

# Resolution and accuracy in Congreve & Lamsdell matrices

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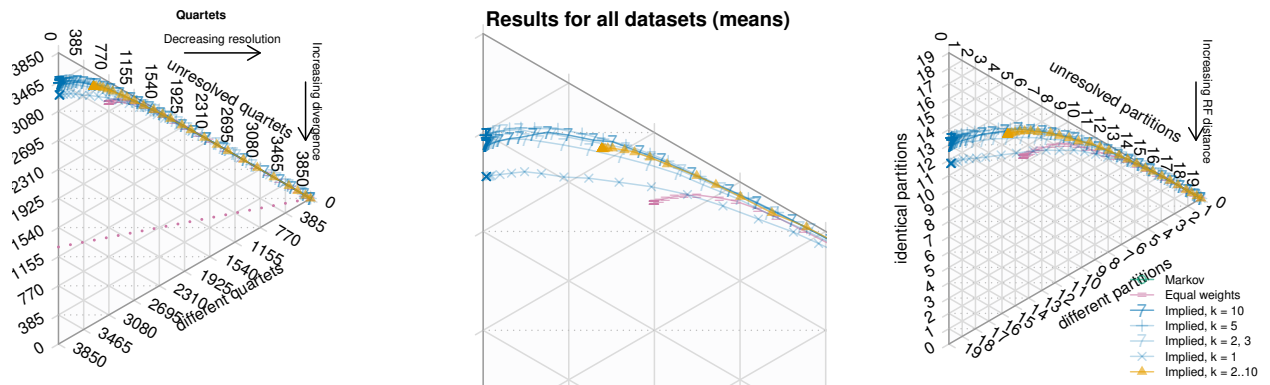
2024-02-23

## Contents

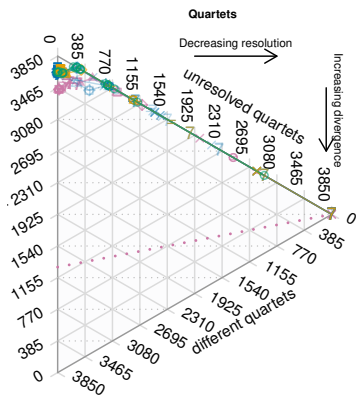
0.1	Summary . . . . .	1
0.2	Trees 1–10 . . . . .	2
0.3	Trees 11–20 . . . . .	5
0.4	Trees 21–30 . . . . .	8
0.5	Trees 31–40 . . . . .	11
0.6	Trees 41–50 . . . . .	14
0.7	Trees 51–60 . . . . .	17
0.8	Trees 61–70 . . . . .	20
0.9	Trees 71–80 . . . . .	23
0.10	Trees 81–90 . . . . .	26
0.11	Trees 91–100 . . . . .	29
	References . . . . .	31

This page depicts the analytical results of all 100 matrices generated by Congreve & Lamsdell [1] using a ternary plotting approach [2], with quartets and partitions used as distance metrics.

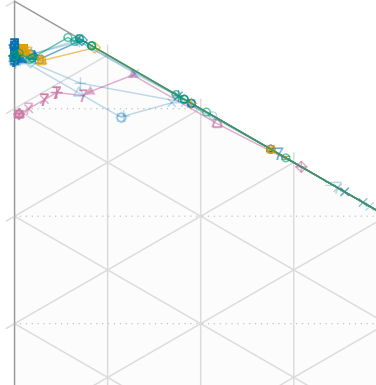
## 0.1 Summary



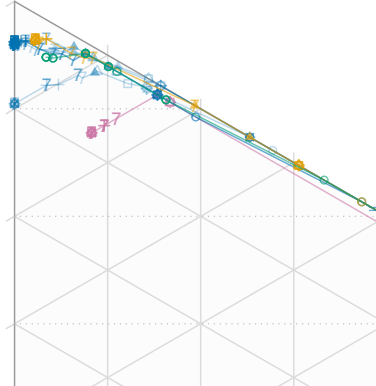
## 0.2 Trees 1–10



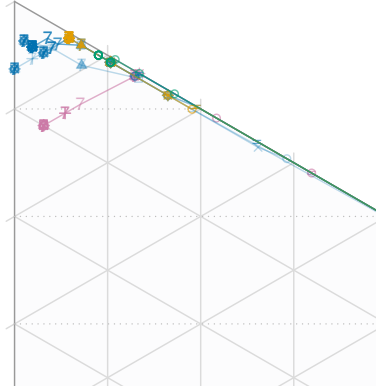
**Dataset 1: CI = 0.28**



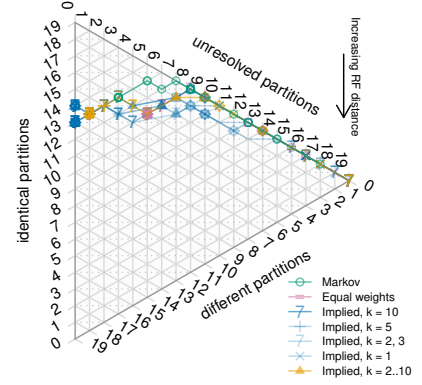
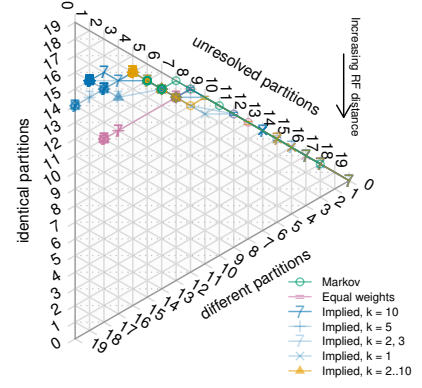
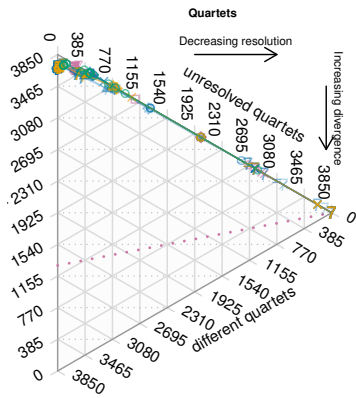
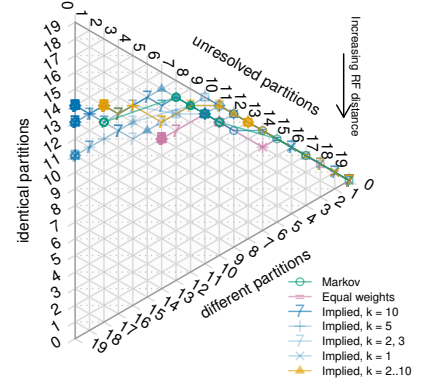
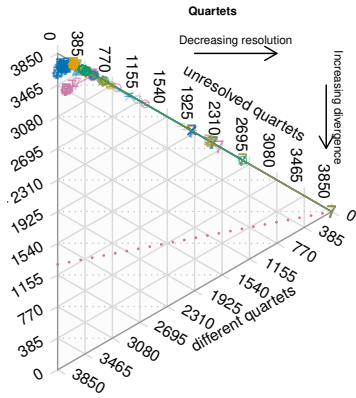
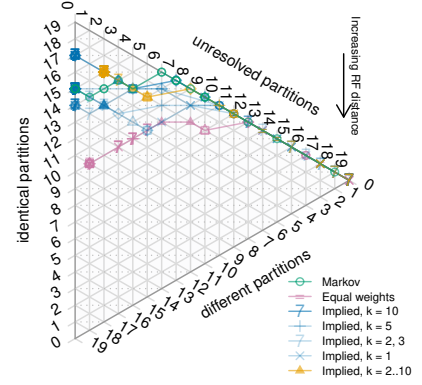
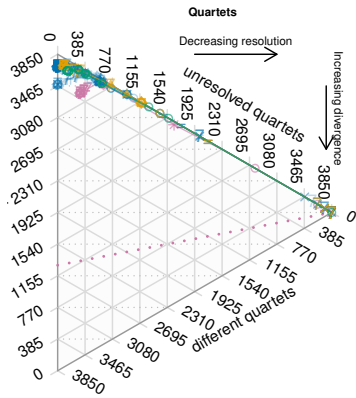
**Dataset 2: CI = 0.25**

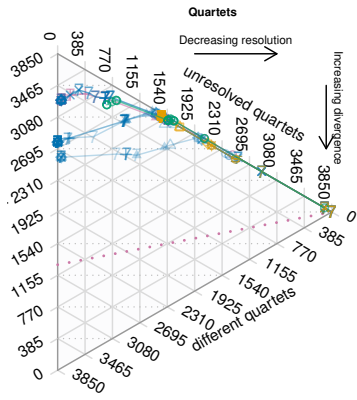


**Dataset 3: CI = 0.29**

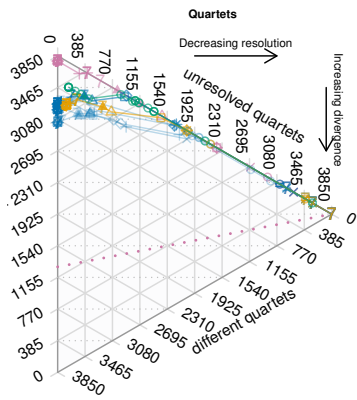
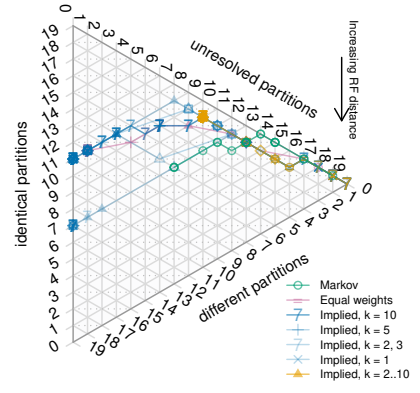
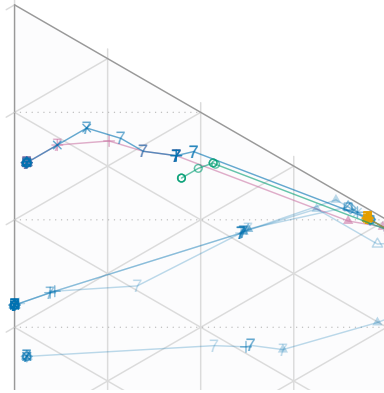


**Dataset 4: CI = 0.29**

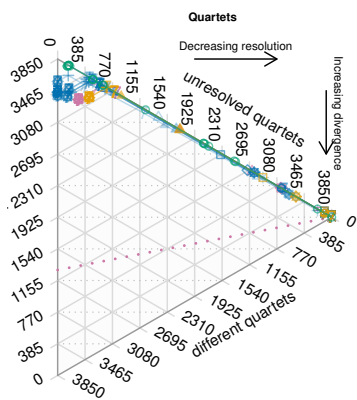
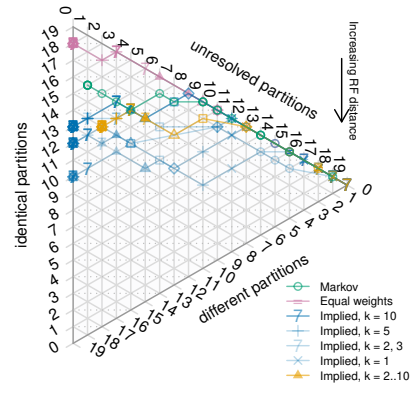
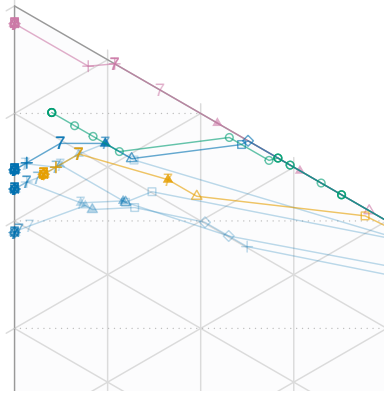




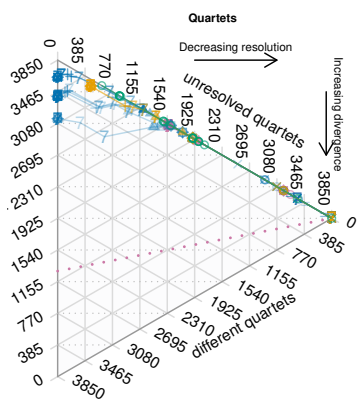
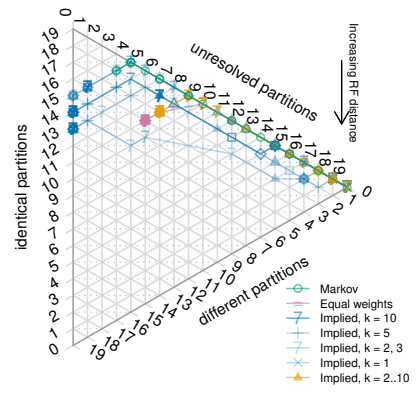
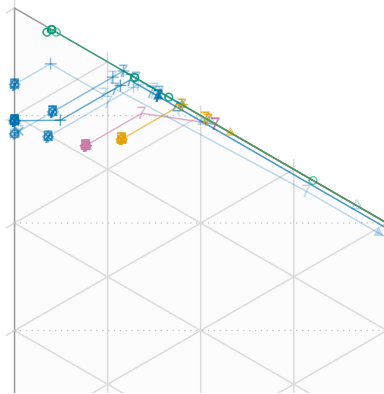
Dataset 5: CI = 0.26



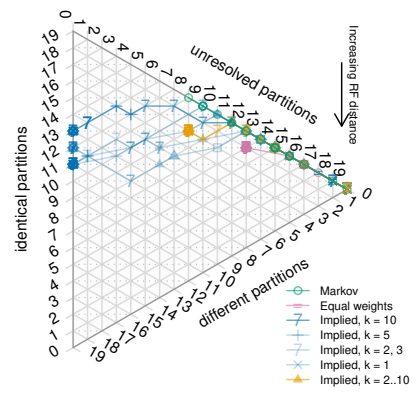
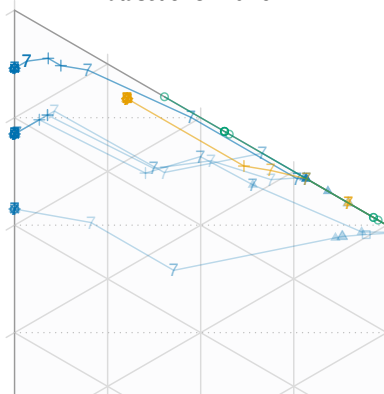
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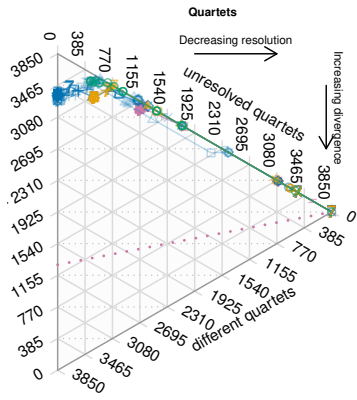


Dataset 7: CI = 0.27

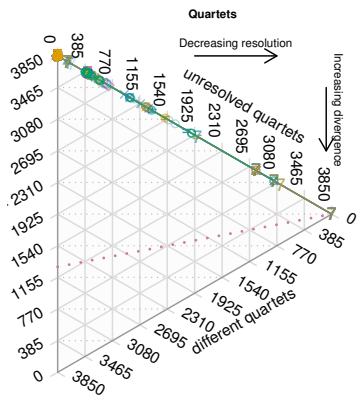
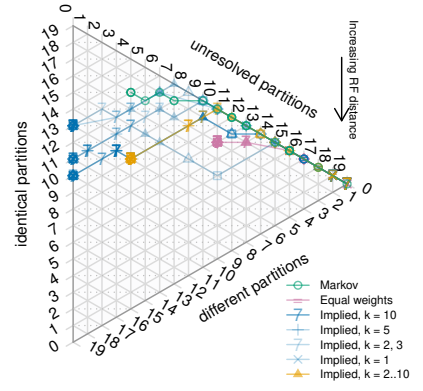
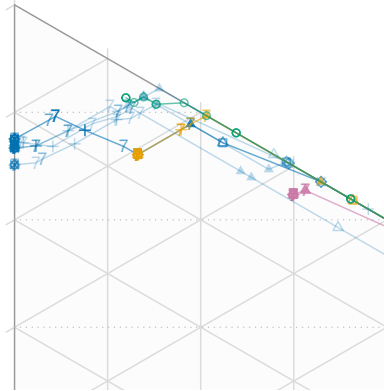


Dataset 8: CI = 0.25

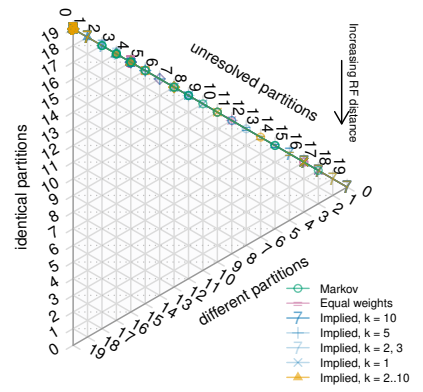
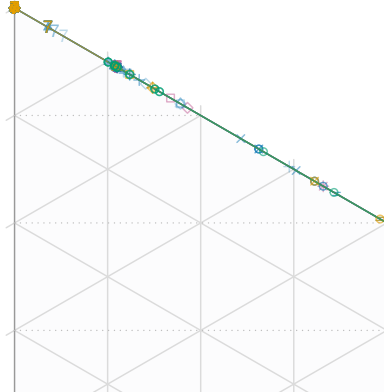




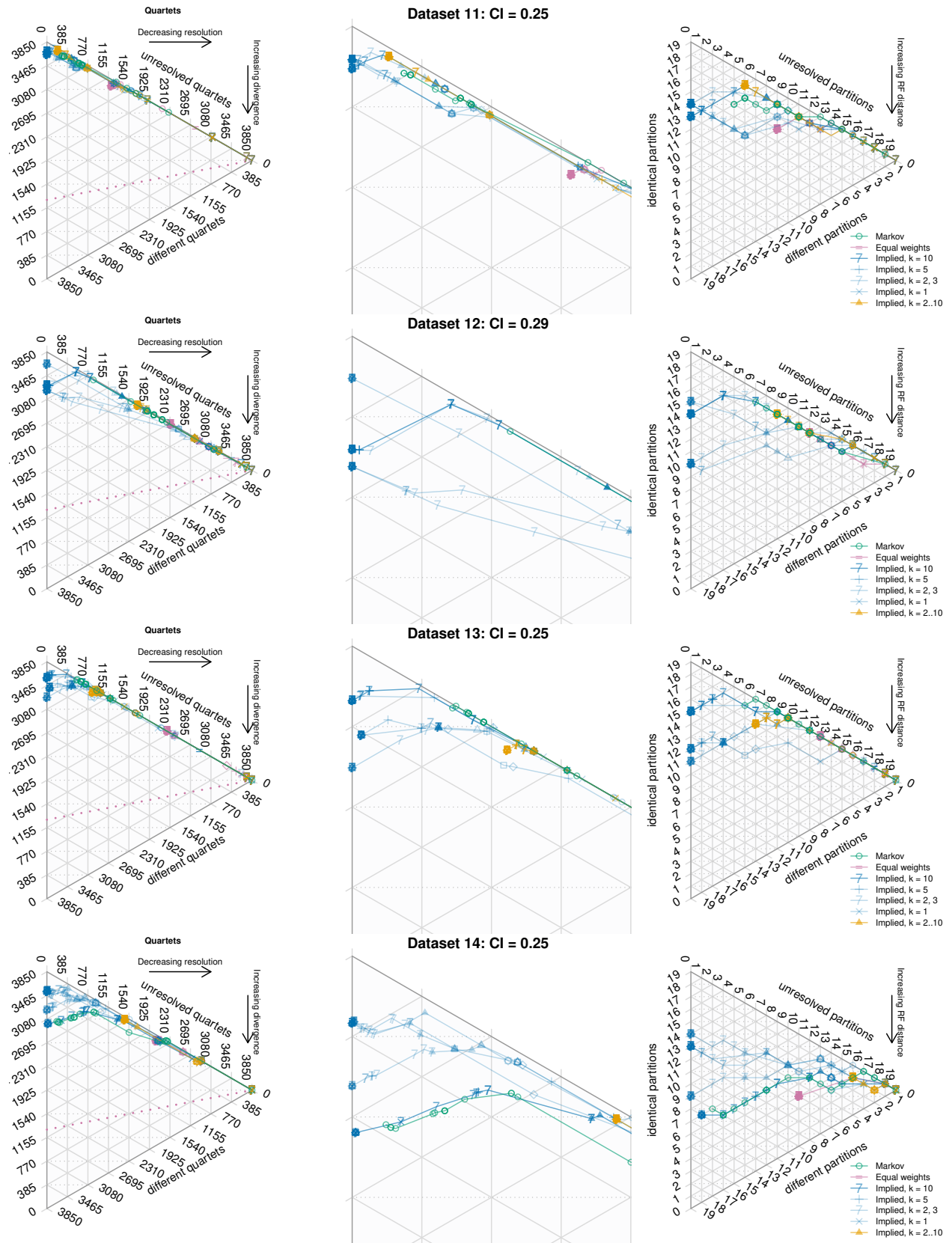
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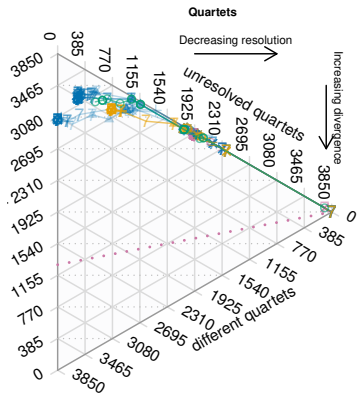


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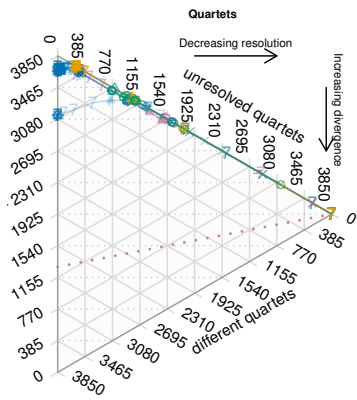
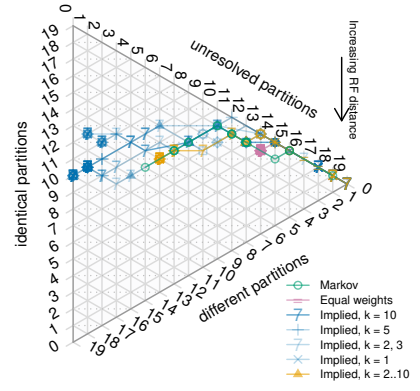
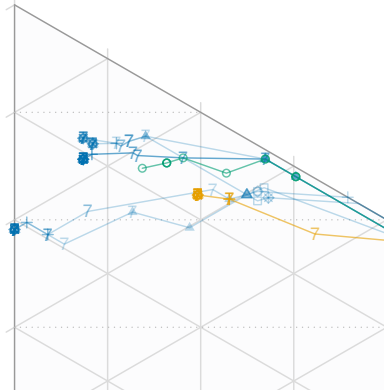


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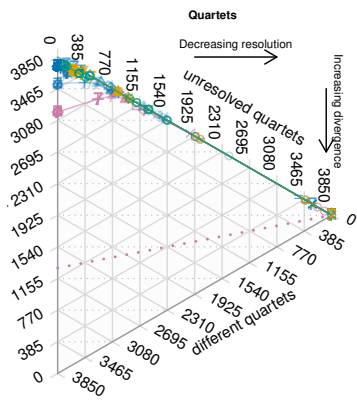
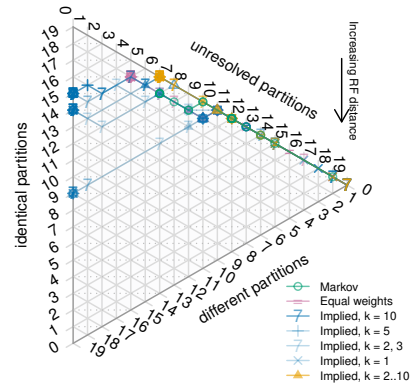
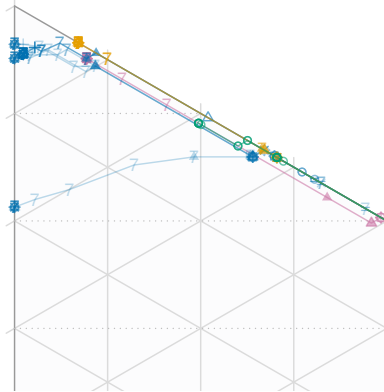




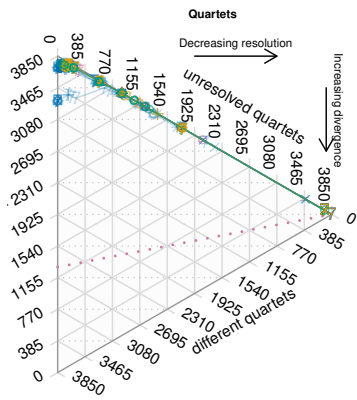
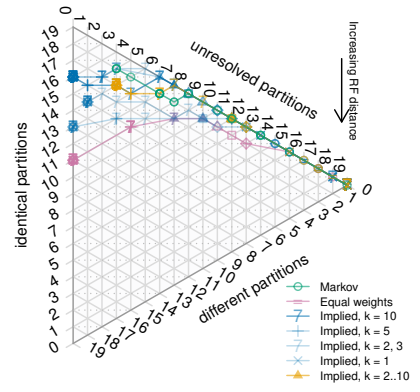
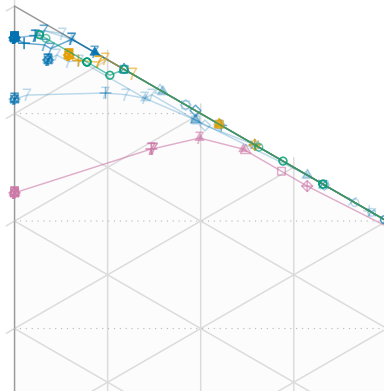
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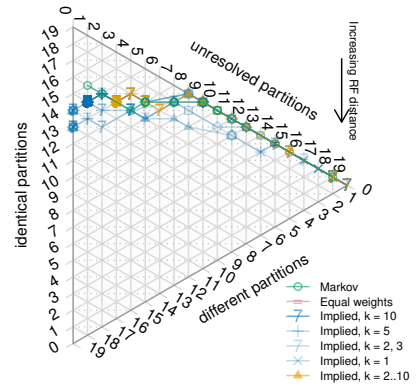
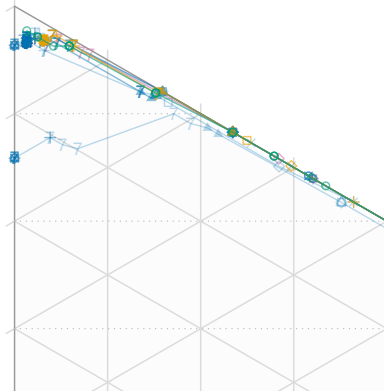
Dataset 16: CI = 0.25

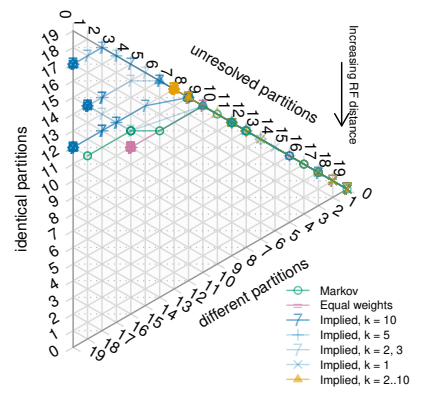
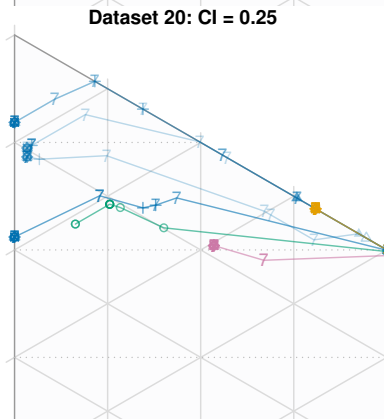
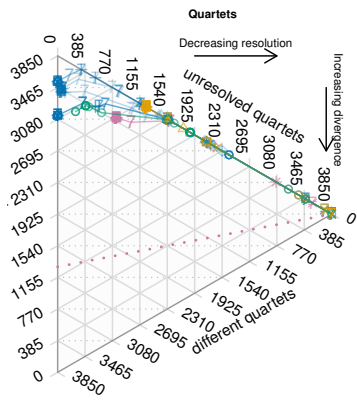
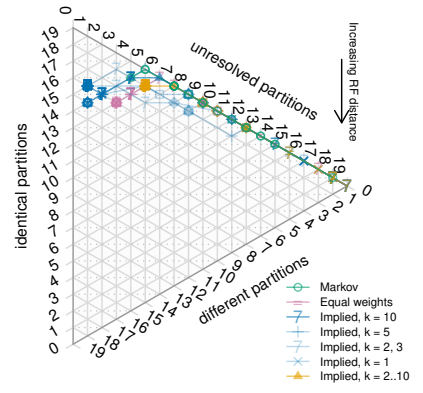
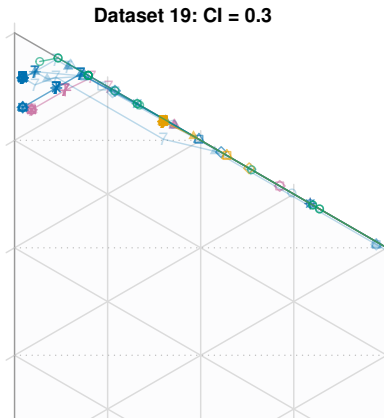
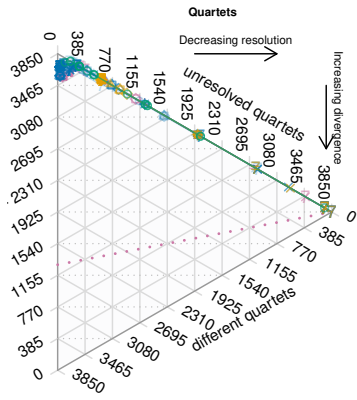


Dataset 17: CI = 0.27

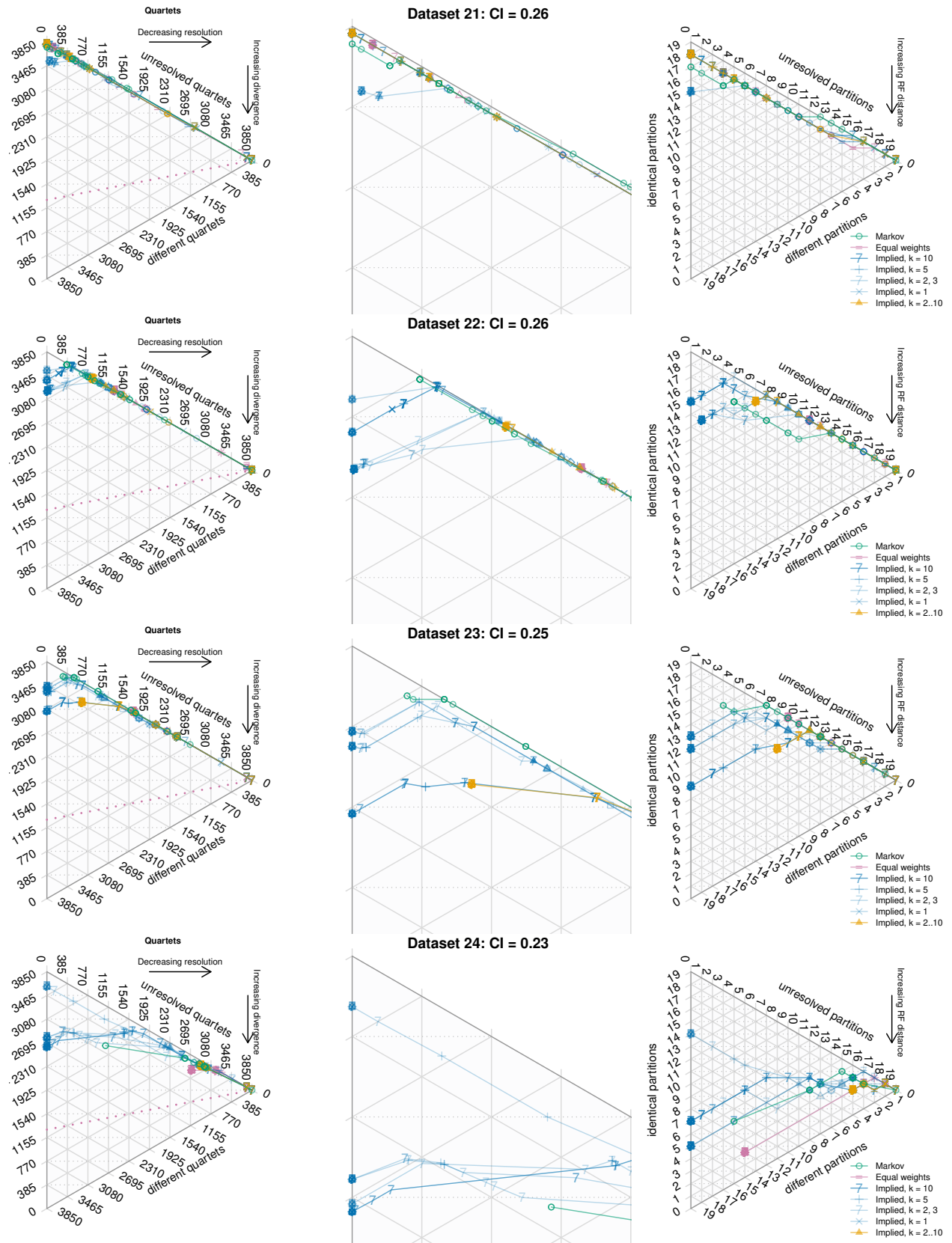


Dataset 18: CI = 0.28

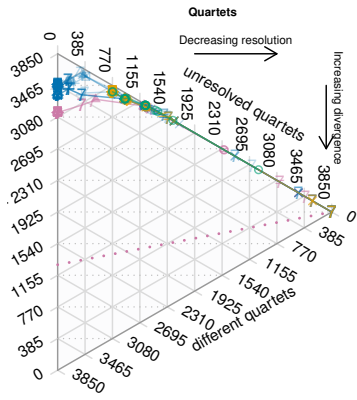




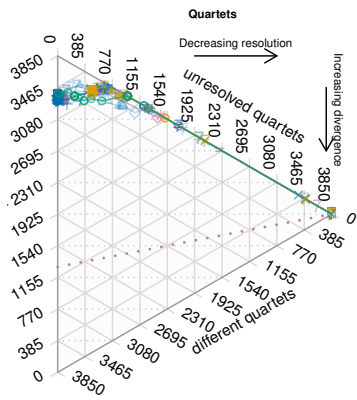
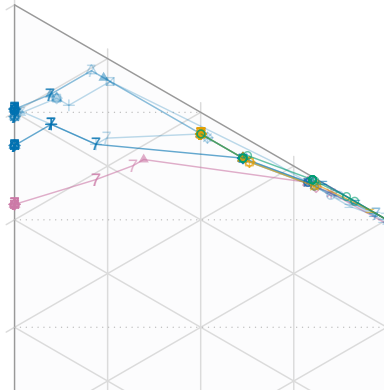
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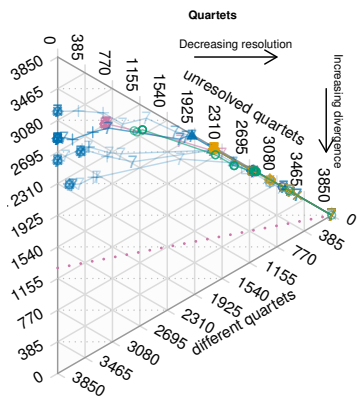
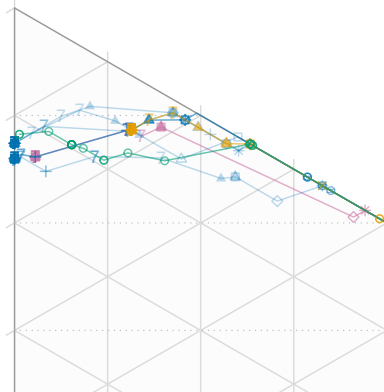




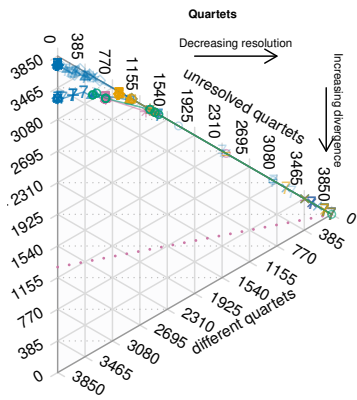
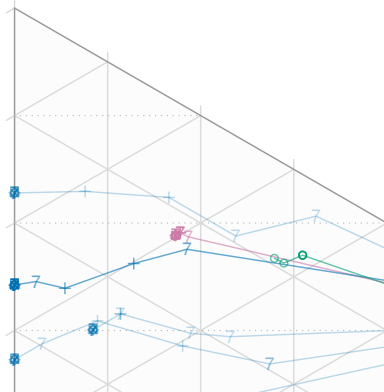
Dataset 25: CI = 0.28



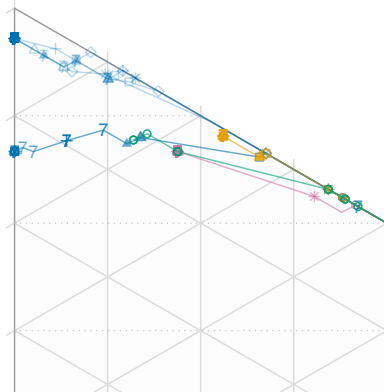
Dataset 26: CI = 0.27

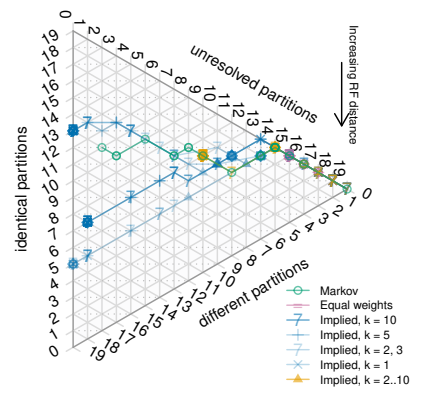
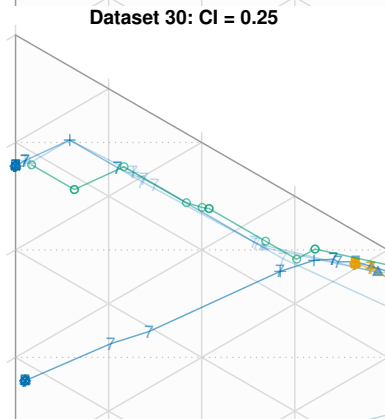
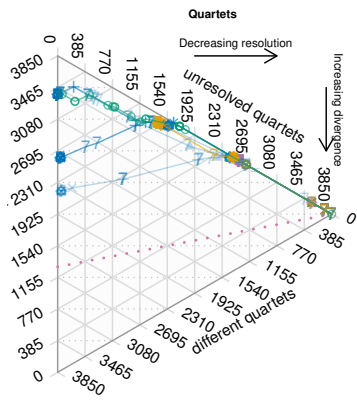
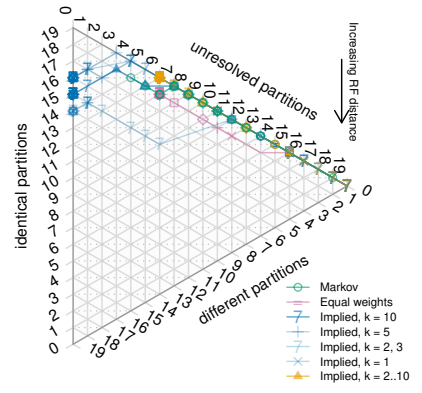
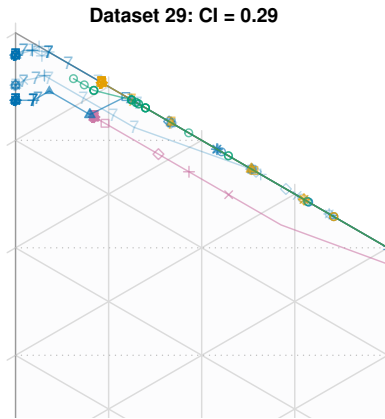
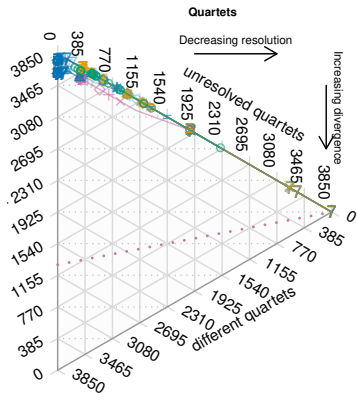


Dataset 27: CI = 0.26

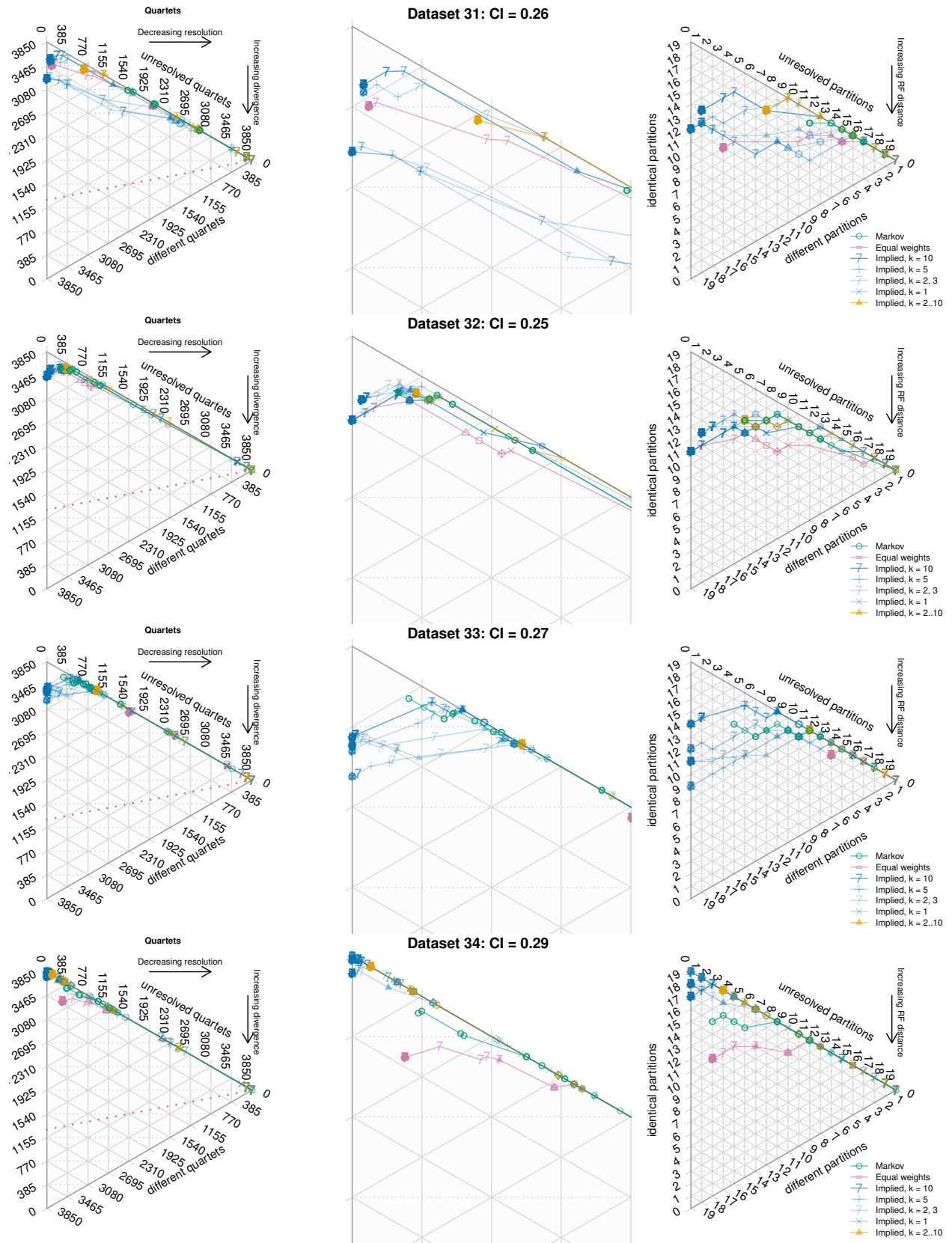


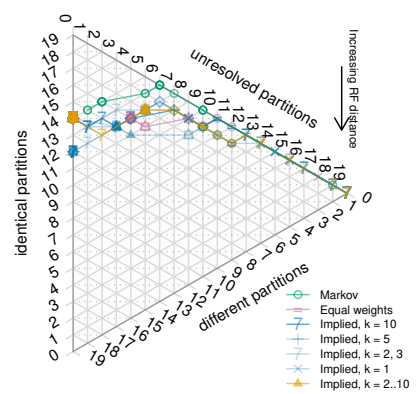
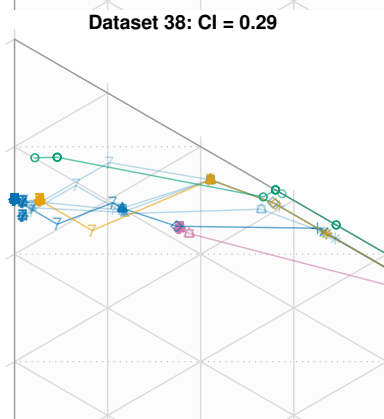
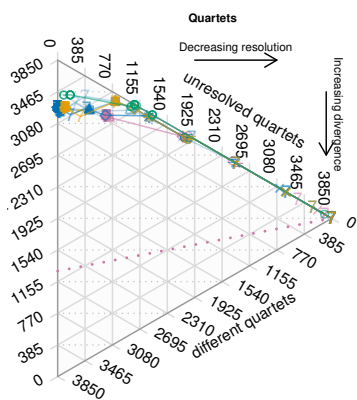
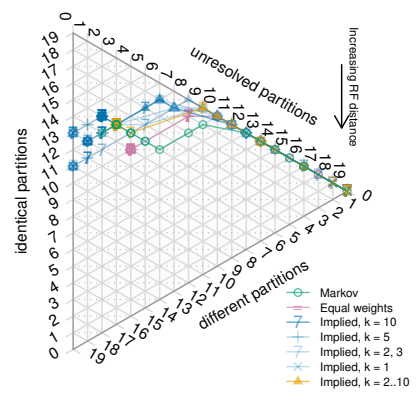
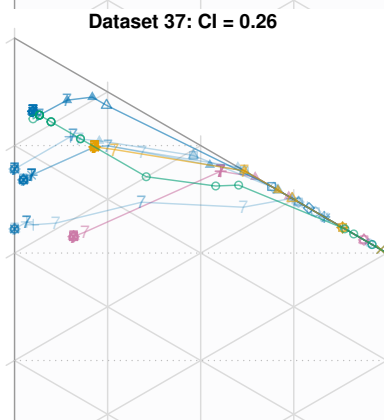
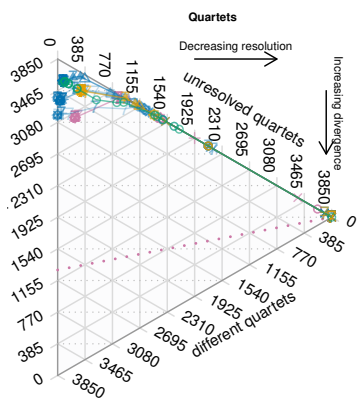
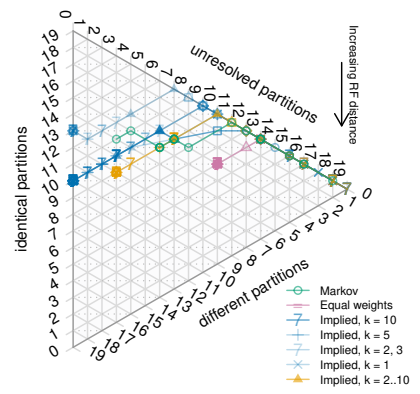
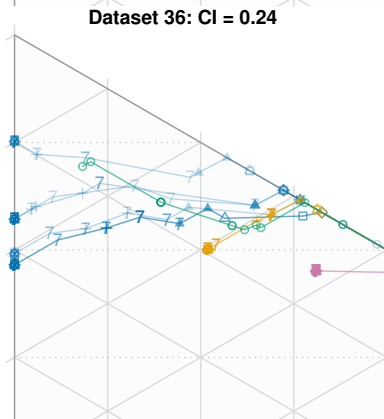
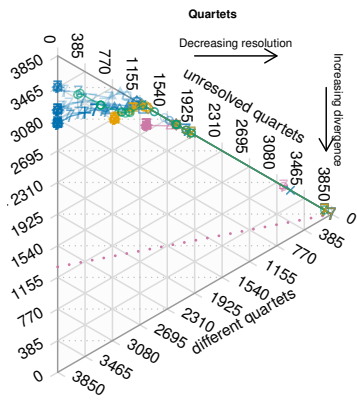
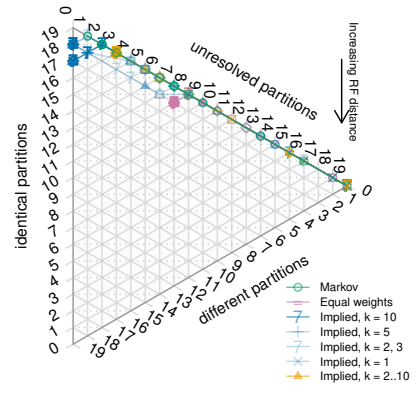
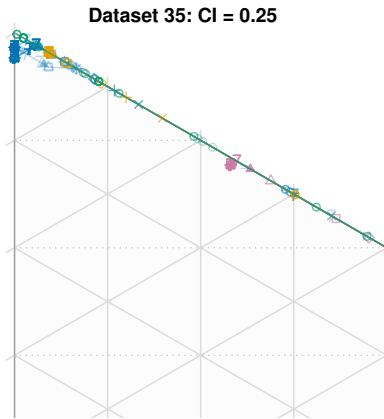
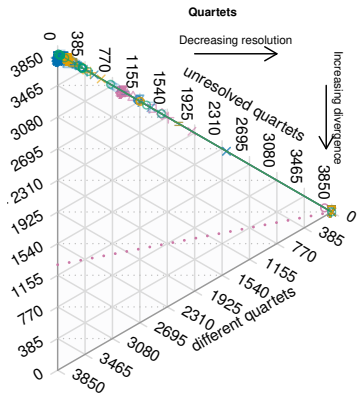
Dataset 28: CI = 0.27

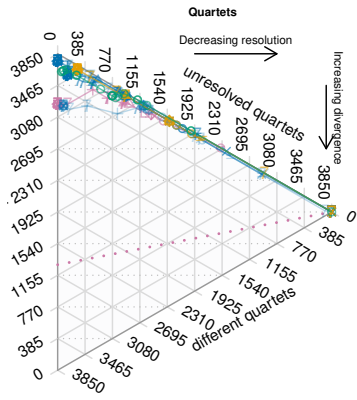




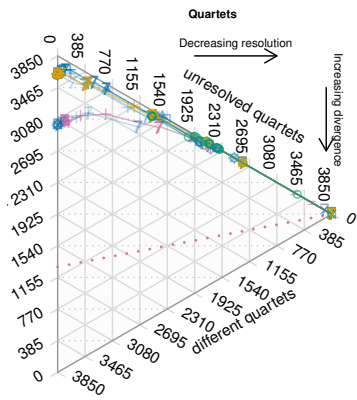
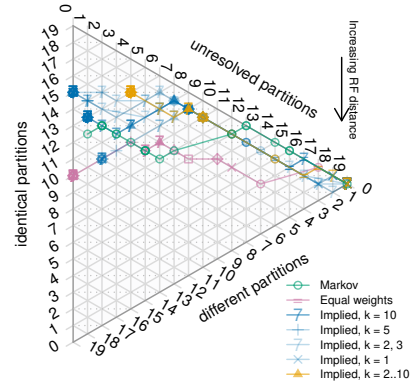
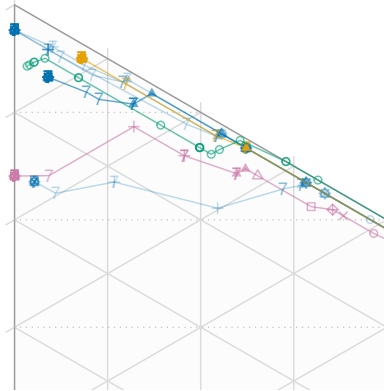
## 0.5 Trees 31–40



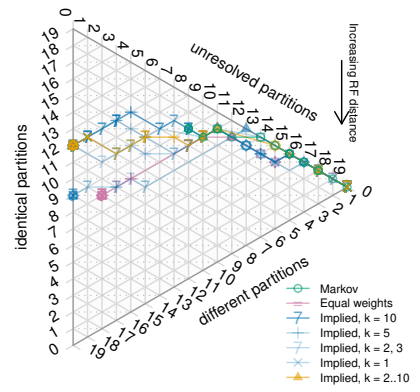
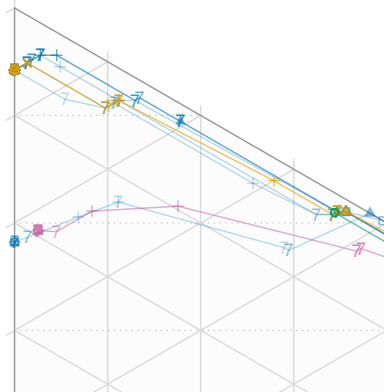




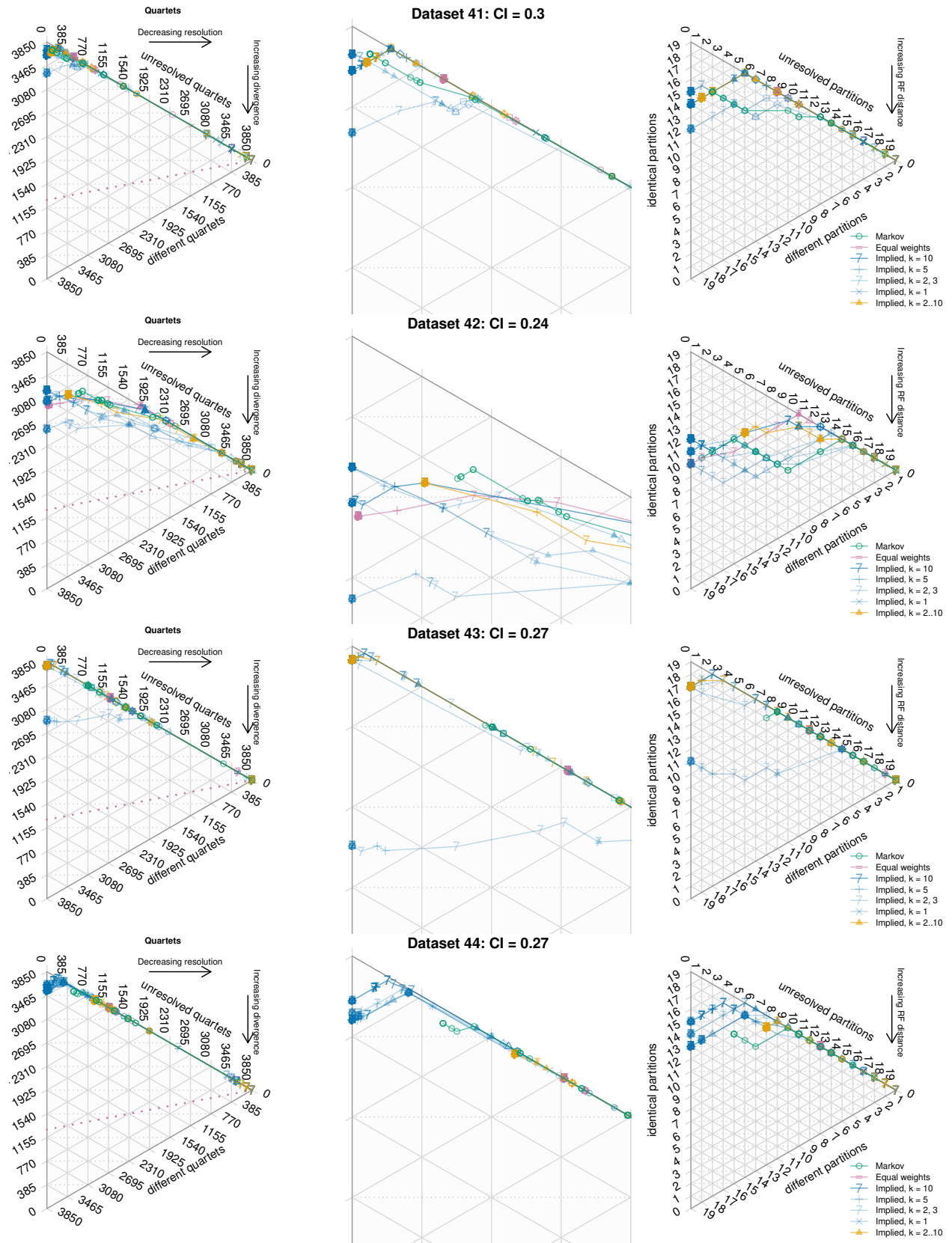
Dataset 39: CI = 0.25

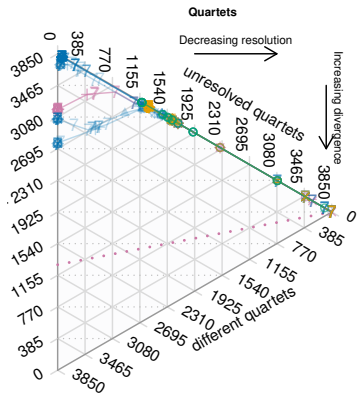


Dataset 40: CI = 0.24

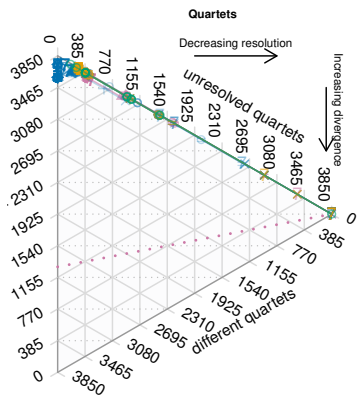
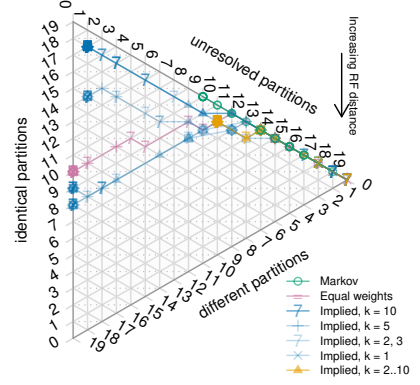
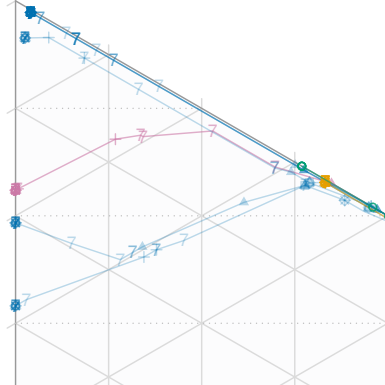


## 0.6 Trees 41–50

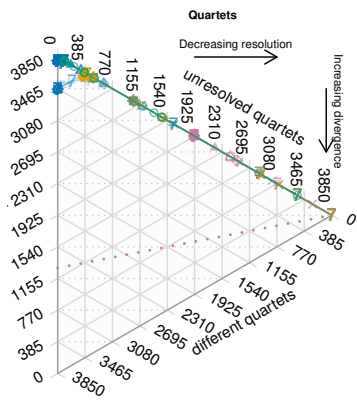
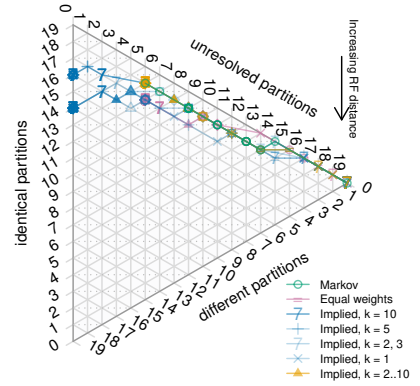
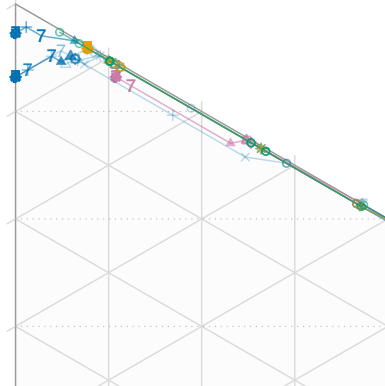




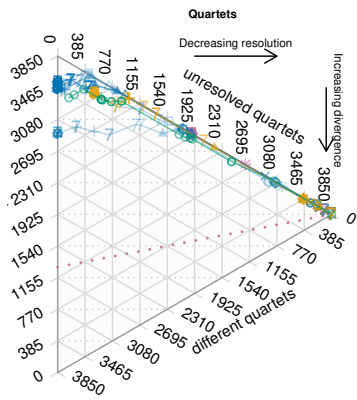
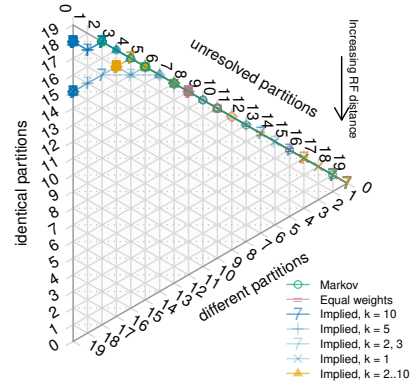
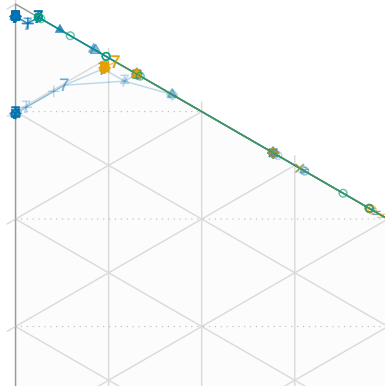
**Dataset 45: CI = 0.27**



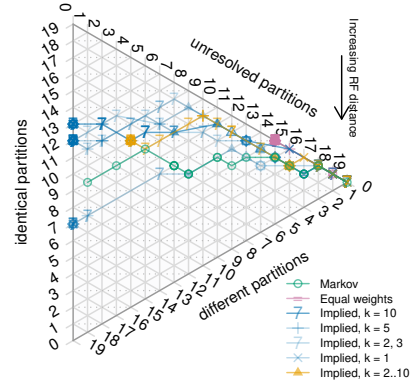
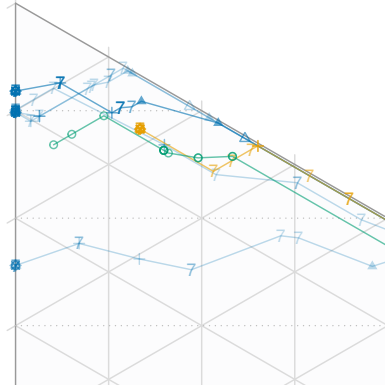
**Dataset 46: CI = 0.24**

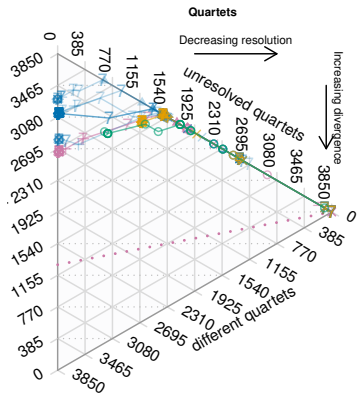


**Dataset 47: CI = 0.29**

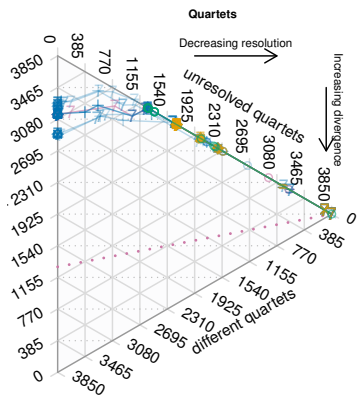
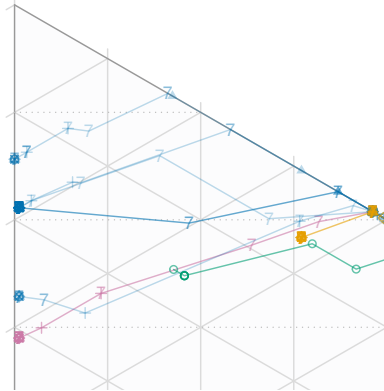


**Dataset 48: CI = 0.27**

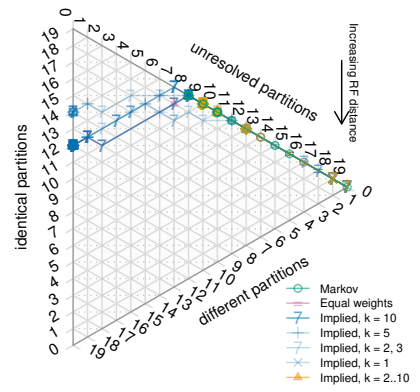
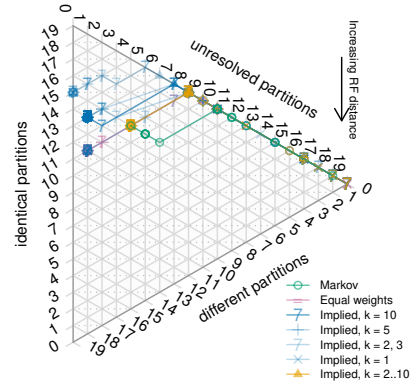
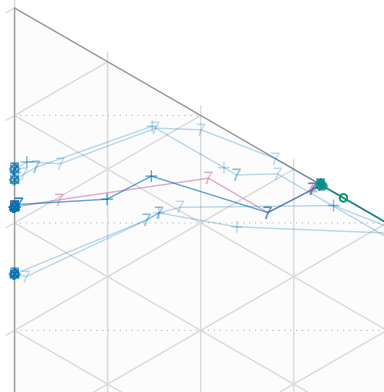




Dataset 49: CI = 0.28

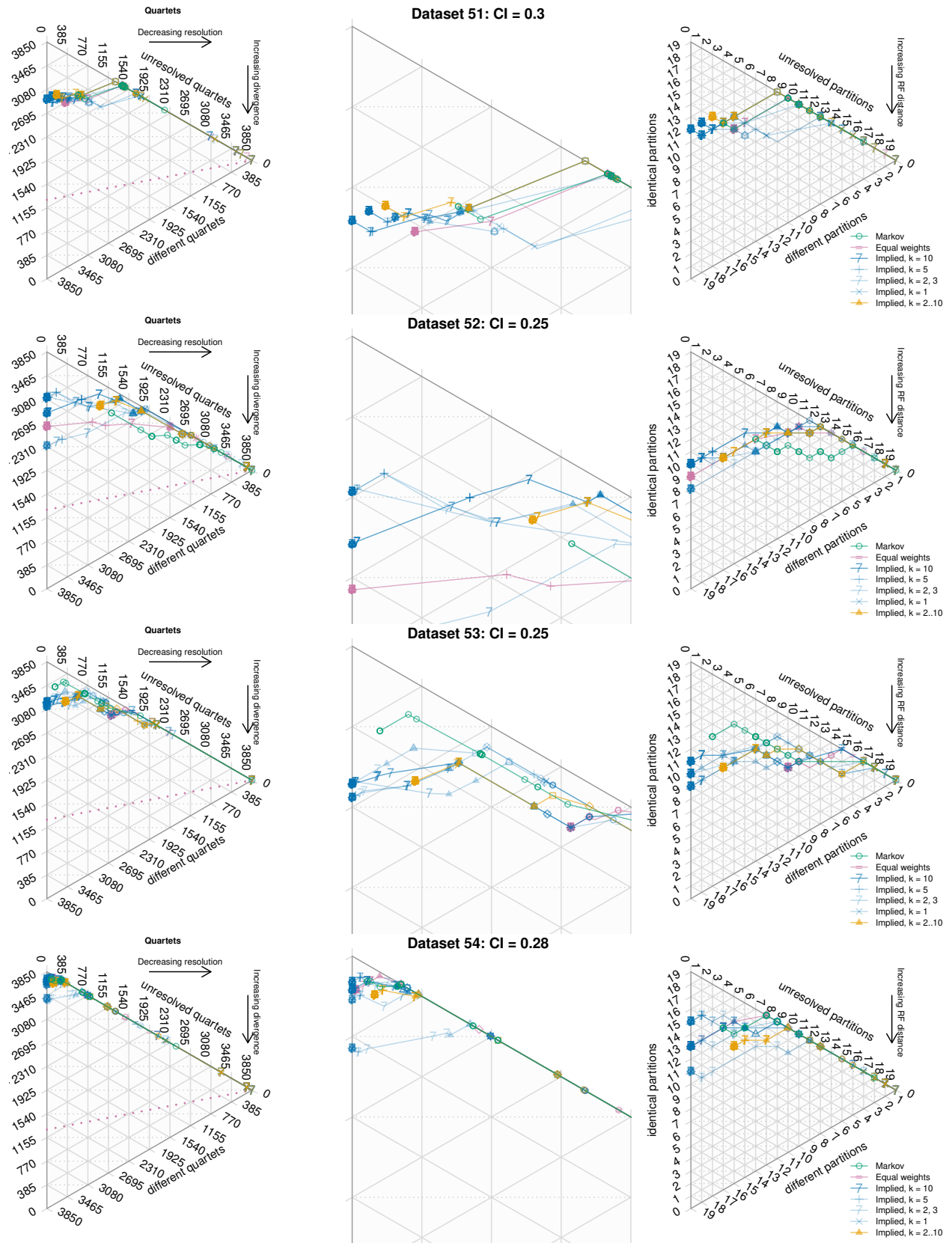


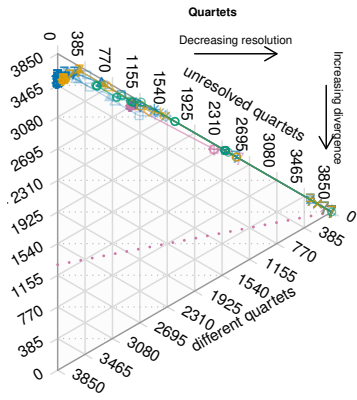
Dataset 50: CI = 0.25



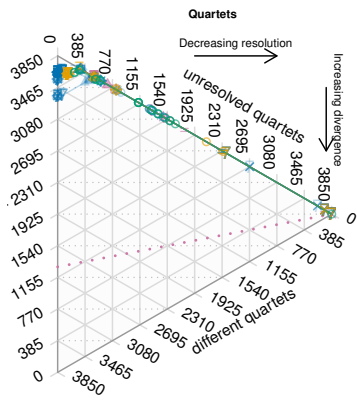
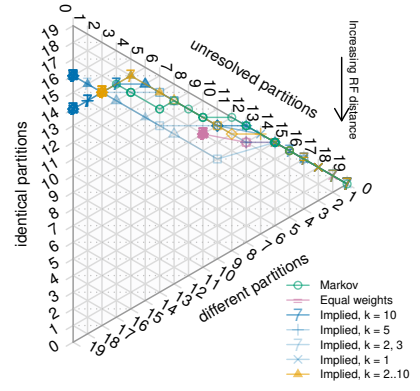
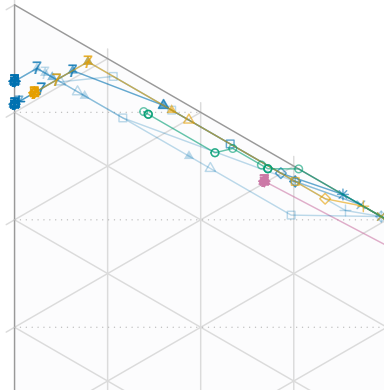


## 0.7 Trees 51–60

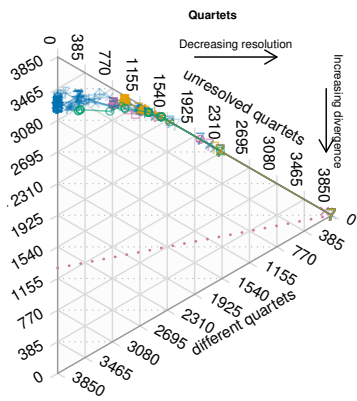
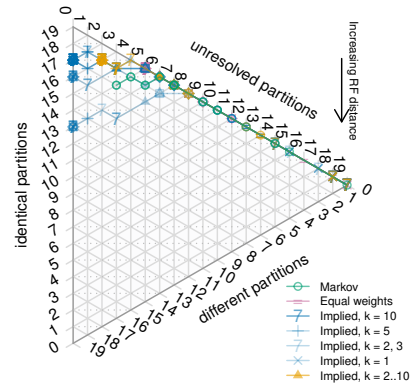
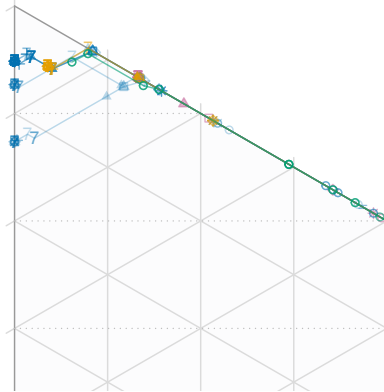




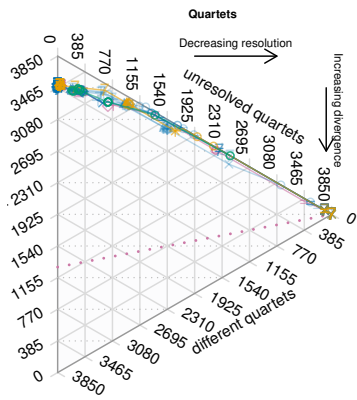
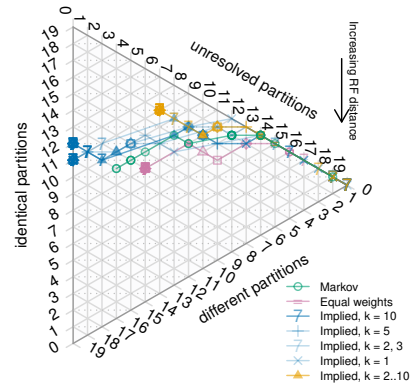
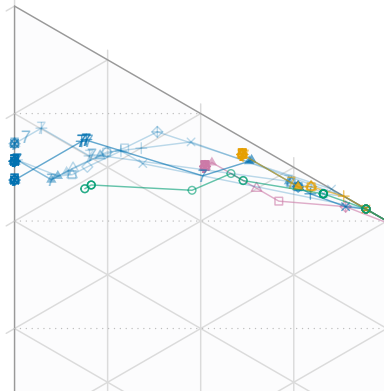
Dataset 55: CI = 0.28



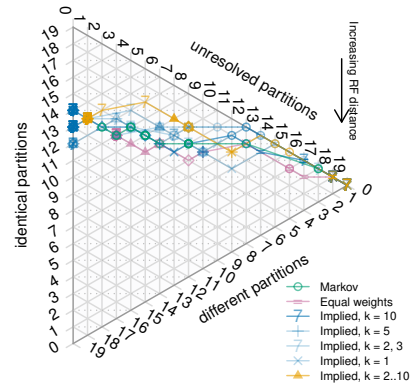
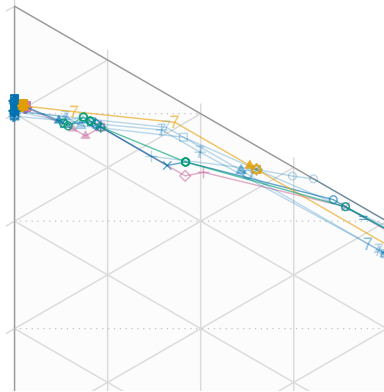
Dataset 56: CI = 0.31

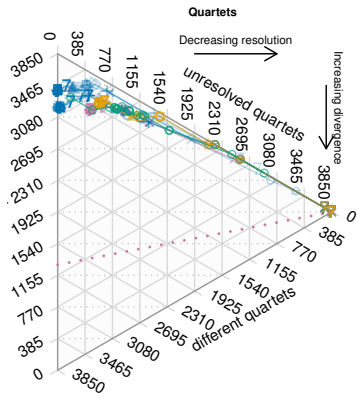


Dataset 57: CI = 0.25

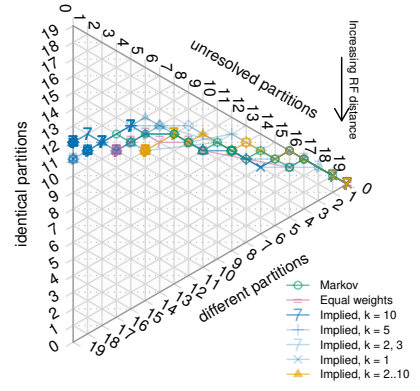
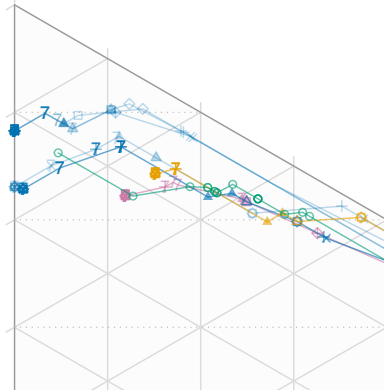


Dataset 58: CI = 0.25

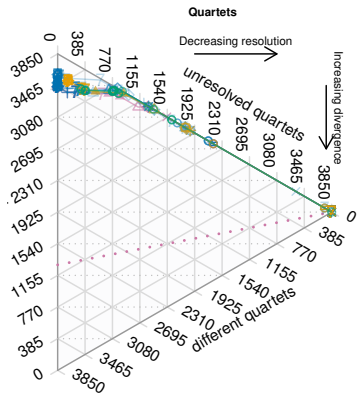
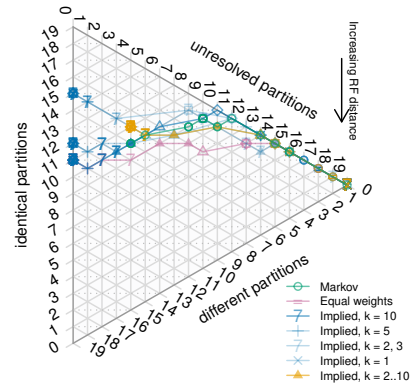
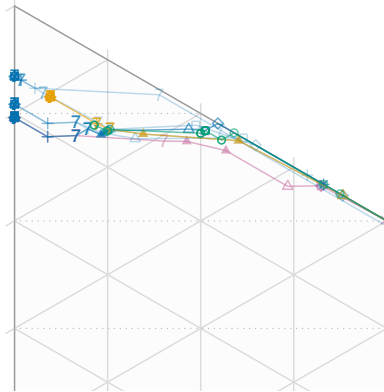




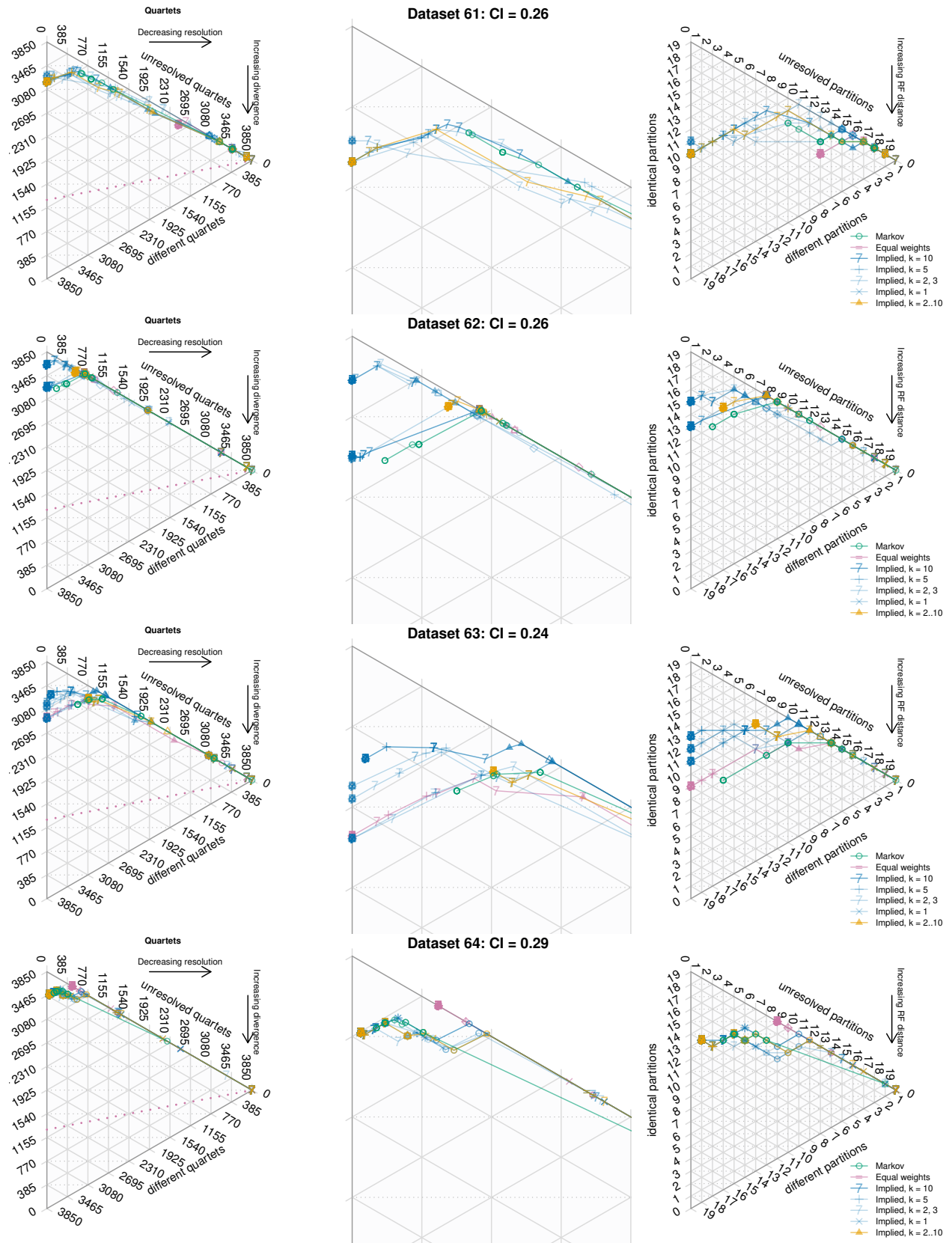
Dataset 59: CI = 0.26

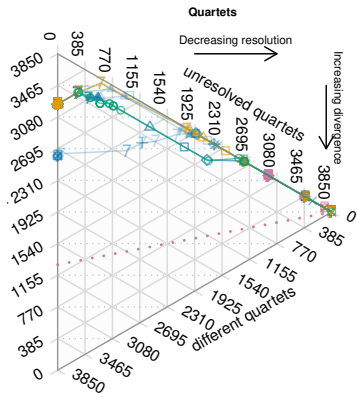


Dataset 60: CI = 0.24

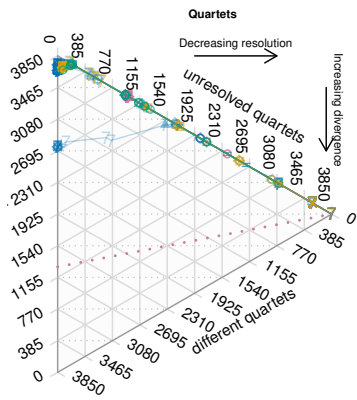
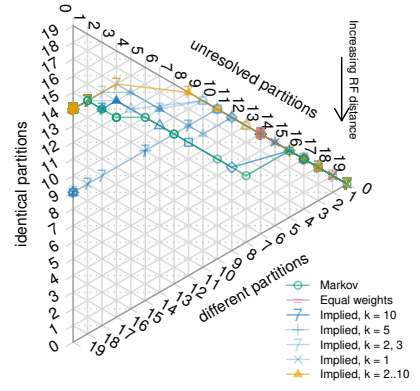
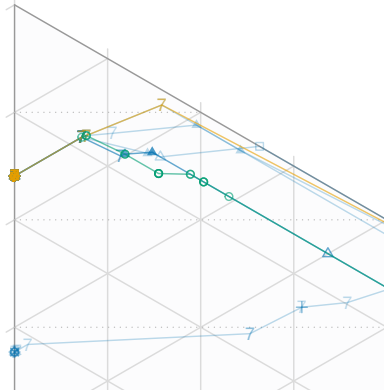


## 0.8 Trees 61–70

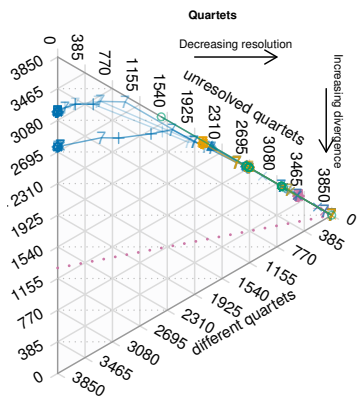
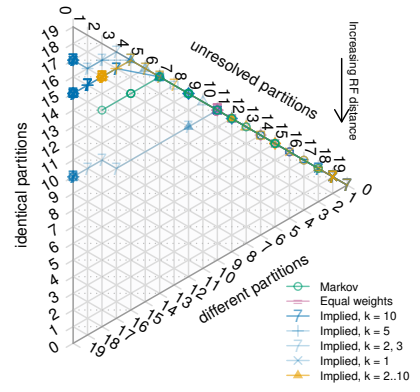
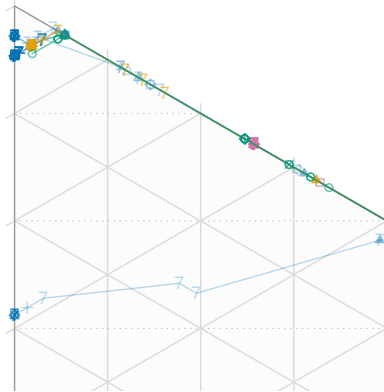




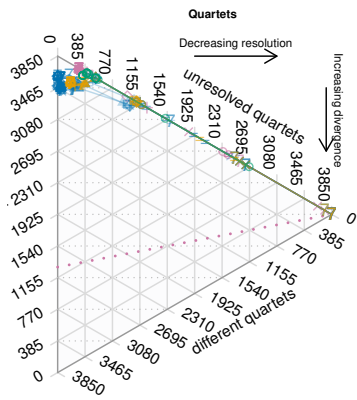
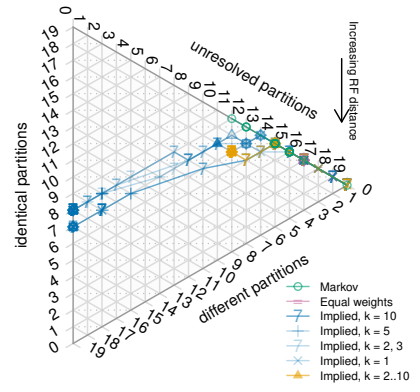
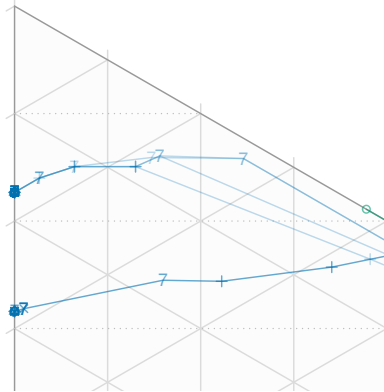
**Dataset 65: CI = 0.25**



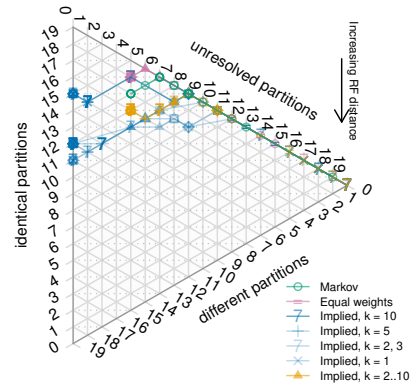
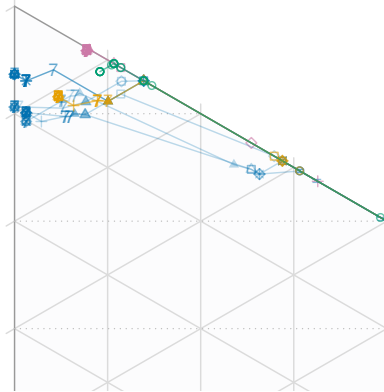
**Dataset 66: CI = 0.27**

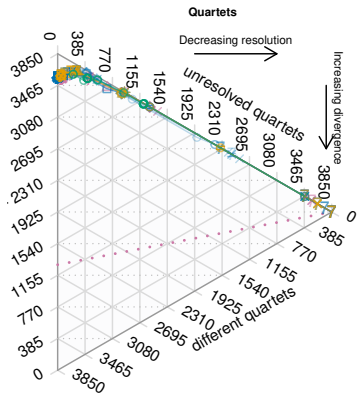


**Dataset 67: CI = 0.26**

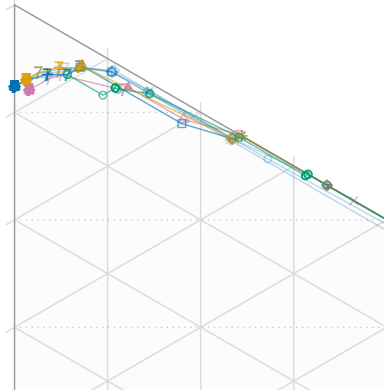


**Dataset 68: CI = 0.31**

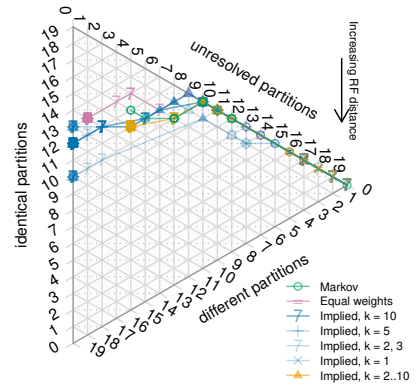
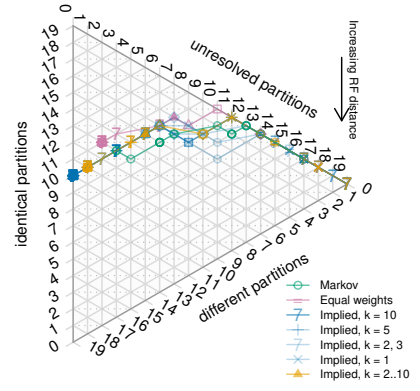
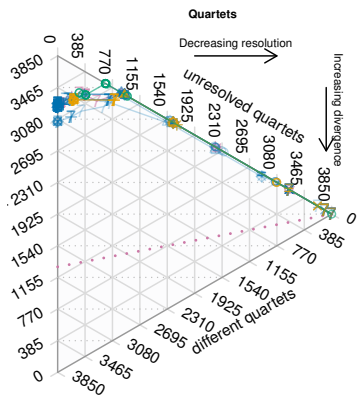
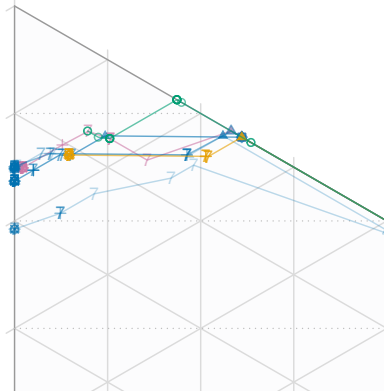




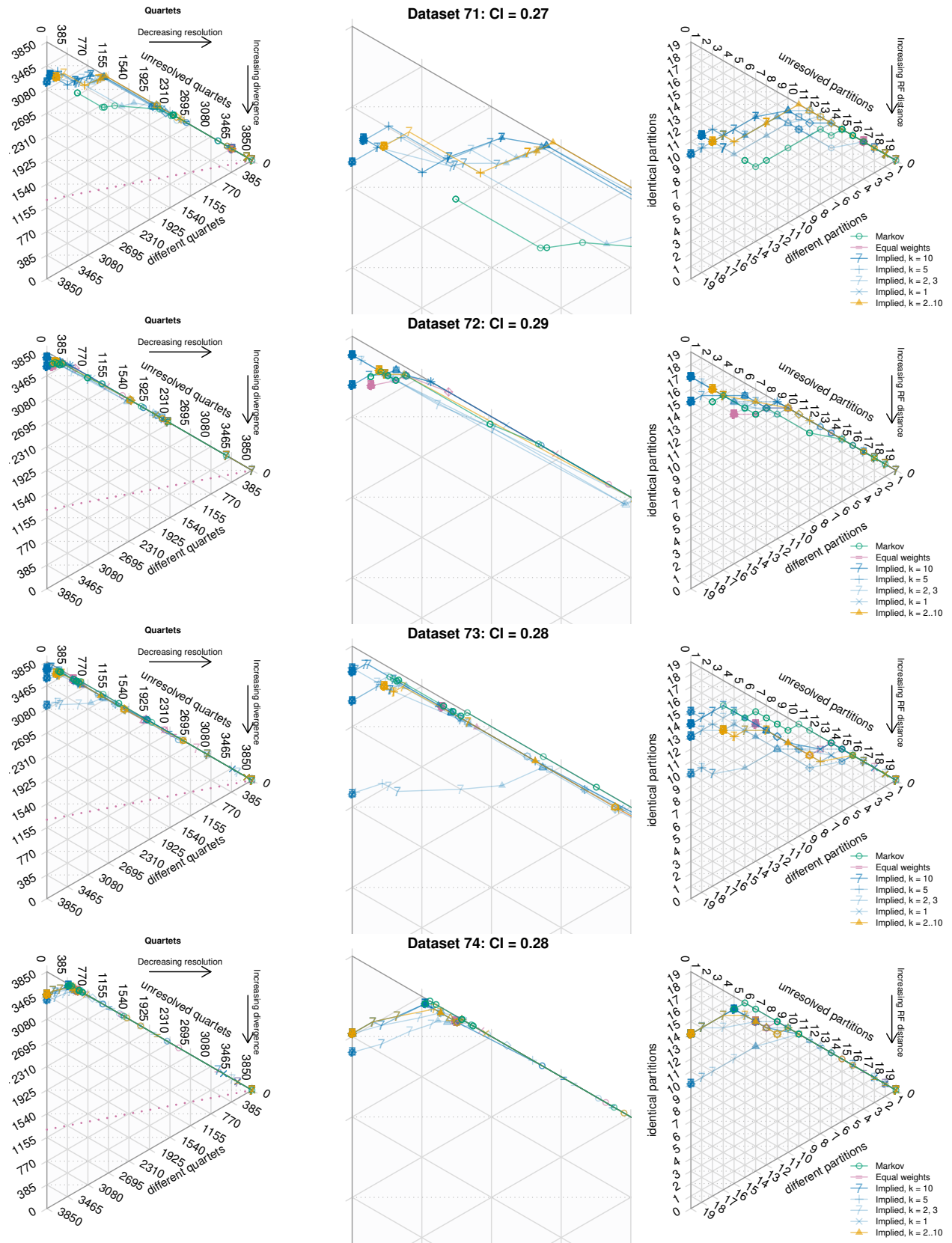
Dataset 69: CI = 0.27

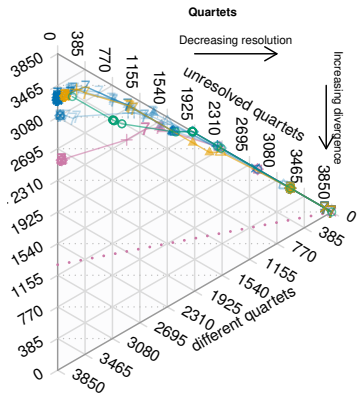


Dataset 70: CI = 0.27

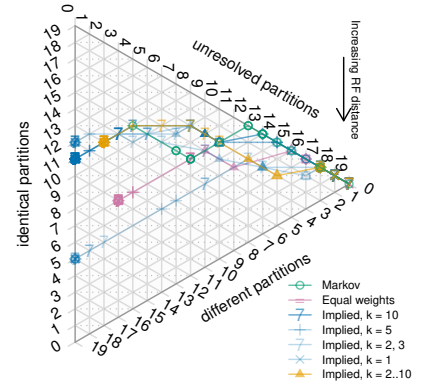
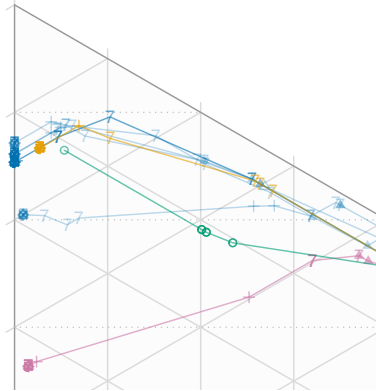


## 0.9 Trees 71–80

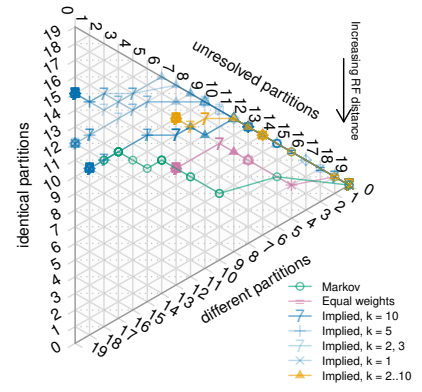
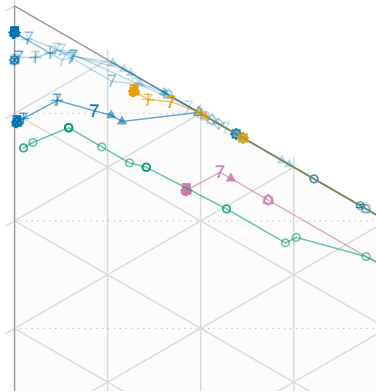




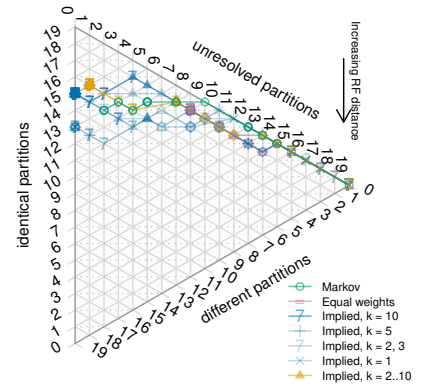
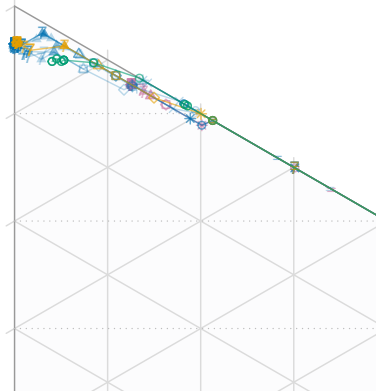
Dataset 75: CI = 0.24



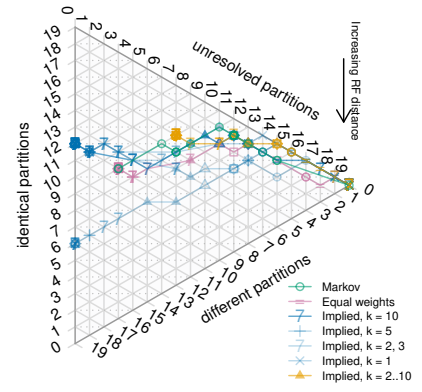
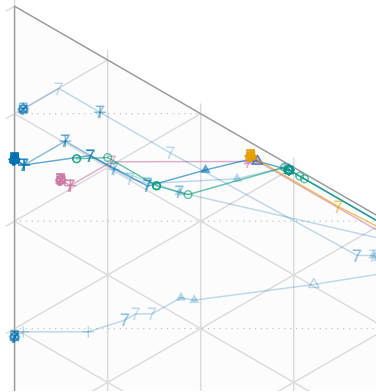
Dataset 76: CI = 0.26



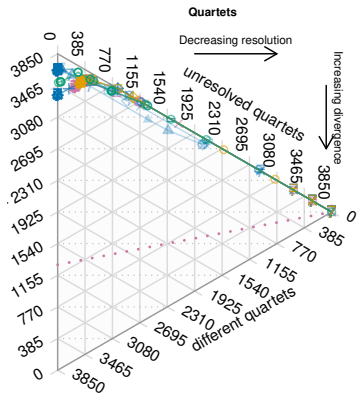
Dataset 77: CI = 0.28



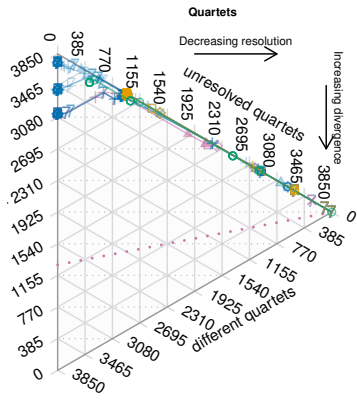
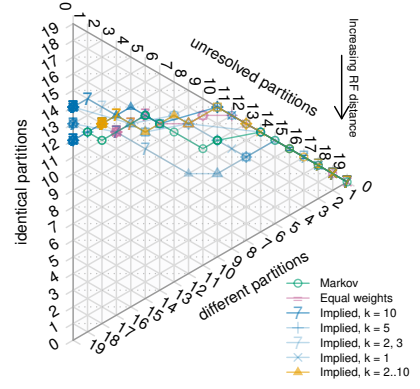
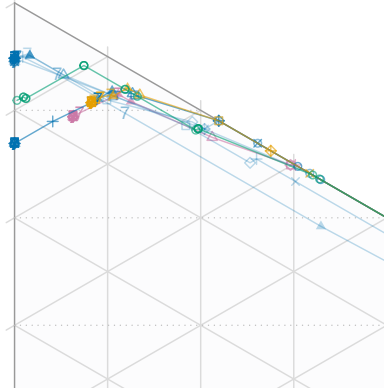
Dataset 78: CI = 0.24



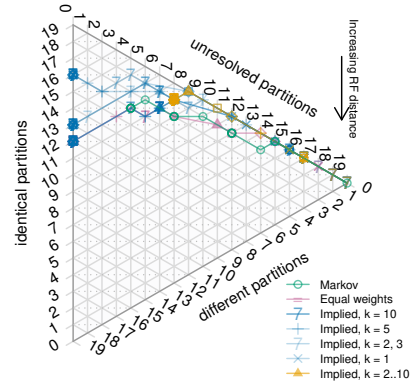
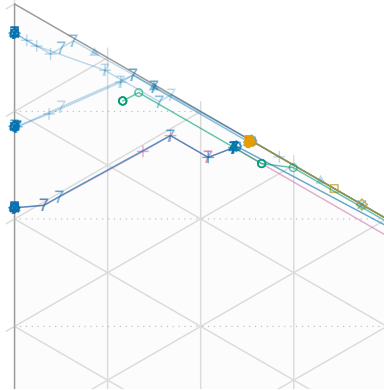




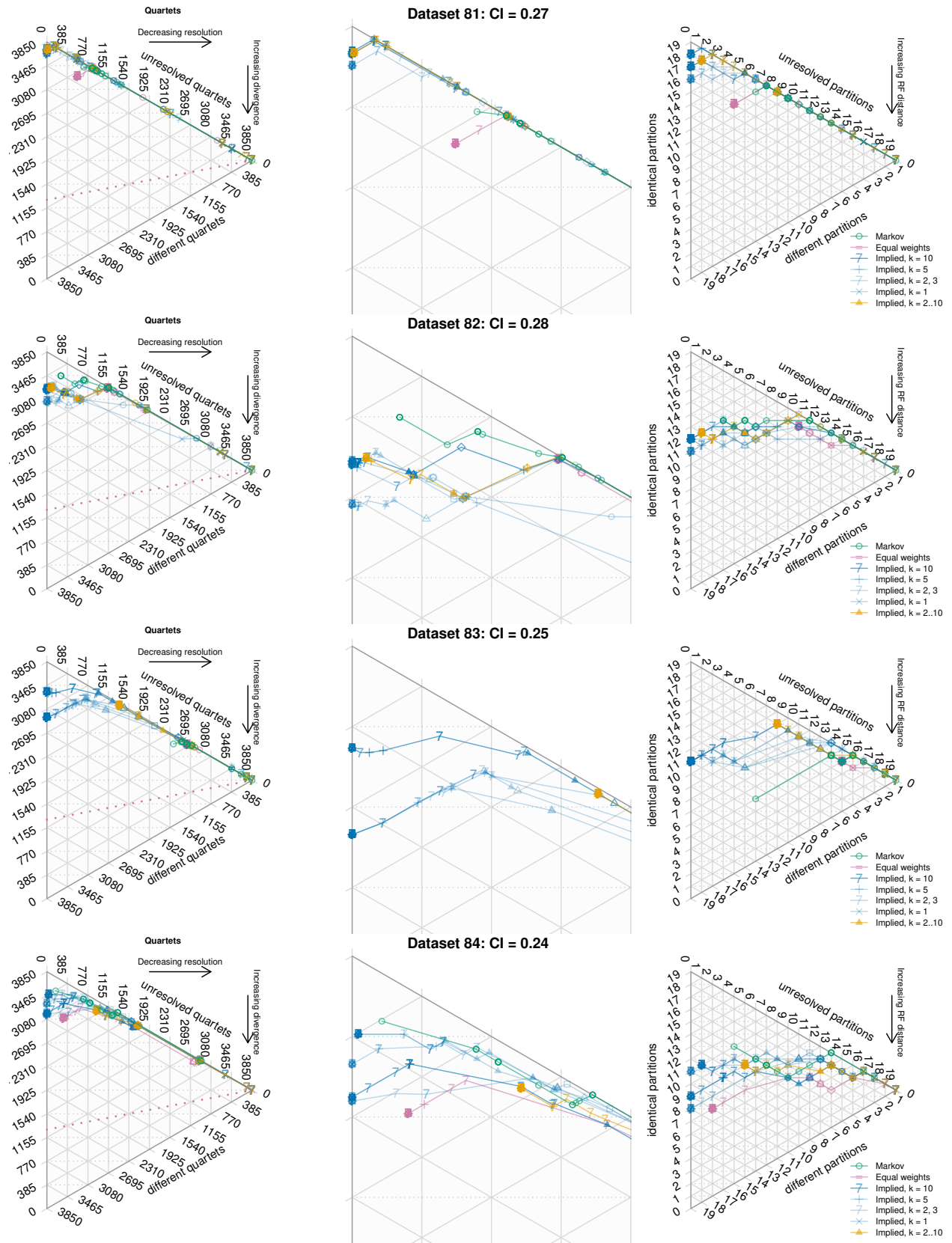
Dataset 79: CI = 0.24

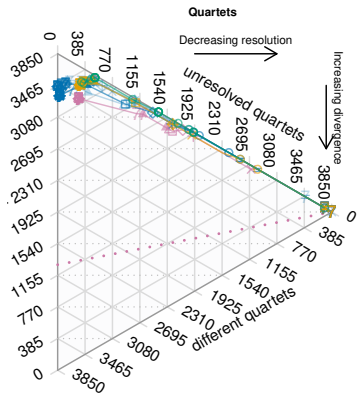


Dataset 80: CI = 0.27

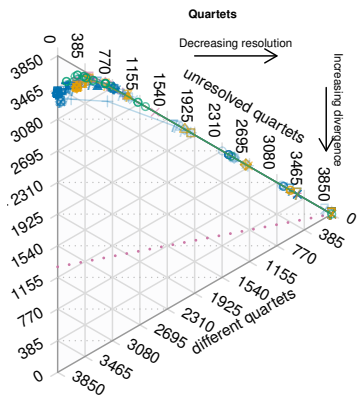
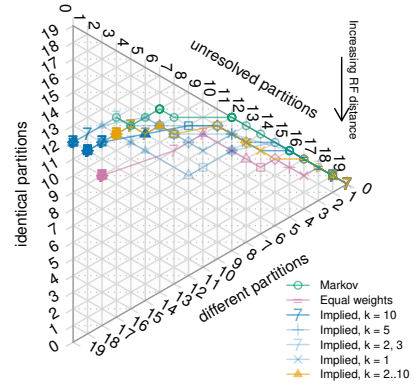
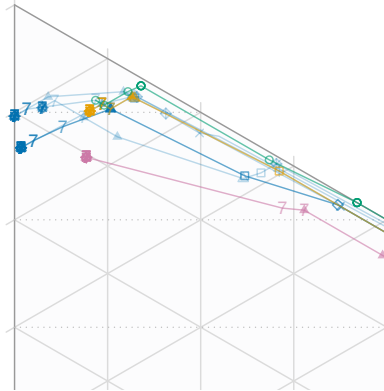


# 0.10 Trees 81–90

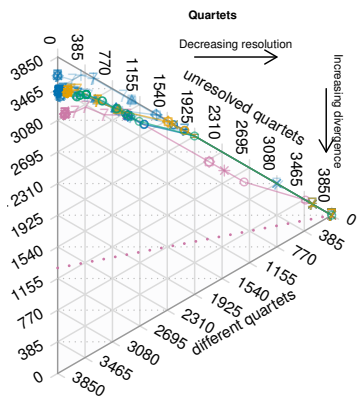
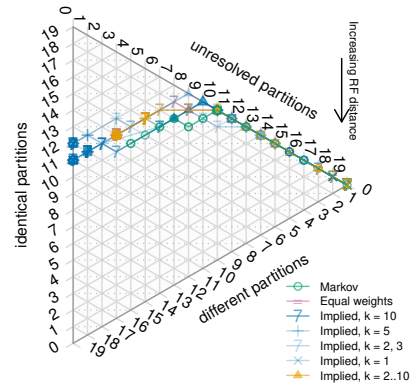
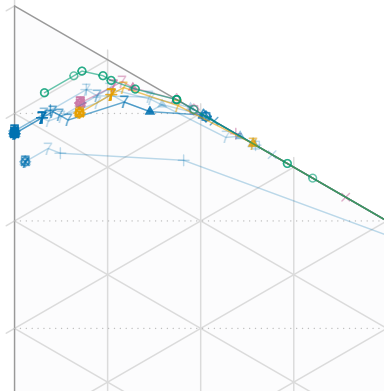




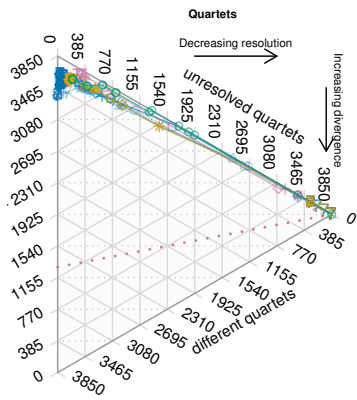
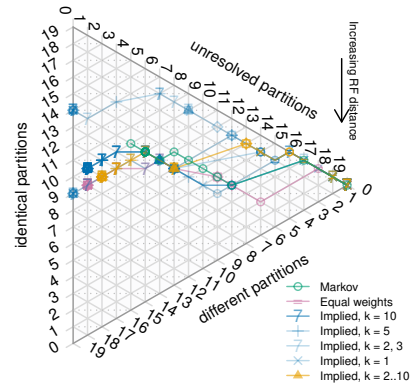
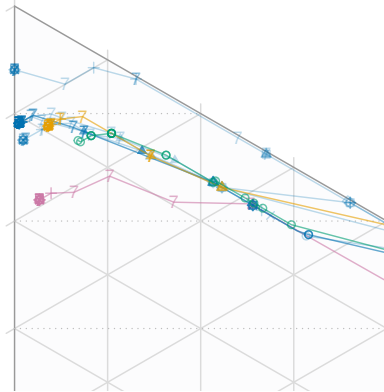
Dataset 85: CI = 0.27



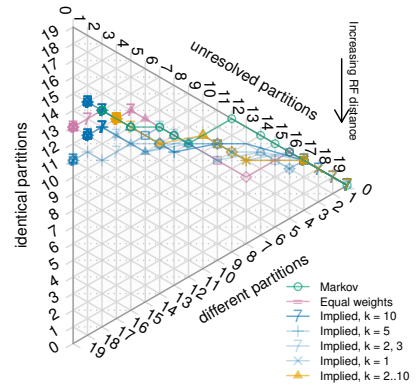
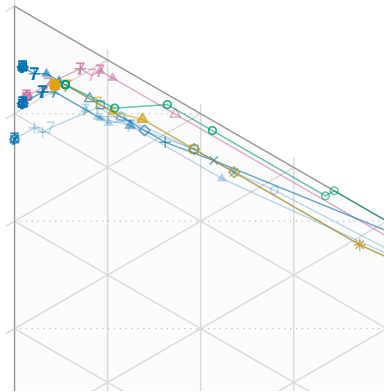
Dataset 86: CI = 0.27

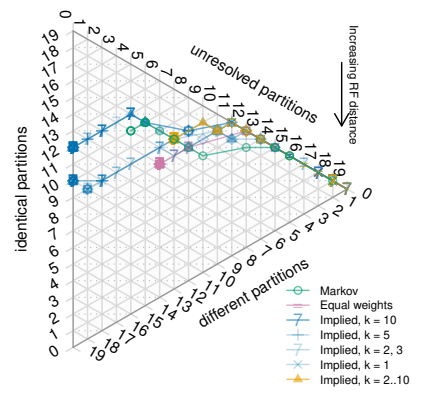
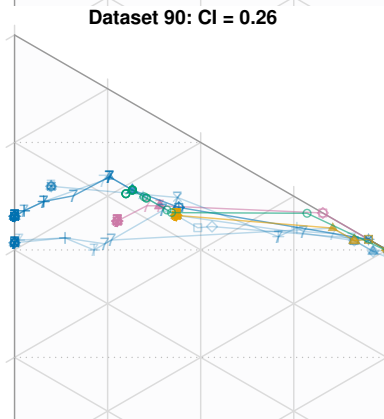
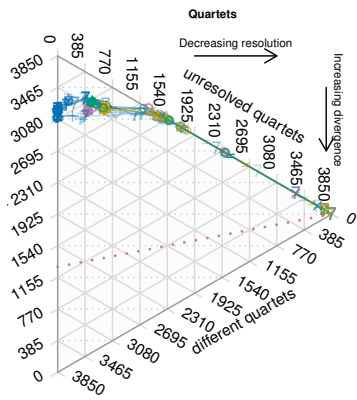
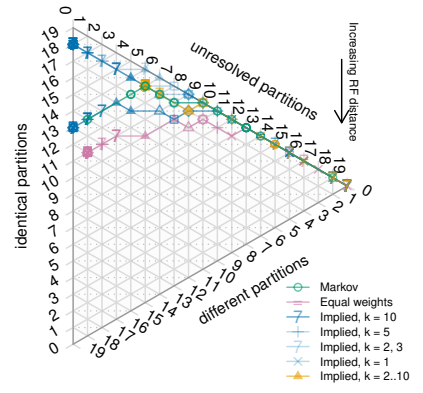
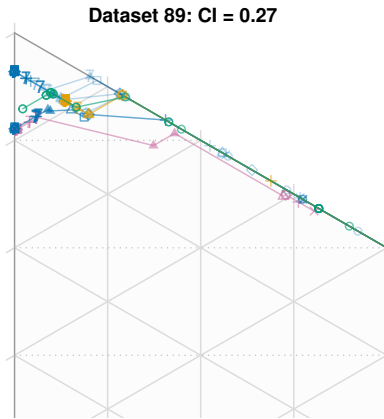
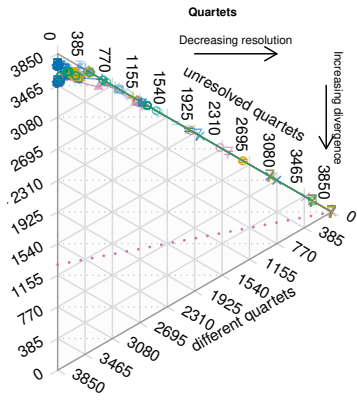


Dataset 87: CI = 0.23

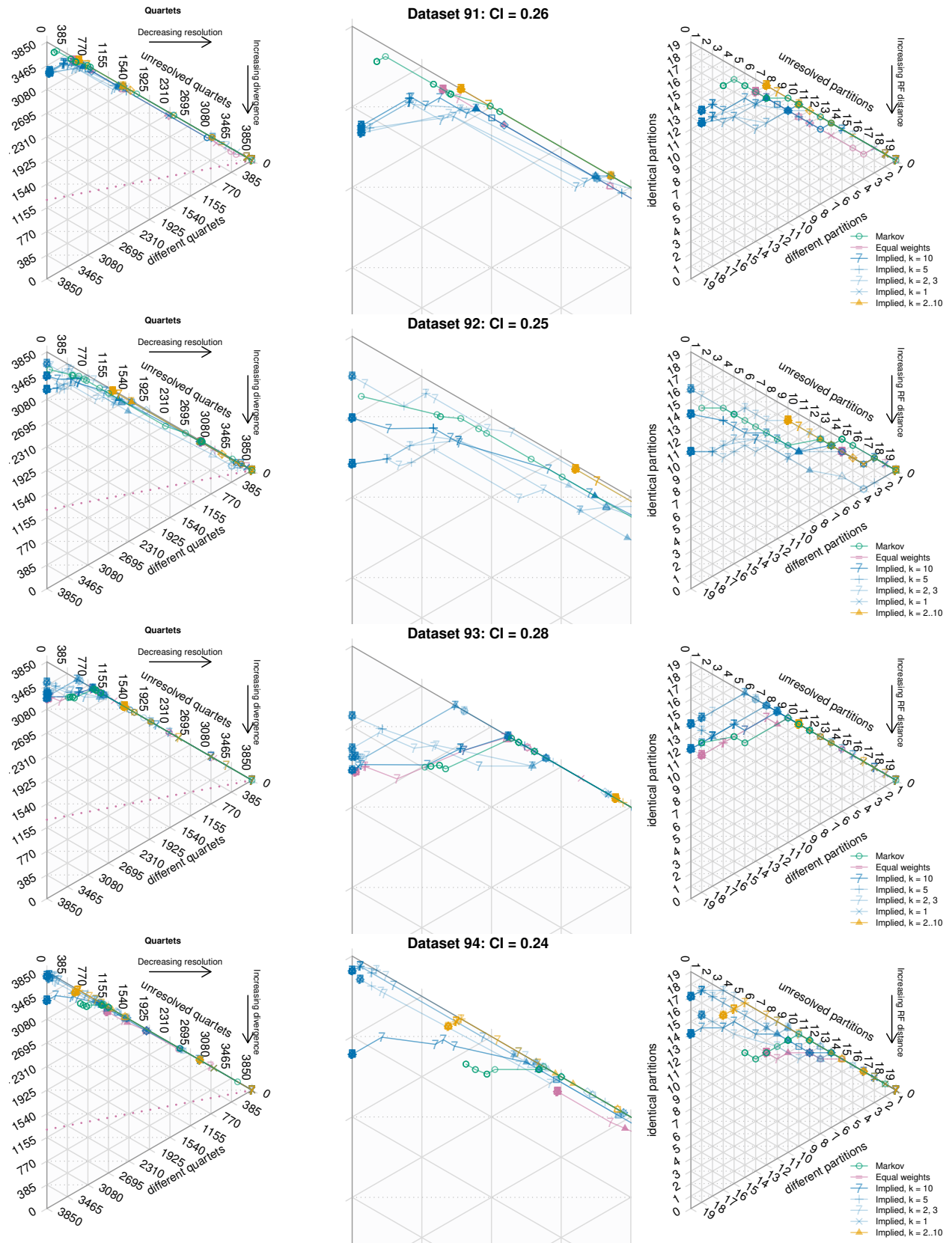


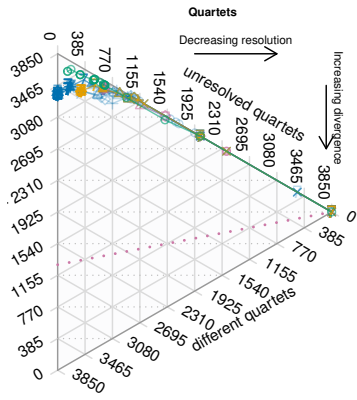
Dataset 88: CI = 0.25



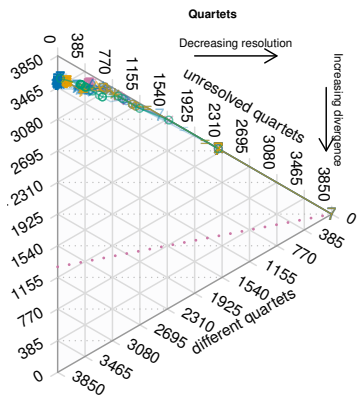
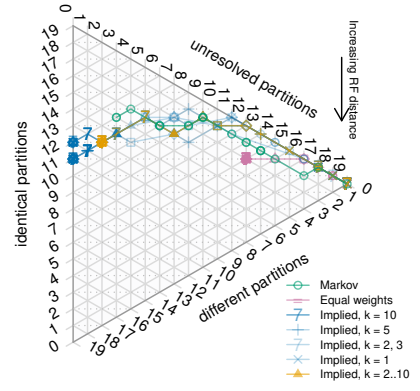
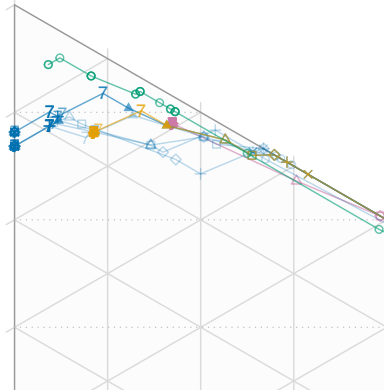


# 0.11 Trees 91–100

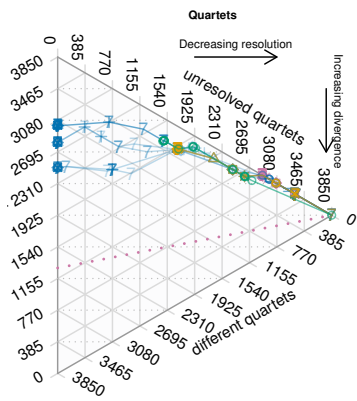
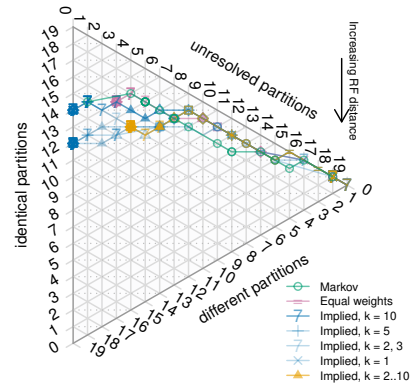
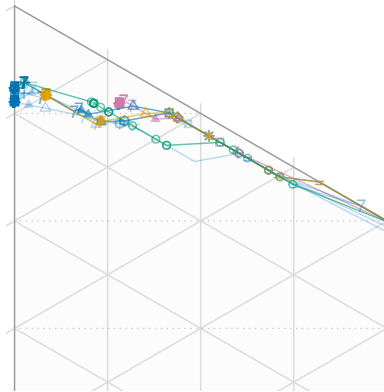




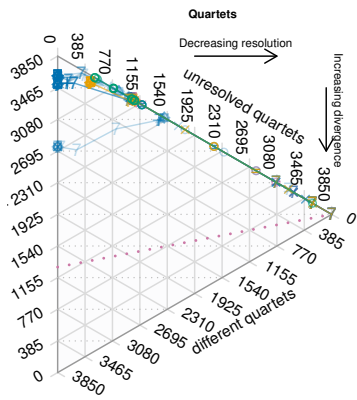
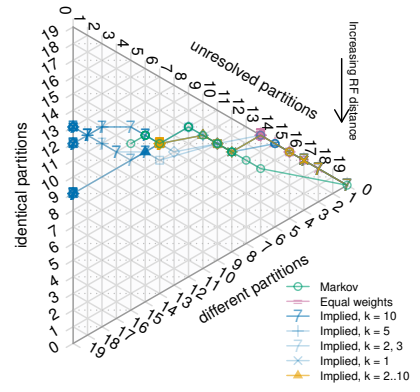
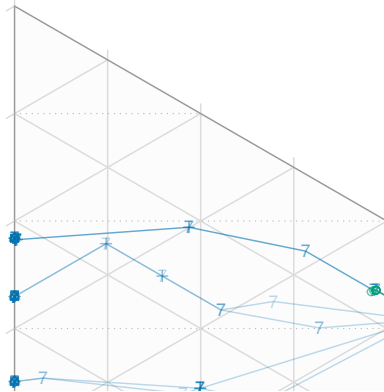
Dataset 95: CI = 0.24



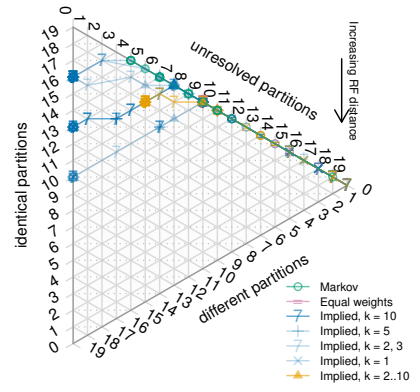
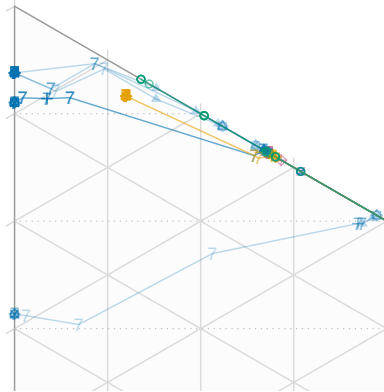
Dataset 96: CI = 0.26

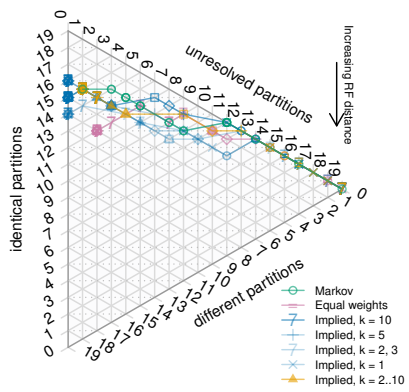
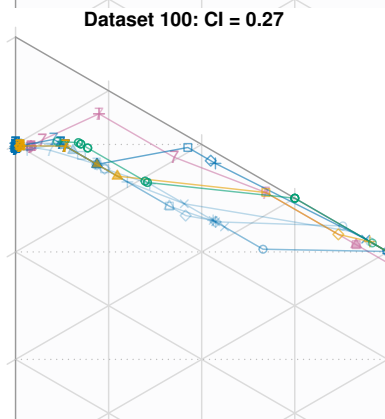
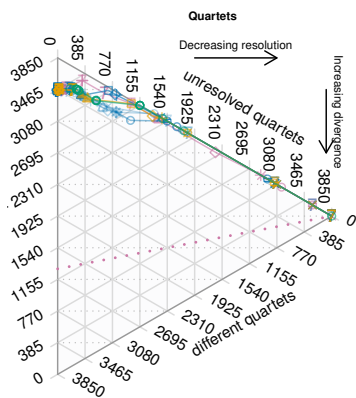
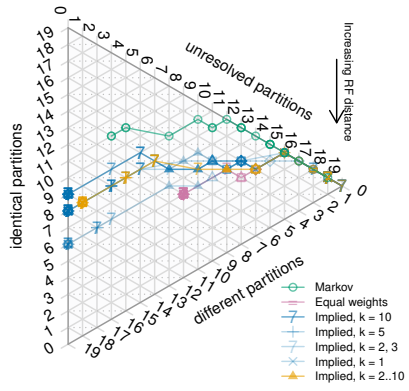
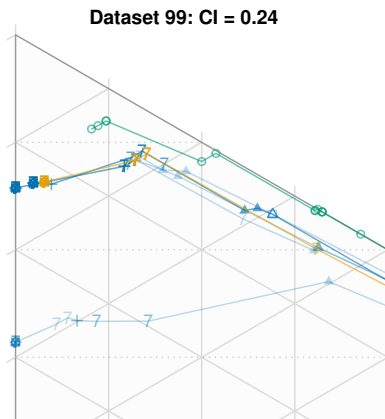
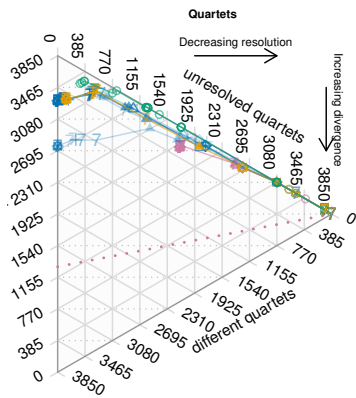


Dataset 97: CI = 0.27



Dataset 98: CI = 0.26





## References

1. Congreve CR, Lamsdell JC. 2016 Implied weighting and its utility in palaeontological datasets: a study using modelled phylogenetic matrices. *Palaeontology* **59**, 447–465. (doi:10.1111/pala.12236)
2. Smith MR. 2019 Bayesian and parsimony approaches reconstruct informative trees from simulated morphological datasets. *Biology Letters* **15**, 20180632. (doi:10.1098/rsbl.2018.0632)