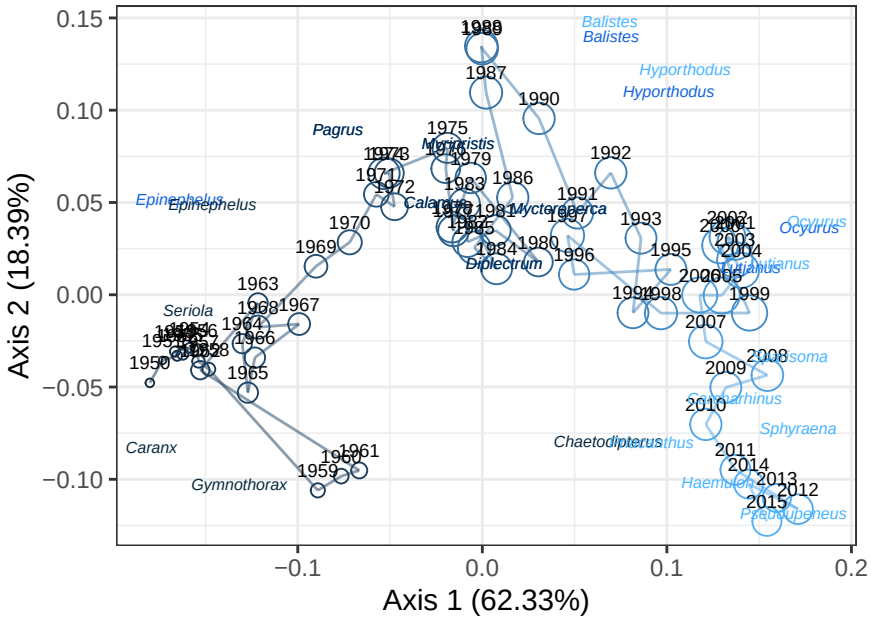
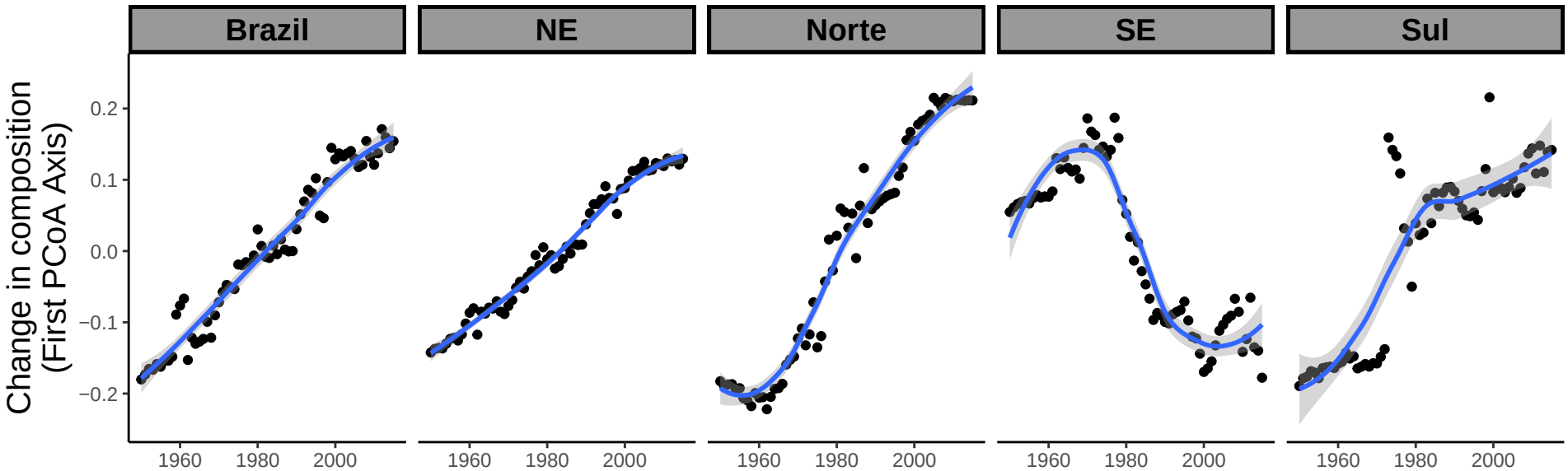
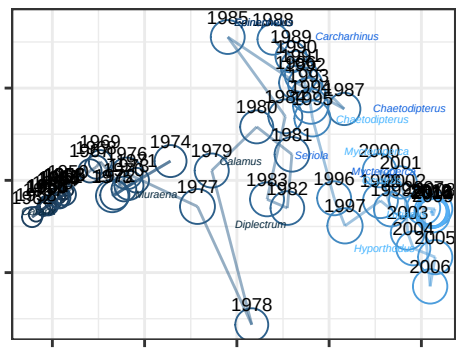
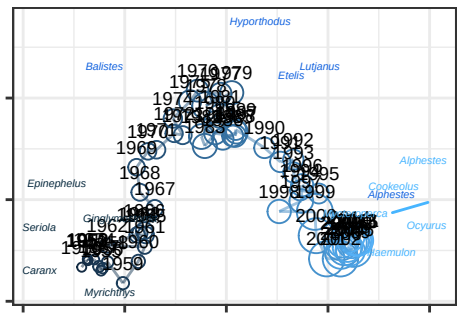
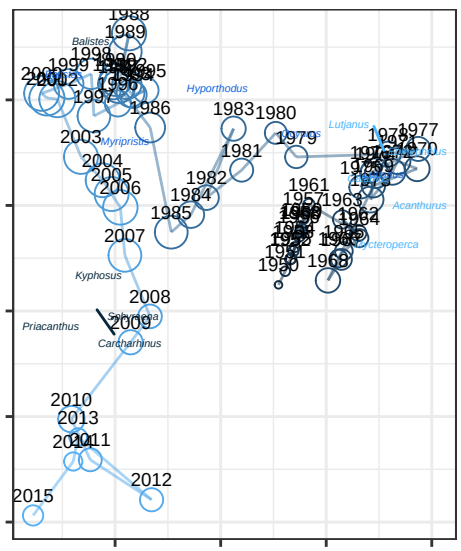
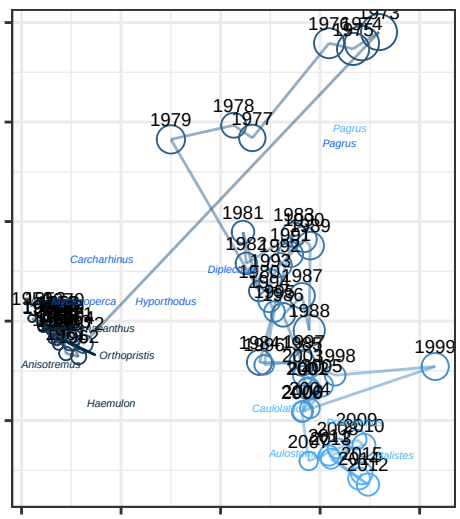

Axis 2 (18.39%)
Axis 1 (62.33%)
0.15
0.10
0.05
0.00
−0.05
−0.10
−0.1
0.0
0.1
0.2
Balistes
Hyporthodus
Pagrus
Epinephelus
Ocyurus
Lutjanus
Seriola
Sphyraena
Caranx
Gymnothorax
Chaetodipterus
Haemulon
Pseudupeneus
Diplectrum
Mycteroperca
Myripristis
Calamus


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