

Supplementary table 2. Details of the PhyloBayes analyses under CAT-GTR.

Matrix	Number of cycles		
	(min. of 2 chains)	bpcomp maxdiff	burn-in
60boot	6501	0.0944444	2000
MareMatrix	5020	0.0324001	2000
Best108	8959	0.0759295	4000
Best108 hp-recoded	12886	0.0397183	1000
Best108 dayoff4-recoded	6500	0.0485092	1000
Best108 dayoff6-recoded	7994	0.0554071	1000

maxdiff < 0.1: good run, maxdiff < 0.3: acceptable.