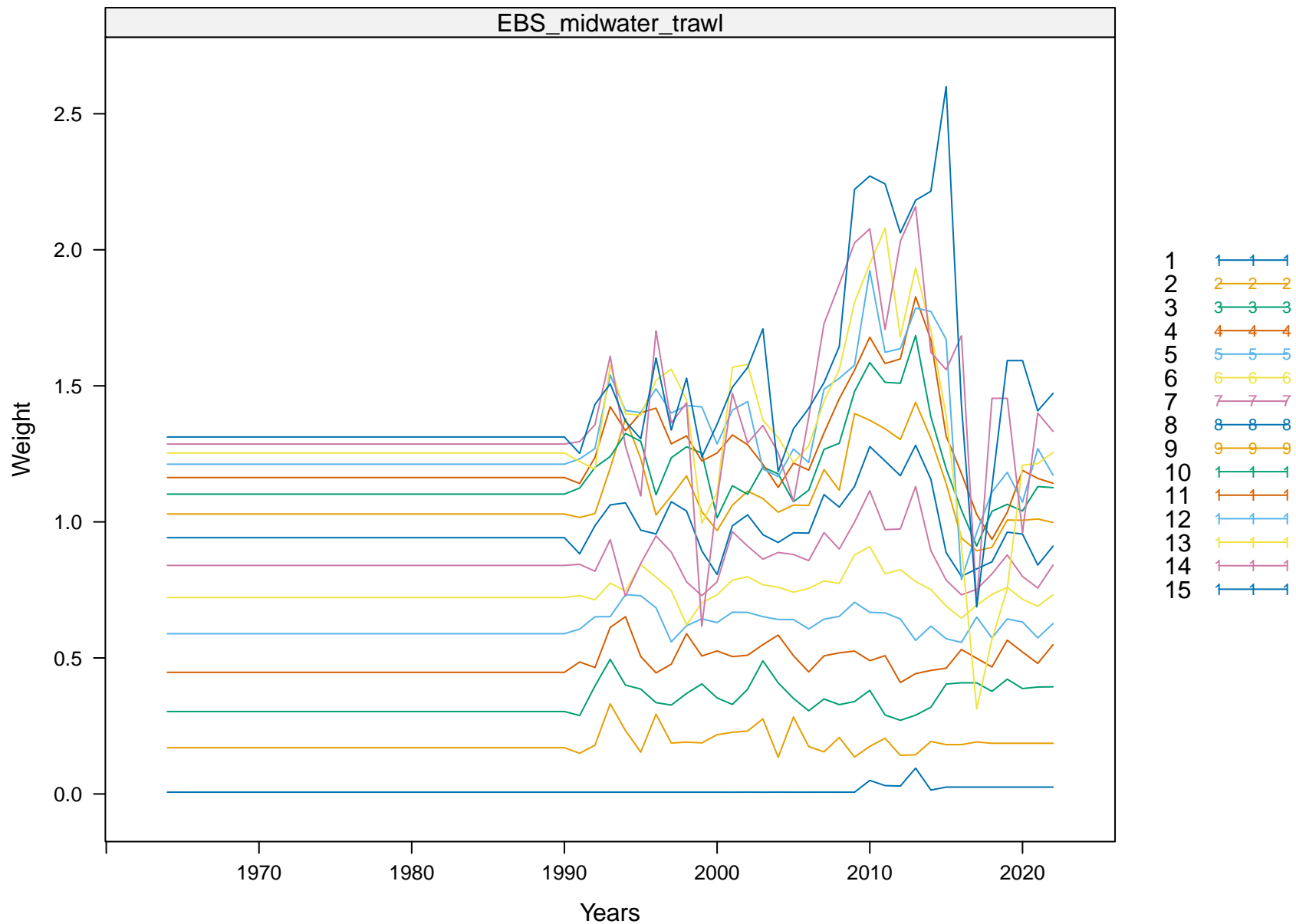
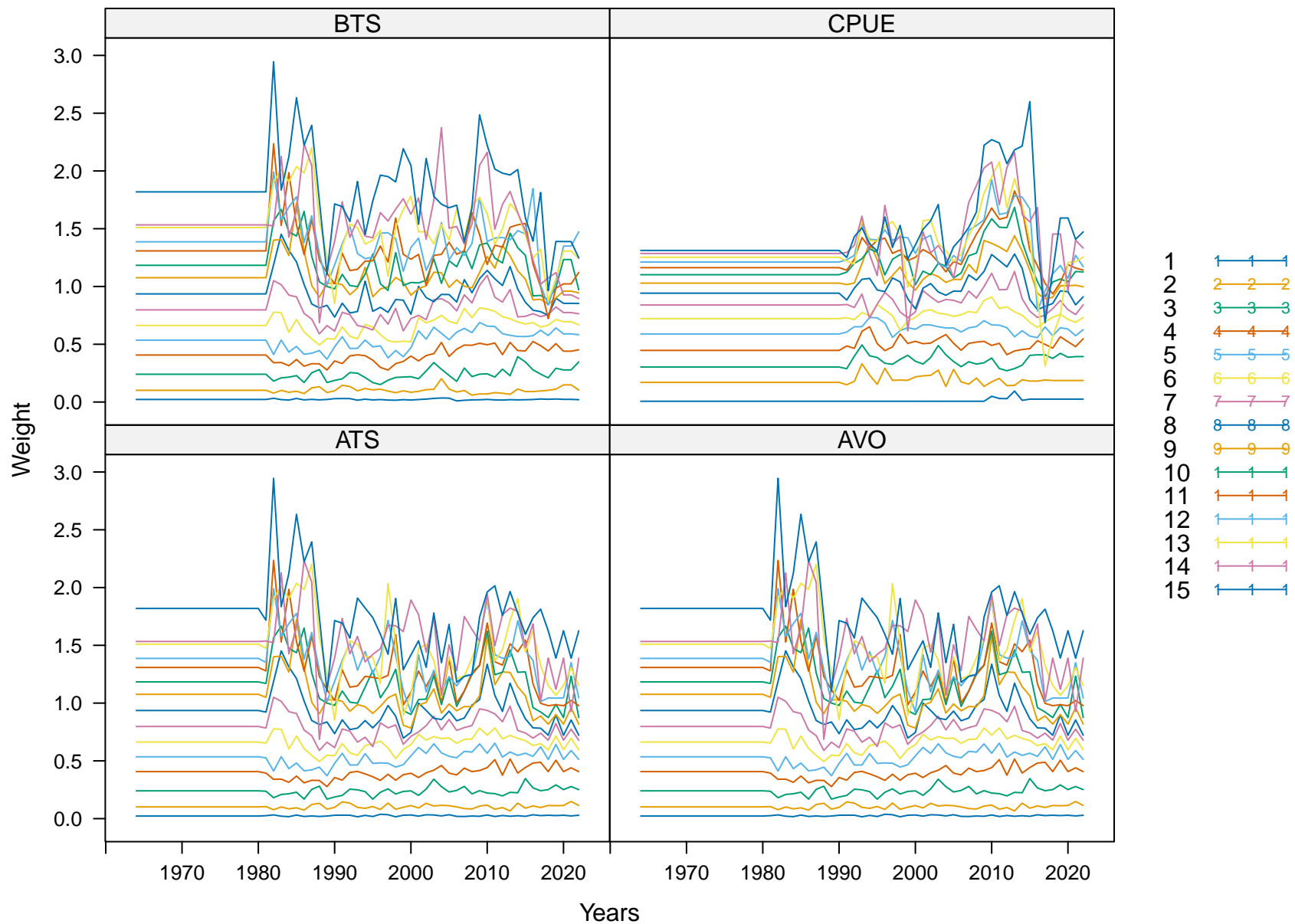


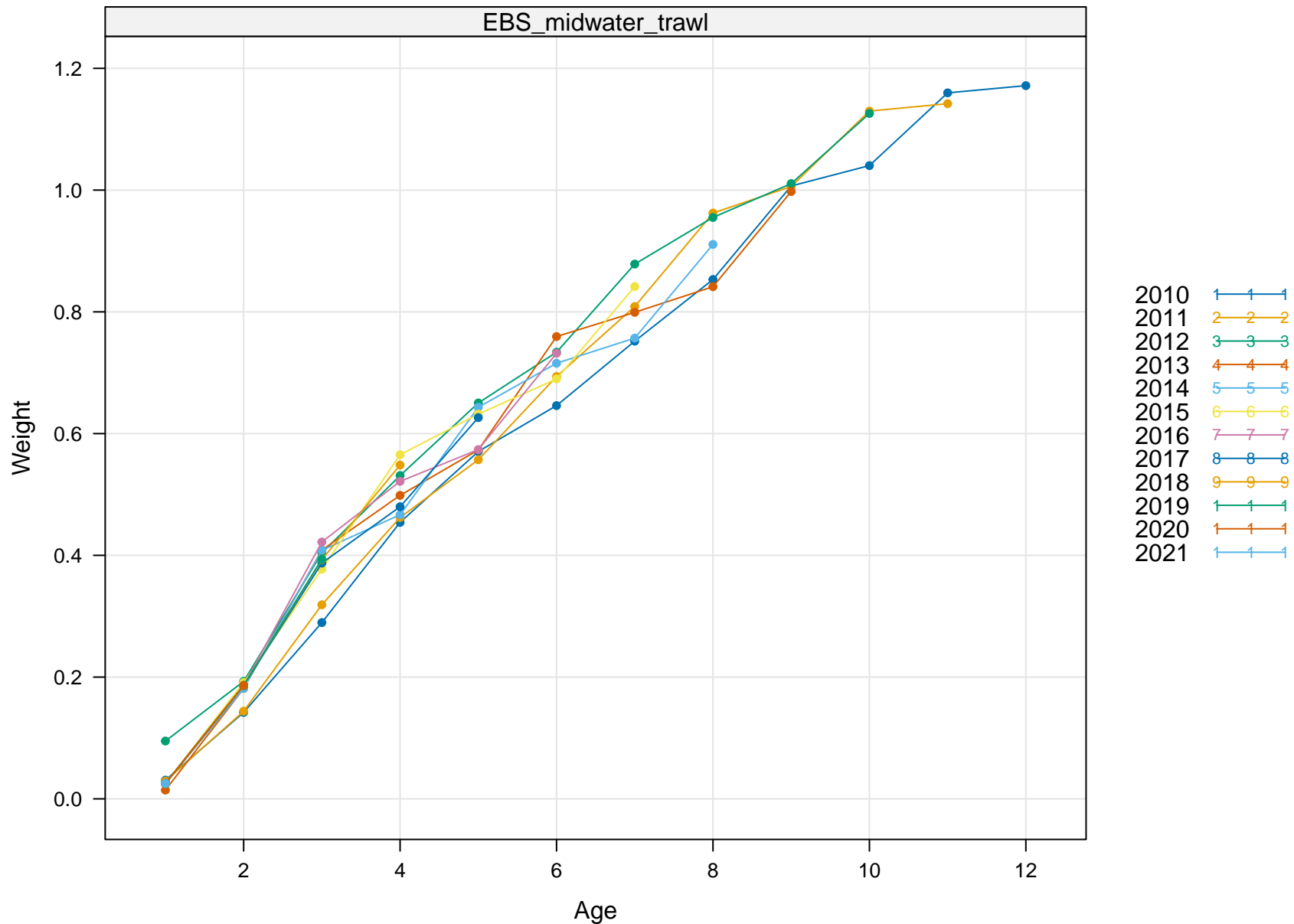
# Weight at age in the fishery



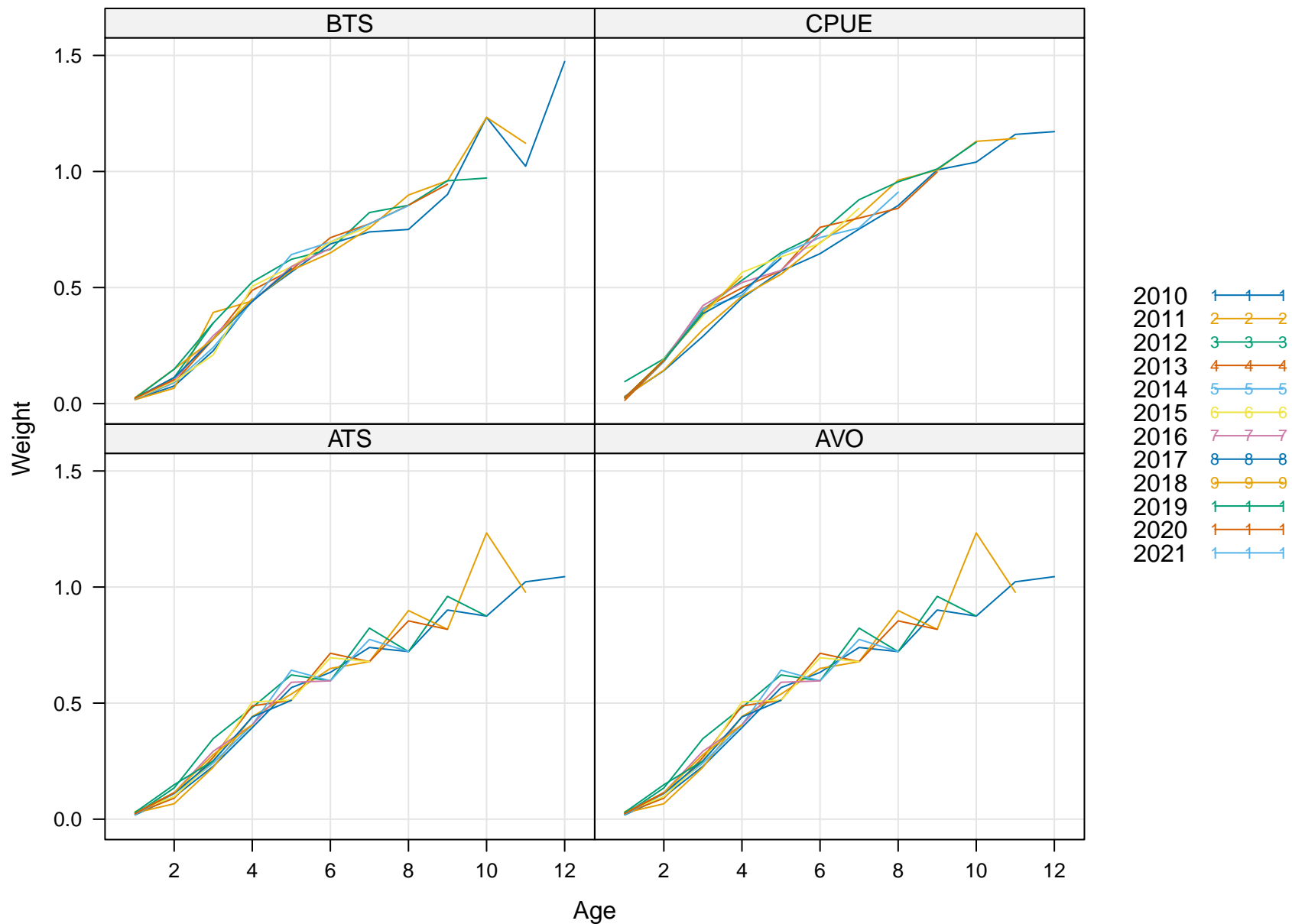
# Weight at age in the survey



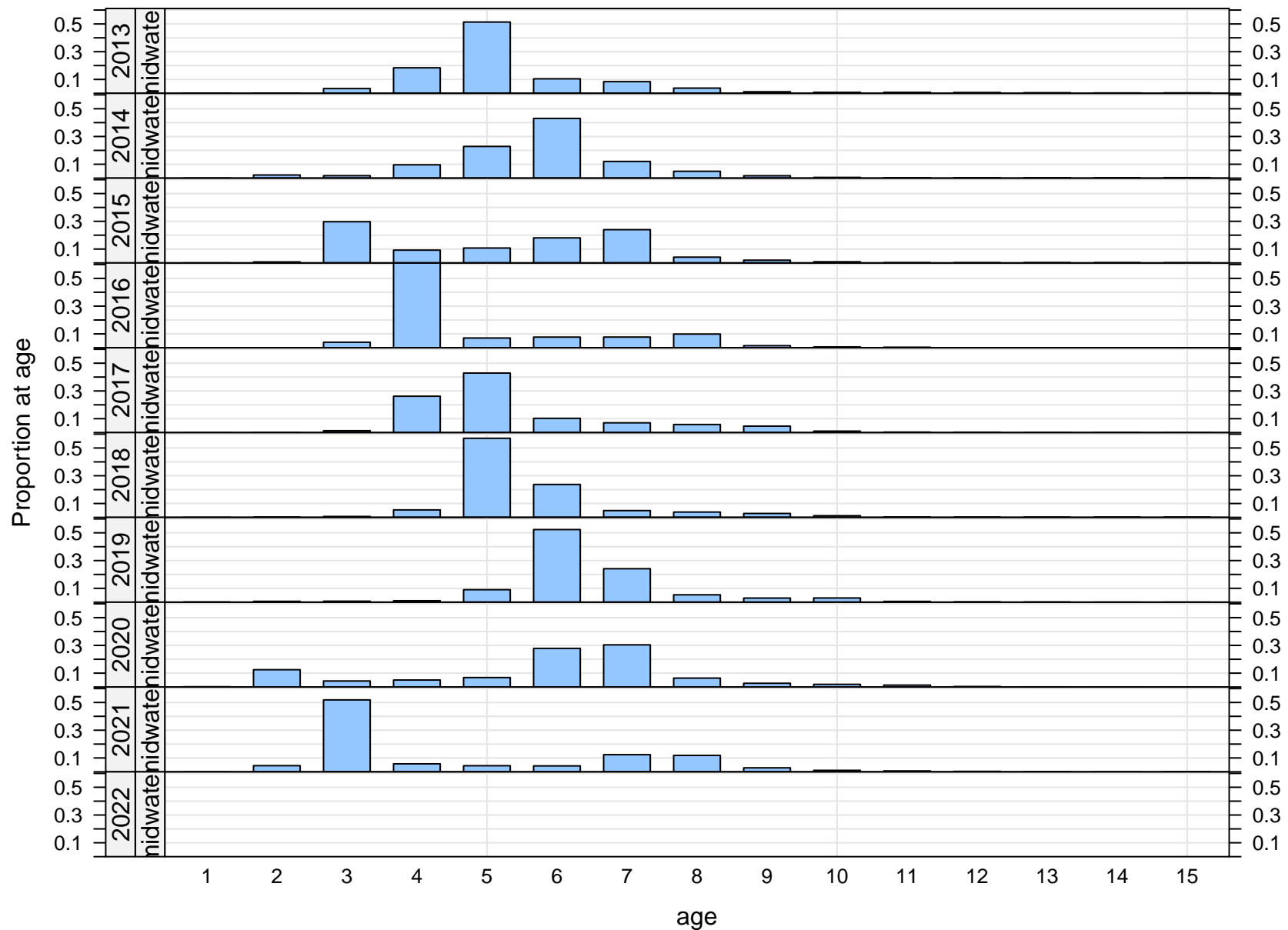
## Weight at age by cohort in the fleet



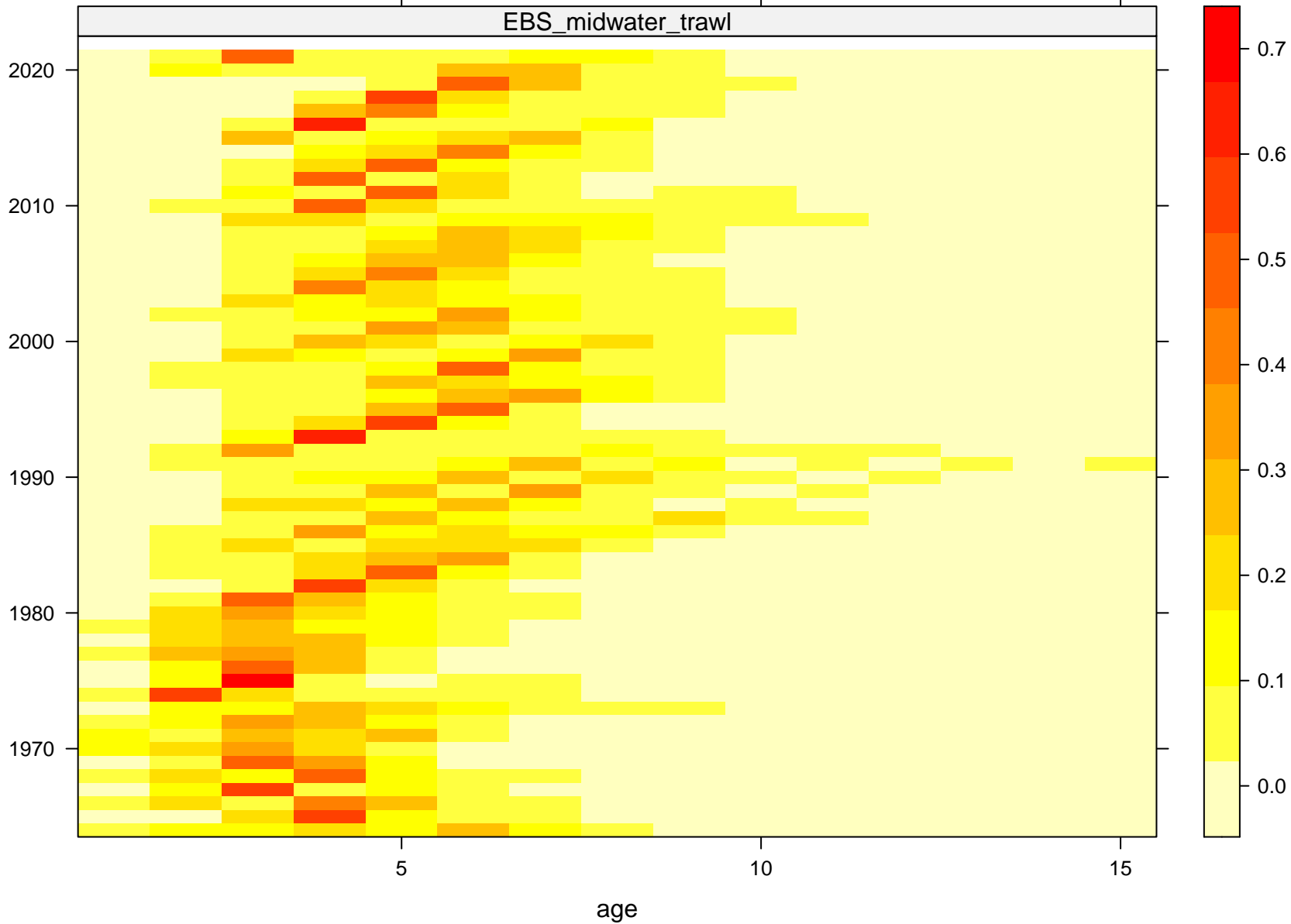
# Weight at age by cohort in the survey



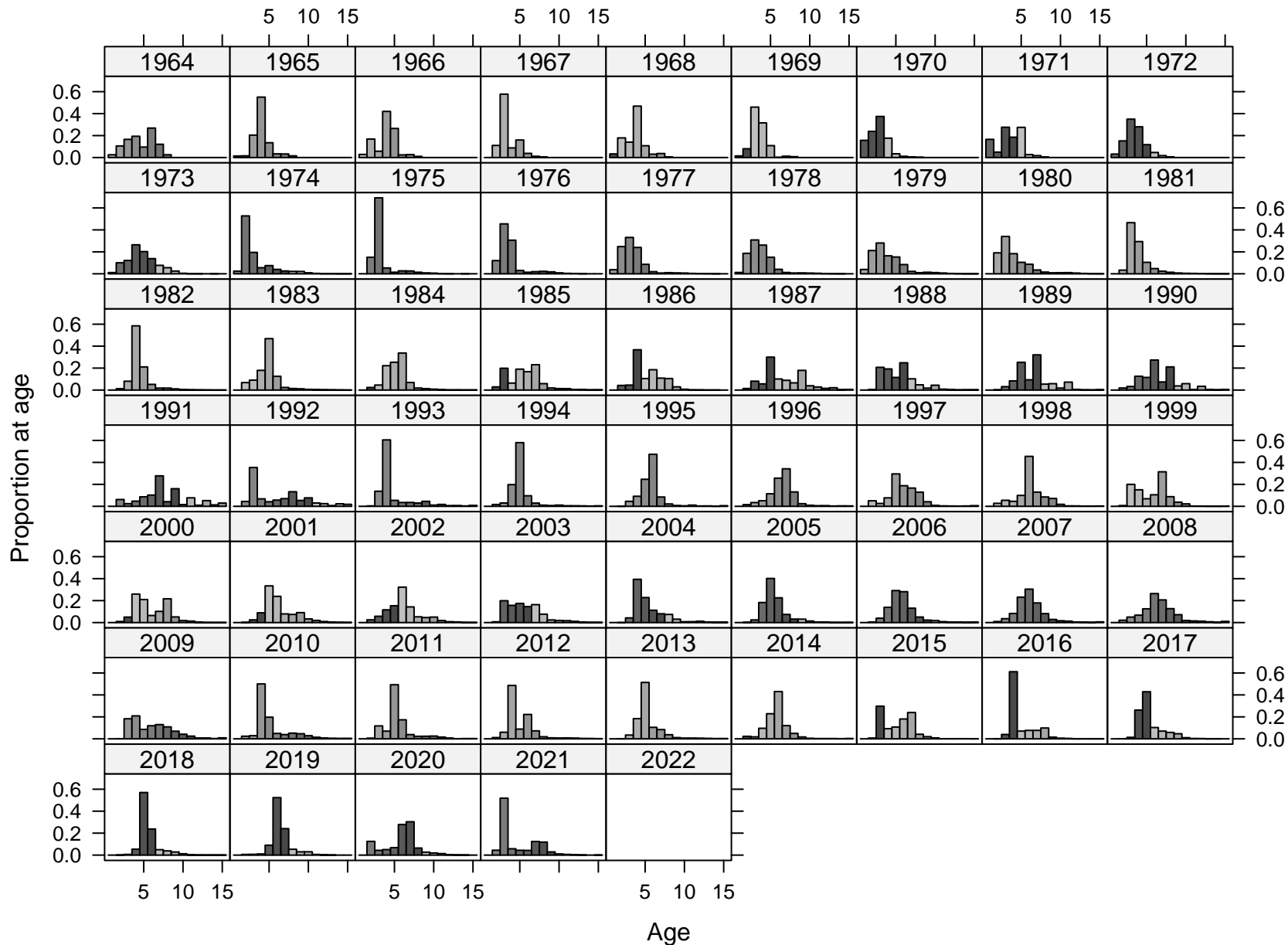
# Age composition in fleets



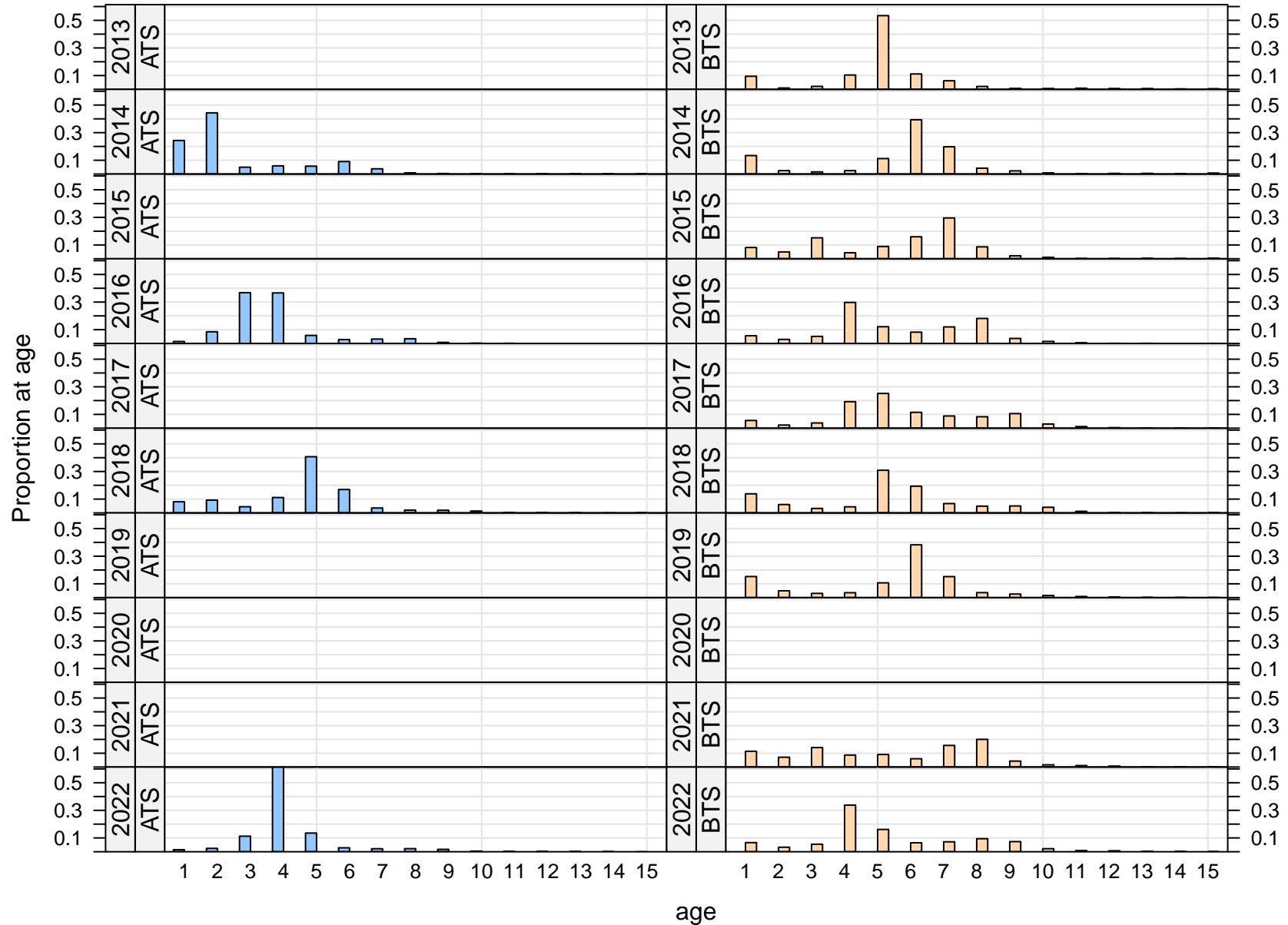
# Age composition in fleets



# Age composition in fleets EBS\_midwater\_trawl

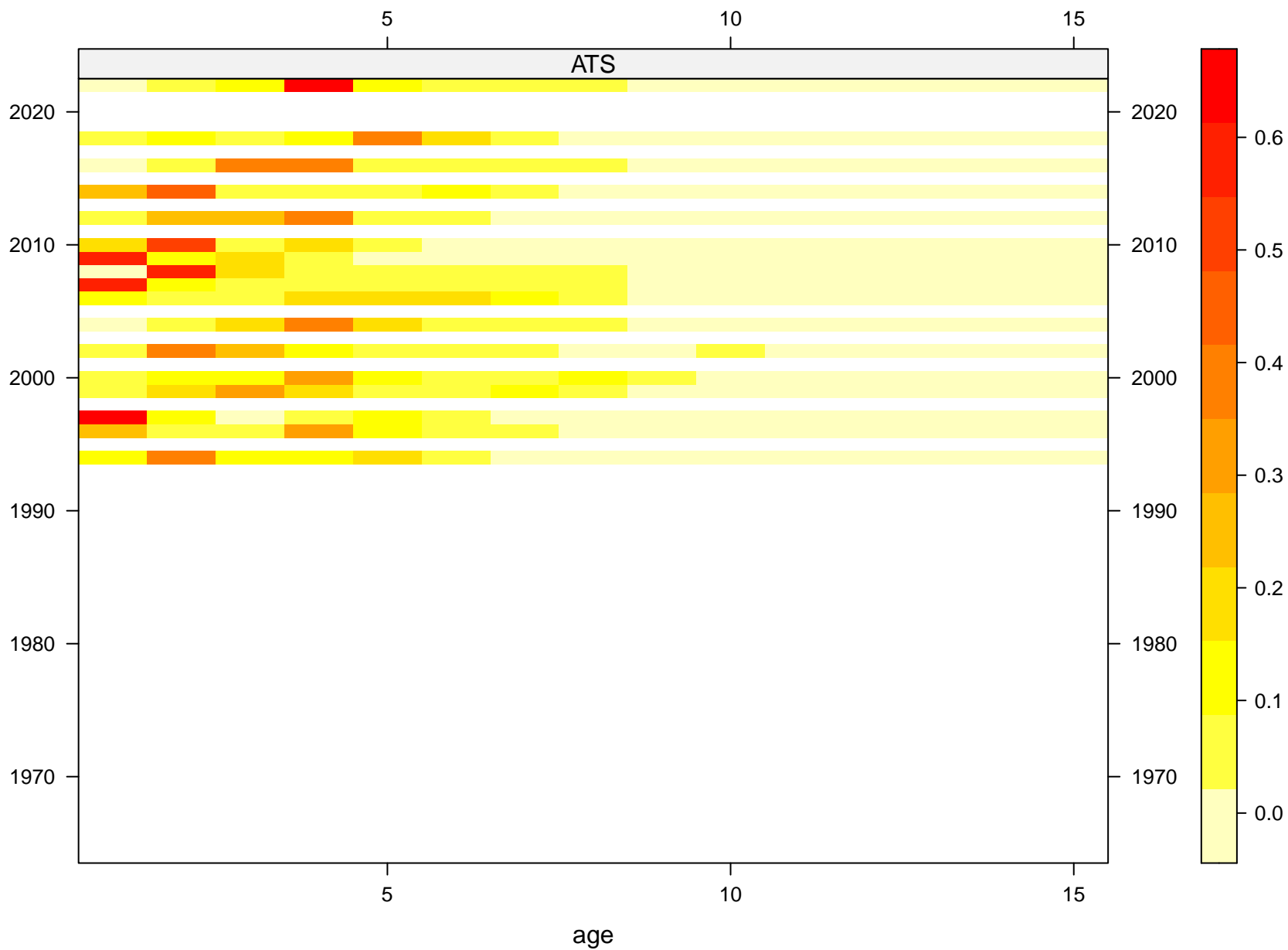


# Age composition in surveys

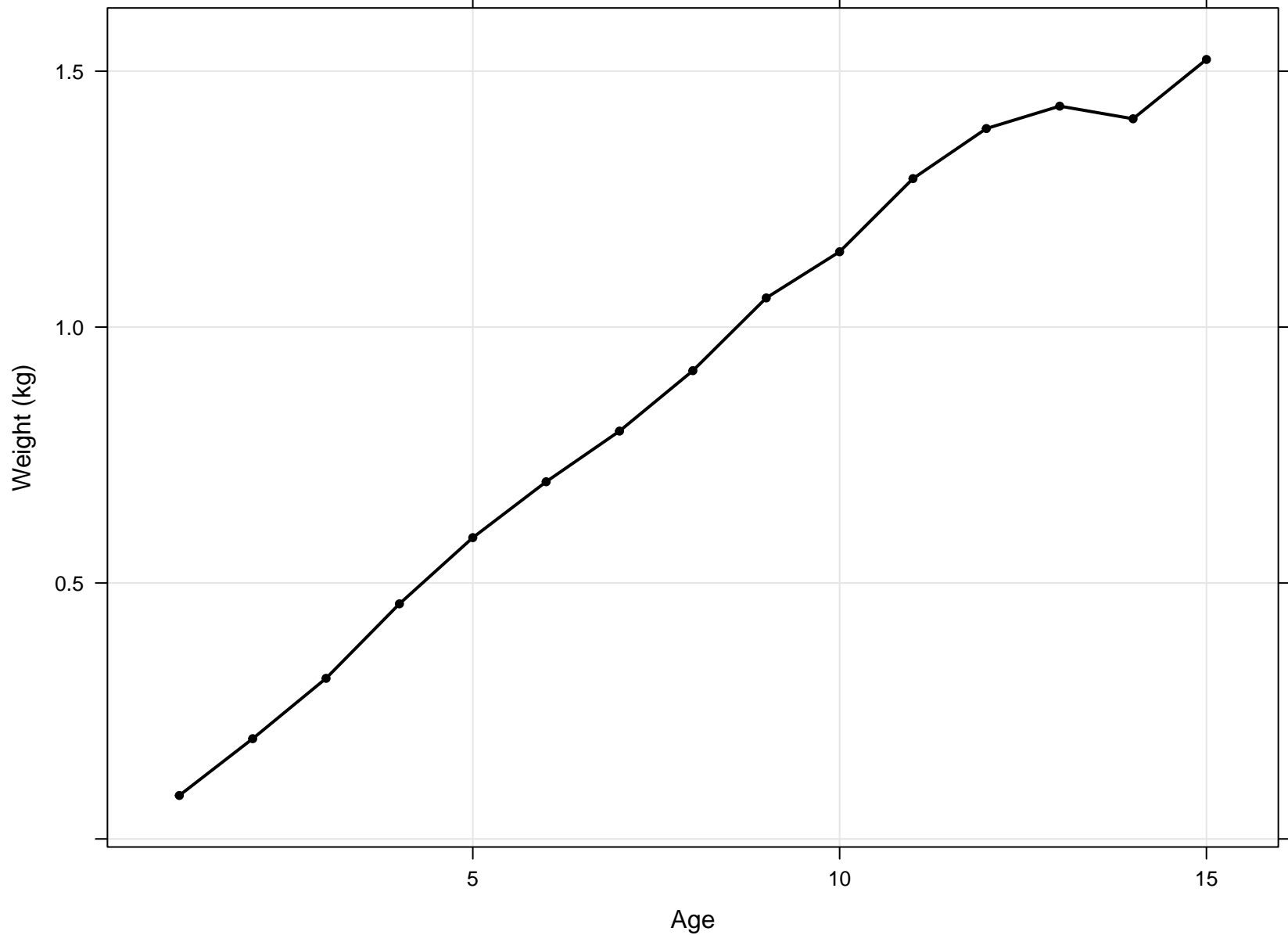




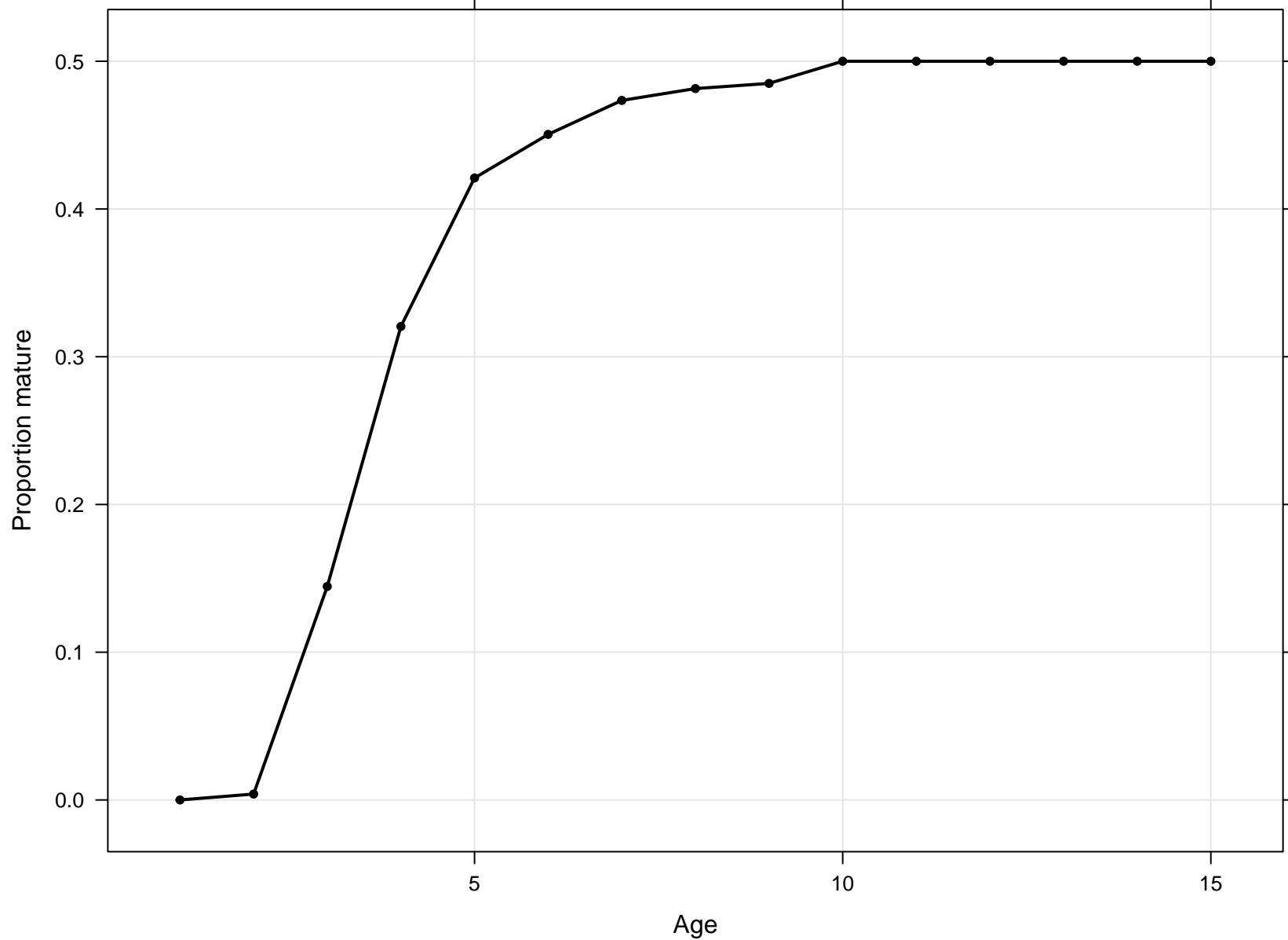
## Age composition in surveys



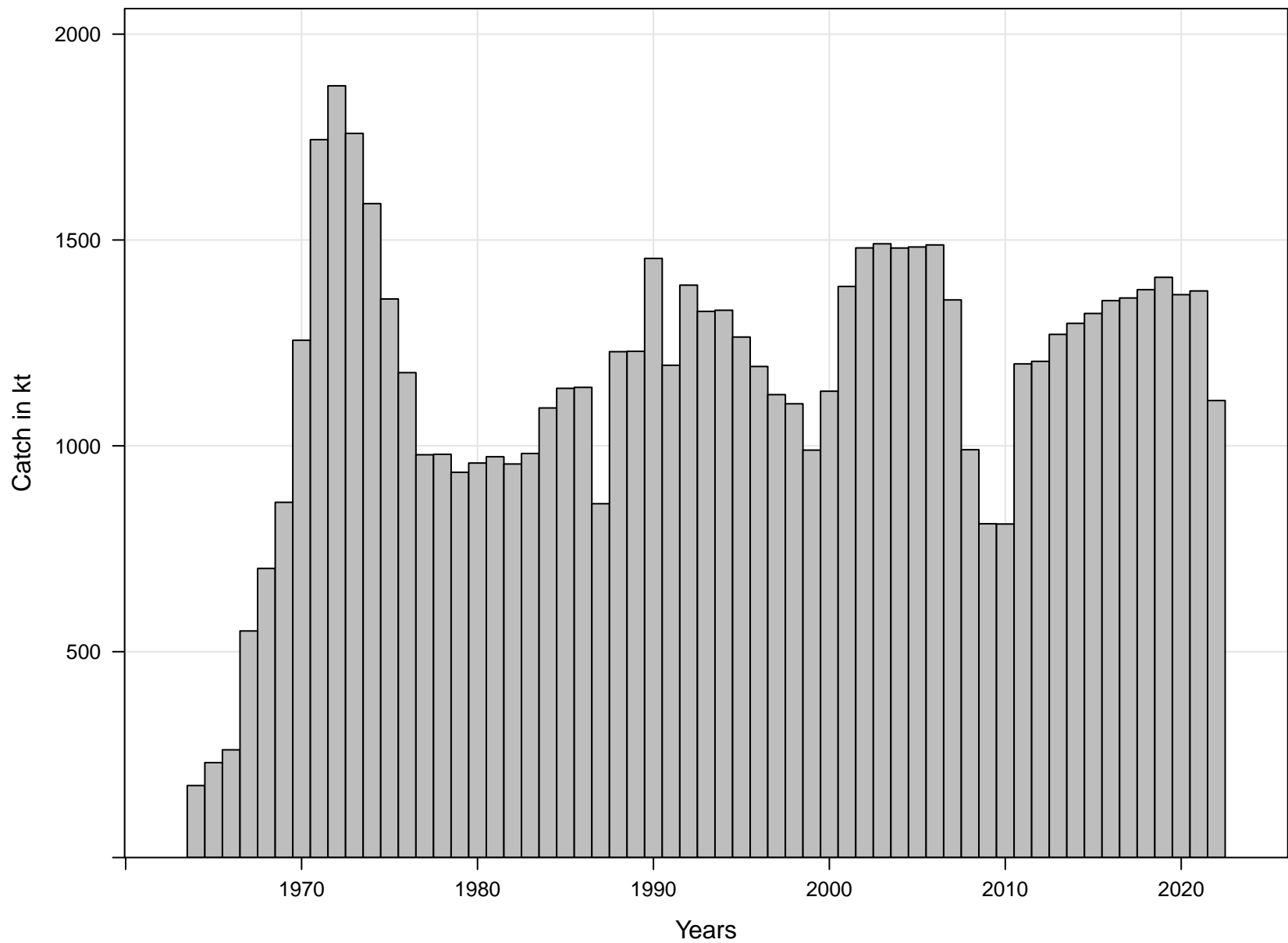
Weight in the stock



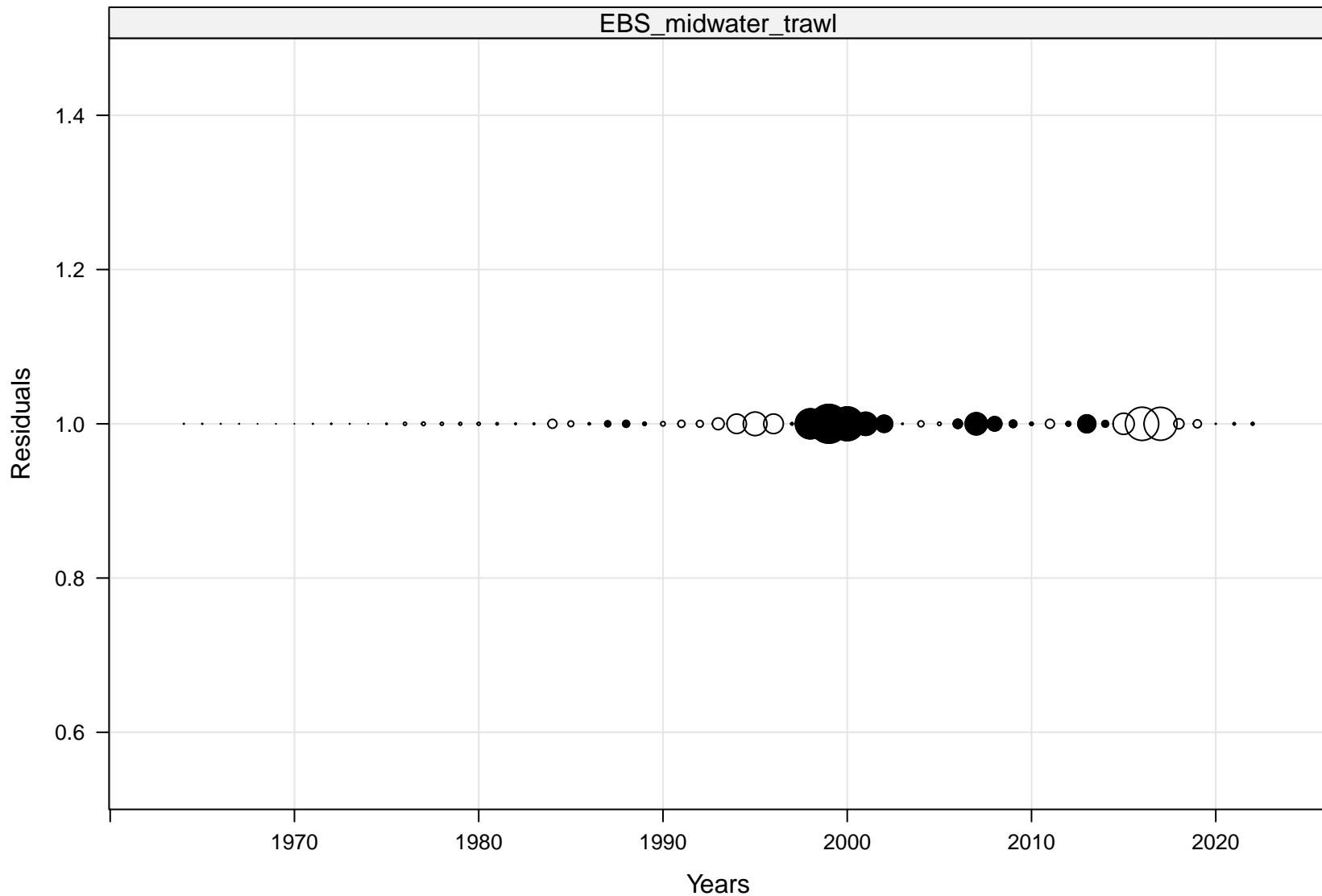
**Maturity in the stock**

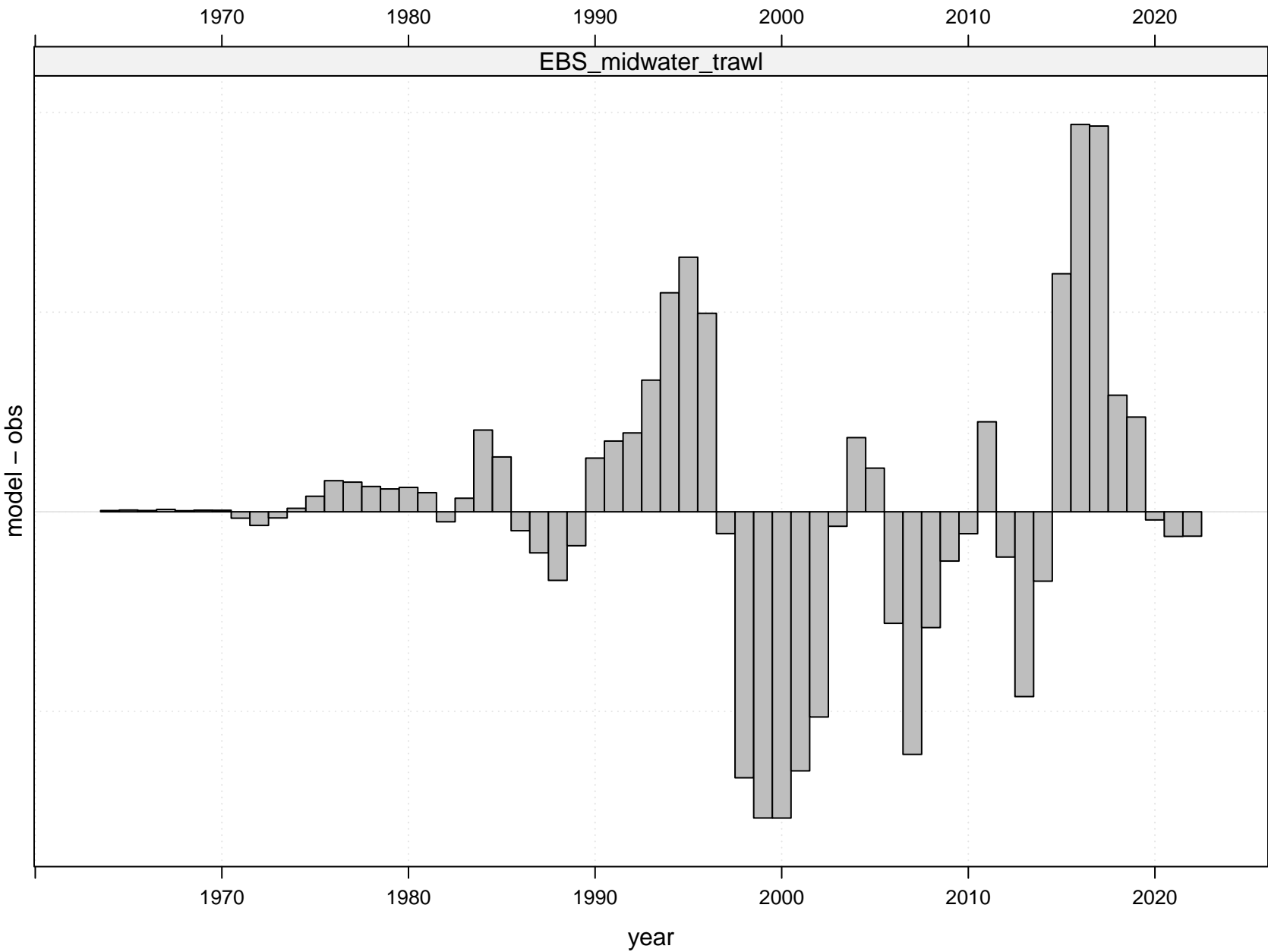


# Total catch

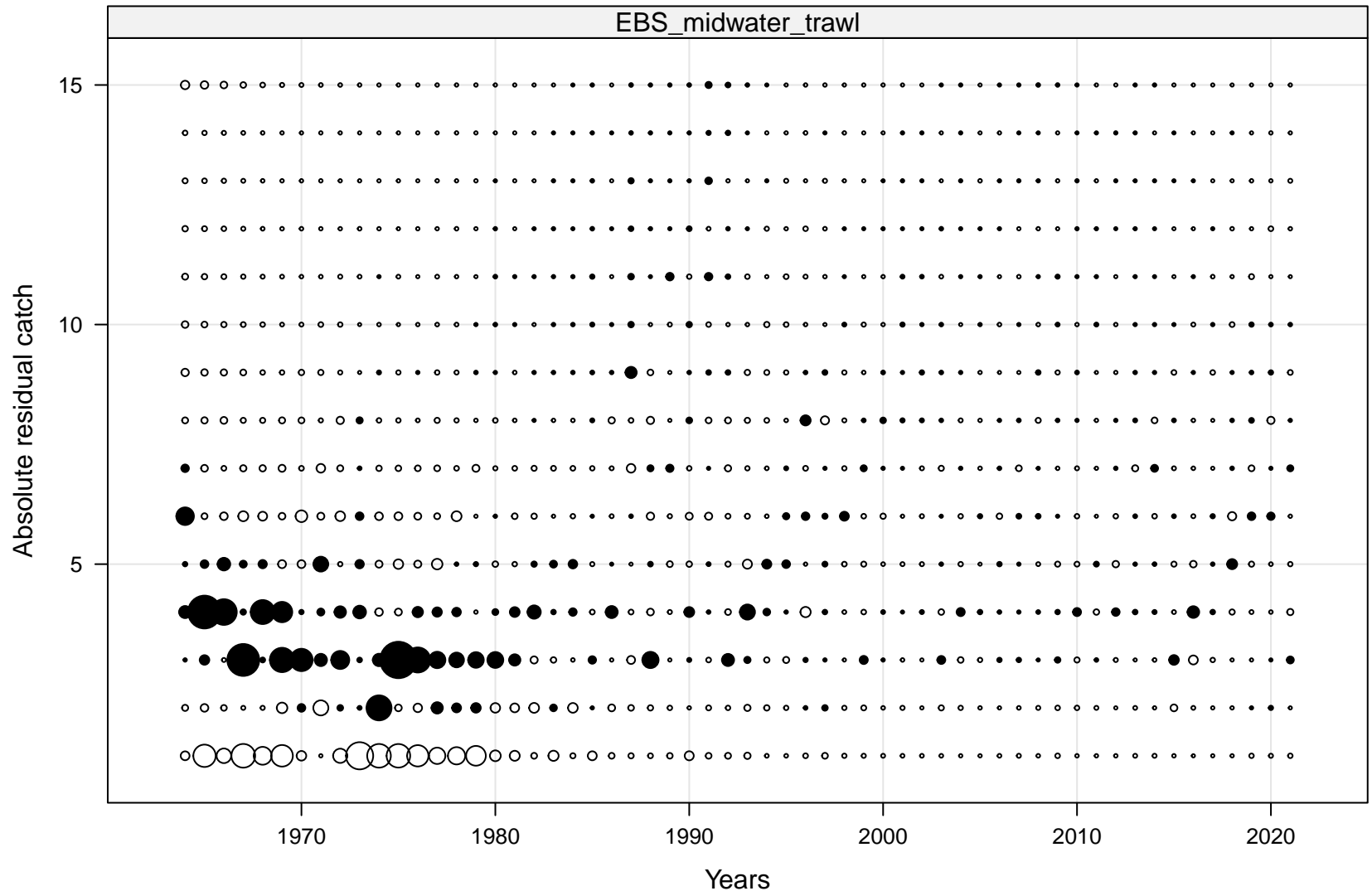
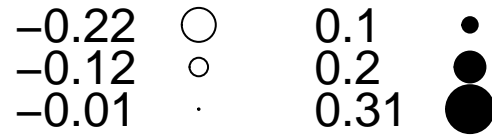


# Catch residuals by fleet





# Absolute residual catch by fleet

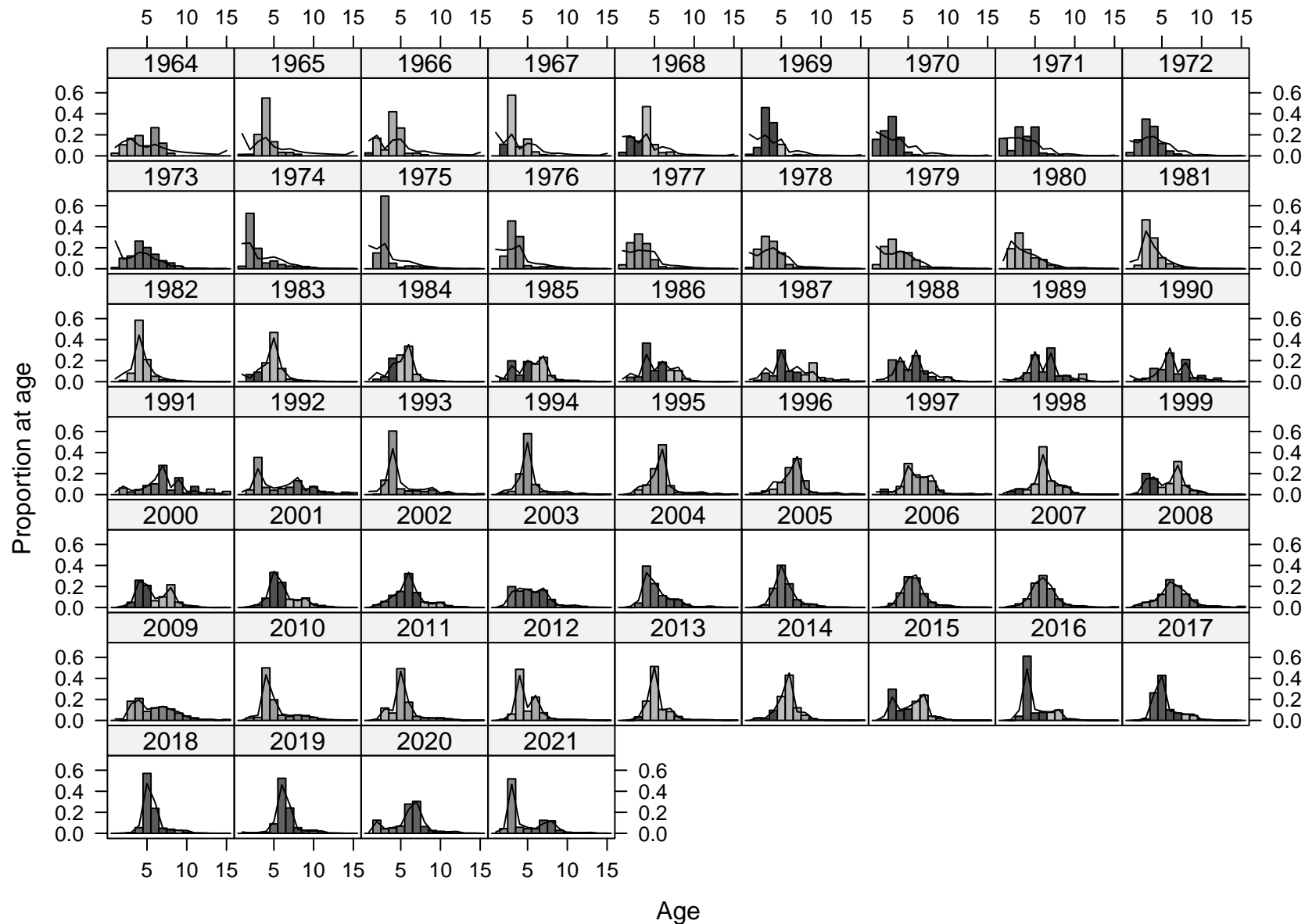


# Age fits EBS\_midwater\_trawl

Observed

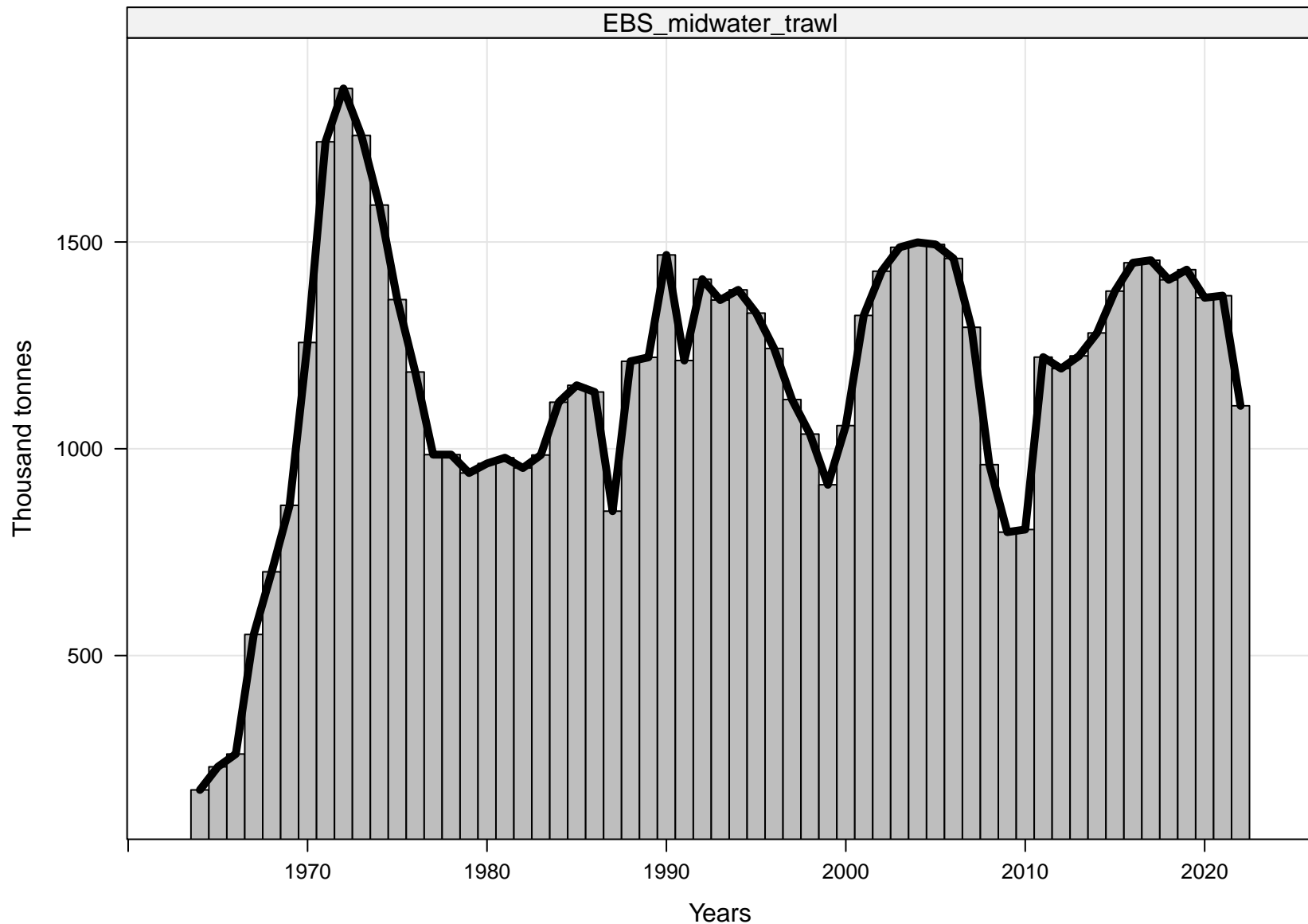


Predicted





**Predicted and observed catches by fleet**  
Observed Predicted

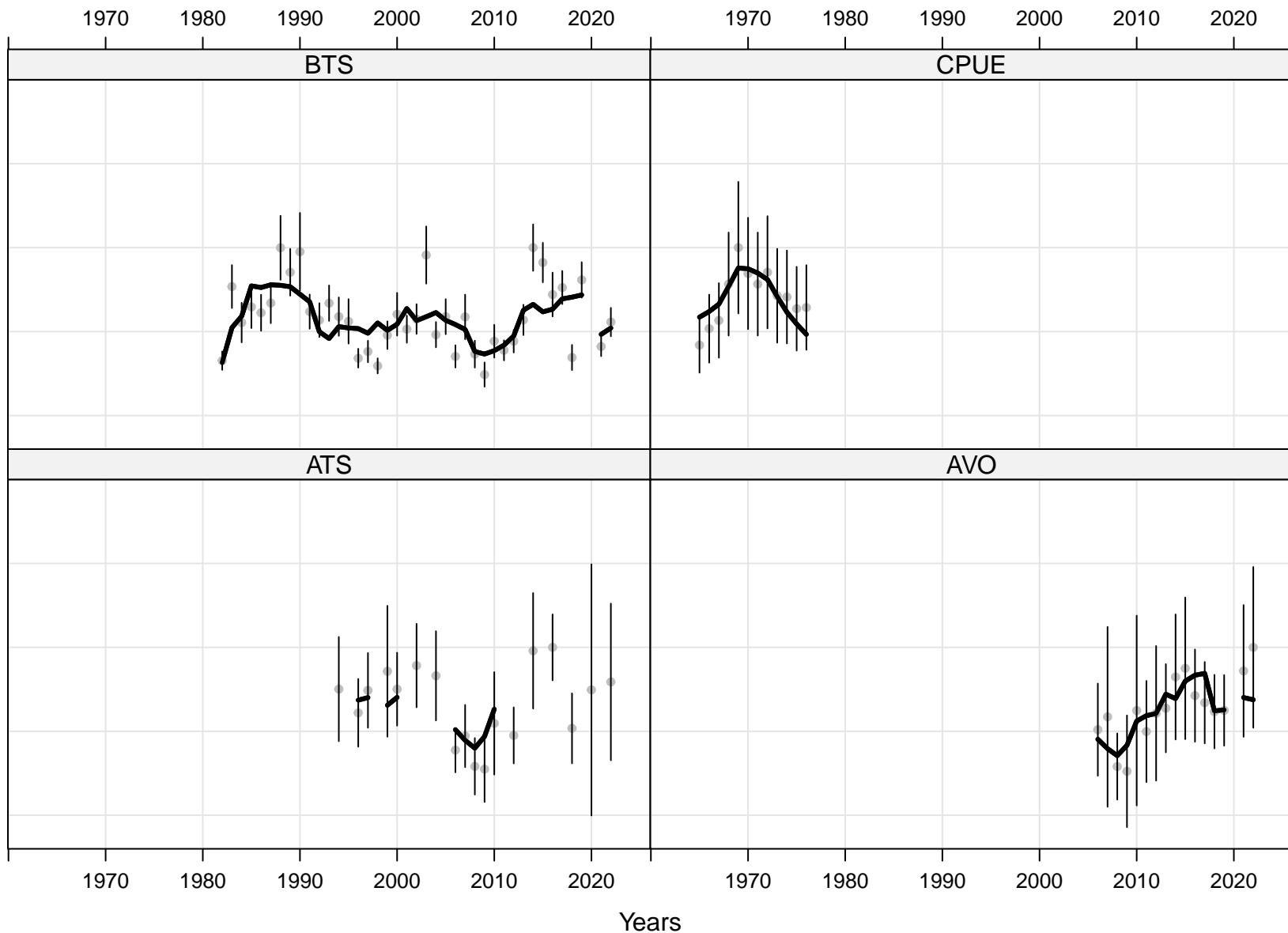


# Predicted and observed indices

Observed •

Predicted —

Normalized index value

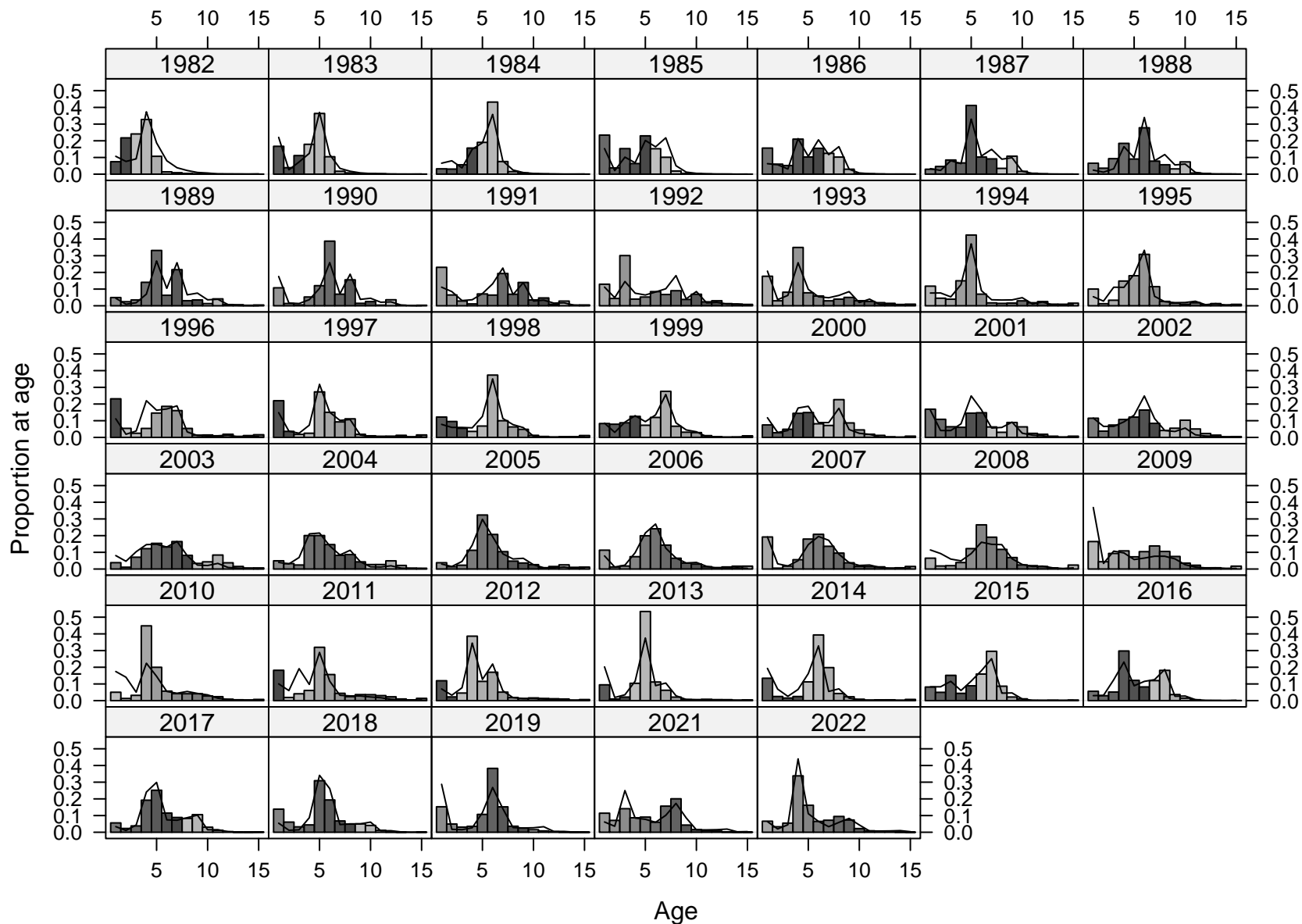


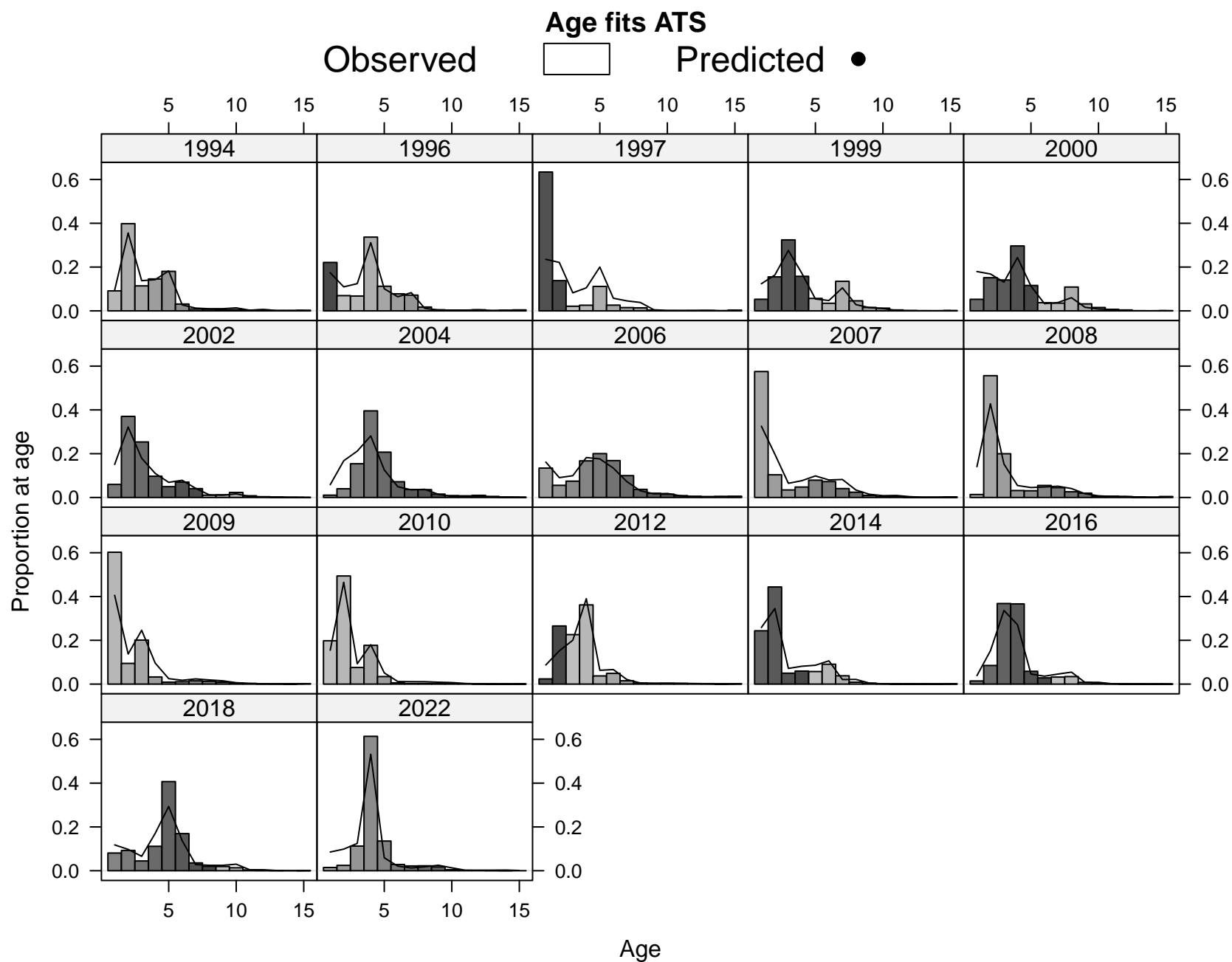
# Age fits BTS

Observed

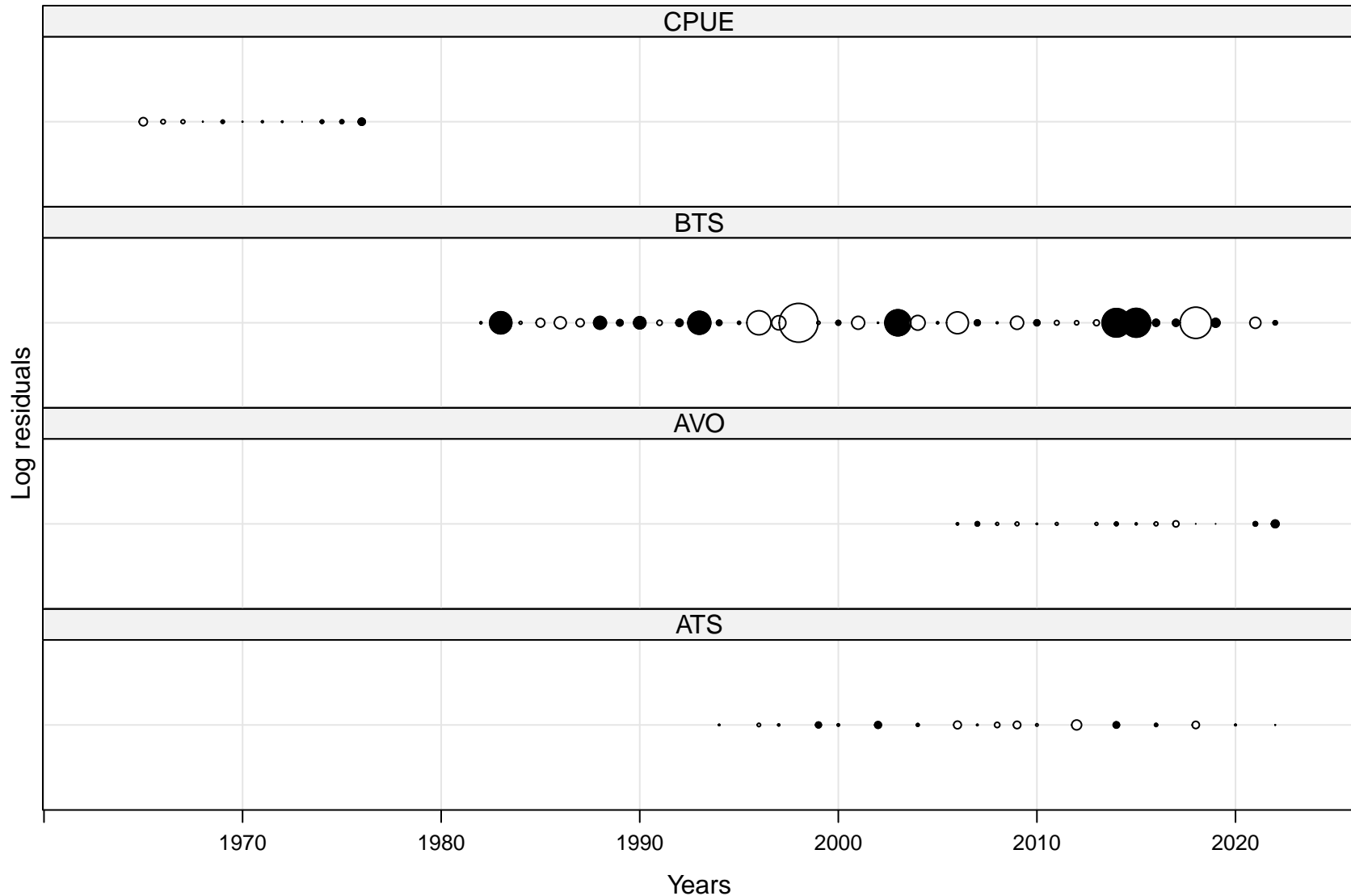
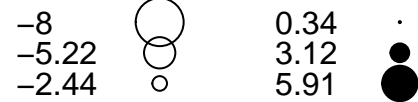


Predicted

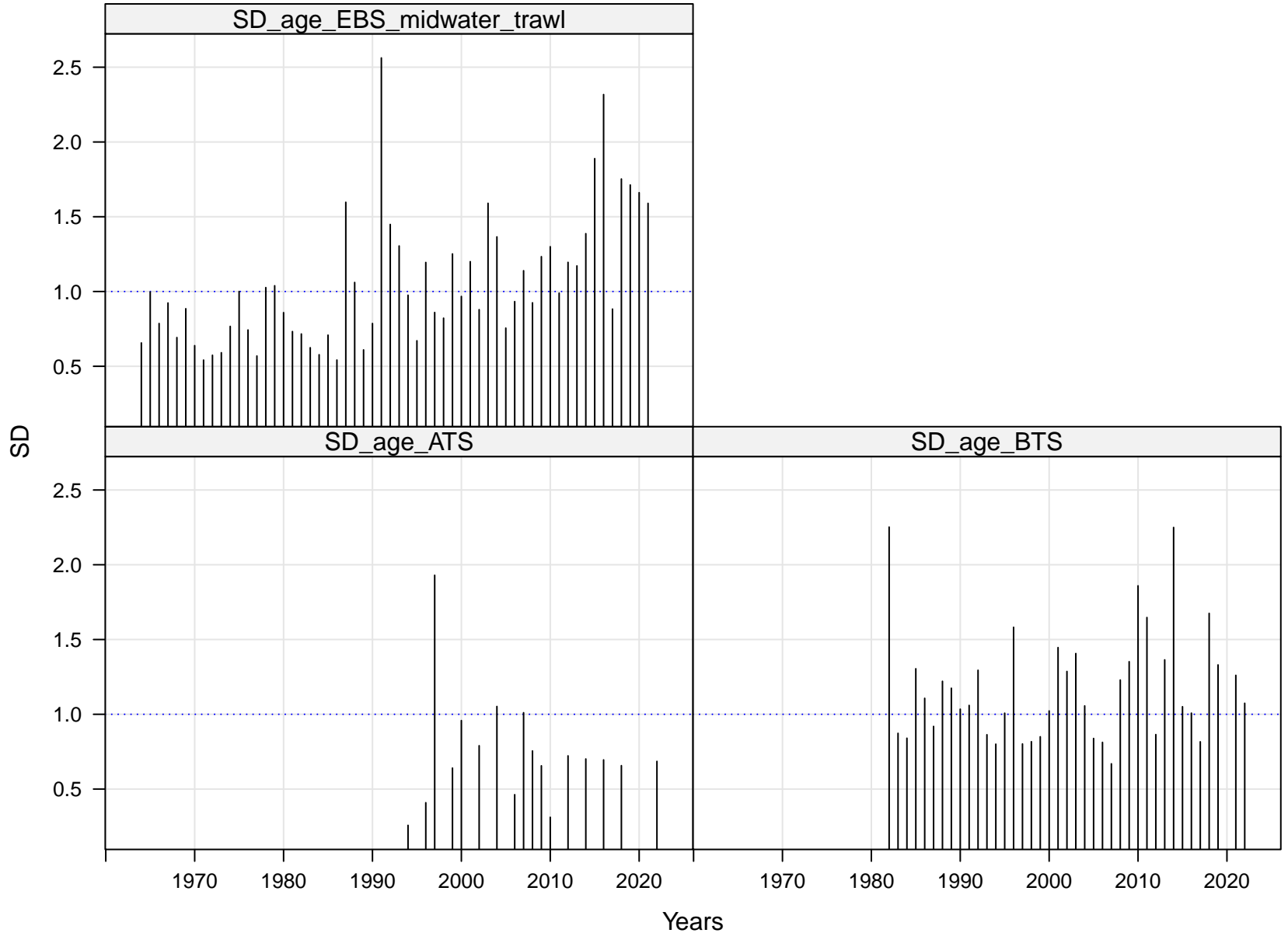




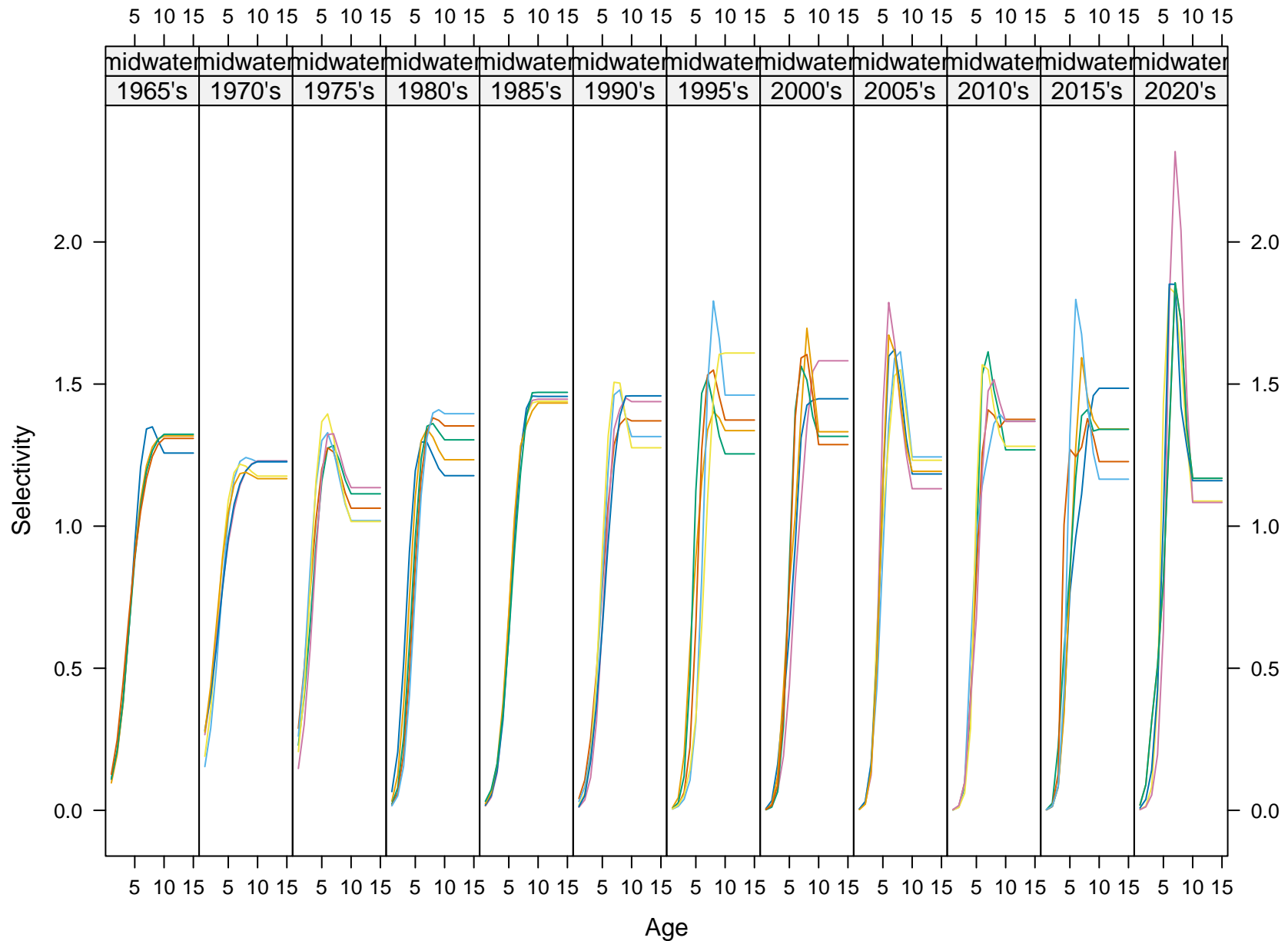
# Standardized survey residuals



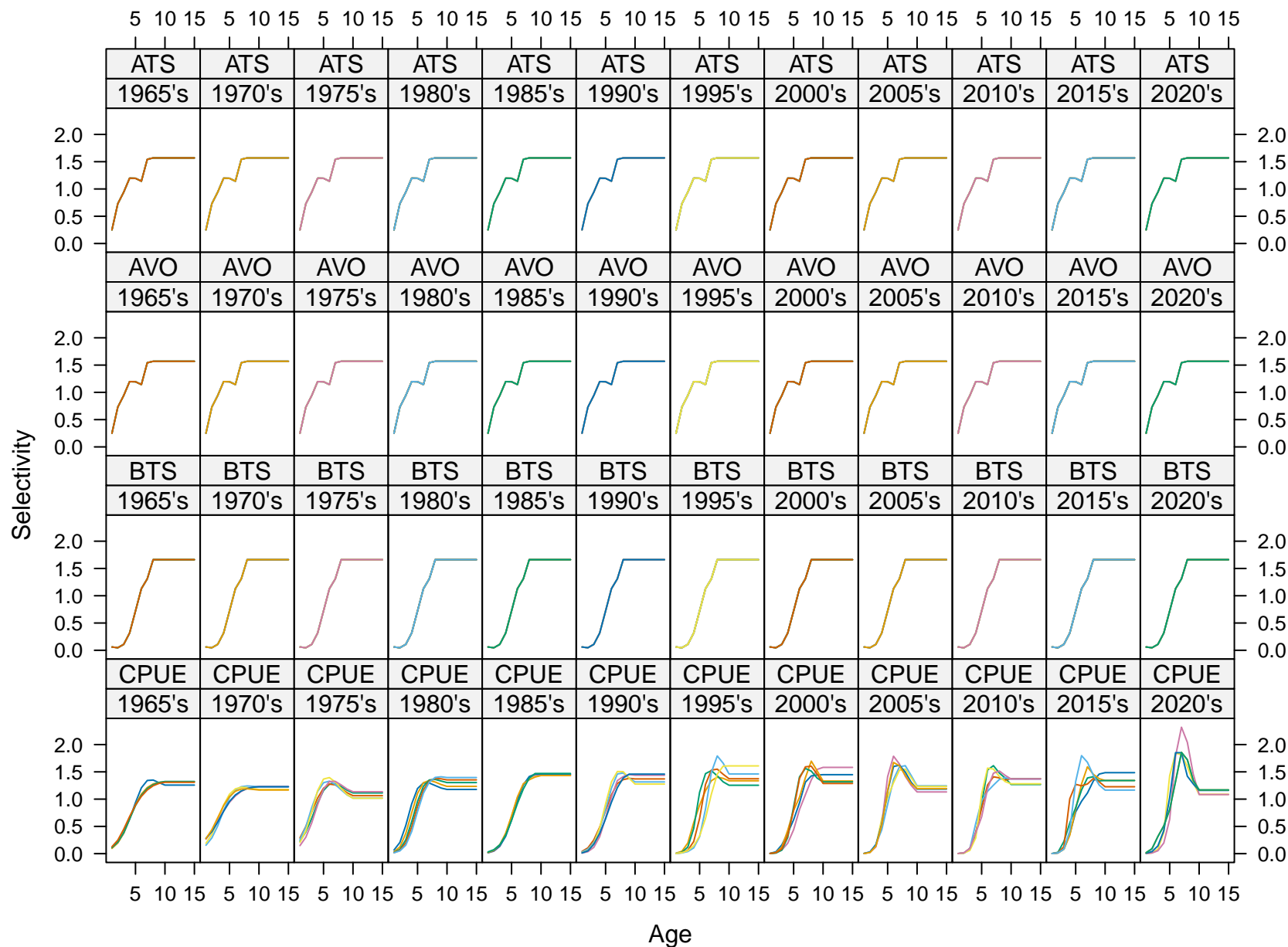
# SD per input series



# Selectivity of the Fishery by Pentad

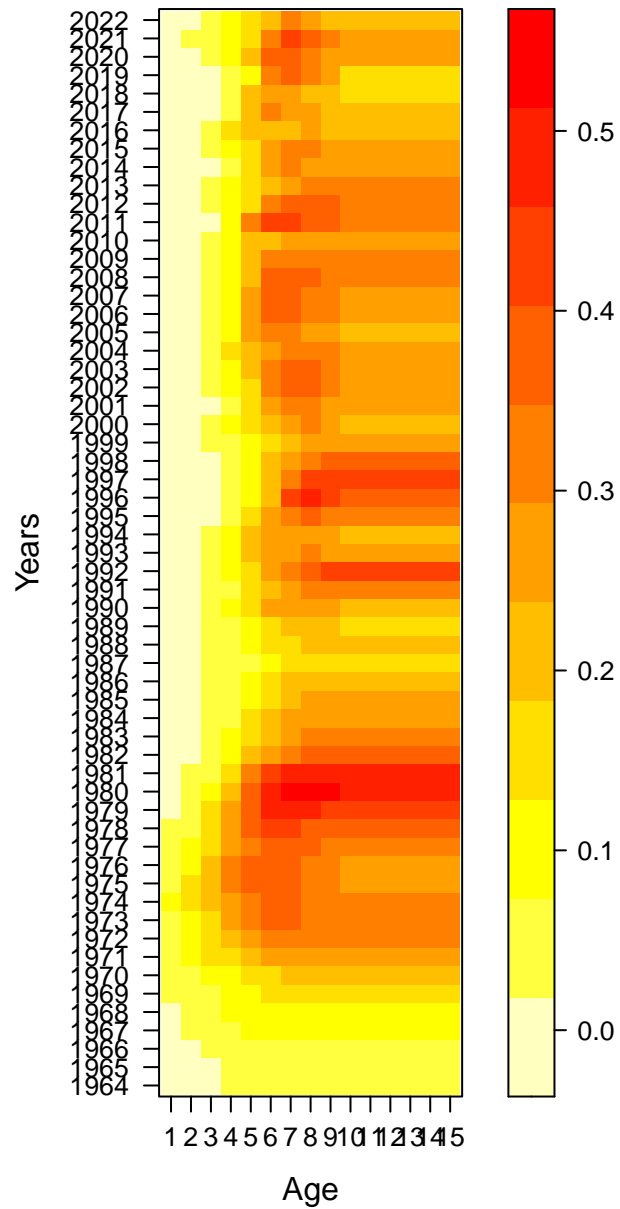


# Selectivity of the survey by Pentad

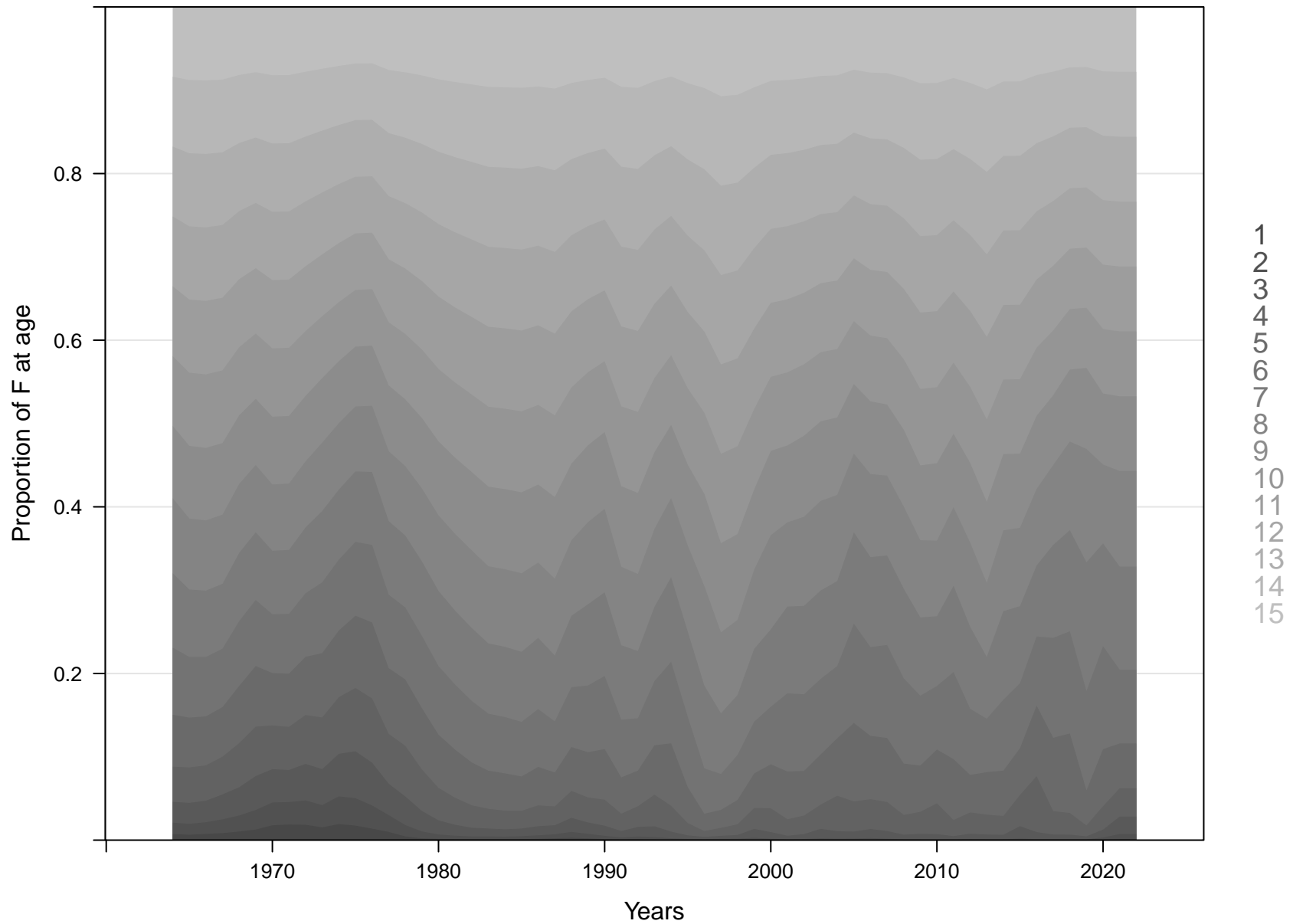




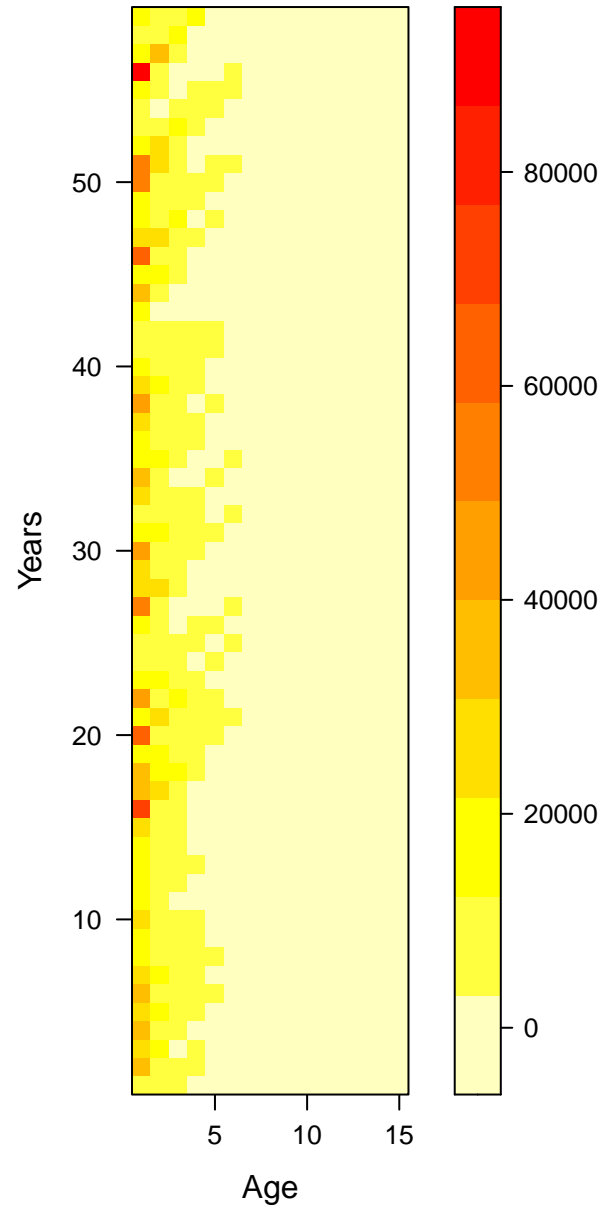
**F at age**



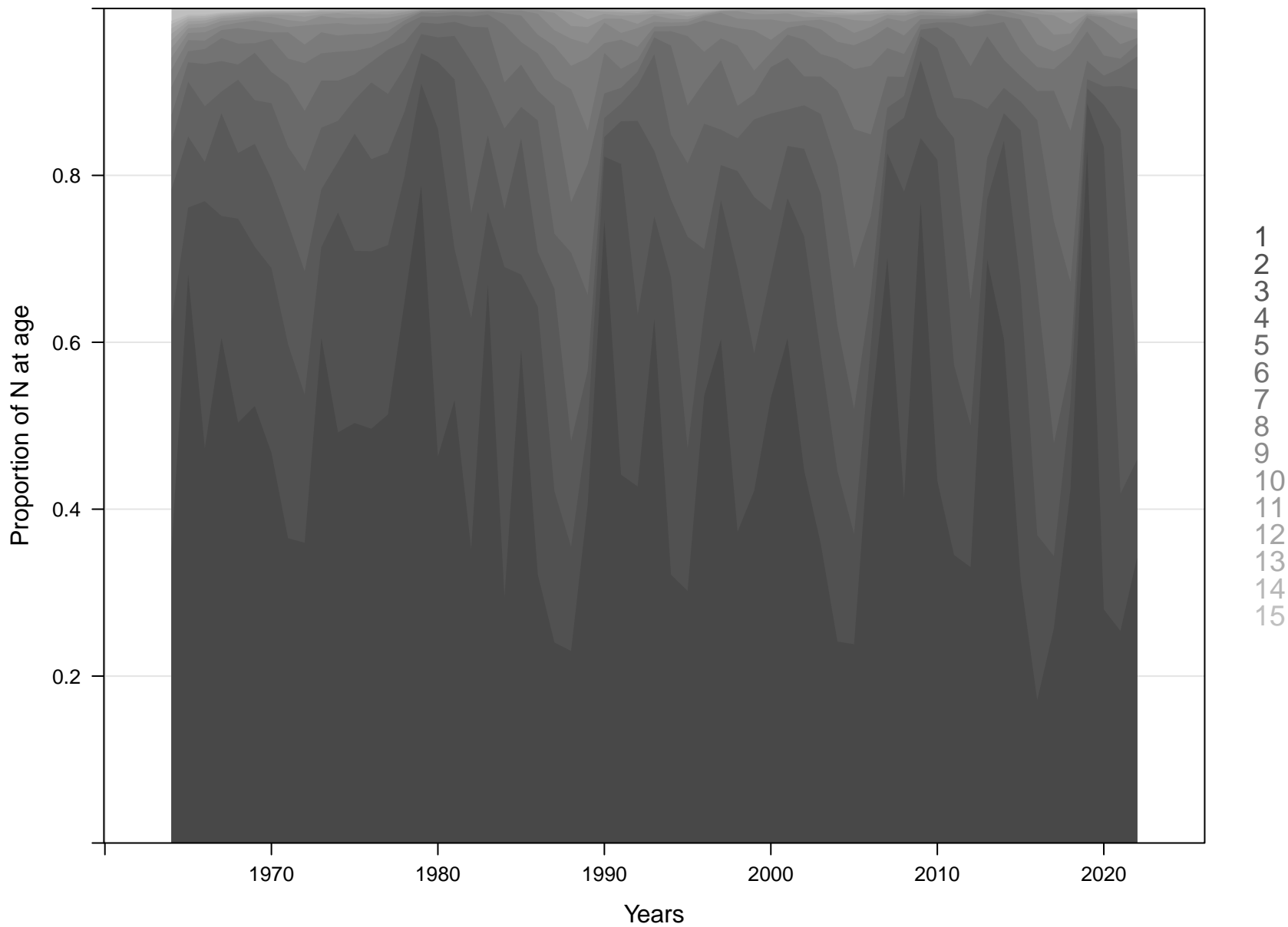
# F proportion at age



**N at age**



## Proportion at age

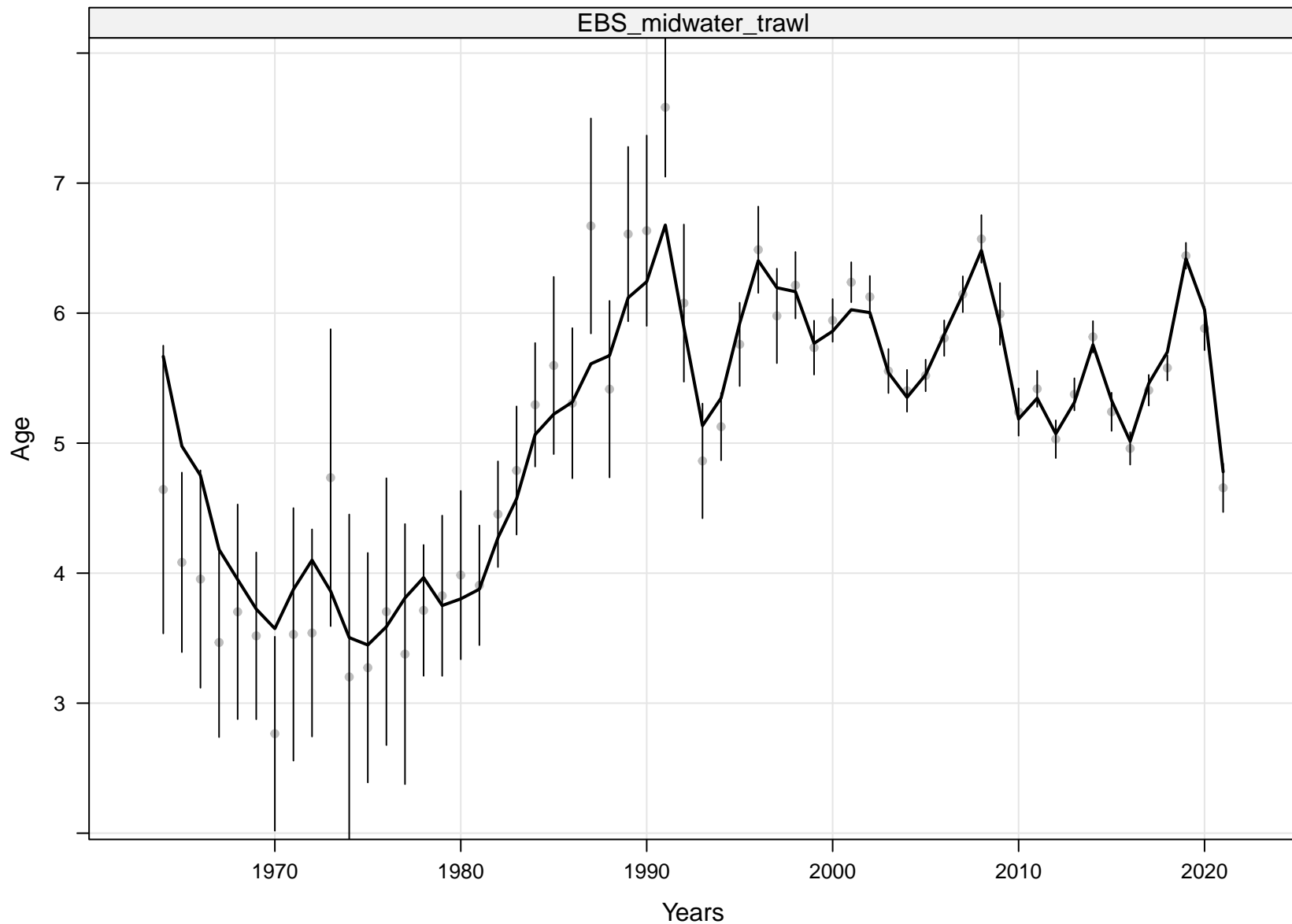


# Fishery mean age

Observed



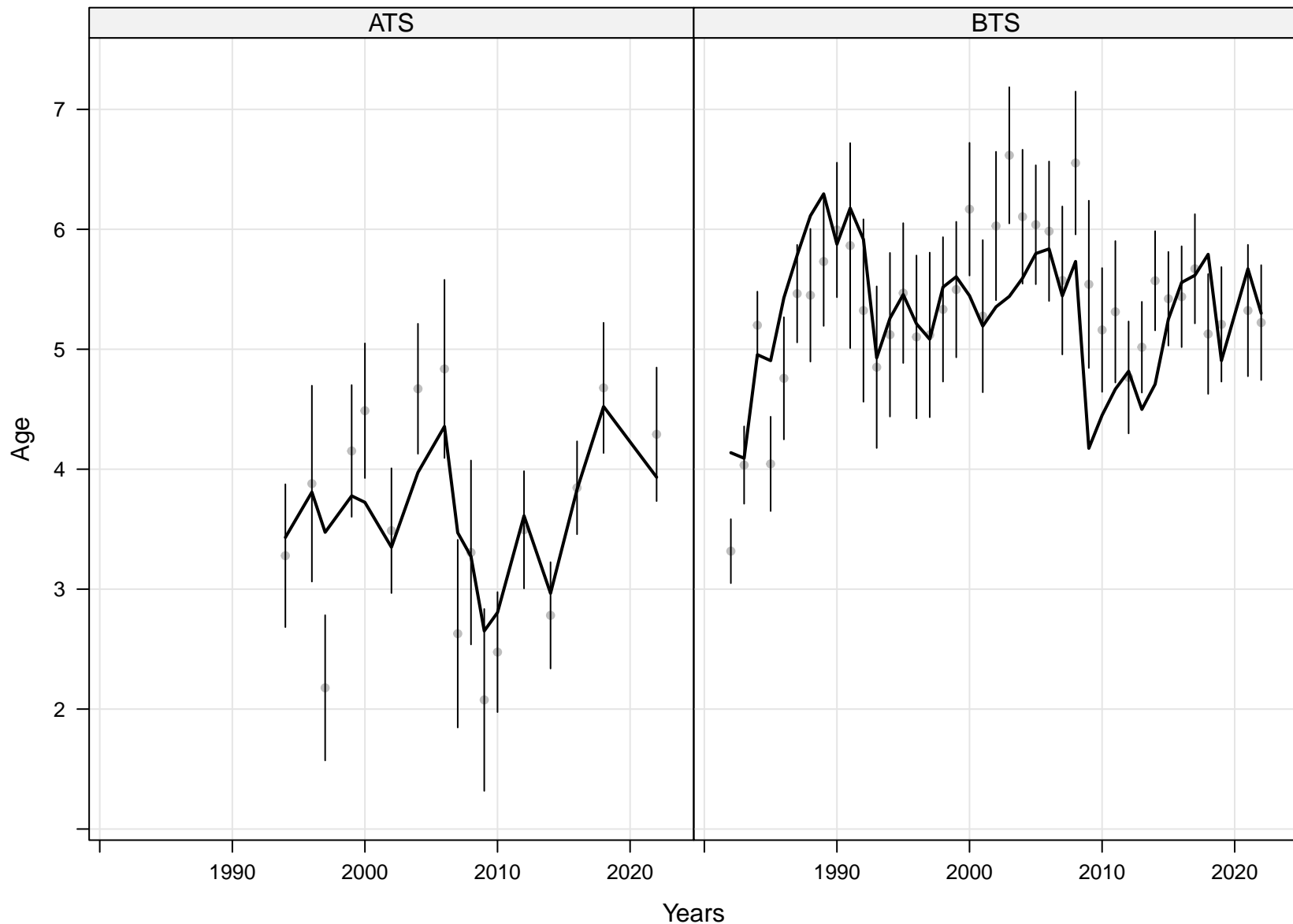
Modelled

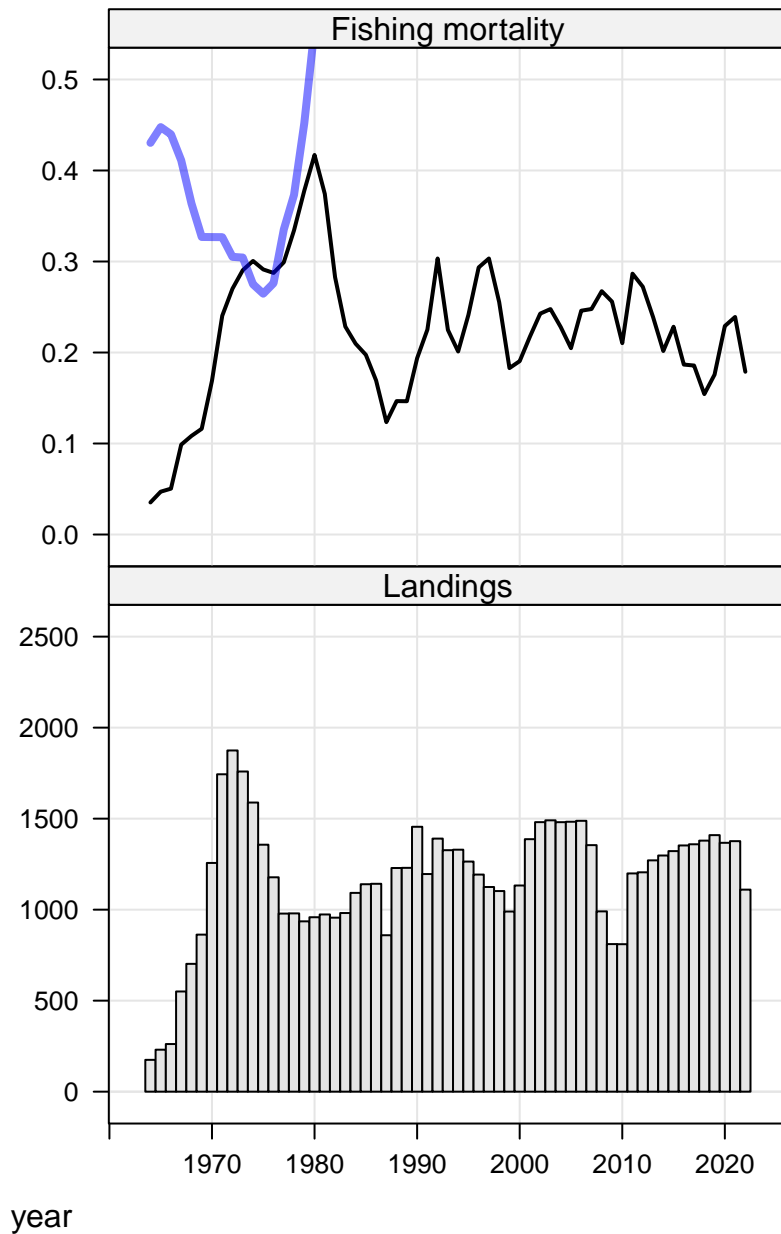
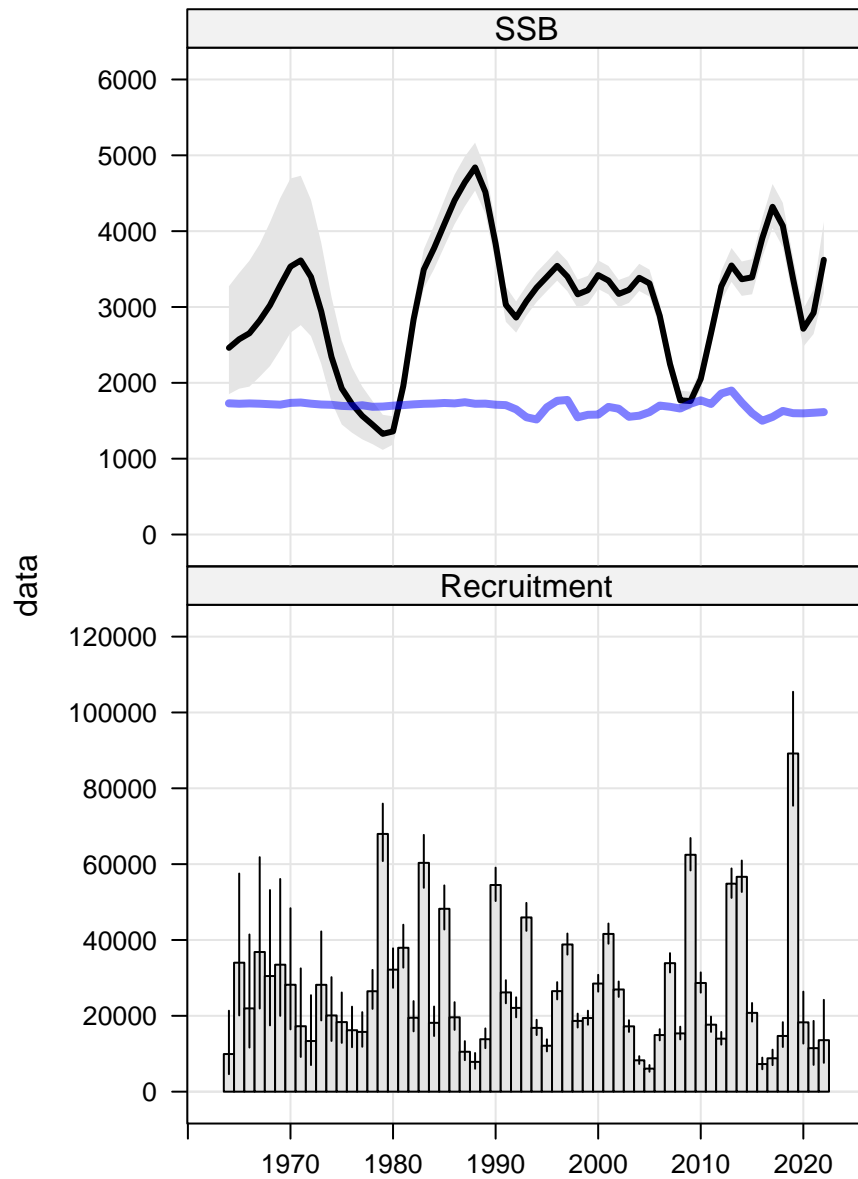


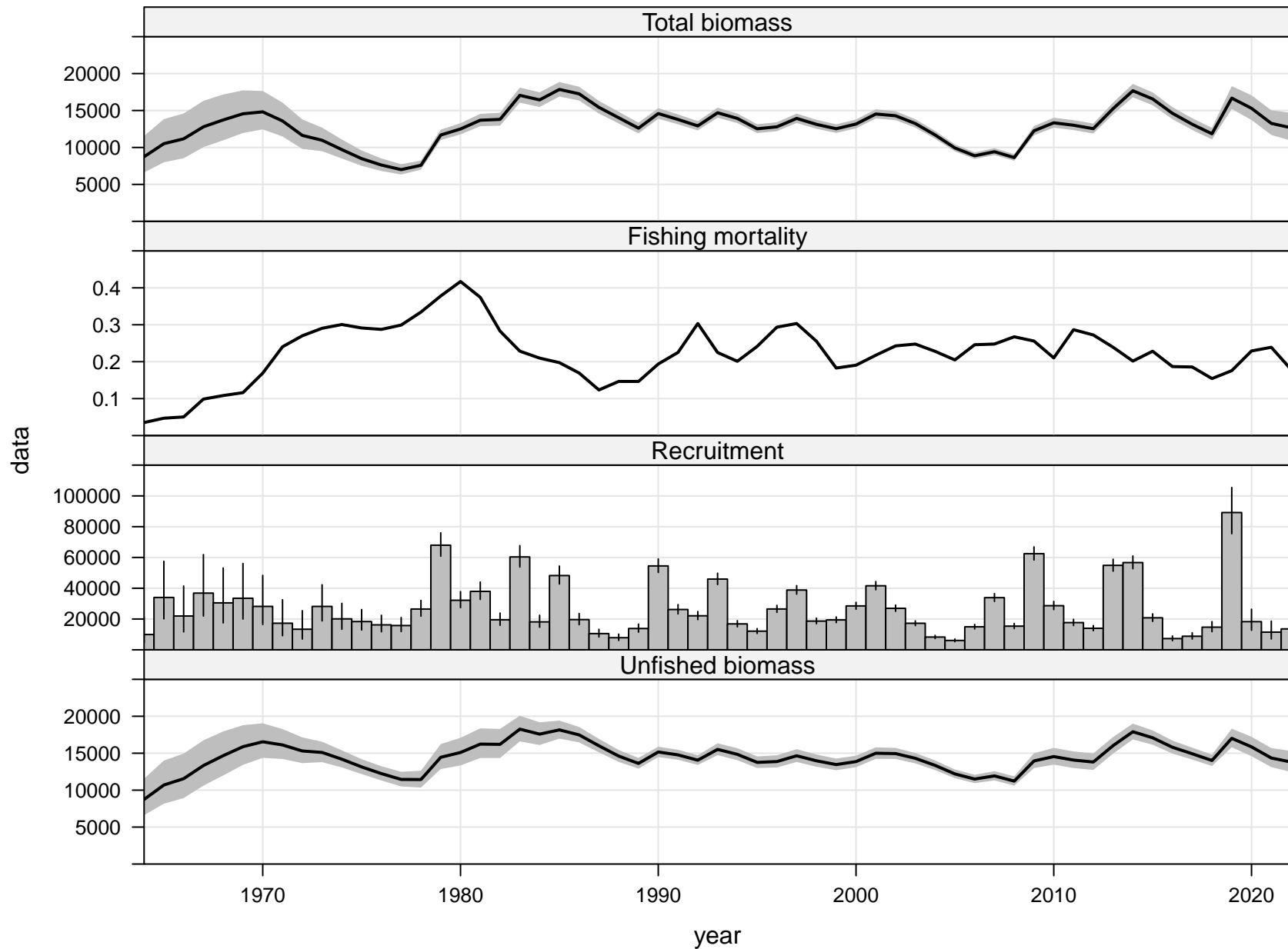
# Survey mean age

Observed ●

Modelled —

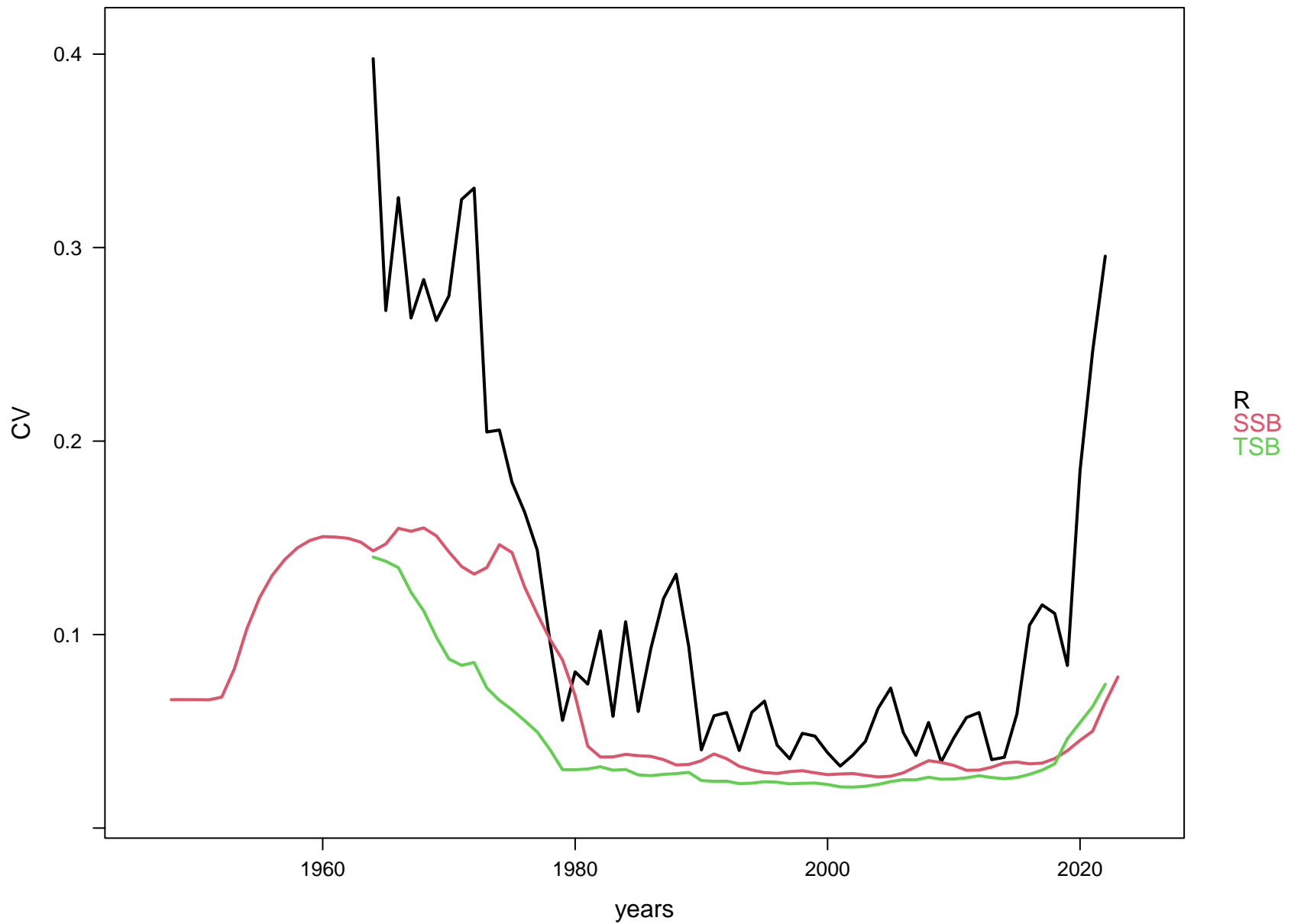




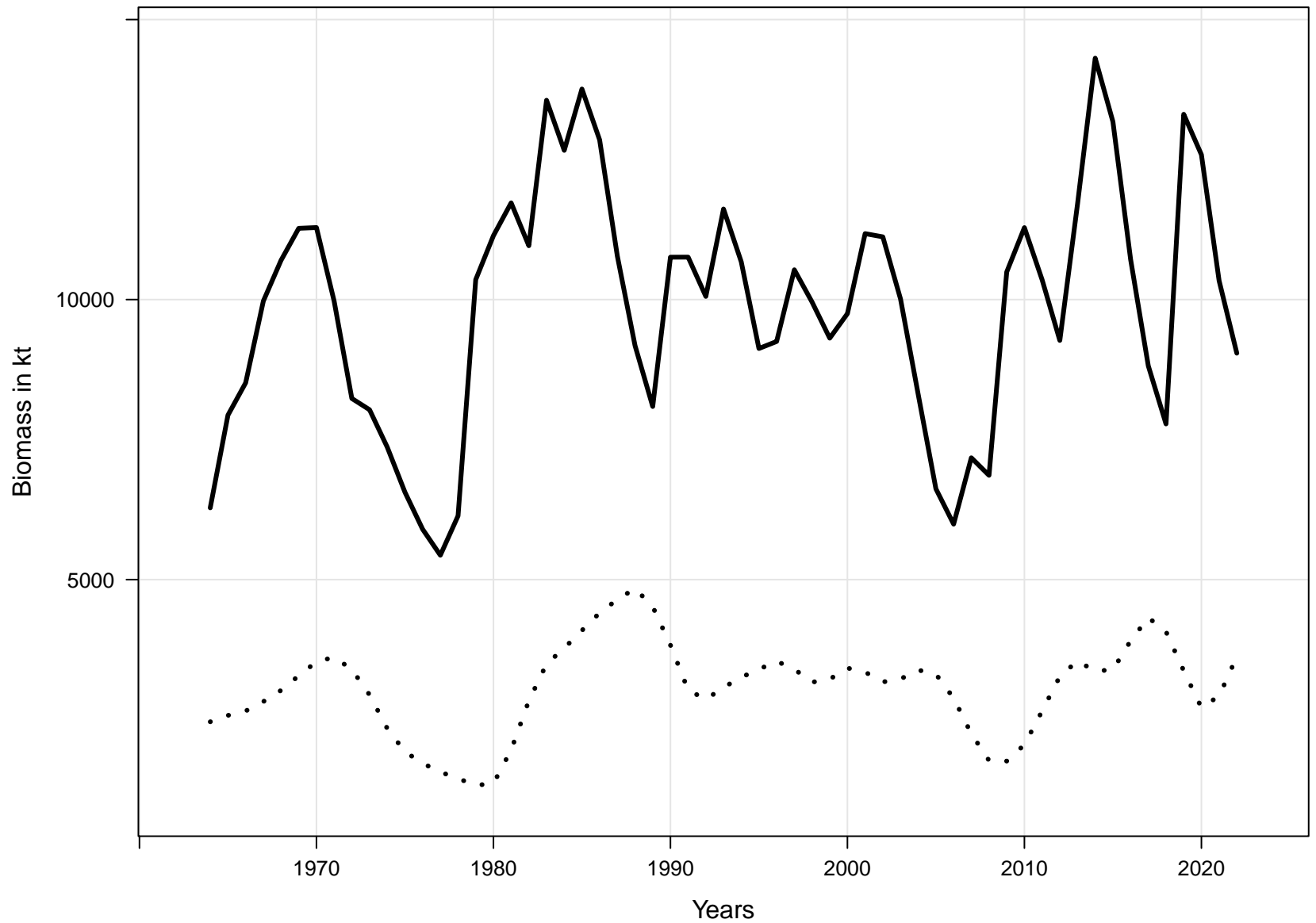




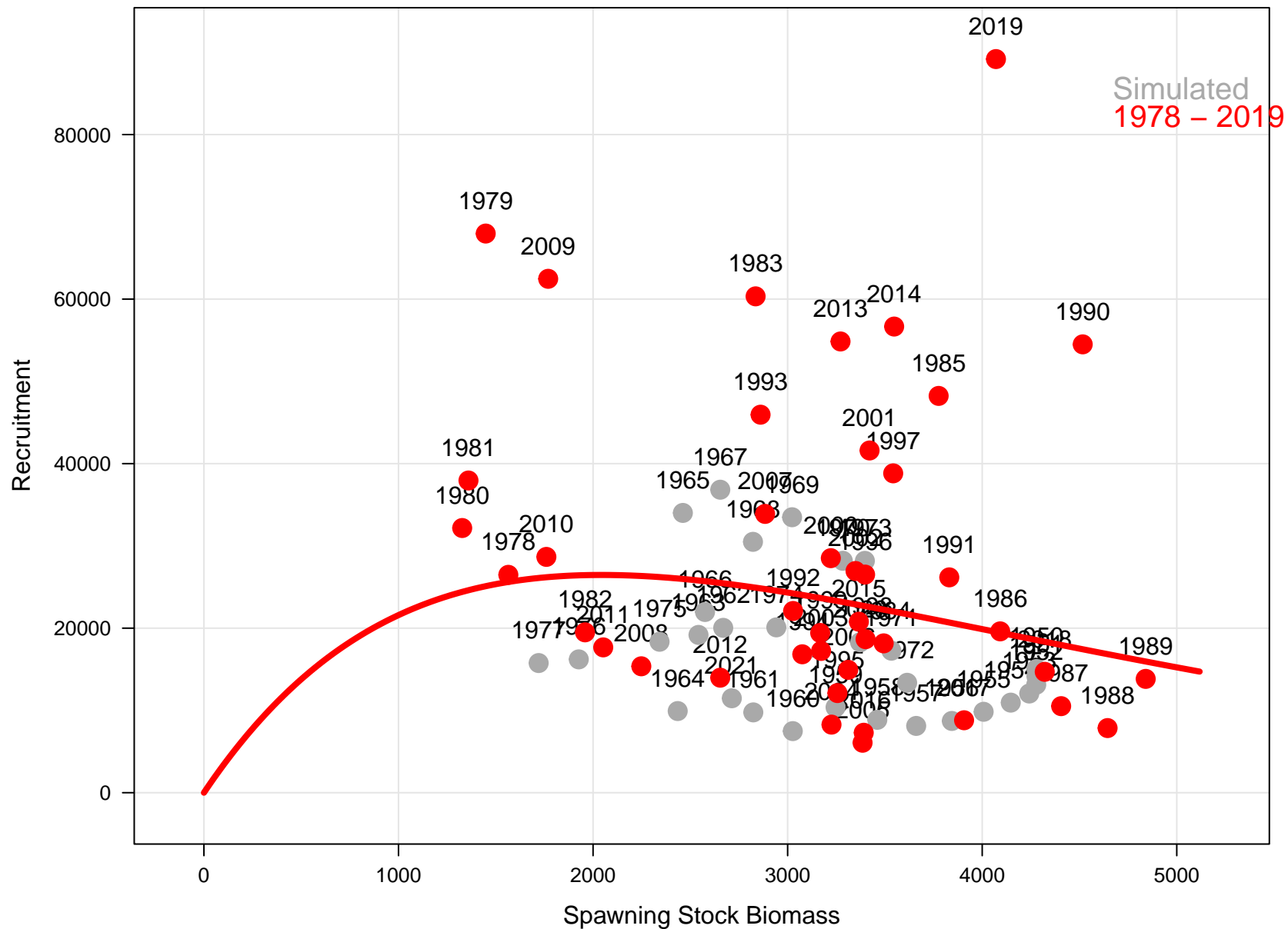
# Uncertainty of key parameters



Mature – Immature fish  
Mature ..... Immature —

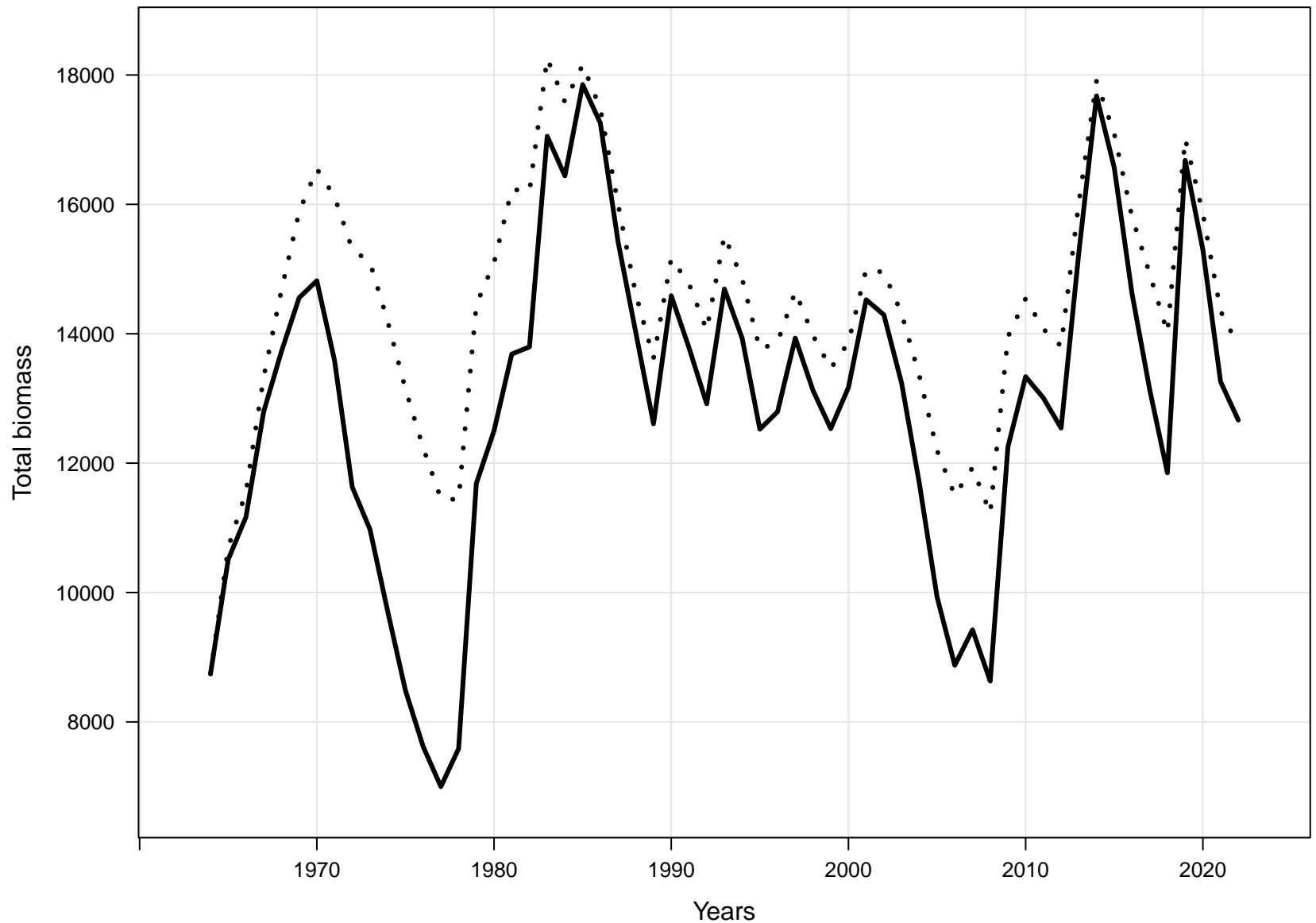


# Stock Recruitment



# Comparing fished with unfished biomass

Fished — Unfished .....



## SSB prediction

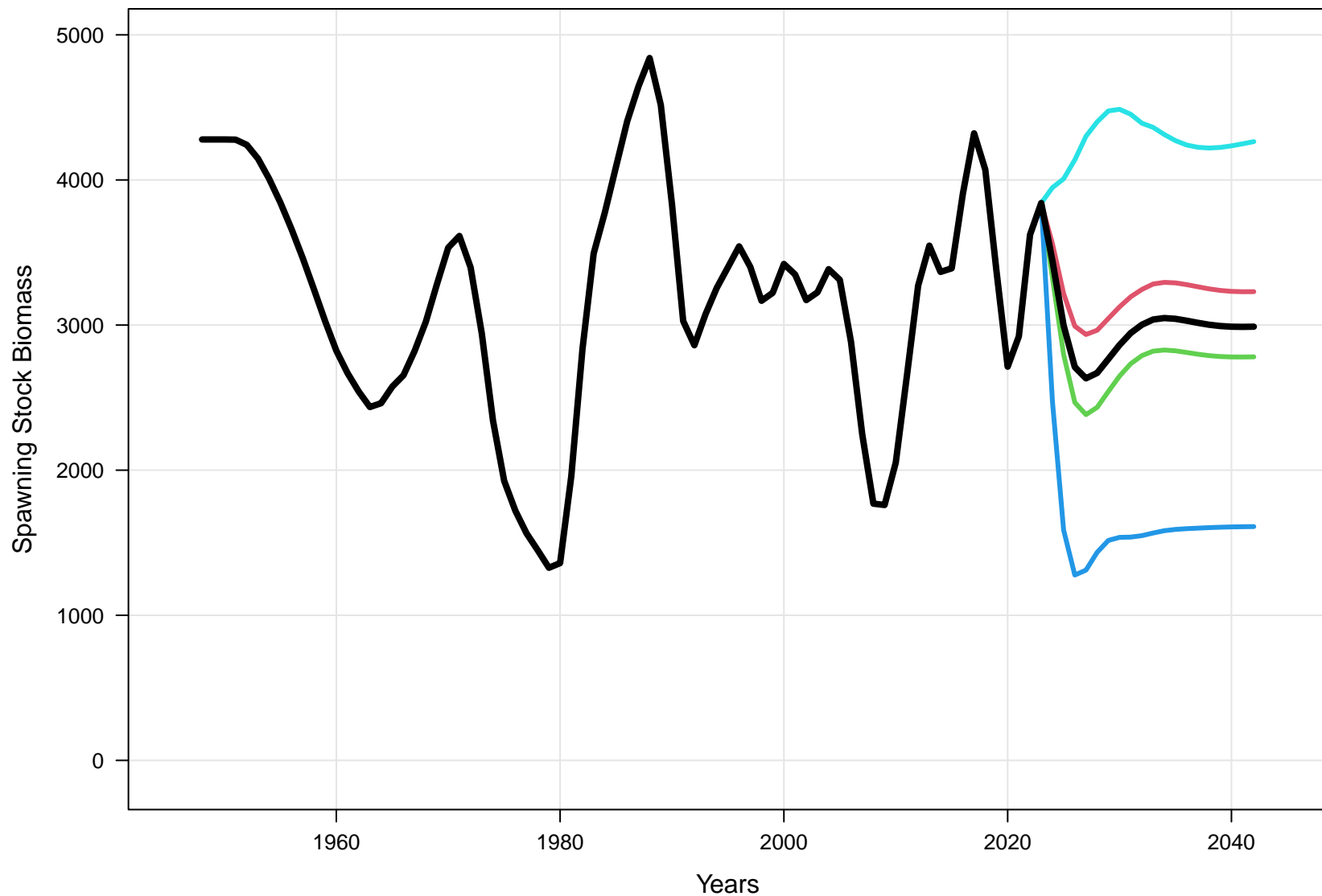
F2022 SQ

F2022 0.75x

F2022 1.25x

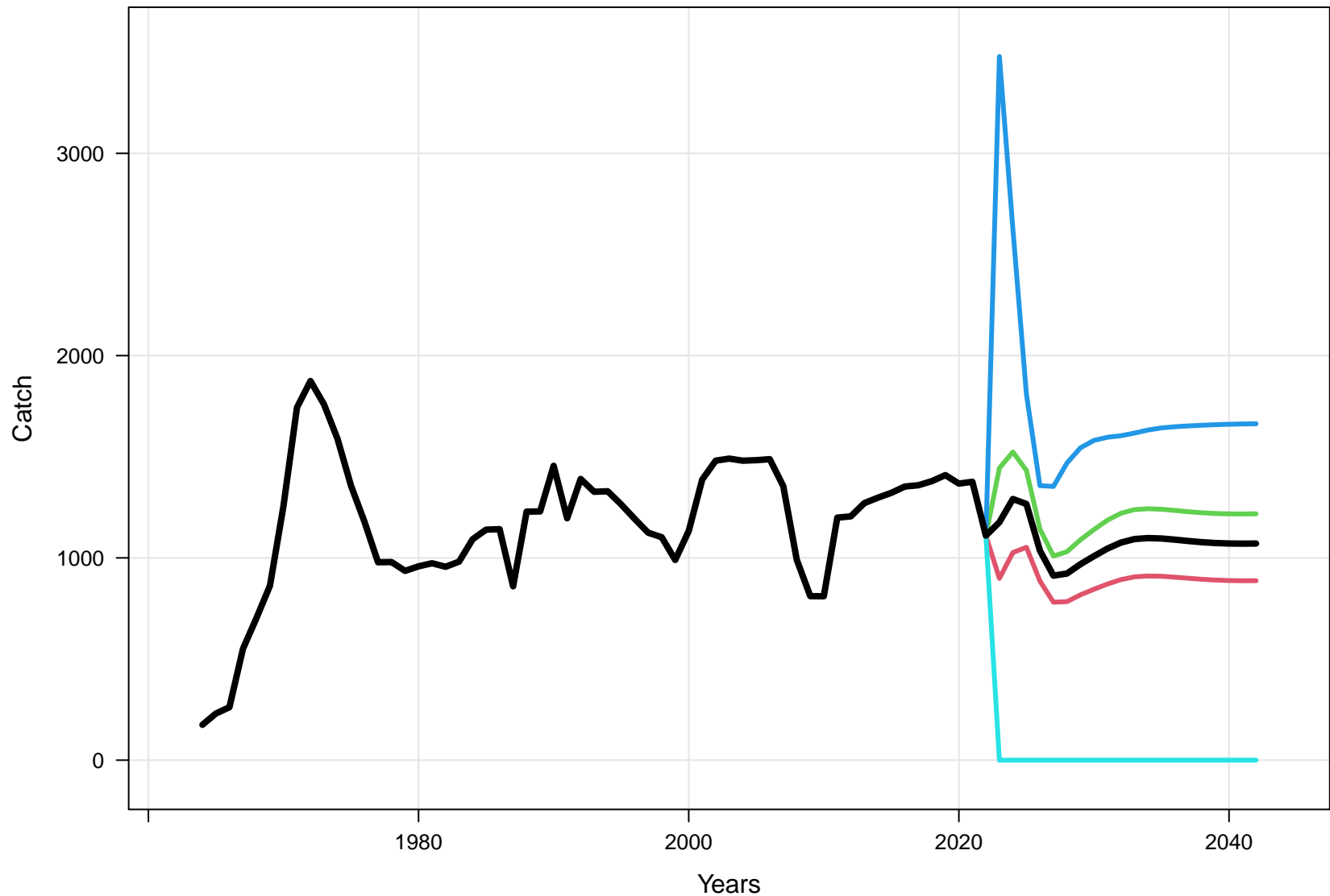
FMSY

F2022 0x

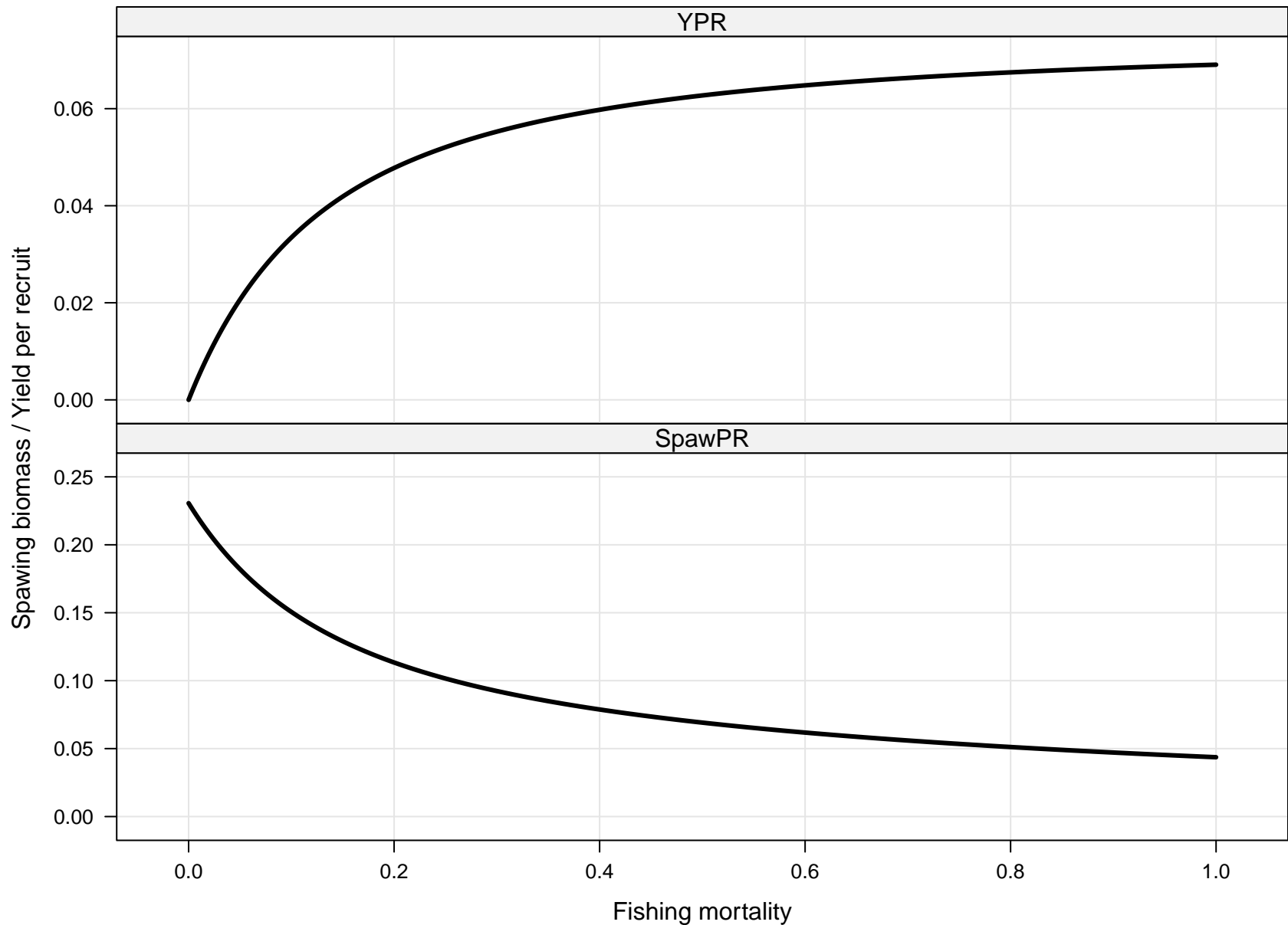


# Catch prediction

F2022 SQ		FMSY	
F2022 0.75x		F2022 0x	
F2022 1.25x			



# Yield and spawning stock biomass per recruit



Kobe plot

