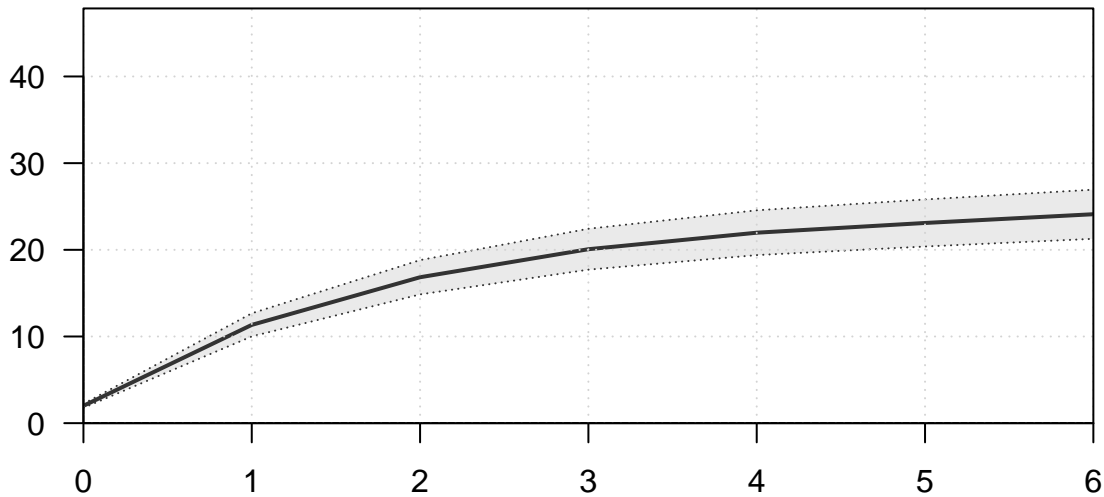
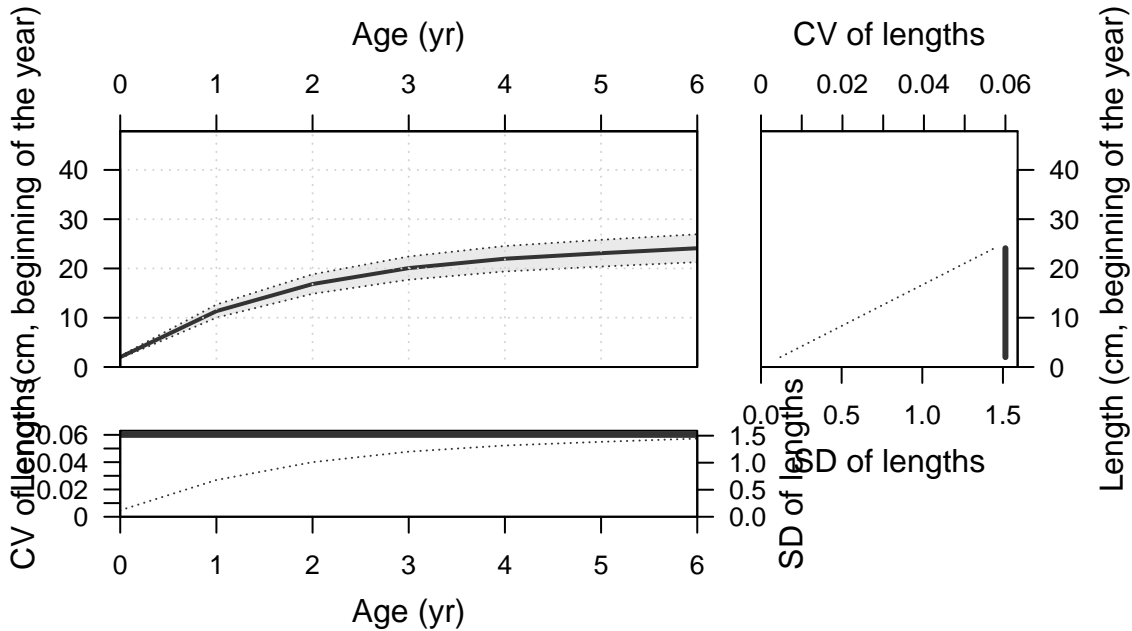


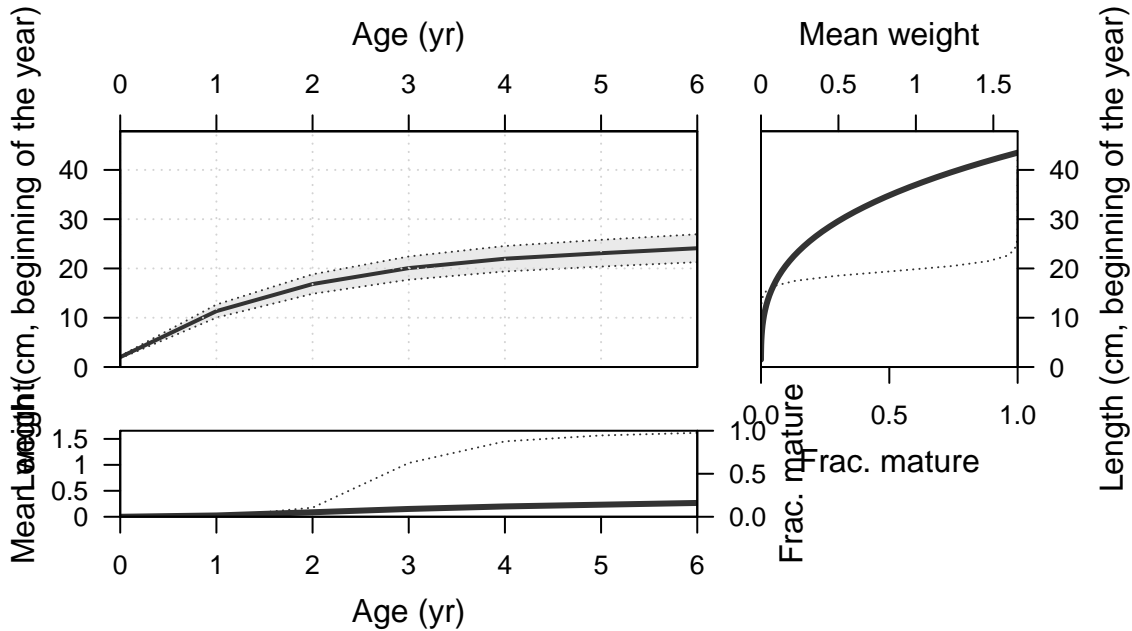
Plots created using the 'r4ss' package in R  
Stock Synthesis version: 3.30.19.0  
StartTime: Fri Jul 22 11:46:20 2022  
Data\_File: data.ss  
Control\_File: control.ss

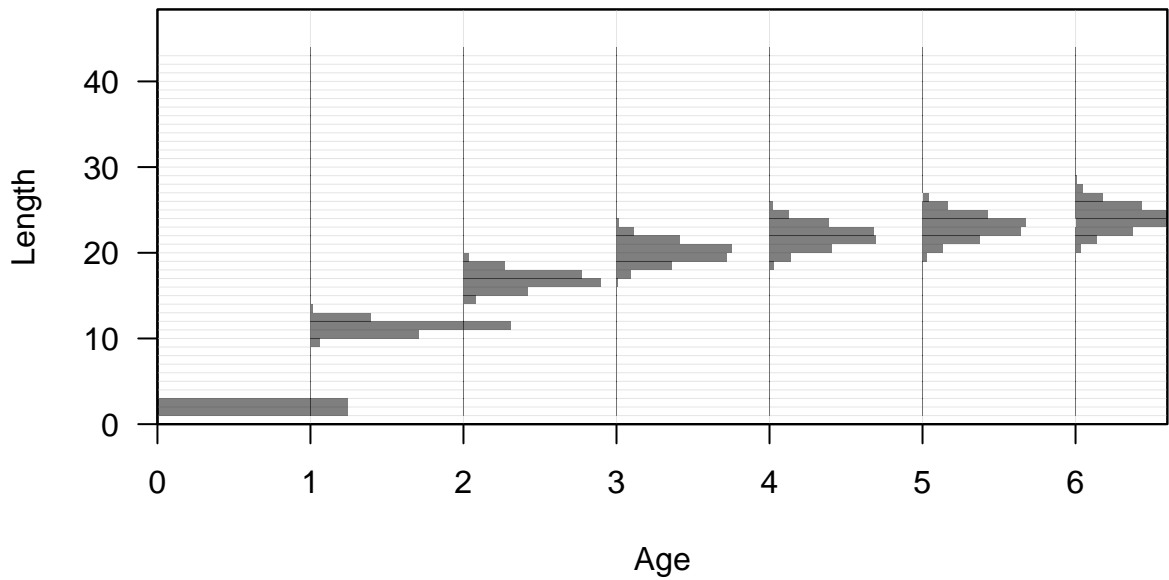
Length (cm, beginning of the year)

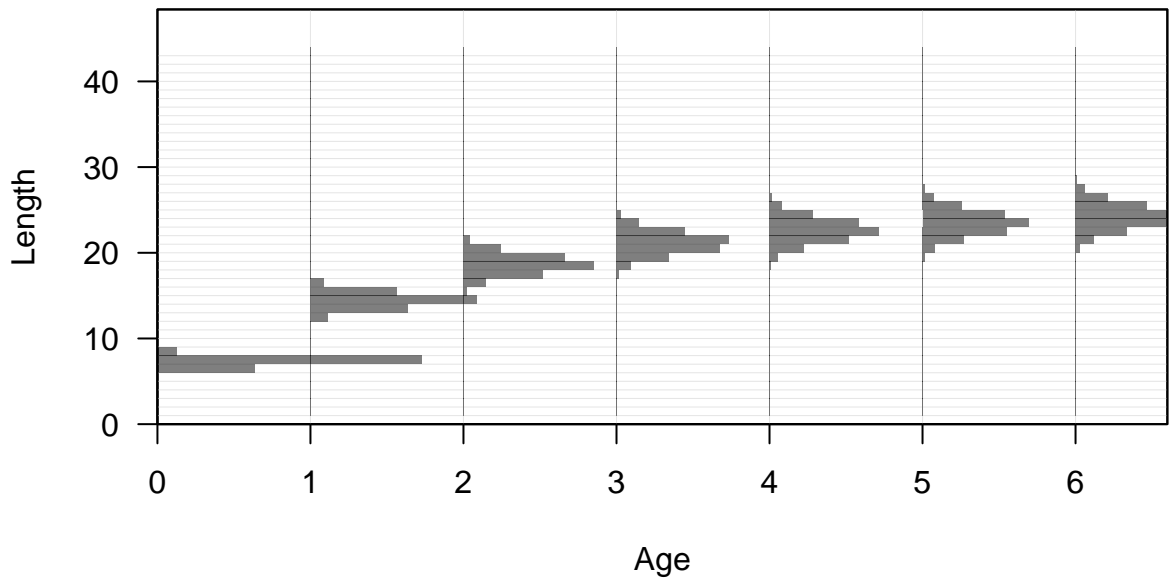


Age (yr)

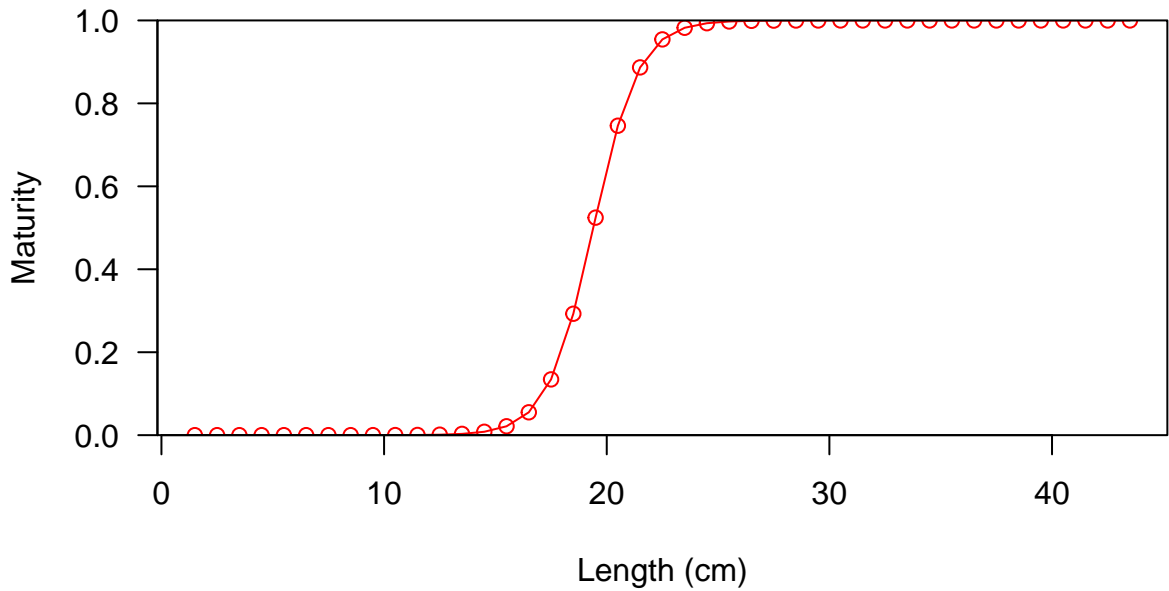










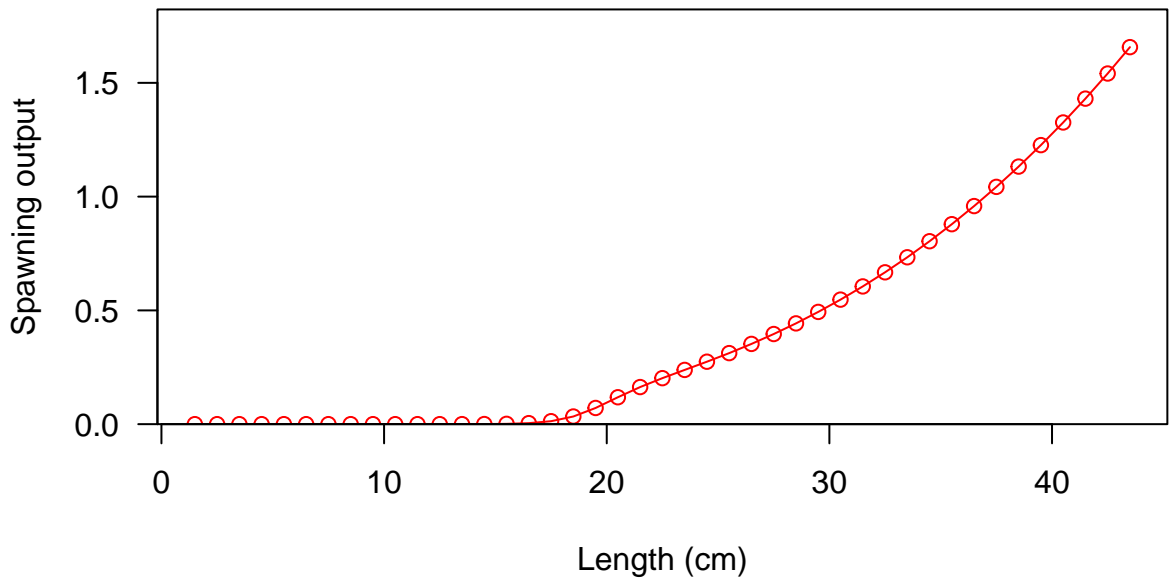






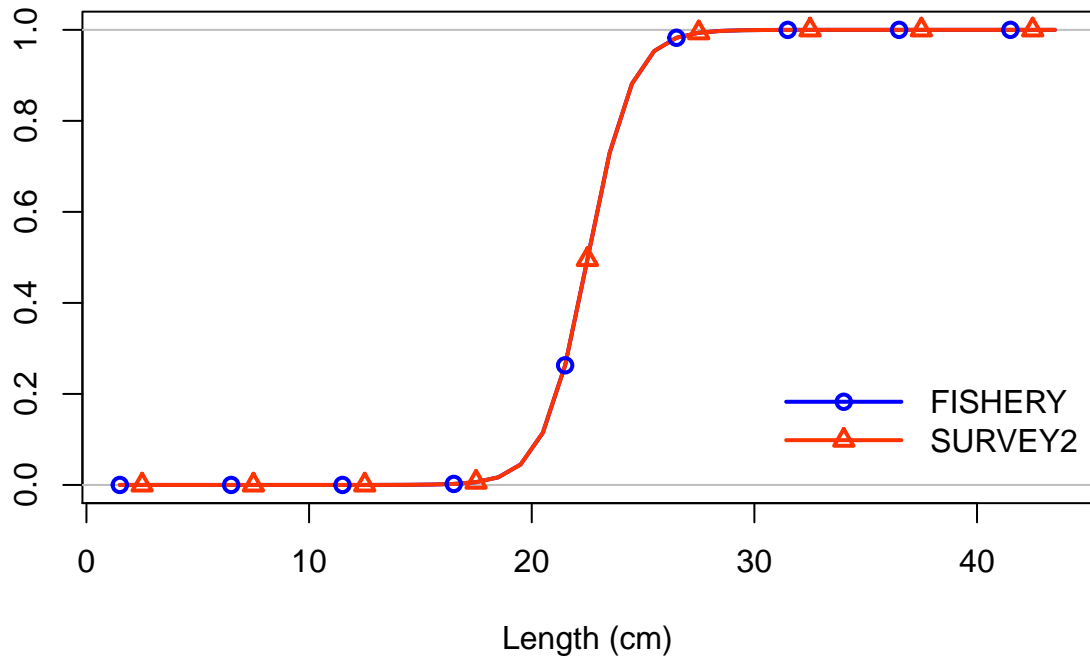




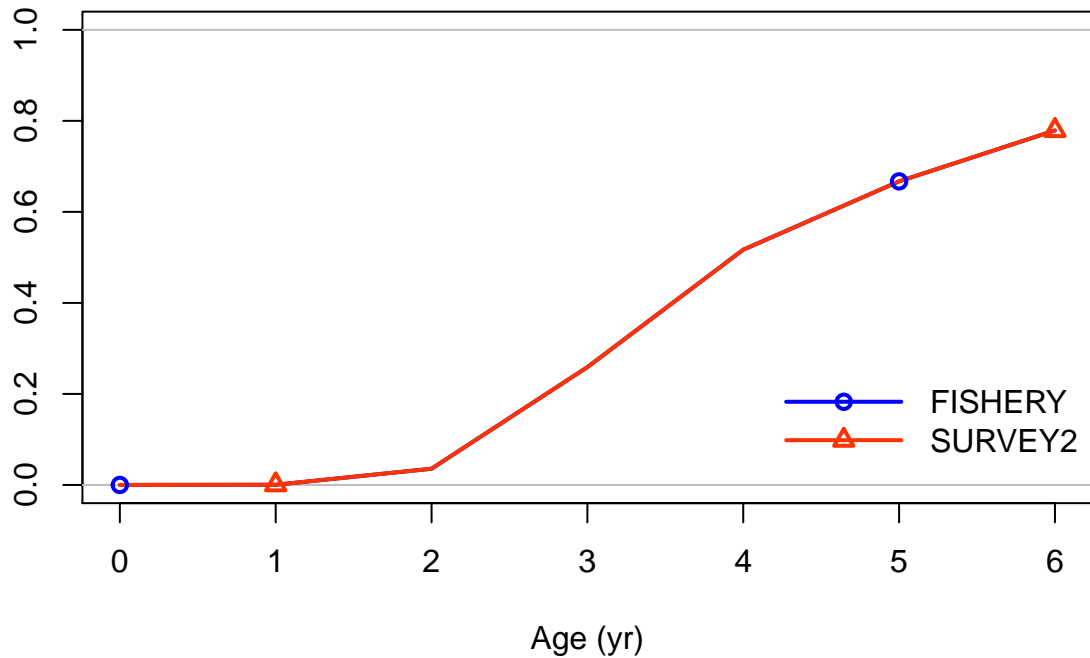




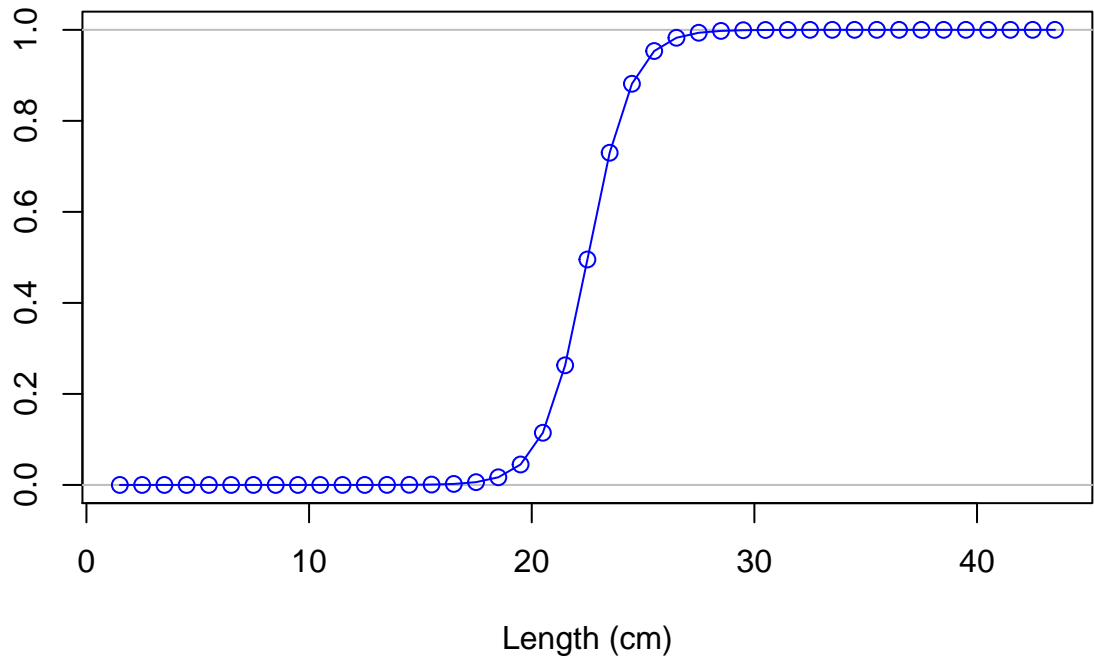
Selectivity



Selectivity

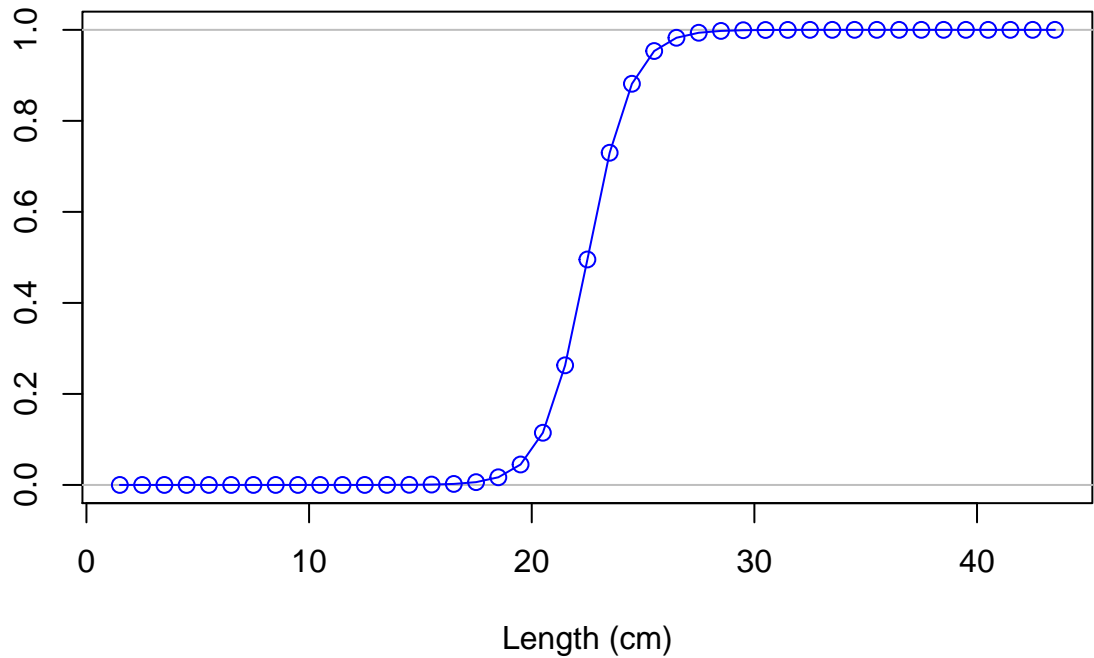


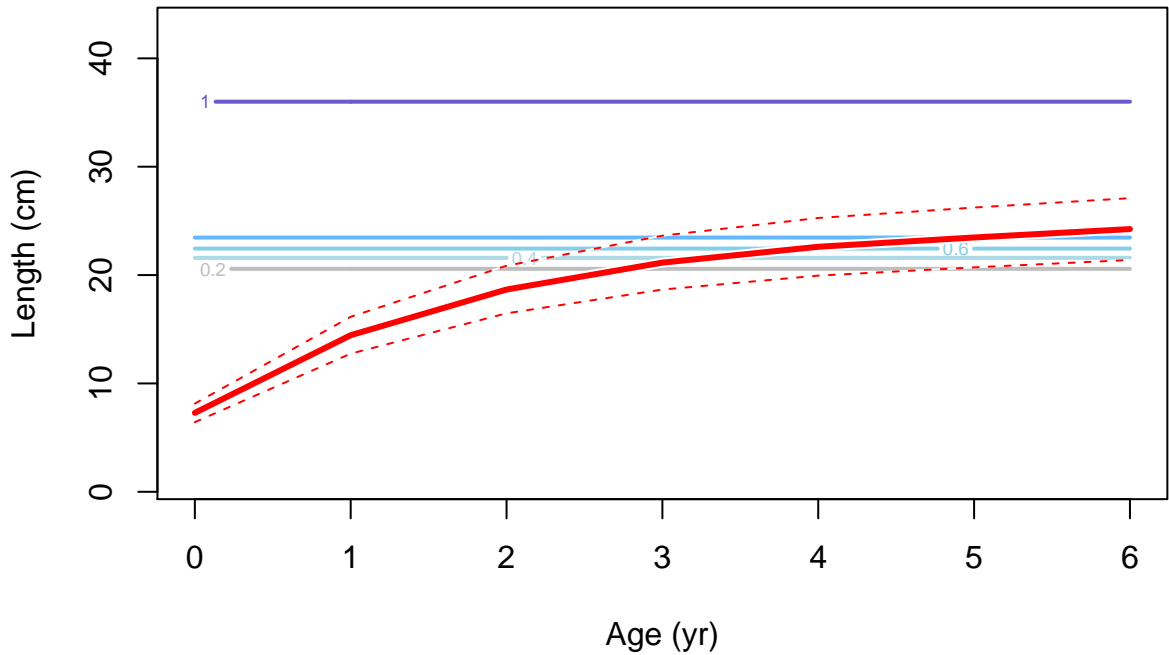
Selectivity

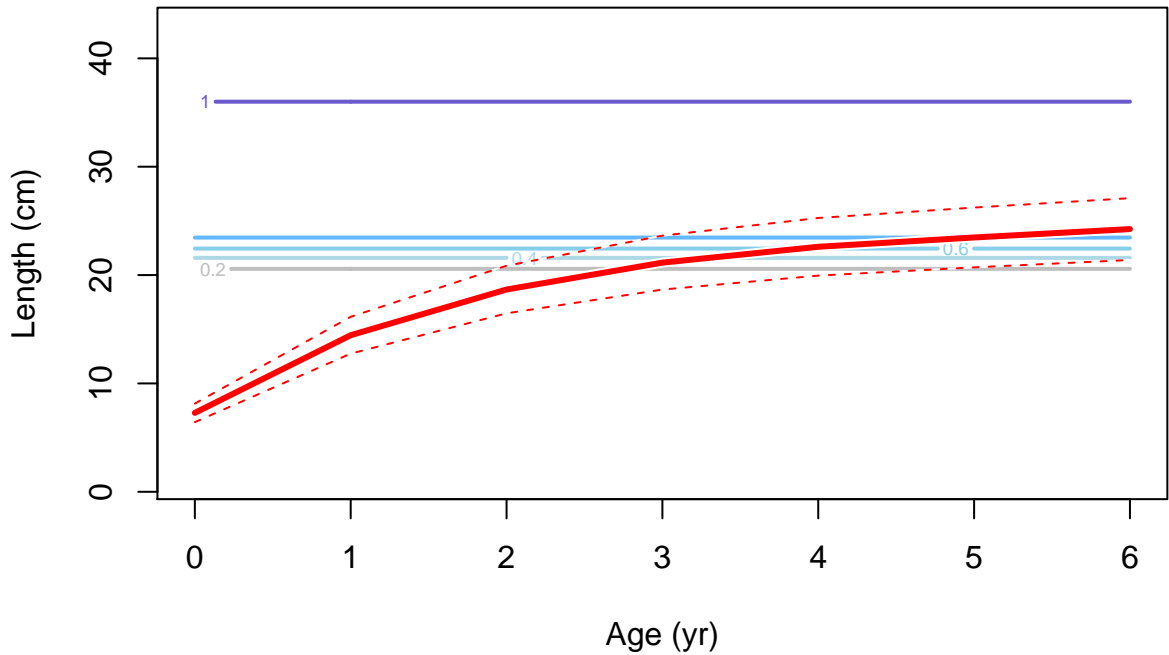




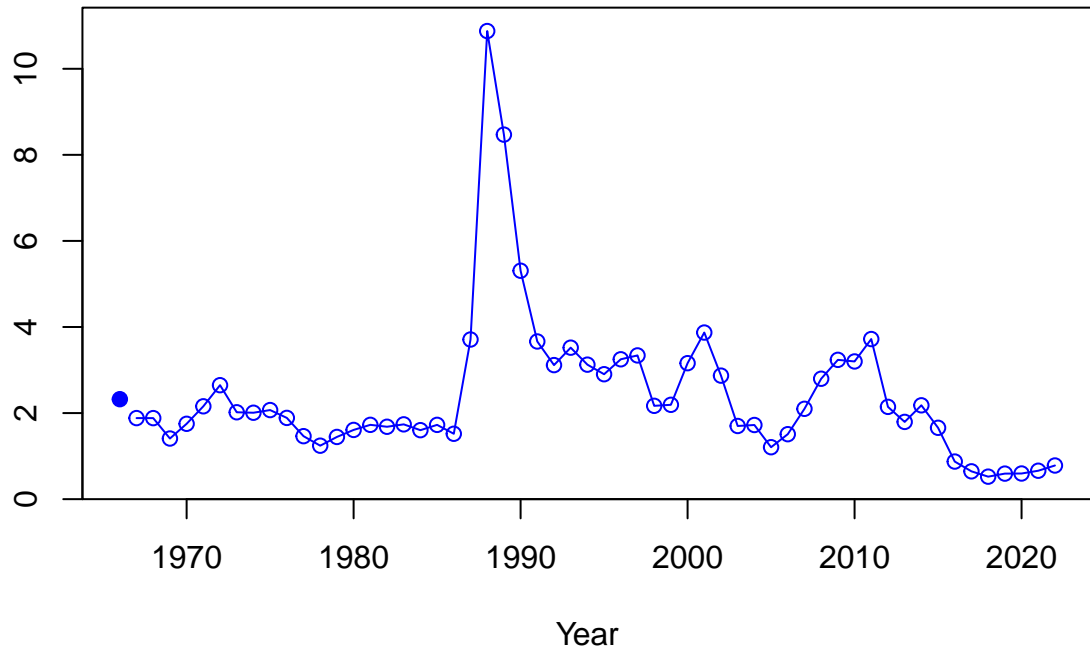
Selectivity



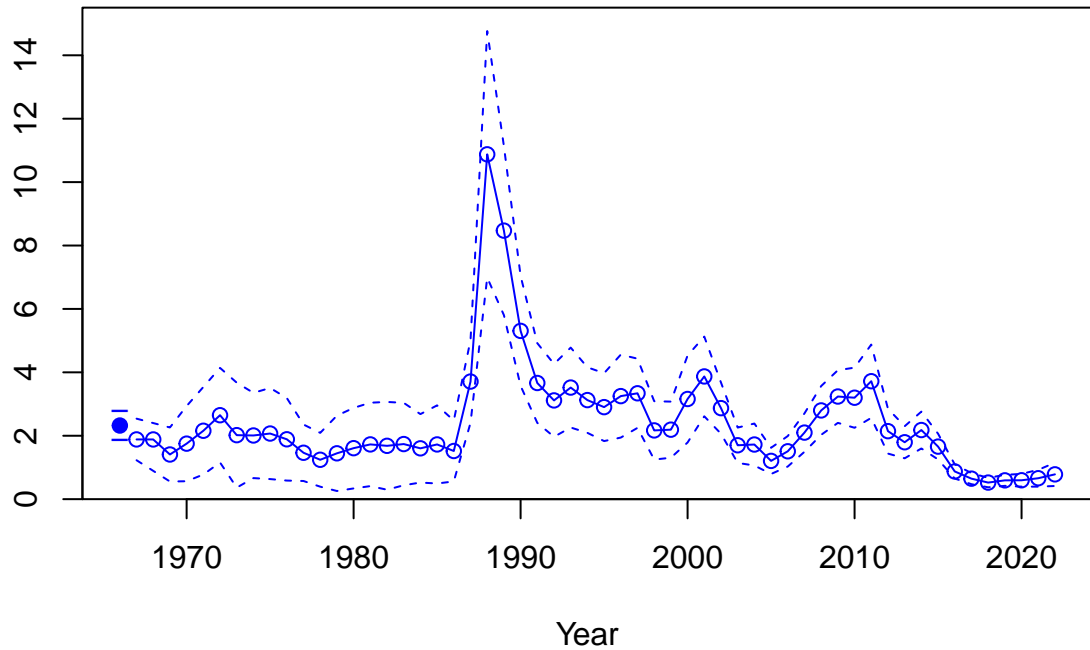




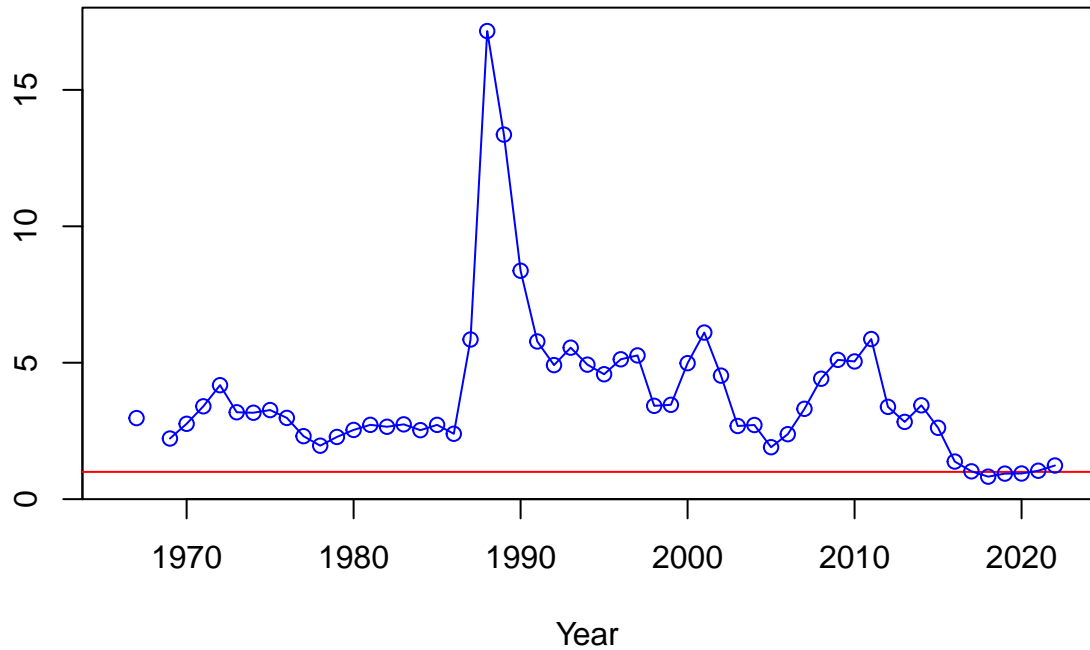
Spawning biomass (mt)



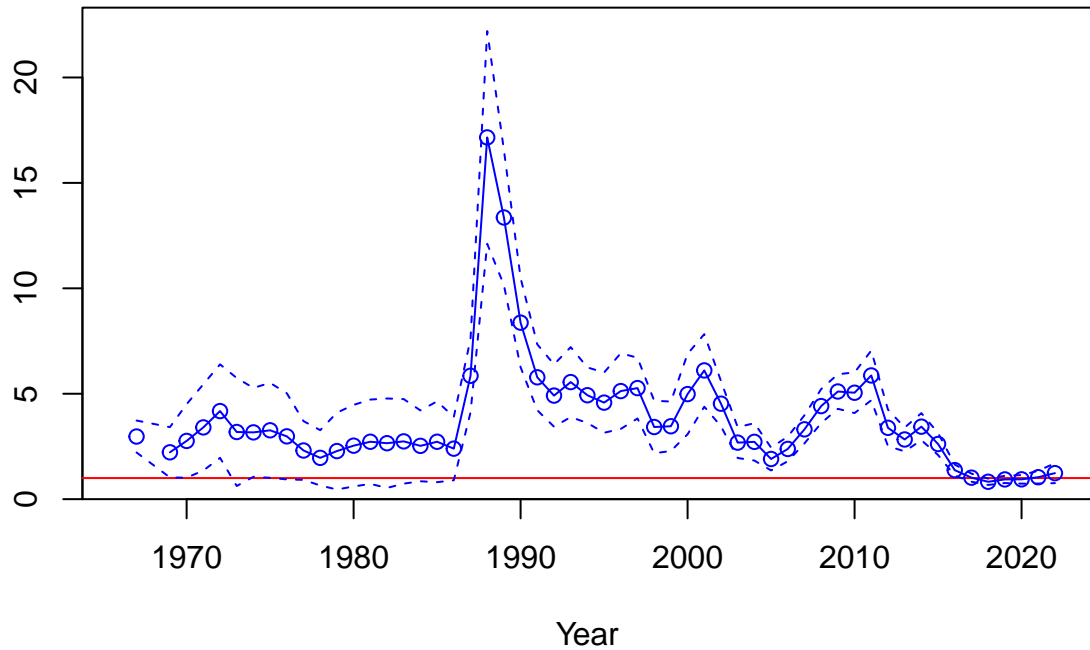
Spawning biomass (mt)

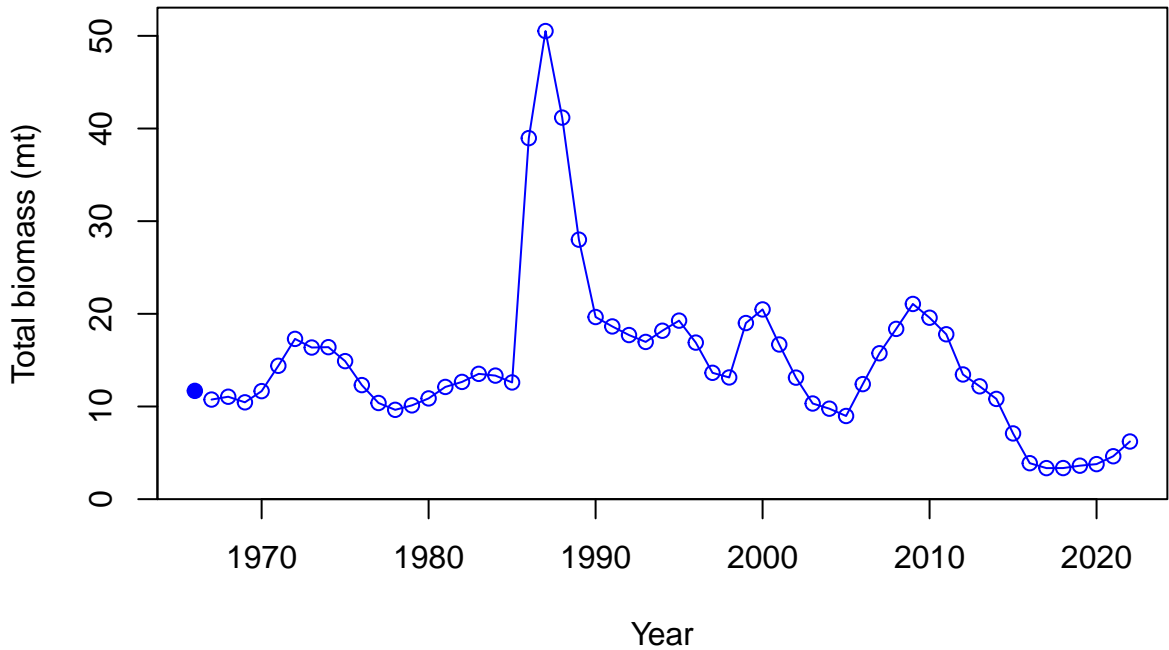


Relative spawning biomass:  $B/B_{MSY}$



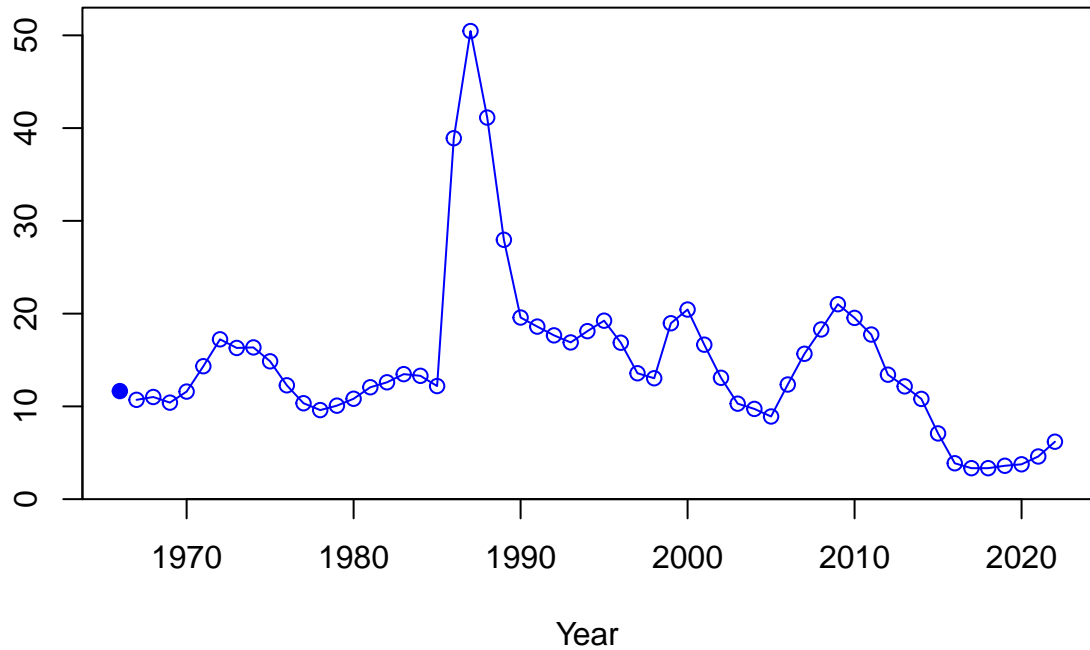
Relative spawning biomass:  $B/B_{MSY}$



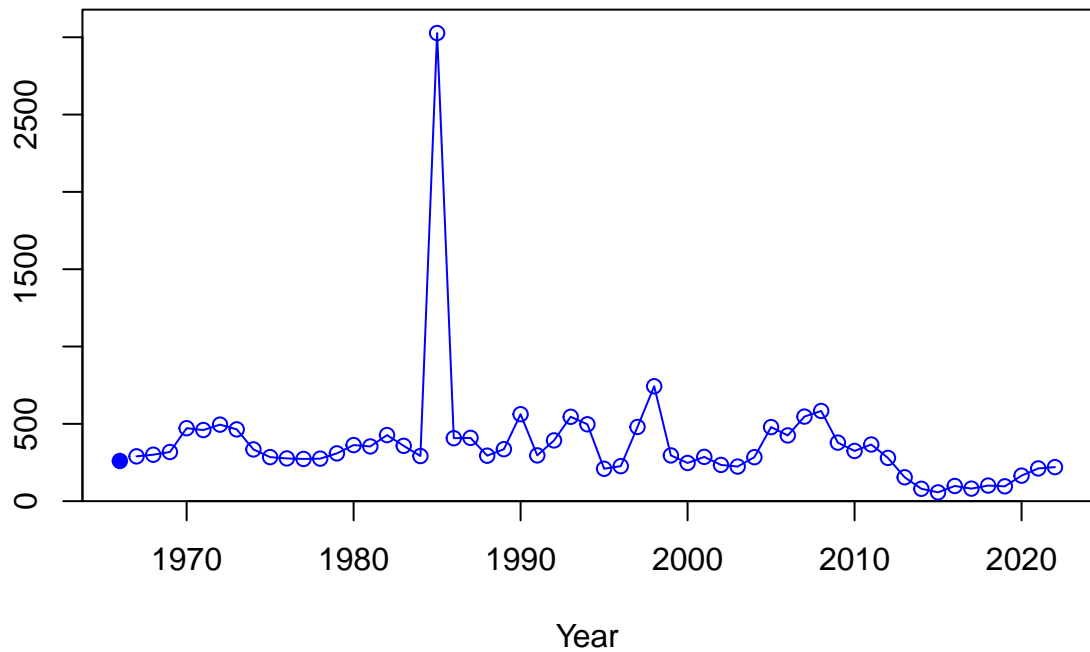




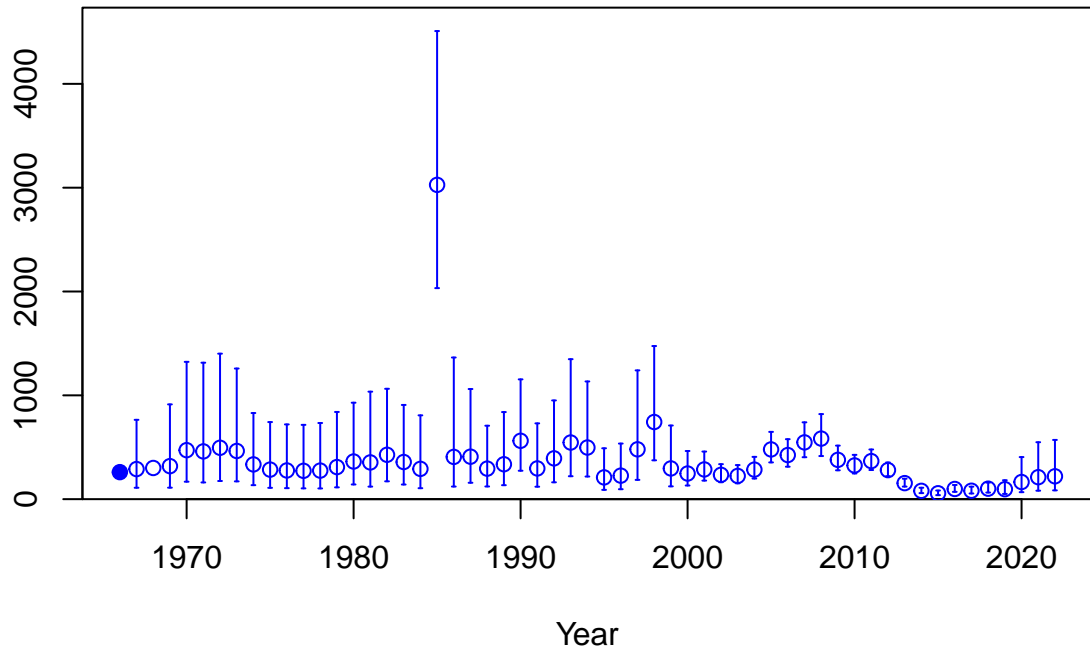
Summary biomass (mt)



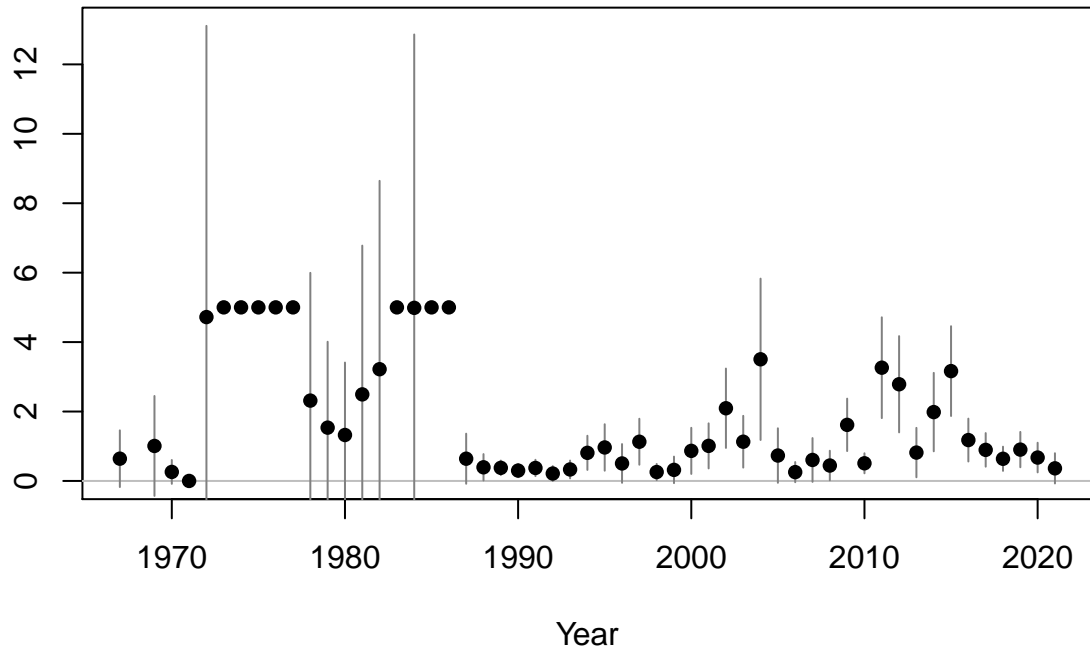
Age-0 recruits (1,000s)

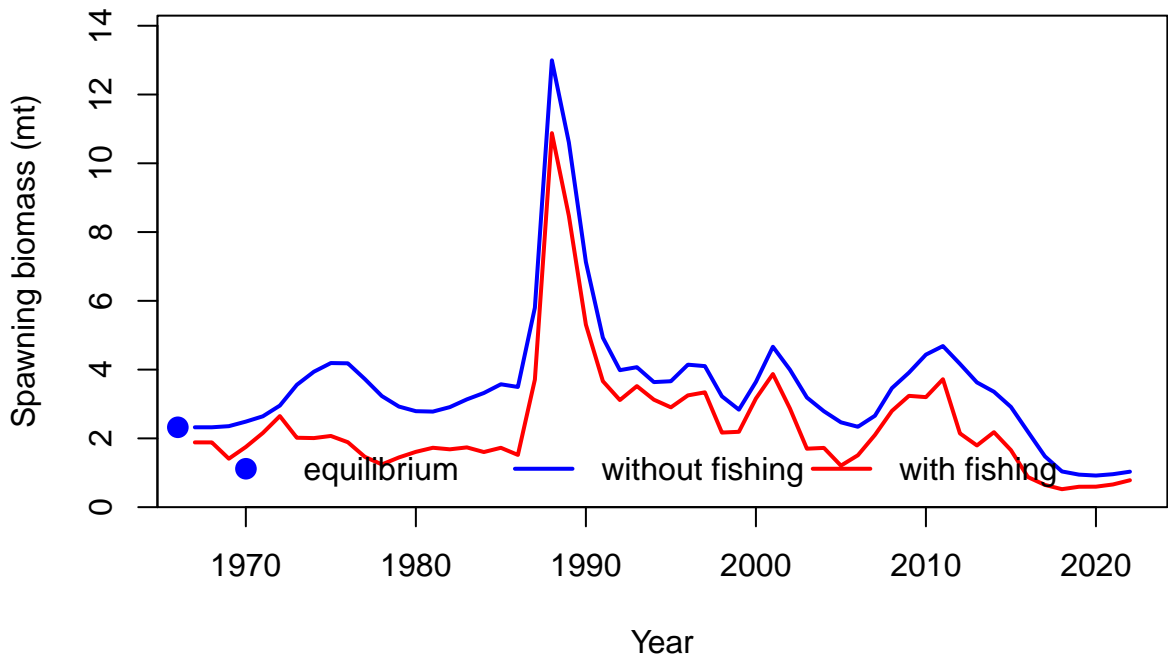


Age-0 recruits (1,000s)



Summary Fishing Mortality





Log recruitment deviation

2  
1  
0  
-1

1970

1980

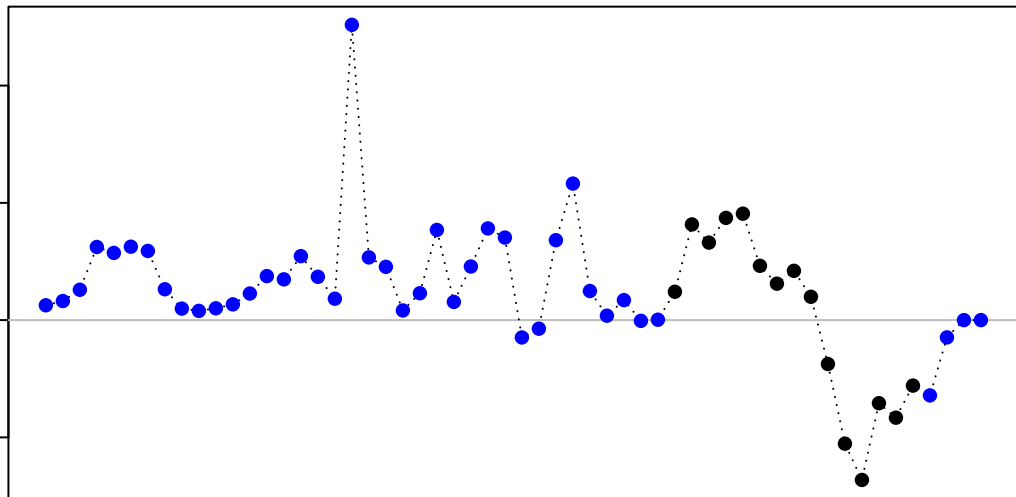
1990

2000

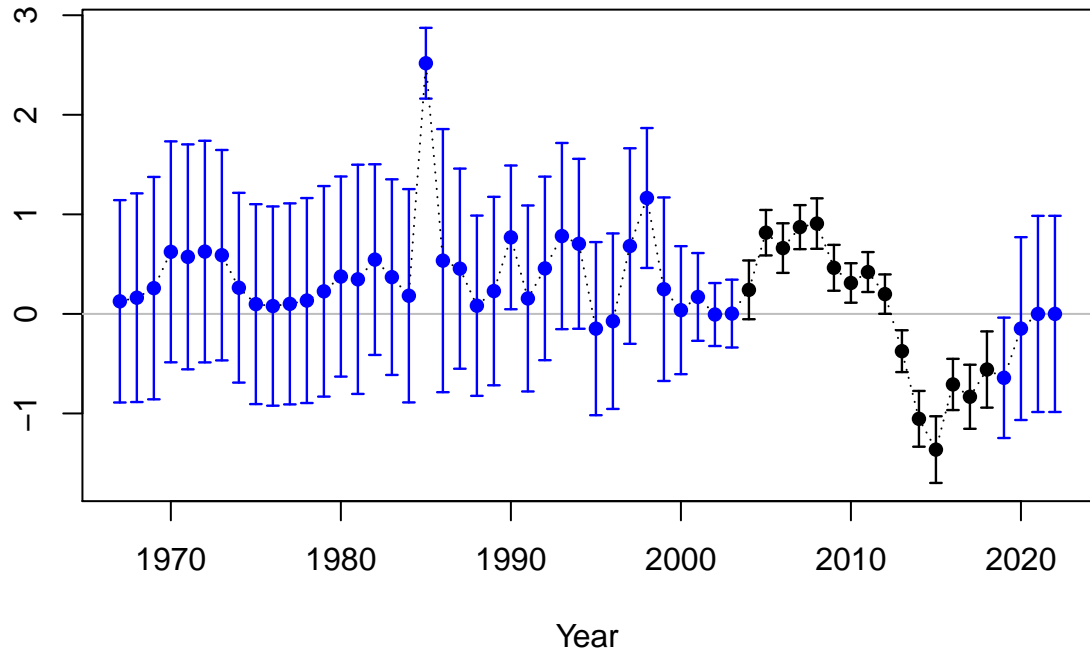
2010

2020

Year

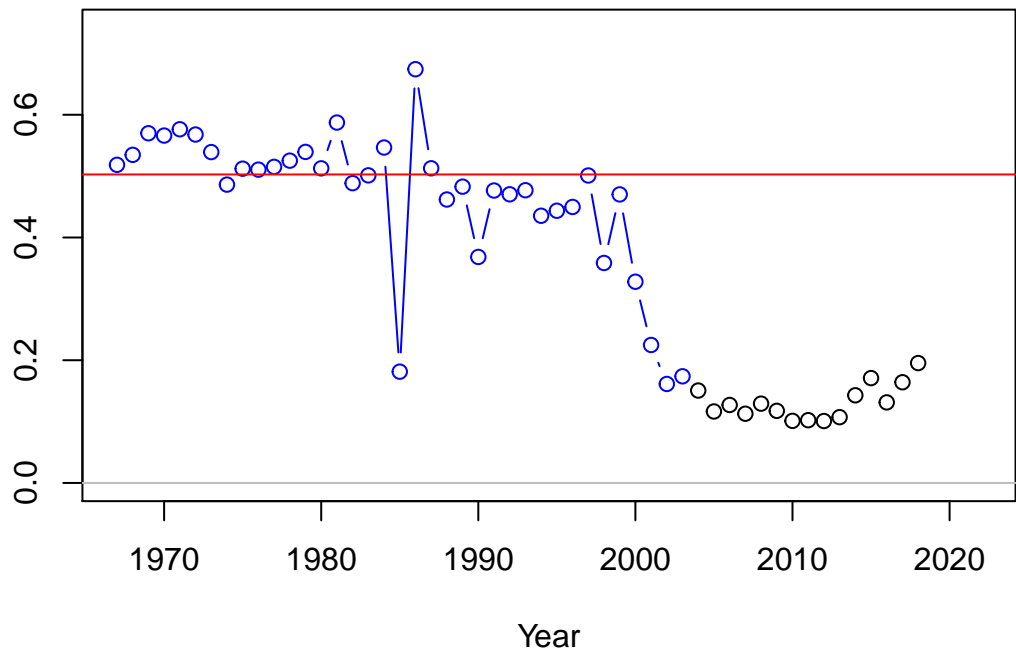


Log recruitment deviation

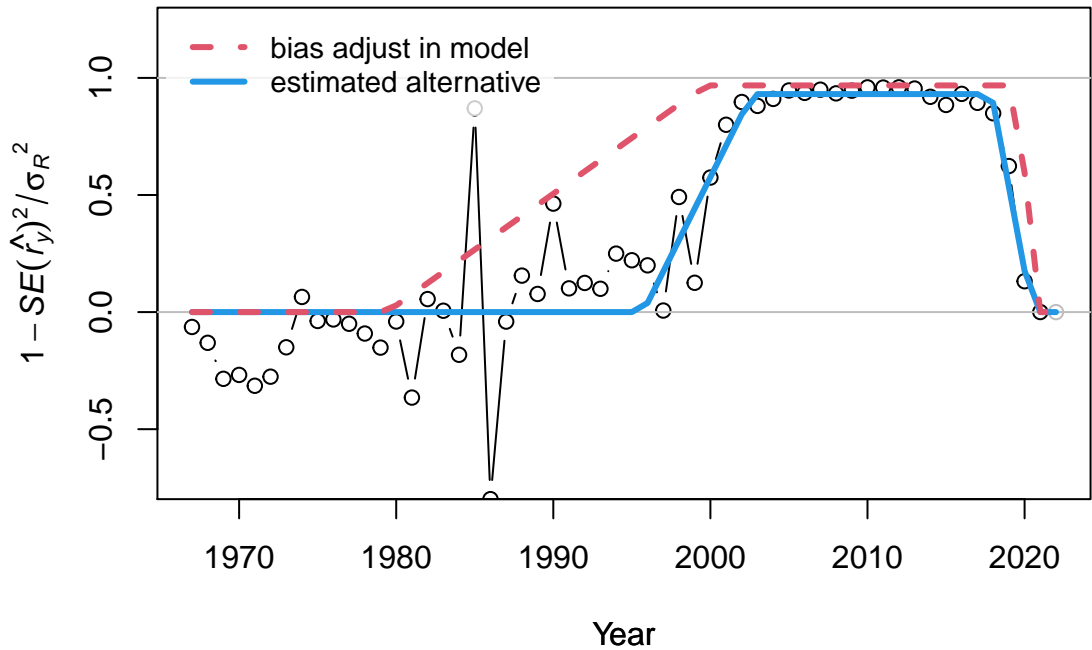


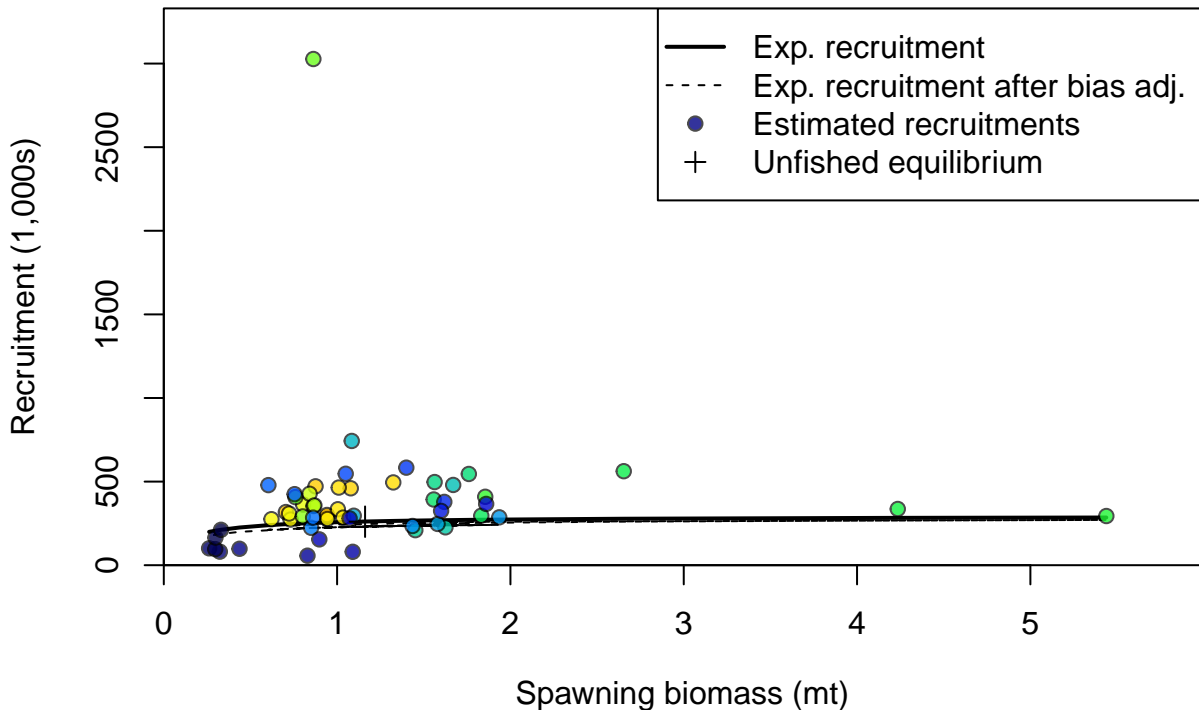
## Recruitment deviation variance

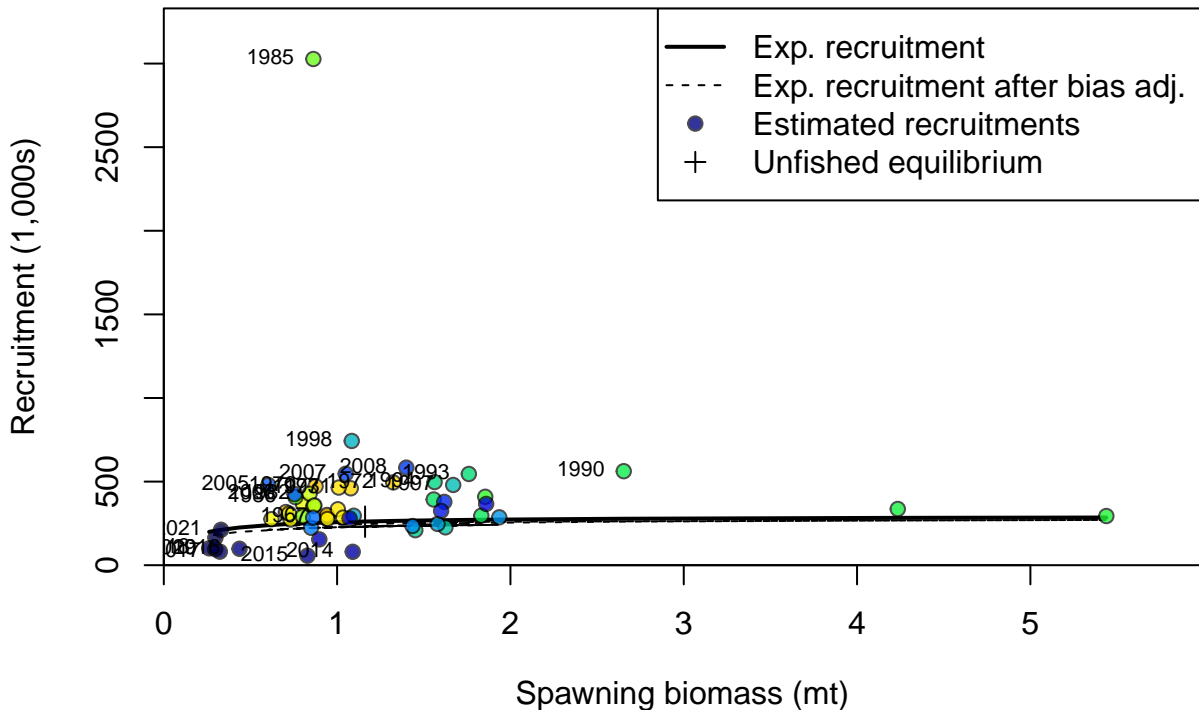
Asymptotic standard error estimate



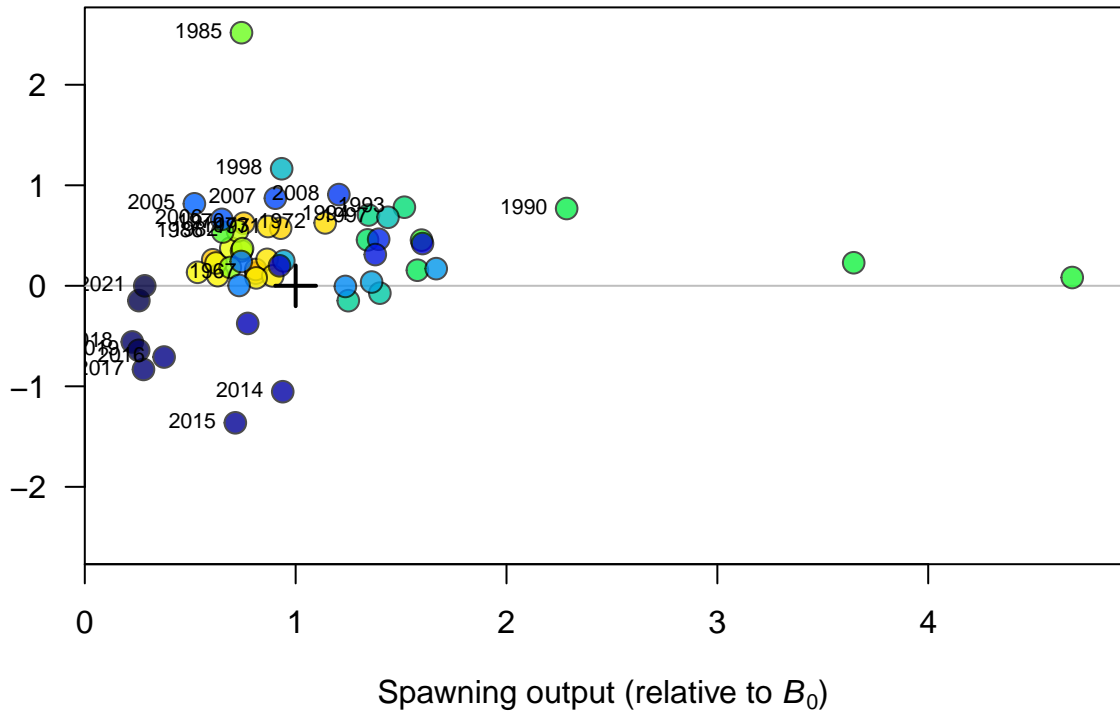


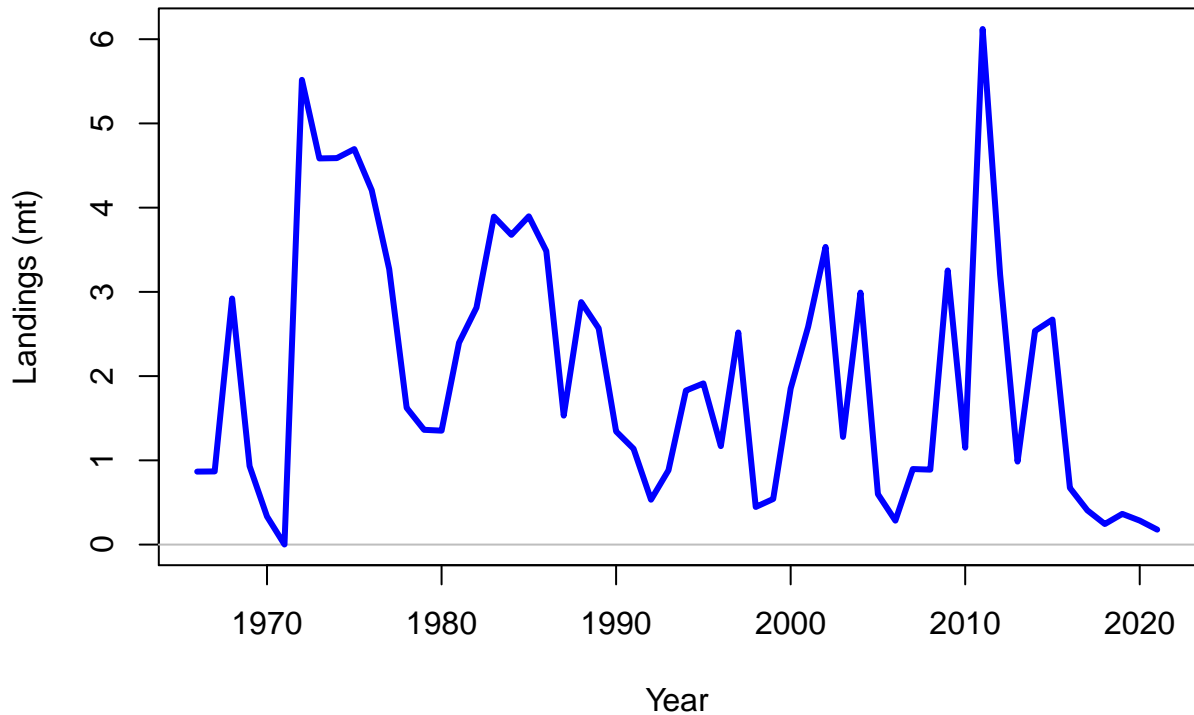


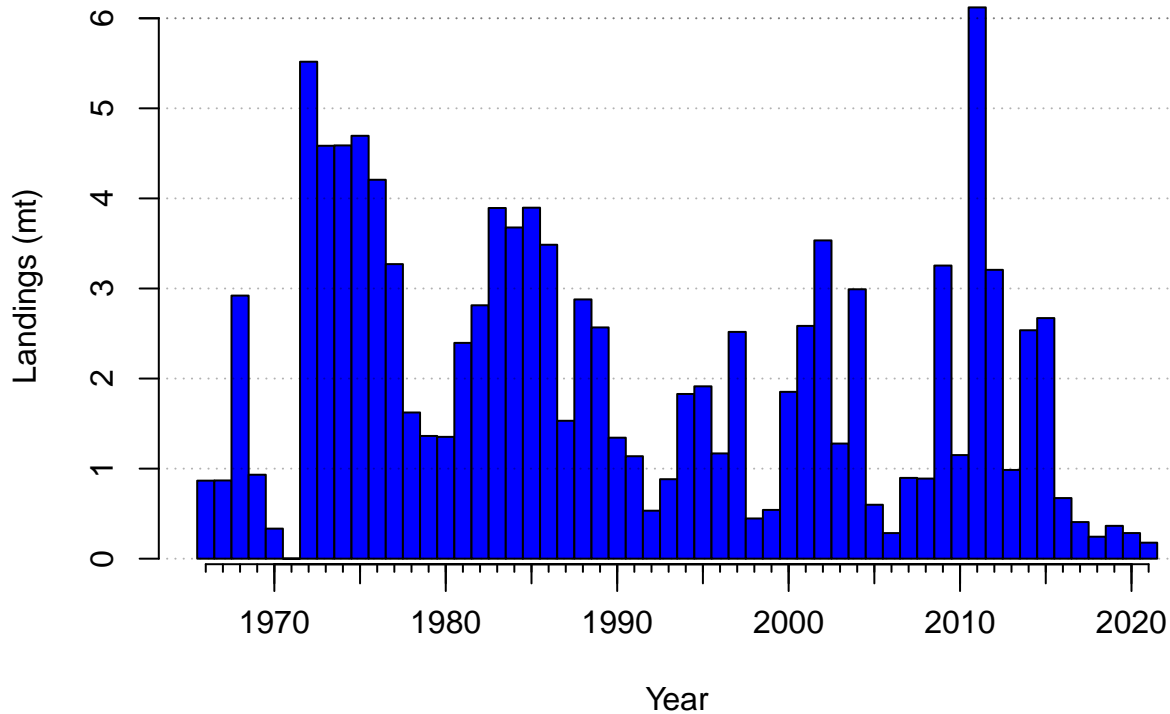




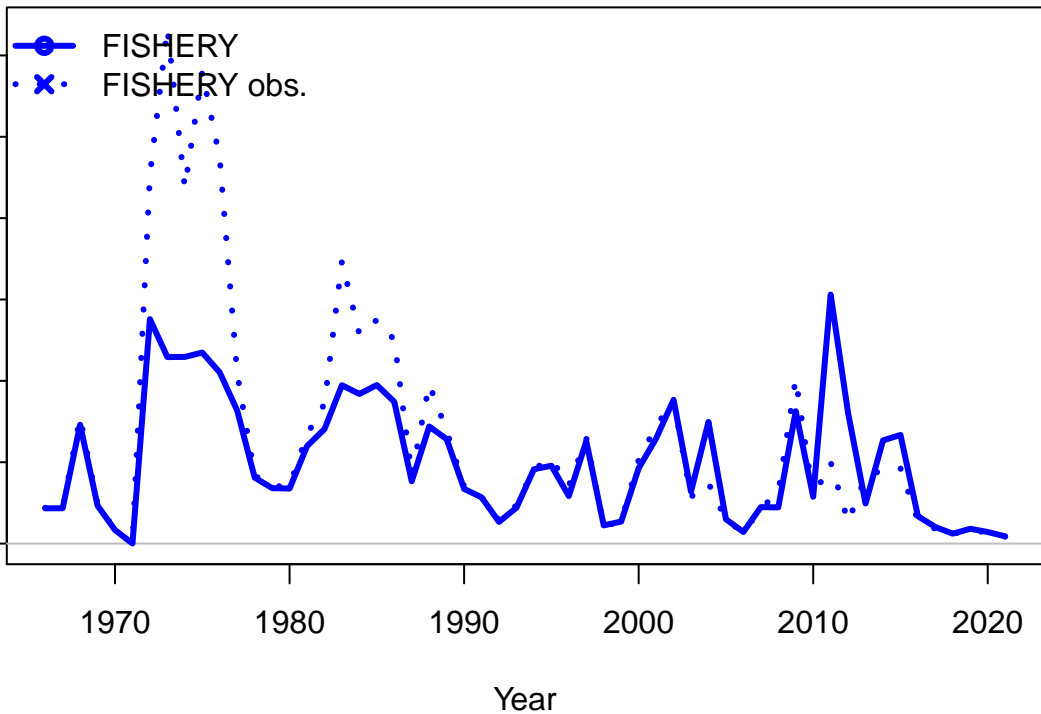
Log recruitment deviation

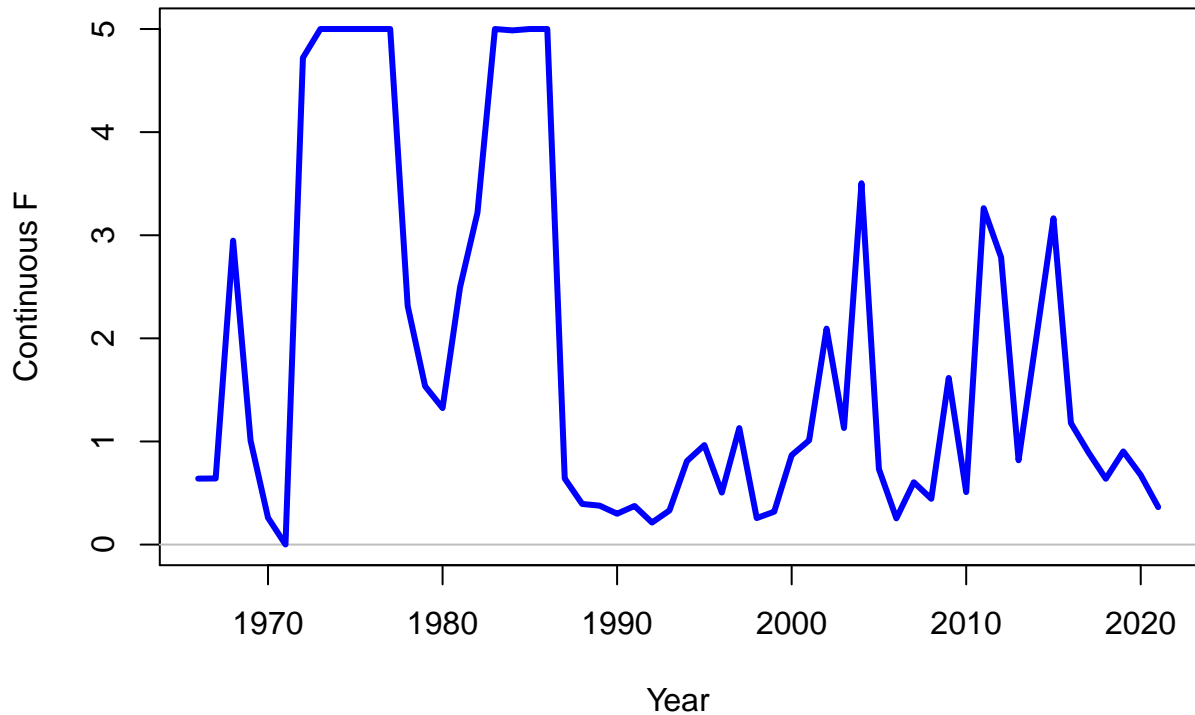






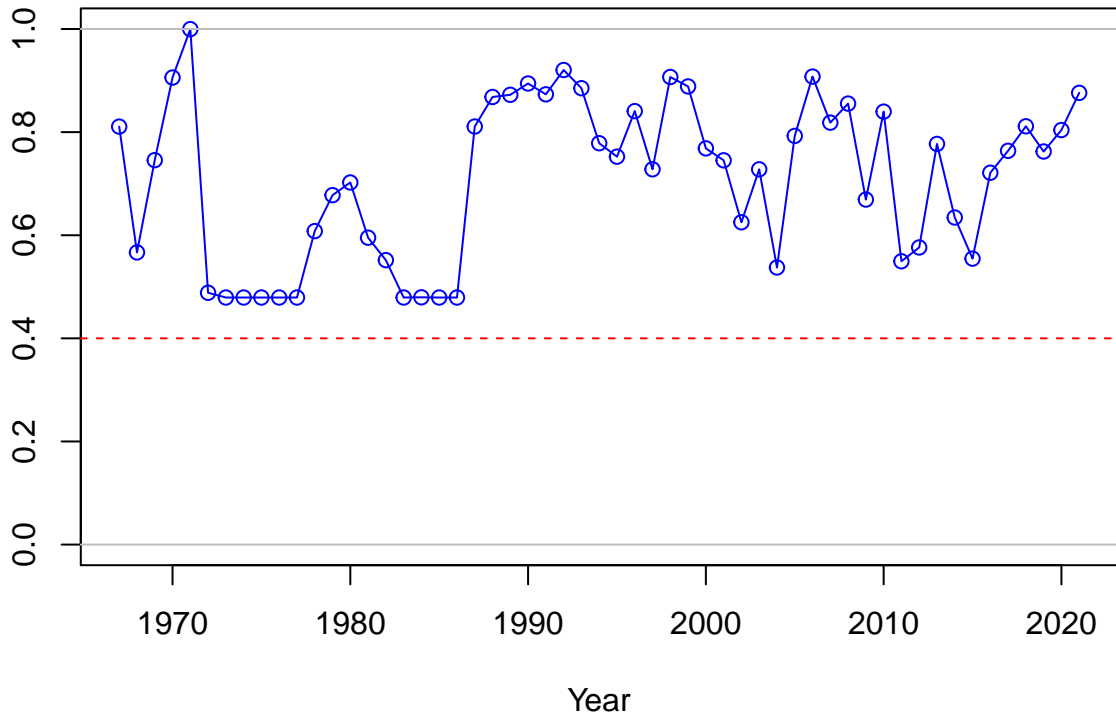
Observed and expected Landings (mt)



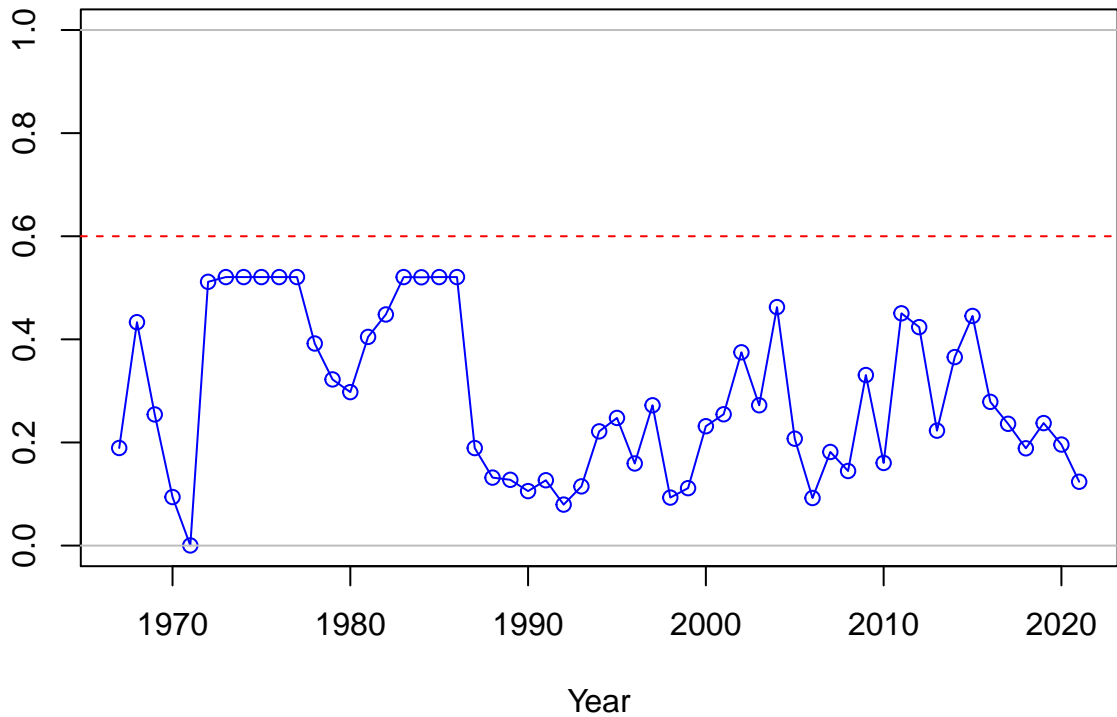




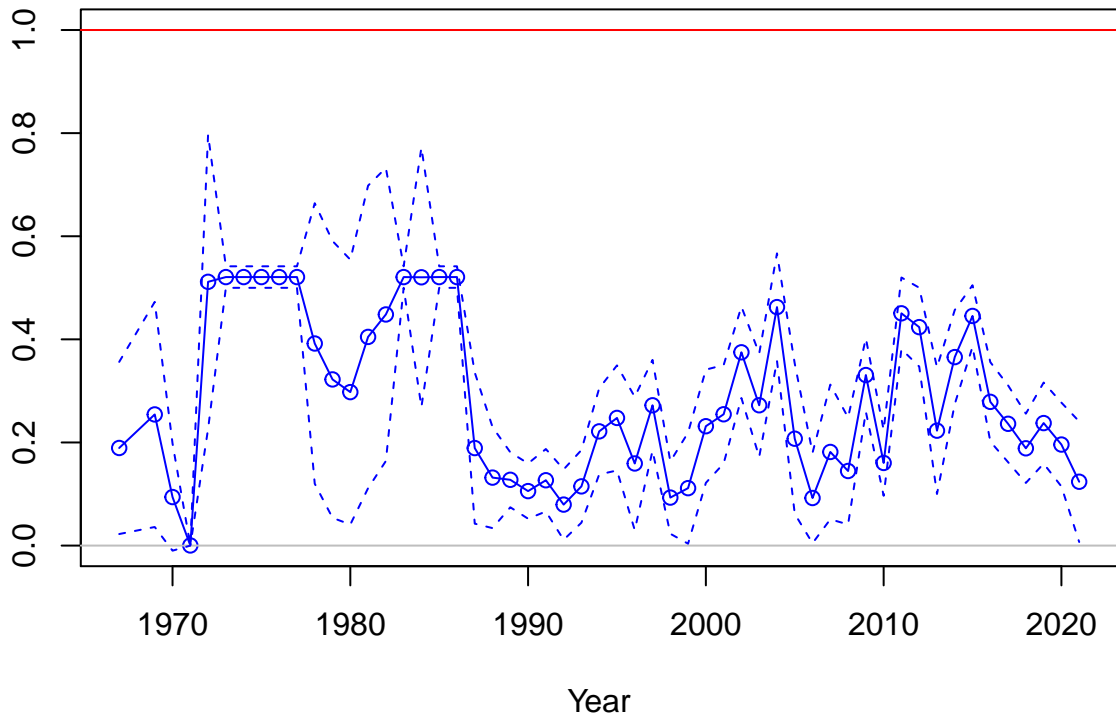
SPR



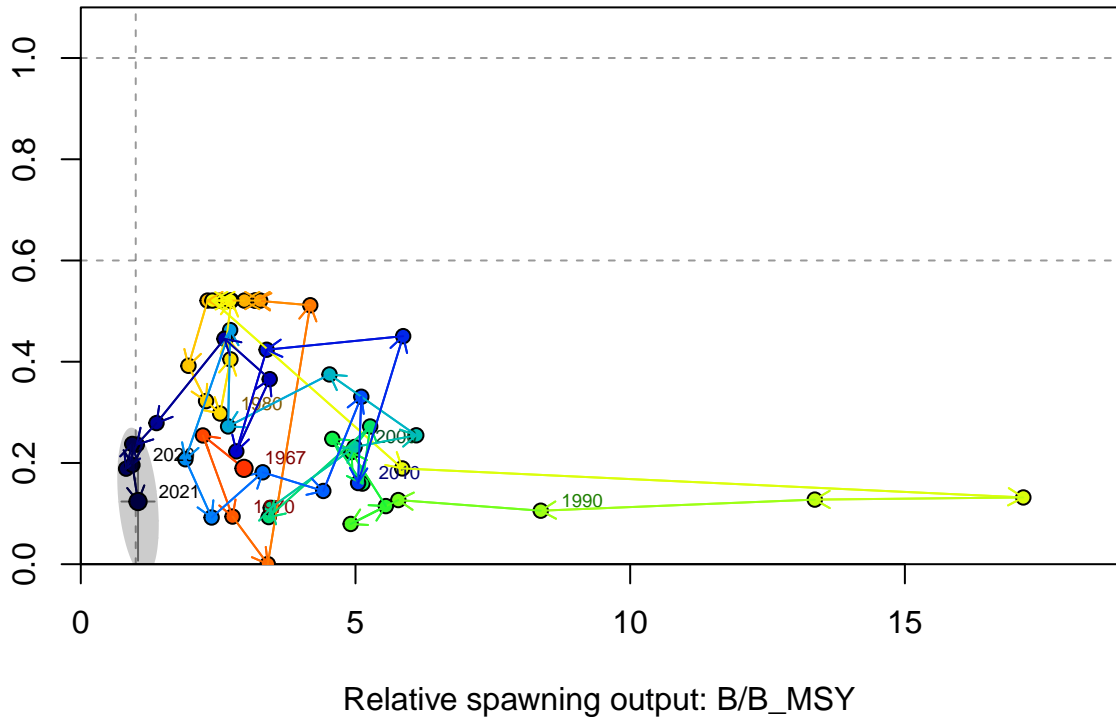
1-SPR



Fishing intensity: 1-SPR



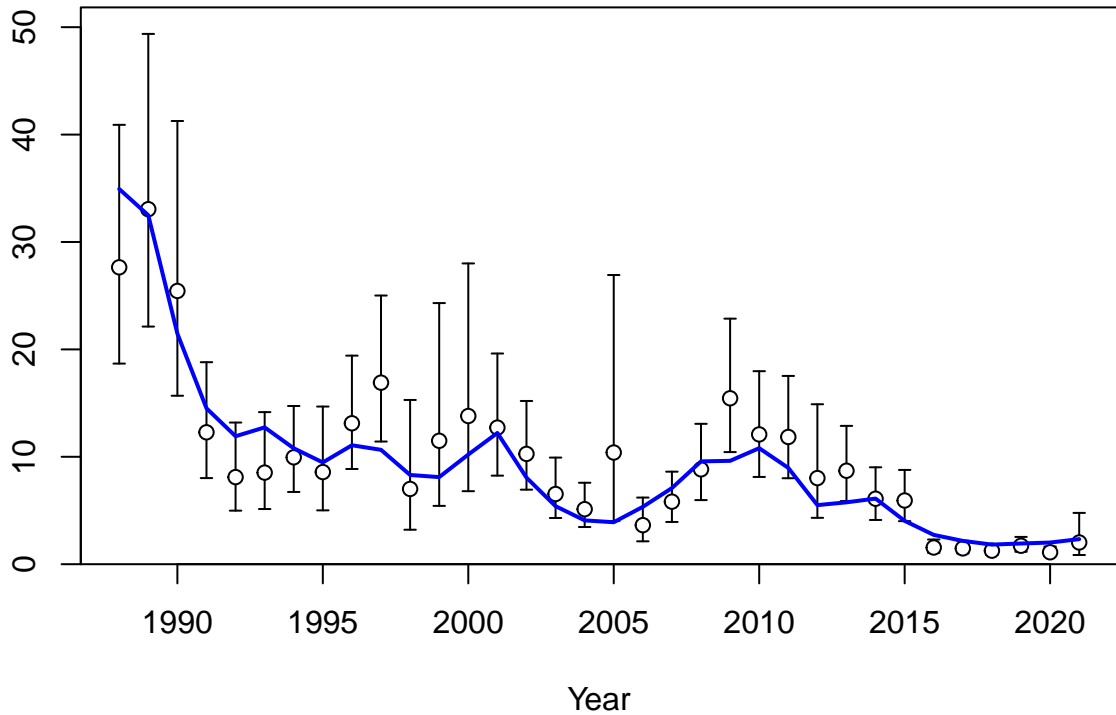
Fishing intensity: 1-SPR

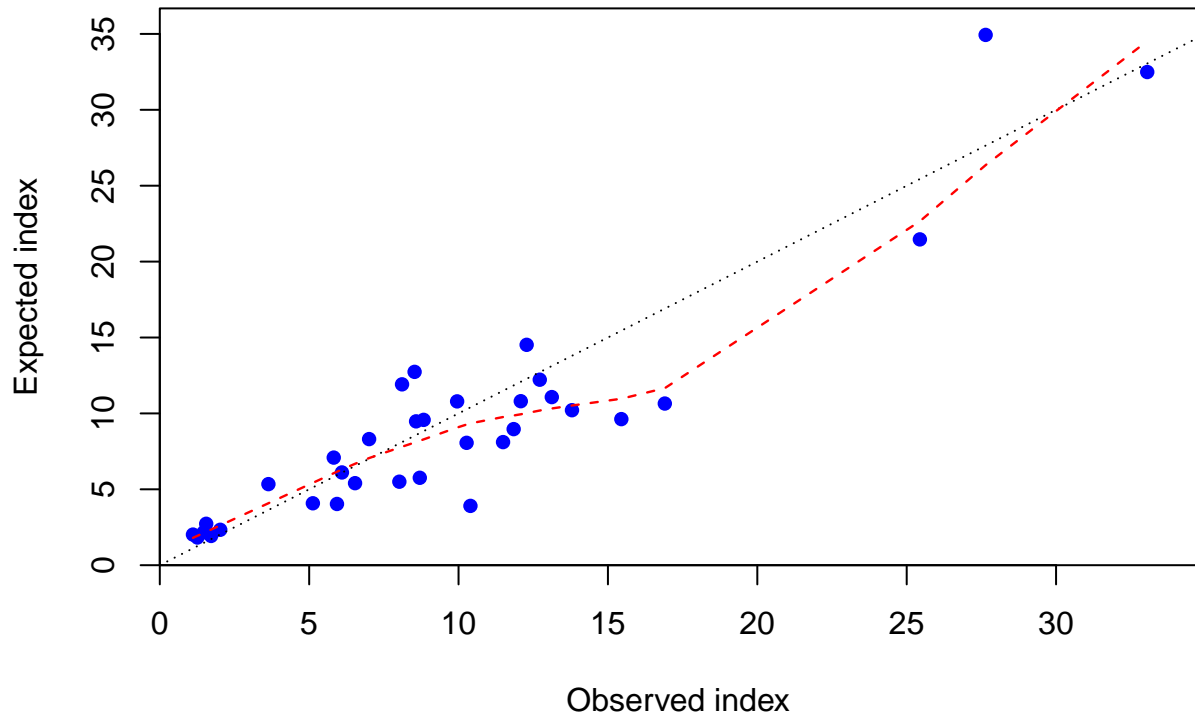


Index



Index



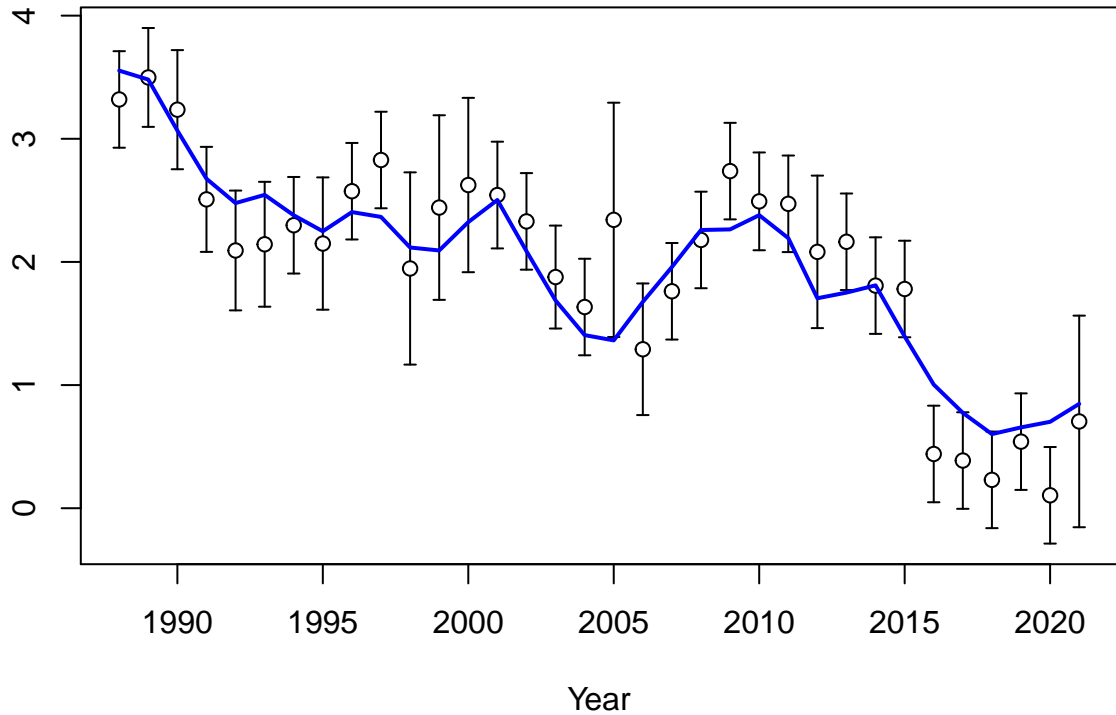


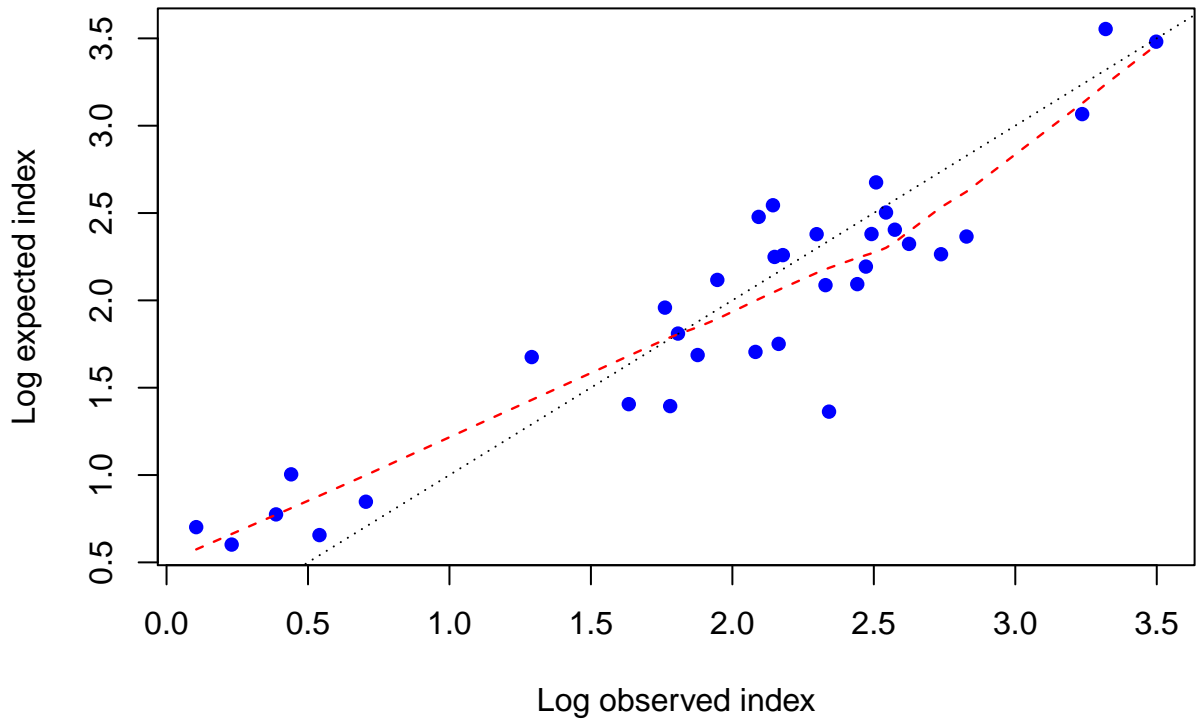
Log index

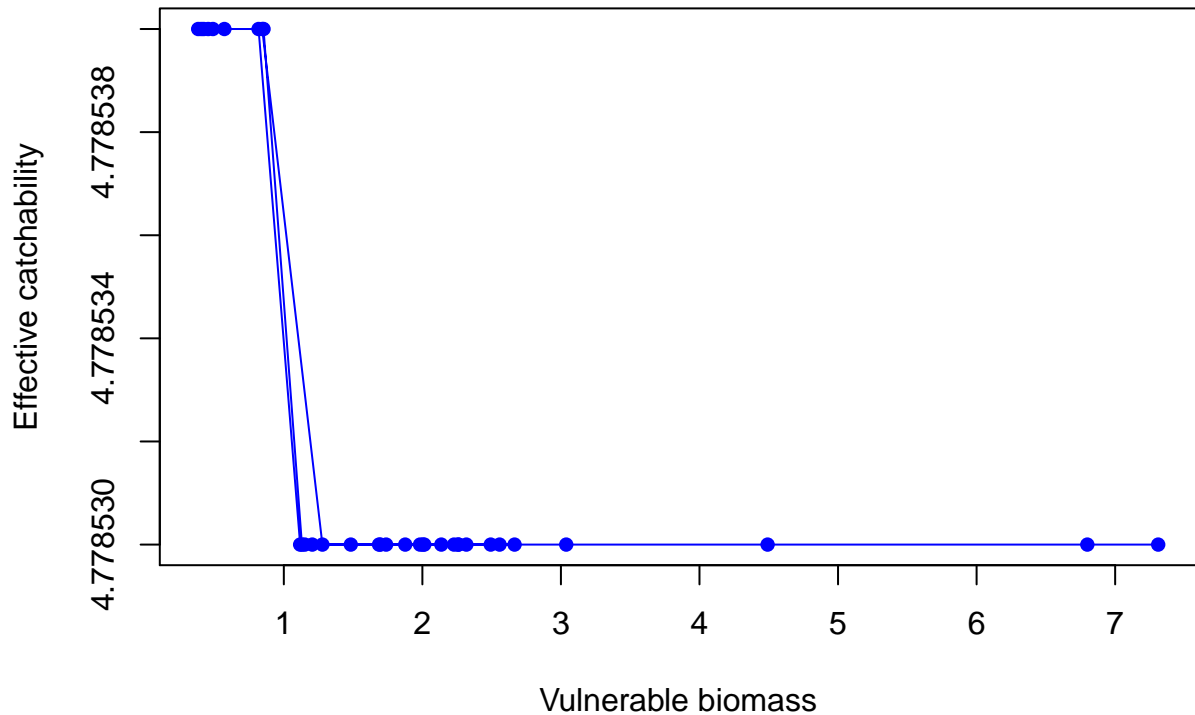


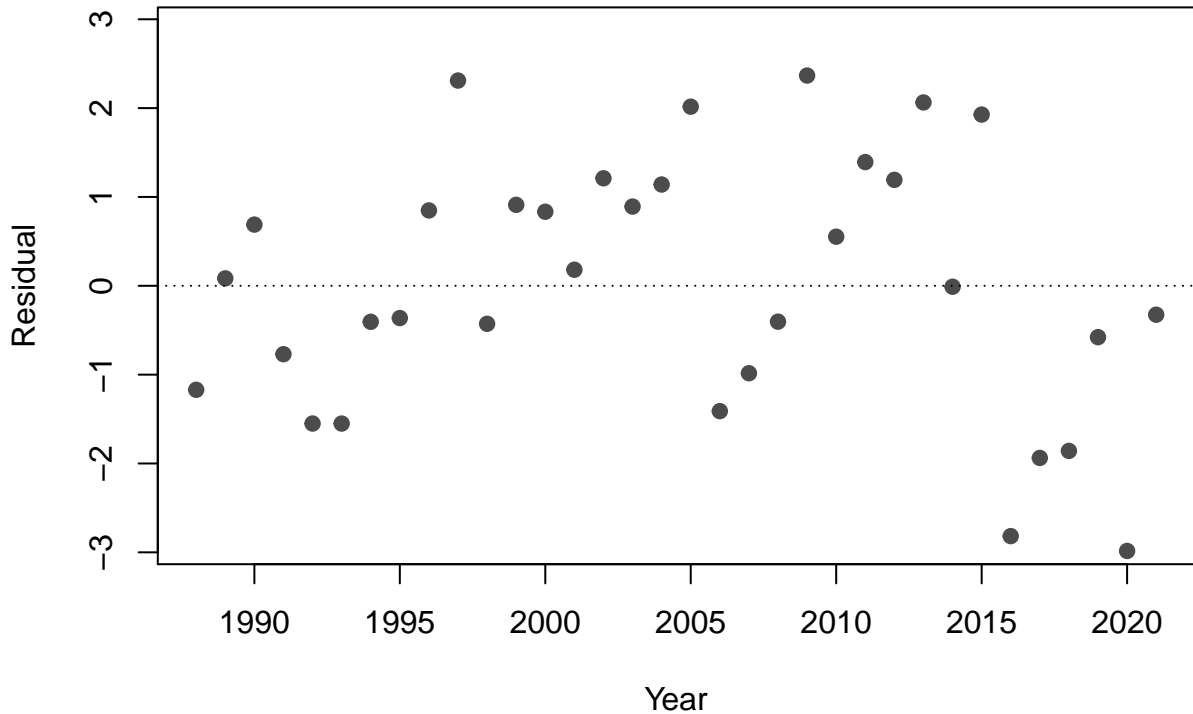


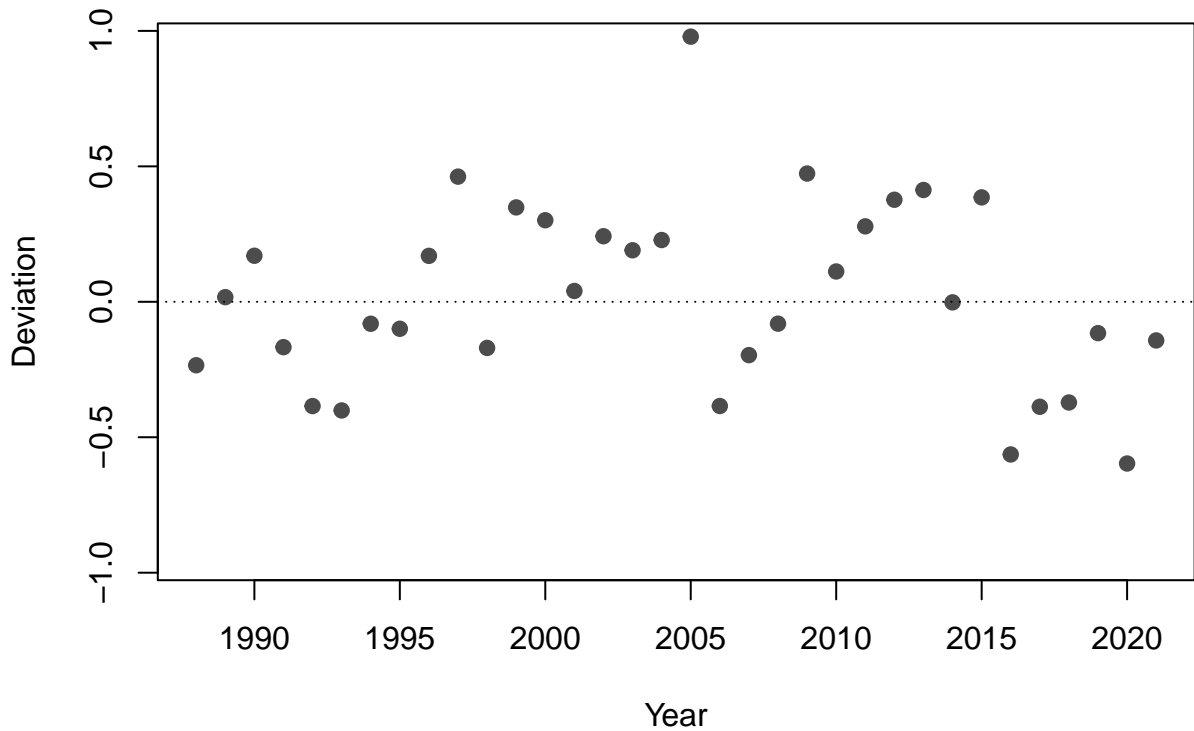
Log index

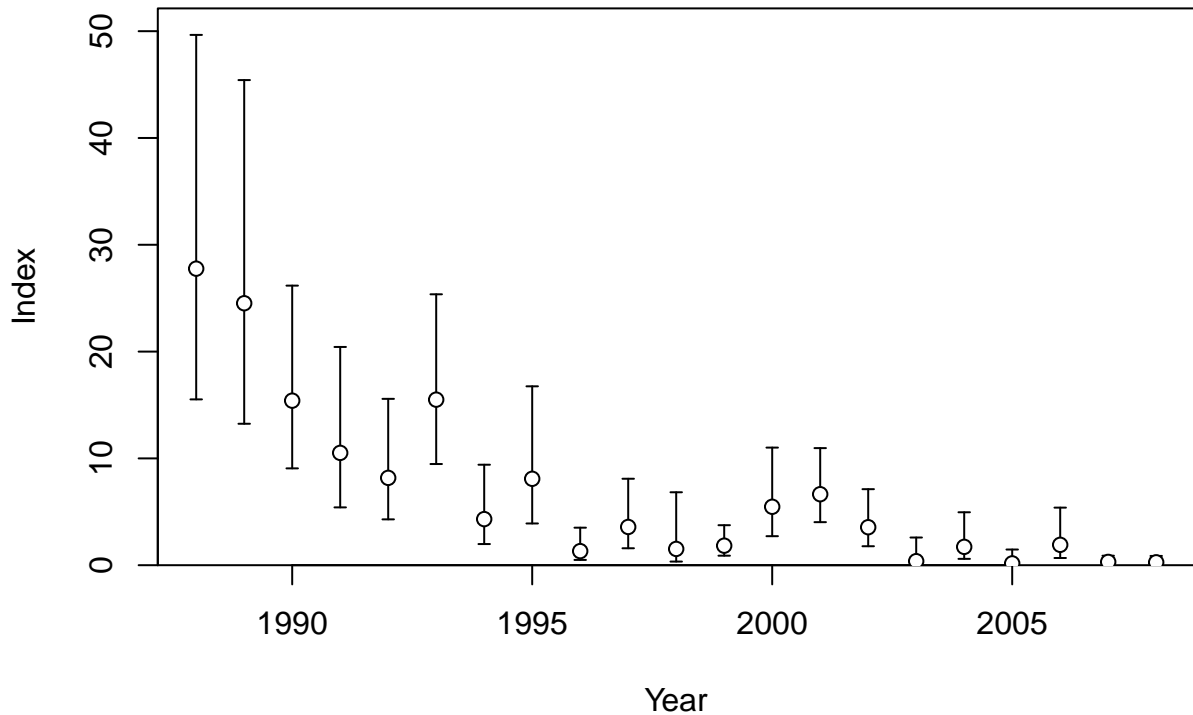


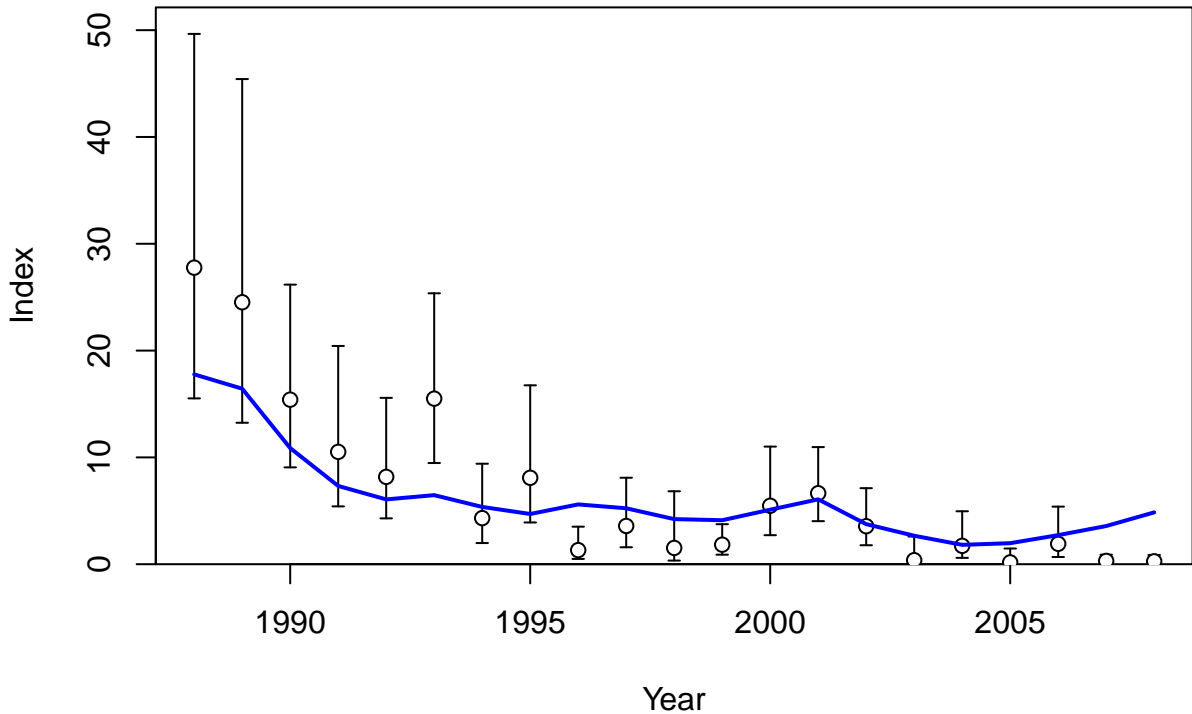


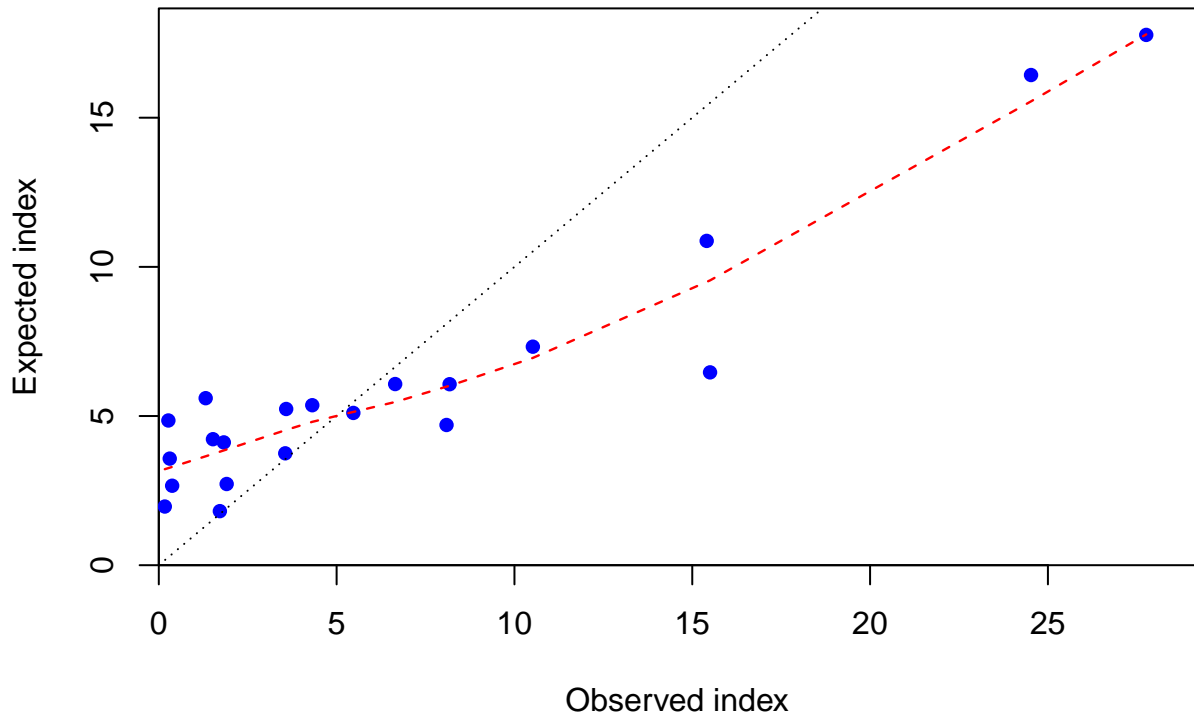






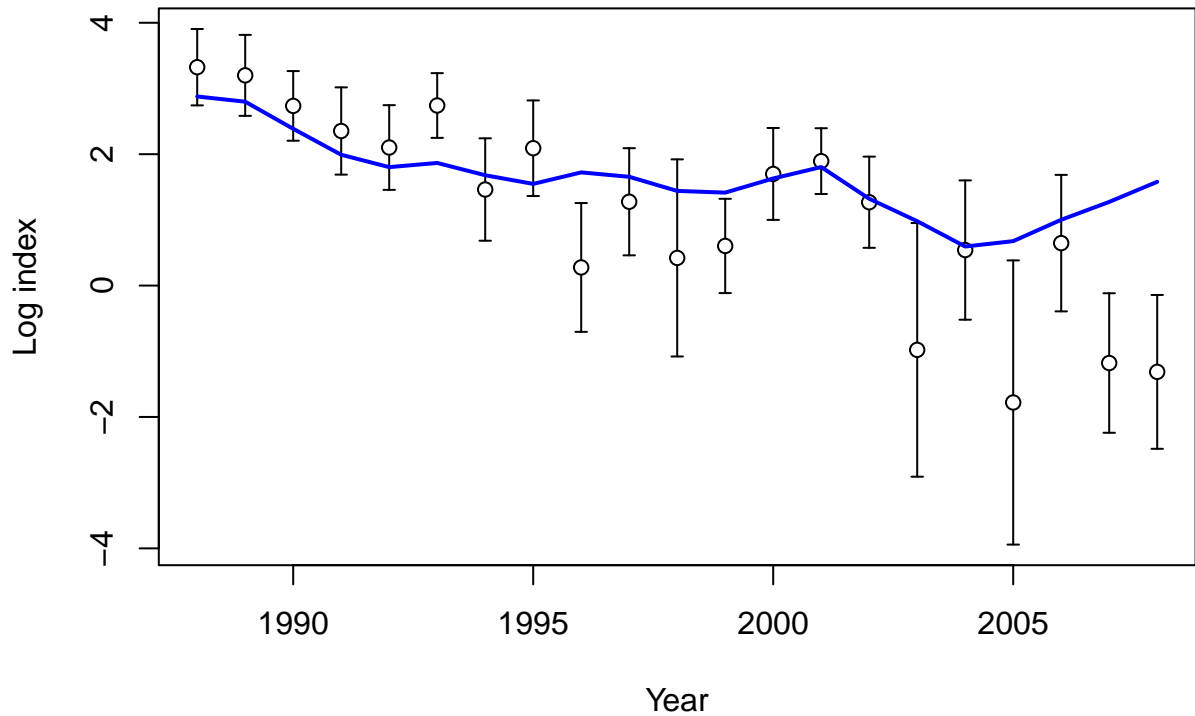


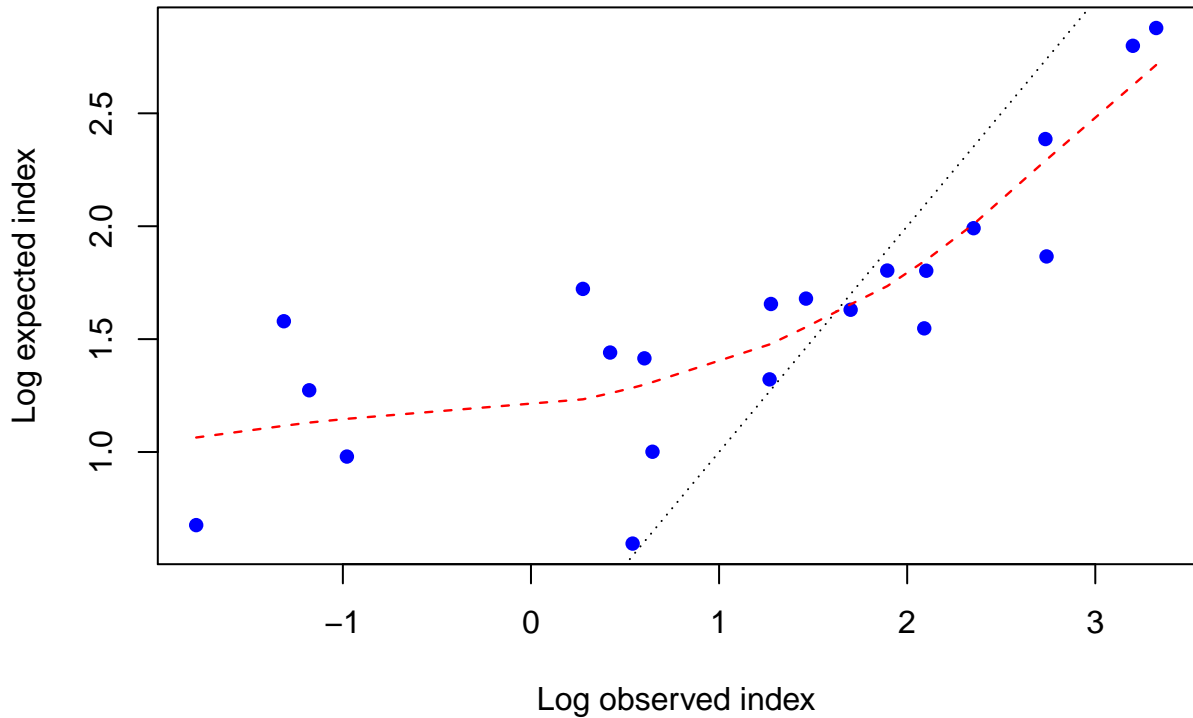


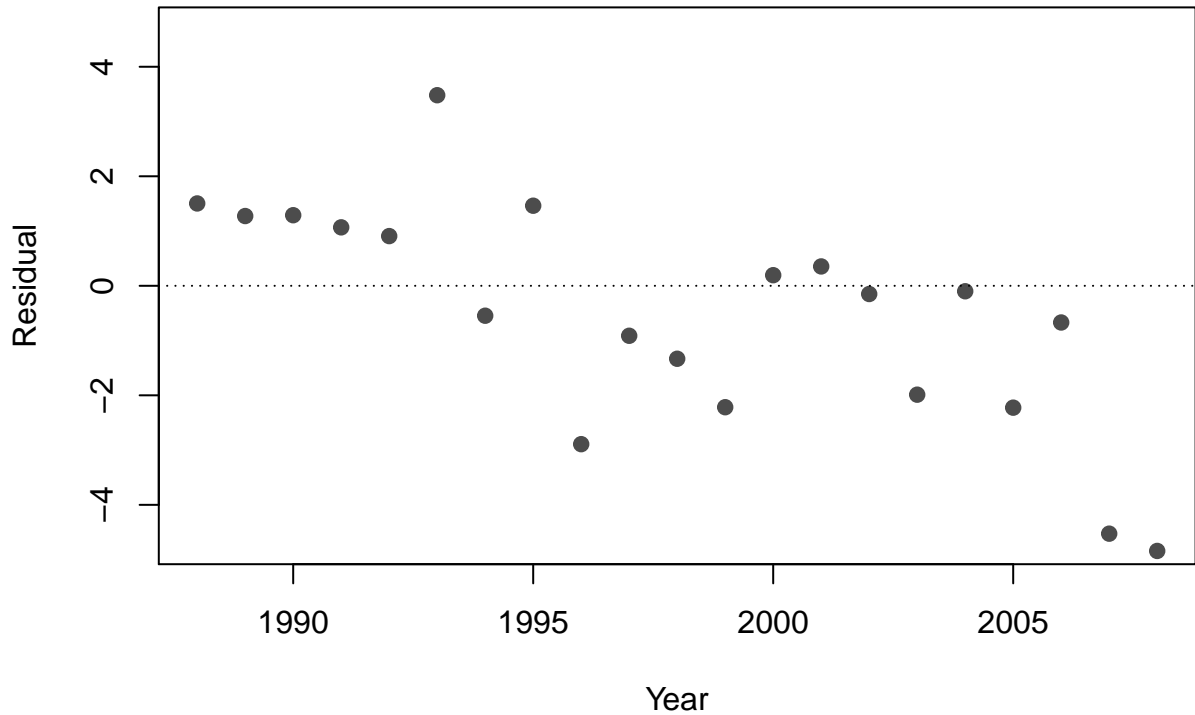




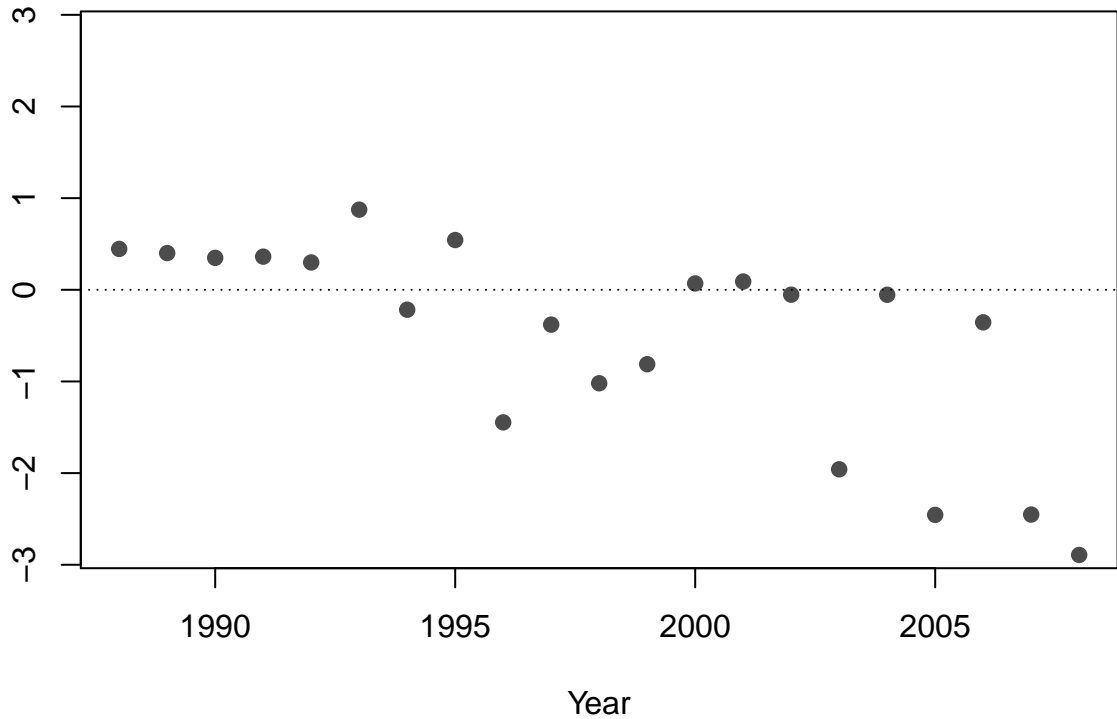


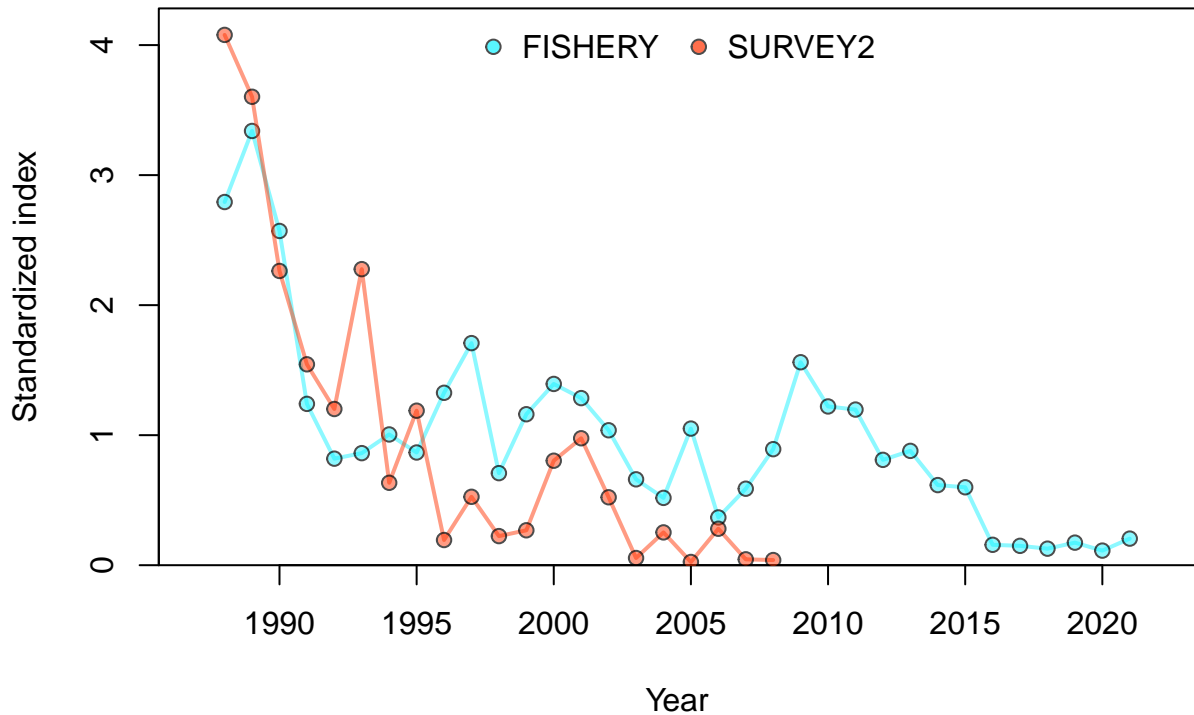




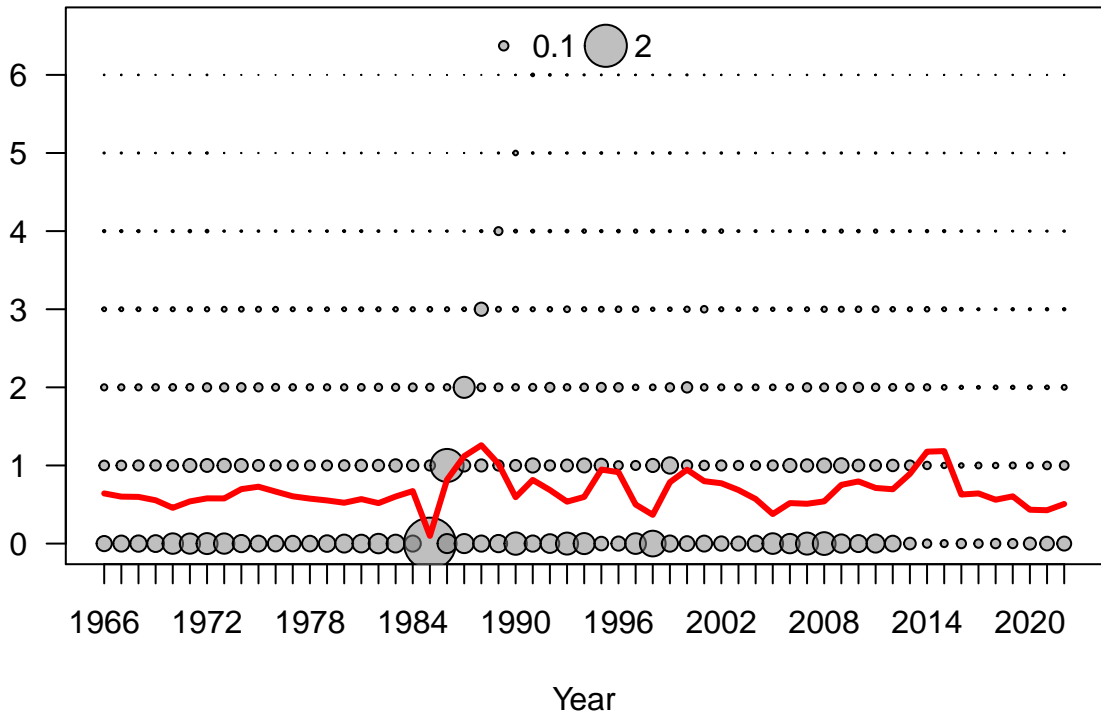


Deviation

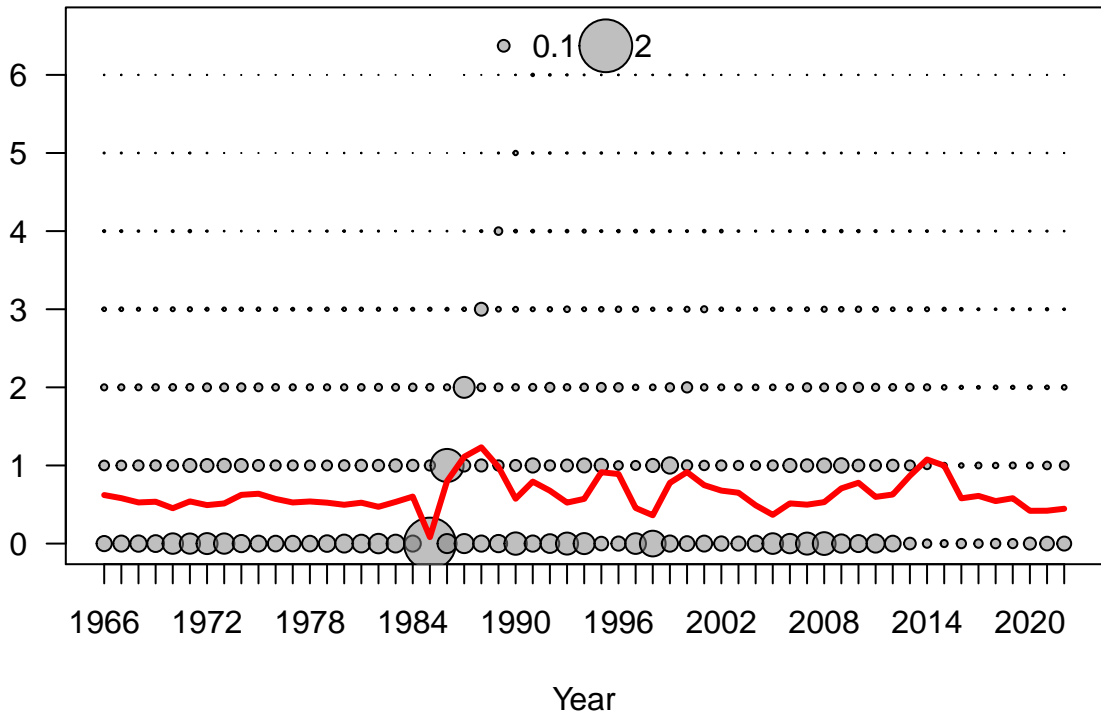




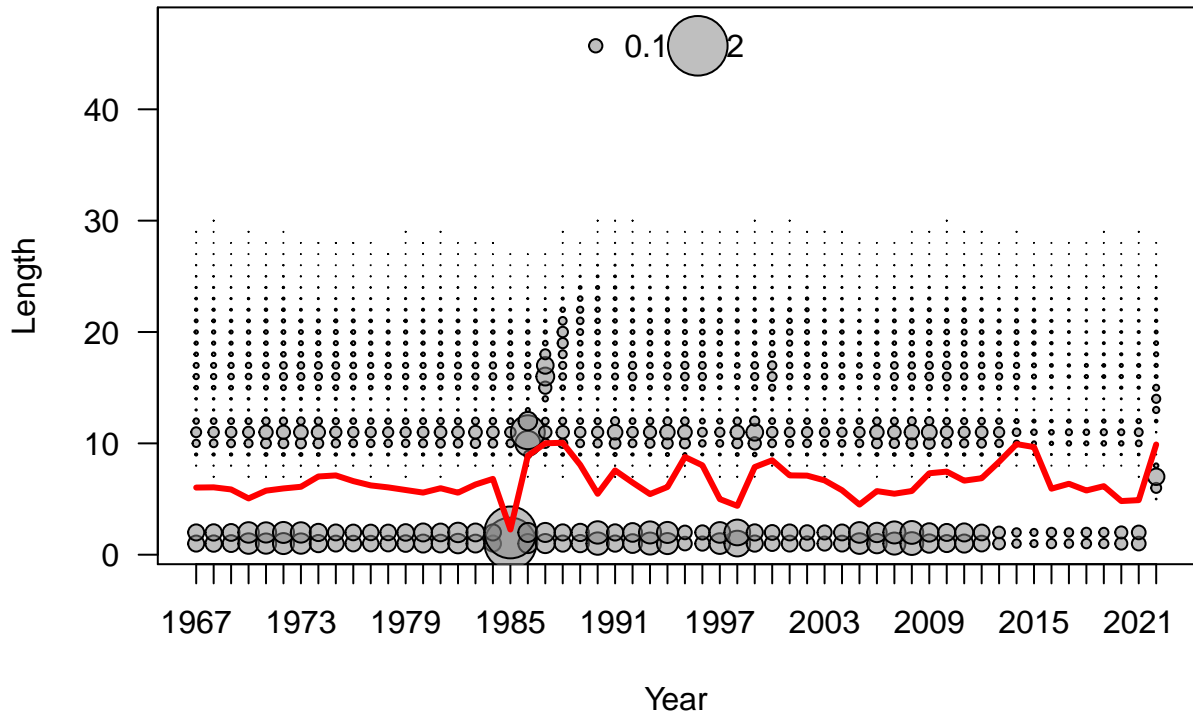
Age

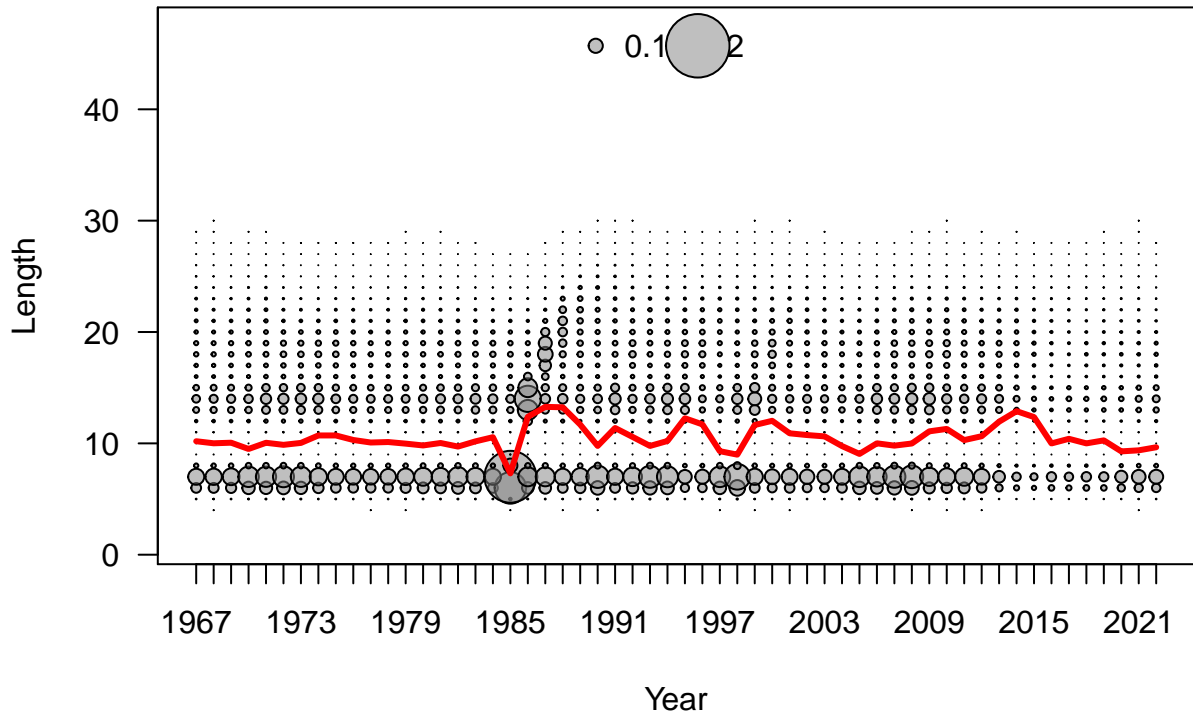


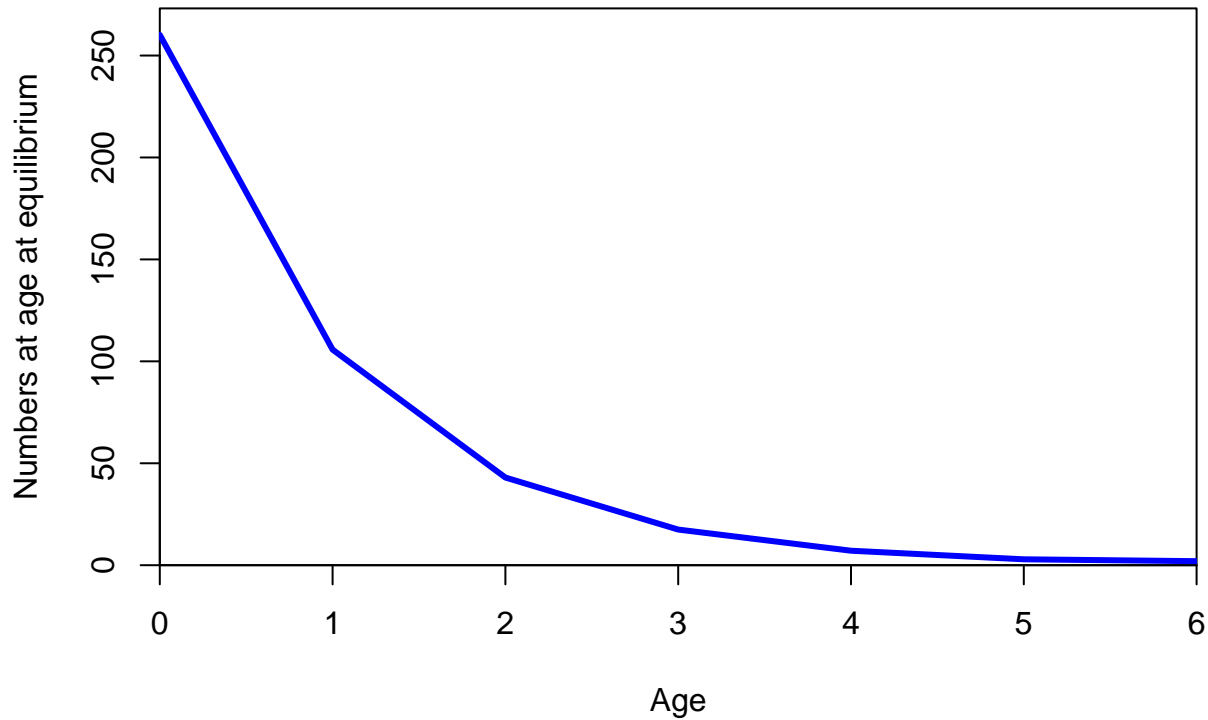
Age





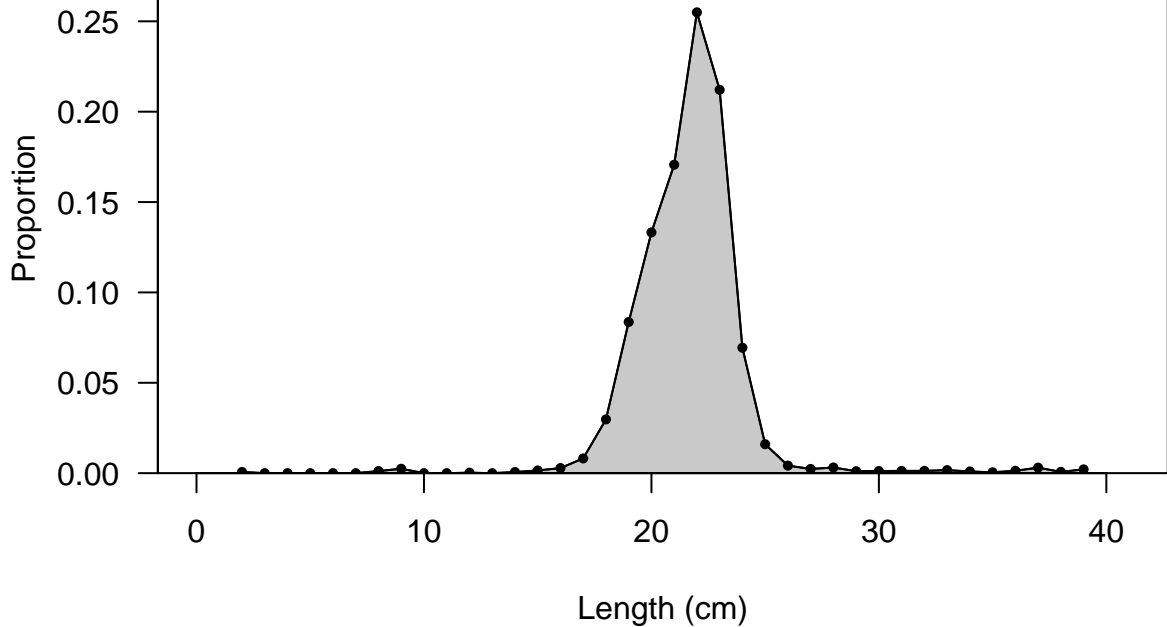


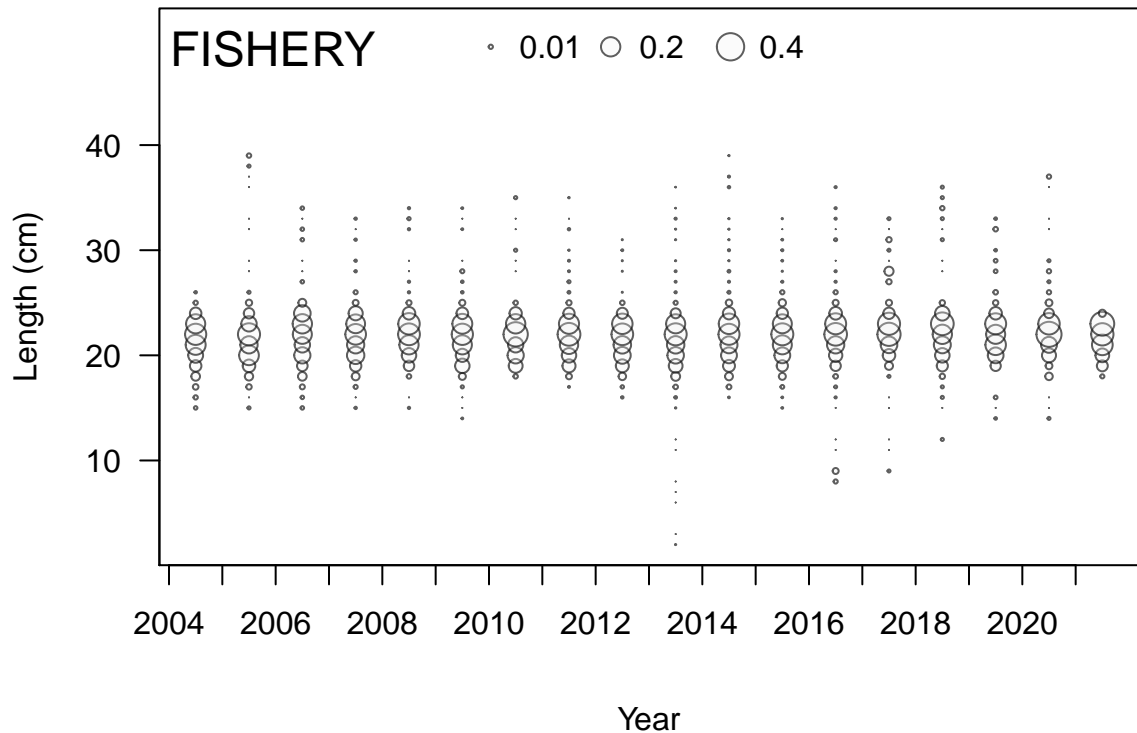




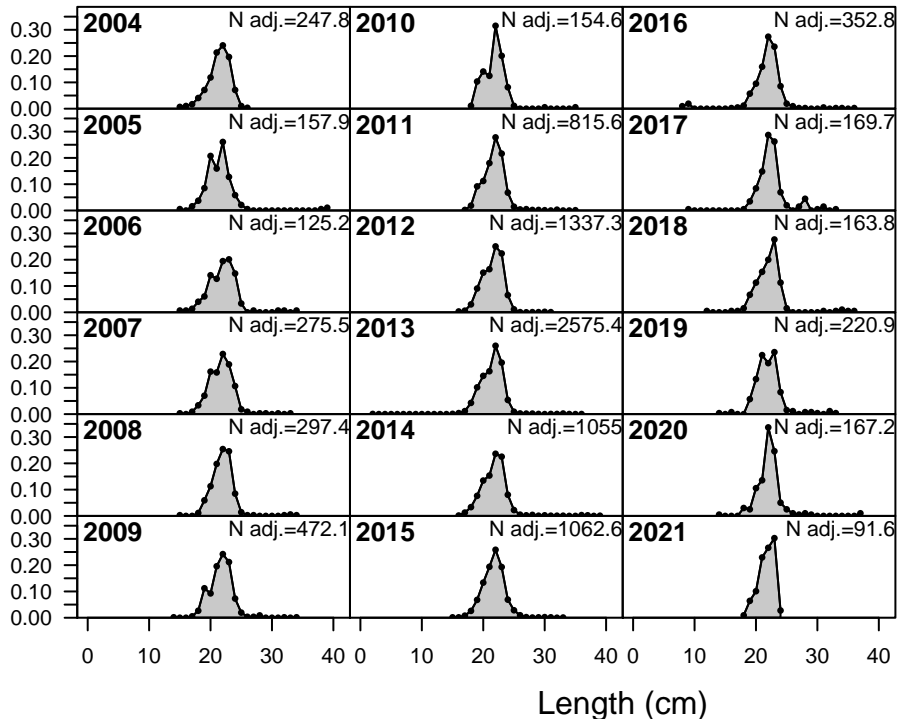
**FISHERY**

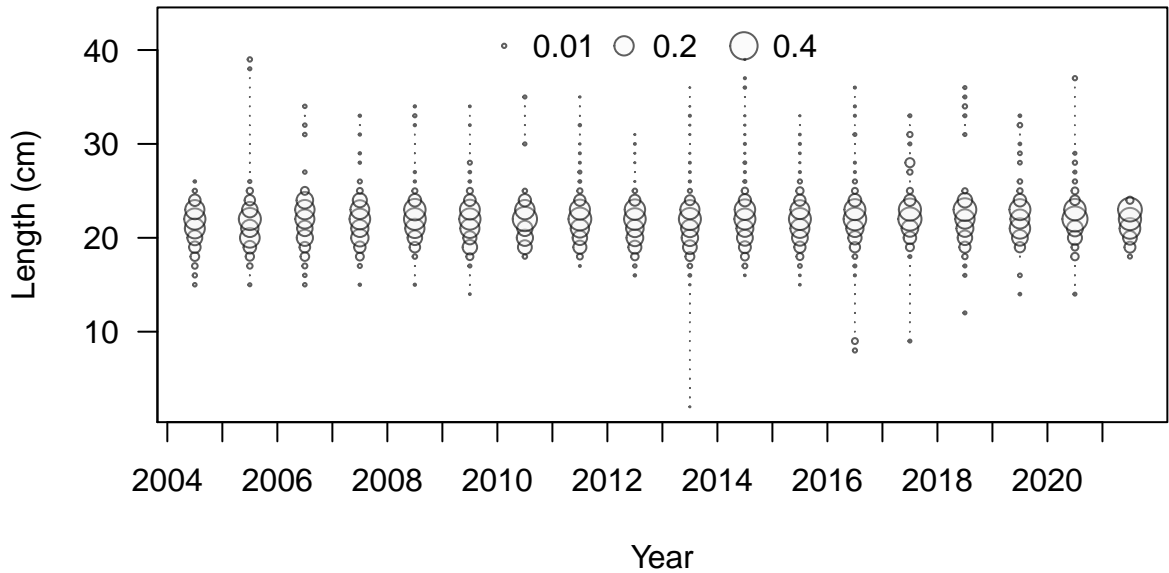
Sum of N adj.=9742.3



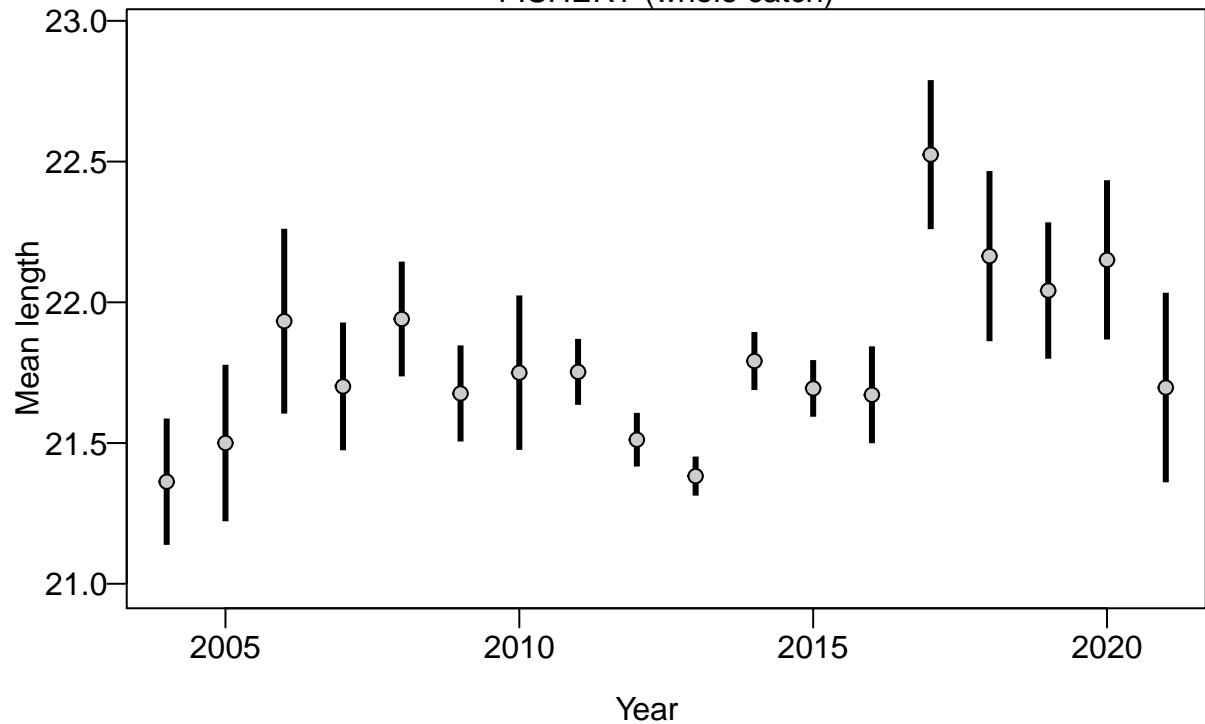


Proportion

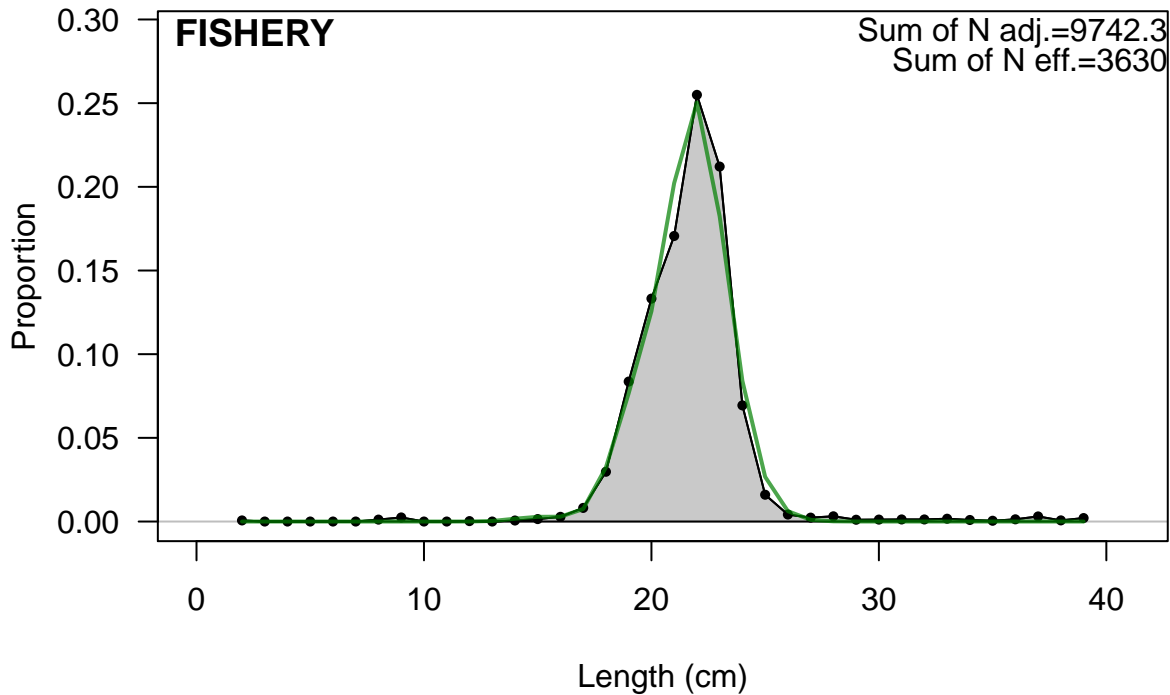


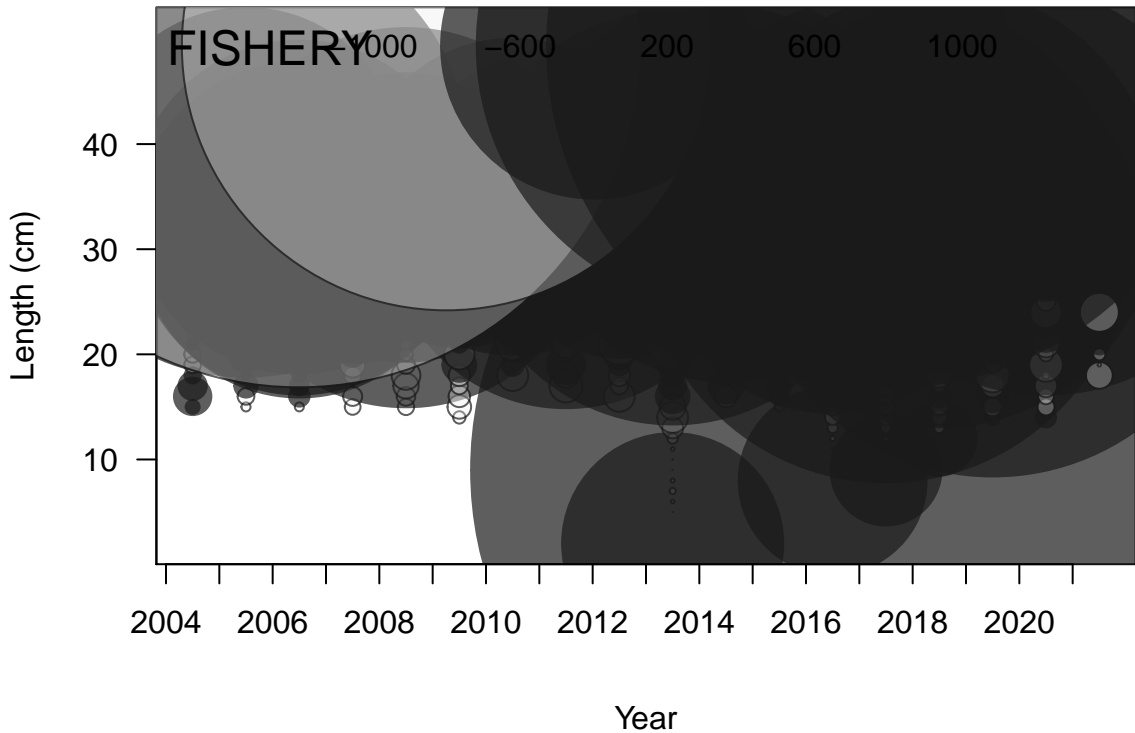


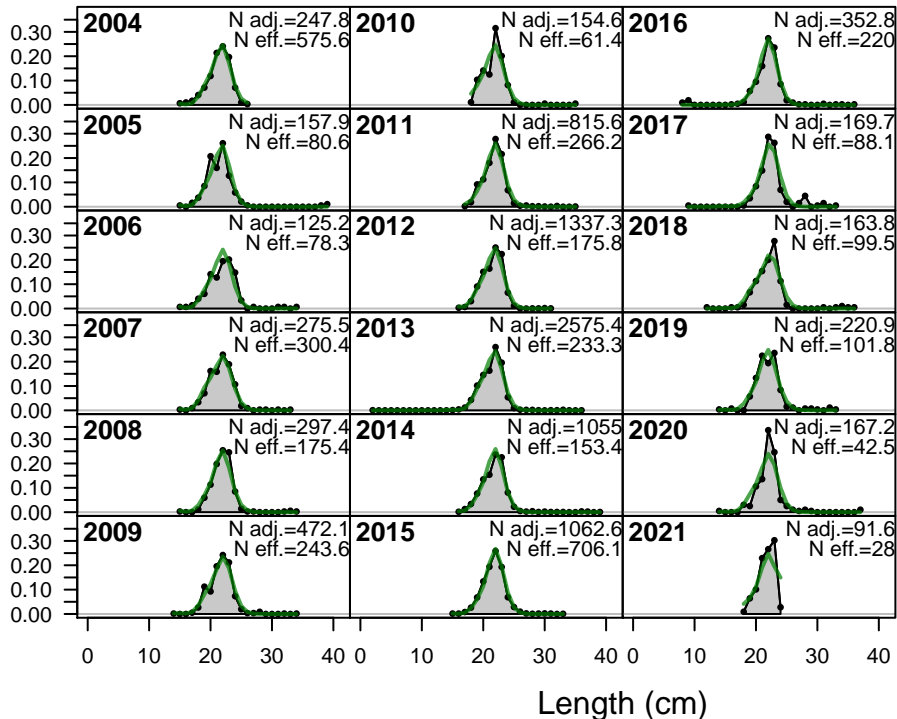
FISHERY (whole catch)

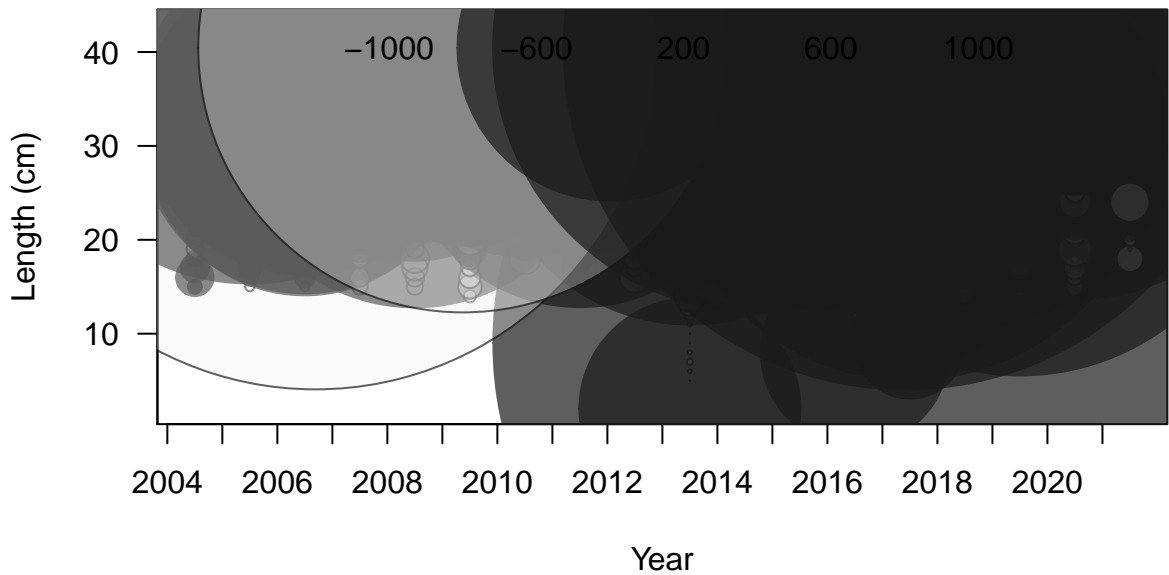




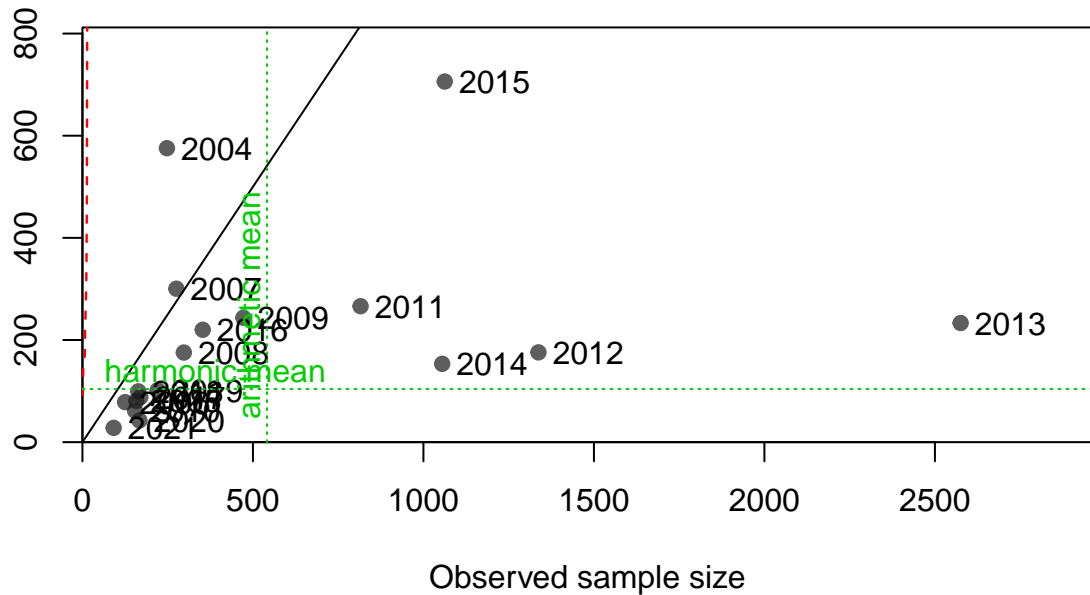




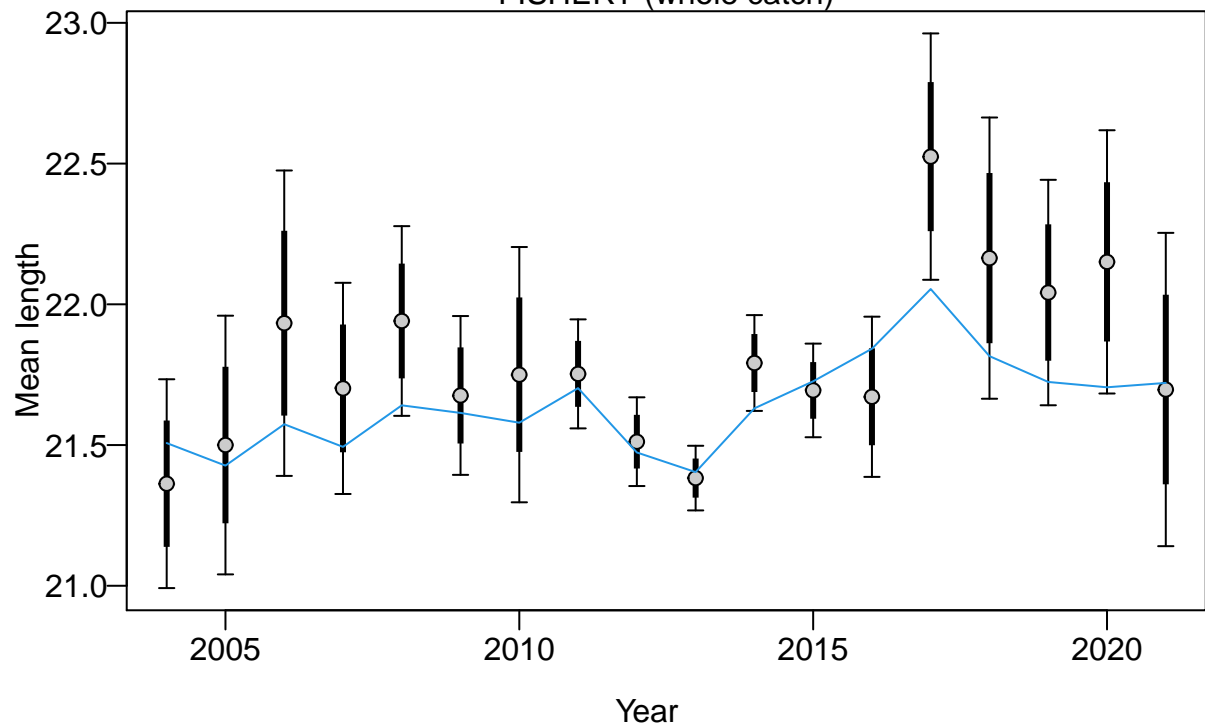


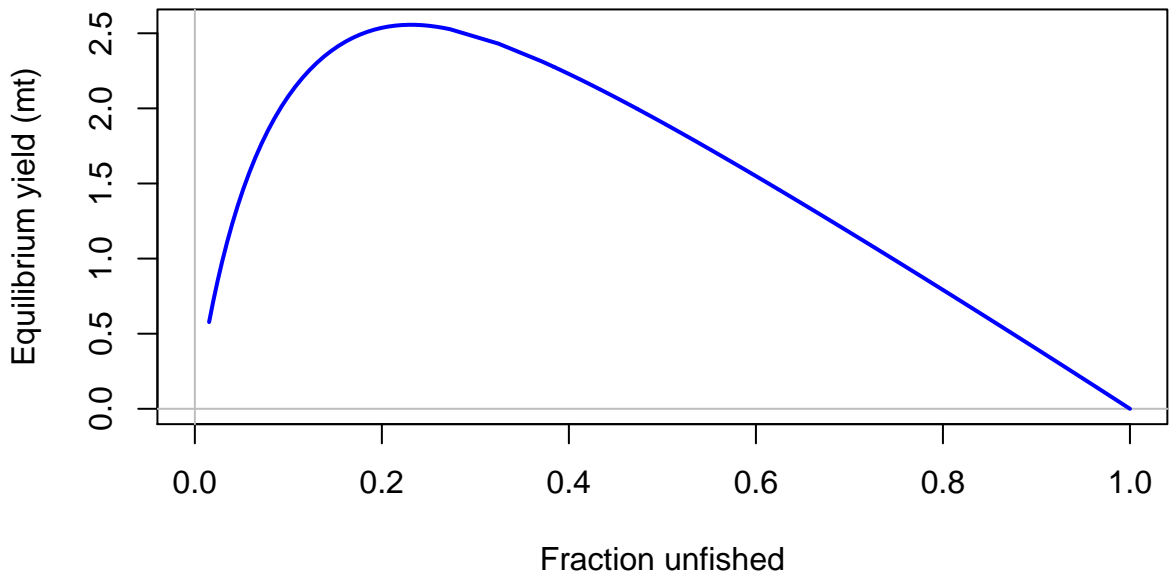


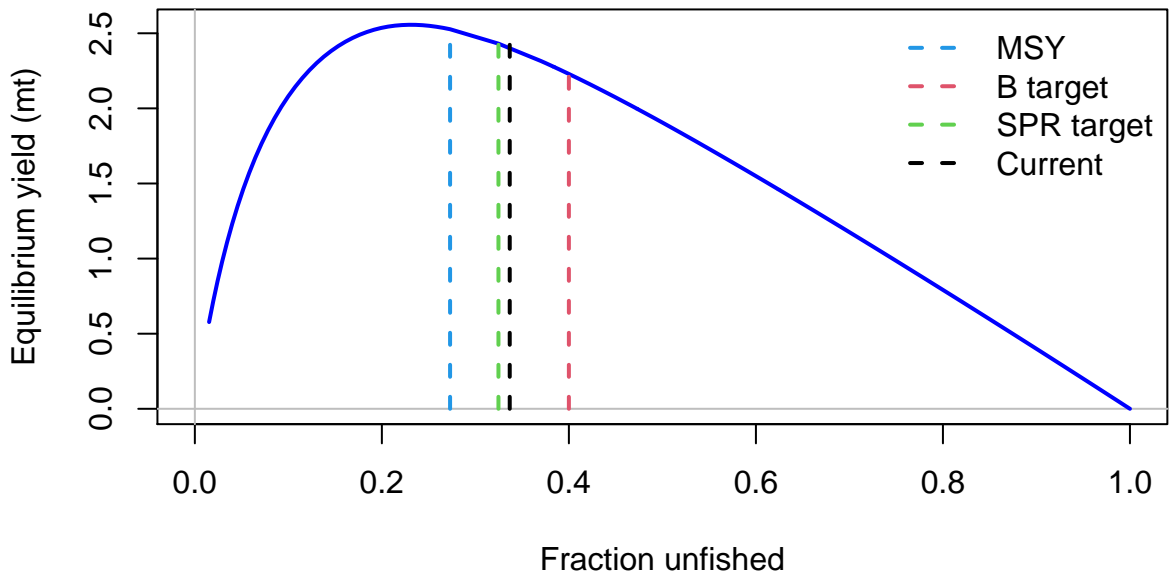
Effective sample size



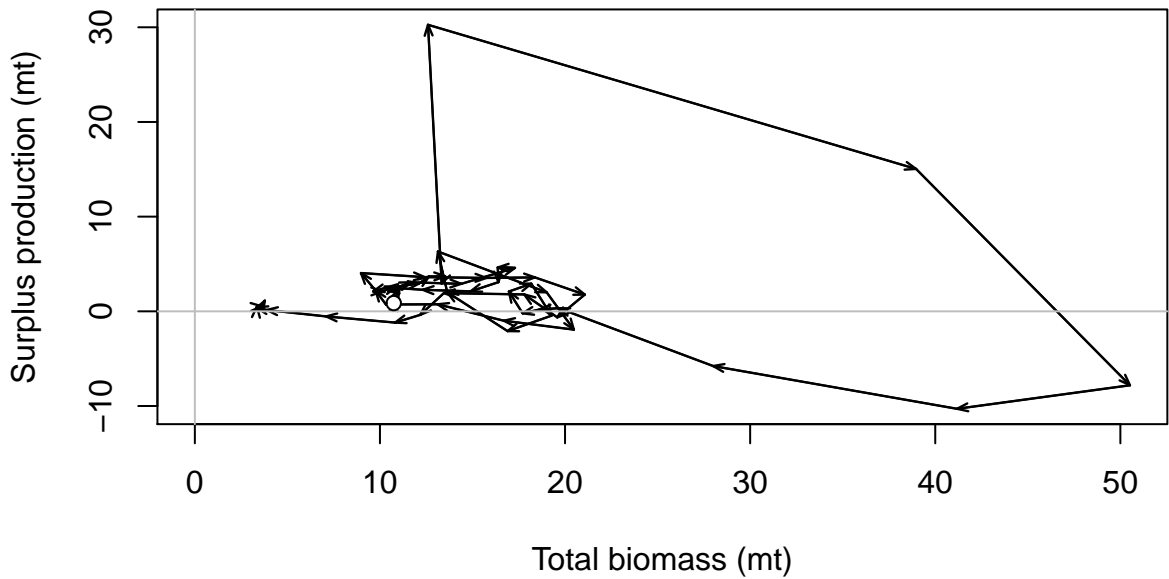
FISHERY (whole catch)

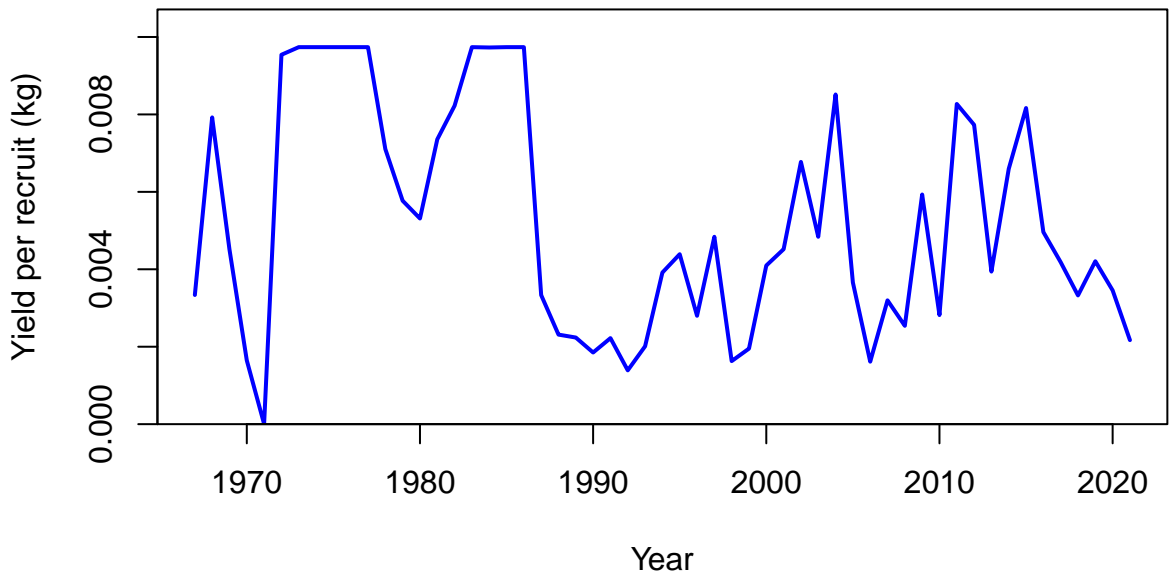


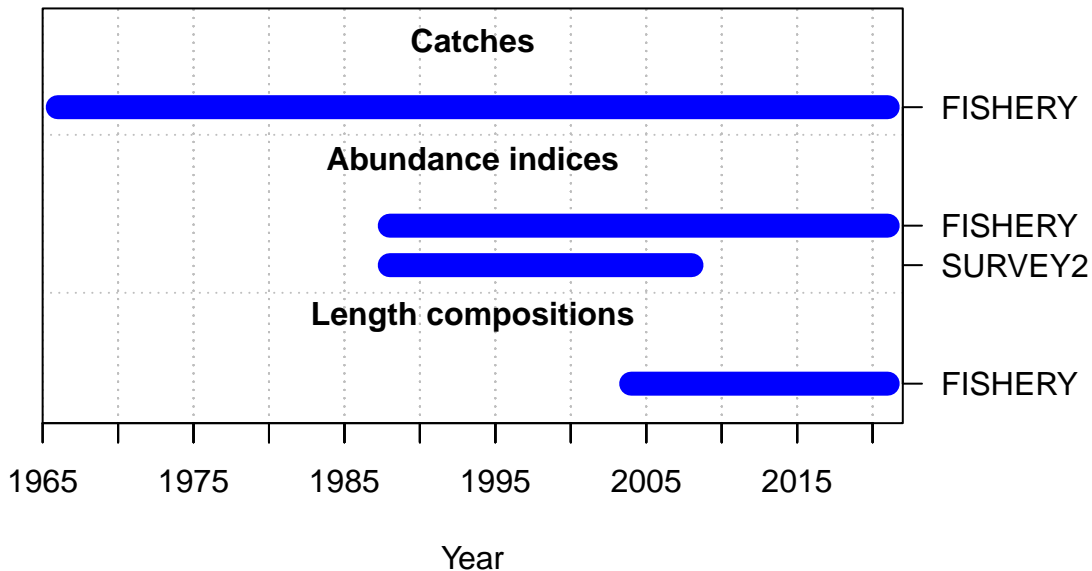


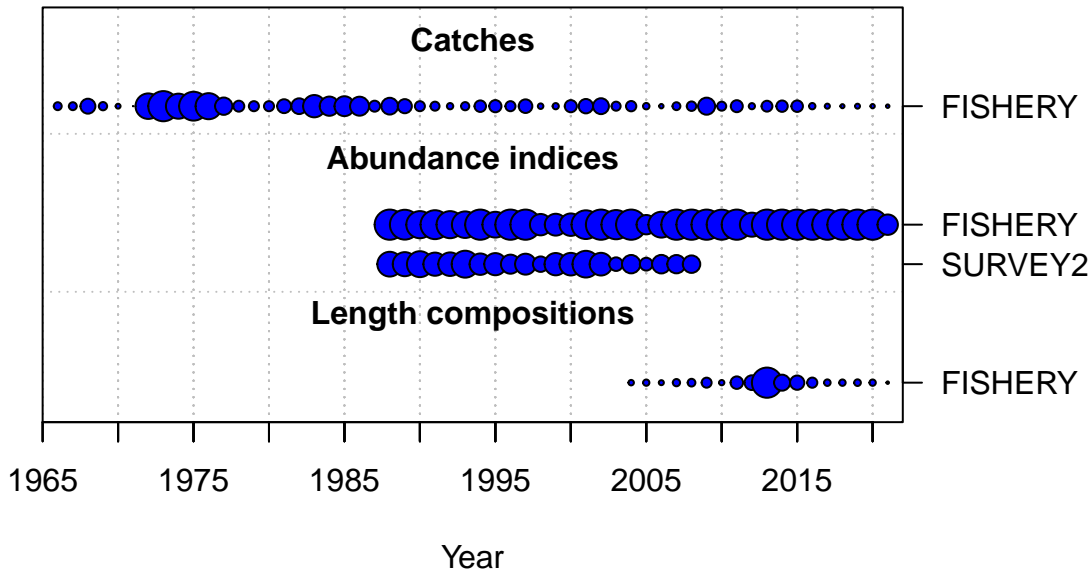






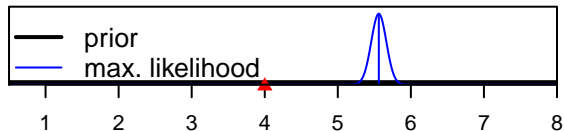




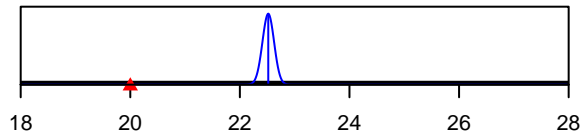


Density

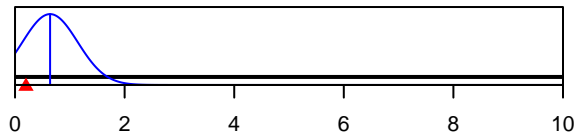
SR\_LN(R0)



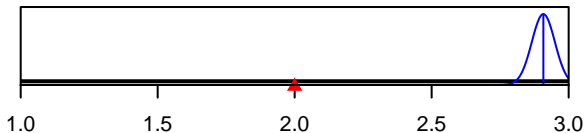
Size\_inflection\_FISHERY(1)



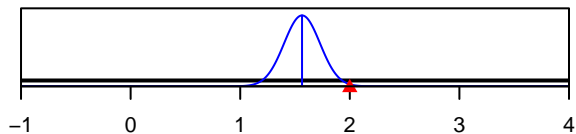
InitF\_seas\_1\_flt\_1FISHERY



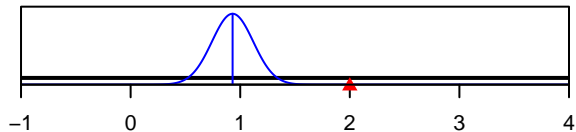
Size\_95%width\_FISHERY(1)



LnQ\_base\_FISHERY(1)



LnQ\_base\_SURVEY2(2)



Parameter value