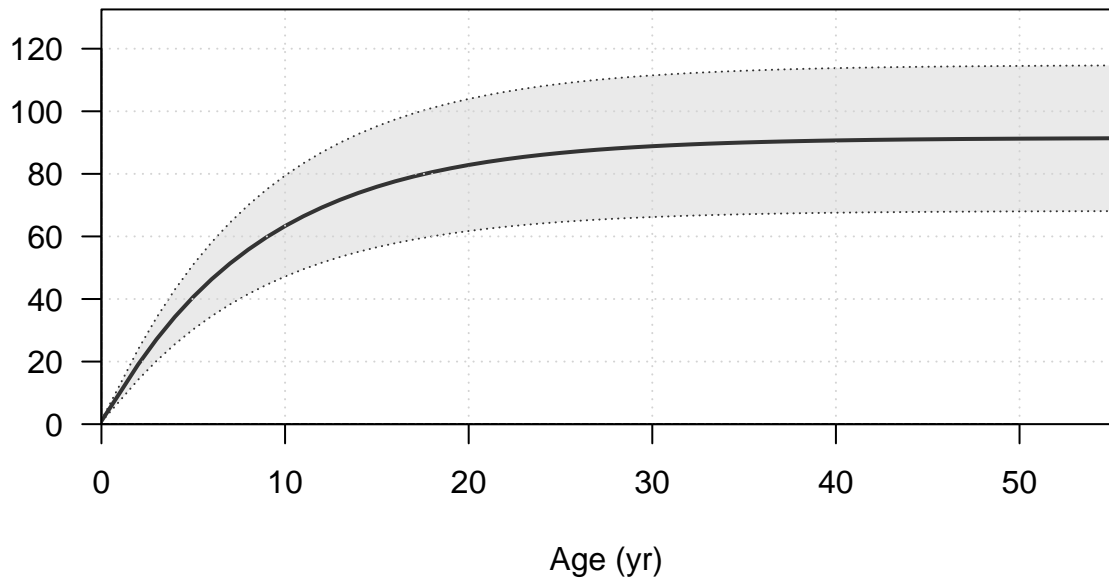
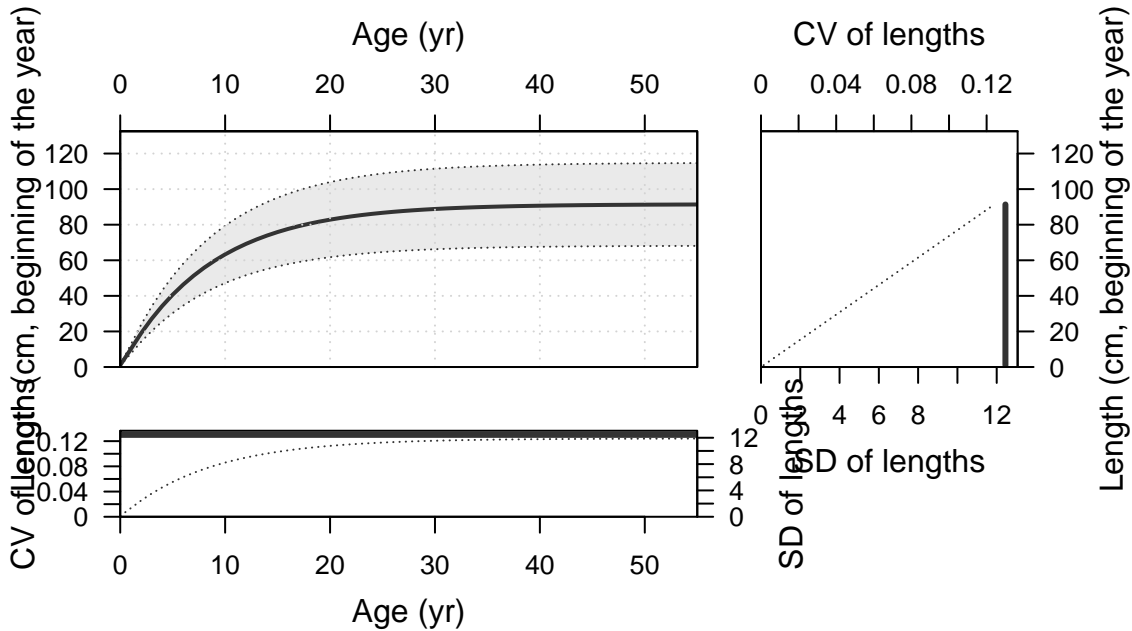
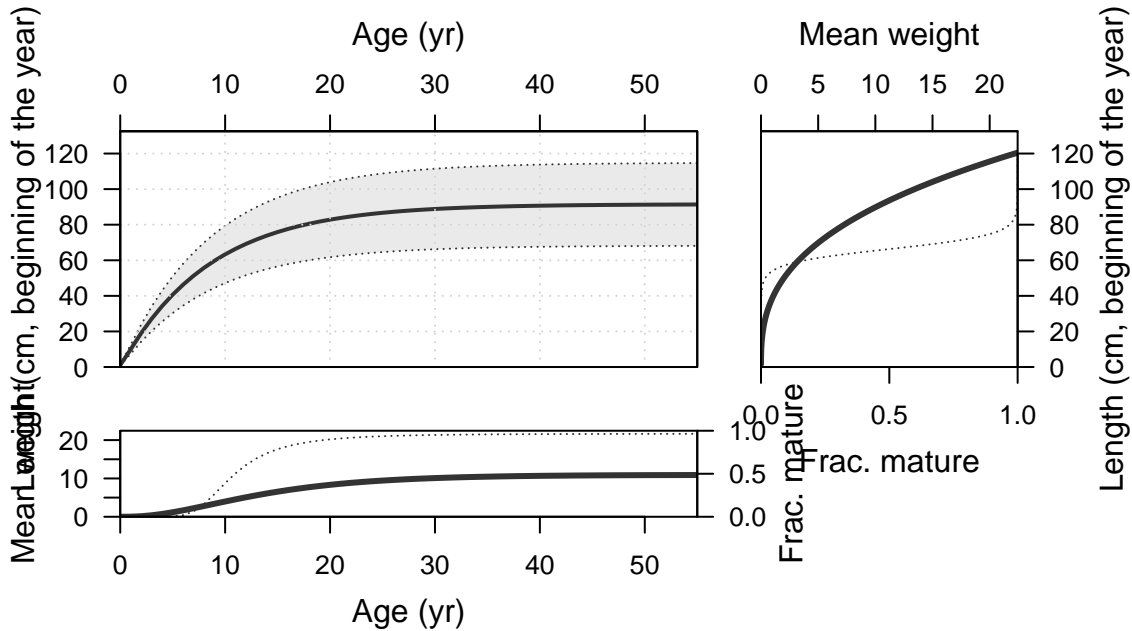


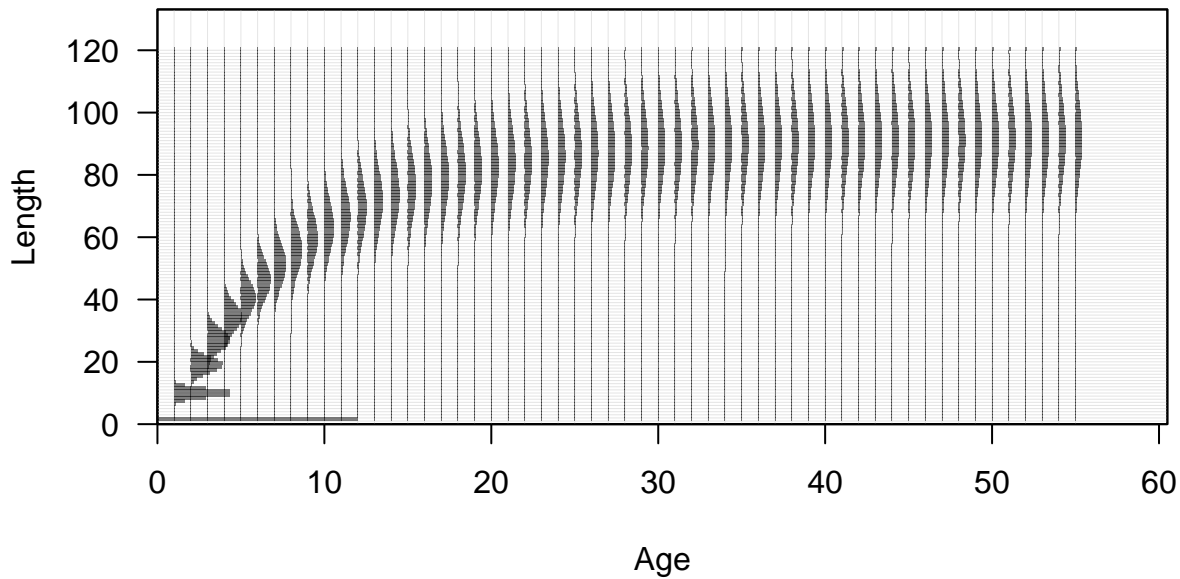
Plots created using the 'r4ss' package in R  
Stock Synthesis version: 3.30.19.0  
StartTime: Tue Jul 05 12:43:10 2022  
Data\_File: data.ss  
Control\_File: control.ss

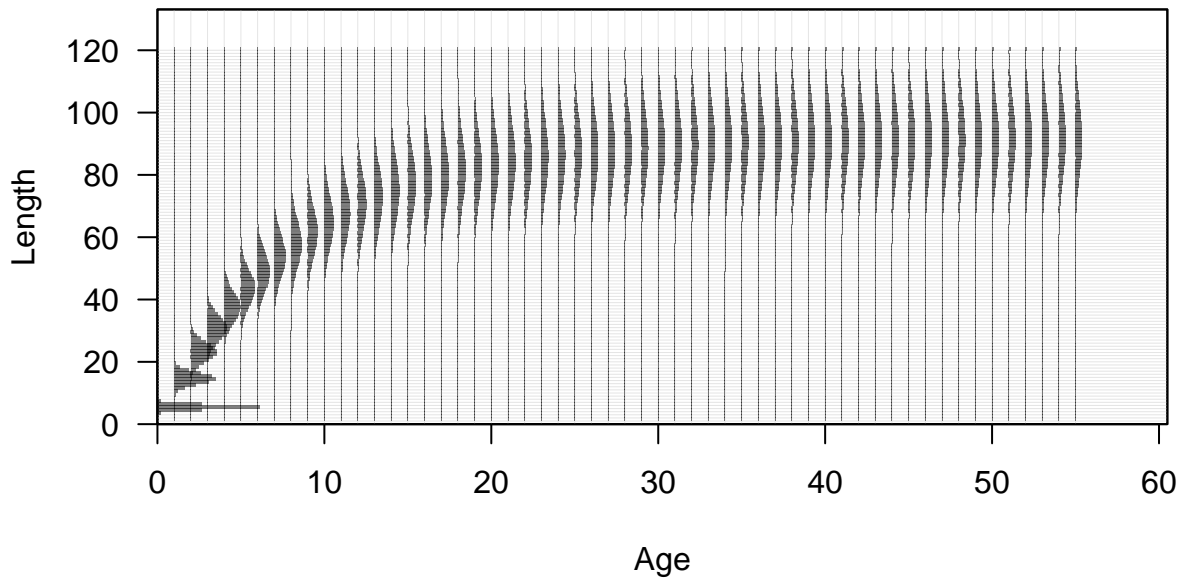
Length (cm, beginning of the year)



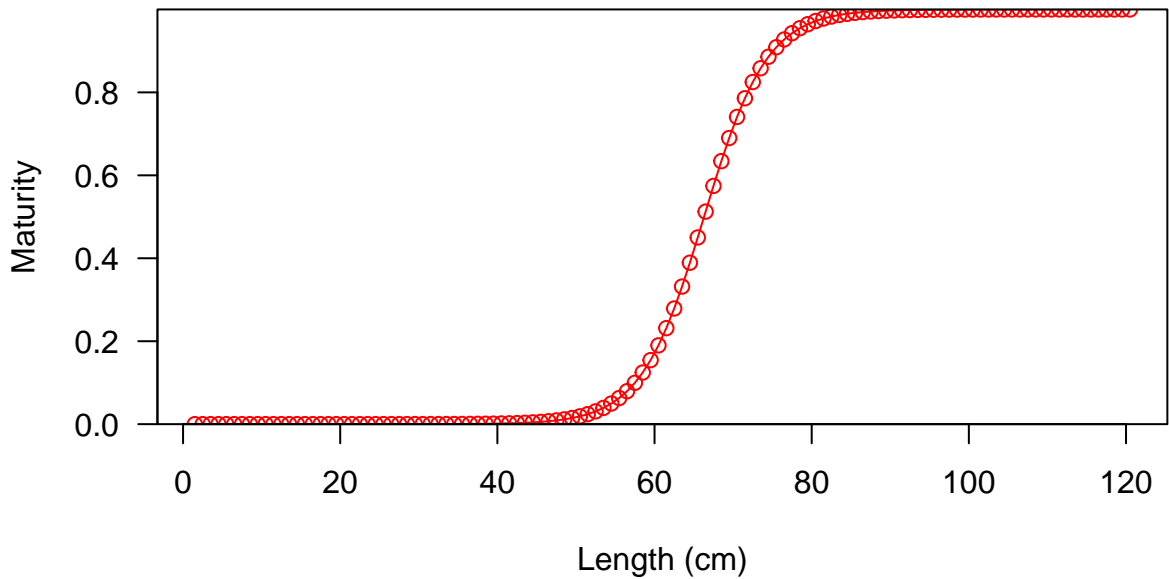












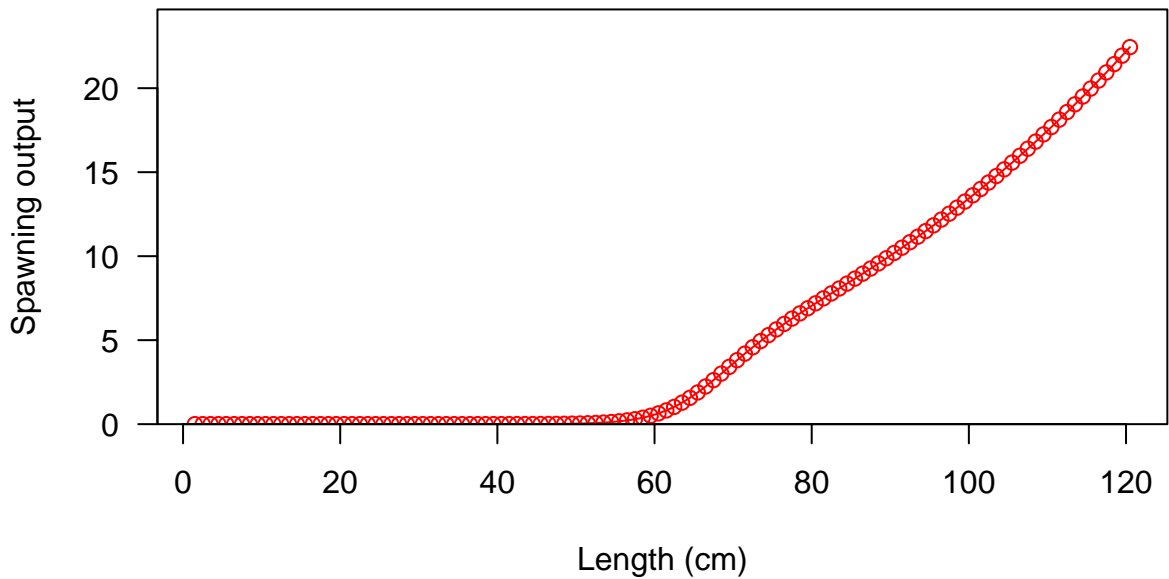




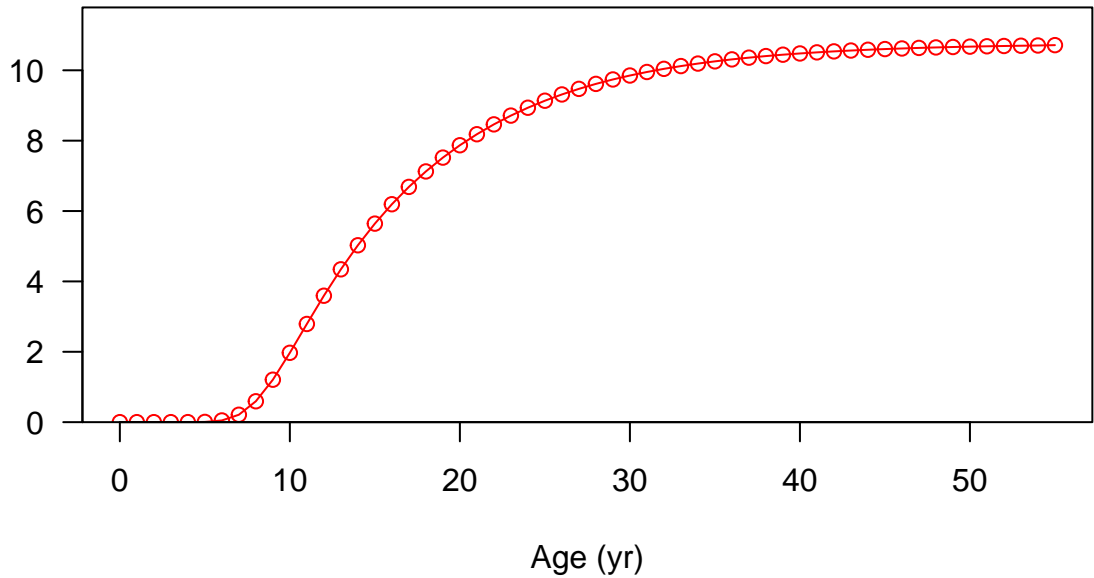


Fecundity

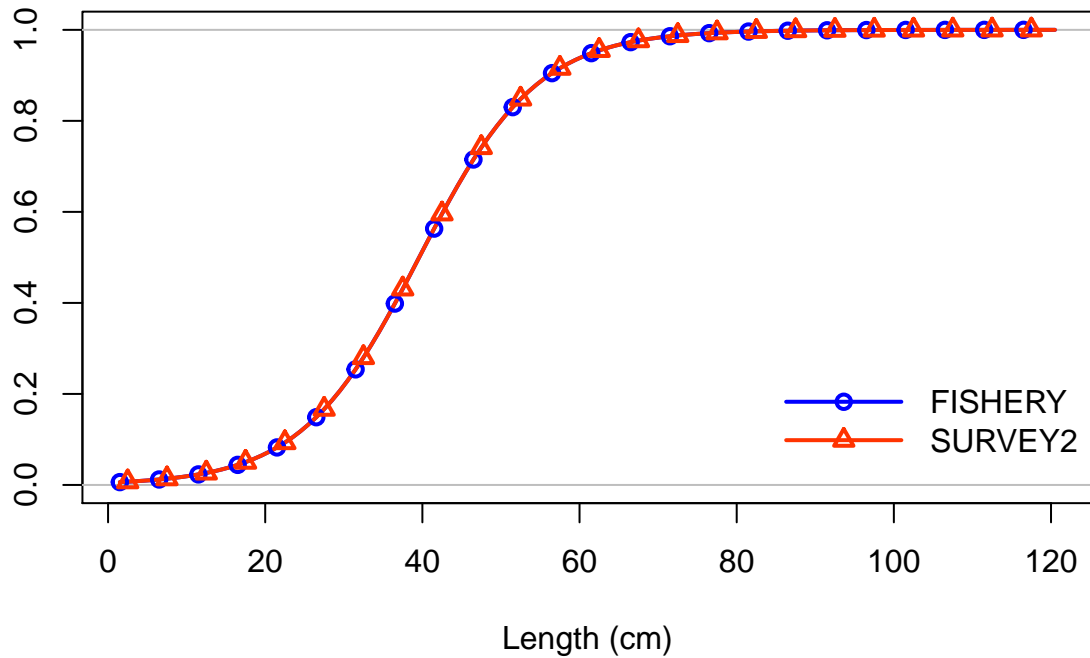




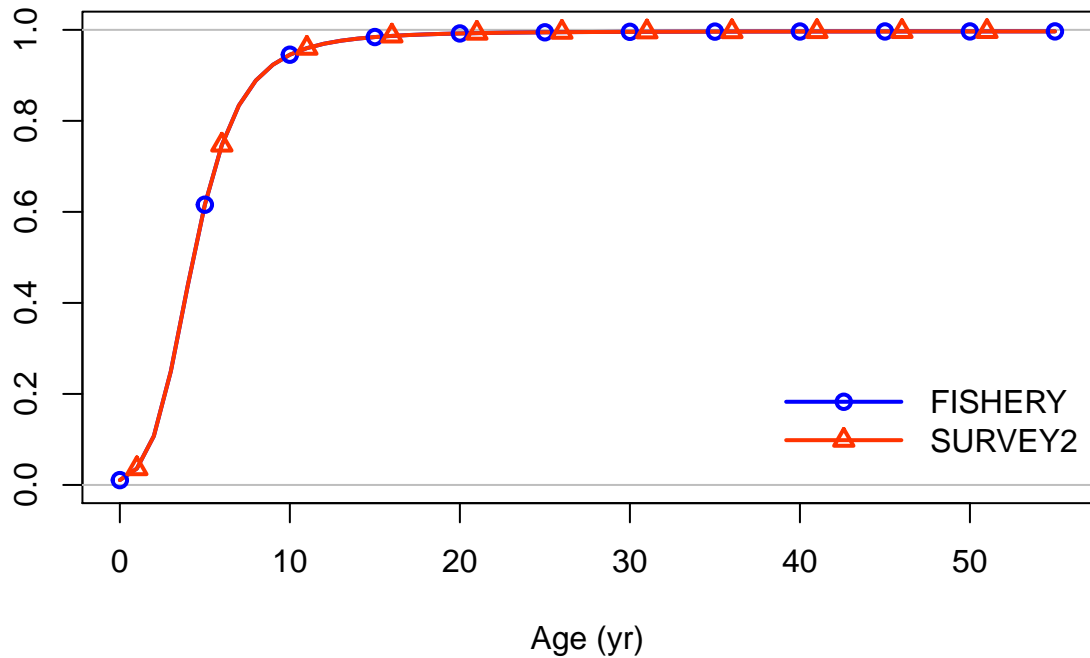
Spawning output



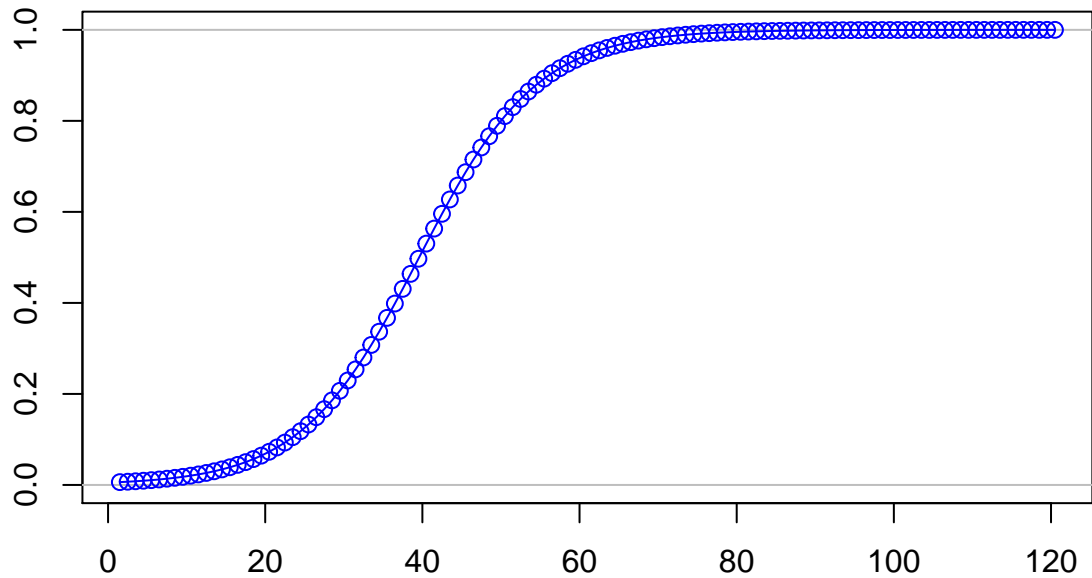
Selectivity



Selectivity



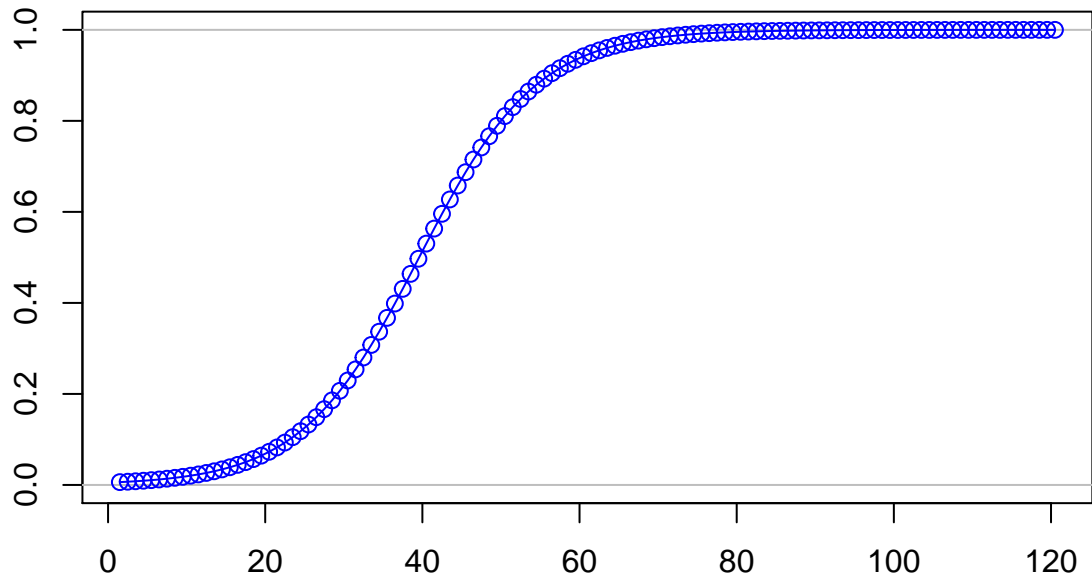
Selectivity



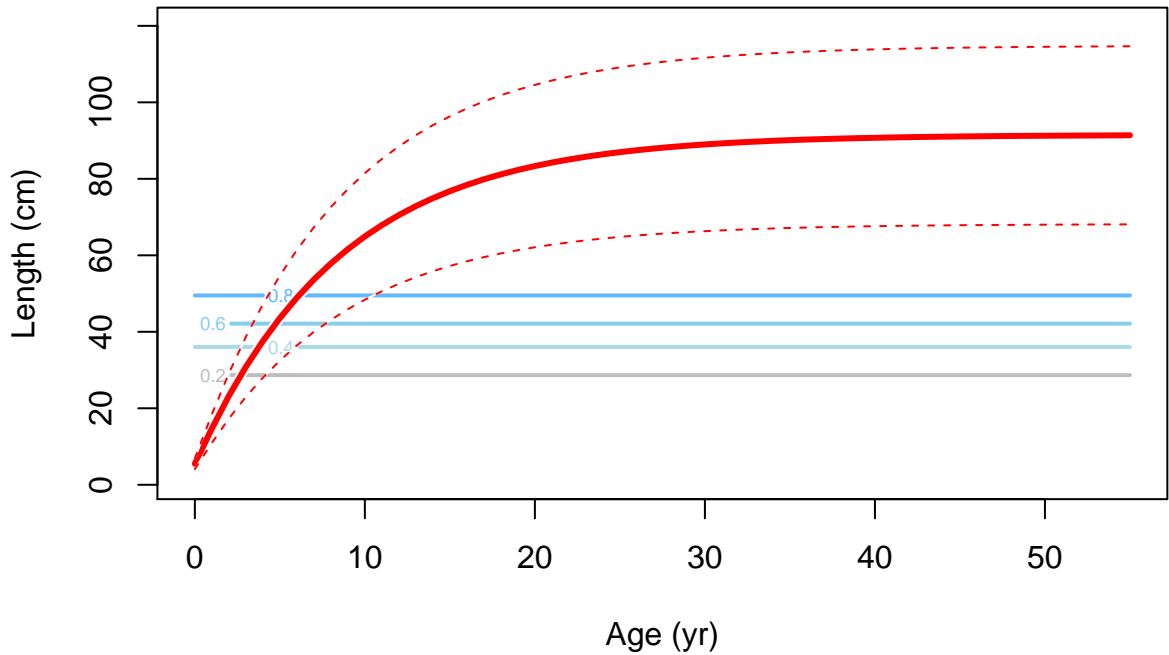
Length (cm)

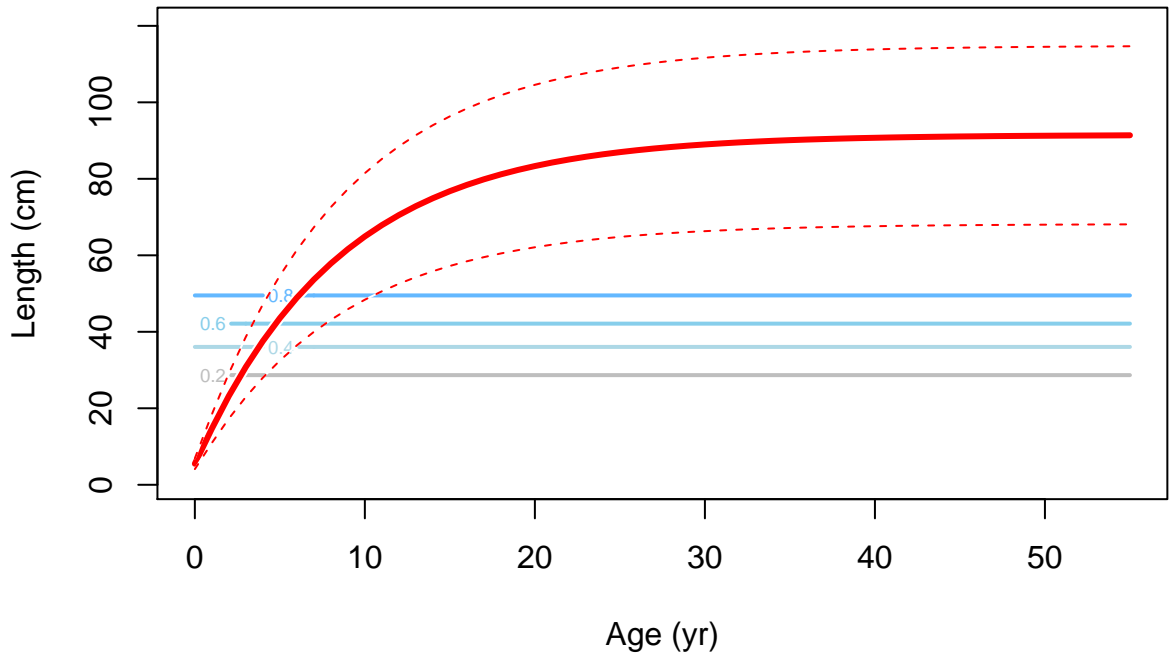


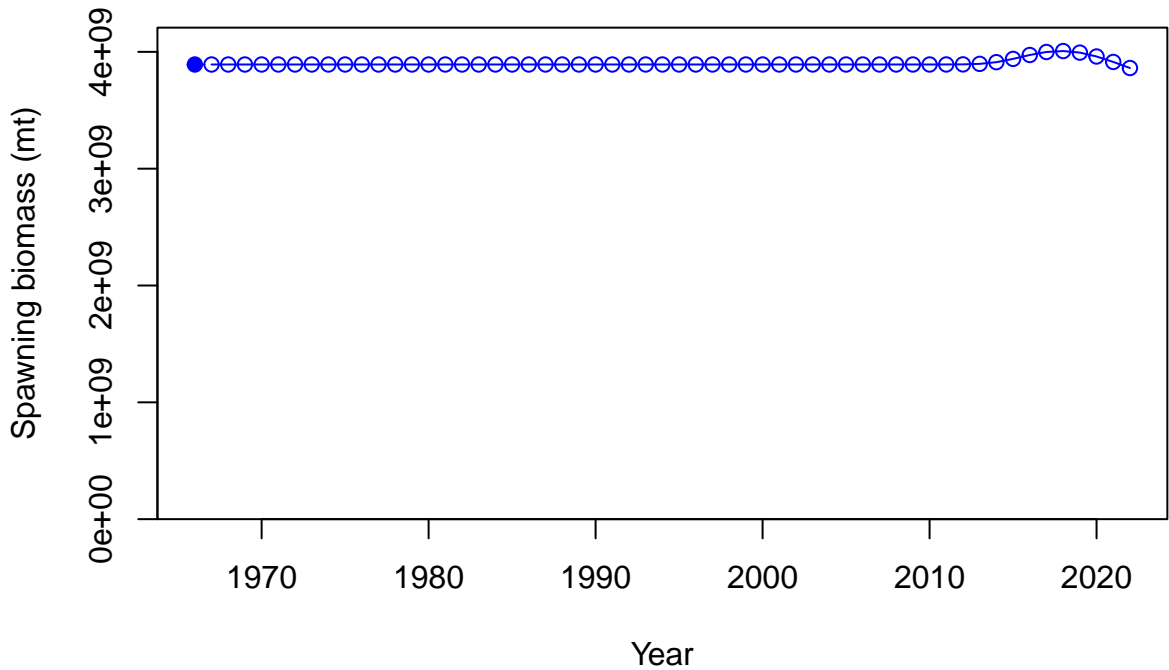
Selectivity



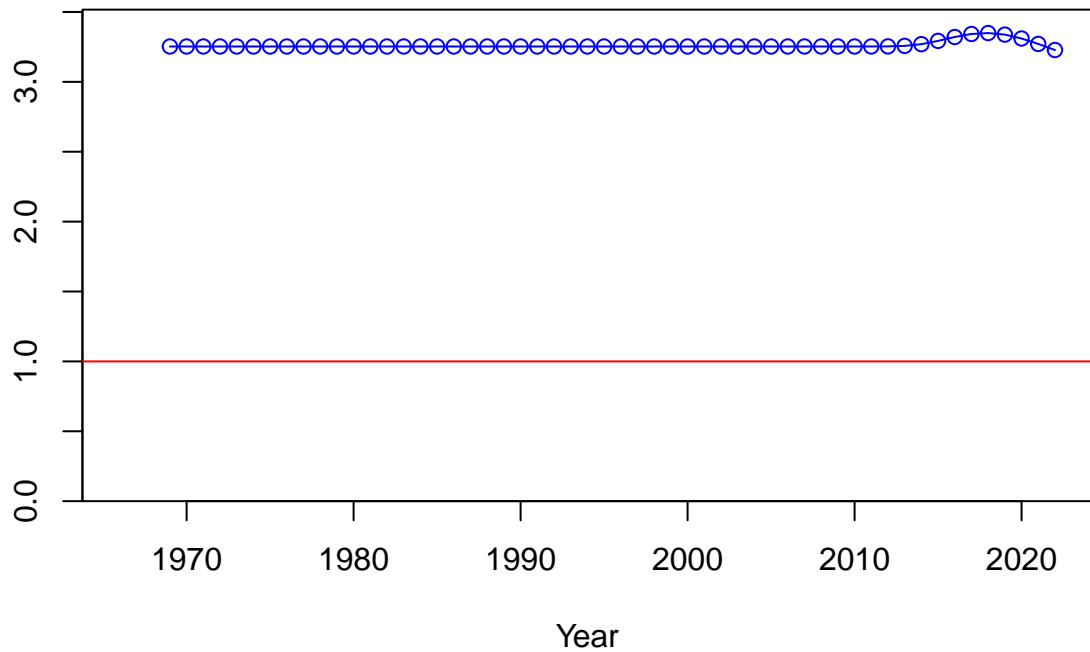
Length (cm)



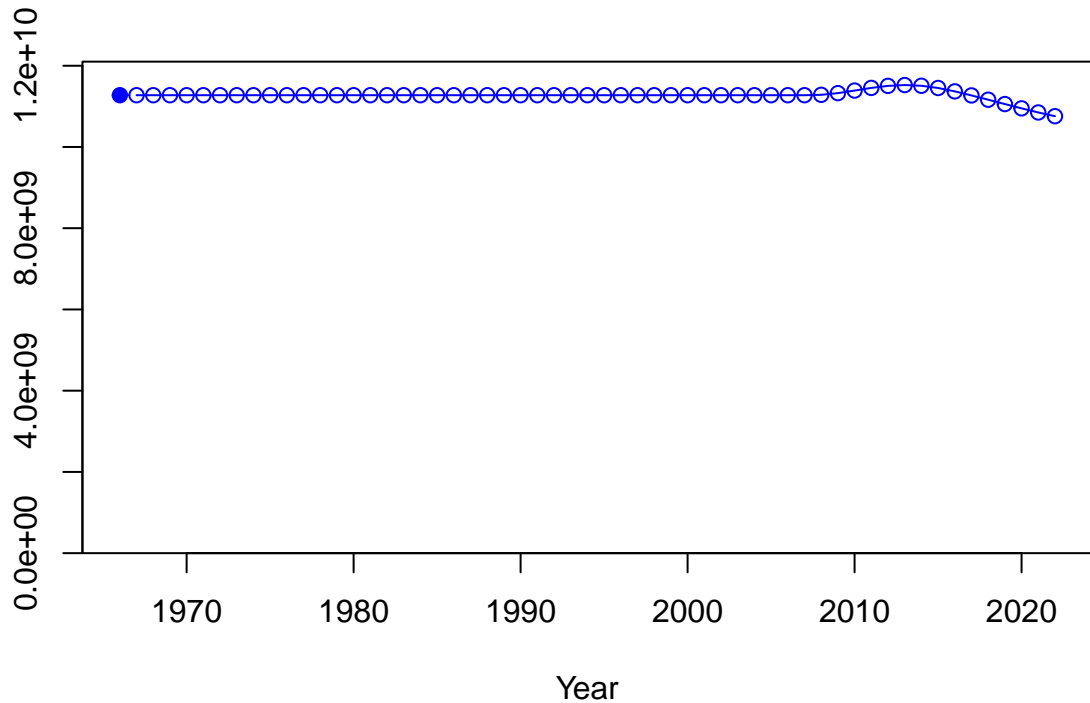




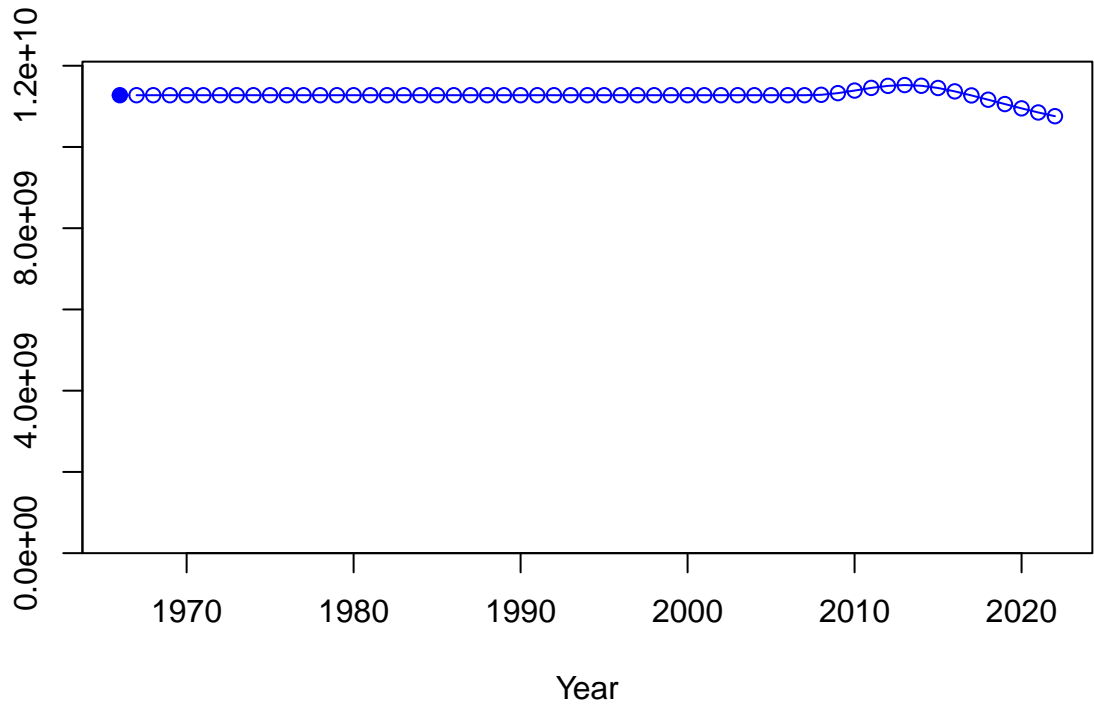
Relative spawning biomass:  $B/B_{MSY}$



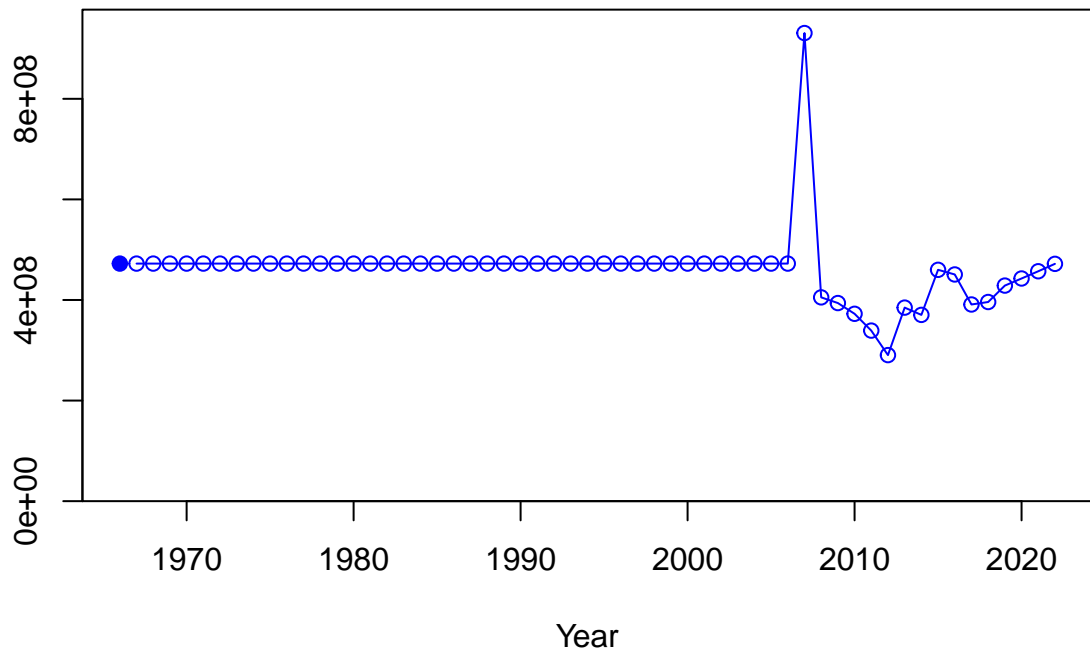
Total biomass (mt)



Summary biomass (mt)

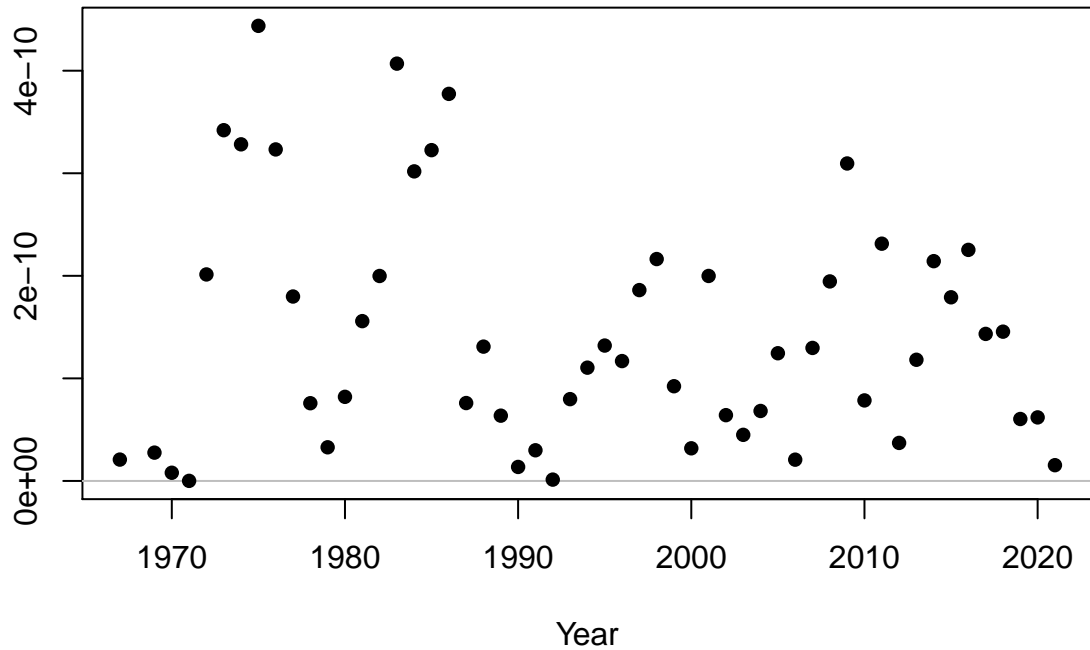


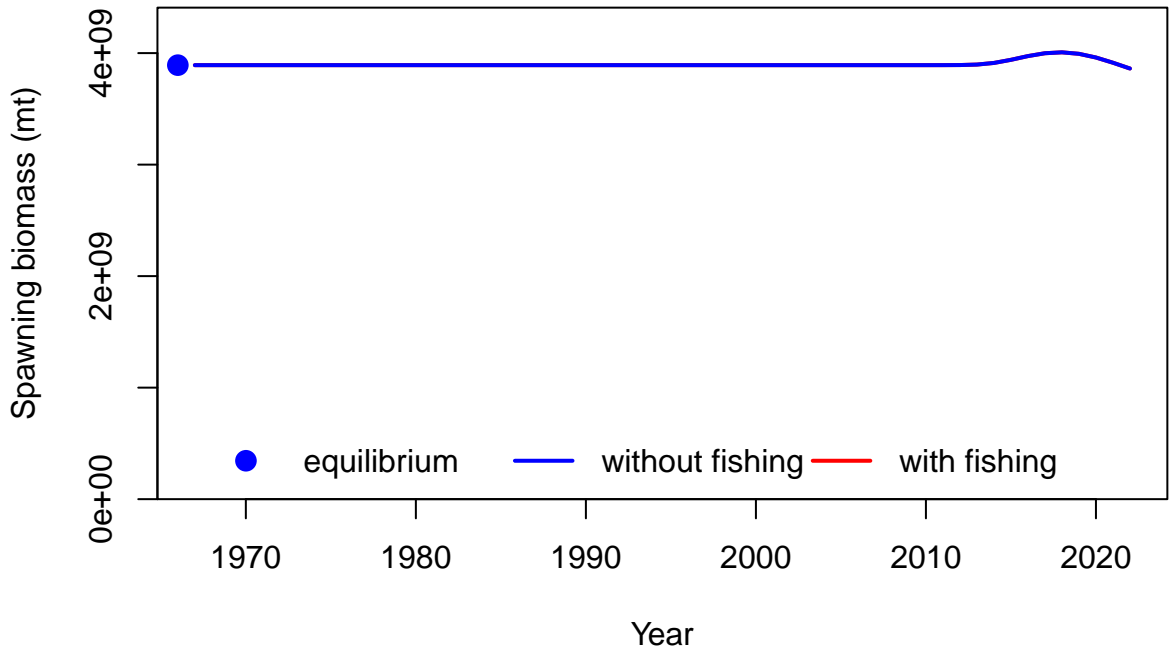
Age-0 recruits (1,000s)



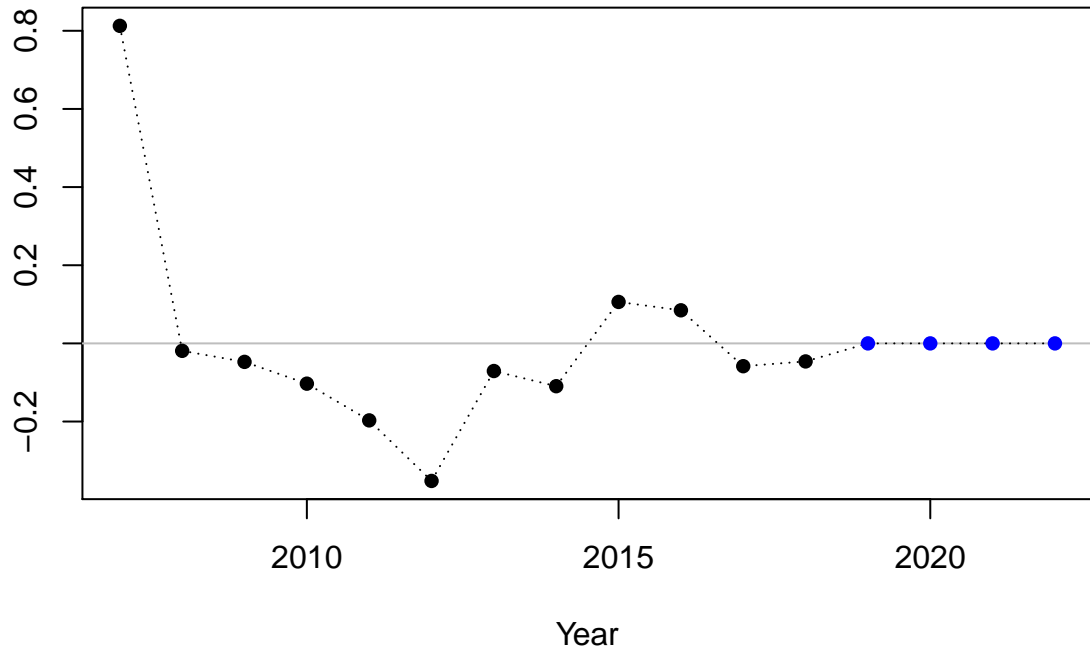


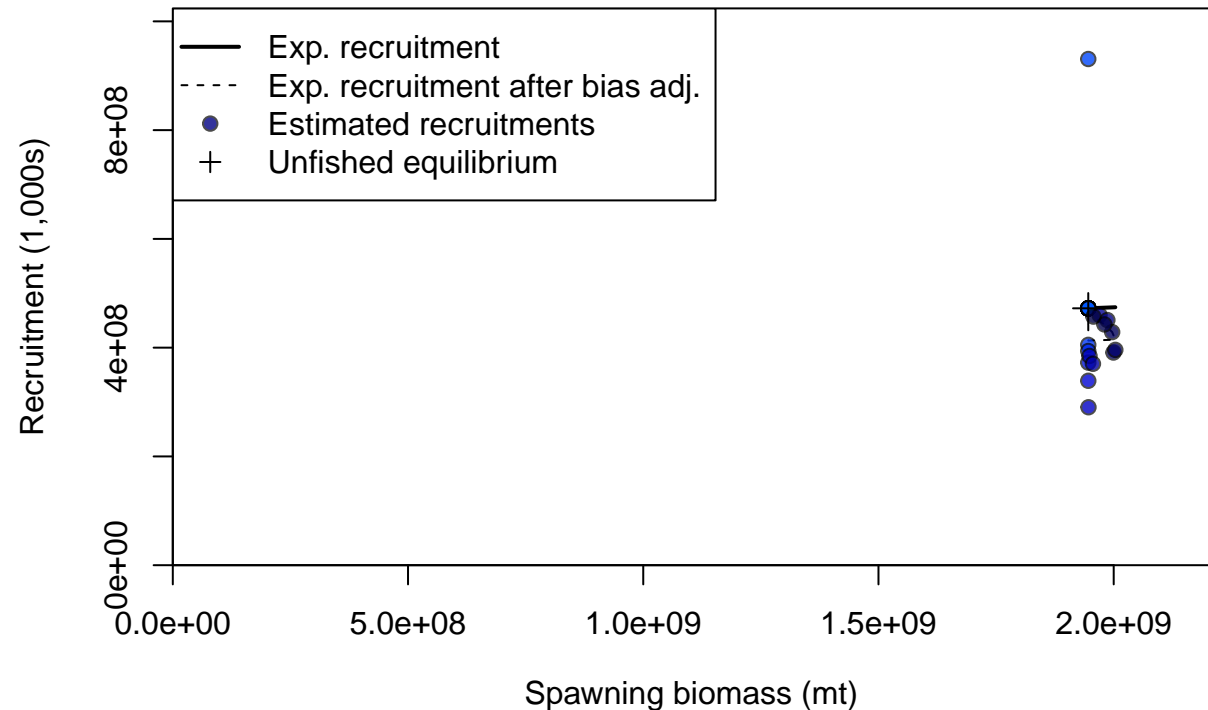
Summary Fishing Mortality

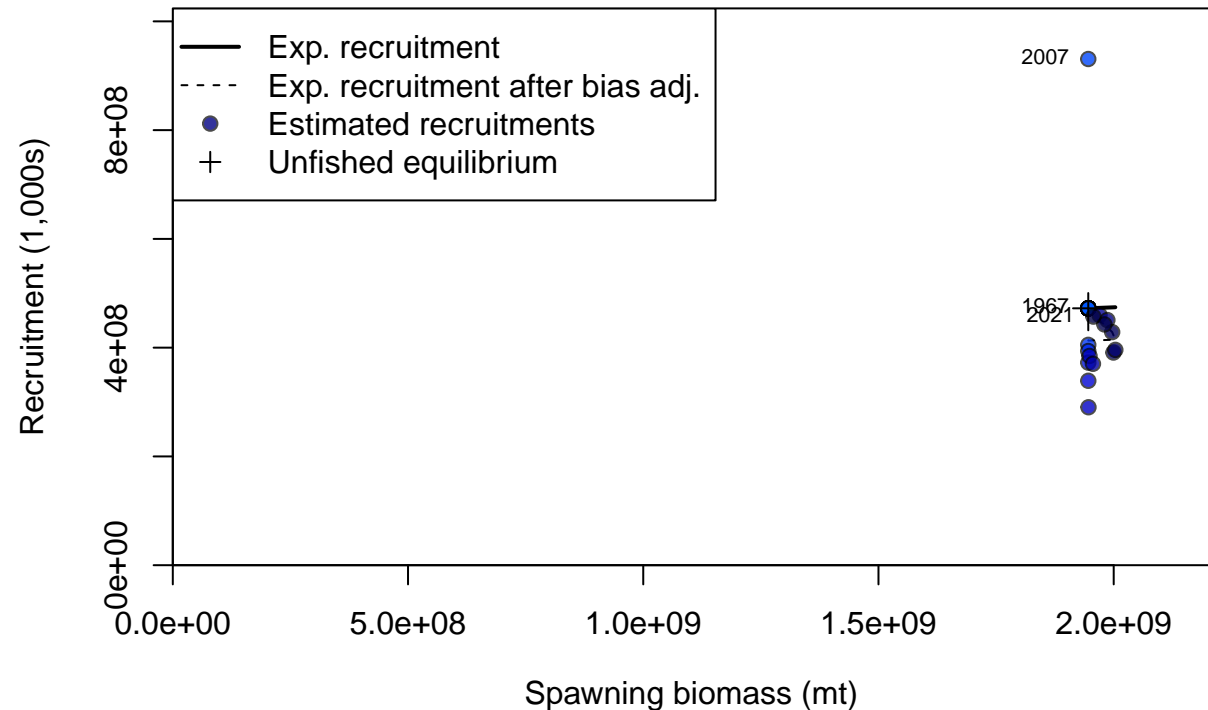


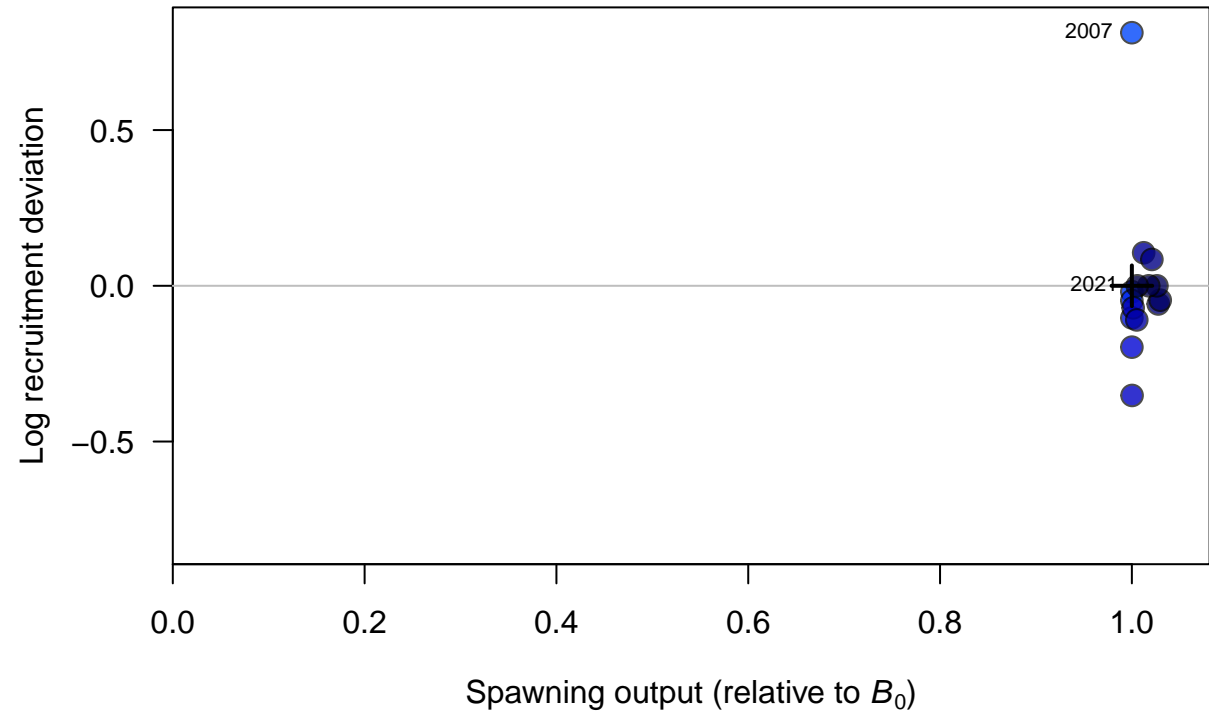


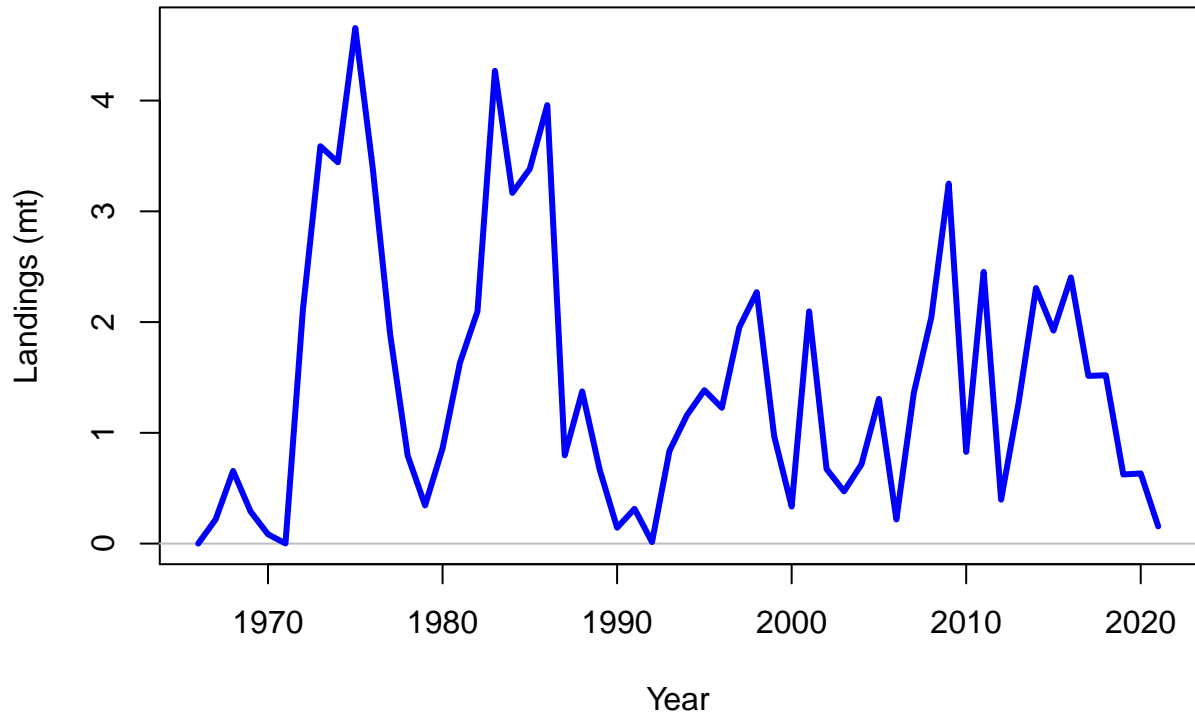
Log recruitment deviation

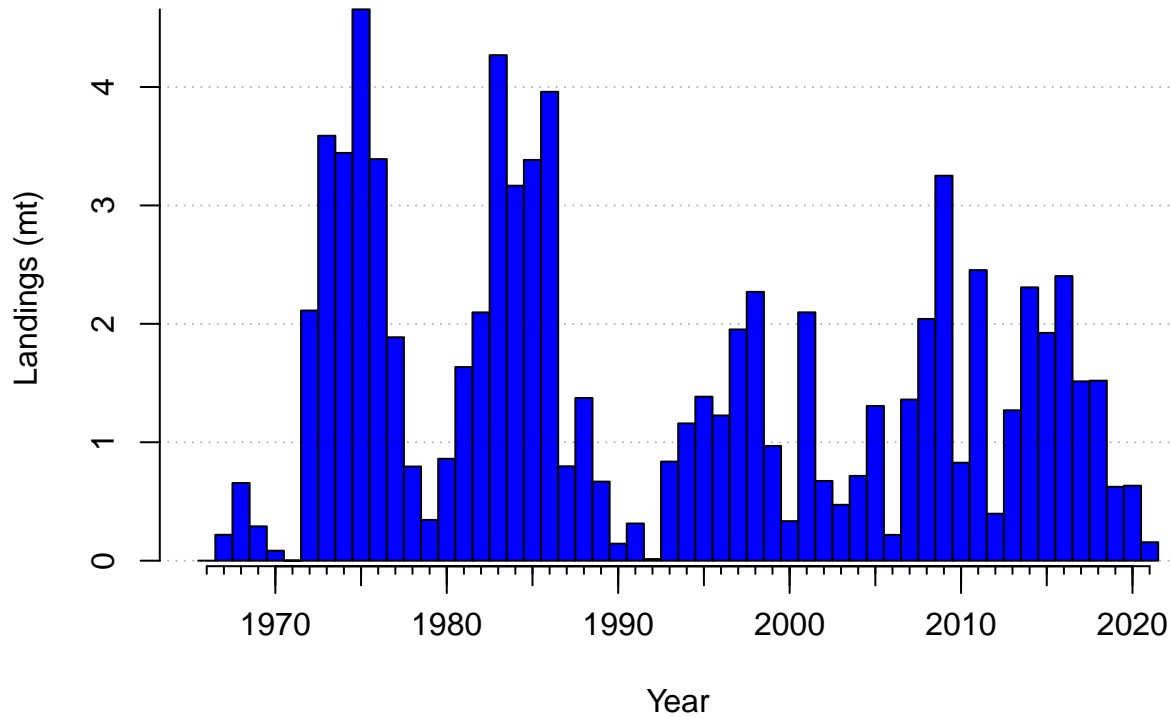




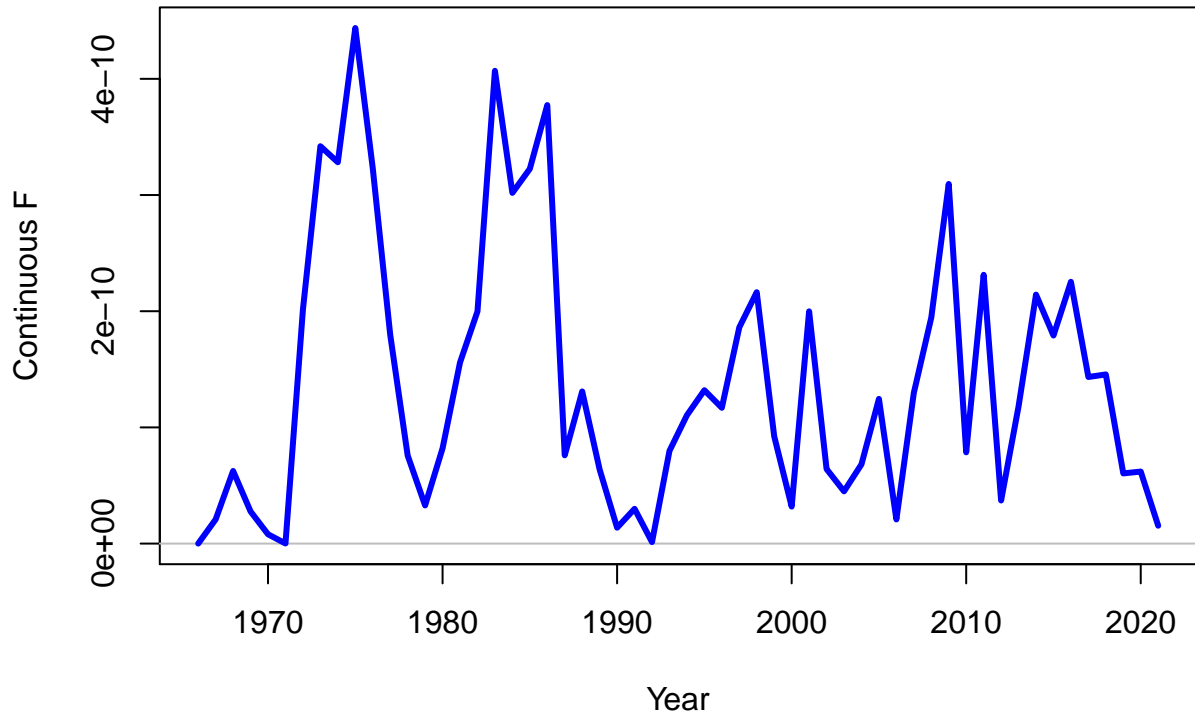




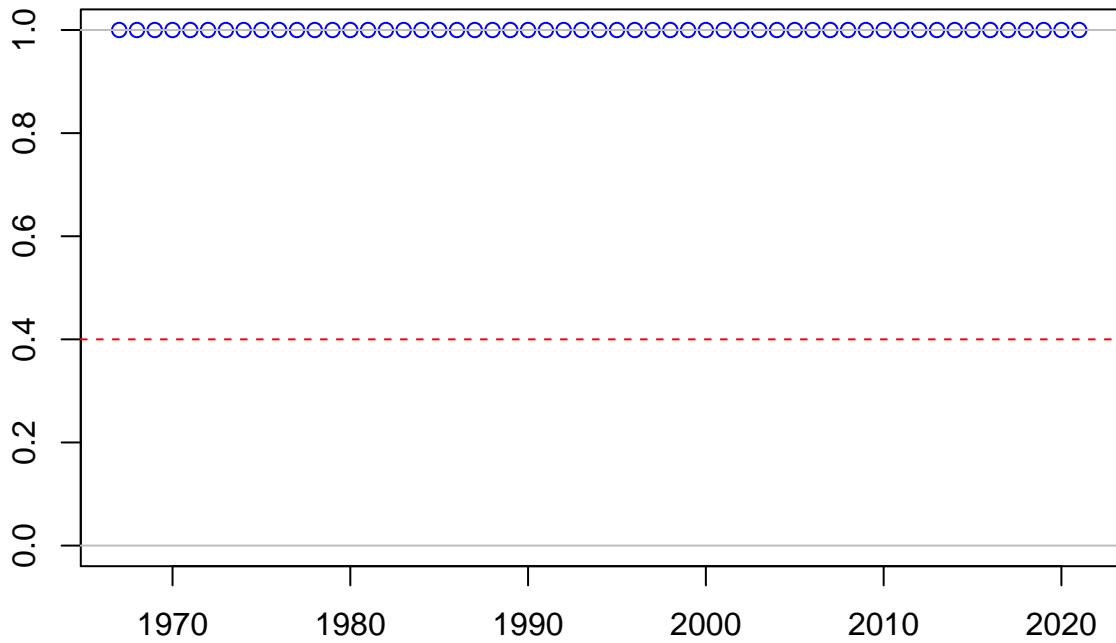




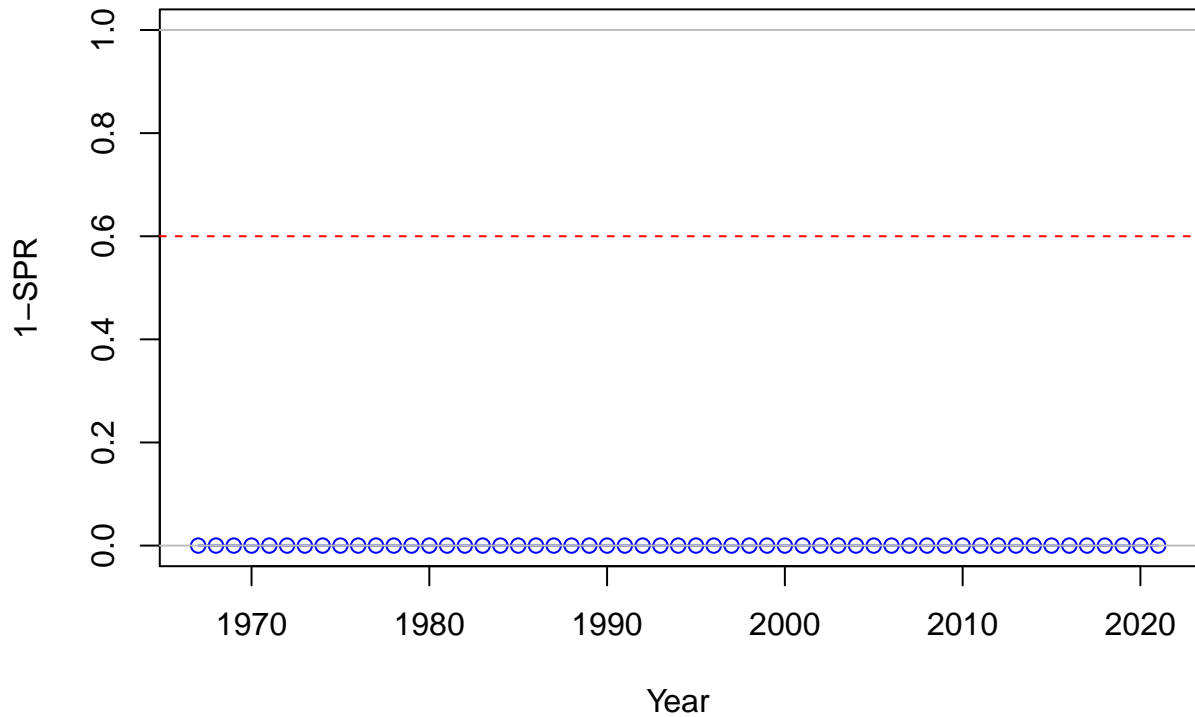




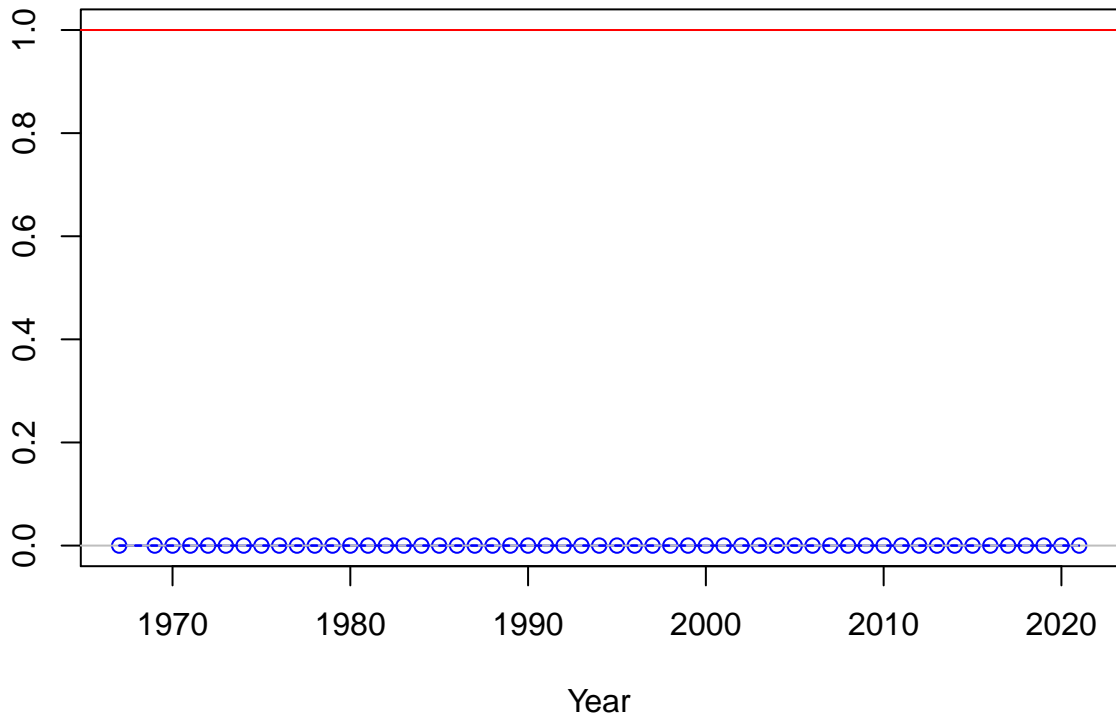
SPR



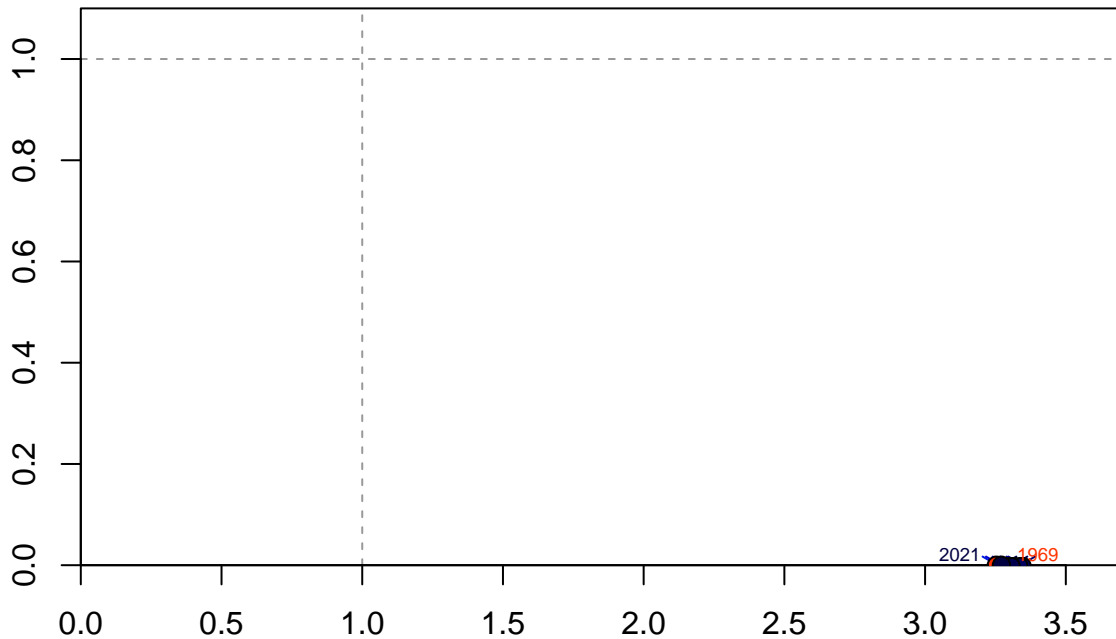
Year



Fishing intensity: 1-SPR

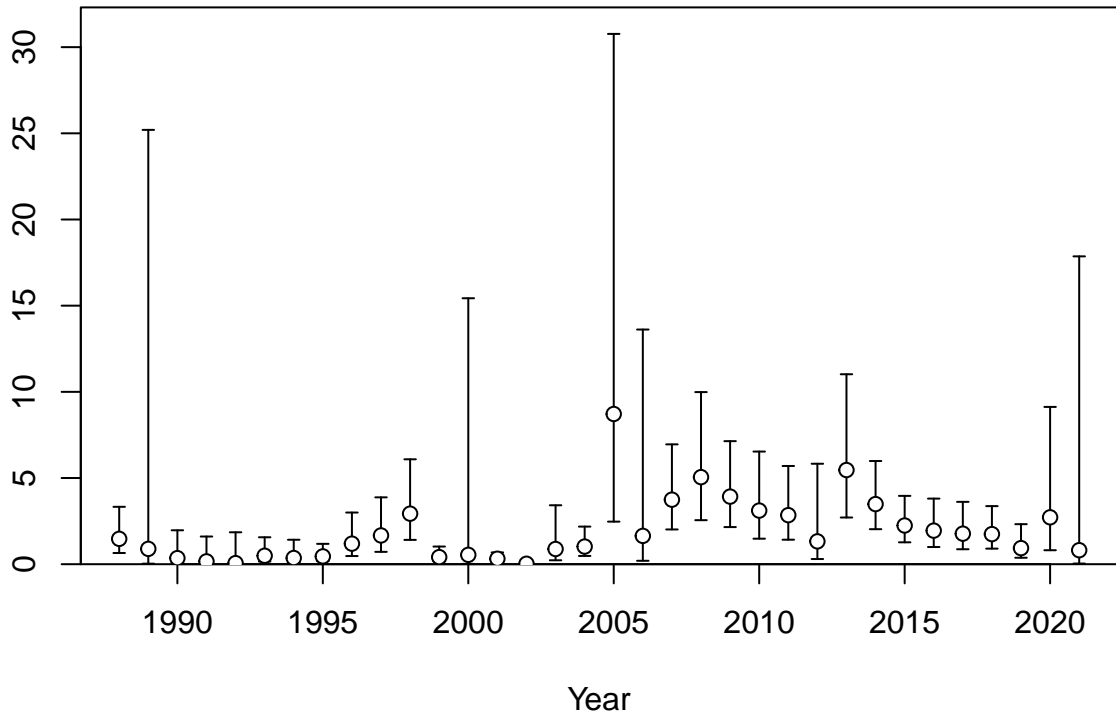


Fishing intensity: 1-SPR

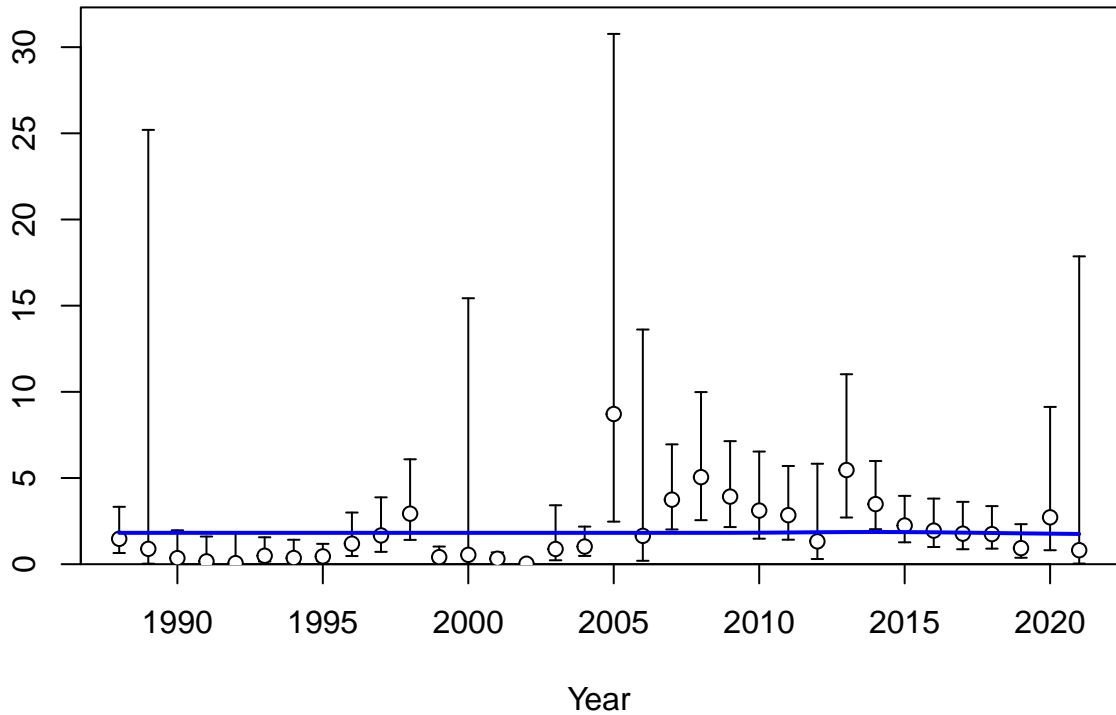


Relative spawning output: B/B\_MS

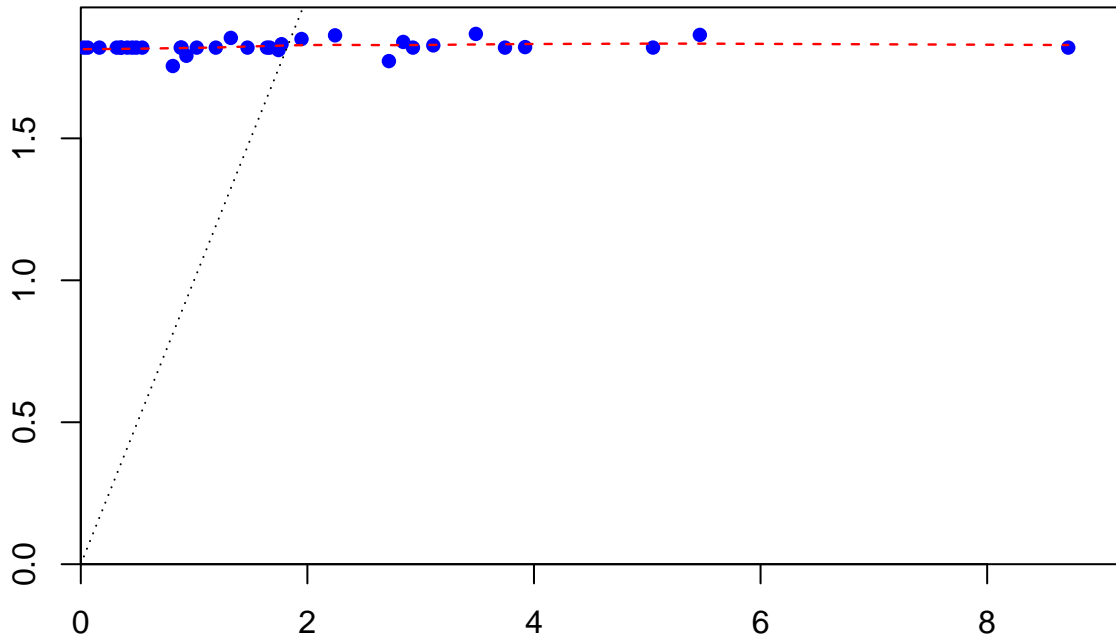
Index



Index



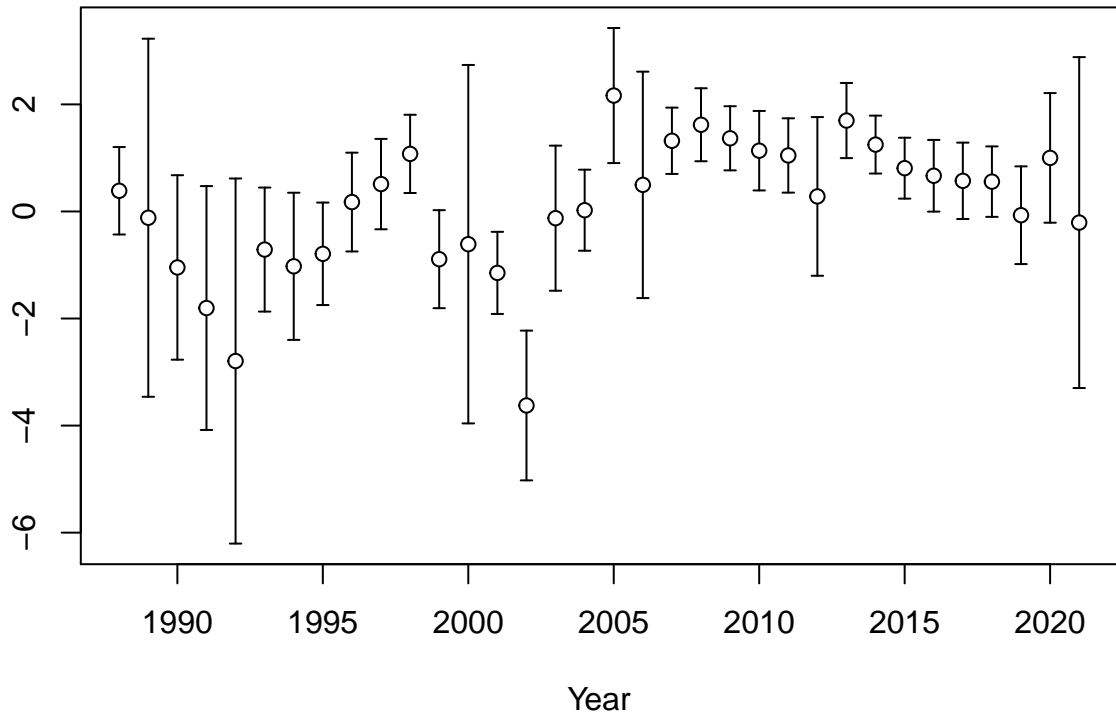
Expected index



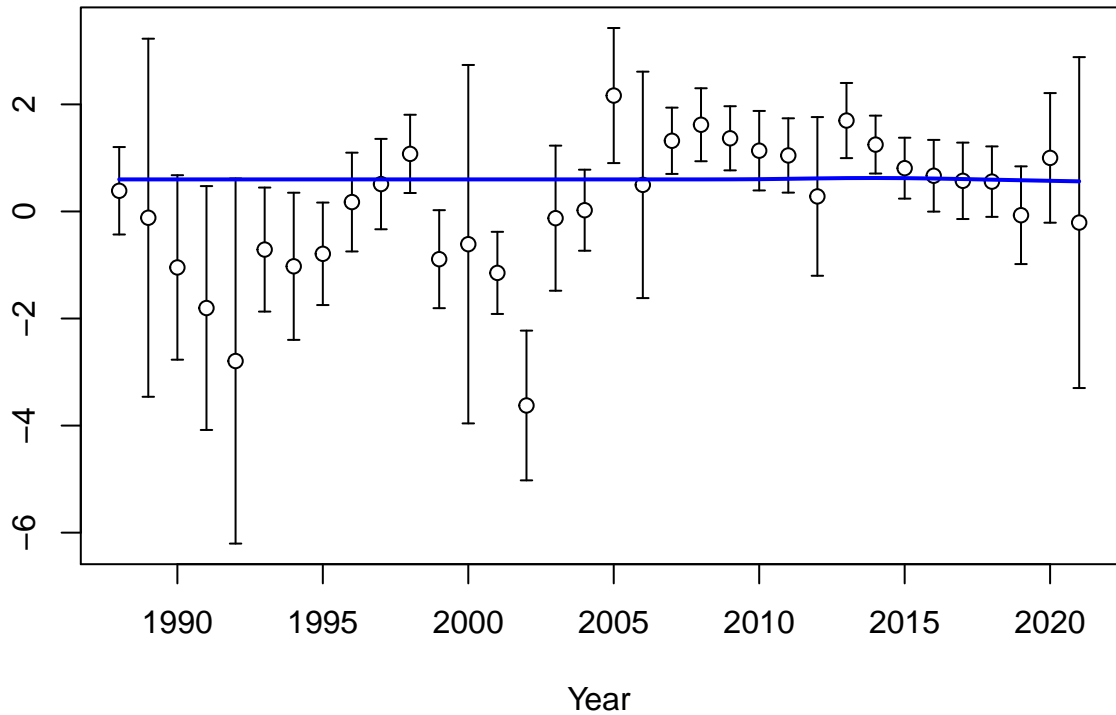
Observed index

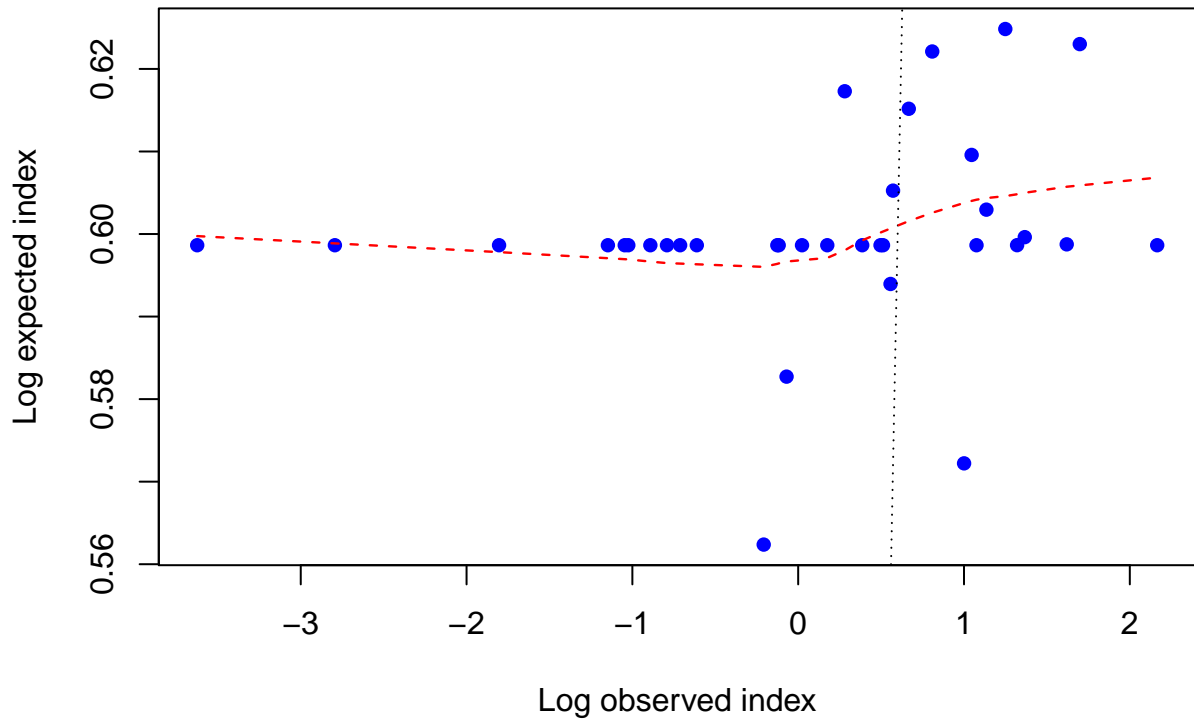


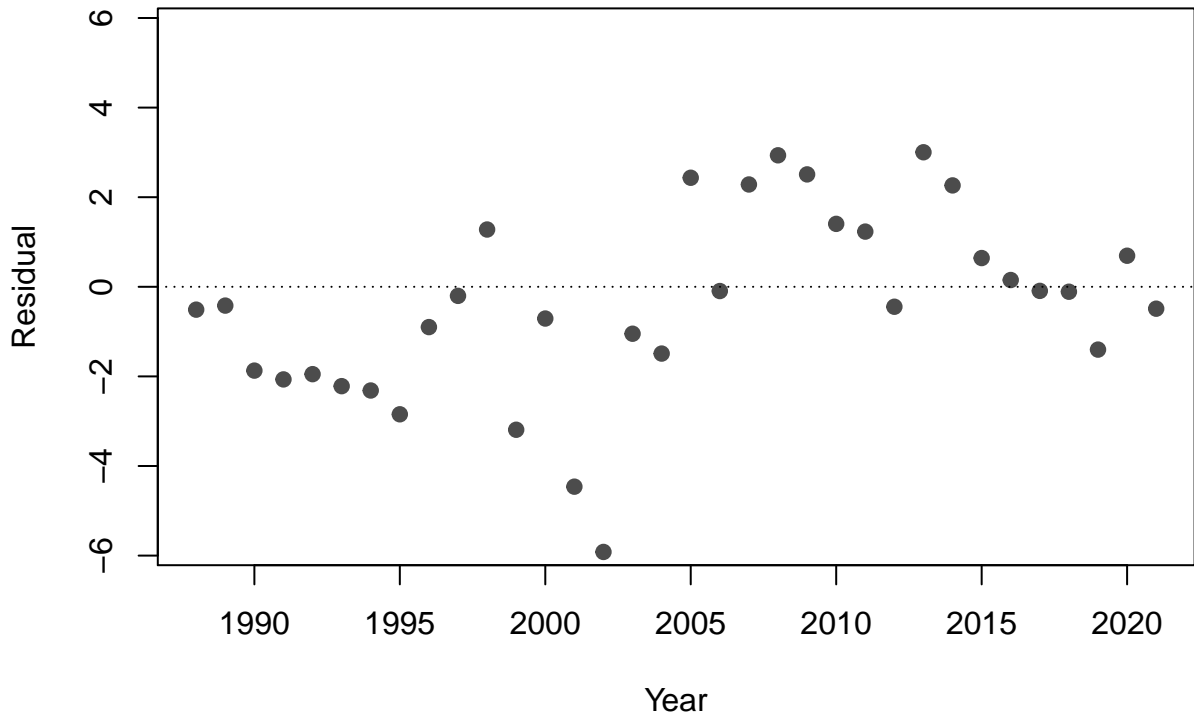
Log index



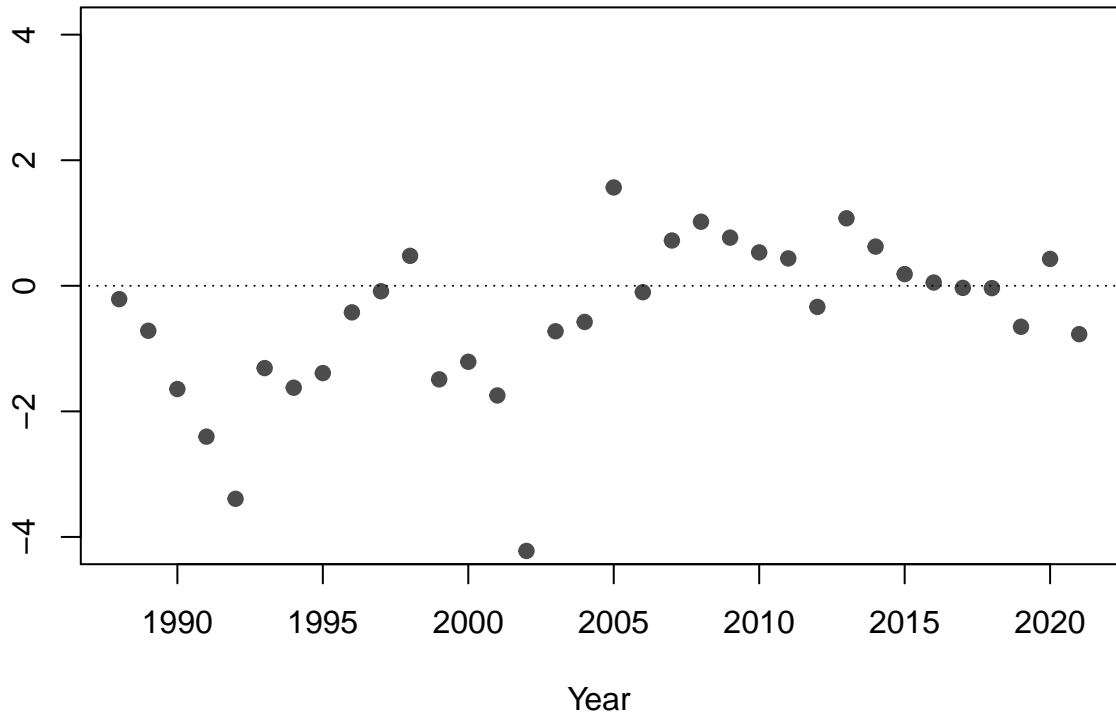
Log index

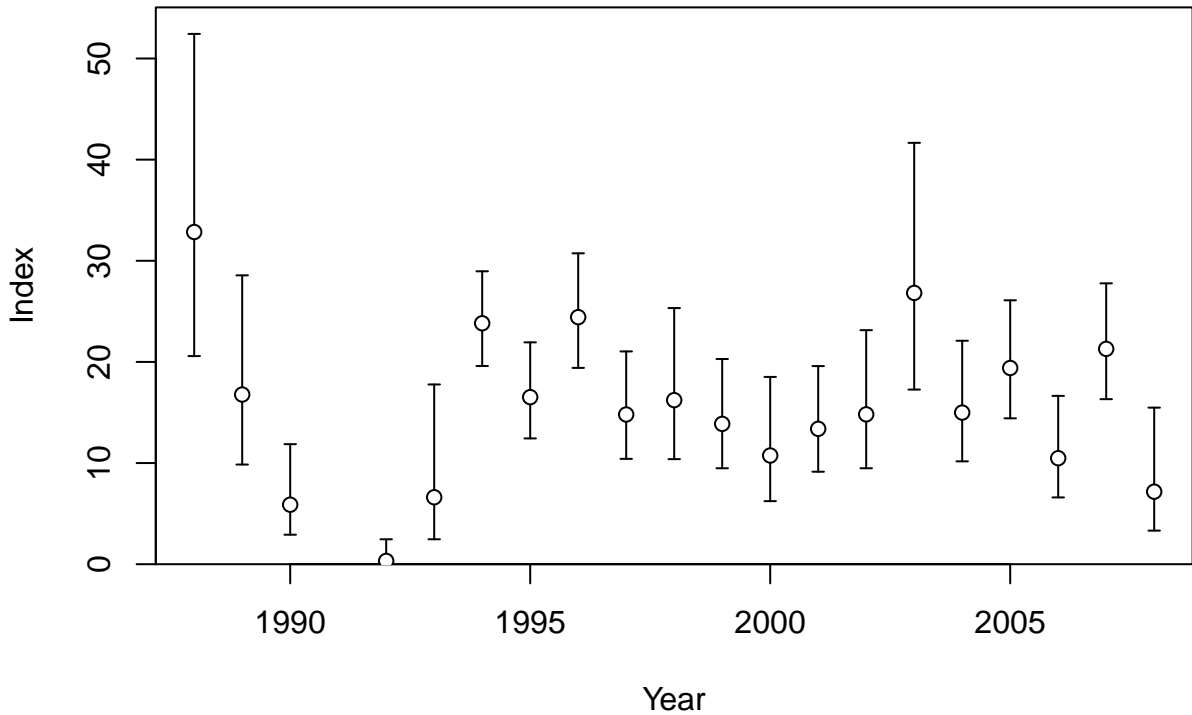


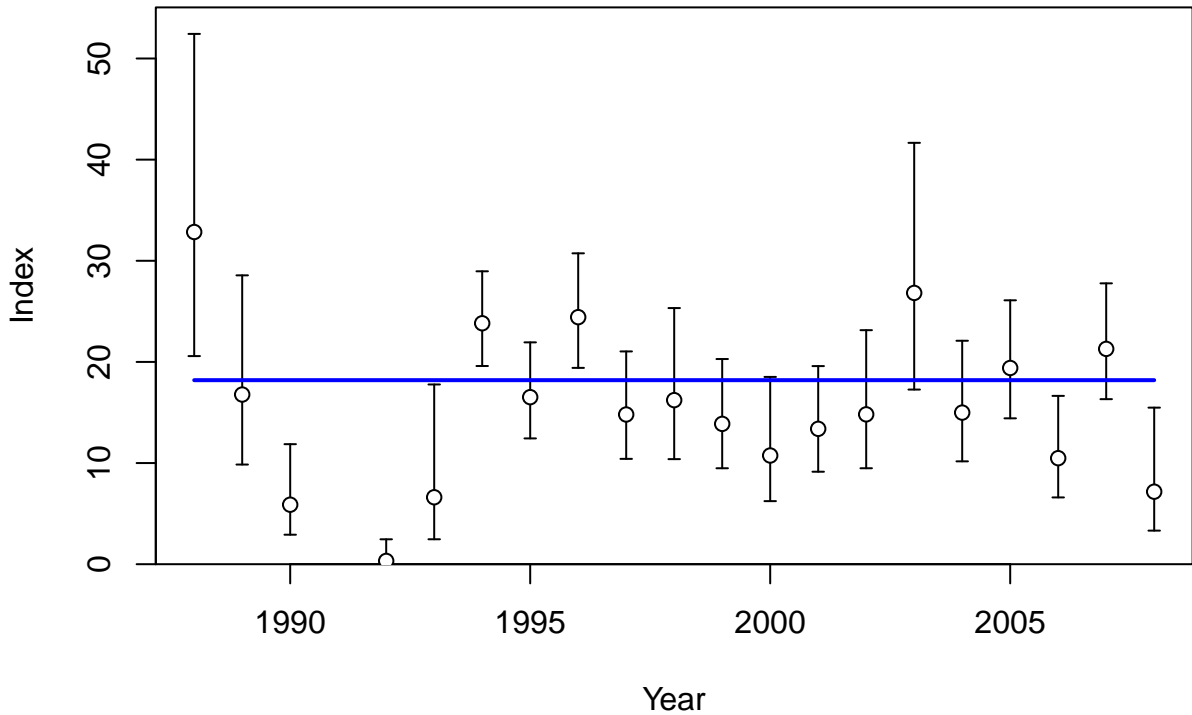


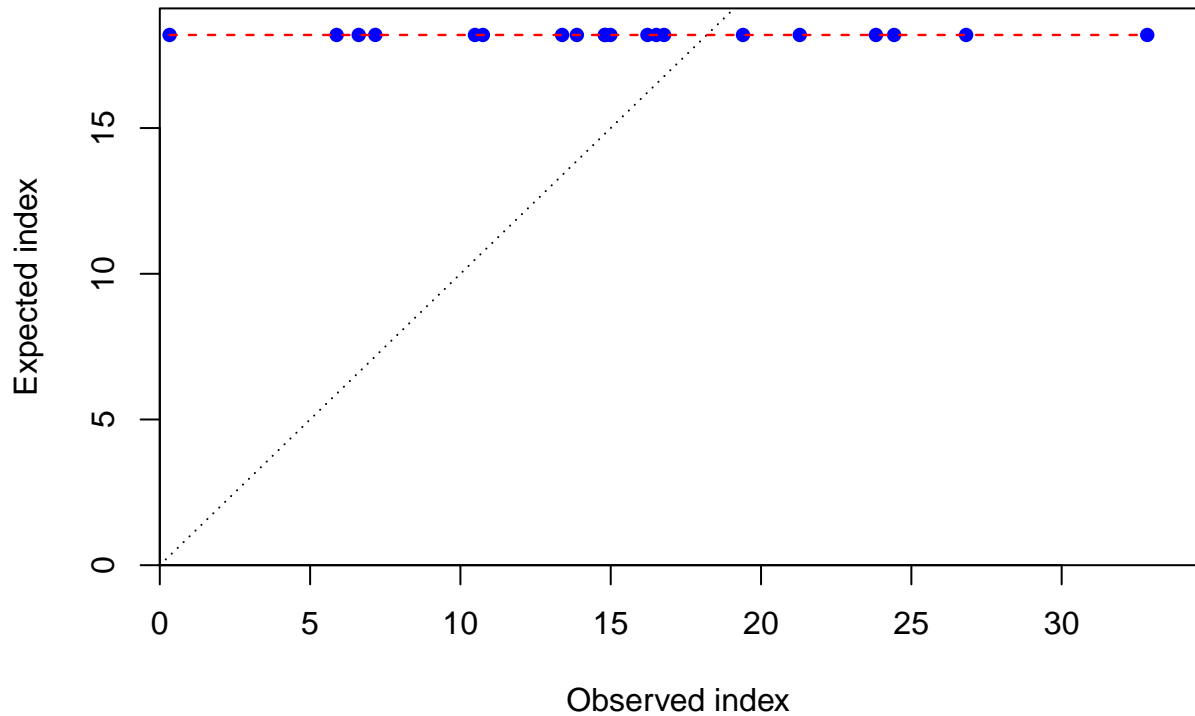


Deviation



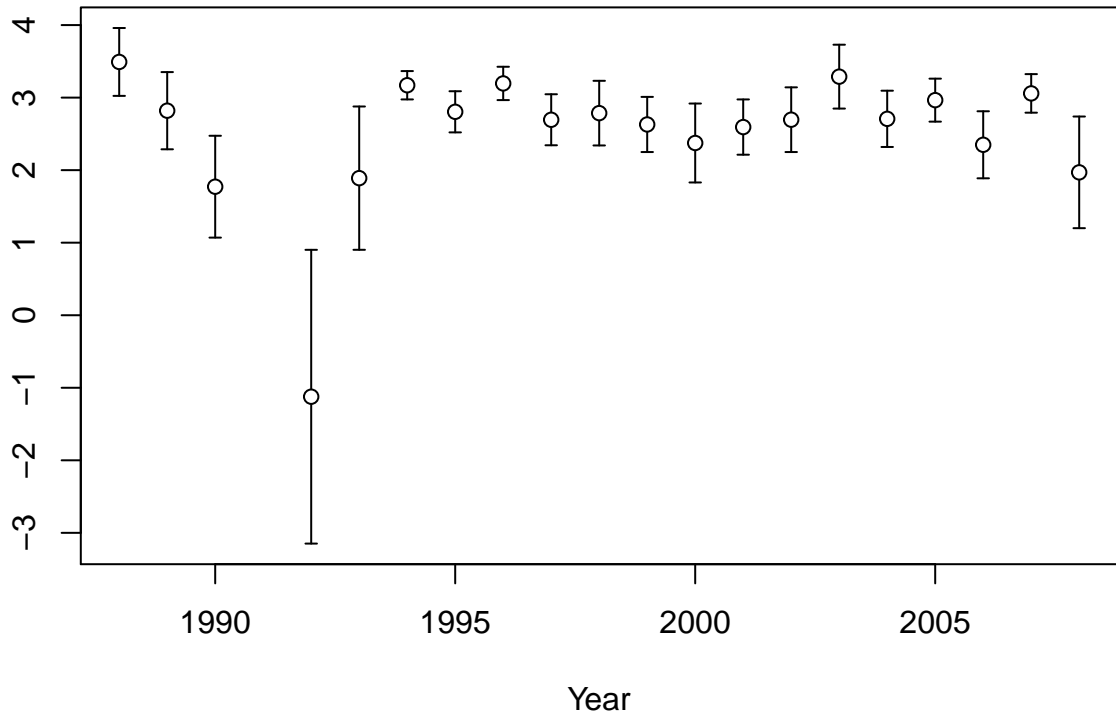




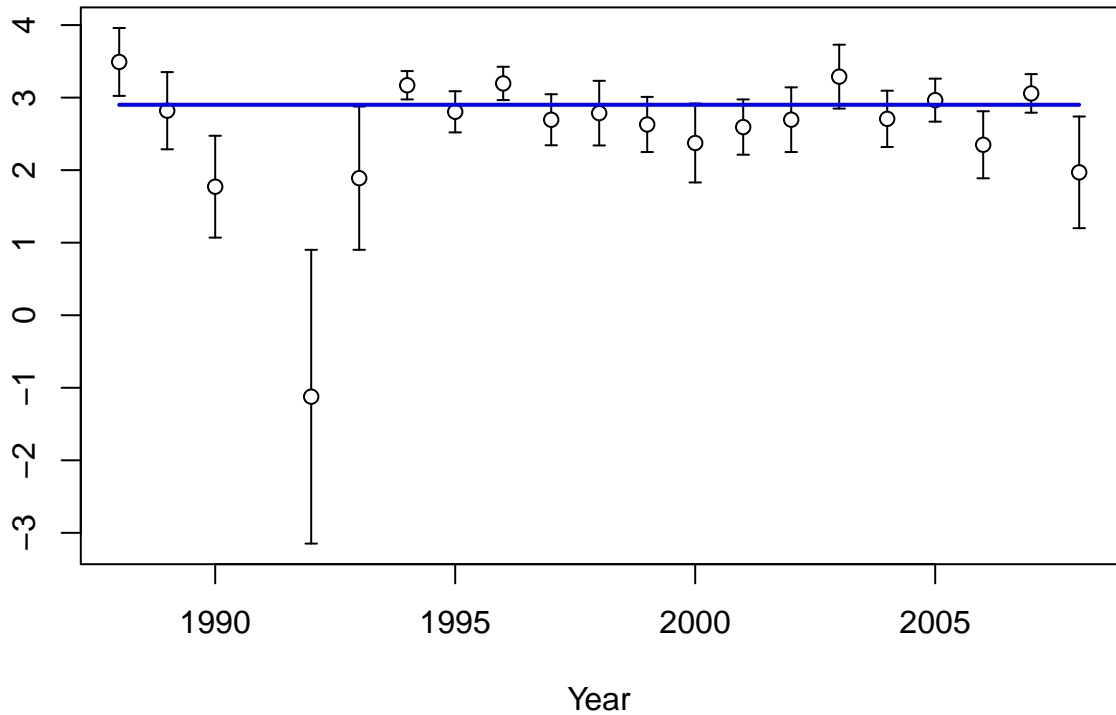


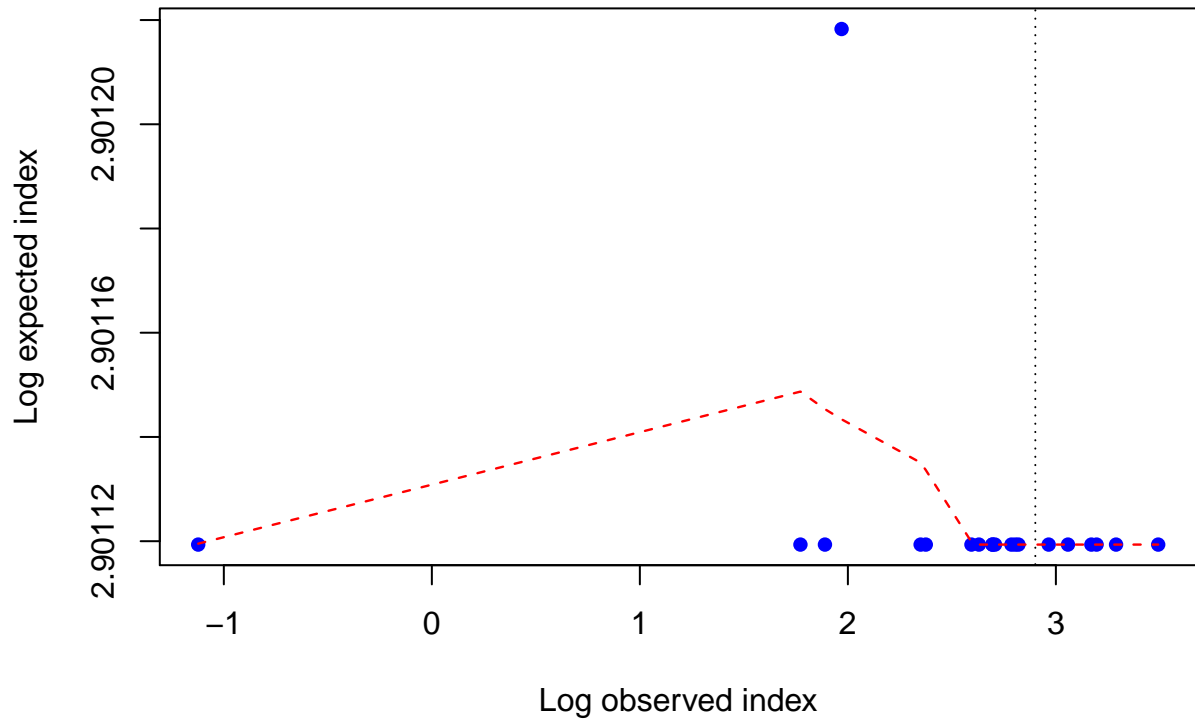


Log index

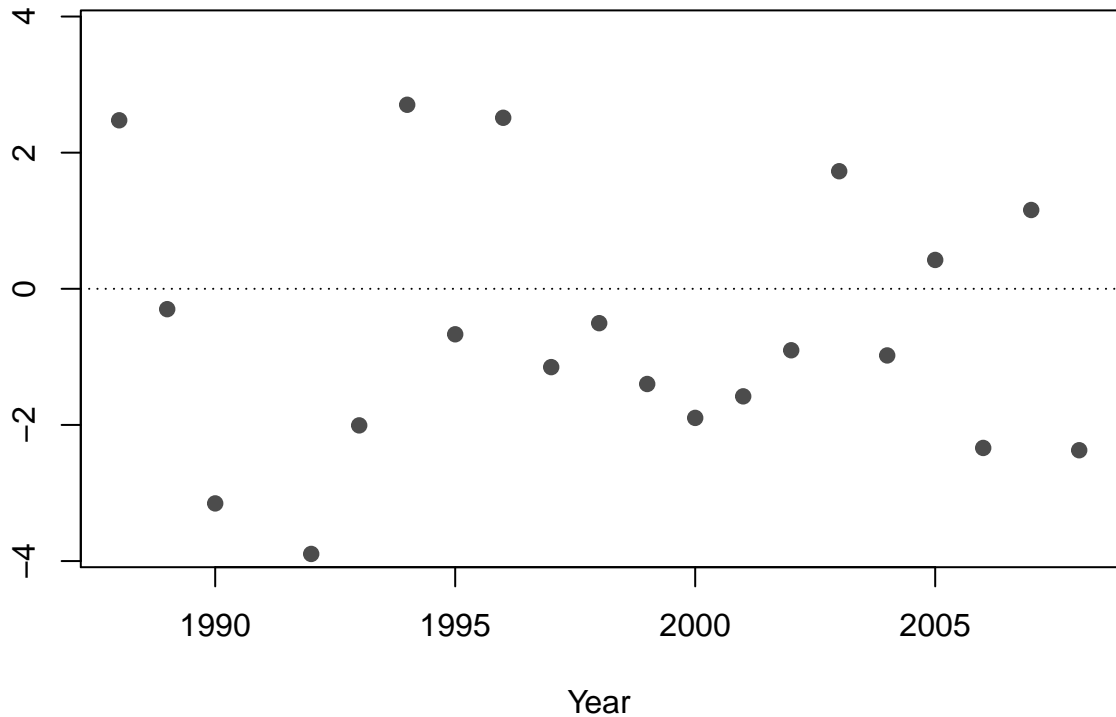


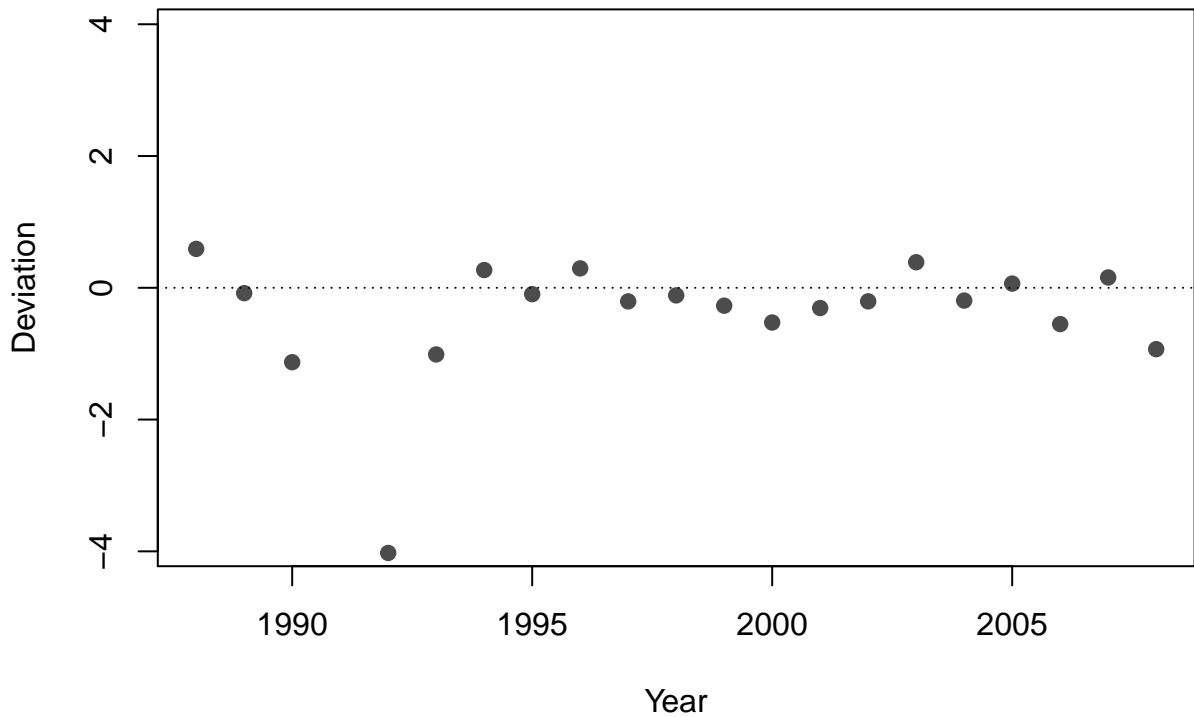
Log index

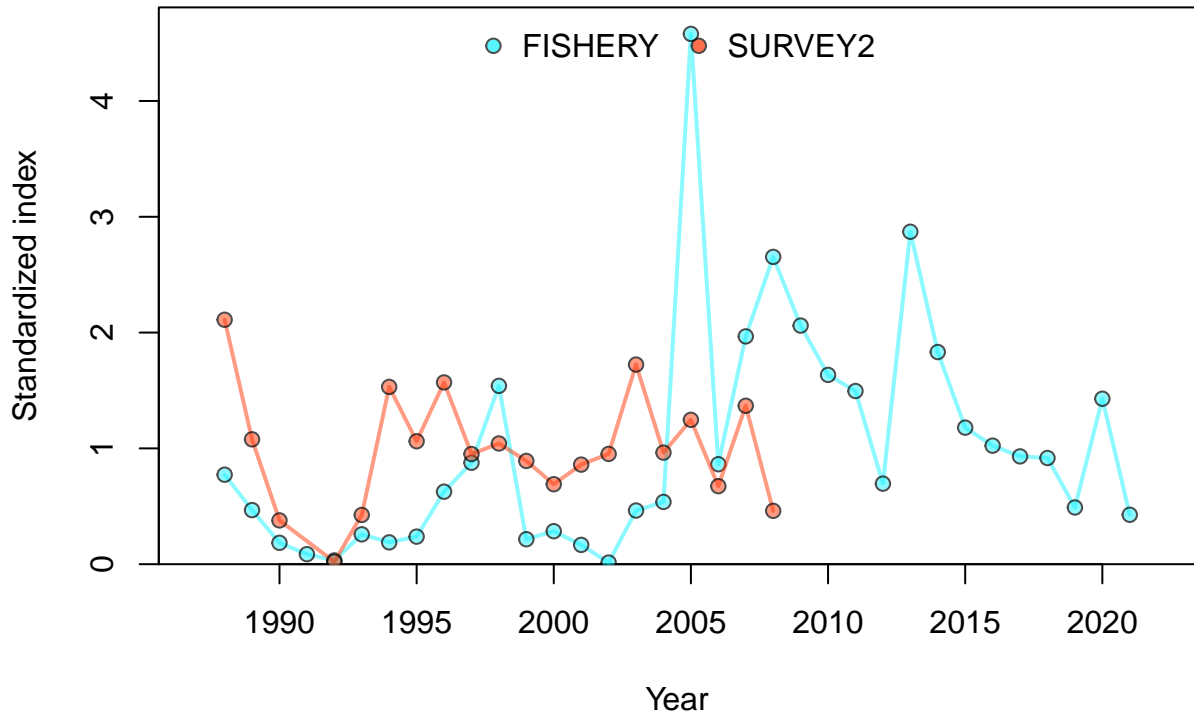


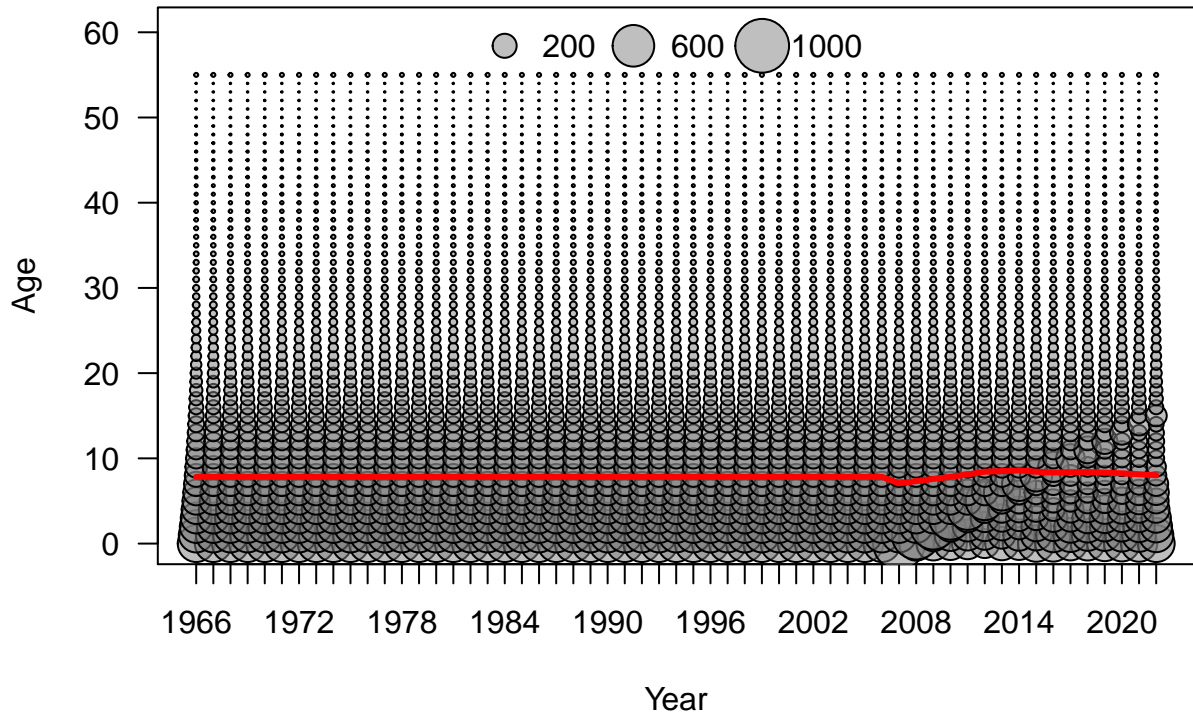


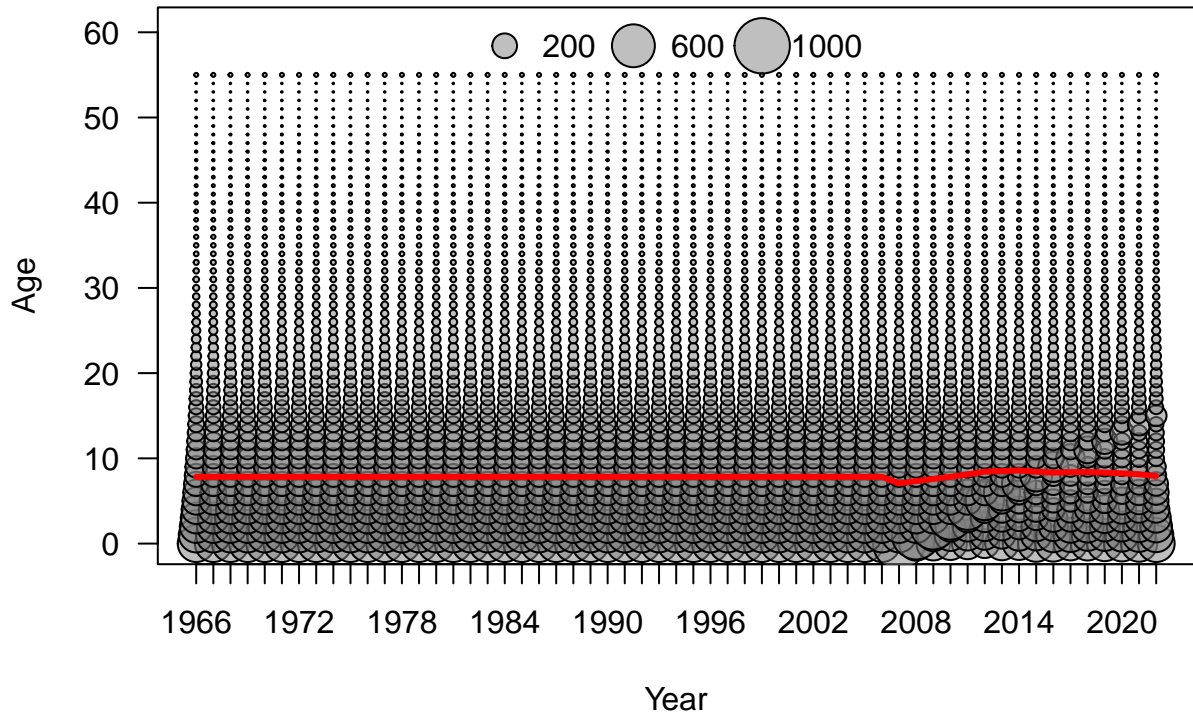
Residual



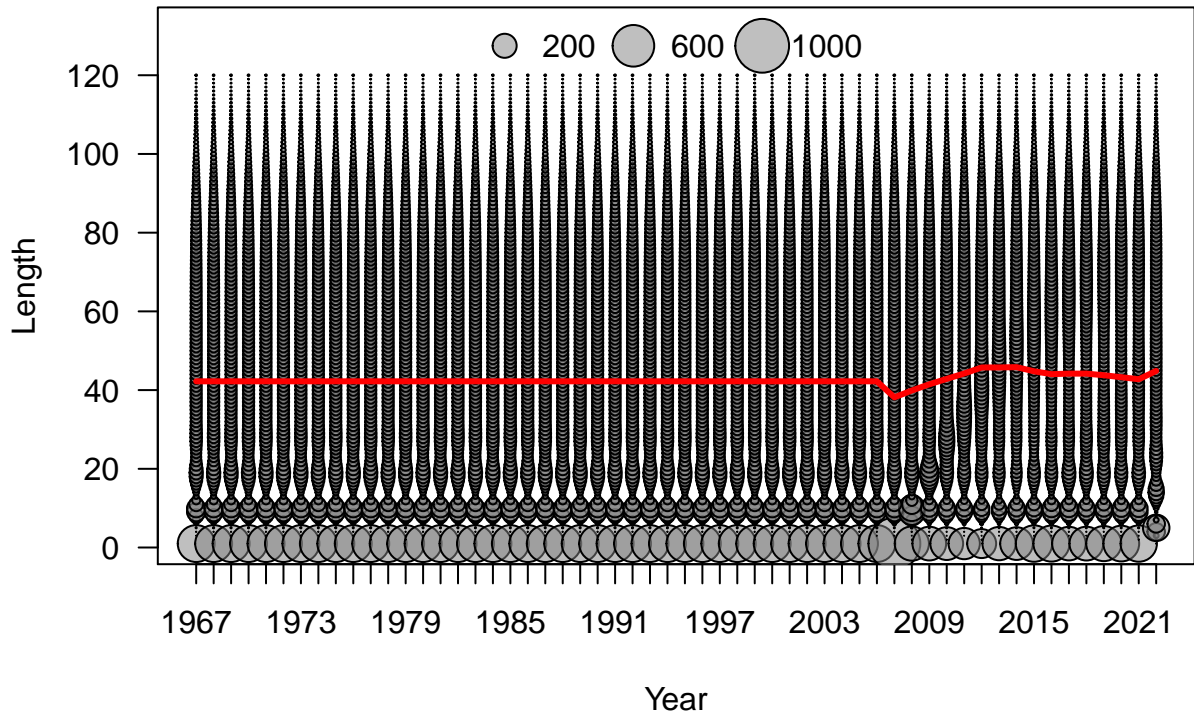


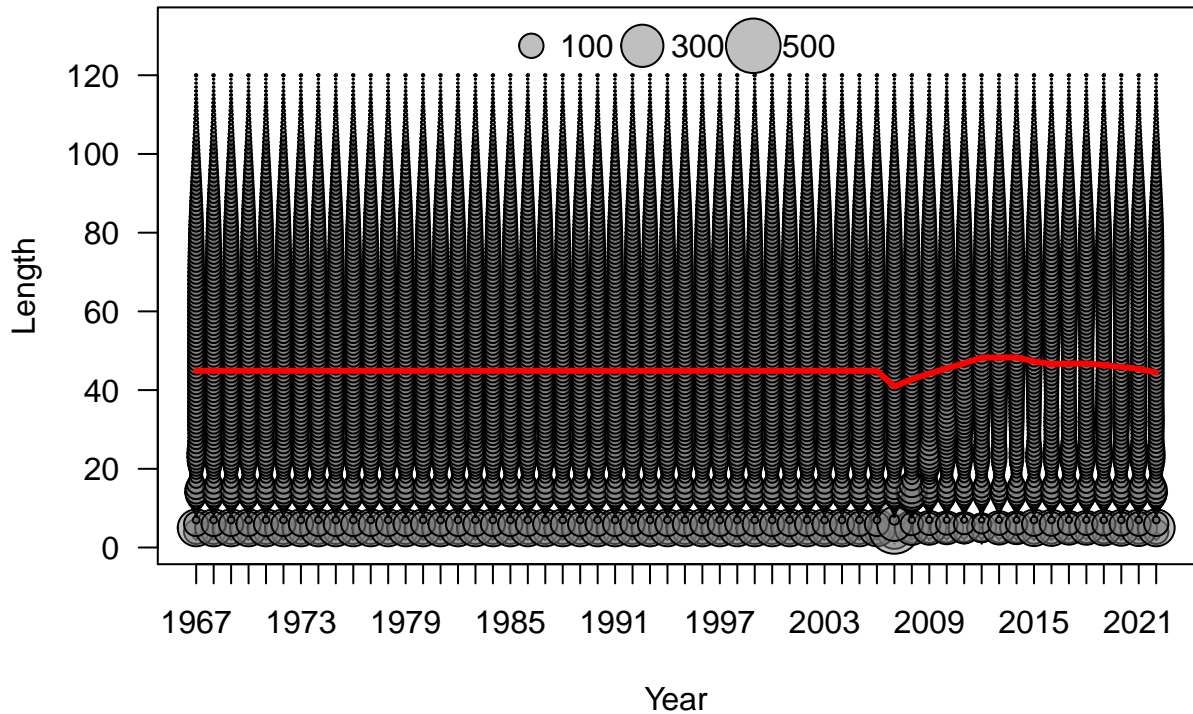












Numbers at age at equilibrium

4e+08  
2e+08  
0e+00

0

10

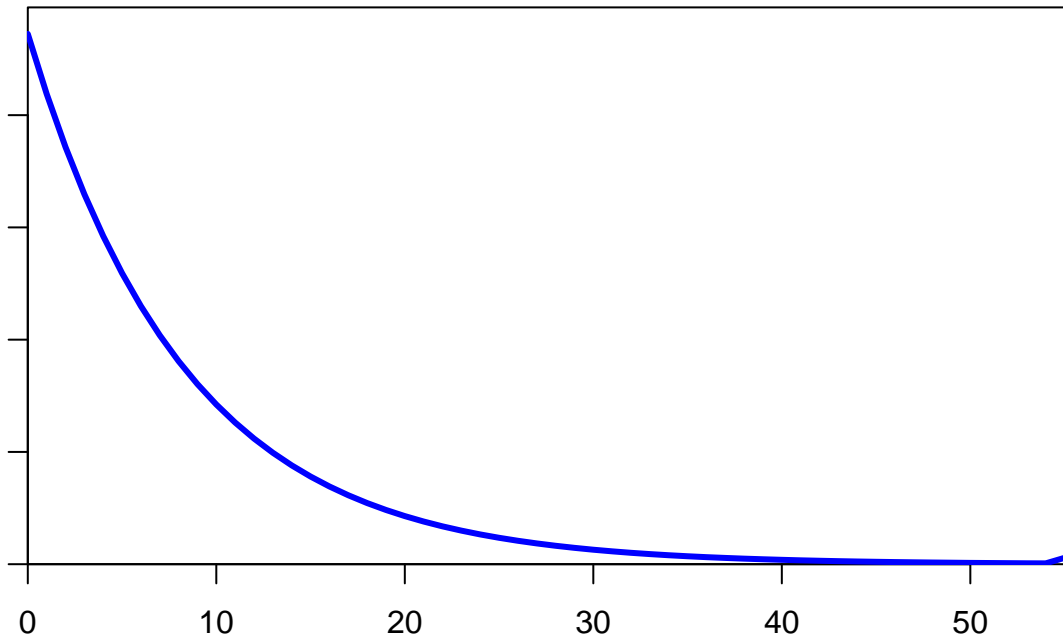
20

30

40

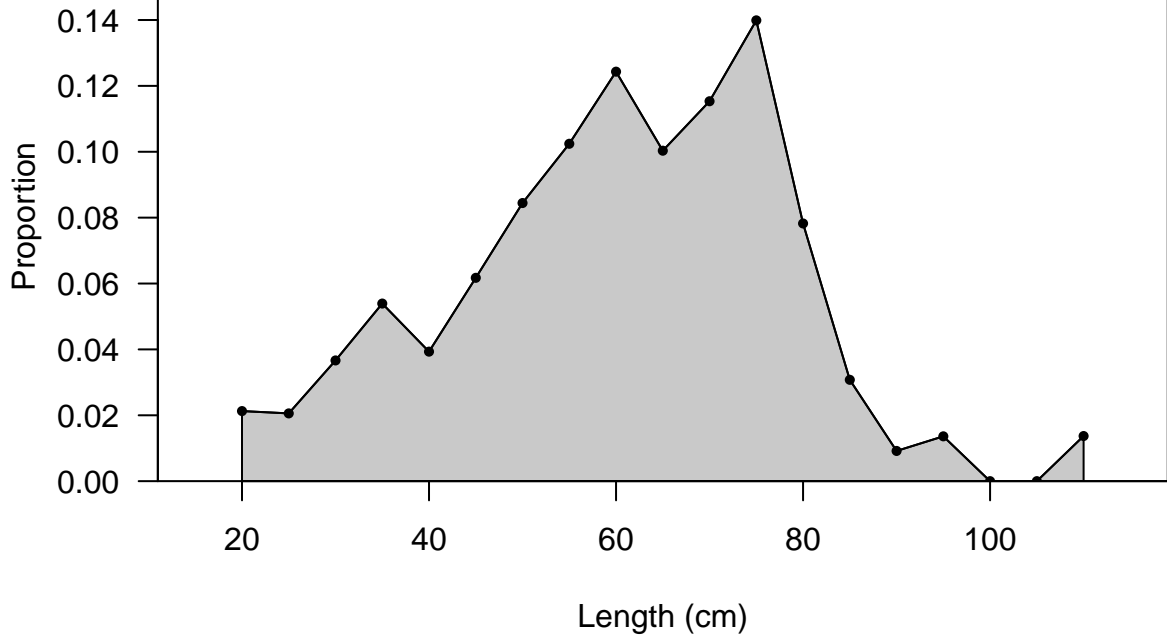
50

Age



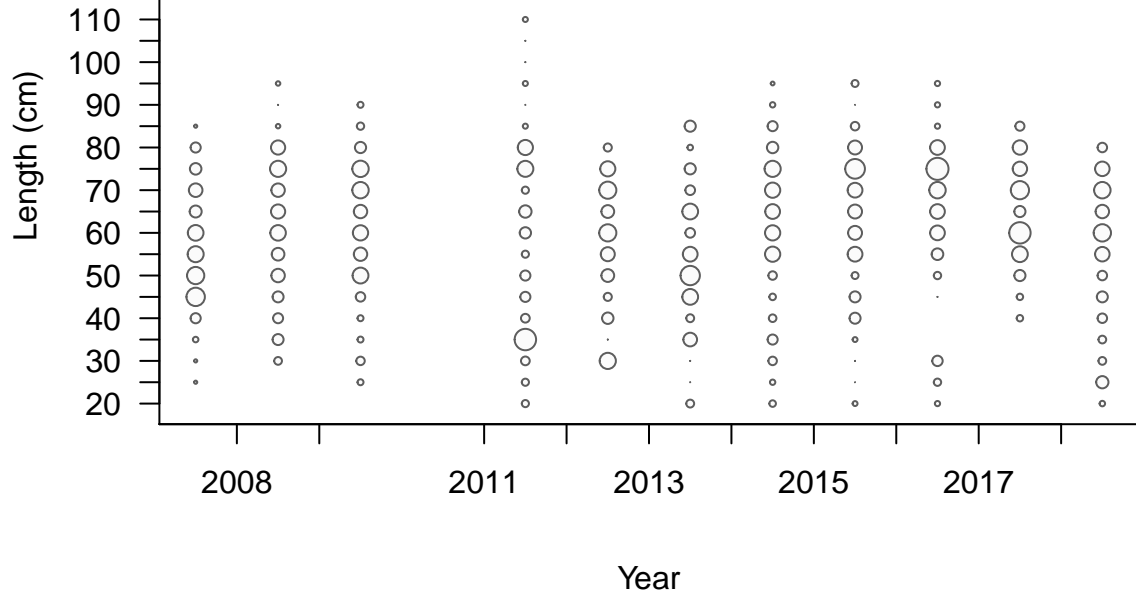
# FISHERY

Sum of N adj.=345.8

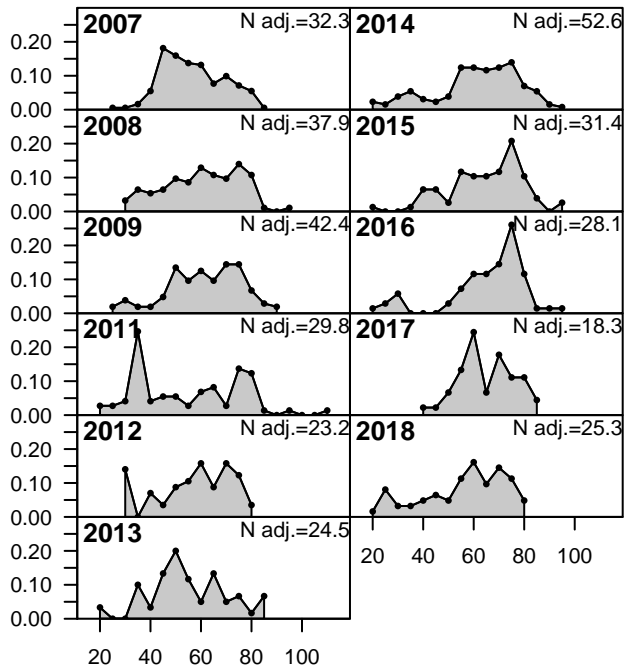


# FISHERY

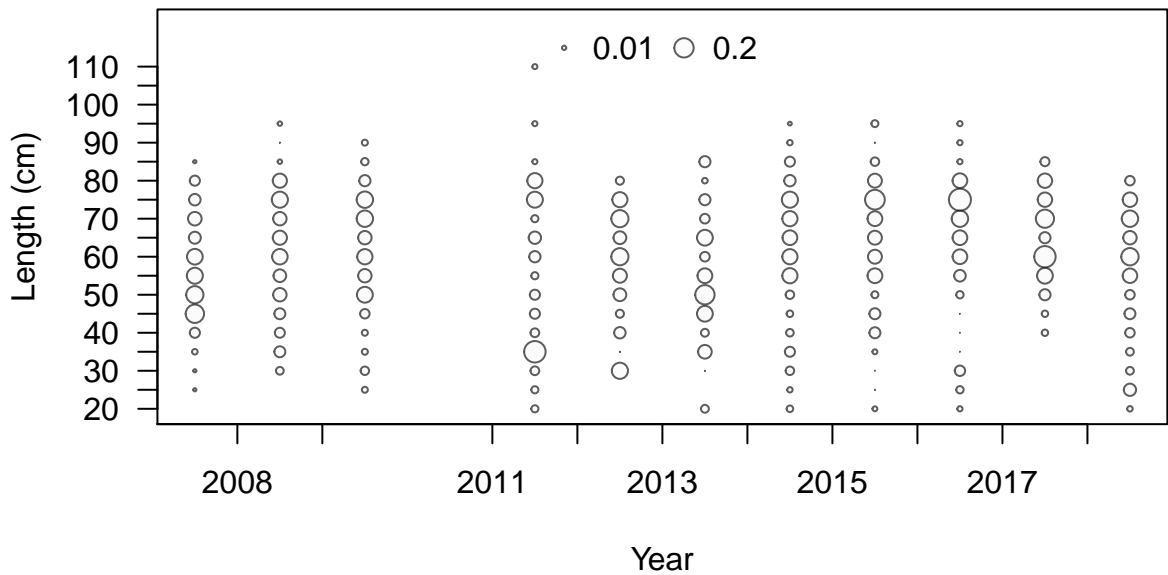
◦ 0.01 ○ 0.2



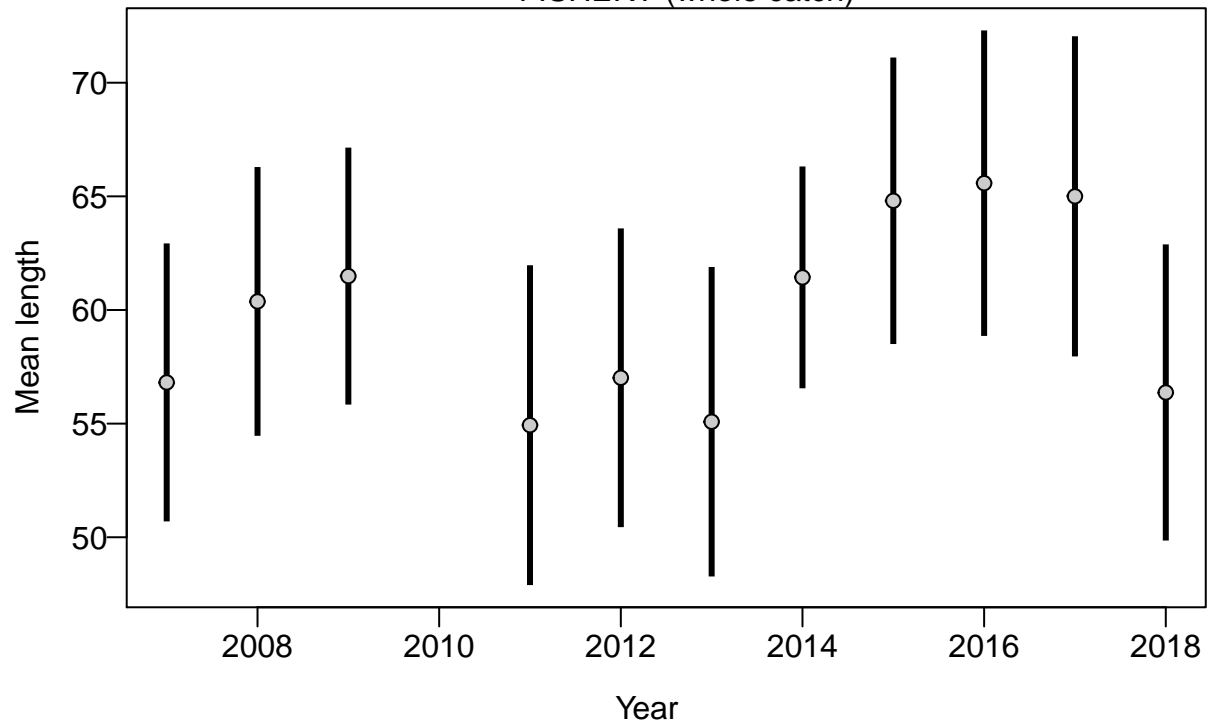
Proportion



Length (cm)



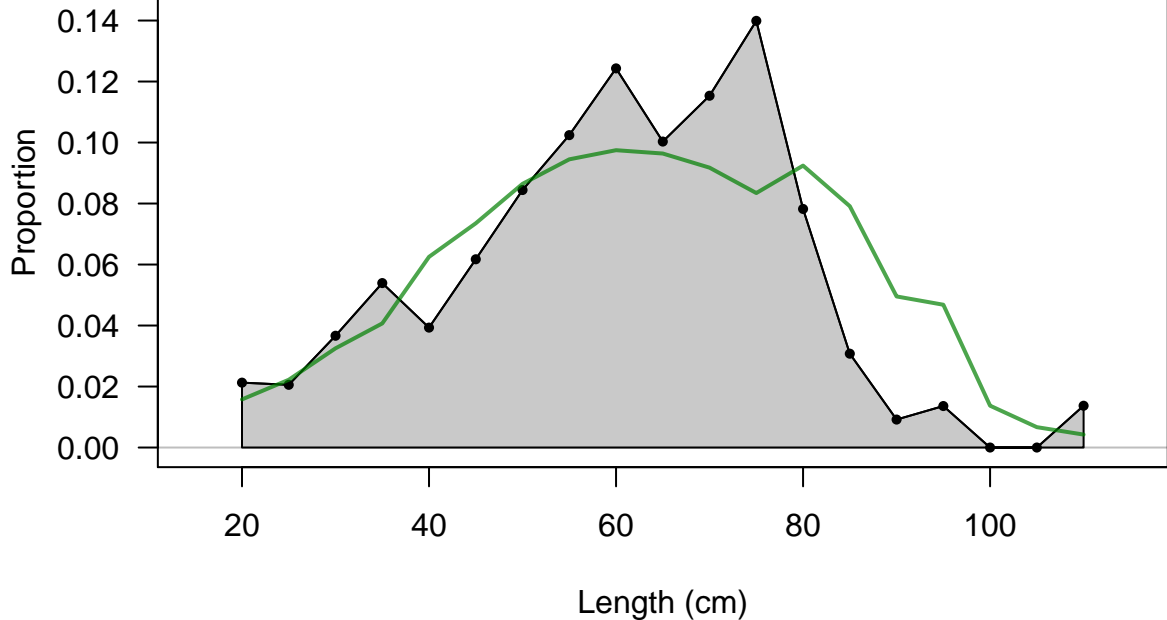
FISHERY (whole catch)

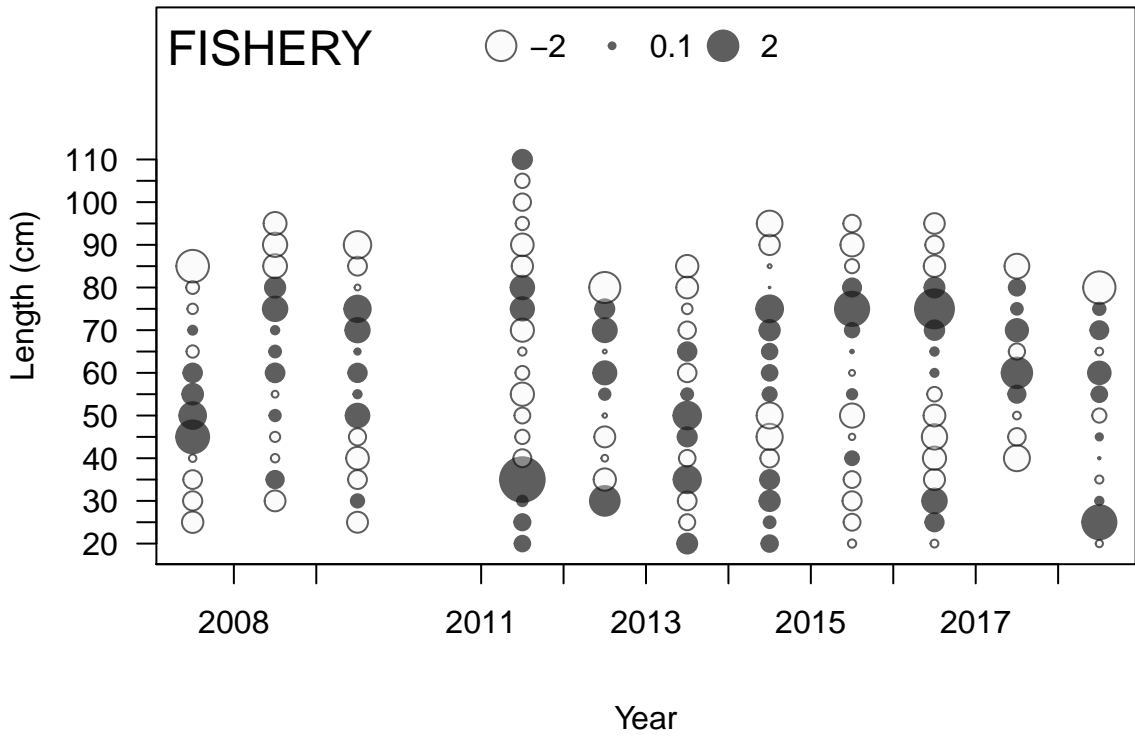




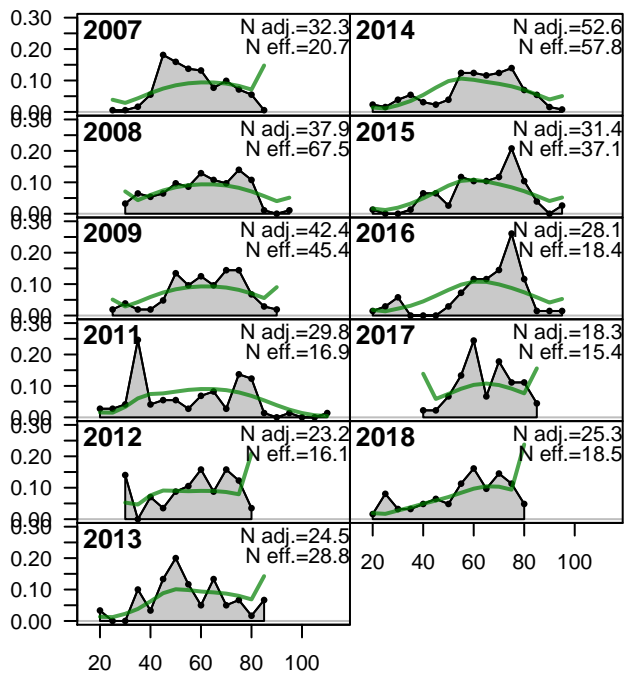
# FISHERY

Sum of N adj.=345.8  
Sum of N eff.=342.7

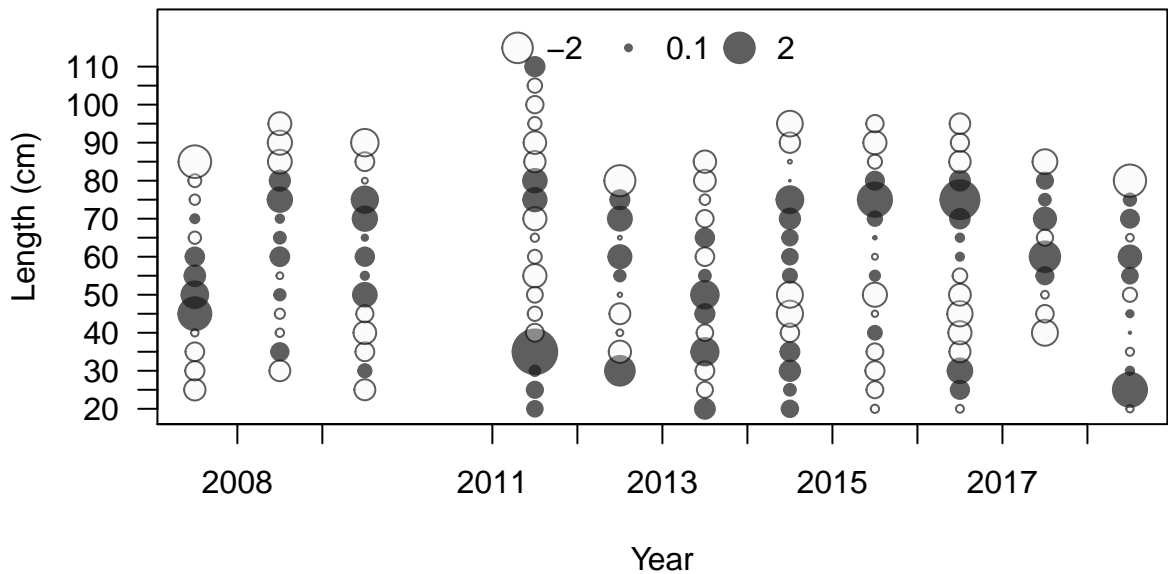




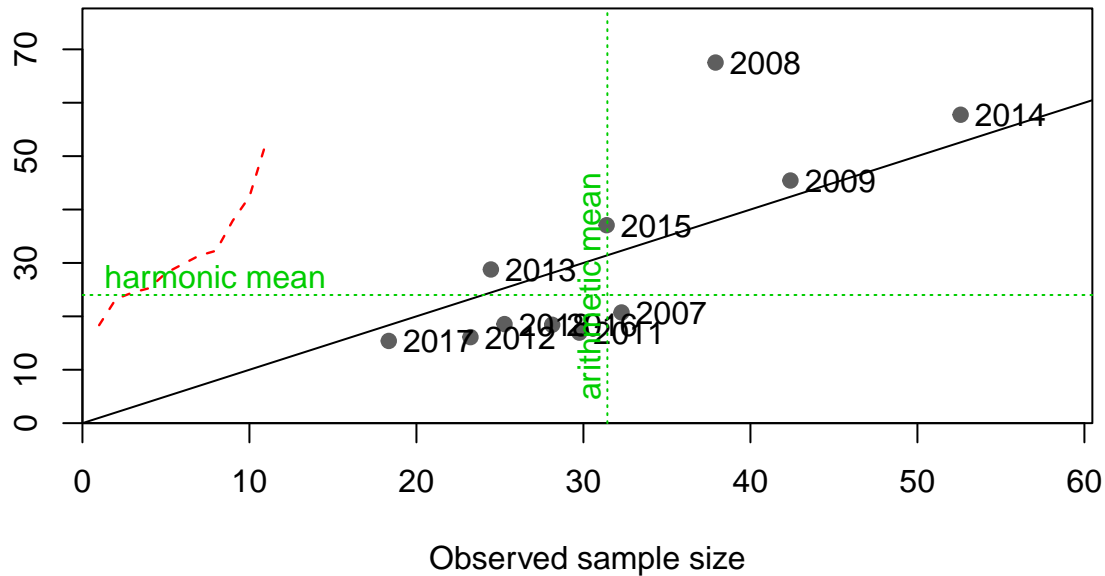
Proportion



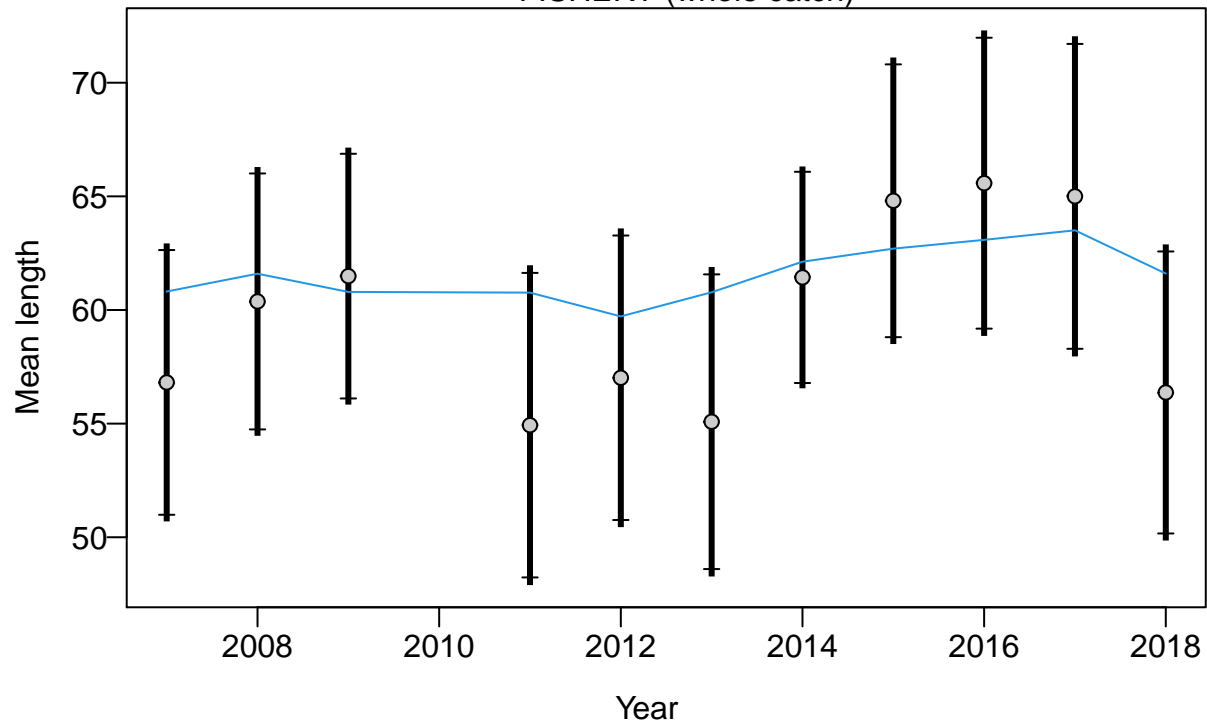
Length (cm)

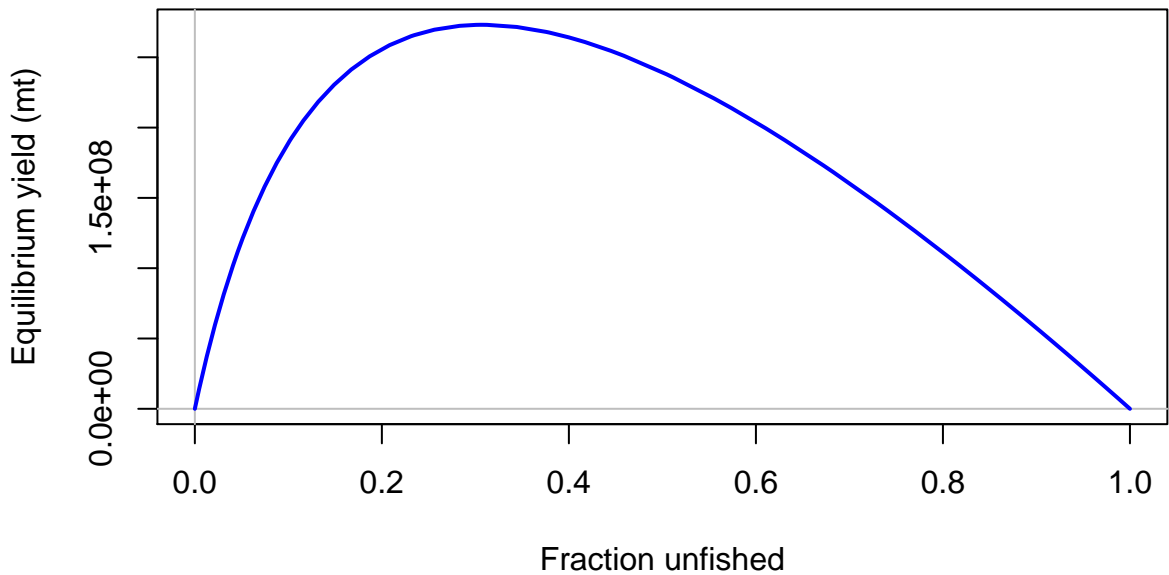


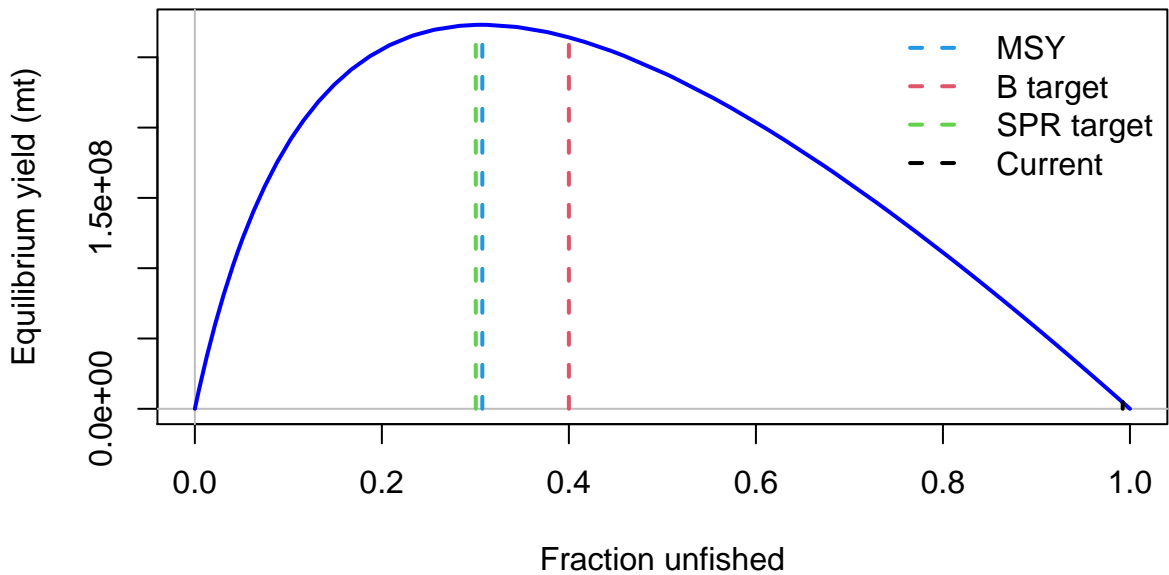
Effective sample size



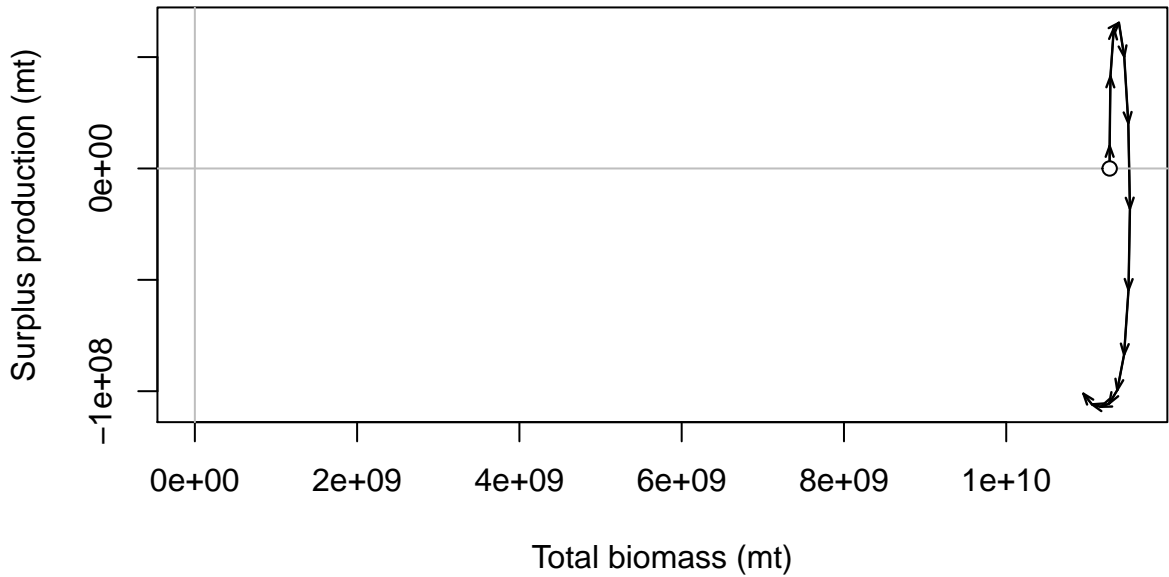
FISHERY (whole catch)

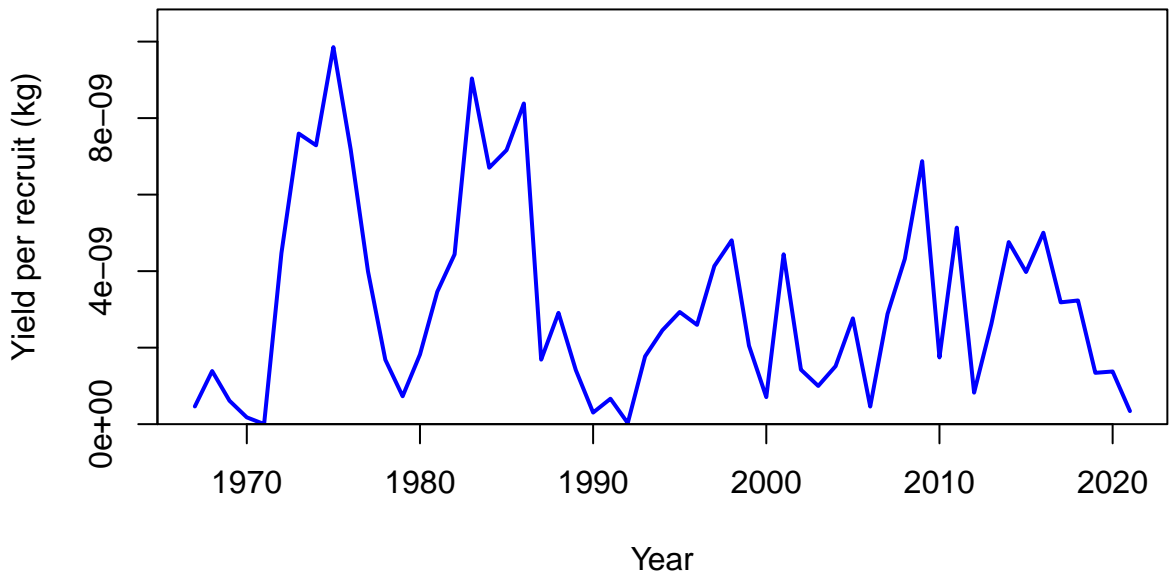


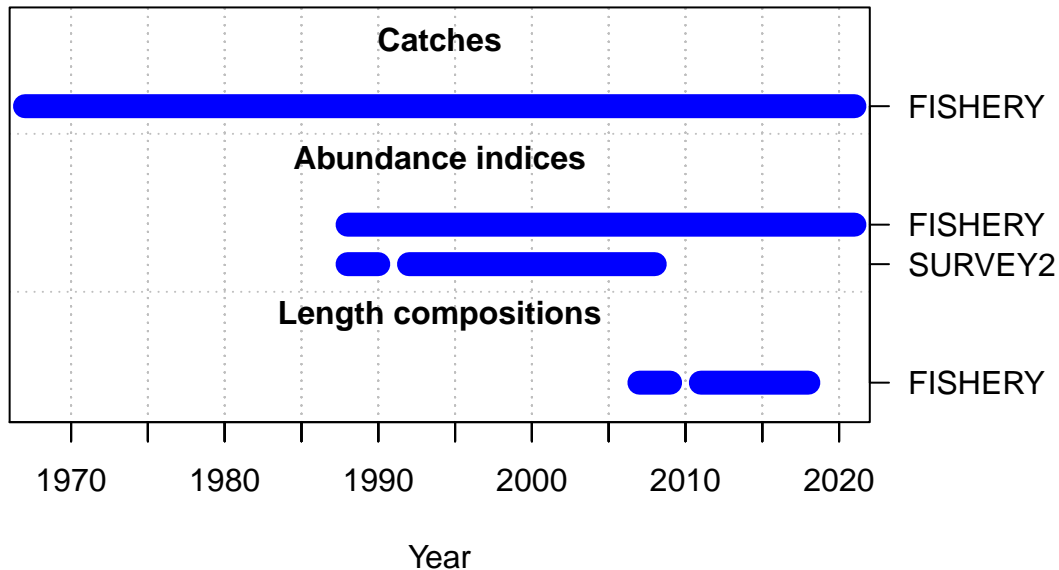


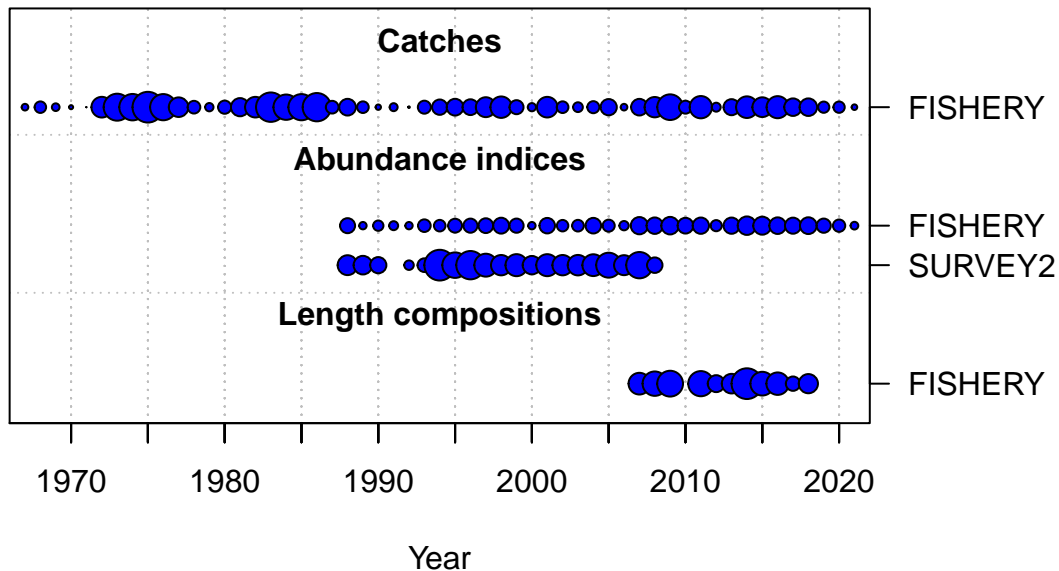






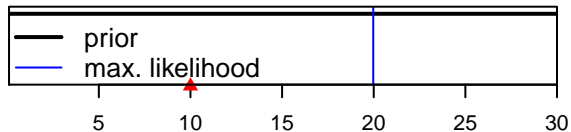




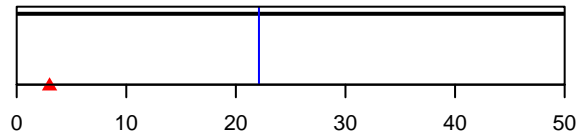


Density

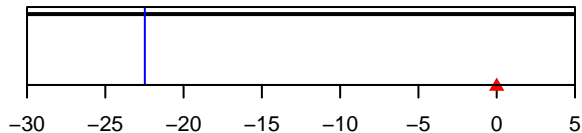
SR\_LN(R0)



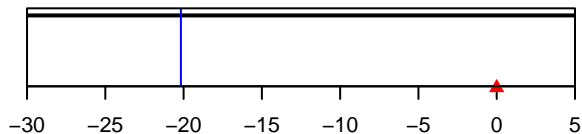
Size\_95%width\_FISHERY(1)



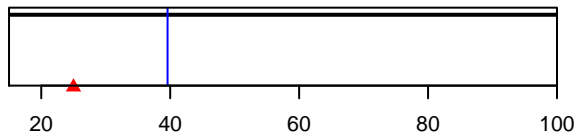
LnQ\_base\_FISHERY(1)



LnQ\_base\_SURVEY2(2)



Size\_inflection\_FISHERY(1)



Parameter value