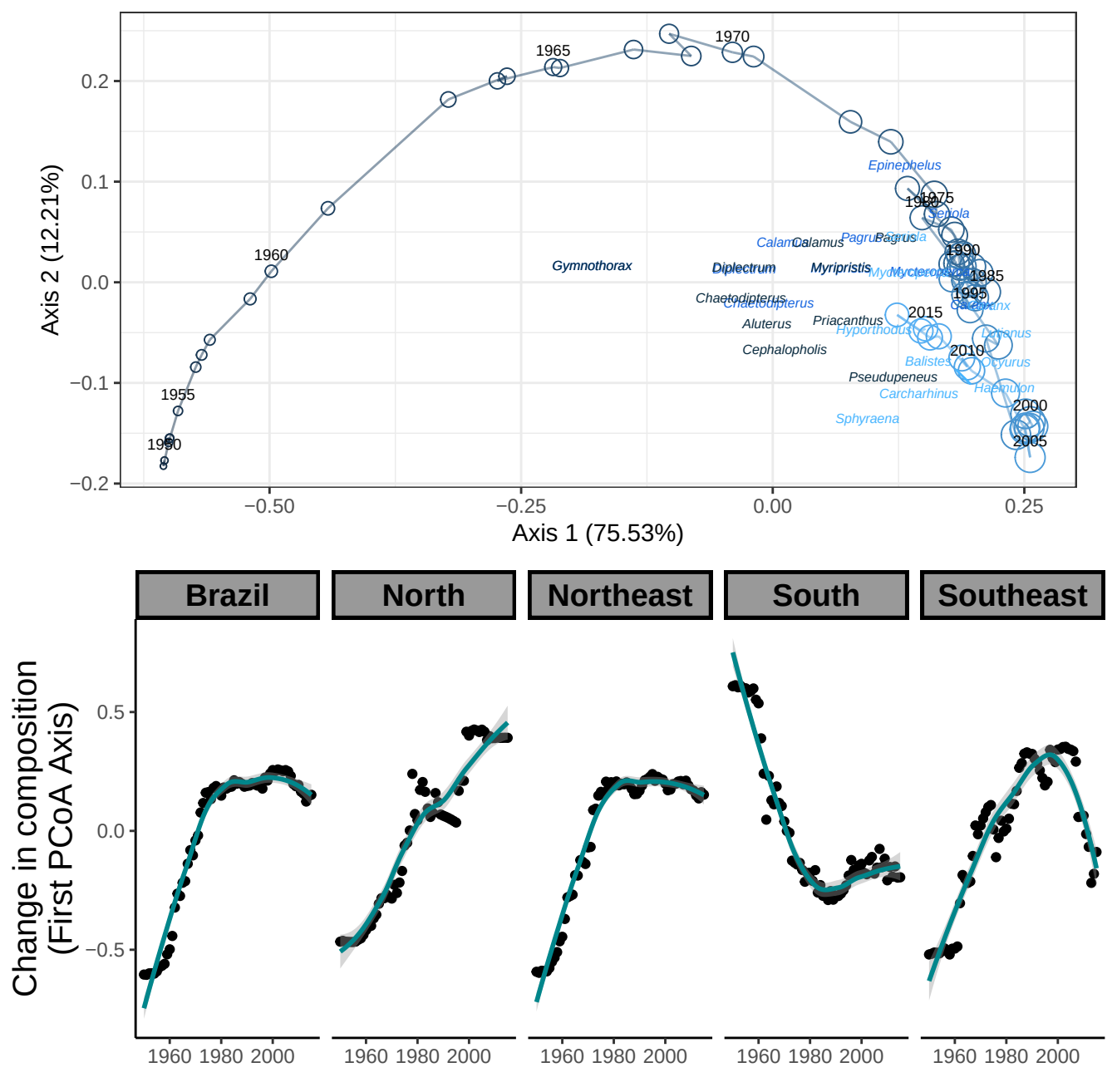
Axis 2 (12.21%)
Axis 1 (75.53%)
0.2
0.1
0.0
−0.1
−0.2
−0.50
−0.25
0.00
0.25
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
Epinephelus
Serriola
Calamus
Pagrus
Gymnothorax
Diplectrum
Myripristis
Chaetodipterus
Aluterus
Priacanthus
Cephalopholis
Pseudupeneus
Carcharhinus
Sphyraena
Balistes
Ocyurus
Haemulon
Lutjanus
Brazil
North
Northeast
South
Southeast
Change in composition
(First PCoA Axis)
0.5
0.0
−0.5
1960 1980 2000