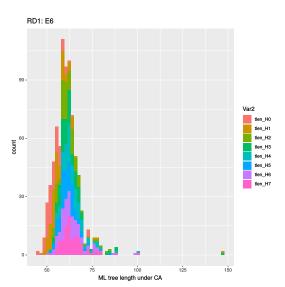
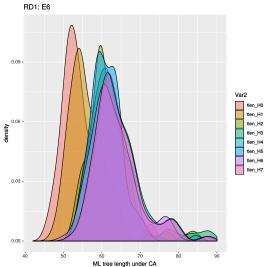
Random Permutation Test

Reduced Dataset 1: E6

H0: (gray-blue-yellow-red-black-green)
H1: gray+(blue-yellow-red-black-green)
H2: gray+blue+(yellow-red-black-green)
H3: gray+blue+yellow+(red-black-green)
H4: gray+blue+yellow+red+(black-green)
H5: gray+blue+(red-black)+(green-yellow)
H6: gray+blue+red+black+(green-yellow)

H7: gray+blue+yellow+red+black+green

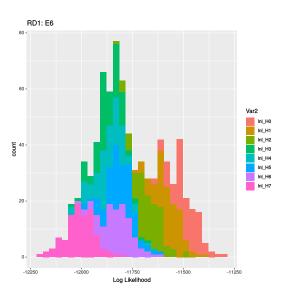


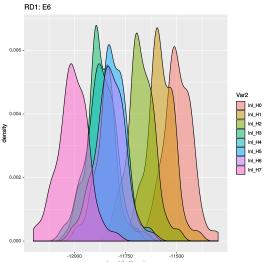


Kruskal-Wallis rank sum test on ML tree length chi-squared = 267.71, df = 7, p-value < 2.2e-16

Multiple comparison test after Kruskal-Wallis

p.value: 0.05 obs.dif critical.dif difference tlen_H0-tlen_H1 81.97 102.0845 FALSE tlen_H0-tlen_H2 293.32 102.0845 TRUE tlen_H0-tlen_H3 322.51 102.0845 TRUE 102.0845 tlen_H0-tlen_H4 390.28 TRUE tlen_H0-tlen_H5 286.30 102.0845 TRUE tlen_H0-tlen_H6 341.05 102.0845 TRUE tlen_H0-tlen_H7 380.17 102.0845 TRUE

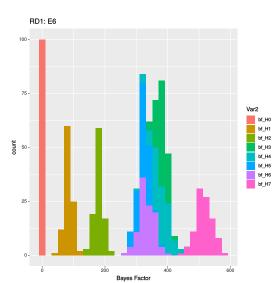


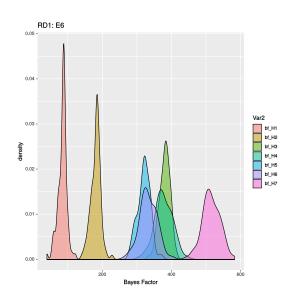


Kruskal-Wallis rank sum test on the Log Likelihood chi-squared = 657.55, df = 7, p-value < 2.2e-16

Multiple comparison test after Kruskal-Wallis

p.value: 0.05 critical.dif difference obs.dif 102.0845 Inl H0-Inl H1 77.79 FALSE Inl_H0-Inl_H2 179.79 102.0845 TRUE Inl_H0-Inl_H3 483.00 TRUE 102.0845 102.0845 TRUE Inl_H0-Inl_H4 473.91 Inl H0-Inl H5 373.19 102.0845 TRUE 102.0845 Inl H0-Inl H6 396.07 TRUE Inl_H0-Inl_H7 655.13 102.0845 **TRUE**





Kruskal-Wallis rank sum test on the ΔBF chi-squared = 644.87, df = 6, p-value < 2.2e-16

Multiple comparison test after Kruskal-Wallis p.value: 0.05

obs dif critical dif difference bf_H1-bf_H2 100.00 86 8822 TRUF bf_H1-bf_H3 449.43 86.8822 TRUE bf_H1-bf_H4 431.25 86.8822 TRUE bf_H1-bf_H5 238.54 86 8822 TRUF bf_H1-bf_H6 280.79 86.8822 TRUE bf_H1-bf_H7 599.99 86.8822 TRUE bf_H2-bf_H3 349.43 86.8822 TRUE bf_H2-bf_H4 331.25 86.8822 **TRUE** bf_H2-bf_H5 138.54 86.8822 TRUE bf_H2-bf_H6 180.79 86.8822 TRUE bf_H2-bf_H7 499.99 86.8822 TRUE bf_H3-bf_H4 18.18 86.8822 FALSE bf_H3-bf_H5 210.89 86.8822 TRUE bf_H3-bf_H6 168.64 86.8822 TRUE bf_H3-bf_H7 150.56 86.8822 TRUE bf_H4-bf_H5 192.71 86.8822 TRUE bf_H4-bf_H6 150.46 86.8822 TRUE bf_H4-bf_H7 168.74 TRUE 86.8822 86.8822 FALSE bf_H5-bf_H6 42.25 bf_H5-bf_H7 361.45 86.8822 TRUE bf_H6-bf_H7 319.20 86.8822 TRUE