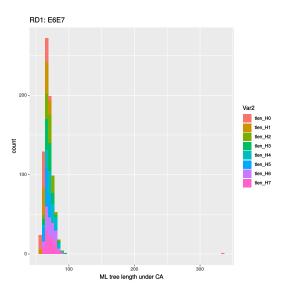
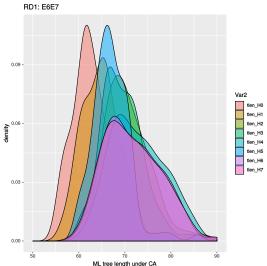
Reduced Dataset 1: E6E7

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

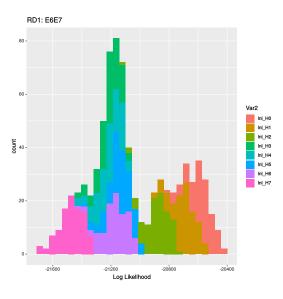


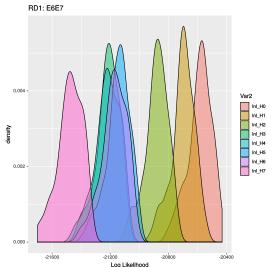


Kruskal-Wallis rank sum test on ML tree length chi-squared = 276.65, df = 7, p-value < 2.2e-16

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

obs.dif critical.dif difference tlen_H0-tlen_H1 93.73 102.0845 FALSE tlen_H0-tlen_H2 330.76 102.0845 TRUE tlen_H0-tlen_H3 296.09 102.0845 TRUE tlen_H0-tlen_H4 405.87 102.0845 TRUE tlen_H0-tlen_H5 187.34 102.0845 TRUE tlen_H0-tlen_H6 361.87 102.0845 TRUE tlen_H0-tlen_H7 357.54 102.0845 TRUE

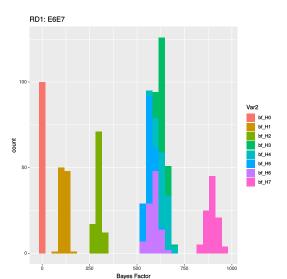


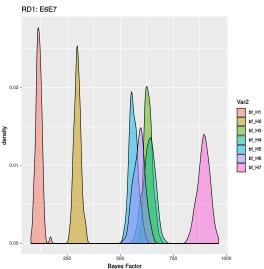


Kruskal-Wallis rank sum test on the Log Likelihood chi-squared = 694.21, df = 7, p-value < 2.2e-16

Multiple comparison test after Kruskal-Wallis

p.value: 0.05 obs.dif critical.dif difference 102.0845 Inl_H0-Inl_H1 74.62 FALSE Inl_H0-Inl_H2 180.52 102.0845 TRUE Inl_H0-Inl_H3 474.95 TRUE 102.0845 Inl_H0-Inl_H4 476.26 102.0845 TRUE 102.0845 Inl H0-Inl H5 376.31 TRUE 102.0845 Inl H0-Inl H6 412.88 TRUE Inl_H0-Inl_H7 680.70 102.0845 **TRUE**





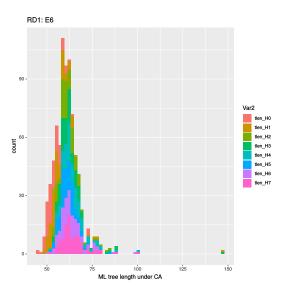
Kruskal-Wallis rank sum test on the ΔBF chi-squared = 646.23, df = 6, p-value < 2.2e-16

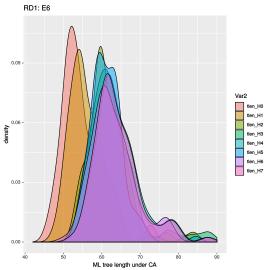
Multiple comparison test after Kruskal-Wallis p.value: 0.05

critical dif difference obs dif bf_H1-bf_H2 100.00 86 8822 TRUF bf_H1-bf_H3 435.21 86.8822 TRUE bf_H1-bf_H4 442.02 86.8822 TRUE bf_H1-bf_H5 223.84 86 8822 TRUF bf_H1-bf_H6 298.93 86.8822 TRUE bf_H1-bf_H7 600.00 86.8822 TRUE bf_H2-bf_H3 335.21 86.8822 TRUE bf_H2-bf_H4 342.02 86.8822 **TRUE** bf_H2-bf_H5 123.84 86.8822 TRUE bf_H2-bf_H6 198.93 86.8822 TRUE bf_H2-bf_H7 500.00 86.8822 TRUE bf_H3-bf_H4 6.81 86.8822 FALSE bf_H3-bf_H5 211.37 86.8822 TRUE bf_H3-bf_H6 136.28 86.8822 TRUE bf_H3-bf_H7 164.79 86.8822 TRUE bf_H4-bf_H5 218.18 86.8822 TRUE bf_H4-bf_H6 143.09 86.8822 TRUE bf_H4-bf_H7 157.98 86.8822 TRUE 86.8822 FALSE bf_H5-bf_H6 75.09 bf_H5-bf_H7 376.16 86.8822 TRUE bf_H6-bf_H7 301.07 86.8822 TRUE

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

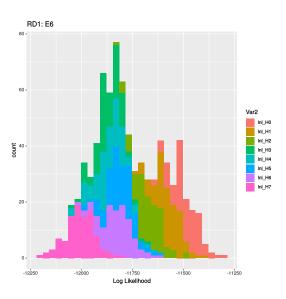


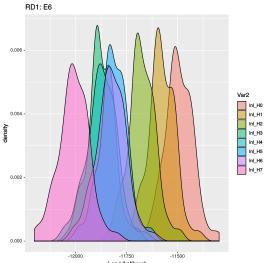


Kruskal-Wallis rank sum test on ML tree length chi-squared = 267.71, df = 7, p-value < 2.2e-16

Multiple comparison test after Kruskal-Wallis

p.value. 0.00			
	obs.dif	critical.dif d	ifference
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
tlen_H0-tlen_H4	390.28	102.0845	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

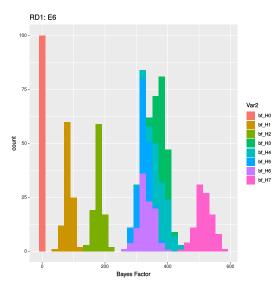


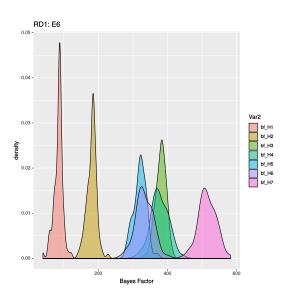


Kruskal-Wallis rank sum test on the Log Likelihood chi-squared = 657.55, df = 7, p-value < 2.2e-16

Multiple comparison test after Kruskal-Wallis

p. ra.ao. 0.00	obs.dif	critical.dif	difference	
	Inl_H0-Inl_H1	77.79	102.0845	FALSE
	Inl_H0-Inl_H2	179.79	102.0845	TRUE
	Inl_H0-Inl_H3	483.00	102.0845	TRUE
	Inl_H0-Inl_H4	473.91	102.0845	TRUE
	Inl_H0-Inl_H5	373.19	102.0845	TRUE
	Inl_H0-Inl_H6	396.07	102.0845	TRUE
	Inl_H0-Inl_H7	655.13	102.0845	TRUE





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

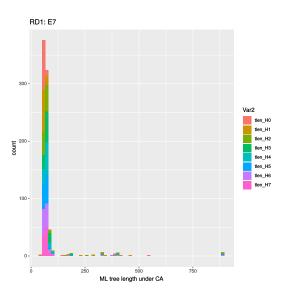
Multiple comparison test after Kruskal-Wallis

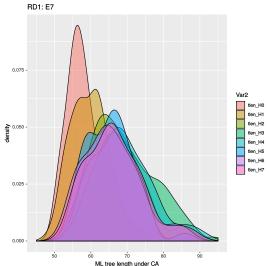
p.value: 0.05			
	obs.dif	critical.dif	difference
bf_H1-bf_H2	100.00	86.8822	TRUE
bf_H1-bf_H3	449.43	86.8822	TRUE
bf_H1-bf_H4	431.25	86.8822	TRUE
bf_H1-bf_H5	238.54	86.8822	TRUE
bf_H1-bf_H6	280.79	86.8822	TRUE
bf_H1-bf_H7	599.99	86.8822	TRUE
bf_H2-bf_H3	349.43	86.8822	TRUE
bf_H2-bf_H4	331.25	86.8822	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	86.8822	TRUE
bf_H5-bf_H6	42.25	86.8822	FALSE
bf_H5-bf_H7	361.45	86.8822	TRUE
bf_H6-bf_H7	319.20	86.8822	TRUE

Reduced Dataset 1: E7

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

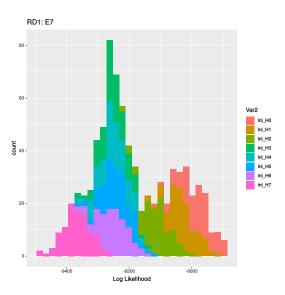


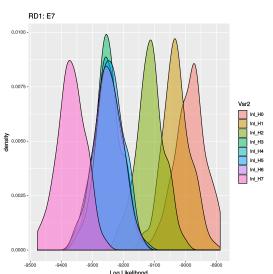


Kruskal-Wallis rank sum test on ML tree length chi-squared = 165.86, df = 7, p-value < 2.2e-16

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

obs.dif critical.dif difference tlen_H0-tlen_H1 97.52 102.0845 FALSE tlen_H0-tlen_H2 269.31 102.0845 TRUE tlen_H0-tlen_H3 335.53 102.0845 TRUE tlen_H0-tlen_H4 308.82 102.0845 TRUE tlen_H0-tlen_H5 227.26 102.0845 TRUE tlen_H0-tlen_H6 234.92 102.0845 TRUE tlen_H0-tlen_H7 256.56 102.0845 TRUE

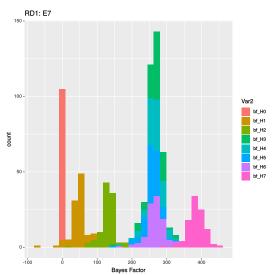


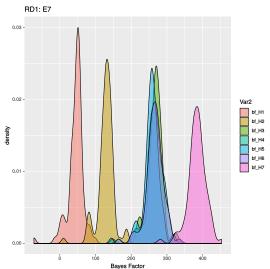


Kruskal-Wallis rank sum test on the Log Likelihood chi-squared = 665.11, df = 7, p-value < 2.2e-16

Multiple comparison test after Kruskal-Wallis

p.value: 0.05 critical.dif difference obs.dif 102.0845 Inl H0-Inl H1 57.17 FALSE Inl_H0-Inl_H2 167.52 102.0845 TRUE Inl_H0-Inl_H3 431.76 102.0845 TRUE 102.0845 TRUE Inl_H0-Inl_H4 429.51 102.0845 Inl H0-Inl H5 406.16 TRUE Inl_H0-Inl_H6 428.60 102.0845 TRUE Inl_H0-Inl_H7 661.76 102.0845 **TRUE**





Kruskal-Wallis rank sum test on the Δ BF chi-squared = 565.76, df = 6, p-value < 2.2e-16

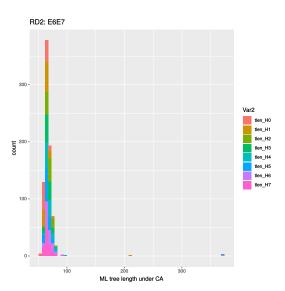
Multiple comparison test after Kruskal-Wallis p.value: 0.05

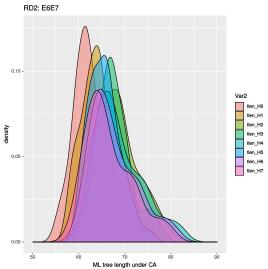
obs dif critical dif difference bf_H1-bf_H2 98.05 86 8822 TRUE bf_H1-bf_H3 368.34 86.8822 TRUE bf_H1-bf_H4 358.75 86.8822 TRUE bf_H1-bf_H5 309.04 86 8822 TRUF bf_H1-bf_H6 359.78 86.8822 TRUE bf_H1-bf_H7 597.99 86.8822 TRUE bf_H2-bf_H3 270.29 86.8822 TRUE bf_H2-bf_H4 260.70 86.8822 **TRUE** bf_H2-bf_H5 210.99 86.8822 TRUE bf_H2-bf_H6 261.73 86.8822 TRUE bf_H2-bf_H7 499.94 86.8822 TRUE bf_H3-bf_H4 9.59 86.8822 FALSE bf_H3-bf_H5 59.30 86.8822 FALSE bf_H3-bf_H6 8.56 86.8822 **FALSE** bf_H3-bf_H7 229.65 86.8822 TRUE bf_H4-bf_H5 49.71 86.8822 FALSE bf_H4-bf_H6 86.8822 FALSE 1.03 bf_H4-bf_H7 239.24 TRUE 86.8822 86.8822 FALSE bf_H5-bf_H6 50.74 bf_H5-bf_H7 288.95 86.8822 TRUE bf_H6-bf_H7 238.21 86.8822 TRUE

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

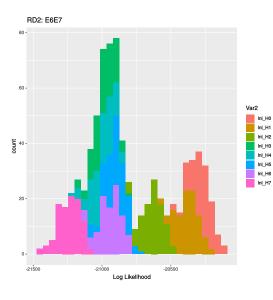


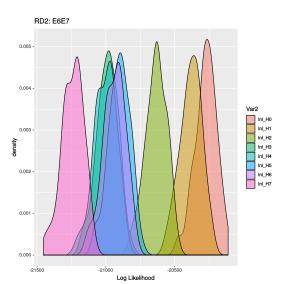


Kruskal-Wallis rank sum test on ML tree length chi-squared = 167.42, df = 7, p-value < 2.2e-16

Multiple comparison test after Kruskal-Wallis

•	obs.dif	critical.dif di	fference
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
tlen_H0-tlen_H4	320.92	102.0845	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

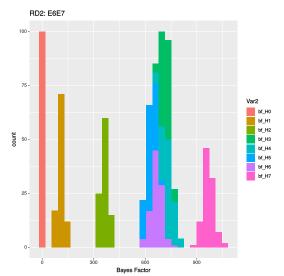


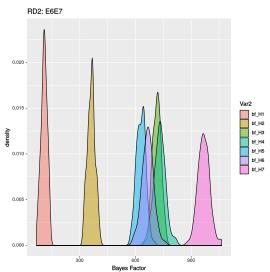


Kruskal-Wallis rank sum test on the Log Likelihood chi-squared = 705.72, df = 7, p-value < 2.2e-16

Multiple comparison test after Kruskal-Wallis

p. value. 0.00	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	102.0845	TRUE
Inl_H0-Inl_H4	494.20	102.0845	TRUE
Inl_H0-Inl_H5	360.52	102.0845	TRUE
Inl_H0-Inl_H6	407.66	102.0845	TRUE
Inl_H0-Inl_H7	681.23	102.0845	TRUE





Kruskal-Wallis rank sum test on the Δ BF chi-squared = 654.07, df = 6, p-value < 2.2e-16

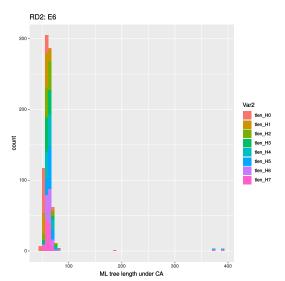
Multiple comparison test after Kruskal-Wallis

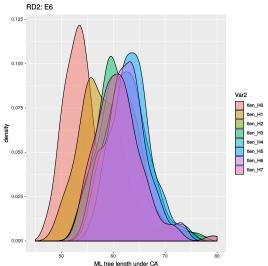
p.value: 0.05			
p	obs.dif	critical.dif	difference
bf_H1-bf_H2	100.00	86.8822	TRUE
bf_H1-bf_H3	423.75	86.8822	TRUE
bf_H1-bf_H4	459.52	86.8822	TRUE
bf_H1-bf_H5	218.17	86.8822	TRUE
bf_H1-bf_H6	298.56	86.8822	TRUE
bf_H1-bf_H7	600.00	86.8822	TRUE
bf_H2-bf_H3	323.75	86.8822	TRUE
bf_H2-bf_H4	359.52	86.8822	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
bf_H5-bf_H6	80.39	86.8822	FALSE
bf_H5-bf_H7	381.83	86.8822	TRUE
bf_H6-bf_H7	301.44	86.8822	TRUE

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

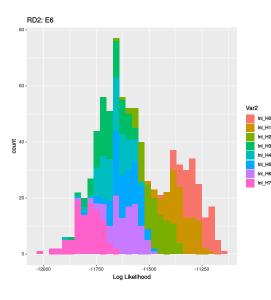


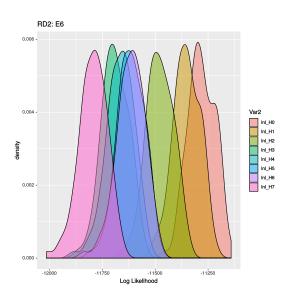


Kruskal-Wallis rank sum test on ML tree length chi-squared = 245.99, df = 7, p-value < 2.2e-16

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 tlen_H0-tlen_H4 376.16 102.0845 TRUE tlen_H0-tlen_H5 404.37 102.0845 TRUE tlen_H0-tlen_H6 359.76 102.0845 TRUE tlen_H0-tlen_H7 284.35 102.0845 TRUE

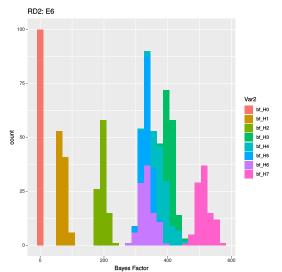


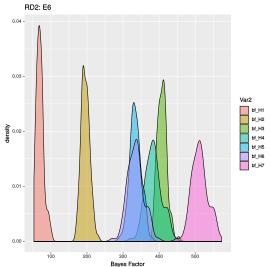


Kruskal-Wallis rank sum test on the Log Likelihood chi-squared = 672.47, df = 7, p-value < 2.2e-16

Multiple comparison test after Kruskal-Wallis

p.value: 0.05 obs.dif critical.dif difference 102.0845 Inl H0-Inl H1 62.68 FALSE Inl_H0-Inl_H2 181.64 102.0845 TRUE Inl_H0-Inl_H3 508.34 102.0845 TRUE 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

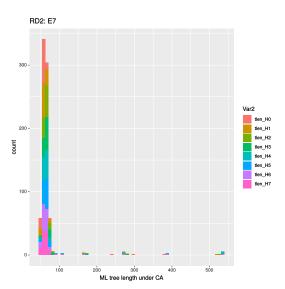
Multiple comparison test after Kruskal-Wallis

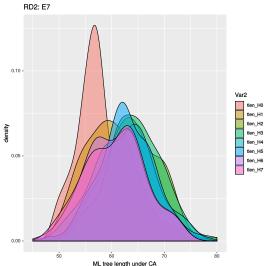
p.value: 0.05 obs dif critical dif difference bf_H1-bf_H2 100.00 86 8822 TRUF bf_H1-bf_H3 481.73 86.8822 TRUE bf_H1-bf_H4 409.48 86.8822 TRUE bf_H1-bf_H5 253.42 86 8822 TRUF bf_H1-bf_H6 255.38 86.8822 TRUE bf_H1-bf_H7 599.99 86.8822 TRUE bf_H2-bf_H3 381.73 86.8822 TRUE bf_H2-bf_H4 309.48 86.8822 **TRUE** 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

Reduced Dataset 2: E7

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



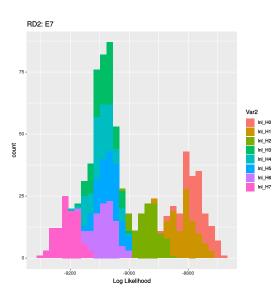


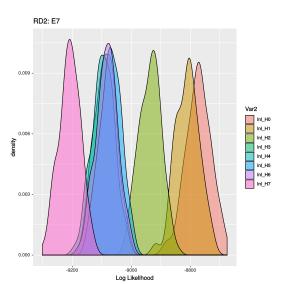
Kruskal-Wallis rank sum test on ML tree length chi-squared = 110.41, df = 7, p-value < 2.2e-16

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

obs.dif critical.dif difference tlen_H0-tlen_H1 100.82 102.0845 **FALSE** tlen_H0-tlen_H2 258.38 102.0845 TRUE tlen_H0-tlen_H3 278.32 102.0845 TRUE 102.0845 tlen_H0-tlen_H4 220.37 TRUE tlen_H0-tlen_H5 224.17 102.0845 TRUE tlen_H0-tlen_H6 154.42 TRUE 102.0845 tlen_H0-tlen_H7 157.36 TRUE

102.0845

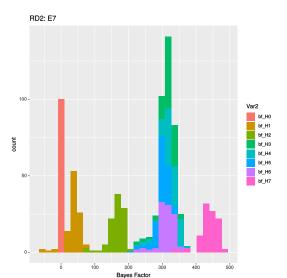


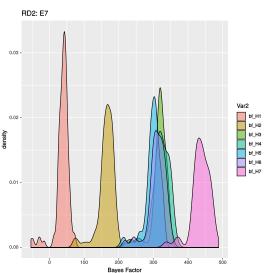


Kruskal-Wallis rank sum test on the Log Likelihood chi-squared = 688.43, df = 7, p-value < 2.2e-16

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

critical.dif difference obs.dif 102.0845 Inl_H0-Inl_H1 49.38 FALSE Inl_H0-Inl_H2 173.36 102.0845 TRUE Inl_H0-Inl_H3 436.45 102.0845 TRUE 102.0845 TRUE Inl_H0-Inl_H4 459.10 Inl H0-Inl H5 381.42 102.0845 TRUE 102.0845 Inl H0-Inl H6 421.58 TRUE Inl_H0-Inl_H7 671.59 102.0845 **TRUE**





Kruskal-Wallis rank sum test on the ΔBF chi-squared = 565.76, 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 99.96 86 8822 TRUE bf_H1-bf_H3 373.27 86.8822 TRUE bf_H1-bf_H4 410.86 86.8822 TRUE bf_H1-bf_H5 271.96 86 8822 TRUF bf_H1-bf_H6 344.92 86.8822 TRUE bf_H1-bf_H7 598.89 86.8822 TRUE bf_H2-bf_H3 273.31 86.8822 TRUE bf_H2-bf_H4 310.90 86.8822 **TRUE** bf_H2-bf_H5 172.00 86.8822 TRUE bf_H2-bf_H6 244.96 86.8822 TRUE bf_H2-bf_H7 498.93 86.8822 TRUE bf_H3-bf_H4 37.59 86.8822 FALSE bf_H3-bf_H5 101.31 86.8822 TRUE bf_H3-bf_H6 28.35 86.8822 **FALSE** bf_H3-bf_H7 225.62 86.8822 TRUE bf_H4-bf_H5 138.90 86.8822 TRUE bf_H4-bf_H6 65.94 86.8822 FALSE bf_H4-bf_H7 188.03 86.8822 TRUE FALSE bf_H5-bf_H6 72.96 86.8822 bf_H5-bf_H7 326.93 86.8822 TRUE bf_H6-bf_H7 253.97 86.8822 TRUE