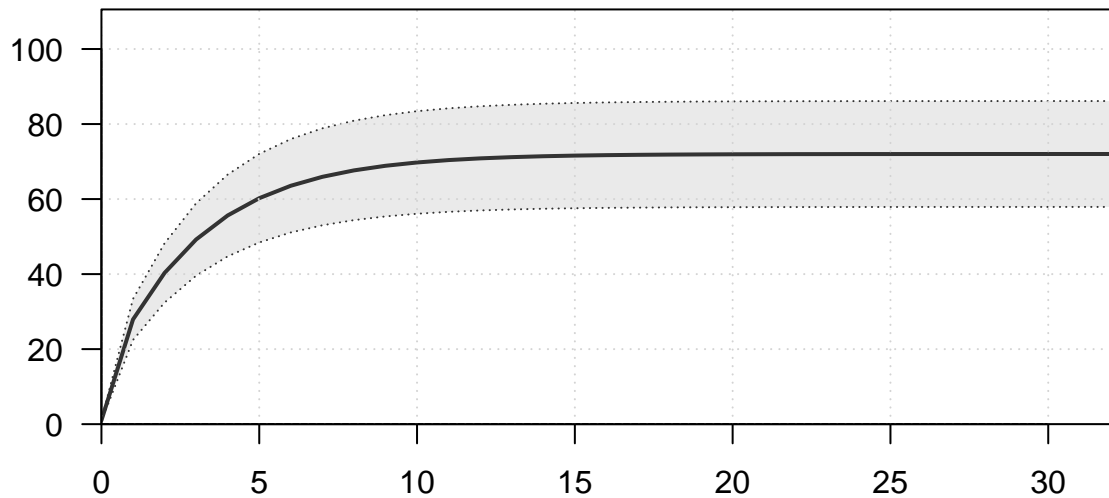


Plots created using the 'r4ss' package in R  
Stock Synthesis version: 3.30.19.0  
StartTime: Tue Jul 12 11:24:33 2022  
Data\_File: data.ss  
Control\_File: control.ss

Length (cm, beginning of the year)



Age (yr)

















Fecundity



Fecundity

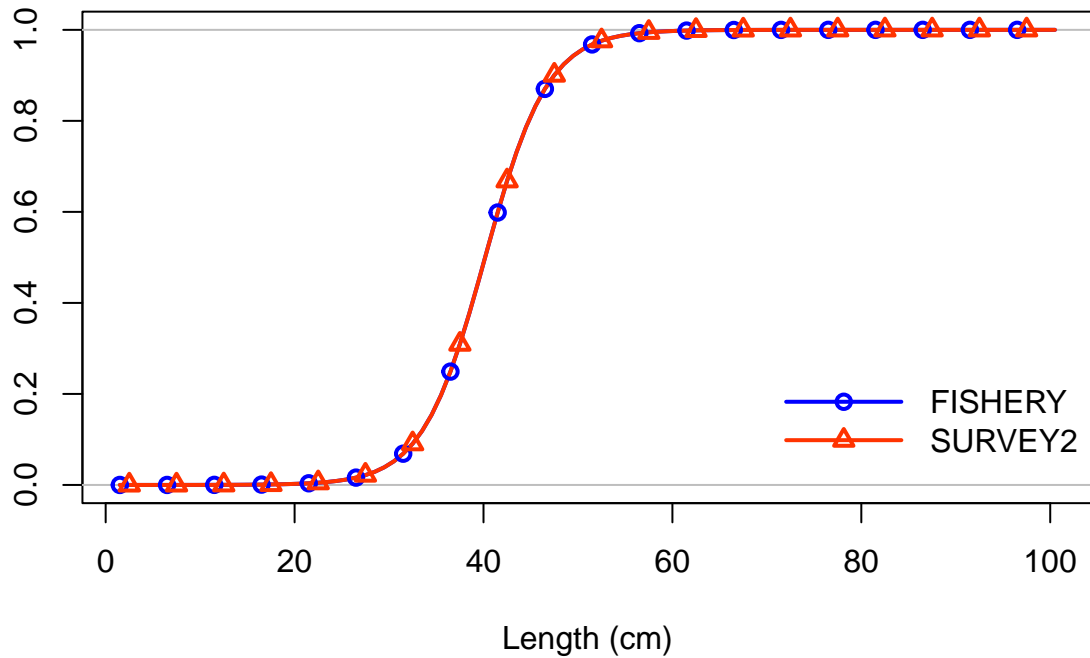


Spawning output

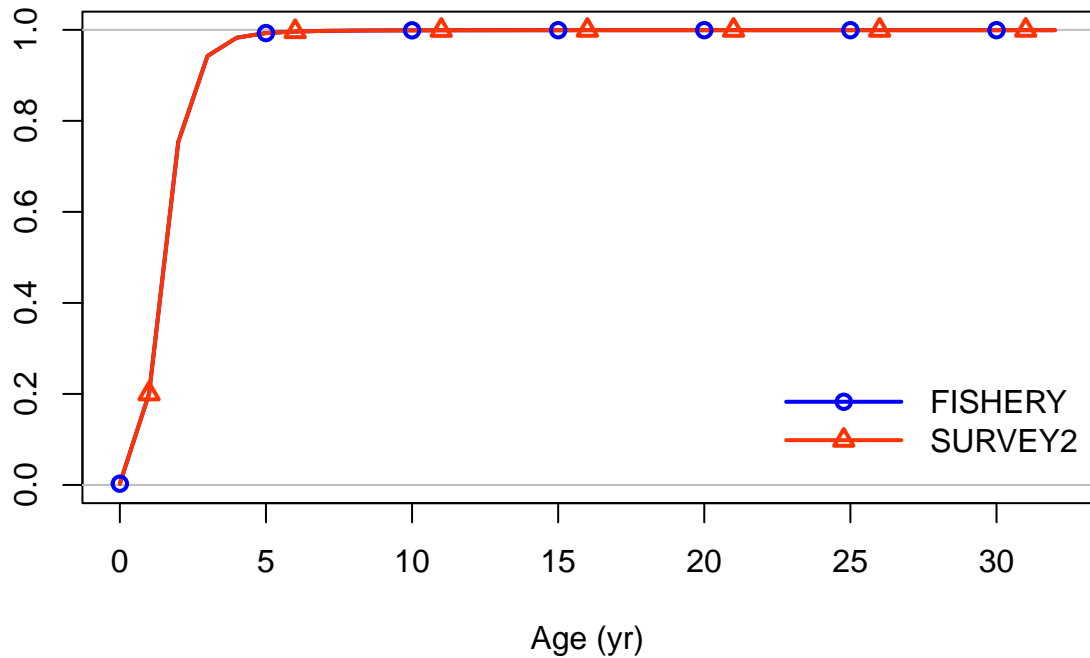




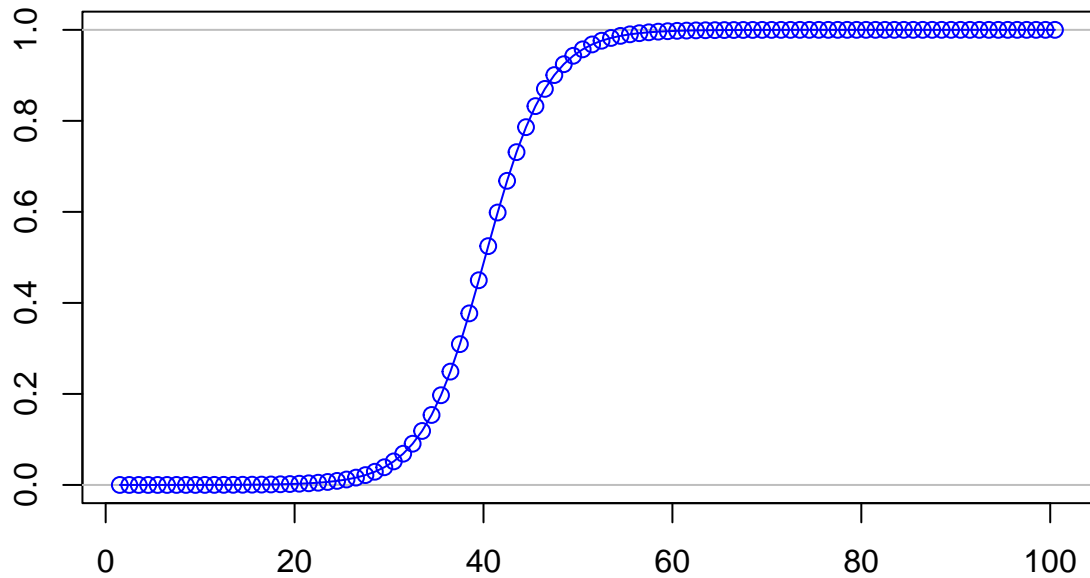
Selectivity



Selectivity



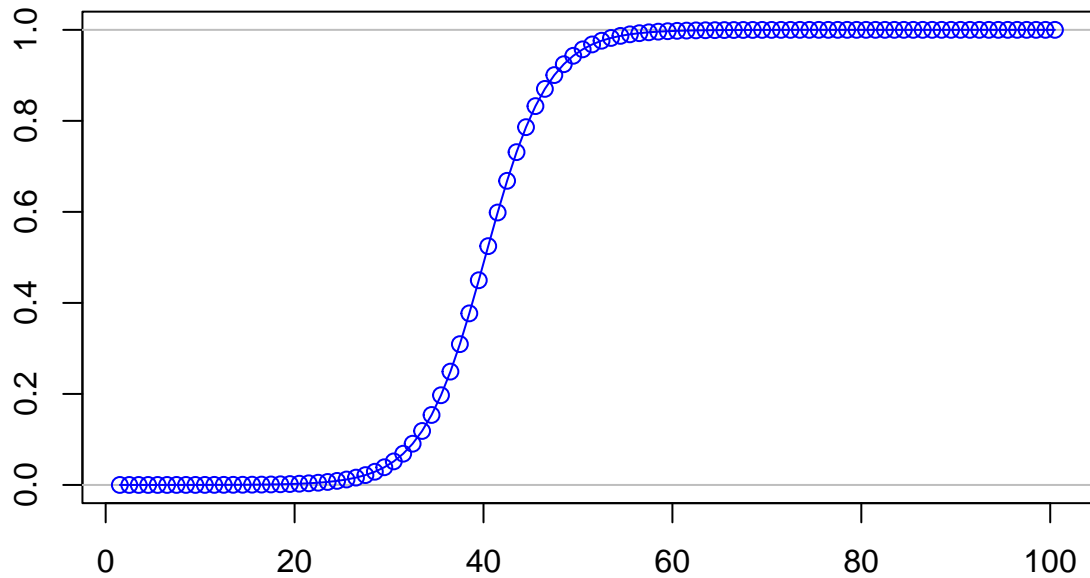
Selectivity



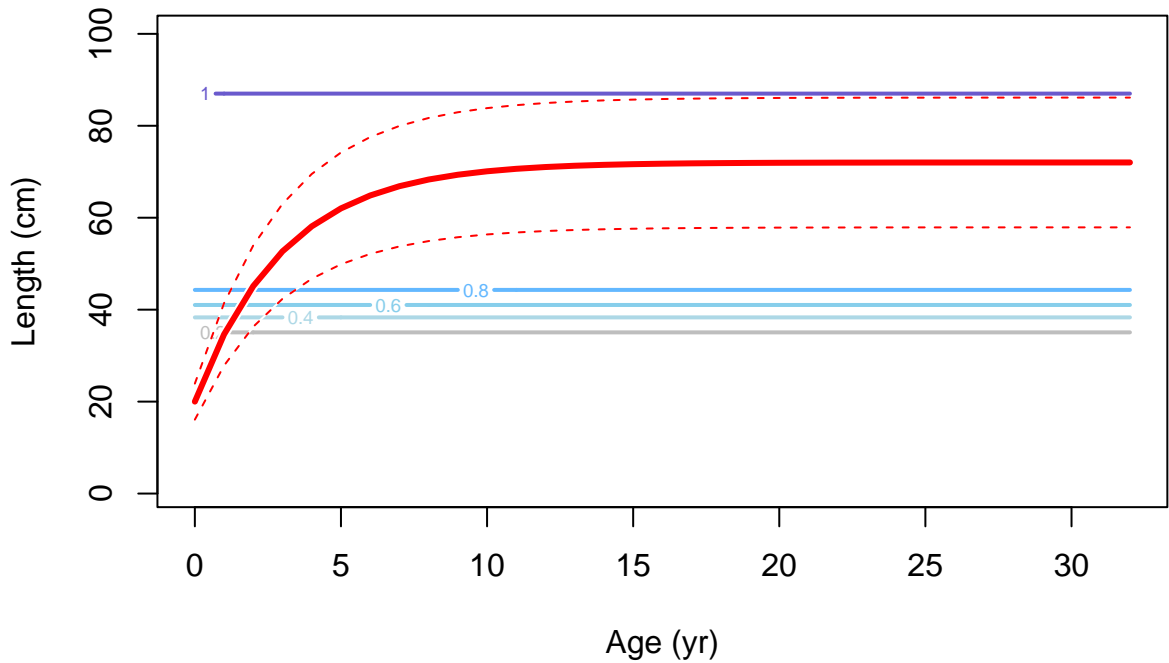
Length (cm)

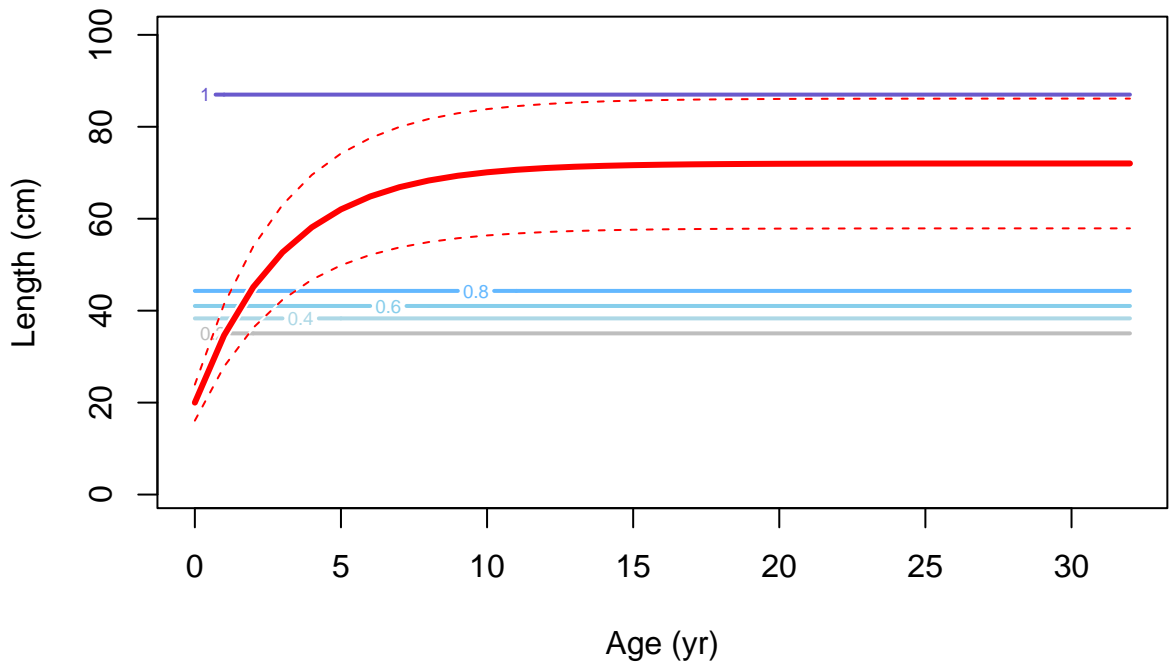


Selectivity

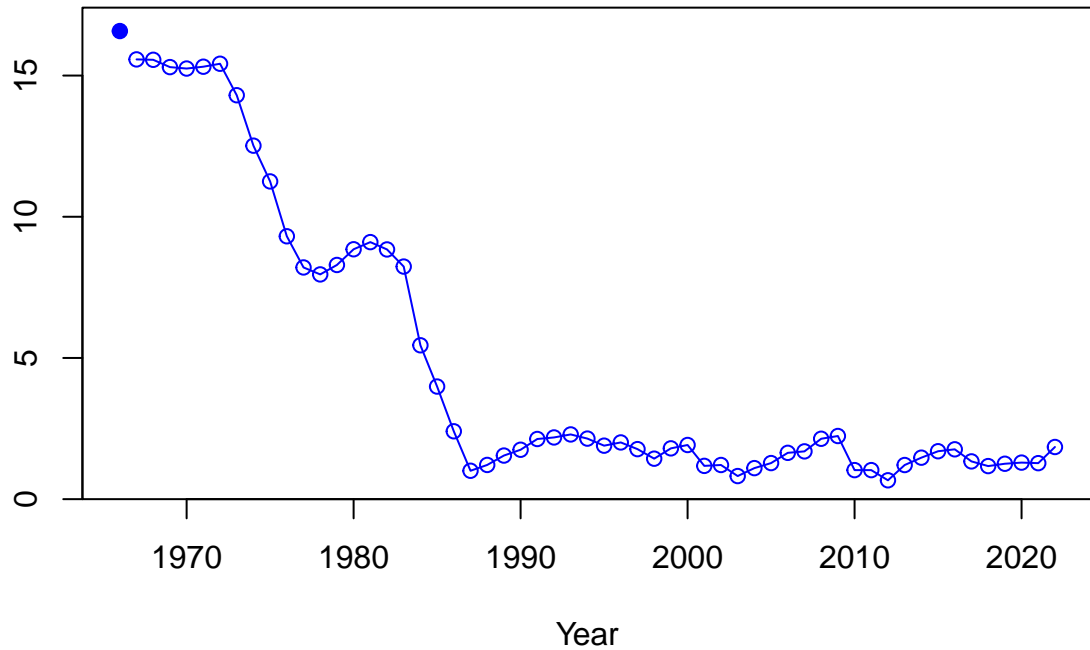


Length (cm)

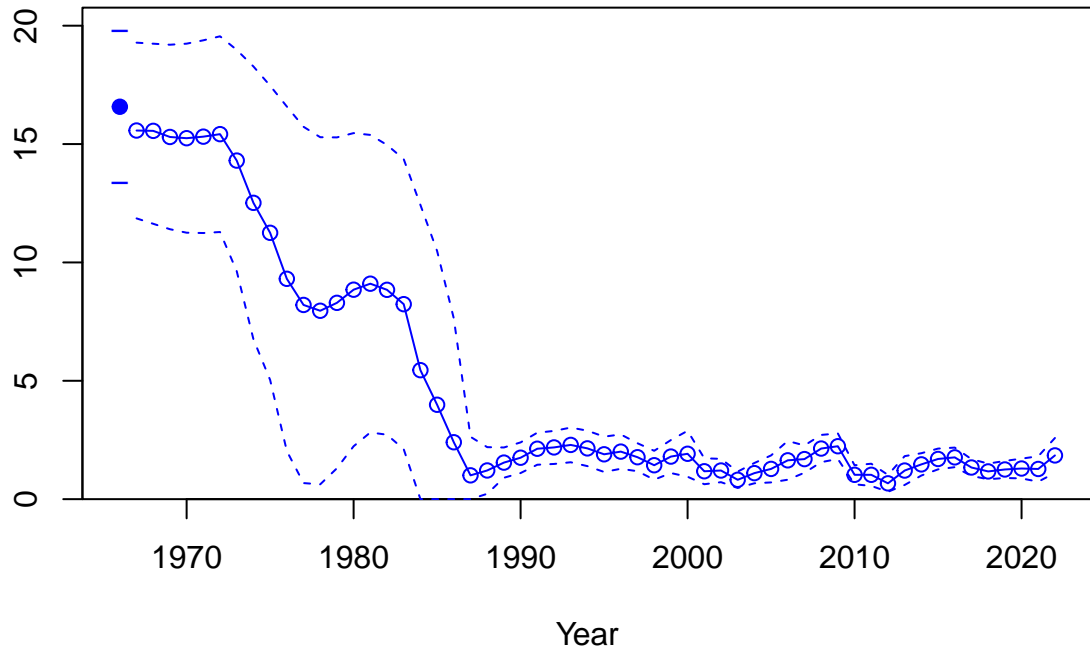




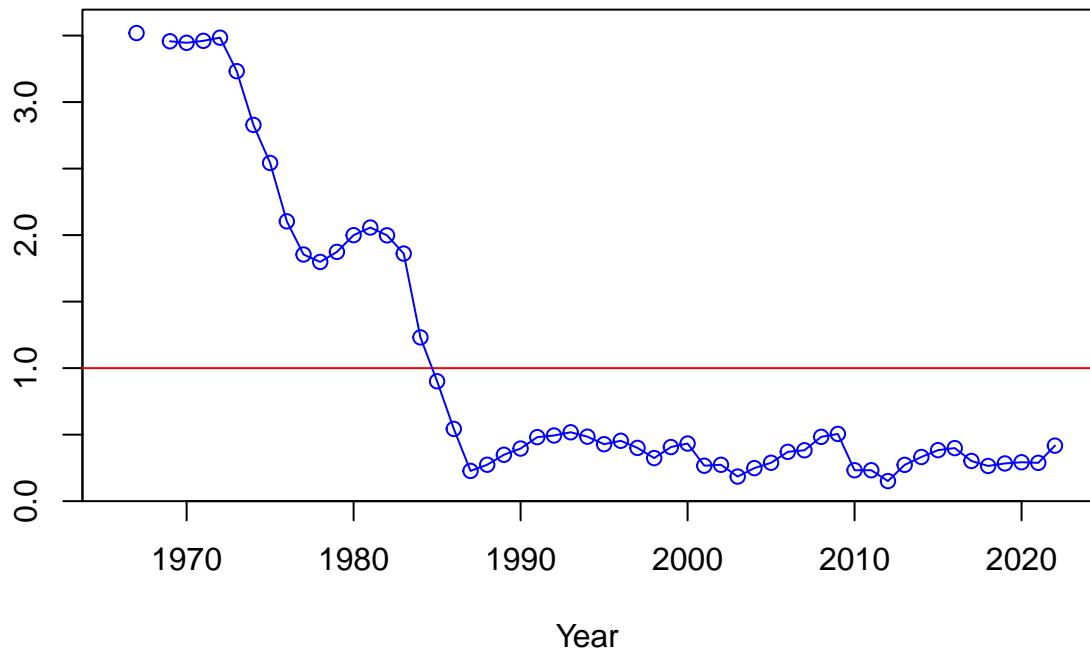
Spawning biomass (mt)



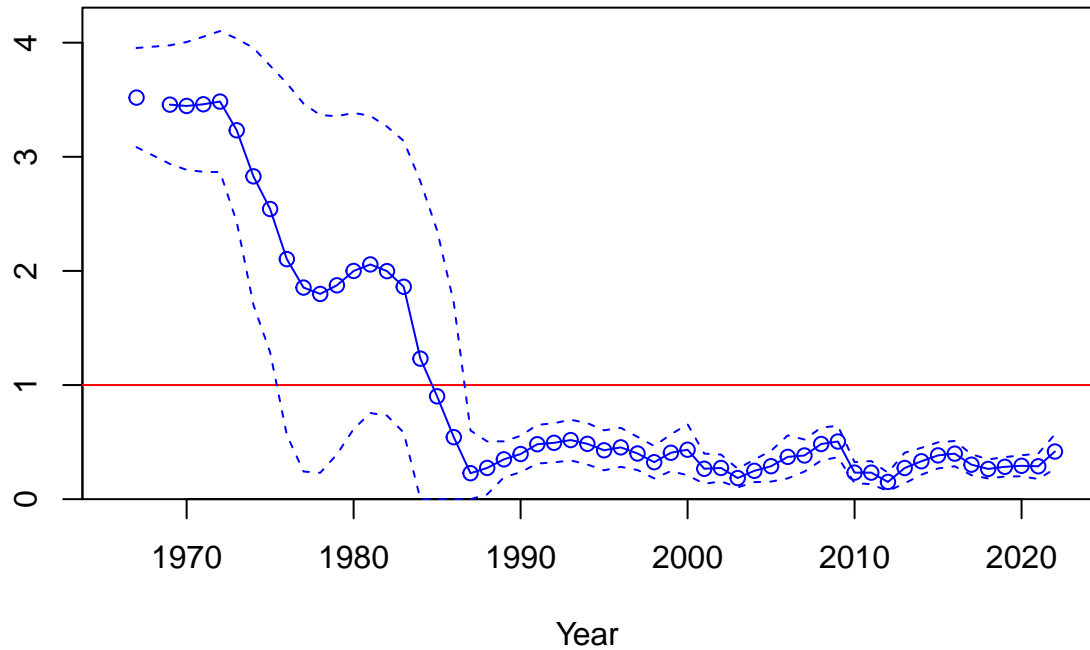
Spawning biomass (mt)

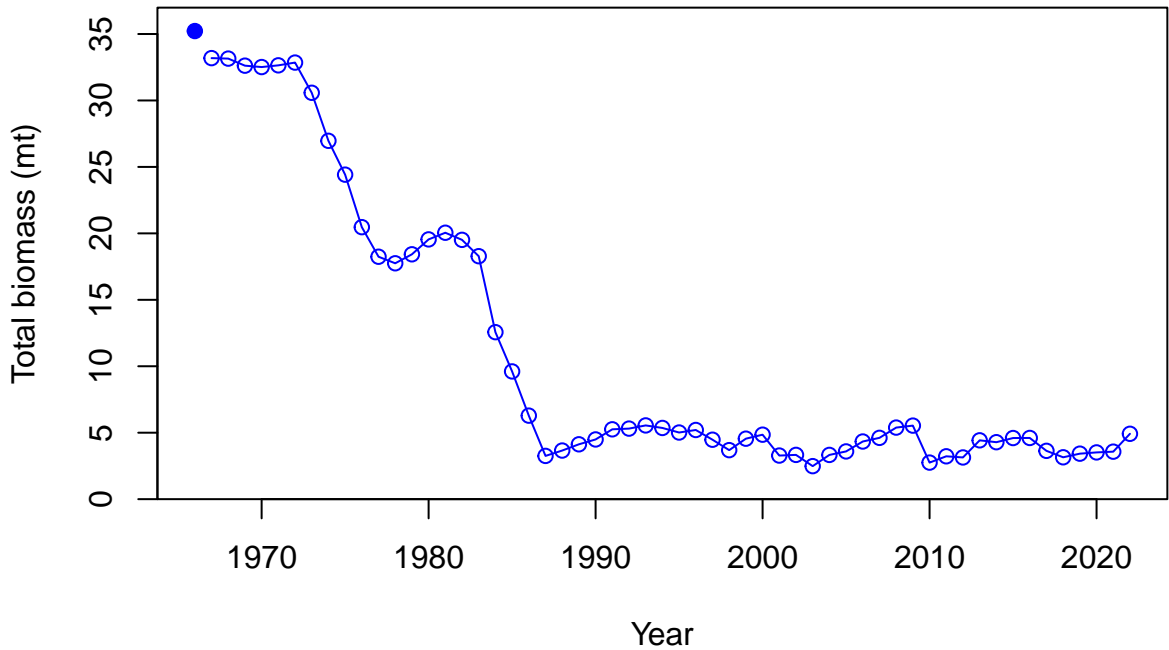


Relative spawning biomass:  $B/B_{MSY}$

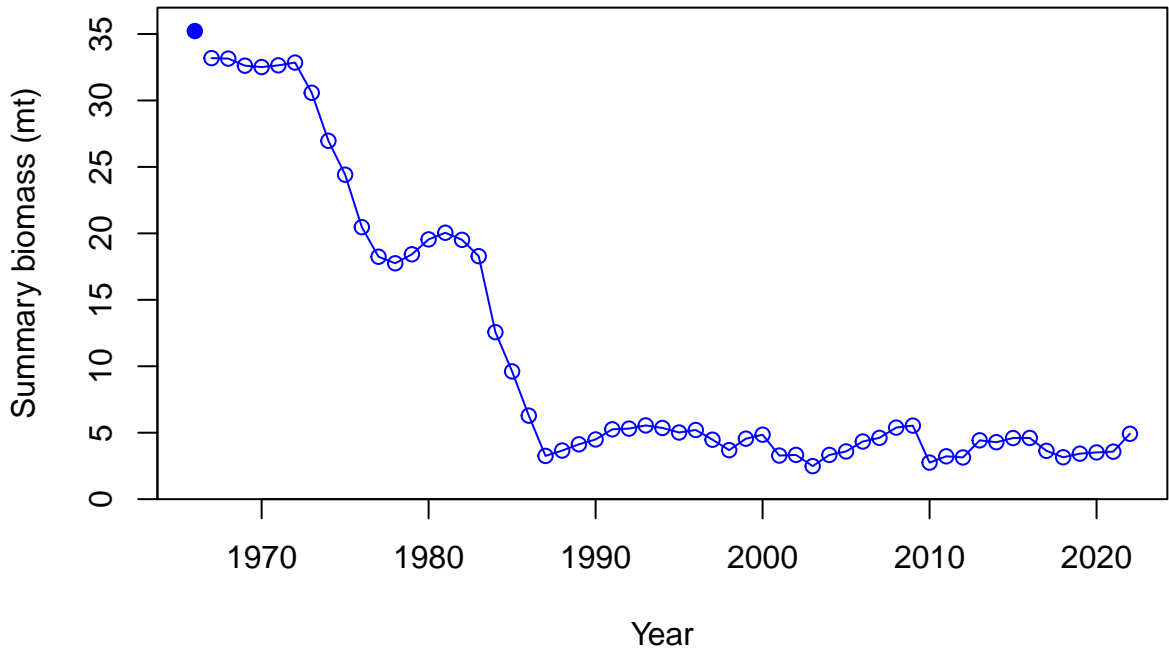


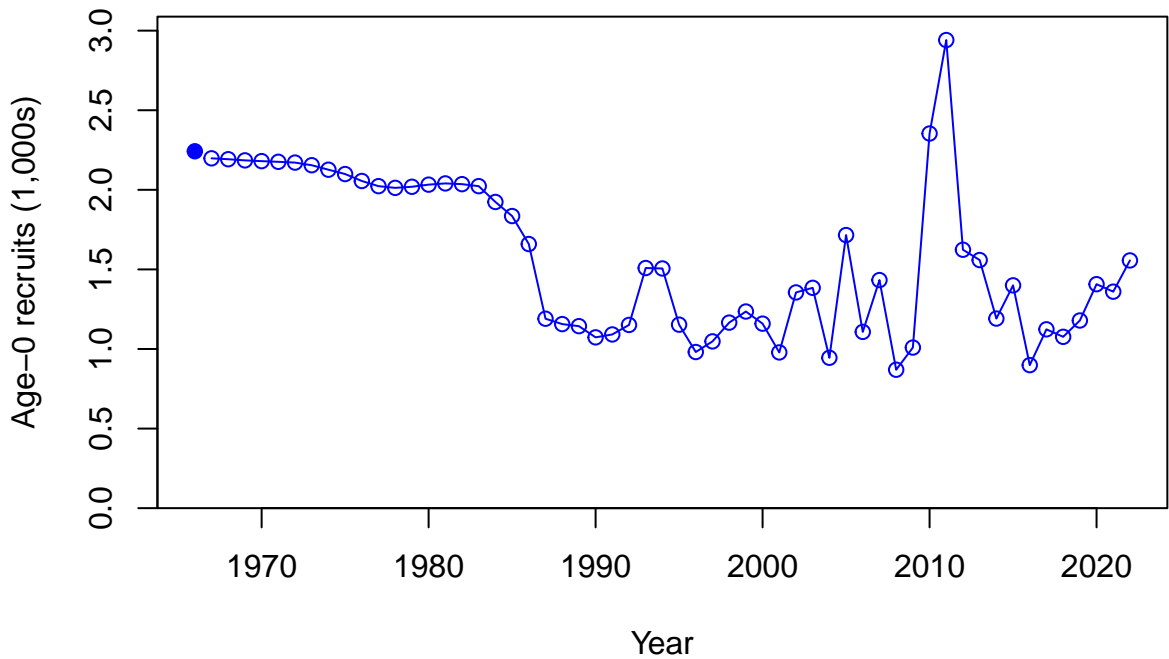
Relative spawning biomass:  $B/B_{MSY}$



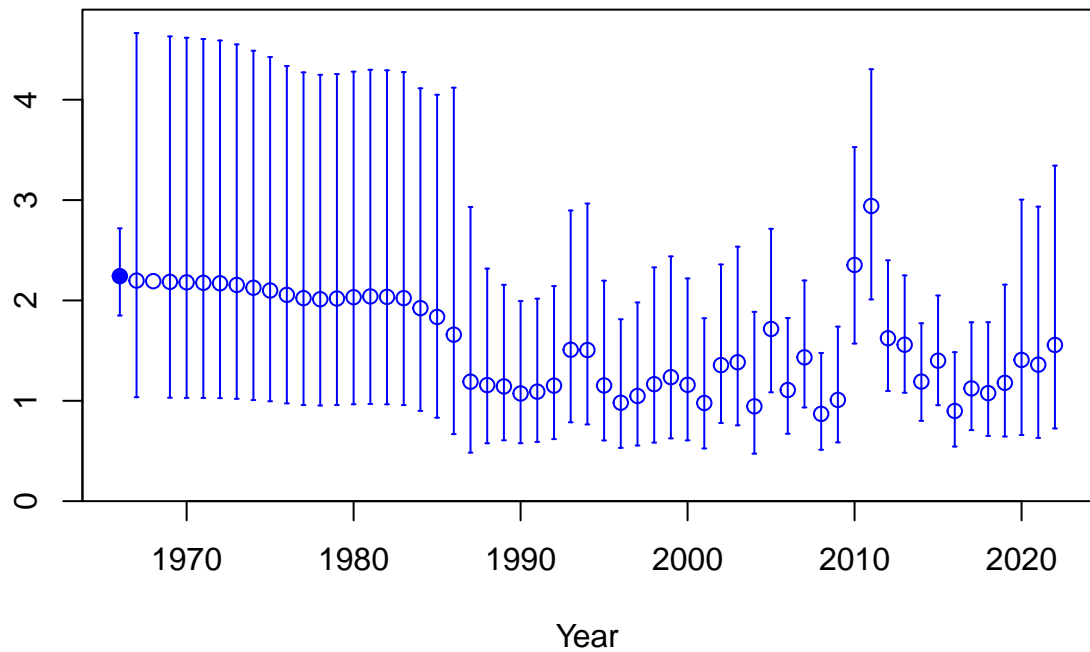




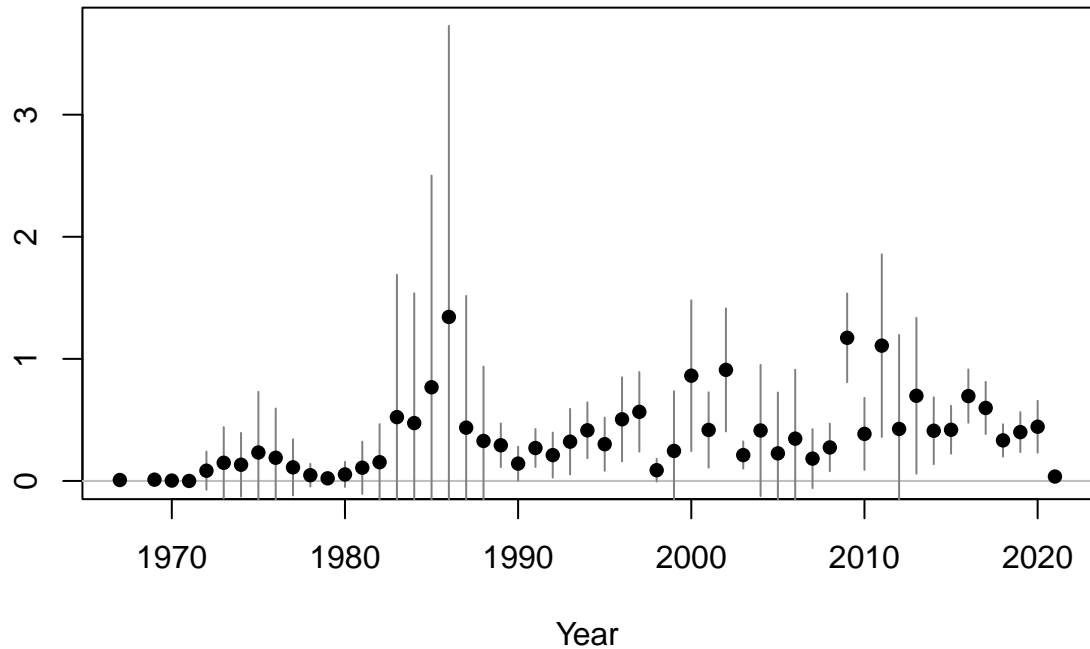




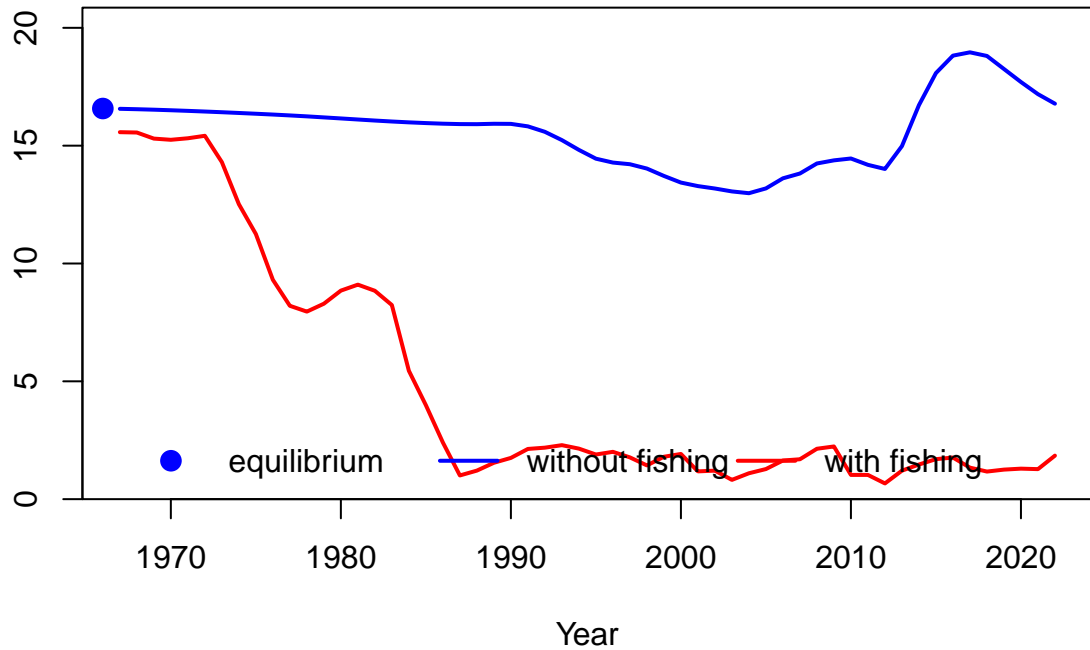
Age-0 recruits (1,000s)



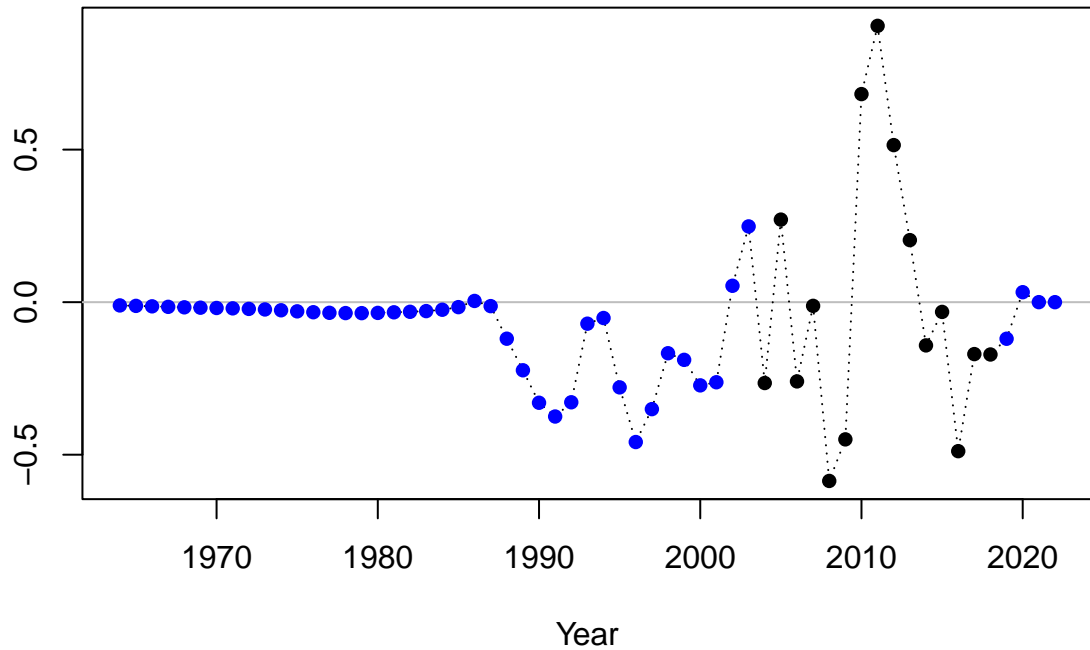
Summary Fishing Mortality



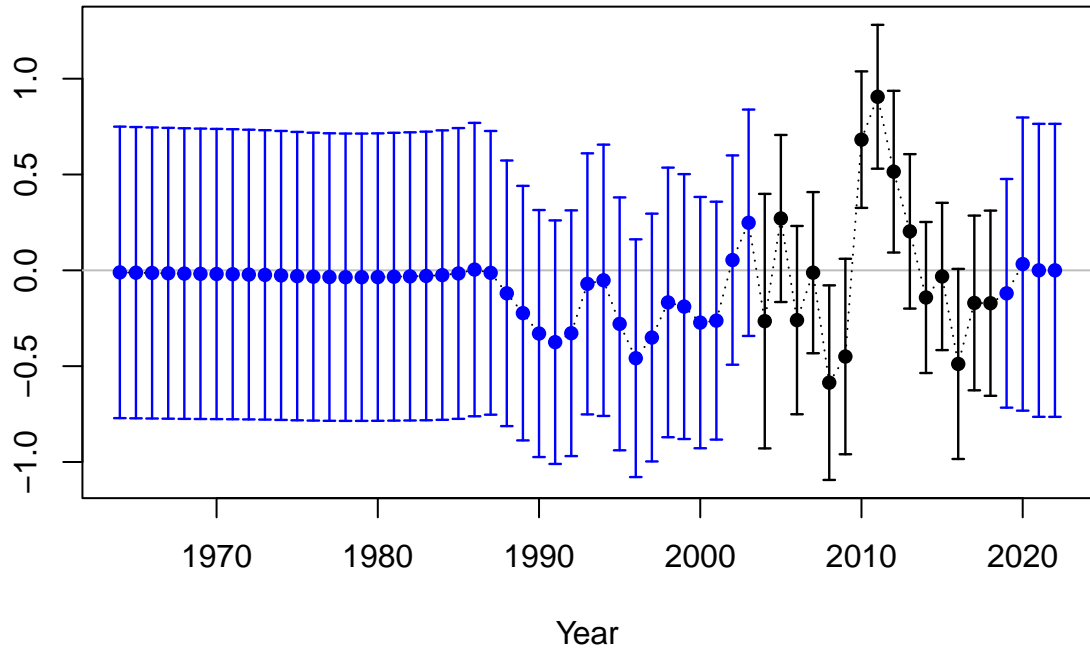
Spawning biomass (mt)



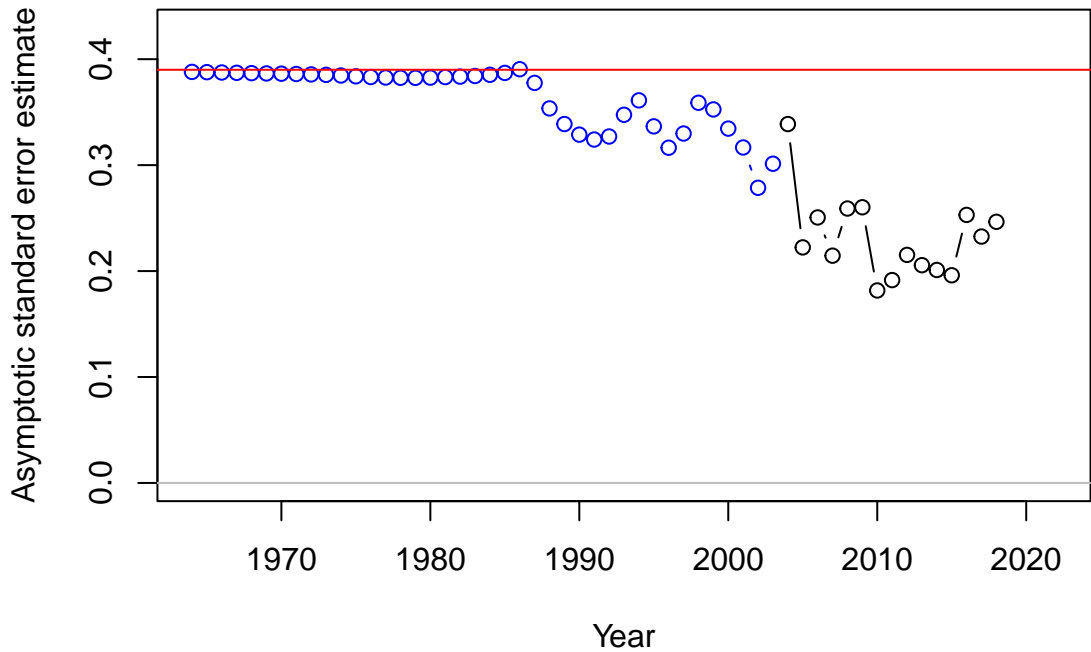
Log recruitment deviation



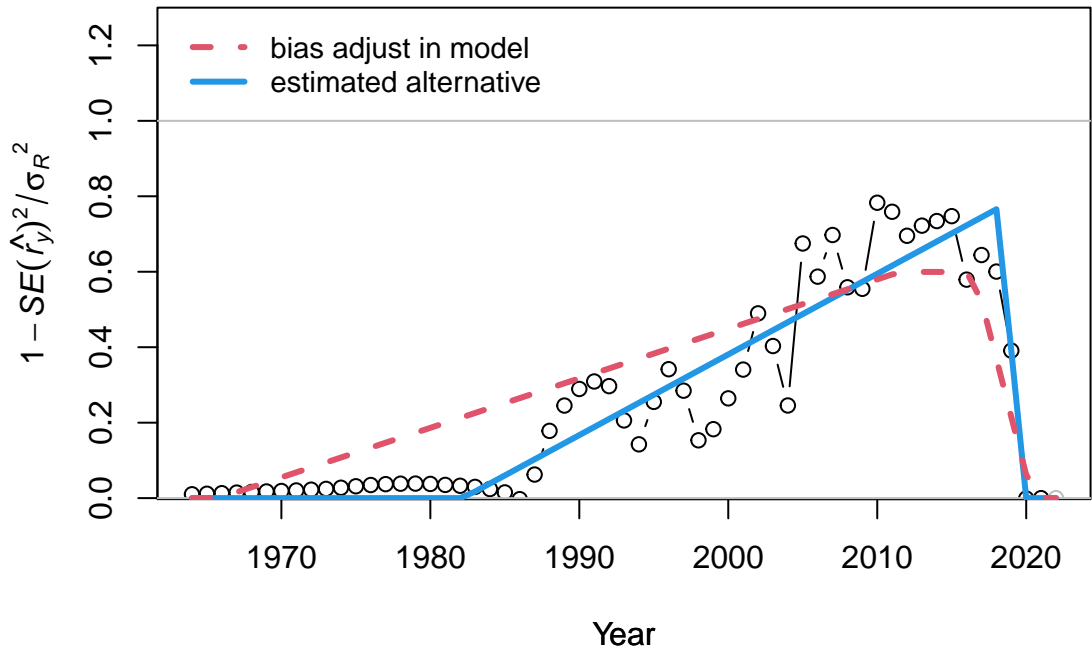
Log recruitment deviation

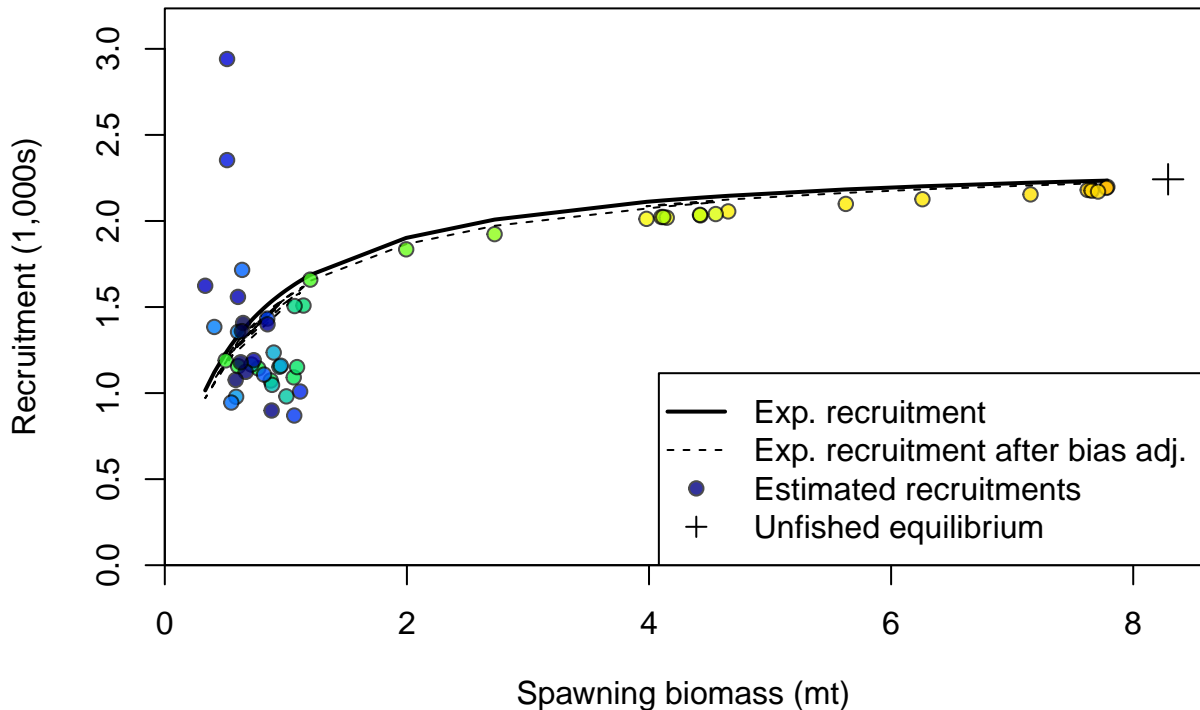


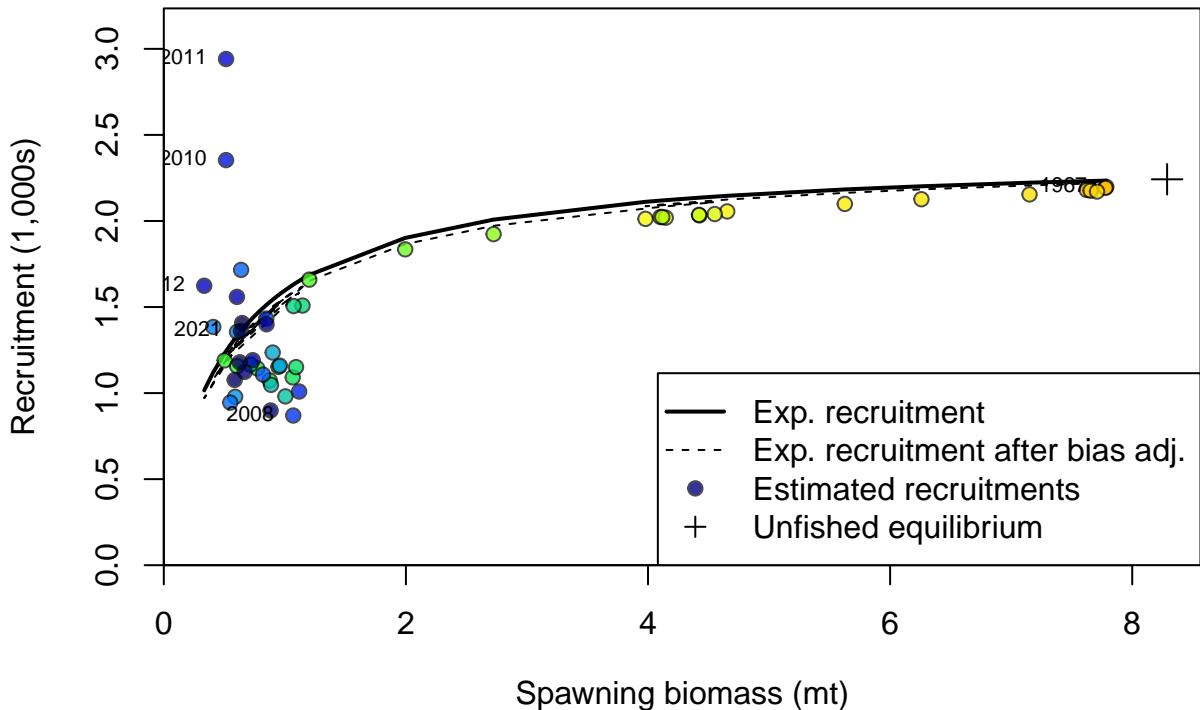
## Recruitment deviation variance



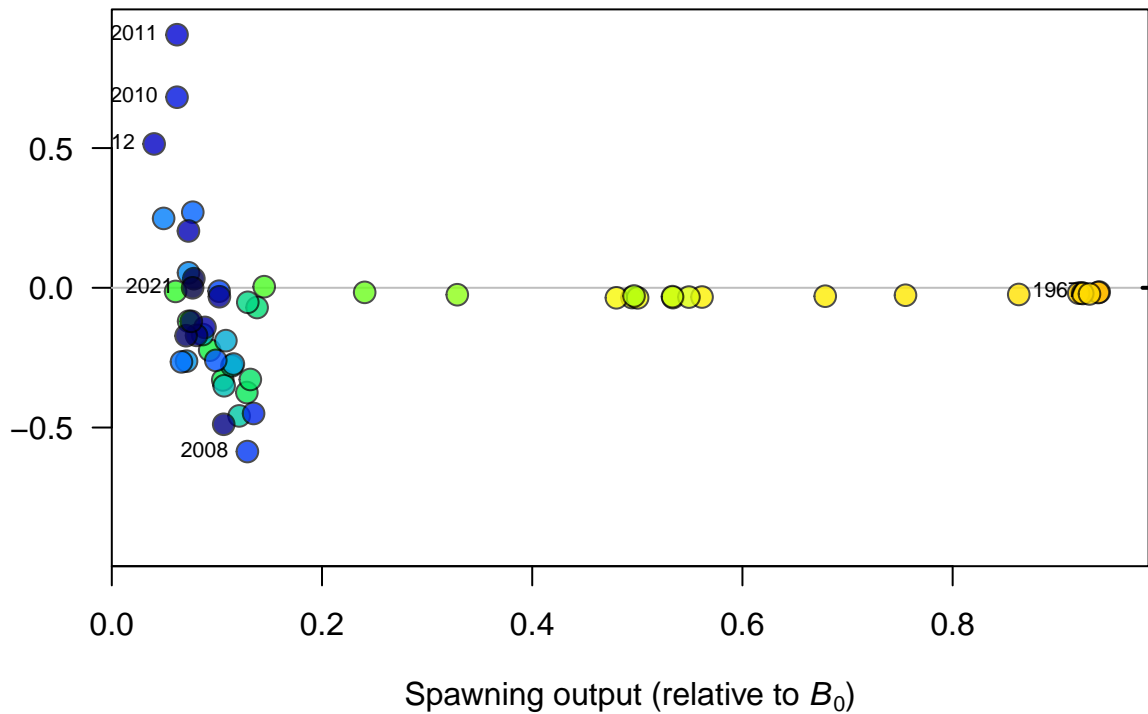


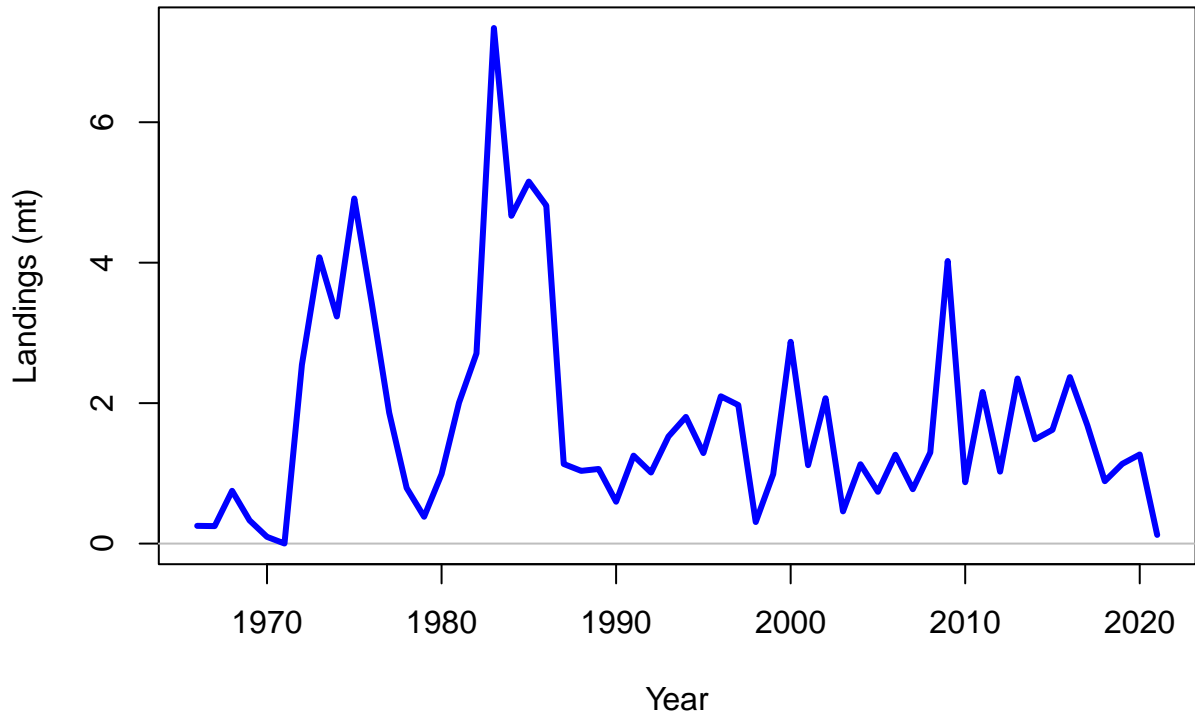


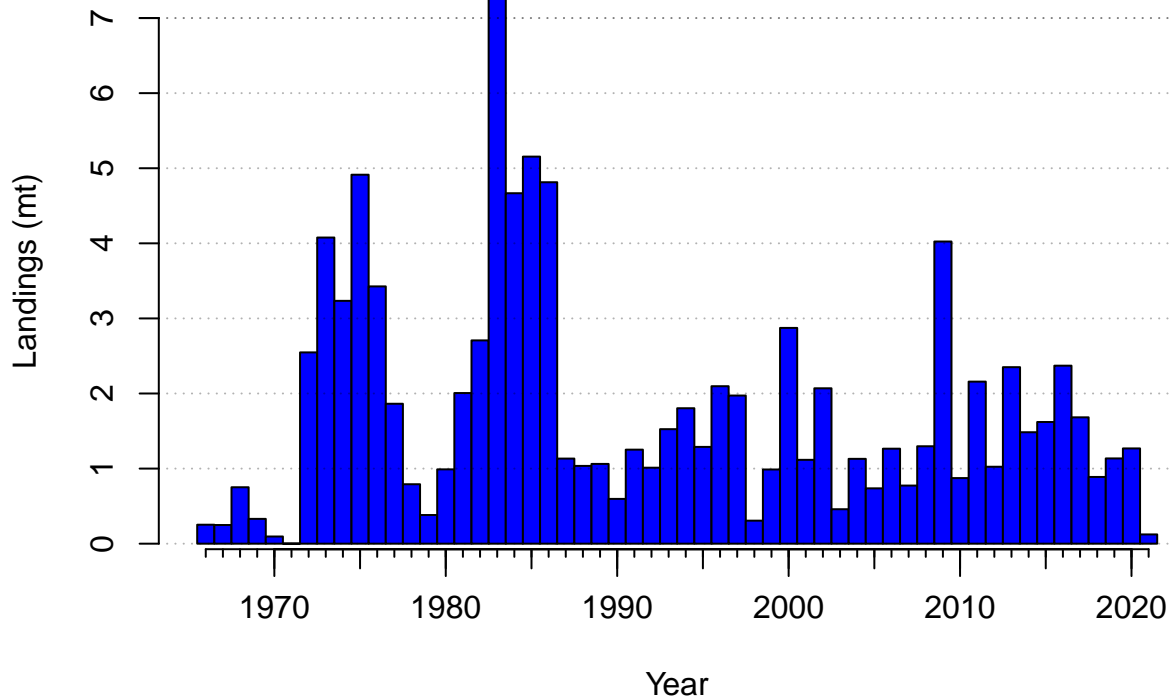




Log recruitment deviation







Observed and expected Landings (mt)

FISHERY  
FISHERY obs.

6  
4  
2  
0

1970

1980

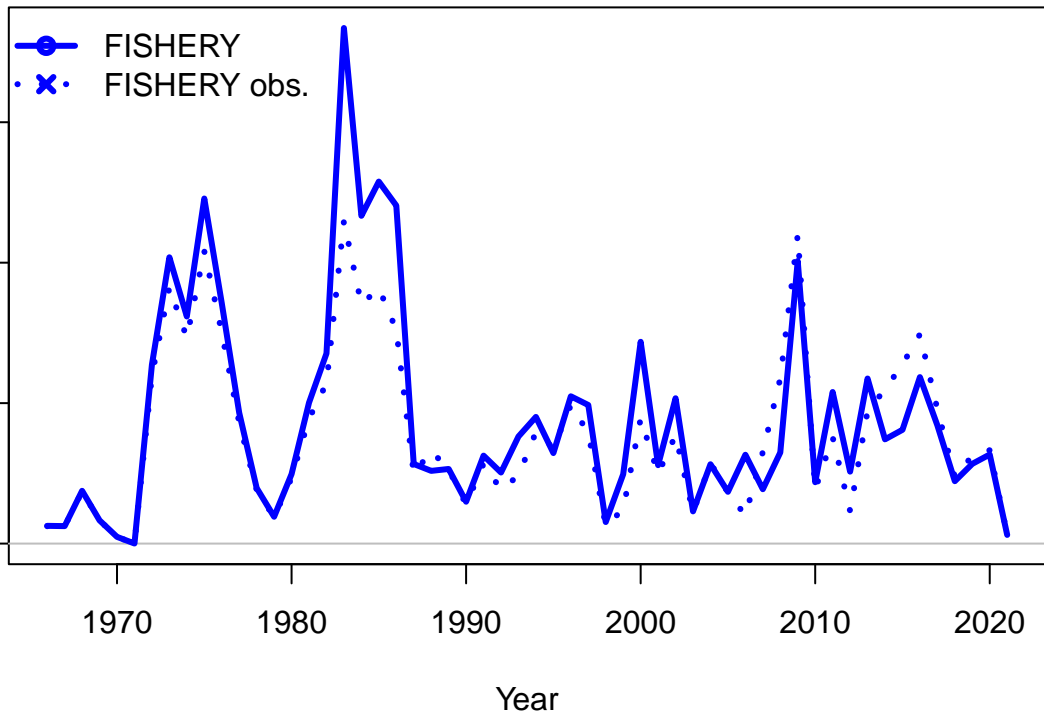
1990

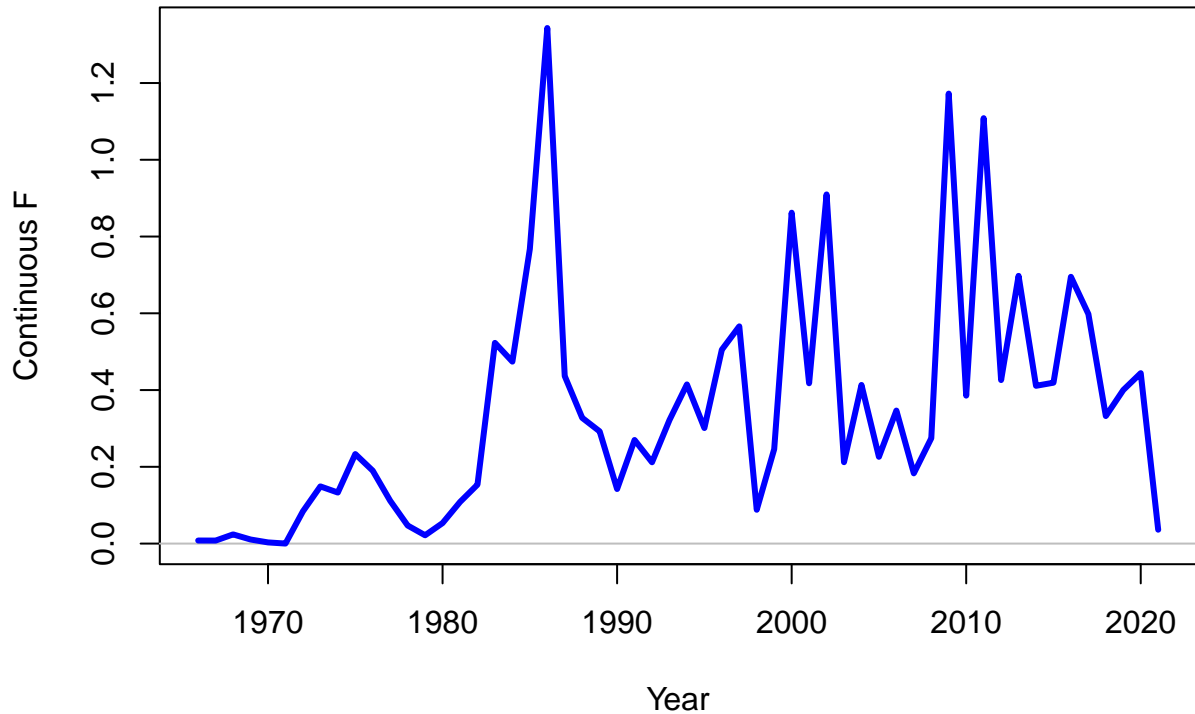
2000

2010

2020

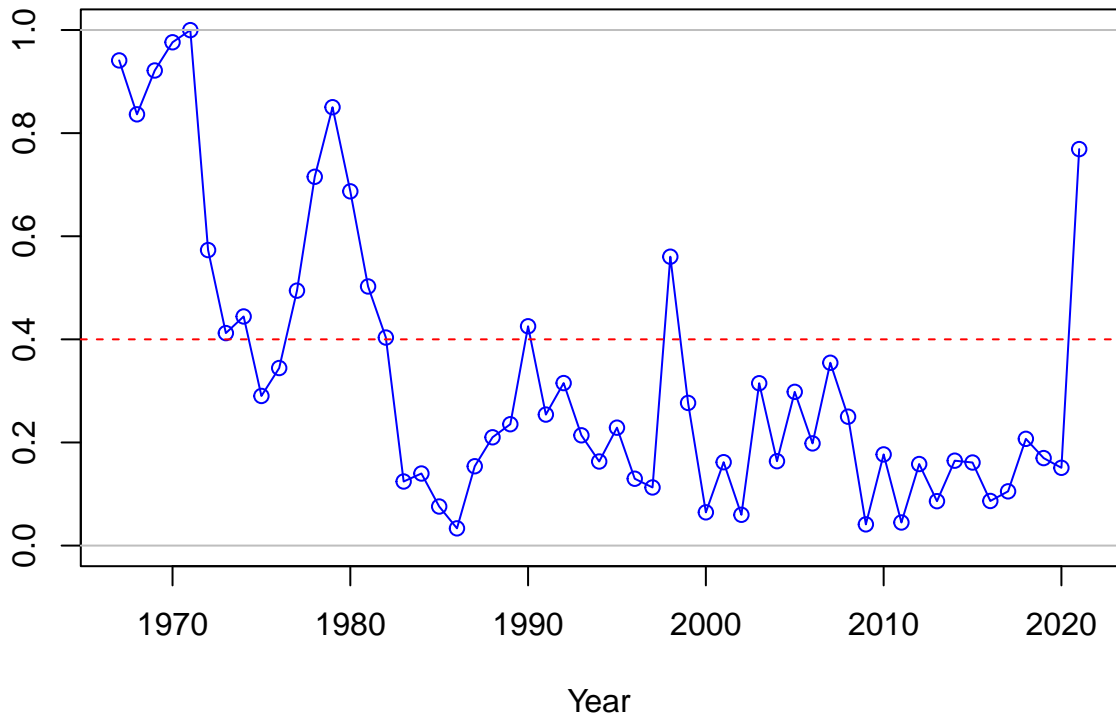
Year



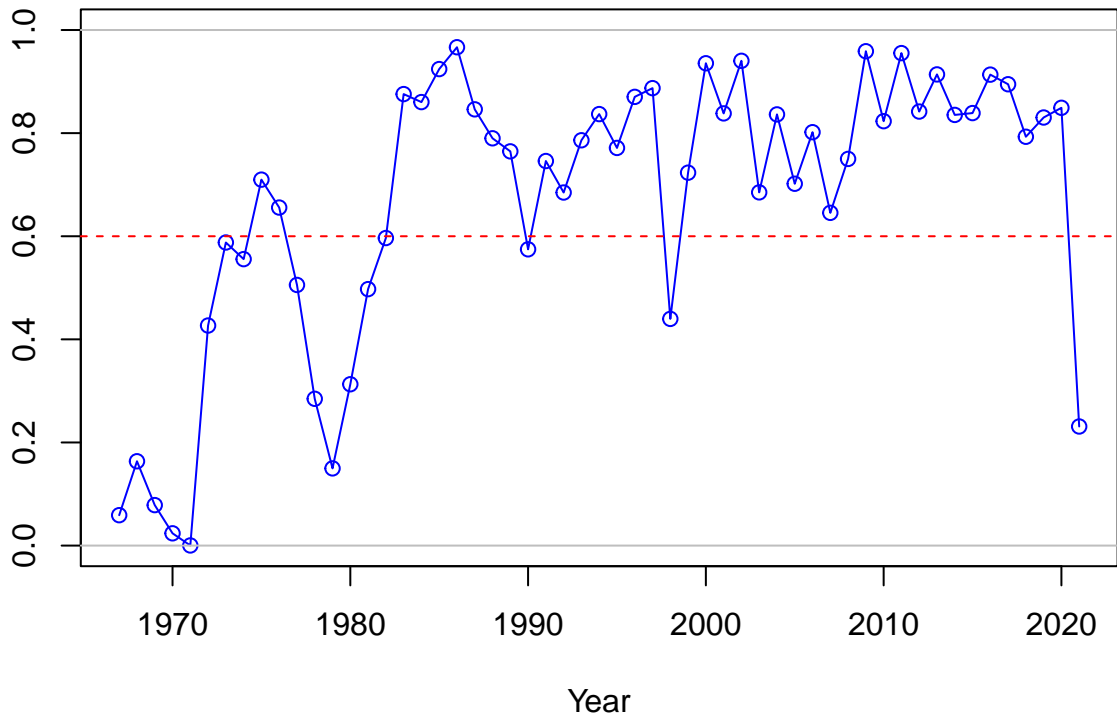




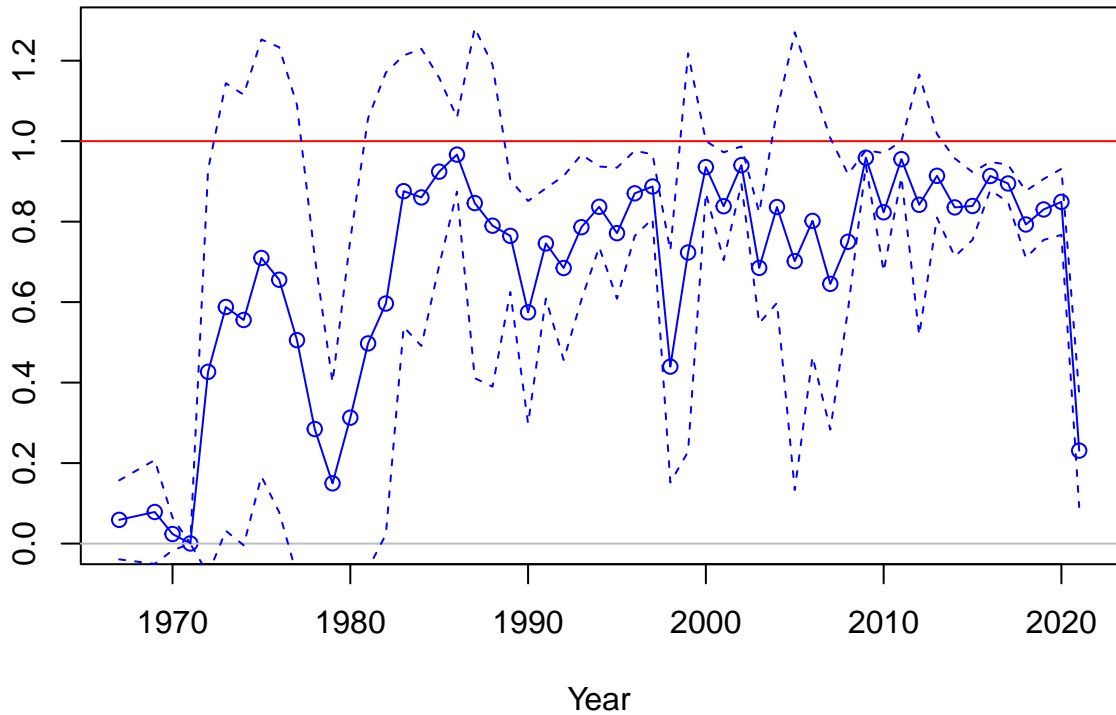
SPR



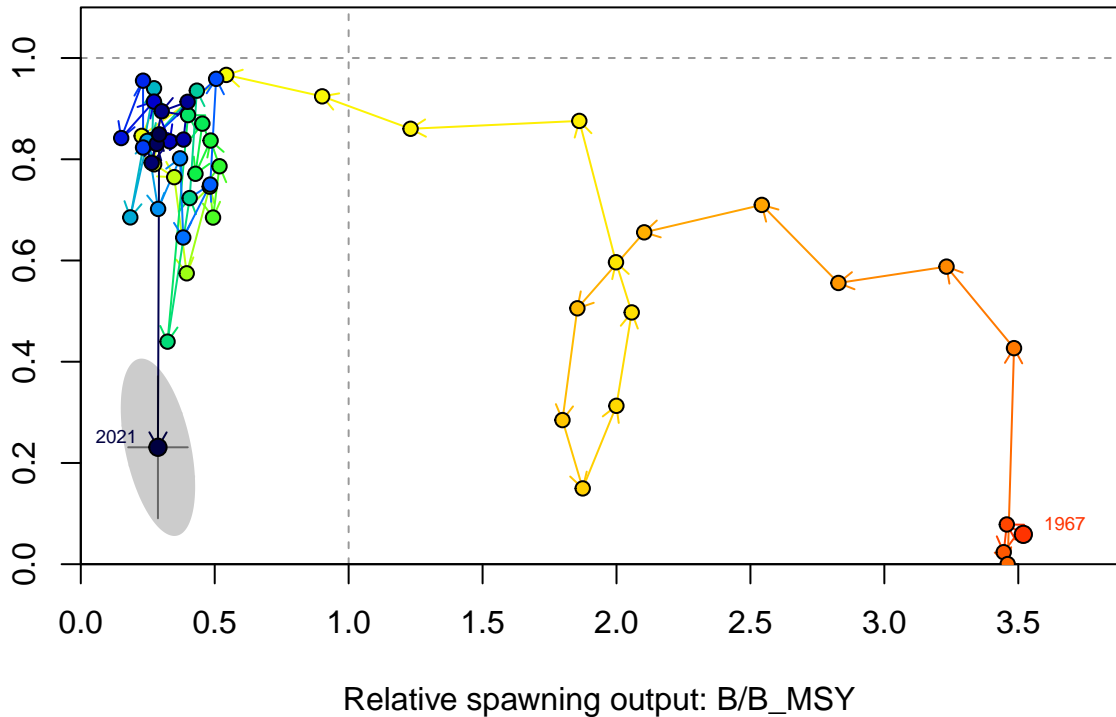
1-SPR



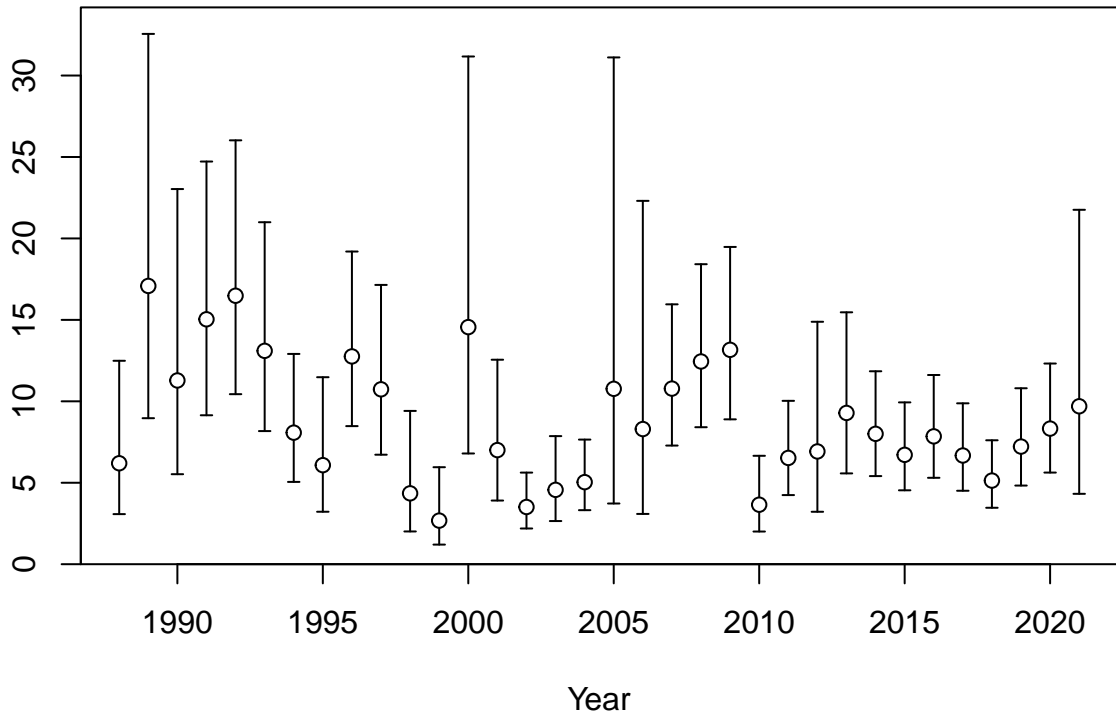
Fishing intensity: 1-SPR



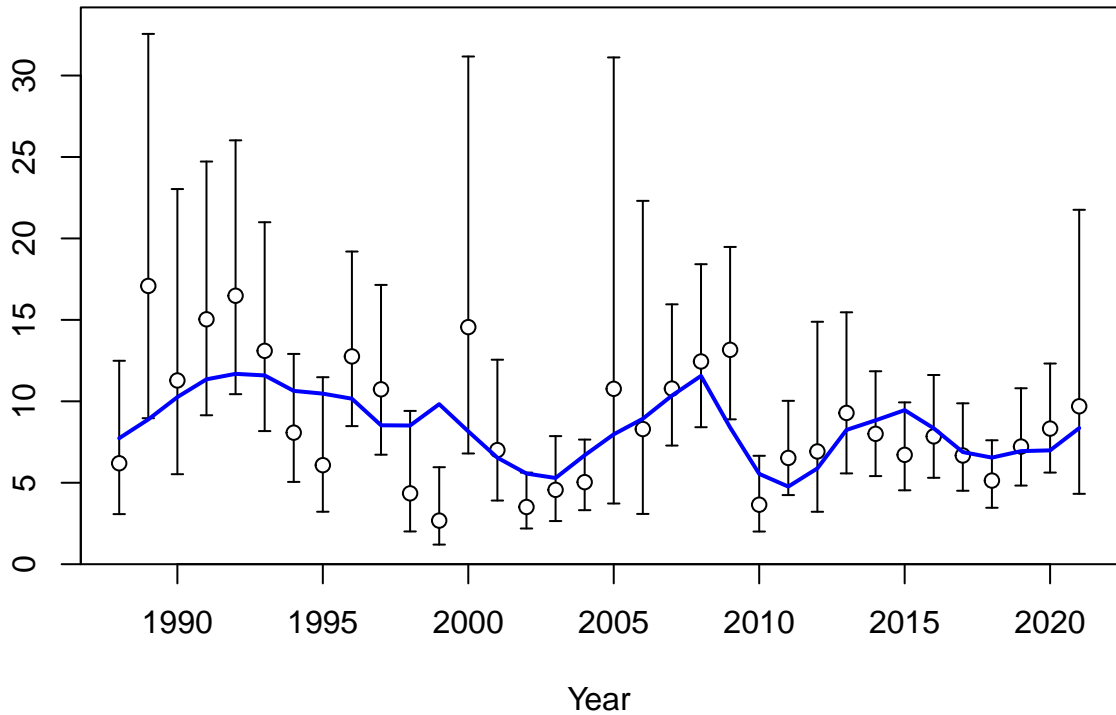
Fishing intensity: 1-SPR

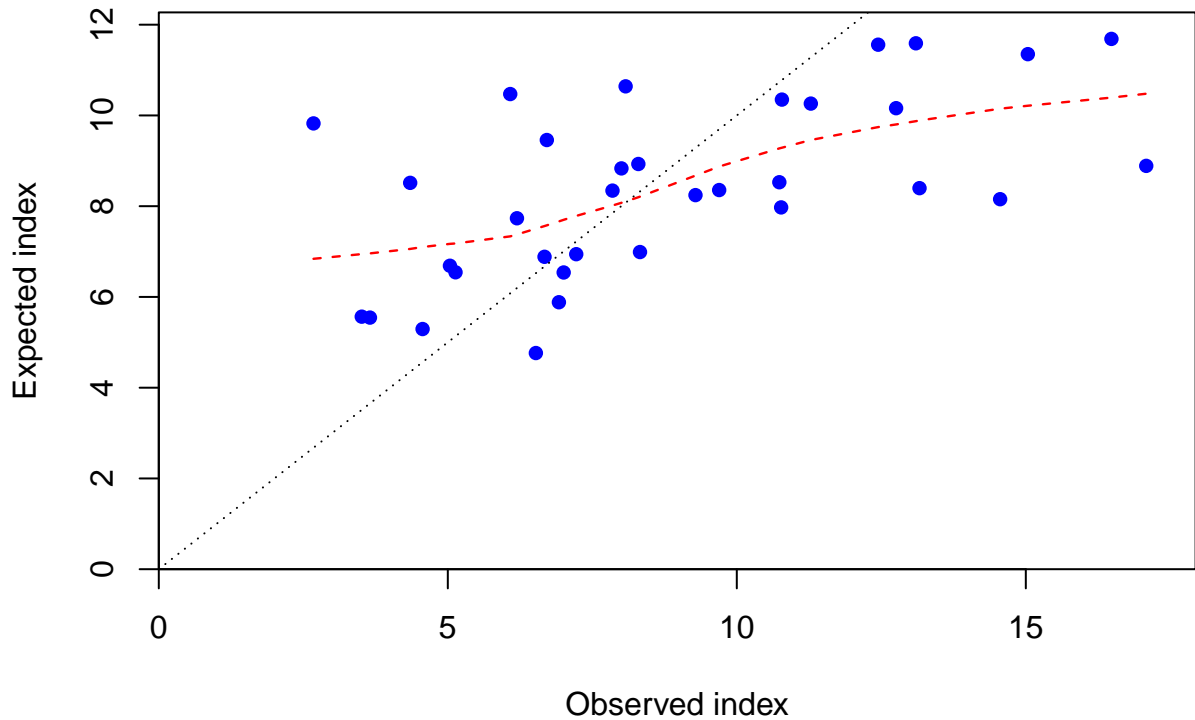


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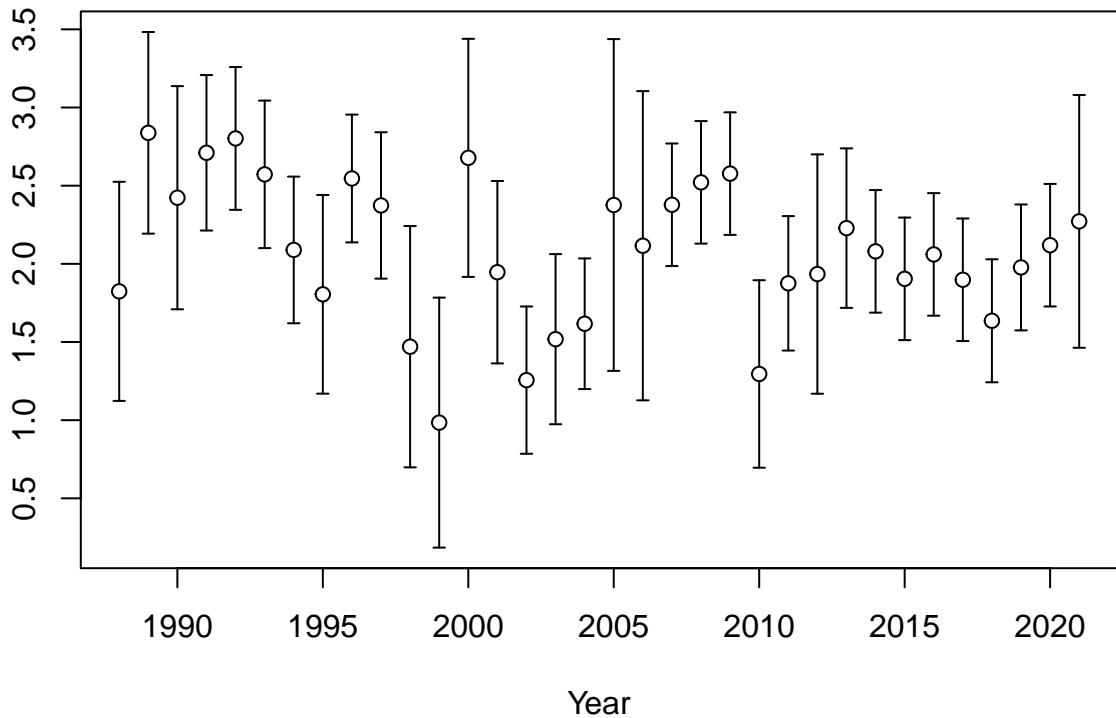


Index



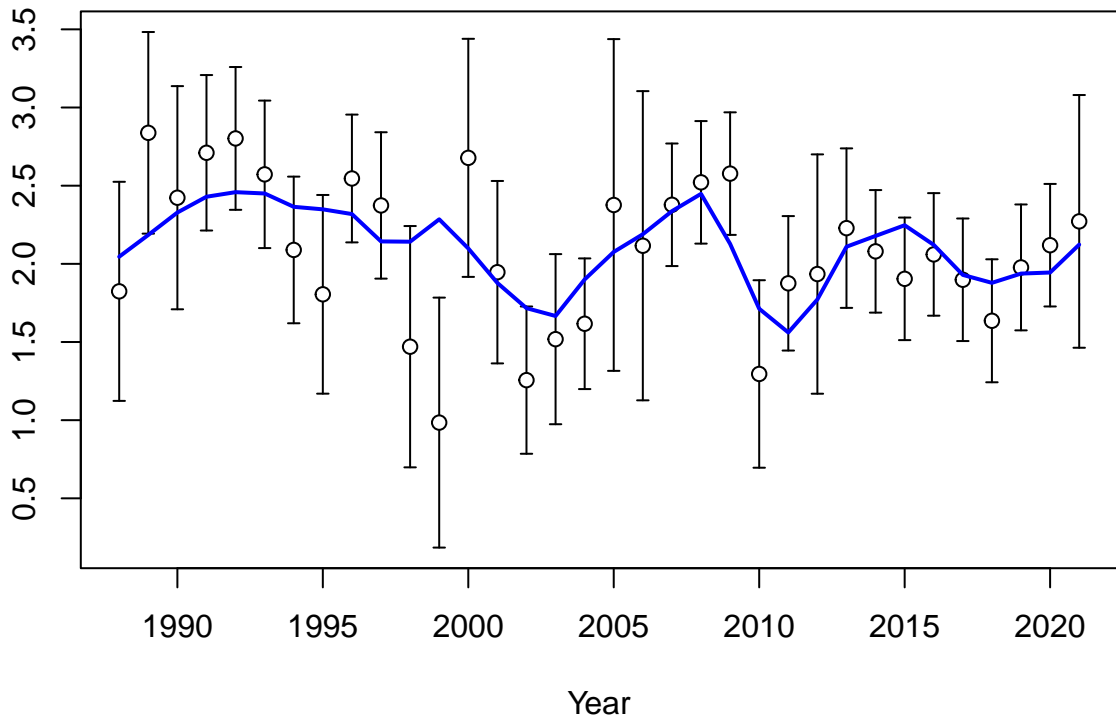


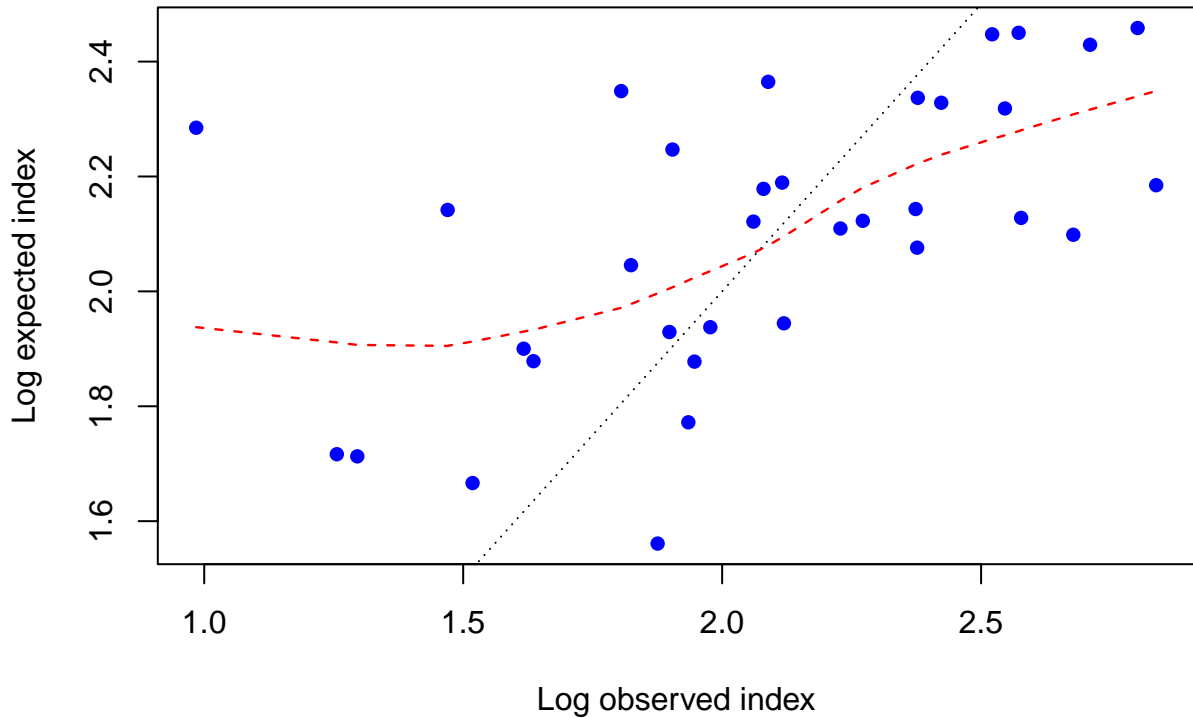
Log index

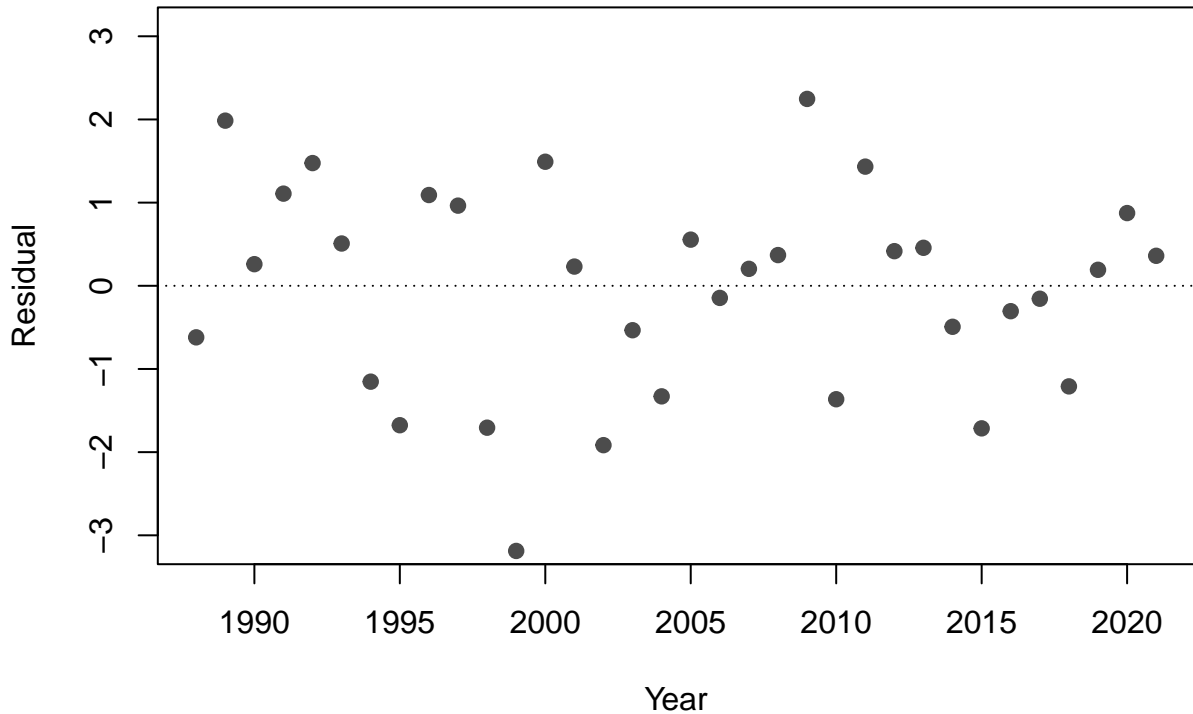


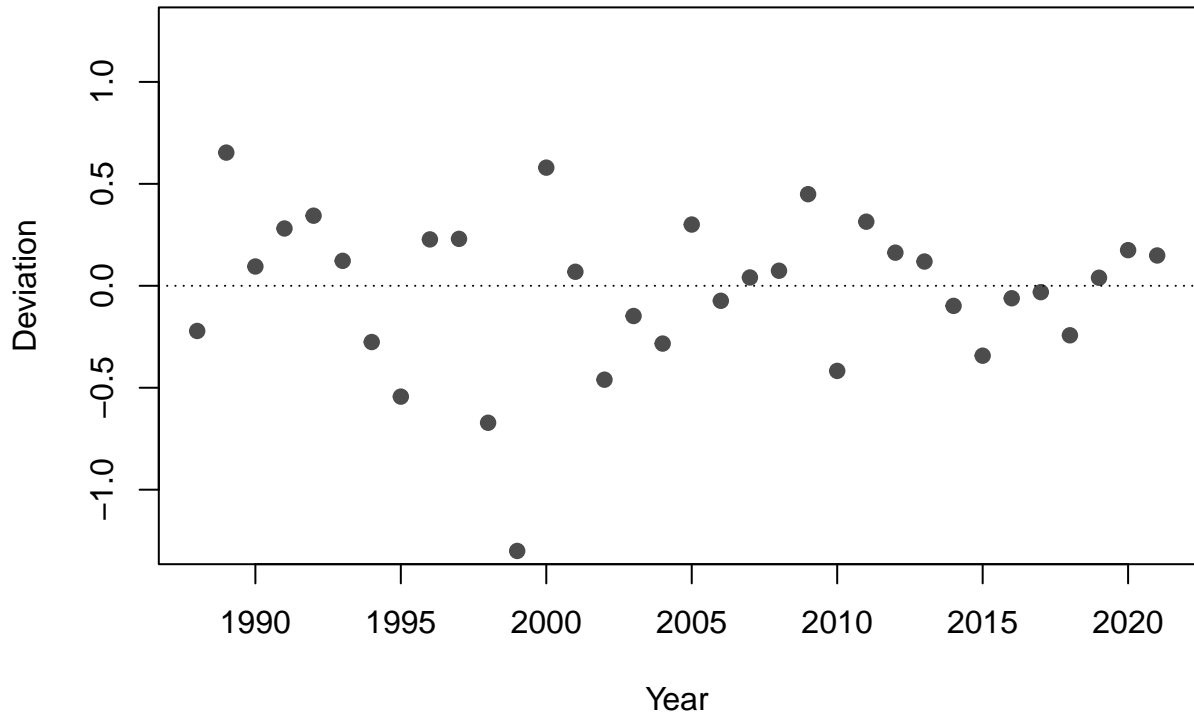


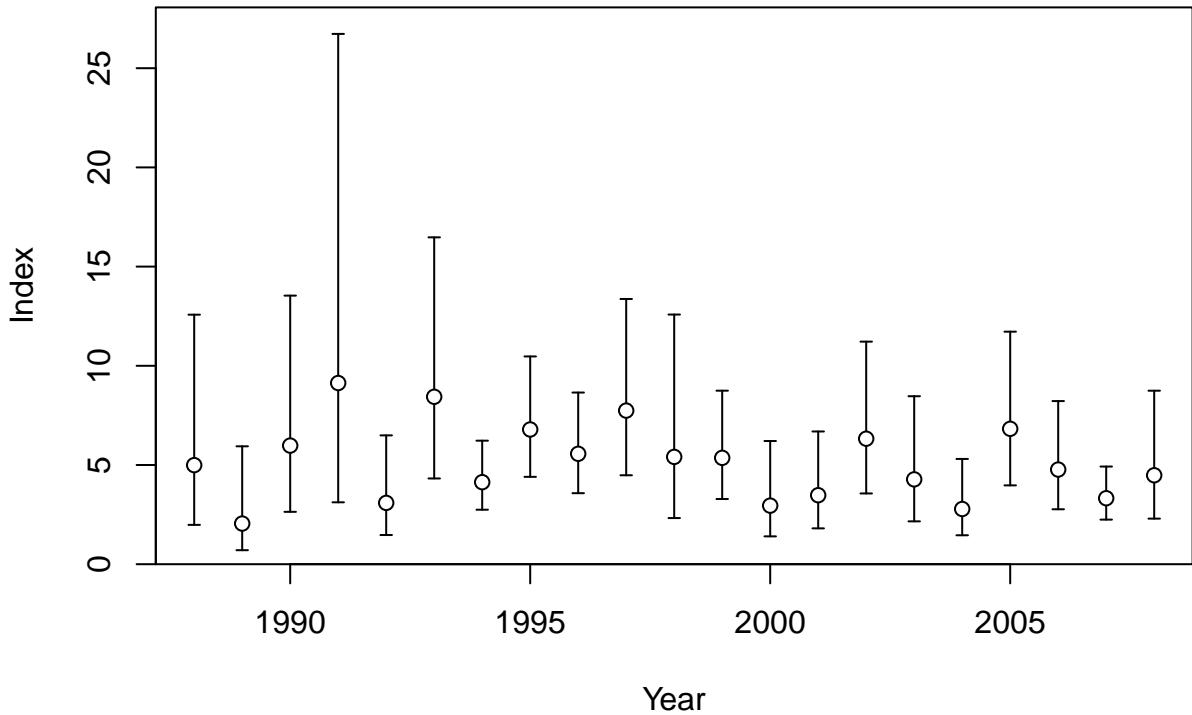
Log index



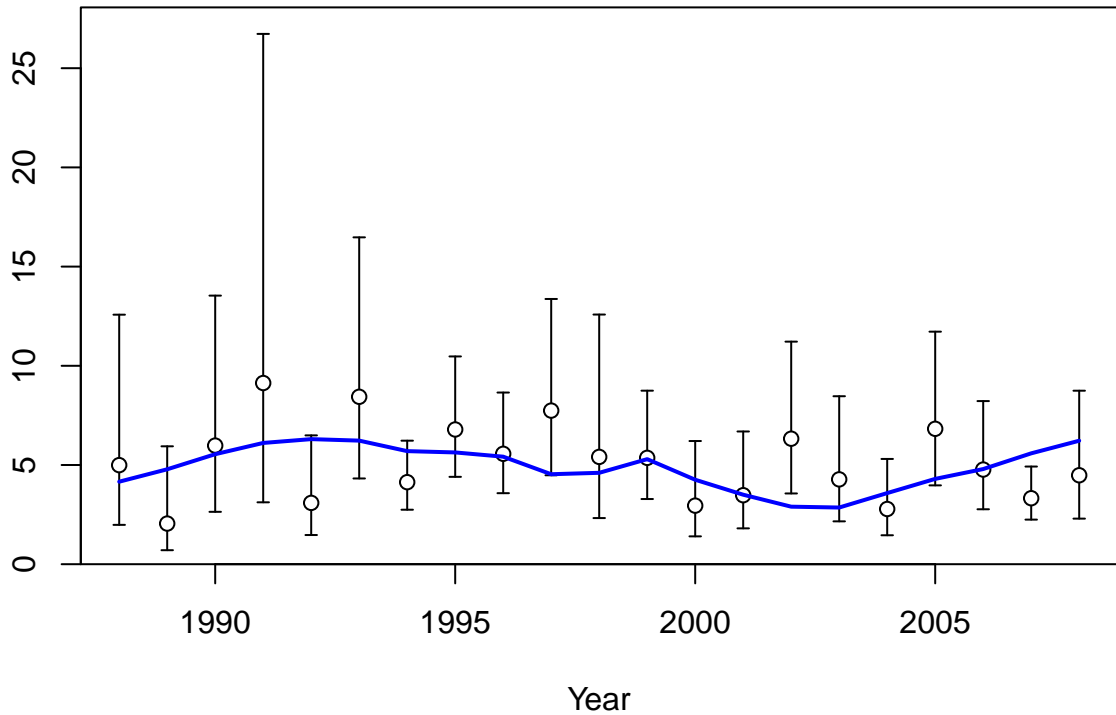


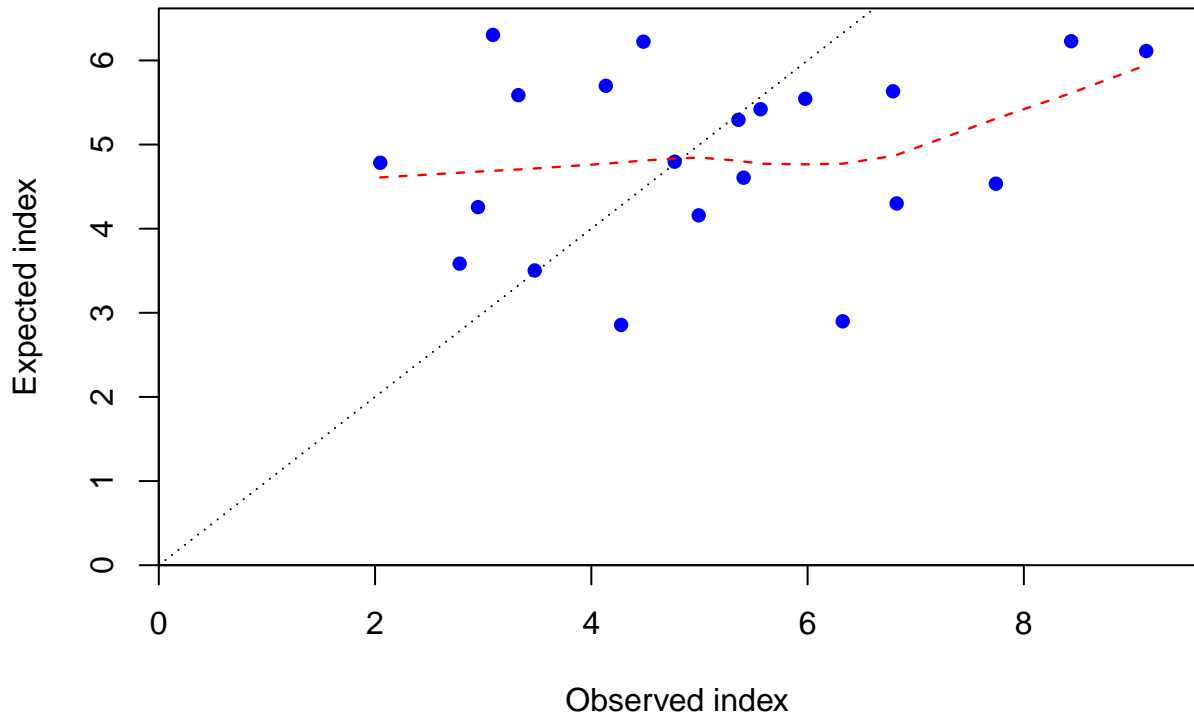


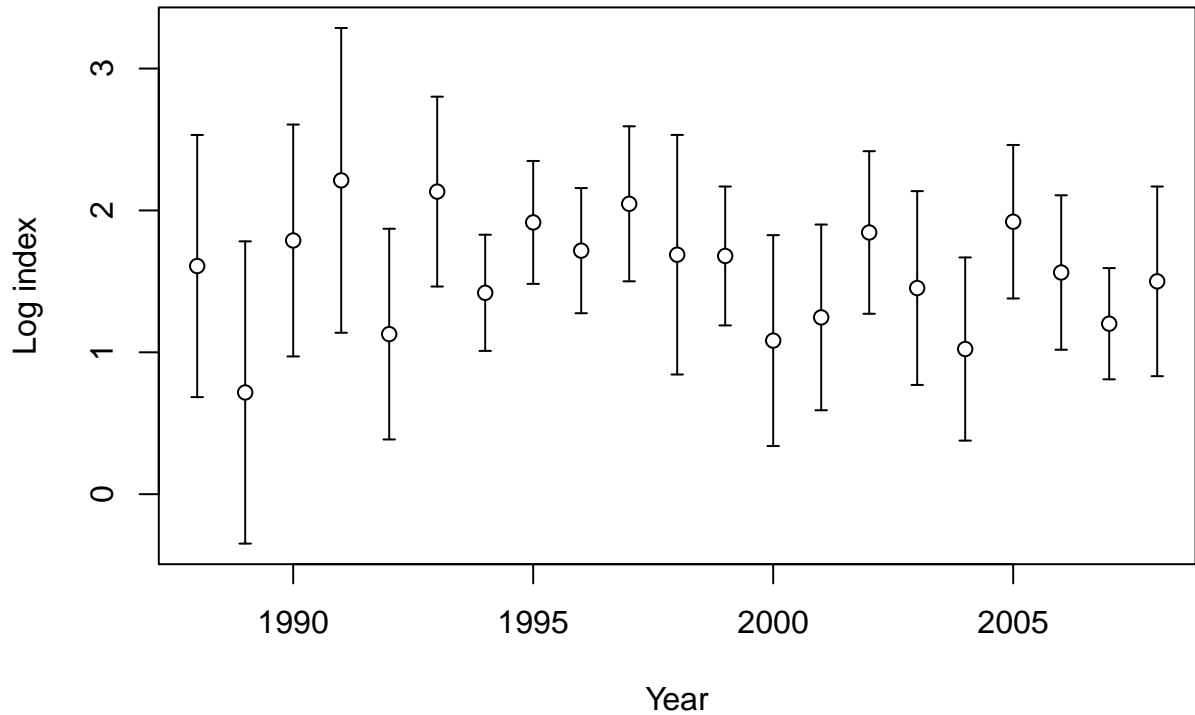




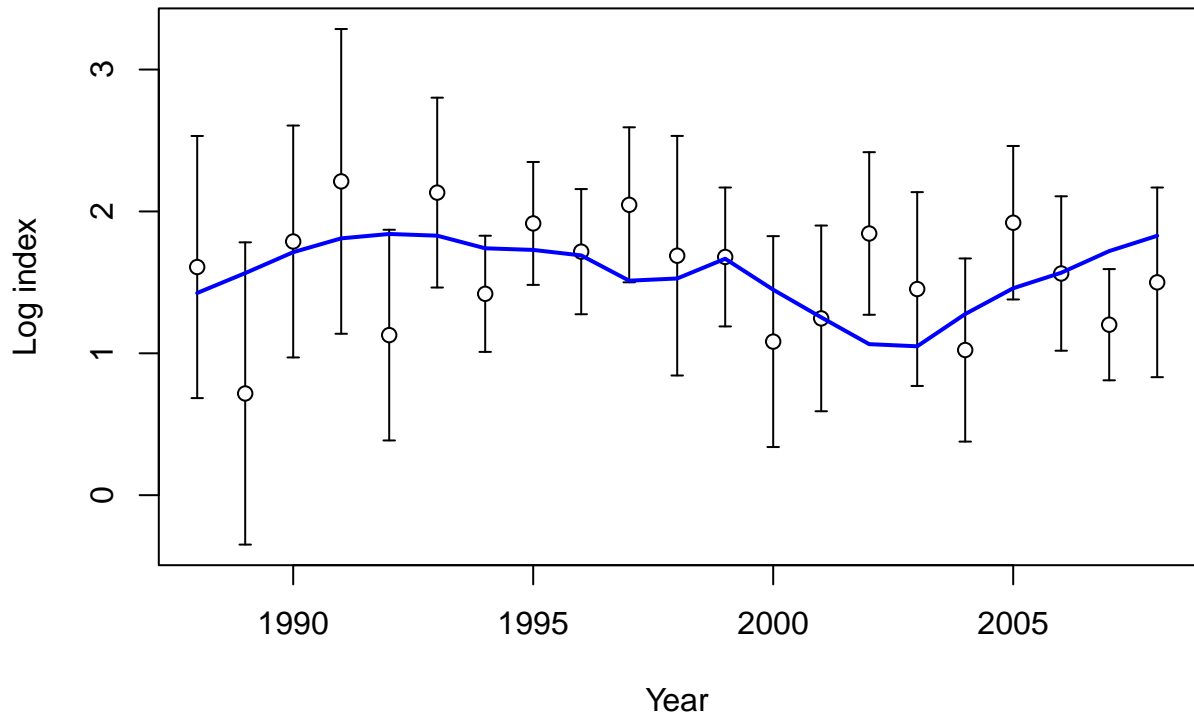
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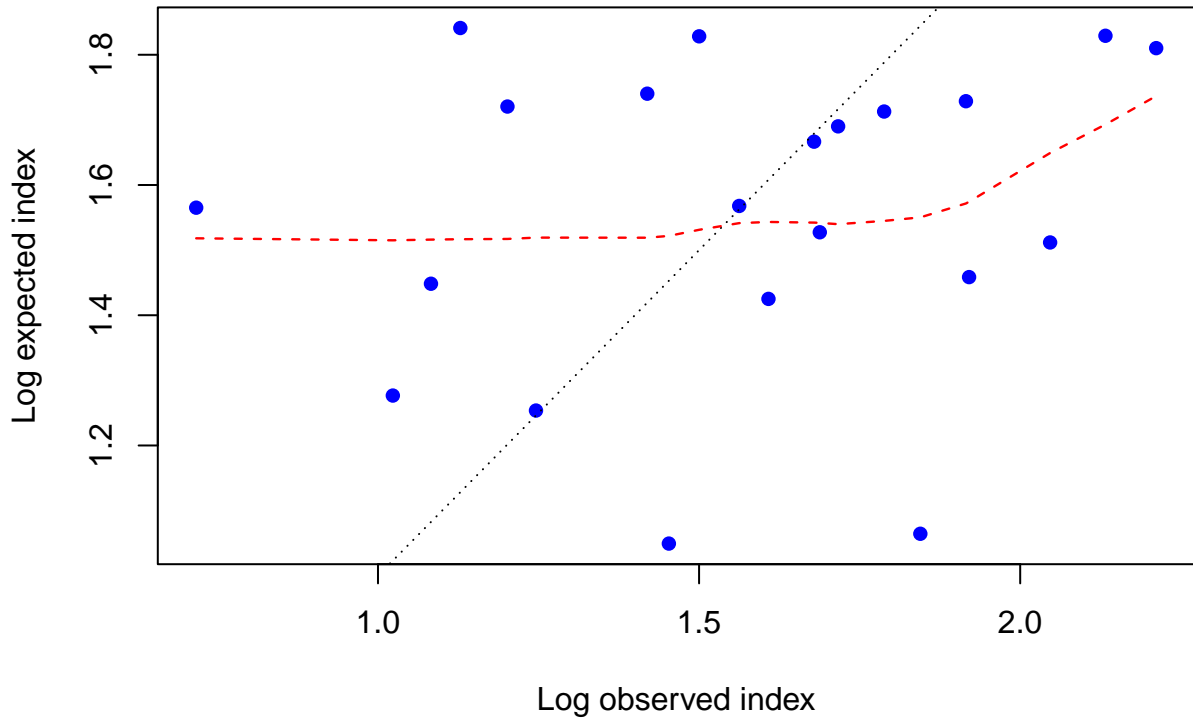


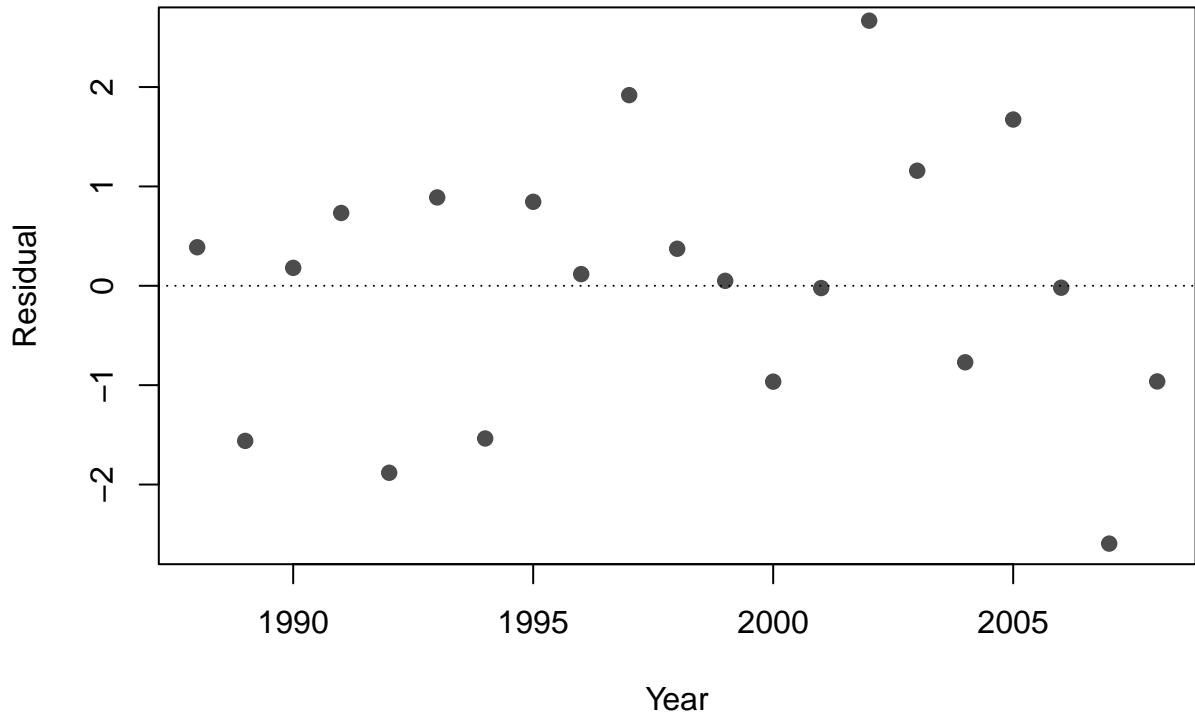


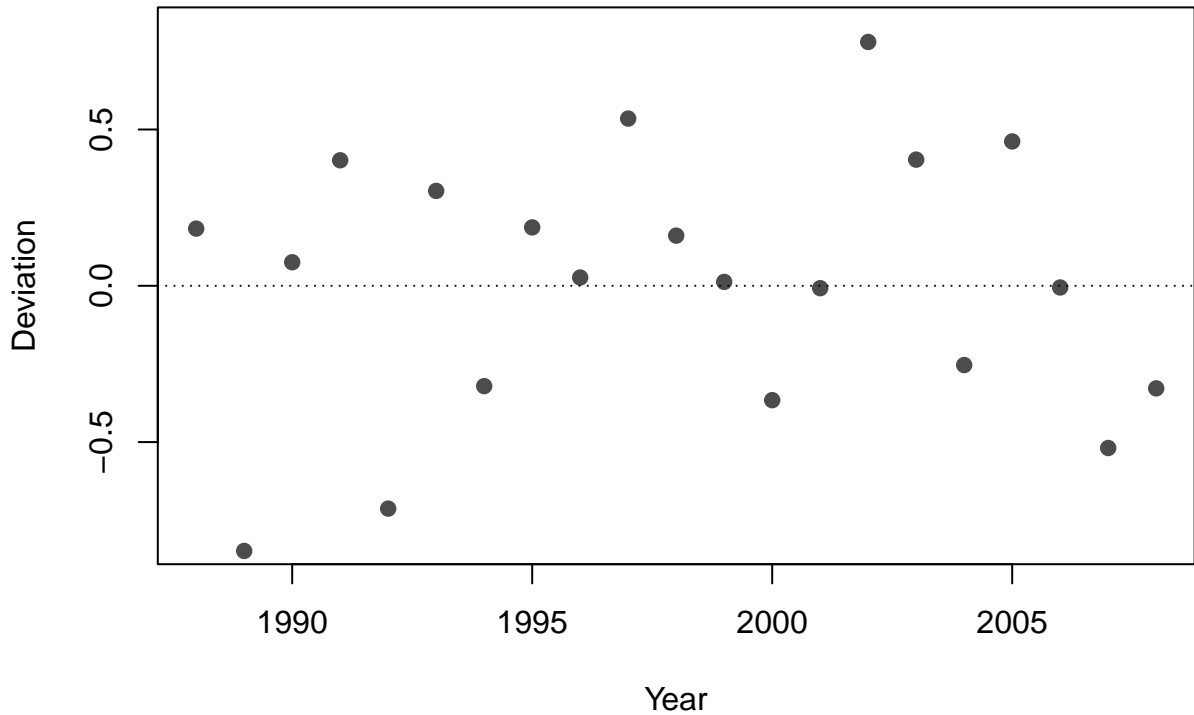




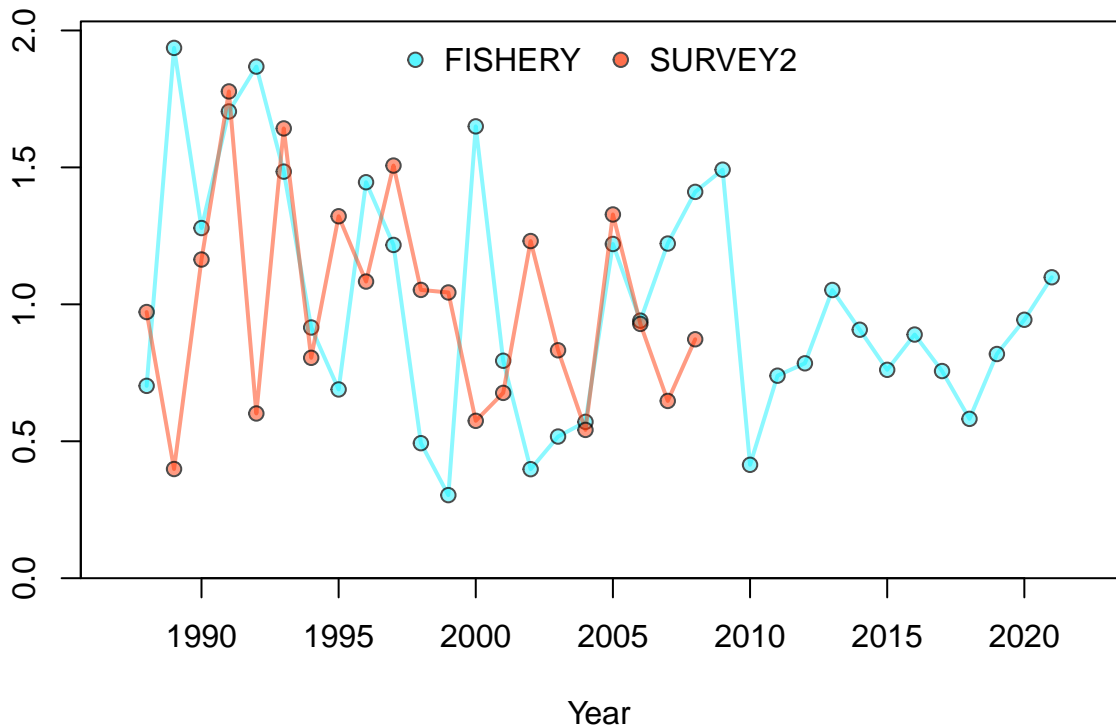


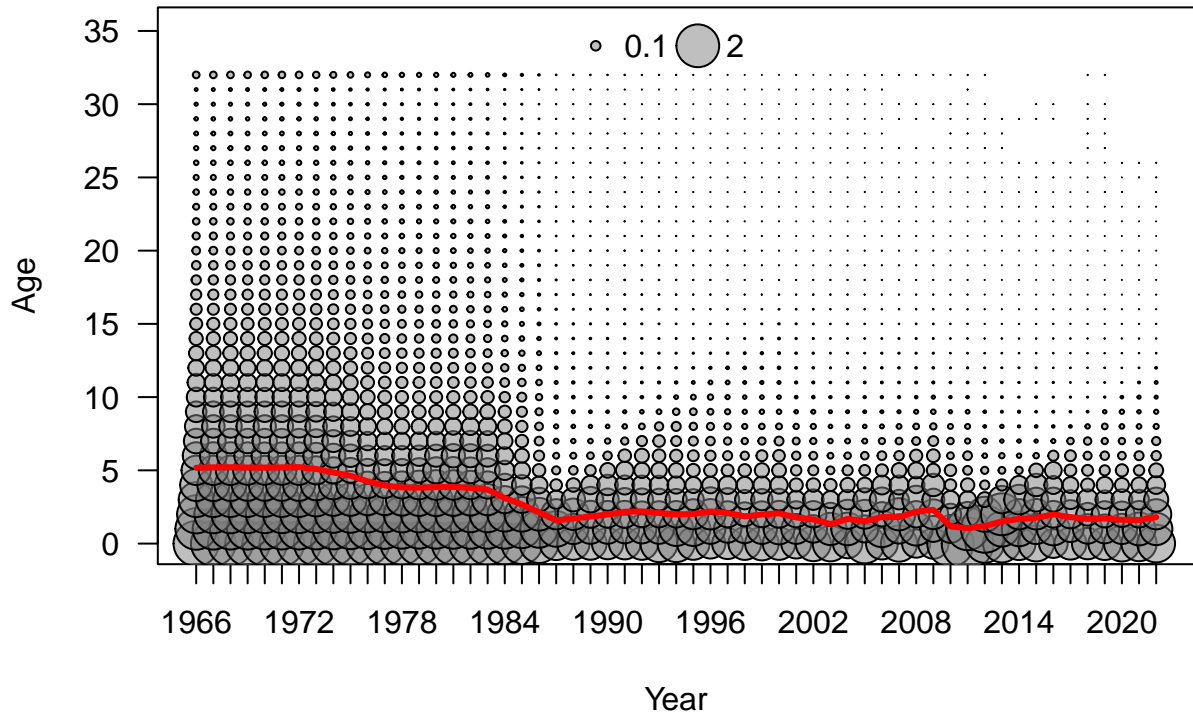


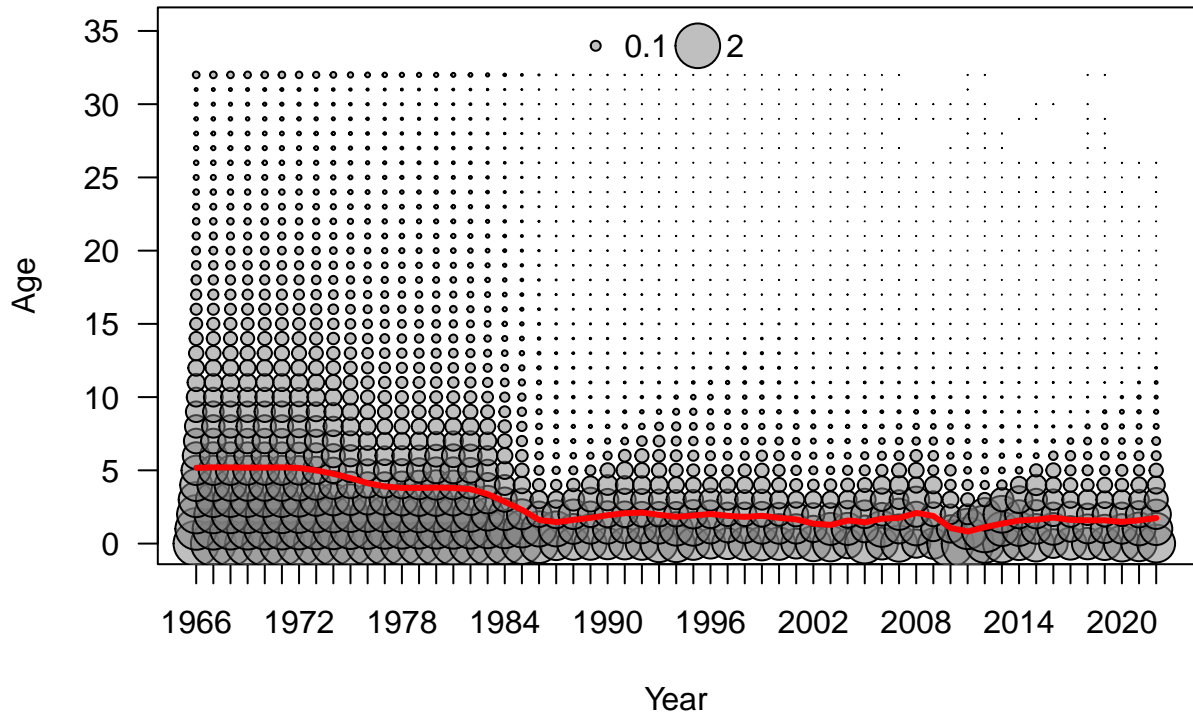


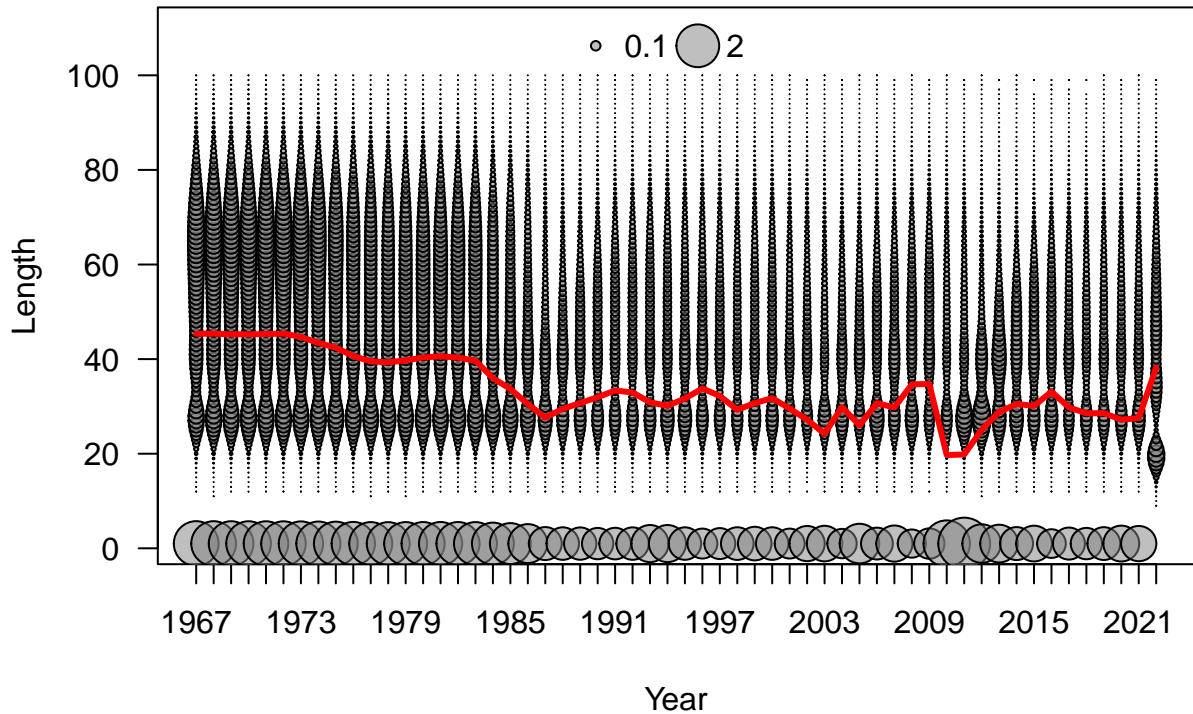


Standardized index

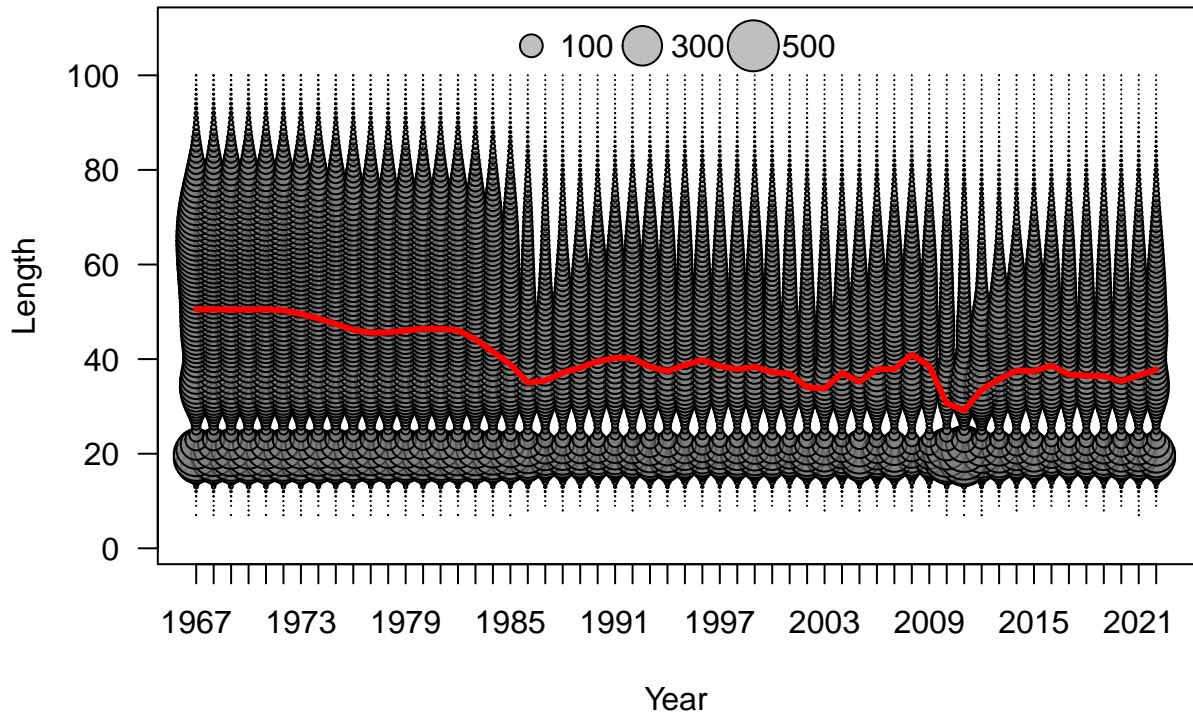


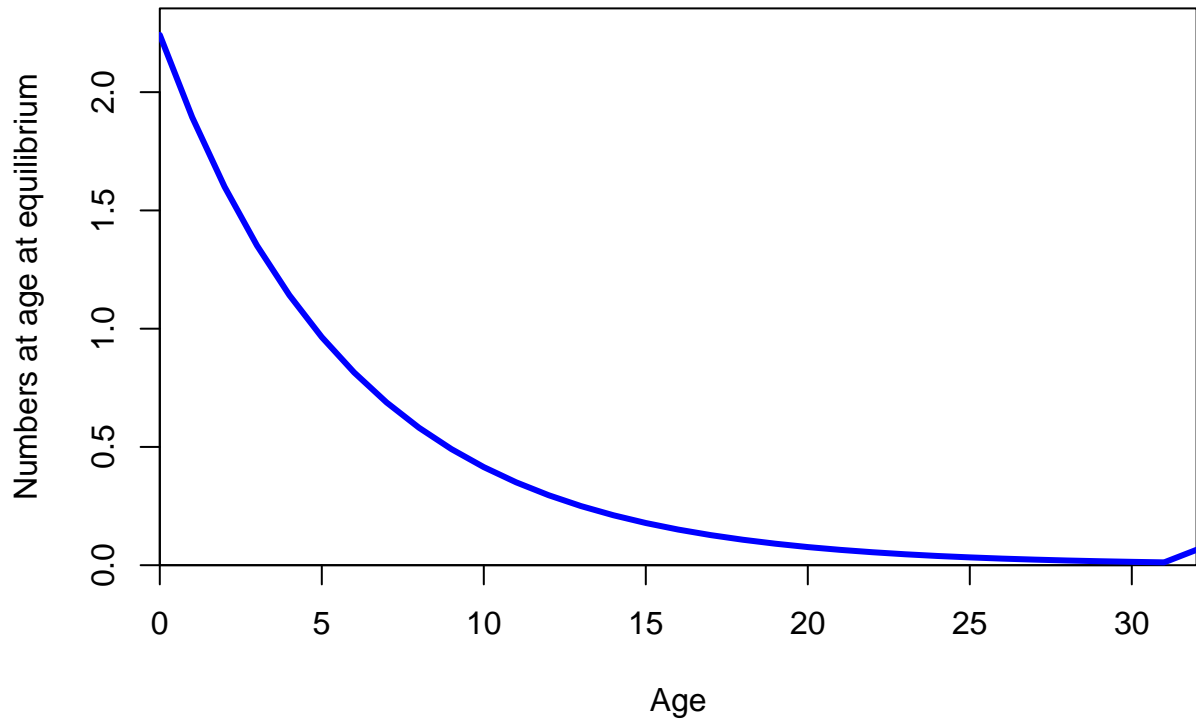


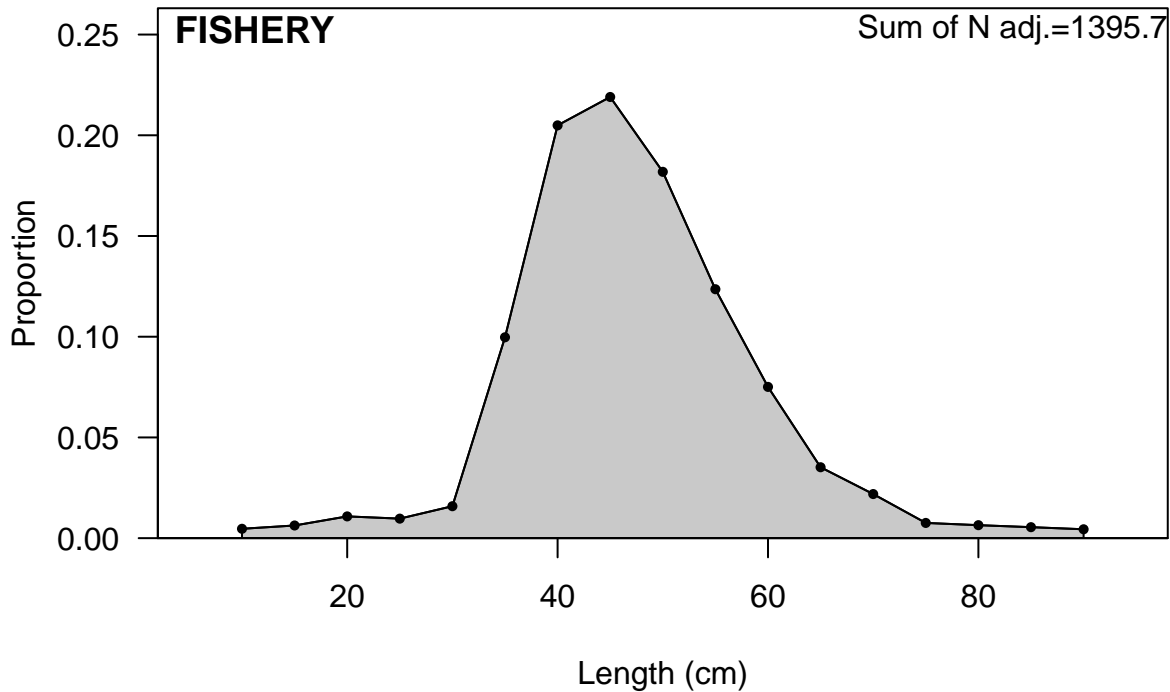










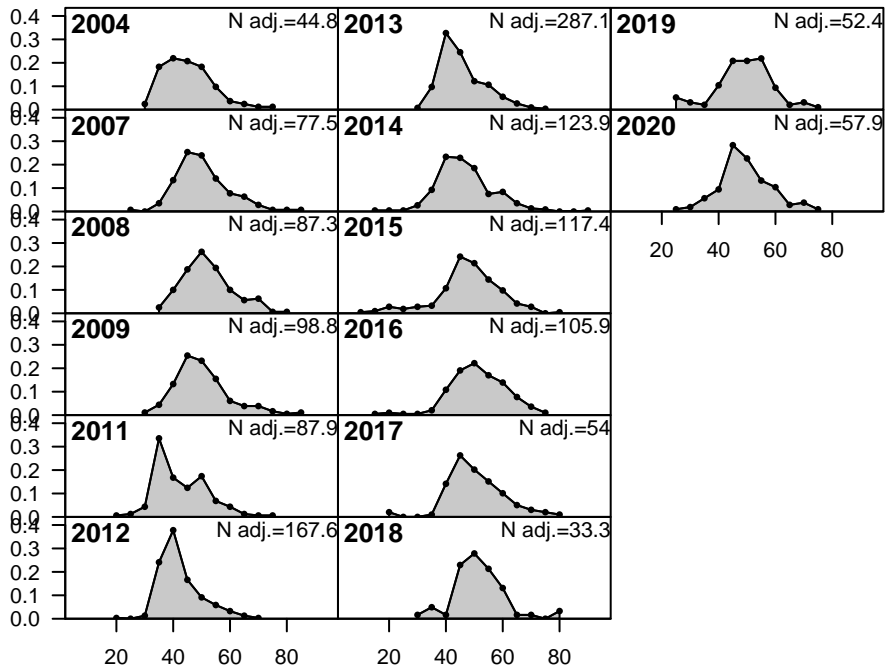


# FISHERY

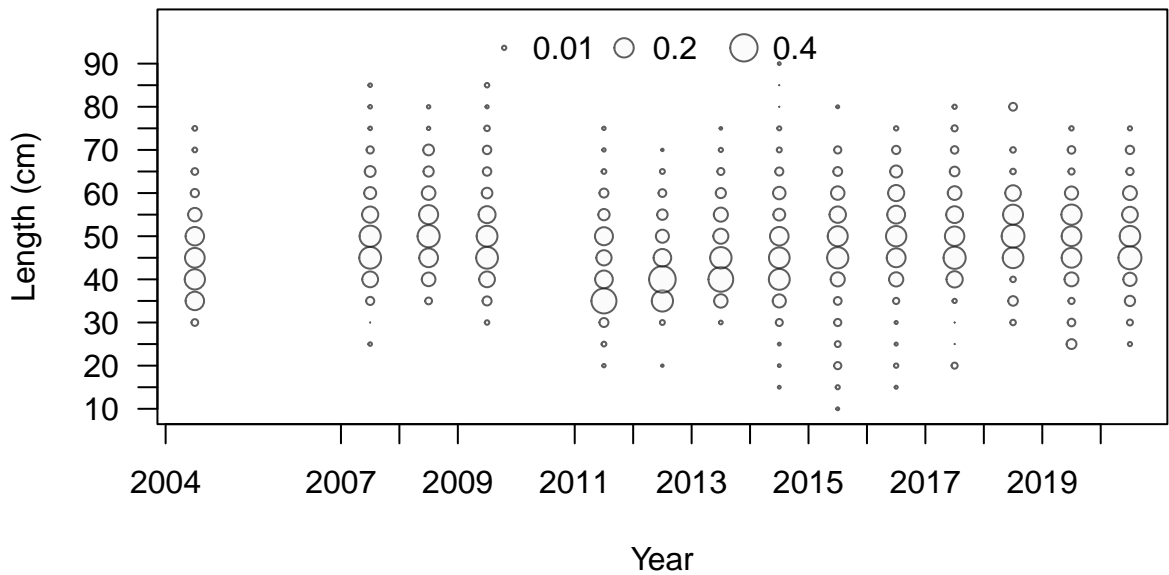
• 0.01 ○ 0.2 ○ 0.4



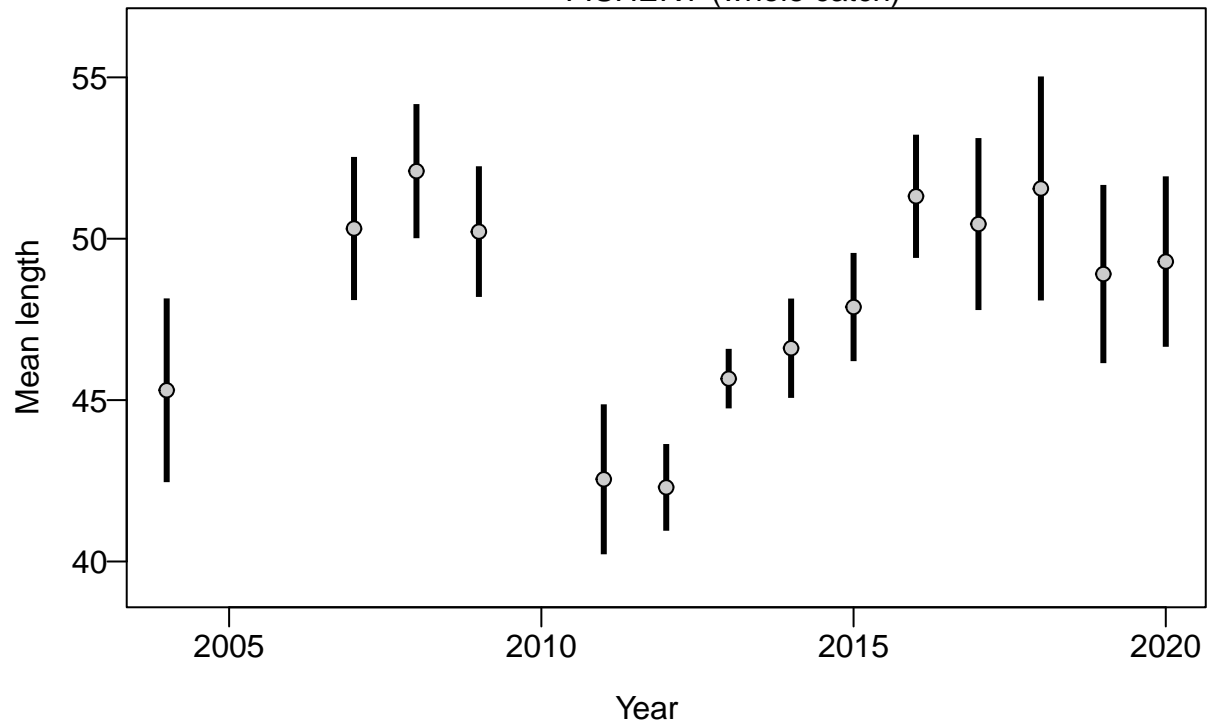
Proportion

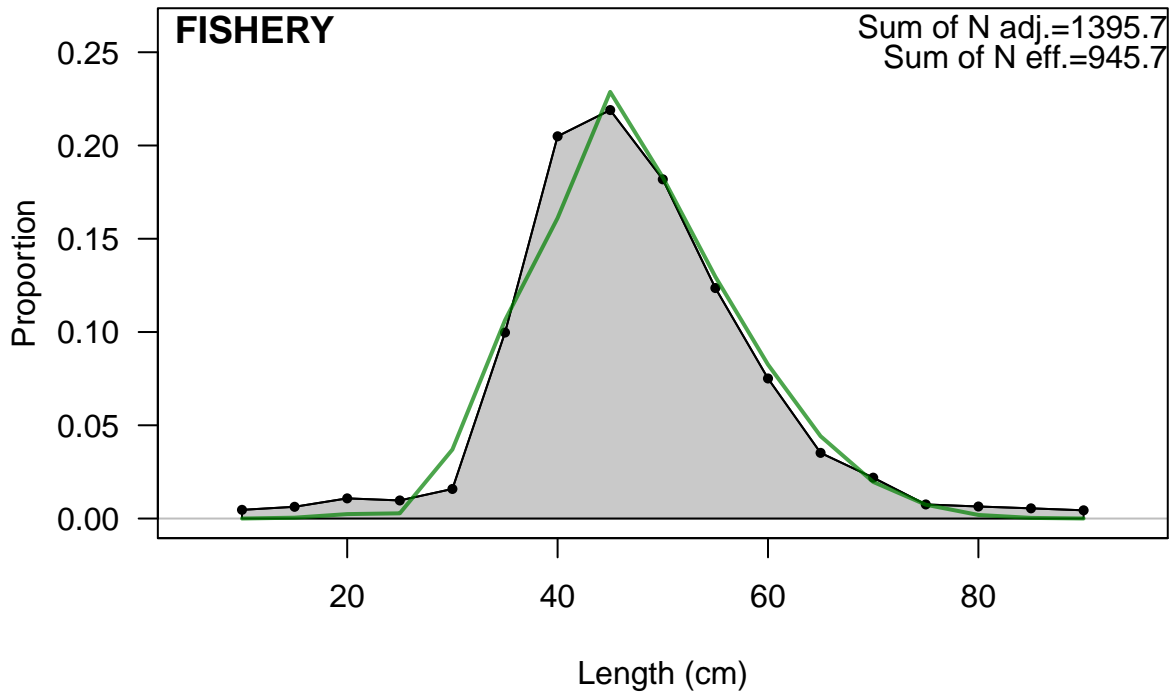


Length (cm)

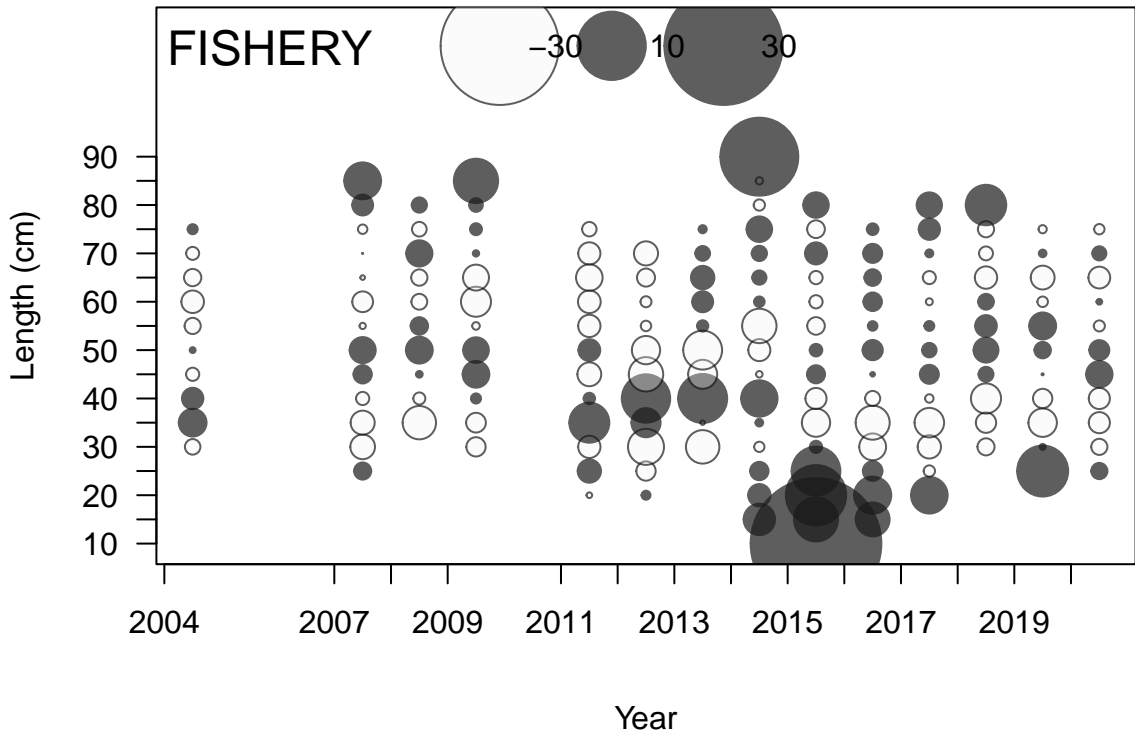


FISHERY (whole catch)

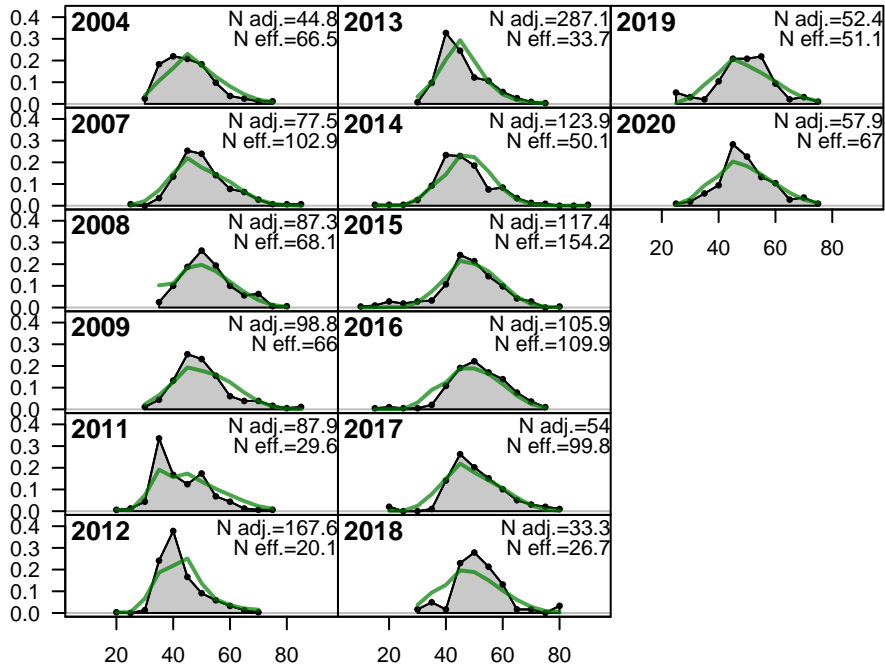




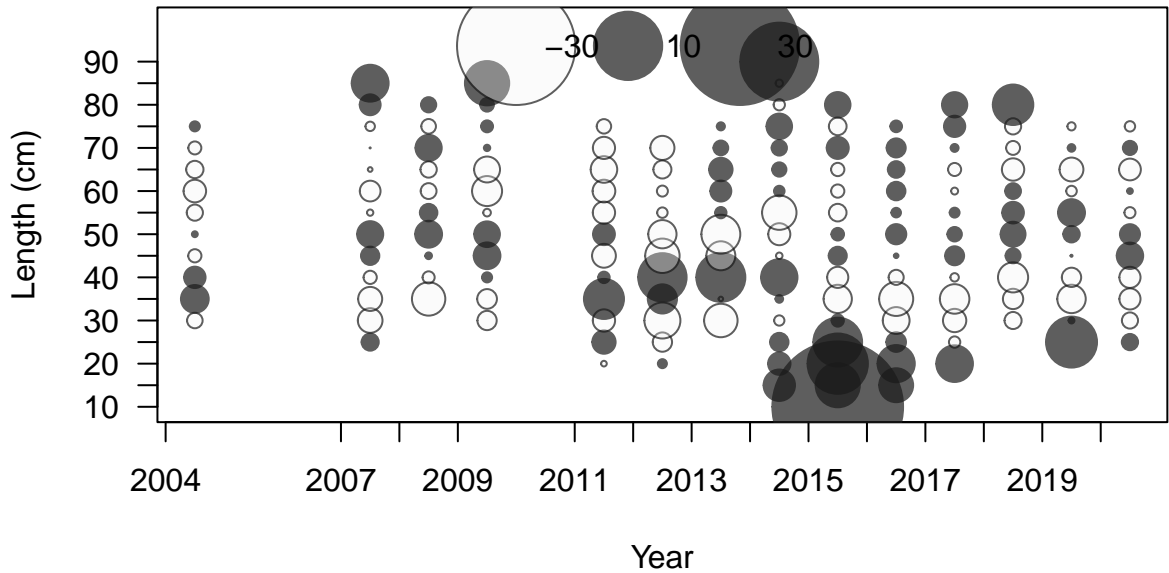




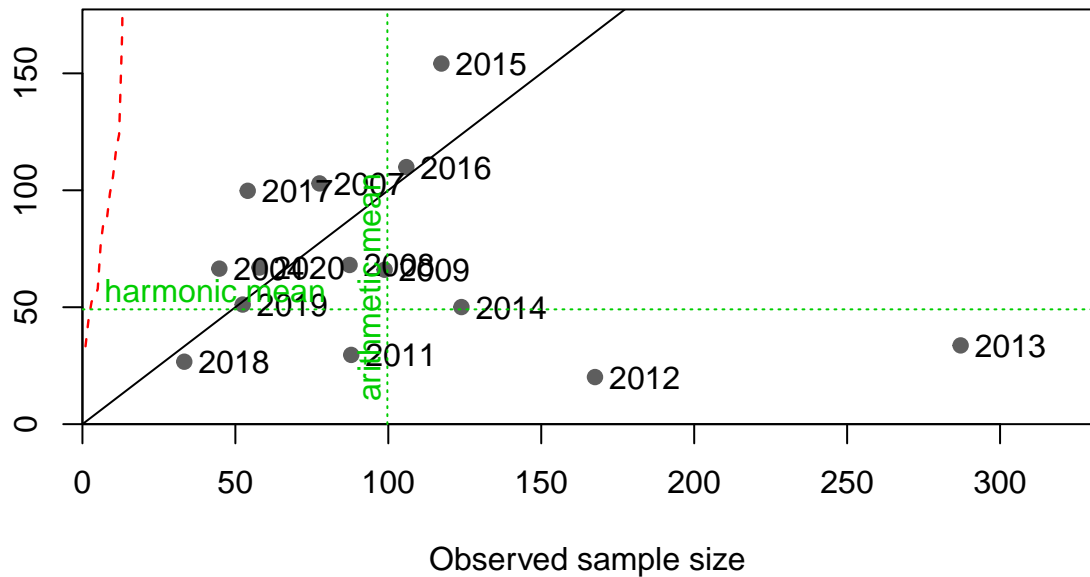
Proportion



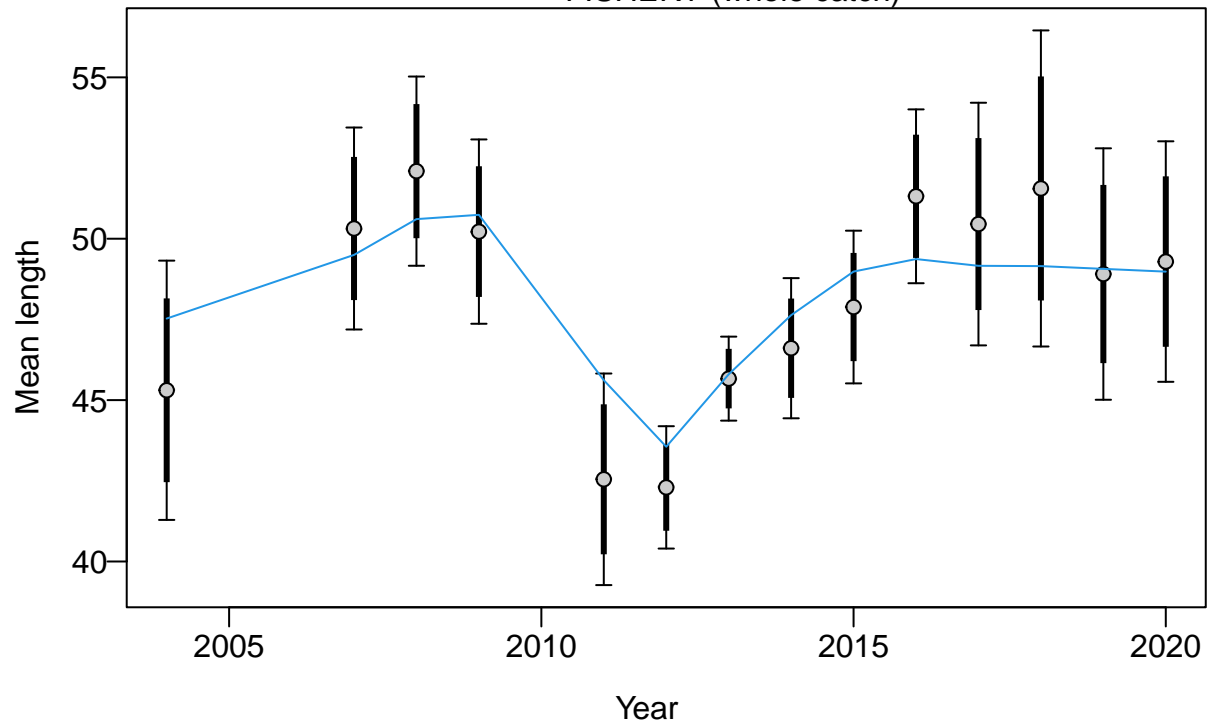
Length (cm)

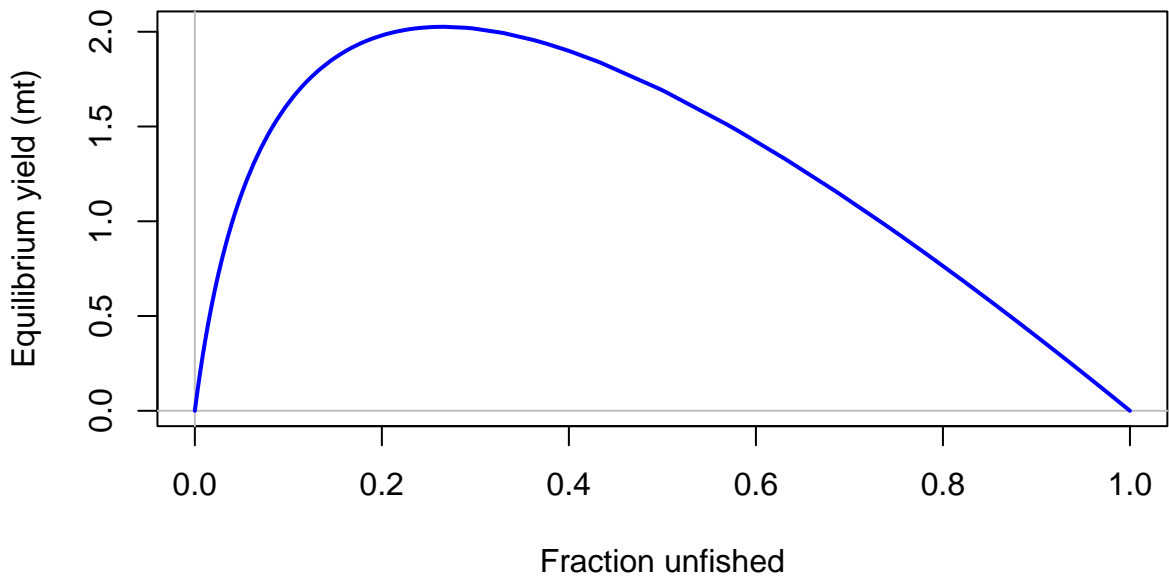


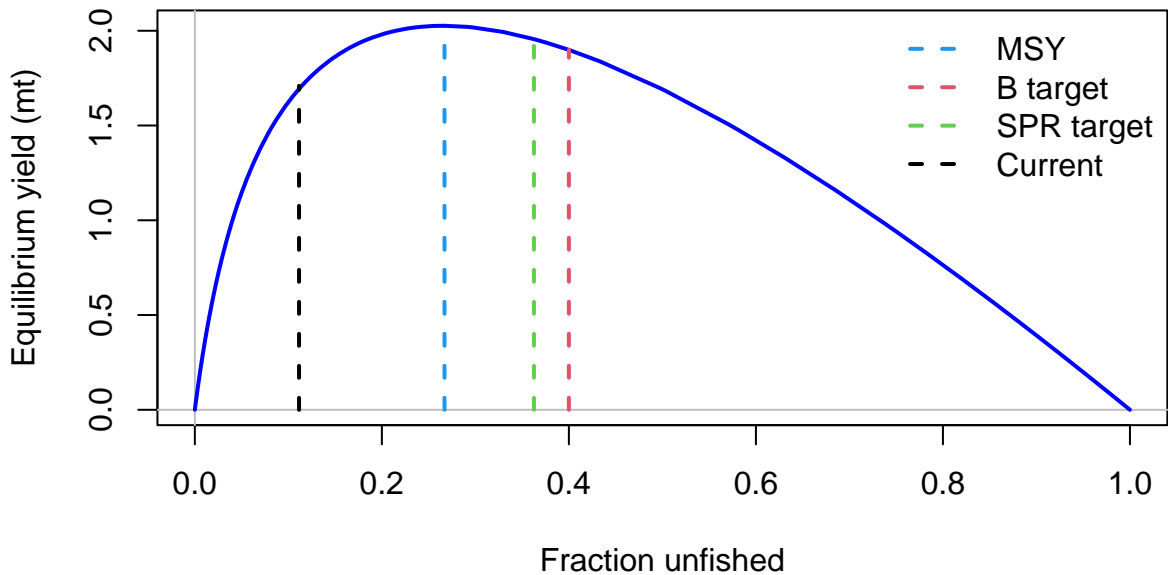
Effective sample size

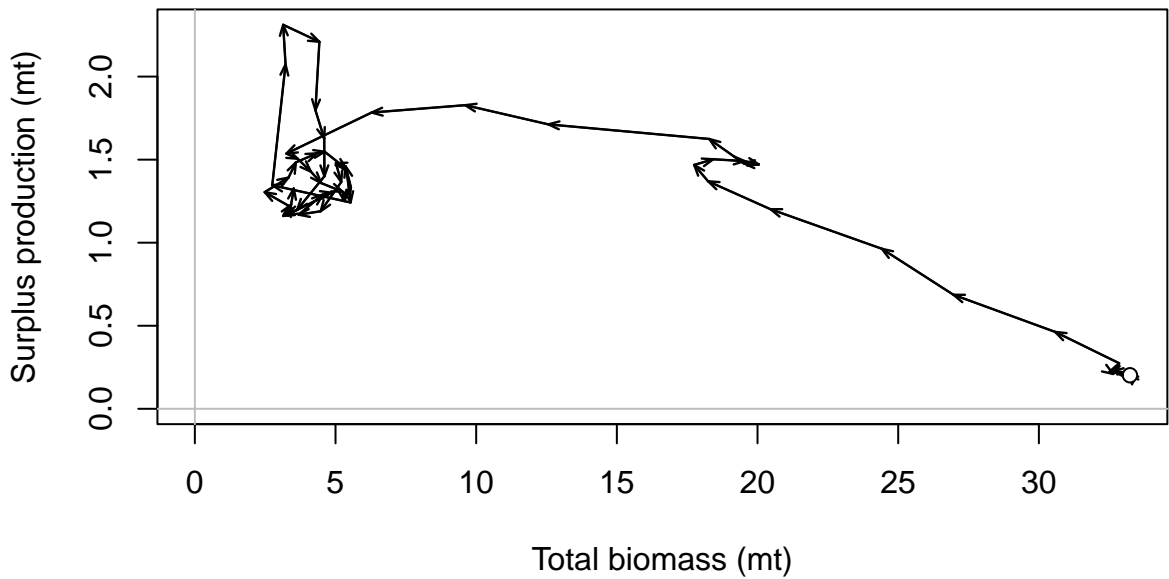


## FISHERY (whole catch)

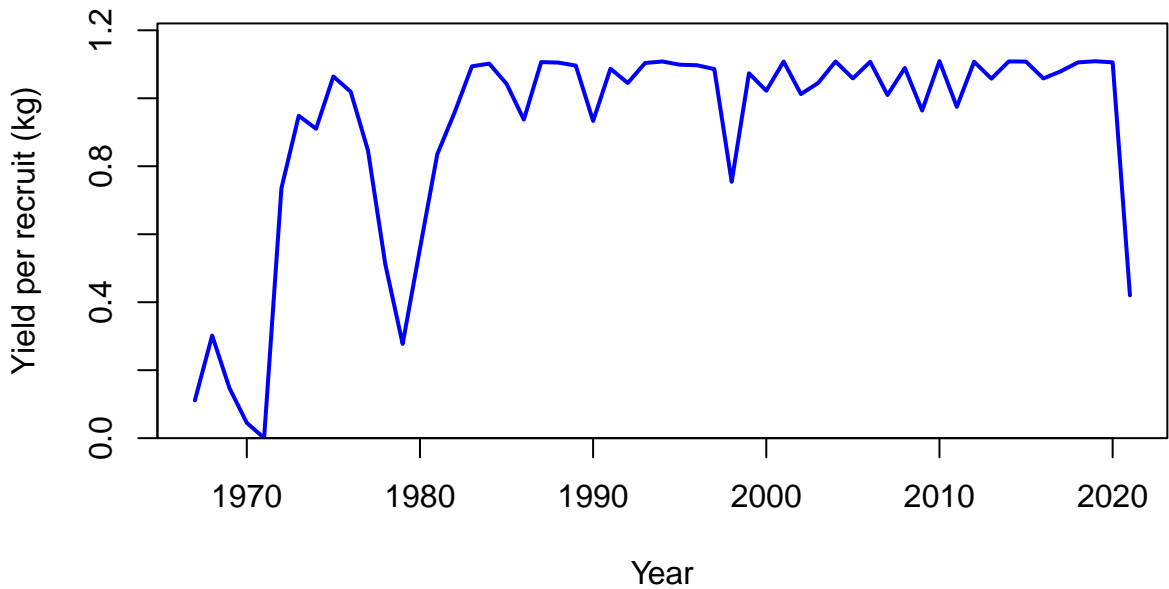


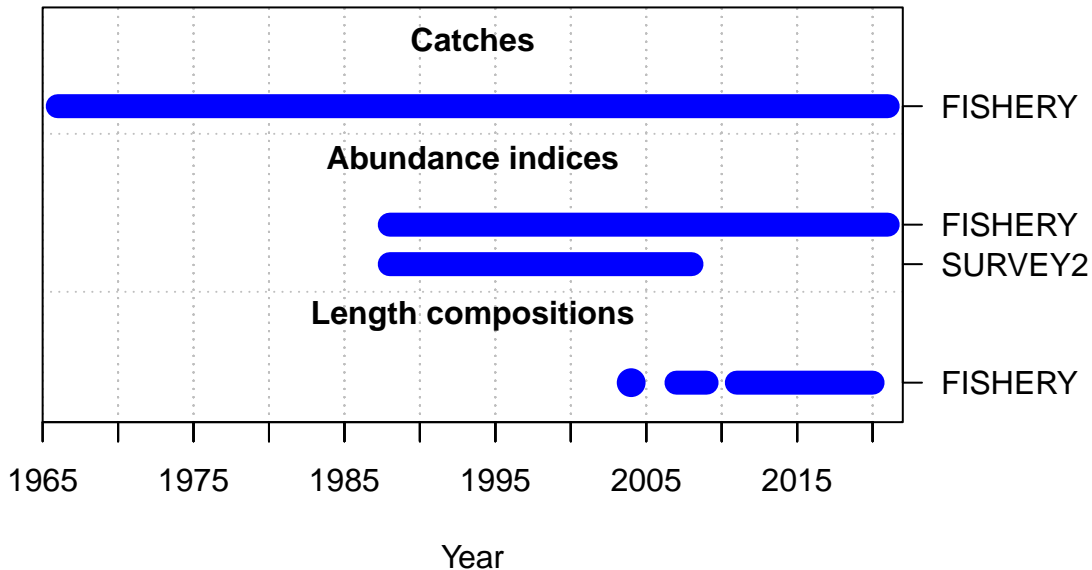


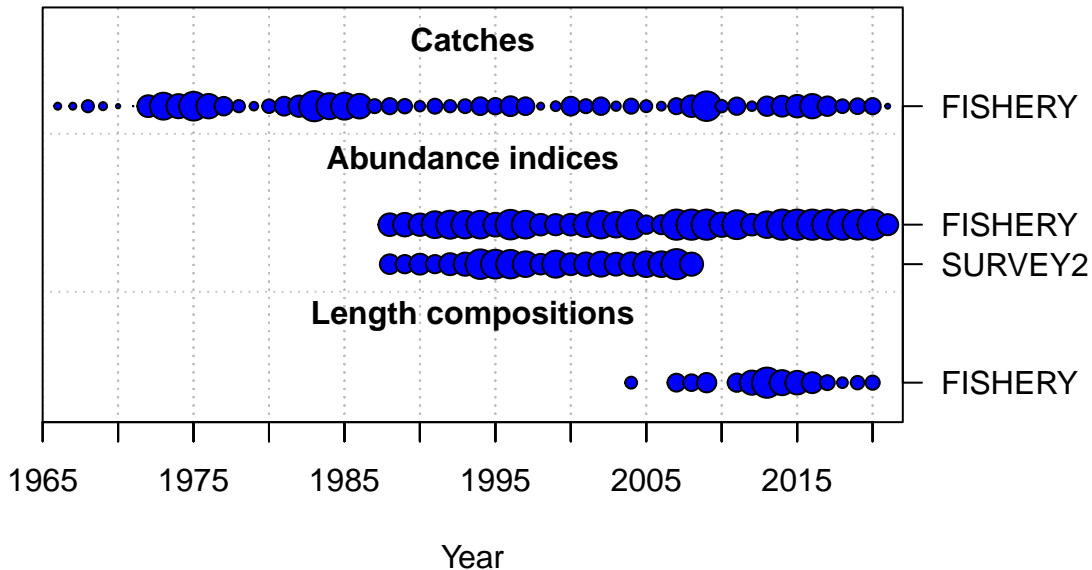






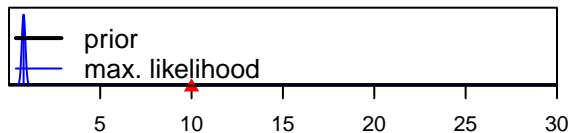




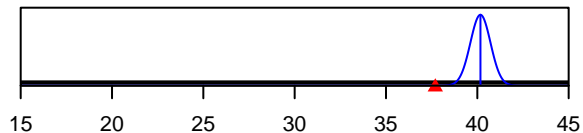


Density

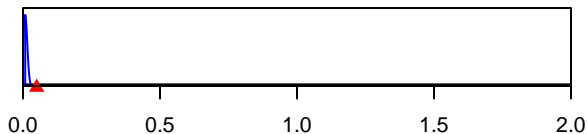
SR\_LN(R0)



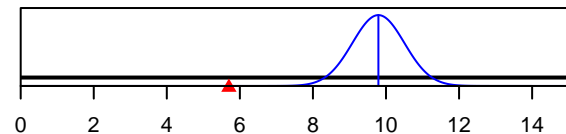
Size\_inflection\_FISHERY(1)



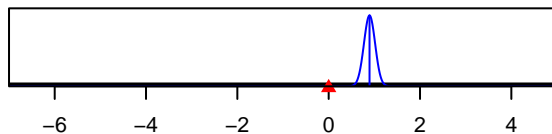
InitF\_seas\_1\_flt\_1FISHERY



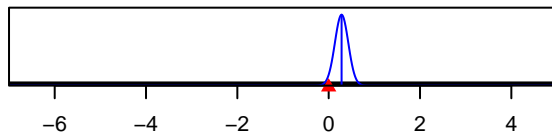
Size\_95%width\_FISHERY(1)



LnQ\_base\_FISHERY(1)



LnQ\_base\_SURVEY2(2)



Parameter value