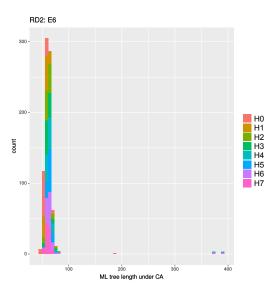
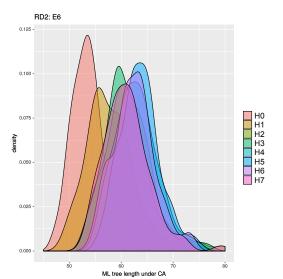
Random Permutation Test

Reduced Dataset 2: 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



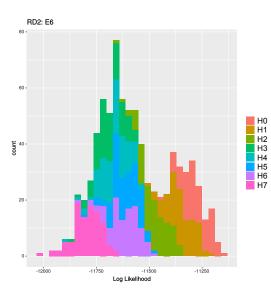


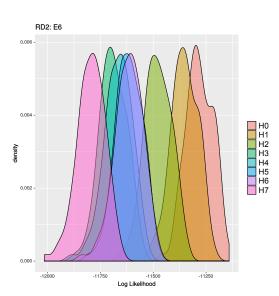
Kruskal-Wallis rank sum test on ML tree length chi-squared = 245.99, df = 7, p-value < 2.2e-16

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

obs.dif critical.dif difference tlen_H0-tlen_H1 127.82 102.0845 TRUE tlen_H0-tlen_H2 298.49 102.0845 TRUE tlen_H0-tlen_H3 272.81 102.0845 TRUE 102.0845 tlen_H0-tlen_H4 376.16 TRUE tlen_H0-tlen_H5 404.37 102.0845 TRUE tlen_H0-tlen_H6 359.76 102.0845 TRUE tlen_H0-tlen_H7 284.35 TRUE

102.0845

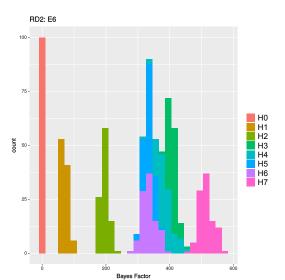


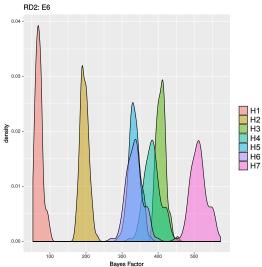


Kruskal-Wallis rank sum test on the Log Likelihood chi-squared = 672.47, df = 7, p-value < 2.2e-16

Multiple comparison test after Kruskal-Wallis

p.value: 0.05 critical.dif difference obs.dif 102.0845 Inl_H0-Inl_H1 62.68 FALSE Inl_H0-Inl_H2 181.64 102.0845 TRUE TRUE Inl_H0-Inl_H3 508.34 102.0845 TRUE Inl_H0-Inl_H4 464.06 102.0845 Inl H0-Inl H5 373.04 102.0845 TRUE 102.0845 Inl H0-Inl H6 373.03 TRUE Inl_H0-Inl_H7 651.45 102.0845 **TRUE**





Kruskal-Wallis rank sum test on the ΔBF chi-squared = 658.24, 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 481.73 86.8822 TRUE bf_H1-bf_H4 409.48 86.8822 TRUE bf_H1-bf_H5 253.42 86 8822 TRUF bf_H1-bf_H6 255.38 86.8822 TRUE bf_H1-bf_H7 599.99 86.8822 TRUE bf_H2-bf_H3 381.73 86.8822 TRUE bf_H2-bf_H4 309.48 86.8822 **TRUE** bf_H2-bf_H5 153.42 86.8822 TRUE bf_H2-bf_H6 155.38 86.8822 TRUE bf_H2-bf_H7 499.99 86.8822 TRUE bf_H3-bf_H4 72.25 86.8822 FALSE bf_H3-bf_H5 228.31 86.8822 TRUE bf_H3-bf_H6 226.35 86.8822 TRUE bf_H3-bf_H7 118.26 86.8822 TRUE bf_H4-bf_H5 156.06 86.8822 TRUE bf_H4-bf_H6 154.10 86.8822 TRUE bf_H4-bf_H7 190.51 86.8822 TRUE 86.8822 FALSE bf_H5-bf_H6 1.96 bf_H5-bf_H7 346.57 86.8822 TRUE bf_H6-bf_H7 344.61 86.8822 TRUE