Node support efficacy in Congreve & Lamsdell matrices

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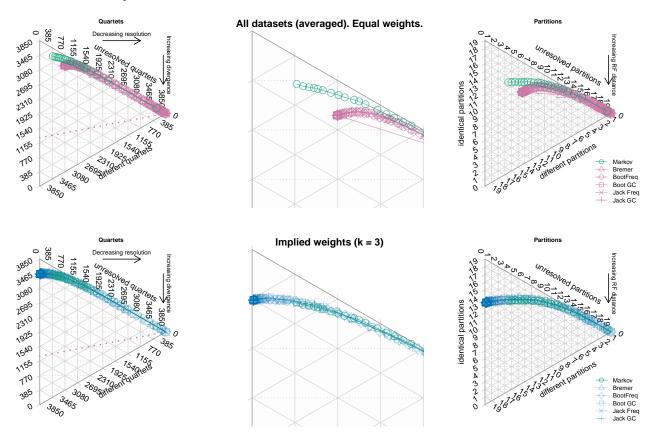
Contents

	Summary																					
0.2	Trees $1-10$																					3
0.3	Trees $11-20$																					8
0.4	Trees $21-30$																					13
0.5	Trees $31-40$																					18
0.6	Trees $41-50$																					23
0.7	Trees $51-60$																					28
0.8	Trees $61-70$					 																33
0.9	Trees $71-80$					 																38
0.10	$Trees\ 81–90\ .$					 																43
	$Trees\ 91100$																					
Refe	rences					 			 													53

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.

The most highly resolved tree is progressively reduced by collapsing nodes with a support value below an increasing threshold.

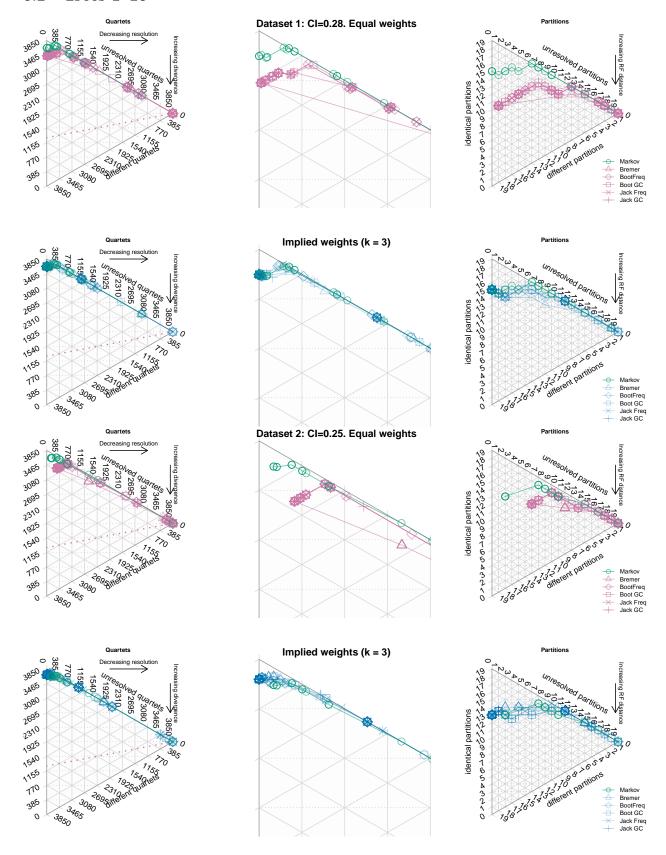
0.1 Summary

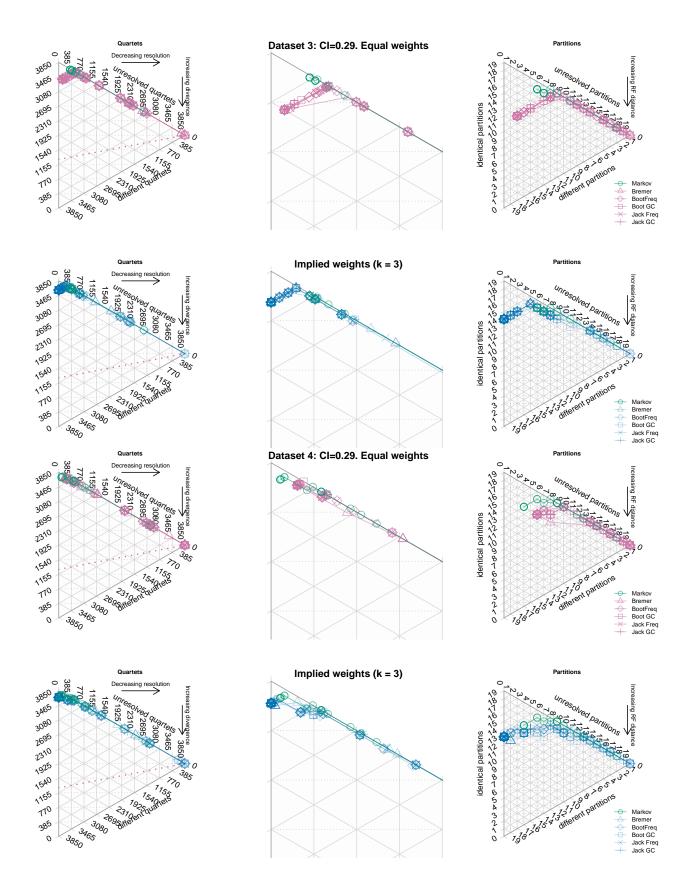


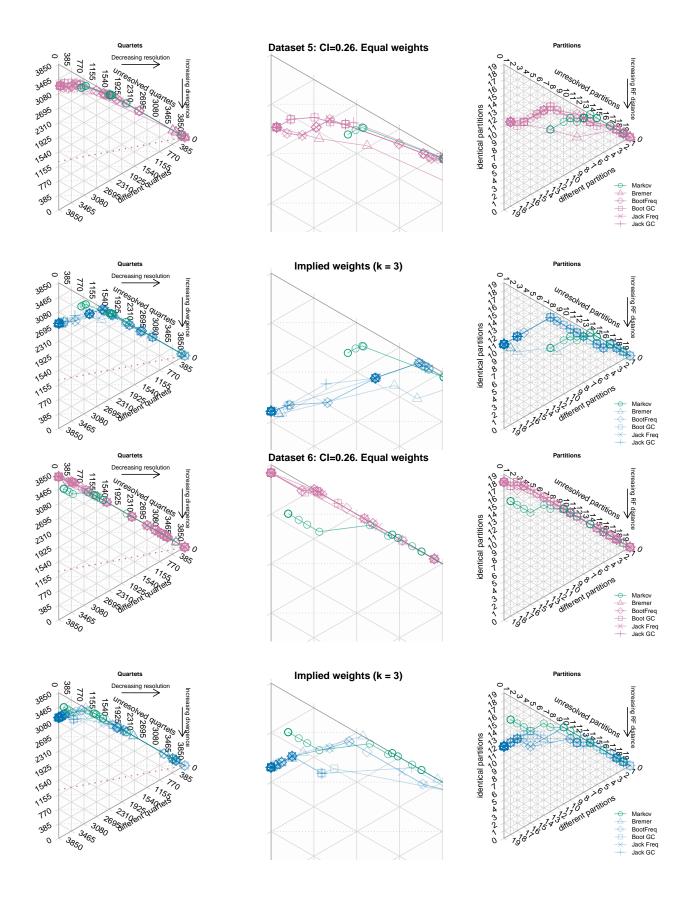
Though the Bootstrap GC metric systematically produces the lowest normalized tree distances (SD/MaxI), it is not significantly better than other methods. The following table reports P values that fail to reject the null hypothesis that the specified node support metric is equally good at ascribing incorrect nodes the lowest support values.

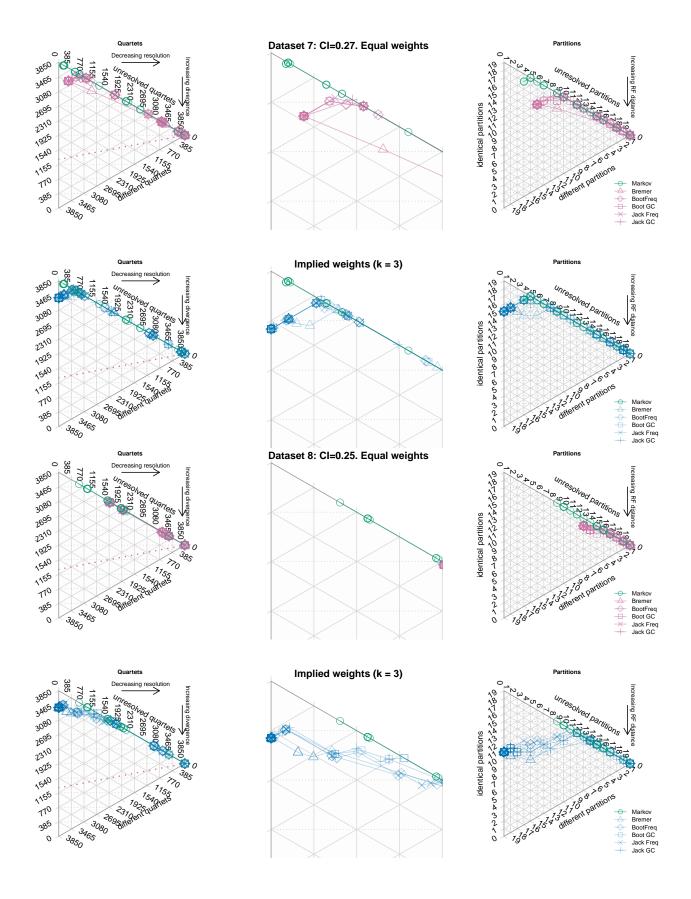
Package 'Quartet' is not available; cannot display table.

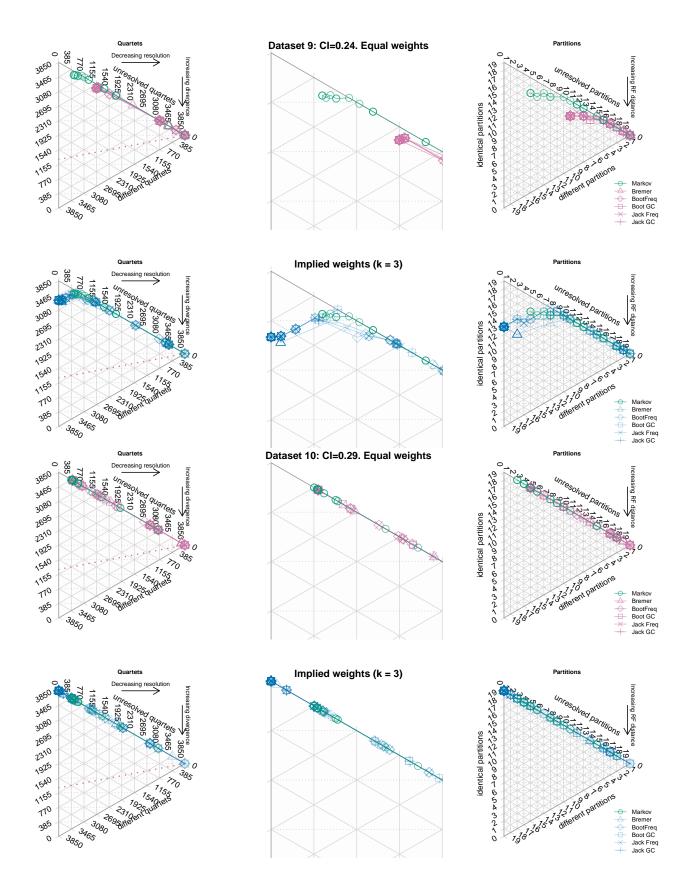
0.2 Trees 1-10



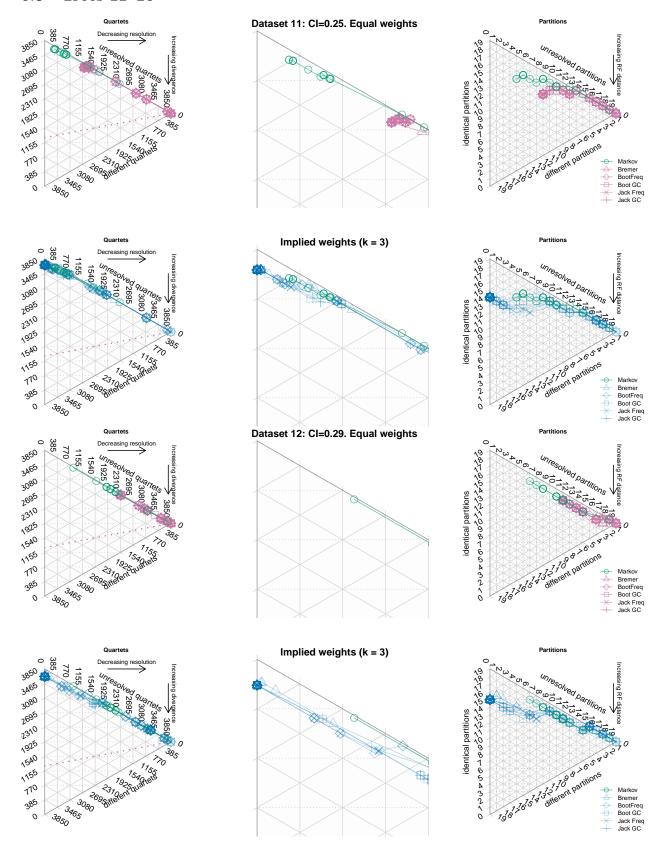


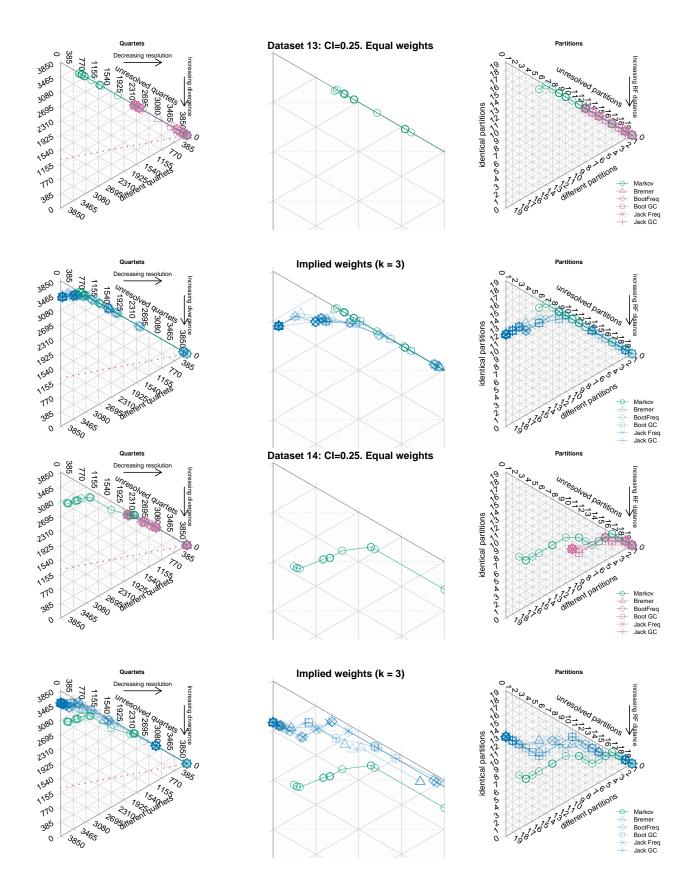


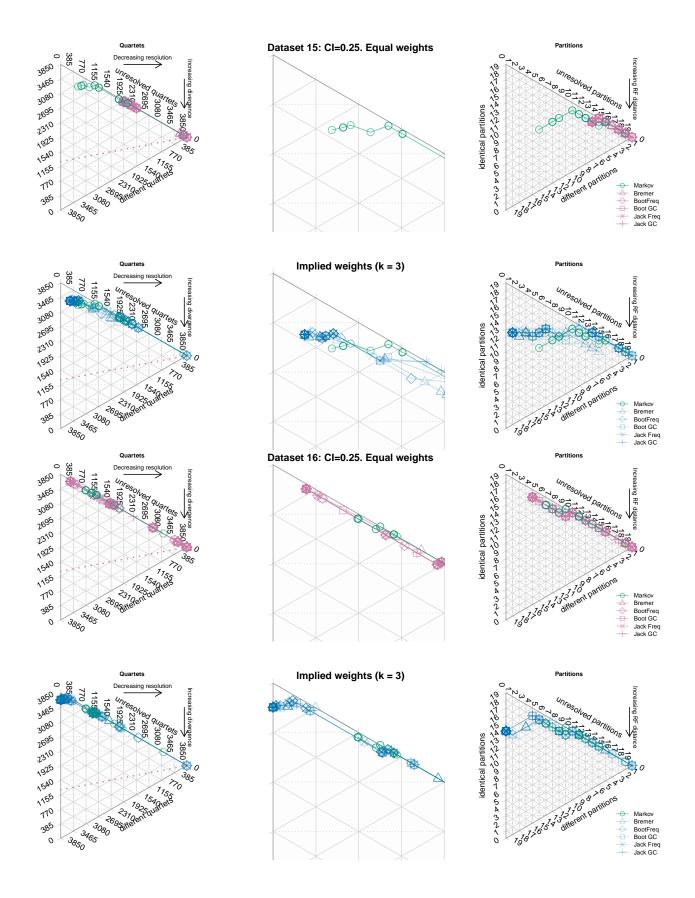


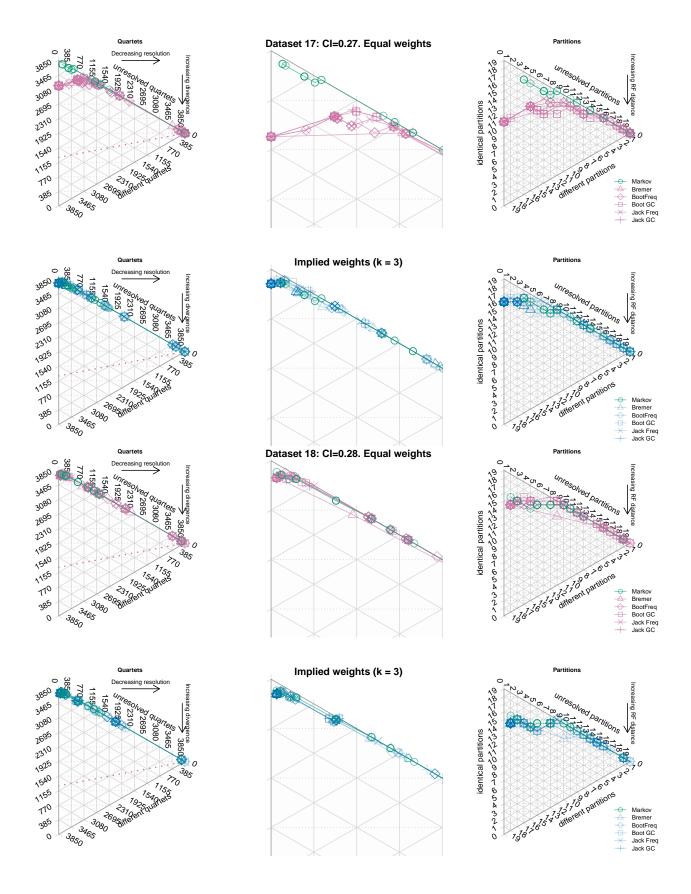


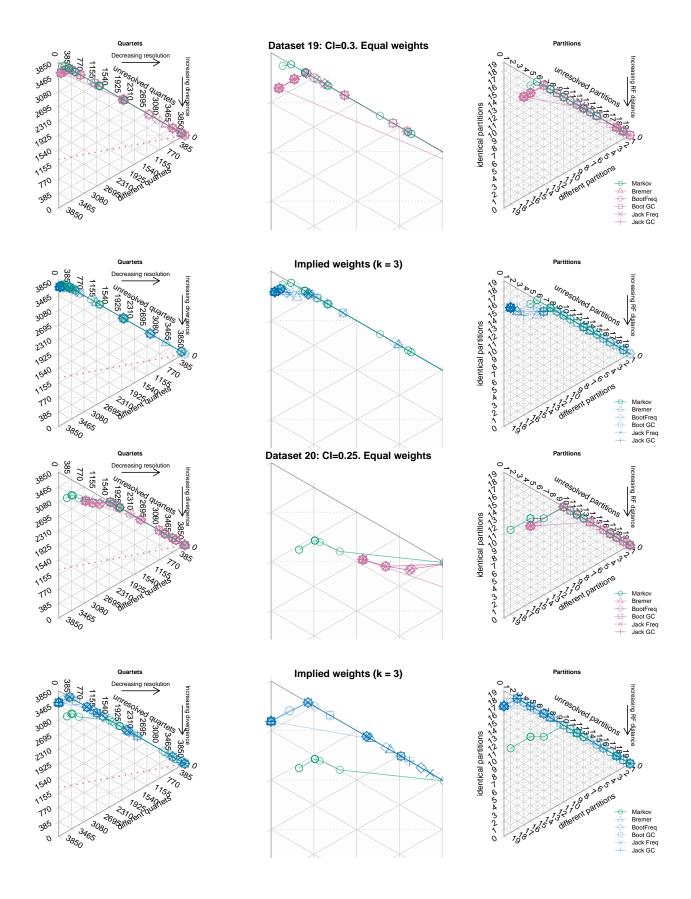
0.3 Trees 11-20



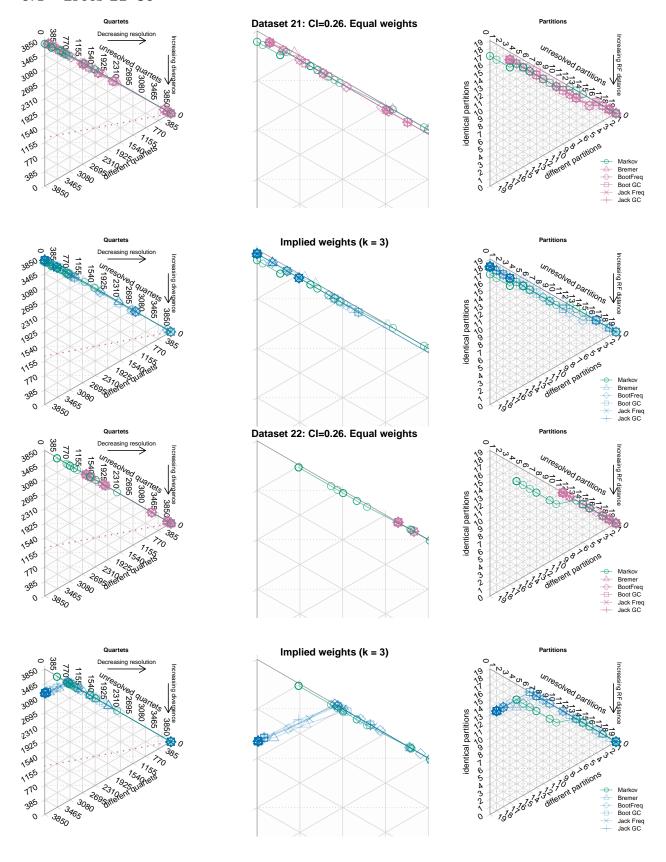


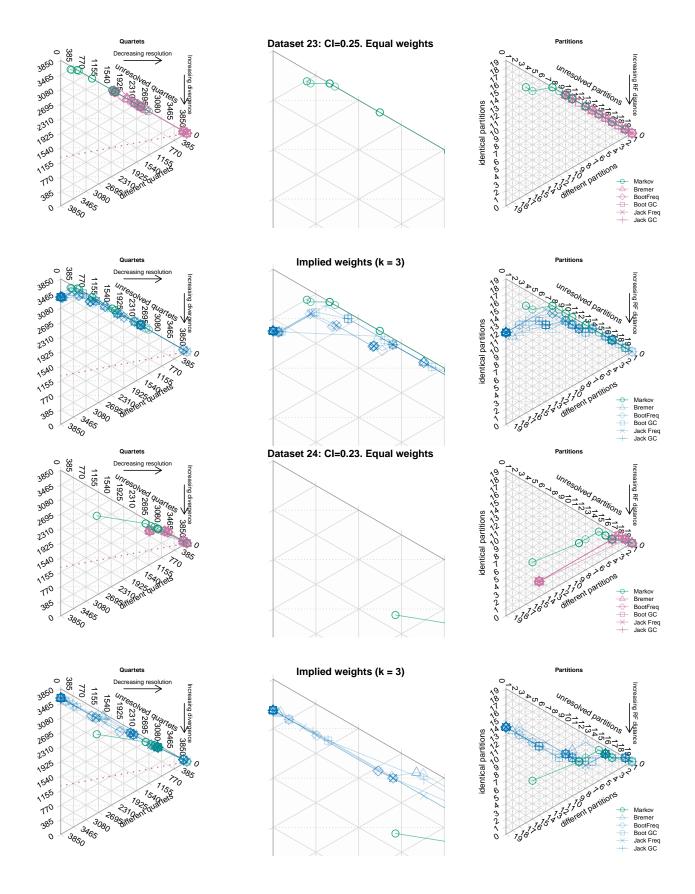


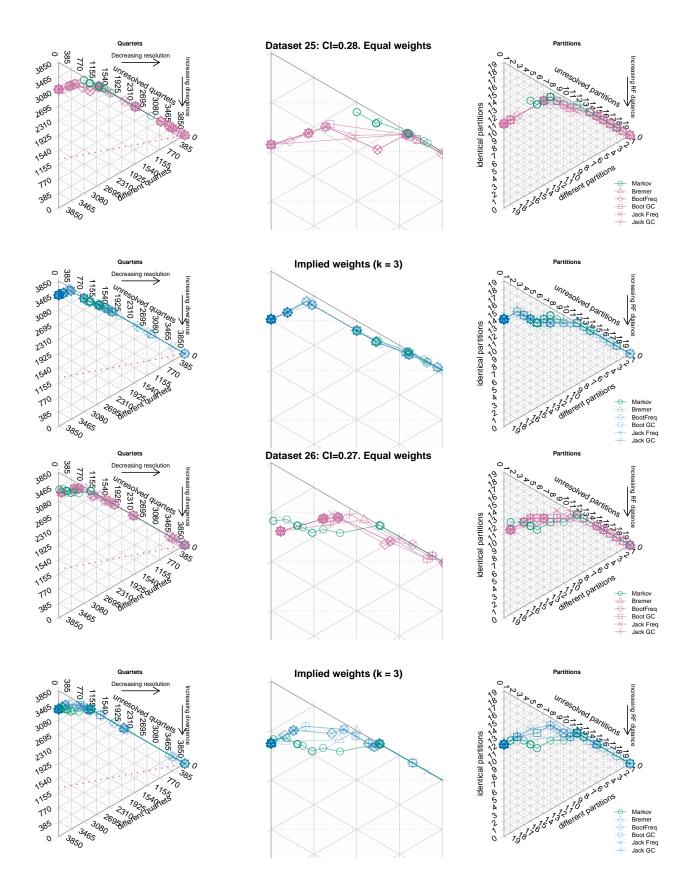


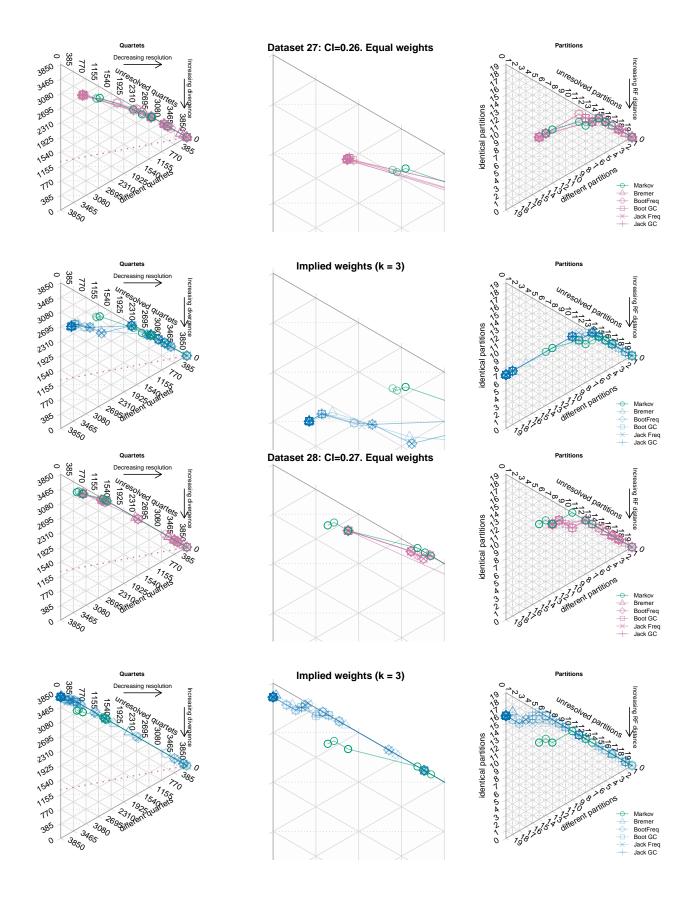


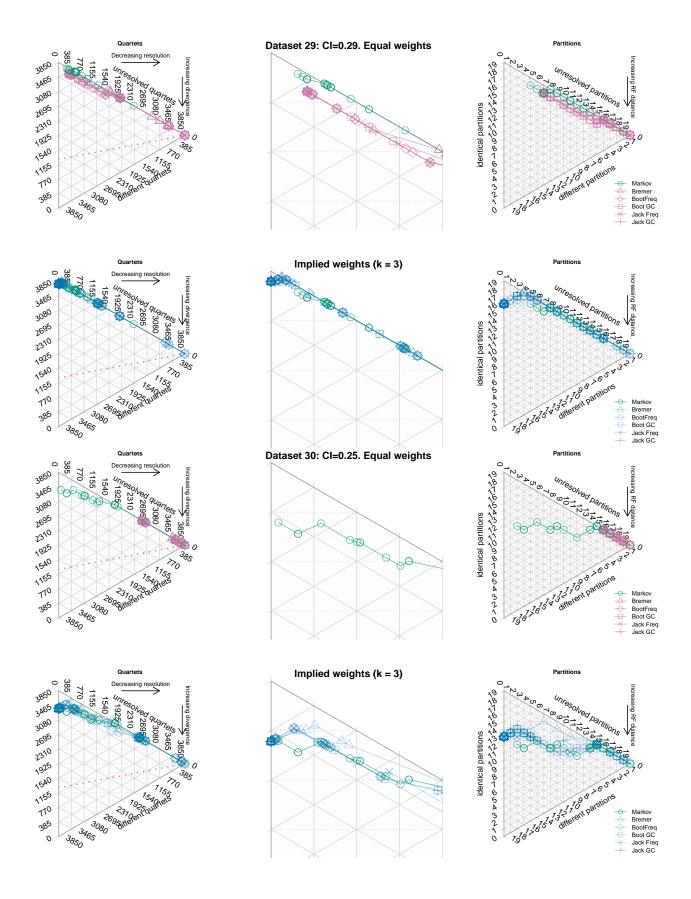
0.4 Trees 21-30



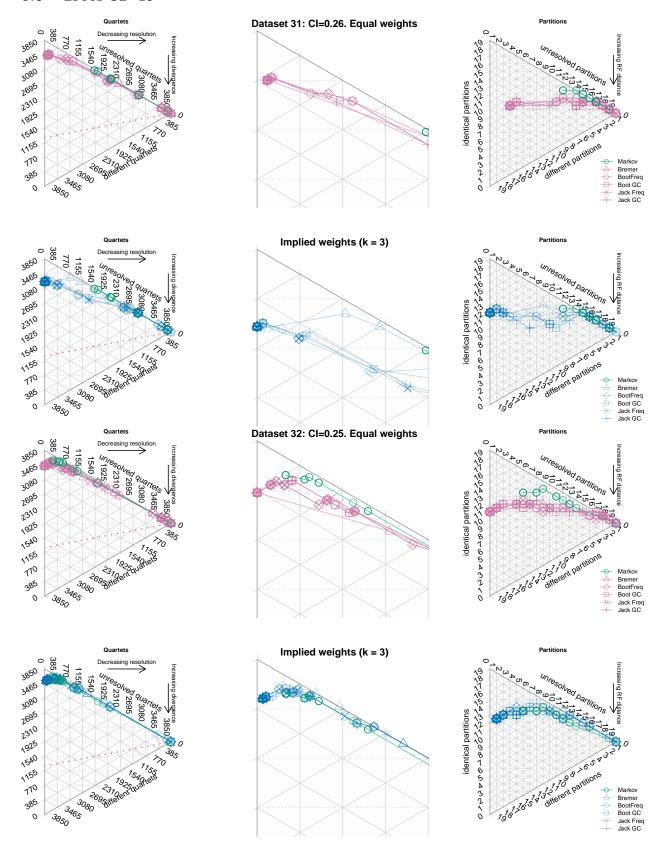


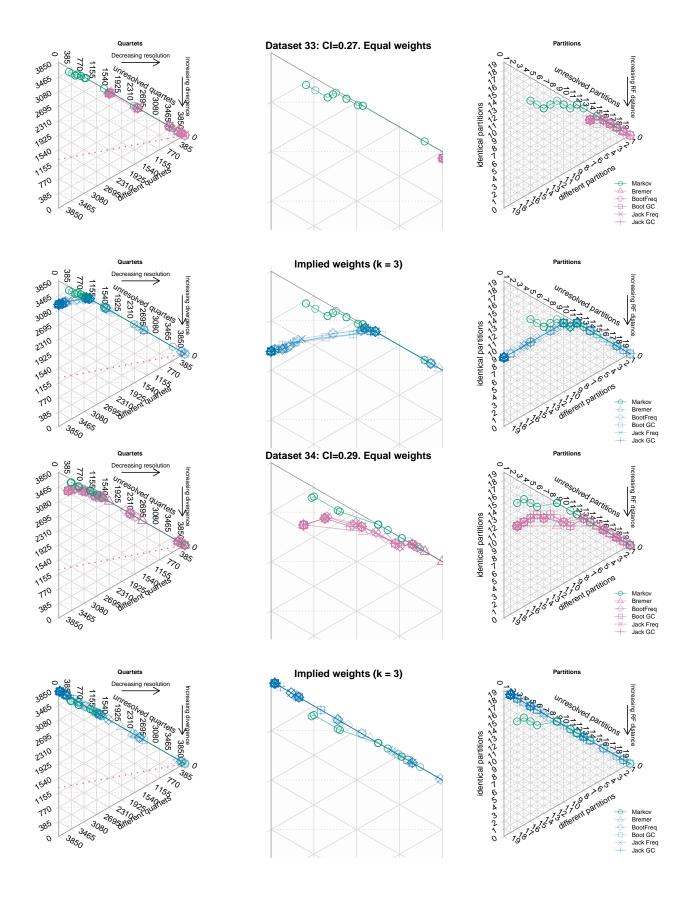


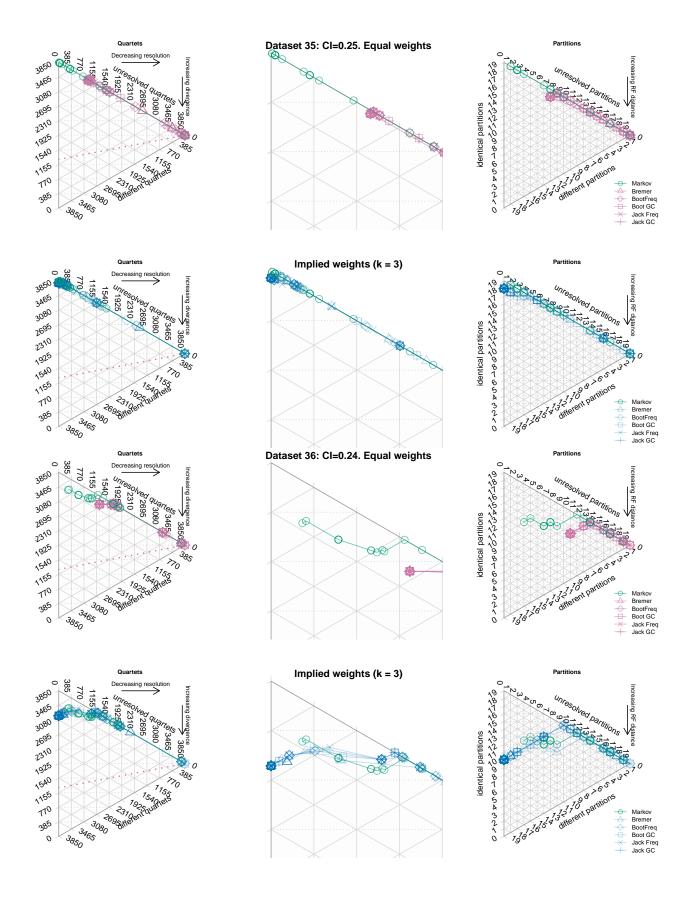


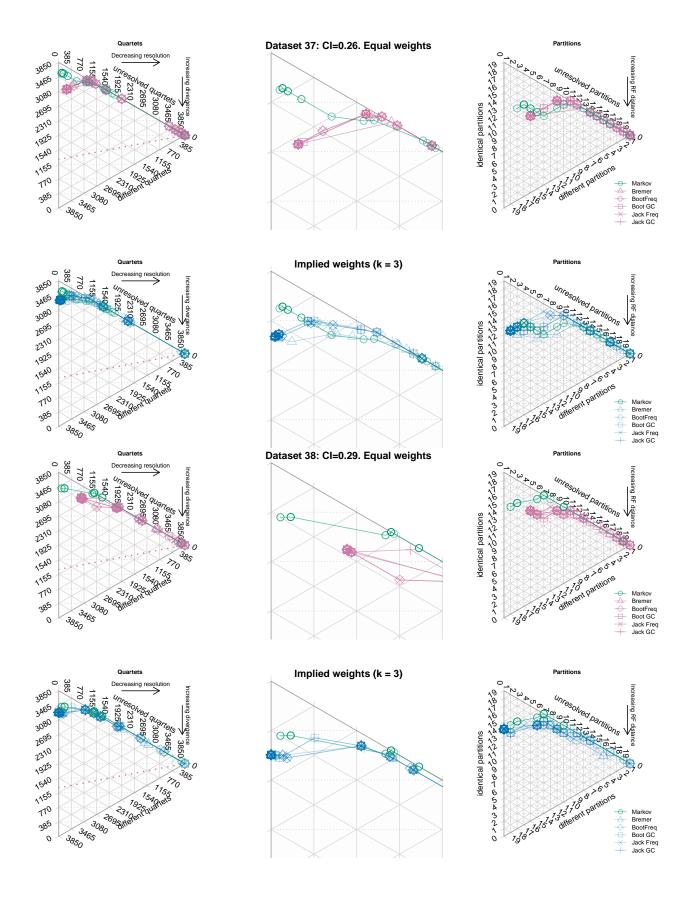


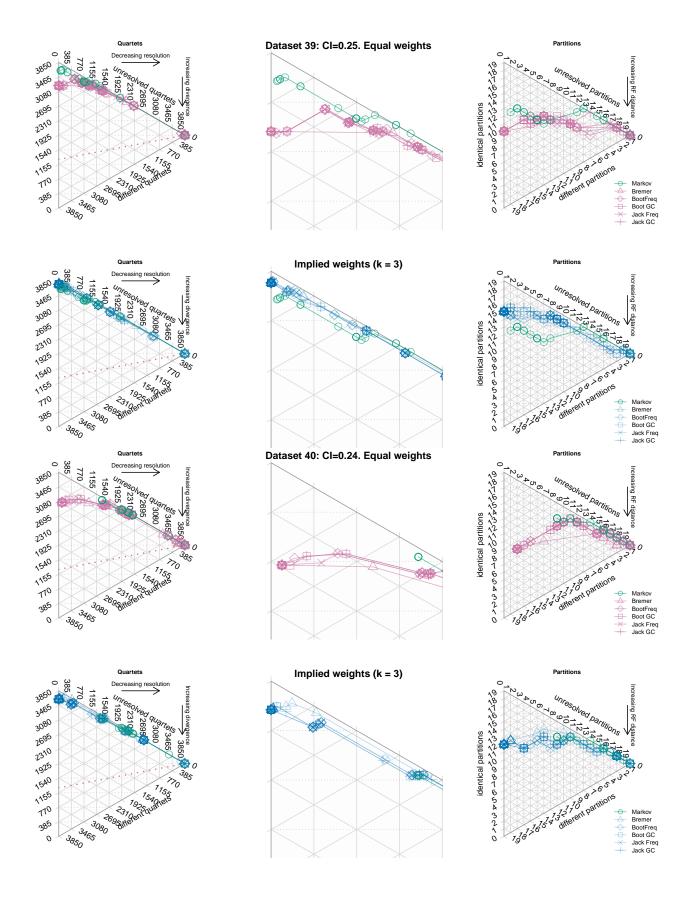
0.5 Trees 31-40



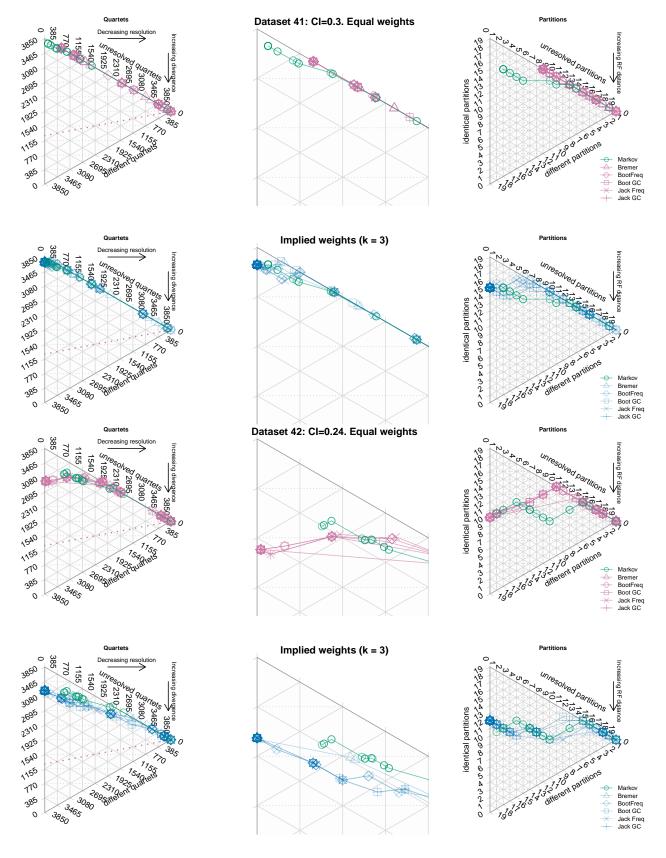


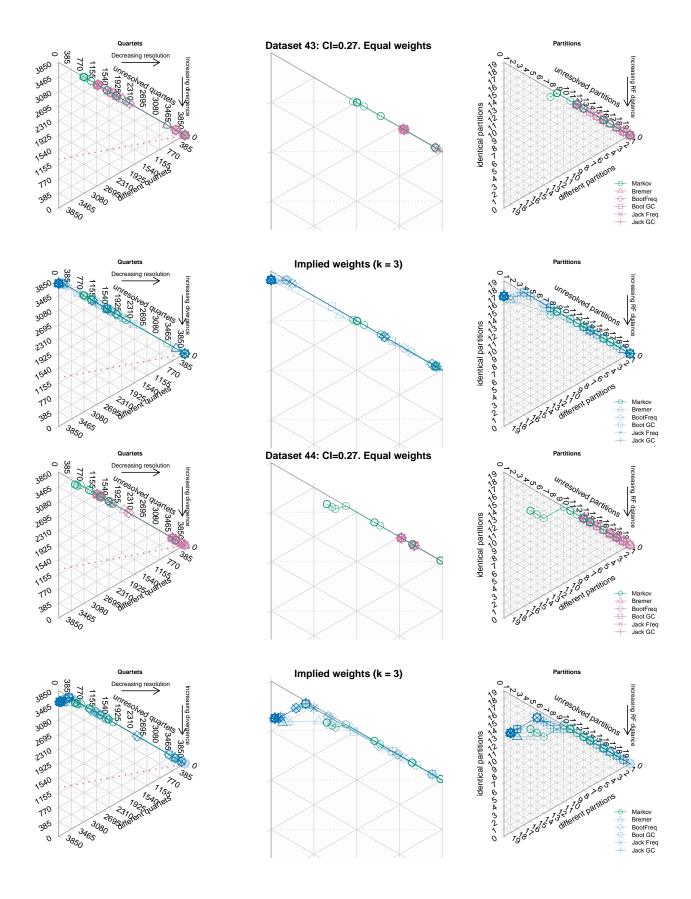


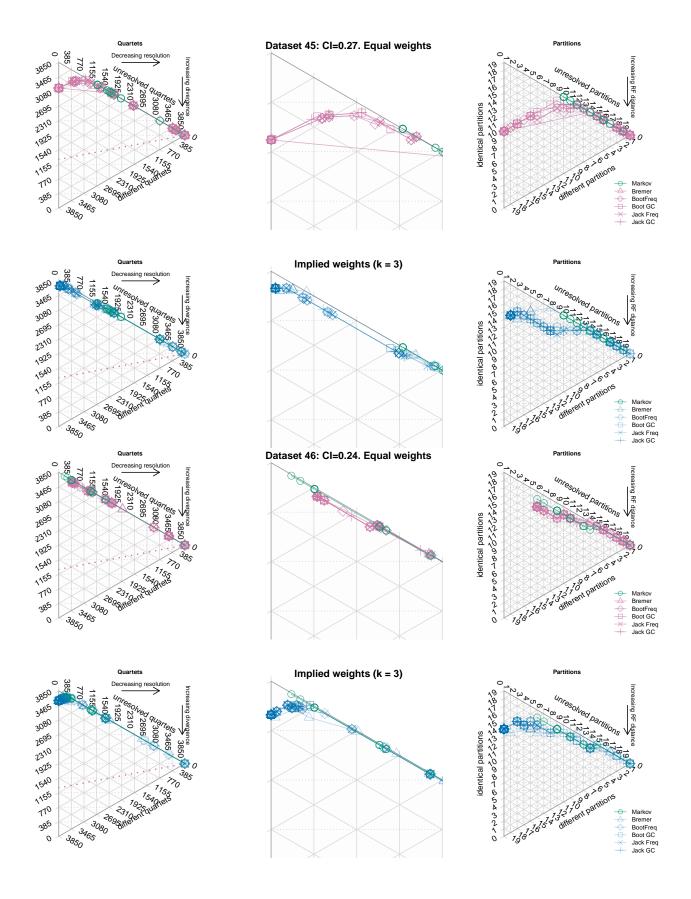


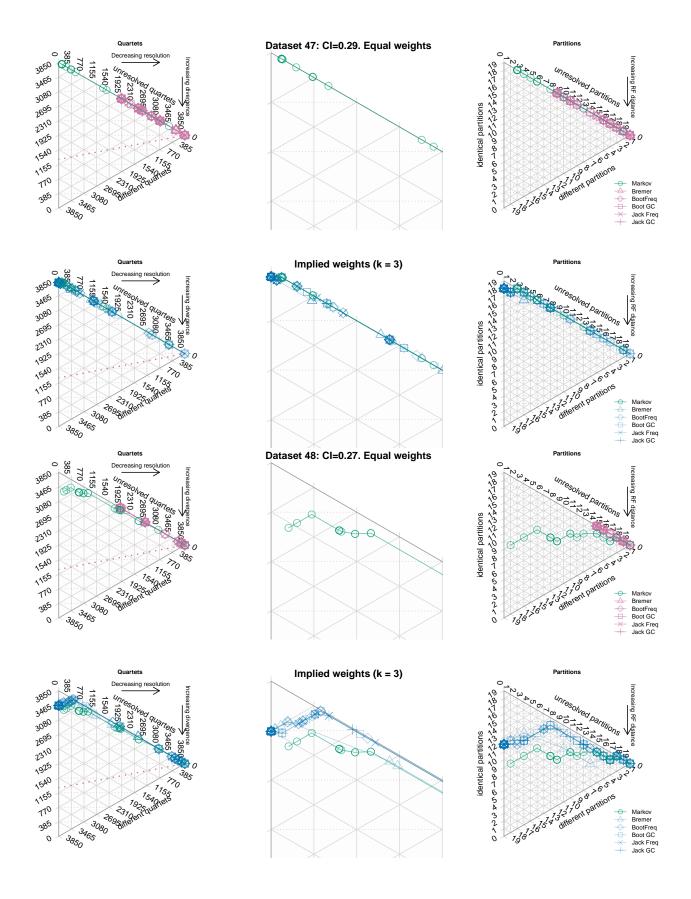


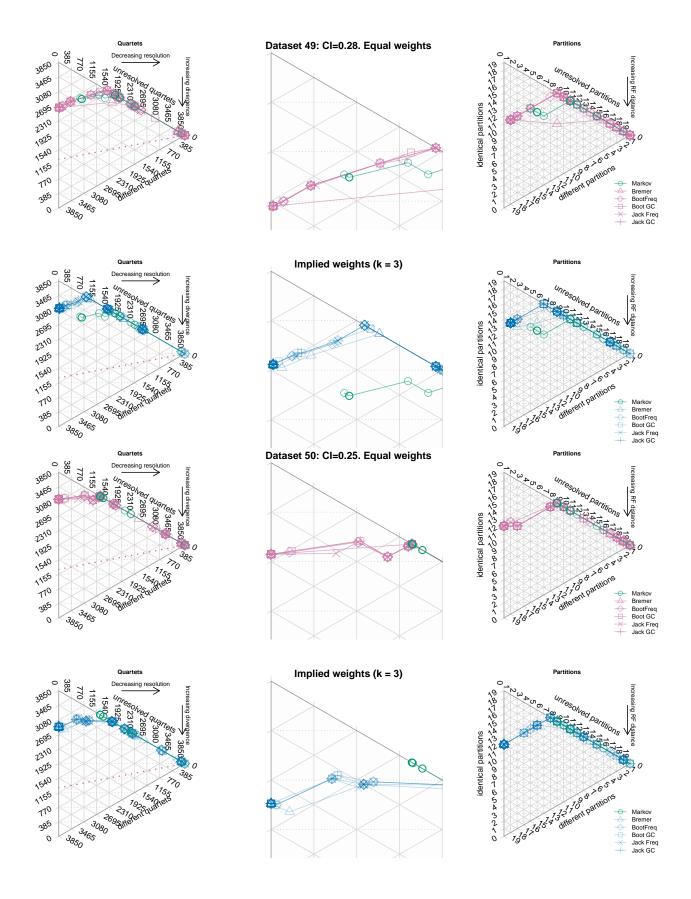
0.6 Trees 41-50



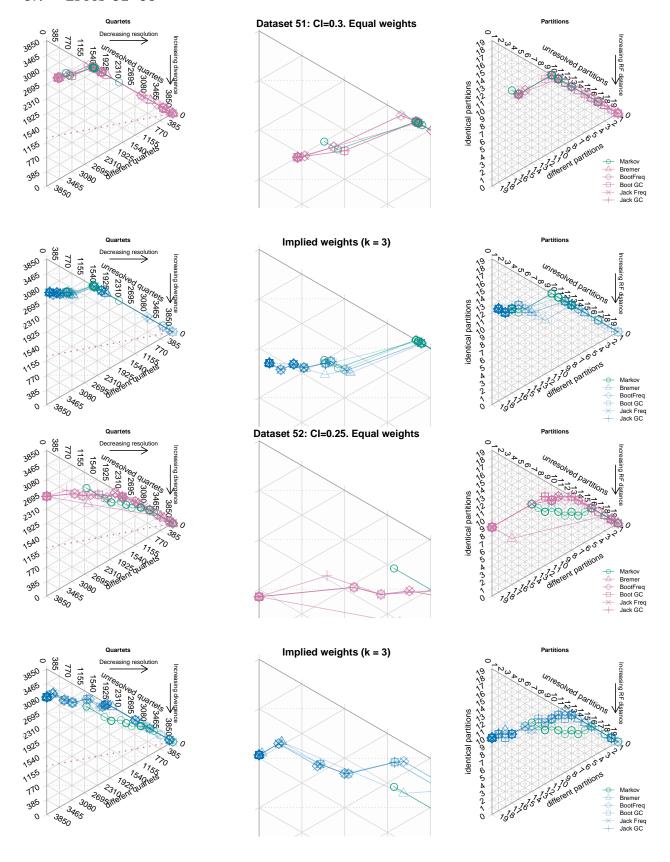


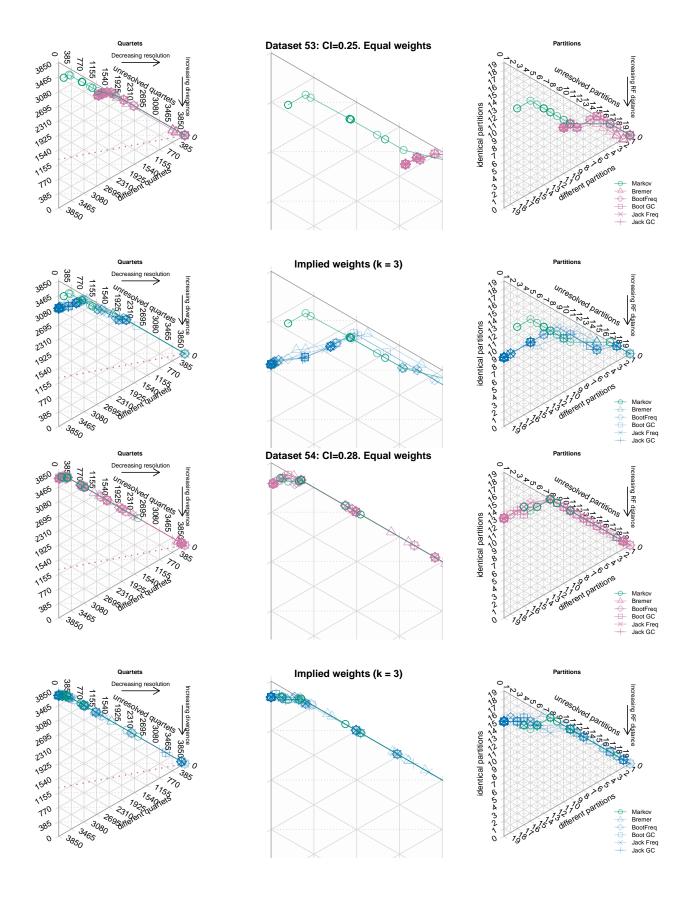


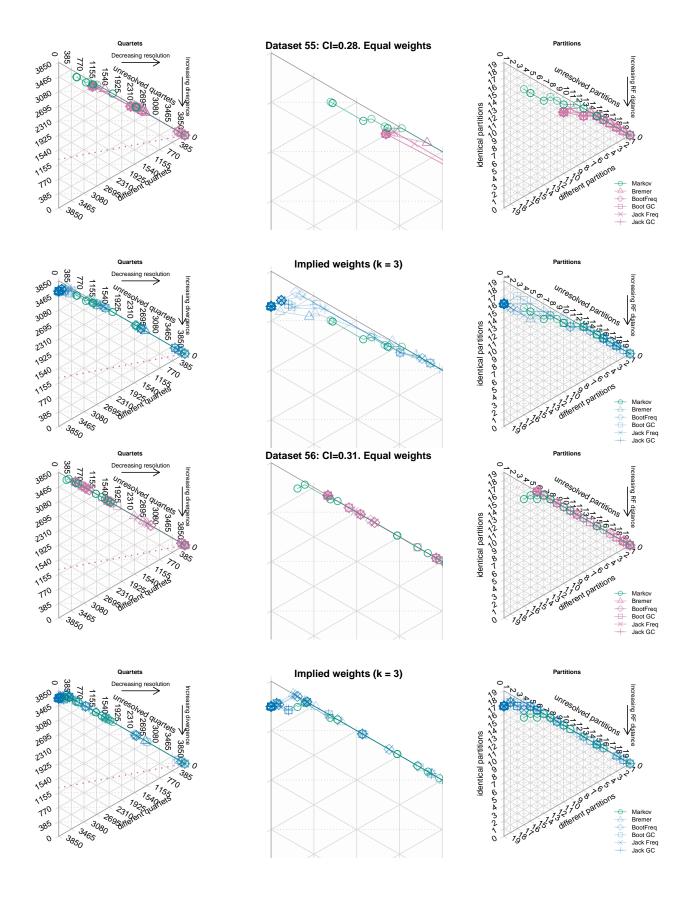


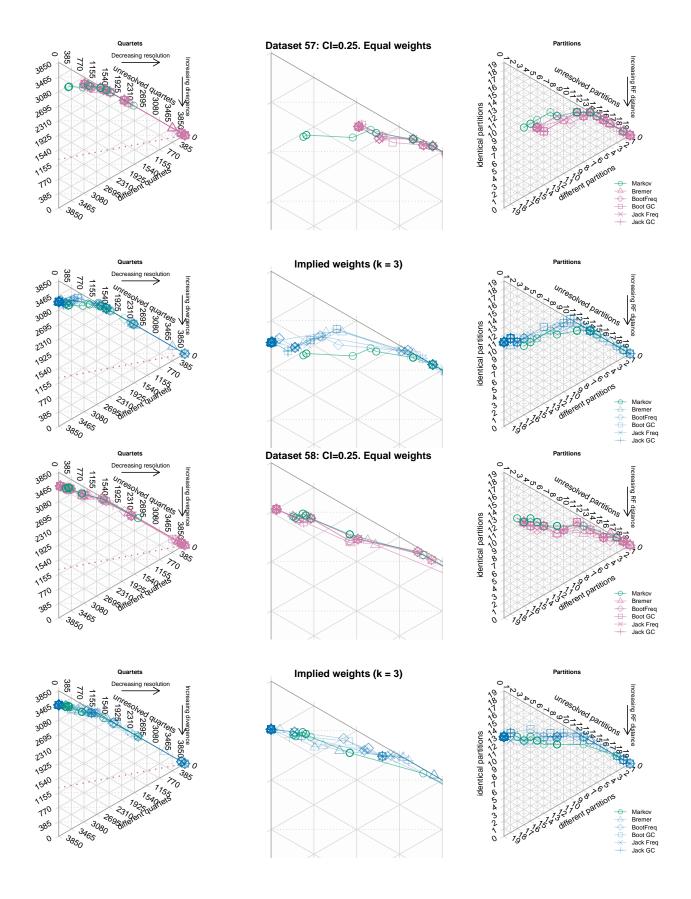


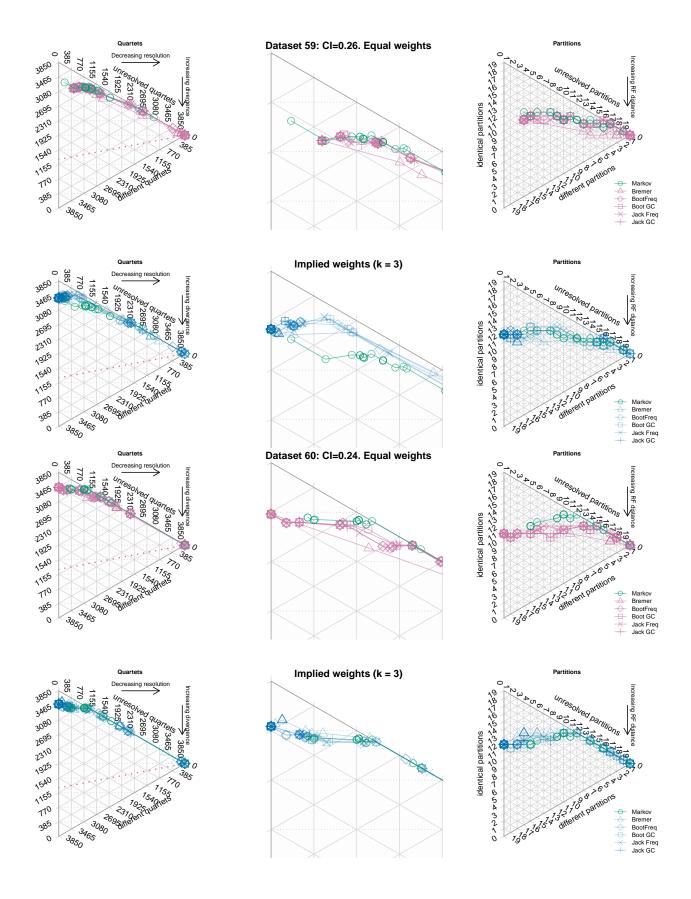
0.7 Trees 51-60



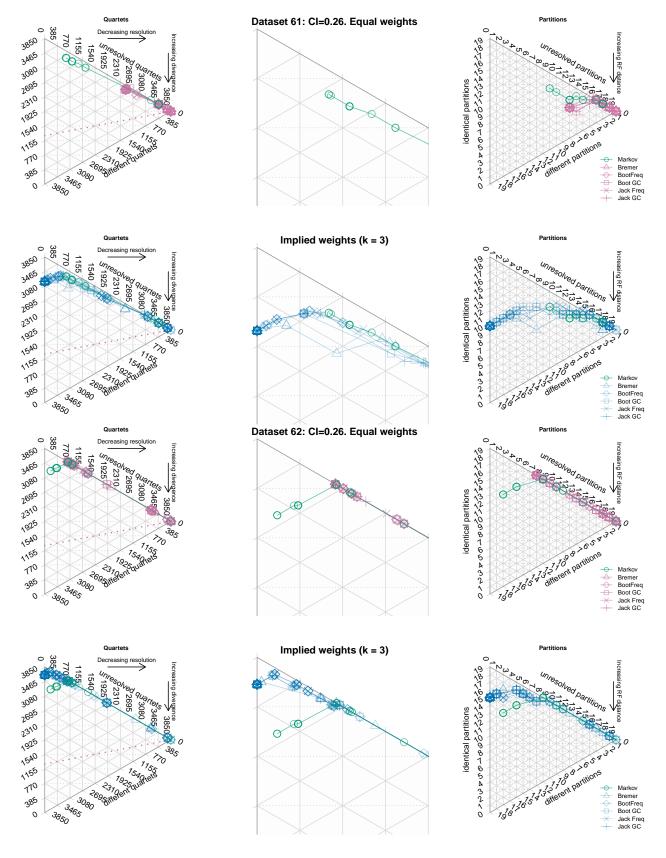


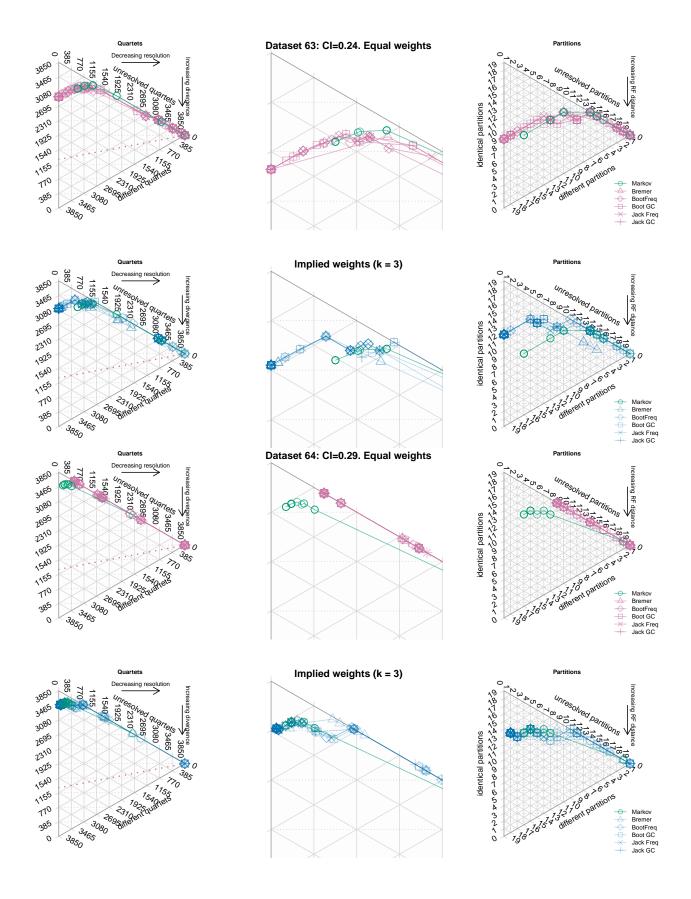


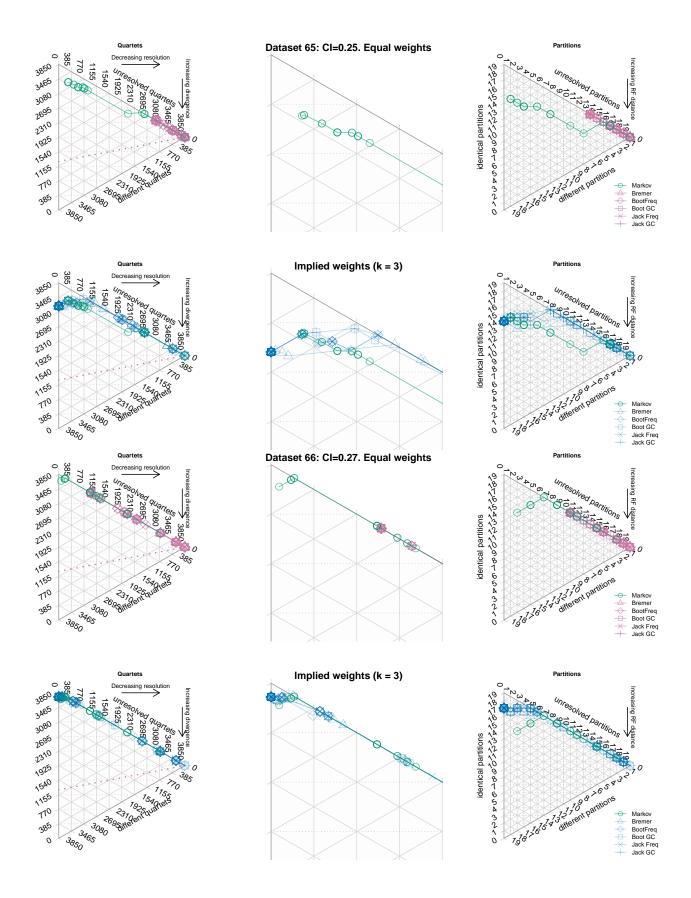


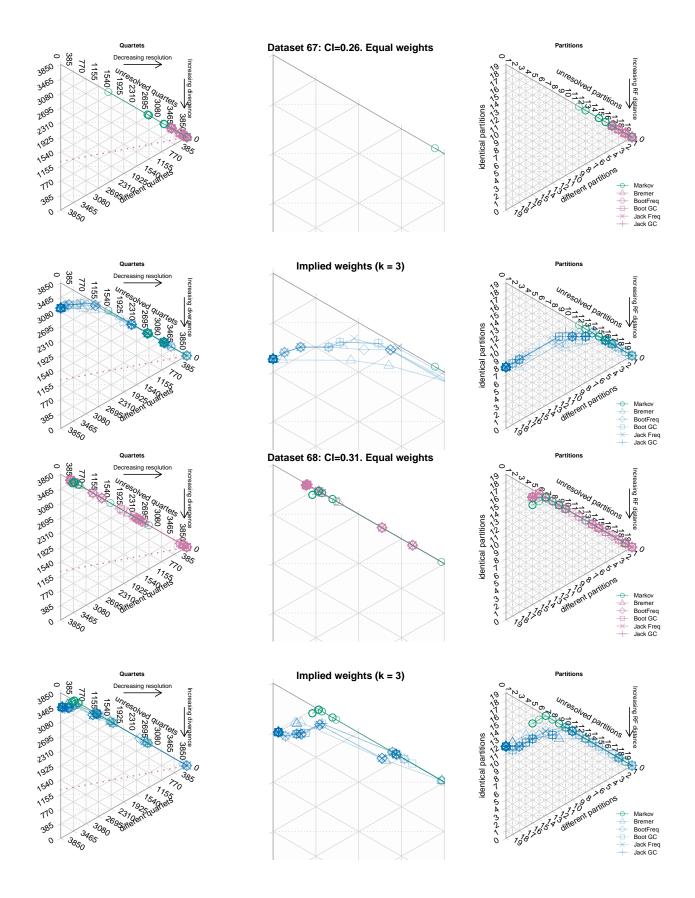


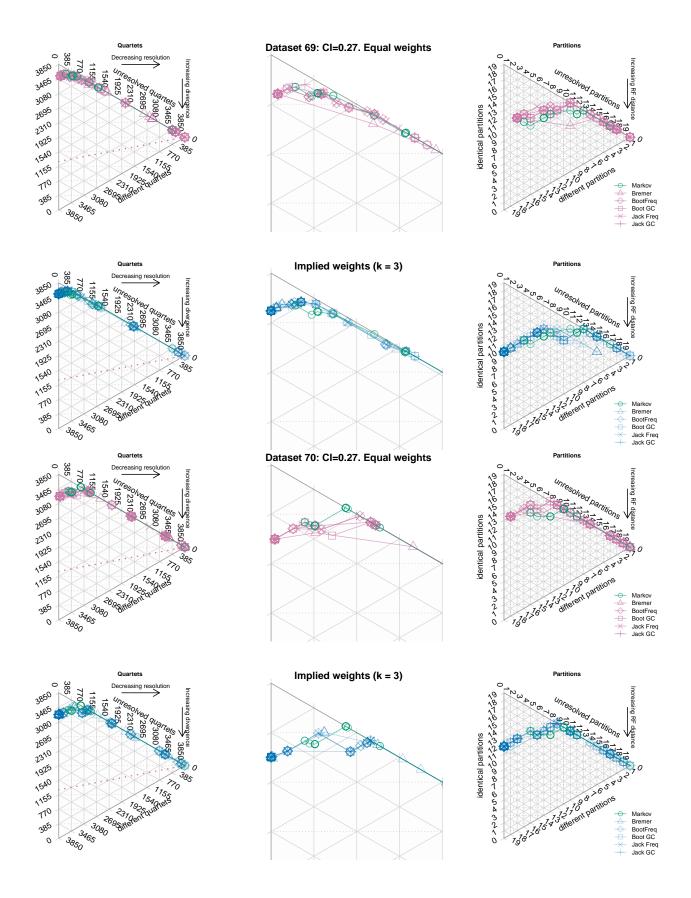
0.8 Trees 61-70



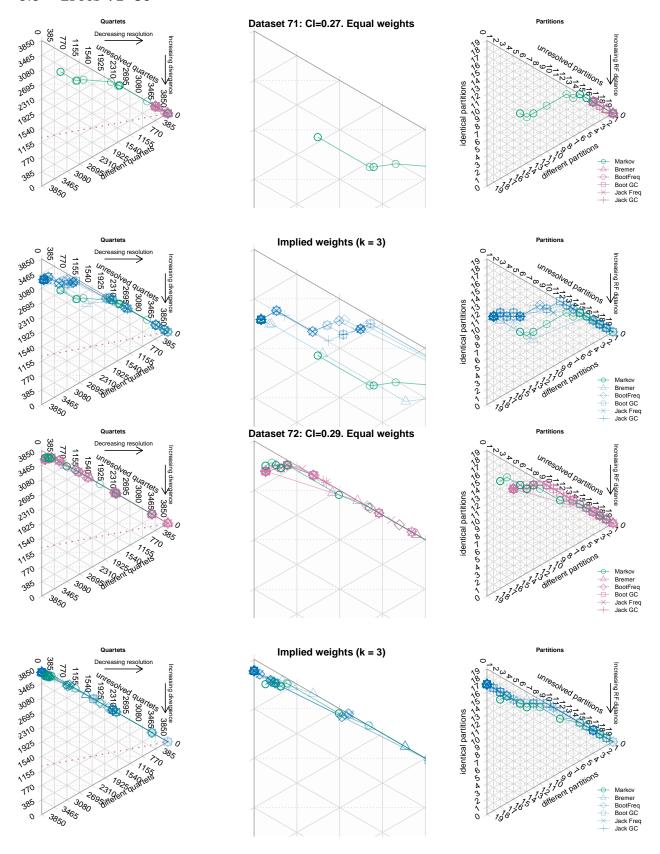


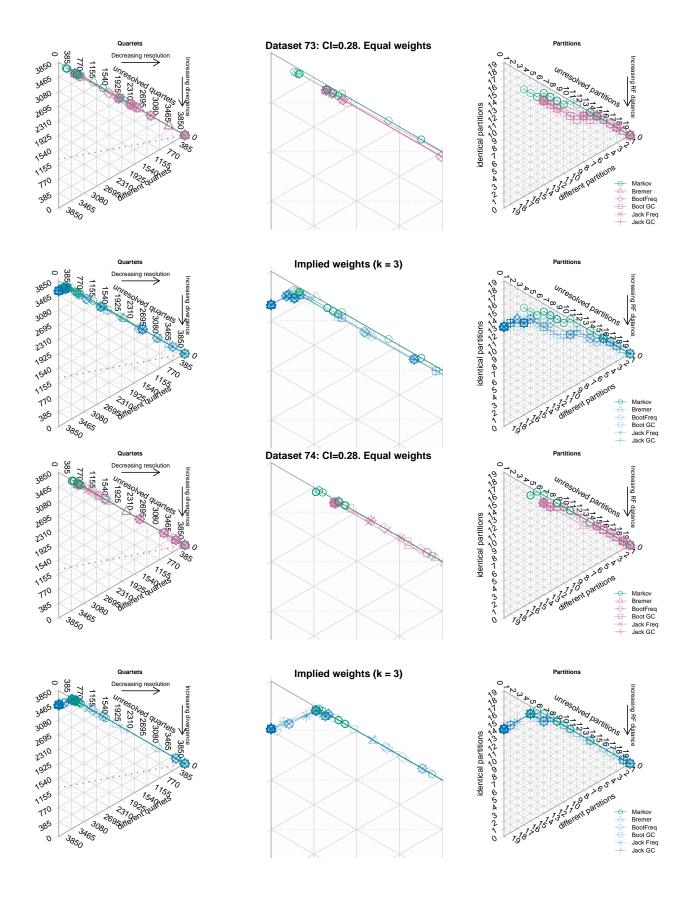


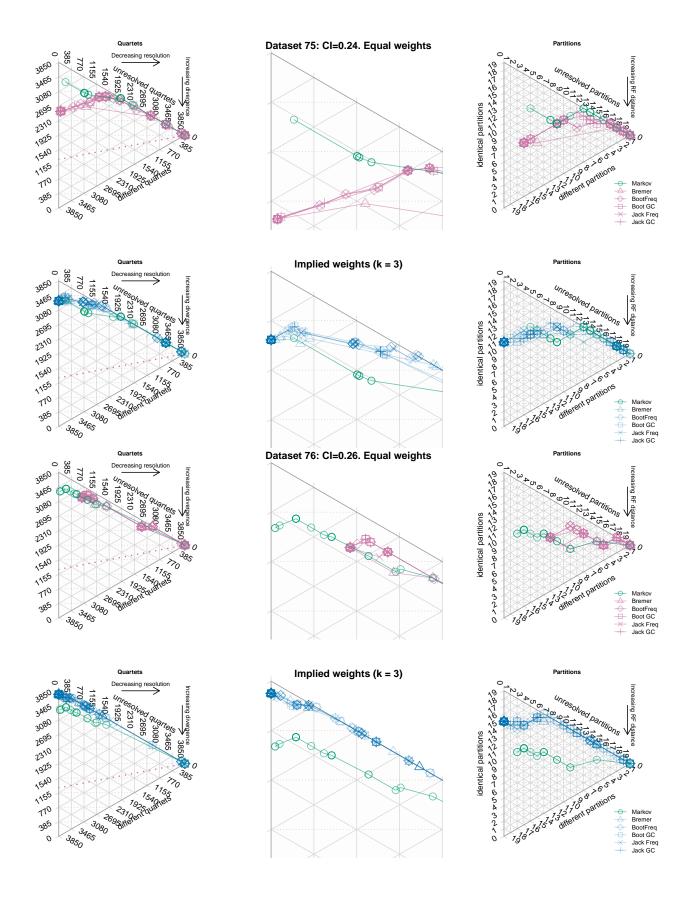


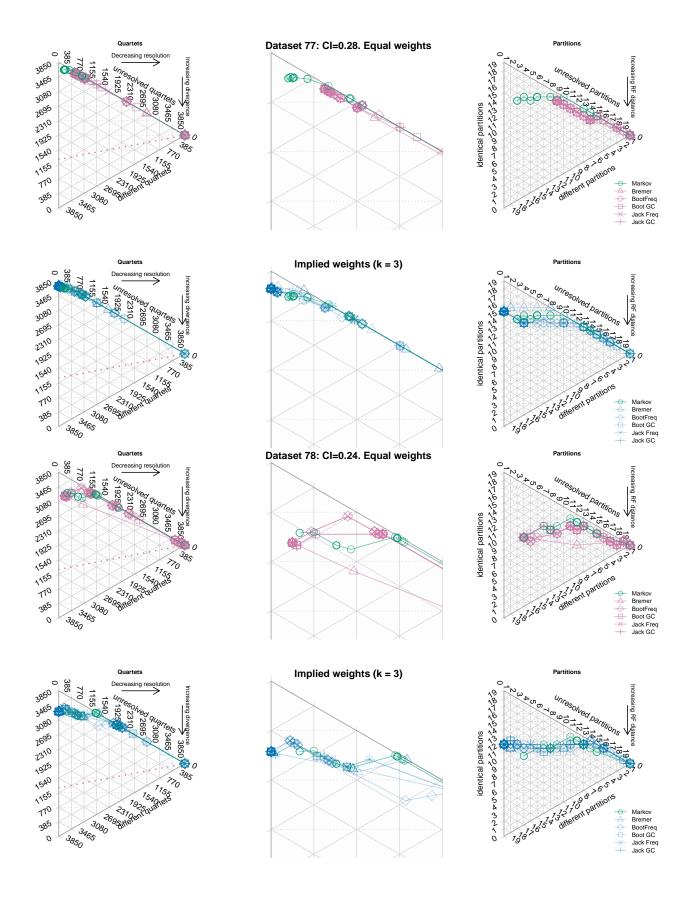


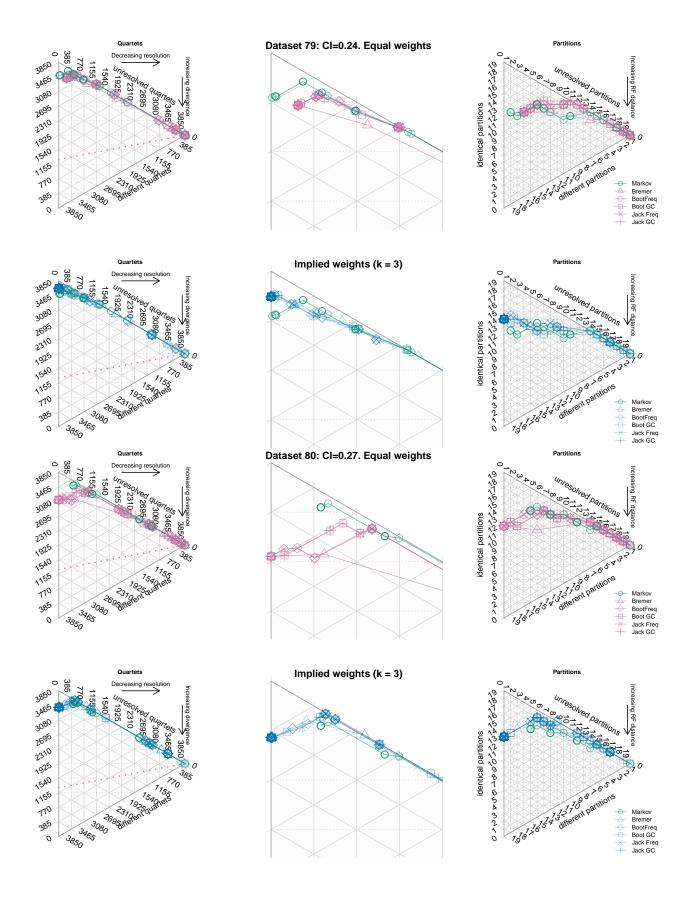
0.9 Trees 71-80



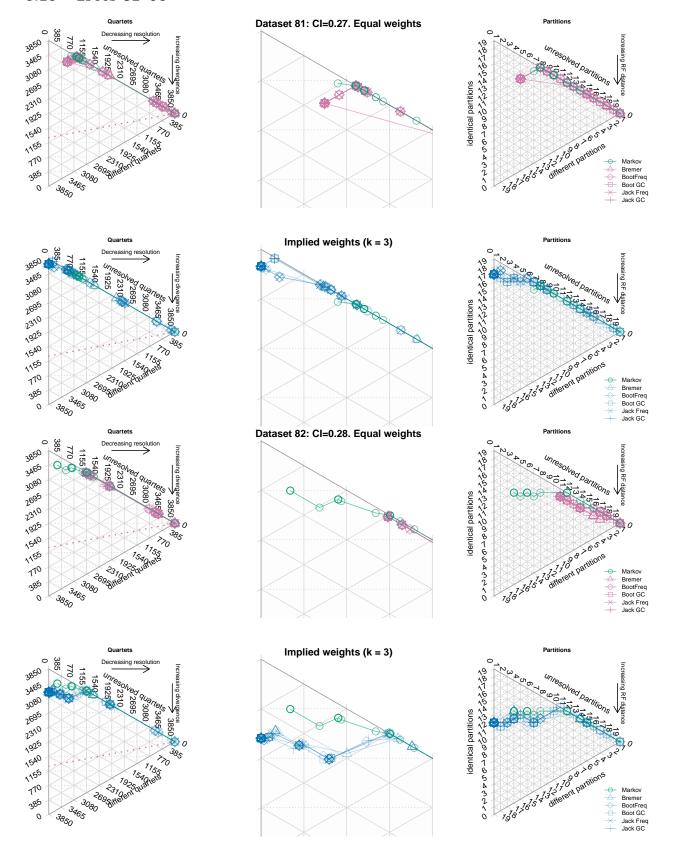


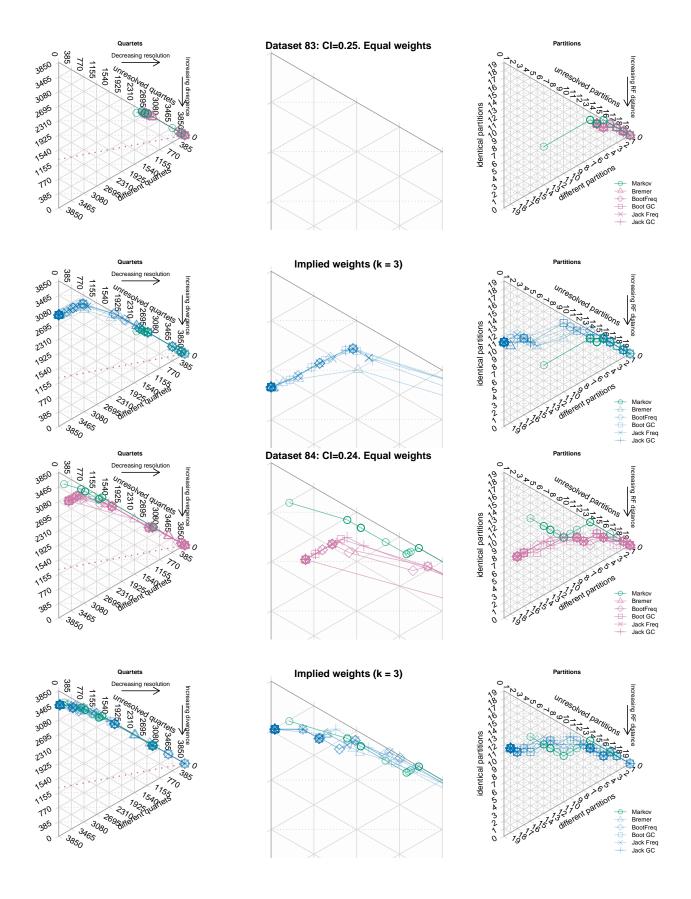


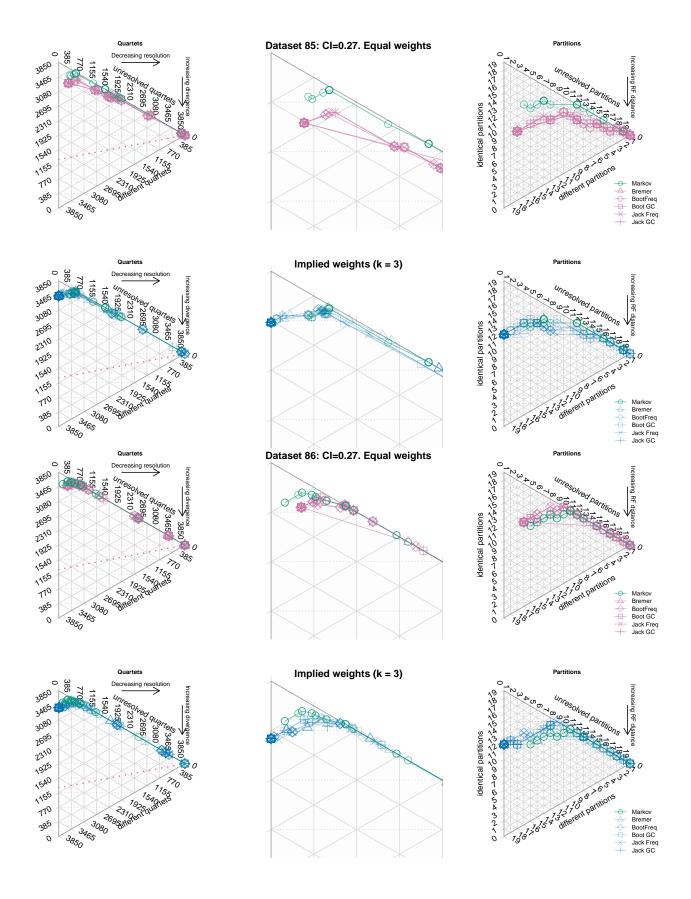


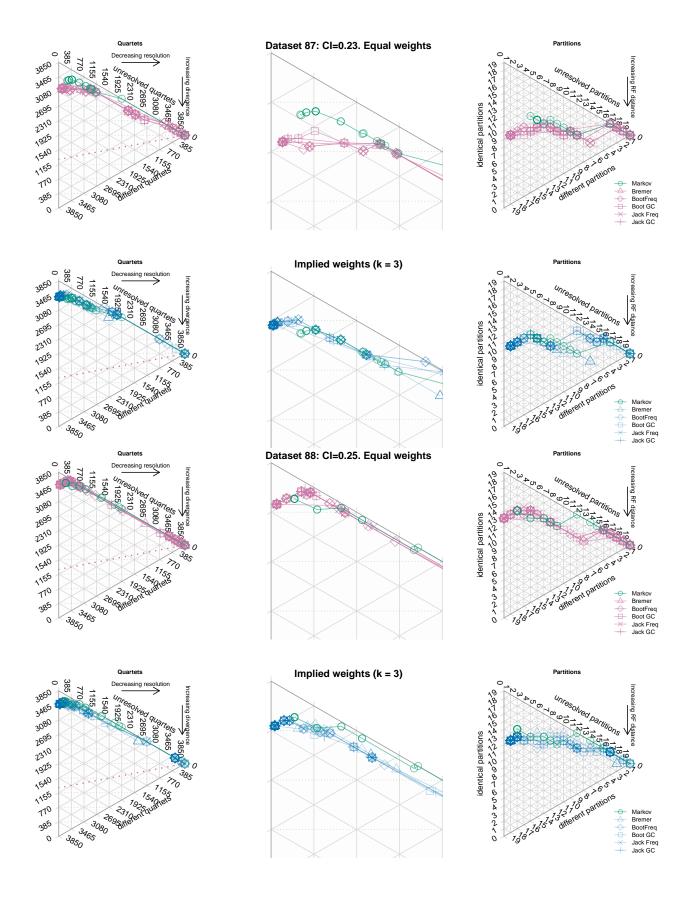


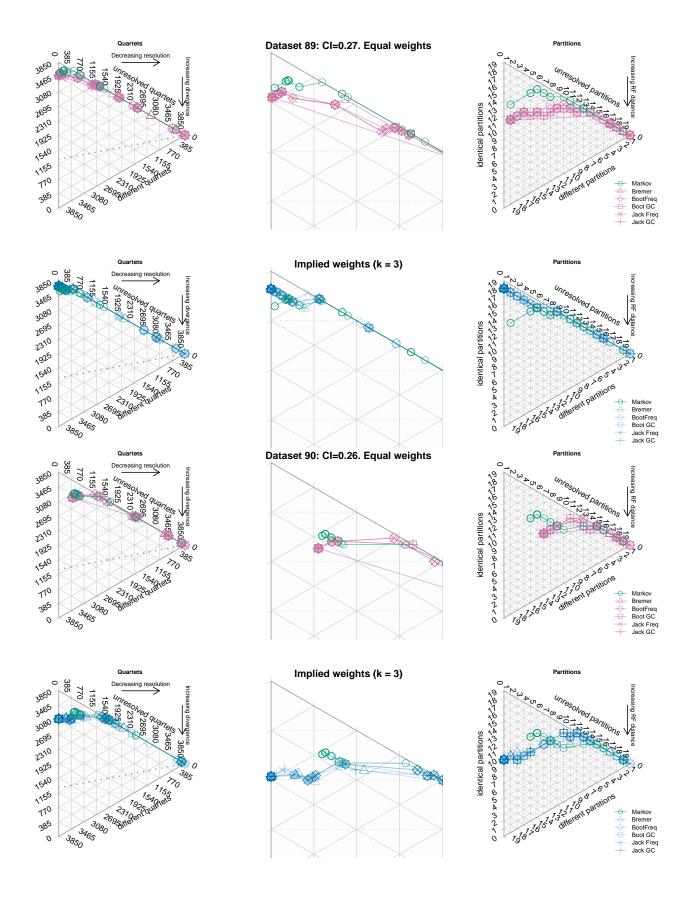
0.10 Trees 81-90



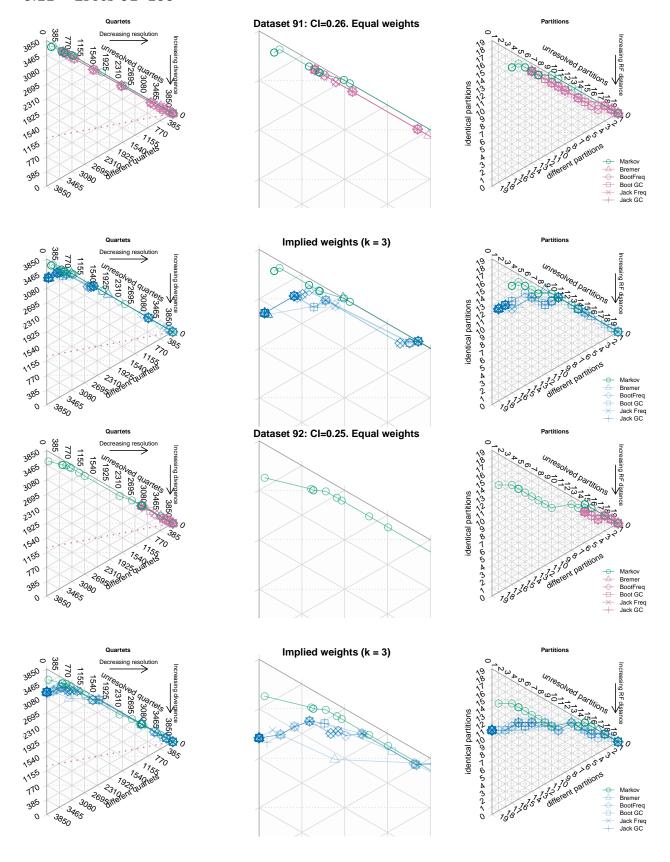


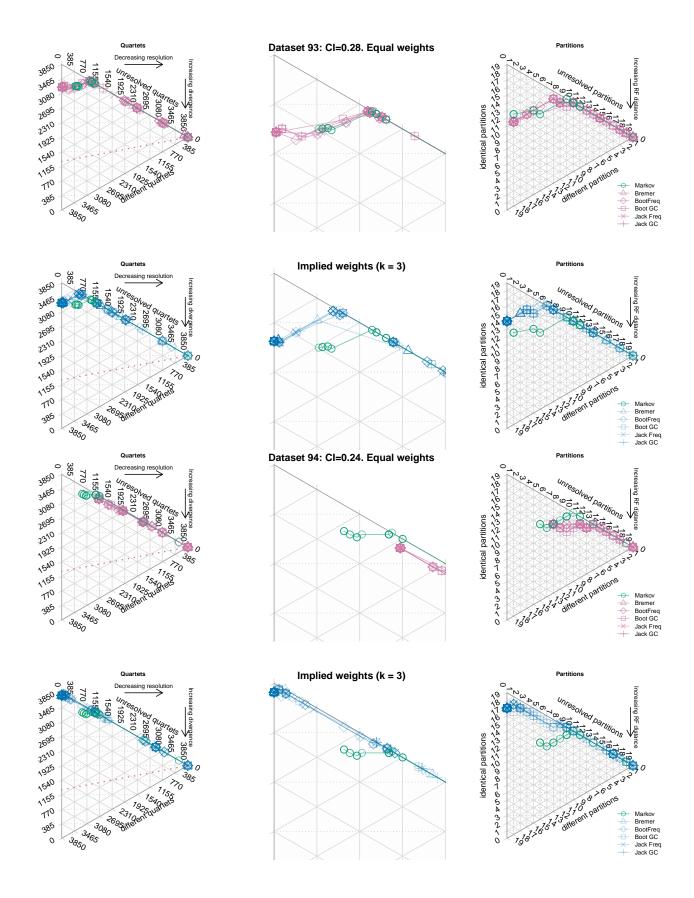


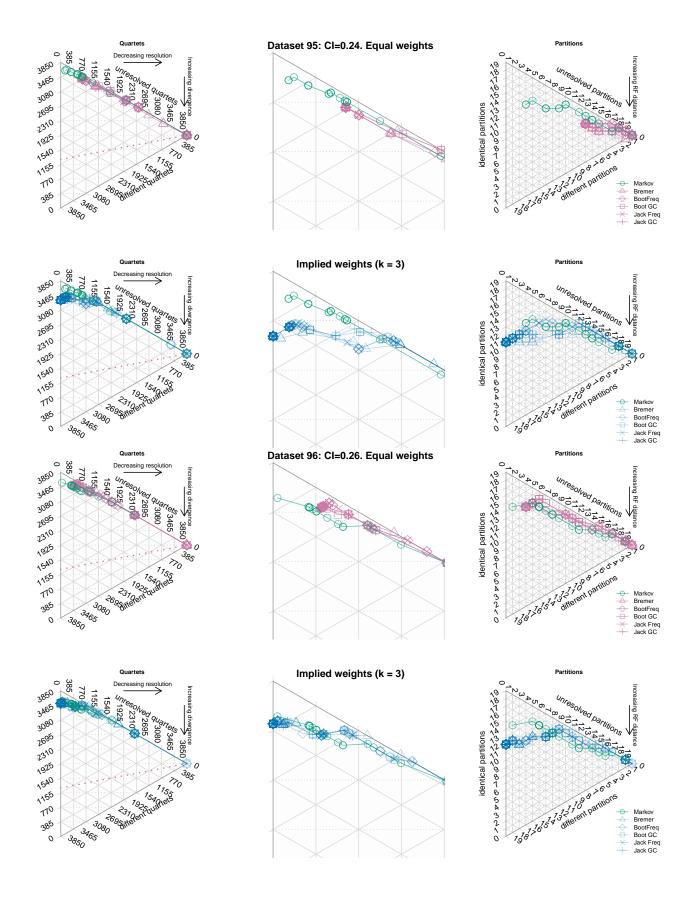


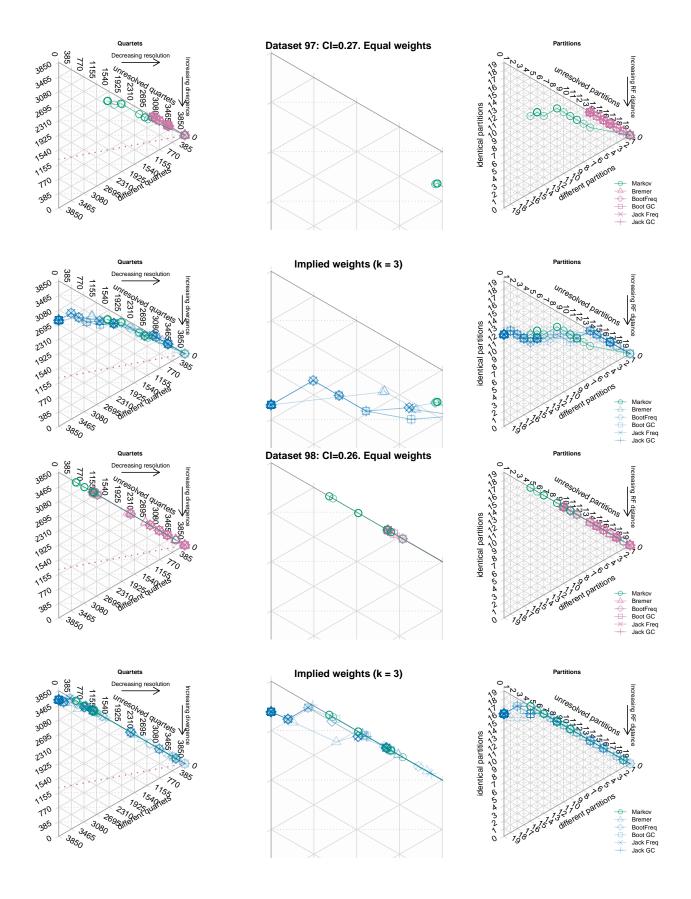


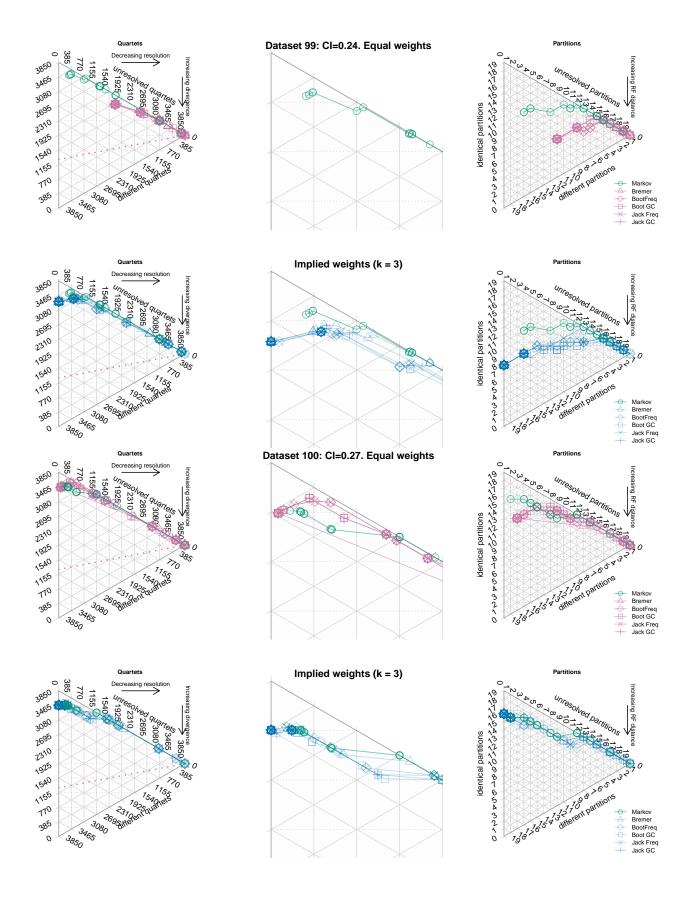
0.11 Trees 91–100











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. 2019 Bayesian and parsimony approaches reconstruct informative trees from simulated morphological datasets. $Biology\ Letters\ {f 15},\ 20180632.$ (doi:10.1098/rsbl.2018.0632)