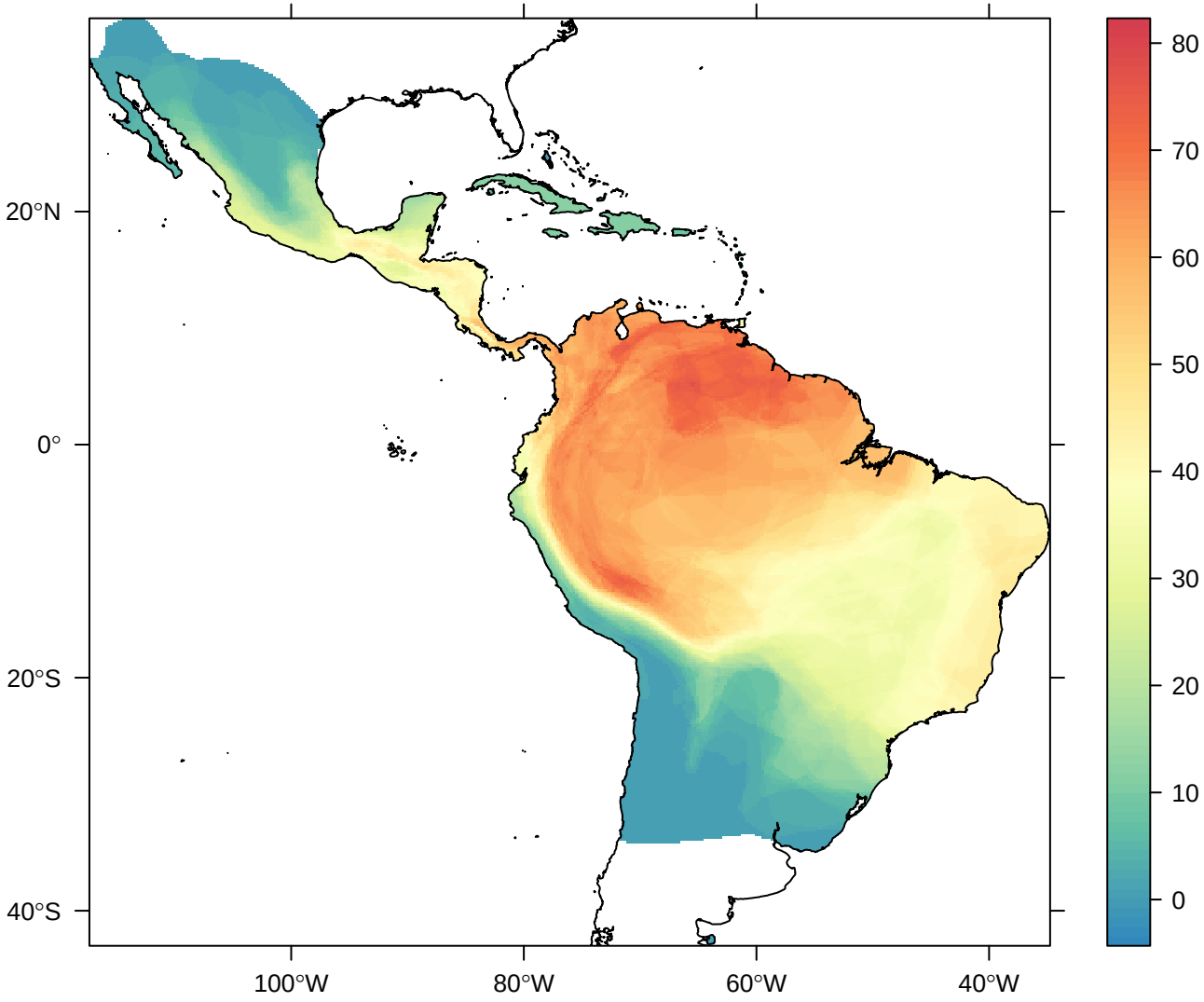
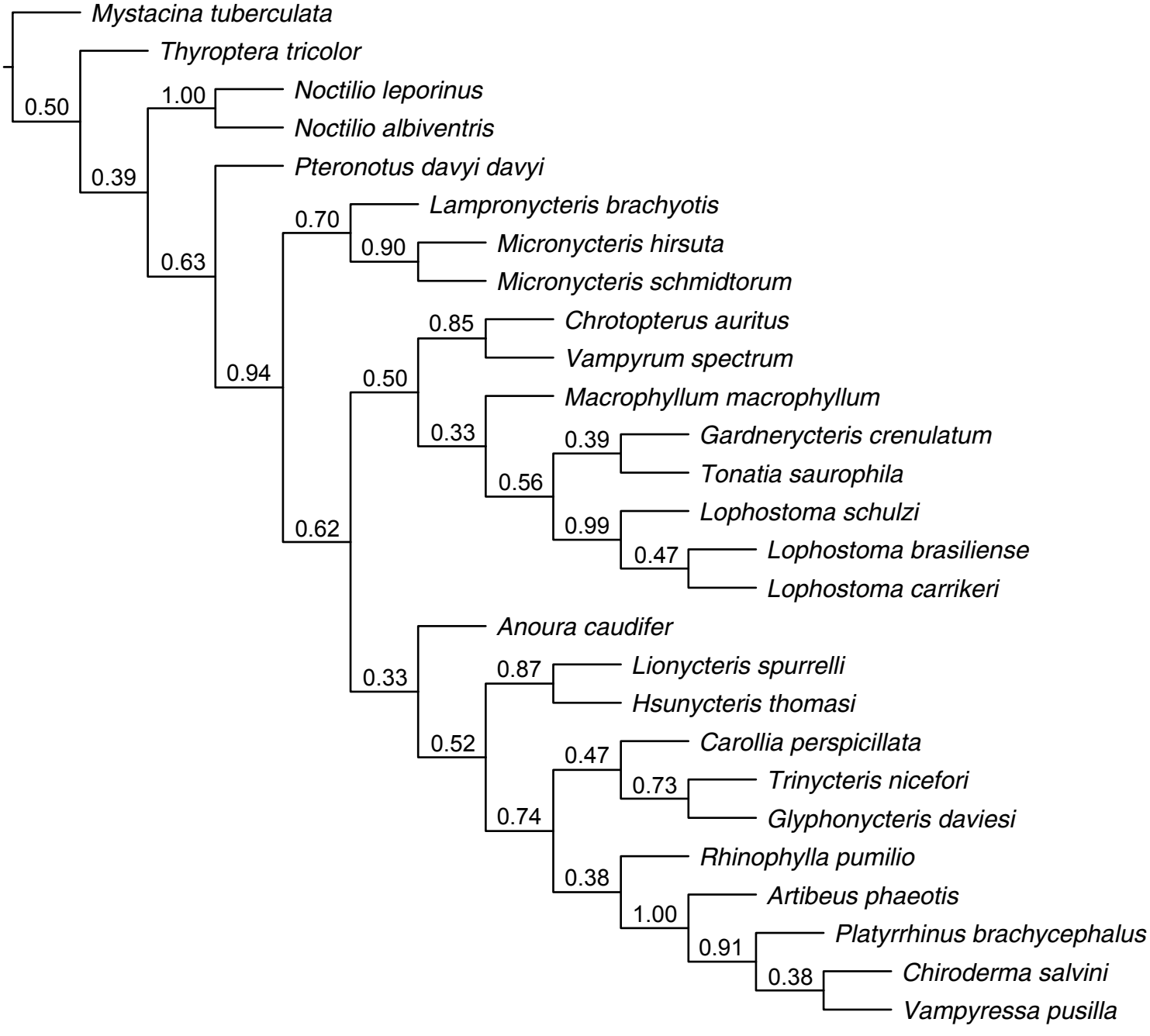
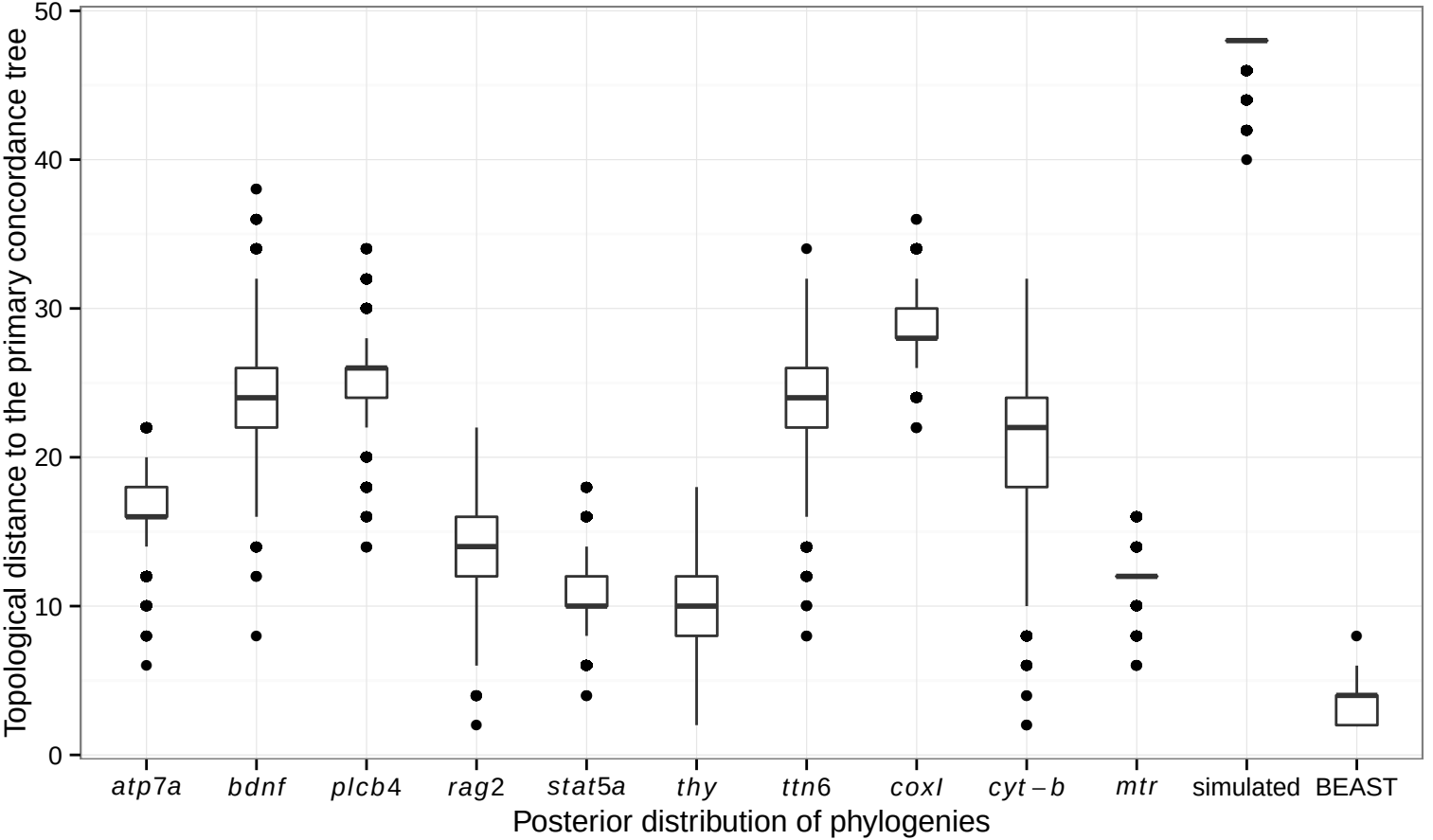
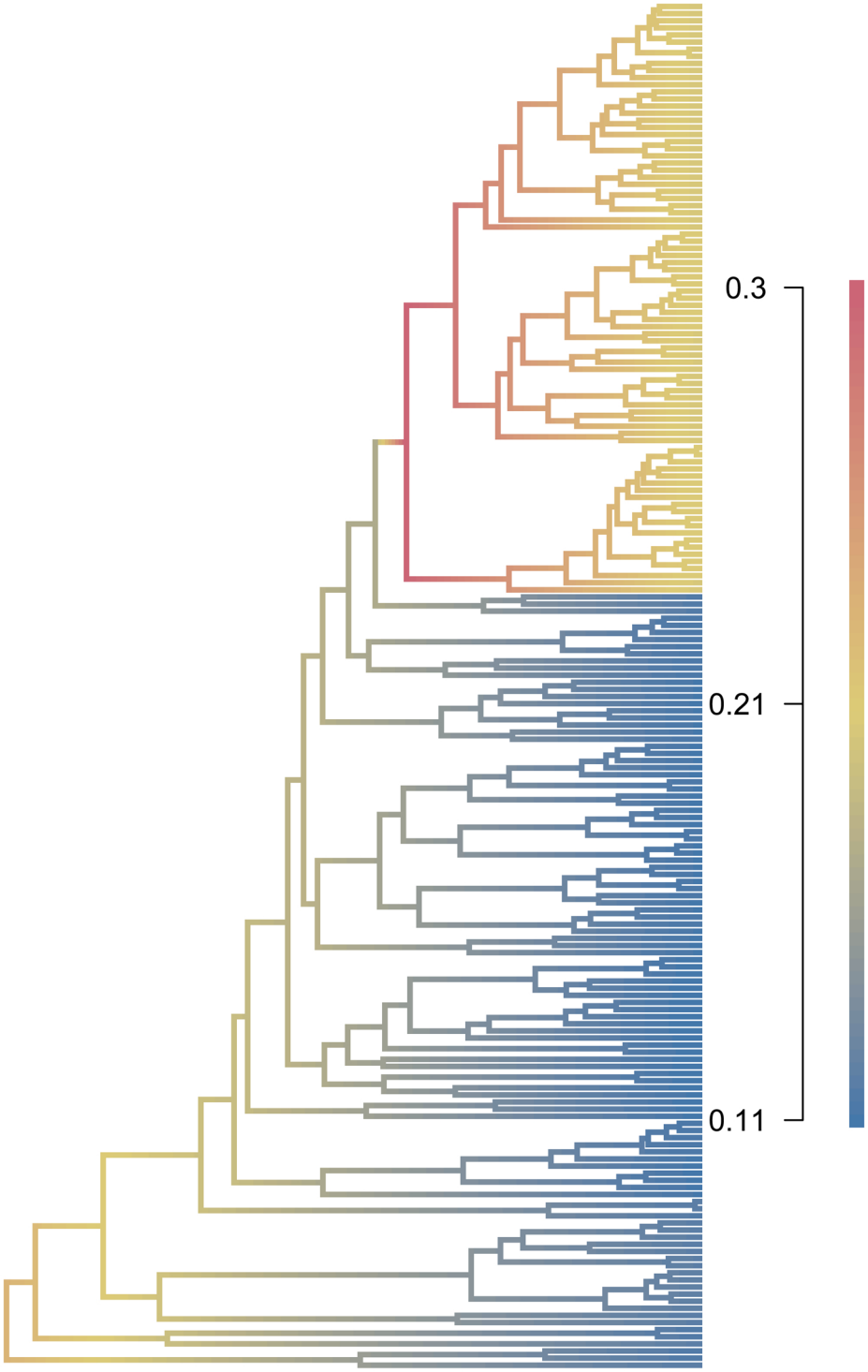
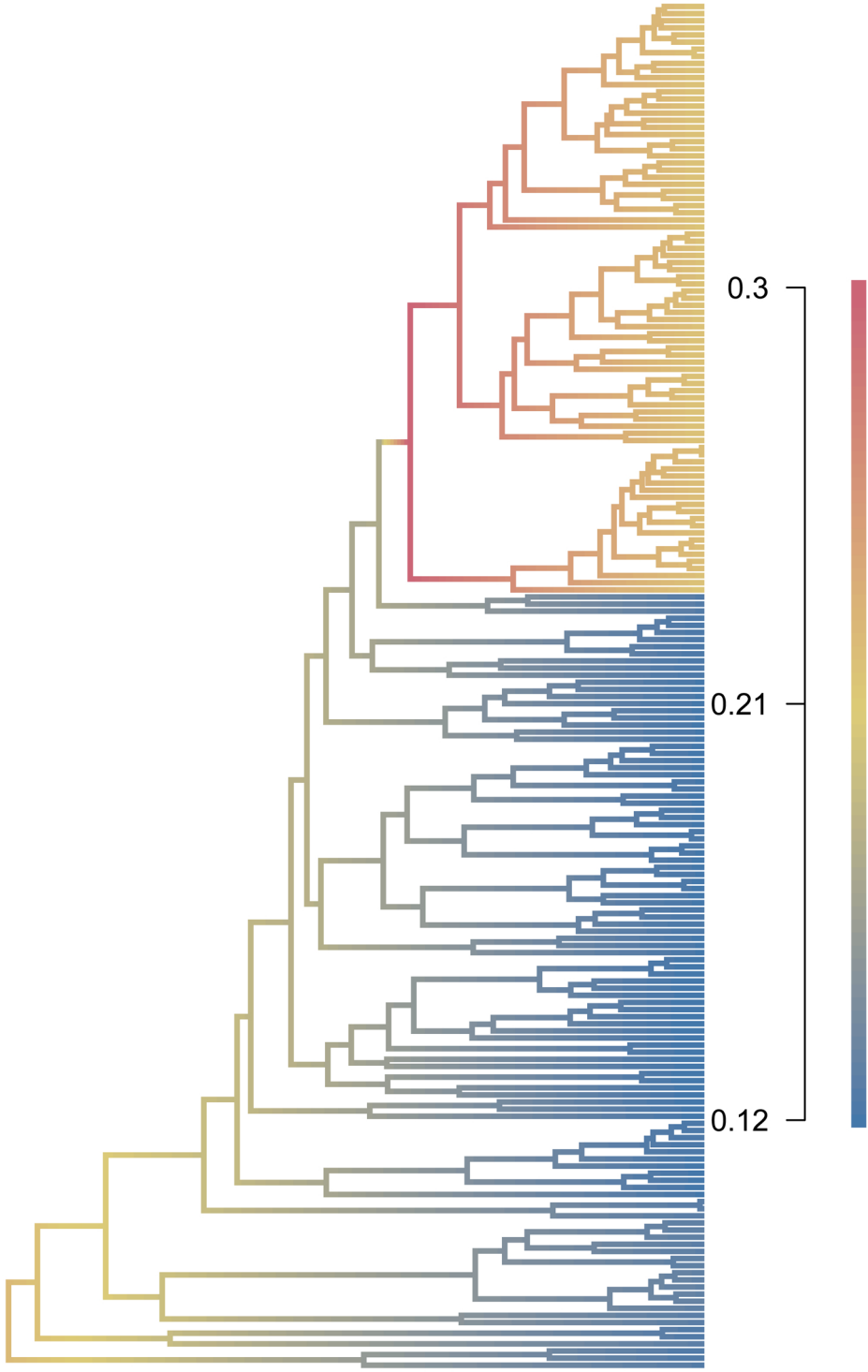
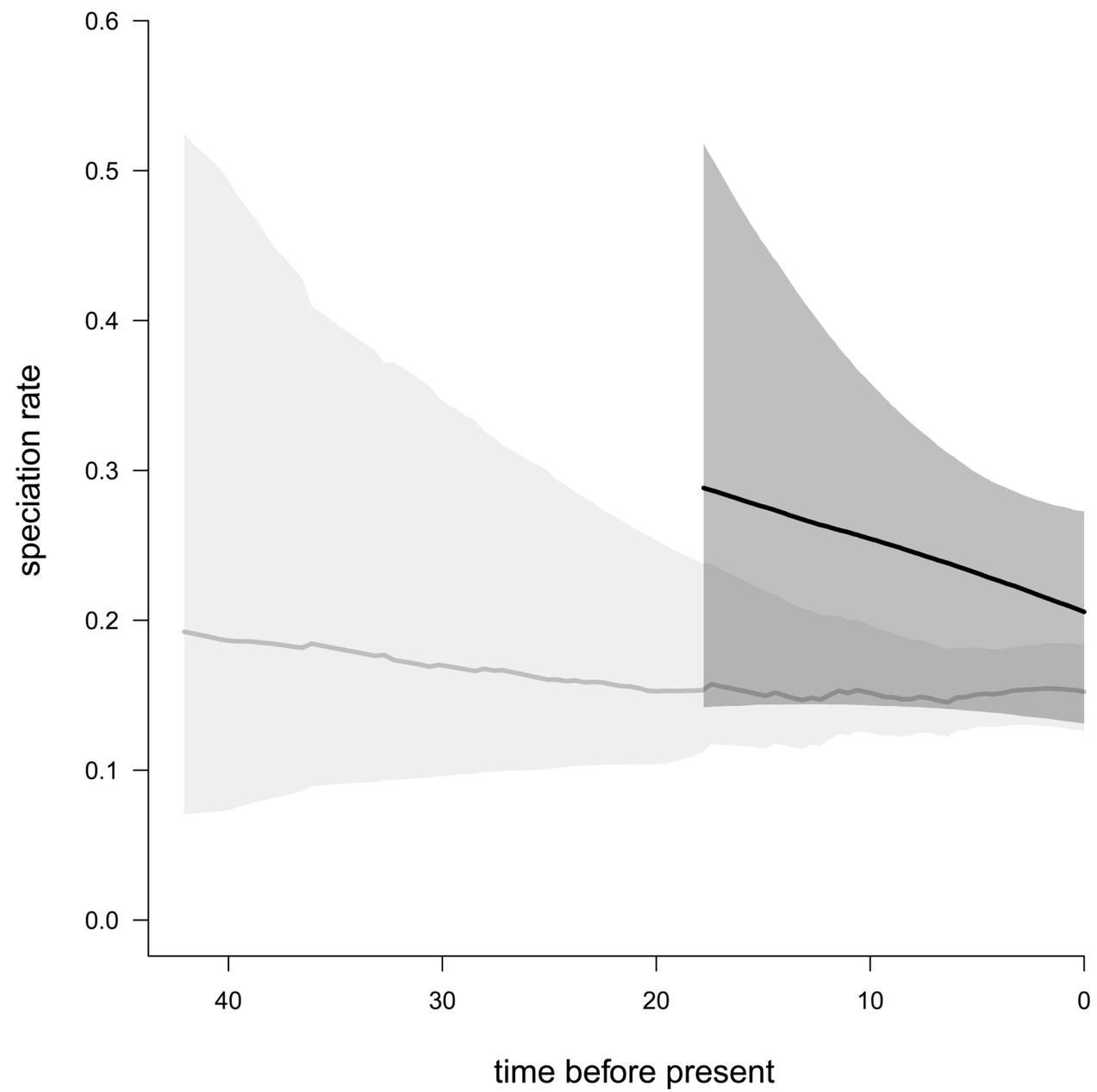

20°N
0°
20°S
40°S
100°W
80°W
60°W
40°W
80
70
60
50
40
30
20
10
0

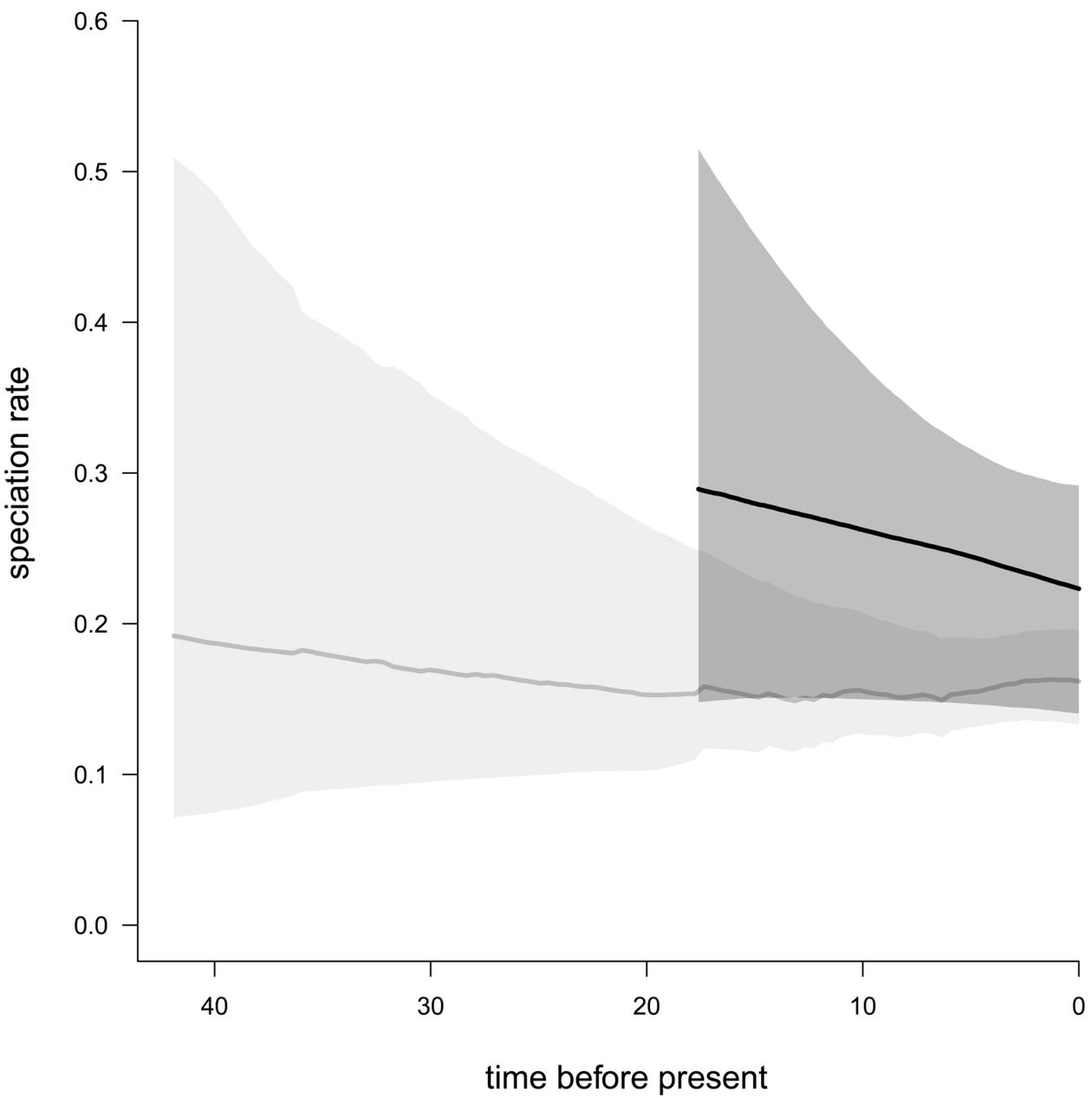

Mystacina tuberculata
Thyroptera tricolor
0.50
1.00
Noctilio leporinus
Noctilio albiventris
0.39
Pteronotus davyi davyi
0.70
Lampronycteris brachyotis
0.90
Micronycteris hirsuta
Micronycteris schmidtorum
0.63
0.85
Chrotopterus auritus
Vampyrum spectrum
0.94
0.50
Macrophyllum macrophyllum
0.33
0.39
Gardnerycteris crenulatum
Tonatia saurophila
0.56
Lophostoma schulzi
0.99
0.62
0.47
Lophostoma brasiliense
Lophostoma carrikeri
Anoura caudifer
0.87
Lionycteris spurrelli
Hsunycteris thomasi
0.33
0.52
0.47
Carollia perspicillata
0.73
Trinycteris nicefori
Glyphonycteris daviesi
0.74
Rhinophylla pumilio
0.38
Artibeus phaeotis
1.00
Platyrrhinus brachycephalus
0.91
0.38
Chiroderma salvini
Vampyressa pusilla

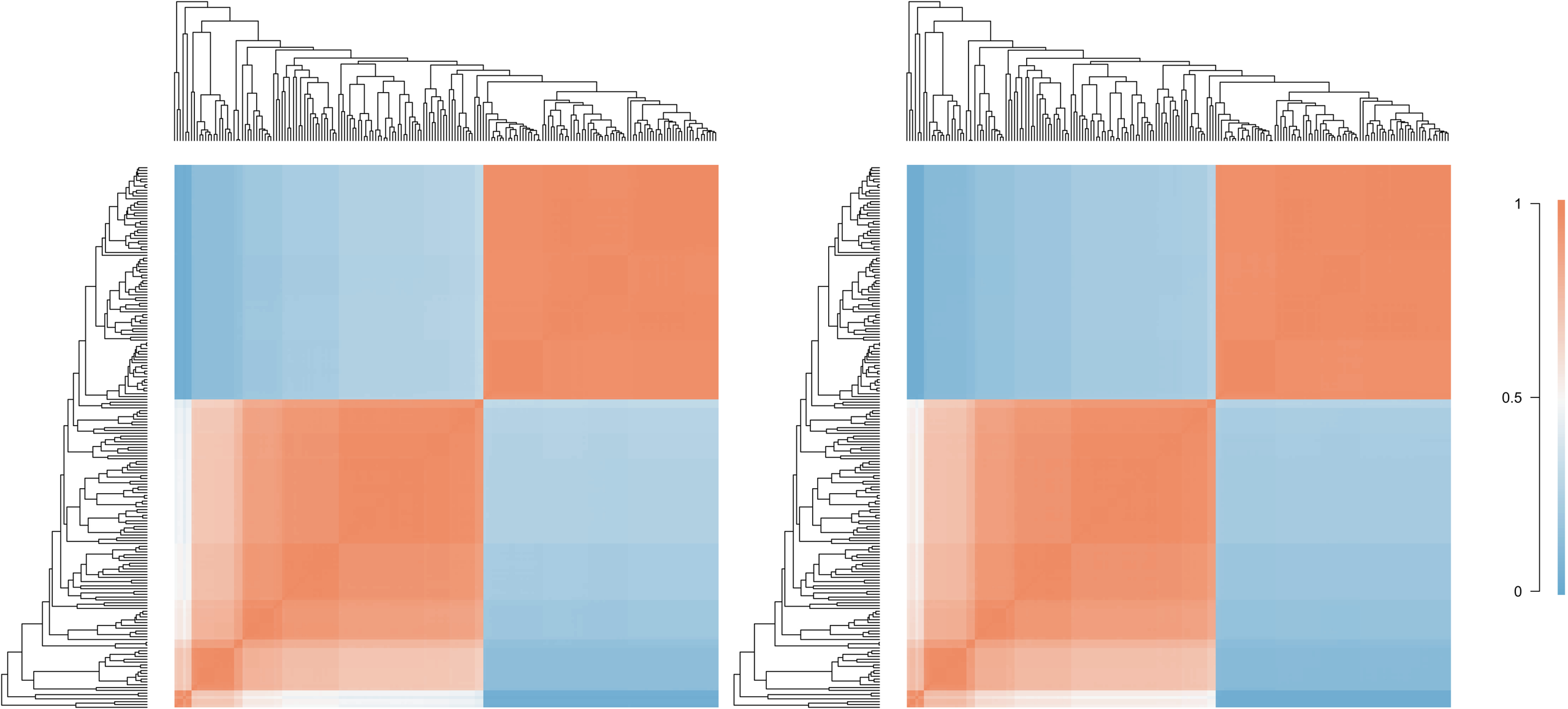

Topological distance to the primary concordance tree
50
40
30
20
10
0
atp7a
bdnf
plcb4
rag2
stat5a
thy
ttn6
coxI
cyt−b
mtr
simulated
BEAST
Posterior distribution of phylogenies

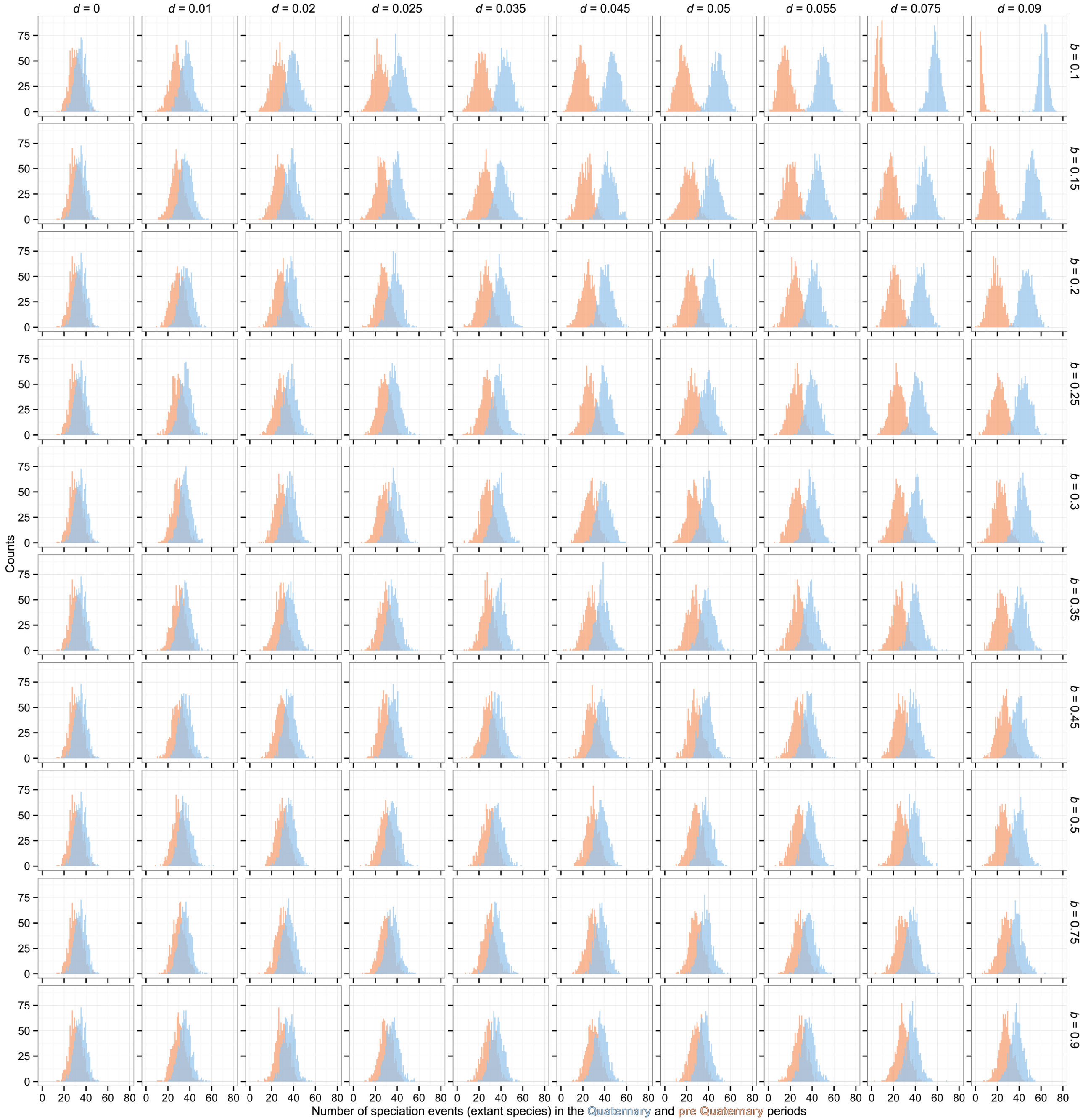

0.3
0.21
0.11

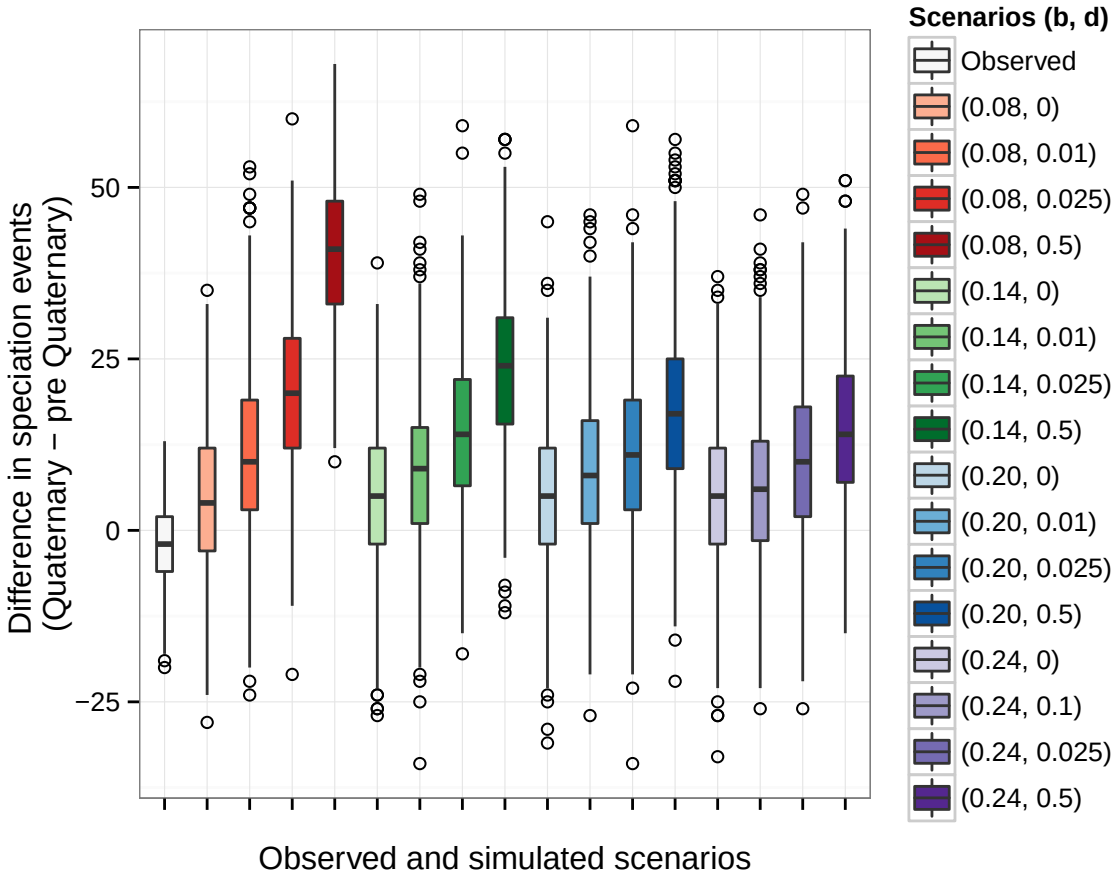

0.3
0.21
0.12

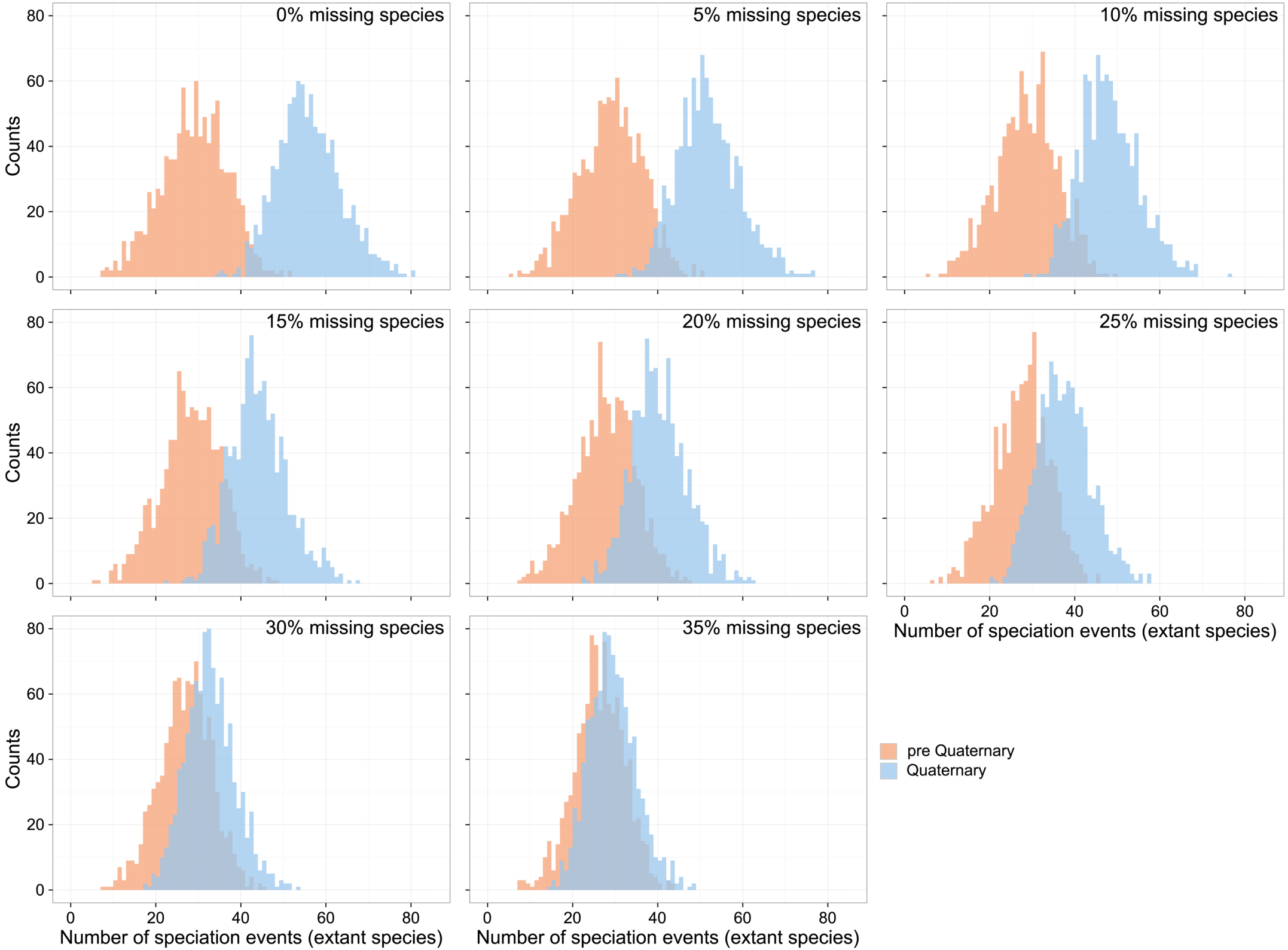

0.6
0.5
0.4
0.3
0.2
0.1
0.0
speciation rate
40
30
20
10
0
time before present


0.6
0.5
0.4
0.3
0.2
0.1
0.0
speciation rate
40
30
20
10
0
time before present


1
0.5
0


d = 0
d = 0.01
d = 0.02
d = 0.025
d = 0.035
d = 0.045
d = 0.05
d = 0.055
d = 0.075
d = 0.09
b = 0.1
b = 0.15
b = 0.2
b = 0.25
b = 0.3
b = 0.35
b = 0.45
b = 0.5
b = 0.75
b = 0.9
Counts
0
25
50
75
0
20
40
60
80
Number of speciation events (extant species) in the Quaternary and pre Quaternary periods


Scenarios (b, d)
Observed
(0.08, 0)
(0.08, 0.01)
(0.08, 0.025)
(0.08, 0.5)
(0.14, 0)
(0.14, 0.01)
(0.14, 0.025)
(0.14, 0.5)
(0.20, 0)
(0.20, 0.01)
(0.20, 0.025)
(0.20, 0.5)
(0.24, 0)
(0.24, 0.1)
(0.24, 0.025)
(0.24, 0.5)
Difference in speciation events
(Quaternary – pre Quaternary)
50
25
0
−25
Observed and simulated scenarios


0% missing species
5% missing species
10% missing species
15% missing species
20% missing species
25% missing species
30% missing species
35% missing species
Counts
0
20
40
60
80
Number of speciation events (extant species)
pre Quaternary
Quaternary