

Plots created using the 'r4ss' package in R

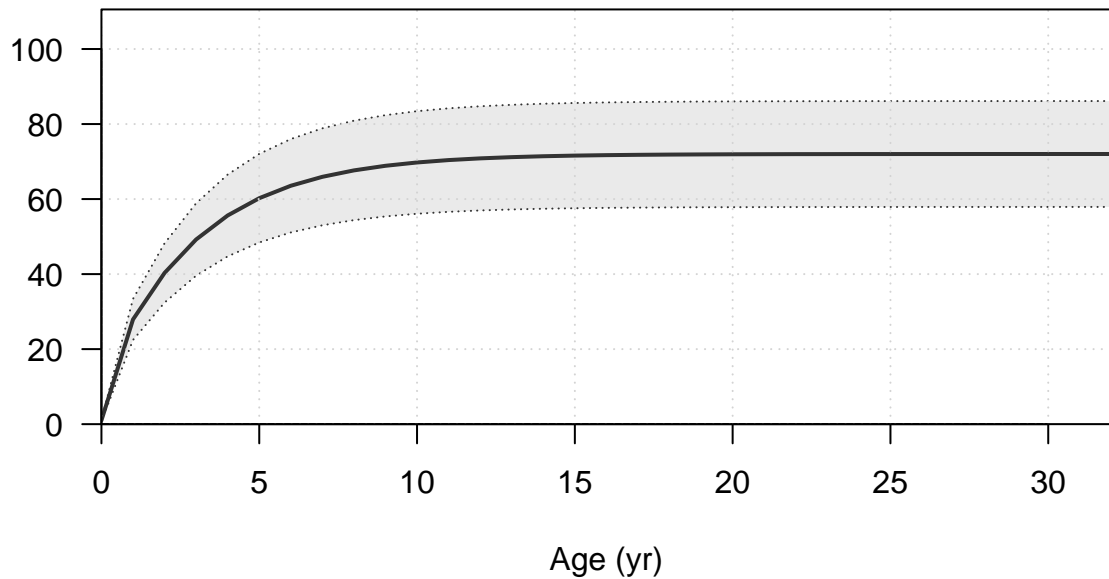
Stock Synthesis version: 3.30.19.0

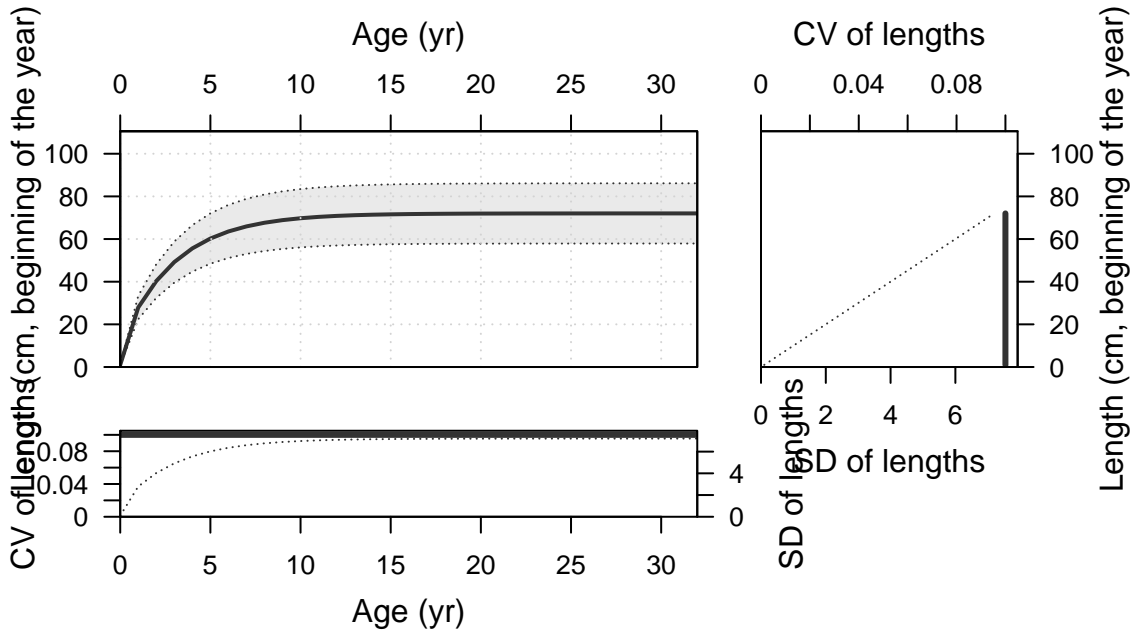
StartTime: Fri Jul 08 11:15:18 2022

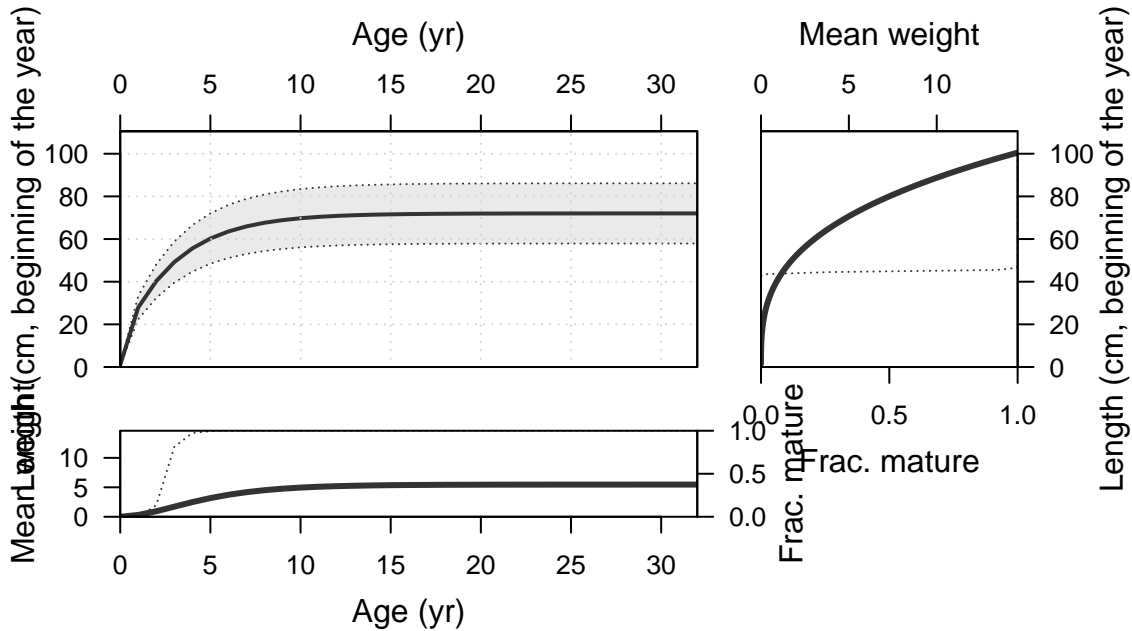
Data\_File: data.ss

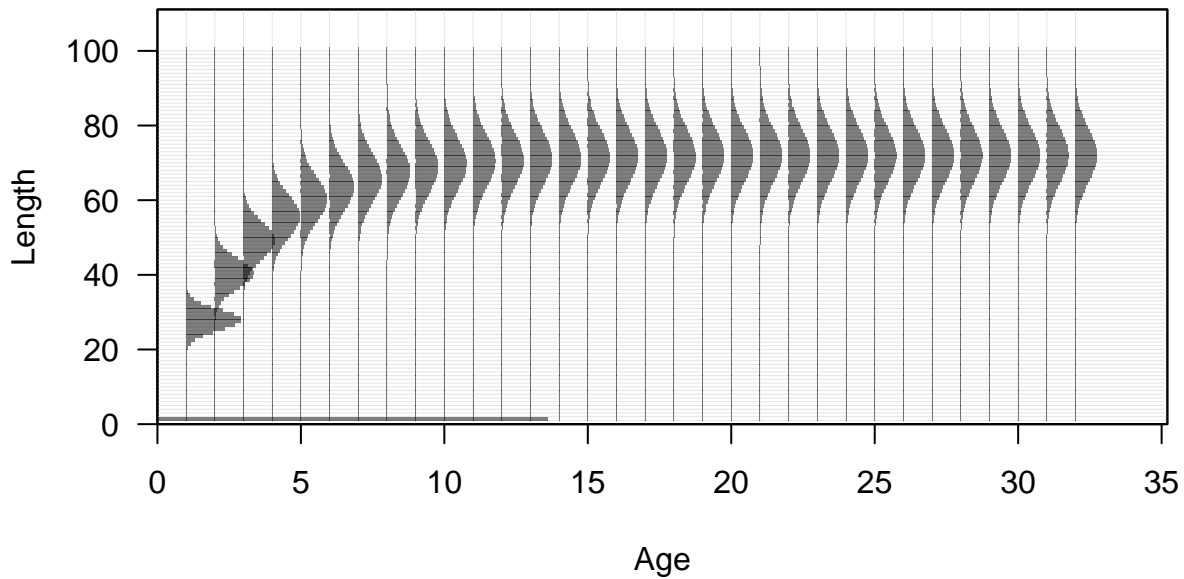
Control\_File: control.ss

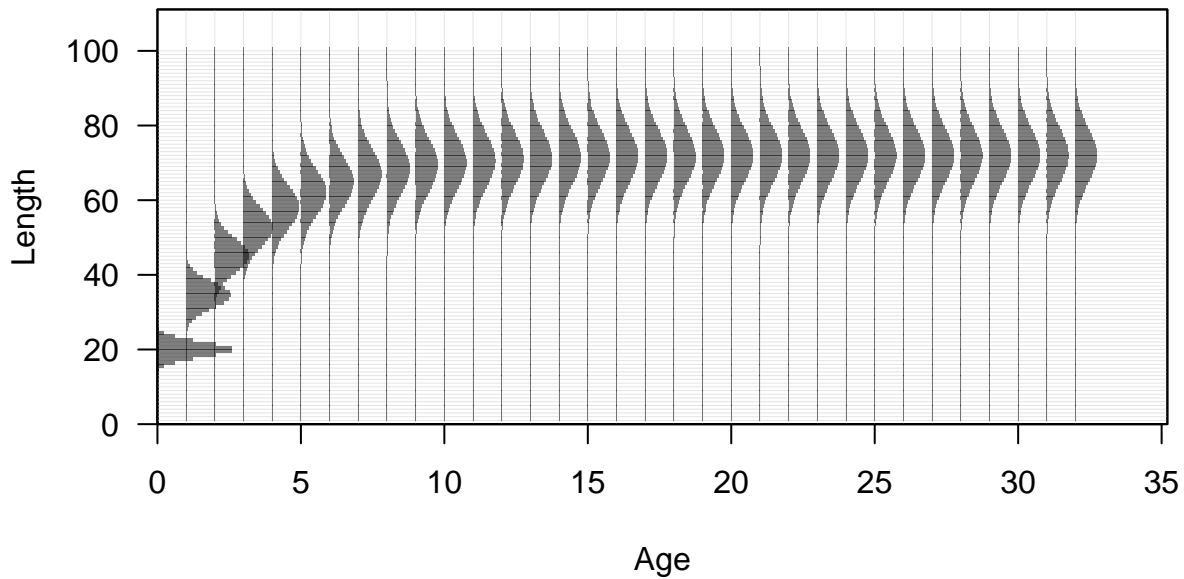
Length (cm, beginning of the year)















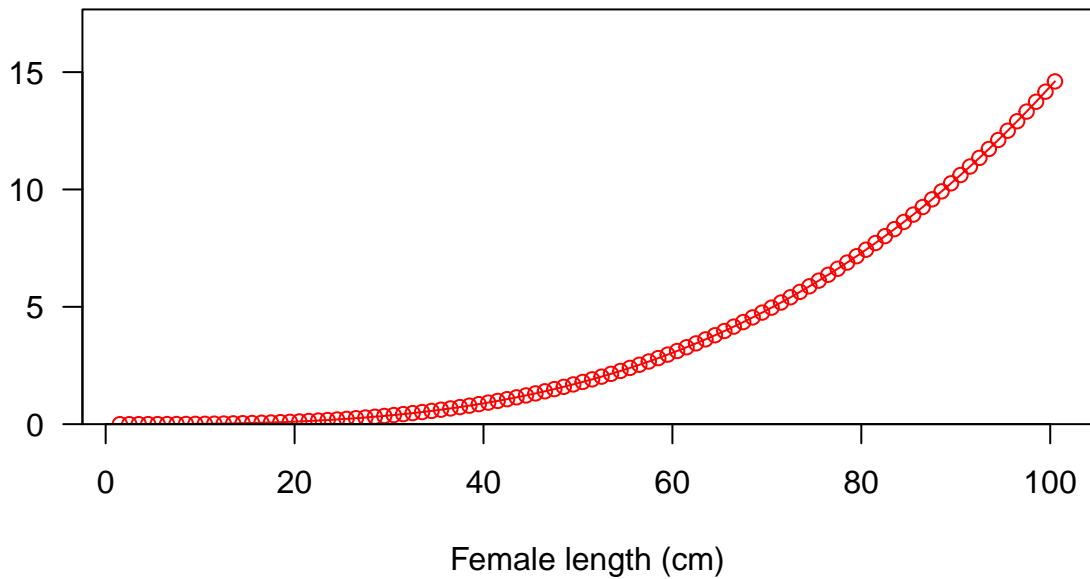




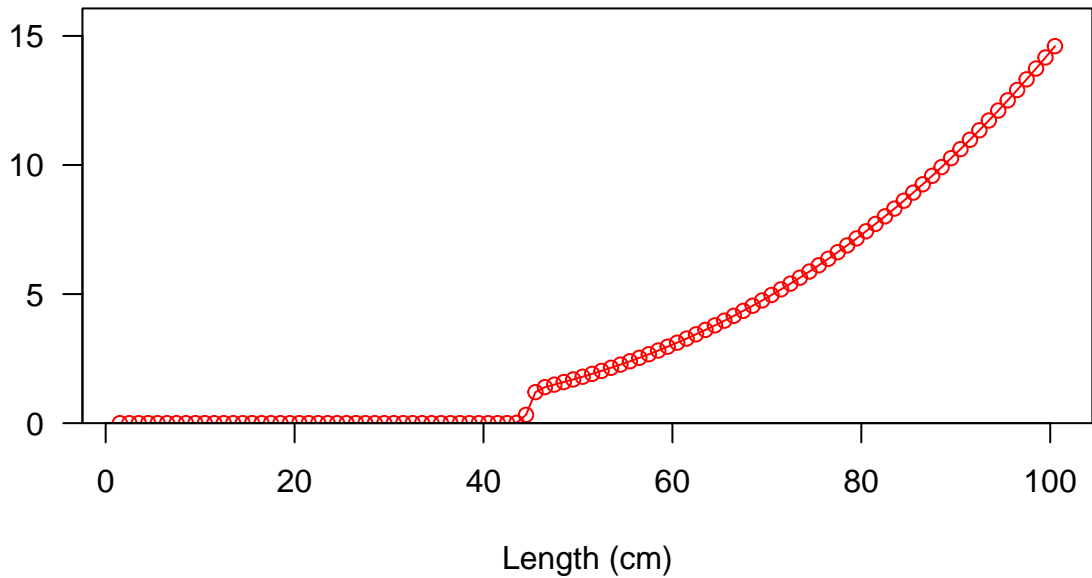
Fecundity

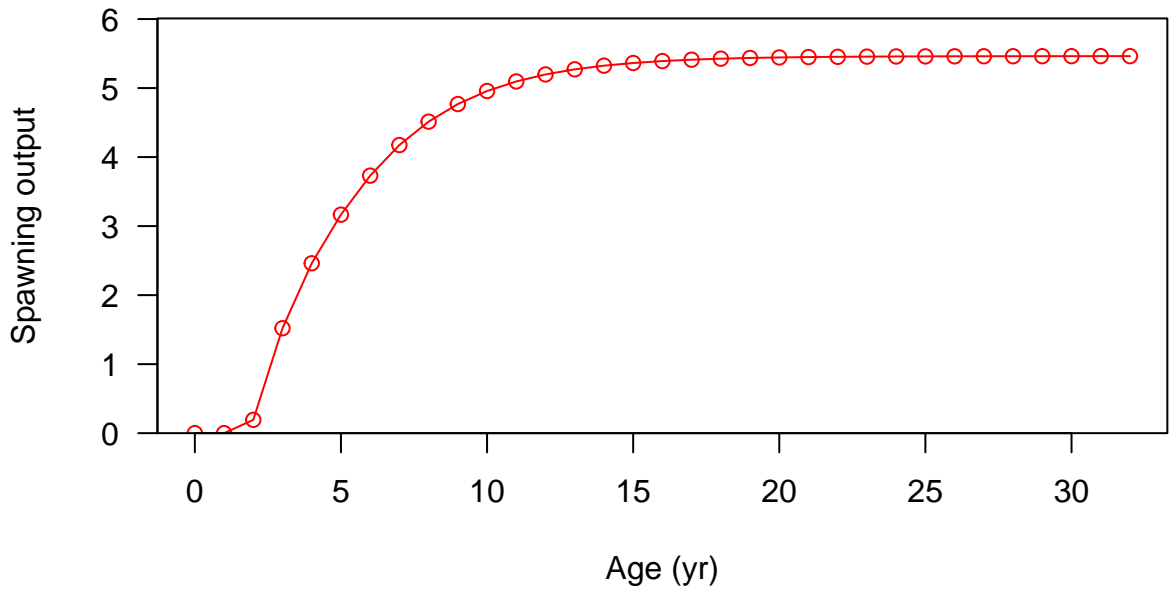


Fecundity

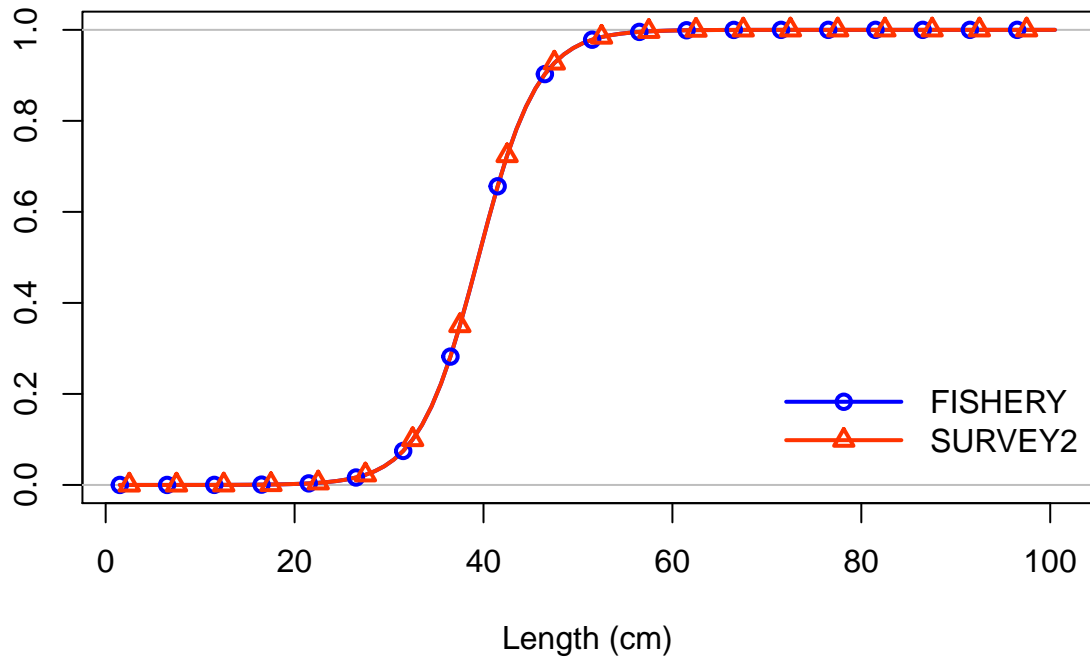


Spawning output

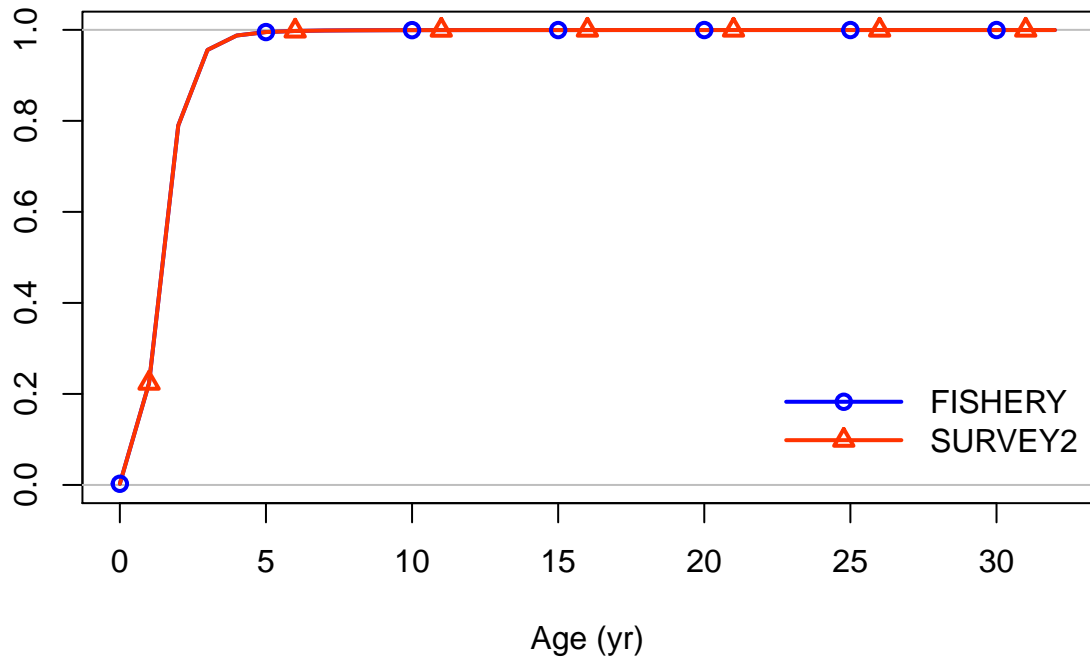




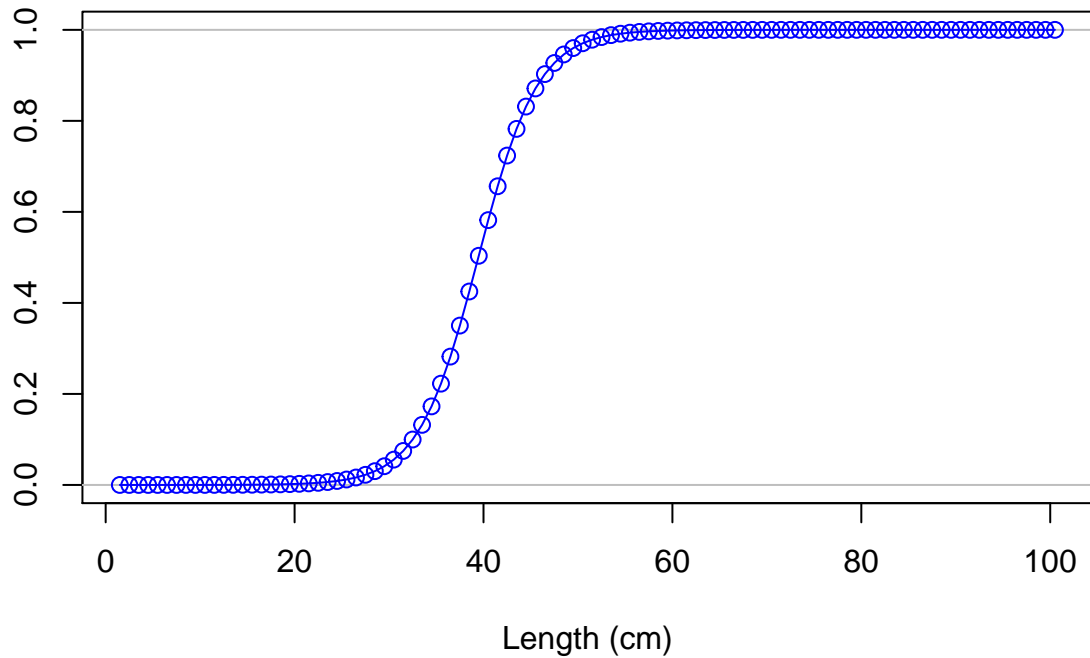
Selectivity



Selectivity

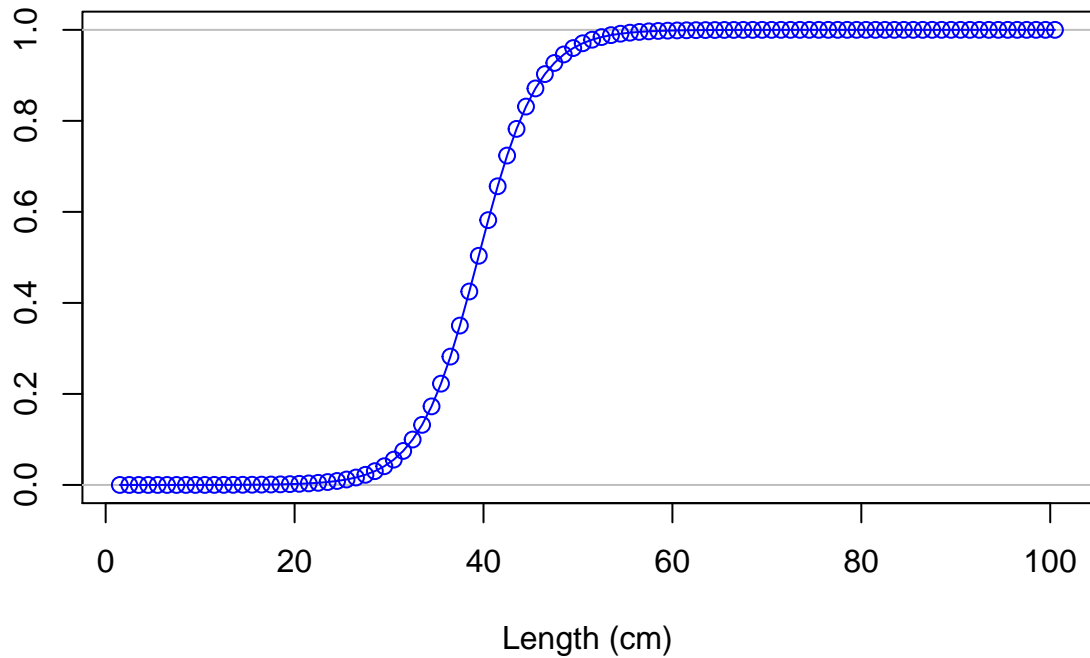


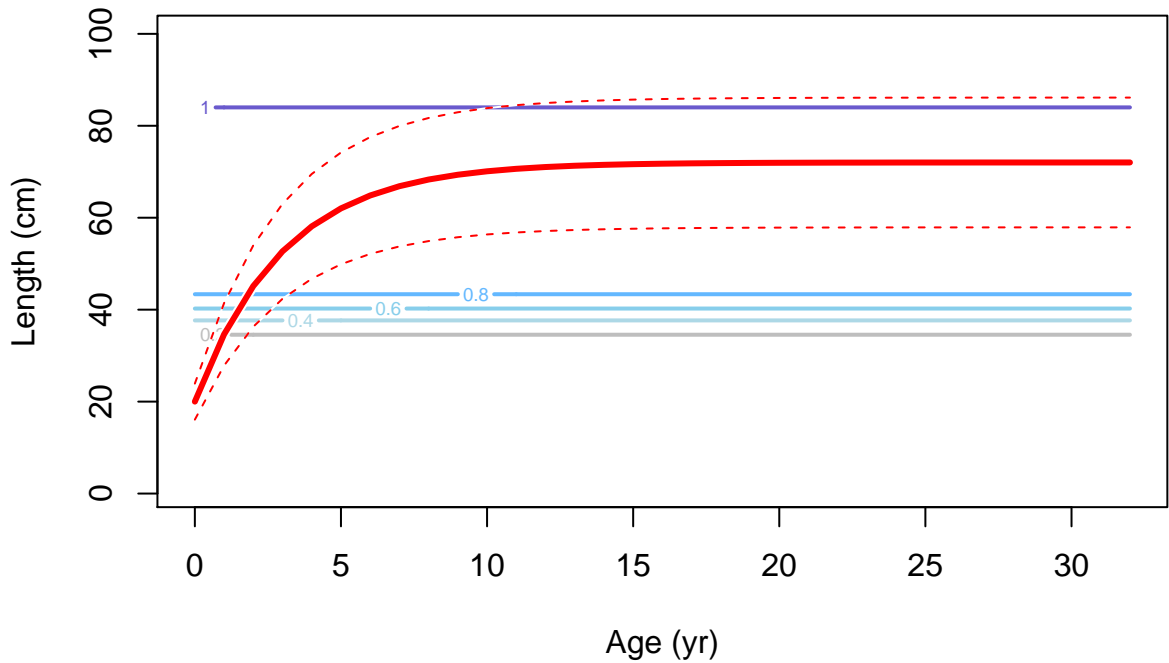
Selectivity

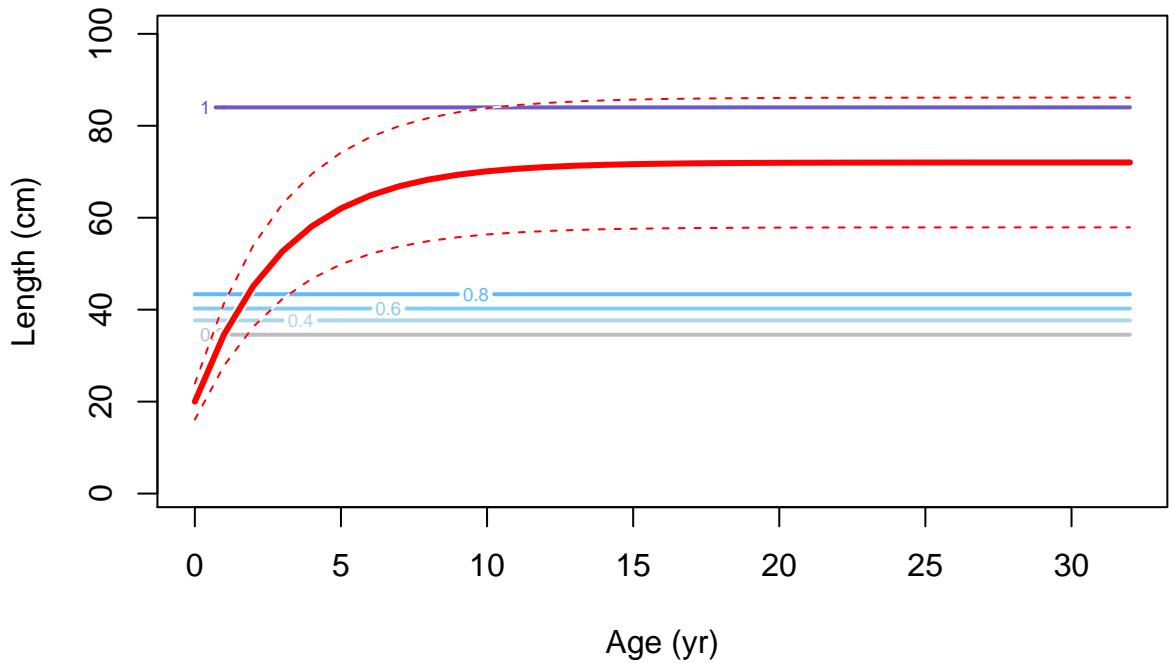


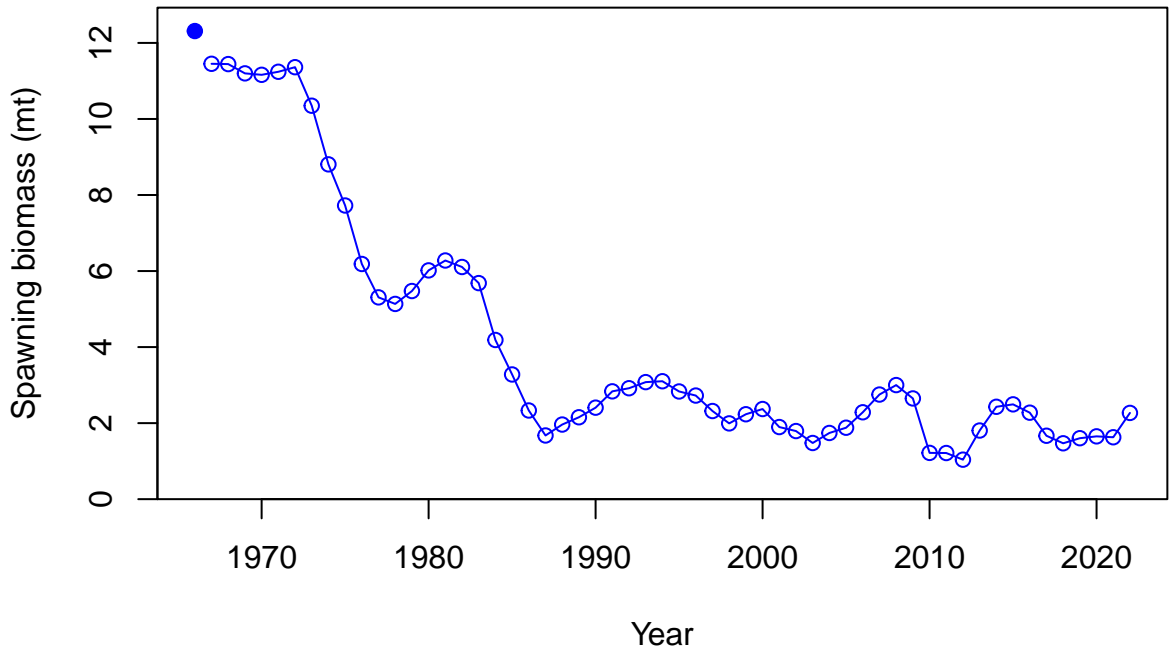


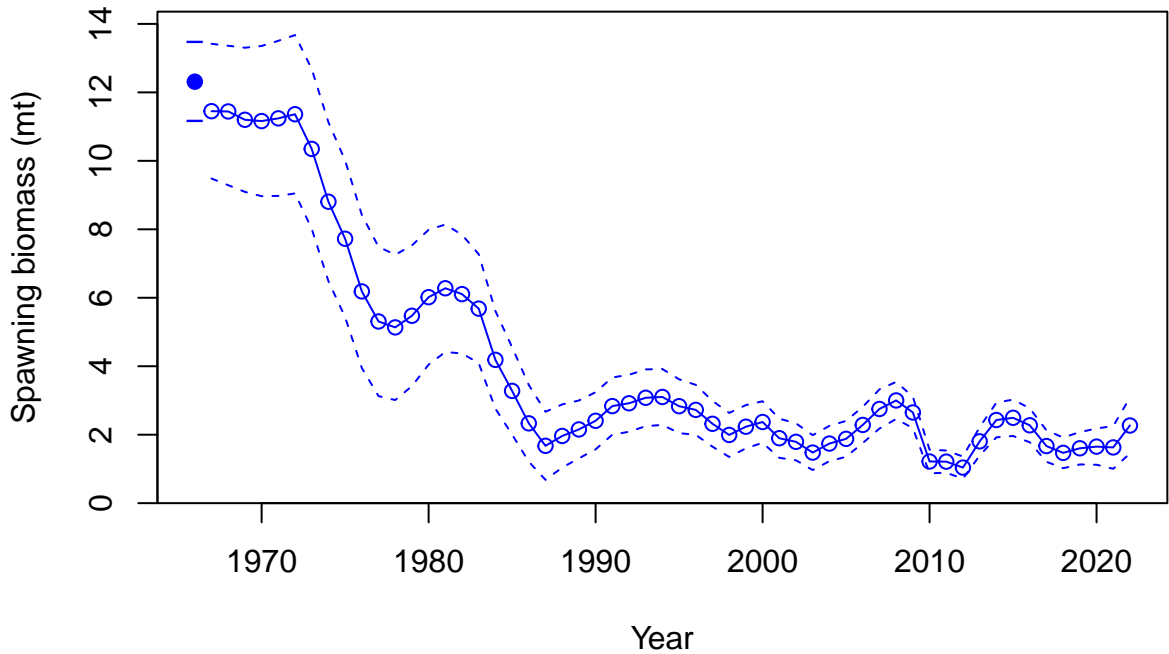
Selectivity



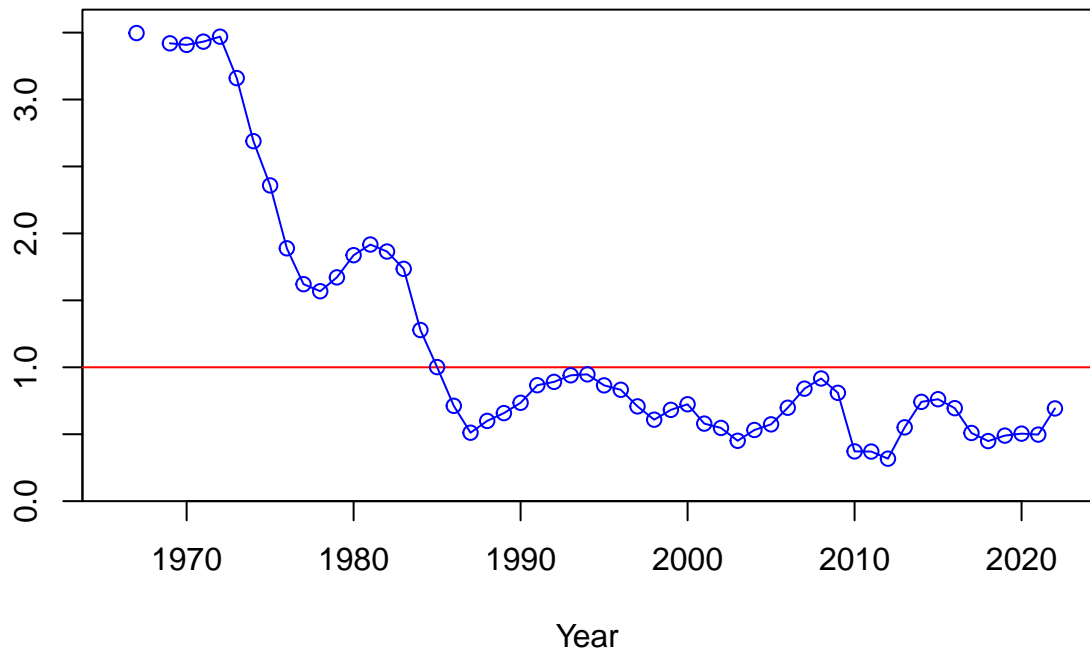




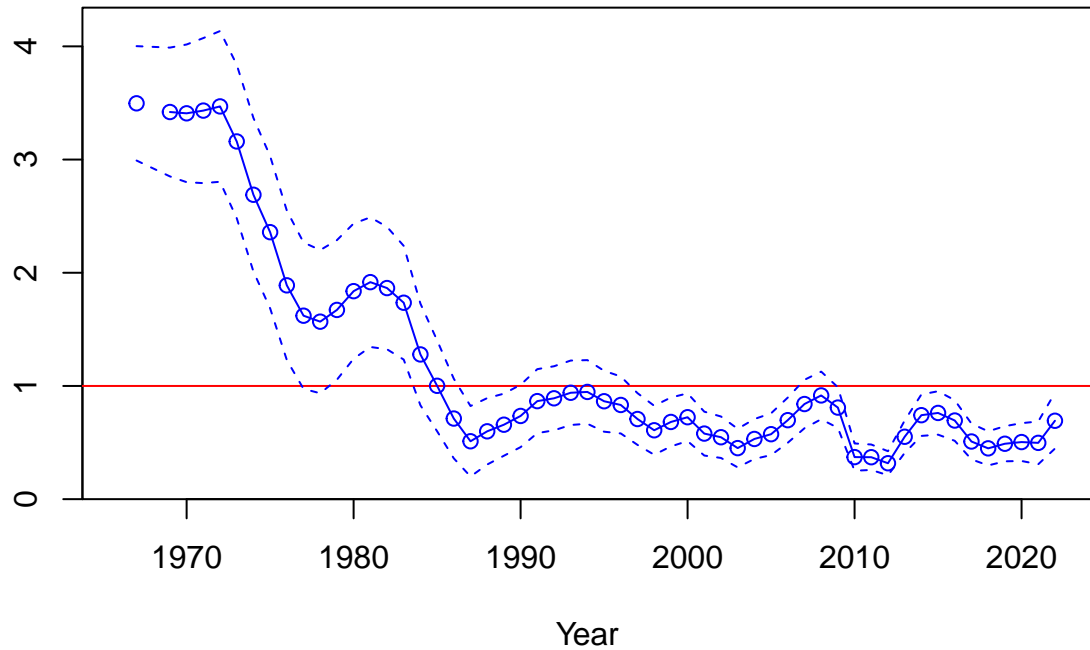


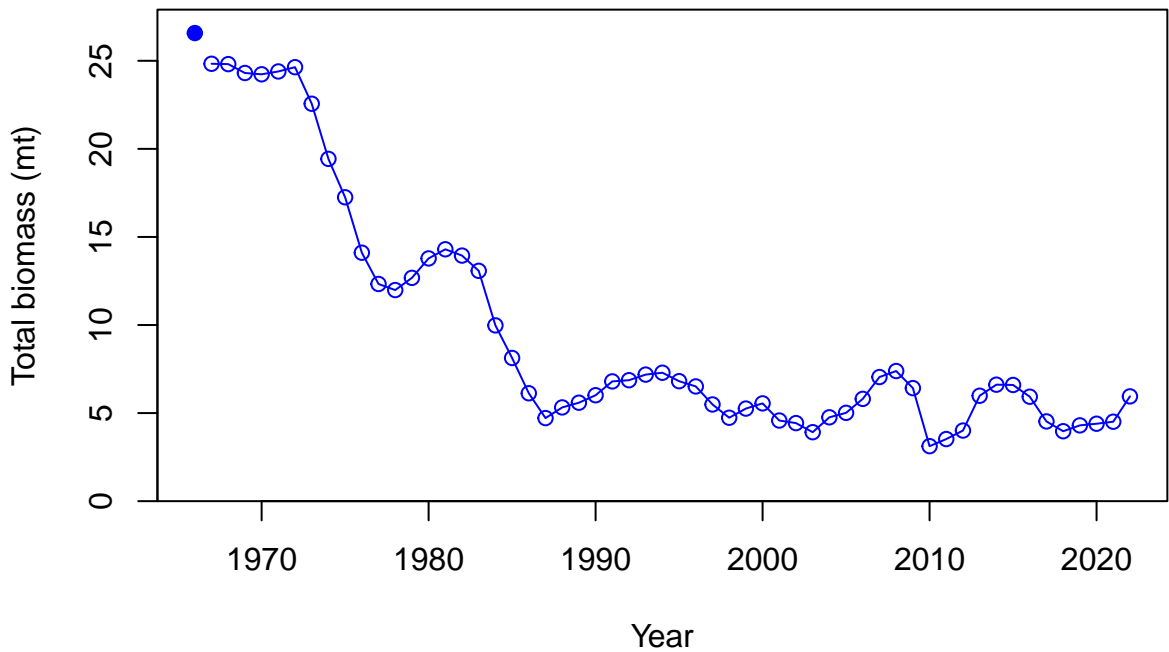


Relative spawning biomass:  $B/B_{MSY}$

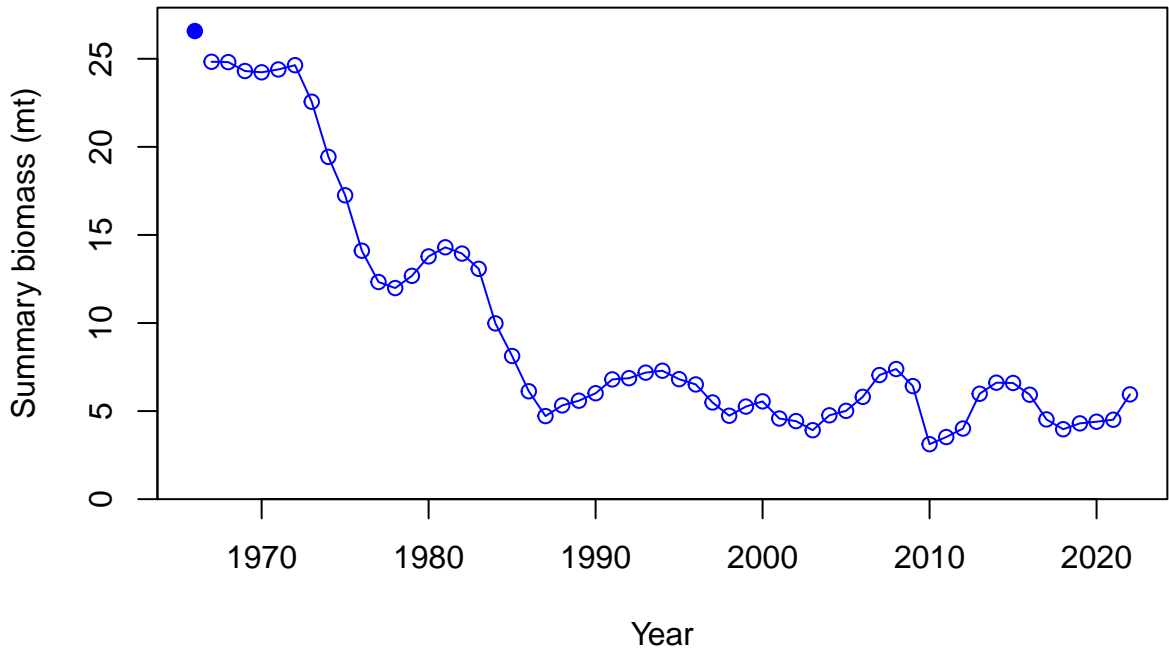


Relative spawning biomass:  $B/B_{MSY}$

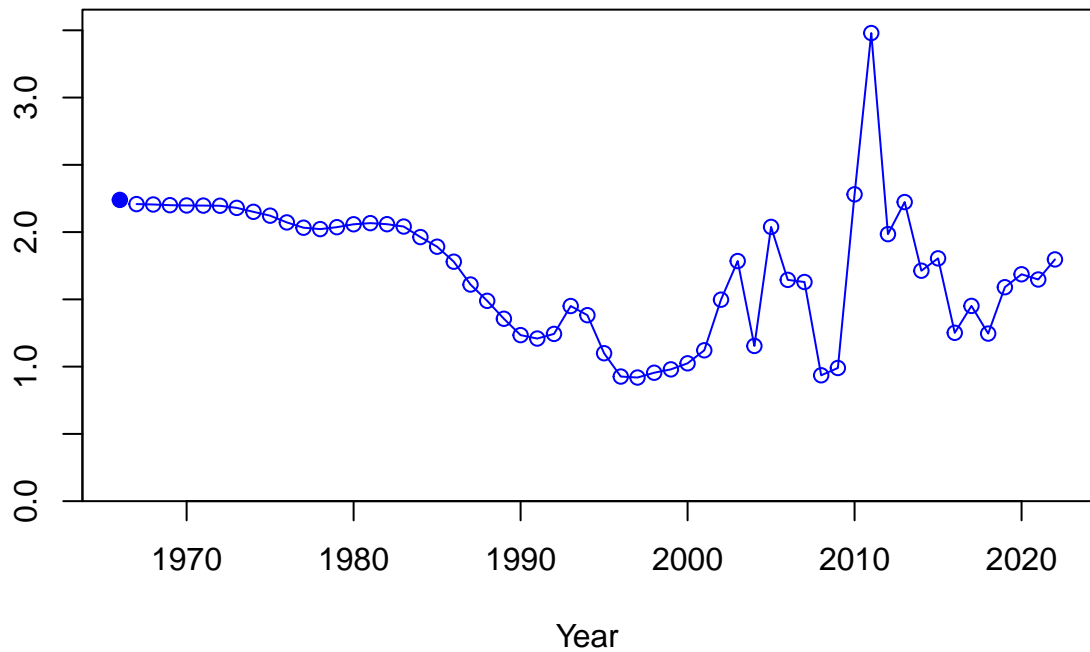




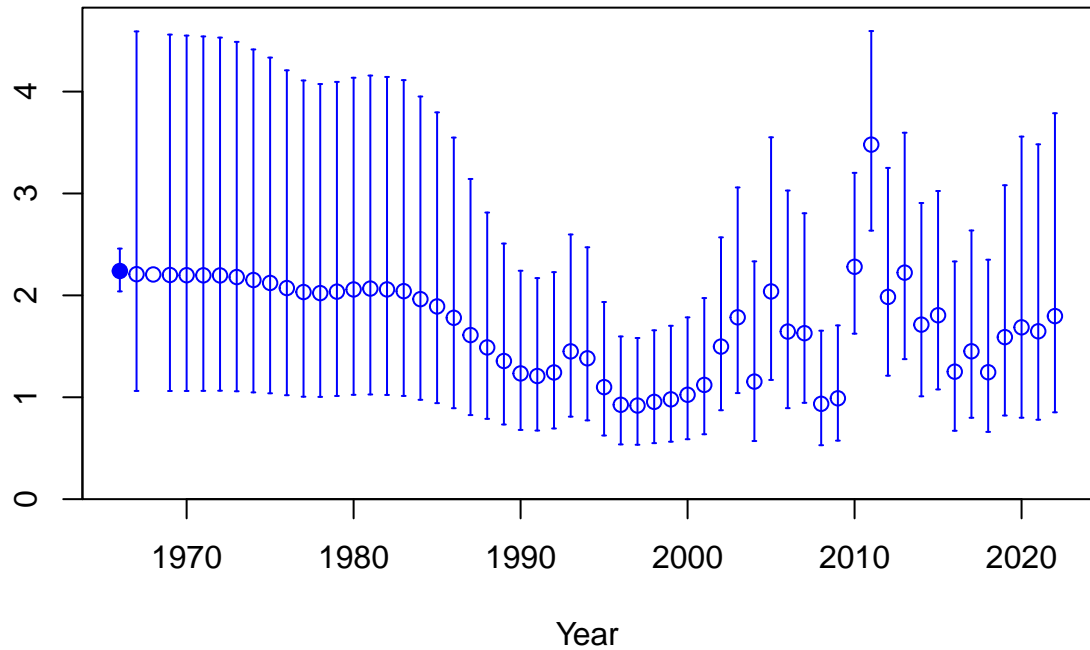




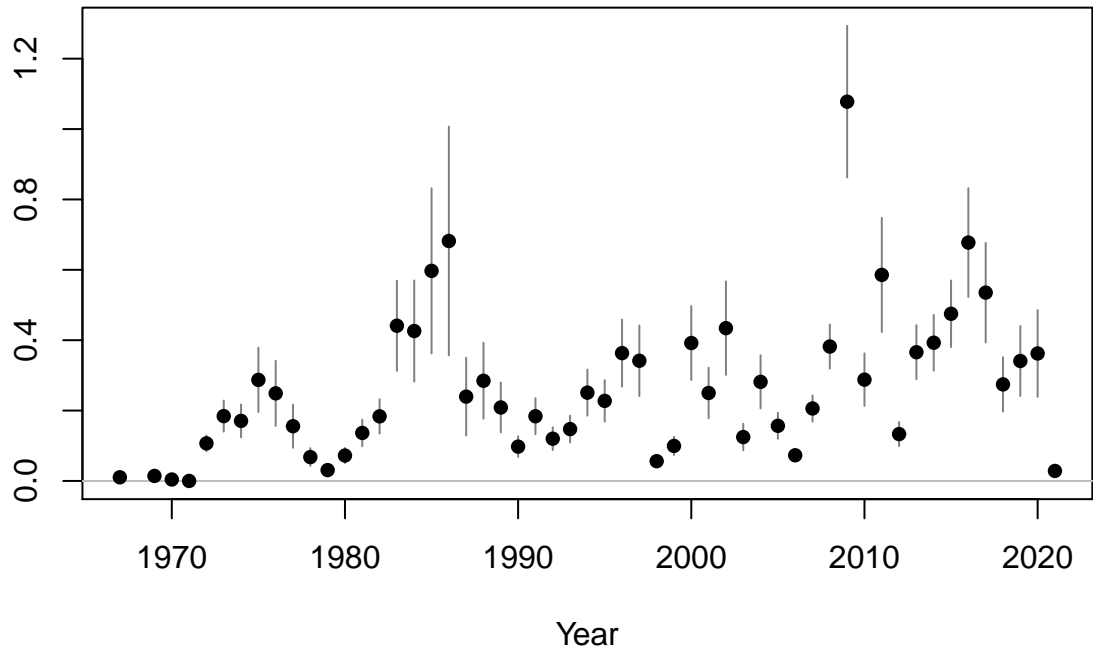
Age-0 recruits (1,000s)

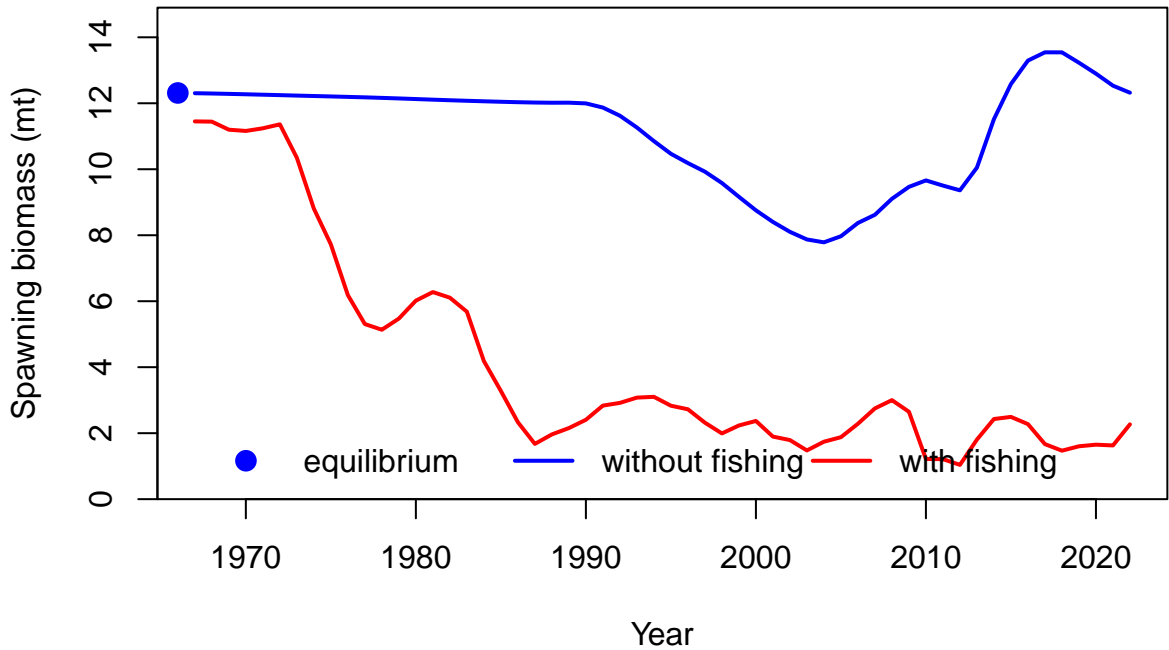


Age-0 recruits (1,000s)



Summary Fishing Mortality





Log recruitment deviation

0.5  
0.0  
-0.5

1970

1980

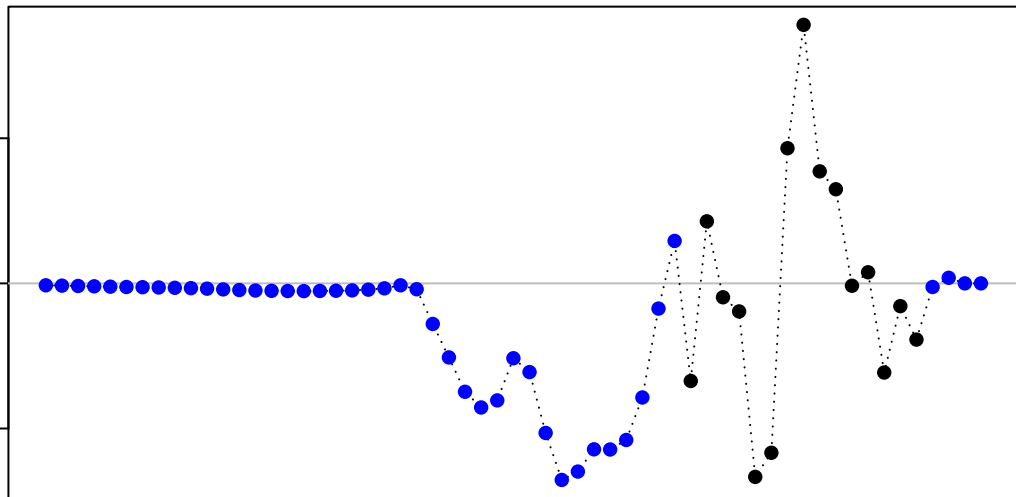
1990

2000

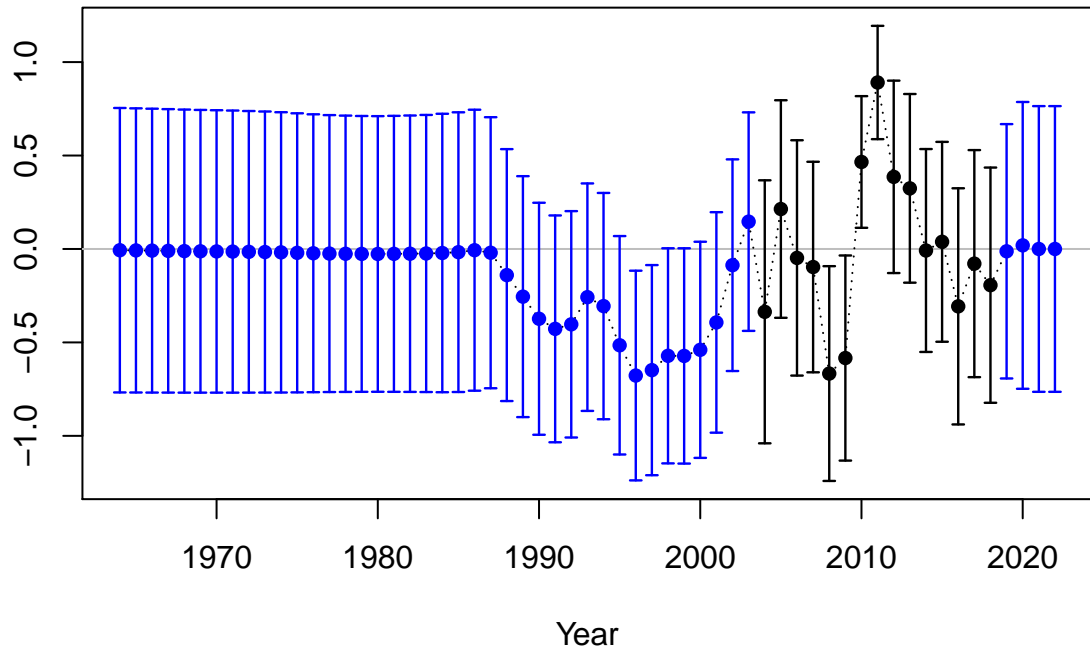
2010

2020

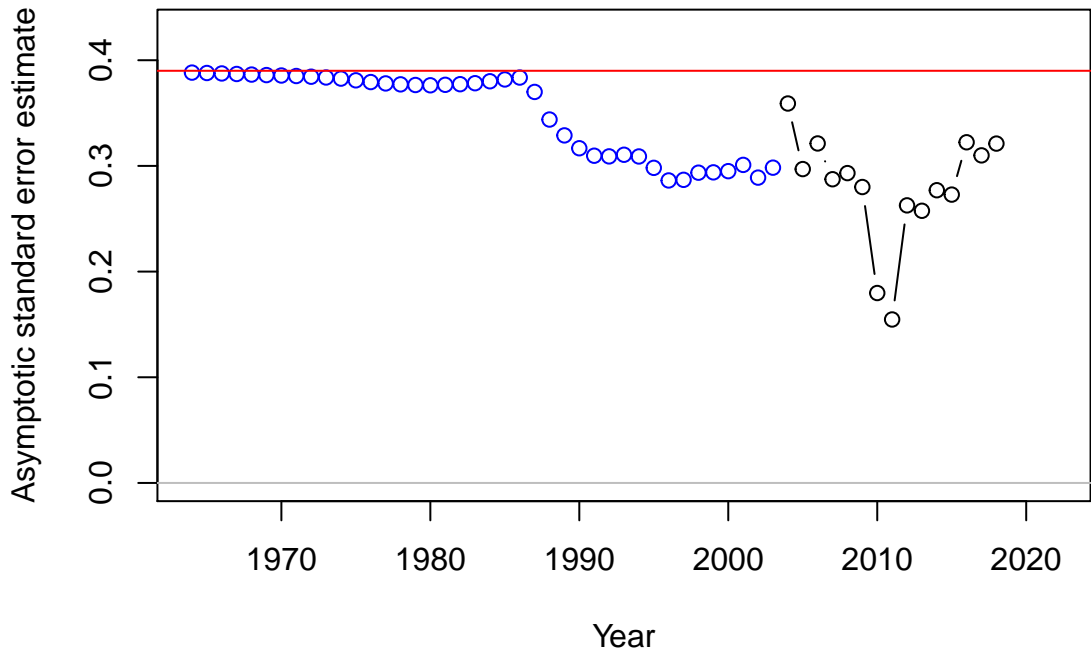
Year



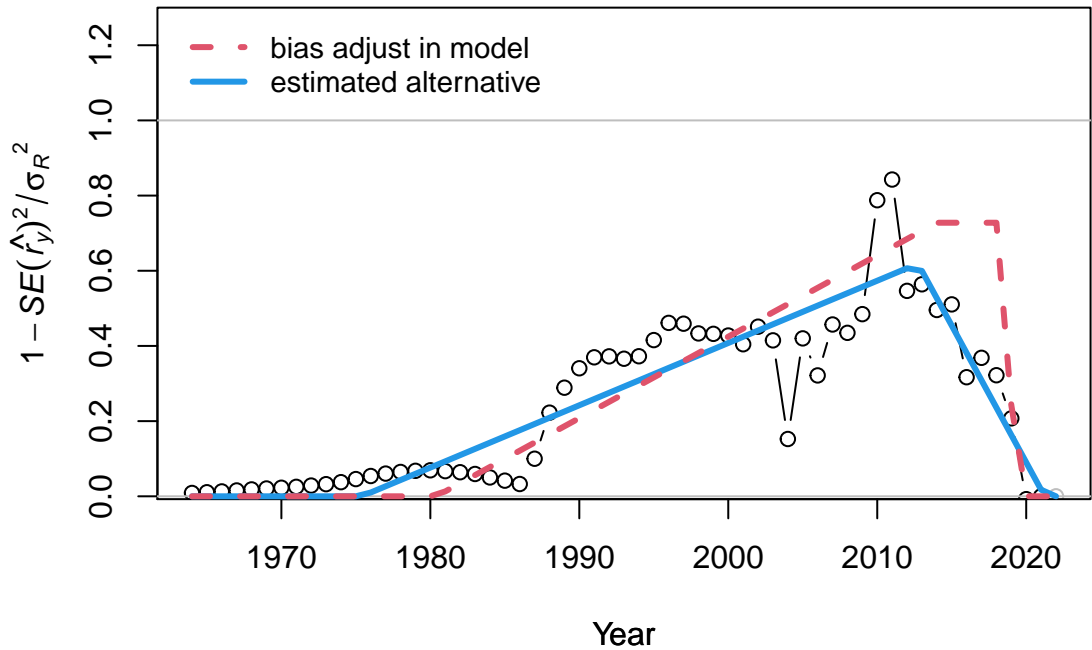
Log recruitment deviation

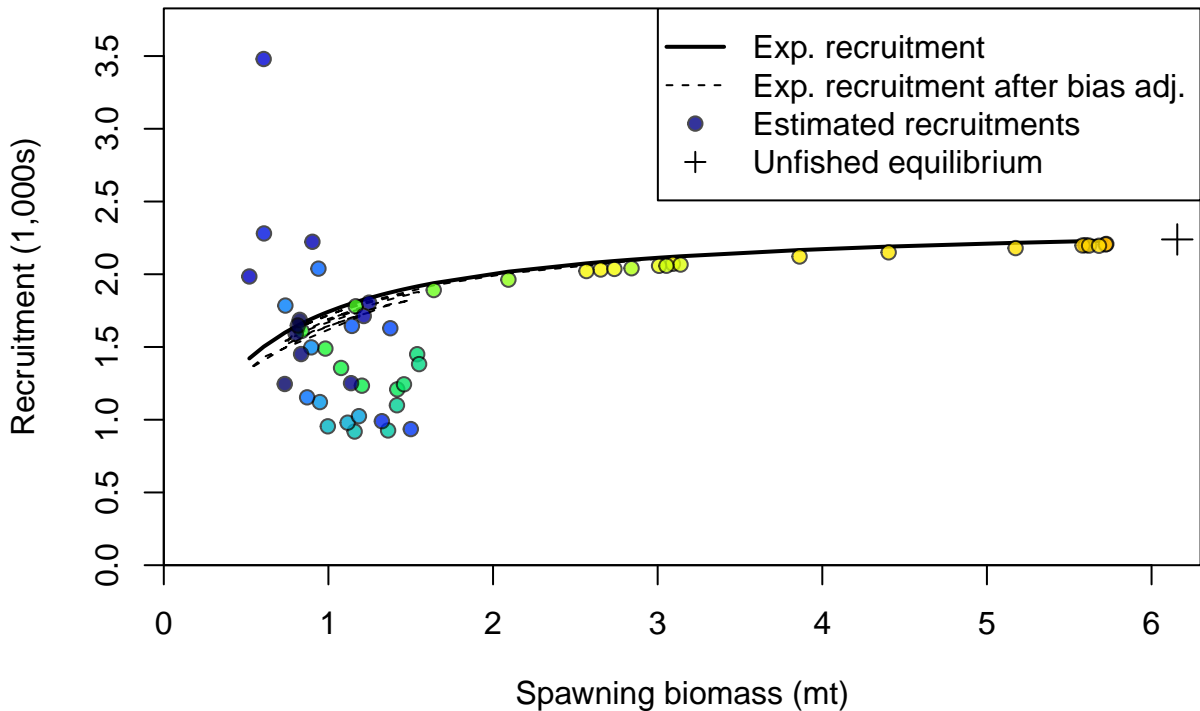


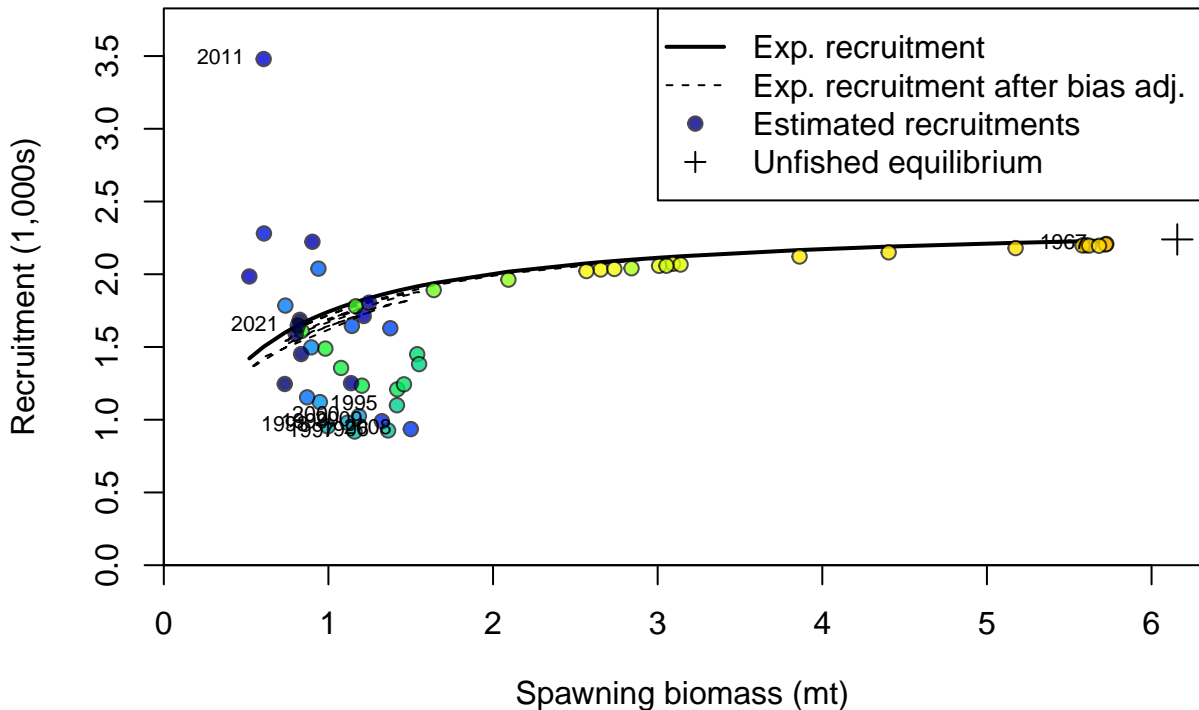
## Recruitment deviation variance



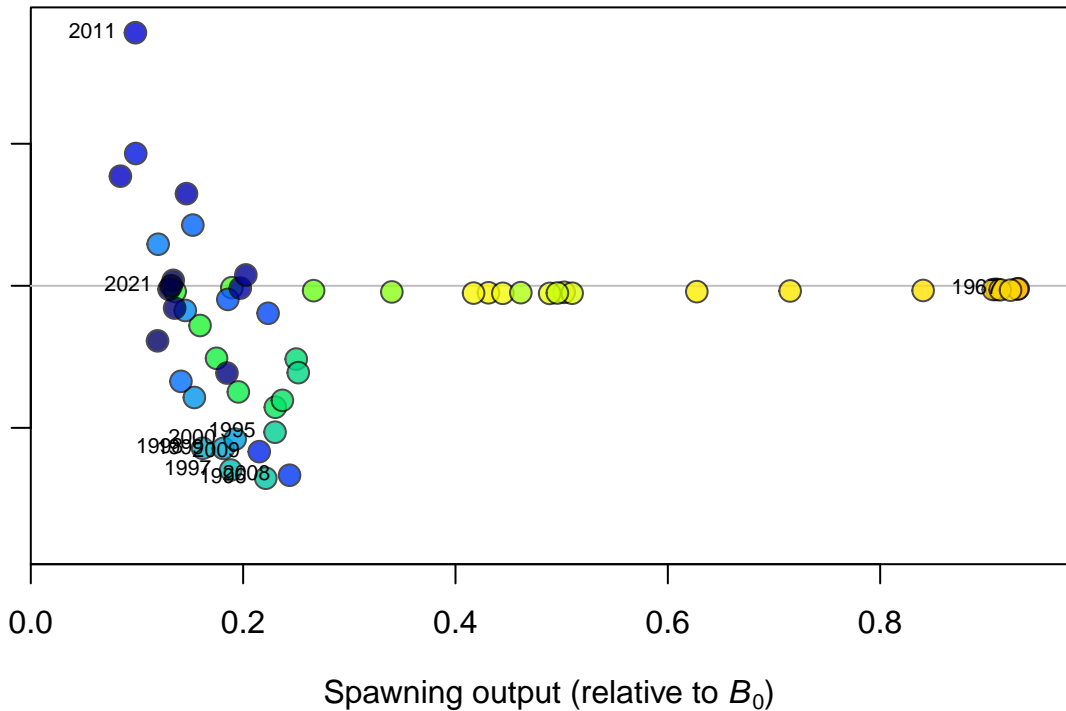


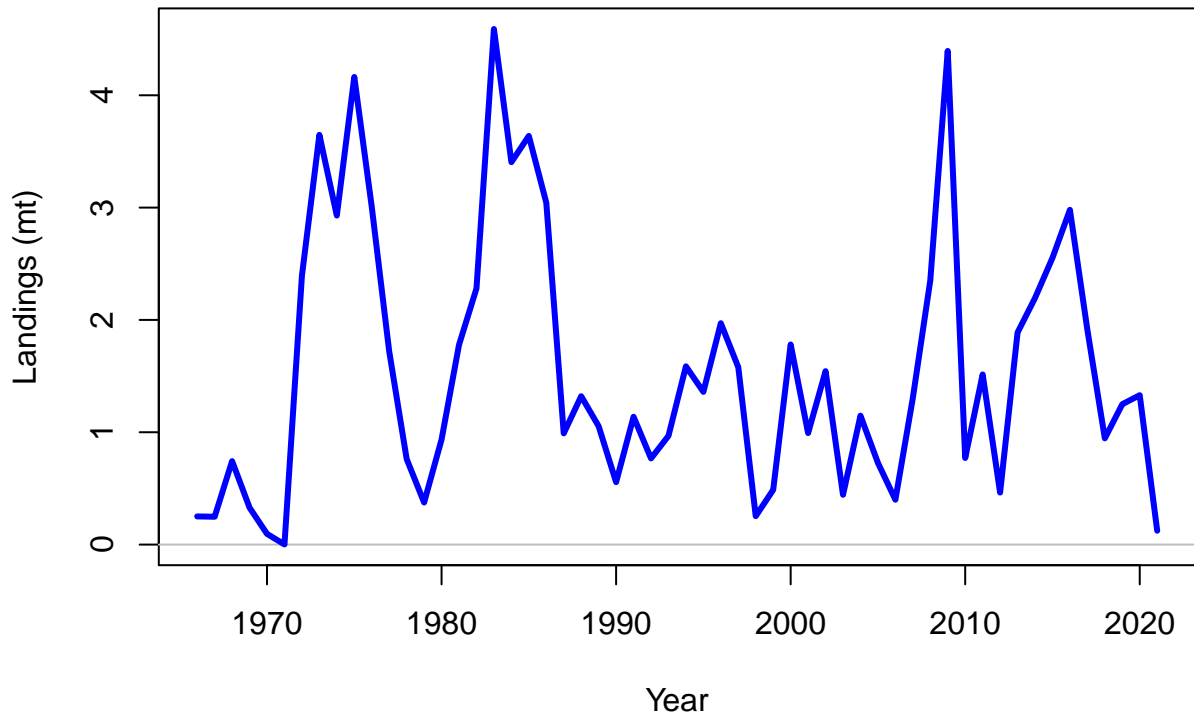


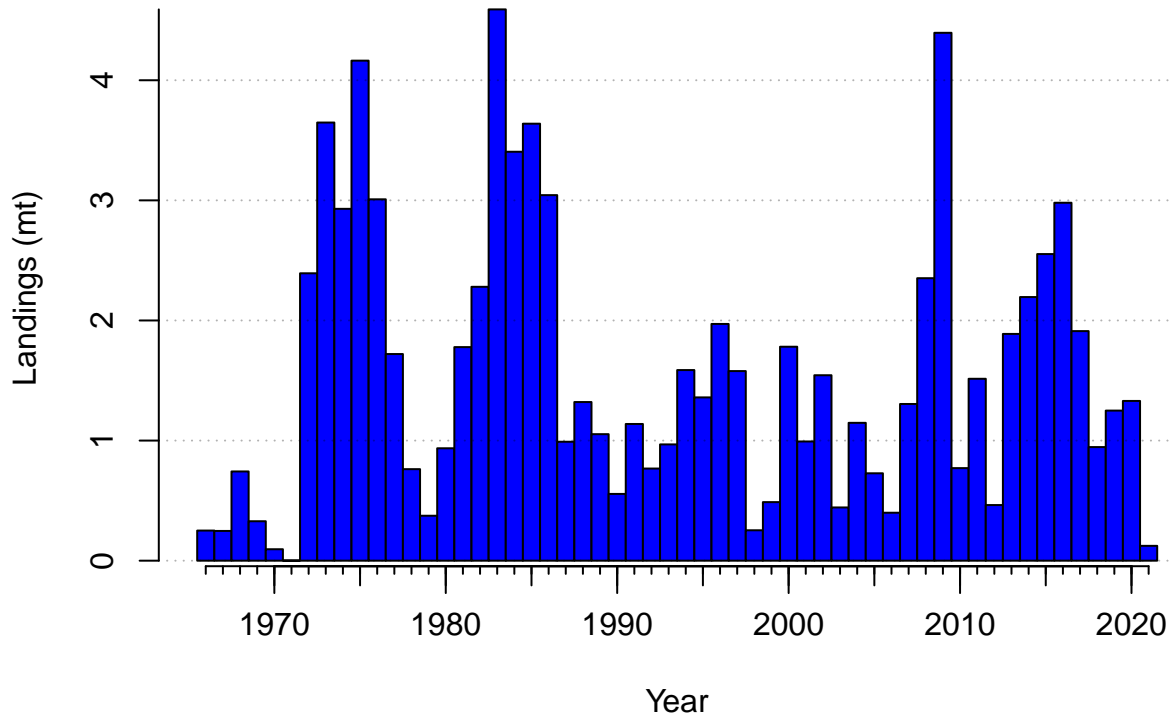


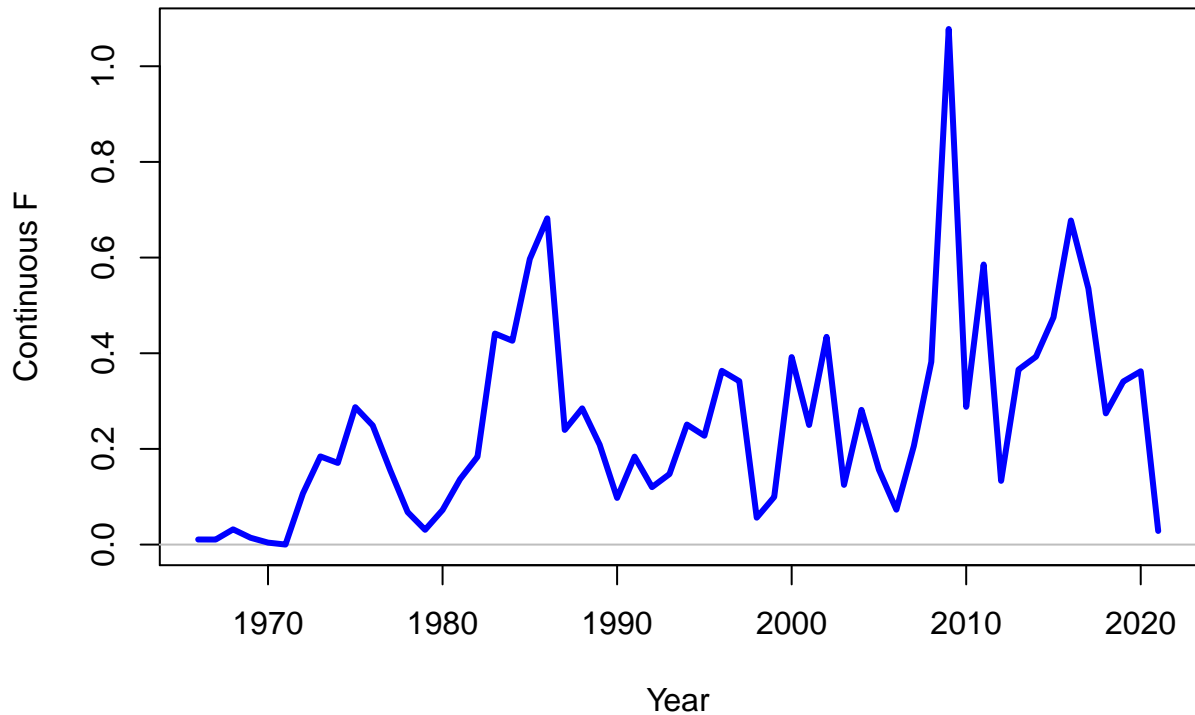


Log recruitment deviation

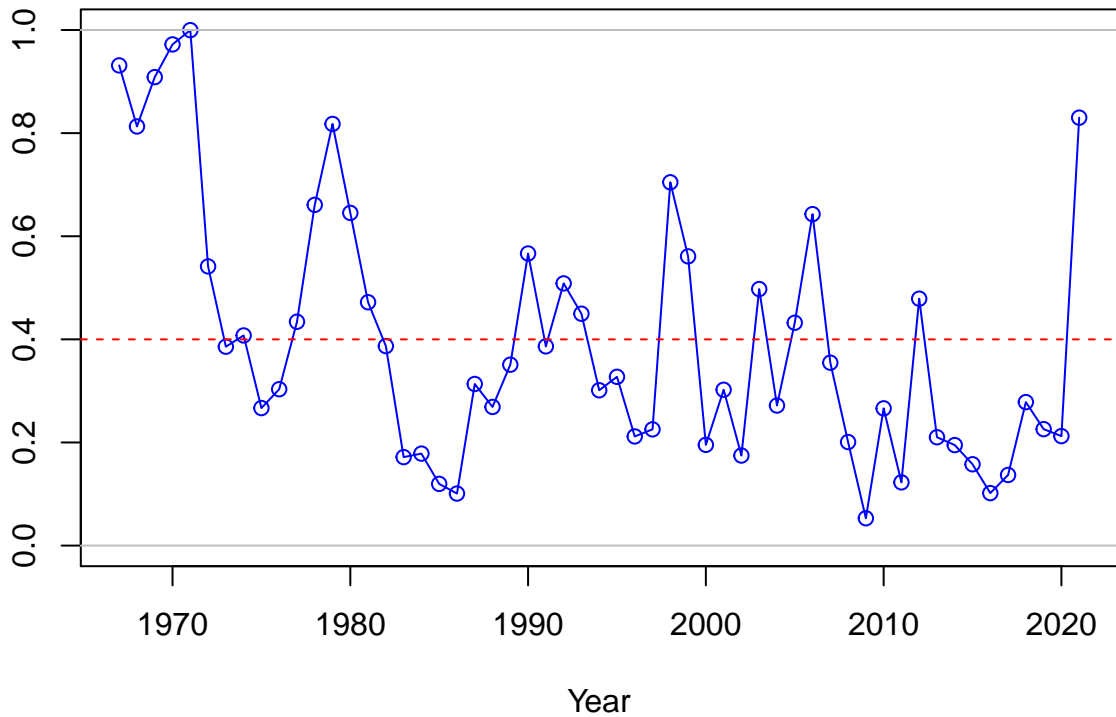






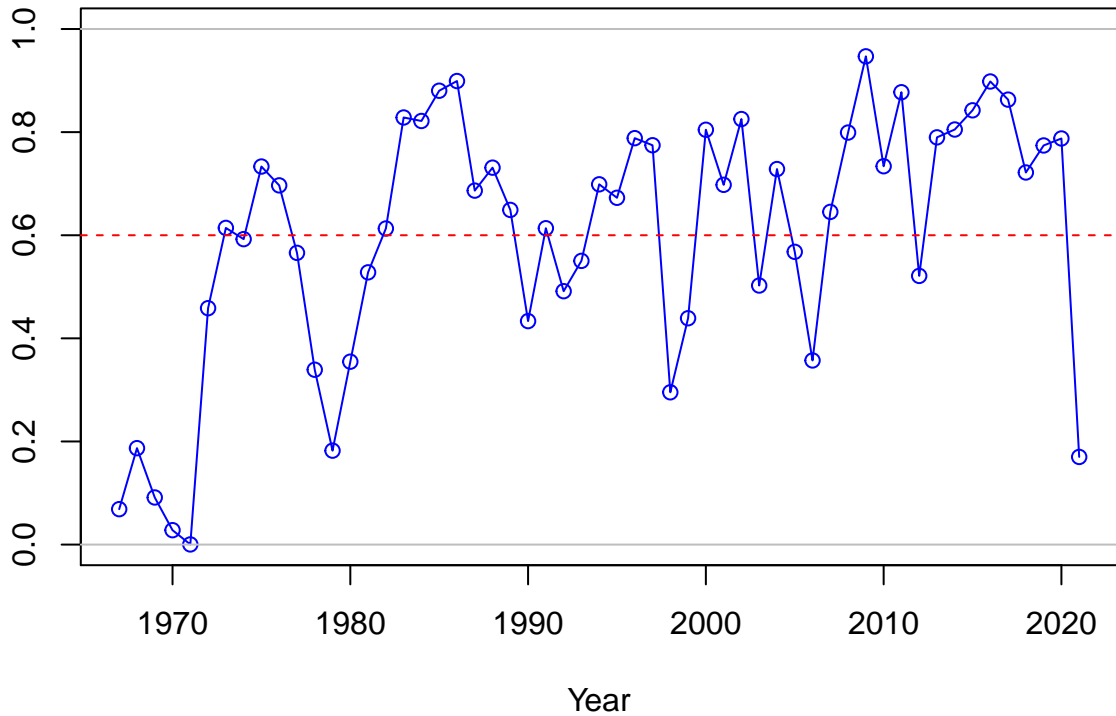


SPR

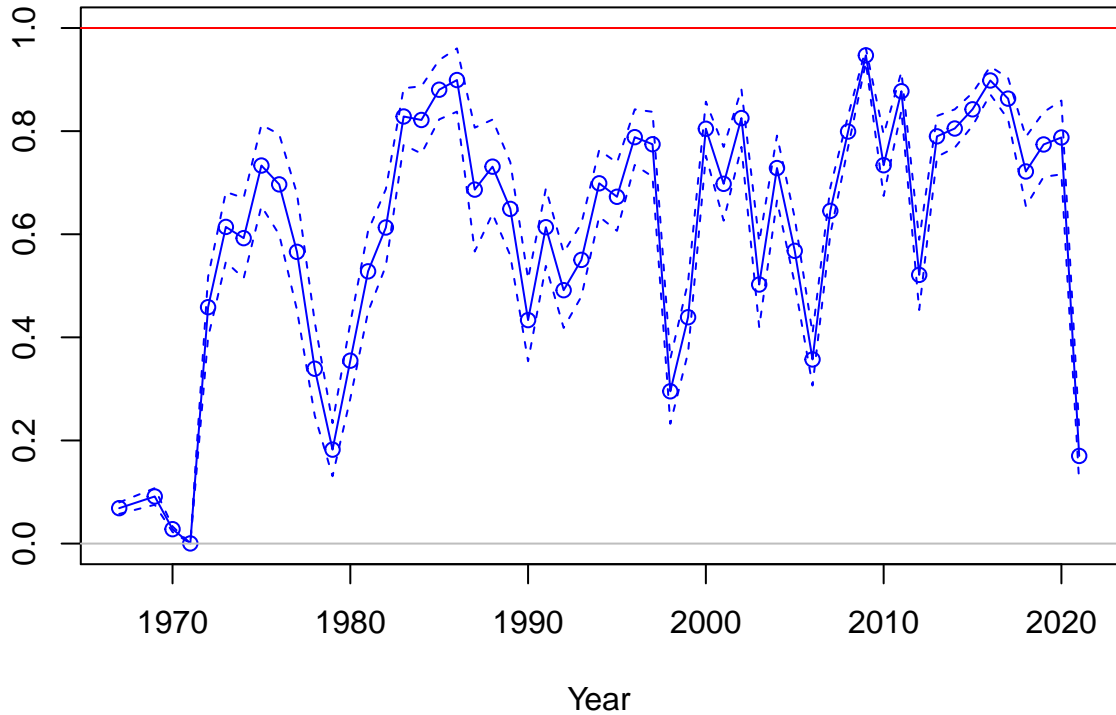


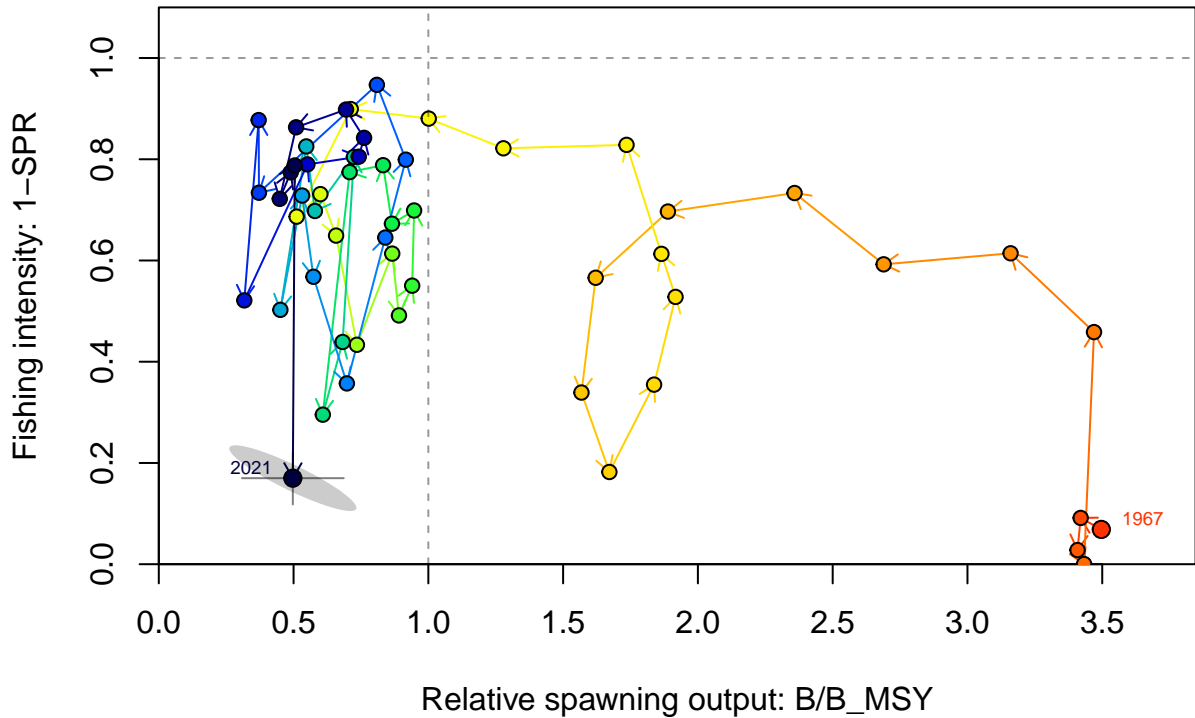


1-SPR

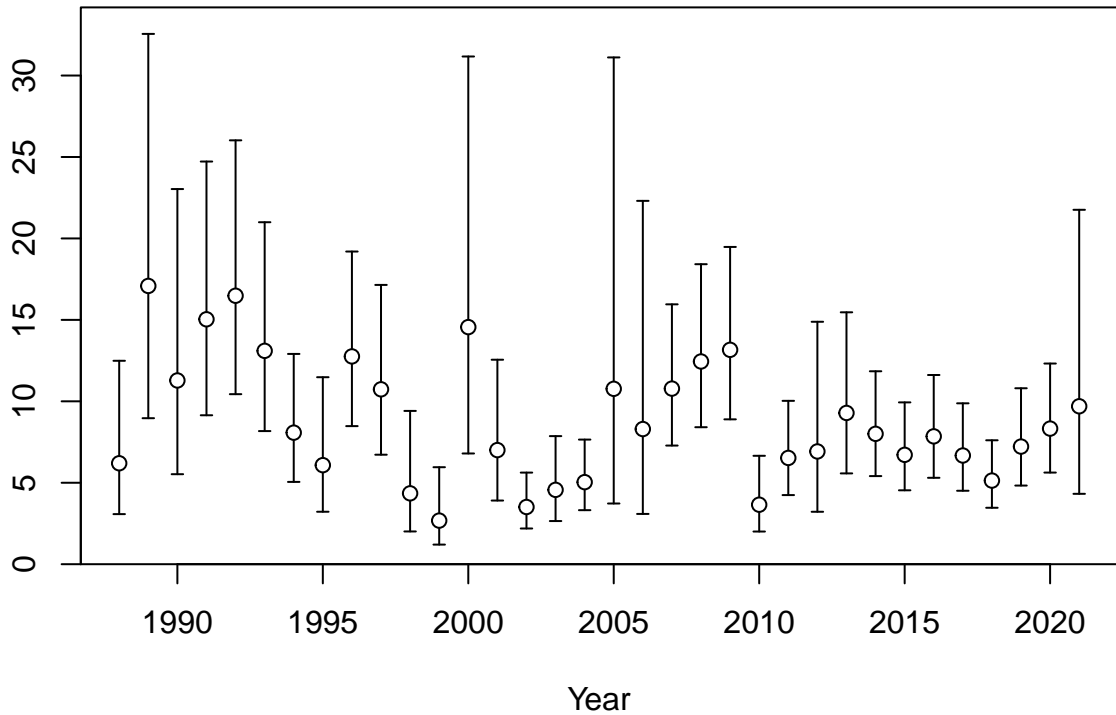


Fishing intensity: 1-SPR

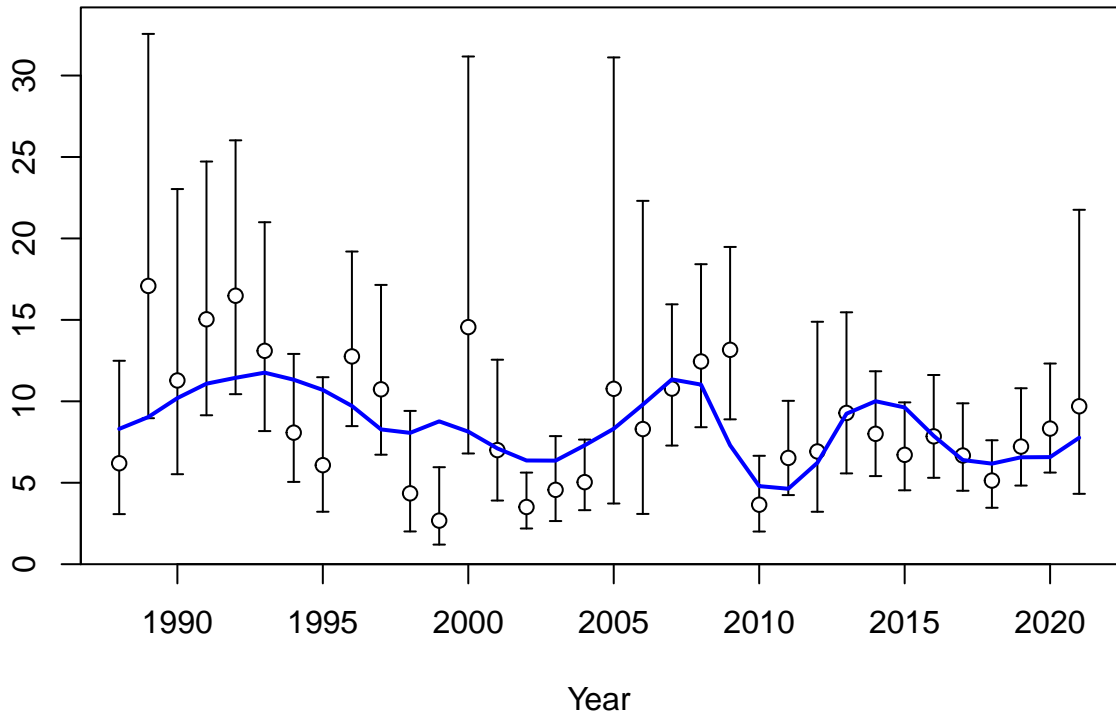


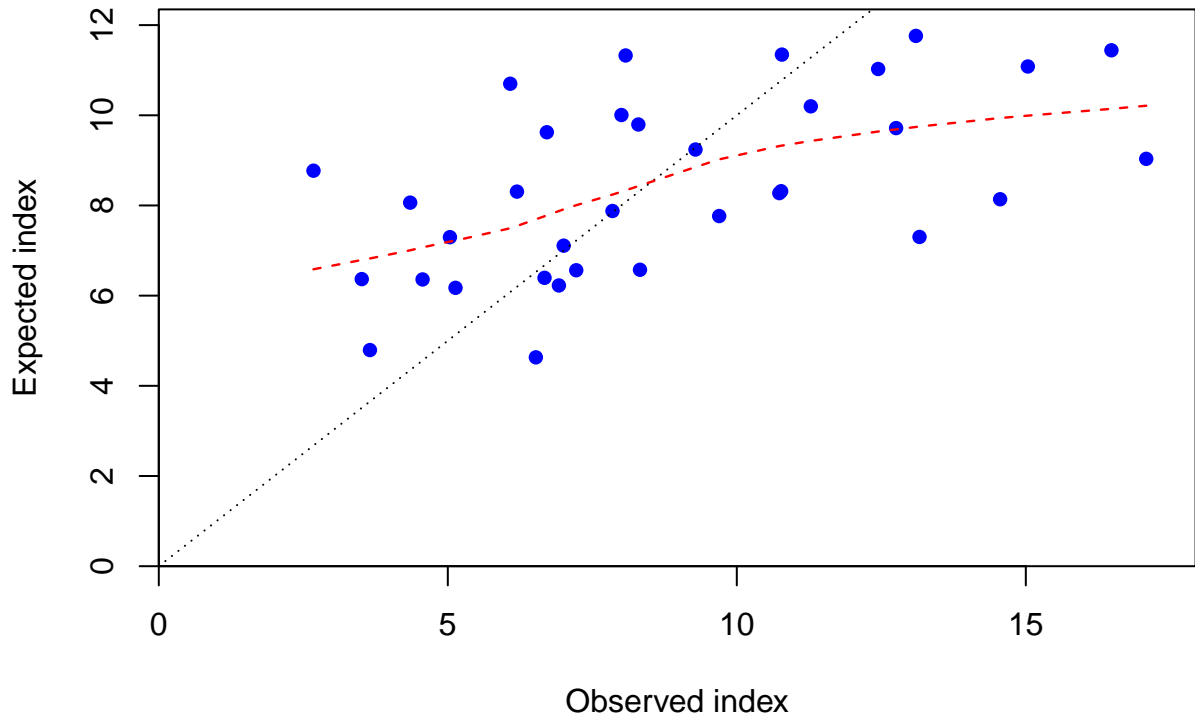


Index

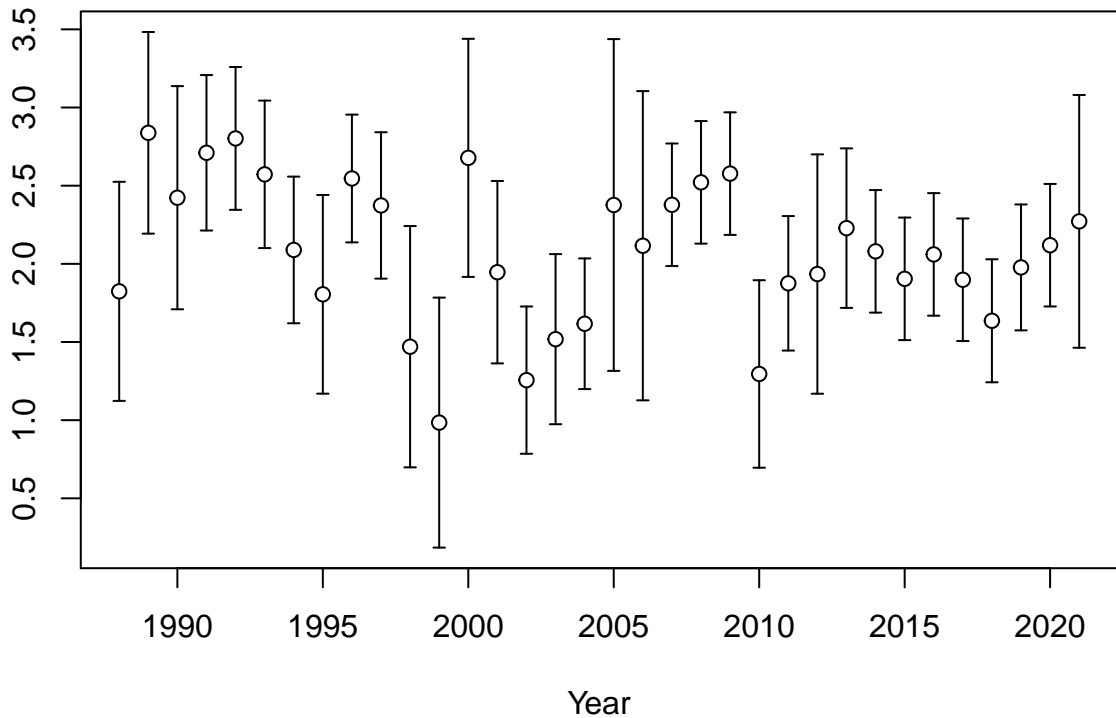


Index

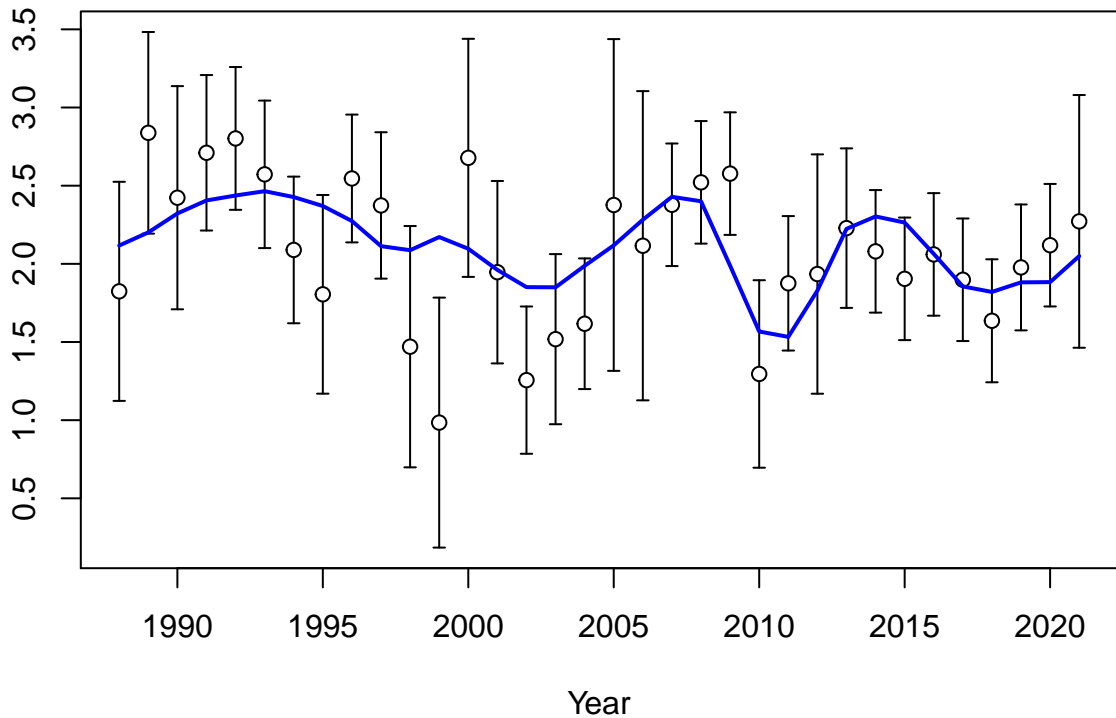




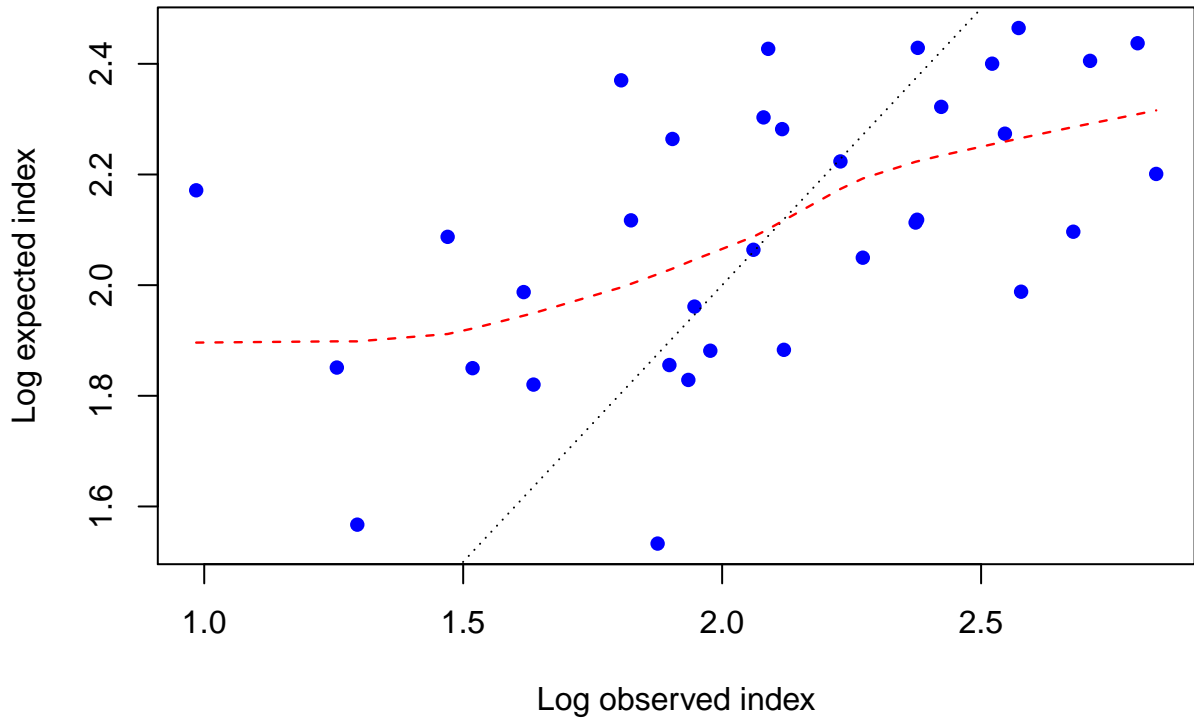
Log index

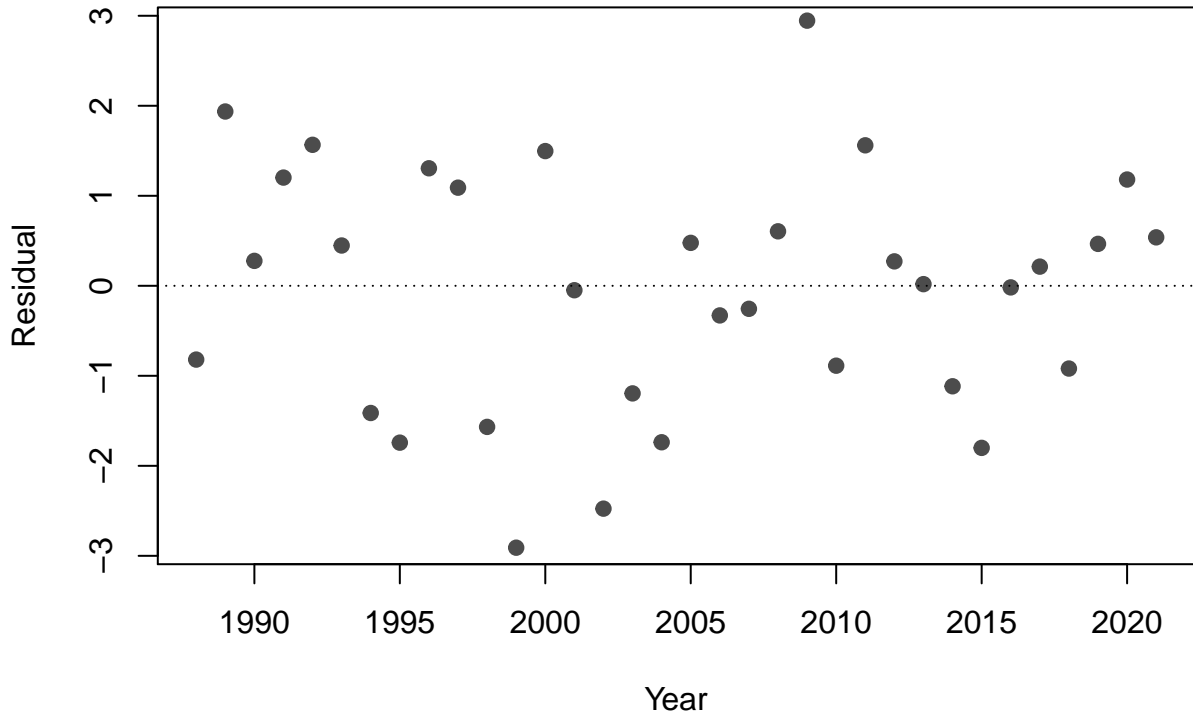


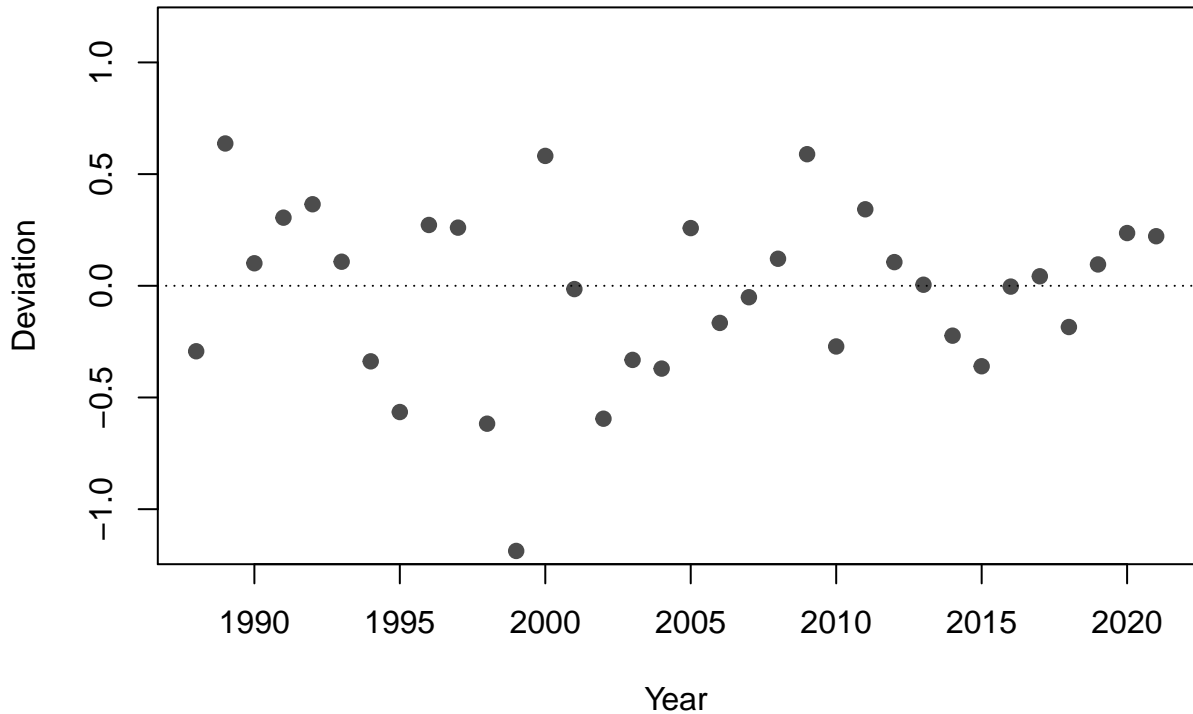
Log index

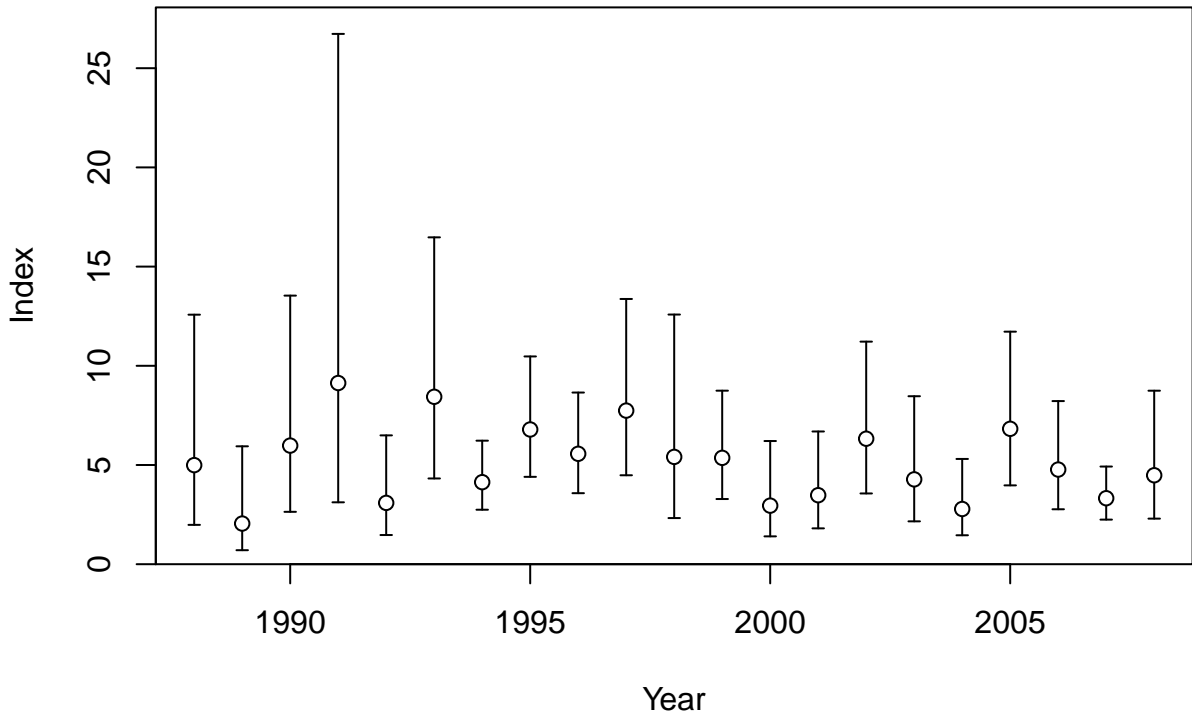


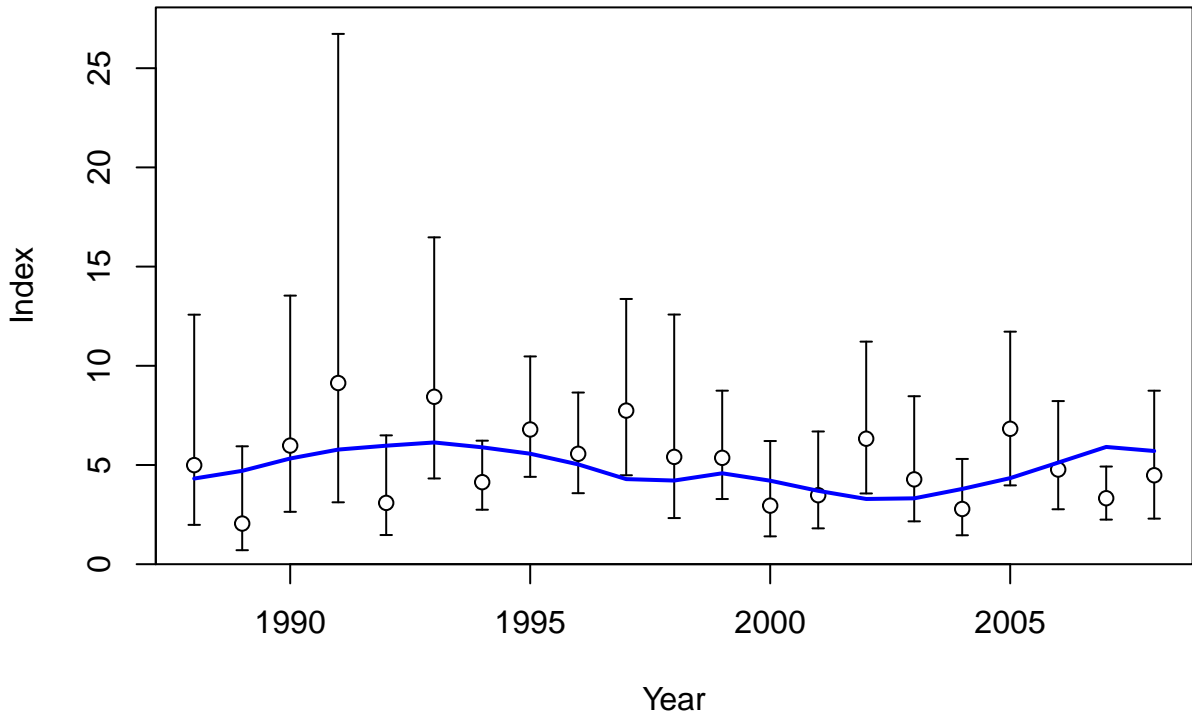


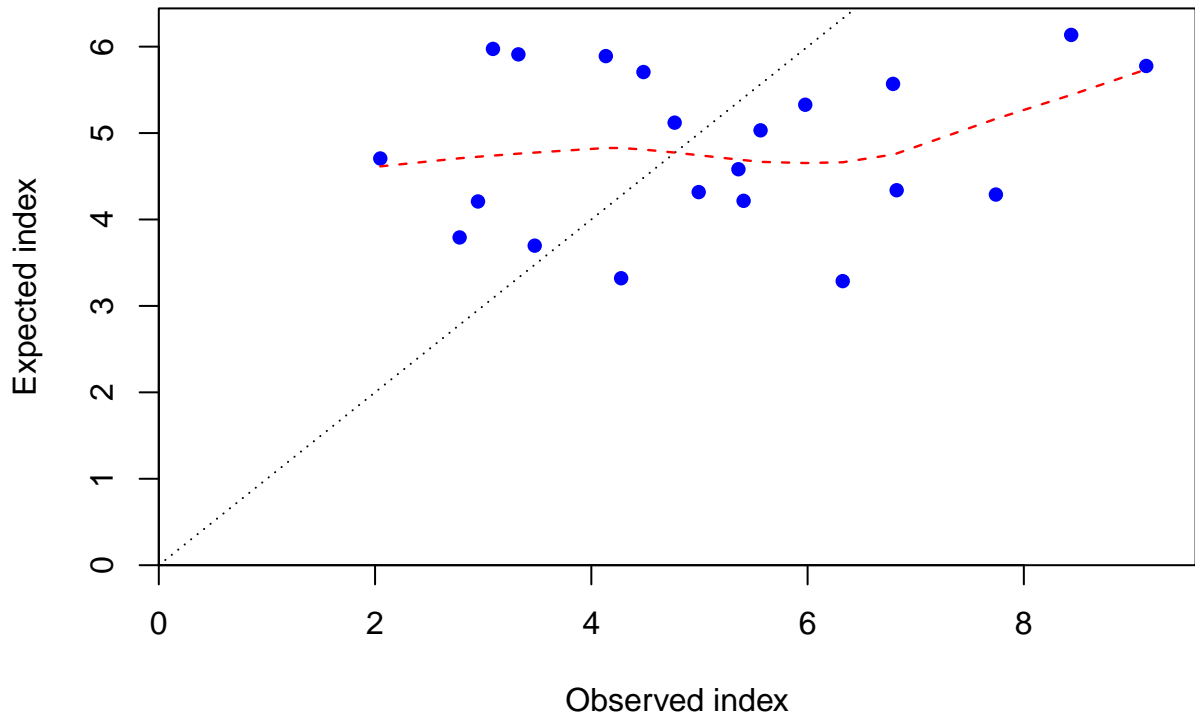


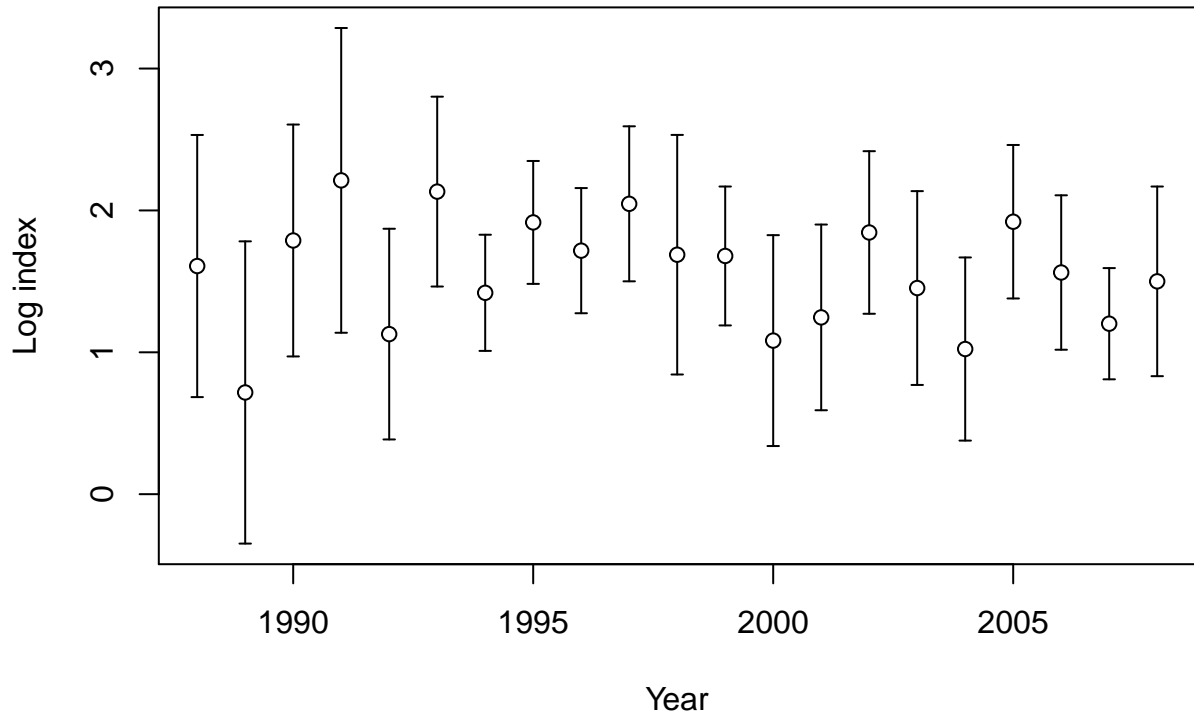


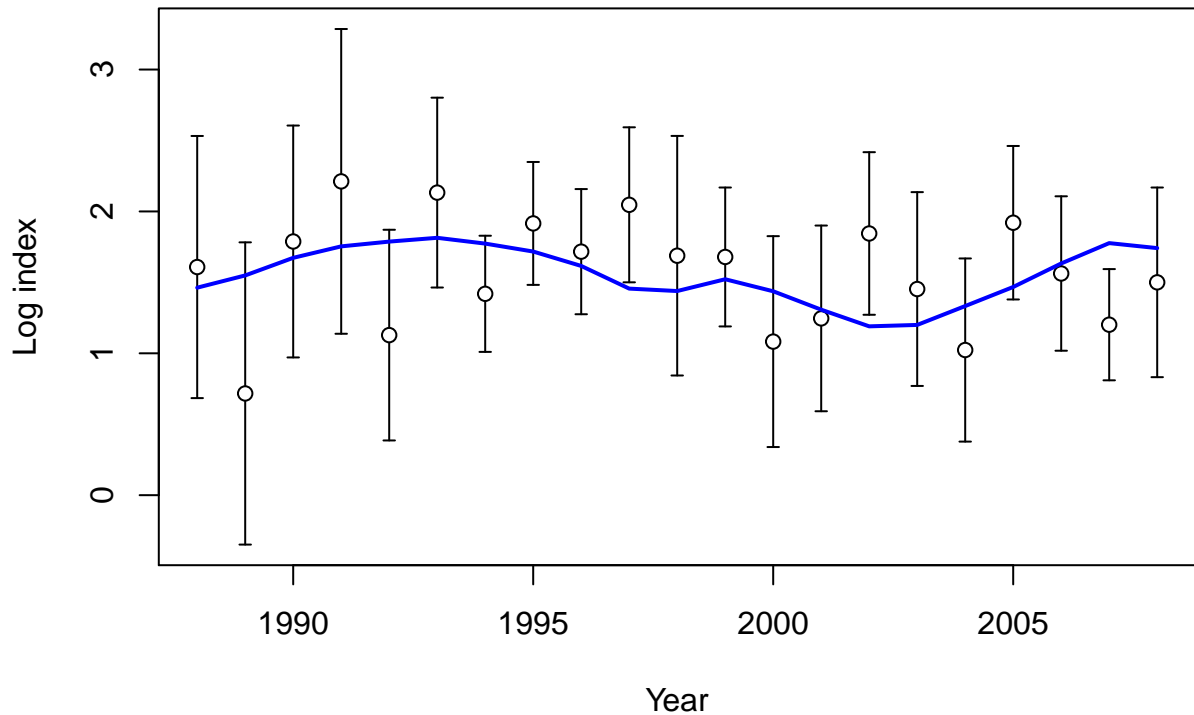




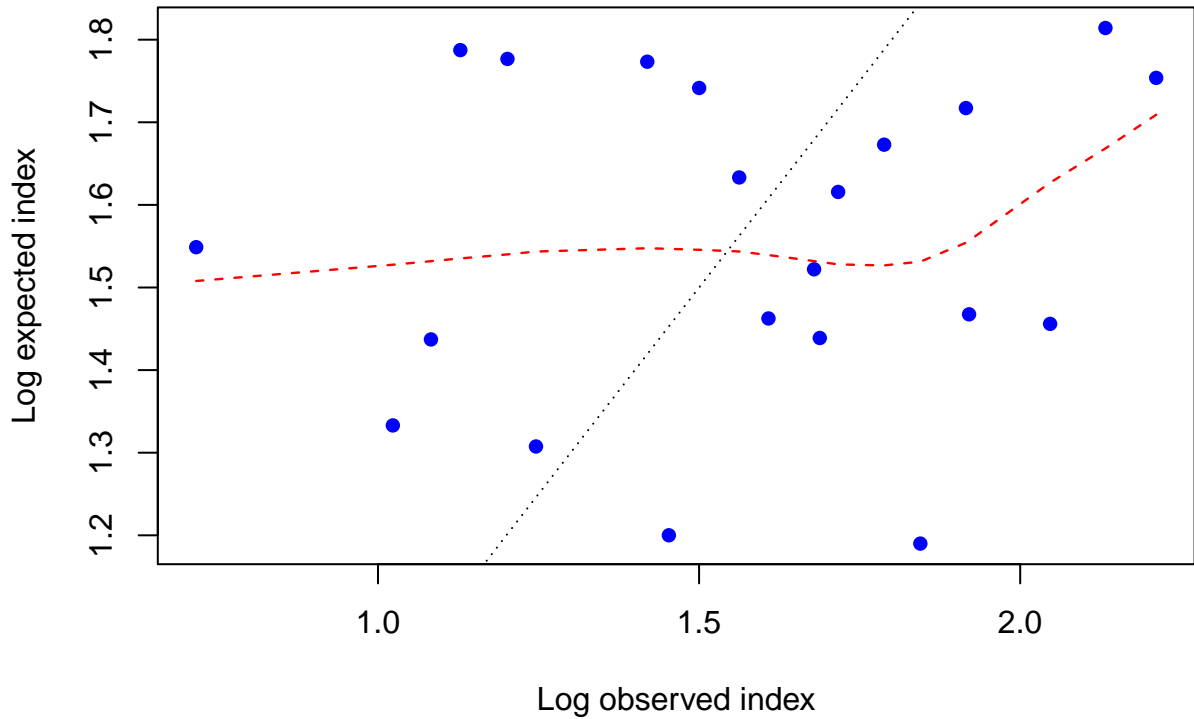




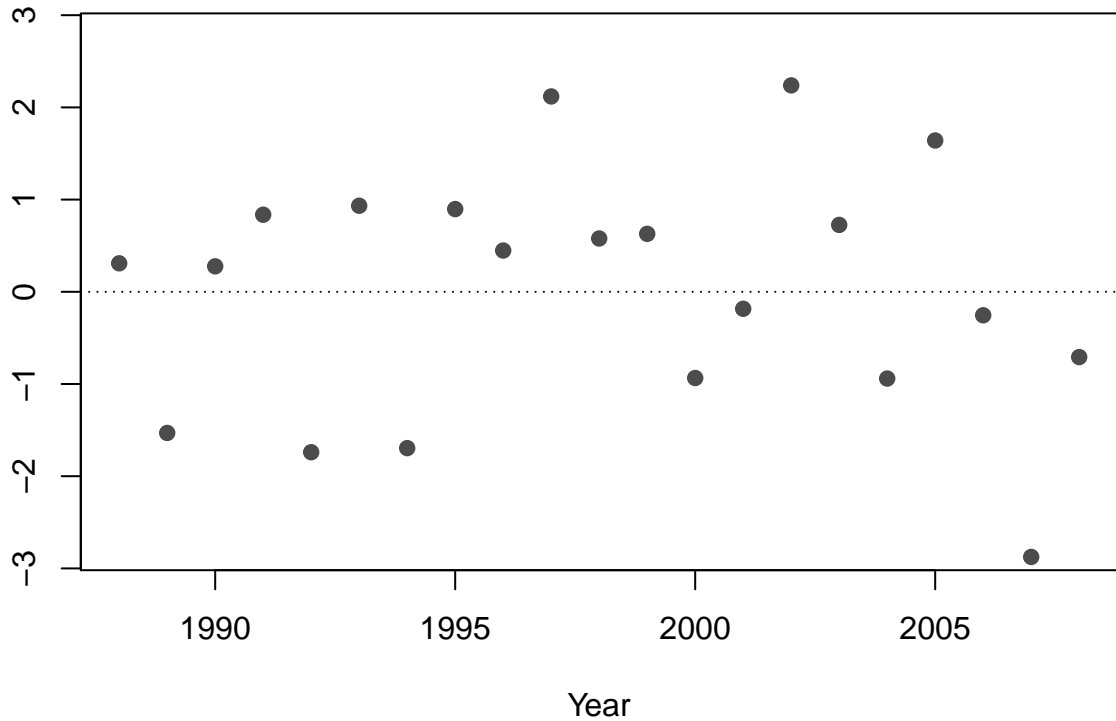


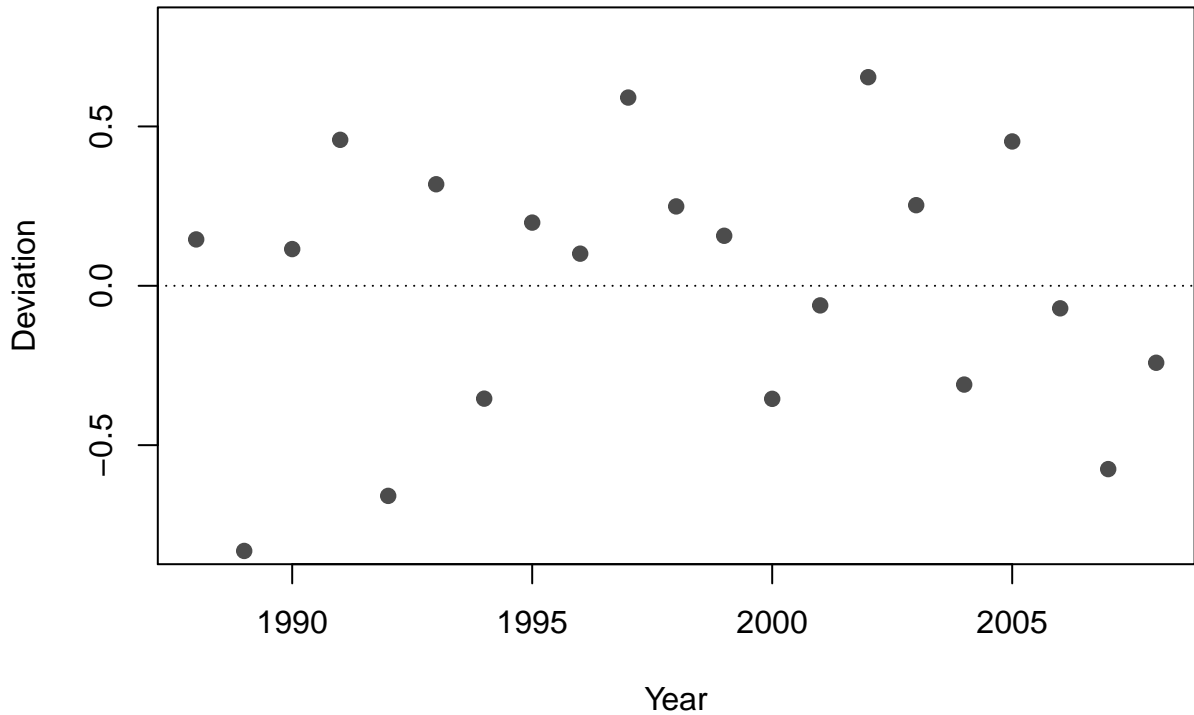




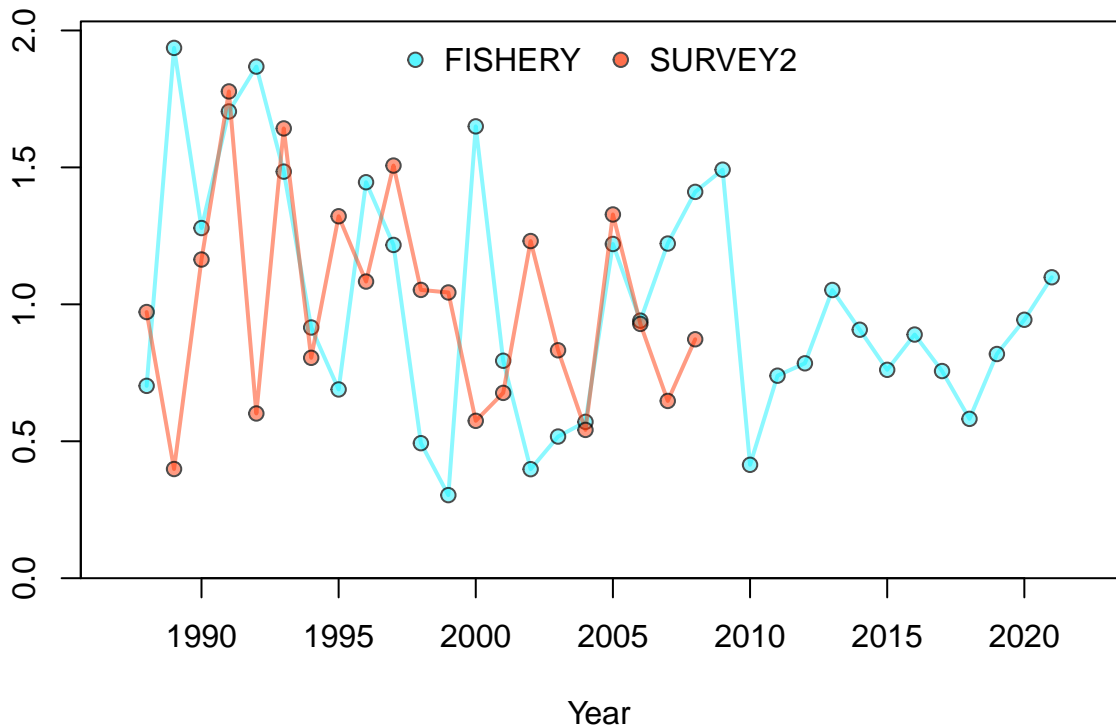


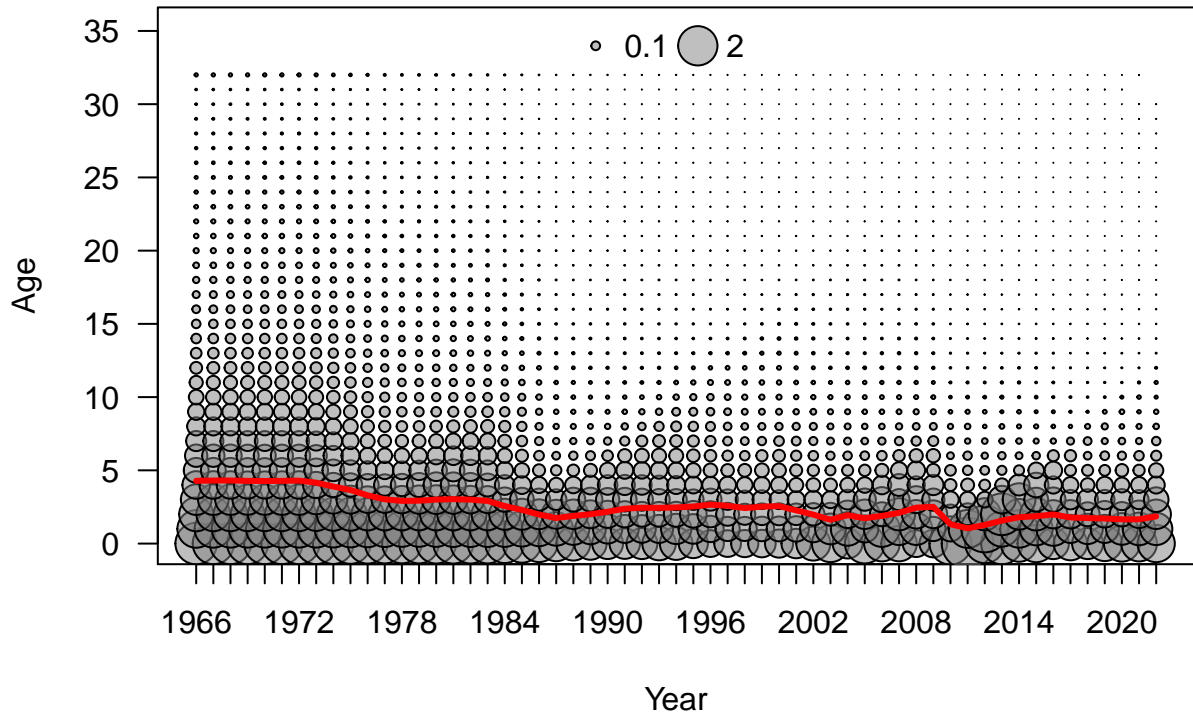
Residual

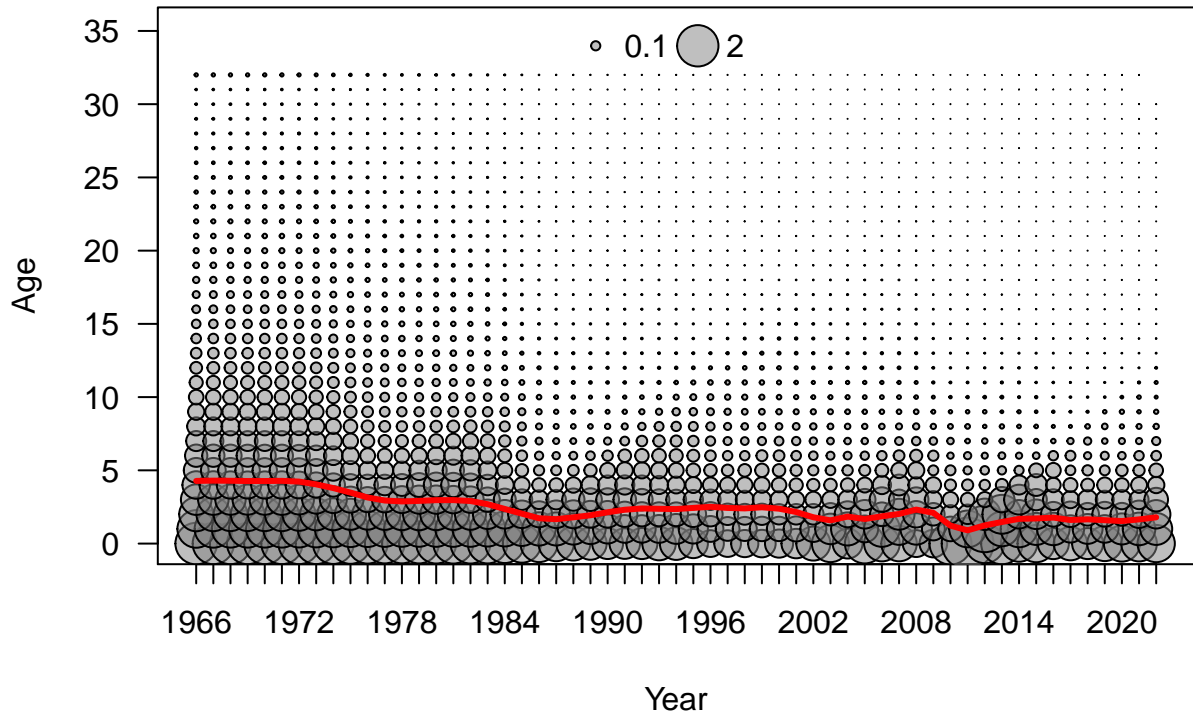


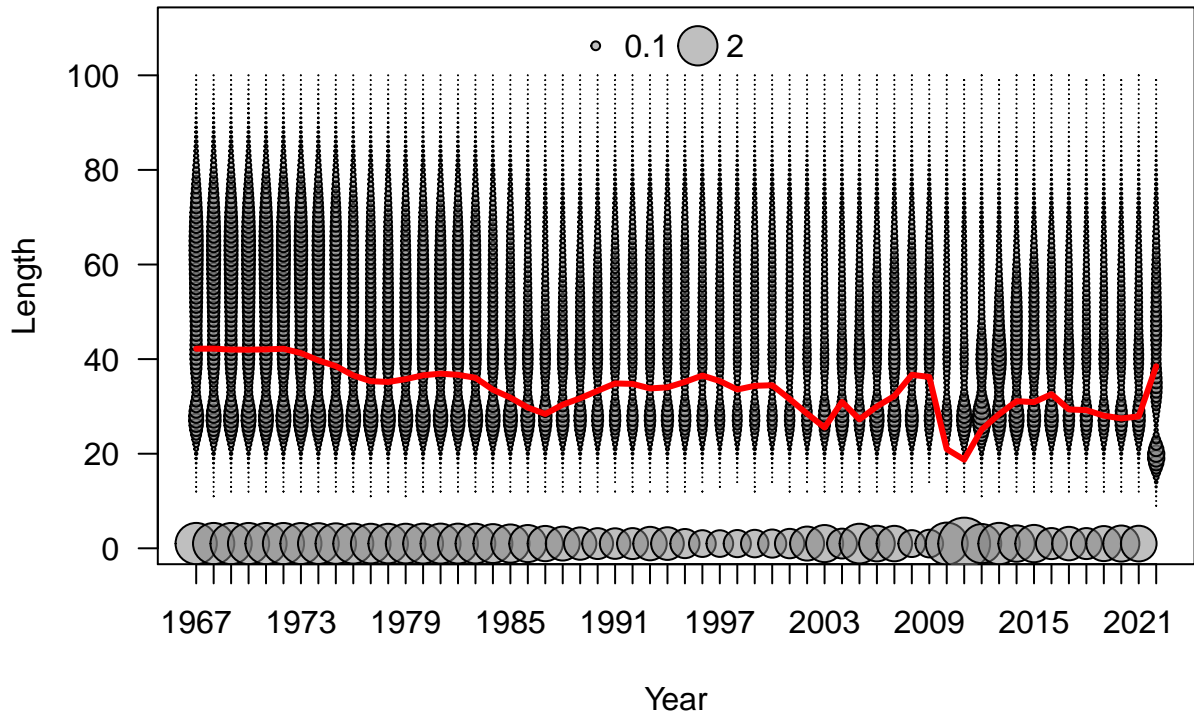


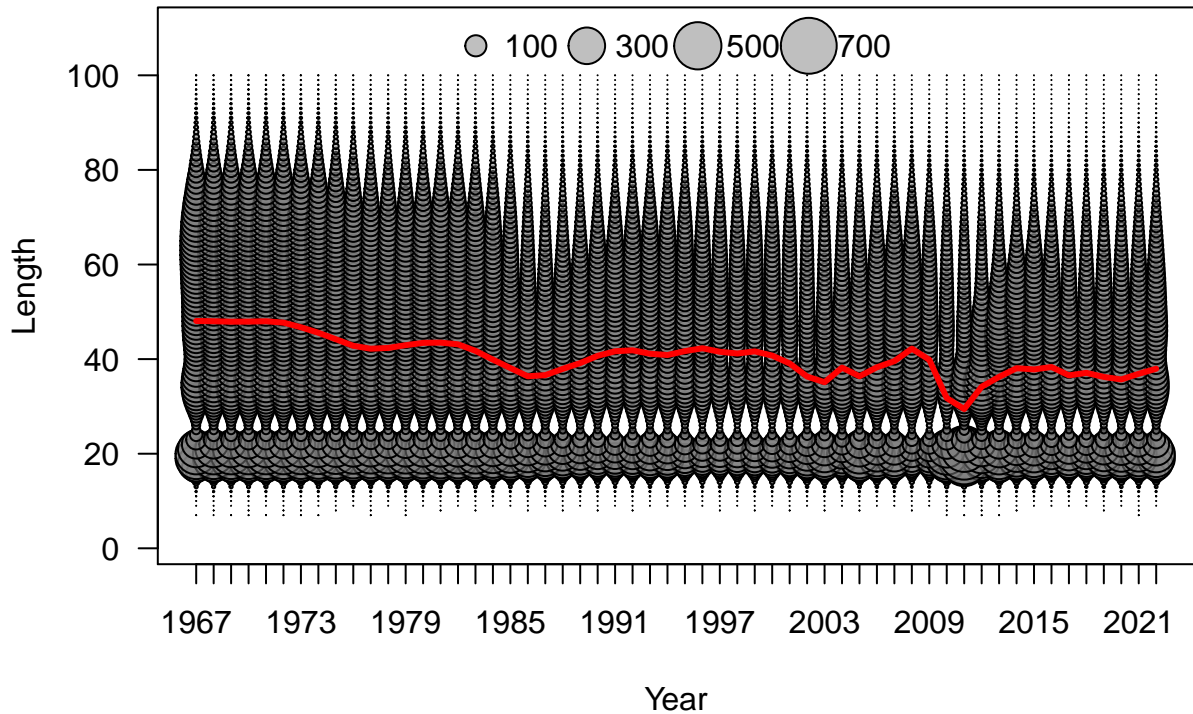
Standardized index



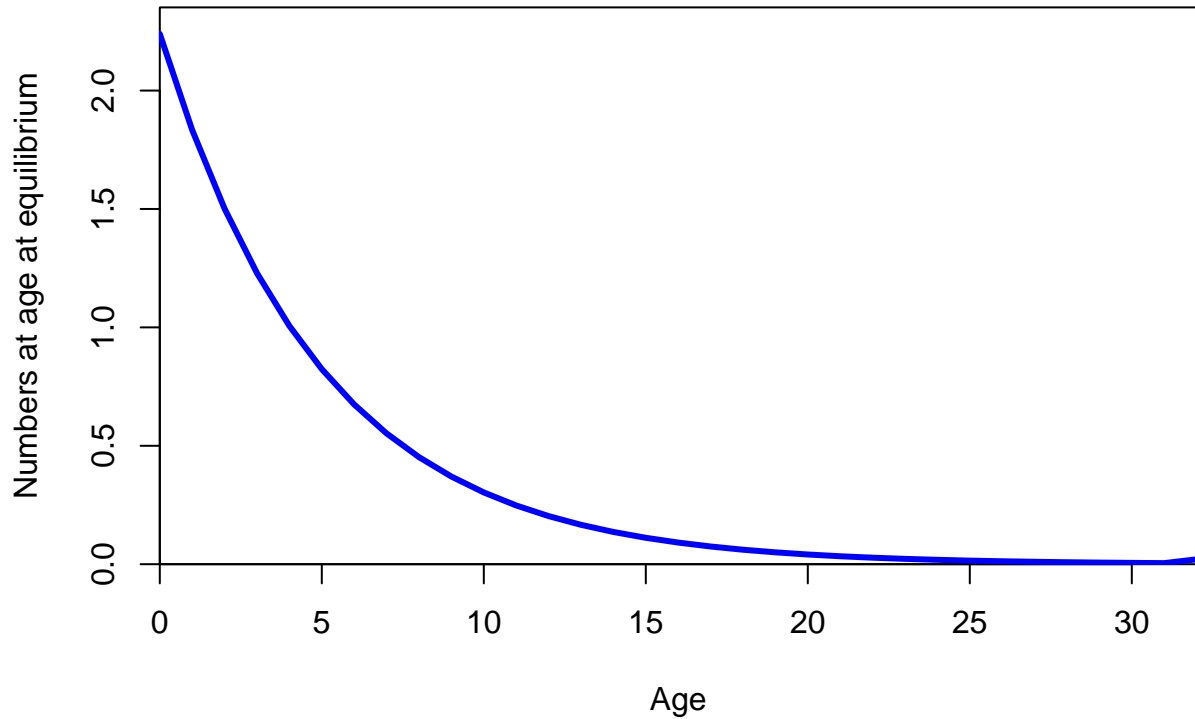


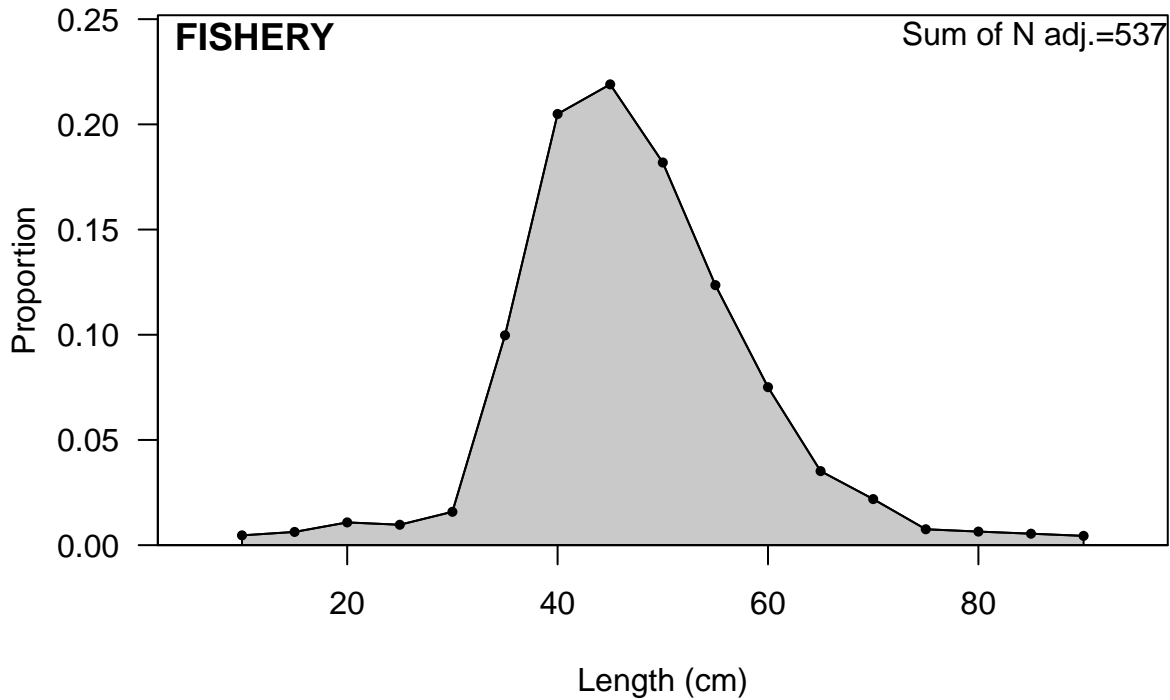






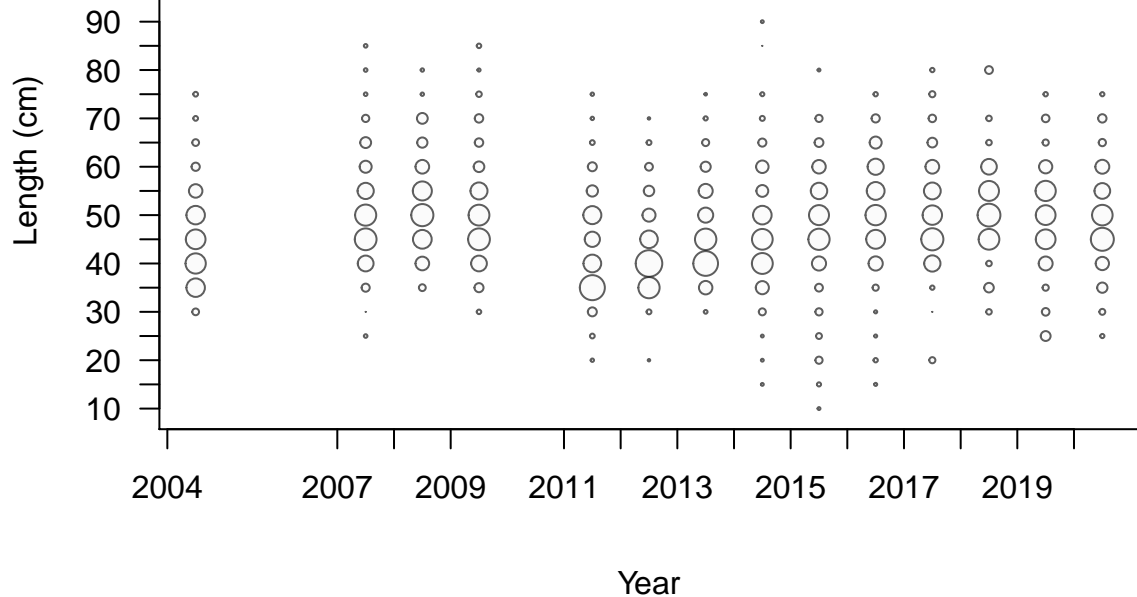




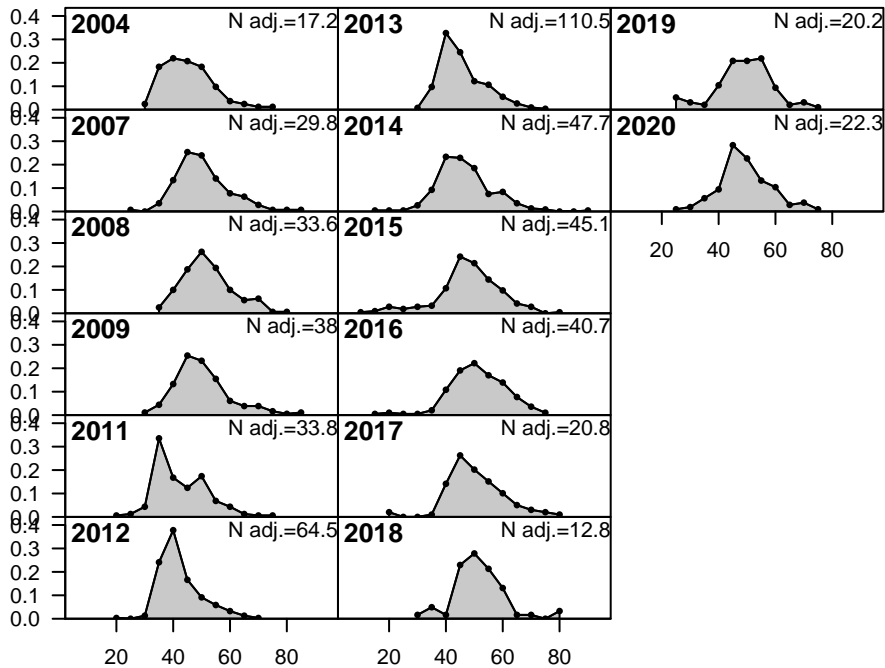


# FISHERY

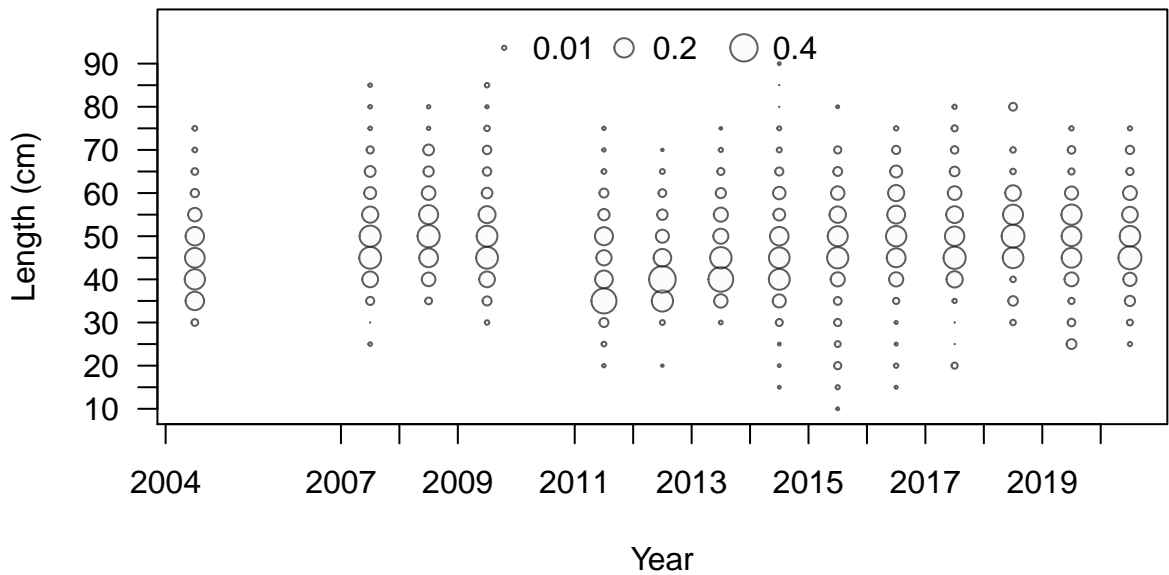
• 0.01 ○ 0.2 ○ 0.4



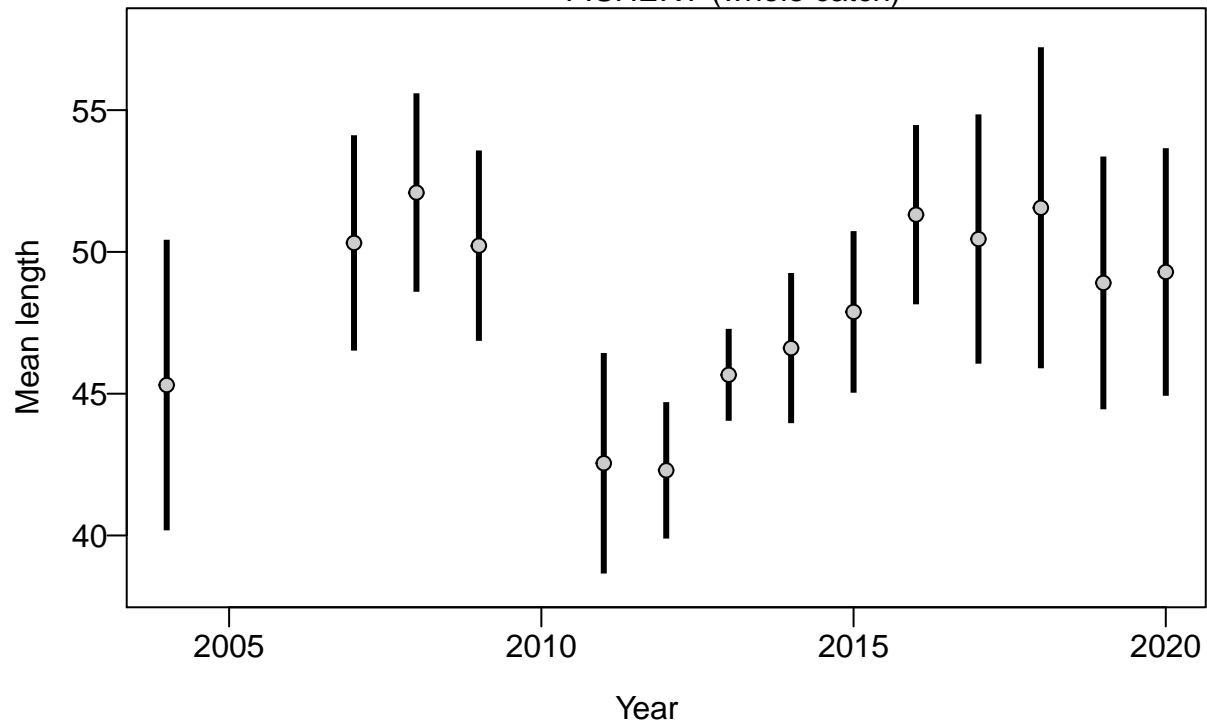
Proportion

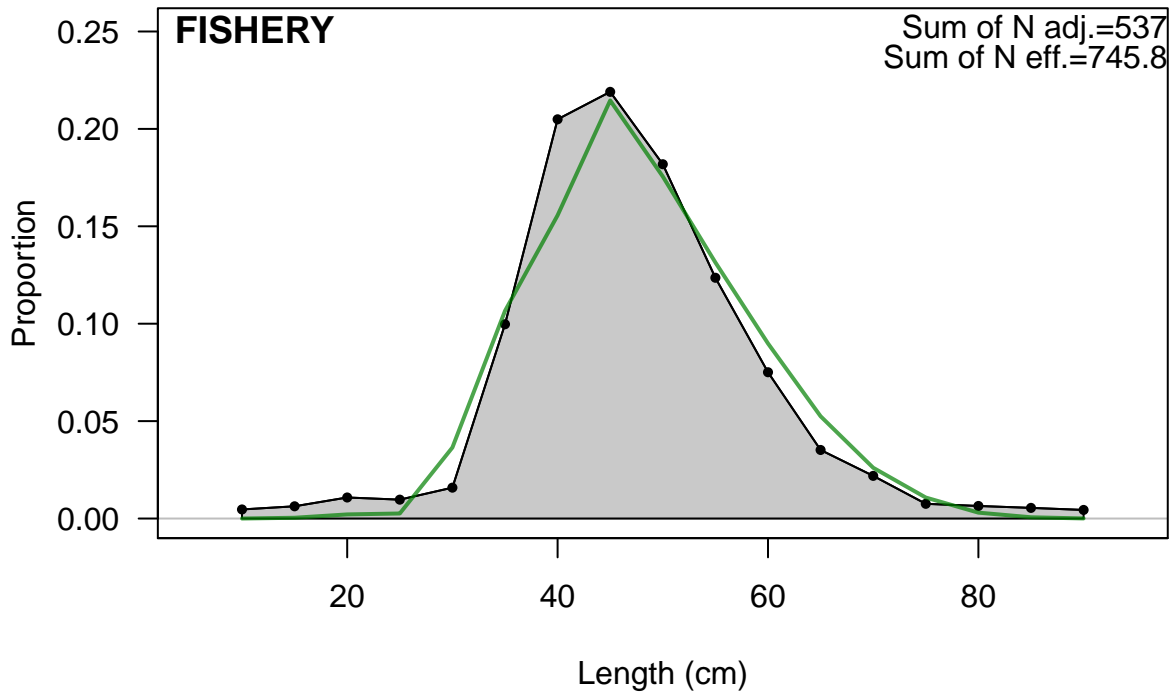


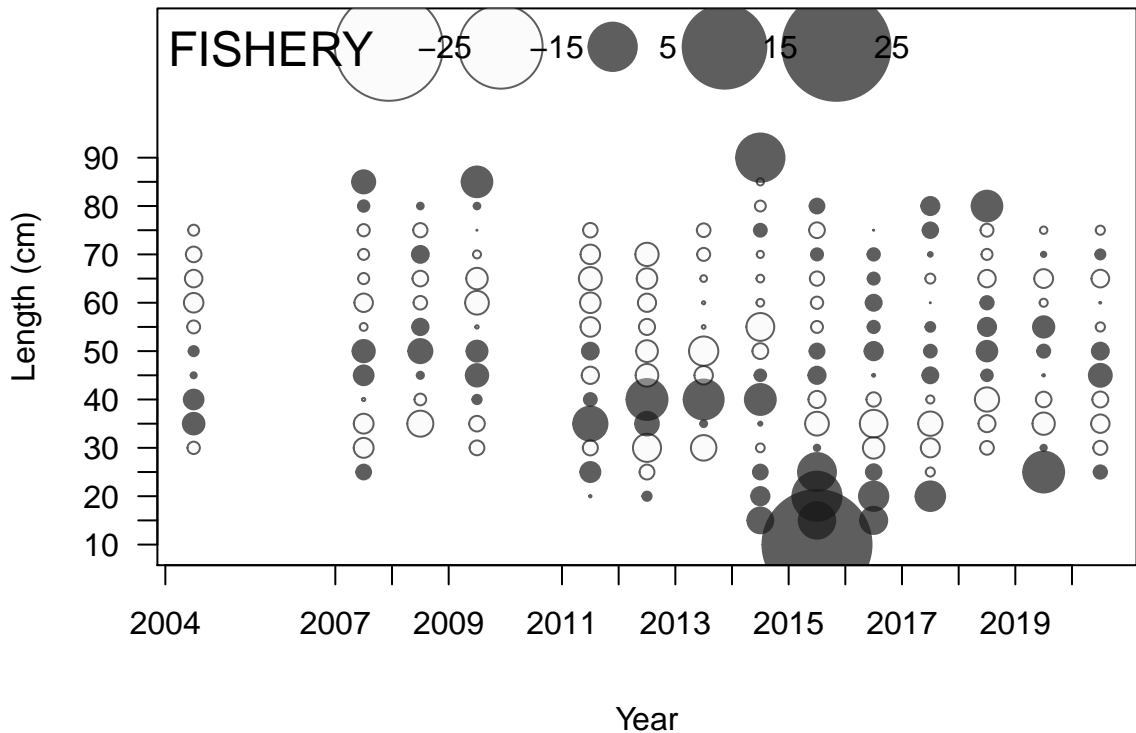
Length (cm)



FISHERY (whole catch)

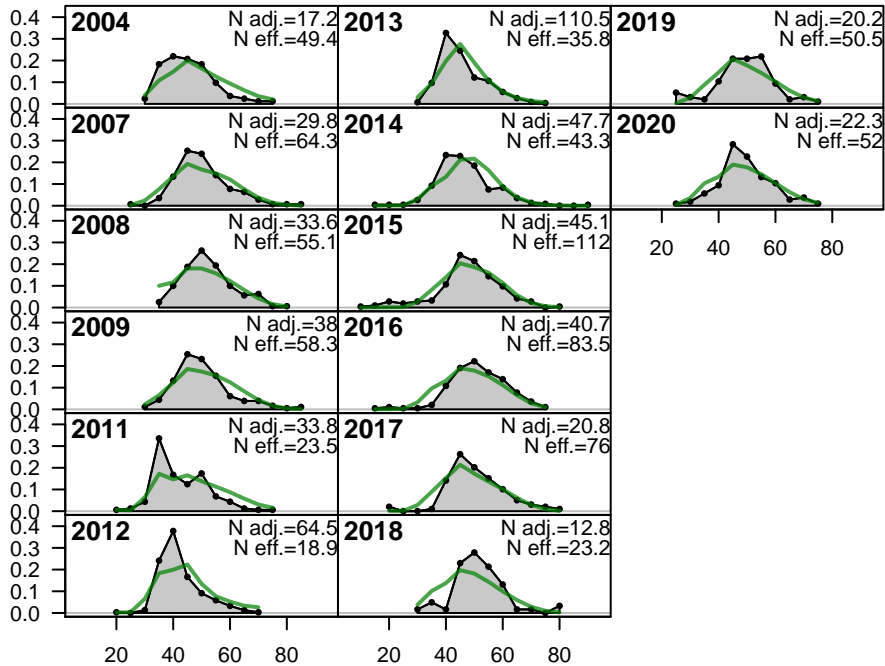






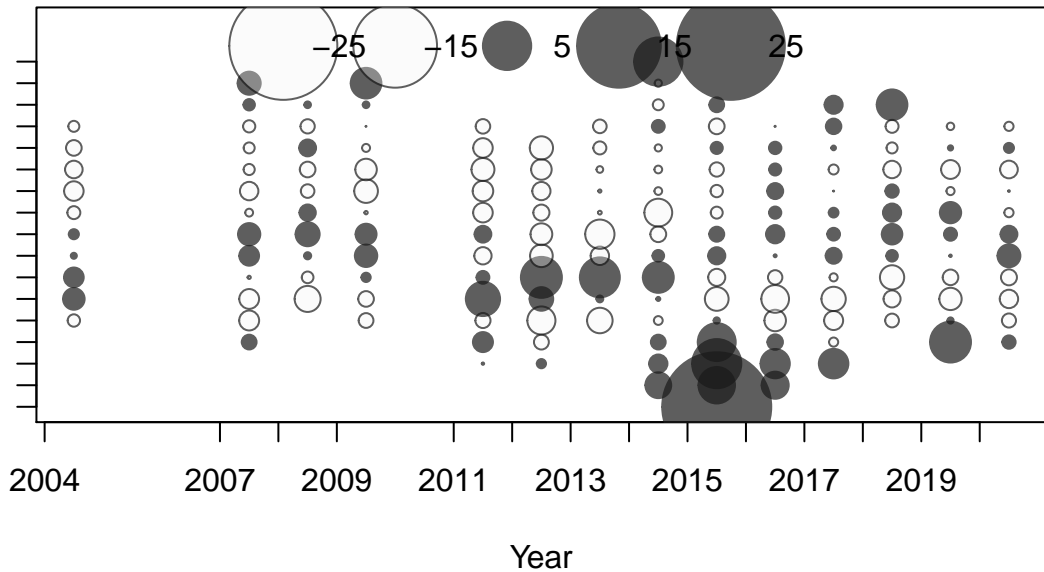


Proportion

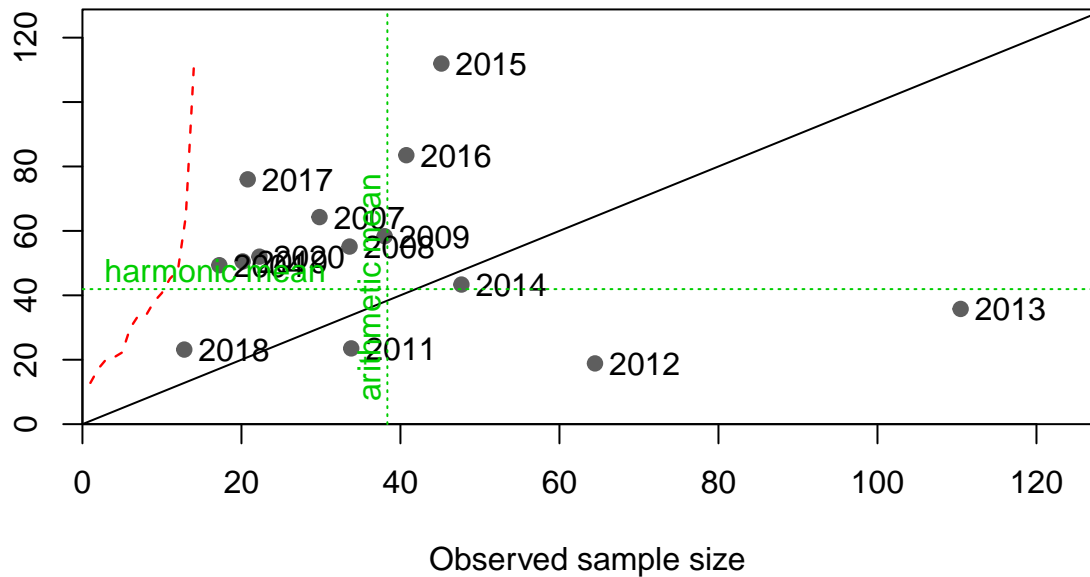


Length (cm)

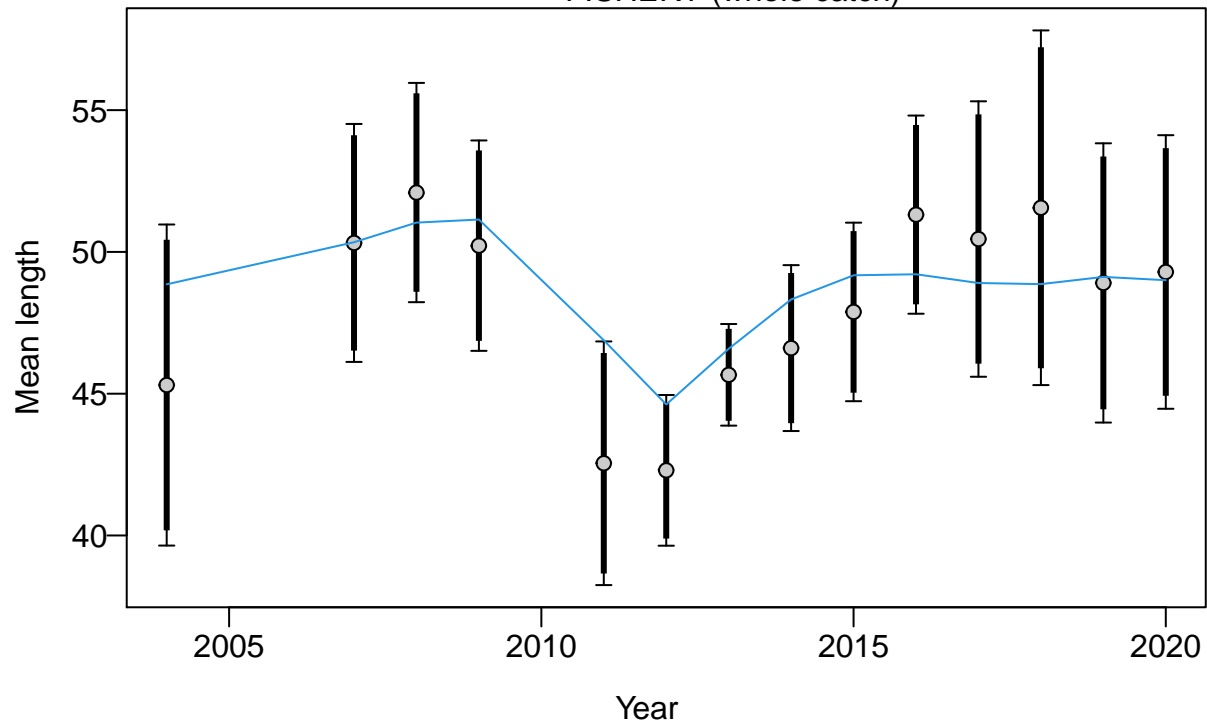
Length (cm)

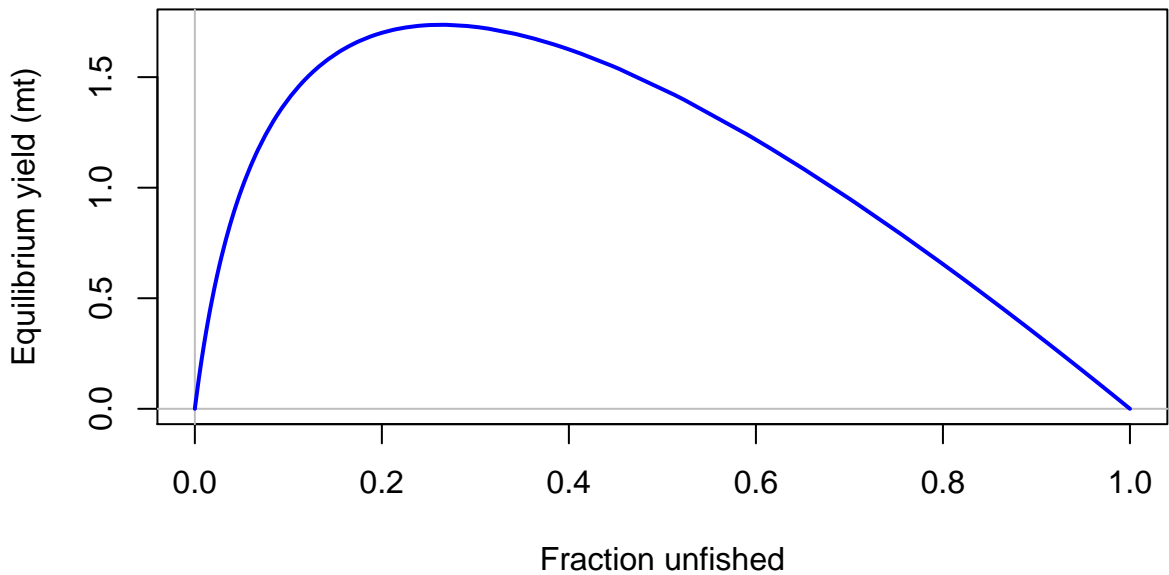


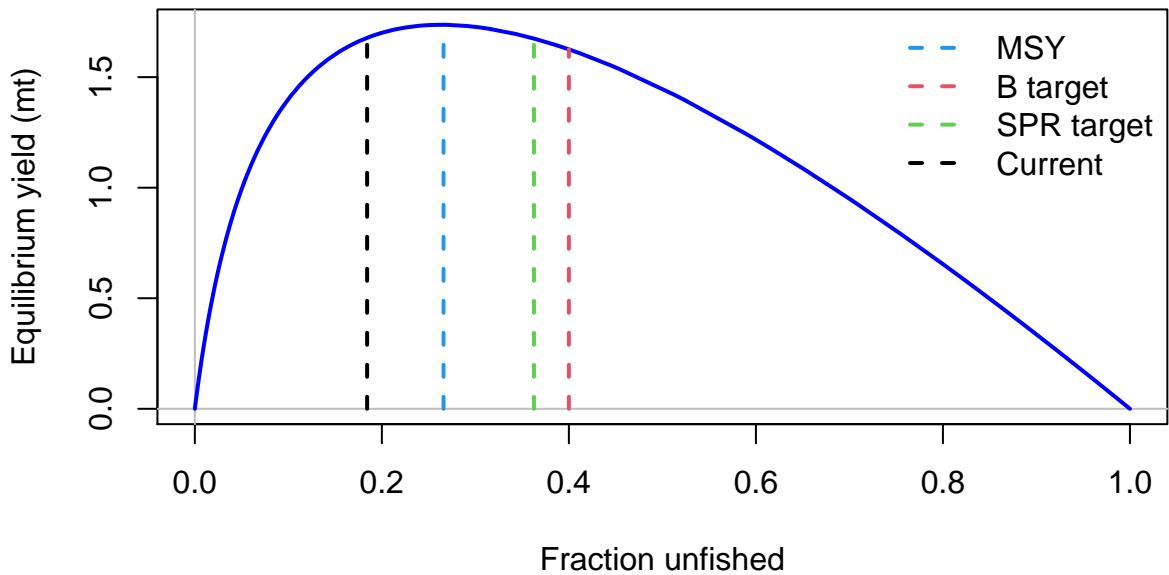
Effective sample size

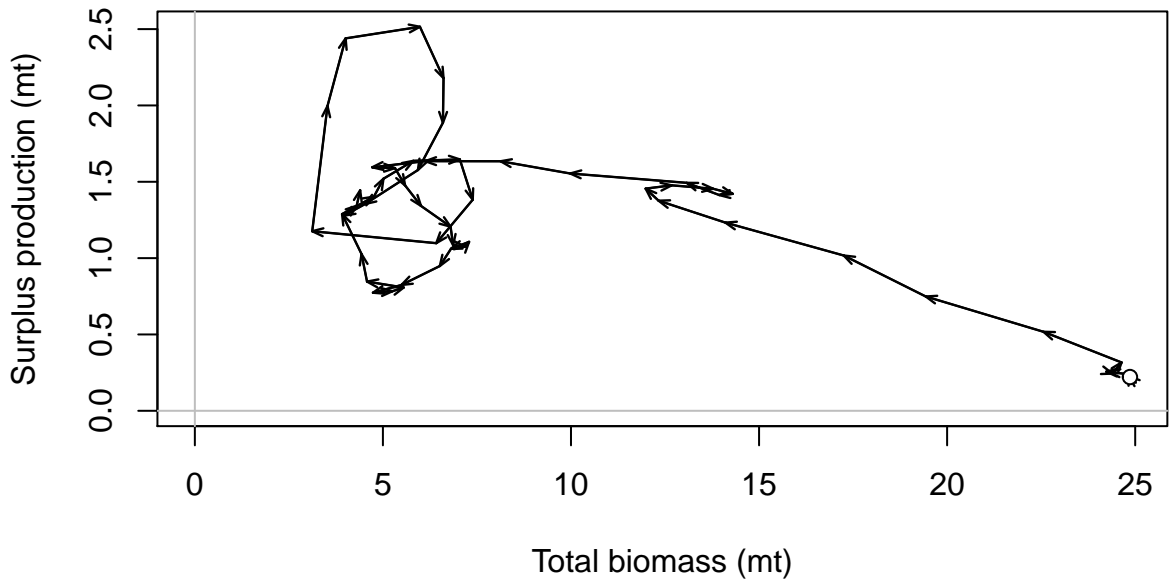


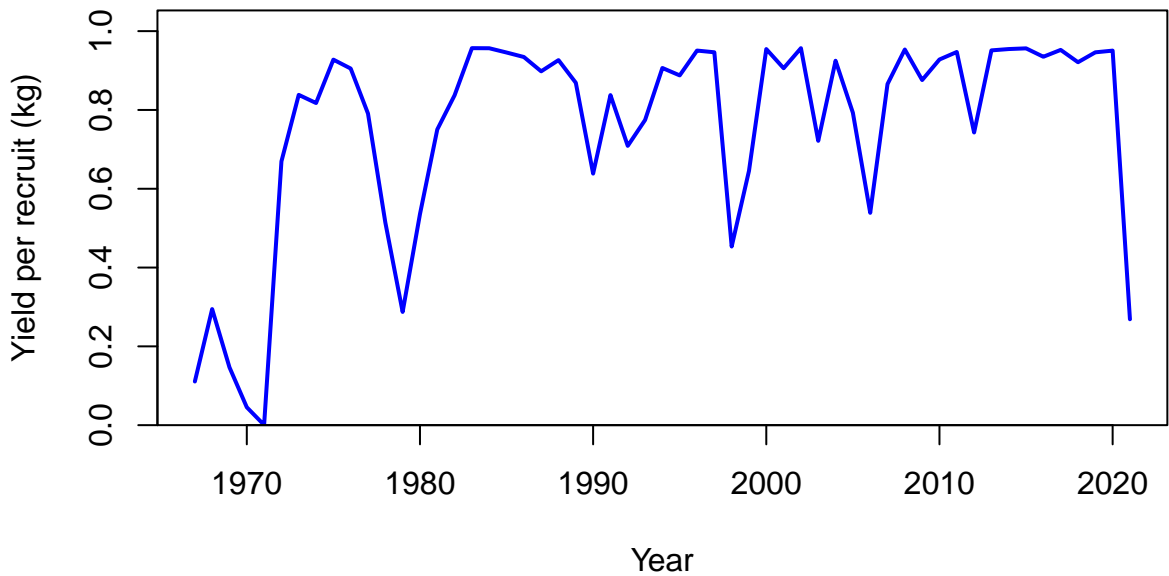
FISHERY (whole catch)



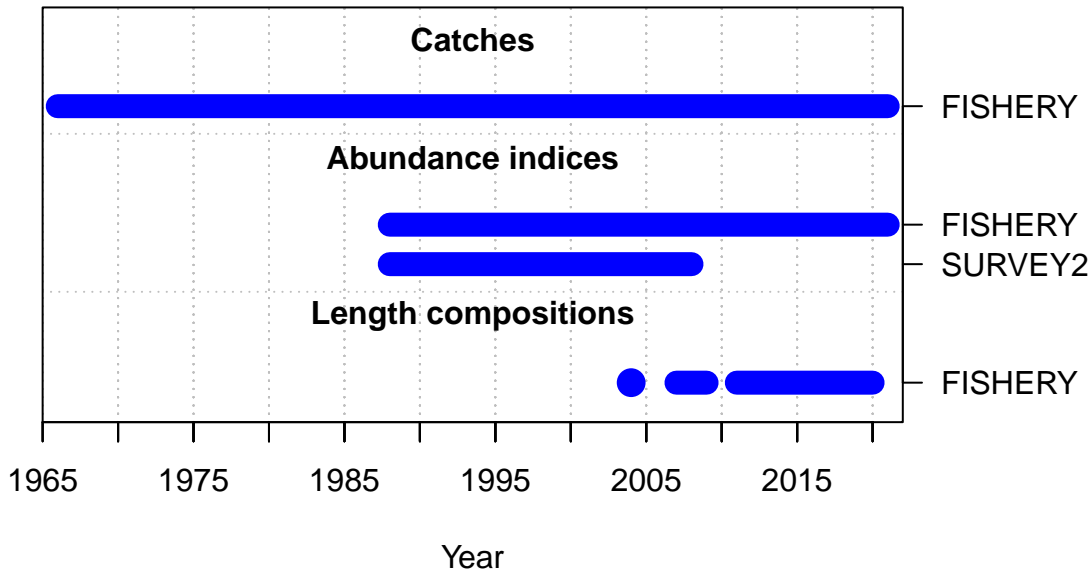


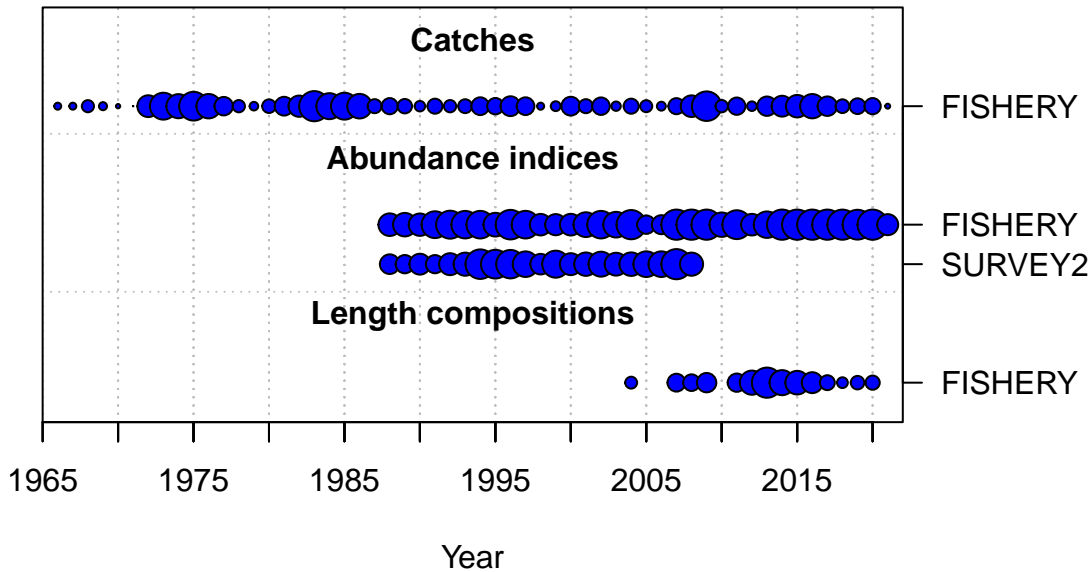






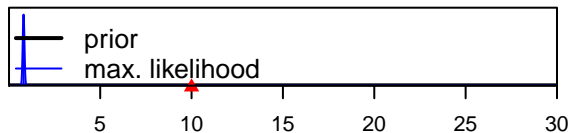




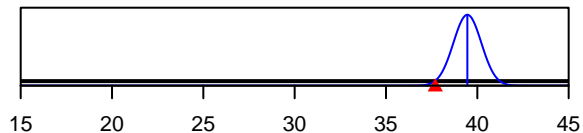


Density

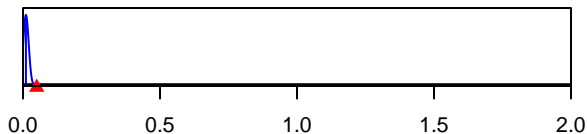
SR\_LN(R0)



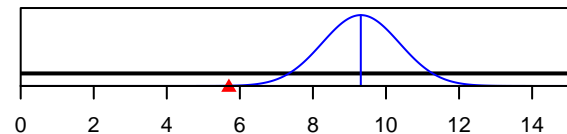
Size\_inflection\_FISHERY(1)



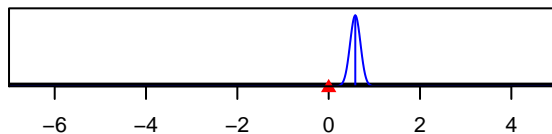
InitF\_seas\_1\_flt\_1FISHERY



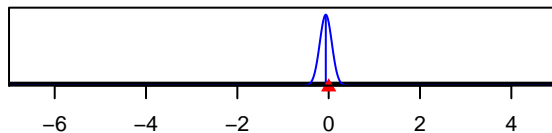
Size\_95%width\_FISHERY(1)



LnQ\_base\_FISHERY(1)



LnQ\_base\_SURVEY2(2)



Parameter value