90
38	A1	2764	G	O4'-C1'-N9	6.21	113.17	108.20
10	B1	25	G	C5'-C4'-C3'	6.21	125.93	116.00
11	B2	16	G	C4-N9-C1'	6.21	134.57	126.50
11	B2	67	C	C6-N1-C2	-6.21	117.82	120.30
11	B2	292	U	C6-N1-C2	-6.21	117.28	121.00
11	B2	529	C	C6-N1-C1'	-6.21	113.35	120.80
38	A1	1252	G	C5-N7-C8	6.21	107.40	104.30
11	B2	136	A	C5-N7-C8	6.20	107.00	103.90
11	B2	534	G	C5'-C4'-O4'	6.20	116.55	109.10
38	A1	219	G	C4-C5-C6	6.20	122.52	118.80
38	A1	731	C	N3-C4-C5	-6.20	119.42	121.90
38	A1	1106	C	N1-C2-O2	6.20	122.62	118.90
38	A1	2368	G	O4'-C1'-N9	6.20	113.16	108.20
38	A1	2871	A	C3'-C2'-C1'	6.20	106.46	101.50
38	A1	2960	G	N3-C2-N2	6.20	124.24	119.90
38	A1	2991	C	C5-C4-N4	-6.20	115.86	120.20
11	B2	316	C	N1-C2-O2	6.20	122.62	118.90
38	A1	33	U	N3-C4-C5	-6.20	110.88	114.60
38	A1	347	G	N1-C2-N3	-6.20	120.18	123.90
38	A1	517	A	N7-C8-N9	-6.20	110.70	113.80
38	A1	1959	C	N3-C4-N4	6.20	122.34	118.00
38	A1	2212	C	O4'-C1'-N1	6.20	113.16	108.20
38	A1	2662	G	C5-C6-N1	-6.20	108.40	111.50
38	A1	2900	C	C5-C6-N1	6.20	124.10	121.00
11	B2	11	A	C4-C5-N7	6.20	113.80	110.70
11	B2	679	G	C4-C5-C6	6.20	122.52	118.80
11	B2	1174	A	C3'-C2'-C1'	6.20	106.46	101.50
38	A1	283	U	N3-C4-O4	6.20	123.74	119.40
38	A1	412	G	N1-C2-N3	-6.20	120.18	123.90
38	A1	1240	U	N1-C2-O2	-6.20	118.46	122.80
38	A1	1508	A	P-O3'-C3'	6.20	127.14	119.70
38	A1	1513	G	C4-C5-C6	6.20	122.52	118.80
38	A1	2161	A	N9-C4-C5	6.20	108.28	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2684	G	N9-C1'-C2'	-6.20	105.18	112.00
39	A3	32	C	N3-C2-O2	6.20	126.24	121.90
11	B2	476	C	O4'-C1'-N1	6.20	113.16	108.20
11	B2	621	G	C4-C5-N7	-6.20	108.32	110.80
11	B2	663	G	N9-C1'-C2'	-6.20	105.18	112.00
11	B2	1274	C	N3-C2-O2	6.20	126.24	121.90
11	B2	1367	C	N1-C2-O2	-6.20	115.18	118.90
38	A1	866	G	C2-N3-C4	6.20	115.00	111.90
38	A1	904	G	C8-N9-C4	6.20	108.88	106.40
38	A1	1385	C	C4-C5-C6	6.20	120.50	117.40
38	A1	1946	G	O4'-C1'-N9	6.20	113.16	108.20
38	A1	1961	G	N7-C8-N9	-6.20	110.00	113.10
38	A1	2780	G	O4'-C1'-N9	6.20	113.16	108.20
38	A1	2837	C	C4-C5-C6	-6.20	114.30	117.40
38	A1	2866	A	N1-C6-N6	6.20	122.32	118.60
38	A1	2949	G	C6-C5-N7	-6.20	126.68	130.40
38	A1	2971	U	N3-C4-C5	-6.20	110.88	114.60
10	B1	40	U	C5'-C4'-O4'	-6.20	101.66	109.10
11	B2	123	U	P-O3'-C3'	-6.20	112.26	119.70
11	B2	598	U	C5-C6-N1	6.20	125.80	122.70
38	A1	136	U	C2-N1-C1'	6.20	125.14	117.70
38	A1	406	G	C1'-O4'-C4'	-6.20	104.94	109.90
38	A1	1184	U	C5-C6-N1	6.20	125.80	122.70
38	A1	1952	G	C8-N9-C4	-6.20	103.92	106.40
61	AN	20	ARG	NE-CZ-NH2	-6.20	117.20	120.30
11	B2	1259	A	C8-N9-C4	-6.20	103.32	105.80
19	BG	95	ARG	NE-CZ-NH1	6.20	123.40	120.30
38	A1	598	C	P-O3'-C3'	6.20	127.14	119.70
38	A1	677	A	C5-C6-N6	-6.20	118.74	123.70
38	A1	941	C	C5-C4-N4	-6.20	115.86	120.20
38	A1	977	C	OP1-P-OP2	-6.20	110.31	119.60
38	A1	1595	G	C4-C5-N7	6.20	113.28	110.80
38	A1	2421	A	C4-C5-C6	6.20	120.10	117.00
38	A1	2949	G	N7-C8-N9	6.20	116.20	113.10
39	A3	27	C	O4'-C4'-C3'	-6.20	97.81	104.00
26	BN	98	ASP	CB-CA-C	-6.19	98.01	110.40
38	A1	44	C	N3-C4-N4	6.19	122.34	118.00
38	A1	431	U	C2-N3-C4	-6.19	123.28	127.00
38	A1	1303	C	P-O3'-C3'	-6.19	112.27	119.70
38	A1	1338	G	N1-C2-N3	-6.19	120.18	123.90
38	A1	2558	U	O4'-C1'-N1	6.19	113.16	108.20
58	Ak	151	ARG	N-CA-CB	6.19	121.75	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	B1	10	G	C6-N1-C2	-6.19	121.38	125.10
11	B2	304	C	C5-C4-N4	-6.19	115.87	120.20
11	B2	1354	A	C5-C6-N6	-6.19	118.75	123.70
38	A1	87	C	C4'-C3'-C2'	6.19	108.79	102.60
38	A1	1388	U	C6-N1-C2	-6.19	117.28	121.00
38	A1	1502	C	C6-N1-C2	-6.19	117.82	120.30
38	A1	2139	A	C5-C6-N6	-6.19	118.75	123.70
11	B2	380	C	C5-C4-N4	-6.19	115.87	120.20
11	B2	410	U	C5-C4-O4	-6.19	122.19	125.90
11	B2	446	G	N7-C8-N9	-6.19	110.00	113.10
11	B2	995	G	N1-C6-O6	6.19	123.61	119.90
38	A1	816	C	N1-C2-O2	6.19	122.61	118.90
38	A1	889	C	O4'-C1'-N1	6.19	113.15	108.20
38	A1	1942	G	N3-C2-N2	6.19	124.23	119.90
38	A1	2062	A	N1-C2-N3	6.19	132.40	129.30
38	A1	2965	C	C6-N1-C2	-6.19	117.82	120.30
11	B2	682	A	N1-C2-N3	6.19	132.39	129.30
11	B2	782	A	C4-C5-C6	6.19	120.09	117.00
11	B2	966	G	N3-C2-N2	6.19	124.23	119.90
39	A3	100	A	C8-N9-C4	-6.19	103.32	105.80
9	AX	149	PHE	CB-CG-CD1	-6.19	116.47	120.80
10	B1	74	A	C4-C5-C6	6.19	120.09	117.00
11	B2	375	G	N3-C2-N2	6.19	124.23	119.90
11	B2	399	A	P-O5'-C5'	-6.19	111.00	120.90
11	B2	1262	U	O5'-P-OP1	6.19	118.12	110.70
38	A1	139	G	C2-N3-C4	-6.19	108.81	111.90
38	A1	149	G	C5-C6-O6	-6.19	124.89	128.60
38	A1	746	C	C6-N1-C2	-6.19	117.83	120.30
38	A1	929	G	C8-N9-C1'	6.19	135.04	127.00
38	A1	1248	C	C2-N1-C1'	6.19	125.61	118.80
38	A1	1305	C	P-O3'-C3'	-6.19	112.28	119.70
38	A1	1552	C	C5'-C4'-C3'	6.19	125.90	116.00
38	A1	2506	G	C8-N9-C4	-6.19	103.92	106.40
38	A1	2871	A	C6-N1-C2	6.19	122.31	118.60
38	A1	3006	G	C4-C5-C6	6.19	122.51	118.80
38	A1	98	G	C4'-C3'-C2'	-6.19	96.41	102.60
38	A1	1768	C	C5-C6-N1	6.19	124.09	121.00
38	A1	1799	G	N1-C2-N3	-6.19	120.19	123.90
38	A1	2444	G	N3-C4-C5	-6.19	125.51	128.60
38	A1	2767	C	C6-N1-C2	-6.19	117.83	120.30
11	B2	1172	A	C5-C6-N1	-6.18	114.61	117.70
29	BQ	70	ASP	N-CA-CB	6.18	121.73	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	339	A	O4'-C1'-N9	6.18	113.15	108.20
38	A1	617	G	C2-N3-C4	6.18	114.99	111.90
38	A1	1109	G	C4'-C3'-C2'	-6.18	96.42	102.60
38	A1	1366	U	C5-C6-N1	-6.18	119.61	122.70
38	A1	1371	U	O4'-C1'-N1	6.18	113.15	108.20
38	A1	2231	G	C3'-C2'-C1'	6.18	106.45	101.50
38	A1	2254	U	C6-N1-C2	-6.18	117.29	121.00
38	A1	2896	G	N3-C2-N2	-6.18	115.57	119.90
46	AD	187	ARG	NE-CZ-NH1	6.18	123.39	120.30
38	A1	238	C	C4-C5-C6	6.18	120.49	117.40
38	A1	243	G	C8-N9-C4	-6.18	103.93	106.40
38	A1	985	A	C6-N1-C2	6.18	122.31	118.60
38	A1	1556	G	N3-C4-C5	6.18	131.69	128.60
38	A1	1708	U	C5-C6-N1	6.18	125.79	122.70
38	A1	1884	C	C2-N3-C4	6.18	122.99	119.90
38	A1	2099	G	C5-C6-N1	-6.18	108.41	111.50
38	A1	2434	A	C6-N1-C2	-6.18	114.89	118.60
38	A1	2479	C	O4'-C1'-N1	6.18	113.15	108.20
45	AC	279	ARG	NE-CZ-NH1	6.18	123.39	120.30
11	B2	246	A	N9-C4-C5	6.18	108.27	105.80
11	B2	1263	C	C1'-O4'-C4'	6.18	114.84	109.90
38	A1	1297	C	O4'-C1'-N1	6.18	113.14	108.20
38	A1	1375	G	C5-C6-O6	-6.18	124.89	128.60
38	A1	1771	C	C4'-C3'-C2'	6.18	108.78	102.60
38	A1	1801	C	P-O3'-C3'	-6.18	112.28	119.70
38	A1	2892	A	C4-C5-C6	-6.18	113.91	117.00
10	B1	27	A	C5-C6-N6	-6.18	118.76	123.70
11	B2	1236	G	OP1-P-OP2	-6.18	110.33	119.60
38	A1	705	G	C5'-C4'-O4'	6.18	116.52	109.10
38	A1	1332	A	C4-C5-N7	-6.18	107.61	110.70
38	A1	1385	C	C2-N3-C4	6.18	122.99	119.90
38	A1	1413	A	N3-C4-C5	-6.18	122.47	126.80
38	A1	1538	A	C5-N7-C8	6.18	106.99	103.90
38	A1	1655	G	O4'-C1'-N9	6.18	113.14	108.20
38	A1	2293	G	N3-C2-N2	6.18	124.23	119.90
38	A1	2781	A	N9-C4-C5	6.18	108.27	105.80
38	A1	2896	G	N7-C8-N9	-6.18	110.01	113.10
50	AF	78	MET	N-CA-CB	6.18	121.72	110.60
11	B2	585	U	N3-C4-C5	-6.18	110.89	114.60
38	A1	117	A	C5'-C4'-O4'	6.18	116.51	109.10
38	A1	851	G	O4'-C1'-N9	6.18	113.14	108.20
38	A1	1837	A	C4-C5-C6	6.18	120.09	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	BF	92	ARG	NE-CZ-NH2	-6.18	117.21	120.30
32	BT	73	LEU	CB-CG-CD1	-6.18	100.50	111.00
38	A1	1028	G	C5-C6-O6	-6.18	124.89	128.60
38	A1	2019	C	C5-C6-N1	6.18	124.09	121.00
38	A1	2181	G	C4-C5-N7	6.18	113.27	110.80
38	A1	2877	A	C1'-O4'-C4'	6.18	114.84	109.90
11	B2	345	G	N3-C4-N9	-6.17	122.30	126.00
11	B2	557	G	C1'-O4'-C4'	-6.17	104.96	109.90
11	B2	936	A	O4'-C1'-N9	6.17	113.14	108.20
11	B2	1420	U	N1-C2-O2	-6.17	118.48	122.80
16	BD	85	GLU	CB-CA-C	-6.17	98.05	110.40
38	A1	121	G	C6-C5-N7	-6.17	126.70	130.40
38	A1	124	C	C2-N3-C4	6.17	122.99	119.90
38	A1	674	G	C6-C5-N7	-6.17	126.69	130.40
38	A1	801	A	C4-C5-C6	6.17	120.09	117.00
38	A1	852	A	N3-C4-C5	-6.17	122.48	126.80
38	A1	1105	C	N3-C4-N4	6.17	122.32	118.00
38	A1	1367	A	C5-N7-C8	6.17	106.99	103.90
45	AC	225	THR	CA-CB-CG2	-6.17	103.75	112.40
11	B2	237	C	N1-C2-N3	-6.17	114.88	119.20
11	B2	366	C	O4'-C1'-N1	6.17	113.14	108.20
11	B2	1064	C	C5-C6-N1	6.17	124.09	121.00
11	B2	1466	G	C4-C5-N7	6.17	113.27	110.80
36	BX	28	LYS	N-CA-CB	6.17	121.71	110.60
38	A1	1377	G	N3-C4-C5	-6.17	125.51	128.60
38	A1	2765	C	C2-N1-C1'	-6.17	112.01	118.80
42	Aa	90	ALA	N-CA-CB	6.17	118.74	110.10
53	Ah	11	ARG	NE-CZ-NH2	-6.17	117.21	120.30
10	B1	54	G	O4'-C1'-N9	6.17	113.14	108.20
11	B2	729	G	N7-C8-N9	-6.17	110.01	113.10
11	B2	937	A	C6-C5-N7	-6.17	127.98	132.30
11	B2	971	G	C4-C5-C6	6.17	122.50	118.80
38	A1	135	U	P-O3'-C3'	6.17	127.11	119.70
38	A1	386	A	N7-C8-N9	-6.17	110.72	113.80
38	A1	718	G	C4-C5-N7	-6.17	108.33	110.80
38	A1	722	C	C5'-C4'-O4'	6.17	116.50	109.10
38	A1	812	C	N3-C4-C5	-6.17	119.43	121.90
38	A1	1226	G	N1-C2-N2	-6.17	110.65	116.20
38	A1	1239	C	C2-N3-C4	6.17	122.98	119.90
38	A1	1661	A	C5-C6-N1	-6.17	114.61	117.70
38	A1	2002	A	N7-C8-N9	-6.17	110.71	113.80
38	A1	2482	G	N1-C6-O6	6.17	123.60	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2984	A	C6-C5-N7	-6.17	127.98	132.30
39	A3	12	G	C4'-C3'-C2'	-6.17	96.43	102.60
41	AA	104	TYR	CG-CD1-CE1	6.17	126.24	121.30
59	AL	9	ARG	NE-CZ-NH2	-6.17	117.21	120.30
11	B2	115	A	O4'-C1'-N9	6.17	113.14	108.20
11	B2	445	G	C2-N3-C4	6.17	114.98	111.90
11	B2	697	A	C8-N9-C4	-6.17	103.33	105.80
11	B2	1143	G	P-O3'-C3'	-6.17	112.30	119.70
11	B2	1144	G	N7-C8-N9	-6.17	110.02	113.10
11	B2	1334	A	C5-N7-C8	6.17	106.98	103.90
38	A1	1906	G	C2-N3-C4	-6.17	108.81	111.90
38	A1	2182	A	C6-C5-N7	-6.17	127.98	132.30
38	A1	2615	U	C4-C5-C6	6.17	123.40	119.70
39	A3	9	A	N1-C6-N6	6.17	122.30	118.60
11	B2	194	C	C5-C6-N1	6.17	124.08	121.00
11	B2	516	A	O4'-C1'-N9	-6.17	103.27	108.20
11	B2	680	C	N3-C4-N4	6.17	122.32	118.00
11	B2	895	C	P-O5'-C5'	-6.17	111.03	120.90
11	B2	922	G	C6-N1-C2	-6.17	121.40	125.10
11	B2	1024	G	N3-C4-C5	6.17	131.69	128.60
11	B2	1056	G	C2-N3-C4	6.17	114.98	111.90
11	B2	1187	A	C5'-C4'-O4'	6.17	116.50	109.10
11	B2	1458	A	C4-C5-N7	-6.17	107.62	110.70
11	B2	1472	G	N1-C6-O6	6.17	123.60	119.90
38	A1	9	A	C6-N1-C2	6.17	122.30	118.60
38	A1	202	A	N7-C8-N9	-6.17	110.72	113.80
38	A1	1618	G	C5'-C4'-O4'	6.17	116.50	109.10
38	A1	1763	A	C5-C6-N6	-6.17	118.77	123.70
38	A1	1791	A	N3-C4-C5	-6.17	122.48	126.80
38	A1	2064	U	C5'-C4'-O4'	6.17	116.50	109.10
38	A1	2118	C	P-O3'-C3'	6.17	127.10	119.70
38	A1	2126	G	N3-C4-N9	-6.17	122.30	126.00
38	A1	2859	U	C5-C6-N1	6.17	125.78	122.70
60	AM	98	TRP	CB-CG-CD2	-6.17	118.58	126.60
7	AU	59	TYR	CB-CG-CD1	-6.17	117.30	121.00
11	B2	865	A	C6-C5-N7	-6.17	127.98	132.30
11	B2	884	G	N9-C4-C5	-6.17	102.93	105.40
11	B2	1122	C	N3-C4-C5	-6.17	119.43	121.90
16	BD	51	PHE	CB-CG-CD1	-6.17	116.48	120.80
38	A1	232	U	O4'-C1'-N1	6.17	113.13	108.20
38	A1	498	U	C5-C4-O4	-6.17	122.20	125.90
38	A1	1227	A	C5-C6-N6	-6.17	118.77	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1367	A	O4'-C1'-N9	6.17	113.13	108.20
38	A1	1440	C	C4-C5-C6	-6.17	114.32	117.40
38	A1	2126	G	C4'-C3'-C2'	-6.17	96.43	102.60
38	A1	2404	G	N3-C4-C5	-6.17	125.52	128.60
38	A1	2510	A	C5-C6-N1	-6.17	114.62	117.70
38	A1	2727	C	N3-C4-C5	-6.17	119.43	121.90
38	A1	2836	G	P-O3'-C3'	6.17	127.10	119.70
11	B2	391	G	C8-N9-C4	-6.17	103.93	106.40
11	B2	750	C	N1-C2-N3	-6.17	114.88	119.20
20	BH	146	TYR	CB-CG-CD1	-6.17	117.30	121.00
32	BT	68	ARG	NE-CZ-NH1	6.17	123.38	120.30
38	A1	867	C	N1-C2-O2	6.17	122.60	118.90
38	A1	1367	A	N3-C4-C5	-6.17	122.48	126.80
38	A1	1554	G	C5'-C4'-C3'	-6.17	106.14	116.00
38	A1	2224	G	O4'-C4'-C3'	-6.17	97.83	104.00
63	AP	55	TYR	CB-CG-CD2	6.17	124.70	121.00
11	B2	48	G	P-O3'-C3'	6.16	127.10	119.70
11	B2	269	A	C6-C5-N7	-6.16	127.98	132.30
11	B2	1250	C	C4'-C3'-C2'	-6.16	96.44	102.60
38	A1	120	G	P-O3'-C3'	6.16	127.10	119.70
38	A1	562	G	C6-C5-N7	-6.16	126.70	130.40
38	A1	770	G	N1-C2-N3	-6.16	120.20	123.90
38	A1	968	A	N1-C2-N3	6.16	132.38	129.30
38	A1	1531	C	C6-N1-C2	-6.16	117.83	120.30
38	A1	1758	U	N3-C2-O2	6.16	126.51	122.20
38	A1	2296	A	N1-C6-N6	6.16	122.30	118.60
38	A1	2902	G	C6-N1-C2	6.16	128.80	125.10
39	A3	84	U	C5-C4-O4	-6.16	122.20	125.90
11	B2	825	C	C5-C4-N4	-6.16	115.89	120.20
11	B2	1083	G	O4'-C1'-N9	6.16	113.13	108.20
38	A1	369	G	N7-C8-N9	6.16	116.18	113.10
38	A1	791	C	C1'-O4'-C4'	6.16	114.83	109.90
38	A1	1348	G	N3-C4-C5	6.16	131.68	128.60
38	A1	1588	C	C3'-C2'-C1'	6.16	106.43	101.50
38	A1	2567	C	N1-C2-N3	6.16	123.51	119.20
11	B2	276	A	C3'-C2'-C1'	-6.16	96.57	101.50
11	B2	976	A	C4-C5-C6	6.16	120.08	117.00
11	B2	1087	C	P-O3'-C3'	6.16	127.09	119.70
38	A1	284	U	C6-N1-C2	-6.16	117.30	121.00
38	A1	336	C	C4-C5-C6	6.16	120.48	117.40
38	A1	394	A	C5'-C4'-O4'	-6.16	101.71	109.10
38	A1	915	G	C1'-O4'-C4'	6.16	114.83	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1598	U	N3-C4-O4	6.16	123.71	119.40
38	A1	1947	A	O4'-C1'-N9	6.16	113.13	108.20
38	A1	2390	G	N9-C1'-C2'	-6.16	105.22	112.00
38	A1	2656	A	C5-C6-N6	-6.16	118.77	123.70
39	A3	102	G	N3-C2-N2	6.16	124.21	119.90
11	B2	129	G	N1-C2-N3	-6.16	120.20	123.90
11	B2	414	G	C8-N9-C4	-6.16	103.94	106.40
38	A1	510	A	C1'-O4'-C4'	-6.16	104.97	109.90
38	A1	701	G	OP1-P-OP2	-6.16	110.36	119.60
38	A1	1742	C	O5'-C5'-C4'	-6.16	100.00	111.70
38	A1	2223	G	N1-C2-N3	-6.16	120.20	123.90
47	Ad	77	ARG	N-CA-CB	6.16	121.69	110.60
11	B2	989	C	OP1-P-OP2	-6.16	110.36	119.60
38	A1	2021	G	C5-C6-N1	-6.16	108.42	111.50
9	AX	415	TYR	CA-CB-CG	-6.16	101.70	113.40
11	B2	136	A	C6-C5-N7	-6.16	127.99	132.30
11	B2	198	A	C5'-C4'-C3'	-6.16	106.15	116.00
11	B2	334	G	C4-C5-C6	6.16	122.49	118.80
11	B2	976	A	N1-C2-N3	6.16	132.38	129.30
11	B2	1091	C	P-O5'-C5'	-6.16	111.05	120.90
11	B2	1092	G	N3-C4-C5	-6.16	125.52	128.60
11	B2	1222	C	C5-C6-N1	6.16	124.08	121.00
11	B2	1447	A	N1-C2-N3	6.16	132.38	129.30
38	A1	178	G	OP1-P-OP2	-6.16	110.37	119.60
38	A1	588	U	N3-C2-O2	-6.16	117.89	122.20
38	A1	665	C	N1-C2-O2	6.16	122.59	118.90
38	A1	967	G	O4'-C1'-N9	6.16	113.12	108.20
38	A1	1167	A	N7-C8-N9	6.16	116.88	113.80
38	A1	1180	G	N3-C4-N9	6.16	129.69	126.00
38	A1	1605	A	P-O3'-C3'	-6.16	112.31	119.70
38	A1	1774	A	C4-C5-C6	6.16	120.08	117.00
38	A1	1791	A	C8-N9-C4	-6.16	103.34	105.80
38	A1	1989	G	C5-N7-C8	6.16	107.38	104.30
38	A1	2102	A	C5-C6-N1	-6.16	114.62	117.70
38	A1	2307	C	C5-C4-N4	-6.16	115.89	120.20
38	A1	2315	G	C8-N9-C4	6.16	108.86	106.40
38	A1	2822	G	C5-C6-N1	-6.16	108.42	111.50
12	AG	9	PHE	CB-CG-CD2	-6.16	116.49	120.80
18	BF	200	ALA	N-CA-CB	6.15	118.72	110.10
38	A1	1264	G	C5-C6-O6	-6.15	124.91	128.60
38	A1	1330	G	O4'-C1'-N9	6.15	113.12	108.20
11	B2	42	G	C8-N9-C4	-6.15	103.94	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1030	U	N3-C4-C5	-6.15	110.91	114.60
11	B2	1221	A	C4-C5-C6	6.15	120.08	117.00
38	A1	277	A	N1-C2-N3	-6.15	126.22	129.30
38	A1	657	U	N1-C2-N3	-6.15	111.21	114.90
38	A1	693	G	N3-C4-C5	-6.15	125.52	128.60
38	A1	901	C	P-O3'-C3'	6.15	127.08	119.70
38	A1	1261	C	C5'-C4'-O4'	6.15	116.48	109.10
38	A1	1945	C	N3-C4-C5	-6.15	119.44	121.90
38	A1	2416	G	N1-C2-N3	-6.15	120.21	123.90
38	A1	2637	U	N3-C2-O2	6.15	126.51	122.20
38	A1	2725	U	N3-C2-O2	6.15	126.51	122.20
52	AH	2	PRO	CA-N-CD	-6.15	102.89	111.50
52	AH	2	PRO	N-CA-CB	6.15	110.68	103.30
11	B2	391	G	P-O3'-C3'	-6.15	112.32	119.70
11	B2	955	G	N3-C4-N9	-6.15	122.31	126.00
11	B2	961	U	P-O3'-C3'	6.15	127.08	119.70
11	B2	990	G	O4'-C4'-C3'	-6.15	97.85	104.00
11	B2	1060	G	N3-C2-N2	6.15	124.21	119.90
38	A1	307	C	P-O5'-C5'	6.15	130.74	120.90
38	A1	453	U	O4'-C1'-N1	6.15	113.12	108.20
38	A1	671	G	N3-C2-N2	6.15	124.21	119.90
38	A1	1171	G	C8-N9-C1'	6.15	135.00	127.00
38	A1	2266	C	N3-C2-O2	6.15	126.21	121.90
38	A1	2279	G	C4-C5-C6	-6.15	115.11	118.80
38	A1	3040	G	C4-C5-N7	-6.15	108.34	110.80
39	A3	28	C	N1-C2-N3	6.15	123.50	119.20
5	AS	143	THR	N-CA-CB	6.15	121.98	110.30
11	B2	938	C	O4'-C1'-N1	6.15	113.12	108.20
11	B2	1147	G	C5-C6-N1	-6.15	108.43	111.50
11	B2	1413	G	C5-N7-C8	-6.15	101.23	104.30
15	BC	98	ARG	NE-CZ-NH1	-6.15	117.22	120.30
38	A1	50	C	N1-C2-N3	-6.15	114.90	119.20
38	A1	744	G	N1-C6-O6	6.15	123.59	119.90
38	A1	809	A	C5-C6-N6	-6.15	118.78	123.70
38	A1	889	C	P-O3'-C3'	6.15	127.08	119.70
11	B2	275	A	P-O3'-C3'	6.15	127.08	119.70
11	B2	294	A	C5-C6-N6	-6.15	118.78	123.70
11	B2	303	G	N7-C8-N9	6.15	116.17	113.10
11	B2	594	A	C8-N9-C4	-6.15	103.34	105.80
11	B2	884	G	C2-N3-C4	6.15	114.97	111.90
11	B2	1201	G	N3-C2-N2	6.15	124.20	119.90
11	B2	1428	G	C2-N3-C4	6.15	114.97	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1440	G	C6-C5-N7	-6.15	126.71	130.40
38	A1	177	G	N1-C6-O6	6.15	123.59	119.90
38	A1	514	U	C6-N1-C2	6.15	124.69	121.00
38	A1	587	A	C5-C6-N6	-6.15	118.78	123.70
38	A1	883	G	N9-C4-C5	6.15	107.86	105.40
38	A1	965	A	O4'-C4'-C3'	6.15	111.02	106.10
38	A1	1021	G	C4-C5-C6	6.15	122.49	118.80
38	A1	1987	A	N3-C4-C5	6.15	131.10	126.80
38	A1	2075	U	C5-C4-O4	6.15	129.59	125.90
38	A1	2686	A	N9-C4-C5	6.15	108.26	105.80
38	A1	3005	C	C5'-C4'-C3'	-6.15	106.16	116.00
10	B1	46	U	P-O5'-C5'	6.15	130.73	120.90
11	B2	507	G	O4'-C1'-N9	6.15	113.12	108.20
38	A1	935	A	N7-C8-N9	-6.15	110.73	113.80
38	A1	2503	C	O4'-C1'-N1	6.15	113.12	108.20
38	A1	2685	G	C5-N7-C8	6.15	107.37	104.30
38	A1	3031	U	P-O3'-C3'	-6.15	112.33	119.70
11	B2	91	G	N1-C2-N3	-6.14	120.21	123.90
11	B2	371	U	C6-N1-C2	-6.14	117.31	121.00
11	B2	404	C	N1-C2-N3	-6.14	114.90	119.20
11	B2	875	G	N3-C4-C5	6.14	131.67	128.60
11	B2	1102	A	N7-C8-N9	6.14	116.87	113.80
20	BH	195	ASP	CB-CG-OD2	-6.14	112.77	118.30
38	A1	341	U	N3-C4-O4	6.14	123.70	119.40
38	A1	387	A	O4'-C1'-N9	6.14	113.11	108.20
38	A1	1565	G	C4'-C3'-C2'	-6.14	96.46	102.60
38	A1	2599	C	C5-C4-N4	-6.14	115.90	120.20
38	A1	2683	G	C5-C6-O6	-6.14	124.91	128.60
38	A1	2779	G	N3-C4-C5	-6.14	125.53	128.60
54	AI	86	LYS	N-CA-CB	6.14	121.66	110.60
10	B1	30	G	C5-C6-N1	6.14	114.57	111.50
11	B2	897	A	N1-C6-N6	6.14	122.28	118.60
11	B2	1112	G	C4-C5-N7	6.14	113.26	110.80
38	A1	254	A	N1-C6-N6	6.14	122.28	118.60
38	A1	527	G	C5-C6-N1	-6.14	108.43	111.50
38	A1	530	A	C4-C5-C6	6.14	120.07	117.00
38	A1	904	G	N9-C1'-C2'	-6.14	105.24	112.00
38	A1	1100	G	C5'-C4'-O4'	6.14	116.47	109.10
38	A1	1186	G	N1-C2-N3	-6.14	120.21	123.90
38	A1	1277	G	N1-C2-N3	-6.14	120.21	123.90
38	A1	1629	G	N9-C4-C5	6.14	107.86	105.40
38	A1	1802	G	C8-N9-C4	-6.14	103.94	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1992	A	C5-C6-N6	-6.14	118.78	123.70
38	A1	2010	G	O4'-C1'-N9	6.14	113.11	108.20
38	A1	2333	G	C5-C6-N1	-6.14	108.43	111.50
38	A1	2439	G	N3-C4-N9	6.14	129.69	126.00
38	A1	2945	A	N1-C2-N3	-6.14	126.23	129.30
11	B2	305	C	N3-C4-N4	6.14	122.30	118.00
38	A1	890	G	C8-N9-C1'	-6.14	119.02	127.00
38	A1	1069	A	N9-C4-C5	-6.14	103.34	105.80
38	A1	2785	G	N3-C2-N2	6.14	124.20	119.90
11	B2	51	A	C4-C5-C6	6.14	120.07	117.00
11	B2	1173	A	C5-C6-N1	-6.14	114.63	117.70
11	B2	1445	A	C4-C5-C6	6.14	120.07	117.00
38	A1	408	C	C5'-C4'-O4'	-6.14	101.73	109.10
38	A1	488	A	C4-C5-N7	-6.14	107.63	110.70
38	A1	513	C	C5-C6-N1	6.14	124.07	121.00
38	A1	681	C	C5-C6-N1	6.14	124.07	121.00
38	A1	703	G	N3-C2-N2	6.14	124.20	119.90
38	A1	837	G	P-O3'-C3'	6.14	127.07	119.70
38	A1	1123	A	C3'-C2'-C1'	-6.14	96.59	101.50
38	A1	1387	G	N7-C8-N9	6.14	116.17	113.10
38	A1	1642	G	N3-C2-N2	6.14	124.20	119.90
38	A1	1714	G	N1-C2-N3	-6.14	120.22	123.90
38	A1	2016	C	C2-N3-C4	6.14	122.97	119.90
38	A1	2028	G	C8-N9-C4	-6.14	103.94	106.40
38	A1	2037	A	C4-C5-N7	-6.14	107.63	110.70
38	A1	2248	G	N1-C6-O6	6.14	123.58	119.90
38	A1	2347	G	N7-C8-N9	6.14	116.17	113.10
38	A1	2581	G	N1-C2-N3	-6.14	120.22	123.90
46	AD	189	ARG	NE-CZ-NH1	6.14	123.37	120.30
38	A1	2641	C	C2-N3-C4	-6.14	116.83	119.90
38	A1	3000	U	C5-C6-N1	6.14	125.77	122.70
60	AM	75	ARG	NE-CZ-NH2	-6.14	117.23	120.30
11	B2	581	G	N1-C2-N2	-6.14	110.68	116.20
11	B2	1099	A	C6-N1-C2	6.14	122.28	118.60
11	B2	1180	G	C4-C5-N7	-6.14	108.34	110.80
11	B2	1207	G	O4'-C1'-N9	6.14	113.11	108.20
38	A1	698	U	C5-C6-N1	6.14	125.77	122.70
38	A1	1763	A	O4'-C1'-N9	6.14	113.11	108.20
38	A1	2441	A	C2-N3-C4	-6.14	107.53	110.60
11	B2	465	C	O4'-C1'-N1	6.13	113.11	108.20
11	B2	1115	G	N3-C4-N9	-6.13	122.32	126.00
38	A1	657	U	C2-N3-C4	6.13	130.68	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	668	G	C8-N9-C1'	6.13	134.98	127.00
38	A1	847	A	C2-N3-C4	-6.13	107.53	110.60
38	A1	1287	G	C6-N1-C2	-6.13	121.42	125.10
38	A1	1536	U	O4'-C1'-N1	6.13	113.11	108.20
38	A1	1537	U	N1-C2-O2	6.13	127.09	122.80
38	A1	1556	G	O4'-C1'-N9	6.13	113.11	108.20
38	A1	1712	U	N1-C2-N3	6.13	118.58	114.90
38	A1	2000	G	N1-C6-O6	6.13	123.58	119.90
38	A1	2404	G	N9-C4-C5	6.13	107.85	105.40
38	A1	2428	C	O4'-C1'-N1	6.13	113.11	108.20
51	Ag	5	PRO	N-CA-C	-6.13	96.15	112.10
38	A1	1104	A	C4-C5-C6	6.13	120.07	117.00
38	A1	1699	U	O4'-C1'-N1	6.13	113.11	108.20
38	A1	2004	A	C4-C5-N7	-6.13	107.63	110.70
11	B2	47	A	P-O3'-C3'	6.13	127.06	119.70
11	B2	138	C	N1-C2-O2	6.13	122.58	118.90
11	B2	365	C	C5-C6-N1	6.13	124.06	121.00
11	B2	1019	A	C2'-C3'-O3'	6.13	123.51	113.70
11	B2	1297	G	C5-N7-C8	6.13	107.37	104.30
14	BB	83	PHE	CB-CG-CD2	-6.13	116.51	120.80
25	BM	131	GLY	C-N-CA	6.13	137.03	121.70
38	A1	171	A	C3'-C2'-C1'	6.13	106.41	101.50
38	A1	493	A	O4'-C1'-N9	6.13	113.11	108.20
38	A1	548	U	C5-C6-N1	6.13	125.77	122.70
38	A1	668	G	C4-N9-C1'	-6.13	118.53	126.50
38	A1	1538	A	C6-N1-C2	6.13	122.28	118.60
38	A1	1919	A	N3-C4-N9	6.13	132.31	127.40
38	A1	2250	G	OP1-P-O3'	6.13	118.69	105.20
38	A1	2312	U	C5-C6-N1	-6.13	119.63	122.70
38	A1	2529	G	C8-N9-C4	6.13	108.85	106.40
38	A1	2848	C	C6-N1-C1'	-6.13	113.44	120.80
38	A1	3031	U	C5-C4-O4	-6.13	122.22	125.90
39	A3	39	C	P-O5'-C5'	-6.13	111.09	120.90
11	B2	333	A	N9-C4-C5	-6.13	103.35	105.80
11	B2	1081	C	C5-C6-N1	6.13	124.06	121.00
11	B2	1400	A	N9-C4-C5	-6.13	103.35	105.80
11	B2	1419	G	P-O3'-C3'	-6.13	112.34	119.70
38	A1	74	A	N3-C4-C5	-6.13	122.51	126.80
38	A1	951	C	O4'-C4'-C3'	-6.13	97.87	104.00
38	A1	2613	C	P-O5'-C5'	6.13	130.71	120.90
38	A1	2984	A	N1-C6-N6	6.13	122.28	118.60
11	B2	239	A	C1'-O4'-C4'	-6.13	105.00	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	679	G	C6-C5-N7	-6.13	126.72	130.40
11	B2	862	C	C4-C5-C6	6.13	120.46	117.40
38	A1	1203	C	N3-C4-C5	-6.13	119.45	121.90
38	A1	1217	U	O4'-C1'-N1	6.13	113.10	108.20
38	A1	1257	G	N9-C4-C5	6.13	107.85	105.40
38	A1	1360	G	C4-C5-N7	-6.13	108.35	110.80
38	A1	2340	A	O4'-C1'-N9	6.13	113.10	108.20
38	A1	2346	A	C6-C5-N7	-6.13	128.01	132.30
43	AB	69	LYS	O-C-N	6.13	132.50	122.70
57	Aj	54	LYS	N-CA-CB	6.13	121.63	110.60
7	AU	92	PHE	CB-CG-CD2	-6.13	116.51	120.80
11	B2	306	C	C1'-O4'-C4'	6.13	114.80	109.90
38	A1	258	C	N1-C2-N3	-6.13	114.91	119.20
38	A1	454	C	C1'-O4'-C4'	-6.13	105.00	109.90
38	A1	652	G	C8-N9-C4	-6.13	103.95	106.40
38	A1	2594	U	N3-C4-O4	6.13	123.69	119.40
38	A1	2658	G	N1-C2-N3	-6.13	120.22	123.90
38	A1	2950	G	C8-N9-C4	6.13	108.85	106.40
65	AV	52	TRP	CZ3-CH2-CZ2	-6.13	114.25	121.60
10	B1	45	G	N3-C4-N9	6.12	129.68	126.00
38	A1	272	G	C5-C6-O6	-6.12	124.92	128.60
38	A1	634	G	N1-C6-O6	6.12	123.58	119.90
38	A1	1002	A	C4-C5-C6	6.12	120.06	117.00
38	A1	1171	G	N3-C2-N2	-6.12	115.61	119.90
38	A1	2414	G	N9-C4-C5	-6.12	102.95	105.40
38	A1	2551	G	N9-C4-C5	-6.12	102.95	105.40
11	B2	23	G	N1-C6-O6	6.12	123.57	119.90
11	B2	726	A	N3-C4-C5	-6.12	122.51	126.80
11	B2	1294	G	N3-C4-N9	6.12	129.67	126.00
11	B2	1462	A	C5'-C4'-O4'	6.12	116.45	109.10
38	A1	103	A	N7-C8-N9	-6.12	110.74	113.80
38	A1	107	G	C6-N1-C2	6.12	128.77	125.10
38	A1	524	C	C5'-C4'-C3'	6.12	125.80	116.00
38	A1	770	G	C5-N7-C8	6.12	107.36	104.30
38	A1	821	U	C5-C6-N1	6.12	125.76	122.70
38	A1	898	G	N1-C6-O6	6.12	123.57	119.90
38	A1	2594	U	N1-C2-O2	-6.12	118.51	122.80
38	A1	2890	A	N3-C4-N9	6.12	132.30	127.40
39	A3	17	G	P-O3'-C3'	6.12	127.05	119.70
44	Ab	86	ASN	N-CA-CB	6.12	121.62	110.60
11	B2	22	G	N1-C2-N3	-6.12	120.23	123.90
11	B2	120	C	C2-N3-C4	6.12	122.96	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	836	G	C6-C5-N7	-6.12	126.73	130.40
11	B2	1159	U	C2-N3-C4	-6.12	123.33	127.00
38	A1	118	A	N9-C4-C5	6.12	108.25	105.80
38	A1	119	U	N3-C2-O2	6.12	126.48	122.20
38	A1	424	U	N3-C4-O4	6.12	123.68	119.40
38	A1	1026	A	N1-C6-N6	6.12	122.27	118.60
38	A1	1940	U	C5-C6-N1	-6.12	119.64	122.70
38	A1	2464	G	O4'-C1'-N9	6.12	113.10	108.20
38	A1	2479	C	N1-C1'-C2'	-6.12	105.27	112.00
39	A3	100	A	C5-C6-N1	-6.12	114.64	117.70
11	B2	245	U	N3-C4-O4	6.12	123.68	119.40
11	B2	367	G	C5-C6-N1	-6.12	108.44	111.50
11	B2	722	G	N3-C2-N2	6.12	124.18	119.90
38	A1	98	G	C5-N7-C8	6.12	107.36	104.30
38	A1	218	A	O4'-C1'-N9	6.12	113.10	108.20
38	A1	2537	G	C1'-O4'-C4'	-6.12	105.00	109.90
11	B2	391	G	N3-C4-N9	-6.12	122.33	126.00
11	B2	586	C	C5-C4-N4	-6.12	115.92	120.20
11	B2	1040	A	N9-C4-C5	6.12	108.25	105.80
38	A1	480	A	C8-N9-C4	-6.12	103.35	105.80
38	A1	510	A	C5-C6-N6	-6.12	118.81	123.70
38	A1	1085	G	N3-C4-N9	-6.12	122.33	126.00
38	A1	1666	G	N7-C8-N9	6.12	116.16	113.10
11	B2	1234	A	C5-N7-C8	6.12	106.96	103.90
38	A1	30	G	C4-C5-C6	6.12	122.47	118.80
38	A1	518	A	C5-N7-C8	6.12	106.96	103.90
38	A1	1181	C	P-O3'-C3'	6.12	127.04	119.70
38	A1	1993	A	C5-C6-N6	-6.12	118.81	123.70
39	A3	59	C	C5'-C4'-O4'	-6.12	101.76	109.10
11	B2	608	G	C6-C5-N7	6.12	134.07	130.40
11	B2	836	G	C8-N9-C4	-6.12	103.95	106.40
11	B2	1352	G	N9-C4-C5	6.12	107.85	105.40
38	A1	270	C	C5-C6-N1	6.12	124.06	121.00
38	A1	432	C	P-O3'-C3'	6.12	127.04	119.70
38	A1	1392	G	C5-C6-N1	-6.12	108.44	111.50
38	A1	1428	G	C6-C5-N7	-6.12	126.73	130.40
38	A1	1521	G	C3'-C2'-C1'	6.12	106.39	101.50
38	A1	1625	A	C5-N7-C8	6.12	106.96	103.90
38	A1	2346	A	O4'-C1'-N9	6.12	113.09	108.20
40	AK	72	ARG	NE-CZ-NH1	-6.12	117.24	120.30
11	B2	35	G	C8-N9-C4	-6.11	103.95	106.40
11	B2	185	G	C4'-C3'-C2'	-6.11	96.49	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	217	C	C4'-C3'-C2'	-6.11	96.49	102.60
11	B2	275	A	C2-N3-C4	6.11	113.66	110.60
11	B2	502	U	N3-C4-C5	-6.11	110.93	114.60
11	B2	683	A	P-O3'-C3'	-6.11	112.36	119.70
11	B2	858	A	C5-C6-N6	-6.11	118.81	123.70
11	B2	1279	A	N1-C2-N3	6.11	132.36	129.30
38	A1	670	G	C1'-O4'-C4'	6.11	114.79	109.90
38	A1	978	C	O4'-C4'-C3'	-6.11	97.89	104.00
10	B1	10	G	O4'-C1'-N9	6.11	113.09	108.20
11	B2	482	G	N3-C2-N2	6.11	124.18	119.90
11	B2	550	G	C6-C5-N7	-6.11	126.73	130.40
11	B2	994	C	C5-C6-N1	6.11	124.06	121.00
38	A1	822	A	C4-C5-C6	6.11	120.06	117.00
38	A1	2903	U	O4'-C1'-N1	6.11	113.09	108.20
47	Ad	8	ARG	NE-CZ-NH1	-6.11	117.24	120.30
11	B2	33	U	O4'-C1'-C2'	6.11	113.10	107.60
11	B2	207	G	O4'-C4'-C3'	-6.11	97.89	104.00
11	B2	221	A	N1-C2-N3	6.11	132.36	129.30
11	B2	587	G	C6-N1-C2	6.11	128.77	125.10
11	B2	779	G	C5-C6-N1	6.11	114.56	111.50
11	B2	846	G	P-O3'-C3'	6.11	127.03	119.70
11	B2	956	C	O4'-C1'-N1	6.11	113.09	108.20
11	B2	1291	G	N3-C2-N2	6.11	124.18	119.90
11	B2	1397	C	N3-C4-N4	6.11	122.28	118.00
38	A1	318	G	N1-C6-O6	6.11	123.57	119.90
38	A1	2015	G	O4'-C1'-N9	6.11	113.09	108.20
38	A1	2113	G	C4-C5-N7	-6.11	108.36	110.80
38	A1	2127	G	C5-C6-N1	-6.11	108.44	111.50
38	A1	2221	A	C4-C5-C6	6.11	120.06	117.00
38	A1	2538	G	N3-C2-N2	6.11	124.18	119.90
38	A1	2889	A	C4-C5-N7	-6.11	107.64	110.70
11	B2	242	A	P-O3'-C3'	6.11	127.03	119.70
38	A1	546	C	N3-C4-C5	-6.11	119.46	121.90
66	AY	25	MET	CG-SD-CE	-6.11	90.42	100.20
11	B2	281	G	P-O3'-C3'	-6.11	112.37	119.70
11	B2	598	U	N3-C4-C5	-6.11	110.94	114.60
11	B2	977	G	C4-C5-N7	6.11	113.24	110.80
11	B2	1463	A	C4-C5-N7	-6.11	107.65	110.70
13	BA	52	LEU	N-CA-CB	6.11	122.61	110.40
38	A1	1223	A	C5-N7-C8	-6.11	100.85	103.90
38	A1	1535	U	C4'-C3'-C2'	-6.11	96.49	102.60
38	A1	1822	G	N3-C2-N2	6.11	124.17	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1829	C	O4'-C1'-N1	6.11	113.09	108.20
38	A1	2158	G	N1-C2-N3	-6.11	120.24	123.90
55	Ai	61	ALA	CB-CA-C	-6.11	100.94	110.10
11	B2	82	G	N7-C8-N9	-6.11	110.05	113.10
11	B2	626	G	C4-C5-N7	-6.11	108.36	110.80
11	B2	910	G	O4'-C1'-N9	6.11	113.08	108.20
11	B2	1066	C	N1-C2-N3	6.11	123.47	119.20
11	B2	1330	G	N1-C6-O6	6.11	123.56	119.90
11	B2	1423	A	C5'-C4'-O4'	-6.11	101.77	109.10
38	A1	36	G	N9-C4-C5	6.11	107.84	105.40
38	A1	448	A	N1-C2-N3	6.11	132.35	129.30
38	A1	1076	G	P-O3'-C3'	-6.11	112.37	119.70
38	A1	1925	A	N1-C6-N6	6.11	122.26	118.60
38	A1	2261	C	C1'-O4'-C4'	6.11	114.78	109.90
38	A1	2279	G	P-O3'-C3'	6.11	127.03	119.70
38	A1	2570	A	C6-C5-N7	-6.11	128.03	132.30
38	A1	2890	A	N3-C4-C5	-6.11	122.53	126.80
10	B1	66	C	C4-C5-C6	6.10	120.45	117.40
38	A1	2075	U	C4-C5-C6	6.10	123.36	119.70
38	A1	2092	G	N3-C4-C5	-6.10	125.55	128.60
38	A1	2551	G	C5-N7-C8	6.10	107.35	104.30
60	AM	157	ARG	NE-CZ-NH2	6.10	123.35	120.30
11	B2	166	A	P-O5'-C5'	6.10	130.66	120.90
11	B2	281	G	N3-C4-N9	-6.10	122.34	126.00
11	B2	874	G	C6-C5-N7	-6.10	126.74	130.40
11	B2	889	G	C2-N3-C4	6.10	114.95	111.90
11	B2	1323	A	C5-C6-N6	-6.10	118.82	123.70
11	B2	1330	G	C5-C6-N1	-6.10	108.45	111.50
38	A1	100	C	C2-N3-C4	6.10	122.95	119.90
38	A1	535	G	N9-C4-C5	6.10	107.84	105.40
38	A1	622	A	C5-N7-C8	-6.10	100.85	103.90
38	A1	630	G	N1-C2-N3	-6.10	120.24	123.90
38	A1	782	G	N3-C2-N2	6.10	124.17	119.90
38	A1	785	C	C1'-O4'-C4'	-6.10	105.02	109.90
38	A1	897	U	C5'-C4'-C3'	-6.10	106.24	116.00
38	A1	1413	A	O4'-C1'-N9	6.10	113.08	108.20
38	A1	1710	C	C5-C6-N1	6.10	124.05	121.00
38	A1	1799	G	O4'-C1'-N9	6.10	113.08	108.20
38	A1	1841	G	C2-N3-C4	6.10	114.95	111.90
38	A1	2698	G	C5-C6-N1	-6.10	108.45	111.50
11	B2	152	G	C6-N1-C2	-6.10	121.44	125.10
11	B2	614	G	C6-C5-N7	-6.10	126.74	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	851	C	N3-C4-N4	6.10	122.27	118.00
11	B2	1225	C	N1-C1'-C2'	-6.10	105.29	112.00
38	A1	8	G	N1-C2-N3	-6.10	120.24	123.90
38	A1	1979	G	N7-C8-N9	6.10	116.15	113.10
38	A1	2266	C	P-O3'-C3'	6.10	127.02	119.70
38	A1	2360	G	P-O3'-C3'	6.10	127.02	119.70
11	B2	16	G	C6-C5-N7	-6.10	126.74	130.40
11	B2	207	G	C3'-C2'-C1'	-6.10	96.62	101.50
11	B2	252	U	P-O3'-C3'	-6.10	112.38	119.70
11	B2	256	G	O4'-C4'-C3'	-6.10	97.90	104.00
11	B2	372	G	C4-C5-C6	6.10	122.46	118.80
11	B2	816	G	C5'-C4'-O4'	6.10	116.42	109.10
38	A1	1595	G	O4'-C1'-N9	6.10	113.08	108.20
38	A1	1694	G	C4-C5-N7	-6.10	108.36	110.80
38	A1	1837	A	C5-N7-C8	6.10	106.95	103.90
38	A1	1839	U	N1-C2-O2	-6.10	118.53	122.80
38	A1	2393	G	N1-C2-N2	6.10	121.69	116.20
38	A1	2622	C	O4'-C1'-N1	6.10	113.08	108.20
38	A1	2638	G	N3-C2-N2	6.10	124.17	119.90
38	A1	2707	G	P-O3'-C3'	6.10	127.02	119.70
52	AH	76	LEU	CB-CG-CD1	-6.10	100.63	111.00
60	AM	92	PRO	N-CA-CB	6.10	110.62	103.30
11	B2	203	A	C1'-O4'-C4'	-6.10	105.02	109.90
11	B2	512	U	C5-C6-N1	6.10	125.75	122.70
11	B2	706	G	P-O3'-C3'	6.10	127.02	119.70
11	B2	1009	G	C5-C6-O6	-6.10	124.94	128.60
11	B2	1033	G	C1'-O4'-C4'	-6.10	105.02	109.90
11	B2	1235	A	C2-N3-C4	6.10	113.65	110.60
11	B2	1374	C	N3-C2-O2	-6.10	117.63	121.90
38	A1	14	A	N9-C4-C5	6.10	108.24	105.80
38	A1	652	G	C5-N7-C8	-6.10	101.25	104.30
38	A1	730	C	N3-C2-O2	-6.10	117.63	121.90
38	A1	1764	G	C4-C5-C6	6.10	122.46	118.80
38	A1	1777	U	N3-C4-C5	-6.10	110.94	114.60
38	A1	1894	A	C6-N1-C2	-6.10	114.94	118.60
38	A1	1978	A	O4'-C1'-N9	6.10	113.08	108.20
38	A1	1998	G	O4'-C1'-N9	6.10	113.08	108.20
38	A1	2780	G	N3-C2-N2	6.10	124.17	119.90
57	Aj	69	PHE	CB-CG-CD2	6.10	125.07	120.80
11	B2	6	G	C5-C6-N1	6.10	114.55	111.50
11	B2	66	G	N3-C2-N2	6.10	124.17	119.90
11	B2	451	A	O4'-C1'-N9	6.10	113.08	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1270	C	N3-C4-N4	6.10	122.27	118.00
38	A1	197	C	C2-N3-C4	6.10	122.95	119.90
38	A1	881	G	C6-C5-N7	-6.10	126.74	130.40
38	A1	892	U	N3-C4-C5	-6.10	110.94	114.60
38	A1	2131	C	P-O3'-C3'	-6.10	112.39	119.70
11	B2	13	C	C5'-C4'-C3'	6.09	125.75	116.00
11	B2	61	A	O4'-C1'-N9	6.09	113.08	108.20
11	B2	398	C	C5-C4-N4	-6.09	115.93	120.20
11	B2	696	G	N1-C2-N2	-6.09	110.72	116.20
11	B2	1494	C	C6-N1-C2	-6.09	117.86	120.30
16	BD	54	ARG	NE-CZ-NH1	-6.09	117.25	120.30
38	A1	383	C	C5-C4-N4	-6.09	115.93	120.20
38	A1	647	G	N9-C4-C5	6.09	107.84	105.40
38	A1	883	G	C4-C5-N7	-6.09	108.36	110.80
38	A1	1354	G	N1-C2-N2	-6.09	110.71	116.20
38	A1	1822	G	N1-C6-O6	-6.09	116.24	119.90
1	A7	60	TYR	CB-CG-CD1	6.09	124.66	121.00
10	B1	6	G	C6-C5-N7	-6.09	126.74	130.40
11	B2	66	G	N9-C4-C5	-6.09	102.96	105.40
11	B2	274	G	C5-C6-N1	-6.09	108.45	111.50
11	B2	340	A	C6-C5-N7	-6.09	128.03	132.30
38	A1	402	G	N1-C2-N2	6.09	121.68	116.20
38	A1	2720	U	O4'-C4'-C3'	-6.09	97.91	104.00
38	A1	2995	A	C5-C6-N1	-6.09	114.65	117.70
52	AH	58	ASP	CB-CG-OD1	6.09	123.78	118.30
10	B1	65	C	O5'-P-OP2	-6.09	100.22	105.70
11	B2	86	C	C5-C4-N4	-6.09	115.94	120.20
11	B2	112	G	N1-C2-N3	-6.09	120.25	123.90
11	B2	242	A	N9-C4-C5	6.09	108.24	105.80
11	B2	251	G	P-O3'-C3'	-6.09	112.39	119.70
11	B2	253	G	C4'-C3'-C2'	-6.09	96.51	102.60
11	B2	385	A	N1-C6-N6	6.09	122.25	118.60
11	B2	418	G	C4-C5-C6	6.09	122.45	118.80
11	B2	674	C	O4'-C1'-N1	6.09	113.07	108.20
11	B2	689	C	N1-C2-O2	6.09	122.56	118.90
11	B2	716	G	P-O3'-C3'	-6.09	112.39	119.70
11	B2	841	C	P-O5'-C5'	-6.09	111.15	120.90
11	B2	1227	A	O4'-C1'-N9	6.09	113.07	108.20
11	B2	1413	G	C4-C5-C6	6.09	122.45	118.80
38	A1	372	A	N1-C2-N3	6.09	132.35	129.30
38	A1	1323	U	C5-C4-O4	-6.09	122.25	125.90
38	A1	2347	G	C8-N9-C4	-6.09	103.96	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2466	C	C2-N3-C4	6.09	122.94	119.90
38	A1	2802	G	N1-C2-N3	-6.09	120.25	123.90
11	B2	72	C	O4'-C1'-N1	6.09	113.07	108.20
11	B2	307	G	C6-N1-C2	-6.09	121.45	125.10
11	B2	1084	U	N1-C2-N3	-6.09	111.25	114.90
11	B2	1232	G	N3-C2-N2	6.09	124.16	119.90
11	B2	1350	U	N3-C4-C5	-6.09	110.95	114.60
11	B2	1484	C	N1-C2-O2	6.09	122.55	118.90
38	A1	20	C	C5-C6-N1	6.09	124.05	121.00
38	A1	24	G	N3-C4-C5	-6.09	125.56	128.60
38	A1	123	A	P-O5'-C5'	6.09	130.64	120.90
38	A1	334	G	O5'-P-OP1	6.09	118.01	110.70
38	A1	983	G	N9-C4-C5	6.09	107.84	105.40
38	A1	1295	G	C4-C5-C6	6.09	122.45	118.80
38	A1	2652	G	O4'-C1'-N9	6.09	113.07	108.20
38	A1	2900	C	O4'-C4'-C3'	-6.09	97.91	104.00
11	B2	1016	G	O4'-C1'-N9	6.09	113.07	108.20
38	A1	329	G	C2-N3-C4	-6.09	108.86	111.90
38	A1	1571	G	C8-N9-C4	-6.09	103.97	106.40
38	A1	2449	A	C4-C5-N7	-6.09	107.66	110.70
11	B2	194	C	C2-N1-C1'	6.09	125.50	118.80
11	B2	297	G	O4'-C1'-N9	6.09	113.07	108.20
11	B2	490	C	N3-C4-N4	6.09	122.26	118.00
11	B2	851	C	C4-C5-C6	6.09	120.44	117.40
38	A1	165	G	C4-C5-C6	6.09	122.45	118.80
38	A1	545	G	N3-C4-C5	6.09	131.64	128.60
38	A1	1827	A	P-O3'-C3'	-6.09	112.40	119.70
38	A1	2028	G	C4'-C3'-C2'	-6.09	96.51	102.60
38	A1	2185	A	C5-C6-N1	-6.09	114.66	117.70
38	A1	2259	G	C6-C5-N7	-6.09	126.75	130.40
38	A1	2691	G	C4-C5-C6	6.09	122.45	118.80
11	B2	112	G	N1-C6-O6	6.08	123.55	119.90
11	B2	155	U	N3-C2-O2	-6.08	117.94	122.20
11	B2	740	G	C4-C5-C6	6.08	122.45	118.80
11	B2	988	A	C6-N1-C2	-6.08	114.95	118.60
11	B2	1066	C	P-O3'-C3'	-6.08	112.40	119.70
17	BE	172	GLU	OE1-CD-OE2	6.08	130.60	123.30
38	A1	2206	G	N1-C2-N2	-6.08	110.72	116.20
38	A1	3011	G	O4'-C1'-N9	6.08	113.07	108.20
39	A3	89	G	O4'-C1'-N9	6.08	113.07	108.20
11	B2	344	G	N3-C2-N2	6.08	124.16	119.90
11	B2	723	G	N3-C4-N9	-6.08	122.35	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	735	A	N9-C4-C5	6.08	108.23	105.80
11	B2	780	C	N1-C2-N3	-6.08	114.94	119.20
11	B2	1158	G	N1-C2-N3	-6.08	120.25	123.90
11	B2	1247	A	C6-N1-C2	-6.08	114.95	118.60
38	A1	104	C	N1-C2-N3	-6.08	114.94	119.20
38	A1	783	C	C6-N1-C2	6.08	122.73	120.30
38	A1	1444	A	C5-C6-N6	-6.08	118.83	123.70
38	A1	1905	G	C5-N7-C8	-6.08	101.26	104.30
38	A1	1923	A	C6-C5-N7	-6.08	128.04	132.30
38	A1	2186	C	N3-C4-N4	6.08	122.26	118.00
38	A1	2762	G	O4'-C1'-N9	6.08	113.07	108.20
38	A1	2825	A	C5-N7-C8	6.08	106.94	103.90
11	B2	379	A	C6-C5-N7	-6.08	128.04	132.30
11	B2	836	G	O4'-C4'-C3'	-6.08	97.92	104.00
20	BH	194	LYS	N-CA-CB	6.08	121.55	110.60
38	A1	1061	G	C6-C5-N7	-6.08	126.75	130.40
38	A1	1201	G	O4'-C1'-N9	6.08	113.06	108.20
38	A1	1540	A	O4'-C1'-N9	6.08	113.06	108.20
38	A1	2030	G	O4'-C1'-N9	6.08	113.07	108.20
38	A1	2298	C	C4'-C3'-C2'	-6.08	96.52	102.60
38	A1	2831	G	C4-C5-C6	6.08	122.45	118.80
38	A1	2879	G	C4-C5-C6	6.08	122.45	118.80
39	A3	55	G	O4'-C1'-N9	6.08	113.06	108.20
66	AY	155	LEU	N-CA-CB	6.08	122.56	110.40
11	B2	1063	A	C6-N1-C2	-6.08	114.95	118.60
11	B2	1226	G	N9-C4-C5	-6.08	102.97	105.40
11	B2	1253	G	O4'-C1'-N9	6.08	113.06	108.20
11	B2	1267	U	C5-C6-N1	-6.08	119.66	122.70
38	A1	326	C	N3-C4-C5	-6.08	119.47	121.90
38	A1	1129	G	O4'-C1'-N9	6.08	113.06	108.20
38	A1	1981	G	N3-C2-N2	6.08	124.16	119.90
38	A1	2091	U	N1-C2-O2	-6.08	118.54	122.80
10	B1	56	U	O4'-C1'-N1	6.08	113.06	108.20
11	B2	81	C	C5'-C4'-O4'	-6.08	101.81	109.10
11	B2	571	C	P-O5'-C5'	-6.08	111.17	120.90
11	B2	691	G	N9-C4-C5	-6.08	102.97	105.40
11	B2	706	G	C6-C5-N7	-6.08	126.75	130.40
11	B2	716	G	N3-C4-C5	-6.08	125.56	128.60
38	A1	2023	A	C4-C5-C6	6.08	120.04	117.00
38	A1	2691	G	C1'-O4'-C4'	-6.08	105.04	109.90
42	Aa	24	ARG	NE-CZ-NH1	6.08	123.34	120.30
10	B1	7	G	C8-N9-C1'	-6.08	119.10	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	75	C	N3-C2-O2	6.08	126.15	121.90
11	B2	188	C	P-O5'-C5'	6.08	130.62	120.90
11	B2	477	G	C4-C5-N7	6.08	113.23	110.80
11	B2	565	C	O4'-C1'-N1	6.08	113.06	108.20
11	B2	1143	G	C8-N9-C4	-6.08	103.97	106.40
38	A1	270	C	C6-N1-C2	-6.08	117.87	120.30
59	AL	56	ASP	CB-CG-OD2	-6.08	112.83	118.30
11	B2	387	G	O5'-P-OP2	-6.08	100.23	105.70
11	B2	449	U	C2-N1-C1'	6.08	124.99	117.70
11	B2	463	G	C5-C6-O6	-6.08	124.95	128.60
11	B2	736	A	C4-C5-N7	-6.08	107.66	110.70
11	B2	801	A	O3'-P-O5'	-6.08	92.46	104.00
11	B2	1260	G	C6-C5-N7	-6.08	126.75	130.40
11	B2	1409	G	C5-C6-O6	-6.08	124.95	128.60
38	A1	963	G	N9-C4-C5	6.08	107.83	105.40
38	A1	1099	C	N3-C4-N4	6.08	122.25	118.00
38	A1	1151	G	C5-C6-O6	-6.08	124.95	128.60
38	A1	1228	G	C4-C5-C6	6.08	122.44	118.80
38	A1	1259	G	N3-C2-N2	6.08	124.15	119.90
39	A3	47	G	C5'-C4'-C3'	-6.08	106.28	116.00
44	Ab	15	ARG	NE-CZ-NH2	-6.08	117.26	120.30
11	B2	430	G	N1-C2-N3	-6.07	120.26	123.90
11	B2	1105	C	C5'-C4'-C3'	-6.07	106.28	116.00
11	B2	1189	G	C8-N9-C4	6.07	108.83	106.40
11	B2	1247	A	C1'-O4'-C4'	6.07	114.76	109.90
11	B2	1430	G	C1'-O4'-C4'	-6.07	105.04	109.90
16	BD	18	TRP	CZ3-CH2-CZ2	-6.07	114.31	121.60
20	BH	42	ARG	N-CA-CB	6.07	121.53	110.60
38	A1	9	A	C5-C6-N1	-6.07	114.66	117.70
38	A1	981	A	C4'-C3'-C2'	6.07	108.67	102.60
38	A1	1134	A	O4'-C1'-N9	6.07	113.06	108.20
38	A1	1465	A	C2-N3-C4	-6.07	107.56	110.60
38	A1	1596	G	N1-C2-N3	-6.07	120.26	123.90
38	A1	2287	C	C2-N1-C1'	6.07	125.48	118.80
38	A1	2306	C	N3-C4-C5	-6.07	119.47	121.90
38	A1	2988	A	C4-C5-C6	6.07	120.04	117.00
43	AB	167	ARG	NE-CZ-NH2	6.07	123.34	120.30
11	B2	137	A	C4-C5-N7	-6.07	107.66	110.70
11	B2	675	A	N3-C4-C5	-6.07	122.55	126.80
11	B2	759	C	N3-C4-N4	6.07	122.25	118.00
38	A1	64	A	N1-C6-N6	6.07	122.24	118.60
38	A1	1295	G	C4-C5-N7	-6.07	108.37	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1404	G	P-O5'-C5'	-6.07	111.19	120.90
11	B2	101	G	C5-C6-N1	-6.07	108.47	111.50
11	B2	872	A	N1-C2-N3	6.07	132.34	129.30
11	B2	1339	G	N1-C2-N3	-6.07	120.26	123.90
11	B2	1373	A	N9-C4-C5	6.07	108.23	105.80
11	B2	1430	G	N9-C4-C5	6.07	107.83	105.40
16	BD	110	TYR	CB-CG-CD1	6.07	124.64	121.00
38	A1	49	A	N9-C4-C5	-6.07	103.37	105.80
38	A1	517	A	O4'-C1'-N9	6.07	113.06	108.20
38	A1	771	G	C4-C5-C6	6.07	122.44	118.80
38	A1	848	A	C5-C6-N6	-6.07	118.84	123.70
38	A1	1168	A	O4'-C4'-C3'	-6.07	97.93	104.00
38	A1	2093	A	N7-C8-N9	-6.07	110.77	113.80
38	A1	2336	G	C6-C5-N7	6.07	134.04	130.40
38	A1	2483	U	N1-C2-O2	6.07	127.05	122.80
38	A1	2729	A	N7-C8-N9	-6.07	110.77	113.80
38	A1	2747	C	C2-N3-C4	6.07	122.94	119.90
38	A1	2872	G	N9-C4-C5	-6.07	102.97	105.40
11	B2	880	G	N3-C4-N9	-6.07	122.36	126.00
38	A1	248	C	O4'-C1'-N1	6.07	113.06	108.20
38	A1	301	G	N1-C2-N3	-6.07	120.26	123.90
38	A1	2175	G	C5-C6-N1	6.07	114.53	111.50
38	A1	2716	C	C5-C4-N4	-6.07	115.95	120.20
10	B1	49	C	C1'-O4'-C4'	-6.07	105.05	109.90
11	B2	161	C	C6-N1-C2	6.07	122.73	120.30
11	B2	658	A	C6-N1-C2	-6.07	114.96	118.60
20	BH	157	ARG	NE-CZ-NH1	-6.07	117.27	120.30
38	A1	218	A	C5-C6-N6	-6.07	118.84	123.70
38	A1	406	G	OP1-P-OP2	-6.07	110.50	119.60
38	A1	470	A	C4-C5-N7	-6.07	107.67	110.70
38	A1	741	G	N3-C4-C5	-6.07	125.57	128.60
38	A1	1742	C	N3-C4-C5	-6.07	119.47	121.90
38	A1	1784	G	C4-C5-N7	6.07	113.23	110.80
38	A1	2037	A	N1-C2-N3	6.07	132.33	129.30
11	B2	30	C	C2-N1-C1'	6.07	125.47	118.80
11	B2	393	A	N3-C4-C5	-6.07	122.55	126.80
11	B2	401	U	P-O3'-C3'	6.07	126.98	119.70
11	B2	476	C	C6-N1-C2	-6.07	117.87	120.30
11	B2	679	G	O4'-C1'-N9	6.07	113.05	108.20
11	B2	1265	G	O4'-C1'-N9	6.07	113.05	108.20
38	A1	339	A	C5-C6-N6	-6.07	118.85	123.70
38	A1	759	G	C5-C6-O6	-6.07	124.96	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	A1	890	G	N9-C1'-C2'	-6.07	105.33	112.00
38	A1	1103	C	N1-C2-O2	6.07	122.54	118.90
38	A1	1638	C	C5-C4-N4	-6.07	115.95	120.20
38	A1	1987	A	C5-C6-N6	-6.07	118.85	123.70
38	A1	2147	C	P-O3'-C3'	6.07	126.98	119.70
38	A1	2384	G	N9-C4-C5	-6.07	102.97	105.40
11	B2	1	A	N1-C2-N3	-6.06	126.27	129.30
11	B2	1364	C	O4'-C1'-N1	6.06	113.05	108.20
34	BV	68	TYR	CG-CD2-CE2	-6.06	116.45	121.30
38	A1	2318	G	N1-C6-O6	6.06	123.54	119.90
38	A1	2860	G	C6-N1-C2	6.06	128.74	125.10
38	A1	3033	G	N3-C4-C5	-6.06	125.57	128.60
11	B2	52	U	C5-C4-O4	6.06	129.54	125.90
11	B2	369	A	OP1-P-OP2	-6.06	110.51	119.60
11	B2	750	C	N3-C4-C5	-6.06	119.47	121.90
11	B2	768	A	C5-C6-N6	-6.06	118.85	123.70
11	B2	974	G	N1-C2-N2	-6.06	110.74	116.20
11	B2	1169	C	C2-N3-C4	6.06	122.93	119.90
38	A1	509	A	N1-C6-N6	6.06	122.24	118.60
38	A1	842	C	C5-C4-N4	-6.06	115.96	120.20
38	A1	868	U	N3-C4-C5	-6.06	110.96	114.60
38	A1	1405	G	C5-C6-O6	-6.06	124.96	128.60
38	A1	2104	G	N7-C8-N9	6.06	116.13	113.10
38	A1	2764	G	N7-C8-N9	-6.06	110.07	113.10
39	A3	58	C	O4'-C1'-N1	6.06	113.05	108.20
11	B2	83	C	C2-N3-C4	6.06	122.93	119.90
11	B2	1121	C	C1'-O4'-C4'	6.06	114.75	109.90
11	B2	1339	G	C8-N9-C4	-6.06	103.98	106.40
38	A1	822	A	C5-C6-N6	-6.06	118.85	123.70
38	A1	1000	G	O4'-C1'-N9	6.06	113.05	108.20
39	A3	111	G	N1-C2-N2	6.06	121.66	116.20
11	B2	288	G	N1-C6-O6	6.06	123.53	119.90
11	B2	663	G	P-O3'-C3'	-6.06	112.43	119.70
11	B2	1142	G	N3-C4-C5	-6.06	125.57	128.60
11	B2	1255	C	N3-C4-N4	6.06	122.24	118.00
38	A1	223	U	C4-C5-C6	6.06	123.33	119.70
38	A1	378	G	C4'-C3'-C2'	-6.06	96.54	102.60
38	A1	708	A	C6-C5-N7	-6.06	128.06	132.30
38	A1	747	G	N7-C8-N9	-6.06	110.07	113.10
38	A1	2529	G	C1'-O4'-C4'	-6.06	105.05	109.90
38	A1	2987	U	C5-C4-O4	6.06	129.53	125.90
11	B2	669	A	C8-N9-C4	-6.06	103.38	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1161	A	N7-C8-N9	6.06	116.83	113.80
11	B2	1226	G	C5-N7-C8	-6.06	101.27	104.30
11	B2	1412	A	C6-N1-C2	6.06	122.23	118.60
38	A1	49	A	C5-C6-N1	-6.06	114.67	117.70
38	A1	273	G	C5-C6-O6	-6.06	124.97	128.60
38	A1	1596	G	N7-C8-N9	6.06	116.13	113.10
38	A1	2509	A	P-O5'-C5'	-6.06	111.21	120.90
41	AA	45	ARG	NE-CZ-NH1	6.06	123.33	120.30
49	Ae	55	TRP	CB-CG-CD1	6.06	134.88	127.00
11	B2	1399	G	N9-C4-C5	6.06	107.82	105.40
38	A1	178	G	N7-C8-N9	6.06	116.13	113.10
38	A1	770	G	C4'-C3'-C2'	-6.06	96.54	102.60
38	A1	1467	G	N1-C2-N3	-6.06	120.27	123.90
38	A1	2233	G	C5-C6-O6	6.06	132.23	128.60
11	B2	349	A	C3'-C2'-C1'	-6.05	96.66	101.50
11	B2	486	A	C6-N1-C2	-6.05	114.97	118.60
11	B2	1242	C	C2-N3-C4	6.05	122.93	119.90
11	B2	1296	U	O4'-C1'-N1	6.05	113.04	108.20
29	BQ	120	ARG	NE-CZ-NH1	6.05	123.33	120.30
38	A1	199	C	OP1-P-OP2	-6.05	110.52	119.60
38	A1	1380	G	O4'-C1'-N9	6.05	113.04	108.20
38	A1	2641	C	C2-N1-C1'	6.05	125.46	118.80
39	A3	103	C	N1-C2-O2	-6.05	115.27	118.90
45	AC	317	VAL	CA-CB-CG2	-6.05	101.82	110.90
11	B2	707	A	C4-C5-C6	6.05	120.03	117.00
11	B2	934	G	N9-C4-C5	-6.05	102.98	105.40
38	A1	623	G	N1-C6-O6	6.05	123.53	119.90
38	A1	2120	C	C2-N3-C4	6.05	122.93	119.90
38	A1	2408	G	C4-C5-C6	6.05	122.43	118.80
38	A1	2744	U	C6-N1-C2	-6.05	117.37	121.00
11	B2	43	A	C5-N7-C8	6.05	106.93	103.90
11	B2	137	A	N1-C6-N6	6.05	122.23	118.60
11	B2	941	C	C6-N1-C2	-6.05	117.88	120.30
11	B2	1338	C	C3'-C2'-C1'	6.05	106.34	101.50
11	B2	1372	C	C1'-O4'-C4'	6.05	114.74	109.90
38	A1	655	C	C2-N3-C4	6.05	122.93	119.90
38	A1	895	C	N3-C2-O2	6.05	126.14	121.90
38	A1	962	C	P-O3'-C3'	6.05	126.96	119.70
38	A1	1361	G	N1-C6-O6	6.05	123.53	119.90
38	A1	2017	A	C2-N3-C4	-6.05	107.57	110.60
38	A1	2428	C	N3-C2-O2	-6.05	117.66	121.90
38	A1	2454	G	N3-C2-N2	6.05	124.14	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2952	C	C5-C6-N1	-6.05	117.97	121.00
46	AD	158	ARG	NE-CZ-NH1	6.05	123.33	120.30
11	B2	240	U	C5'-C4'-C3'	-6.05	106.32	116.00
11	B2	529	C	O4'-C1'-N1	6.05	113.04	108.20
38	A1	219	G	C5'-C4'-O4'	-6.05	101.84	109.10
38	A1	556	G	P-O3'-C3'	6.05	126.96	119.70
38	A1	1370	G	P-O3'-C3'	-6.05	112.44	119.70
38	A1	2167	C	N3-C4-C5	-6.05	119.48	121.90
38	A1	2602	G	C5-C6-O6	-6.05	124.97	128.60
39	A3	62	A	C5-C6-N1	-6.05	114.67	117.70
11	B2	283	U	C4-C5-C6	6.05	123.33	119.70
11	B2	711	U	C5-C6-N1	-6.05	119.68	122.70
11	B2	1140	A	N7-C8-N9	6.05	116.82	113.80
11	B2	1317	G	C6-C5-N7	-6.05	126.77	130.40
11	B2	1478	A	O4'-C1'-N9	6.05	113.04	108.20
38	A1	776	G	N1-C2-N3	-6.05	120.27	123.90
38	A1	1868	C	C2-N3-C4	6.05	122.92	119.90
38	A1	2530	G	N3-C2-N2	-6.05	115.67	119.90
9	AX	359	PHE	CB-CG-CD2	6.05	125.03	120.80
11	B2	52	U	N3-C4-C5	-6.05	110.97	114.60
11	B2	289	C	O4'-C1'-N1	6.05	113.04	108.20
11	B2	1040	A	C5-N7-C8	-6.05	100.88	103.90
11	B2	1382	G	N1-C2-N3	-6.05	120.27	123.90
38	A1	167	G	N9-C4-C5	-6.05	102.98	105.40
38	A1	288	G	N3-C4-C5	-6.05	125.58	128.60
38	A1	871	G	N3-C4-C5	6.05	131.62	128.60
38	A1	1164	C	C1'-O4'-C4'	-6.05	105.06	109.90
38	A1	1878	G	C2-N3-C4	6.05	114.92	111.90
38	A1	1993	A	O4'-C1'-N9	6.05	113.04	108.20
38	A1	2505	A	N1-C2-N3	-6.05	126.28	129.30
38	A1	2852	U	C4-C5-C6	6.05	123.33	119.70
38	A1	2966	C	P-O3'-C3'	6.05	126.95	119.70
39	A3	16	G	C6-C5-N7	-6.05	126.77	130.40
11	B2	23	G	N9-C4-C5	-6.04	102.98	105.40
11	B2	171	U	C5'-C4'-O4'	-6.04	101.85	109.10
11	B2	526	A	C2-N3-C4	-6.04	107.58	110.60
11	B2	656	U	N1-C2-O2	6.04	127.03	122.80
11	B2	662	C	C4-C5-C6	6.04	120.42	117.40
11	B2	886	G	P-O3'-C3'	-6.04	112.45	119.70
11	B2	1248	A	C5-N7-C8	6.04	106.92	103.90
38	A1	656	G	C5-C6-O6	-6.04	124.97	128.60
38	A1	769	G	C6-N1-C2	6.04	128.73	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2336	G	C4-C5-N7	-6.04	108.38	110.80
11	B2	75	C	C6-N1-C2	6.04	122.72	120.30
11	B2	156	A	N1-C6-N6	6.04	122.23	118.60
11	B2	268	C	P-O3'-C3'	-6.04	112.45	119.70
11	B2	465	C	C2-N3-C4	6.04	122.92	119.90
11	B2	655	A	N9-C4-C5	6.04	108.22	105.80
11	B2	854	C	O4'-C1'-N1	6.04	113.04	108.20
11	B2	1250	C	C5-C4-N4	-6.04	115.97	120.20
18	BF	192	ARG	NE-CZ-NH2	6.04	123.32	120.30
38	A1	77	C	C5-C4-N4	-6.04	115.97	120.20
38	A1	424	U	N3-C4-C5	-6.04	110.97	114.60
38	A1	971	G	N1-C6-O6	6.04	123.53	119.90
38	A1	1182	C	C5-C6-N1	-6.04	117.98	121.00
38	A1	1871	C	N3-C2-O2	-6.04	117.67	121.90
38	A1	2046	C	C4'-C3'-C2'	-6.04	96.56	102.60
38	A1	2368	G	N1-C6-O6	6.04	123.53	119.90
38	A1	2944	G	O4'-C1'-N9	6.04	113.03	108.20
39	A3	39	C	N3-C2-O2	6.04	126.13	121.90
11	B2	650	A	C6-N1-C2	-6.04	114.97	118.60
11	B2	924	U	O4'-C1'-N1	6.04	113.03	108.20
11	B2	1268	C	P-O3'-C3'	-6.04	112.45	119.70
11	B2	1323	A	N1-C6-N6	6.04	122.22	118.60
11	B2	1418	G	N3-C4-C5	6.04	131.62	128.60
38	A1	766	G	C2-N3-C4	6.04	114.92	111.90
38	A1	1616	A	O4'-C1'-N9	6.04	113.03	108.20
38	A1	2134	G	C4-C5-C6	6.04	122.42	118.80
38	A1	2781	A	N3-C4-C5	-6.04	122.57	126.80
38	A1	2888	G	C5'-C4'-C3'	6.04	125.67	116.00
11	B2	28	U	O5'-P-OP2	-6.04	100.26	105.70
38	A1	506	G	C2-N3-C4	6.04	114.92	111.90
38	A1	1377	G	C6-C5-N7	-6.04	126.78	130.40
39	A3	30	G	P-O3'-C3'	6.04	126.95	119.70
11	B2	29	G	C4-C5-N7	6.04	113.22	110.80
11	B2	1170	C	O4'-C1'-N1	6.04	113.03	108.20
29	BQ	142	LEU	N-CA-C	-6.04	94.69	111.00
38	A1	233	A	P-O5'-C5'	-6.04	111.24	120.90
38	A1	1291	C	N1-C2-N3	-6.04	114.97	119.20
38	A1	1336	G	N1-C2-N3	-6.04	120.28	123.90
38	A1	1408	G	C5-C6-N1	-6.04	108.48	111.50
38	A1	1861	G	N1-C2-N3	-6.04	120.28	123.90
43	AB	134	ARG	CG-CD-NE	-6.04	99.12	111.80
49	Ae	1	MET	CG-SD-CE	-6.04	90.54	100.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	849	U	O4'-C1'-N1	6.04	113.03	108.20
11	B2	1292	A	C5-C6-N6	-6.04	118.87	123.70
28	BP	6	TYR	CG-CD2-CE2	-6.04	116.47	121.30
38	A1	1066	C	C6-N1-C1'	-6.04	113.56	120.80
38	A1	1508	A	N1-C2-N3	6.04	132.32	129.30
38	A1	2515	U	N3-C4-O4	6.04	123.63	119.40
11	B2	1062	G	C5-C6-O6	-6.04	124.98	128.60
11	B2	1147	G	C5-C6-O6	-6.04	124.98	128.60
11	B2	1149	C	O4'-C1'-N1	6.04	113.03	108.20
11	B2	1173	A	O4'-C1'-N9	6.04	113.03	108.20
11	B2	1390	G	O4'-C1'-N9	6.04	113.03	108.20
38	A1	346	U	C3'-C2'-C1'	6.04	106.33	101.50
38	A1	937	A	C4-C5-C6	6.04	120.02	117.00
38	A1	1770	A	C5-N7-C8	6.04	106.92	103.90
38	A1	2281	A	O4'-C1'-N9	6.04	113.03	108.20
38	A1	2780	G	N1-C2-N3	-6.04	120.28	123.90
39	A3	89	G	C5-C6-N1	-6.04	108.48	111.50
11	B2	672	G	C1'-O4'-C4'	-6.03	105.07	109.90
11	B2	1014	C	O4'-C1'-N1	6.03	113.03	108.20
38	A1	81	G	C4-C5-N7	-6.03	108.39	110.80
38	A1	312	G	C4-C5-N7	-6.03	108.39	110.80
38	A1	448	A	C5-C6-N6	-6.03	118.87	123.70
38	A1	930	G	C2-N3-C4	6.03	114.92	111.90
38	A1	975	C	N3-C2-O2	6.03	126.12	121.90
38	A1	982	G	C4'-C3'-C2'	-6.03	96.57	102.60
38	A1	1187	A	C5-N7-C8	6.03	106.92	103.90
38	A1	1198	G	N3-C4-C5	6.03	131.62	128.60
38	A1	1446	G	C4-C5-C6	-6.03	115.18	118.80
38	A1	1512	G	N9-C4-C5	-6.03	102.99	105.40
38	A1	2037	A	C5-N7-C8	6.03	106.92	103.90
38	A1	2269	C	N3-C2-O2	-6.03	117.68	121.90
38	A1	2298	C	O4'-C1'-N1	6.03	113.03	108.20
38	A1	2615	U	O4'-C1'-N1	6.03	113.03	108.20
38	A1	2879	G	C4-N9-C1'	6.03	134.34	126.50
11	B2	513	A	P-O5'-C5'	6.03	130.55	120.90
38	A1	279	G	C5'-C4'-O4'	6.03	116.34	109.10
38	A1	1467	G	C4-C5-N7	-6.03	108.39	110.80
38	A1	1535	U	C2-N3-C4	-6.03	123.38	127.00
38	A1	1911	G	C6-N1-C2	6.03	128.72	125.10
38	A1	2858	C	N3-C2-O2	-6.03	117.68	121.90
8	AW	49	ARG	NE-CZ-NH1	6.03	123.32	120.30
11	B2	219	C	C4-C5-C6	6.03	120.42	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1271	G	C4'-C3'-C2'	-6.03	96.57	102.60
11	B2	1477	U	N3-C4-O4	6.03	123.62	119.40
38	A1	133	G	N3-C2-N2	6.03	124.12	119.90
38	A1	219	G	O4'-C4'-C3'	-6.03	97.97	104.00
38	A1	246	A	N3-C4-N9	6.03	132.22	127.40
38	A1	745	C	N1-C2-N3	6.03	123.42	119.20
38	A1	1901	A	O4'-C1'-N9	6.03	113.03	108.20
38	A1	1992	A	C6-C5-N7	-6.03	128.08	132.30
38	A1	2120	C	C4-C5-C6	6.03	120.42	117.40
38	A1	2197	U	C4-C5-C6	6.03	123.32	119.70
38	A1	2558	U	C5-C6-N1	6.03	125.72	122.70
38	A1	2694	C	C1'-O4'-C4'	-6.03	105.08	109.90
60	AM	160	ARG	NE-CZ-NH2	-6.03	117.28	120.30
10	B1	68	C	C2-N3-C4	6.03	122.91	119.90
11	B2	827	G	C6-N1-C2	6.03	128.72	125.10
11	B2	1260	G	N9-C4-C5	-6.03	102.99	105.40
38	A1	512	G	N9-C4-C5	-6.03	102.99	105.40
38	A1	958	A	C4'-C3'-C2'	-6.03	96.57	102.60
38	A1	1208	A	N3-C4-N9	6.03	132.22	127.40
38	A1	1484	U	C1'-O4'-C4'	-6.03	105.08	109.90
38	A1	2037	A	C1'-O4'-C4'	6.03	114.72	109.90
38	A1	2793	C	C6-N1-C2	-6.03	117.89	120.30
11	B2	993	C	C4-C5-C6	6.03	120.41	117.40
11	B2	1328	G	C4-C5-C6	6.03	122.42	118.80
11	B2	1396	C	C5'-C4'-O4'	-6.03	101.87	109.10
38	A1	140	C	N3-C2-O2	-6.03	117.68	121.90
38	A1	270	C	O4'-C1'-N1	6.03	113.02	108.20
38	A1	437	G	C4'-C3'-C2'	-6.03	96.57	102.60
38	A1	2697	G	N3-C2-N2	6.03	124.12	119.90
38	A1	2868	C	C5-C4-N4	6.03	124.42	120.20
61	AN	11	TYR	CB-CG-CD1	6.03	124.62	121.00
11	B2	477	G	N3-C4-N9	6.03	129.62	126.00
11	B2	619	A	N3-C4-N9	6.03	132.22	127.40
11	B2	855	C	C5-C6-N1	6.03	124.01	121.00
11	B2	950	C	O4'-C1'-N1	6.03	113.02	108.20
11	B2	1331	G	C6-C5-N7	-6.03	126.78	130.40
38	A1	479	G	C8-N9-C4	-6.03	103.99	106.40
38	A1	2762	G	C4-C5-N7	6.03	113.21	110.80
38	A1	2897	C	O4'-C1'-N1	6.03	113.02	108.20
11	B2	492	G	C6-C5-N7	-6.02	126.79	130.40
26	BN	118	ASP	CB-CG-OD1	6.02	123.72	118.30
38	A1	24	G	C6-C5-N7	-6.02	126.78	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	862	G	C4-C5-C6	6.02	122.41	118.80
38	A1	1760	C	C5-C4-N4	-6.02	115.98	120.20
43	AB	225	ARG	NE-CZ-NH1	6.02	123.31	120.30
10	B1	33	C	C5-C4-N4	6.02	124.42	120.20
10	B1	58	A	C5-N7-C8	6.02	106.91	103.90
11	B2	88	G	C4'-C3'-C2'	-6.02	96.58	102.60
11	B2	88	G	N1-C2-N3	-6.02	120.29	123.90
11	B2	985	C	N1-C2-N3	-6.02	114.98	119.20
11	B2	1163	U	O4'-C4'-C3'	-6.02	97.98	104.00
11	B2	1482	C	N1-C2-O2	6.02	122.51	118.90
38	A1	24	G	C3'-C2'-C1'	6.02	106.32	101.50
38	A1	289	G	C5'-C4'-O4'	6.02	116.33	109.10
38	A1	368	U	O4'-C1'-N1	6.02	113.02	108.20
38	A1	1179	G	C6-C5-N7	-6.02	126.79	130.40
38	A1	1207	G	N3-C2-N2	6.02	124.12	119.90
38	A1	1261	C	N3-C2-O2	6.02	126.12	121.90
38	A1	2034	G	C6-C5-N7	-6.02	126.79	130.40
38	A1	2311	C	C2-N3-C4	6.02	122.91	119.90
38	A1	2834	C	N3-C4-C5	-6.02	119.49	121.90
38	A1	2990	G	C6-C5-N7	-6.02	126.79	130.40
38	A1	2999	G	N7-C8-N9	6.02	116.11	113.10
39	A3	44	C	N1-C1'-C2'	-6.02	105.38	112.00
39	A3	102	G	N3-C4-N9	6.02	129.61	126.00
11	B2	433	U	C4-C5-C6	-6.02	116.09	119.70
11	B2	478	C	P-O5'-C5'	6.02	130.53	120.90
11	B2	485	A	N3-C4-C5	-6.02	122.59	126.80
11	B2	841	C	O5'-C5'-C4'	-6.02	100.26	111.70
38	A1	243	G	N1-C6-O6	6.02	123.51	119.90
38	A1	372	A	C8-N9-C4	-6.02	103.39	105.80
38	A1	865	C	N1-C2-N3	-6.02	114.99	119.20
43	AB	156	ARG	NE-CZ-NH1	6.02	123.31	120.30
11	B2	313	G	N9-C4-C5	-6.02	102.99	105.40
11	B2	502	U	N1-C2-O2	6.02	127.01	122.80
11	B2	571	C	N3-C2-O2	6.02	126.11	121.90
11	B2	1047	U	C5-C4-O4	6.02	129.51	125.90
11	B2	1425	C	C6-N1-C2	-6.02	117.89	120.30
38	A1	435	G	N3-C4-C5	-6.02	125.59	128.60
38	A1	700	A	C6-C5-N7	-6.02	128.09	132.30
38	A1	1563	G	OP1-P-OP2	-6.02	110.57	119.60
38	A1	1693	G	O4'-C1'-N9	6.02	113.02	108.20
38	A1	2147	C	C1'-O4'-C4'	-6.02	105.08	109.90
38	A1	2161	A	N3-C4-C5	-6.02	122.59	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2444	G	O4'-C1'-N9	6.02	113.02	108.20
38	A1	2608	U	N3-C4-C5	-6.02	110.99	114.60
39	A3	18	G	O4'-C1'-N9	6.02	113.02	108.20
47	Ad	80	MET	CG-SD-CE	-6.02	90.57	100.20
57	Aj	40	PHE	N-CA-CB	6.02	121.43	110.60
65	AV	3	ARG	NE-CZ-NH2	6.02	123.31	120.30
11	B2	56	A	C2-N3-C4	-6.02	107.59	110.60
11	B2	114	A	C5-C6-N1	-6.02	114.69	117.70
11	B2	118	U	O4'-C1'-N1	6.02	113.01	108.20
11	B2	525	A	C5-C6-N1	-6.02	114.69	117.70
11	B2	1092	G	C6-C5-N7	-6.02	126.79	130.40
11	B2	1279	A	C6-C5-N7	-6.02	128.09	132.30
11	B2	1348	C	N1-C2-N3	-6.02	114.99	119.20
13	BA	138	ARG	NE-CZ-NH1	-6.02	117.29	120.30
38	A1	865	C	O5'-P-OP2	-6.02	100.28	105.70
38	A1	960	C	C4-C5-C6	6.02	120.41	117.40
38	A1	1377	G	C4-C5-C6	6.02	122.41	118.80
38	A1	1413	A	C5-C6-N1	-6.02	114.69	117.70
38	A1	1467	G	C4-C5-C6	6.02	122.41	118.80
38	A1	2165	A	C8-N9-C4	6.02	108.21	105.80
38	A1	2736	G	C5-C6-N1	6.02	114.51	111.50
11	B2	1118	C	N3-C4-C5	-6.02	119.49	121.90
38	A1	788	A	C8-N9-C4	6.02	108.21	105.80
38	A1	916	A	N1-C2-N3	6.02	132.31	129.30
38	A1	1792	A	N3-C4-C5	-6.02	122.59	126.80
38	A1	2305	U	N3-C4-C5	-6.02	110.99	114.60
11	B2	1338	C	C5'-C4'-C3'	6.01	125.62	116.00
38	A1	235	G	O4'-C1'-N9	6.01	113.01	108.20
38	A1	266	A	C4-N9-C1'	6.01	137.13	126.30
38	A1	706	U	N3-C4-O4	6.01	123.61	119.40
38	A1	1246	G	C4-C5-C6	6.01	122.41	118.80
38	A1	1554	G	N1-C2-N2	6.01	121.61	116.20
38	A1	1812	A	C2-N3-C4	-6.01	107.59	110.60
11	B2	88	G	C4-C5-C6	6.01	122.41	118.80
11	B2	1316	U	N3-C2-O2	6.01	126.41	122.20
27	BO	51	ALA	N-CA-CB	6.01	118.52	110.10
38	A1	1207	G	N9-C1'-C2'	-6.01	105.39	112.00
38	A1	2201	C	N3-C4-C5	-6.01	119.50	121.90
10	B1	20	G	C5'-C4'-O4'	6.01	116.31	109.10
11	B2	426	C	C4-C5-C6	6.01	120.41	117.40
11	B2	1461	U	C5-C6-N1	6.01	125.71	122.70
38	A1	616	C	C2-N1-C1'	6.01	125.41	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1090	G	C5-N7-C8	6.01	107.31	104.30
38	A1	1356	A	C1'-O4'-C4'	-6.01	105.09	109.90
38	A1	1382	C	N3-C4-C5	-6.01	119.50	121.90
38	A1	1778	G	P-O5'-C5'	6.01	130.52	120.90
38	A1	1819	G	C4'-C3'-C2'	-6.01	96.59	102.60
38	A1	2366	G	C4-N9-C1'	-6.01	118.69	126.50
38	A1	2475	G	C5-C6-N1	-6.01	108.49	111.50
56	AJ	105	VAL	CA-CB-CG1	6.01	119.92	110.90
11	B2	84	C	P-O3'-C3'	6.01	126.91	119.70
11	B2	164	A	N3-C4-C5	-6.01	122.59	126.80
38	A1	8	G	C6-C5-N7	-6.01	126.79	130.40
38	A1	454	C	C6-N1-C2	-6.01	117.90	120.30
38	A1	821	U	N3-C4-C5	-6.01	111.00	114.60
38	A1	823	G	C6-C5-N7	-6.01	126.79	130.40
38	A1	1495	A	C5-N7-C8	6.01	106.91	103.90
11	B2	497	C	N3-C4-C5	-6.01	119.50	121.90
11	B2	784	G	N7-C8-N9	-6.01	110.10	113.10
11	B2	997	G	N7-C8-N9	6.01	116.10	113.10
38	A1	1170	G	C5-C6-O6	-6.01	125.00	128.60
38	A1	2017	A	C8-N9-C4	6.01	108.20	105.80
38	A1	2554	A	P-O3'-C3'	6.01	126.91	119.70
38	A1	2898	G	N7-C8-N9	-6.01	110.10	113.10
61	AN	167	LYS	C-N-CA	6.01	136.72	121.70
11	B2	277	G	C3'-C2'-C1'	6.01	106.31	101.50
11	B2	1112	G	P-O3'-C3'	-6.01	112.49	119.70
11	B2	1318	U	O4'-C1'-N1	6.01	113.00	108.20
38	A1	571	G	N3-C4-C5	6.01	131.60	128.60
38	A1	744	G	N3-C4-C5	-6.01	125.60	128.60
38	A1	868	U	N1-C2-O2	6.01	127.00	122.80
38	A1	871	G	C2-N3-C4	-6.01	108.90	111.90
38	A1	923	A	N1-C2-N3	-6.01	126.30	129.30
38	A1	1258	G	OP1-P-OP2	-6.01	110.59	119.60
38	A1	2407	G	N1-C2-N3	-6.01	120.30	123.90
38	A1	2448	A	C4-C5-C6	6.01	120.00	117.00
38	A1	2538	G	C3'-C2'-C1'	6.01	106.31	101.50
38	A1	2539	G	N7-C8-N9	6.01	116.10	113.10
38	A1	2626	U	C2-N3-C4	-6.01	123.40	127.00
11	B2	661	C	N3-C4-C5	-6.00	119.50	121.90
38	A1	239	G	O4'-C1'-N9	6.00	113.00	108.20
38	A1	474	G	N3-C2-N2	6.00	124.10	119.90
38	A1	528	G	C8-N9-C4	-6.00	104.00	106.40
38	A1	646	U	N3-C4-O4	6.00	123.60	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1357	G	N3-C2-N2	6.00	124.10	119.90
38	A1	1826	G	C5-C6-O6	-6.00	125.00	128.60
38	A1	1899	C	C5'-C4'-C3'	-6.00	106.39	116.00
38	A1	2072	G	N1-C2-N3	-6.00	120.30	123.90
38	A1	2193	G	C2-N3-C4	6.00	114.90	111.90
38	A1	2318	G	OP1-P-OP2	-6.00	110.59	119.60
54	AI	131	VAL	CA-CB-CG1	-6.00	101.89	110.90
7	AU	77	TYR	CG-CD1-CE1	6.00	126.10	121.30
10	B1	74	A	C5-N7-C8	6.00	106.90	103.90
11	B2	598	U	N3-C4-O4	6.00	123.60	119.40
11	B2	726	A	N7-C8-N9	6.00	116.80	113.80
11	B2	779	G	C6-C5-N7	-6.00	126.80	130.40
11	B2	1378	A	C4-C5-C6	6.00	120.00	117.00
38	A1	164	A	O4'-C1'-N9	6.00	113.00	108.20
38	A1	509	A	N3-C4-C5	-6.00	122.60	126.80
38	A1	696	G	C5-C6-N1	-6.00	108.50	111.50
38	A1	1095	A	C5-C6-N6	-6.00	118.90	123.70
38	A1	1223	A	N7-C8-N9	6.00	116.80	113.80
38	A1	2047	U	C1'-O4'-C4'	6.00	114.70	109.90
38	A1	2224	G	N7-C8-N9	6.00	116.10	113.10
11	B2	1283	G	C8-N9-C4	-6.00	104.00	106.40
11	B2	1431	C	C5-C4-N4	-6.00	116.00	120.20
38	A1	205	A	C5-N7-C8	6.00	106.90	103.90
38	A1	306	G	P-O5'-C5'	6.00	130.50	120.90
38	A1	611	G	C6-C5-N7	-6.00	126.80	130.40
38	A1	1136	G	N9-C4-C5	-6.00	103.00	105.40
38	A1	1304	G	N3-C2-N2	6.00	124.10	119.90
38	A1	1515	G	P-O5'-C5'	6.00	130.50	120.90
38	A1	1674	G	N7-C8-N9	6.00	116.10	113.10
38	A1	1677	A	C5-C6-N1	-6.00	114.70	117.70
38	A1	1771	C	O4'-C1'-N1	6.00	113.00	108.20
38	A1	2065	C	O4'-C1'-N1	6.00	113.00	108.20
38	A1	2314	U	N3-C4-O4	6.00	123.60	119.40
38	A1	2810	G	C5-C6-O6	-6.00	125.00	128.60
38	A1	3034	C	C5-C4-N4	-6.00	116.00	120.20
39	A3	9	A	O4'-C1'-N9	6.00	113.00	108.20
43	AB	219	ARG	NE-CZ-NH2	6.00	123.30	120.30
11	B2	173	G	C6-N1-C2	6.00	128.70	125.10
11	B2	588	C	C5-C4-N4	-6.00	116.00	120.20
11	B2	688	C	C2-N1-C1'	6.00	125.40	118.80
11	B2	732	G	N1-C2-N3	-6.00	120.30	123.90
11	B2	905	A	N3-C4-C5	-6.00	122.60	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	168	G	C5-N7-C8	-6.00	101.30	104.30
38	A1	583	A	OP1-P-OP2	-6.00	110.60	119.60
38	A1	640	C	C5-C4-N4	-6.00	116.00	120.20
38	A1	2684	G	C2-N3-C4	6.00	114.90	111.90
38	A1	3037	G	N1-C2-N3	-6.00	120.30	123.90
11	B2	506	G	C5-C6-N1	-6.00	108.50	111.50
11	B2	614	G	C8-N9-C4	-6.00	104.00	106.40
11	B2	619	A	C2-N3-C4	6.00	113.60	110.60
11	B2	868	C	C2-N3-C4	6.00	122.90	119.90
11	B2	912	G	P-O3'-C3'	6.00	126.90	119.70
11	B2	1170	C	N3-C4-C5	-6.00	119.50	121.90
11	B2	1212	U	N1-C2-O2	6.00	127.00	122.80
32	BT	76	MET	CG-SD-CE	-6.00	90.60	100.20
38	A1	354	G	C5-C6-N1	-6.00	108.50	111.50
38	A1	569	G	C4-C5-C6	6.00	122.40	118.80
38	A1	798	G	P-O3'-C3'	6.00	126.90	119.70
38	A1	849	C	C2-N1-C1'	-6.00	112.20	118.80
38	A1	1058	A	P-O3'-C3'	6.00	126.90	119.70
38	A1	1742	C	N3-C2-O2	-6.00	117.70	121.90
38	A1	2092	G	C4-C5-N7	-6.00	108.40	110.80
38	A1	2506	G	C6-N1-C2	6.00	128.70	125.10
11	B2	281	G	C1'-O4'-C4'	-6.00	105.10	109.90
11	B2	910	G	C2-N3-C4	6.00	114.90	111.90
11	B2	1103	G	C2-N3-C4	-6.00	108.90	111.90
11	B2	1119	U	N1-C2-N3	-6.00	111.30	114.90
11	B2	1488	C	N1-C2-O2	6.00	122.50	118.90
38	A1	342	C	N3-C4-N4	6.00	122.20	118.00
38	A1	881	G	O4'-C1'-N9	6.00	113.00	108.20
38	A1	1130	G	N3-C2-N2	6.00	124.10	119.90
38	A1	1496	A	C5-N7-C8	6.00	106.90	103.90
38	A1	2037	A	O4'-C4'-C3'	-6.00	98.00	104.00
38	A1	2199	U	C2-N1-C1'	6.00	124.90	117.70
38	A1	2294	A	C5-N7-C8	6.00	106.90	103.90
60	AM	125	TYR	CG-CD1-CE1	-6.00	116.50	121.30
11	B2	75	C	C5'-C4'-O4'	6.00	116.30	109.10
11	B2	518	U	O4'-C4'-C3'	-6.00	98.00	104.00
11	B2	544	C	C6-N1-C2	-6.00	117.90	120.30
11	B2	1484	C	N3-C4-N4	6.00	122.20	118.00
25	BM	56	SER	N-CA-CB	6.00	119.49	110.50
38	A1	1018	G	C5-C6-O6	-6.00	125.00	128.60
38	A1	1778	G	C6-N1-C2	6.00	128.70	125.10
38	A1	2666	G	N3-C4-C5	-6.00	125.60	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	330	U	O4'-C1'-N1	5.99	112.99	108.20
11	B2	804	U	O4'-C1'-N1	5.99	112.99	108.20
11	B2	822	A	N3-C4-C5	-5.99	122.61	126.80
11	B2	1189	G	N1-C2-N3	-5.99	120.30	123.90
11	B2	1248	A	O4'-C1'-N9	5.99	113.00	108.20
38	A1	252	A	N1-C2-N3	-5.99	126.30	129.30
38	A1	938	U	C5-C6-N1	-5.99	119.70	122.70
38	A1	1038	U	N3-C4-C5	-5.99	111.00	114.60
38	A1	1145	G	C5-N7-C8	5.99	107.30	104.30
38	A1	1648	C	O4'-C4'-C3'	-5.99	98.01	104.00
38	A1	2061	A	N9-C4-C5	-5.99	103.40	105.80
38	A1	2417	G	N9-C1'-C2'	-5.99	105.41	112.00
38	A1	2471	A	O4'-C1'-N9	5.99	113.00	108.20
38	A1	2604	G	C6-C5-N7	-5.99	126.80	130.40
38	A1	2676	A	C5-C6-N6	-5.99	118.91	123.70
38	A1	2731	C	N1-C2-N3	5.99	123.39	119.20
39	A3	39	C	C6-N1-C2	-5.99	117.90	120.30
11	B2	975	A	O3'-P-O5'	5.99	115.38	104.00
38	A1	78	C	C1'-O4'-C4'	-5.99	105.11	109.90
38	A1	203	G	C5-C6-N1	-5.99	108.50	111.50
38	A1	712	C	N1-C2-N3	-5.99	115.01	119.20
38	A1	1329	G	C5-N7-C8	-5.99	101.30	104.30
38	A1	1637	C	C2-N3-C4	5.99	122.90	119.90
38	A1	1732	C	C4-C5-C6	5.99	120.40	117.40
38	A1	1983	C	N1-C2-N3	-5.99	115.01	119.20
38	A1	2513	C	C2-N3-C4	5.99	122.90	119.90
38	A1	2563	A	C5-C6-N1	-5.99	114.70	117.70
11	B2	666	G	C6-C5-N7	-5.99	126.81	130.40
11	B2	822	A	C2-N3-C4	5.99	113.60	110.60
11	B2	1198	A	O4'-C1'-N9	5.99	112.99	108.20
38	A1	277	A	C4-C5-N7	-5.99	107.70	110.70
38	A1	866	G	N1-C2-N3	-5.99	120.31	123.90
38	A1	1088	G	C5-N7-C8	-5.99	101.31	104.30
38	A1	1577	C	O4'-C1'-N1	5.99	112.99	108.20
38	A1	1754	A	N9-C4-C5	-5.99	103.40	105.80
38	A1	1818	G	C5'-C4'-O4'	5.99	116.29	109.10
38	A1	2177	A	O4'-C1'-N9	5.99	112.99	108.20
11	B2	37	G	N1-C2-N3	-5.99	120.31	123.90
11	B2	111	G	N3-C4-N9	5.99	129.59	126.00
11	B2	622	C	N1-C2-O2	-5.99	115.31	118.90
11	B2	1455	A	N1-C2-N3	5.99	132.29	129.30
38	A1	127	C	C4'-C3'-C2'	-5.99	96.61	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	269	C	C5-C4-N4	-5.99	116.01	120.20
38	A1	293	G	C5-C6-N1	-5.99	108.51	111.50
38	A1	922	C	N3-C4-C5	-5.99	119.50	121.90
38	A1	1621	G	O4'-C4'-C3'	-5.99	98.01	104.00
38	A1	1906	G	C6-N1-C2	5.99	128.69	125.10
38	A1	2702	A	C4'-C3'-C2'	-5.99	96.61	102.60
38	A1	2857	C	P-O3'-C3'	5.99	126.89	119.70
45	AC	319	SER	N-CA-CB	5.99	119.48	110.50
11	B2	592	G	C6-N1-C2	5.99	128.69	125.10
11	B2	754	G	C4-C5-C6	5.99	122.39	118.80
11	B2	1006	C	C6-N1-C1'	-5.99	113.61	120.80
11	B2	1202	G	N9-C4-C5	-5.99	103.00	105.40
11	B2	1393	A	N1-C2-N3	5.99	132.29	129.30
38	A1	123	A	C1'-O4'-C4'	5.99	114.69	109.90
38	A1	273	G	C8-N9-C4	5.99	108.80	106.40
38	A1	848	A	N3-C4-N9	-5.99	122.61	127.40
38	A1	852	A	N1-C2-N3	-5.99	126.31	129.30
38	A1	1715	G	C4-C5-N7	-5.99	108.41	110.80
38	A1	2171	G	N9-C4-C5	-5.99	103.00	105.40
11	B2	199	A	C5-C6-N1	-5.99	114.71	117.70
11	B2	280	C	N3-C4-N4	5.99	122.19	118.00
11	B2	947	G	N3-C4-C5	5.99	131.59	128.60
11	B2	1339	G	N9-C4-C5	5.99	107.79	105.40
38	A1	348	G	N1-C2-N2	5.99	121.59	116.20
38	A1	499	A	O4'-C1'-N9	5.99	112.99	108.20
38	A1	1250	A	C5'-C4'-O4'	5.99	116.28	109.10
38	A1	1998	G	C2-N3-C4	5.99	114.89	111.90
38	A1	2034	G	O4'-C1'-N9	5.99	112.99	108.20
38	A1	2357	U	C6-N1-C2	5.99	124.59	121.00
38	A1	2649	A	N9-C4-C5	-5.99	103.41	105.80
38	A1	2898	G	C4-C5-C6	5.99	122.39	118.80
38	A1	3046	C	C4-C5-C6	5.99	120.39	117.40
11	B2	1190	C	N3-C4-N4	5.98	122.19	118.00
11	B2	1256	C	N3-C4-N4	5.98	122.19	118.00
38	A1	1178	G	C1'-O4'-C4'	-5.98	105.11	109.90
38	A1	2308	C	O4'-C1'-C2'	-5.98	99.82	105.80
39	A3	15	G	C8-N9-C1'	5.98	134.78	127.00
50	AF	58	ASP	CB-CG-OD1	5.98	123.69	118.30
11	B2	116	C	C6-N1-C2	-5.98	117.91	120.30
11	B2	124	C	C5-C4-N4	5.98	124.39	120.20
11	B2	207	G	N9-C4-C5	-5.98	103.01	105.40
11	B2	316	C	C2-N3-C4	5.98	122.89	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	442	C	P-O5'-C5'	5.98	130.47	120.90
11	B2	490	C	N3-C4-C5	5.98	124.29	121.90
11	B2	635	C	O4'-C1'-N1	5.98	112.99	108.20
11	B2	862	C	N1-C2-O2	5.98	122.49	118.90
11	B2	1177	C	O4'-C4'-C3'	-5.98	98.02	104.00
38	A1	642	G	N1-C2-N3	-5.98	120.31	123.90
38	A1	785	C	N3-C4-C5	-5.98	119.51	121.90
38	A1	2059	G	N9-C4-C5	-5.98	103.01	105.40
38	A1	2406	C	C3'-C2'-C1'	5.98	106.29	101.50
38	A1	2475	G	C6-C5-N7	-5.98	126.81	130.40
38	A1	2666	G	N1-C2-N3	-5.98	120.31	123.90
10	B1	9	A	C8-N9-C4	-5.98	103.41	105.80
10	B1	19	G	O4'-C1'-C2'	5.98	112.98	107.60
11	B2	145	A	C5-C6-N1	-5.98	114.71	117.70
11	B2	298	C	O4'-C1'-N1	5.98	112.98	108.20
11	B2	461	A	N7-C8-N9	-5.98	110.81	113.80
38	A1	426	G	C6-C5-N7	-5.98	126.81	130.40
38	A1	935	A	C5-C6-N6	-5.98	118.92	123.70
38	A1	1747	C	C2-N3-C4	5.98	122.89	119.90
38	A1	1761	C	C2-N1-C1'	5.98	125.38	118.80
38	A1	1979	G	C5-C6-N1	-5.98	108.51	111.50
39	A3	121	A	C8-N9-C4	5.98	108.19	105.80
10	B1	8	U	C4'-C3'-C2'	-5.98	96.62	102.60
11	B2	1208	A	C5'-C4'-C3'	5.98	125.57	116.00
11	B2	1226	G	C4-C5-N7	5.98	113.19	110.80
11	B2	1298	G	C6-C5-N7	-5.98	126.81	130.40
38	A1	1046	A	C5'-C4'-O4'	5.98	116.27	109.10
38	A1	1156	G	O4'-C1'-N9	5.98	112.98	108.20
38	A1	1228	G	N7-C8-N9	5.98	116.09	113.10
38	A1	1370	G	N3-C2-N2	5.98	124.09	119.90
38	A1	1737	A	N3-C4-C5	-5.98	122.61	126.80
38	A1	2450	A	C5-C6-N1	-5.98	114.71	117.70
38	A1	2574	G	N9-C4-C5	5.98	107.79	105.40
44	Ab	79	TYR	CA-CB-CG	-5.98	102.04	113.40
11	B2	150	G	C6-C5-N7	-5.98	126.81	130.40
11	B2	624	G	N3-C4-N9	-5.98	122.41	126.00
11	B2	755	U	C5-C4-O4	-5.98	122.31	125.90
11	B2	880	G	C5-C6-N1	-5.98	108.51	111.50
11	B2	1095	C	P-O3'-C3'	5.98	126.87	119.70
11	B2	1144	G	C4-C5-N7	-5.98	108.41	110.80
18	BF	8	TYR	CG-CD1-CE1	-5.98	116.52	121.30
38	A1	235	G	N1-C2-N2	-5.98	110.82	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	657	U	C6-N1-C2	5.98	124.59	121.00
38	A1	760	G	C6-C5-N7	-5.98	126.81	130.40
38	A1	1808	G	C5-C6-N1	-5.98	108.51	111.50
38	A1	2009	G	O4'-C1'-N9	5.98	112.98	108.20
38	A1	2583	G	C8-N9-C4	-5.98	104.01	106.40
39	A3	115	C	N1-C2-O2	5.98	122.49	118.90
59	AL	9	ARG	N-CA-CB	5.98	121.36	110.60
63	AP	3	ARG	NE-CZ-NH1	5.98	123.29	120.30
11	B2	637	G	C8-N9-C4	-5.98	104.01	106.40
11	B2	643	G	C6-C5-N7	-5.98	126.81	130.40
38	A1	530	A	C3'-C2'-C1'	-5.98	96.72	101.50
38	A1	1402	C	O4'-C1'-N1	5.98	112.98	108.20
38	A1	1484	U	O4'-C1'-N1	5.98	112.98	108.20
38	A1	2746	G	C4-C5-N7	-5.98	108.41	110.80
61	AN	154	MET	CG-SD-CE	-5.98	90.64	100.20
11	B2	151	G	P-O3'-C3'	5.97	126.87	119.70
11	B2	348	C	C2-N3-C4	5.97	122.89	119.90
11	B2	392	G	C3'-C2'-C1'	-5.97	96.72	101.50
36	BX	2	ALA	N-CA-CB	5.97	118.47	110.10
38	A1	613	C	C2-N1-C1'	5.97	125.37	118.80
38	A1	625	A	C4-C5-N7	-5.97	107.71	110.70
38	A1	1116	A	N9-C4-C5	5.97	108.19	105.80
38	A1	1643	A	N9-C4-C5	5.97	108.19	105.80
38	A1	2820	C	N3-C4-C5	-5.97	119.51	121.90
39	A3	5	G	C5-C6-N1	-5.97	108.51	111.50
10	B1	19	G	C4-N9-C1'	5.97	134.26	126.50
11	B2	617	A	C6-N1-C2	5.97	122.18	118.60
11	B2	811	G	N1-C6-O6	5.97	123.48	119.90
11	B2	1126	G	C5-C6-O6	-5.97	125.02	128.60
11	B2	1213	G	C4-C5-N7	5.97	113.19	110.80
38	A1	558	C	N1-C2-N3	-5.97	115.02	119.20
38	A1	774	G	C6-C5-N7	-5.97	126.82	130.40
38	A1	1930	A	C6-C5-N7	-5.97	128.12	132.30
38	A1	2300	C	C5-C4-N4	-5.97	116.02	120.20
38	A1	2558	U	N1-C2-O2	-5.97	118.62	122.80
38	A1	2947	G	O4'-C1'-C2'	-5.97	99.83	105.80
10	B1	43	G	N9-C4-C5	-5.97	103.01	105.40
11	B2	220	G	N9-C4-C5	-5.97	103.01	105.40
11	B2	605	C	N1-C2-O2	5.97	122.48	118.90
11	B2	794	A	O4'-C1'-N9	5.97	112.98	108.20
11	B2	944	C	C2-N3-C4	5.97	122.89	119.90
11	B2	1374	C	C4'-C3'-C2'	-5.97	96.63	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1463	A	C4-C5-C6	5.97	119.98	117.00
38	A1	356	C	N3-C2-O2	-5.97	117.72	121.90
38	A1	655	C	C3'-C2'-C1'	5.97	106.28	101.50
38	A1	678	G	N7-C8-N9	-5.97	110.11	113.10
38	A1	1116	A	C5-C6-N6	-5.97	118.92	123.70
11	B2	11	A	O4'-C1'-N9	5.97	112.98	108.20
11	B2	79	G	P-O3'-C3'	-5.97	112.54	119.70
11	B2	258	A	C5-N7-C8	5.97	106.89	103.90
11	B2	674	C	C5-C6-N1	-5.97	118.02	121.00
11	B2	768	A	C8-N9-C4	-5.97	103.41	105.80
17	BE	29	ALA	N-CA-CB	5.97	118.46	110.10
38	A1	1118	A	C6-C5-N7	-5.97	128.12	132.30
38	A1	1732	C	O4'-C1'-N1	5.97	112.97	108.20
38	A1	2256	G	C5-C6-O6	-5.97	125.02	128.60
7	AU	39	TYR	CG-CD2-CE2	-5.97	116.53	121.30
11	B2	698	A	C5-N7-C8	5.97	106.88	103.90
11	B2	870	U	P-O3'-C3'	5.97	126.86	119.70
30	BR	53	TYR	CB-CG-CD1	-5.97	117.42	121.00
38	A1	65	G	C5-C6-O6	-5.97	125.02	128.60
38	A1	1902	G	N1-C2-N2	-5.97	110.83	116.20
38	A1	2568	A	C6-N1-C2	-5.97	115.02	118.60
11	B2	191	A	O4'-C1'-N9	5.97	112.97	108.20
38	A1	620	G	C5-C6-N1	-5.97	108.52	111.50
38	A1	763	A	N1-C6-N6	5.97	122.18	118.60
38	A1	893	C	C5-C6-N1	-5.97	118.02	121.00
38	A1	1007	U	N3-C4-C5	-5.97	111.02	114.60
38	A1	1365	G	O4'-C1'-N9	5.97	112.97	108.20
38	A1	1498	C	N3-C2-O2	-5.97	117.72	121.90
38	A1	1642	G	OP1-P-O3'	5.97	118.33	105.20
38	A1	1740	U	O4'-C1'-N1	5.97	112.97	108.20
38	A1	2822	G	N1-C2-N3	-5.97	120.32	123.90
39	A3	13	C	C1'-O4'-C4'	-5.97	105.13	109.90
5	AS	96	LEU	CB-CG-CD1	5.96	121.14	111.00
10	B1	39	A	N9-C4-C5	5.96	108.19	105.80
11	B2	195	C	C5-C6-N1	5.96	123.98	121.00
11	B2	551	U	C4-C5-C6	-5.96	116.12	119.70
11	B2	791	G	N3-C2-N2	5.96	124.08	119.90
14	BB	12	TYR	CB-CG-CD2	-5.96	117.42	121.00
38	A1	148	C	N3-C4-C5	-5.96	119.51	121.90
38	A1	714	C	N3-C4-C5	-5.96	119.51	121.90
38	A1	900	C	N3-C2-O2	-5.96	117.72	121.90
38	A1	1067	G	C4-C5-C6	5.96	122.38	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1656	C	O4'-C1'-N1	5.96	112.97	108.20
38	A1	1691	U	C4'-C3'-C2'	-5.96	96.64	102.60
38	A1	1950	G	C6-C5-N7	-5.96	126.82	130.40
38	A1	2072	G	O4'-C4'-C3'	-5.96	98.04	104.00
38	A1	2300	C	O3'-P-O5'	-5.96	92.67	104.00
38	A1	2538	G	C4-C5-N7	-5.96	108.41	110.80
38	A1	2698	G	C6-C5-N7	-5.96	126.82	130.40
38	A1	2806	A	N3-C4-C5	-5.96	122.62	126.80
38	A1	2893	U	C2-N1-C1'	5.96	124.86	117.70
42	Aa	20	LYS	N-CA-CB	5.96	121.33	110.60
8	AW	63	ARG	NE-CZ-NH1	5.96	123.28	120.30
10	B1	9	A	N3-C4-N9	-5.96	122.63	127.40
11	B2	162	C	O4'-C1'-N1	5.96	112.97	108.20
11	B2	392	G	C5-N7-C8	5.96	107.28	104.30
11	B2	614	G	P-O5'-C5'	-5.96	111.36	120.90
11	B2	687	G	C4-C5-C6	5.96	122.38	118.80
11	B2	1466	G	N1-C2-N3	-5.96	120.32	123.90
38	A1	55	G	N9-C4-C5	-5.96	103.02	105.40
38	A1	278	C	C6-N1-C2	5.96	122.69	120.30
38	A1	488	A	C1'-O4'-C4'	-5.96	105.13	109.90
38	A1	2346	A	N7-C8-N9	-5.96	110.82	113.80
38	A1	2562	G	N3-C2-N2	5.96	124.07	119.90
11	B2	48	G	C6-N1-C2	5.96	128.68	125.10
11	B2	154	C	N1-C2-N3	5.96	123.37	119.20
11	B2	246	A	C6-C5-N7	-5.96	128.13	132.30
11	B2	372	G	N3-C4-C5	-5.96	125.62	128.60
11	B2	431	U	N1-C2-N3	-5.96	111.32	114.90
11	B2	756	A	C5'-C4'-O4'	-5.96	101.95	109.10
11	B2	845	G	C5-C6-O6	-5.96	125.02	128.60
11	B2	970	G	N3-C2-N2	5.96	124.07	119.90
11	B2	1192	C	C5-C4-N4	-5.96	116.03	120.20
38	A1	73	A	N3-C4-N9	-5.96	122.63	127.40
38	A1	900	C	O4'-C1'-N1	5.96	112.97	108.20
38	A1	1573	A	C3'-C2'-C1'	-5.96	96.73	101.50
43	AB	139	VAL	CA-CB-CG2	-5.96	101.96	110.90
58	Ak	185	LEU	N-CA-CB	5.96	122.32	110.40
7	AU	9	ARG	NE-CZ-NH2	5.96	123.28	120.30
11	B2	60	A	N7-C8-N9	-5.96	110.82	113.80
38	A1	2173	U	P-O3'-C3'	5.96	126.85	119.70
38	A1	2253	G	N9-C4-C5	-5.96	103.02	105.40
38	A1	2334	G	C4-C5-C6	5.96	122.38	118.80
3	Af	42	ARG	NH1-CZ-NH2	5.96	125.95	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	49	C	O4'-C1'-N1	5.96	112.97	108.20
11	B2	160	C	C4'-C3'-C2'	-5.96	96.64	102.60
11	B2	194	C	C2-N3-C4	-5.96	116.92	119.90
11	B2	754	G	O4'-C1'-N9	5.96	112.97	108.20
11	B2	1159	U	N3-C4-C5	5.96	118.18	114.60
11	B2	1427	C	O4'-C1'-N1	5.96	112.97	108.20
11	B2	1485	G	N3-C2-N2	5.96	124.07	119.90
13	BA	194	PRO	N-CA-CB	5.96	110.45	103.30
38	A1	100	C	N3-C4-C5	-5.96	119.52	121.90
38	A1	125	C	N1-C2-O2	5.96	122.48	118.90
38	A1	528	G	P-O3'-C3'	5.96	126.85	119.70
38	A1	761	U	C4-C5-C6	5.96	123.28	119.70
38	A1	1021	G	C5'-C4'-O4'	5.96	116.25	109.10
38	A1	1919	A	N3-C4-C5	-5.96	122.63	126.80
38	A1	2262	C	N3-C4-C5	-5.96	119.52	121.90
38	A1	2903	U	N3-C4-O4	5.96	123.57	119.40
11	B2	225	U	O4'-C1'-N1	5.96	112.97	108.20
11	B2	727	G	OP1-P-OP2	-5.96	110.67	119.60
11	B2	1046	G	O4'-C1'-N9	5.96	112.97	108.20
11	B2	1290	U	C5-C6-N1	5.96	125.68	122.70
11	B2	1440	G	O4'-C4'-C3'	-5.96	98.04	104.00
38	A1	343	C	C2-N3-C4	5.96	122.88	119.90
38	A1	792	A	C6-N1-C2	5.96	122.17	118.60
38	A1	1385	C	N3-C2-O2	5.96	126.07	121.90
38	A1	1411	G	C5-N7-C8	5.96	107.28	104.30
38	A1	2197	U	N3-C4-C5	-5.96	111.03	114.60
40	A5	8	ARG	NE-CZ-NH2	-5.96	117.32	120.30
38	A1	721	G	C2-N3-C4	5.96	114.88	111.90
38	A1	744	G	C5-C6-O6	-5.96	125.03	128.60
38	A1	786	G	C6-C5-N7	-5.96	126.83	130.40
38	A1	1096	A	C8-N9-C4	-5.96	103.42	105.80
38	A1	1396	A	P-O3'-C3'	5.96	126.85	119.70
38	A1	1709	C	C3'-C2'-C1'	5.96	106.26	101.50
38	A1	1921	U	C4-C5-C6	-5.96	116.13	119.70
38	A1	2363	G	C5-C6-N1	-5.96	108.52	111.50
11	B2	151	G	N3-C4-N9	-5.95	122.43	126.00
11	B2	884	G	N1-C2-N3	-5.95	120.33	123.90
11	B2	919	U	C6-N1-C1'	-5.95	112.86	121.20
11	B2	1367	C	N3-C2-O2	5.95	126.07	121.90
11	B2	1446	G	N3-C2-N2	5.95	124.07	119.90
38	A1	320	C	O4'-C1'-N1	5.95	112.96	108.20
38	A1	769	G	O4'-C1'-N9	5.95	112.96	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	A1	872	G	N3-C2-N2	-5.95	115.73	119.90
38	A1	922	C	C2-N3-C4	5.95	122.88	119.90
38	A1	1735	G	P-O5'-C5'	5.95	130.42	120.90
38	A1	2428	C	C4'-C3'-C2'	-5.95	96.65	102.60
38	A1	2584	A	C6-N1-C2	-5.95	115.03	118.60
38	A1	2948	A	N1-C2-N3	5.95	132.28	129.30
39	A3	93	G	C5-C6-O6	-5.95	125.03	128.60
10	B1	32	A	C4-C5-C6	5.95	119.98	117.00
38	A1	675	G	C5-C6-O6	-5.95	125.03	128.60
38	A1	684	G	C5-N7-C8	5.95	107.28	104.30
38	A1	2199	U	N3-C4-O4	5.95	123.57	119.40
38	A1	2326	C	O4'-C1'-N1	5.95	112.96	108.20
38	A1	2662	G	C8-N9-C4	-5.95	104.02	106.40
52	AH	19	PRO	N-CA-C	5.95	127.58	112.10
10	B1	49	C	O4'-C1'-N1	5.95	112.96	108.20
11	B2	821	G	C6-C5-N7	-5.95	126.83	130.40
11	B2	974	G	C6-N1-C2	-5.95	121.53	125.10
11	B2	985	C	C4'-C3'-C2'	5.95	108.55	102.60
11	B2	1347	U	O4'-C1'-N1	5.95	112.96	108.20
38	A1	186	A	C5-N7-C8	5.95	106.88	103.90
38	A1	455	G	C2-N3-C4	5.95	114.88	111.90
38	A1	741	G	C4-C5-N7	-5.95	108.42	110.80
38	A1	884	C	C6-N1-C2	-5.95	117.92	120.30
38	A1	1168	A	C8-N9-C4	-5.95	103.42	105.80
38	A1	1803	U	N3-C2-O2	-5.95	118.03	122.20
38	A1	2028	G	C2-N3-C4	5.95	114.88	111.90
38	A1	2384	G	N3-C4-N9	5.95	129.57	126.00
38	A1	2488	C	N3-C2-O2	-5.95	117.73	121.90
38	A1	2792	G	N3-C2-N2	5.95	124.06	119.90
10	B1	54	G	C8-N9-C4	-5.95	104.02	106.40
11	B2	201	G	C5-C6-O6	-5.95	125.03	128.60
11	B2	355	C	C4'-C3'-C2'	-5.95	96.65	102.60
11	B2	570	G	C4-C5-C6	5.95	122.37	118.80
11	B2	810	G	N7-C8-N9	-5.95	110.12	113.10
11	B2	922	G	N7-C8-N9	-5.95	110.13	113.10
11	B2	1257	U	N3-C2-O2	5.95	126.36	122.20
34	BV	72	TYR	CB-CG-CD2	-5.95	117.43	121.00
38	A1	1084	G	C2-N3-C4	5.95	114.87	111.90
38	A1	1415	C	C1'-O4'-C4'	5.95	114.66	109.90
38	A1	1477	C	C5-C6-N1	5.95	123.97	121.00
38	A1	1768	C	C2-N3-C4	-5.95	116.93	119.90
38	A1	2617	G	C5-C6-O6	5.95	132.17	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2694	C	P-O3'-C3'	-5.95	112.56	119.70
38	A1	2737	G	C6-N1-C2	5.95	128.67	125.10
38	A1	2868	C	O4'-C1'-N1	5.95	112.96	108.20
38	A1	3036	C	O4'-C4'-C3'	-5.95	98.05	104.00
49	Ae	53	LYS	N-CA-CB	5.95	121.31	110.60
10	B1	49	C	C5-C6-N1	5.95	123.97	121.00
11	B2	621	G	C5-C6-O6	-5.95	125.03	128.60
11	B2	1216	A	O4'-C1'-N9	5.95	112.96	108.20
35	BW	36	ARG	NE-CZ-NH1	-5.95	117.33	120.30
38	A1	269	C	N1-C2-O2	-5.95	115.33	118.90
38	A1	602	G	C6-N1-C2	-5.95	121.53	125.10
38	A1	1505	G	N1-C2-N3	-5.95	120.33	123.90
38	A1	1845	C	N3-C4-N4	5.95	122.16	118.00
38	A1	1937	A	C2-N3-C4	5.95	113.57	110.60
11	B2	729	G	C5-C6-N1	-5.95	108.53	111.50
11	B2	1060	G	C5'-C4'-O4'	5.95	116.23	109.10
32	BT	41	THR	CA-CB-OG1	5.95	121.48	109.00
34	BV	89	ARG	NE-CZ-NH1	5.95	123.27	120.30
38	A1	11	G	C8-N9-C1'	-5.95	119.27	127.00
38	A1	122	G	C8-N9-C4	-5.95	104.02	106.40
38	A1	223	U	O4'-C4'-C3'	-5.95	98.06	104.00
38	A1	502	G	O4'-C1'-N9	5.95	112.96	108.20
38	A1	802	G	N3-C4-C5	-5.95	125.63	128.60
38	A1	833	G	O4'-C1'-N9	5.95	112.96	108.20
38	A1	1016	C	N3-C4-C5	-5.95	119.52	121.90
38	A1	2306	C	C2-N3-C4	5.95	122.87	119.90
38	A1	2469	G	C4-C5-C6	5.95	122.37	118.80
38	A1	2492	G	C4-C5-N7	5.95	113.18	110.80
38	A1	2560	G	N1-C2-N3	-5.95	120.33	123.90
38	A1	2579	G	C5-C6-O6	-5.95	125.03	128.60
38	A1	2791	C	N3-C4-N4	5.95	122.16	118.00
39	A3	79	U	P-O3'-C3'	5.95	126.83	119.70
11	B2	574	A	C5-N7-C8	5.94	106.87	103.90
11	B2	1112	G	N3-C4-C5	5.94	131.57	128.60
11	B2	1178	C	N3-C4-N4	5.94	122.16	118.00
38	A1	135	U	C5-C4-O4	-5.94	122.33	125.90
38	A1	1169	G	N1-C6-O6	5.94	123.47	119.90
38	A1	1250	A	C4-C5-C6	5.94	119.97	117.00
50	AF	122	ALA	CB-CA-C	-5.94	101.18	110.10
11	B2	274	G	C6-C5-N7	-5.94	126.83	130.40
11	B2	777	G	N7-C8-N9	5.94	116.07	113.10
11	B2	856	G	C5-C6-O6	-5.94	125.03	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	883	G	O5'-P-OP1	-5.94	100.35	105.70
11	B2	896	A	C2-N3-C4	5.94	113.57	110.60
11	B2	976	A	N9-C4-C5	5.94	108.18	105.80
11	B2	1002	G	C8-N9-C4	5.94	108.78	106.40
11	B2	1485	G	C6-N1-C2	5.94	128.67	125.10
38	A1	619	G	O4'-C1'-N9	5.94	112.95	108.20
38	A1	1027	A	C5-N7-C8	5.94	106.87	103.90
38	A1	1102	C	C2-N3-C4	5.94	122.87	119.90
38	A1	1982	C	N3-C2-O2	-5.94	117.74	121.90
38	A1	1984	G	N3-C2-N2	5.94	124.06	119.90
38	A1	2045	C	C2-N3-C4	5.94	122.87	119.90
38	A1	2096	G	C4-C5-C6	5.94	122.36	118.80
38	A1	2177	A	C5-N7-C8	5.94	106.87	103.90
39	A3	75	G	C8-N9-C4	5.94	108.78	106.40
11	B2	392	G	N1-C2-N3	-5.94	120.34	123.90
11	B2	615	G	N7-C8-N9	5.94	116.07	113.10
11	B2	679	G	N9-C4-C5	5.94	107.78	105.40
11	B2	798	U	N1-C1'-C2'	-5.94	105.47	112.00
11	B2	939	C	N3-C4-C5	-5.94	119.52	121.90
11	B2	1343	C	N3-C2-O2	5.94	126.06	121.90
38	A1	270	C	O4'-C4'-C3'	-5.94	98.06	104.00
38	A1	2226	G	C2-N3-C4	5.94	114.87	111.90
38	A1	2784	A	C6-C5-N7	-5.94	128.14	132.30
38	A1	296	G	N3-C4-N9	5.94	129.56	126.00
38	A1	382	G	C5-C6-N1	-5.94	108.53	111.50
38	A1	994	G	N7-C8-N9	-5.94	110.13	113.10
38	A1	1224	A	C8-N9-C4	-5.94	103.42	105.80
38	A1	1655	G	N1-C2-N3	-5.94	120.34	123.90
38	A1	2429	G	C6-C5-N7	-5.94	126.84	130.40
11	B2	160	C	O5'-C5'-C4'	-5.94	100.42	111.70
11	B2	264	C	N3-C4-N4	5.94	122.16	118.00
11	B2	408	C	N3-C4-C5	-5.94	119.53	121.90
11	B2	435	A	C4-C5-N7	-5.94	107.73	110.70
11	B2	893	U	P-O3'-C3'	5.94	126.83	119.70
11	B2	1103	G	N7-C8-N9	-5.94	110.13	113.10
11	B2	1167	C	C4'-C3'-C2'	-5.94	96.66	102.60
11	B2	1331	G	P-O3'-C3'	-5.94	112.58	119.70
14	BB	51	ARG	NE-CZ-NH1	5.94	123.27	120.30
38	A1	19	G	C2-N3-C4	5.94	114.87	111.90
38	A1	54	G	N3-C2-N2	5.94	124.06	119.90
38	A1	313	U	P-O3'-C3'	5.94	126.83	119.70
38	A1	468	A	C6-C5-N7	-5.94	128.14	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	654	C	N1-C2-O2	-5.94	115.34	118.90
38	A1	708	A	C4-C5-N7	-5.94	107.73	110.70
38	A1	1889	G	N3-C4-N9	5.94	129.56	126.00
38	A1	2119	C	N3-C4-C5	-5.94	119.53	121.90
38	A1	2187	C	C4-C5-C6	5.94	120.37	117.40
38	A1	2261	C	P-O5'-C5'	-5.94	111.40	120.90
38	A1	2563	A	C5-C6-N6	-5.94	118.95	123.70
38	A1	2565	A	O4'-C1'-N9	5.94	112.95	108.20
38	A1	2712	G	O3'-P-O5'	-5.94	92.72	104.00
38	A1	2732	U	N1-C2-N3	5.94	118.46	114.90
39	A3	13	C	C2-N3-C4	5.94	122.87	119.90
11	B2	212	G	N3-C4-N9	5.94	129.56	126.00
11	B2	853	G	C5-N7-C8	-5.94	101.33	104.30
11	B2	1020	G	C4-C5-C6	5.94	122.36	118.80
11	B2	1245	C	C4-C5-C6	5.94	120.37	117.40
11	B2	1441	G	N1-C2-N3	-5.94	120.34	123.90
38	A1	13	U	C5-C4-O4	-5.94	122.34	125.90
38	A1	219	G	N3-C2-N2	5.94	124.06	119.90
38	A1	855	G	N7-C8-N9	5.94	116.07	113.10
38	A1	1091	G	C6-N1-C2	-5.94	121.54	125.10
39	A3	89	G	N1-C6-O6	5.94	123.46	119.90
59	AL	42	ARG	NH1-CZ-NH2	5.94	125.93	119.40
11	B2	262	G	C2'-C3'-O3'	5.93	123.19	113.70
11	B2	1109	C	C5-C6-N1	-5.93	118.03	121.00
11	B2	1196	A	C2-N3-C4	5.93	113.57	110.60
11	B2	1417	A	O4'-C1'-N9	5.93	112.95	108.20
19	BG	77	ASP	CB-CG-OD1	-5.93	112.96	118.30
38	A1	1699	U	O4'-C4'-C3'	-5.93	98.07	104.00
38	A1	2033	G	O4'-C1'-C2'	-5.93	99.86	105.80
38	A1	2187	C	N3-C2-O2	5.93	126.05	121.90
38	A1	2299	G	C6-C5-N7	-5.93	126.84	130.40
38	A1	2471	A	C5-C6-N6	-5.93	118.95	123.70
38	A1	2881	G	C4-C5-C6	5.93	122.36	118.80
11	B2	288	G	N3-C2-N2	5.93	124.05	119.90
11	B2	298	C	C5-C4-N4	-5.93	116.05	120.20
11	B2	645	G	C4-C5-C6	5.93	122.36	118.80
11	B2	886	G	C8-N9-C4	-5.93	104.03	106.40
11	B2	966	G	C5-C6-O6	-5.93	125.04	128.60
38	A1	117	A	O4'-C4'-C3'	-5.93	98.07	104.00
38	A1	178	G	N1-C2-N3	-5.93	120.34	123.90
38	A1	284	U	O4'-C1'-N1	5.93	112.95	108.20
38	A1	874	U	C5-C4-O4	-5.93	122.34	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1056	C	C2-N3-C4	5.93	122.87	119.90
38	A1	1211	C	P-O3'-C3'	-5.93	112.58	119.70
38	A1	1482	G	C4-N9-C1'	5.93	134.21	126.50
38	A1	2388	U	N3-C2-O2	5.93	126.35	122.20
38	A1	2746	G	C4-C5-C6	5.93	122.36	118.80
11	B2	1021	C	C5-C6-N1	-5.93	118.03	121.00
38	A1	16	G	N1-C2-N3	-5.93	120.34	123.90
38	A1	541	A	C4-C5-C6	5.93	119.97	117.00
38	A1	964	C	N3-C4-C5	-5.93	119.53	121.90
38	A1	1415	C	C4-C5-C6	5.93	120.37	117.40
38	A1	2053	G	C5-C6-O6	-5.93	125.04	128.60
38	A1	2490	C	O4'-C1'-N1	5.93	112.94	108.20
38	A1	2814	U	O4'-C1'-N1	5.93	112.94	108.20
38	A1	2891	A	C2-N3-C4	5.93	113.56	110.60
65	AV	56	TYR	N-CA-CB	5.93	121.28	110.60
11	B2	217	C	P-O3'-C3'	-5.93	112.58	119.70
11	B2	288	G	C4-C5-C6	5.93	122.36	118.80
11	B2	646	U	N3-C4-O4	5.93	123.55	119.40
11	B2	1144	G	C5'-C4'-C3'	5.93	125.49	116.00
11	B2	1468	A	C8-N9-C4	5.93	108.17	105.80
38	A1	1557	G	C4'-C3'-C2'	-5.93	96.67	102.60
38	A1	1709	C	C5-C4-N4	-5.93	116.05	120.20
38	A1	1722	G	C4-N9-C1'	5.93	134.21	126.50
38	A1	1773	C	N3-C4-N4	5.93	122.15	118.00
38	A1	1823	A	C6-C5-N7	-5.93	128.15	132.30
38	A1	2129	G	N3-C2-N2	5.93	124.05	119.90
38	A1	2987	U	N3-C4-C5	-5.93	111.04	114.60
11	B2	452	G	N3-C2-N2	5.93	124.05	119.90
38	A1	410	C	O4'-C1'-N1	5.93	112.94	108.20
38	A1	1361	G	OP1-P-OP2	-5.93	110.71	119.60
38	A1	2430	C	C4-C5-C6	5.93	120.36	117.40
38	A1	2723	G	C4-C5-C6	5.93	122.36	118.80
38	A1	2895	G	C8-N9-C4	-5.93	104.03	106.40
11	B2	440	C	C6-N1-C2	-5.93	117.93	120.30
11	B2	518	U	C1'-O4'-C4'	5.93	114.64	109.90
11	B2	557	G	O4'-C1'-N9	5.93	112.94	108.20
11	B2	560	A	C4'-C3'-C2'	-5.93	96.67	102.60
11	B2	766	G	C8-N9-C4	-5.93	104.03	106.40
18	BF	82	ARG	NE-CZ-NH1	5.93	123.26	120.30
21	BI	61	TYR	CB-CG-CD2	-5.93	117.44	121.00
38	A1	633	A	C4-C5-C6	5.93	119.96	117.00
38	A1	1005	G	P-O5'-C5'	-5.93	111.42	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2338	A	O4'-C1'-C2'	-5.93	99.87	105.80
38	A1	2364	G	C5-C6-O6	-5.93	125.04	128.60
38	A1	2562	G	C2-N3-C4	-5.93	108.94	111.90
38	A1	2831	G	N7-C8-N9	-5.93	110.14	113.10
11	B2	224	A	C5-C6-N1	-5.92	114.74	117.70
11	B2	304	C	O4'-C4'-C3'	-5.92	98.08	104.00
11	B2	372	G	N3-C2-N2	5.92	124.05	119.90
11	B2	446	G	N3-C2-N2	5.92	124.05	119.90
11	B2	628	G	N1-C2-N3	-5.92	120.34	123.90
11	B2	666	G	O4'-C1'-N9	5.92	112.94	108.20
11	B2	1245	C	P-O5'-C5'	-5.92	111.42	120.90
38	A1	113	C	N1-C2-O2	5.92	122.45	118.90
38	A1	147	C	C6-N1-C1'	5.92	127.91	120.80
38	A1	430	A	N1-C2-N3	5.92	132.26	129.30
38	A1	710	G	O4'-C4'-C3'	-5.92	98.08	104.00
38	A1	1008	U	C1'-O4'-C4'	5.92	114.64	109.90
38	A1	1059	C	C4-C5-C6	5.92	120.36	117.40
38	A1	1127	C	N3-C4-C5	-5.92	119.53	121.90
38	A1	1380	G	O4'-C4'-C3'	-5.92	98.08	104.00
38	A1	1468	G	N1-C2-N3	-5.92	120.34	123.90
38	A1	1488	C	C6-N1-C2	5.92	122.67	120.30
38	A1	1744	A	C5'-C4'-O4'	5.92	116.21	109.10
38	A1	1746	C	N3-C4-N4	5.92	122.15	118.00
38	A1	2364	G	C5-N7-C8	5.92	107.26	104.30
38	A1	2683	G	C4-C5-N7	-5.92	108.43	110.80
39	A3	51	U	C4'-C3'-C2'	-5.92	96.68	102.60
39	A3	55	G	C4-C5-C6	5.92	122.36	118.80
54	AI	28	VAL	CA-CB-CG1	5.92	119.79	110.90
11	B2	592	G	C5-C6-N1	-5.92	108.54	111.50
11	B2	954	G	O4'-C1'-N9	5.92	112.94	108.20
11	B2	1046	G	N3-C2-N2	5.92	124.05	119.90
38	A1	659	U	P-O3'-C3'	5.92	126.81	119.70
38	A1	1104	A	C5-C6-N6	-5.92	118.96	123.70
38	A1	1325	A	C4-C5-C6	5.92	119.96	117.00
38	A1	1603	G	O3'-P-O5'	5.92	115.25	104.00
38	A1	2685	G	C4-C5-C6	5.92	122.35	118.80
6	AT	41	ARG	NE-CZ-NH2	-5.92	117.34	120.30
11	B2	443	C	C5-C6-N1	5.92	123.96	121.00
11	B2	892	C	C4'-C3'-C2'	5.92	108.52	102.60
11	B2	1005	G	N3-C2-N2	5.92	124.05	119.90
11	B2	1468	A	C5-C6-N1	-5.92	114.74	117.70
19	BG	53	LYS	O-C-N	-5.92	113.22	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BM	101	ALA	N-CA-CB	5.92	118.39	110.10
38	A1	102	A	C5'-C4'-C3'	5.92	125.47	116.00
38	A1	410	C	C2-N3-C4	5.92	122.86	119.90
38	A1	437	G	O4'-C1'-N9	5.92	112.94	108.20
38	A1	491	G	P-O3'-C3'	5.92	126.81	119.70
38	A1	707	U	C2-N1-C1'	5.92	124.81	117.70
38	A1	928	A	C5-C6-N6	-5.92	118.96	123.70
38	A1	1299	C	N3-C4-N4	5.92	122.14	118.00
38	A1	2385	G	P-O3'-C3'	5.92	126.81	119.70
38	A1	2392	A	C6-C5-N7	-5.92	128.16	132.30
48	AE	63	LYS	N-CA-CB	5.92	121.26	110.60
11	B2	1236	G	C4-C5-C6	5.92	122.35	118.80
38	A1	410	C	C6-N1-C1'	-5.92	113.70	120.80
38	A1	741	G	C2-N3-C4	5.92	114.86	111.90
38	A1	2238	G	C8-N9-C4	-5.92	104.03	106.40
11	B2	219	C	C5-C4-N4	-5.92	116.06	120.20
11	B2	534	G	C2-N3-C4	5.92	114.86	111.90
11	B2	957	A	O4'-C1'-N9	5.92	112.94	108.20
11	B2	1082	A	C6-C5-N7	-5.92	128.16	132.30
11	B2	1460	G	N1-C6-O6	5.92	123.45	119.90
38	A1	506	G	C4-C5-N7	5.92	113.17	110.80
38	A1	903	C	N1-C2-O2	-5.92	115.35	118.90
38	A1	1131	G	N9-C4-C5	-5.92	103.03	105.40
38	A1	1510	U	N3-C4-O4	5.92	123.54	119.40
38	A1	2116	G	N7-C8-N9	-5.92	110.14	113.10
38	A1	2530	G	C5-C6-N1	5.92	114.46	111.50
38	A1	2833	G	C8-N9-C4	5.92	108.77	106.40
38	A1	2959	A	C4'-C3'-C2'	-5.92	96.68	102.60
4	AQ	88	ARG	CB-CA-C	5.92	122.23	110.40
11	B2	617	A	C5-C6-N6	-5.92	118.97	123.70
11	B2	1009	G	N7-C8-N9	-5.92	110.14	113.10
17	BE	23	ARG	NH1-CZ-NH2	-5.92	112.89	119.40
28	BP	52	PHE	N-CA-CB	5.92	121.25	110.60
38	A1	148	C	O4'-C1'-N1	5.92	112.93	108.20
38	A1	234	G	C4-C5-C6	5.92	122.35	118.80
38	A1	637	G	N1-C2-N2	-5.92	110.88	116.20
38	A1	758	C	C5-C6-N1	5.92	123.96	121.00
38	A1	942	U	C1'-O4'-C4'	-5.92	105.17	109.90
38	A1	1166	A	N1-C2-N3	-5.92	126.34	129.30
38	A1	1734	G	C6-C5-N7	-5.92	126.85	130.40
38	A1	2255	C	C6-N1-C1'	-5.92	113.70	120.80
38	A1	2447	A	C4-C5-C6	5.92	119.96	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2653	G	N3-C2-N2	5.92	124.04	119.90
38	A1	2758	G	C4-N9-C1'	-5.92	118.81	126.50
38	A1	2860	G	C5-C6-N1	-5.92	108.54	111.50
50	AF	54	VAL	CA-CB-CG2	-5.92	102.02	110.90
11	B2	311	A	N9-C4-C5	5.92	108.17	105.80
11	B2	582	G	C8-N9-C4	-5.92	104.03	106.40
11	B2	1335	A	C5-C6-N6	-5.92	118.97	123.70
17	BE	52	TYR	CZ-CE2-CD2	-5.92	114.48	119.80
38	A1	389	C	C4'-C3'-C2'	-5.92	96.69	102.60
38	A1	481	G	C4-C5-N7	-5.92	108.43	110.80
38	A1	489	G	N7-C8-N9	5.92	116.06	113.10
38	A1	876	C	N1-C2-O2	5.92	122.45	118.90
38	A1	2008	G	P-O3'-C3'	-5.92	112.60	119.70
38	A1	2257	A	C2-N3-C4	-5.92	107.64	110.60
38	A1	2945	A	C5-C6-N6	-5.92	118.97	123.70
38	A1	3033	G	C5-N7-C8	5.92	107.26	104.30
9	AX	268	ASN	CB-CG-OD1	-5.91	109.77	121.60
11	B2	127	G	O4'-C1'-N9	5.91	112.93	108.20
11	B2	189	C	C5'-C4'-O4'	5.91	116.20	109.10
11	B2	642	G	C4-C5-N7	-5.91	108.43	110.80
11	B2	1297	G	N1-C2-N3	-5.91	120.35	123.90
11	B2	1374	C	C2-N1-C1'	5.91	125.30	118.80
11	B2	1402	C	O4'-C1'-N1	5.91	112.93	108.20
11	B2	1412	A	C4-C5-N7	-5.91	107.74	110.70
11	B2	1444	G	C5-C6-N1	-5.91	108.54	111.50
38	A1	378	G	C5'-C4'-O4'	5.91	116.20	109.10
38	A1	1401	G	N1-C2-N3	-5.91	120.35	123.90
38	A1	2191	U	N1-C2-N3	-5.91	111.35	114.90
38	A1	2193	G	C5-C6-O6	-5.91	125.05	128.60
38	A1	2217	C	C4'-C3'-C2'	5.91	108.51	102.60
38	A1	2294	A	C1'-O4'-C4'	5.91	114.63	109.90
38	A1	2782	A	C4-C5-N7	-5.91	107.74	110.70
53	Ah	21	ARG	NE-CZ-NH1	5.91	123.26	120.30
11	B2	136	A	O4'-C1'-N9	5.91	112.93	108.20
38	A1	196	A	N7-C8-N9	-5.91	110.84	113.80
38	A1	293	G	N3-C4-C5	-5.91	125.64	128.60
38	A1	694	A	C5'-C4'-C3'	-5.91	106.54	116.00
9	AX	219	VAL	CB-CA-C	-5.91	100.17	111.40
11	B2	56	A	C5-C6-N6	-5.91	118.97	123.70
11	B2	82	G	C4-C5-C6	-5.91	115.25	118.80
11	B2	595	U	O4'-C1'-N1	5.91	112.93	108.20
11	B2	968	C	P-O3'-C3'	5.91	126.79	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1058	G	C8-N9-C4	-5.91	104.04	106.40
11	B2	1228	A	N7-C8-N9	5.91	116.75	113.80
38	A1	80	G	N7-C8-N9	-5.91	110.14	113.10
38	A1	696	G	C4'-C3'-C2'	-5.91	96.69	102.60
38	A1	1083	G	C5-C6-O6	-5.91	125.05	128.60
38	A1	1119	A	N7-C8-N9	5.91	116.76	113.80
38	A1	2002	A	C8-N9-C4	-5.91	103.44	105.80
38	A1	2006	C	C6-N1-C2	-5.91	117.94	120.30
38	A1	2465	A	C4-C5-C6	5.91	119.95	117.00
38	A1	2630	C	C2-N3-C4	5.91	122.86	119.90
58	Ak	151	ARG	NE-CZ-NH2	-5.91	117.34	120.30
5	AS	54	VAL	CA-CB-CG2	-5.91	102.04	110.90
9	AX	29	TRP	CG-CD2-CE3	-5.91	128.58	133.90
11	B2	92	G	C1'-O4'-C4'	-5.91	105.17	109.90
11	B2	201	G	N3-C4-C5	-5.91	125.65	128.60
11	B2	427	G	C8-N9-C4	5.91	108.76	106.40
11	B2	886	G	N9-C4-C5	5.91	107.76	105.40
11	B2	1068	C	C4'-C3'-C2'	-5.91	96.69	102.60
11	B2	1235	A	C6-N1-C2	-5.91	115.06	118.60
11	B2	1387	C	N1-C2-N3	-5.91	115.06	119.20
38	A1	302	U	C4-C5-C6	-5.91	116.16	119.70
38	A1	967	G	N3-C2-N2	5.91	124.04	119.90
38	A1	1272	A	O4'-C1'-N9	5.91	112.93	108.20
38	A1	1342	G	N7-C8-N9	5.91	116.06	113.10
38	A1	2497	G	C5-N7-C8	5.91	107.25	104.30
38	A1	2573	C	C1'-O4'-C4'	5.91	114.63	109.90
41	AA	58	LYS	CB-CA-C	-5.91	98.58	110.40
41	AA	119	ARG	NE-CZ-NH1	-5.91	117.35	120.30
11	B2	369	A	P-O5'-C5'	5.91	130.35	120.90
11	B2	437	A	N7-C8-N9	-5.91	110.85	113.80
11	B2	1178	C	C2-N3-C4	5.91	122.85	119.90
38	A1	982	G	C6-N1-C2	5.91	128.64	125.10
38	A1	1614	U	N1-C2-O2	-5.91	118.67	122.80
38	A1	2499	U	C5-C4-O4	-5.91	122.36	125.90
38	A1	2504	U	C5-C4-O4	-5.91	122.36	125.90
38	A1	2727	C	C4-C5-C6	5.91	120.35	117.40
39	A3	89	G	C2'-C3'-O3'	5.91	123.15	113.70
11	B2	267	C	P-O5'-C5'	5.91	130.35	120.90
11	B2	1057	A	C4'-C3'-C2'	-5.91	96.69	102.60
38	A1	80	G	N9-C4-C5	-5.91	103.04	105.40
38	A1	898	G	N9-C4-C5	5.91	107.76	105.40
38	A1	933	G	C6-C5-N7	-5.91	126.86	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	955	A	N9-C4-C5	5.91	108.16	105.80
38	A1	1471	G	C4-C5-C6	-5.91	115.26	118.80
38	A1	1611	C	C5-C4-N4	-5.91	116.07	120.20
38	A1	1809	G	C5'-C4'-O4'	5.91	116.19	109.10
38	A1	1827	A	C5-C6-N6	-5.91	118.98	123.70
38	A1	2136	G	C6-C5-N7	-5.91	126.86	130.40
38	A1	2366	G	C6-N1-C2	5.91	128.64	125.10
38	A1	2580	G	C2-N3-C4	-5.91	108.95	111.90
39	A3	3	G	N9-C4-C5	-5.91	103.04	105.40
11	B2	1	A	C5-C6-N6	-5.90	118.98	123.70
11	B2	1198	A	C5-C6-N6	-5.90	118.98	123.70
11	B2	1230	G	C6-N1-C2	5.90	128.64	125.10
38	A1	551	A	C4-C5-N7	-5.90	107.75	110.70
38	A1	1133	U	O4'-C1'-N1	5.90	112.92	108.20
38	A1	1816	C	C2-N3-C4	5.90	122.85	119.90
38	A1	1916	U	C5-C4-O4	5.90	129.44	125.90
38	A1	2247	G	C3'-C2'-C1'	5.90	106.22	101.50
38	A1	2714	G	O4'-C1'-N9	5.90	112.92	108.20
59	AL	34	ARG	NE-CZ-NH2	-5.90	117.35	120.30
10	B1	6	G	C6-N1-C2	5.90	128.64	125.10
11	B2	1309	A	C8-N9-C4	5.90	108.16	105.80
38	A1	30	G	N3-C4-C5	-5.90	125.65	128.60
38	A1	84	A	O5'-P-OP1	5.90	117.78	110.70
38	A1	440	A	N1-C6-N6	5.90	122.14	118.60
38	A1	1010	G	C6-C5-N7	-5.90	126.86	130.40
38	A1	1257	G	C8-N9-C1'	-5.90	119.33	127.00
38	A1	1659	G	C5-C6-N1	-5.90	108.55	111.50
38	A1	1873	G	O4'-C1'-C2'	5.90	112.91	107.60
38	A1	1946	G	N1-C6-O6	5.90	123.44	119.90
38	A1	2105	A	N1-C2-N3	5.90	132.25	129.30
38	A1	2183	A	C5-C6-N6	-5.90	118.98	123.70
38	A1	2201	C	C6-N1-C2	-5.90	117.94	120.30
39	A3	104	C	C5-C4-N4	-5.90	116.07	120.20
66	AY	12	ARG	CG-CD-NE	-5.90	99.41	111.80
10	B1	70	C	N3-C4-N4	5.90	122.13	118.00
11	B2	923	A	C5-N7-C8	-5.90	100.95	103.90
11	B2	1009	G	C5-N7-C8	5.90	107.25	104.30
38	A1	471	U	C5-C6-N1	5.90	125.65	122.70
38	A1	2021	G	C6-C5-N7	-5.90	126.86	130.40
38	A1	2224	G	C6-C5-N7	-5.90	126.86	130.40
38	A1	2657	A	C8-N9-C4	-5.90	103.44	105.80
38	A1	2738	G	C2-N3-C4	5.90	114.85	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	3033	G	N3-C2-N2	5.90	124.03	119.90
11	B2	21	A	C8-N9-C4	5.90	108.16	105.80
11	B2	251	G	N1-C2-N2	-5.90	110.89	116.20
38	A1	1067	G	N3-C4-C5	-5.90	125.65	128.60
38	A1	2106	G	C1'-O4'-C4'	-5.90	105.18	109.90
11	B2	257	U	O4'-C1'-N1	5.90	112.92	108.20
11	B2	300	G	C2-N3-C4	5.90	114.85	111.90
11	B2	871	A	C4-C5-C6	5.90	119.95	117.00
11	B2	1228	A	O4'-C1'-N9	5.90	112.92	108.20
11	B2	1440	G	N7-C8-N9	-5.90	110.15	113.10
38	A1	395	G	C4-C5-N7	5.90	113.16	110.80
38	A1	1105	C	C5'-C4'-O4'	5.90	116.18	109.10
38	A1	1549	C	C2-N3-C4	5.90	122.85	119.90
38	A1	2849	C	P-O3'-C3'	5.90	126.78	119.70
38	A1	2851	A	C6-N1-C2	-5.90	115.06	118.60
38	A1	2990	G	N1-C2-N2	-5.90	110.89	116.20
46	AD	104	ASP	CB-CG-OD1	5.90	123.61	118.30
11	B2	259	A	O4'-C1'-N9	5.90	112.92	108.20
38	A1	128	C	C5-C4-N4	-5.90	116.07	120.20
38	A1	573	G	O4'-C1'-N9	5.90	112.92	108.20
38	A1	746	C	O4'-C1'-N1	5.90	112.92	108.20
38	A1	908	U	N3-C4-C5	5.90	118.14	114.60
38	A1	962	C	C5'-C4'-O4'	5.90	116.17	109.10
38	A1	971	G	C6-N1-C2	-5.90	121.56	125.10
38	A1	1833	G	C5-N7-C8	5.90	107.25	104.30
38	A1	2219	A	C3'-C2'-C1'	5.90	106.22	101.50
38	A1	2684	G	C6-N1-C2	-5.90	121.56	125.10
39	A3	20	G	O4'-C1'-N9	5.90	112.92	108.20
5	AS	43	MET	CG-SD-CE	-5.89	90.77	100.20
11	B2	340	A	P-O3'-C3'	-5.89	112.63	119.70
11	B2	1083	G	C4-C5-C6	5.89	122.34	118.80
11	B2	1128	U	P-O5'-C5'	5.89	130.33	120.90
38	A1	102	A	P-O3'-C3'	5.89	126.77	119.70
38	A1	315	U	P-O5'-C5'	-5.89	111.47	120.90
38	A1	371	U	N3-C4-O4	5.89	123.53	119.40
38	A1	1015	G	OP1-P-OP2	-5.89	110.76	119.60
38	A1	1202	G	C6-C5-N7	-5.89	126.86	130.40
38	A1	1207	G	N3-C4-C5	5.89	131.55	128.60
38	A1	1445	G	N9-C4-C5	5.89	107.76	105.40
38	A1	1633	A	C4'-C3'-C2'	-5.89	96.71	102.60
38	A1	1849	A	C2-N3-C4	-5.89	107.65	110.60
38	A1	1884	C	C5-C4-N4	-5.89	116.07	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1940	U	P-O5'-C5'	-5.89	111.47	120.90
38	A1	2373	G	C3'-C2'-C1'	5.89	106.22	101.50
38	A1	2433	U	C6-N1-C2	-5.89	117.46	121.00
54	AI	125	ARG	NE-CZ-NH2	-5.89	117.35	120.30
58	Ak	147	ALA	CB-CA-C	-5.89	101.26	110.10
60	AM	11	TRP	CB-CG-CD2	-5.89	118.94	126.60
11	B2	57	G	N1-C6-O6	5.89	123.44	119.90
11	B2	744	A	C5-N7-C8	5.89	106.85	103.90
11	B2	1040	A	O4'-C1'-N9	5.89	112.91	108.20
11	B2	1242	C	P-O5'-C5'	5.89	130.33	120.90
38	A1	397	G	C6-C5-N7	-5.89	126.86	130.40
38	A1	475	U	N3-C2-O2	5.89	126.33	122.20
38	A1	583	A	C4-C5-N7	-5.89	107.75	110.70
38	A1	632	G	C8-N9-C4	5.89	108.76	106.40
38	A1	908	U	O4'-C1'-N1	5.89	112.92	108.20
38	A1	1363	C	N1-C2-O2	-5.89	115.36	118.90
38	A1	1373	C	P-O3'-C3'	5.89	126.77	119.70
38	A1	1864	G	C6-N1-C2	-5.89	121.56	125.10
38	A1	2240	G	C5-C6-N1	5.89	114.45	111.50
38	A1	2259	G	C4-C5-N7	5.89	113.16	110.80
39	A3	15	G	C8-N9-C4	-5.89	104.04	106.40
4	AQ	135	LYS	CB-CA-C	-5.89	98.62	110.40
38	A1	806	C	O4'-C1'-N1	5.89	112.91	108.20
38	A1	1552	C	N1-C1'-C2'	-5.89	105.52	112.00
38	A1	1794	C	C4-C5-C6	-5.89	114.45	117.40
11	B2	1272	G	O4'-C1'-N9	5.89	112.91	108.20
38	A1	145	C	P-O3'-C3'	5.89	126.77	119.70
38	A1	629	G	N7-C8-N9	5.89	116.04	113.10
38	A1	953	G	P-O3'-C3'	5.89	126.77	119.70
38	A1	1646	G	O4'-C1'-N9	5.89	112.91	108.20
38	A1	1864	G	N3-C4-C5	-5.89	125.66	128.60
38	A1	1878	G	N3-C2-N2	5.89	124.02	119.90
38	A1	2714	G	N3-C4-N9	-5.89	122.47	126.00
38	A1	3032	C	C4'-C3'-C2'	-5.89	96.71	102.60
11	B2	751	C	N3-C2-O2	5.89	126.02	121.90
38	A1	905	G	C6-C5-N7	-5.89	126.87	130.40
38	A1	2244	G	C5-N7-C8	-5.89	101.36	104.30
10	B1	29	C	O4'-C4'-C3'	-5.89	98.11	104.00
11	B2	738	C	C5-C4-N4	-5.89	116.08	120.20
11	B2	1335	A	C5-N7-C8	-5.89	100.96	103.90
38	A1	782	G	N3-C4-C5	5.89	131.54	128.60
38	A1	987	G	C4'-C3'-C2'	-5.89	96.71	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1385	C	C1'-O4'-C4'	-5.89	105.19	109.90
38	A1	2285	G	C4-C5-C6	5.89	122.33	118.80
38	A1	2848	C	N3-C4-N4	5.89	122.12	118.00
38	A1	2988	A	N3-C4-C5	-5.89	122.68	126.80
41	AA	1	MET	CG-SD-CE	-5.89	90.78	100.20
43	AB	220	ARG	NE-CZ-NH2	5.89	123.24	120.30
11	B2	495	G	C6-N1-C2	5.88	128.63	125.10
11	B2	866	A	C6-C5-N7	-5.88	128.18	132.30
11	B2	1311	C	N3-C2-O2	5.88	126.02	121.90
11	B2	1409	G	N9-C4-C5	-5.88	103.05	105.40
38	A1	101	G	C5-C6-O6	-5.88	125.07	128.60
38	A1	828	G	C5-C6-O6	-5.88	125.07	128.60
38	A1	1453	G	C3'-C2'-C1'	-5.88	96.79	101.50
38	A1	1454	G	N9-C1'-C2'	-5.88	105.53	112.00
38	A1	2105	A	C2-N3-C4	-5.88	107.66	110.60
38	A1	2478	G	C1'-O4'-C4'	-5.88	105.19	109.90
38	A1	3038	A	C8-N9-C4	-5.88	103.45	105.80
11	B2	393	A	C5'-C4'-C3'	-5.88	106.59	116.00
11	B2	745	G	N1-C6-O6	5.88	123.43	119.90
11	B2	853	G	C6-N1-C2	5.88	128.63	125.10
11	B2	866	A	C5-N7-C8	5.88	106.84	103.90
11	B2	919	U	P-O5'-C5'	5.88	130.31	120.90
11	B2	1277	C	N1-C2-O2	5.88	122.43	118.90
32	BT	52	ARG	NE-CZ-NH2	-5.88	117.36	120.30
38	A1	865	C	N1-C2-O2	5.88	122.43	118.90
38	A1	1159	U	N3-C4-O4	5.88	123.52	119.40
38	A1	2762	G	C5-C6-N1	5.88	114.44	111.50
38	A1	3014	U	N1-C2-O2	-5.88	118.68	122.80
11	B2	109	U	O4'-C1'-N1	5.88	112.91	108.20
11	B2	244	G	N7-C8-N9	5.88	116.04	113.10
11	B2	321	A	C2-N3-C4	5.88	113.54	110.60
11	B2	374	G	C5-C6-O6	-5.88	125.07	128.60
11	B2	451	A	P-O3'-C3'	5.88	126.76	119.70
11	B2	1449	G	O4'-C4'-C3'	-5.88	98.12	104.00
38	A1	408	C	N3-C4-C5	-5.88	119.55	121.90
38	A1	554	C	N3-C4-N4	5.88	122.12	118.00
38	A1	703	G	C5-N7-C8	5.88	107.24	104.30
38	A1	1115	A	C8-N9-C4	-5.88	103.45	105.80
38	A1	1264	G	N1-C6-O6	5.88	123.43	119.90
38	A1	1403	C	O4'-C1'-N1	5.88	112.91	108.20
38	A1	1486	G	O4'-C1'-N9	5.88	112.91	108.20
38	A1	1515	G	N9-C4-C5	-5.88	103.05	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1979	G	O4'-C1'-N9	5.88	112.91	108.20
38	A1	2879	G	C8-N9-C1'	-5.88	119.36	127.00
11	B2	1151	A	P-O3'-C3'	-5.88	112.64	119.70
11	B2	1343	C	C5-C6-N1	5.88	123.94	121.00
38	A1	112	U	P-O3'-C3'	5.88	126.76	119.70
38	A1	266	A	N9-C4-C5	5.88	108.15	105.80
38	A1	1364	C	P-O3'-C3'	-5.88	112.64	119.70
38	A1	2884	C	C6-N1-C2	5.88	122.65	120.30
38	A1	3020	G	C8-N9-C1'	-5.88	119.36	127.00
11	B2	108	G	O4'-C1'-N9	5.88	112.90	108.20
38	A1	271	G	N3-C4-N9	5.88	129.53	126.00
38	A1	459	C	N3-C2-O2	-5.88	117.78	121.90
38	A1	644	G	N3-C4-C5	5.88	131.54	128.60
38	A1	725	G	N1-C2-N3	-5.88	120.37	123.90
38	A1	869	A	O4'-C1'-N9	5.88	112.90	108.20
38	A1	1517	G	C2-N3-C4	-5.88	108.96	111.90
38	A1	1540	A	C5-C6-N6	-5.88	119.00	123.70
38	A1	1862	G	C4-C5-N7	-5.88	108.45	110.80
38	A1	2008	G	C6-N1-C2	5.88	128.63	125.10
38	A1	2402	A	O4'-C1'-C2'	-5.88	99.92	105.80
38	A1	2828	G	C5-C6-O6	-5.88	125.07	128.60
10	B1	25	G	C4-C5-C6	5.88	122.33	118.80
11	B2	397	C	N3-C2-O2	-5.88	117.79	121.90
11	B2	737	C	C5'-C4'-O4'	5.88	116.15	109.10
11	B2	1320	A	C8-N9-C4	-5.88	103.45	105.80
38	A1	1258	G	C2-N3-C4	-5.88	108.96	111.90
38	A1	1356	A	C4-C5-C6	5.88	119.94	117.00
38	A1	1442	G	C5'-C4'-C3'	-5.88	106.60	116.00
38	A1	2014	A	O5'-P-OP2	5.88	117.75	110.70
38	A1	2325	C	N3-C4-C5	-5.88	119.55	121.90
38	A1	2902	G	O5'-P-OP2	-5.88	100.41	105.70
11	B2	1065	C	C2-N3-C4	5.88	122.84	119.90
38	A1	300	U	C5-C6-N1	5.88	125.64	122.70
38	A1	447	G	C8-N9-C4	-5.88	104.05	106.40
38	A1	943	G	C5'-C4'-O4'	5.88	116.15	109.10
38	A1	1108	A	C2-N3-C4	-5.88	107.66	110.60
38	A1	1178	G	N9-C4-C5	5.88	107.75	105.40
38	A1	1221	U	C2-N3-C4	-5.88	123.47	127.00
38	A1	1553	G	C5-C6-N1	5.88	114.44	111.50
38	A1	2816	C	C5-C6-N1	5.88	123.94	121.00
41	AA	170	GLU	OE1-CD-OE2	5.88	130.35	123.30
43	AB	154	MET	CG-SD-CE	-5.88	90.80	100.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	152	G	C5-C6-O6	-5.87	125.08	128.60
11	B2	344	G	C4'-C3'-C2'	-5.87	96.73	102.60
11	B2	1091	C	C1'-O4'-C4'	-5.87	105.20	109.90
38	A1	69	C	OP1-P-OP2	-5.87	110.79	119.60
38	A1	262	C	C2-N1-C1'	-5.87	112.34	118.80
38	A1	919	G	P-O3'-C3'	5.87	126.75	119.70
38	A1	1130	G	C6-C5-N7	-5.87	126.88	130.40
38	A1	1671	A	C2-N3-C4	5.87	113.54	110.60
38	A1	1966	C	C4-C5-C6	5.87	120.34	117.40
38	A1	2033	G	N1-C6-O6	5.87	123.42	119.90
38	A1	2433	U	C5-C6-N1	5.87	125.64	122.70
38	A1	2462	U	P-O3'-C3'	-5.87	112.65	119.70
38	A1	2603	A	C5-C6-N1	-5.87	114.76	117.70
38	A1	2811	U	N3-C4-C5	-5.87	111.08	114.60
38	A1	2977	G	N9-C4-C5	-5.87	103.05	105.40
39	A3	35	A	N3-C4-N9	-5.87	122.70	127.40
58	Ak	26	ALA	CB-CA-C	-5.87	101.29	110.10
11	B2	105	C	O3'-P-O5'	5.87	115.16	104.00
11	B2	151	G	C6-C5-N7	5.87	133.92	130.40
11	B2	384	G	N3-C4-N9	5.87	129.52	126.00
11	B2	500	A	N1-C2-N3	-5.87	126.36	129.30
11	B2	667	G	C2-N3-C4	-5.87	108.96	111.90
11	B2	985	C	N3-C2-O2	5.87	126.01	121.90
11	B2	1433	C	N1-C2-N3	-5.87	115.09	119.20
34	BV	50	THR	CA-CB-CG2	5.87	120.62	112.40
38	A1	15	A	N1-C2-N3	-5.87	126.36	129.30
38	A1	61	G	C5-N7-C8	5.87	107.23	104.30
38	A1	82	C	C6-N1-C2	-5.87	117.95	120.30
38	A1	878	G	C6-C5-N7	-5.87	126.88	130.40
38	A1	908	U	C2-N3-C4	-5.87	123.48	127.00
38	A1	1093	G	C5-N7-C8	-5.87	101.36	104.30
38	A1	1604	G	O4'-C1'-N9	5.87	112.90	108.20
38	A1	1651	A	C5-N7-C8	5.87	106.84	103.90
38	A1	3033	G	C5-C6-O6	-5.87	125.08	128.60
45	AC	251	ARG	NE-CZ-NH1	5.87	123.24	120.30
10	B1	35	G	O4'-C1'-C2'	5.87	112.88	107.60
38	A1	41	G	C5-C6-N1	-5.87	108.56	111.50
38	A1	568	A	C8-N9-C4	5.87	108.15	105.80
38	A1	1168	A	C4-C5-N7	-5.87	107.77	110.70
10	B1	5	C	N3-C2-O2	5.87	126.01	121.90
11	B2	841	C	C5-C4-N4	-5.87	116.09	120.20
11	B2	1274	C	C1'-O4'-C4'	5.87	114.59	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1418	G	N9-C1'-C2'	-5.87	105.55	112.00
15	BC	75	LEU	N-CA-CB	5.87	122.14	110.40
20	BH	14	GLU	C-N-CA	5.87	136.37	121.70
38	A1	7	G	C5-C6-N1	-5.87	108.57	111.50
38	A1	461	C	N3-C4-N4	5.87	122.11	118.00
38	A1	615	A	O4'-C1'-N9	5.87	112.89	108.20
38	A1	1211	C	N3-C4-C5	-5.87	119.55	121.90
38	A1	1286	G	N3-C2-N2	5.87	124.01	119.90
38	A1	1832	G	N3-C4-N9	-5.87	122.48	126.00
38	A1	1955	U	C2-N3-C4	-5.87	123.48	127.00
38	A1	2325	C	N3-C4-N4	5.87	122.11	118.00
38	A1	2890	A	O4'-C1'-C2'	-5.87	99.93	105.80
11	B2	674	C	C1'-O4'-C4'	-5.87	105.21	109.90
11	B2	887	G	O4'-C4'-C3'	-5.87	98.13	104.00
38	A1	803	A	C8-N9-C4	-5.87	103.45	105.80
38	A1	1352	U	P-O5'-C5'	-5.87	111.51	120.90
38	A1	1707	A	N1-C2-N3	5.87	132.23	129.30
60	AM	83	SER	N-CA-CB	5.87	119.30	110.50
1	A7	33	TYR	CB-CG-CD2	-5.87	117.48	121.00
11	B2	732	G	C6-N1-C2	5.87	128.62	125.10
11	B2	747	U	O4'-C1'-N1	5.87	112.89	108.20
11	B2	1423	A	C5'-C4'-C3'	5.87	125.39	116.00
38	A1	484	C	N3-C4-N4	5.87	122.11	118.00
38	A1	512	G	N3-C4-C5	5.87	131.53	128.60
38	A1	575	G	N3-C2-N2	5.87	124.01	119.90
38	A1	644	G	O4'-C1'-N9	5.87	112.89	108.20
38	A1	769	G	C5'-C4'-C3'	-5.87	106.61	116.00
38	A1	841	U	N3-C4-O4	5.87	123.51	119.40
38	A1	971	G	C4-C5-C6	5.87	122.32	118.80
38	A1	1727	G	N7-C8-N9	-5.87	110.17	113.10
38	A1	2037	A	O5'-C5'-C4'	-5.87	100.56	111.70
38	A1	2053	G	N3-C4-C5	-5.87	125.67	128.60
38	A1	2431	C	C4-C5-C6	5.87	120.33	117.40
38	A1	2754	A	N1-C2-N3	5.87	132.23	129.30
38	A1	2961	A	C2-N3-C4	5.87	113.53	110.60
11	B2	244	G	C5-N7-C8	-5.86	101.37	104.30
11	B2	638	G	N1-C2-N3	-5.86	120.38	123.90
11	B2	1182	G	N1-C2-N2	-5.86	110.92	116.20
13	BA	25	ASP	CB-CG-OD1	-5.86	113.02	118.30
14	BB	195	PHE	CB-CG-CD1	5.86	124.90	120.80
38	A1	196	A	C6-C5-N7	-5.86	128.20	132.30
38	A1	328	G	O4'-C1'-N9	5.86	112.89	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	821	U	O4'-C4'-C3'	-5.86	98.14	104.00
38	A1	1306	A	N1-C2-N3	5.86	132.23	129.30
38	A1	1651	A	C6-N1-C2	5.86	122.12	118.60
38	A1	2067	U	N1-C2-O2	-5.86	118.69	122.80
38	A1	2336	G	C8-N9-C1'	5.86	134.62	127.00
38	A1	2376	U	C3'-C2'-C1'	5.86	106.19	101.50
38	A1	2703	G	N3-C4-C5	-5.86	125.67	128.60
45	AC	321	PHE	CB-CG-CD1	5.86	124.91	120.80
46	AD	190	ARG	NE-CZ-NH1	5.86	123.23	120.30
56	AJ	135	SER	O-C-N	5.86	132.08	122.70
11	B2	1228	A	C5-C6-N6	-5.86	119.01	123.70
11	B2	1364	C	C2-N1-C1'	5.86	125.25	118.80
38	A1	1403	C	N3-C4-N4	5.86	122.10	118.00
38	A1	2255	C	O4'-C4'-C3'	-5.86	98.14	104.00
43	AB	38	GLU	CB-CG-CD	-5.86	98.37	114.20
65	AV	53	THR	O-C-N	-5.86	113.32	122.70
11	B2	235	G	N9-C4-C5	-5.86	103.06	105.40
11	B2	251	G	N3-C4-N9	5.86	129.52	126.00
11	B2	270	A	C5-C6-N6	-5.86	119.01	123.70
11	B2	995	G	N3-C4-N9	-5.86	122.48	126.00
11	B2	1278	A	C5-C6-N6	-5.86	119.01	123.70
38	A1	318	G	C1'-O4'-C4'	-5.86	105.21	109.90
38	A1	896	G	N9-C4-C5	5.86	107.74	105.40
38	A1	935	A	N1-C2-N3	5.86	132.23	129.30
38	A1	1257	G	C6-N1-C2	5.86	128.62	125.10
38	A1	1735	G	C6-N1-C2	5.86	128.62	125.10
11	B2	715	C	P-O5'-C5'	5.86	130.28	120.90
11	B2	1418	G	C2-N3-C4	-5.86	108.97	111.90
38	A1	239	G	P-O3'-C3'	-5.86	112.67	119.70
38	A1	346	U	C5-C4-O4	-5.86	122.39	125.90
38	A1	407	A	C3'-C2'-C1'	5.86	106.19	101.50
38	A1	849	C	P-O5'-C5'	-5.86	111.53	120.90
38	A1	1862	G	N7-C8-N9	5.86	116.03	113.10
39	A3	84	U	P-O3'-C3'	5.86	126.73	119.70
45	AC	42	ALA	N-CA-CB	5.86	118.30	110.10
11	B2	528	G	N3-C2-N2	5.86	124.00	119.90
11	B2	1066	C	C1'-O4'-C4'	5.86	114.59	109.90
38	A1	931	C	P-O5'-C5'	5.86	130.27	120.90
38	A1	1286	G	C5-C6-O6	-5.86	125.09	128.60
38	A1	1434	C	O4'-C1'-N1	5.86	112.89	108.20
38	A1	1826	G	O4'-C1'-N9	5.86	112.89	108.20
38	A1	1880	A	N1-C2-N3	5.86	132.23	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1915	G	N3-C2-N2	5.86	124.00	119.90
38	A1	2079	U	N3-C2-O2	-5.86	118.10	122.20
38	A1	2200	A	P-O3'-C3'	-5.86	112.67	119.70
38	A1	2279	G	C1'-O4'-C4'	-5.86	105.22	109.90
38	A1	2393	G	C4'-C3'-C2'	-5.86	96.74	102.60
38	A1	2454	G	C5'-C4'-C3'	-5.86	106.63	116.00
38	A1	2714	G	N3-C2-N2	5.86	124.00	119.90
38	A1	2879	G	O4'-C1'-N9	5.86	112.89	108.20
10	B1	18	U	N3-C4-C5	-5.86	111.09	114.60
10	B1	64	C	O5'-C5'-C4'	-5.86	100.58	111.70
11	B2	183	A	P-O3'-C3'	5.86	126.73	119.70
11	B2	548	A	O4'-C1'-N9	5.86	112.89	108.20
11	B2	1090	C	C1'-O4'-C4'	5.86	114.58	109.90
11	B2	1249	A	C2-N3-C4	5.86	113.53	110.60
11	B2	1261	U	N3-C2-O2	5.86	126.30	122.20
19	BG	97	LYS	CB-CA-C	-5.86	98.69	110.40
38	A1	51	G	N1-C2-N3	-5.86	120.39	123.90
38	A1	266	A	C6-N1-C2	5.86	122.11	118.60
38	A1	1517	G	N9-C4-C5	-5.86	103.06	105.40
38	A1	1604	G	O4'-C1'-C2'	5.86	112.87	107.60
38	A1	2032	G	C4-C5-N7	5.86	113.14	110.80
38	A1	2858	C	O4'-C1'-N1	5.86	112.88	108.20
11	B2	64	G	N1-C6-O6	5.85	123.41	119.90
11	B2	701	G	N1-C6-O6	-5.85	116.39	119.90
11	B2	1440	G	C1'-O4'-C4'	5.85	114.58	109.90
38	A1	1375	G	N7-C8-N9	-5.85	110.17	113.10
7	AU	93	TYR	CB-CG-CD2	-5.85	117.49	121.00
11	B2	86	C	N3-C4-N4	5.85	122.10	118.00
11	B2	611	A	C2-N3-C4	5.85	113.53	110.60
11	B2	893	U	C2-N3-C4	5.85	130.51	127.00
11	B2	1441	G	N7-C8-N9	-5.85	110.17	113.10
11	B2	1458	A	C5-N7-C8	5.85	106.83	103.90
38	A1	19	G	N3-C2-N2	5.85	124.00	119.90
38	A1	516	A	C5-C6-N6	-5.85	119.02	123.70
38	A1	1036	C	N3-C2-O2	5.85	126.00	121.90
38	A1	1169	G	O4'-C1'-N9	5.85	112.88	108.20
38	A1	1221	U	C4-C5-C6	5.85	123.21	119.70
38	A1	1544	C	N3-C4-N4	5.85	122.10	118.00
38	A1	1643	A	C4-C5-N7	-5.85	107.77	110.70
38	A1	1868	C	O4'-C1'-N1	5.85	112.88	108.20
38	A1	1970	G	C5-N7-C8	5.85	107.23	104.30
38	A1	2407	G	N3-C2-N2	5.85	124.00	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2597	A	C5-C6-N6	-5.85	119.02	123.70
38	A1	2854	A	C3'-C2'-C1'	-5.85	96.82	101.50
11	B2	327	G	O4'-C1'-N9	5.85	112.88	108.20
11	B2	379	A	N7-C8-N9	-5.85	110.88	113.80
11	B2	485	A	C5-N7-C8	5.85	106.83	103.90
11	B2	961	U	C5'-C4'-C3'	-5.85	106.64	116.00
38	A1	1763	A	C3'-C2'-C1'	-5.85	96.82	101.50
38	A1	2003	C	C2-N3-C4	-5.85	116.97	119.90
38	A1	2337	G	N9-C4-C5	-5.85	103.06	105.40
38	A1	2796	C	C5-C4-N4	-5.85	116.10	120.20
60	AM	48	ALA	CB-CA-C	-5.85	101.32	110.10
11	B2	137	A	C5-C6-N1	-5.85	114.78	117.70
11	B2	221	A	C5-C6-N6	5.85	128.38	123.70
11	B2	464	G	C6-C5-N7	-5.85	126.89	130.40
11	B2	892	C	N1-C2-O2	-5.85	115.39	118.90
38	A1	33	U	P-O5'-C5'	-5.85	111.54	120.90
38	A1	1148	C	N3-C4-N4	5.85	122.09	118.00
38	A1	1278	C	C2-N3-C4	5.85	122.83	119.90
38	A1	1429	A	C5-C6-N6	-5.85	119.02	123.70
38	A1	1476	C	N1-C2-O2	5.85	122.41	118.90
38	A1	1576	C	C3'-C2'-C1'	5.85	106.18	101.50
38	A1	1601	G	O4'-C1'-N9	5.85	112.88	108.20
38	A1	1781	C	N3-C4-C5	-5.85	119.56	121.90
38	A1	1825	G	N1-C6-O6	5.85	123.41	119.90
38	A1	2439	G	N1-C2-N2	-5.85	110.94	116.20
38	A1	2804	C	C5-C6-N1	5.85	123.92	121.00
38	A1	3046	C	N3-C4-C5	-5.85	119.56	121.90
10	B1	56	U	N1-C2-O2	-5.85	118.71	122.80
11	B2	196	G	C8-N9-C4	5.85	108.74	106.40
11	B2	247	G	P-O3'-C3'	5.85	126.72	119.70
11	B2	392	G	N3-C4-N9	5.85	129.51	126.00
11	B2	700	G	O4'-C4'-C3'	-5.85	98.15	104.00
11	B2	1206	G	N1-C2-N3	-5.85	120.39	123.90
11	B2	1208	A	N1-C6-N6	5.85	122.11	118.60
11	B2	1430	G	N3-C4-N9	-5.85	122.49	126.00
18	BF	155	ARG	NE-CZ-NH2	-5.85	117.38	120.30
20	BH	108	PHE	CB-CG-CD2	-5.85	116.71	120.80
38	A1	242	C	C1'-O4'-C4'	-5.85	105.22	109.90
38	A1	262	C	C6-N1-C1'	5.85	127.82	120.80
38	A1	421	C	C6-N1-C2	-5.85	117.96	120.30
38	A1	1265	A	C3'-C2'-C1'	-5.85	96.82	101.50
38	A1	1881	A	C5'-C4'-O4'	5.85	116.12	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2251	G	O4'-C1'-N9	5.85	112.88	108.20
11	B2	618	G	N1-C6-O6	5.85	123.41	119.90
11	B2	1399	G	C1'-O4'-C4'	5.85	114.58	109.90
11	B2	1494	C	O4'-C1'-N1	5.85	112.88	108.20
38	A1	124	C	C6-N1-C2	-5.85	117.96	120.30
38	A1	650	C	O4'-C1'-N1	5.85	112.88	108.20
38	A1	993	G	O4'-C1'-N9	5.85	112.88	108.20
38	A1	2344	G	C2-N3-C4	-5.85	108.98	111.90
39	A3	34	C	C4'-C3'-C2'	-5.85	96.75	102.60
10	B1	1	G	N1-C6-O6	5.84	123.41	119.90
10	B1	6	G	C5-C6-N1	-5.84	108.58	111.50
10	B1	57	C	C4'-C3'-C2'	-5.84	96.75	102.60
11	B2	42	G	C5-C6-O6	-5.84	125.09	128.60
11	B2	72	C	C3'-C2'-C1'	5.84	106.18	101.50
11	B2	193	G	C4'-C3'-C2'	-5.84	96.76	102.60
11	B2	216	G	C5-N7-C8	5.84	107.22	104.30
11	B2	528	G	C5-C6-N1	-5.84	108.58	111.50
11	B2	963	A	P-O5'-C5'	5.84	130.25	120.90
23	BK	16	ARG	NH1-CZ-NH2	5.84	125.83	119.40
38	A1	369	G	C5-N7-C8	-5.84	101.38	104.30
38	A1	728	A	C5-N7-C8	5.84	106.82	103.90
38	A1	1671	A	C4-C5-N7	5.84	113.62	110.70
38	A1	1676	G	N1-C2-N3	-5.84	120.39	123.90
38	A1	1815	C	N3-C4-C5	-5.84	119.56	121.90
39	A3	41	A	C5-C6-N6	-5.84	119.03	123.70
66	AY	53	TYR	CG-CD1-CE1	-5.84	116.62	121.30
3	Af	26	TRP	CB-CG-CD1	5.84	134.60	127.00
11	B2	653	C	C2-N3-C4	5.84	122.82	119.90
38	A1	443	C	C4'-C3'-C2'	-5.84	96.76	102.60
38	A1	623	G	C6-C5-N7	-5.84	126.89	130.40
38	A1	1225	A	N1-C6-N6	5.84	122.11	118.60
38	A1	1509	C	C2-N3-C4	5.84	122.82	119.90
38	A1	1520	G	N9-C4-C5	5.84	107.74	105.40
38	A1	1615	G	C4-C5-C6	5.84	122.31	118.80
38	A1	1722	G	P-O5'-C5'	5.84	130.25	120.90
38	A1	2361	C	N3-C2-O2	5.84	125.99	121.90
38	A1	2899	G	O4'-C1'-N9	5.84	112.87	108.20
38	A1	2957	G	C6-C5-N7	-5.84	126.89	130.40
38	A1	2985	U	N3-C2-O2	5.84	126.29	122.20
63	AP	36	ARG	NE-CZ-NH1	-5.84	117.38	120.30
10	B1	44	G	N1-C2-N3	-5.84	120.39	123.90
11	B2	322	G	C3'-C2'-C1'	5.84	106.17	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	368	C	C4'-C3'-C2'	5.84	108.44	102.60
11	B2	724	C	N3-C4-N4	5.84	122.09	118.00
38	A1	301	G	C8-N9-C4	5.84	108.74	106.40
38	A1	701	G	C5'-C4'-C3'	5.84	125.35	116.00
38	A1	934	G	N9-C4-C5	-5.84	103.06	105.40
38	A1	1786	G	C5-C6-O6	-5.84	125.09	128.60
38	A1	2066	C	N3-C4-N4	5.84	122.09	118.00
38	A1	2962	A	C5-C6-N1	-5.84	114.78	117.70
39	A3	49	A	C4-C5-C6	5.84	119.92	117.00
46	AD	168	ASP	CB-CG-OD2	-5.84	113.04	118.30
11	B2	29	G	N3-C2-N2	5.84	123.99	119.90
11	B2	561	A	C5-C6-N1	-5.84	114.78	117.70
11	B2	1032	A	O4'-C1'-N9	5.84	112.87	108.20
11	B2	1134	G	N1-C2-N3	-5.84	120.40	123.90
11	B2	1388	G	N3-C2-N2	5.84	123.99	119.90
38	A1	591	G	C6-C5-N7	-5.84	126.90	130.40
38	A1	1232	G	C4-C5-N7	-5.84	108.46	110.80
38	A1	1558	U	N1-C2-O2	-5.84	118.71	122.80
38	A1	1739	U	N3-C4-C5	-5.84	111.10	114.60
38	A1	2151	C	C4-C5-C6	5.84	120.32	117.40
38	A1	2198	U	O4'-C1'-N1	5.84	112.87	108.20
11	B2	768	A	C6-C5-N7	-5.84	128.21	132.30
11	B2	1036	G	N3-C4-C5	-5.84	125.68	128.60
11	B2	1290	U	O4'-C1'-N1	5.84	112.87	108.20
38	A1	1254	C	O4'-C1'-N1	5.84	112.87	108.20
38	A1	1307	C	P-O3'-C3'	-5.84	112.69	119.70
38	A1	1458	C	C5-C4-N4	-5.84	116.11	120.20
38	A1	1609	G	C6-C5-N7	-5.84	126.90	130.40
38	A1	1714	G	O4'-C1'-N9	5.84	112.87	108.20
38	A1	1938	G	C5-N7-C8	5.84	107.22	104.30
38	A1	2175	G	N9-C4-C5	5.84	107.73	105.40
38	A1	3000	U	N1-C2-O2	5.84	126.89	122.80
41	AA	45	ARG	CD-NE-CZ	-5.84	115.43	123.60
11	B2	691	G	C4-C5-N7	5.84	113.14	110.80
11	B2	777	G	C1'-O4'-C4'	-5.84	105.23	109.90
11	B2	1082	A	N9-C4-C5	-5.84	103.47	105.80
11	B2	1429	G	N9-C4-C5	-5.84	103.06	105.40
38	A1	147	C	O4'-C4'-C3'	-5.84	98.16	104.00
38	A1	1070	G	C4-N9-C1'	5.84	134.09	126.50
38	A1	1601	G	OP1-P-OP2	-5.84	110.85	119.60
38	A1	1617	G	C5-C6-O6	-5.84	125.10	128.60
38	A1	1632	U	O4'-C1'-N1	5.84	112.87	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1719	C	N3-C4-N4	5.84	122.09	118.00
38	A1	2028	G	N9-C4-C5	5.84	107.73	105.40
38	A1	2828	G	N1-C2-N3	-5.84	120.40	123.90
39	A3	14	G	N1-C2-N2	5.84	121.45	116.20
39	A3	112	C	P-O3'-C3'	-5.84	112.70	119.70
60	AM	76	TRP	CG-CD2-CE3	-5.84	128.65	133.90
11	B2	181	G	O4'-C1'-N9	5.83	112.87	108.20
11	B2	439	G	C6-C5-N7	-5.83	126.90	130.40
11	B2	1024	G	C4-C5-N7	5.83	113.13	110.80
11	B2	1044	A	C2-N3-C4	5.83	113.52	110.60
11	B2	1063	A	C4'-C3'-C2'	-5.83	96.77	102.60
38	A1	834	G	O4'-C1'-N9	5.83	112.87	108.20
38	A1	1497	C	O4'-C1'-N1	5.83	112.87	108.20
11	B2	307	G	N7-C8-N9	-5.83	110.18	113.10
11	B2	369	A	C5-C6-N6	-5.83	119.03	123.70
11	B2	640	U	OP1-P-OP2	-5.83	110.85	119.60
11	B2	786	G	C6-N1-C2	5.83	128.60	125.10
11	B2	1471	G	P-O3'-C3'	5.83	126.70	119.70
14	BB	119	ASP	N-CA-CB	5.83	121.10	110.60
38	A1	107	G	C8-N9-C4	-5.83	104.07	106.40
38	A1	1220	U	O4'-C1'-N1	5.83	112.87	108.20
38	A1	2004	A	C5-C6-N6	-5.83	119.03	123.70
38	A1	2789	G	C6-C5-N7	-5.83	126.90	130.40
38	A1	3000	U	P-O3'-C3'	5.83	126.70	119.70
39	A3	119	C	N3-C2-O2	-5.83	117.82	121.90
10	B1	53	G	C3'-C2'-C1'	-5.83	96.83	101.50
10	B1	59	A	C4-C5-N7	5.83	113.61	110.70
11	B2	250	G	N1-C6-O6	5.83	123.40	119.90
11	B2	690	C	N1-C2-N3	-5.83	115.12	119.20
11	B2	846	G	C4'-C3'-C2'	5.83	108.43	102.60
11	B2	1183	C	C2-N3-C4	5.83	122.82	119.90
38	A1	473	C	C5-C6-N1	5.83	123.92	121.00
38	A1	933	G	N1-C2-N2	-5.83	110.95	116.20
38	A1	1198	G	C6-C5-N7	-5.83	126.90	130.40
38	A1	1341	U	N1-C2-N3	-5.83	111.40	114.90
38	A1	1544	C	O4'-C1'-N1	5.83	112.86	108.20
38	A1	1724	A	C5-N7-C8	5.83	106.82	103.90
38	A1	1765	A	C2-N3-C4	5.83	113.52	110.60
38	A1	2056	A	C5-C6-N6	-5.83	119.03	123.70
38	A1	2764	G	N9-C4-C5	-5.83	103.07	105.40
38	A1	2833	G	O4'-C1'-N9	5.83	112.87	108.20
38	A1	2867	U	C2-N3-C4	-5.83	123.50	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1041	C	C5-C6-N1	5.83	123.92	121.00
11	B2	1273	G	N9-C4-C5	5.83	107.73	105.40
38	A1	133	G	P-O5'-C5'	5.83	130.23	120.90
38	A1	287	G	C5-N7-C8	5.83	107.22	104.30
38	A1	972	C	P-O3'-C3'	5.83	126.70	119.70
38	A1	1394	G	N3-C4-C5	-5.83	125.69	128.60
38	A1	2163	G	C5-C6-N1	-5.83	108.58	111.50
41	AA	113	LEU	CB-CG-CD2	5.83	120.91	111.00
57	Aj	8	ARG	NE-CZ-NH1	5.83	123.22	120.30
11	B2	75	C	P-O3'-C3'	5.83	126.69	119.70
11	B2	1091	C	C5'-C4'-C3'	5.83	125.33	116.00
11	B2	1359	C	N3-C4-N4	5.83	122.08	118.00
11	B2	1372	C	C5-C4-N4	5.83	124.28	120.20
38	A1	141	C	O4'-C1'-N1	5.83	112.86	108.20
38	A1	208	A	N3-C4-C5	-5.83	122.72	126.80
38	A1	498	U	O4'-C1'-N1	5.83	112.86	108.20
38	A1	801	A	N3-C4-C5	-5.83	122.72	126.80
38	A1	815	U	C3'-C2'-C1'	-5.83	96.84	101.50
38	A1	999	A	C8-N9-C4	-5.83	103.47	105.80
38	A1	1125	A	N1-C2-N3	5.83	132.22	129.30
38	A1	1754	A	C6-N1-C2	5.83	122.10	118.60
38	A1	1781	C	C6-N1-C2	-5.83	117.97	120.30
38	A1	1870	G	C6-N1-C2	5.83	128.60	125.10
38	A1	2039	U	N3-C4-O4	5.83	123.48	119.40
38	A1	2279	G	C5-C6-O6	-5.83	125.10	128.60
43	AB	25	ARG	N-CA-CB	5.83	121.09	110.60
56	AJ	101	ASP	CB-CG-OD2	-5.83	113.05	118.30
10	B1	57	C	C5-C6-N1	-5.83	118.09	121.00
11	B2	891	A	C5-C6-N1	-5.83	114.79	117.70
38	A1	277	A	N7-C8-N9	-5.83	110.89	113.80
38	A1	2059	G	C4'-C3'-C2'	-5.83	96.77	102.60
38	A1	2869	U	O4'-C1'-C2'	-5.83	99.97	105.80
11	B2	118	U	C5-C6-N1	5.83	125.61	122.70
11	B2	303	G	P-O3'-C3'	5.83	126.69	119.70
11	B2	503	G	N3-C4-N9	-5.83	122.50	126.00
11	B2	1262	U	N3-C2-O2	5.83	126.28	122.20
38	A1	868	U	C2-N3-C4	5.83	130.50	127.00
38	A1	1354	G	C5'-C4'-O4'	5.83	116.09	109.10
38	A1	1471	G	C5-N7-C8	-5.83	101.39	104.30
11	B2	387	G	O4'-C1'-N9	5.82	112.86	108.20
11	B2	639	G	N1-C2-N2	-5.82	110.96	116.20
11	B2	937	A	C2-N3-C4	5.82	113.51	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1305	U	C5'-C4'-O4'	5.82	116.09	109.10
38	A1	459	C	N3-C4-C5	-5.82	119.57	121.90
38	A1	584	G	C6-C5-N7	-5.82	126.91	130.40
38	A1	1045	A	C1'-O4'-C4'	5.82	114.56	109.90
38	A1	1765	A	C5-C6-N1	-5.82	114.79	117.70
38	A1	2346	A	C5-N7-C8	5.82	106.81	103.90
38	A1	2383	A	O4'-C1'-N9	5.82	112.86	108.20
38	A1	2724	A	N9-C4-C5	5.82	108.13	105.80
38	A1	2817	U	N3-C2-O2	5.82	126.28	122.20
38	A1	2947	G	C1'-O4'-C4'	-5.82	105.24	109.90
42	Aa	31	ALA	O-C-N	-5.82	113.38	122.70
63	AP	91	ARG	NE-CZ-NH2	-5.82	117.39	120.30
65	AV	21	MET	N-CA-C	-5.82	95.27	111.00
10	B1	29	C	O4'-C1'-N1	5.82	112.86	108.20
11	B2	154	C	C6-N1-C2	-5.82	117.97	120.30
11	B2	406	U	C5-C6-N1	-5.82	119.79	122.70
11	B2	613	C	C2-N3-C4	5.82	122.81	119.90
38	A1	357	G	C5-C6-O6	-5.82	125.11	128.60
38	A1	1151	G	P-O3'-C3'	-5.82	112.71	119.70
9	AX	247	TYR	CB-CG-CD2	-5.82	117.51	121.00
11	B2	22	G	N3-C2-N2	5.82	123.97	119.90
11	B2	264	C	P-O5'-C5'	5.82	130.21	120.90
11	B2	338	C	N3-C2-O2	5.82	125.97	121.90
11	B2	901	G	C6-N1-C2	-5.82	121.61	125.10
11	B2	934	G	P-O5'-C5'	-5.82	111.59	120.90
11	B2	1225	C	N3-C4-C5	-5.82	119.57	121.90
11	B2	1405	C	C5-C6-N1	5.82	123.91	121.00
12	B3	113	GLU	CB-CG-CD	-5.82	98.48	114.20
13	BA	19	TYR	CB-CG-CD1	5.82	124.49	121.00
13	BA	125	ALA	N-CA-CB	5.82	118.25	110.10
38	A1	437	G	C4-C5-C6	5.82	122.29	118.80
38	A1	848	A	N7-C8-N9	-5.82	110.89	113.80
38	A1	858	G	C1'-O4'-C4'	5.82	114.56	109.90
38	A1	1374	G	N3-C4-N9	-5.82	122.51	126.00
38	A1	1433	C	C6-N1-C1'	5.82	127.78	120.80
38	A1	1445	G	C4-N9-C1'	5.82	134.07	126.50
38	A1	2221	A	C8-N9-C4	5.82	108.13	105.80
38	A1	2388	U	C4'-C3'-C2'	-5.82	96.78	102.60
38	A1	2736	G	C8-N9-C4	5.82	108.73	106.40
11	B2	414	G	N3-C2-N2	5.82	123.97	119.90
35	BW	48	THR	N-CA-C	-5.82	95.29	111.00
38	A1	206	A	C3'-C2'-C1'	5.82	106.16	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1459	A	C8-N9-C4	-5.82	103.47	105.80
38	A1	1539	U	P-O5'-C5'	5.82	130.21	120.90
38	A1	2333	G	C8-N9-C4	-5.82	104.07	106.40
10	B1	17	C	C4-C5-C6	5.82	120.31	117.40
11	B2	43	A	N1-C6-N6	5.82	122.09	118.60
11	B2	61	A	N1-C2-N3	5.82	132.21	129.30
11	B2	505	U	N3-C4-C5	-5.82	111.11	114.60
11	B2	1470	G	C5-C6-N1	-5.82	108.59	111.50
38	A1	724	G	N1-C2-N2	-5.82	110.96	116.20
38	A1	1137	G	N3-C2-N2	5.82	123.97	119.90
38	A1	1670	A	P-O3'-C3'	5.82	126.68	119.70
38	A1	1719	C	C2-N1-C1'	5.82	125.20	118.80
38	A1	2400	U	C2-N3-C4	-5.82	123.51	127.00
60	AM	71	ARG	NE-CZ-NH2	-5.82	117.39	120.30
11	B2	62	G	P-O3'-C3'	5.82	126.68	119.70
11	B2	534	G	N1-C6-O6	5.82	123.39	119.90
11	B2	1050	G	C2-N3-C4	5.82	114.81	111.90
16	BD	161	ALA	N-CA-CB	5.82	118.24	110.10
17	BE	33	ARG	NE-CZ-NH1	5.82	123.21	120.30
38	A1	329	G	C4-C5-C6	5.82	122.29	118.80
38	A1	1065	C	C5-C6-N1	5.82	123.91	121.00
38	A1	1441	C	C5-C6-N1	5.82	123.91	121.00
38	A1	1927	C	N3-C2-O2	-5.82	117.83	121.90
38	A1	2199	U	N3-C4-C5	-5.82	111.11	114.60
38	A1	2327	C	N1-C2-O2	5.82	122.39	118.90
38	A1	2474	A	C5-C6-N6	-5.82	119.05	123.70
39	A3	10	U	C5-C4-O4	-5.82	122.41	125.90
11	B2	18	C	N3-C2-O2	5.81	125.97	121.90
11	B2	743	U	C2-N3-C4	-5.81	123.51	127.00
11	B2	1428	G	C6-N1-C2	-5.81	121.61	125.10
11	B2	1481	G	N3-C2-N2	-5.81	115.83	119.90
38	A1	1411	G	C6-N1-C2	5.81	128.59	125.10
38	A1	2075	U	N3-C2-O2	-5.81	118.13	122.20
7	AU	77	TYR	CD1-CG-CD2	-5.81	111.51	117.90
11	B2	884	G	C4'-C3'-C2'	-5.81	96.79	102.60
11	B2	1410	G	N1-C2-N3	-5.81	120.41	123.90
11	B2	1450	U	C2-N3-C4	-5.81	123.51	127.00
14	BB	139	ALA	CB-CA-C	-5.81	101.38	110.10
38	A1	289	G	N3-C2-N2	5.81	123.97	119.90
38	A1	643	G	O4'-C4'-C3'	-5.81	98.19	104.00
38	A1	1082	A	C5-N7-C8	-5.81	100.99	103.90
38	A1	2412	A	N7-C8-N9	-5.81	110.89	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	29	G	C2-N3-C4	-5.81	108.99	111.90
11	B2	297	G	C1'-O4'-C4'	5.81	114.55	109.90
11	B2	533	C	C6-N1-C2	-5.81	117.98	120.30
11	B2	836	G	O4'-C1'-N9	5.81	112.85	108.20
11	B2	1221	A	C6-N1-C2	-5.81	115.11	118.60
11	B2	1261	U	N3-C4-O4	5.81	123.47	119.40
11	B2	1457	A	C6-C5-N7	-5.81	128.23	132.30
38	A1	482	A	C4-C5-N7	-5.81	107.79	110.70
38	A1	589	G	N1-C6-O6	5.81	123.39	119.90
38	A1	591	G	N3-C4-C5	-5.81	125.69	128.60
38	A1	1515	G	C5-N7-C8	5.81	107.20	104.30
38	A1	2264	G	N1-C2-N3	-5.81	120.41	123.90
38	A1	2634	U	O4'-C1'-N1	5.81	112.85	108.20
38	A1	2769	U	N1-C2-N3	5.81	118.39	114.90
10	B1	4	G	O4'-C1'-N9	5.81	112.85	108.20
10	B1	6	G	N1-C2-N3	-5.81	120.42	123.90
11	B2	509	C	C5-C6-N1	-5.81	118.10	121.00
32	BT	28	PHE	CG-CD2-CE2	-5.81	114.41	120.80
38	A1	32	C	C2-N3-C4	5.81	122.81	119.90
38	A1	548	U	N3-C2-O2	5.81	126.27	122.20
38	A1	653	U	C2-N1-C1'	-5.81	110.73	117.70
38	A1	816	C	P-O5'-C5'	-5.81	111.61	120.90
38	A1	1037	C	C6-N1-C1'	-5.81	113.83	120.80
38	A1	1082	A	C8-N9-C4	-5.81	103.48	105.80
38	A1	1130	G	C2-N3-C4	5.81	114.80	111.90
38	A1	1296	A	C5-C6-N6	-5.81	119.05	123.70
38	A1	1421	C	C6-N1-C2	-5.81	117.98	120.30
38	A1	1544	C	N3-C4-C5	-5.81	119.58	121.90
38	A1	1620	C	N3-C4-N4	5.81	122.07	118.00
38	A1	1714	G	C5-N7-C8	5.81	107.20	104.30
38	A1	1962	G	P-O5'-C5'	5.81	130.19	120.90
38	A1	2047	U	O4'-C1'-N1	5.81	112.85	108.20
38	A1	2202	U	N3-C4-C5	-5.81	111.11	114.60
38	A1	2269	C	C6-N1-C1'	5.81	127.77	120.80
38	A1	2970	U	C2-N1-C1'	5.81	124.67	117.70
12	AG	90	ALA	C-N-CA	5.81	134.50	122.30
11	B2	460	C	C2-N1-C1'	5.81	125.19	118.80
11	B2	573	C	C5-C6-N1	-5.81	118.10	121.00
11	B2	702	G	OP2-P-O3'	5.81	117.98	105.20
11	B2	822	A	C5-C6-N6	-5.81	119.05	123.70
11	B2	938	C	N1-C2-O2	-5.81	115.42	118.90
11	B2	953	C	O4'-C1'-N1	5.81	112.85	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1477	U	O4'-C1'-N1	5.81	112.84	108.20
38	A1	371	U	C5-C4-O4	-5.81	122.42	125.90
38	A1	932	C	O4'-C1'-N1	5.81	112.85	108.20
38	A1	1102	C	N1-C2-N3	-5.81	115.14	119.20
38	A1	1136	G	C4-C5-C6	5.81	122.28	118.80
38	A1	1170	G	O4'-C1'-N9	5.81	112.85	108.20
38	A1	1273	C	C6-N1-C2	-5.81	117.98	120.30
38	A1	1538	A	C6-C5-N7	-5.81	128.23	132.30
38	A1	2505	A	C6-N1-C2	5.81	122.08	118.60
38	A1	2882	G	C5-C6-O6	-5.81	125.12	128.60
11	B2	624	G	O4'-C1'-N9	5.81	112.84	108.20
11	B2	1095	C	C6-N1-C2	-5.81	117.98	120.30
11	B2	1372	C	N3-C4-C5	-5.81	119.58	121.90
38	A1	896	G	C2-N3-C4	5.81	114.80	111.90
38	A1	1143	A	C5-N7-C8	5.81	106.80	103.90
38	A1	1227	A	C6-C5-N7	-5.81	128.24	132.30
38	A1	1567	C	P-O3'-C3'	-5.81	112.73	119.70
41	AA	161	PRO	N-CA-CB	-5.81	96.21	102.60
11	B2	256	G	N1-C6-O6	5.80	123.38	119.90
11	B2	347	G	C4-C5-N7	5.80	113.12	110.80
11	B2	488	A	C6-N1-C2	5.80	122.08	118.60
11	B2	570	G	P-O3'-C3'	5.80	126.67	119.70
11	B2	620	G	C5-C6-O6	-5.80	125.12	128.60
11	B2	895	C	C2-N3-C4	5.80	122.80	119.90
11	B2	913	G	C4-C5-N7	-5.80	108.48	110.80
11	B2	1082	A	O4'-C1'-N9	5.80	112.84	108.20
38	A1	128	C	N3-C4-C5	-5.80	119.58	121.90
38	A1	431	U	C5-C4-O4	5.80	129.38	125.90
38	A1	1079	A	P-O5'-C5'	5.80	130.19	120.90
38	A1	1533	G	N1-C2-N3	5.80	127.38	123.90
38	A1	2062	A	C4-C5-N7	-5.80	107.80	110.70
38	A1	2346	A	N9-C4-C5	5.80	108.12	105.80
38	A1	2404	G	C8-N9-C4	-5.80	104.08	106.40
38	A1	2561	G	N3-C2-N2	5.80	123.96	119.90
38	A1	2658	G	C6-N1-C2	5.80	128.58	125.10
38	A1	2999	G	N3-C2-N2	5.80	123.96	119.90
39	A3	112	C	C1'-O4'-C4'	5.80	114.54	109.90
20	BH	17	VAL	CA-CB-CG2	5.80	119.61	110.90
38	A1	1364	C	N3-C4-C5	-5.80	119.58	121.90
38	A1	1618	G	C2-N3-C4	-5.80	109.00	111.90
38	A1	1842	C	C2-N1-C1'	5.80	125.18	118.80
38	A1	2859	U	C5'-C4'-C3'	5.80	125.28	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	3046	C	C5'-C4'-O4'	5.80	116.06	109.10
11	B2	276	A	C4-C5-N7	-5.80	107.80	110.70
11	B2	663	G	C5-C6-O6	-5.80	125.12	128.60
11	B2	870	U	N1-C2-N3	-5.80	111.42	114.90
11	B2	970	G	C2-N3-C4	5.80	114.80	111.90
11	B2	1238	G	C5-C6-O6	-5.80	125.12	128.60
11	B2	1251	C	C4-C5-C6	5.80	120.30	117.40
38	A1	1038	U	N3-C2-O2	5.80	126.26	122.20
38	A1	1310	A	C5-C6-N1	-5.80	114.80	117.70
38	A1	2256	G	O4'-C1'-N9	5.80	112.84	108.20
39	A3	112	C	C2-N3-C4	5.80	122.80	119.90
44	Ab	97	ARG	NE-CZ-NH2	-5.80	117.40	120.30
11	B2	1002	G	P-O5'-C5'	-5.80	111.62	120.90
19	BG	108	ARG	NE-CZ-NH1	-5.80	117.40	120.30
38	A1	645	U	C5-C4-O4	5.80	129.38	125.90
38	A1	719	C	C5-C4-N4	-5.80	116.14	120.20
38	A1	748	G	N1-C2-N3	-5.80	120.42	123.90
38	A1	1948	A	N1-C2-N3	5.80	132.20	129.30
38	A1	2079	U	N3-C4-C5	-5.80	111.12	114.60
38	A1	2120	C	C5'-C4'-O4'	5.80	116.06	109.10
38	A1	2184	G	C4-C5-N7	5.80	113.12	110.80
38	A1	2322	A	C5-C6-N6	-5.80	119.06	123.70
38	A1	2964	A	C5-C6-N6	-5.80	119.06	123.70
11	B2	320	G	N3-C2-N2	5.80	123.96	119.90
11	B2	609	G	P-O5'-C5'	-5.80	111.62	120.90
11	B2	664	G	C6-N1-C2	-5.80	121.62	125.10
11	B2	735	A	O4'-C1'-N9	5.80	112.84	108.20
11	B2	1094	U	N3-C4-C5	-5.80	111.12	114.60
11	B2	1381	G	N9-C4-C5	5.80	107.72	105.40
38	A1	204	G	C8-N9-C4	-5.80	104.08	106.40
38	A1	304	G	C6-N1-C2	5.80	128.58	125.10
38	A1	2541	U	C4-C5-C6	5.80	123.18	119.70
38	A1	2676	A	C6-N1-C2	-5.80	115.12	118.60
11	B2	309	A	N1-C2-N3	5.80	132.20	129.30
11	B2	621	G	N1-C6-O6	5.80	123.38	119.90
11	B2	987	G	C4-C5-N7	-5.80	108.48	110.80
11	B2	1171	G	C4-C5-C6	5.80	122.28	118.80
11	B2	1422	G	C4-C5-N7	5.80	113.12	110.80
38	A1	56	G	O4'-C1'-N9	5.80	112.84	108.20
38	A1	100	C	C3'-C2'-C1'	5.80	106.14	101.50
38	A1	403	G	C4-C5-C6	5.80	122.28	118.80
38	A1	1540	A	C3'-C2'-C1'	5.80	106.14	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1891	C	N3-C4-C5	-5.80	119.58	121.90
38	A1	1912	A	N7-C8-N9	-5.80	110.90	113.80
38	A1	2367	C	C6-N1-C2	-5.80	117.98	120.30
38	A1	2441	A	C5-N7-C8	5.80	106.80	103.90
39	A3	100	A	N9-C4-C5	5.80	108.12	105.80
45	AC	90	TYR	CB-CG-CD1	-5.80	117.52	121.00
11	B2	29	G	C5-N7-C8	-5.79	101.40	104.30
11	B2	304	C	N3-C4-N4	5.79	122.06	118.00
13	BA	135	ARG	NE-CZ-NH2	-5.79	117.40	120.30
38	A1	894	C	C4-C5-C6	5.79	120.30	117.40
38	A1	1107	G	N3-C4-C5	-5.79	125.70	128.60
38	A1	1186	G	N3-C4-C5	-5.79	125.70	128.60
38	A1	1882	C	N1-C2-O2	-5.79	115.42	118.90
38	A1	2410	U	C4-C5-C6	-5.79	116.22	119.70
9	AX	34	LEU	CB-CG-CD2	5.79	120.85	111.00
11	B2	228	G	N3-C2-N2	5.79	123.95	119.90
11	B2	268	C	N3-C4-N4	5.79	122.06	118.00
11	B2	1492	U	P-O3'-C3'	-5.79	112.75	119.70
30	BR	109	ALA	CB-CA-C	-5.79	101.41	110.10
38	A1	273	G	N3-C4-N9	5.79	129.48	126.00
38	A1	589	G	O4'-C1'-C2'	-5.79	100.01	105.80
38	A1	726	G	C5-C6-N1	-5.79	108.60	111.50
38	A1	1291	C	N3-C4-N4	5.79	122.06	118.00
38	A1	1340	G	C6-N1-C2	5.79	128.58	125.10
38	A1	2422	G	O4'-C1'-N9	5.79	112.83	108.20
38	A1	2665	G	C8-N9-C4	-5.79	104.08	106.40
39	A3	78	C	C2-N3-C4	5.79	122.80	119.90
11	B2	571	C	N3-C4-N4	5.79	122.05	118.00
11	B2	575	A	N7-C8-N9	5.79	116.69	113.80
11	B2	730	G	P-O3'-C3'	5.79	126.65	119.70
11	B2	987	G	C5-N7-C8	5.79	107.20	104.30
35	BW	28	PHE	CB-CG-CD2	5.79	124.85	120.80
38	A1	186	A	C5-C6-N1	-5.79	114.81	117.70
38	A1	1532	G	C2-N3-C4	5.79	114.80	111.90
38	A1	1606	C	C4-C5-C6	5.79	120.30	117.40
38	A1	1697	G	C5-C6-N1	-5.79	108.60	111.50
38	A1	1902	G	C8-N9-C4	5.79	108.72	106.40
38	A1	1910	C	C5-C4-N4	-5.79	116.15	120.20
38	A1	1912	A	O4'-C1'-N9	5.79	112.83	108.20
38	A1	2146	C	O4'-C1'-N1	5.79	112.83	108.20
38	A1	2877	A	O5'-P-OP2	5.79	117.65	110.70
11	B2	188	C	O4'-C1'-N1	5.79	112.83	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	610	G	C5-C6-O6	-5.79	125.13	128.60
11	B2	1034	G	C8-N9-C4	-5.79	104.08	106.40
38	A1	384	G	C6-C5-N7	-5.79	126.93	130.40
38	A1	1375	G	O4'-C1'-N9	5.79	112.83	108.20
38	A1	1443	G	C4-C5-N7	-5.79	108.48	110.80
38	A1	1482	G	C8-N9-C4	-5.79	104.08	106.40
38	A1	1717	C	C5'-C4'-O4'	5.79	116.05	109.10
38	A1	1813	A	C4'-C3'-C2'	-5.79	96.81	102.60
38	A1	2980	G	N3-C2-N2	5.79	123.95	119.90
10	B1	11	C	O4'-C1'-N1	5.79	112.83	108.20
11	B2	37	G	O4'-C1'-N9	5.79	112.83	108.20
11	B2	155	U	C5-C6-N1	5.79	125.59	122.70
11	B2	235	G	C5-C6-O6	-5.79	125.13	128.60
11	B2	629	U	O4'-C1'-N1	5.79	112.83	108.20
21	BI	53	ILE	O-C-N	5.79	131.96	122.70
38	A1	226	C	O4'-C1'-N1	5.79	112.83	108.20
38	A1	536	G	C8-N9-C4	-5.79	104.08	106.40
38	A1	696	G	OP2-P-O3'	5.79	117.94	105.20
38	A1	746	C	O3'-P-O5'	-5.79	93.00	104.00
38	A1	1283	G	N3-C2-N2	-5.79	115.85	119.90
38	A1	1665	G	O4'-C1'-N9	5.79	112.83	108.20
38	A1	1903	G	C4-C5-C6	5.79	122.27	118.80
38	A1	2982	G	N3-C4-C5	-5.79	125.70	128.60
50	AF	8	ARG	CD-NE-CZ	5.79	131.71	123.60
11	B2	58	U	C4-C5-C6	5.79	123.17	119.70
11	B2	176	U	N3-C2-O2	-5.79	118.15	122.20
11	B2	1139	A	N7-C8-N9	-5.79	110.91	113.80
11	B2	1414	G	N1-C2-N3	-5.79	120.43	123.90
38	A1	742	C	N3-C4-N4	5.79	122.05	118.00
38	A1	1082	A	C6-N1-C2	-5.79	115.13	118.60
38	A1	1293	G	N1-C6-O6	5.79	123.37	119.90
38	A1	1868	C	N3-C4-C5	-5.79	119.58	121.90
11	B2	25	C	C4-C5-C6	5.79	120.29	117.40
11	B2	1229	A	C5-C6-N6	-5.79	119.07	123.70
11	B2	1326	G	N1-C2-N3	-5.79	120.43	123.90
38	A1	268	C	O4'-C4'-C3'	-5.79	98.21	104.00
38	A1	350	A	N9-C4-C5	5.79	108.11	105.80
38	A1	488	A	N3-C4-C5	-5.79	122.75	126.80
38	A1	586	A	N3-C4-C5	-5.79	122.75	126.80
38	A1	1517	G	N1-C2-N2	-5.79	110.99	116.20
38	A1	2336	G	N3-C4-C5	-5.79	125.71	128.60
38	A1	2447	A	C4-C5-N7	-5.79	107.81	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2496	G	O4'-C1'-N9	5.79	112.83	108.20
38	A1	2570	A	N3-C4-N9	5.79	132.03	127.40
38	A1	2992	G	C5-C6-N1	-5.79	108.61	111.50
39	A3	46	G	C4'-C3'-C2'	-5.79	96.81	102.60
11	B2	572	U	O4'-C1'-N1	5.78	112.83	108.20
20	BH	50	ARG	CD-NE-CZ	-5.78	115.50	123.60
26	BN	96	PHE	CB-CG-CD1	5.78	124.85	120.80
38	A1	68	G	C5-C6-N1	-5.78	108.61	111.50
38	A1	527	G	C3'-C2'-C1'	-5.78	96.87	101.50
38	A1	566	G	N1-C2-N3	-5.78	120.43	123.90
38	A1	595	C	N3-C4-N4	5.78	122.05	118.00
38	A1	932	C	N3-C4-N4	5.78	122.05	118.00
38	A1	1144	A	C8-N9-C4	-5.78	103.49	105.80
38	A1	1442	G	C3'-C2'-C1'	-5.78	96.87	101.50
38	A1	1472	U	N3-C2-O2	5.78	126.25	122.20
38	A1	1581	A	C4-C5-C6	5.78	119.89	117.00
38	A1	1712	U	C6-N1-C2	-5.78	117.53	121.00
38	A1	1760	C	N1-C2-O2	5.78	122.37	118.90
38	A1	2215	U	C1'-O4'-C4'	-5.78	105.27	109.90
38	A1	2331	A	OP1-P-OP2	-5.78	110.92	119.60
38	A1	2726	G	N1-C2-N2	-5.78	111.00	116.20
38	A1	2790	C	N3-C4-N4	5.78	122.05	118.00
38	A1	2814	U	N1-C2-N3	5.78	118.37	114.90
9	AX	261	LEU	CB-CA-C	-5.78	99.22	110.20
11	B2	88	G	C5-C6-O6	-5.78	125.13	128.60
38	A1	671	G	C4-N9-C1'	-5.78	118.98	126.50
38	A1	731	C	C4'-C3'-C2'	-5.78	96.82	102.60
38	A1	1019	G	N3-C4-N9	-5.78	122.53	126.00
38	A1	2113	G	P-O5'-C5'	-5.78	111.65	120.90
11	B2	808	C	N1-C2-O2	5.78	122.37	118.90
11	B2	880	G	C8-N9-C4	-5.78	104.09	106.40
11	B2	1289	G	N3-C4-C5	5.78	131.49	128.60
11	B2	1323	A	C8-N9-C4	-5.78	103.49	105.80
38	A1	146	U	P-O5'-C5'	-5.78	111.65	120.90
38	A1	149	G	N1-C2-N2	-5.78	111.00	116.20
38	A1	363	G	N7-C8-N9	5.78	115.99	113.10
38	A1	561	C	C3'-C2'-C1'	-5.78	96.88	101.50
38	A1	906	G	C4-C5-C6	5.78	122.27	118.80
38	A1	939	A	C5-C6-N6	-5.78	119.08	123.70
38	A1	993	G	OP1-P-O3'	5.78	117.92	105.20
38	A1	1199	U	N3-C4-O4	5.78	123.45	119.40
38	A1	1658	A	C4-C5-N7	-5.78	107.81	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1673	C	N1-C2-O2	-5.78	115.43	118.90
38	A1	1854	G	C5-N7-C8	-5.78	101.41	104.30
38	A1	2526	G	C5'-C4'-C3'	5.78	125.25	116.00
38	A1	2696	G	P-O3'-C3'	5.78	126.64	119.70
38	A1	2740	G	N7-C8-N9	5.78	115.99	113.10
38	A1	2846	A	C6-C5-N7	-5.78	128.25	132.30
39	A3	60	C	P-O3'-C3'	-5.78	112.76	119.70
10	B1	29	C	C4-C5-C6	5.78	120.29	117.40
11	B2	452	G	C2-N3-C4	5.78	114.79	111.90
11	B2	680	C	N3-C4-C5	-5.78	119.59	121.90
29	BQ	80	ARG	NE-CZ-NH1	5.78	123.19	120.30
38	A1	450	G	C8-N9-C4	-5.78	104.09	106.40
38	A1	851	G	N7-C8-N9	-5.78	110.21	113.10
38	A1	1195	G	C5-C6-N1	-5.78	108.61	111.50
38	A1	1332	A	N3-C4-C5	-5.78	122.75	126.80
38	A1	1719	C	O4'-C1'-N1	5.78	112.82	108.20
38	A1	1904	G	C6-N1-C2	-5.78	121.63	125.10
38	A1	2401	A	N9-C4-C5	5.78	108.11	105.80
60	AM	26	ARG	NE-CZ-NH1	5.78	123.19	120.30
11	B2	66	G	O4'-C1'-N9	5.78	112.82	108.20
11	B2	106	A	N1-C2-N3	5.78	132.19	129.30
11	B2	706	G	N3-C4-C5	5.78	131.49	128.60
11	B2	1003	G	C6-N1-C2	-5.78	121.63	125.10
11	B2	1322	C	N3-C4-C5	5.78	124.21	121.90
38	A1	670	G	C5-C6-O6	-5.78	125.13	128.60
38	A1	845	U	C5'-C4'-O4'	5.78	116.03	109.10
38	A1	943	G	N1-C2-N3	-5.78	120.43	123.90
38	A1	1328	G	C5-C6-O6	-5.78	125.13	128.60
38	A1	1547	U	N1-C2-O2	-5.78	118.76	122.80
38	A1	1764	G	C8-N9-C4	-5.78	104.09	106.40
38	A1	1778	G	O4'-C1'-N9	5.78	112.82	108.20
38	A1	2132	C	O4'-C1'-N1	5.78	112.82	108.20
38	A1	2200	A	C6-C5-N7	-5.78	128.25	132.30
45	AC	44	TYR	CG-CD1-CE1	-5.78	116.68	121.30
45	AC	139	TYR	CB-CG-CD1	5.78	124.47	121.00
50	AF	101	VAL	N-CA-C	-5.78	95.40	111.00
1	A7	39	VAL	CA-CB-CG1	-5.78	102.23	110.90
11	B2	164	A	C5-N7-C8	5.78	106.79	103.90
11	B2	304	C	C2-N1-C1'	5.78	125.15	118.80
11	B2	503	G	N1-C2-N3	5.78	127.37	123.90
38	A1	33	U	C4-C5-C6	5.78	123.17	119.70
38	A1	176	G	P-O5'-C5'	-5.78	111.66	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1304	G	C8-N9-C4	-5.78	104.09	106.40
38	A1	1403	C	P-O3'-C3'	-5.78	112.77	119.70
38	A1	1546	G	O4'-C1'-N9	5.78	112.82	108.20
38	A1	1644	G	C5-C6-N1	5.78	114.39	111.50
38	A1	1912	A	C8-N9-C4	5.78	108.11	105.80
38	A1	2272	G	N3-C2-N2	5.78	123.94	119.90
38	A1	2439	G	C6-N1-C2	-5.78	121.63	125.10
38	A1	2473	C	C4-C5-C6	5.78	120.29	117.40
38	A1	2824	C	C3'-C2'-C1'	5.78	106.12	101.50
39	A3	90	A	C5-N7-C8	5.78	106.79	103.90
11	B2	922	G	C3'-C2'-C1'	-5.77	96.88	101.50
11	B2	1206	G	N1-C6-O6	5.77	123.36	119.90
15	BC	53	TYR	CD1-CE1-CZ	5.77	125.00	119.80
27	BO	58	GLN	N-CA-CB	5.77	120.99	110.60
38	A1	1825	G	C4-C5-C6	5.77	122.27	118.80
38	A1	2447	A	N9-C4-C5	5.77	108.11	105.80
38	A1	2737	G	N7-C8-N9	-5.77	110.21	113.10
39	A3	31	U	N3-C4-O4	5.77	123.44	119.40
54	AI	13	ARG	NE-CZ-NH2	-5.77	117.41	120.30
11	B2	135	U	N1-C2-O2	5.77	126.84	122.80
11	B2	209	A	C5-C6-N1	-5.77	114.81	117.70
11	B2	299	G	P-O3'-C3'	5.77	126.63	119.70
11	B2	342	G	N1-C6-O6	5.77	123.36	119.90
11	B2	787	U	C5'-C4'-C3'	-5.77	106.76	116.00
11	B2	1313	G	C5-C6-N1	-5.77	108.61	111.50
11	B2	1472	G	C3'-C2'-C1'	5.77	106.12	101.50
38	A1	48	G	C5'-C4'-O4'	5.77	116.03	109.10
38	A1	452	A	N1-C2-N3	5.77	132.19	129.30
38	A1	469	A	C5-C6-N6	-5.77	119.08	123.70
38	A1	537	U	C2-N3-C4	-5.77	123.54	127.00
38	A1	966	G	O4'-C1'-N9	5.77	112.82	108.20
38	A1	973	C	C5-C6-N1	5.77	123.89	121.00
38	A1	1075	G	N1-C2-N3	-5.77	120.44	123.90
38	A1	1141	C	C6-N1-C2	-5.77	117.99	120.30
38	A1	1160	U	P-O3'-C3'	5.77	126.63	119.70
38	A1	1776	G	N1-C6-O6	5.77	123.36	119.90
38	A1	1936	C	C2'-C3'-O3'	5.77	122.94	113.70
38	A1	2219	A	N1-C6-N6	5.77	122.06	118.60
38	A1	2265	C	C1'-O4'-C4'	-5.77	105.28	109.90
38	A1	2430	C	C5-C6-N1	-5.77	118.11	121.00
38	A1	2717	A	N7-C8-N9	-5.77	110.91	113.80
40	AK	63	PRO	N-CA-CB	5.77	110.23	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1261	U	O4'-C1'-N1	5.77	112.82	108.20
38	A1	2138	A	C3'-C2'-C1'	5.77	106.12	101.50
38	A1	2423	G	N3-C4-N9	5.77	129.46	126.00
38	A1	2520	C	N3-C4-C5	-5.77	119.59	121.90
10	B1	49	C	O4'-C4'-C3'	-5.77	98.23	104.00
11	B2	181	G	N7-C8-N9	5.77	115.98	113.10
11	B2	513	A	C3'-C2'-C1'	5.77	106.12	101.50
11	B2	622	C	N3-C4-N4	5.77	122.04	118.00
11	B2	712	G	C6-N1-C2	5.77	128.56	125.10
38	A1	14	A	C5-C6-N1	-5.77	114.82	117.70
38	A1	1042	G	C6-C5-N7	-5.77	126.94	130.40
38	A1	1060	C	N3-C2-O2	5.77	125.94	121.90
38	A1	1208	A	N3-C4-C5	-5.77	122.76	126.80
38	A1	1294	A	C4-C5-C6	5.77	119.89	117.00
38	A1	1475	G	C6-N1-C2	-5.77	121.64	125.10
38	A1	1760	C	C4'-C3'-C2'	-5.77	96.83	102.60
58	Ak	51	LEU	CA-CB-CG	5.77	128.57	115.30
10	B1	72	C	N1-C2-O2	-5.77	115.44	118.90
11	B2	307	G	C5-C6-N1	5.77	114.38	111.50
11	B2	618	G	C2-N3-C4	-5.77	109.02	111.90
11	B2	845	G	C4-C5-N7	-5.77	108.49	110.80
11	B2	1106	A	O4'-C4'-C3'	-5.77	98.23	104.00
11	B2	1352	G	C4-C5-N7	-5.77	108.49	110.80
38	A1	323	U	C5'-C4'-O4'	-5.77	102.18	109.10
38	A1	367	G	N7-C8-N9	5.77	115.98	113.10
38	A1	1059	C	N3-C4-C5	-5.77	119.59	121.90
38	A1	1655	G	N1-C2-N2	-5.77	111.01	116.20
38	A1	1899	C	N3-C4-C5	-5.77	119.59	121.90
38	A1	2124	C	N3-C4-C5	-5.77	119.59	121.90
38	A1	2514	C	N3-C4-C5	-5.77	119.59	121.90
38	A1	2784	A	C4'-C3'-C2'	-5.77	96.83	102.60
39	A3	19	G	C5-C6-N1	5.77	114.38	111.50
11	B2	70	C	O4'-C4'-C3'	-5.77	98.23	104.00
11	B2	349	A	N9-C4-C5	-5.77	103.49	105.80
11	B2	1142	G	C3'-C2'-C1'	5.77	106.11	101.50
38	A1	75	G	N3-C2-N2	5.77	123.94	119.90
38	A1	1000	G	N3-C4-C5	-5.77	125.72	128.60
38	A1	1282	A	C5-N7-C8	5.77	106.78	103.90
38	A1	2277	G	C5'-C4'-C3'	5.77	125.23	116.00
38	A1	2403	G	C4-C5-C6	5.77	122.26	118.80
61	AN	125	ARG	NE-CZ-NH1	5.77	123.18	120.30
11	B2	45	U	C5-C6-N1	5.76	125.58	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1142	G	C4-C5-C6	5.76	122.26	118.80
11	B2	1194	C	N3-C4-N4	5.76	122.04	118.00
11	B2	1419	G	C6-C5-N7	-5.76	126.94	130.40
38	A1	1187	A	C6-C5-N7	-5.76	128.26	132.30
38	A1	1308	G	P-O5'-C5'	5.76	130.12	120.90
38	A1	1434	C	P-O3'-C3'	-5.76	112.78	119.70
38	A1	1715	G	N9-C4-C5	5.76	107.71	105.40
38	A1	2827	C	C6-N1-C1'	-5.76	113.88	120.80
67	AZ	2	ASP	CA-CB-CG	-5.76	100.72	113.40
11	B2	263	C	P-O5'-C5'	-5.76	111.68	120.90
11	B2	796	C	C4'-C3'-C2'	-5.76	96.84	102.60
38	A1	72	U	C6-N1-C2	-5.76	117.54	121.00
38	A1	200	G	C4-C5-C6	5.76	122.26	118.80
38	A1	950	G	C4-C5-N7	-5.76	108.50	110.80
38	A1	1155	A	C1'-O4'-C4'	5.76	114.51	109.90
38	A1	1487	U	OP2-P-O3'	5.76	117.88	105.20
38	A1	1809	G	N1-C2-N3	-5.76	120.44	123.90
38	A1	2105	A	C3'-C2'-C1'	5.76	106.11	101.50
38	A1	2287	C	N1-C2-N3	5.76	123.23	119.20
38	A1	2586	A	C4-C5-C6	5.76	119.88	117.00
58	Ak	42	ARG	NE-CZ-NH1	-5.76	117.42	120.30
5	AS	34	GLU	N-CA-CB	5.76	120.97	110.60
10	B1	36	A	C4'-C3'-C2'	-5.76	96.84	102.60
11	B2	281	G	C3'-C2'-C1'	5.76	106.11	101.50
11	B2	616	G	O4'-C1'-C2'	5.76	112.79	107.60
11	B2	800	G	N3-C2-N2	5.76	123.93	119.90
17	BE	205	PHE	CB-CG-CD2	5.76	124.83	120.80
38	A1	255	G	N1-C6-O6	5.76	123.36	119.90
38	A1	726	G	N9-C4-C5	-5.76	103.10	105.40
38	A1	1073	G	O4'-C1'-N9	5.76	112.81	108.20
38	A1	1390	U	C2-N3-C4	5.76	130.46	127.00
38	A1	1393	C	N3-C4-N4	5.76	122.03	118.00
38	A1	1764	G	O4'-C1'-N9	5.76	112.81	108.20
38	A1	2003	C	N3-C2-O2	-5.76	117.87	121.90
38	A1	2011	U	O4'-C1'-N1	5.76	112.81	108.20
38	A1	2565	A	C4-C5-N7	-5.76	107.82	110.70
38	A1	2703	G	C4-C5-C6	5.76	122.26	118.80
12	AG	77	TYR	CB-CG-CD2	5.76	124.46	121.00
10	B1	16	C	C5-C6-N1	5.76	123.88	121.00
11	B2	164	A	C3'-C2'-C1'	5.76	106.11	101.50
11	B2	203	A	N3-C4-C5	-5.76	122.77	126.80
11	B2	204	G	C5-C6-O6	-5.76	125.14	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1309	A	C6-C5-N7	-5.76	128.27	132.30
11	B2	1436	U	C6-N1-C2	-5.76	117.54	121.00
17	BE	10	LEU	N-CA-C	-5.76	95.45	111.00
38	A1	225	C	N3-C4-C5	-5.76	119.60	121.90
38	A1	308	C	P-O3'-C3'	5.76	126.61	119.70
38	A1	524	C	N3-C4-N4	5.76	122.03	118.00
38	A1	579	C	C2'-C3'-O3'	5.76	122.92	113.70
38	A1	816	C	N1-C2-N3	-5.76	115.17	119.20
38	A1	899	A	O4'-C1'-N9	5.76	112.81	108.20
38	A1	1725	A	C5-C6-N1	-5.76	114.82	117.70
38	A1	2006	C	O4'-C1'-N1	5.76	112.81	108.20
38	A1	2306	C	C5-C6-N1	5.76	123.88	121.00
38	A1	2844	G	N3-C2-N2	5.76	123.93	119.90
38	A1	449	G	C8-N9-C4	-5.76	104.10	106.40
38	A1	2773	A	C5-C6-N6	-5.76	119.09	123.70
11	B2	177	A	C5-N7-C8	5.76	106.78	103.90
11	B2	948	G	C5-C6-N1	5.76	114.38	111.50
11	B2	979	U	C2-N3-C4	-5.76	123.55	127.00
38	A1	94	A	C5-C6-N6	-5.76	119.09	123.70
38	A1	1618	G	C6-C5-N7	-5.76	126.95	130.40
38	A1	1773	C	C5-C6-N1	5.76	123.88	121.00
38	A1	2126	G	N1-C2-N3	-5.76	120.45	123.90
38	A1	2173	U	N1-C2-O2	5.76	126.83	122.80
38	A1	2411	C	N1-C2-O2	-5.76	115.45	118.90
38	A1	2853	A	N3-C4-N9	5.76	132.01	127.40
38	A1	2857	C	O5'-C5'-C4'	-5.76	100.76	111.70
38	A1	3034	C	N3-C4-C5	-5.76	119.60	121.90
39	A3	42	A	C6-N1-C2	-5.76	115.15	118.60
11	B2	874	G	N7-C8-N9	5.75	115.98	113.10
11	B2	915	U	N3-C4-O4	5.75	123.43	119.40
38	A1	60	G	O4'-C1'-N9	5.75	112.80	108.20
38	A1	1294	A	P-O3'-C3'	5.75	126.61	119.70
38	A1	1474	A	C4-C5-C6	5.75	119.88	117.00
38	A1	1865	U	C4-C5-C6	-5.75	116.25	119.70
38	A1	2584	A	C5-C6-N6	-5.75	119.10	123.70
11	B2	269	A	C4-C5-C6	5.75	119.88	117.00
11	B2	464	G	C5-C6-O6	-5.75	125.15	128.60
11	B2	815	C	N3-C4-C5	-5.75	119.60	121.90
11	B2	1030	U	O4'-C1'-N1	5.75	112.80	108.20
11	B2	1195	U	C2-N3-C4	-5.75	123.55	127.00
11	B2	1387	C	C2-N3-C4	5.75	122.78	119.90
17	BE	59	ALA	N-CA-CB	5.75	118.16	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	BK	113	ARG	NE-CZ-NH1	5.75	123.18	120.30
38	A1	828	G	C5-N7-C8	5.75	107.18	104.30
38	A1	880	U	C5-C4-O4	5.75	129.35	125.90
38	A1	1405	G	C5-N7-C8	5.75	107.18	104.30
38	A1	1826	G	P-O3'-C3'	5.75	126.60	119.70
38	A1	2074	U	C3'-C2'-C1'	-5.75	96.90	101.50
43	AB	117	ASP	CB-CG-OD2	5.75	123.48	118.30
11	B2	689	C	C2-N3-C4	5.75	122.78	119.90
11	B2	775	G	C4'-C3'-C2'	-5.75	96.85	102.60
11	B2	1091	C	C2-N3-C4	5.75	122.78	119.90
11	B2	1123	G	C4-C5-N7	-5.75	108.50	110.80
11	B2	1484	C	C6-N1-C1'	-5.75	113.90	120.80
38	A1	534	G	O4'-C1'-N9	5.75	112.80	108.20
38	A1	569	G	C8-N9-C4	-5.75	104.10	106.40
38	A1	1784	G	N9-C4-C5	-5.75	103.10	105.40
38	A1	1807	G	C6-C5-N7	-5.75	126.95	130.40
38	A1	2350	G	O3'-P-O5'	-5.75	93.07	104.00
38	A1	2676	A	N1-C6-N6	5.75	122.05	118.60
38	A1	2950	G	C2-N3-C4	5.75	114.78	111.90
41	AA	169	THR	CA-CB-CG2	5.75	120.45	112.40
10	B1	26	C	C6-N1-C2	5.75	122.60	120.30
10	B1	42	C	P-O3'-C3'	5.75	126.60	119.70
11	B2	197	A	C6-C5-N7	-5.75	128.28	132.30
11	B2	443	C	C4'-C3'-C2'	-5.75	96.85	102.60
11	B2	523	C	N1-C2-O2	5.75	122.35	118.90
11	B2	1290	U	C5-C4-O4	-5.75	122.45	125.90
38	A1	410	C	N3-C2-O2	5.75	125.92	121.90
38	A1	1462	G	O4'-C1'-N9	5.75	112.80	108.20
38	A1	1664	G	N1-C2-N3	-5.75	120.45	123.90
11	B2	93	A	C5-N7-C8	5.75	106.77	103.90
11	B2	234	G	C8-N9-C4	-5.75	104.10	106.40
11	B2	587	G	C5-C6-N1	-5.75	108.63	111.50
11	B2	632	C	C5-C4-N4	-5.75	116.18	120.20
11	B2	807	C	N1-C2-N3	-5.75	115.18	119.20
11	B2	979	U	C5-C6-N1	5.75	125.57	122.70
11	B2	1296	U	N3-C4-C5	-5.75	111.15	114.60
38	A1	439	G	P-O3'-C3'	5.75	126.60	119.70
38	A1	602	G	C6-C5-N7	-5.75	126.95	130.40
38	A1	1233	U	N3-C4-O4	5.75	123.42	119.40
38	A1	1448	G	O4'-C1'-N9	5.75	112.80	108.20
38	A1	2072	G	C6-C5-N7	-5.75	126.95	130.40
38	A1	2084	A	C2-N3-C4	5.75	113.47	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2860	G	C4-C5-N7	-5.75	108.50	110.80
38	A1	3039	G	C4-C5-N7	-5.75	108.50	110.80
39	A3	69	C	C4-C5-C6	-5.75	114.53	117.40
11	B2	254	G	N1-C2-N2	5.75	121.37	116.20
11	B2	367	G	C4-C5-C6	5.75	122.25	118.80
11	B2	398	C	N1-C2-N3	5.75	123.22	119.20
11	B2	435	A	P-O5'-C5'	-5.75	111.70	120.90
11	B2	505	U	P-O3'-C3'	5.75	126.60	119.70
11	B2	592	G	C2-N3-C4	5.75	114.77	111.90
11	B2	919	U	C2-N3-C4	-5.75	123.55	127.00
11	B2	1265	G	C6-N1-C2	5.75	128.55	125.10
11	B2	1348	C	O4'-C1'-N1	5.75	112.80	108.20
38	A1	211	A	C6-C5-N7	-5.75	128.28	132.30
38	A1	507	G	C2-N3-C4	-5.75	109.03	111.90
38	A1	1328	G	C4-C5-N7	5.75	113.10	110.80
38	A1	1638	C	C5-C6-N1	-5.75	118.13	121.00
38	A1	1795	C	N3-C2-O2	5.75	125.92	121.90
11	B2	337	C	N3-C2-O2	5.75	125.92	121.90
11	B2	481	C	N3-C4-N4	5.75	122.02	118.00
11	B2	531	G	C6-N1-C2	5.75	128.55	125.10
11	B2	689	C	O4'-C1'-N1	5.75	112.80	108.20
38	A1	94	A	C5-C6-N1	-5.75	114.83	117.70
38	A1	139	G	P-O5'-C5'	-5.75	111.71	120.90
38	A1	556	G	C4-C5-C6	5.75	122.25	118.80
38	A1	1658	A	C5-C6-N1	-5.75	114.83	117.70
38	A1	2065	C	C5-C4-N4	-5.75	116.18	120.20
38	A1	2195	G	N1-C2-N3	-5.75	120.45	123.90
40	AK	4	ILE	CA-CB-CG2	5.75	122.39	110.90
11	B2	305	C	N3-C4-C5	-5.74	119.60	121.90
11	B2	471	G	N3-C4-N9	5.74	129.45	126.00
38	A1	277	A	C6-N1-C2	5.74	122.05	118.60
38	A1	541	A	C5-N7-C8	5.74	106.77	103.90
38	A1	895	C	O4'-C1'-C2'	-5.74	100.06	105.80
38	A1	1169	G	C5'-C4'-C3'	5.74	125.19	116.00
38	A1	1522	A	C6-C5-N7	-5.74	128.28	132.30
38	A1	2199	U	O4'-C4'-C3'	-5.74	98.26	104.00
38	A1	2346	A	OP2-P-O3'	5.74	117.84	105.20
38	A1	2579	G	N1-C6-O6	5.74	123.35	119.90
38	A1	2730	U	O4'-C1'-N1	5.74	112.80	108.20
38	A1	2853	A	N3-C4-C5	-5.74	122.78	126.80
38	A1	2954	C	C2-N3-C4	5.74	122.77	119.90
9	AX	394	PHE	CB-CG-CD2	5.74	124.82	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	588	C	N3-C4-N4	5.74	122.02	118.00
11	B2	960	A	C5-N7-C8	5.74	106.77	103.90
11	B2	1074	C	C4-C5-C6	-5.74	114.53	117.40
37	BY	8	TYR	CD1-CG-CD2	5.74	124.22	117.90
38	A1	35	G	C5-C6-O6	-5.74	125.16	128.60
38	A1	416	A	N1-C6-N6	5.74	122.05	118.60
38	A1	1618	G	C5-C6-N1	-5.74	108.63	111.50
38	A1	2824	C	C2-N3-C4	-5.74	117.03	119.90
11	B2	438	A	P-O3'-C3'	-5.74	112.81	119.70
11	B2	1152	C	C4-C5-C6	5.74	120.27	117.40
11	B2	1154	G	N1-C6-O6	5.74	123.34	119.90
13	BA	135	ARG	NE-CZ-NH1	5.74	123.17	120.30
38	A1	912	G	O4'-C1'-N9	5.74	112.79	108.20
38	A1	1417	U	N1-C2-N3	-5.74	111.45	114.90
38	A1	2145	G	N1-C2-N3	-5.74	120.46	123.90
38	A1	2355	G	O4'-C1'-N9	5.74	112.79	108.20
38	A1	2429	G	C2-N3-C4	5.74	114.77	111.90
38	A1	2537	G	C8-N9-C1'	5.74	134.46	127.00
43	AB	197	MET	N-CA-CB	5.74	120.93	110.60
11	B2	56	A	C5'-C4'-C3'	-5.74	106.82	116.00
11	B2	993	C	N3-C4-C5	-5.74	119.60	121.90
14	BB	149	TYR	CG-CD2-CE2	-5.74	116.71	121.30
38	A1	335	C	C5-C4-N4	5.74	124.22	120.20
38	A1	413	A	O4'-C1'-N9	5.74	112.79	108.20
38	A1	851	G	P-O5'-C5'	5.74	130.08	120.90
38	A1	1083	G	N9-C4-C5	5.74	107.69	105.40
38	A1	1165	C	C4'-C3'-C2'	-5.74	96.86	102.60
38	A1	1185	A	N7-C8-N9	5.74	116.67	113.80
38	A1	1326	U	N1-C2-O2	-5.74	118.78	122.80
38	A1	1388	U	N3-C4-O4	5.74	123.42	119.40
38	A1	1573	A	O4'-C1'-N9	5.74	112.79	108.20
38	A1	1898	A	C6-N1-C2	5.74	122.04	118.60
38	A1	2569	G	N1-C2-N3	-5.74	120.46	123.90
10	B1	60	A	OP2-P-O3'	5.74	117.82	105.20
11	B2	127	G	C4'-C3'-C2'	-5.74	96.86	102.60
11	B2	252	U	N1-C1'-C2'	-5.74	105.69	112.00
11	B2	1353	C	O4'-C1'-N1	5.74	112.79	108.20
11	B2	1392	G	P-O3'-C3'	5.74	126.58	119.70
38	A1	1369	G	N3-C4-C5	-5.74	125.73	128.60
38	A1	1726	A	C6-C5-N7	-5.74	128.28	132.30
4	AQ	23	TRP	CG-CD2-CE3	-5.74	128.74	133.90
11	B2	112	G	C5-C6-O6	-5.74	125.16	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1071	C	C5-C4-N4	-5.74	116.19	120.20
24	BL	82	MET	CG-SD-CE	-5.74	91.03	100.20
38	A1	171	A	O4'-C1'-N9	5.74	112.79	108.20
38	A1	566	G	O5'-P-OP2	-5.74	100.54	105.70
38	A1	635	G	N1-C2-N2	5.74	121.36	116.20
38	A1	716	U	P-O3'-C3'	5.74	126.58	119.70
38	A1	1284	C	P-O5'-C5'	-5.74	111.72	120.90
38	A1	1399	C	C4'-C3'-C2'	-5.74	96.86	102.60
38	A1	1424	G	N3-C2-N2	5.74	123.91	119.90
38	A1	1639	G	O4'-C1'-N9	5.74	112.79	108.20
38	A1	1677	A	O4'-C1'-N9	5.74	112.79	108.20
38	A1	2368	G	P-O5'-C5'	-5.74	111.72	120.90
38	A1	2563	A	N3-C4-C5	-5.74	122.78	126.80
38	A1	2844	G	C6-C5-N7	-5.74	126.96	130.40
45	AC	191	SER	N-CA-CB	5.74	119.10	110.50
60	AM	165	ALA	CB-CA-C	-5.74	101.50	110.10
66	AY	142	TYR	CG-CD1-CE1	5.74	125.89	121.30
5	AS	133	PHE	N-CA-CB	5.73	120.92	110.60
11	B2	35	G	C2-N3-C4	-5.73	109.03	111.90
27	BO	4	PHE	CB-CG-CD1	-5.73	116.79	120.80
38	A1	41	G	C4-N9-C1'	5.73	133.95	126.50
38	A1	1178	G	O4'-C1'-C2'	5.73	112.76	107.60
38	A1	1659	G	C5'-C4'-C3'	-5.73	106.83	116.00
38	A1	1750	C	N1-C2-O2	5.73	122.34	118.90
11	B2	111	G	C2-N3-C4	5.73	114.77	111.90
11	B2	234	G	O4'-C1'-N9	5.73	112.79	108.20
11	B2	316	C	O4'-C1'-N1	5.73	112.79	108.20
11	B2	1113	G	C8-N9-C4	5.73	108.69	106.40
11	B2	1300	A	C4'-C3'-C2'	-5.73	96.87	102.60
38	A1	255	G	N3-C4-C5	-5.73	125.73	128.60
38	A1	315	U	N3-C4-C5	-5.73	111.16	114.60
38	A1	700	A	N1-C6-N6	5.73	122.04	118.60
38	A1	993	G	C5-N7-C8	5.73	107.17	104.30
38	A1	1737	A	C8-N9-C4	-5.73	103.51	105.80
39	A3	74	U	N3-C4-C5	-5.73	111.16	114.60
11	B2	218	C	C3'-C2'-C1'	5.73	106.08	101.50
11	B2	506	G	N9-C4-C5	-5.73	103.11	105.40
11	B2	1016	G	N9-C4-C5	-5.73	103.11	105.40
11	B2	1198	A	C4'-C3'-C2'	-5.73	96.87	102.60
11	B2	1324	U	O4'-C1'-N1	5.73	112.78	108.20
11	B2	1484	C	N1-C2-N3	-5.73	115.19	119.20
38	A1	92	G	O4'-C1'-N9	5.73	112.78	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	122	G	C4-C5-C6	5.73	122.24	118.80
38	A1	600	A	C6-N1-C2	-5.73	115.16	118.60
38	A1	1010	G	C8-N9-C4	-5.73	104.11	106.40
38	A1	1331	U	N3-C4-O4	5.73	123.41	119.40
38	A1	1442	G	C5-C6-N1	-5.73	108.64	111.50
38	A1	1709	C	C6-N1-C2	5.73	122.59	120.30
38	A1	2026	C	C4-C5-C6	5.73	120.27	117.40
38	A1	2562	G	C5-C6-N1	-5.73	108.63	111.50
38	A1	2567	C	O4'-C1'-N1	5.73	112.78	108.20
38	A1	2687	A	C5-C6-N1	-5.73	114.83	117.70
63	AP	44	ARG	NE-CZ-NH2	5.73	123.17	120.30
11	B2	123	U	P-O5'-C5'	-5.73	111.73	120.90
11	B2	134	A	C8-N9-C4	-5.73	103.51	105.80
11	B2	234	G	C4-C5-C6	5.73	122.24	118.80
11	B2	1432	U	N3-C4-O4	5.73	123.41	119.40
27	BO	111	ARG	N-CA-CB	5.73	120.91	110.60
38	A1	423	G	C1'-O4'-C4'	-5.73	105.32	109.90
38	A1	1680	G	N3-C4-C5	-5.73	125.73	128.60
38	A1	2803	U	N3-C4-C5	-5.73	111.16	114.60
38	A1	2898	G	C4-N9-C1'	-5.73	119.05	126.50
10	B1	51	G	C6-N1-C2	-5.73	121.66	125.10
11	B2	13	C	N3-C4-C5	-5.73	119.61	121.90
11	B2	66	G	C6-C5-N7	-5.73	126.96	130.40
11	B2	277	G	C5-C6-O6	5.73	132.04	128.60
11	B2	869	U	C5-C4-O4	-5.73	122.46	125.90
11	B2	1415	U	N3-C4-C5	-5.73	111.16	114.60
38	A1	972	C	N3-C4-N4	5.73	122.01	118.00
38	A1	2286	U	O4'-C1'-N1	5.73	112.78	108.20
9	AX	376	PRO	N-CA-CB	5.73	110.17	103.30
11	B2	635	C	O5'-P-OP1	-5.73	100.55	105.70
11	B2	647	G	N1-C2-N3	-5.73	120.46	123.90
11	B2	763	G	C5-C6-O6	-5.73	125.16	128.60
11	B2	918	A	O4'-C4'-C3'	5.73	110.68	106.10
38	A1	344	G	C5-C6-N1	-5.73	108.64	111.50
38	A1	565	A	C8-N9-C4	-5.73	103.51	105.80
38	A1	986	G	C5-N7-C8	-5.73	101.44	104.30
38	A1	2540	A	C1'-O4'-C4'	5.73	114.48	109.90
39	A3	104	C	N3-C4-N4	5.73	122.01	118.00
10	B1	29	C	P-O5'-C5'	5.72	130.06	120.90
11	B2	347	G	C1'-O4'-C4'	-5.72	105.32	109.90
11	B2	516	A	N7-C8-N9	5.72	116.66	113.80
17	BE	166	MET	CG-SD-CE	-5.72	91.04	100.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	BP	40	ARG	NE-CZ-NH1	-5.72	117.44	120.30
38	A1	642	G	C6-C5-N7	-5.72	126.97	130.40
38	A1	766	G	C5-N7-C8	5.72	107.16	104.30
38	A1	1126	C	N3-C2-O2	5.72	125.91	121.90
38	A1	1290	G	N3-C2-N2	5.72	123.91	119.90
38	A1	1425	U	C5-C6-N1	-5.72	119.84	122.70
38	A1	1429	A	C3'-C2'-C1'	-5.72	96.92	101.50
38	A1	1902	G	C5'-C4'-C3'	5.72	125.16	116.00
38	A1	2207	C	N3-C4-C5	-5.72	119.61	121.90
38	A1	2355	G	C6-C5-N7	-5.72	126.97	130.40
38	A1	2620	G	C3'-C2'-C1'	-5.72	96.92	101.50
38	A1	2743	U	C2-N3-C4	-5.72	123.56	127.00
10	B1	39	A	OP1-P-OP2	-5.72	111.02	119.60
11	B2	36	G	C8-N9-C1'	5.72	134.44	127.00
11	B2	551	U	C1'-O4'-C4'	5.72	114.48	109.90
11	B2	1095	C	C4-C5-C6	5.72	120.26	117.40
11	B2	1120	G	C1'-O4'-C4'	-5.72	105.32	109.90
38	A1	564	U	C2-N3-C4	-5.72	123.57	127.00
38	A1	614	G	C8-N9-C4	-5.72	104.11	106.40
38	A1	1097	G	C5'-C4'-O4'	-5.72	102.23	109.10
38	A1	1262	C	O4'-C1'-N1	5.72	112.78	108.20
38	A1	2480	G	C5'-C4'-O4'	5.72	115.97	109.10
38	A1	2562	G	C4-C5-C6	5.72	122.23	118.80
38	A1	2615	U	O4'-C1'-C2'	5.72	112.75	107.60
38	A1	3009	C	N3-C4-N4	5.72	122.00	118.00
64	AR	87	PHE	CG-CD2-CE2	-5.72	114.51	120.80
10	B1	30	G	C2-N3-C4	5.72	114.76	111.90
11	B2	819	G	C2-N3-C4	-5.72	109.04	111.90
11	B2	876	A	C6-N1-C2	5.72	122.03	118.60
20	BH	114	ARG	NE-CZ-NH1	5.72	123.16	120.30
38	A1	1394	G	C4-C5-C6	5.72	122.23	118.80
11	B2	1202	G	N3-C4-N9	5.72	129.43	126.00
38	A1	18	C	C5-C4-N4	-5.72	116.20	120.20
38	A1	534	G	C5-C6-N1	-5.72	108.64	111.50
38	A1	601	A	C8-N9-C4	-5.72	103.51	105.80
38	A1	983	G	P-O5'-C5'	5.72	130.05	120.90
38	A1	1333	G	C4'-C3'-C2'	-5.72	96.88	102.60
38	A1	2041	U	C4'-C3'-C2'	-5.72	96.88	102.60
38	A1	2108	U	N3-C4-O4	5.72	123.40	119.40
38	A1	2264	G	N9-C1'-C2'	-5.72	105.71	112.00
39	A3	15	G	C5-C6-O6	-5.72	125.17	128.60
7	AU	5	SER	N-CA-C	-5.72	95.56	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	263	C	C5-C4-N4	-5.72	116.20	120.20
11	B2	915	U	N3-C4-C5	-5.72	111.17	114.60
11	B2	1118	C	N1-C2-O2	-5.72	115.47	118.90
11	B2	1305	U	OP1-P-OP2	-5.72	111.02	119.60
11	B2	1448	A	C5-C6-N1	-5.72	114.84	117.70
13	BA	89	ARG	CG-CD-NE	-5.72	99.79	111.80
38	A1	1612	G	C3'-C2'-C1'	5.72	106.07	101.50
38	A1	1665	G	N1-C2-N3	-5.72	120.47	123.90
38	A1	1736	G	N1-C6-O6	5.72	123.33	119.90
38	A1	2406	C	N3-C4-N4	5.72	122.00	118.00
10	B1	70	C	C2-N3-C4	5.72	122.76	119.90
10	B1	70	C	O4'-C1'-N1	5.72	112.77	108.20
11	B2	124	C	C5-C6-N1	5.72	123.86	121.00
11	B2	412	U	N3-C4-C5	-5.72	111.17	114.60
11	B2	469	U	C4-C5-C6	5.72	123.13	119.70
11	B2	868	C	N1-C2-N3	5.72	123.20	119.20
11	B2	1200	U	C6-N1-C2	-5.72	117.57	121.00
11	B2	1373	A	O4'-C1'-N9	5.72	112.77	108.20
38	A1	380	A	C2-N3-C4	-5.72	107.74	110.60
38	A1	400	U	P-O5'-C5'	-5.72	111.75	120.90
38	A1	442	G	N3-C2-N2	5.72	123.90	119.90
38	A1	682	G	C6-C5-N7	-5.72	126.97	130.40
38	A1	876	C	O4'-C1'-N1	5.72	112.77	108.20
38	A1	1500	C	C5'-C4'-O4'	-5.72	102.24	109.10
38	A1	1558	U	C3'-C2'-C1'	5.72	106.07	101.50
38	A1	1572	C	O4'-C1'-C2'	-5.72	100.08	105.80
38	A1	1578	C	N3-C2-O2	-5.72	117.90	121.90
38	A1	1631	A	C8-N9-C4	5.72	108.09	105.80
38	A1	2405	U	C5-C4-O4	-5.72	122.47	125.90
38	A1	2692	A	N1-C2-N3	5.72	132.16	129.30
38	A1	2944	G	N1-C2-N3	-5.72	120.47	123.90
39	A3	20	G	C8-N9-C1'	-5.72	119.57	127.00
45	AC	30	TRP	CB-CG-CD2	5.72	134.03	126.60
10	B1	50	G	C6-N1-C2	5.71	128.53	125.10
11	B2	12	U	O4'-C1'-N1	5.71	112.77	108.20
11	B2	191	A	C6-C5-N7	-5.71	128.30	132.30
11	B2	692	G	C5-C6-O6	-5.71	125.17	128.60
11	B2	883	G	N3-C4-C5	5.71	131.46	128.60
11	B2	981	U	C5-C6-N1	5.71	125.56	122.70
11	B2	1100	G	N3-C4-C5	-5.71	125.74	128.60
11	B2	1176	C	C2-N3-C4	5.71	122.76	119.90
11	B2	1189	G	C2-N3-C4	5.71	114.76	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1216	A	C4-C5-C6	5.71	119.86	117.00
11	B2	1401	U	C6-N1-C2	5.71	124.43	121.00
20	BH	79	TYR	CG-CD1-CE1	5.71	125.87	121.30
33	BU	65	ASP	CB-CG-OD2	-5.71	113.16	118.30
38	A1	284	U	N3-C4-O4	5.71	123.40	119.40
38	A1	901	C	P-O5'-C5'	5.71	130.04	120.90
38	A1	2671	C	O4'-C1'-N1	5.71	112.77	108.20
38	A1	2855	G	C8-N9-C4	-5.71	104.11	106.40
38	A1	2972	G	C5-C6-N1	5.71	114.36	111.50
11	B2	799	C	C5-C6-N1	5.71	123.86	121.00
29	BQ	45	TYR	CZ-CE2-CD2	5.71	124.94	119.80
38	A1	217	A	C5-C6-N1	-5.71	114.84	117.70
38	A1	588	U	C5'-C4'-O4'	5.71	115.96	109.10
38	A1	1055	C	N3-C2-O2	5.71	125.90	121.90
38	A1	1549	C	C6-N1-C2	-5.71	118.02	120.30
38	A1	1594	G	C2-N3-C4	5.71	114.76	111.90
38	A1	2013	A	C5'-C4'-O4'	5.71	115.95	109.10
10	B1	65	C	N3-C2-O2	5.71	125.90	121.90
11	B2	506	G	C5-N7-C8	5.71	107.16	104.30
14	BB	101	MET	O-C-N	-5.71	113.56	122.70
38	A1	66	C	N1-C2-O2	-5.71	115.47	118.90
38	A1	805	C	O4'-C1'-N1	5.71	112.77	108.20
38	A1	963	G	C8-N9-C4	-5.71	104.12	106.40
38	A1	1299	C	C1'-O4'-C4'	5.71	114.47	109.90
38	A1	1564	C	C6-N1-C2	5.71	122.58	120.30
38	A1	1614	U	C1'-O4'-C4'	-5.71	105.33	109.90
38	A1	1765	A	C6-C5-N7	-5.71	128.30	132.30
38	A1	1796	U	N1-C2-N3	-5.71	111.47	114.90
38	A1	2433	U	C2-N3-C4	5.71	130.43	127.00
38	A1	2579	G	O4'-C1'-N9	5.71	112.77	108.20
39	A3	18	G	N7-C8-N9	5.71	115.95	113.10
54	AI	55	LEU	O-C-N	-5.71	113.56	122.70
11	B2	80	A	P-O5'-C5'	5.71	130.04	120.90
11	B2	306	C	C2-N3-C4	5.71	122.75	119.90
60	AM	84	LYS	N-CA-CB	5.71	120.88	110.60
11	B2	290	C	N1-C2-N3	-5.71	115.20	119.20
11	B2	309	A	C2-N3-C4	-5.71	107.75	110.60
11	B2	605	C	C5-C6-N1	5.71	123.85	121.00
20	BH	51	HIS	CA-CB-CG	5.71	123.30	113.60
38	A1	139	G	O4'-C1'-N9	5.71	112.77	108.20
38	A1	299	U	N3-C2-O2	5.71	126.20	122.20
38	A1	454	C	N3-C4-C5	-5.71	119.62	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	456	G	C4-C5-N7	-5.71	108.52	110.80
38	A1	524	C	N3-C4-C5	-5.71	119.62	121.90
38	A1	598	C	C5-C4-N4	-5.71	116.20	120.20
38	A1	764	G	O4'-C1'-N9	5.71	112.77	108.20
38	A1	991	U	C3'-C2'-C1'	-5.71	96.93	101.50
38	A1	1392	G	N1-C2-N3	-5.71	120.47	123.90
38	A1	1577	C	N3-C4-N4	5.71	122.00	118.00
38	A1	1939	C	C2-N3-C4	5.71	122.75	119.90
38	A1	2190	A	C6-C5-N7	-5.71	128.31	132.30
38	A1	2194	A	O4'-C1'-N9	5.71	112.77	108.20
38	A1	2230	G	P-O3'-C3'	5.71	126.55	119.70
38	A1	2522	C	C5-C4-N4	-5.71	116.20	120.20
38	A1	2863	A	N3-C4-C5	-5.71	122.80	126.80
38	A1	2878	A	N7-C8-N9	-5.71	110.95	113.80
39	A3	92	G	N3-C2-N2	5.71	123.90	119.90
11	B2	159	C	P-O3'-C3'	5.71	126.55	119.70
11	B2	352	A	O4'-C1'-N9	5.71	112.77	108.20
11	B2	545	C	N1-C2-N3	-5.71	115.20	119.20
11	B2	574	A	C4-C5-N7	-5.71	107.85	110.70
11	B2	1320	A	P-O3'-C3'	-5.71	112.85	119.70
11	B2	1463	A	O4'-C4'-C3'	-5.71	98.29	104.00
26	BN	70	ARG	NE-CZ-NH2	-5.71	117.45	120.30
38	A1	1447	G	OP1-P-OP2	-5.71	111.04	119.60
38	A1	1550	C	C6-N1-C2	-5.71	118.02	120.30
38	A1	1961	G	C5-C6-O6	-5.71	125.18	128.60
38	A1	2163	G	N1-C2-N3	-5.71	120.48	123.90
38	A1	2230	G	C5-C6-O6	-5.71	125.18	128.60
38	A1	2489	C	P-O5'-C5'	5.71	130.03	120.90
39	A3	113	C	N1-C2-N3	5.71	123.19	119.20
55	Ai	23	ARG	NE-CZ-NH1	5.71	123.15	120.30
11	B2	17	C	N3-C2-O2	5.71	125.89	121.90
11	B2	781	U	N3-C4-O4	-5.71	115.41	119.40
11	B2	997	G	N3-C2-N2	5.71	123.89	119.90
11	B2	1493	C	C5'-C4'-O4'	5.71	115.95	109.10
38	A1	833	G	C6-C5-N7	-5.71	126.98	130.40
38	A1	880	U	N3-C4-C5	-5.71	111.18	114.60
38	A1	1163	U	N3-C4-C5	-5.71	111.18	114.60
38	A1	1203	C	N3-C4-N4	5.71	121.99	118.00
38	A1	1264	G	N3-C2-N2	5.71	123.89	119.90
38	A1	2053	G	C4-C5-C6	5.71	122.22	118.80
2	A8	49	TYR	CB-CG-CD1	-5.70	117.58	121.00
10	B1	41	C	C6-N1-C2	-5.70	118.02	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	18	C	N1-C2-O2	-5.70	115.48	118.90
11	B2	275	A	N3-C4-C5	-5.70	122.81	126.80
11	B2	995	G	C5-C6-O6	-5.70	125.18	128.60
11	B2	1185	A	N7-C8-N9	-5.70	110.95	113.80
20	BH	44	LEU	CB-CA-C	-5.70	99.36	110.20
33	BU	91	TYR	CB-CG-CD2	5.70	124.42	121.00
38	A1	198	C	C6-N1-C2	5.70	122.58	120.30
38	A1	301	G	O4'-C1'-N9	5.70	112.76	108.20
38	A1	828	G	P-O3'-C3'	-5.70	112.86	119.70
38	A1	1210	G	C3'-C2'-C1'	5.70	106.06	101.50
38	A1	1259	G	N1-C2-N3	-5.70	120.48	123.90
38	A1	1957	U	O4'-C1'-C2'	-5.70	100.10	105.80
38	A1	2164	G	N7-C8-N9	5.70	115.95	113.10
45	AC	183	MET	CA-CB-CG	5.70	123.00	113.30
11	B2	439	G	C5-C6-O6	-5.70	125.18	128.60
11	B2	824	G	C6-C5-N7	-5.70	126.98	130.40
11	B2	1258	C	N3-C4-N4	5.70	121.99	118.00
17	BE	158	TYR	CD1-CE1-CZ	-5.70	114.67	119.80
27	BO	136	ARG	NE-CZ-NH2	-5.70	117.45	120.30
38	A1	474	G	N3-C4-C5	5.70	131.45	128.60
38	A1	1264	G	N9-C4-C5	5.70	107.68	105.40
38	A1	1354	G	C6-C5-N7	-5.70	126.98	130.40
38	A1	1918	U	C6-N1-C2	-5.70	117.58	121.00
38	A1	2508	G	N3-C4-C5	5.70	131.45	128.60
11	B2	369	A	C1'-O4'-C4'	5.70	114.46	109.90
11	B2	637	G	N1-C2-N3	5.70	127.32	123.90
11	B2	885	G	N3-C4-C5	-5.70	125.75	128.60
11	B2	1129	A	C2-N3-C4	-5.70	107.75	110.60
11	B2	1242	C	O4'-C4'-C3'	-5.70	98.30	104.00
11	B2	1481	G	C5-N7-C8	5.70	107.15	104.30
38	A1	48	G	C2-N3-C4	5.70	114.75	111.90
38	A1	215	A	C2'-C3'-O3'	5.70	122.82	113.70
38	A1	359	C	N3-C4-C5	-5.70	119.62	121.90
38	A1	455	G	N3-C2-N2	5.70	123.89	119.90
38	A1	957	C	C5-C4-N4	-5.70	116.21	120.20
38	A1	2272	G	O3'-P-O5'	5.70	114.83	104.00
38	A1	2303	A	C5-N7-C8	5.70	106.75	103.90
38	A1	2338	A	O4'-C1'-N9	5.70	112.76	108.20
38	A1	3010	C	C5-C6-N1	5.70	123.85	121.00
10	B1	49	C	C2-N3-C4	5.70	122.75	119.90
10	B1	49	C	C6-N1-C2	-5.70	118.02	120.30
11	B2	186	U	N1-C2-N3	5.70	118.32	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	439	G	OP1-P-OP2	-5.70	111.05	119.60
13	BA	123	ALA	N-CA-CB	5.70	118.08	110.10
36	BX	18	THR	CA-CB-CG2	-5.70	104.42	112.40
38	A1	459	C	C4-C5-C6	5.70	120.25	117.40
38	A1	587	A	C4-C5-N7	-5.70	107.85	110.70
38	A1	1037	C	N1-C1'-C2'	-5.70	105.73	112.00
38	A1	1168	A	N7-C8-N9	-5.70	110.95	113.80
38	A1	1588	C	C5-C4-N4	-5.70	116.21	120.20
38	A1	2127	G	N9-C4-C5	5.70	107.68	105.40
38	A1	2593	A	C5-N7-C8	5.70	106.75	103.90
38	A1	2599	C	C5-C6-N1	5.70	123.85	121.00
38	A1	2990	G	C5-C6-N1	-5.70	108.65	111.50
10	B1	58	A	N7-C8-N9	-5.70	110.95	113.80
11	B2	253	G	C5-C6-O6	-5.70	125.18	128.60
11	B2	859	A	C4-C5-C6	5.70	119.85	117.00
11	B2	1158	G	N3-C4-C5	5.70	131.45	128.60
26	BN	98	ASP	CB-CG-OD1	5.70	123.43	118.30
38	A1	70	G	N1-C2-N3	-5.70	120.48	123.90
38	A1	300	U	C5'-C4'-O4'	5.70	115.94	109.10
38	A1	656	G	C2-N3-C4	5.70	114.75	111.90
38	A1	1078	G	C5-N7-C8	5.70	107.15	104.30
11	B2	166	A	C5-N7-C8	5.70	106.75	103.90
11	B2	572	U	C3'-C2'-C1'	-5.70	96.94	101.50
11	B2	725	C	C5-C6-N1	5.70	123.85	121.00
11	B2	864	G	C8-N9-C4	-5.70	104.12	106.40
11	B2	949	G	C8-N9-C4	5.70	108.68	106.40
11	B2	1000	G	C8-N9-C4	5.70	108.68	106.40
17	BE	128	ARG	NE-CZ-NH1	5.70	123.15	120.30
38	A1	362	A	N7-C8-N9	-5.70	110.95	113.80
38	A1	981	A	C5-C6-N1	-5.70	114.85	117.70
38	A1	1094	U	N1-C2-O2	-5.70	118.81	122.80
38	A1	1853	C	C2-N3-C4	5.70	122.75	119.90
38	A1	2065	C	N3-C4-C5	5.70	124.18	121.90
38	A1	2382	A	C8-N9-C4	-5.70	103.52	105.80
38	A1	2979	C	N3-C4-N4	5.70	121.99	118.00
39	A3	70	C	N3-C4-N4	5.70	121.99	118.00
62	AO	34	ARG	CD-NE-CZ	-5.70	115.63	123.60
11	B2	308	G	C2-N3-C4	5.69	114.75	111.90
11	B2	423	U	O4'-C4'-C3'	-5.69	98.31	104.00
11	B2	885	G	C4'-C3'-C2'	-5.69	96.91	102.60
11	B2	1114	G	N1-C6-O6	5.69	123.32	119.90
38	A1	2292	A	C5'-C4'-C3'	-5.69	106.89	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	163	C	C5-C4-N4	-5.69	116.22	120.20
11	B2	315	A	C4'-C3'-C2'	-5.69	96.91	102.60
13	BA	126	MET	N-CA-CB	5.69	120.85	110.60
38	A1	175	G	N3-C4-C5	-5.69	125.75	128.60
38	A1	224	G	N7-C8-N9	5.69	115.95	113.10
38	A1	306	G	N1-C2-N2	-5.69	111.08	116.20
38	A1	530	A	O4'-C4'-C3'	-5.69	98.31	104.00
38	A1	810	A	C4-C5-C6	5.69	119.85	117.00
38	A1	1271	G	C6-C5-N7	-5.69	126.98	130.40
38	A1	2255	C	C2-N1-C1'	5.69	125.06	118.80
38	A1	2310	G	O4'-C1'-N9	5.69	112.75	108.20
38	A1	2445	G	N9-C1'-C2'	-5.69	105.74	112.00
38	A1	2486	A	C3'-C2'-C1'	-5.69	96.95	101.50
39	A3	50	G	O4'-C1'-N9	5.69	112.75	108.20
11	B2	437	A	O5'-P-OP2	-5.69	100.58	105.70
11	B2	1077	U	C4'-C3'-C2'	-5.69	96.91	102.60
11	B2	1094	U	C4'-C3'-C2'	-5.69	96.91	102.60
11	B2	1172	A	O4'-C1'-N9	5.69	112.75	108.20
11	B2	1270	C	O4'-C1'-N1	5.69	112.75	108.20
11	B2	1364	C	N3-C2-O2	5.69	125.88	121.90
17	BE	55	TYR	CB-CG-CD1	5.69	124.42	121.00
20	BH	20	ARG	NE-CZ-NH2	-5.69	117.45	120.30
38	A1	86	G	C5-C6-O6	-5.69	125.19	128.60
38	A1	132	G	N9-C4-C5	-5.69	103.12	105.40
38	A1	664	A	C5-N7-C8	-5.69	101.06	103.90
38	A1	734	C	N1-C2-O2	5.69	122.31	118.90
38	A1	814	G	N3-C4-N9	5.69	129.41	126.00
38	A1	1005	G	C8-N9-C4	5.69	108.68	106.40
38	A1	1070	G	C8-N9-C1'	-5.69	119.60	127.00
38	A1	2400	U	C4-C5-C6	5.69	123.11	119.70
38	A1	2733	A	C5-N7-C8	5.69	106.75	103.90
38	A1	2738	G	C5-C6-N1	-5.69	108.66	111.50
52	AH	64	PHE	CB-CG-CD2	5.69	124.78	120.80
11	B2	276	A	N3-C4-C5	-5.69	122.82	126.80
11	B2	378	A	C5-N7-C8	5.69	106.75	103.90
38	A1	584	G	N3-C4-N9	5.69	129.41	126.00
38	A1	1439	G	N1-C6-O6	5.69	123.31	119.90
38	A1	1547	U	P-O5'-C5'	5.69	130.00	120.90
38	A1	1639	G	N7-C8-N9	-5.69	110.26	113.10
38	A1	1739	U	O4'-C1'-N1	5.69	112.75	108.20
38	A1	2240	G	N1-C2-N3	-5.69	120.49	123.90
38	A1	2814	U	N1-C2-O2	-5.69	118.82	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	B1	35	G	O4'-C1'-N9	5.69	112.75	108.20
11	B2	1138	G	N3-C2-N2	5.69	123.88	119.90
11	B2	1302	C	N3-C4-C5	-5.69	119.62	121.90
31	BS	49	ARG	NE-CZ-NH2	5.69	123.14	120.30
38	A1	885	A	C2-N3-C4	5.69	113.44	110.60
38	A1	1149	C	C5-C6-N1	5.69	123.84	121.00
38	A1	1445	G	N1-C2-N3	-5.69	120.49	123.90
38	A1	1891	C	N3-C2-O2	-5.69	117.92	121.90
38	A1	2192	G	N3-C2-N2	-5.69	115.92	119.90
38	A1	2827	C	N1-C2-O2	5.69	122.31	118.90
43	AB	84	TYR	CG-CD1-CE1	-5.69	116.75	121.30
45	AC	209	VAL	C-N-CA	5.69	134.24	122.30
11	B2	162	C	N3-C4-C5	-5.69	119.63	121.90
11	B2	471	G	O4'-C4'-C3'	-5.69	98.31	104.00
11	B2	529	C	C4-C5-C6	5.69	120.24	117.40
15	BC	110	ARG	N-CA-CB	5.69	120.83	110.60
16	BD	108	ILE	CB-CA-C	5.69	122.97	111.60
38	A1	145	C	O4'-C1'-N1	5.69	112.75	108.20
38	A1	549	G	C8-N9-C4	-5.69	104.13	106.40
38	A1	1705	C	C6-N1-C2	-5.69	118.03	120.30
38	A1	2960	G	C5-C6-N1	-5.69	108.66	111.50
11	B2	146	A	N1-C2-N3	5.68	132.14	129.30
11	B2	253	G	C6-N1-C2	5.68	128.51	125.10
11	B2	382	G	N3-C2-N2	5.68	123.88	119.90
11	B2	812	U	C3'-C2'-C1'	5.68	106.05	101.50
38	A1	1209	A	C5-C6-N6	-5.68	119.15	123.70
38	A1	1451	A	N1-C2-N3	5.68	132.14	129.30
38	A1	1533	G	N1-C2-N2	-5.68	111.08	116.20
38	A1	1627	G	C4-C5-C6	5.68	122.21	118.80
38	A1	1911	G	C5-C6-O6	5.68	132.01	128.60
38	A1	2155	C	N1-C2-O2	5.68	122.31	118.90
38	A1	2953	U	P-O5'-C5'	5.68	129.99	120.90
39	A3	48	A	C5-N7-C8	5.68	106.74	103.90
45	AC	41	PHE	CB-CG-CD1	-5.68	116.82	120.80
11	B2	50	C	C5-C4-N4	-5.68	116.22	120.20
11	B2	289	C	C6-N1-C2	-5.68	118.03	120.30
11	B2	1036	G	C6-C5-N7	-5.68	126.99	130.40
38	A1	112	U	N1-C2-O2	-5.68	118.82	122.80
38	A1	149	G	C4-C5-C6	5.68	122.21	118.80
38	A1	1444	A	C5'-C4'-O4'	5.68	115.92	109.10
38	A1	1708	U	C1'-O4'-C4'	-5.68	105.36	109.90
38	A1	1929	C	N1-C2-N3	-5.68	115.22	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1938	G	C8-N9-C4	5.68	108.67	106.40
38	A1	2020	G	N1-C2-N3	-5.68	120.49	123.90
38	A1	2609	G	C5-C6-O6	-5.68	125.19	128.60
39	A3	95	G	N9-C4-C5	-5.68	103.13	105.40
11	B2	933	G	C2-N3-C4	5.68	114.74	111.90
38	A1	1114	G	O4'-C1'-N9	5.68	112.75	108.20
38	A1	1361	G	C5-N7-C8	-5.68	101.46	104.30
38	A1	2290	U	O4'-C1'-C2'	-5.68	100.12	105.80
57	Aj	3	TYR	CG-CD1-CE1	-5.68	116.76	121.30
11	B2	107	C	C4-C5-C6	-5.68	114.56	117.40
11	B2	977	G	N3-C2-N2	5.68	123.88	119.90
11	B2	1426	C	C5-C6-N1	5.68	123.84	121.00
26	BN	69	MET	CG-SD-CE	-5.68	91.11	100.20
38	A1	246	A	N3-C4-C5	-5.68	122.82	126.80
38	A1	766	G	O4'-C1'-N9	5.68	112.74	108.20
38	A1	995	G	C2-N3-C4	5.68	114.74	111.90
38	A1	1272	A	C8-N9-C4	-5.68	103.53	105.80
38	A1	1595	G	N1-C2-N3	-5.68	120.49	123.90
38	A1	1720	G	C4-C5-C6	5.68	122.21	118.80
38	A1	1759	A	C5-N7-C8	5.68	106.74	103.90
38	A1	2080	G	O4'-C1'-N9	5.68	112.74	108.20
38	A1	2269	C	P-O3'-C3'	-5.68	112.89	119.70
39	A3	32	C	N1-C2-N3	-5.68	115.22	119.20
59	AL	82	ASP	CB-CG-OD2	-5.68	113.19	118.30
11	B2	206	C	O4'-C1'-N1	5.68	112.74	108.20
11	B2	511	C	P-O3'-C3'	5.68	126.51	119.70
11	B2	1307	G	O4'-C1'-N9	5.68	112.74	108.20
38	A1	212	A	C4-C5-N7	-5.68	107.86	110.70
38	A1	221	G	C5-C6-N1	-5.68	108.66	111.50
38	A1	1091	G	N1-C2-N3	5.68	127.31	123.90
38	A1	1700	U	N3-C4-C5	-5.68	111.19	114.60
38	A1	1908	C	C4-C5-C6	5.68	120.24	117.40
61	AN	88	VAL	CG1-CB-CG2	5.68	119.98	110.90
10	B1	36	A	N7-C8-N9	-5.68	110.96	113.80
11	B2	266	A	O4'-C1'-N9	5.68	112.74	108.20
11	B2	784	G	C5-N7-C8	5.68	107.14	104.30
11	B2	825	C	C5-C6-N1	5.68	123.84	121.00
11	B2	1243	C	C5-C4-N4	-5.68	116.23	120.20
11	B2	1459	G	C2'-C3'-O3'	5.68	122.78	113.70
38	A1	509	A	C6-C5-N7	-5.68	128.33	132.30
38	A1	545	G	N9-C4-C5	-5.68	103.13	105.40
38	A1	1093	G	N3-C4-C5	-5.68	125.76	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1247	U	P-O5'-C5'	5.68	129.98	120.90
38	A1	1259	G	C5-C6-O6	-5.68	125.19	128.60
38	A1	1450	C	C5-C4-N4	-5.68	116.23	120.20
38	A1	1675	C	N3-C4-N4	5.68	121.97	118.00
38	A1	2424	A	C5-C6-N1	-5.68	114.86	117.70
38	A1	3021	C	C2-N3-C4	5.68	122.74	119.90
59	AL	108	PHE	CB-CG-CD1	-5.68	116.83	120.80
59	AL	125	LYS	N-CA-CB	5.68	120.82	110.60
4	AQ	51	LYS	CB-CA-C	-5.67	99.05	110.40
11	B2	238	G	C4'-C3'-C2'	-5.67	96.92	102.60
11	B2	818	A	C5-C6-N6	-5.67	119.16	123.70
11	B2	1286	C	C1'-O4'-C4'	-5.67	105.36	109.90
38	A1	785	C	C2-N3-C4	5.67	122.74	119.90
38	A1	909	A	OP1-P-OP2	-5.67	111.09	119.60
38	A1	1226	G	C5'-C4'-C3'	5.67	125.08	116.00
38	A1	1671	A	N1-C2-N3	-5.67	126.46	129.30
38	A1	2165	A	O4'-C1'-N9	5.67	112.74	108.20
38	A1	2373	G	O5'-P-OP1	5.67	117.51	110.70
38	A1	2494	A	N3-C4-C5	-5.67	122.83	126.80
39	A3	4	C	N3-C4-C5	-5.67	119.63	121.90
39	A3	14	G	C6-C5-N7	-5.67	127.00	130.40
39	A3	52	U	C1'-O4'-C4'	-5.67	105.36	109.90
11	B2	106	A	C5-N7-C8	5.67	106.74	103.90
11	B2	172	G	C2-N3-C4	5.67	114.74	111.90
11	B2	713	A	N9-C4-C5	-5.67	103.53	105.80
11	B2	918	A	C5-N7-C8	5.67	106.74	103.90
11	B2	1489	A	N9-C4-C5	5.67	108.07	105.80
38	A1	2318	G	C2-N3-C4	-5.67	109.06	111.90
38	A1	2320	U	P-O3'-C3'	-5.67	112.89	119.70
38	A1	2877	A	C5-C6-N6	-5.67	119.16	123.70
10	B1	7	G	C4-N9-C1'	5.67	133.87	126.50
11	B2	566	C	O4'-C1'-N1	5.67	112.74	108.20
11	B2	923	A	C1'-O4'-C4'	5.67	114.44	109.90
11	B2	1220	G	N9-C4-C5	5.67	107.67	105.40
17	BE	50	ARG	NE-CZ-NH2	-5.67	117.46	120.30
20	BH	17	VAL	CA-CB-CG1	-5.67	102.39	110.90
34	BV	72	TYR	CB-CG-CD1	5.67	124.40	121.00
38	A1	58	G	C8-N9-C4	5.67	108.67	106.40
38	A1	322	C	C6-N1-C2	-5.67	118.03	120.30
38	A1	1331	U	C5-C4-O4	-5.67	122.50	125.90
38	A1	1818	G	C5-C6-N1	-5.67	108.67	111.50
38	A1	2157	U	C4-C5-C6	5.67	123.10	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2858	C	N3-C4-N4	5.67	121.97	118.00
38	A1	2974	U	O4'-C1'-N1	5.67	112.74	108.20
38	A1	3005	C	C5-C6-N1	5.67	123.84	121.00
39	A3	2	G	C5'-C4'-C3'	5.67	125.08	116.00
11	B2	1127	A	C5-C6-N6	-5.67	119.16	123.70
26	BN	74	ARG	NE-CZ-NH1	5.67	123.14	120.30
38	A1	1775	G	C4-C5-C6	5.67	122.20	118.80
38	A1	2049	U	C4-C5-C6	5.67	123.10	119.70
38	A1	2625	C	O4'-C1'-N1	5.67	112.74	108.20
38	A1	2679	A	N1-C6-N6	5.67	122.00	118.60
38	A1	2697	G	C6-C5-N7	-5.67	127.00	130.40
38	A1	2993	G	C5-N7-C8	-5.67	101.47	104.30
10	B1	19	G	C5-C6-N1	-5.67	108.67	111.50
11	B2	683	A	C4'-C3'-C2'	-5.67	96.93	102.60
11	B2	970	G	C4'-C3'-C2'	-5.67	96.93	102.60
11	B2	1024	G	N7-C8-N9	5.67	115.93	113.10
11	B2	1230	G	N3-C4-C5	5.67	131.43	128.60
11	B2	1400	A	C6-N1-C2	5.67	122.00	118.60
38	A1	26	G	N1-C2-N3	-5.67	120.50	123.90
38	A1	39	C	C6-N1-C2	-5.67	118.03	120.30
38	A1	998	G	N9-C1'-C2'	-5.67	105.77	112.00
38	A1	1741	C	C6-N1-C2	-5.67	118.03	120.30
38	A1	1743	G	N9-C4-C5	5.67	107.67	105.40
38	A1	1922	A	C5-C6-N6	-5.67	119.17	123.70
38	A1	2258	A	C5-N7-C8	5.67	106.73	103.90
38	A1	2387	A	C5-C6-N1	-5.67	114.87	117.70
39	A3	18	G	N9-C4-C5	5.67	107.67	105.40
52	AH	2	PRO	N-CD-CG	5.67	111.70	103.20
10	B1	47	G	C2-N3-C4	5.67	114.73	111.90
11	B2	142	G	C4-N9-C1'	-5.67	119.13	126.50
11	B2	621	G	N1-C2-N3	-5.67	120.50	123.90
11	B2	892	C	C4-C5-C6	5.67	120.23	117.40
11	B2	1000	G	N3-C2-N2	5.67	123.87	119.90
11	B2	1197	C	C6-N1-C2	-5.67	118.03	120.30
38	A1	1178	G	C2-N3-C4	5.67	114.73	111.90
38	A1	1866	G	C5-N7-C8	5.67	107.13	104.30
38	A1	2085	C	C4-C5-C6	-5.67	114.57	117.40
38	A1	2382	A	C4-C5-C6	5.67	119.83	117.00
30	BR	56	TYR	CB-CG-CD1	-5.67	117.60	121.00
38	A1	358	C	C1'-O4'-C4'	-5.67	105.37	109.90
38	A1	684	G	C5-C6-N1	-5.67	108.67	111.50
38	A1	1860	A	C5-C6-N1	5.67	120.53	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
39	A3	118	G	N1-C2-N2	5.67	121.30	116.20
11	B2	180	G	C6-N1-C2	-5.66	121.70	125.10
11	B2	1360	C	N3-C4-N4	5.66	121.96	118.00
26	BN	75	VAL	CA-CB-CG1	-5.66	102.41	110.90
38	A1	20	C	N3-C4-C5	-5.66	119.64	121.90
38	A1	404	G	C5-N7-C8	-5.66	101.47	104.30
38	A1	803	A	N7-C8-N9	5.66	116.63	113.80
38	A1	1057	C	O4'-C1'-N1	5.66	112.73	108.20
38	A1	1159	U	C5-C4-O4	-5.66	122.50	125.90
38	A1	1237	A	C5'-C4'-O4'	5.66	115.90	109.10
38	A1	2011	U	N3-C2-O2	-5.66	118.23	122.20
38	A1	2199	U	C6-N1-C2	-5.66	117.60	121.00
38	A1	2535	C	O4'-C1'-N1	5.66	112.73	108.20
38	A1	2557	C	N3-C4-N4	5.66	121.96	118.00
38	A1	2686	A	C4-C5-N7	-5.66	107.87	110.70
38	A1	2801	G	C6-N1-C2	5.66	128.50	125.10
11	B2	401	U	C3'-C2'-C1'	5.66	106.03	101.50
11	B2	521	G	N1-C6-O6	5.66	123.30	119.90
14	BB	68	LEU	CB-CG-CD2	5.66	120.62	111.00
38	A1	757	C	N1-C2-O2	-5.66	115.50	118.90
38	A1	1452	G	C8-N9-C4	-5.66	104.14	106.40
38	A1	1860	A	N7-C8-N9	-5.66	110.97	113.80
39	A3	116	C	C2-N3-C4	5.66	122.73	119.90
11	B2	434	A	C2'-C3'-O3'	5.66	122.75	113.70
11	B2	713	A	O4'-C1'-N9	5.66	112.73	108.20
11	B2	740	G	O4'-C1'-N9	5.66	112.73	108.20
11	B2	789	G	N9-C1'-C2'	-5.66	105.77	112.00
11	B2	1096	G	C8-N9-C4	-5.66	104.14	106.40
11	B2	1450	U	N1-C2-O2	-5.66	118.84	122.80
38	A1	237	G	N1-C6-O6	5.66	123.30	119.90
38	A1	279	G	C2-N3-C4	5.66	114.73	111.90
38	A1	1070	G	C2-N3-C4	5.66	114.73	111.90
38	A1	1390	U	OP1-P-OP2	-5.66	111.11	119.60
38	A1	1897	G	N1-C2-N3	-5.66	120.50	123.90
38	A1	2391	G	P-O3'-C3'	5.66	126.49	119.70
38	A1	2717	A	N1-C2-N3	5.66	132.13	129.30
38	A1	2746	G	N3-C2-N2	5.66	123.86	119.90
38	A1	2779	G	O4'-C1'-N9	5.66	112.73	108.20
11	B2	224	A	C4-C5-C6	5.66	119.83	117.00
11	B2	535	U	C5'-C4'-C3'	5.66	125.05	116.00
11	B2	1092	G	C8-N9-C1'	5.66	134.36	127.00
11	B2	1350	U	O4'-C1'-N1	5.66	112.73	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	BK	71	PHE	CB-CG-CD1	-5.66	116.84	120.80
25	BM	115	VAL	CA-CB-CG1	5.66	119.39	110.90
38	A1	66	C	O4'-C4'-C3'	-5.66	98.34	104.00
38	A1	123	A	C5-C6-N1	5.66	120.53	117.70
38	A1	1185	A	C6-C5-N7	-5.66	128.34	132.30
38	A1	1232	G	P-O5'-C5'	5.66	129.95	120.90
38	A1	1234	A	C5-C6-N6	-5.66	119.17	123.70
38	A1	1579	G	C4-C5-N7	5.66	113.06	110.80
38	A1	1766	A	C5-C6-N1	-5.66	114.87	117.70
38	A1	1957	U	O4'-C4'-C3'	5.66	110.63	106.10
38	A1	2442	A	C2-N3-C4	5.66	113.43	110.60
38	A1	2611	U	C5-C6-N1	5.66	125.53	122.70
38	A1	2664	G	N3-C4-C5	5.66	131.43	128.60
47	Ad	30	LYS	N-CA-CB	5.66	120.79	110.60
64	AR	96	GLN	N-CA-CB	5.66	120.79	110.60
11	B2	119	A	N9-C4-C5	5.66	108.06	105.80
11	B2	801	A	C5-C6-N6	-5.66	119.17	123.70
38	A1	352	G	N1-C2-N3	-5.66	120.51	123.90
38	A1	381	G	C4-N9-C1'	5.66	133.85	126.50
38	A1	2693	G	C5-N7-C8	5.66	107.13	104.30
38	A1	2854	A	N3-C4-C5	-5.66	122.84	126.80
11	B2	26	A	C6-C5-N7	-5.66	128.34	132.30
11	B2	673	C	C5'-C4'-C3'	5.66	125.05	116.00
11	B2	736	A	N3-C4-C5	-5.66	122.84	126.80
13	BA	48	VAL	CB-CA-C	-5.66	100.66	111.40
17	BE	206	PRO	O-C-N	5.66	131.75	122.70
26	BN	126	VAL	N-CA-C	-5.66	95.73	111.00
27	BO	91	LEU	CB-CG-CD2	5.66	120.61	111.00
38	A1	43	G	N1-C2-N3	5.66	127.29	123.90
38	A1	252	A	C5-N7-C8	5.66	106.73	103.90
38	A1	497	G	C4'-C3'-C2'	-5.66	96.94	102.60
38	A1	841	U	C6-N1-C2	-5.66	117.61	121.00
38	A1	932	C	C6-N1-C2	-5.66	118.04	120.30
38	A1	1181	C	N1-C2-O2	-5.66	115.51	118.90
38	A1	1656	C	N1-C2-O2	5.66	122.29	118.90
38	A1	1912	A	P-O5'-C5'	5.66	129.95	120.90
39	A3	93	G	C6-N1-C2	5.66	128.49	125.10
11	B2	218	C	P-O5'-C5'	5.65	129.95	120.90
11	B2	590	G	C8-N9-C1'	5.65	134.35	127.00
38	A1	1788	G	C5-C6-N1	-5.65	108.67	111.50
38	A1	1824	G	C4'-C3'-C2'	-5.65	96.95	102.60
38	A1	2014	A	P-O5'-C5'	5.65	129.95	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2839	A	N9-C4-C5	-5.65	103.54	105.80
11	B2	32	A	N7-C8-N9	-5.65	110.97	113.80
11	B2	196	G	C2'-C3'-O3'	5.65	122.75	113.70
11	B2	1204	C	N1-C2-N3	-5.65	115.24	119.20
29	BQ	126	GLU	N-CA-CB	5.65	120.77	110.60
38	A1	44	C	C5-C4-N4	-5.65	116.24	120.20
38	A1	180	A	C4'-C3'-C2'	-5.65	96.95	102.60
38	A1	197	C	C4-C5-C6	5.65	120.23	117.40
38	A1	616	C	C4-C5-C6	5.65	120.23	117.40
38	A1	1719	C	C6-N1-C1'	-5.65	114.02	120.80
38	A1	2450	A	C6-C5-N7	-5.65	128.34	132.30
38	A1	2488	C	C6-N1-C2	-5.65	118.04	120.30
39	A3	9	A	C6-C5-N7	-5.65	128.34	132.30
10	B1	25	G	C5'-C4'-O4'	-5.65	102.32	109.10
11	B2	397	C	N3-C4-C5	-5.65	119.64	121.90
11	B2	593	G	C5'-C4'-C3'	5.65	125.04	116.00
11	B2	958	G	N7-C8-N9	5.65	115.92	113.10
11	B2	1198	A	C6-C5-N7	-5.65	128.34	132.30
38	A1	80	G	O4'-C4'-C3'	-5.65	98.35	104.00
38	A1	127	C	C2-N3-C4	5.65	122.73	119.90
38	A1	576	G	C2-N3-C4	5.65	114.72	111.90
38	A1	833	G	N9-C1'-C2'	-5.65	105.78	112.00
38	A1	1091	G	O4'-C1'-N9	5.65	112.72	108.20
38	A1	1110	A	C5'-C4'-O4'	5.65	115.88	109.10
38	A1	2378	C	N1-C2-O2	-5.65	115.51	118.90
38	A1	2702	A	C5-N7-C8	5.65	106.73	103.90
38	A1	3033	G	C6-N1-C2	5.65	128.49	125.10
11	B2	384	G	C8-N9-C4	5.65	108.66	106.40
11	B2	666	G	N3-C4-C5	5.65	131.43	128.60
11	B2	924	U	C5'-C4'-C3'	5.65	125.04	116.00
38	A1	171	A	C1'-O4'-C4'	5.65	114.42	109.90
38	A1	739	C	N3-C4-C5	-5.65	119.64	121.90
38	A1	2552	C	P-O3'-C3'	5.65	126.48	119.70
43	AB	117	ASP	CB-CG-OD1	-5.65	113.22	118.30
11	B2	63	G	P-O5'-C5'	-5.65	111.86	120.90
11	B2	232	G	O5'-P-OP2	5.65	117.48	110.70
11	B2	269	A	OP1-P-OP2	-5.65	111.13	119.60
11	B2	1274	C	O4'-C1'-N1	5.65	112.72	108.20
11	B2	1413	G	C8-N9-C4	-5.65	104.14	106.40
25	BM	32	ASP	CB-CG-OD2	-5.65	113.22	118.30
38	A1	116	G	C6-C5-N7	-5.65	127.01	130.40
38	A1	295	G	C6-N1-C2	5.65	128.49	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1043	U	C5-C6-N1	5.65	125.52	122.70
38	A1	1224	A	C5-C6-N6	-5.65	119.18	123.70
38	A1	1238	G	O4'-C1'-N9	5.65	112.72	108.20
38	A1	1488	C	N3-C4-N4	5.65	121.95	118.00
38	A1	1720	G	C5-C6-O6	-5.65	125.21	128.60
38	A1	2634	U	C6-N1-C2	-5.65	117.61	121.00
38	A1	2837	C	N3-C2-O2	5.65	125.85	121.90
11	B2	391	G	N3-C4-C5	5.65	131.42	128.60
11	B2	757	G	C4-C5-C6	5.65	122.19	118.80
11	B2	1181	G	N3-C2-N2	5.65	123.85	119.90
17	BE	26	TYR	CG-CD2-CE2	-5.65	116.78	121.30
38	A1	332	A	C4-C5-C6	5.65	119.82	117.00
38	A1	1409	U	C5-C4-O4	-5.65	122.51	125.90
38	A1	2344	G	C8-N9-C4	-5.65	104.14	106.40
38	A1	2492	G	C5-C6-O6	-5.65	125.21	128.60
38	A1	2979	C	C4-C5-C6	-5.65	114.58	117.40
11	B2	240	U	C5'-C4'-O4'	5.64	115.87	109.10
11	B2	1124	G	C4-C5-C6	5.64	122.19	118.80
18	BF	51	ASP	CB-CG-OD1	-5.64	113.22	118.30
38	A1	519	A	OP1-P-OP2	-5.64	111.13	119.60
38	A1	653	U	C6-N1-C2	5.64	124.39	121.00
38	A1	2292	A	C4'-C3'-C2'	5.64	108.24	102.60
55	Ai	55	GLN	N-CA-CB	5.64	120.76	110.60
7	AU	112	ARG	NE-CZ-NH1	-5.64	117.48	120.30
11	B2	232	G	C2-N3-C4	-5.64	109.08	111.90
11	B2	556	G	C6-C5-N7	-5.64	127.01	130.40
11	B2	990	G	O4'-C1'-N9	5.64	112.71	108.20
11	B2	1204	C	P-O5'-C5'	5.64	129.93	120.90
11	B2	1370	U	C5-C6-N1	5.64	125.52	122.70
35	BW	28	PHE	CB-CG-CD1	-5.64	116.85	120.80
38	A1	291	A	N7-C8-N9	5.64	116.62	113.80
38	A1	303	A	C5-N7-C8	5.64	106.72	103.90
38	A1	432	C	C6-N1-C2	5.64	122.56	120.30
38	A1	679	U	C3'-C2'-C1'	5.64	106.01	101.50
38	A1	927	G	N1-C2-N3	-5.64	120.52	123.90
38	A1	1196	A	C4-C5-N7	-5.64	107.88	110.70
38	A1	1563	G	N1-C2-N3	-5.64	120.52	123.90
38	A1	1620	C	O4'-C1'-N1	5.64	112.71	108.20
38	A1	2383	A	C5-C6-N6	-5.64	119.19	123.70
11	B2	800	G	N7-C8-N9	5.64	115.92	113.10
11	B2	1099	A	C5-N7-C8	-5.64	101.08	103.90
38	A1	695	G	N7-C8-N9	-5.64	110.28	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	811	C	C2-N3-C4	5.64	122.72	119.90
38	A1	1133	U	O3'-P-O5'	5.64	114.72	104.00
38	A1	2415	C	C1'-O4'-C4'	-5.64	105.39	109.90
38	A1	2620	G	N9-C4-C5	-5.64	103.14	105.40
38	A1	3043	C	N1-C2-O2	5.64	122.28	118.90
58	Ak	193	ALA	N-CA-CB	5.64	118.00	110.10
11	B2	137	A	P-O5'-C5'	5.64	129.92	120.90
11	B2	413	G	N1-C2-N3	-5.64	120.52	123.90
11	B2	438	A	OP1-P-O3'	5.64	117.61	105.20
11	B2	1441	G	N3-C2-N2	5.64	123.85	119.90
11	B2	1494	C	N3-C4-N4	5.64	121.95	118.00
38	A1	77	C	O4'-C1'-N1	5.64	112.71	108.20
38	A1	256	G	C6-C5-N7	-5.64	127.02	130.40
38	A1	325	G	C8-N9-C4	-5.64	104.14	106.40
38	A1	861	G	N3-C4-C5	5.64	131.42	128.60
38	A1	936	G	C8-N9-C4	5.64	108.66	106.40
38	A1	1309	G	O4'-C1'-N9	5.64	112.71	108.20
38	A1	1420	U	C2-N1-C1'	5.64	124.47	117.70
38	A1	1695	G	C5-C6-O6	-5.64	125.22	128.60
38	A1	1791	A	C2-N3-C4	5.64	113.42	110.60
38	A1	2640	C	C2-N1-C1'	5.64	125.00	118.80
38	A1	2871	A	C8-N9-C4	-5.64	103.54	105.80
47	Ad	76	MET	CG-SD-CE	-5.64	91.17	100.20
60	AM	90	TYR	CB-CG-CD1	-5.64	117.62	121.00
66	AY	118	ARG	CD-NE-CZ	-5.64	115.71	123.60
11	B2	442	C	O4'-C4'-C3'	-5.64	98.36	104.00
11	B2	678	G	N7-C8-N9	-5.64	110.28	113.10
11	B2	973	U	C6-N1-C2	-5.64	117.62	121.00
38	A1	1136	G	N1-C2-N2	5.64	121.27	116.20
38	A1	2528	U	C5-C6-N1	5.64	125.52	122.70
38	A1	2693	G	O4'-C1'-N9	5.64	112.71	108.20
54	AI	21	MET	CB-CA-C	-5.64	99.12	110.40
10	B1	39	A	C6-N1-C2	-5.64	115.22	118.60
11	B2	360	A	C3'-C2'-C1'	5.64	106.01	101.50
11	B2	842	U	P-O5'-C5'	-5.64	111.88	120.90
11	B2	951	G	C3'-C2'-C1'	-5.64	96.99	101.50
11	B2	1252	C	N3-C4-N4	5.64	121.95	118.00
11	B2	1479	C	N3-C4-C5	-5.64	119.64	121.90
38	A1	1445	G	C6-N1-C2	5.64	128.48	125.10
38	A1	1546	G	C8-N9-C4	-5.64	104.15	106.40
38	A1	1640	G	C4-C5-N7	5.64	113.05	110.80
38	A1	2151	C	C6-N1-C2	5.64	122.56	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2162	G	C2-N3-C4	5.64	114.72	111.90
38	A1	2391	G	N9-C4-C5	5.64	107.66	105.40
38	A1	2551	G	C5'-C4'-C3'	-5.64	106.98	116.00
38	A1	2689	G	C5-C6-N1	-5.64	108.68	111.50
10	B1	47	G	C4'-C3'-C2'	-5.63	96.97	102.60
11	B2	7	G	N3-C2-N2	5.63	123.84	119.90
11	B2	343	G	P-O3'-C3'	-5.63	112.94	119.70
11	B2	635	C	C6-N1-C2	5.63	122.55	120.30
11	B2	1292	A	C5-N7-C8	5.63	106.72	103.90
11	B2	1392	G	O3'-P-O5'	-5.63	93.30	104.00
38	A1	386	A	P-O3'-C3'	-5.63	112.94	119.70
38	A1	504	G	C4-C5-N7	-5.63	108.55	110.80
38	A1	562	G	N3-C4-N9	5.63	129.38	126.00
38	A1	792	A	C8-N9-C4	-5.63	103.55	105.80
38	A1	1475	G	C5'-C4'-O4'	5.63	115.86	109.10
38	A1	1527	G	O4'-C1'-N9	5.63	112.71	108.20
38	A1	1904	G	C5-N7-C8	5.63	107.12	104.30
38	A1	1956	G	C4-C5-N7	5.63	113.05	110.80
38	A1	2196	C	C5-C4-N4	-5.63	116.26	120.20
38	A1	2583	G	O4'-C1'-N9	5.63	112.71	108.20
38	A1	2720	U	C1'-O4'-C4'	5.63	114.41	109.90
59	AL	6	LYS	N-CA-CB	5.63	120.74	110.60
3	Af	18	LYS	CB-CA-C	-5.63	99.13	110.40
38	A1	377	C	C4'-C3'-C2'	5.63	108.23	102.60
38	A1	732	G	N1-C2-N3	-5.63	120.52	123.90
38	A1	758	C	C6-N1-C2	-5.63	118.05	120.30
38	A1	1834	C	N1-C1'-C2'	-5.63	105.80	112.00
38	A1	2487	G	C6-C5-N7	-5.63	127.02	130.40
38	A1	2684	G	N1-C6-O6	5.63	123.28	119.90
38	A1	2892	A	C5-C6-N1	5.63	120.52	117.70
11	B2	22	G	C6-N1-C2	5.63	128.48	125.10
11	B2	437	A	N1-C6-N6	5.63	121.98	118.60
11	B2	520	G	N3-C4-C5	-5.63	125.78	128.60
11	B2	1120	G	C3'-C2'-C1'	-5.63	97.00	101.50
11	B2	1138	G	C8-N9-C1'	5.63	134.32	127.00
11	B2	1455	A	O4'-C4'-C3'	-5.63	98.37	104.00
38	A1	889	C	C4-C5-C6	5.63	120.22	117.40
38	A1	1216	A	C5-C6-N6	-5.63	119.19	123.70
38	A1	1486	G	C1'-O4'-C4'	-5.63	105.39	109.90
38	A1	1902	G	N3-C4-C5	-5.63	125.78	128.60
38	A1	1963	G	N3-C4-N9	5.63	129.38	126.00
38	A1	2491	C	O4'-C1'-N1	5.63	112.70	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
41	AA	202	VAL	N-CA-C	-5.63	95.80	111.00
60	AM	44	ARG	NE-CZ-NH2	5.63	123.12	120.30
62	AO	196	PHE	CB-CG-CD2	-5.63	116.86	120.80
11	B2	1225	C	C4'-C3'-C2'	5.63	108.23	102.60
11	B2	1376	C	O4'-C1'-N1	5.63	112.70	108.20
29	BQ	58	TYR	CB-CG-CD1	-5.63	117.62	121.00
38	A1	87	C	O4'-C1'-N1	5.63	112.70	108.20
38	A1	1127	C	O4'-C1'-N1	5.63	112.70	108.20
38	A1	1168	A	O4'-C1'-N9	5.63	112.70	108.20
38	A1	1293	G	C4-C5-N7	-5.63	108.55	110.80
38	A1	1436	A	C3'-C2'-C1'	5.63	106.00	101.50
38	A1	2000	G	C5-C6-O6	-5.63	125.22	128.60
38	A1	2064	U	C5-C4-O4	-5.63	122.52	125.90
38	A1	2331	A	C4-C5-C6	5.63	119.81	117.00
38	A1	2607	U	N1-C2-N3	-5.63	111.52	114.90
11	B2	189	C	N3-C4-N4	5.63	121.94	118.00
11	B2	246	A	C2'-C3'-O3'	5.63	122.70	113.70
11	B2	329	G	N9-C4-C5	5.63	107.65	105.40
11	B2	695	G	C3'-C2'-C1'	-5.63	97.00	101.50
11	B2	963	A	C5-C6-N1	-5.63	114.89	117.70
34	BV	85	TYR	CG-CD2-CE2	5.63	125.80	121.30
38	A1	519	A	O4'-C1'-N9	5.63	112.70	108.20
38	A1	1172	U	C4-C5-C6	5.63	123.08	119.70
38	A1	1526	G	C6-N1-C2	5.63	128.48	125.10
38	A1	1560	G	C3'-C2'-C1'	5.63	106.00	101.50
38	A1	1769	G	N9-C4-C5	-5.63	103.15	105.40
38	A1	1864	G	O4'-C1'-N9	5.63	112.70	108.20
38	A1	2193	G	C1'-O4'-C4'	-5.63	105.40	109.90
38	A1	2469	G	N1-C2-N2	-5.63	111.14	116.20
38	A1	2704	A	C2-N3-C4	-5.63	107.79	110.60
38	A1	2892	A	C4'-C3'-C2'	5.63	108.23	102.60
61	AN	21	GLU	N-CA-CB	5.63	120.73	110.60
11	B2	96	G	N1-C2-N3	-5.63	120.52	123.90
11	B2	121	C	N3-C4-C5	-5.63	119.65	121.90
11	B2	487	U	C4-C5-C6	-5.63	116.32	119.70
11	B2	501	G	C6-C5-N7	-5.63	127.03	130.40
11	B2	559	G	C1'-O4'-C4'	5.63	114.40	109.90
11	B2	1309	A	N3-C4-N9	5.63	131.90	127.40
38	A1	53	A	C5-C6-N6	-5.63	119.20	123.70
38	A1	307	C	C4'-C3'-C2'	-5.63	96.97	102.60
38	A1	502	G	N1-C6-O6	5.63	123.28	119.90
38	A1	610	C	OP2-P-O3'	5.63	117.58	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1124	G	C5-C6-O6	-5.63	125.22	128.60
38	A1	1428	G	C4'-C3'-C2'	5.63	108.23	102.60
38	A1	2321	A	C5-C6-N6	-5.63	119.20	123.70
38	A1	2518	G	C5-N7-C8	5.63	107.11	104.30
38	A1	2527	G	N3-C2-N2	5.63	123.84	119.90
38	A1	2694	C	N1-C2-O2	-5.63	115.52	118.90
38	A1	2870	A	N1-C2-N3	5.63	132.11	129.30
11	B2	713	A	C4-C5-C6	5.62	119.81	117.00
11	B2	1233	G	N7-C8-N9	5.62	115.91	113.10
11	B2	1281	U	C2-N3-C4	-5.62	123.62	127.00
17	BE	231	PHE	CB-CG-CD1	5.62	124.74	120.80
38	A1	373	G	C5-C6-N1	-5.62	108.69	111.50
38	A1	562	G	C2-N3-C4	-5.62	109.09	111.90
38	A1	2070	U	N1-C1'-C2'	-5.62	105.81	112.00
38	A1	2455	G	N9-C4-C5	-5.62	103.15	105.40
11	B2	286	G	N1-C2-N2	5.62	121.26	116.20
11	B2	936	A	N3-C4-C5	-5.62	122.86	126.80
11	B2	1105	C	N3-C2-O2	-5.62	117.96	121.90
11	B2	1215	G	C5-C6-O6	-5.62	125.23	128.60
38	A1	461	C	C5-C4-N4	-5.62	116.26	120.20
38	A1	519	A	P-O3'-C3'	5.62	126.45	119.70
38	A1	1603	G	N1-C2-N2	-5.62	111.14	116.20
38	A1	2003	C	O4'-C1'-N1	5.62	112.70	108.20
38	A1	2429	G	C6-N1-C2	5.62	128.47	125.10
38	A1	2850	G	C4-C5-C6	5.62	122.17	118.80
38	A1	2968	G	P-O3'-C3'	-5.62	112.95	119.70
3	Af	4	ASN	N-CA-C	-5.62	95.82	111.00
11	B2	132	G	C5-C6-N1	-5.62	108.69	111.50
11	B2	236	C	N3-C2-O2	5.62	125.83	121.90
11	B2	697	A	C5-C6-N1	-5.62	114.89	117.70
11	B2	762	G	C8-N9-C4	-5.62	104.15	106.40
11	B2	851	C	C2-N3-C4	5.62	122.71	119.90
11	B2	1068	C	C5'-C4'-O4'	5.62	115.85	109.10
11	B2	1138	G	O4'-C1'-N9	5.62	112.70	108.20
38	A1	194	G	C6-N1-C2	5.62	128.47	125.10
38	A1	1290	G	N1-C2-N3	-5.62	120.53	123.90
38	A1	1361	G	C1'-O4'-C4'	5.62	114.40	109.90
38	A1	1474	A	N1-C2-N3	5.62	132.11	129.30
38	A1	1886	C	C2-N3-C4	5.62	122.71	119.90
38	A1	1889	G	C5-N7-C8	-5.62	101.49	104.30
38	A1	1941	A	C5-C6-N1	-5.62	114.89	117.70
38	A1	2884	C	C5-C4-N4	-5.62	116.27	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
44	Ab	72	ARG	NE-CZ-NH1	5.62	123.11	120.30
10	B1	56	U	C2-N3-C4	-5.62	123.63	127.00
11	B2	1079	G	C4-C5-C6	-5.62	115.43	118.80
38	A1	97	C	C3'-C2'-C1'	5.62	106.00	101.50
38	A1	209	G	N1-C2-N3	-5.62	120.53	123.90
38	A1	1175	C	C6-N1-C2	5.62	122.55	120.30
38	A1	2303	A	C5-C6-N6	-5.62	119.20	123.70
38	A1	2736	G	O4'-C1'-N9	5.62	112.70	108.20
64	AR	22	ARG	NE-CZ-NH1	-5.62	117.49	120.30
11	B2	320	G	N3-C4-N9	5.62	129.37	126.00
11	B2	1107	C	C5-C4-N4	-5.62	116.27	120.20
11	B2	1390	G	N1-C2-N3	-5.62	120.53	123.90
20	BH	87	ARG	C-N-CA	5.62	135.75	121.70
38	A1	45	G	C5-C6-O6	-5.62	125.23	128.60
38	A1	1849	A	N9-C4-C5	-5.62	103.55	105.80
38	A1	2660	G	C5-C6-N1	5.62	114.31	111.50
11	B2	436	A	C5-C6-N1	-5.62	114.89	117.70
11	B2	824	G	C5-N7-C8	5.62	107.11	104.30
38	A1	209	G	C5-C6-N1	-5.62	108.69	111.50
38	A1	2008	G	N3-C4-C5	-5.62	125.79	128.60
38	A1	2092	G	C5-C6-N1	-5.62	108.69	111.50
38	A1	2178	A	C5-C6-N1	-5.62	114.89	117.70
11	B2	425	C	OP2-P-O3'	5.62	117.56	105.20
11	B2	867	A	C5-C6-N6	-5.62	119.21	123.70
11	B2	1014	C	N1-C2-O2	-5.62	115.53	118.90
11	B2	1215	G	N3-C4-N9	5.62	129.37	126.00
11	B2	1268	C	N3-C2-O2	-5.62	117.97	121.90
11	B2	1484	C	C5-C4-N4	-5.62	116.27	120.20
15	BC	98	ARG	NH1-CZ-NH2	5.62	125.58	119.40
38	A1	112	U	C5'-C4'-C3'	-5.62	107.02	116.00
38	A1	544	A	P-O3'-C3'	5.62	126.44	119.70
38	A1	817	G	P-O5'-C5'	-5.62	111.91	120.90
38	A1	1223	A	C3'-C2'-C1'	5.62	105.99	101.50
38	A1	1503	C	C4'-C3'-C2'	-5.62	96.98	102.60
38	A1	1757	G	P-O3'-C3'	5.62	126.44	119.70
38	A1	2669	U	C5'-C4'-O4'	5.62	115.84	109.10
38	A1	2713	A	C4-C5-C6	5.62	119.81	117.00
38	A1	2994	G	C4-C5-C6	5.62	122.17	118.80
46	AD	128	ARG	NE-CZ-NH2	-5.62	117.49	120.30
11	B2	375	G	P-O3'-C3'	-5.61	112.96	119.70
11	B2	1365	G	N1-C2-N3	-5.61	120.53	123.90
14	BB	128	ARG	CG-CD-NE	-5.61	100.01	111.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	595	C	OP1-P-OP2	-5.61	111.18	119.60
38	A1	636	G	N1-C2-N3	-5.61	120.53	123.90
38	A1	1348	G	C2-N3-C4	-5.61	109.09	111.90
38	A1	2405	U	N3-C4-O4	5.61	123.33	119.40
38	A1	2810	G	N3-C4-C5	-5.61	125.79	128.60
38	A1	2840	C	C5-C4-N4	-5.61	116.27	120.20
11	B2	223	G	N1-C2-N3	-5.61	120.53	123.90
11	B2	585	U	C5-C4-O4	-5.61	122.53	125.90
11	B2	1169	C	P-O3'-C3'	5.61	126.44	119.70
11	B2	1293	A	OP1-P-OP2	-5.61	111.18	119.60
38	A1	419	G	C5-C6-N1	-5.61	108.69	111.50
38	A1	1726	A	N1-C2-N3	5.61	132.11	129.30
38	A1	2096	G	C5-C6-N1	-5.61	108.69	111.50
38	A1	2276	G	N7-C8-N9	-5.61	110.29	113.10
11	B2	145	A	C5-C6-N6	-5.61	119.21	123.70
11	B2	233	C	C5-C4-N4	-5.61	116.27	120.20
11	B2	262	G	C5'-C4'-C3'	-5.61	107.03	116.00
11	B2	1149	C	C5-C6-N1	5.61	123.81	121.00
11	B2	1404	C	N1-C2-O2	-5.61	115.53	118.90
38	A1	736	U	O4'-C1'-N1	5.61	112.69	108.20
38	A1	887	U	P-O3'-C3'	5.61	126.43	119.70
38	A1	991	U	N3-C4-O4	5.61	123.33	119.40
38	A1	1029	C	O3'-P-O5'	5.61	114.66	104.00
38	A1	1208	A	OP1-P-O3'	5.61	117.54	105.20
38	A1	1350	C	C5-C6-N1	5.61	123.81	121.00
38	A1	1825	G	C6-C5-N7	-5.61	127.03	130.40
38	A1	1987	A	C5-C6-N1	-5.61	114.89	117.70
38	A1	2154	G	N1-C2-N3	-5.61	120.53	123.90
38	A1	2223	G	C8-N9-C4	-5.61	104.16	106.40
38	A1	2515	U	C4-C5-C6	5.61	123.07	119.70
38	A1	3045	G	O4'-C1'-N9	5.61	112.69	108.20
11	B2	620	G	N9-C4-C5	-5.61	103.16	105.40
38	A1	854	G	N9-C4-C5	-5.61	103.16	105.40
10	B1	27	A	P-O5'-C5'	5.61	129.87	120.90
10	B1	60	A	OP1-P-OP2	-5.61	111.19	119.60
11	B2	330	U	N3-C4-O4	5.61	123.33	119.40
38	A1	128	C	C6-N1-C1'	-5.61	114.07	120.80
38	A1	329	G	O4'-C4'-C3'	-5.61	98.39	104.00
38	A1	405	G	O4'-C1'-N9	5.61	112.69	108.20
38	A1	994	G	N3-C2-N2	-5.61	115.97	119.90
38	A1	1672	G	N3-C4-C5	5.61	131.40	128.60
38	A1	1810	G	C6-C5-N7	5.61	133.76	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1835	A	O4'-C1'-C2'	-5.61	100.19	105.80
38	A1	2097	G	C4-C5-C6	5.61	122.17	118.80
38	A1	2176	G	C6-N1-C2	5.61	128.47	125.10
38	A1	2178	A	OP1-P-OP2	-5.61	111.19	119.60
38	A1	2663	G	N9-C4-C5	-5.61	103.16	105.40
38	A1	2994	G	C5-N7-C8	-5.61	101.50	104.30
39	A3	82	C	N3-C4-N4	5.61	121.93	118.00
55	Ai	24	ARG	NE-CZ-NH1	-5.61	117.50	120.30
11	B2	942	A	C4-C5-C6	5.61	119.80	117.00
11	B2	1298	G	C1'-O4'-C4'	-5.61	105.42	109.90
12	B3	108	ARG	NE-CZ-NH1	5.61	123.10	120.30
32	BT	13	LEU	CB-CG-CD1	5.61	120.53	111.00
38	A1	79	C	N1-C2-O2	5.61	122.26	118.90
38	A1	394	A	C4-C5-N7	-5.61	107.90	110.70
38	A1	569	G	C4-C5-N7	-5.61	108.56	110.80
38	A1	825	C	C4'-C3'-C2'	-5.61	96.99	102.60
38	A1	949	C	C5-C6-N1	5.61	123.80	121.00
38	A1	1513	G	C6-N1-C2	-5.61	121.74	125.10
38	A1	2014	A	C4-C5-C6	5.61	119.80	117.00
38	A1	2824	C	C4'-C3'-C2'	-5.61	96.99	102.60
38	A1	2863	A	C5-C6-N6	-5.61	119.22	123.70
38	A1	2998	G	N7-C8-N9	5.61	115.90	113.10
40	AK	81	SER	N-CA-CB	5.61	118.91	110.50
11	B2	855	C	N3-C4-N4	5.60	121.92	118.00
11	B2	1137	G	C2-N3-C4	-5.60	109.10	111.90
38	A1	64	A	O4'-C1'-N9	5.60	112.68	108.20
38	A1	2104	G	C6-C5-N7	-5.60	127.04	130.40
38	A1	2203	G	C5-N7-C8	5.60	107.10	104.30
39	A3	115	C	N1-C2-N3	-5.60	115.28	119.20
10	B1	21	G	C4'-C3'-C2'	-5.60	97.00	102.60
11	B2	33	U	C3'-C2'-C1'	-5.60	97.02	101.50
11	B2	530	G	P-O3'-C3'	5.60	126.42	119.70
11	B2	771	G	C6-C5-N7	-5.60	127.04	130.40
11	B2	1034	G	P-O3'-C3'	5.60	126.42	119.70
11	B2	1466	G	C5'-C4'-O4'	-5.60	102.38	109.10
38	A1	1039	C	N3-C4-N4	5.60	121.92	118.00
38	A1	1976	C	N3-C4-N4	5.60	121.92	118.00
38	A1	2133	G	N9-C4-C5	-5.60	103.16	105.40
38	A1	2231	G	C6-C5-N7	-5.60	127.04	130.40
38	A1	2463	G	C4-N9-C1'	-5.60	119.22	126.50
38	A1	2605	G	N1-C2-N3	-5.60	120.54	123.90
38	A1	2630	C	P-O3'-C3'	-5.60	112.98	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	3035	C	P-O5'-C5'	-5.60	111.94	120.90
9	AX	387	PHE	CB-CG-CD2	-5.60	116.88	120.80
11	B2	360	A	C4-C5-C6	5.60	119.80	117.00
11	B2	432	G	C1'-O4'-C4'	5.60	114.38	109.90
11	B2	1457	A	C4-C5-C6	5.60	119.80	117.00
38	A1	318	G	C5-C6-O6	-5.60	125.24	128.60
38	A1	611	G	P-O5'-C5'	-5.60	111.94	120.90
38	A1	789	G	C6-N1-C2	5.60	128.46	125.10
38	A1	909	A	N1-C2-N3	-5.60	126.50	129.30
38	A1	1824	G	N9-C4-C5	-5.60	103.16	105.40
38	A1	2074	U	P-O5'-C5'	-5.60	111.94	120.90
38	A1	2944	G	C3'-C2'-C1'	5.60	105.98	101.50
38	A1	3006	G	C5-C6-N1	-5.60	108.70	111.50
11	B2	453	G	N1-C2-N3	-5.60	120.54	123.90
11	B2	659	U	O4'-C1'-N1	5.60	112.68	108.20
11	B2	832	G	C6-N1-C2	-5.60	121.74	125.10
11	B2	881	G	O4'-C4'-C3'	-5.60	98.40	104.00
38	A1	467	U	P-O3'-C3'	5.60	126.42	119.70
38	A1	495	U	C3'-C2'-C1'	5.60	105.98	101.50
38	A1	515	G	N7-C8-N9	5.60	115.90	113.10
38	A1	697	U	C5-C6-N1	5.60	125.50	122.70
38	A1	1093	G	C2-N3-C4	5.60	114.70	111.90
38	A1	1113	G	C5-N7-C8	-5.60	101.50	104.30
38	A1	1191	C	C2-N1-C1'	5.60	124.96	118.80
38	A1	1429	A	P-O3'-C3'	-5.60	112.98	119.70
38	A1	1494	U	C2-N3-C4	-5.60	123.64	127.00
38	A1	1520	G	C5-C6-N1	-5.60	108.70	111.50
38	A1	1757	G	C3'-C2'-C1'	-5.60	97.02	101.50
38	A1	1928	A	C6-C5-N7	-5.60	128.38	132.30
38	A1	2623	G	N9-C4-C5	-5.60	103.16	105.40
38	A1	2683	G	N3-C4-C5	-5.60	125.80	128.60
38	A1	2891	A	N3-C4-C5	-5.60	122.88	126.80
4	AQ	25	ASP	CB-CG-OD1	5.60	123.34	118.30
5	AS	138	PRO	N-CA-CB	5.60	110.02	103.30
11	B2	230	C	O4'-C1'-N1	5.60	112.68	108.20
11	B2	282	G	C4-C5-N7	5.60	113.04	110.80
11	B2	655	A	N3-C4-N9	-5.60	122.92	127.40
11	B2	816	G	O4'-C1'-N9	5.60	112.68	108.20
11	B2	893	U	C1'-O4'-C4'	-5.60	105.42	109.90
11	B2	1319	C	C5-C6-N1	5.60	123.80	121.00
38	A1	404	G	N7-C8-N9	5.60	115.90	113.10
38	A1	584	G	C3'-C2'-C1'	-5.60	97.02	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1442	G	N7-C8-N9	-5.60	110.30	113.10
38	A1	1664	G	C5'-C4'-O4'	5.60	115.82	109.10
38	A1	1956	G	N9-C1'-C2'	-5.60	105.84	112.00
38	A1	2323	C	O3'-P-O5'	-5.60	93.36	104.00
38	A1	2490	C	N3-C4-C5	-5.60	119.66	121.90
38	A1	2493	A	C5-C6-N1	-5.60	114.90	117.70
38	A1	2692	A	C4-C5-N7	-5.60	107.90	110.70
10	B1	20	G	N9-C4-C5	5.60	107.64	105.40
11	B2	1063	A	N9-C4-C5	5.60	108.04	105.80
38	A1	669	G	C8-N9-C4	5.60	108.64	106.40
38	A1	1807	G	C4-C5-C6	5.60	122.16	118.80
38	A1	1950	G	N9-C4-C5	-5.60	103.16	105.40
38	A1	2096	G	C4'-C3'-C2'	-5.60	97.00	102.60
39	A3	51	U	P-O5'-C5'	5.60	129.85	120.90
10	B1	70	C	C5-C4-N4	-5.59	116.28	120.20
11	B2	114	A	N3-C4-C5	-5.59	122.88	126.80
11	B2	760	C	C2-N3-C4	5.59	122.70	119.90
11	B2	885	G	P-O5'-C5'	5.59	129.85	120.90
11	B2	1402	C	N3-C4-C5	-5.59	119.66	121.90
11	B2	1433	C	C4'-C3'-C2'	-5.59	97.00	102.60
17	BE	192	ASN	C-N-CA	5.59	135.69	121.70
38	A1	71	A	N3-C4-C5	-5.59	122.88	126.80
38	A1	643	G	O4'-C1'-N9	5.59	112.67	108.20
38	A1	699	A	N3-C4-C5	-5.59	122.88	126.80
38	A1	1449	C	N3-C2-O2	5.59	125.82	121.90
38	A1	1754	A	C5-N7-C8	5.59	106.70	103.90
38	A1	2158	G	C2-N3-C4	5.59	114.70	111.90
38	A1	2294	A	O4'-C1'-C2'	-5.59	100.20	105.80
38	A1	2405	U	C3'-C2'-C1'	5.59	105.97	101.50
38	A1	2663	G	C4-C5-N7	5.59	113.04	110.80
38	A1	2725	U	C5-C4-O4	-5.59	122.54	125.90
11	B2	841	C	C1'-O4'-C4'	5.59	114.38	109.90
34	BV	90	ASP	CB-CG-OD1	5.59	123.33	118.30
38	A1	231	G	C8-N9-C4	-5.59	104.16	106.40
38	A1	452	A	C5'-C4'-C3'	-5.59	107.05	116.00
38	A1	930	G	O4'-C1'-N9	5.59	112.67	108.20
38	A1	1580	G	N3-C4-N9	-5.59	122.64	126.00
38	A1	1851	U	N3-C4-O4	5.59	123.31	119.40
38	A1	2523	C	N3-C4-C5	-5.59	119.66	121.90
38	A1	2555	C	C5-C6-N1	5.59	123.80	121.00
46	AD	225	LEU	N-CA-CB	5.59	121.59	110.40
57	Aj	42	ARG	NE-CZ-NH1	5.59	123.10	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	146	A	C5-C6-N6	-5.59	119.23	123.70
11	B2	439	G	N1-C6-O6	5.59	123.25	119.90
11	B2	647	G	C4-C5-C6	5.59	122.16	118.80
11	B2	775	G	OP1-P-OP2	-5.59	111.21	119.60
11	B2	816	G	N3-C4-C5	5.59	131.40	128.60
11	B2	819	G	C4-C5-C6	5.59	122.16	118.80
11	B2	1390	G	C6-C5-N7	-5.59	127.05	130.40
17	BE	63	ARG	NE-CZ-NH1	5.59	123.10	120.30
38	A1	25	U	O4'-C1'-N1	5.59	112.67	108.20
38	A1	137	A	N1-C6-N6	5.59	121.95	118.60
38	A1	978	C	P-O3'-C3'	-5.59	112.99	119.70
38	A1	1185	A	C1'-O4'-C4'	-5.59	105.43	109.90
38	A1	1886	C	N1-C2-N3	-5.59	115.29	119.20
38	A1	2241	U	C1'-O4'-C4'	-5.59	105.43	109.90
38	A1	2502	C	C3'-C2'-C1'	5.59	105.97	101.50
9	AX	87	LEU	CB-CG-CD2	5.59	120.50	111.00
11	B2	373	C	C1'-O4'-C4'	-5.59	105.43	109.90
11	B2	441	U	C4'-C3'-C2'	-5.59	97.01	102.60
11	B2	729	G	C4-C5-N7	5.59	113.03	110.80
11	B2	774	U	N3-C4-C5	-5.59	111.25	114.60
11	B2	802	G	N3-C4-C5	5.59	131.39	128.60
11	B2	975	A	C3'-C2'-C1'	-5.59	97.03	101.50
11	B2	1247	A	P-O3'-C3'	5.59	126.41	119.70
11	B2	1486	A	N1-C2-N3	5.59	132.09	129.30
38	A1	331	G	N1-C2-N3	-5.59	120.55	123.90
38	A1	1291	C	C5-C6-N1	5.59	123.79	121.00
38	A1	1364	C	O4'-C1'-N1	5.59	112.67	108.20
38	A1	2027	G	N7-C8-N9	-5.59	110.31	113.10
38	A1	2096	G	C6-C5-N7	-5.59	127.05	130.40
38	A1	2118	C	N3-C4-N4	5.59	121.91	118.00
39	A3	29	G	N7-C8-N9	-5.59	110.31	113.10
45	AC	87	ARG	CG-CD-NE	-5.59	100.06	111.80
11	B2	1301	U	C4-C5-C6	5.59	123.05	119.70
20	BH	209	ARG	N-CA-CB	5.59	120.66	110.60
38	A1	98	G	C8-N9-C4	5.59	108.64	106.40
38	A1	1023	C	N3-C4-N4	5.59	121.91	118.00
38	A1	1261	C	P-O3'-C3'	-5.59	113.00	119.70
38	A1	2279	G	N3-C4-C5	5.59	131.39	128.60
38	A1	2540	A	C6-N1-C2	5.59	121.95	118.60
38	A1	2663	G	N1-C6-O6	5.59	123.25	119.90
41	AA	78	GLY	N-CA-C	-5.59	99.13	113.10
9	AX	263	ALA	N-CA-CB	5.59	117.92	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	416	A	OP1-P-OP2	-5.59	111.22	119.60
11	B2	553	C	OP1-P-OP2	-5.59	111.22	119.60
11	B2	939	C	C5-C4-N4	-5.59	116.29	120.20
38	A1	32	C	N3-C2-O2	5.59	125.81	121.90
38	A1	509	A	N3-C4-N9	5.59	131.87	127.40
38	A1	1302	G	C6-C5-N7	-5.59	127.05	130.40
38	A1	1309	G	C1'-O4'-C4'	5.59	114.37	109.90
38	A1	1647	C	N3-C4-C5	-5.59	119.67	121.90
38	A1	2023	A	C5-C6-N1	-5.59	114.91	117.70
38	A1	2084	A	N9-C4-C5	5.59	108.03	105.80
38	A1	2689	G	N9-C4-C5	-5.59	103.17	105.40
38	A1	2718	G	C8-N9-C1'	5.59	134.26	127.00
38	A1	3008	C	N3-C4-N4	5.59	121.91	118.00
40	A5	32	PHE	CB-CG-CD2	5.59	124.71	120.80
65	AV	39	ARG	N-CA-CB	5.59	120.66	110.60
67	AZ	52	TYR	CB-CG-CD2	-5.59	117.65	121.00
11	B2	13	C	C6-N1-C1'	-5.58	114.10	120.80
11	B2	1155	U	N3-C2-O2	5.58	126.11	122.20
11	B2	1296	U	N3-C4-O4	5.58	123.31	119.40
11	B2	1463	A	N1-C2-N3	5.58	132.09	129.30
11	B2	1481	G	N1-C2-N3	-5.58	120.55	123.90
38	A1	229	G	N1-C6-O6	5.58	123.25	119.90
38	A1	682	G	C4-C5-C6	5.58	122.15	118.80
38	A1	2046	C	O4'-C1'-C2'	-5.58	100.22	105.80
38	A1	2755	G	C6-C5-N7	-5.58	127.05	130.40
38	A1	2799	C	C2-N1-C1'	5.58	124.94	118.80
11	B2	104	A	N3-C4-C5	-5.58	122.89	126.80
11	B2	116	C	C1'-O4'-C4'	-5.58	105.43	109.90
11	B2	439	G	N9-C4-C5	-5.58	103.17	105.40
11	B2	696	G	C4-C5-N7	-5.58	108.57	110.80
11	B2	864	G	C4-C5-N7	5.58	113.03	110.80
11	B2	1001	A	N7-C8-N9	-5.58	111.01	113.80
11	B2	1129	A	C5-C6-N6	-5.58	119.23	123.70
11	B2	1134	G	P-O5'-C5'	-5.58	111.97	120.90
11	B2	1270	C	C4'-C3'-C2'	-5.58	97.02	102.60
14	BB	96	PHE	CB-CG-CD2	5.58	124.71	120.80
33	BU	5	TYR	CB-CG-CD2	-5.58	117.65	121.00
38	A1	672	C	N1-C2-N3	-5.58	115.29	119.20
38	A1	1170	G	C4'-C3'-C2'	-5.58	97.02	102.60
38	A1	1257	G	C4-N9-C1'	5.58	133.76	126.50
38	A1	1464	A	C5-C6-N6	-5.58	119.23	123.70
38	A1	1516	C	P-O3'-C3'	5.58	126.40	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1622	G	N7-C8-N9	5.58	115.89	113.10
38	A1	1881	A	C4-C5-N7	-5.58	107.91	110.70
38	A1	2494	A	C6-N1-C2	-5.58	115.25	118.60
38	A1	3023	G	C4-N9-C1'	-5.58	119.24	126.50
45	AC	207	LEU	CB-CG-CD1	5.58	120.49	111.00
45	AC	359	VAL	CG1-CB-CG2	5.58	119.83	110.90
11	B2	37	G	C6-C5-N7	-5.58	127.05	130.40
11	B2	786	G	C4-C5-N7	5.58	113.03	110.80
11	B2	1149	C	N3-C4-C5	-5.58	119.67	121.90
11	B2	1206	G	C2-N3-C4	5.58	114.69	111.90
38	A1	43	G	C6-N1-C2	-5.58	121.75	125.10
38	A1	312	G	C6-C5-N7	-5.58	127.05	130.40
38	A1	361	G	C5-C6-O6	5.58	131.95	128.60
38	A1	872	G	O4'-C1'-N9	5.58	112.67	108.20
38	A1	1380	G	N1-C6-O6	5.58	123.25	119.90
38	A1	1482	G	C6-N1-C2	5.58	128.45	125.10
38	A1	2044	C	C5-C6-N1	5.58	123.79	121.00
38	A1	2105	A	C4-C5-C6	5.58	119.79	117.00
38	A1	2296	A	C8-N9-C4	-5.58	103.57	105.80
38	A1	2824	C	O4'-C1'-N1	5.58	112.67	108.20
38	A1	2901	C	N3-C4-C5	-5.58	119.67	121.90
59	AL	126	ALA	CB-CA-C	-5.58	101.73	110.10
11	B2	192	G	N7-C8-N9	5.58	115.89	113.10
11	B2	584	C	C1'-O4'-C4'	5.58	114.36	109.90
11	B2	982	U	N3-C2-O2	5.58	126.11	122.20
16	BD	147	GLU	C-N-CA	5.58	135.65	121.70
38	A1	104	C	O4'-C1'-N1	5.58	112.66	108.20
38	A1	817	G	C5-N7-C8	-5.58	101.51	104.30
38	A1	1636	C	N3-C4-C5	-5.58	119.67	121.90
38	A1	1723	A	C4'-C3'-C2'	-5.58	97.02	102.60
38	A1	1889	G	C5-C6-N1	-5.58	108.71	111.50
38	A1	2175	G	N1-C2-N3	-5.58	120.55	123.90
38	A1	2213	G	O4'-C1'-N9	5.58	112.66	108.20
38	A1	2298	C	P-O5'-C5'	5.58	129.83	120.90
38	A1	2886	C	C4-C5-C6	5.58	120.19	117.40
55	Ai	80	ARG	NE-CZ-NH1	-5.58	117.51	120.30
9	AX	238	GLY	C-N-CA	5.58	135.65	121.70
10	B1	24	A	C2-N3-C4	5.58	113.39	110.60
11	B2	248	U	C1'-O4'-C4'	5.58	114.36	109.90
11	B2	346	C	C3'-C2'-C1'	5.58	105.96	101.50
11	B2	719	G	O4'-C1'-N9	5.58	112.66	108.20
11	B2	764	C	C2-N3-C4	5.58	122.69	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1105	C	N3-C4-N4	5.58	121.91	118.00
11	B2	1323	A	C5-N7-C8	5.58	106.69	103.90
11	B2	1430	G	C4-C5-N7	-5.58	108.57	110.80
13	BA	67	TYR	CB-CG-CD2	-5.58	117.65	121.00
38	A1	403	G	C5'-C4'-O4'	5.58	115.79	109.10
38	A1	713	C	C5-C6-N1	-5.58	118.21	121.00
38	A1	717	A	C8-N9-C4	-5.58	103.57	105.80
38	A1	1130	G	C5-C6-O6	-5.58	125.25	128.60
38	A1	1302	G	C6-N1-C2	-5.58	121.75	125.10
38	A1	1451	A	C5-N7-C8	5.58	106.69	103.90
38	A1	1456	U	C5-C6-N1	5.58	125.49	122.70
38	A1	1526	G	C8-N9-C4	5.58	108.63	106.40
38	A1	2007	C	C5-C4-N4	-5.58	116.30	120.20
38	A1	2219	A	C4-C5-N7	-5.58	107.91	110.70
11	B2	986	G	C5-N7-C8	5.58	107.09	104.30
11	B2	1321	U	N3-C4-C5	5.58	117.95	114.60
30	BR	95	SER	N-CA-CB	5.58	118.87	110.50
38	A1	259	A	C5'-C4'-O4'	-5.58	102.41	109.10
38	A1	542	A	N1-C6-N6	5.58	121.95	118.60
38	A1	724	G	N3-C2-N2	5.58	123.80	119.90
38	A1	1476	C	O4'-C1'-N1	5.58	112.66	108.20
38	A1	1683	C	C1'-O4'-C4'	5.58	114.36	109.90
11	B2	280	C	C5-C6-N1	5.58	123.79	121.00
11	B2	1149	C	C6-N1-C2	-5.58	118.07	120.30
11	B2	1192	C	P-O3'-C3'	5.58	126.39	119.70
11	B2	1280	C	C4-C5-C6	-5.58	114.61	117.40
11	B2	1328	G	C5-C6-N1	-5.58	108.71	111.50
38	A1	68	G	C6-N1-C2	5.58	128.44	125.10
38	A1	98	G	N9-C1'-C2'	-5.58	105.87	112.00
38	A1	445	G	C1'-O4'-C4'	-5.58	105.44	109.90
38	A1	916	A	P-O5'-C5'	-5.58	111.98	120.90
38	A1	1196	A	C1'-O4'-C4'	5.58	114.36	109.90
38	A1	1338	G	C5-C6-N1	-5.58	108.71	111.50
38	A1	1387	G	C3'-C2'-C1'	-5.58	97.04	101.50
38	A1	1507	A	C4-C5-C6	5.58	119.79	117.00
38	A1	1718	C	O4'-C1'-N1	5.58	112.66	108.20
38	A1	2659	G	N3-C4-C5	5.58	131.39	128.60
38	A1	3019	C	C5-C4-N4	-5.58	116.30	120.20
11	B2	40	C	O4'-C1'-N1	5.57	112.66	108.20
11	B2	101	G	N3-C2-N2	5.57	123.80	119.90
11	B2	156	A	N1-C2-N3	5.57	132.09	129.30
11	B2	896	A	C5-C6-N6	-5.57	119.24	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	932	C	OP1-P-O3'	5.57	117.46	105.20
11	B2	1396	C	P-O5'-C5'	5.57	129.82	120.90
18	BF	184	TRP	CE3-CZ3-CH2	-5.57	115.07	121.20
38	A1	20	C	N3-C2-O2	-5.57	118.00	121.90
38	A1	200	G	C5-C6-N1	-5.57	108.71	111.50
38	A1	278	C	N1-C2-N3	-5.57	115.30	119.20
38	A1	768	C	N3-C4-N4	5.57	121.90	118.00
38	A1	885	A	N7-C8-N9	-5.57	111.01	113.80
38	A1	1225	A	C5-C6-N1	-5.57	114.91	117.70
38	A1	1491	U	O4'-C1'-N1	5.57	112.66	108.20
38	A1	1510	U	N1-C2-N3	5.57	118.24	114.90
38	A1	2280	G	C5-N7-C8	-5.57	101.51	104.30
11	B2	63	G	O3'-P-O5'	-5.57	93.41	104.00
11	B2	1191	G	N3-C2-N2	5.57	123.80	119.90
11	B2	1485	G	C5-C6-O6	-5.57	125.26	128.60
38	A1	512	G	P-O5'-C5'	-5.57	111.98	120.90
38	A1	764	G	N9-C1'-C2'	-5.57	105.87	112.00
38	A1	909	A	O4'-C1'-N9	5.57	112.66	108.20
38	A1	1645	U	O4'-C1'-N1	5.57	112.66	108.20
11	B2	82	G	N1-C2-N3	-5.57	120.56	123.90
11	B2	142	G	O5'-P-OP1	5.57	117.39	110.70
11	B2	314	G	N7-C8-N9	-5.57	110.31	113.10
16	BD	90	ASP	CB-CG-OD1	5.57	123.31	118.30
35	BW	12	ARG	NE-CZ-NH2	5.57	123.08	120.30
38	A1	186	A	N1-C2-N3	5.57	132.09	129.30
38	A1	275	C	C2-N3-C4	5.57	122.69	119.90
38	A1	519	A	C1'-O4'-C4'	5.57	114.36	109.90
38	A1	641	G	N1-C6-O6	5.57	123.24	119.90
38	A1	912	G	C4'-C3'-C2'	-5.57	97.03	102.60
38	A1	1058	A	N9-C4-C5	-5.57	103.57	105.80
38	A1	1322	G	C5'-C4'-O4'	5.57	115.78	109.10
38	A1	1622	G	O4'-C1'-N9	5.57	112.66	108.20
38	A1	1672	G	C5'-C4'-O4'	-5.57	102.42	109.10
38	A1	2130	C	N3-C4-N4	5.57	121.90	118.00
38	A1	2169	C	C4-C5-C6	-5.57	114.61	117.40
38	A1	2276	G	C5-C6-O6	-5.57	125.26	128.60
38	A1	2653	G	C5-C6-N1	-5.57	108.72	111.50
38	A1	2721	C	N3-C2-O2	-5.57	118.00	121.90
11	B2	670	C	N1-C2-O2	-5.57	115.56	118.90
11	B2	1411	G	C8-N9-C1'	5.57	134.24	127.00
38	A1	368	U	N3-C4-C5	-5.57	111.26	114.60
38	A1	1294	A	C4-C5-N7	-5.57	107.92	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1469	U	N1-C2-N3	5.57	118.24	114.90
38	A1	1561	G	N1-C2-N3	-5.57	120.56	123.90
38	A1	1565	G	N7-C8-N9	-5.57	110.31	113.10
38	A1	2896	G	C6-C5-N7	-5.57	127.06	130.40
38	A1	2952	C	N3-C4-C5	-5.57	119.67	121.90
57	Aj	41	ARG	NE-CZ-NH1	-5.57	117.52	120.30
10	B1	56	U	N3-C2-O2	5.57	126.10	122.20
11	B2	500	A	N9-C4-C5	5.57	108.03	105.80
11	B2	1195	U	N1-C2-O2	5.57	126.70	122.80
11	B2	1442	G	C5-C6-O6	-5.57	125.26	128.60
11	B2	1463	A	C5-N7-C8	5.57	106.68	103.90
38	A1	7	G	C2-N3-C4	-5.57	109.12	111.90
38	A1	111	U	N3-C2-O2	5.57	126.10	122.20
38	A1	457	C	P-O3'-C3'	5.57	126.38	119.70
38	A1	508	G	C3'-C2'-C1'	-5.57	97.05	101.50
38	A1	1246	G	C5-C6-N1	-5.57	108.72	111.50
38	A1	1271	G	N1-C2-N3	-5.57	120.56	123.90
38	A1	1352	U	N1-C2-O2	5.57	126.70	122.80
38	A1	1395	G	C8-N9-C4	5.57	108.63	106.40
38	A1	1630	U	C4-C5-C6	-5.57	116.36	119.70
38	A1	1713	G	C6-C5-N7	-5.57	127.06	130.40
38	A1	1905	G	N1-C2-N3	-5.57	120.56	123.90
38	A1	2347	G	C4-C5-C6	5.57	122.14	118.80
38	A1	2569	G	C5-C6-N1	-5.57	108.72	111.50
38	A1	3043	C	N3-C2-O2	-5.57	118.00	121.90
43	AB	180	TYR	CZ-CE2-CD2	5.57	124.81	119.80
11	B2	224	A	N9-C4-C5	-5.57	103.57	105.80
11	B2	239	A	N1-C2-N3	-5.57	126.52	129.30
11	B2	555	U	C5-C6-N1	5.57	125.48	122.70
11	B2	895	C	O4'-C1'-N1	5.57	112.65	108.20
38	A1	625	A	C5-N7-C8	5.57	106.68	103.90
38	A1	819	U	C5-C4-O4	-5.57	122.56	125.90
38	A1	902	C	O4'-C1'-N1	5.57	112.65	108.20
38	A1	1345	G	O4'-C1'-N9	5.57	112.65	108.20
38	A1	1373	C	C5-C6-N1	-5.57	118.22	121.00
38	A1	1375	G	P-O5'-C5'	-5.57	112.00	120.90
38	A1	1402	C	C6-N1-C2	-5.57	118.07	120.30
38	A1	1894	A	N3-C4-C5	-5.57	122.90	126.80
38	A1	1922	A	P-O3'-C3'	5.57	126.38	119.70
38	A1	2206	G	O4'-C1'-N9	5.57	112.65	108.20
38	A1	2644	G	N1-C2-N3	-5.57	120.56	123.90
39	A3	81	C	C2-N3-C4	5.57	122.68	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
44	Ab	22	ARG	NE-CZ-NH2	-5.57	117.52	120.30
58	Ak	35	ALA	N-CA-CB	5.57	117.89	110.10
11	B2	972	C	N3-C4-N4	5.56	121.89	118.00
38	A1	63	A	N1-C2-N3	-5.56	126.52	129.30
38	A1	951	C	C2-N1-C1'	5.56	124.92	118.80
38	A1	1291	C	C6-N1-C2	5.56	122.53	120.30
38	A1	3024	C	C4-C5-C6	-5.56	114.62	117.40
39	A3	26	C	C4-C5-C6	-5.56	114.62	117.40
40	AK	64	ARG	NE-CZ-NH2	-5.56	117.52	120.30
11	B2	266	A	N1-C2-N3	5.56	132.08	129.30
11	B2	964	A	C8-N9-C4	-5.56	103.58	105.80
11	B2	1018	C	C3'-C2'-C1'	5.56	105.95	101.50
11	B2	1096	G	C4'-C3'-C2'	-5.56	97.04	102.60
11	B2	1252	C	C6-N1-C1'	-5.56	114.12	120.80
11	B2	1409	G	C6-N1-C2	-5.56	121.76	125.10
18	BF	126	ARG	CD-NE-CZ	5.56	131.39	123.60
38	A1	68	G	C3'-C2'-C1'	5.56	105.95	101.50
38	A1	69	C	N1-C2-O2	5.56	122.24	118.90
38	A1	144	A	C6-C5-N7	-5.56	128.41	132.30
38	A1	408	C	C1'-O4'-C4'	-5.56	105.45	109.90
38	A1	857	U	C5'-C4'-O4'	5.56	115.78	109.10
38	A1	1230	G	N7-C8-N9	5.56	115.88	113.10
38	A1	2038	C	O4'-C1'-N1	5.56	112.65	108.20
38	A1	2218	C	N3-C4-C5	-5.56	119.67	121.90
38	A1	2348	G	O4'-C1'-N9	5.56	112.65	108.20
38	A1	2417	G	N1-C2-N2	5.56	121.21	116.20
38	A1	2661	U	O4'-C1'-N1	5.56	112.65	108.20
38	A1	2800	U	N1-C2-O2	-5.56	118.91	122.80
39	A3	125	U	C5'-C4'-O4'	5.56	115.78	109.10
65	AV	60	ARG	NE-CZ-NH2	-5.56	117.52	120.30
11	B2	489	C	N3-C4-C5	-5.56	119.68	121.90
11	B2	523	C	N3-C4-C5	-5.56	119.68	121.90
11	B2	600	C	O4'-C1'-N1	5.56	112.65	108.20
11	B2	1112	G	O4'-C1'-N9	5.56	112.65	108.20
11	B2	1132	C	C2-N3-C4	5.56	122.68	119.90
11	B2	1445	A	C1'-O4'-C4'	5.56	114.35	109.90
38	A1	217	A	OP1-P-OP2	-5.56	111.26	119.60
38	A1	218	A	C4'-C3'-C2'	-5.56	97.04	102.60
38	A1	461	C	C2-N3-C4	-5.56	117.12	119.90
38	A1	1036	C	C4'-C3'-C2'	-5.56	97.04	102.60
38	A1	1226	G	O3'-P-O5'	-5.56	93.44	104.00
38	A1	1281	A	C5'-C4'-O4'	-5.56	102.43	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1689	G	O4'-C1'-N9	5.56	112.65	108.20
11	B2	198	A	N1-C2-N3	5.56	132.08	129.30
11	B2	483	G	C3'-C2'-C1'	5.56	105.95	101.50
38	A1	525	C	N3-C4-N4	5.56	121.89	118.00
38	A1	665	C	N1-C2-N3	-5.56	115.31	119.20
38	A1	702	G	C6-N1-C2	5.56	128.44	125.10
38	A1	930	G	N3-C2-N2	5.56	123.79	119.90
38	A1	970	G	N7-C8-N9	5.56	115.88	113.10
38	A1	981	A	N7-C8-N9	-5.56	111.02	113.80
38	A1	1027	A	O4'-C1'-C2'	5.56	112.60	107.60
38	A1	1525	G	C5-N7-C8	5.56	107.08	104.30
38	A1	1561	G	N3-C4-C5	-5.56	125.82	128.60
38	A1	1680	G	C1'-O4'-C4'	5.56	114.35	109.90
38	A1	2227	G	P-O5'-C5'	5.56	129.79	120.90
38	A1	2997	G	N3-C2-N2	5.56	123.79	119.90
10	B1	2	G	O4'-C4'-C3'	-5.56	98.44	104.00
11	B2	268	C	OP1-P-OP2	-5.56	111.26	119.60
11	B2	277	G	C4-C5-C6	5.56	122.13	118.80
11	B2	443	C	N3-C4-C5	-5.56	119.68	121.90
11	B2	566	C	C5-C4-N4	-5.56	116.31	120.20
11	B2	1027	C	N3-C4-N4	5.56	121.89	118.00
38	A1	470	A	C4-C5-C6	-5.56	114.22	117.00
38	A1	538	G	C5-C6-N1	-5.56	108.72	111.50
38	A1	929	G	N3-C2-N2	5.56	123.79	119.90
38	A1	980	G	C5-C6-N1	-5.56	108.72	111.50
38	A1	2047	U	N3-C2-O2	-5.56	118.31	122.20
38	A1	2888	G	C5-N7-C8	5.56	107.08	104.30
38	A1	2952	C	N1-C2-O2	-5.56	115.56	118.90
39	A3	74	U	P-O5'-C5'	5.56	129.79	120.90
11	B2	218	C	N3-C4-N4	5.56	121.89	118.00
38	A1	927	G	C4-C5-N7	5.56	113.02	110.80
38	A1	1067	G	P-O5'-C5'	-5.56	112.01	120.90
38	A1	2314	U	N1-C2-N3	5.56	118.23	114.90
38	A1	2680	A	C5-N7-C8	5.56	106.68	103.90
41	AA	5	ARG	NE-CZ-NH2	-5.56	117.52	120.30
11	B2	474	G	C4-N9-C1'	-5.55	119.28	126.50
11	B2	531	G	N1-C2-N3	-5.55	120.57	123.90
11	B2	1010	G	C5-C6-O6	-5.55	125.27	128.60
11	B2	1280	C	C2-N3-C4	5.55	122.68	119.90
38	A1	272	G	OP1-P-OP2	-5.55	111.27	119.60
38	A1	669	G	N1-C2-N3	-5.55	120.57	123.90
38	A1	1443	G	C5-N7-C8	5.55	107.08	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1454	G	N3-C2-N2	5.55	123.79	119.90
38	A1	1610	C	O4'-C4'-C3'	-5.55	98.45	104.00
38	A1	1795	C	N1-C2-N3	-5.55	115.31	119.20
38	A1	1801	C	C2-N3-C4	5.55	122.68	119.90
38	A1	1876	G	C1'-O4'-C4'	5.55	114.34	109.90
38	A1	1888	G	C5-N7-C8	5.55	107.08	104.30
38	A1	2372	C	O4'-C1'-C2'	-5.55	100.25	105.80
56	AJ	124	ARG	NE-CZ-NH1	-5.55	117.52	120.30
11	B2	966	G	N1-C2-N2	-5.55	111.20	116.20
13	BA	126	MET	CG-SD-CE	-5.55	91.31	100.20
38	A1	581	A	N7-C8-N9	-5.55	111.02	113.80
38	A1	1274	G	C6-N1-C2	-5.55	121.77	125.10
38	A1	2760	A	C4'-C3'-C2'	-5.55	97.05	102.60
38	A1	2789	G	N7-C8-N9	5.55	115.88	113.10
38	A1	2802	G	O4'-C1'-N9	5.55	112.64	108.20
39	A3	94	G	N1-C2-N2	5.55	121.20	116.20
44	Ab	30	ARG	NE-CZ-NH2	-5.55	117.52	120.30
11	B2	48	G	C5-N7-C8	-5.55	101.53	104.30
11	B2	501	G	N1-C2-N3	-5.55	120.57	123.90
11	B2	528	G	C5-N7-C8	5.55	107.08	104.30
11	B2	743	U	P-O3'-C3'	-5.55	113.04	119.70
11	B2	1216	A	C8-N9-C4	-5.55	103.58	105.80
11	B2	1422	G	C1'-O4'-C4'	-5.55	105.46	109.90
11	B2	1445	A	C6-N1-C2	5.55	121.93	118.60
38	A1	1526	G	C5-C6-O6	-5.55	125.27	128.60
38	A1	1620	C	C4'-C3'-C2'	-5.55	97.05	102.60
38	A1	1827	A	C2-N3-C4	-5.55	107.82	110.60
38	A1	1881	A	C6-N1-C2	-5.55	115.27	118.60
38	A1	2791	C	P-O5'-C5'	5.55	129.78	120.90
38	A1	2806	A	C5-N7-C8	5.55	106.67	103.90
38	A1	2813	G	N7-C8-N9	-5.55	110.32	113.10
11	B2	24	C	N3-C4-N4	5.55	121.89	118.00
11	B2	133	G	C2-N3-C4	5.55	114.67	111.90
11	B2	885	G	O4'-C1'-N9	5.55	112.64	108.20
11	B2	982	U	N1-C1'-C2'	-5.55	105.90	112.00
11	B2	1393	A	C4-C5-C6	5.55	119.77	117.00
18	BF	95	TYR	N-CA-CB	5.55	120.59	110.60
38	A1	84	A	C5'-C4'-C3'	5.55	124.88	116.00
38	A1	222	A	C5-N7-C8	5.55	106.67	103.90
38	A1	406	G	C5-C6-N1	-5.55	108.73	111.50
38	A1	478	C	C6-N1-C2	5.55	122.52	120.30
38	A1	971	G	C8-N9-C4	-5.55	104.18	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1573	A	O5'-C5'-C4'	5.55	122.24	111.70
38	A1	1682	C	N3-C4-N4	5.55	121.89	118.00
38	A1	1684	C	C5-C4-N4	-5.55	116.31	120.20
38	A1	1989	G	C3'-C2'-C1'	-5.55	97.06	101.50
38	A1	2703	G	C8-N9-C4	-5.55	104.18	106.40
38	A1	2865	C	O5'-P-OP2	-5.55	100.71	105.70
40	A5	45	ARG	NE-CZ-NH2	-5.55	117.53	120.30
67	AZ	99	ARG	NE-CZ-NH2	-5.55	117.53	120.30
11	B2	724	C	C4-C5-C6	5.55	120.17	117.40
11	B2	1411	G	C6-C5-N7	-5.55	127.07	130.40
38	A1	1351	G	N1-C2-N3	-5.55	120.57	123.90
38	A1	1399	C	C6-N1-C2	-5.55	118.08	120.30
38	A1	1461	G	N1-C6-O6	5.55	123.23	119.90
38	A1	1613	A	N1-C2-N3	5.55	132.07	129.30
38	A1	2047	U	C3'-C2'-C1'	5.55	105.94	101.50
38	A1	2187	C	N1-C2-N3	-5.55	115.32	119.20
38	A1	2208	C	N3-C4-N4	5.55	121.88	118.00
38	A1	2572	U	N1-C2-N3	5.55	118.23	114.90
11	B2	159	C	C5-C4-N4	-5.55	116.32	120.20
11	B2	282	G	P-O5'-C5'	5.55	129.77	120.90
20	BH	139	VAL	CA-CB-CG2	-5.55	102.58	110.90
22	BJ	89	PHE	CB-CG-CD1	-5.55	116.92	120.80
38	A1	182	U	C5-C4-O4	-5.55	122.57	125.90
38	A1	369	G	C5-C6-N1	-5.55	108.73	111.50
38	A1	655	C	C5-C6-N1	5.55	123.77	121.00
38	A1	996	U	N1-C2-O2	-5.55	118.92	122.80
38	A1	1331	U	O4'-C4'-C3'	-5.55	98.45	104.00
38	A1	1463	C	N1-C2-O2	5.55	122.23	118.90
38	A1	1734	G	C2-N3-C4	-5.55	109.13	111.90
38	A1	1816	C	C6-N1-C2	-5.55	118.08	120.30
38	A1	1848	A	O4'-C1'-N9	5.55	112.64	108.20
38	A1	2180	C	C5-C6-N1	5.55	123.77	121.00
38	A1	2547	A	C8-N9-C4	-5.55	103.58	105.80
39	A3	42	A	C5-N7-C8	5.55	106.67	103.90
46	AD	234	THR	N-CA-CB	5.55	120.84	110.30
11	B2	590	G	N9-C4-C5	5.54	107.62	105.40
11	B2	881	G	C5'-C4'-C3'	5.54	124.87	116.00
38	A1	356	C	O4'-C1'-N1	5.54	112.64	108.20
38	A1	563	A	C5-N7-C8	5.54	106.67	103.90
38	A1	1042	G	N3-C2-N2	5.54	123.78	119.90
38	A1	1713	G	C5-C6-N1	-5.54	108.73	111.50
38	A1	1928	A	C5-C6-N1	-5.54	114.93	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2310	G	N3-C2-N2	5.54	123.78	119.90
38	A1	2809	G	P-O5'-C5'	5.54	129.77	120.90
50	AF	158	THR	CA-CB-CG2	-5.54	104.64	112.40
11	B2	246	A	C4-C5-N7	-5.54	107.93	110.70
11	B2	362	C	C2'-C3'-O3'	5.54	122.57	113.70
11	B2	723	G	C5'-C4'-O4'	5.54	115.75	109.10
11	B2	880	G	C5'-C4'-O4'	5.54	115.75	109.10
11	B2	949	G	P-O5'-C5'	5.54	129.77	120.90
11	B2	1204	C	N1-C2-O2	5.54	122.23	118.90
18	BF	202	PHE	CB-CG-CD1	-5.54	116.92	120.80
29	BQ	136	TYR	CG-CD1-CE1	5.54	125.73	121.30
38	A1	697	U	C4-C5-C6	-5.54	116.37	119.70
38	A1	1123	A	C6-N1-C2	-5.54	115.27	118.60
38	A1	1191	C	C4-C5-C6	5.54	120.17	117.40
38	A1	1323	U	C6-N1-C2	-5.54	117.67	121.00
38	A1	1394	G	N1-C2-N3	-5.54	120.57	123.90
38	A1	1756	C	N3-C4-C5	-5.54	119.68	121.90
38	A1	2047	U	O5'-P-OP1	-5.54	100.71	105.70
38	A1	2354	A	C8-N9-C4	5.54	108.02	105.80
11	B2	86	C	C2-N1-C1'	-5.54	112.70	118.80
11	B2	379	A	N3-C4-C5	-5.54	122.92	126.80
11	B2	706	G	C5-C6-O6	-5.54	125.28	128.60
11	B2	816	G	C5'-C4'-C3'	-5.54	107.13	116.00
11	B2	847	A	O5'-P-OP1	5.54	117.35	110.70
11	B2	900	G	C2-N3-C4	5.54	114.67	111.90
11	B2	904	G	C5-N7-C8	5.54	107.07	104.30
11	B2	961	U	C5-C6-N1	5.54	125.47	122.70
38	A1	398	U	C6-N1-C2	-5.54	117.67	121.00
38	A1	821	U	OP1-P-OP2	-5.54	111.29	119.60
38	A1	888	U	C5-C6-N1	5.54	125.47	122.70
38	A1	1304	G	C4-C5-C6	-5.54	115.47	118.80
38	A1	1625	A	C4-C5-N7	-5.54	107.93	110.70
38	A1	1829	C	O4'-C1'-C2'	-5.54	100.26	105.80
38	A1	2403	G	C3'-C2'-C1'	-5.54	97.07	101.50
38	A1	2746	G	O4'-C1'-N9	5.54	112.63	108.20
38	A1	2825	A	C5-C6-N6	-5.54	119.27	123.70
38	A1	2888	G	N7-C8-N9	-5.54	110.33	113.10
39	A3	120	C	C4-C5-C6	5.54	120.17	117.40
45	AC	314	TYR	CB-CG-CD2	-5.54	117.67	121.00
26	BN	43	PRO	N-CD-CG	5.54	111.51	103.20
38	A1	288	G	C5-N7-C8	-5.54	101.53	104.30
38	A1	555	G	C5-C6-O6	-5.54	125.28	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	693	G	C4-C5-C6	5.54	122.12	118.80
38	A1	1089	C	C6-N1-C1'	-5.54	114.15	120.80
38	A1	1533	G	C6-N1-C2	-5.54	121.78	125.10
38	A1	3004	C	N1-C1'-C2'	5.54	121.20	114.00
39	A3	72	G	C5-C6-O6	-5.54	125.28	128.60
64	AR	23	ARG	N-CA-CB	5.54	120.57	110.60
9	AX	192	TYR	CB-CG-CD2	-5.54	117.68	121.00
11	B2	149	U	C3'-C2'-C1'	-5.54	97.07	101.50
11	B2	529	C	O4'-C1'-C2'	-5.54	100.26	105.80
11	B2	558	C	P-O5'-C5'	5.54	129.76	120.90
11	B2	1224	U	C4-C5-C6	5.54	123.02	119.70
38	A1	30	G	C6-C5-N7	-5.54	127.08	130.40
38	A1	1020	G	C6-C5-N7	-5.54	127.08	130.40
38	A1	1083	G	C5-C6-N1	5.54	114.27	111.50
38	A1	1490	G	C4-C5-N7	5.54	113.02	110.80
38	A1	1753	G	O4'-C1'-N9	5.54	112.63	108.20
38	A1	1902	G	N3-C4-N9	5.54	129.32	126.00
38	A1	1951	G	C4-C5-N7	-5.54	108.58	110.80
38	A1	2279	G	N9-C4-C5	-5.54	103.18	105.40
38	A1	2581	G	N3-C2-N2	5.54	123.78	119.90
38	A1	2731	C	C4-C5-C6	5.54	120.17	117.40
38	A1	2970	U	C5'-C4'-C3'	5.54	124.86	116.00
38	A1	2999	G	N9-C4-C5	-5.54	103.19	105.40
39	A3	75	G	N3-C4-C5	5.54	131.37	128.60
60	AM	113	VAL	CA-CB-CG2	-5.54	102.59	110.90
11	B2	79	G	C5-N7-C8	5.54	107.07	104.30
11	B2	195	C	N3-C4-C5	-5.54	119.69	121.90
11	B2	212	G	C5-N7-C8	5.54	107.07	104.30
11	B2	483	G	C6-C5-N7	-5.54	127.08	130.40
11	B2	984	C	C2-N1-C1'	5.54	124.89	118.80
19	BG	43	LEU	CB-CG-CD2	5.54	120.41	111.00
38	A1	986	G	N1-C6-O6	5.54	123.22	119.90
38	A1	2003	C	OP2-P-O3'	5.54	117.38	105.20
38	A1	2262	C	C4-C5-C6	5.54	120.17	117.40
38	A1	2723	G	C2-N3-C4	5.54	114.67	111.90
11	B2	138	C	C2-N3-C4	5.54	122.67	119.90
11	B2	721	A	C8-N9-C4	-5.54	103.59	105.80
11	B2	908	G	N1-C6-O6	5.54	123.22	119.90
11	B2	1241	U	C5'-C4'-O4'	5.54	115.74	109.10
12	B3	45	ARG	NE-CZ-NH2	-5.54	117.53	120.30
38	A1	365	G	N3-C4-N9	5.54	129.32	126.00
38	A1	708	A	N3-C4-C5	-5.54	122.93	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1088	G	C4-C5-C6	5.54	122.12	118.80
38	A1	1827	A	N9-C4-C5	5.54	108.01	105.80
38	A1	1952	G	O4'-C1'-N9	5.54	112.63	108.20
38	A1	1993	A	C4-C5-N7	-5.54	107.93	110.70
38	A1	2172	G	N3-C4-C5	5.54	131.37	128.60
54	AI	77	ARG	NE-CZ-NH1	-5.54	117.53	120.30
56	AJ	86	ARG	N-CA-CB	5.54	120.56	110.60
11	B2	377	A	C4-C5-C6	5.53	119.77	117.00
11	B2	678	G	N1-C2-N3	-5.53	120.58	123.90
11	B2	756	A	O4'-C1'-N9	5.53	112.63	108.20
38	A1	212	A	C3'-C2'-C1'	5.53	105.93	101.50
38	A1	259	A	C5-C6-N6	-5.53	119.27	123.70
38	A1	287	G	N3-C4-C5	5.53	131.37	128.60
38	A1	417	C	C5-C4-N4	-5.53	116.33	120.20
38	A1	708	A	C8-N9-C4	-5.53	103.59	105.80
38	A1	721	G	O4'-C1'-N9	5.53	112.63	108.20
38	A1	760	G	N3-C4-C5	-5.53	125.83	128.60
38	A1	1006	A	C6-N1-C2	5.53	121.92	118.60
38	A1	1210	G	N3-C2-N2	5.53	123.77	119.90
38	A1	1270	G	N7-C8-N9	5.53	115.87	113.10
38	A1	1691	U	N3-C4-C5	-5.53	111.28	114.60
38	A1	2068	U	N3-C4-O4	5.53	123.27	119.40
38	A1	2378	C	P-O5'-C5'	5.53	129.75	120.90
10	B1	33	C	O5'-C5'-C4'	-5.53	101.19	111.70
11	B2	401	U	OP1-P-OP2	-5.53	111.30	119.60
11	B2	596	A	C5'-C4'-O4'	5.53	115.74	109.10
25	BM	41	ARG	O-C-N	5.53	131.55	122.70
38	A1	303	A	C8-N9-C4	-5.53	103.59	105.80
38	A1	471	U	O4'-C1'-N1	5.53	112.63	108.20
38	A1	726	G	N3-C2-N2	5.53	123.77	119.90
38	A1	937	A	N3-C4-C5	-5.53	122.93	126.80
38	A1	1058	A	O4'-C1'-N9	5.53	112.63	108.20
38	A1	1199	U	P-O5'-C5'	-5.53	112.05	120.90
38	A1	1791	A	O4'-C1'-N9	5.53	112.63	108.20
38	A1	1855	G	C5-C6-O6	-5.53	125.28	128.60
39	A3	23	A	C1'-O4'-C4'	5.53	114.33	109.90
40	AK	11	VAL	CA-CB-CG2	5.53	119.20	110.90
11	B2	157	A	N3-C4-C5	-5.53	122.93	126.80
11	B2	351	C	C1'-O4'-C4'	-5.53	105.48	109.90
11	B2	395	C	C4-C5-C6	5.53	120.17	117.40
11	B2	950	C	C2-N3-C4	5.53	122.67	119.90
11	B2	1380	C	C3'-C2'-C1'	-5.53	97.08	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1385	U	O4'-C1'-N1	5.53	112.62	108.20
17	BE	100	TYR	CB-CG-CD1	-5.53	117.68	121.00
20	BH	72	MET	CG-SD-CE	-5.53	91.35	100.20
38	A1	106	G	C5-C6-N1	5.53	114.27	111.50
38	A1	686	C	C1'-O4'-C4'	5.53	114.33	109.90
38	A1	906	G	N3-C2-N2	5.53	123.77	119.90
38	A1	1675	C	C5-C4-N4	-5.53	116.33	120.20
38	A1	1766	A	C4-C5-C6	5.53	119.77	117.00
38	A1	2340	A	N3-C4-C5	5.53	130.67	126.80
38	A1	2436	A	N3-C4-C5	5.53	130.67	126.80
38	A1	2992	G	C4'-C3'-C2'	-5.53	97.07	102.60
38	A1	2997	G	C4-C5-N7	5.53	113.01	110.80
11	B2	596	A	C4-C5-C6	5.53	119.76	117.00
11	B2	1186	C	N3-C4-C5	-5.53	119.69	121.90
11	B2	1239	A	C5-C6-N1	-5.53	114.94	117.70
22	BJ	60	ALA	N-CA-CB	5.53	117.84	110.10
38	A1	2689	G	N1-C6-O6	5.53	123.22	119.90
38	A1	2824	C	P-O3'-C3'	-5.53	113.06	119.70
61	AN	144	PHE	O-C-N	-5.53	113.85	122.70
9	AX	63	THR	CA-CB-CG2	-5.53	104.66	112.40
11	B2	903	G	OP2-P-O3'	5.53	117.36	105.20
11	B2	1143	G	C5'-C4'-C3'	5.53	124.84	116.00
11	B2	1167	C	N3-C4-C5	-5.53	119.69	121.90
38	A1	31	G	P-O3'-C3'	-5.53	113.07	119.70
38	A1	143	C	C1'-O4'-C4'	5.53	114.32	109.90
38	A1	169	G	C5-N7-C8	5.53	107.06	104.30
38	A1	558	C	O5'-C5'-C4'	-5.53	101.20	111.70
38	A1	1195	G	C2-N3-C4	-5.53	109.14	111.90
38	A1	1250	A	N3-C4-C5	-5.53	122.93	126.80
38	A1	1375	G	N3-C4-C5	-5.53	125.84	128.60
38	A1	1451	A	C5-C6-N1	5.53	120.46	117.70
38	A1	2454	G	C5-N7-C8	-5.53	101.54	104.30
38	A1	2761	G	O4'-C1'-N9	5.53	112.62	108.20
38	A1	2875	C	O5'-C5'-C4'	-5.53	101.20	111.70
39	A3	75	G	N7-C8-N9	-5.53	110.34	113.10
42	Aa	49	ILE	CB-CA-C	-5.53	100.54	111.60
11	B2	81	C	C5-C4-N4	-5.53	116.33	120.20
11	B2	594	A	C5-C6-N6	-5.53	119.28	123.70
11	B2	764	C	N1-C2-O2	5.53	122.22	118.90
11	B2	1214	G	C5-C6-O6	-5.53	125.28	128.60
13	BA	10	ARG	NE-CZ-NH2	-5.53	117.54	120.30
14	BB	89	ALA	N-CA-CB	5.53	117.84	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	934	G	C6-N1-C2	-5.53	121.78	125.10
38	A1	1685	C	O4'-C1'-N1	5.53	112.62	108.20
38	A1	2025	A	N9-C4-C5	-5.53	103.59	105.80
38	A1	2610	C	O4'-C1'-N1	5.53	112.62	108.20
38	A1	2891	A	N7-C8-N9	-5.53	111.04	113.80
11	B2	288	G	C5-C6-O6	-5.52	125.29	128.60
11	B2	466	C	N1-C2-N3	-5.52	115.33	119.20
39	A3	10	U	O4'-C1'-N1	5.52	112.62	108.20
39	A3	93	G	P-O5'-C5'	5.52	129.74	120.90
45	AC	259	TRP	CB-CG-CD1	5.52	134.18	127.00
11	B2	390	G	C6-N1-C2	5.52	128.41	125.10
11	B2	655	A	C1'-O4'-C4'	-5.52	105.48	109.90
11	B2	734	G	C1'-O4'-C4'	5.52	114.32	109.90
38	A1	637	G	N9-C4-C5	5.52	107.61	105.40
38	A1	1080	G	P-O5'-C5'	-5.52	112.06	120.90
38	A1	1230	G	C5-C6-N1	-5.52	108.74	111.50
38	A1	1277	G	C3'-C2'-C1'	-5.52	97.08	101.50
38	A1	1519	G	N1-C2-N3	-5.52	120.59	123.90
38	A1	2146	C	C5-C4-N4	-5.52	116.33	120.20
38	A1	2625	C	C5-C6-N1	5.52	123.76	121.00
38	A1	2825	A	N7-C8-N9	-5.52	111.04	113.80
39	A3	105	G	O4'-C4'-C3'	-5.52	98.48	104.00
11	B2	351	C	OP1-P-OP2	-5.52	111.32	119.60
11	B2	560	A	C8-N9-C4	-5.52	103.59	105.80
11	B2	1137	G	N3-C2-N2	5.52	123.77	119.90
11	B2	1356	A	N3-C4-C5	-5.52	122.94	126.80
32	BT	11	TYR	CD1-CG-CD2	-5.52	111.83	117.90
38	A1	361	G	N7-C8-N9	-5.52	110.34	113.10
38	A1	677	A	C6-C5-N7	-5.52	128.44	132.30
38	A1	1872	G	N1-C2-N3	-5.52	120.59	123.90
38	A1	2486	A	C5-C6-N1	-5.52	114.94	117.70
38	A1	2548	A	C4-C5-N7	-5.52	107.94	110.70
38	A1	2795	G	N1-C2-N2	-5.52	111.23	116.20
67	AZ	29	THR	CA-CB-CG2	-5.52	104.67	112.40
11	B2	28	U	N1-C2-O2	-5.52	118.94	122.80
11	B2	510	A	C6-C5-N7	-5.52	128.44	132.30
11	B2	539	C	C5-C6-N1	-5.52	118.24	121.00
11	B2	703	U	N3-C4-O4	-5.52	115.54	119.40
11	B2	1327	C	P-O3'-C3'	-5.52	113.08	119.70
38	A1	814	G	C2-N3-C4	5.52	114.66	111.90
38	A1	1109	G	C5-C6-N1	-5.52	108.74	111.50
38	A1	1338	G	C2-N3-C4	5.52	114.66	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1812	A	O4'-C1'-N9	5.52	112.62	108.20
38	A1	2038	C	N3-C4-N4	5.52	121.86	118.00
38	A1	3020	G	C5-N7-C8	5.52	107.06	104.30
64	AR	35	PHE	CB-CG-CD1	-5.52	116.94	120.80
11	B2	19	G	C5-C6-N1	5.52	114.26	111.50
11	B2	74	U	O4'-C1'-N1	5.52	112.61	108.20
11	B2	890	C	N3-C4-N4	5.52	121.86	118.00
11	B2	1402	C	N1-C2-O2	5.52	122.21	118.90
26	BN	5	LYS	N-CA-CB	5.52	120.53	110.60
38	A1	186	A	C1'-O4'-C4'	5.52	114.31	109.90
38	A1	197	C	N3-C4-N4	5.52	121.86	118.00
38	A1	345	C	N3-C4-N4	5.52	121.86	118.00
38	A1	437	G	C6-N1-C2	5.52	128.41	125.10
38	A1	902	C	N3-C4-N4	5.52	121.86	118.00
38	A1	1116	A	C6-C5-N7	-5.52	128.44	132.30
38	A1	1625	A	C1'-O4'-C4'	-5.52	105.49	109.90
38	A1	1660	A	P-O5'-C5'	-5.52	112.07	120.90
38	A1	2103	C	C2-N3-C4	5.52	122.66	119.90
38	A1	2139	A	N3-C4-C5	-5.52	122.94	126.80
38	A1	2810	G	C6-N1-C2	5.52	128.41	125.10
38	A1	2860	G	N1-C2-N3	-5.52	120.59	123.90
38	A1	2864	G	O4'-C1'-N9	5.52	112.61	108.20
45	AC	185	TYR	CB-CA-C	-5.52	99.37	110.40
5	AS	70	GLN	CA-CB-CG	5.52	125.53	113.40
11	B2	676	G	N3-C2-N2	5.52	123.76	119.90
11	B2	913	G	C8-N9-C1'	5.52	134.17	127.00
11	B2	1328	G	N1-C6-O6	5.52	123.21	119.90
38	A1	326	C	C4-C5-C6	5.52	120.16	117.40
38	A1	1856	G	C4-C5-N7	5.52	113.01	110.80
38	A1	2305	U	N3-C4-O4	5.52	123.26	119.40
58	Ak	195	TYR	CB-CG-CD2	5.52	124.31	121.00
10	B1	31	G	C6-N1-C2	-5.51	121.79	125.10
10	B1	74	A	N9-C4-C5	5.51	108.01	105.80
11	B2	211	G	C5-C6-N1	-5.51	108.74	111.50
11	B2	425	C	C4'-C3'-C2'	-5.51	97.09	102.60
11	B2	965	G	C8-N9-C4	5.51	108.61	106.40
11	B2	1017	U	OP1-P-OP2	-5.51	111.33	119.60
11	B2	1129	A	C5-N7-C8	5.51	106.66	103.90
11	B2	1273	G	C6-N1-C2	-5.51	121.79	125.10
11	B2	1389	G	C5'-C4'-O4'	5.51	115.72	109.10
11	B2	1438	A	N9-C4-C5	5.51	108.00	105.80
38	A1	260	A	C5-C6-N6	-5.51	119.29	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	322	C	N3-C4-C5	-5.51	119.69	121.90
38	A1	486	A	C2-N3-C4	-5.51	107.84	110.60
38	A1	674	G	N7-C8-N9	-5.51	110.34	113.10
38	A1	1223	A	C5'-C4'-C3'	-5.51	107.17	116.00
38	A1	1510	U	C2-N3-C4	-5.51	123.69	127.00
38	A1	1603	G	P-O3'-C3'	5.51	126.32	119.70
38	A1	2285	G	C1'-O4'-C4'	5.51	114.31	109.90
38	A1	2946	C	P-O5'-C5'	5.51	129.72	120.90
39	A3	70	C	P-O3'-C3'	5.51	126.32	119.70
43	AB	17	PHE	CB-CG-CD2	5.51	124.66	120.80
47	Ad	9	SER	N-CA-CB	5.51	118.77	110.50
11	B2	204	G	N1-C2-N3	-5.51	120.59	123.90
11	B2	418	G	C6-N1-C2	5.51	128.41	125.10
11	B2	683	A	C5-C6-N1	-5.51	114.94	117.70
38	A1	80	G	C6-C5-N7	-5.51	127.09	130.40
38	A1	801	A	N7-C8-N9	-5.51	111.04	113.80
38	A1	1909	C	C1'-O4'-C4'	5.51	114.31	109.90
38	A1	2963	G	C4'-C3'-C2'	-5.51	97.09	102.60
6	AT	41	ARG	NE-CZ-NH1	-5.51	117.55	120.30
11	B2	178	C	C6-N1-C2	-5.51	118.09	120.30
11	B2	247	G	C4-N9-C1'	-5.51	119.33	126.50
11	B2	1321	U	N3-C2-O2	5.51	126.06	122.20
23	BK	121	ARG	C-N-CA	5.51	135.48	121.70
38	A1	172	C	C4-C5-C6	-5.51	114.64	117.40
38	A1	452	A	C4-C5-N7	-5.51	107.94	110.70
38	A1	489	G	O4'-C1'-N9	5.51	112.61	108.20
38	A1	913	G	C1'-O4'-C4'	5.51	114.31	109.90
38	A1	1039	C	N1-C2-O2	-5.51	115.59	118.90
38	A1	1043	U	P-O5'-C5'	-5.51	112.08	120.90
38	A1	1151	G	N3-C4-N9	5.51	129.31	126.00
38	A1	1383	G	C5-C6-N1	-5.51	108.74	111.50
38	A1	1996	C	N3-C4-N4	5.51	121.86	118.00
38	A1	2337	G	C5-C6-O6	-5.51	125.29	128.60
38	A1	2652	G	C4-C5-C6	5.51	122.11	118.80
46	AD	36	ILE	N-CA-CB	5.51	123.47	110.80
9	AX	247	TYR	CB-CG-CD1	5.51	124.31	121.00
11	B2	197	A	P-O5'-C5'	5.51	129.71	120.90
11	B2	767	U	N1-C2-O2	-5.51	118.94	122.80
11	B2	935	G	C6-N1-C2	-5.51	121.80	125.10
38	A1	83	G	C5-C6-N1	-5.51	108.75	111.50
38	A1	525	C	C6-N1-C2	5.51	122.50	120.30
38	A1	658	C	C5-C6-N1	5.51	123.75	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	864	C	C2-N3-C4	5.51	122.66	119.90
38	A1	1487	U	C6-N1-C2	5.51	124.31	121.00
38	A1	1849	A	N7-C8-N9	-5.51	111.05	113.80
38	A1	1892	G	O4'-C1'-C2'	5.51	112.56	107.60
38	A1	2884	C	O4'-C1'-N1	5.51	112.61	108.20
39	A3	82	C	N1-C2-N3	-5.51	115.34	119.20
44	Ab	31	TYR	CD1-CE1-CZ	5.51	124.76	119.80
11	B2	258	A	N1-C2-N3	-5.51	126.55	129.30
11	B2	1414	G	N7-C8-N9	-5.51	110.35	113.10
16	BD	18	TRP	CB-CG-CD1	-5.51	119.84	127.00
38	A1	230	A	C3'-C2'-C1'	-5.51	97.09	101.50
38	A1	250	G	N3-C4-N9	-5.51	122.69	126.00
38	A1	1164	C	N3-C4-C5	-5.51	119.70	121.90
38	A1	2621	U	N3-C4-C5	-5.51	111.30	114.60
41	AA	24	PHE	CB-CG-CD2	5.51	124.66	120.80
11	B2	51	A	C5-N7-C8	5.51	106.65	103.90
11	B2	216	G	C5'-C4'-C3'	5.51	124.81	116.00
11	B2	294	A	N9-C4-C5	5.51	108.00	105.80
11	B2	610	G	C3'-C2'-C1'	-5.51	97.09	101.50
11	B2	725	C	C4'-C3'-C2'	-5.51	97.09	102.60
11	B2	896	A	N3-C4-C5	-5.51	122.95	126.80
11	B2	1321	U	OP1-P-OP2	-5.51	111.34	119.60
11	B2	1417	A	P-O5'-C5'	5.51	129.71	120.90
38	A1	847	A	N1-C2-N3	5.51	132.05	129.30
38	A1	953	G	C5-C6-N1	-5.51	108.75	111.50
38	A1	1017	A	C4-C5-C6	5.51	119.75	117.00
38	A1	1143	A	O4'-C1'-N9	5.51	112.61	108.20
38	A1	1367	A	C6-C5-N7	-5.51	128.45	132.30
38	A1	2277	G	O4'-C1'-N9	5.51	112.61	108.20
38	A1	2361	C	C2-N3-C4	5.51	122.65	119.90
38	A1	2808	C	C5-C4-N4	-5.51	116.34	120.20
38	A1	2892	A	C6-C5-N7	5.51	136.16	132.30
50	AF	97	PHE	CZ-CE2-CD2	-5.51	113.49	120.10
67	AZ	1	MET	CG-SD-CE	-5.51	91.39	100.20
11	B2	75	C	O4'-C1'-N1	5.50	112.60	108.20
11	B2	590	G	O4'-C1'-N9	5.50	112.60	108.20
11	B2	1306	A	C5-C6-N1	-5.50	114.95	117.70
38	A1	561	C	O4'-C1'-N1	5.50	112.60	108.20
38	A1	594	U	C4-C5-C6	5.50	123.00	119.70
38	A1	2639	G	C6-C5-N7	-5.50	127.10	130.40
11	B2	358	G	C4-C5-N7	5.50	113.00	110.80
11	B2	753	G	P-O3'-C3'	5.50	126.30	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	765	U	C4-C5-C6	5.50	123.00	119.70
11	B2	1181	G	C2-N3-C4	-5.50	109.15	111.90
14	BB	123	ASP	N-CA-CB	5.50	120.51	110.60
38	A1	423	G	C2-N3-C4	5.50	114.65	111.90
38	A1	666	A	C8-N9-C4	-5.50	103.60	105.80
38	A1	1998	G	C6-C5-N7	-5.50	127.10	130.40
38	A1	2045	C	N3-C2-O2	5.50	125.75	121.90
38	A1	2059	G	N3-C2-N2	5.50	123.75	119.90
38	A1	2300	C	C5-C6-N1	5.50	123.75	121.00
38	A1	2455	G	C8-N9-C4	5.50	108.60	106.40
38	A1	2460	A	C8-N9-C4	-5.50	103.60	105.80
38	A1	2900	C	P-O3'-C3'	-5.50	113.10	119.70
45	AC	8	ARG	N-CA-CB	5.50	120.51	110.60
48	AE	91	LEU	CB-CG-CD2	5.50	120.36	111.00
65	AV	40	TYR	CZ-CE2-CD2	5.50	124.75	119.80
11	B2	37	G	C5-N7-C8	5.50	107.05	104.30
11	B2	701	G	C4-C5-N7	-5.50	108.60	110.80
11	B2	761	U	N1-C2-N3	-5.50	111.60	114.90
11	B2	820	G	C4-C5-N7	-5.50	108.60	110.80
11	B2	1135	G	C5-N7-C8	-5.50	101.55	104.30
11	B2	1137	G	N3-C4-N9	-5.50	122.70	126.00
11	B2	1301	U	C6-N1-C2	-5.50	117.70	121.00
11	B2	1422	G	N7-C8-N9	5.50	115.85	113.10
38	A1	60	G	C5-C6-O6	-5.50	125.30	128.60
38	A1	771	G	C5-N7-C8	-5.50	101.55	104.30
38	A1	1100	G	C6-N1-C2	5.50	128.40	125.10
38	A1	1169	G	C4-C5-N7	5.50	113.00	110.80
38	A1	1505	G	C3'-C2'-C1'	5.50	105.90	101.50
38	A1	1532	G	N9-C4-C5	-5.50	103.20	105.40
39	A3	17	G	C8-N9-C4	5.50	108.60	106.40
6	AT	33	ARG	NE-CZ-NH1	5.50	123.05	120.30
11	B2	21	A	OP1-P-OP2	-5.50	111.35	119.60
11	B2	111	G	O3'-P-O5'	-5.50	93.55	104.00
11	B2	334	G	C6-C5-N7	-5.50	127.10	130.40
11	B2	420	C	C6-N1-C2	5.50	122.50	120.30
38	A1	185	A	P-O3'-C3'	5.50	126.30	119.70
38	A1	1960	U	C5-C6-N1	5.50	125.45	122.70
38	A1	2759	A	C5'-C4'-C3'	-5.50	107.20	116.00
39	A3	27	C	N1-C2-O2	5.50	122.20	118.90
6	AT	33	ARG	N-CA-C	-5.50	96.16	111.00
11	B2	384	G	C5-C6-N1	5.50	114.25	111.50
11	B2	661	C	N3-C4-N4	5.50	121.85	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	968	C	C2-N3-C4	5.50	122.65	119.90
11	B2	1157	G	C2-N3-C4	5.50	114.65	111.90
11	B2	1392	G	N9-C4-C5	-5.50	103.20	105.40
23	BK	1	MET	CG-SD-CE	5.50	109.00	100.20
38	A1	10	C	C3'-C2'-C1'	5.50	105.90	101.50
38	A1	360	G	O4'-C1'-N9	5.50	112.60	108.20
38	A1	541	A	C2-N3-C4	-5.50	107.85	110.60
38	A1	1365	G	C8-N9-C1'	-5.50	119.85	127.00
38	A1	1873	G	N3-C2-N2	5.50	123.75	119.90
38	A1	2553	U	N3-C2-O2	5.50	126.05	122.20
38	A1	2722	G	C5-N7-C8	5.50	107.05	104.30
38	A1	2819	C	C2-N3-C4	5.50	122.65	119.90
38	A1	2899	G	N3-C4-C5	5.50	131.35	128.60
43	AB	104	GLU	CB-CA-C	-5.50	99.40	110.40
11	B2	122	C	P-O5'-C5'	5.50	129.69	120.90
11	B2	370	A	C3'-C2'-C1'	-5.50	97.10	101.50
11	B2	640	U	O4'-C1'-N1	5.50	112.60	108.20
11	B2	841	C	N1-C2-O2	5.50	122.20	118.90
11	B2	1004	U	P-O5'-C5'	5.50	129.69	120.90
11	B2	1456	C	C5-C4-N4	-5.50	116.35	120.20
20	BH	18	MET	N-CA-CB	5.50	120.49	110.60
38	A1	271	G	N7-C8-N9	-5.50	110.35	113.10
38	A1	285	C	C4-C5-C6	-5.50	114.65	117.40
38	A1	285	C	N3-C4-N4	5.50	121.85	118.00
38	A1	653	U	C2-N3-C4	-5.50	123.70	127.00
38	A1	726	G	O4'-C1'-N9	5.50	112.60	108.20
38	A1	870	G	C4-C5-C6	5.50	122.10	118.80
38	A1	1205	U	C5-C6-N1	5.50	125.45	122.70
38	A1	1360	G	C5-N7-C8	5.50	107.05	104.30
38	A1	1513	G	C6-C5-N7	-5.50	127.10	130.40
38	A1	1583	G	N3-C2-N2	5.50	123.75	119.90
38	A1	1782	C	C2-N3-C4	5.50	122.65	119.90
38	A1	2064	U	C3'-C2'-C1'	-5.50	97.10	101.50
38	A1	2367	C	N3-C4-C5	-5.50	119.70	121.90
38	A1	2608	U	C6-N1-C2	-5.50	117.70	121.00
11	B2	378	A	C6-C5-N7	-5.50	128.45	132.30
38	A1	509	A	O4'-C4'-C3'	-5.50	98.50	104.00
38	A1	593	C	N3-C2-O2	5.50	125.75	121.90
38	A1	944	G	N9-C4-C5	-5.50	103.20	105.40
38	A1	1095	A	N9-C4-C5	5.50	108.00	105.80
38	A1	2499	U	O4'-C1'-N1	-5.50	103.80	108.20
10	B1	67	C	C4-C5-C6	-5.49	114.65	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	890	C	N1-C2-N3	-5.49	115.36	119.20
11	B2	1038	C	P-O3'-C3'	-5.49	113.11	119.70
11	B2	1051	G	C4-C5-C6	5.49	122.10	118.80
38	A1	1287	G	P-O5'-C5'	-5.49	112.11	120.90
38	A1	2336	G	N3-C2-N2	5.49	123.75	119.90
38	A1	2531	G	OP1-P-OP2	-5.49	111.36	119.60
38	A1	2697	G	N7-C8-N9	-5.49	110.35	113.10
44	Ab	79	TYR	CB-CA-C	-5.49	99.41	110.40
45	AC	128	LEU	CB-CG-CD1	-5.49	101.66	111.00
10	B1	22	A	O4'-C1'-N9	5.49	112.59	108.20
11	B2	268	C	O4'-C1'-N1	5.49	112.59	108.20
11	B2	707	A	C6-C5-N7	-5.49	128.46	132.30
11	B2	1405	C	N3-C4-C5	-5.49	119.70	121.90
38	A1	1178	G	C6-N1-C2	-5.49	121.81	125.10
38	A1	2258	A	C4-C5-N7	-5.49	107.95	110.70
38	A1	2559	G	O4'-C1'-N9	5.49	112.59	108.20
10	B1	57	C	C1'-O4'-C4'	-5.49	105.51	109.90
11	B2	228	G	C4-N9-C1'	-5.49	119.36	126.50
11	B2	374	G	N7-C8-N9	-5.49	110.36	113.10
11	B2	406	U	O3'-P-O5'	-5.49	93.57	104.00
11	B2	737	C	C5-C4-N4	-5.49	116.36	120.20
11	B2	934	G	O4'-C4'-C3'	-5.49	98.51	104.00
11	B2	1368	A	C3'-C2'-C1'	-5.49	97.11	101.50
38	A1	206	A	O4'-C4'-C3'	-5.49	98.51	104.00
38	A1	259	A	C3'-C2'-C1'	-5.49	97.11	101.50
38	A1	434	G	N1-C2-N3	-5.49	120.61	123.90
38	A1	445	G	C6-N1-C2	-5.49	121.81	125.10
38	A1	1210	G	O4'-C1'-N9	5.49	112.59	108.20
38	A1	1282	A	O4'-C1'-N9	5.49	112.59	108.20
38	A1	1435	G	C5-C6-O6	-5.49	125.31	128.60
38	A1	2894	A	C1'-O4'-C4'	-5.49	105.51	109.90
38	A1	3040	G	C6-C5-N7	-5.49	127.11	130.40
10	B1	16	C	C6-N1-C2	-5.49	118.11	120.30
11	B2	827	G	C5-N7-C8	5.49	107.04	104.30
11	B2	889	G	C6-N1-C2	-5.49	121.81	125.10
11	B2	1234	A	N1-C2-N3	5.49	132.04	129.30
11	B2	1461	U	O4'-C4'-C3'	5.49	110.49	106.10
20	BH	162	LEU	CB-CG-CD1	-5.49	101.67	111.00
38	A1	362	A	C5-N7-C8	5.49	106.64	103.90
38	A1	1210	G	C4'-C3'-C2'	-5.49	97.11	102.60
38	A1	1218	C	N3-C4-N4	5.49	121.84	118.00
38	A1	1347	U	N3-C2-O2	5.49	126.04	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1888	G	C8-N9-C1'	5.49	134.13	127.00
38	A1	2011	U	N1-C2-N3	5.49	118.19	114.90
38	A1	2021	G	N1-C2-N3	-5.49	120.61	123.90
38	A1	2106	G	C6-C5-N7	-5.49	127.11	130.40
38	A1	2318	G	C8-N9-C4	5.49	108.60	106.40
38	A1	2352	G	C6-C5-N7	-5.49	127.11	130.40
38	A1	2367	C	C4'-C3'-C2'	-5.49	97.11	102.60
38	A1	2497	G	N1-C2-N3	-5.49	120.61	123.90
38	A1	2583	G	C5'-C4'-C3'	5.49	124.78	116.00
11	B2	478	C	N1-C2-N3	5.49	123.04	119.20
11	B2	766	G	C4-C5-N7	5.49	113.00	110.80
11	B2	1027	C	C4'-C3'-C2'	-5.49	97.11	102.60
38	A1	518	A	N7-C8-N9	-5.49	111.06	113.80
38	A1	1086	U	C2-N3-C4	5.49	130.29	127.00
38	A1	1896	U	N3-C4-O4	5.49	123.24	119.40
11	B2	306	C	O4'-C1'-C2'	-5.49	100.31	105.80
11	B2	360	A	O4'-C1'-N9	5.49	112.59	108.20
11	B2	398	C	O5'-P-OP1	-5.49	100.76	105.70
11	B2	407	G	O4'-C4'-C3'	-5.49	98.51	104.00
11	B2	774	U	OP2-P-O3'	5.49	117.27	105.20
11	B2	1073	C	O4'-C1'-N1	5.49	112.59	108.20
38	A1	1494	U	N1-C2-O2	-5.49	118.96	122.80
38	A1	1823	A	C4-C5-C6	5.49	119.74	117.00
38	A1	2587	G	N3-C2-N2	5.49	123.74	119.90
43	AB	48	ILE	N-CA-C	-5.49	96.19	111.00
60	AM	127	TRP	CE2-CD2-CG	-5.49	102.91	107.30
10	B1	34	U	C5-C4-O4	-5.48	122.61	125.90
11	B2	19	G	N1-C2-N2	5.48	121.14	116.20
11	B2	112	G	N3-C4-C5	-5.48	125.86	128.60
11	B2	985	C	C4-C5-C6	5.48	120.14	117.40
38	A1	139	G	N3-C4-C5	5.48	131.34	128.60
38	A1	142	G	C5-N7-C8	-5.48	101.56	104.30
38	A1	297	G	N9-C4-C5	5.48	107.59	105.40
38	A1	740	C	C4-C5-C6	5.48	120.14	117.40
38	A1	1396	A	C4-C5-N7	5.48	113.44	110.70
38	A1	1774	A	N3-C4-C5	-5.48	122.96	126.80
38	A1	1887	A	C4-C5-C6	5.48	119.74	117.00
38	A1	2267	U	N1-C2-O2	5.48	126.64	122.80
38	A1	2734	C	N3-C4-N4	5.48	121.84	118.00
38	A1	2855	G	C4-C5-C6	5.48	122.09	118.80
60	AM	36	VAL	N-CA-C	-5.48	96.19	111.00
11	B2	271	G	N3-C2-N2	5.48	123.74	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	530	G	C6-C5-N7	-5.48	127.11	130.40
11	B2	572	U	N1-C2-O2	5.48	126.64	122.80
38	A1	32	C	O4'-C1'-N1	5.48	112.59	108.20
38	A1	588	U	N3-C4-O4	5.48	123.24	119.40
38	A1	861	G	P-O3'-C3'	-5.48	113.12	119.70
38	A1	897	U	C5-C6-N1	5.48	125.44	122.70
38	A1	1565	G	C4-C5-N7	5.48	112.99	110.80
38	A1	1654	G	N1-C2-N3	-5.48	120.61	123.90
38	A1	1716	G	C4-C5-N7	-5.48	108.61	110.80
38	A1	1980	U	N3-C4-C5	-5.48	111.31	114.60
38	A1	2323	C	N1-C2-O2	5.48	122.19	118.90
38	A1	2427	C	N1-C2-N3	5.48	123.04	119.20
38	A1	2548	A	C5-N7-C8	5.48	106.64	103.90
8	AW	53	ARG	CG-CD-NE	-5.48	100.29	111.80
9	AX	137	PRO	N-CA-C	5.48	126.35	112.10
11	B2	36	G	C5'-C4'-O4'	5.48	115.68	109.10
11	B2	89	G	N9-C4-C5	5.48	107.59	105.40
11	B2	153	G	C4-C5-N7	5.48	112.99	110.80
11	B2	237	C	C6-N1-C2	-5.48	118.11	120.30
11	B2	509	C	P-O3'-C3'	-5.48	113.12	119.70
11	B2	694	U	C3'-C2'-C1'	-5.48	97.12	101.50
11	B2	708	C	C2-N1-C1'	5.48	124.83	118.80
11	B2	778	G	N1-C2-N3	-5.48	120.61	123.90
11	B2	786	G	N3-C4-N9	-5.48	122.71	126.00
11	B2	1444	G	OP1-P-OP2	-5.48	111.38	119.60
25	BM	41	ARG	NH1-CZ-NH2	5.48	125.43	119.40
38	A1	733	A	C1'-O4'-C4'	-5.48	105.52	109.90
38	A1	842	C	N3-C2-O2	5.48	125.74	121.90
38	A1	963	G	C1'-O4'-C4'	5.48	114.28	109.90
38	A1	1009	G	N3-C2-N2	5.48	123.74	119.90
38	A1	1790	G	C4-C5-N7	-5.48	108.61	110.80
38	A1	2560	G	N1-C6-O6	5.48	123.19	119.90
38	A1	3003	A	C5-N7-C8	5.48	106.64	103.90
11	B2	152	G	C6-C5-N7	-5.48	127.11	130.40
11	B2	251	G	N7-C8-N9	-5.48	110.36	113.10
11	B2	373	C	P-O5'-C5'	5.48	129.67	120.90
11	B2	482	G	C6-N1-C2	-5.48	121.81	125.10
11	B2	510	A	N7-C8-N9	5.48	116.54	113.80
11	B2	806	G	N1-C2-N3	-5.48	120.61	123.90
38	A1	1367	A	C4-C5-N7	-5.48	107.96	110.70
38	A1	1485	A	N9-C4-C5	5.48	107.99	105.80
38	A1	2359	G	C2-N3-C4	5.48	114.64	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2539	G	N3-C4-N9	5.48	129.29	126.00
11	B2	582	G	C5-C6-N1	-5.48	108.76	111.50
11	B2	773	A	N3-C4-C5	-5.48	122.97	126.80
11	B2	1240	A	N9-C4-C5	-5.48	103.61	105.80
11	B2	1409	G	N9-C1'-C2'	5.48	121.12	114.00
11	B2	1422	G	C4'-C3'-C2'	-5.48	97.12	102.60
11	B2	1432	U	O4'-C4'-C3'	-5.48	98.52	104.00
16	BD	96	THR	CA-CB-CG2	-5.48	104.73	112.40
38	A1	131	C	N3-C2-O2	5.48	125.73	121.90
38	A1	272	G	N7-C8-N9	-5.48	110.36	113.10
38	A1	720	C	C4-C5-C6	5.48	120.14	117.40
38	A1	1014	U	C3'-C2'-C1'	-5.48	97.12	101.50
38	A1	2316	U	N3-C4-O4	5.48	123.23	119.40
38	A1	2651	G	C1'-O4'-C4'	-5.48	105.52	109.90
11	B2	838	C	C6-N1-C2	-5.48	118.11	120.30
38	A1	179	A	C5-C6-N1	-5.48	114.96	117.70
38	A1	1047	A	C6-C5-N7	-5.48	128.47	132.30
10	B1	25	G	C4-N9-C1'	-5.47	119.38	126.50
11	B2	136	A	C2-N3-C4	5.47	113.34	110.60
11	B2	149	U	P-O5'-C5'	-5.47	112.14	120.90
11	B2	659	U	C5-C6-N1	5.47	125.44	122.70
11	B2	749	C	C2-N1-C1'	-5.47	112.78	118.80
11	B2	833	C	C5-C4-N4	-5.47	116.37	120.20
11	B2	866	A	O5'-C5'-C4'	-5.47	101.30	111.70
11	B2	952	A	C8-N9-C4	5.47	107.99	105.80
11	B2	1332	C	C6-N1-C2	-5.47	118.11	120.30
18	BF	51	ASP	CB-CG-OD2	5.47	123.23	118.30
38	A1	401	C	C6-N1-C2	-5.47	118.11	120.30
38	A1	407	A	N1-C2-N3	5.47	132.04	129.30
38	A1	488	A	C5-N7-C8	5.47	106.64	103.90
38	A1	629	G	N1-C6-O6	5.47	123.18	119.90
38	A1	700	A	N3-C4-N9	5.47	131.78	127.40
38	A1	860	A	C6-C5-N7	-5.47	128.47	132.30
38	A1	1700	U	N1-C2-O2	-5.47	118.97	122.80
38	A1	1846	G	OP1-P-OP2	-5.47	111.39	119.60
38	A1	1851	U	C5-C4-O4	-5.47	122.61	125.90
38	A1	2217	C	N3-C4-N4	5.47	121.83	118.00
38	A1	2317	G	N1-C2-N2	-5.47	111.27	116.20
38	A1	2444	G	N9-C4-C5	5.47	107.59	105.40
38	A1	2477	G	C4-C5-C6	5.47	122.08	118.80
38	A1	2528	U	O4'-C1'-N1	5.47	112.58	108.20
38	A1	2543	A	C3'-C2'-C1'	-5.47	97.12	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2714	G	N1-C6-O6	5.47	123.19	119.90
38	A1	2741	U	O4'-C1'-N1	5.47	112.58	108.20
42	Aa	76	VAL	CA-CB-CG2	-5.47	102.69	110.90
47	Ad	74	ARG	NE-CZ-NH1	5.47	123.04	120.30
55	Ai	24	ARG	NE-CZ-NH2	5.47	123.04	120.30
66	AY	127	ARG	NE-CZ-NH2	5.47	123.04	120.30
11	B2	372	G	P-O3'-C3'	-5.47	113.13	119.70
11	B2	823	A	N1-C6-N6	5.47	121.88	118.60
38	A1	28	A	N9-C4-C5	5.47	107.99	105.80
38	A1	569	G	N3-C2-N2	5.47	123.73	119.90
38	A1	587	A	C4-C5-C6	5.47	119.74	117.00
38	A1	718	G	C2-N3-C4	-5.47	109.16	111.90
38	A1	1516	C	C1'-O4'-C4'	5.47	114.28	109.90
38	A1	1819	G	C6-C5-N7	-5.47	127.12	130.40
38	A1	1970	G	C4-C5-N7	-5.47	108.61	110.80
38	A1	2111	C	C2-N1-C1'	5.47	124.82	118.80
38	A1	2235	G	N9-C4-C5	5.47	107.59	105.40
38	A1	2277	G	C4-C5-C6	5.47	122.08	118.80
38	A1	2514	C	C5'-C4'-C3'	5.47	124.76	116.00
38	A1	2635	C	C4-C5-C6	-5.47	114.66	117.40
39	A3	77	A	C4'-C3'-C2'	-5.47	97.13	102.60
43	AB	39	LYS	N-CA-C	-5.47	96.23	111.00
11	B2	109	U	N3-C2-O2	5.47	126.03	122.20
11	B2	475	C	C4-C5-C6	5.47	120.14	117.40
11	B2	1232	G	N3-C4-C5	5.47	131.34	128.60
38	A1	437	G	N1-C2-N3	-5.47	120.62	123.90
38	A1	1611	C	P-O5'-C5'	5.47	129.65	120.90
38	A1	1792	A	N7-C8-N9	5.47	116.54	113.80
38	A1	2116	G	C5-C6-N1	-5.47	108.77	111.50
38	A1	2261	C	O5'-P-OP1	5.47	117.27	110.70
38	A1	2267	U	C6-N1-C2	5.47	124.28	121.00
38	A1	2327	C	O4'-C1'-N1	5.47	112.58	108.20
38	A1	2639	G	N3-C2-N2	5.47	123.73	119.90
11	B2	627	G	C5-N7-C8	5.47	107.03	104.30
11	B2	799	C	OP1-P-OP2	-5.47	111.40	119.60
11	B2	864	G	C6-C5-N7	-5.47	127.12	130.40
17	BE	204	ARG	NH1-CZ-NH2	-5.47	113.38	119.40
38	A1	37	C	C2-N3-C4	5.47	122.63	119.90
38	A1	73	A	N9-C4-C5	5.47	107.99	105.80
38	A1	515	G	C8-N9-C1'	5.47	134.11	127.00
38	A1	858	G	N9-C4-C5	5.47	107.59	105.40
38	A1	1432	C	C4-C5-C6	5.47	120.13	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1608	G	C6-N1-C2	5.47	128.38	125.10
38	A1	1843	C	N3-C4-C5	-5.47	119.71	121.90
38	A1	2337	G	N1-C6-O6	5.47	123.18	119.90
38	A1	3013	U	O4'-C1'-N1	5.47	112.58	108.20
40	A5	11	VAL	CG1-CB-CG2	5.47	119.65	110.90
11	B2	315	A	C8-N9-C4	-5.47	103.61	105.80
11	B2	615	G	C3'-C2'-C1'	-5.47	97.13	101.50
11	B2	727	G	C5-N7-C8	5.47	107.03	104.30
14	BB	41	TYR	CG-CD2-CE2	-5.47	116.93	121.30
22	BJ	56	ARG	NE-CZ-NH1	-5.47	117.57	120.30
38	A1	612	G	C8-N9-C4	-5.47	104.21	106.40
38	A1	705	G	C5-N7-C8	5.47	107.03	104.30
38	A1	837	G	C2'-C3'-O3'	5.47	122.45	113.70
38	A1	1431	U	C4'-C3'-C2'	-5.47	97.13	102.60
38	A1	1989	G	C4-C5-N7	-5.47	108.61	110.80
38	A1	2390	G	C1'-O4'-C4'	-5.47	105.53	109.90
39	A3	19	G	C8-N9-C4	-5.47	104.21	106.40
39	A3	55	G	N9-C4-C5	5.47	107.59	105.40
9	AX	210	ILE	O-C-N	5.47	131.45	122.70
11	B2	331	C	N3-C2-O2	5.47	125.73	121.90
11	B2	439	G	N1-C2-N2	-5.47	111.28	116.20
38	A1	210	A	O4'-C1'-N9	5.47	112.57	108.20
38	A1	473	C	N1-C1'-C2'	5.47	121.11	114.00
38	A1	719	C	N3-C4-C5	-5.47	119.71	121.90
38	A1	760	G	N1-C6-O6	5.47	123.18	119.90
38	A1	1010	G	O4'-C1'-N9	5.47	112.57	108.20
38	A1	1379	A	C5-N7-C8	5.47	106.63	103.90
38	A1	2885	C	C5-C4-N4	-5.47	116.37	120.20
38	A1	2976	G	C5-N7-C8	5.47	107.03	104.30
38	A1	2978	G	N1-C2-N3	-5.47	120.62	123.90
62	AO	67	LEU	CB-CG-CD1	5.47	120.29	111.00
11	B2	269	A	C8-N9-C4	5.46	107.99	105.80
11	B2	366	C	P-O3'-C3'	-5.46	113.14	119.70
11	B2	378	A	C4'-C3'-C2'	5.46	108.06	102.60
11	B2	733	C	O4'-C1'-N1	5.46	112.57	108.20
11	B2	917	A	O4'-C1'-N9	5.46	112.57	108.20
11	B2	1100	G	C8-N9-C1'	-5.46	119.90	127.00
38	A1	165	G	C1'-O4'-C4'	5.46	114.27	109.90
38	A1	186	A	P-O5'-C5'	-5.46	112.16	120.90
38	A1	301	G	C8-N9-C1'	-5.46	119.89	127.00
38	A1	873	G	O4'-C1'-N9	5.46	112.57	108.20
38	A1	908	U	N3-C4-O4	5.46	123.22	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1291	C	C3'-C2'-C1'	-5.46	97.13	101.50
38	A1	1794	C	O4'-C1'-N1	5.46	112.57	108.20
38	A1	2048	C	C1'-O4'-C4'	5.46	114.27	109.90
38	A1	2145	G	C5-N7-C8	-5.46	101.57	104.30
38	A1	2299	G	N9-C4-C5	5.46	107.59	105.40
38	A1	2522	C	C5-C6-N1	5.46	123.73	121.00
38	A1	3009	C	C3'-C2'-C1'	5.46	105.87	101.50
39	A3	115	C	OP1-P-OP2	-5.46	111.40	119.60
11	B2	49	C	C5'-C4'-C3'	5.46	124.74	116.00
25	BM	11	LYS	CA-CB-CG	5.46	125.42	113.40
25	BM	58	TYR	CG-CD2-CE2	-5.46	116.93	121.30
38	A1	730	C	N3-C4-C5	-5.46	119.72	121.90
38	A1	1126	C	N3-C4-C5	-5.46	119.72	121.90
38	A1	1158	G	C5-C6-O6	-5.46	125.32	128.60
38	A1	1507	A	C4-C5-N7	-5.46	107.97	110.70
41	AA	192	LEU	CB-CG-CD1	5.46	120.29	111.00
11	B2	560	A	C5-C6-N6	-5.46	119.33	123.70
11	B2	762	G	N9-C1'-C2'	-5.46	105.99	112.00
11	B2	1247	A	N1-C2-N3	5.46	132.03	129.30
11	B2	1459	G	N9-C4-C5	5.46	107.58	105.40
12	B3	33	ARG	NE-CZ-NH2	-5.46	117.57	120.30
17	BE	134	LYS	CB-CA-C	-5.46	99.48	110.40
38	A1	137	A	C2-N3-C4	-5.46	107.87	110.60
38	A1	435	G	C2-N3-C4	5.46	114.63	111.90
38	A1	782	G	N9-C4-C5	-5.46	103.22	105.40
38	A1	1421	C	O4'-C1'-N1	5.46	112.57	108.20
38	A1	1460	C	N3-C4-C5	-5.46	119.72	121.90
38	A1	1609	G	N7-C8-N9	-5.46	110.37	113.10
38	A1	1665	G	N1-C2-N2	5.46	121.12	116.20
38	A1	1979	G	N1-C2-N2	-5.46	111.28	116.20
38	A1	2019	C	C5'-C4'-O4'	5.46	115.65	109.10
38	A1	2495	A	C4'-C3'-C2'	-5.46	97.14	102.60
11	B2	483	G	C4-C5-C6	5.46	122.08	118.80
11	B2	1220	G	C6-C5-N7	-5.46	127.12	130.40
11	B2	1334	A	O4'-C1'-N9	5.46	112.57	108.20
11	B2	1478	A	C5-C6-N1	-5.46	114.97	117.70
38	A1	895	C	C4'-C3'-C2'	-5.46	97.14	102.60
38	A1	1898	A	C4'-C3'-C2'	5.46	108.06	102.60
38	A1	2313	G	N9-C4-C5	-5.46	103.22	105.40
39	A3	4	C	C5-C4-N4	-5.46	116.38	120.20
39	A3	31	U	C5-C4-O4	-5.46	122.62	125.90
11	B2	177	A	C5-C6-N1	-5.46	114.97	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	754	G	C6-N1-C2	5.46	128.38	125.10
11	B2	800	G	N1-C6-O6	5.46	123.17	119.90
11	B2	860	G	N3-C4-C5	-5.46	125.87	128.60
38	A1	164	A	C5-C6-N6	-5.46	119.33	123.70
38	A1	685	G	C4-C5-C6	5.46	122.08	118.80
38	A1	717	A	C5'-C4'-O4'	5.46	115.65	109.10
38	A1	1046	A	C4-C5-C6	5.46	119.73	117.00
38	A1	1147	G	P-O3'-C3'	-5.46	113.15	119.70
38	A1	1522	A	C5-C6-N6	-5.46	119.33	123.70
38	A1	2174	G	N7-C8-N9	5.46	115.83	113.10
38	A1	2427	C	N1-C2-O2	-5.46	115.62	118.90
38	A1	3045	G	N3-C4-N9	-5.46	122.72	126.00
43	AB	29	LYS	N-CA-CB	5.46	120.43	110.60
7	AU	118	ARG	NE-CZ-NH1	-5.46	117.57	120.30
11	B2	19	G	C5-N7-C8	-5.46	101.57	104.30
11	B2	115	A	C5-C6-N1	-5.46	114.97	117.70
11	B2	233	C	C4'-C3'-C2'	-5.46	97.14	102.60
11	B2	288	G	C6-C5-N7	-5.46	127.13	130.40
11	B2	466	C	C4'-C3'-C2'	-5.46	97.14	102.60
11	B2	744	A	C4-C5-C6	5.46	119.73	117.00
11	B2	806	G	C5-N7-C8	-5.46	101.57	104.30
11	B2	1249	A	C5-C6-N1	-5.46	114.97	117.70
38	A1	527	G	C4-C5-N7	-5.46	108.62	110.80
38	A1	531	G	C6-N1-C2	-5.46	121.83	125.10
38	A1	1069	A	C5'-C4'-O4'	5.46	115.65	109.10
38	A1	1347	U	C5-C6-N1	5.46	125.43	122.70
38	A1	1374	G	O4'-C1'-N9	5.46	112.57	108.20
38	A1	1419	G	C5'-C4'-O4'	-5.46	102.55	109.10
38	A1	1707	A	N9-C4-C5	5.46	107.98	105.80
38	A1	2106	G	C4'-C3'-C2'	-5.46	97.14	102.60
38	A1	2129	G	C8-N9-C1'	5.46	134.09	127.00
38	A1	2272	G	C6-C5-N7	-5.46	127.13	130.40
38	A1	2358	U	C2-N3-C4	-5.46	123.73	127.00
38	A1	2475	G	N7-C8-N9	5.46	115.83	113.10
43	AB	35	TYR	CG-CD2-CE2	-5.46	116.94	121.30
11	B2	1211	A	C8-N9-C4	-5.46	103.62	105.80
38	A1	1265	A	C4-C5-C6	5.46	119.73	117.00
38	A1	1349	G	C4-C5-C6	5.46	122.07	118.80
38	A1	1598	U	O4'-C1'-N1	5.46	112.56	108.20
38	A1	1847	U	C2-N3-C4	-5.46	123.73	127.00
38	A1	1917	U	N1-C2-O2	-5.46	118.98	122.80
38	A1	2517	U	C6-N1-C2	-5.46	117.73	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2772	U	N3-C2-O2	5.46	126.02	122.20
38	A1	2828	G	C6-N1-C2	5.46	128.37	125.10
11	B2	382	G	C8-N9-C4	-5.45	104.22	106.40
11	B2	643	G	C4-C5-C6	5.45	122.07	118.80
11	B2	1243	C	C5-C6-N1	5.45	123.73	121.00
11	B2	1306	A	N1-C6-N6	5.45	121.87	118.60
38	A1	222	A	N9-C4-C5	5.45	107.98	105.80
38	A1	481	G	N1-C2-N2	-5.45	111.29	116.20
38	A1	849	C	C6-N1-C1'	5.45	127.34	120.80
38	A1	892	U	C5-C6-N1	5.45	125.43	122.70
38	A1	1190	G	N9-C4-C5	-5.45	103.22	105.40
38	A1	1276	G	N9-C4-C5	-5.45	103.22	105.40
38	A1	1434	C	N3-C4-C5	-5.45	119.72	121.90
38	A1	1553	G	O3'-P-O5'	-5.45	93.64	104.00
38	A1	1585	U	C4-C5-C6	5.45	122.97	119.70
38	A1	1647	C	C6-N1-C2	-5.45	118.12	120.30
38	A1	1814	A	O4'-C1'-N9	5.45	112.56	108.20
38	A1	1828	A	C5-C6-N6	-5.45	119.34	123.70
38	A1	1856	G	N1-C6-O6	5.45	123.17	119.90
38	A1	2333	G	N7-C8-N9	5.45	115.83	113.10
38	A1	2773	A	N1-C2-N3	-5.45	126.57	129.30
38	A1	2854	A	C8-N9-C4	-5.45	103.62	105.80
43	AB	42	ARG	NE-CZ-NH2	-5.45	117.57	120.30
46	AD	156	GLU	N-CA-CB	5.45	120.42	110.60
11	B2	1280	C	C6-N1-C2	-5.45	118.12	120.30
23	BK	13	ALA	CB-CA-C	5.45	118.28	110.10
38	A1	702	G	N9-C1'-C2'	-5.45	106.00	112.00
38	A1	843	C	N3-C2-O2	5.45	125.72	121.90
38	A1	1737	A	O4'-C4'-C3'	-5.45	98.55	104.00
41	AA	208	MET	CG-SD-CE	-5.45	91.48	100.20
53	Ah	2	ARG	NE-CZ-NH1	-5.45	117.57	120.30
67	AZ	52	TYR	CB-CG-CD1	5.45	124.27	121.00
4	AQ	121	ARG	NE-CZ-NH1	5.45	123.03	120.30
11	B2	420	C	N3-C4-C5	-5.45	119.72	121.90
11	B2	476	C	P-O5'-C5'	-5.45	112.18	120.90
11	B2	509	C	N3-C2-O2	5.45	125.72	121.90
11	B2	988	A	O4'-C1'-N9	5.45	112.56	108.20
11	B2	997	G	N1-C2-N3	-5.45	120.63	123.90
11	B2	1142	G	N9-C4-C5	5.45	107.58	105.40
11	B2	1446	G	C8-N9-C4	5.45	108.58	106.40
38	A1	104	C	N1-C2-O2	5.45	122.17	118.90
38	A1	141	C	C5'-C4'-C3'	5.45	124.72	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	399	C	C5-C6-N1	5.45	123.73	121.00
38	A1	428	A	C6-N1-C2	-5.45	115.33	118.60
38	A1	520	G	C1'-O4'-C4'	-5.45	105.54	109.90
38	A1	962	C	C6-N1-C2	-5.45	118.12	120.30
38	A1	982	G	C2-N3-C4	5.45	114.62	111.90
38	A1	991	U	N3-C2-O2	5.45	126.02	122.20
38	A1	2063	U	C5'-C4'-O4'	5.45	115.64	109.10
38	A1	2139	A	N9-C1'-C2'	-5.45	106.00	112.00
38	A1	2658	G	C3'-C2'-C1'	-5.45	97.14	101.50
38	A1	2856	G	C2-N3-C4	5.45	114.62	111.90
39	A3	93	G	N3-C2-N2	5.45	123.72	119.90
60	AM	122	ASP	O-C-N	-5.45	113.94	123.20
11	B2	201	G	N9-C4-C5	5.45	107.58	105.40
11	B2	244	G	C6-C5-N7	-5.45	127.13	130.40
11	B2	431	U	C5-C6-N1	5.45	125.42	122.70
11	B2	912	G	N3-C2-N2	5.45	123.71	119.90
11	B2	1287	G	N9-C4-C5	5.45	107.58	105.40
18	BF	11	ARG	NE-CZ-NH2	-5.45	117.58	120.30
38	A1	389	C	C4-C5-C6	5.45	120.12	117.40
38	A1	525	C	C6-N1-C1'	-5.45	114.26	120.80
38	A1	1129	G	C4'-C3'-C2'	-5.45	97.15	102.60
38	A1	1179	G	O4'-C1'-N9	5.45	112.56	108.20
38	A1	1442	G	C4-C5-C6	5.45	122.07	118.80
38	A1	1634	A	C3'-C2'-C1'	-5.45	97.14	101.50
38	A1	1849	A	C4-C5-C6	5.45	119.72	117.00
38	A1	2220	C	C2-N3-C4	5.45	122.62	119.90
38	A1	2287	C	P-O3'-C3'	5.45	126.24	119.70
38	A1	2340	A	C5-C6-N1	-5.45	114.98	117.70
38	A1	1250	A	C5-C6-N6	-5.45	119.34	123.70
38	A1	1345	G	N1-C6-O6	5.45	123.17	119.90
38	A1	1401	G	N9-C4-C5	-5.45	103.22	105.40
38	A1	1629	G	N3-C2-N2	5.45	123.71	119.90
38	A1	1873	G	C6-C5-N7	-5.45	127.13	130.40
38	A1	2101	A	C4'-C3'-C2'	-5.45	97.15	102.60
38	A1	2813	G	C8-N9-C4	5.45	108.58	106.40
48	AE	134	ILE	CA-CB-CG1	5.45	121.35	111.00
7	AU	27	MET	CG-SD-CE	-5.45	91.49	100.20
11	B2	1240	A	C2-N3-C4	-5.45	107.88	110.60
33	BU	65	ASP	CB-CG-OD1	5.45	123.20	118.30
38	A1	1534	G	C6-C5-N7	-5.45	127.13	130.40
38	A1	1610	C	N3-C2-O2	-5.45	118.09	121.90
38	A1	2488	C	C4'-C3'-C2'	5.45	108.05	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2555	C	C4-C5-C6	-5.45	114.68	117.40
38	A1	2713	A	C4'-C3'-C2'	-5.45	97.16	102.60
39	A3	36	U	C5'-C4'-O4'	5.45	115.63	109.10
2	A8	38	VAL	CA-CB-CG2	-5.44	102.73	110.90
11	B2	48	G	C8-N9-C4	5.44	108.58	106.40
11	B2	174	G	C4-N9-C1'	5.44	133.58	126.50
11	B2	340	A	N3-C4-C5	-5.44	122.99	126.80
11	B2	437	A	O5'-P-OP1	5.44	117.23	110.70
38	A1	1074	G	N9-C1'-C2'	-5.44	106.01	112.00
38	A1	1864	G	C8-N9-C4	5.44	108.58	106.40
38	A1	2217	C	N1-C2-O2	-5.44	115.63	118.90
39	A3	10	U	N3-C2-O2	5.44	126.01	122.20
39	A3	61	C	C1'-O4'-C4'	5.44	114.25	109.90
11	B2	109	U	C1'-O4'-C4'	5.44	114.25	109.90
11	B2	275	A	N7-C8-N9	-5.44	111.08	113.80
11	B2	428	G	C5-N7-C8	5.44	107.02	104.30
11	B2	712	G	OP1-P-OP2	-5.44	111.44	119.60
11	B2	911	C	C5-C4-N4	5.44	124.01	120.20
11	B2	951	G	N1-C2-N3	-5.44	120.64	123.90
38	A1	409	C	C5-C6-N1	5.44	123.72	121.00
38	A1	449	G	C1'-O4'-C4'	5.44	114.25	109.90
38	A1	545	G	N1-C6-O6	5.44	123.17	119.90
38	A1	1288	C	N1-C2-N3	-5.44	115.39	119.20
38	A1	1447	G	N9-C4-C5	-5.44	103.22	105.40
38	A1	1747	C	C5-C6-N1	-5.44	118.28	121.00
38	A1	1999	G	N1-C2-N3	-5.44	120.63	123.90
39	A3	42	A	N1-C2-N3	5.44	132.02	129.30
39	A3	86	C	C5-C6-N1	5.44	123.72	121.00
63	AP	85	PHE	CB-CG-CD2	5.44	124.61	120.80
4	AQ	24	ILE	N-CA-CB	5.44	123.31	110.80
11	B2	32	A	C6-C5-N7	-5.44	128.49	132.30
11	B2	617	A	O4'-C4'-C3'	-5.44	98.56	104.00
11	B2	812	U	O4'-C1'-N1	5.44	112.55	108.20
11	B2	826	C	P-O5'-C5'	5.44	129.60	120.90
11	B2	1276	G	C4-C5-C6	5.44	122.06	118.80
11	B2	1301	U	N3-C4-O4	5.44	123.21	119.40
17	BE	89	ASP	CB-CG-OD1	-5.44	113.40	118.30
24	BL	9	ALA	N-CA-C	-5.44	96.31	111.00
33	BU	5	TYR	CD1-CG-CD2	5.44	123.88	117.90
38	A1	871	G	C4'-C3'-C2'	-5.44	97.16	102.60
38	A1	1220	U	C2-N3-C4	-5.44	123.73	127.00
38	A1	1307	C	C5-C6-N1	5.44	123.72	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2132	C	N1-C1'-C2'	-5.44	106.02	112.00
38	A1	2163	G	C5'-C4'-C3'	-5.44	107.29	116.00
38	A1	2230	G	N1-C2-N3	-5.44	120.64	123.90
38	A1	2546	G	N9-C4-C5	5.44	107.58	105.40
38	A1	2593	A	N3-C4-C5	-5.44	122.99	126.80
39	A3	77	A	O4'-C1'-N9	5.44	112.55	108.20
11	B2	218	C	O4'-C1'-C2'	-5.44	100.36	105.80
11	B2	777	G	P-O3'-C3'	-5.44	113.17	119.70
38	A1	242	C	O5'-P-OP2	-5.44	100.81	105.70
38	A1	1349	G	C4'-C3'-C2'	-5.44	97.16	102.60
38	A1	2944	G	N3-C4-N9	-5.44	122.74	126.00
11	B2	729	G	N3-C4-C5	-5.44	125.88	128.60
11	B2	1182	G	N3-C4-C5	5.44	131.32	128.60
38	A1	69	C	N3-C2-O2	-5.44	118.09	121.90
38	A1	790	U	N3-C4-C5	5.44	117.86	114.60
38	A1	1641	G	OP2-P-O3'	5.44	117.16	105.20
38	A1	2243	G	C5'-C4'-O4'	-5.44	102.58	109.10
38	A1	2446	C	C3'-C2'-C1'	5.44	105.85	101.50
38	A1	2705	C	C3'-C2'-C1'	5.44	105.85	101.50
38	A1	2806	A	C8-N9-C4	-5.44	103.62	105.80
38	A1	2896	G	N1-C2-N2	5.44	121.09	116.20
47	Ad	18	PRO	N-CA-CB	5.44	109.82	103.30
11	B2	57	G	C5-C6-N1	5.44	114.22	111.50
11	B2	304	C	O4'-C1'-N1	5.44	112.55	108.20
11	B2	540	G	C6-C5-N7	-5.44	127.14	130.40
11	B2	1167	C	O4'-C1'-N1	5.44	112.55	108.20
11	B2	1305	U	O4'-C1'-N1	5.44	112.55	108.20
38	A1	374	C	C2-N3-C4	5.44	122.62	119.90
38	A1	880	U	N3-C2-O2	5.44	126.00	122.20
38	A1	1691	U	O4'-C1'-C2'	-5.44	100.36	105.80
38	A1	1815	C	C6-N1-C2	-5.44	118.13	120.30
38	A1	2033	G	C8-N9-C4	-5.44	104.23	106.40
38	A1	2245	C	C5-C6-N1	5.44	123.72	121.00
38	A1	3018	C	C2-N3-C4	5.44	122.62	119.90
11	B2	402	G	N3-C2-N2	5.43	123.70	119.90
11	B2	1140	A	O4'-C1'-N9	5.43	112.55	108.20
38	A1	166	G	C6-C5-N7	-5.43	127.14	130.40
38	A1	656	G	C1'-O4'-C4'	-5.43	105.55	109.90
38	A1	767	G	C4-C5-N7	-5.43	108.63	110.80
38	A1	904	G	C4-N9-C1'	-5.43	119.44	126.50
38	A1	912	G	C4-C5-C6	5.43	122.06	118.80
38	A1	1327	C	N3-C2-O2	5.43	125.70	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1360	G	N1-C2-N3	-5.43	120.64	123.90
38	A1	1699	U	C2-N1-C1'	5.43	124.22	117.70
38	A1	1818	G	C1'-O4'-C4'	-5.43	105.55	109.90
38	A1	2239	C	C5'-C4'-C3'	-5.43	107.30	116.00
38	A1	2456	C	C5'-C4'-O4'	5.43	115.62	109.10
39	A3	32	C	C2-N3-C4	5.43	122.62	119.90
9	AX	236	ALA	CB-CA-C	-5.43	101.95	110.10
11	B2	552	C	N3-C4-C5	-5.43	119.73	121.90
11	B2	696	G	C6-N1-C2	5.43	128.36	125.10
11	B2	1036	G	N3-C4-N9	5.43	129.26	126.00
11	B2	1072	C	C2-N1-C1'	5.43	124.78	118.80
11	B2	1130	A	C5-C6-N6	-5.43	119.35	123.70
11	B2	1182	G	C6-C5-N7	-5.43	127.14	130.40
11	B2	1217	C	N3-C4-C5	-5.43	119.73	121.90
11	B2	1326	G	C5-N7-C8	5.43	107.02	104.30
11	B2	1396	C	C2-N1-C1'	5.43	124.78	118.80
20	BH	77	SER	N-CA-CB	5.43	118.65	110.50
37	BY	38	TRP	CB-CG-CD1	5.43	134.06	127.00
38	A1	270	C	C3'-C2'-C1'	-5.43	97.15	101.50
38	A1	810	A	C6-C5-N7	-5.43	128.50	132.30
38	A1	1372	C	C5-C4-N4	-5.43	116.40	120.20
38	A1	1524	A	C5'-C4'-O4'	5.43	115.62	109.10
38	A1	2180	C	C6-N1-C2	5.43	122.47	120.30
38	A1	2397	C	O4'-C1'-C2'	5.43	112.49	107.60
38	A1	2651	G	C5-C6-N1	-5.43	108.78	111.50
38	A1	2704	A	N1-C2-N3	5.43	132.02	129.30
38	A1	2833	G	C4'-C3'-C2'	-5.43	97.17	102.60
38	A1	2899	G	C6-N1-C2	5.43	128.36	125.10
10	B1	50	G	N7-C8-N9	5.43	115.82	113.10
11	B2	805	C	C5-C4-N4	-5.43	116.40	120.20
38	A1	116	G	C5-N7-C8	-5.43	101.58	104.30
38	A1	3000	U	C2-N3-C4	5.43	130.26	127.00
11	B2	659	U	O4'-C4'-C3'	-5.43	98.57	104.00
11	B2	989	C	P-O3'-C3'	5.43	126.22	119.70
11	B2	1421	C	O4'-C1'-N1	5.43	112.54	108.20
22	BJ	87	ARG	NE-CZ-NH1	5.43	123.01	120.30
33	BU	39	ARG	NE-CZ-NH2	-5.43	117.58	120.30
38	A1	836	U	C4'-C3'-C2'	-5.43	97.17	102.60
38	A1	930	G	N3-C4-N9	-5.43	122.74	126.00
38	A1	1001	C	C5-C6-N1	5.43	123.71	121.00
38	A1	1492	C	O4'-C1'-N1	5.43	112.54	108.20
38	A1	2075	U	C5-C6-N1	5.43	125.42	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2493	A	N7-C8-N9	-5.43	111.08	113.80
39	A3	107	G	C4-C5-C6	5.43	122.06	118.80
47	Ad	5	TYR	CB-CG-CD1	5.43	124.26	121.00
38	A1	61	G	N3-C4-N9	5.43	129.26	126.00
38	A1	65	G	N1-C2-N3	-5.43	120.64	123.90
38	A1	679	U	N1-C2-O2	-5.43	119.00	122.80
38	A1	1936	C	N3-C4-N4	5.43	121.80	118.00
38	A1	1971	C	N3-C2-O2	5.43	125.70	121.90
38	A1	1983	C	C4'-C3'-C2'	-5.43	97.17	102.60
38	A1	2030	G	N3-C4-C5	-5.43	125.89	128.60
38	A1	2460	A	N3-C4-C5	-5.43	123.00	126.80
11	B2	772	G	C8-N9-C4	5.43	108.57	106.40
11	B2	811	G	O4'-C1'-N9	5.43	112.54	108.20
11	B2	1260	G	C5'-C4'-C3'	-5.43	107.32	116.00
11	B2	1330	G	C4'-C3'-C2'	-5.43	97.17	102.60
38	A1	18	C	N3-C4-C5	-5.43	119.73	121.90
38	A1	241	C	N3-C4-N4	5.43	121.80	118.00
38	A1	822	A	C1'-O4'-C4'	5.43	114.24	109.90
38	A1	1181	C	C6-N1-C2	5.43	122.47	120.30
38	A1	1290	G	C8-N9-C1'	5.43	134.06	127.00
38	A1	1407	A	C3'-C2'-C1'	5.43	105.84	101.50
38	A1	1475	G	N3-C4-C5	5.43	131.31	128.60
38	A1	1544	C	C4-C5-C6	5.43	120.11	117.40
38	A1	1561	G	C4-C5-N7	-5.43	108.63	110.80
38	A1	1619	C	P-O5'-C5'	-5.43	112.22	120.90
38	A1	2624	G	C5-C6-N1	-5.43	108.79	111.50
38	A1	2972	G	N1-C6-O6	5.43	123.16	119.90
39	A3	2	G	O5'-P-OP2	-5.43	100.82	105.70
11	B2	334	G	C5-C6-O6	-5.42	125.34	128.60
11	B2	542	G	N1-C2-N3	-5.42	120.65	123.90
11	B2	1427	C	C4'-C3'-C2'	-5.42	97.18	102.60
38	A1	719	C	C5'-C4'-C3'	5.42	124.68	116.00
38	A1	1407	A	C5-C6-N6	-5.42	119.36	123.70
38	A1	1556	G	C4'-C3'-C2'	-5.42	97.18	102.60
38	A1	1589	G	N1-C2-N2	-5.42	111.32	116.20
38	A1	1862	G	C6-N1-C2	-5.42	121.85	125.10
38	A1	1896	U	N1-C2-N3	5.42	118.15	114.90
38	A1	1901	A	C3'-C2'-C1'	-5.42	97.16	101.50
38	A1	1931	G	O5'-P-OP1	5.42	117.21	110.70
38	A1	1970	G	N1-C2-N3	-5.42	120.65	123.90
38	A1	2332	G	C4'-C3'-C2'	-5.42	97.18	102.60
38	A1	2818	C	N3-C2-O2	5.42	125.70	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2969	G	C6-N1-C2	5.42	128.35	125.10
11	B2	985	C	C2'-C3'-O3'	5.42	122.38	113.70
11	B2	1188	C	C5'-C4'-C3'	-5.42	107.32	116.00
38	A1	451	C	C6-N1-C2	-5.42	118.13	120.30
38	A1	1672	G	OP1-P-OP2	-5.42	111.47	119.60
38	A1	1964	G	C8-N9-C4	-5.42	104.23	106.40
38	A1	2338	A	C8-N9-C4	-5.42	103.63	105.80
38	A1	2573	C	O4'-C1'-N1	5.42	112.54	108.20
10	B1	49	C	N3-C4-N4	5.42	121.80	118.00
11	B2	374	G	N1-C2-N3	-5.42	120.65	123.90
11	B2	535	U	N3-C4-O4	5.42	123.19	119.40
11	B2	814	C	OP2-P-O3'	5.42	117.12	105.20
11	B2	1241	U	O4'-C1'-N1	5.42	112.54	108.20
38	A1	26	G	C4-C5-C6	5.42	122.05	118.80
38	A1	244	A	C5-N7-C8	5.42	106.61	103.90
38	A1	352	G	C6-C5-N7	-5.42	127.15	130.40
38	A1	596	C	N3-C4-C5	-5.42	119.73	121.90
38	A1	773	U	C1'-O4'-C4'	5.42	114.24	109.90
38	A1	780	G	C2-N3-C4	-5.42	109.19	111.90
38	A1	968	A	C6-C5-N7	-5.42	128.50	132.30
38	A1	1062	C	P-O3'-C3'	5.42	126.20	119.70
38	A1	1493	C	N3-C2-O2	5.42	125.69	121.90
38	A1	1583	G	C8-N9-C1'	5.42	134.05	127.00
38	A1	1895	G	N3-C4-N9	5.42	129.25	126.00
38	A1	1967	G	N3-C2-N2	5.42	123.70	119.90
38	A1	2361	C	C5-C4-N4	-5.42	116.41	120.20
38	A1	2864	G	C5-C6-N1	-5.42	108.79	111.50
57	Aj	64	LYS	C-N-CA	5.42	135.25	121.70
11	B2	281	G	N1-C2-N2	-5.42	111.32	116.20
23	BK	123	THR	N-CA-CB	5.42	120.60	110.30
38	A1	28	A	C8-N9-C4	-5.42	103.63	105.80
38	A1	1135	A	C8-N9-C4	-5.42	103.63	105.80
38	A1	1725	A	C6-C5-N7	-5.42	128.51	132.30
38	A1	2046	C	C6-N1-C1'	-5.42	114.30	120.80
38	A1	2706	C	OP1-P-OP2	-5.42	111.47	119.60
11	B2	278	A	N3-C4-N9	5.42	131.74	127.40
11	B2	332	C	N1-C2-N3	-5.42	115.41	119.20
11	B2	701	G	N7-C8-N9	-5.42	110.39	113.10
11	B2	888	A	C8-N9-C4	-5.42	103.63	105.80
11	B2	974	G	N3-C2-N2	5.42	123.69	119.90
22	BJ	4	TRP	CG-CD2-CE3	-5.42	129.02	133.90
38	A1	400	U	C5-C4-O4	-5.42	122.65	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	406	G	C2-N3-C4	5.42	114.61	111.90
38	A1	530	A	N9-C4-C5	-5.42	103.63	105.80
38	A1	634	G	N9-C4-C5	-5.42	103.23	105.40
38	A1	669	G	N9-C4-C5	-5.42	103.23	105.40
38	A1	1079	A	C6-C5-N7	-5.42	128.51	132.30
38	A1	1111	G	N3-C4-N9	-5.42	122.75	126.00
38	A1	1376	U	C6-N1-C2	-5.42	117.75	121.00
38	A1	1583	G	N9-C1'-C2'	-5.42	106.04	112.00
38	A1	2094	A	C8-N9-C4	-5.42	103.63	105.80
38	A1	2365	G	P-O5'-C5'	5.42	129.57	120.90
38	A1	2432	G	N1-C2-N3	-5.42	120.65	123.90
38	A1	2529	G	C5-C6-N1	-5.42	108.79	111.50
38	A1	2667	U	C1'-O4'-C4'	5.42	114.23	109.90
39	A3	83	C	OP1-P-OP2	-5.42	111.47	119.60
10	B1	43	G	C3'-C2'-C1'	5.42	105.83	101.50
11	B2	124	C	N1-C2-N3	-5.42	115.41	119.20
11	B2	1039	C	N1-C2-N3	-5.42	115.41	119.20
38	A1	132	G	N3-C2-N2	5.42	123.69	119.90
38	A1	255	G	N3-C4-N9	5.42	129.25	126.00
38	A1	529	G	C5-C6-N1	5.42	114.21	111.50
38	A1	1124	G	C6-N1-C2	5.42	128.35	125.10
38	A1	1419	G	O4'-C1'-N9	5.42	112.53	108.20
38	A1	2197	U	C5-C6-N1	-5.42	119.99	122.70
38	A1	2302	C	C5-C6-N1	5.42	123.71	121.00
38	A1	2553	U	C2-N3-C4	5.42	130.25	127.00
38	A1	2707	G	O4'-C1'-N9	5.42	112.53	108.20
39	A3	55	G	C5-C6-O6	-5.42	125.35	128.60
11	B2	351	C	C4'-C3'-C2'	-5.42	97.19	102.60
11	B2	579	U	C5-C4-O4	-5.42	122.65	125.90
21	BI	39	ARG	NE-CZ-NH2	-5.42	117.59	120.30
38	A1	275	C	C6-N1-C2	-5.42	118.13	120.30
38	A1	292	U	N3-C4-C5	-5.42	111.35	114.60
38	A1	1685	C	O4'-C4'-C3'	-5.42	98.58	104.00
38	A1	2249	A	N9-C4-C5	5.42	107.97	105.80
38	A1	2840	C	N3-C4-N4	5.42	121.79	118.00
38	A1	2845	C	C5-C6-N1	-5.42	118.29	121.00
4	AQ	25	ASP	N-CA-CB	5.41	120.34	110.60
11	B2	103	A	N3-C4-N9	-5.41	123.07	127.40
11	B2	226	G	C4-C5-N7	5.41	112.97	110.80
11	B2	906	G	C8-N9-C4	5.41	108.57	106.40
11	B2	1034	G	C5-C6-N1	-5.41	108.79	111.50
11	B2	1293	A	N3-C4-C5	-5.41	123.01	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1411	G	N9-C4-C5	5.41	107.56	105.40
38	A1	641	G	P-O5'-C5'	5.41	129.56	120.90
38	A1	654	C	C4-C5-C6	-5.41	114.69	117.40
38	A1	1356	A	O4'-C1'-N9	5.41	112.53	108.20
38	A1	2092	G	C4'-C3'-C2'	-5.41	97.19	102.60
38	A1	2277	G	N1-C2-N3	5.41	127.15	123.90
38	A1	2736	G	C1'-O4'-C4'	5.41	114.23	109.90
38	A1	2821	G	N3-C4-C5	5.41	131.31	128.60
10	B1	68	C	C5-C6-N1	5.41	123.71	121.00
11	B2	590	G	C6-C5-N7	-5.41	127.15	130.40
38	A1	122	G	P-O3'-C3'	-5.41	113.20	119.70
38	A1	254	A	C8-N9-C4	5.41	107.97	105.80
38	A1	393	C	N1-C2-O2	5.41	122.15	118.90
38	A1	449	G	N9-C4-C5	5.41	107.56	105.40
38	A1	1096	A	O3'-P-O5'	5.41	114.28	104.00
38	A1	1711	C	C6-N1-C2	-5.41	118.14	120.30
38	A1	1777	U	C4-C5-C6	5.41	122.95	119.70
10	B1	30	G	C4-N9-C1'	-5.41	119.47	126.50
11	B2	399	A	C6-C5-N7	5.41	136.09	132.30
11	B2	626	G	C5-C6-O6	-5.41	125.35	128.60
11	B2	1249	A	N9-C4-C5	5.41	107.97	105.80
11	B2	1428	G	C4-N9-C1'	-5.41	119.47	126.50
13	BA	91	TYR	CB-CA-C	-5.41	99.58	110.40
38	A1	78	C	C6-N1-C2	-5.41	118.14	120.30
38	A1	407	A	O4'-C1'-C2'	-5.41	100.39	105.80
38	A1	437	G	N7-C8-N9	-5.41	110.39	113.10
38	A1	610	C	N3-C4-C5	-5.41	119.74	121.90
38	A1	856	A	C3'-C2'-C1'	5.41	105.83	101.50
38	A1	1783	U	C5'-C4'-O4'	5.41	115.59	109.10
38	A1	1974	G	N3-C2-N2	5.41	123.69	119.90
38	A1	2031	G	C1'-O4'-C4'	5.41	114.23	109.90
38	A1	2568	A	N3-C4-C5	-5.41	123.01	126.80
38	A1	2746	G	N1-C2-N2	-5.41	111.33	116.20
62	AO	20	ASN	N-CA-C	-5.41	96.39	111.00
10	B1	17	C	N1-C2-O2	5.41	122.14	118.90
11	B2	18	C	O4'-C1'-N1	5.41	112.53	108.20
11	B2	46	A	N3-C4-C5	-5.41	123.01	126.80
11	B2	278	A	N9-C4-C5	-5.41	103.64	105.80
11	B2	551	U	N1-C2-O2	-5.41	119.02	122.80
11	B2	988	A	O3'-P-O5'	5.41	114.28	104.00
11	B2	1295	C	C4'-C3'-C2'	-5.41	97.19	102.60
11	B2	1313	G	C6-N1-C2	5.41	128.34	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
16	BD	119	ARG	NE-CZ-NH2	-5.41	117.60	120.30
38	A1	175	G	N9-C4-C5	5.41	107.56	105.40
38	A1	220	C	C1'-O4'-C4'	5.41	114.23	109.90
38	A1	1000	G	N3-C4-N9	5.41	129.25	126.00
38	A1	1322	G	N3-C4-N9	-5.41	122.75	126.00
38	A1	1410	A	N1-C2-N3	5.41	132.00	129.30
38	A1	1509	C	C5-C6-N1	5.41	123.70	121.00
38	A1	1680	G	N1-C6-O6	5.41	123.14	119.90
38	A1	2465	A	C6-N1-C2	5.41	121.84	118.60
38	A1	2506	G	C6-C5-N7	-5.41	127.15	130.40
38	A1	2812	U	O4'-C4'-C3'	-5.41	98.59	104.00
43	AB	45	VAL	CA-CB-CG2	-5.41	102.79	110.90
44	Ab	86	ASN	CA-CB-CG	5.41	125.30	113.40
63	AP	39	ARG	NE-CZ-NH2	-5.41	117.59	120.30
11	B2	388	G	C4'-C3'-C2'	-5.41	97.19	102.60
11	B2	839	G	C4-C5-C6	5.41	122.04	118.80
11	B2	847	A	C4-C5-N7	-5.41	108.00	110.70
38	A1	128	C	C6-N1-C2	-5.41	118.14	120.30
38	A1	132	G	C3'-C2'-C1'	-5.41	97.17	101.50
38	A1	1082	A	O4'-C1'-N9	5.41	112.53	108.20
38	A1	2509	A	C6-C5-N7	-5.41	128.51	132.30
38	A1	2944	G	C4'-C3'-C2'	-5.41	97.19	102.60
38	A1	2983	G	N1-C2-N3	-5.41	120.66	123.90
50	AF	90	LEU	N-CA-C	-5.41	96.40	111.00
5	AS	50	TYR	CB-CG-CD2	5.41	124.24	121.00
11	B2	1399	G	N1-C2-N3	5.41	127.14	123.90
11	B2	1495	U	C5-C4-O4	-5.41	122.66	125.90
26	BN	59	ALA	N-CA-CB	5.41	117.67	110.10
38	A1	430	A	C1'-O4'-C4'	-5.41	105.58	109.90
38	A1	520	G	C4-C5-N7	5.41	112.96	110.80
38	A1	1762	G	C5-C6-O6	-5.41	125.36	128.60
38	A1	2031	G	N3-C4-C5	-5.41	125.90	128.60
38	A1	2172	G	C5-C6-N1	-5.41	108.80	111.50
38	A1	2280	G	N1-C6-O6	5.41	123.14	119.90
38	A1	2331	A	O4'-C1'-N9	5.41	112.53	108.20
38	A1	2478	G	N3-C4-N9	5.41	129.24	126.00
38	A1	2484	C	C5'-C4'-C3'	-5.41	107.35	116.00
38	A1	2508	G	N3-C4-N9	-5.41	122.76	126.00
11	B2	396	C	C1'-O4'-C4'	-5.40	105.58	109.90
11	B2	569	G	C6-C5-N7	-5.40	127.16	130.40
11	B2	957	A	N1-C2-N3	5.40	132.00	129.30
11	B2	1259	A	C8-N9-C1'	-5.40	117.97	127.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1015	G	C6-C5-N7	-5.40	127.16	130.40
38	A1	1285	C	C6-N1-C2	-5.40	118.14	120.30
38	A1	1960	U	P-O3'-C3'	-5.40	113.22	119.70
11	B2	83	C	N1-C2-O2	5.40	122.14	118.90
11	B2	658	A	C6-C5-N7	-5.40	128.52	132.30
11	B2	714	G	C6-C5-N7	-5.40	127.16	130.40
11	B2	1000	G	C2-N3-C4	5.40	114.60	111.90
28	BP	12	ARG	NE-CZ-NH1	5.40	123.00	120.30
38	A1	40	G	C1'-O4'-C4'	5.40	114.22	109.90
38	A1	251	C	C5-C4-N4	-5.40	116.42	120.20
38	A1	379	U	N1-C2-N3	-5.40	111.66	114.90
38	A1	382	G	N1-C6-O6	5.40	123.14	119.90
38	A1	884	C	O4'-C1'-N1	5.40	112.52	108.20
38	A1	1354	G	C5-N7-C8	5.40	107.00	104.30
38	A1	1702	C	C6-N1-C2	-5.40	118.14	120.30
38	A1	2134	G	C6-C5-N7	-5.40	127.16	130.40
38	A1	2983	G	N7-C8-N9	5.40	115.80	113.10
38	A1	3012	C	P-O3'-C3'	5.40	126.18	119.70
58	Ak	202	THR	CA-CB-CG2	-5.40	104.84	112.40
11	B2	47	A	N7-C8-N9	-5.40	111.10	113.80
11	B2	104	A	C5'-C4'-O4'	5.40	115.58	109.10
11	B2	214	C	C5'-C4'-O4'	5.40	115.58	109.10
11	B2	721	A	N1-C6-N6	5.40	121.84	118.60
11	B2	955	G	N9-C4-C5	5.40	107.56	105.40
11	B2	1443	G	C5'-C4'-O4'	5.40	115.58	109.10
17	BE	73	VAL	N-CA-C	-5.40	96.42	111.00
38	A1	503	U	O5'-P-OP2	5.40	117.18	110.70
38	A1	649	A	C4'-C3'-C2'	-5.40	97.20	102.60
38	A1	1087	G	O4'-C1'-N9	5.40	112.52	108.20
38	A1	1104	A	N7-C8-N9	-5.40	111.10	113.80
38	A1	1465	A	C5'-C4'-O4'	-5.40	102.62	109.10
38	A1	1580	G	C6-N1-C2	-5.40	121.86	125.10
38	A1	1951	G	N1-C6-O6	5.40	123.14	119.90
38	A1	2460	A	C5-C6-N6	-5.40	119.38	123.70
38	A1	2461	C	N1-C2-N3	-5.40	115.42	119.20
38	A1	2594	U	C2-N3-C4	5.40	130.24	127.00
39	A3	20	G	C5-N7-C8	5.40	107.00	104.30
39	A3	76	U	C4-C5-C6	5.40	122.94	119.70
11	B2	130	G	N3-C4-C5	-5.40	125.90	128.60
11	B2	615	G	C6-N1-C2	-5.40	121.86	125.10
11	B2	1484	C	P-O5'-C5'	-5.40	112.26	120.90
38	A1	18	C	C2-N3-C4	5.40	122.60	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1399	C	C3'-C2'-C1'	5.40	105.82	101.50
38	A1	1597	G	P-O3'-C3'	5.40	126.18	119.70
38	A1	2637	U	C3'-C2'-C1'	5.40	105.82	101.50
38	A1	2760	A	N3-C4-N9	5.40	131.72	127.40
11	B2	111	G	C5'-C4'-C3'	-5.40	107.36	116.00
11	B2	574	A	O4'-C1'-N9	5.40	112.52	108.20
11	B2	1124	G	C6-C5-N7	-5.40	127.16	130.40
11	B2	1239	A	C5-N7-C8	5.40	106.60	103.90
11	B2	1389	G	N3-C2-N2	5.40	123.68	119.90
11	B2	1414	G	N1-C6-O6	5.40	123.14	119.90
38	A1	55	G	C1'-O4'-C4'	5.40	114.22	109.90
38	A1	249	G	O4'-C1'-N9	5.40	112.52	108.20
38	A1	361	G	C5-C6-N1	-5.40	108.80	111.50
38	A1	423	G	N1-C2-N3	-5.40	120.66	123.90
38	A1	839	A	C5-N7-C8	5.40	106.60	103.90
38	A1	1005	G	C5-C6-N1	-5.40	108.80	111.50
38	A1	1130	G	N7-C8-N9	5.40	115.80	113.10
38	A1	1360	G	C5-C6-N1	-5.40	108.80	111.50
38	A1	1375	G	N3-C4-N9	5.40	129.24	126.00
38	A1	1410	A	C5-C6-N1	-5.40	115.00	117.70
38	A1	1635	G	C6-N1-C2	5.40	128.34	125.10
38	A1	1641	G	O3'-P-O5'	-5.40	93.75	104.00
38	A1	1689	G	N9-C4-C5	-5.40	103.24	105.40
38	A1	1695	G	N9-C1'-C2'	-5.40	106.06	112.00
38	A1	1804	G	P-O3'-C3'	5.40	126.18	119.70
38	A1	2087	U	OP1-P-O3'	5.40	117.08	105.20
38	A1	2125	C	P-O5'-C5'	5.40	129.53	120.90
38	A1	2491	C	N3-C4-C5	-5.40	119.74	121.90
41	AA	113	LEU	N-CA-CB	5.40	121.19	110.40
11	B2	39	U	C2-N3-C4	-5.40	123.76	127.00
11	B2	973	U	C4-C5-C6	5.40	122.94	119.70
11	B2	1239	A	P-O5'-C5'	-5.40	112.27	120.90
17	BE	179	PHE	N-CA-CB	5.40	120.31	110.60
20	BH	114	ARG	CG-CD-NE	-5.40	100.47	111.80
38	A1	484	C	O4'-C1'-N1	5.40	112.52	108.20
38	A1	494	C	N3-C4-N4	5.40	121.78	118.00
38	A1	748	G	O4'-C1'-N9	5.40	112.52	108.20
38	A1	2033	G	C1'-O4'-C4'	5.40	114.22	109.90
38	A1	2736	G	C4-C5-N7	5.40	112.96	110.80
61	AN	48	SER	N-CA-CB	5.40	118.59	110.50
11	B2	586	C	C3'-C2'-C1'	5.39	105.81	101.50
11	B2	838	C	C2-N3-C4	5.39	122.60	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	852	G	N1-C2-N2	5.39	121.06	116.20
38	A1	496	A	C2-N3-C4	5.39	113.30	110.60
38	A1	676	G	O3'-P-O5'	-5.39	93.75	104.00
38	A1	777	A	C4-C5-N7	-5.39	108.00	110.70
38	A1	1037	C	C4-C5-C6	5.39	120.10	117.40
38	A1	1430	A	C6-C5-N7	-5.39	128.52	132.30
38	A1	1592	U	O4'-C1'-N1	5.39	112.52	108.20
38	A1	1695	G	C1'-O4'-C4'	-5.39	105.58	109.90
38	A1	1799	G	C8-N9-C1'	5.39	134.01	127.00
38	A1	1865	U	C2-N3-C4	5.39	130.24	127.00
38	A1	2143	C	C5-C6-N1	5.39	123.70	121.00
38	A1	2688	C	C5'-C4'-C3'	-5.39	107.37	116.00
1	A7	30	LYS	C-N-CA	5.39	135.18	121.70
11	B2	1245	C	C1'-O4'-C4'	-5.39	105.59	109.90
38	A1	218	A	N9-C4-C5	-5.39	103.64	105.80
38	A1	349	A	C2-N3-C4	5.39	113.30	110.60
38	A1	652	G	N1-C2-N3	-5.39	120.67	123.90
38	A1	894	C	O4'-C1'-N1	5.39	112.51	108.20
38	A1	1339	C	C5-C4-N4	-5.39	116.43	120.20
38	A1	1556	G	C6-C5-N7	-5.39	127.17	130.40
38	A1	1820	C	O4'-C1'-N1	5.39	112.51	108.20
38	A1	2008	G	C8-N9-C4	-5.39	104.24	106.40
38	A1	2105	A	C6-C5-N7	-5.39	128.53	132.30
38	A1	2694	C	C4'-C3'-C2'	-5.39	97.21	102.60
38	A1	3035	C	N3-C4-C5	-5.39	119.74	121.90
39	A3	75	G	N1-C2-N2	-5.39	111.35	116.20
11	B2	434	A	OP2-P-O3'	5.39	117.06	105.20
11	B2	483	G	N3-C2-N2	5.39	123.67	119.90
38	A1	2266	C	C5-C4-N4	-5.39	116.43	120.20
55	Ai	54	TRP	CH2-CZ2-CE2	5.39	122.79	117.40
11	B2	70	C	C5-C6-N1	5.39	123.69	121.00
11	B2	245	U	C6-N1-C2	-5.39	117.77	121.00
11	B2	386	C	C5-C4-N4	-5.39	116.43	120.20
11	B2	656	U	C4-C5-C6	5.39	122.93	119.70
11	B2	707	A	N9-C4-C5	-5.39	103.64	105.80
11	B2	722	G	C2-N3-C4	5.39	114.59	111.90
11	B2	1150	G	C8-N9-C1'	5.39	134.01	127.00
11	B2	1379	G	C6-C5-N7	-5.39	127.17	130.40
38	A1	749	G	N9-C4-C5	5.39	107.56	105.40
38	A1	1179	G	N3-C2-N2	5.39	123.67	119.90
38	A1	1643	A	N3-C4-C5	-5.39	123.03	126.80
38	A1	1664	G	C5-N7-C8	5.39	107.00	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1950	G	OP1-P-O3'	5.39	117.06	105.20
38	A1	2311	C	C3'-C2'-C1'	-5.39	97.19	101.50
38	A1	2480	G	OP2-P-O3'	5.39	117.06	105.20
43	AB	9	ARG	NE-CZ-NH2	-5.39	117.61	120.30
45	AC	339	ARG	NE-CZ-NH2	-5.39	117.61	120.30
9	AX	60	GLN	O-C-N	5.39	131.32	122.70
11	B2	159	C	C6-N1-C2	-5.39	118.14	120.30
11	B2	436	A	C1'-O4'-C4'	-5.39	105.59	109.90
11	B2	664	G	N3-C4-N9	-5.39	122.77	126.00
13	BA	23	ALA	N-CA-CB	5.39	117.64	110.10
38	A1	986	G	N7-C8-N9	5.39	115.79	113.10
38	A1	2219	A	C2-N3-C4	-5.39	107.91	110.60
38	A1	2228	G	N1-C2-N3	-5.39	120.67	123.90
38	A1	2500	G	C5-C6-N1	-5.39	108.81	111.50
39	A3	48	A	OP2-P-O3'	5.39	117.05	105.20
11	B2	151	G	N1-C6-O6	5.39	123.13	119.90
11	B2	282	G	N1-C2-N2	5.39	121.05	116.20
11	B2	342	G	C3'-C2'-C1'	-5.39	97.19	101.50
11	B2	494	G	C5-N7-C8	5.39	106.99	104.30
11	B2	1344	U	C3'-C2'-C1'	-5.39	97.19	101.50
38	A1	482	A	N9-C4-C5	-5.39	103.65	105.80
38	A1	701	G	O4'-C1'-N9	5.39	112.51	108.20
38	A1	762	G	P-O3'-C3'	5.39	126.16	119.70
38	A1	869	A	N9-C4-C5	-5.39	103.65	105.80
38	A1	879	A	C5'-C4'-O4'	5.39	115.56	109.10
38	A1	1171	G	N1-C6-O6	5.39	123.13	119.90
38	A1	1252	G	N3-C2-N2	5.39	123.67	119.90
38	A1	1715	G	O4'-C1'-N9	5.39	112.51	108.20
38	A1	1981	G	P-O5'-C5'	-5.39	112.28	120.90
38	A1	2365	G	O4'-C1'-N9	5.39	112.51	108.20
39	A3	96	C	C2-N3-C4	5.39	122.59	119.90
39	A3	123	U	C4-C5-C6	5.39	122.93	119.70
11	B2	28	U	N3-C4-C5	-5.38	111.37	114.60
11	B2	296	A	C3'-C2'-C1'	-5.38	97.19	101.50
11	B2	320	G	O4'-C1'-N9	5.38	112.51	108.20
11	B2	344	G	N7-C8-N9	5.38	115.79	113.10
11	B2	537	G	N1-C6-O6	5.38	123.13	119.90
11	B2	962	G	N7-C8-N9	-5.38	110.41	113.10
11	B2	1138	G	N3-C4-C5	-5.38	125.91	128.60
13	BA	64	VAL	CA-CB-CG1	5.38	118.97	110.90
13	BA	172	LYS	N-CA-CB	5.38	120.29	110.60
21	BI	41	MET	CG-SD-CE	-5.38	91.58	100.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1704	C	C4-C5-C6	5.38	120.09	117.40
11	B2	899	G	N1-C2-N2	-5.38	111.36	116.20
11	B2	1236	G	N3-C4-N9	5.38	129.23	126.00
11	B2	1382	G	C4-C5-C6	5.38	122.03	118.80
38	A1	187	C	N1-C2-O2	5.38	122.13	118.90
38	A1	335	C	N3-C4-C5	-5.38	119.75	121.90
38	A1	1090	G	O5'-P-OP2	-5.38	100.86	105.70
38	A1	1372	C	O4'-C1'-N1	5.38	112.51	108.20
38	A1	1507	A	C5-C6-N6	-5.38	119.39	123.70
38	A1	1531	C	C4-C5-C6	-5.38	114.71	117.40
38	A1	2605	G	C5-N7-C8	5.38	106.99	104.30
9	AX	27	LEU	CB-CG-CD2	5.38	120.15	111.00
11	B2	1181	G	N1-C2-N2	-5.38	111.36	116.20
38	A1	285	C	OP1-P-O3'	5.38	117.04	105.20
38	A1	377	C	C4-C5-C6	5.38	120.09	117.40
38	A1	417	C	N3-C4-C5	5.38	124.05	121.90
38	A1	887	U	N3-C4-O4	5.38	123.17	119.40
38	A1	1015	G	C2-N3-C4	5.38	114.59	111.90
38	A1	1483	U	N3-C2-O2	5.38	125.97	122.20
38	A1	1573	A	P-O3'-C3'	5.38	126.16	119.70
38	A1	2122	G	N3-C4-C5	5.38	131.29	128.60
38	A1	2636	C	N1-C2-O2	5.38	122.13	118.90
9	AX	237	HIS	CA-CB-CG	-5.38	104.45	113.60
11	B2	1236	G	N3-C4-C5	-5.38	125.91	128.60
29	BQ	16	ARG	NE-CZ-NH1	-5.38	117.61	120.30
38	A1	718	G	O4'-C1'-N9	5.38	112.50	108.20
38	A1	1119	A	N3-C4-C5	-5.38	123.03	126.80
38	A1	1167	A	O4'-C1'-N9	5.38	112.50	108.20
38	A1	1268	A	C2-N3-C4	-5.38	107.91	110.60
38	A1	1548	A	C5-N7-C8	5.38	106.59	103.90
38	A1	2405	U	C4'-C3'-C2'	-5.38	97.22	102.60
9	AX	178	VAL	CA-CB-CG2	-5.38	102.83	110.90
11	B2	74	U	C5-C6-N1	5.38	125.39	122.70
11	B2	150	G	N7-C8-N9	-5.38	110.41	113.10
11	B2	777	G	O4'-C1'-N9	5.38	112.50	108.20
11	B2	795	G	C8-N9-C4	-5.38	104.25	106.40
11	B2	1032	A	C4-C5-N7	-5.38	108.01	110.70
11	B2	1199	A	N7-C8-N9	-5.38	111.11	113.80
38	A1	83	G	N9-C4-C5	-5.38	103.25	105.40
38	A1	407	A	C4'-C3'-C2'	-5.38	97.22	102.60
38	A1	533	G	N3-C4-N9	-5.38	122.77	126.00
38	A1	795	G	N1-C6-O6	5.38	123.13	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	987	G	C5-C6-O6	-5.38	125.37	128.60
38	A1	1022	G	O5'-P-OP1	5.38	117.16	110.70
38	A1	1079	A	N3-C4-N9	5.38	131.70	127.40
38	A1	1131	G	C5'-C4'-O4'	5.38	115.55	109.10
38	A1	1387	G	P-O3'-C3'	5.38	126.16	119.70
38	A1	2203	G	N9-C4-C5	5.38	107.55	105.40
38	A1	2586	A	C5-C6-N1	-5.38	115.01	117.70
38	A1	3001	C	N3-C4-C5	-5.38	119.75	121.90
10	B1	30	G	N3-C4-N9	5.38	129.23	126.00
11	B2	396	C	C2-N3-C4	-5.38	117.21	119.90
11	B2	1181	G	C5-N7-C8	5.38	106.99	104.30
20	BH	149	ALA	CB-CA-C	-5.38	102.04	110.10
27	BO	6	HIS	CB-CA-C	-5.38	99.65	110.40
38	A1	639	C	OP1-P-OP2	-5.38	111.53	119.60
38	A1	922	C	P-O3'-C3'	5.38	126.15	119.70
38	A1	1091	G	C5-C6-O6	-5.38	125.37	128.60
38	A1	1392	G	C3'-C2'-C1'	-5.38	97.20	101.50
38	A1	1516	C	O4'-C1'-C2'	-5.38	100.42	105.80
38	A1	1996	C	C5'-C4'-O4'	-5.38	102.65	109.10
38	A1	2198	U	C2-N1-C1'	5.38	124.15	117.70
38	A1	2326	C	N3-C2-O2	-5.38	118.14	121.90
38	A1	2350	G	C5-N7-C8	5.38	106.99	104.30
38	A1	2360	G	C4-C5-C6	5.38	122.03	118.80
38	A1	2740	G	N1-C2-N2	-5.38	111.36	116.20
38	A1	2762	G	C6-N1-C2	-5.38	121.87	125.10
38	A1	2886	C	N1-C2-N3	5.38	122.96	119.20
56	AJ	91	ARG	NE-CZ-NH1	5.38	122.99	120.30
59	AL	44	LYS	N-CA-CB	5.38	120.28	110.60
11	B2	119	A	N1-C2-N3	5.38	131.99	129.30
11	B2	259	A	N7-C8-N9	-5.38	111.11	113.80
11	B2	314	G	C6-C5-N7	-5.38	127.17	130.40
38	A1	762	G	C5-C6-O6	-5.38	125.38	128.60
38	A1	875	G	C4'-C3'-C2'	-5.38	97.22	102.60
38	A1	1645	U	N3-C4-C5	5.38	117.83	114.60
38	A1	2421	A	C8-N9-C4	-5.38	103.65	105.80
38	A1	2786	G	C6-N1-C2	5.38	128.32	125.10
11	B2	286	G	C4-C5-N7	5.37	112.95	110.80
11	B2	731	A	N7-C8-N9	5.37	116.49	113.80
11	B2	1204	C	C4-C5-C6	5.37	120.09	117.40
11	B2	1231	G	C8-N9-C4	5.37	108.55	106.40
11	B2	1283	G	C4-N9-C1'	5.37	133.49	126.50
38	A1	52	A	O4'-C1'-N9	5.37	112.50	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	142	G	C8-N9-C4	-5.37	104.25	106.40
38	A1	184	A	OP1-P-OP2	-5.37	111.54	119.60
38	A1	1288	C	C5-C6-N1	5.37	123.69	121.00
38	A1	1581	A	N1-C2-N3	5.37	131.99	129.30
38	A1	1583	G	C5-N7-C8	5.37	106.99	104.30
38	A1	2156	A	C5-N7-C8	5.37	106.59	103.90
38	A1	2417	G	C4-N9-C1'	-5.37	119.52	126.50
38	A1	2484	C	C5'-C4'-O4'	5.37	115.55	109.10
38	A1	2777	G	OP1-P-OP2	-5.37	111.54	119.60
38	A1	2784	A	P-O3'-C3'	-5.37	113.25	119.70
39	A3	4	C	O4'-C1'-N1	5.37	112.50	108.20
11	B2	38	G	C2-N3-C4	5.37	114.59	111.90
11	B2	359	A	C8-N9-C4	-5.37	103.65	105.80
11	B2	403	C	C6-N1-C2	-5.37	118.15	120.30
11	B2	640	U	C2-N1-C1'	5.37	124.15	117.70
11	B2	1144	G	C1'-O4'-C4'	5.37	114.20	109.90
11	B2	1185	A	C2-N3-C4	5.37	113.29	110.60
38	A1	164	A	C4-C5-N7	-5.37	108.01	110.70
38	A1	520	G	C6-C5-N7	-5.37	127.18	130.40
38	A1	1114	G	N1-C6-O6	5.37	123.12	119.90
38	A1	1168	A	P-O3'-C3'	5.37	126.14	119.70
38	A1	1404	G	N9-C4-C5	-5.37	103.25	105.40
38	A1	1566	G	C4-C5-N7	5.37	112.95	110.80
38	A1	1722	G	N3-C2-N2	5.37	123.66	119.90
38	A1	1811	G	C2-N3-C4	5.37	114.59	111.90
38	A1	2205	A	C5-C6-N1	-5.37	115.02	117.70
38	A1	2234	C	O4'-C4'-C3'	-5.37	98.63	104.00
38	A1	2263	G	N7-C8-N9	-5.37	110.42	113.10
38	A1	2442	A	C6-C5-N7	-5.37	128.54	132.30
38	A1	2498	G	N3-C2-N2	5.37	123.66	119.90
38	A1	2568	A	P-O5'-C5'	-5.37	112.31	120.90
38	A1	2828	G	C5-N7-C8	5.37	106.99	104.30
61	AN	106	ASP	N-CA-CB	5.37	120.27	110.60
11	B2	101	G	C5-C6-O6	-5.37	125.38	128.60
38	A1	2700	U	C5-C6-N1	5.37	125.39	122.70
7	AU	84	ARG	NH1-CZ-NH2	5.37	125.31	119.40
9	AX	369	ARG	NE-CZ-NH1	5.37	122.98	120.30
10	B1	15	G	C6-N1-C2	5.37	128.32	125.10
11	B2	387	G	P-O5'-C5'	-5.37	112.31	120.90
11	B2	941	C	C5-C4-N4	-5.37	116.44	120.20
11	B2	1435	G	N3-C4-C5	-5.37	125.92	128.60
38	A1	391	C	N3-C4-N4	5.37	121.76	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	433	C	N1-C2-O2	5.37	122.12	118.90
38	A1	460	C	C5'-C4'-C3'	-5.37	107.41	116.00
38	A1	590	A	N3-C4-N9	5.37	131.69	127.40
38	A1	1154	A	C5-N7-C8	5.37	106.58	103.90
38	A1	1682	C	C5-C6-N1	-5.37	118.32	121.00
38	A1	1876	G	C8-N9-C4	-5.37	104.25	106.40
38	A1	2638	G	C8-N9-C4	-5.37	104.25	106.40
38	A1	2879	G	C5-C6-N1	-5.37	108.82	111.50
11	B2	799	C	N3-C4-N4	5.37	121.76	118.00
11	B2	1312	C	C5-C6-N1	5.37	123.68	121.00
16	BD	154	TYR	CB-CA-C	-5.37	99.67	110.40
29	BQ	94	ASP	CB-CG-OD2	-5.37	113.47	118.30
38	A1	121	G	C4-C5-C6	5.37	122.02	118.80
38	A1	1140	C	C1'-O4'-C4'	-5.37	105.61	109.90
38	A1	1842	C	P-O3'-C3'	-5.37	113.26	119.70
50	AF	61	ARG	N-CA-CB	5.37	120.26	110.60
11	B2	137	A	P-O3'-C3'	5.37	126.14	119.70
11	B2	1009	G	C2-N3-C4	5.37	114.58	111.90
11	B2	1010	G	N3-C2-N2	5.37	123.66	119.90
11	B2	1067	G	C5'-C4'-C3'	5.37	124.58	116.00
11	B2	1178	C	P-O3'-C3'	5.37	126.14	119.70
38	A1	230	A	N1-C2-N3	5.37	131.98	129.30
38	A1	352	G	C6-N1-C2	5.37	128.32	125.10
38	A1	1352	U	P-O3'-C3'	5.37	126.14	119.70
38	A1	1619	C	O4'-C1'-N1	5.37	112.49	108.20
38	A1	2090	A	C4-C5-N7	-5.37	108.02	110.70
38	A1	2134	G	N3-C2-N2	5.37	123.66	119.90
38	A1	2414	G	P-O3'-C3'	-5.37	113.26	119.70
41	AA	108	ILE	N-CA-C	-5.37	96.52	111.00
46	AD	172	ARG	NE-CZ-NH1	5.37	122.98	120.30
11	B2	337	C	O4'-C1'-N1	5.36	112.49	108.20
11	B2	739	G	OP1-P-OP2	-5.36	111.56	119.60
11	B2	744	A	N3-C4-C5	-5.36	123.05	126.80
29	BQ	148	TYR	CB-CG-CD1	-5.36	117.78	121.00
38	A1	213	G	C4-C5-C6	5.36	122.02	118.80
38	A1	1600	G	P-O3'-C3'	-5.36	113.26	119.70
38	A1	1605	A	C8-N9-C4	-5.36	103.66	105.80
38	A1	1894	A	C2-N3-C4	-5.36	107.92	110.60
38	A1	1927	C	N3-C4-N4	5.36	121.75	118.00
38	A1	1956	G	C6-C5-N7	-5.36	127.18	130.40
38	A1	2057	G	N3-C4-N9	5.36	129.22	126.00
38	A1	2154	G	C1'-O4'-C4'	5.36	114.19	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2172	G	O4'-C4'-C3'	-5.36	98.64	104.00
38	A1	2242	A	N3-C4-N9	-5.36	123.11	127.40
38	A1	2361	C	N3-C4-C5	-5.36	119.75	121.90
38	A1	2423	G	C5-C6-O6	-5.36	125.38	128.60
38	A1	2739	G	C5-C6-N1	5.36	114.18	111.50
39	A3	16	G	C1'-O4'-C4'	5.36	114.19	109.90
11	B2	175	G	N1-C2-N2	-5.36	111.37	116.20
11	B2	495	G	N3-C4-N9	5.36	129.22	126.00
11	B2	1202	G	C5-N7-C8	-5.36	101.62	104.30
38	A1	215	A	C6-C5-N7	-5.36	128.55	132.30
38	A1	1962	G	C8-N9-C4	-5.36	104.25	106.40
38	A1	2218	C	C5-C4-N4	-5.36	116.45	120.20
38	A1	2405	U	N1-C2-N3	5.36	118.12	114.90
38	A1	2501	G	C4-N9-C1'	-5.36	119.53	126.50
9	AX	360	ARG	NE-CZ-NH1	5.36	122.98	120.30
11	B2	85	A	C5-N7-C8	5.36	106.58	103.90
11	B2	1124	G	O5'-C5'-C4'	-5.36	101.52	111.70
11	B2	1153	G	N7-C8-N9	5.36	115.78	113.10
38	A1	137	A	C5'-C4'-O4'	5.36	115.53	109.10
38	A1	538	G	N3-C2-N2	5.36	123.65	119.90
38	A1	787	G	N3-C2-N2	5.36	123.65	119.90
38	A1	1656	C	C5-C6-N1	5.36	123.68	121.00
38	A1	1839	U	N1-C2-N3	5.36	118.12	114.90
38	A1	2366	G	O4'-C1'-N9	5.36	112.49	108.20
38	A1	2469	G	C6-N1-C2	-5.36	121.88	125.10
38	A1	2641	C	O4'-C1'-C2'	-5.36	100.44	105.80
38	A1	2833	G	C4-C5-C6	5.36	122.02	118.80
39	A3	104	C	C4-C5-C6	5.36	120.08	117.40
10	B1	8	U	N1-C2-O2	-5.36	119.05	122.80
11	B2	721	A	O4'-C4'-C3'	-5.36	98.64	104.00
11	B2	1119	U	O4'-C1'-N1	5.36	112.49	108.20
11	B2	1373	A	N7-C8-N9	5.36	116.48	113.80
38	A1	19	G	N3-C4-C5	-5.36	125.92	128.60
38	A1	128	C	N3-C2-O2	5.36	125.65	121.90
38	A1	132	G	C5-C6-O6	-5.36	125.39	128.60
38	A1	352	G	N3-C4-N9	5.36	129.22	126.00
38	A1	1155	A	C8-N9-C4	-5.36	103.66	105.80
38	A1	1511	C	N3-C4-N4	5.36	121.75	118.00
38	A1	2435	G	P-O3'-C3'	5.36	126.13	119.70
11	B2	111	G	OP1-P-O3'	5.36	116.99	105.20
11	B2	624	G	N3-C2-N2	5.36	123.65	119.90
11	B2	977	G	C5-C6-N1	-5.36	108.82	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1069	G	C8-N9-C4	5.36	108.54	106.40
11	B2	1078	U	C5-C4-O4	-5.36	122.69	125.90
11	B2	1095	C	N3-C4-C5	-5.36	119.76	121.90
14	BB	69	ALA	N-CA-CB	5.36	117.60	110.10
16	BD	170	MET	CG-SD-CE	5.36	108.77	100.20
33	BU	25	GLU	CB-CA-C	-5.36	99.69	110.40
38	A1	440	A	C2-N3-C4	-5.36	107.92	110.60
38	A1	485	G	C5-N7-C8	-5.36	101.62	104.30
38	A1	920	G	O4'-C1'-N9	5.36	112.49	108.20
38	A1	1209	A	C2-N3-C4	5.36	113.28	110.60
38	A1	1422	G	N1-C2-N3	-5.36	120.69	123.90
38	A1	1461	G	N3-C4-N9	-5.36	122.78	126.00
38	A1	1775	G	O4'-C1'-N9	5.36	112.49	108.20
38	A1	2126	G	C8-N9-C1'	5.36	133.97	127.00
38	A1	2178	A	N7-C8-N9	-5.36	111.12	113.80
38	A1	2295	C	N3-C4-C5	-5.36	119.76	121.90
38	A1	2393	G	O4'-C1'-N9	5.36	112.49	108.20
38	A1	2853	A	O4'-C1'-N9	5.36	112.49	108.20
10	B1	77	A	C4-C5-C6	5.36	119.68	117.00
11	B2	29	G	O4'-C1'-N9	5.36	112.48	108.20
11	B2	46	A	C5-C6-N1	-5.36	115.02	117.70
11	B2	447	A	C4-C5-N7	-5.36	108.02	110.70
11	B2	634	C	N3-C4-N4	5.36	121.75	118.00
11	B2	910	G	N9-C4-C5	-5.36	103.26	105.40
17	BE	132	MET	CG-SD-CE	-5.36	91.63	100.20
38	A1	70	G	C5'-C4'-C3'	5.36	124.57	116.00
38	A1	320	C	P-O5'-C5'	5.36	129.47	120.90
38	A1	843	C	N3-C4-C5	-5.36	119.76	121.90
38	A1	984	U	C6-N1-C2	-5.36	117.79	121.00
38	A1	1382	C	O4'-C1'-N1	5.36	112.48	108.20
38	A1	1456	U	C4-C5-C6	5.36	122.91	119.70
38	A1	2135	C	N3-C2-O2	-5.36	118.15	121.90
38	A1	2255	C	N3-C4-N4	5.36	121.75	118.00
38	A1	2581	G	N7-C8-N9	5.36	115.78	113.10
38	A1	2635	C	N3-C4-N4	5.36	121.75	118.00
43	AB	109	TYR	CB-CG-CD1	5.36	124.21	121.00
11	B2	1332	C	C5'-C4'-O4'	5.35	115.52	109.10
38	A1	86	G	C4-C5-C6	5.35	122.01	118.80
38	A1	101	G	O5'-P-OP1	5.35	117.12	110.70
38	A1	786	G	N7-C8-N9	-5.35	110.42	113.10
45	AC	68	MET	CG-SD-CE	-5.35	91.63	100.20
11	B2	121	C	N1-C2-O2	-5.35	115.69	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	135	U	C6-N1-C2	-5.35	117.79	121.00
11	B2	1048	G	C4'-C3'-C2'	-5.35	97.25	102.60
11	B2	1141	G	O5'-P-OP1	-5.35	100.88	105.70
11	B2	1143	G	C6-N1-C2	5.35	128.31	125.10
11	B2	1154	G	N3-C4-C5	5.35	131.28	128.60
11	B2	1358	A	P-O3'-C3'	-5.35	113.28	119.70
38	A1	125	C	O4'-C1'-N1	5.35	112.48	108.20
38	A1	507	G	C6-C5-N7	-5.35	127.19	130.40
38	A1	1195	G	C5'-C4'-O4'	5.35	115.52	109.10
38	A1	1264	G	O4'-C1'-N9	5.35	112.48	108.20
38	A1	1411	G	C8-N9-C4	5.35	108.54	106.40
38	A1	1587	A	N1-C2-N3	-5.35	126.62	129.30
38	A1	1705	C	C5'-C4'-O4'	5.35	115.52	109.10
38	A1	1842	C	C2-N3-C4	-5.35	117.22	119.90
38	A1	1879	U	C5-C4-O4	5.35	129.11	125.90
38	A1	1921	U	N1-C2-N3	-5.35	111.69	114.90
38	A1	2119	C	C3'-C2'-C1'	5.35	105.78	101.50
38	A1	2235	G	C2-N3-C4	5.35	114.58	111.90
38	A1	2658	G	N9-C4-C5	-5.35	103.26	105.40
38	A1	2684	G	N3-C2-N2	5.35	123.65	119.90
38	A1	2729	A	N1-C6-N6	5.35	121.81	118.60
38	A1	2981	G	C2-N3-C4	5.35	114.58	111.90
11	B2	1123	G	C8-N9-C1'	5.35	133.96	127.00
11	B2	1424	G	C5'-C4'-C3'	-5.35	107.44	116.00
30	BR	17	ASP	C-N-CA	5.35	135.08	121.70
38	A1	222	A	C4-C5-N7	-5.35	108.02	110.70
38	A1	748	G	N3-C4-C5	5.35	131.28	128.60
38	A1	760	G	O4'-C1'-N9	5.35	112.48	108.20
38	A1	1726	A	N9-C4-C5	5.35	107.94	105.80
38	A1	2723	G	N3-C4-C5	-5.35	125.92	128.60
38	A1	2794	G	C2-N3-C4	5.35	114.58	111.90
38	A1	2810	G	C2-N3-C4	5.35	114.58	111.90
11	B2	59	C	O4'-C1'-N1	5.35	112.48	108.20
11	B2	68	G	O5'-P-OP1	5.35	117.12	110.70
11	B2	157	A	N7-C8-N9	5.35	116.47	113.80
11	B2	586	C	N3-C4-C5	5.35	124.04	121.90
11	B2	1168	C	C4-C5-C6	5.35	120.08	117.40
38	A1	603	G	N1-C2-N3	-5.35	120.69	123.90
38	A1	660	U	C1'-O4'-C4'	5.35	114.18	109.90
38	A1	774	G	C4-C5-C6	5.35	122.01	118.80
38	A1	813	G	C8-N9-C4	-5.35	104.26	106.40
38	A1	925	U	O4'-C1'-C2'	5.35	112.42	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1697	G	C2-N3-C4	-5.35	109.22	111.90
38	A1	1816	C	C5-C4-N4	-5.35	116.45	120.20
38	A1	1961	G	C8-N9-C4	5.35	108.54	106.40
38	A1	2027	G	C5'-C4'-C3'	-5.35	107.44	116.00
38	A1	2866	A	C4-C5-C6	5.35	119.67	117.00
9	AX	298	TYR	CD1-CE1-CZ	5.35	124.61	119.80
10	B1	15	G	P-O3'-C3'	5.35	126.12	119.70
11	B2	192	G	C2-N3-C4	-5.35	109.23	111.90
11	B2	196	G	C4-N9-C1'	-5.35	119.55	126.50
11	B2	947	G	C5-C6-O6	-5.35	125.39	128.60
11	B2	1116	G	O4'-C1'-N9	5.35	112.48	108.20
13	BA	102	ARG	NE-CZ-NH2	-5.35	117.63	120.30
23	BK	33	VAL	CG1-CB-CG2	5.35	119.45	110.90
38	A1	646	U	C4-C5-C6	-5.35	116.49	119.70
38	A1	1427	A	C5-C6-N1	-5.35	115.03	117.70
38	A1	2013	A	N7-C8-N9	-5.35	111.13	113.80
38	A1	2369	G	C4-C5-C6	5.35	122.01	118.80
38	A1	2497	G	P-O5'-C5'	-5.35	112.34	120.90
38	A1	2696	G	N1-C2-N3	-5.35	120.69	123.90
38	A1	3039	G	C5-C6-O6	-5.35	125.39	128.60
64	AR	16	LEU	N-CA-CB	5.35	121.09	110.40
11	B2	141	C	N3-C4-N4	5.35	121.74	118.00
11	B2	281	G	C5'-C4'-C3'	5.35	124.55	116.00
11	B2	651	U	N3-C2-O2	5.35	125.94	122.20
11	B2	945	G	N9-C4-C5	5.35	107.54	105.40
11	B2	1033	G	N1-C6-O6	5.35	123.11	119.90
27	BO	113	ARG	N-CA-CB	5.35	120.22	110.60
38	A1	574	C	N3-C4-N4	5.35	121.74	118.00
38	A1	1648	C	OP1-P-OP2	-5.35	111.58	119.60
38	A1	2367	C	C5'-C4'-O4'	5.35	115.52	109.10
38	A1	2518	G	C4'-C3'-C2'	-5.35	97.25	102.60
48	AE	174	TYR	CG-CD2-CE2	5.35	125.58	121.30
11	B2	231	G	C8-N9-C4	-5.34	104.26	106.40
11	B2	233	C	OP2-P-O3'	5.34	116.96	105.20
11	B2	786	G	O4'-C1'-N9	5.34	112.48	108.20
11	B2	1265	G	N3-C4-N9	5.34	129.21	126.00
13	BA	139	LYS	N-CA-CB	5.34	120.22	110.60
24	BL	46	ARG	NE-CZ-NH2	-5.34	117.63	120.30
29	BQ	149	ASP	N-CA-C	-5.34	96.57	111.00
38	A1	335	C	P-O3'-C3'	5.34	126.11	119.70
38	A1	797	C	C6-N1-C2	-5.34	118.16	120.30
38	A1	833	G	N7-C8-N9	-5.34	110.43	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1267	A	N3-C4-C5	-5.34	123.06	126.80
38	A1	1612	G	N3-C4-C5	-5.34	125.93	128.60
38	A1	2007	C	N1-C1'-C2'	-5.34	106.12	112.00
38	A1	2212	C	N1-C1'-C2'	-5.34	106.12	112.00
38	A1	2421	A	C5-N7-C8	5.34	106.57	103.90
38	A1	2666	G	O4'-C1'-N9	5.34	112.48	108.20
38	A1	2953	U	C6-N1-C2	-5.34	117.79	121.00
11	B2	453	G	O4'-C1'-N9	5.34	112.47	108.20
11	B2	642	G	N3-C2-N2	5.34	123.64	119.90
11	B2	1227	A	C8-N9-C4	-5.34	103.66	105.80
38	A1	15	A	N3-C4-C5	5.34	130.54	126.80
38	A1	119	U	C4'-C3'-C2'	5.34	107.94	102.60
38	A1	473	C	C1'-O4'-C4'	5.34	114.17	109.90
38	A1	521	C	C6-N1-C2	5.34	122.44	120.30
38	A1	550	A	C4-C5-C6	5.34	119.67	117.00
38	A1	1080	G	C5'-C4'-C3'	5.34	124.55	116.00
38	A1	1216	A	C4-C5-C6	5.34	119.67	117.00
10	B1	45	G	C5-C6-N1	5.34	114.17	111.50
11	B2	150	G	C3'-C2'-C1'	5.34	105.77	101.50
11	B2	404	C	C5-C6-N1	5.34	123.67	121.00
11	B2	497	C	N1-C2-O2	5.34	122.10	118.90
11	B2	843	G	N1-C2-N3	-5.34	120.69	123.90
11	B2	1075	A	C6-C5-N7	-5.34	128.56	132.30
11	B2	1326	G	N9-C4-C5	5.34	107.54	105.40
11	B2	1438	A	C5-C6-N6	-5.34	119.43	123.70
30	BR	113	ARG	NE-CZ-NH2	-5.34	117.63	120.30
38	A1	86	G	C5-C6-N1	-5.34	108.83	111.50
38	A1	206	A	O4'-C1'-C2'	-5.34	100.46	105.80
38	A1	218	A	P-O5'-C5'	5.34	129.45	120.90
38	A1	239	G	OP1-P-OP2	-5.34	111.59	119.60
38	A1	244	A	O4'-C1'-N9	5.34	112.47	108.20
38	A1	543	G	N9-C4-C5	-5.34	103.26	105.40
38	A1	1234	A	C3'-C2'-C1'	5.34	105.77	101.50
38	A1	1352	U	C5-C4-O4	-5.34	122.69	125.90
38	A1	1381	C	N3-C4-N4	5.34	121.74	118.00
38	A1	1504	C	C4-C5-C6	-5.34	114.73	117.40
38	A1	1558	U	C6-N1-C2	-5.34	117.80	121.00
38	A1	1790	G	C5-N7-C8	5.34	106.97	104.30
38	A1	1957	U	C6-N1-C1'	-5.34	113.72	121.20
38	A1	2262	C	N3-C2-O2	-5.34	118.16	121.90
38	A1	2678	U	N3-C4-C5	-5.34	111.39	114.60
61	AN	64	ALA	N-CA-CB	5.34	117.58	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	243	G	C1'-O4'-C4'	5.34	114.17	109.90
11	B2	794	A	C8-N9-C4	-5.34	103.66	105.80
38	A1	87	C	P-O3'-C3'	5.34	126.11	119.70
38	A1	255	G	C5-C6-O6	-5.34	125.40	128.60
38	A1	413	A	C4'-C3'-C2'	-5.34	97.26	102.60
38	A1	574	C	O4'-C1'-N1	5.34	112.47	108.20
38	A1	592	C	O3'-P-O5'	-5.34	93.85	104.00
38	A1	981	A	C6-N1-C2	-5.34	115.40	118.60
38	A1	1161	A	C4-C5-C6	5.34	119.67	117.00
38	A1	2187	C	C5-C6-N1	-5.34	118.33	121.00
38	A1	2394	G	P-O5'-C5'	5.34	129.44	120.90
38	A1	2850	G	N7-C8-N9	-5.34	110.43	113.10
38	A1	2898	G	N1-C2-N3	-5.34	120.70	123.90
39	A3	70	C	C2-N3-C4	5.34	122.57	119.90
43	AB	25	ARG	NH1-CZ-NH2	-5.34	113.53	119.40
9	AX	265	LEU	N-CA-CB	5.34	121.08	110.40
11	B2	327	G	N3-C4-N9	5.34	129.20	126.00
11	B2	1036	G	P-O3'-C3'	-5.34	113.29	119.70
11	B2	1076	G	N3-C4-N9	-5.34	122.80	126.00
38	A1	81	G	C5-C6-O6	-5.34	125.40	128.60
38	A1	1021	G	C5'-C4'-C3'	-5.34	107.46	116.00
38	A1	1134	A	N1-C2-N3	5.34	131.97	129.30
38	A1	1442	G	N1-C6-O6	5.34	123.10	119.90
38	A1	2527	G	P-O3'-C3'	-5.34	113.29	119.70
66	AY	155	LEU	CB-CG-CD2	5.34	120.08	111.00
7	AU	82	THR	CA-CB-CG2	-5.34	104.93	112.40
11	B2	43	A	O4'-C1'-N9	5.34	112.47	108.20
11	B2	169	C	N1-C2-O2	-5.34	115.70	118.90
11	B2	279	U	N3-C4-O4	5.34	123.14	119.40
11	B2	429	A	N3-C4-C5	-5.34	123.06	126.80
11	B2	613	C	O4'-C1'-N1	5.34	112.47	108.20
11	B2	681	G	C5-N7-C8	5.34	106.97	104.30
11	B2	765	U	C5-C4-O4	5.34	129.10	125.90
11	B2	782	A	O4'-C1'-N9	5.34	112.47	108.20
11	B2	1054	A	C6-N1-C2	-5.34	115.40	118.60
11	B2	1260	G	C5-C6-O6	-5.34	125.40	128.60
17	BE	162	TYR	CB-CG-CD1	5.34	124.20	121.00
38	A1	310	C	C4'-C3'-C2'	-5.34	97.26	102.60
38	A1	462	A	C8-N9-C4	5.34	107.94	105.80
38	A1	485	G	C1'-O4'-C4'	5.34	114.17	109.90
38	A1	630	G	N1-C6-O6	5.34	123.10	119.90
38	A1	934	G	C5-C6-O6	-5.34	125.40	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1023	C	C6-N1-C2	-5.34	118.17	120.30
38	A1	1101	U	O4'-C4'-C3'	-5.34	98.66	104.00
38	A1	1552	C	N3-C2-O2	5.34	125.64	121.90
38	A1	1763	A	O4'-C1'-C2'	5.34	112.40	107.60
38	A1	2006	C	N3-C4-N4	5.34	121.73	118.00
38	A1	2008	G	C5-C6-O6	-5.34	125.40	128.60
38	A1	2740	G	C5-N7-C8	-5.34	101.63	104.30
38	A1	2986	G	C6-N1-C2	5.34	128.30	125.10
39	A3	121	A	OP1-P-OP2	-5.34	111.59	119.60
11	B2	224	A	N3-C4-N9	5.33	131.67	127.40
11	B2	329	G	C5-C6-O6	-5.33	125.40	128.60
11	B2	660	C	O5'-P-OP2	-5.33	100.90	105.70
38	A1	527	G	C8-N9-C4	-5.33	104.27	106.40
38	A1	1147	G	N3-C4-C5	5.33	131.27	128.60
38	A1	1274	G	C4-C5-N7	5.33	112.93	110.80
38	A1	1282	A	OP2-P-O3'	5.33	116.94	105.20
38	A1	1915	G	C5'-C4'-O4'	5.33	115.50	109.10
11	B2	193	G	C4-C5-N7	5.33	112.93	110.80
11	B2	217	C	N3-C2-O2	-5.33	118.17	121.90
11	B2	415	C	N3-C4-C5	-5.33	119.77	121.90
11	B2	516	A	OP1-P-O3'	5.33	116.93	105.20
11	B2	1191	G	N1-C6-O6	5.33	123.10	119.90
11	B2	1248	A	N9-C1'-C2'	-5.33	106.13	112.00
11	B2	1337	A	C5-C6-N6	-5.33	119.43	123.70
38	A1	244	A	N3-C4-N9	5.33	131.67	127.40
38	A1	695	G	P-O3'-C3'	5.33	126.10	119.70
38	A1	860	A	C5-C6-N6	-5.33	119.43	123.70
38	A1	874	U	C6-N1-C2	-5.33	117.80	121.00
38	A1	1176	C	P-O3'-C3'	5.33	126.10	119.70
38	A1	1208	A	C1'-O4'-C4'	-5.33	105.63	109.90
38	A1	1224	A	C5'-C4'-C3'	-5.33	107.47	116.00
38	A1	2121	C	C6-N1-C1'	-5.33	114.40	120.80
38	A1	3021	C	N1-C2-N3	-5.33	115.47	119.20
58	Ak	191	LEU	CA-CB-CG	5.33	127.57	115.30
10	B1	43	G	P-O3'-C3'	5.33	126.10	119.70
11	B2	173	G	N1-C2-N3	-5.33	120.70	123.90
11	B2	195	C	O3'-P-O5'	5.33	114.13	104.00
11	B2	660	C	C1'-O4'-C4'	5.33	114.17	109.90
11	B2	1130	A	N1-C2-N3	5.33	131.97	129.30
11	B2	1222	C	C1'-O4'-C4'	5.33	114.17	109.90
11	B2	1294	G	C3'-C2'-C1'	5.33	105.77	101.50
37	BY	33	ASP	CB-CG-OD2	5.33	123.10	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	259	A	N1-C6-N6	5.33	121.80	118.60
38	A1	310	C	C1'-O4'-C4'	-5.33	105.64	109.90
38	A1	629	G	C5-N7-C8	-5.33	101.63	104.30
38	A1	686	C	C5'-C4'-C3'	-5.33	107.47	116.00
38	A1	827	G	C5-N7-C8	-5.33	101.63	104.30
38	A1	1126	C	N3-C4-N4	5.33	121.73	118.00
38	A1	1180	G	C4'-C3'-C2'	-5.33	97.27	102.60
38	A1	1257	G	N7-C8-N9	-5.33	110.43	113.10
38	A1	1323	U	O4'-C1'-N1	5.33	112.47	108.20
38	A1	1551	G	C8-N9-C4	-5.33	104.27	106.40
38	A1	1657	G	N9-C4-C5	-5.33	103.27	105.40
38	A1	1959	C	N3-C4-C5	-5.33	119.77	121.90
38	A1	2015	G	C8-N9-C4	5.33	108.53	106.40
38	A1	2175	G	C2-N3-C4	5.33	114.56	111.90
38	A1	2519	C	C6-N1-C2	-5.33	118.17	120.30
38	A1	2834	C	N1-C2-N3	-5.33	115.47	119.20
38	A1	2966	C	C4'-C3'-C2'	-5.33	97.27	102.60
45	AC	172	TRP	CB-CG-CD1	-5.33	120.07	127.00
62	AO	105	ASP	CB-CG-OD1	5.33	123.10	118.30
11	B2	923	A	C6-N1-C2	-5.33	115.40	118.60
11	B2	1202	G	C4'-C3'-C2'	-5.33	97.27	102.60
20	BH	29	ARG	NE-CZ-NH2	5.33	122.97	120.30
38	A1	1658	A	N1-C2-N3	5.33	131.97	129.30
38	A1	2943	G	O4'-C4'-C3'	-5.33	98.67	104.00
10	B1	33	C	OP2-P-O3'	5.33	116.92	105.20
11	B2	23	G	N1-C2-N2	-5.33	111.40	116.20
11	B2	65	G	C6-N1-C2	5.33	128.30	125.10
11	B2	232	G	N3-C4-C5	5.33	131.26	128.60
11	B2	647	G	P-O3'-C3'	5.33	126.09	119.70
11	B2	661	C	C5'-C4'-C3'	5.33	124.53	116.00
11	B2	1426	C	C6-N1-C1'	5.33	127.19	120.80
38	A1	179	A	C6-C5-N7	-5.33	128.57	132.30
38	A1	433	C	N3-C4-N4	5.33	121.73	118.00
38	A1	775	C	C4-C5-C6	5.33	120.06	117.40
38	A1	809	A	N1-C2-N3	5.33	131.96	129.30
38	A1	2121	C	C2-N1-C1'	5.33	124.66	118.80
38	A1	2195	G	O5'-P-OP2	-5.33	100.91	105.70
38	A1	2281	A	C6-N1-C2	-5.33	115.40	118.60
38	A1	2518	G	P-O5'-C5'	-5.33	112.37	120.90
38	A1	2657	A	N1-C2-N3	5.33	131.96	129.30
38	A1	2863	A	C4-C5-N7	-5.33	108.04	110.70
10	B1	60	A	P-O5'-C5'	5.33	129.42	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	517	U	N3-C4-O4	5.33	123.13	119.40
38	A1	188	A	C1'-O4'-C4'	5.33	114.16	109.90
38	A1	1487	U	N1-C2-O2	5.33	126.53	122.80
38	A1	2267	U	P-O5'-C5'	-5.33	112.38	120.90
38	A1	2268	C	C4-C5-C6	5.33	120.06	117.40
45	AC	223	ALA	N-CA-CB	5.33	117.56	110.10
11	B2	329	G	C5-C6-N1	-5.33	108.84	111.50
11	B2	389	G	N9-C1'-C2'	-5.33	106.14	112.00
11	B2	412	U	OP1-P-OP2	-5.33	111.61	119.60
11	B2	456	U	P-O5'-C5'	5.33	129.42	120.90
11	B2	1111	G	C5-C6-N1	-5.33	108.84	111.50
11	B2	1313	G	C2-N3-C4	5.33	114.56	111.90
20	BH	145	ARG	NE-CZ-NH2	5.33	122.96	120.30
38	A1	298	G	C2-N3-C4	-5.33	109.24	111.90
38	A1	582	A	N9-C4-C5	5.33	107.93	105.80
38	A1	1347	U	N1-C2-O2	-5.33	119.07	122.80
38	A1	1475	G	O4'-C1'-N9	5.33	112.46	108.20
38	A1	1604	G	C5-N7-C8	5.33	106.96	104.30
38	A1	1909	C	C2-N3-C4	5.33	122.56	119.90
38	A1	2029	C	N3-C4-C5	-5.33	119.77	121.90
39	A3	9	A	C2-N3-C4	-5.33	107.94	110.60
39	A3	30	G	C3'-C2'-C1'	5.33	105.76	101.50
39	A3	66	A	C5-C6-N1	-5.33	115.04	117.70
55	Ai	68	TYR	CB-CG-CD1	-5.33	117.81	121.00
59	AL	95	TYR	CG-CD1-CE1	5.33	125.56	121.30
11	B2	142	G	C5-C6-N1	5.32	114.16	111.50
11	B2	210	A	N3-C4-C5	-5.32	123.07	126.80
11	B2	447	A	C5-N7-C8	5.32	106.56	103.90
11	B2	614	G	P-O3'-C3'	5.32	126.09	119.70
11	B2	639	G	C5-C6-N1	-5.32	108.84	111.50
11	B2	884	G	C1'-O4'-C4'	-5.32	105.64	109.90
11	B2	1181	G	N9-C4-C5	5.32	107.53	105.40
34	BV	71	ALA	N-CA-C	-5.32	96.63	111.00
38	A1	86	G	O4'-C1'-N9	5.32	112.46	108.20
38	A1	840	G	N1-C2-N3	-5.32	120.71	123.90
38	A1	861	G	C6-C5-N7	-5.32	127.21	130.40
38	A1	928	A	OP2-P-O3'	5.32	116.91	105.20
38	A1	1147	G	O4'-C1'-N9	5.32	112.46	108.20
38	A1	1151	G	C6-C5-N7	-5.32	127.20	130.40
38	A1	1587	A	C6-C5-N7	-5.32	128.57	132.30
38	A1	1699	U	N1-C2-O2	-5.32	119.07	122.80
38	A1	2437	G	C8-N9-C4	5.32	108.53	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2465	A	N9-C4-C5	-5.32	103.67	105.80
38	A1	2516	G	C4-C5-C6	5.32	121.99	118.80
38	A1	2661	U	C5-C6-N1	5.32	125.36	122.70
11	B2	1126	G	N1-C6-O6	5.32	123.09	119.90
11	B2	1153	G	C5-N7-C8	-5.32	101.64	104.30
38	A1	2447	A	C1'-O4'-C4'	-5.32	105.64	109.90
47	Ad	16	ARG	NE-CZ-NH1	5.32	122.96	120.30
6	AT	30	VAL	CA-CB-CG1	-5.32	102.92	110.90
11	B2	229	G	C5'-C4'-O4'	5.32	115.48	109.10
11	B2	459	G	C1'-O4'-C4'	-5.32	105.64	109.90
11	B2	507	G	C2-N3-C4	5.32	114.56	111.90
11	B2	562	A	N1-C6-N6	5.32	121.79	118.60
11	B2	582	G	C5-N7-C8	5.32	106.96	104.30
11	B2	585	U	C6-N1-C2	-5.32	117.81	121.00
11	B2	606	U	N3-C4-O4	5.32	123.12	119.40
11	B2	1002	G	C6-C5-N7	-5.32	127.21	130.40
38	A1	120	G	N9-C4-C5	-5.32	103.27	105.40
38	A1	512	G	N1-C2-N3	-5.32	120.71	123.90
38	A1	604	A	C8-N9-C4	5.32	107.93	105.80
38	A1	981	A	C8-N9-C4	5.32	107.93	105.80
38	A1	1061	G	N1-C6-O6	5.32	123.09	119.90
38	A1	1198	G	C6-N1-C2	5.32	128.29	125.10
38	A1	1367	A	C5-C6-N6	-5.32	119.44	123.70
38	A1	1393	C	C6-N1-C1'	-5.32	114.42	120.80
38	A1	2202	U	O4'-C1'-N1	5.32	112.46	108.20
38	A1	2454	G	N9-C4-C5	5.32	107.53	105.40
38	A1	2633	A	O4'-C1'-N9	5.32	112.46	108.20
38	A1	2892	A	C2'-C3'-O3'	5.32	122.21	113.70
39	A3	66	A	C4-C5-N7	-5.32	108.04	110.70
59	AL	143	GLU	N-CA-CB	5.32	120.18	110.60
11	B2	502	U	O4'-C4'-C3'	-5.32	98.68	104.00
38	A1	896	G	C5-N7-C8	-5.32	101.64	104.30
38	A1	961	C	C5-C6-N1	-5.32	118.34	121.00
38	A1	1096	A	C6-C5-N7	-5.32	128.58	132.30
38	A1	2363	G	N1-C2-N2	-5.32	111.41	116.20
9	AX	247	TYR	CZ-CE2-CD2	-5.32	115.02	119.80
11	B2	508	C	N3-C4-C5	5.32	124.03	121.90
11	B2	1473	A	C4-C5-C6	5.32	119.66	117.00
23	BK	134	TYR	N-CA-CB	5.32	120.17	110.60
38	A1	688	G	C4'-C3'-C2'	-5.32	97.28	102.60
38	A1	717	A	O4'-C1'-N9	5.32	112.45	108.20
38	A1	725	G	C4-C5-N7	5.32	112.93	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	793	C	C4-C5-C6	5.32	120.06	117.40
38	A1	966	G	C5-N7-C8	5.32	106.96	104.30
38	A1	1489	G	O4'-C4'-C3'	-5.32	98.68	104.00
38	A1	1592	U	N3-C4-O4	5.32	123.12	119.40
38	A1	1784	G	C5-N7-C8	5.32	106.96	104.30
38	A1	1815	C	C5-C6-N1	5.32	123.66	121.00
38	A1	1918	U	C4'-C3'-C2'	-5.32	97.28	102.60
38	A1	2113	G	C6-N1-C2	5.32	128.29	125.10
38	A1	2255	C	O3'-P-O5'	-5.32	93.90	104.00
38	A1	2415	C	N3-C2-O2	5.32	125.62	121.90
38	A1	2950	G	C5-C6-N1	-5.32	108.84	111.50
45	AC	242	ARG	NE-CZ-NH1	5.32	122.96	120.30
46	AD	66	SER	N-CA-CB	5.32	118.48	110.50
10	B1	15	G	N3-C2-N2	5.32	123.62	119.90
11	B2	10	G	P-O5'-C5'	-5.32	112.39	120.90
11	B2	396	C	C6-N1-C2	5.32	122.43	120.30
11	B2	652	C	C4-C5-C6	5.32	120.06	117.40
11	B2	1300	A	N7-C8-N9	5.32	116.46	113.80
38	A1	208	A	C4-C5-C6	5.32	119.66	117.00
38	A1	1086	U	C5-C4-O4	5.32	129.09	125.90
38	A1	1336	G	P-O5'-C5'	-5.32	112.40	120.90
38	A1	1573	A	C5-N7-C8	5.32	106.56	103.90
38	A1	1806	C	C5-C6-N1	5.32	123.66	121.00
38	A1	1813	A	C5-N7-C8	5.32	106.56	103.90
38	A1	1931	G	C4'-C3'-C2'	-5.32	97.28	102.60
38	A1	1975	C	N1-C2-N3	5.32	122.92	119.20
38	A1	2326	C	C2-N1-C1'	5.32	124.65	118.80
38	A1	2835	A	P-O3'-C3'	-5.32	113.32	119.70
45	AC	314	TYR	CG-CD1-CE1	-5.32	117.05	121.30
11	B2	1146	G	C3'-C2'-C1'	5.31	105.75	101.50
38	A1	703	G	O4'-C1'-N9	5.31	112.45	108.20
38	A1	1308	G	O4'-C4'-C3'	-5.31	98.69	104.00
38	A1	1735	G	O4'-C1'-N9	5.31	112.45	108.20
38	A1	2073	G	C2-N3-C4	-5.31	109.24	111.90
38	A1	2085	C	C6-N1-C2	-5.31	118.17	120.30
38	A1	2813	G	O4'-C1'-N9	5.31	112.45	108.20
39	A3	50	G	N9-C4-C5	-5.31	103.28	105.40
11	B2	194	C	N1-C2-O2	-5.31	115.71	118.90
11	B2	335	G	C8-N9-C1'	5.31	133.91	127.00
11	B2	753	G	C5'-C4'-C3'	-5.31	107.50	116.00
11	B2	888	A	N7-C8-N9	5.31	116.46	113.80
11	B2	931	C	C4'-C3'-C2'	-5.31	97.29	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1133	C	C2-N3-C4	5.31	122.56	119.90
11	B2	1412	A	C2-N3-C4	5.31	113.26	110.60
14	BB	114	VAL	N-CA-C	-5.31	96.66	111.00
38	A1	387	A	C6-N1-C2	5.31	121.79	118.60
38	A1	492	A	O4'-C1'-N9	5.31	112.45	108.20
38	A1	970	G	C5-N7-C8	-5.31	101.64	104.30
38	A1	1764	G	C4'-C3'-C2'	5.31	107.91	102.60
38	A1	2241	U	P-O5'-C5'	5.31	129.40	120.90
38	A1	2422	G	N9-C4-C5	-5.31	103.28	105.40
38	A1	2551	G	N3-C2-N2	5.31	123.62	119.90
38	A1	2561	G	O3'-P-O5'	5.31	114.09	104.00
38	A1	2644	G	P-O3'-C3'	-5.31	113.33	119.70
39	A3	37	U	C2-N3-C4	5.31	130.19	127.00
8	AW	29	ARG	NE-CZ-NH2	-5.31	117.64	120.30
11	B2	858	A	N3-C4-N9	5.31	131.65	127.40
11	B2	1061	A	C2-N3-C4	-5.31	107.94	110.60
38	A1	462	A	C3'-C2'-C1'	5.31	105.75	101.50
38	A1	1041	U	O4'-C1'-N1	5.31	112.45	108.20
38	A1	1706	G	P-O5'-C5'	-5.31	112.40	120.90
38	A1	1979	G	N3-C4-C5	-5.31	125.94	128.60
38	A1	2605	G	O3'-P-O5'	-5.31	93.91	104.00
38	A1	2704	A	C4-C5-N7	-5.31	108.05	110.70
10	B1	31	G	N1-C6-O6	5.31	123.08	119.90
11	B2	352	A	C8-N9-C4	-5.31	103.68	105.80
11	B2	644	G	C5-C6-O6	-5.31	125.41	128.60
11	B2	887	G	N9-C4-C5	5.31	107.52	105.40
20	BH	29	ARG	NE-CZ-NH1	5.31	122.95	120.30
23	BK	85	ALA	O-C-N	-5.31	114.20	122.70
38	A1	84	A	C3'-C2'-C1'	-5.31	97.25	101.50
38	A1	308	C	C5'-C4'-C3'	5.31	124.50	116.00
38	A1	715	G	P-O5'-C5'	-5.31	112.41	120.90
38	A1	821	U	C6-N1-C2	-5.31	117.81	121.00
38	A1	862	G	O4'-C1'-N9	5.31	112.45	108.20
38	A1	1846	G	N7-C8-N9	5.31	115.75	113.10
38	A1	2081	C	P-O5'-C5'	5.31	129.40	120.90
38	A1	2641	C	C5-C4-N4	-5.31	116.48	120.20
38	A1	2819	C	N1-C1'-C2'	-5.31	106.16	112.00
38	A1	2879	G	C5'-C4'-C3'	-5.31	107.51	116.00
62	AO	21	TYR	CG-CD1-CE1	5.31	125.55	121.30
5	AS	129	TYR	CB-CG-CD2	5.31	124.18	121.00
11	B2	111	G	N1-C6-O6	5.31	123.08	119.90
11	B2	1198	A	N7-C8-N9	-5.31	111.15	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	BC	2	ALA	CB-CA-C	-5.31	102.14	110.10
26	BN	25	TRP	CD1-NE1-CE2	-5.31	104.22	109.00
38	A1	231	G	C5-C6-N1	-5.31	108.85	111.50
38	A1	423	G	N9-C4-C5	-5.31	103.28	105.40
38	A1	434	G	C8-N9-C4	-5.31	104.28	106.40
38	A1	1124	G	C2-N3-C4	-5.31	109.25	111.90
38	A1	1506	U	P-O3'-C3'	-5.31	113.33	119.70
38	A1	1583	G	O4'-C1'-N9	5.31	112.45	108.20
38	A1	2996	A	C5-C6-N1	-5.31	115.05	117.70
54	AI	56	ARG	N-CA-CB	5.31	120.15	110.60
11	B2	198	A	OP1-P-O3'	5.31	116.87	105.20
11	B2	396	C	P-O3'-C3'	5.31	126.07	119.70
38	A1	463	A	P-O3'-C3'	5.31	126.07	119.70
38	A1	912	G	C5'-C4'-C3'	-5.31	107.51	116.00
38	A1	1068	U	C5-C6-N1	-5.31	120.05	122.70
38	A1	1146	U	P-O5'-C5'	-5.31	112.41	120.90
38	A1	1591	C	N3-C4-C5	-5.31	119.78	121.90
38	A1	1654	G	C3'-C2'-C1'	-5.31	97.25	101.50
38	A1	1825	G	C4'-C3'-C2'	-5.31	97.29	102.60
38	A1	2282	G	C6-C5-N7	-5.31	127.22	130.40
38	A1	2641	C	C3'-C2'-C1'	5.31	105.75	101.50
38	A1	2660	G	N1-C2-N3	-5.31	120.72	123.90
38	A1	2689	G	C6-N1-C2	5.31	128.28	125.10
38	A1	2719	G	N9-C4-C5	5.31	107.52	105.40
11	B2	131	G	O4'-C1'-N9	5.30	112.44	108.20
11	B2	393	A	N9-C1'-C2'	-5.30	106.17	112.00
11	B2	668	G	C4-C5-C6	5.30	121.98	118.80
11	B2	1174	A	C6-N1-C2	-5.30	115.42	118.60
34	BV	24	TYR	CG-CD1-CE1	-5.30	117.06	121.30
38	A1	426	G	C3'-C2'-C1'	5.30	105.74	101.50
38	A1	514	U	N1-C2-O2	5.30	126.51	122.80
38	A1	830	G	C3'-C2'-C1'	-5.30	97.26	101.50
38	A1	1950	G	C6-N1-C2	-5.30	121.92	125.10
38	A1	2292	A	C2-N3-C4	5.30	113.25	110.60
38	A1	2407	G	C8-N9-C4	-5.30	104.28	106.40
38	A1	2499	U	N3-C4-O4	5.30	123.11	119.40
38	A1	2526	G	C4-C5-N7	-5.30	108.68	110.80
39	A3	43	C	OP1-P-OP2	-5.30	111.64	119.60
62	AO	148	HIS	CA-C-N	-5.30	105.53	117.20
5	AS	37	ARG	NE-CZ-NH2	-5.30	117.65	120.30
11	B2	408	C	N1-C1'-C2'	-5.30	106.17	112.00
38	A1	212	A	N1-C6-N6	5.30	121.78	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	565	A	O4'-C1'-N9	5.30	112.44	108.20
38	A1	606	A	N7-C8-N9	5.30	116.45	113.80
38	A1	1071	A	C6-C5-N7	-5.30	128.59	132.30
38	A1	1209	A	C1'-O4'-C4'	-5.30	105.66	109.90
38	A1	2231	G	C4-C5-C6	5.30	121.98	118.80
41	AA	61	LYS	N-CA-CB	5.30	120.14	110.60
60	AM	31	ARG	NE-CZ-NH2	5.30	122.95	120.30
11	B2	276	A	C5-C6-N1	-5.30	115.05	117.70
11	B2	468	G	N3-C4-N9	-5.30	122.82	126.00
11	B2	1254	C	P-O3'-C3'	-5.30	113.34	119.70
14	BB	188	PHE	CD1-CE1-CZ	-5.30	113.74	120.10
19	BG	55	PHE	CB-CG-CD2	-5.30	117.09	120.80
38	A1	210	A	C5-C6-N6	-5.30	119.46	123.70
38	A1	337	G	C6-N1-C2	5.30	128.28	125.10
38	A1	428	A	N1-C6-N6	5.30	121.78	118.60
38	A1	792	A	N1-C2-N3	-5.30	126.65	129.30
38	A1	1016	C	N3-C2-O2	5.30	125.61	121.90
38	A1	1186	G	C4-C5-C6	5.30	121.98	118.80
38	A1	1323	U	N1-C2-O2	5.30	126.51	122.80
38	A1	1569	A	O4'-C1'-N9	5.30	112.44	108.20
38	A1	1787	U	C5-C6-N1	5.30	125.35	122.70
10	B1	8	U	C4-C5-C6	5.30	122.88	119.70
11	B2	281	G	O4'-C1'-N9	5.30	112.44	108.20
11	B2	545	C	C4-C5-C6	5.30	120.05	117.40
11	B2	634	C	C6-N1-C1'	-5.30	114.44	120.80
11	B2	1208	A	C5-C6-N6	-5.30	119.46	123.70
11	B2	1231	G	N3-C4-C5	5.30	131.25	128.60
11	B2	1481	G	C5'-C4'-O4'	5.30	115.46	109.10
29	BQ	101	ARG	NE-CZ-NH1	5.30	122.95	120.30
38	A1	59	U	N3-C4-C5	5.30	117.78	114.60
38	A1	165	G	N3-C4-C5	-5.30	125.95	128.60
38	A1	1092	U	C4'-C3'-C2'	-5.30	97.30	102.60
38	A1	1227	A	C5-C6-N1	-5.30	115.05	117.70
38	A1	2286	U	N1-C2-O2	5.30	126.51	122.80
38	A1	2836	G	C4-C5-N7	5.30	112.92	110.80
46	AD	73	LEU	CB-CA-C	-5.30	100.13	110.20
38	A1	254	A	C5'-C4'-O4'	5.30	115.46	109.10
38	A1	276	G	C5-C6-O6	-5.30	125.42	128.60
38	A1	725	G	C5-C6-N1	-5.30	108.85	111.50
38	A1	1273	C	N1-C2-N3	5.30	122.91	119.20
38	A1	1786	G	O4'-C1'-N9	5.30	112.44	108.20
11	B2	50	C	O5'-P-OP2	5.30	117.06	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	875	G	C4-C5-C6	-5.30	115.62	118.80
27	BO	135	PHE	CB-CG-CD2	5.30	124.51	120.80
38	A1	485	G	N3-C2-N2	5.30	123.61	119.90
38	A1	668	G	C5-C6-O6	-5.30	125.42	128.60
38	A1	692	C	C5-C4-N4	-5.30	116.49	120.20
38	A1	851	G	C5'-C4'-O4'	5.30	115.46	109.10
38	A1	955	A	N1-C6-N6	5.30	121.78	118.60
38	A1	1058	A	N1-C2-N3	5.30	131.95	129.30
38	A1	1070	G	C6-C5-N7	-5.30	127.22	130.40
38	A1	1645	U	C4-C5-C6	-5.30	116.52	119.70
64	AR	9	ARG	NE-CZ-NH1	5.30	122.95	120.30
11	B2	1166	G	N3-C2-N2	5.29	123.61	119.90
11	B2	1332	C	C5-C6-N1	5.29	123.65	121.00
38	A1	295	G	C2-N3-C4	5.29	114.55	111.90
38	A1	1370	G	C5'-C4'-O4'	-5.29	102.75	109.10
38	A1	2133	G	C3'-C2'-C1'	5.29	105.74	101.50
39	A3	14	G	O4'-C1'-N9	5.29	112.44	108.20
10	B1	14	A	C3'-C2'-C1'	-5.29	97.27	101.50
11	B2	29	G	N3-C4-C5	5.29	131.25	128.60
11	B2	246	A	N3-C4-C5	-5.29	123.09	126.80
11	B2	645	G	C6-N1-C2	-5.29	121.92	125.10
11	B2	801	A	C5-C6-N1	-5.29	115.05	117.70
11	B2	1490	C	C2-N3-C4	5.29	122.55	119.90
15	BC	67	ARG	NE-CZ-NH1	5.29	122.95	120.30
18	BF	116	TYR	CG-CD1-CE1	-5.29	117.06	121.30
21	BI	17	SER	N-CA-CB	5.29	118.44	110.50
23	BK	76	GLU	N-CA-CB	5.29	120.13	110.60
38	A1	350	A	C6-C5-N7	-5.29	128.59	132.30
38	A1	944	G	C5-N7-C8	5.29	106.95	104.30
38	A1	1083	G	N9-C1'-C2'	-5.29	106.18	112.00
38	A1	2226	G	C5-C6-O6	-5.29	125.42	128.60
38	A1	2316	U	C2-N3-C4	-5.29	123.82	127.00
38	A1	2618	C	N1-C2-O2	-5.29	115.72	118.90
38	A1	2876	G	C2-N3-C4	5.29	114.55	111.90
38	A1	2979	C	C6-N1-C2	-5.29	118.18	120.30
57	Aj	47	TYR	CD1-CE1-CZ	5.29	124.56	119.80
11	B2	69	U	C4'-C3'-C2'	-5.29	97.31	102.60
11	B2	492	G	C6-N1-C2	-5.29	121.92	125.10
11	B2	617	A	N9-C4-C5	5.29	107.92	105.80
11	B2	853	G	C8-N9-C4	-5.29	104.28	106.40
18	BF	136	ARG	NH1-CZ-NH2	-5.29	113.58	119.40
28	BP	53	ARG	NE-CZ-NH1	5.29	122.95	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	330	U	N3-C4-C5	-5.29	111.42	114.60
38	A1	398	U	C5-C6-N1	5.29	125.34	122.70
38	A1	442	G	C6-C5-N7	-5.29	127.22	130.40
38	A1	644	G	C5-C6-N1	-5.29	108.86	111.50
38	A1	1244	C	N3-C2-O2	5.29	125.61	121.90
38	A1	1248	C	C6-N1-C2	5.29	122.42	120.30
38	A1	1416	G	N7-C8-N9	5.29	115.75	113.10
38	A1	1874	G	C4'-C3'-C2'	-5.29	97.31	102.60
38	A1	2191	U	O4'-C1'-N1	5.29	112.43	108.20
38	A1	2331	A	C5-N7-C8	5.29	106.55	103.90
38	A1	2720	U	C6-N1-C2	-5.29	117.83	121.00
39	A3	14	G	N1-C6-O6	5.29	123.08	119.90
47	Ad	49	GLY	N-CA-C	-5.29	99.87	113.10
12	AG	79	TYR	CB-CG-CD2	5.29	124.17	121.00
10	B1	60	A	C3'-C2'-C1'	5.29	105.73	101.50
11	B2	1163	U	C1'-O4'-C4'	5.29	114.13	109.90
38	A1	940	G	C1'-O4'-C4'	5.29	114.13	109.90
38	A1	1298	C	C2-N3-C4	-5.29	117.25	119.90
38	A1	1742	C	C1'-O4'-C4'	-5.29	105.67	109.90
38	A1	2226	G	C5-C6-N1	-5.29	108.86	111.50
39	A3	74	U	C5-C6-N1	-5.29	120.06	122.70
4	AQ	81	ARG	NE-CZ-NH1	-5.29	117.66	120.30
11	B2	31	U	P-O5'-C5'	5.29	129.36	120.90
11	B2	374	G	N9-C4-C5	-5.29	103.28	105.40
11	B2	511	C	C4-C5-C6	5.29	120.04	117.40
11	B2	569	G	N7-C8-N9	-5.29	110.46	113.10
11	B2	898	G	C8-N9-C4	-5.29	104.28	106.40
14	BB	54	VAL	CA-CB-CG1	5.29	118.83	110.90
38	A1	238	C	N3-C4-C5	-5.29	119.78	121.90
38	A1	353	C	C4-C5-C6	5.29	120.04	117.40
38	A1	696	G	C3'-C2'-C1'	5.29	105.73	101.50
38	A1	885	A	N9-C4-C5	5.29	107.92	105.80
38	A1	1075	G	N3-C2-N2	5.29	123.60	119.90
38	A1	1256	G	C2-N3-C4	5.29	114.54	111.90
38	A1	1298	C	C5-C6-N1	5.29	123.64	121.00
38	A1	1634	A	C4'-C3'-C2'	-5.29	97.31	102.60
38	A1	1828	A	C2-N3-C4	5.29	113.24	110.60
38	A1	2031	G	C4-C5-C6	5.29	121.97	118.80
38	A1	2990	G	C4-C5-C6	5.29	121.97	118.80
38	A1	3007	A	C5'-C4'-C3'	5.29	124.46	116.00
38	A1	3040	G	C5-C6-O6	-5.29	125.43	128.60
62	AO	13	ARG	NH1-CZ-NH2	-5.29	113.58	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	AS	52	ASP	CB-CG-OD1	5.29	123.06	118.30
11	B2	228	G	C6-N1-C2	5.29	128.27	125.10
25	BM	121	ILE	N-CA-C	-5.29	96.72	111.00
38	A1	747	G	C5-N7-C8	5.29	106.94	104.30
38	A1	1197	G	C2-N3-C4	5.29	114.54	111.90
38	A1	1490	G	N3-C2-N2	5.29	123.60	119.90
38	A1	2577	U	O4'-C1'-N1	5.29	112.43	108.20
38	A1	2973	A	N1-C6-N6	5.29	121.77	118.60
11	B2	676	G	C4-C5-N7	5.29	112.91	110.80
11	B2	877	A	N3-C4-N9	5.29	131.63	127.40
11	B2	1060	G	N3-C4-N9	5.29	129.17	126.00
11	B2	1100	G	C6-N1-C2	5.29	128.27	125.10
11	B2	1100	G	OP1-P-OP2	-5.29	111.67	119.60
11	B2	1210	A	N9-C4-C5	5.29	107.91	105.80
11	B2	1303	C	C1'-O4'-C4'	5.29	114.13	109.90
11	B2	1389	G	N3-C4-C5	-5.29	125.96	128.60
21	BI	11	LEU	CB-CG-CD2	5.29	119.99	111.00
29	BQ	49	MET	CG-SD-CE	-5.29	91.74	100.20
38	A1	360	G	C4-C5-N7	-5.29	108.69	110.80
38	A1	437	G	O5'-P-OP2	-5.29	100.94	105.70
38	A1	504	G	C6-C5-N7	-5.29	127.23	130.40
38	A1	568	A	C6-N1-C2	-5.29	115.43	118.60
38	A1	615	A	N7-C8-N9	-5.29	111.16	113.80
38	A1	682	G	O4'-C1'-N9	5.29	112.43	108.20
38	A1	1012	G	N3-C2-N2	5.29	123.60	119.90
38	A1	1391	C	C6-N1-C2	-5.29	118.19	120.30
38	A1	1992	A	C5-C6-N1	-5.29	115.06	117.70
38	A1	2063	U	N3-C2-O2	5.29	125.90	122.20
38	A1	2319	C	N3-C4-N4	5.29	121.70	118.00
38	A1	2628	U	N1-C2-N3	-5.29	111.73	114.90
38	A1	2724	A	C5'-C4'-C3'	-5.29	107.54	116.00
10	B1	20	G	C3'-C2'-C1'	5.28	105.73	101.50
11	B2	142	G	C8-N9-C1'	5.28	133.87	127.00
11	B2	436	A	C5-C6-N6	-5.28	119.47	123.70
11	B2	600	C	C3'-C2'-C1'	-5.28	97.27	101.50
11	B2	868	C	C6-N1-C1'	5.28	127.14	120.80
16	BD	33	TYR	CG-CD2-CE2	-5.28	117.07	121.30
22	BJ	33	SER	O-C-N	-5.28	114.25	122.70
38	A1	232	U	C5-C6-N1	5.28	125.34	122.70
38	A1	264	G	N1-C6-O6	5.28	123.07	119.90
38	A1	447	G	C3'-C2'-C1'	-5.28	97.27	101.50
38	A1	724	G	N7-C8-N9	-5.28	110.46	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1057	C	O4'-C4'-C3'	-5.28	98.72	104.00
38	A1	1459	A	C6-C5-N7	-5.28	128.60	132.30
38	A1	1477	C	N3-C4-C5	-5.28	119.79	121.90
38	A1	2028	G	O4'-C1'-N9	5.28	112.43	108.20
38	A1	2181	G	N3-C2-N2	5.28	123.60	119.90
38	A1	2263	G	C4-C5-N7	-5.28	108.69	110.80
38	A1	2272	G	C5-N7-C8	5.28	106.94	104.30
38	A1	2346	A	C4-C5-N7	-5.28	108.06	110.70
38	A1	2512	C	C4'-C3'-C2'	-5.28	97.32	102.60
38	A1	2569	G	C6-C5-N7	-5.28	127.23	130.40
38	A1	2682	G	C5'-C4'-C3'	-5.28	107.55	116.00
45	AC	38	MET	CG-SD-CE	-5.28	91.75	100.20
52	AH	8	VAL	CG1-CB-CG2	-5.28	102.45	110.90
11	B2	165	U	N3-C4-C5	-5.28	111.43	114.60
11	B2	645	G	O4'-C1'-N9	5.28	112.43	108.20
11	B2	855	C	N3-C4-C5	-5.28	119.79	121.90
38	A1	119	U	O4'-C1'-N1	5.28	112.42	108.20
38	A1	332	A	P-O3'-C3'	5.28	126.04	119.70
38	A1	769	G	C5'-C4'-O4'	5.28	115.44	109.10
38	A1	780	G	C4-C5-N7	5.28	112.91	110.80
38	A1	831	C	N1-C2-O2	5.28	122.07	118.90
38	A1	944	G	N1-C2-N3	-5.28	120.73	123.90
38	A1	2809	G	C4-C5-N7	-5.28	108.69	110.80
38	A1	2963	G	N7-C8-N9	-5.28	110.46	113.10
4	AQ	139	TYR	CB-CG-CD2	-5.28	117.83	121.00
11	B2	173	G	N3-C4-C5	-5.28	125.96	128.60
11	B2	1269	G	N1-C6-O6	5.28	123.07	119.90
37	BY	38	TRP	CG-CD2-CE3	-5.28	129.15	133.90
38	A1	203	G	C2-N3-C4	-5.28	109.26	111.90
38	A1	1076	G	N1-C6-O6	5.28	123.07	119.90
38	A1	1137	G	C4-C5-C6	5.28	121.97	118.80
38	A1	1560	G	N9-C4-C5	-5.28	103.29	105.40
38	A1	1718	C	C4'-C3'-C2'	5.28	107.88	102.60
38	A1	1811	G	N7-C8-N9	5.28	115.74	113.10
38	A1	2034	G	C4'-C3'-C2'	-5.28	97.32	102.60
38	A1	2346	A	C2-N3-C4	5.28	113.24	110.60
38	A1	2509	A	N1-C2-N3	5.28	131.94	129.30
39	A3	91	G	C2-N3-C4	-5.28	109.26	111.90
46	AD	19	PRO	N-CD-CG	5.28	111.12	103.20
2	A8	49	TYR	CD1-CE1-CZ	5.28	124.55	119.80
11	B2	258	A	C5'-C4'-O4'	5.28	115.44	109.10
11	B2	662	C	C2-N1-C1'	5.28	124.61	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	942	A	N1-C2-N3	5.28	131.94	129.30
11	B2	988	A	OP1-P-OP2	-5.28	111.68	119.60
11	B2	1034	G	N3-C4-C5	-5.28	125.96	128.60
11	B2	1141	G	C6-C5-N7	-5.28	127.23	130.40
38	A1	324	C	N1-C2-O2	-5.28	115.73	118.90
38	A1	365	G	N1-C2-N3	-5.28	120.73	123.90
38	A1	1280	C	O4'-C1'-C2'	-5.28	100.52	105.80
38	A1	2176	G	N1-C6-O6	5.28	123.07	119.90
38	A1	2350	G	C4-N9-C1'	5.28	133.36	126.50
38	A1	2565	A	C4'-C3'-C2'	-5.28	97.32	102.60
38	A1	2809	G	C2-N3-C4	-5.28	109.26	111.90
39	A3	34	C	C4-C5-C6	5.28	120.04	117.40
11	B2	196	G	C3'-C2'-C1'	5.28	105.72	101.50
11	B2	228	G	P-O5'-C5'	-5.28	112.45	120.90
11	B2	266	A	C4-C5-N7	-5.28	108.06	110.70
11	B2	340	A	C3'-C2'-C1'	5.28	105.72	101.50
11	B2	592	G	C6-C5-N7	-5.28	127.23	130.40
11	B2	612	C	N3-C4-N4	5.28	121.69	118.00
11	B2	809	C	P-O3'-C3'	5.28	126.03	119.70
11	B2	839	G	C5-C6-N1	-5.28	108.86	111.50
11	B2	1408	C	C3'-C2'-C1'	5.28	105.72	101.50
25	BM	31	THR	N-CA-C	-5.28	96.75	111.00
38	A1	23	G	N9-C4-C5	-5.28	103.29	105.40
38	A1	69	C	C1'-O4'-C4'	5.28	114.12	109.90
38	A1	143	C	O4'-C1'-N1	5.28	112.42	108.20
38	A1	422	G	C6-N1-C2	5.28	128.27	125.10
38	A1	647	G	N1-C2-N2	-5.28	111.45	116.20
38	A1	711	C	C4'-C3'-C2'	-5.28	97.32	102.60
38	A1	966	G	C8-N9-C4	-5.28	104.29	106.40
38	A1	1037	C	O4'-C1'-N1	5.28	112.42	108.20
38	A1	1151	G	C1'-O4'-C4'	-5.28	105.68	109.90
38	A1	1380	G	N3-C2-N2	5.28	123.59	119.90
38	A1	1526	G	N3-C2-N2	5.28	123.59	119.90
38	A1	1676	G	C4-C5-N7	-5.28	108.69	110.80
38	A1	1836	A	N9-C1'-C2'	-5.28	106.20	112.00
38	A1	2007	C	OP1-P-OP2	-5.28	111.69	119.60
38	A1	2427	C	C6-N1-C2	-5.28	118.19	120.30
38	A1	2530	G	N9-C4-C5	-5.28	103.29	105.40
38	A1	2809	G	C1'-O4'-C4'	-5.28	105.68	109.90
11	B2	561	A	C6-C5-N7	-5.28	128.61	132.30
11	B2	593	G	O4'-C4'-C3'	-5.28	98.72	104.00
11	B2	664	G	N7-C8-N9	5.28	115.74	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1010	G	C2-N3-C4	5.28	114.54	111.90
18	BF	207	ASN	CB-CG-OD1	-5.28	111.05	121.60
22	BJ	103	THR	N-CA-C	-5.28	96.76	111.00
38	A1	309	C	O4'-C1'-N1	5.28	112.42	108.20
38	A1	360	G	C5'-C4'-O4'	5.28	115.43	109.10
38	A1	368	U	C1'-O4'-C4'	5.28	114.12	109.90
38	A1	399	C	C2-N3-C4	5.28	122.54	119.90
38	A1	1459	A	C5-C6-N1	-5.28	115.06	117.70
38	A1	1779	C	C5-C4-N4	-5.28	116.51	120.20
38	A1	1826	G	N3-C2-N2	5.28	123.59	119.90
38	A1	2066	C	N3-C4-C5	-5.28	119.79	121.90
38	A1	2155	C	O4'-C1'-N1	5.28	112.42	108.20
38	A1	2538	G	N1-C2-N3	-5.28	120.73	123.90
38	A1	2648	C	C5'-C4'-O4'	5.28	115.43	109.10
38	A1	2819	C	O4'-C1'-N1	5.28	112.42	108.20
38	A1	2888	G	N1-C2-N3	-5.28	120.73	123.90
38	A1	2902	G	N3-C2-N2	5.28	123.59	119.90
38	A1	3022	C	N3-C4-N4	5.28	121.69	118.00
39	A3	46	G	P-O3'-C3'	-5.28	113.37	119.70
58	Ak	201	TYR	CB-CG-CD2	5.28	124.17	121.00
11	B2	841	C	N3-C4-N4	5.27	121.69	118.00
38	A1	671	G	C4-C5-C6	5.27	121.97	118.80
38	A1	1737	A	C5-N7-C8	5.27	106.54	103.90
38	A1	2983	G	N3-C4-C5	5.27	131.24	128.60
11	B2	212	G	C6-N1-C2	5.27	128.26	125.10
11	B2	1211	A	C4-C5-N7	-5.27	108.06	110.70
11	B2	1416	C	C1'-O4'-C4'	-5.27	105.68	109.90
38	A1	194	G	O4'-C1'-N9	5.27	112.42	108.20
38	A1	399	C	N3-C2-O2	5.27	125.59	121.90
38	A1	445	G	C4-C5-N7	5.27	112.91	110.80
38	A1	596	C	C2-N3-C4	-5.27	117.26	119.90
38	A1	778	A	C6-N1-C2	-5.27	115.44	118.60
38	A1	890	G	N9-C4-C5	5.27	107.51	105.40
38	A1	1216	A	P-O3'-C3'	5.27	126.03	119.70
38	A1	1504	C	N1-C2-N3	-5.27	115.51	119.20
38	A1	1609	G	N3-C4-N9	-5.27	122.84	126.00
38	A1	1802	G	N9-C4-C5	5.27	107.51	105.40
38	A1	1818	G	C5-C6-O6	-5.27	125.44	128.60
38	A1	1888	G	C6-C5-N7	-5.27	127.24	130.40
38	A1	2025	A	C4-C5-N7	5.27	113.34	110.70
38	A1	2050	U	N1-C2-N3	-5.27	111.74	114.90
38	A1	2217	C	N3-C2-O2	5.27	125.59	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2296	A	C4'-C3'-C2'	5.27	107.87	102.60
38	A1	2586	A	C5-N7-C8	5.27	106.54	103.90
38	A1	2899	G	C3'-C2'-C1'	5.27	105.72	101.50
38	A1	2902	G	P-O3'-C3'	5.27	126.03	119.70
39	A3	73	U	O4'-C1'-N1	5.27	112.42	108.20
11	B2	43	A	C5'-C4'-O4'	5.27	115.43	109.10
11	B2	307	G	C3'-C2'-C1'	-5.27	97.28	101.50
11	B2	471	G	C2-N3-C4	5.27	114.53	111.90
11	B2	1276	G	C5-C6-O6	-5.27	125.44	128.60
38	A1	98	G	C6-N1-C2	5.27	128.26	125.10
38	A1	117	A	C4-C5-C6	5.27	119.64	117.00
38	A1	695	G	C5-C6-O6	-5.27	125.44	128.60
38	A1	761	U	O4'-C1'-N1	5.27	112.42	108.20
38	A1	1069	A	O4'-C1'-C2'	5.27	112.34	107.60
38	A1	2712	G	OP2-P-O3'	5.27	116.80	105.20
38	A1	2728	U	C3'-C2'-C1'	-5.27	97.28	101.50
9	AX	377	LEU	CB-CG-CD2	5.27	119.96	111.00
10	B1	46	U	C3'-C2'-C1'	-5.27	97.28	101.50
11	B2	170	C	C3'-C2'-C1'	5.27	105.72	101.50
11	B2	550	G	C8-N9-C4	5.27	108.51	106.40
11	B2	781	U	C4-C5-C6	-5.27	116.54	119.70
11	B2	881	G	N7-C8-N9	5.27	115.73	113.10
13	BA	64	VAL	CB-CA-C	-5.27	101.39	111.40
38	A1	544	A	C6-N1-C2	5.27	121.76	118.60
38	A1	649	A	N7-C8-N9	-5.27	111.17	113.80
38	A1	804	C	C5-C4-N4	-5.27	116.51	120.20
38	A1	1124	G	C4-C5-C6	5.27	121.96	118.80
38	A1	1272	A	C3'-C2'-C1'	5.27	105.72	101.50
38	A1	1352	U	N1-C2-N3	-5.27	111.74	114.90
38	A1	1422	G	C4-C5-C6	5.27	121.96	118.80
38	A1	1728	C	C4-C5-C6	5.27	120.03	117.40
38	A1	2031	G	O5'-P-OP1	5.27	117.02	110.70
38	A1	2459	G	N9-C4-C5	5.27	107.51	105.40
38	A1	2955	G	C4-N9-C1'	-5.27	119.65	126.50
44	Ab	42	ARG	NH1-CZ-NH2	-5.27	113.60	119.40
63	AP	13	ARG	NE-CZ-NH1	-5.27	117.67	120.30
67	AZ	17	VAL	CA-CB-CG1	5.27	118.80	110.90
11	B2	299	G	C2-N3-C4	-5.27	109.27	111.90
11	B2	316	C	P-O3'-C3'	5.27	126.02	119.70
11	B2	380	C	N3-C4-N4	5.27	121.69	118.00
11	B2	577	C	N1-C2-O2	5.27	122.06	118.90
11	B2	1420	U	C3'-C2'-C1'	-5.27	97.29	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	149	G	C6-N1-C2	-5.27	121.94	125.10
38	A1	211	A	N3-C4-C5	-5.27	123.11	126.80
38	A1	528	G	N1-C2-N2	5.27	120.94	116.20
38	A1	603	G	N3-C4-N9	-5.27	122.84	126.00
38	A1	758	C	C4'-C3'-C2'	-5.27	97.33	102.60
38	A1	1064	G	N9-C4-C5	5.27	107.51	105.40
38	A1	1404	G	N1-C6-O6	5.27	123.06	119.90
38	A1	1408	G	O4'-C1'-N9	5.27	112.41	108.20
43	AB	180	TYR	CG-CD1-CE1	5.27	125.51	121.30
51	Ag	8	GLU	CB-CG-CD	-5.27	99.97	114.20
11	B2	156	A	C4-C5-C6	5.27	119.63	117.00
11	B2	1452	G	C8-N9-C4	-5.27	104.29	106.40
38	A1	179	A	C5-C6-N6	-5.27	119.49	123.70
38	A1	508	G	N3-C4-C5	5.27	131.23	128.60
38	A1	841	U	C4'-C3'-C2'	-5.27	97.33	102.60
38	A1	1832	G	C8-N9-C4	-5.27	104.29	106.40
38	A1	2063	U	C2-N1-C1'	-5.27	111.38	117.70
38	A1	2071	C	C4'-C3'-C2'	-5.27	97.33	102.60
38	A1	2318	G	N7-C8-N9	-5.27	110.47	113.10
38	A1	2828	G	C5-C6-N1	-5.27	108.87	111.50
38	A1	2887	C	C5-C4-N4	5.27	123.89	120.20
10	B1	38	G	C5'-C4'-O4'	5.26	115.42	109.10
11	B2	529	C	N1-C2-N3	-5.26	115.51	119.20
11	B2	556	G	C4-C5-N7	5.26	112.91	110.80
11	B2	672	G	C5'-C4'-O4'	5.26	115.42	109.10
11	B2	959	G	C6-N1-C2	-5.26	121.94	125.10
11	B2	1241	U	P-O5'-C5'	5.26	129.32	120.90
20	BH	149	ALA	N-CA-CB	5.26	117.47	110.10
38	A1	52	A	N3-C4-C5	-5.26	123.11	126.80
38	A1	1856	G	C6-C5-N7	-5.26	127.24	130.40
38	A1	2176	G	C2-N3-C4	5.26	114.53	111.90
38	A1	2238	G	N9-C4-C5	-5.26	103.29	105.40
41	AA	22	ARG	NE-CZ-NH2	-5.26	117.67	120.30
4	AQ	43	ARG	NH1-CZ-NH2	5.26	125.19	119.40
11	B2	19	G	N7-C8-N9	5.26	115.73	113.10
11	B2	211	G	O4'-C1'-N9	5.26	112.41	108.20
11	B2	1010	G	O4'-C1'-N9	5.26	112.41	108.20
11	B2	1266	A	C6-N1-C2	5.26	121.76	118.60
38	A1	1361	G	N3-C4-N9	5.26	129.16	126.00
38	A1	1714	G	C6-C5-N7	-5.26	127.24	130.40
38	A1	2877	A	O4'-C1'-C2'	-5.26	100.54	105.80
10	B1	60	A	C2-N3-C4	-5.26	107.97	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	377	A	C1'-O4'-C4'	5.26	114.11	109.90
11	B2	386	C	C3'-C2'-C1'	5.26	105.71	101.50
11	B2	463	G	N7-C8-N9	5.26	115.73	113.10
11	B2	525	A	O4'-C1'-N9	5.26	112.41	108.20
11	B2	730	G	O4'-C1'-C2'	5.26	112.34	107.60
11	B2	769	A	O4'-C1'-C2'	-5.26	100.54	105.80
32	BT	66	HIS	CB-CA-C	-5.26	99.88	110.40
38	A1	26	G	N3-C2-N2	5.26	123.58	119.90
38	A1	273	G	C4'-C3'-C2'	-5.26	97.34	102.60
38	A1	572	U	N1-C2-O2	5.26	126.48	122.80
38	A1	692	C	N3-C4-N4	5.26	121.68	118.00
38	A1	763	A	N7-C8-N9	-5.26	111.17	113.80
38	A1	1382	C	C5'-C4'-O4'	5.26	115.41	109.10
38	A1	1418	A	P-O3'-C3'	5.26	126.01	119.70
38	A1	2801	G	C4-C5-C6	5.26	121.96	118.80
38	A1	2829	C	O4'-C1'-N1	5.26	112.41	108.20
38	A1	2956	G	N3-C4-C5	-5.26	125.97	128.60
39	A3	33	U	O4'-C4'-C3'	-5.26	98.74	104.00
59	AL	123	VAL	CG1-CB-CG2	5.26	119.32	110.90
11	B2	764	C	N1-C1'-C2'	-5.26	106.22	112.00
11	B2	868	C	C5-C4-N4	-5.26	116.52	120.20
38	A1	238	C	N1-C2-N3	-5.26	115.52	119.20
38	A1	243	G	N3-C4-N9	5.26	129.16	126.00
38	A1	422	G	N7-C8-N9	-5.26	110.47	113.10
38	A1	544	A	C5'-C4'-O4'	5.26	115.41	109.10
38	A1	574	C	C3'-C2'-C1'	5.26	105.71	101.50
38	A1	823	G	N3-C2-N2	5.26	123.58	119.90
38	A1	1158	G	C3'-C2'-C1'	-5.26	97.29	101.50
38	A1	1258	G	N3-C4-C5	5.26	131.23	128.60
38	A1	1293	G	N1-C2-N3	-5.26	120.75	123.90
38	A1	1328	G	N1-C2-N2	-5.26	111.47	116.20
38	A1	1582	G	O4'-C1'-N9	5.26	112.41	108.20
38	A1	1617	G	P-O3'-C3'	-5.26	113.39	119.70
38	A1	1816	C	C5'-C4'-C3'	5.26	124.42	116.00
38	A1	1906	G	C6-C5-N7	-5.26	127.24	130.40
38	A1	1940	U	N3-C4-C5	-5.26	111.44	114.60
38	A1	2287	C	N1-C2-O2	-5.26	115.75	118.90
38	A1	2355	G	C5-N7-C8	-5.26	101.67	104.30
38	A1	2385	G	N1-C6-O6	5.26	123.06	119.90
38	A1	2528	U	N3-C4-O4	5.26	123.08	119.40
11	B2	124	C	C4'-C3'-C2'	-5.26	97.34	102.60
11	B2	949	G	P-O3'-C3'	5.26	126.01	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	986	G	O4'-C1'-N9	5.26	112.41	108.20
11	B2	1022	U	O4'-C1'-C2'	-5.26	100.54	105.80
11	B2	1040	A	C6-N1-C2	-5.26	115.44	118.60
11	B2	1114	G	N1-C2-N2	5.26	120.93	116.20
11	B2	1279	A	C5-C6-N1	-5.26	115.07	117.70
11	B2	1297	G	OP1-P-OP2	-5.26	111.71	119.60
11	B2	1468	A	C5-C6-N6	-5.26	119.49	123.70
38	A1	1961	G	C4-C5-C6	5.26	121.95	118.80
38	A1	1963	G	O5'-P-OP1	5.26	117.01	110.70
38	A1	2656	A	C3'-C2'-C1'	-5.26	97.29	101.50
11	B2	193	G	C6-C5-N7	-5.26	127.25	130.40
11	B2	466	C	N3-C4-N4	5.26	121.68	118.00
11	B2	593	G	N3-C4-C5	-5.26	125.97	128.60
11	B2	607	U	C5'-C4'-O4'	5.26	115.41	109.10
11	B2	971	G	N9-C4-C5	5.26	107.50	105.40
11	B2	975	A	C2-N3-C4	5.26	113.23	110.60
11	B2	1181	G	N1-C6-O6	5.26	123.05	119.90
19	BG	108	ARG	O-C-N	5.26	132.14	123.20
38	A1	374	C	C5-C6-N1	-5.26	118.37	121.00
38	A1	681	C	C4-C5-C6	5.26	120.03	117.40
38	A1	916	A	C5-N7-C8	-5.26	101.27	103.90
38	A1	1091	G	N3-C4-N9	5.26	129.15	126.00
38	A1	1525	G	C5-C6-O6	-5.26	125.45	128.60
38	A1	2018	C	O4'-C1'-N1	5.26	112.41	108.20
38	A1	2199	U	C2-N3-C4	5.26	130.15	127.00
38	A1	2465	A	C2-N3-C4	-5.26	107.97	110.60
38	A1	2665	G	C5'-C4'-C3'	-5.26	107.59	116.00
38	A1	3021	C	C5-C4-N4	-5.26	116.52	120.20
11	B2	610	G	OP2-P-O3'	5.25	116.76	105.20
11	B2	1343	C	C2-N3-C4	5.25	122.53	119.90
11	B2	1366	U	C1'-O4'-C4'	5.25	114.10	109.90
38	A1	589	G	OP1-P-OP2	-5.25	111.72	119.60
38	A1	1174	U	O4'-C1'-N1	5.25	112.40	108.20
38	A1	1395	G	N3-C4-N9	-5.25	122.85	126.00
38	A1	1663	C	C3'-C2'-C1'	-5.25	97.30	101.50
38	A1	2864	G	C4-C5-C6	5.25	121.95	118.80
43	AB	164	GLY	C-N-CA	5.25	133.34	122.30
11	B2	46	A	N1-C6-N6	5.25	121.75	118.60
11	B2	206	C	C2-N1-C1'	-5.25	113.02	118.80
11	B2	442	C	C2-N1-C1'	5.25	124.58	118.80
11	B2	447	A	N1-C6-N6	5.25	121.75	118.60
11	B2	531	G	O4'-C1'-C2'	5.25	112.33	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1171	G	C5-C6-O6	-5.25	125.45	128.60
11	B2	1399	G	C5-N7-C8	-5.25	101.67	104.30
38	A1	143	C	O5'-P-OP2	5.25	117.00	110.70
38	A1	603	G	N3-C4-C5	5.25	131.23	128.60
38	A1	780	G	C5-C6-O6	-5.25	125.45	128.60
38	A1	1235	A	C5-C6-N6	-5.25	119.50	123.70
38	A1	1455	U	N1-C2-O2	5.25	126.48	122.80
38	A1	1681	G	C6-C5-N7	-5.25	127.25	130.40
38	A1	2031	G	N3-C2-N2	5.25	123.58	119.90
38	A1	2106	G	N1-C2-N3	-5.25	120.75	123.90
38	A1	2230	G	O4'-C1'-N9	5.25	112.40	108.20
39	A3	89	G	C6-C5-N7	-5.25	127.25	130.40
66	AY	94	GLU	CB-CA-C	-5.25	99.89	110.40
3	Af	47	THR	N-CA-CB	5.25	120.28	110.30
10	B1	47	G	C5-C6-N1	5.25	114.13	111.50
11	B2	63	G	N3-C2-N2	5.25	123.58	119.90
38	A1	339	A	C1'-O4'-C4'	-5.25	105.70	109.90
38	A1	371	U	O4'-C1'-C2'	-5.25	100.55	105.80
38	A1	684	G	C4-C5-N7	-5.25	108.70	110.80
38	A1	1076	G	N3-C4-C5	-5.25	125.97	128.60
38	A1	1246	G	N3-C2-N2	5.25	123.58	119.90
38	A1	1264	G	C4-C5-N7	-5.25	108.70	110.80
38	A1	1636	C	C2-N3-C4	5.25	122.53	119.90
38	A1	2039	U	N1-C2-N3	-5.25	111.75	114.90
38	A1	2092	G	C4-C5-C6	5.25	121.95	118.80
38	A1	2098	C	C3'-C2'-C1'	5.25	105.70	101.50
38	A1	2169	C	P-O3'-C3'	5.25	126.00	119.70
43	AB	188	PHE	CB-CG-CD1	-5.25	117.12	120.80
45	AC	86	TYR	CG-CD2-CE2	5.25	125.50	121.30
66	AY	40	THR	N-CA-C	-5.25	96.82	111.00
11	B2	347	G	N3-C4-N9	5.25	129.15	126.00
11	B2	1007	A	C4'-C3'-C2'	-5.25	97.35	102.60
11	B2	1036	G	C4-C5-C6	5.25	121.95	118.80
11	B2	1269	G	O5'-P-OP2	-5.25	100.97	105.70
23	BK	25	ARG	CD-NE-CZ	5.25	130.95	123.60
38	A1	36	G	C4-C5-N7	-5.25	108.70	110.80
38	A1	506	G	N7-C8-N9	5.25	115.72	113.10
38	A1	762	G	C2-N3-C4	-5.25	109.28	111.90
38	A1	1033	C	N3-C4-N4	5.25	121.67	118.00
38	A1	1195	G	C3'-C2'-C1'	-5.25	97.30	101.50
38	A1	2246	G	N3-C4-N9	-5.25	122.85	126.00
38	A1	2246	G	P-O5'-C5'	5.25	129.30	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	201	G	P-O5'-C5'	-5.25	112.50	120.90
11	B2	334	G	N1-C2-N3	-5.25	120.75	123.90
11	B2	394	C	C5'-C4'-C3'	5.25	124.40	116.00
11	B2	1137	G	N9-C1'-C2'	-5.25	106.23	112.00
11	B2	1138	G	C2-N3-C4	5.25	114.52	111.90
11	B2	1217	C	C1'-O4'-C4'	5.25	114.10	109.90
11	B2	1466	G	C5-N7-C8	-5.25	101.68	104.30
18	BF	38	PHE	CB-CG-CD2	5.25	124.47	120.80
38	A1	188	A	P-O3'-C3'	-5.25	113.40	119.70
38	A1	445	G	C2-N3-C4	-5.25	109.28	111.90
38	A1	1076	G	C4'-C3'-C2'	-5.25	97.35	102.60
38	A1	1153	U	N3-C2-O2	5.25	125.88	122.20
38	A1	1161	A	C4'-C3'-C2'	-5.25	97.35	102.60
38	A1	1445	G	C4-C5-C6	5.25	121.95	118.80
38	A1	2119	C	N3-C4-N4	5.25	121.67	118.00
38	A1	2133	G	N1-C6-O6	5.25	123.05	119.90
38	A1	2465	A	C8-N9-C4	5.25	107.90	105.80
38	A1	2637	U	C5-C6-N1	-5.25	120.08	122.70
38	A1	2947	G	N3-C4-C5	5.25	131.22	128.60
62	AO	21	TYR	CD1-CE1-CZ	-5.25	115.08	119.80
11	B2	345	G	N3-C4-C5	5.25	131.22	128.60
11	B2	449	U	C2-N3-C4	-5.25	123.85	127.00
11	B2	550	G	N1-C2-N3	-5.25	120.75	123.90
11	B2	898	G	P-O3'-C3'	-5.25	113.40	119.70
11	B2	1032	A	N3-C4-C5	-5.25	123.13	126.80
38	A1	1207	G	N1-C2-N2	-5.25	111.48	116.20
38	A1	1578	C	O4'-C1'-C2'	-5.25	100.55	105.80
38	A1	1786	G	C3'-C2'-C1'	-5.25	97.30	101.50
38	A1	2198	U	C4-C5-C6	5.25	122.85	119.70
38	A1	2243	G	N3-C2-N2	5.25	123.57	119.90
38	A1	2251	G	N3-C4-C5	5.25	131.22	128.60
38	A1	2756	G	C6-N1-C2	5.25	128.25	125.10
39	A3	106	G	C1'-O4'-C4'	-5.25	105.70	109.90
51	Ag	45	GLU	CA-C-N	5.25	131.79	117.10
11	B2	226	G	C1'-O4'-C4'	5.25	114.10	109.90
11	B2	637	G	N3-C4-C5	-5.25	125.98	128.60
11	B2	692	G	O4'-C1'-N9	5.25	112.40	108.20
11	B2	1470	G	O4'-C1'-N9	5.25	112.40	108.20
38	A1	239	G	N1-C2-N3	-5.25	120.75	123.90
38	A1	1048	C	C5'-C4'-O4'	-5.25	102.81	109.10
38	A1	1380	G	P-O3'-C3'	-5.25	113.41	119.70
38	A1	1642	G	C8-N9-C4	5.25	108.50	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1701	C	N3-C4-C5	-5.25	119.80	121.90
38	A1	2757	G	C8-N9-C4	-5.25	104.30	106.40
57	Aj	67	LEU	CB-CG-CD2	5.25	119.92	111.00
61	AN	52	ALA	CB-CA-C	-5.25	102.23	110.10
11	B2	9	U	N3-C2-O2	-5.24	118.53	122.20
11	B2	232	G	N1-C2-N2	-5.24	111.48	116.20
11	B2	297	G	C4-C5-N7	5.24	112.90	110.80
11	B2	454	G	C8-N9-C4	5.24	108.50	106.40
11	B2	747	U	C2'-C3'-O3'	5.24	122.09	113.70
11	B2	875	G	O4'-C1'-N9	5.24	112.39	108.20
11	B2	1103	G	C6-C5-N7	-5.24	127.25	130.40
11	B2	1285	C	N3-C4-N4	5.24	121.67	118.00
11	B2	1420	U	C5-C4-O4	-5.24	122.75	125.90
11	B2	1465	C	C5'-C4'-O4'	5.24	115.39	109.10
14	BB	100	THR	CA-CB-CG2	-5.24	105.06	112.40
26	BN	127	VAL	CA-CB-CG2	-5.24	103.04	110.90
38	A1	34	C	C5-C4-N4	-5.24	116.53	120.20
38	A1	210	A	C8-N9-C4	5.24	107.90	105.80
38	A1	259	A	C6-N1-C2	-5.24	115.45	118.60
38	A1	427	G	N7-C8-N9	-5.24	110.48	113.10
38	A1	447	G	C6-C5-N7	-5.24	127.25	130.40
38	A1	1310	A	N3-C4-C5	-5.24	123.13	126.80
38	A1	1761	C	C2-N3-C4	5.24	122.52	119.90
38	A1	1826	G	N1-C6-O6	5.24	123.05	119.90
38	A1	1968	A	C8-N9-C4	-5.24	103.70	105.80
38	A1	2168	C	C1'-O4'-C4'	5.24	114.09	109.90
38	A1	2344	G	C1'-O4'-C4'	-5.24	105.70	109.90
43	AB	179	TYR	CD1-CE1-CZ	5.24	124.52	119.80
10	B1	51	G	N3-C4-N9	-5.24	122.86	126.00
18	BF	20	THR	CA-CB-CG2	-5.24	105.06	112.40
38	A1	884	C	N3-C4-C5	-5.24	119.80	121.90
38	A1	1063	C	C2-N3-C4	5.24	122.52	119.90
38	A1	1158	G	N1-C2-N2	-5.24	111.48	116.20
38	A1	1960	U	N3-C4-O4	5.24	123.07	119.40
38	A1	2698	G	C8-N9-C4	5.24	108.50	106.40
38	A1	2999	G	C5-C6-O6	-5.24	125.45	128.60
41	AA	115	PRO	N-CA-CB	5.24	109.59	103.30
11	B2	270	A	N3-C4-C5	-5.24	123.13	126.80
11	B2	1116	G	C4-C5-C6	5.24	121.94	118.80
11	B2	1380	C	P-O5'-C5'	-5.24	112.52	120.90
15	BC	13	ARG	NE-CZ-NH1	-5.24	117.68	120.30
29	BQ	103	VAL	CA-CB-CG2	-5.24	103.04	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	303	A	C5-C6-N6	-5.24	119.51	123.70
38	A1	904	G	C4'-C3'-C2'	-5.24	97.36	102.60
38	A1	1138	C	C4'-C3'-C2'	-5.24	97.36	102.60
38	A1	1254	C	O4'-C1'-C2'	-5.24	100.56	105.80
38	A1	2082	C	N1-C2-N3	-5.24	115.53	119.20
38	A1	2264	G	O4'-C1'-C2'	5.24	112.32	107.60
38	A1	2270	G	O4'-C1'-N9	5.24	112.39	108.20
38	A1	2509	A	C4-C5-C6	5.24	119.62	117.00
39	A3	91	G	N3-C4-N9	-5.24	122.86	126.00
39	A3	95	G	C6-C5-N7	-5.24	127.26	130.40
10	B1	6	G	C5'-C4'-C3'	5.24	124.38	116.00
10	B1	22	A	C4-C5-N7	-5.24	108.08	110.70
10	B1	57	C	P-O5'-C5'	5.24	129.28	120.90
11	B2	852	G	O4'-C4'-C3'	-5.24	98.76	104.00
11	B2	1188	C	N3-C4-C5	-5.24	119.81	121.90
17	BE	83	PHE	CB-CG-CD2	-5.24	117.13	120.80
18	BF	40	ARG	NE-CZ-NH2	-5.24	117.68	120.30
19	BG	102	ARG	NE-CZ-NH2	5.24	122.92	120.30
20	BH	163	ARG	NH1-CZ-NH2	-5.24	113.64	119.40
32	BT	66	HIS	N-CA-CB	5.24	120.03	110.60
38	A1	37	C	C6-N1-C2	-5.24	118.20	120.30
38	A1	114	C	C6-N1-C2	-5.24	118.20	120.30
38	A1	240	A	C5'-C4'-C3'	5.24	124.38	116.00
38	A1	718	G	C4-C5-C6	5.24	121.94	118.80
38	A1	994	G	C6-N1-C2	5.24	128.24	125.10
38	A1	1299	C	N1-C1'-C2'	-5.24	106.24	112.00
38	A1	1627	G	N3-C2-N2	5.24	123.57	119.90
38	A1	2193	G	C3'-C2'-C1'	-5.24	97.31	101.50
38	A1	2457	C	N1-C2-O2	-5.24	115.76	118.90
38	A1	2510	A	OP1-P-OP2	-5.24	111.74	119.60
38	A1	2765	C	N3-C4-N4	5.24	121.67	118.00
38	A1	2887	C	N3-C4-C5	-5.24	119.81	121.90
39	A3	46	G	N1-C2-N2	5.24	120.91	116.20
51	Ag	45	GLU	OE1-CD-OE2	5.24	129.59	123.30
11	B2	19	G	O4'-C1'-N9	5.24	112.39	108.20
11	B2	342	G	N7-C8-N9	-5.24	110.48	113.10
38	A1	626	C	N1-C1'-C2'	-5.24	106.24	112.00
38	A1	1128	G	N3-C2-N2	5.24	123.57	119.90
38	A1	2061	A	N3-C4-N9	5.24	131.59	127.40
38	A1	2381	A	C8-N9-C1'	-5.24	118.27	127.70
38	A1	2730	U	C4-C5-C6	5.24	122.84	119.70
60	AM	53	TYR	CB-CG-CD1	5.24	124.14	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	B1	18	U	C4'-C3'-C2'	5.24	107.83	102.60
11	B2	315	A	N3-C4-N9	5.24	131.59	127.40
11	B2	466	C	C6-N1-C2	-5.24	118.21	120.30
11	B2	883	G	N3-C2-N2	5.24	123.56	119.90
11	B2	1404	C	O5'-C5'-C4'	-5.24	101.75	111.70
19	BG	119	VAL	N-CA-C	-5.24	96.86	111.00
38	A1	604	A	C5-N7-C8	5.24	106.52	103.90
38	A1	662	A	C8-N9-C4	-5.24	103.71	105.80
38	A1	1193	G	C6-C5-N7	-5.24	127.26	130.40
38	A1	2152	G	N3-C4-C5	-5.24	125.98	128.60
38	A1	2245	C	N1-C2-O2	5.24	122.04	118.90
38	A1	2809	G	C4'-C3'-C2'	-5.24	97.36	102.60
38	A1	2978	G	C5-N7-C8	5.24	106.92	104.30
11	B2	297	G	C6-C5-N7	-5.23	127.26	130.40
11	B2	925	U	N3-C2-O2	5.23	125.86	122.20
38	A1	1126	C	C5'-C4'-C3'	-5.23	107.63	116.00
38	A1	1171	G	N9-C4-C5	5.23	107.49	105.40
38	A1	2138	A	N1-C2-N3	-5.23	126.68	129.30
38	A1	2288	C	N1-C2-O2	5.23	122.04	118.90
4	AQ	31	ASP	CB-CG-OD2	5.23	123.01	118.30
4	AQ	126	ARG	NH1-CZ-NH2	-5.23	113.64	119.40
11	B2	762	G	C4-N9-C1'	-5.23	119.70	126.50
11	B2	1158	G	C2-N3-C4	-5.23	109.28	111.90
11	B2	1440	G	C2-N3-C4	5.23	114.52	111.90
38	A1	600	A	C5-C6-N6	-5.23	119.51	123.70
38	A1	871	G	N7-C8-N9	5.23	115.72	113.10
38	A1	1112	G	C3'-C2'-C1'	-5.23	97.31	101.50
38	A1	1331	U	OP2-P-O3'	5.23	116.71	105.20
38	A1	1696	G	N3-C4-C5	-5.23	125.98	128.60
38	A1	2292	A	C8-N9-C4	5.23	107.89	105.80
38	A1	2322	A	C1'-O4'-C4'	5.23	114.09	109.90
42	Aa	11	PHE	CB-CG-CD2	5.23	124.46	120.80
45	AC	41	PHE	CB-CG-CD2	5.23	124.46	120.80
48	AE	124	PRO	N-CD-CG	5.23	111.05	103.20
57	Aj	82	ARG	NE-CZ-NH1	5.23	122.92	120.30
60	AM	133	VAL	CA-CB-CG1	5.23	118.75	110.90
11	B2	42	G	C4-C5-N7	5.23	112.89	110.80
11	B2	709	G	C8-N9-C4	5.23	108.49	106.40
11	B2	897	A	C4-C5-C6	5.23	119.61	117.00
11	B2	918	A	C8-N9-C4	-5.23	103.71	105.80
11	B2	1141	G	N1-C6-O6	5.23	123.04	119.90
11	B2	1434	C	P-O3'-C3'	5.23	125.98	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	177	G	C1'-O4'-C4'	-5.23	105.72	109.90
38	A1	508	G	N3-C4-N9	-5.23	122.86	126.00
38	A1	713	C	C2-N3-C4	-5.23	117.28	119.90
38	A1	1091	G	C5-N7-C8	-5.23	101.69	104.30
38	A1	1451	A	N1-C6-N6	5.23	121.74	118.60
38	A1	1490	G	C6-C5-N7	-5.23	127.26	130.40
38	A1	1932	G	N3-C4-C5	5.23	131.22	128.60
38	A1	2087	U	P-O5'-C5'	5.23	129.27	120.90
38	A1	2277	G	C5-N7-C8	-5.23	101.69	104.30
38	A1	2545	A	N3-C4-N9	5.23	131.58	127.40
38	A1	2559	G	C2-N3-C4	5.23	114.52	111.90
38	A1	2560	G	N1-C2-N2	5.23	120.91	116.20
38	A1	2852	U	OP1-P-OP2	-5.23	111.75	119.60
39	A3	23	A	C5-C6-N1	-5.23	115.08	117.70
39	A3	27	C	N3-C4-N4	5.23	121.66	118.00
11	B2	208	U	N3-C2-O2	5.23	125.86	122.20
20	BH	135	ASP	CB-CG-OD1	-5.23	113.59	118.30
38	A1	919	G	C5-C6-N1	-5.23	108.89	111.50
38	A1	957	C	C4-C5-C6	5.23	120.02	117.40
38	A1	1121	C	C5-C6-N1	5.23	123.61	121.00
38	A1	2506	G	O3'-P-O5'	-5.23	94.06	104.00
38	A1	2693	G	C4'-C3'-C2'	-5.23	97.37	102.60
38	A1	2731	C	C5-C6-N1	-5.23	118.39	121.00
38	A1	2821	G	N1-C2-N3	-5.23	120.76	123.90
39	A3	12	G	P-O5'-C5'	-5.23	112.53	120.90
6	AT	56	THR	CA-CB-CG2	-5.23	105.08	112.40
10	B1	45	G	C8-N9-C1'	-5.23	120.20	127.00
11	B2	10	G	C4-C5-N7	5.23	112.89	110.80
11	B2	11	A	C4-C5-C6	5.23	119.61	117.00
11	B2	38	G	C5-C6-N1	-5.23	108.89	111.50
11	B2	175	G	N1-C6-O6	5.23	123.04	119.90
11	B2	294	A	C4-C5-C6	5.23	119.61	117.00
11	B2	488	A	P-O3'-C3'	-5.23	113.43	119.70
11	B2	1230	G	OP1-P-OP2	-5.23	111.76	119.60
38	A1	438	G	C6-N1-C2	-5.23	121.96	125.10
38	A1	494	C	O4'-C1'-N1	5.23	112.38	108.20
38	A1	551	A	C4'-C3'-C2'	-5.23	97.37	102.60
38	A1	700	A	C8-N9-C4	5.23	107.89	105.80
38	A1	904	G	C5'-C4'-C3'	-5.23	107.64	116.00
38	A1	1477	C	C5-C4-N4	-5.23	116.54	120.20
38	A1	1769	G	C5-N7-C8	5.23	106.91	104.30
38	A1	1822	G	N1-C2-N3	-5.23	120.76	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2508	G	O4'-C1'-N9	5.23	112.38	108.20
38	A1	2656	A	N3-C4-N9	5.23	131.58	127.40
11	B2	178	C	P-O5'-C5'	-5.23	112.54	120.90
11	B2	368	C	C5-C6-N1	5.23	123.61	121.00
11	B2	516	A	C4-N9-C1'	5.23	135.71	126.30
11	B2	627	G	N7-C8-N9	-5.23	110.49	113.10
11	B2	1099	A	C4'-C3'-C2'	-5.23	97.37	102.60
38	A1	275	C	N3-C4-N4	5.23	121.66	118.00
38	A1	440	A	C5'-C4'-O4'	-5.23	102.83	109.10
38	A1	482	A	C2-N3-C4	-5.23	107.99	110.60
38	A1	732	G	C5-C6-O6	-5.23	125.46	128.60
38	A1	1269	U	O4'-C1'-N1	5.23	112.38	108.20
38	A1	1466	U	N3-C2-O2	-5.23	118.54	122.20
38	A1	1501	G	O4'-C1'-N9	5.23	112.38	108.20
38	A1	1873	G	C4-C5-N7	5.23	112.89	110.80
38	A1	2571	G	C4'-C3'-C2'	-5.23	97.37	102.60
38	A1	2799	C	C6-N1-C1'	-5.23	114.53	120.80
5	AS	128	TRP	N-CA-CB	5.22	120.00	110.60
11	B2	394	C	P-O5'-C5'	5.22	129.26	120.90
11	B2	1131	G	OP2-P-O3'	5.22	116.70	105.20
11	B2	1389	G	C5-C6-N1	-5.22	108.89	111.50
38	A1	136	U	C6-N1-C1'	-5.22	113.89	121.20
38	A1	333	A	N3-C4-C5	-5.22	123.14	126.80
38	A1	365	G	C4-N9-C1'	-5.22	119.71	126.50
38	A1	731	C	C2-N3-C4	-5.22	117.29	119.90
38	A1	953	G	C4-C5-N7	-5.22	108.71	110.80
38	A1	1131	G	N1-C6-O6	5.22	123.03	119.90
38	A1	1173	G	C4-C5-C6	5.22	121.94	118.80
38	A1	1345	G	N3-C4-C5	5.22	131.21	128.60
38	A1	1805	U	C5-C4-O4	5.22	129.03	125.90
38	A1	1886	C	C6-N1-C1'	-5.22	114.53	120.80
38	A1	2895	G	C5-C6-N1	-5.22	108.89	111.50
11	B2	36	G	C2-N3-C4	-5.22	109.29	111.90
11	B2	286	G	C8-N9-C4	5.22	108.49	106.40
11	B2	604	C	C4-C5-C6	5.22	120.01	117.40
11	B2	977	G	C6-N1-C2	5.22	128.23	125.10
38	A1	82	C	O3'-P-O5'	5.22	113.92	104.00
38	A1	581	A	C2-N3-C4	-5.22	107.99	110.60
38	A1	623	G	C4-C5-C6	5.22	121.93	118.80
38	A1	929	G	OP1-P-OP2	-5.22	111.77	119.60
38	A1	1708	U	C5'-C4'-O4'	5.22	115.37	109.10
38	A1	1714	G	C1'-O4'-C4'	5.22	114.08	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2062	A	N3-C4-N9	-5.22	123.22	127.40
38	A1	2598	C	N1-C2-N3	-5.22	115.55	119.20
38	A1	2650	G	C5'-C4'-C3'	-5.22	107.64	116.00
38	A1	2768	C	C5-C4-N4	-5.22	116.55	120.20
39	A3	17	G	P-O5'-C5'	-5.22	112.54	120.90
44	Ab	31	TYR	CB-CG-CD1	5.22	124.13	121.00
11	B2	217	C	O4'-C1'-N1	5.22	112.38	108.20
11	B2	255	G	N9-C4-C5	-5.22	103.31	105.40
11	B2	773	A	C2-N3-C4	5.22	113.21	110.60
38	A1	659	U	N3-C2-O2	5.22	125.86	122.20
38	A1	674	G	C5-C6-N1	-5.22	108.89	111.50
38	A1	852	A	N7-C8-N9	5.22	116.41	113.80
38	A1	1032	C	N3-C4-C5	-5.22	119.81	121.90
38	A1	2512	C	P-O5'-C5'	-5.22	112.55	120.90
38	A1	2970	U	C6-N1-C1'	-5.22	113.89	121.20
4	AQ	87	ALA	CB-CA-C	-5.22	102.27	110.10
11	B2	312	U	C4-C5-C6	-5.22	116.57	119.70
11	B2	430	G	O4'-C1'-N9	5.22	112.38	108.20
11	B2	598	U	C5'-C4'-O4'	-5.22	102.84	109.10
11	B2	836	G	C6-N1-C2	5.22	128.23	125.10
11	B2	1462	A	C5'-C4'-C3'	-5.22	107.65	116.00
38	A1	328	G	C5'-C4'-C3'	-5.22	107.65	116.00
38	A1	330	U	P-O5'-C5'	5.22	129.25	120.90
38	A1	356	C	C4'-C3'-C2'	-5.22	97.38	102.60
38	A1	435	G	C4-C5-N7	-5.22	108.71	110.80
38	A1	623	G	O4'-C1'-N9	5.22	112.38	108.20
38	A1	668	G	O4'-C4'-C3'	-5.22	98.78	104.00
38	A1	1556	G	C6-N1-C2	-5.22	121.97	125.10
38	A1	1653	U	C5-C6-N1	5.22	125.31	122.70
38	A1	1881	A	N9-C1'-C2'	-5.22	106.26	112.00
38	A1	1896	U	O4'-C1'-N1	5.22	112.38	108.20
38	A1	1978	A	N1-C6-N6	5.22	121.73	118.60
38	A1	2832	G	N1-C2-N3	-5.22	120.77	123.90
38	A1	2952	C	OP1-P-OP2	-5.22	111.77	119.60
38	A1	2981	G	O4'-C1'-N9	5.22	112.38	108.20
38	A1	2988	A	N9-C4-C5	5.22	107.89	105.80
59	AL	113	LEU	CB-CG-CD2	5.22	119.87	111.00
11	B2	500	A	N3-C4-N9	-5.22	123.23	127.40
11	B2	990	G	N1-C6-O6	5.22	123.03	119.90
38	A1	67	U	C4-C5-C6	-5.22	116.57	119.70
38	A1	169	G	C5-C6-N1	-5.22	108.89	111.50
38	A1	233	A	C4'-C3'-C2'	-5.22	97.38	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	940	G	P-O3'-C3'	5.22	125.96	119.70
38	A1	1533	G	C8-N9-C1'	5.22	133.78	127.00
38	A1	1848	A	P-O5'-C5'	-5.22	112.55	120.90
38	A1	2367	C	C4-C5-C6	5.22	120.01	117.40
38	A1	2744	U	O4'-C1'-N1	5.22	112.37	108.20
38	A1	2776	A	N9-C4-C5	-5.22	103.71	105.80
1	A7	66	LYS	N-CA-CB	5.22	119.99	110.60
3	Af	3	ARG	NE-CZ-NH2	-5.22	117.69	120.30
9	AX	277	TYR	CB-CG-CD1	-5.22	117.87	121.00
11	B2	268	C	C5-C6-N1	5.22	123.61	121.00
11	B2	855	C	N1-C2-O2	5.22	122.03	118.90
11	B2	904	G	N3-C2-N2	5.22	123.55	119.90
11	B2	961	U	C5'-C4'-O4'	5.22	115.36	109.10
11	B2	1127	A	C4'-C3'-C2'	5.22	107.82	102.60
11	B2	1235	A	C8-N9-C4	-5.22	103.71	105.80
11	B2	1415	U	O4'-C1'-N1	5.22	112.37	108.20
27	BO	129	GLN	CB-CA-C	5.22	120.83	110.40
38	A1	548	U	C4-C5-C6	-5.22	116.57	119.70
38	A1	901	C	N3-C4-C5	-5.22	119.81	121.90
38	A1	1280	C	O4'-C1'-N1	5.22	112.37	108.20
38	A1	1565	G	N3-C4-N9	5.22	129.13	126.00
38	A1	1863	G	C4-C5-C6	-5.22	115.67	118.80
38	A1	2099	G	N9-C4-C5	-5.22	103.31	105.40
39	A3	105	G	N3-C2-N2	5.22	123.55	119.90
45	AC	266	TRP	CE2-CD2-CG	-5.22	103.13	107.30
64	AR	57	ARG	CB-CA-C	-5.22	99.97	110.40
4	AQ	139	TYR	CB-CG-CD1	5.21	124.13	121.00
11	B2	74	U	P-O3'-C3'	5.21	125.96	119.70
11	B2	602	G	O4'-C4'-C3'	-5.21	98.79	104.00
11	B2	731	A	N9-C4-C5	-5.21	103.71	105.80
11	B2	1102	A	N1-C2-N3	5.21	131.91	129.30
11	B2	1330	G	C2-N3-C4	-5.21	109.29	111.90
11	B2	1433	C	N3-C2-O2	5.21	125.55	121.90
31	BS	4	ILE	CB-CA-C	5.21	122.03	111.60
36	BX	11	VAL	CA-CB-CG2	5.21	118.72	110.90
38	A1	54	G	N9-C4-C5	-5.21	103.31	105.40
38	A1	546	C	N1-C1'-C2'	-5.21	106.26	112.00
38	A1	854	G	N1-C2-N2	5.21	120.89	116.20
38	A1	1336	G	N9-C1'-C2'	-5.21	106.26	112.00
38	A1	1720	G	OP1-P-OP2	-5.21	111.78	119.60
38	A1	2271	G	N3-C4-C5	-5.21	125.99	128.60
42	Aa	10	ILE	N-CA-C	-5.21	96.92	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	331	C	C5'-C4'-C3'	5.21	124.34	116.00
14	BB	174	GLU	OE1-CD-OE2	5.21	129.56	123.30
20	BH	36	TYR	CB-CG-CD1	5.21	124.13	121.00
38	A1	85	G	C5'-C4'-C3'	5.21	124.34	116.00
38	A1	170	A	C8-N9-C4	-5.21	103.72	105.80
38	A1	342	C	N1-C2-N3	-5.21	115.55	119.20
38	A1	590	A	C5'-C4'-C3'	-5.21	107.66	116.00
38	A1	652	G	C6-C5-N7	-5.21	127.27	130.40
38	A1	1444	A	P-O3'-C3'	5.21	125.95	119.70
38	A1	1596	G	C2-N3-C4	5.21	114.51	111.90
38	A1	1601	G	N9-C4-C5	5.21	107.48	105.40
38	A1	2093	A	N3-C4-C5	-5.21	123.15	126.80
39	A3	37	U	N1-C2-N3	-5.21	111.77	114.90
11	B2	193	G	C8-N9-C4	-5.21	104.31	106.40
11	B2	390	G	O4'-C1'-N9	5.21	112.37	108.20
11	B2	1013	G	C6-C5-N7	-5.21	127.27	130.40
38	A1	109	G	C4'-C3'-C2'	-5.21	97.39	102.60
38	A1	123	A	C6-C5-N7	5.21	135.95	132.30
38	A1	256	G	C4'-C3'-C2'	-5.21	97.39	102.60
38	A1	367	G	C4-C5-N7	5.21	112.88	110.80
38	A1	554	C	C4'-C3'-C2'	-5.21	97.39	102.60
38	A1	598	C	O4'-C1'-N1	5.21	112.37	108.20
38	A1	961	C	O3'-P-O5'	-5.21	94.10	104.00
38	A1	963	G	N3-C4-C5	-5.21	125.99	128.60
38	A1	1068	U	C4-C5-C6	5.21	122.83	119.70
38	A1	1398	C	O4'-C1'-N1	5.21	112.37	108.20
38	A1	2184	G	C1'-O4'-C4'	5.21	114.07	109.90
38	A1	2839	A	N3-C4-N9	5.21	131.57	127.40
38	A1	3041	U	C2-N1-C1'	-5.21	111.45	117.70
47	Ad	60	THR	CA-CB-OG1	5.21	119.94	109.00
11	B2	156	A	P-O5'-C5'	-5.21	112.56	120.90
11	B2	357	C	C6-N1-C1'	-5.21	114.55	120.80
11	B2	406	U	N1-C2-O2	-5.21	119.15	122.80
11	B2	494	G	N3-C2-N2	5.21	123.55	119.90
11	B2	1101	G	N3-C2-N2	5.21	123.55	119.90
11	B2	1271	G	N3-C4-C5	5.21	131.21	128.60
13	BA	158	VAL	CA-CB-CG2	-5.21	103.09	110.90
38	A1	605	A	C4-C5-N7	-5.21	108.09	110.70
38	A1	730	C	C4'-C3'-C2'	-5.21	97.39	102.60
38	A1	1345	G	C5-N7-C8	-5.21	101.69	104.30
38	A1	1388	U	N3-C2-O2	5.21	125.85	122.20
38	A1	2673	C	O4'-C4'-C3'	-5.21	98.79	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	120	C	O4'-C1'-N1	5.21	112.37	108.20
11	B2	180	G	N1-C2-N2	-5.21	111.51	116.20
11	B2	375	G	P-O5'-C5'	-5.21	112.57	120.90
11	B2	393	A	C5-N7-C8	5.21	106.50	103.90
11	B2	401	U	N3-C4-O4	5.21	123.05	119.40
11	B2	569	G	C5-N7-C8	5.21	106.90	104.30
11	B2	721	A	C5-C6-N1	-5.21	115.10	117.70
11	B2	1199	A	N1-C6-N6	5.21	121.72	118.60
11	B2	1205	G	C4-N9-C1'	-5.21	119.73	126.50
11	B2	1239	A	N9-C4-C5	-5.21	103.72	105.80
11	B2	1261	U	N1-C2-O2	-5.21	119.16	122.80
11	B2	1393	A	O4'-C1'-N9	5.21	112.37	108.20
11	B2	1394	G	O5'-C5'-C4'	-5.21	101.80	111.70
16	BD	83	LEU	N-CA-C	-5.21	96.94	111.00
24	BL	42	THR	CA-CB-CG2	-5.21	105.11	112.40
38	A1	335	C	C6-N1-C2	5.21	122.38	120.30
38	A1	944	G	C5-C6-N1	5.21	114.10	111.50
38	A1	1529	A	C1'-O4'-C4'	-5.21	105.73	109.90
38	A1	1575	G	C6-N1-C2	-5.21	121.97	125.10
38	A1	1736	G	N9-C4-C5	5.21	107.48	105.40
38	A1	1753	G	C4-C5-C6	5.21	121.92	118.80
38	A1	1868	C	C1'-O4'-C4'	5.21	114.07	109.90
38	A1	2321	A	C2-N3-C4	5.21	113.20	110.60
38	A1	2878	A	C4-C5-C6	5.21	119.60	117.00
6	AT	31	ASP	CB-CG-OD1	5.21	122.99	118.30
10	B1	14	A	N9-C4-C5	5.21	107.88	105.80
10	B1	15	G	OP1-P-OP2	-5.21	111.79	119.60
11	B2	234	G	C4-C5-N7	-5.21	108.72	110.80
11	B2	540	G	C2-N3-C4	5.21	114.50	111.90
11	B2	706	G	C5'-C4'-O4'	5.21	115.35	109.10
11	B2	1343	C	N1-C2-O2	-5.21	115.78	118.90
38	A1	175	G	C4-C5-N7	-5.21	108.72	110.80
38	A1	1335	C	C4-C5-C6	5.21	120.00	117.40
38	A1	1831	C	C5-C6-N1	5.21	123.60	121.00
38	A1	1877	C	C6-N1-C2	-5.21	118.22	120.30
38	A1	2201	C	C5'-C4'-O4'	5.21	115.35	109.10
38	A1	2253	G	C5'-C4'-C3'	5.21	124.33	116.00
38	A1	2401	A	C1'-O4'-C4'	5.21	114.06	109.90
39	A3	49	A	C1'-O4'-C4'	-5.21	105.73	109.90
44	Ab	39	LYS	C-N-CA	5.21	134.72	121.70
48	AE	17	ALA	CB-CA-C	5.21	117.91	110.10
62	AO	12	ARG	NE-CZ-NH2	-5.21	117.70	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	2	U	N1-C2-O2	5.21	126.44	122.80
11	B2	875	G	O4'-C4'-C3'	-5.21	98.80	104.00
38	A1	68	G	C4-C5-C6	5.21	121.92	118.80
38	A1	91	G	N9-C4-C5	5.21	107.48	105.40
38	A1	838	A	C1'-O4'-C4'	5.21	114.06	109.90
38	A1	980	G	C4-C5-N7	-5.21	108.72	110.80
38	A1	1611	C	C2-N3-C4	-5.21	117.30	119.90
39	A3	94	G	C5-C6-O6	-5.21	125.48	128.60
11	B2	52	U	N1-C1'-C2'	-5.20	106.28	112.00
11	B2	286	G	C6-C5-N7	-5.20	127.28	130.40
11	B2	655	A	O4'-C1'-N9	5.20	112.36	108.20
11	B2	1429	G	C3'-C2'-C1'	5.20	105.66	101.50
15	BC	112	ALA	CB-CA-C	-5.20	102.29	110.10
38	A1	555	G	C6-N1-C2	5.20	128.22	125.10
38	A1	1086	U	C5-C6-N1	5.20	125.30	122.70
38	A1	1132	U	O3'-P-O5'	-5.20	94.11	104.00
38	A1	1132	U	N3-C2-O2	5.20	125.84	122.20
38	A1	1453	G	N3-C2-N2	5.20	123.54	119.90
38	A1	1934	C	O4'-C1'-N1	5.20	112.36	108.20
38	A1	2196	C	N3-C4-C5	5.20	123.98	121.90
38	A1	2265	C	C4-C5-C6	5.20	120.00	117.40
38	A1	2278	U	P-O5'-C5'	5.20	129.22	120.90
38	A1	2332	G	O5'-P-OP2	-5.20	101.02	105.70
38	A1	2436	A	P-O3'-C3'	5.20	125.94	119.70
38	A1	2580	G	N9-C4-C5	-5.20	103.32	105.40
38	A1	2959	A	N1-C6-N6	5.20	121.72	118.60
11	B2	50	C	P-O5'-C5'	5.20	129.22	120.90
11	B2	303	G	N1-C2-N3	5.20	127.02	123.90
11	B2	553	C	N1-C2-N3	-5.20	115.56	119.20
11	B2	1358	A	O4'-C1'-N9	5.20	112.36	108.20
38	A1	360	G	OP1-P-OP2	-5.20	111.80	119.60
38	A1	929	G	C4-C5-C6	5.20	121.92	118.80
38	A1	1075	G	P-O3'-C3'	-5.20	113.46	119.70
38	A1	1990	U	N3-C4-O4	5.20	123.04	119.40
38	A1	2465	A	O4'-C1'-N9	5.20	112.36	108.20
11	B2	621	G	N3-C4-C5	-5.20	126.00	128.60
11	B2	697	A	P-O3'-C3'	5.20	125.94	119.70
11	B2	1119	U	C5-C6-N1	5.20	125.30	122.70
20	BH	60	ASN	N-CA-CB	5.20	119.96	110.60
25	BM	50	ALA	N-CA-C	-5.20	96.96	111.00
38	A1	238	C	N3-C4-N4	5.20	121.64	118.00
38	A1	621	G	P-O5'-C5'	5.20	129.22	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	760	G	C8-N9-C4	-5.20	104.32	106.40
38	A1	1266	A	O4'-C1'-N9	5.20	112.36	108.20
38	A1	1639	G	N1-C2-N3	-5.20	120.78	123.90
38	A1	1649	G	C4-C5-C6	5.20	121.92	118.80
38	A1	1881	A	C5-C6-N1	-5.20	115.10	117.70
38	A1	2653	G	C4-C5-C6	5.20	121.92	118.80
39	A3	115	C	C2-N1-C1'	-5.20	113.08	118.80
41	AA	5	ARG	CD-NE-CZ	5.20	130.88	123.60
48	AE	179	PHE	CG-CD2-CE2	5.20	126.52	120.80
10	B1	61	U	C3'-C2'-C1'	5.20	105.66	101.50
10	B1	75	C	OP1-P-OP2	-5.20	111.80	119.60
11	B2	333	A	C6-N1-C2	-5.20	115.48	118.60
11	B2	613	C	C5-C6-N1	5.20	123.60	121.00
11	B2	639	G	N3-C2-N2	5.20	123.54	119.90
11	B2	641	A	C4-C5-C6	5.20	119.60	117.00
11	B2	1126	G	N9-C1'-C2'	-5.20	106.28	112.00
11	B2	1189	G	OP1-P-OP2	-5.20	111.80	119.60
11	B2	1300	A	N1-C2-N3	5.20	131.90	129.30
12	B3	109	ASP	CB-CG-OD2	-5.20	113.62	118.30
38	A1	132	G	C4-C5-N7	5.20	112.88	110.80
38	A1	766	G	P-O5'-C5'	-5.20	112.58	120.90
38	A1	1114	G	C4-C5-C6	5.20	121.92	118.80
38	A1	1241	C	N3-C4-C5	-5.20	119.82	121.90
38	A1	1294	A	N1-C6-N6	5.20	121.72	118.60
38	A1	1517	G	N1-C2-N3	5.20	127.02	123.90
38	A1	1577	C	C5-C6-N1	5.20	123.60	121.00
38	A1	1684	C	O4'-C1'-N1	5.20	112.36	108.20
38	A1	2826	U	N1-C2-O2	5.20	126.44	122.80
38	A1	2889	A	C3'-C2'-C1'	5.20	105.66	101.50
42	Aa	59	TRP	CG-CD2-CE3	-5.20	129.22	133.90
54	AI	21	MET	CG-SD-CE	-5.20	91.88	100.20
11	B2	626	G	P-O5'-C5'	-5.20	112.58	120.90
11	B2	693	C	O4'-C4'-C3'	-5.20	98.80	104.00
11	B2	752	G	C4-C5-C6	5.20	121.92	118.80
11	B2	1113	G	N7-C8-N9	-5.20	110.50	113.10
18	BF	111	ARG	CD-NE-CZ	-5.20	116.32	123.60
22	BJ	89	PHE	CG-CD1-CE1	-5.20	115.08	120.80
38	A1	623	G	C6-N1-C2	-5.20	121.98	125.10
38	A1	951	C	C1'-O4'-C4'	5.20	114.06	109.90
38	A1	1152	C	P-O3'-C3'	-5.20	113.46	119.70
38	A1	1589	G	N3-C4-N9	-5.20	122.88	126.00
38	A1	1972	C	C4'-C3'-C2'	-5.20	97.40	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	A1	2318	G	N1-C2-N2	-5.20	111.52	116.20
38	A1	2662	G	C3'-C2'-C1'	-5.20	97.34	101.50
38	A1	2797	C	C6-N1-C1'	-5.20	114.56	120.80
11	B2	1082	A	C2-N3-C4	-5.20	108.00	110.60
11	B2	1092	G	C5-C6-N1	-5.20	108.90	111.50
11	B2	1094	U	N3-C4-O4	5.20	123.04	119.40
11	B2	1105	C	C2'-C3'-O3'	5.20	122.01	113.70
11	B2	1315	G	C3'-C2'-C1'	5.20	105.66	101.50
20	BH	201	TYR	CB-CG-CD1	-5.20	117.88	121.00
26	BN	36	ARG	NE-CZ-NH1	5.20	122.90	120.30
34	BV	52	VAL	CA-CB-CG2	-5.20	103.11	110.90
38	A1	89	C	C2-N1-C1'	5.20	124.52	118.80
38	A1	586	A	C3'-C2'-C1'	-5.20	97.34	101.50
38	A1	592	C	N1-C1'-C2'	-5.20	106.29	112.00
38	A1	1525	G	N1-C2-N3	-5.20	120.78	123.90
38	A1	1708	U	C4-C5-C6	-5.20	116.58	119.70
38	A1	2057	G	C8-N9-C1'	5.20	133.75	127.00
38	A1	2262	C	N3-C4-N4	5.20	121.64	118.00
38	A1	2412	A	N9-C4-C5	5.20	107.88	105.80
38	A1	2846	A	C5-C6-N6	-5.20	119.54	123.70
39	A3	5	G	N1-C2-N2	5.20	120.88	116.20
39	A3	126	C	O4'-C1'-N1	5.20	112.36	108.20
45	AC	161	VAL	CG1-CB-CG2	5.20	119.21	110.90
60	AM	96	LEU	CB-CG-CD1	5.20	119.83	111.00
11	B2	1318	U	C4'-C3'-C2'	-5.19	97.41	102.60
33	BU	37	THR	N-CA-CB	5.19	120.17	110.30
38	A1	1472	U	C2-N3-C4	5.19	130.12	127.00
38	A1	1621	G	C6-C5-N7	-5.19	127.28	130.40
38	A1	1913	C	P-O3'-C3'	-5.19	113.47	119.70
38	A1	2495	A	C5'-C4'-O4'	5.19	115.33	109.10
38	A1	2761	G	N9-C4-C5	5.19	107.48	105.40
10	B1	74	A	C6-N1-C2	5.19	121.72	118.60
11	B2	476	C	C5-C4-N4	-5.19	116.57	120.20
11	B2	836	G	C3'-C2'-C1'	-5.19	97.34	101.50
11	B2	1202	G	P-O3'-C3'	-5.19	113.47	119.70
14	BB	168	TYR	CA-CB-CG	-5.19	103.53	113.40
14	BB	202	ARG	NE-CZ-NH1	5.19	122.90	120.30
28	BP	12	ARG	CD-NE-CZ	-5.19	116.33	123.60
33	BU	16	VAL	CA-CB-CG2	-5.19	103.11	110.90
34	BV	33	ARG	N-CA-CB	5.19	119.95	110.60
38	A1	18	C	O4'-C1'-N1	5.19	112.35	108.20
38	A1	61	G	O4'-C1'-N9	5.19	112.35	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	282	G	C6-C5-N7	-5.19	127.28	130.40
38	A1	552	A	C4-C5-N7	5.19	113.30	110.70
38	A1	636	G	N7-C8-N9	-5.19	110.50	113.10
38	A1	1310	A	C4-C5-N7	-5.19	108.10	110.70
38	A1	1366	U	O4'-C1'-N1	5.19	112.35	108.20
38	A1	1369	G	C3'-C2'-C1'	-5.19	97.35	101.50
38	A1	1626	A	N7-C8-N9	5.19	116.40	113.80
38	A1	1963	G	C1'-O4'-C4'	-5.19	105.75	109.90
38	A1	2064	U	C2-N3-C4	-5.19	123.88	127.00
38	A1	2606	C	C2-N3-C4	5.19	122.50	119.90
43	AB	135	GLU	N-CA-C	-5.19	96.98	111.00
64	AR	23	ARG	C-N-CA	5.19	133.21	122.30
11	B2	269	A	P-O3'-C3'	-5.19	113.47	119.70
11	B2	384	G	C1'-O4'-C4'	-5.19	105.75	109.90
11	B2	468	G	C6-C5-N7	-5.19	127.29	130.40
11	B2	489	C	C4'-C3'-C2'	5.19	107.79	102.60
11	B2	1263	C	C6-N1-C2	-5.19	118.22	120.30
38	A1	431	U	N3-C4-O4	-5.19	115.77	119.40
38	A1	851	G	C4-C5-C6	5.19	121.91	118.80
38	A1	1776	G	C1'-O4'-C4'	5.19	114.05	109.90
38	A1	2286	U	C3'-C2'-C1'	-5.19	97.35	101.50
38	A1	2326	C	C4-C5-C6	5.19	120.00	117.40
11	B2	57	G	P-O3'-C3'	5.19	125.93	119.70
11	B2	174	G	C4-C5-C6	5.19	121.91	118.80
11	B2	920	U	N1-C1'-C2'	-5.19	106.29	112.00
11	B2	1339	G	C6-C5-N7	-5.19	127.29	130.40
38	A1	302	U	N1-C2-N3	-5.19	111.79	114.90
38	A1	541	A	C1'-O4'-C4'	5.19	114.05	109.90
38	A1	2077	A	C5-N7-C8	5.19	106.50	103.90
38	A1	2672	A	C1'-O4'-C4'	5.19	114.05	109.90
38	A1	2843	C	N3-C2-O2	5.19	125.53	121.90
11	B2	91	G	C1'-O4'-C4'	-5.19	105.75	109.90
11	B2	128	A	C5-C6-N6	-5.19	119.55	123.70
11	B2	584	C	O4'-C4'-C3'	-5.19	98.81	104.00
11	B2	762	G	N1-C2-N2	-5.19	111.53	116.20
11	B2	769	A	O4'-C1'-N9	5.19	112.35	108.20
11	B2	790	G	N9-C1'-C2'	-5.19	106.29	112.00
11	B2	1044	A	N1-C2-N3	-5.19	126.71	129.30
11	B2	1083	G	O4'-C4'-C3'	-5.19	98.81	104.00
11	B2	1336	U	O4'-C1'-N1	5.19	112.35	108.20
11	B2	1443	G	C8-N9-C4	-5.19	104.33	106.40
34	BV	4	ARG	NE-CZ-NH1	5.19	122.89	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	90	A	N7-C8-N9	5.19	116.39	113.80
38	A1	241	C	C5'-C4'-C3'	-5.19	107.70	116.00
38	A1	1437	C	N3-C4-N4	5.19	121.63	118.00
38	A1	1669	A	C2-N3-C4	-5.19	108.01	110.60
38	A1	2151	C	C3'-C2'-C1'	5.19	105.65	101.50
11	B2	1103	G	P-O3'-C3'	5.19	125.92	119.70
11	B2	1394	G	C5-C6-N1	-5.19	108.91	111.50
38	A1	205	A	C5'-C4'-O4'	5.19	115.32	109.10
38	A1	861	G	C5'-C4'-C3'	-5.19	107.70	116.00
38	A1	2484	C	O4'-C1'-N1	5.19	112.35	108.20
38	A1	2571	G	O4'-C4'-C3'	-5.19	98.81	104.00
56	AJ	88	GLU	OE1-CD-OE2	-5.19	117.08	123.30
10	B1	45	G	C4-N9-C1'	5.18	133.24	126.50
11	B2	283	U	C6-N1-C2	-5.18	117.89	121.00
11	B2	1356	A	N7-C8-N9	-5.18	111.21	113.80
26	BN	126	VAL	CA-CB-CG2	-5.18	103.12	110.90
38	A1	57	C	N1-C2-O2	5.18	122.01	118.90
38	A1	174	C	P-O3'-C3'	-5.18	113.48	119.70
38	A1	263	U	C3'-C2'-C1'	-5.18	97.35	101.50
38	A1	430	A	O4'-C1'-C2'	5.18	112.27	107.60
38	A1	435	G	C6-N1-C2	-5.18	121.99	125.10
38	A1	939	A	C5-C6-N1	-5.18	115.11	117.70
38	A1	1003	C	C5-C6-N1	5.18	123.59	121.00
38	A1	1234	A	C4-C5-C6	5.18	119.59	117.00
38	A1	1308	G	C5'-C4'-O4'	5.18	115.32	109.10
38	A1	1516	C	C2-N3-C4	5.18	122.49	119.90
39	A3	31	U	N1-C2-N3	-5.18	111.79	114.90
45	AC	130	ARG	NH1-CZ-NH2	5.18	125.10	119.40
58	Ak	207	ALA	N-CA-CB	5.18	117.36	110.10
10	B1	26	C	C5-C6-N1	5.18	123.59	121.00
11	B2	341	C	C5'-C4'-O4'	5.18	115.32	109.10
11	B2	814	C	C2-N3-C4	5.18	122.49	119.90
11	B2	1182	G	C1'-O4'-C4'	-5.18	105.75	109.90
35	BW	3	LYS	CA-C-N	5.18	131.61	117.10
38	A1	145	C	C1'-O4'-C4'	5.18	114.05	109.90
38	A1	830	G	C6-N1-C2	5.18	128.21	125.10
38	A1	1301	G	C4-C5-C6	5.18	121.91	118.80
38	A1	1800	G	O4'-C1'-N9	5.18	112.34	108.20
38	A1	1987	A	N7-C8-N9	-5.18	111.21	113.80
38	A1	2137	A	OP1-P-OP2	-5.18	111.83	119.60
38	A1	2592	U	C1'-O4'-C4'	-5.18	105.75	109.90
38	A1	2773	A	O5'-P-OP2	-5.18	101.03	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
39	A3	120	C	C4'-C3'-C2'	-5.18	97.42	102.60
41	AA	154	ARG	NE-CZ-NH2	5.18	122.89	120.30
47	Ad	52	VAL	CB-CA-C	-5.18	101.55	111.40
11	B2	554	C	N3-C4-C5	-5.18	119.83	121.90
11	B2	856	G	C5-C6-N1	-5.18	108.91	111.50
11	B2	945	G	N3-C2-N2	5.18	123.53	119.90
20	BH	93	LEU	CB-CG-CD2	5.18	119.81	111.00
29	BQ	58	TYR	CB-CG-CD2	5.18	124.11	121.00
38	A1	736	U	O4'-C1'-C2'	-5.18	100.62	105.80
38	A1	915	G	O4'-C1'-N9	5.18	112.34	108.20
38	A1	1045	A	P-O3'-C3'	5.18	125.92	119.70
38	A1	1416	G	N1-C2-N3	-5.18	120.79	123.90
38	A1	1589	G	O4'-C1'-N9	5.18	112.34	108.20
38	A1	1727	G	C4'-C3'-C2'	-5.18	97.42	102.60
38	A1	2755	G	N1-C2-N3	-5.18	120.79	123.90
11	B2	327	G	OP1-P-OP2	-5.18	111.83	119.60
11	B2	497	C	P-O3'-C3'	5.18	125.92	119.70
11	B2	592	G	C8-N9-C1'	5.18	133.73	127.00
11	B2	641	A	C5-C6-N1	-5.18	115.11	117.70
11	B2	1178	C	P-O5'-C5'	-5.18	112.61	120.90
11	B2	1317	G	N1-C2-N3	-5.18	120.79	123.90
37	BY	24	ARG	NE-CZ-NH1	5.18	122.89	120.30
38	A1	211	A	C5-C6-N6	-5.18	119.56	123.70
38	A1	666	A	C5-C6-N1	-5.18	115.11	117.70
38	A1	674	G	C5-N7-C8	5.18	106.89	104.30
38	A1	706	U	C3'-C2'-C1'	-5.18	97.36	101.50
38	A1	721	G	P-O3'-C3'	5.18	125.92	119.70
38	A1	810	A	N3-C4-N9	5.18	131.54	127.40
38	A1	1162	C	N3-C4-N4	5.18	121.63	118.00
38	A1	1237	A	C2-N3-C4	-5.18	108.01	110.60
38	A1	1455	U	C5'-C4'-C3'	-5.18	107.71	116.00
38	A1	2340	A	N1-C2-N3	5.18	131.89	129.30
54	AI	51	GLN	CA-CB-CG	5.18	124.80	113.40
11	B2	1364	C	C5-C4-N4	-5.18	116.58	120.20
38	A1	349	A	O5'-P-OP2	5.18	116.91	110.70
38	A1	355	G	C6-C5-N7	-5.18	127.29	130.40
38	A1	1155	A	N1-C2-N3	-5.18	126.71	129.30
38	A1	1396	A	C8-N9-C4	5.18	107.87	105.80
38	A1	1949	A	C6-N1-C2	-5.18	115.49	118.60
38	A1	2841	G	C6-C5-N7	-5.18	127.29	130.40
38	A1	2867	U	C4-C5-C6	5.18	122.81	119.70
66	AY	10	ARG	NE-CZ-NH2	5.18	122.89	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	206	C	N3-C2-O2	5.18	125.52	121.90
11	B2	487	U	N1-C2-N3	-5.18	111.80	114.90
11	B2	511	C	N3-C4-N4	5.18	121.62	118.00
11	B2	803	C	N1-C2-N3	-5.18	115.58	119.20
11	B2	830	A	C5-C6-N6	-5.18	119.56	123.70
11	B2	1229	A	C4-C5-C6	5.18	119.59	117.00
16	BD	156	ARG	N-CA-CB	5.18	119.92	110.60
38	A1	169	G	C4-C5-C6	5.18	121.91	118.80
38	A1	484	C	C4'-C3'-C2'	-5.18	97.42	102.60
38	A1	773	U	O4'-C4'-C3'	-5.18	98.82	104.00
38	A1	1132	U	OP1-P-OP2	-5.18	111.83	119.60
38	A1	1437	C	C5-C4-N4	-5.18	116.58	120.20
38	A1	1778	G	N1-C2-N3	-5.18	120.80	123.90
38	A1	1811	G	C5'-C4'-C3'	5.18	124.28	116.00
38	A1	2000	G	N7-C8-N9	-5.18	110.51	113.10
38	A1	2028	G	OP1-P-OP2	-5.18	111.83	119.60
38	A1	2074	U	P-O3'-C3'	5.18	125.91	119.70
38	A1	2509	A	N3-C4-N9	5.18	131.54	127.40
39	A3	14	G	OP1-P-OP2	-5.18	111.84	119.60
11	B2	163	C	N3-C4-C5	-5.17	119.83	121.90
11	B2	746	A	C6-C5-N7	-5.17	128.68	132.30
11	B2	922	G	N3-C4-C5	-5.17	126.01	128.60
11	B2	1079	G	C6-C5-N7	5.17	133.50	130.40
11	B2	1183	C	N3-C4-N4	5.17	121.62	118.00
11	B2	1370	U	O4'-C1'-N1	5.17	112.34	108.20
38	A1	181	U	N1-C2-N3	-5.17	111.80	114.90
38	A1	194	G	OP1-P-OP2	-5.17	111.84	119.60
38	A1	200	G	C5-N7-C8	-5.17	101.71	104.30
38	A1	953	G	O4'-C1'-N9	5.17	112.34	108.20
38	A1	1469	U	P-O5'-C5'	5.17	129.18	120.90
38	A1	1781	C	C4-C5-C6	5.17	119.99	117.40
38	A1	1864	G	O4'-C1'-C2'	5.17	112.26	107.60
38	A1	2014	A	N1-C2-N3	5.17	131.89	129.30
38	A1	2086	C	N1-C2-O2	-5.17	115.80	118.90
38	A1	2126	G	O4'-C1'-N9	5.17	112.34	108.20
38	A1	2165	A	C5-C6-N1	-5.17	115.11	117.70
38	A1	2735	C	O4'-C1'-N1	5.17	112.34	108.20
38	A1	3045	G	P-O3'-C3'	-5.17	113.49	119.70
40	A5	27	ILE	N-CA-C	-5.17	97.03	111.00
10	B1	4	G	N3-C4-C5	5.17	131.19	128.60
11	B2	522	C	N1-C2-N3	5.17	122.82	119.20
11	B2	713	A	C5-N7-C8	5.17	106.49	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1124	G	N1-C6-O6	5.17	123.00	119.90
11	B2	1157	G	P-O5'-C5'	5.17	129.18	120.90
11	B2	1418	G	C6-N1-C2	5.17	128.20	125.10
38	A1	396	G	N9-C1'-C2'	-5.17	106.31	112.00
38	A1	578	C	N3-C4-N4	5.17	121.62	118.00
38	A1	1054	A	C5-C6-N1	-5.17	115.11	117.70
38	A1	1137	G	C4-C5-N7	-5.17	108.73	110.80
38	A1	2191	U	N3-C4-C5	-5.17	111.50	114.60
38	A1	2288	C	O4'-C1'-N1	5.17	112.34	108.20
38	A1	2319	C	C2-N3-C4	5.17	122.49	119.90
11	B2	611	A	N3-C4-C5	-5.17	123.18	126.80
18	BF	161	ARG	NE-CZ-NH1	5.17	122.89	120.30
19	BG	26	THR	CA-CB-CG2	-5.17	105.16	112.40
38	A1	82	C	C4'-C3'-C2'	-5.17	97.43	102.60
38	A1	367	G	N1-C2-N3	-5.17	120.80	123.90
38	A1	1261	C	C2-N1-C1'	5.17	124.49	118.80
38	A1	1353	A	C5'-C4'-O4'	5.17	115.31	109.10
38	A1	1396	A	C6-C5-N7	-5.17	128.68	132.30
38	A1	1425	U	P-O5'-C5'	-5.17	112.62	120.90
38	A1	1718	C	N1-C2-N3	-5.17	115.58	119.20
38	A1	2129	G	N1-C2-N2	-5.17	111.55	116.20
38	A1	2147	C	O4'-C1'-N1	5.17	112.34	108.20
38	A1	2460	A	OP1-P-OP2	-5.17	111.84	119.60
45	AC	100	ILE	CG1-CB-CG2	-5.17	100.02	111.40
62	AO	88	LEU	CB-CG-CD2	5.17	119.79	111.00
11	B2	1351	U	C4'-C3'-C2'	-5.17	97.43	102.60
38	A1	65	G	C6-C5-N7	-5.17	127.30	130.40
38	A1	1076	G	C5'-C4'-C3'	-5.17	107.73	116.00
38	A1	1349	G	C6-C5-N7	-5.17	127.30	130.40
38	A1	1454	G	P-O3'-C3'	5.17	125.90	119.70
38	A1	2380	A	O4'-C1'-N9	5.17	112.34	108.20
38	A1	2615	U	C5-C4-O4	5.17	129.00	125.90
38	A1	2950	G	C6-N1-C2	5.17	128.20	125.10
10	B1	54	G	P-O3'-C3'	5.17	125.90	119.70
11	B2	117	C	C6-N1-C2	-5.17	118.23	120.30
11	B2	227	C	C5-C6-N1	5.17	123.58	121.00
11	B2	262	G	N3-C4-C5	5.17	131.18	128.60
11	B2	418	G	C4-C5-N7	-5.17	108.73	110.80
11	B2	467	G	C5-N7-C8	5.17	106.88	104.30
11	B2	761	U	C1'-O4'-C4'	5.17	114.03	109.90
11	B2	842	U	C2-N3-C4	-5.17	123.90	127.00
11	B2	1190	C	C3'-C2'-C1'	5.17	105.63	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1383	A	C5'-C4'-O4'	5.17	115.30	109.10
16	BD	150	ASP	CB-CG-OD2	5.17	122.95	118.30
38	A1	228	U	C5-C6-N1	-5.17	120.12	122.70
38	A1	326	C	N1-C2-O2	-5.17	115.80	118.90
38	A1	452	A	O4'-C1'-N9	5.17	112.33	108.20
38	A1	528	G	N7-C8-N9	5.17	115.68	113.10
38	A1	596	C	C5-C4-N4	-5.17	116.58	120.20
38	A1	611	G	C6-N1-C2	5.17	128.20	125.10
38	A1	638	A	C8-N9-C4	-5.17	103.73	105.80
38	A1	716	U	N3-C4-O4	5.17	123.02	119.40
38	A1	1276	G	C6-N1-C2	-5.17	122.00	125.10
38	A1	1365	G	C4-N9-C1'	5.17	133.22	126.50
38	A1	1471	G	C5-C6-N1	5.17	114.08	111.50
38	A1	1526	G	N3-C4-C5	-5.17	126.02	128.60
38	A1	1739	U	OP2-P-O3'	5.17	116.57	105.20
38	A1	2120	C	C5-C4-N4	5.17	123.82	120.20
38	A1	2158	G	C1'-O4'-C4'	5.17	114.03	109.90
11	B2	253	G	N9-C1'-C2'	-5.17	106.32	112.00
11	B2	1001	A	C6-C5-N7	-5.17	128.68	132.30
11	B2	1258	C	O3'-P-O5'	-5.17	94.18	104.00
11	B2	1433	C	O4'-C4'-C3'	-5.17	98.83	104.00
28	BP	6	TYR	CD1-CG-CD2	5.17	123.58	117.90
38	A1	109	G	OP1-P-OP2	-5.17	111.85	119.60
38	A1	164	A	C5-N7-C8	5.17	106.48	103.90
38	A1	302	U	C5'-C4'-C3'	-5.17	107.73	116.00
38	A1	1009	G	C5-N7-C8	5.17	106.88	104.30
38	A1	1018	G	C5-C6-N1	-5.17	108.92	111.50
38	A1	1093	G	N3-C2-N2	5.17	123.52	119.90
38	A1	1113	G	N9-C4-C5	-5.17	103.33	105.40
38	A1	1357	G	N1-C2-N2	-5.17	111.55	116.20
38	A1	1858	G	P-O3'-C3'	5.17	125.90	119.70
38	A1	2235	G	C5'-C4'-C3'	-5.17	107.73	116.00
38	A1	3001	C	C5'-C4'-C3'	-5.17	107.73	116.00
39	A3	103	C	N3-C4-C5	-5.17	119.83	121.90
4	AQ	88	ARG	NE-CZ-NH1	5.17	122.88	120.30
26	BN	5	LYS	C-N-CA	5.17	134.61	121.70
38	A1	234	G	C8-N9-C4	-5.17	104.33	106.40
38	A1	235	G	OP2-P-O3'	5.17	116.56	105.20
38	A1	502	G	C5-C6-O6	-5.17	125.50	128.60
38	A1	1059	C	OP1-P-OP2	-5.17	111.85	119.60
38	A1	1175	C	C4-C5-C6	5.17	119.98	117.40
38	A1	1484	U	O4'-C4'-C3'	5.17	110.23	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1888	G	C4-N9-C1'	-5.17	119.79	126.50
38	A1	2304	C	N3-C4-C5	-5.17	119.83	121.90
1	A7	5	ASN	N-CA-CB	5.16	119.89	110.60
11	B2	17	C	N3-C4-N4	5.16	121.61	118.00
11	B2	531	G	C3'-C2'-C1'	-5.16	97.37	101.50
11	B2	1384	G	C4-C5-N7	-5.16	108.73	110.80
17	BE	158	TYR	CZ-CE2-CD2	-5.16	115.15	119.80
38	A1	165	G	C4-C5-N7	5.16	112.86	110.80
38	A1	719	C	C5-C6-N1	5.16	123.58	121.00
38	A1	746	C	N3-C4-N4	5.16	121.61	118.00
38	A1	1020	G	C6-N1-C2	5.16	128.20	125.10
38	A1	1211	C	N3-C4-N4	5.16	121.61	118.00
38	A1	1247	U	O4'-C1'-C2'	5.16	112.25	107.60
38	A1	1401	G	N7-C8-N9	-5.16	110.52	113.10
38	A1	1572	C	O5'-P-OP1	5.16	116.90	110.70
38	A1	1733	C	C5-C6-N1	-5.16	118.42	121.00
38	A1	1756	C	O4'-C1'-N1	5.16	112.33	108.20
38	A1	1949	A	N1-C2-N3	5.16	131.88	129.30
38	A1	2641	C	O4'-C4'-C3'	-5.16	98.84	104.00
45	AC	266	TRP	NE1-CE2-CD2	5.16	112.46	107.30
56	AJ	74	ARG	NE-CZ-NH1	5.16	122.88	120.30
11	B2	315	A	C1'-O4'-C4'	5.16	114.03	109.90
14	BB	181	GLU	OE1-CD-OE2	5.16	129.49	123.30
38	A1	24	G	C2-N3-C4	5.16	114.48	111.90
38	A1	406	G	O3'-P-O5'	5.16	113.81	104.00
38	A1	1490	G	C2-N3-C4	-5.16	109.32	111.90
38	A1	1837	A	O4'-C1'-N9	5.16	112.33	108.20
38	A1	2552	C	P-O5'-C5'	5.16	129.16	120.90
39	A3	61	C	O5'-C5'-C4'	-5.16	101.89	111.70
10	B1	6	G	N9-C4-C5	-5.16	103.34	105.40
11	B2	203	A	N1-C2-N3	5.16	131.88	129.30
11	B2	252	U	N3-C4-C5	-5.16	111.50	114.60
11	B2	648	A	C8-N9-C4	5.16	107.86	105.80
11	B2	916	U	N1-C2-O2	-5.16	119.19	122.80
11	B2	950	C	C2-N1-C1'	5.16	124.48	118.80
11	B2	1223	C	C4'-C3'-C2'	-5.16	97.44	102.60
11	B2	1284	C	O4'-C1'-N1	5.16	112.33	108.20
38	A1	284	U	N3-C4-C5	-5.16	111.50	114.60
38	A1	910	G	O4'-C1'-N9	5.16	112.33	108.20
38	A1	1159	U	N1-C2-O2	5.16	126.41	122.80
38	A1	1170	G	N3-C2-N2	5.16	123.51	119.90
38	A1	1235	A	O4'-C1'-N9	5.16	112.33	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1558	U	N3-C4-C5	-5.16	111.50	114.60
38	A1	1924	A	N1-C2-N3	5.16	131.88	129.30
38	A1	1935	C	P-O3'-C3'	5.16	125.89	119.70
38	A1	1969	C	N3-C4-N4	5.16	121.61	118.00
38	A1	2015	G	N9-C1'-C2'	-5.16	106.32	112.00
38	A1	2519	C	C1'-O4'-C4'	-5.16	105.77	109.90
38	A1	2579	G	C5-N7-C8	5.16	106.88	104.30
38	A1	2581	G	O4'-C1'-N9	5.16	112.33	108.20
44	Ab	40	TRP	N-CA-CB	5.16	119.89	110.60
46	AD	111	ARG	NE-CZ-NH1	5.16	122.88	120.30
50	AF	24	TYR	C-N-CA	5.16	134.60	121.70
67	AZ	76	LYS	CA-C-N	5.16	131.55	117.10
10	B1	3	G	C8-N9-C4	5.16	108.46	106.40
11	B2	130	G	C4-C5-C6	5.16	121.90	118.80
11	B2	303	G	N3-C2-N2	5.16	123.51	119.90
11	B2	392	G	N3-C4-C5	-5.16	126.02	128.60
11	B2	673	C	C2-N1-C1'	5.16	124.47	118.80
11	B2	705	C	C3'-C2'-C1'	5.16	105.63	101.50
11	B2	818	A	C1'-O4'-C4'	5.16	114.03	109.90
11	B2	934	G	C2'-C3'-O3'	5.16	121.95	113.70
11	B2	953	C	N3-C4-C5	-5.16	119.84	121.90
11	B2	986	G	N3-C4-N9	5.16	129.09	126.00
11	B2	1027	C	C5-C6-N1	5.16	123.58	121.00
11	B2	1288	C	C5-C4-N4	-5.16	116.59	120.20
11	B2	1323	A	C4-N9-C1'	5.16	135.58	126.30
11	B2	1424	G	N9-C4-C5	-5.16	103.34	105.40
12	B3	10	GLU	N-CA-C	-5.16	97.07	111.00
38	A1	553	C	C3'-C2'-C1'	5.16	105.63	101.50
38	A1	592	C	N3-C4-C5	5.16	123.96	121.90
38	A1	633	A	N7-C8-N9	-5.16	111.22	113.80
38	A1	839	A	P-O3'-C3'	-5.16	113.51	119.70
38	A1	1151	G	N1-C6-O6	5.16	123.00	119.90
38	A1	1374	G	C5-C6-N1	-5.16	108.92	111.50
38	A1	1514	C	N3-C4-C5	-5.16	119.84	121.90
38	A1	1520	G	C5-N7-C8	-5.16	101.72	104.30
38	A1	1563	G	O4'-C1'-N9	5.16	112.33	108.20
38	A1	1595	G	N7-C8-N9	-5.16	110.52	113.10
38	A1	1659	G	N1-C6-O6	5.16	123.00	119.90
38	A1	1817	C	N3-C2-O2	5.16	125.51	121.90
38	A1	2044	C	P-O5'-C5'	5.16	129.15	120.90
47	Ad	1	MET	CG-SD-CE	-5.16	91.95	100.20
11	B2	606	U	C5-C4-O4	-5.16	122.81	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	987	G	N9-C4-C5	5.16	107.46	105.40
11	B2	1031	G	C5-C6-N1	-5.16	108.92	111.50
11	B2	1240	A	C6-C5-N7	-5.16	128.69	132.30
11	B2	1320	A	C3'-C2'-C1'	-5.16	97.37	101.50
11	B2	1491	C	N1-C1'-C2'	-5.16	106.33	112.00
38	A1	266	A	C6-C5-N7	-5.16	128.69	132.30
38	A1	1271	G	O4'-C1'-N9	5.16	112.33	108.20
38	A1	1689	G	N1-C6-O6	5.16	122.99	119.90
38	A1	2078	A	P-O5'-C5'	-5.16	112.65	120.90
38	A1	2109	C	N1-C2-N3	5.16	122.81	119.20
38	A1	2379	G	N3-C2-N2	5.16	123.51	119.90
38	A1	2702	A	P-O5'-C5'	-5.16	112.65	120.90
10	B1	56	U	C5-C4-O4	5.16	128.99	125.90
11	B2	127	G	C8-N9-C4	-5.16	104.34	106.40
11	B2	945	G	C4-C5-C6	5.16	121.89	118.80
11	B2	1471	G	N1-C2-N3	-5.16	120.81	123.90
29	BQ	136	TYR	CB-CG-CD2	5.16	124.09	121.00
38	A1	8	G	C8-N9-C1'	5.16	133.70	127.00
38	A1	133	G	N3-C4-C5	-5.16	126.02	128.60
38	A1	495	U	N3-C4-O4	5.16	123.01	119.40
38	A1	656	G	C8-N9-C1'	5.16	133.70	127.00
38	A1	671	G	C6-N1-C2	-5.16	122.01	125.10
38	A1	979	G	O3'-P-O5'	5.16	113.80	104.00
38	A1	1336	G	N7-C8-N9	5.16	115.68	113.10
38	A1	1556	G	N1-C2-N3	-5.16	120.81	123.90
38	A1	1617	G	C6-N1-C2	5.16	128.19	125.10
38	A1	1695	G	C8-N9-C4	5.16	108.46	106.40
38	A1	1949	A	N7-C8-N9	-5.16	111.22	113.80
38	A1	2242	A	O5'-C5'-C4'	-5.16	101.91	111.70
38	A1	2364	G	O4'-C1'-N9	5.16	112.33	108.20
38	A1	2712	G	N1-C2-N3	-5.16	120.81	123.90
38	A1	2774	C	C5-C6-N1	5.16	123.58	121.00
39	A3	100	A	C3'-C2'-C1'	-5.16	97.38	101.50
11	B2	68	G	O4'-C1'-N9	5.15	112.32	108.20
11	B2	353	G	P-O5'-C5'	5.15	129.15	120.90
11	B2	632	C	N3-C4-C5	-5.15	119.84	121.90
11	B2	1470	G	N1-C2-N3	-5.15	120.81	123.90
38	A1	422	G	OP1-P-OP2	-5.15	111.87	119.60
38	A1	1438	C	N1-C2-O2	5.15	121.99	118.90
38	A1	2462	U	N3-C4-C5	-5.15	111.51	114.60
38	A1	2789	G	N3-C2-N2	5.15	123.51	119.90
38	A1	2843	C	N1-C2-N3	-5.15	115.59	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	140	C	N1-C2-N3	-5.15	115.59	119.20
11	B2	341	C	N3-C4-N4	5.15	121.61	118.00
11	B2	603	G	C2-N3-C4	5.15	114.48	111.90
11	B2	811	G	C4'-C3'-C2'	-5.15	97.45	102.60
11	B2	1019	A	C3'-C2'-C1'	5.15	105.62	101.50
11	B2	1448	A	C3'-C2'-C1'	-5.15	97.38	101.50
26	BN	92	GLY	C-N-CA	5.15	134.58	121.70
37	BY	37	ARG	NE-CZ-NH1	5.15	122.88	120.30
38	A1	193	A	C2-N3-C4	5.15	113.18	110.60
38	A1	205	A	N9-C4-C5	5.15	107.86	105.80
38	A1	489	G	N1-C2-N3	-5.15	120.81	123.90
38	A1	593	C	C6-N1-C2	-5.15	118.24	120.30
38	A1	673	A	C8-N9-C4	-5.15	103.74	105.80
38	A1	789	G	C2-N3-C4	5.15	114.48	111.90
38	A1	884	C	C2-N1-C1'	5.15	124.47	118.80
38	A1	1392	G	P-O3'-C3'	5.15	125.88	119.70
38	A1	1548	A	N9-C1'-C2'	-5.15	106.33	112.00
38	A1	1786	G	C5-N7-C8	5.15	106.88	104.30
38	A1	1818	G	C8-N9-C4	-5.15	104.34	106.40
38	A1	1819	G	C8-N9-C4	5.15	108.46	106.40
38	A1	1884	C	N3-C2-O2	5.15	125.51	121.90
38	A1	2245	C	C6-N1-C2	-5.15	118.24	120.30
38	A1	2315	G	O4'-C1'-N9	5.15	112.32	108.20
38	A1	2454	G	N3-C4-C5	-5.15	126.02	128.60
38	A1	2688	C	O4'-C1'-N1	5.15	112.32	108.20
38	A1	2701	U	P-O5'-C5'	-5.15	112.66	120.90
64	AR	11	LYS	N-CA-CB	5.15	119.87	110.60
11	B2	101	G	C6-C5-N7	-5.15	127.31	130.40
11	B2	219	C	O4'-C1'-N1	5.15	112.32	108.20
11	B2	220	G	N3-C4-N9	5.15	129.09	126.00
11	B2	610	G	C8-N9-C1'	5.15	133.69	127.00
11	B2	829	U	C5-C4-O4	5.15	128.99	125.90
11	B2	854	C	P-O3'-C3'	5.15	125.88	119.70
11	B2	1038	C	N1-C2-N3	-5.15	115.59	119.20
11	B2	1445	A	N9-C4-C5	5.15	107.86	105.80
20	BH	21	TRP	CA-CB-CG	-5.15	103.91	113.70
20	BH	133	ARG	NE-CZ-NH2	5.15	122.88	120.30
38	A1	101	G	O4'-C1'-N9	5.15	112.32	108.20
38	A1	218	A	C6-N1-C2	-5.15	115.51	118.60
38	A1	551	A	C8-N9-C4	-5.15	103.74	105.80
38	A1	828	G	C8-N9-C1'	5.15	133.70	127.00
38	A1	876	C	N3-C4-C5	-5.15	119.84	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1272	A	C5-N7-C8	5.15	106.47	103.90
38	A1	1603	G	C4-C5-N7	-5.15	108.74	110.80
38	A1	2497	G	C2-N3-C4	5.15	114.47	111.90
61	AN	87	ARG	NE-CZ-NH2	-5.15	117.72	120.30
66	AY	82	ASP	CB-CG-OD2	-5.15	113.67	118.30
11	B2	173	G	C5-N7-C8	5.15	106.87	104.30
11	B2	1271	G	N7-C8-N9	-5.15	110.53	113.10
11	B2	1335	A	N9-C4-C5	-5.15	103.74	105.80
31	BS	55	THR	CA-C-O	5.15	130.91	120.10
38	A1	543	G	C6-C5-N7	-5.15	127.31	130.40
38	A1	1575	G	N3-C2-N2	5.15	123.50	119.90
38	A1	1711	C	N1-C1'-C2'	-5.15	106.34	112.00
38	A1	2240	G	N9-C4-C5	-5.15	103.34	105.40
51	Ag	33	LYS	N-CA-CB	5.15	119.87	110.60
64	AR	30	ARG	NH1-CZ-NH2	5.15	125.06	119.40
11	B2	614	G	C6-N1-C2	5.15	128.19	125.10
11	B2	1484	C	C3'-C2'-C1'	-5.15	97.38	101.50
23	BK	27	ARG	NE-CZ-NH1	5.15	122.87	120.30
38	A1	221	G	C5'-C4'-O4'	5.15	115.28	109.10
38	A1	392	G	N9-C4-C5	-5.15	103.34	105.40
38	A1	748	G	C4-N9-C1'	5.15	133.19	126.50
38	A1	824	C	C2-N3-C4	5.15	122.47	119.90
38	A1	1132	U	N3-C4-C5	-5.15	111.51	114.60
38	A1	1554	G	O4'-C1'-N9	5.15	112.32	108.20
43	AB	79	VAL	CG1-CB-CG2	5.15	119.14	110.90
56	AJ	79	ARG	NE-CZ-NH1	-5.15	117.73	120.30
11	B2	897	A	C5-C6-N6	-5.15	119.58	123.70
11	B2	1174	A	O4'-C1'-N9	5.15	112.32	108.20
11	B2	1459	G	N1-C2-N3	-5.15	120.81	123.90
38	A1	1175	C	C5-C6-N1	-5.15	118.43	121.00
38	A1	2216	G	C5-N7-C8	-5.15	101.73	104.30
38	A1	2539	G	C8-N9-C4	-5.15	104.34	106.40
38	A1	2733	A	C6-N1-C2	-5.15	115.51	118.60
38	A1	2849	C	C5-C6-N1	-5.15	118.43	121.00
54	AI	23	LEU	N-CA-CB	5.15	120.69	110.40
9	AX	52	ILE	N-CA-CB	5.14	122.63	110.80
11	B2	6	G	C6-N1-C2	-5.14	122.01	125.10
11	B2	50	C	N3-C4-N4	5.14	121.60	118.00
11	B2	106	A	C3'-C2'-C1'	5.14	105.61	101.50
11	B2	625	G	C4-C5-N7	-5.14	108.74	110.80
11	B2	811	G	C5-C6-O6	-5.14	125.51	128.60
11	B2	832	G	C5'-C4'-C3'	-5.14	107.77	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1381	G	N7-C8-N9	-5.14	110.53	113.10
38	A1	345	C	C6-N1-C2	-5.14	118.24	120.30
38	A1	1376	U	N1-C2-O2	-5.14	119.20	122.80
38	A1	1564	C	C5-C4-N4	-5.14	116.60	120.20
38	A1	1746	C	C5'-C4'-C3'	-5.14	107.77	116.00
38	A1	1824	G	N3-C4-C5	5.14	131.17	128.60
38	A1	2050	U	P-O5'-C5'	-5.14	112.67	120.90
38	A1	2338	A	C5'-C4'-C3'	-5.14	107.77	116.00
38	A1	2507	C	OP1-P-OP2	-5.14	111.88	119.60
5	AS	95	LEU	N-CA-CB	5.14	120.68	110.40
9	AX	227	GLU	CB-CA-C	-5.14	100.11	110.40
11	B2	394	C	N1-C2-N3	-5.14	115.60	119.20
11	B2	408	C	C3'-C2'-C1'	5.14	105.61	101.50
11	B2	555	U	OP1-P-OP2	-5.14	111.89	119.60
11	B2	861	G	C3'-C2'-C1'	-5.14	97.39	101.50
11	B2	1268	C	O4'-C1'-C2'	-5.14	100.66	105.80
11	B2	1275	U	C6-N1-C2	-5.14	117.92	121.00
25	BM	20	TYR	CB-CG-CD1	5.14	124.09	121.00
30	BR	34	PHE	CG-CD2-CE2	5.14	126.46	120.80
38	A1	223	U	N1-C1'-C2'	-5.14	106.34	112.00
38	A1	387	A	C8-N9-C4	-5.14	103.74	105.80
38	A1	644	G	N9-C1'-C2'	-5.14	106.34	112.00
38	A1	956	U	C3'-C2'-C1'	5.14	105.61	101.50
38	A1	1191	C	C3'-C2'-C1'	5.14	105.61	101.50
38	A1	1412	C	N3-C2-O2	5.14	125.50	121.90
38	A1	1589	G	C5-N7-C8	5.14	106.87	104.30
38	A1	1594	G	C8-N9-C1'	5.14	133.69	127.00
38	A1	1776	G	N9-C1'-C2'	-5.14	106.34	112.00
38	A1	2038	C	OP1-P-OP2	-5.14	111.89	119.60
38	A1	2059	G	C5-C6-N1	-5.14	108.93	111.50
38	A1	2252	C	C4'-C3'-C2'	-5.14	97.46	102.60
38	A1	2267	U	C5-C4-O4	5.14	128.99	125.90
38	A1	2676	A	N9-C4-C5	5.14	107.86	105.80
38	A1	2702	A	C4-C5-C6	5.14	119.57	117.00
38	A1	2996	A	N7-C8-N9	5.14	116.37	113.80
39	A3	77	A	C5-N7-C8	5.14	106.47	103.90
43	AB	197	MET	CG-SD-CE	5.14	108.43	100.20
11	B2	6	G	C6-C5-N7	-5.14	127.32	130.40
11	B2	1010	G	OP1-P-OP2	-5.14	111.89	119.60
22	BJ	92	ARG	NE-CZ-NH1	-5.14	117.73	120.30
30	BR	39	VAL	CA-CB-CG1	5.14	118.61	110.90
38	A1	1381	C	C2-N3-C4	5.14	122.47	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1752	C	P-O5'-C5'	-5.14	112.67	120.90
38	A1	2170	C	N3-C4-C5	-5.14	119.84	121.90
38	A1	2452	C	N1-C1'-C2'	-5.14	106.34	112.00
11	B2	393	A	N9-C4-C5	5.14	107.86	105.80
11	B2	533	C	N1-C2-O2	-5.14	115.82	118.90
11	B2	595	U	C4-C5-C6	-5.14	116.62	119.70
11	B2	725	C	C6-N1-C2	-5.14	118.25	120.30
11	B2	825	C	P-O3'-C3'	-5.14	113.53	119.70
11	B2	846	G	C5'-C4'-O4'	5.14	115.27	109.10
11	B2	1477	U	C2-N3-C4	5.14	130.08	127.00
30	BR	60	TYR	CB-CG-CD2	-5.14	117.92	121.00
38	A1	266	A	C5-C6-N6	-5.14	119.59	123.70
38	A1	428	A	OP1-P-OP2	-5.14	111.89	119.60
38	A1	480	A	O5'-P-OP2	-5.14	101.08	105.70
38	A1	711	C	P-O3'-C3'	-5.14	113.53	119.70
38	A1	1074	G	C4'-C3'-C2'	-5.14	97.46	102.60
38	A1	1098	C	C4-C5-C6	-5.14	114.83	117.40
38	A1	1145	G	C6-N1-C2	5.14	128.18	125.10
38	A1	1656	C	C6-N1-C2	-5.14	118.24	120.30
38	A1	2539	G	N3-C4-C5	-5.14	126.03	128.60
38	A1	2815	C	C4-C5-C6	5.14	119.97	117.40
39	A3	21	C	C6-N1-C2	5.14	122.36	120.30
46	AD	1	MET	CG-SD-CE	-5.14	91.98	100.20
11	B2	56	A	C5-C6-N1	-5.14	115.13	117.70
11	B2	1312	C	C4-C5-C6	5.14	119.97	117.40
38	A1	979	G	C4-C5-C6	-5.14	115.72	118.80
38	A1	1151	G	C8-N9-C4	5.14	108.45	106.40
60	AM	150	ALA	O-C-N	5.14	130.92	122.70
4	AQ	66	ARG	N-CA-CB	5.14	119.84	110.60
11	B2	46	A	N9-C4-C5	5.14	107.85	105.80
11	B2	92	G	N9-C4-C5	-5.14	103.34	105.40
11	B2	1103	G	N1-C6-O6	5.14	122.98	119.90
38	A1	75	G	N7-C8-N9	-5.14	110.53	113.10
38	A1	343	C	C4'-C3'-C2'	-5.14	97.46	102.60
38	A1	406	G	C5'-C4'-C3'	-5.14	107.78	116.00
38	A1	478	C	N1-C2-O2	5.14	121.98	118.90
38	A1	567	G	O4'-C1'-N9	5.14	112.31	108.20
38	A1	568	A	C4-C5-N7	-5.14	108.13	110.70
38	A1	624	U	P-O5'-C5'	5.14	129.12	120.90
38	A1	741	G	N9-C4-C5	5.14	107.45	105.40
38	A1	1113	G	N1-C2-N3	-5.14	120.82	123.90
38	A1	1148	C	P-O5'-C5'	-5.14	112.68	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1791	A	N7-C8-N9	-5.14	111.23	113.80
38	A1	1959	C	C2-N1-C1'	5.14	124.45	118.80
38	A1	2345	U	P-O3'-C3'	-5.14	113.54	119.70
38	A1	2849	C	O4'-C4'-C3'	-5.14	98.86	104.00
43	AB	75	GLU	N-CA-CB	5.14	119.84	110.60
11	B2	132	G	N3-C4-N9	-5.13	122.92	126.00
11	B2	287	G	C6-C5-N7	-5.13	127.32	130.40
11	B2	292	U	C3'-C2'-C1'	5.13	105.61	101.50
11	B2	446	G	N3-C4-N9	-5.13	122.92	126.00
11	B2	685	G	O4'-C1'-N9	5.13	112.31	108.20
11	B2	875	G	N1-C2-N2	5.13	120.82	116.20
11	B2	935	G	C4-N9-C1'	5.13	133.18	126.50
11	B2	951	G	N9-C4-C5	-5.13	103.35	105.40
11	B2	1200	U	C2-N3-C4	-5.13	123.92	127.00
17	BE	20	TYR	N-CA-CB	5.13	119.84	110.60
26	BN	36	ARG	N-CA-CB	5.13	119.84	110.60
38	A1	79	C	N1-C2-N3	-5.13	115.61	119.20
38	A1	259	A	C2-N3-C4	-5.13	108.03	110.60
38	A1	621	G	C4-C5-C6	5.13	121.88	118.80
38	A1	1020	G	C5'-C4'-O4'	5.13	115.26	109.10
38	A1	1048	C	C2-N1-C1'	5.13	124.45	118.80
38	A1	1092	U	N3-C2-O2	5.13	125.80	122.20
38	A1	1684	C	C5'-C4'-O4'	-5.13	102.94	109.10
38	A1	1807	G	N3-C2-N2	5.13	123.49	119.90
38	A1	1838	C	N3-C2-O2	5.13	125.50	121.90
38	A1	1889	G	N1-C6-O6	5.13	122.98	119.90
38	A1	2050	U	C5-C6-N1	5.13	125.27	122.70
38	A1	2122	G	O4'-C1'-N9	5.13	112.31	108.20
38	A1	2184	G	O4'-C1'-C2'	-5.13	100.67	105.80
38	A1	2414	G	N3-C2-N2	5.13	123.50	119.90
38	A1	2554	A	N1-C2-N3	5.13	131.87	129.30
38	A1	2708	U	P-O5'-C5'	5.13	129.12	120.90
9	AX	101	PRO	N-CA-CB	5.13	109.46	103.30
11	B2	1014	C	C5-C6-N1	5.13	123.57	121.00
17	BE	60	ARG	NH1-CZ-NH2	5.13	125.05	119.40
38	A1	644	G	C2-N3-C4	-5.13	109.33	111.90
38	A1	1197	G	C4-C5-C6	5.13	121.88	118.80
38	A1	1210	G	C4-C5-C6	5.13	121.88	118.80
38	A1	2019	C	O4'-C1'-N1	5.13	112.31	108.20
38	A1	2107	G	C6-N1-C2	5.13	128.18	125.10
61	AN	85	LYS	CA-CB-CG	5.13	124.69	113.40
11	B2	407	G	C4-C5-C6	5.13	121.88	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	737	C	C2-N3-C4	-5.13	117.33	119.90
11	B2	834	C	OP1-P-O3'	5.13	116.49	105.20
11	B2	1036	G	N3-C2-N2	5.13	123.49	119.90
38	A1	139	G	C8-N9-C4	-5.13	104.35	106.40
38	A1	470	A	N7-C8-N9	5.13	116.37	113.80
38	A1	1135	A	OP2-P-O3'	5.13	116.49	105.20
38	A1	1541	U	N3-C4-O4	5.13	122.99	119.40
38	A1	1914	U	C3'-C2'-C1'	-5.13	97.39	101.50
38	A1	2235	G	C3'-C2'-C1'	-5.13	97.39	101.50
38	A1	2425	A	N7-C8-N9	5.13	116.37	113.80
38	A1	2713	A	C4-C5-N7	-5.13	108.13	110.70
38	A1	2753	G	C4'-C3'-C2'	-5.13	97.47	102.60
38	A1	2955	G	N3-C4-N9	5.13	129.08	126.00
50	AF	143	ASP	CB-CG-OD1	5.13	122.92	118.30
5	AS	82	ARG	NE-CZ-NH1	-5.13	117.73	120.30
9	AX	342	PRO	N-CD-CG	5.13	110.89	103.20
11	B2	158	U	C5-C6-N1	5.13	125.27	122.70
11	B2	383	C	N3-C4-N4	5.13	121.59	118.00
11	B2	650	A	N1-C2-N3	5.13	131.87	129.30
11	B2	765	U	C6-N1-C2	-5.13	117.92	121.00
11	B2	1011	C	C4-C5-C6	5.13	119.97	117.40
11	B2	1437	G	N3-C4-N9	-5.13	122.92	126.00
38	A1	1941	A	OP1-P-OP2	-5.13	111.90	119.60
38	A1	2390	G	C5-N7-C8	5.13	106.86	104.30
38	A1	2957	G	N3-C4-C5	-5.13	126.03	128.60
39	A3	66	A	C5-C6-N6	-5.13	119.60	123.70
11	B2	320	G	C5-N7-C8	5.13	106.86	104.30
11	B2	554	C	N3-C4-N4	5.13	121.59	118.00
11	B2	723	G	C5-N7-C8	5.13	106.86	104.30
11	B2	789	G	N1-C6-O6	5.13	122.98	119.90
11	B2	958	G	N3-C2-N2	5.13	123.49	119.90
11	B2	1108	U	C2-N3-C4	-5.13	123.92	127.00
11	B2	1473	A	O4'-C1'-N9	5.13	112.30	108.20
31	BS	11	ARG	NE-CZ-NH1	5.13	122.86	120.30
38	A1	58	G	N3-C2-N2	5.13	123.49	119.90
38	A1	359	C	C5-C4-N4	-5.13	116.61	120.20
38	A1	429	U	N3-C4-O4	5.13	122.99	119.40
38	A1	822	A	O4'-C1'-N9	5.13	112.30	108.20
38	A1	1286	G	N1-C6-O6	5.13	122.98	119.90
38	A1	1607	C	C5'-C4'-O4'	5.13	115.25	109.10
38	A1	1654	G	N1-C6-O6	5.13	122.98	119.90
38	A1	1677	A	C5-C6-N6	-5.13	119.60	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2542	G	C5'-C4'-O4'	5.13	115.25	109.10
38	A1	2945	A	N3-C4-C5	-5.13	123.21	126.80
38	A1	2992	G	C6-N1-C2	5.13	128.18	125.10
58	Ak	54	VAL	CB-CA-C	-5.13	101.66	111.40
11	B2	280	C	C2-N1-C1'	5.13	124.44	118.80
11	B2	643	G	C5-N7-C8	5.13	106.86	104.30
11	B2	693	C	C6-N1-C2	5.13	122.35	120.30
11	B2	962	G	C6-C5-N7	-5.13	127.32	130.40
11	B2	973	U	N3-C2-O2	-5.13	118.61	122.20
38	A1	244	A	C2-N3-C4	5.13	113.16	110.60
38	A1	669	G	N1-C6-O6	5.13	122.97	119.90
38	A1	1101	U	N3-C4-C5	-5.13	111.52	114.60
38	A1	1450	C	P-O5'-C5'	5.13	129.10	120.90
38	A1	1621	G	N9-C4-C5	-5.13	103.35	105.40
38	A1	1756	C	C2-N1-C1'	-5.13	113.16	118.80
38	A1	1877	C	C5-C4-N4	-5.13	116.61	120.20
38	A1	2398	C	N1-C2-O2	5.13	121.98	118.90
38	A1	2585	G	C2-N3-C4	5.13	114.46	111.90
38	A1	2881	G	C5'-C4'-C3'	5.13	124.20	116.00
11	B2	121	C	C2-N1-C1'	5.12	124.44	118.80
11	B2	676	G	C6-N1-C2	5.12	128.18	125.10
38	A1	91	G	C4-C5-N7	-5.12	108.75	110.80
38	A1	589	G	C6-C5-N7	-5.12	127.33	130.40
38	A1	1085	G	N1-C2-N3	-5.12	120.83	123.90
38	A1	1135	A	N9-C4-C5	5.12	107.85	105.80
38	A1	1527	G	N1-C6-O6	5.12	122.97	119.90
38	A1	1841	G	C3'-C2'-C1'	-5.12	97.40	101.50
38	A1	1842	C	N1-C2-O2	-5.12	115.83	118.90
38	A1	2100	U	N3-C4-O4	5.12	122.99	119.40
38	A1	2202	U	C5-C4-O4	5.12	128.97	125.90
11	B2	845	G	N1-C2-N2	5.12	120.81	116.20
11	B2	1112	G	C4'-C3'-C2'	-5.12	97.48	102.60
11	B2	1121	C	N3-C4-N4	5.12	121.59	118.00
36	BX	29	VAL	CA-CB-CG2	-5.12	103.22	110.90
38	A1	122	G	C5-C6-N1	-5.12	108.94	111.50
38	A1	170	A	C6-N1-C2	-5.12	115.53	118.60
38	A1	626	C	P-O5'-C5'	5.12	129.10	120.90
38	A1	628	A	N3-C4-N9	-5.12	123.30	127.40
38	A1	1421	C	N1-C2-O2	-5.12	115.83	118.90
38	A1	1494	U	N3-C4-O4	-5.12	115.81	119.40
38	A1	1605	A	O5'-P-OP2	5.12	116.85	110.70
38	A1	2380	A	C4-C5-N7	-5.12	108.14	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
39	A3	24	C	O3'-P-O5'	5.12	113.73	104.00
39	A3	126	C	N3-C4-N4	5.12	121.59	118.00
10	B1	3	G	C4-C5-N7	5.12	112.85	110.80
10	B1	65	C	C4'-C3'-C2'	-5.12	97.48	102.60
11	B2	7	G	C4-C5-C6	5.12	121.87	118.80
11	B2	192	G	C6-N1-C2	5.12	128.17	125.10
11	B2	320	G	N9-C4-C5	-5.12	103.35	105.40
11	B2	543	C	C4'-C3'-C2'	-5.12	97.48	102.60
11	B2	772	G	C5'-C4'-O4'	5.12	115.25	109.10
11	B2	1395	G	O4'-C1'-N9	5.12	112.30	108.20
16	BD	11	TYR	CB-CG-CD2	5.12	124.07	121.00
34	BV	40	LEU	CB-CG-CD1	-5.12	102.29	111.00
38	A1	2347	G	C6-C5-N7	-5.12	127.33	130.40
38	A1	2599	C	N1-C2-O2	-5.12	115.83	118.90
38	A1	2825	A	C4-C5-C6	5.12	119.56	117.00
39	A3	20	G	C5'-C4'-O4'	5.12	115.25	109.10
39	A3	20	G	C5-C6-O6	-5.12	125.53	128.60
39	A3	42	A	C4-C5-N7	-5.12	108.14	110.70
44	Ab	92	ALA	N-CA-CB	5.12	117.27	110.10
11	B2	459	G	O4'-C1'-N9	5.12	112.30	108.20
11	B2	1042	U	N3-C4-O4	5.12	122.98	119.40
11	B2	1370	U	O4'-C4'-C3'	-5.12	98.88	104.00
11	B2	1450	U	N3-C2-O2	5.12	125.78	122.20
38	A1	712	C	C5-C6-N1	5.12	123.56	121.00
38	A1	1738	A	C5-C6-N1	-5.12	115.14	117.70
38	A1	2008	G	N7-C8-N9	5.12	115.66	113.10
61	AN	9	ASP	CA-CB-CG	-5.12	102.14	113.40
11	B2	175	G	C5-C6-O6	-5.12	125.53	128.60
11	B2	348	C	N1-C2-N3	-5.12	115.62	119.20
11	B2	524	U	O4'-C1'-N1	-5.12	104.11	108.20
11	B2	536	A	C5-C6-N6	-5.12	119.61	123.70
11	B2	987	G	C4-C5-C6	5.12	121.87	118.80
11	B2	1103	G	N1-C2-N2	-5.12	111.59	116.20
11	B2	1197	C	N3-C4-N4	5.12	121.58	118.00
38	A1	652	G	C4'-C3'-C2'	-5.12	97.48	102.60
38	A1	661	G	C8-N9-C1'	5.12	133.65	127.00
38	A1	1037	C	C5-C6-N1	-5.12	118.44	121.00
38	A1	1112	G	N1-C2-N3	-5.12	120.83	123.90
38	A1	1220	U	N1-C2-O2	5.12	126.38	122.80
38	A1	1423	G	N1-C2-N2	5.12	120.81	116.20
38	A1	1658	A	C4-N9-C1'	5.12	135.51	126.30
38	A1	1739	U	N1-C2-N3	-5.12	111.83	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1999	G	N9-C4-C5	5.12	107.45	105.40
38	A1	2120	C	C6-N1-C1'	-5.12	114.66	120.80
38	A1	2281	A	N7-C8-N9	-5.12	111.24	113.80
38	A1	2738	G	C4-C5-C6	5.12	121.87	118.80
11	B2	5	C	N3-C4-C5	-5.12	119.85	121.90
11	B2	276	A	C5-C6-N6	-5.12	119.61	123.70
11	B2	290	C	P-O3'-C3'	5.12	125.84	119.70
11	B2	1041	C	N1-C2-N3	-5.12	115.62	119.20
38	A1	71	A	C8-N9-C4	-5.12	103.75	105.80
38	A1	565	A	N3-C4-C5	-5.12	123.22	126.80
38	A1	1129	G	N7-C8-N9	5.12	115.66	113.10
38	A1	1174	U	O4'-C1'-C2'	-5.12	100.68	105.80
38	A1	1193	G	P-O3'-C3'	-5.12	113.56	119.70
38	A1	2563	A	C8-N9-C4	-5.12	103.75	105.80
11	B2	114	A	C5'-C4'-O4'	5.12	115.24	109.10
11	B2	126	G	C4'-C3'-C2'	-5.12	97.48	102.60
11	B2	223	G	C5-C6-N1	-5.12	108.94	111.50
11	B2	474	G	C8-N9-C1'	5.12	133.65	127.00
11	B2	867	A	C4-C5-N7	5.12	113.26	110.70
11	B2	1021	C	C5-C4-N4	-5.12	116.62	120.20
11	B2	1109	C	C5-C4-N4	-5.12	116.62	120.20
11	B2	1266	A	P-O3'-C3'	-5.12	113.56	119.70
11	B2	1378	A	N3-C4-C5	-5.12	123.22	126.80
11	B2	1458	A	N1-C2-N3	5.12	131.86	129.30
11	B2	1481	G	N7-C8-N9	-5.12	110.54	113.10
38	A1	55	G	C8-N9-C4	5.12	108.45	106.40
38	A1	130	G	C8-N9-C1'	5.12	133.65	127.00
38	A1	224	G	C2-N3-C4	5.12	114.46	111.90
38	A1	369	G	O4'-C1'-C2'	-5.12	100.69	105.80
38	A1	381	G	N3-C4-N9	-5.12	122.93	126.00
38	A1	842	C	C5'-C4'-C3'	5.12	124.19	116.00
38	A1	1398	C	C4-C5-C6	5.12	119.96	117.40
38	A1	1600	G	N1-C2-N2	-5.12	111.60	116.20
38	A1	2462	U	C5-C6-N1	5.12	125.26	122.70
38	A1	2536	A	C6-C5-N7	-5.12	128.72	132.30
38	A1	2694	C	C2-N1-C1'	5.12	124.43	118.80
38	A1	2700	U	O4'-C4'-C3'	-5.12	98.88	104.00
38	A1	2836	G	N3-C4-N9	-5.12	122.93	126.00
11	B2	236	C	C1'-O4'-C4'	5.11	113.99	109.90
11	B2	292	U	C6-N1-C1'	5.11	128.36	121.20
11	B2	353	G	C1'-O4'-C4'	-5.11	105.81	109.90
11	B2	586	C	O4'-C1'-N1	5.11	112.29	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	BI	79	PHE	CB-CG-CD1	-5.11	117.22	120.80
38	A1	293	G	N3-C2-N2	5.11	123.48	119.90
38	A1	583	A	C6-C5-N7	-5.11	128.72	132.30
38	A1	628	A	C4-C5-N7	-5.11	108.14	110.70
38	A1	658	C	O4'-C1'-N1	5.11	112.29	108.20
38	A1	757	C	C5-C4-N4	-5.11	116.62	120.20
38	A1	835	G	C5-C6-O6	-5.11	125.53	128.60
38	A1	906	G	N1-C2-N3	-5.11	120.83	123.90
38	A1	1163	U	C2-N1-C1'	5.11	123.84	117.70
38	A1	1487	U	C3'-C2'-C1'	5.11	105.59	101.50
38	A1	2028	G	N3-C4-C5	-5.11	126.04	128.60
38	A1	2307	C	C5-C6-N1	5.11	123.56	121.00
46	AD	33	ARG	NE-CZ-NH2	-5.11	117.74	120.30
58	Ak	124	ILE	N-CA-C	-5.11	97.19	111.00
61	AN	36	MET	CB-CA-C	-5.11	100.17	110.40
67	AZ	63	PHE	CB-CG-CD1	-5.11	117.22	120.80
11	B2	748	A	N7-C8-N9	-5.11	111.24	113.80
11	B2	1114	G	O4'-C4'-C3'	-5.11	98.89	104.00
38	A1	346	U	C2-N3-C4	5.11	130.07	127.00
38	A1	786	G	P-O3'-C3'	5.11	125.83	119.70
38	A1	1083	G	P-O3'-C3'	-5.11	113.57	119.70
38	A1	1782	C	N3-C4-N4	5.11	121.58	118.00
38	A1	2223	G	N3-C4-C5	5.11	131.16	128.60
11	B2	68	G	C4-N9-C1'	-5.11	119.86	126.50
11	B2	148	C	N3-C4-N4	5.11	121.58	118.00
11	B2	404	C	N3-C4-C5	-5.11	119.86	121.90
11	B2	618	G	C6-C5-N7	-5.11	127.33	130.40
11	B2	742	U	P-O5'-C5'	5.11	129.08	120.90
11	B2	937	A	C4'-C3'-C2'	-5.11	97.49	102.60
11	B2	981	U	C5-C4-O4	-5.11	122.83	125.90
11	B2	1060	G	N3-C4-C5	-5.11	126.04	128.60
11	B2	1087	C	C1'-O4'-C4'	-5.11	105.81	109.90
11	B2	1111	G	N7-C8-N9	-5.11	110.55	113.10
11	B2	1411	G	C4-C5-C6	5.11	121.87	118.80
16	BD	54	ARG	CD-NE-CZ	5.11	130.75	123.60
17	BE	63	ARG	NE-CZ-NH2	-5.11	117.75	120.30
38	A1	455	G	C3'-C2'-C1'	-5.11	97.41	101.50
38	A1	1013	G	C4-C5-C6	-5.11	115.73	118.80
38	A1	1053	A	C4-C5-N7	-5.11	108.14	110.70
38	A1	1133	U	C5-C4-O4	-5.11	122.83	125.90
38	A1	1309	G	C4-N9-C1'	-5.11	119.86	126.50
38	A1	2021	G	N9-C4-C5	-5.11	103.36	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2970	U	C4'-C3'-C2'	-5.11	97.49	102.60
39	A3	125	U	C5-C6-N1	-5.11	120.14	122.70
49	Ae	5	THR	CA-CB-CG2	5.11	119.56	112.40
57	Aj	24	ARG	CA-CB-CG	5.11	124.64	113.40
10	B1	35	G	C1'-O4'-C4'	-5.11	105.81	109.90
11	B2	1490	C	C4-C5-C6	5.11	119.95	117.40
23	BK	2	ARG	NE-CZ-NH1	5.11	122.86	120.30
23	BK	34	GLU	CB-CA-C	-5.11	100.18	110.40
38	A1	171	A	P-O5'-C5'	-5.11	112.73	120.90
38	A1	213	G	N3-C2-N2	5.11	123.48	119.90
38	A1	829	G	C1'-O4'-C4'	-5.11	105.81	109.90
38	A1	941	C	C6-N1-C2	-5.11	118.26	120.30
38	A1	1054	A	O4'-C4'-C3'	-5.11	98.89	104.00
38	A1	1270	G	N9-C4-C5	-5.11	103.36	105.40
38	A1	1332	A	N1-C2-N3	-5.11	126.75	129.30
38	A1	1649	G	C6-C5-N7	-5.11	127.33	130.40
38	A1	2733	A	C4-C5-N7	-5.11	108.15	110.70
10	B1	60	A	C6-C5-N7	-5.11	128.72	132.30
11	B2	321	A	N9-C1'-C2'	-5.11	106.38	112.00
11	B2	896	A	N9-C4-C5	5.11	107.84	105.80
11	B2	1083	G	C5-C6-O6	-5.11	125.54	128.60
38	A1	8	G	O4'-C1'-N9	5.11	112.29	108.20
38	A1	1125	A	O4'-C1'-N9	5.11	112.29	108.20
38	A1	1329	G	N3-C2-N2	5.11	123.47	119.90
38	A1	2039	U	C5-C4-O4	-5.11	122.83	125.90
38	A1	2368	G	C6-C5-N7	-5.11	127.33	130.40
38	A1	2867	U	OP1-P-OP2	-5.11	111.94	119.60
38	A1	3022	C	C1'-O4'-C4'	-5.11	105.81	109.90
39	A3	18	G	O4'-C1'-C2'	5.11	112.20	107.60
67	AZ	66	THR	CA-CB-OG1	5.11	119.73	109.00
10	B1	39	A	C4-N9-C1'	5.11	135.49	126.30
11	B2	311	A	N3-C4-N9	5.11	131.48	127.40
11	B2	340	A	N3-C4-N9	5.11	131.48	127.40
11	B2	361	A	O4'-C1'-C2'	5.11	112.19	107.60
11	B2	1040	A	C2-N3-C4	-5.11	108.05	110.60
32	BT	21	LEU	CB-CG-CD2	5.11	119.68	111.00
38	A1	472	A	N3-C4-C5	-5.11	123.23	126.80
38	A1	799	C	P-O3'-C3'	-5.11	113.58	119.70
38	A1	1389	A	O5'-P-OP1	-5.11	101.11	105.70
38	A1	1443	G	N7-C8-N9	-5.11	110.55	113.10
38	A1	1720	G	C6-C5-N7	-5.11	127.34	130.40
38	A1	2338	A	N1-C2-N3	5.11	131.85	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2384	G	C5'-C4'-O4'	5.11	115.23	109.10
38	A1	2893	U	N3-C4-O4	5.11	122.97	119.40
38	A1	3027	C	C6-N1-C2	5.11	122.34	120.30
58	Ak	212	GLU	OE1-CD-OE2	5.11	129.43	123.30
11	B2	19	G	C8-N9-C1'	5.10	133.64	127.00
11	B2	1428	G	N1-C2-N3	-5.10	120.84	123.90
38	A1	35	G	C4-C5-N7	5.10	112.84	110.80
38	A1	272	G	O4'-C1'-N9	5.10	112.28	108.20
38	A1	384	G	C8-N9-C1'	5.10	133.64	127.00
38	A1	696	G	O4'-C1'-N9	5.10	112.28	108.20
38	A1	855	G	C8-N9-C4	-5.10	104.36	106.40
38	A1	1548	A	N1-C2-N3	-5.10	126.75	129.30
38	A1	2247	G	C2-N3-C4	-5.10	109.35	111.90
11	B2	816	G	C8-N9-C4	-5.10	104.36	106.40
11	B2	856	G	C8-N9-C4	5.10	108.44	106.40
11	B2	1400	A	P-O3'-C3'	-5.10	113.58	119.70
21	BI	99	PHE	CB-CG-CD2	-5.10	117.23	120.80
30	BR	8	ARG	NE-CZ-NH1	5.10	122.85	120.30
32	BT	30	ALA	N-CA-CB	5.10	117.25	110.10
38	A1	563	A	O4'-C1'-N9	5.10	112.28	108.20
38	A1	700	A	C5-N7-C8	5.10	106.45	103.90
38	A1	743	A	C5-C6-N1	-5.10	115.15	117.70
38	A1	1718	C	C3'-C2'-C1'	-5.10	97.42	101.50
38	A1	1793	G	N9-C4-C5	5.10	107.44	105.40
38	A1	1820	C	N1-C2-O2	-5.10	115.84	118.90
38	A1	1879	U	N1-C2-O2	-5.10	119.23	122.80
38	A1	2027	G	C8-N9-C4	5.10	108.44	106.40
38	A1	2093	A	P-O3'-C3'	5.10	125.82	119.70
38	A1	2095	U	C6-N1-C1'	-5.10	114.06	121.20
38	A1	2223	G	N3-C4-N9	-5.10	122.94	126.00
38	A1	2278	U	OP1-P-OP2	-5.10	111.94	119.60
38	A1	3032	C	C5-C6-N1	5.10	123.55	121.00
39	A3	20	G	C4-N9-C1'	5.10	133.13	126.50
39	A3	98	G	C4-C5-N7	-5.10	108.76	110.80
39	A3	118	G	C5-C6-N1	-5.10	108.95	111.50
46	AD	167	TRP	CE3-CZ3-CH2	-5.10	115.59	121.20
11	B2	51	A	C4-C5-N7	-5.10	108.15	110.70
11	B2	724	C	C6-N1-C2	-5.10	118.26	120.30
11	B2	1391	U	C6-N1-C2	-5.10	117.94	121.00
38	A1	381	G	O5'-C5'-C4'	-5.10	102.01	111.70
38	A1	382	G	C4-C5-C6	5.10	121.86	118.80
38	A1	478	C	P-O3'-C3'	-5.10	113.58	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	634	G	C4-C5-C6	5.10	121.86	118.80
38	A1	1033	C	C4'-C3'-C2'	-5.10	97.50	102.60
38	A1	1077	G	C5-C6-N1	-5.10	108.95	111.50
38	A1	1124	G	P-O3'-C3'	5.10	125.82	119.70
38	A1	1304	G	N1-C6-O6	-5.10	116.84	119.90
38	A1	1681	G	P-O3'-C3'	5.10	125.82	119.70
38	A1	2360	G	C6-C5-N7	-5.10	127.34	130.40
38	A1	2554	A	N3-C4-C5	-5.10	123.23	126.80
39	A3	41	A	C8-N9-C4	-5.10	103.76	105.80
47	Ad	53	GLU	C-N-CA	5.10	134.45	121.70
12	AG	7	VAL	CA-CB-CG2	-5.10	103.25	110.90
7	AU	70	ASP	CB-CA-C	-5.10	100.20	110.40
11	B2	117	C	N1-C2-O2	5.10	121.96	118.90
11	B2	608	G	O4'-C1'-N9	5.10	112.28	108.20
11	B2	767	U	C5-C4-O4	5.10	128.96	125.90
11	B2	812	U	C1'-O4'-C4'	5.10	113.98	109.90
11	B2	1109	C	C2-N1-C1'	5.10	124.41	118.80
11	B2	1232	G	N1-C2-N2	-5.10	111.61	116.20
18	BF	110	ILE	CA-CB-CG1	-5.10	101.31	111.00
38	A1	114	C	C5-C4-N4	-5.10	116.63	120.20
38	A1	679	U	N3-C4-C5	-5.10	111.54	114.60
38	A1	727	A	N1-C6-N6	5.10	121.66	118.60
38	A1	801	A	P-O3'-C3'	-5.10	113.58	119.70
38	A1	998	G	C5'-C4'-O4'	5.10	115.22	109.10
38	A1	1048	C	C4-C5-C6	5.10	119.95	117.40
38	A1	1128	G	C6-C5-N7	-5.10	127.34	130.40
38	A1	1498	C	N1-C2-O2	5.10	121.96	118.90
38	A1	1539	U	C1'-O4'-C4'	-5.10	105.82	109.90
38	A1	1669	A	C3'-C2'-C1'	5.10	105.58	101.50
38	A1	1865	U	C5-C4-O4	-5.10	122.84	125.90
38	A1	2077	A	C5-C6-N1	-5.10	115.15	117.70
38	A1	2425	A	P-O3'-C3'	5.10	125.82	119.70
38	A1	2963	G	C5-N7-C8	5.10	106.85	104.30
45	AC	23	ILE	CA-CB-CG1	5.10	120.69	111.00
11	B2	177	A	O4'-C1'-C2'	-5.10	100.70	105.80
11	B2	921	G	P-O3'-C3'	-5.10	113.58	119.70
11	B2	930	G	C4-C5-C6	5.10	121.86	118.80
11	B2	1062	G	C4-C5-C6	5.10	121.86	118.80
11	B2	1261	U	C2-N3-C4	5.10	130.06	127.00
11	B2	1449	G	N1-C6-O6	5.10	122.96	119.90
38	A1	284	U	C5-C6-N1	5.10	125.25	122.70
38	A1	288	G	O4'-C1'-N9	5.10	112.28	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	843	C	N1-C2-O2	-5.10	115.84	118.90
38	A1	1011	A	C5-C6-N6	-5.10	119.62	123.70
38	A1	1163	U	P-O3'-C3'	-5.10	113.58	119.70
38	A1	1525	G	C6-N1-C2	5.10	128.16	125.10
38	A1	2307	C	C1'-O4'-C4'	5.10	113.98	109.90
38	A1	2448	A	C8-N9-C4	-5.10	103.76	105.80
39	A3	116	C	C5-C6-N1	5.10	123.55	121.00
40	AK	61	ASP	CB-CG-OD1	5.10	122.89	118.30
11	B2	90	C	N1-C2-O2	-5.10	115.84	118.90
11	B2	1418	G	C5-N7-C8	5.10	106.85	104.30
38	A1	1807	G	C4'-C3'-C2'	-5.10	97.50	102.60
38	A1	2041	U	C5-C4-O4	-5.10	122.84	125.90
46	AD	123	ASN	N-CA-C	-5.10	97.24	111.00
48	AE	107	PHE	CG-CD2-CE2	-5.10	115.19	120.80
11	B2	125	G	N1-C6-O6	5.09	122.96	119.90
11	B2	156	A	O4'-C4'-C3'	-5.09	98.91	104.00
11	B2	202	G	C6-C5-N7	-5.09	127.34	130.40
11	B2	395	C	C5-C4-N4	-5.09	116.63	120.20
11	B2	702	G	C8-N9-C4	-5.09	104.36	106.40
11	B2	811	G	N3-C4-C5	-5.09	126.05	128.60
11	B2	832	G	O4'-C1'-N9	5.09	112.28	108.20
11	B2	1422	G	N1-C2-N3	-5.09	120.84	123.90
38	A1	516	A	O4'-C1'-N9	5.09	112.28	108.20
38	A1	748	G	C8-N9-C1'	-5.09	120.38	127.00
38	A1	1077	G	N1-C2-N3	-5.09	120.84	123.90
38	A1	1166	A	N9-C4-C5	5.09	107.84	105.80
38	A1	1335	C	N3-C4-C5	-5.09	119.86	121.90
38	A1	1845	C	OP1-P-OP2	-5.09	111.96	119.60
38	A1	1892	G	C5-C6-N1	-5.09	108.95	111.50
38	A1	1963	G	C2-N3-C4	5.09	114.45	111.90
38	A1	2401	A	C2-N3-C4	5.09	113.15	110.60
38	A1	2717	A	C4-C5-C6	5.09	119.55	117.00
46	AD	219	VAL	CA-CB-CG2	-5.09	103.26	110.90
11	B2	59	C	N3-C2-O2	-5.09	118.33	121.90
11	B2	647	G	C6-C5-N7	-5.09	127.34	130.40
38	A1	609	G	C8-N9-C1'	5.09	133.62	127.00
38	A1	1506	U	C5-C6-N1	5.09	125.25	122.70
38	A1	1657	G	N3-C4-C5	-5.09	126.05	128.60
38	A1	1941	A	C4-C5-C6	5.09	119.55	117.00
38	A1	2781	A	C1'-O4'-C4'	5.09	113.97	109.90
39	A3	88	A	C6-C5-N7	-5.09	128.74	132.30
10	B1	72	C	N3-C2-O2	5.09	125.47	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	150	G	N3-C4-C5	5.09	131.15	128.60
11	B2	342	G	C5-C6-O6	-5.09	125.55	128.60
11	B2	461	A	N9-C4-C5	5.09	107.84	105.80
11	B2	779	G	C2-N3-C4	-5.09	109.35	111.90
11	B2	959	G	C5'-C4'-O4'	5.09	115.21	109.10
11	B2	1143	G	C5-C6-N1	-5.09	108.95	111.50
11	B2	1436	U	C5'-C4'-O4'	5.09	115.21	109.10
11	B2	1464	C	O5'-P-OP1	-5.09	101.12	105.70
18	BF	85	VAL	CA-CB-CG2	5.09	118.54	110.90
38	A1	283	U	N1-C2-O2	5.09	126.36	122.80
38	A1	529	G	C2-N3-C4	5.09	114.44	111.90
38	A1	782	G	C4'-C3'-C2'	-5.09	97.51	102.60
38	A1	902	C	N3-C2-O2	5.09	125.46	121.90
38	A1	1251	G	C5'-C4'-C3'	5.09	124.15	116.00
38	A1	1506	U	O4'-C1'-N1	5.09	112.27	108.20
38	A1	1607	C	N3-C4-C5	-5.09	119.86	121.90
38	A1	2587	G	N1-C2-N3	-5.09	120.84	123.90
38	A1	2827	C	C1'-O4'-C4'	-5.09	105.83	109.90
39	A3	69	C	C2-N3-C4	5.09	122.45	119.90
39	A3	117	G	C8-N9-C4	-5.09	104.36	106.40
40	AK	76	GLU	N-CA-CB	5.09	119.77	110.60
62	AO	92	TYR	CB-CG-CD2	-5.09	117.94	121.00
64	AR	40	ARG	NE-CZ-NH1	-5.09	117.75	120.30
1	A7	4	PHE	CB-CG-CD2	-5.09	117.24	120.80
11	B2	335	G	O4'-C4'-C3'	-5.09	98.91	104.00
11	B2	355	C	C3'-C2'-C1'	5.09	105.57	101.50
11	B2	468	G	C4-C5-C6	5.09	121.85	118.80
11	B2	972	C	C5-C6-N1	-5.09	118.46	121.00
11	B2	1480	G	C2-N3-C4	5.09	114.44	111.90
22	BJ	82	GLU	CB-CA-C	5.09	120.58	110.40
38	A1	54	G	C4-C5-N7	5.09	112.84	110.80
38	A1	854	G	C5-C6-N1	-5.09	108.96	111.50
38	A1	1005	G	C4-C5-N7	5.09	112.84	110.80
38	A1	1050	C	C2-N3-C4	5.09	122.44	119.90
38	A1	1824	G	C3'-C2'-C1'	5.09	105.57	101.50
38	A1	1861	G	C4-C5-N7	-5.09	108.76	110.80
38	A1	1881	A	O5'-P-OP1	5.09	116.81	110.70
38	A1	2671	C	C6-N1-C2	5.09	122.34	120.30
38	A1	2682	G	N9-C1'-C2'	-5.09	106.40	112.00
38	A1	3006	G	N9-C4-C5	5.09	107.44	105.40
39	A3	84	U	C1'-O4'-C4'	-5.09	105.83	109.90
52	AH	25	ILE	CB-CA-C	5.09	121.78	111.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	B3	106	LYS	O-C-N	-5.09	114.56	122.70
38	A1	292	U	O4'-C1'-N1	5.09	112.27	108.20
38	A1	1557	G	O3'-P-O5'	-5.09	94.33	104.00
38	A1	1998	G	N3-C4-N9	5.09	129.05	126.00
39	A3	10	U	P-O5'-C5'	-5.09	112.76	120.90
11	B2	520	G	C4'-C3'-C2'	-5.09	97.51	102.60
11	B2	1123	G	N7-C8-N9	-5.09	110.56	113.10
22	BJ	18	VAL	N-CA-C	-5.09	97.27	111.00
23	BK	108	VAL	C-N-CA	5.09	132.98	122.30
28	BP	29	PRO	N-CA-CB	5.09	109.40	103.30
38	A1	167	G	N3-C4-N9	5.09	129.05	126.00
38	A1	250	G	C2-N3-C4	-5.09	109.36	111.90
38	A1	263	U	P-O3'-C3'	-5.09	113.60	119.70
38	A1	288	G	C2-N3-C4	5.09	114.44	111.90
38	A1	382	G	C3'-C2'-C1'	5.09	105.57	101.50
38	A1	940	G	N3-C2-N2	5.09	123.46	119.90
38	A1	1002	A	C6-N1-C2	-5.09	115.55	118.60
38	A1	1589	G	C4-C5-N7	-5.09	108.77	110.80
38	A1	1807	G	C3'-C2'-C1'	5.09	105.57	101.50
38	A1	2157	U	N3-C4-C5	-5.09	111.55	114.60
38	A1	2495	A	C4-C5-N7	-5.09	108.16	110.70
38	A1	2944	G	N3-C4-C5	5.09	131.14	128.60
38	A1	2984	A	N7-C8-N9	-5.09	111.26	113.80
45	AC	352	GLN	N-CA-CB	5.09	119.75	110.60
46	AD	28	PRO	N-CA-CB	5.09	109.40	103.30
11	B2	404	C	C5-C4-N4	-5.08	116.64	120.20
11	B2	1040	A	N3-C4-C5	-5.08	123.24	126.80
13	BA	59	PHE	CB-CG-CD2	5.08	124.36	120.80
38	A1	118	A	C5-N7-C8	5.08	106.44	103.90
38	A1	656	G	N3-C4-C5	-5.08	126.06	128.60
38	A1	1176	C	N3-C4-C5	-5.08	119.87	121.90
38	A1	1518	G	C8-N9-C4	5.08	108.43	106.40
38	A1	2443	G	C5-C6-N1	5.08	114.04	111.50
39	A3	9	A	N9-C4-C5	-5.08	103.77	105.80
40	A5	20	GLN	CG-CD-OE1	-5.08	111.43	121.60
43	AB	182	TYR	CB-CG-CD2	5.08	124.05	121.00
50	AF	173	TYR	CB-CG-CD1	5.08	124.05	121.00
40	AK	71	VAL	C-N-CA	5.08	134.41	121.70
10	B1	20	G	P-O5'-C5'	-5.08	112.77	120.90
11	B2	617	A	OP2-P-O3'	5.08	116.38	105.20
11	B2	648	A	C5'-C4'-O4'	5.08	115.20	109.10
11	B2	855	C	N1-C2-N3	-5.08	115.64	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1356	A	N9-C4-C5	5.08	107.83	105.80
11	B2	1429	G	C4-N9-C1'	-5.08	119.89	126.50
11	B2	1429	G	C8-N9-C1'	5.08	133.61	127.00
38	A1	758	C	O4'-C1'-N1	5.08	112.27	108.20
38	A1	995	G	N3-C4-C5	-5.08	126.06	128.60
38	A1	1607	C	O4'-C1'-N1	5.08	112.27	108.20
38	A1	2579	G	N1-C2-N2	5.08	120.78	116.20
50	AF	56	TYR	CG-CD2-CE2	-5.08	117.23	121.30
54	AI	98	LYS	N-CA-CB	5.08	119.75	110.60
10	B1	20	G	C5'-C4'-C3'	-5.08	107.87	116.00
11	B2	222	G	O4'-C4'-C3'	-5.08	98.92	104.00
11	B2	287	G	N1-C2-N2	-5.08	111.63	116.20
11	B2	457	G	C6-C5-N7	-5.08	127.35	130.40
11	B2	656	U	C2-N1-C1'	5.08	123.80	117.70
11	B2	674	C	C2-N3-C4	5.08	122.44	119.90
11	B2	688	C	N1-C2-N3	5.08	122.76	119.20
11	B2	984	C	P-O3'-C3'	5.08	125.80	119.70
11	B2	1134	G	N1-C2-N2	5.08	120.77	116.20
11	B2	1285	C	C4'-C3'-C2'	-5.08	97.52	102.60
20	BH	87	ARG	CG-CD-NE	-5.08	101.13	111.80
22	BJ	16	ARG	NE-CZ-NH1	-5.08	117.76	120.30
38	A1	24	G	C4-C5-C6	5.08	121.85	118.80
38	A1	42	G	C4-N9-C1'	-5.08	119.89	126.50
38	A1	925	U	C1'-O4'-C4'	-5.08	105.83	109.90
38	A1	927	G	C1'-O4'-C4'	5.08	113.97	109.90
38	A1	985	A	C1'-O4'-C4'	-5.08	105.83	109.90
38	A1	1229	U	C3'-C2'-C1'	5.08	105.56	101.50
38	A1	1234	A	P-O3'-C3'	-5.08	113.60	119.70
38	A1	1461	G	C5-C6-N1	-5.08	108.96	111.50
38	A1	1608	G	C8-N9-C4	-5.08	104.37	106.40
38	A1	2019	C	C4-C5-C6	5.08	119.94	117.40
38	A1	2023	A	P-O3'-C3'	-5.08	113.60	119.70
38	A1	2426	U	C5-C4-O4	5.08	128.95	125.90
38	A1	2684	G	N7-C8-N9	5.08	115.64	113.10
38	A1	2854	A	O4'-C1'-C2'	5.08	112.17	107.60
43	AB	204	PHE	CB-CG-CD2	5.08	124.36	120.80
46	AD	238	ARG	NE-CZ-NH1	-5.08	117.76	120.30
61	AN	15	PRO	N-CA-CB	5.08	109.40	103.30
11	B2	951	G	N7-C8-N9	5.08	115.64	113.10
11	B2	1172	A	C6-C5-N7	-5.08	128.74	132.30
19	BG	105	LYS	N-CA-CB	5.08	119.74	110.60
38	A1	173	G	N3-C2-N2	5.08	123.46	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1077	G	C6-N1-C2	5.08	128.15	125.10
38	A1	1345	G	C2-N3-C4	-5.08	109.36	111.90
38	A1	1988	U	C5-C6-N1	5.08	125.24	122.70
38	A1	2040	A	N9-C4-C5	5.08	107.83	105.80
43	AB	17	PHE	CB-CG-CD1	-5.08	117.24	120.80
67	AZ	2	ASP	CB-CG-OD2	5.08	122.87	118.30
9	AX	219	VAL	N-CA-CB	5.08	122.67	111.50
10	B1	27	A	C4-C5-C6	5.08	119.54	117.00
10	B1	46	U	C2-N1-C1'	5.08	123.79	117.70
11	B2	14	C	O4'-C1'-N1	5.08	112.26	108.20
11	B2	99	C	C5-C4-N4	-5.08	116.64	120.20
11	B2	327	G	C5-C6-N1	-5.08	108.96	111.50
11	B2	347	G	N9-C1'-C2'	-5.08	106.41	112.00
11	B2	424	U	C4-C5-C6	5.08	122.75	119.70
11	B2	567	A	OP2-P-O3'	5.08	116.37	105.20
11	B2	860	G	C2-N3-C4	5.08	114.44	111.90
11	B2	944	C	OP1-P-OP2	-5.08	111.98	119.60
13	BA	48	VAL	CG1-CB-CG2	-5.08	102.78	110.90
38	A1	131	C	N1-C2-N3	-5.08	115.64	119.20
38	A1	605	A	C8-N9-C4	-5.08	103.77	105.80
38	A1	1015	G	C4-C5-N7	5.08	112.83	110.80
38	A1	1038	U	N1-C2-O2	-5.08	119.24	122.80
38	A1	1086	U	O5'-P-OP2	5.08	116.80	110.70
38	A1	1142	A	N9-C4-C5	-5.08	103.77	105.80
38	A1	1392	G	C5'-C4'-O4'	5.08	115.19	109.10
38	A1	1734	G	C5'-C4'-C3'	-5.08	107.87	116.00
38	A1	1906	G	C5-C6-O6	-5.08	125.55	128.60
38	A1	1982	C	O4'-C1'-N1	5.08	112.26	108.20
38	A1	2647	G	C8-N9-C4	5.08	108.43	106.40
43	AB	105	GLY	O-C-N	-5.08	114.58	122.70
45	AC	358	TYR	CD1-CE1-CZ	-5.08	115.23	119.80
46	AD	200	VAL	CB-CA-C	-5.08	101.75	111.40
59	AL	4	ARG	NE-CZ-NH2	-5.08	117.76	120.30
67	AZ	99	ARG	NE-CZ-NH1	5.08	122.84	120.30
11	B2	819	G	N9-C4-C5	5.08	107.43	105.40
11	B2	1299	A	C5-C6-N1	-5.08	115.16	117.70
11	B2	1359	C	C6-N1-C1'	-5.08	114.71	120.80
38	A1	799	C	C5-C4-N4	-5.08	116.65	120.20
38	A1	1160	U	C5'-C4'-O4'	5.08	115.19	109.10
38	A1	1247	U	C2-N3-C4	5.08	130.05	127.00
38	A1	1443	G	C5'-C4'-C3'	-5.08	107.88	116.00
38	A1	2448	A	C6-C5-N7	-5.08	128.75	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2954	C	P-O5'-C5'	-5.08	112.78	120.90
49	Ae	32	LYS	N-CA-CB	5.08	119.74	110.60
11	B2	221	A	C5-N7-C8	5.08	106.44	103.90
11	B2	445	G	P-O5'-C5'	-5.08	112.78	120.90
11	B2	757	G	N1-C2-N3	-5.08	120.86	123.90
11	B2	1470	G	N9-C4-C5	5.08	107.43	105.40
38	A1	185	A	O4'-C1'-N9	5.08	112.26	108.20
38	A1	212	A	C6-C5-N7	5.08	135.85	132.30
38	A1	428	A	N9-C4-C5	5.08	107.83	105.80
38	A1	546	C	OP2-P-O3'	5.08	116.37	105.20
38	A1	1189	A	OP2-P-O3'	5.08	116.37	105.20
38	A1	1607	C	C5-C6-N1	5.08	123.54	121.00
38	A1	2268	C	N3-C4-C5	-5.08	119.87	121.90
38	A1	2297	C	P-O5'-C5'	5.08	129.02	120.90
38	A1	2621	U	C5'-C4'-O4'	-5.08	103.01	109.10
38	A1	2885	C	N3-C4-N4	5.08	121.55	118.00
11	B2	476	C	C2-N3-C4	5.07	122.44	119.90
11	B2	538	C	C5-C4-N4	-5.07	116.65	120.20
11	B2	792	C	N3-C4-N4	5.07	121.55	118.00
11	B2	932	C	O4'-C4'-C3'	-5.07	98.93	104.00
11	B2	1112	G	C6-C5-N7	-5.07	127.36	130.40
11	B2	1428	G	C8-N9-C1'	5.07	133.59	127.00
11	B2	1461	U	C6-N1-C1'	5.07	128.30	121.20
38	A1	1021	G	C2-N3-C4	-5.07	109.36	111.90
38	A1	1146	U	C6-N1-C1'	-5.07	114.10	121.20
38	A1	1309	G	N1-C6-O6	5.07	122.94	119.90
38	A1	1665	G	N7-C8-N9	-5.07	110.56	113.10
38	A1	2485	C	O4'-C1'-N1	5.07	112.26	108.20
38	A1	2521	U	C2-N1-C1'	5.07	123.79	117.70
38	A1	2894	A	O4'-C1'-N9	5.07	112.26	108.20
48	AE	2	ALA	N-CA-CB	5.07	117.20	110.10
60	AM	8	ARG	NH1-CZ-NH2	-5.07	113.82	119.40
11	B2	100	A	C2-N3-C4	-5.07	108.06	110.60
11	B2	385	A	C4'-C3'-C2'	-5.07	97.53	102.60
39	A3	116	C	P-O3'-C3'	-5.07	113.61	119.70
6	AT	41	ARG	NH1-CZ-NH2	5.07	124.98	119.40
11	B2	198	A	C3'-C2'-C1'	5.07	105.56	101.50
11	B2	798	U	C3'-C2'-C1'	5.07	105.56	101.50
11	B2	859	A	N7-C8-N9	5.07	116.33	113.80
38	A1	315	U	N3-C2-O2	5.07	125.75	122.20
38	A1	519	A	C6-N1-C2	5.07	121.64	118.60
38	A1	920	G	N1-C2-N3	-5.07	120.86	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	983	G	N3-C2-N2	-5.07	116.35	119.90
38	A1	1031	C	C2-N3-C4	5.07	122.44	119.90
38	A1	1079	A	N1-C2-N3	5.07	131.84	129.30
38	A1	1601	G	C5'-C4'-C3'	5.07	124.11	116.00
38	A1	1607	C	C1'-O4'-C4'	-5.07	105.84	109.90
38	A1	1831	C	N3-C4-N4	5.07	121.55	118.00
38	A1	2110	C	C6-N1-C1'	-5.07	114.71	120.80
38	A1	2432	G	C4-C5-N7	5.07	112.83	110.80
38	A1	2458	U	O4'-C1'-N1	5.07	112.26	108.20
38	A1	2605	G	N3-C4-C5	-5.07	126.06	128.60
49	Ae	28	TYR	CZ-CE2-CD2	-5.07	115.24	119.80
11	B2	46	A	C8-N9-C4	-5.07	103.77	105.80
11	B2	963	A	C5'-C4'-O4'	5.07	115.18	109.10
12	B3	94	VAL	N-CA-C	-5.07	97.31	111.00
34	BV	62	SER	C-N-CA	5.07	134.37	121.70
38	A1	679	U	O4'-C1'-C2'	-5.07	100.73	105.80
38	A1	1085	G	N3-C4-C5	5.07	131.13	128.60
38	A1	1286	G	O4'-C4'-C3'	-5.07	98.93	104.00
38	A1	1852	U	N3-C4-C5	-5.07	111.56	114.60
38	A1	2040	A	C8-N9-C4	-5.07	103.77	105.80
39	A3	48	A	C5-C6-N6	-5.07	119.64	123.70
42	Aa	25	TRP	CE3-CZ3-CH2	-5.07	115.62	121.20
11	B2	95	G	C5-C6-N1	-5.07	108.97	111.50
11	B2	641	A	C5'-C4'-C3'	5.07	124.11	116.00
11	B2	913	G	C2-N3-C4	5.07	114.43	111.90
38	A1	482	A	O4'-C4'-C3'	-5.07	98.93	104.00
38	A1	527	G	P-O5'-C5'	5.07	129.01	120.90
38	A1	1098	C	P-O5'-C5'	5.07	129.01	120.90
38	A1	1445	G	C8-N9-C4	-5.07	104.37	106.40
38	A1	1746	C	P-O3'-C3'	5.07	125.78	119.70
38	A1	2384	G	C1'-O4'-C4'	-5.07	105.85	109.90
38	A1	2741	U	N1-C2-N3	-5.07	111.86	114.90
10	B1	69	G	O4'-C4'-C3'	-5.07	98.94	104.00
11	B2	78	G	C2-N3-C4	-5.07	109.37	111.90
11	B2	181	G	N3-C2-N2	5.07	123.44	119.90
11	B2	203	A	C5-C6-N1	-5.07	115.17	117.70
11	B2	250	G	N3-C2-N2	5.07	123.45	119.90
11	B2	284	A	C6-N1-C2	-5.07	115.56	118.60
11	B2	507	G	C5-N7-C8	-5.07	101.77	104.30
38	A1	567	G	C1'-O4'-C4'	5.07	113.95	109.90
38	A1	910	G	C4-C5-N7	5.07	112.83	110.80
38	A1	1061	G	N1-C2-N3	-5.07	120.86	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1172	U	P-O3'-C3'	-5.07	113.62	119.70
38	A1	1417	U	O3'-P-O5'	-5.07	94.38	104.00
38	A1	1680	G	N3-C2-N2	5.07	123.44	119.90
38	A1	2460	A	C5-N7-C8	5.07	106.43	103.90
38	A1	2671	C	C2-N1-C1'	5.07	124.37	118.80
38	A1	2821	G	C5-C6-N1	-5.07	108.97	111.50
54	AI	100	TYR	CB-CG-CD1	-5.07	117.96	121.00
54	AI	134	VAL	CA-CB-CG1	5.07	118.50	110.90
11	B2	863	U	P-O3'-C3'	5.06	125.78	119.70
11	B2	1110	U	C1'-O4'-C4'	5.06	113.95	109.90
38	A1	532	G	C5'-C4'-O4'	-5.06	103.02	109.10
38	A1	556	G	C4-C5-N7	5.06	112.83	110.80
38	A1	1423	G	N3-C4-C5	5.06	131.13	128.60
38	A1	1594	G	N9-C4-C5	5.06	107.42	105.40
38	A1	1889	G	C6-N1-C2	5.06	128.14	125.10
38	A1	2150	G	N1-C6-O6	5.06	122.94	119.90
10	B1	8	U	C6-N1-C2	-5.06	117.96	121.00
11	B2	449	U	C5-C4-O4	-5.06	122.86	125.90
11	B2	703	U	P-O5'-C5'	5.06	129.00	120.90
11	B2	1345	G	C5-N7-C8	-5.06	101.77	104.30
11	B2	1397	C	O5'-P-OP2	-5.06	101.14	105.70
38	A1	46	C	O4'-C1'-N1	5.06	112.25	108.20
38	A1	632	G	C5-C6-O6	5.06	131.64	128.60
38	A1	671	G	N7-C8-N9	-5.06	110.57	113.10
38	A1	1064	G	C4-C5-C6	5.06	121.84	118.80
38	A1	1224	A	N9-C4-C5	5.06	107.83	105.80
38	A1	1354	G	N3-C4-N9	5.06	129.04	126.00
38	A1	1547	U	O4'-C4'-C3'	-5.06	98.94	104.00
38	A1	1568	A	C6-N1-C2	5.06	121.64	118.60
38	A1	1755	C	C5-C6-N1	5.06	123.53	121.00
38	A1	2777	G	C5-C6-N1	-5.06	108.97	111.50
38	A1	2863	A	N9-C4-C5	5.06	107.83	105.80
38	A1	2864	G	C5-N7-C8	5.06	106.83	104.30
38	A1	2959	A	C6-C5-N7	-5.06	128.76	132.30
11	B2	53	G	N3-C4-N9	5.06	129.04	126.00
11	B2	352	A	OP1-P-OP2	-5.06	112.01	119.60
11	B2	689	C	OP1-P-OP2	-5.06	112.01	119.60
11	B2	822	A	C3'-C2'-C1'	5.06	105.55	101.50
11	B2	896	A	C5-C6-N1	5.06	120.23	117.70
38	A1	361	G	P-O3'-C3'	-5.06	113.63	119.70
38	A1	982	G	C3'-C2'-C1'	5.06	105.55	101.50
38	A1	1666	G	C4-C5-C6	-5.06	115.76	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1756	C	N3-C4-N4	5.06	121.54	118.00
38	A1	1987	A	C1'-O4'-C4'	-5.06	105.85	109.90
38	A1	2144	U	OP1-P-OP2	-5.06	112.01	119.60
38	A1	2303	A	O4'-C1'-N9	-5.06	104.15	108.20
51	Ag	36	TYR	O-C-N	5.06	130.80	122.70
60	AM	153	HIS	CA-CB-CG	-5.06	105.00	113.60
65	AV	39	ARG	NE-CZ-NH2	-5.06	117.77	120.30
11	B2	90	C	C2'-C3'-O3'	5.06	121.79	113.70
11	B2	621	G	O4'-C1'-N9	5.06	112.25	108.20
11	B2	928	A	C5-C6-N6	-5.06	119.65	123.70
11	B2	1116	G	N1-C2-N2	-5.06	111.65	116.20
11	B2	1148	G	N1-C6-O6	5.06	122.94	119.90
11	B2	1340	U	C4-C5-C6	5.06	122.73	119.70
33	BU	75	THR	N-CA-C	-5.06	97.34	111.00
36	BX	51	ILE	CG1-CB-CG2	5.06	122.53	111.40
38	A1	114	C	N3-C4-C5	-5.06	119.88	121.90
38	A1	749	G	C4-C5-C6	5.06	121.84	118.80
38	A1	972	C	OP2-P-O3'	5.06	116.33	105.20
38	A1	1022	G	C5-C6-O6	-5.06	125.56	128.60
38	A1	1245	C	P-O5'-C5'	5.06	128.99	120.90
38	A1	1394	G	C5-C6-O6	-5.06	125.56	128.60
38	A1	1892	G	C4-C5-N7	5.06	112.82	110.80
38	A1	2258	A	OP1-P-O3'	5.06	116.33	105.20
38	A1	2278	U	C3'-C2'-C1'	-5.06	97.45	101.50
38	A1	2683	G	N9-C4-C5	5.06	107.42	105.40
38	A1	2977	G	N1-C2-N2	-5.06	111.65	116.20
38	A1	3030	A	C6-C5-N7	-5.06	128.76	132.30
39	A3	90	A	N3-C4-C5	-5.06	123.26	126.80
11	B2	57	G	O4'-C1'-N9	5.06	112.25	108.20
11	B2	325	A	C3'-C2'-C1'	5.06	105.55	101.50
11	B2	329	G	C4-C5-N7	-5.06	108.78	110.80
11	B2	668	G	C5-C6-N1	-5.06	108.97	111.50
11	B2	844	G	C6-N1-C2	-5.06	122.07	125.10
11	B2	1167	C	C5-C4-N4	-5.06	116.66	120.20
11	B2	1401	U	C5'-C4'-O4'	-5.06	103.03	109.10
38	A1	259	A	C1'-O4'-C4'	-5.06	105.85	109.90
38	A1	301	G	C4'-C3'-C2'	5.06	107.66	102.60
38	A1	413	A	C8-N9-C4	-5.06	103.78	105.80
38	A1	436	C	OP2-P-O3'	5.06	116.33	105.20
38	A1	749	G	N3-C4-N9	-5.06	122.97	126.00
38	A1	766	G	C8-N9-C4	-5.06	104.38	106.40
38	A1	776	G	C4-C5-C6	5.06	121.83	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	836	U	P-O3'-C3'	5.06	125.77	119.70
38	A1	989	G	C1'-O4'-C4'	5.06	113.94	109.90
38	A1	1372	C	P-O3'-C3'	-5.06	113.63	119.70
38	A1	2408	G	N3-C4-N9	-5.06	122.97	126.00
38	A1	2471	A	C5-N7-C8	5.06	106.43	103.90
38	A1	2638	G	C6-N1-C2	5.06	128.13	125.10
38	A1	2685	G	C2-N3-C4	5.06	114.43	111.90
38	A1	2693	G	N3-C4-C5	-5.06	126.07	128.60
38	A1	2838	U	C4'-C3'-C2'	5.06	107.66	102.60
38	A1	2988	A	C4-C5-N7	-5.06	108.17	110.70
38	A1	2998	G	N1-C2-N3	-5.06	120.87	123.90
39	A3	93	G	C5'-C4'-C3'	5.06	124.09	116.00
11	B2	64	G	P-O5'-C5'	5.06	128.99	120.90
11	B2	561	A	C4'-C3'-C2'	-5.06	97.54	102.60
38	A1	426	G	N9-C1'-C2'	-5.06	106.44	112.00
38	A1	1443	G	N3-C2-N2	5.06	123.44	119.90
38	A1	1809	G	N1-C2-N2	-5.06	111.65	116.20
38	A1	2005	A	N9-C4-C5	5.06	107.82	105.80
38	A1	2640	C	N1-C2-N3	5.06	122.74	119.20
1	A7	28	PRO	N-CA-CB	5.05	109.37	103.30
11	B2	72	C	C4'-C3'-C2'	-5.05	97.55	102.60
11	B2	408	C	C1'-O4'-C4'	-5.05	105.86	109.90
11	B2	534	G	C6-C5-N7	-5.05	127.37	130.40
11	B2	600	C	OP1-P-OP2	-5.05	112.02	119.60
11	B2	804	U	C2'-C3'-O3'	5.05	121.79	113.70
11	B2	1048	G	O4'-C1'-N9	5.05	112.24	108.20
11	B2	1069	G	P-O3'-C3'	5.05	125.77	119.70
38	A1	42	G	N1-C2-N3	-5.05	120.87	123.90
38	A1	44	C	O4'-C1'-N1	5.05	112.24	108.20
38	A1	61	G	N9-C4-C5	-5.05	103.38	105.40
38	A1	213	G	N3-C4-C5	-5.05	126.07	128.60
38	A1	263	U	C5-C6-N1	5.05	125.23	122.70
38	A1	609	G	C6-C5-N7	-5.05	127.37	130.40
38	A1	616	C	N3-C2-O2	-5.05	118.36	121.90
38	A1	640	C	C4'-C3'-C2'	5.05	107.65	102.60
38	A1	1118	A	O4'-C1'-N9	5.05	112.24	108.20
38	A1	1186	G	N3-C4-N9	5.05	129.03	126.00
38	A1	1451	A	C8-N9-C4	5.05	107.82	105.80
38	A1	1496	A	N3-C4-N9	5.05	131.44	127.40
38	A1	1696	G	O4'-C1'-N9	5.05	112.24	108.20
38	A1	1722	G	N7-C8-N9	5.05	115.63	113.10
38	A1	1960	U	C6-N1-C2	-5.05	117.97	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2150	G	C4-C5-N7	-5.05	108.78	110.80
38	A1	2238	G	N3-C4-N9	5.05	129.03	126.00
38	A1	2335	G	C4-C5-N7	5.05	112.82	110.80
41	AA	194	ARG	C-N-CA	5.05	132.92	122.30
11	B2	848	G	O4'-C1'-N9	5.05	112.24	108.20
11	B2	1099	A	N9-C4-C5	5.05	107.82	105.80
11	B2	1493	C	C3'-C2'-C1'	5.05	105.54	101.50
24	BL	47	ILE	N-CA-C	-5.05	97.36	111.00
38	A1	416	A	N3-C4-C5	-5.05	123.26	126.80
38	A1	671	G	C3'-C2'-C1'	-5.05	97.46	101.50
38	A1	2132	C	C6-N1-C2	-5.05	118.28	120.30
38	A1	2449	A	C4-C5-C6	5.05	119.53	117.00
59	AL	36	MET	CG-SD-CE	-5.05	92.11	100.20
66	AY	16	LYS	CB-CG-CD	5.05	124.74	111.60
4	AQ	21	ARG	NE-CZ-NH1	-5.05	117.77	120.30
11	B2	42	G	C4-C5-C6	5.05	121.83	118.80
11	B2	93	A	C5'-C4'-O4'	5.05	115.16	109.10
11	B2	278	A	C5-N7-C8	5.05	106.42	103.90
11	B2	320	G	C6-N1-C2	5.05	128.13	125.10
11	B2	431	U	N3-C2-O2	5.05	125.74	122.20
11	B2	987	G	C1'-O4'-C4'	-5.05	105.86	109.90
11	B2	1015	C	C5-C4-N4	-5.05	116.66	120.20
11	B2	1139	A	C6-C5-N7	-5.05	128.76	132.30
11	B2	1278	A	C5-N7-C8	5.05	106.43	103.90
14	BB	155	PRO	N-CD-CG	5.05	110.78	103.20
15	BC	61	ARG	NH1-CZ-NH2	5.05	124.96	119.40
22	BJ	56	ARG	CG-CD-NE	-5.05	101.19	111.80
38	A1	49	A	O4'-C1'-N9	-5.05	104.16	108.20
38	A1	282	G	C5-C6-N1	-5.05	108.97	111.50
38	A1	681	C	O4'-C1'-N1	5.05	112.24	108.20
38	A1	785	C	N3-C2-O2	5.05	125.44	121.90
38	A1	1012	G	C5-N7-C8	5.05	106.83	104.30
38	A1	1452	G	N1-C2-N2	-5.05	111.65	116.20
38	A1	1548	A	OP2-P-O3'	5.05	116.31	105.20
38	A1	2179	G	O4'-C1'-N9	5.05	112.24	108.20
38	A1	2496	G	C4-C5-N7	-5.05	108.78	110.80
38	A1	2513	C	C6-N1-C2	-5.05	118.28	120.30
38	A1	2591	A	C5'-C4'-C3'	-5.05	107.92	116.00
38	A1	2749	G	C4-C5-N7	5.05	112.82	110.80
41	AA	67	ASP	CB-CG-OD1	-5.05	113.75	118.30
57	Aj	10	TYR	CB-CG-CD2	-5.05	117.97	121.00
58	Ak	133	PRO	N-CA-CB	5.05	109.36	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	42	G	O3'-P-O5'	-5.05	94.41	104.00
11	B2	445	G	C8-N9-C4	-5.05	104.38	106.40
11	B2	484	U	O4'-C1'-C2'	-5.05	100.75	105.80
11	B2	730	G	C2-N3-C4	5.05	114.42	111.90
11	B2	954	G	N7-C8-N9	5.05	115.62	113.10
11	B2	1028	C	O4'-C1'-N1	5.05	112.24	108.20
11	B2	1035	C	N1-C2-N3	-5.05	115.67	119.20
11	B2	1084	U	N3-C4-O4	5.05	122.93	119.40
38	A1	51	G	C1'-O4'-C4'	5.05	113.94	109.90
38	A1	119	U	C5-C4-O4	-5.05	122.87	125.90
38	A1	812	C	P-O3'-C3'	-5.05	113.64	119.70
38	A1	895	C	C5-C4-N4	-5.05	116.67	120.20
38	A1	1090	G	N1-C6-O6	5.05	122.93	119.90
38	A1	1580	G	O4'-C4'-C3'	-5.05	98.95	104.00
38	A1	1989	G	P-O3'-C3'	5.05	125.76	119.70
38	A1	1990	U	O4'-C1'-N1	5.05	112.24	108.20
38	A1	2008	G	C5-N7-C8	-5.05	101.78	104.30
38	A1	2041	U	O5'-P-OP2	-5.05	101.16	105.70
38	A1	2172	G	C5-C6-O6	-5.05	125.57	128.60
38	A1	2342	C	O4'-C4'-C3'	-5.05	98.95	104.00
38	A1	2902	G	C5-C6-O6	5.05	131.63	128.60
40	A5	14	ALA	N-CA-C	-5.05	97.37	111.00
11	B2	99	C	C4'-C3'-C2'	5.05	107.65	102.60
11	B2	296	A	C6-N1-C2	-5.05	115.57	118.60
11	B2	494	G	N1-C2-N3	-5.05	120.87	123.90
11	B2	605	C	O3'-P-O5'	-5.05	94.41	104.00
11	B2	1159	U	O4'-C1'-N1	5.05	112.24	108.20
11	B2	1326	G	N3-C4-N9	-5.05	122.97	126.00
36	BX	69	SER	N-CA-CB	5.05	118.07	110.50
38	A1	55	G	C6-C5-N7	-5.05	127.37	130.40
38	A1	739	C	C4'-C3'-C2'	-5.05	97.55	102.60
38	A1	1368	A	P-O3'-C3'	5.05	125.76	119.70
38	A1	1497	C	C5-C4-N4	-5.05	116.67	120.20
38	A1	2008	G	C5-C6-N1	-5.05	108.98	111.50
38	A1	2213	G	C3'-C2'-C1'	5.05	105.54	101.50
38	A1	2700	U	N1-C2-O2	-5.05	119.27	122.80
11	B2	55	G	C6-N1-C2	5.05	128.13	125.10
11	B2	196	G	P-O5'-C5'	5.05	128.98	120.90
11	B2	392	G	C6-C5-N7	-5.05	127.37	130.40
11	B2	681	G	P-O3'-C3'	-5.05	113.64	119.70
14	BB	168	TYR	CB-CG-CD2	-5.05	117.97	121.00
38	A1	420	U	C4-C5-C6	5.05	122.73	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1152	C	C5-C6-N1	5.05	123.52	121.00
38	A1	1167	A	C2-N3-C4	-5.05	108.08	110.60
38	A1	1294	A	C5-N7-C8	5.05	106.42	103.90
38	A1	1563	G	C4-C5-C6	5.05	121.83	118.80
38	A1	1709	C	C4-C5-C6	-5.05	114.88	117.40
38	A1	2638	G	C4-C5-C6	5.05	121.83	118.80
38	A1	2653	G	C6-N1-C2	5.05	128.13	125.10
11	B2	741	A	O4'-C1'-N9	5.04	112.24	108.20
38	A1	297	G	N7-C8-N9	5.04	115.62	113.10
38	A1	507	G	N1-C2-N2	5.04	120.74	116.20
38	A1	588	U	C1'-O4'-C4'	-5.04	105.86	109.90
38	A1	1180	G	O3'-P-O5'	5.04	113.59	104.00
38	A1	1334	G	N3-C4-N9	-5.04	122.97	126.00
38	A1	1628	C	C2-N3-C4	5.04	122.42	119.90
38	A1	1851	U	C3'-C2'-C1'	5.04	105.54	101.50
55	Ai	74	ALA	CB-CA-C	-5.04	102.53	110.10
11	B2	214	C	C2-N3-C4	5.04	122.42	119.90
11	B2	617	A	C4-C5-N7	5.04	113.22	110.70
11	B2	1054	A	C2-N3-C4	-5.04	108.08	110.60
11	B2	1469	G	C1'-O4'-C4'	-5.04	105.86	109.90
18	BF	101	GLY	C-N-CA	5.04	134.31	121.70
38	A1	62	C	O4'-C1'-N1	5.04	112.23	108.20
38	A1	495	U	C2-N1-C1'	5.04	123.75	117.70
38	A1	1201	G	C5'-C4'-O4'	-5.04	103.05	109.10
38	A1	1917	U	C5-C6-N1	-5.04	120.18	122.70
38	A1	1925	A	C5-N7-C8	5.04	106.42	103.90
38	A1	1941	A	C3'-C2'-C1'	-5.04	97.47	101.50
38	A1	2141	C	N3-C4-C5	-5.04	119.88	121.90
38	A1	2378	C	C4-C5-C6	5.04	119.92	117.40
38	A1	2542	G	C8-N9-C4	5.04	108.42	106.40
38	A1	2896	G	C2-N3-C4	-5.04	109.38	111.90
63	AP	78	VAL	CA-CB-CG2	-5.04	103.34	110.90
9	AX	285	GLY	N-CA-C	-5.04	100.50	113.10
11	B2	420	C	O4'-C1'-N1	5.04	112.23	108.20
11	B2	816	G	C4-C5-N7	5.04	112.82	110.80
11	B2	943	C	C6-N1-C1'	-5.04	114.75	120.80
11	B2	955	G	N7-C8-N9	5.04	115.62	113.10
11	B2	995	G	C5-N7-C8	-5.04	101.78	104.30
11	B2	1005	G	C3'-C2'-C1'	5.04	105.53	101.50
11	B2	1053	A	C4-C5-N7	-5.04	108.18	110.70
11	B2	1249	A	C3'-C2'-C1'	-5.04	97.47	101.50
11	B2	1396	C	C5-C4-N4	-5.04	116.67	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	BG	30	ILE	O-C-N	-5.04	114.63	123.20
24	BL	51	LYS	CB-CA-C	-5.04	100.32	110.40
38	A1	149	G	C2'-C3'-O3'	5.04	121.77	113.70
38	A1	480	A	C5'-C4'-C3'	5.04	124.06	116.00
38	A1	480	A	C6-C5-N7	-5.04	128.77	132.30
38	A1	596	C	C4-C5-C6	5.04	119.92	117.40
38	A1	618	C	N3-C4-N4	5.04	121.53	118.00
38	A1	634	G	N3-C2-N2	-5.04	116.37	119.90
38	A1	909	A	C6-C5-N7	-5.04	128.77	132.30
38	A1	926	C	O4'-C1'-C2'	-5.04	100.76	105.80
38	A1	1523	A	N3-C4-N9	5.04	131.43	127.40
38	A1	1903	G	P-O5'-C5'	5.04	128.97	120.90
38	A1	1960	U	C5-C4-O4	-5.04	122.88	125.90
38	A1	2070	U	C3'-C2'-C1'	-5.04	97.47	101.50
38	A1	2159	C	C5-C6-N1	-5.04	118.48	121.00
38	A1	2814	U	P-O5'-C5'	5.04	128.97	120.90
38	A1	2962	A	C4-C5-N7	-5.04	108.18	110.70
48	AE	150	VAL	CA-CB-CG2	-5.04	103.34	110.90
57	Aj	23	GLU	CA-CB-CG	5.04	124.49	113.40
10	B1	19	G	C5-N7-C8	5.04	106.82	104.30
11	B2	647	G	C5-C6-O6	-5.04	125.58	128.60
11	B2	822	A	C5'-C4'-C3'	-5.04	107.94	116.00
11	B2	855	C	O5'-C5'-C4'	-5.04	102.12	111.70
38	A1	312	G	P-O5'-C5'	-5.04	112.84	120.90
38	A1	1002	A	C5'-C4'-C3'	-5.04	107.94	116.00
38	A1	1549	C	O4'-C1'-N1	5.04	112.23	108.20
38	A1	1694	G	N7-C8-N9	-5.04	110.58	113.10
38	A1	1766	A	P-O5'-C5'	-5.04	112.83	120.90
38	A1	1968	A	C6-N1-C2	5.04	121.62	118.60
38	A1	2856	G	N3-C2-N2	5.04	123.43	119.90
11	B2	453	G	C4-N9-C1'	-5.04	119.95	126.50
11	B2	525	A	C5-N7-C8	5.04	106.42	103.90
11	B2	857	C	N3-C4-C5	-5.04	119.88	121.90
11	B2	1099	A	N3-C4-C5	5.04	130.33	126.80
11	B2	1302	C	N3-C4-N4	5.04	121.53	118.00
15	BC	114	TYR	CZ-CE2-CD2	-5.04	115.27	119.80
18	BF	116	TYR	CB-CG-CD1	-5.04	117.98	121.00
38	A1	218	A	C2-N3-C4	-5.04	108.08	110.60
38	A1	224	G	N3-C4-N9	5.04	129.02	126.00
38	A1	388	G	N7-C8-N9	-5.04	110.58	113.10
38	A1	410	C	C2-N1-C1'	5.04	124.34	118.80
38	A1	720	C	O4'-C1'-N1	5.04	112.23	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	779	A	N1-C2-N3	5.04	131.82	129.30
38	A1	1124	G	C5-C6-N1	-5.04	108.98	111.50
38	A1	1385	C	N1-C2-O2	-5.04	115.88	118.90
38	A1	2041	U	N3-C4-O4	5.04	122.93	119.40
38	A1	2294	A	P-O3'-C3'	5.04	125.75	119.70
38	A1	2346	A	C8-N9-C4	-5.04	103.78	105.80
38	A1	2640	C	C4-C5-C6	5.04	119.92	117.40
38	A1	2756	G	P-O5'-C5'	-5.04	112.84	120.90
38	A1	3027	C	C6-N1-C1'	-5.04	114.75	120.80
39	A3	63	G	O4'-C1'-N9	5.04	112.23	108.20
39	A3	107	G	N7-C8-N9	-5.04	110.58	113.10
11	B2	311	A	C5-C6-N1	-5.04	115.18	117.70
11	B2	624	G	C8-N9-C4	-5.04	104.39	106.40
11	B2	901	G	C5'-C4'-O4'	5.04	115.14	109.10
11	B2	984	C	C5-C4-N4	-5.04	116.67	120.20
11	B2	1092	G	C5'-C4'-C3'	5.04	124.06	116.00
11	B2	1117	A	C4-C5-N7	-5.04	108.18	110.70
38	A1	583	A	C3'-C2'-C1'	5.04	105.53	101.50
38	A1	891	C	N1-C2-N3	-5.04	115.67	119.20
38	A1	1901	A	C6-C5-N7	-5.04	128.77	132.30
38	A1	2143	C	O4'-C1'-N1	5.04	112.23	108.20
38	A1	2691	G	C8-N9-C4	-5.04	104.39	106.40
38	A1	2778	A	P-O3'-C3'	5.04	125.75	119.70
38	A1	2994	G	P-O3'-C3'	-5.04	113.66	119.70
59	AL	3	ARG	CG-CD-NE	-5.04	101.22	111.80
67	AZ	51	TYR	CG-CD2-CE2	-5.04	117.27	121.30
5	AS	25	LEU	N-CA-CB	5.04	120.47	110.40
11	B2	387	G	C5-C6-N1	-5.04	108.98	111.50
11	B2	424	U	O4'-C1'-N1	5.04	112.23	108.20
11	B2	452	G	N1-C2-N3	-5.04	120.88	123.90
11	B2	802	G	N3-C4-N9	-5.04	122.98	126.00
11	B2	855	C	P-O5'-C5'	-5.04	112.84	120.90
11	B2	1100	G	C5'-C4'-O4'	5.04	115.14	109.10
11	B2	1138	G	OP1-P-OP2	-5.04	112.05	119.60
38	A1	7	G	C8-N9-C4	5.04	108.41	106.40
38	A1	198	C	OP2-P-O3'	5.04	116.28	105.20
38	A1	592	C	N1-C2-O2	-5.04	115.88	118.90
38	A1	600	A	O4'-C1'-N9	5.04	112.23	108.20
38	A1	686	C	N3-C2-O2	5.04	125.42	121.90
38	A1	795	G	C2-N3-C4	5.04	114.42	111.90
38	A1	1093	G	N3-C4-N9	5.04	129.02	126.00
38	A1	1120	C	N3-C4-N4	5.04	121.53	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1344	C	C1'-O4'-C4'	5.04	113.93	109.90
38	A1	1714	G	C4-C5-C6	5.04	121.82	118.80
38	A1	2055	U	OP1-P-OP2	-5.04	112.05	119.60
38	A1	2797	C	N1-C2-O2	-5.04	115.88	118.90
38	A1	2862	A	C2-N3-C4	-5.04	108.08	110.60
38	A1	2995	A	N7-C8-N9	5.04	116.32	113.80
45	AC	20	ALA	N-CA-CB	5.04	117.15	110.10
61	AN	122	LEU	N-CA-CB	5.04	120.47	110.40
11	B2	277	G	N3-C4-N9	5.03	129.02	126.00
11	B2	329	G	N7-C8-N9	5.03	115.62	113.10
11	B2	387	G	C2-N3-C4	5.03	114.42	111.90
11	B2	540	G	P-O5'-C5'	-5.03	112.85	120.90
11	B2	970	G	C6-C5-N7	-5.03	127.38	130.40
11	B2	1157	G	C6-C5-N7	-5.03	127.38	130.40
11	B2	1485	G	C5-N7-C8	5.03	106.82	104.30
18	BF	6	LYS	CA-CB-CG	5.03	124.47	113.40
38	A1	91	G	C6-C5-N7	5.03	133.42	130.40
38	A1	92	G	N3-C2-N2	5.03	123.42	119.90
38	A1	174	C	C5'-C4'-O4'	5.03	115.14	109.10
38	A1	195	U	O5'-P-OP2	-5.03	101.17	105.70
38	A1	358	C	C5-C4-N4	-5.03	116.68	120.20
38	A1	654	C	O4'-C1'-N1	5.03	112.23	108.20
38	A1	1379	A	C4-C5-N7	-5.03	108.18	110.70
38	A1	1580	G	OP1-P-OP2	-5.03	112.05	119.60
38	A1	2051	A	N3-C4-C5	-5.03	123.28	126.80
38	A1	2494	A	C5'-C4'-O4'	5.03	115.14	109.10
38	A1	2505	A	N3-C4-C5	-5.03	123.28	126.80
38	A1	2678	U	P-O5'-C5'	-5.03	112.84	120.90
60	AM	37	VAL	CA-CB-CG2	5.03	118.45	110.90
11	B2	1	A	N3-C4-N9	5.03	131.43	127.40
11	B2	169	C	C4'-C3'-C2'	-5.03	97.57	102.60
11	B2	204	G	C6-C5-N7	-5.03	127.38	130.40
11	B2	825	C	N3-C4-N4	5.03	121.52	118.00
11	B2	1485	G	N1-C2-N3	-5.03	120.88	123.90
27	BO	4	PHE	CB-CG-CD2	5.03	124.32	120.80
38	A1	77	C	N3-C4-N4	5.03	121.52	118.00
38	A1	479	G	N3-C4-N9	-5.03	122.98	126.00
38	A1	1515	G	N3-C4-C5	-5.03	126.08	128.60
38	A1	1596	G	N9-C4-C5	-5.03	103.39	105.40
38	A1	1612	G	C5-C6-O6	-5.03	125.58	128.60
38	A1	2315	G	C5-N7-C8	5.03	106.82	104.30
38	A1	2833	G	N9-C4-C5	-5.03	103.39	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	AF	8	ARG	NE-CZ-NH1	-5.03	117.78	120.30
10	B1	33	C	N1-C2-O2	-5.03	115.88	118.90
11	B2	295	G	C5-N7-C8	5.03	106.81	104.30
11	B2	1016	G	OP1-P-OP2	-5.03	112.05	119.60
11	B2	1137	G	O4'-C1'-C2'	5.03	112.13	107.60
11	B2	1282	C	C4'-C3'-C2'	-5.03	97.57	102.60
20	BH	85	PHE	CB-CG-CD1	-5.03	117.28	120.80
38	A1	449	G	OP1-P-O3'	5.03	116.27	105.20
38	A1	1225	A	C8-N9-C1'	-5.03	118.64	127.70
38	A1	1289	C	C6-N1-C2	-5.03	118.29	120.30
38	A1	1358	C	P-O5'-C5'	5.03	128.95	120.90
38	A1	1527	G	C6-C5-N7	-5.03	127.38	130.40
38	A1	2184	G	N1-C2-N3	-5.03	120.88	123.90
38	A1	2372	C	C4-C5-C6	-5.03	114.88	117.40
38	A1	2412	A	N1-C2-N3	5.03	131.82	129.30
38	A1	2595	C	N1-C1'-C2'	-5.03	106.47	112.00
38	A1	2658	G	C5-N7-C8	5.03	106.81	104.30
38	A1	2693	G	N1-C2-N2	-5.03	111.67	116.20
45	AC	23	ILE	O-C-N	-5.03	114.65	122.70
11	B2	86	C	O4'-C1'-N1	5.03	112.22	108.20
11	B2	93	A	OP1-P-O3'	5.03	116.26	105.20
11	B2	396	C	C4'-C3'-C2'	-5.03	97.57	102.60
11	B2	970	G	N3-C4-C5	-5.03	126.09	128.60
11	B2	1045	A	N9-C4-C5	5.03	107.81	105.80
18	BF	120	ASN	CB-CA-C	-5.03	100.34	110.40
38	A1	397	G	N1-C2-N3	-5.03	120.88	123.90
38	A1	573	G	C5-N7-C8	5.03	106.81	104.30
38	A1	808	A	N7-C8-N9	5.03	116.31	113.80
38	A1	1403	C	C4-C5-C6	5.03	119.92	117.40
38	A1	1777	U	N3-C4-O4	5.03	122.92	119.40
38	A1	1799	G	C6-C5-N7	-5.03	127.38	130.40
38	A1	2188	C	C5-C6-N1	5.03	123.51	121.00
38	A1	2269	C	N3-C4-N4	5.03	121.52	118.00
38	A1	2835	A	C5-C6-N1	-5.03	115.19	117.70
39	A3	52	U	C2-N1-C1'	5.03	123.73	117.70
9	AX	271	LEU	CB-CG-CD2	-5.03	102.45	111.00
11	B2	1	A	C5'-C4'-O4'	5.03	115.13	109.10
11	B2	308	G	N1-C2-N3	-5.03	120.88	123.90
11	B2	512	U	O4'-C1'-N1	5.03	112.22	108.20
11	B2	837	C	P-O5'-C5'	-5.03	112.86	120.90
11	B2	885	G	C5'-C4'-O4'	-5.03	103.07	109.10
11	B2	1122	C	OP2-P-O3'	5.03	116.26	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	B2	1265	G	C4'-C3'-C2'	-5.03	97.57	102.60
11	B2	1350	U	C4-C5-C6	5.03	122.72	119.70
15	BC	146	PHE	CB-CG-CD1	-5.03	117.28	120.80
38	A1	70	G	N9-C1'-C2'	-5.03	106.47	112.00
38	A1	370	A	C4-C5-C6	5.03	119.51	117.00
38	A1	387	A	C5-C6-N1	-5.03	115.19	117.70
38	A1	647	G	N3-C4-N9	-5.03	122.98	126.00
38	A1	734	C	C5-C4-N4	5.03	123.72	120.20
38	A1	861	G	C4-C5-N7	5.03	112.81	110.80
38	A1	879	A	C5-N7-C8	5.03	106.41	103.90
38	A1	1087	G	C4-C5-C6	5.03	121.82	118.80
38	A1	1419	G	O4'-C4'-C3'	-5.03	98.97	104.00
38	A1	1644	G	P-O3'-C3'	5.03	125.73	119.70
38	A1	1652	A	C6-N1-C2	-5.03	115.58	118.60
38	A1	1698	G	N3-C2-N2	5.03	123.42	119.90
38	A1	1764	G	C5-C6-O6	-5.03	125.58	128.60
38	A1	2265	C	N3-C2-O2	5.03	125.42	121.90
38	A1	2480	G	N3-C4-N9	5.03	129.02	126.00
38	A1	2710	G	C4-C5-N7	-5.03	108.79	110.80
38	A1	2836	G	N3-C4-C5	5.03	131.11	128.60
39	A3	25	A	C5'-C4'-C3'	5.03	124.04	116.00
46	AD	251	ARG	NH1-CZ-NH2	-5.03	113.87	119.40
55	Ai	74	ALA	N-CA-CB	5.03	117.14	110.10
3	Af	41	ARG	N-CA-CB	5.03	119.65	110.60
10	B1	19	G	C4-C5-N7	-5.03	108.79	110.80
11	B2	82	G	C5-N7-C8	5.03	106.81	104.30
11	B2	721	A	N7-C8-N9	-5.03	111.29	113.80
11	B2	1031	G	C6-C5-N7	-5.03	127.38	130.40
17	BE	144	ASP	CB-CG-OD2	-5.03	113.78	118.30
27	BO	68	ASP	CB-CG-OD1	5.03	122.82	118.30
38	A1	282	G	P-O5'-C5'	-5.03	112.86	120.90
38	A1	631	G	C1'-O4'-C4'	-5.03	105.88	109.90
38	A1	796	C	C5-C4-N4	-5.03	116.68	120.20
38	A1	917	A	P-O3'-C3'	5.03	125.73	119.70
38	A1	1025	A	C8-N9-C1'	-5.03	118.66	127.70
38	A1	1581	A	C2-N3-C4	5.03	113.11	110.60
38	A1	1720	G	O4'-C1'-N9	5.03	112.22	108.20
38	A1	2274	C	C5-C6-N1	5.03	123.51	121.00
38	A1	2463	G	N7-C8-N9	5.03	115.61	113.10
38	A1	2532	G	P-O5'-C5'	-5.03	112.86	120.90
38	A1	2628	U	C5-C6-N1	5.03	125.21	122.70
38	A1	2796	C	O3'-P-O5'	5.03	113.55	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
39	A3	6	G	P-O3'-C3'	-5.03	113.67	119.70
39	A3	117	G	C5-N7-C8	-5.03	101.79	104.30
43	AB	163	ALA	CB-CA-C	-5.03	102.56	110.10
47	Ad	77	ARG	NE-CZ-NH2	-5.03	117.79	120.30
64	AR	25	LEU	CB-CA-C	5.03	119.75	110.20
66	AY	69	ARG	NE-CZ-NH1	5.03	122.81	120.30
11	B2	1419	G	N9-C4-C5	5.02	107.41	105.40
16	BD	57	ARG	O-C-N	5.02	130.74	122.70
29	BQ	74	ARG	NE-CZ-NH2	5.02	122.81	120.30
38	A1	1495	A	C6-N1-C2	5.02	121.61	118.60
38	A1	1538	A	N1-C2-N3	-5.02	126.79	129.30
38	A1	1861	G	C2-N3-C4	5.02	114.41	111.90
1	A7	33	TYR	CG-CD2-CE2	-5.02	117.28	121.30
9	AX	74	GLY	C-N-CA	5.02	134.26	121.70
11	B2	130	G	N7-C8-N9	5.02	115.61	113.10
11	B2	526	A	C4-C5-N7	-5.02	108.19	110.70
11	B2	590	G	O5'-P-OP1	5.02	116.73	110.70
11	B2	717	C	C2-N3-C4	-5.02	117.39	119.90
22	BJ	70	GLY	CA-C-O	-5.02	111.56	120.60
38	A1	26	G	C6-N1-C2	5.02	128.11	125.10
38	A1	139	G	C5-N7-C8	5.02	106.81	104.30
38	A1	268	C	O5'-P-OP2	-5.02	101.18	105.70
38	A1	433	C	C5'-C4'-O4'	5.02	115.13	109.10
38	A1	495	U	O5'-P-OP2	5.02	116.73	110.70
38	A1	1191	C	C1'-O4'-C4'	5.02	113.92	109.90
38	A1	1736	G	P-O3'-C3'	-5.02	113.67	119.70
38	A1	2191	U	N3-C4-O4	5.02	122.92	119.40
38	A1	2543	A	N9-C4-C5	-5.02	103.79	105.80
38	A1	2650	G	C6-N1-C2	5.02	128.11	125.10
38	A1	2683	G	C5-N7-C8	5.02	106.81	104.30
38	A1	2780	G	C5'-C4'-C3'	5.02	124.04	116.00
39	A3	77	A	OP1-P-O3'	5.02	116.25	105.20
45	AC	338	VAL	CA-CB-CG1	5.02	118.43	110.90
11	B2	264	C	N1-C2-O2	5.02	121.91	118.90
11	B2	726	A	P-O3'-C3'	-5.02	113.67	119.70
11	B2	901	G	C5-C6-N1	5.02	114.01	111.50
11	B2	1051	G	C6-C5-N7	-5.02	127.39	130.40
11	B2	1080	C	OP2-P-O3'	5.02	116.25	105.20
11	B2	1327	C	C5-C6-N1	5.02	123.51	121.00
11	B2	1449	G	C5-C6-N1	-5.02	108.99	111.50
34	BV	96	LYS	N-CA-CB	5.02	119.64	110.60
38	A1	1106	C	O4'-C1'-N1	5.02	112.22	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	2226	G	N3-C4-C5	-5.02	126.09	128.60
38	A1	3006	G	C5-N7-C8	5.02	106.81	104.30
11	B2	336	C	C6-N1-C1'	-5.02	114.78	120.80
11	B2	771	G	C5-C6-O6	5.02	131.61	128.60
11	B2	864	G	N7-C8-N9	5.02	115.61	113.10
11	B2	1116	G	C5-C6-N1	-5.02	108.99	111.50
11	B2	1221	A	N9-C4-C5	5.02	107.81	105.80
11	B2	1237	G	O4'-C1'-N9	5.02	112.22	108.20
11	B2	1356	A	OP1-P-OP2	-5.02	112.07	119.60
35	BW	15	ARG	CB-CG-CD	5.02	124.65	111.60
38	A1	93	C	P-O3'-C3'	5.02	125.72	119.70
38	A1	129	C	N3-C2-O2	5.02	125.41	121.90
38	A1	572	U	N3-C2-O2	-5.02	118.69	122.20
38	A1	780	G	C6-N1-C2	5.02	128.11	125.10
38	A1	789	G	C8-N9-C4	-5.02	104.39	106.40
38	A1	1077	G	N3-C4-C5	-5.02	126.09	128.60
38	A1	1120	C	N3-C4-C5	-5.02	119.89	121.90
38	A1	1277	G	N3-C2-N2	5.02	123.41	119.90
38	A1	1407	A	C1'-O4'-C4'	5.02	113.92	109.90
38	A1	2315	G	C6-N1-C2	5.02	128.11	125.10
38	A1	2566	A	C5-N7-C8	5.02	106.41	103.90
38	A1	2581	G	OP1-P-OP2	-5.02	112.07	119.60
38	A1	2625	C	P-O3'-C3'	5.02	125.72	119.70
38	A1	2992	G	C4-C5-C6	5.02	121.81	118.80
39	A3	118	G	N9-C1'-C2'	-5.02	106.48	112.00
46	AD	241	VAL	CA-CB-CG1	-5.02	103.37	110.90
47	Ad	38	MET	N-CA-CB	5.02	119.64	110.60
51	Ag	28	ALA	N-CA-CB	5.02	117.13	110.10
1	A7	62	LYS	N-CA-CB	5.02	119.63	110.60
11	B2	267	C	C1'-O4'-C4'	5.02	113.92	109.90
11	B2	649	A	O4'-C1'-N9	5.02	112.21	108.20
11	B2	887	G	N1-C2-N3	-5.02	120.89	123.90
11	B2	962	G	C4-C5-C6	5.02	121.81	118.80
11	B2	1159	U	P-O3'-C3'	-5.02	113.68	119.70
11	B2	1188	C	N1-C2-N3	-5.02	115.69	119.20
11	B2	1384	G	C5-N7-C8	5.02	106.81	104.30
38	A1	10	C	N1-C2-N3	-5.02	115.69	119.20
38	A1	60	G	N1-C2-N2	5.02	120.72	116.20
38	A1	167	G	C4'-C3'-C2'	-5.02	97.58	102.60
38	A1	252	A	C4-C5-C6	5.02	119.51	117.00
38	A1	511	A	N9-C4-C5	-5.02	103.79	105.80
38	A1	738	C	C4-C5-C6	5.02	119.91	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1505	G	C8-N9-C4	-5.02	104.39	106.40
38	A1	1578	C	P-O3'-C3'	-5.02	113.68	119.70
38	A1	2253	G	N3-C4-N9	5.02	129.01	126.00
38	A1	2435	G	N3-C4-N9	5.02	129.01	126.00
38	A1	2733	A	C6-C5-N7	-5.02	128.79	132.30
38	A1	2757	G	C6-N1-C2	5.02	128.11	125.10
39	A3	28	C	C6-N1-C1'	5.02	126.82	120.80
39	A3	48	A	O4'-C1'-C2'	5.02	112.12	107.60
51	Ag	4	PHE	N-CA-CB	5.02	119.63	110.60
52	AH	76	LEU	O-C-N	-5.02	114.67	122.70
11	B2	428	G	C6-C5-N7	-5.02	127.39	130.40
11	B2	437	A	C2-N3-C4	-5.02	108.09	110.60
11	B2	534	G	N1-C2-N2	-5.02	111.69	116.20
11	B2	1055	C	O4'-C4'-C3'	-5.02	98.98	104.00
11	B2	1141	G	C5-C6-O6	-5.02	125.59	128.60
11	B2	1335	A	C5-C6-N1	-5.02	115.19	117.70
15	BC	9	ARG	NE-CZ-NH2	-5.02	117.79	120.30
15	BC	157	PRO	N-CD-CG	5.02	110.72	103.20
38	A1	269	C	C5'-C4'-O4'	-5.02	103.08	109.10
38	A1	1128	G	P-O5'-C5'	-5.02	112.88	120.90
38	A1	1809	G	N9-C4-C5	-5.02	103.39	105.40
38	A1	1949	A	C4'-C3'-C2'	-5.02	97.58	102.60
38	A1	2153	C	P-O5'-C5'	-5.02	112.87	120.90
3	Af	42	ARG	CB-CA-C	-5.01	100.37	110.40
10	B1	45	G	C5-C6-O6	-5.01	125.59	128.60
11	B2	774	U	N1-C1'-C2'	5.01	120.52	114.00
11	B2	1256	C	N3-C4-C5	-5.01	119.89	121.90
25	BM	36	ALA	CB-CA-C	-5.01	102.58	110.10
38	A1	220	C	C3'-C2'-C1'	5.01	105.51	101.50
38	A1	639	C	N3-C4-C5	-5.01	119.89	121.90
38	A1	828	G	N1-C6-O6	5.01	122.91	119.90
38	A1	885	A	C5-N7-C8	5.01	106.41	103.90
38	A1	1173	G	C6-C5-N7	-5.01	127.39	130.40
38	A1	1942	G	O4'-C4'-C3'	-5.01	98.99	104.00
38	A1	2012	G	N3-C2-N2	5.01	123.41	119.90
38	A1	2081	C	O4'-C1'-N1	5.01	112.21	108.20
38	A1	2136	G	C5-C6-O6	-5.01	125.59	128.60
38	A1	2238	G	N1-C2-N3	-5.01	120.89	123.90
38	A1	2359	G	N7-C8-N9	-5.01	110.59	113.10
38	A1	2517	U	C2-N3-C4	5.01	130.01	127.00
38	A1	2799	C	OP1-P-OP2	-5.01	112.08	119.60
38	A1	2959	A	C5-C6-N1	-5.01	115.19	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
39	A3	113	C	C2-N3-C4	-5.01	117.39	119.90
43	AB	32	PRO	N-CD-CG	5.01	110.72	103.20
11	B2	65	G	C1'-O4'-C4'	5.01	113.91	109.90
11	B2	342	G	C5-N7-C8	5.01	106.81	104.30
11	B2	363	C	C5-C4-N4	-5.01	116.69	120.20
11	B2	1368	A	P-O3'-C3'	5.01	125.72	119.70
38	A1	8	G	P-O3'-C3'	5.01	125.72	119.70
38	A1	430	A	C2-N3-C4	-5.01	108.09	110.60
38	A1	513	C	N3-C4-C5	-5.01	119.89	121.90
38	A1	539	A	C3'-C2'-C1'	5.01	105.51	101.50
38	A1	1239	C	N1-C2-O2	5.01	121.91	118.90
38	A1	1597	G	C5-C6-O6	-5.01	125.59	128.60
38	A1	2169	C	O4'-C1'-N1	5.01	112.21	108.20
38	A1	2243	G	C5-C6-O6	-5.01	125.59	128.60
38	A1	2801	G	C3'-C2'-C1'	-5.01	97.49	101.50
39	A3	13	C	N3-C4-N4	5.01	121.51	118.00
39	A3	65	G	C1'-O4'-C4'	-5.01	105.89	109.90
40	AK	35	VAL	CA-CB-CG1	-5.01	103.38	110.90
11	B2	807	C	N3-C2-O2	5.01	125.41	121.90
11	B2	1032	A	C1'-O4'-C4'	5.01	113.91	109.90
11	B2	1379	G	C4-C5-N7	-5.01	108.80	110.80
11	B2	1390	G	C8-N9-C4	-5.01	104.40	106.40
32	BT	14	GLU	O-C-N	5.01	130.72	122.70
38	A1	288	G	C4-C5-N7	5.01	112.81	110.80
38	A1	612	G	N1-C2-N3	-5.01	120.89	123.90
38	A1	792	A	N9-C4-C5	5.01	107.80	105.80
38	A1	1489	G	C4-C5-C6	5.01	121.81	118.80
38	A1	1643	A	N7-C8-N9	-5.01	111.29	113.80
38	A1	1646	G	C4-C5-N7	-5.01	108.80	110.80
38	A1	1956	G	N3-C2-N2	5.01	123.41	119.90
38	A1	2065	C	C2-N3-C4	-5.01	117.39	119.90
38	A1	2336	G	C3'-C2'-C1'	-5.01	97.49	101.50
42	Aa	54	VAL	CA-CB-CG2	5.01	118.42	110.90
54	AI	111	GLU	N-CA-CB	5.01	119.62	110.60
66	AY	11	GLY	O-C-N	5.01	130.72	122.70
10	B1	19	G	C6-N1-C2	5.01	128.11	125.10
11	B2	102	U	C3'-C2'-C1'	5.01	105.51	101.50
11	B2	578	G	C4-C5-C6	5.01	121.81	118.80
11	B2	952	A	C6-C5-N7	-5.01	128.79	132.30
11	B2	998	A	C5-C6-N6	-5.01	119.69	123.70
11	B2	1063	A	C4-C5-C6	5.01	119.50	117.00
11	B2	1210	A	C5'-C4'-C3'	-5.01	107.98	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	BU	110	PHE	CB-CG-CD2	5.01	124.31	120.80
38	A1	41	G	C8-N9-C4	-5.01	104.40	106.40
38	A1	111	U	N1-C2-O2	-5.01	119.29	122.80
38	A1	209	G	C4'-C3'-C2'	-5.01	97.59	102.60
38	A1	222	A	N7-C8-N9	-5.01	111.30	113.80
38	A1	237	G	C5-C6-N1	5.01	114.00	111.50
38	A1	587	A	C1'-O4'-C4'	-5.01	105.89	109.90
38	A1	1186	G	O3'-P-O5'	-5.01	94.48	104.00
38	A1	1600	G	O4'-C1'-N9	5.01	112.21	108.20
38	A1	1900	U	O4'-C1'-N1	5.01	112.21	108.20
38	A1	2496	G	C4'-C3'-C2'	-5.01	97.59	102.60
38	A1	2991	C	N1-C1'-C2'	-5.01	106.49	112.00
38	A1	3005	C	N3-C4-C5	-5.01	119.90	121.90
43	AB	88	ASP	CB-CG-OD2	-5.01	113.79	118.30
5	AS	83	TYR	CB-CG-CD1	5.01	124.00	121.00
11	B2	1173	A	C5-C6-N6	-5.01	119.69	123.70
11	B2	1336	U	C4'-C3'-C2'	-5.01	97.59	102.60
15	BC	132	LEU	CB-CG-CD2	5.01	119.51	111.00
38	A1	61	G	C6-C5-N7	-5.01	127.39	130.40
38	A1	300	U	OP1-P-OP2	-5.01	112.09	119.60
38	A1	361	G	N1-C2-N3	-5.01	120.89	123.90
38	A1	674	G	N9-C4-C5	-5.01	103.40	105.40
38	A1	1332	A	OP1-P-OP2	-5.01	112.09	119.60
38	A1	1655	G	C4-C5-C6	5.01	121.81	118.80
38	A1	2208	C	O5'-P-OP2	-5.01	101.19	105.70
38	A1	2581	G	C6-C5-N7	-5.01	127.39	130.40
39	A3	5	G	O4'-C1'-N9	5.01	112.21	108.20
40	A5	46	ARG	NE-CZ-NH1	5.01	122.80	120.30
12	AG	32	ILE	CA-CB-CG1	5.01	120.51	111.00
11	B2	607	U	C1'-O4'-C4'	5.01	113.91	109.90
11	B2	643	G	C1'-O4'-C4'	-5.01	105.89	109.90
11	B2	772	G	N3-C4-C5	-5.01	126.10	128.60
11	B2	783	G	N3-C2-N2	5.01	123.41	119.90
11	B2	809	C	C6-N1-C1'	-5.01	114.79	120.80
17	BE	26	TYR	CG-CD1-CE1	5.01	125.31	121.30
24	BL	64	TRP	CE3-CZ3-CH2	5.01	126.71	121.20
38	A1	45	G	C6-C5-N7	-5.01	127.40	130.40
38	A1	519	A	C6-C5-N7	-5.01	128.80	132.30
38	A1	533	G	N9-C4-C5	5.01	107.40	105.40
38	A1	656	G	C8-N9-C4	-5.01	104.40	106.40
38	A1	948	C	C1'-O4'-C4'	5.01	113.91	109.90
38	A1	998	G	C5-C6-N1	5.01	114.00	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	A1	1131	G	C4-C5-N7	5.01	112.80	110.80
38	A1	1153	U	C2'-C3'-O3'	5.01	121.71	113.70
38	A1	1222	U	N1-C1'-C2'	5.01	120.51	114.00
38	A1	1532	G	O4'-C1'-N9	5.01	112.21	108.20
38	A1	2268	C	C2-N1-C1'	5.01	124.31	118.80
38	A1	2302	C	C6-N1-C2	-5.01	118.30	120.30
38	A1	3033	G	N1-C2-N3	-5.01	120.90	123.90
56	AJ	52	ARG	N-CA-CB	5.01	119.61	110.60
59	AL	19	TRP	CD1-NE1-CE2	5.01	113.51	109.00
11	B2	556	G	P-O5'-C5'	-5.00	112.89	120.90
11	B2	989	C	C4'-C3'-C2'	-5.00	97.59	102.60
38	A1	248	C	N1-C2-O2	-5.00	115.90	118.90
38	A1	1700	U	C4-C5-C6	5.00	122.70	119.70
38	A1	1948	A	C4-C5-C6	5.00	119.50	117.00
38	A1	2407	G	C2-N3-C4	5.00	114.40	111.90
38	A1	2777	G	C4-C5-N7	-5.00	108.80	110.80
38	A1	2963	G	N9-C4-C5	-5.00	103.40	105.40
57	Aj	79	THR	N-CA-C	-5.00	97.49	111.00
61	AN	136	ARG	N-CA-CB	5.00	119.61	110.60
10	B1	52	G	C5-C6-N1	-5.00	109.00	111.50
11	B2	29	G	P-O5'-C5'	-5.00	112.89	120.90
11	B2	185	G	N1-C2-N3	-5.00	120.90	123.90
11	B2	274	G	C4-C5-C6	5.00	121.80	118.80
11	B2	370	A	C5-C6-N1	-5.00	115.20	117.70
11	B2	502	U	O4'-C1'-N1	5.00	112.20	108.20
11	B2	747	U	C4'-C3'-C2'	-5.00	97.60	102.60
11	B2	755	U	N3-C4-C5	5.00	117.60	114.60
11	B2	1112	G	N1-C2-N3	-5.00	120.90	123.90
11	B2	1242	C	C1'-O4'-C4'	5.00	113.90	109.90
11	B2	1248	A	C2-N3-C4	5.00	113.10	110.60
11	B2	1334	A	C5-C6-N1	-5.00	115.20	117.70
38	A1	641	G	C5'-C4'-O4'	5.00	115.11	109.10
38	A1	1006	A	N3-C4-C5	-5.00	123.30	126.80
38	A1	1134	A	C2-N3-C4	-5.00	108.10	110.60
38	A1	1419	G	N3-C2-N2	5.00	123.40	119.90
38	A1	1489	G	C2-N3-C4	-5.00	109.40	111.90
38	A1	2080	G	N3-C2-N2	5.00	123.40	119.90
38	A1	2193	G	O4'-C1'-C2'	5.00	112.10	107.60
38	A1	2259	G	N3-C2-N2	5.00	123.40	119.90
38	A1	2289	A	N3-C4-C5	-5.00	123.30	126.80
38	A1	2450	A	C8-N9-C4	-5.00	103.80	105.80
38	A1	2684	G	C4-C5-N7	-5.00	108.80	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
61	AN	18	THR	C-N-CA	5.00	134.21	121.70
11	B2	569	G	C4-C5-C6	5.00	121.80	118.80
11	B2	598	U	O4'-C4'-C3'	-5.00	99.00	104.00
11	B2	625	G	N3-C4-N9	5.00	129.00	126.00
11	B2	844	G	C5-N7-C8	-5.00	101.80	104.30
11	B2	936	A	P-O3'-C3'	5.00	125.70	119.70
11	B2	971	G	C3'-C2'-C1'	-5.00	97.50	101.50
11	B2	983	G	C2-N3-C4	5.00	114.40	111.90
11	B2	1014	C	C2-N1-C1'	5.00	124.30	118.80
38	A1	306	G	C2'-C3'-O3'	5.00	121.70	113.70
38	A1	315	U	C4-C5-C6	5.00	122.70	119.70
38	A1	418	C	N1-C2-O2	-5.00	115.90	118.90
38	A1	783	C	N1-C2-N3	-5.00	115.70	119.20
38	A1	876	C	C5-C4-N4	5.00	123.70	120.20
38	A1	1084	G	N9-C4-C5	5.00	107.40	105.40
38	A1	1170	G	C4-C5-N7	-5.00	108.80	110.80
38	A1	1170	G	N9-C4-C5	-5.00	103.40	105.40
38	A1	1366	U	N3-C4-C5	5.00	117.60	114.60
38	A1	1415	C	C5-C4-N4	-5.00	116.70	120.20
38	A1	1476	C	P-O5'-C5'	-5.00	112.90	120.90
38	A1	1802	G	C1'-O4'-C4'	5.00	113.90	109.90
38	A1	1960	U	N3-C2-O2	-5.00	118.70	122.20
38	A1	2168	C	O4'-C1'-C2'	-5.00	100.80	105.80
38	A1	2439	G	C5-C6-O6	-5.00	125.60	128.60
39	A3	12	G	C6-C5-N7	-5.00	127.40	130.40
39	A3	76	U	N1-C2-O2	5.00	126.30	122.80
60	AM	27	MET	O-C-N	-5.00	114.70	122.70

All (12) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
19	BG	53	LYS	CA
20	BH	85	PHE	CA
20	BH	86	MET	CA
20	BH	87	ARG	CA
20	BH	96	LYS	CA
38	A1	2063	U	C3',C4'
49	Ae	14	THR	CB
51	Ag	13	LYS	CA
52	AH	91	LYS	CA
59	AL	11	LEU	CA
59	AL	44	LYS	CA

All (2533) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
38	A1	100	C	Sidechain
38	A1	1000	G	Sidechain
38	A1	1002	A	Sidechain
38	A1	1011	A	Sidechain
38	A1	1012	G	Sidechain
38	A1	1014	U	Sidechain
38	A1	1015	G	Sidechain
38	A1	1017	A	Sidechain
38	A1	1019	G	Sidechain
38	A1	102	A	Sidechain
38	A1	1022	G	Sidechain
38	A1	1023	C	Sidechain
38	A1	1028	G	Sidechain
38	A1	1029	C	Sidechain
38	A1	103	A	Sidechain
38	A1	1030	C	Sidechain
38	A1	1032	C	Sidechain
38	A1	1034	G	Sidechain
38	A1	1035	G	Sidechain
38	A1	1037	C	Sidechain
38	A1	1041	U	Sidechain
38	A1	1044	C	Sidechain
38	A1	1045	A	Sidechain
38	A1	1049	U	Sidechain
38	A1	105	C	Sidechain
38	A1	1051	C	Sidechain
38	A1	1056	C	Sidechain
38	A1	1057	C	Sidechain
38	A1	1059	C	Sidechain
38	A1	106	G	Sidechain
38	A1	1060	C	Sidechain
38	A1	1061	G	Sidechain
38	A1	1063	C	Sidechain
38	A1	1066	C	Sidechain
38	A1	1067	G	Sidechain
38	A1	107	G	Sidechain
38	A1	1070	G	Sidechain
38	A1	1071	A	Sidechain
38	A1	1074	G	Sidechain
38	A1	1075	G	Sidechain
38	A1	108	G	Sidechain
38	A1	1081	U	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	1083	G	Sidechain
38	A1	1084	G	Sidechain
38	A1	1085	G	Sidechain
38	A1	1086	U	Sidechain
38	A1	1090	G	Sidechain
38	A1	1092	U	Sidechain
38	A1	1093	G	Sidechain
38	A1	1094	U	Sidechain
38	A1	1096	A	Sidechain
38	A1	1099	C	Sidechain
38	A1	110	A	Sidechain
38	A1	1100	G	Sidechain
38	A1	1101	U	Sidechain
38	A1	1102	C	Sidechain
38	A1	1107	G	Sidechain
38	A1	1110	A	Sidechain
38	A1	1111	G	Sidechain
38	A1	1113	G	Sidechain
38	A1	1115	A	Sidechain
38	A1	1116	A	Sidechain
38	A1	1117	C	Sidechain
38	A1	1118	A	Sidechain
38	A1	1121	C	Sidechain
38	A1	1123	A	Sidechain
38	A1	1125	A	Sidechain
38	A1	1128	G	Sidechain
38	A1	1130	G	Sidechain
38	A1	1132	U	Sidechain
38	A1	1135	A	Sidechain
38	A1	1138	C	Sidechain
38	A1	1142	A	Sidechain
38	A1	1146	U	Sidechain
38	A1	1147	G	Sidechain
38	A1	1148	C	Sidechain
38	A1	115	C	Sidechain
38	A1	1151	G	Sidechain
38	A1	1153	U	Sidechain
38	A1	1162	C	Sidechain
38	A1	1163	U	Sidechain
38	A1	1165	C	Sidechain
38	A1	1166	A	Sidechain
38	A1	1167	A	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	117	A	Sidechain
38	A1	1170	G	Sidechain
38	A1	1171	G	Sidechain
38	A1	1179	G	Sidechain
38	A1	118	A	Sidechain
38	A1	1180	G	Sidechain
38	A1	1181	C	Sidechain
38	A1	1187	A	Sidechain
38	A1	1189	A	Sidechain
38	A1	119	U	Sidechain
38	A1	1192	G	Sidechain
38	A1	1193	G	Sidechain
38	A1	1194	G	Sidechain
38	A1	1195	G	Sidechain
38	A1	1199	U	Sidechain
38	A1	1200	A	Sidechain
38	A1	1201	G	Sidechain
38	A1	1203	C	Sidechain
38	A1	1205	U	Sidechain
38	A1	1206	A	Sidechain
38	A1	1208	A	Sidechain
38	A1	1209	A	Sidechain
38	A1	1210	G	Sidechain
38	A1	1212	A	Sidechain
38	A1	1215	C	Sidechain
38	A1	1216	A	Sidechain
38	A1	1217	U	Sidechain
38	A1	122	G	Sidechain
38	A1	1220	U	Sidechain
38	A1	1222	U	Sidechain
38	A1	1223	A	Sidechain
38	A1	1224	A	Sidechain
38	A1	1225	A	Sidechain
38	A1	1228	G	Sidechain
38	A1	1229	U	Sidechain
38	A1	123	A	Sidechain
38	A1	1230	G	Sidechain
38	A1	1234	A	Sidechain
38	A1	1238	G	Sidechain
38	A1	1239	C	Sidechain
38	A1	1240	U	Sidechain
38	A1	1241	C	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	1243	C	Sidechain
38	A1	1244	C	Sidechain
38	A1	1245	C	Sidechain
38	A1	1246	G	Sidechain
38	A1	1247	U	Sidechain
38	A1	1248	C	Sidechain
38	A1	125	C	Sidechain
38	A1	1250	A	Sidechain
38	A1	1256	G	Sidechain
38	A1	1257	G	Sidechain
38	A1	1258	G	Sidechain
38	A1	1259	G	Sidechain
38	A1	1261	C	Sidechain
38	A1	1264	G	Sidechain
38	A1	1266	A	Sidechain
38	A1	1268	A	Sidechain
38	A1	1269	U	Sidechain
38	A1	1271	G	Sidechain
38	A1	1273	C	Sidechain
38	A1	1274	G	Sidechain
38	A1	1275	G	Sidechain
38	A1	1279	U	Sidechain
38	A1	1281	A	Sidechain
38	A1	1285	C	Sidechain
38	A1	1286	G	Sidechain
38	A1	1287	G	Sidechain
38	A1	1289	C	Sidechain
38	A1	1290	G	Sidechain
38	A1	1291	C	Sidechain
38	A1	1294	A	Sidechain
38	A1	1295	G	Sidechain
38	A1	1296	A	Sidechain
38	A1	1297	C	Sidechain
38	A1	1298	C	Sidechain
38	A1	13	U	Sidechain
38	A1	130	G	Sidechain
38	A1	1301	G	Sidechain
38	A1	1302	G	Sidechain
38	A1	1305	C	Sidechain
38	A1	1306	A	Sidechain
38	A1	1307	C	Sidechain
38	A1	1308	G	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	1324	G	Sidechain
38	A1	1326	U	Sidechain
38	A1	133	G	Sidechain
38	A1	1331	U	Sidechain
38	A1	1333	G	Sidechain
38	A1	1336	G	Sidechain
38	A1	1339	C	Sidechain
38	A1	1340	G	Sidechain
38	A1	1345	G	Sidechain
38	A1	1347	U	Sidechain
38	A1	1348	G	Sidechain
38	A1	1349	G	Sidechain
38	A1	135	U	Sidechain
38	A1	1351	G	Sidechain
38	A1	1353	A	Sidechain
38	A1	1354	G	Sidechain
38	A1	1356	A	Sidechain
38	A1	1357	G	Sidechain
38	A1	136	U	Sidechain
38	A1	1369	G	Sidechain
38	A1	137	A	Sidechain
38	A1	1370	G	Sidechain
38	A1	1372	C	Sidechain
38	A1	1373	C	Sidechain
38	A1	1374	G	Sidechain
38	A1	1375	G	Sidechain
38	A1	1377	G	Sidechain
38	A1	138	U	Sidechain
38	A1	1380	G	Sidechain
38	A1	1381	C	Sidechain
38	A1	1385	C	Sidechain
38	A1	1386	G	Sidechain
38	A1	1387	G	Sidechain
38	A1	1388	U	Sidechain
38	A1	1390	U	Sidechain
38	A1	1392	G	Sidechain
38	A1	1393	C	Sidechain
38	A1	1394	G	Sidechain
38	A1	1395	G	Sidechain
38	A1	1399	C	Sidechain
38	A1	140	C	Sidechain
38	A1	1400	U	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	1401	G	Sidechain
38	A1	1403	C	Sidechain
38	A1	1405	G	Sidechain
38	A1	1409	U	Sidechain
38	A1	1410	A	Sidechain
38	A1	1411	G	Sidechain
38	A1	1412	C	Sidechain
38	A1	1414	G	Sidechain
38	A1	1415	C	Sidechain
38	A1	1416	G	Sidechain
38	A1	1418	A	Sidechain
38	A1	1421	C	Sidechain
38	A1	1423	G	Sidechain
38	A1	1424	G	Sidechain
38	A1	1425	U	Sidechain
38	A1	1428	G	Sidechain
38	A1	1429	A	Sidechain
38	A1	143	C	Sidechain
38	A1	1433	C	Sidechain
38	A1	1434	C	Sidechain
38	A1	1435	G	Sidechain
38	A1	1439	G	Sidechain
38	A1	1440	C	Sidechain
38	A1	1441	C	Sidechain
38	A1	1442	G	Sidechain
38	A1	1443	G	Sidechain
38	A1	1444	A	Sidechain
38	A1	1445	G	Sidechain
38	A1	1446	G	Sidechain
38	A1	1447	G	Sidechain
38	A1	1448	G	Sidechain
38	A1	1449	C	Sidechain
38	A1	1453	G	Sidechain
38	A1	1454	G	Sidechain
38	A1	1455	U	Sidechain
38	A1	1459	A	Sidechain
38	A1	146	U	Sidechain
38	A1	1462	G	Sidechain
38	A1	1465	A	Sidechain
38	A1	1467	G	Sidechain
38	A1	1471	G	Sidechain
38	A1	1472	U	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	1473	C	Sidechain
38	A1	1474	A	Sidechain
38	A1	1476	C	Sidechain
38	A1	1477	C	Sidechain
38	A1	1479	U	Sidechain
38	A1	148	C	Sidechain
38	A1	1481	G	Sidechain
38	A1	1486	G	Sidechain
38	A1	149	G	Sidechain
38	A1	1491	U	Sidechain
38	A1	1494	U	Sidechain
38	A1	1495	A	Sidechain
38	A1	1501	G	Sidechain
38	A1	1504	C	Sidechain
38	A1	1505	G	Sidechain
38	A1	1509	C	Sidechain
38	A1	1512	G	Sidechain
38	A1	1513	G	Sidechain
38	A1	1514	C	Sidechain
38	A1	1516	C	Sidechain
38	A1	1520	G	Sidechain
38	A1	1521	G	Sidechain
38	A1	1522	A	Sidechain
38	A1	1523	A	Sidechain
38	A1	1524	A	Sidechain
38	A1	1525	G	Sidechain
38	A1	1526	G	Sidechain
38	A1	1527	G	Sidechain
38	A1	1528	A	Sidechain
38	A1	1532	G	Sidechain
38	A1	1533	G	Sidechain
38	A1	1539	U	Sidechain
38	A1	1540	A	Sidechain
38	A1	1541	U	Sidechain
38	A1	1546	G	Sidechain
38	A1	1548	A	Sidechain
38	A1	1553	G	Sidechain
38	A1	1554	G	Sidechain
38	A1	1555	G	Sidechain
38	A1	1560	G	Sidechain
38	A1	1561	G	Sidechain
38	A1	1565	G	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	1569	A	Sidechain
38	A1	1570	C	Sidechain
38	A1	1571	G	Sidechain
38	A1	1575	G	Sidechain
38	A1	1576	C	Sidechain
38	A1	1577	C	Sidechain
38	A1	1578	C	Sidechain
38	A1	1581	A	Sidechain
38	A1	1582	G	Sidechain
38	A1	1583	G	Sidechain
38	A1	1584	G	Sidechain
38	A1	1585	U	Sidechain
38	A1	1586	G	Sidechain
38	A1	1589	G	Sidechain
38	A1	1591	C	Sidechain
38	A1	1592	U	Sidechain
38	A1	1594	G	Sidechain
38	A1	1596	G	Sidechain
38	A1	16	G	Sidechain
38	A1	1600	G	Sidechain
38	A1	1601	G	Sidechain
38	A1	1602	C	Sidechain
38	A1	1603	G	Sidechain
38	A1	1604	G	Sidechain
38	A1	1608	G	Sidechain
38	A1	1609	G	Sidechain
38	A1	1610	C	Sidechain
38	A1	1612	G	Sidechain
38	A1	1613	A	Sidechain
38	A1	1616	A	Sidechain
38	A1	1618	G	Sidechain
38	A1	1620	C	Sidechain
38	A1	1621	G	Sidechain
38	A1	1622	G	Sidechain
38	A1	1623	C	Sidechain
38	A1	1624	U	Sidechain
38	A1	1625	A	Sidechain
38	A1	1626	A	Sidechain
38	A1	1627	G	Sidechain
38	A1	1630	U	Sidechain
38	A1	1631	A	Sidechain
38	A1	1632	U	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	1633	A	Sidechain
38	A1	1635	G	Sidechain
38	A1	1637	C	Sidechain
38	A1	1638	C	Sidechain
38	A1	164	A	Sidechain
38	A1	1640	G	Sidechain
38	A1	1641	G	Sidechain
38	A1	1642	G	Sidechain
38	A1	1644	G	Sidechain
38	A1	1653	U	Sidechain
38	A1	1655	G	Sidechain
38	A1	1657	G	Sidechain
38	A1	1659	G	Sidechain
38	A1	166	G	Sidechain
38	A1	1660	A	Sidechain
38	A1	1661	A	Sidechain
38	A1	1663	C	Sidechain
38	A1	1665	G	Sidechain
38	A1	1666	G	Sidechain
38	A1	1668	G	Sidechain
38	A1	167	G	Sidechain
38	A1	1674	G	Sidechain
38	A1	1675	C	Sidechain
38	A1	1676	G	Sidechain
38	A1	1677	A	Sidechain
38	A1	1679	U	Sidechain
38	A1	1680	G	Sidechain
38	A1	1681	G	Sidechain
38	A1	1687	C	Sidechain
38	A1	1690	U	Sidechain
38	A1	1695	G	Sidechain
38	A1	1696	G	Sidechain
38	A1	1699	U	Sidechain
38	A1	17	C	Sidechain
38	A1	1707	A	Sidechain
38	A1	1708	U	Sidechain
38	A1	1709	C	Sidechain
38	A1	1713	G	Sidechain
38	A1	1714	G	Sidechain
38	A1	1717	C	Sidechain
38	A1	1718	C	Sidechain
38	A1	1719	C	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	172	C	Sidechain
38	A1	1721	U	Sidechain
38	A1	1722	G	Sidechain
38	A1	1725	A	Sidechain
38	A1	1726	A	Sidechain
38	A1	1727	G	Sidechain
38	A1	1731	U	Sidechain
38	A1	1733	C	Sidechain
38	A1	1734	G	Sidechain
38	A1	1735	G	Sidechain
38	A1	1737	A	Sidechain
38	A1	1739	U	Sidechain
38	A1	1740	U	Sidechain
38	A1	1741	C	Sidechain
38	A1	1743	G	Sidechain
38	A1	1744	A	Sidechain
38	A1	1745	U	Sidechain
38	A1	1746	C	Sidechain
38	A1	175	G	Sidechain
38	A1	1750	C	Sidechain
38	A1	1753	G	Sidechain
38	A1	1758	U	Sidechain
38	A1	1759	A	Sidechain
38	A1	176	G	Sidechain
38	A1	1760	C	Sidechain
38	A1	1763	A	Sidechain
38	A1	1768	C	Sidechain
38	A1	1769	G	Sidechain
38	A1	177	G	Sidechain
38	A1	1773	C	Sidechain
38	A1	1774	A	Sidechain
38	A1	1775	G	Sidechain
38	A1	1776	G	Sidechain
38	A1	1777	U	Sidechain
38	A1	178	G	Sidechain
38	A1	1781	C	Sidechain
38	A1	1782	C	Sidechain
38	A1	1783	U	Sidechain
38	A1	1784	G	Sidechain
38	A1	1787	U	Sidechain
38	A1	1788	G	Sidechain
38	A1	1789	A	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	1792	A	Sidechain
38	A1	1793	G	Sidechain
38	A1	1794	C	Sidechain
38	A1	1795	C	Sidechain
38	A1	1796	U	Sidechain
38	A1	1798	A	Sidechain
38	A1	1799	G	Sidechain
38	A1	1800	G	Sidechain
38	A1	1802	G	Sidechain
38	A1	1803	U	Sidechain
38	A1	1804	G	Sidechain
38	A1	1805	U	Sidechain
38	A1	1807	G	Sidechain
38	A1	181	U	Sidechain
38	A1	1810	G	Sidechain
38	A1	1811	G	Sidechain
38	A1	1814	A	Sidechain
38	A1	1815	C	Sidechain
38	A1	1817	C	Sidechain
38	A1	1819	G	Sidechain
38	A1	182	U	Sidechain
38	A1	1822	G	Sidechain
38	A1	1823	A	Sidechain
38	A1	1824	G	Sidechain
38	A1	1826	G	Sidechain
38	A1	183	G	Sidechain
38	A1	1833	G	Sidechain
38	A1	184	A	Sidechain
38	A1	1841	G	Sidechain
38	A1	1844	C	Sidechain
38	A1	1846	G	Sidechain
38	A1	1848	A	Sidechain
38	A1	185	A	Sidechain
38	A1	1852	U	Sidechain
38	A1	1854	G	Sidechain
38	A1	1856	G	Sidechain
38	A1	1857	A	Sidechain
38	A1	1858	G	Sidechain
38	A1	1861	G	Sidechain
38	A1	1863	G	Sidechain
38	A1	1865	U	Sidechain
38	A1	187	C	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	1870	G	Sidechain
38	A1	1873	G	Sidechain
38	A1	1876	G	Sidechain
38	A1	1877	C	Sidechain
38	A1	1878	G	Sidechain
38	A1	1882	C	Sidechain
38	A1	1884	C	Sidechain
38	A1	1885	G	Sidechain
38	A1	1886	C	Sidechain
38	A1	1888	G	Sidechain
38	A1	189	U	Sidechain
38	A1	1890	U	Sidechain
38	A1	1891	C	Sidechain
38	A1	1896	U	Sidechain
38	A1	1897	G	Sidechain
38	A1	190	C	Sidechain
38	A1	1900	U	Sidechain
38	A1	1901	A	Sidechain
38	A1	1902	G	Sidechain
38	A1	1903	G	Sidechain
38	A1	1907	G	Sidechain
38	A1	1908	C	Sidechain
38	A1	1914	U	Sidechain
38	A1	1919	A	Sidechain
38	A1	1920	A	Sidechain
38	A1	1921	U	Sidechain
38	A1	1924	A	Sidechain
38	A1	1926	A	Sidechain
38	A1	1927	C	Sidechain
38	A1	1928	A	Sidechain
38	A1	1929	C	Sidechain
38	A1	1930	A	Sidechain
38	A1	1931	G	Sidechain
38	A1	1932	G	Sidechain
38	A1	1933	U	Sidechain
38	A1	1934	C	Sidechain
38	A1	1935	C	Sidechain
38	A1	1936	C	Sidechain
38	A1	1937	A	Sidechain
38	A1	1938	G	Sidechain
38	A1	1939	C	Sidechain
38	A1	194	G	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	1941	A	Sidechain
38	A1	1942	G	Sidechain
38	A1	1946	G	Sidechain
38	A1	1947	A	Sidechain
38	A1	1949	A	Sidechain
38	A1	195	U	Sidechain
38	A1	1950	G	Sidechain
38	A1	1952	G	Sidechain
38	A1	1953	U	Sidechain
38	A1	1956	G	Sidechain
38	A1	1957	U	Sidechain
38	A1	1958	A	Sidechain
38	A1	196	A	Sidechain
38	A1	1961	G	Sidechain
38	A1	1962	G	Sidechain
38	A1	1966	C	Sidechain
38	A1	1968	A	Sidechain
38	A1	1969	C	Sidechain
38	A1	1970	G	Sidechain
38	A1	1973	U	Sidechain
38	A1	1975	C	Sidechain
38	A1	1976	C	Sidechain
38	A1	1978	A	Sidechain
38	A1	1980	U	Sidechain
38	A1	1981	G	Sidechain
38	A1	1982	C	Sidechain
38	A1	1985	G	Sidechain
38	A1	1987	A	Sidechain
38	A1	1988	U	Sidechain
38	A1	1989	G	Sidechain
38	A1	1990	U	Sidechain
38	A1	1991	G	Sidechain
38	A1	1993	A	Sidechain
38	A1	1994	G	Sidechain
38	A1	1998	G	Sidechain
38	A1	2001	U	Sidechain
38	A1	2002	A	Sidechain
38	A1	2003	C	Sidechain
38	A1	2004	A	Sidechain
38	A1	2006	C	Sidechain
38	A1	2007	C	Sidechain
38	A1	2010	G	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	2011	U	Sidechain
38	A1	2015	G	Sidechain
38	A1	2017	A	Sidechain
38	A1	2019	C	Sidechain
38	A1	2025	A	Sidechain
38	A1	2033	G	Sidechain
38	A1	2034	G	Sidechain
38	A1	2036	A	Sidechain
38	A1	2037	A	Sidechain
38	A1	2039	U	Sidechain
38	A1	2040	A	Sidechain
38	A1	2042	A	Sidechain
38	A1	2045	C	Sidechain
38	A1	2047	U	Sidechain
38	A1	2048	C	Sidechain
38	A1	2050	U	Sidechain
38	A1	2051	A	Sidechain
38	A1	2053	G	Sidechain
38	A1	2054	G	Sidechain
38	A1	2055	U	Sidechain
38	A1	2057	G	Sidechain
38	A1	206	A	Sidechain
38	A1	2061	A	Sidechain
38	A1	2063	U	Sidechain
38	A1	2064	U	Sidechain
38	A1	2067	U	Sidechain
38	A1	2068	U	Sidechain
38	A1	207	A	Sidechain
38	A1	2071	C	Sidechain
38	A1	2072	G	Sidechain
38	A1	2076	A	Sidechain
38	A1	2078	A	Sidechain
38	A1	2082	C	Sidechain
38	A1	2084	A	Sidechain
38	A1	2086	C	Sidechain
38	A1	2088	G	Sidechain
38	A1	2089	C	Sidechain
38	A1	2090	A	Sidechain
38	A1	2091	U	Sidechain
38	A1	2092	G	Sidechain
38	A1	2093	A	Sidechain
38	A1	2097	G	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	2099	G	Sidechain
38	A1	210	A	Sidechain
38	A1	2101	A	Sidechain
38	A1	2106	G	Sidechain
38	A1	211	A	Sidechain
38	A1	2110	C	Sidechain
38	A1	2112	C	Sidechain
38	A1	2113	G	Sidechain
38	A1	2114	C	Sidechain
38	A1	2115	U	Sidechain
38	A1	2117	U	Sidechain
38	A1	2119	C	Sidechain
38	A1	2120	C	Sidechain
38	A1	2122	G	Sidechain
38	A1	2123	G	Sidechain
38	A1	2124	C	Sidechain
38	A1	2126	G	Sidechain
38	A1	2131	C	Sidechain
38	A1	2132	C	Sidechain
38	A1	2134	G	Sidechain
38	A1	2138	A	Sidechain
38	A1	2139	A	Sidechain
38	A1	214	C	Sidechain
38	A1	2140	C	Sidechain
38	A1	2141	C	Sidechain
38	A1	2142	U	Sidechain
38	A1	2148	U	Sidechain
38	A1	2149	G	Sidechain
38	A1	2152	G	Sidechain
38	A1	2154	G	Sidechain
38	A1	2156	A	Sidechain
38	A1	2158	G	Sidechain
38	A1	2161	A	Sidechain
38	A1	2162	G	Sidechain
38	A1	2164	G	Sidechain
38	A1	2165	A	Sidechain
38	A1	2166	C	Sidechain
38	A1	2167	C	Sidechain
38	A1	2171	G	Sidechain
38	A1	2172	G	Sidechain
38	A1	2175	G	Sidechain
38	A1	2176	G	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	2177	A	Sidechain
38	A1	2178	A	Sidechain
38	A1	2179	G	Sidechain
38	A1	218	A	Sidechain
38	A1	2183	A	Sidechain
38	A1	2184	G	Sidechain
38	A1	2189	C	Sidechain
38	A1	2190	A	Sidechain
38	A1	2191	U	Sidechain
38	A1	2192	G	Sidechain
38	A1	2195	G	Sidechain
38	A1	220	C	Sidechain
38	A1	2201	C	Sidechain
38	A1	2202	U	Sidechain
38	A1	2203	G	Sidechain
38	A1	2204	C	Sidechain
38	A1	2205	A	Sidechain
38	A1	2208	C	Sidechain
38	A1	221	G	Sidechain
38	A1	2210	G	Sidechain
38	A1	2212	C	Sidechain
38	A1	2216	G	Sidechain
38	A1	2217	C	Sidechain
38	A1	2218	C	Sidechain
38	A1	2219	A	Sidechain
38	A1	2223	G	Sidechain
38	A1	2224	G	Sidechain
38	A1	2226	G	Sidechain
38	A1	2228	G	Sidechain
38	A1	2229	G	Sidechain
38	A1	2230	G	Sidechain
38	A1	2233	G	Sidechain
38	A1	2234	C	Sidechain
38	A1	2235	G	Sidechain
38	A1	2237	A	Sidechain
38	A1	2240	G	Sidechain
38	A1	2241	U	Sidechain
38	A1	2243	G	Sidechain
38	A1	2244	G	Sidechain
38	A1	2245	C	Sidechain
38	A1	2247	G	Sidechain
38	A1	2248	G	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	2249	A	Sidechain
38	A1	2250	G	Sidechain
38	A1	2253	G	Sidechain
38	A1	2256	G	Sidechain
38	A1	2257	A	Sidechain
38	A1	2258	A	Sidechain
38	A1	2259	G	Sidechain
38	A1	226	C	Sidechain
38	A1	2260	C	Sidechain
38	A1	2262	C	Sidechain
38	A1	2265	C	Sidechain
38	A1	2266	C	Sidechain
38	A1	2267	U	Sidechain
38	A1	227	G	Sidechain
38	A1	2270	G	Sidechain
38	A1	2272	G	Sidechain
38	A1	2274	C	Sidechain
38	A1	2275	G	Sidechain
38	A1	2278	U	Sidechain
38	A1	2279	G	Sidechain
38	A1	2280	G	Sidechain
38	A1	2281	A	Sidechain
38	A1	2285	G	Sidechain
38	A1	2286	U	Sidechain
38	A1	2291	G	Sidechain
38	A1	2295	C	Sidechain
38	A1	2298	C	Sidechain
38	A1	23	G	Sidechain
38	A1	230	A	Sidechain
38	A1	2301	C	Sidechain
38	A1	2302	C	Sidechain
38	A1	2303	A	Sidechain
38	A1	2304	C	Sidechain
38	A1	2305	U	Sidechain
38	A1	2308	C	Sidechain
38	A1	2310	G	Sidechain
38	A1	2316	U	Sidechain
38	A1	2317	G	Sidechain
38	A1	2318	G	Sidechain
38	A1	2320	U	Sidechain
38	A1	2322	A	Sidechain
38	A1	2324	C	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	2328	G	Sidechain
38	A1	2329	A	Sidechain
38	A1	2331	A	Sidechain
38	A1	2334	G	Sidechain
38	A1	2336	G	Sidechain
38	A1	2337	G	Sidechain
38	A1	2338	A	Sidechain
38	A1	234	G	Sidechain
38	A1	2340	A	Sidechain
38	A1	2341	G	Sidechain
38	A1	2342	C	Sidechain
38	A1	2343	G	Sidechain
38	A1	2345	U	Sidechain
38	A1	2346	A	Sidechain
38	A1	2348	G	Sidechain
38	A1	2349	U	Sidechain
38	A1	2351	G	Sidechain
38	A1	2354	A	Sidechain
38	A1	2356	U	Sidechain
38	A1	2358	U	Sidechain
38	A1	236	G	Sidechain
38	A1	2361	C	Sidechain
38	A1	2362	U	Sidechain
38	A1	237	G	Sidechain
38	A1	2371	A	Sidechain
38	A1	2373	G	Sidechain
38	A1	2379	G	Sidechain
38	A1	238	C	Sidechain
38	A1	2382	A	Sidechain
38	A1	2384	G	Sidechain
38	A1	2386	U	Sidechain
38	A1	2388	U	Sidechain
38	A1	239	G	Sidechain
38	A1	2393	G	Sidechain
38	A1	2394	G	Sidechain
38	A1	2398	C	Sidechain
38	A1	2399	C	Sidechain
38	A1	24	G	Sidechain
38	A1	2400	U	Sidechain
38	A1	2403	G	Sidechain
38	A1	2404	G	Sidechain
38	A1	2405	U	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	2407	G	Sidechain
38	A1	2408	G	Sidechain
38	A1	241	C	Sidechain
38	A1	2410	U	Sidechain
38	A1	2414	G	Sidechain
38	A1	2418	G	Sidechain
38	A1	2419	U	Sidechain
38	A1	242	C	Sidechain
38	A1	2420	C	Sidechain
38	A1	2423	G	Sidechain
38	A1	2428	C	Sidechain
38	A1	2429	G	Sidechain
38	A1	2434	A	Sidechain
38	A1	2435	G	Sidechain
38	A1	2436	A	Sidechain
38	A1	2437	G	Sidechain
38	A1	2441	A	Sidechain
38	A1	2444	G	Sidechain
38	A1	2445	G	Sidechain
38	A1	2450	A	Sidechain
38	A1	2451	G	Sidechain
38	A1	2453	C	Sidechain
38	A1	2458	U	Sidechain
38	A1	2459	G	Sidechain
38	A1	246	A	Sidechain
38	A1	2460	A	Sidechain
38	A1	2463	G	Sidechain
38	A1	2469	G	Sidechain
38	A1	2470	U	Sidechain
38	A1	2472	A	Sidechain
38	A1	2473	C	Sidechain
38	A1	2474	A	Sidechain
38	A1	2475	G	Sidechain
38	A1	2477	G	Sidechain
38	A1	2479	C	Sidechain
38	A1	248	C	Sidechain
38	A1	2481	G	Sidechain
38	A1	2483	U	Sidechain
38	A1	2485	C	Sidechain
38	A1	2487	G	Sidechain
38	A1	249	G	Sidechain
38	A1	2490	C	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	2492	G	Sidechain
38	A1	2493	A	Sidechain
38	A1	2494	A	Sidechain
38	A1	2497	G	Sidechain
38	A1	2499	U	Sidechain
38	A1	2501	G	Sidechain
38	A1	2504	U	Sidechain
38	A1	2506	G	Sidechain
38	A1	2508	G	Sidechain
38	A1	2509	A	Sidechain
38	A1	2517	U	Sidechain
38	A1	2523	C	Sidechain
38	A1	2526	G	Sidechain
38	A1	2529	G	Sidechain
38	A1	2531	G	Sidechain
38	A1	2532	G	Sidechain
38	A1	2538	G	Sidechain
38	A1	2539	G	Sidechain
38	A1	2540	A	Sidechain
38	A1	2541	U	Sidechain
38	A1	2542	G	Sidechain
38	A1	2544	C	Sidechain
38	A1	2548	A	Sidechain
38	A1	2559	G	Sidechain
38	A1	256	G	Sidechain
38	A1	2560	G	Sidechain
38	A1	2562	G	Sidechain
38	A1	2566	A	Sidechain
38	A1	2574	G	Sidechain
38	A1	2576	C	Sidechain
38	A1	2577	U	Sidechain
38	A1	258	C	Sidechain
38	A1	2580	G	Sidechain
38	A1	2581	G	Sidechain
38	A1	2583	G	Sidechain
38	A1	2584	A	Sidechain
38	A1	2585	G	Sidechain
38	A1	2587	G	Sidechain
38	A1	2588	C	Sidechain
38	A1	2590	C	Sidechain
38	A1	2592	U	Sidechain
38	A1	2593	A	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	2594	U	Sidechain
38	A1	260	A	Sidechain
38	A1	2604	G	Sidechain
38	A1	2605	G	Sidechain
38	A1	2612	A	Sidechain
38	A1	2613	C	Sidechain
38	A1	2617	G	Sidechain
38	A1	2618	C	Sidechain
38	A1	2619	U	Sidechain
38	A1	2622	C	Sidechain
38	A1	2626	U	Sidechain
38	A1	263	U	Sidechain
38	A1	2630	C	Sidechain
38	A1	2631	C	Sidechain
38	A1	2634	U	Sidechain
38	A1	2636	C	Sidechain
38	A1	2639	G	Sidechain
38	A1	264	G	Sidechain
38	A1	2641	C	Sidechain
38	A1	2642	C	Sidechain
38	A1	2645	C	Sidechain
38	A1	2646	A	Sidechain
38	A1	2647	G	Sidechain
38	A1	2649	A	Sidechain
38	A1	2650	G	Sidechain
38	A1	2652	G	Sidechain
38	A1	2653	G	Sidechain
38	A1	2656	A	Sidechain
38	A1	2658	G	Sidechain
38	A1	2663	G	Sidechain
38	A1	2667	U	Sidechain
38	A1	2669	U	Sidechain
38	A1	2671	C	Sidechain
38	A1	2674	C	Sidechain
38	A1	2675	C	Sidechain
38	A1	2676	A	Sidechain
38	A1	2679	A	Sidechain
38	A1	2680	A	Sidechain
38	A1	2684	G	Sidechain
38	A1	2688	C	Sidechain
38	A1	269	C	Sidechain
38	A1	2693	G	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	2694	C	Sidechain
38	A1	2697	G	Sidechain
38	A1	2700	U	Sidechain
38	A1	2703	G	Sidechain
38	A1	2707	G	Sidechain
38	A1	2708	U	Sidechain
38	A1	2710	G	Sidechain
38	A1	2712	G	Sidechain
38	A1	2713	A	Sidechain
38	A1	2714	G	Sidechain
38	A1	2717	A	Sidechain
38	A1	2719	G	Sidechain
38	A1	272	G	Sidechain
38	A1	2722	G	Sidechain
38	A1	2723	G	Sidechain
38	A1	2726	G	Sidechain
38	A1	2727	C	Sidechain
38	A1	2728	U	Sidechain
38	A1	273	G	Sidechain
38	A1	2733	A	Sidechain
38	A1	2737	G	Sidechain
38	A1	2738	G	Sidechain
38	A1	2739	G	Sidechain
38	A1	274	C	Sidechain
38	A1	2742	G	Sidechain
38	A1	2743	U	Sidechain
38	A1	2744	U	Sidechain
38	A1	2746	G	Sidechain
38	A1	275	C	Sidechain
38	A1	2751	C	Sidechain
38	A1	2752	U	Sidechain
38	A1	2753	G	Sidechain
38	A1	2754	A	Sidechain
38	A1	2756	G	Sidechain
38	A1	2759	A	Sidechain
38	A1	276	G	Sidechain
38	A1	2761	G	Sidechain
38	A1	2764	G	Sidechain
38	A1	2766	C	Sidechain
38	A1	2768	C	Sidechain
38	A1	2769	U	Sidechain
38	A1	277	A	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	2773	A	Sidechain
38	A1	2774	C	Sidechain
38	A1	2775	G	Sidechain
38	A1	2777	G	Sidechain
38	A1	2779	G	Sidechain
38	A1	2783	C	Sidechain
38	A1	2785	G	Sidechain
38	A1	2787	G	Sidechain
38	A1	279	G	Sidechain
38	A1	2792	G	Sidechain
38	A1	2793	C	Sidechain
38	A1	2794	G	Sidechain
38	A1	2795	G	Sidechain
38	A1	2799	C	Sidechain
38	A1	28	A	Sidechain
38	A1	2800	U	Sidechain
38	A1	2801	G	Sidechain
38	A1	2803	U	Sidechain
38	A1	2804	C	Sidechain
38	A1	2806	A	Sidechain
38	A1	2810	G	Sidechain
38	A1	2817	U	Sidechain
38	A1	2819	C	Sidechain
38	A1	2821	G	Sidechain
38	A1	2822	G	Sidechain
38	A1	2827	C	Sidechain
38	A1	2829	C	Sidechain
38	A1	2831	G	Sidechain
38	A1	2832	G	Sidechain
38	A1	2833	G	Sidechain
38	A1	2835	A	Sidechain
38	A1	2836	G	Sidechain
38	A1	2838	U	Sidechain
38	A1	2839	A	Sidechain
38	A1	284	U	Sidechain
38	A1	2842	C	Sidechain
38	A1	2843	C	Sidechain
38	A1	2844	G	Sidechain
38	A1	2847	G	Sidechain
38	A1	2848	C	Sidechain
38	A1	2850	G	Sidechain
38	A1	2852	U	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	2853	A	Sidechain
38	A1	2854	A	Sidechain
38	A1	2855	G	Sidechain
38	A1	2856	G	Sidechain
38	A1	286	G	Sidechain
38	A1	2860	G	Sidechain
38	A1	2862	A	Sidechain
38	A1	2863	A	Sidechain
38	A1	2864	G	Sidechain
38	A1	2869	U	Sidechain
38	A1	287	G	Sidechain
38	A1	2874	C	Sidechain
38	A1	2877	A	Sidechain
38	A1	288	G	Sidechain
38	A1	2882	G	Sidechain
38	A1	2883	C	Sidechain
38	A1	2884	C	Sidechain
38	A1	2888	G	Sidechain
38	A1	289	G	Sidechain
38	A1	2891	A	Sidechain
38	A1	2892	A	Sidechain
38	A1	2893	U	Sidechain
38	A1	2898	G	Sidechain
38	A1	2899	G	Sidechain
38	A1	2902	G	Sidechain
38	A1	292	U	Sidechain
38	A1	2943	G	Sidechain
38	A1	2944	G	Sidechain
38	A1	2947	G	Sidechain
38	A1	2948	A	Sidechain
38	A1	2949	G	Sidechain
38	A1	2950	G	Sidechain
38	A1	2951	G	Sidechain
38	A1	2953	U	Sidechain
38	A1	2955	G	Sidechain
38	A1	2956	G	Sidechain
38	A1	2959	A	Sidechain
38	A1	296	G	Sidechain
38	A1	2961	A	Sidechain
38	A1	2962	A	Sidechain
38	A1	2963	G	Sidechain
38	A1	2964	A	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	2965	C	Sidechain
38	A1	2967	C	Sidechain
38	A1	2969	G	Sidechain
38	A1	297	G	Sidechain
38	A1	2974	U	Sidechain
38	A1	2975	A	Sidechain
38	A1	2976	G	Sidechain
38	A1	2977	G	Sidechain
38	A1	2978	G	Sidechain
38	A1	298	G	Sidechain
38	A1	2980	G	Sidechain
38	A1	2982	G	Sidechain
38	A1	2986	G	Sidechain
38	A1	2987	U	Sidechain
38	A1	2988	A	Sidechain
38	A1	299	U	Sidechain
38	A1	2990	G	Sidechain
38	A1	2994	G	Sidechain
38	A1	2995	A	Sidechain
38	A1	2997	G	Sidechain
38	A1	2998	G	Sidechain
38	A1	2999	G	Sidechain
38	A1	30	G	Sidechain
38	A1	3000	U	Sidechain
38	A1	3004	C	Sidechain
38	A1	3005	C	Sidechain
38	A1	3007	A	Sidechain
38	A1	3009	C	Sidechain
38	A1	302	U	Sidechain
38	A1	3022	C	Sidechain
38	A1	3023	G	Sidechain
38	A1	3024	C	Sidechain
38	A1	3026	C	Sidechain
38	A1	3027	C	Sidechain
38	A1	3031	U	Sidechain
38	A1	3034	C	Sidechain
38	A1	3035	C	Sidechain
38	A1	3036	C	Sidechain
38	A1	3038	A	Sidechain
38	A1	304	G	Sidechain
38	A1	3042	C	Sidechain
38	A1	3044	U	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	3045	G	Sidechain
38	A1	305	G	Sidechain
38	A1	308	C	Sidechain
38	A1	309	C	Sidechain
38	A1	31	G	Sidechain
38	A1	310	C	Sidechain
38	A1	312	G	Sidechain
38	A1	313	U	Sidechain
38	A1	316	G	Sidechain
38	A1	317	A	Sidechain
38	A1	318	G	Sidechain
38	A1	319	A	Sidechain
38	A1	32	C	Sidechain
38	A1	322	C	Sidechain
38	A1	324	C	Sidechain
38	A1	325	G	Sidechain
38	A1	326	C	Sidechain
38	A1	328	G	Sidechain
38	A1	329	G	Sidechain
38	A1	33	U	Sidechain
38	A1	330	U	Sidechain
38	A1	332	A	Sidechain
38	A1	336	C	Sidechain
38	A1	338	A	Sidechain
38	A1	339	A	Sidechain
38	A1	34	C	Sidechain
38	A1	341	U	Sidechain
38	A1	342	C	Sidechain
38	A1	348	G	Sidechain
38	A1	35	G	Sidechain
38	A1	351	C	Sidechain
38	A1	353	C	Sidechain
38	A1	354	G	Sidechain
38	A1	355	G	Sidechain
38	A1	358	C	Sidechain
38	A1	361	G	Sidechain
38	A1	363	G	Sidechain
38	A1	364	A	Sidechain
38	A1	365	G	Sidechain
38	A1	366	G	Sidechain
38	A1	369	G	Sidechain
38	A1	37	C	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	373	G	Sidechain
38	A1	374	C	Sidechain
38	A1	376	C	Sidechain
38	A1	379	U	Sidechain
38	A1	380	A	Sidechain
38	A1	384	G	Sidechain
38	A1	386	A	Sidechain
38	A1	388	G	Sidechain
38	A1	390	C	Sidechain
38	A1	394	A	Sidechain
38	A1	396	G	Sidechain
38	A1	397	G	Sidechain
38	A1	398	U	Sidechain
38	A1	40	G	Sidechain
38	A1	400	U	Sidechain
38	A1	401	C	Sidechain
38	A1	402	G	Sidechain
38	A1	404	G	Sidechain
38	A1	405	G	Sidechain
38	A1	407	A	Sidechain
38	A1	409	C	Sidechain
38	A1	410	C	Sidechain
38	A1	412	G	Sidechain
38	A1	413	A	Sidechain
38	A1	416	A	Sidechain
38	A1	417	C	Sidechain
38	A1	419	G	Sidechain
38	A1	42	G	Sidechain
38	A1	420	U	Sidechain
38	A1	423	G	Sidechain
38	A1	424	U	Sidechain
38	A1	428	A	Sidechain
38	A1	43	G	Sidechain
38	A1	431	U	Sidechain
38	A1	433	C	Sidechain
38	A1	434	G	Sidechain
38	A1	435	G	Sidechain
38	A1	438	G	Sidechain
38	A1	439	G	Sidechain
38	A1	44	C	Sidechain
38	A1	442	G	Sidechain
38	A1	444	U	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	447	G	Sidechain
38	A1	448	A	Sidechain
38	A1	449	G	Sidechain
38	A1	45	G	Sidechain
38	A1	450	G	Sidechain
38	A1	452	A	Sidechain
38	A1	454	C	Sidechain
38	A1	455	G	Sidechain
38	A1	457	C	Sidechain
38	A1	461	C	Sidechain
38	A1	462	A	Sidechain
38	A1	463	A	Sidechain
38	A1	465	C	Sidechain
38	A1	468	A	Sidechain
38	A1	470	A	Sidechain
38	A1	474	G	Sidechain
38	A1	477	C	Sidechain
38	A1	478	C	Sidechain
38	A1	48	G	Sidechain
38	A1	481	G	Sidechain
38	A1	482	A	Sidechain
38	A1	488	A	Sidechain
38	A1	489	G	Sidechain
38	A1	493	A	Sidechain
38	A1	496	A	Sidechain
38	A1	497	G	Sidechain
38	A1	498	U	Sidechain
38	A1	499	A	Sidechain
38	A1	503	U	Sidechain
38	A1	506	G	Sidechain
38	A1	51	G	Sidechain
38	A1	515	G	Sidechain
38	A1	516	A	Sidechain
38	A1	517	A	Sidechain
38	A1	518	A	Sidechain
38	A1	519	A	Sidechain
38	A1	52	A	Sidechain
38	A1	520	G	Sidechain
38	A1	521	C	Sidechain
38	A1	524	C	Sidechain
38	A1	525	C	Sidechain
38	A1	527	G	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	529	G	Sidechain
38	A1	53	A	Sidechain
38	A1	532	G	Sidechain
38	A1	534	G	Sidechain
38	A1	536	G	Sidechain
38	A1	537	U	Sidechain
38	A1	54	G	Sidechain
38	A1	540	A	Sidechain
38	A1	543	G	Sidechain
38	A1	545	G	Sidechain
38	A1	548	U	Sidechain
38	A1	549	G	Sidechain
38	A1	55	G	Sidechain
38	A1	552	A	Sidechain
38	A1	553	C	Sidechain
38	A1	555	G	Sidechain
38	A1	557	G	Sidechain
38	A1	558	C	Sidechain
38	A1	559	G	Sidechain
38	A1	560	G	Sidechain
38	A1	562	G	Sidechain
38	A1	566	G	Sidechain
38	A1	567	G	Sidechain
38	A1	568	A	Sidechain
38	A1	569	G	Sidechain
38	A1	571	G	Sidechain
38	A1	577	C	Sidechain
38	A1	583	A	Sidechain
38	A1	585	G	Sidechain
38	A1	586	A	Sidechain
38	A1	588	U	Sidechain
38	A1	589	G	Sidechain
38	A1	59	U	Sidechain
38	A1	590	A	Sidechain
38	A1	597	C	Sidechain
38	A1	603	G	Sidechain
38	A1	61	G	Sidechain
38	A1	612	G	Sidechain
38	A1	613	C	Sidechain
38	A1	621	G	Sidechain
38	A1	622	A	Sidechain
38	A1	623	G	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	625	A	Sidechain
38	A1	627	G	Sidechain
38	A1	629	G	Sidechain
38	A1	63	A	Sidechain
38	A1	632	G	Sidechain
38	A1	635	G	Sidechain
38	A1	643	G	Sidechain
38	A1	644	G	Sidechain
38	A1	646	U	Sidechain
38	A1	647	G	Sidechain
38	A1	648	C	Sidechain
38	A1	652	G	Sidechain
38	A1	654	C	Sidechain
38	A1	655	C	Sidechain
38	A1	656	G	Sidechain
38	A1	658	C	Sidechain
38	A1	659	U	Sidechain
38	A1	660	U	Sidechain
38	A1	661	G	Sidechain
38	A1	662	A	Sidechain
38	A1	663	A	Sidechain
38	A1	664	A	Sidechain
38	A1	665	C	Sidechain
38	A1	674	G	Sidechain
38	A1	675	G	Sidechain
38	A1	676	G	Sidechain
38	A1	677	A	Sidechain
38	A1	684	G	Sidechain
38	A1	685	G	Sidechain
38	A1	689	U	Sidechain
38	A1	690	G	Sidechain
38	A1	691	G	Sidechain
38	A1	694	A	Sidechain
38	A1	696	G	Sidechain
38	A1	697	U	Sidechain
38	A1	698	U	Sidechain
38	A1	7	G	Sidechain
38	A1	70	G	Sidechain
38	A1	700	A	Sidechain
38	A1	701	G	Sidechain
38	A1	703	G	Sidechain
38	A1	704	G	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	705	G	Sidechain
38	A1	707	U	Sidechain
38	A1	71	A	Sidechain
38	A1	710	G	Sidechain
38	A1	712	C	Sidechain
38	A1	713	C	Sidechain
38	A1	715	G	Sidechain
38	A1	716	U	Sidechain
38	A1	72	U	Sidechain
38	A1	721	G	Sidechain
38	A1	725	G	Sidechain
38	A1	726	G	Sidechain
38	A1	727	A	Sidechain
38	A1	728	A	Sidechain
38	A1	733	A	Sidechain
38	A1	735	A	Sidechain
38	A1	738	C	Sidechain
38	A1	739	C	Sidechain
38	A1	743	A	Sidechain
38	A1	746	C	Sidechain
38	A1	747	G	Sidechain
38	A1	749	G	Sidechain
38	A1	75	G	Sidechain
38	A1	760	G	Sidechain
38	A1	761	U	Sidechain
38	A1	763	A	Sidechain
38	A1	767	G	Sidechain
38	A1	770	G	Sidechain
38	A1	771	G	Sidechain
38	A1	775	C	Sidechain
38	A1	776	G	Sidechain
38	A1	777	A	Sidechain
38	A1	778	A	Sidechain
38	A1	779	A	Sidechain
38	A1	78	C	Sidechain
38	A1	780	G	Sidechain
38	A1	786	G	Sidechain
38	A1	787	G	Sidechain
38	A1	788	A	Sidechain
38	A1	789	G	Sidechain
38	A1	79	C	Sidechain
38	A1	790	U	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	791	C	Sidechain
38	A1	798	G	Sidechain
38	A1	8	G	Sidechain
38	A1	80	G	Sidechain
38	A1	800	G	Sidechain
38	A1	802	G	Sidechain
38	A1	803	A	Sidechain
38	A1	807	G	Sidechain
38	A1	808	A	Sidechain
38	A1	809	A	Sidechain
38	A1	81	G	Sidechain
38	A1	810	A	Sidechain
38	A1	816	C	Sidechain
38	A1	817	G	Sidechain
38	A1	818	A	Sidechain
38	A1	821	U	Sidechain
38	A1	823	G	Sidechain
38	A1	824	C	Sidechain
38	A1	825	C	Sidechain
38	A1	827	G	Sidechain
38	A1	83	G	Sidechain
38	A1	832	A	Sidechain
38	A1	833	G	Sidechain
38	A1	834	G	Sidechain
38	A1	835	G	Sidechain
38	A1	836	U	Sidechain
38	A1	838	A	Sidechain
38	A1	842	C	Sidechain
38	A1	844	C	Sidechain
38	A1	845	U	Sidechain
38	A1	847	A	Sidechain
38	A1	850	C	Sidechain
38	A1	852	A	Sidechain
38	A1	853	G	Sidechain
38	A1	857	U	Sidechain
38	A1	859	G	Sidechain
38	A1	86	G	Sidechain
38	A1	860	A	Sidechain
38	A1	861	G	Sidechain
38	A1	862	G	Sidechain
38	A1	865	C	Sidechain
38	A1	866	G	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	871	G	Sidechain
38	A1	872	G	Sidechain
38	A1	873	G	Sidechain
38	A1	874	U	Sidechain
38	A1	875	G	Sidechain
38	A1	876	C	Sidechain
38	A1	877	U	Sidechain
38	A1	878	G	Sidechain
38	A1	879	A	Sidechain
38	A1	88	G	Sidechain
38	A1	880	U	Sidechain
38	A1	881	G	Sidechain
38	A1	884	C	Sidechain
38	A1	885	A	Sidechain
38	A1	887	U	Sidechain
38	A1	889	C	Sidechain
38	A1	890	G	Sidechain
38	A1	892	U	Sidechain
38	A1	897	U	Sidechain
38	A1	899	A	Sidechain
38	A1	90	A	Sidechain
38	A1	902	C	Sidechain
38	A1	903	C	Sidechain
38	A1	904	G	Sidechain
38	A1	905	G	Sidechain
38	A1	908	U	Sidechain
38	A1	911	G	Sidechain
38	A1	912	G	Sidechain
38	A1	918	A	Sidechain
38	A1	919	G	Sidechain
38	A1	92	G	Sidechain
38	A1	921	C	Sidechain
38	A1	934	G	Sidechain
38	A1	936	G	Sidechain
38	A1	937	A	Sidechain
38	A1	938	U	Sidechain
38	A1	941	C	Sidechain
38	A1	943	G	Sidechain
38	A1	946	U	Sidechain
38	A1	947	C	Sidechain
38	A1	948	C	Sidechain
38	A1	95	G	Sidechain

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Mol	Chain	Res	Type	Group
38	A1	953	G	Sidechain
38	A1	954	A	Sidechain
38	A1	956	U	Sidechain
38	A1	96	C	Sidechain
38	A1	960	C	Sidechain
38	A1	961	C	Sidechain
38	A1	963	G	Sidechain
38	A1	964	C	Sidechain
38	A1	965	A	Sidechain
38	A1	966	G	Sidechain
38	A1	969	U	Sidechain
38	A1	970	G	Sidechain
38	A1	975	C	Sidechain
38	A1	979	G	Sidechain
38	A1	98	G	Sidechain
38	A1	980	G	Sidechain
38	A1	983	G	Sidechain
38	A1	989	G	Sidechain
38	A1	990	G	Sidechain
38	A1	992	G	Sidechain
38	A1	993	G	Sidechain
38	A1	994	G	Sidechain
38	A1	995	G	Sidechain
38	A1	996	U	Sidechain
38	A1	997	A	Sidechain
38	A1	998	G	Sidechain
39	A3	1	C	Sidechain
39	A3	10	U	Sidechain
39	A3	101	A	Sidechain
39	A3	102	G	Sidechain
39	A3	104	C	Sidechain
39	A3	106	G	Sidechain
39	A3	11	A	Sidechain
39	A3	111	G	Sidechain
39	A3	113	C	Sidechain
39	A3	116	C	Sidechain
39	A3	121	A	Sidechain
39	A3	124	A	Sidechain
39	A3	14	G	Sidechain
39	A3	16	G	Sidechain
39	A3	17	G	Sidechain
39	A3	19	G	Sidechain

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Mol	Chain	Res	Type	Group
39	A3	2	G	Sidechain
39	A3	21	C	Sidechain
39	A3	25	A	Sidechain
39	A3	26	C	Sidechain
39	A3	27	C	Sidechain
39	A3	29	G	Sidechain
39	A3	3	G	Sidechain
39	A3	31	U	Sidechain
39	A3	32	C	Sidechain
39	A3	35	A	Sidechain
39	A3	38	U	Sidechain
39	A3	4	C	Sidechain
39	A3	42	A	Sidechain
39	A3	43	C	Sidechain
39	A3	46	G	Sidechain
39	A3	48	A	Sidechain
39	A3	49	A	Sidechain
39	A3	51	U	Sidechain
39	A3	53	A	Sidechain
39	A3	54	A	Sidechain
39	A3	57	C	Sidechain
39	A3	58	C	Sidechain
39	A3	60	C	Sidechain
39	A3	63	G	Sidechain
39	A3	68	C	Sidechain
39	A3	71	G	Sidechain
39	A3	72	G	Sidechain
39	A3	73	U	Sidechain
39	A3	74	U	Sidechain
39	A3	75	G	Sidechain
39	A3	76	U	Sidechain
39	A3	78	C	Sidechain
39	A3	79	U	Sidechain
39	A3	82	C	Sidechain
39	A3	84	U	Sidechain
39	A3	86	C	Sidechain
39	A3	89	G	Sidechain
39	A3	9	A	Sidechain
39	A3	93	G	Sidechain
40	A5	32	PHE	Sidechain
40	A5	67	SER	Mainchain
2	A8	49	TYR	Sidechain

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Mol	Chain	Res	Type	Group
41	AA	107	PHE	Sidechain
41	AA	120	TYR	Sidechain
41	AA	18	ARG	Sidechain
41	AA	203	TYR	Sidechain
43	AB	10	ARG	Sidechain
43	AB	107	TYR	Sidechain
43	AB	156	ARG	Sidechain
43	AB	167	ARG	Sidechain
43	AB	234	ARG	Sidechain
43	AB	238	ARG	Sidechain
43	AB	30	TYR	Sidechain
43	AB	60	ARG	Sidechain
45	AC	135	LEU	Peptide
45	AC	156	LYS	Peptide
45	AC	185	TYR	Sidechain
45	AC	26	ARG	Sidechain
45	AC	292	ASN	Peptide
45	AC	304	GLU	Peptide
45	AC	343	ARG	Sidechain
46	AD	111	ARG	Sidechain
46	AD	130	ARG	Sidechain
46	AD	140	LEU	Peptide
46	AD	187	ARG	Sidechain
46	AD	22	PHE	Sidechain
46	AD	251	ARG	Sidechain
46	AD	33	ARG	Sidechain
46	AD	82	PHE	Sidechain
46	AD	91	ARG	Sidechain
48	AE	145	ARG	Sidechain
48	AE	149	ARG	Sidechain
48	AE	152	ARG	Sidechain
48	AE	24	ARG	Sidechain
48	AE	58	ARG	Sidechain
48	AE	88	TYR	Sidechain
50	AF	133	ARG	Sidechain
50	AF	173	TYR	Sidechain
50	AF	6	TRP	Peptide
12	AG	33	ARG	Sidechain
12	AG	45	ARG	Sidechain
52	AH	1	MET	Peptide
52	AH	59	PRO	Peptide
54	AI	128	TYR	Sidechain

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Mol	Chain	Res	Type	Group
54	AI	42	ARG	Sidechain
54	AI	62	ARG	Sidechain
54	AI	67	TYR	Sidechain
54	AI	76	ARG	Sidechain
54	AI	91	ARG	Sidechain
54	AI	96	ARG	Sidechain
56	AJ	46	TYR	Sidechain
56	AJ	74	ARG	Sidechain
56	AJ	86	ARG	Sidechain
56	AJ	96	ARG	Sidechain
40	AK	16	ARG	Sidechain
40	AK	64	ARG	Sidechain
59	AL	10	LYS	Peptide
59	AL	12	ARG	Sidechain
59	AL	47	TRP	Peptide
59	AL	53	TYR	Peptide
59	AL	54	ALA	Peptide
59	AL	63	PHE	Peptide,Sidechain
59	AL	65	ARG	Sidechain
59	AL	8	VAL	Peptide
59	AL	95	TYR	Sidechain
60	AM	31	ARG	Sidechain
60	AM	59	TYR	Sidechain
60	AM	71	ARG	Sidechain
60	AM	73	ARG	Sidechain
61	AN	108	TYR	Sidechain
61	AN	163	ARG	Sidechain
61	AN	17	TYR	Sidechain
61	AN	22	TYR	Sidechain
61	AN	58	ARG	Sidechain
61	AN	72	TYR	Sidechain
61	AN	82	TYR	Sidechain
62	AO	14	ARG	Sidechain
62	AO	15	ARG	Sidechain
62	AO	152	TYR	Sidechain
62	AO	171	TYR	Sidechain
62	AO	184	HIS	Sidechain
62	AO	22	ARG	Sidechain
62	AO	65	ARG	Sidechain
62	AO	8	ARG	Sidechain
62	AO	84	TYR	Sidechain
62	AO	92	TYR	Sidechain

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Mol	Chain	Res	Type	Group
63	AP	12	ARG	Sidechain
63	AP	13	ARG	Sidechain
63	AP	41	ARG	Sidechain
63	AP	93	ILE	Mainchain
4	AQ	100	ARG	Sidechain
4	AQ	133	LYS	Peptide
4	AQ	139	TYR	Sidechain
4	AQ	3	THR	Peptide
4	AQ	66	ARG	Sidechain
64	AR	3	GLN	Peptide
5	AS	129	TYR	Sidechain
5	AS	133	PHE	Sidechain
5	AS	139	PHE	Sidechain
5	AS	40	ARG	Sidechain
5	AS	83	TYR	Sidechain
6	AT	41	ARG	Sidechain
6	AT	61	ARG	Sidechain
7	AU	119	ARG	Sidechain
7	AU	33	ARG	Sidechain
7	AU	42	ARG	Sidechain
7	AU	59	TYR	Sidechain
65	AV	39	ARG	Sidechain
65	AV	45	ARG	Sidechain
65	AV	56	TYR	Sidechain
65	AV	60	ARG	Sidechain
65	AV	9	TYR	Sidechain
9	AX	132	PHE	Sidechain
9	AX	173	PHE	Sidechain
9	AX	220	PHE	Sidechain
9	AX	251	PHE	Sidechain
9	AX	287	TYR	Sidechain
9	AX	373	TYR	Sidechain
9	AX	384	PHE	Sidechain
9	AX	412	TYR	Sidechain
9	AX	415	TYR	Sidechain
66	AY	10	ARG	Sidechain
66	AY	69	ARG	Sidechain
67	AZ	51	TYR	Sidechain
42	Aa	26	LYS	Peptide
42	Aa	7	GLU	Peptide
44	Ab	15	ARG	Sidechain
44	Ab	18	ARG	Sidechain

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Mol	Chain	Res	Type	Group
44	Ab	25	ARG	Sidechain
44	Ab	26	GLN	Peptide
44	Ab	34	PHE	Peptide
44	Ab	35	LYS	Peptide
44	Ab	38	PRO	Peptide
44	Ab	57	LYS	Peptide
44	Ab	79	TYR	Sidechain
47	Ad	41	ARG	Sidechain
49	Ae	1	MET	Peptide
49	Ae	11	ARG	Sidechain
49	Ae	22	ARG	Sidechain
49	Ae	25	ARG	Sidechain
49	Ae	45	ARG	Sidechain
49	Ae	49	TYR	Sidechain
49	Ae	50	ARG	Sidechain
49	Ae	51	TRP	Peptide
49	Ae	8	PHE	Peptide
3	Af	2	ALA	Peptide
3	Af	33	ARG	Peptide
3	Af	34	ARG	Sidechain
3	Af	37	THR	Peptide
3	Af	38	HIS	Peptide
3	Af	48	LYS	Peptide
51	Ag	33	LYS	Peptide
51	Ag	38	ARG	Sidechain
51	Ag	4	PHE	Peptide
51	Ag	40	ARG	Sidechain
51	Ag	41	PRO	Peptide
53	Ah	11	ARG	Sidechain
53	Ah	2	ARG	Sidechain
55	Ai	17	TYR	Sidechain
55	Ai	22	ARG	Sidechain
57	Aj	30	ARG	Peptide
57	Aj	54	LYS	Peptide
57	Aj	57	GLY	Peptide
57	Aj	58	ARG	Peptide
57	Aj	59	GLU	Peptide
57	Aj	62	VAL	Peptide
57	Aj	82	ARG	Sidechain
58	Ak	213	TYR	Sidechain
58	Ak	33	MET	Peptide
58	Ak	54	VAL	Peptide

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Mol	Chain	Res	Type	Group
58	Ak	82	TYR	Sidechain
10	B1	10	G	Sidechain
10	B1	13	C	Sidechain
10	B1	15	G	Sidechain
10	B1	17	C	Sidechain
10	B1	18	U	Sidechain
10	B1	19	G	Sidechain
10	B1	2	G	Sidechain
10	B1	23	G	Sidechain
10	B1	24	A	Sidechain
10	B1	30	G	Sidechain
10	B1	31	G	Sidechain
10	B1	32	A	Sidechain
10	B1	33	C	Sidechain
10	B1	35	G	Sidechain
10	B1	43	G	Sidechain
10	B1	44	G	Sidechain
10	B1	46	U	Sidechain
10	B1	48	U	Sidechain
10	B1	49	C	Sidechain
10	B1	51	G	Sidechain
10	B1	52	G	Sidechain
10	B1	53	G	Sidechain
10	B1	54	G	Sidechain
10	B1	55	U	Sidechain
10	B1	56	U	Sidechain
10	B1	59	A	Sidechain
10	B1	6	G	Sidechain
10	B1	64	C	Sidechain
10	B1	68	C	Sidechain
10	B1	69	G	Sidechain
10	B1	7	G	Sidechain
10	B1	71	C	Sidechain
10	B1	75	C	Sidechain
10	B1	8	U	Sidechain
10	B1	9	A	Sidechain
11	B2	10	G	Sidechain
11	B2	100	A	Sidechain
11	B2	1000	G	Sidechain
11	B2	1002	G	Sidechain
11	B2	1003	G	Sidechain
11	B2	1006	C	Sidechain

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Mol	Chain	Res	Type	Group
11	B2	1007	A	Sidechain
11	B2	1008	U	Sidechain
11	B2	1009	G	Sidechain
11	B2	101	G	Sidechain
11	B2	1013	G	Sidechain
11	B2	1014	C	Sidechain
11	B2	1016	G	Sidechain
11	B2	1018	C	Sidechain
11	B2	1022	U	Sidechain
11	B2	1023	C	Sidechain
11	B2	1029	G	Sidechain
11	B2	1030	U	Sidechain
11	B2	1032	A	Sidechain
11	B2	1033	G	Sidechain
11	B2	1035	C	Sidechain
11	B2	1036	G	Sidechain
11	B2	1038	C	Sidechain
11	B2	1039	C	Sidechain
11	B2	1040	A	Sidechain
11	B2	1041	C	Sidechain
11	B2	1042	U	Sidechain
11	B2	1043	U	Sidechain
11	B2	1044	A	Sidechain
11	B2	1045	A	Sidechain
11	B2	1046	G	Sidechain
11	B2	1047	U	Sidechain
11	B2	1048	G	Sidechain
11	B2	1049	U	Sidechain
11	B2	1050	G	Sidechain
11	B2	1054	A	Sidechain
11	B2	1056	G	Sidechain
11	B2	1058	G	Sidechain
11	B2	1059	C	Sidechain
11	B2	106	A	Sidechain
11	B2	1060	G	Sidechain
11	B2	1063	A	Sidechain
11	B2	1065	C	Sidechain
11	B2	1066	C	Sidechain
11	B2	1067	G	Sidechain
11	B2	1069	G	Sidechain
11	B2	107	C	Sidechain
11	B2	1070	C	Sidechain

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Mol	Chain	Res	Type	Group
11	B2	1072	C	Sidechain
11	B2	1076	G	Sidechain
11	B2	1079	G	Sidechain
11	B2	1082	A	Sidechain
11	B2	1083	G	Sidechain
11	B2	1090	C	Sidechain
11	B2	1093	C	Sidechain
11	B2	1095	C	Sidechain
11	B2	1097	G	Sidechain
11	B2	110	C	Sidechain
11	B2	1100	G	Sidechain
11	B2	1101	G	Sidechain
11	B2	1103	G	Sidechain
11	B2	1104	G	Sidechain
11	B2	1108	U	Sidechain
11	B2	111	G	Sidechain
11	B2	1111	G	Sidechain
11	B2	1112	G	Sidechain
11	B2	1113	G	Sidechain
11	B2	1114	G	Sidechain
11	B2	1115	G	Sidechain
11	B2	1118	C	Sidechain
11	B2	1120	G	Sidechain
11	B2	1121	C	Sidechain
11	B2	1122	C	Sidechain
11	B2	1124	G	Sidechain
11	B2	1127	A	Sidechain
11	B2	1128	U	Sidechain
11	B2	1135	G	Sidechain
11	B2	1136	A	Sidechain
11	B2	1137	G	Sidechain
11	B2	1138	G	Sidechain
11	B2	1139	A	Sidechain
11	B2	1141	G	Sidechain
11	B2	1142	G	Sidechain
11	B2	1143	G	Sidechain
11	B2	1144	G	Sidechain
11	B2	1146	G	Sidechain
11	B2	1148	G	Sidechain
11	B2	1150	G	Sidechain
11	B2	1151	A	Sidechain
11	B2	1153	G	Sidechain

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Mol	Chain	Res	Type	Group
11	B2	1155	U	Sidechain
11	B2	1157	G	Sidechain
11	B2	1158	G	Sidechain
11	B2	116	C	Sidechain
11	B2	1161	A	Sidechain
11	B2	1162	G	Sidechain
11	B2	1163	U	Sidechain
11	B2	1166	G	Sidechain
11	B2	1167	C	Sidechain
11	B2	1169	C	Sidechain
11	B2	117	C	Sidechain
11	B2	1172	A	Sidechain
11	B2	1174	A	Sidechain
11	B2	1179	C	Sidechain
11	B2	1181	G	Sidechain
11	B2	1184	U	Sidechain
11	B2	1185	A	Sidechain
11	B2	1188	C	Sidechain
11	B2	1189	G	Sidechain
11	B2	119	A	Sidechain
11	B2	1191	G	Sidechain
11	B2	1193	G	Sidechain
11	B2	1197	C	Sidechain
11	B2	1198	A	Sidechain
11	B2	1199	A	Sidechain
11	B2	12	U	Sidechain
11	B2	1202	G	Sidechain
11	B2	1203	G	Sidechain
11	B2	1204	C	Sidechain
11	B2	1207	G	Sidechain
11	B2	1208	A	Sidechain
11	B2	121	C	Sidechain
11	B2	1211	A	Sidechain
11	B2	1212	U	Sidechain
11	B2	1215	G	Sidechain
11	B2	1218	C	Sidechain
11	B2	1219	C	Sidechain
11	B2	1220	G	Sidechain
11	B2	1223	C	Sidechain
11	B2	1226	G	Sidechain
11	B2	1227	A	Sidechain
11	B2	1228	A	Sidechain

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Mol	Chain	Res	Type	Group
11	B2	1229	A	Sidechain
11	B2	123	U	Sidechain
11	B2	1231	G	Sidechain
11	B2	1232	G	Sidechain
11	B2	1234	A	Sidechain
11	B2	1235	A	Sidechain
11	B2	1239	A	Sidechain
11	B2	124	C	Sidechain
11	B2	1240	A	Sidechain
11	B2	1241	U	Sidechain
11	B2	1245	C	Sidechain
11	B2	1247	A	Sidechain
11	B2	1250	C	Sidechain
11	B2	1251	C	Sidechain
11	B2	1256	C	Sidechain
11	B2	1259	A	Sidechain
11	B2	1260	G	Sidechain
11	B2	1261	U	Sidechain
11	B2	1264	G	Sidechain
11	B2	1265	G	Sidechain
11	B2	1267	U	Sidechain
11	B2	1271	G	Sidechain
11	B2	1273	G	Sidechain
11	B2	1276	G	Sidechain
11	B2	1280	C	Sidechain
11	B2	1282	C	Sidechain
11	B2	1284	C	Sidechain
11	B2	1285	C	Sidechain
11	B2	1287	G	Sidechain
11	B2	1289	G	Sidechain
11	B2	1293	A	Sidechain
11	B2	1294	G	Sidechain
11	B2	1295	C	Sidechain
11	B2	1298	G	Sidechain
11	B2	1300	A	Sidechain
11	B2	1304	C	Sidechain
11	B2	1305	U	Sidechain
11	B2	1309	A	Sidechain
11	B2	1316	U	Sidechain
11	B2	1317	G	Sidechain
11	B2	1319	C	Sidechain
11	B2	1321	U	Sidechain

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Mol	Chain	Res	Type	Group
11	B2	1324	U	Sidechain
11	B2	1325	C	Sidechain
11	B2	1326	G	Sidechain
11	B2	1331	G	Sidechain
11	B2	1332	C	Sidechain
11	B2	1333	G	Sidechain
11	B2	1334	A	Sidechain
11	B2	1336	U	Sidechain
11	B2	1339	G	Sidechain
11	B2	1340	U	Sidechain
11	B2	1341	C	Sidechain
11	B2	1342	C	Sidechain
11	B2	1343	C	Sidechain
11	B2	1344	U	Sidechain
11	B2	1345	G	Sidechain
11	B2	1346	C	Sidechain
11	B2	1347	U	Sidechain
11	B2	1348	C	Sidechain
11	B2	135	U	Sidechain
11	B2	1350	U	Sidechain
11	B2	1351	U	Sidechain
11	B2	1352	G	Sidechain
11	B2	1353	C	Sidechain
11	B2	1354	A	Sidechain
11	B2	1355	C	Sidechain
11	B2	1356	A	Sidechain
11	B2	136	A	Sidechain
11	B2	1362	C	Sidechain
11	B2	1369	C	Sidechain
11	B2	137	A	Sidechain
11	B2	1372	C	Sidechain
11	B2	1376	C	Sidechain
11	B2	1379	G	Sidechain
11	B2	138	C	Sidechain
11	B2	1380	C	Sidechain
11	B2	1384	G	Sidechain
11	B2	1385	U	Sidechain
11	B2	139	C	Sidechain
11	B2	1390	G	Sidechain
11	B2	1393	A	Sidechain
11	B2	1398	U	Sidechain
11	B2	1399	G	Sidechain

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Mol	Chain	Res	Type	Group
11	B2	140	C	Sidechain
11	B2	1402	C	Sidechain
11	B2	1403	U	Sidechain
11	B2	1404	C	Sidechain
11	B2	1405	C	Sidechain
11	B2	1406	U	Sidechain
11	B2	1409	G	Sidechain
11	B2	141	C	Sidechain
11	B2	1413	G	Sidechain
11	B2	1414	G	Sidechain
11	B2	1416	C	Sidechain
11	B2	1418	G	Sidechain
11	B2	1419	G	Sidechain
11	B2	142	G	Sidechain
11	B2	1421	C	Sidechain
11	B2	1423	A	Sidechain
11	B2	1424	G	Sidechain
11	B2	1427	C	Sidechain
11	B2	1429	G	Sidechain
11	B2	1430	G	Sidechain
11	B2	1431	C	Sidechain
11	B2	1432	U	Sidechain
11	B2	1433	C	Sidechain
11	B2	1435	G	Sidechain
11	B2	1440	G	Sidechain
11	B2	1441	G	Sidechain
11	B2	1442	G	Sidechain
11	B2	1444	G	Sidechain
11	B2	1449	G	Sidechain
11	B2	1450	U	Sidechain
11	B2	1452	G	Sidechain
11	B2	1453	U	Sidechain
11	B2	1454	A	Sidechain
11	B2	1457	A	Sidechain
11	B2	1458	A	Sidechain
11	B2	1466	G	Sidechain
11	B2	1469	G	Sidechain
11	B2	1470	G	Sidechain
11	B2	1471	G	Sidechain
11	B2	1473	A	Sidechain
11	B2	1474	A	Sidechain
11	B2	1477	U	Sidechain

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Mol	Chain	Res	Type	Group
11	B2	1478	A	Sidechain
11	B2	1480	G	Sidechain
11	B2	1481	G	Sidechain
11	B2	1486	A	Sidechain
11	B2	1487	U	Sidechain
11	B2	1489	A	Sidechain
11	B2	1492	U	Sidechain
11	B2	1493	C	Sidechain
11	B2	150	G	Sidechain
11	B2	152	G	Sidechain
11	B2	153	G	Sidechain
11	B2	155	U	Sidechain
11	B2	156	A	Sidechain
11	B2	157	A	Sidechain
11	B2	159	C	Sidechain
11	B2	161	C	Sidechain
11	B2	162	C	Sidechain
11	B2	168	G	Sidechain
11	B2	174	G	Sidechain
11	B2	175	G	Sidechain
11	B2	178	C	Sidechain
11	B2	180	G	Sidechain
11	B2	181	G	Sidechain
11	B2	182	A	Sidechain
11	B2	184	G	Sidechain
11	B2	185	G	Sidechain
11	B2	186	U	Sidechain
11	B2	188	C	Sidechain
11	B2	190	C	Sidechain
11	B2	191	A	Sidechain
11	B2	195	C	Sidechain
11	B2	196	G	Sidechain
11	B2	2	U	Sidechain
11	B2	20	G	Sidechain
11	B2	201	G	Sidechain
11	B2	203	A	Sidechain
11	B2	204	G	Sidechain
11	B2	205	C	Sidechain
11	B2	207	G	Sidechain
11	B2	210	A	Sidechain
11	B2	212	G	Sidechain
11	B2	215	C	Sidechain

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Mol	Chain	Res	Type	Group
11	B2	216	G	Sidechain
11	B2	217	C	Sidechain
11	B2	220	G	Sidechain
11	B2	223	G	Sidechain
11	B2	225	U	Sidechain
11	B2	226	G	Sidechain
11	B2	228	G	Sidechain
11	B2	229	G	Sidechain
11	B2	23	G	Sidechain
11	B2	231	G	Sidechain
11	B2	232	G	Sidechain
11	B2	235	G	Sidechain
11	B2	237	C	Sidechain
11	B2	238	G	Sidechain
11	B2	240	U	Sidechain
11	B2	246	A	Sidechain
11	B2	247	G	Sidechain
11	B2	249	U	Sidechain
11	B2	250	G	Sidechain
11	B2	252	U	Sidechain
11	B2	255	G	Sidechain
11	B2	256	G	Sidechain
11	B2	257	U	Sidechain
11	B2	258	A	Sidechain
11	B2	259	A	Sidechain
11	B2	261	G	Sidechain
11	B2	262	G	Sidechain
11	B2	27	C	Sidechain
11	B2	270	A	Sidechain
11	B2	277	G	Sidechain
11	B2	279	U	Sidechain
11	B2	282	G	Sidechain
11	B2	283	U	Sidechain
11	B2	288	G	Sidechain
11	B2	289	C	Sidechain
11	B2	291	G	Sidechain
11	B2	292	U	Sidechain
11	B2	294	A	Sidechain
11	B2	295	G	Sidechain
11	B2	298	C	Sidechain
11	B2	299	G	Sidechain
11	B2	30	C	Sidechain

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Mol	Chain	Res	Type	Group
11	B2	300	G	Sidechain
11	B2	301	G	Sidechain
11	B2	302	A	Sidechain
11	B2	303	G	Sidechain
11	B2	304	C	Sidechain
11	B2	305	C	Sidechain
11	B2	307	G	Sidechain
11	B2	308	G	Sidechain
11	B2	309	A	Sidechain
11	B2	31	U	Sidechain
11	B2	319	U	Sidechain
11	B2	32	A	Sidechain
11	B2	320	G	Sidechain
11	B2	322	G	Sidechain
11	B2	323	A	Sidechain
11	B2	324	C	Sidechain
11	B2	325	A	Sidechain
11	B2	326	C	Sidechain
11	B2	33	U	Sidechain
11	B2	332	C	Sidechain
11	B2	334	G	Sidechain
11	B2	335	G	Sidechain
11	B2	34	G	Sidechain
11	B2	340	A	Sidechain
11	B2	342	G	Sidechain
11	B2	347	G	Sidechain
11	B2	348	C	Sidechain
11	B2	35	G	Sidechain
11	B2	355	C	Sidechain
11	B2	356	G	Sidechain
11	B2	359	A	Sidechain
11	B2	36	G	Sidechain
11	B2	362	C	Sidechain
11	B2	363	C	Sidechain
11	B2	365	C	Sidechain
11	B2	368	C	Sidechain
11	B2	369	A	Sidechain
11	B2	37	G	Sidechain
11	B2	370	A	Sidechain
11	B2	371	U	Sidechain
11	B2	372	G	Sidechain
11	B2	375	G	Sidechain

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Mol	Chain	Res	Type	Group
11	B2	376	G	Sidechain
11	B2	38	G	Sidechain
11	B2	382	G	Sidechain
11	B2	385	A	Sidechain
11	B2	386	C	Sidechain
11	B2	387	G	Sidechain
11	B2	389	G	Sidechain
11	B2	39	U	Sidechain
11	B2	390	G	Sidechain
11	B2	391	G	Sidechain
11	B2	392	G	Sidechain
11	B2	394	C	Sidechain
11	B2	395	C	Sidechain
11	B2	399	A	Sidechain
11	B2	400	G	Sidechain
11	B2	401	U	Sidechain
11	B2	402	G	Sidechain
11	B2	404	C	Sidechain
11	B2	405	G	Sidechain
11	B2	406	U	Sidechain
11	B2	407	G	Sidechain
11	B2	408	C	Sidechain
11	B2	41	C	Sidechain
11	B2	410	U	Sidechain
11	B2	414	G	Sidechain
11	B2	419	G	Sidechain
11	B2	421	U	Sidechain
11	B2	422	U	Sidechain
11	B2	423	U	Sidechain
11	B2	427	G	Sidechain
11	B2	430	G	Sidechain
11	B2	431	U	Sidechain
11	B2	432	G	Sidechain
11	B2	434	A	Sidechain
11	B2	436	A	Sidechain
11	B2	438	A	Sidechain
11	B2	439	G	Sidechain
11	B2	44	C	Sidechain
11	B2	440	C	Sidechain
11	B2	441	U	Sidechain
11	B2	443	C	Sidechain
11	B2	445	G	Sidechain

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Mol	Chain	Res	Type	Group
11	B2	446	G	Sidechain
11	B2	447	A	Sidechain
11	B2	449	U	Sidechain
11	B2	45	U	Sidechain
11	B2	451	A	Sidechain
11	B2	452	G	Sidechain
11	B2	453	G	Sidechain
11	B2	454	G	Sidechain
11	B2	455	C	Sidechain
11	B2	456	U	Sidechain
11	B2	458	G	Sidechain
11	B2	459	G	Sidechain
11	B2	46	A	Sidechain
11	B2	460	C	Sidechain
11	B2	461	A	Sidechain
11	B2	463	G	Sidechain
11	B2	464	G	Sidechain
11	B2	467	G	Sidechain
11	B2	469	U	Sidechain
11	B2	47	A	Sidechain
11	B2	470	G	Sidechain
11	B2	472	C	Sidechain
11	B2	477	G	Sidechain
11	B2	48	G	Sidechain
11	B2	480	G	Sidechain
11	B2	483	G	Sidechain
11	B2	484	U	Sidechain
11	B2	488	A	Sidechain
11	B2	490	C	Sidechain
11	B2	491	G	Sidechain
11	B2	494	G	Sidechain
11	B2	495	G	Sidechain
11	B2	500	A	Sidechain
11	B2	505	U	Sidechain
11	B2	506	G	Sidechain
11	B2	510	A	Sidechain
11	B2	512	U	Sidechain
11	B2	513	A	Sidechain
11	B2	514	U	Sidechain
11	B2	516	A	Sidechain
11	B2	517	U	Sidechain
11	B2	521	G	Sidechain

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Mol	Chain	Res	Type	Group
11	B2	524	U	Sidechain
11	B2	528	G	Sidechain
11	B2	529	C	Sidechain
11	B2	53	G	Sidechain
11	B2	530	G	Sidechain
11	B2	533	C	Sidechain
11	B2	538	C	Sidechain
11	B2	539	C	Sidechain
11	B2	54	C	Sidechain
11	B2	541	G	Sidechain
11	B2	542	G	Sidechain
11	B2	543	C	Sidechain
11	B2	550	G	Sidechain
11	B2	551	U	Sidechain
11	B2	556	G	Sidechain
11	B2	557	G	Sidechain
11	B2	559	G	Sidechain
11	B2	56	A	Sidechain
11	B2	560	A	Sidechain
11	B2	563	U	Sidechain
11	B2	568	C	Sidechain
11	B2	57	G	Sidechain
11	B2	570	G	Sidechain
11	B2	571	C	Sidechain
11	B2	572	U	Sidechain
11	B2	575	A	Sidechain
11	B2	576	C	Sidechain
11	B2	581	G	Sidechain
11	B2	582	G	Sidechain
11	B2	585	U	Sidechain
11	B2	588	C	Sidechain
11	B2	59	C	Sidechain
11	B2	595	U	Sidechain
11	B2	597	C	Sidechain
11	B2	599	G	Sidechain
11	B2	6	G	Sidechain
11	B2	60	A	Sidechain
11	B2	601	G	Sidechain
11	B2	604	C	Sidechain
11	B2	605	C	Sidechain
11	B2	607	U	Sidechain
11	B2	609	G	Sidechain

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Mol	Chain	Res	Type	Group
11	B2	610	G	Sidechain
11	B2	612	C	Sidechain
11	B2	616	G	Sidechain
11	B2	617	A	Sidechain
11	B2	618	G	Sidechain
11	B2	620	G	Sidechain
11	B2	621	G	Sidechain
11	B2	622	C	Sidechain
11	B2	624	G	Sidechain
11	B2	625	G	Sidechain
11	B2	626	G	Sidechain
11	B2	628	G	Sidechain
11	B2	63	G	Sidechain
11	B2	632	C	Sidechain
11	B2	634	C	Sidechain
11	B2	635	C	Sidechain
11	B2	636	G	Sidechain
11	B2	639	G	Sidechain
11	B2	64	G	Sidechain
11	B2	640	U	Sidechain
11	B2	642	G	Sidechain
11	B2	643	G	Sidechain
11	B2	644	G	Sidechain
11	B2	645	G	Sidechain
11	B2	648	A	Sidechain
11	B2	649	A	Sidechain
11	B2	651	U	Sidechain
11	B2	654	U	Sidechain
11	B2	657	A	Sidechain
11	B2	66	G	Sidechain
11	B2	660	C	Sidechain
11	B2	662	C	Sidechain
11	B2	665	G	Sidechain
11	B2	667	G	Sidechain
11	B2	669	A	Sidechain
11	B2	672	G	Sidechain
11	B2	678	G	Sidechain
11	B2	68	G	Sidechain
11	B2	681	G	Sidechain
11	B2	683	A	Sidechain
11	B2	684	G	Sidechain
11	B2	685	G	Sidechain

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Mol	Chain	Res	Type	Group
11	B2	687	G	Sidechain
11	B2	688	C	Sidechain
11	B2	69	U	Sidechain
11	B2	690	C	Sidechain
11	B2	691	G	Sidechain
11	B2	693	C	Sidechain
11	B2	694	U	Sidechain
11	B2	695	G	Sidechain
11	B2	697	A	Sidechain
11	B2	7	G	Sidechain
11	B2	700	G	Sidechain
11	B2	701	G	Sidechain
11	B2	702	G	Sidechain
11	B2	706	G	Sidechain
11	B2	707	A	Sidechain
11	B2	708	C	Sidechain
11	B2	709	G	Sidechain
11	B2	71	C	Sidechain
11	B2	710	G	Sidechain
11	B2	711	U	Sidechain
11	B2	713	A	Sidechain
11	B2	716	G	Sidechain
11	B2	717	C	Sidechain
11	B2	718	G	Sidechain
11	B2	719	G	Sidechain
11	B2	72	C	Sidechain
11	B2	720	A	Sidechain
11	B2	721	A	Sidechain
11	B2	723	G	Sidechain
11	B2	724	C	Sidechain
11	B2	725	C	Sidechain
11	B2	728	G	Sidechain
11	B2	732	G	Sidechain
11	B2	734	G	Sidechain
11	B2	739	G	Sidechain
11	B2	74	U	Sidechain
11	B2	740	G	Sidechain
11	B2	742	U	Sidechain
11	B2	743	U	Sidechain
11	B2	744	A	Sidechain
11	B2	748	A	Sidechain
11	B2	749	C	Sidechain

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Mol	Chain	Res	Type	Group
11	B2	752	G	Sidechain
11	B2	753	G	Sidechain
11	B2	757	G	Sidechain
11	B2	758	U	Sidechain
11	B2	76	U	Sidechain
11	B2	761	U	Sidechain
11	B2	765	U	Sidechain
11	B2	769	A	Sidechain
11	B2	77	G	Sidechain
11	B2	772	G	Sidechain
11	B2	777	G	Sidechain
11	B2	778	G	Sidechain
11	B2	78	G	Sidechain
11	B2	784	G	Sidechain
11	B2	786	G	Sidechain
11	B2	788	C	Sidechain
11	B2	79	G	Sidechain
11	B2	790	G	Sidechain
11	B2	793	G	Sidechain
11	B2	794	A	Sidechain
11	B2	795	G	Sidechain
11	B2	797	U	Sidechain
11	B2	798	U	Sidechain
11	B2	799	C	Sidechain
11	B2	8	U	Sidechain
11	B2	800	G	Sidechain
11	B2	802	G	Sidechain
11	B2	804	U	Sidechain
11	B2	806	G	Sidechain
11	B2	810	G	Sidechain
11	B2	811	G	Sidechain
11	B2	813	G	Sidechain
11	B2	816	G	Sidechain
11	B2	82	G	Sidechain
11	B2	820	G	Sidechain
11	B2	821	G	Sidechain
11	B2	823	A	Sidechain
11	B2	824	G	Sidechain
11	B2	826	C	Sidechain
11	B2	827	G	Sidechain
11	B2	83	C	Sidechain
11	B2	832	G	Sidechain

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Mol	Chain	Res	Type	Group
11	B2	834	C	Sidechain
11	B2	839	G	Sidechain
11	B2	84	C	Sidechain
11	B2	840	C	Sidechain
11	B2	842	U	Sidechain
11	B2	844	G	Sidechain
11	B2	845	G	Sidechain
11	B2	846	G	Sidechain
11	B2	85	A	Sidechain
11	B2	850	A	Sidechain
11	B2	852	G	Sidechain
11	B2	854	C	Sidechain
11	B2	856	G	Sidechain
11	B2	858	A	Sidechain
11	B2	86	C	Sidechain
11	B2	860	G	Sidechain
11	B2	867	A	Sidechain
11	B2	87	C	Sidechain
11	B2	873	A	Sidechain
11	B2	874	G	Sidechain
11	B2	876	A	Sidechain
11	B2	879	U	Sidechain
11	B2	88	G	Sidechain
11	B2	881	G	Sidechain
11	B2	882	C	Sidechain
11	B2	884	G	Sidechain
11	B2	885	G	Sidechain
11	B2	886	G	Sidechain
11	B2	889	G	Sidechain
11	B2	890	C	Sidechain
11	B2	892	C	Sidechain
11	B2	894	A	Sidechain
11	B2	896	A	Sidechain
11	B2	897	A	Sidechain
11	B2	899	G	Sidechain
11	B2	900	G	Sidechain
11	B2	903	G	Sidechain
11	B2	905	A	Sidechain
11	B2	906	G	Sidechain
11	B2	908	G	Sidechain
11	B2	91	G	Sidechain
11	B2	913	G	Sidechain

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Mol	Chain	Res	Type	Group
11	B2	914	U	Sidechain
11	B2	916	U	Sidechain
11	B2	917	A	Sidechain
11	B2	918	A	Sidechain
11	B2	919	U	Sidechain
11	B2	921	G	Sidechain
11	B2	922	G	Sidechain
11	B2	923	A	Sidechain
11	B2	928	A	Sidechain
11	B2	930	G	Sidechain
11	B2	932	C	Sidechain
11	B2	936	A	Sidechain
11	B2	939	C	Sidechain
11	B2	94	C	Sidechain
11	B2	940	U	Sidechain
11	B2	941	C	Sidechain
11	B2	942	A	Sidechain
11	B2	945	G	Sidechain
11	B2	948	G	Sidechain
11	B2	949	G	Sidechain
11	B2	951	G	Sidechain
11	B2	952	A	Sidechain
11	B2	954	G	Sidechain
11	B2	955	G	Sidechain
11	B2	961	U	Sidechain
11	B2	962	G	Sidechain
11	B2	963	A	Sidechain
11	B2	964	A	Sidechain
11	B2	965	G	Sidechain
11	B2	975	A	Sidechain
11	B2	976	A	Sidechain
11	B2	977	G	Sidechain
11	B2	978	G	Sidechain
11	B2	979	U	Sidechain
11	B2	98	U	Sidechain
11	B2	983	G	Sidechain
11	B2	984	C	Sidechain
11	B2	985	C	Sidechain
11	B2	986	G	Sidechain
11	B2	987	G	Sidechain
11	B2	988	A	Sidechain
11	B2	990	G	Sidechain

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Mol	Chain	Res	Type	Group
11	B2	992	G	Sidechain
11	B2	995	G	Sidechain
11	B2	996	A	Sidechain
11	B2	997	G	Sidechain
11	B2	998	A	Sidechain
13	BA	118	ARG	Sidechain
13	BA	127	ARG	Sidechain
13	BA	135	ARG	Sidechain
13	BA	178	TYR	Sidechain
13	BA	19	TYR	Sidechain
13	BA	193	GLU	Peptide
13	BA	22	TYR	Sidechain
13	BA	68	PHE	Sidechain
13	BA	71	TYR	Sidechain
13	BA	79	TYR	Sidechain
13	BA	93	ARG	Sidechain
14	BB	12	TYR	Sidechain
14	BB	5	TYR	Sidechain
15	BC	146	PHE	Sidechain
15	BC	166	TYR	Sidechain
15	BC	20	PHE	Sidechain
15	BC	26	ARG	Sidechain
15	BC	30	TYR	Sidechain
15	BC	53	TYR	Sidechain
15	BC	89	TYR	Sidechain
15	BC	98	ARG	Sidechain
16	BD	103	ARG	Sidechain
16	BD	116	ARG	Sidechain
16	BD	138	ARG	Sidechain
16	BD	154	TYR	Sidechain
16	BD	57	ARG	Sidechain
16	BD	76	ARG	Sidechain
16	BD	79	ARG	Sidechain
17	BE	12	ARG	Sidechain
17	BE	128	ARG	Sidechain
17	BE	162	TYR	Peptide
17	BE	20	TYR	Sidechain
17	BE	204	ARG	Sidechain
17	BE	205	PHE	Peptide
17	BE	47	TYR	Sidechain
17	BE	60	ARG	Sidechain
17	BE	81	TYR	Sidechain

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Mol	Chain	Res	Type	Group
18	BF	111	ARG	Sidechain
18	BF	143	PHE	Sidechain
18	BF	40	ARG	Sidechain
19	BG	17	LYS	Peptide
19	BG	43	LEU	Peptide
19	BG	77	ASP	Peptide
19	BG	97	LYS	Mainchain
20	BH	137	THR	Peptide
20	BH	14	GLU	Peptide
20	BH	145	ARG	Sidechain
20	BH	178	MET	Peptide
20	BH	49	GLY	Peptide
20	BH	50	ARG	Sidechain
20	BH	56	PHE	Sidechain
20	BH	72	MET	Peptide
20	BH	79	TYR	Sidechain
20	BH	83	GLY	Peptide
20	BH	84	HIS	Peptide
20	BH	86	MET	Peptide
20	BH	87	ARG	Peptide
21	BI	128	TYR	Sidechain
21	BI	46	TYR	Sidechain
21	BI	86	PHE	Sidechain
22	BJ	26	ARG	Sidechain
22	BJ	30	ARG	Sidechain
22	BJ	36	ARG	Sidechain
22	BJ	49	TYR	Sidechain
22	BJ	62	TYR	Sidechain
22	BJ	64	ASN	Peptide
23	BK	10	ARG	Sidechain
23	BK	12	THR	Peptide
23	BK	134	TYR	Sidechain
23	BK	2	ARG	Sidechain
23	BK	25	ARG	Sidechain
23	BK	71	PHE	Peptide,Sidechain
24	BL	14	ARG	Sidechain
24	BL	41	PRO	Peptide
24	BL	44	ARG	Sidechain
24	BL	46	ARG	Sidechain
24	BL	50	ARG	Sidechain
24	BL	71	ARG	Sidechain
24	BL	83	ARG	Sidechain

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Mol	Chain	Res	Type	Group
24	BL	90	VAL	Peptide
25	BM	127	ARG	Sidechain
25	BM	52	ARG	Sidechain
26	BN	124	TYR	Sidechain
26	BN	131	ARG	Sidechain
26	BN	5	LYS	Peptide
26	BN	65	PRO	Peptide
27	BO	124	LEU	Peptide
27	BO	41	ARG	Sidechain
27	BO	53	TYR	Sidechain
27	BO	85	TYR	Sidechain
27	BO	89	ARG	Sidechain
28	BP	6	TYR	Sidechain
29	BQ	100	ARG	Sidechain
29	BQ	135	TYR	Sidechain
29	BQ	136	TYR	Sidechain
29	BQ	148	TYR	Sidechain
29	BQ	2	ALA	Peptide
29	BQ	55	ARG	Sidechain
29	BQ	58	TYR	Sidechain
30	BR	63	TYR	Sidechain
30	BR	66	ARG	Sidechain
30	BR	92	ARG	Sidechain
31	BS	20	TYR	Sidechain
31	BS	53	TYR	Sidechain
32	BT	19	MET	Peptide
32	BT	26	ARG	Sidechain
32	BT	34	ARG	Sidechain
32	BT	52	ARG	Sidechain
32	BT	59	TYR	Sidechain
33	BU	60	ARG	Sidechain
33	BU	74	ARG	Sidechain
33	BU	83	ARG	Sidechain
33	BU	90	PHE	Sidechain
34	BV	20	TYR	Sidechain
34	BV	21	PHE	Sidechain
34	BV	24	TYR	Sidechain
34	BV	4	ARG	Sidechain
34	BV	55	TYR	Sidechain
34	BV	59	TYR	Sidechain
34	BV	77	ARG	Sidechain
34	BV	80	TYR	Sidechain

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Mol	Chain	Res	Type	Group
34	BV	81	ILE	Peptide
34	BV	85	TYR	Sidechain
34	BV	94	GLU	Peptide
34	BV	96	LYS	Peptide
35	BW	28	PHE	Sidechain
36	BX	22	GLY	Peptide
36	BX	4	ASP	Peptide
36	BX	42	ARG	Sidechain
37	BY	17	ARG	Sidechain
37	BY	37	ARG	Sidechain
37	BY	45	TYR	Sidechain

5.2 Too-close contacts (i)

Due to software issues we are unable to calculate clashes - this section is therefore empty.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A7	63/67 (94%)	43 (68%)	16 (25%)	4 (6%)	1	17
2	A8	30/52 (58%)	22 (73%)	7 (23%)	1 (3%)	4	26
3	Af	49/51 (96%)	40 (82%)	6 (12%)	3 (6%)	1	17
4	AQ	148/150 (99%)	139 (94%)	5 (3%)	4 (3%)	5	31
5	AS	148/150 (99%)	135 (91%)	10 (7%)	3 (2%)	7	38
6	AT	82/84 (98%)	75 (92%)	4 (5%)	3 (4%)	3	24
7	AU	119/121 (98%)	113 (95%)	5 (4%)	1 (1%)	19	60
8	AW	64/72 (89%)	64 (100%)	0	0	100	100
9	AX	430/436 (99%)	322 (75%)	77 (18%)	31 (7%)	1	14
12	AG	121/123 (98%)	114 (94%)	4 (3%)	3 (2%)	5	32

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
12	B3	121/123 (98%)	100 (83%)	14 (12%)	7 (6%)	1	18
13	BA	188/190 (99%)	164 (87%)	12 (6%)	12 (6%)	1	16
14	BB	200/202 (99%)	182 (91%)	12 (6%)	6 (3%)	4	28
15	BC	184/186 (99%)	171 (93%)	9 (5%)	4 (2%)	6	35
16	BD	170/172 (99%)	148 (87%)	20 (12%)	2 (1%)	13	50
17	BE	239/241 (99%)	207 (87%)	20 (8%)	12 (5%)	2	20
18	BF	215/217 (99%)	188 (87%)	16 (7%)	11 (5%)	2	19
19	BG	123/125 (98%)	103 (84%)	13 (11%)	7 (6%)	1	18
20	BH	213/215 (99%)	186 (87%)	14 (7%)	13 (6%)	1	17
21	BI	127/129 (98%)	118 (93%)	8 (6%)	1 (1%)	19	60
22	BJ	125/127 (98%)	107 (86%)	15 (12%)	3 (2%)	6	33
23	BK	133/135 (98%)	116 (87%)	10 (8%)	7 (5%)	2	19
24	BL	100/102 (98%)	90 (90%)	7 (7%)	3 (3%)	4	28
25	BM	131/133 (98%)	112 (86%)	9 (7%)	10 (8%)	1	13
26	BN	143/145 (99%)	128 (90%)	7 (5%)	8 (6%)	2	19
27	BO	146/148 (99%)	122 (84%)	16 (11%)	8 (6%)	2	19
28	BP	54/56 (96%)	44 (82%)	8 (15%)	2 (4%)	3	24
29	BQ	156/158 (99%)	137 (88%)	9 (6%)	10 (6%)	1	16
30	BR	111/113 (98%)	105 (95%)	5 (4%)	1 (1%)	17	57
31	BS	65/67 (97%)	60 (92%)	5 (8%)	0	100	100
32	BT	109/111 (98%)	102 (94%)	5 (5%)	2 (2%)	8	40
33	BU	142/144 (99%)	123 (87%)	11 (8%)	8 (6%)	2	19
34	BV	97/99 (98%)	88 (91%)	5 (5%)	4 (4%)	3	23
35	BW	61/63 (97%)	52 (85%)	6 (10%)	3 (5%)	2	20
36	BX	69/71 (97%)	62 (90%)	6 (9%)	1 (1%)	11	46
37	BY	48/50 (96%)	41 (85%)	5 (10%)	2 (4%)	3	22
40	A5	79/81 (98%)	67 (85%)	9 (11%)	3 (4%)	3	24
40	AK	79/81 (98%)	70 (89%)	4 (5%)	5 (6%)	1	17
41	AA	214/216 (99%)	186 (87%)	19 (9%)	9 (4%)	3	22
42	Aa	78/92 (85%)	69 (88%)	9 (12%)	0	100	100
43	AB	237/239 (99%)	209 (88%)	23 (10%)	5 (2%)	7	36

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
44	Ab	125/127 (98%)	108 (86%)	11 (9%)	6 (5%)	2	21
45	AC	338/365 (93%)	303 (90%)	21 (6%)	14 (4%)	3	23
46	AD	253/255 (99%)	220 (87%)	23 (9%)	10 (4%)	3	23
47	Ad	87/89 (98%)	78 (90%)	6 (7%)	3 (3%)	3	26
48	AE	184/186 (99%)	161 (88%)	15 (8%)	8 (4%)	2	22
49	Ae	60/62 (97%)	43 (72%)	13 (22%)	4 (7%)	1	15
50	AF	182/184 (99%)	165 (91%)	14 (8%)	3 (2%)	9	44
51	Ag	43/45 (96%)	30 (70%)	8 (19%)	5 (12%)	0	6
52	AH	132/134 (98%)	114 (86%)	11 (8%)	7 (5%)	2	19
53	Ah	22/24 (92%)	21 (96%)	1 (4%)	0	100	100
54	AI	140/142 (99%)	121 (86%)	13 (9%)	6 (4%)	2	22
55	Ai	76/78 (97%)	69 (91%)	4 (5%)	3 (4%)	3	23
56	AJ	130/132 (98%)	121 (93%)	6 (5%)	3 (2%)	6	34
57	Aj	92/94 (98%)	69 (75%)	18 (20%)	5 (5%)	2	19
58	Ak	210/212 (99%)	192 (91%)	11 (5%)	7 (3%)	4	26
59	AL	145/147 (99%)	129 (89%)	11 (8%)	5 (3%)	3	26
60	AM	192/194 (99%)	175 (91%)	11 (6%)	6 (3%)	4	27
61	AN	166/168 (99%)	141 (85%)	19 (11%)	6 (4%)	3	25
62	AO	195/197 (99%)	166 (85%)	20 (10%)	9 (5%)	2	21
63	AP	118/120 (98%)	107 (91%)	5 (4%)	6 (5%)	2	19
64	AR	93/95 (98%)	85 (91%)	3 (3%)	5 (5%)	2	19
65	AV	64/66 (97%)	61 (95%)	3 (5%)	0	100	100
66	AY	153/155 (99%)	137 (90%)	12 (8%)	4 (3%)	5	31
67	AZ	97/99 (98%)	84 (87%)	9 (9%)	4 (4%)	3	23
All	All	8708/8907 (98%)	7624 (88%)	733 (8%)	351 (4%)	5	23

All (351) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A7	30	LYS
4	AQ	134	ASN
9	AX	239	ARG
9	AX	277	TYR
9	AX	346	ALA

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Mol	Chain	Res	Type
12	B3	56	ASP
13	BA	128	ARG
14	BB	4	GLU
14	BB	109	PHE
17	BE	237	LYS
18	BF	214	SER
20	BH	85	PHE
20	BH	87	ARG
20	BH	88	ARG
20	BH	90	HIS
20	BH	96	LYS
20	BH	194	LYS
21	BI	58	ALA
22	BJ	23	LYS
23	BK	105	THR
23	BK	122	SER
25	BM	89	SER
26	BN	6	ALA
26	BN	36	ARG
26	BN	116	MET
27	BO	113	ARG
27	BO	143	VAL
28	BP	43	PHE
29	BQ	2	ALA
29	BQ	6	ALA
29	BQ	78	ILE
29	BQ	114	LYS
33	BU	35	VAL
33	BU	77	TYR
33	BU	143	ILE
34	BV	55	TYR
43	AB	210	HIS
44	Ab	36	ASN
45	AC	292	ASN
45	AC	304	GLU
46	AD	75	THR
46	AD	76	PRO
48	AE	127	GLU
49	Ae	6	ALA
50	AF	178	ALA
12	AG	122	MET
51	Ag	38	ARG

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Mol	Chain	Res	Type
51	Ag	45	GLU
52	AH	2	PRO
54	AI	60	ASN
55	Ai	45	ALA
56	AJ	20	ALA
57	Aj	31	SER
57	Aj	60	LYS
40	AK	17	ARG
40	AK	69	GLU
59	AL	17	HIS
60	AM	83	SER
60	AM	88	VAL
61	AN	19	ARG
61	AN	113	ARG
62	AO	136	GLU
63	AP	2	LYS
64	AR	10	ARG
64	AR	13	ARG
1	A7	38	LYS
1	A7	55	HIS
6	AT	72	PRO
9	AX	48	ALA
9	AX	108	GLN
9	AX	147	ILE
9	AX	172	LEU
9	AX	207	ILE
9	AX	303	PRO
9	AX	329	MET
9	AX	374	ILE
9	AX	385	VAL
9	AX	405	LEU
9	AX	432	LYS
12	B3	122	MET
13	BA	52	LEU
13	BA	57	GLY
13	BA	64	VAL
14	BB	93	PRO
16	BD	175	LYS
17	BE	27	LYS
17	BE	150	VAL
17	BE	160	THR
18	BF	2	SER

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Mol	Chain	Res	Type
18	BF	9	ALA
18	BF	136	ARG
18	BF	167	ILE
19	BG	53	LYS
19	BG	54	GLU
20	BH	48	HIS
20	BH	92	SER
22	BJ	21	ARG
23	BK	50	ILE
25	BM	12	GLU
25	BM	132	ARG
29	BQ	24	ILE
29	BQ	70	ASP
34	BV	95	LYS
40	A5	50	ILE
41	AA	94	PRO
41	AA	97	ALA
41	AA	128	ARG
43	AB	38	GLU
43	AB	186	ASN
44	Ab	39	LYS
44	Ab	53	LYS
45	AC	60	LEU
45	AC	138	ASN
45	AC	243	ALA
46	AD	101	ILE
48	AE	120	HIS
48	AE	163	ARG
50	AF	5	ALA
12	AG	5	SER
51	Ag	9	ALA
52	AH	4	GLN
52	AH	25	ILE
54	AI	62	ARG
54	AI	117	GLU
55	Ai	17	TYR
56	AJ	75	HIS
57	Aj	53	PRO
40	AK	52	HIS
58	Ak	35	ALA
58	Ak	61	GLU
59	AL	9	ARG

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Mol	Chain	Res	Type
59	AL	37	ALA
62	AO	54	LYS
62	AO	179	GLU
63	AP	40	PRO
63	AP	56	ALA
63	AP	75	GLU
66	AY	89	LEU
67	AZ	57	ASP
3	Af	44	TRP
4	AQ	89	MET
5	AS	57	LEU
6	AT	48	ASN
9	AX	58	PHE
9	AX	96	MET
9	AX	308	SER
9	AX	345	MET
9	AX	369	ARG
12	B3	64	ALA
12	B3	95	ALA
12	B3	120	GLU
13	BA	65	LYS
14	BB	136	PRO
15	BC	58	GLY
17	BE	88	MET
19	BG	41	LYS
20	BH	19	GLY
20	BH	45	PRO
20	BH	138	SER
23	BK	107	LEU
24	BL	15	SER
24	BL	90	VAL
25	BM	7	ASN
25	BM	50	ALA
25	BM	88	GLY
25	BM	131	GLY
26	BN	121	GLY
27	BO	83	LYS
32	BT	20	SER
33	BU	2	ALA
33	BU	76	TYR
34	BV	26	PRO
36	BX	38	GLY

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Mol	Chain	Res	Type
40	A5	18	ALA
41	AA	2	PRO
44	Ab	21	PRO
45	AC	2	GLY
45	AC	25	PRO
45	AC	318	ARG
45	AC	319	SER
45	AC	347	LYS
46	AD	91	ARG
46	AD	205	GLU
46	AD	211	ALA
48	AE	66	ARG
48	AE	101	ARG
49	Ae	33	GLY
50	AF	2	PRO
12	AG	47	GLN
52	AH	3	LYS
52	AH	13	GLY
58	Ak	107	ARG
59	AL	49	TRP
61	AN	10	ARG
61	AN	82	TYR
61	AN	163	ARG
62	AO	111	PRO
62	AO	172	LEU
62	AO	192	ILE
62	AO	193	ILE
63	AP	96	ALA
3	Af	40	LYS
4	AQ	4	LEU
4	AQ	113	LYS
5	AS	16	ARG
5	AS	111	LYS
6	AT	5	LYS
12	B3	119	LYS
13	BA	10	ARG
13	BA	27	PHE
13	BA	44	LEU
13	BA	76	GLN
13	BA	129	ILE
15	BC	31	GLY
15	BC	151	LEU

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Mol	Chain	Res	Type
16	BD	158	SER
17	BE	20	TYR
18	BF	139	HIS
19	BG	50	LEU
19	BG	56	PRO
20	BH	93	LEU
26	BN	81	GLY
27	BO	74	ILE
32	BT	29	PRO
33	BU	79	GLY
33	BU	128	PHE
35	BW	9	PRO
35	BW	21	CYS
37	BY	3	GLN
40	A5	70	GLU
41	AA	160	ASN
43	AB	40	THR
44	Ab	26	GLN
45	AC	172	TRP
45	AC	325	ALA
46	AD	141	PRO
47	Ad	58	PRO
48	AE	164	HIS
48	AE	179	PHE
49	Ae	38	CYS
51	Ag	34	CYS
52	AH	117	LEU
54	AI	104	PRO
55	Ai	9	SER
56	AJ	33	SER
57	Aj	56	GLU
57	Aj	74	CYS
40	AK	42	LYS
58	Ak	58	THR
58	Ak	69	GLN
60	AM	137	HIS
60	AM	149	ILE
64	AR	7	SER
64	AR	8	PHE
1	A7	56	VAL
3	Af	32	ASN
9	AX	102	GLU

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Mol	Chain	Res	Type
9	AX	250	LYS
9	AX	293	VAL
13	BA	45	ASN
14	BB	91	ALA
15	BC	117	LEU
17	BE	175	GLU
17	BE	194	ALA
17	BE	236	ASP
18	BF	5	TRP
18	BF	6	LYS
20	BH	43	LEU
22	BJ	105	ILE
23	BK	23	LYS
23	BK	52	ALA
25	BM	25	ASN
25	BM	32	ASP
26	BN	5	LYS
27	BO	87	THR
27	BO	137	ARG
28	BP	29	PRO
29	BQ	5	HIS
29	BQ	112	HIS
29	BQ	150	PRO
30	BR	12	PRO
33	BU	39	ARG
34	BV	97	GLU
35	BW	6	ILE
41	AA	19	ALA
41	AA	103	LYS
46	AD	68	ALA
47	Ad	22	VAL
51	Ag	5	PRO
54	AI	59	THR
58	Ak	36	TYR
58	Ak	74	PRO
59	AL	48	THR
60	AM	181	LYS
62	AO	8	ARG
62	AO	162	GLU
66	AY	139	ALA
67	AZ	79	VAL
7	AU	18	ALA

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Mol	Chain	Res	Type
9	AX	324	ILE
9	AX	338	THR
12	B3	103	GLU
17	BE	70	LYS
17	BE	153	ALA
18	BF	16	TRP
18	BF	183	VAL
19	BG	55	PHE
27	BO	125	PRO
29	BQ	18	PRO
41	AA	98	ARG
44	Ab	59	ARG
45	AC	353	ARG
54	AI	84	PRO
60	AM	14	PRO
64	AR	11	LYS
66	AY	32	ASN
9	AX	145	ILE
19	BG	100	GLY
26	BN	111	PRO
41	AA	81	VAL
43	AB	31	ILE
49	Ae	15	PRO
61	AN	8	ILE
9	AX	170	ILE
24	BL	53	PRO
25	BM	120	PRO
67	AZ	42	PRO
67	AZ	86	VAL
9	AX	77	PRO
26	BN	89	PRO
27	BO	82	PRO
46	AD	25	PRO
47	Ad	66	ARG
52	AH	90	PRO
63	AP	65	PRO
2	A8	43	ILE
9	AX	6	PRO
9	AX	109	GLY
9	AX	313	PRO
17	BE	83	PHE
18	BF	129	GLY

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Mol	Chain	Res	Type
23	BK	53	GLY
37	BY	35	GLY
45	AC	31	PRO
46	AD	45	PRO
48	AE	3	VAL
9	AX	144	ILE
13	BA	39	ASP
14	BB	76	GLY
40	AK	50	ILE
66	AY	122	PRO

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A7	57/59 (97%)	55 (96%)	2 (4%)	36	59
2	A8	28/44 (64%)	28 (100%)	0	100	100
3	Af	47/47 (100%)	46 (98%)	1 (2%)	53	72
4	AQ	130/130 (100%)	125 (96%)	5 (4%)	33	57
5	AS	126/126 (100%)	119 (94%)	7 (6%)	21	46
6	AT	75/75 (100%)	73 (97%)	2 (3%)	44	65
7	AU	110/110 (100%)	105 (96%)	5 (4%)	27	52
8	AW	61/66 (92%)	60 (98%)	1 (2%)	62	79
9	AX	351/355 (99%)	341 (97%)	10 (3%)	43	65
12	AG	99/99 (100%)	95 (96%)	4 (4%)	31	55
12	B3	99/99 (100%)	94 (95%)	5 (5%)	24	48
13	BA	166/166 (100%)	152 (92%)	14 (8%)	11	33
14	BB	173/173 (100%)	168 (97%)	5 (3%)	42	64
15	BC	145/145 (100%)	141 (97%)	4 (3%)	43	65
16	BD	153/153 (100%)	148 (97%)	5 (3%)	38	61
17	BE	212/212 (100%)	201 (95%)	11 (5%)	23	48

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
18	BF	181/181 (100%)	173 (96%)	8 (4%)	28	53
19	BG	108/108 (100%)	108 (100%)	0	100	100
20	BH	184/184 (100%)	165 (90%)	19 (10%)	7	25
21	BI	107/107 (100%)	105 (98%)	2 (2%)	57	75
22	BJ	103/103 (100%)	95 (92%)	8 (8%)	12	36
23	BK	111/111 (100%)	108 (97%)	3 (3%)	44	65
24	BL	91/91 (100%)	87 (96%)	4 (4%)	28	53
25	BM	100/100 (100%)	96 (96%)	4 (4%)	31	55
26	BN	119/119 (100%)	114 (96%)	5 (4%)	30	54
27	BO	122/122 (100%)	120 (98%)	2 (2%)	62	79
28	BP	46/46 (100%)	43 (94%)	3 (6%)	17	42
29	BQ	143/143 (100%)	135 (94%)	8 (6%)	21	46
30	BR	102/102 (100%)	92 (90%)	10 (10%)	8	26
31	BS	61/61 (100%)	58 (95%)	3 (5%)	25	50
32	BT	99/99 (100%)	95 (96%)	4 (4%)	31	55
33	BU	121/121 (100%)	118 (98%)	3 (2%)	47	68
34	BV	89/89 (100%)	87 (98%)	2 (2%)	52	71
35	BW	54/54 (100%)	51 (94%)	3 (6%)	21	46
36	BX	60/60 (100%)	53 (88%)	7 (12%)	5	21
37	BY	41/41 (100%)	40 (98%)	1 (2%)	49	69
40	A5	64/64 (100%)	62 (97%)	2 (3%)	40	62
40	AK	64/64 (100%)	59 (92%)	5 (8%)	12	36
41	AA	182/182 (100%)	173 (95%)	9 (5%)	25	50
42	Aa	73/81 (90%)	68 (93%)	5 (7%)	16	41
43	AB	189/189 (100%)	183 (97%)	6 (3%)	39	61
44	Ab	114/114 (100%)	108 (95%)	6 (5%)	22	47
45	AC	291/312 (93%)	278 (96%)	13 (4%)	27	52
46	AD	213/213 (100%)	207 (97%)	6 (3%)	43	65
47	Ad	81/81 (100%)	81 (100%)	0	100	100
48	AE	158/158 (100%)	153 (97%)	5 (3%)	39	61
49	Ae	51/51 (100%)	49 (96%)	2 (4%)	32	56

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
50	AF	156/156 (100%)	150 (96%)	6 (4%)	33	57
51	Ag	37/37 (100%)	36 (97%)	1 (3%)	44	65
52	AH	110/110 (100%)	108 (98%)	2 (2%)	59	77
53	Ah	23/23 (100%)	23 (100%)	0	100	100
54	AI	122/122 (100%)	118 (97%)	4 (3%)	38	61
55	Ai	57/57 (100%)	55 (96%)	2 (4%)	36	59
56	AJ	104/104 (100%)	98 (94%)	6 (6%)	20	45
57	Aj	83/83 (100%)	80 (96%)	3 (4%)	35	59
58	Ak	179/179 (100%)	173 (97%)	6 (3%)	37	60
59	AL	117/117 (100%)	112 (96%)	5 (4%)	29	53
60	AM	162/162 (100%)	155 (96%)	7 (4%)	29	53
61	AN	140/140 (100%)	134 (96%)	6 (4%)	29	53
62	AO	166/166 (100%)	159 (96%)	7 (4%)	30	54
63	AP	101/101 (100%)	99 (98%)	2 (2%)	55	74
64	AR	85/85 (100%)	79 (93%)	6 (7%)	14	39
65	AV	56/56 (100%)	56 (100%)	0	100	100
66	AY	133/133 (100%)	130 (98%)	3 (2%)	50	70
67	AZ	80/80 (100%)	73 (91%)	7 (9%)	10	31
All	All	7465/7521 (99%)	7153 (96%)	312 (4%)	33	54

All (312) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A7	3	ASP
1	A7	64	ILE
3	Af	43	TYR
4	AQ	58	GLN
4	AQ	119	THR
4	AQ	125	ILE
4	AQ	133	LYS
4	AQ	149	LYS
5	AS	27	ILE
5	AS	50	TYR
5	AS	74	PRO
5	AS	85	VAL
5	AS	129	TYR

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Mol	Chain	Res	Type
5	AS	147	GLU
5	AS	154	ARG
6	AT	3	PRO
6	AT	13	THR
7	AU	33	ARG
7	AU	43	ASN
7	AU	52	VAL
7	AU	89	THR
7	AU	103	ILE
8	AW	17	LYS
9	AX	52	ILE
9	AX	61	THR
9	AX	66	ARG
9	AX	77	PRO
9	AX	190	GLU
9	AX	208	GLU
9	AX	258	PRO
9	AX	277	TYR
9	AX	283	ILE
9	AX	294	ASP
12	B3	28	ASP
12	B3	34	LYS
12	B3	77	TYR
12	B3	93	GLU
12	B3	108	ARG
13	BA	20	ILE
13	BA	22	TYR
13	BA	30	VAL
13	BA	44	LEU
13	BA	50	VAL
13	BA	51	THR
13	BA	55	VAL
13	BA	70	VAL
13	BA	101	THR
13	BA	106	ILE
13	BA	137	ILE
13	BA	147	LYS
13	BA	191	LEU
13	BA	195	GLN
14	BB	8	PRO
14	BB	13	LEU
14	BB	102	THR

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Mol	Chain	Res	Type
14	BB	107	LYS
14	BB	169	TRP
15	BC	37	LYS
15	BC	153	LYS
15	BC	157	PRO
15	BC	175	VAL
16	BD	54	ARG
16	BD	65	GLN
16	BD	76	ARG
16	BD	118	MET
16	BD	123	GLN
17	BE	36	PRO
17	BE	38	ASN
17	BE	44	PRO
17	BE	64	LYS
17	BE	67	ASN
17	BE	116	SER
17	BE	171	ARG
17	BE	179	PHE
17	BE	202	ILE
17	BE	209	TRP
17	BE	233	VAL
18	BF	34	ILE
18	BF	70	LEU
18	BF	92	ARG
18	BF	125	LYS
18	BF	126	ARG
18	BF	183	VAL
18	BF	188	PHE
18	BF	197	PHE
20	BH	4	PRO
20	BH	10	PHE
20	BH	26	VAL
20	BH	42	ARG
20	BH	43	LEU
20	BH	63	ILE
20	BH	69	ASN
20	BH	73	ARG
20	BH	81	VAL
20	BH	84	HIS
20	BH	85	PHE
20	BH	86	MET

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Mol	Chain	Res	Type
20	BH	87	ARG
20	BH	88	ARG
20	BH	89	GLU
20	BH	122	VAL
20	BH	140	MET
20	BH	148	VAL
20	BH	209	ARG
21	BI	4	LEU
21	BI	99	PHE
22	BJ	19	LEU
22	BJ	23	LYS
22	BJ	28	LEU
22	BJ	31	GLU
22	BJ	40	GLN
22	BJ	75	VAL
22	BJ	120	VAL
22	BJ	127	GLU
23	BK	60	VAL
23	BK	112	ARG
23	BK	114	THR
24	BL	33	ARG
24	BL	34	MET
24	BL	94	VAL
24	BL	100	LEU
25	BM	42	TRP
25	BM	49	LYS
25	BM	90	LYS
25	BM	105	LEU
26	BN	29	ARG
26	BN	61	GLU
26	BN	69	MET
26	BN	119	ILE
26	BN	145	PRO
27	BO	35	PHE
27	BO	103	ARG
28	BP	5	ASP
28	BP	14	PHE
28	BP	36	LEU
29	BQ	8	LYS
29	BQ	15	LYS
29	BQ	18	PRO
29	BQ	19	ARG

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Mol	Chain	Res	Type
29	BQ	39	LYS
29	BQ	58	TYR
29	BQ	76	LEU
29	BQ	152	THR
30	BR	8	ARG
30	BR	12	PRO
30	BR	41	ASP
30	BR	44	ARG
30	BR	84	ASP
30	BR	93	PRO
30	BR	103	VAL
30	BR	108	ARG
30	BR	110	GLU
30	BR	112	ARG
31	BS	16	LEU
31	BS	53	TYR
31	BS	66	ILE
32	BT	9	ARG
32	BT	34	ARG
32	BT	64	ARG
32	BT	110	ARG
33	BU	27	LYS
33	BU	97	ILE
33	BU	121	ILE
34	BV	12	LYS
34	BV	46	LEU
35	BW	14	LEU
35	BW	53	ILE
35	BW	60	GLU
36	BX	18	THR
36	BX	29	VAL
36	BX	35	ARG
36	BX	46	ARG
36	BX	60	THR
36	BX	65	ARG
36	BX	71	ARG
37	BY	17	ARG
40	A5	44	LYS
40	A5	49	ASN
41	AA	20	LYS
41	AA	24	PHE
41	AA	79	LEU

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Mol	Chain	Res	Type
41	AA	107	PHE
41	AA	134	VAL
41	AA	155	ILE
41	AA	161	PRO
41	AA	194	ARG
41	AA	206	THR
42	Aa	20	LYS
42	Aa	23	PRO
42	Aa	46	GLN
42	Aa	48	VAL
42	Aa	51	ASP
43	AB	42	ARG
43	AB	101	LYS
43	AB	128	TYR
43	AB	137	ASP
43	AB	138	LYS
43	AB	222	PRO
44	Ab	7	LYS
44	Ab	38	PRO
44	Ab	54	LEU
44	Ab	81	GLU
44	Ab	86	ASN
44	Ab	125	VAL
45	AC	18	LYS
45	AC	60	LEU
45	AC	70	VAL
45	AC	139	TYR
45	AC	176	LEU
45	AC	183	MET
45	AC	221	VAL
45	AC	235	LYS
45	AC	240	LYS
45	AC	286	LEU
45	AC	343	ARG
45	AC	361	VAL
45	AC	362	GLU
46	AD	91	ARG
46	AD	169	ASP
46	AD	190	ARG
46	AD	234	THR
46	AD	247	ILE
46	AD	252	GLU

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Mol	Chain	Res	Type
48	AE	39	GLU
48	AE	71	ARG
48	AE	75	PRO
48	AE	137	MET
48	AE	150	VAL
49	Ae	10	LYS
49	Ae	50	ARG
50	AF	2	PRO
50	AF	7	ILE
50	AF	14	PRO
50	AF	45	GLN
50	AF	102	LYS
50	AF	108	VAL
12	AG	6	TYR
12	AG	77	TYR
12	AG	93	GLU
12	AG	94	VAL
51	Ag	40	ARG
52	AH	9	LEU
52	AH	50	GLN
54	AI	13	ARG
54	AI	34	GLU
54	AI	85	TRP
54	AI	129	VAL
55	Ai	23	ARG
55	Ai	71	VAL
56	AJ	32	ASN
56	AJ	60	ASP
56	AJ	79	ARG
56	AJ	89	TYR
56	AJ	102	ASN
56	AJ	132	ARG
57	Aj	2	LYS
57	Aj	37	GLN
57	Aj	84	PHE
40	AK	12	VAL
40	AK	22	VAL
40	AK	24	VAL
40	AK	25	VAL
40	AK	52	HIS
58	Ak	28	VAL
58	Ak	46	ARG

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Mol	Chain	Res	Type
58	Ak	51	LEU
58	Ak	56	ARG
58	Ak	183	GLN
58	Ak	204	ASP
59	AL	17	HIS
59	AL	42	ARG
59	AL	56	ASP
59	AL	104	ASP
59	AL	123	VAL
60	AM	37	VAL
60	AM	67	ARG
60	AM	90	TYR
60	AM	95	SER
60	AM	117	TYR
60	AM	137	HIS
60	AM	139	VAL
61	AN	11	TYR
61	AN	13	ASP
61	AN	20	ARG
61	AN	31	ILE
61	AN	50	HIS
61	AN	137	VAL
62	AO	9	VAL
62	AO	37	VAL
62	AO	60	VAL
62	AO	73	TRP
62	AO	131	VAL
62	AO	140	ASP
62	AO	142	TYR
63	AP	42	ARG
63	AP	78	VAL
64	AR	3	GLN
64	AR	11	LYS
64	AR	31	PHE
64	AR	61	ARG
64	AR	66	VAL
64	AR	85	THR
66	AY	3	LYS
66	AY	37	VAL
66	AY	43	TYR
67	AZ	1	MET
67	AZ	48	ASP

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Mol	Chain	Res	Type
67	AZ	51	TYR
67	AZ	64	GLU
67	AZ	73	LEU
67	AZ	76	LYS
67	AZ	78	PHE

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (66) such sidechains are listed below:

Mol	Chain	Res	Type
5	AS	11	ASN
5	AS	104	GLN
7	AU	17	ASN
7	AU	106	ASN
9	AX	86	GLN
9	AX	315	HIS
15	BC	101	GLN
16	BD	106	GLN
16	BD	127	HIS
17	BE	37	HIS
17	BE	192	ASN
18	BF	3	GLN
20	BH	13	HIS
20	BH	48	HIS
20	BH	51	HIS
20	BH	90	HIS
20	BH	113	GLN
21	BI	9	ASN
21	BI	13	HIS
21	BI	113	HIS
22	BJ	88	GLN
23	BK	117	HIS
24	BL	21	ASN
24	BL	69	HIS
25	BM	29	HIS
25	BM	99	GLN
27	BO	58	GLN
27	BO	72	HIS
27	BO	92	HIS
29	BQ	57	GLN
30	BR	24	HIS
32	BT	84	HIS
33	BU	40	HIS

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Mol	Chain	Res	Type
34	BV	25	HIS
35	BW	25	GLN
35	BW	30	HIS
42	Aa	42	HIS
43	AB	110	ASN
45	AC	50	HIS
45	AC	283	ASN
45	AC	292	ASN
45	AC	313	HIS
46	AD	106	ASN
46	AD	224	ASN
46	AD	229	HIS
47	Ad	25	HIS
48	AE	18	HIS
50	AF	149	GLN
51	Ag	24	ASN
52	AH	97	ASN
56	AJ	32	ASN
57	Aj	20	HIS
57	Aj	78	HIS
40	AK	20	GLN
40	AK	49	ASN
60	AM	174	ASN
61	AN	70	ASN
62	AO	43	HIS
62	AO	47	GLN
62	AO	76	HIS
64	AR	42	HIS
64	AR	50	HIS
64	AR	59	HIS
64	AR	89	HIS
65	AV	57	GLN
66	AY	120	HIS

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
10	B1	76/77 (98%)	20 (26%)	4 (5%)
11	B2	1494/1495 (99%)	264 (17%)	103 (6%)
38	A1	2964/3049 (97%)	600 (20%)	158 (5%)
39	A3	125/126 (99%)	36 (28%)	11 (8%)

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Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
All	All	4659/4747 (98%)	920 (19%)	276 (5%)

All (920) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
10	B1	8	U
10	B1	9	A
10	B1	10	G
10	B1	18	U
10	B1	19	G
10	B1	21	G
10	B1	22	A
10	B1	23	G
10	B1	35	G
10	B1	36	A
10	B1	43	G
10	B1	47	G
10	B1	48	U
10	B1	50	G
10	B1	59	A
10	B1	60	A
10	B1	62	C
10	B1	74	A
10	B1	75	C
10	B1	77	A
11	B2	3	U
11	B2	4	C
11	B2	42	G
11	B2	43	A
11	B2	47	A
11	B2	48	G
11	B2	57	G
11	B2	63	G
11	B2	64	G
11	B2	71	C
11	B2	72	C
11	B2	73	U
11	B2	74	U
11	B2	75	C
11	B2	91	G
11	B2	100	A
11	B2	104	A

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Mol	Chain	Res	Type
11	B2	105	C
11	B2	106	A
11	B2	112	G
11	B2	114	A
11	B2	115	A
11	B2	116	C
11	B2	127	G
11	B2	151	G
11	B2	166	A
11	B2	177	A
11	B2	184	G
11	B2	195	C
11	B2	196	G
11	B2	197	A
11	B2	199	A
11	B2	200	G
11	B2	202	G
11	B2	203	A
11	B2	204	G
11	B2	209	A
11	B2	211	G
11	B2	240	U
11	B2	243	G
11	B2	247	G
11	B2	248	U
11	B2	249	U
11	B2	262	G
11	B2	263	C
11	B2	276	A
11	B2	277	G
11	B2	278	A
11	B2	285	C
11	B2	317	A
11	B2	324	C
11	B2	325	A
11	B2	326	C
11	B2	328	G
11	B2	340	A
11	B2	341	C
11	B2	348	C
11	B2	349	A
11	B2	350	G

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Mol	Chain	Res	Type
11	B2	363	C
11	B2	369	A
11	B2	393	A
11	B2	394	C
11	B2	402	G
11	B2	407	G
11	B2	409	C
11	B2	411	C
11	B2	412	U
11	B2	413	G
11	B2	423	U
11	B2	425	C
11	B2	431	U
11	B2	432	G
11	B2	434	A
11	B2	435	A
11	B2	436	A
11	B2	438	A
11	B2	439	G
11	B2	440	C
11	B2	449	U
11	B2	450	A
11	B2	459	G
11	B2	460	C
11	B2	461	A
11	B2	462	A
11	B2	463	G
11	B2	464	G
11	B2	471	G
11	B2	472	C
11	B2	480	G
11	B2	485	A
11	B2	486	A
11	B2	487	U
11	B2	500	A
11	B2	512	U
11	B2	514	U
11	B2	515	U
11	B2	525	A
11	B2	526	A
11	B2	528	G
11	B2	529	C

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Mol	Chain	Res	Type
11	B2	530	G
11	B2	541	G
11	B2	585	U
11	B2	586	C
11	B2	607	U
11	B2	619	A
11	B2	640	U
11	B2	642	G
11	B2	648	A
11	B2	655	A
11	B2	656	U
11	B2	657	A
11	B2	672	G
11	B2	677	U
11	B2	678	G
11	B2	685	G
11	B2	702	G
11	B2	703	U
11	B2	709	G
11	B2	722	G
11	B2	731	A
11	B2	735	A
11	B2	736	A
11	B2	747	U
11	B2	748	A
11	B2	766	G
11	B2	769	A
11	B2	771	G
11	B2	782	A
11	B2	801	A
11	B2	805	C
11	B2	806	G
11	B2	816	G
11	B2	843	G
11	B2	860	G
11	B2	872	A
11	B2	884	G
11	B2	885	G
11	B2	892	C
11	B2	904	G
11	B2	919	U
11	B2	920	U

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Mol	Chain	Res	Type
11	B2	925	U
11	B2	928	A
11	B2	933	G
11	B2	934	G
11	B2	935	G
11	B2	936	A
11	B2	937	A
11	B2	950	C
11	B2	951	G
11	B2	952	A
11	B2	953	C
11	B2	960	A
11	B2	962	G
11	B2	963	A
11	B2	964	A
11	B2	965	G
11	B2	970	G
11	B2	972	C
11	B2	973	U
11	B2	974	G
11	B2	975	A
11	B2	976	A
11	B2	977	G
11	B2	978	G
11	B2	986	G
11	B2	988	A
11	B2	989	C
11	B2	993	C
11	B2	1002	G
11	B2	1005	G
11	B2	1017	U
11	B2	1018	C
11	B2	1020	G
11	B2	1037	U
11	B2	1038	C
11	B2	1046	G
11	B2	1047	U
11	B2	1053	A
11	B2	1054	A
11	B2	1064	C
11	B2	1068	C
11	B2	1076	G

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Mol	Chain	Res	Type
11	B2	1077	U
11	B2	1078	U
11	B2	1080	C
11	B2	1081	C
11	B2	1082	A
11	B2	1083	G
11	B2	1094	U
11	B2	1095	C
11	B2	1105	C
11	B2	1106	A
11	B2	1112	G
11	B2	1117	A
11	B2	1119	U
11	B2	1128	U
11	B2	1143	G
11	B2	1144	G
11	B2	1151	A
11	B2	1156	A
11	B2	1157	G
11	B2	1161	A
11	B2	1162	G
11	B2	1171	G
11	B2	1172	A
11	B2	1175	C
11	B2	1184	U
11	B2	1185	A
11	B2	1186	C
11	B2	1187	A
11	B2	1198	A
11	B2	1208	A
11	B2	1209	C
11	B2	1210	A
11	B2	1216	A
11	B2	1218	C
11	B2	1239	A
11	B2	1240	A
11	B2	1242	C
11	B2	1246	U
11	B2	1247	A
11	B2	1260	G
11	B2	1261	U
11	B2	1262	U

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Mol	Chain	Res	Type
11	B2	1263	C
11	B2	1265	G
11	B2	1280	C
11	B2	1292	A
11	B2	1298	G
11	B2	1306	A
11	B2	1307	G
11	B2	1308	U
11	B2	1322	C
11	B2	1323	A
11	B2	1324	U
11	B2	1325	C
11	B2	1341	C
11	B2	1354	A
11	B2	1358	A
11	B2	1379	G
11	B2	1409	G
11	B2	1410	G
11	B2	1424	G
11	B2	1437	G
11	B2	1445	A
11	B2	1454	A
11	B2	1457	A
11	B2	1458	A
11	B2	1459	G
11	B2	1460	G
11	B2	1461	U
11	B2	1462	A
11	B2	1472	G
11	B2	1475	C
11	B2	1484	C
11	B2	1485	G
11	B2	1486	A
11	B2	1487	U
11	B2	1489	A
11	B2	1494	C
11	B2	1495	U
38	A1	9	A
38	A1	11	G
38	A1	12	C
38	A1	13	U
38	A1	14	A

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Mol	Chain	Res	Type
38	A1	44	C
38	A1	45	G
38	A1	46	C
38	A1	50	C
38	A1	51	G
38	A1	64	A
38	A1	73	A
38	A1	74	A
38	A1	75	G
38	A1	84	A
38	A1	85	G
38	A1	92	G
38	A1	100	C
38	A1	101	G
38	A1	118	A
38	A1	119	U
38	A1	120	G
38	A1	124	C
38	A1	130	G
38	A1	136	U
38	A1	137	A
38	A1	139	G
38	A1	144	A
38	A1	145	C
38	A1	146	U
38	A1	170	A
38	A1	185	A
38	A1	188	A
38	A1	205	A
38	A1	211	A
38	A1	216	A
38	A1	217	A
38	A1	219	G
38	A1	221	G
38	A1	222	A
38	A1	237	G
38	A1	238	C
38	A1	254	A
38	A1	255	G
38	A1	279	G
38	A1	286	G
38	A1	291	A

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Mol	Chain	Res	Type
38	A1	292	U
38	A1	293	G
38	A1	300	U
38	A1	301	G
38	A1	302	U
38	A1	303	A
38	A1	304	G
38	A1	305	G
38	A1	306	G
38	A1	309	C
38	A1	310	C
38	A1	313	U
38	A1	316	G
38	A1	318	G
38	A1	319	A
38	A1	332	A
38	A1	333	A
38	A1	341	U
38	A1	342	C
38	A1	351	C
38	A1	361	G
38	A1	363	G
38	A1	365	G
38	A1	370	A
38	A1	371	U
38	A1	372	A
38	A1	378	G
38	A1	379	U
38	A1	380	A
38	A1	385	U
38	A1	394	A
38	A1	399	C
38	A1	401	C
38	A1	403	G
38	A1	404	G
38	A1	405	G
38	A1	406	G
38	A1	407	A
38	A1	408	C
38	A1	409	C
38	A1	411	U
38	A1	414	G

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Mol	Chain	Res	Type
38	A1	426	G
38	A1	428	A
38	A1	430	A
38	A1	440	A
38	A1	443	C
38	A1	444	U
38	A1	450	G
38	A1	472	A
38	A1	480	A
38	A1	481	G
38	A1	486	A
38	A1	489	G
38	A1	490	C
38	A1	493	A
38	A1	494	C
38	A1	495	U
38	A1	496	A
38	A1	514	U
38	A1	518	A
38	A1	519	A
38	A1	520	G
38	A1	530	A
38	A1	531	G
38	A1	537	U
38	A1	538	G
38	A1	540	A
38	A1	541	A
38	A1	542	A
38	A1	543	G
38	A1	546	C
38	A1	569	G
38	A1	570	G
38	A1	576	G
38	A1	579	C
38	A1	580	G
38	A1	581	A
38	A1	584	G
38	A1	585	G
38	A1	587	A
38	A1	588	U
38	A1	589	G
38	A1	599	G

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Mol	Chain	Res	Type
38	A1	623	G
38	A1	640	C
38	A1	642	G
38	A1	654	C
38	A1	666	A
38	A1	678	G
38	A1	694	A
38	A1	716	U
38	A1	717	A
38	A1	733	A
38	A1	734	C
38	A1	735	A
38	A1	737	G
38	A1	759	G
38	A1	788	A
38	A1	801	A
38	A1	819	U
38	A1	851	G
38	A1	859	G
38	A1	860	A
38	A1	863	C
38	A1	877	U
38	A1	882	U
38	A1	898	G
38	A1	899	A
38	A1	900	C
38	A1	910	G
38	A1	911	G
38	A1	917	A
38	A1	919	G
38	A1	920	G
38	A1	923	A
38	A1	925	U
38	A1	927	G
38	A1	928	A
38	A1	936	G
38	A1	937	A
38	A1	940	G
38	A1	946	U
38	A1	947	C
38	A1	962	C
38	A1	963	G

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Mol	Chain	Res	Type
38	A1	982	G
38	A1	995	G
38	A1	1002	A
38	A1	1004	U
38	A1	1006	A
38	A1	1007	U
38	A1	1010	G
38	A1	1011	A
38	A1	1013	G
38	A1	1014	U
38	A1	1015	G
38	A1	1016	C
38	A1	1018	G
38	A1	1019	G
38	A1	1024	G
38	A1	1026	A
38	A1	1027	A
38	A1	1028	G
38	A1	1030	C
38	A1	1033	C
38	A1	1036	C
38	A1	1037	C
38	A1	1038	U
38	A1	1039	C
38	A1	1041	U
38	A1	1042	G
38	A1	1043	U
38	A1	1046	A
38	A1	1047	A
38	A1	1048	C
38	A1	1069	A
38	A1	1070	G
38	A1	1072	U
38	A1	1081	U
38	A1	1082	A
38	A1	1083	G
38	A1	1085	G
38	A1	1086	U
38	A1	1097	G
38	A1	1109	G
38	A1	1110	A
38	A1	1118	A

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Mol	Chain	Res	Type
38	A1	1126	C
38	A1	1143	A
38	A1	1145	G
38	A1	1146	U
38	A1	1147	G
38	A1	1156	G
38	A1	1161	A
38	A1	1162	C
38	A1	1166	A
38	A1	1172	U
38	A1	1178	G
38	A1	1180	G
38	A1	1181	C
38	A1	1185	A
38	A1	1186	G
38	A1	1188	C
38	A1	1194	G
38	A1	1195	G
38	A1	1199	U
38	A1	1201	G
38	A1	1206	A
38	A1	1217	U
38	A1	1223	A
38	A1	1226	G
38	A1	1227	A
38	A1	1241	C
38	A1	1242	A
38	A1	1246	G
38	A1	1250	A
38	A1	1251	G
38	A1	1253	U
38	A1	1254	C
38	A1	1261	C
38	A1	1268	A
38	A1	1269	U
38	A1	1273	C
38	A1	1274	G
38	A1	1280	C
38	A1	1282	A
38	A1	1327	C
38	A1	1348	G
38	A1	1354	G

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Mol	Chain	Res	Type
38	A1	1367	A
38	A1	1368	A
38	A1	1369	G
38	A1	1379	A
38	A1	1380	G
38	A1	1391	C
38	A1	1393	C
38	A1	1398	C
38	A1	1407	A
38	A1	1408	G
38	A1	1415	C
38	A1	1416	G
38	A1	1417	U
38	A1	1443	G
38	A1	1444	A
38	A1	1446	G
38	A1	1450	C
38	A1	1471	G
38	A1	1475	G
38	A1	1486	G
38	A1	1488	C
38	A1	1511	C
38	A1	1522	A
38	A1	1525	G
38	A1	1542	U
38	A1	1543	C
38	A1	1554	G
38	A1	1556	G
38	A1	1561	G
38	A1	1562	U
38	A1	1563	G
38	A1	1564	C
38	A1	1573	A
38	A1	1575	G
38	A1	1576	C
38	A1	1577	C
38	A1	1583	G
38	A1	1584	G
38	A1	1585	U
38	A1	1586	G
38	A1	1587	A
38	A1	1588	C

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Mol	Chain	Res	Type
38	A1	1592	U
38	A1	1598	U
38	A1	1609	G
38	A1	1612	G
38	A1	1613	A
38	A1	1614	U
38	A1	1615	G
38	A1	1616	A
38	A1	1621	G
38	A1	1623	C
38	A1	1627	G
38	A1	1628	C
38	A1	1632	U
38	A1	1633	A
38	A1	1634	A
38	A1	1635	G
38	A1	1637	C
38	A1	1639	G
38	A1	1642	G
38	A1	1643	A
38	A1	1644	G
38	A1	1645	U
38	A1	1646	G
38	A1	1654	G
38	A1	1655	G
38	A1	1656	C
38	A1	1657	G
38	A1	1659	G
38	A1	1663	C
38	A1	1664	G
38	A1	1665	G
38	A1	1668	G
38	A1	1669	A
38	A1	1671	A
38	A1	1672	G
38	A1	1678	A
38	A1	1679	U
38	A1	1684	C
38	A1	1688	C
38	A1	1691	U
38	A1	1694	G
38	A1	1697	G

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Mol	Chain	Res	Type
38	A1	1701	C
38	A1	1702	C
38	A1	1703	G
38	A1	1706	G
38	A1	1707	A
38	A1	1708	U
38	A1	1709	C
38	A1	1712	U
38	A1	1713	G
38	A1	1714	G
38	A1	1718	C
38	A1	1719	C
38	A1	1721	U
38	A1	1722	G
38	A1	1723	A
38	A1	1728	C
38	A1	1729	C
38	A1	1732	C
38	A1	1733	C
38	A1	1734	G
38	A1	1736	G
38	A1	1738	A
38	A1	1740	U
38	A1	1741	C
38	A1	1744	A
38	A1	1746	C
38	A1	1753	G
38	A1	1754	A
38	A1	1763	A
38	A1	1765	A
38	A1	1772	A
38	A1	1774	A
38	A1	1777	U
38	A1	1780	C
38	A1	1781	C
38	A1	1782	C
38	A1	1783	U
38	A1	1791	A
38	A1	1803	U
38	A1	1804	G
38	A1	1805	U
38	A1	1806	C

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Mol	Chain	Res	Type
38	A1	1811	G
38	A1	1812	A
38	A1	1833	G
38	A1	1853	C
38	A1	1855	G
38	A1	1859	A
38	A1	1876	G
38	A1	1878	G
38	A1	1880	A
38	A1	1882	C
38	A1	1897	G
38	A1	1903	G
38	A1	1912	A
38	A1	1918	U
38	A1	1919	A
38	A1	1921	U
38	A1	1937	A
38	A1	1940	U
38	A1	1957	U
38	A1	1962	G
38	A1	1976	C
38	A1	1991	G
38	A1	2002	A
38	A1	2003	C
38	A1	2013	A
38	A1	2025	A
38	A1	2032	G
38	A1	2033	G
38	A1	2038	C
38	A1	2040	A
38	A1	2044	C
38	A1	2054	G
38	A1	2056	A
38	A1	2061	A
38	A1	2062	A
38	A1	2063	U
38	A1	2064	U
38	A1	2065	C
38	A1	2079	U
38	A1	2087	U
38	A1	2088	G
38	A1	2091	U

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Mol	Chain	Res	Type
38	A1	2094	A
38	A1	2095	U
38	A1	2096	G
38	A1	2116	G
38	A1	2117	U
38	A1	2144	U
38	A1	2146	C
38	A1	2154	G
38	A1	2155	C
38	A1	2156	A
38	A1	2157	U
38	A1	2159	C
38	A1	2166	C
38	A1	2173	U
38	A1	2178	A
38	A1	2183	A
38	A1	2184	G
38	A1	2192	G
38	A1	2216	G
38	A1	2219	A
38	A1	2220	C
38	A1	2224	G
38	A1	2225	C
38	A1	2227	G
38	A1	2230	G
38	A1	2231	G
38	A1	2232	U
38	A1	2233	G
38	A1	2234	C
38	A1	2235	G
38	A1	2236	C
38	A1	2237	A
38	A1	2238	G
38	A1	2239	C
38	A1	2240	G
38	A1	2241	U
38	A1	2243	G
38	A1	2245	C
38	A1	2246	G
38	A1	2249	A
38	A1	2251	G
38	A1	2252	C

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Mol	Chain	Res	Type
38	A1	2254	U
38	A1	2255	C
38	A1	2256	G
38	A1	2258	A
38	A1	2259	G
38	A1	2268	C
38	A1	2270	G
38	A1	2275	G
38	A1	2276	G
38	A1	2278	U
38	A1	2280	G
38	A1	2281	A
38	A1	2284	C
38	A1	2285	G
38	A1	2286	U
38	A1	2287	C
38	A1	2288	C
38	A1	2289	A
38	A1	2290	U
38	A1	2292	A
38	A1	2293	G
38	A1	2294	A
38	A1	2295	C
38	A1	2296	A
38	A1	2301	C
38	A1	2302	C
38	A1	2303	A
38	A1	2304	C
38	A1	2306	C
38	A1	2308	C
38	A1	2310	G
38	A1	2321	A
38	A1	2325	C
38	A1	2332	G
38	A1	2338	A
38	A1	2339	C
38	A1	2351	G
38	A1	2352	G
38	A1	2363	G
38	A1	2364	G
38	A1	2371	A
38	A1	2396	G

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Mol	Chain	Res	Type
38	A1	2397	C
38	A1	2400	U
38	A1	2401	A
38	A1	2402	A
38	A1	2422	G
38	A1	2434	A
38	A1	2441	A
38	A1	2448	A
38	A1	2449	A
38	A1	2450	A
38	A1	2451	G
38	A1	2459	G
38	A1	2476	A
38	A1	2502	C
38	A1	2507	C
38	A1	2508	G
38	A1	2511	C
38	A1	2515	U
38	A1	2542	G
38	A1	2543	A
38	A1	2544	C
38	A1	2545	A
38	A1	2546	G
38	A1	2547	A
38	A1	2548	A
38	A1	2549	A
38	A1	2556	C
38	A1	2562	G
38	A1	2563	A
38	A1	2587	G
38	A1	2590	C
38	A1	2591	A
38	A1	2593	A
38	A1	2606	C
38	A1	2607	U
38	A1	2613	C
38	A1	2617	G
38	A1	2618	C
38	A1	2619	U
38	A1	2620	G
38	A1	2621	U
38	A1	2633	A

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Mol	Chain	Res	Type
38	A1	2644	G
38	A1	2669	U
38	A1	2681	A
38	A1	2682	G
38	A1	2693	G
38	A1	2697	G
38	A1	2718	G
38	A1	2724	A
38	A1	2725	U
38	A1	2729	A
38	A1	2745	G
38	A1	2748	C
38	A1	2760	A
38	A1	2761	G
38	A1	2794	G
38	A1	2826	U
38	A1	2827	C
38	A1	2840	C
38	A1	2846	A
38	A1	2861	A
38	A1	2864	G
38	A1	2871	A
38	A1	2878	A
38	A1	2889	A
38	A1	2891	A
38	A1	2892	A
38	A1	2893	U
38	A1	2894	A
38	A1	2944	G
38	A1	2945	A
38	A1	2947	G
38	A1	2949	G
38	A1	2958	U
38	A1	2988	A
38	A1	2997	G
38	A1	2998	G
38	A1	3000	U
38	A1	3001	C
38	A1	3002	A
38	A1	3004	C
38	A1	3005	C
38	A1	3027	C

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Mol	Chain	Res	Type
38	A1	3036	C
38	A1	3037	G
38	A1	3038	A
38	A1	3039	G
38	A1	3040	G
38	A1	3042	C
38	A1	3046	C
39	A3	2	G
39	A3	4	C
39	A3	11	A
39	A3	12	G
39	A3	20	G
39	A3	21	C
39	A3	22	C
39	A3	23	A
39	A3	25	A
39	A3	26	C
39	A3	29	G
39	A3	31	U
39	A3	33	U
39	A3	35	A
39	A3	41	A
39	A3	42	A
39	A3	44	C
39	A3	49	A
39	A3	53	A
39	A3	54	A
39	A3	55	G
39	A3	63	G
39	A3	70	C
39	A3	74	U
39	A3	75	G
39	A3	76	U
39	A3	83	C
39	A3	85	C
39	A3	89	G
39	A3	90	A
39	A3	100	A
39	A3	106	G
39	A3	111	G
39	A3	123	U
39	A3	124	A

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Mol	Chain	Res	Type
39	A3	125	U

All (276) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
10	B1	8	U
10	B1	9	A
10	B1	18	U
10	B1	59	A
11	B2	3	U
11	B2	42	G
11	B2	47	A
11	B2	55	G
11	B2	56	A
11	B2	74	U
11	B2	90	C
11	B2	99	C
11	B2	103	A
11	B2	105	C
11	B2	111	G
11	B2	114	A
11	B2	116	C
11	B2	126	G
11	B2	158	U
11	B2	176	U
11	B2	196	G
11	B2	199	A
11	B2	203	A
11	B2	239	A
11	B2	246	A
11	B2	247	G
11	B2	262	G
11	B2	275	A
11	B2	276	A
11	B2	277	G
11	B2	324	C
11	B2	325	A
11	B2	347	G
11	B2	362	C
11	B2	368	C
11	B2	408	C
11	B2	422	U

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Mol	Chain	Res	Type
11	B2	434	A
11	B2	439	G
11	B2	448	A
11	B2	462	A
11	B2	471	G
11	B2	486	A
11	B2	513	A
11	B2	528	G
11	B2	584	C
11	B2	641	A
11	B2	655	A
11	B2	677	U
11	B2	687	G
11	B2	702	G
11	B2	746	A
11	B2	747	U
11	B2	804	U
11	B2	871	A
11	B2	891	A
11	B2	892	C
11	B2	919	U
11	B2	924	U
11	B2	934	G
11	B2	935	G
11	B2	949	G
11	B2	951	G
11	B2	959	G
11	B2	963	A
11	B2	964	A
11	B2	975	A
11	B2	977	G
11	B2	985	C
11	B2	1001	A
11	B2	1017	U
11	B2	1019	A
11	B2	1037	U
11	B2	1053	A
11	B2	1081	C
11	B2	1105	C
11	B2	1142	G
11	B2	1150	G
11	B2	1156	A

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Mol	Chain	Res	Type
11	B2	1161	A
11	B2	1174	A
11	B2	1184	U
11	B2	1185	A
11	B2	1186	C
11	B2	1208	A
11	B2	1217	C
11	B2	1238	G
11	B2	1241	U
11	B2	1245	C
11	B2	1260	G
11	B2	1261	U
11	B2	1291	G
11	B2	1306	A
11	B2	1307	G
11	B2	1322	C
11	B2	1324	U
11	B2	1340	U
11	B2	1399	G
11	B2	1423	A
11	B2	1436	U
11	B2	1453	U
11	B2	1457	A
11	B2	1458	A
11	B2	1459	G
11	B2	1460	G
11	B2	1461	U
11	B2	1483	U
38	A1	11	G
38	A1	12	C
38	A1	84	A
38	A1	91	G
38	A1	99	U
38	A1	119	U
38	A1	129	C
38	A1	210	A
38	A1	215	A
38	A1	237	G
38	A1	285	C
38	A1	299	U
38	A1	300	U
38	A1	301	G

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Mol	Chain	Res	Type
38	A1	302	U
38	A1	332	A
38	A1	364	A
38	A1	371	U
38	A1	379	U
38	A1	393	C
38	A1	408	C
38	A1	427	G
38	A1	444	U
38	A1	471	U
38	A1	480	A
38	A1	485	G
38	A1	493	A
38	A1	513	C
38	A1	518	A
38	A1	529	G
38	A1	545	G
38	A1	579	C
38	A1	584	G
38	A1	588	U
38	A1	598	C
38	A1	716	U
38	A1	734	C
38	A1	736	U
38	A1	859	G
38	A1	883	G
38	A1	897	U
38	A1	899	A
38	A1	919	G
38	A1	936	G
38	A1	940	G
38	A1	946	U
38	A1	981	A
38	A1	994	G
38	A1	1003	C
38	A1	1013	G
38	A1	1014	U
38	A1	1027	A
38	A1	1035	G
38	A1	1037	C
38	A1	1038	U
38	A1	1082	A

Continued on next page...

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Mol	Chain	Res	Type
38	A1	1109	G
38	A1	1117	C
38	A1	1125	A
38	A1	1143	A
38	A1	1145	G
38	A1	1162	C
38	A1	1172	U
38	A1	1180	G
38	A1	1200	A
38	A1	1209	A
38	A1	1245	C
38	A1	1249	G
38	A1	1260	C
38	A1	1267	A
38	A1	1279	U
38	A1	1281	A
38	A1	1367	A
38	A1	1390	U
38	A1	1407	A
38	A1	1443	G
38	A1	1445	G
38	A1	1450	C
38	A1	1485	A
38	A1	1487	U
38	A1	1510	U
38	A1	1541	U
38	A1	1553	G
38	A1	1561	G
38	A1	1572	C
38	A1	1574	A
38	A1	1585	U
38	A1	1614	U
38	A1	1643	A
38	A1	1670	A
38	A1	1677	A
38	A1	1718	C
38	A1	1719	C
38	A1	1722	G
38	A1	1739	U
38	A1	1752	C
38	A1	1753	G
38	A1	1764	G

Continued on next page...

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Mol	Chain	Res	Type
38	A1	1782	C
38	A1	1803	U
38	A1	1804	G
38	A1	1879	U
38	A1	1918	U
38	A1	1920	A
38	A1	1936	C
38	A1	1939	C
38	A1	2002	A
38	A1	2043	A
38	A1	2060	A
38	A1	2062	A
38	A1	2063	U
38	A1	2064	U
38	A1	2068	U
38	A1	2094	A
38	A1	2156	A
38	A1	2158	G
38	A1	2165	A
38	A1	2172	G
38	A1	2215	U
38	A1	2250	G
38	A1	2253	G
38	A1	2280	G
38	A1	2301	C
38	A1	2321	A
38	A1	2324	C
38	A1	2338	A
38	A1	2362	U
38	A1	2363	G
38	A1	2370	C
38	A1	2396	G
38	A1	2400	U
38	A1	2401	A
38	A1	2450	A
38	A1	2501	G
38	A1	2543	A
38	A1	2545	A
38	A1	2546	G
38	A1	2548	A
38	A1	2554	A
38	A1	2562	G

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Mol	Chain	Res	Type
38	A1	2606	C
38	A1	2619	U
38	A1	2696	G
38	A1	2702	A
38	A1	2747	C
38	A1	2826	U
38	A1	2840	C
38	A1	2890	A
38	A1	2891	A
38	A1	2892	A
38	A1	2946	C
38	A1	2947	G
38	A1	2948	A
38	A1	2957	G
38	A1	2987	U
38	A1	3004	C
38	A1	3035	C
38	A1	3041	U
39	A3	19	G
39	A3	21	C
39	A3	25	A
39	A3	40	G
39	A3	48	A
39	A3	52	U
39	A3	62	A
39	A3	74	U
39	A3	75	G
39	A3	89	G
39	A3	123	U

5.4 Non-standard residues in protein, DNA, RNA chains (i)

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

There are no ligands in this entry.

5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

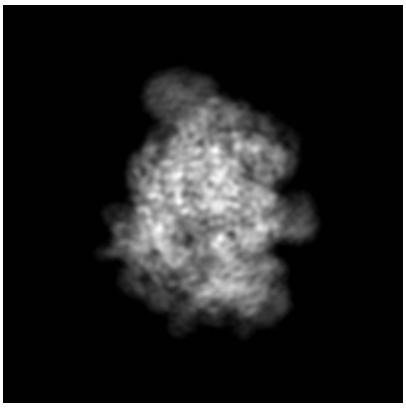
6 Map visualisation (i)

This section contains visualisations of the EMDB entry EMD-5691. These allow visual inspection of the internal detail of the map and identification of artifacts.

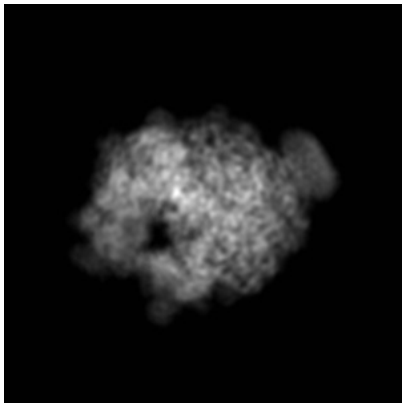
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections (i)

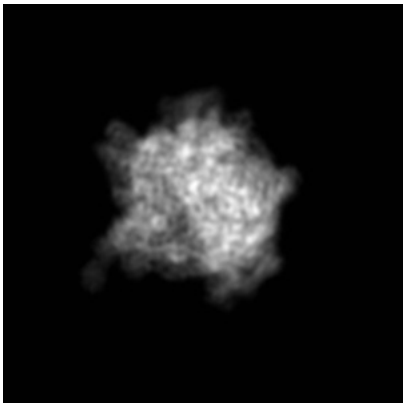
6.1.1 Primary map



X



Y

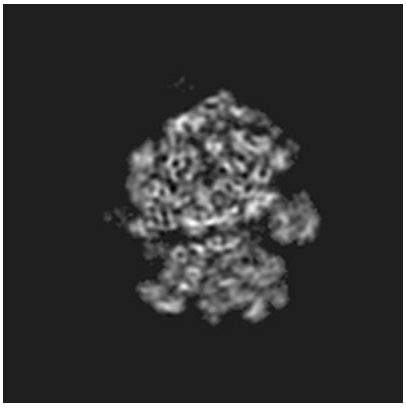


Z

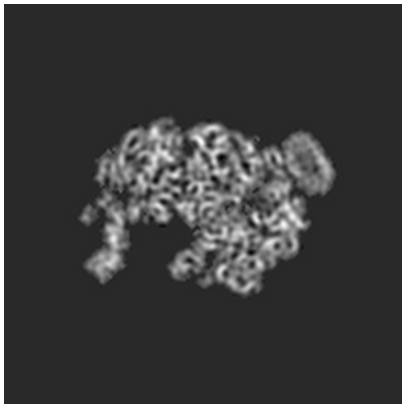
The images above show the map projected in three orthogonal directions.

6.2 Central slices (i)

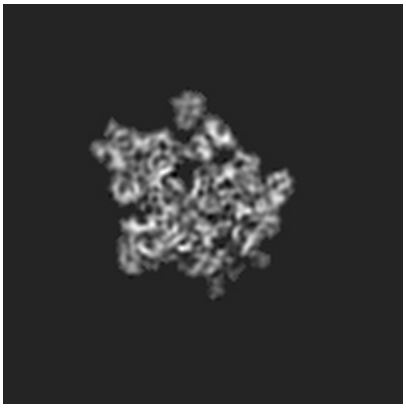
6.2.1 Primary map



X Index: 81



Y Index: 81

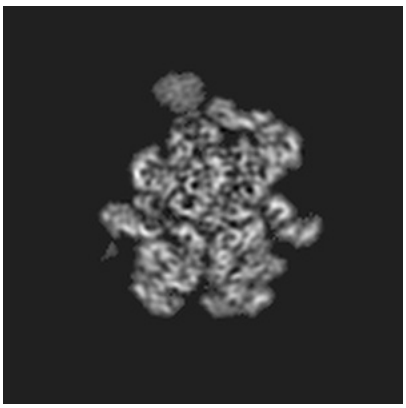


Z Index: 81

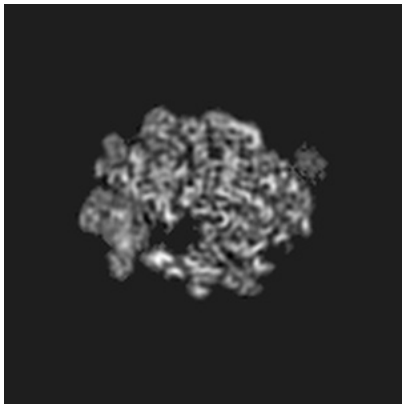
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

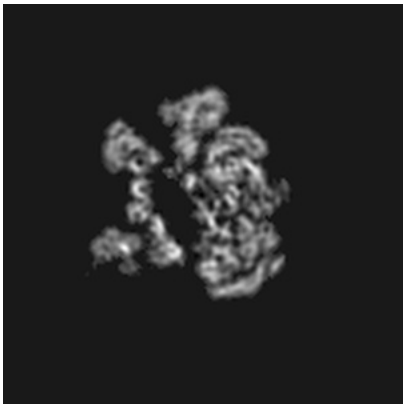
6.3.1 Primary map



X Index: 85



Y Index: 87

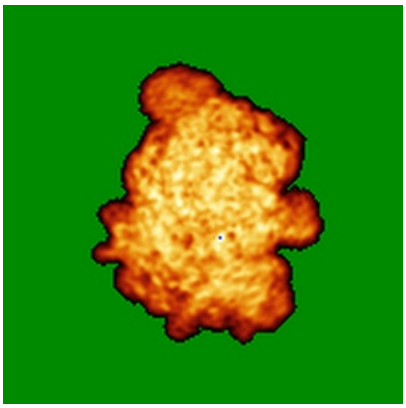


Z Index: 70

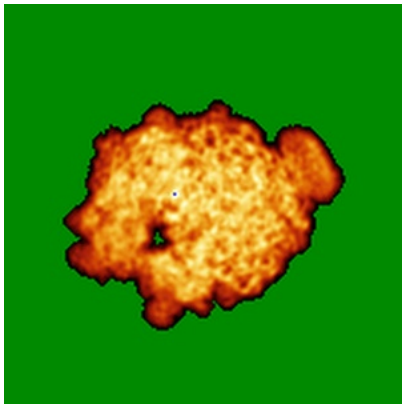
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) (i)

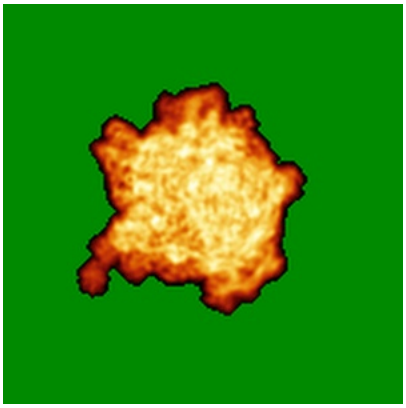
6.4.1 Primary map



X



Y



Z

The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5 Orthogonal surface views (i)

6.5.1 Primary map

X Y Z

The images above show the 3D surface view of the map at the recommended contour level 0.93. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

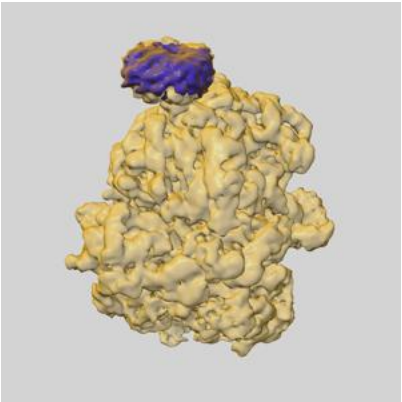
6.6 Mask visualisation (i)

This section shows the 3D surface view of the primary map at 50% transparency overlaid with the specified mask at 0% transparency

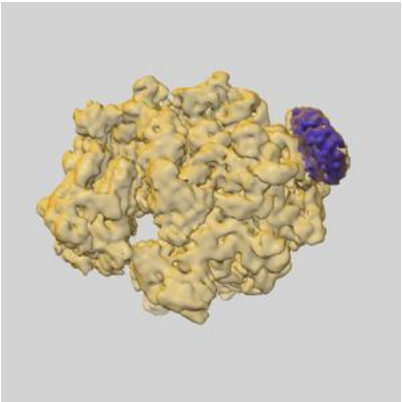
A mask typically either:

- Encompasses the whole structure
- Separates out a domain, a functional unit, a monomer or an area of interest from a larger structure

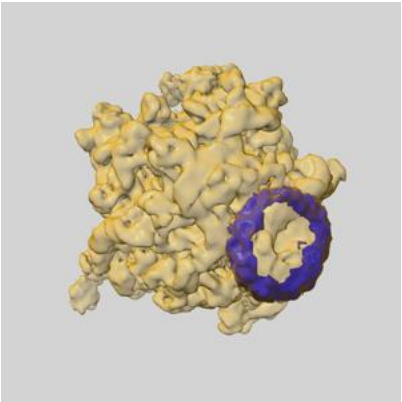
6.6.1 emd_5691_msk_4.map (i)



X

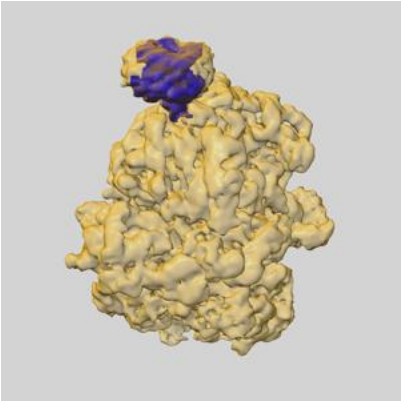


Y

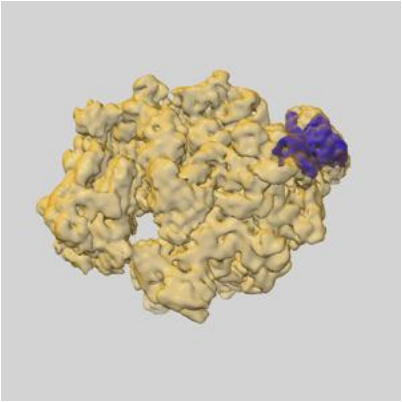


Z

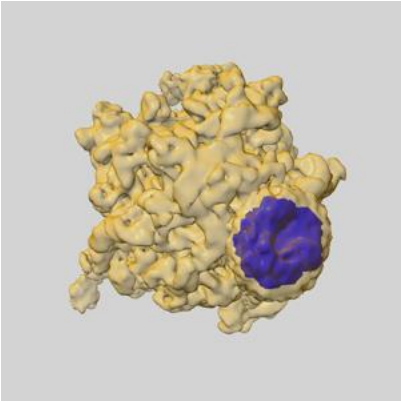
6.6.2 emd_5691_msk_3.map (i)



X

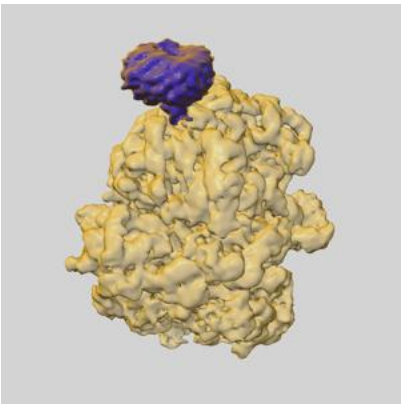


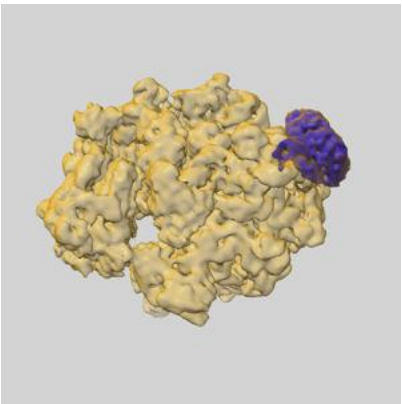
Y

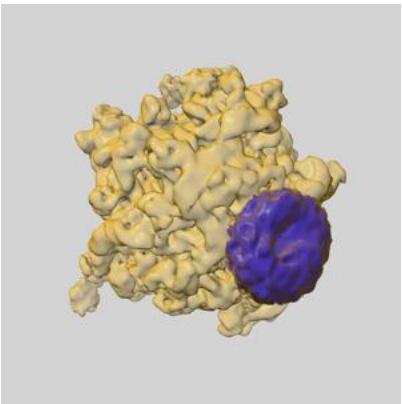


Z

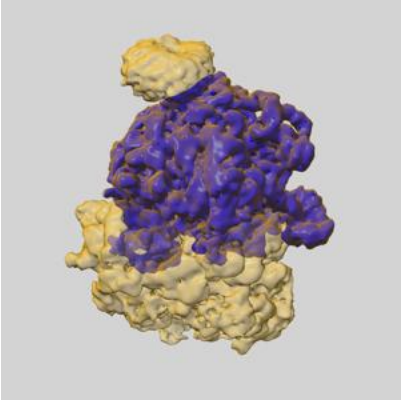
6.6.3 emd_5691_msk_2.map (i)

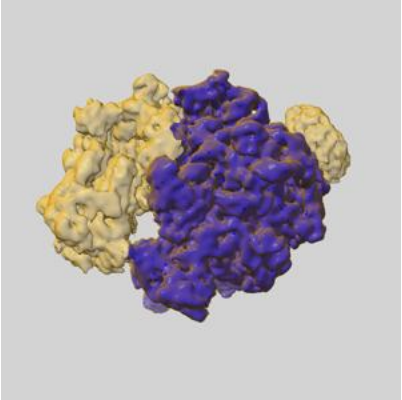

X

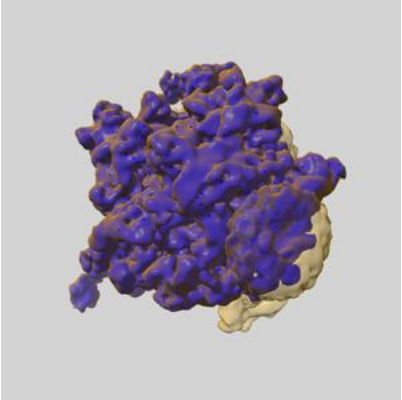

Y


Z

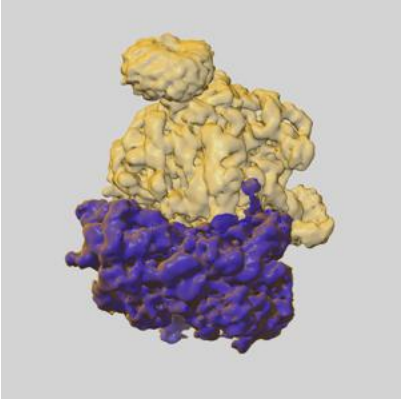
6.6.4 emd_5691_msk_1.map (i)

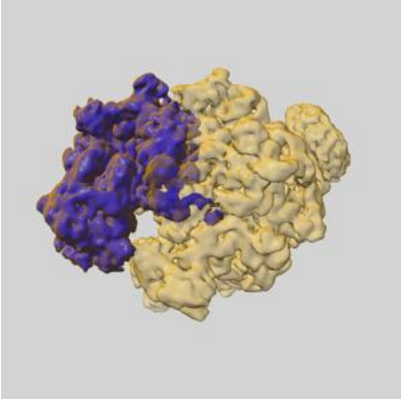

X

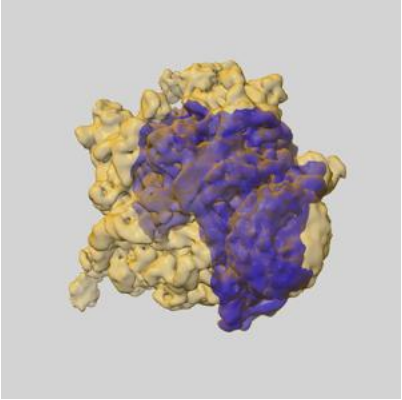

Y


Z

6.6.5 emd_5691_msk_5.map (i)


X

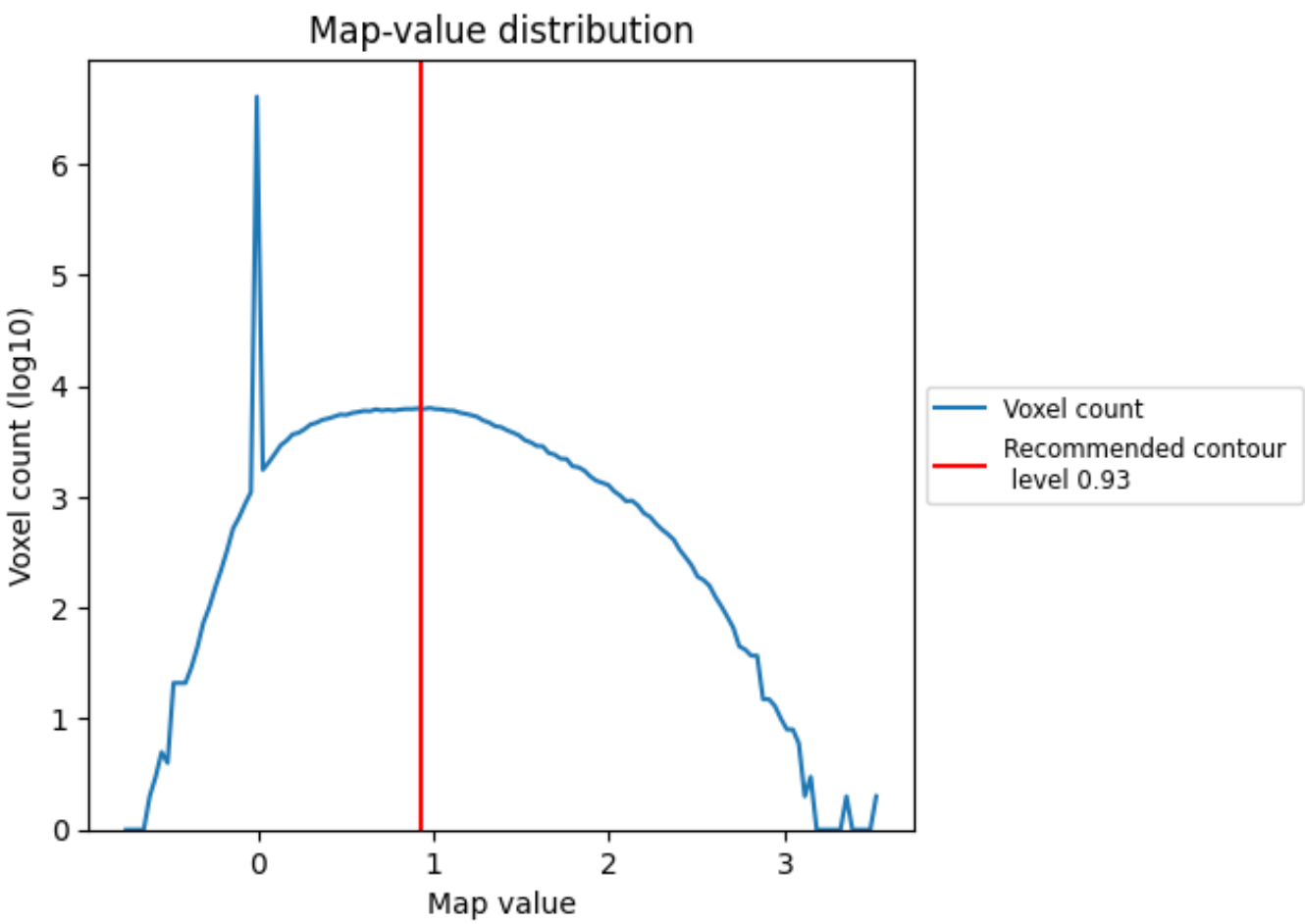

Y


Z

7 Map analysis (i)

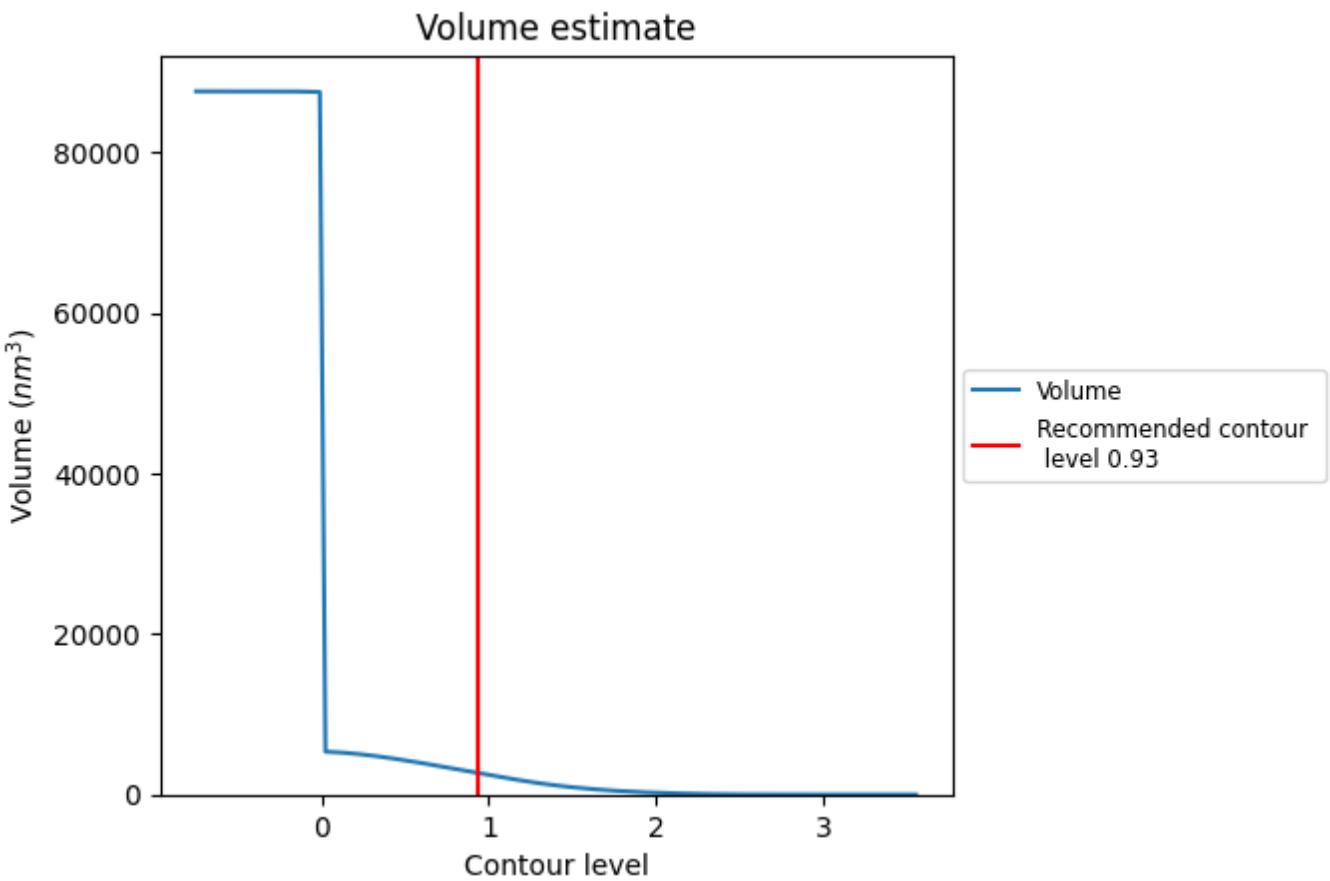
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution (i)



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

7.2 Volume estimate (i)



The volume at the recommended contour level is 2715 nm^3; this corresponds to an approximate mass of 2453 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum (i)

This section was not generated. The rotationally averaged power spectrum is only generated for cubic maps.

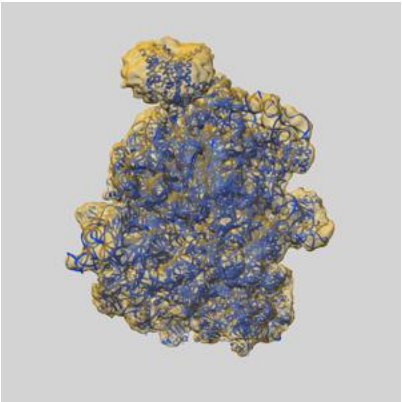
8 Fourier-Shell correlation (i)

This section was not generated. No FSC curve or half-maps provided.

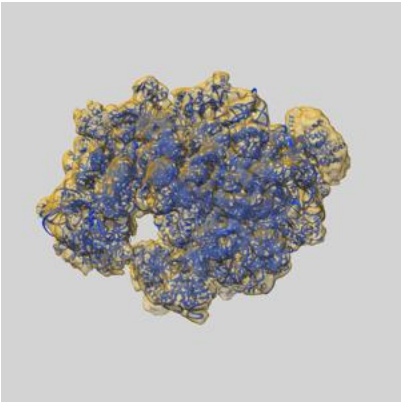
9 Map-model fit (i)

This section contains information regarding the fit between EMDB map EMD-5691 and PDB model 4V4N. Per-residue inclusion information can be found in section 3 on page 16.

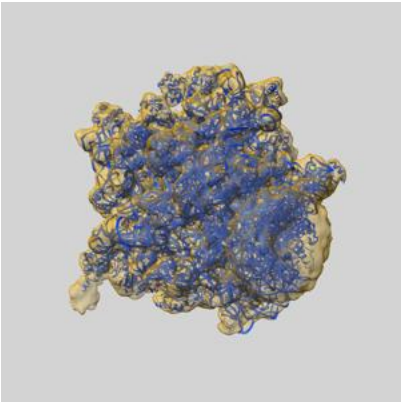
9.1 Map-model overlay (i)



X



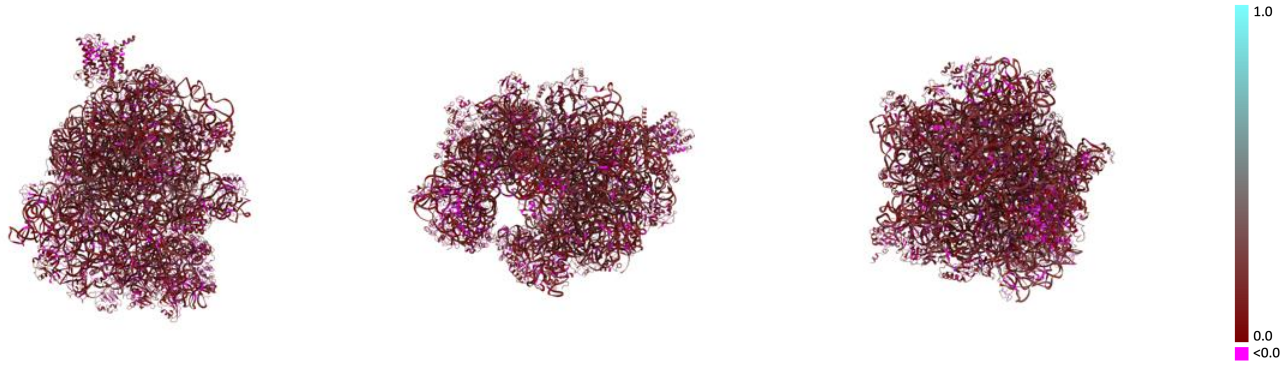
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.93 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

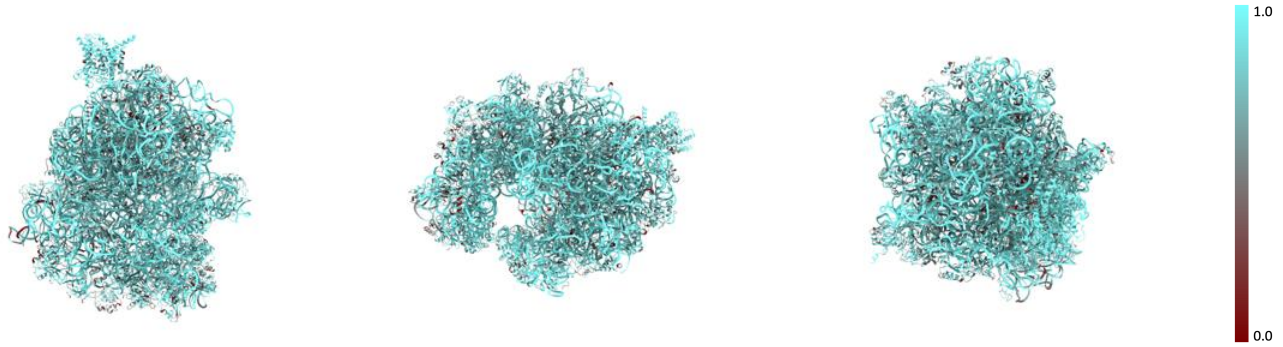
9.2 Q-score mapped to coordinate model (i)



X Y Z

The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

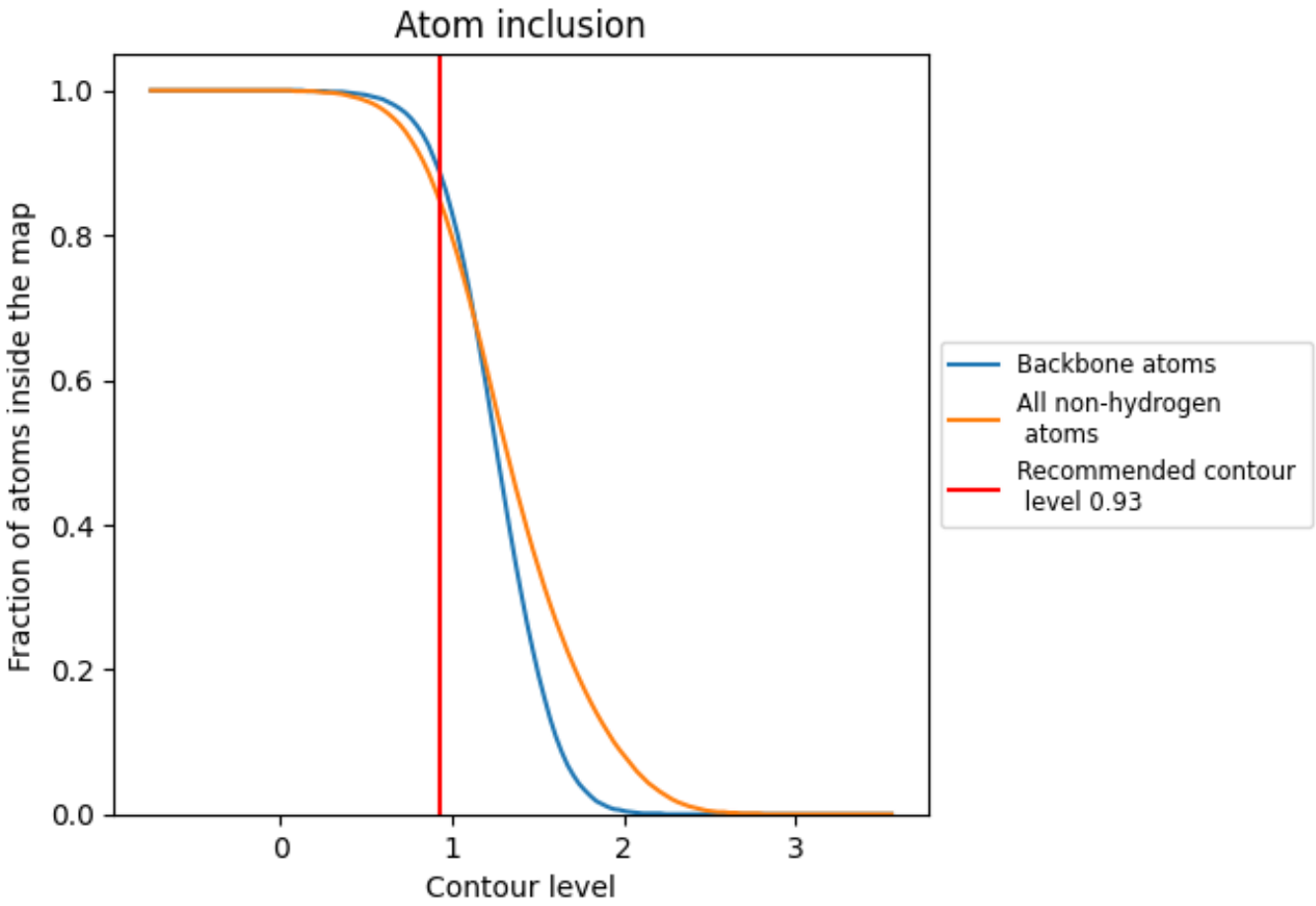
9.3 Atom inclusion mapped to coordinate model (i)



X Y Z

The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.93).

9.4 Atom inclusion (i)



At the recommended contour level, 88% of all backbone atoms, 85% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary (i)

The table lists the average atom inclusion at the recommended contour level (0.93) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.8470	0.1240
A1	0.9300	0.1530
A3	0.8970	0.1350
A5	0.7410	0.1180
A7	0.8860	0.1390
A8	0.9090	0.0680
AA	0.7120	0.0850
AB	0.6590	0.0870
AC	0.6820	0.0840
AD	0.6510	0.0890
AE	0.8360	0.1010
AF	0.7700	0.1100
AG	0.8010	0.1310
AH	0.8720	0.0650
AI	0.6350	0.1030
AJ	0.6970	0.0860
AK	0.6620	0.1130
AL	0.6150	0.0750
AM	0.6090	0.0770
AN	0.6760	0.0960
AO	0.7420	0.1000
AP	0.7630	0.1130
AQ	0.6740	0.0980
AR	0.6640	0.0850
AS	0.7080	0.0980
AT	0.6840	0.1060
AU	0.7180	0.1020
AV	0.7430	0.0970
AW	0.7590	0.1270
AX	0.8680	0.1020
AY	0.6910	0.1130
AZ	0.8210	0.1280
Aa	0.6630	0.0790
Ab	0.6230	0.0900
Ad	0.6940	0.0790

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Chain	Atom inclusion	Q-score
Ae	0.6110	0.0430
Af	0.2890	0.0250
Ag	0.4060	0.0270
Ah	0.5420	0.0520
Ai	0.6860	0.1150
Aj	0.7910	0.0890
Ak	0.7710	0.1020
B1	0.8520	0.1170
B2	0.9350	0.1380
B3	0.5800	0.0800
BA	0.8750	0.1130
BB	0.7500	0.1120
BC	0.7360	0.1080
BD	0.7170	0.0920
BE	0.6980	0.0590
BF	0.7390	0.1020
BG	0.8000	0.0880
BH	0.7540	0.0780
BI	0.7270	0.0990
BJ	0.7290	0.0740
BK	0.6320	0.0360
BL	0.7110	0.0710
BM	0.7710	0.0910
BN	0.6860	0.0930
BO	0.8360	0.0850
BP	0.7530	0.0550
BQ	0.7480	0.0960
BR	0.7180	0.0820
BS	0.5900	0.0680
BT	0.8170	0.0770
BU	0.7540	0.0640
BV	0.7530	0.0900
BW	0.7170	0.0850
BX	0.8830	0.0910
BY	0.7990	0.0630