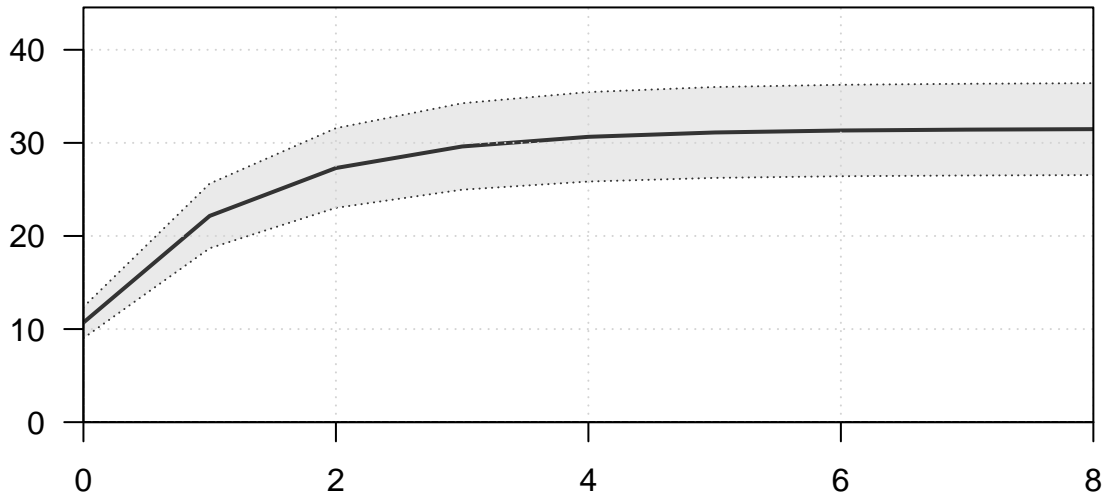
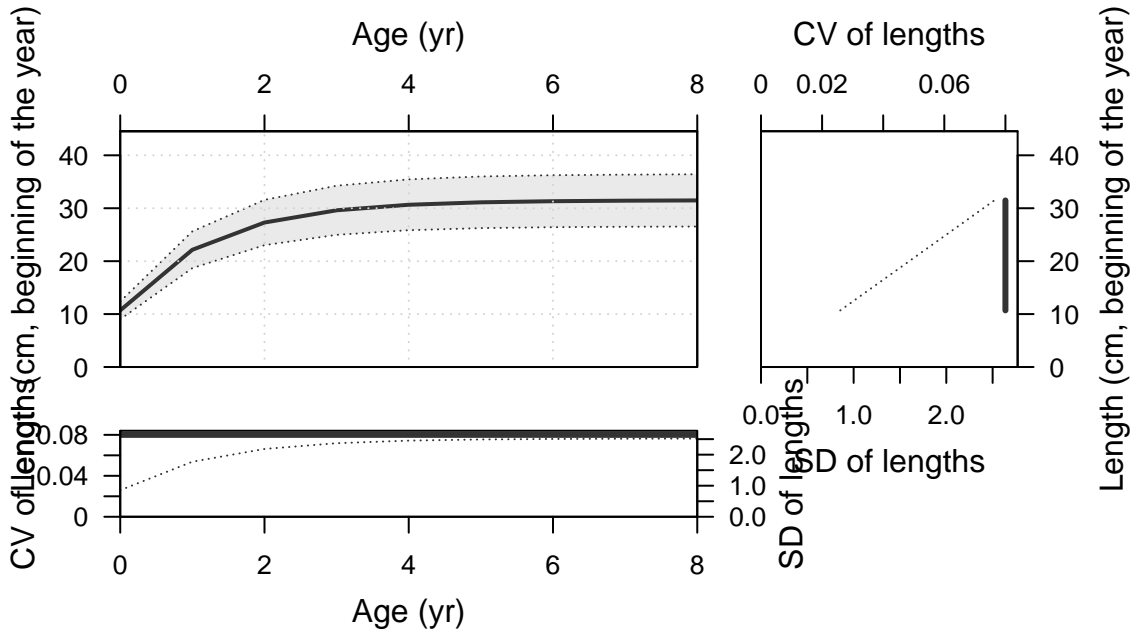


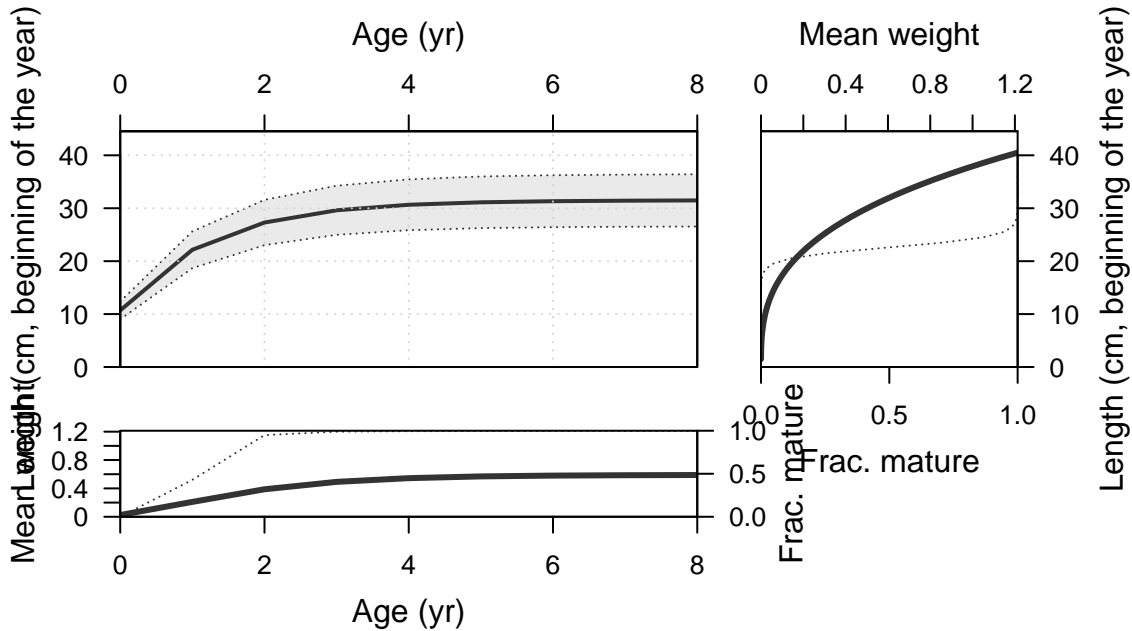
Plots created using the 'r4ss' package in R  
Stock Synthesis version: 3.30.19.0  
StartTime: Fri Jul 15 08:33:57 2022  
Data\_File: data.ss  
Control\_File: control.ss

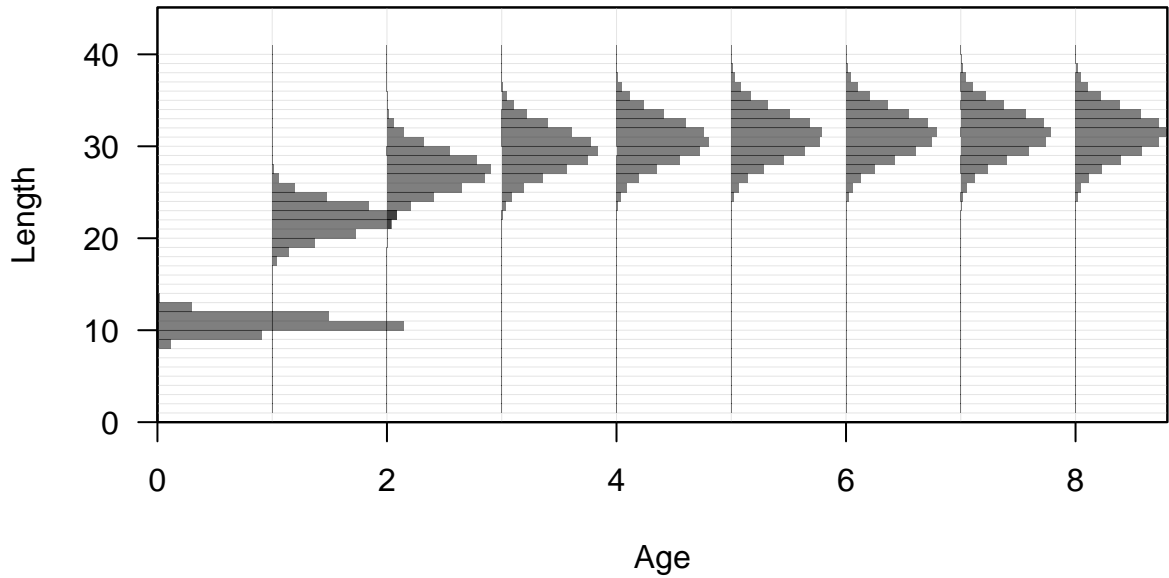
Length (cm, beginning of the year)

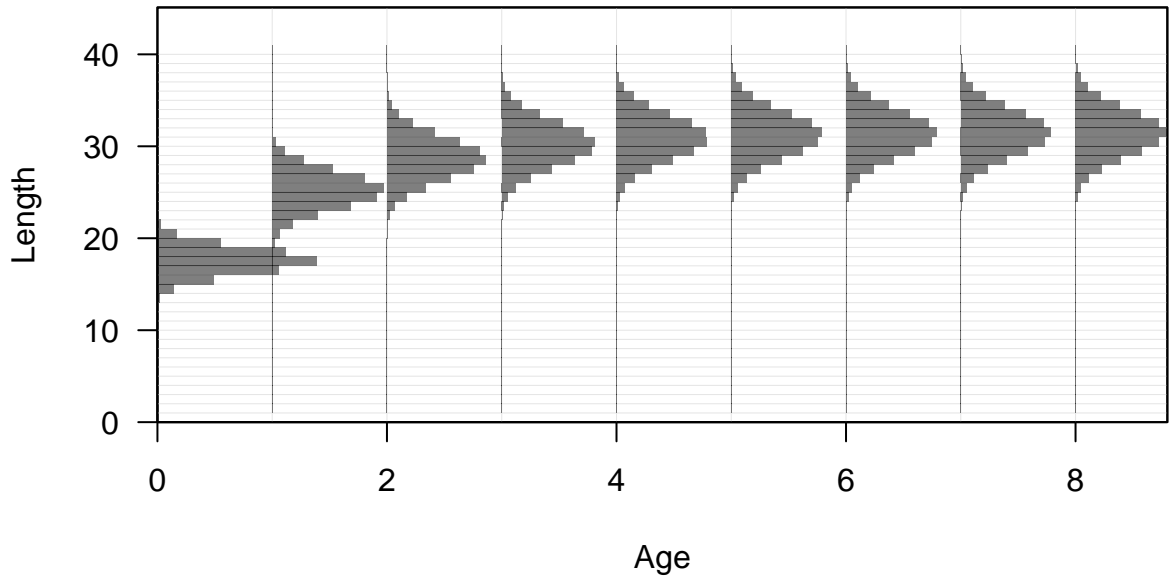


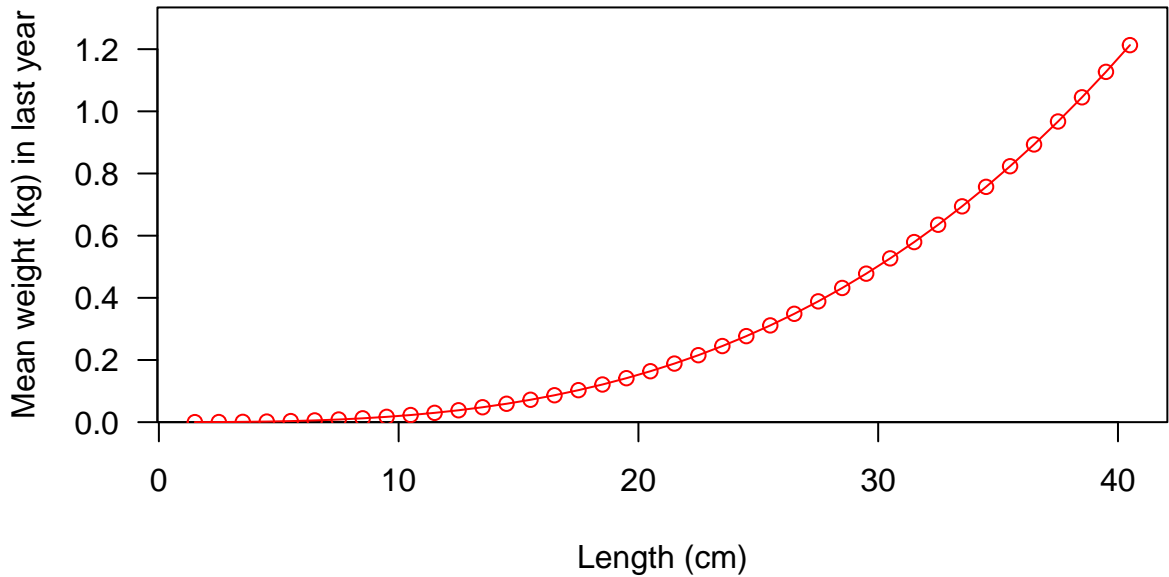
Age (yr)

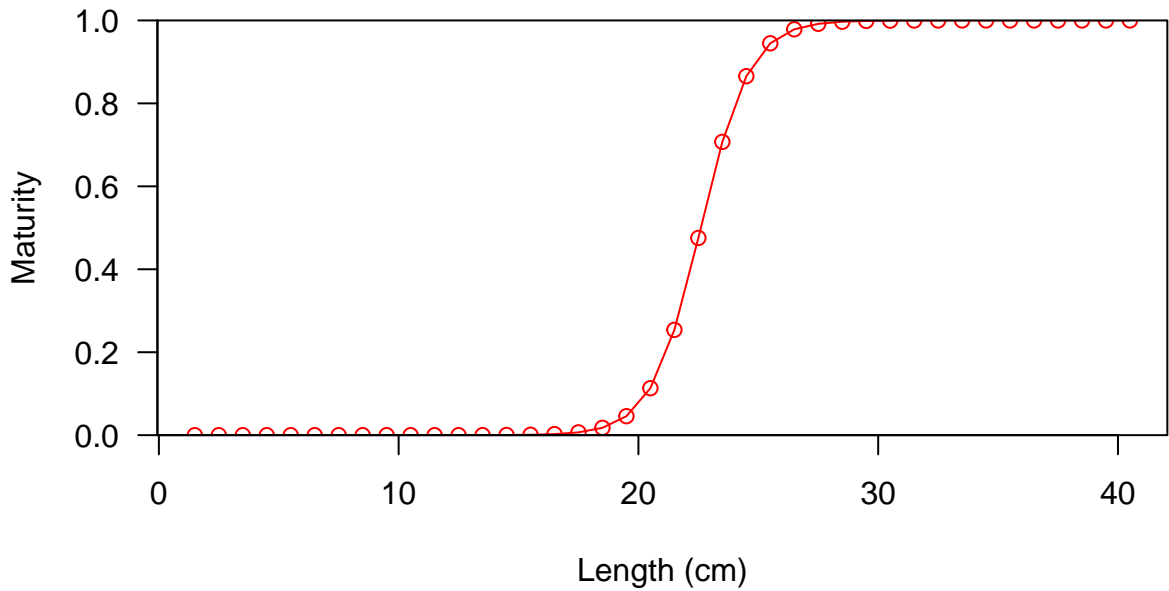




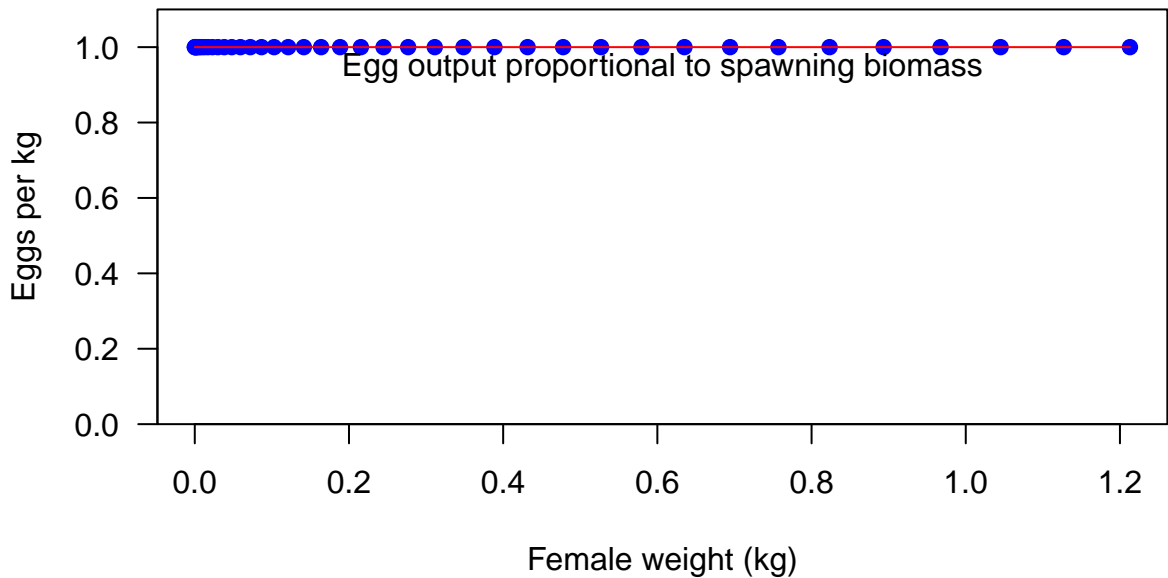


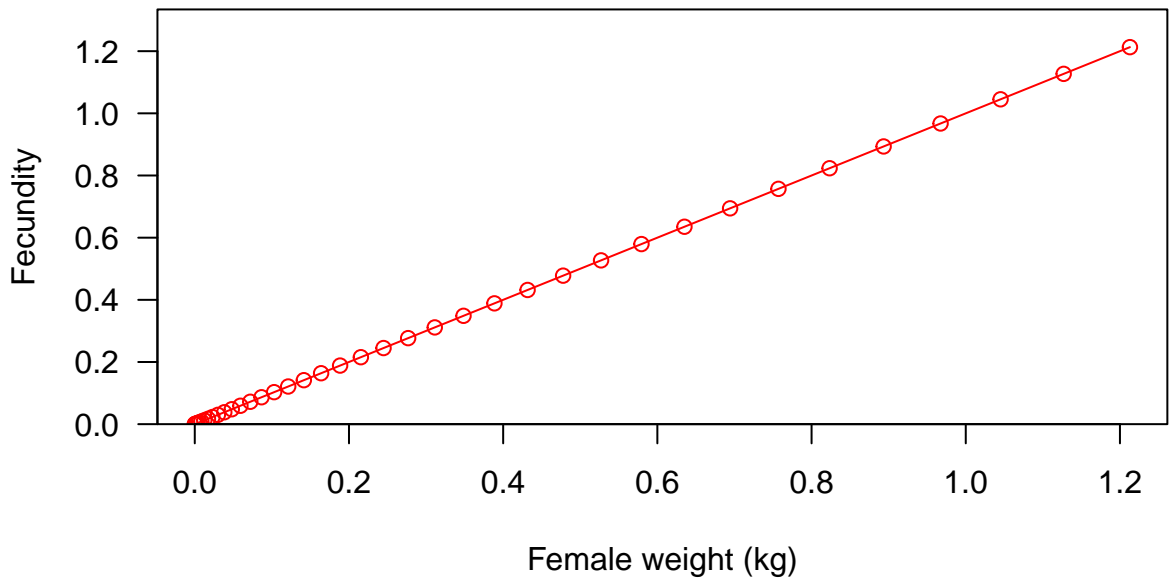


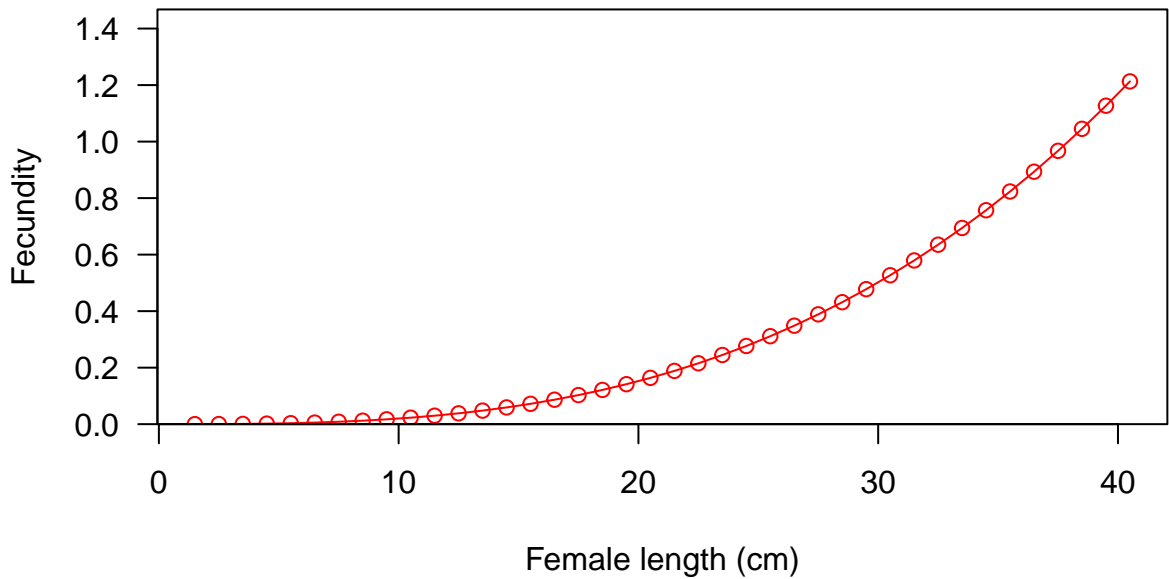


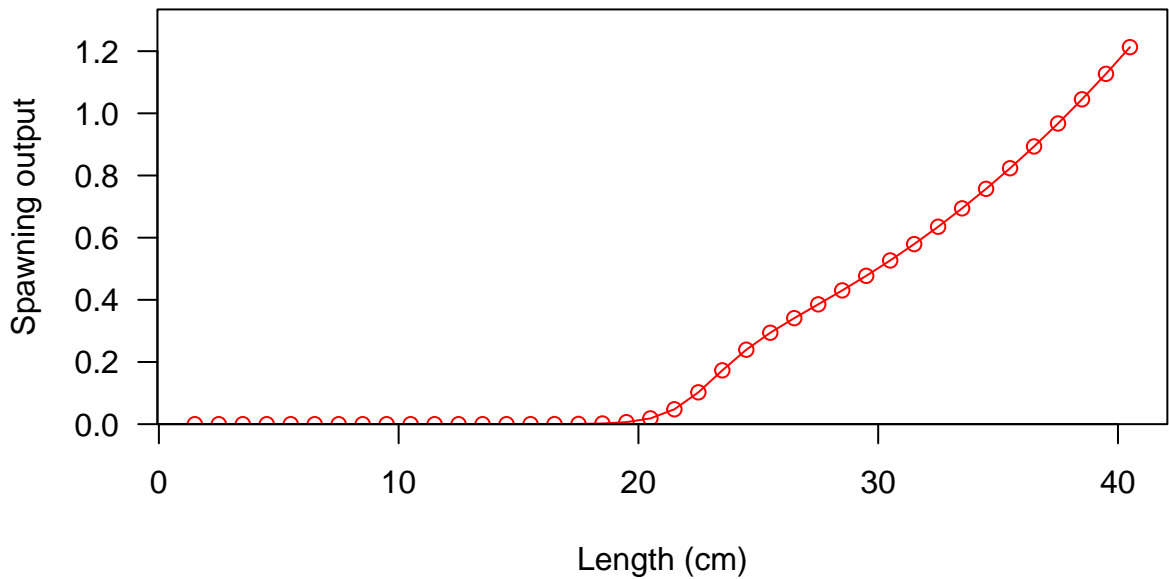


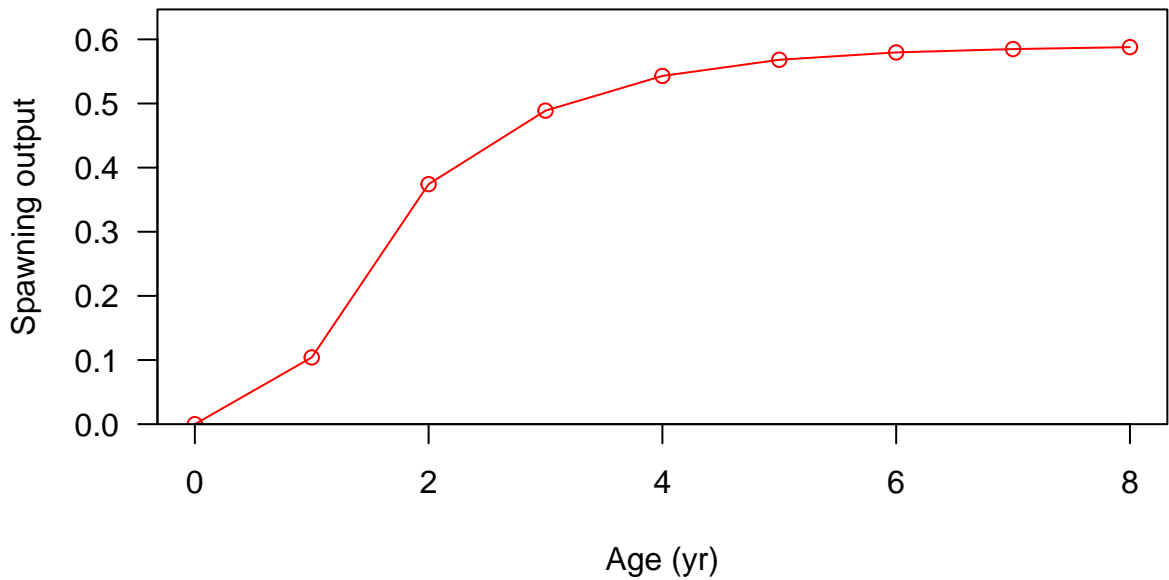




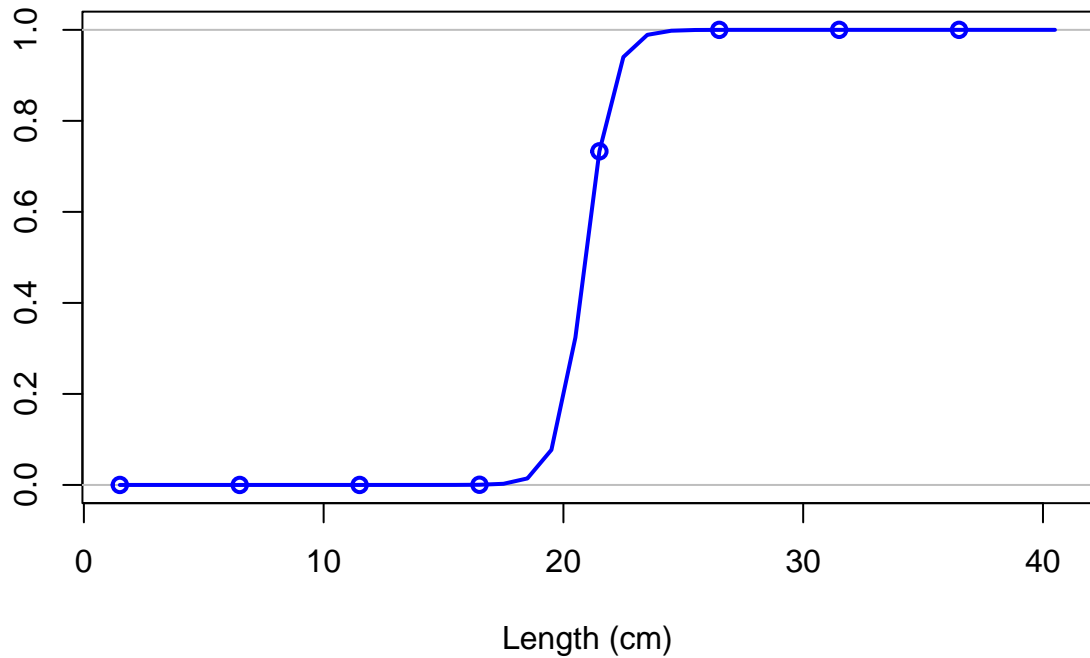




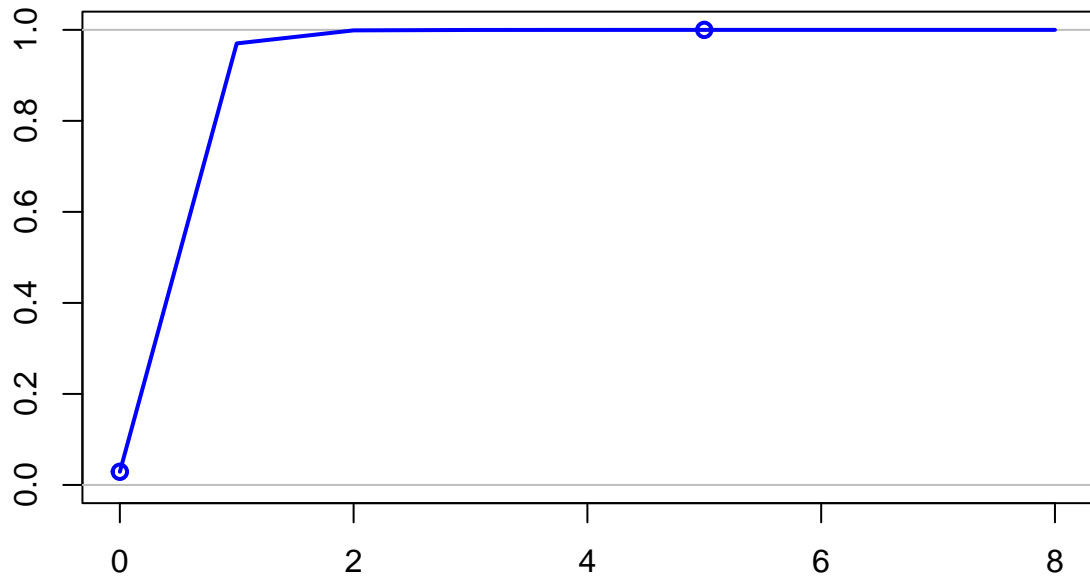




Selectivity

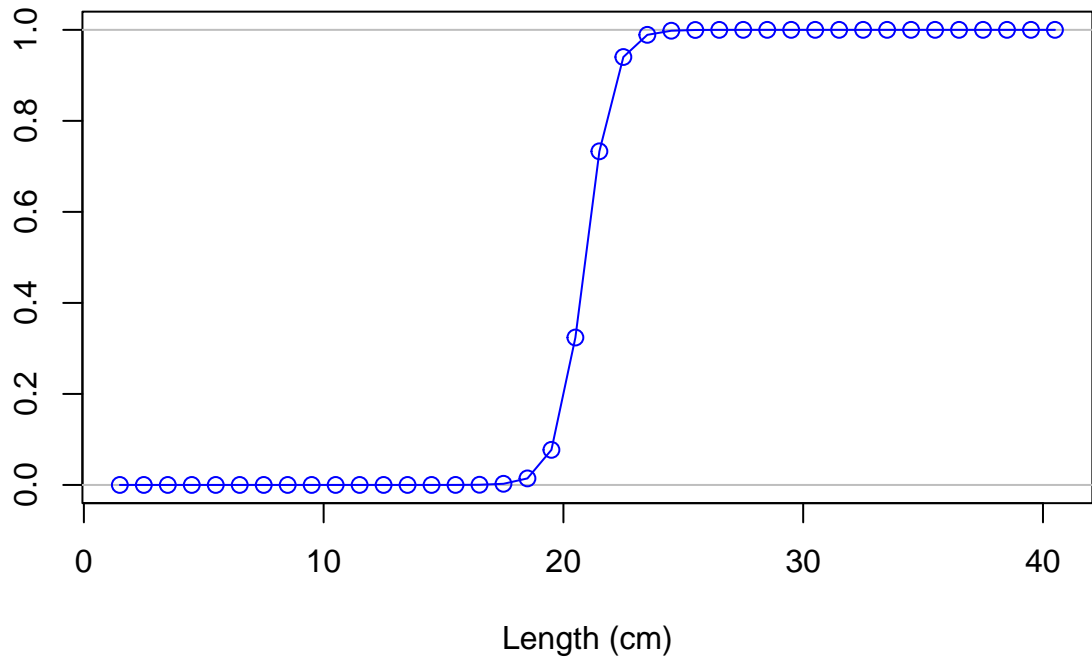


Selectivity

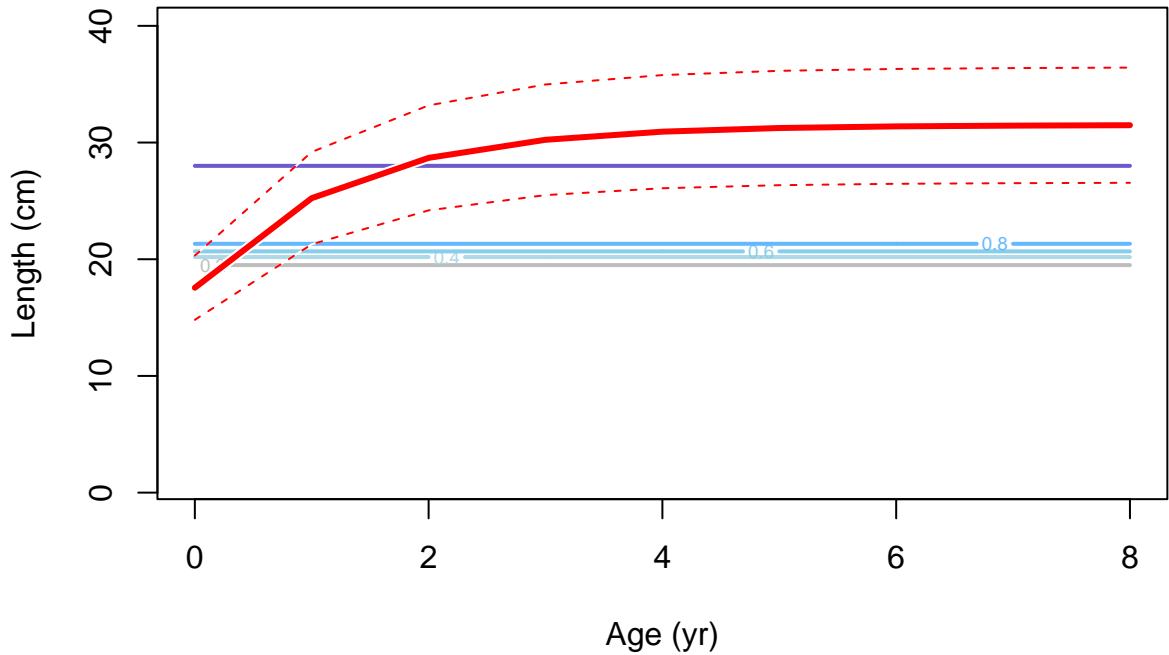


Age (yr)

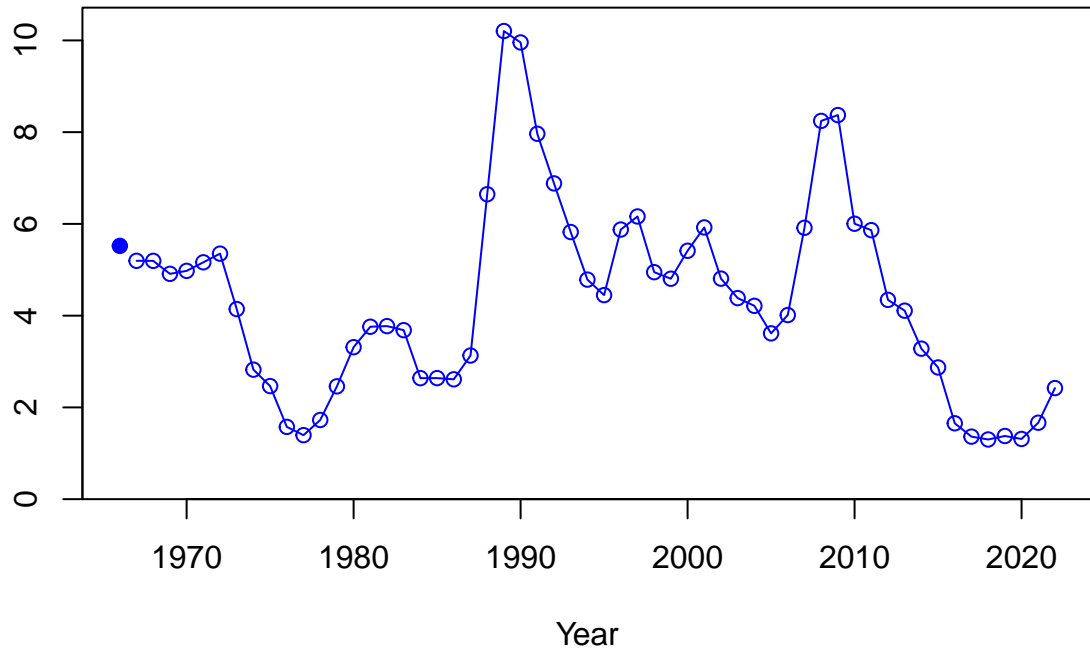
Selectivity



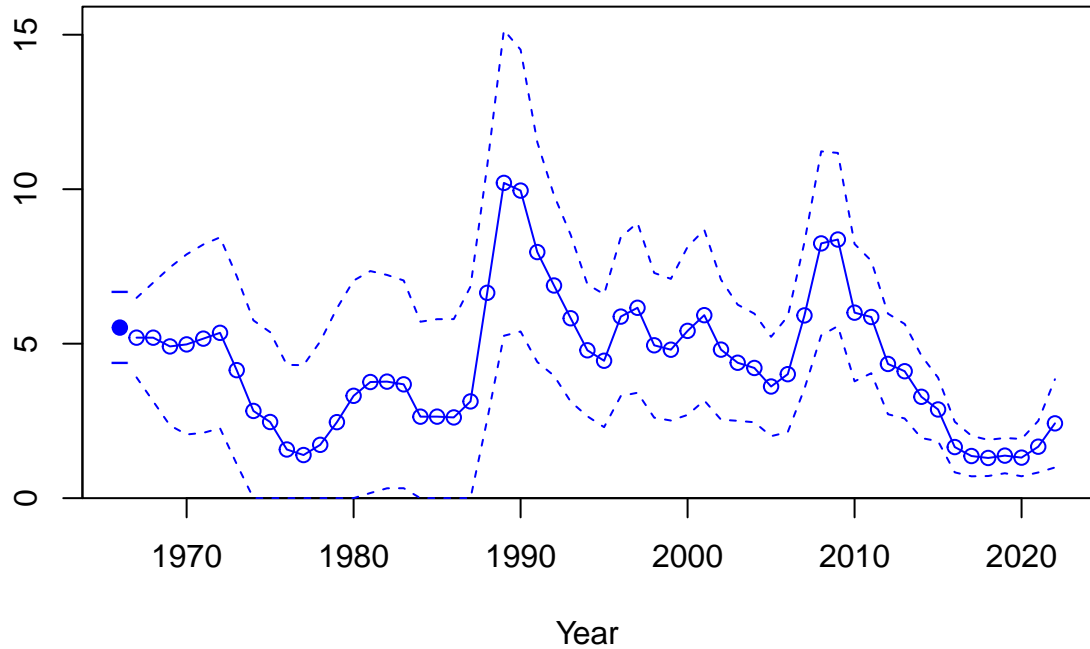




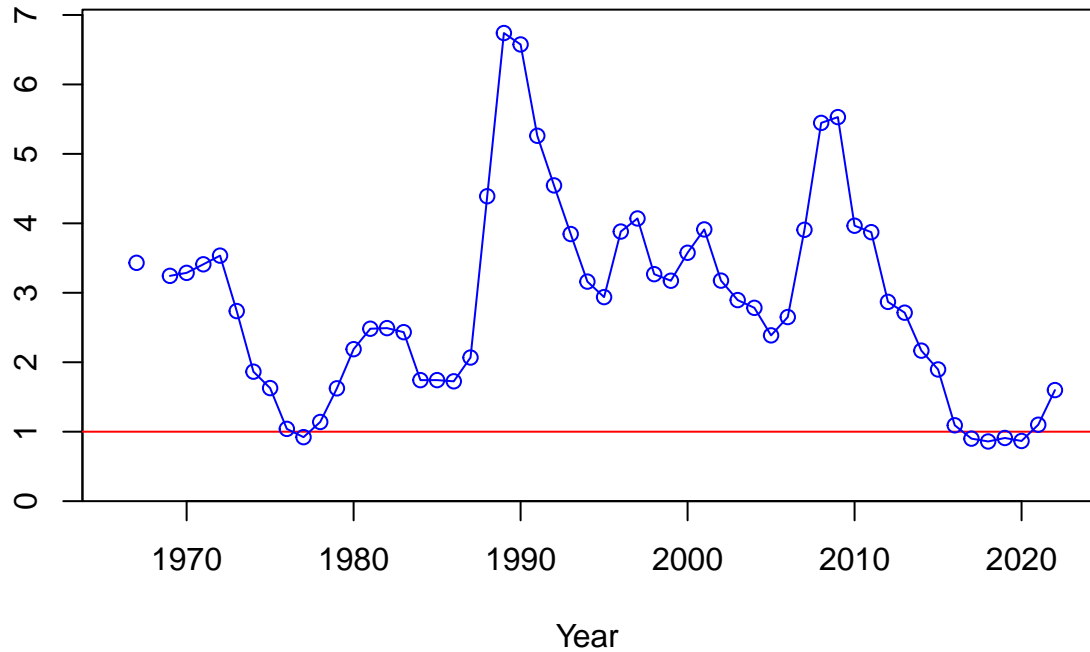
Spawning biomass (mt)



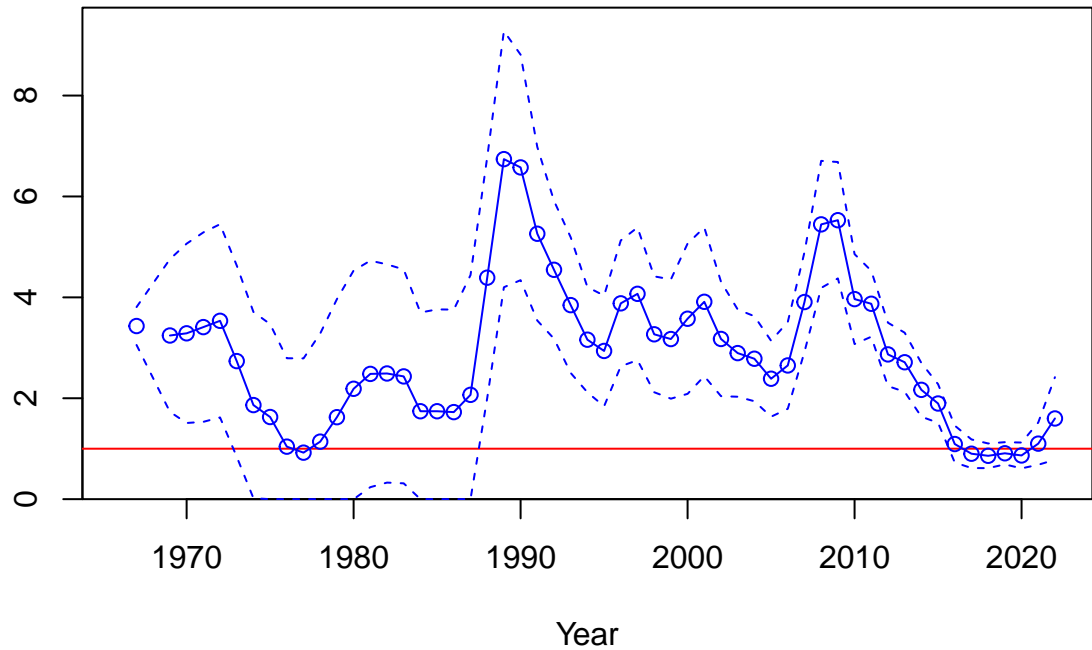
Spawning biomass (mt)

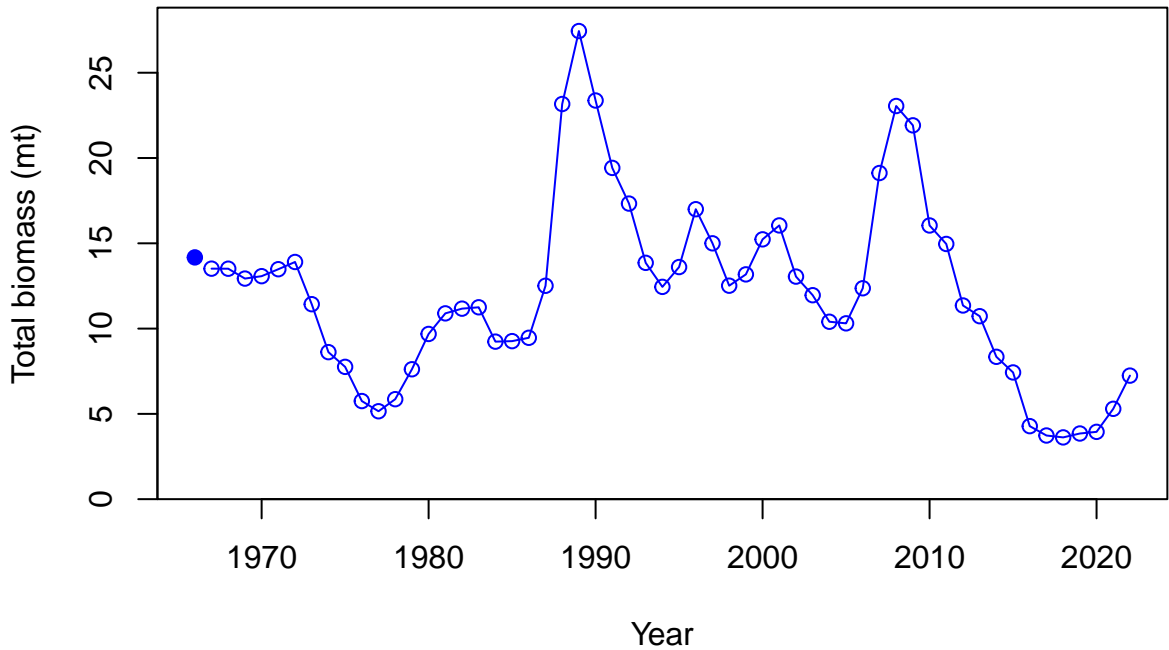


Relative spawning biomass:  $B/B_{MSY}$

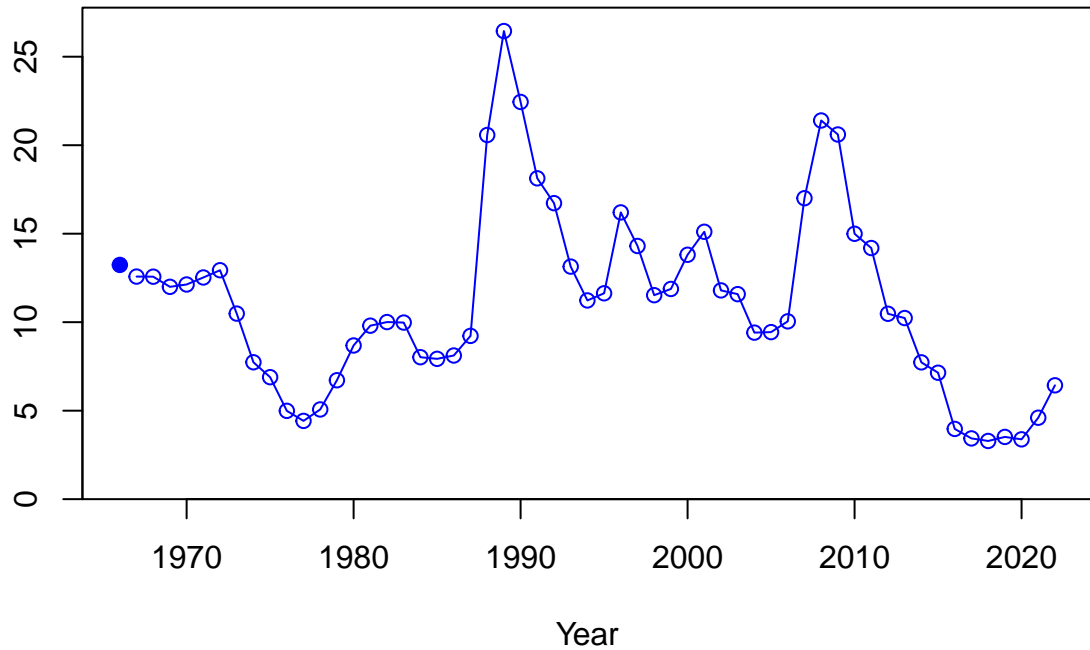


Relative spawning biomass:  $B/B_{MSY}$

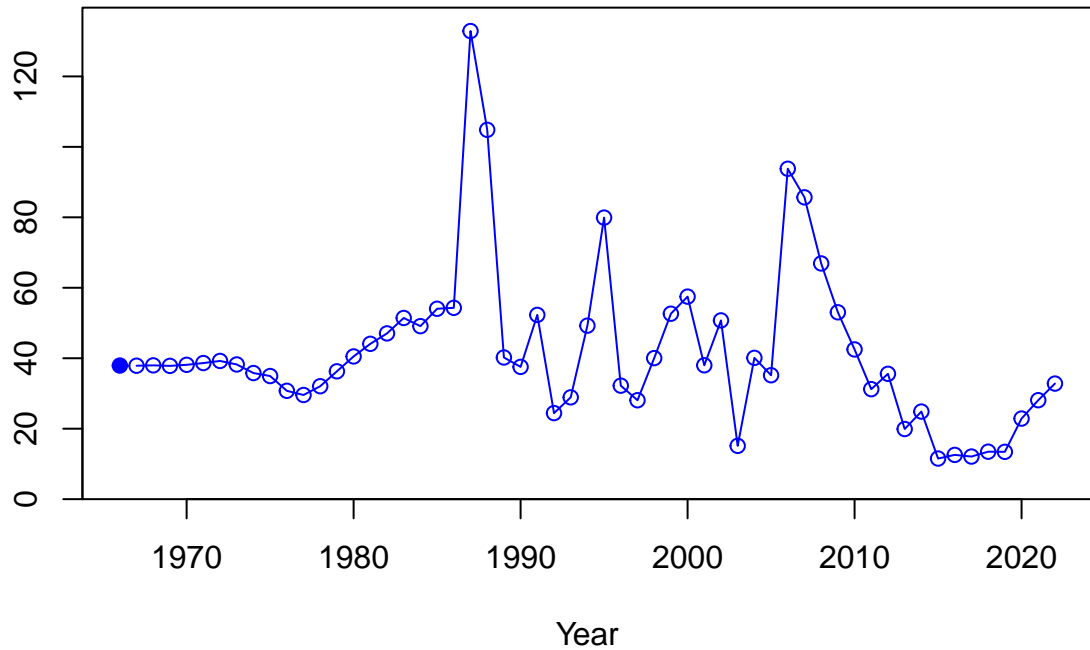




Summary biomass (mt)

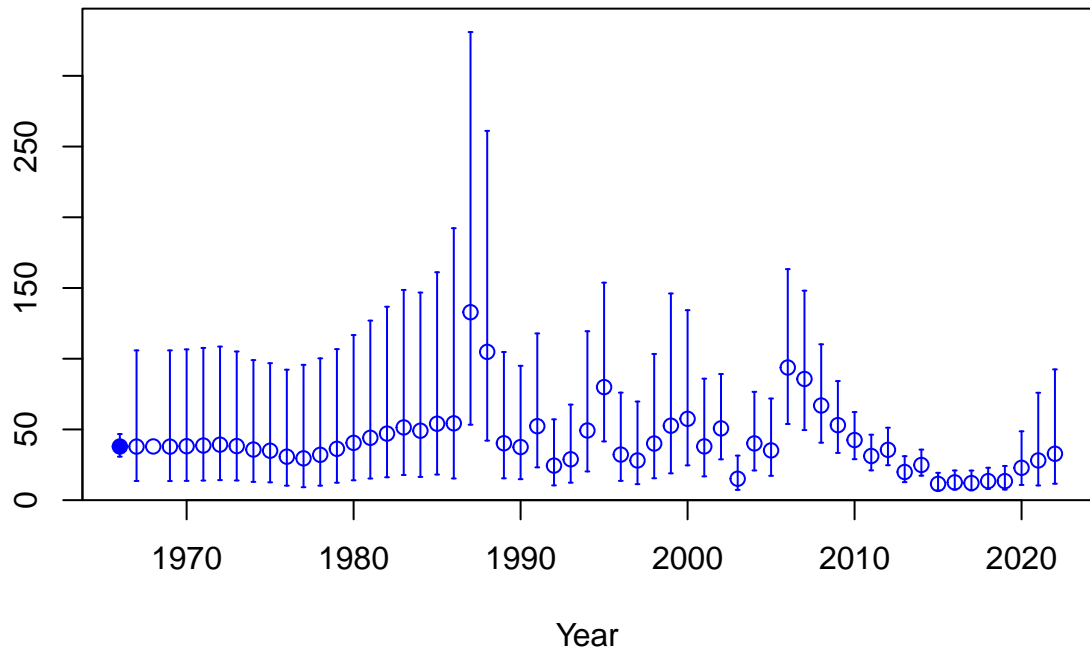


Age-0 recruits (1,000s)

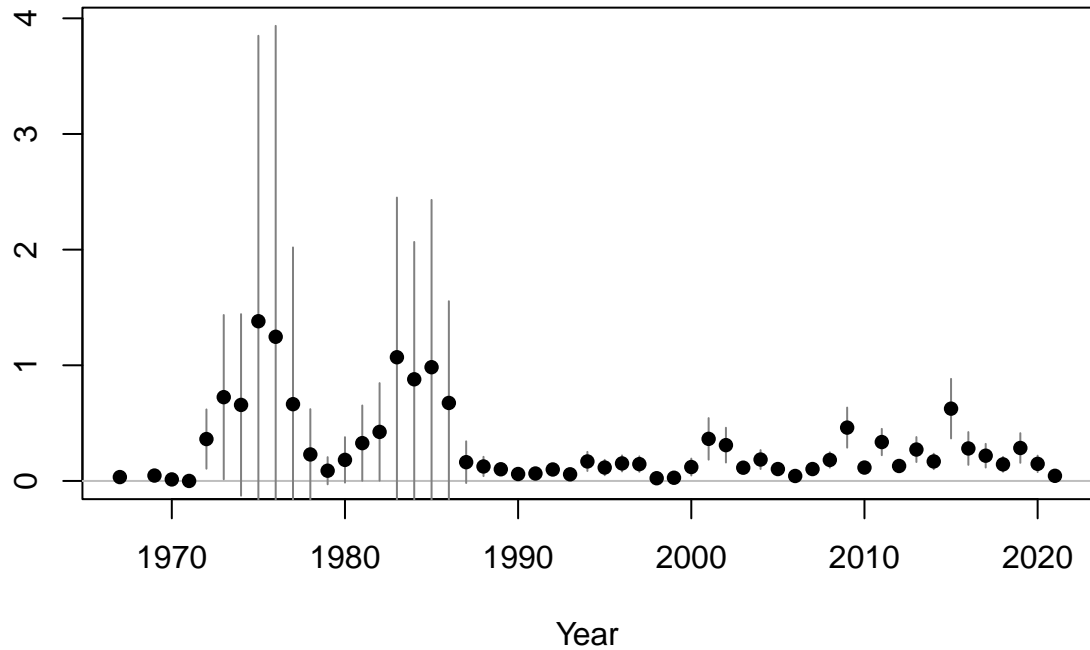




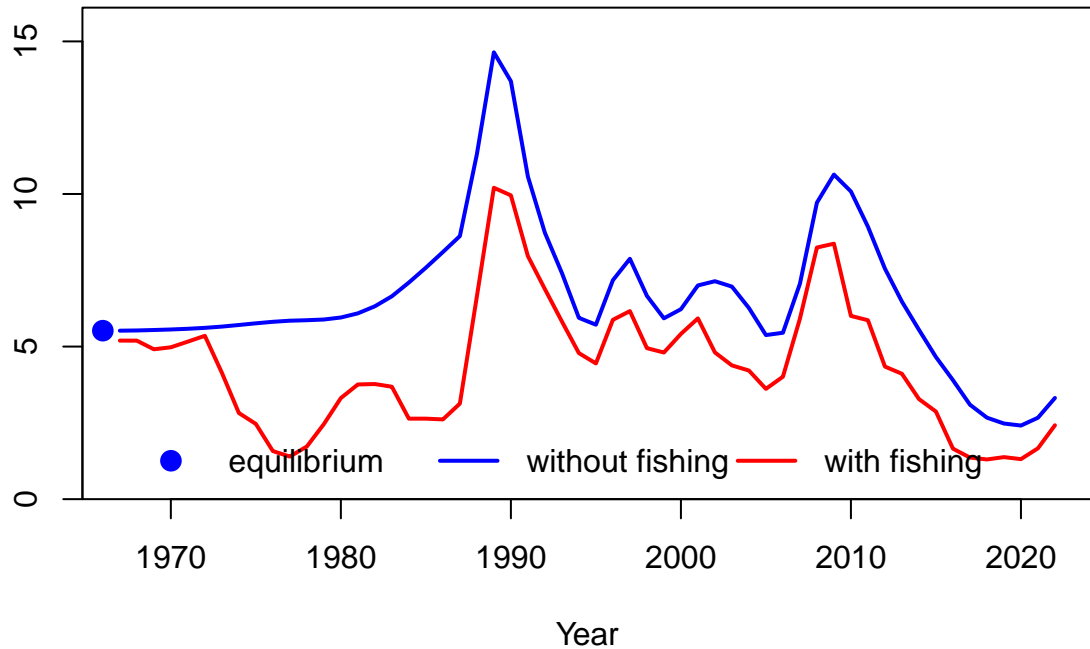
Age-0 recruits (1,000s)



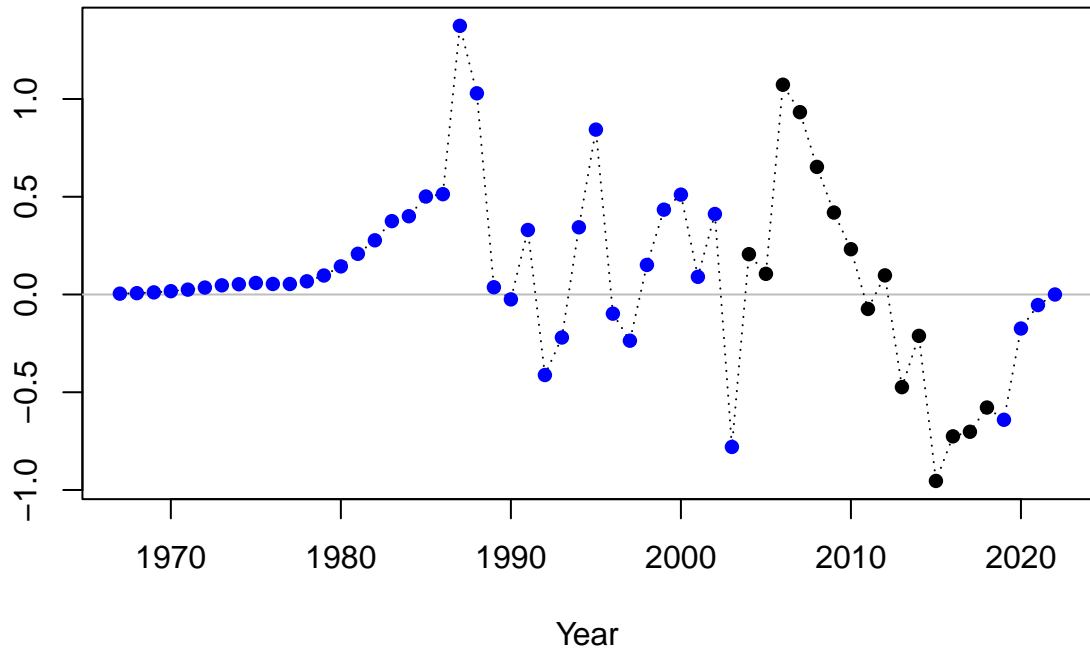
Summary Fishing Mortality



Spawning biomass (mt)



Log recruitment deviation



Log recruitment deviation

2  
1  
0  
-1

1970

1980

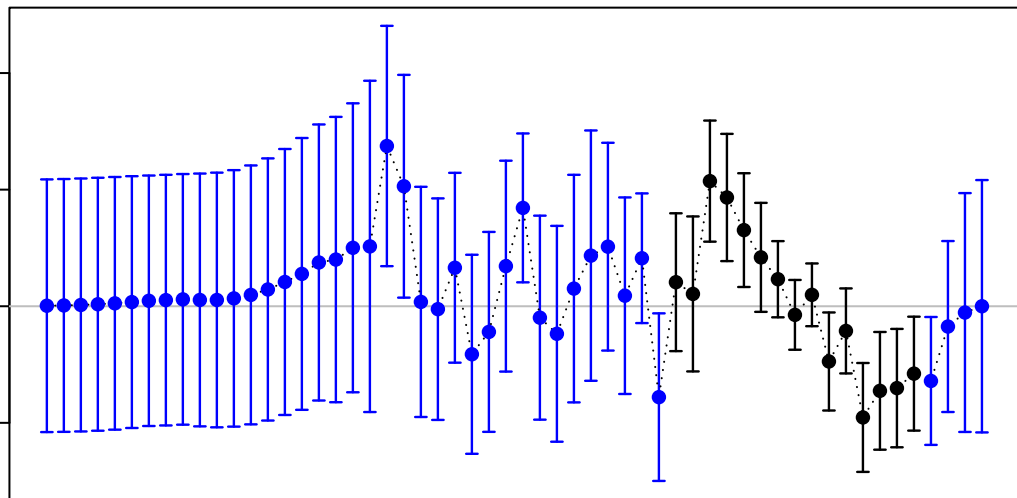
1990

2000

2010

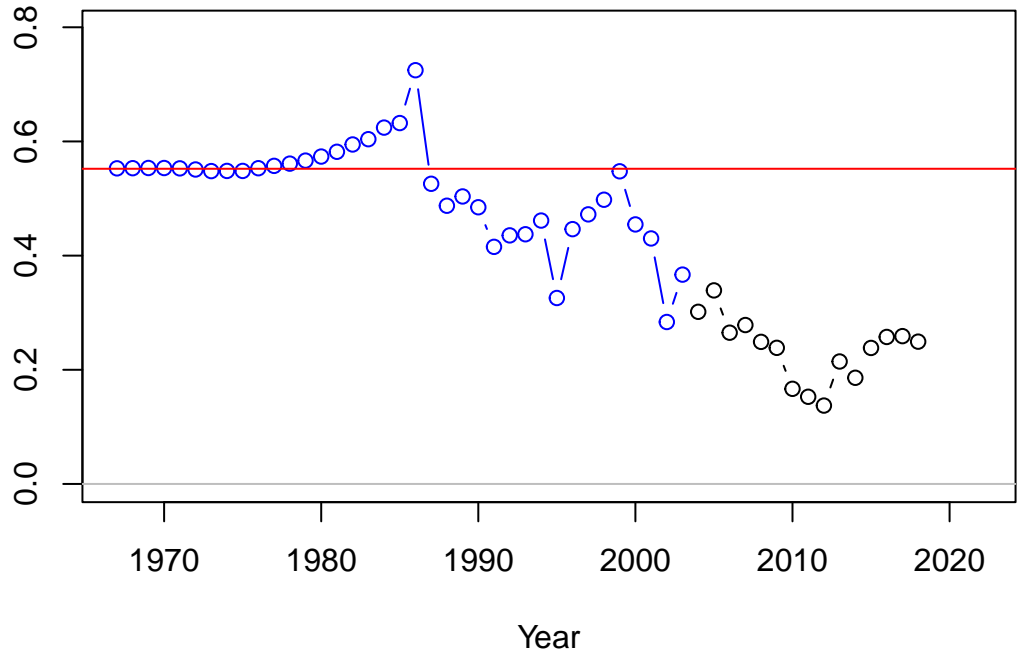
2020

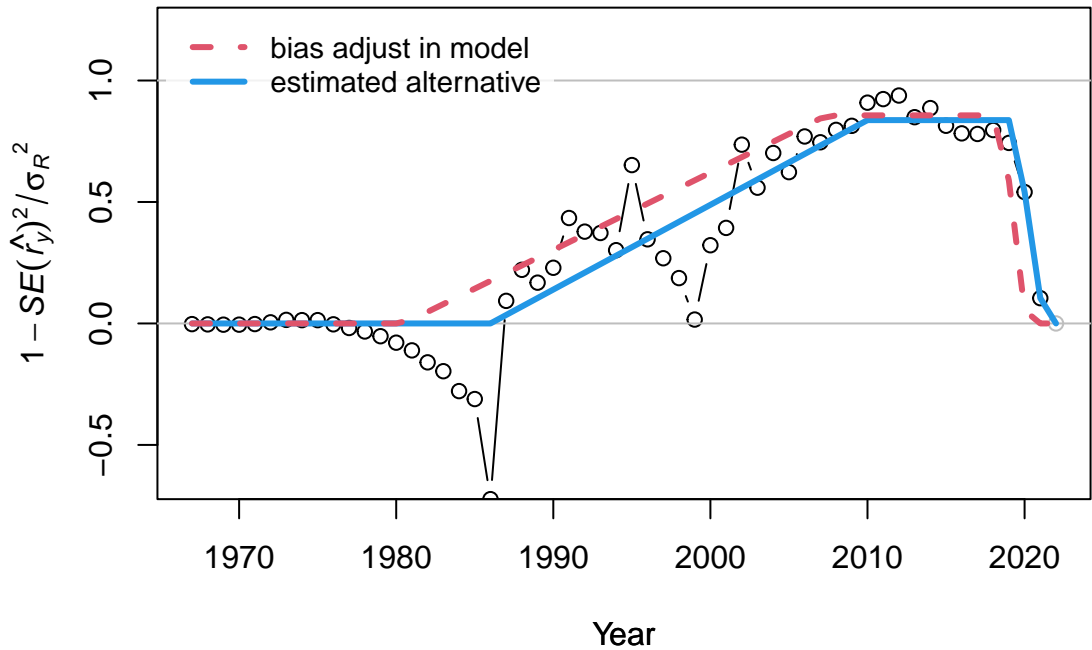
Year

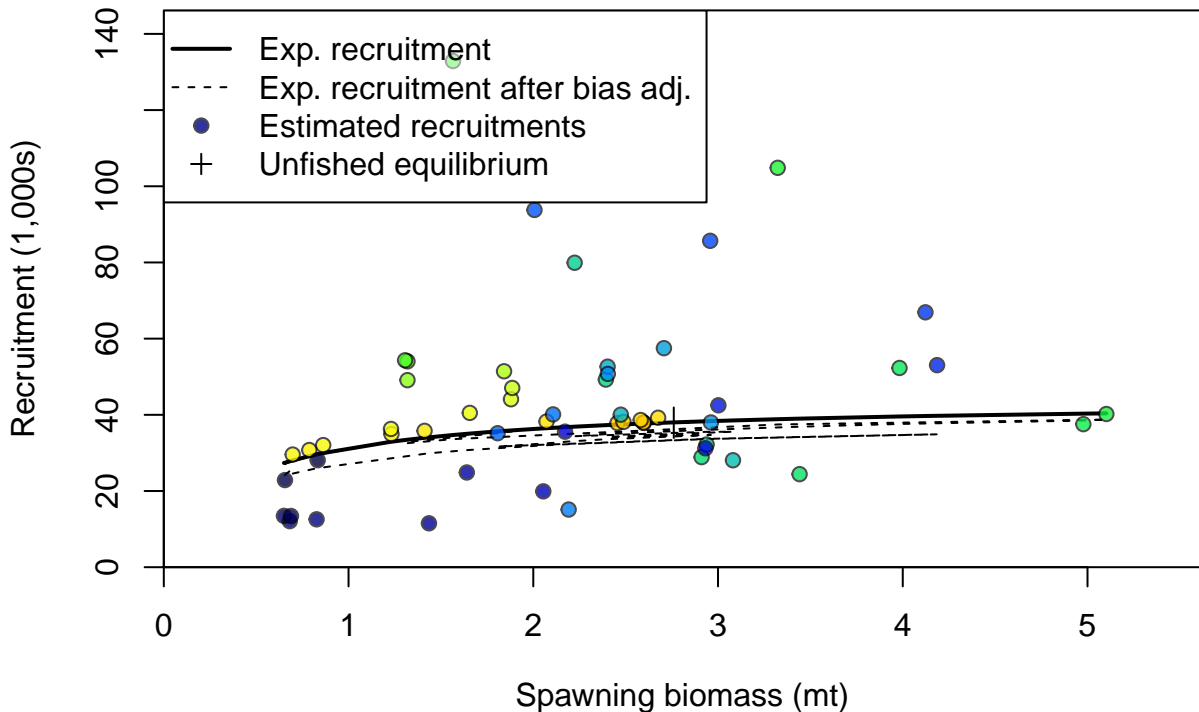


## Recruitment deviation variance

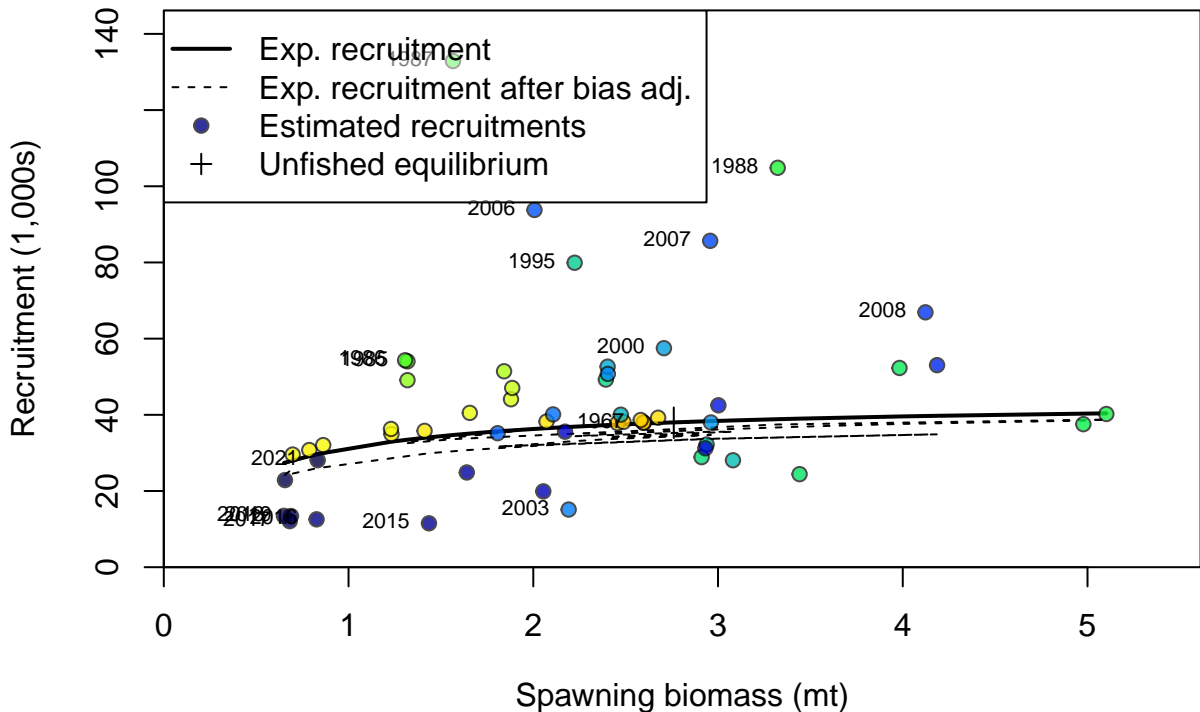
Asymptotic standard error estimate



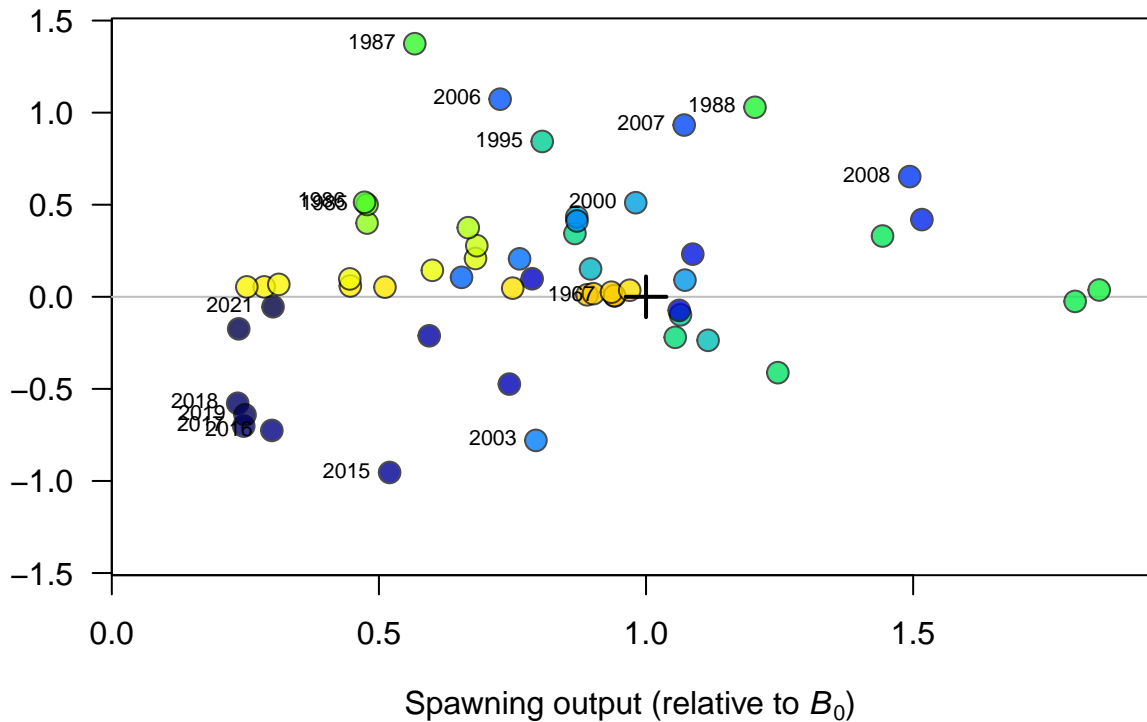


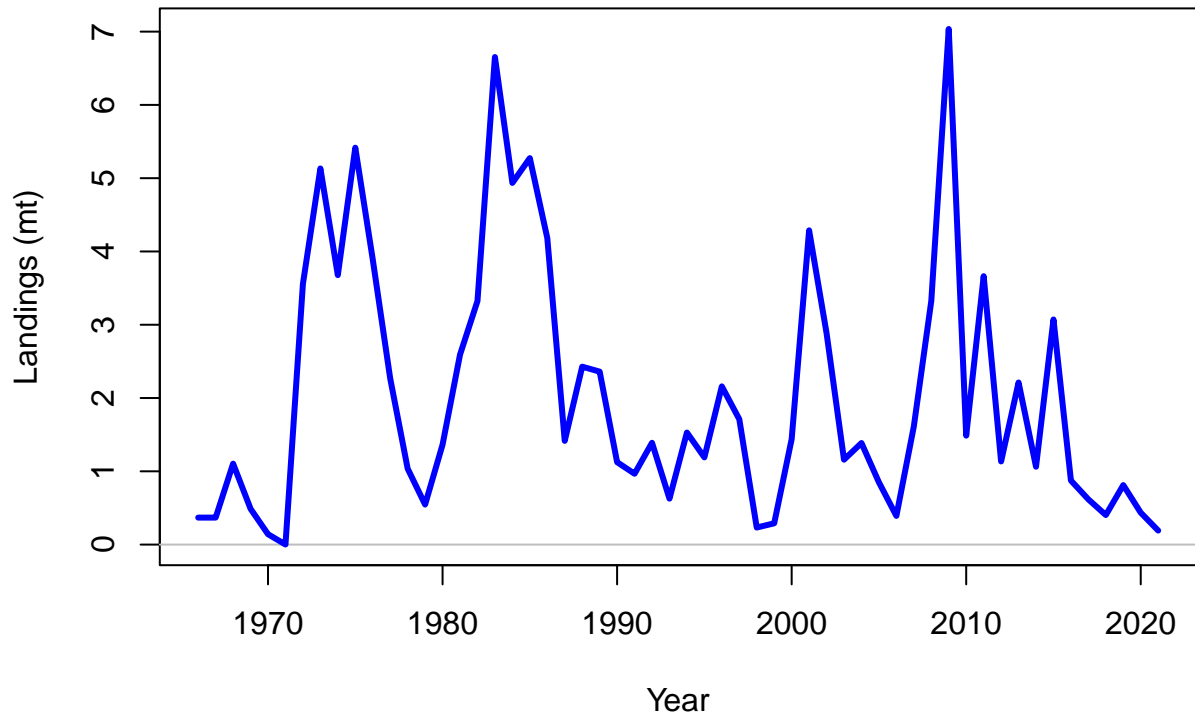


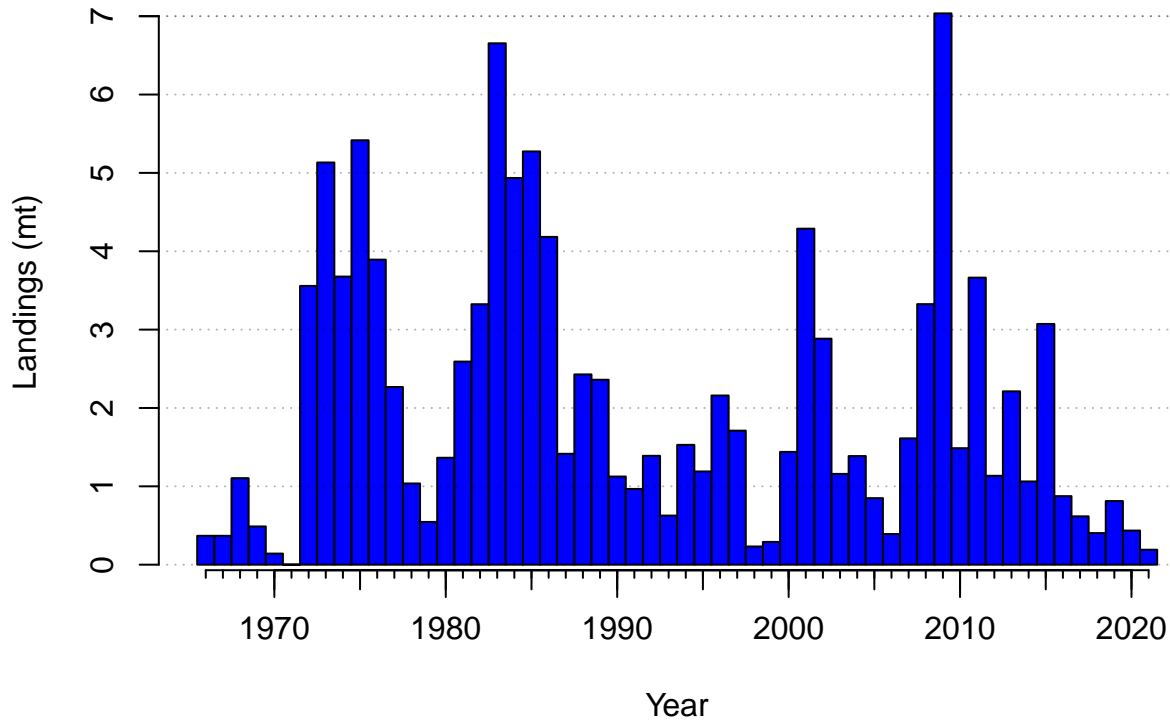




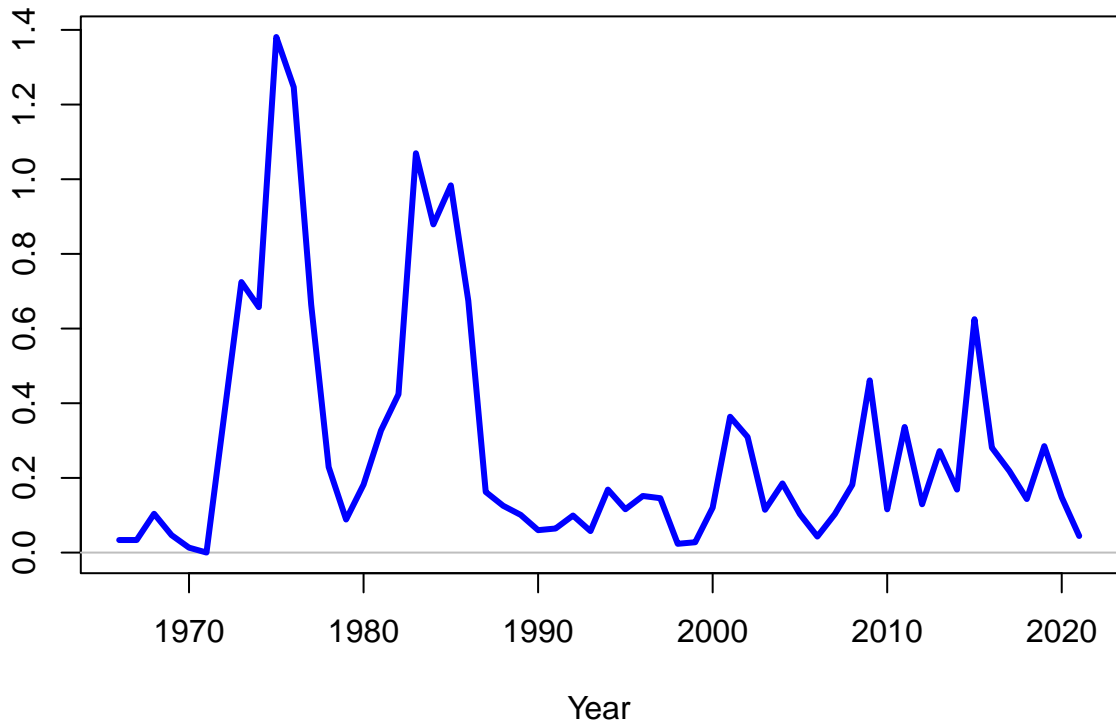
Log recruitment deviation



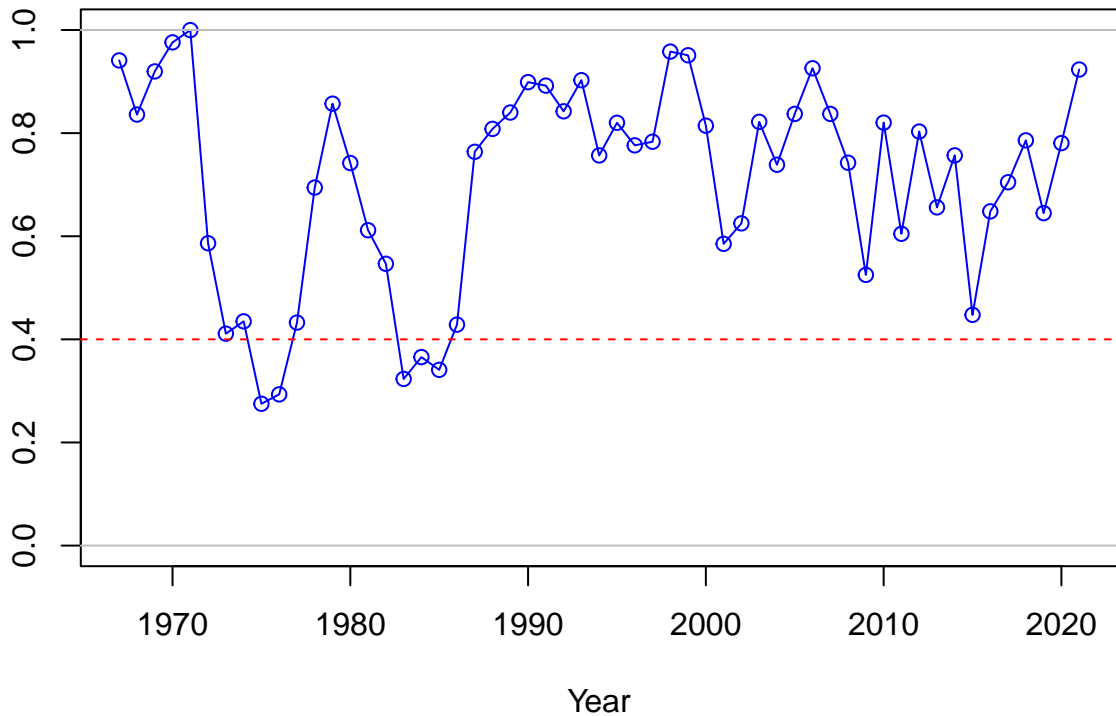


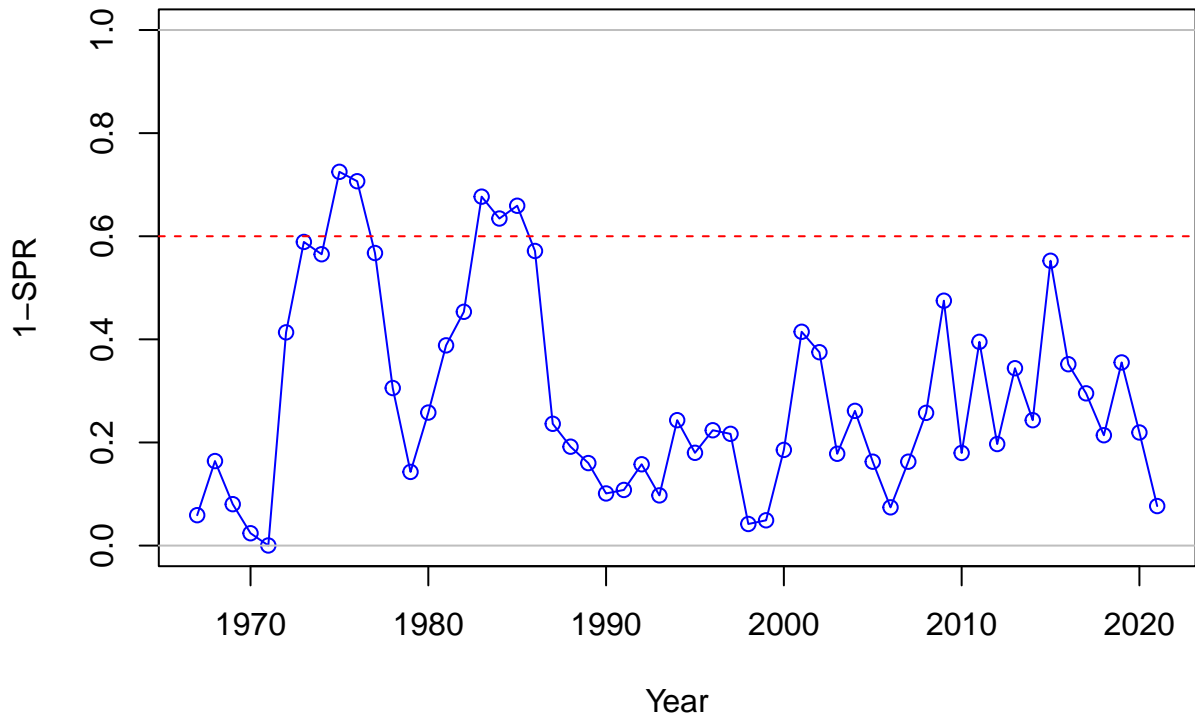


Continuous F

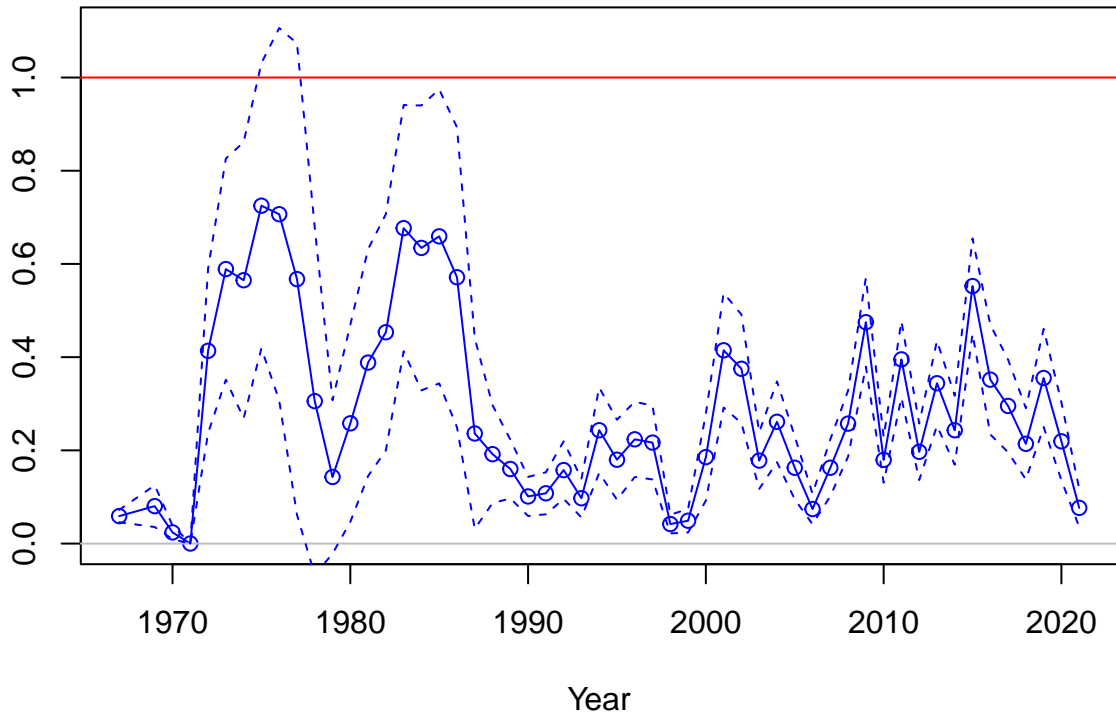


SPR



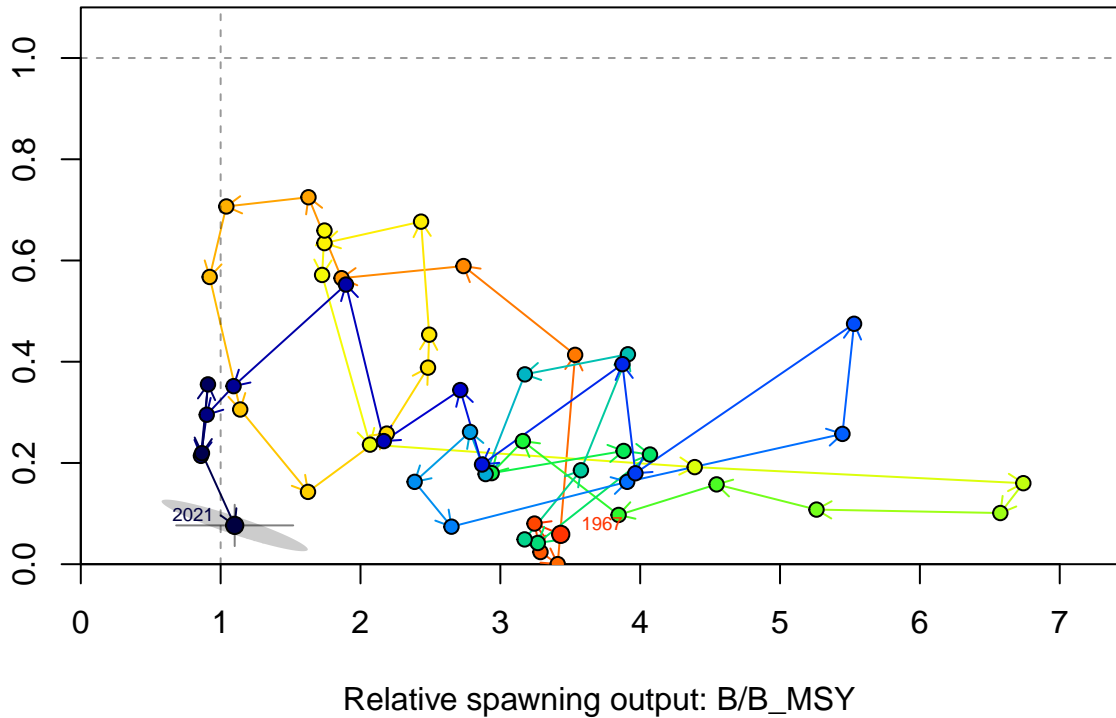


Fishing intensity: 1-SPR

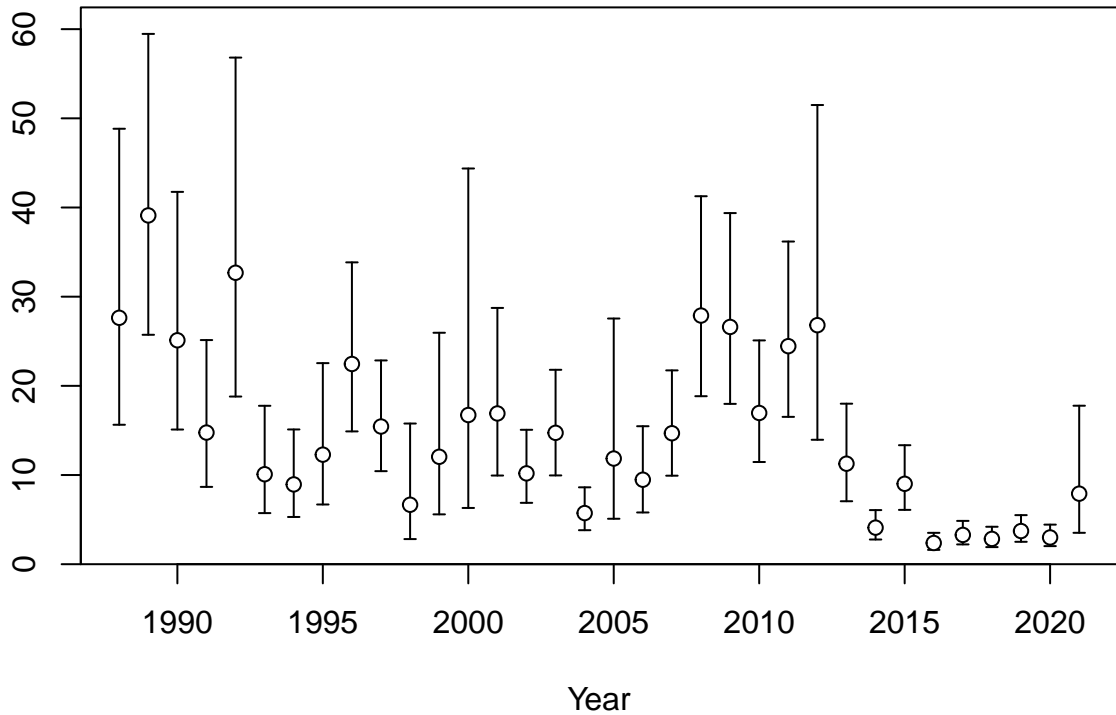


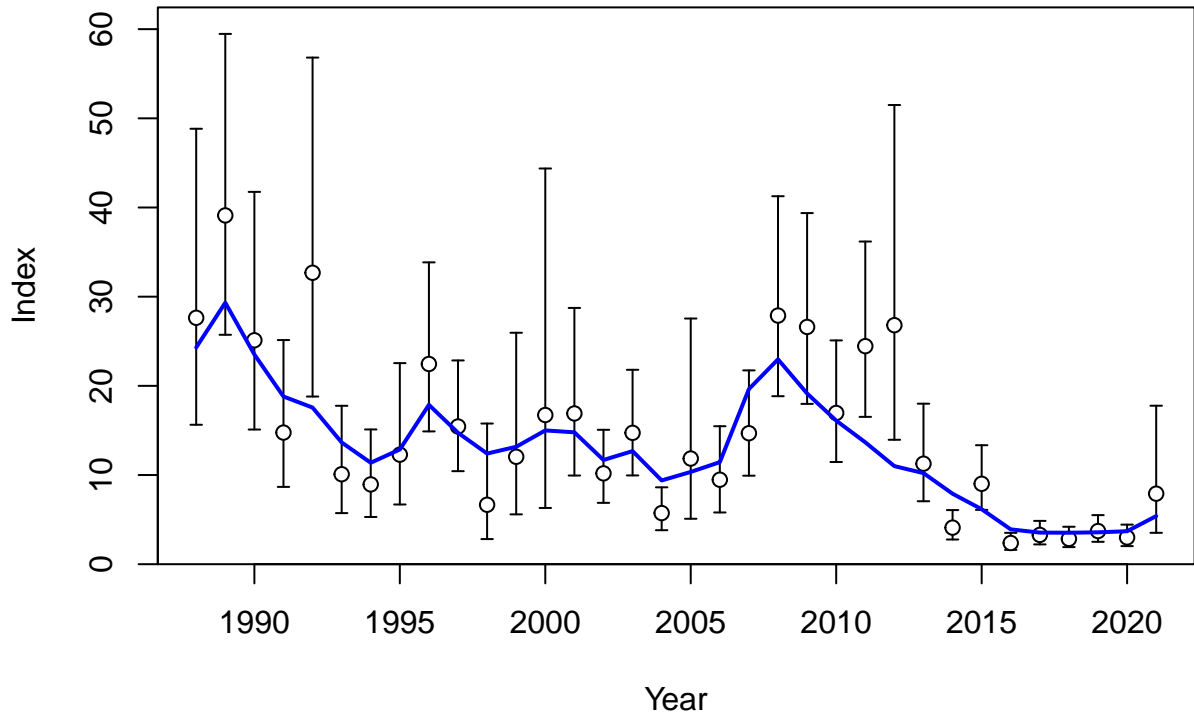


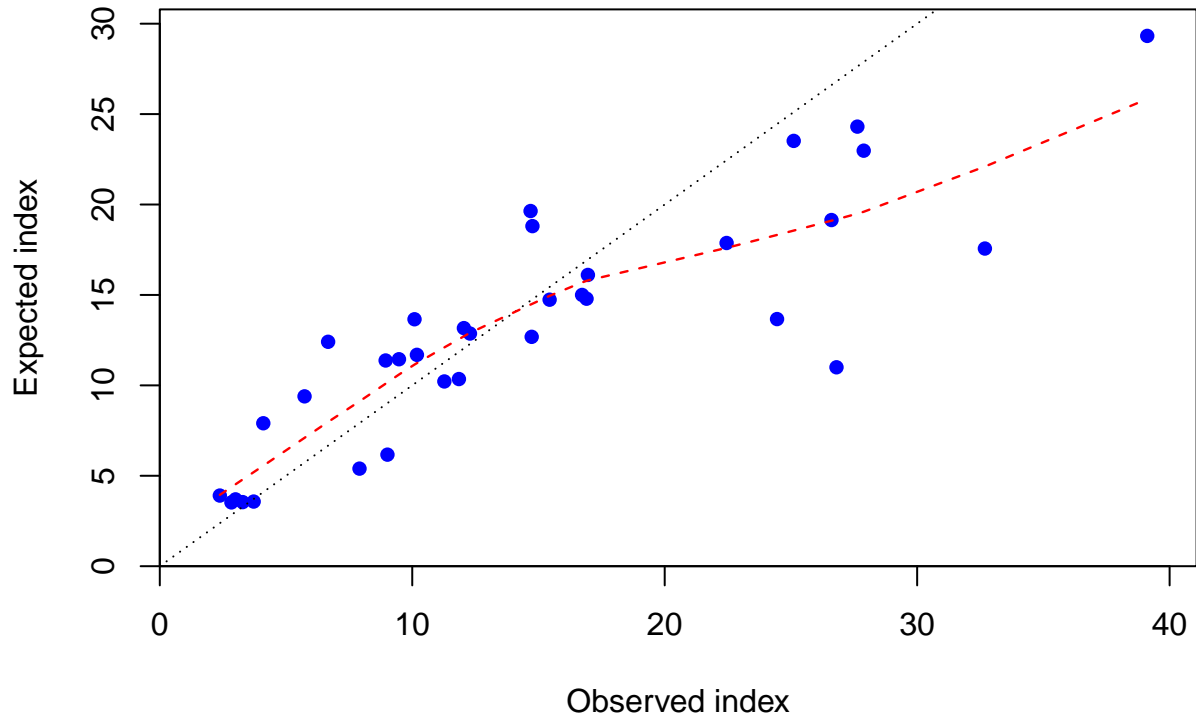
Fishing intensity: 1-SPR



Index







Log index

4  
3  
2  
1

1990

1995

2000

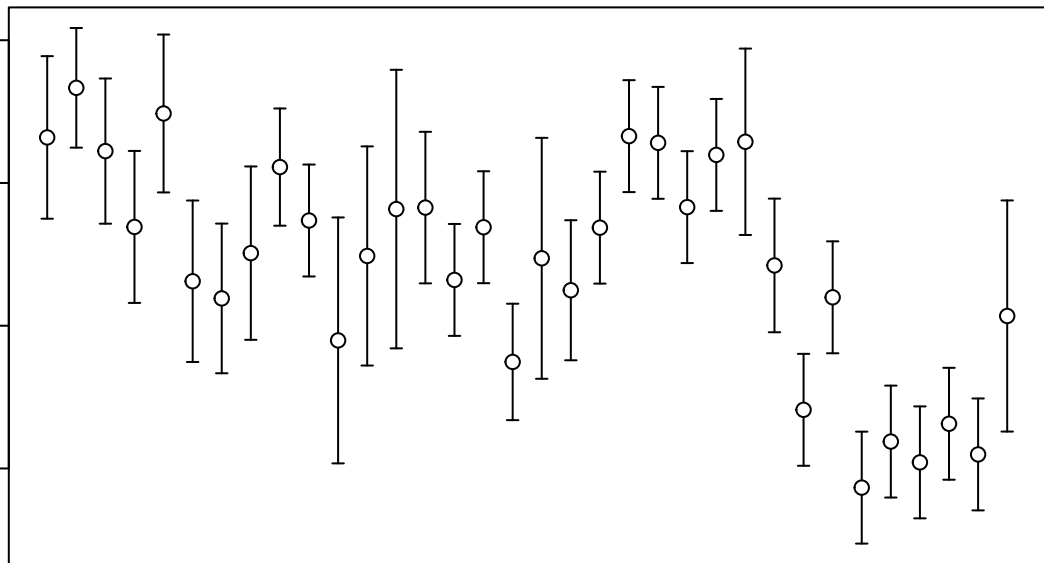
2005

2010

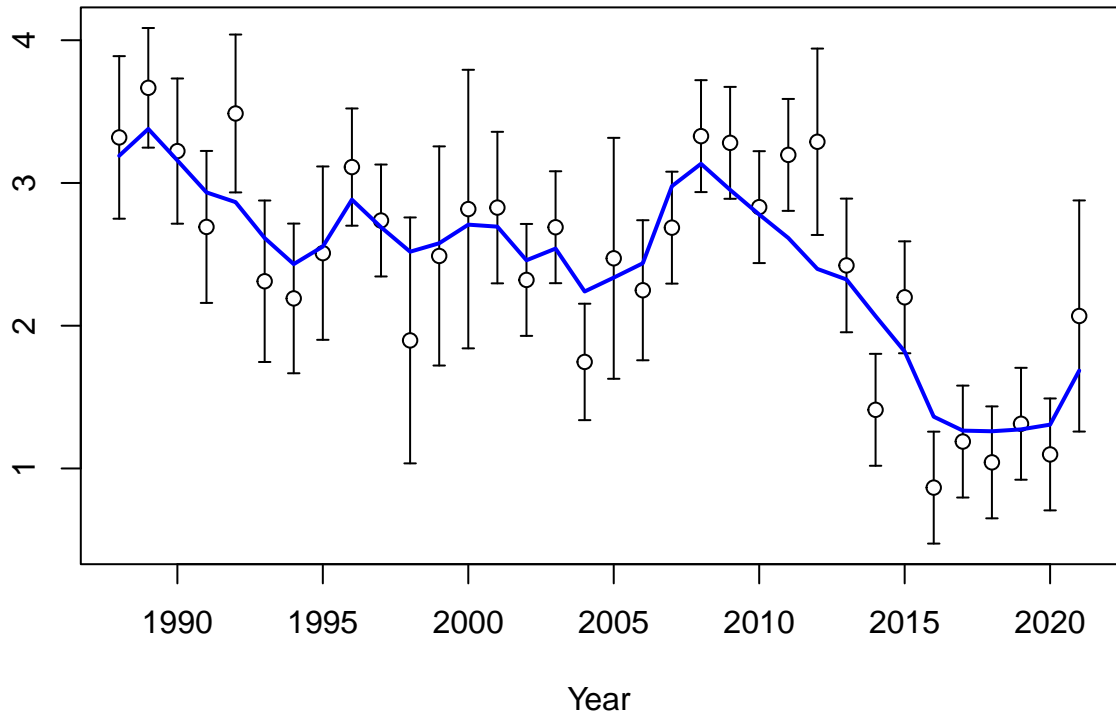
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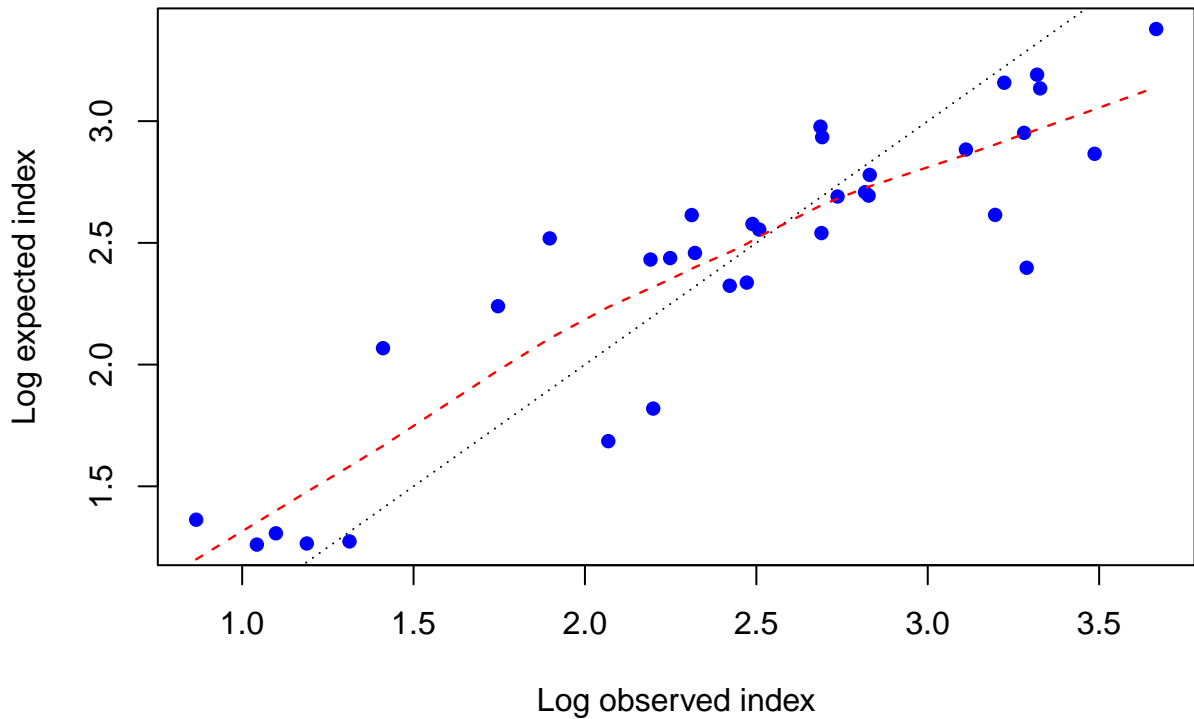
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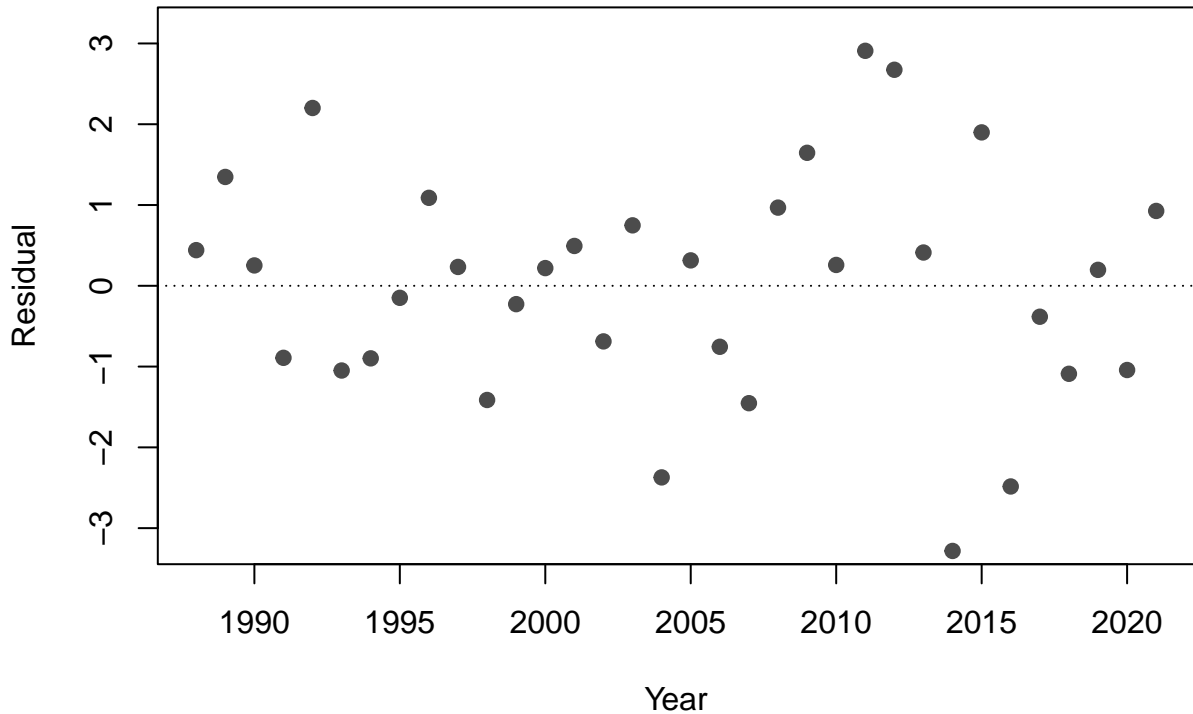
Year



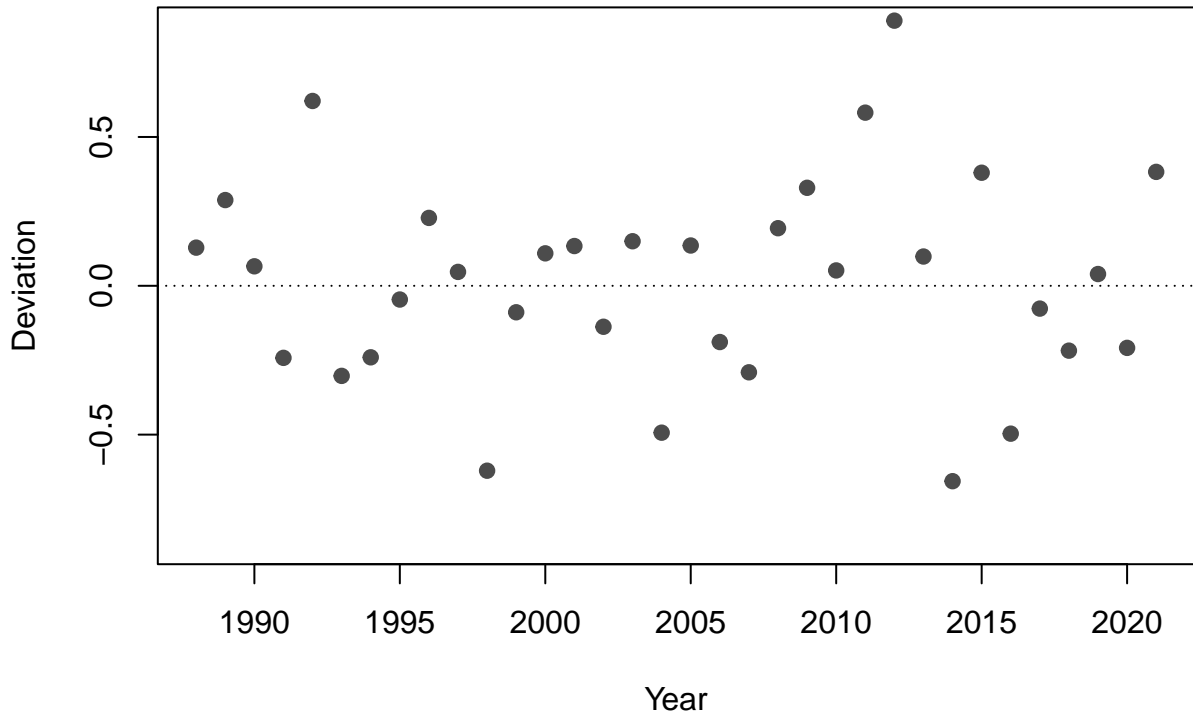
Log index

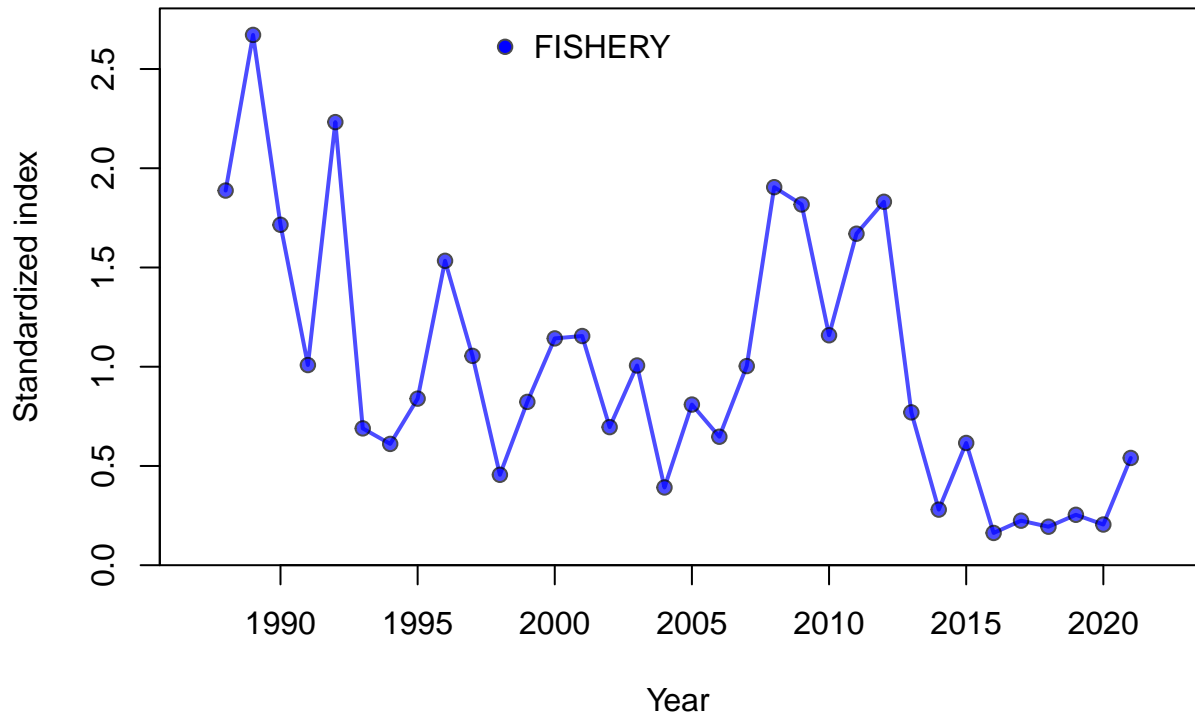


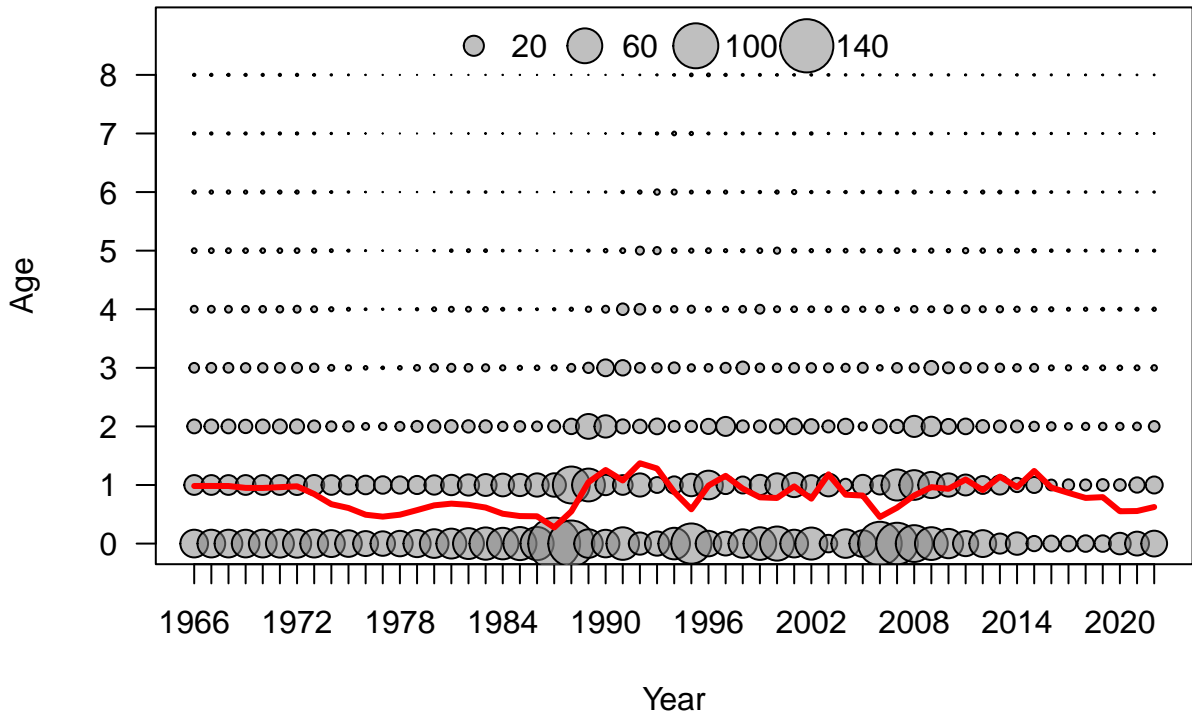


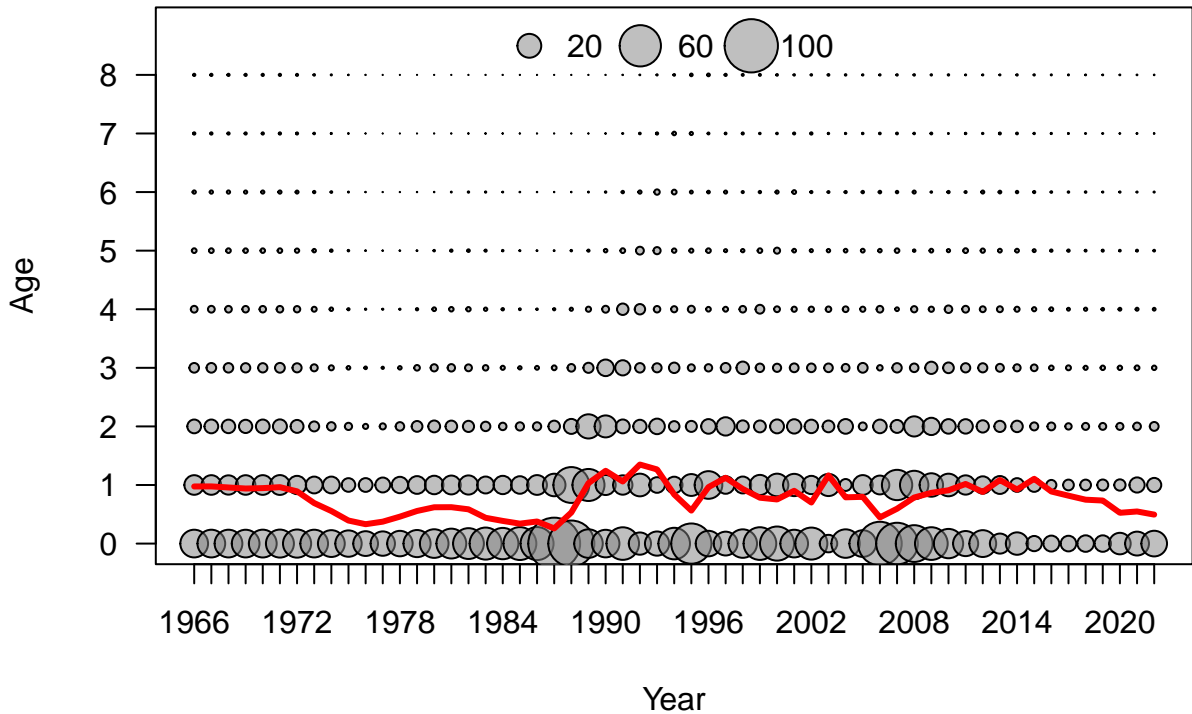


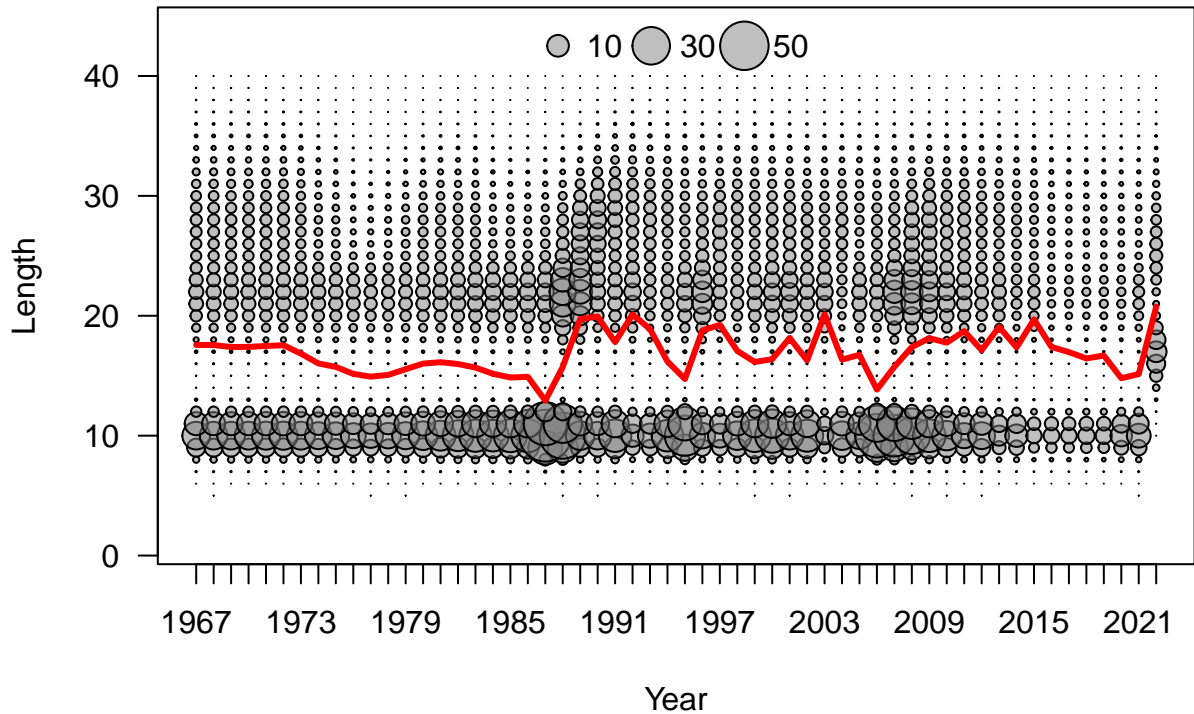


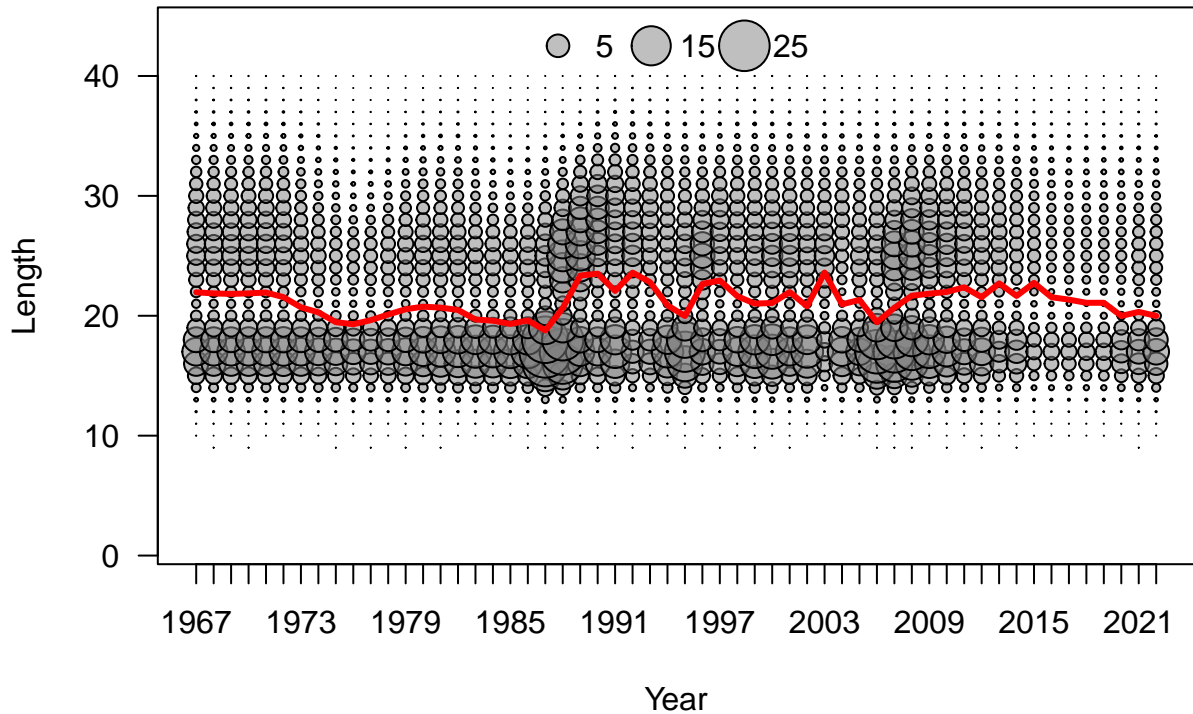


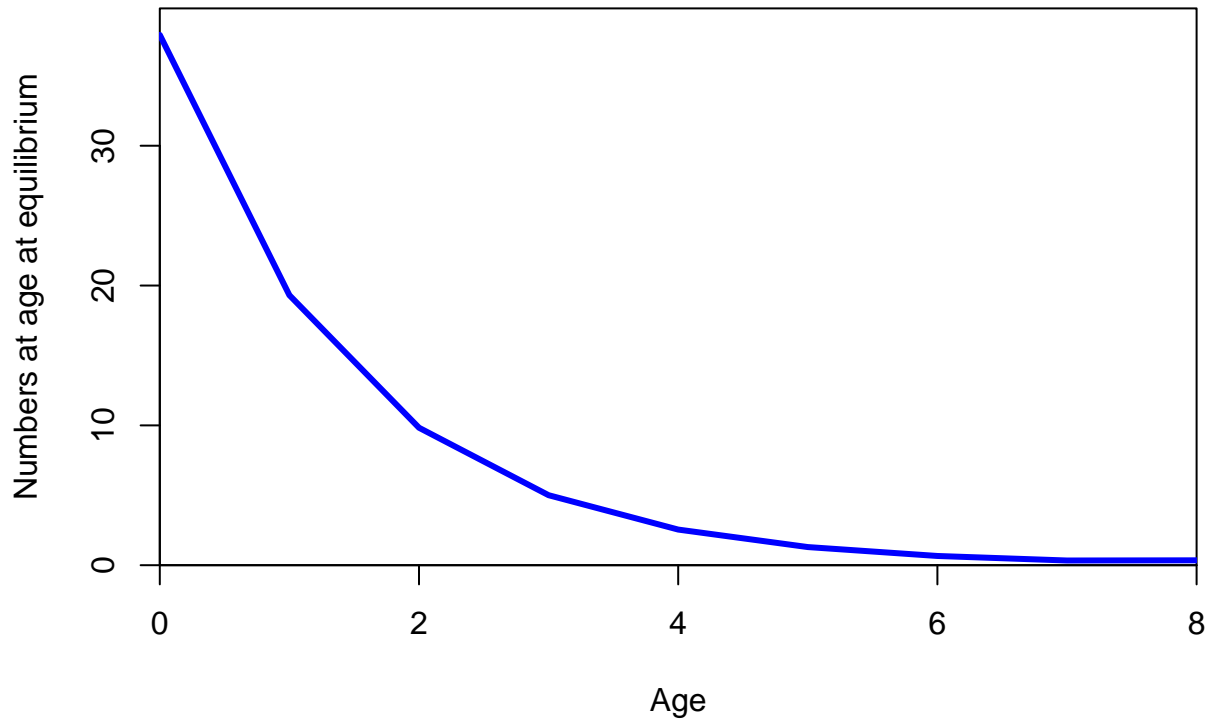






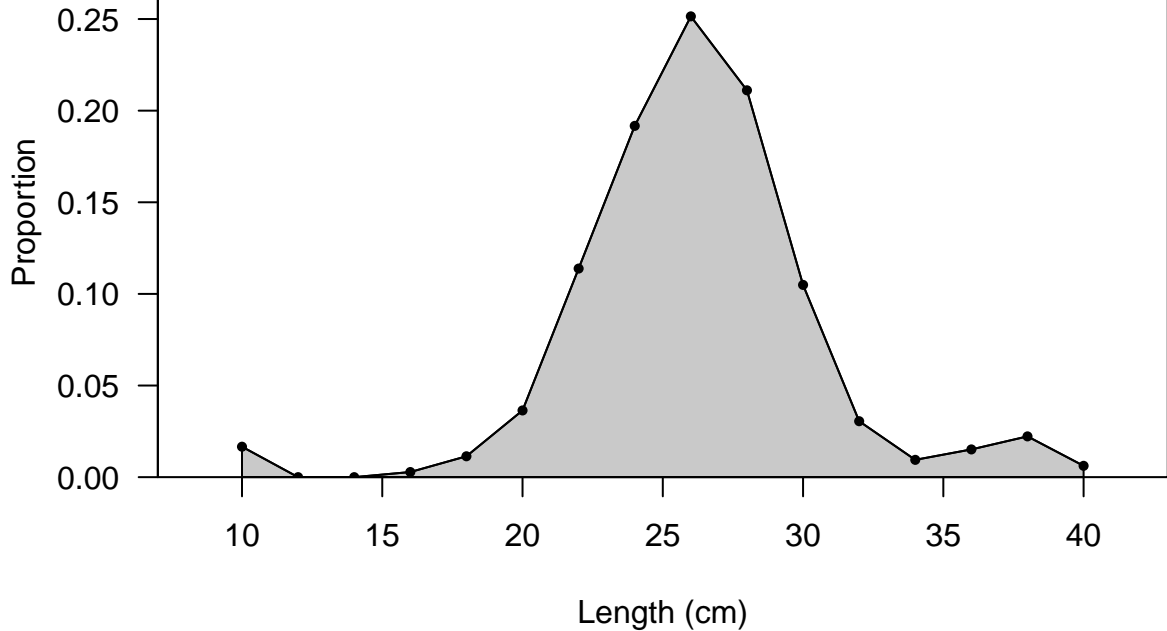




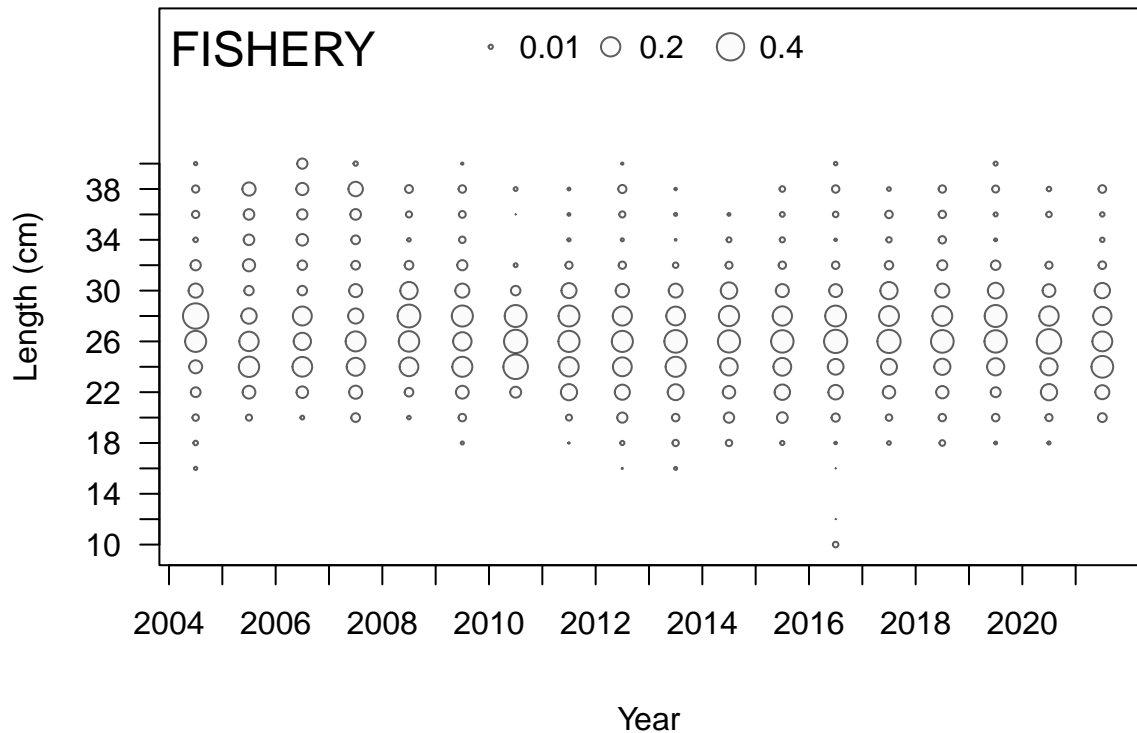


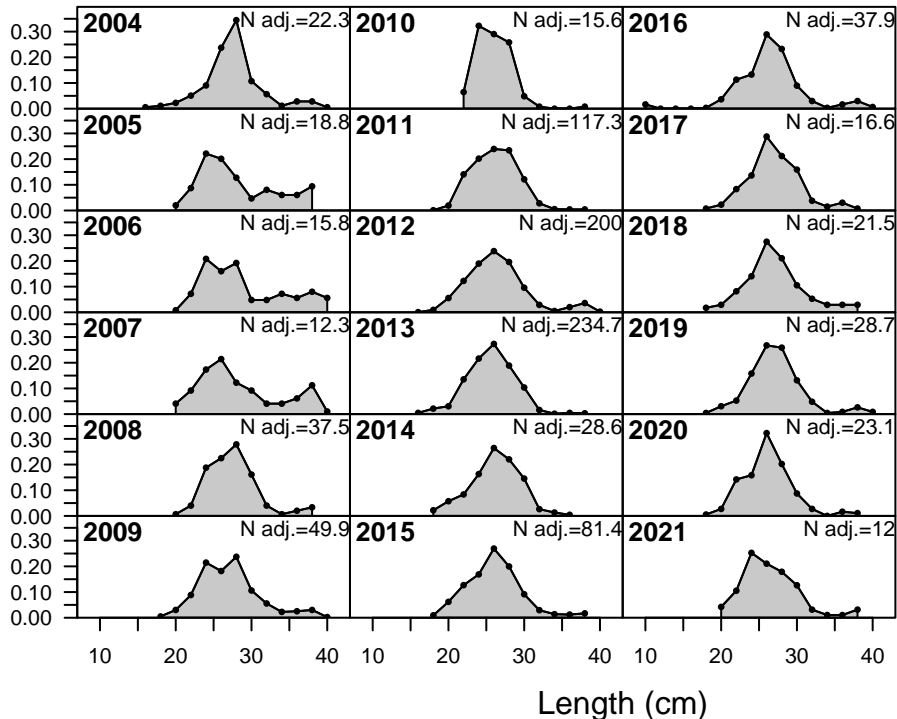
# FISHERY

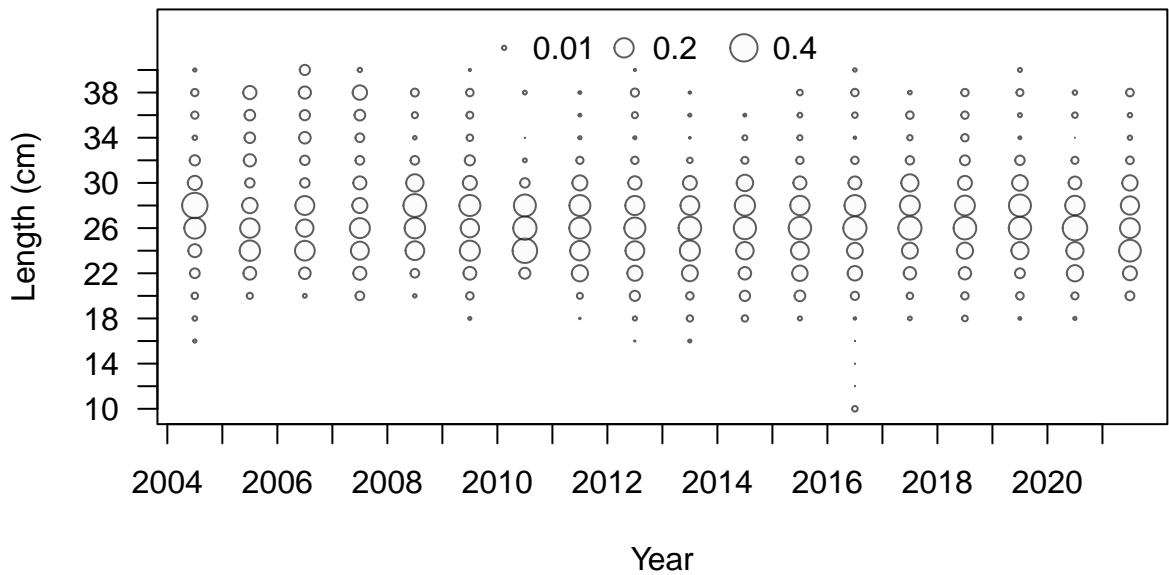
Sum of N adj.=974.1



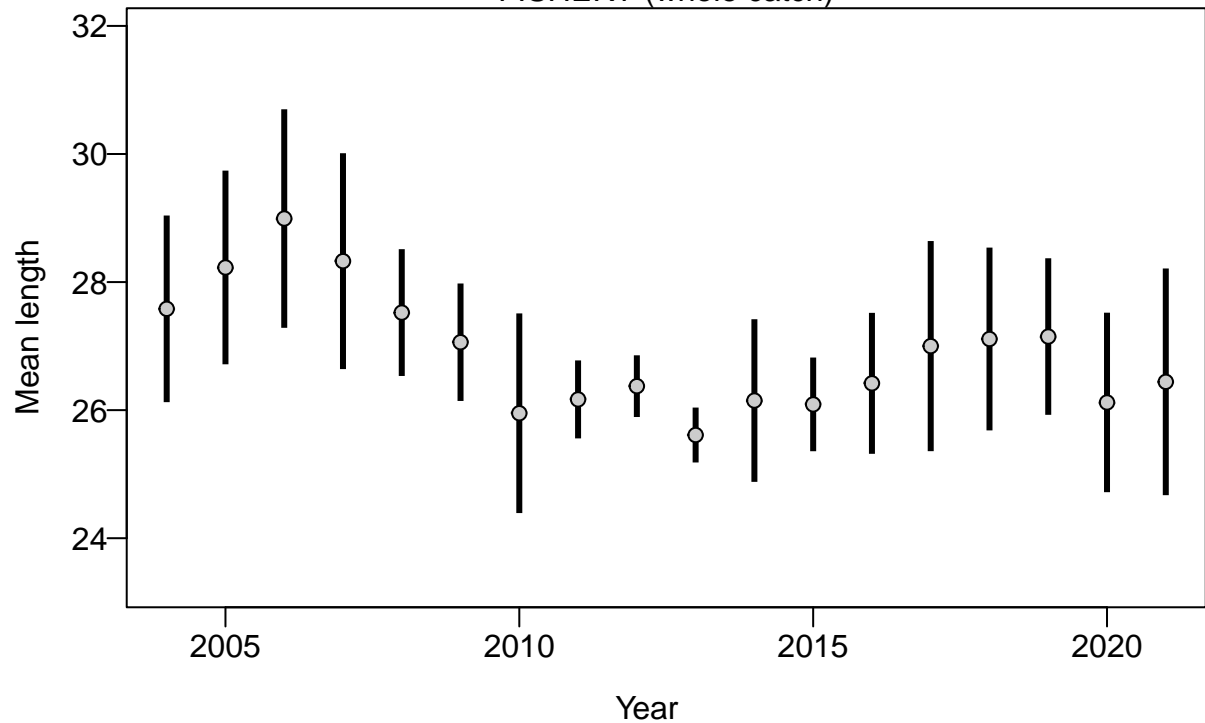


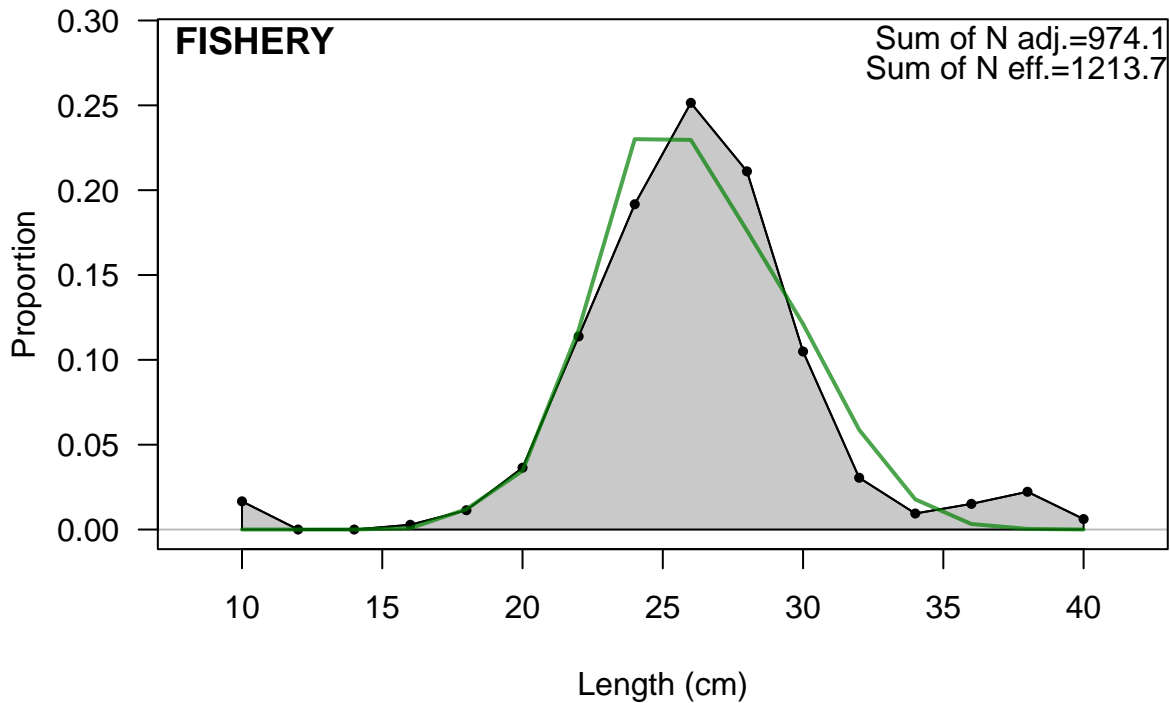


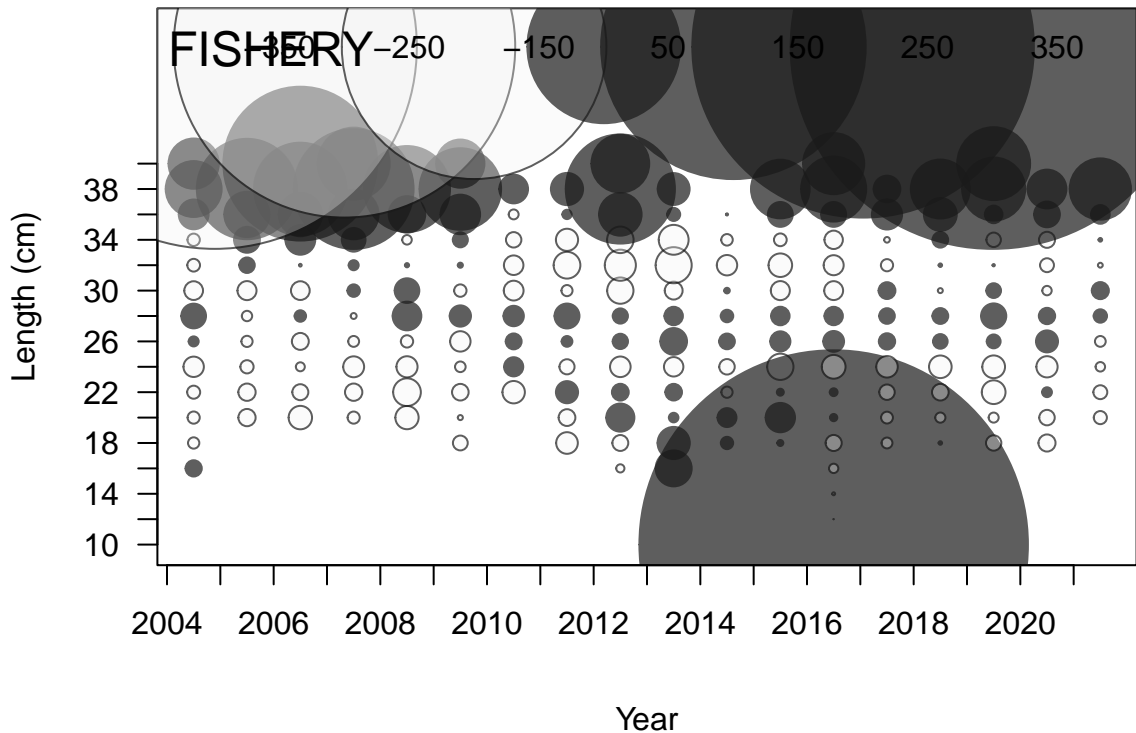


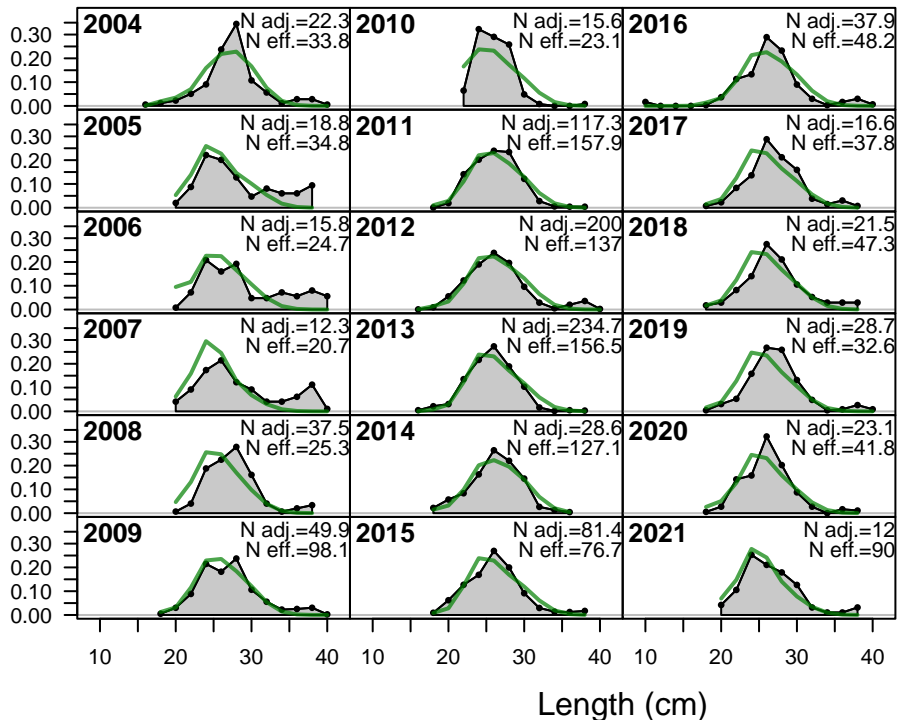


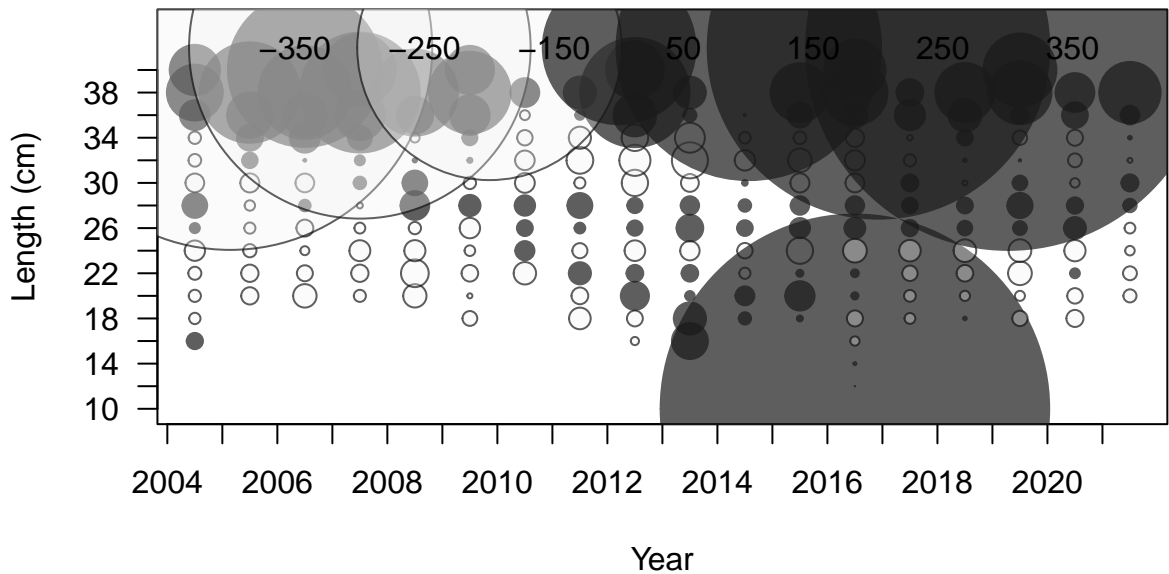
## FISHERY (whole catch)





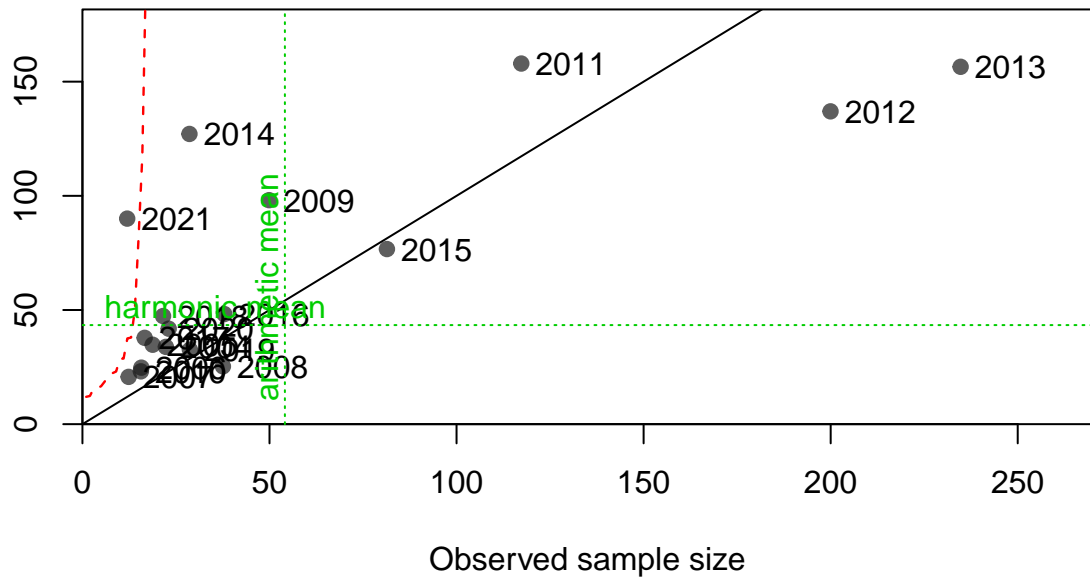




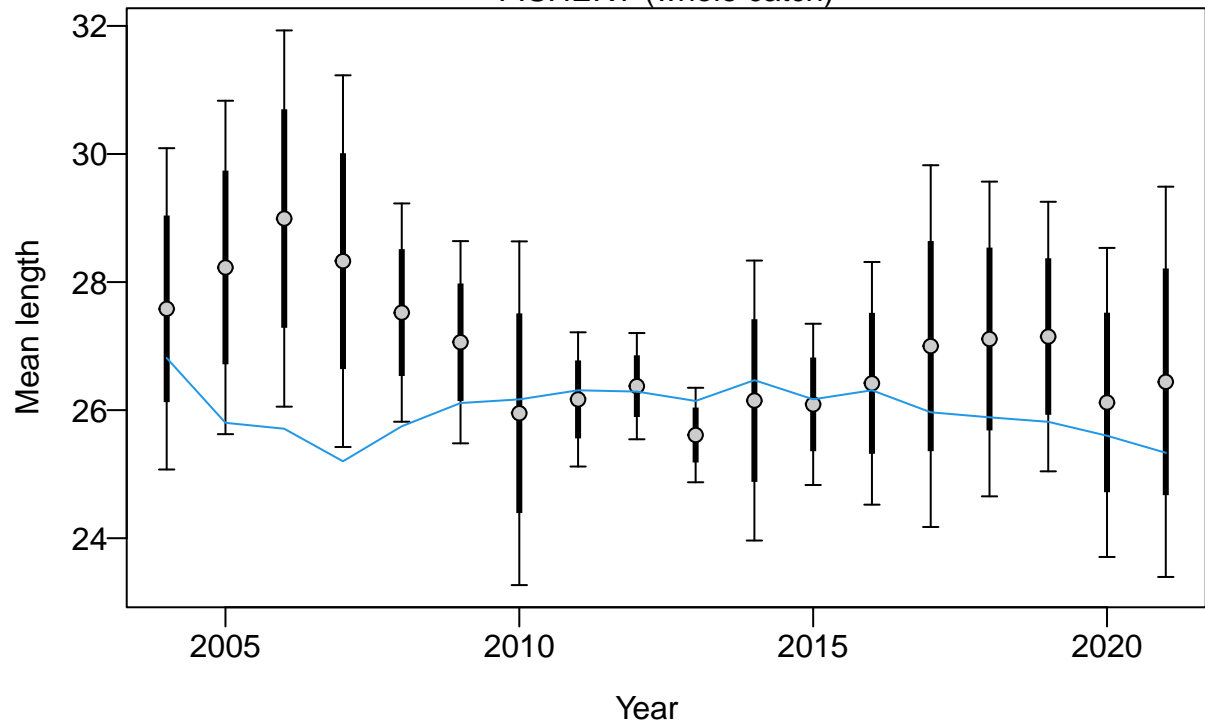


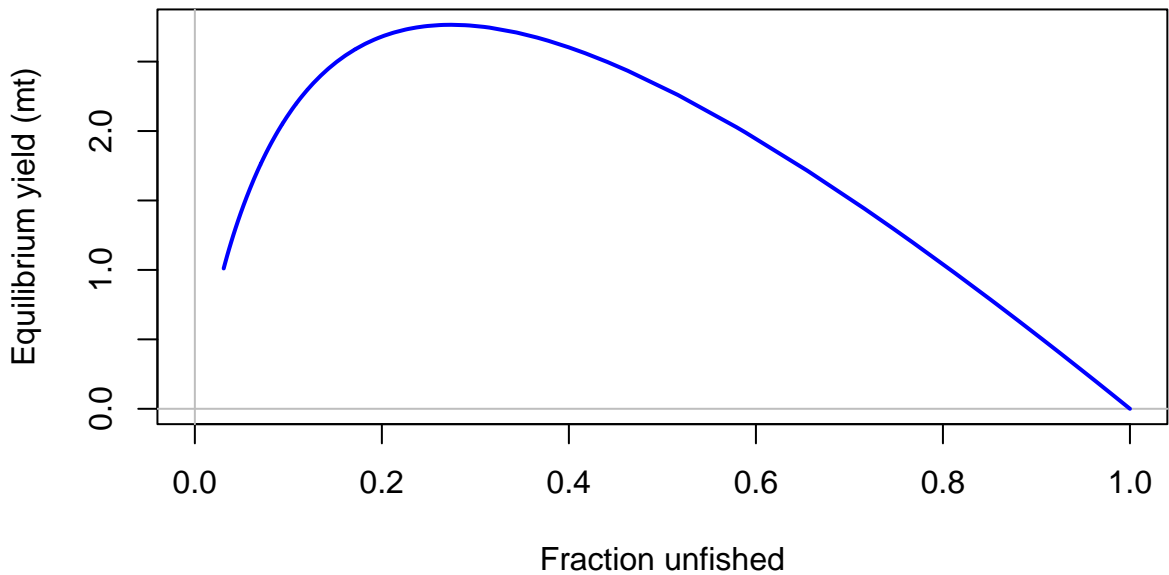


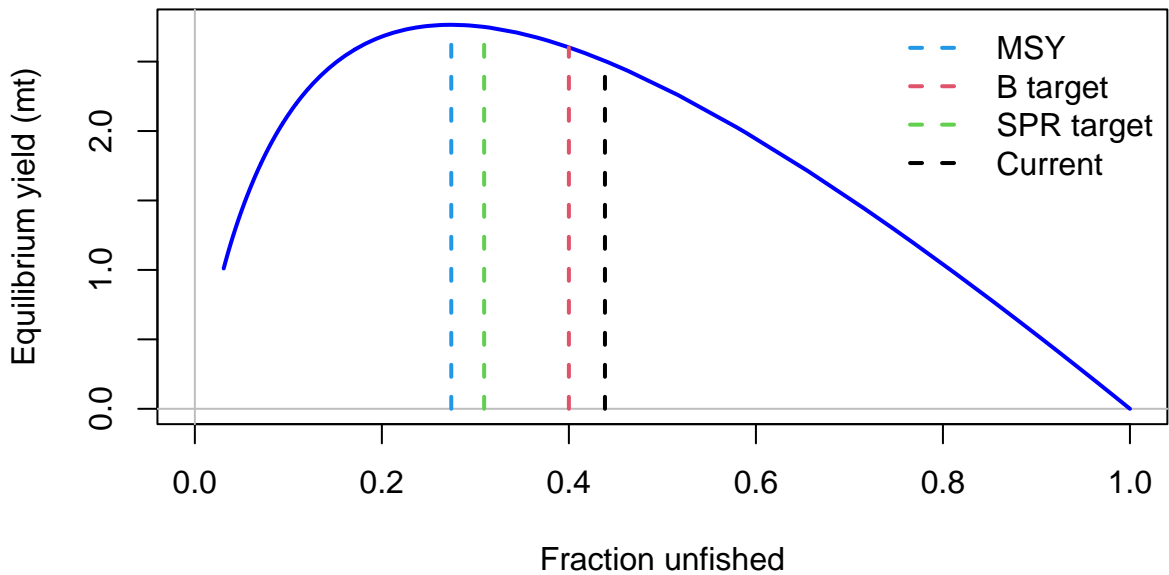
Effective sample size

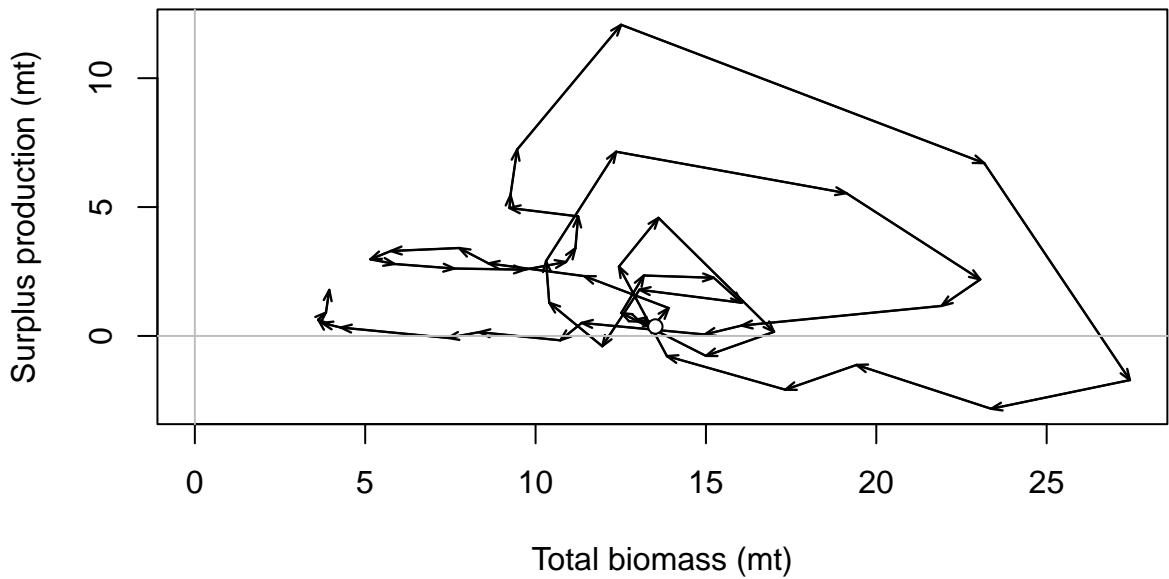


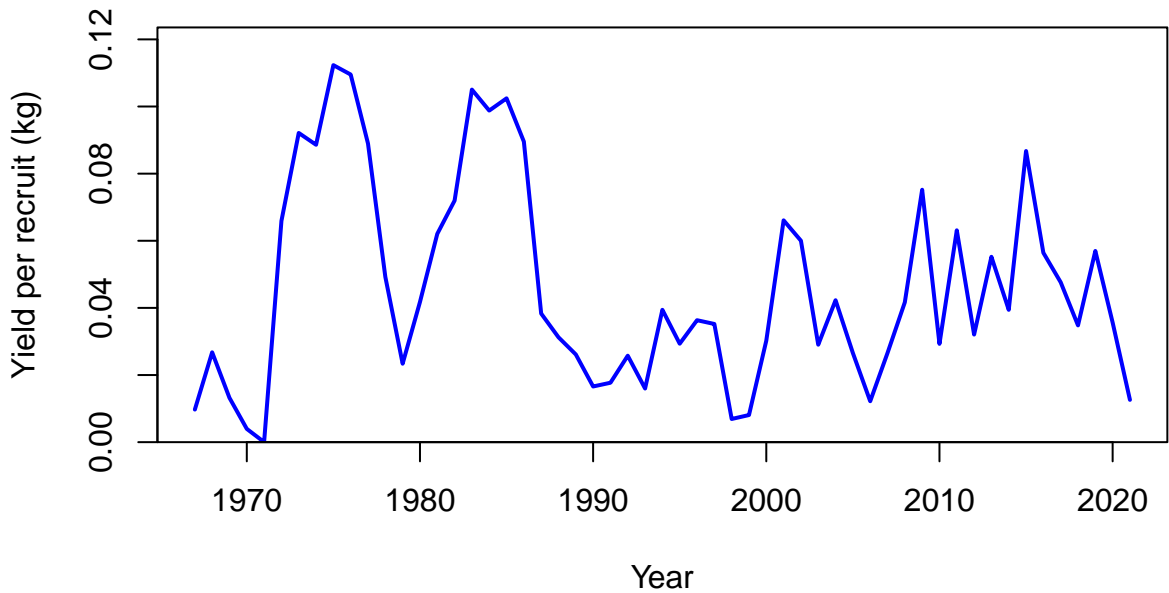
FISHERY (whole catch)

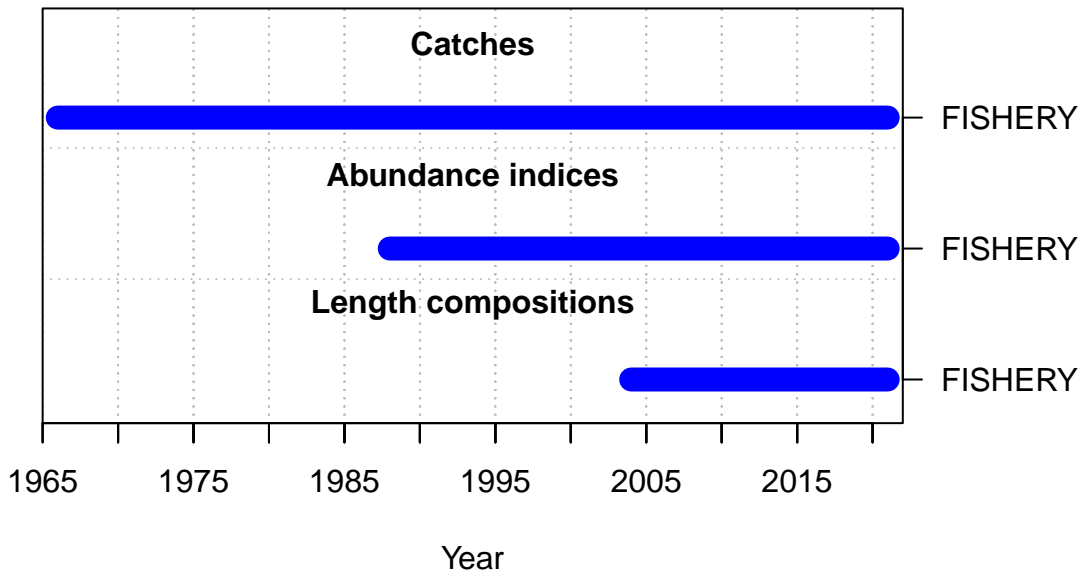


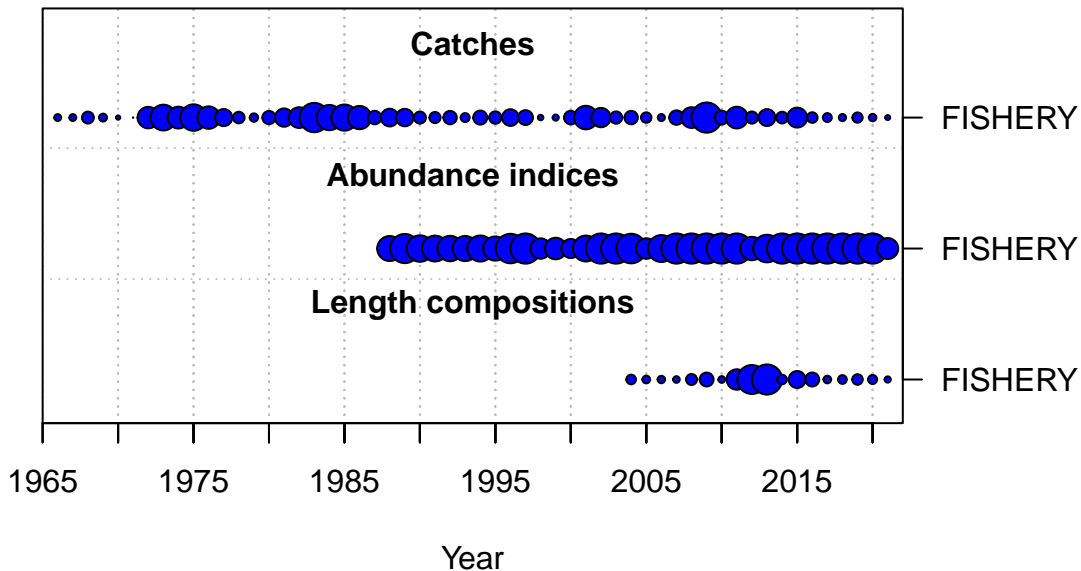






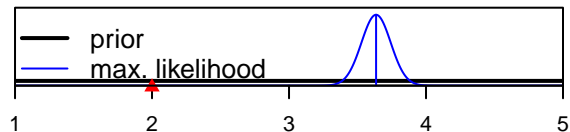




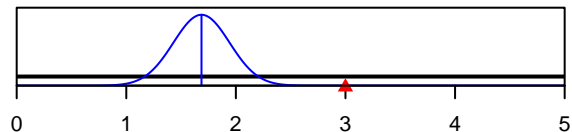




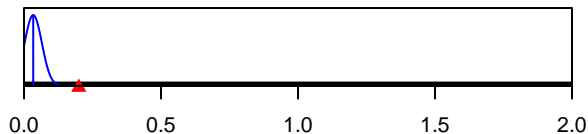
SR\_LN(R0)



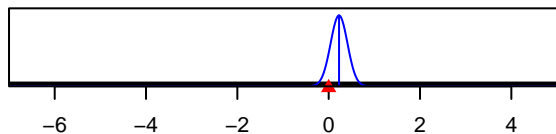
Size\_95%width\_FISHERY(1)



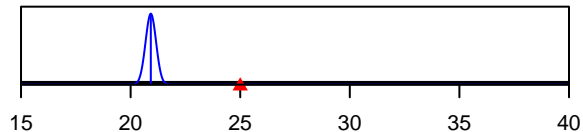
InitF\_seas\_1\_flt\_1FISHERY



LnQ\_base\_FISHERY(1)



Size\_inflection\_FISHERY(1)



Parameter value