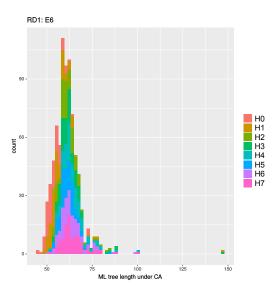
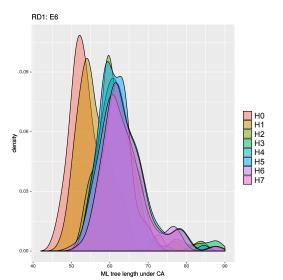
## **Random Permutation Test**

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

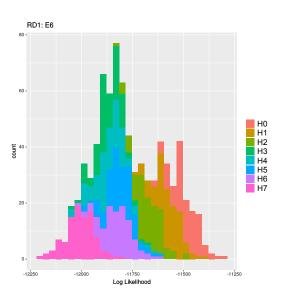


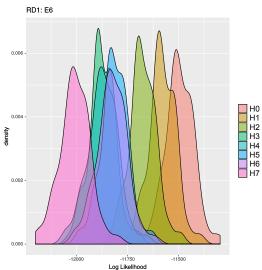


Kruskal-Wallis rank sum test on ML tree length chi-squared = 267.71, df = 7, p-value < 2.2e-16

## Multiple comparison test after Kruskal-Wallis

p. value. 0.00			
•	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
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

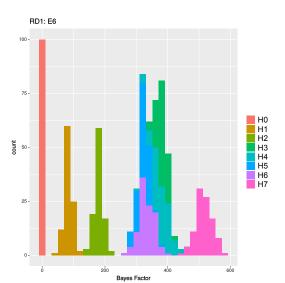


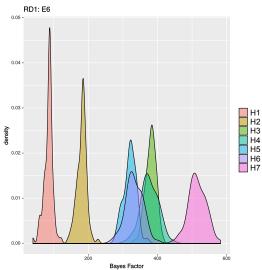


Kruskal-Wallis rank sum test on the Log Likelihood chi-squared = 657.55, df = 7, p-value < 2.2e-16

## Multiple comparison test after Kruskal-Wallis

p.vaiuc. 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 ΔBF chi-squared = 644.87, df = 6, p-value < 2.2e-16

## Multiple comparison test after Kruskal-Wallis

Multiple com	parison	test after i	ti uskai-vva	"
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	