Resolution and accuracy in Congreve & Lamsdell matrices

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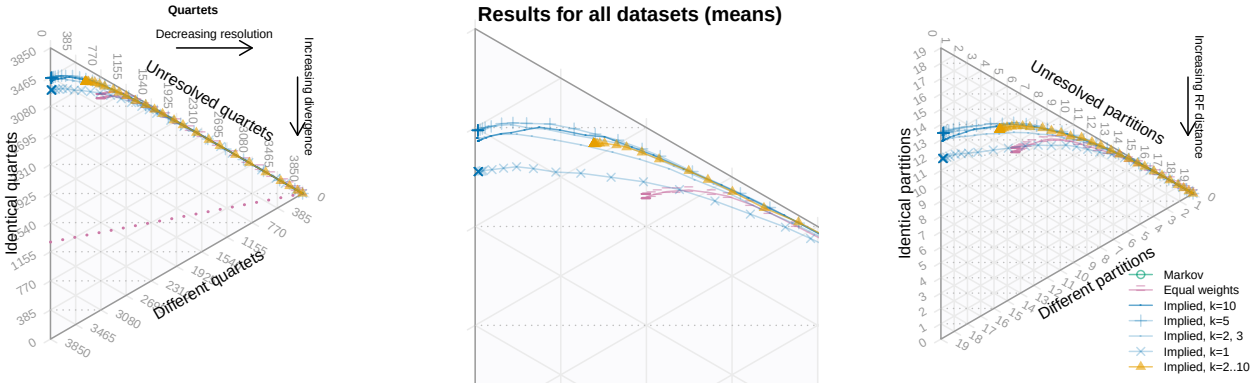
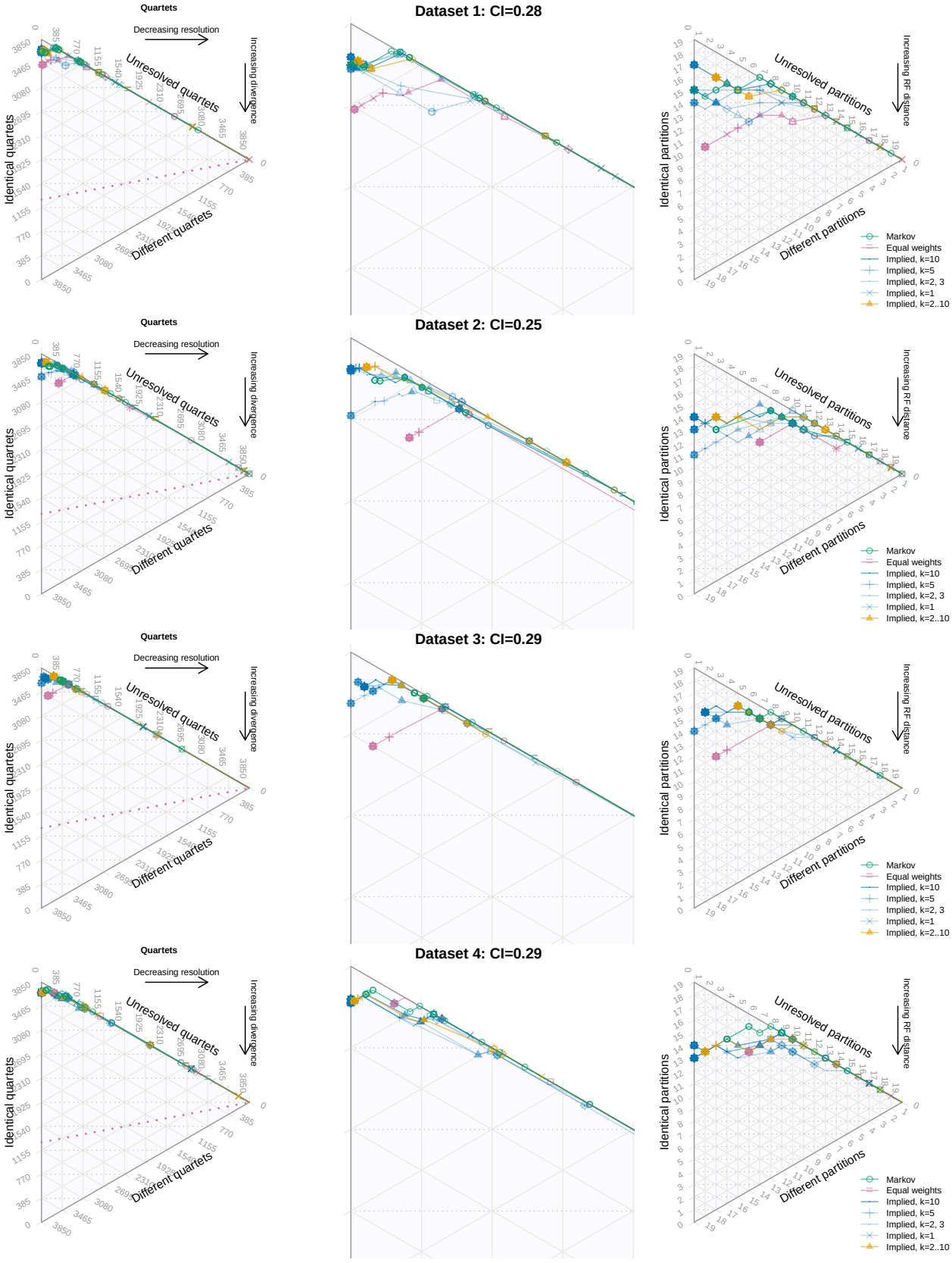
Contents

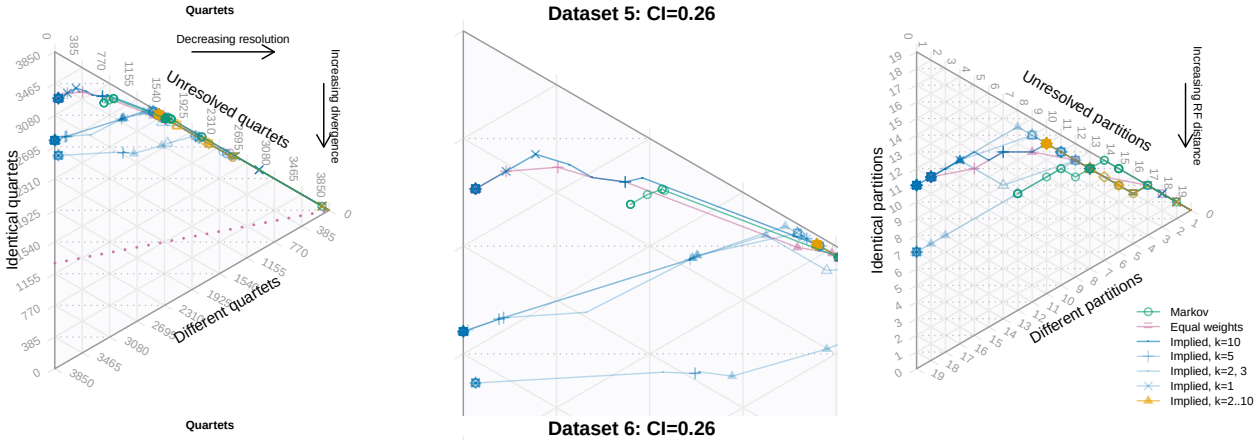
This page depicts the analytical results of all 100 matrices generated by Congreve & Lamsdell [1] using a ternary plotting approach [2], with quartets and partitions used as distance metrics.

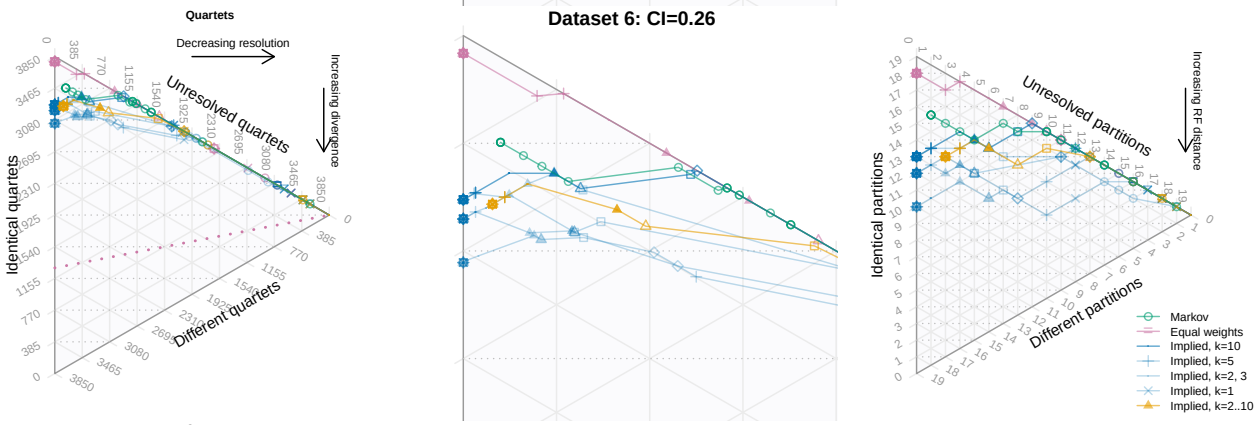
0.1 Summary

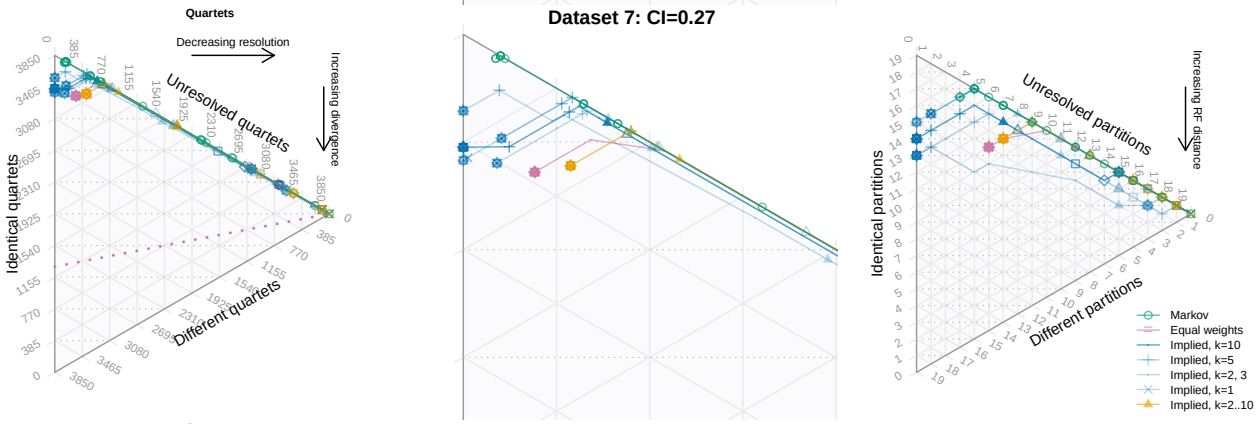


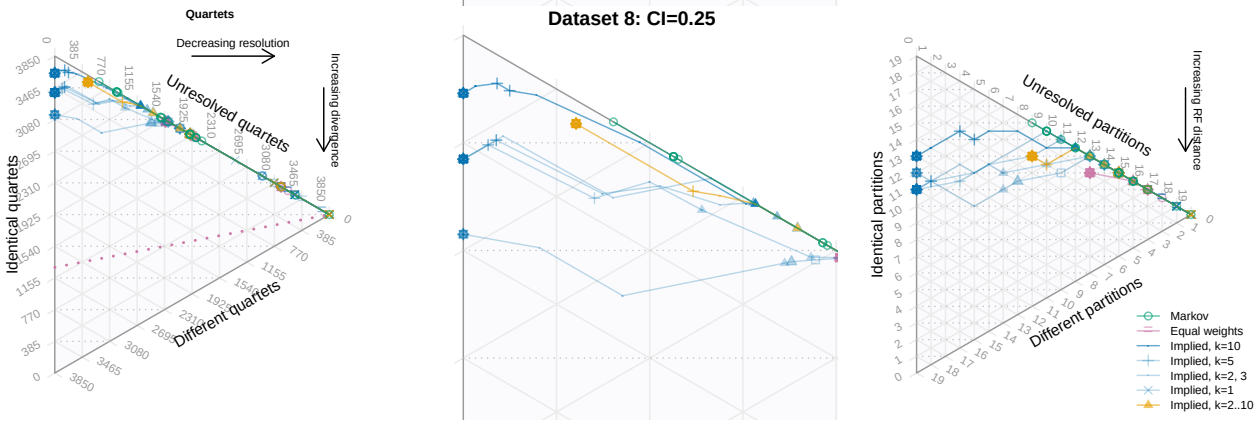
0.2 Trees 1–10


Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 1: CI=0.28
Dataset 2: CI=0.25
Dataset 3: CI=0.29
Dataset 4: CI=0.29
Unresolved partitions
Identical partitions
Different partitions
Increasing RF distance
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10


Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 5: CI=0.26
Unresolved partitions
Identical partitions
Different partitions
Increasing RF distance
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10


Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 6: CI=0.26
Unresolved partitions
Identical partitions
Different partitions
Increasing RF distance
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10


Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 7: CI=0.27
Unresolved partitions
Identical partitions
Different partitions
Increasing RF distance
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10


Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 8: CI=0.25
Unresolved partitions
Identical partitions
Different partitions
Increasing RF distance
Markov
Equal weights
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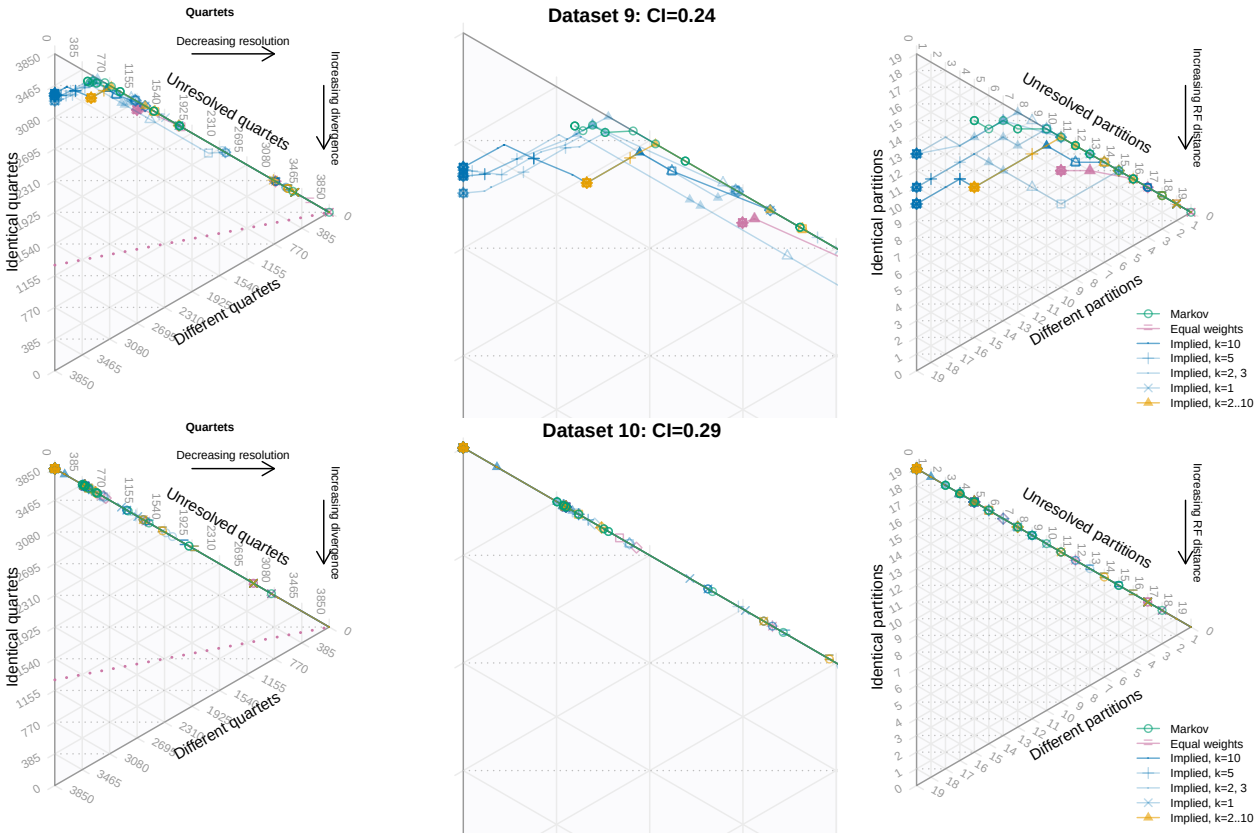
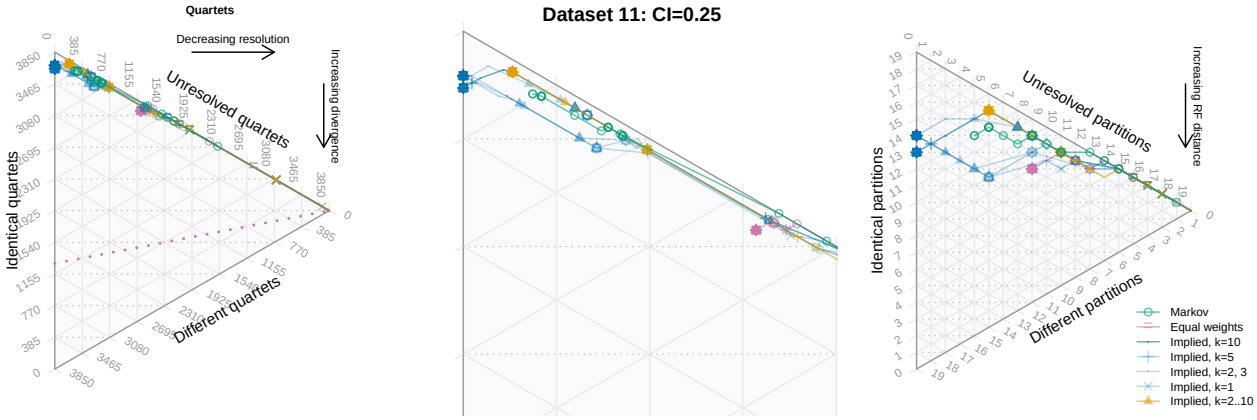
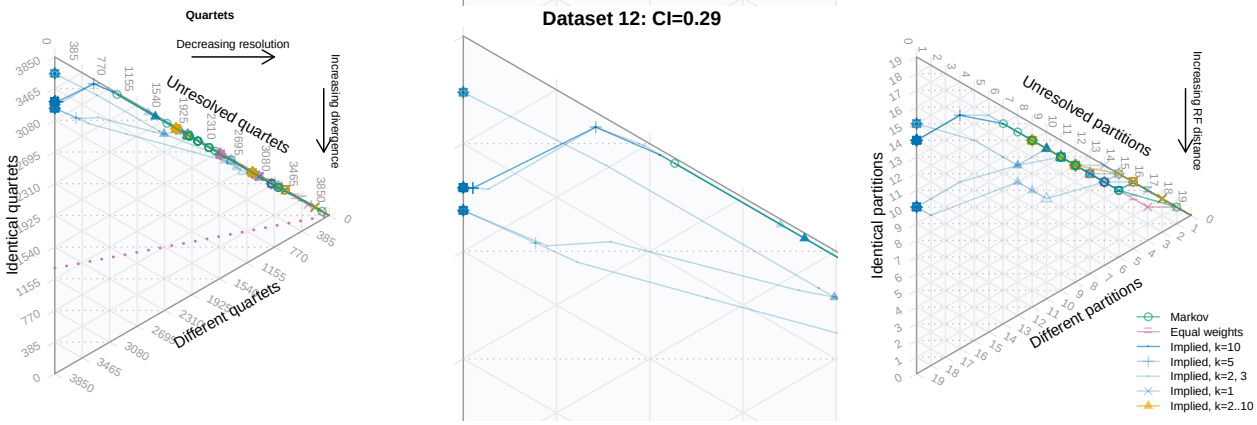
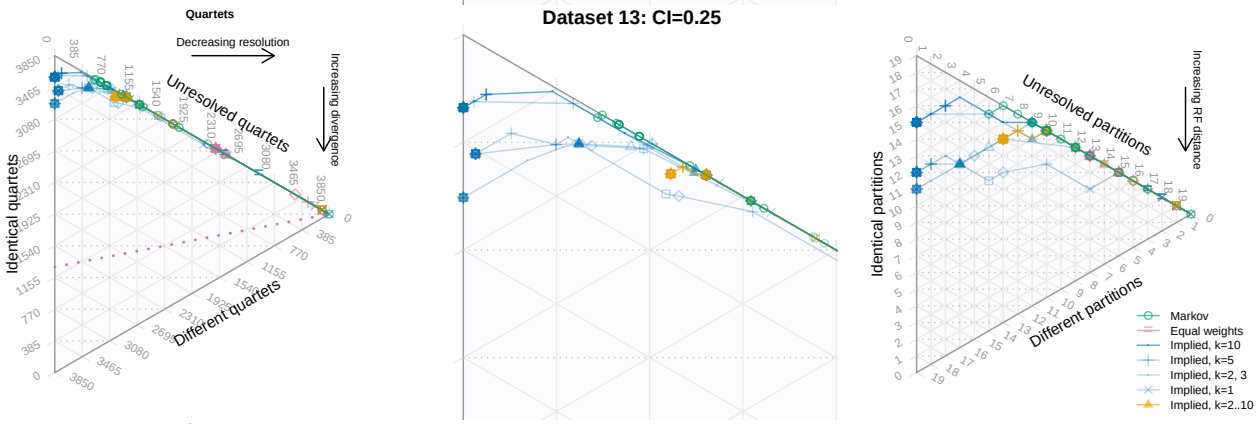
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10

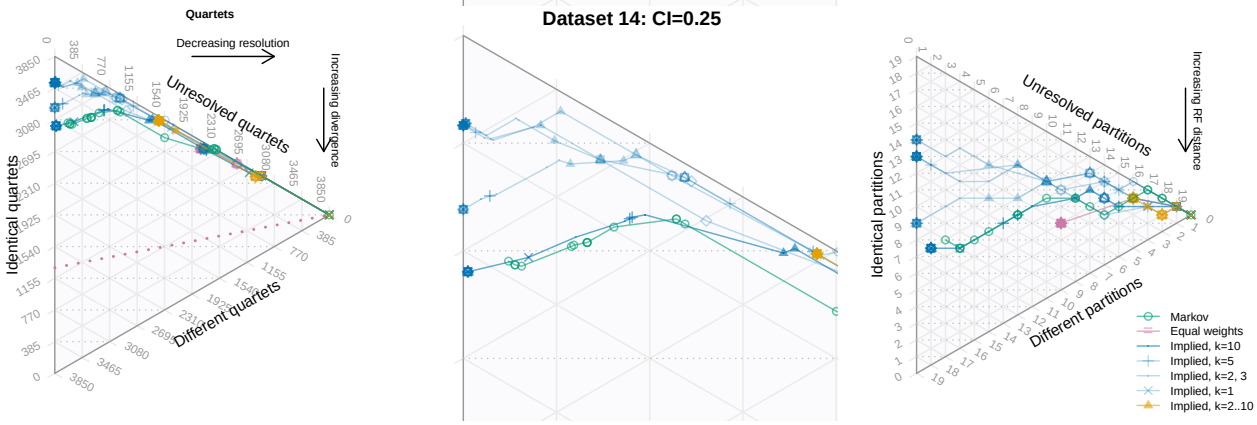

Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 9: CI=0.24
Unresolved partitions
Identical partitions
Increasing RF distance
Different partitions
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10
Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 10: CI=0.29
Unresolved partitions
Identical partitions
Increasing RF distance
Different partitions
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10

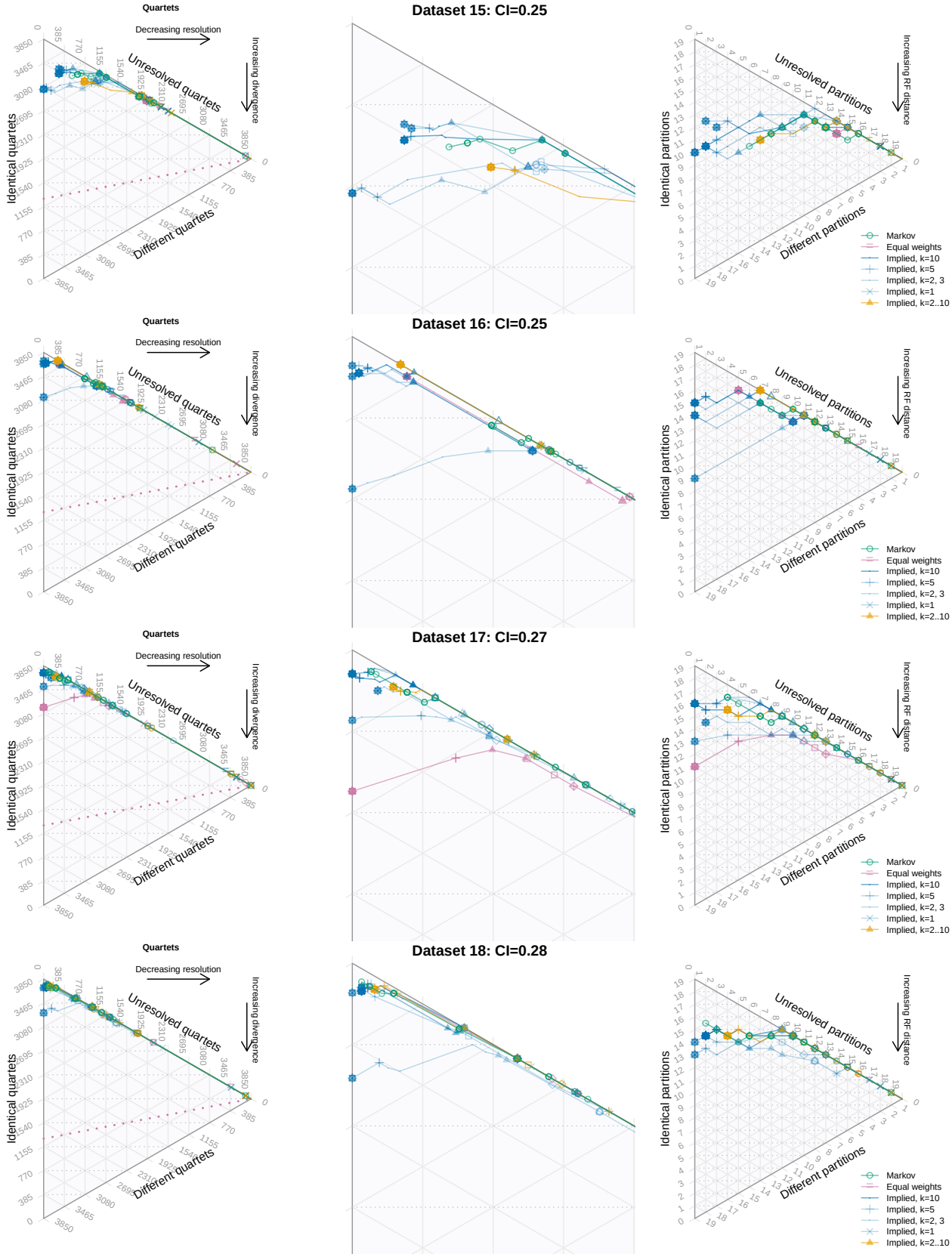
0.3 Trees 11–20

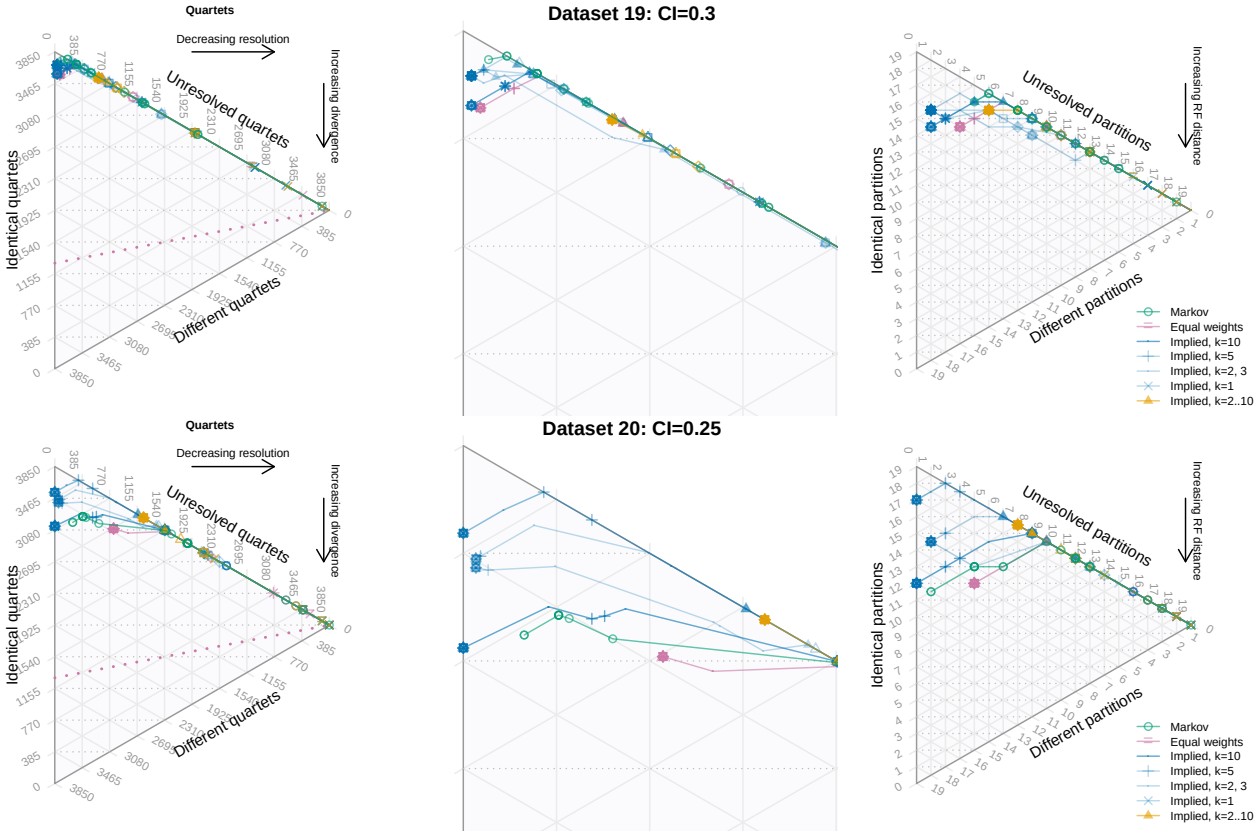









Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 15: CI=0.25
Dataset 16: CI=0.25
Dataset 17: CI=0.27
Dataset 18: CI=0.28
Unresolved partitions
Identical partitions
Different partitions
Increasing RF distance
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10


Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 19: CI=0.3
Unresolved partitions
Identical partitions
Increasing RF distance
Different partitions
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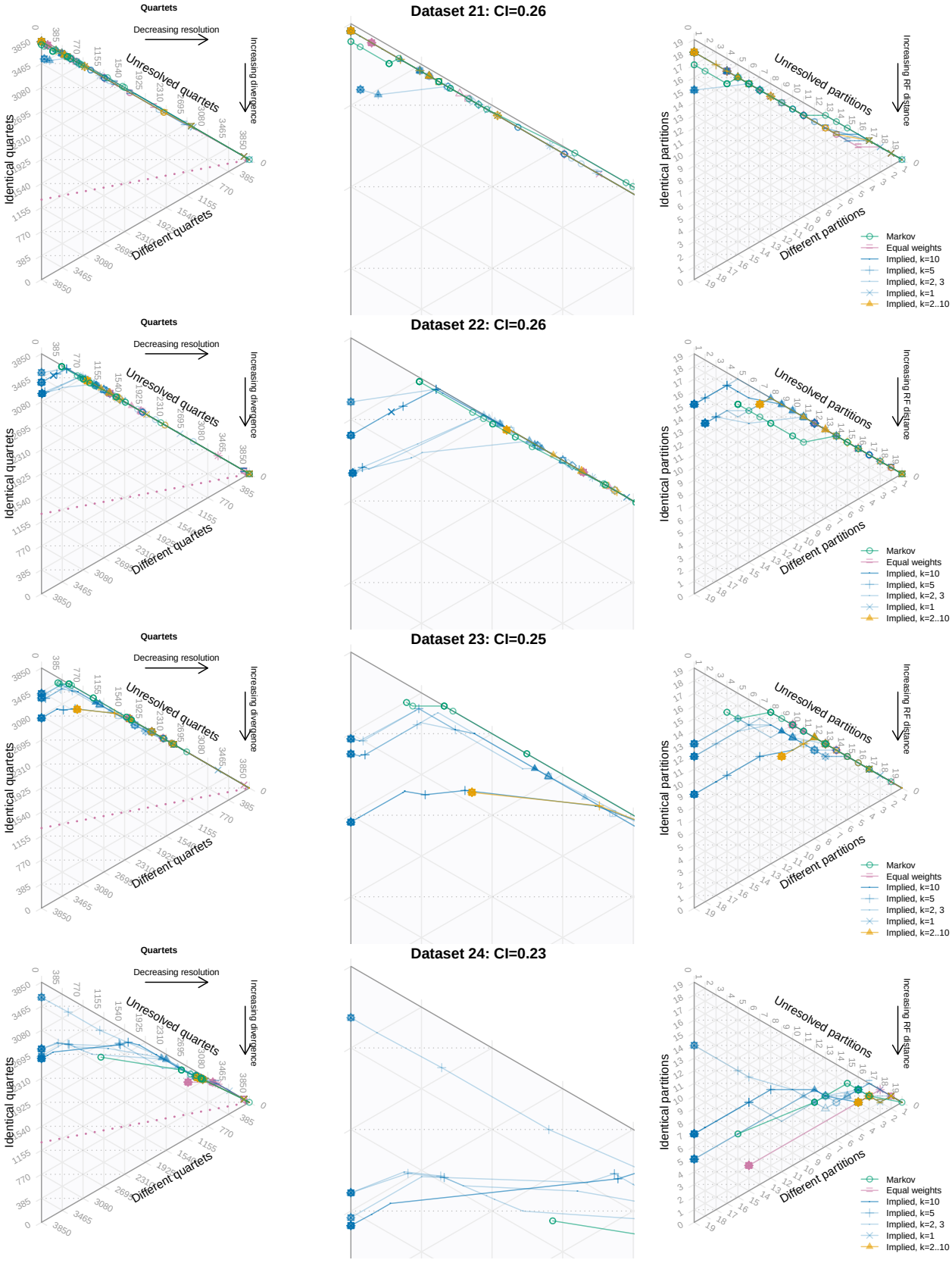
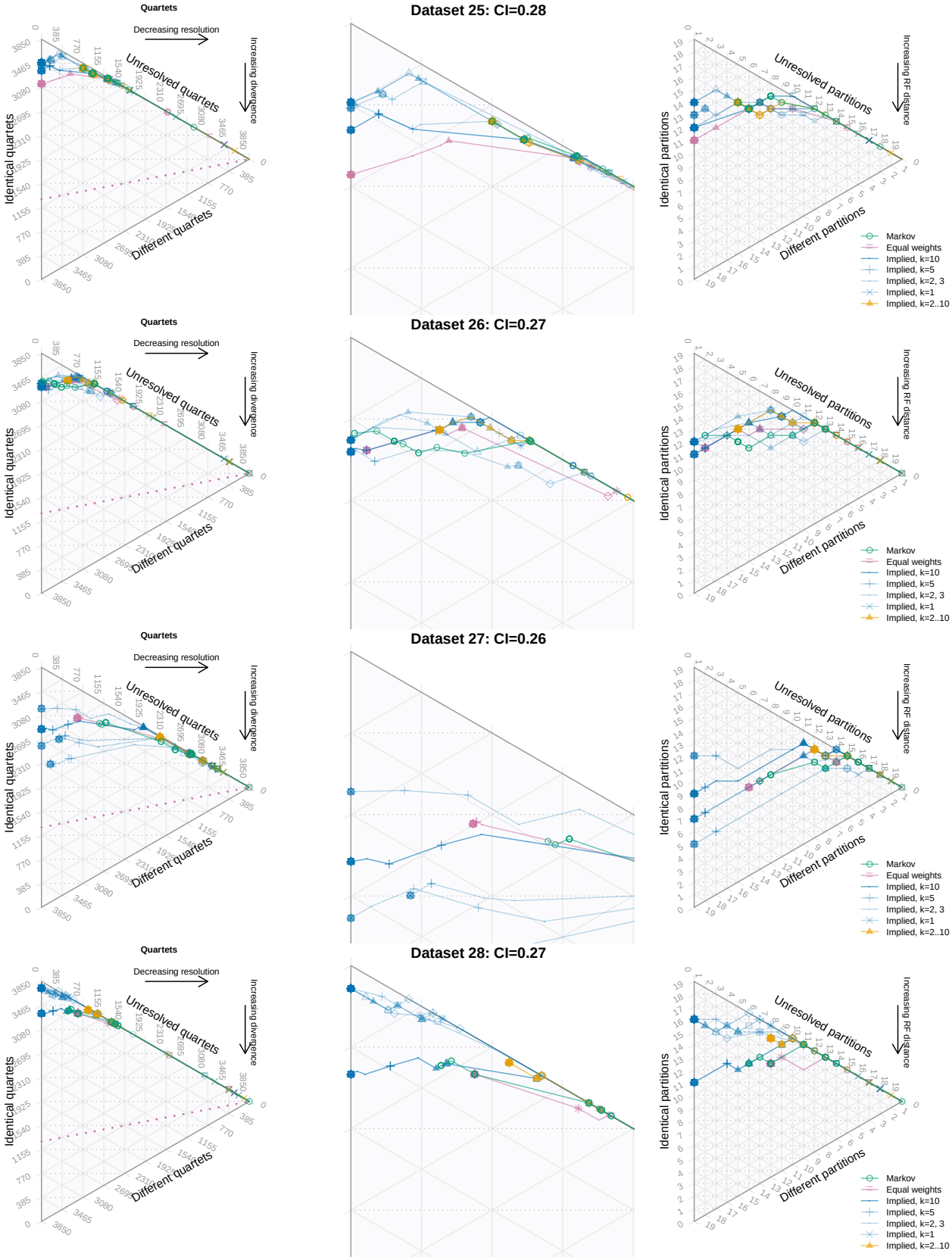
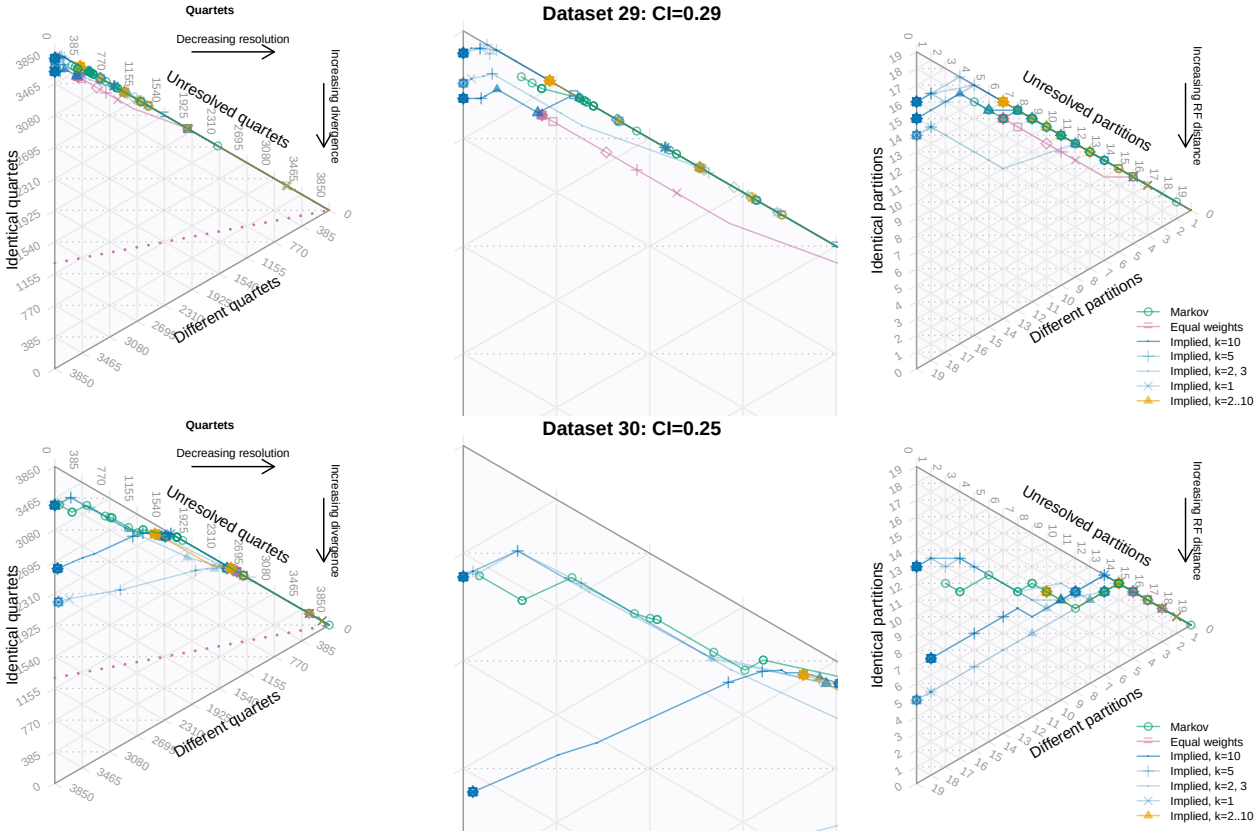
Implied, k=1
Implied, k=2..10
Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 20: CI=0.25
Unresolved partitions
Identical partitions
Increasing RF distance
Different partitions
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10

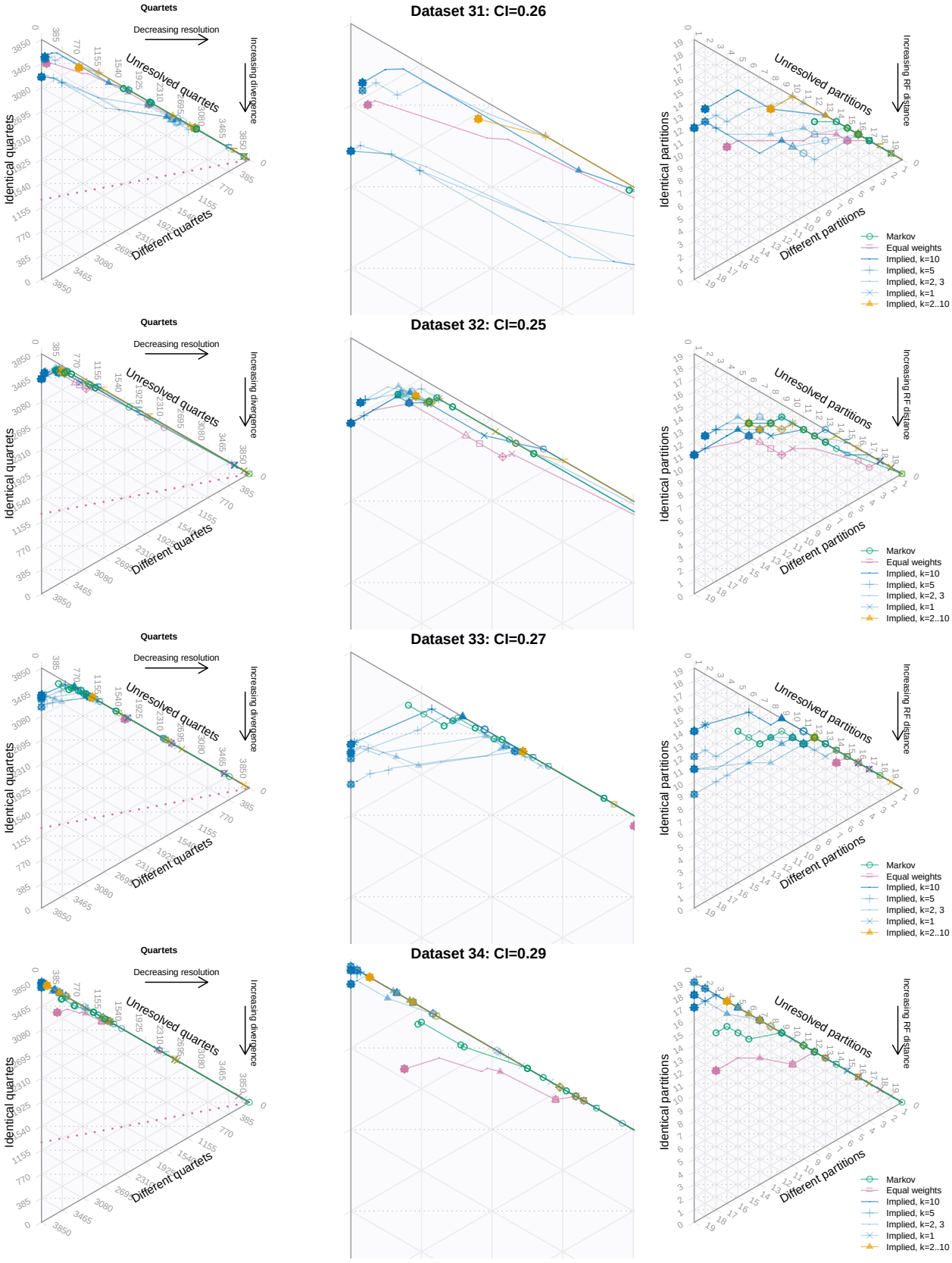
0.4 Trees 21–30

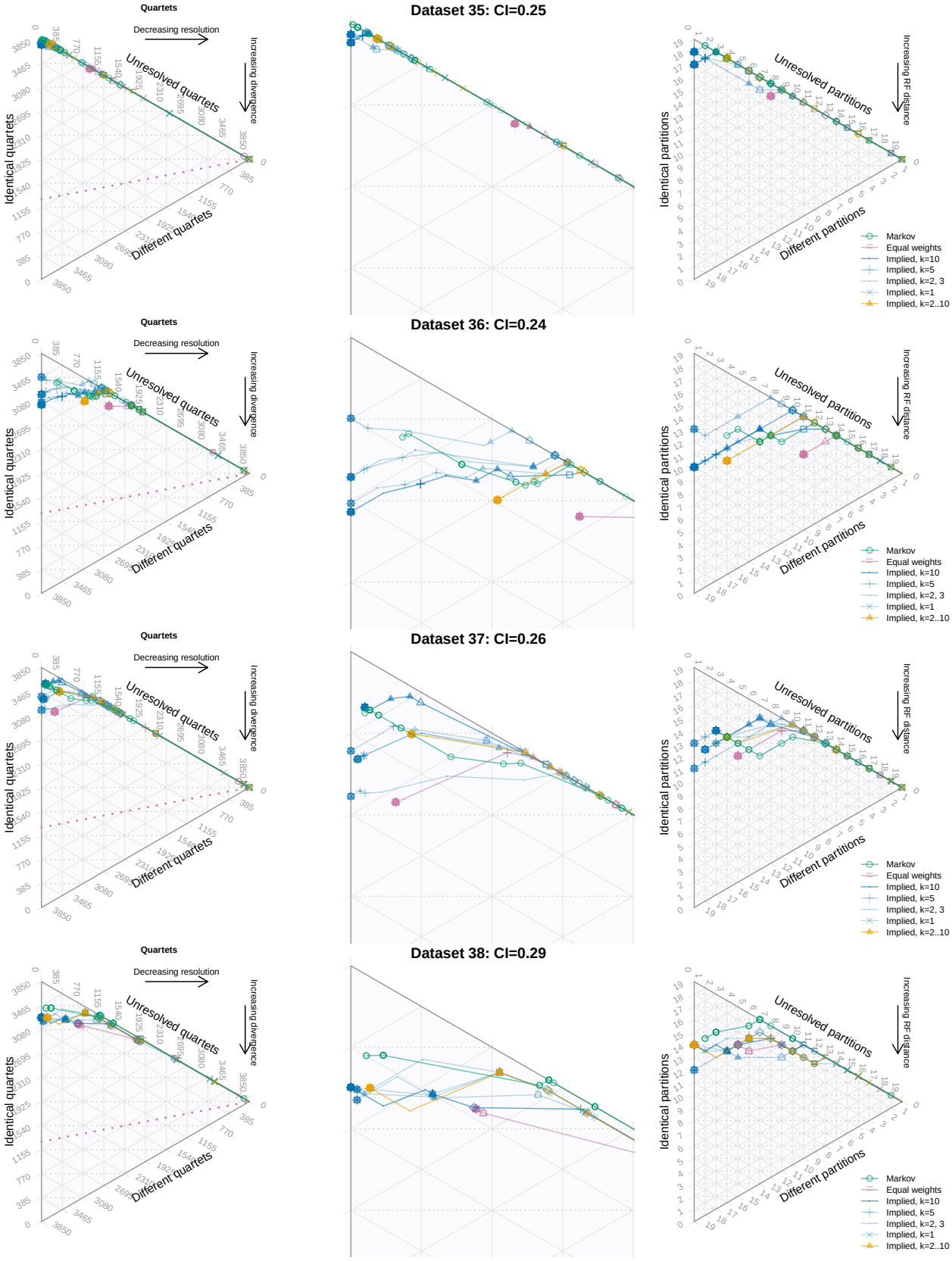


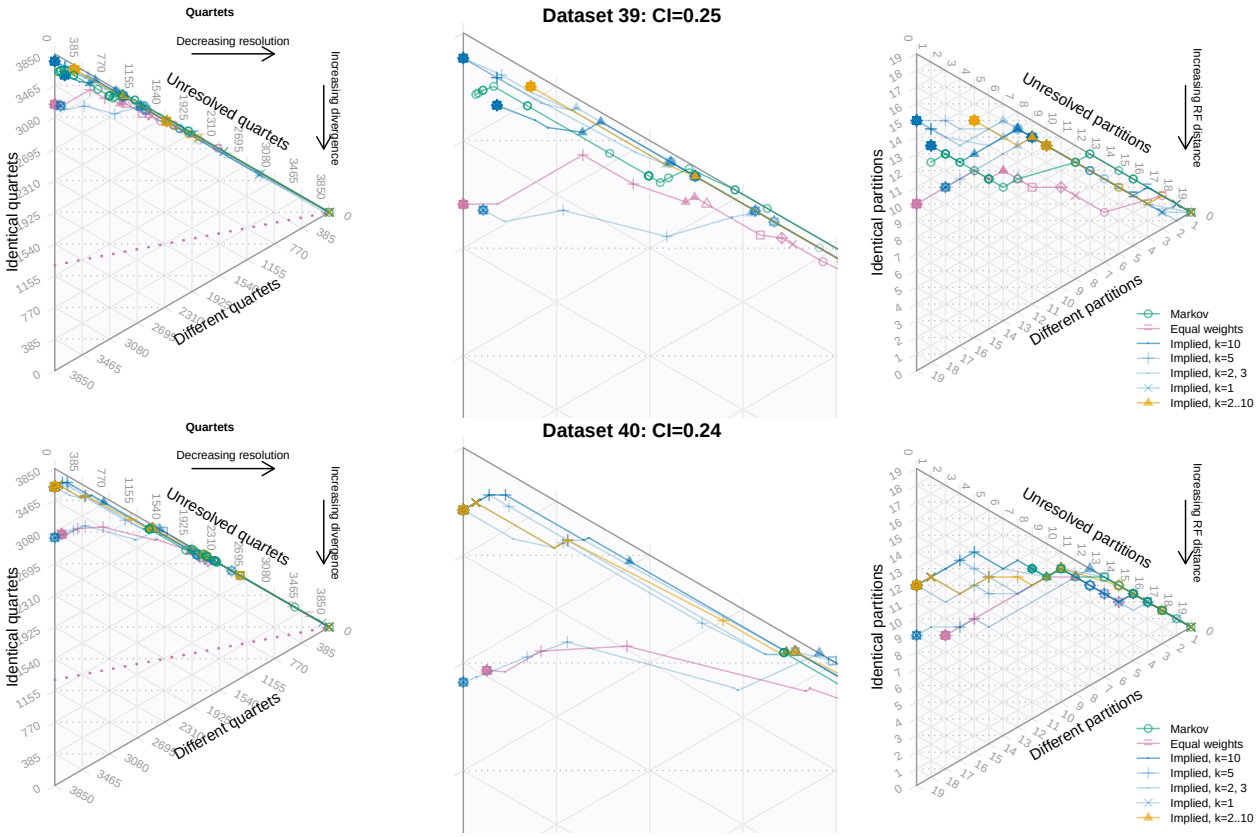

Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 25: CI=0.28
Unresolved partitions
Identical partitions
Different partitions
Increasing RF distance
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10
Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 26: CI=0.27
Unresolved partitions
Identical partitions
Different partitions
Increasing RF distance
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10
Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 27: CI=0.26
Unresolved partitions
Identical partitions
Different partitions
Increasing RF distance
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10
Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 28: CI=0.27
Unresolved partitions
Identical partitions
Different partitions
Increasing RF distance
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10


Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 29: CI=0.29
Unresolved partitions
Identical partitions
Increasing RF distance
Different partitions
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10
Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 30: CI=0.25
Unresolved partitions
Identical partitions
Increasing RF distance
Different partitions
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10

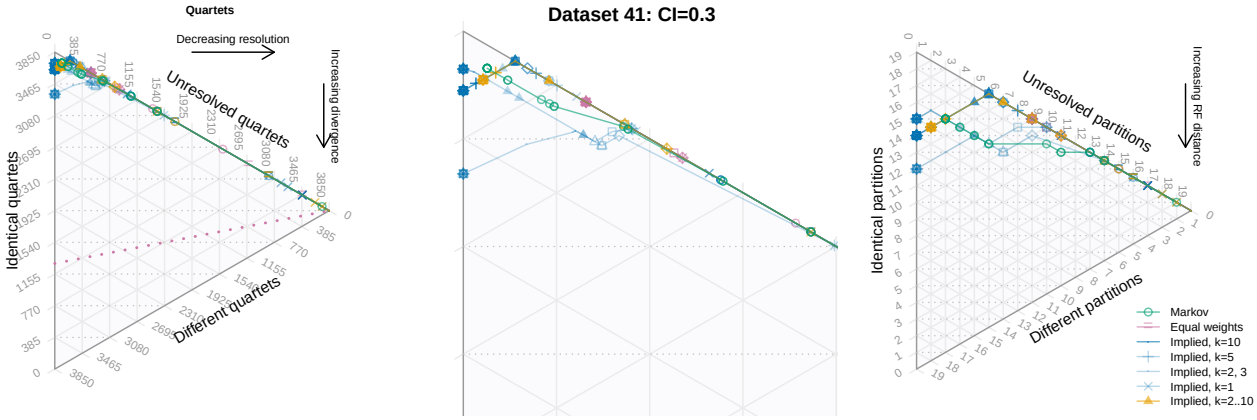
0.5 Trees 31–40

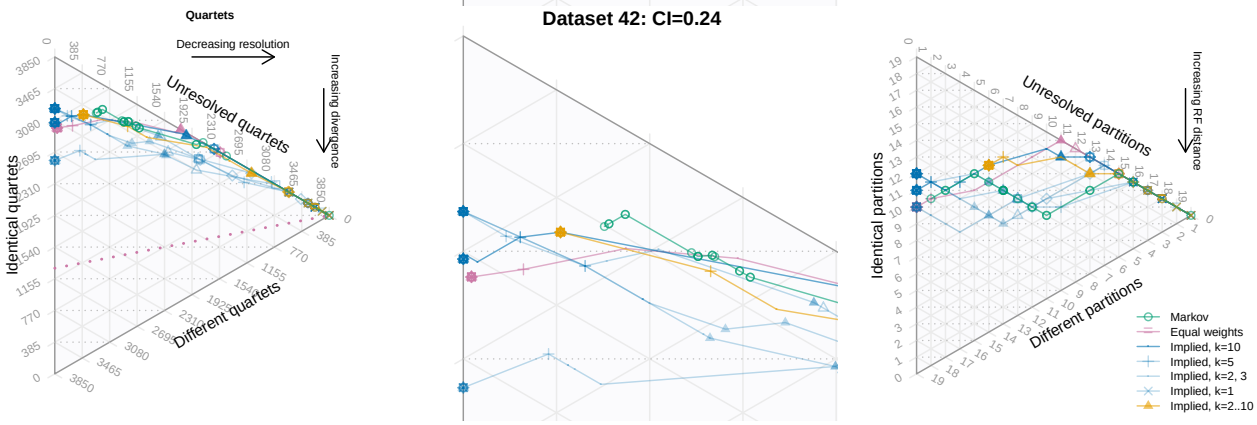


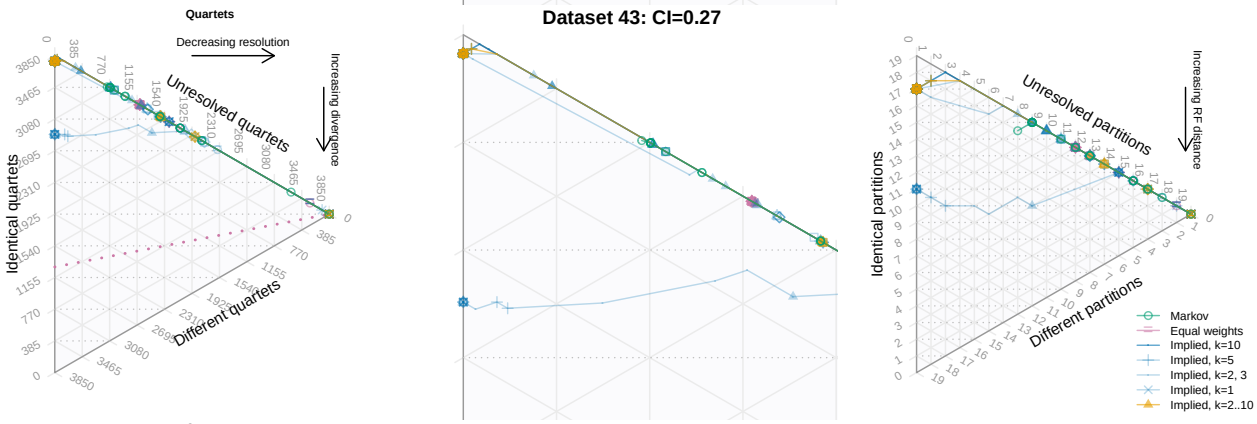

Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 35: CI=0.25
Unresolved partitions
Identical partitions
Different partitions
Increasing RF distance
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10
Dataset 36: CI=0.24
Dataset 37: CI=0.26
Dataset 38: CI=0.29

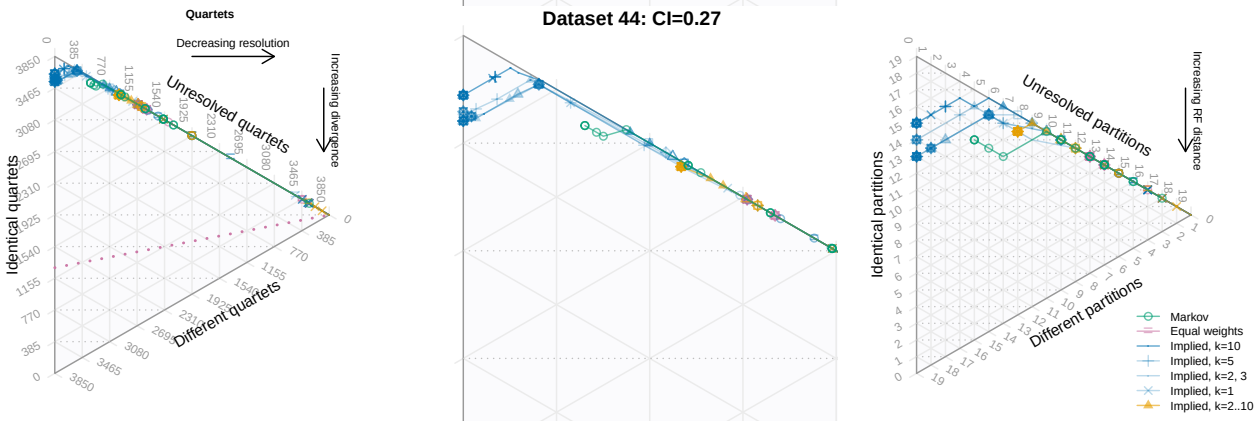

Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 39: CI=0.25
Unresolved partitions
Identical partitions
Increasing RF distance
Different partitions
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10
Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 40: CI=0.24
Unresolved partitions
Identical partitions
Increasing RF distance
Different partitions
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10

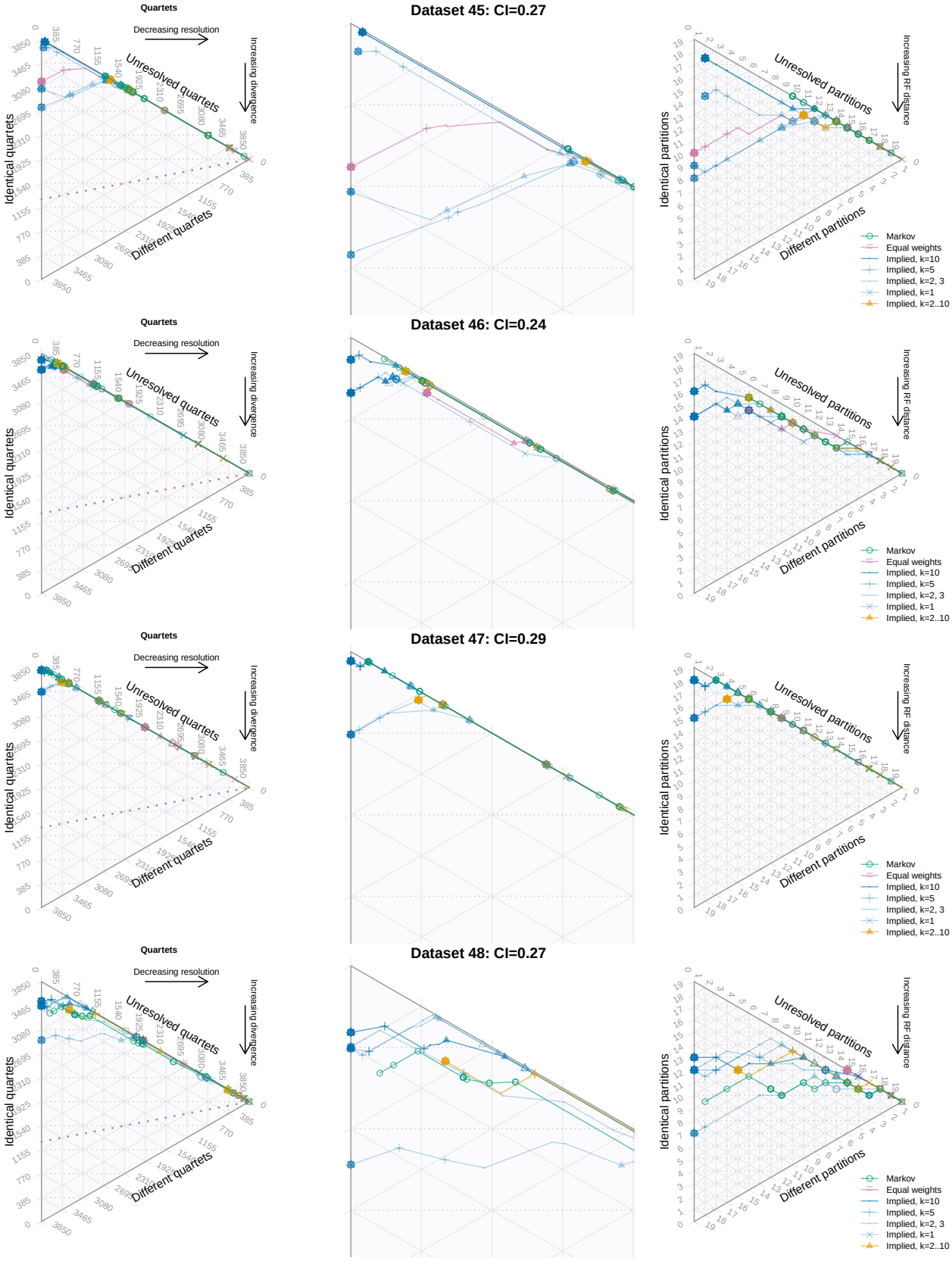
0.6 Trees 41–50

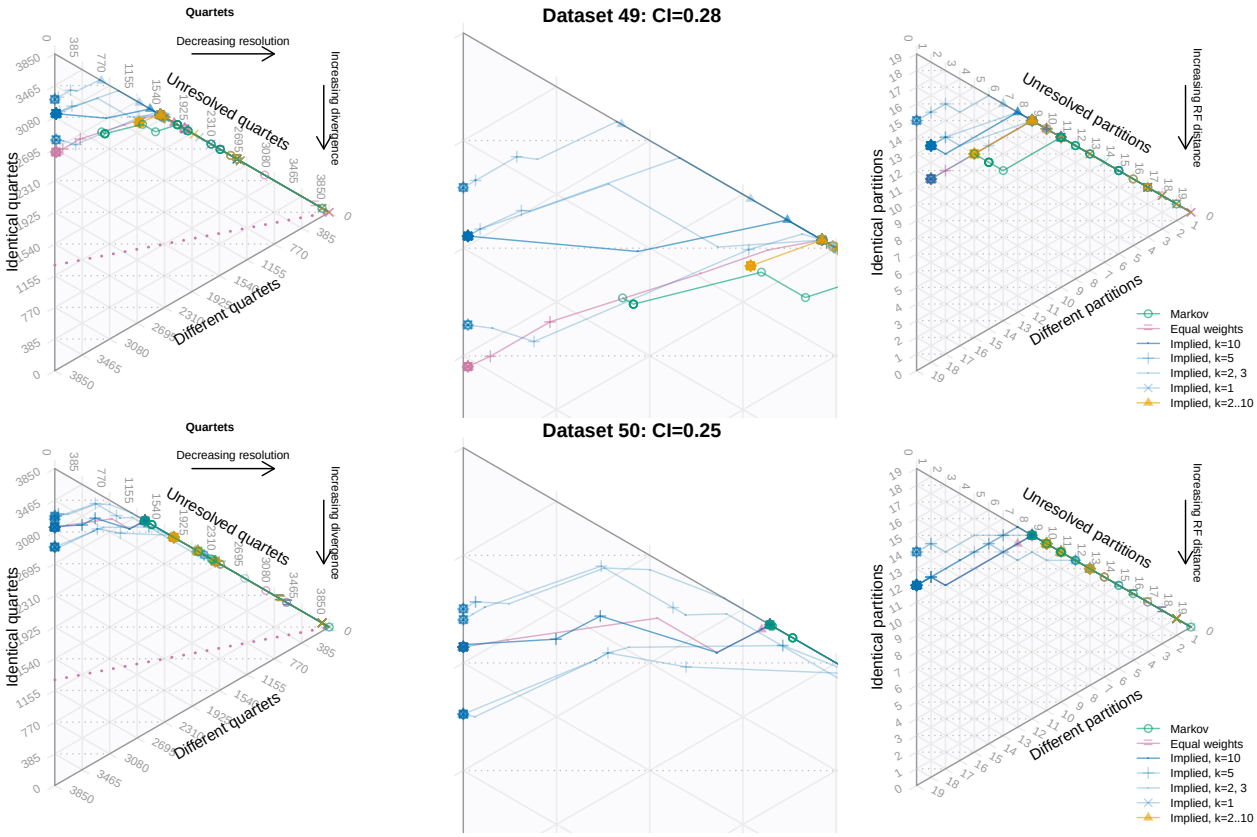




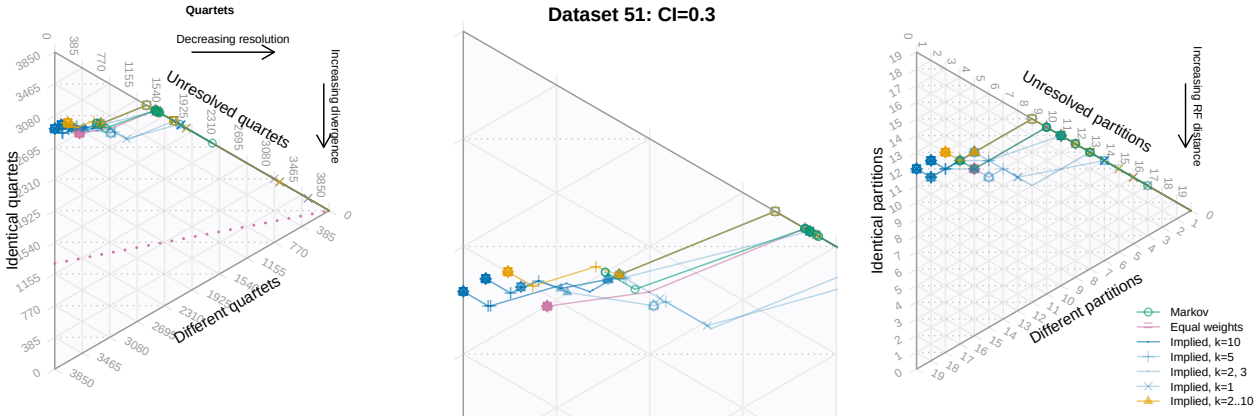


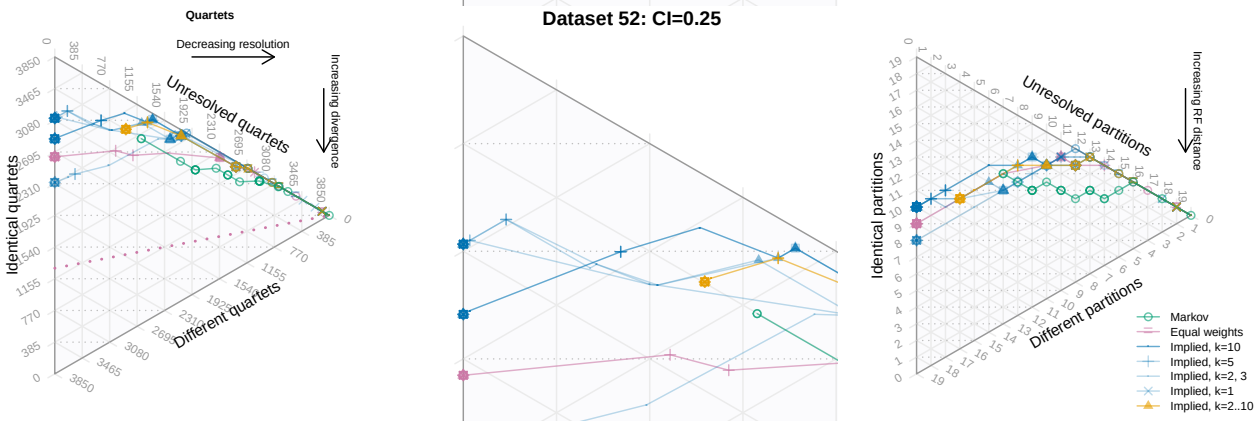


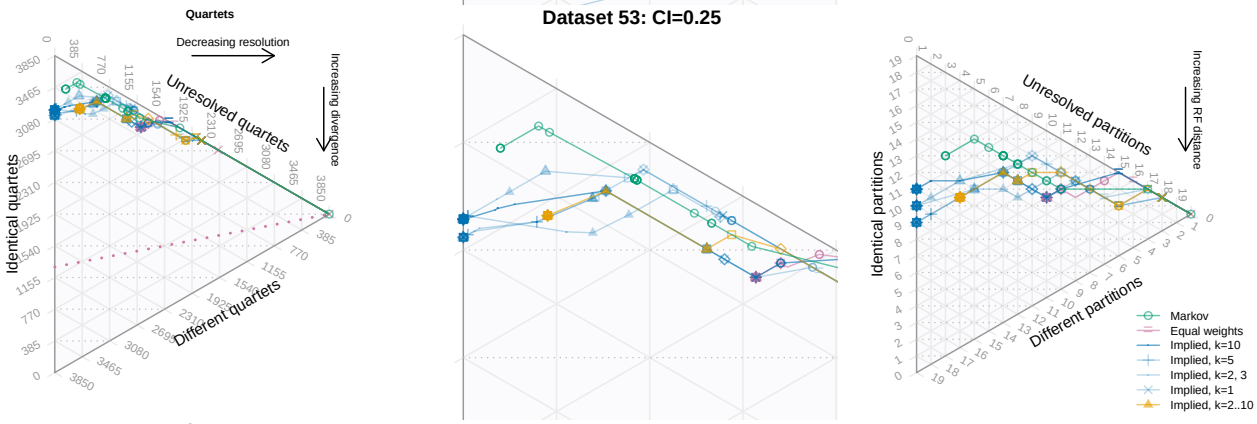

Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 45: CI=0.27
Dataset 46: CI=0.24
Dataset 47: CI=0.29
Dataset 48: CI=0.27
Unresolved partitions
Identical partitions
Different partitions
Increasing RF distance
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10

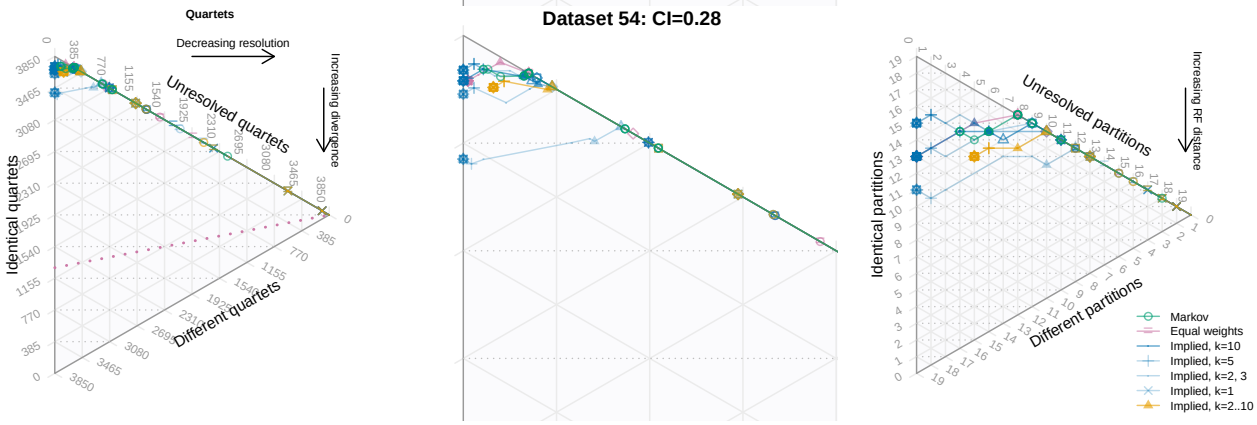

Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 49: CI=0.28
Unresolved partitions
Identical partitions
Increasing RF distance
Different partitions
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10
Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 50: CI=0.25
Unresolved partitions
Identical partitions
Increasing RF distance
Different partitions
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10

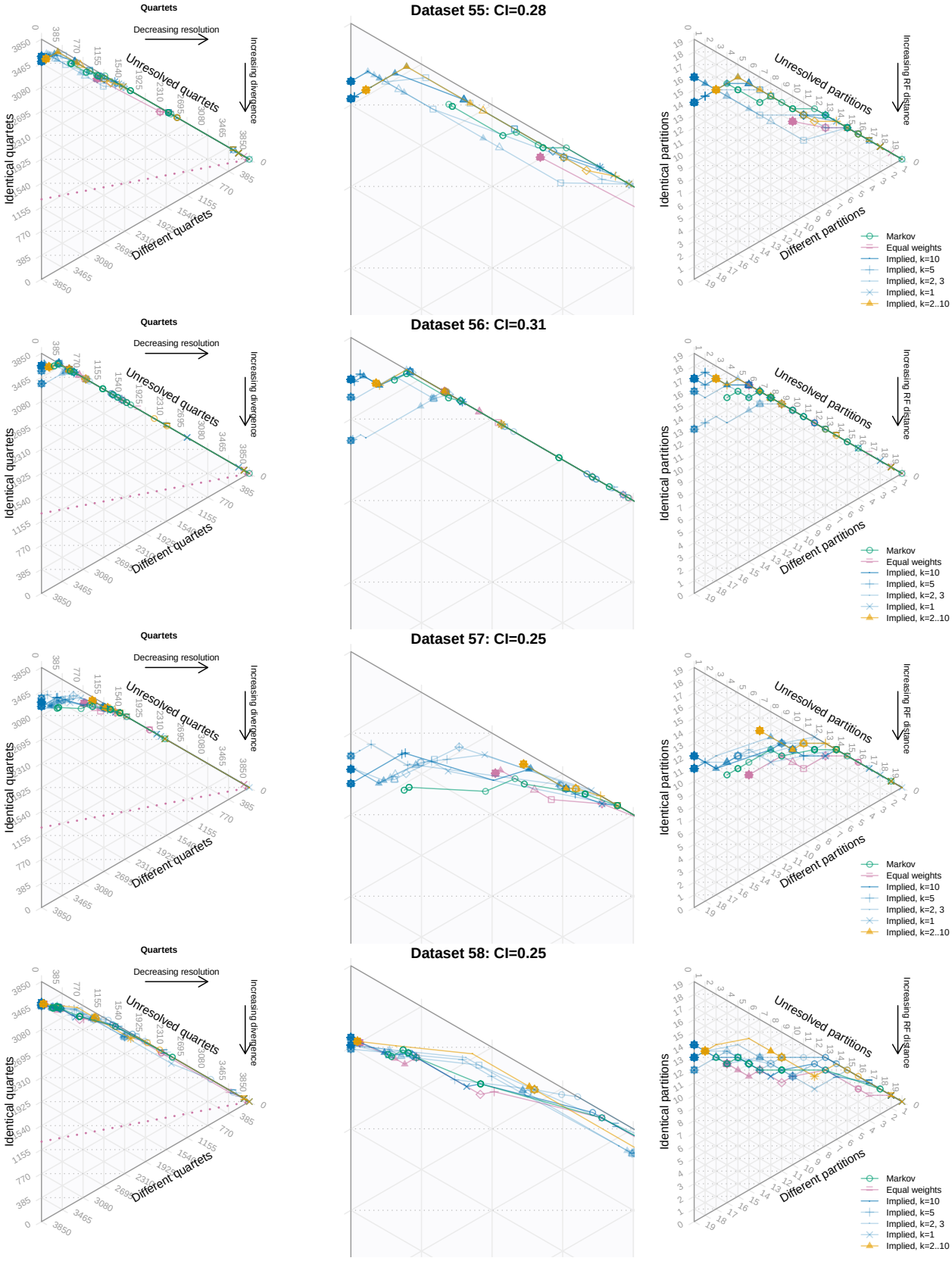
0.7 Trees 51–60

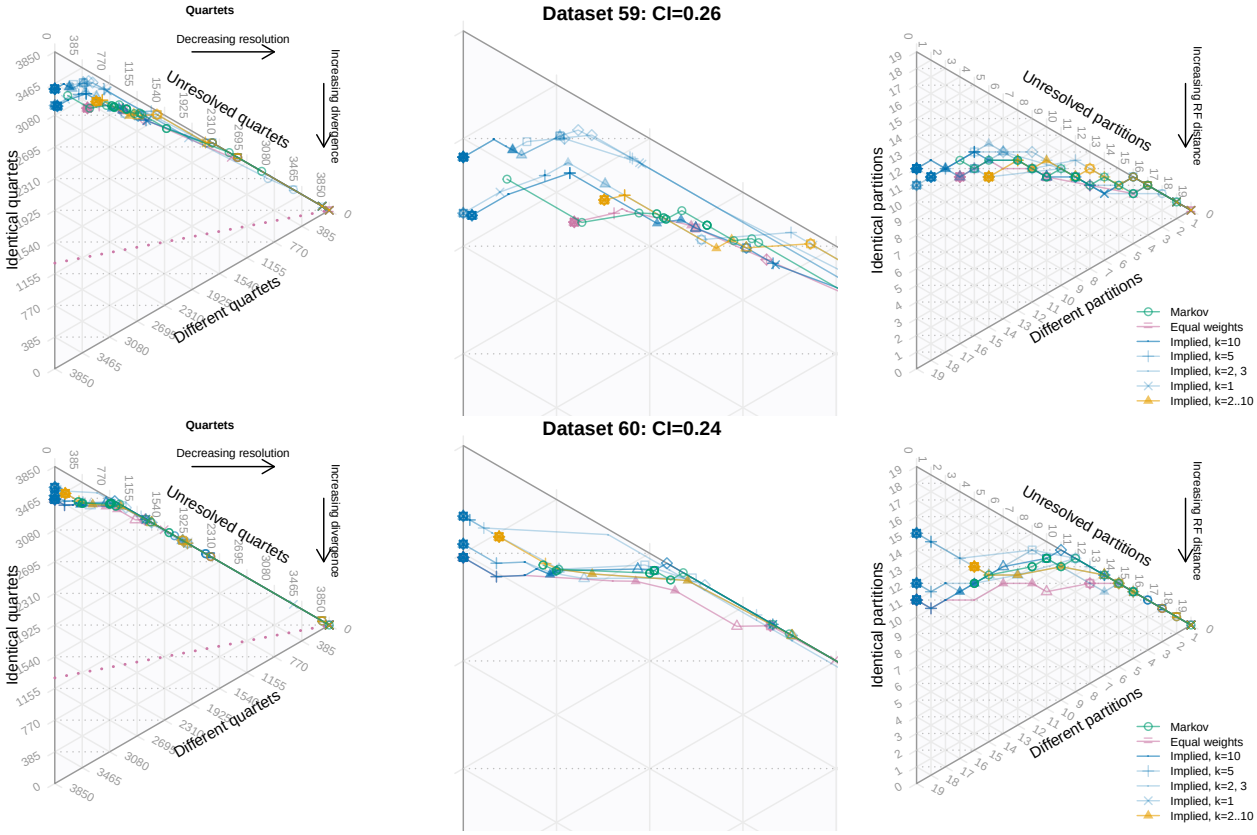




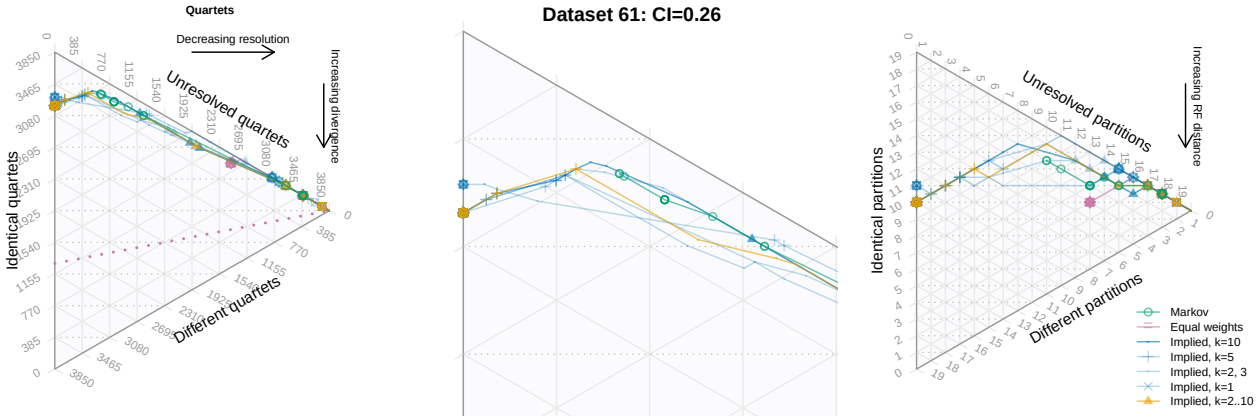


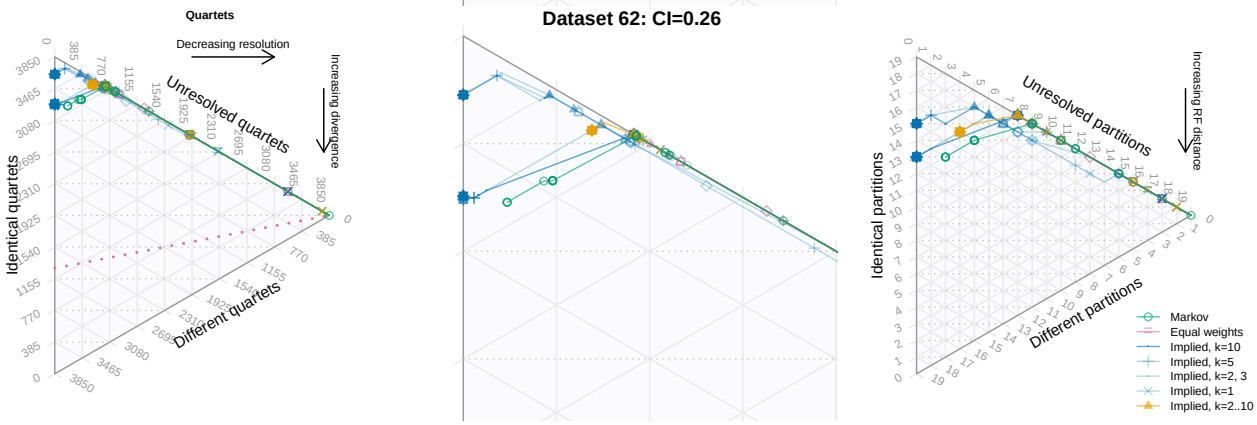


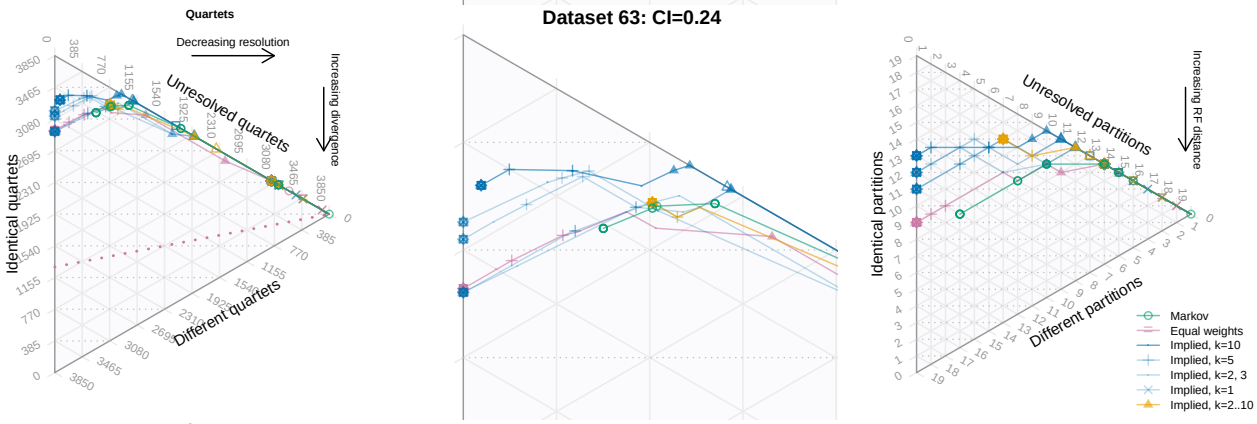

Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 55: CI=0.28
Dataset 56: CI=0.31
Dataset 57: CI=0.25
Dataset 58: CI=0.25
Unresolved partitions
Identical partitions
Different partitions
Increasing RF distance
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10

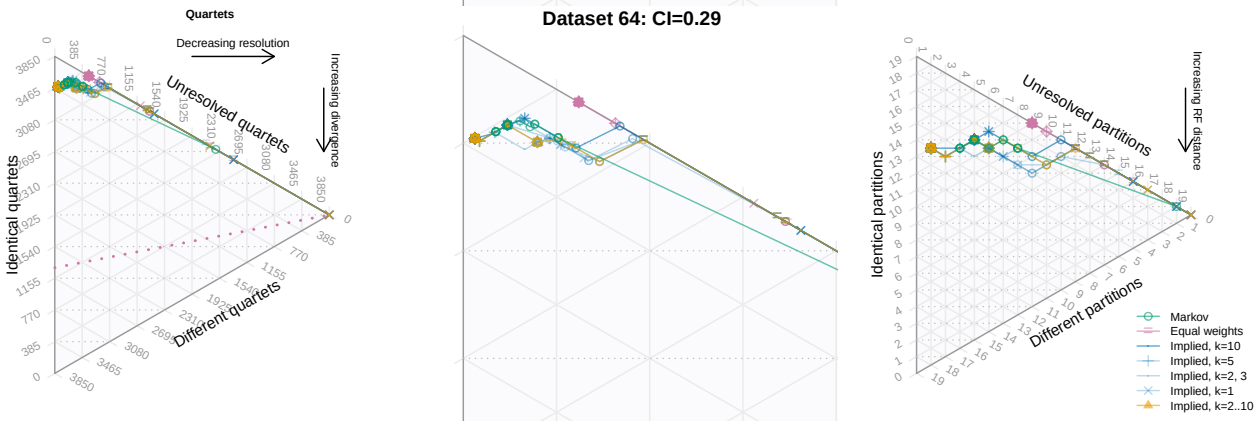

Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 59: CI=0.26
Unresolved partitions
Increasing RF distance
Identical partitions
Different partitions
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10
Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 60: CI=0.24
Unresolved partitions
Increasing RF distance
Identical partitions
Different partitions
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10

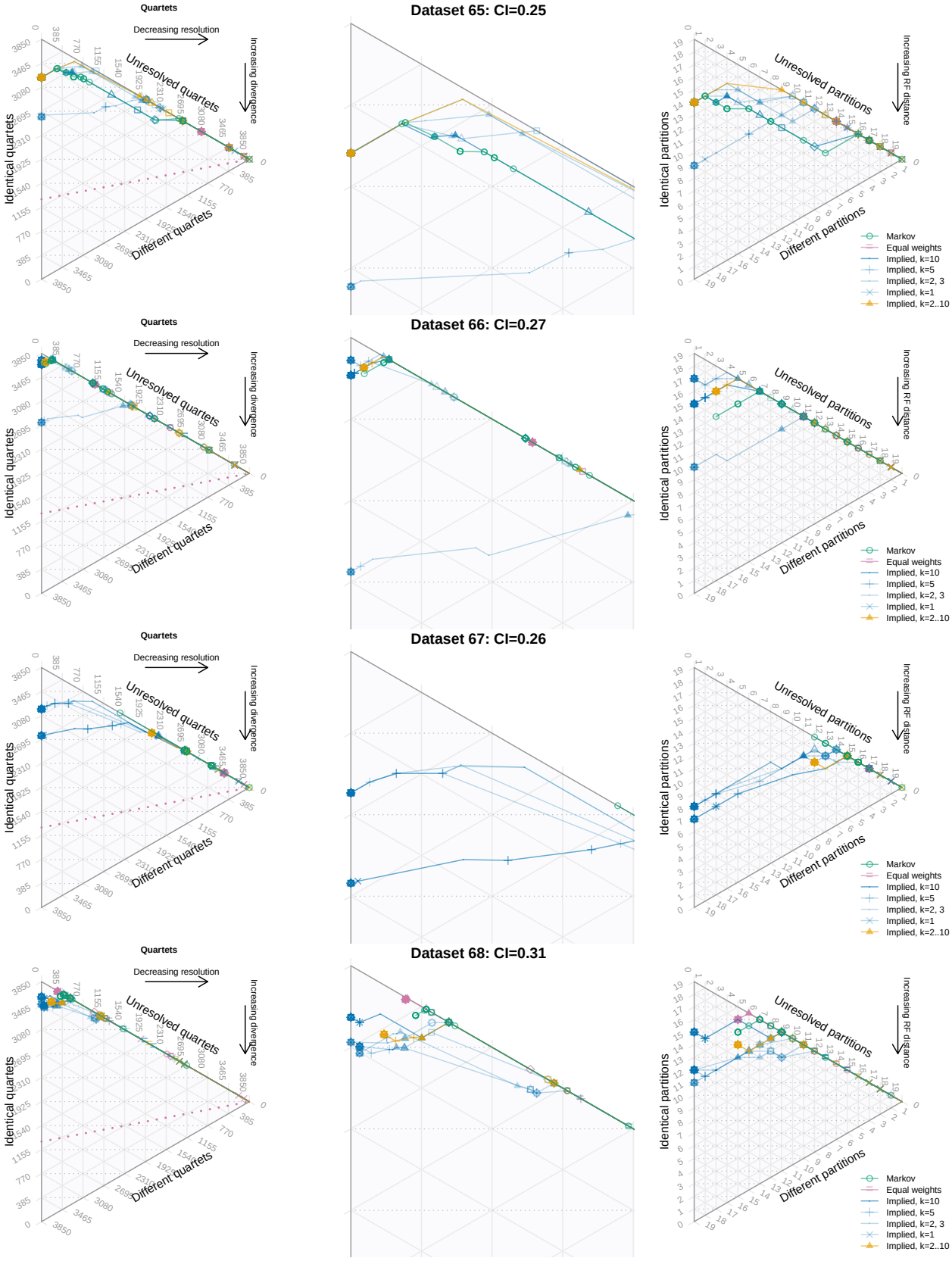
0.8 Trees 61–70

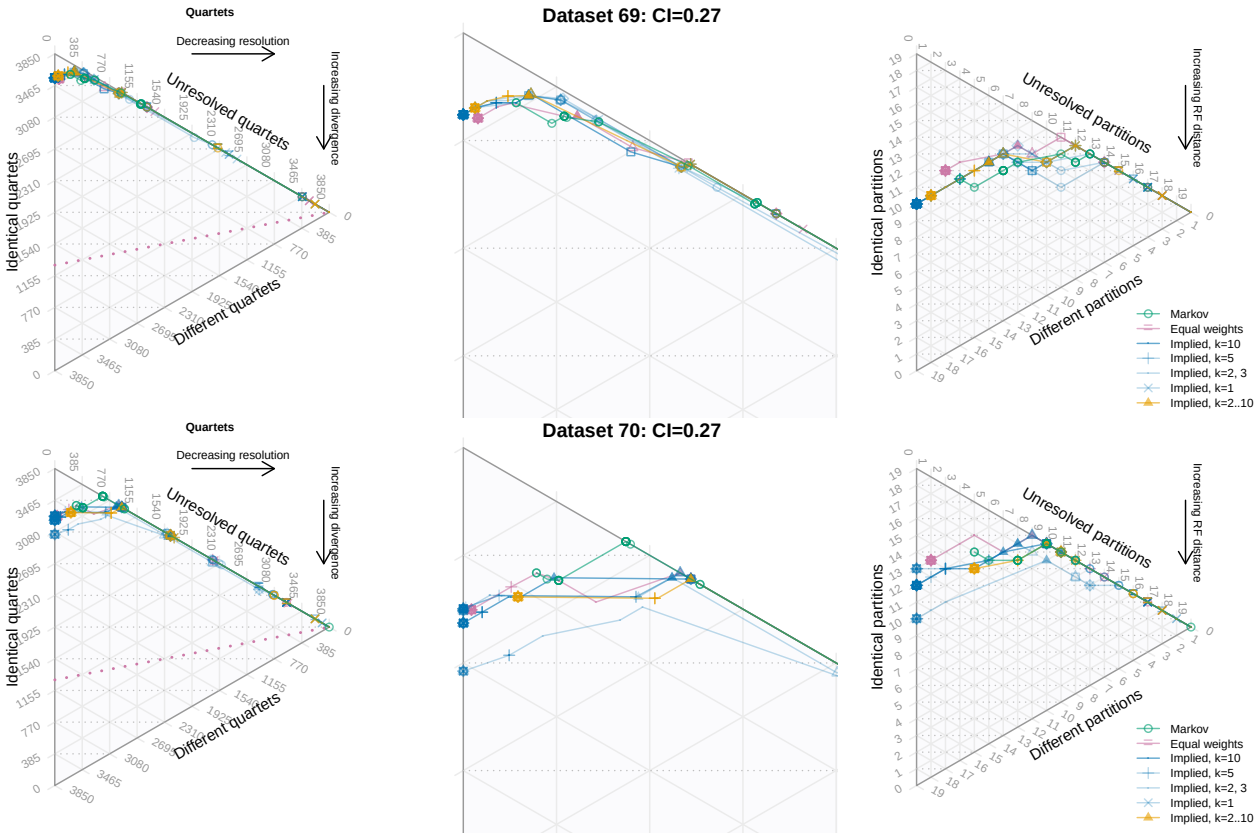




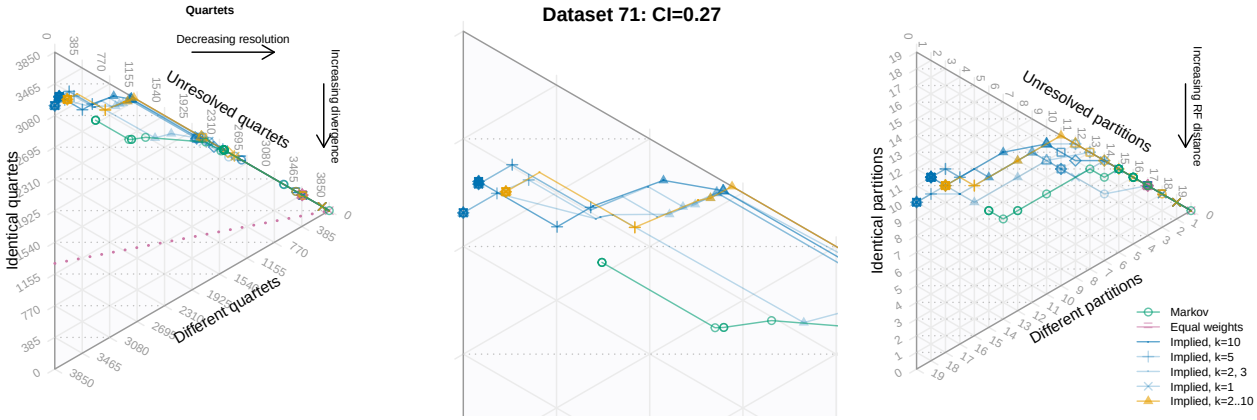


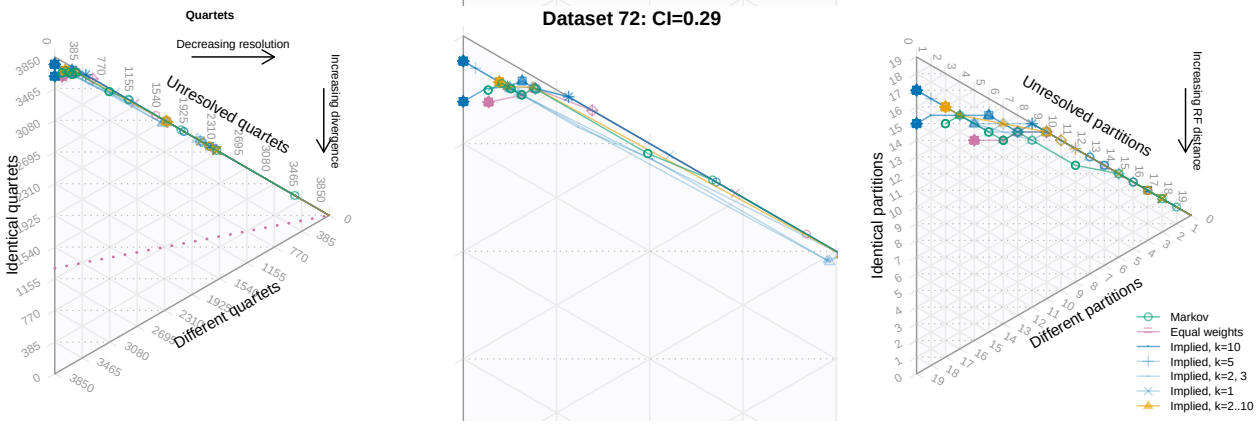


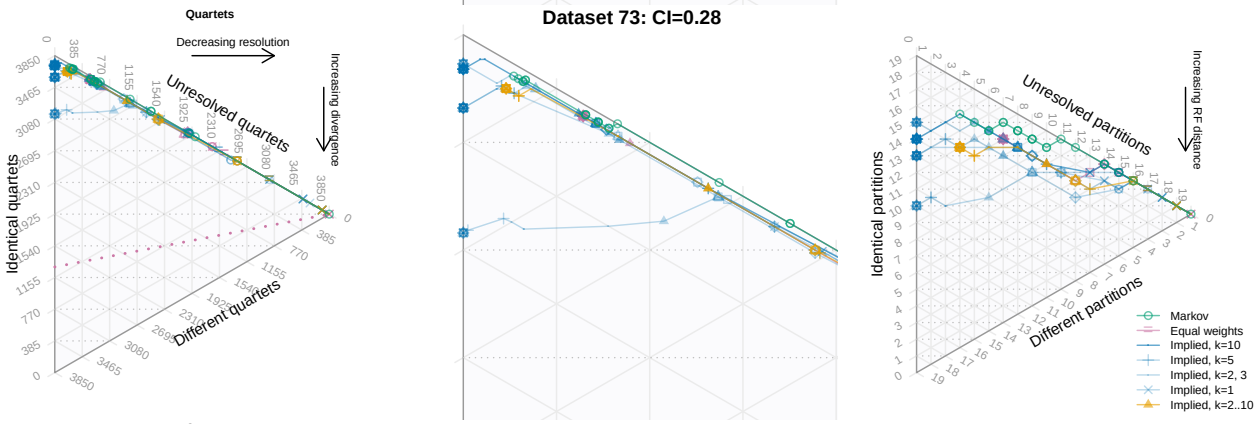

Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 65: CI=0.25
Unresolved partitions
Identical partitions
Different partitions
Increasing RF distance
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10
Dataset 66: CI=0.27
Dataset 67: CI=0.26
Dataset 68: CI=0.31

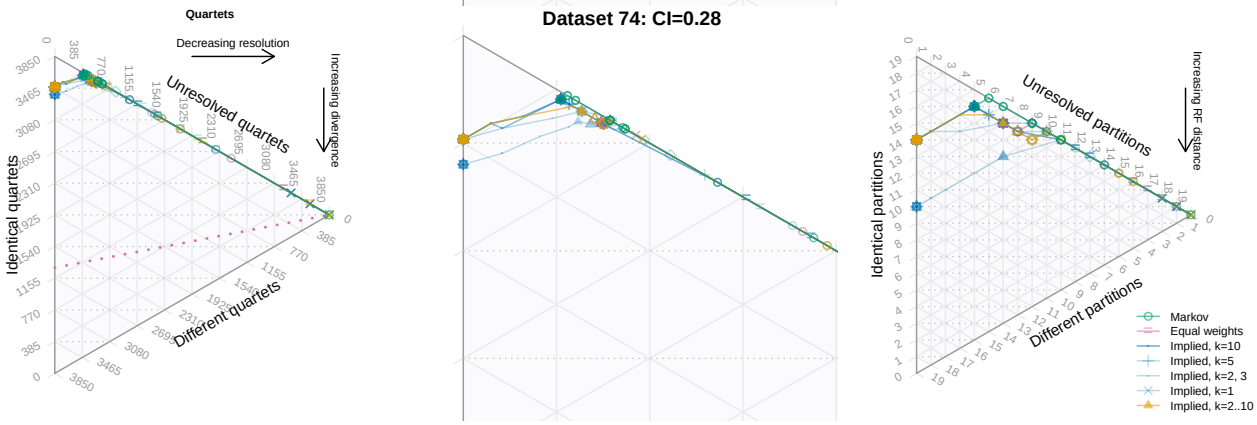

Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 69: CI=0.27
Unresolved partitions
Identical partitions
Different partitions
Increasing RF distance
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10
Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 70: CI=0.27
Unresolved partitions
Identical partitions
Different partitions
Increasing RF distance
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10

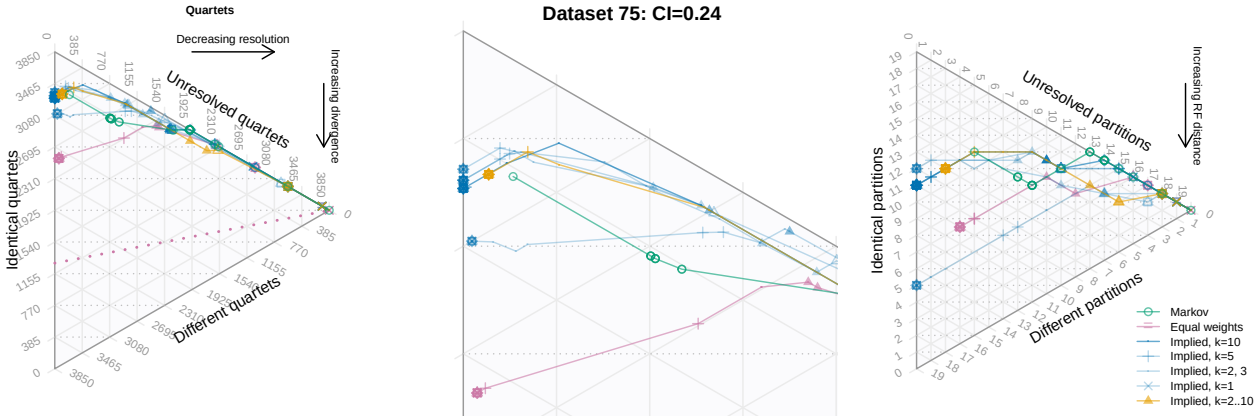
0.9 Trees 71–80

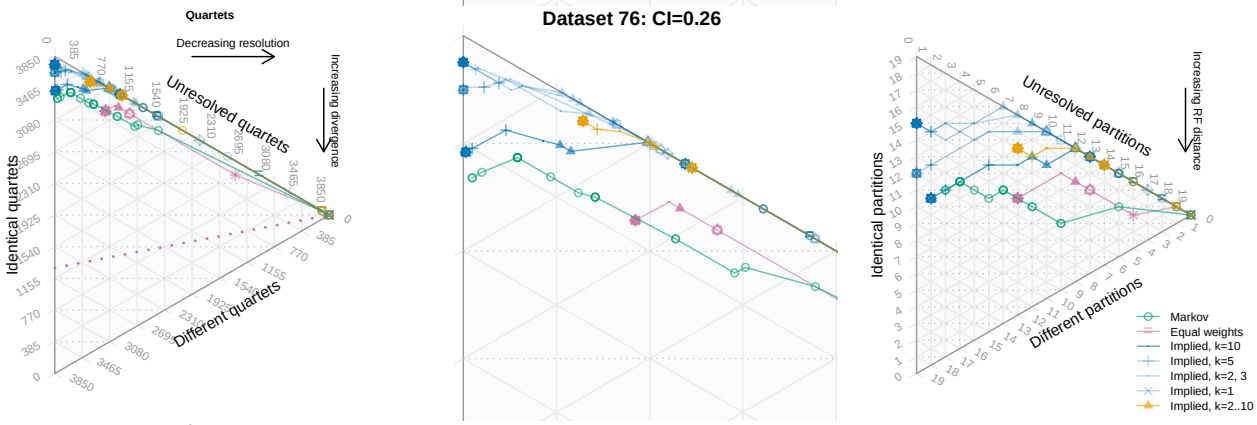


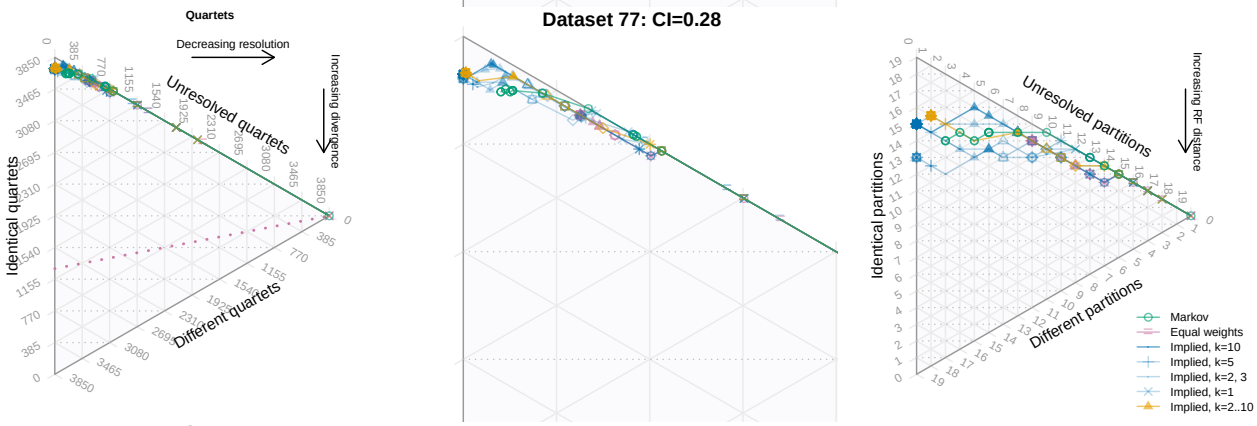


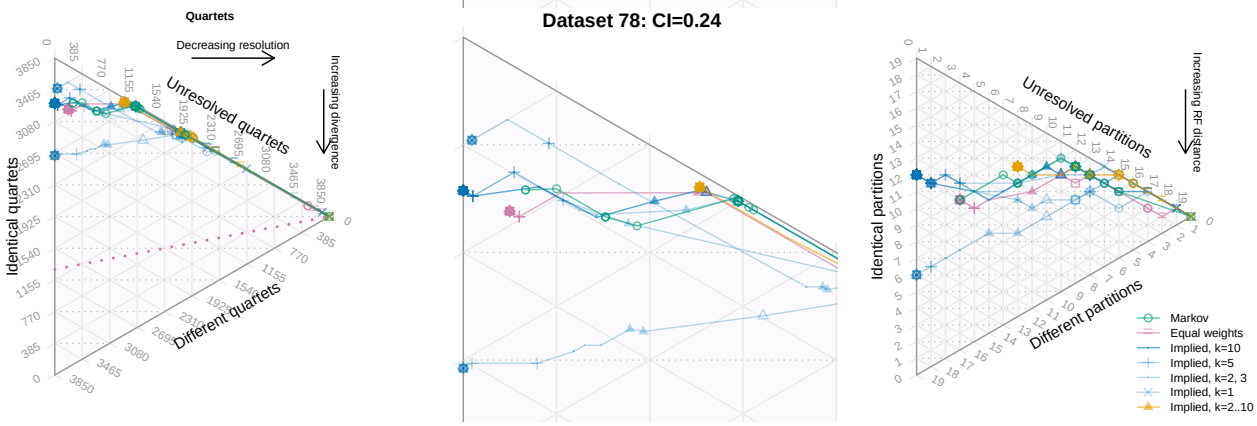


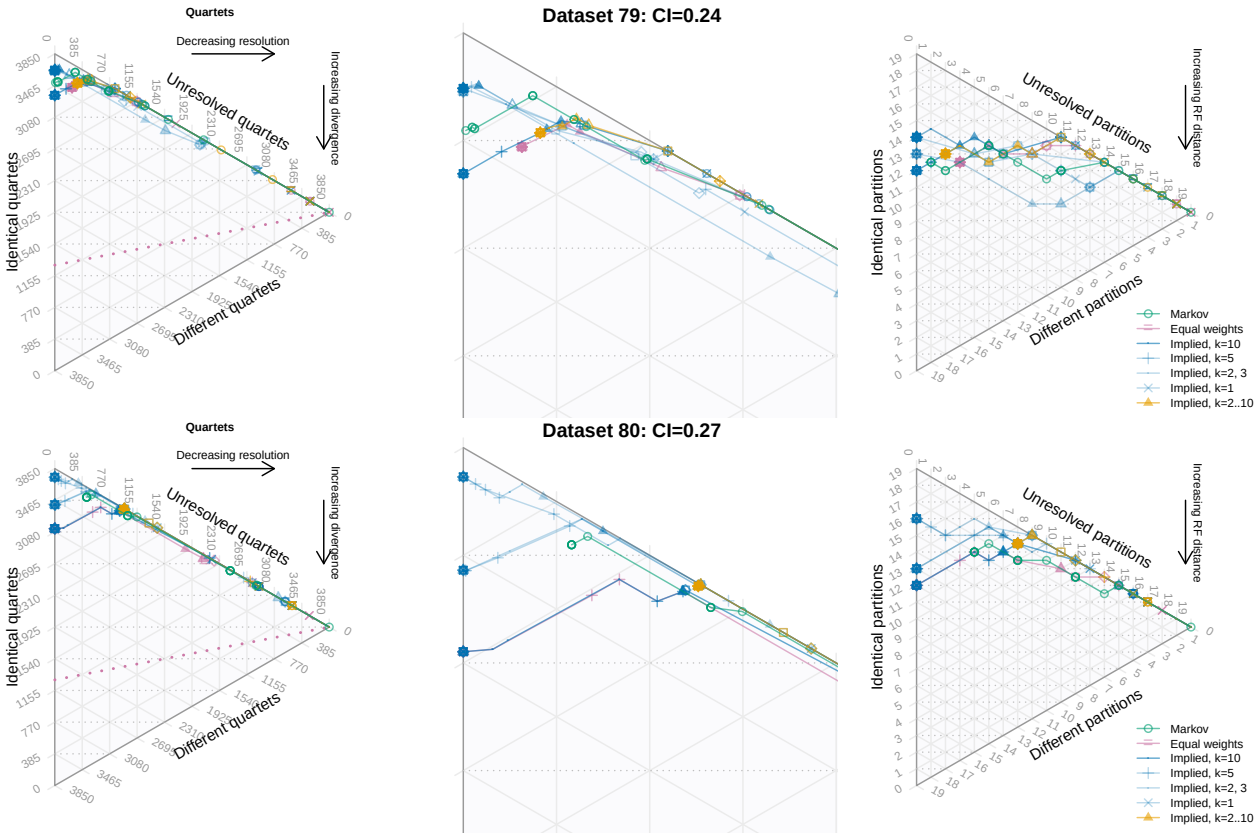



Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 75: CI=0.24
Unresolved partitions
Increasing RF distance
Identical partitions
Different partitions
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10

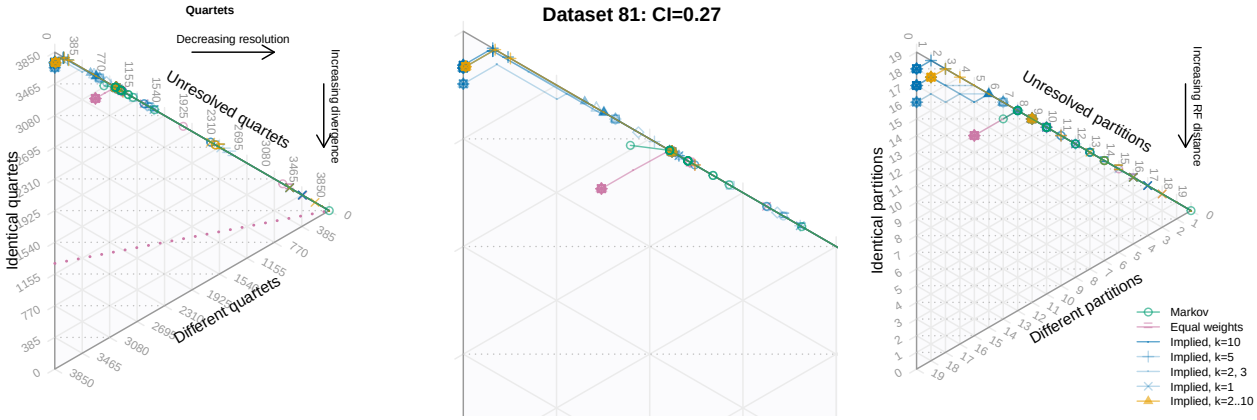

Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 76: CI=0.26
Unresolved partitions
Increasing RF distance
Identical partitions
Different partitions
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10

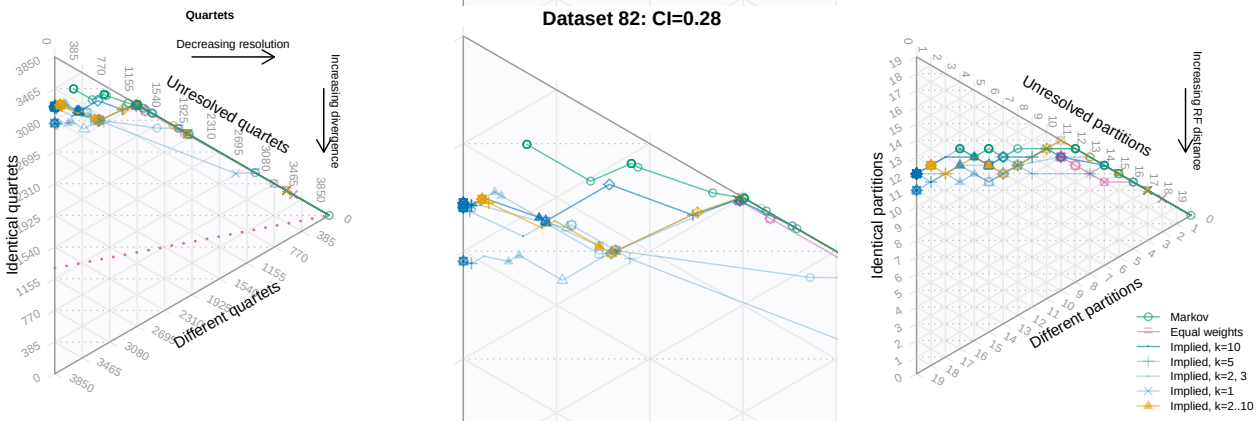

Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 77: CI=0.28
Unresolved partitions
Increasing RF distance
Identical partitions
Different partitions
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10

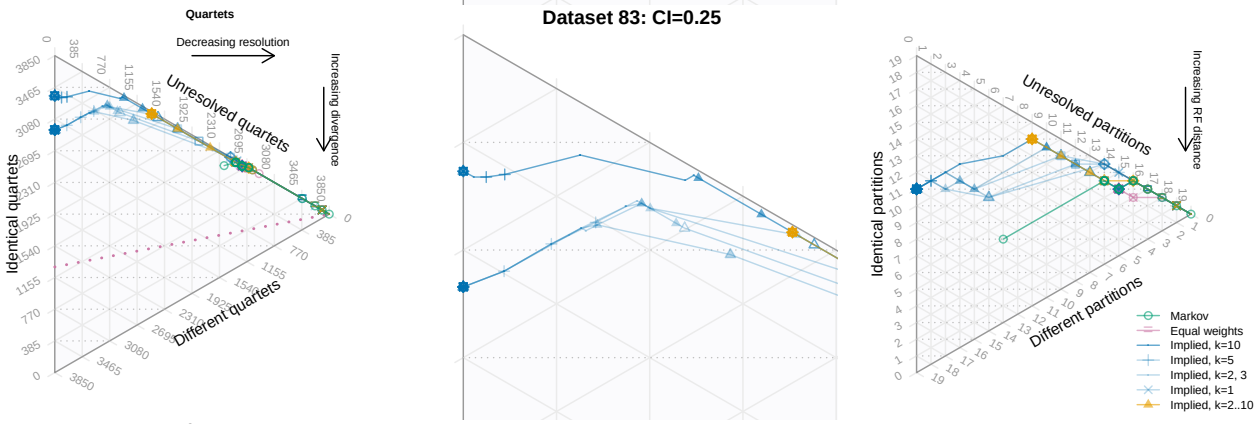

Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 78: CI=0.24
Unresolved partitions
Increasing RF distance
Identical partitions
Different partitions
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10

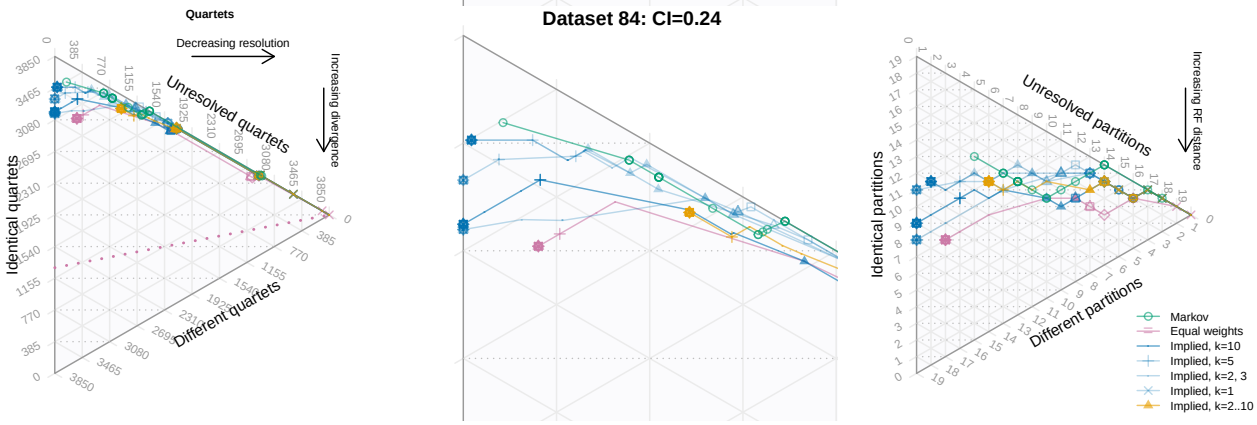

Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 79: CI=0.24
Unresolved partitions
Identical partitions
Increasing RF distance
Different partitions
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10
Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 80: CI=0.27
Unresolved partitions
Identical partitions
Increasing RF distance
Different partitions
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10

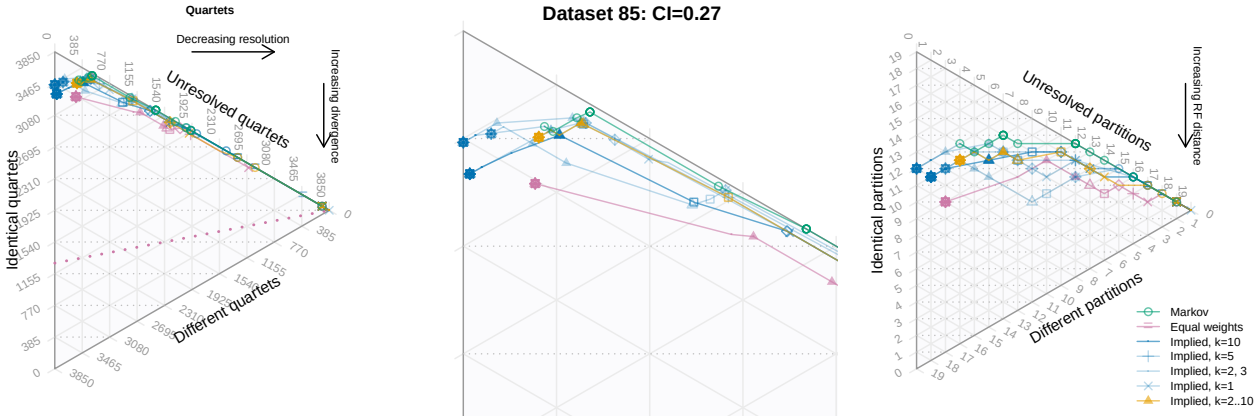
0.10 Trees 81–90

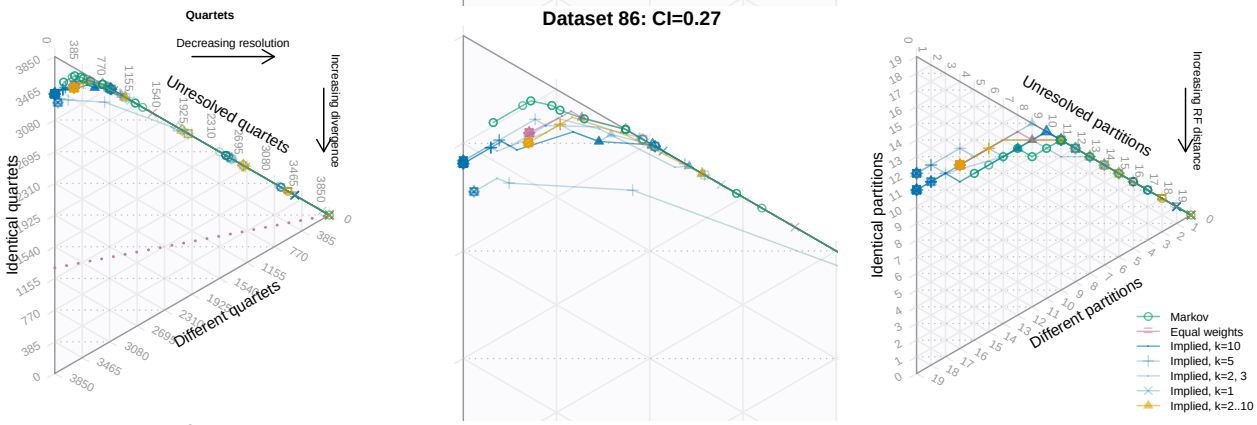


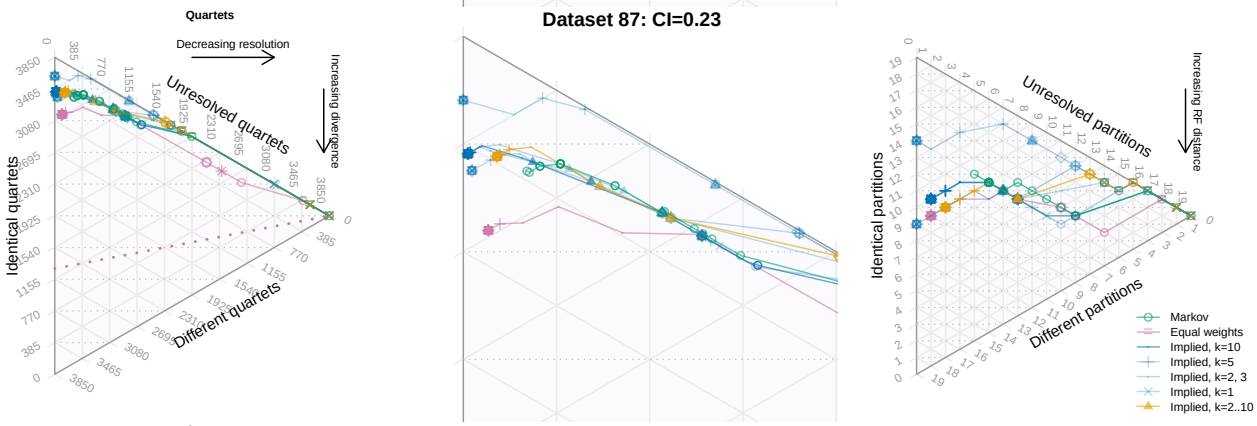


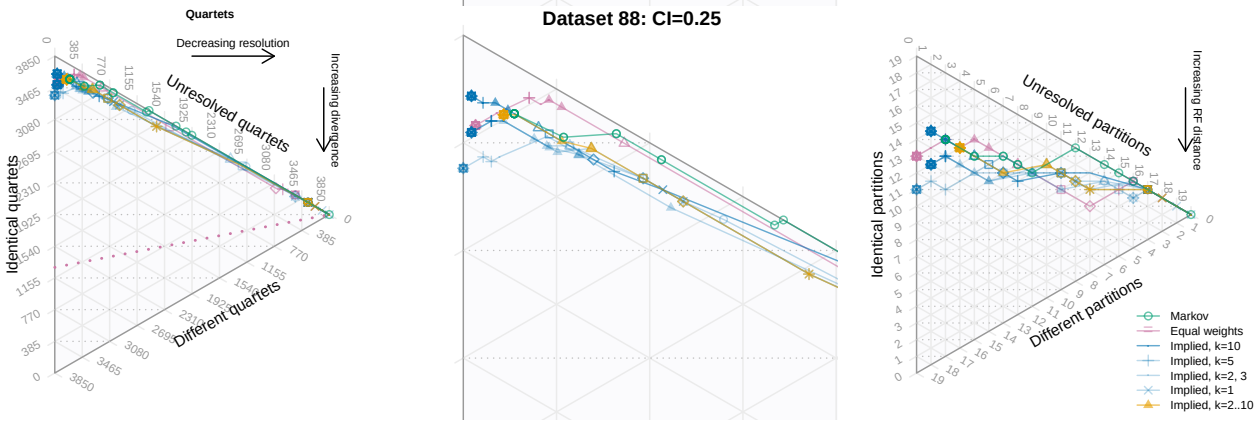


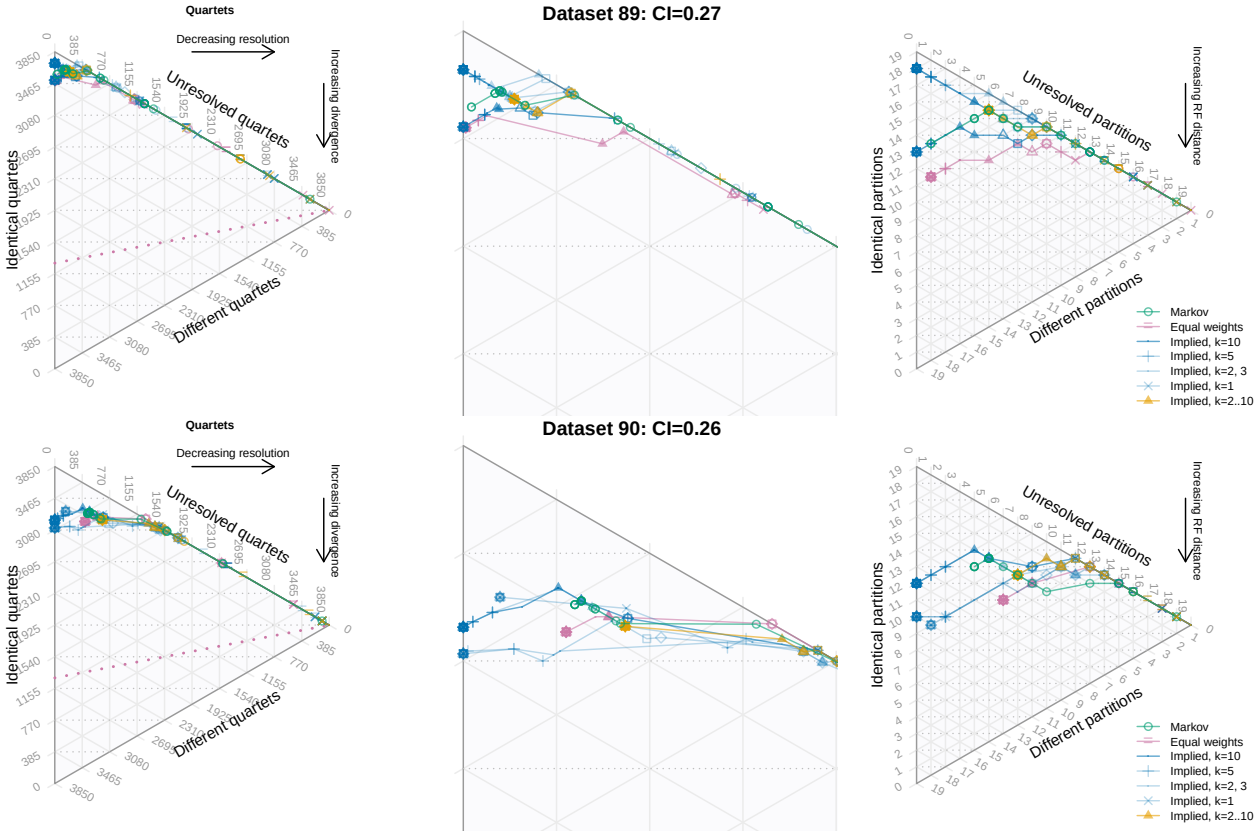



Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 85: CI=0.27
Unresolved partitions
Identical partitions
Different partitions
Increasing RF distance
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10

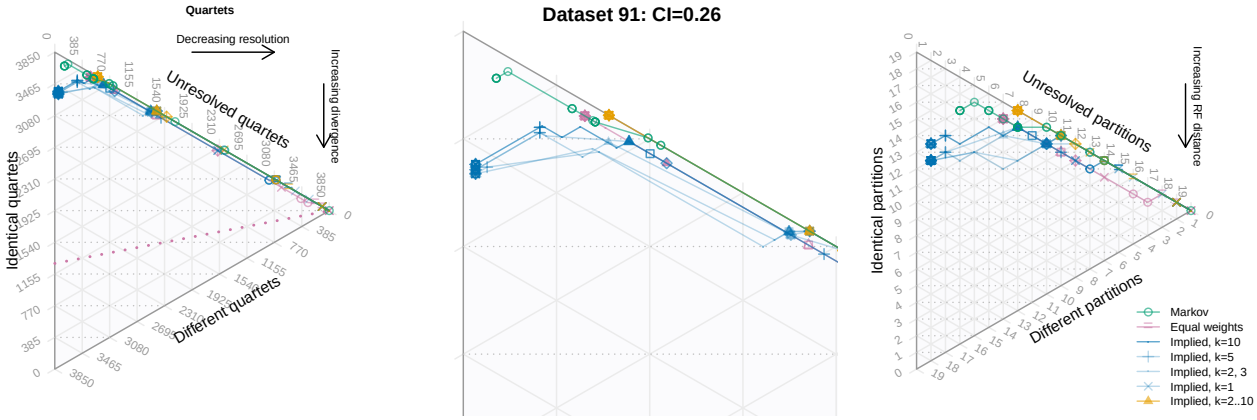

Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 86: CI=0.27
Unresolved partitions
Identical partitions
Different partitions
Increasing RF distance
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10

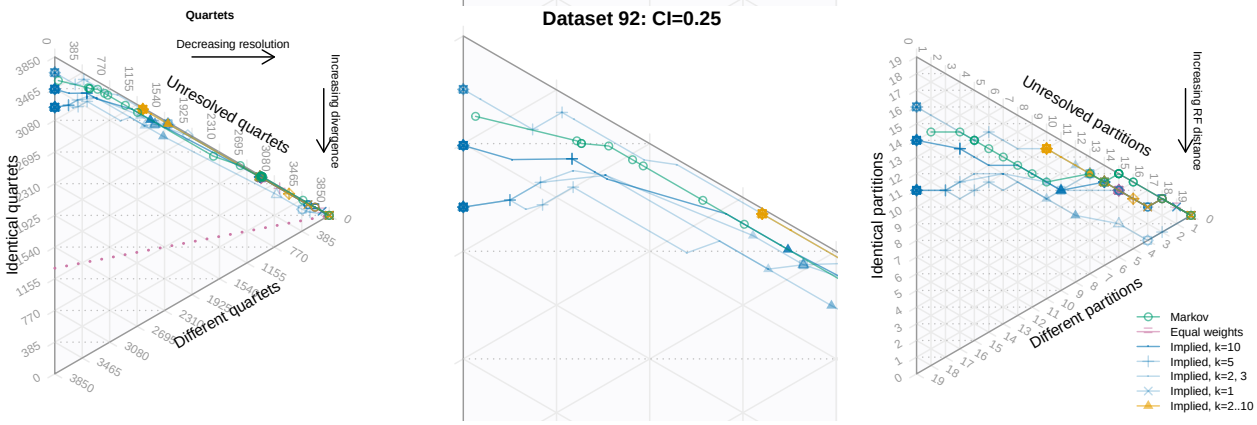

Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 87: CI=0.23
Unresolved partitions
Identical partitions
Different partitions
Increasing RF distance
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10

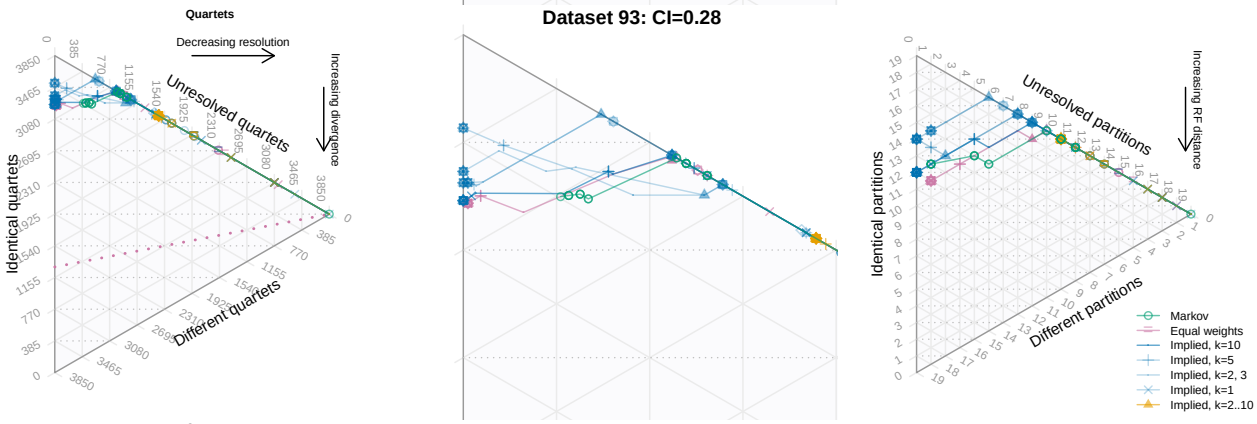

Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 88: CI=0.25
Unresolved partitions
Identical partitions
Different partitions
Increasing RF distance
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10

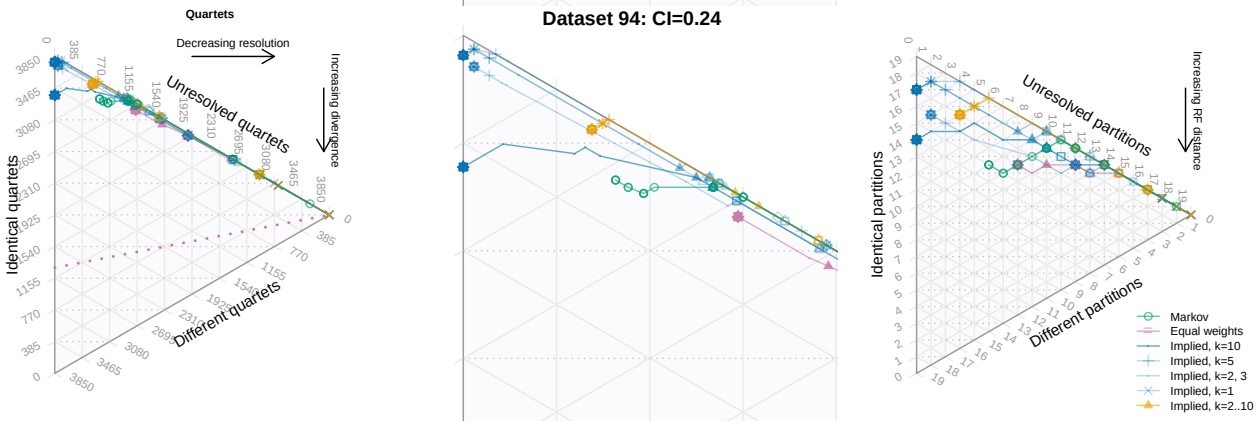

Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 89: CI=0.27
Unresolved partitions
Identical partitions
Different partitions
Increasing RF distance
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10
Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 90: CI=0.26
Unresolved partitions
Identical partitions
Different partitions
Increasing RF distance
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10

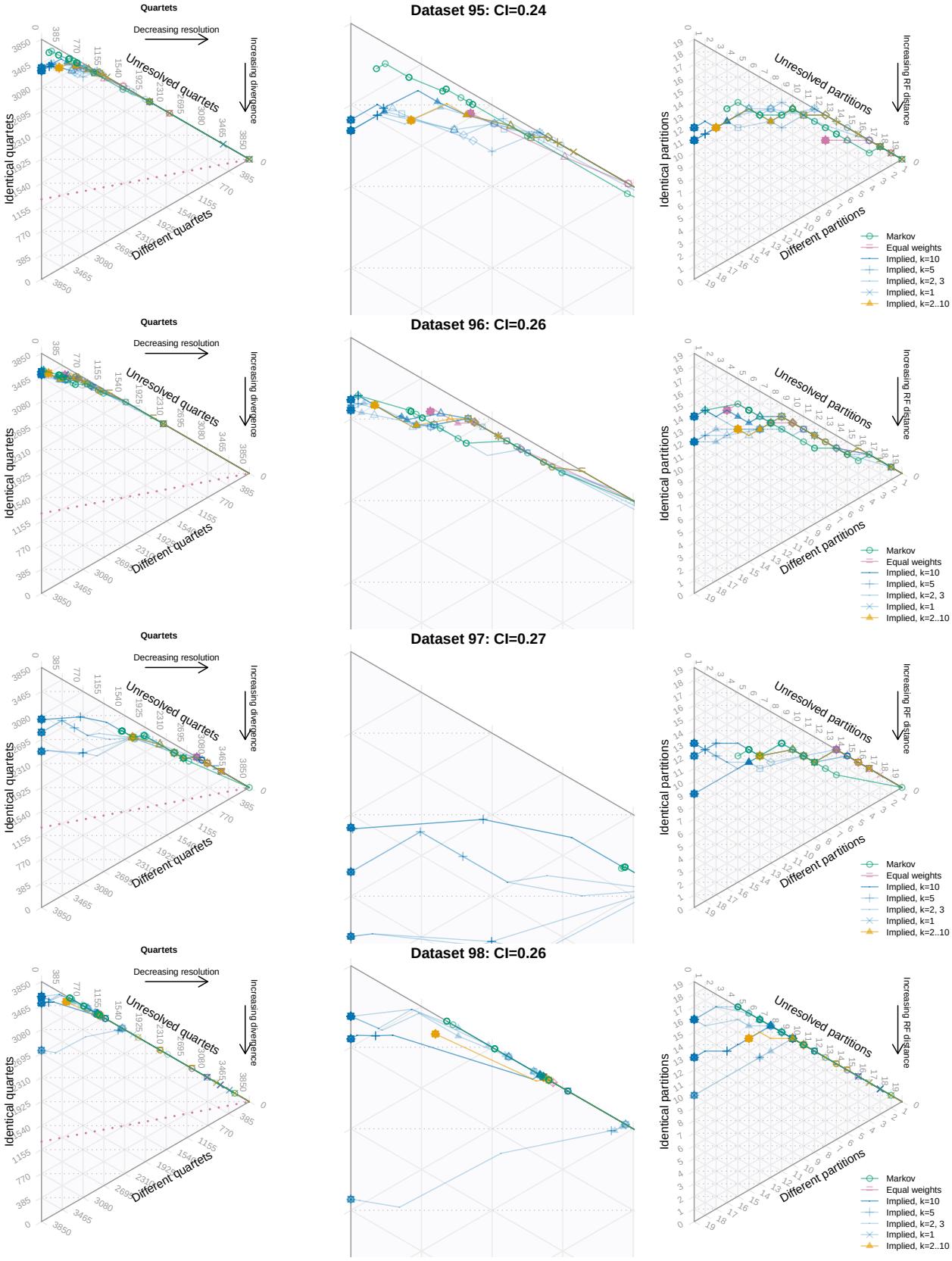
0.11 Trees 91–100

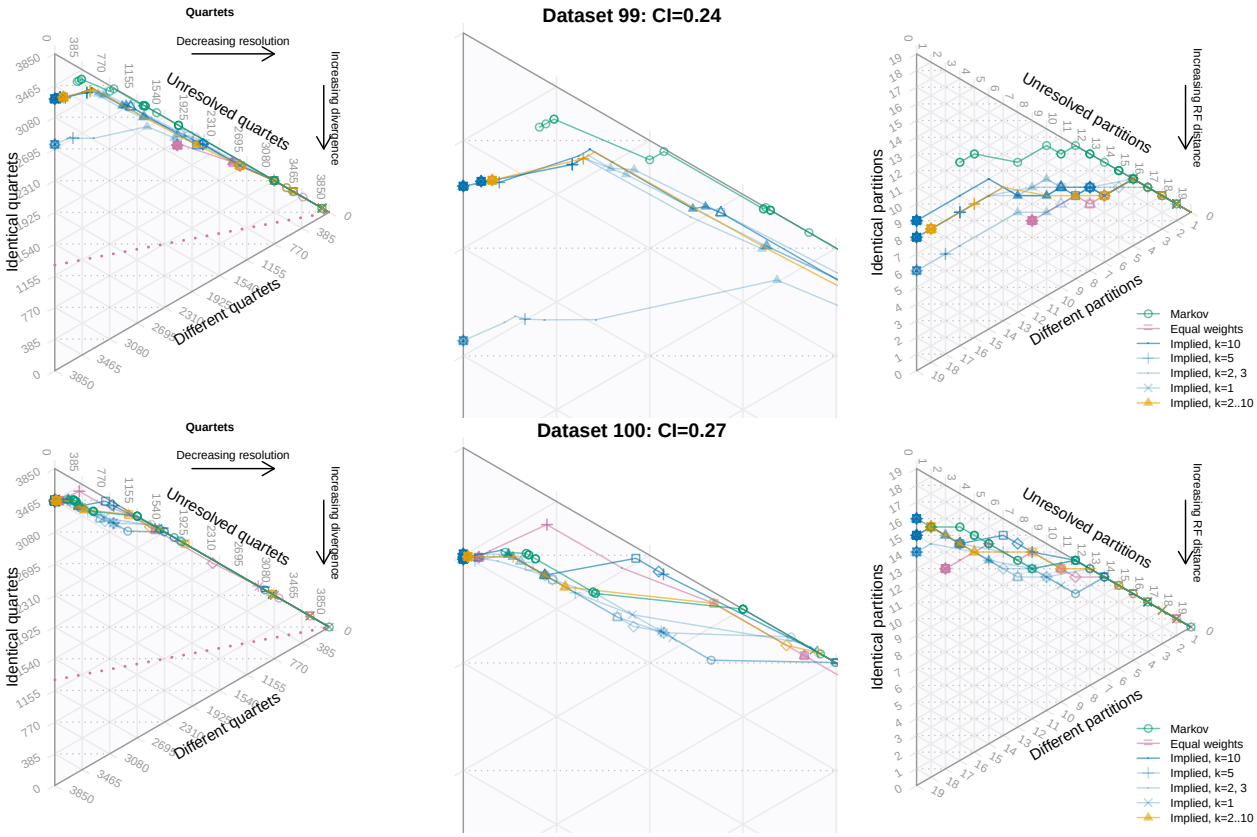









Quartets
Decreasing resolution
Increasing divergence
Unresolved quartets
Identical quartets
Different quartets
Dataset 95: CI=0.24
Dataset 96: CI=0.26
Dataset 97: CI=0.27
Dataset 98: CI=0.26
Unresolved partitions
Identical partitions
Different partitions
Increasing RF distance
Markov
Equal weights
Implied, k=10
Implied, k=5
Implied, k=2, 3
Implied, k=1
Implied, k=2..10



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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)