

Resolution and accuracy in Congreve & Lamsdell matrices

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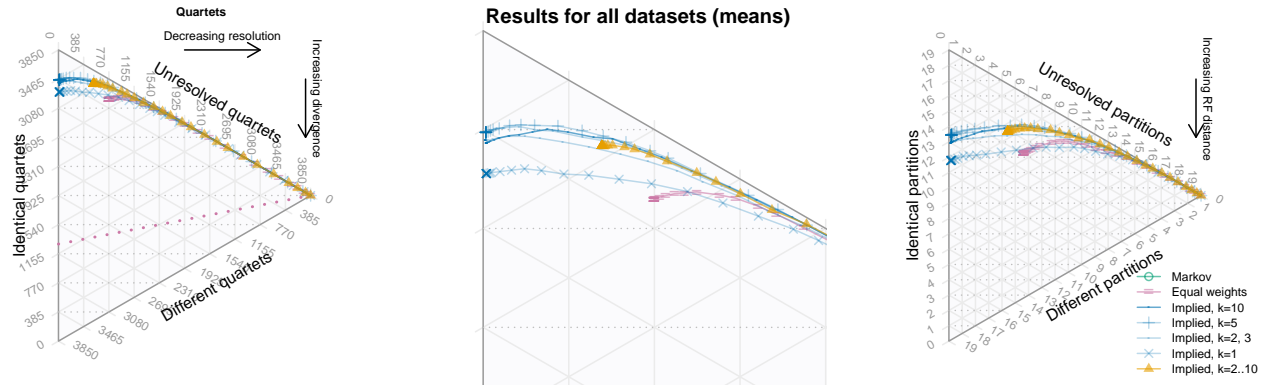
2019-01-20

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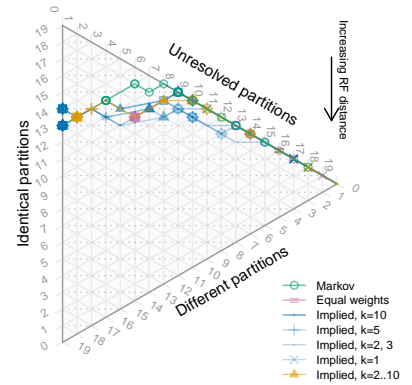
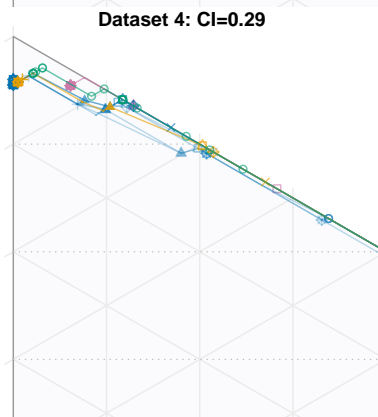
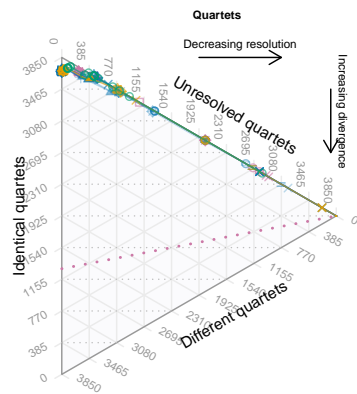
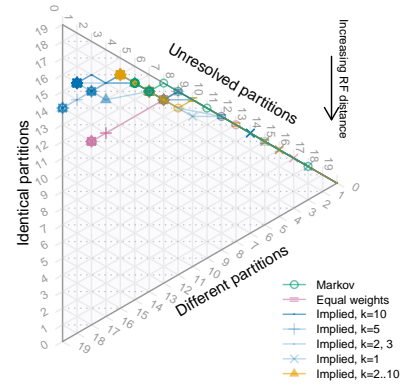
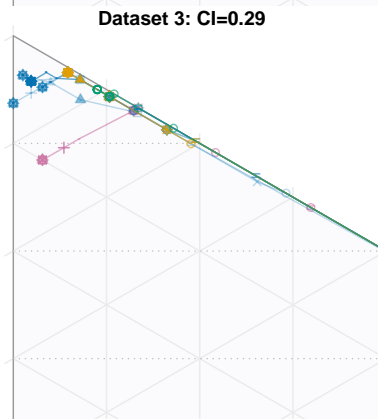
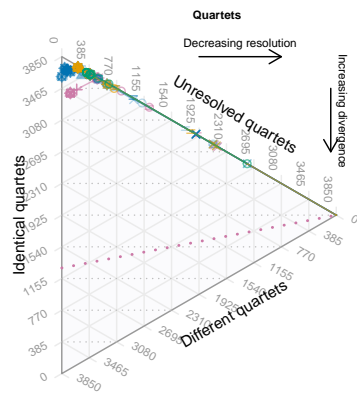
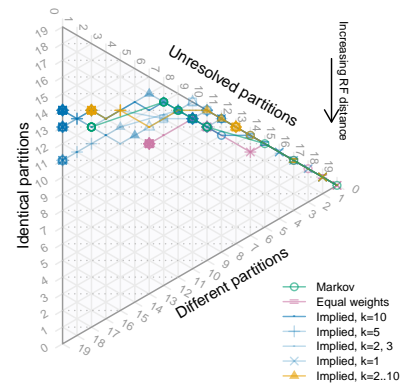
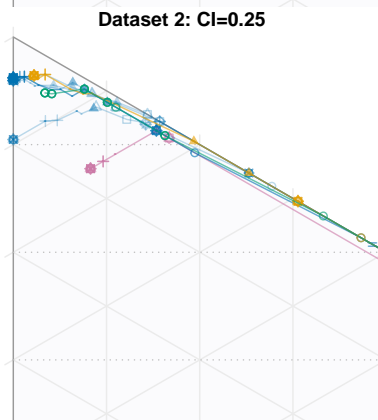
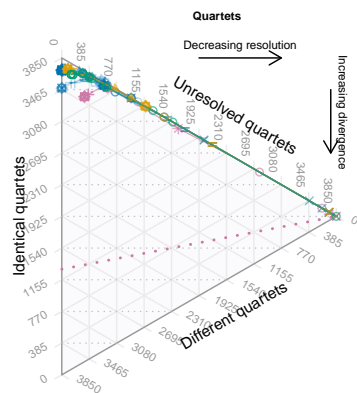
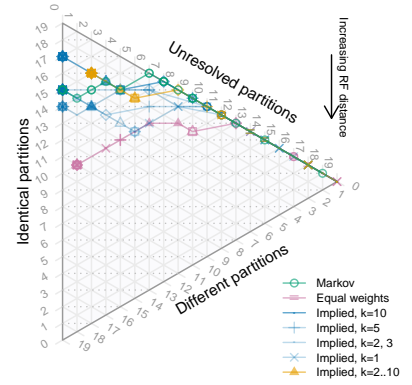
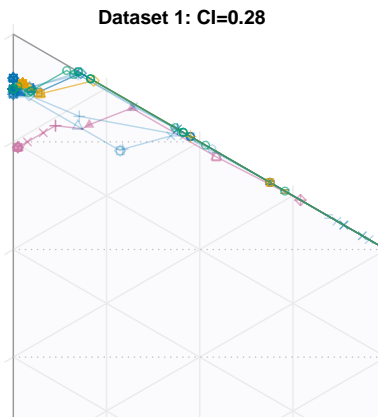
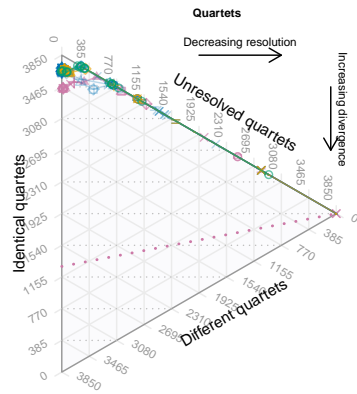
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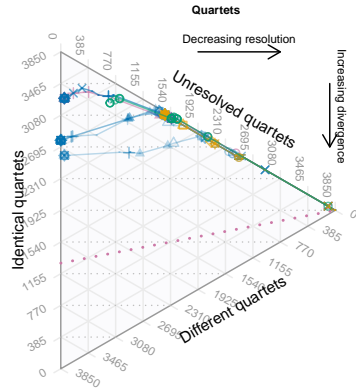
This page depicts the analytical results of all 100 matrices generated by Congreve & Lamsdell [1] using a ternary plotting approach [2], with quartets and partitions used as distance metrics.

0.1 Summary

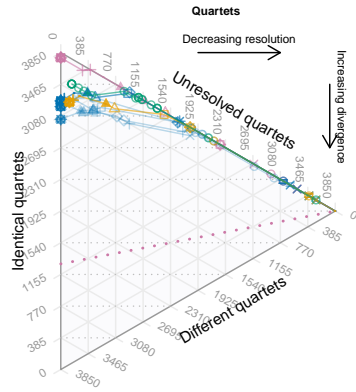
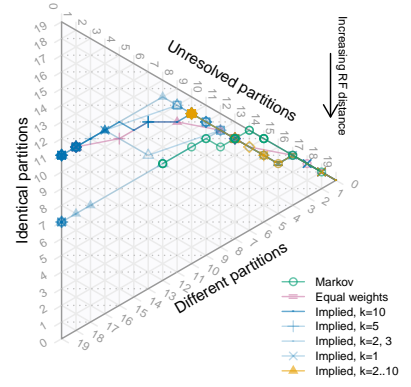


0.2 Trees 1–10

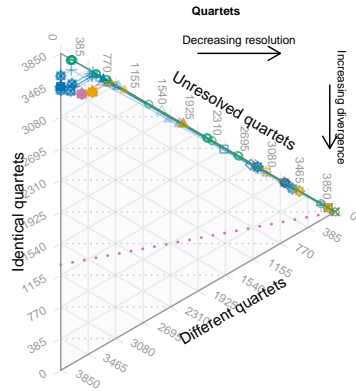
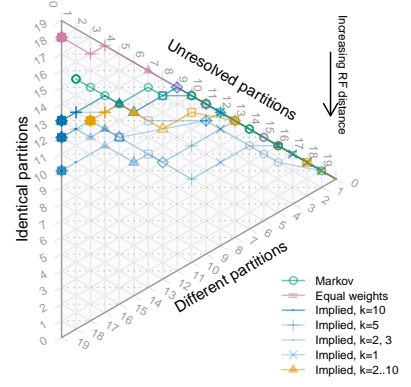




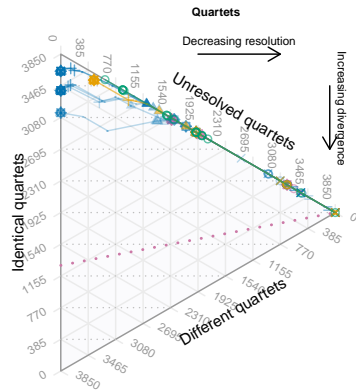
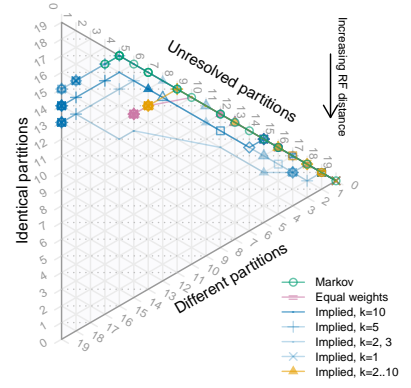
Dataset 5: CI=0.26



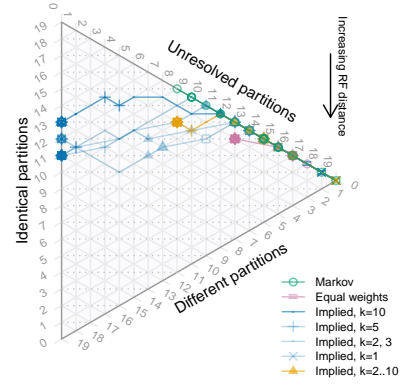
Dataset 6: CI=0.26

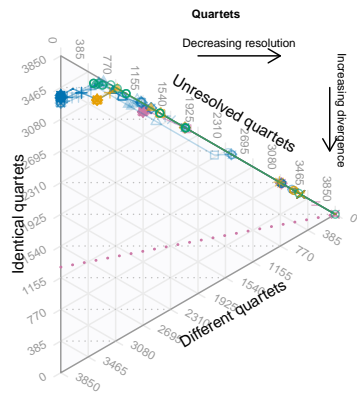


Dataset 7: CI=0.27

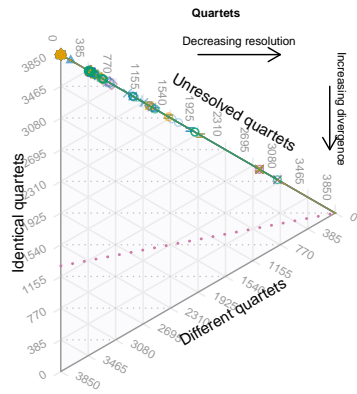
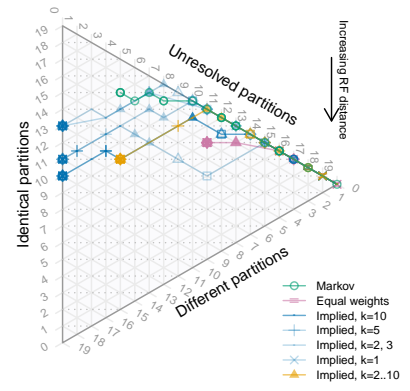
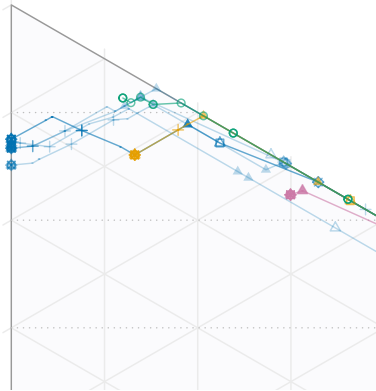


Dataset 8: CI=0.25

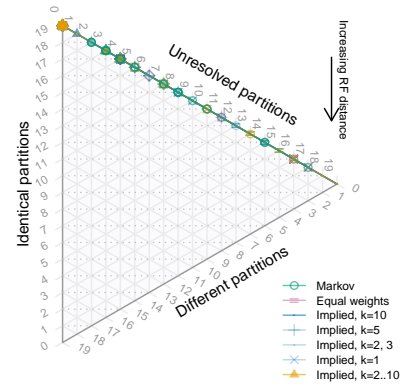
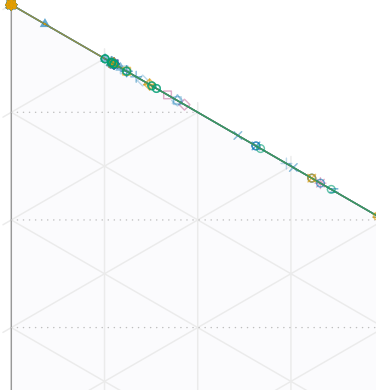




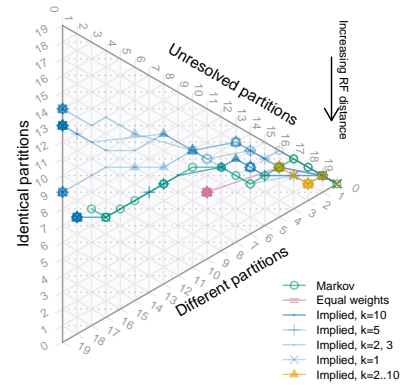
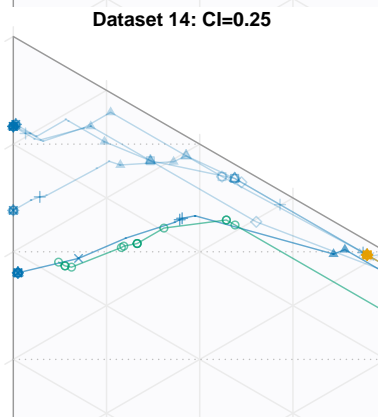
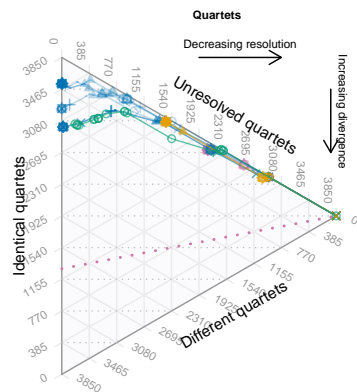
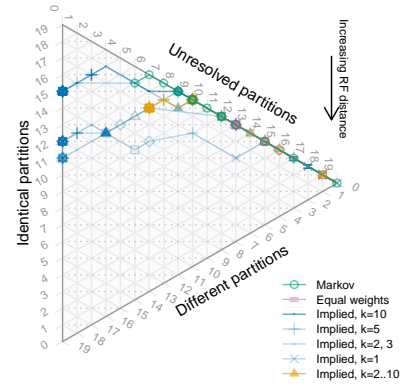
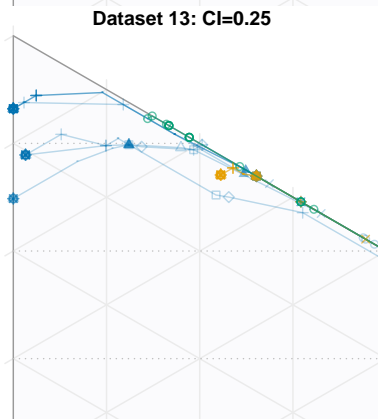
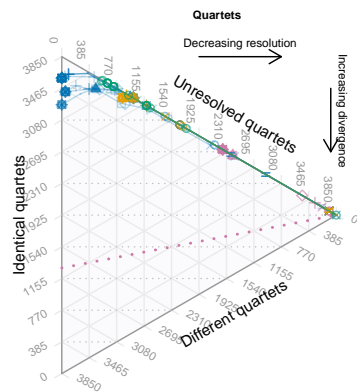
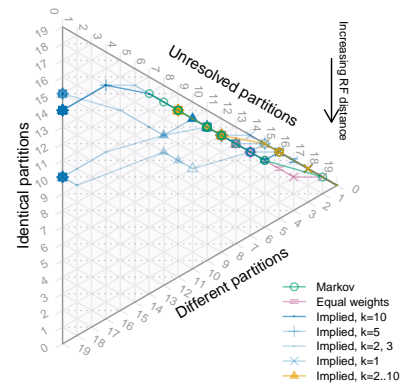
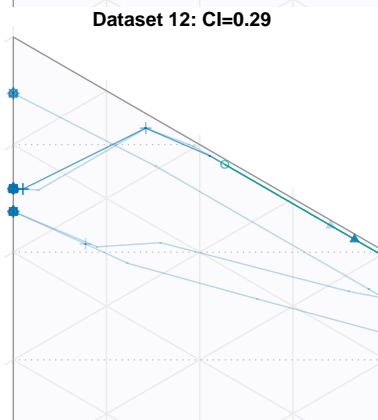
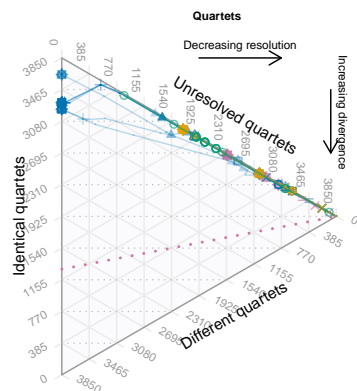
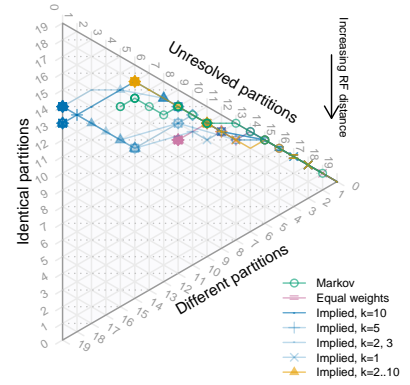
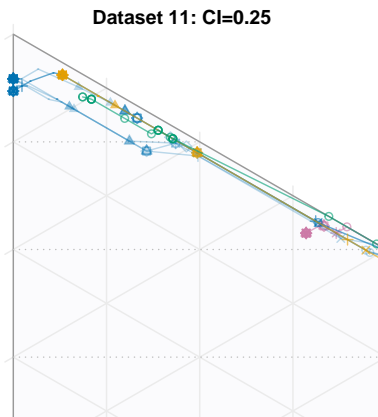
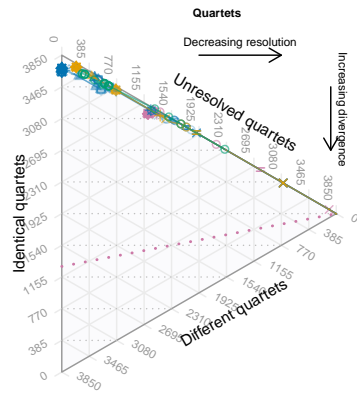
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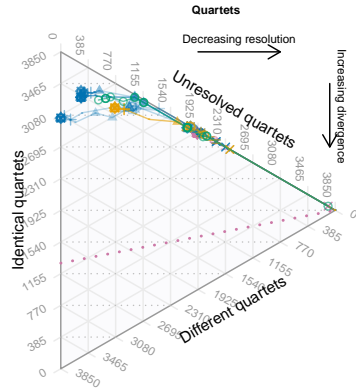


Dataset 10: CI=0.29

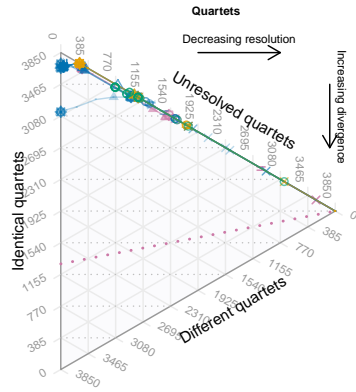
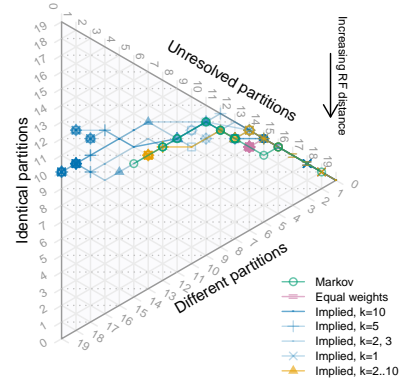


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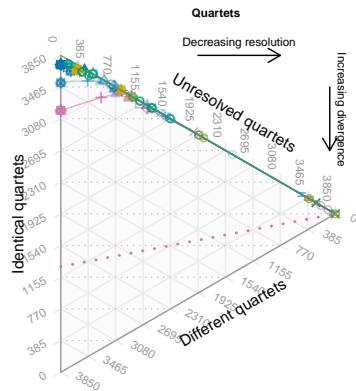
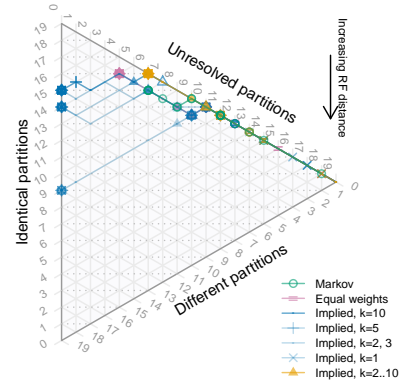




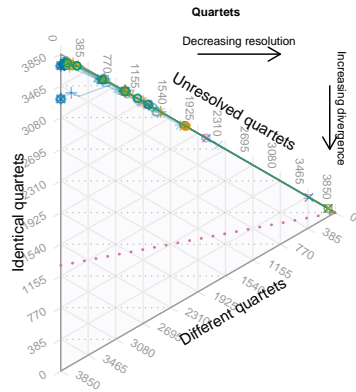
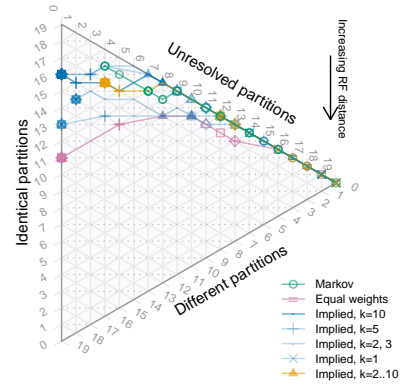
Dataset 15: CI=0.25



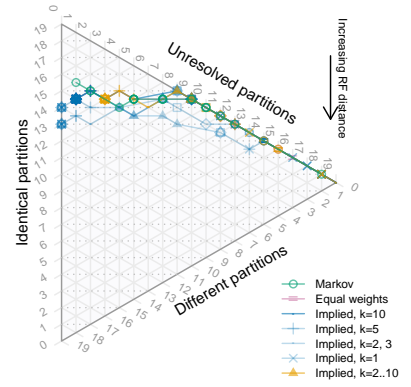
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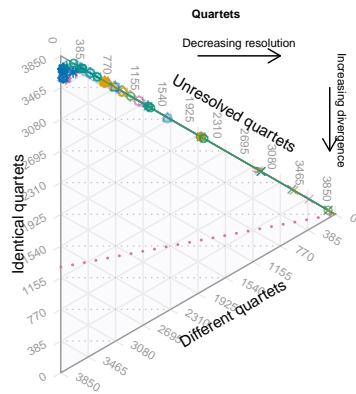


Dataset 17: CI=0.27

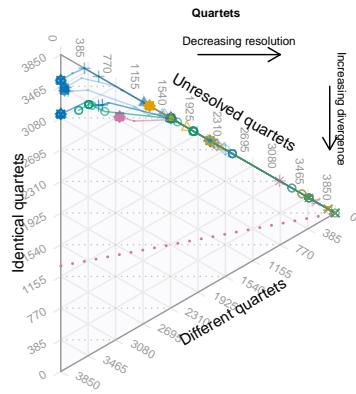
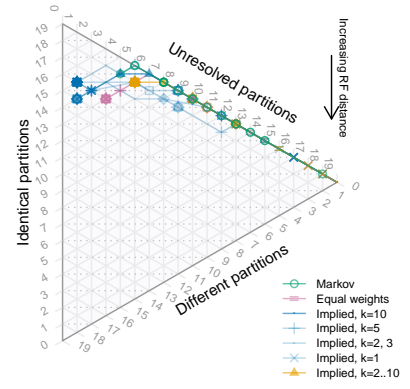
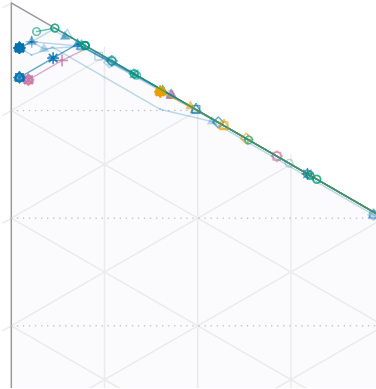


Dataset 18: CI=0.28

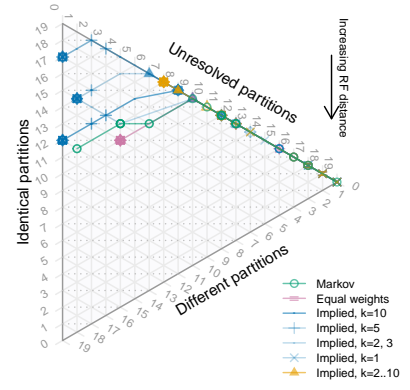
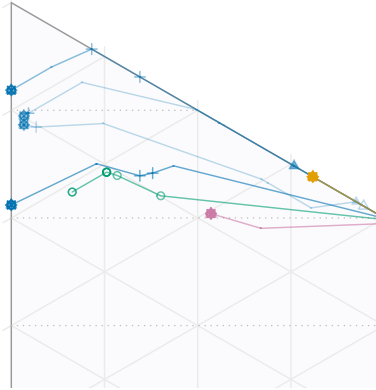




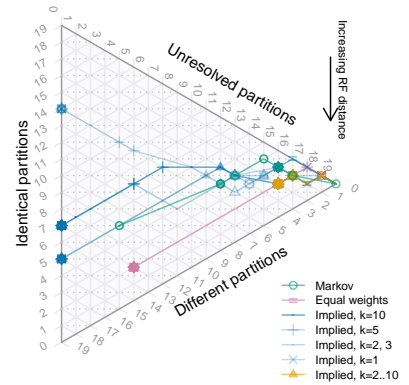
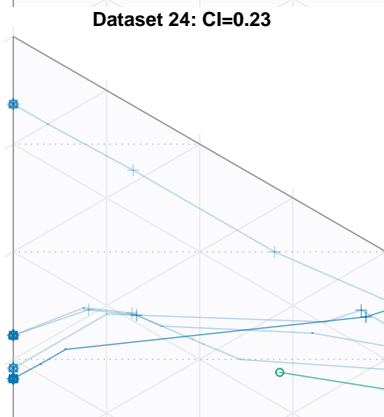
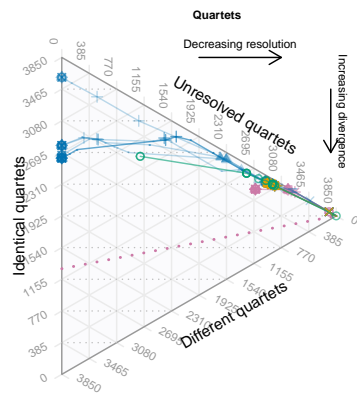
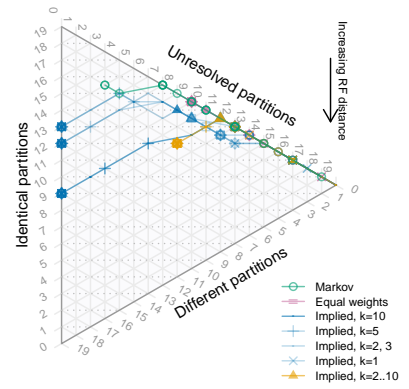
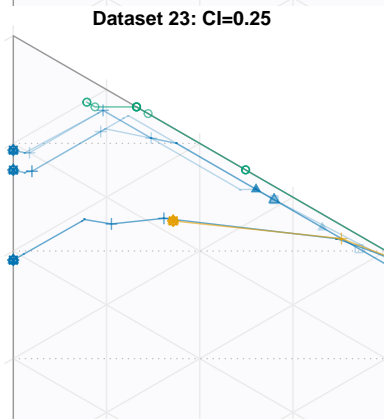
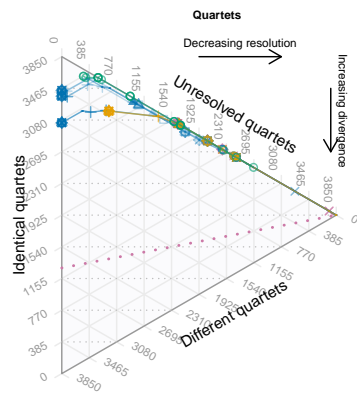
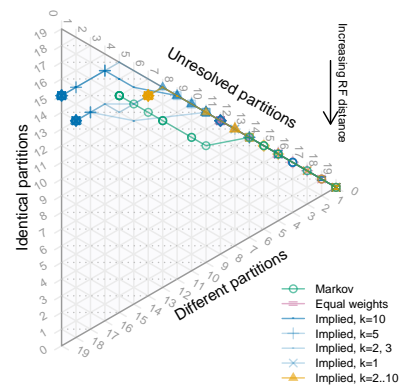
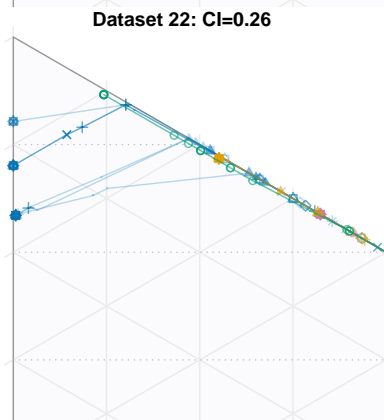
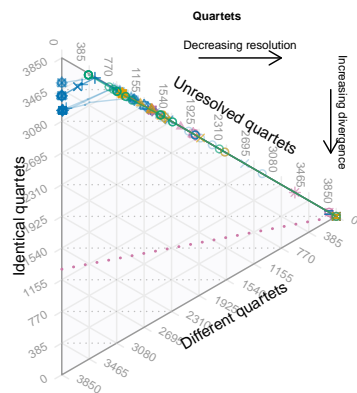
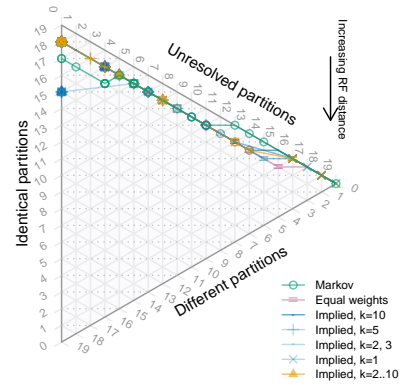
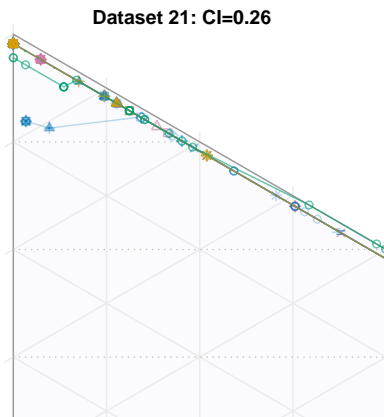
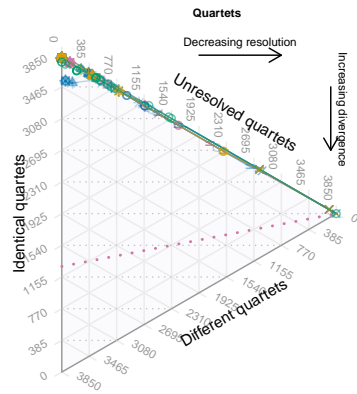
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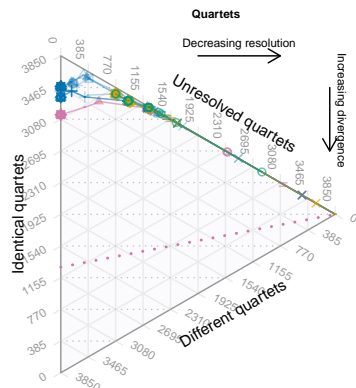


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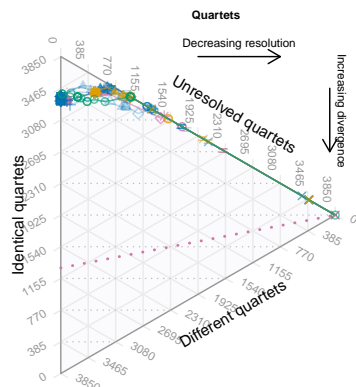
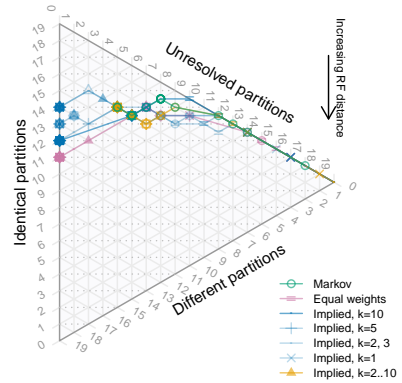


0.4 Trees 21–30

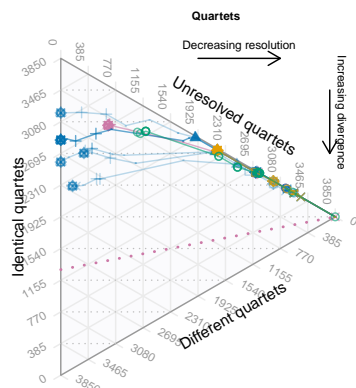
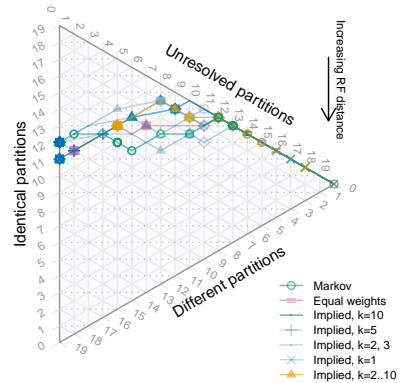




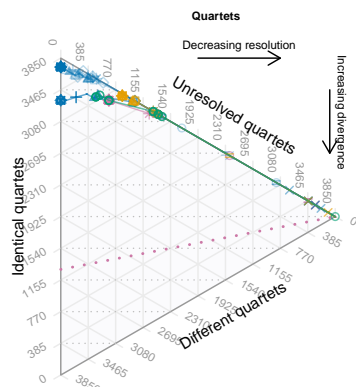
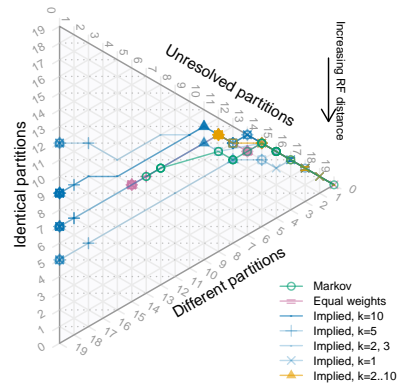
Dataset 25: CI=0.28



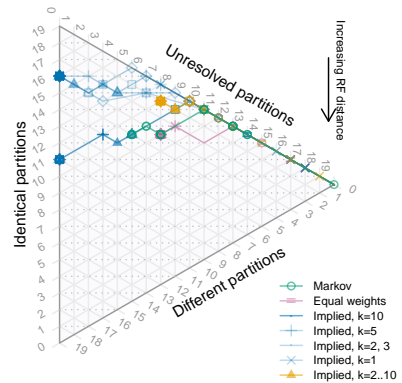
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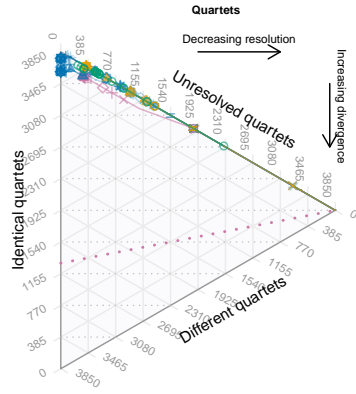


Dataset 27: CI=0.26

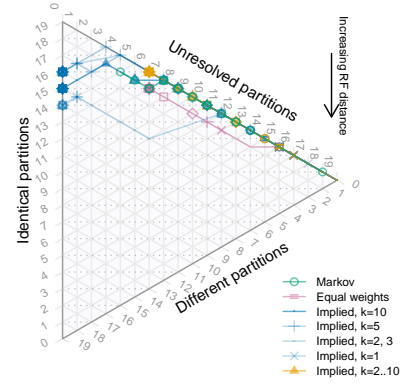
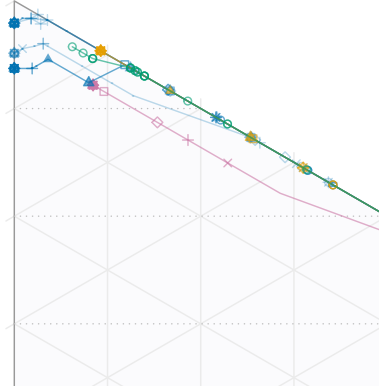


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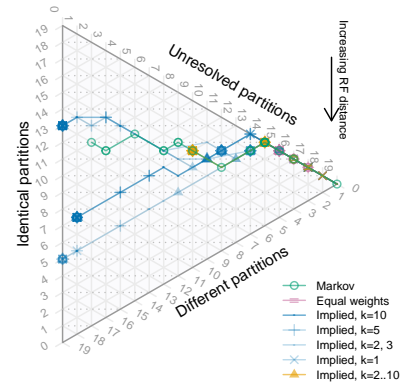
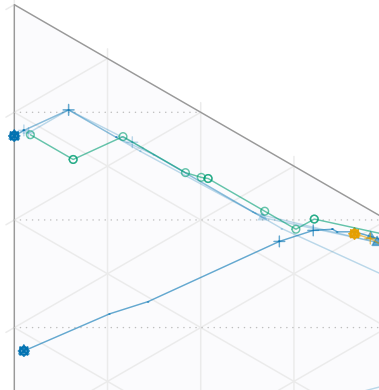
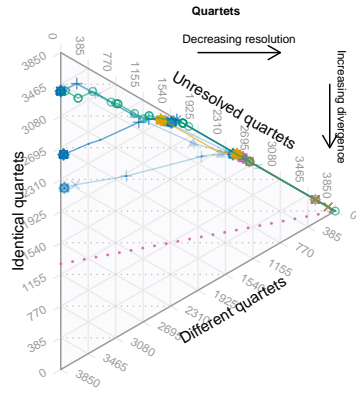




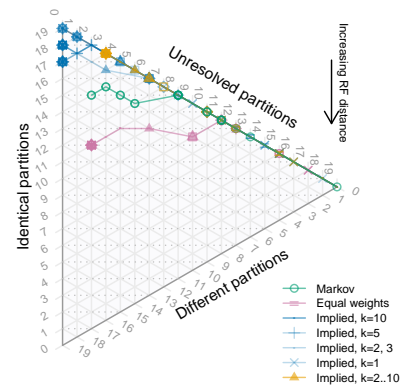
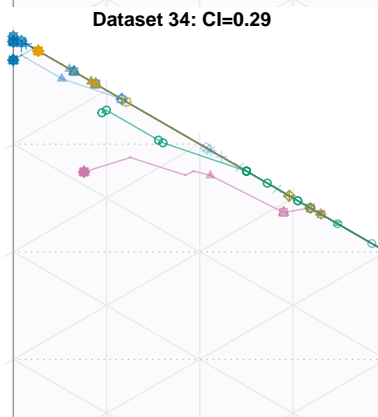
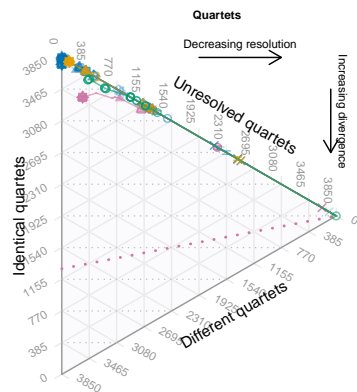
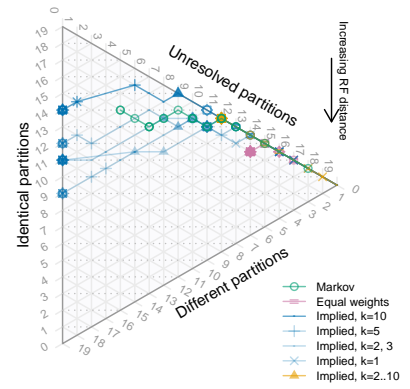
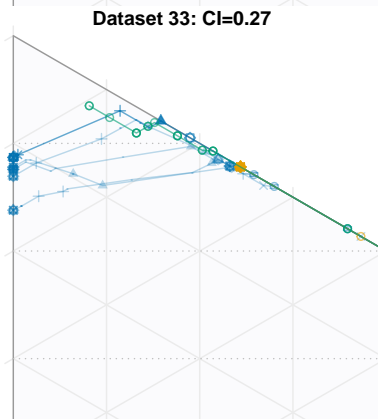
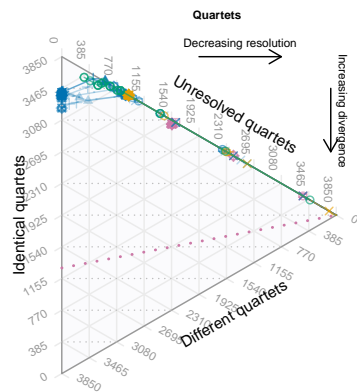
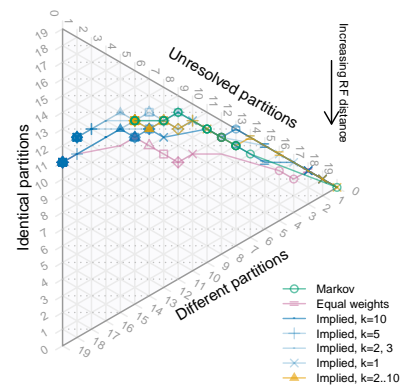
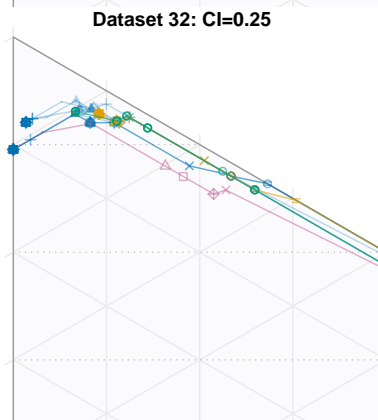
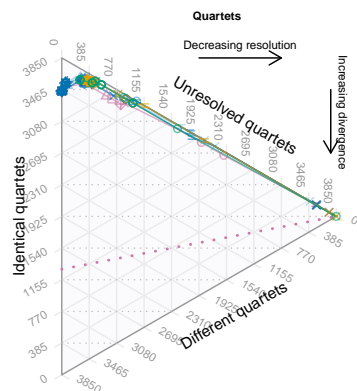
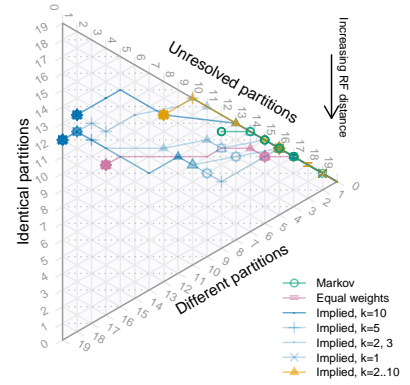
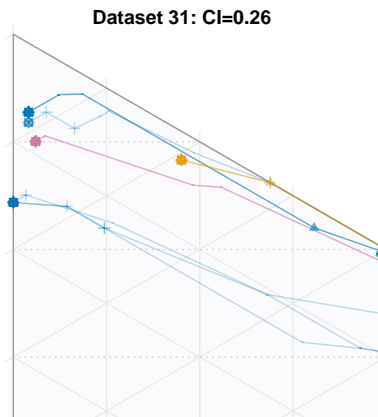
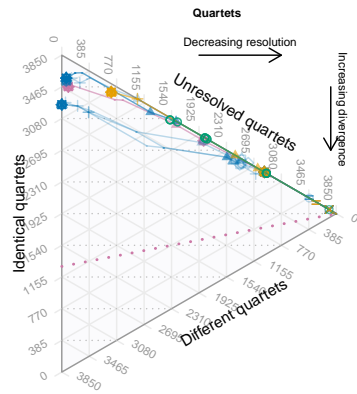
Dataset 29: CI=0.29

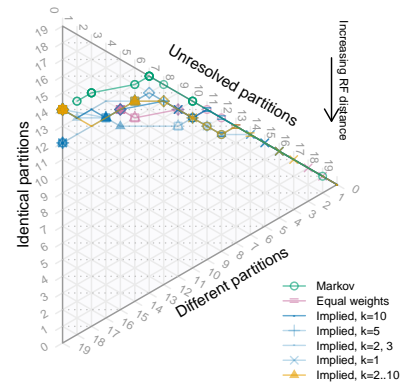
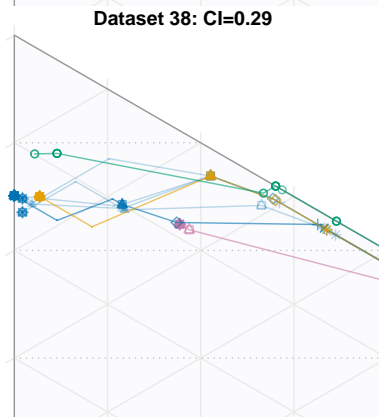
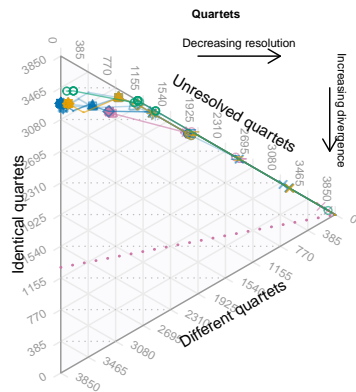
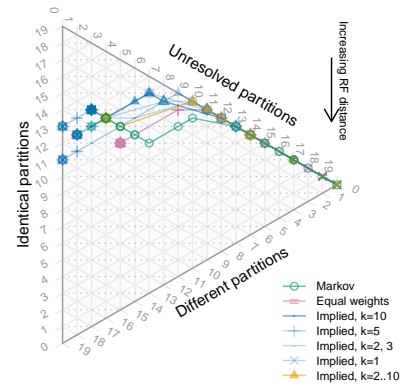
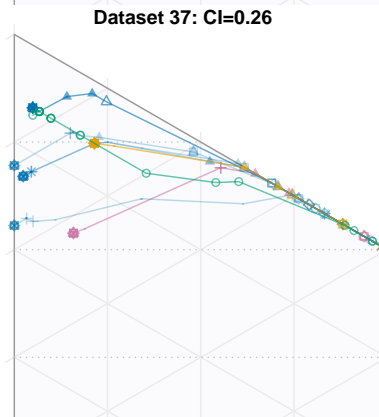
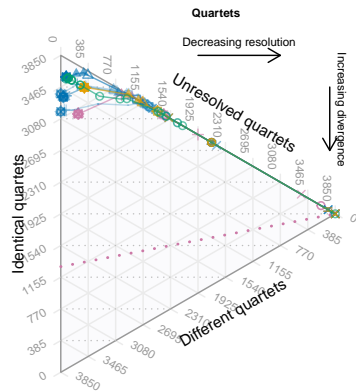
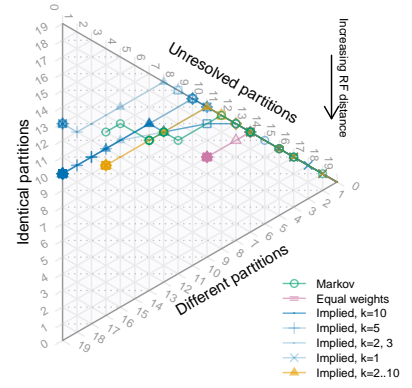
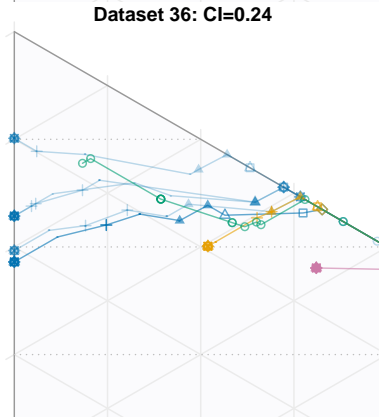
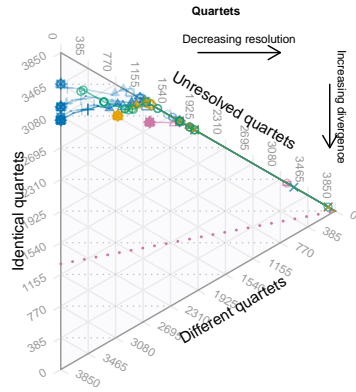
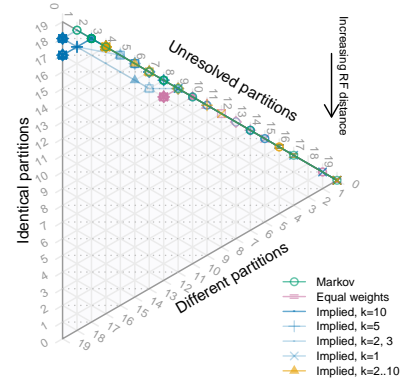
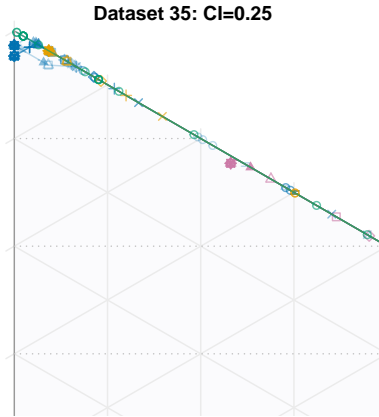
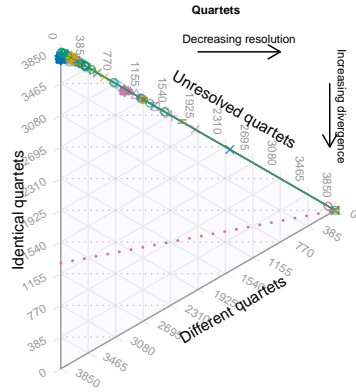


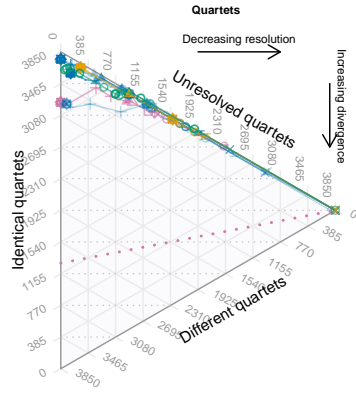
Dataset 30: CI=0.25



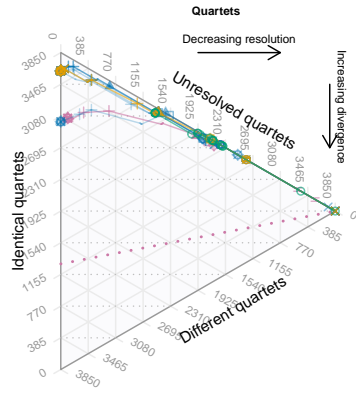
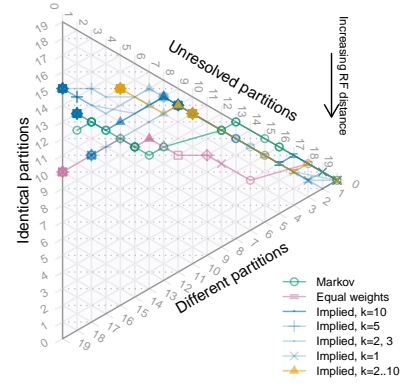
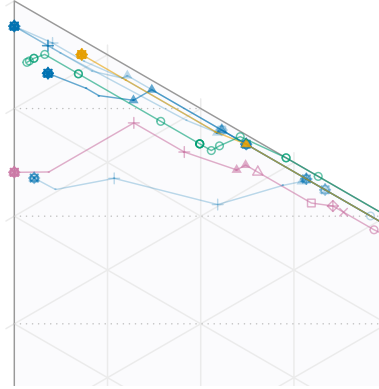
0.5 Trees 31–40



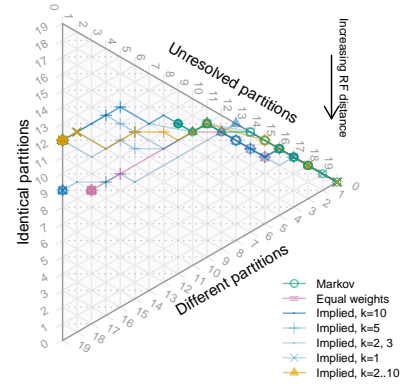
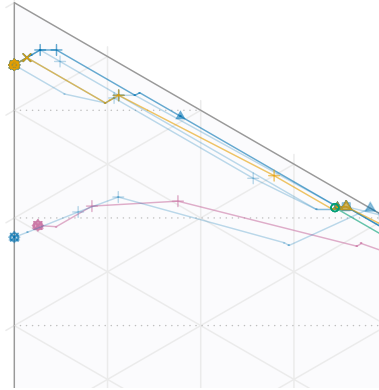




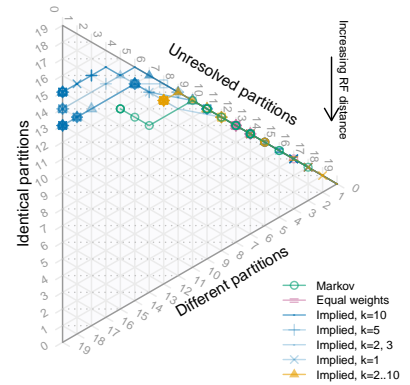
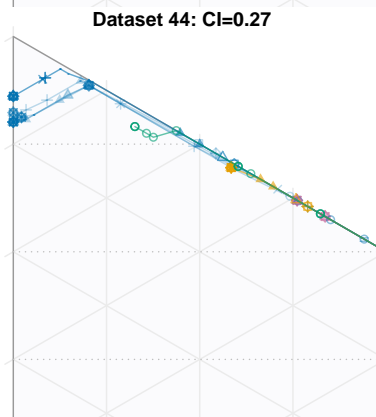
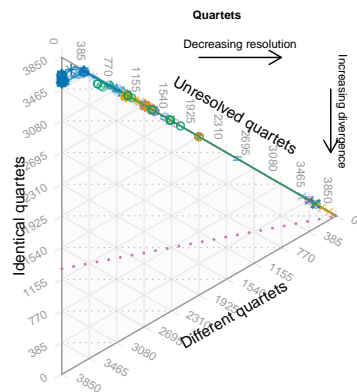
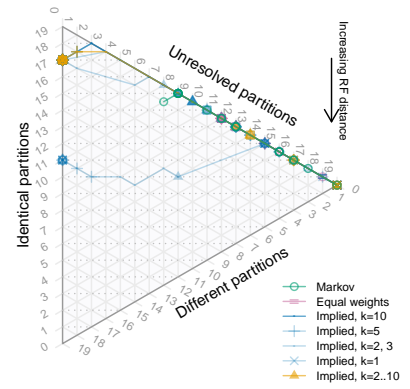
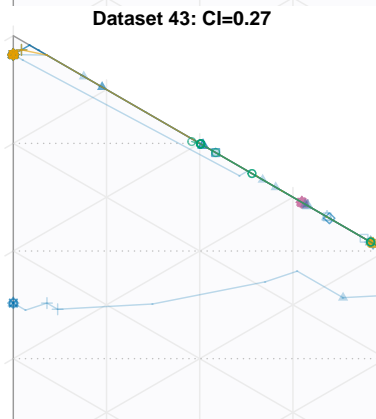
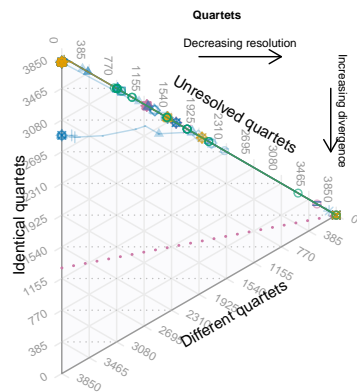
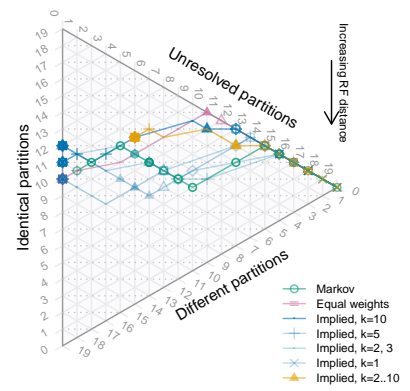
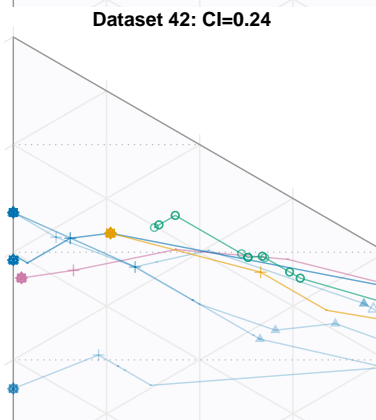
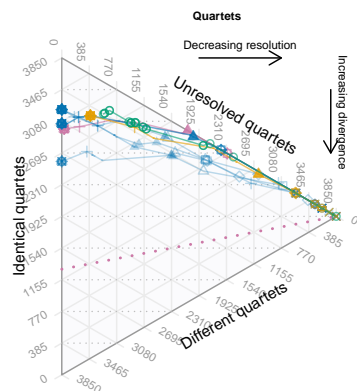
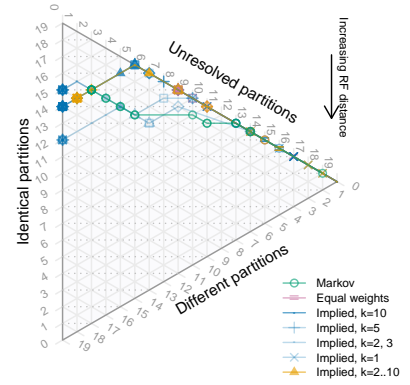
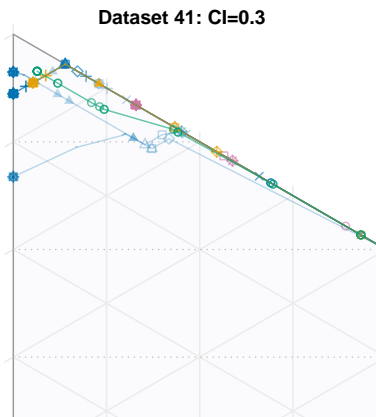
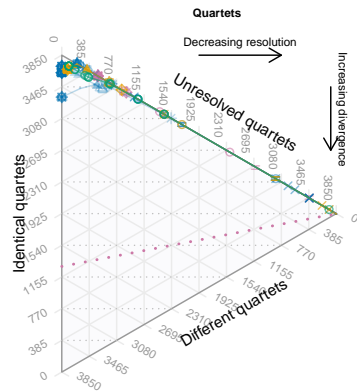
Dataset 39: CI=0.25

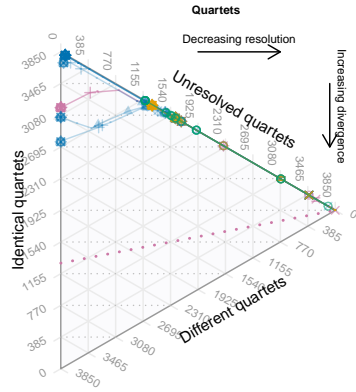


Dataset 40: CI=0.24

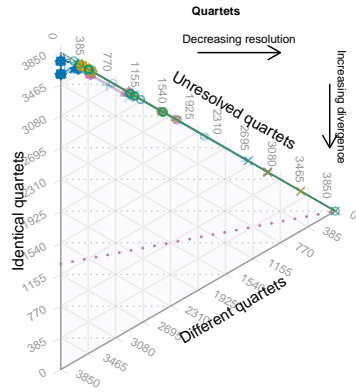
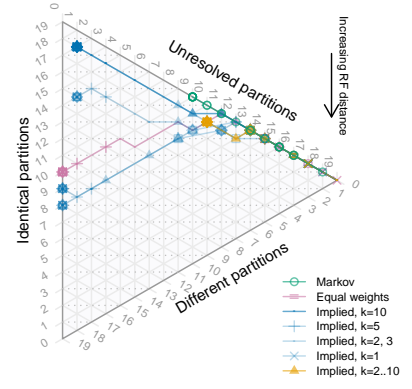
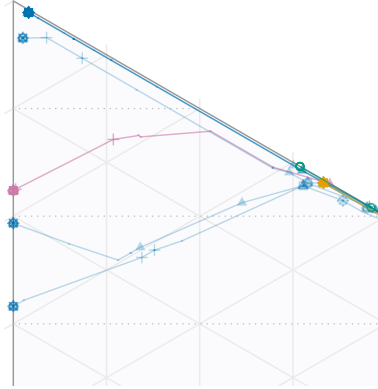


0.6 Trees 41–50

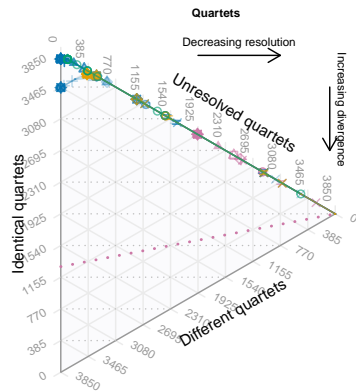
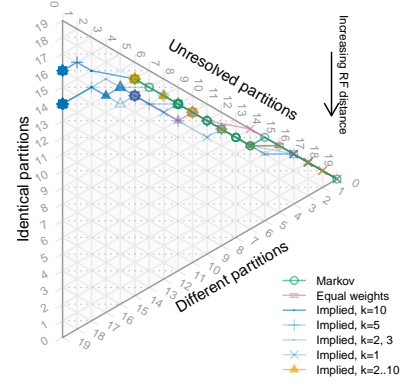
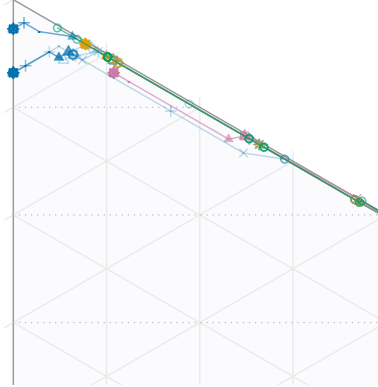




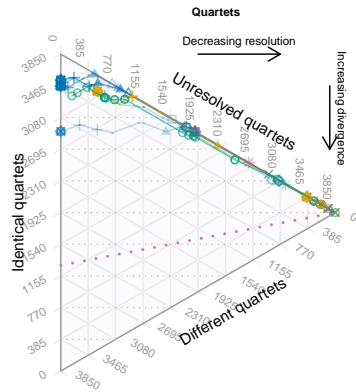
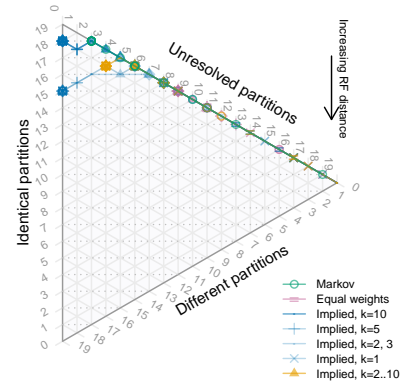
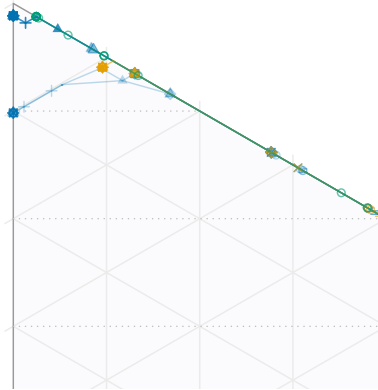
Dataset 45: CI=0.27



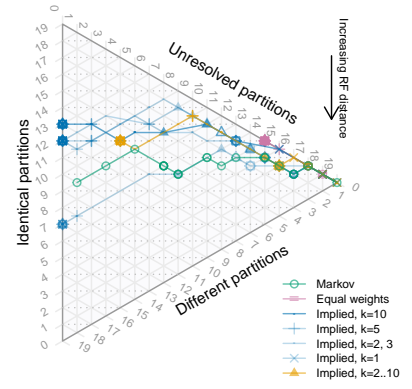
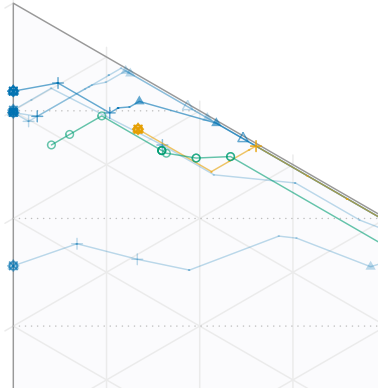
Dataset 46: CI=0.24

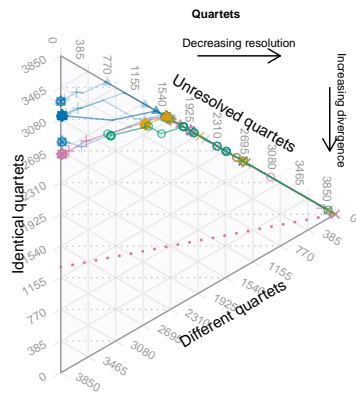


Dataset 47: CI=0.29

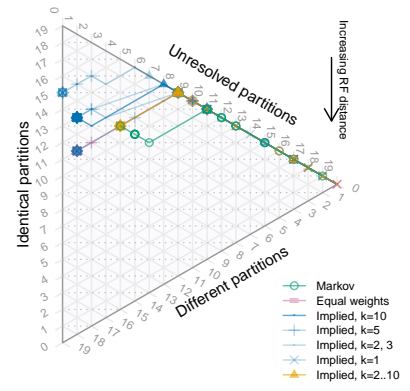
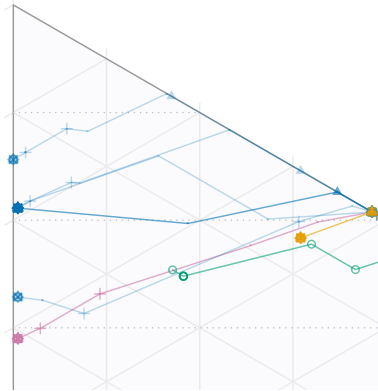


Dataset 48: CI=0.27

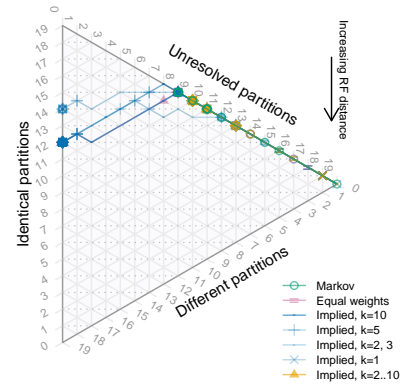
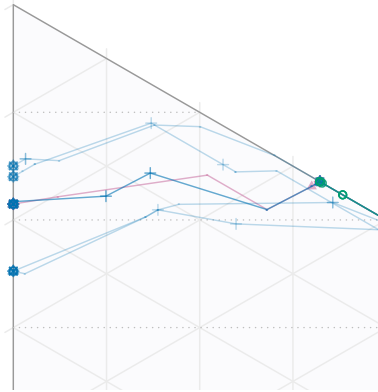




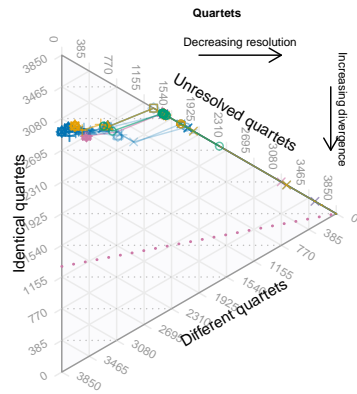
Dataset 49: CI=0.28



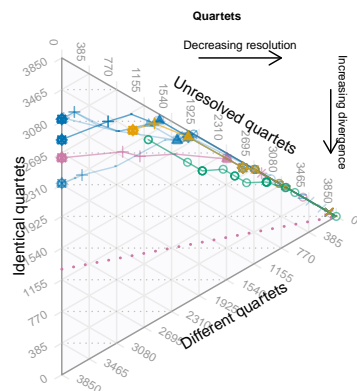
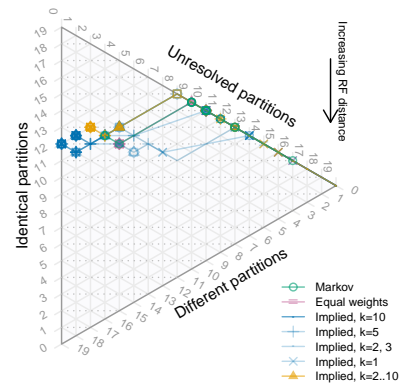
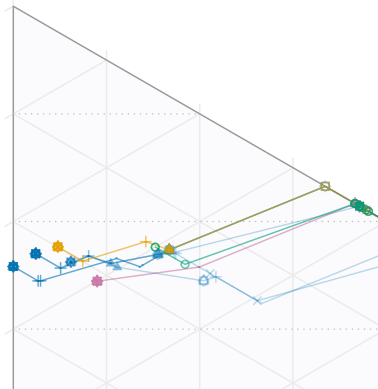
Dataset 50: CI=0.25



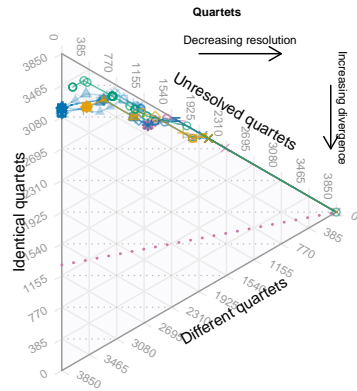
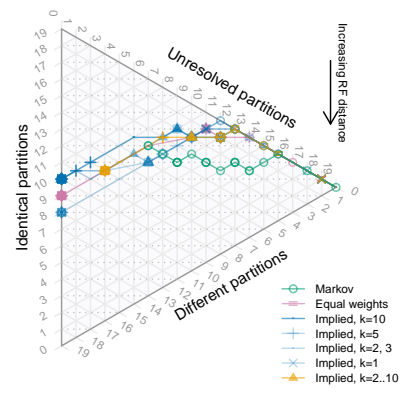
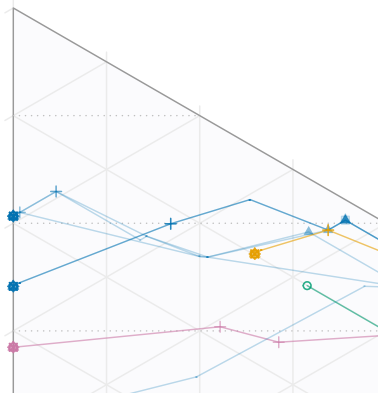
0.7 Trees 51–60



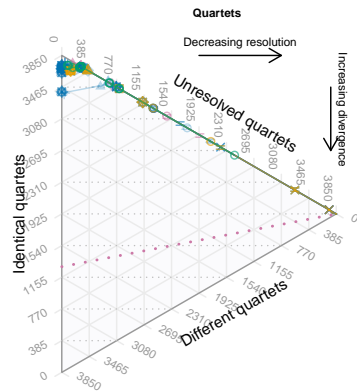
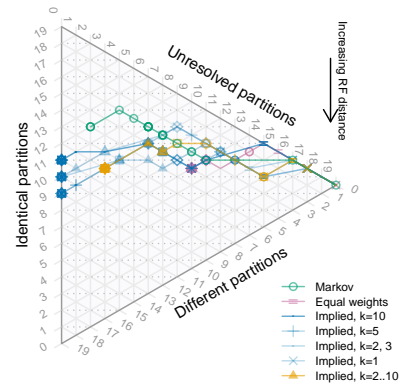
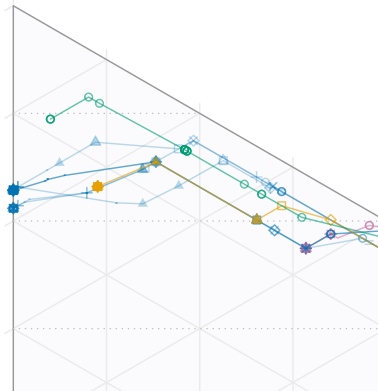
Dataset 51: CI=0.3



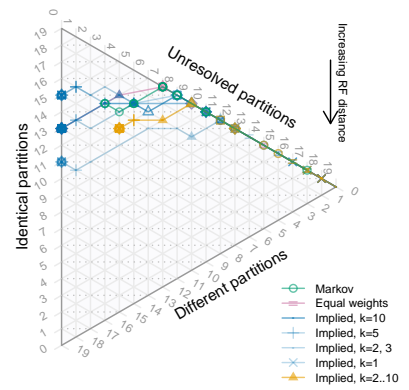
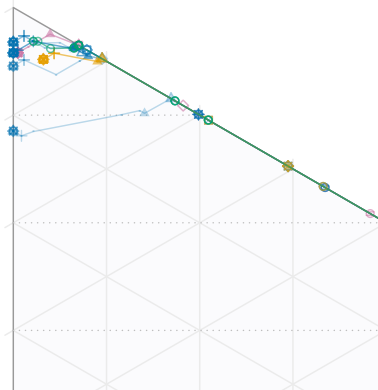
Dataset 52: CI=0.25

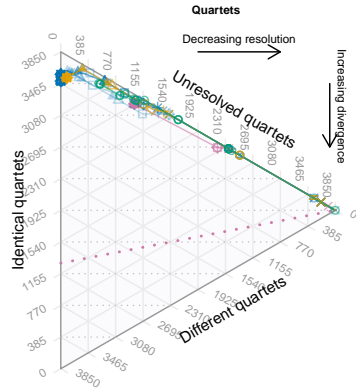


Dataset 53: CI=0.25

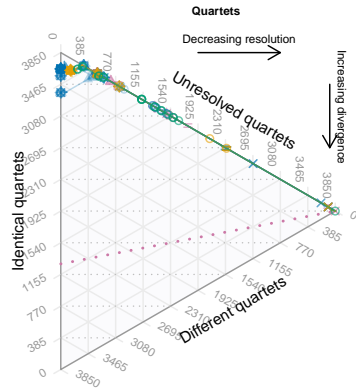
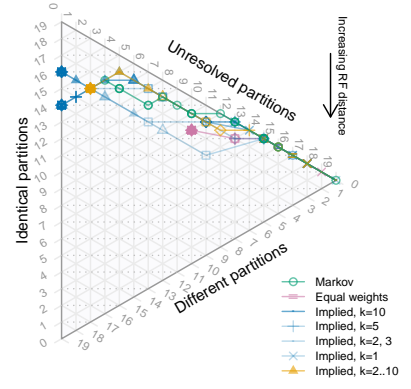
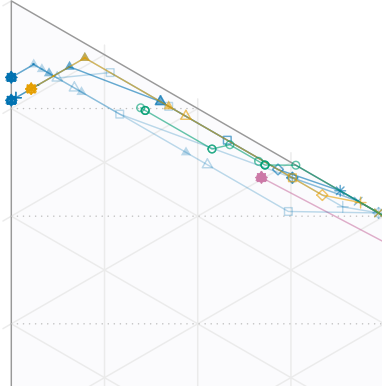


Dataset 54: CI=0.28

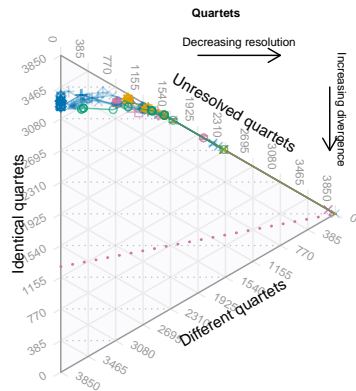
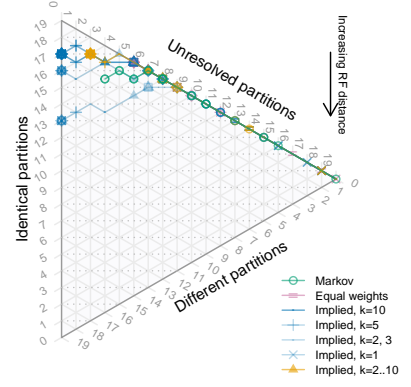
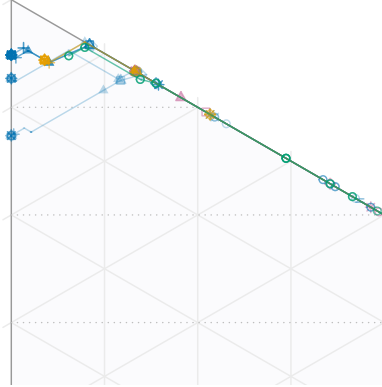




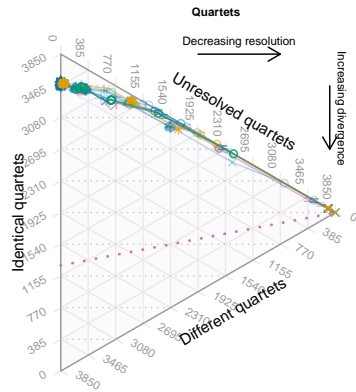
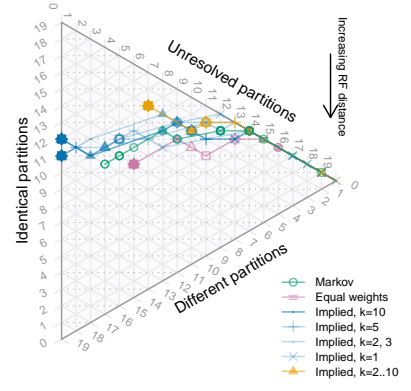
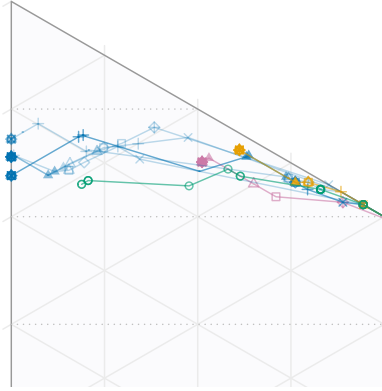
Dataset 55: CI=0.28



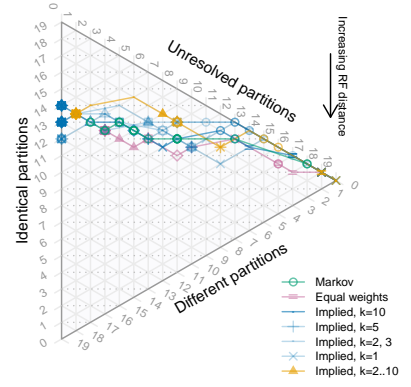
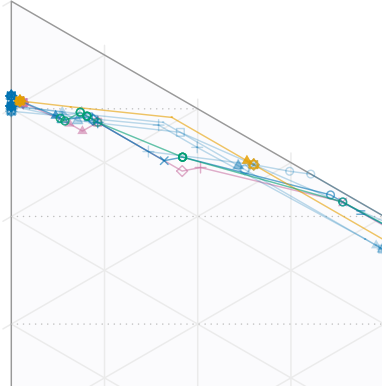
Dataset 56: CI=0.31

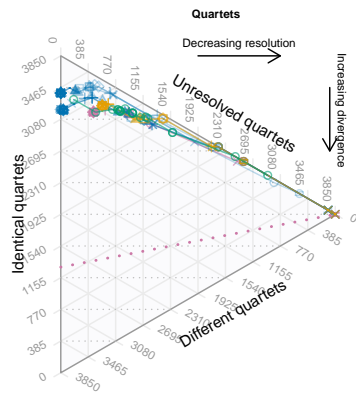


Dataset 57: CI=0.25

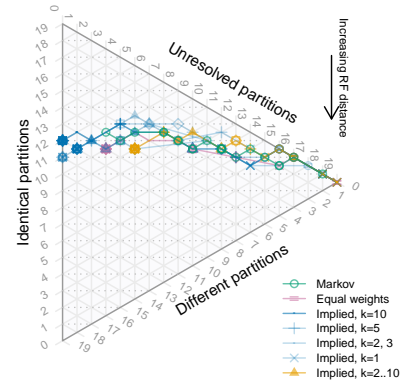
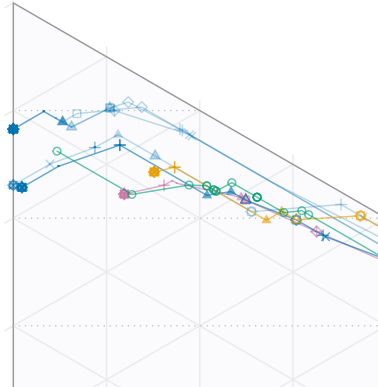


Dataset 58: CI=0.25

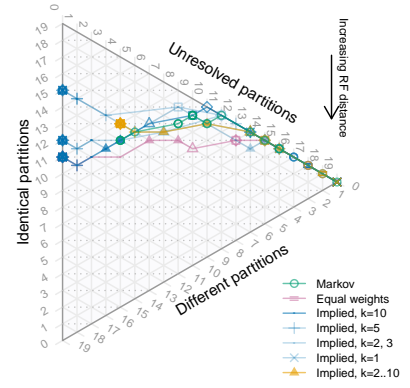
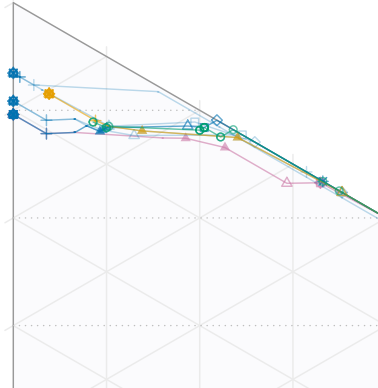
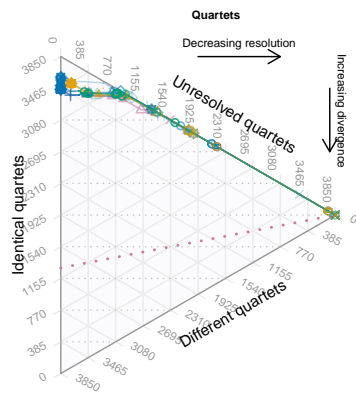




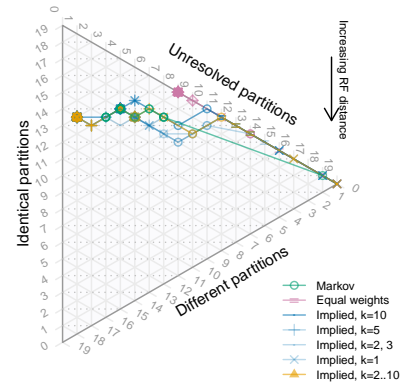
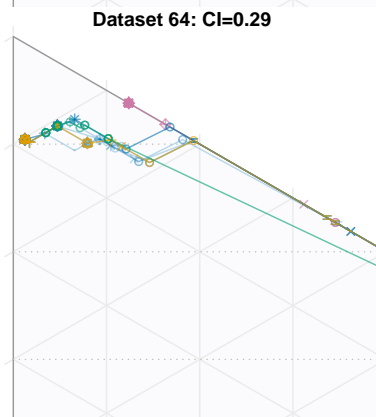
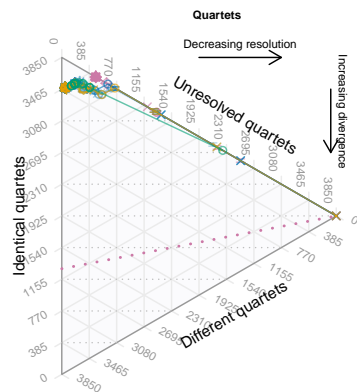
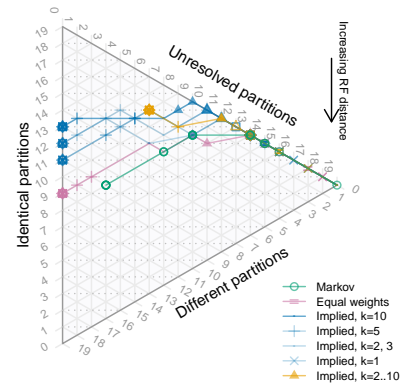
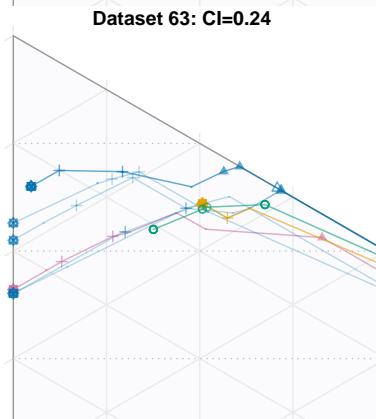
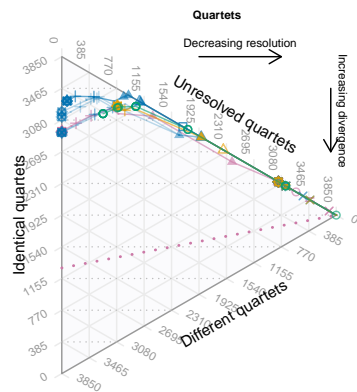
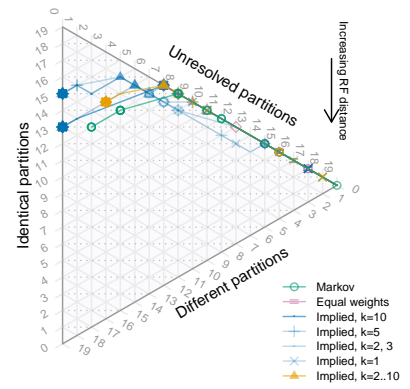
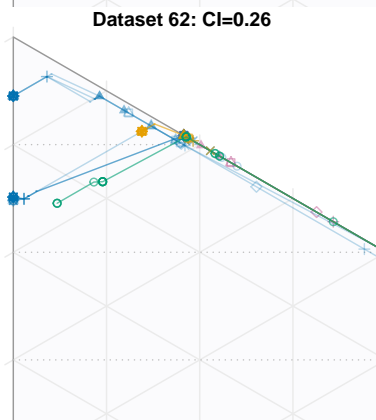
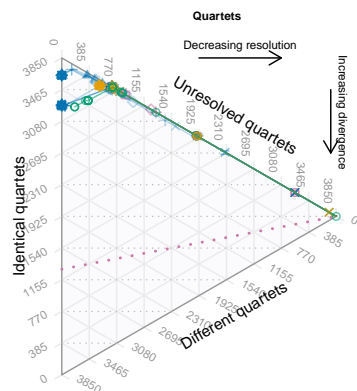
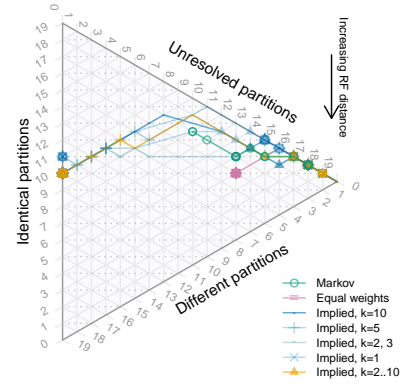
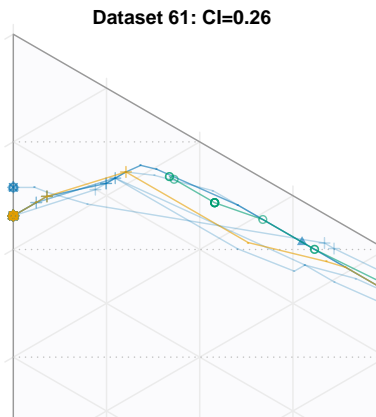
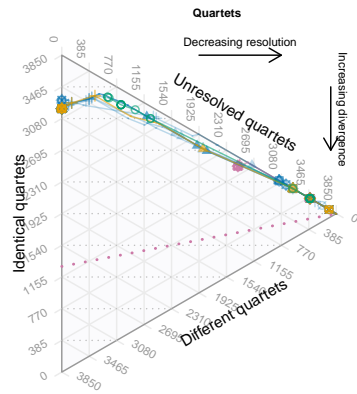
Dataset 59: CI=0.26

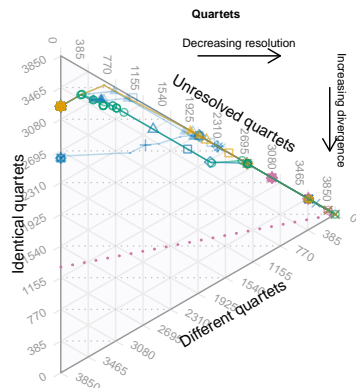


Dataset 60: CI=0.24

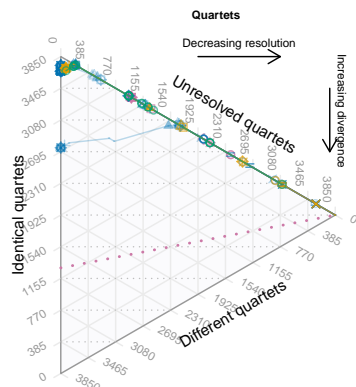
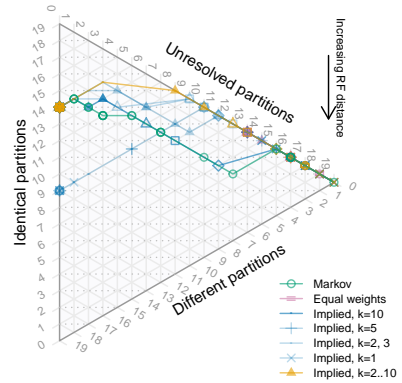


0.8 Trees 61–70

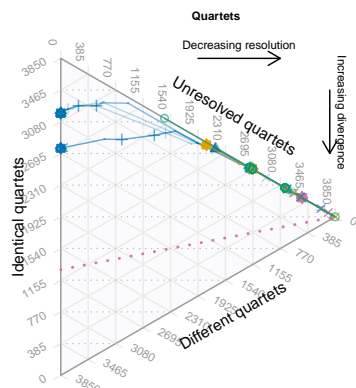
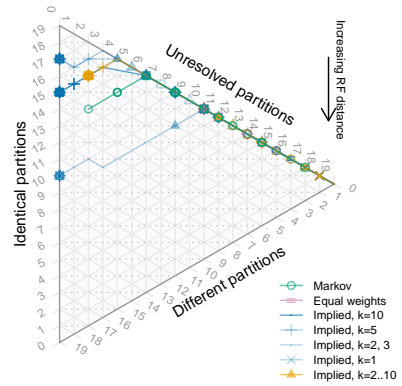




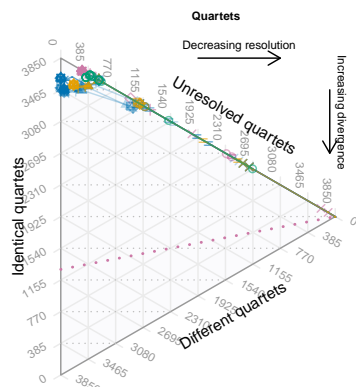
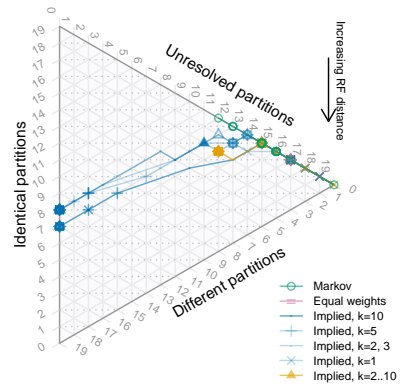
Dataset 65: CI=0.25



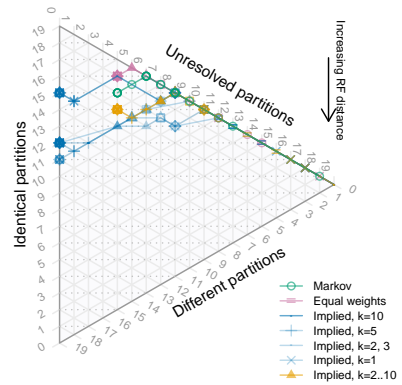
Dataset 66: CI=0.27

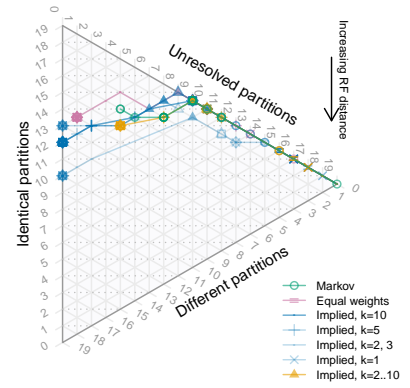
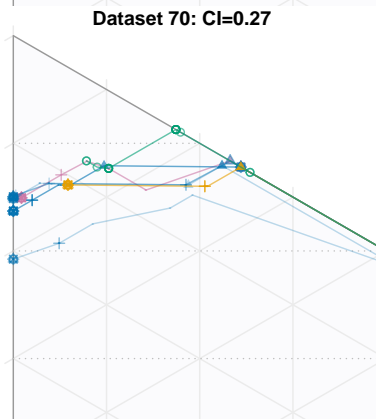
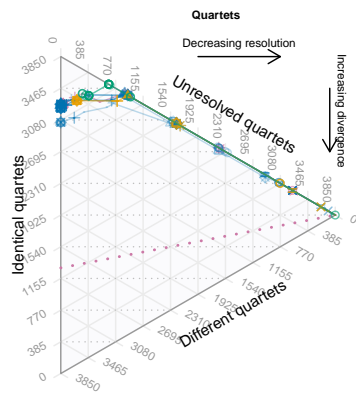
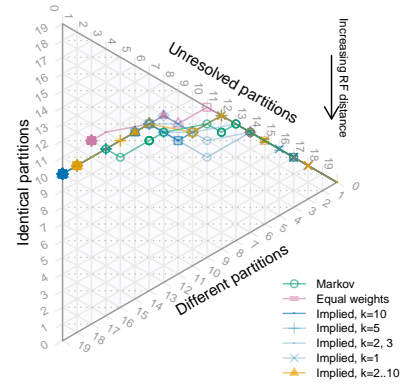
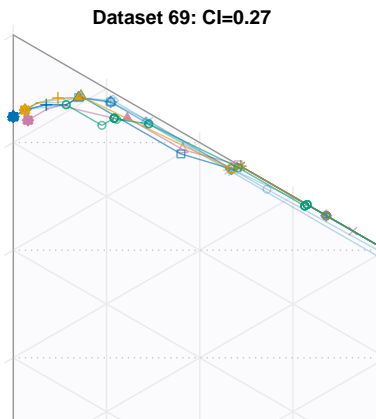
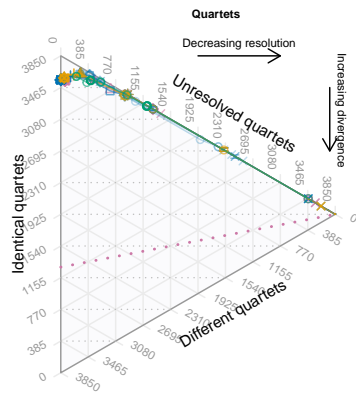


Dataset 67: CI=0.26

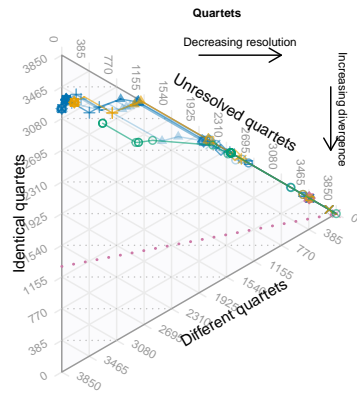


Dataset 68: CI=0.31

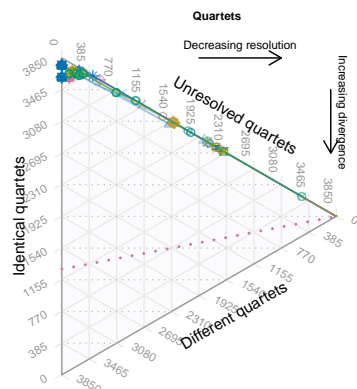
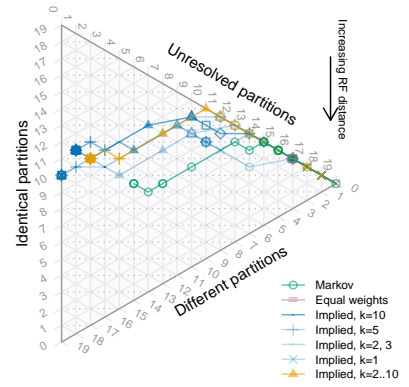
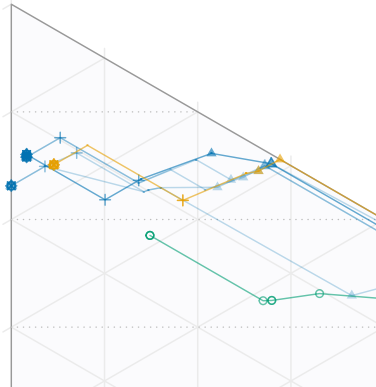




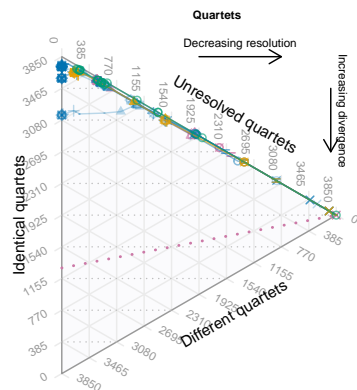
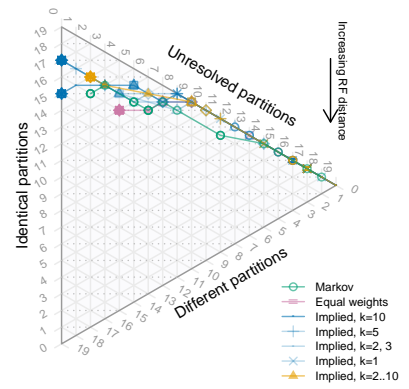
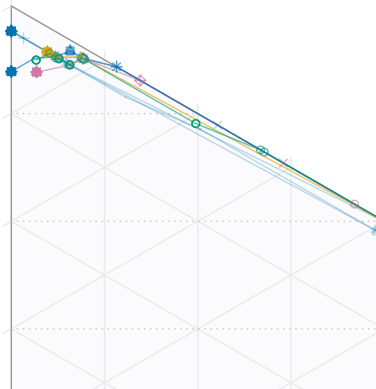
0.9 Trees 71–80



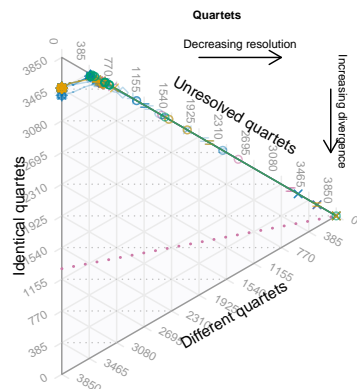
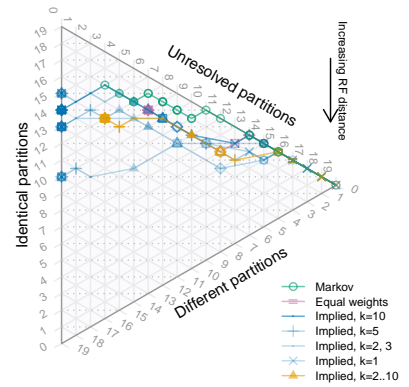
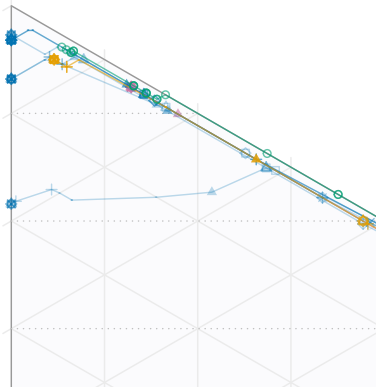
Dataset 71: CI=0.27



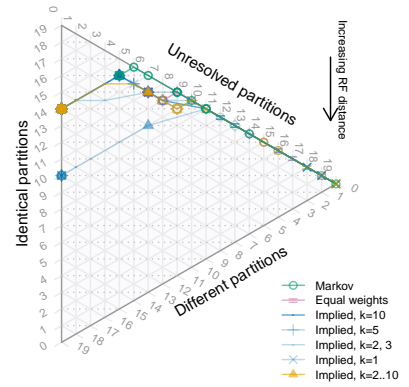
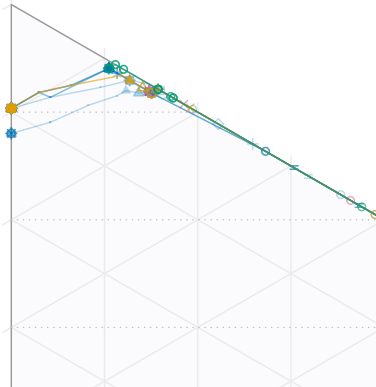
Dataset 72: CI=0.29

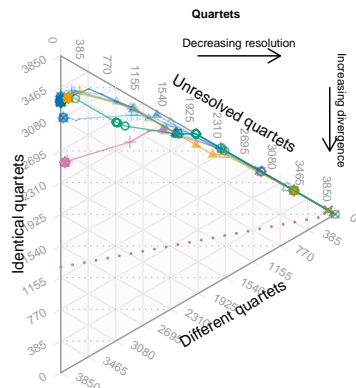


Dataset 73: CI=0.28

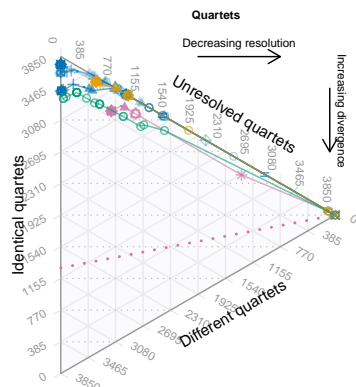
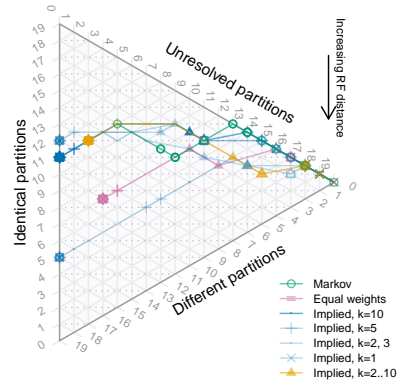


Dataset 74: CI=0.28

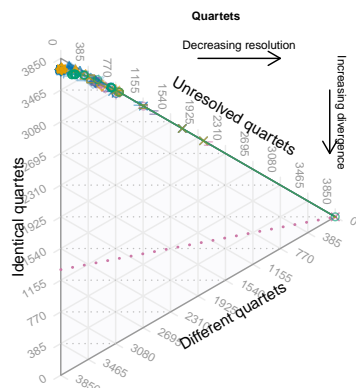
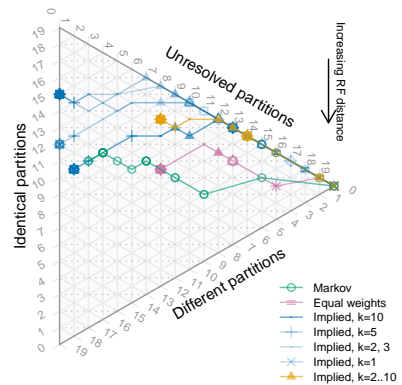




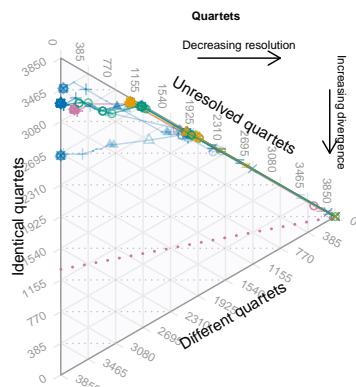
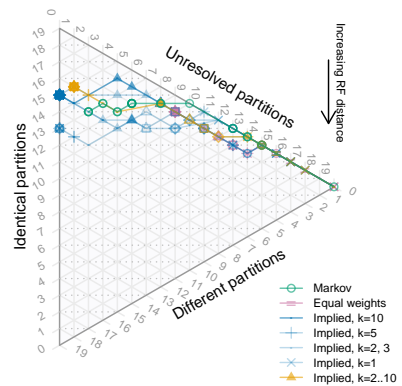
Dataset 75: CI=0.24



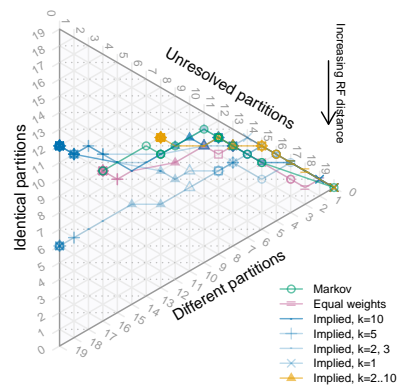
Dataset 76: CI=0.26

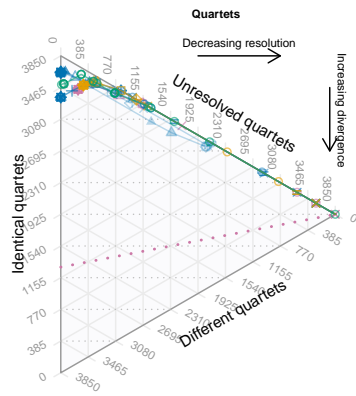


Dataset 77: CI=0.28

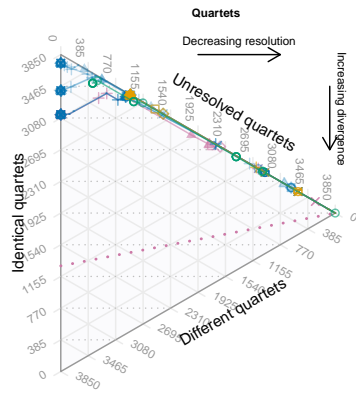
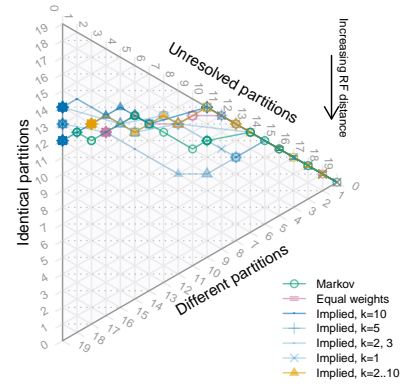
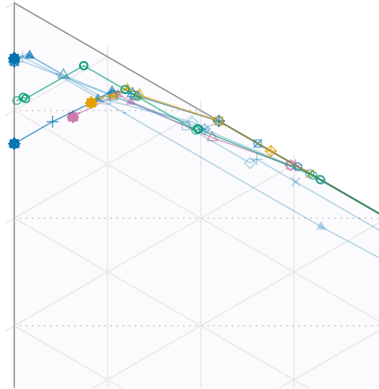


Dataset 78: CI=0.24

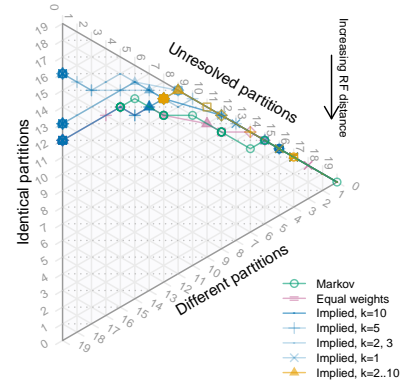
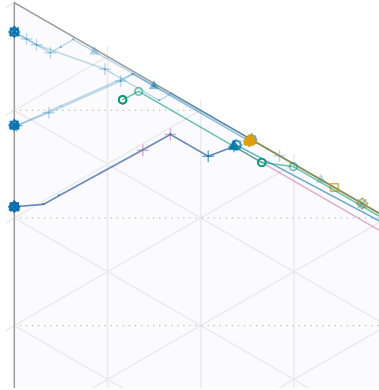




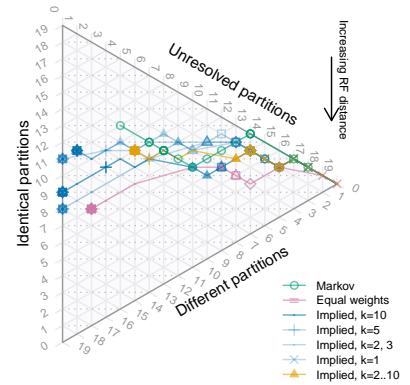
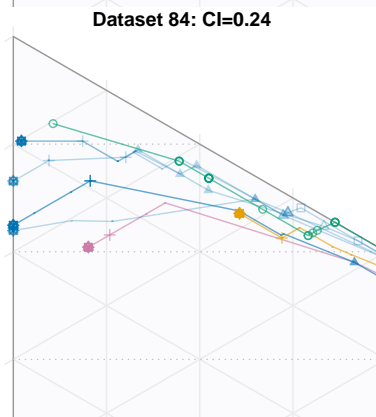
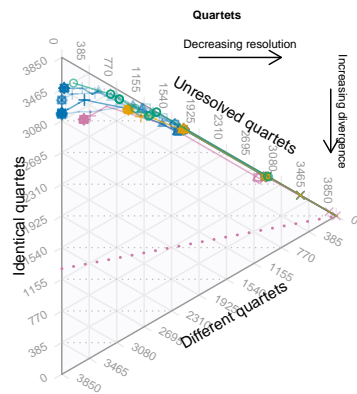
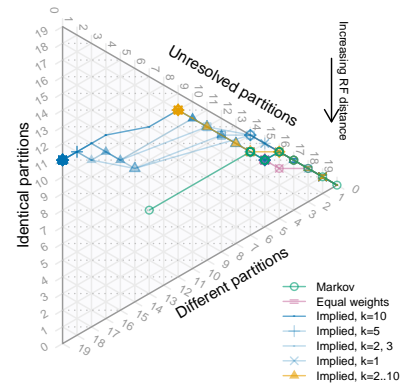
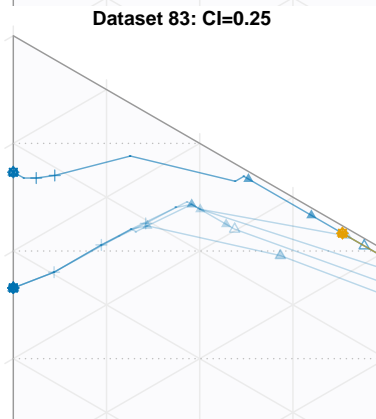
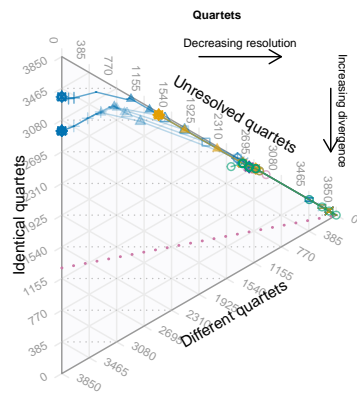
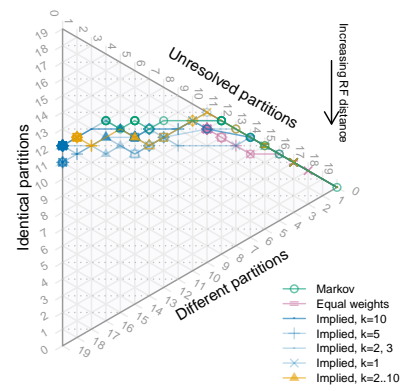
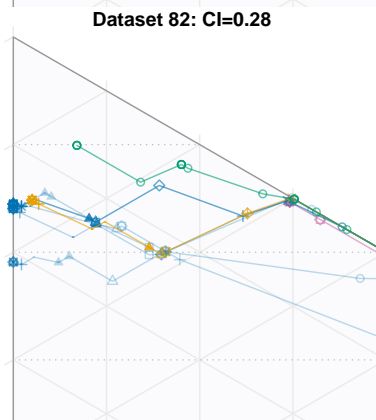
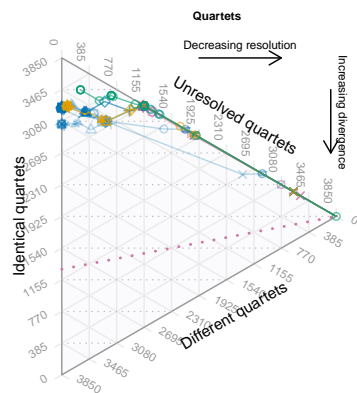
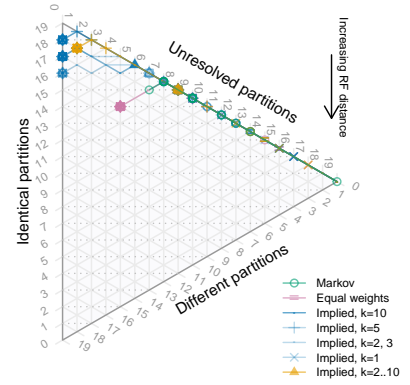
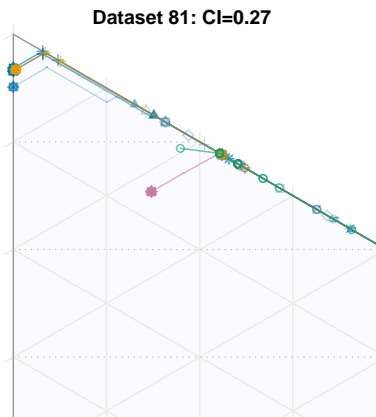
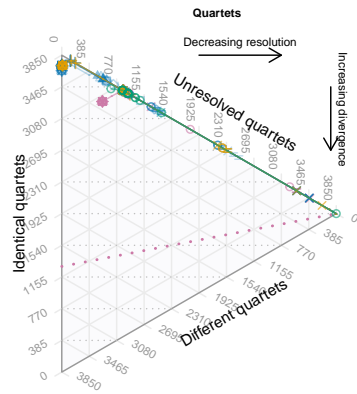
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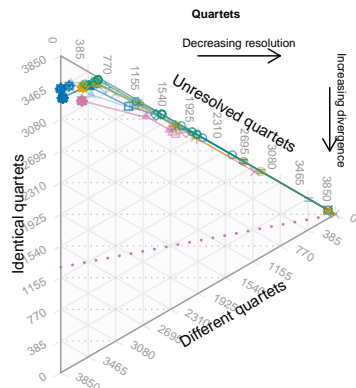


Dataset 80: CI=0.27

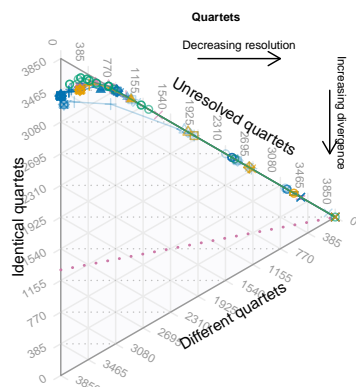
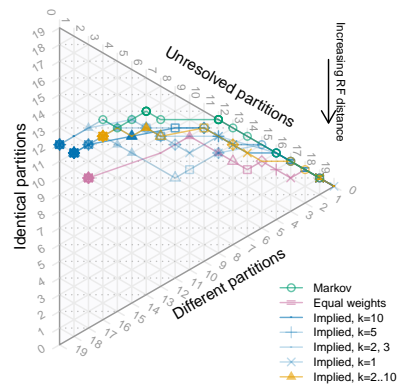


0.10 Trees 81–90

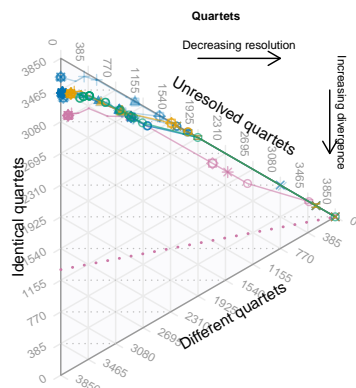
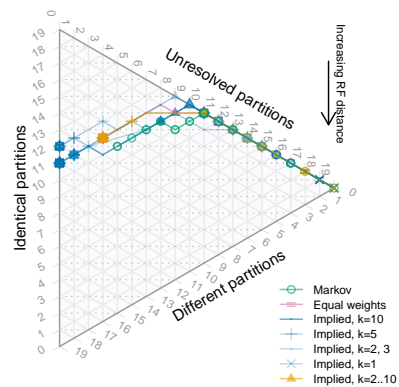




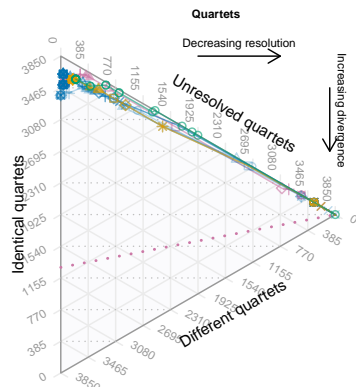
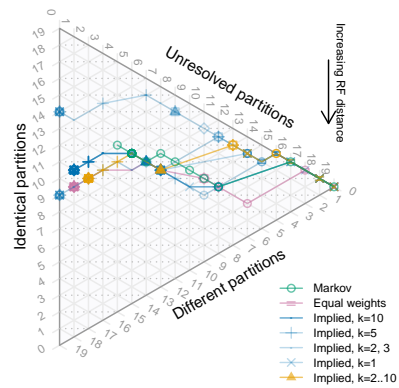
Dataset 85: CI=0.27



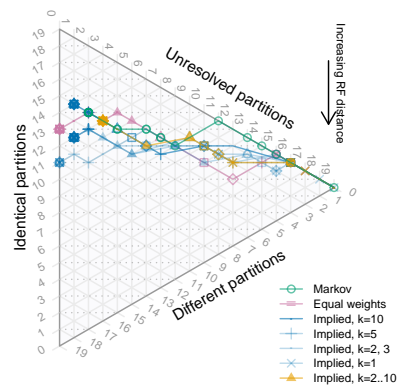
Dataset 86: CI=0.27

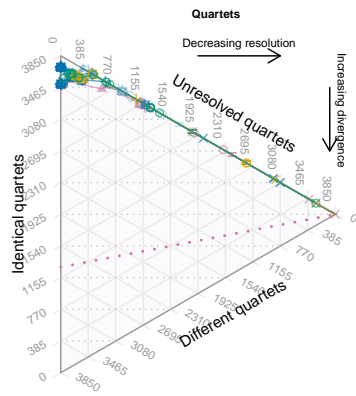


Dataset 87: CI=0.23

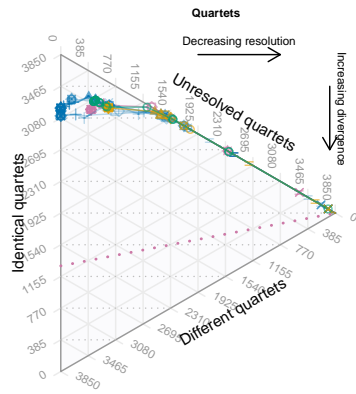
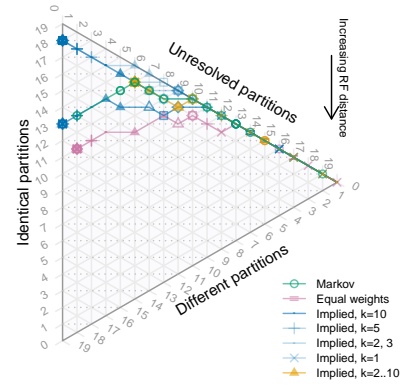
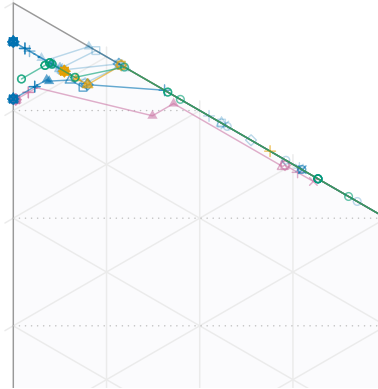


Dataset 88: CI=0.25

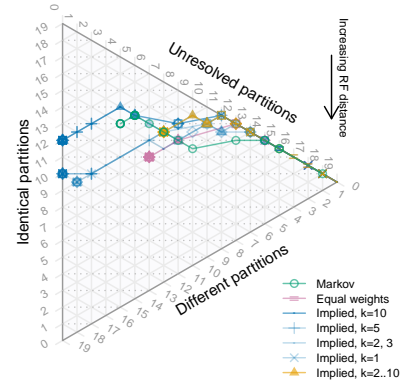
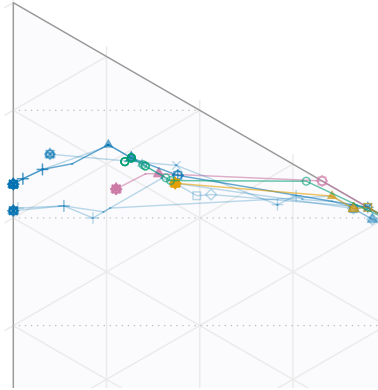




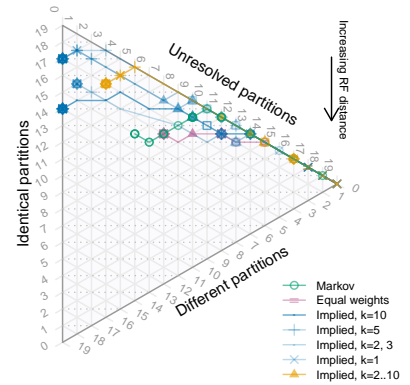
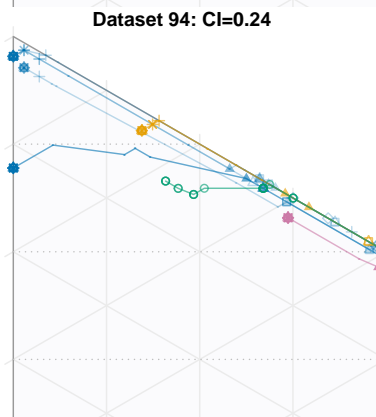
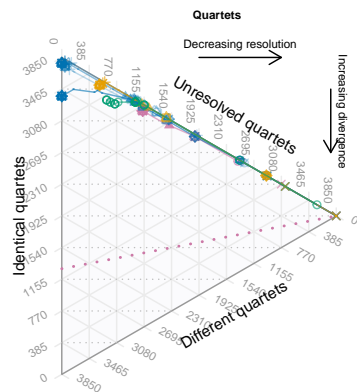
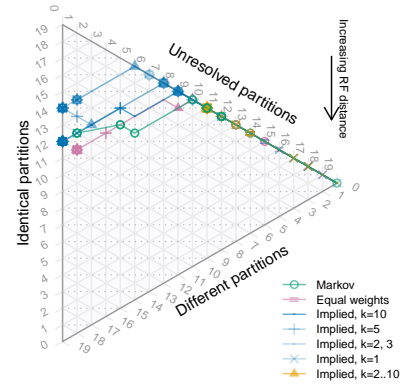
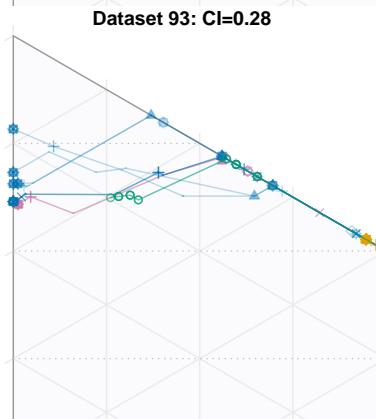
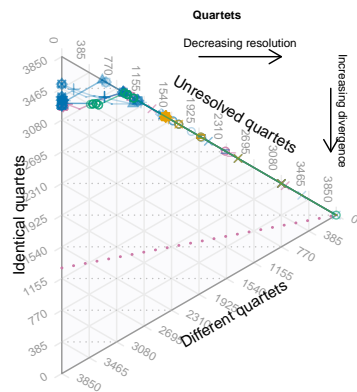
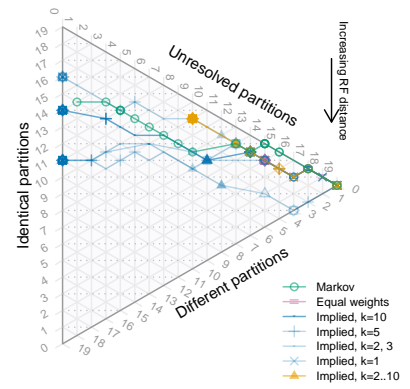
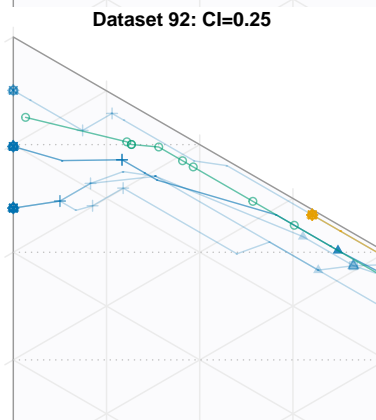
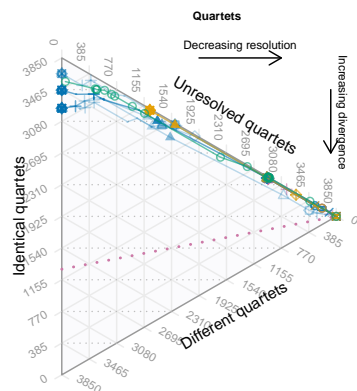
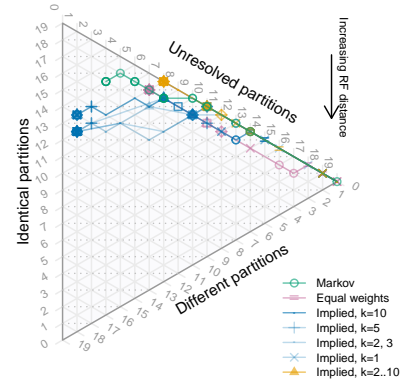
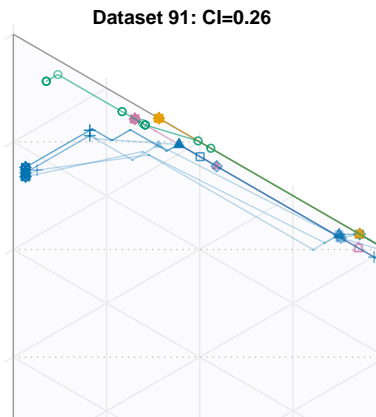
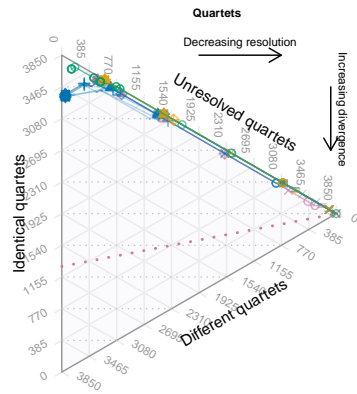
Dataset 89: CI=0.27

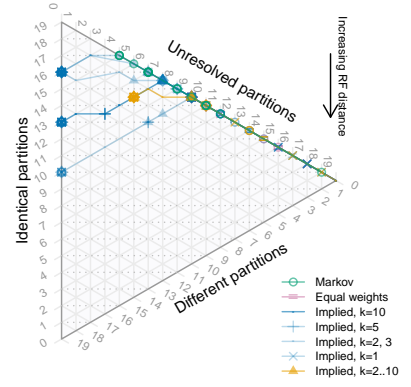
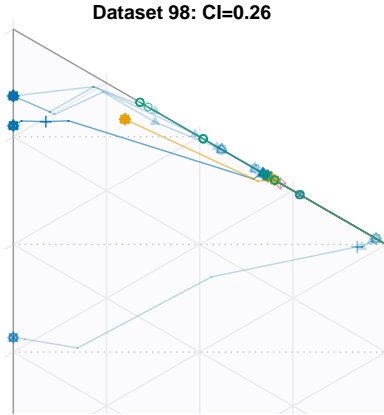
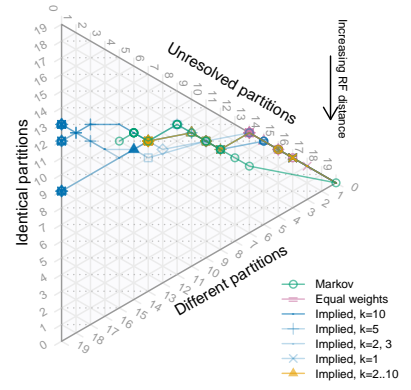
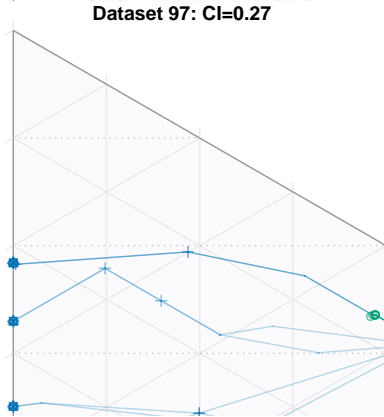
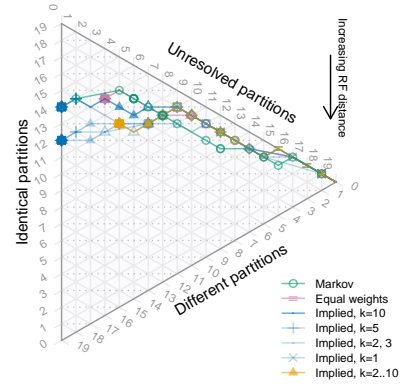
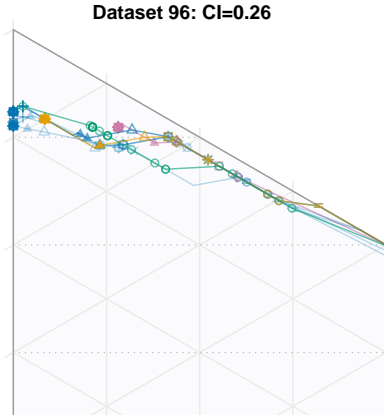
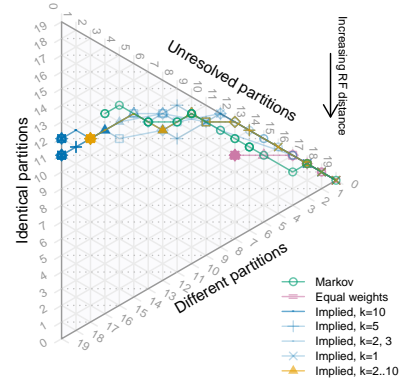
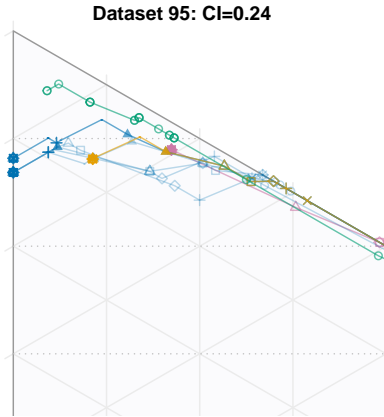
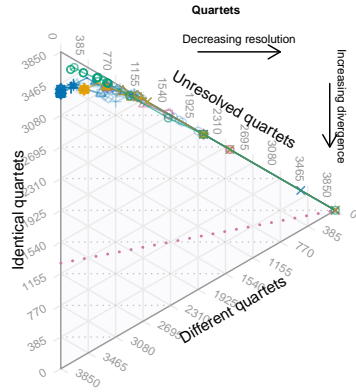


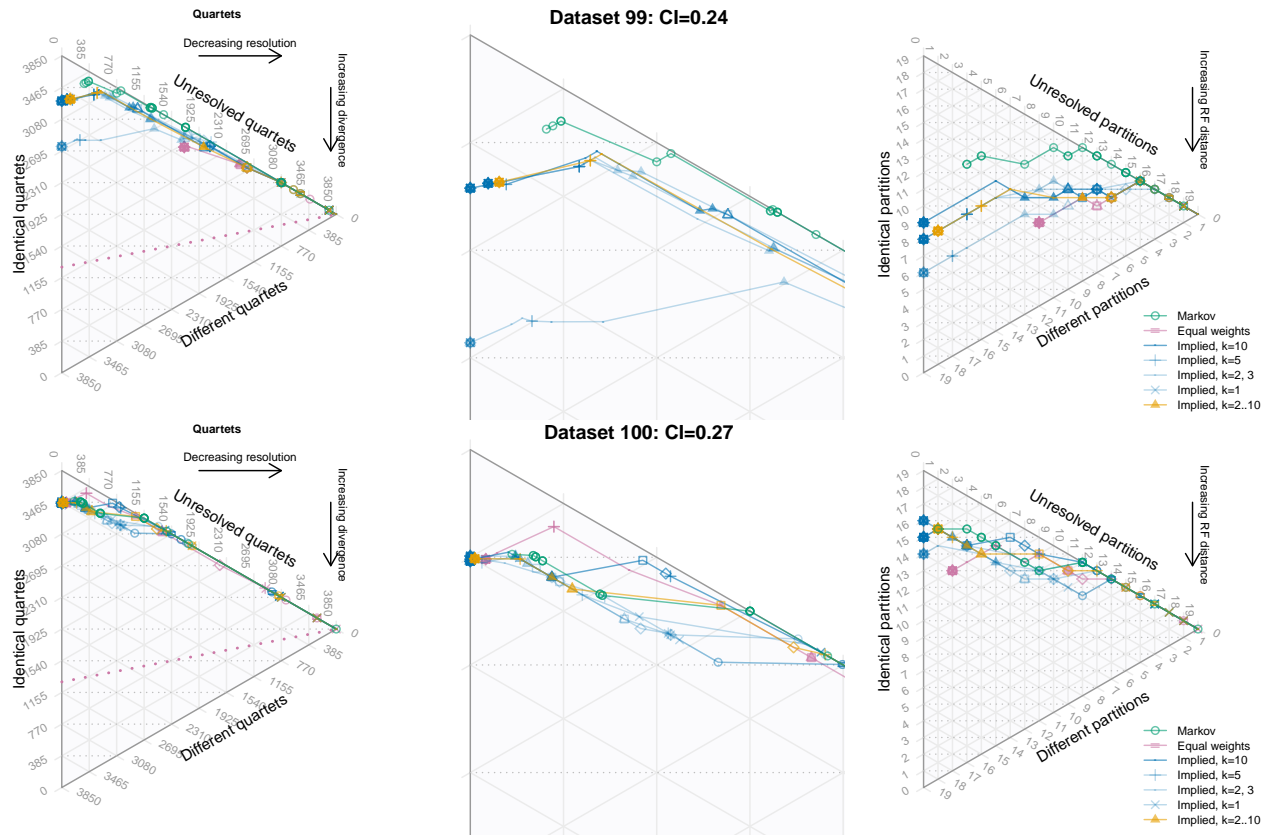
Dataset 90: CI=0.26



0.11 Trees 91–100







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. In press. Bayesian and parsimony approaches reconstruct informative trees from simulated morphological datasets. *Biology Letters; preprint at BioRxiv* (doi:10.1101/227942)