

Plots created using the 'r4ss' package in R  
Stock Synthesis version: 3.30.19.0  
StartTime: Thu Jun 30 12:18:35 2022  
Data\_File: data.ss  
Control\_File: control.ss

Length (cm, beginning of the year)

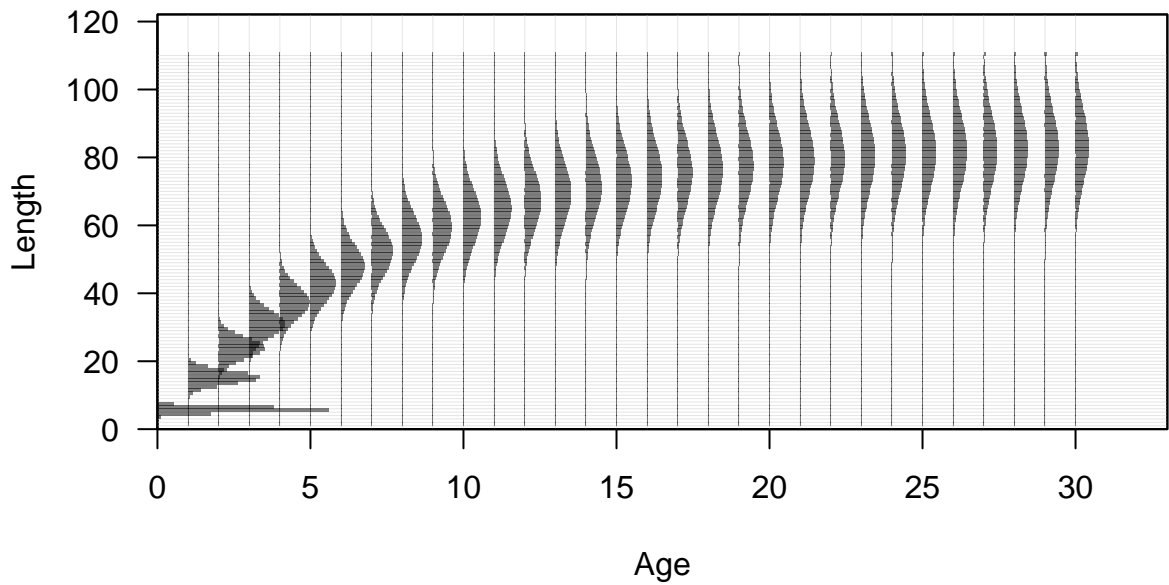


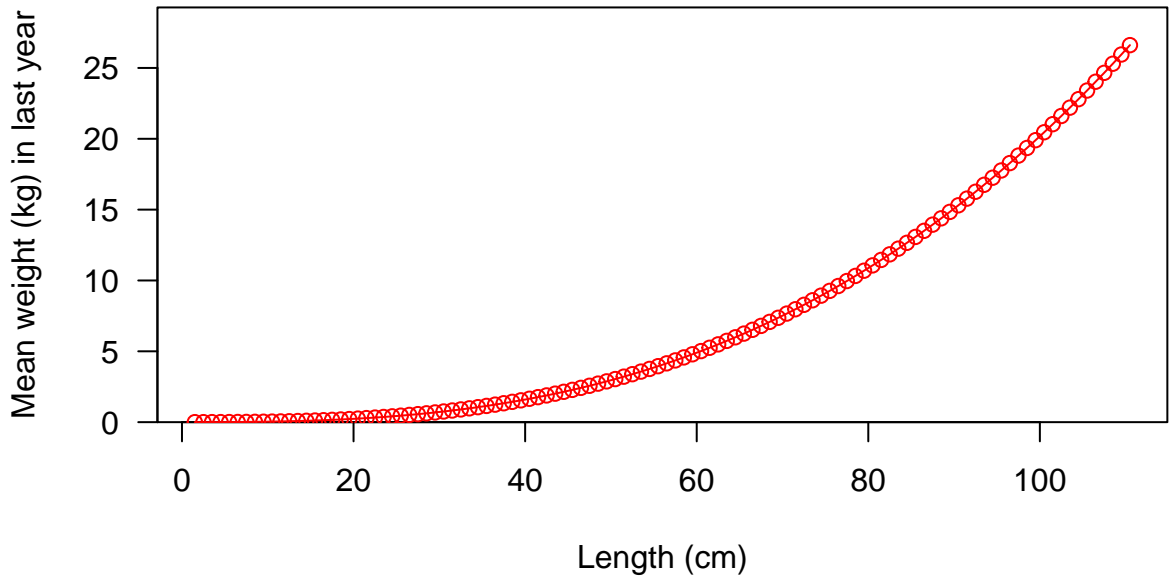
Age (yr)

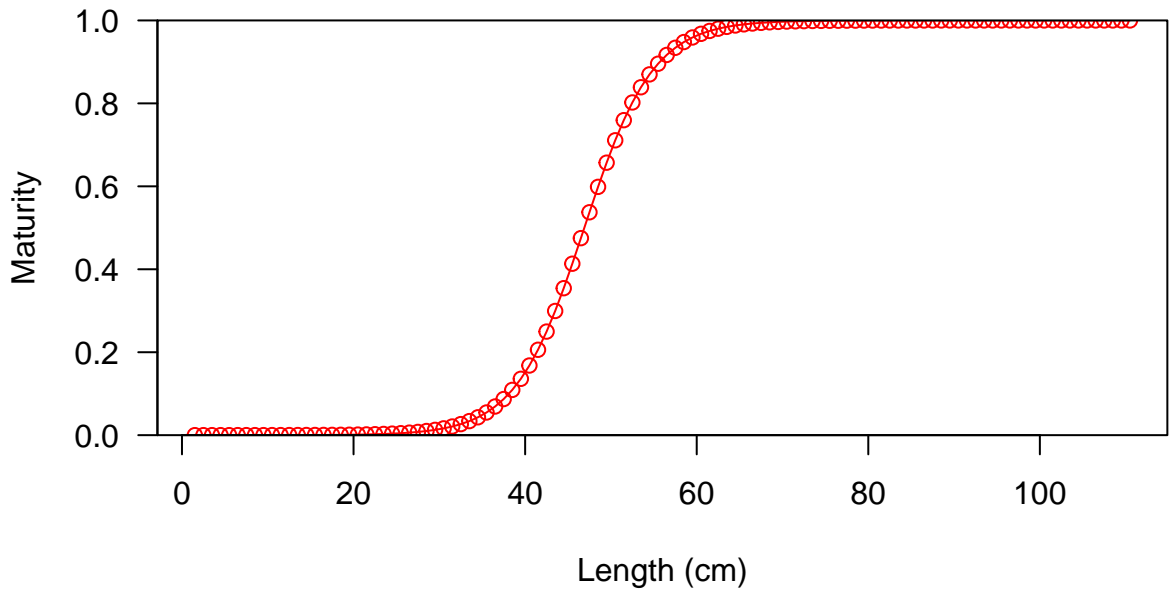






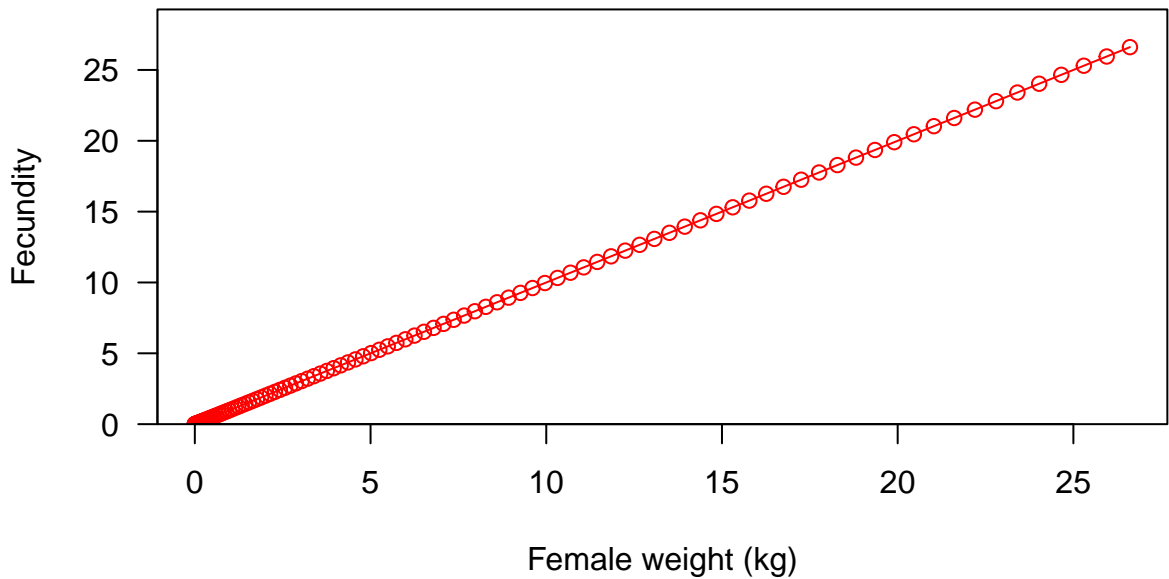




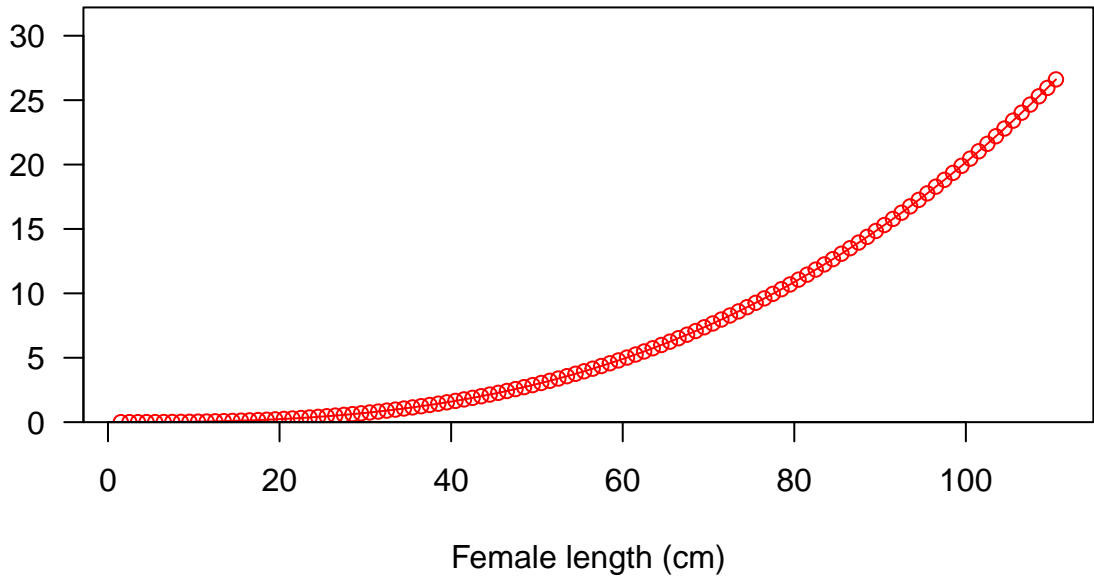




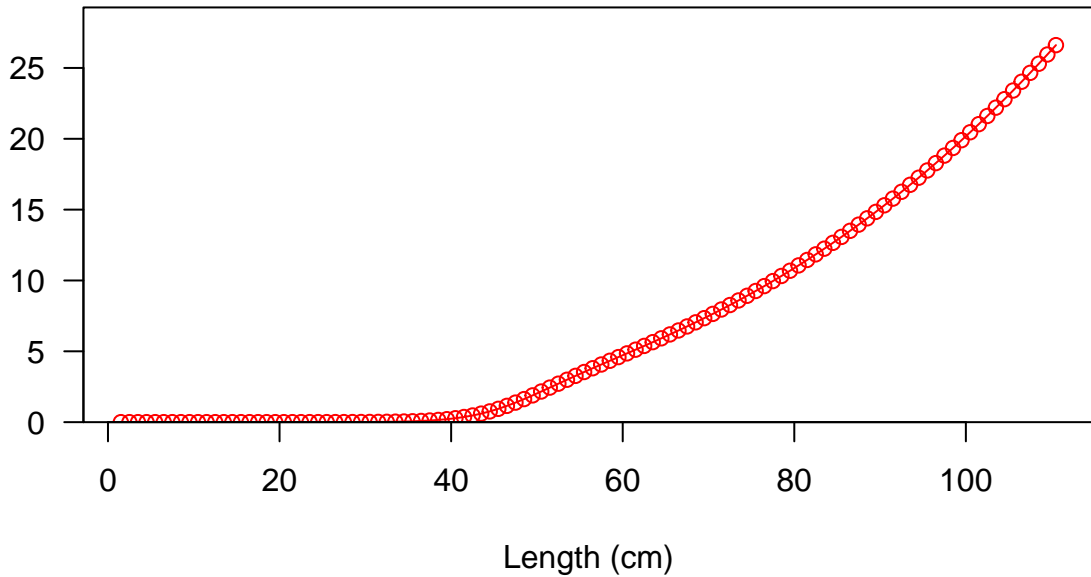




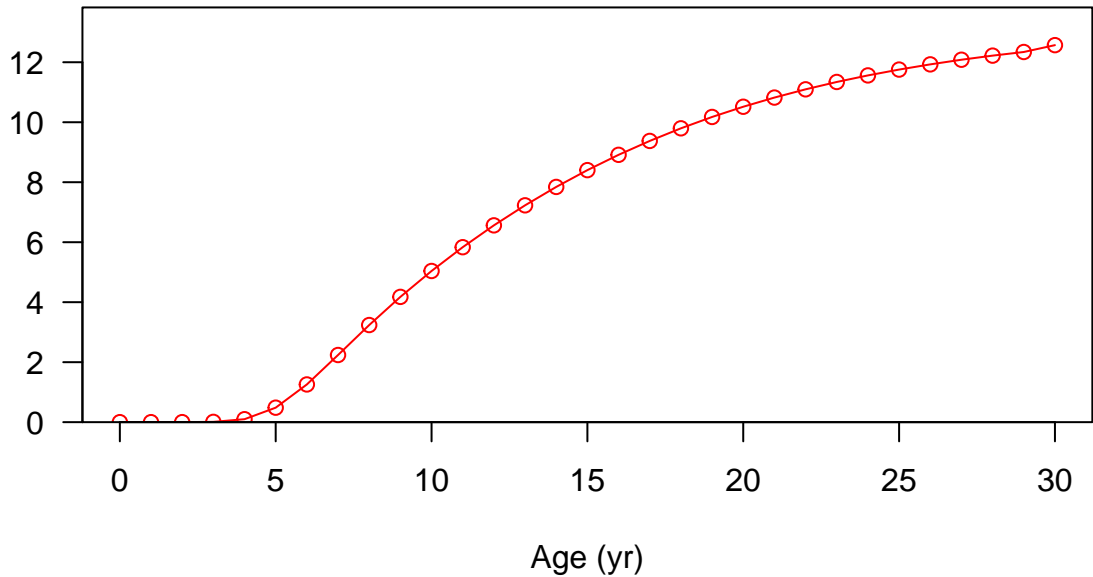
Fecundity



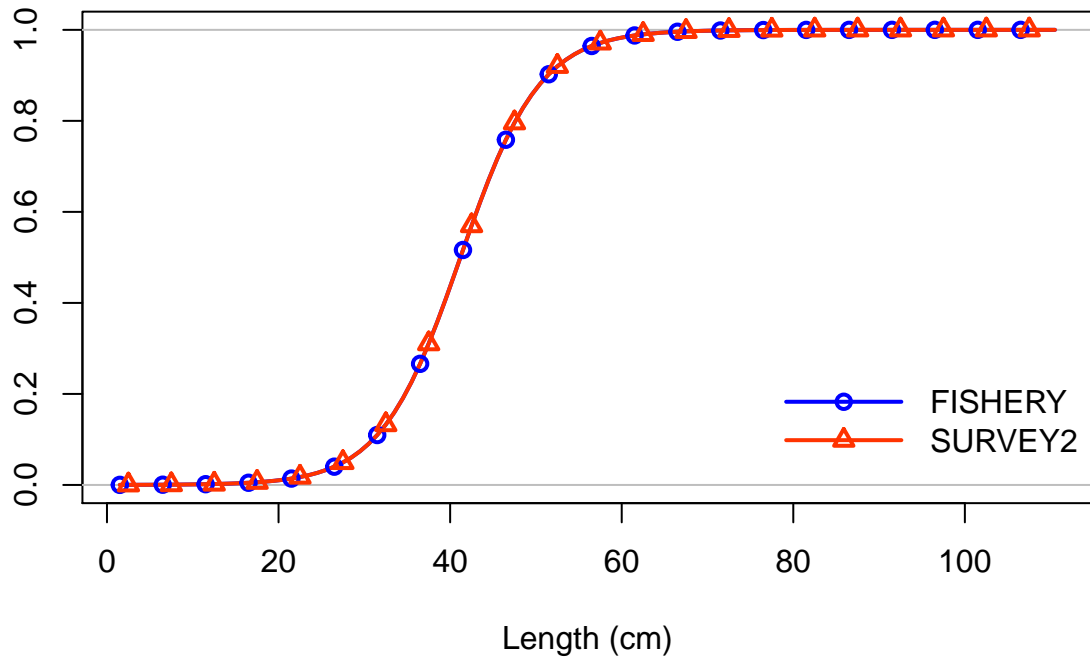
Spawning output



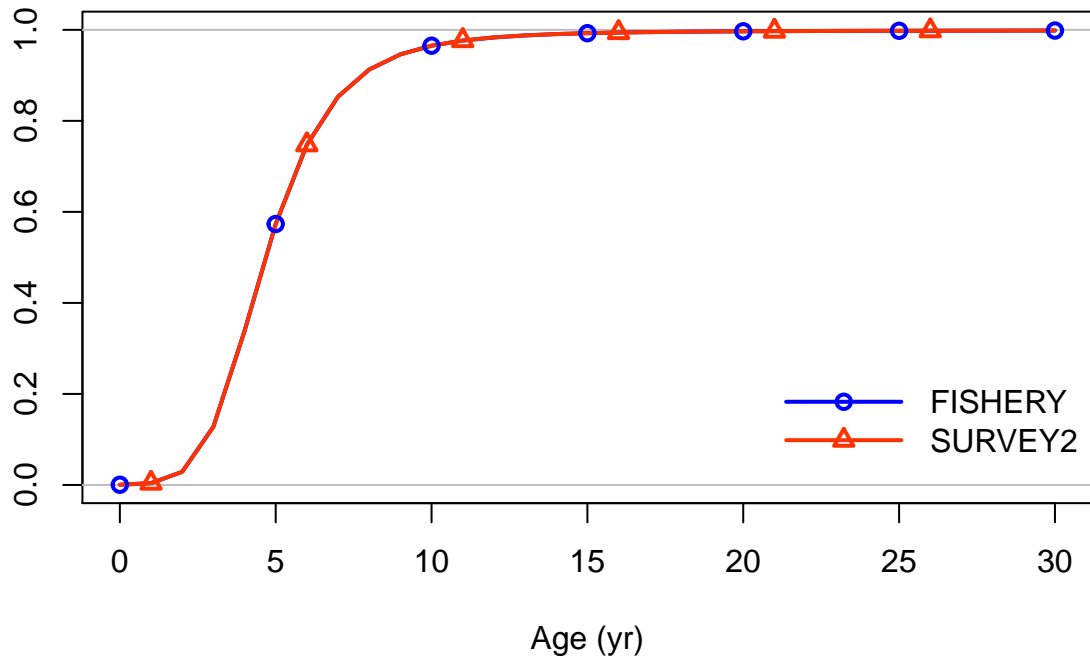
Spawning output



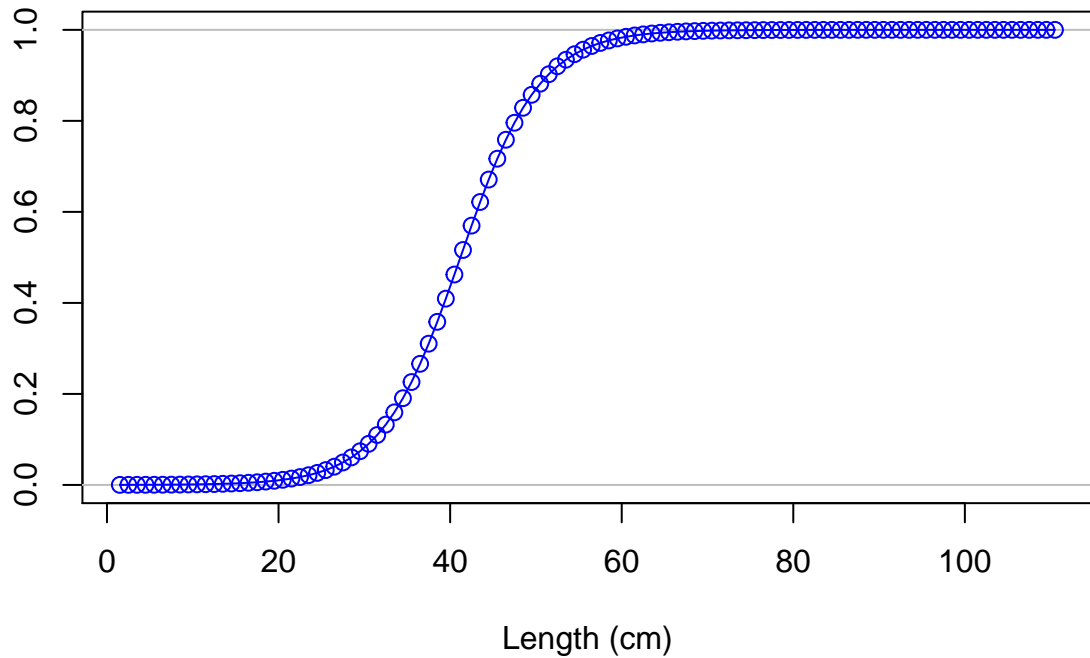
Selectivity



Selectivity

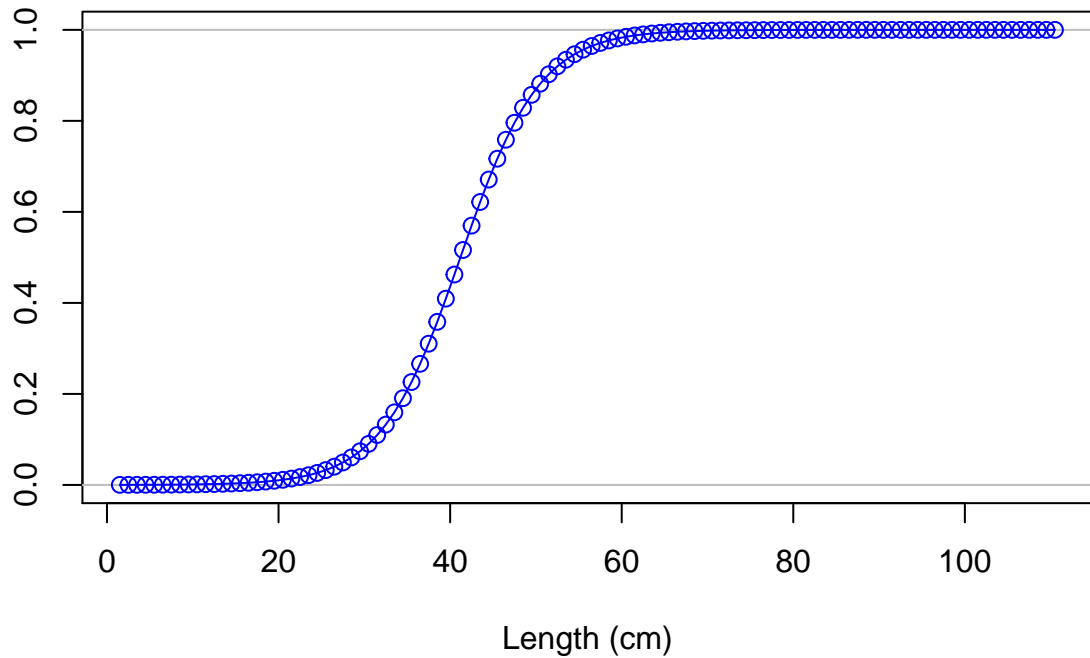


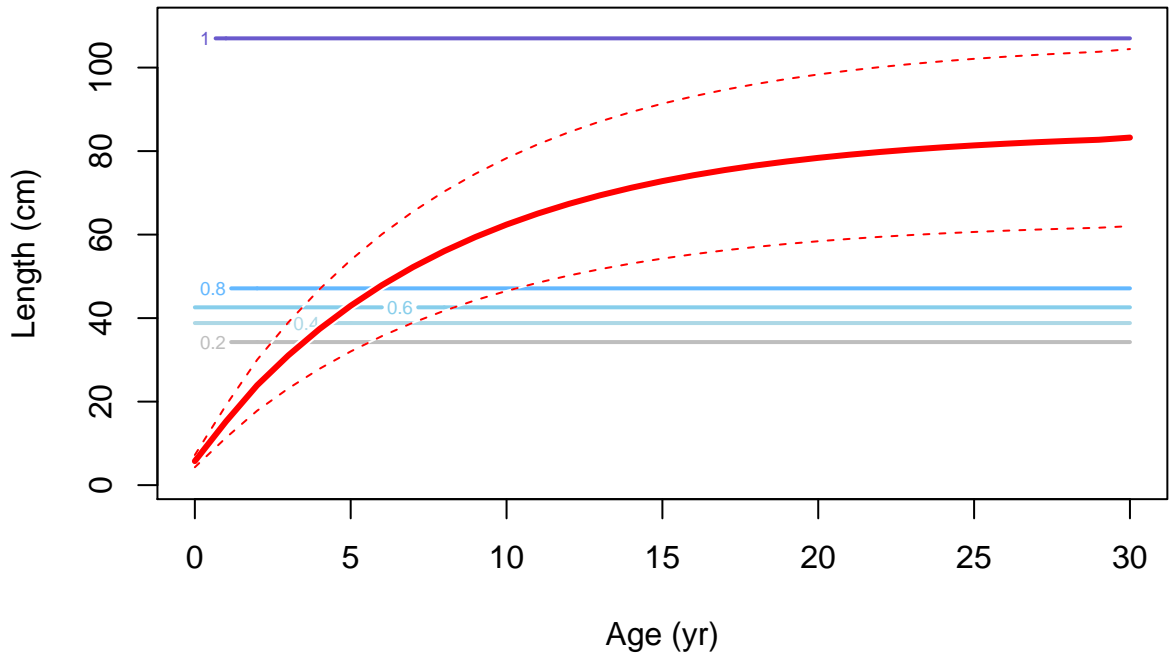
Selectivity

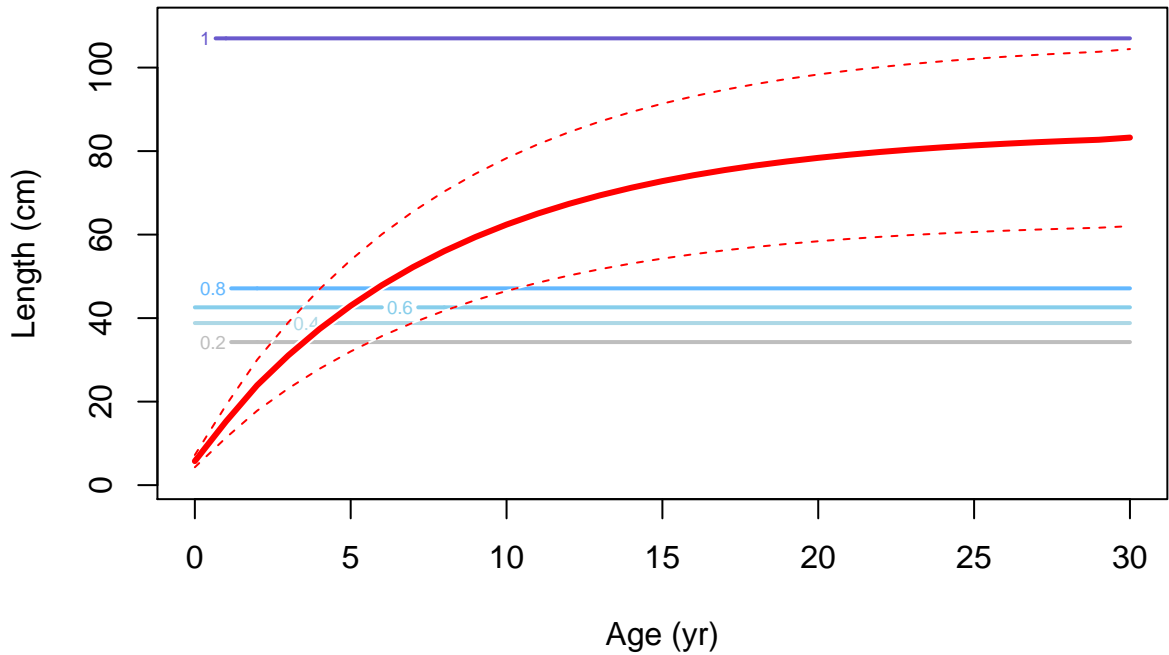




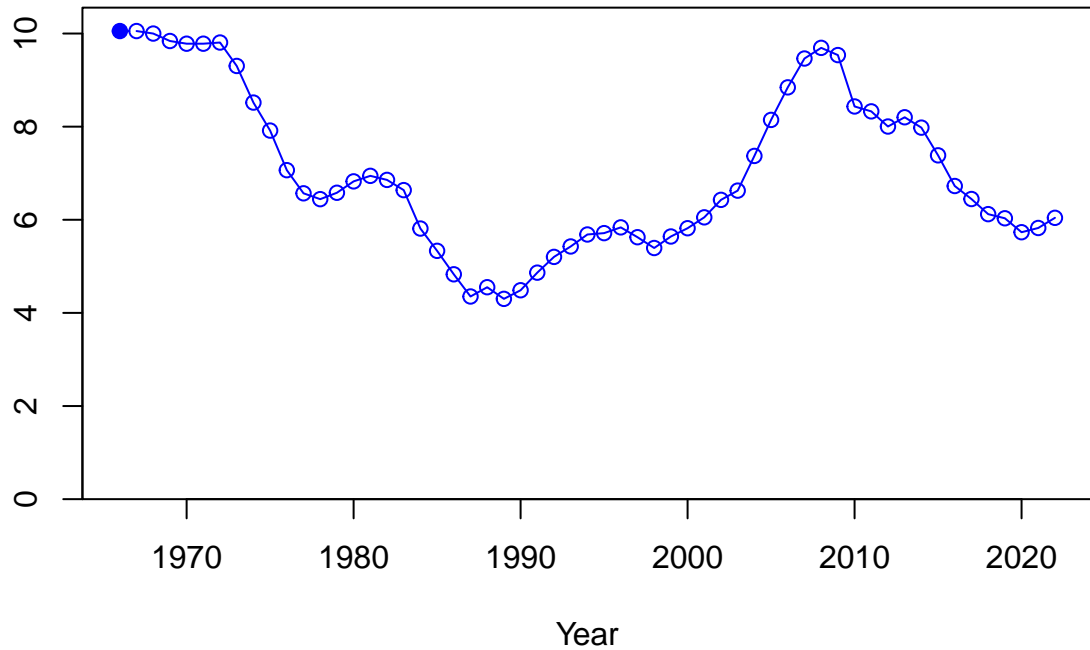
Selectivity



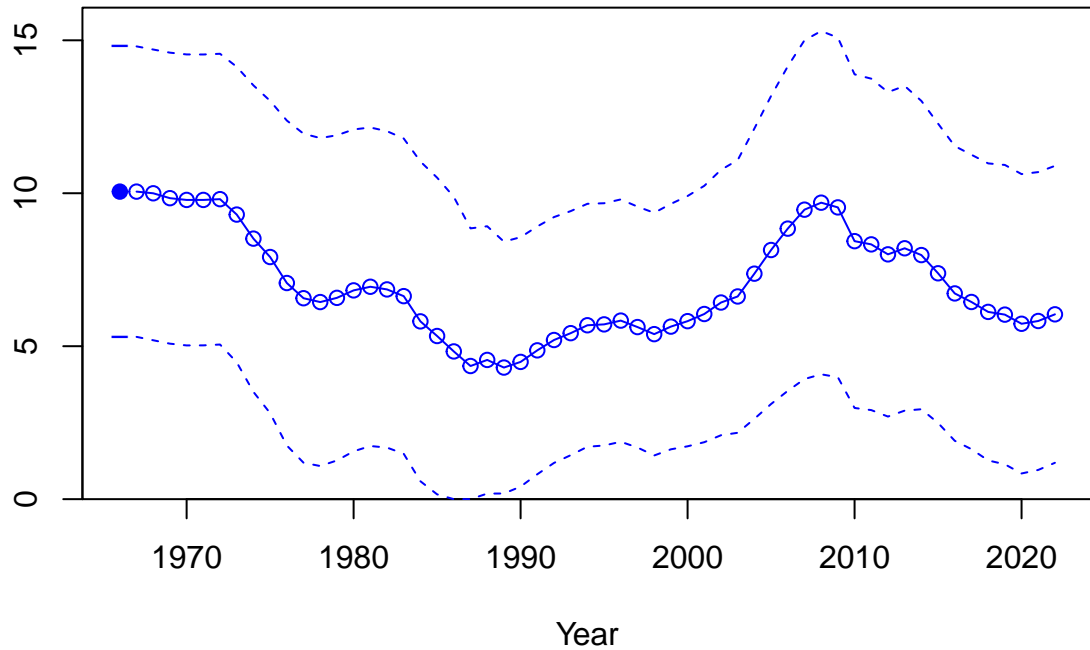




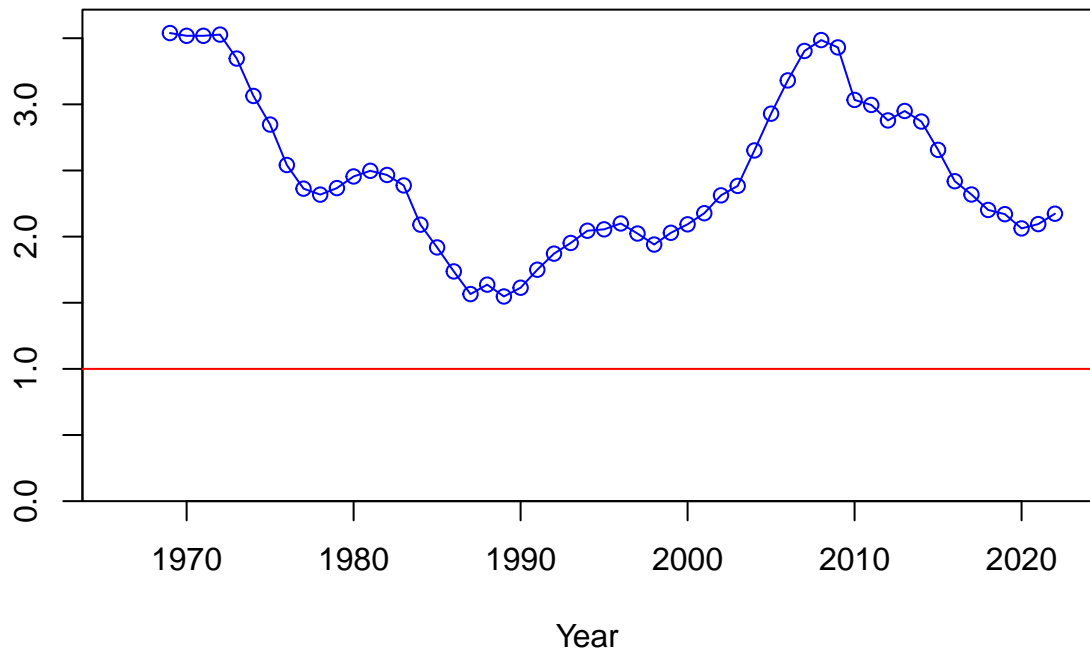
Spawning biomass (mt)



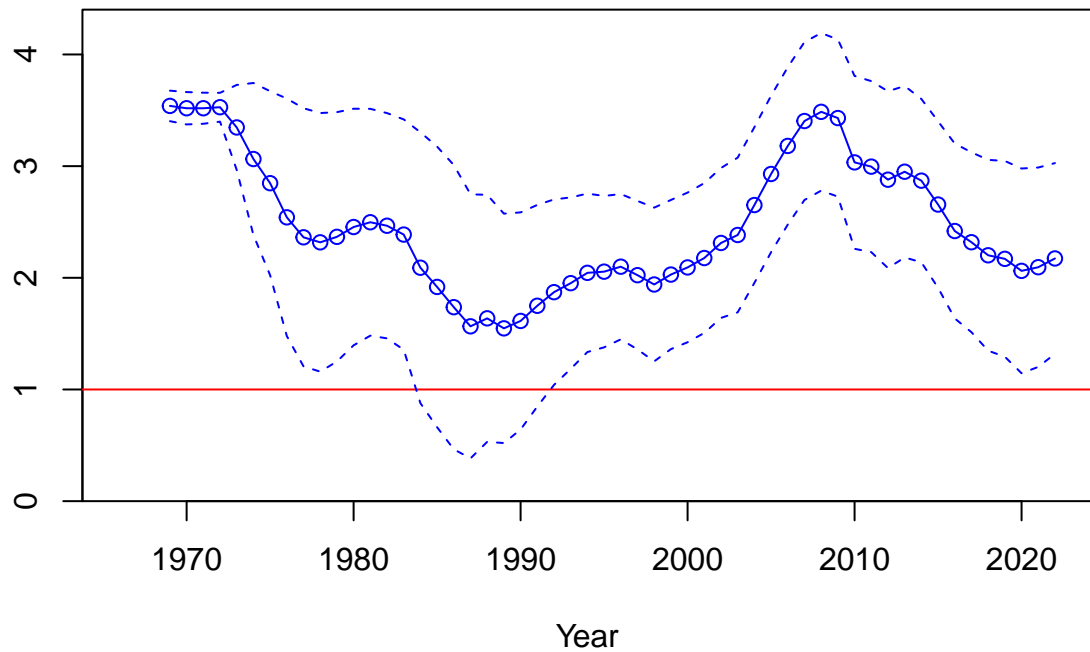
Spawning biomass (mt)

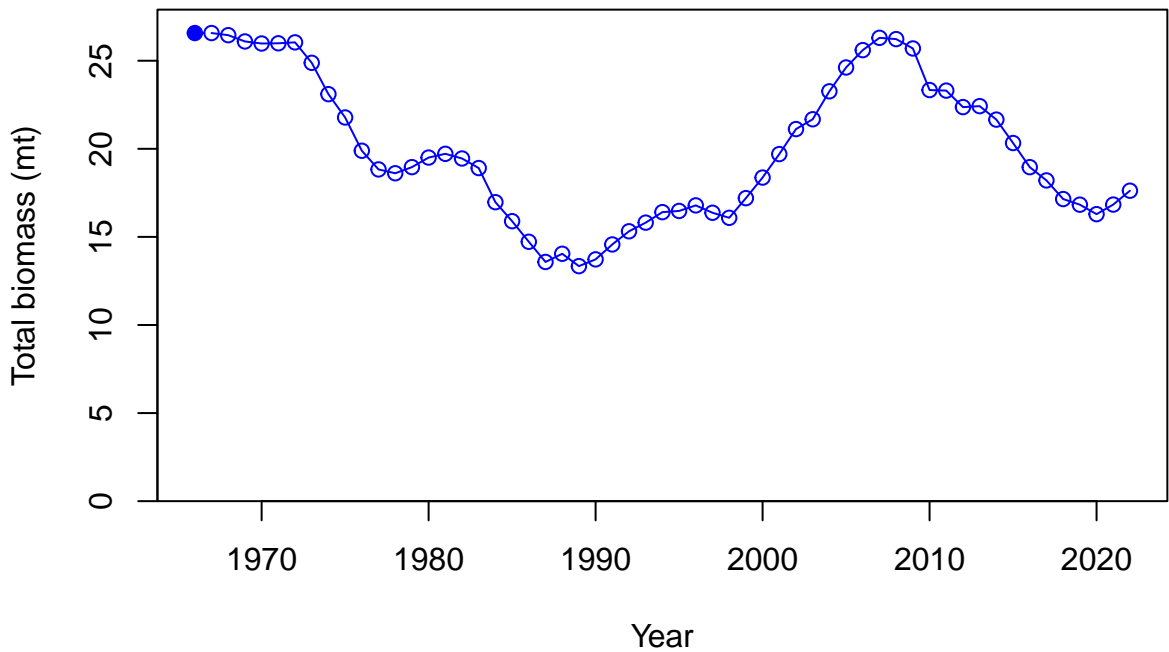


Relative spawning biomass:  $B/B_{MSY}$

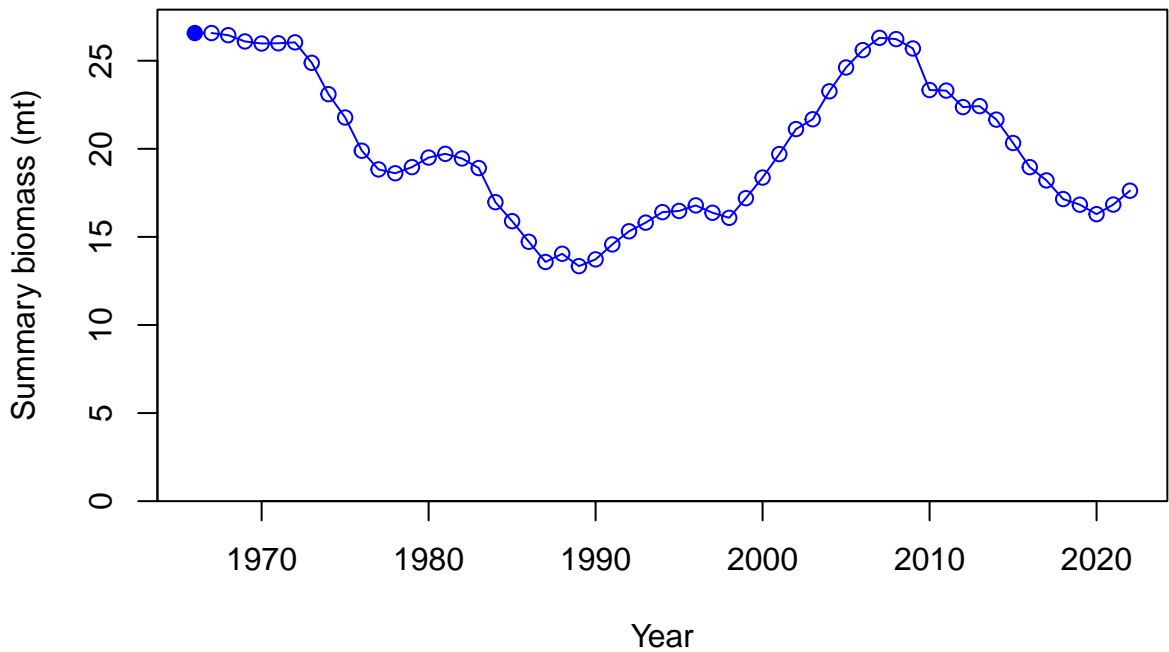


Relative spawning biomass:  $B/B_{MSY}$

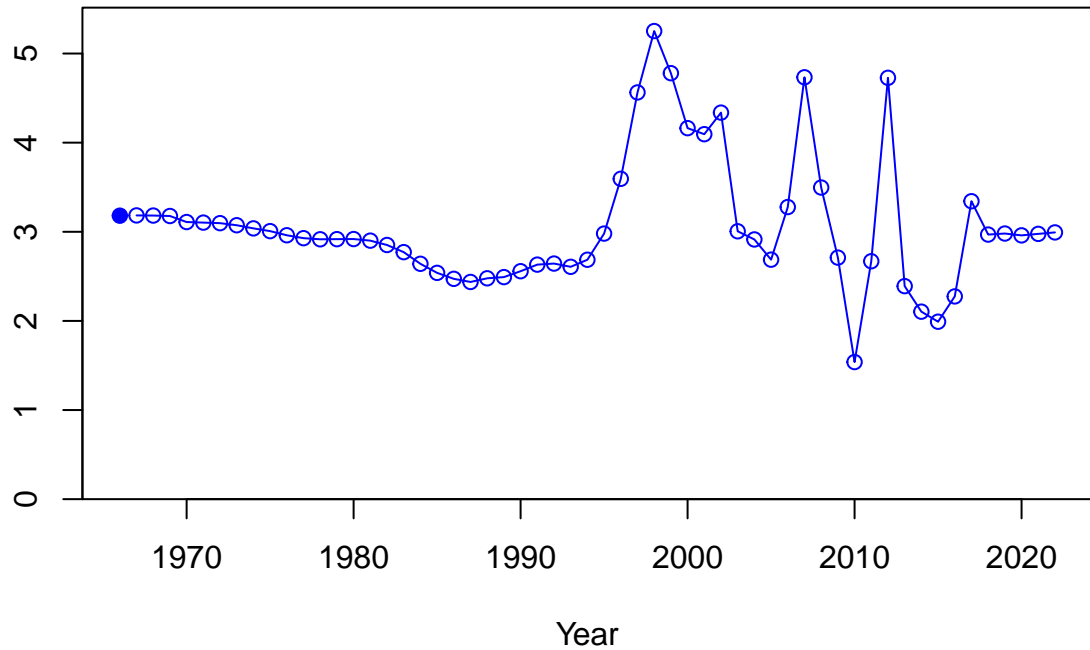




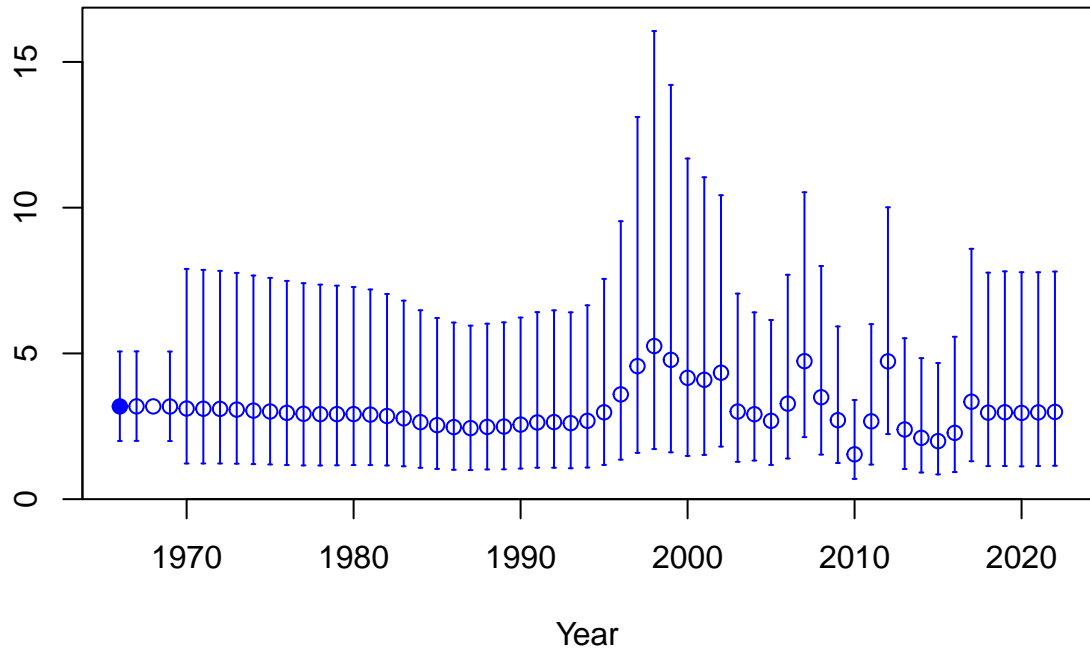




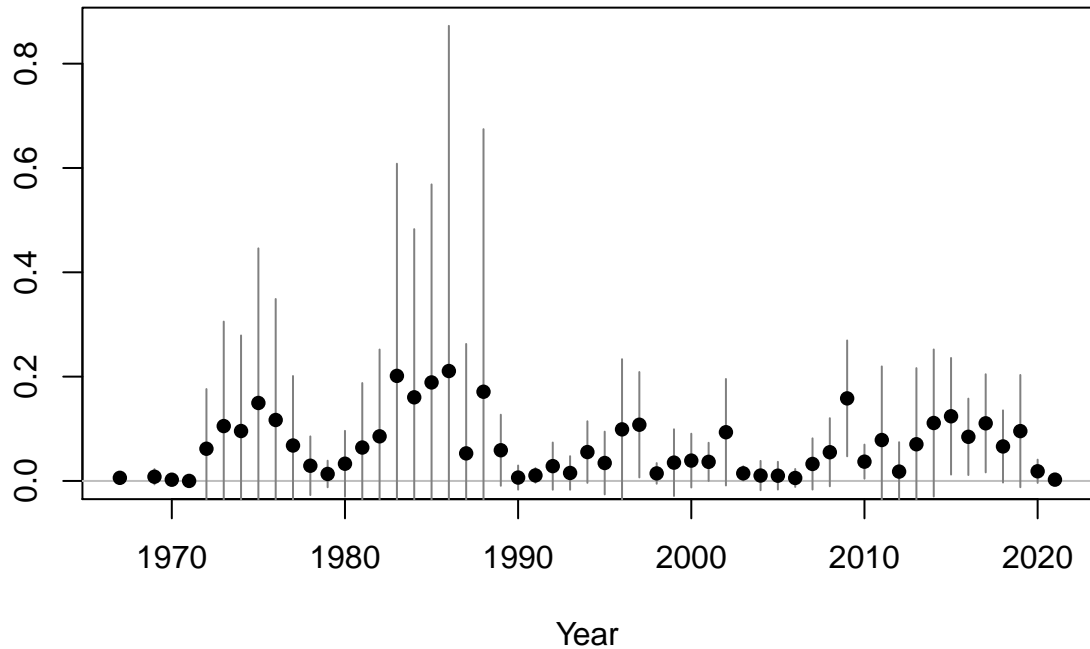
Age-0 recruits (1,000s)

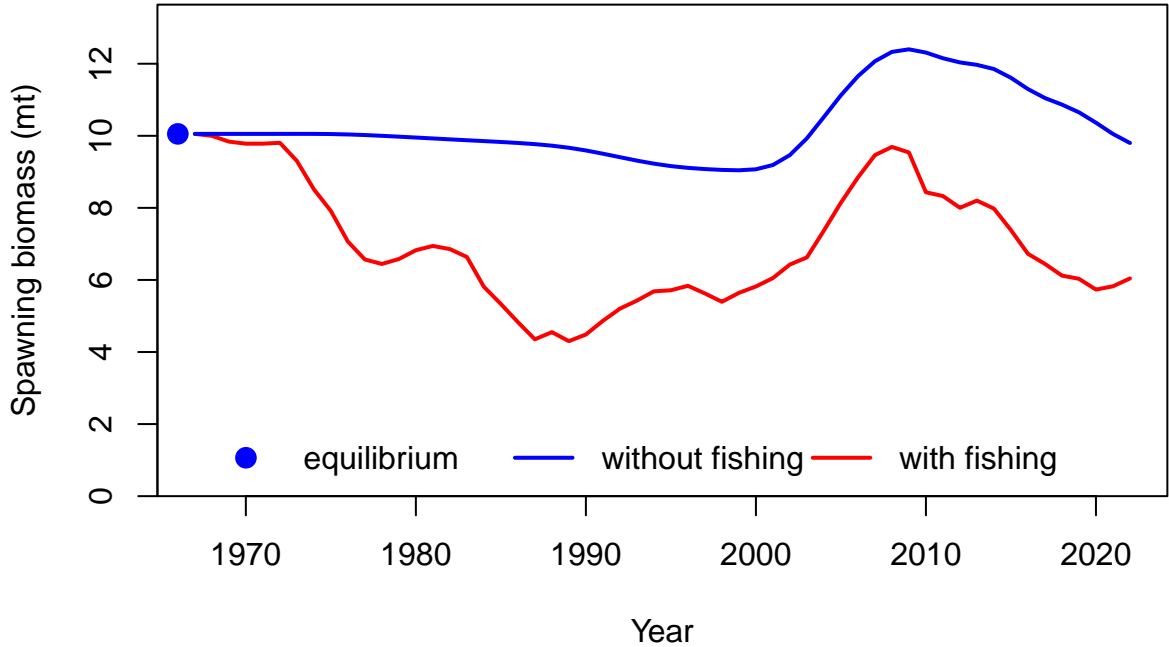


Age-0 recruits (1,000s)

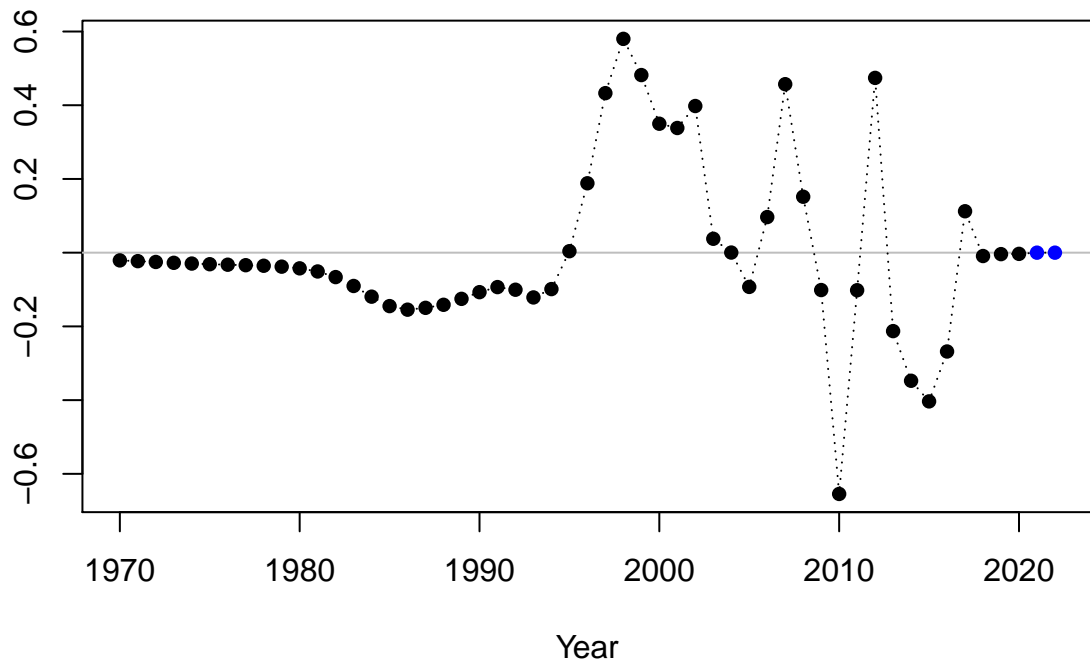


Summary Fishing Mortality

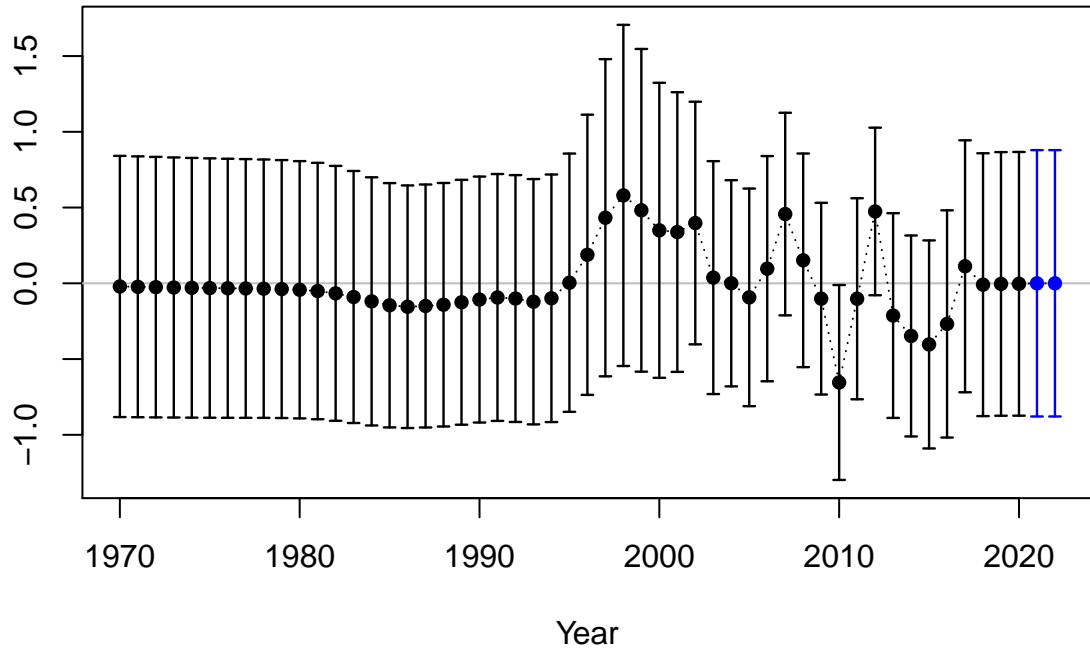




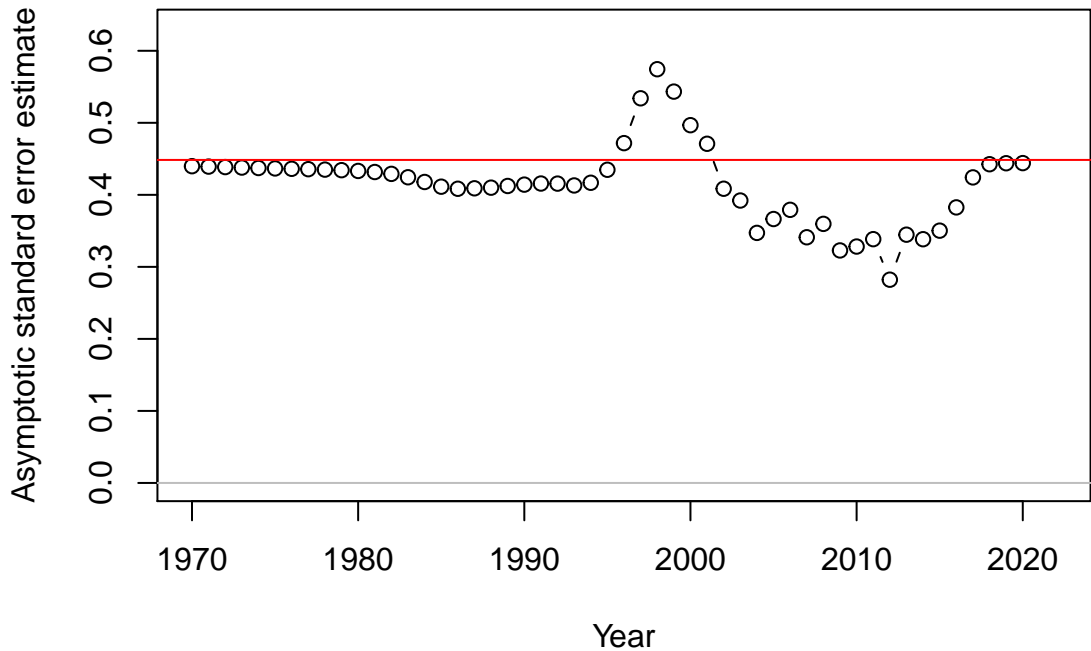
Log recruitment deviation



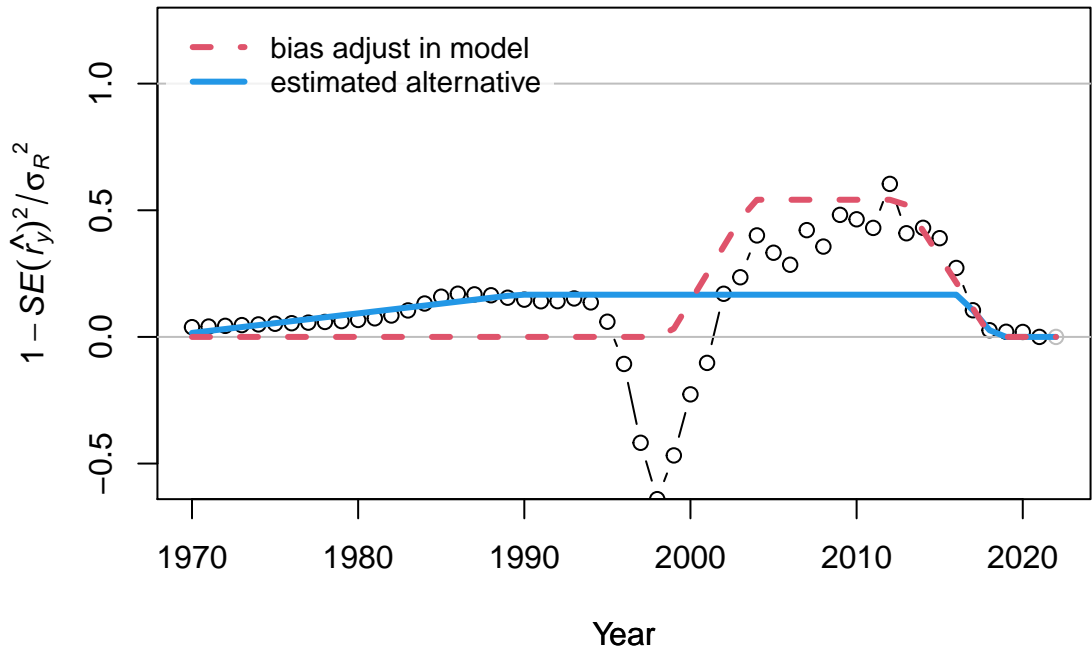
Log recruitment deviation

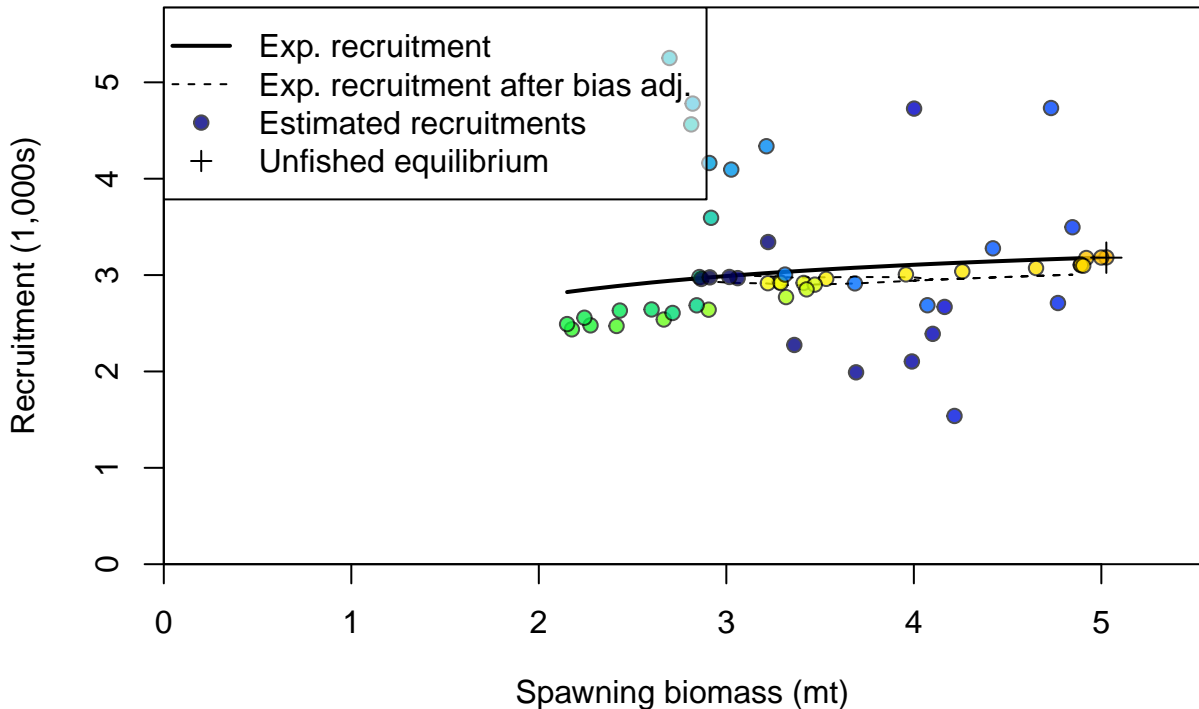


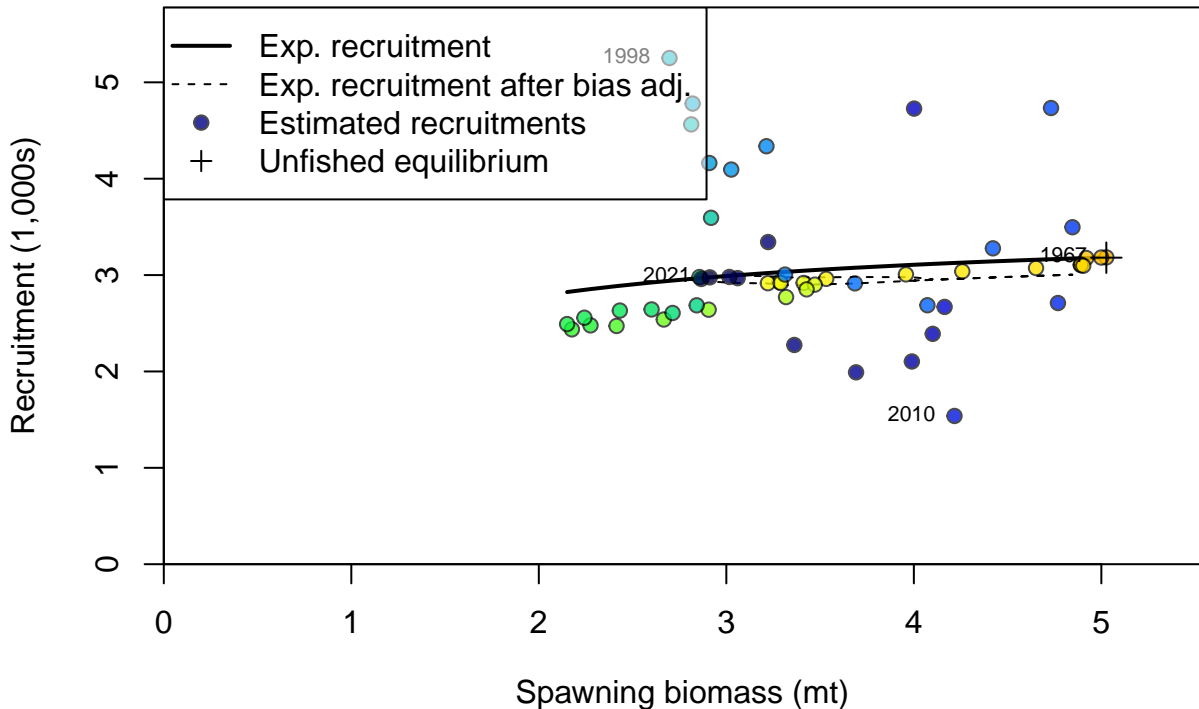
## Recruitment deviation variance

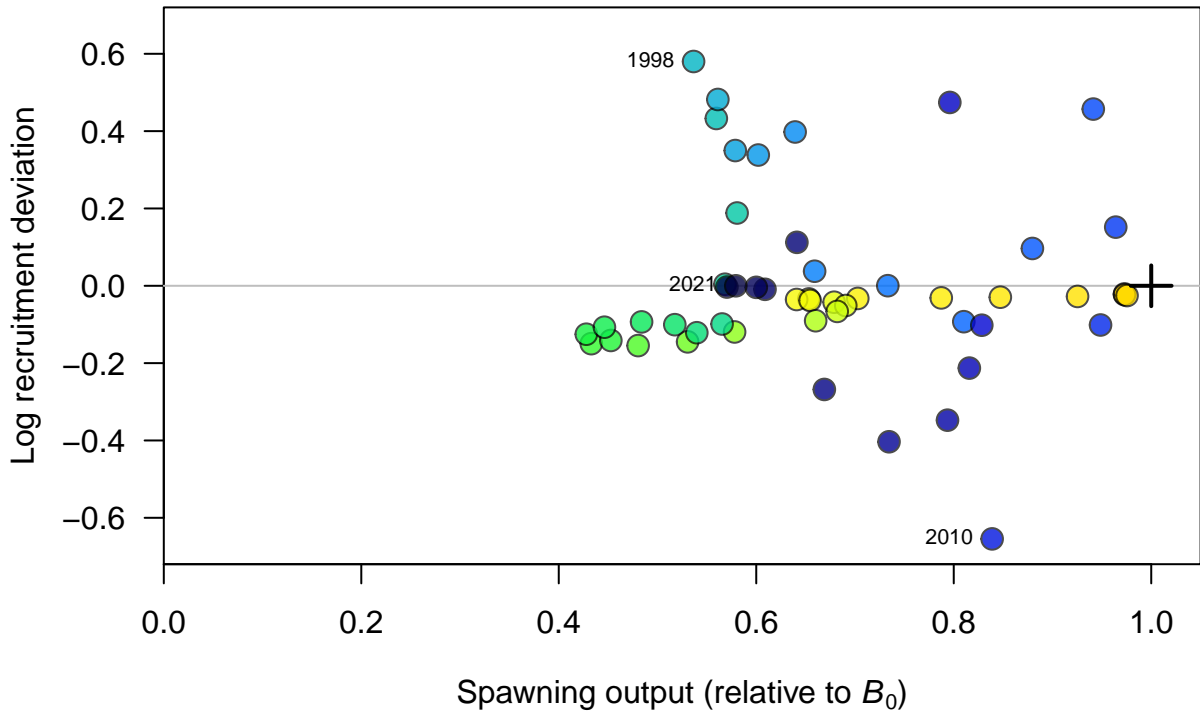


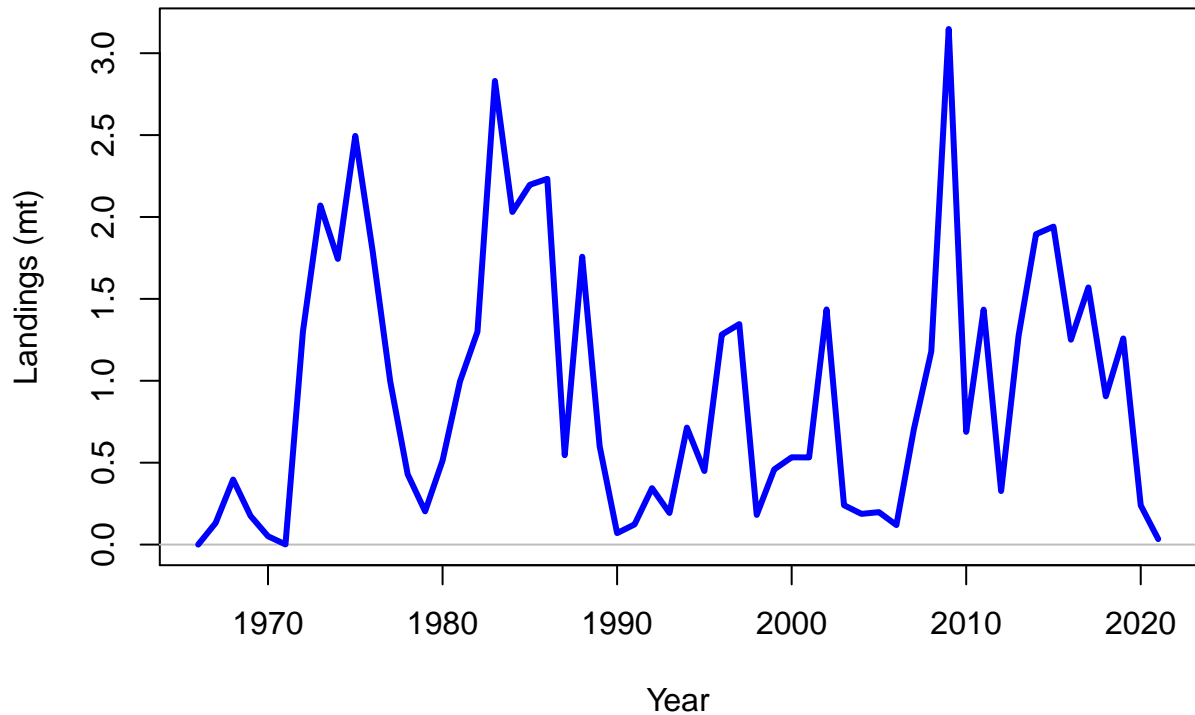


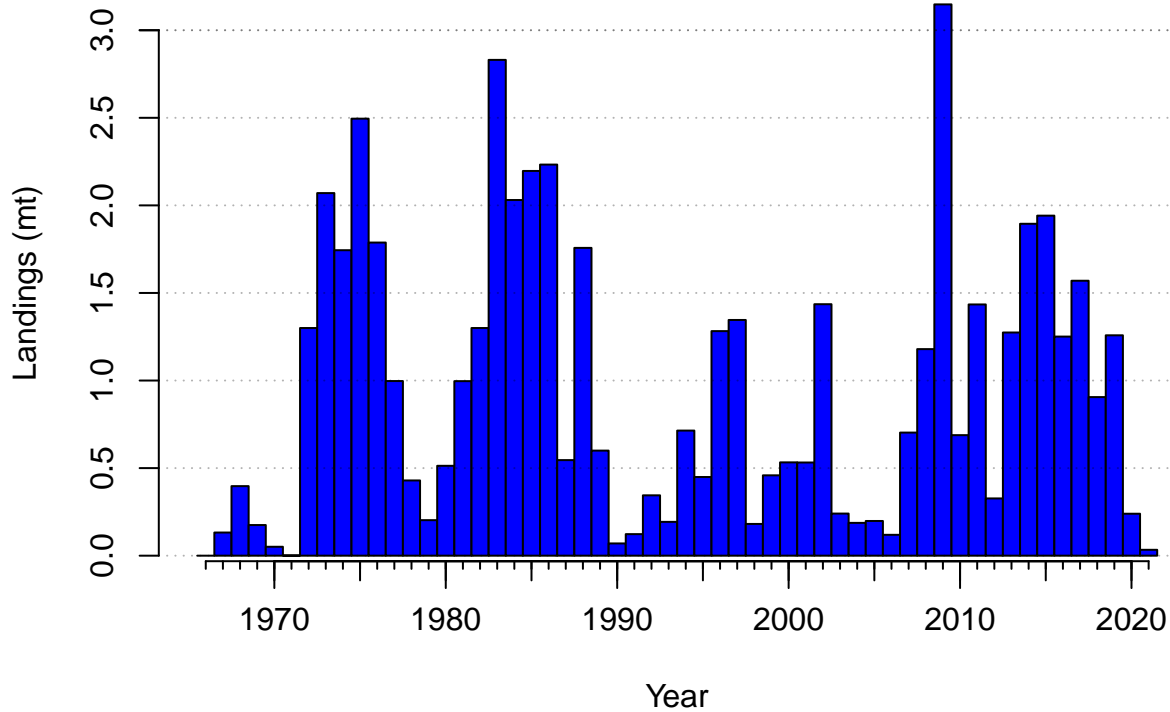


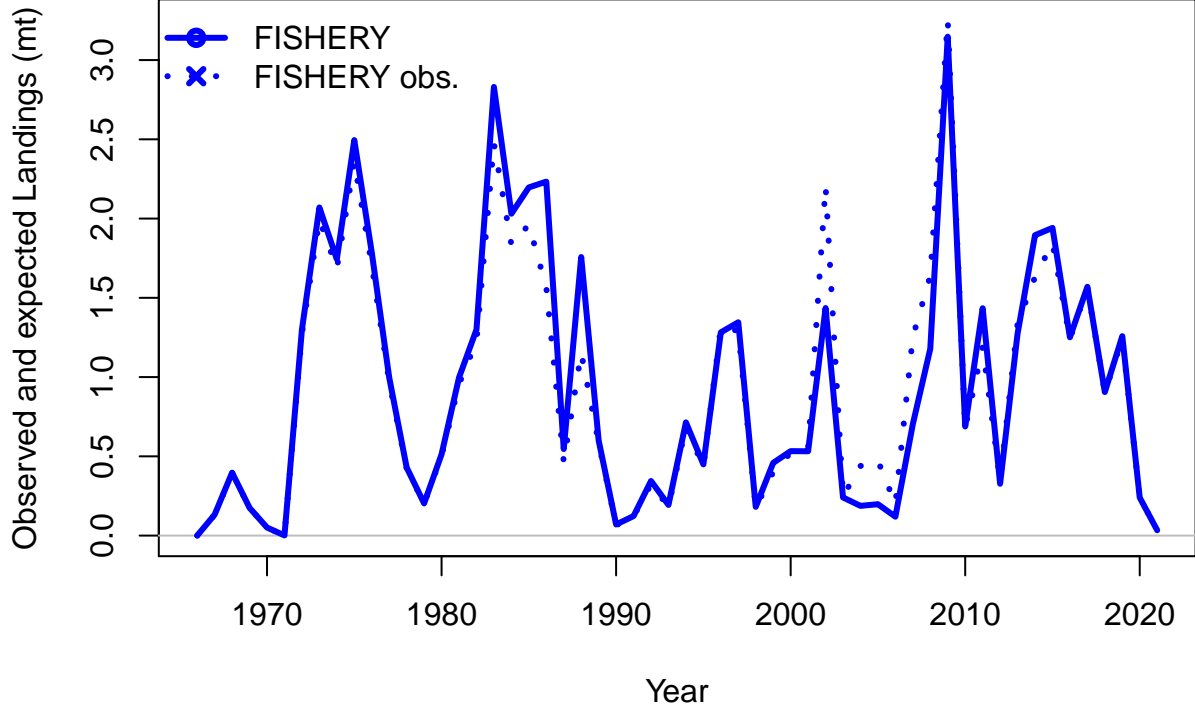


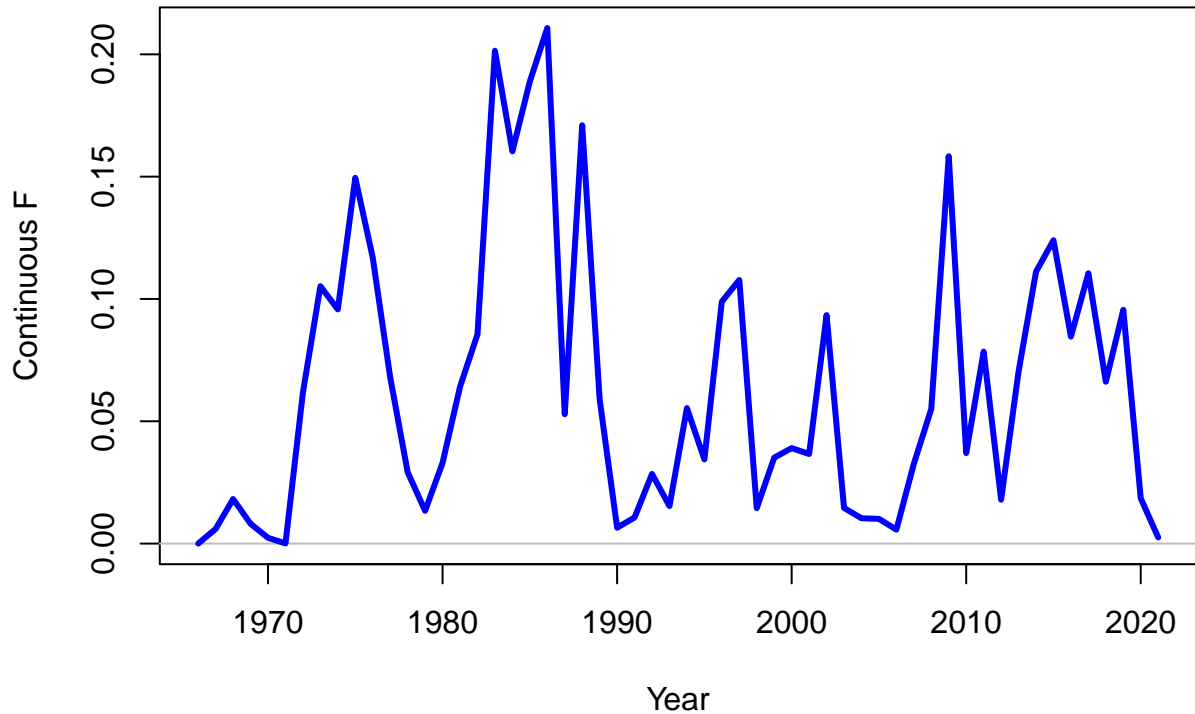






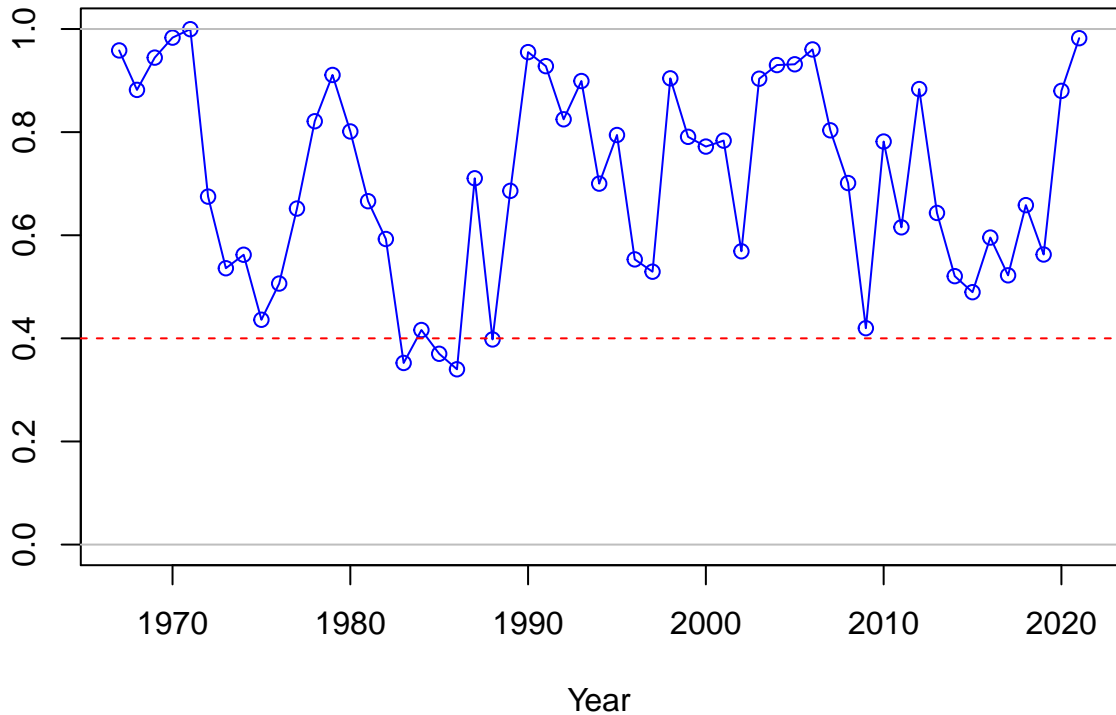


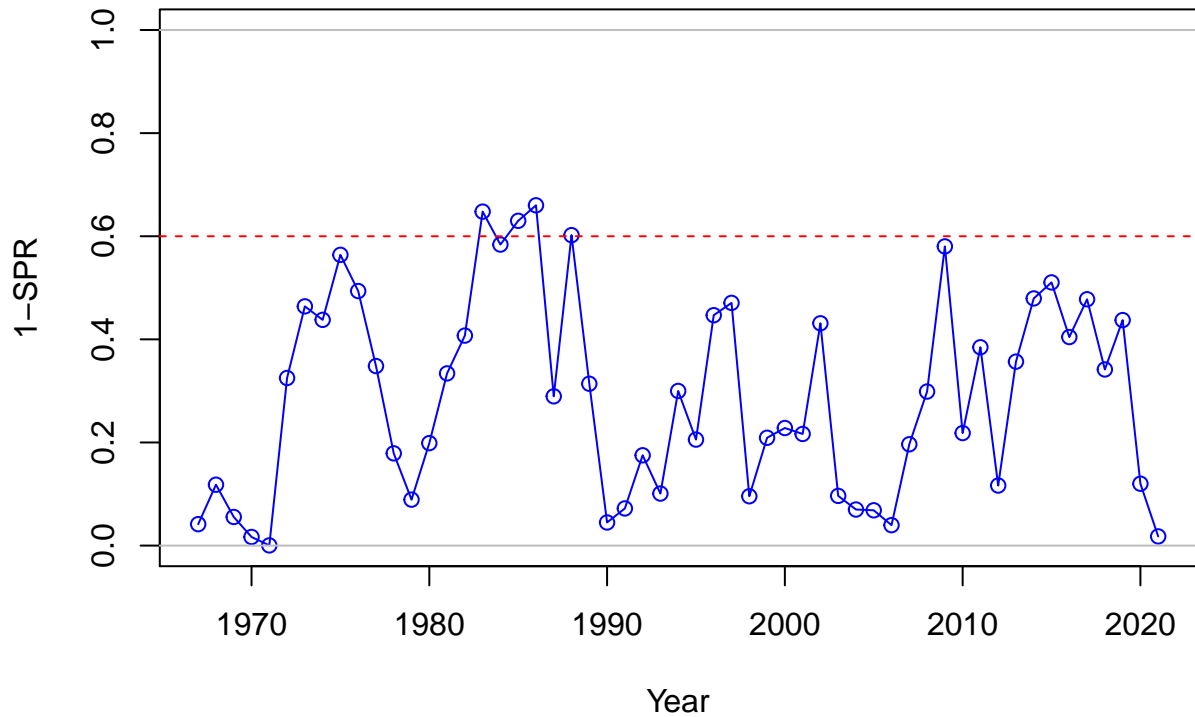




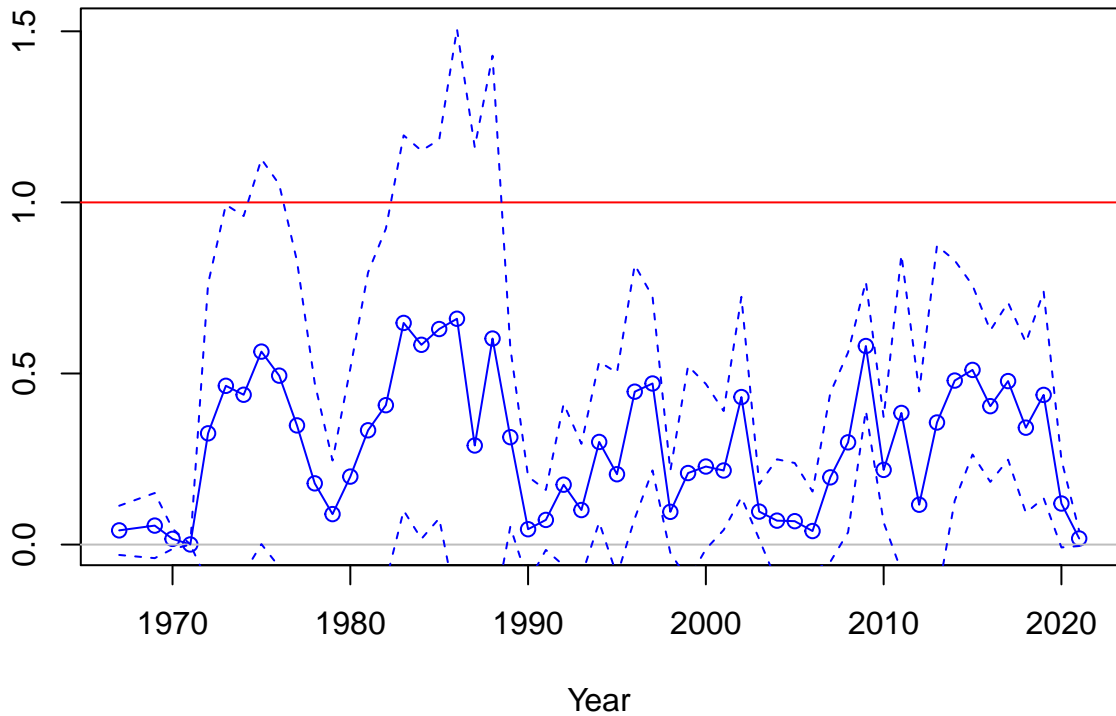


SPR

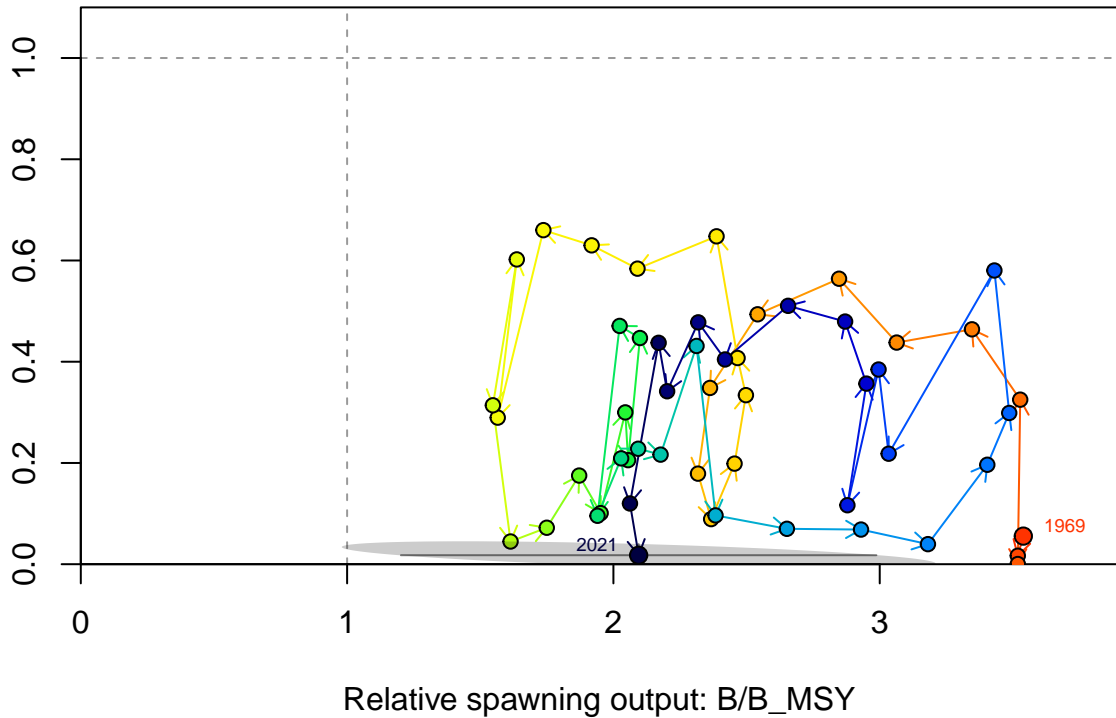




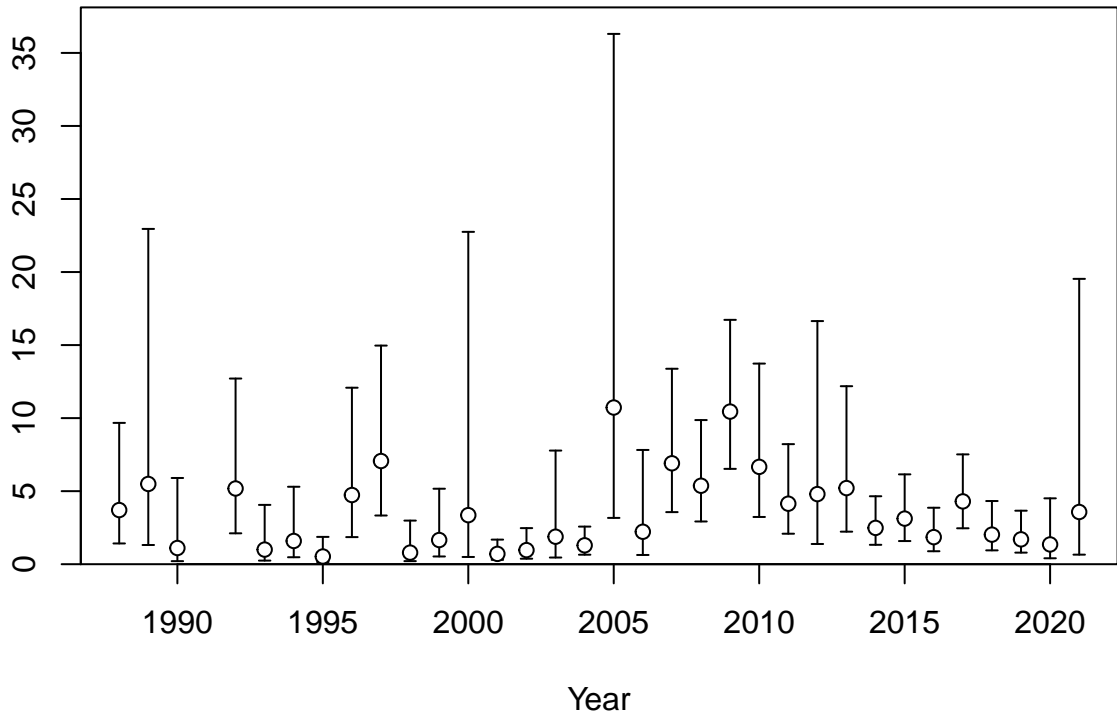
Fishing intensity: 1-SPR



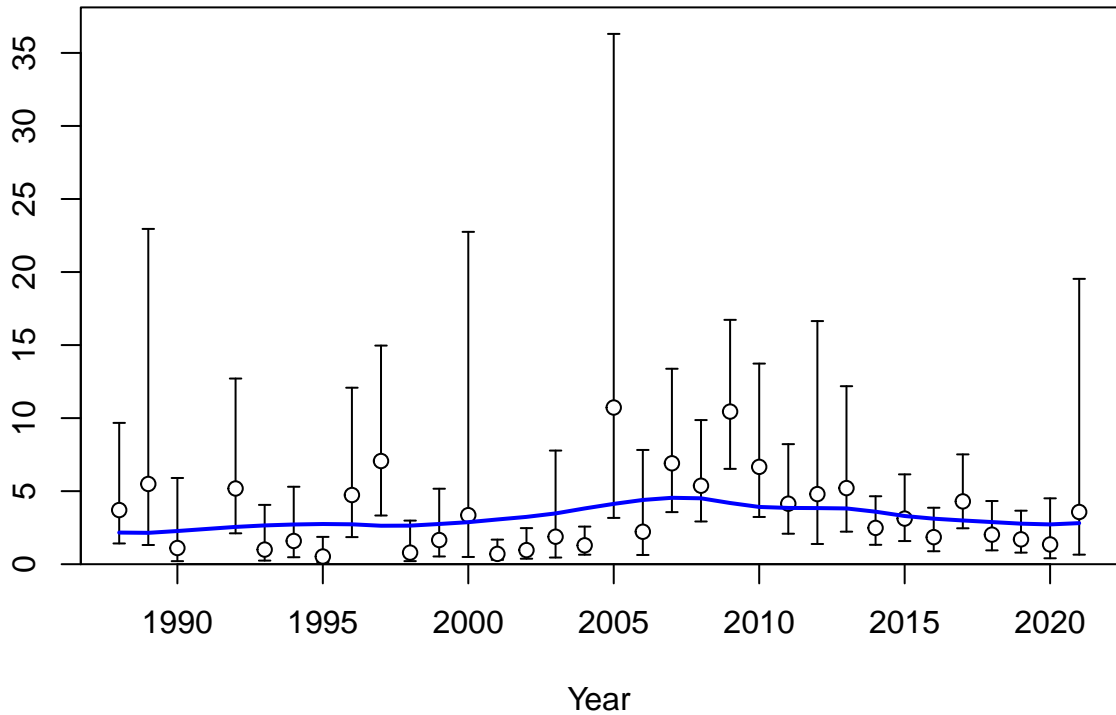
Fishing intensity: 1-SPR

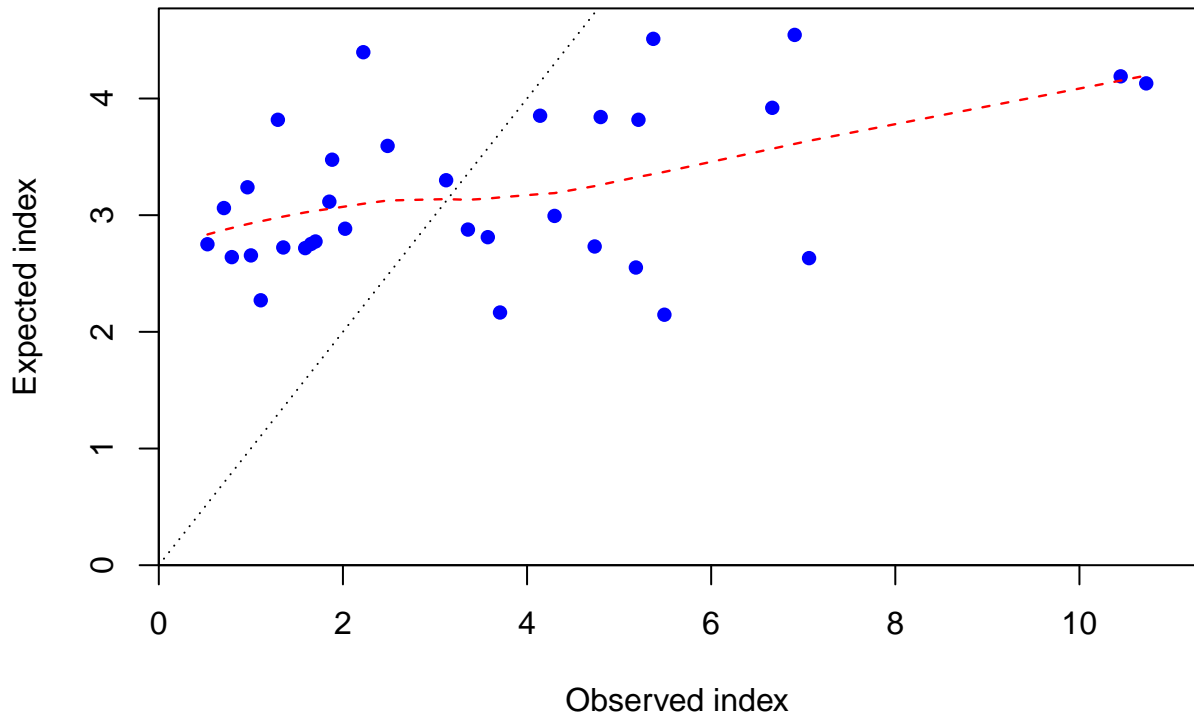


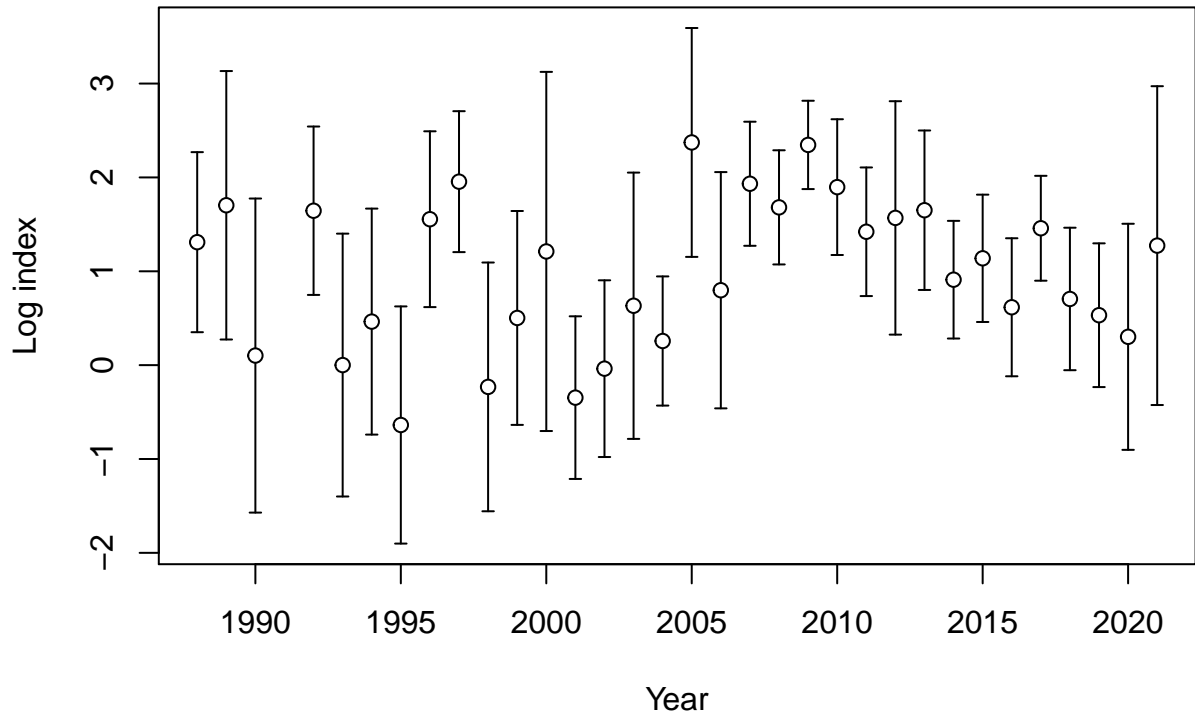
Index



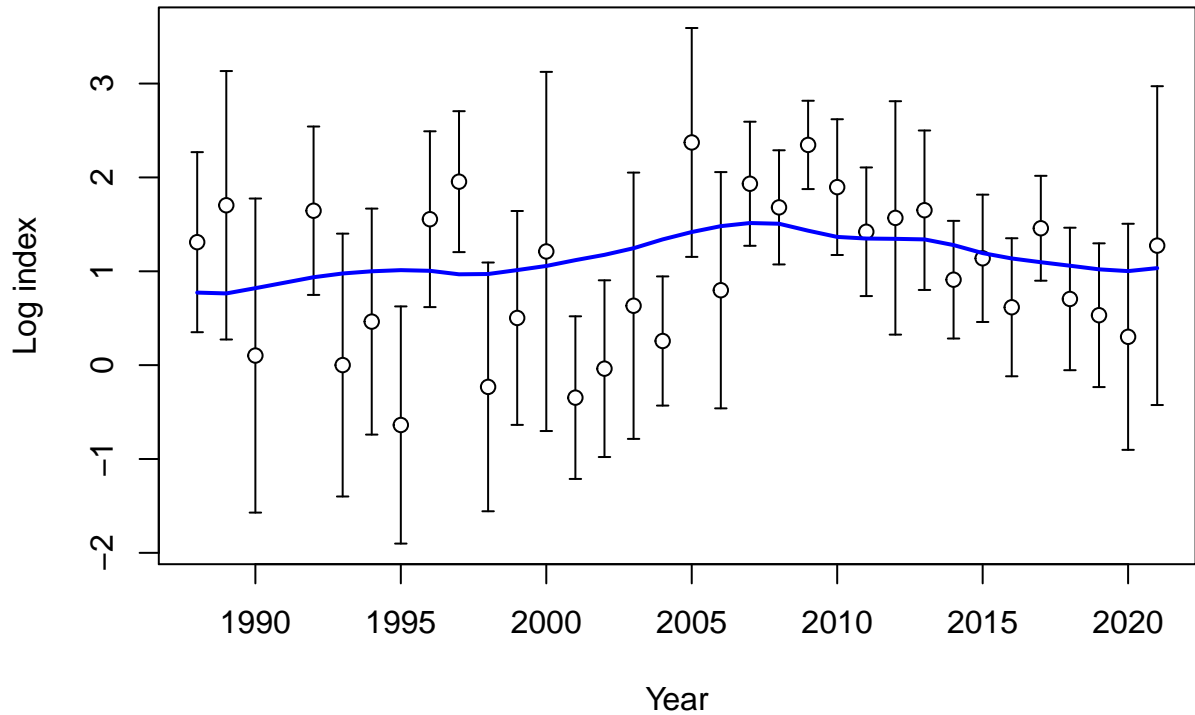
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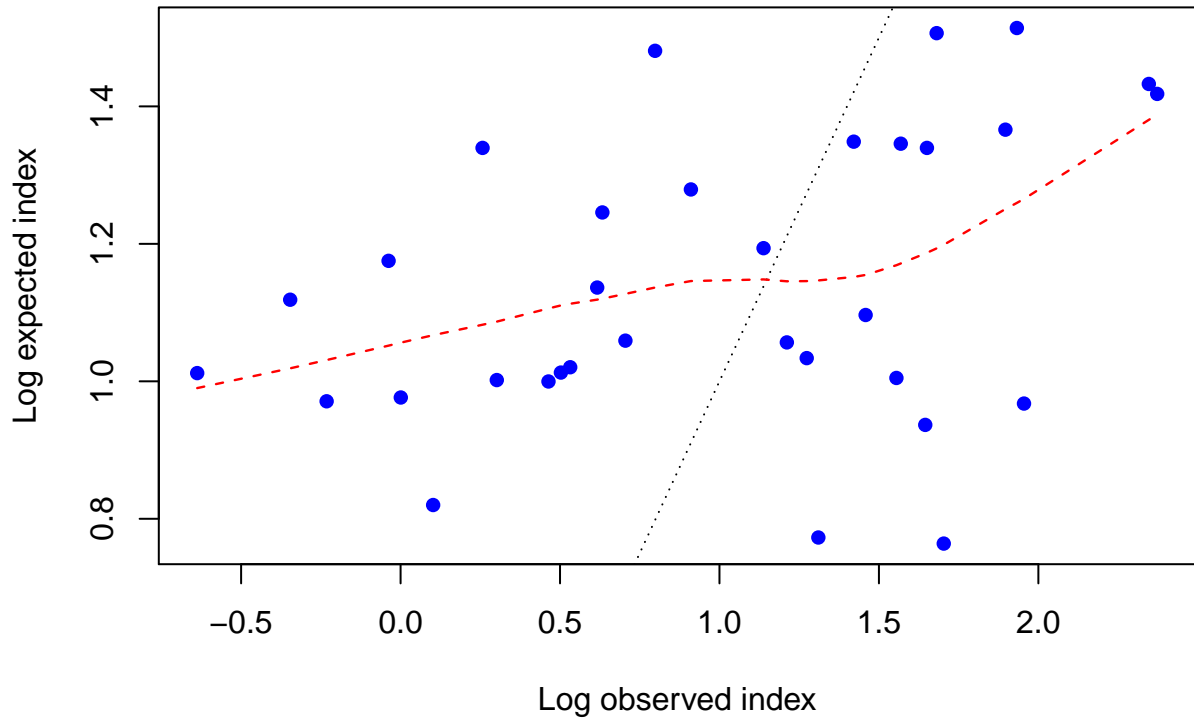


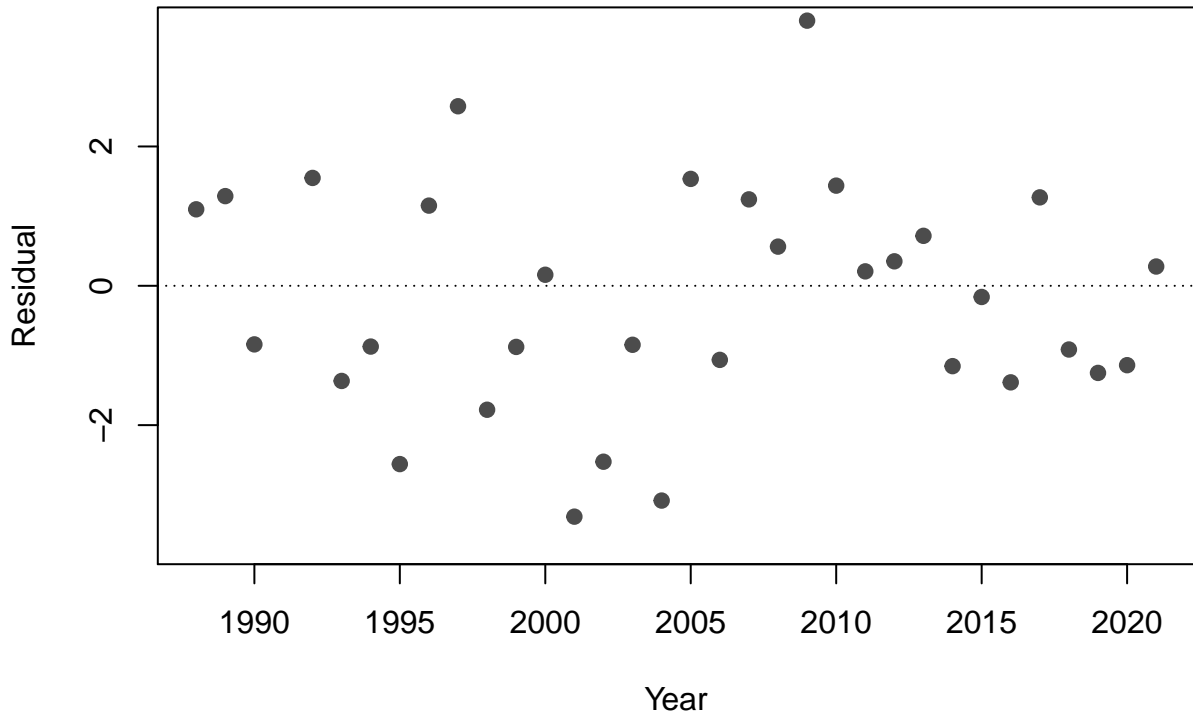


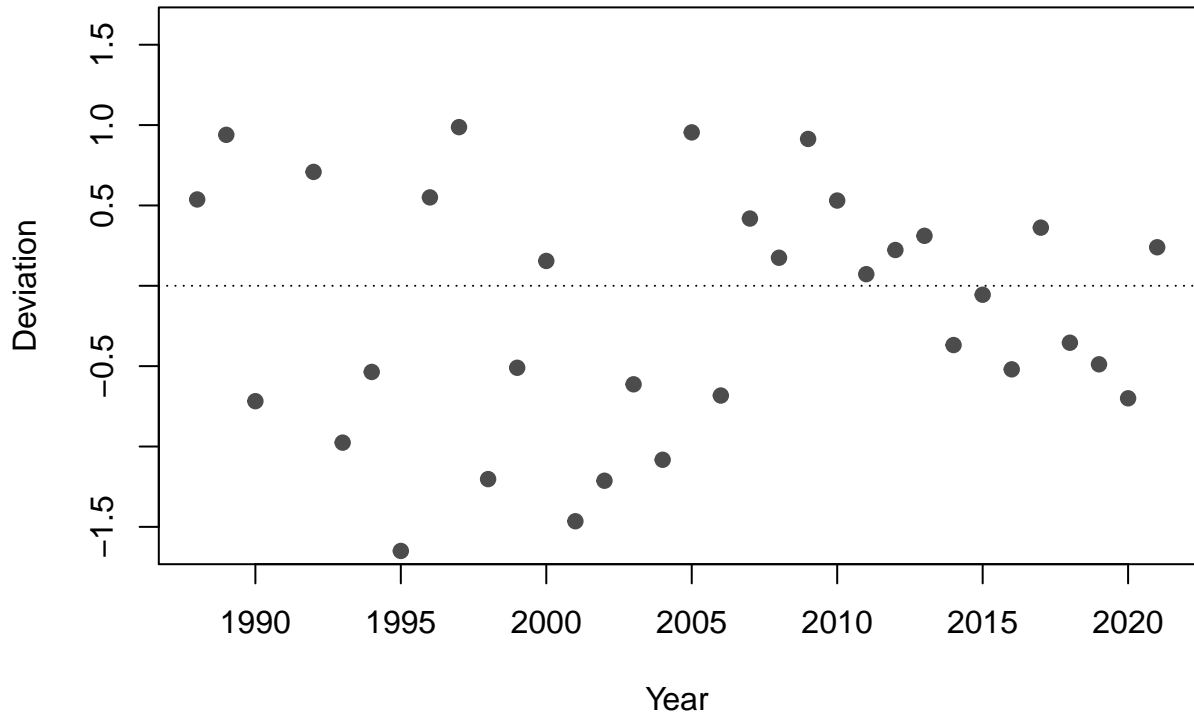


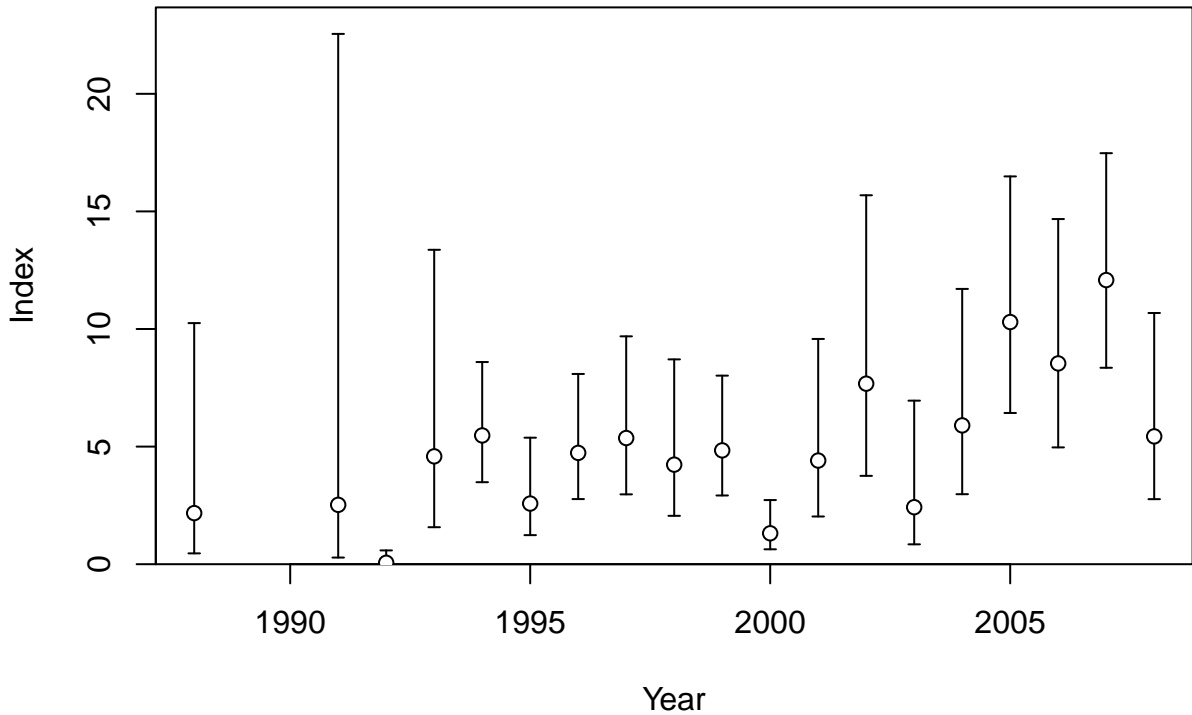


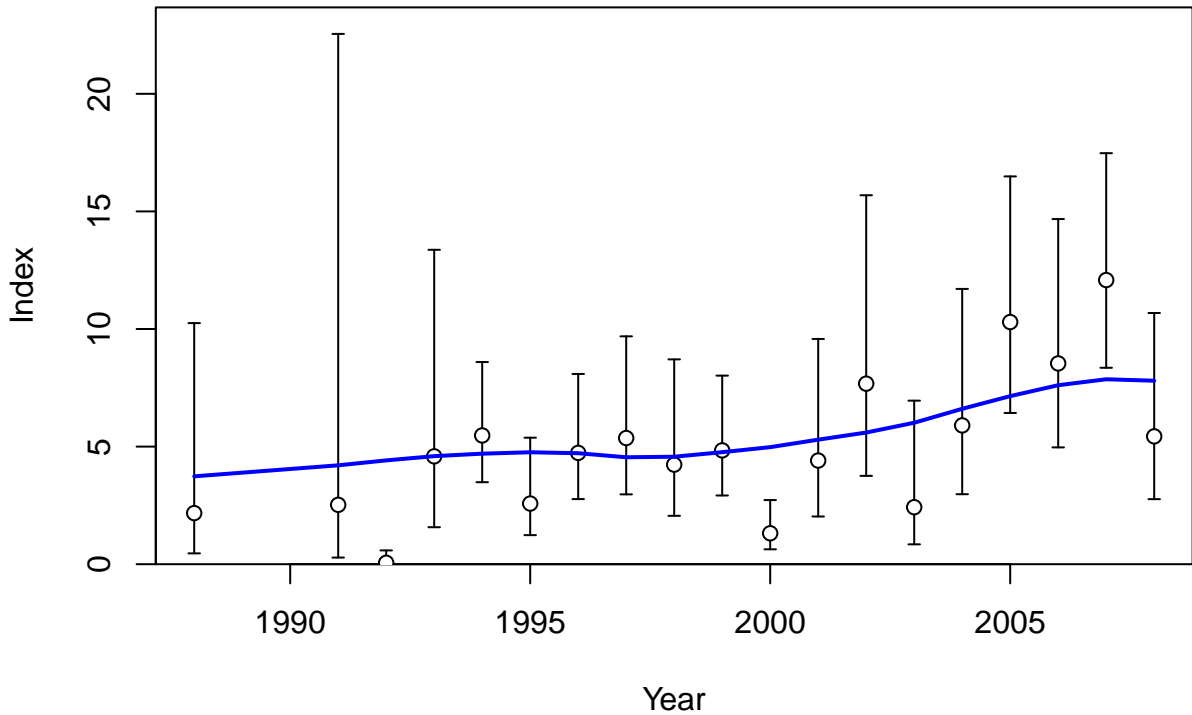


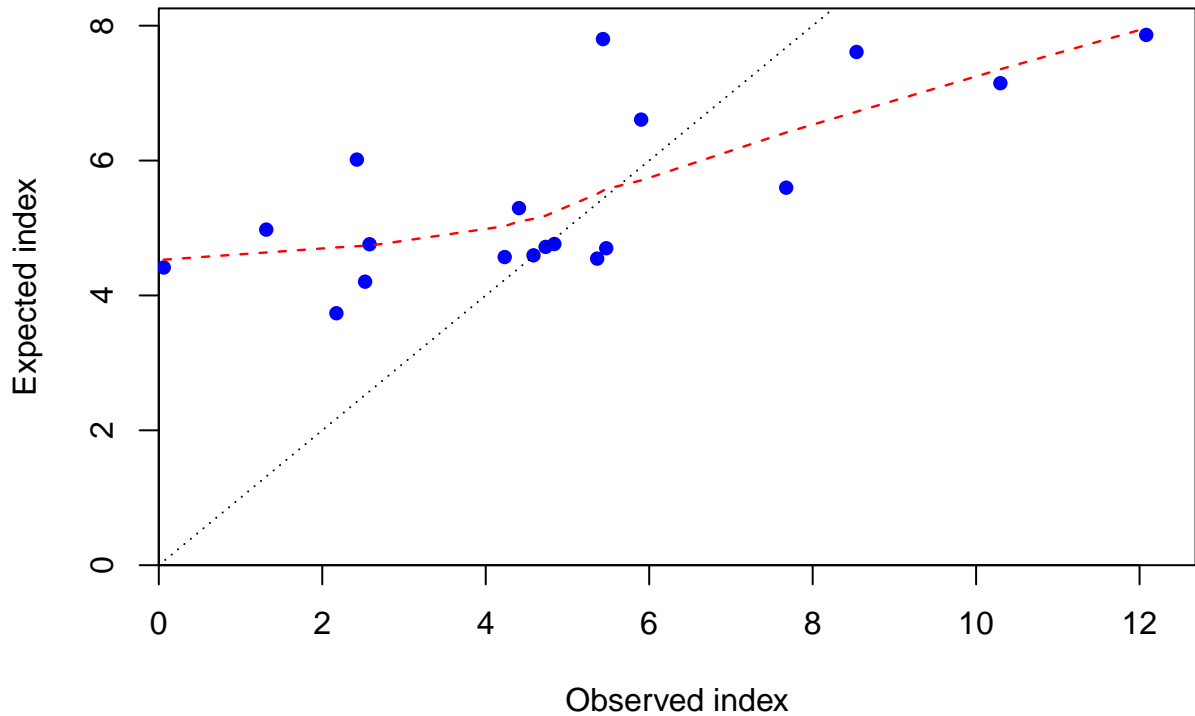


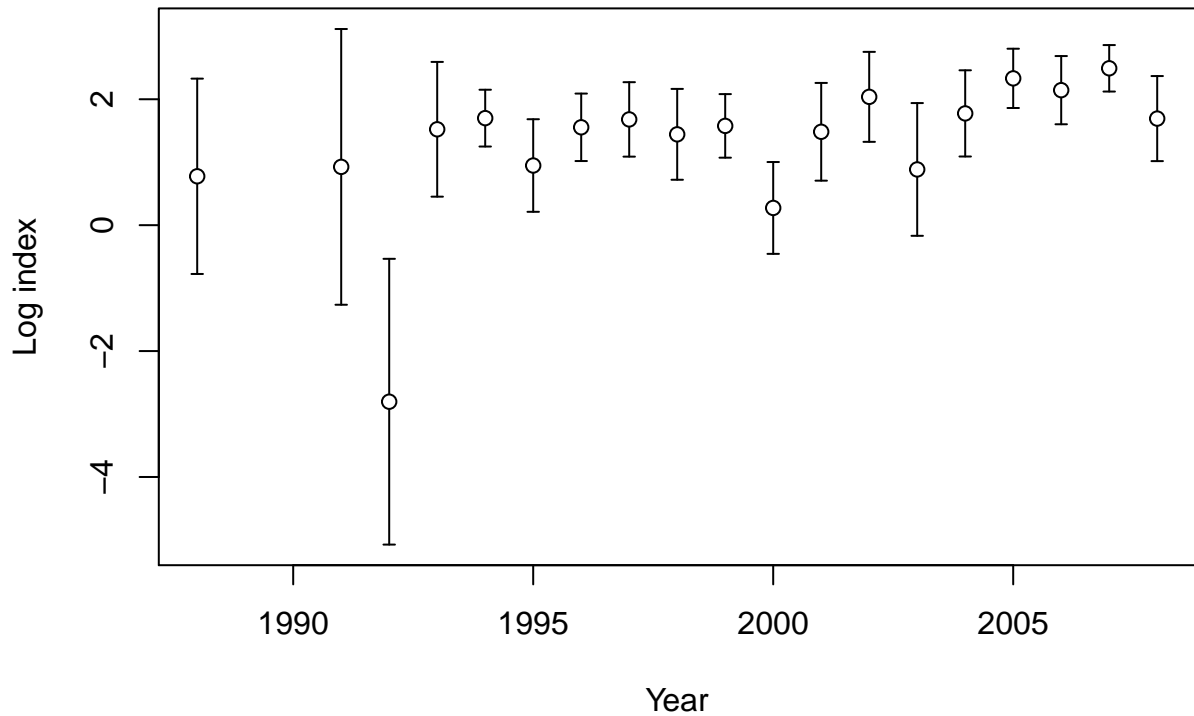




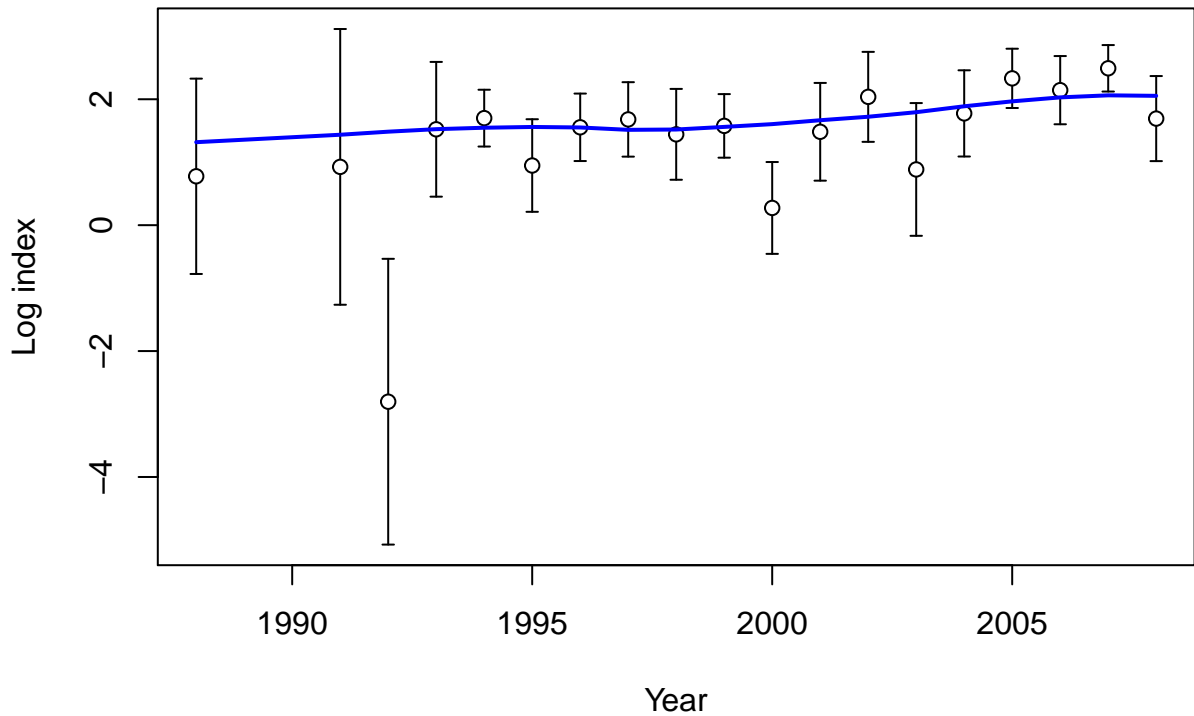


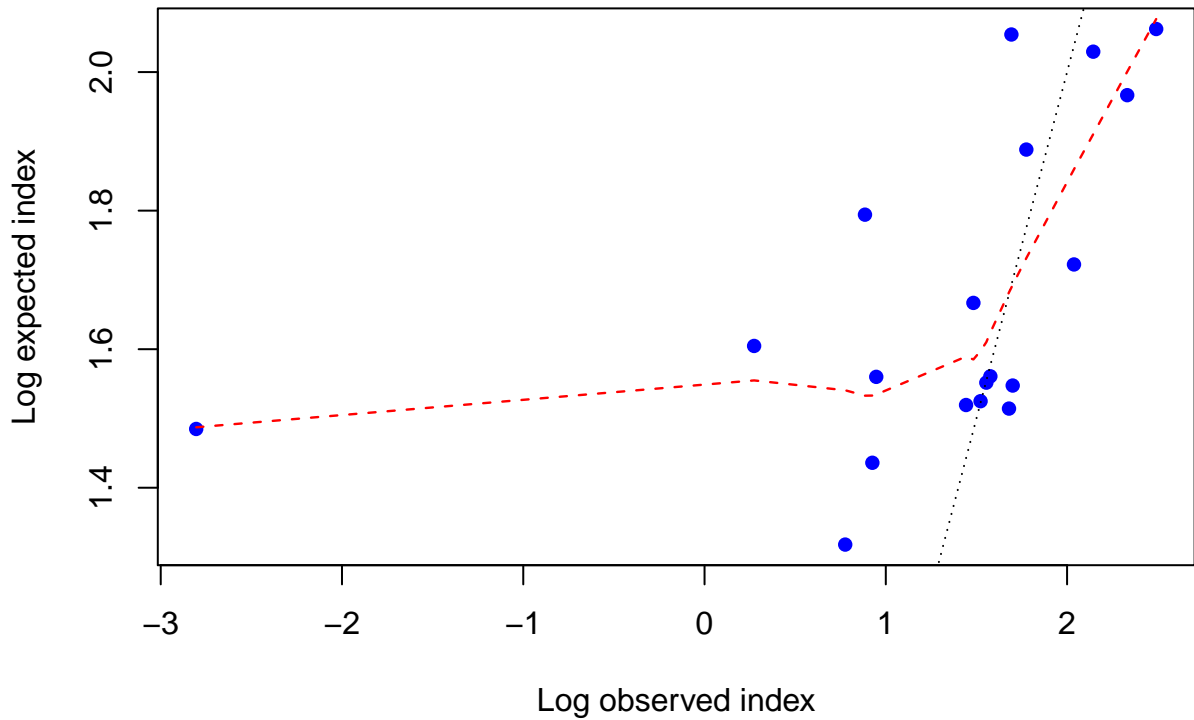


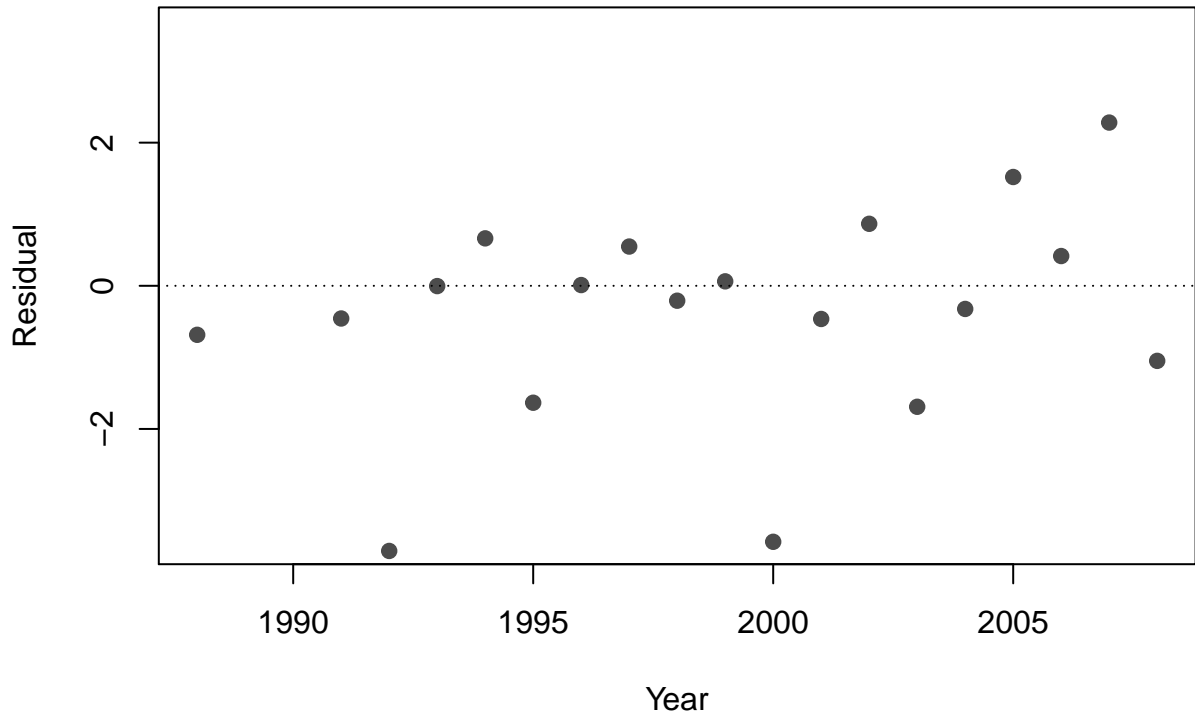


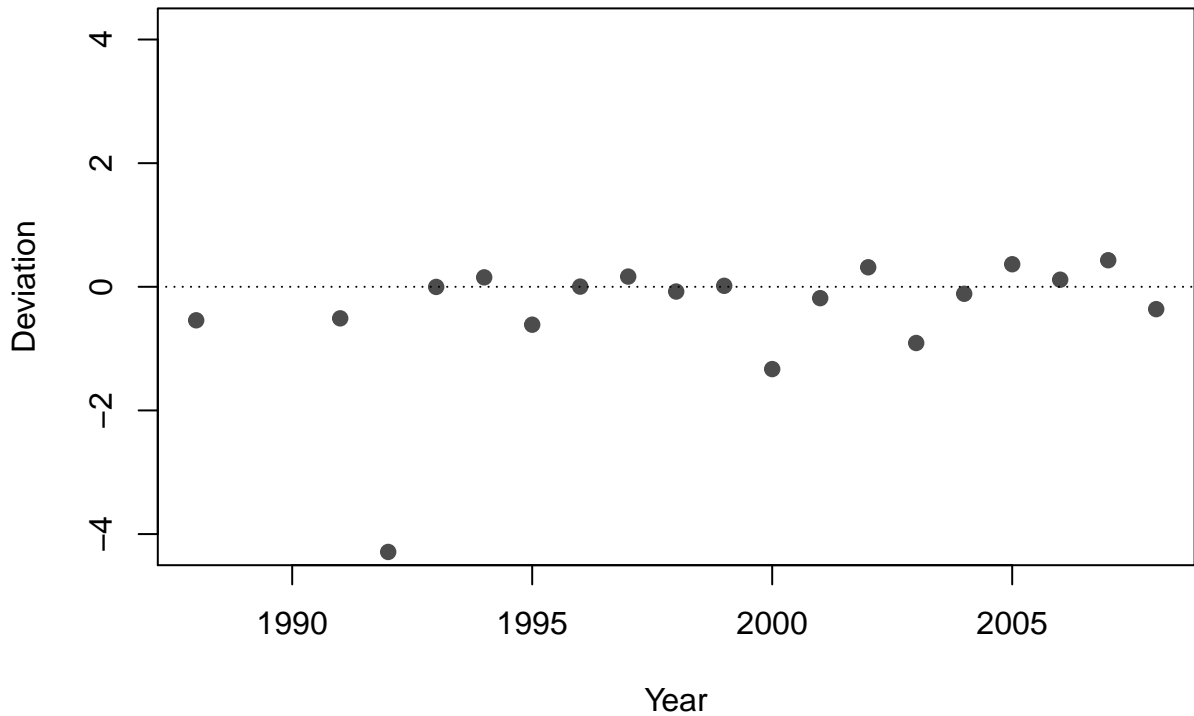




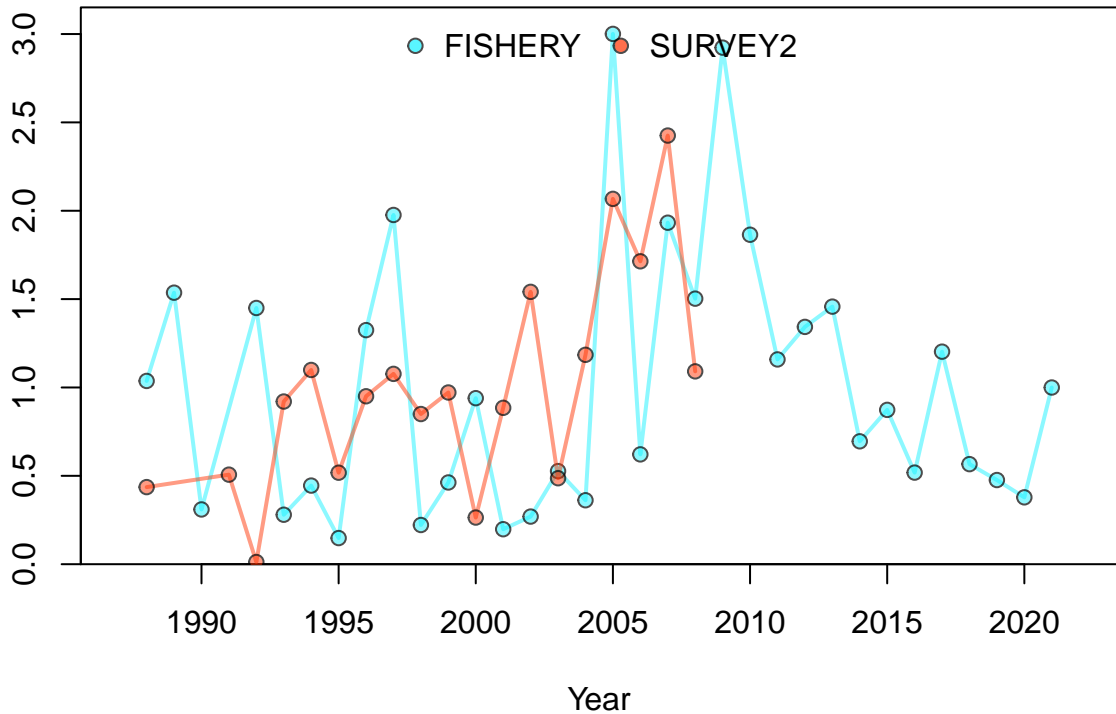


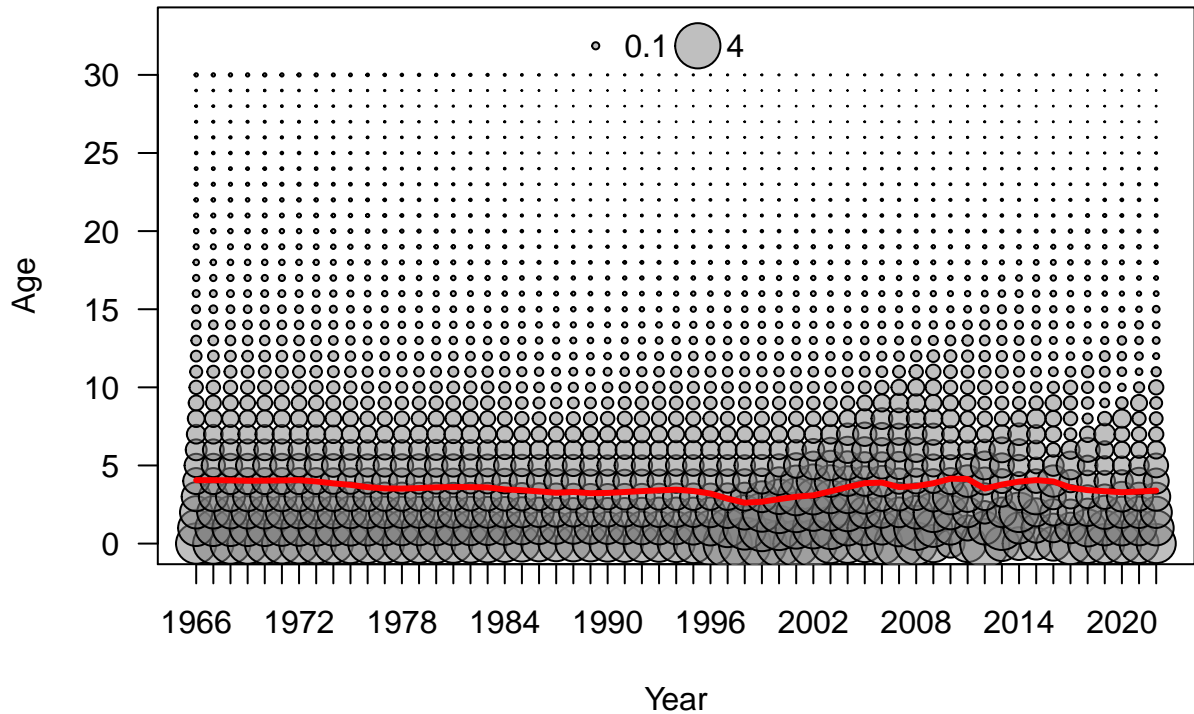


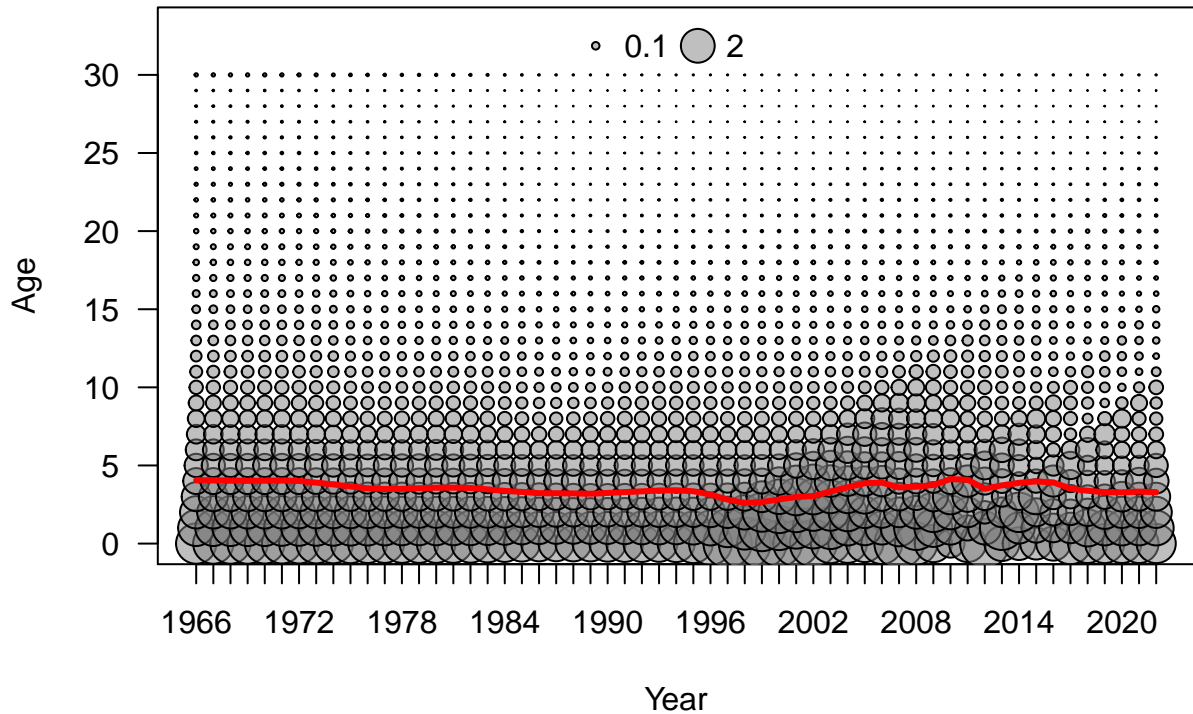




Standardized index







Length

120

100

80

60

40

20

0

◦ 0.1  4

1967

1973

1979

1985

1991

1997

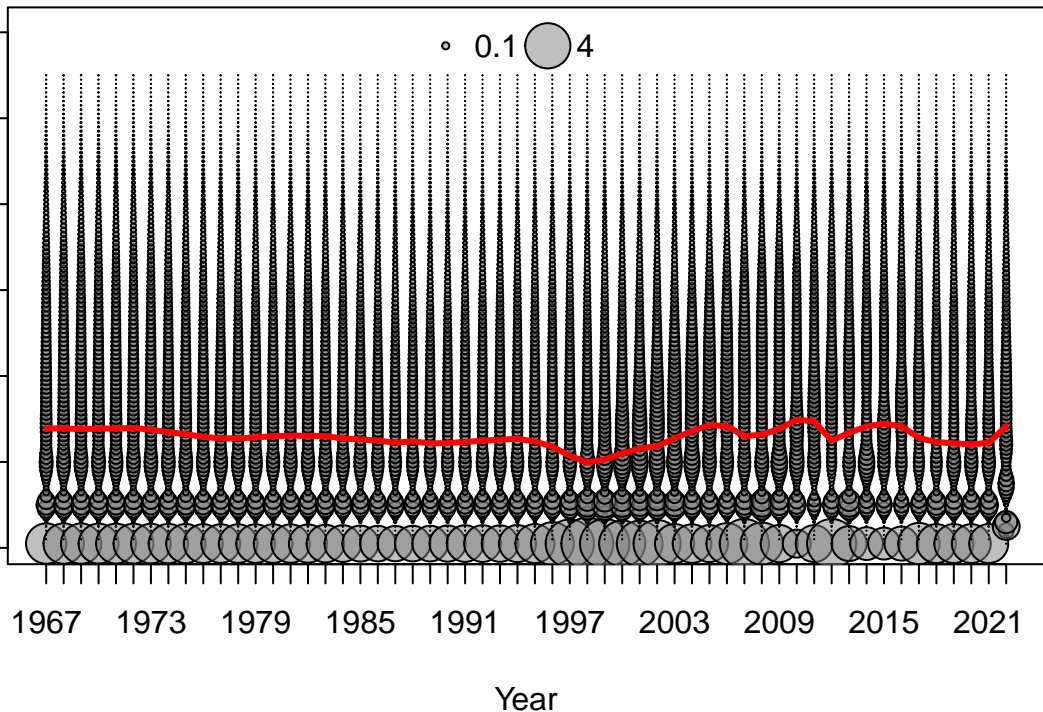
2003

2009

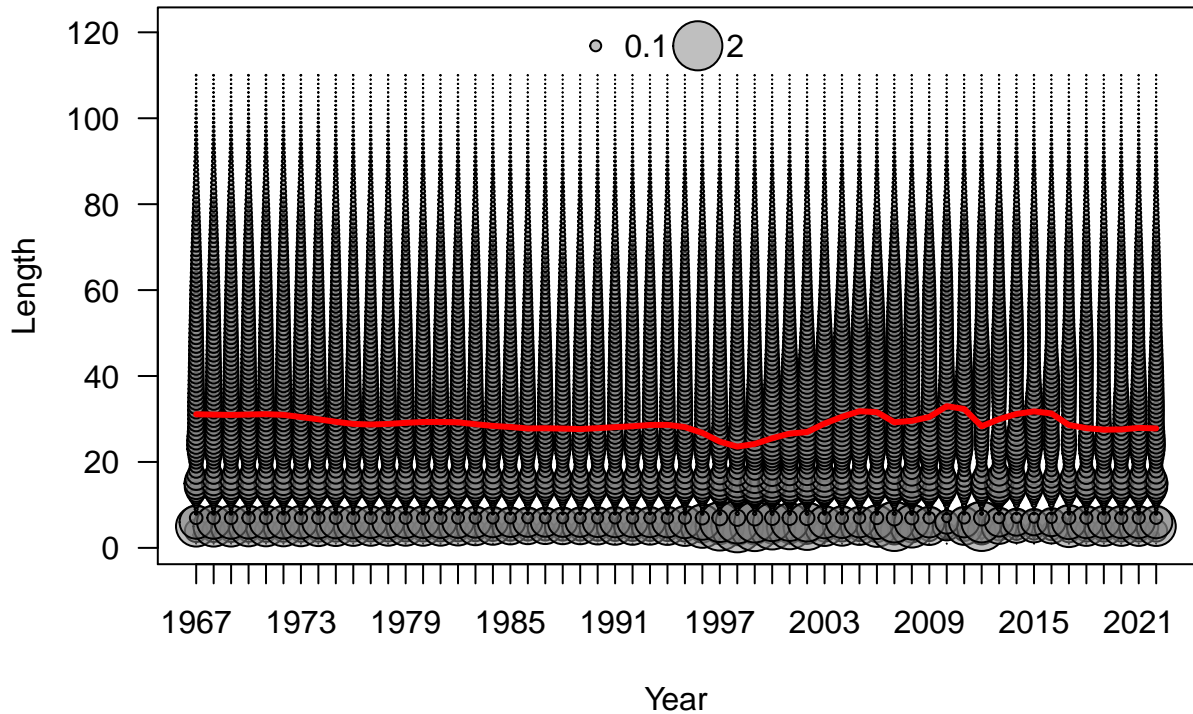
2015

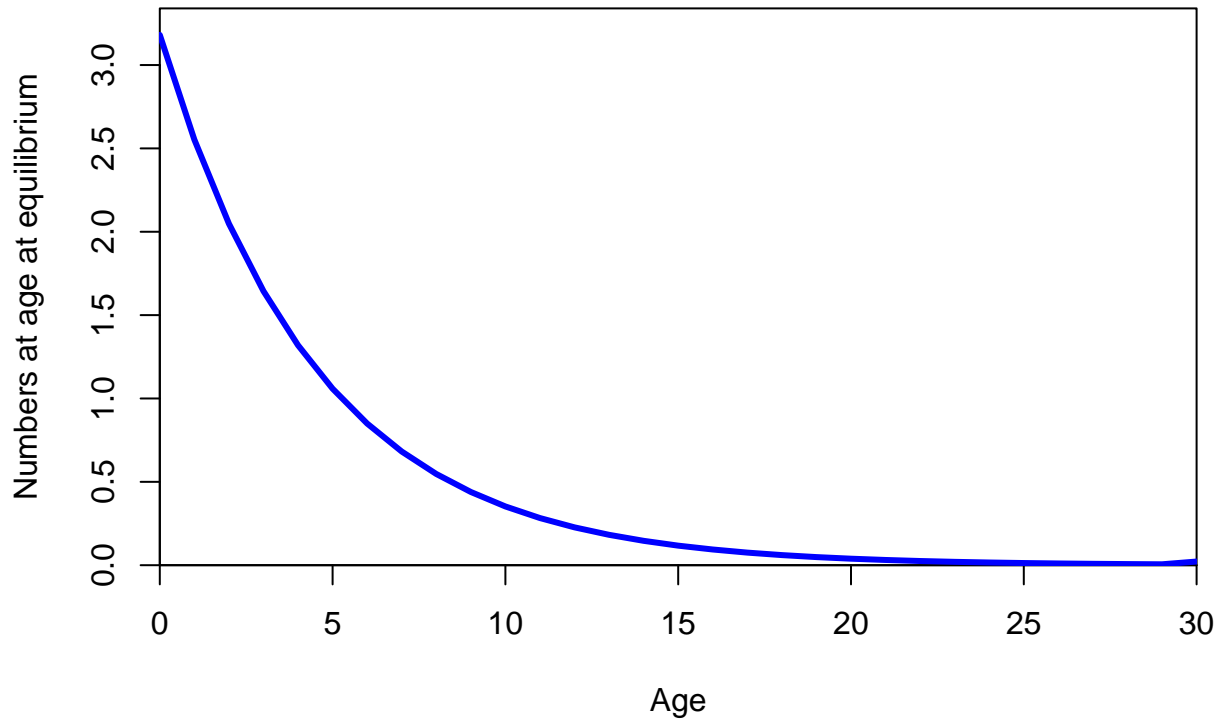
2021

Year



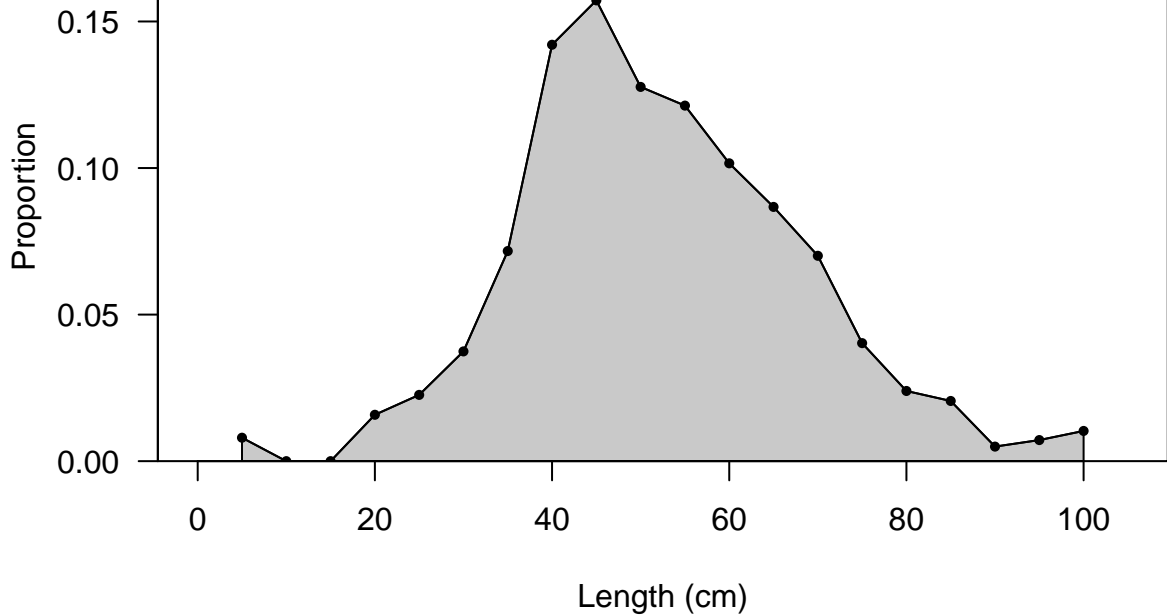


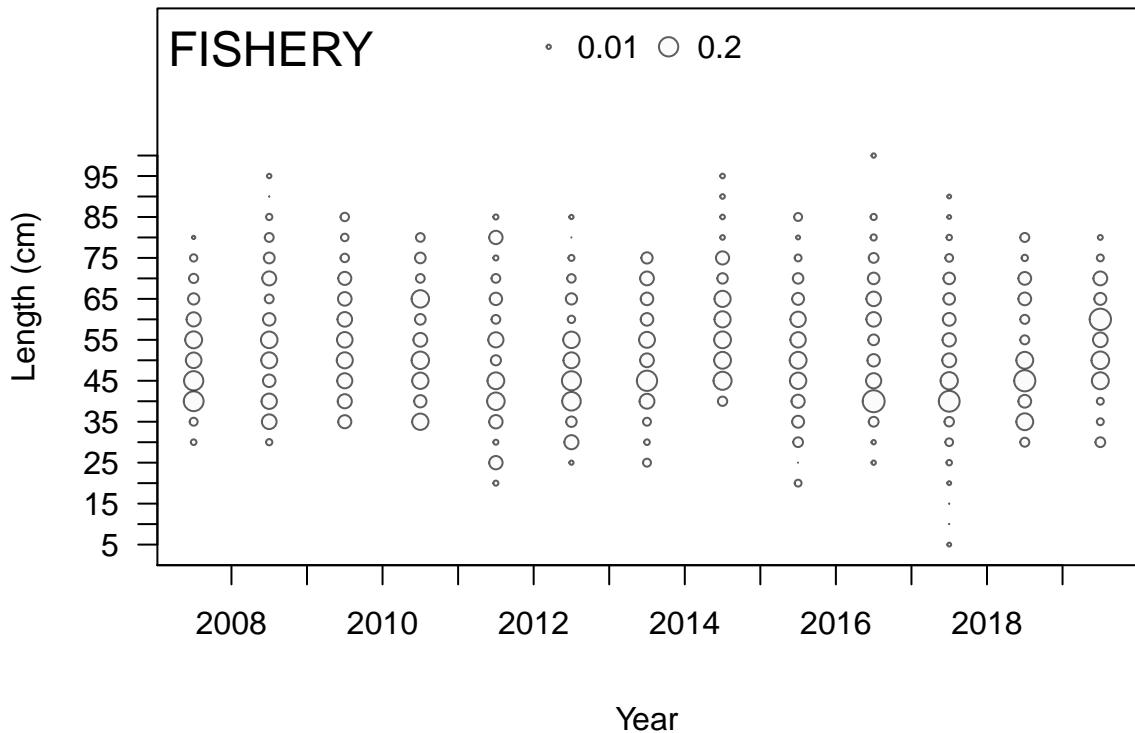




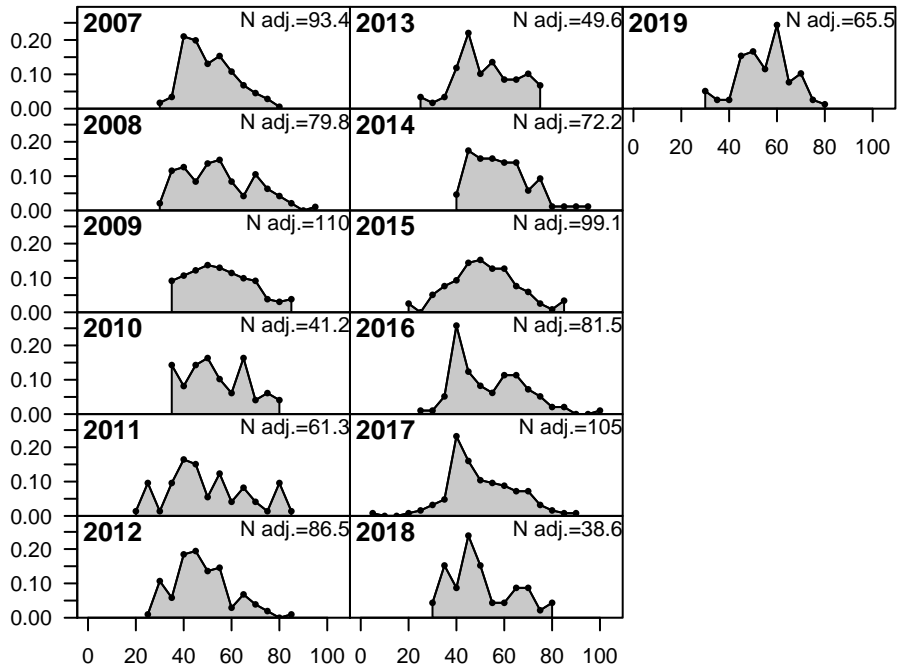
**FISHERY**

Sum of N adj.=983.8

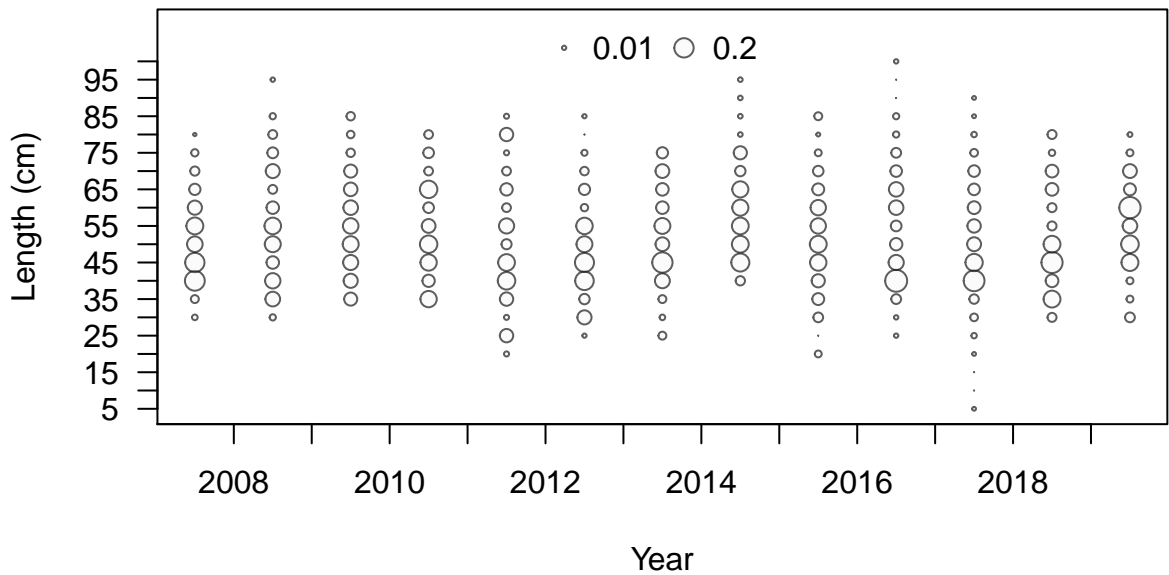




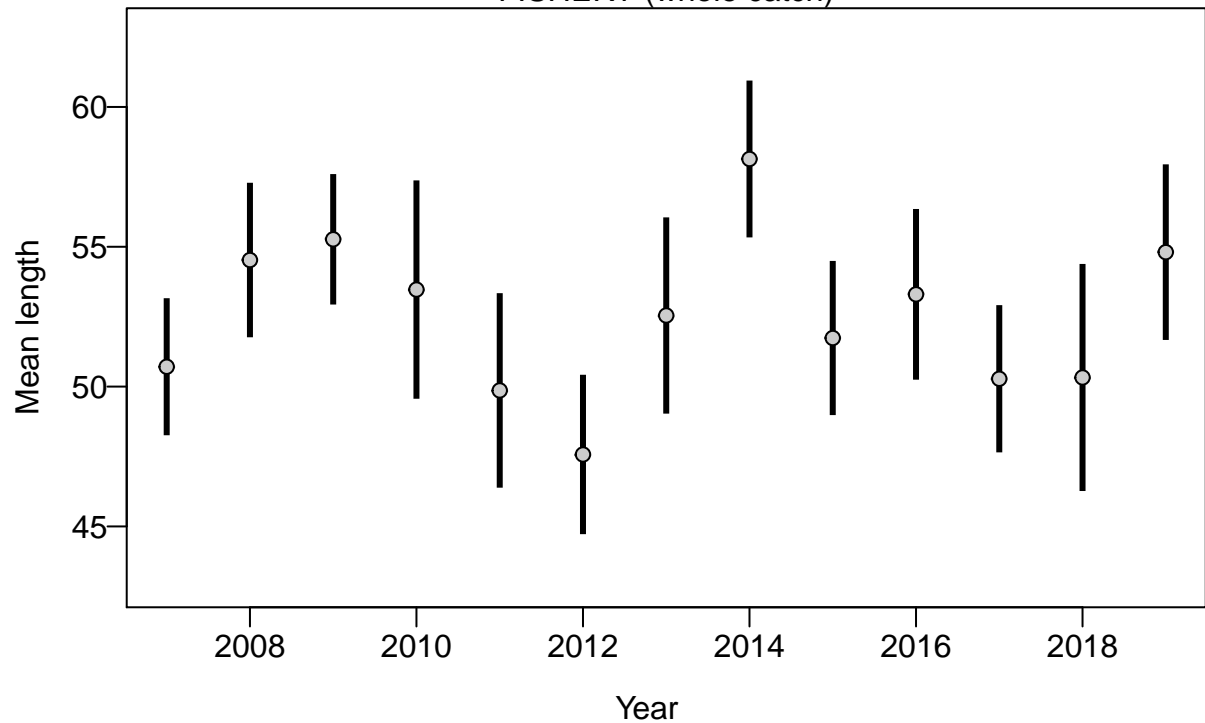
Proportion



Length (cm)

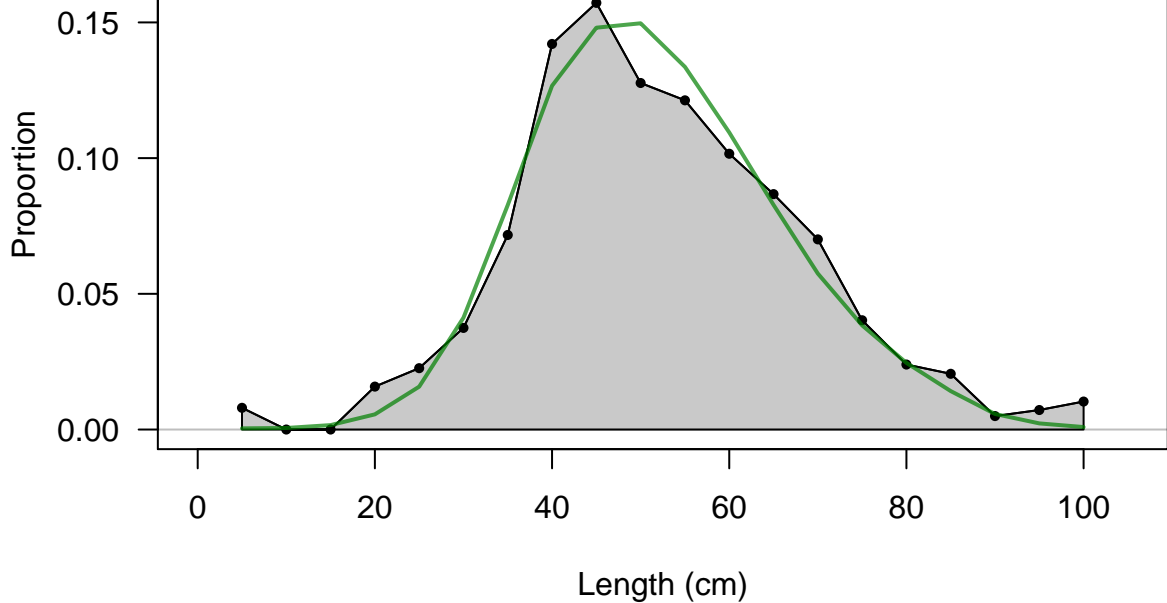


FISHERY (whole catch)

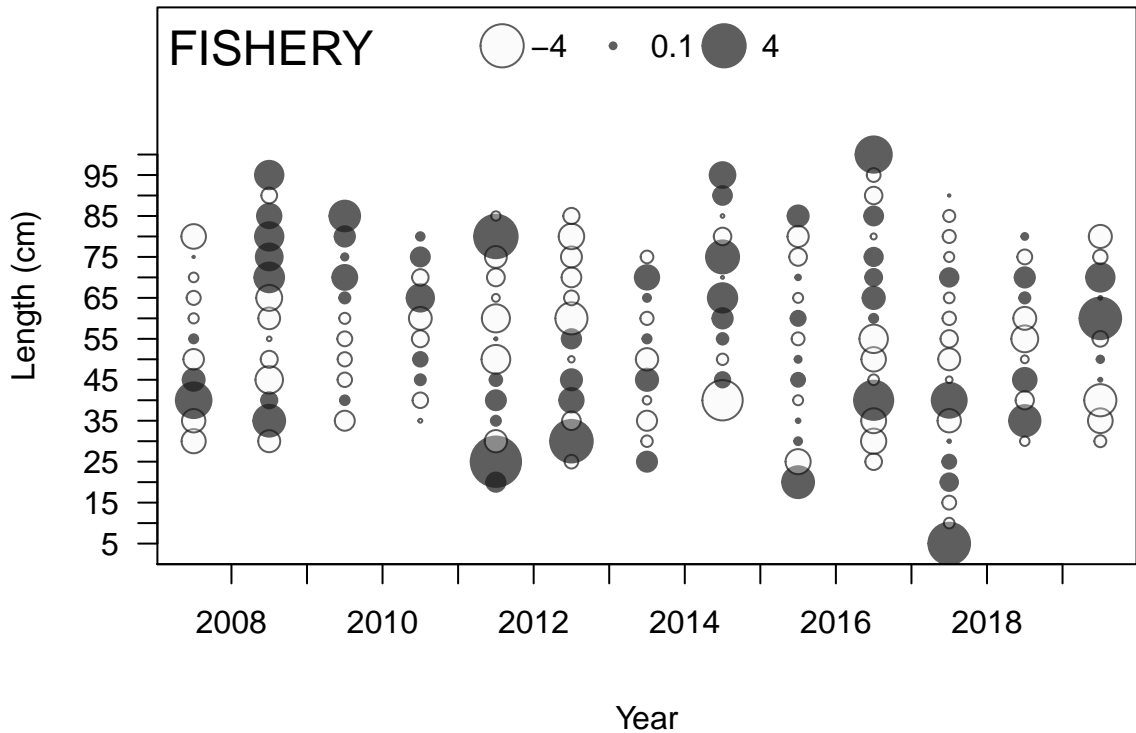


# FISHERY

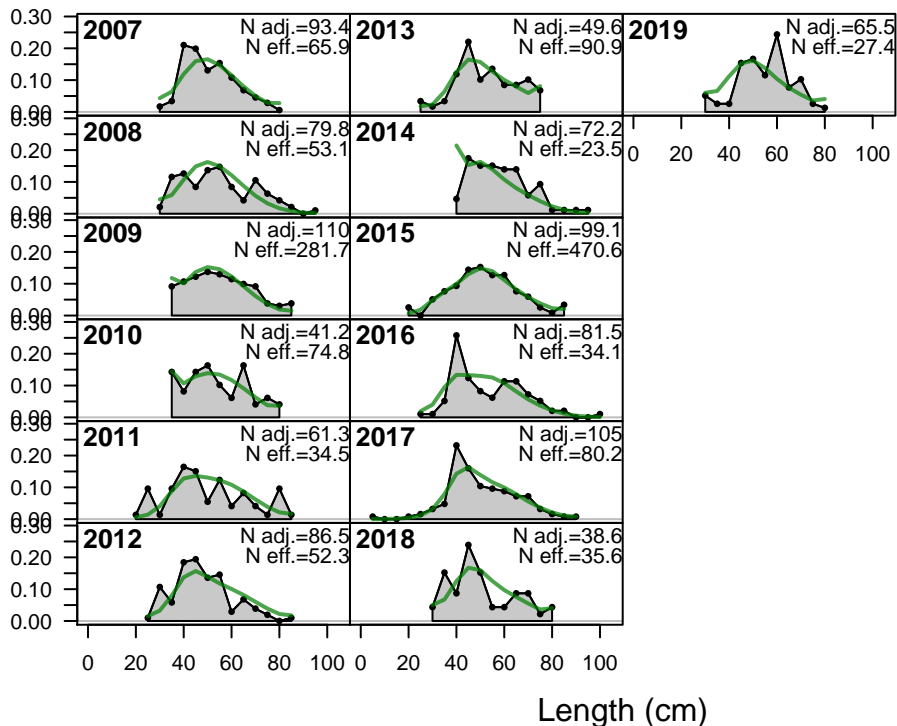
Sum of N adj.=983.8  
Sum of N eff.=1324.4

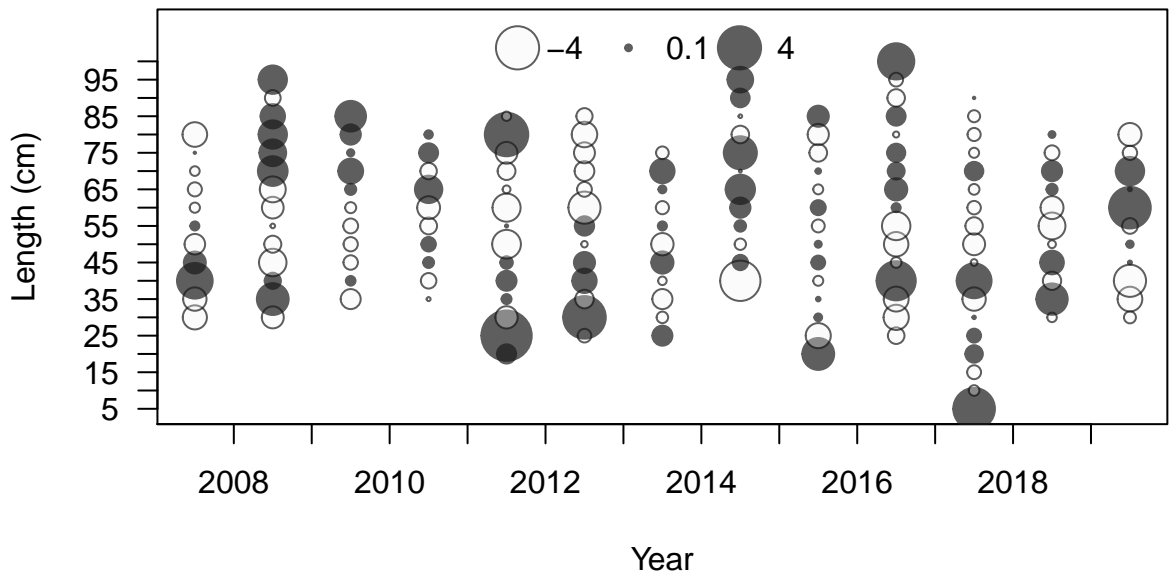




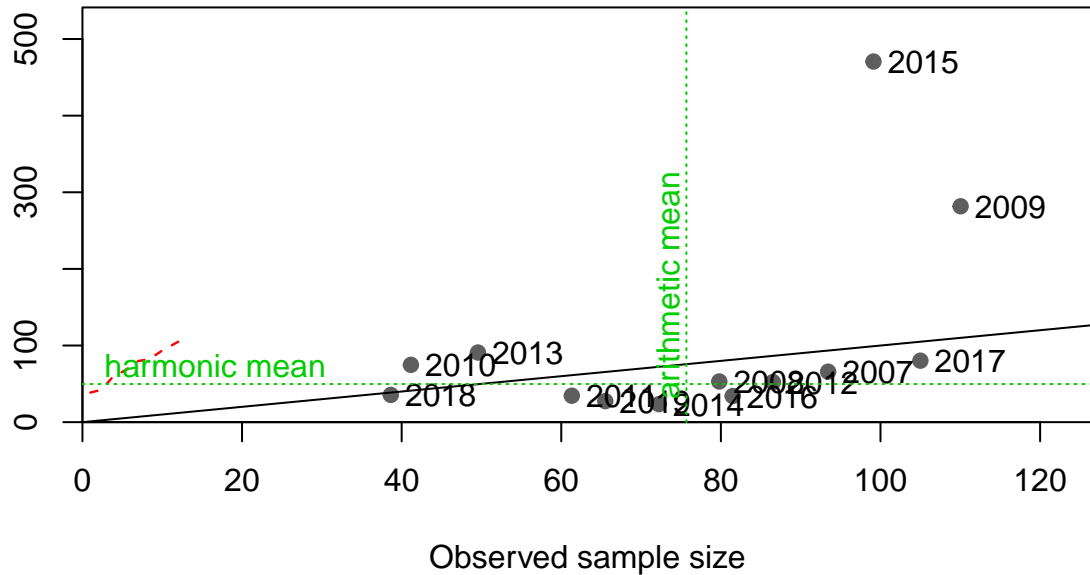


Proportion

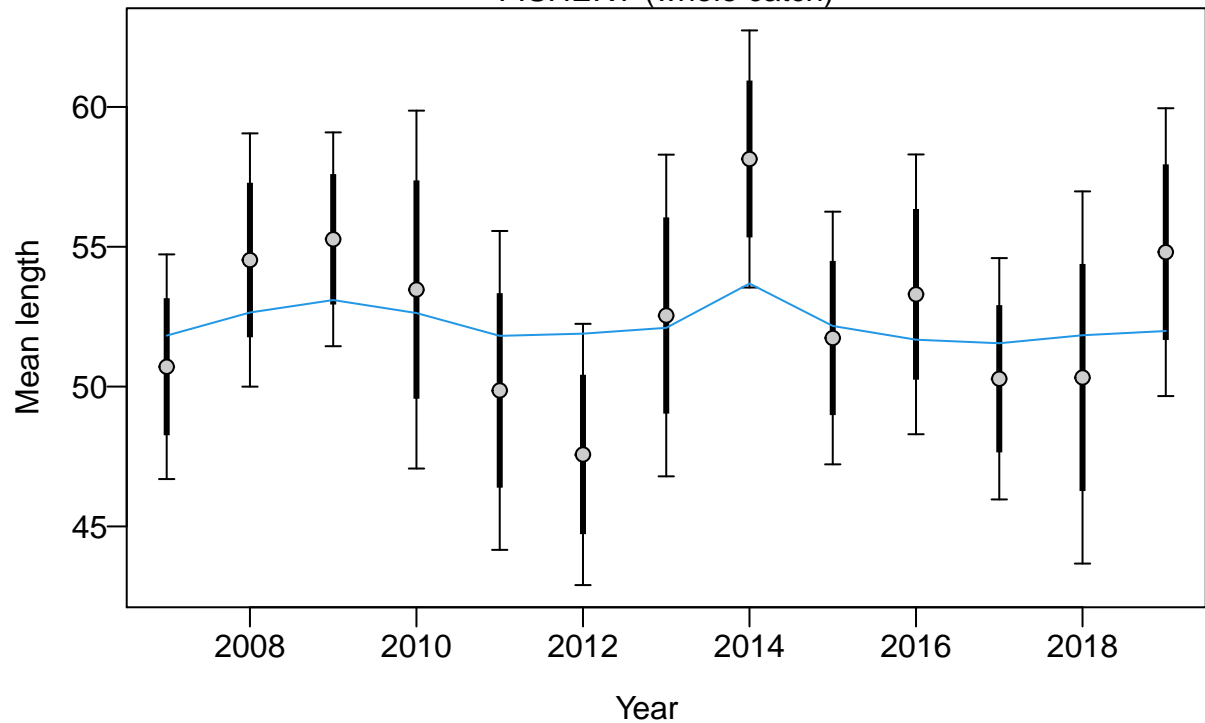


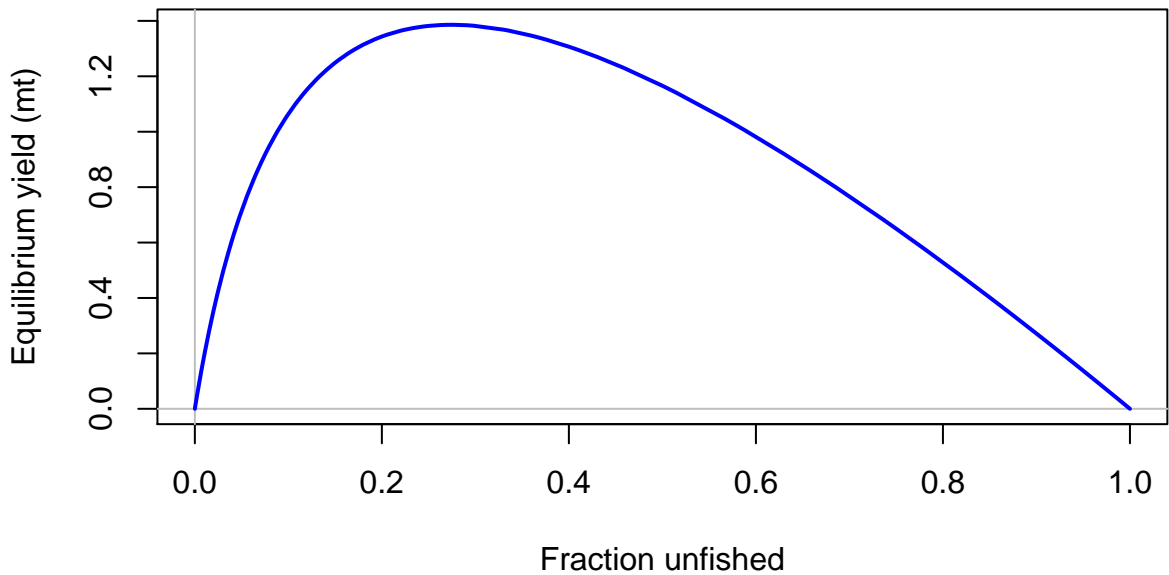


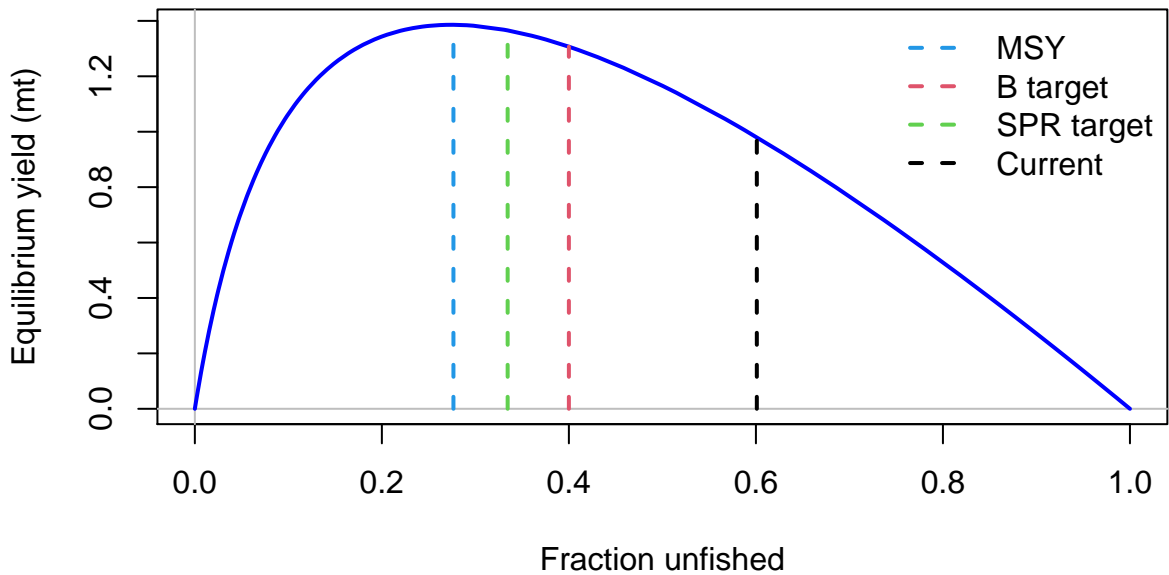
Effective sample size

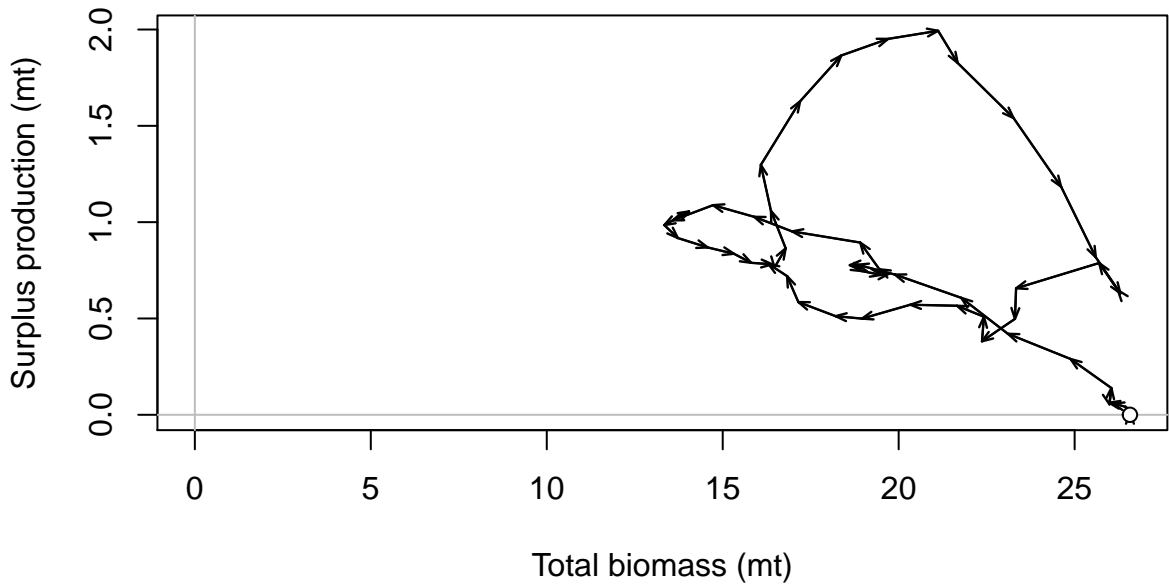


FISHERY (whole catch)

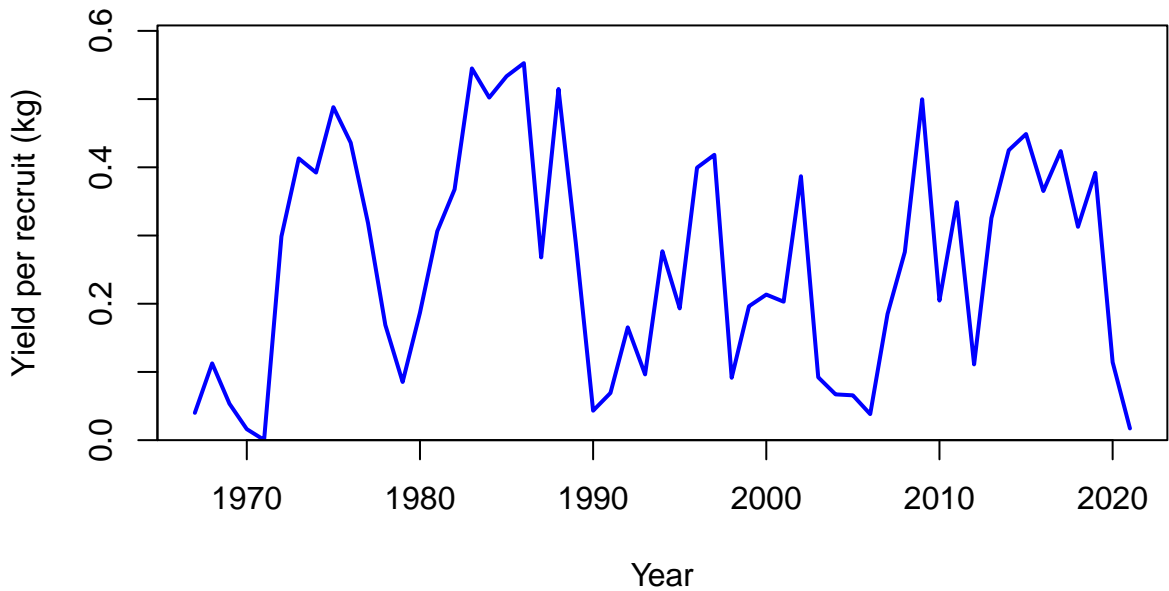


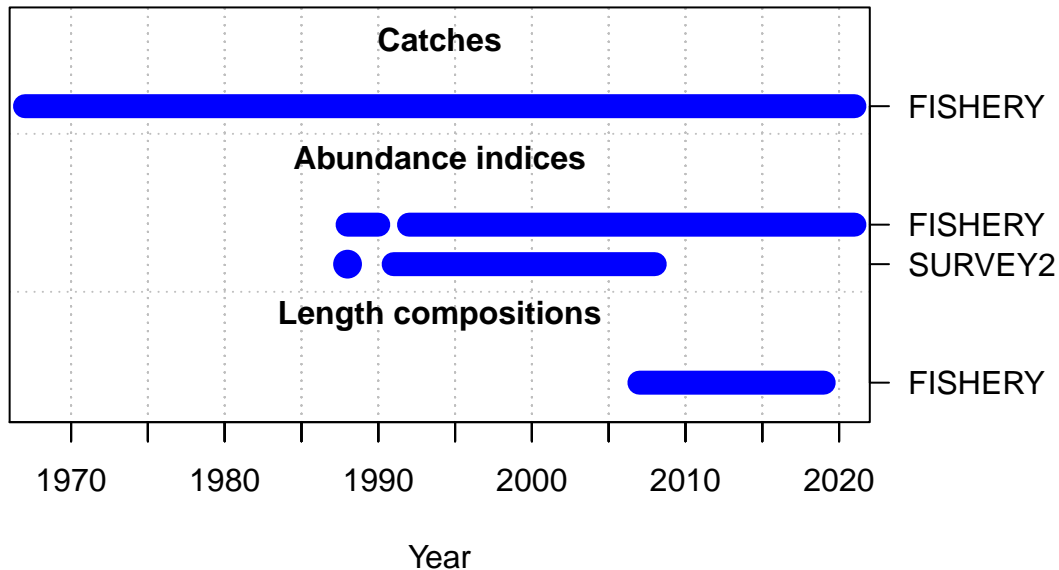


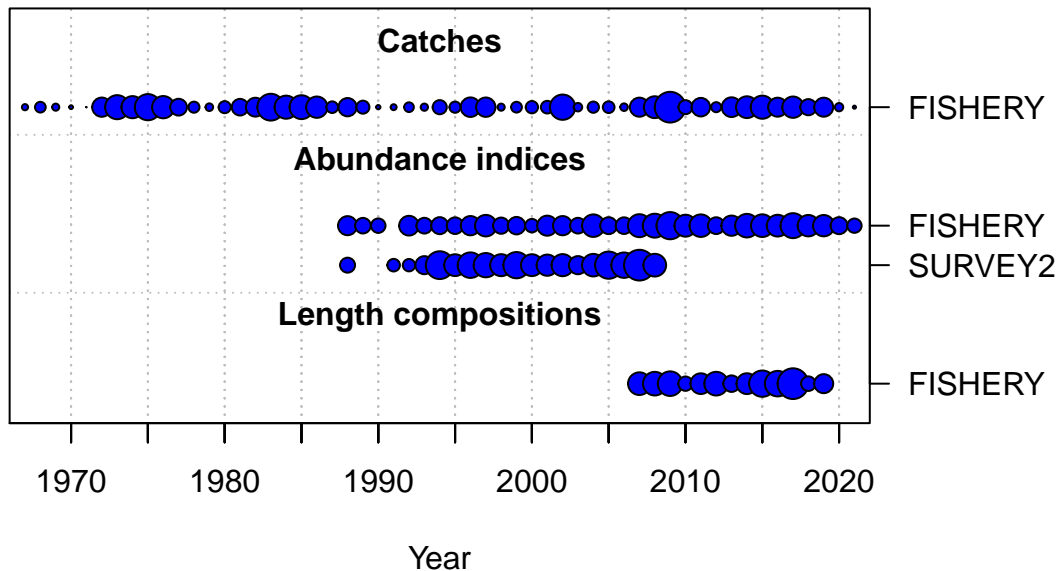




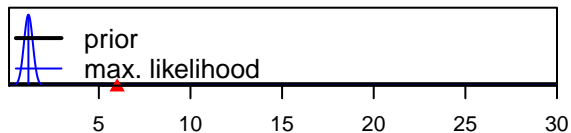




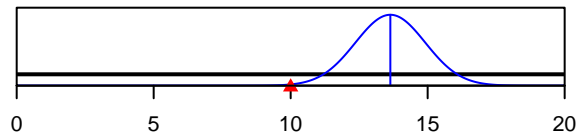




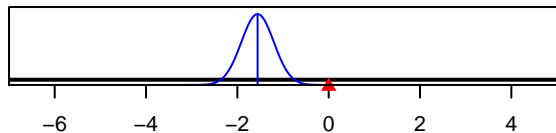
SR\_LN(R0)



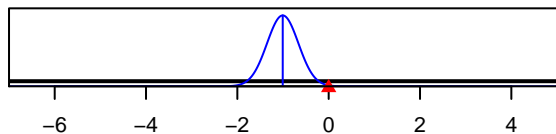
Size\_95%width\_FISHERY(1)



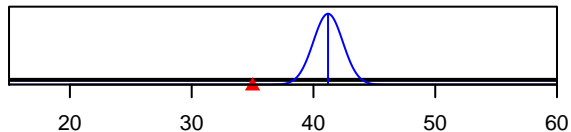
LnQ\_base\_FISHERY(1)



LnQ\_base\_SURVEY2(2)



Size\_inflection\_FISHERY(1)



Parameter value