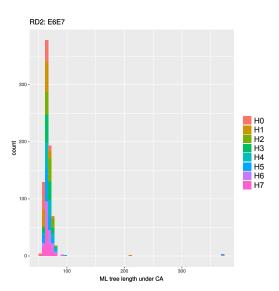
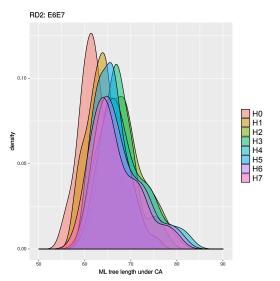
Random Permutation Test

Reduced Dataset 2: E6E7

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

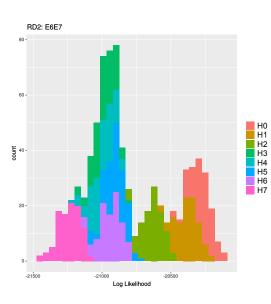


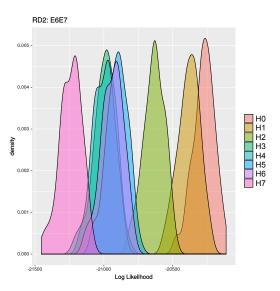


Kruskal-Wallis rank sum test on ML tree length chi-squared = 167.42, df = 7, p-value < 2.2e-16

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

obs.dif critical.dif difference tlen_H0-tlen_H1 101.57 102.0845 **FALSE** tlen_H0-tlen_H2 328.90 102.0845 TRUE tlen_H0-tlen_H3 263.70 102.0845 TRUE 102.0845 tlen_H0-tlen_H4 320.92 TRUE tlen_H0-tlen_H5 180.01 102.0845 TRUE tlen_H0-tlen_H6 267.30 102.0845 TRUE tlen_H0-tlen_H7 216.08 102.0845 TRUE

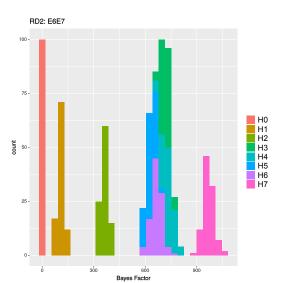


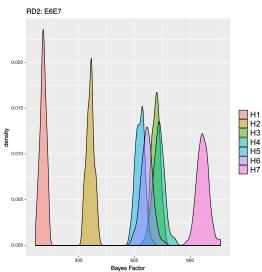


Kruskal-Wallis rank sum test on the Log Likelihood chi-squared = 705.72, df = 7, p-value < 2.2e-16

Multiple comparison test after Kruskal-Wallis

p.value: 0.05 obs.dif critical.dif difference Ilni H0-Ini H1 68.72 102.0845 FALSE Inl_H0-Inl_H2 183.82 102.0845 TRUE Inl_H0-Inl_H3 475.45 TRUE 102.0845 102.0845 TRUE Inl_H0-Inl_H4 494.20 102.0845 Inl H0-Inl H5 360.52 TRUE 102.0845 Inl H0-Inl H6 407.66 TRUE Inl_H0-Inl_H7 681.23 102.0845 **TRUE**





Kruskal-Wallis rank sum test on the ΔBF chi-squared = 654.07, 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 423.75 86.8822 TRUE bf_H1-bf_H4 459.52 86.8822 TRUE bf_H1-bf_H5 218.17 86 8822 TRUF bf_H1-bf_H6 298.56 86.8822 TRUE bf_H1-bf_H7 600.00 86.8822 TRUE bf_H2-bf_H3 323.75 86.8822 TRUE bf_H2-bf_H4 359.52 86.8822 **TRUE** bf_H2-bf_H5 118.17 86.8822 TRUE bf_H2-bf_H6 198.56 86.8822 TRUE bf_H2-bf_H7 500.00 86.8822 TRUE bf_H3-bf_H4 35.77 86.8822 FALSE bf_H3-bf_H5 205.58 86.8822 TRUE bf_H3-bf_H6 125.19 86.8822 TRUE bf_H3-bf_H7 176.25 86.8822 TRUE bf_H4-bf_H5 241.35 86.8822 TRUE bf_H4-bf_H6 160.96 86.8822 TRUE bf_H4-bf_H7 140.48 86.8822 TRUE 86.8822 FALSE bf_H5-bf_H6 80.39 bf_H5-bf_H7 381.83 86.8822 TRUE bf_H6-bf_H7 301.44 86.8822 TRUE