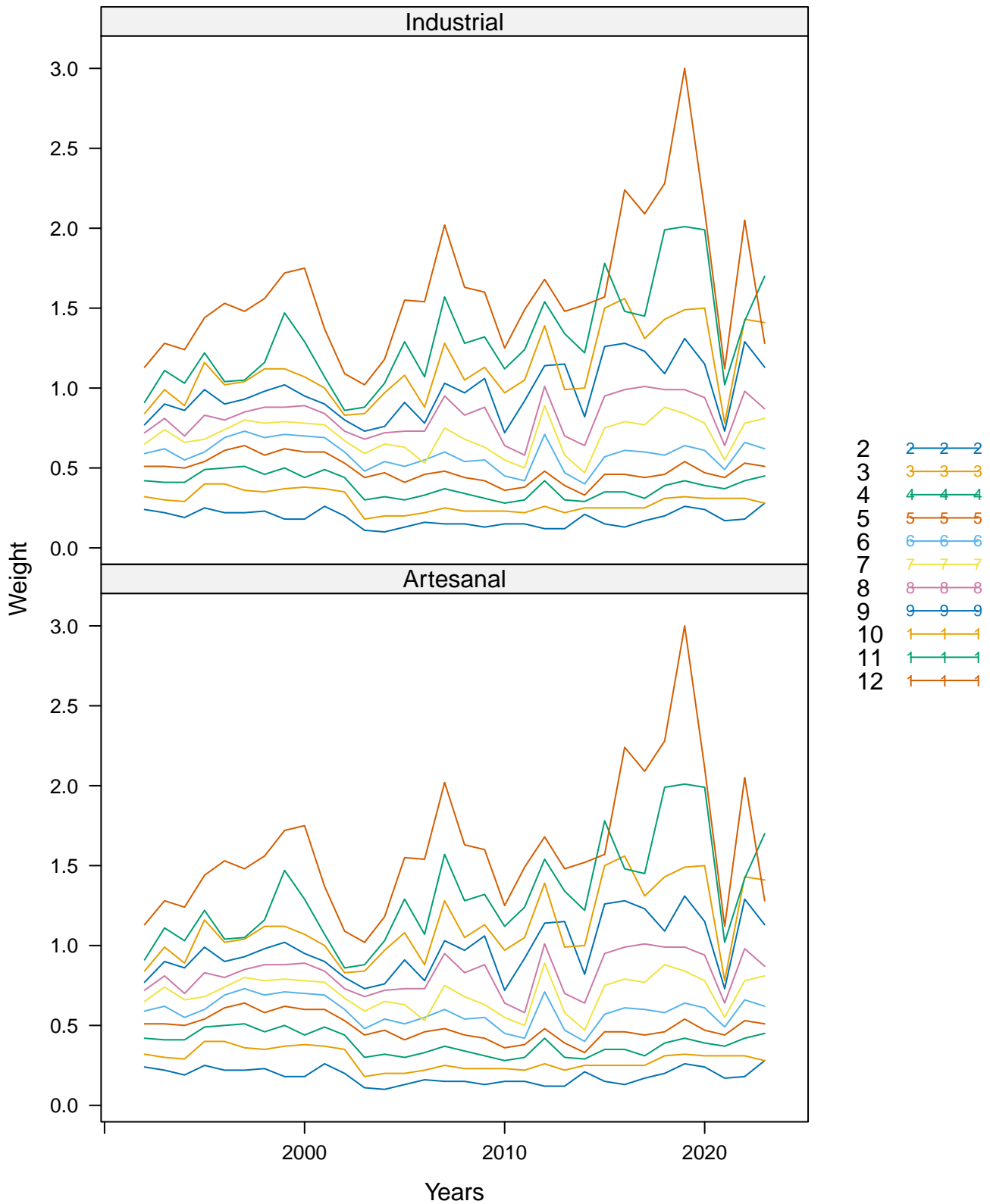
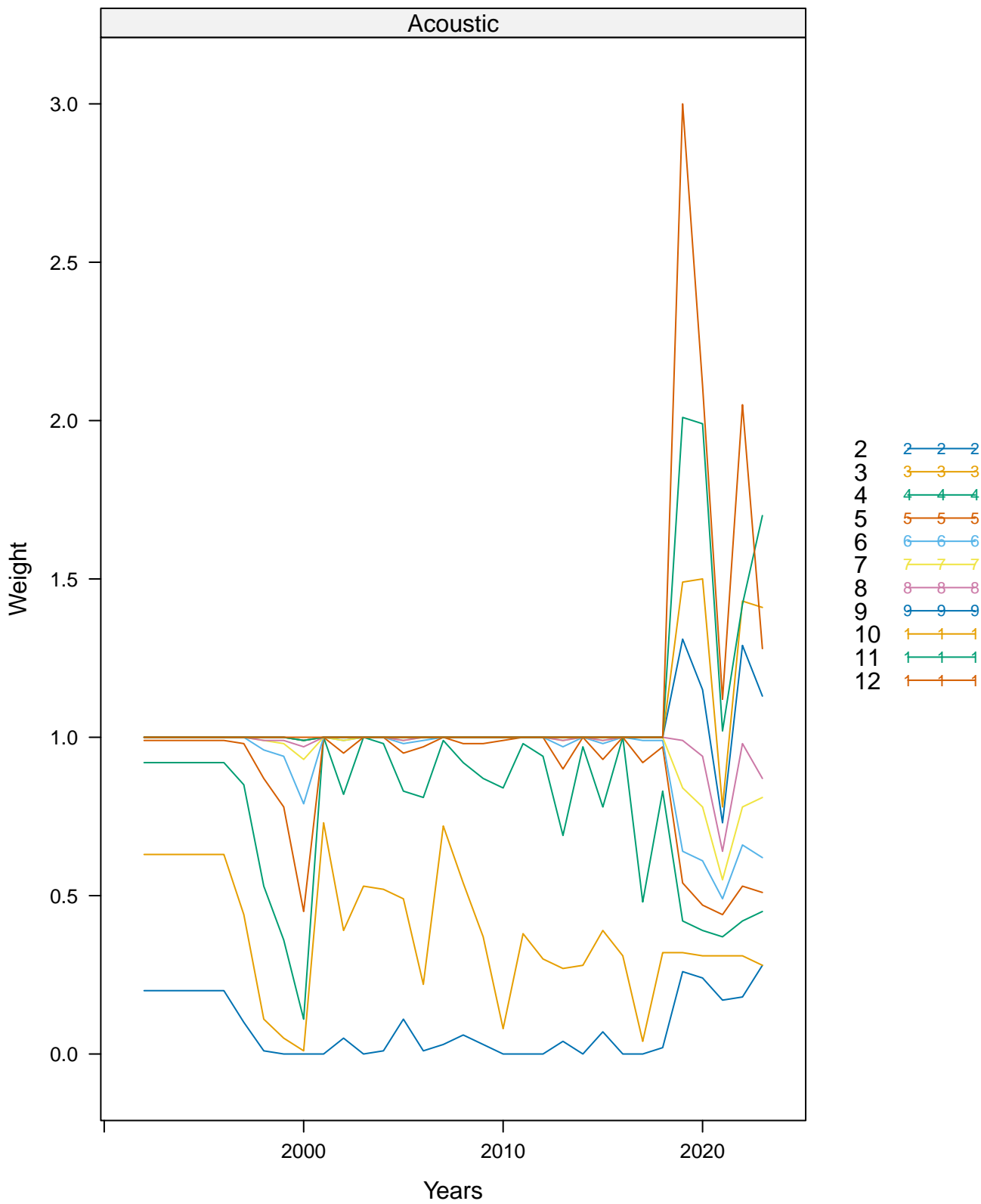


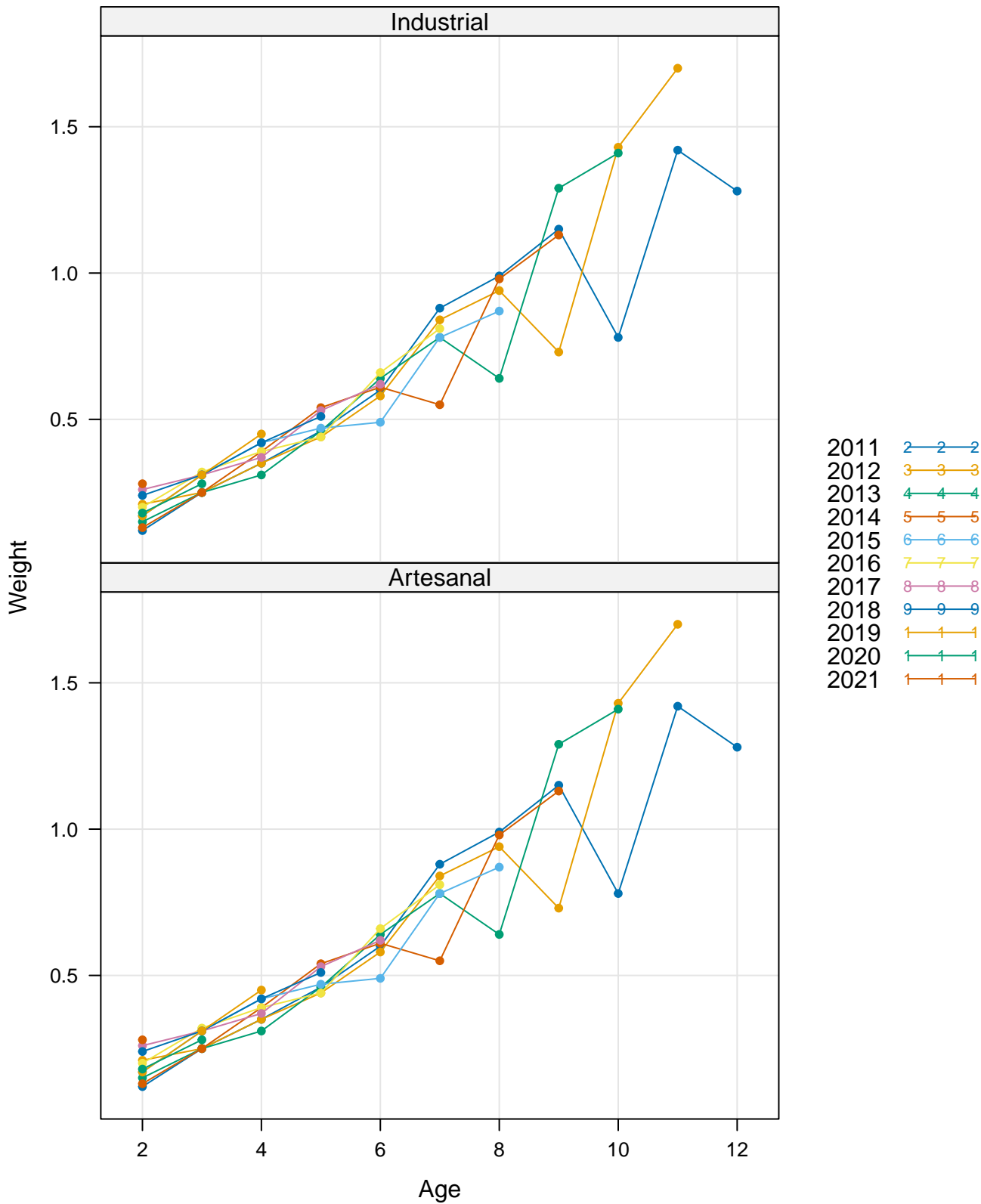
Weight at age in the fishery



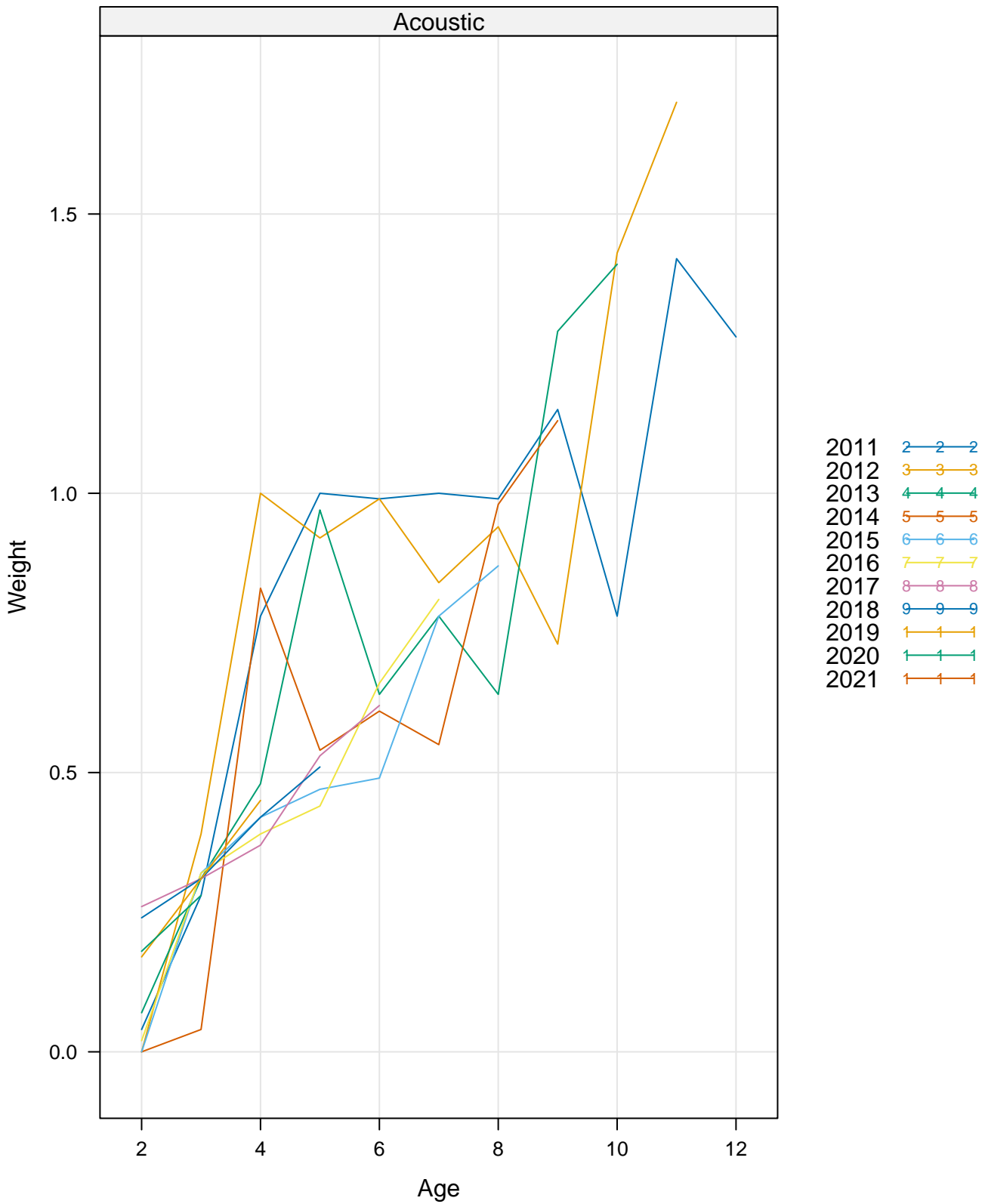
Weight at age in the survey



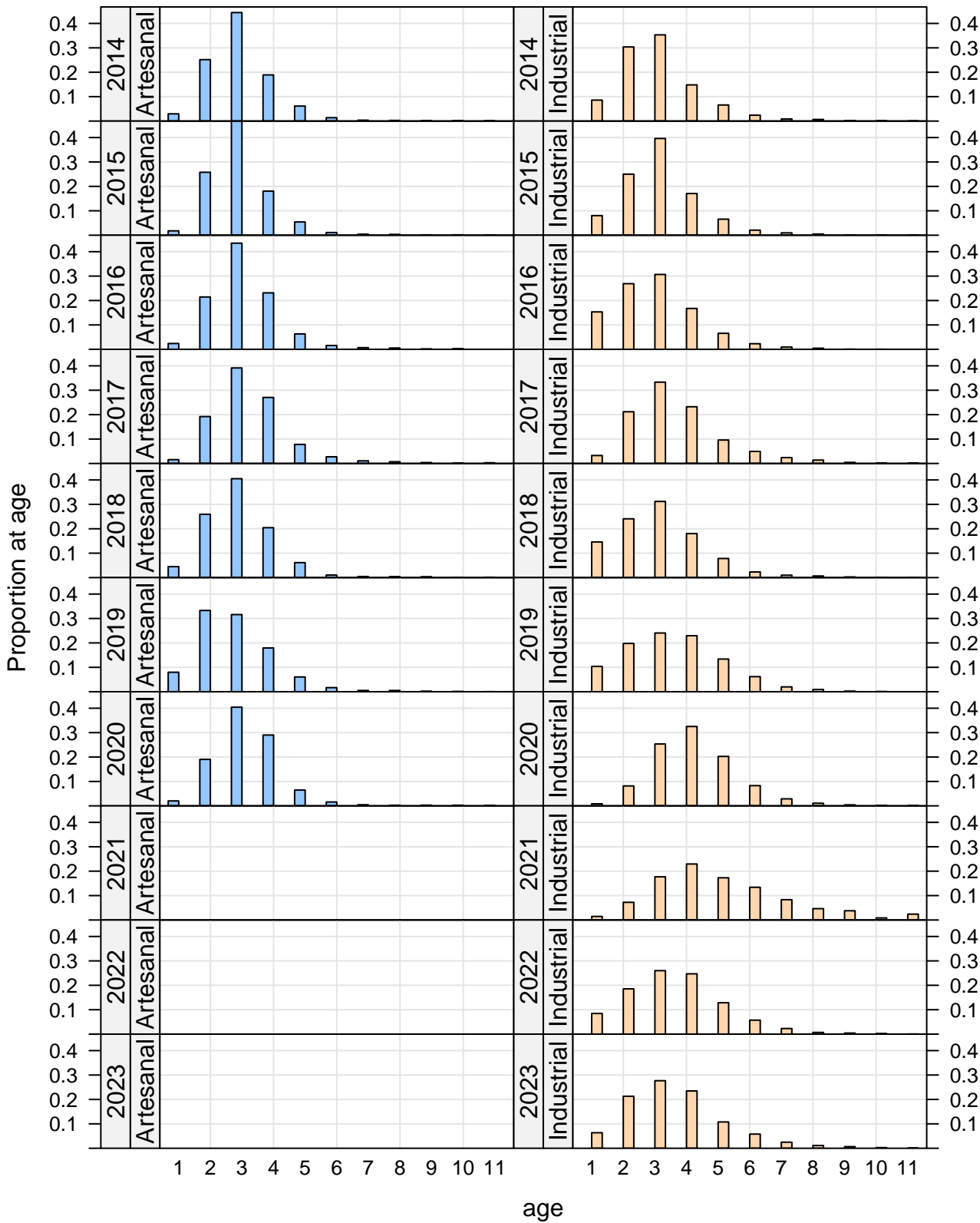
Weight at age by cohort in the fleet



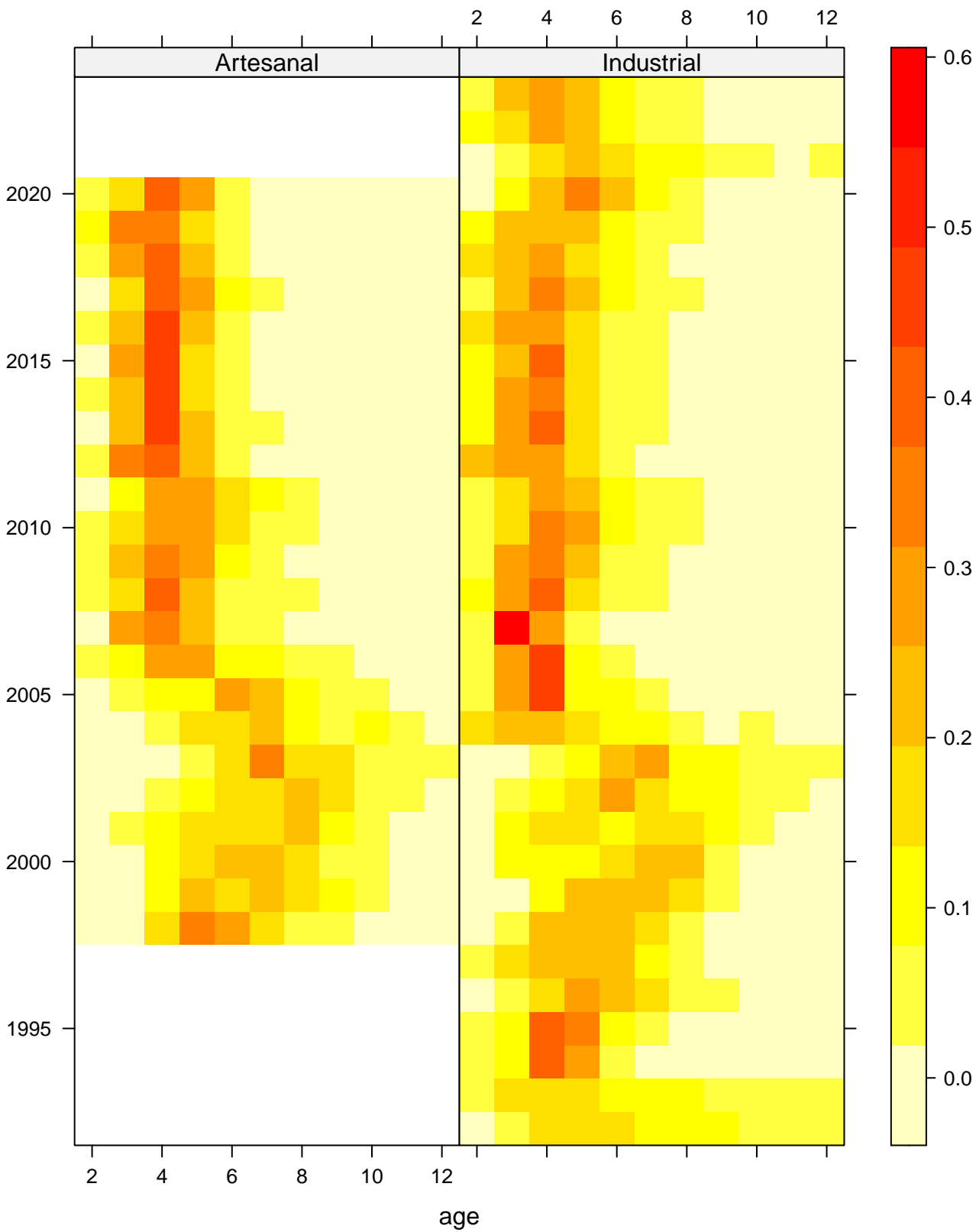
Weight at age by cohort in the survey



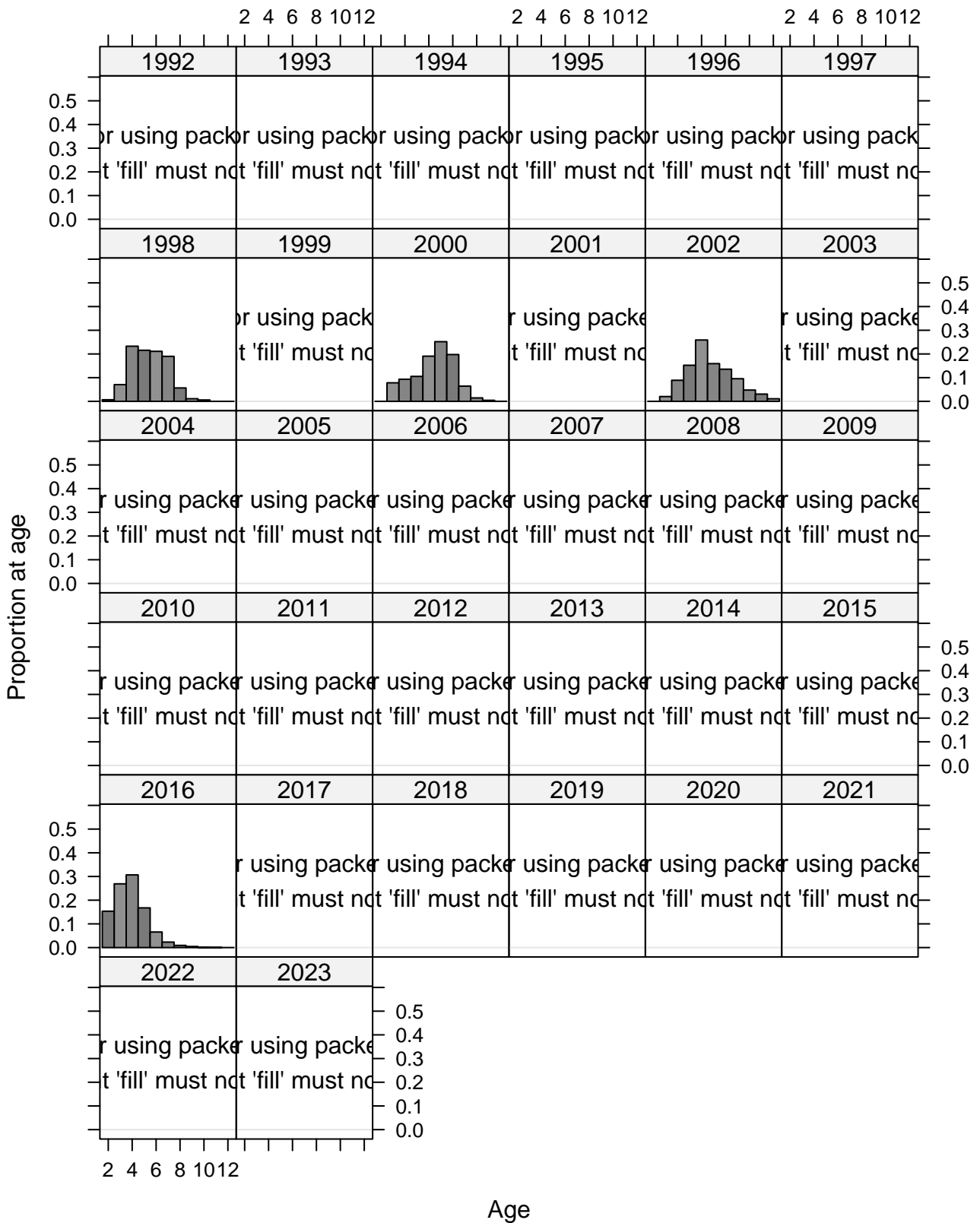
Age composition in fleets



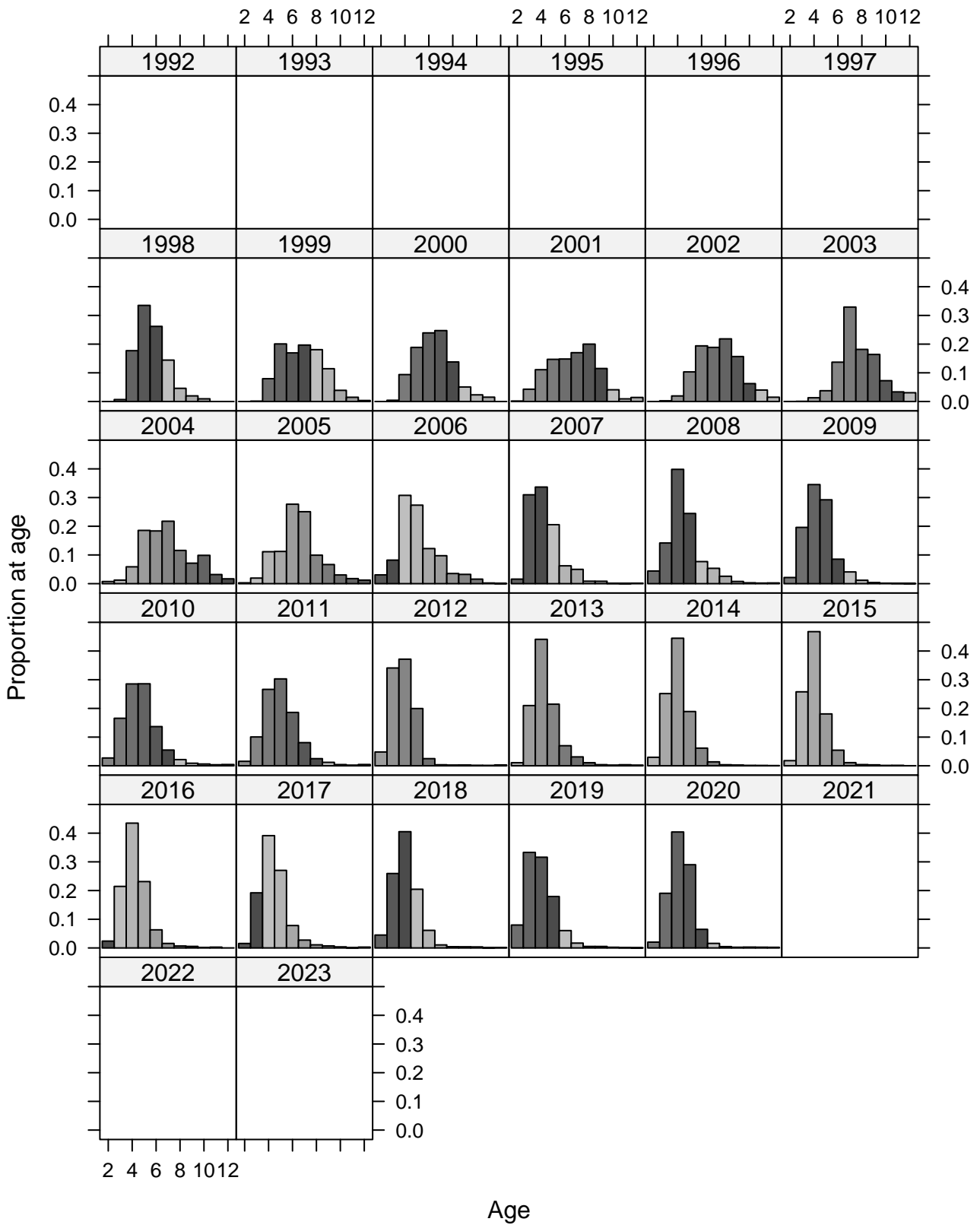
Age composition in fleets



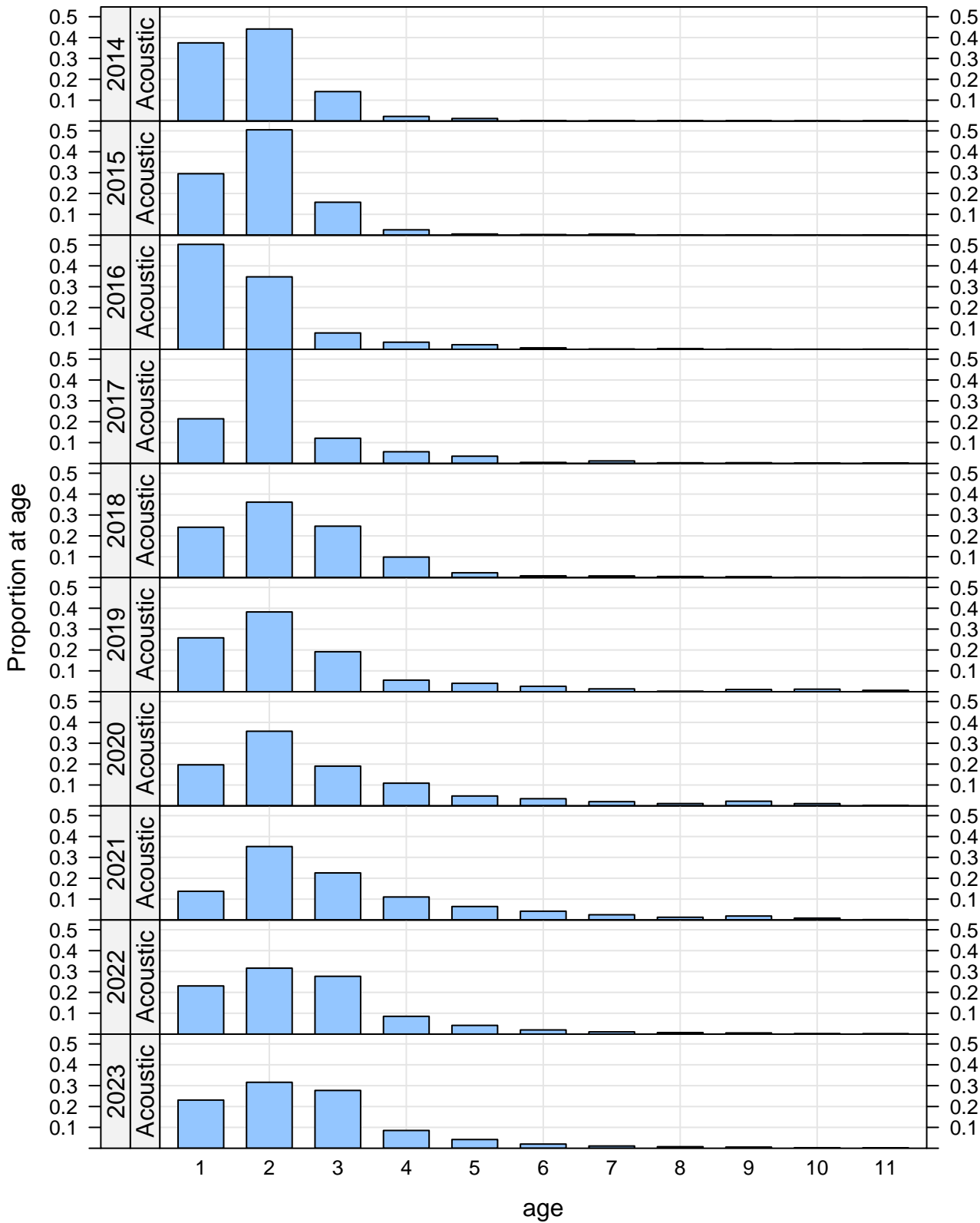
Age composition in fleets Industrial



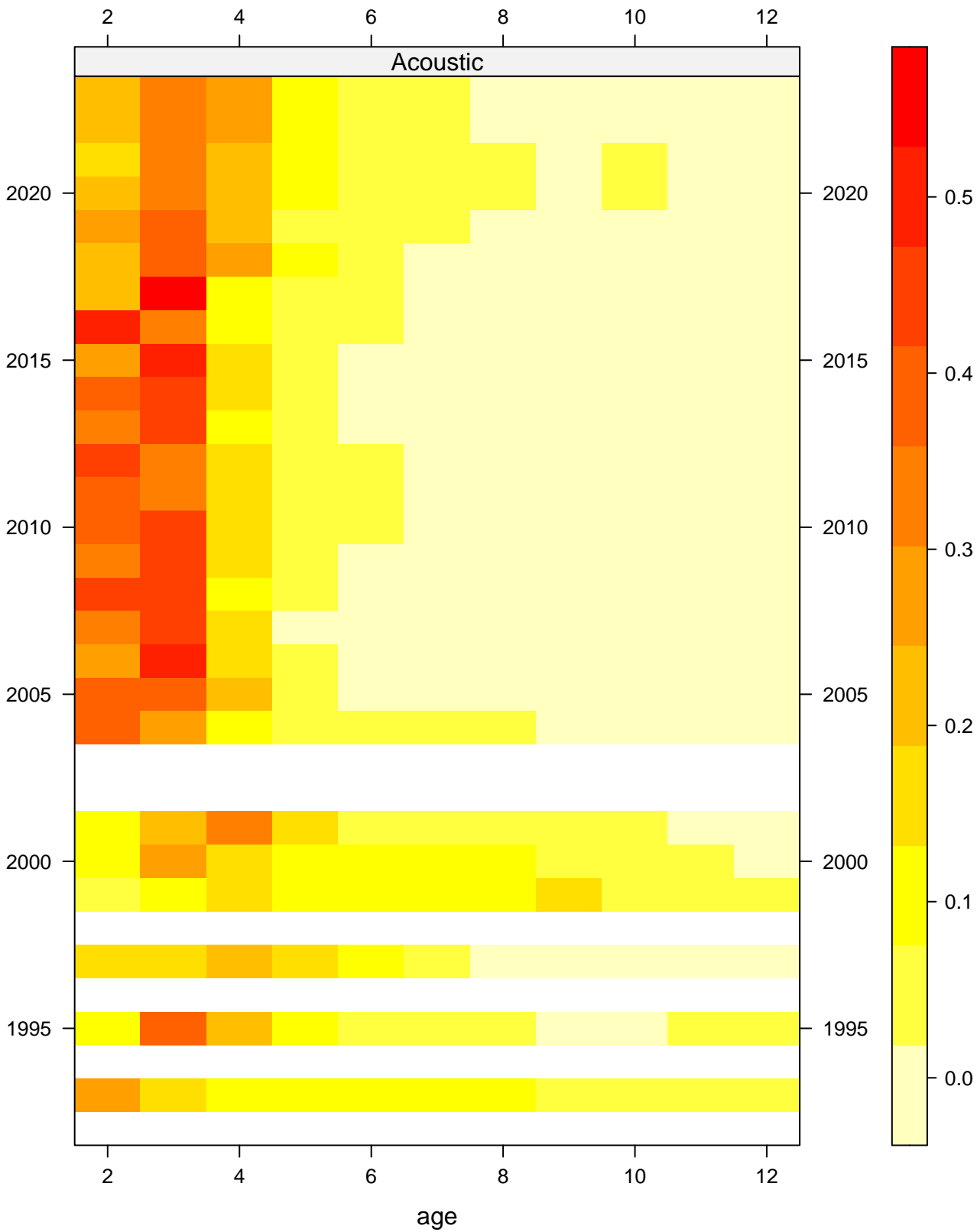
Age composition in fleets Artesanal



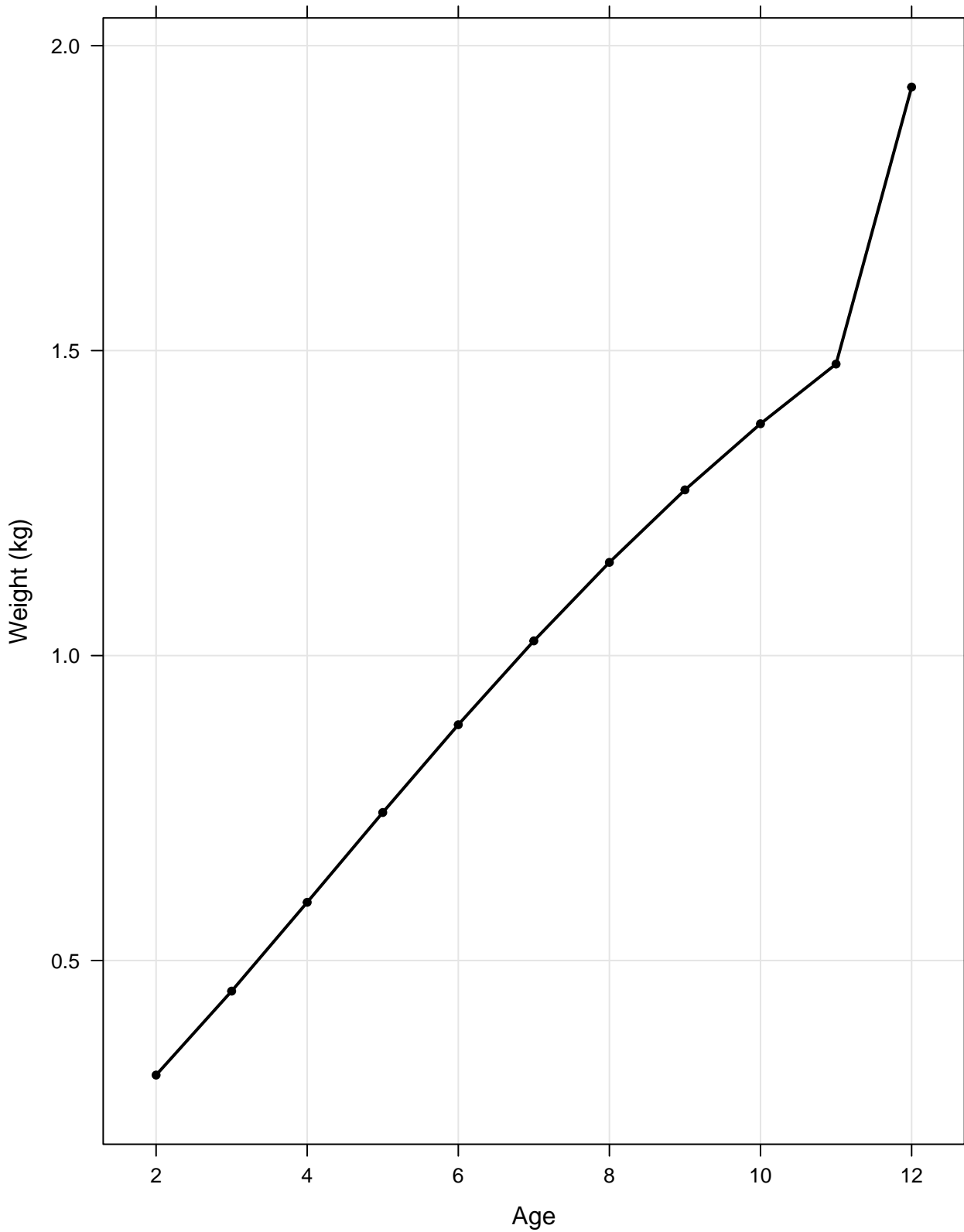
Age composition in surveys



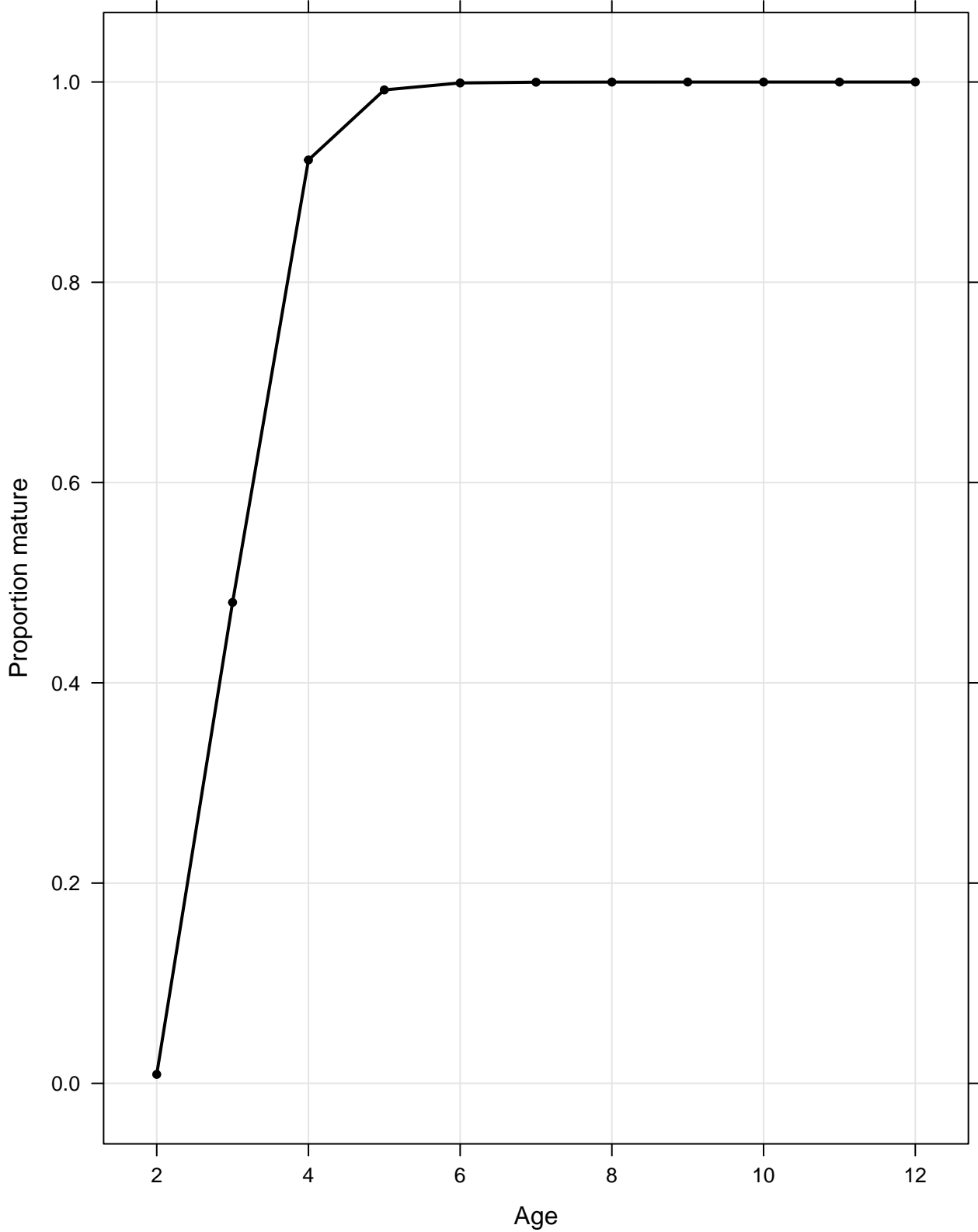
Age composition in surveys



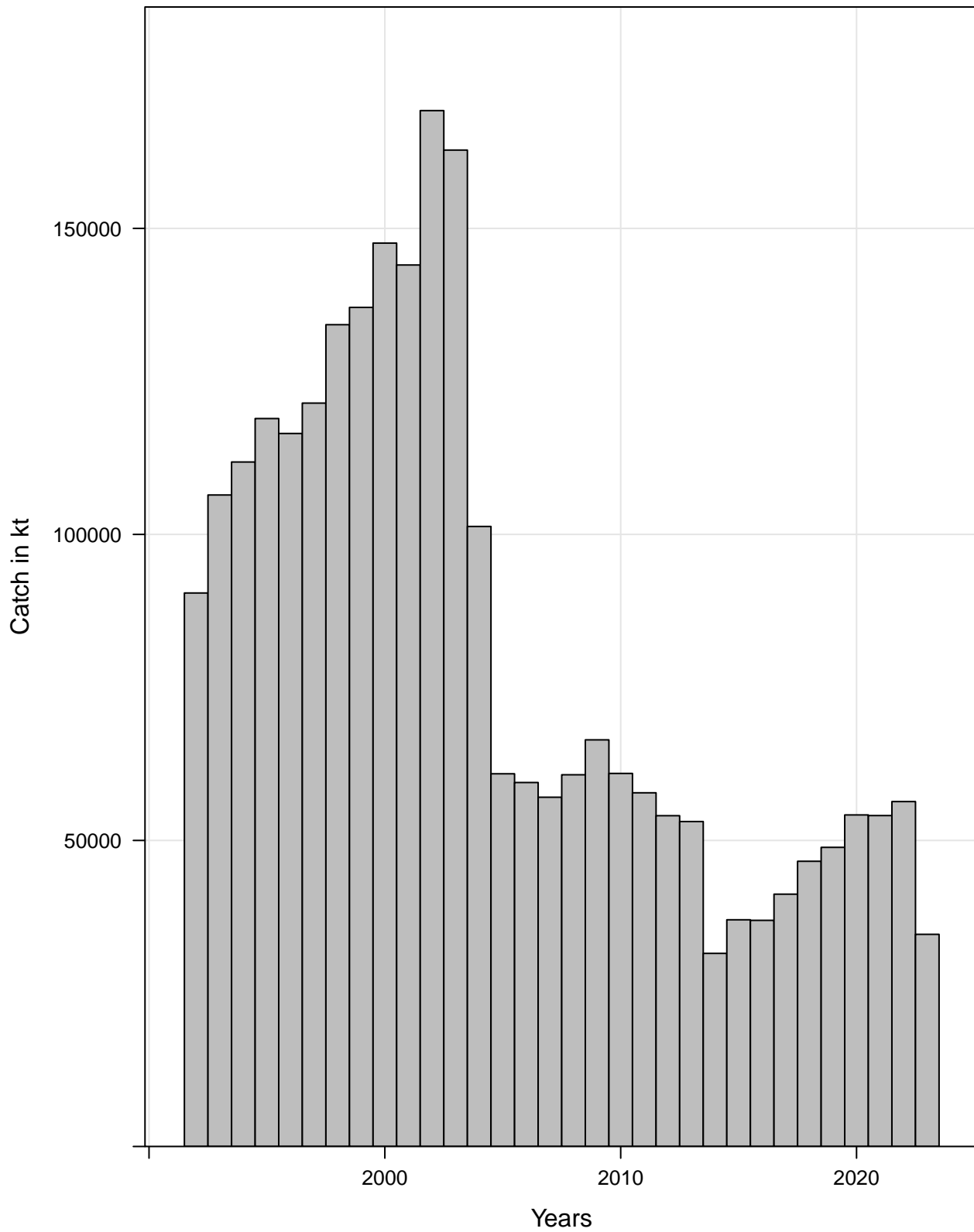
Weight in the stock



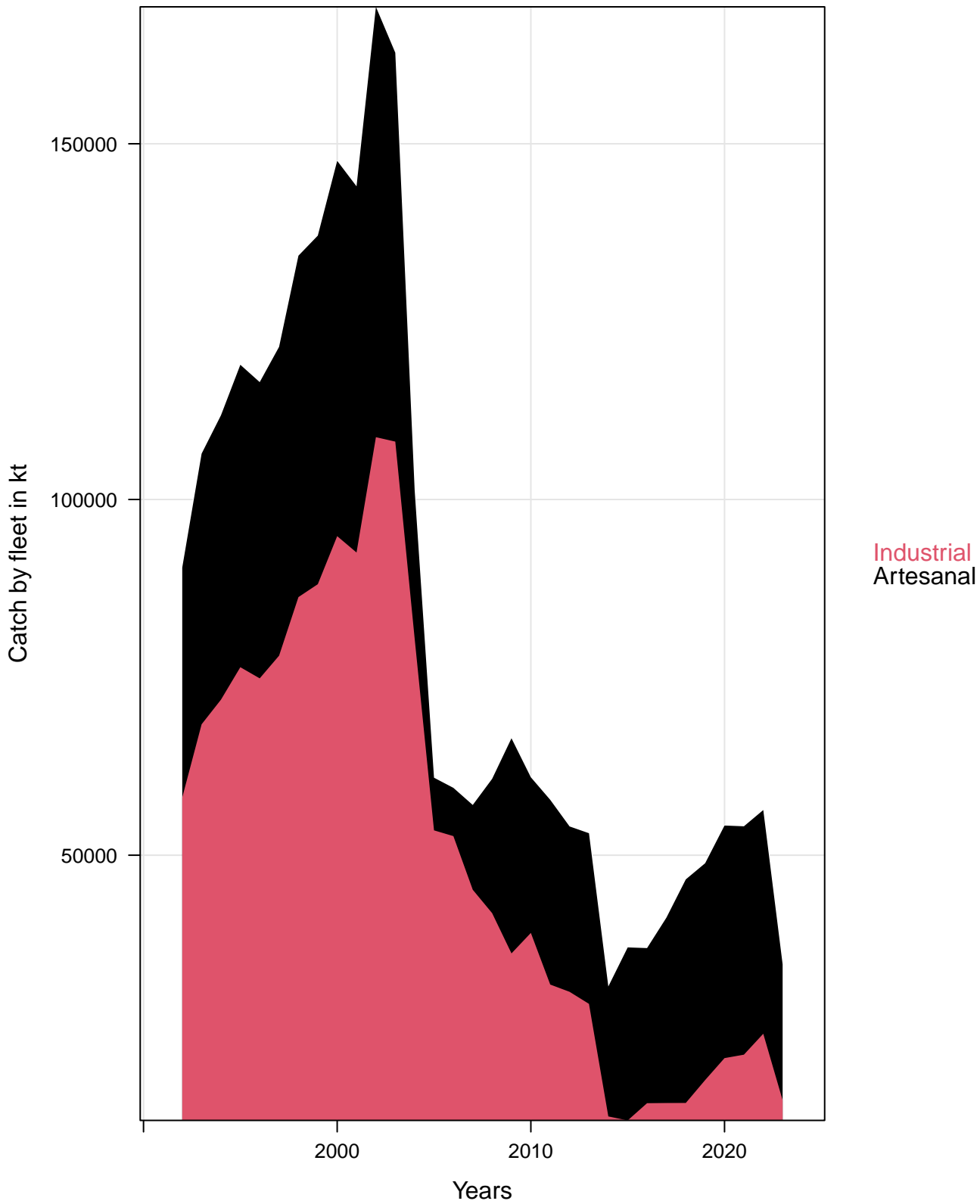
Maturity in the stock



Total catch



Total catch by fleet



Catch residuals by fleet

-0.28

-0.17

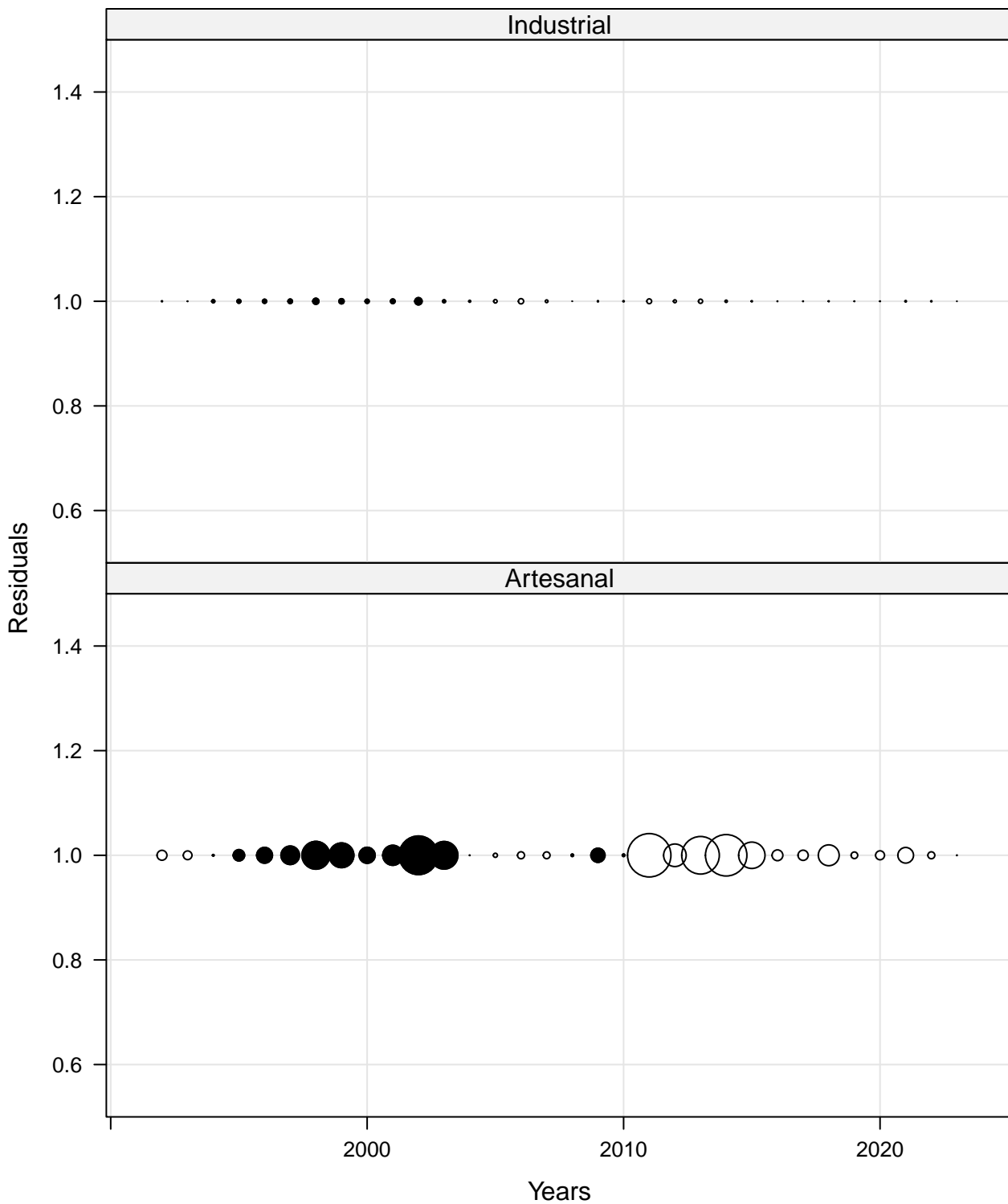
-0.07

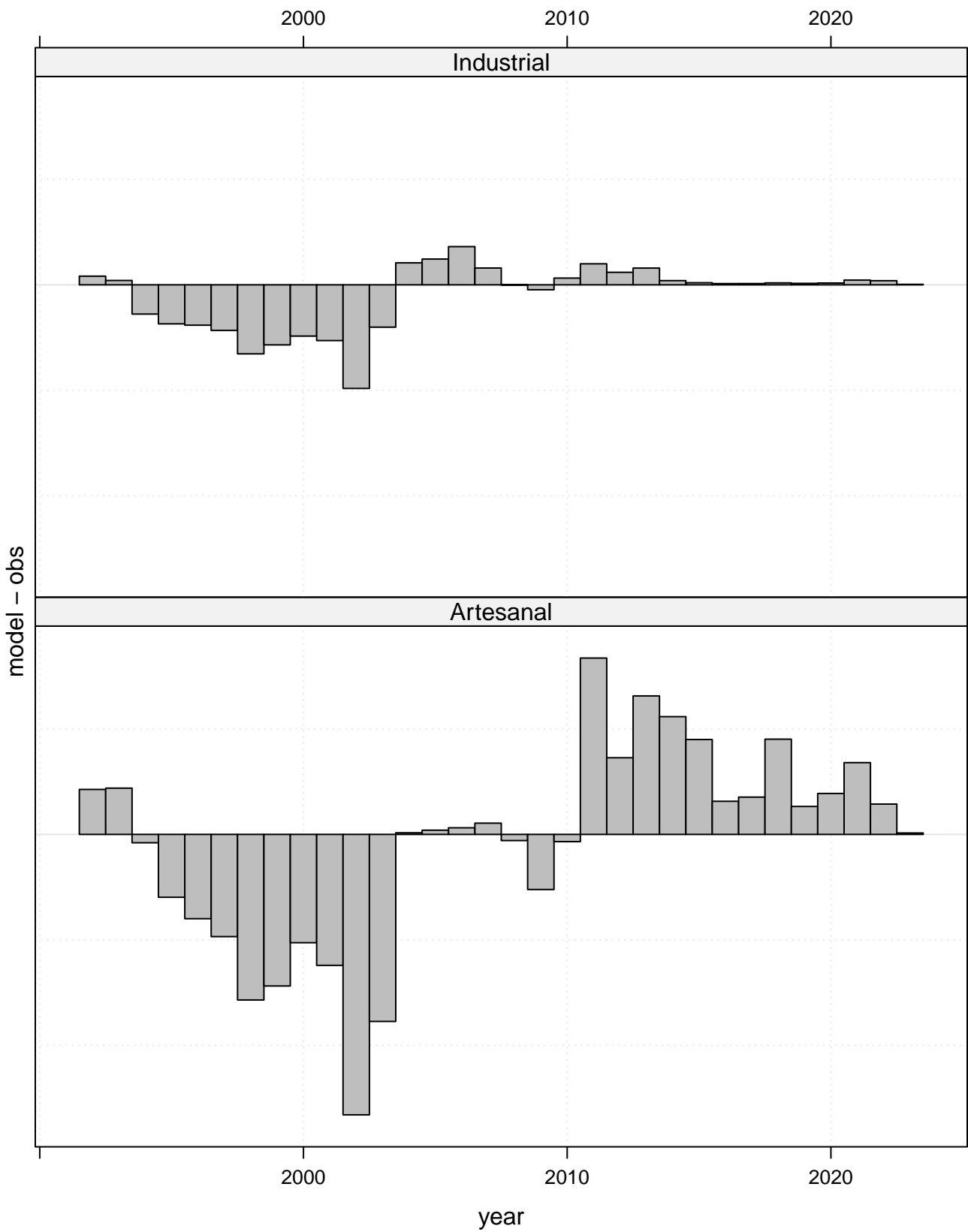


0.04

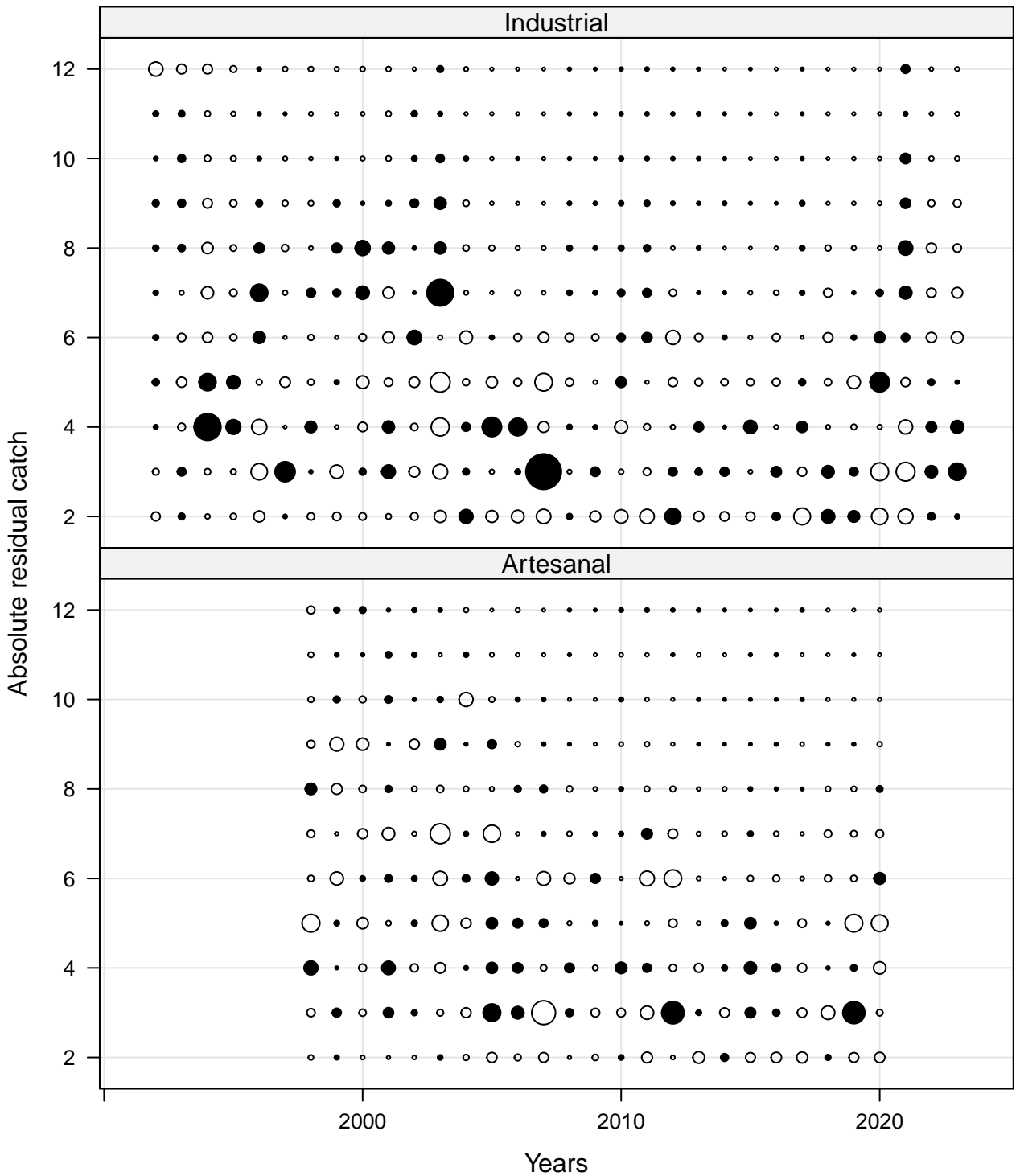
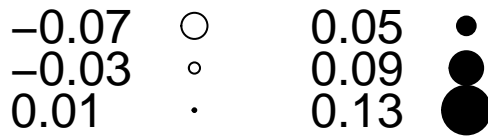
0.14

0.25





Absolute residual catch by fleet

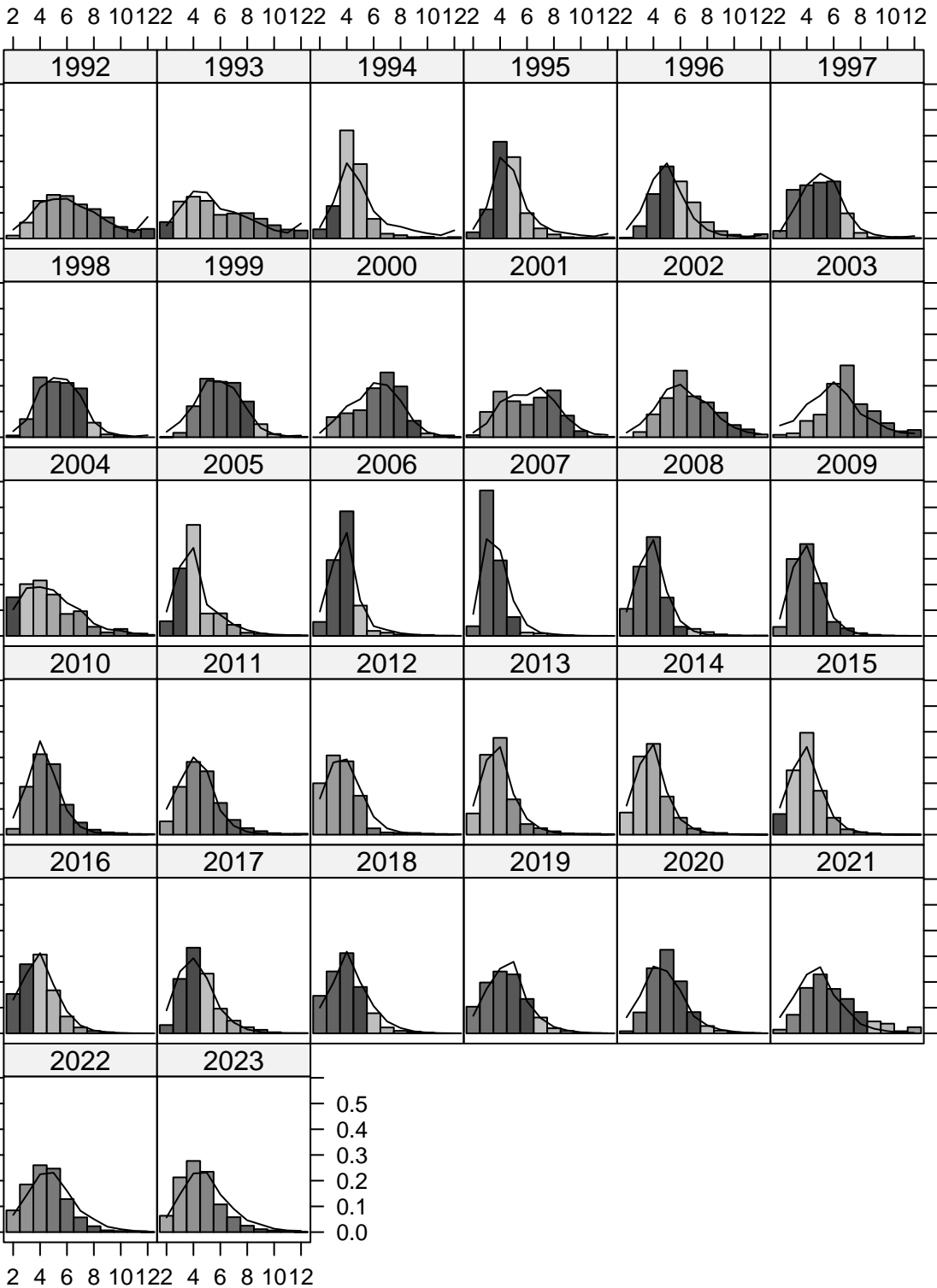


Age fits Industrial

Observed



Predicted ●



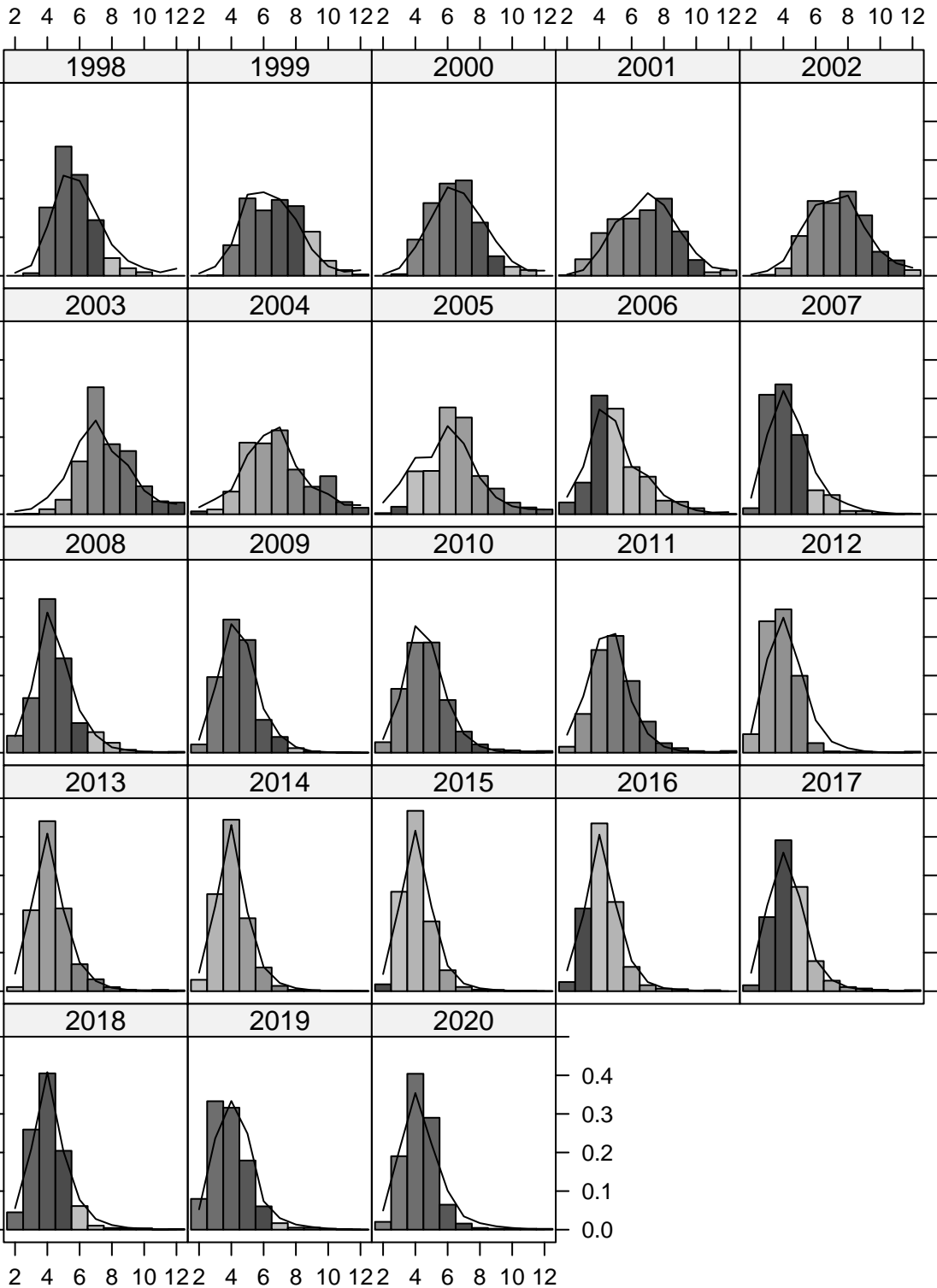
Age

Age fits Artesanal

Observed



Predicted •



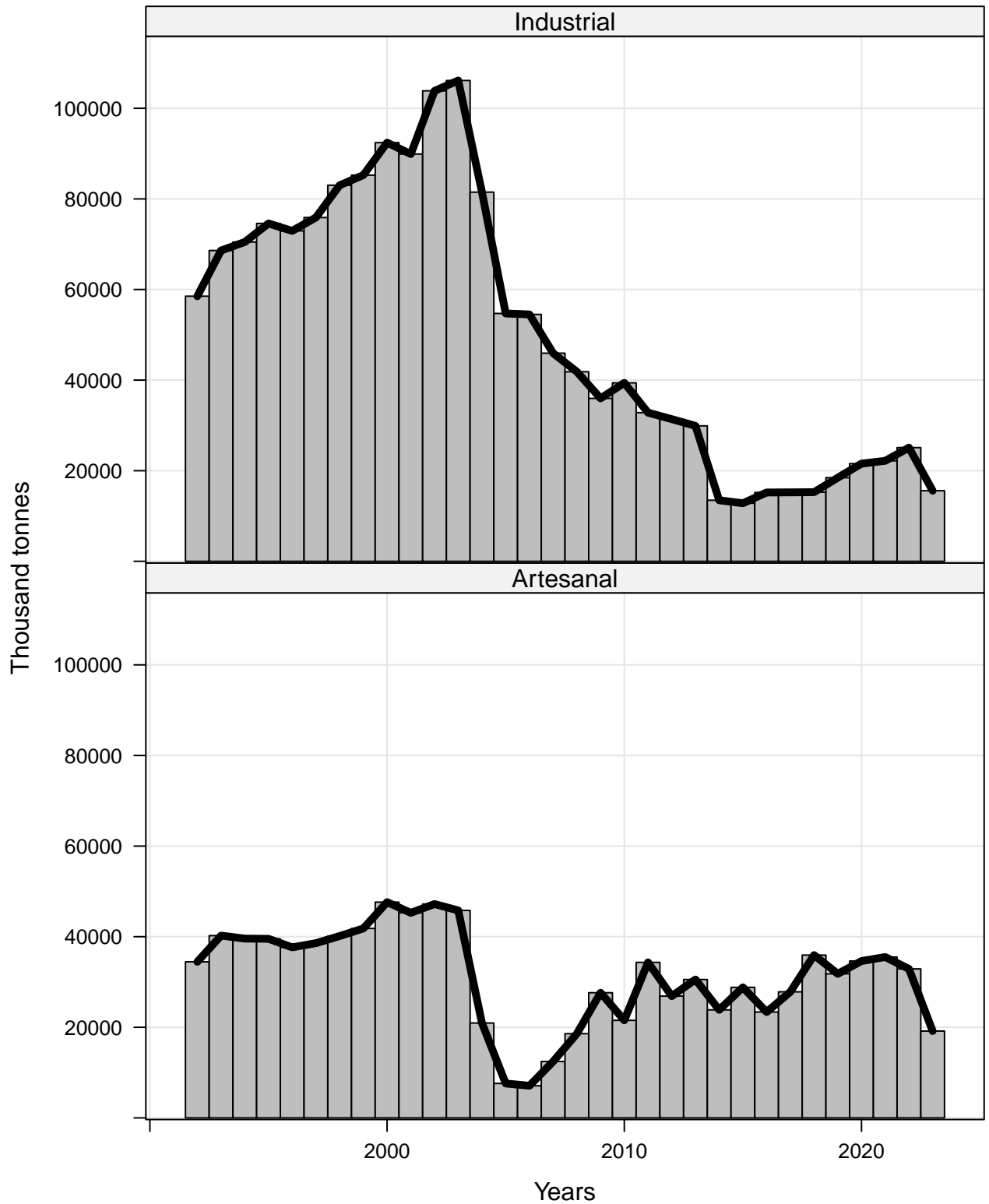
Age

Predicted and observed catches by fleet

Observed

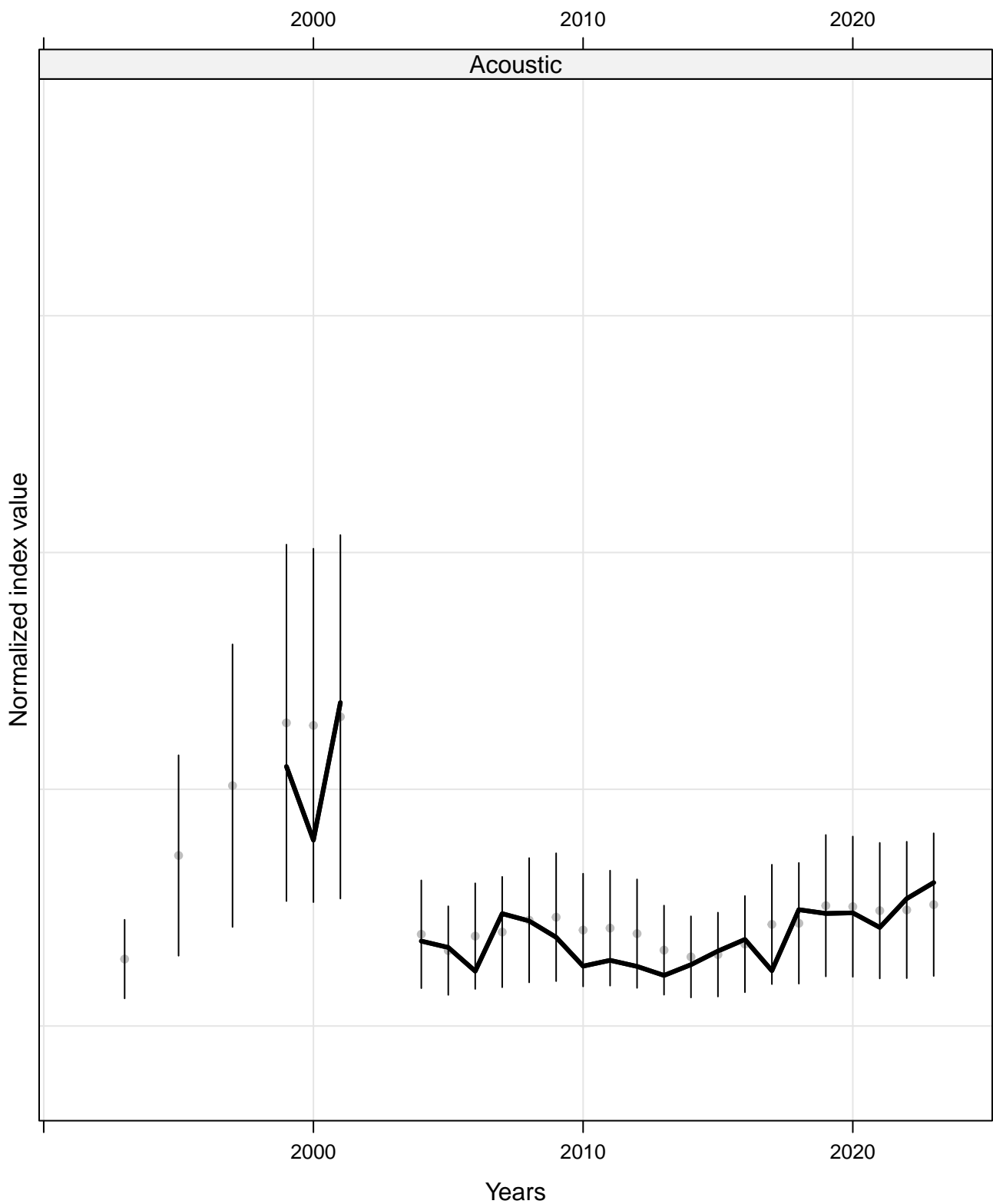


Predicted



Predicted and observed indices

Observed Predicted



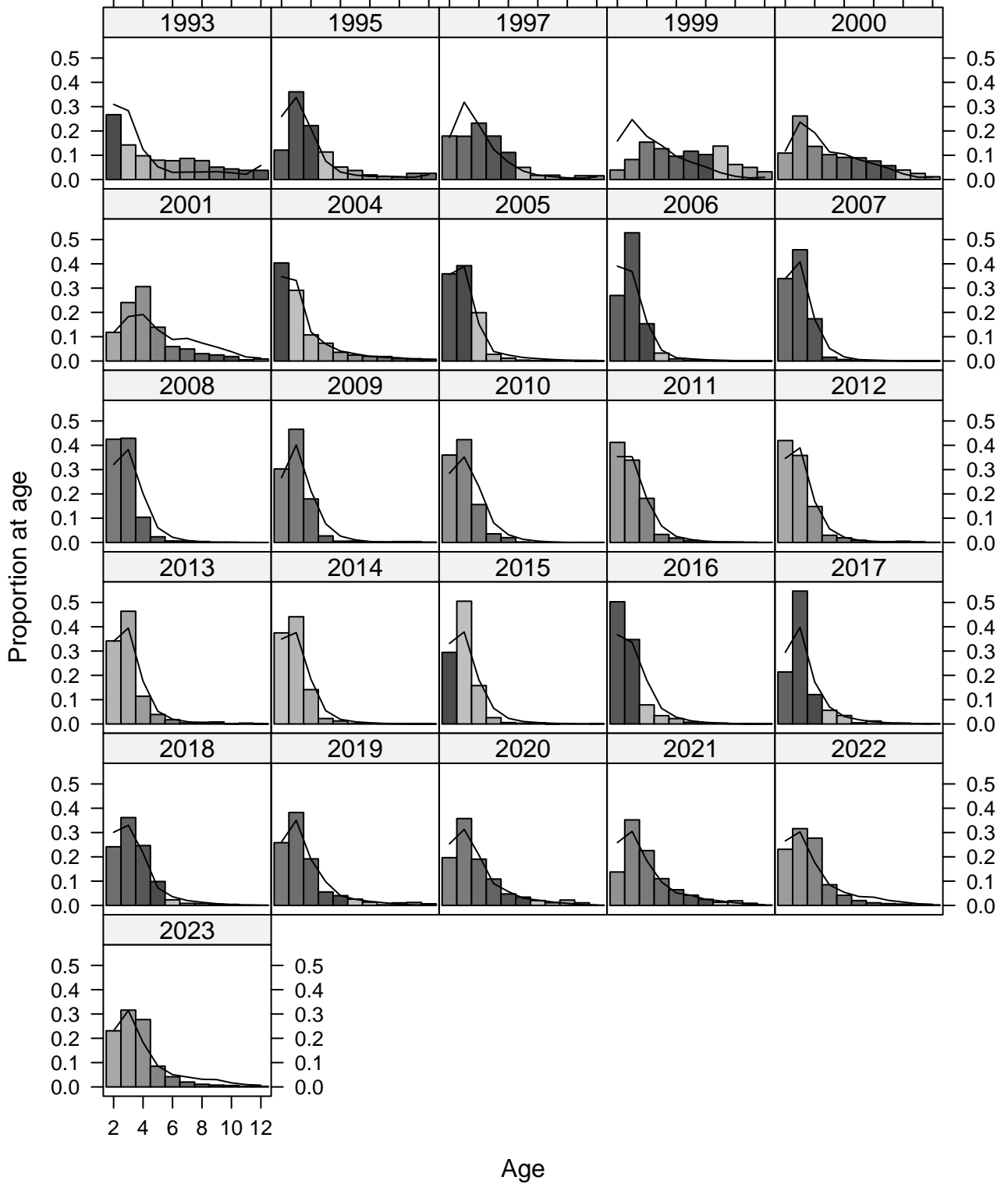
Age fits Acoustic

Observed



Predicted ●

2 4 6 8 10 12 2 4 6 8 10 12 2 4 6 8 10 12 2 4 6 8 10 12 2 4 6 8 10 12



Standardized survey residuals

-5.96

-4.36

-2.75



-1.14

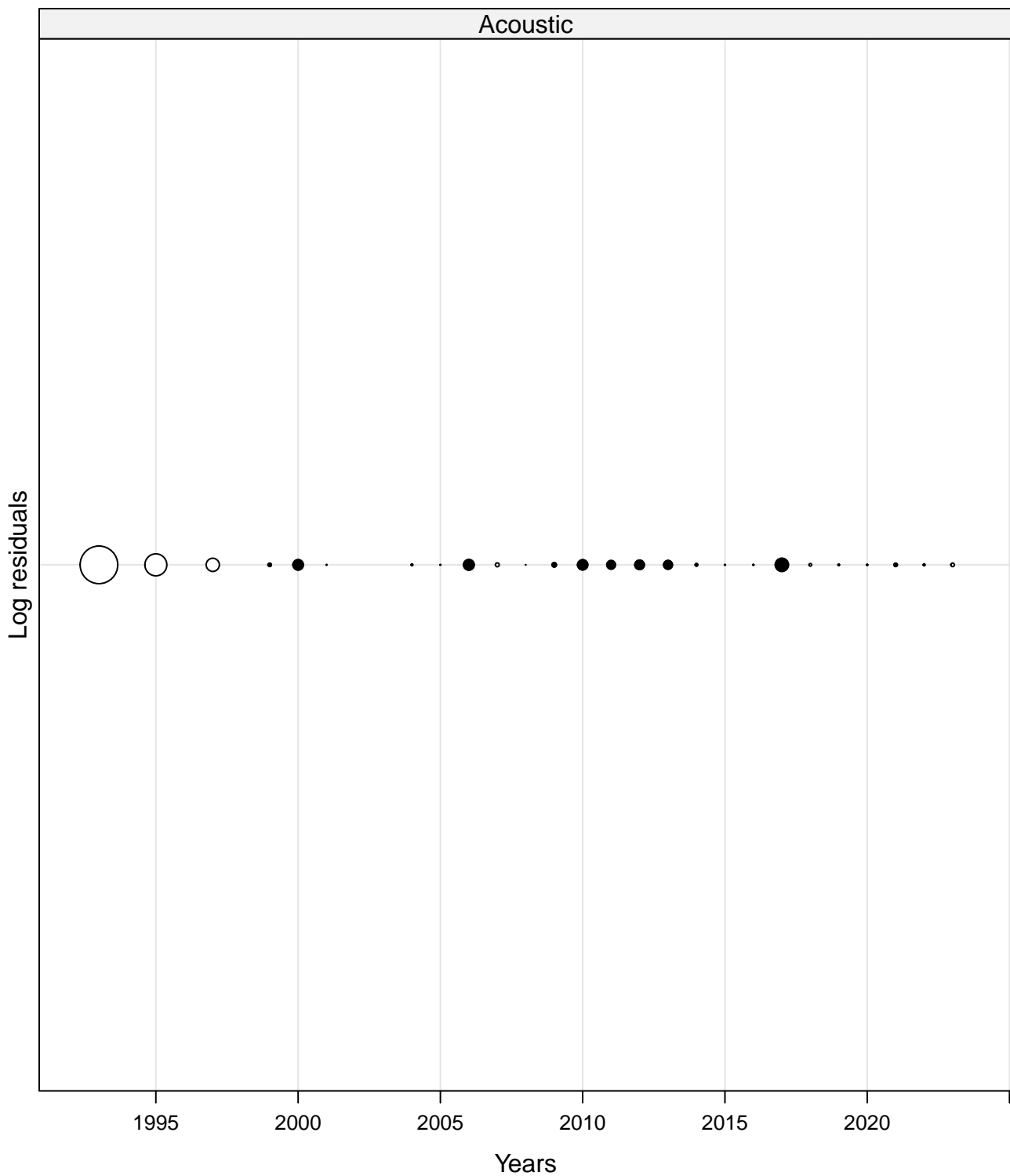
0.46

2.07

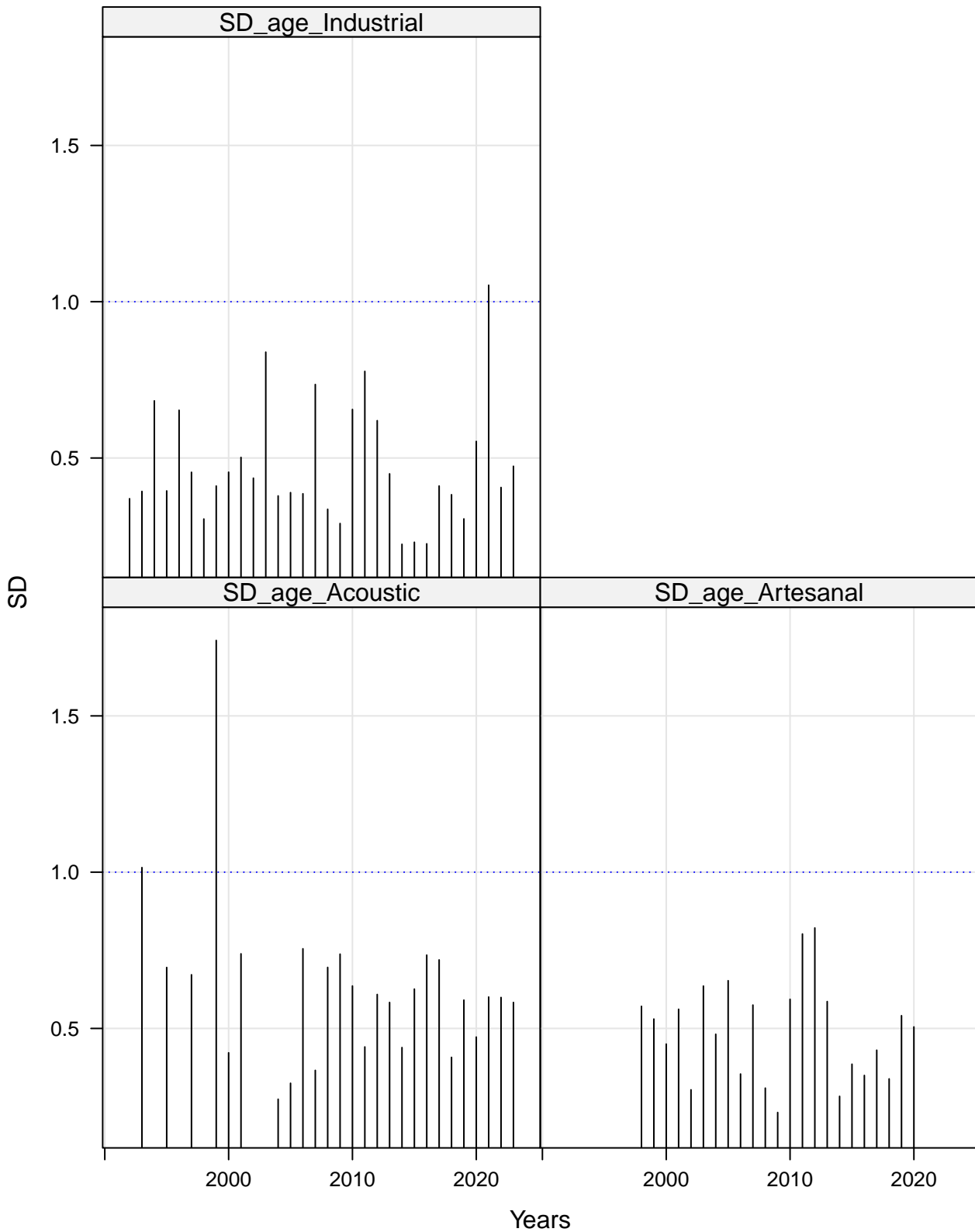
○

•

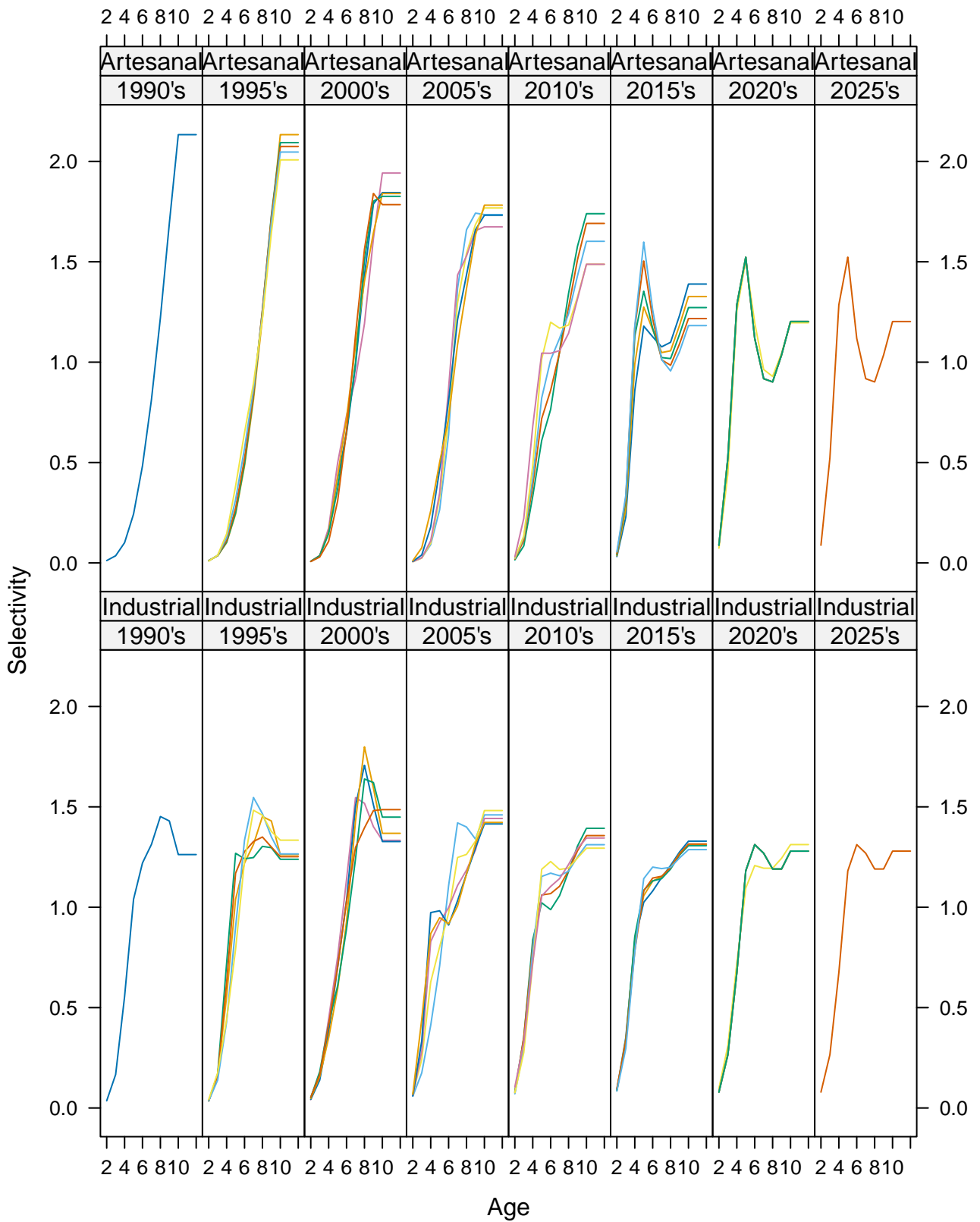
●



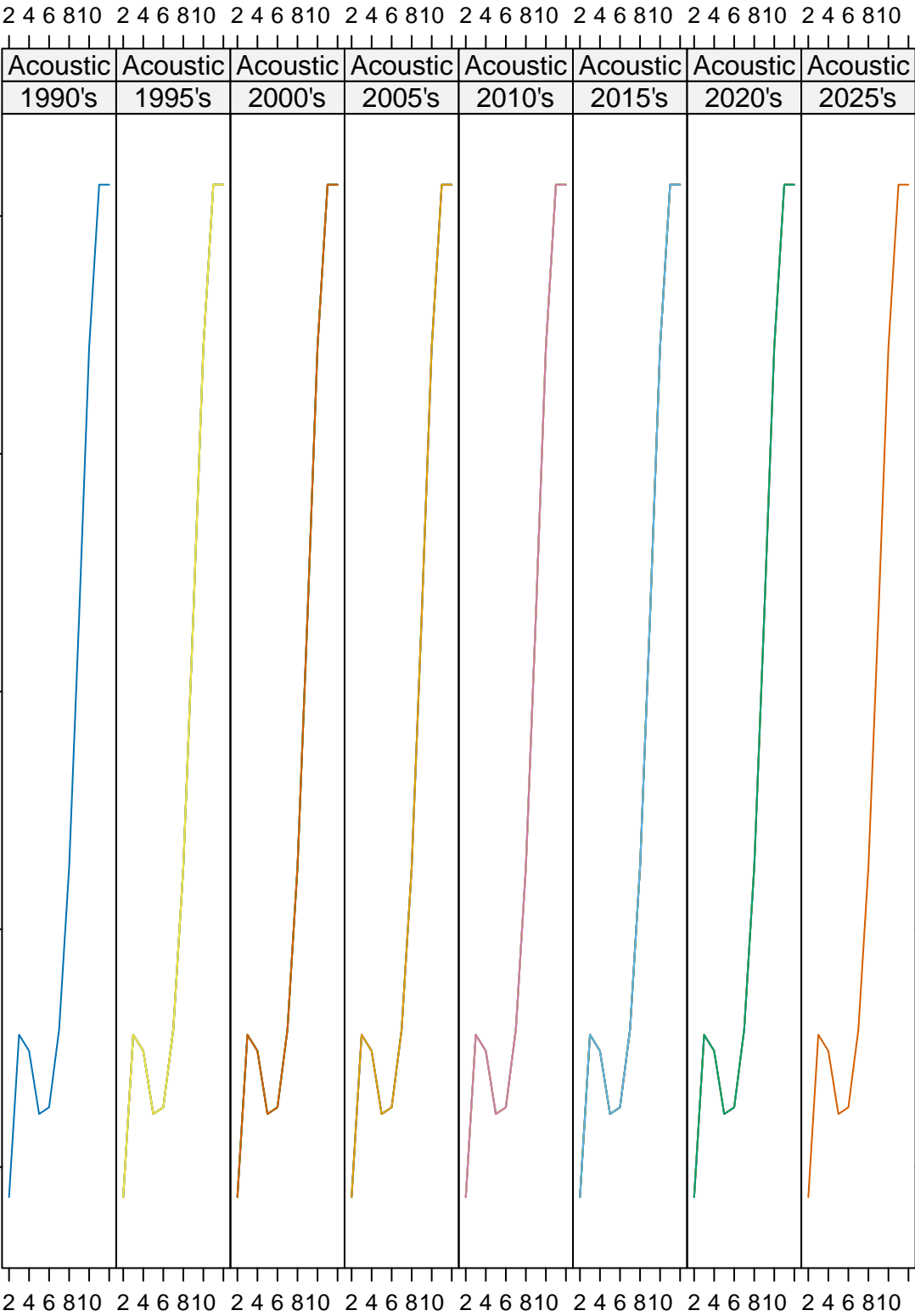
SD per input series



Selectivity of the Fishery by Pentad

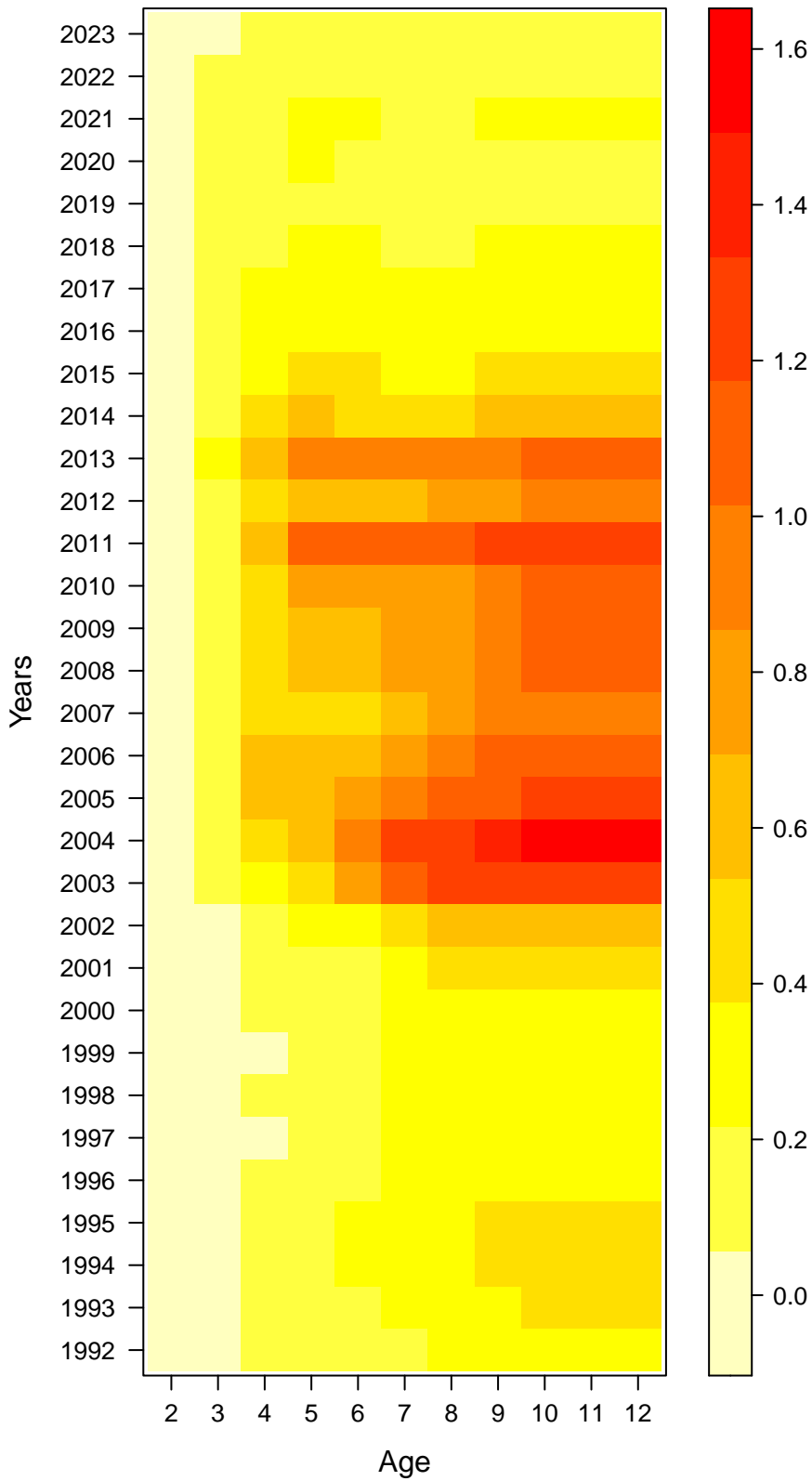


Selectivity of the survey by Pentad

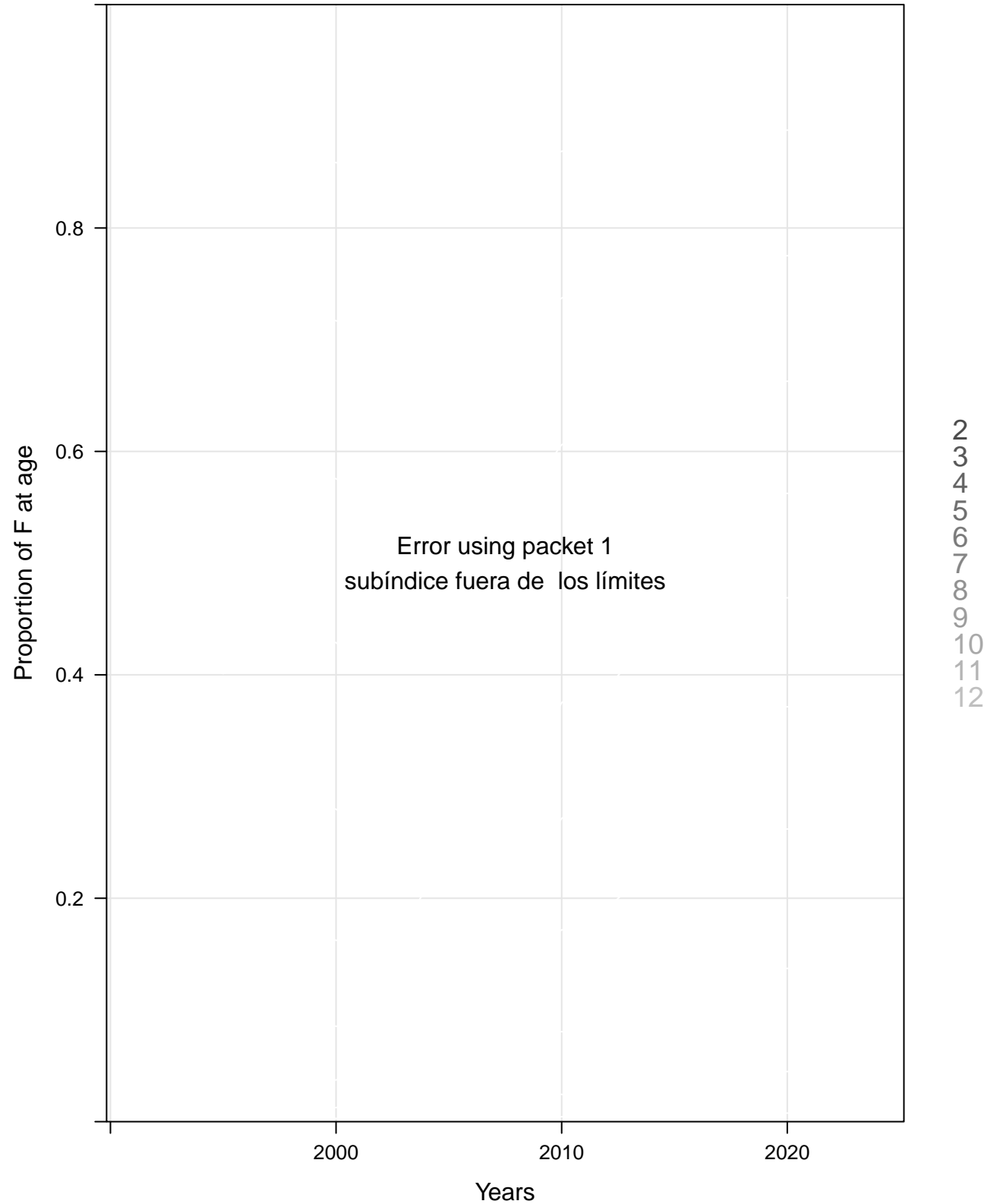


Age

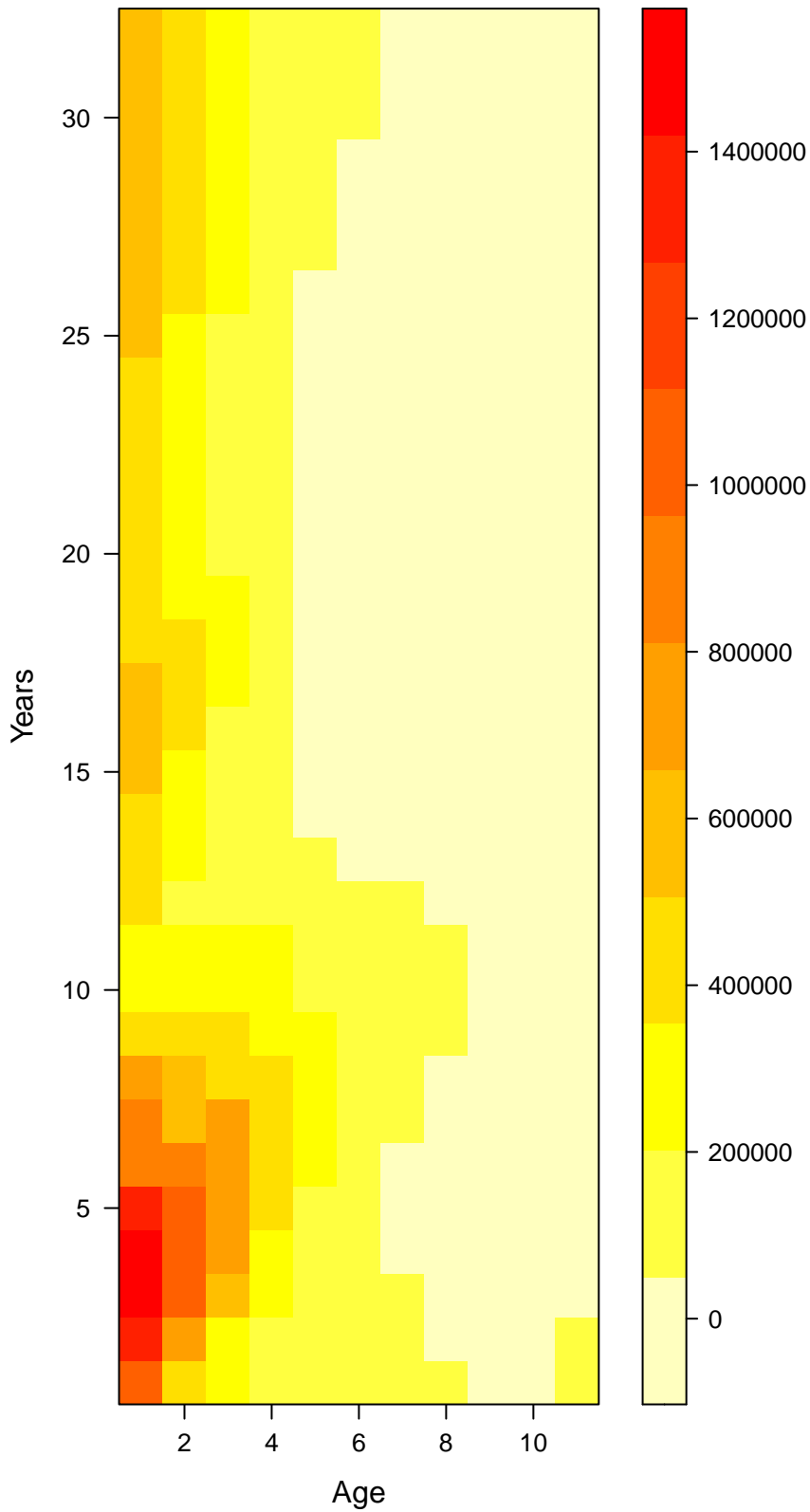
F at age



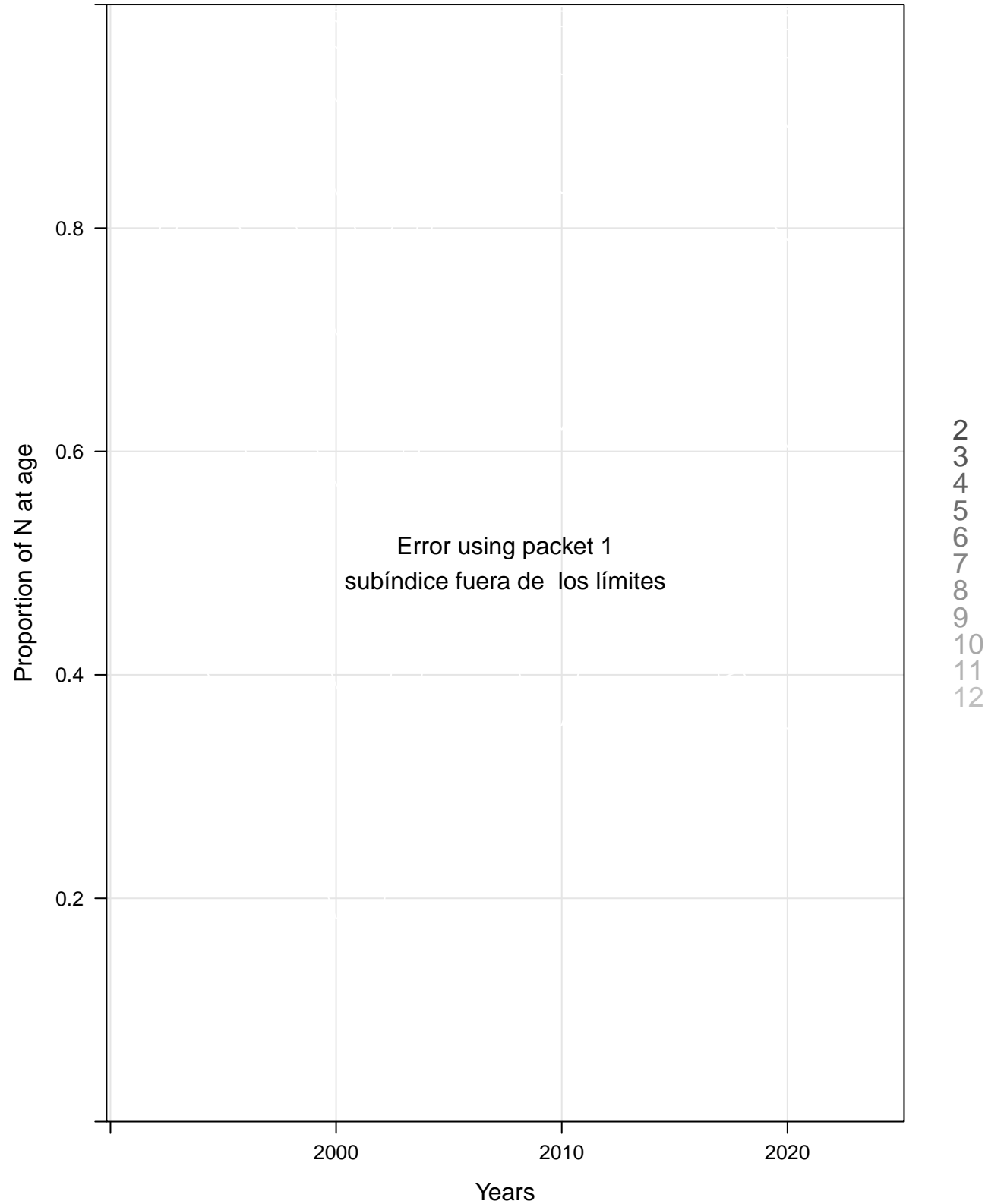
F proportion at age



N at age



Proportion at age

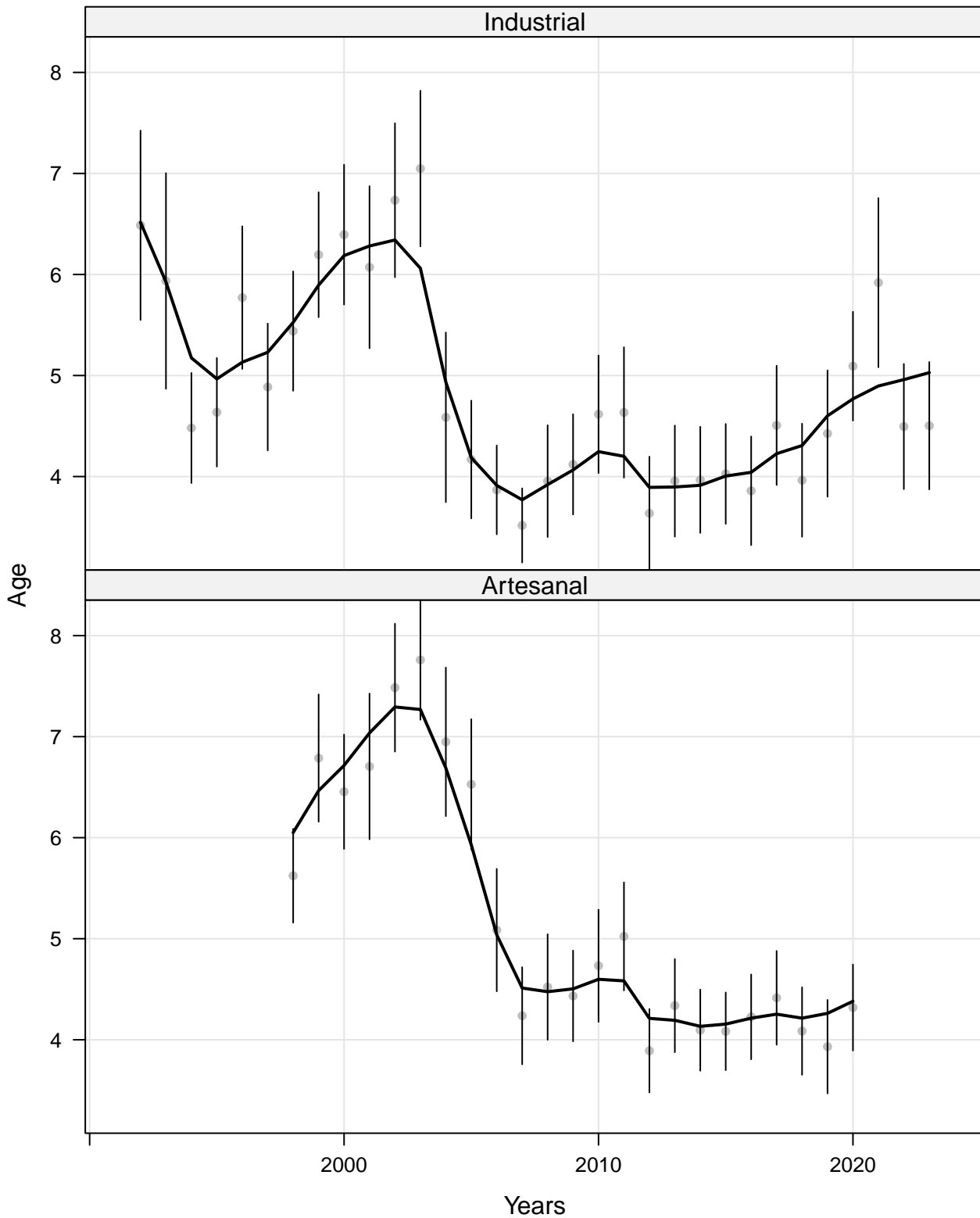


Fishery mean age

Observed



Modelled

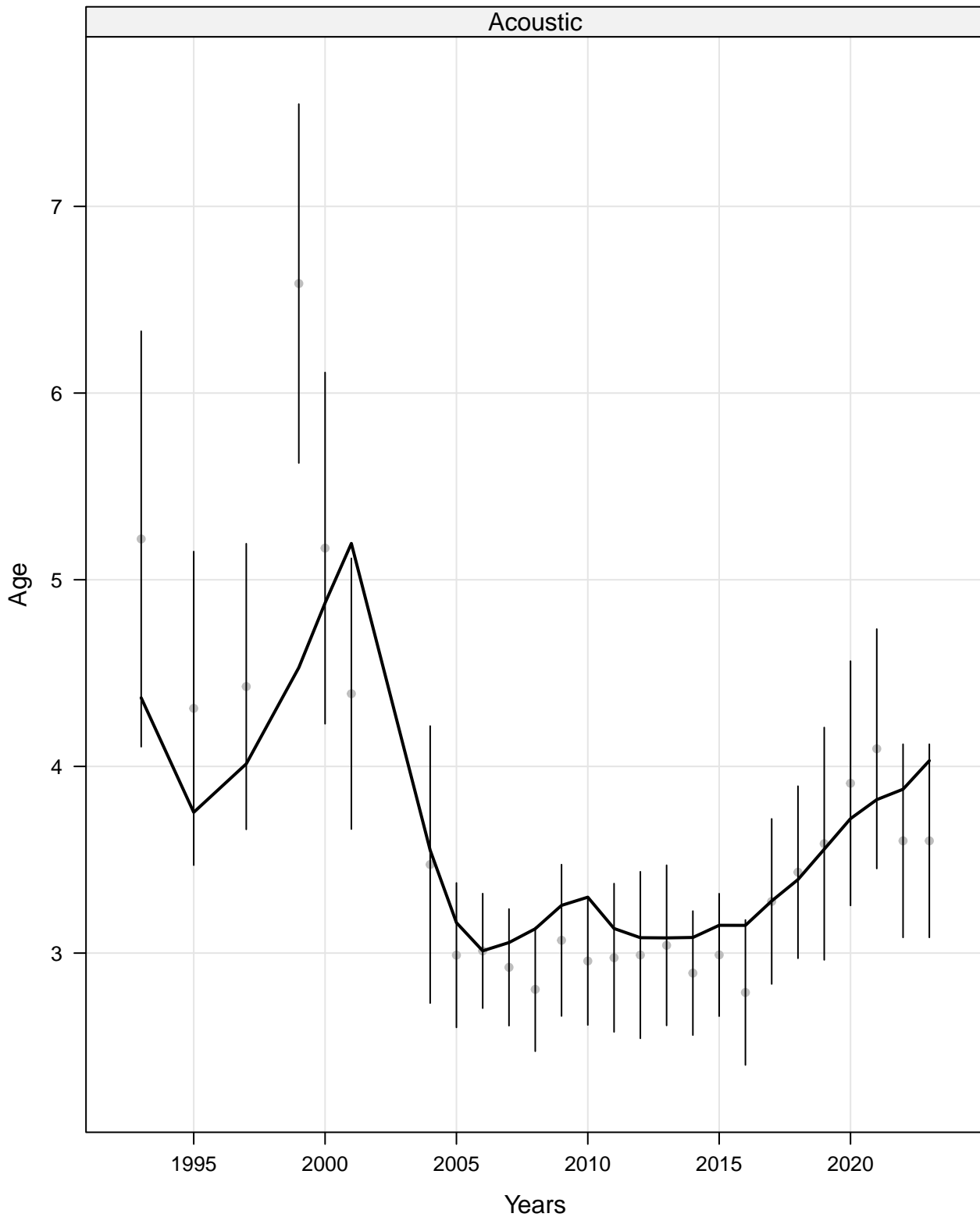


Survey mean age

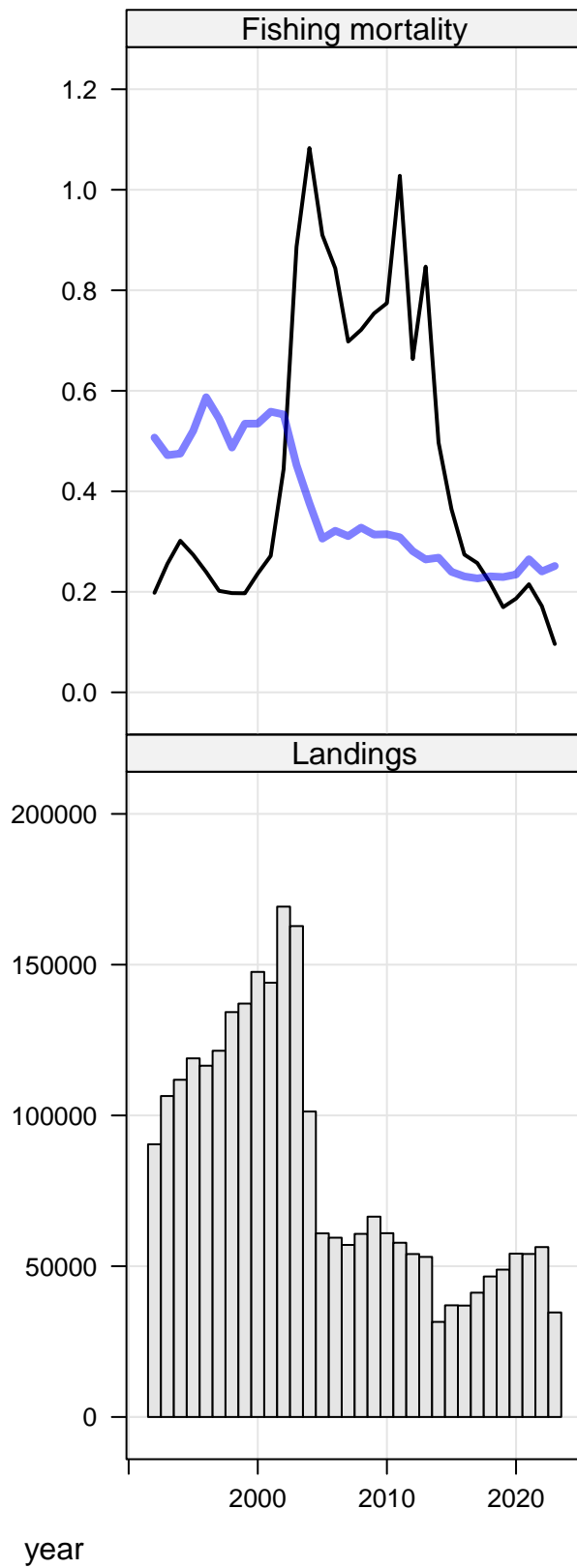
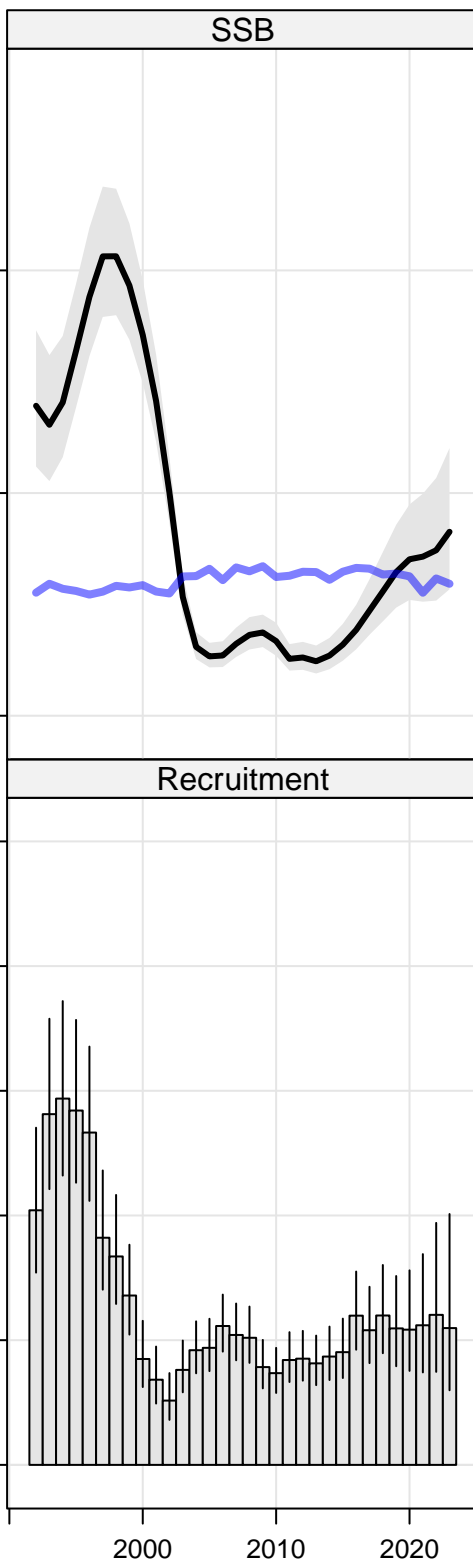
Observed



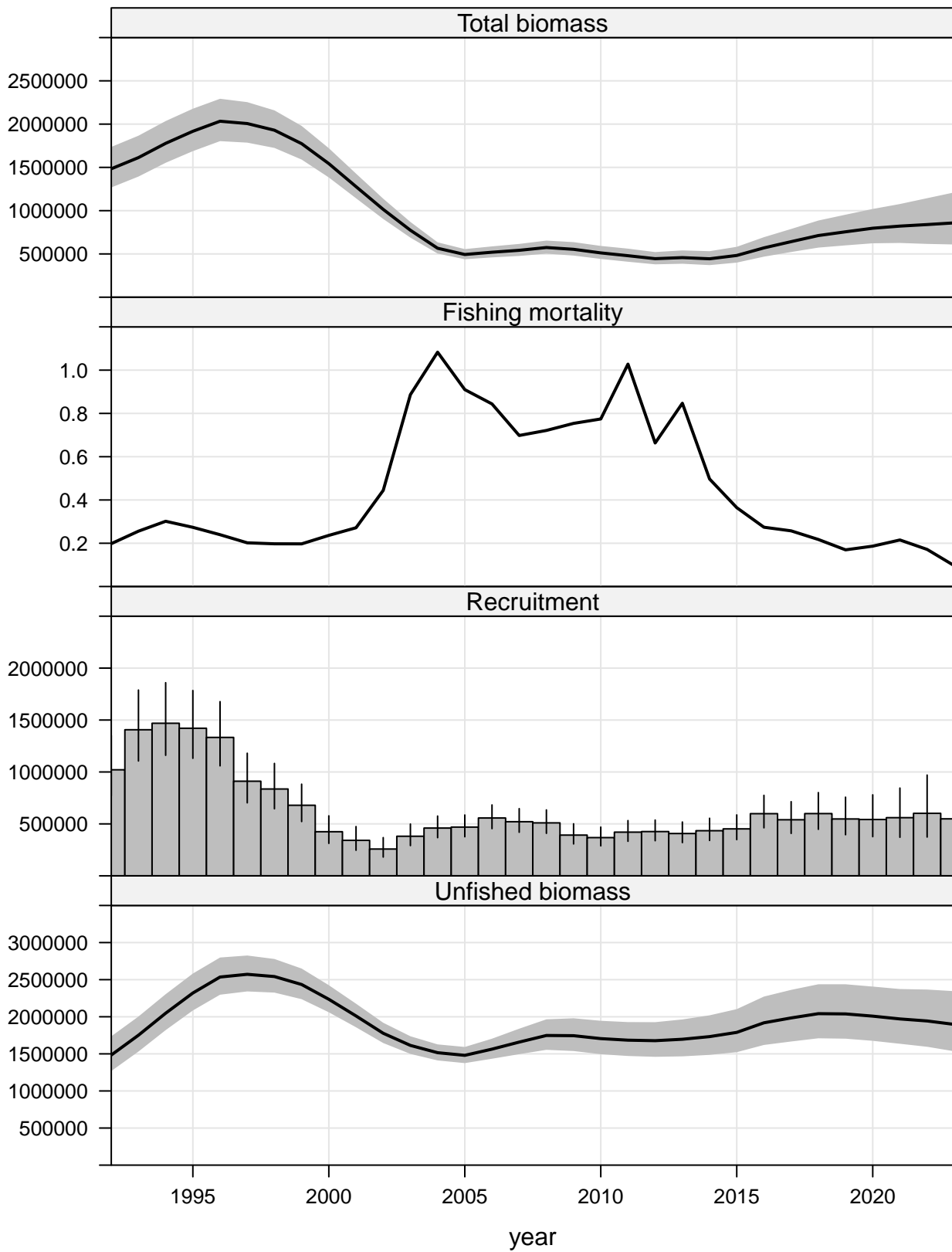
Modelled



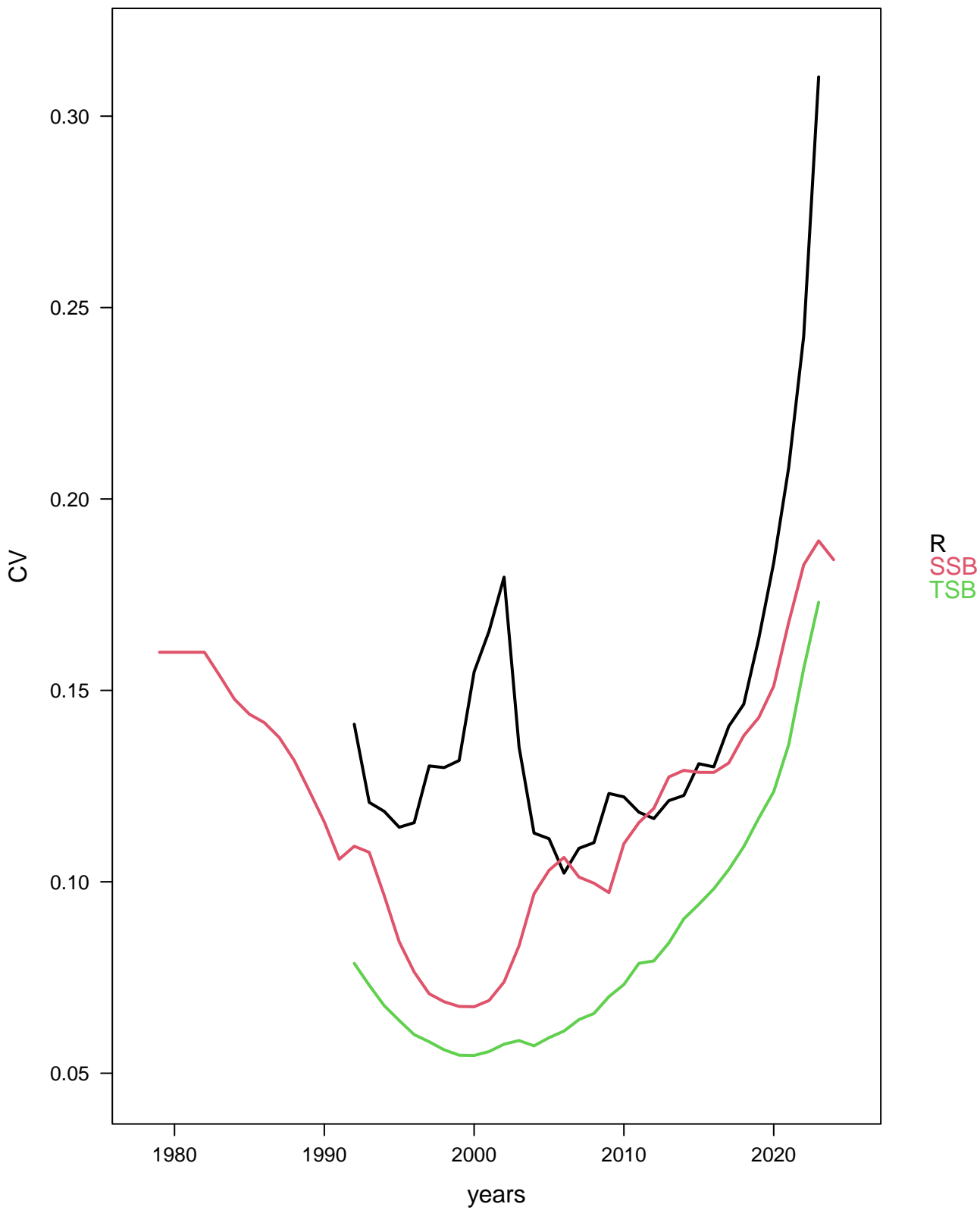
data



data



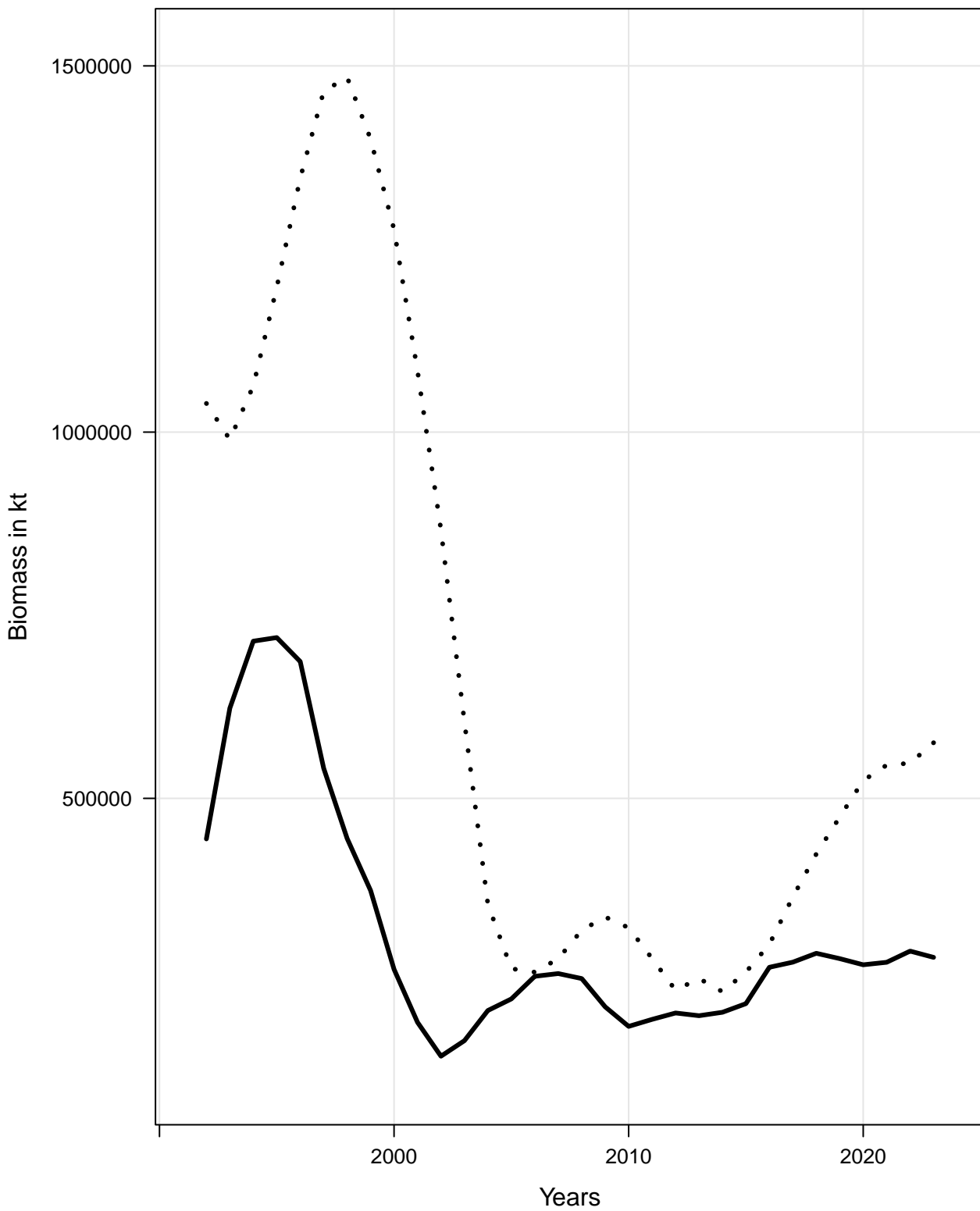
Uncertainty of key parameters



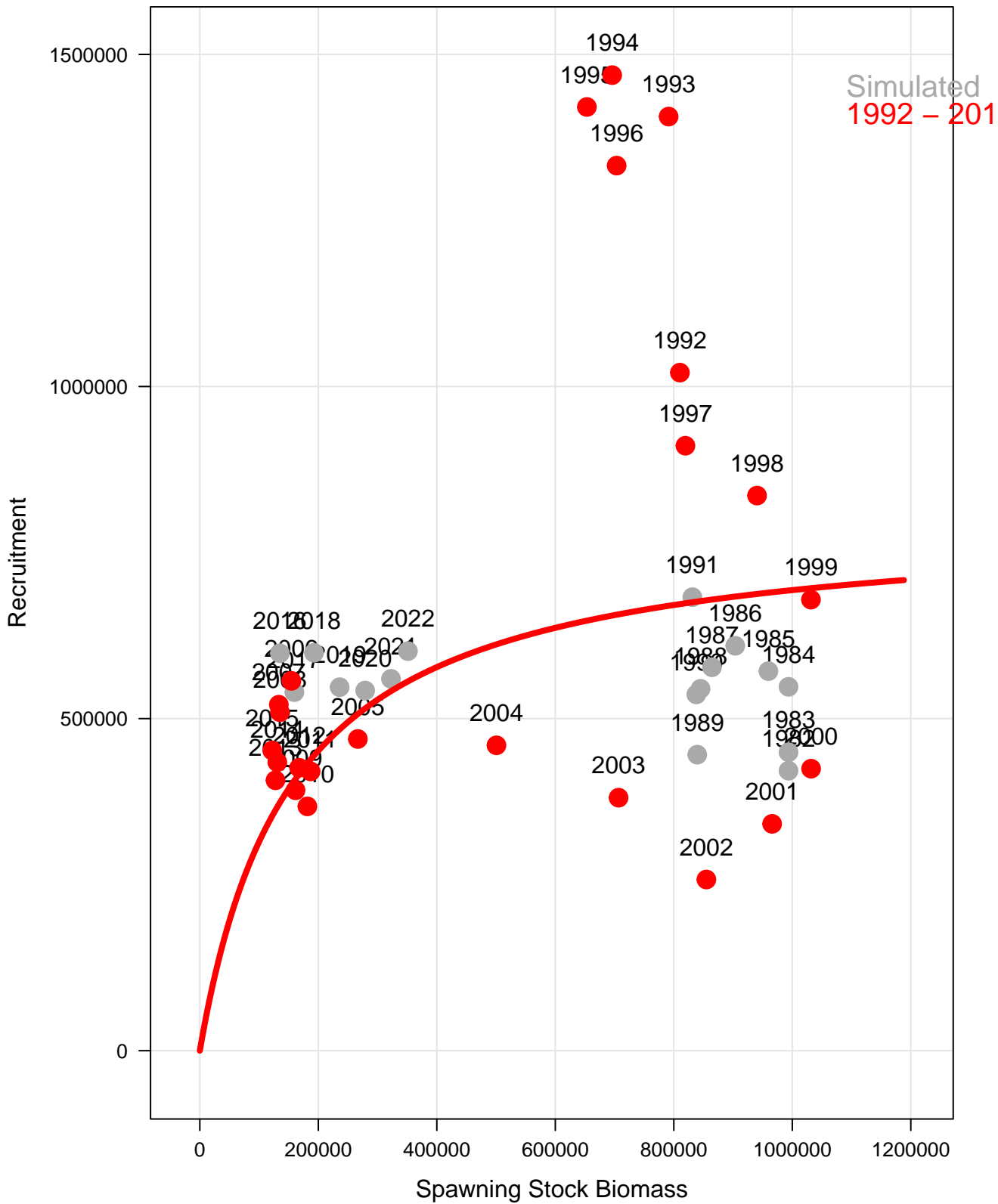
Mature – Immature fish

Mature

Immature —

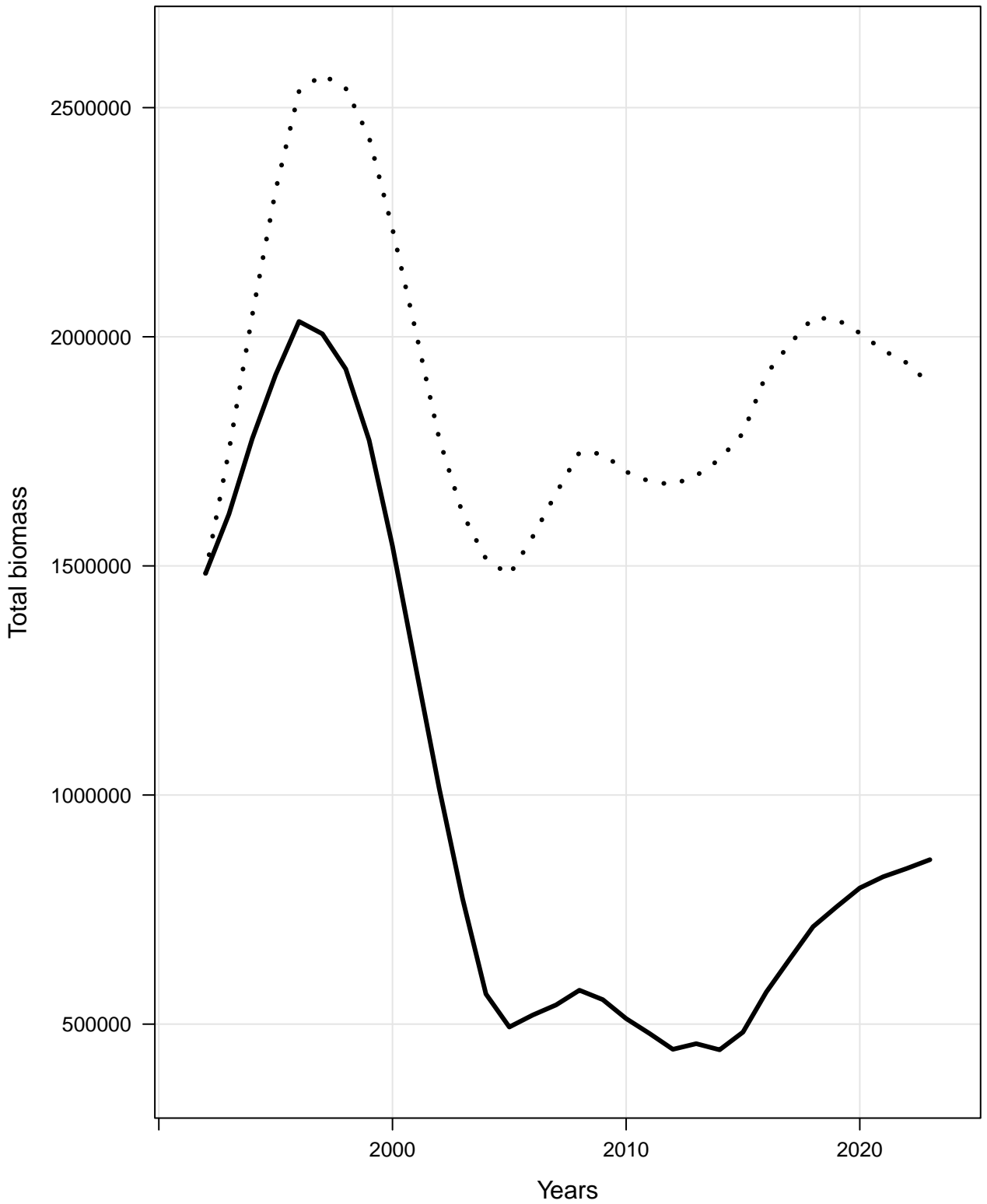


Stock Recruitment



Comparing fished with unfished biomass

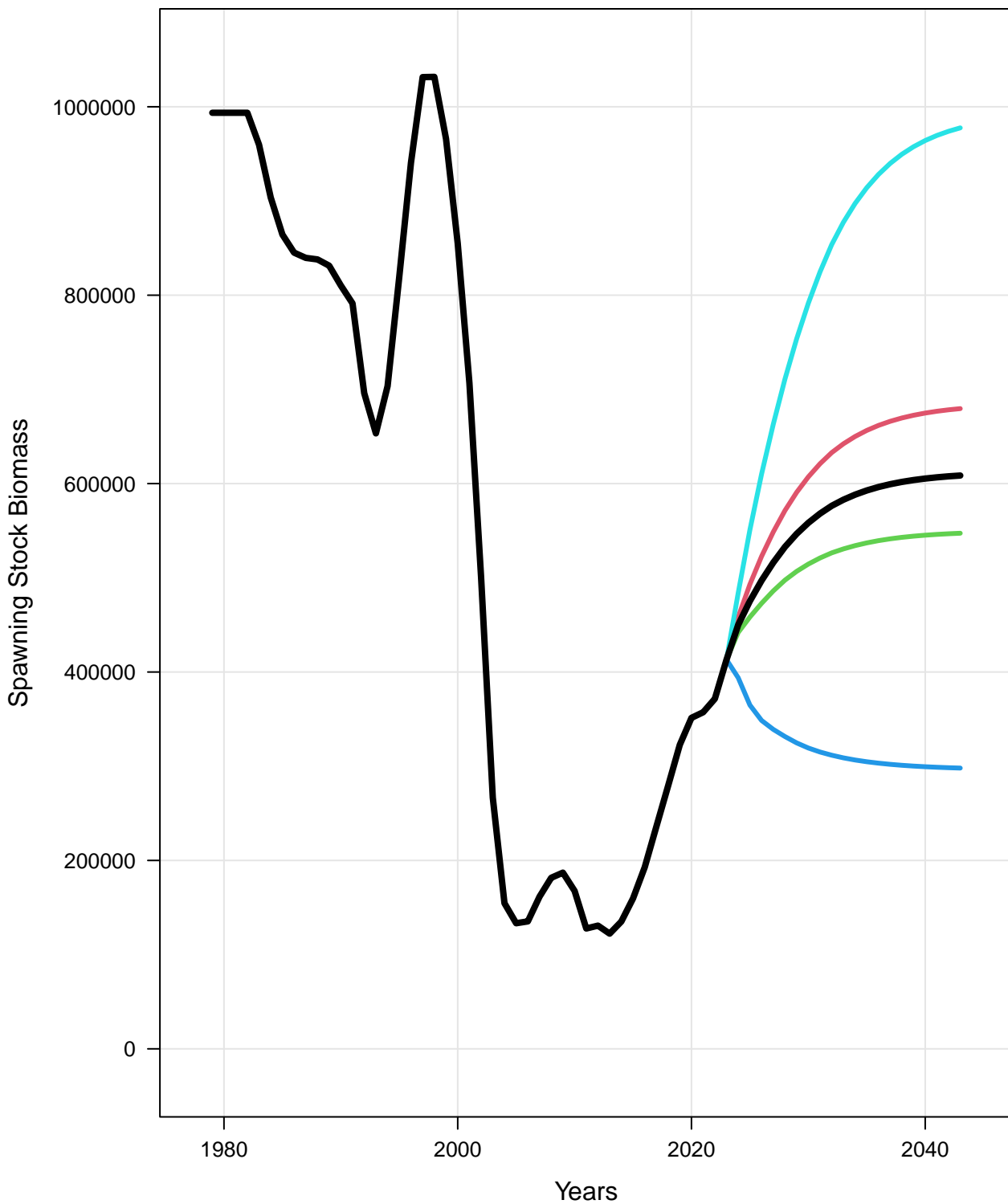
Fished — Unfished



SSB prediction

F2023 SQ
F2023 0.75x
F2023 1.25x

FMSY
F2023 0x



Catch prediction

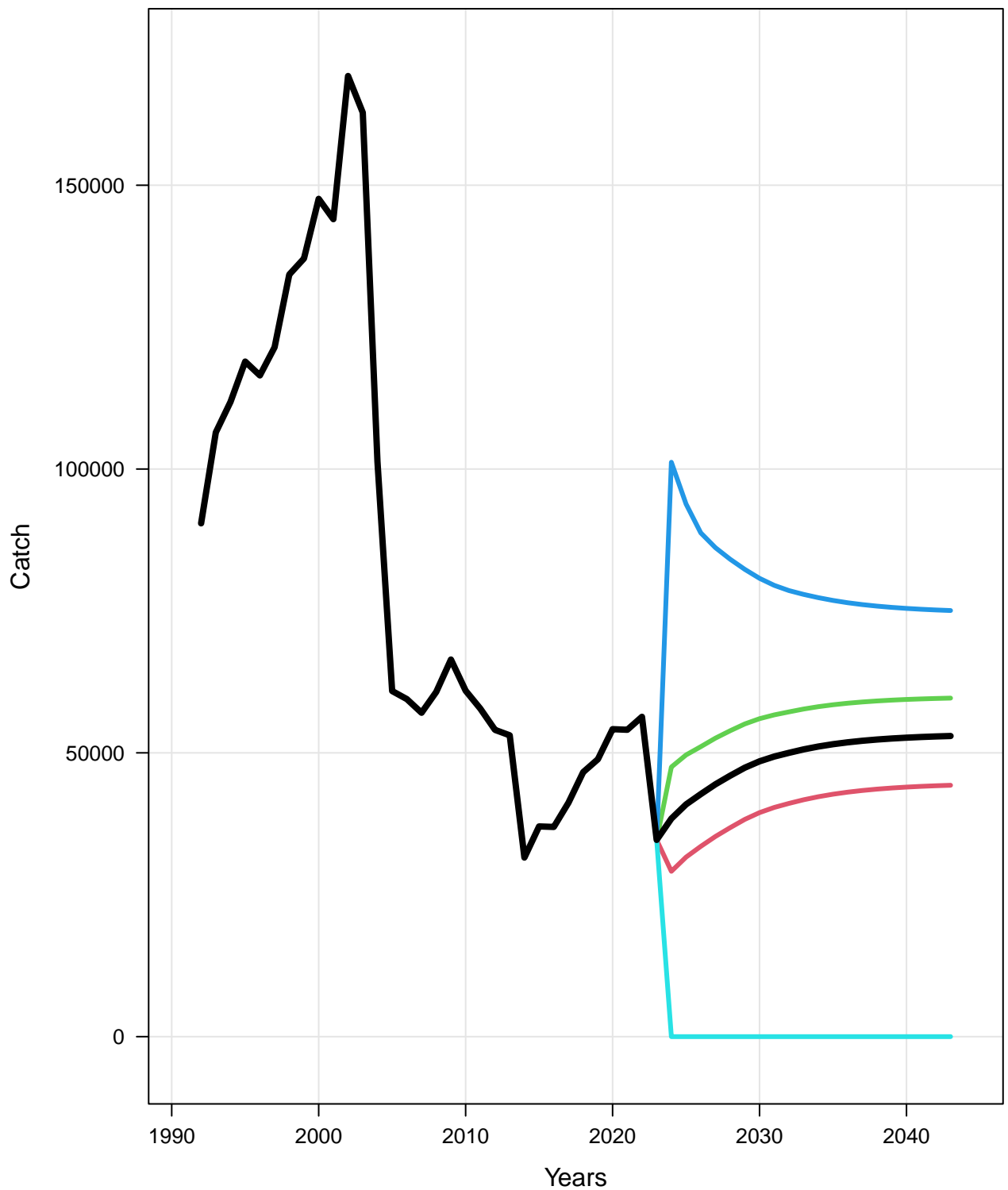
F2023 SQ

F2023 0.75x

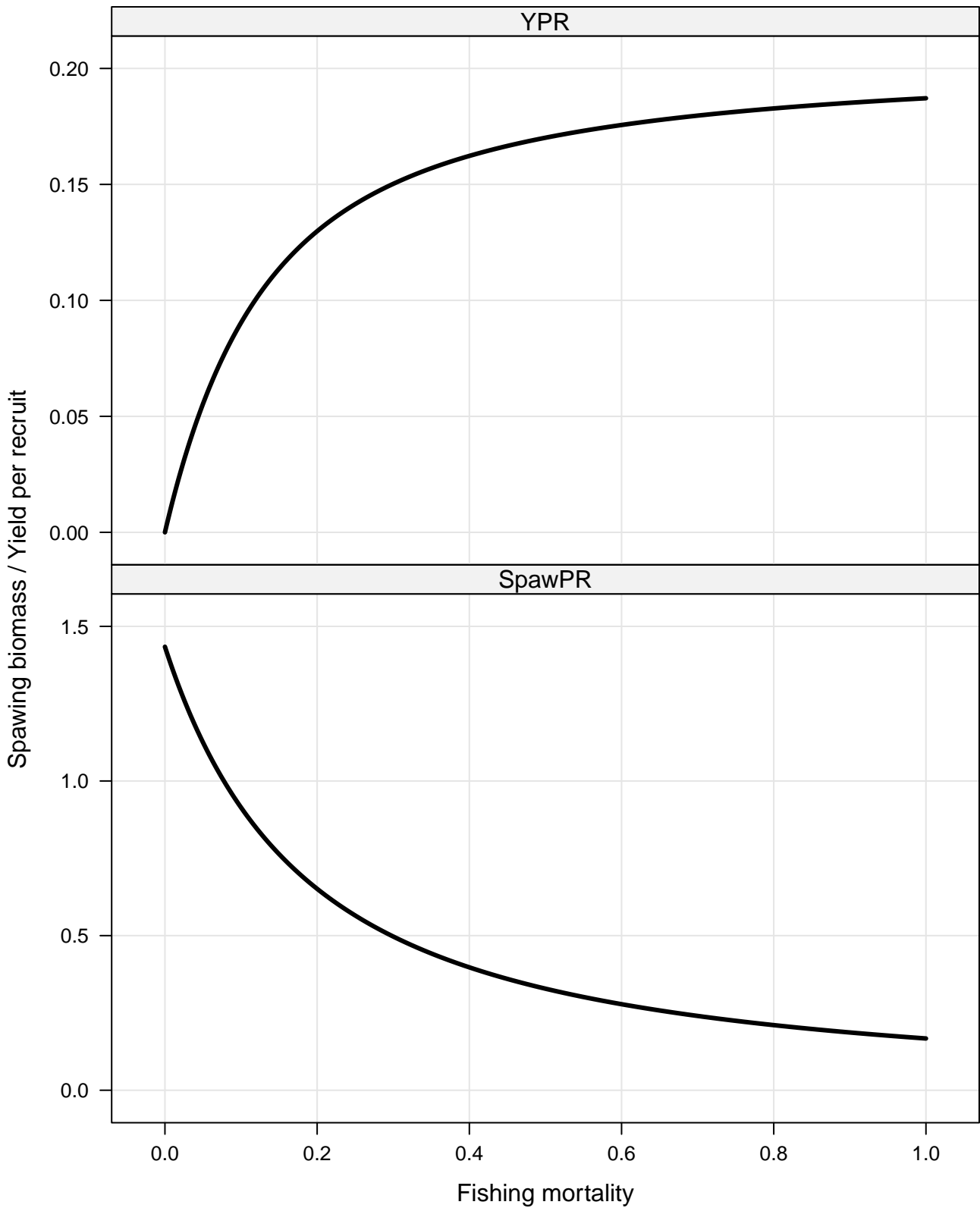
F2023 1.25x

FMSY

F2023 0x



Yield and spawning stock biomass per recruit



Kobe plot

