

Plots created using the 'r4ss' package in R

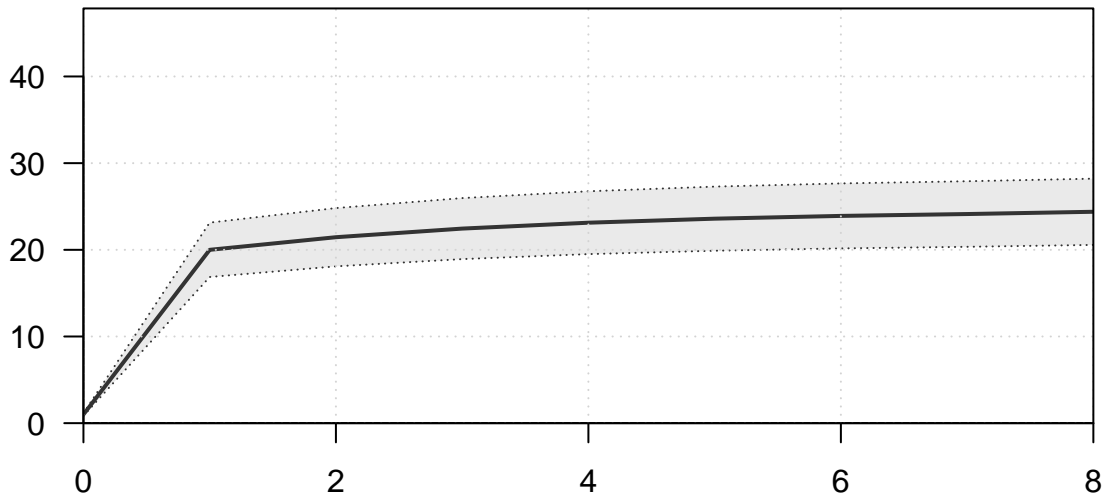
Stock Synthesis version: 3.30.19.0

StartTime: Fri Jul 29 08:23:37 2022

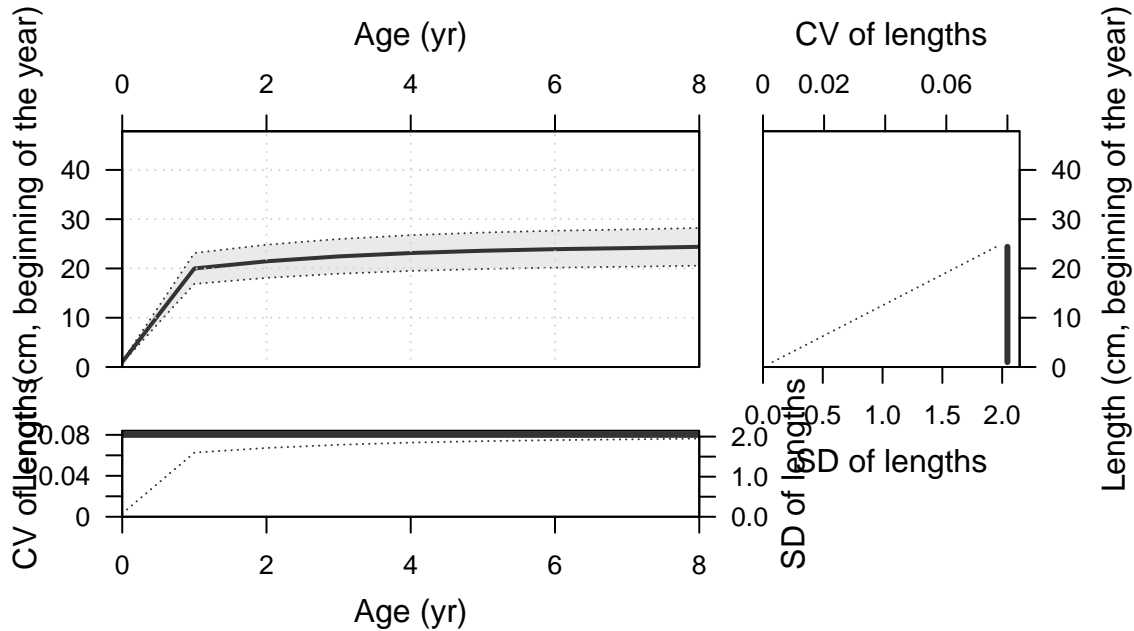
Data\_File: data.ss

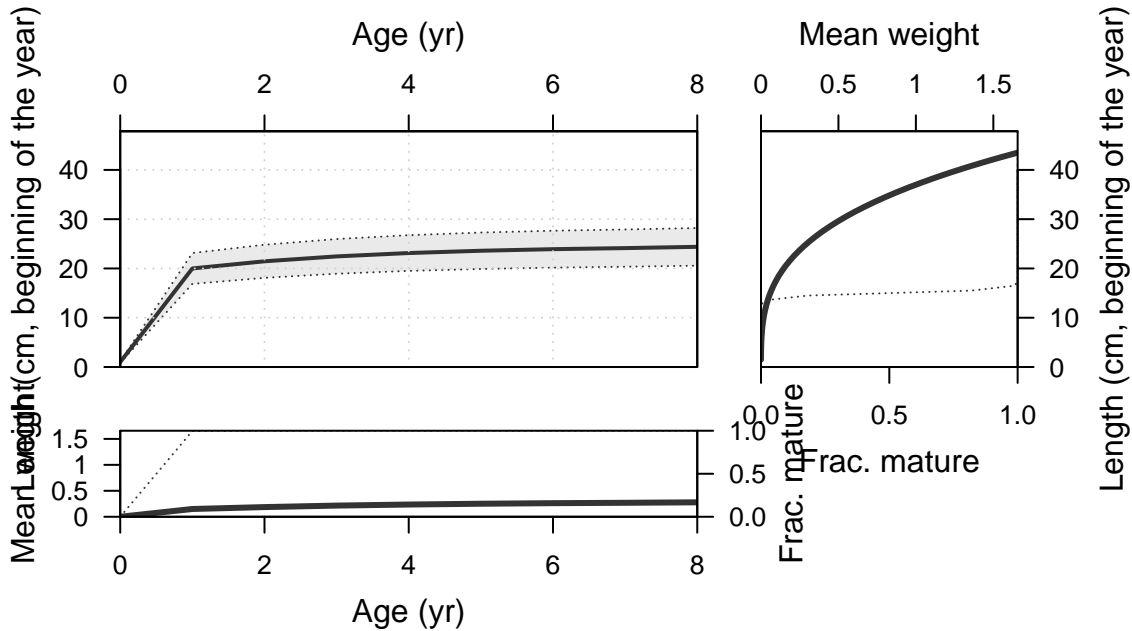
Control\_File: control.ss

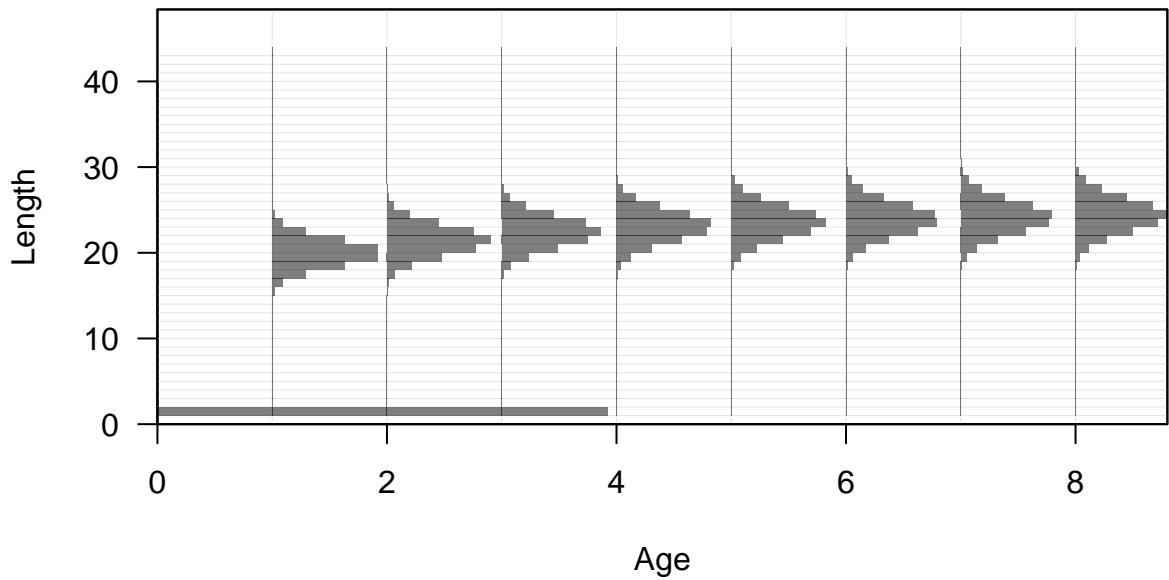
Length (cm, beginning of the year)

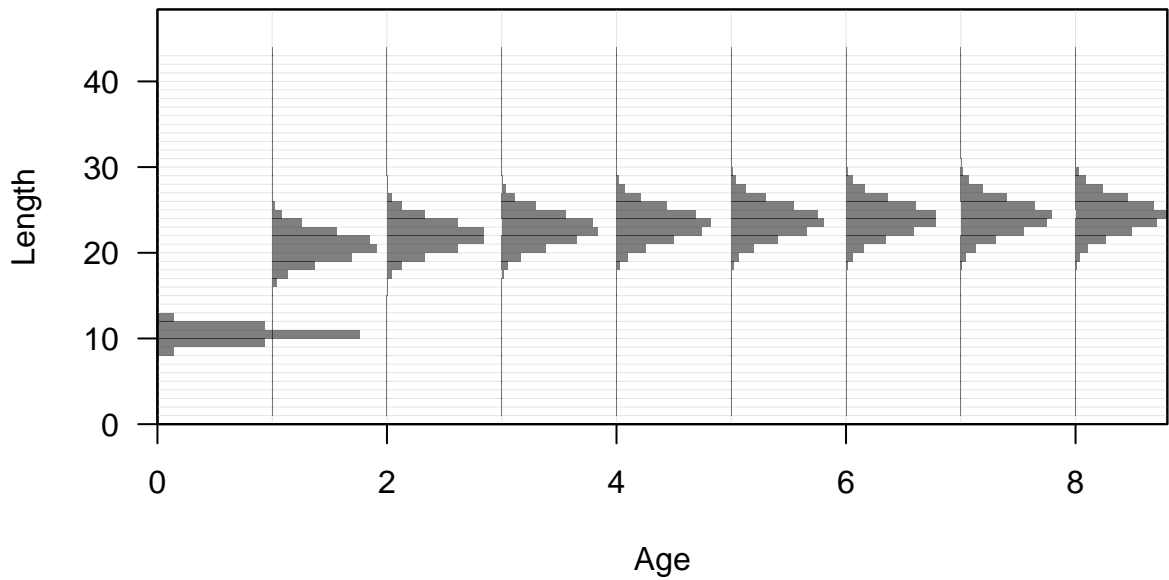


Age (yr)











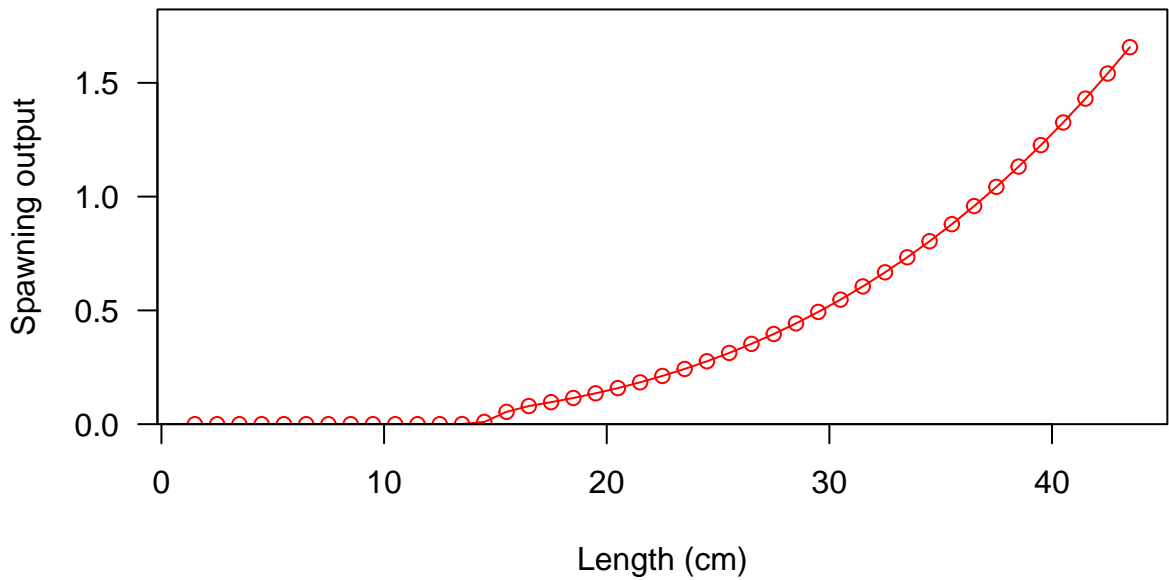


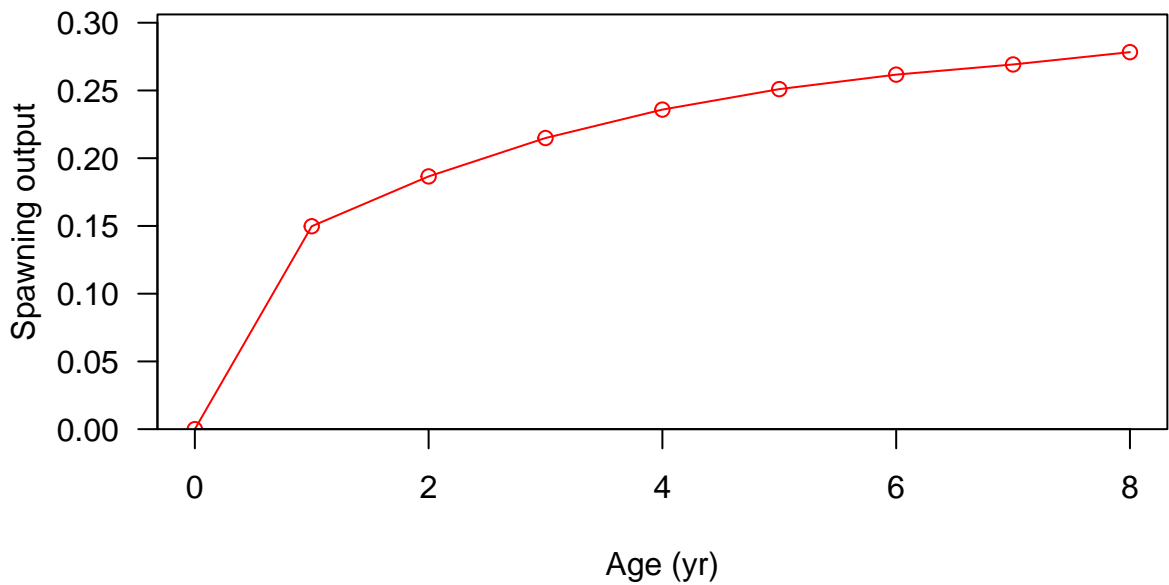




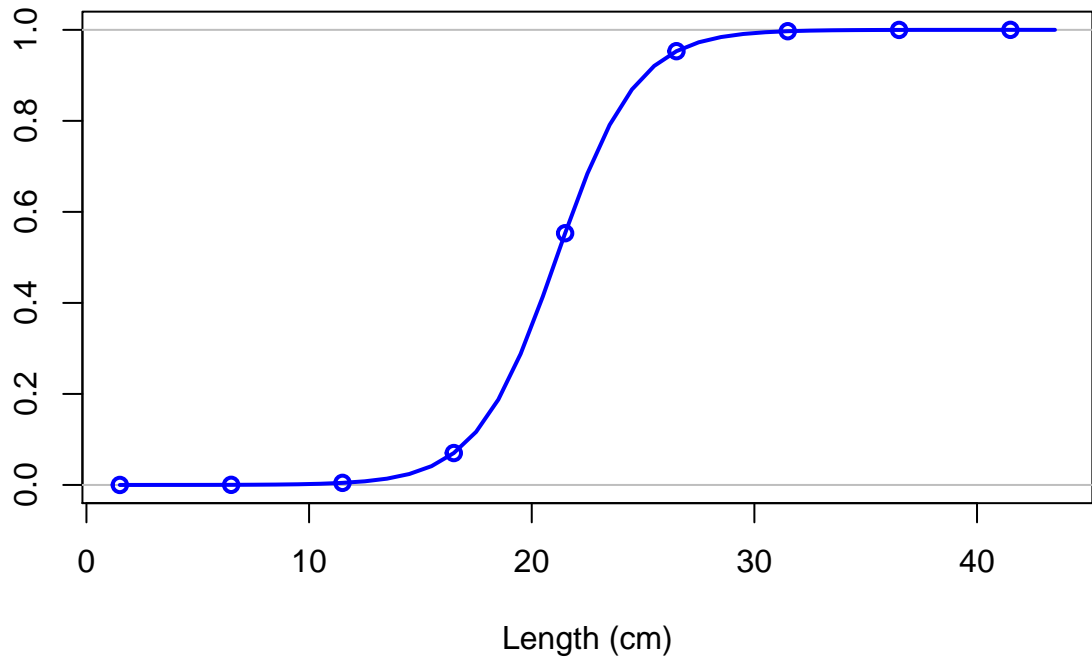




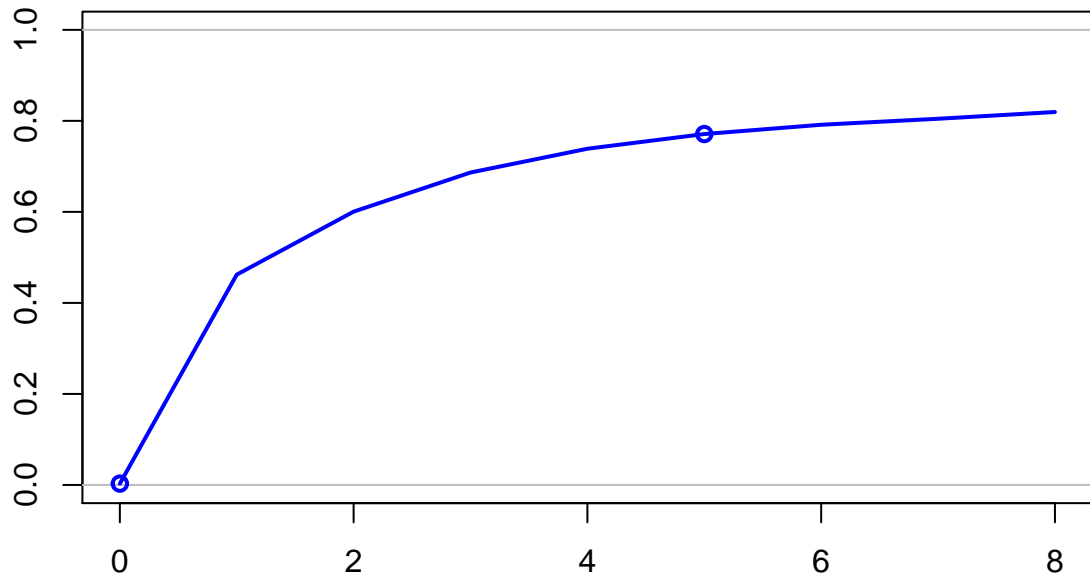




Selectivity

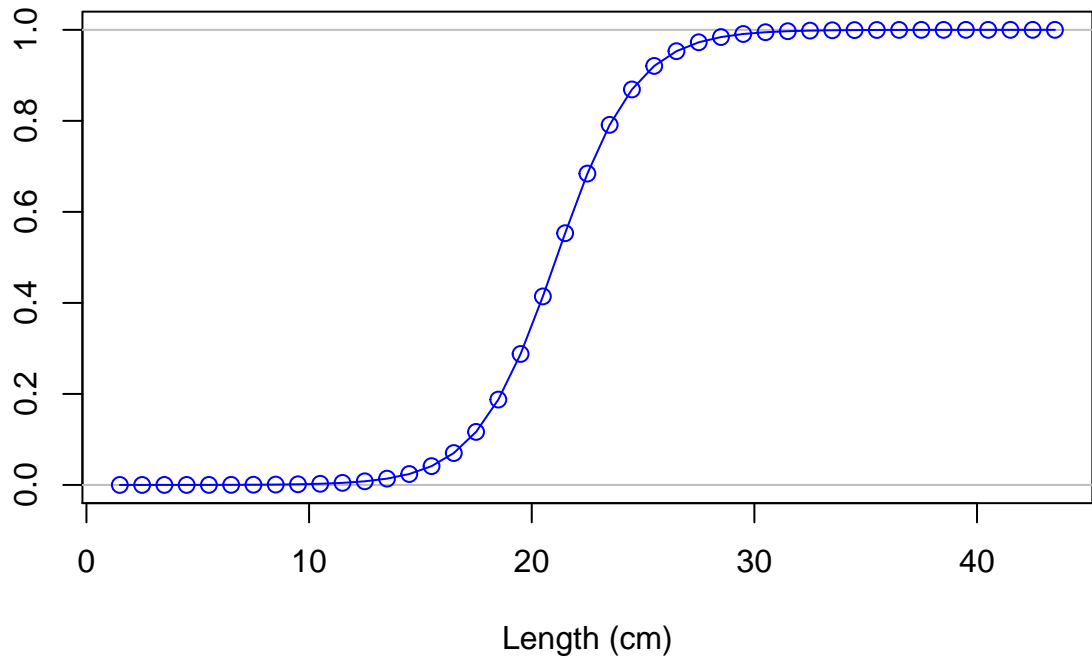


Selectivity

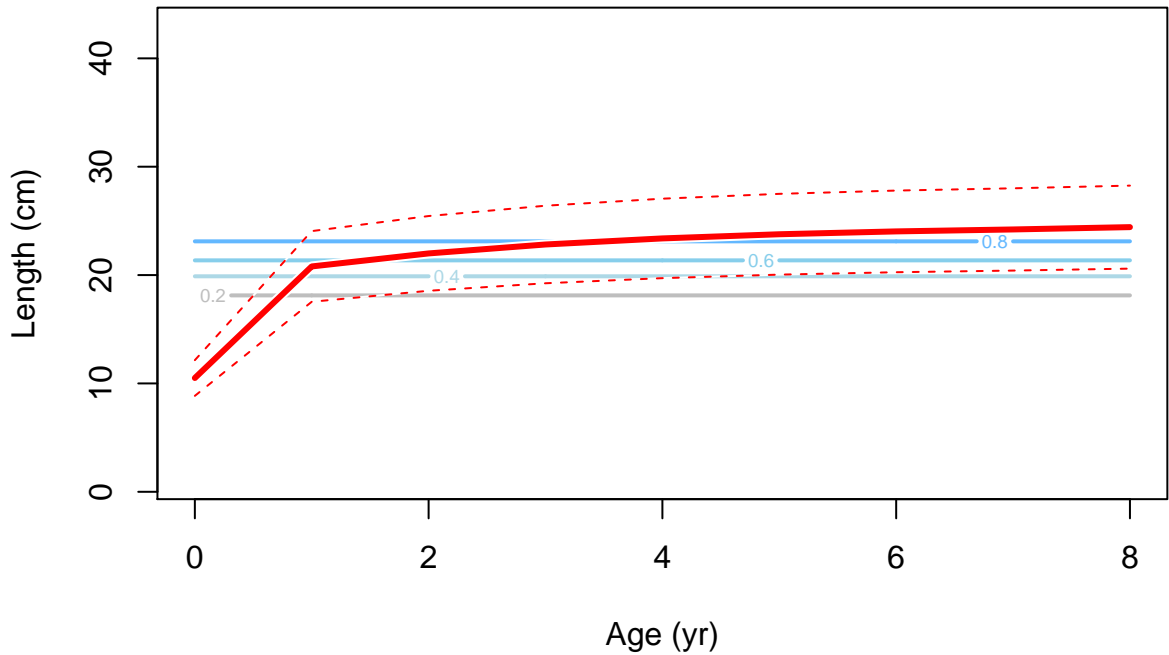


Age (yr)

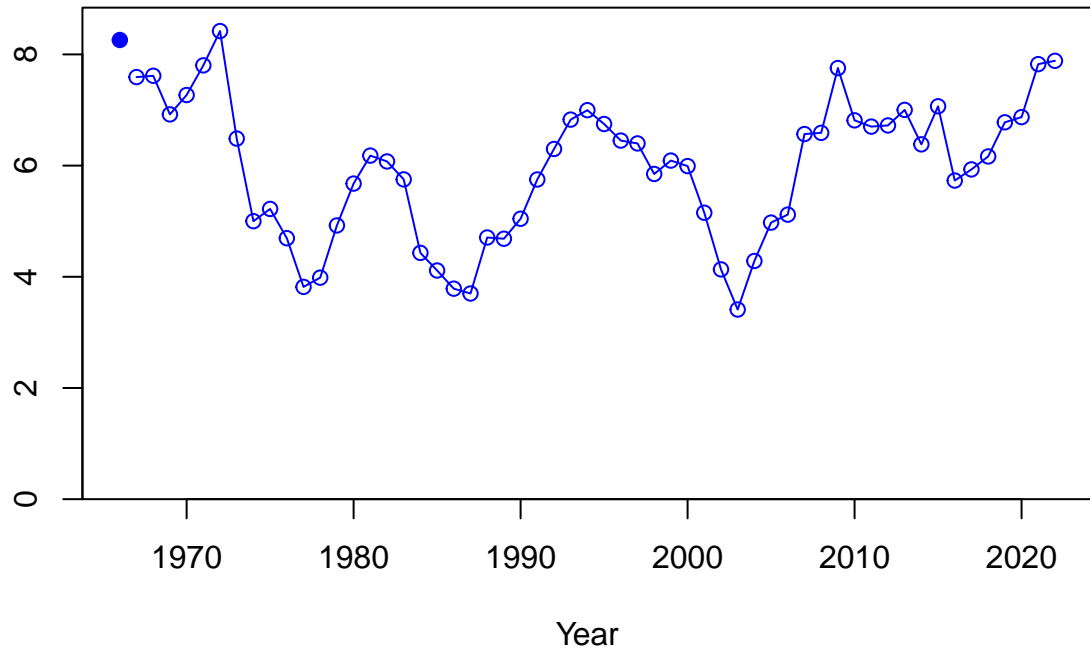
Selectivity



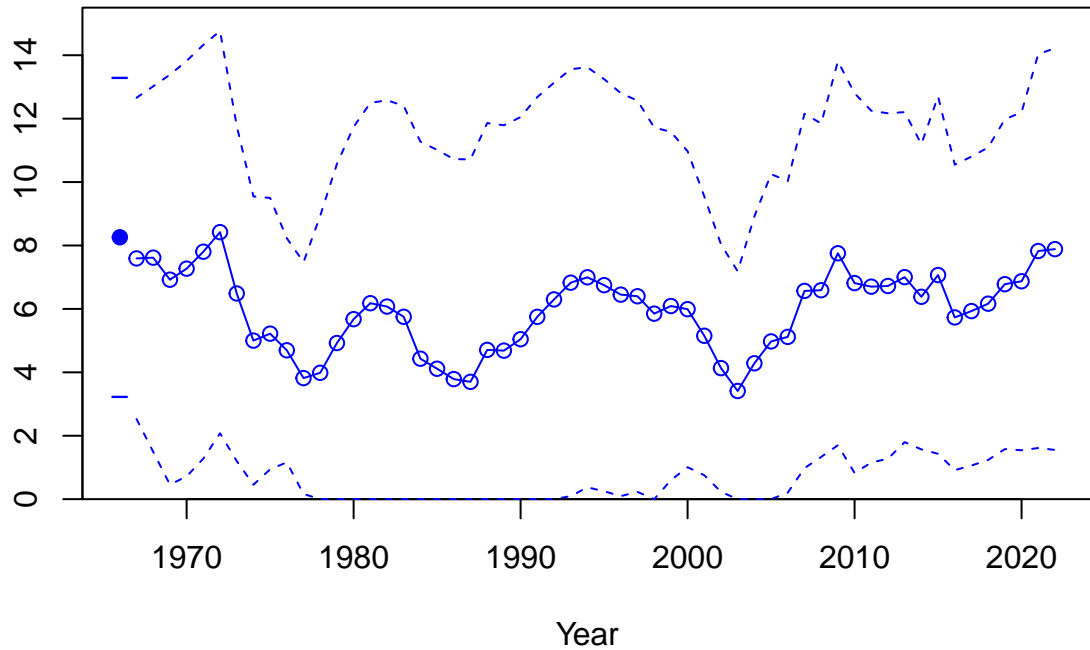




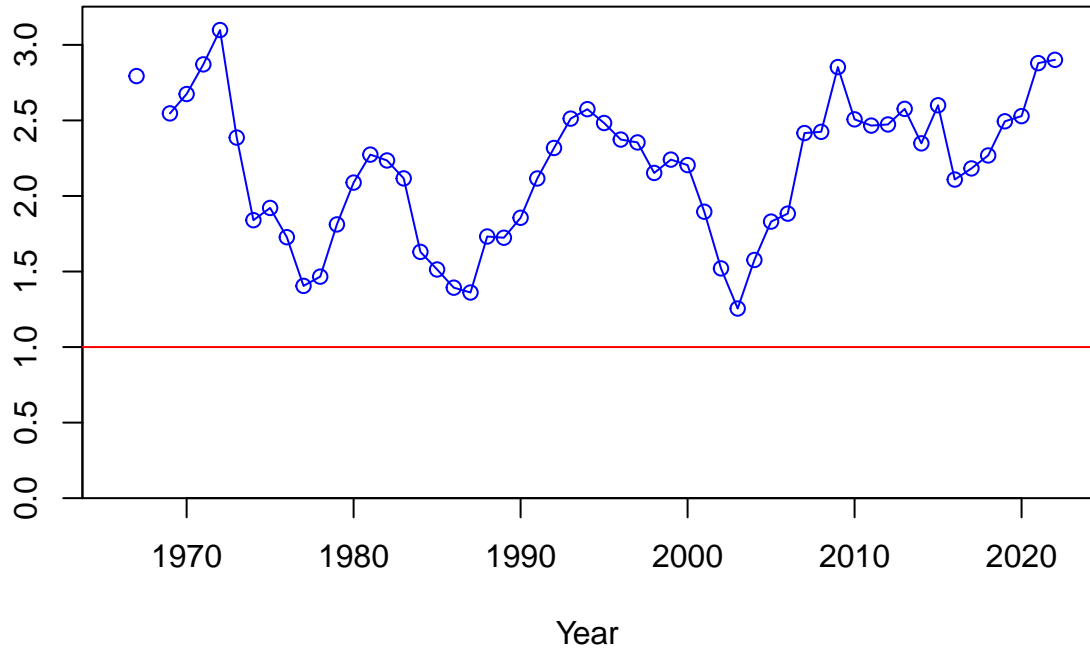
Spawning biomass (mt)



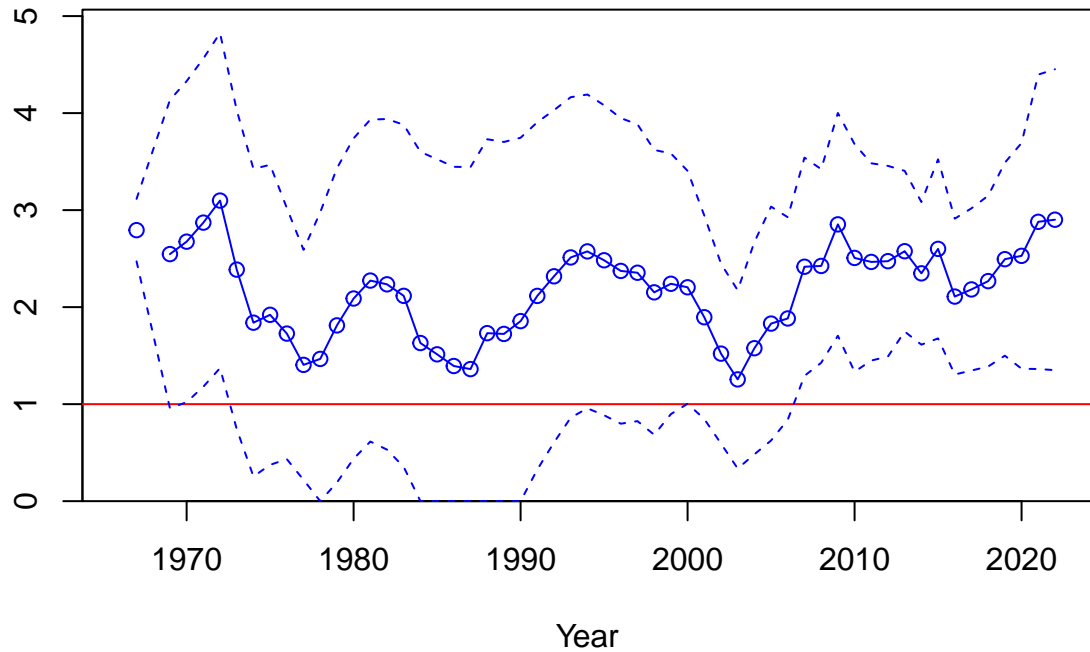
Spawning biomass (mt)

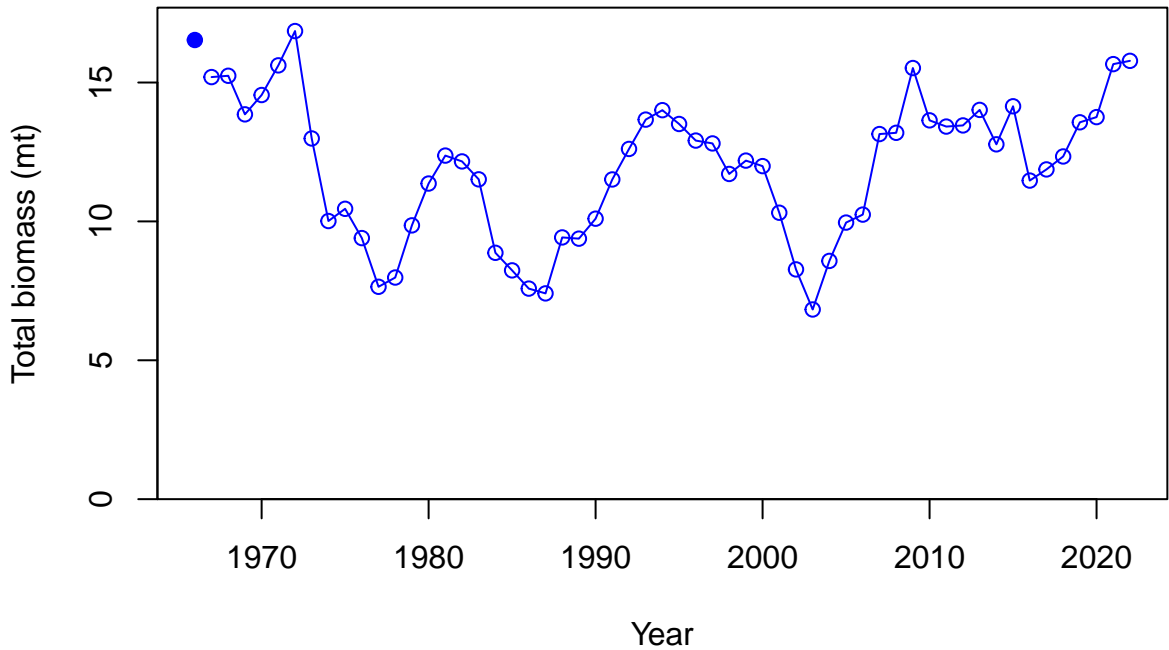


Relative spawning biomass:  $B/B_{MSY}$

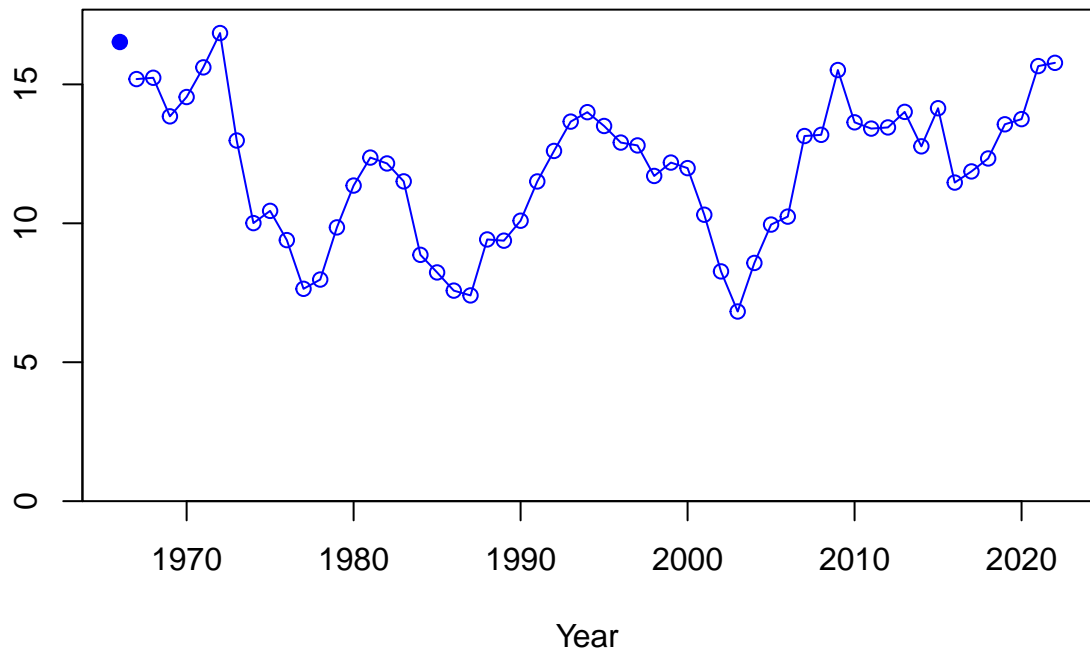


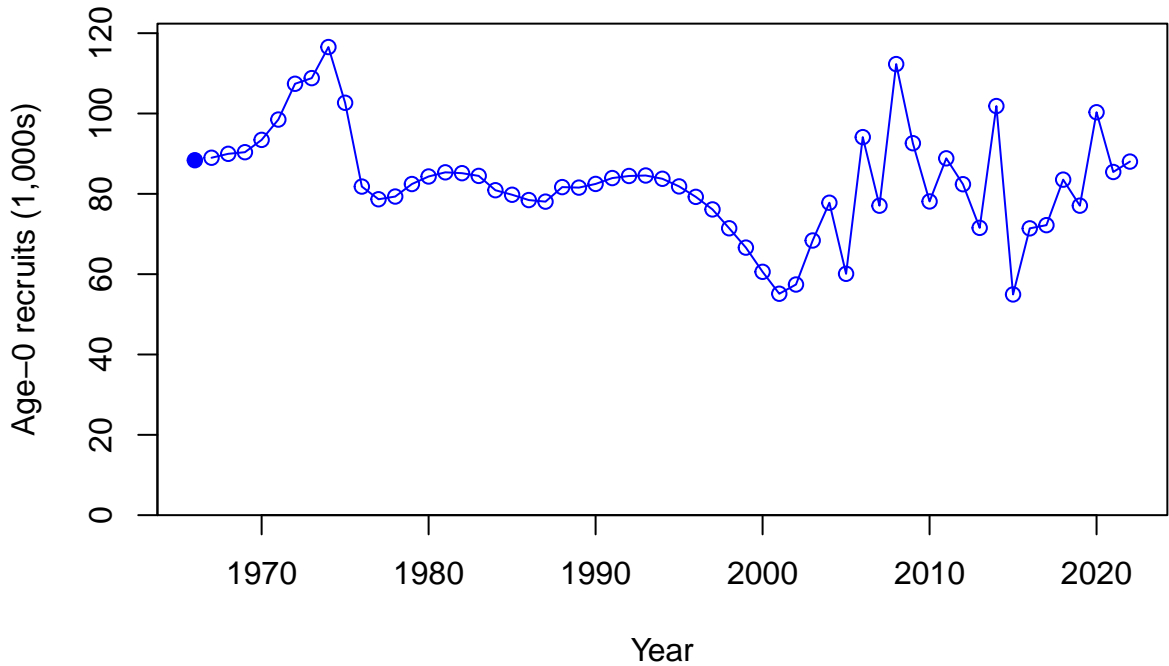
Relative spawning biomass:  $B/B_{MSY}$



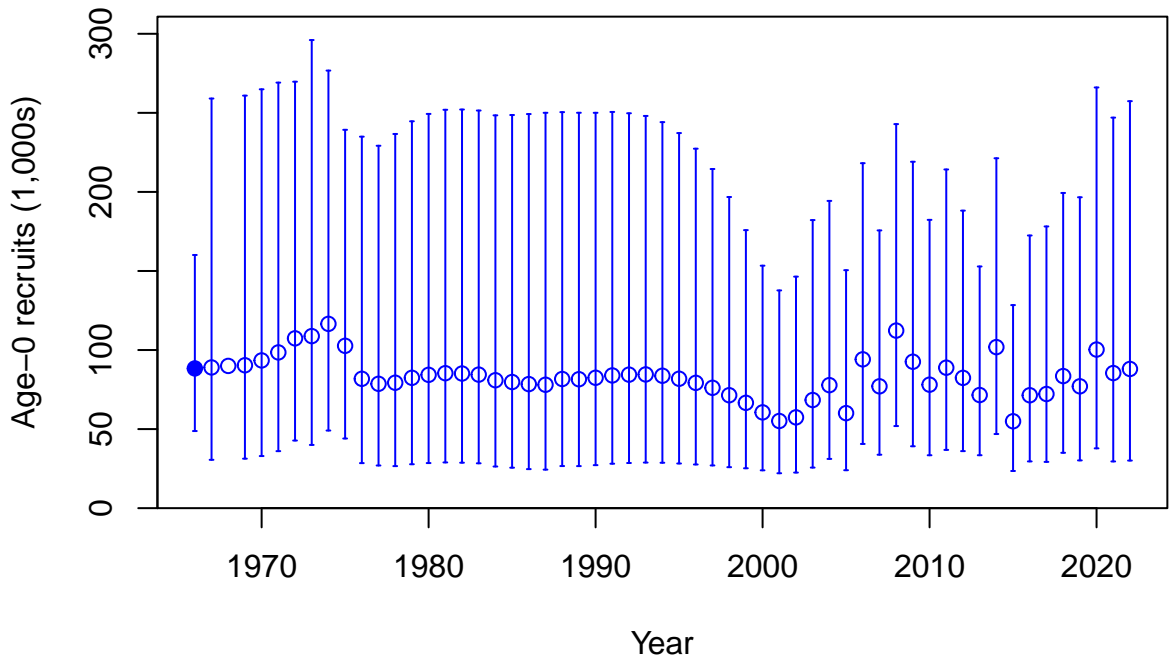


Summary biomass (mt)

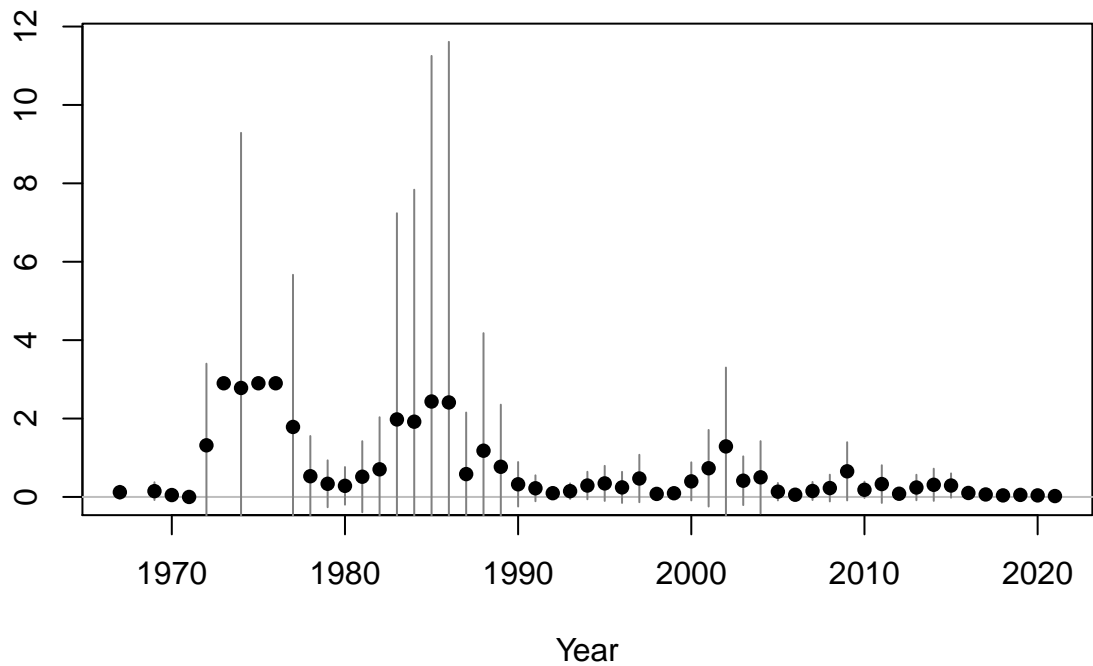


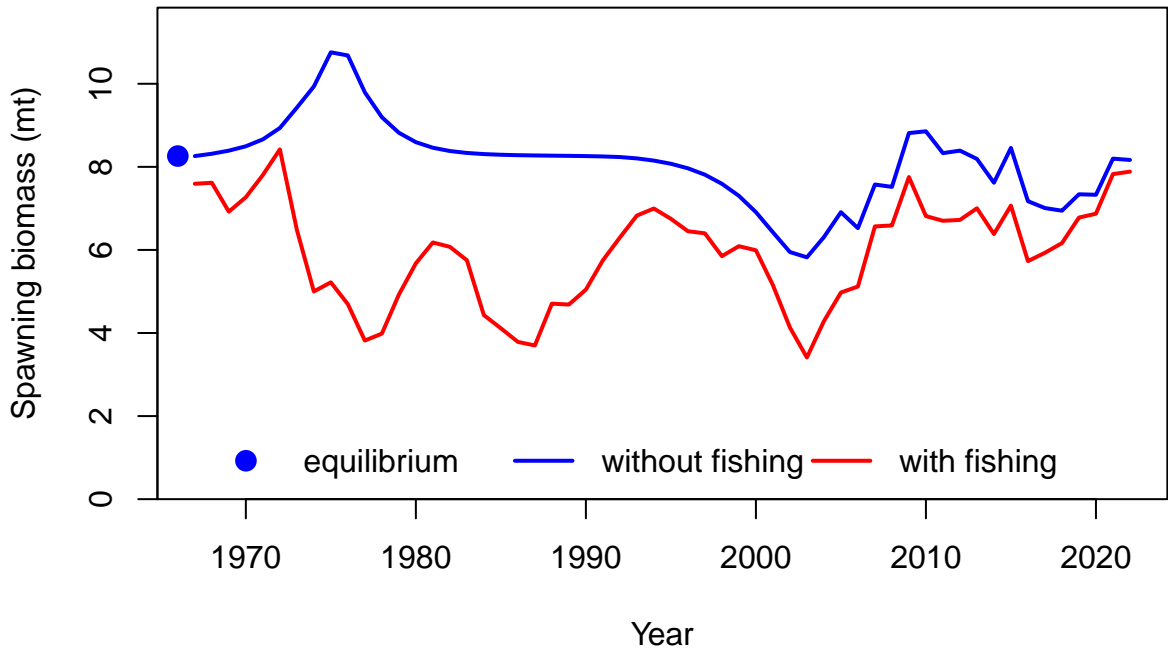




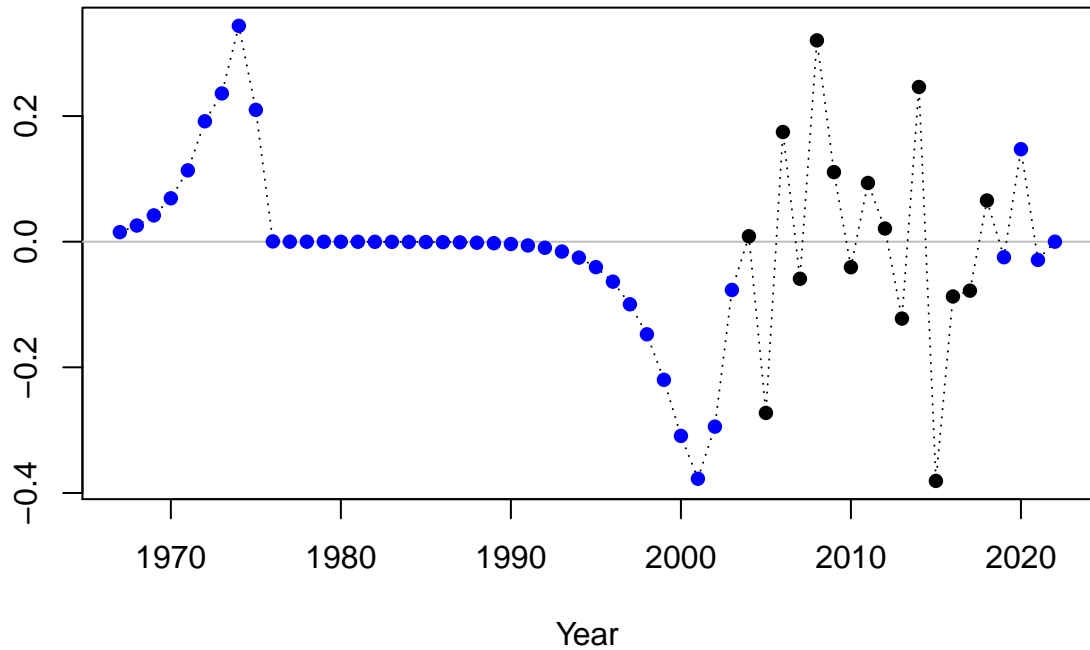


Summary Fishing Mortality





Log recruitment deviation



Log recruitment deviation

1.0  
0.5  
0.0  
-0.5  
-1.0

1970

1980

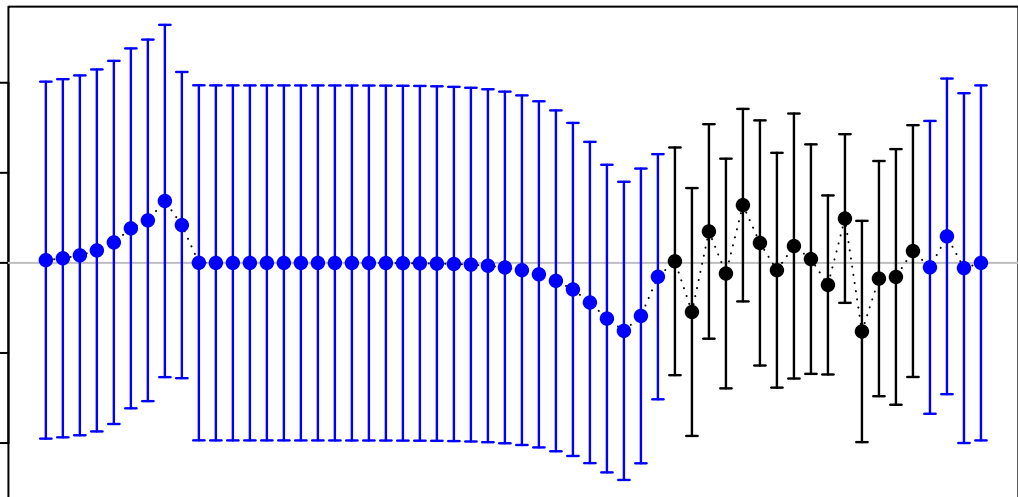
1990

2000

2010

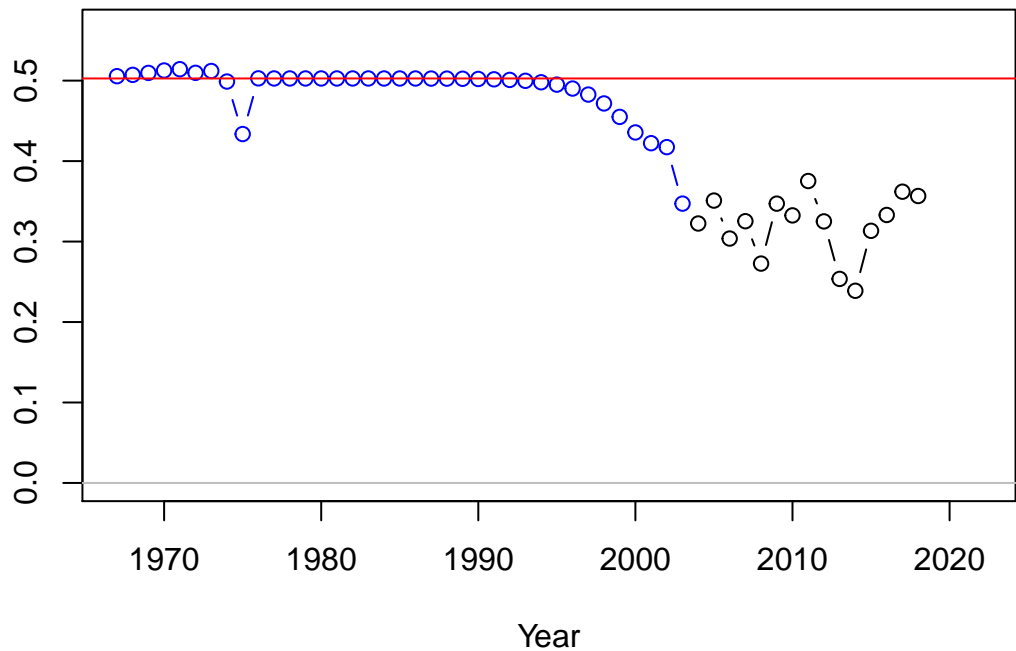
2020

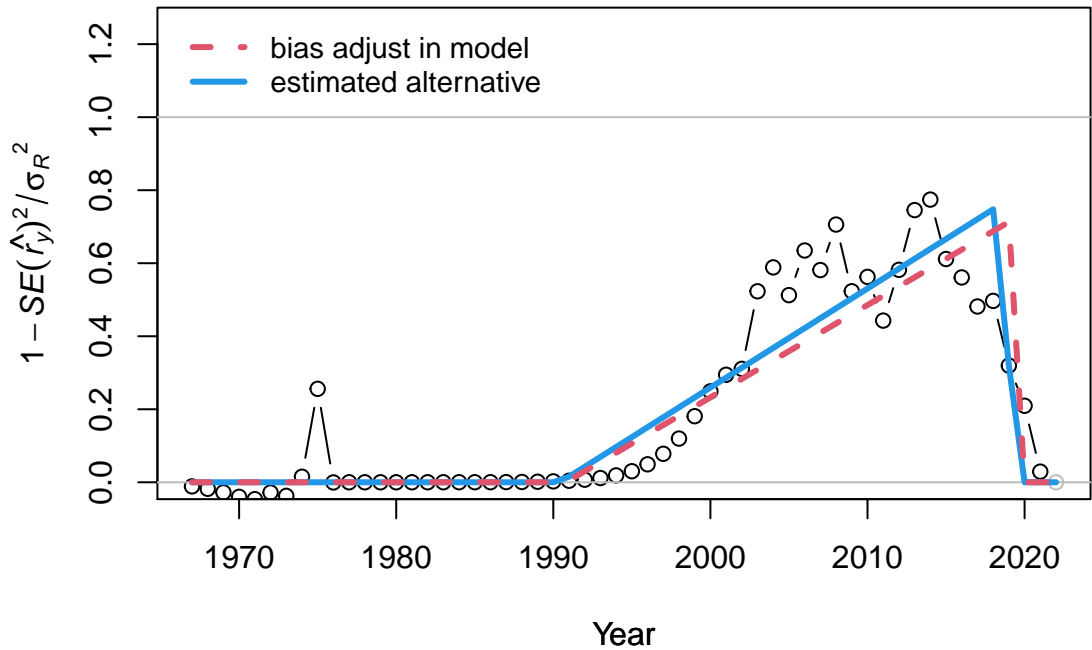
Year

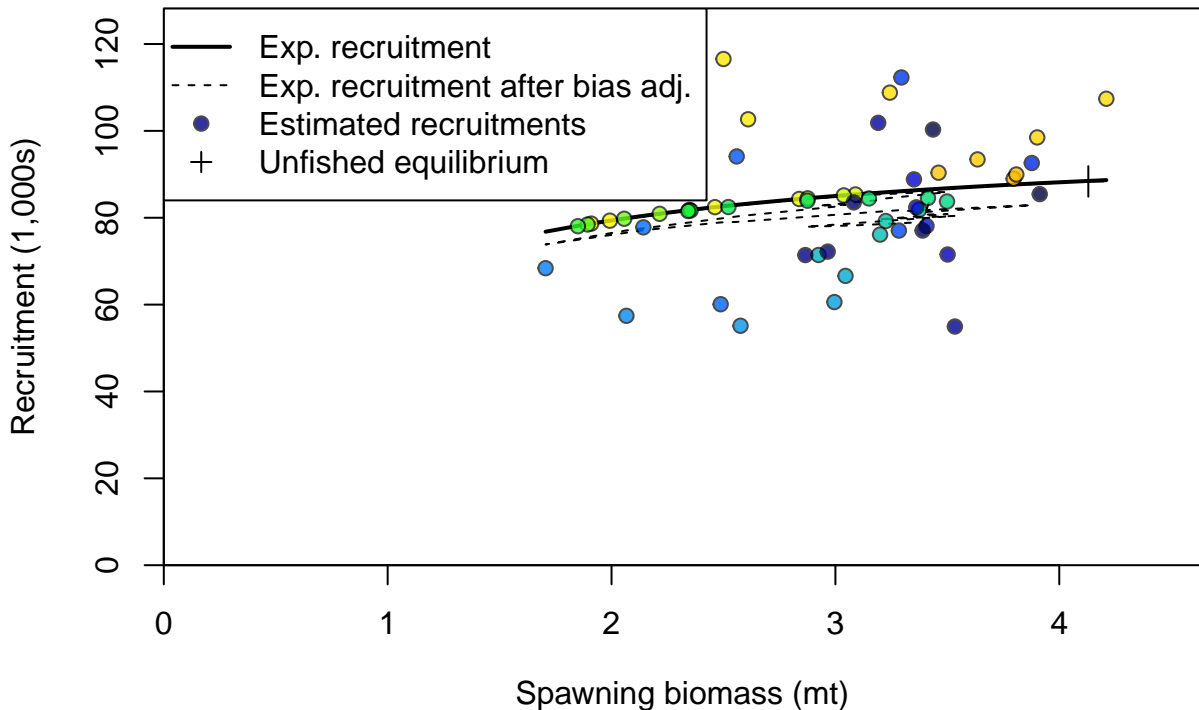


## Recruitment deviation variance

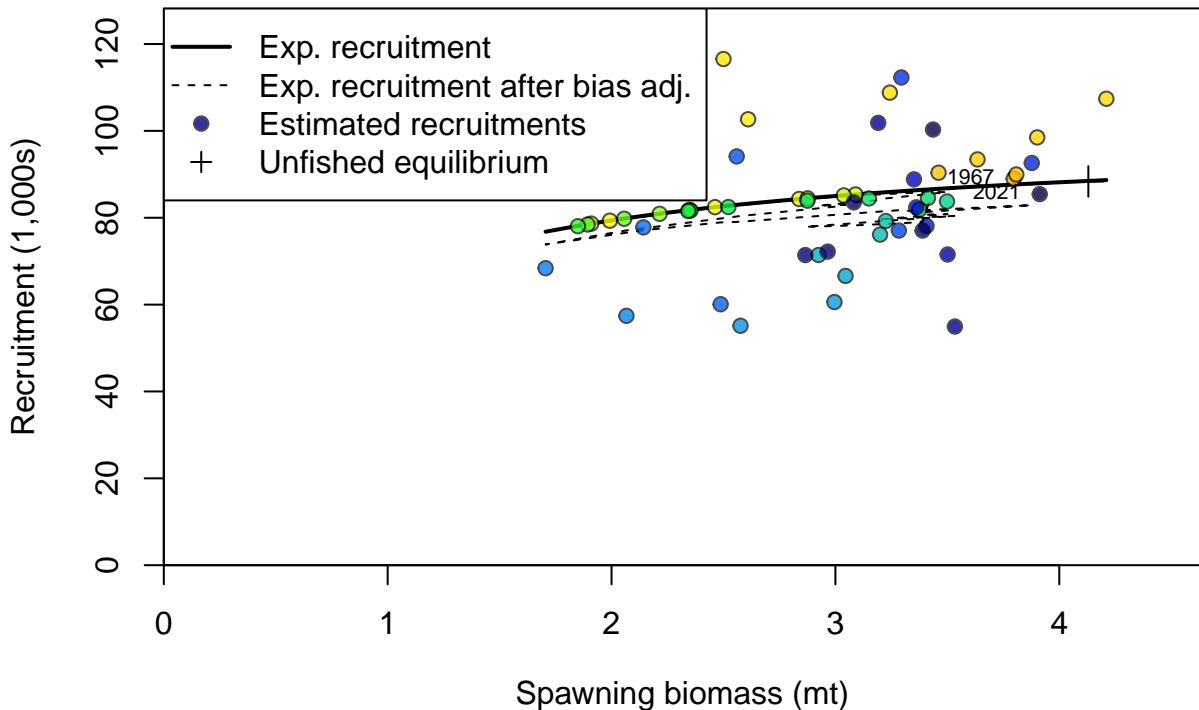
Asymptotic standard error estimate

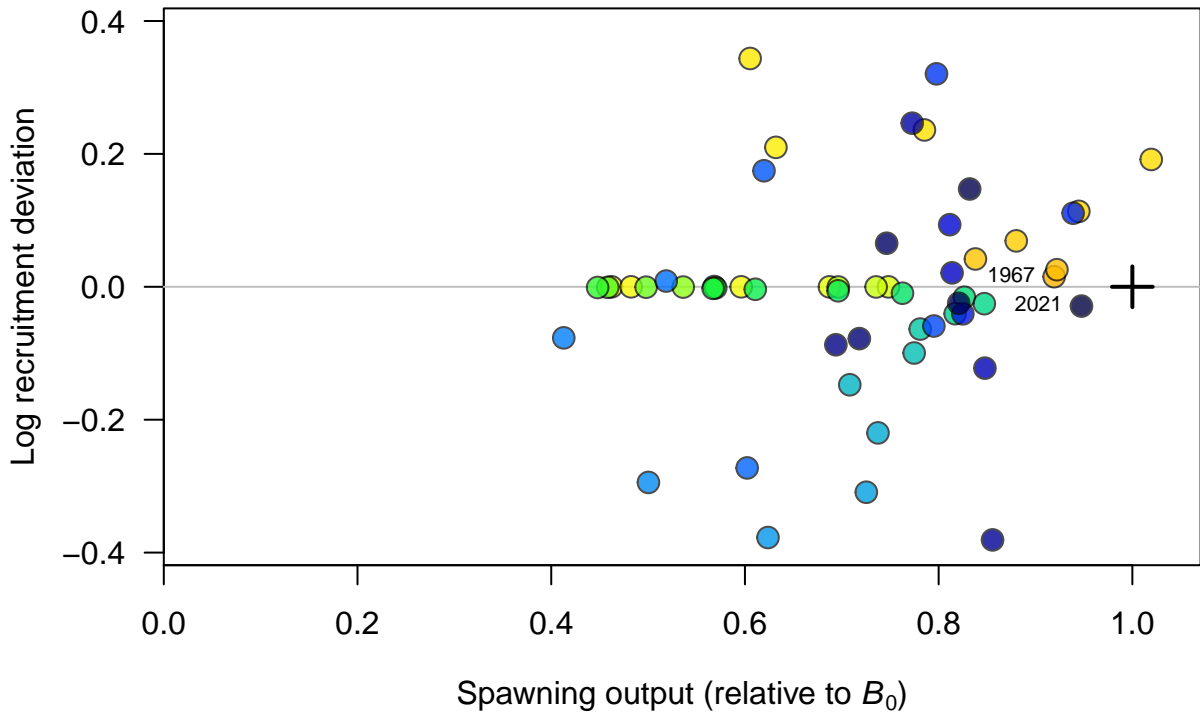


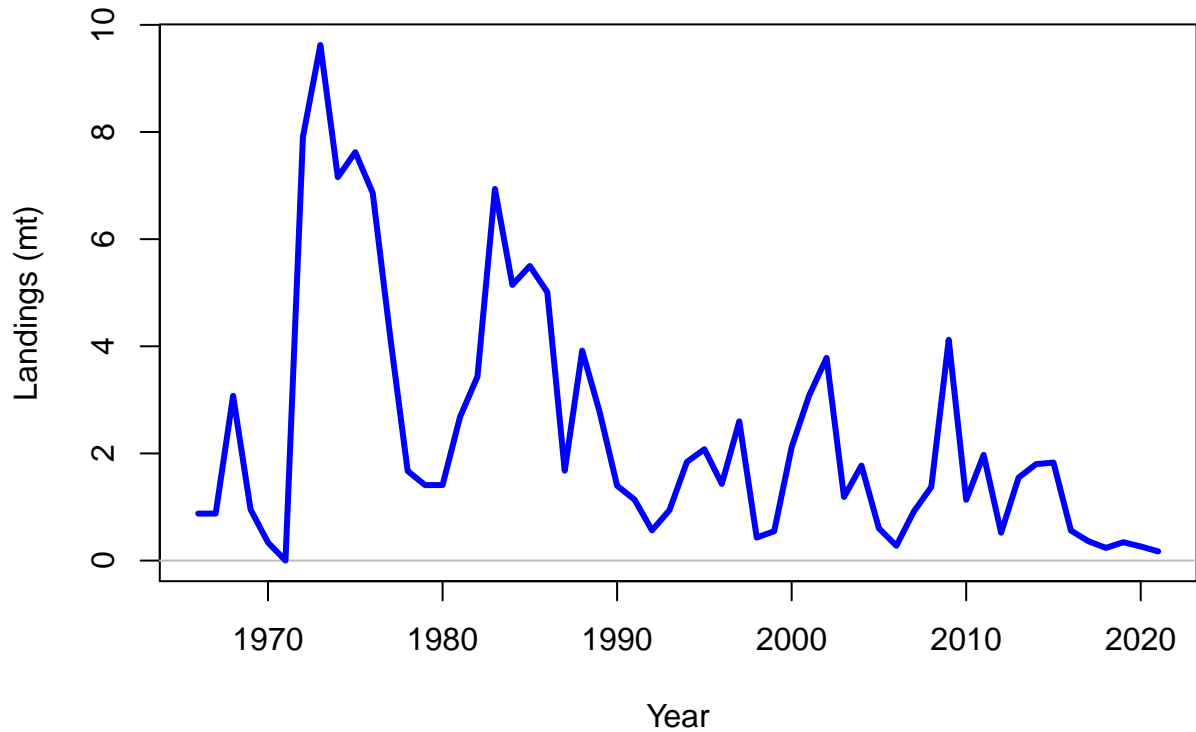


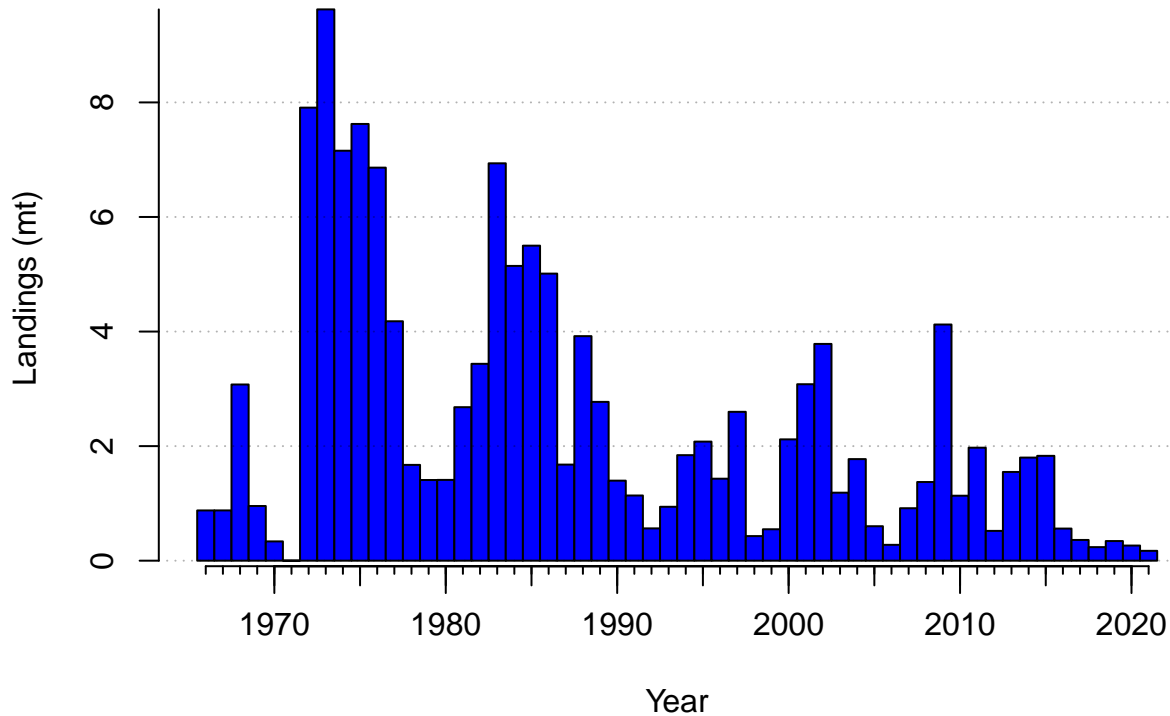


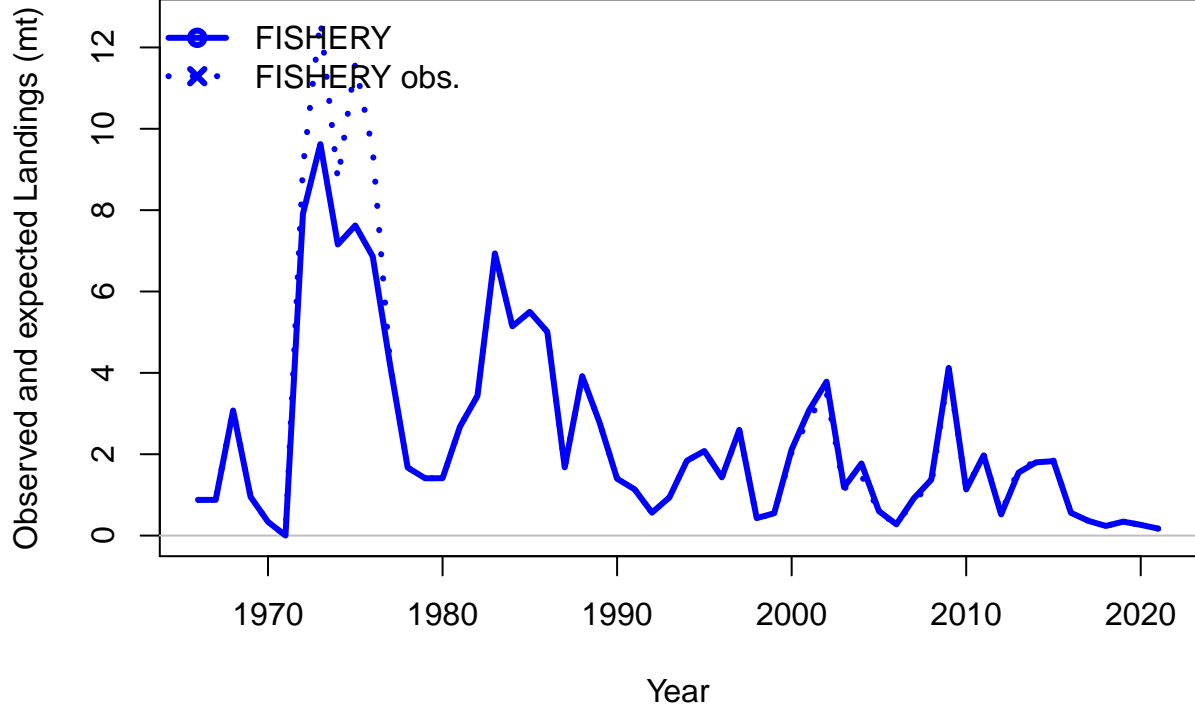


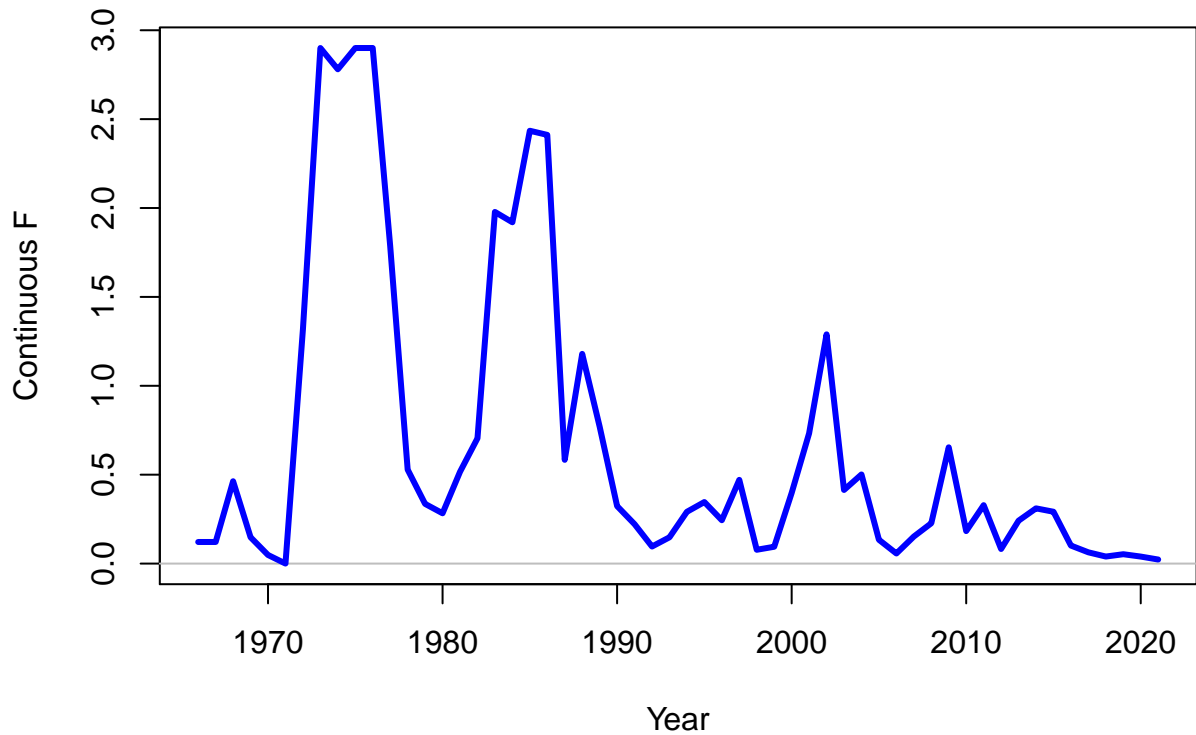




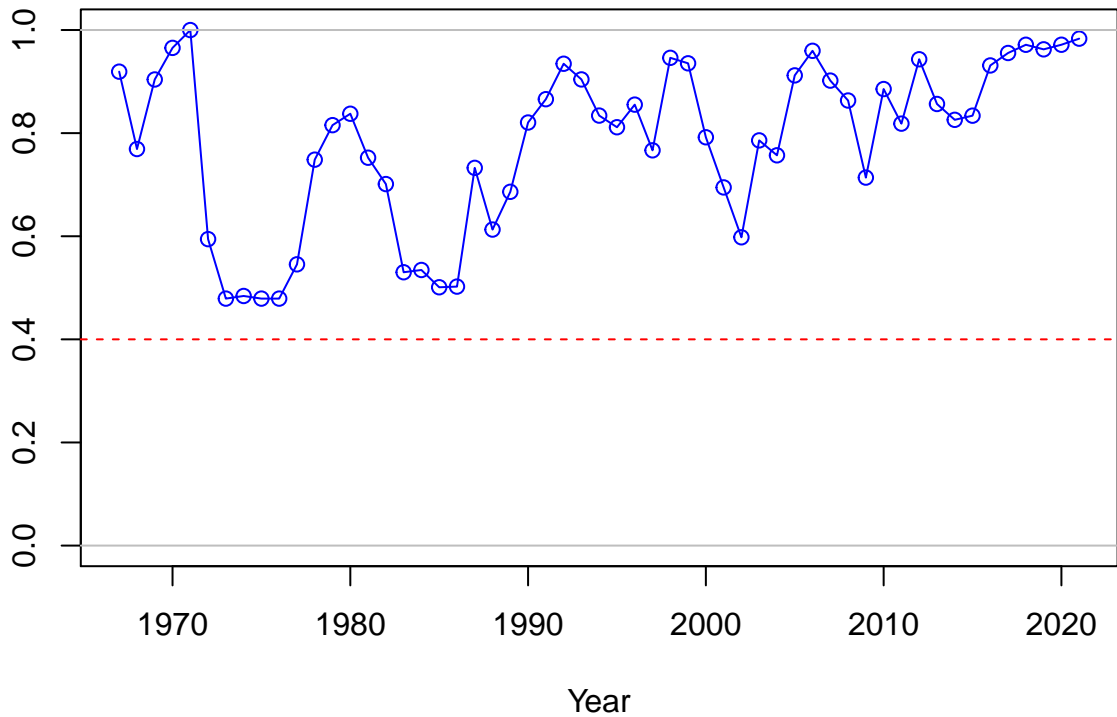




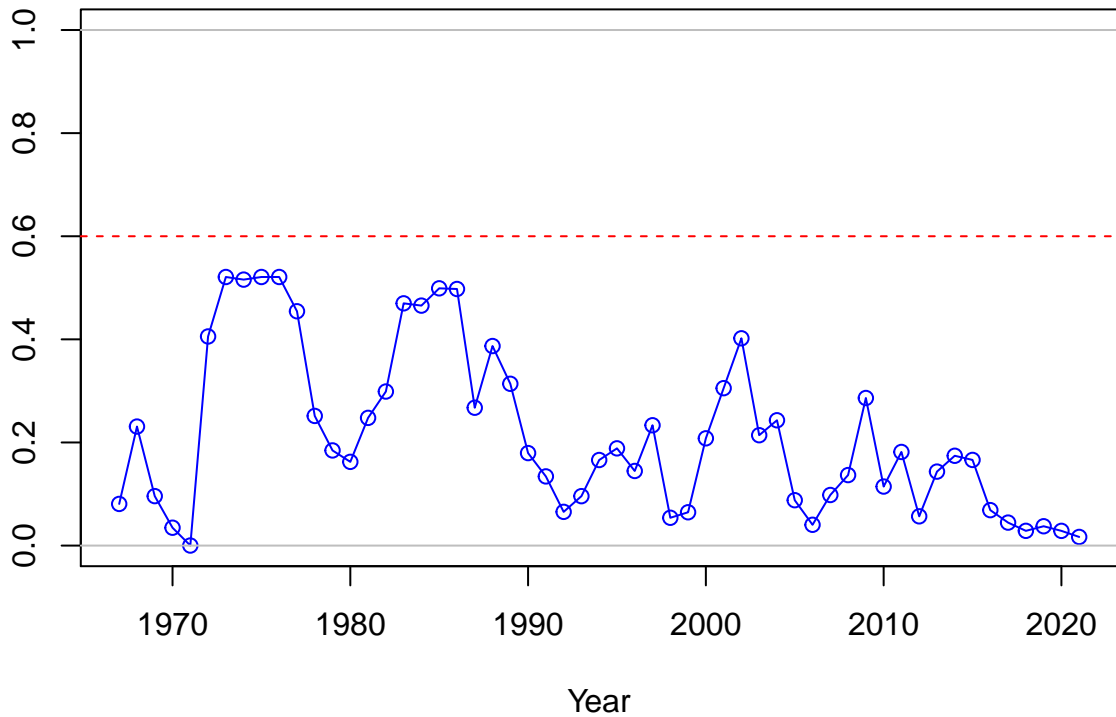




SPR

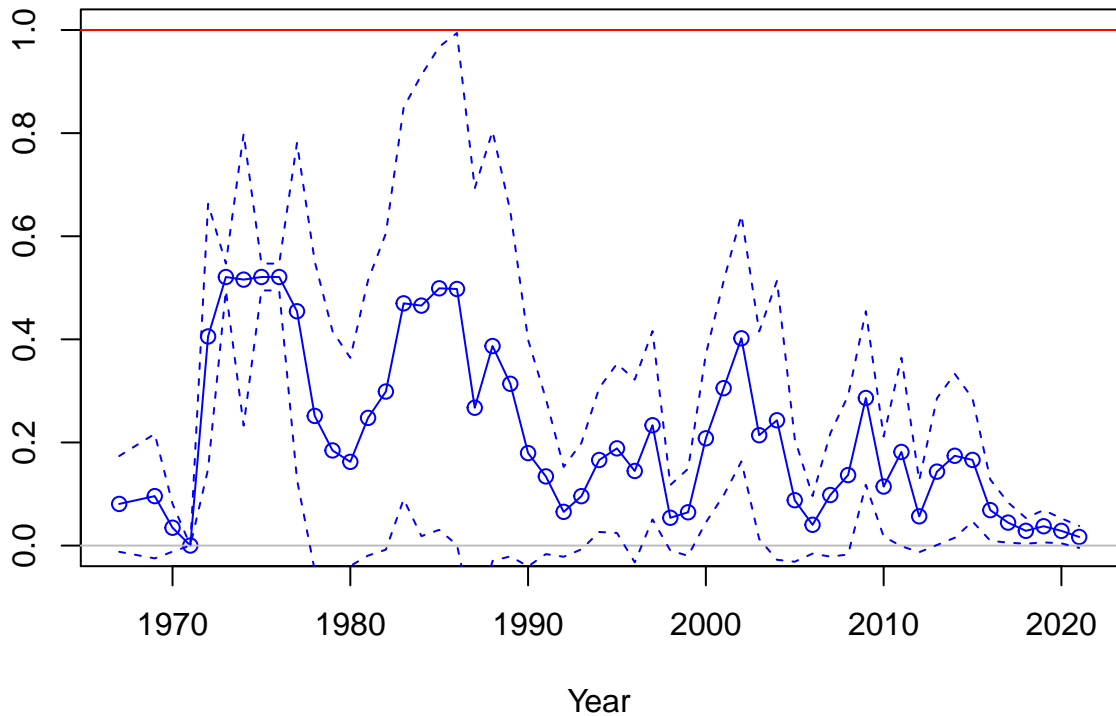


1-SPR

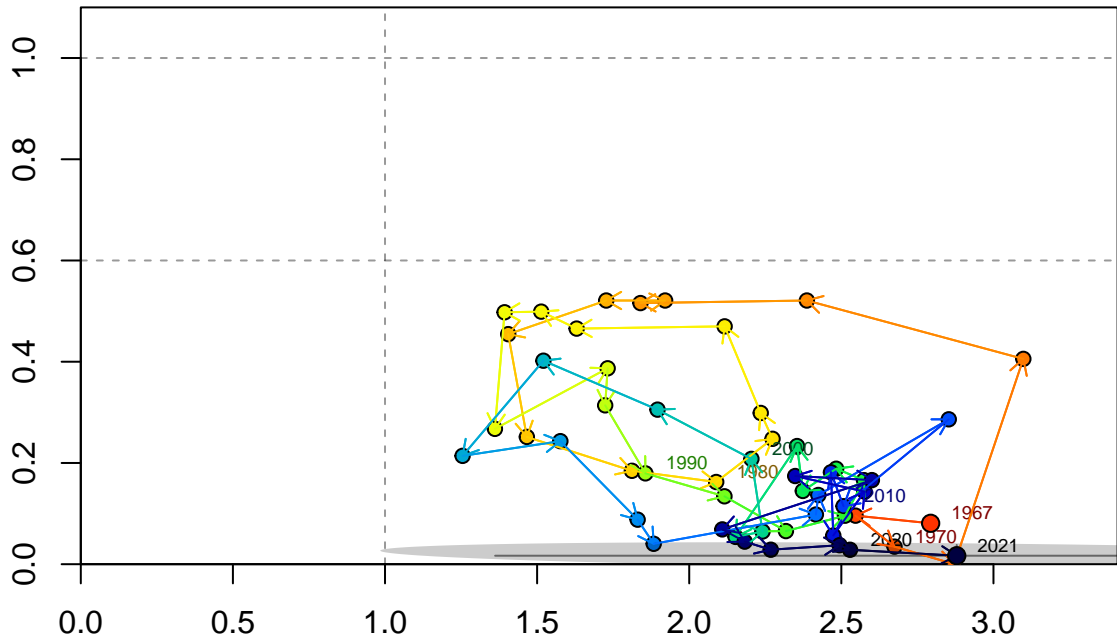




Fishing intensity: 1-SPR

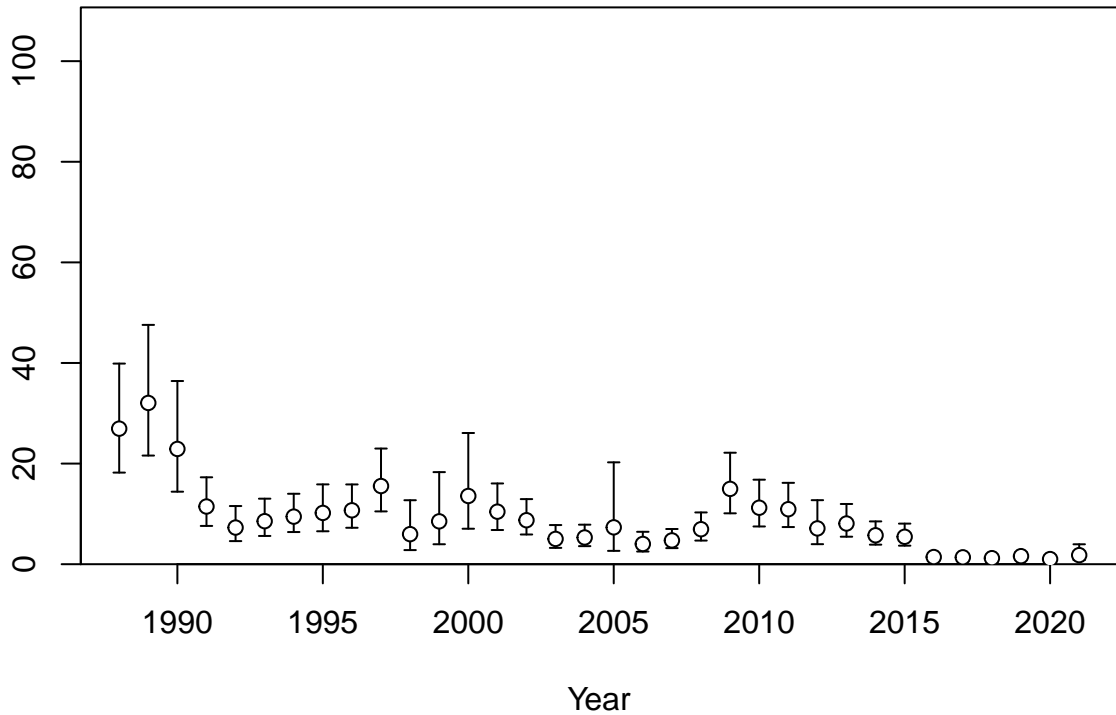


Fishing intensity: 1-SPR

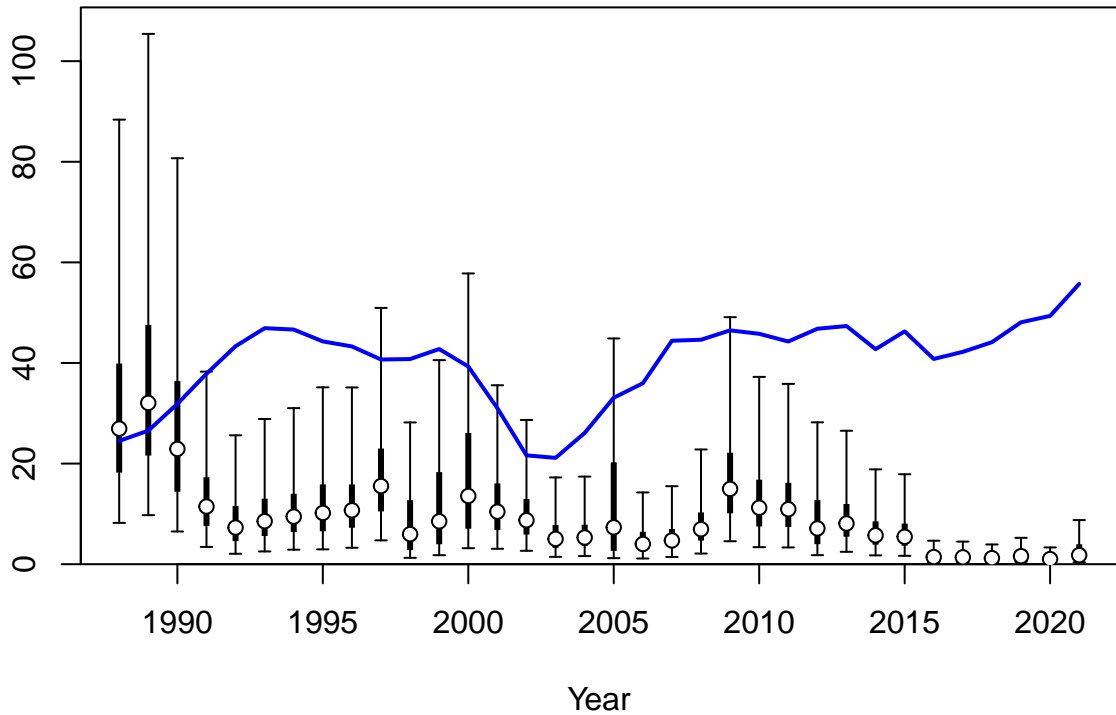


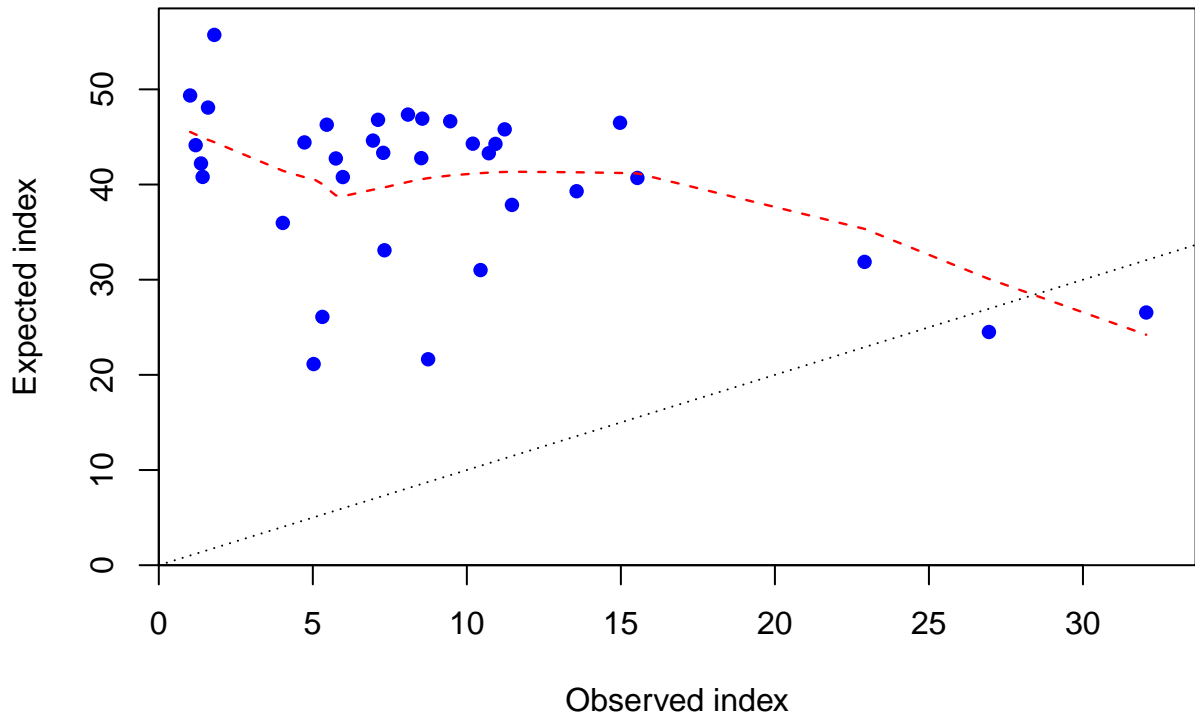
Relative spawning output: B/B\_MS

Index



Index





Log index

4  
3  
2  
1  
0  
-1

1990

1995

2000

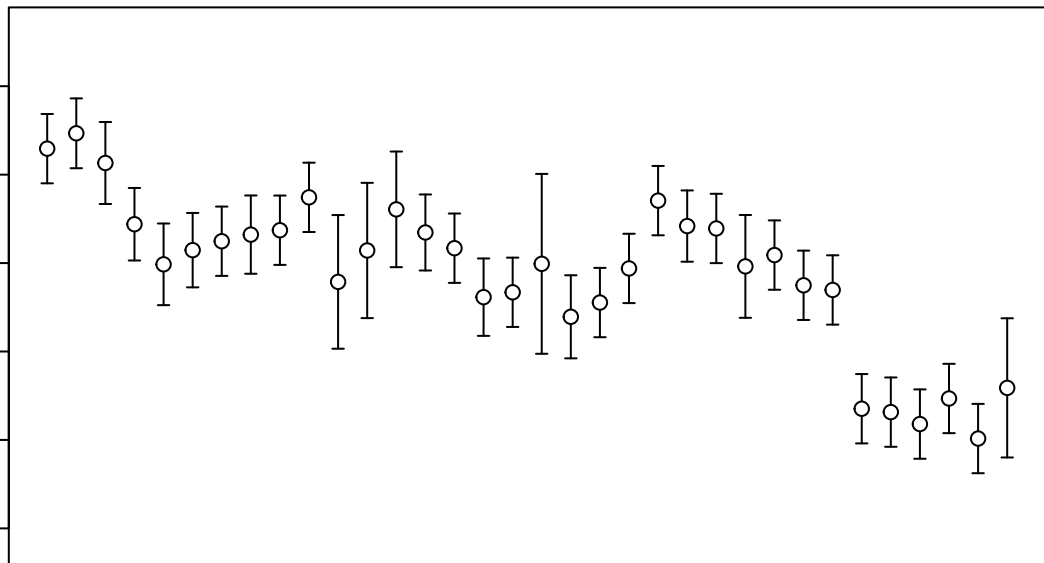
2005

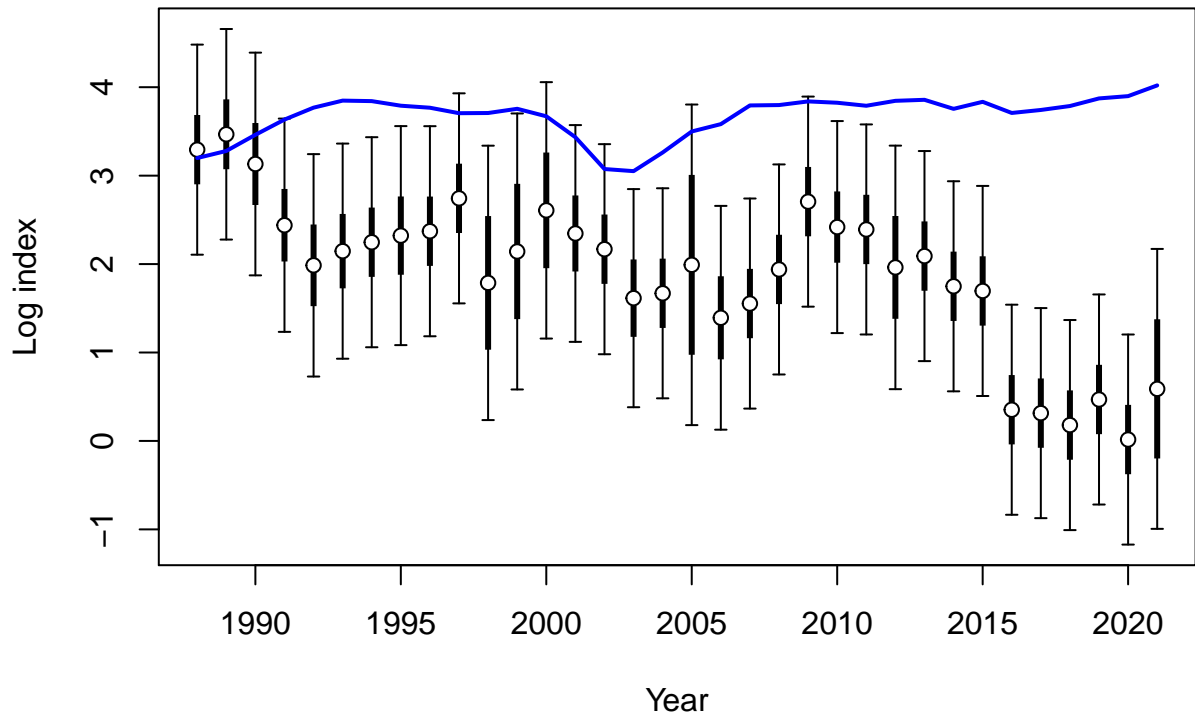
2010

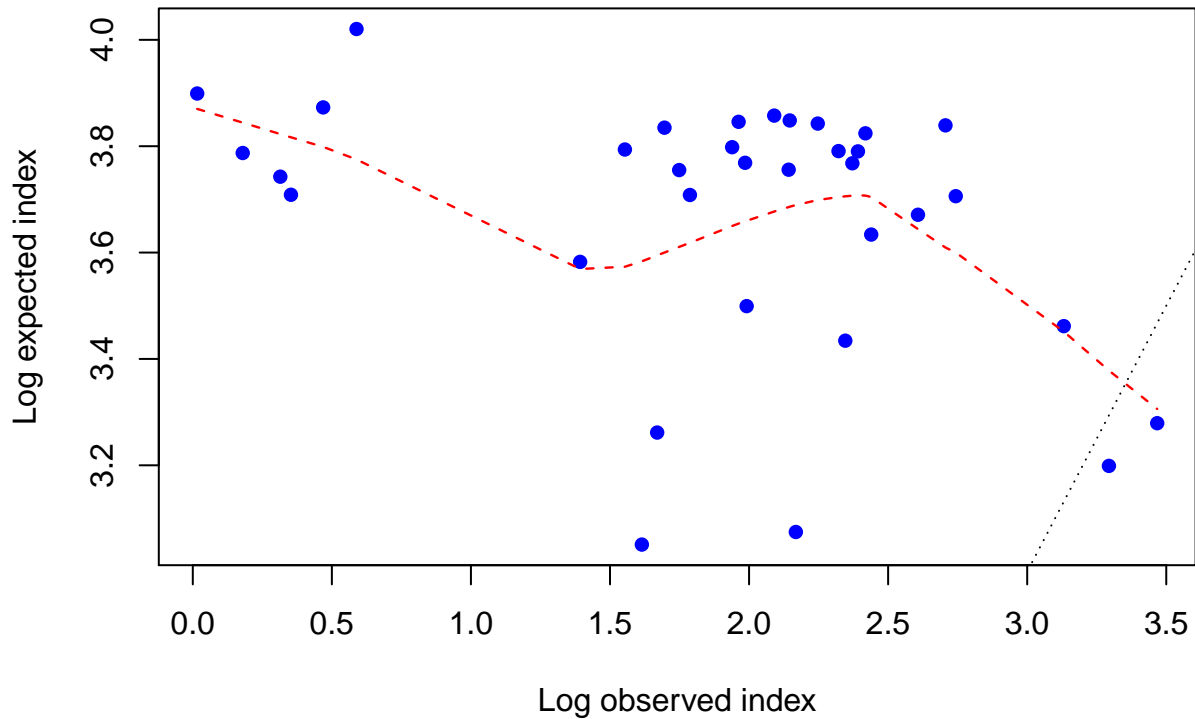
2015

2020

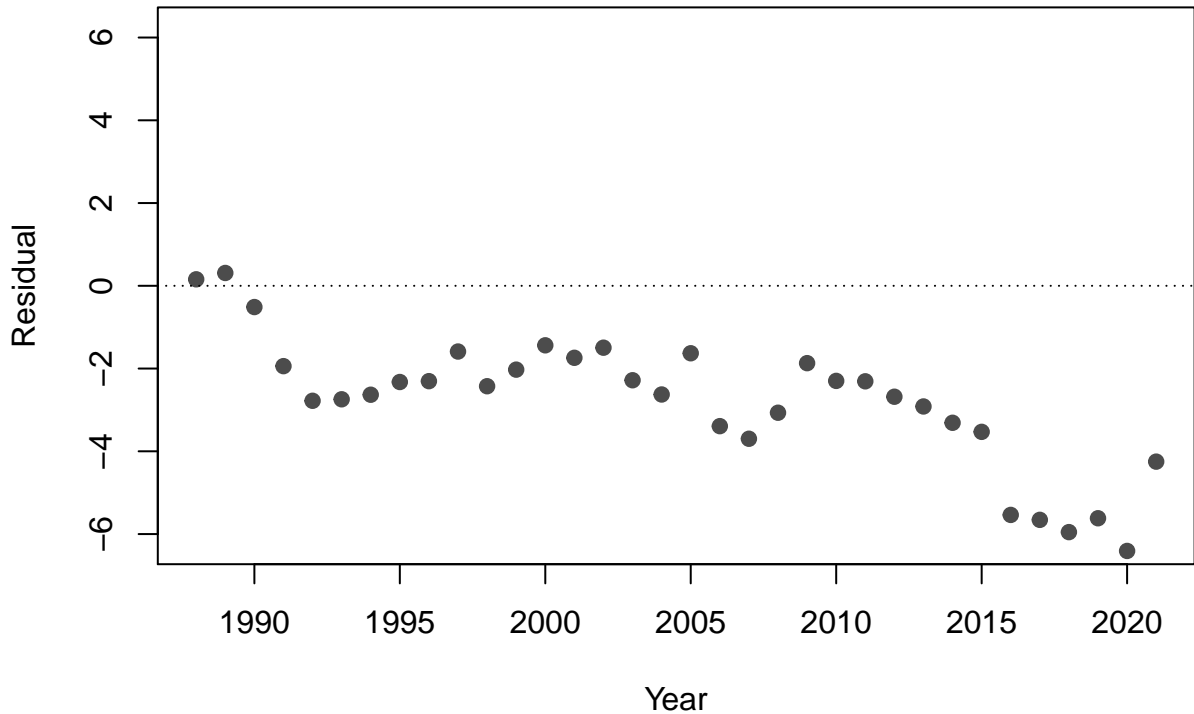
Year



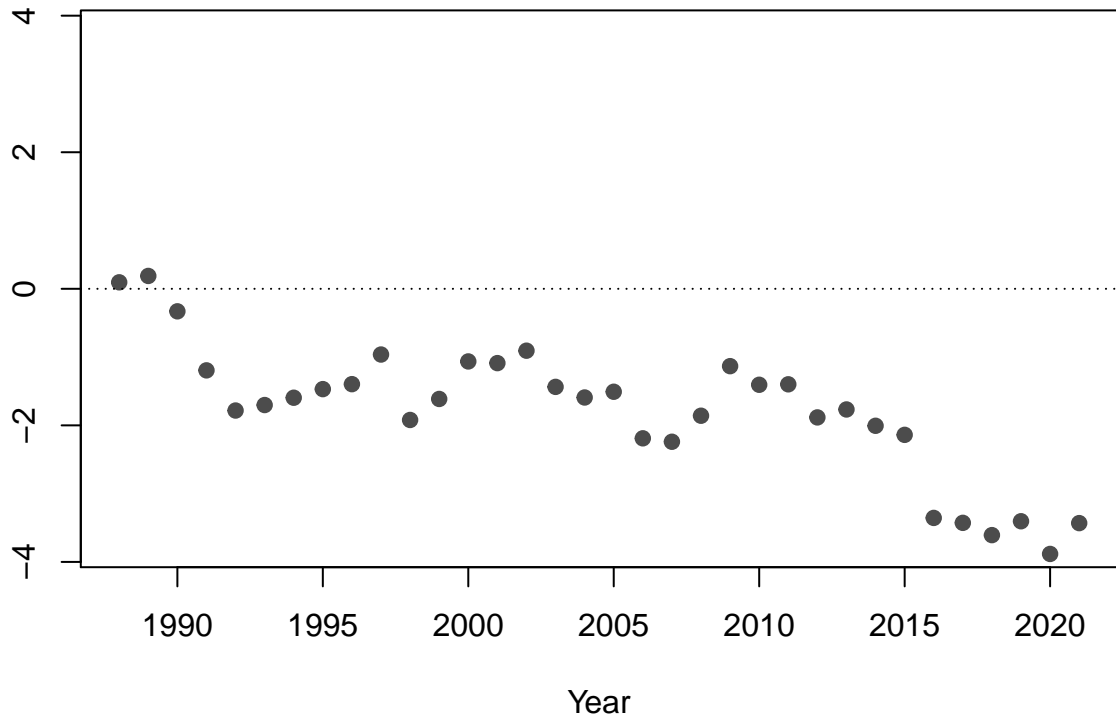


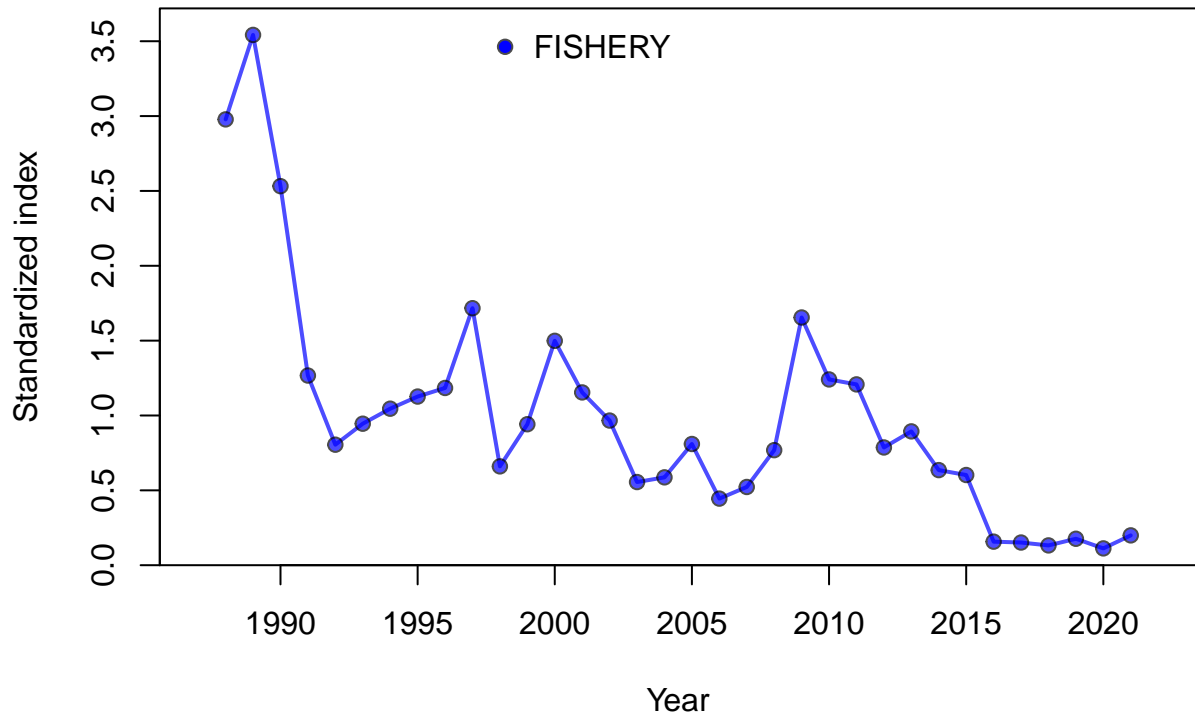




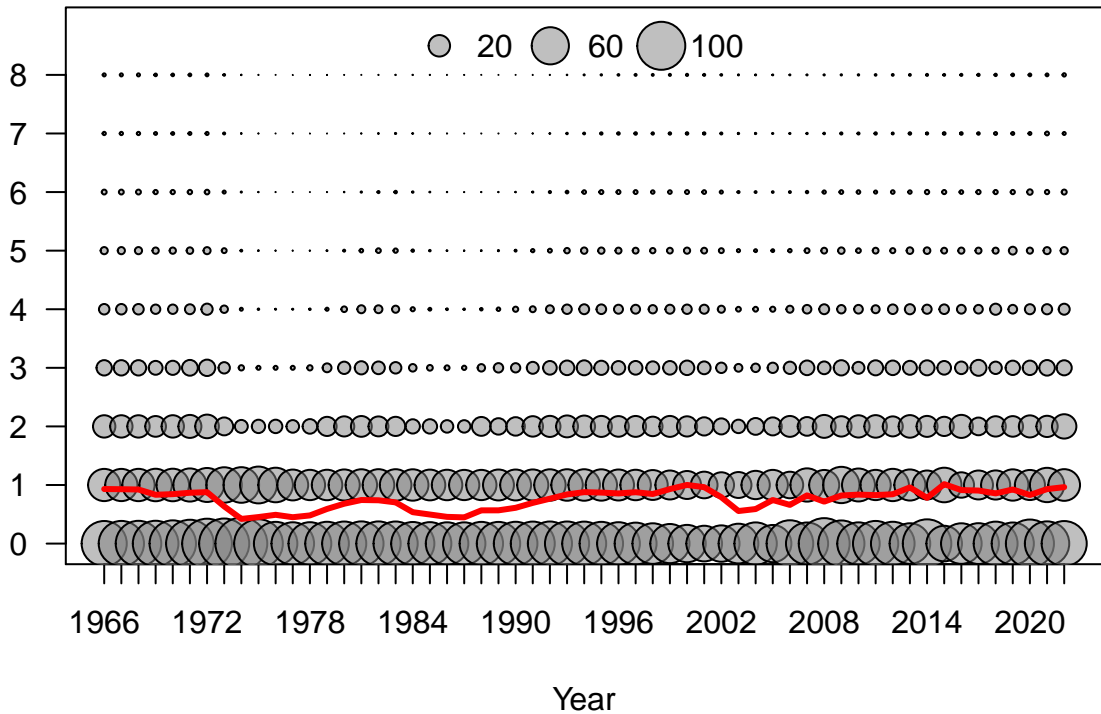


Deviation

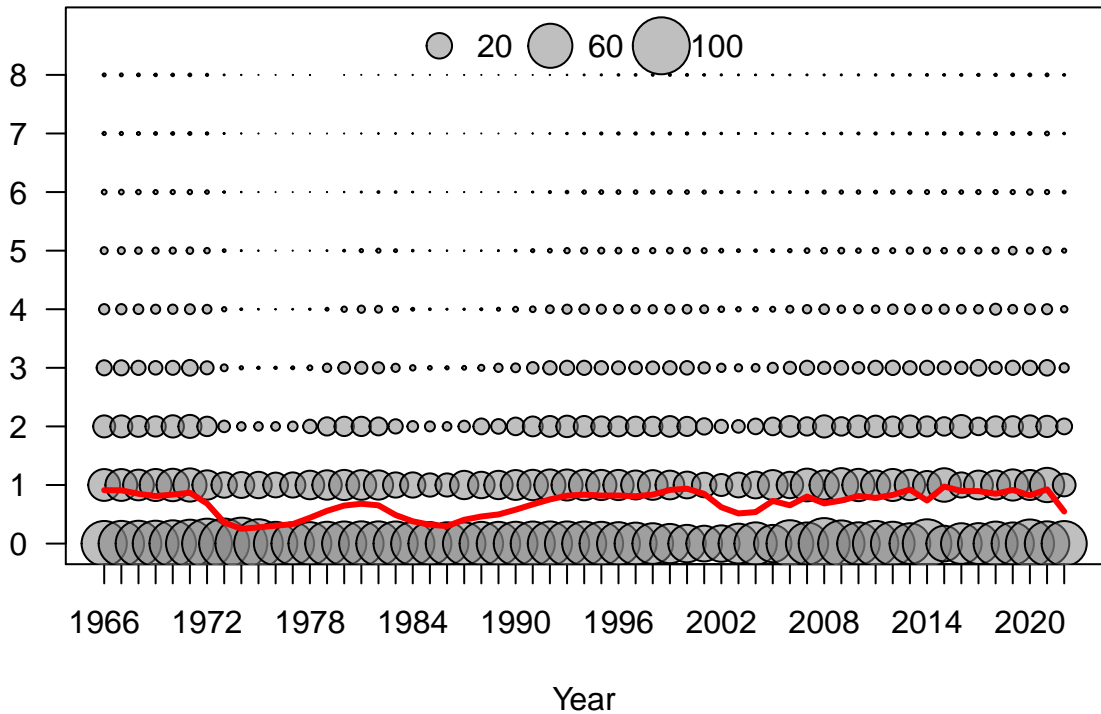


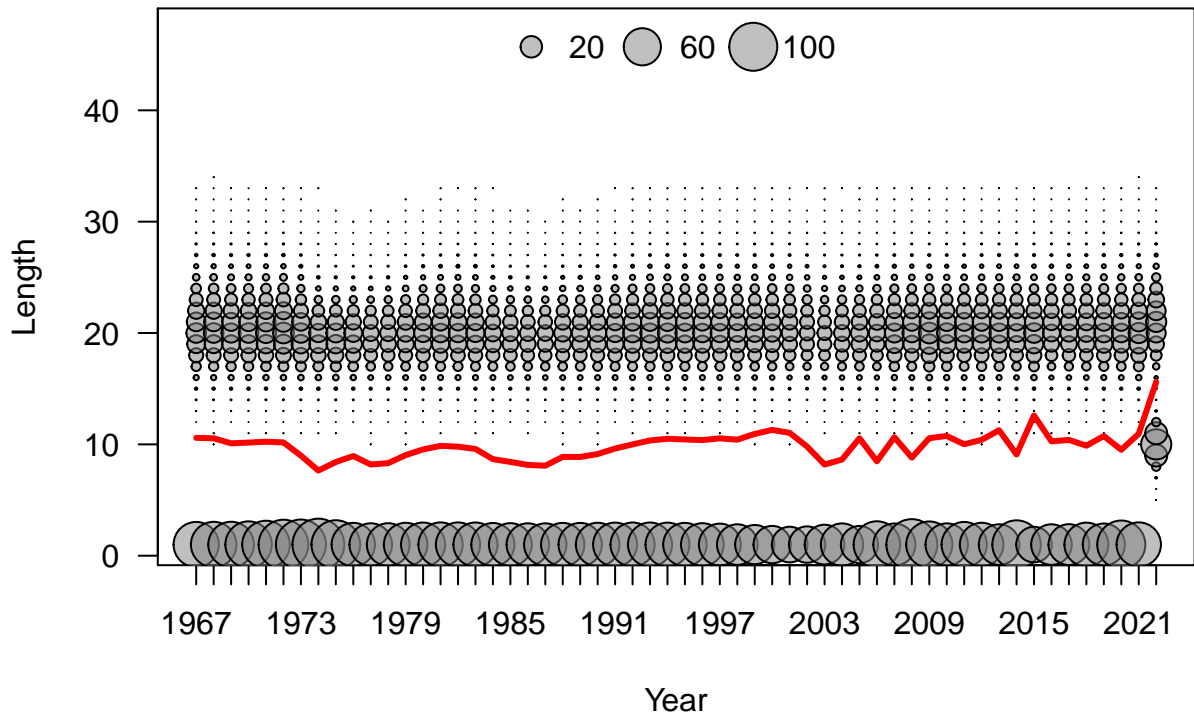


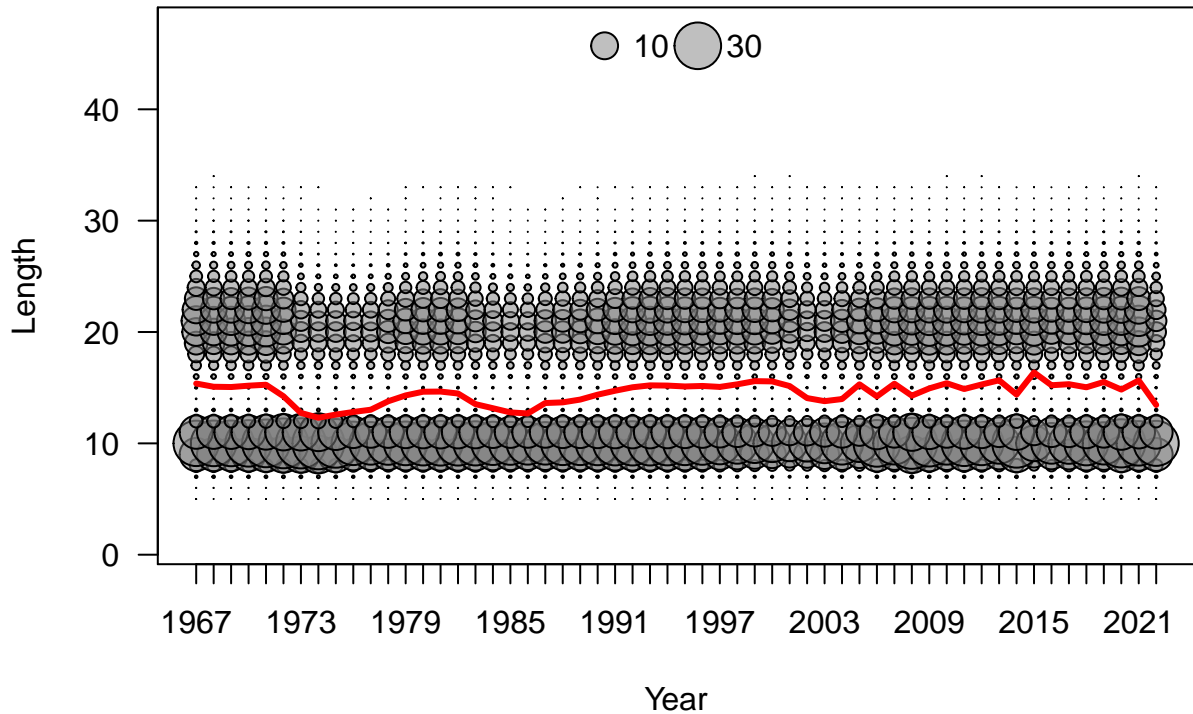
Age

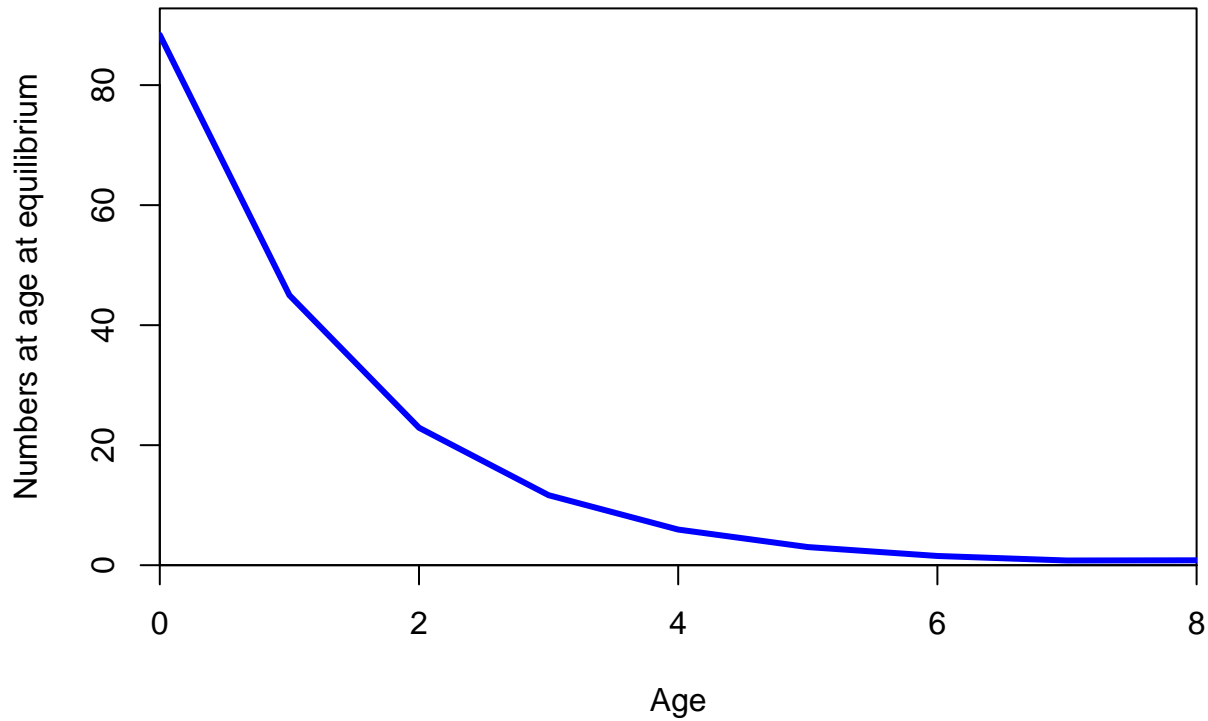


Age





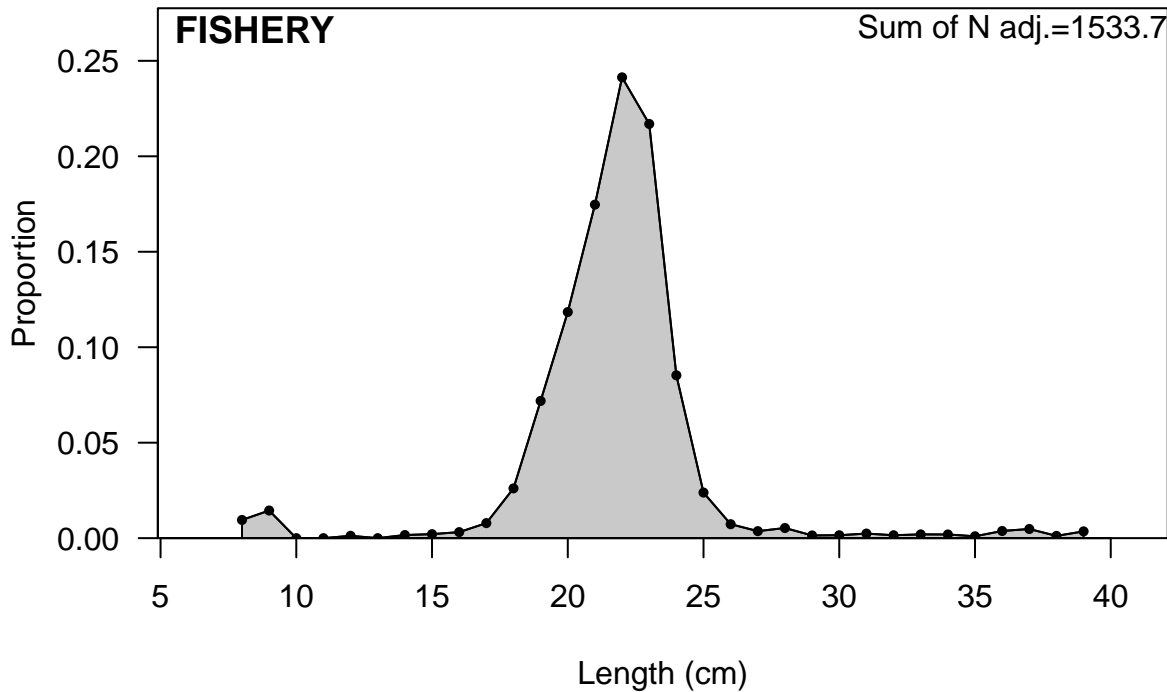


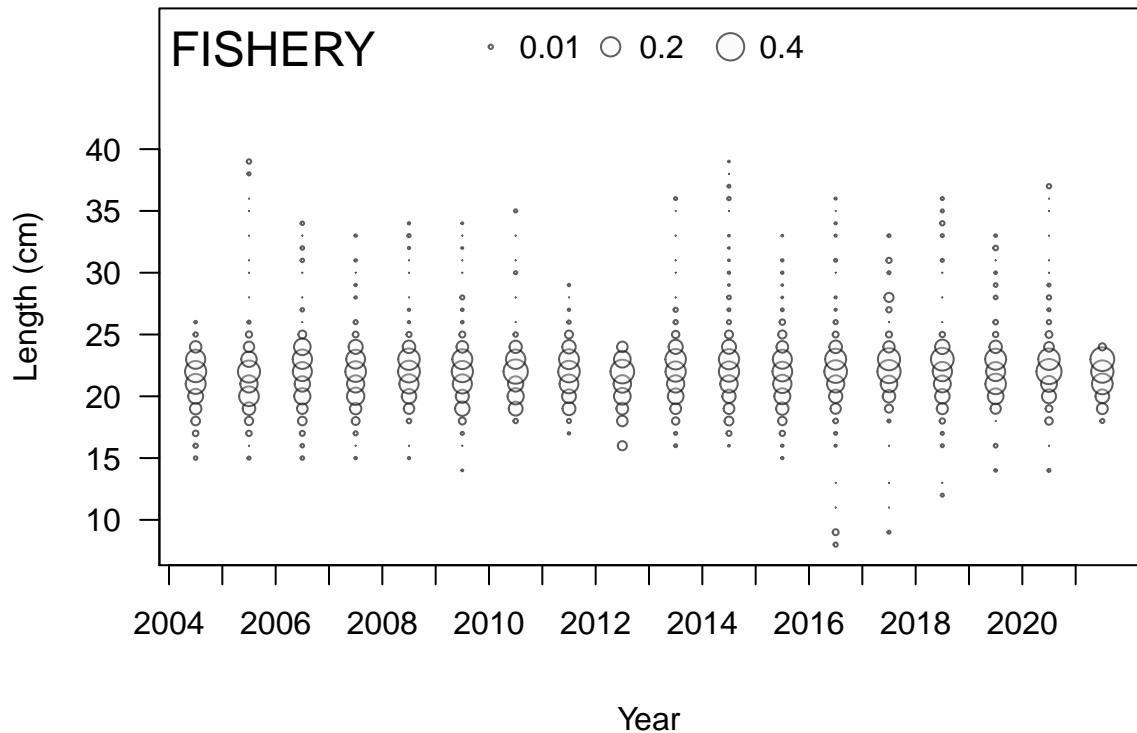




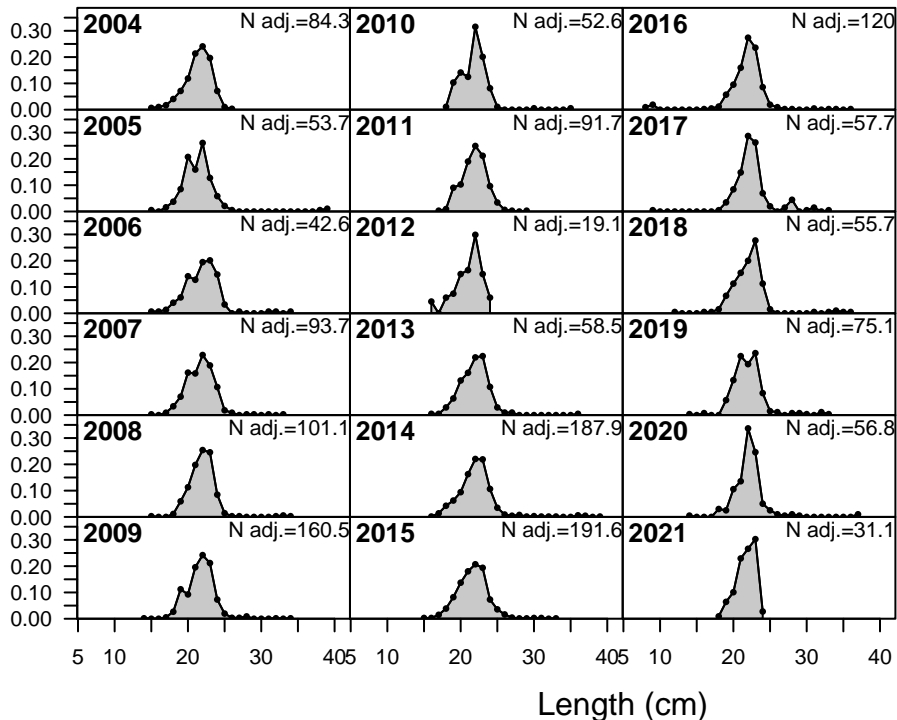
# FISHERY

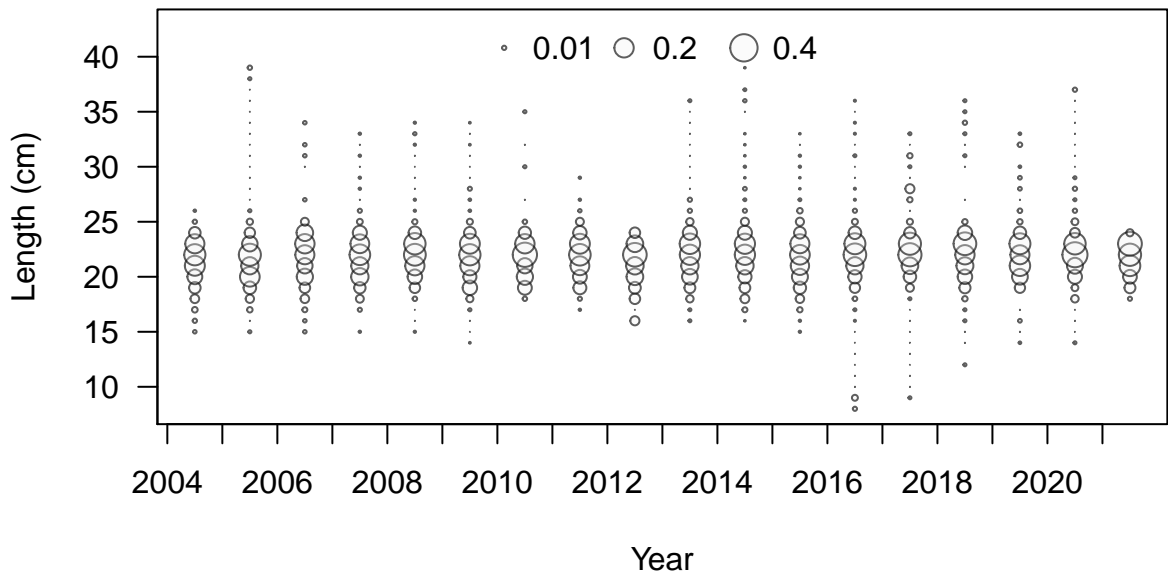
Sum of N adj.=1533.7



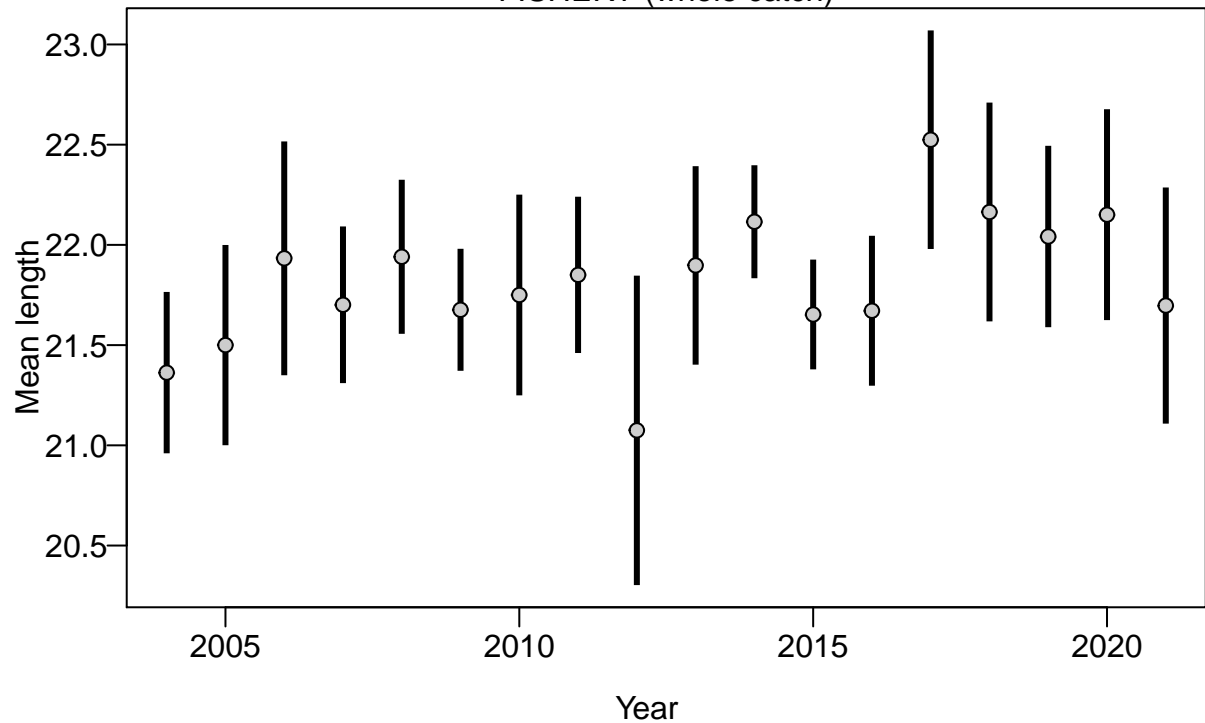


Proportion



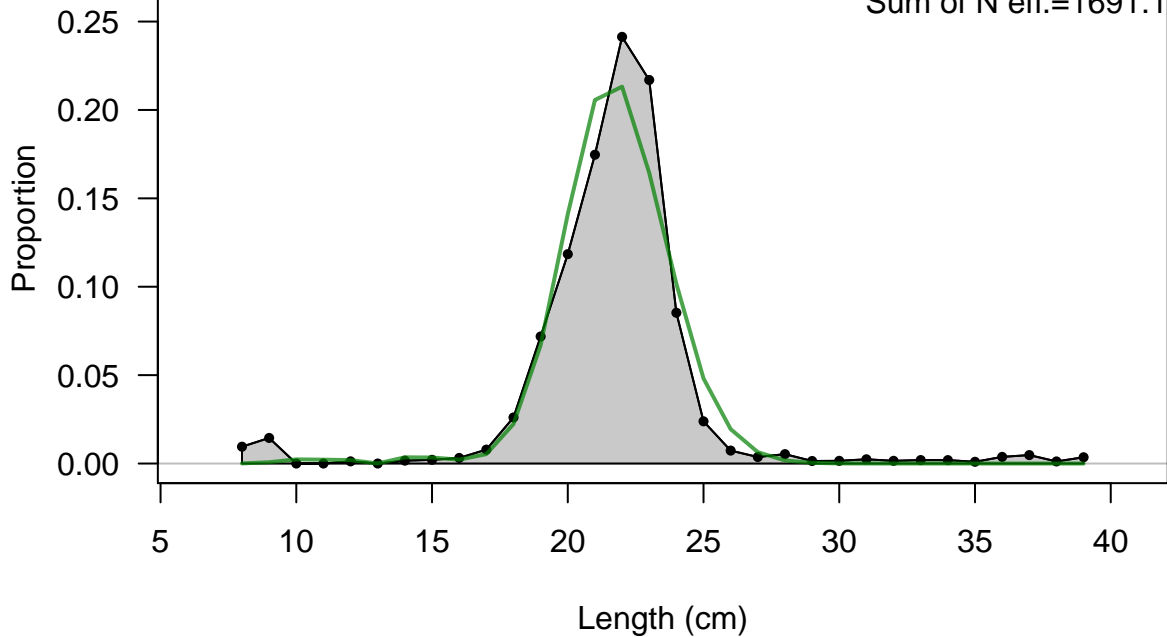


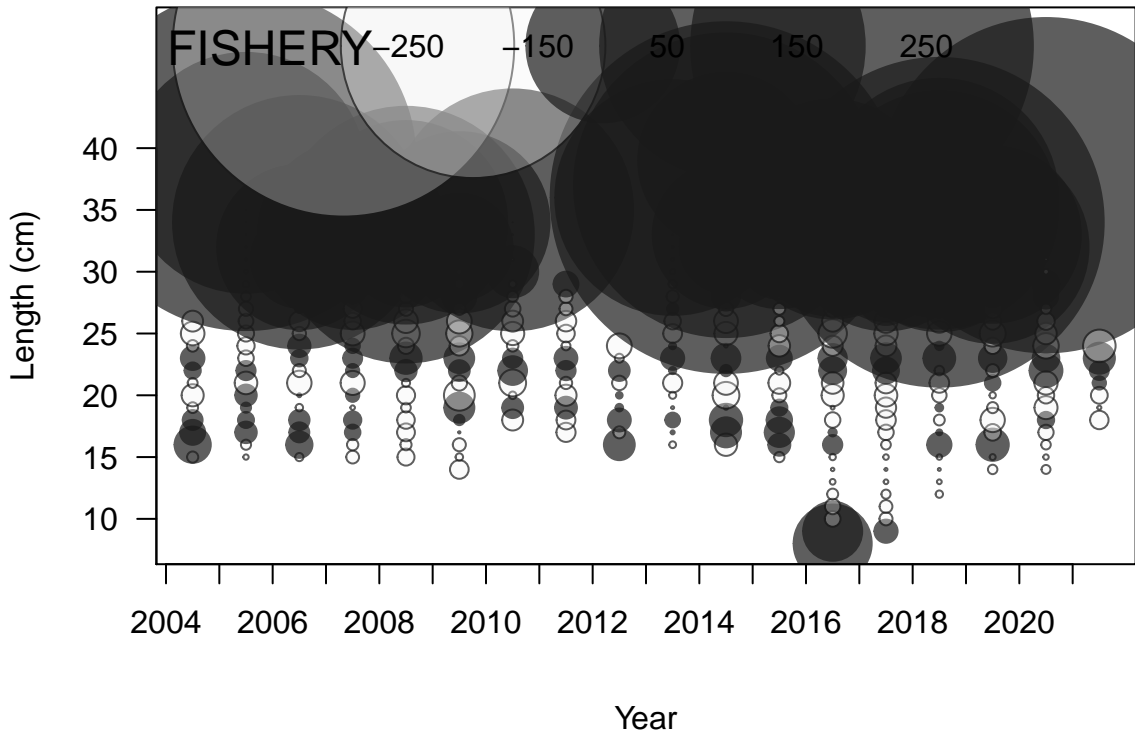
FISHERY (whole catch)

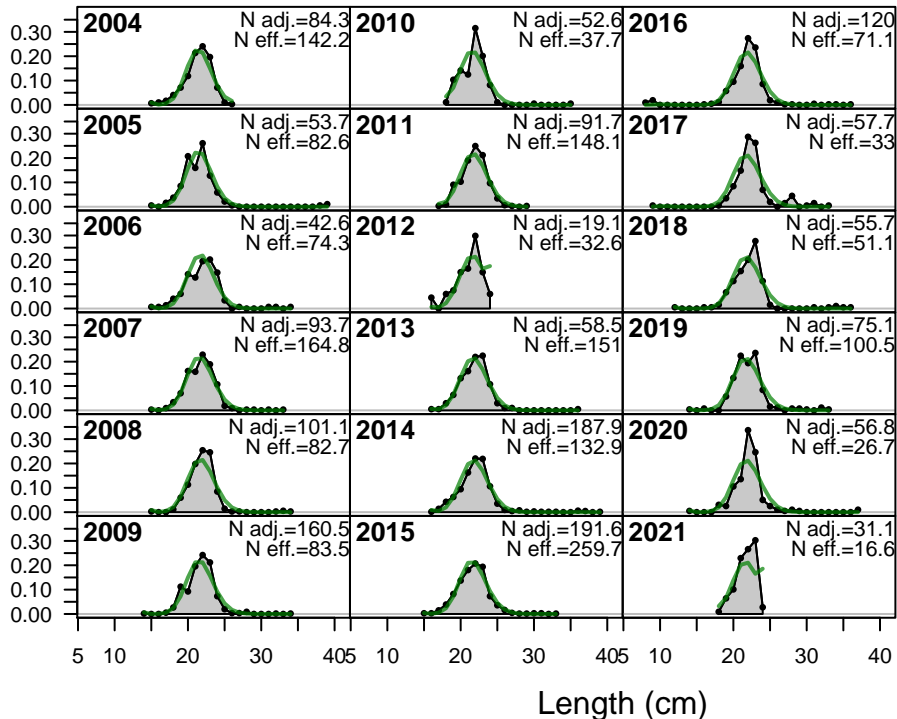


# FISHERY

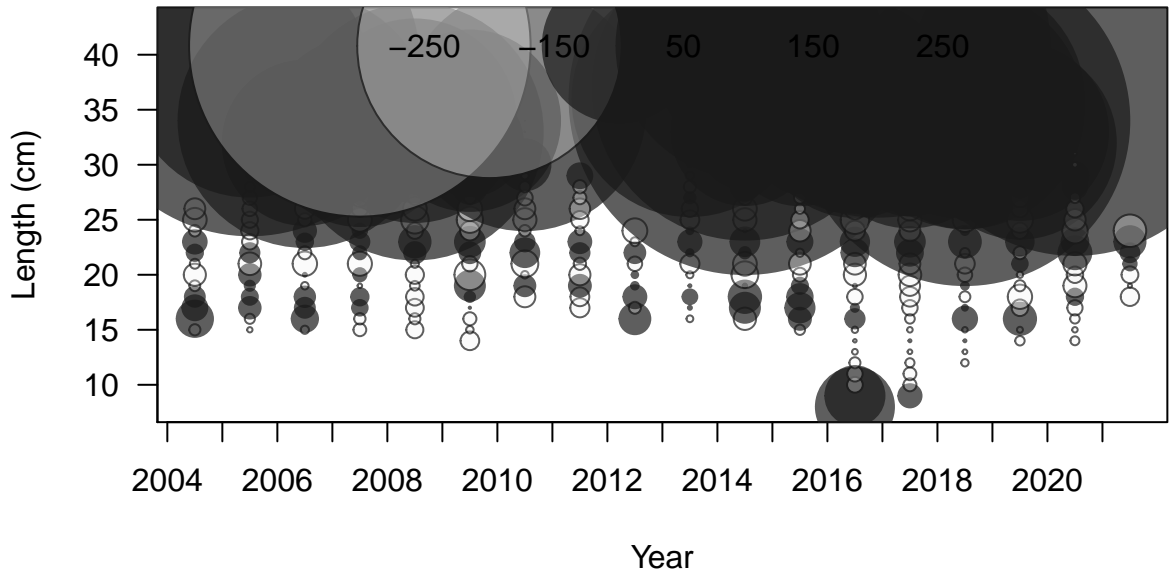
Sum of N adj.=1533.7  
Sum of N eff.=1691.1



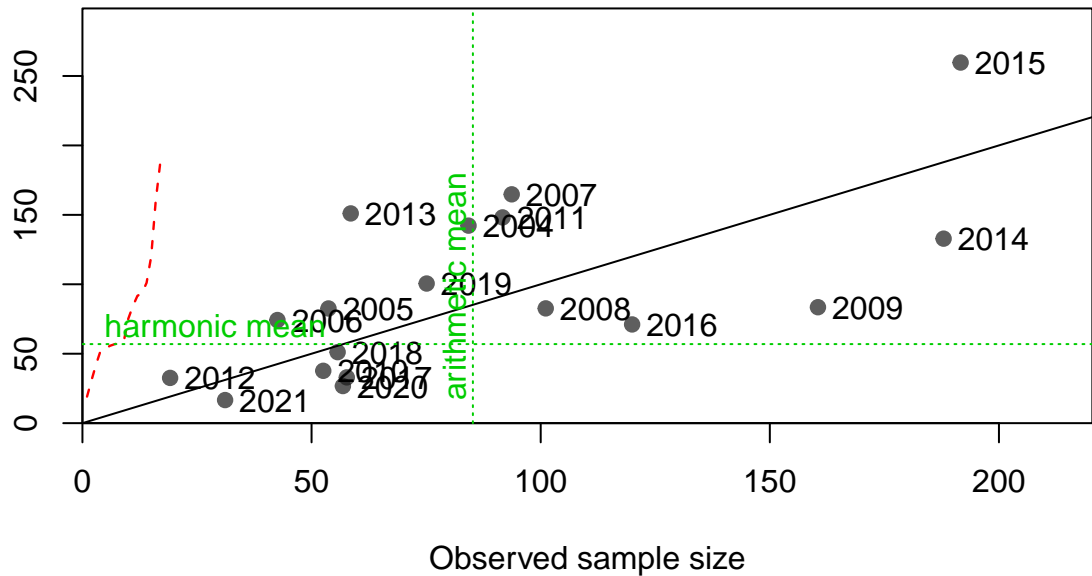




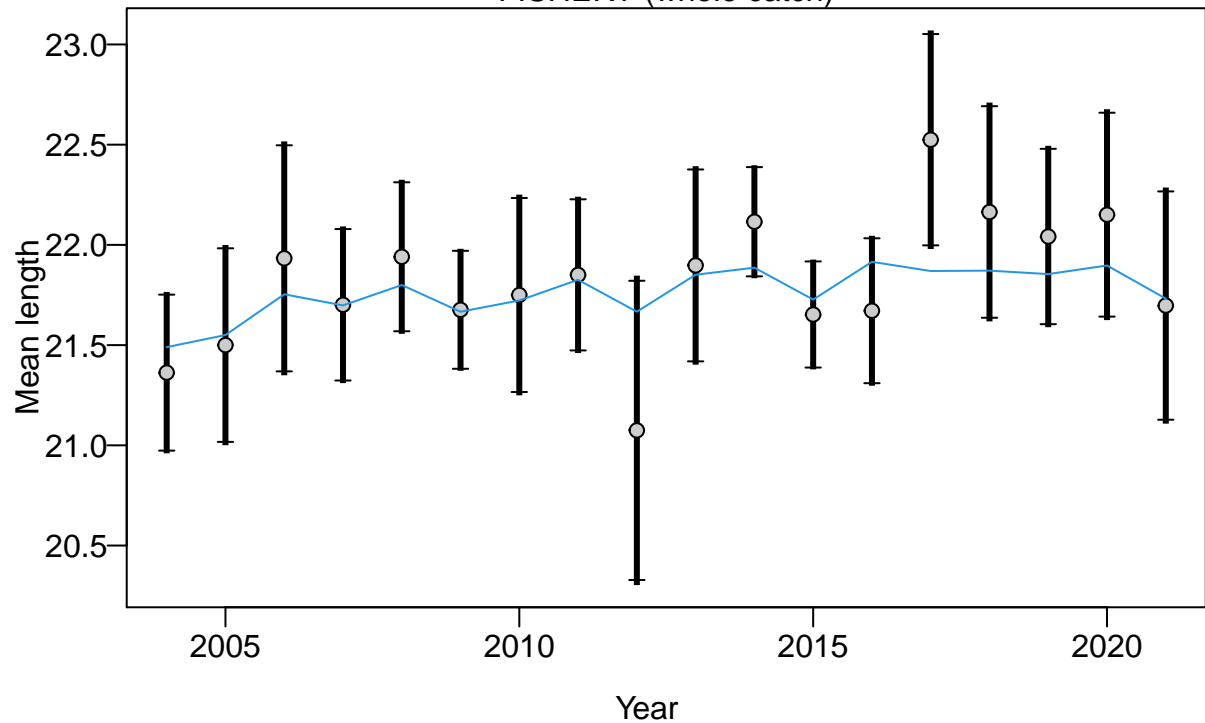


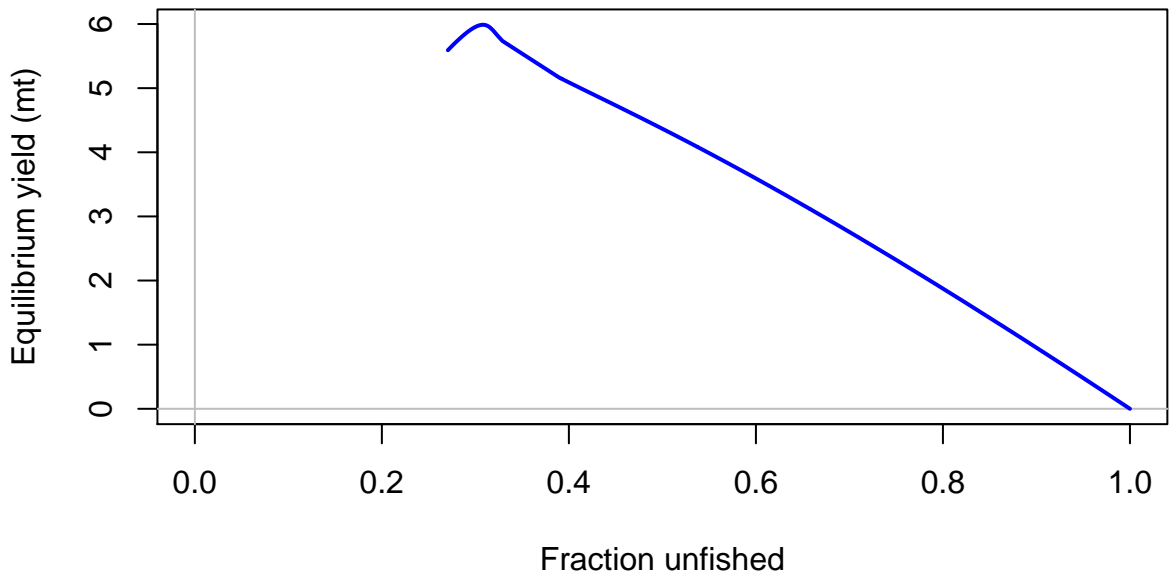


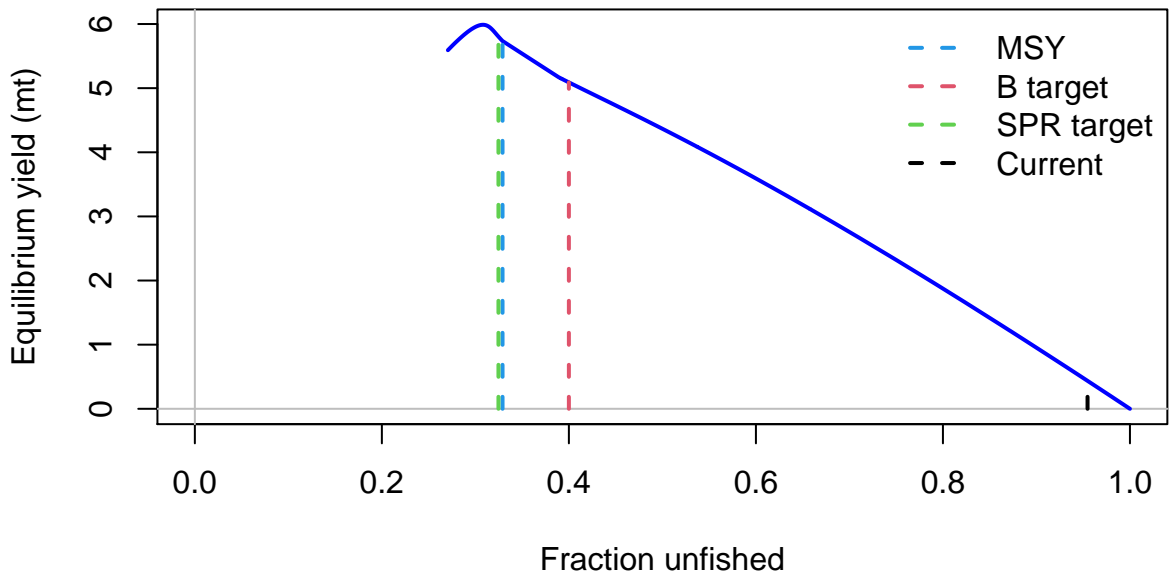
Effective sample size

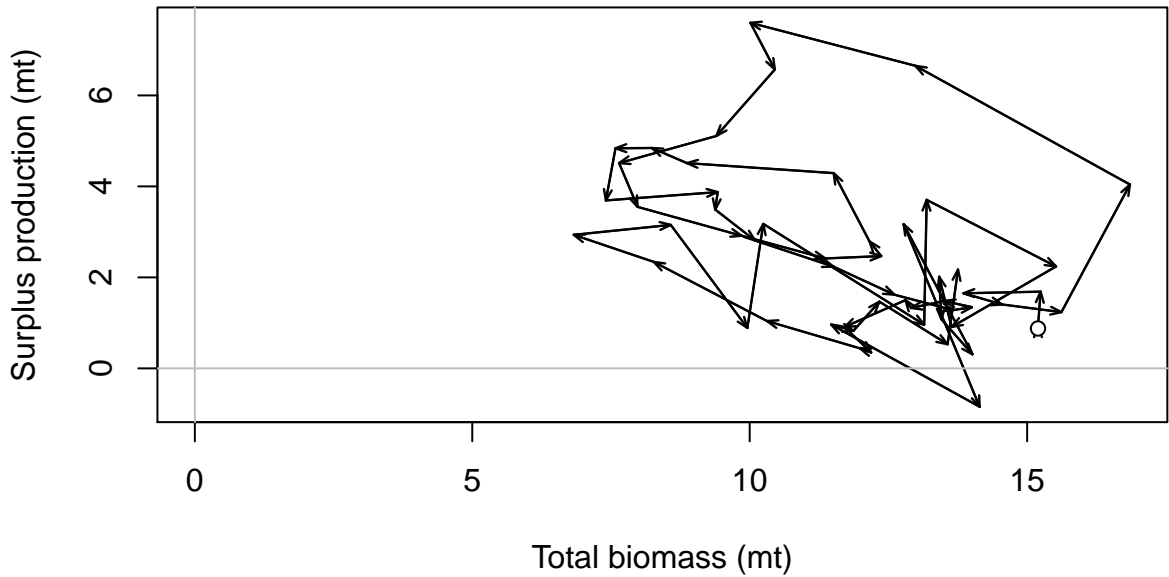


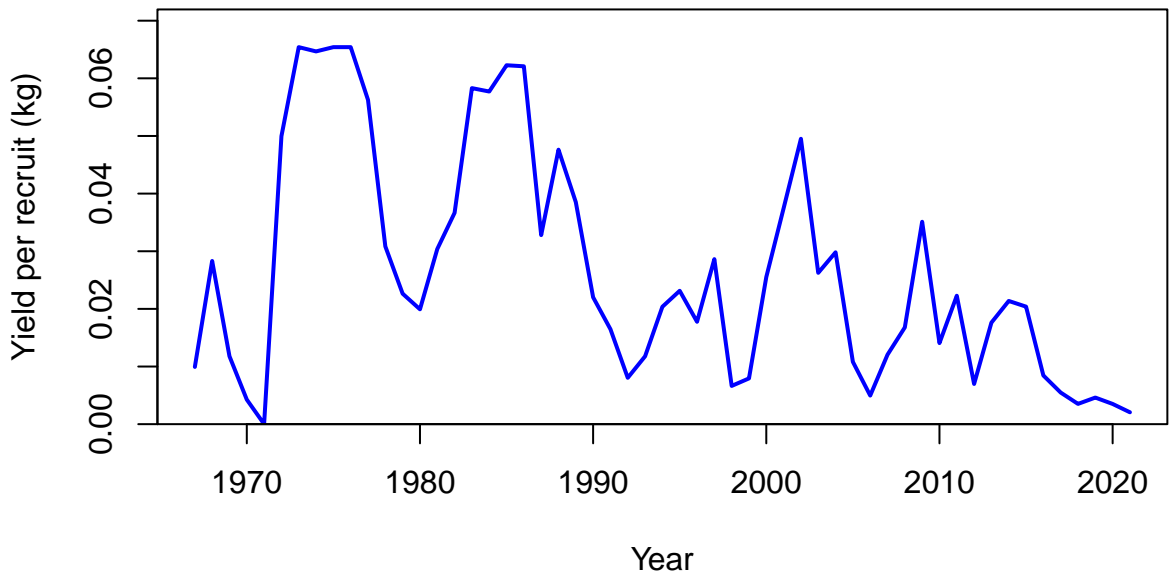
FISHERY (whole catch)

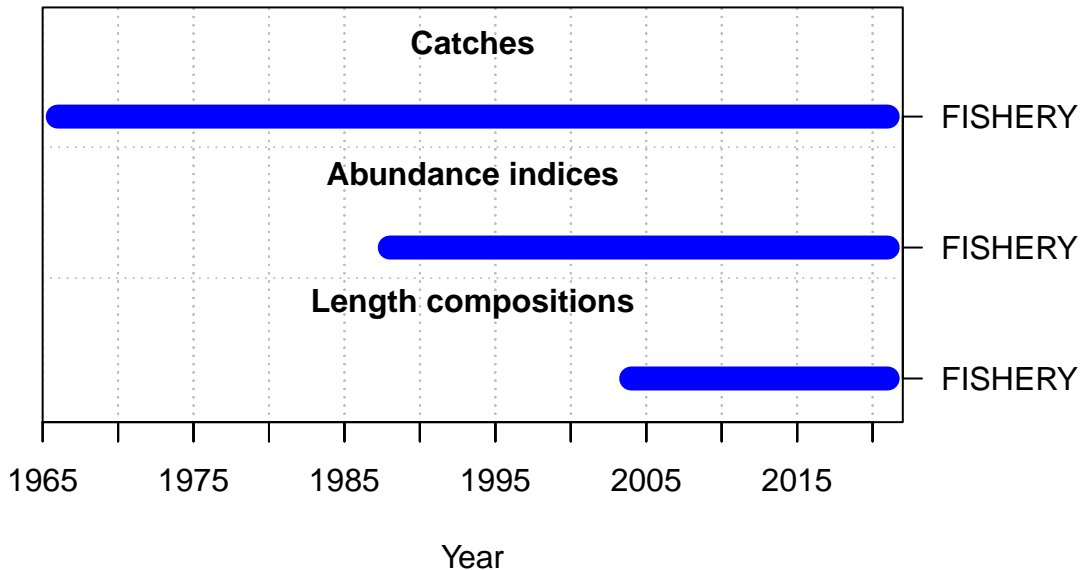




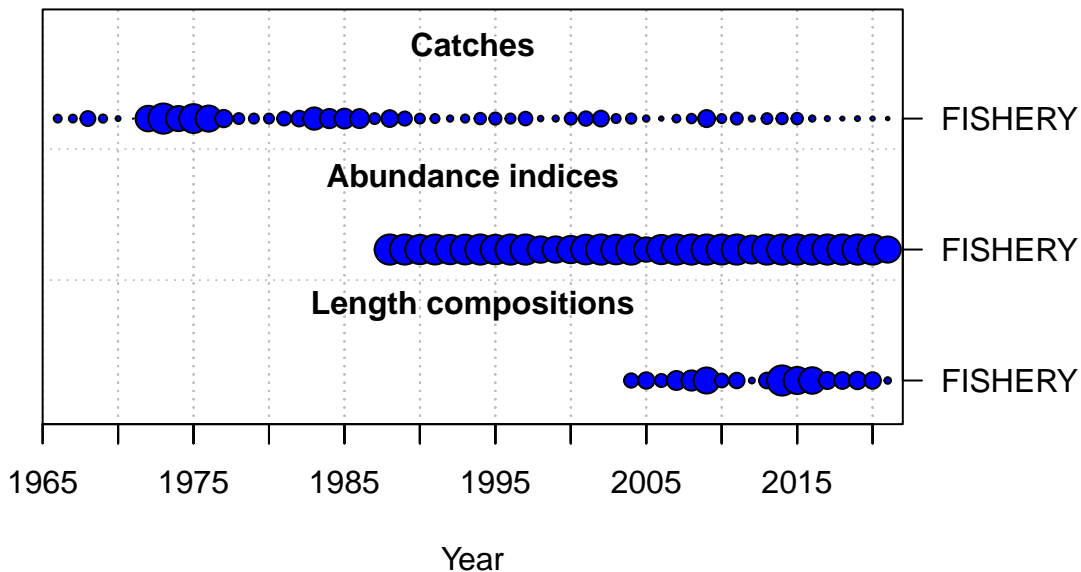






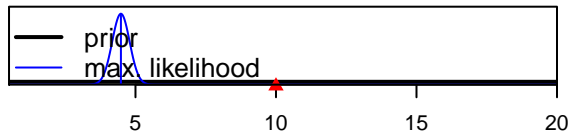




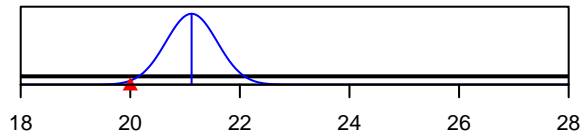


Density

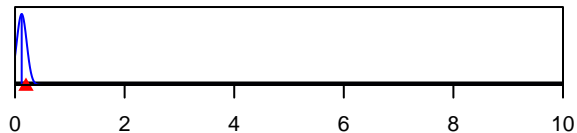
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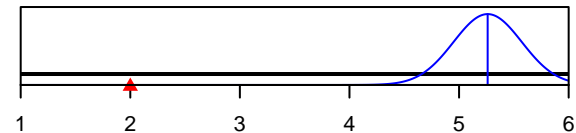
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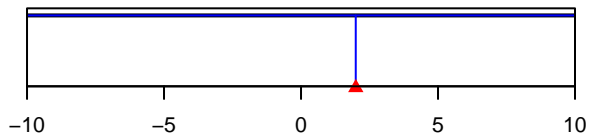
InitF\_seas\_1\_flt\_1FISHERY



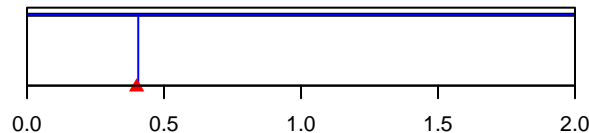
Size\_95%width\_FISHERY(1)



LnQ\_base\_FISHERY(1)



Q\_extraSD\_FISHERY(1)



Parameter value