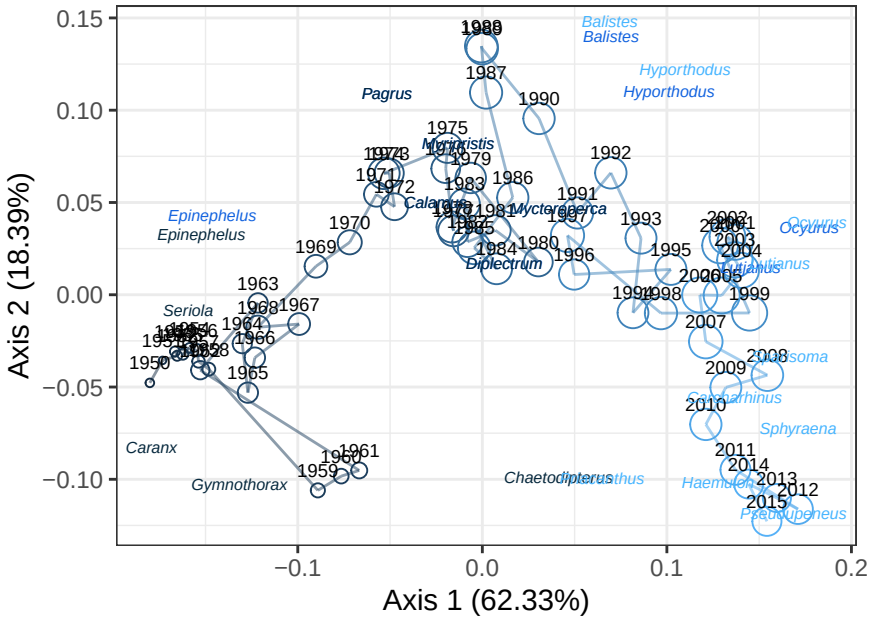
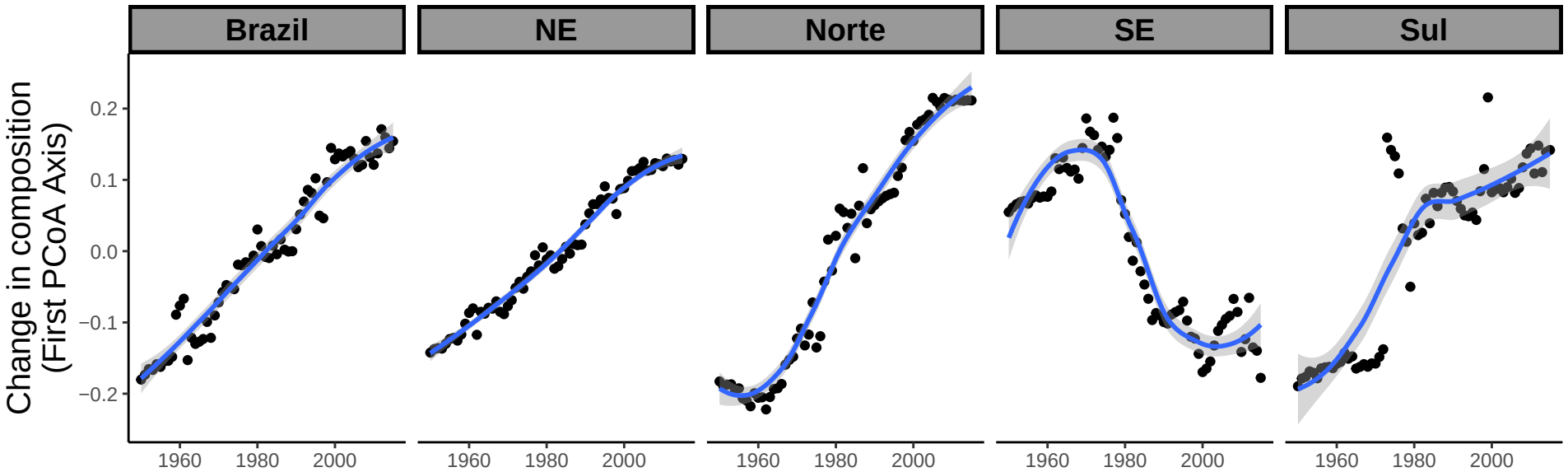
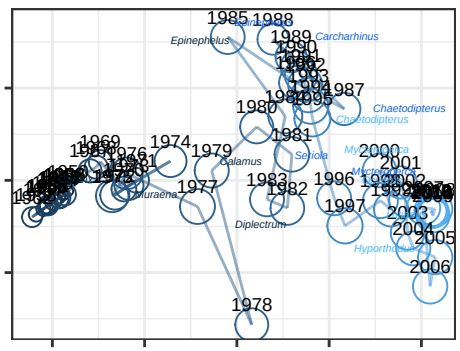
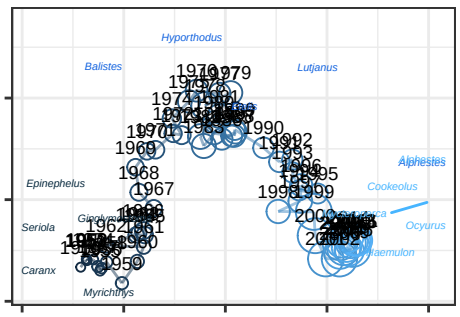
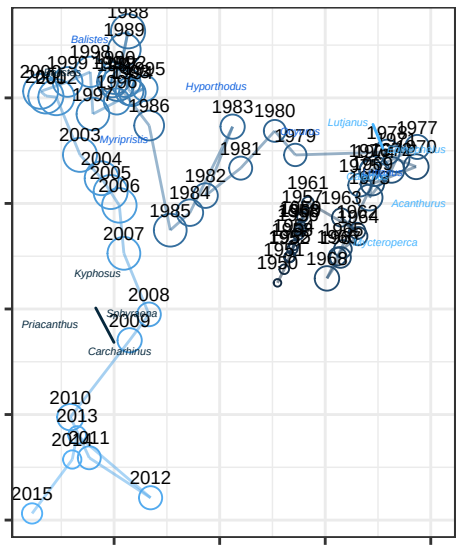
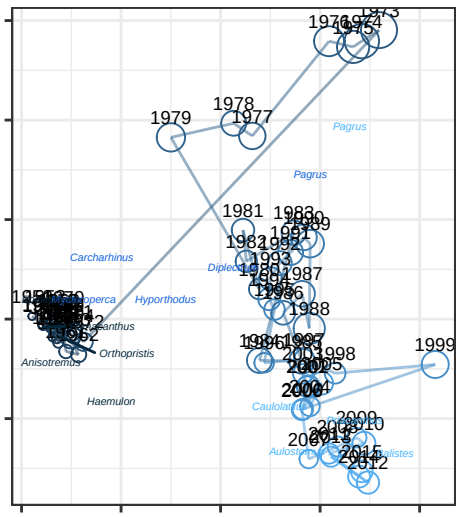

Axis 2 (18.39%)
Axis 1 (62.33%)
0.15
0.10
0.05
0.00
−0.05
−0.10
−0.1
0.0
0.1
0.2
Balistes
Hyporthodus
Pagrus
Epinephelus
Seriola
Caranx
Gymnothorax
Chaetodipterus
Sphyraena
Ocyurus
Lutjanus
Diplectrum
Mycteroperca
Myripristis
Calamus
Carcharhinus
Haemulon
Pseudupeneus


Brazil
NE
Norte
SE
Sul
Change in composition
(First PCoA Axis)
0.2
0.1
0.0
−0.1
−0.2
1960
1980
2000