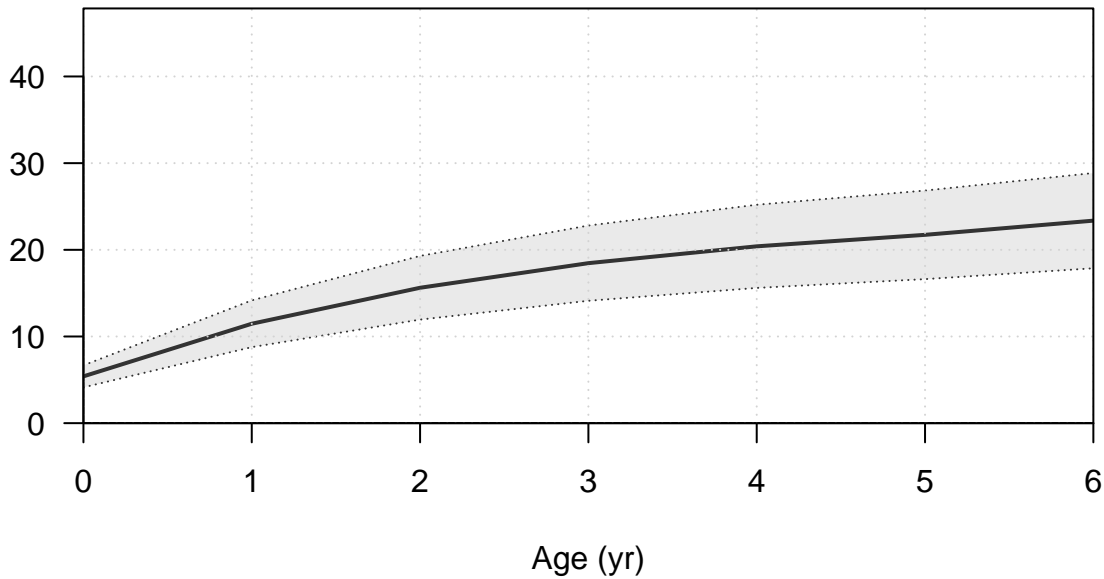
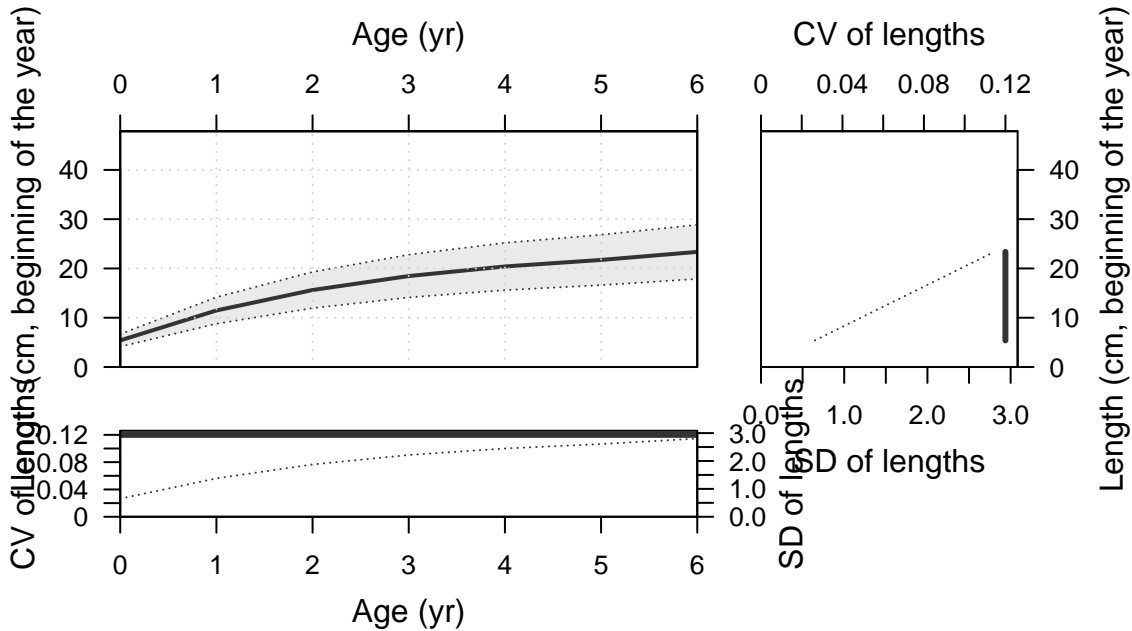
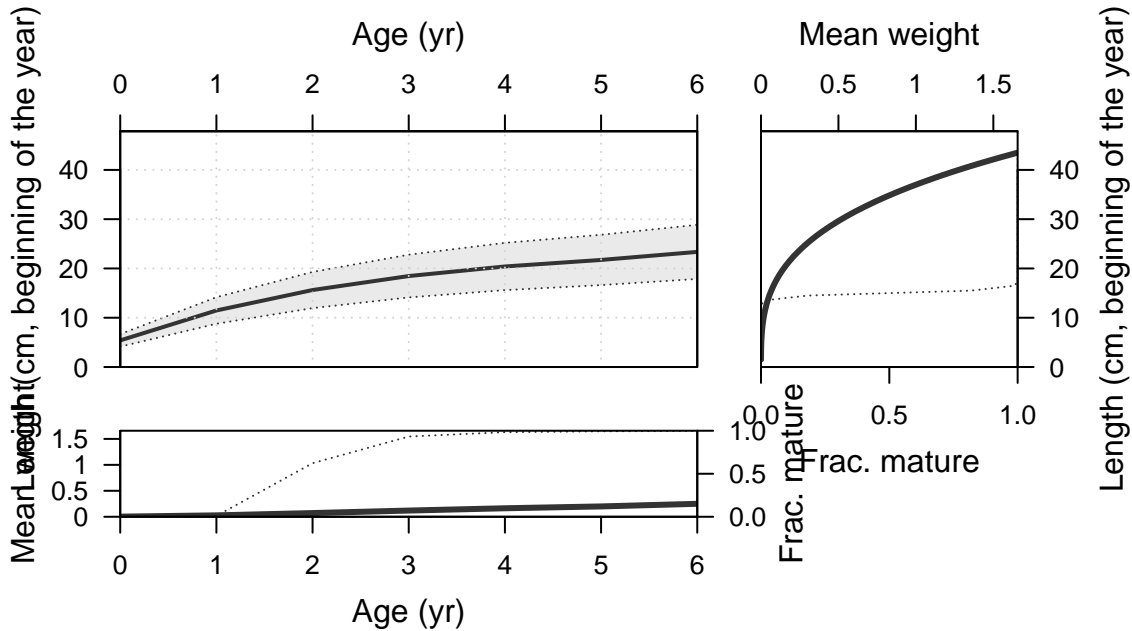


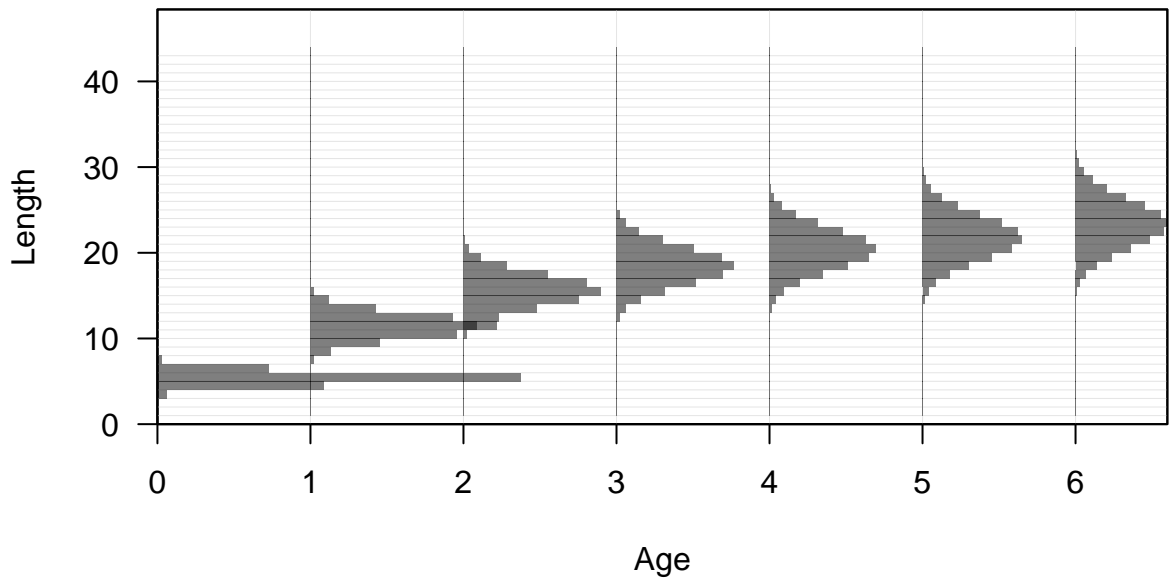
Plots created using the 'r4ss' package in R
Stock Synthesis version: 3.30.19.0
StartTime: Sat Jul 23 08:47:21 2022
Data_File: data.ss
Control_File: control.ss

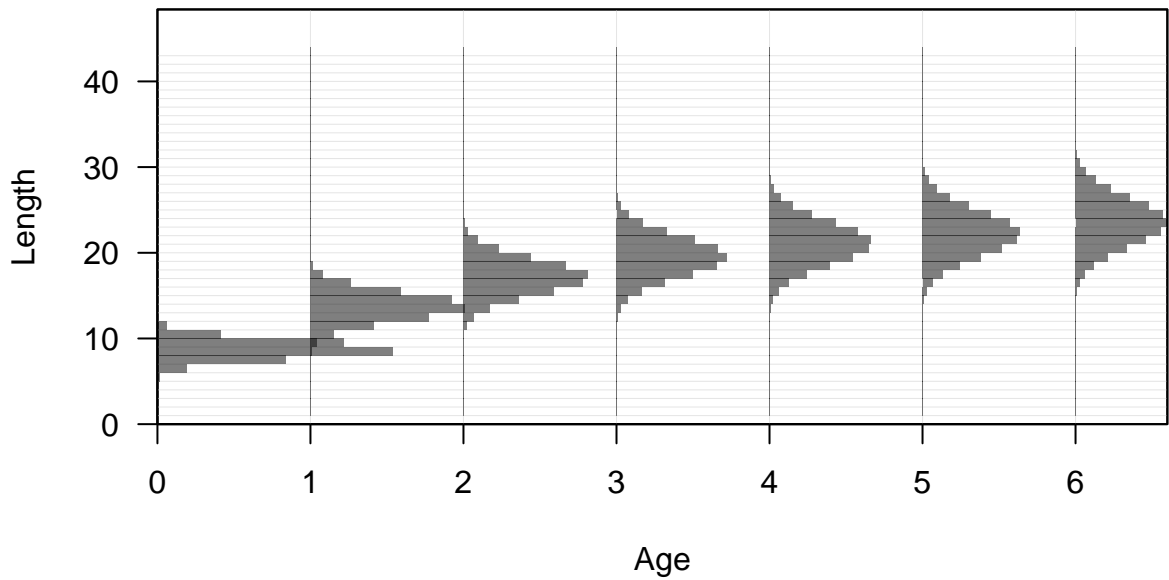
Length (cm, beginning of the year)







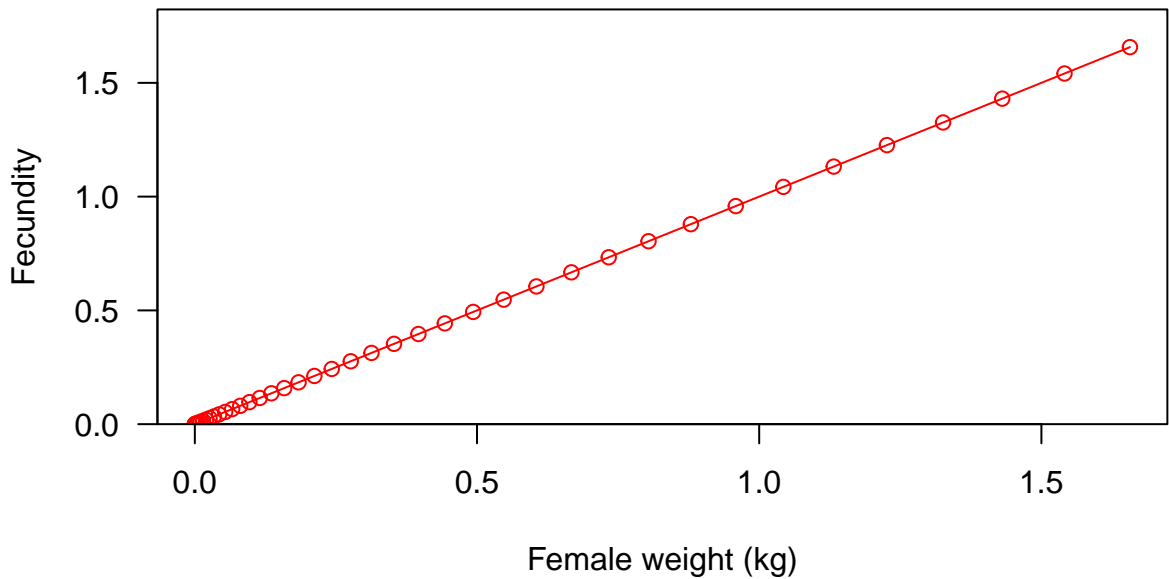






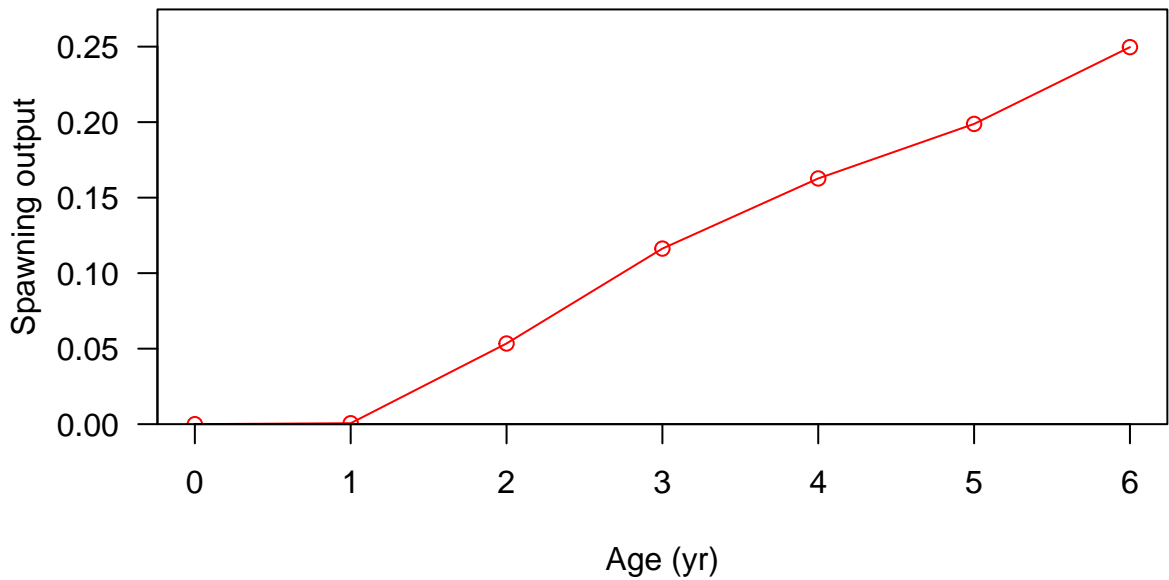




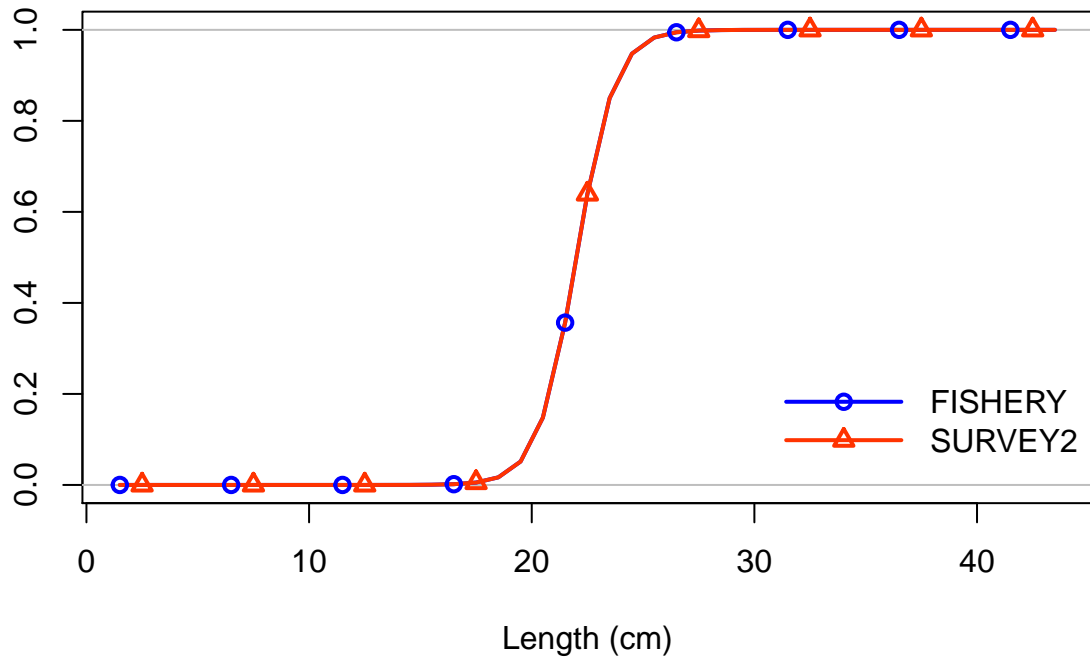




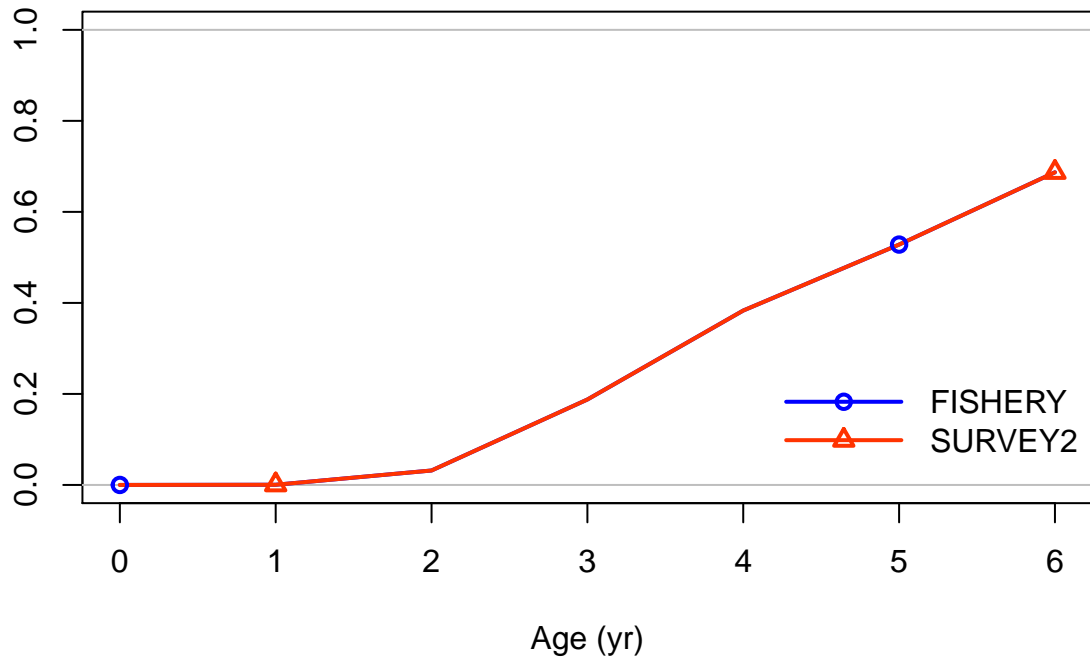




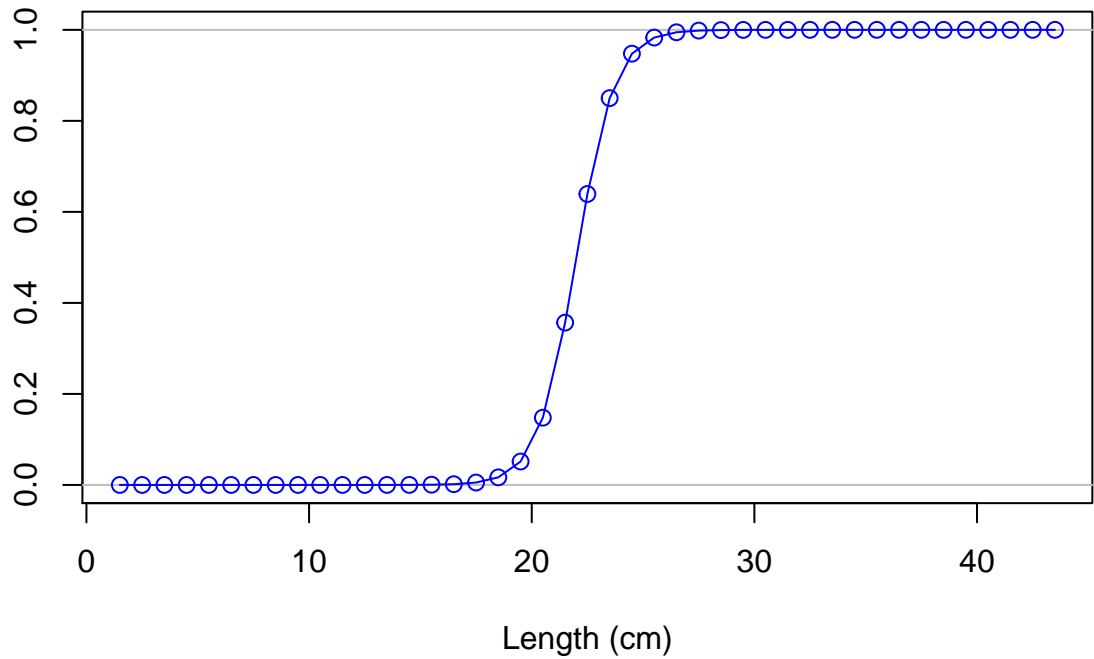
Selectivity



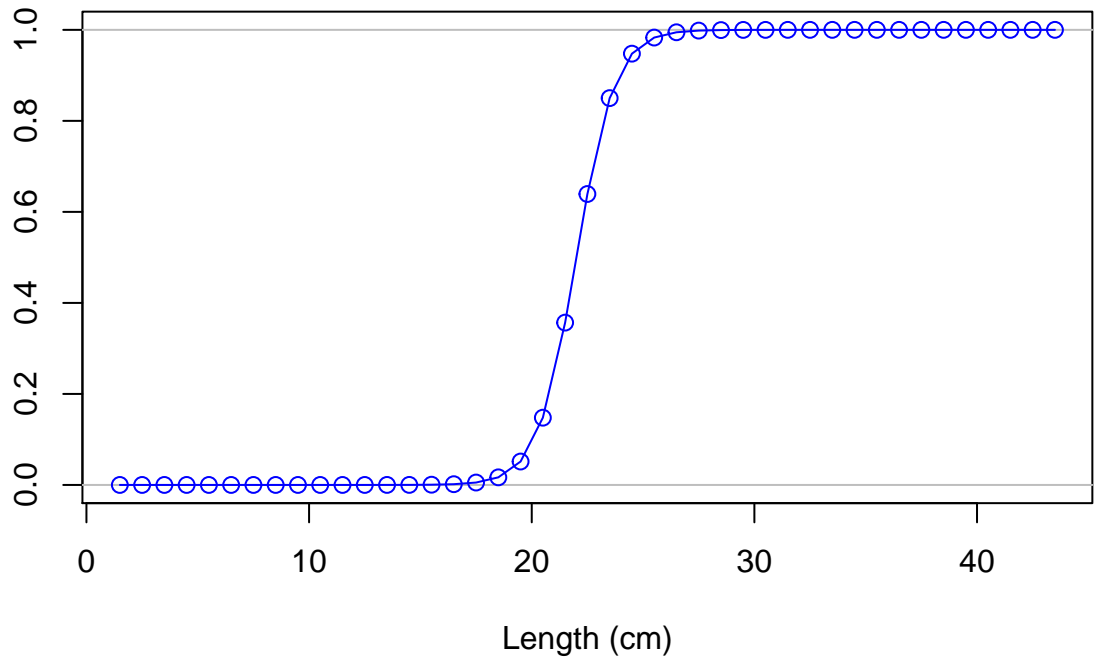
Selectivity

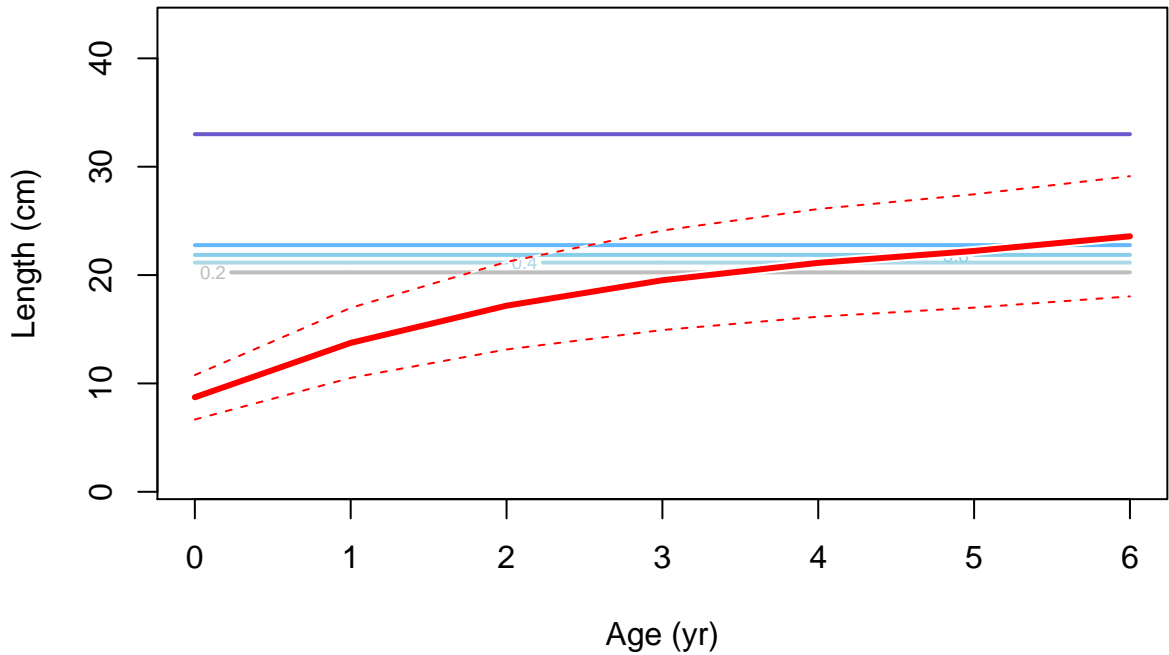


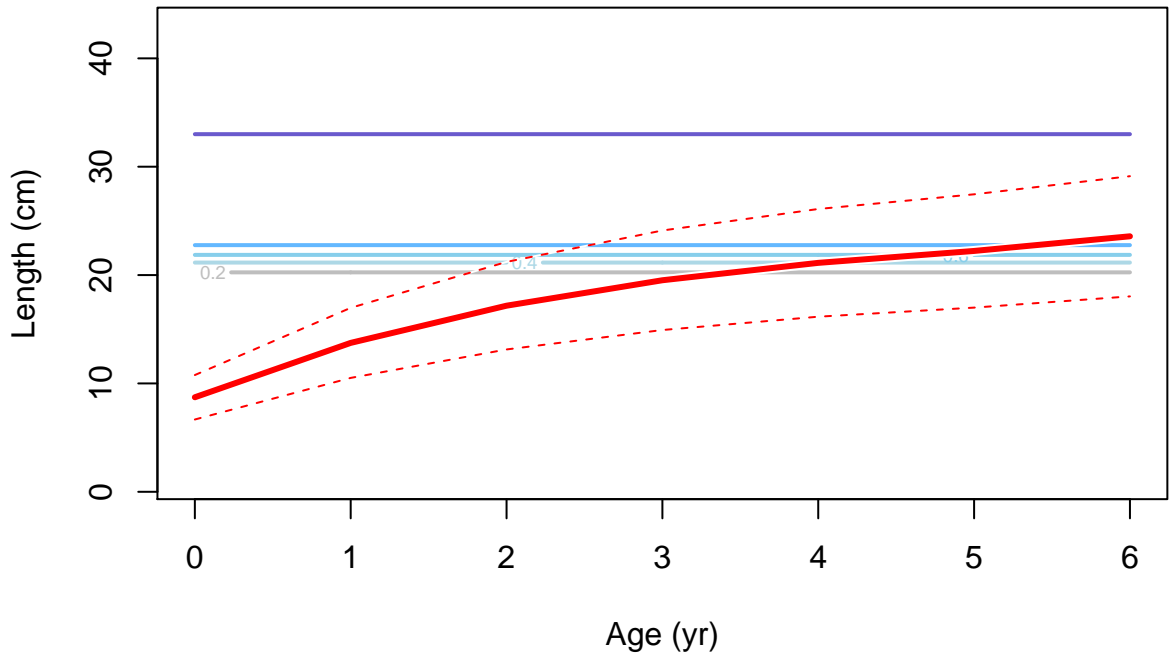
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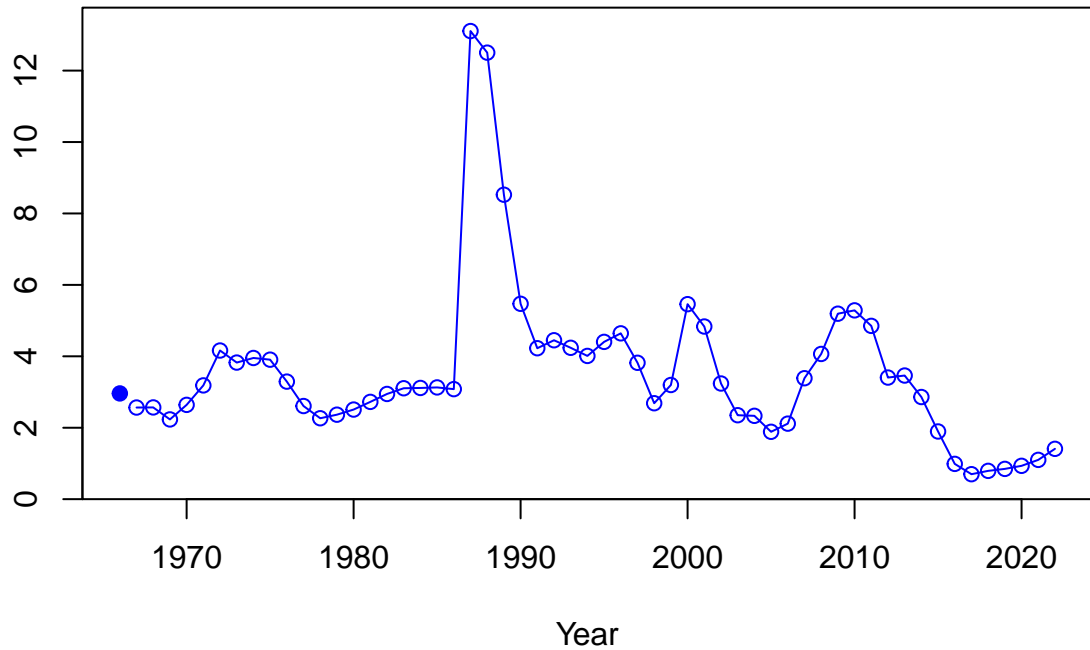
Selectivity



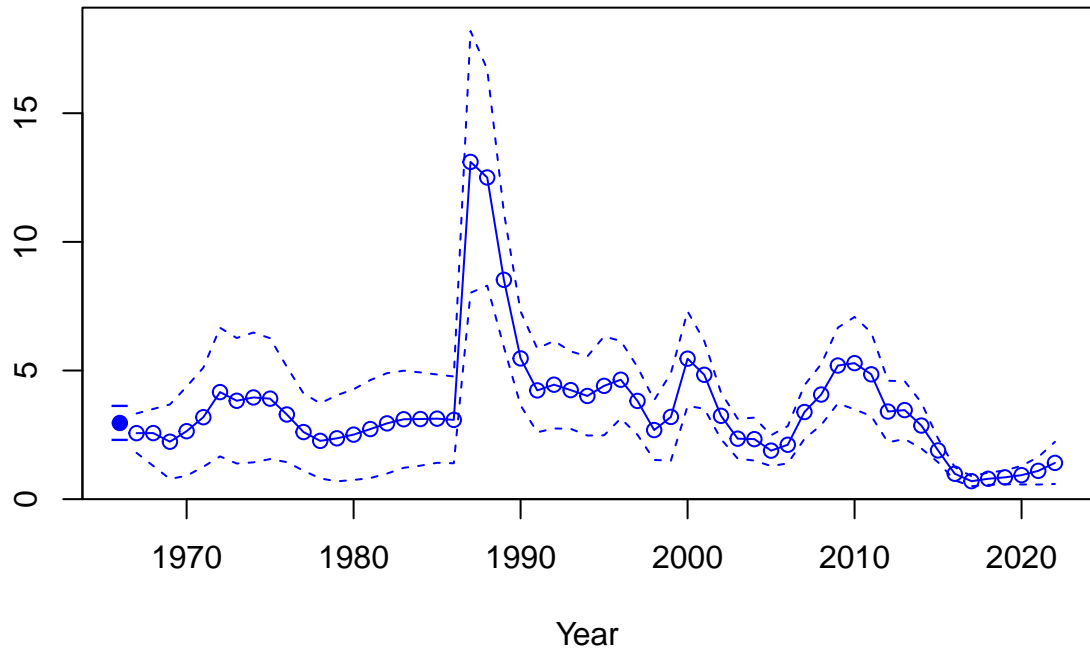




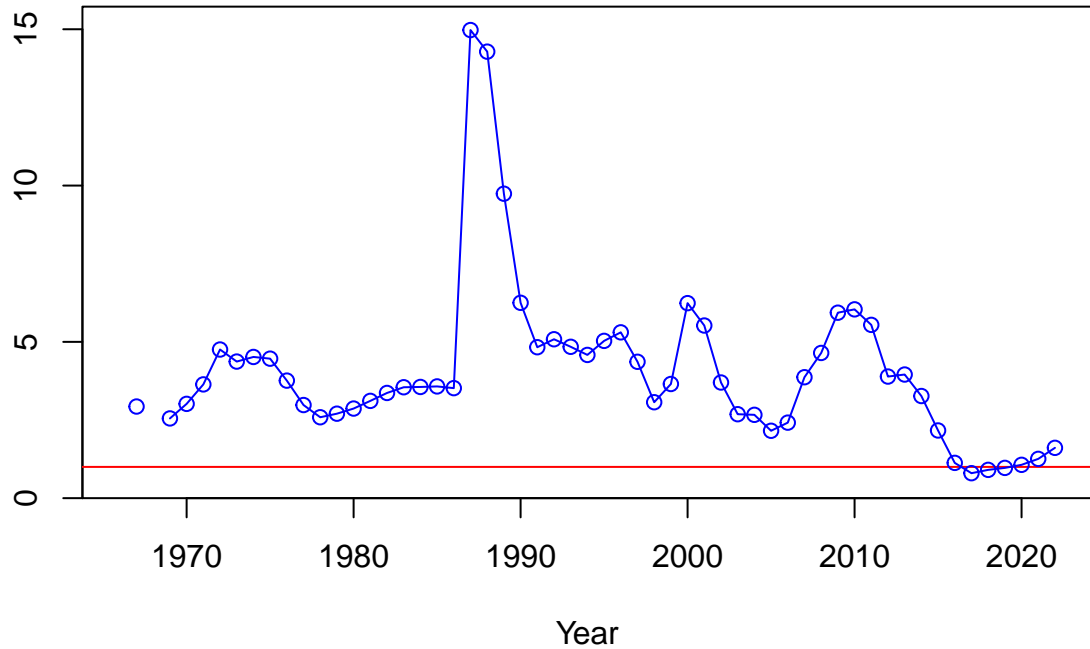
Spawning biomass (mt)



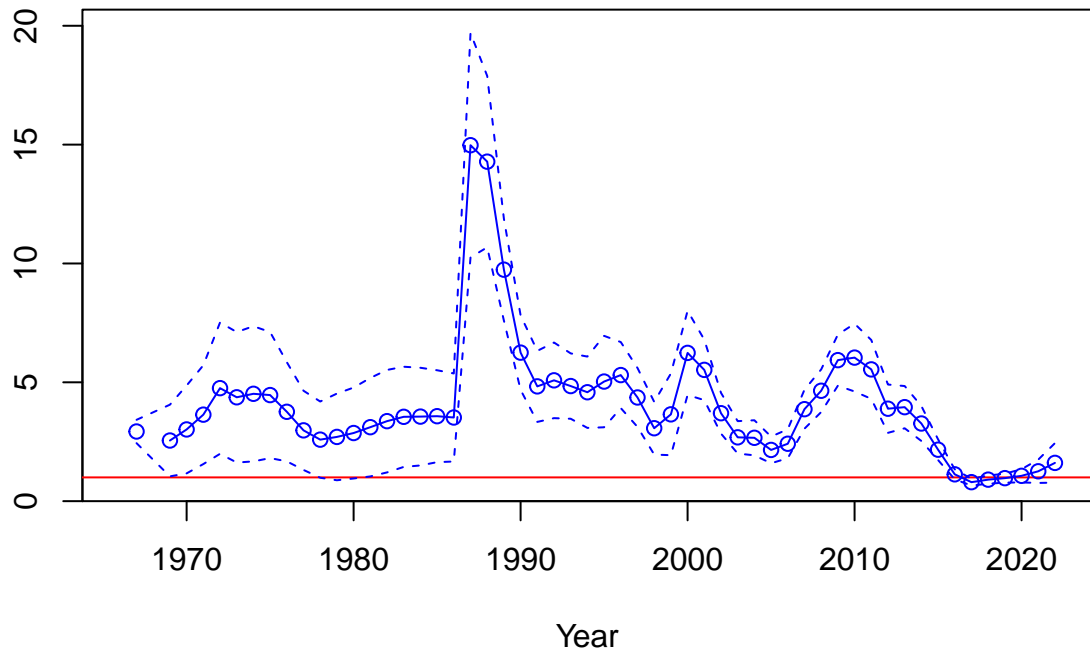
Spawning biomass (mt)

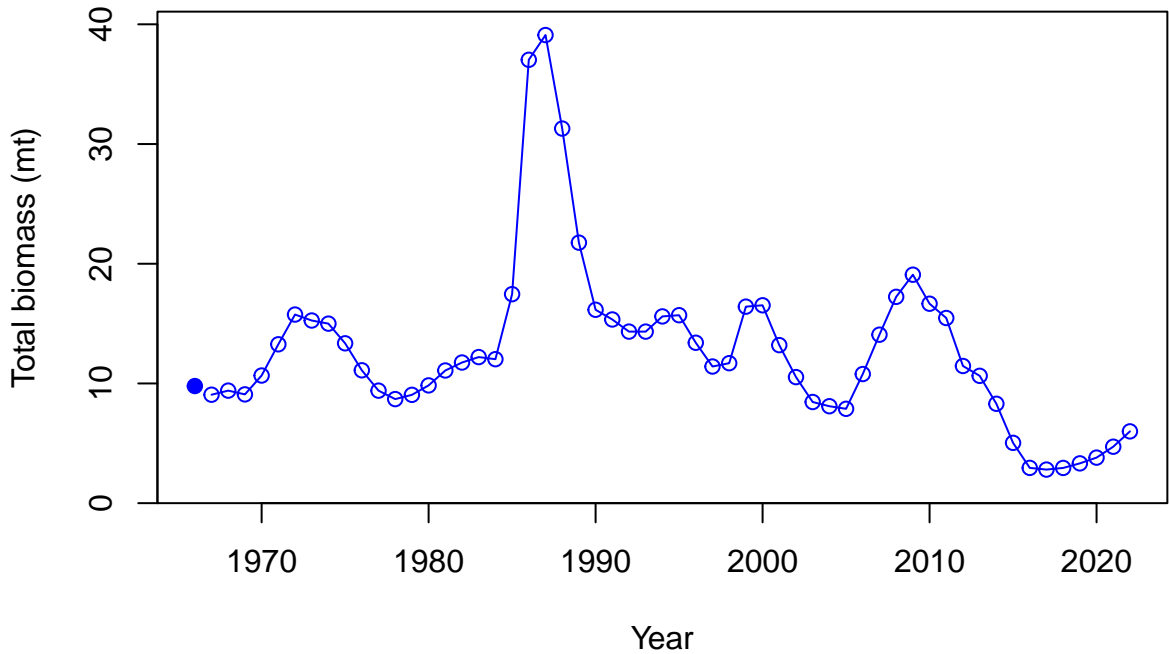


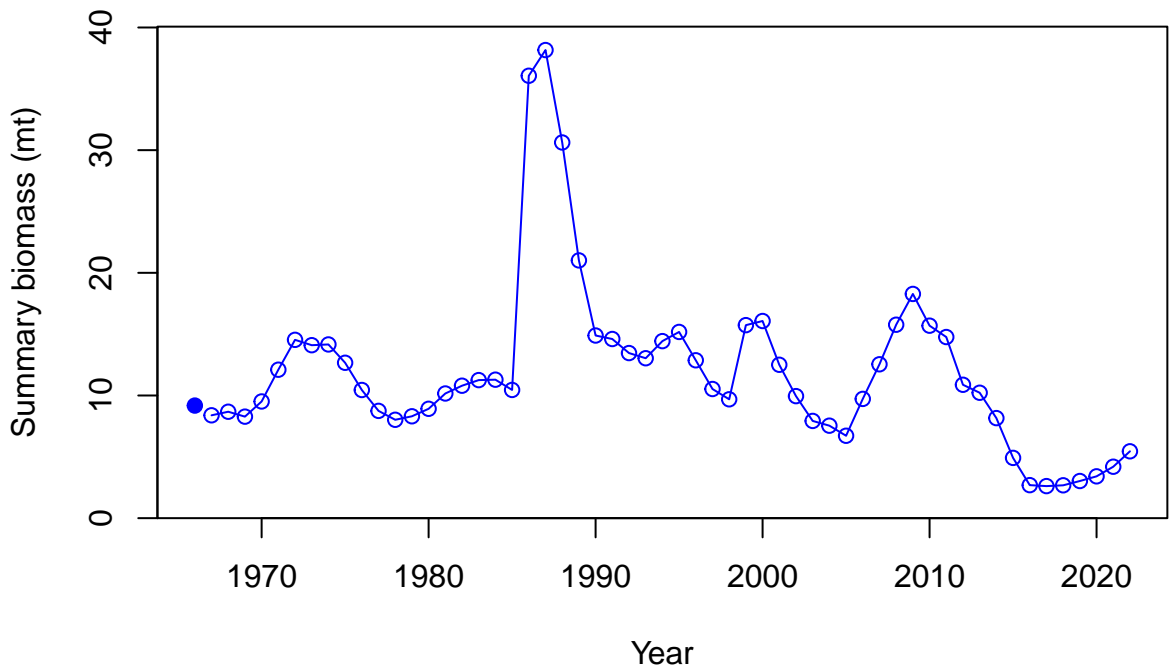
Relative spawning biomass: B/B_{MSY}



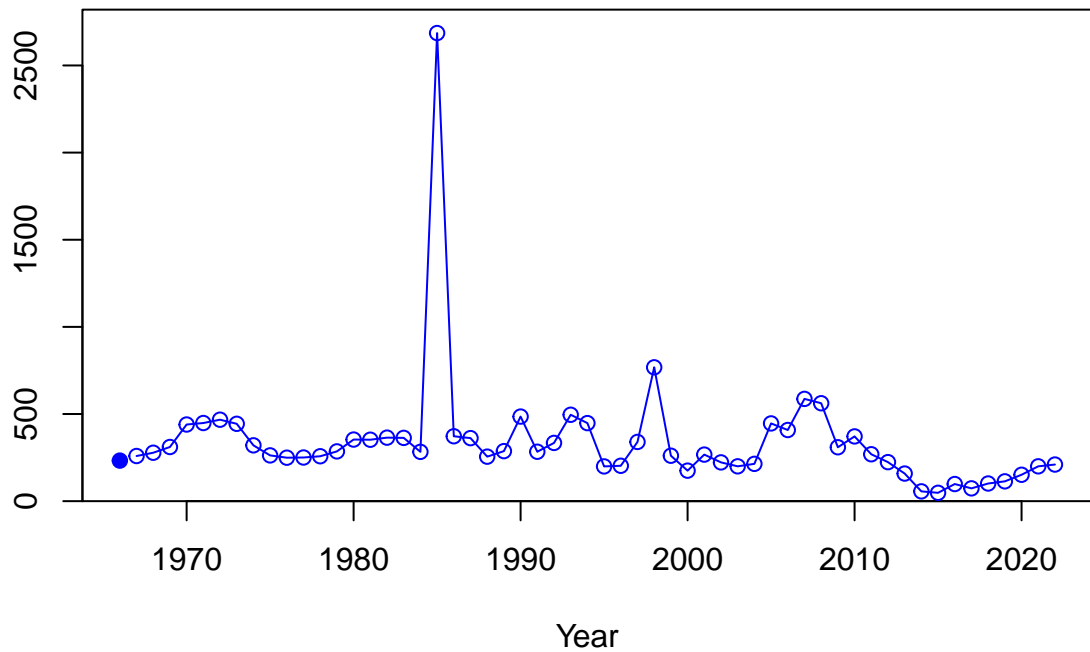
Relative spawning biomass: B/B_{MSY}

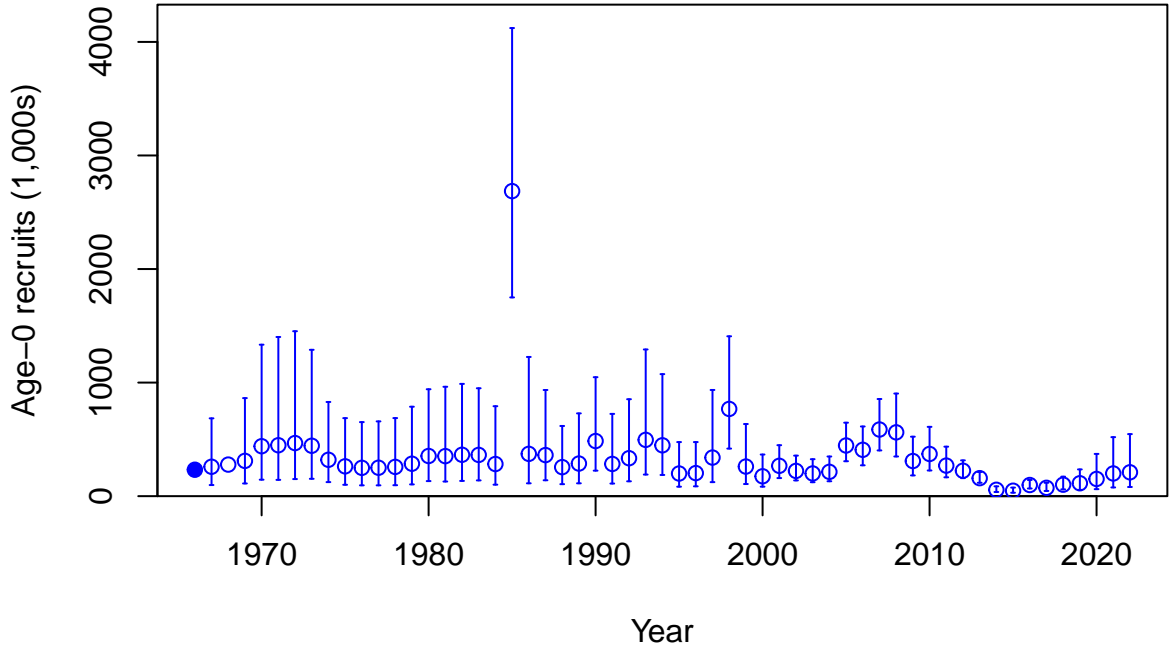




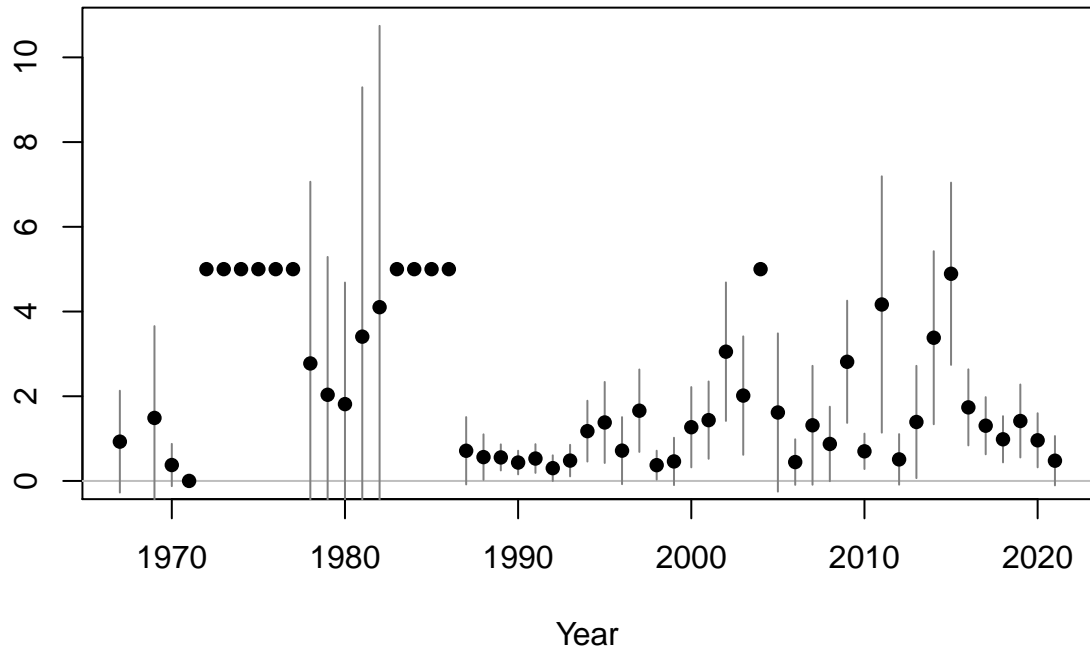


Age-0 recruits (1,000s)

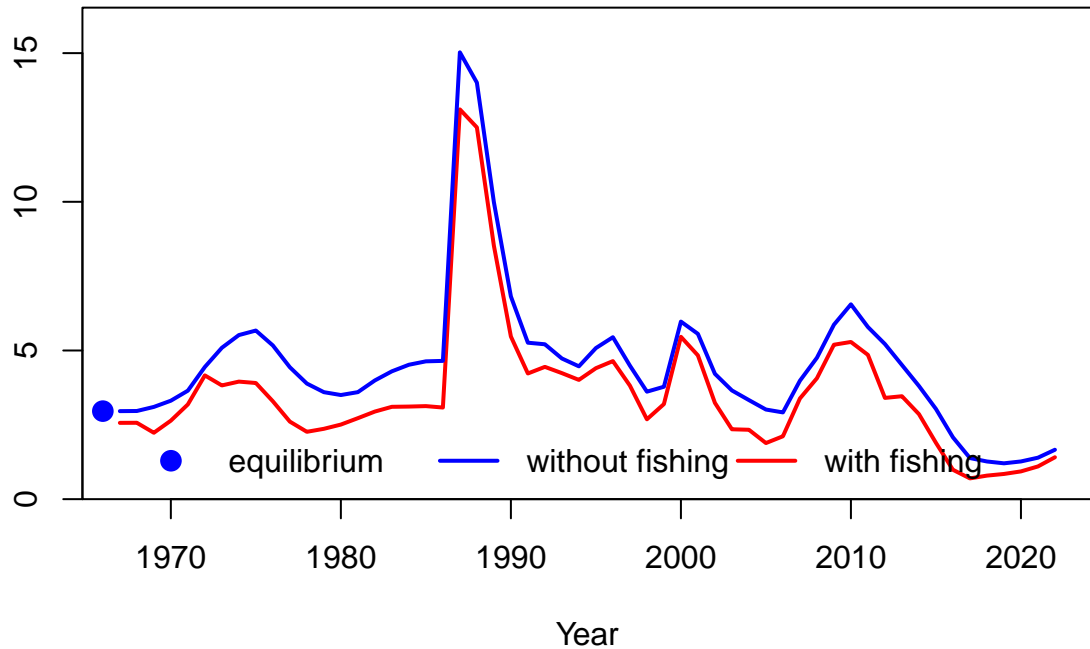




Summary Fishing Mortality



Spawning biomass (mt)



Log recruitment deviation

2
1
0
-1

1970

1980

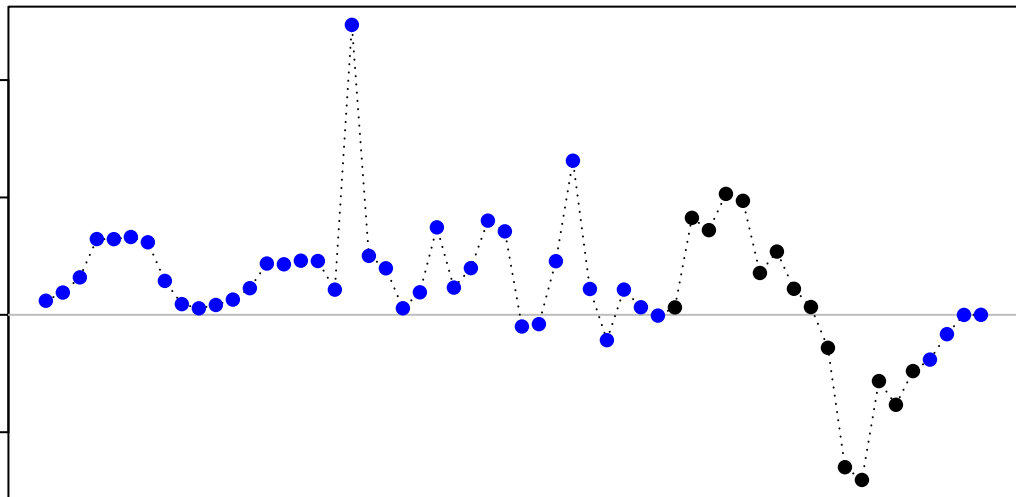
1990

2000

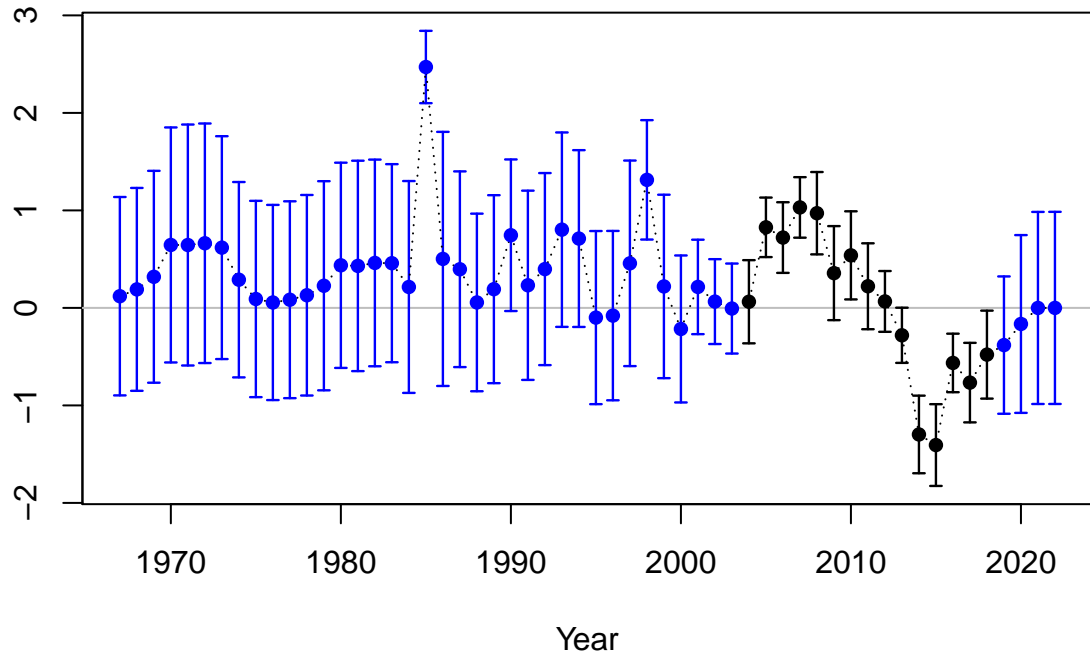
2010

2020

Year

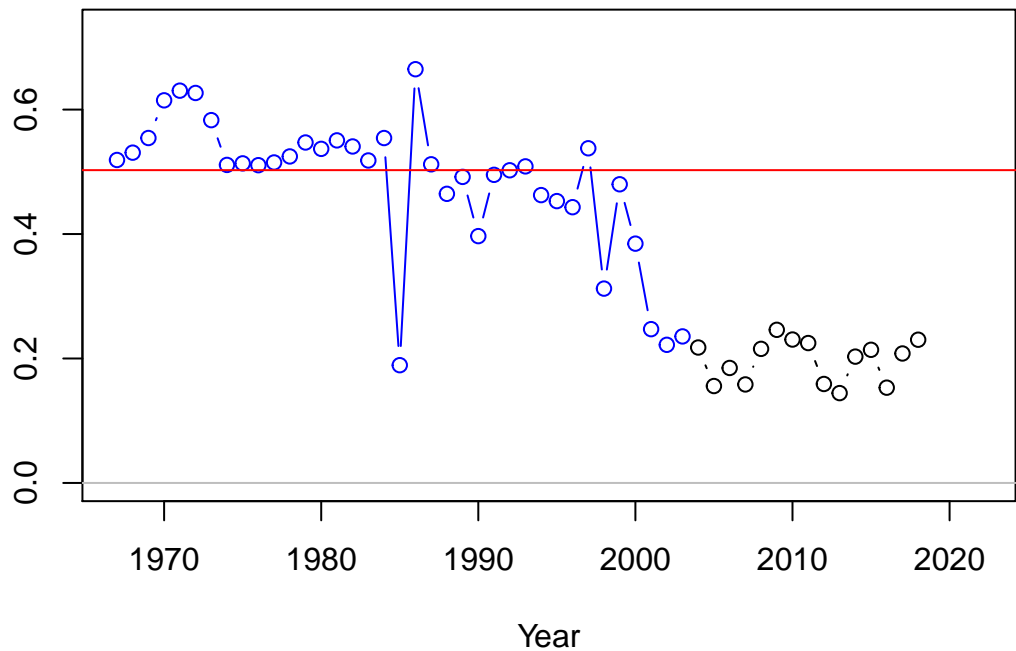


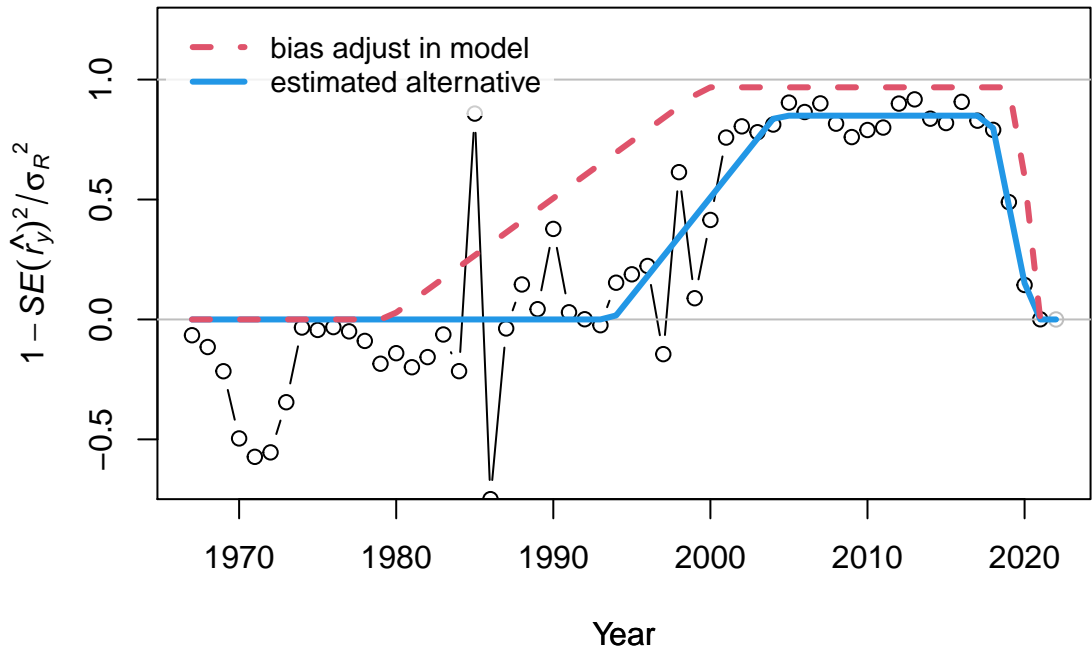
Log recruitment deviation

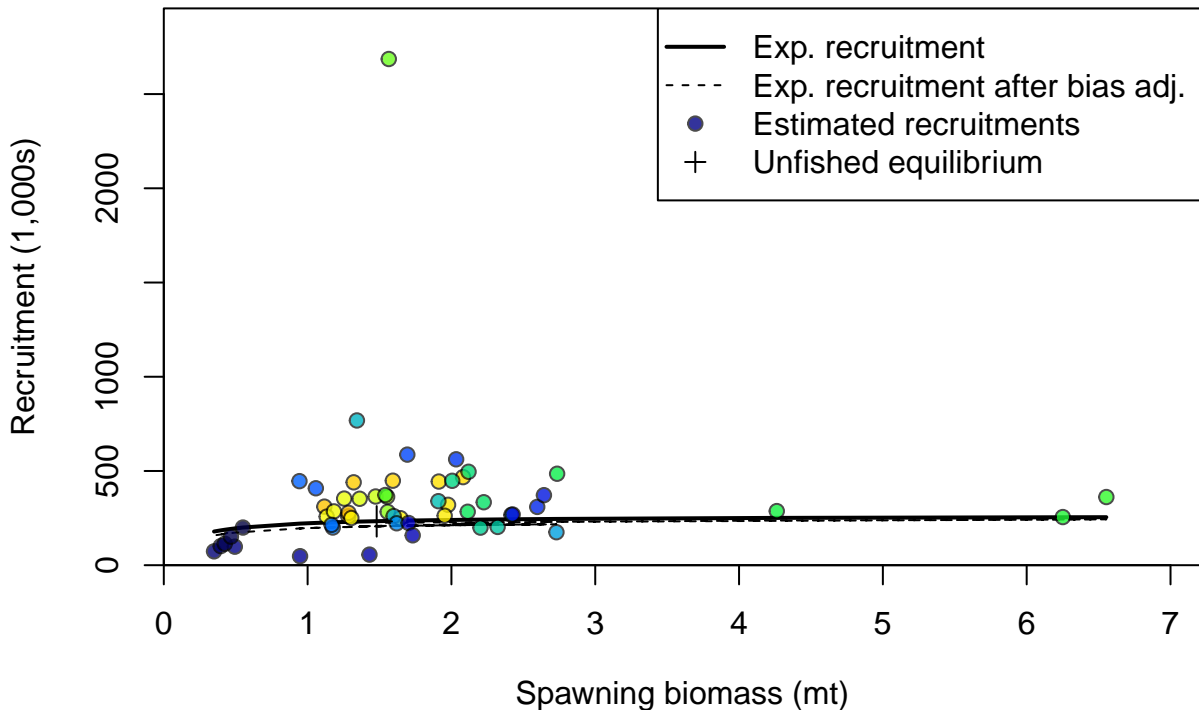


Recruitment deviation variance

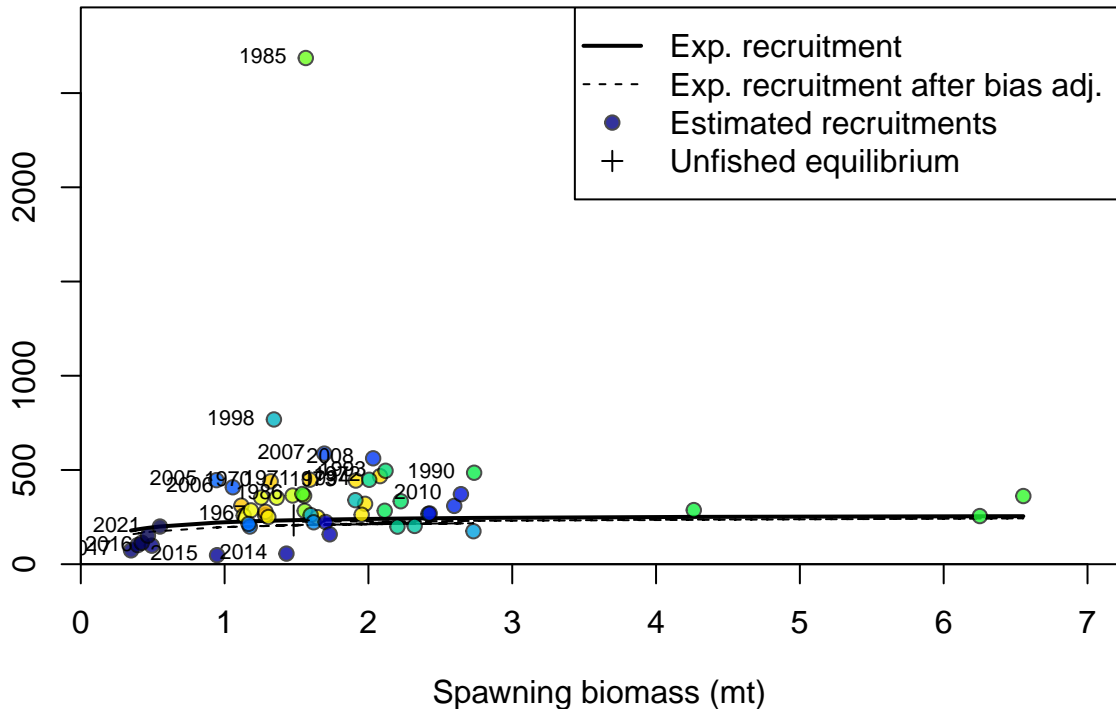
Asymptotic standard error estimate



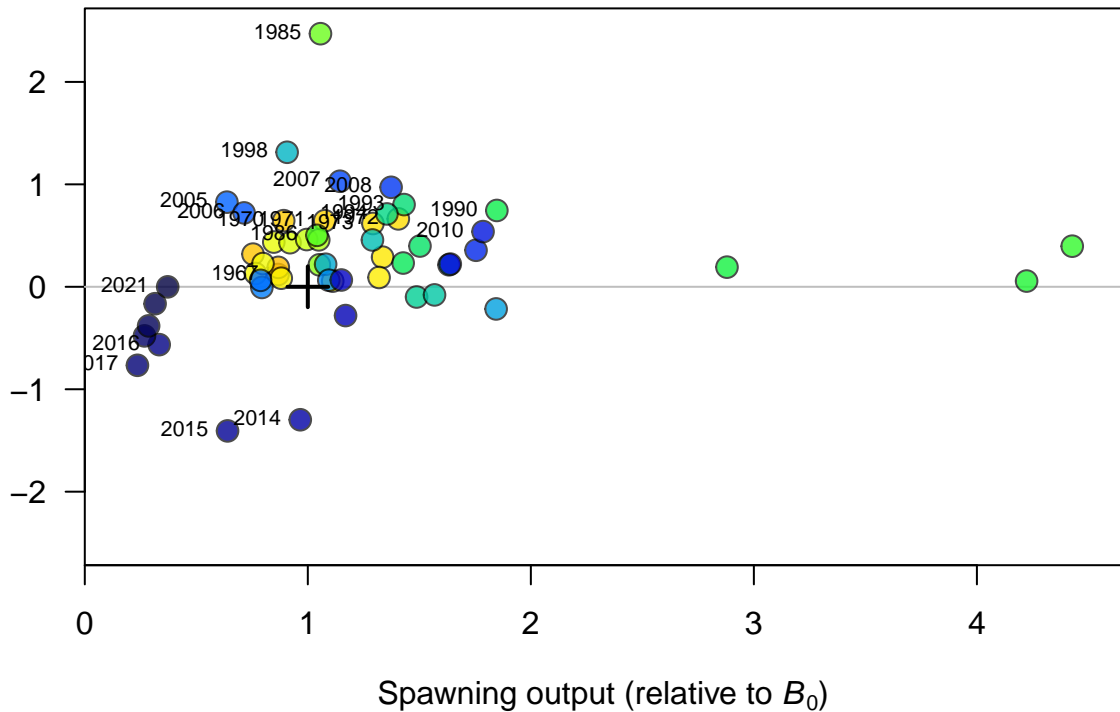


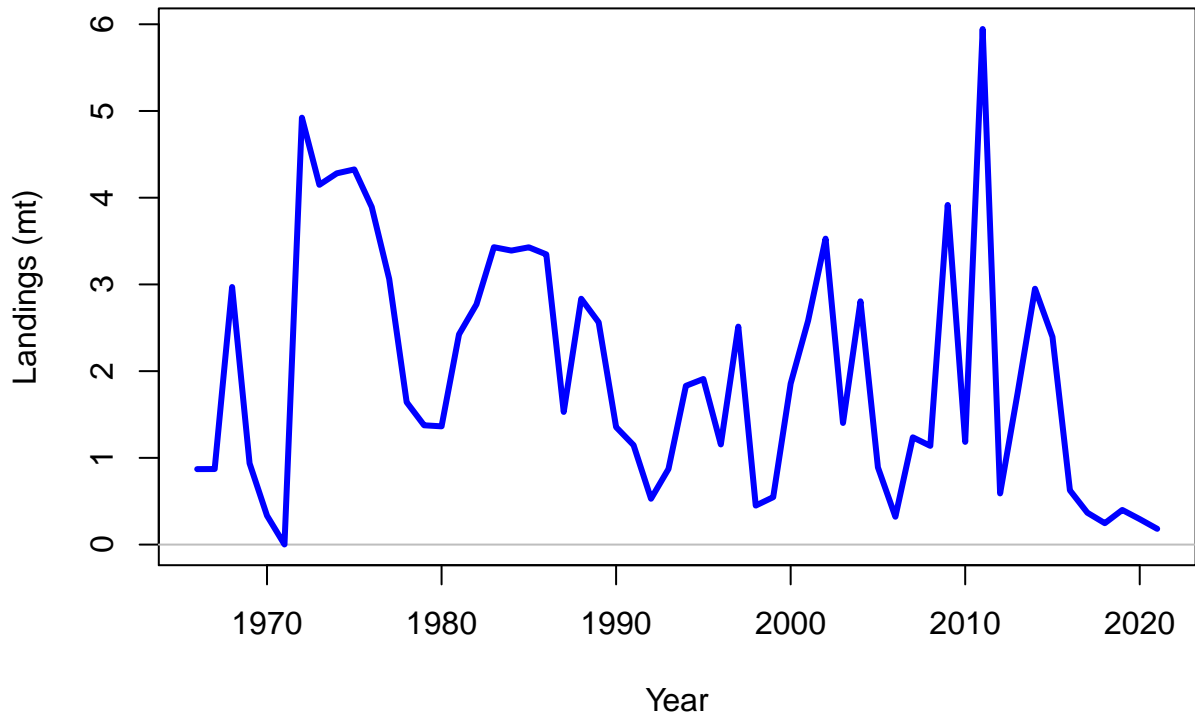


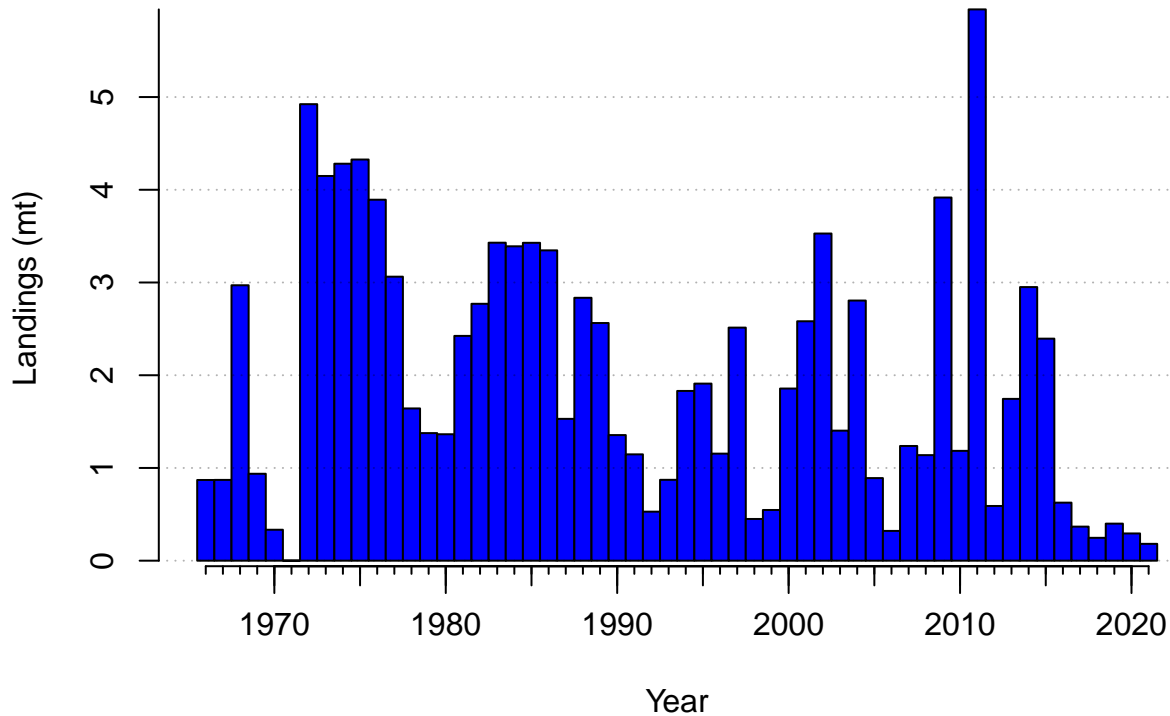
Recruitment (1,000s)

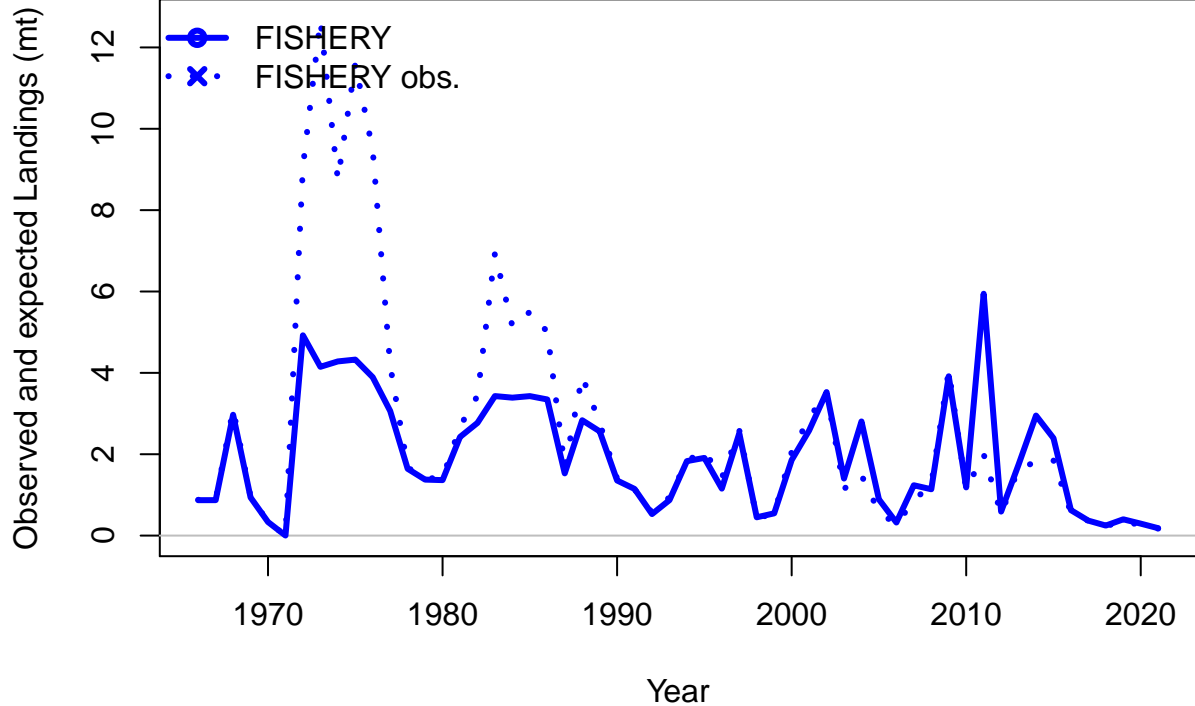


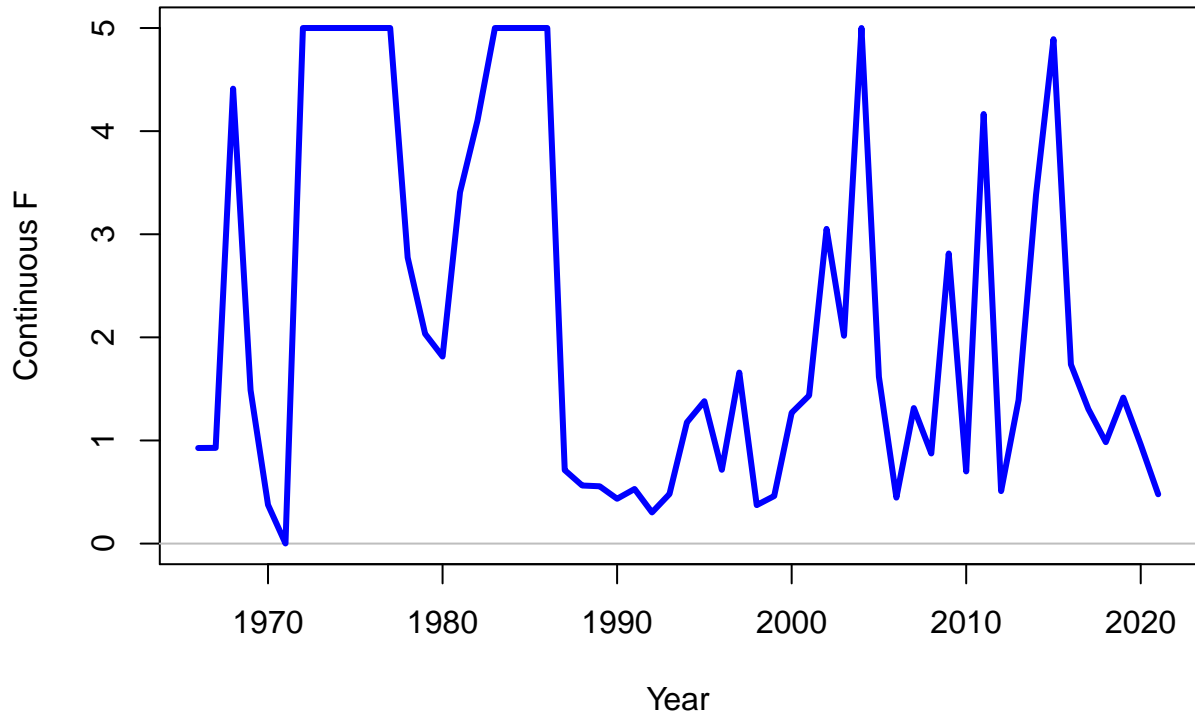
Log recruitment deviation



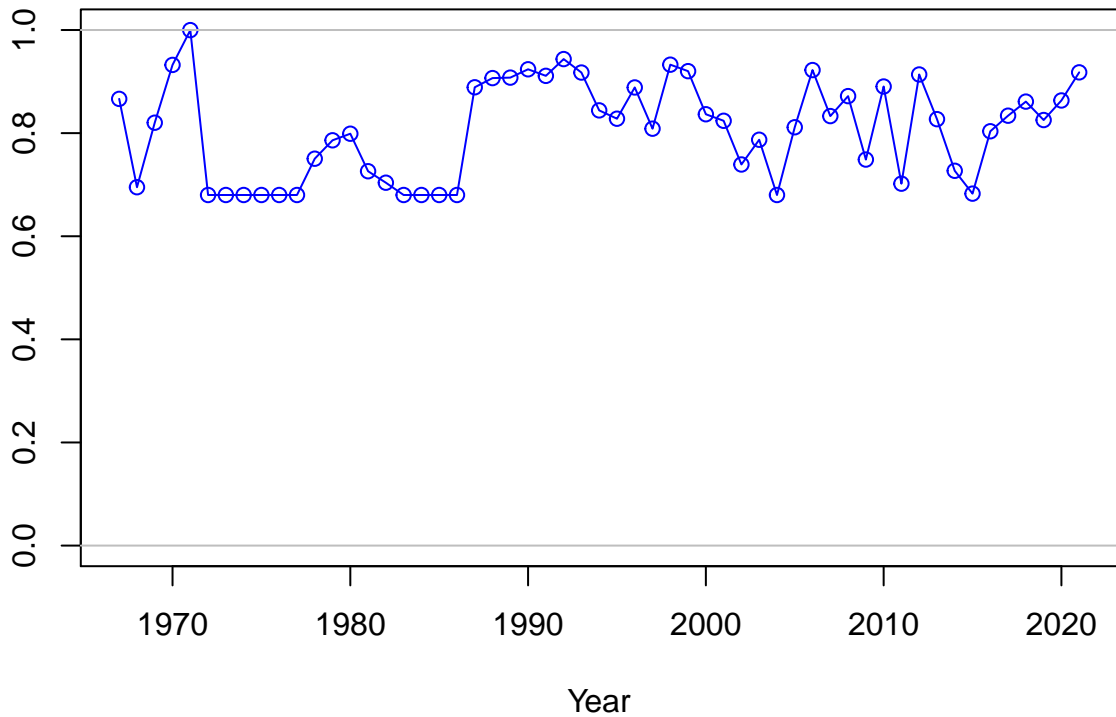




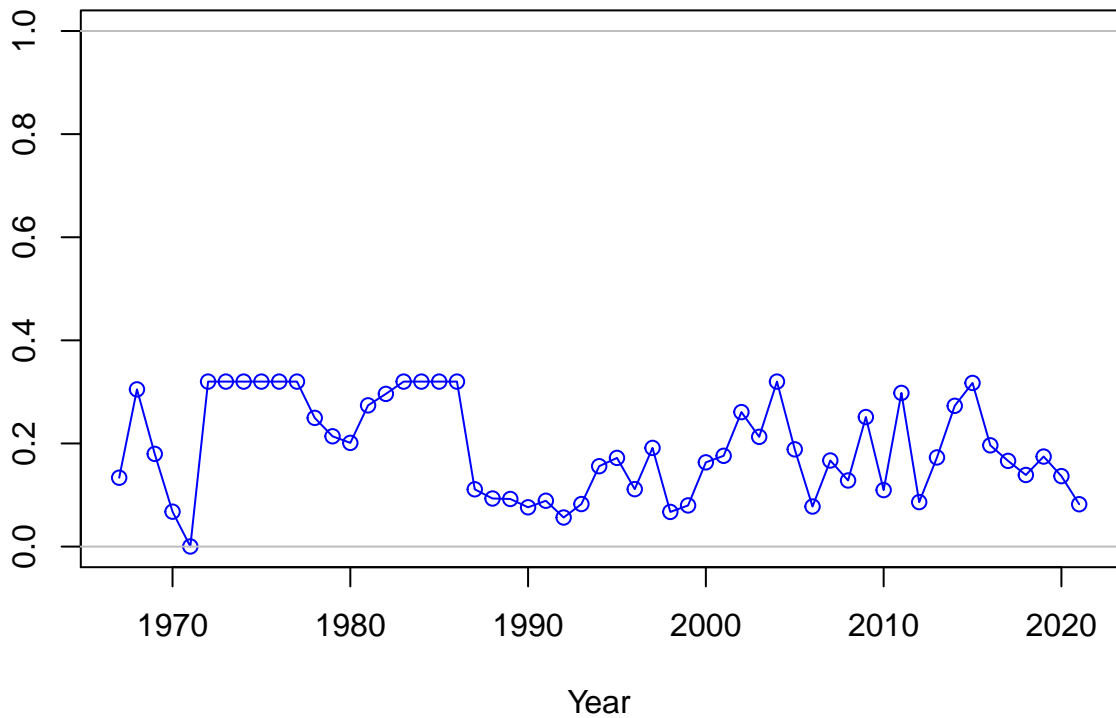




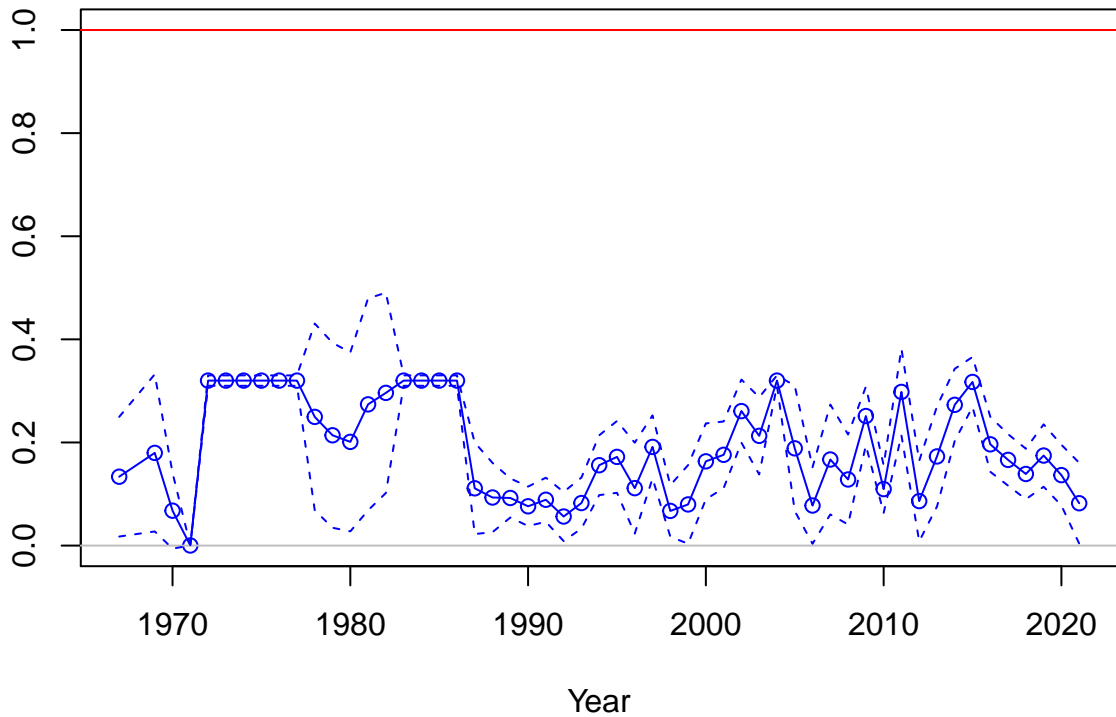
SPR



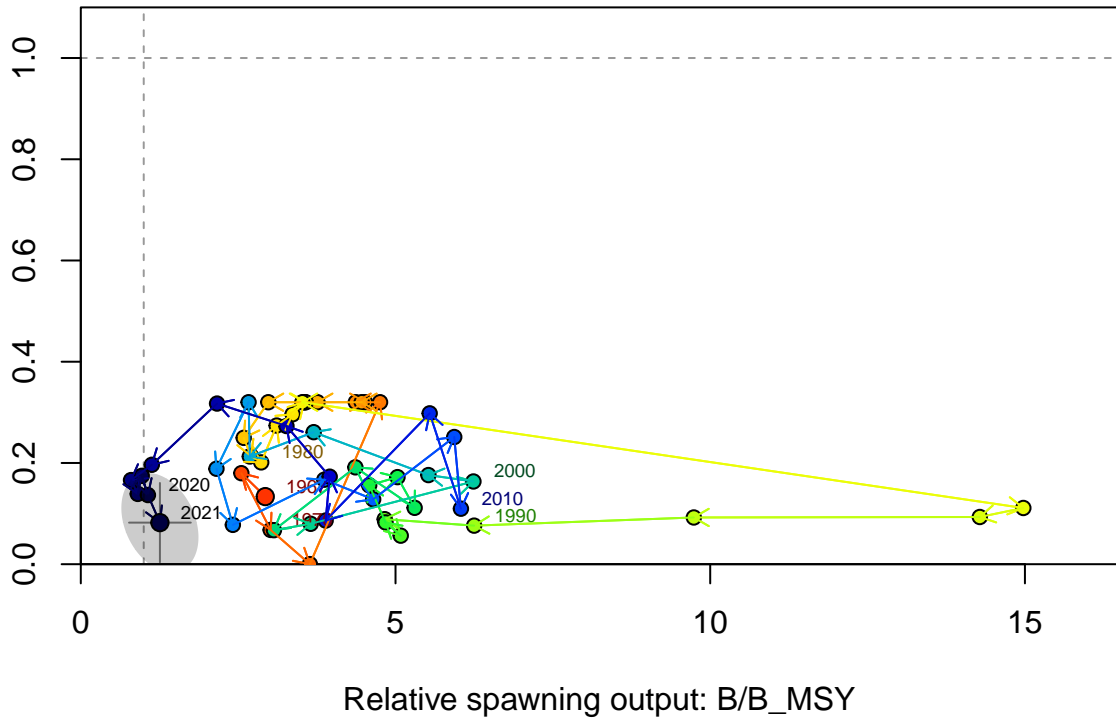
1-SPR



Fishing intensity: 1-SPR



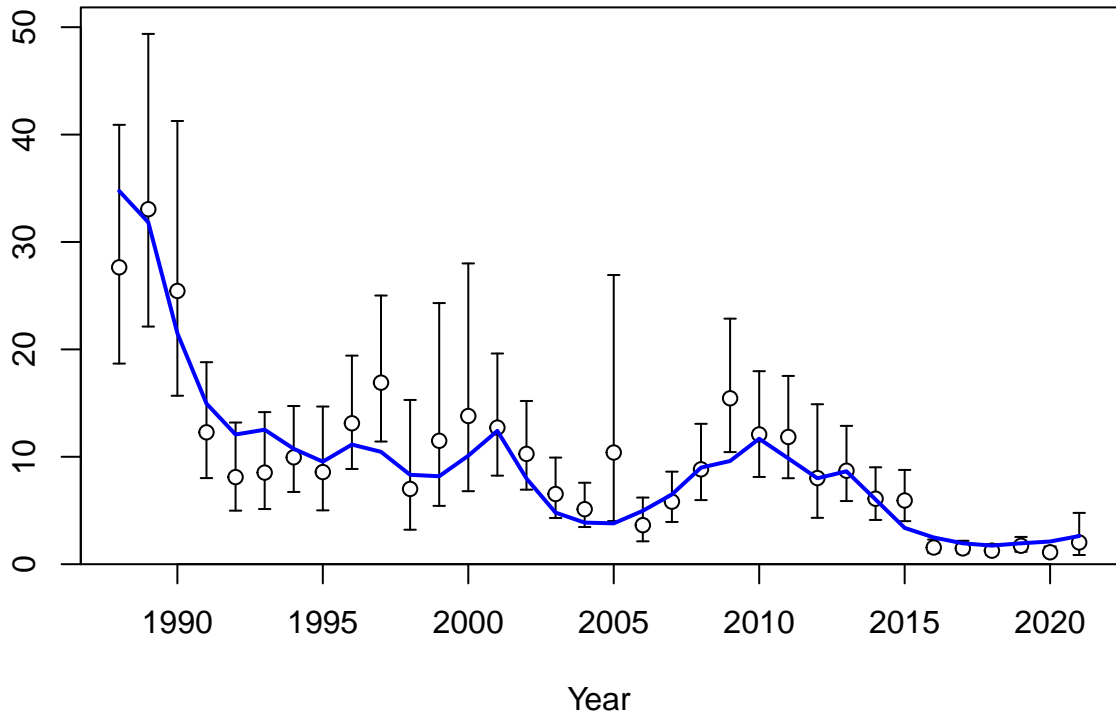
Fishing intensity: 1-SPR



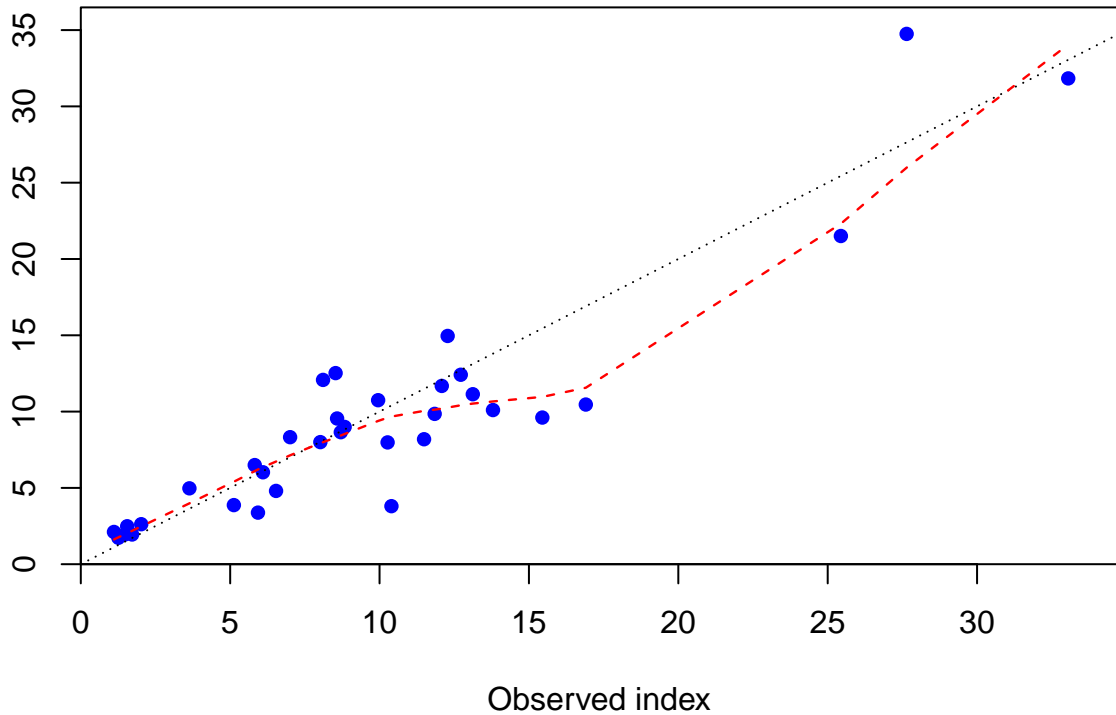
Index



Index



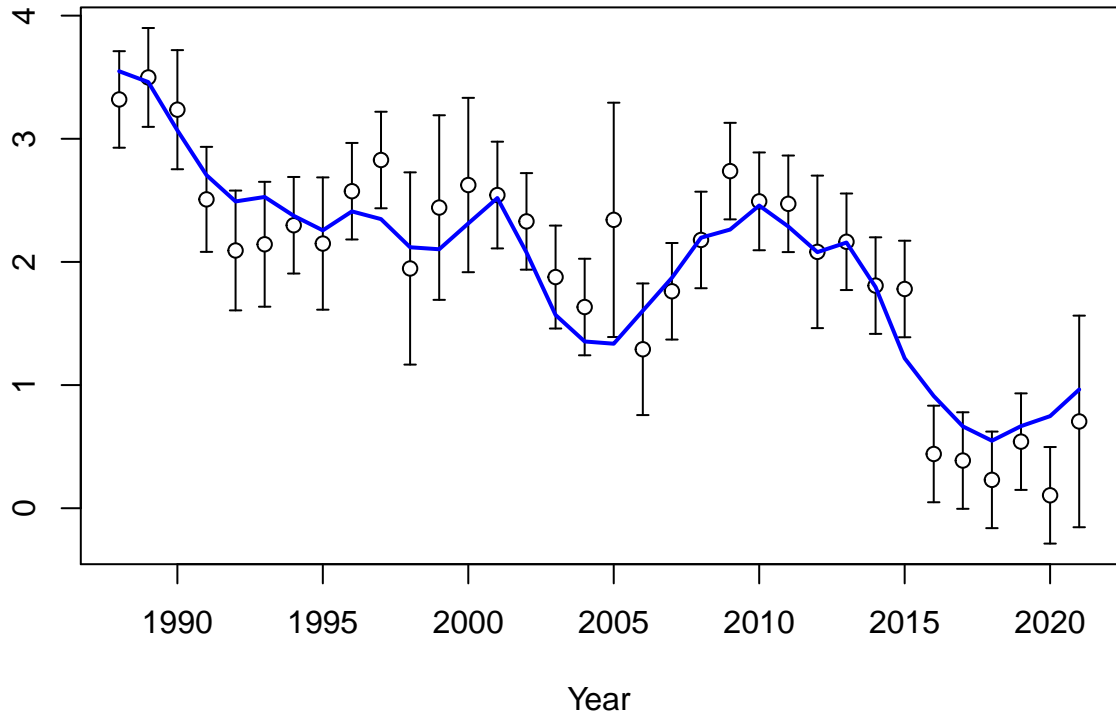
Expected index

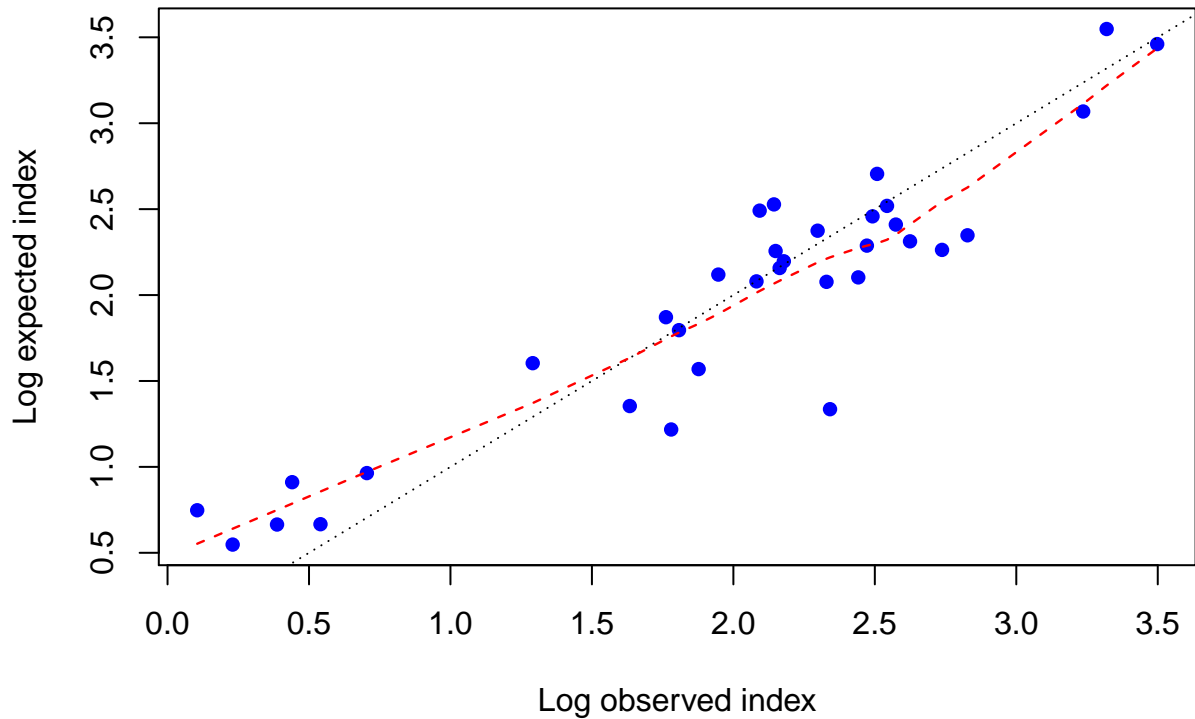


Log index

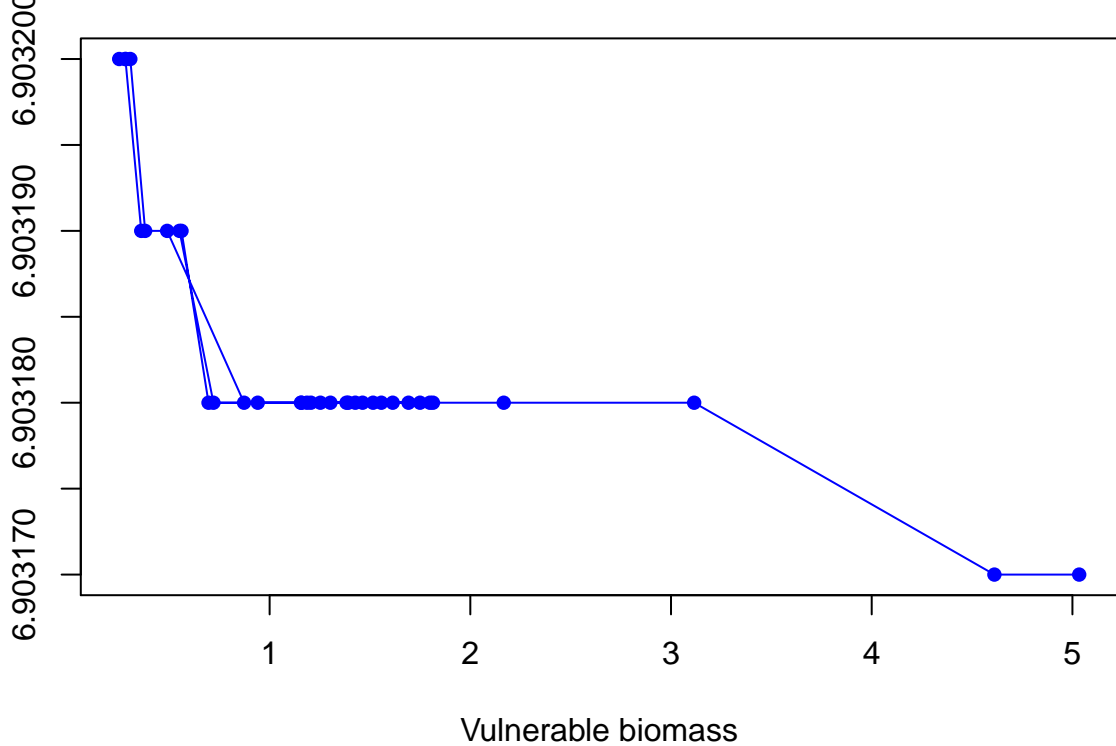


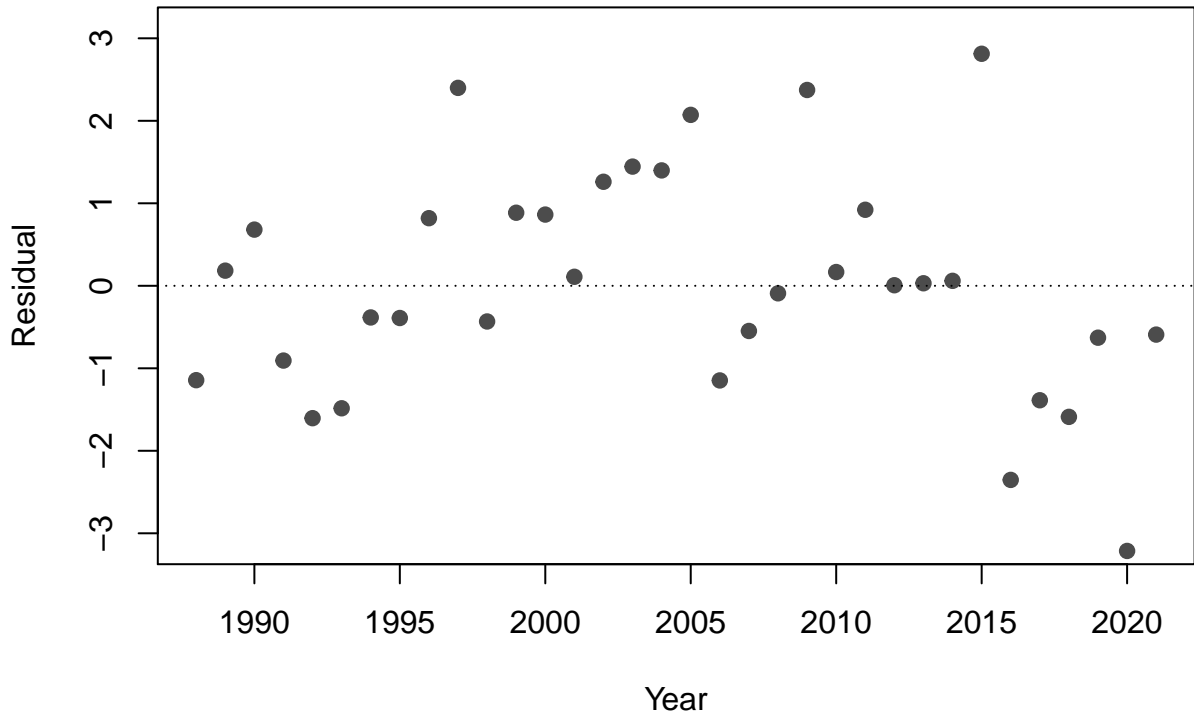
Log index



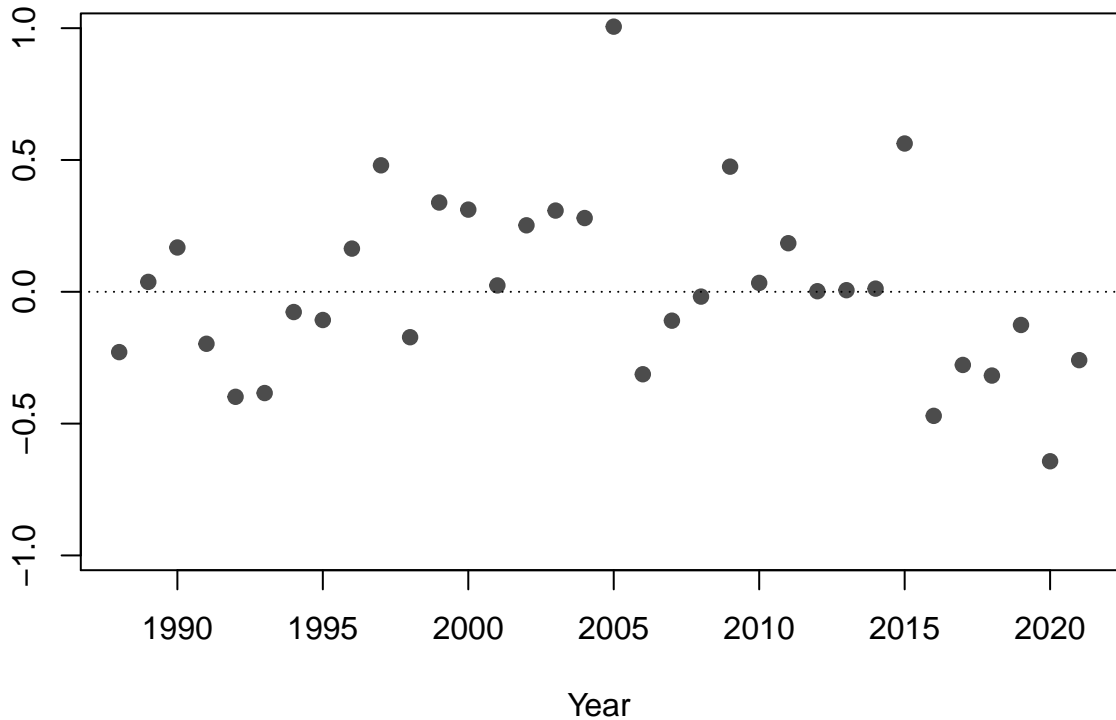


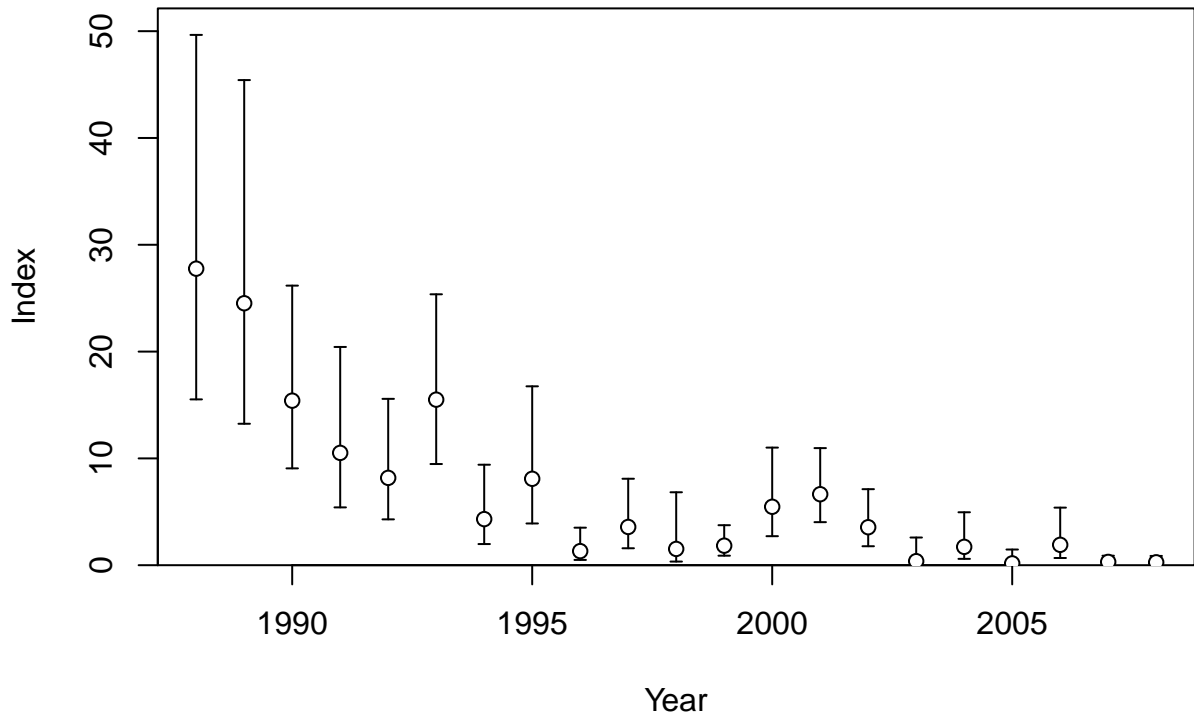
Effective catchability

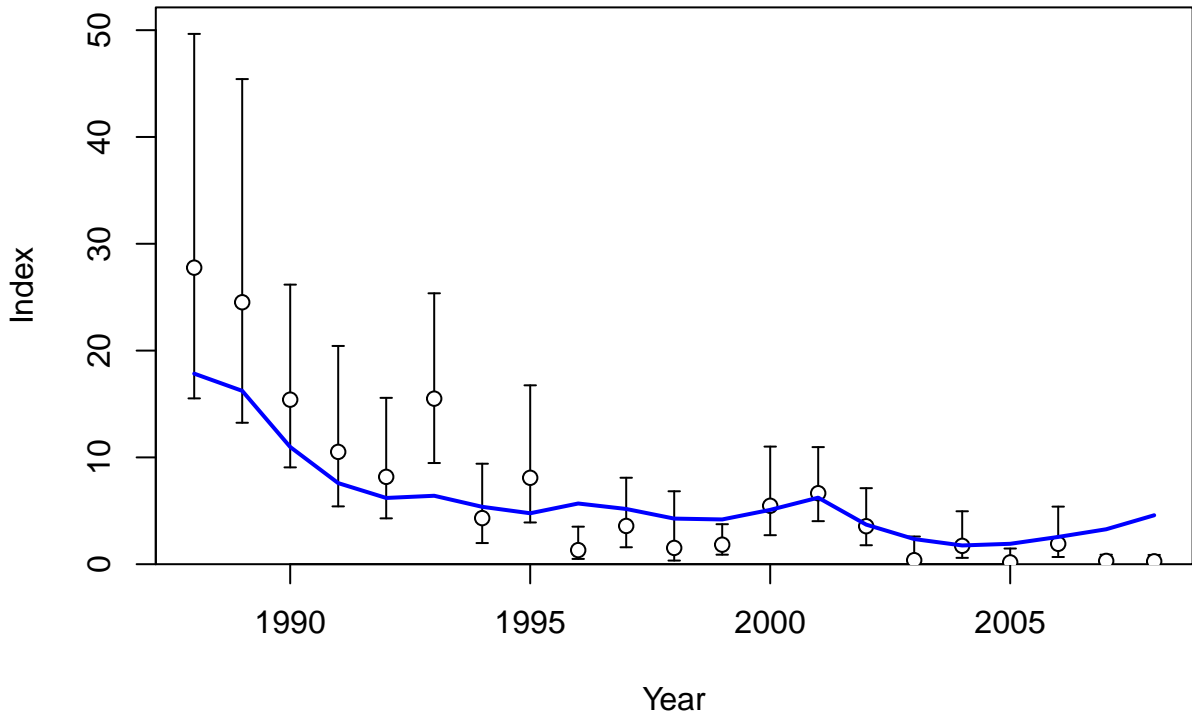


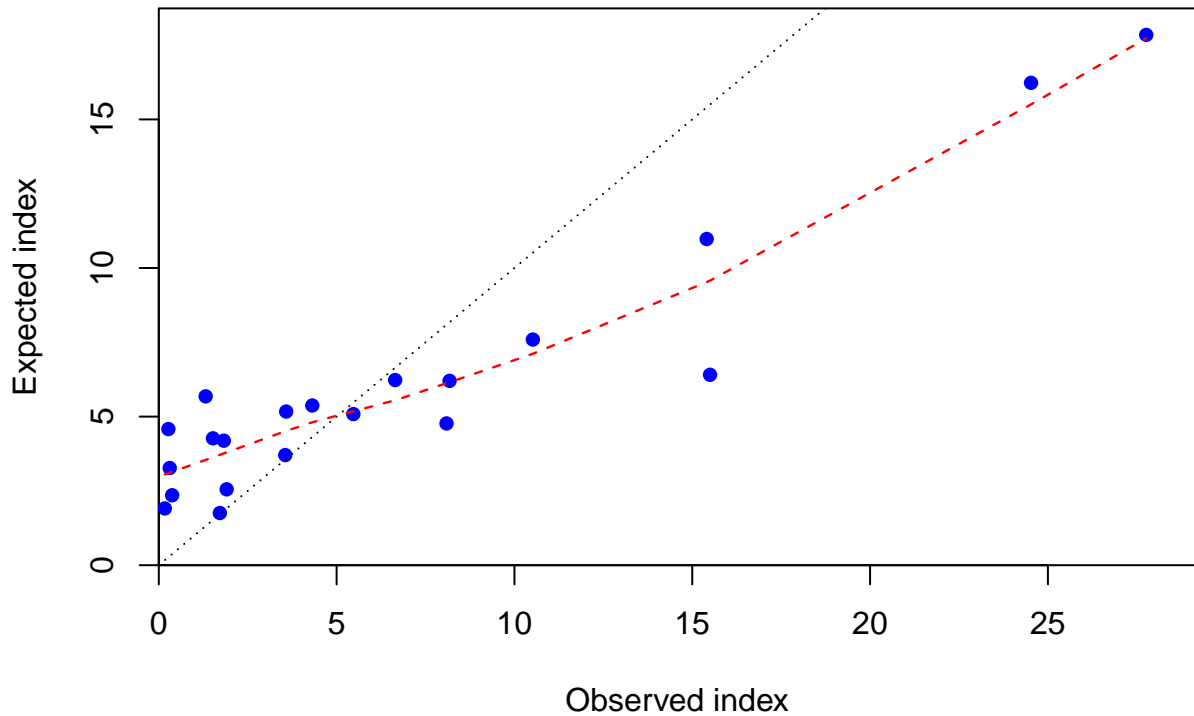


Deviation

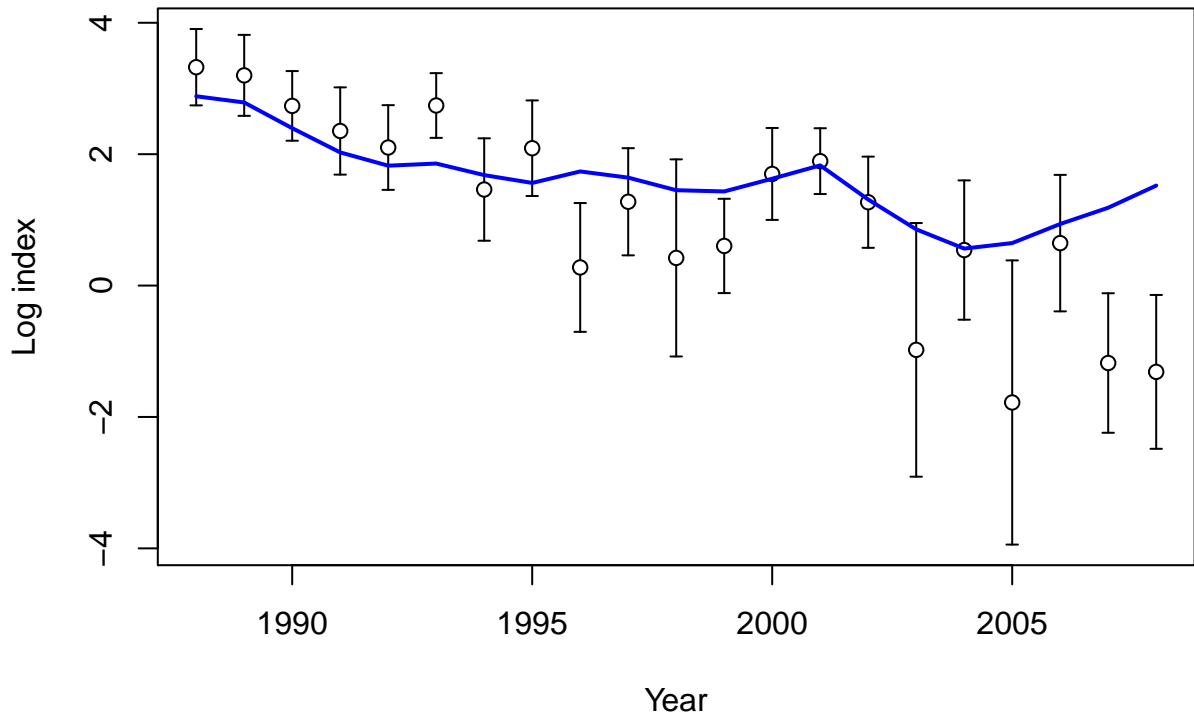


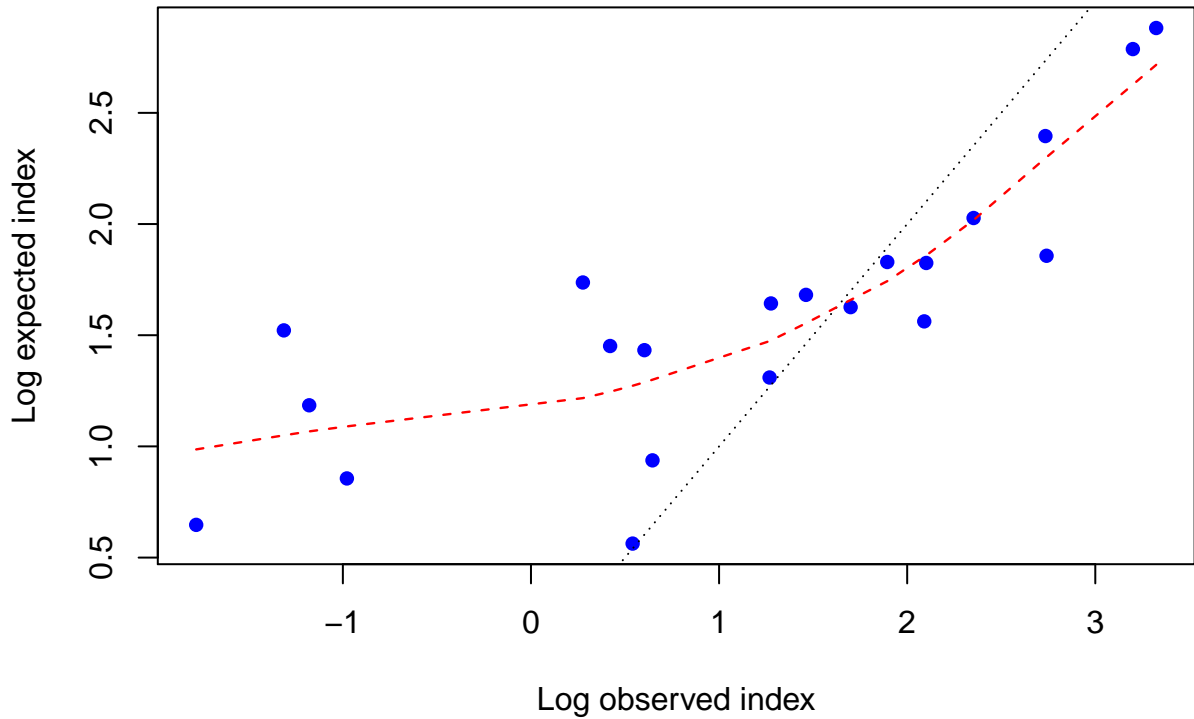












Effective catchability

3.698188
3.698184
3.698180

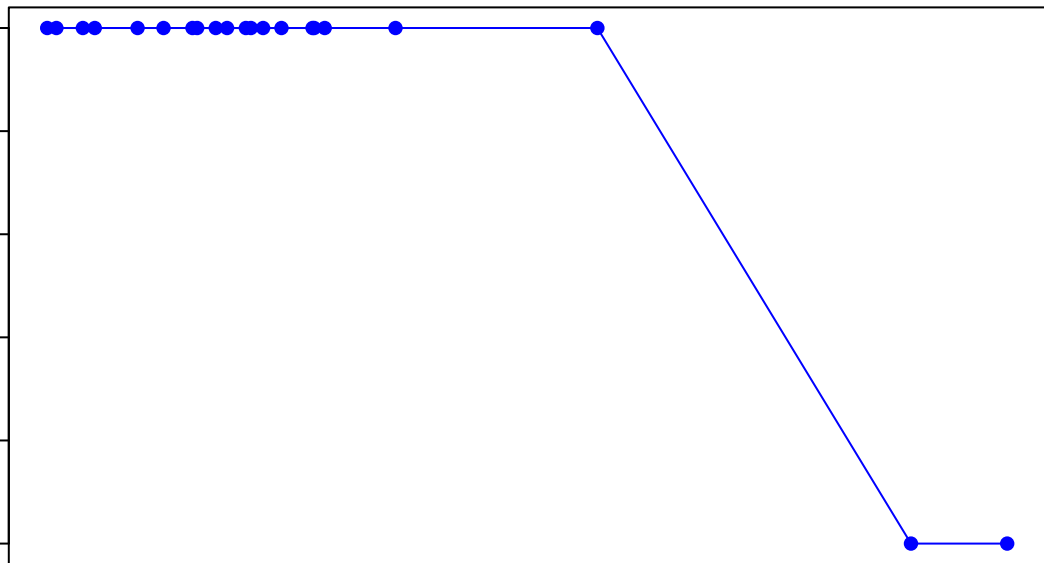
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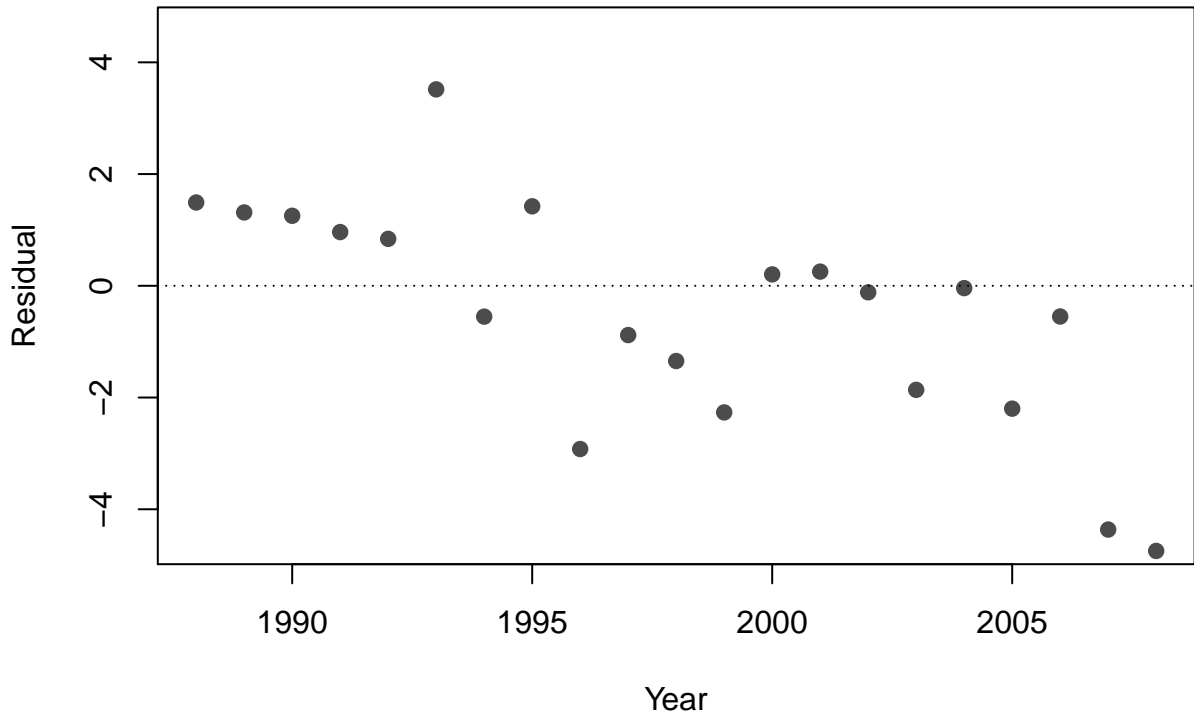
2

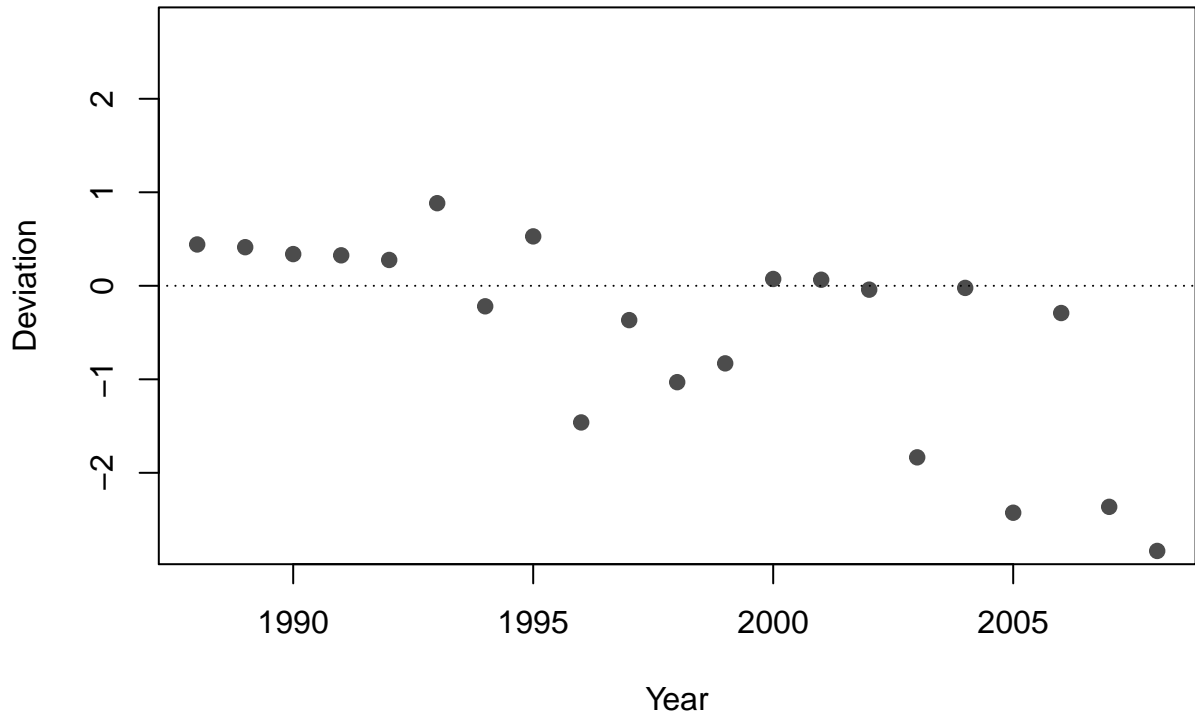
3

4

Vulnerable biomass

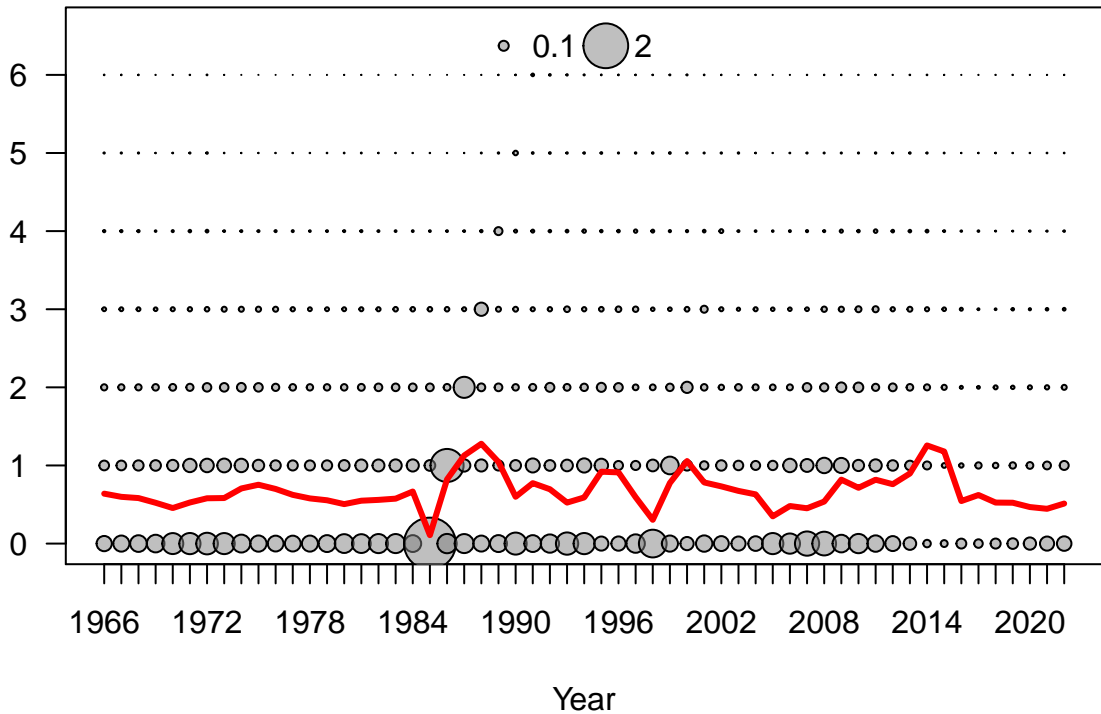




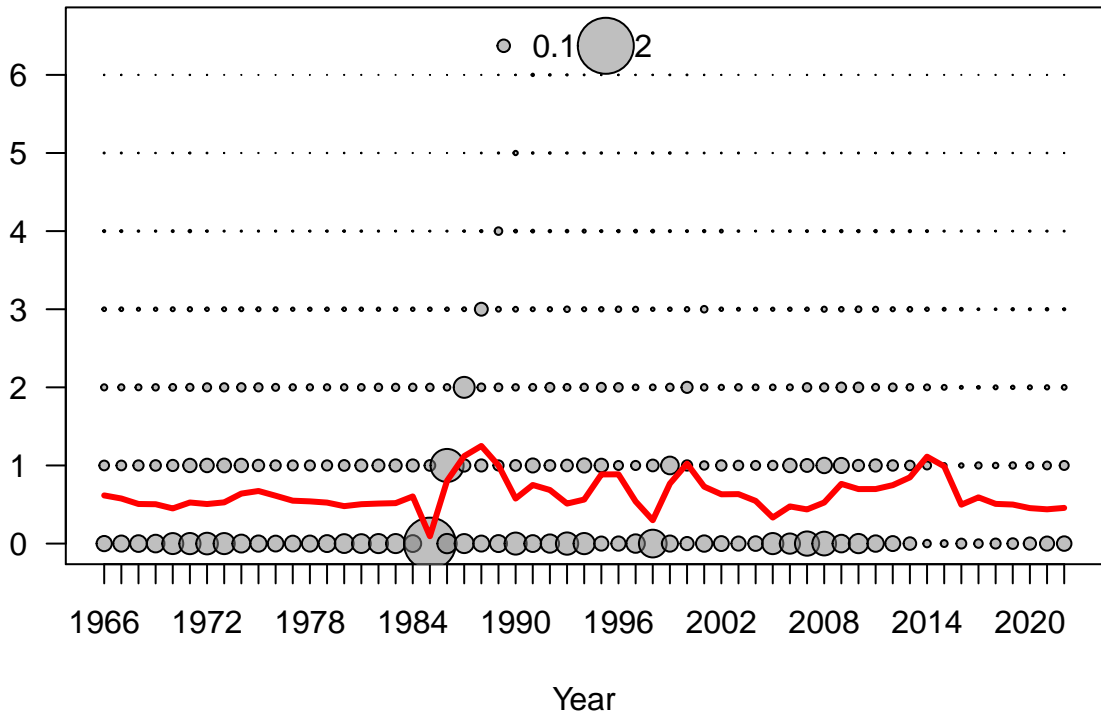


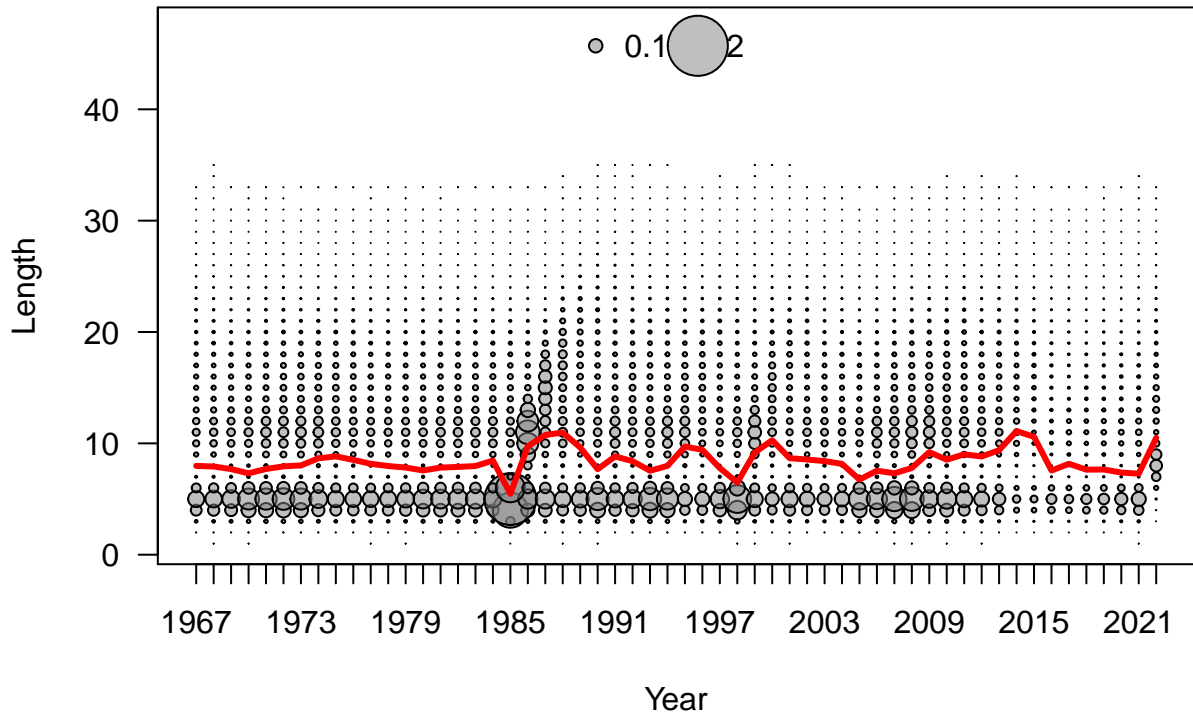


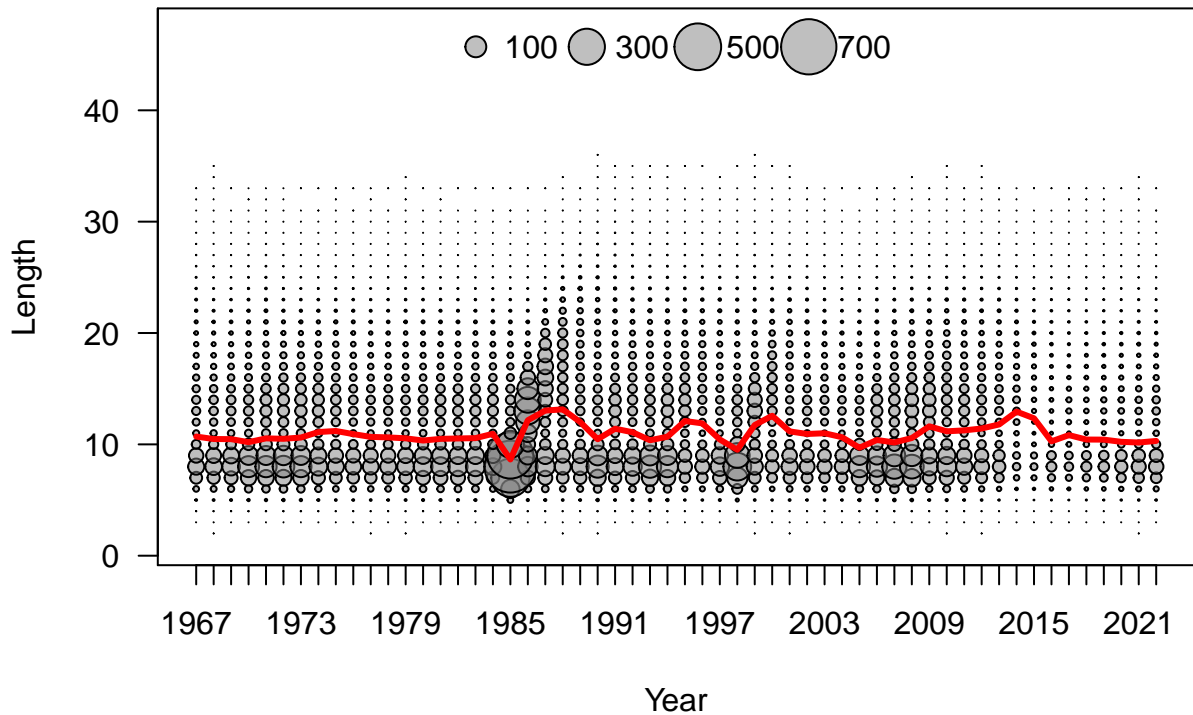
Age

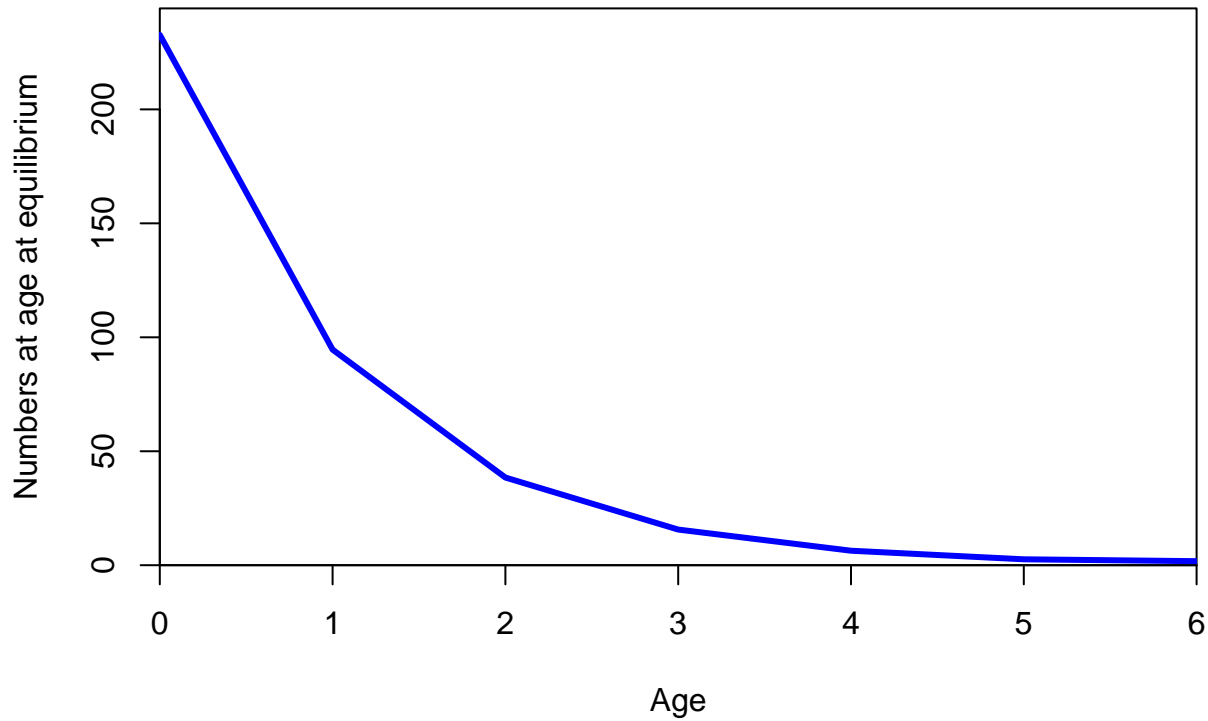


Age



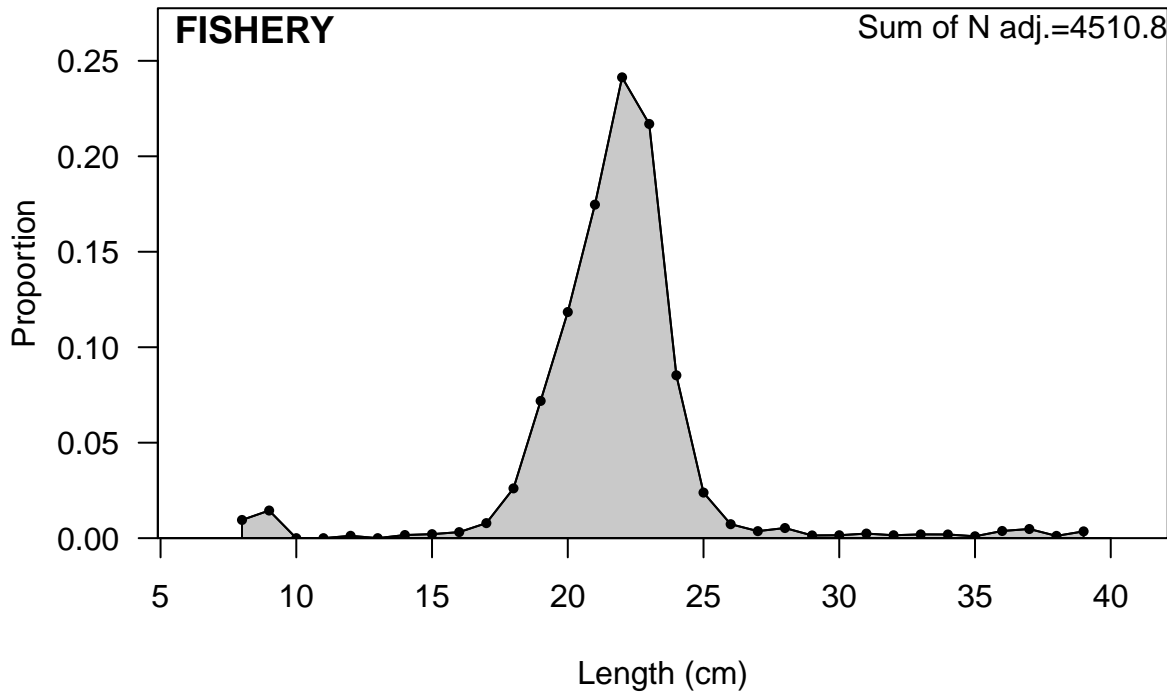


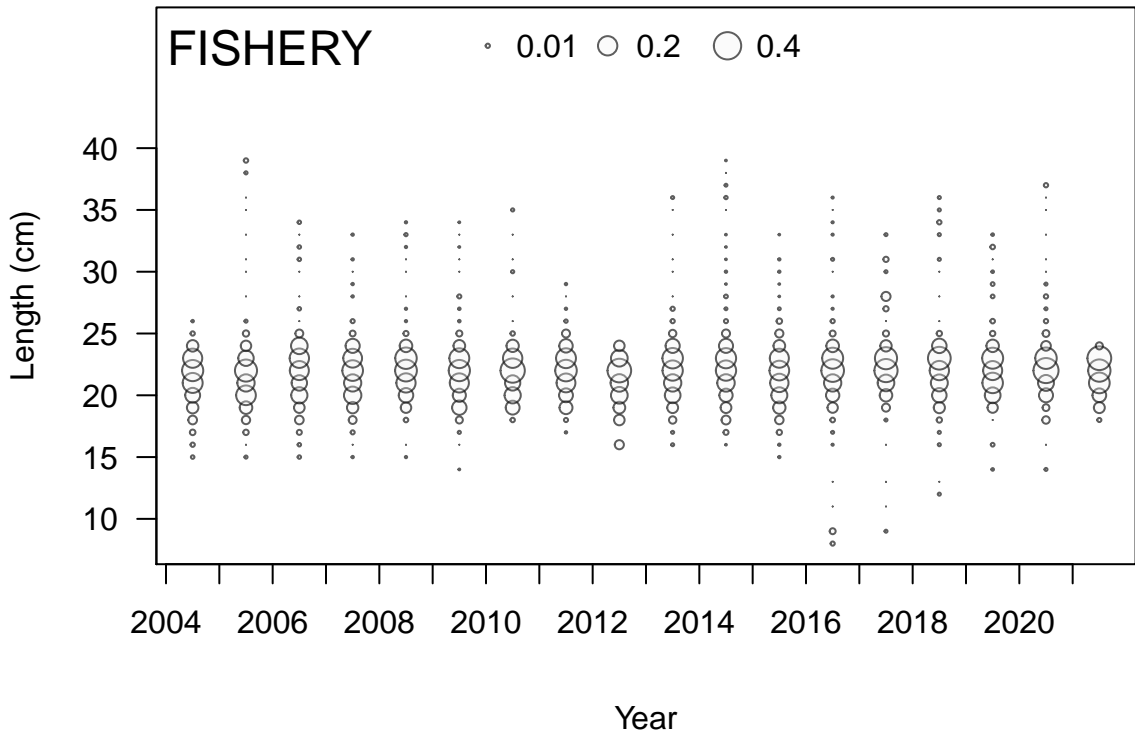




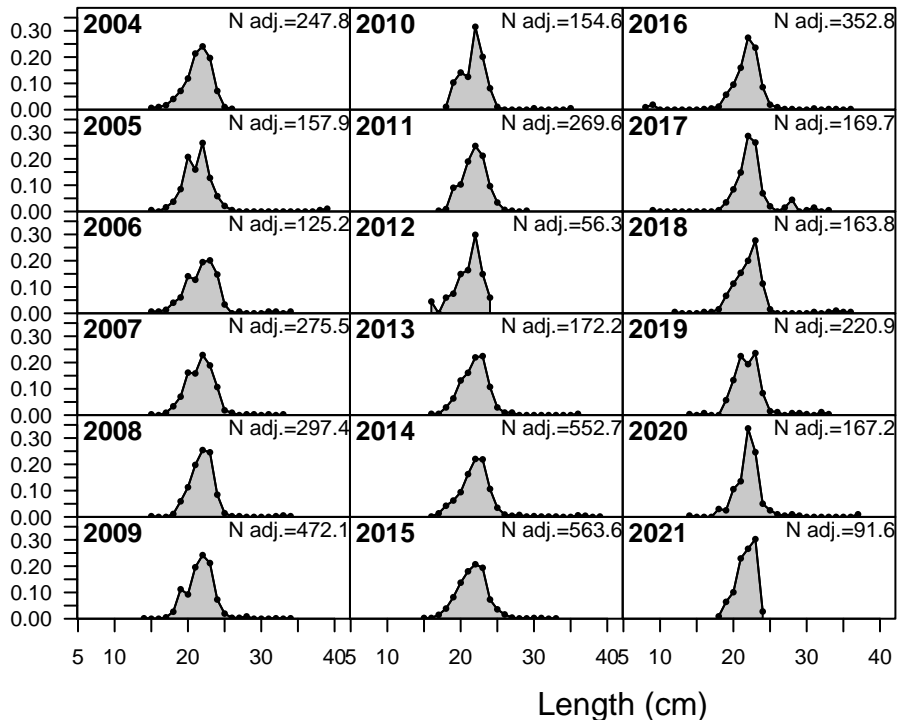
FISHERY

Sum of N adj.=4510.8



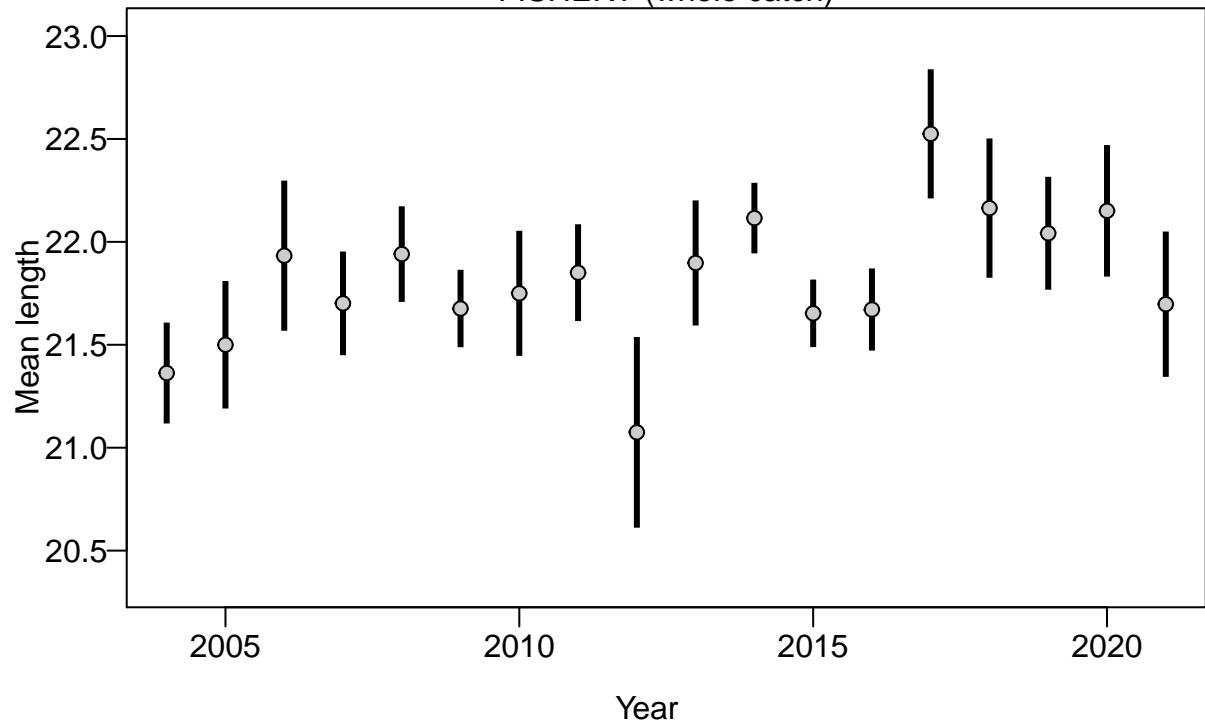


Proportion



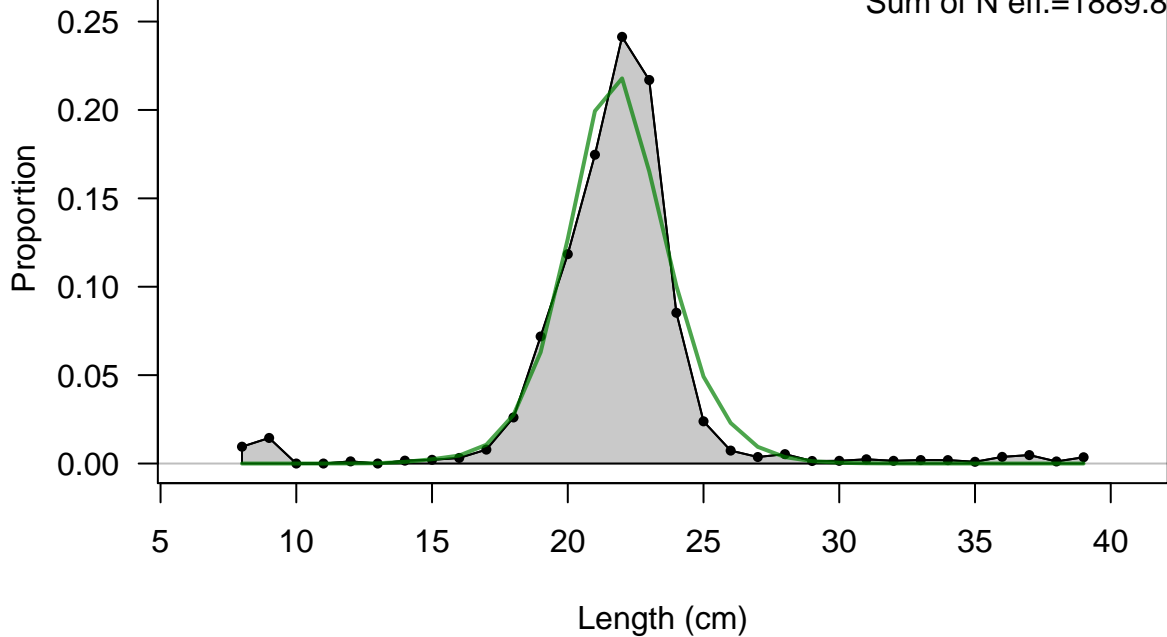


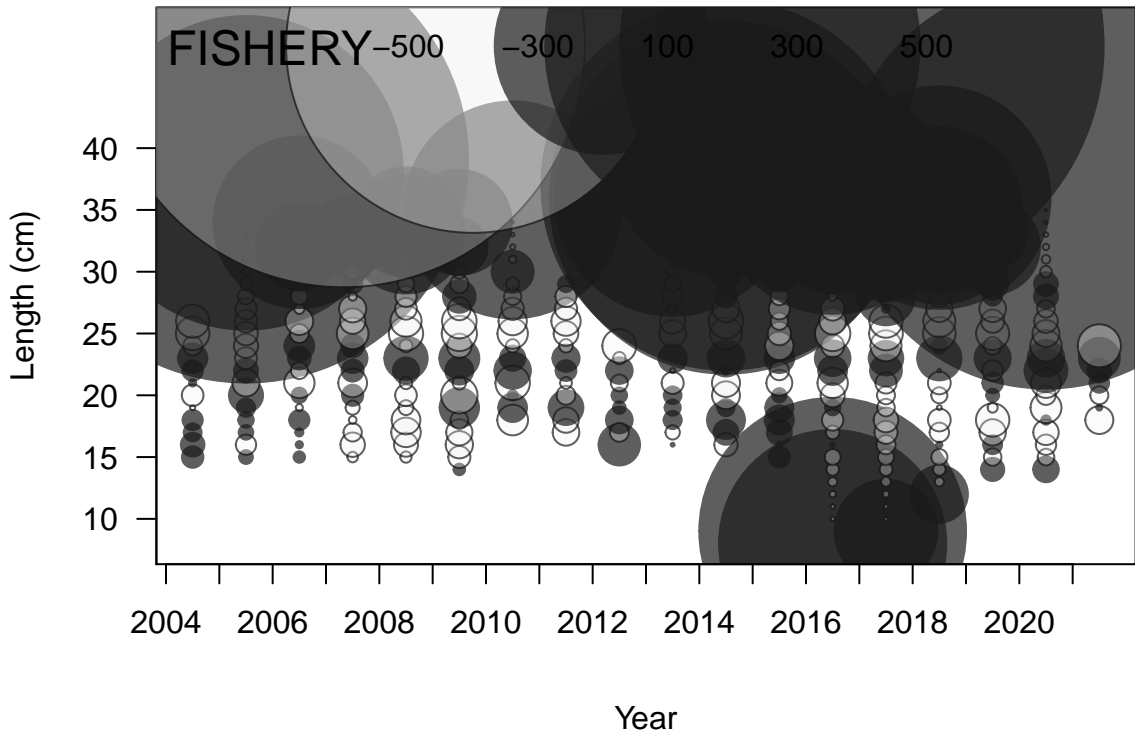
FISHERY (whole catch)

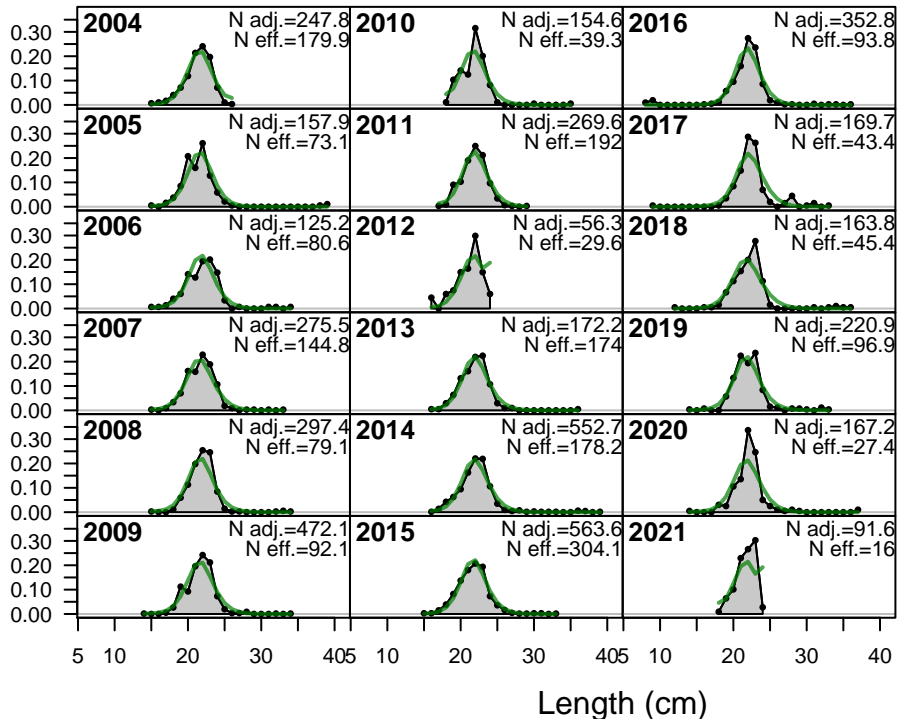


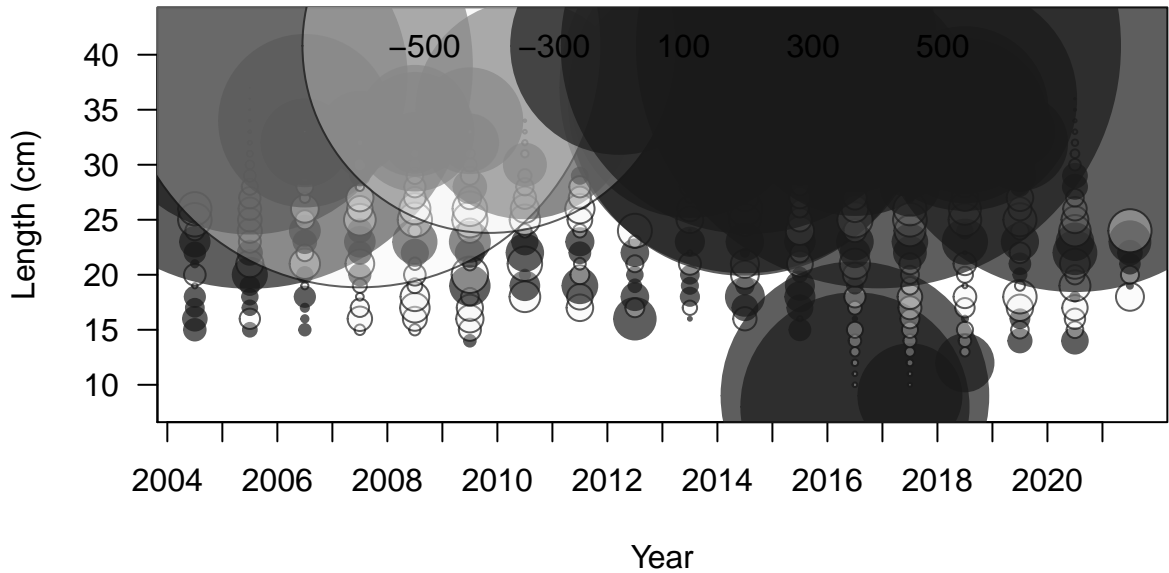
FISHERY

Sum of N adj.=4510.8
Sum of N eff.=1889.8

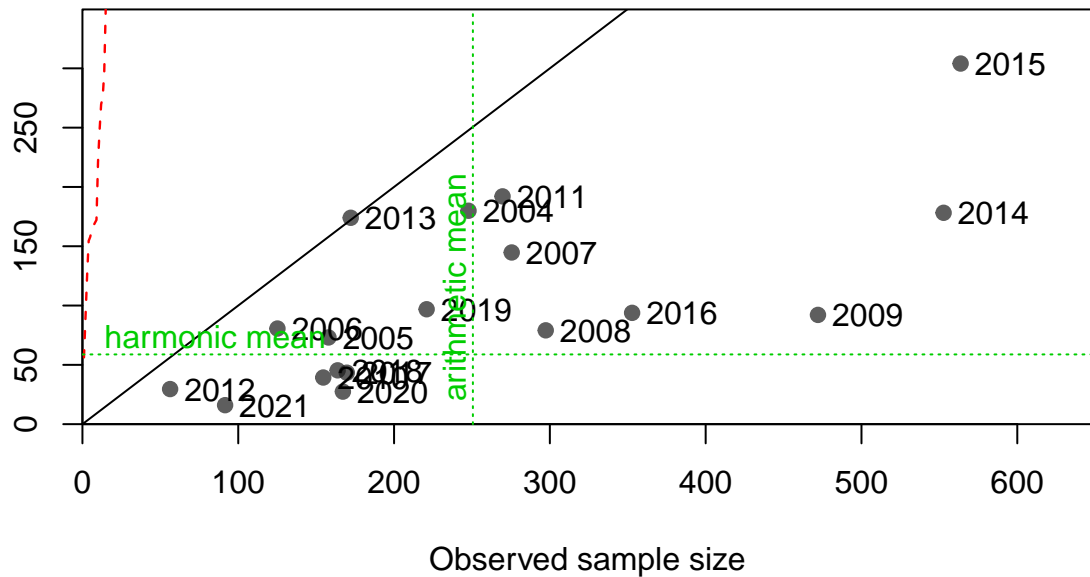




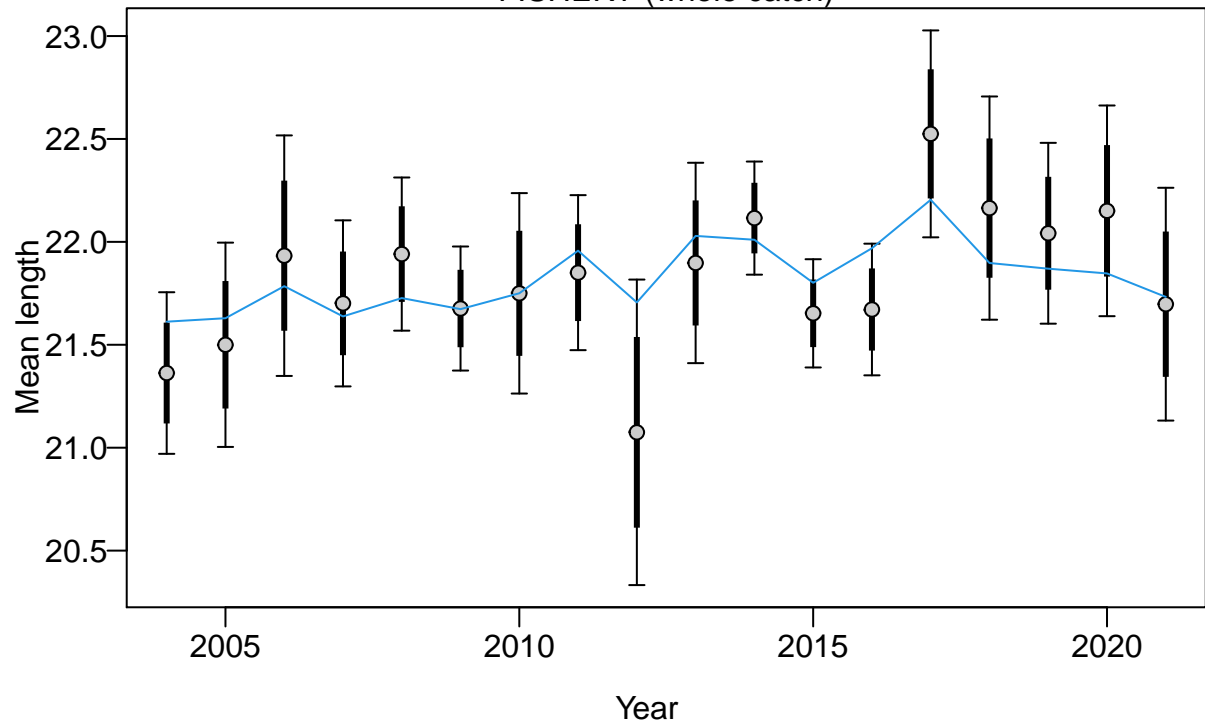


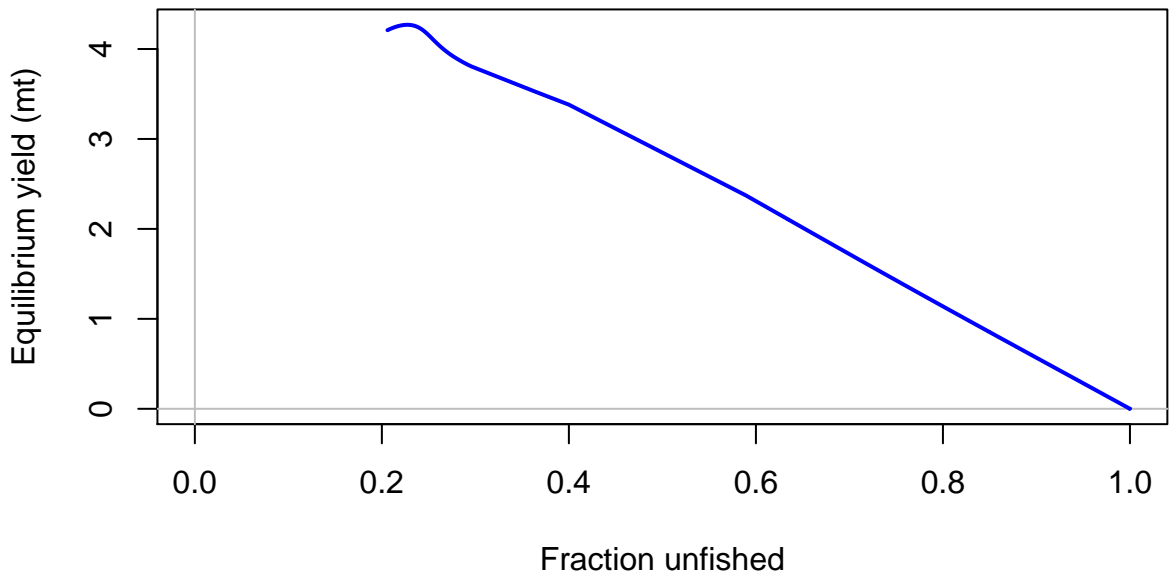


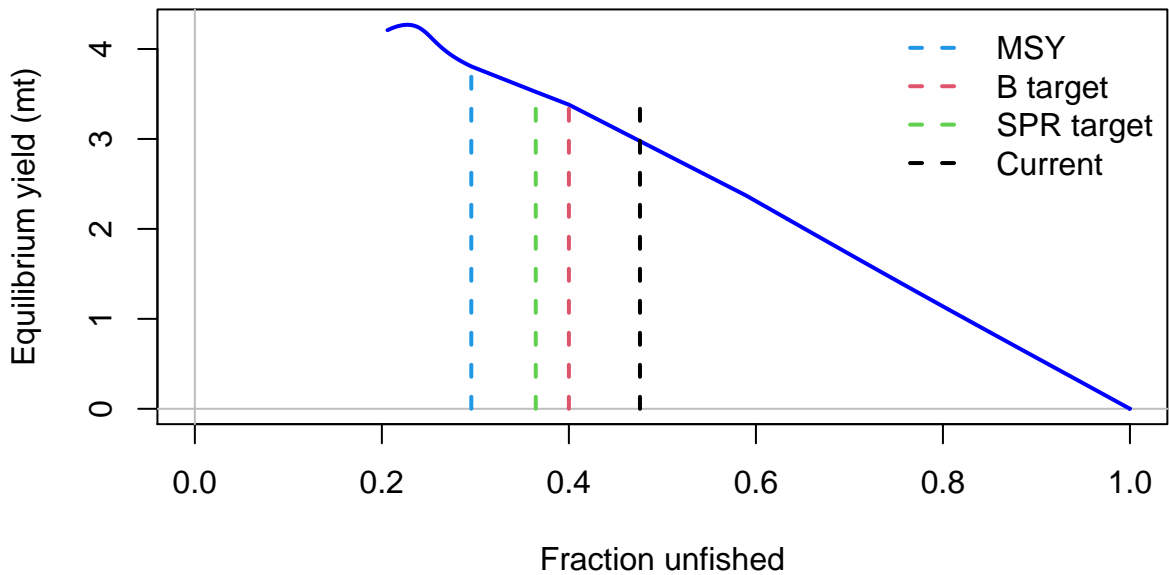
Effective sample size

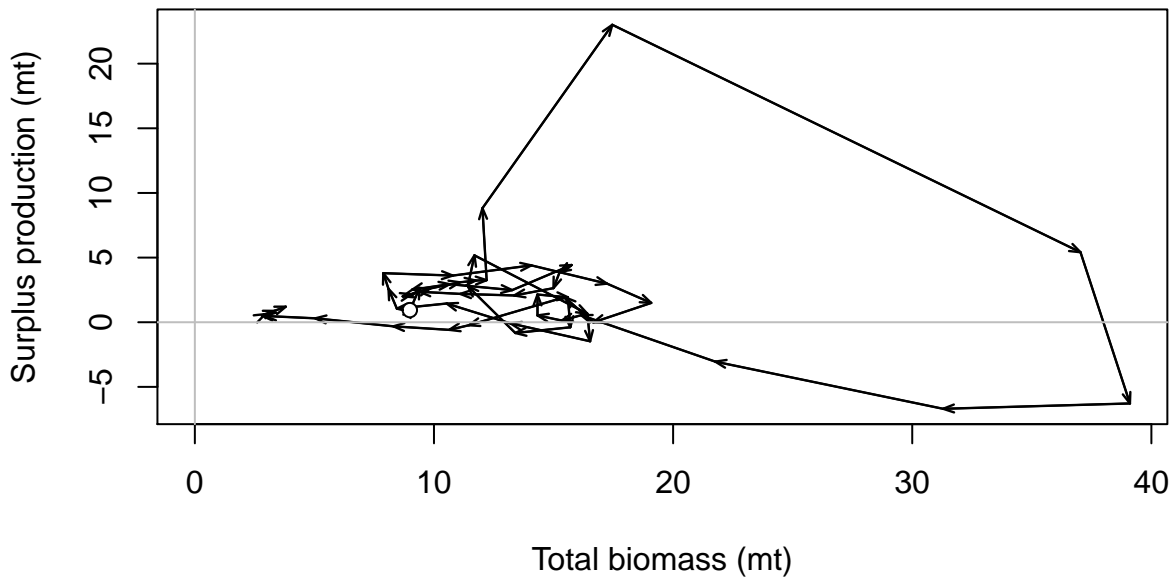


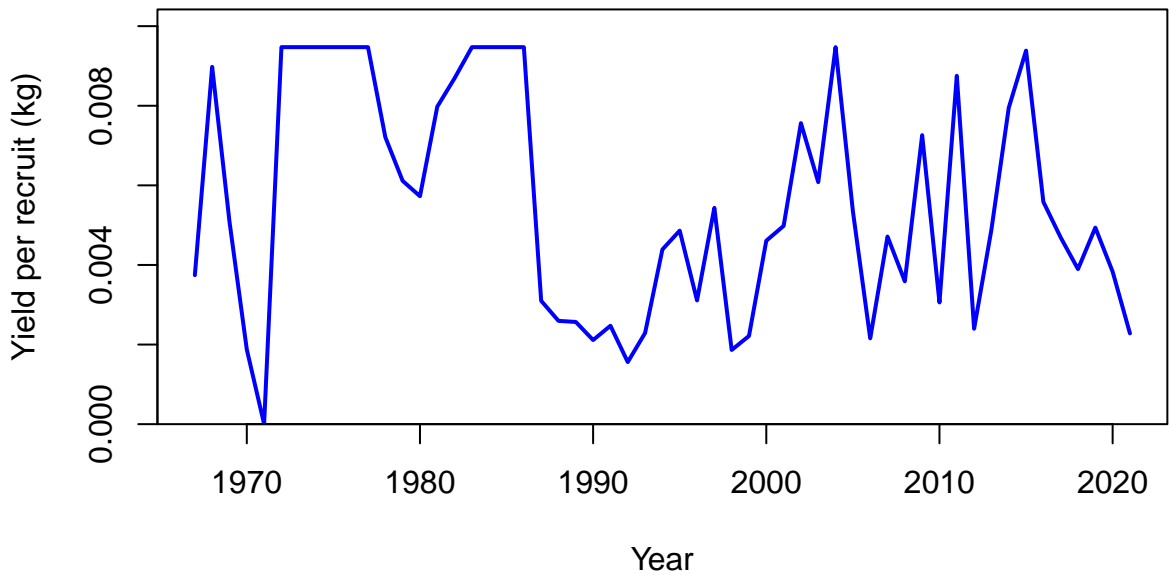
FISHERY (whole catch)

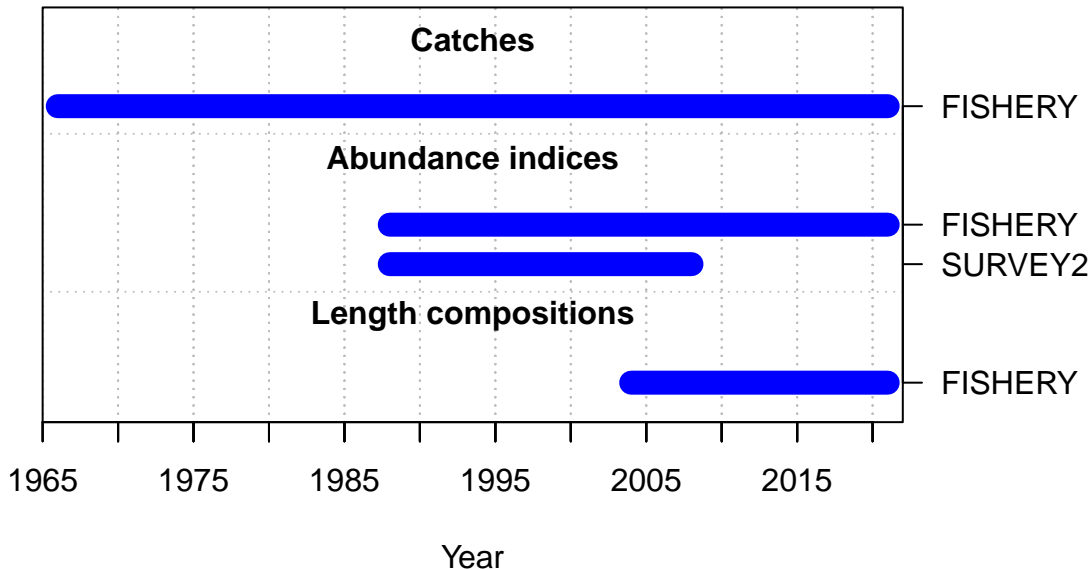


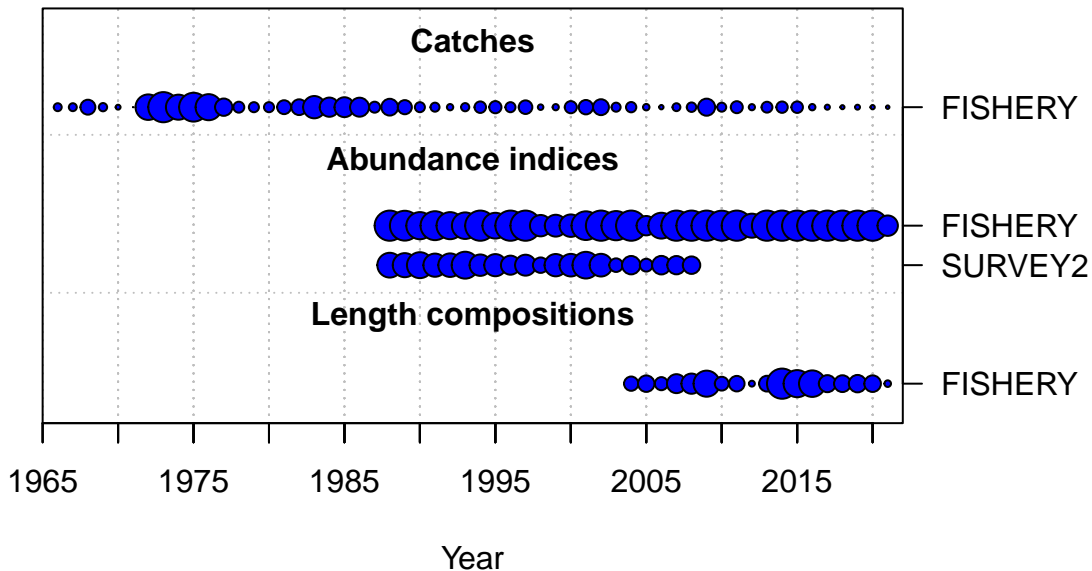






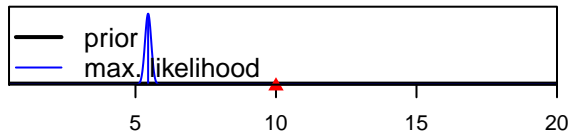




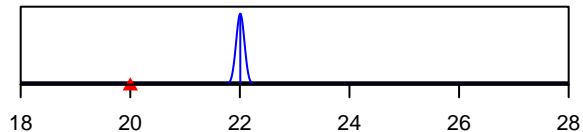


Density

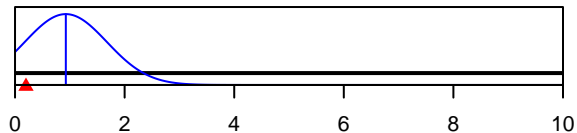
SR_LN(R0)



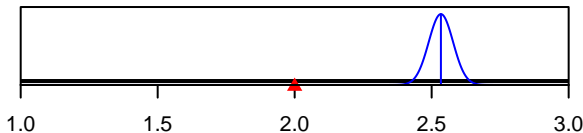
Size_inflection_FISHERY(1)



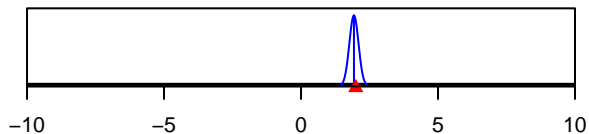
InitF_seas_1flt_1FISHERY



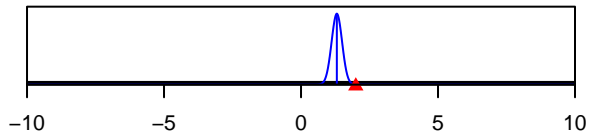
Size_95%width_FISHERY(1)



LnQ_base_FISHERY(1)



LnQ_base_SURVEY2(2)



Parameter value