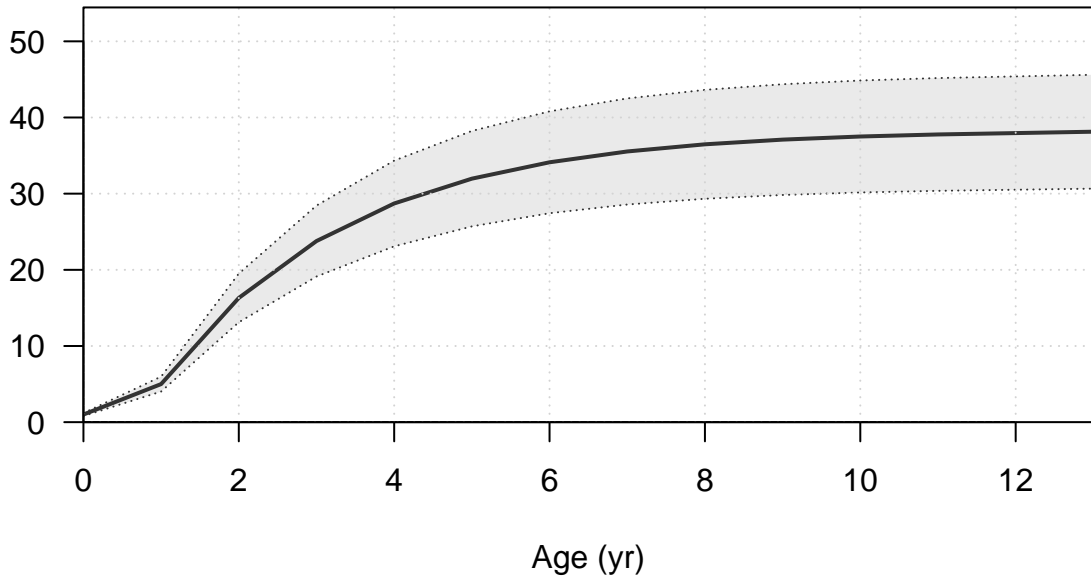
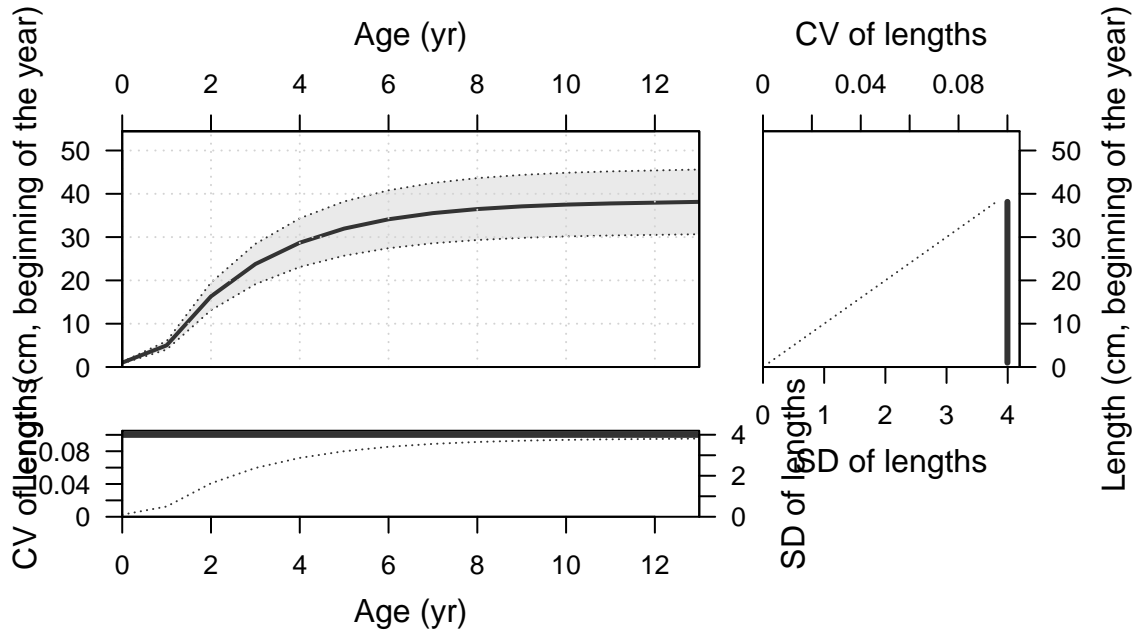
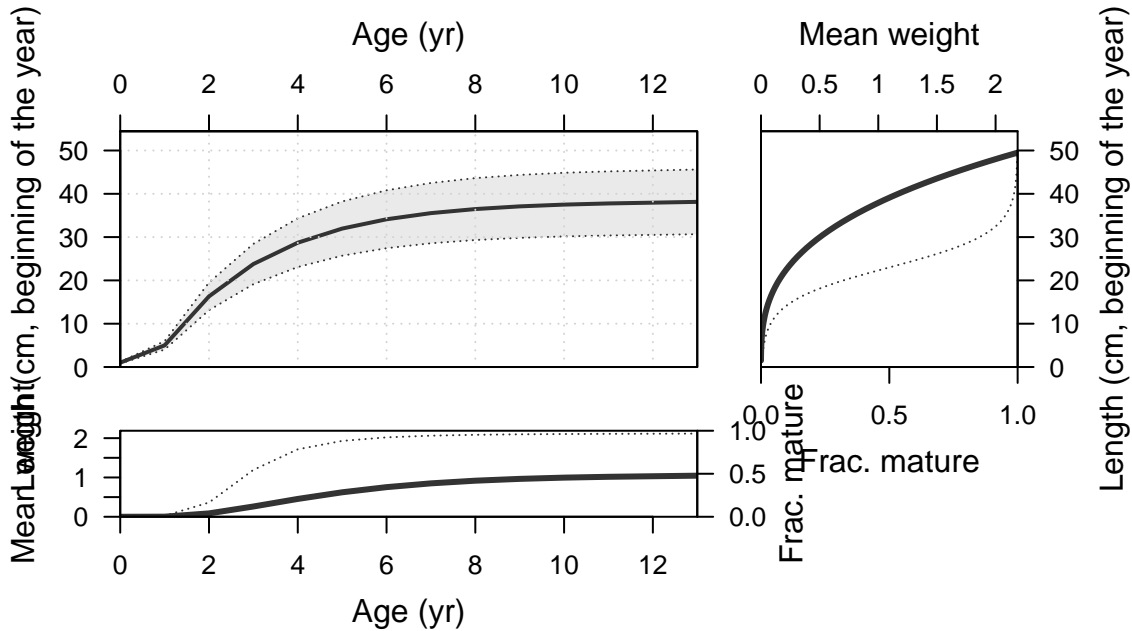


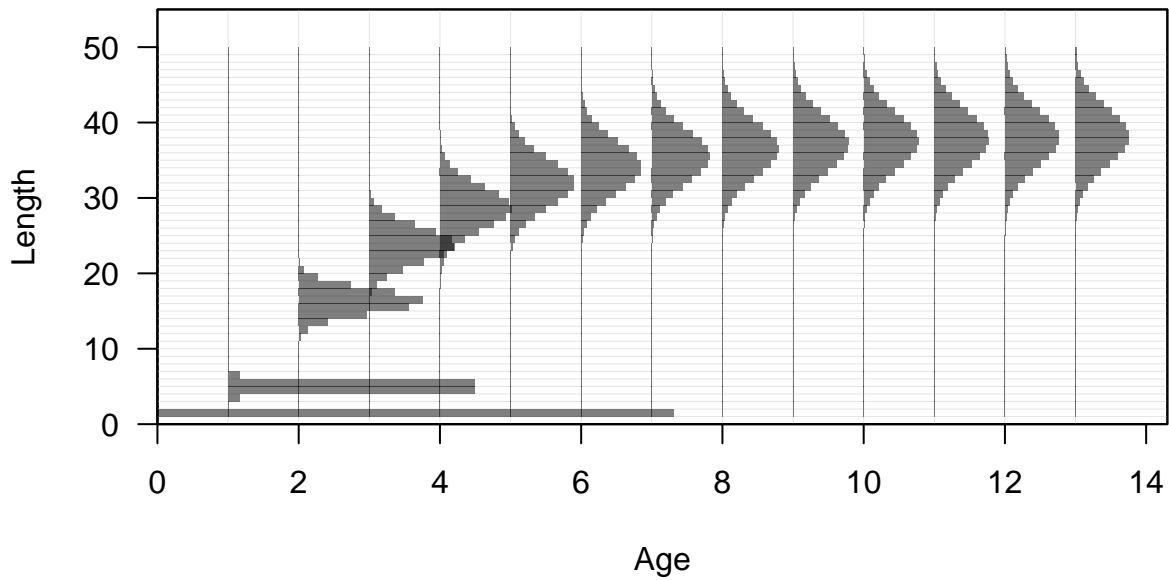
Plots created using the 'r4ss' package in R  
Stock Synthesis version: 3.30.19.0  
StartTime: Mon Jun 20 13:03:21 2022  
Data\_File: data.ss  
Control\_File: control.ss

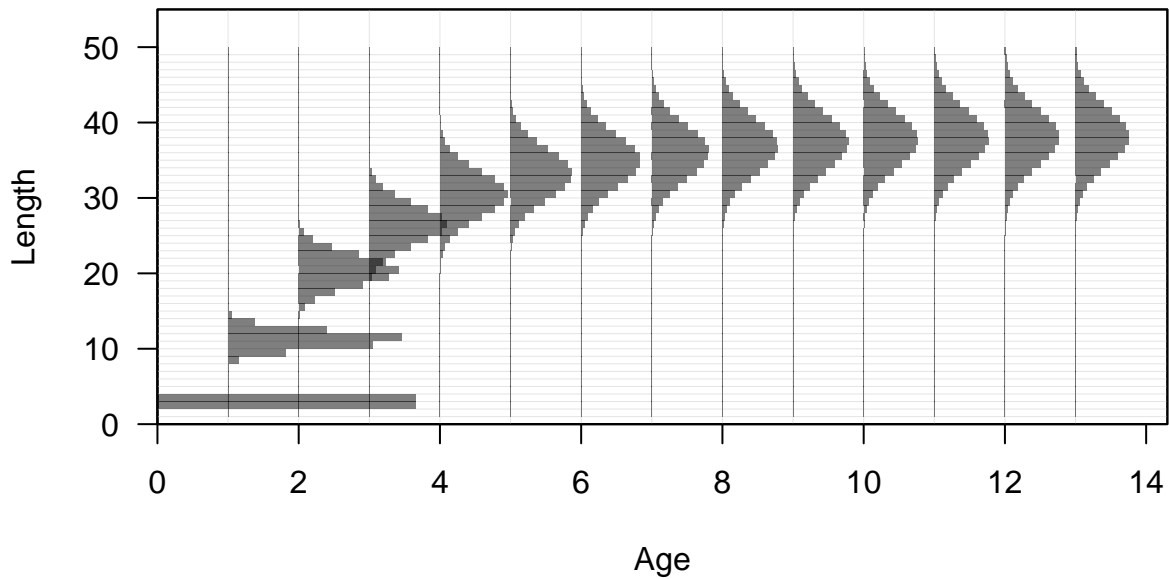
Length (cm, beginning of the year)

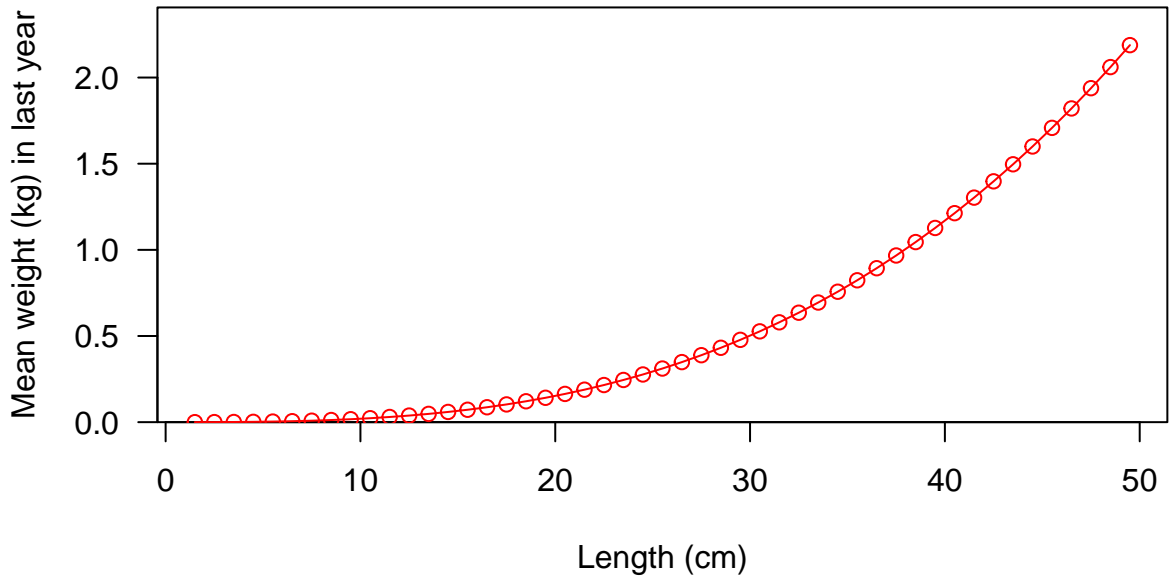


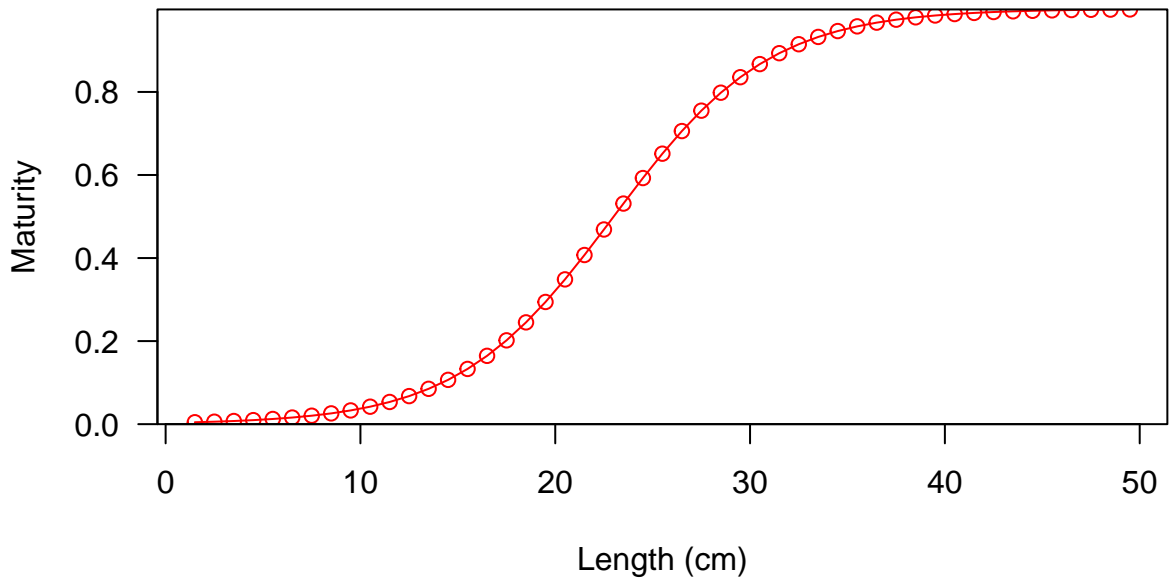




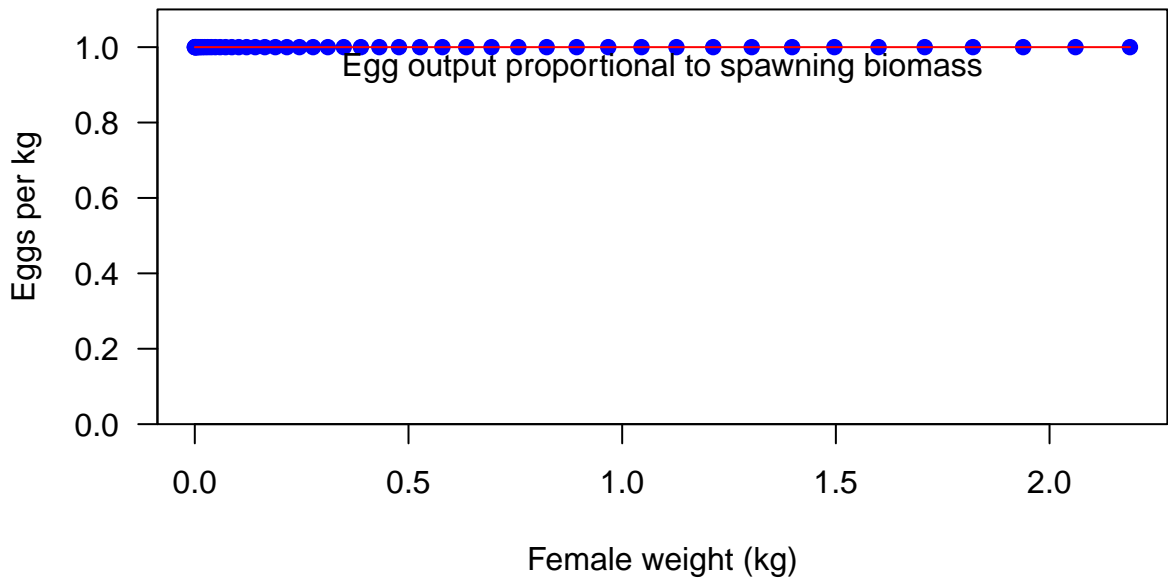


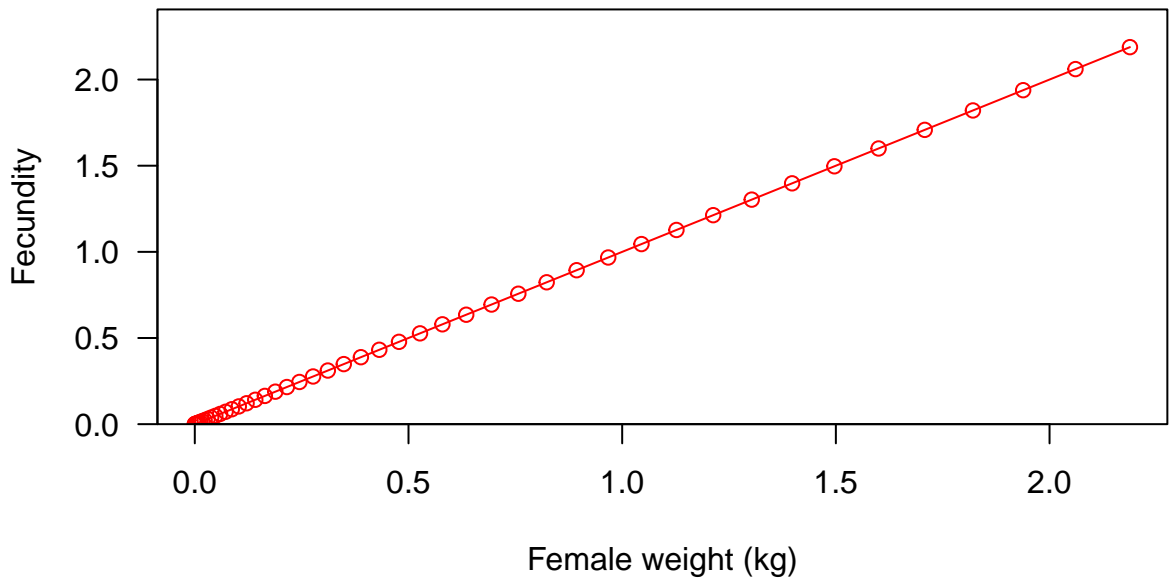


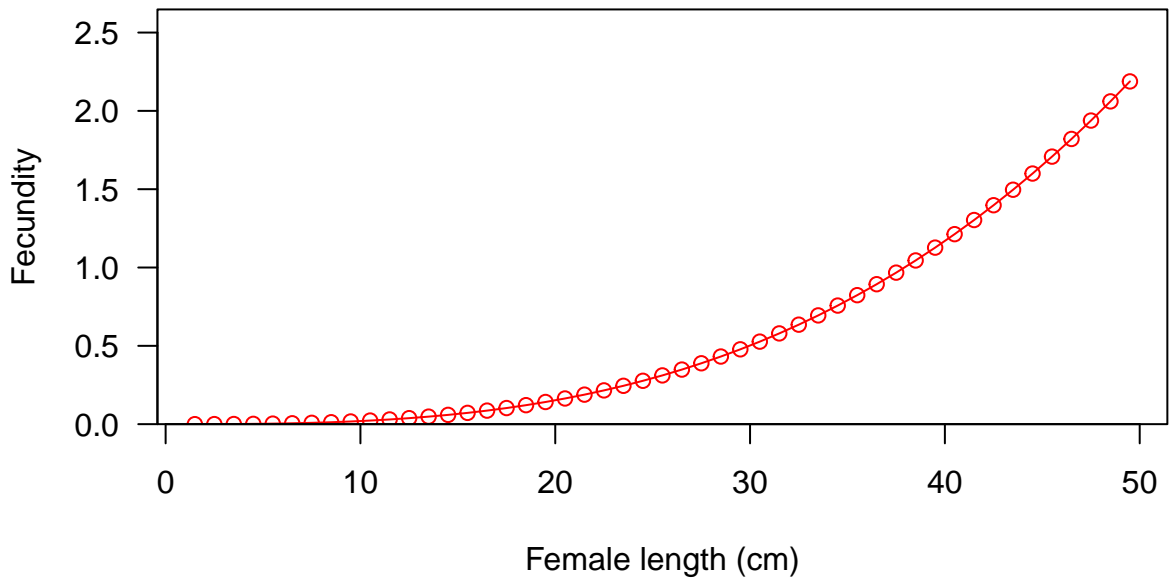


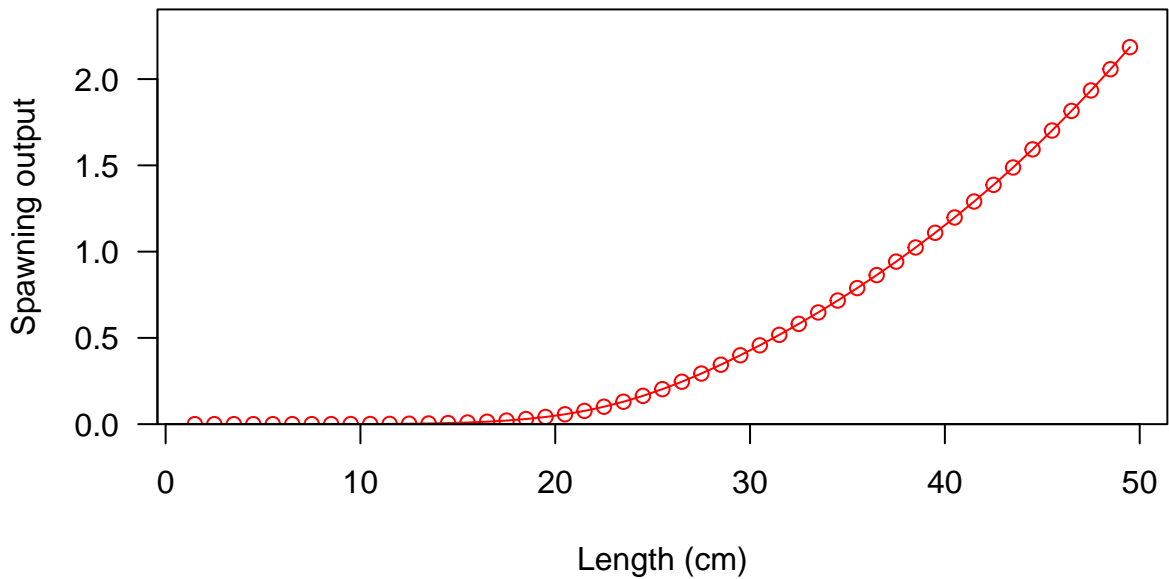


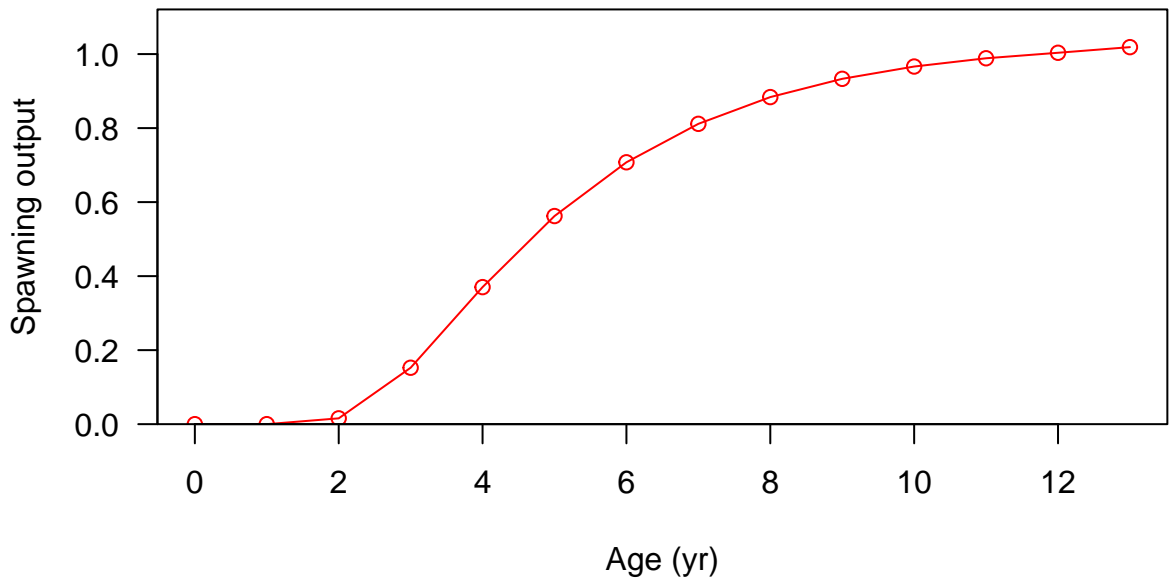




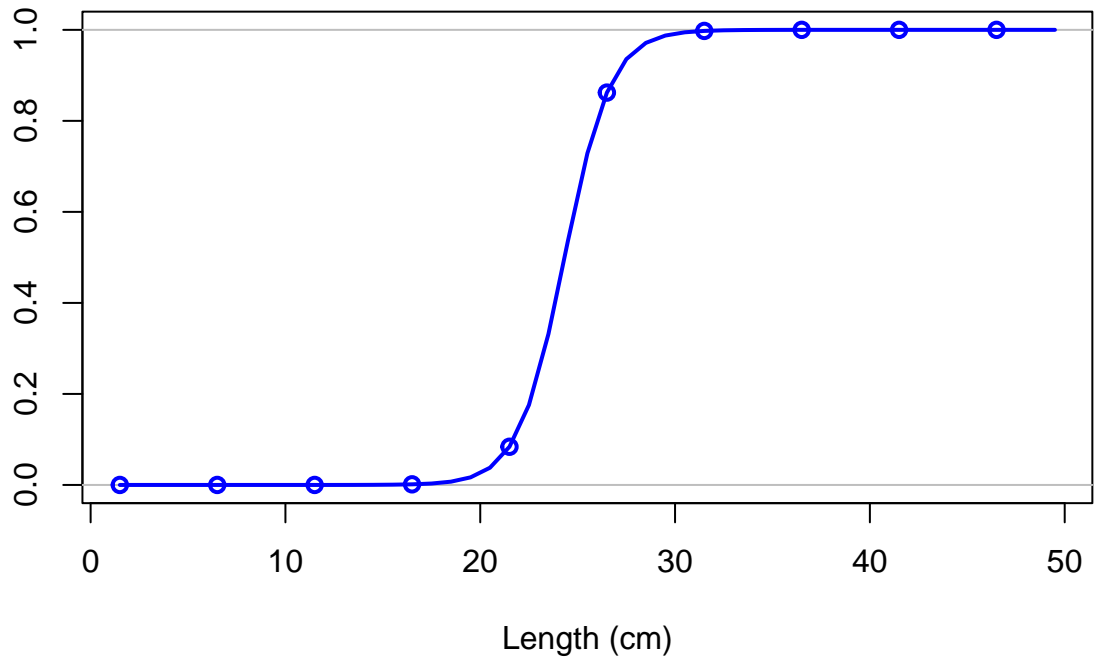




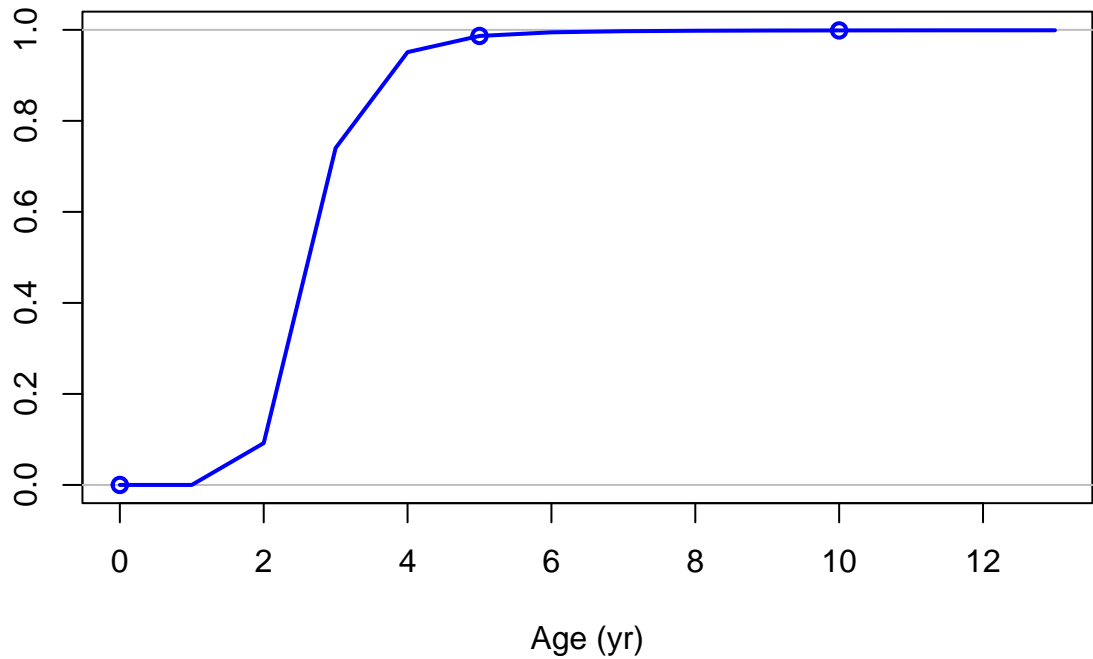




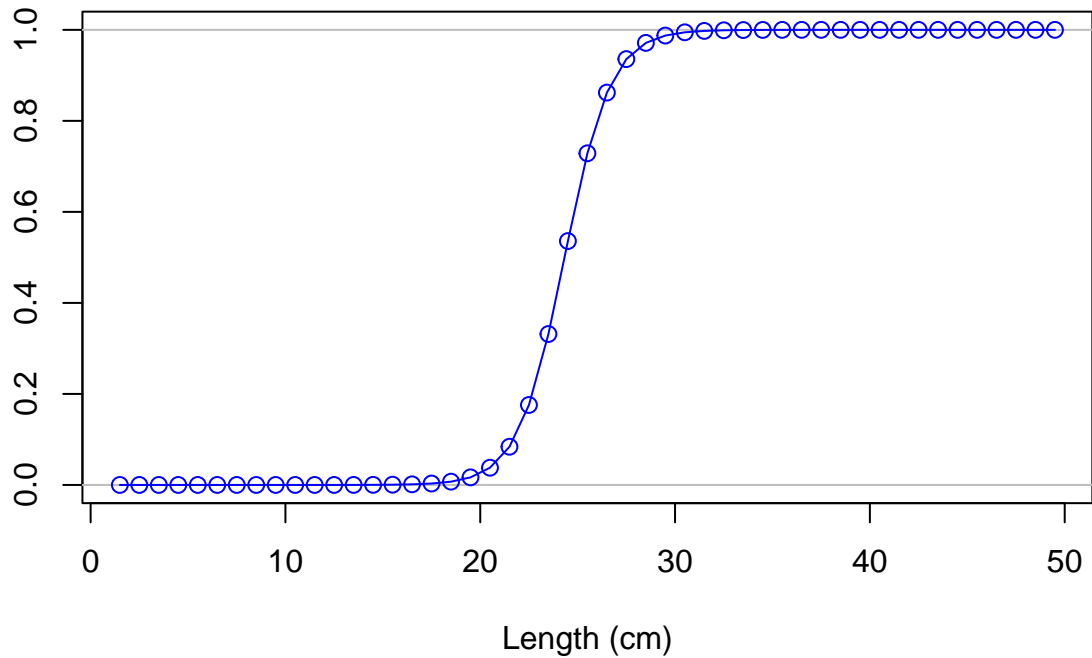
Selectivity



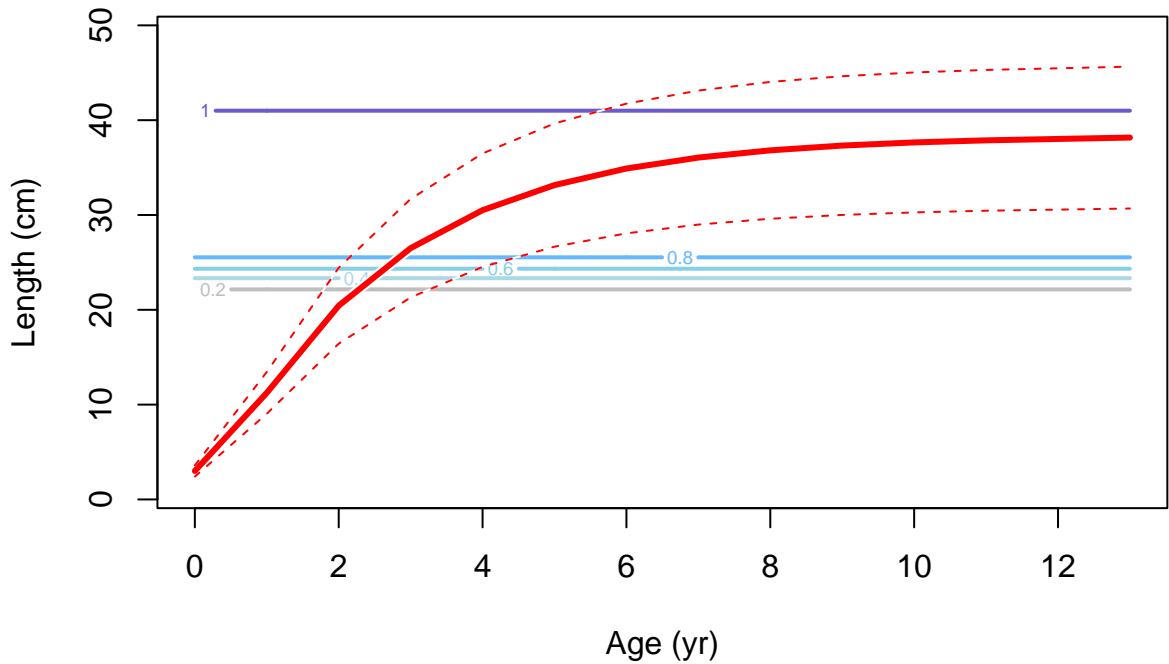
Selectivity

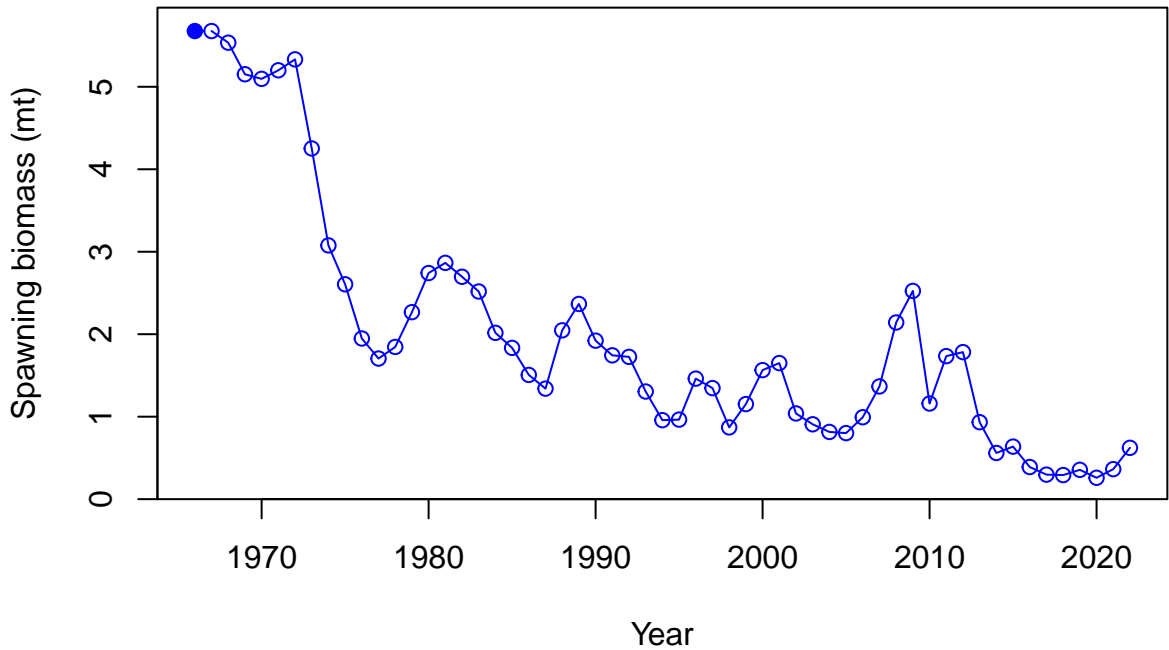


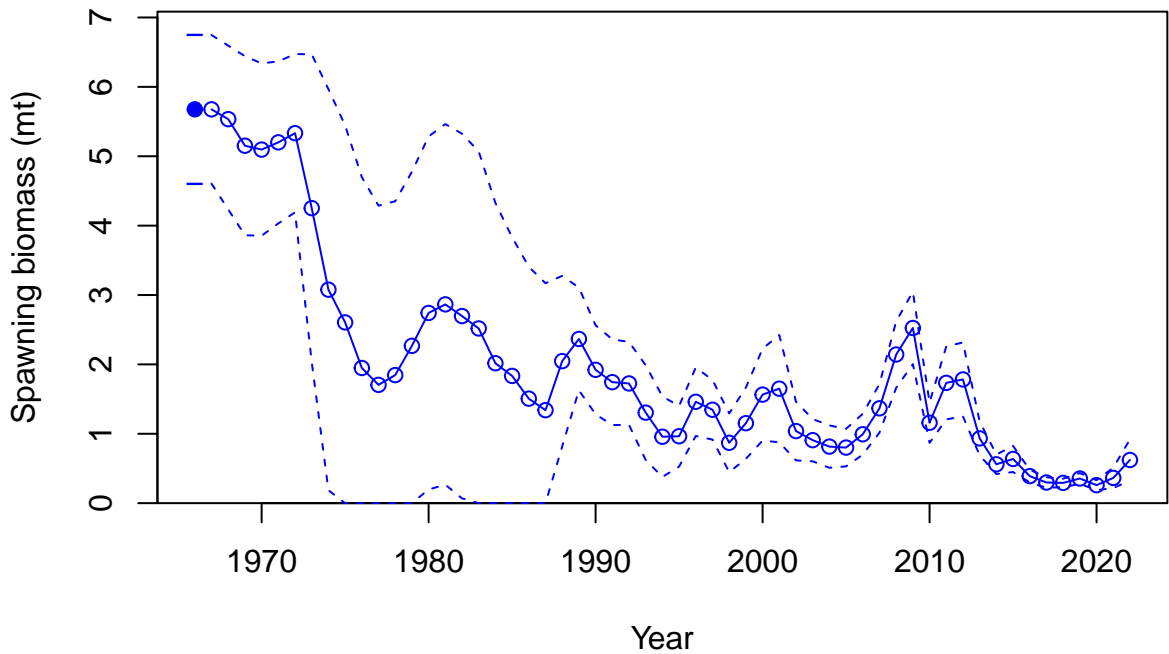
Selectivity



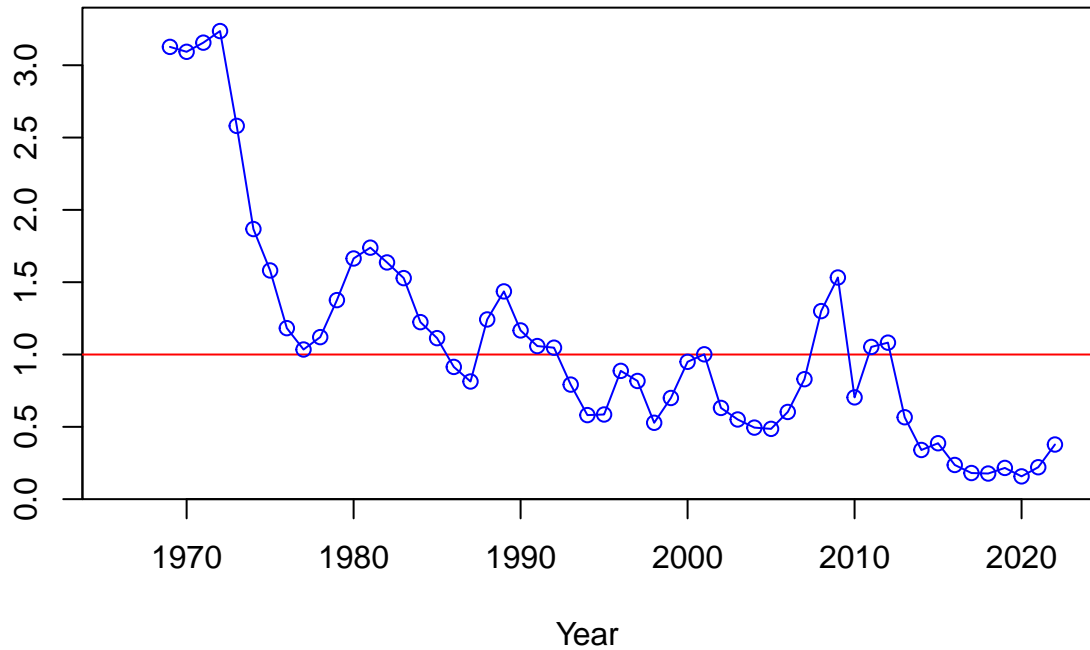




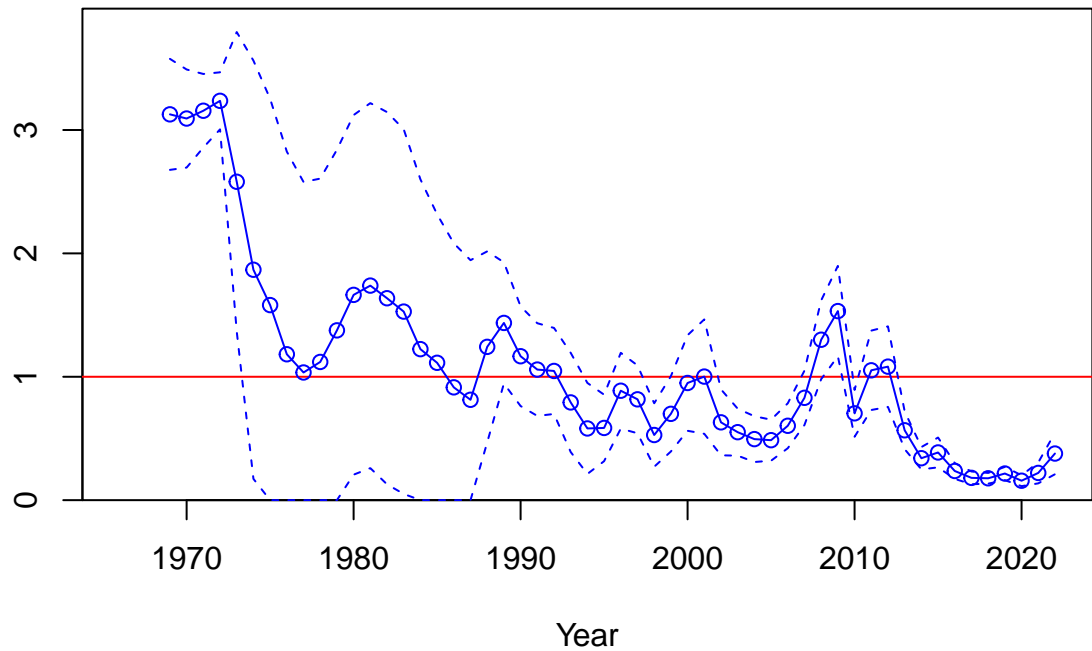


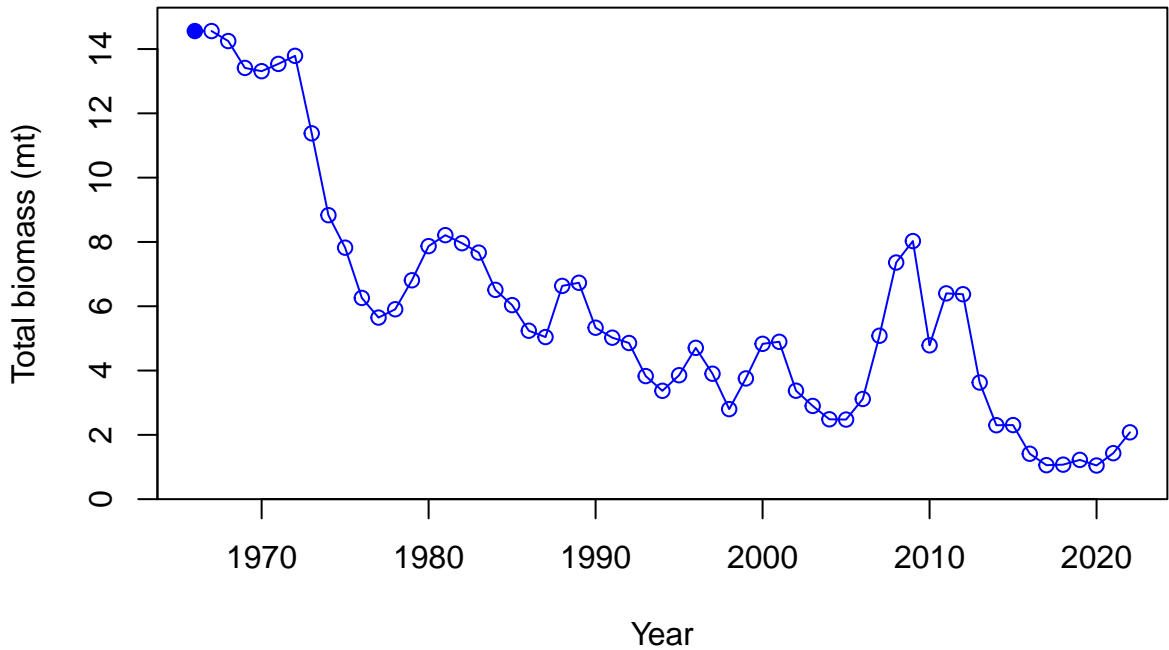


Relative spawning biomass:  $B/B_{MSY}$

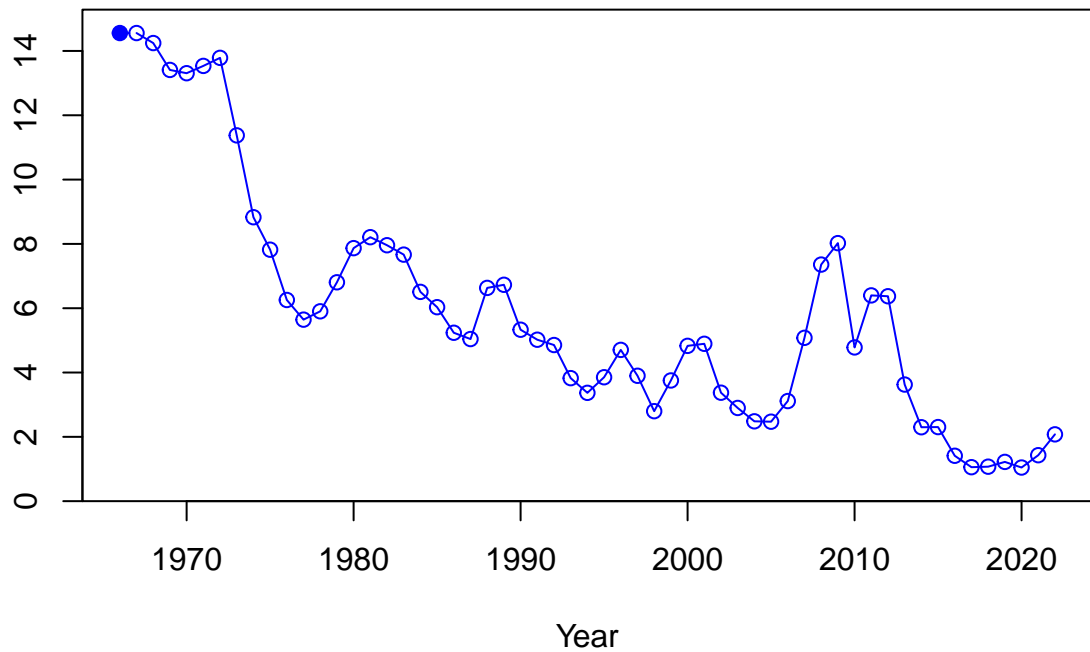


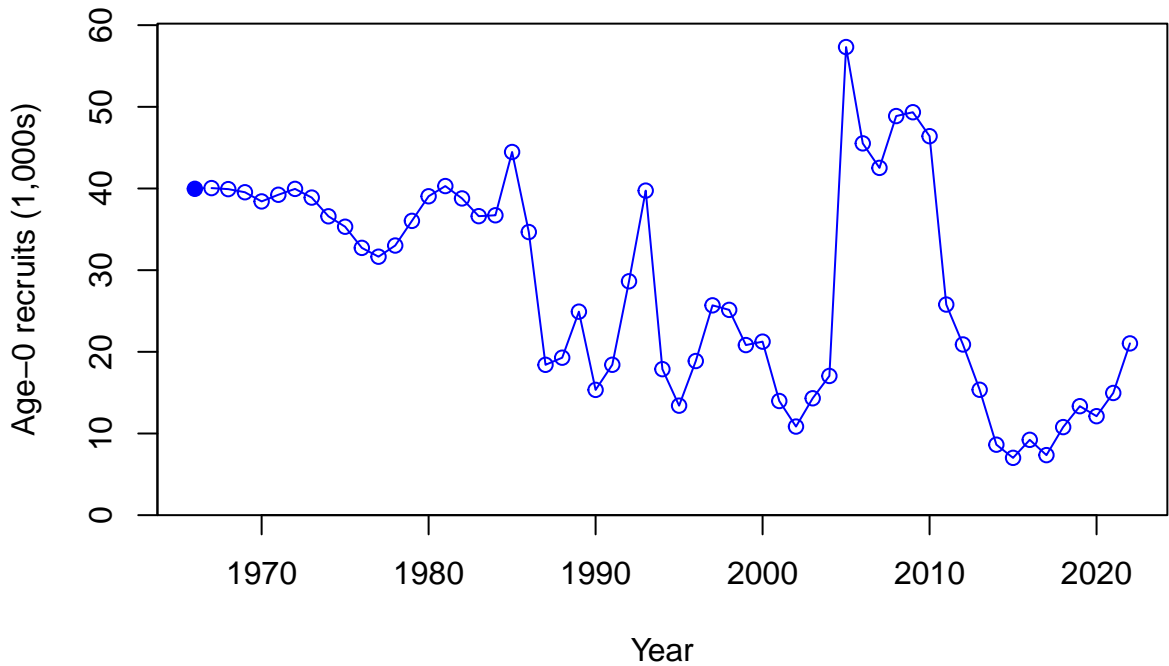
Relative spawning biomass:  $B/B_{MSY}$





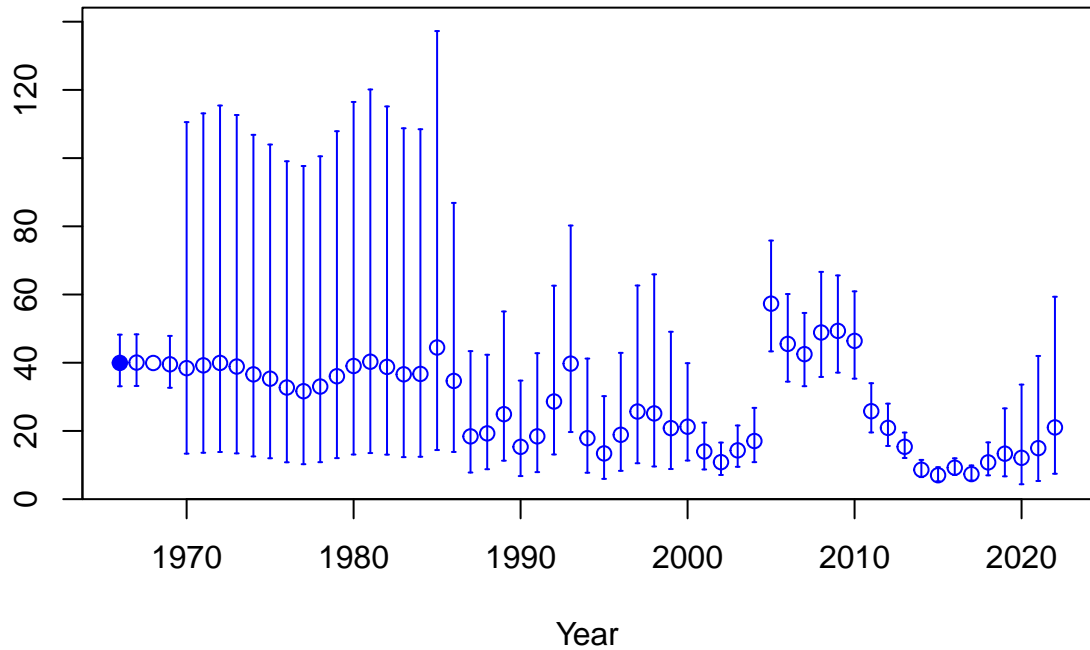
Summary biomass (mt)



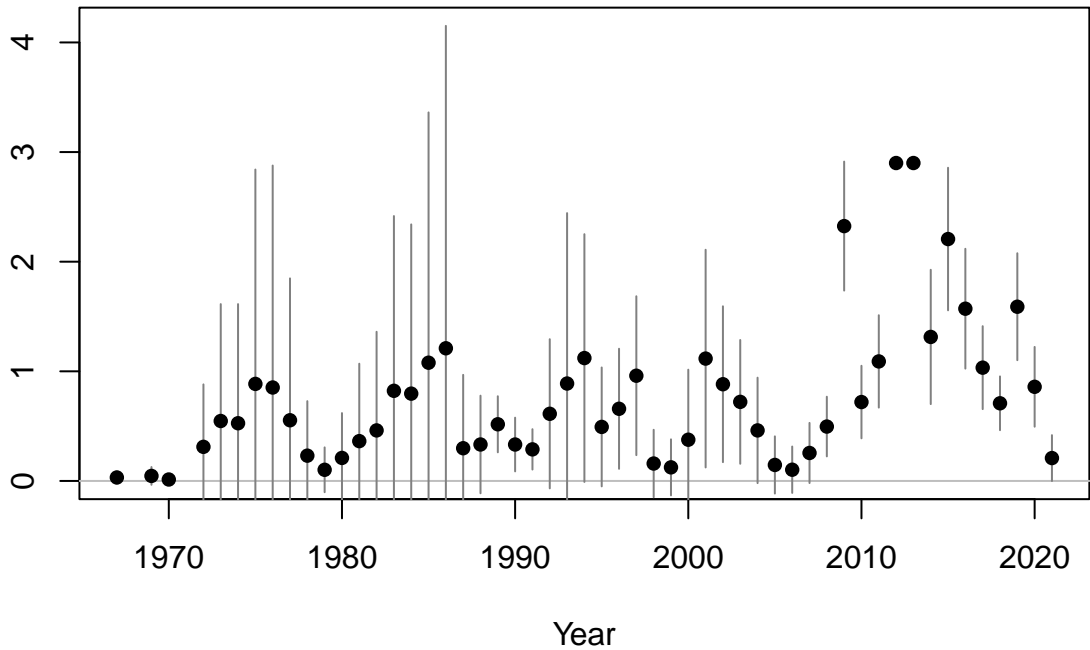




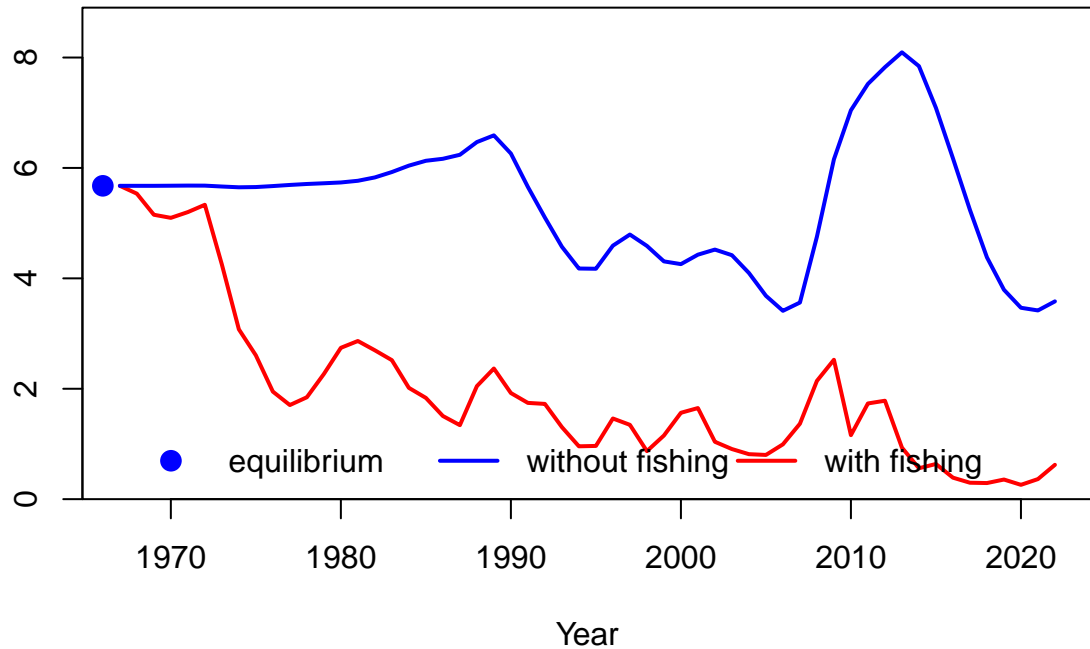
Age-0 recruits (1,000s)



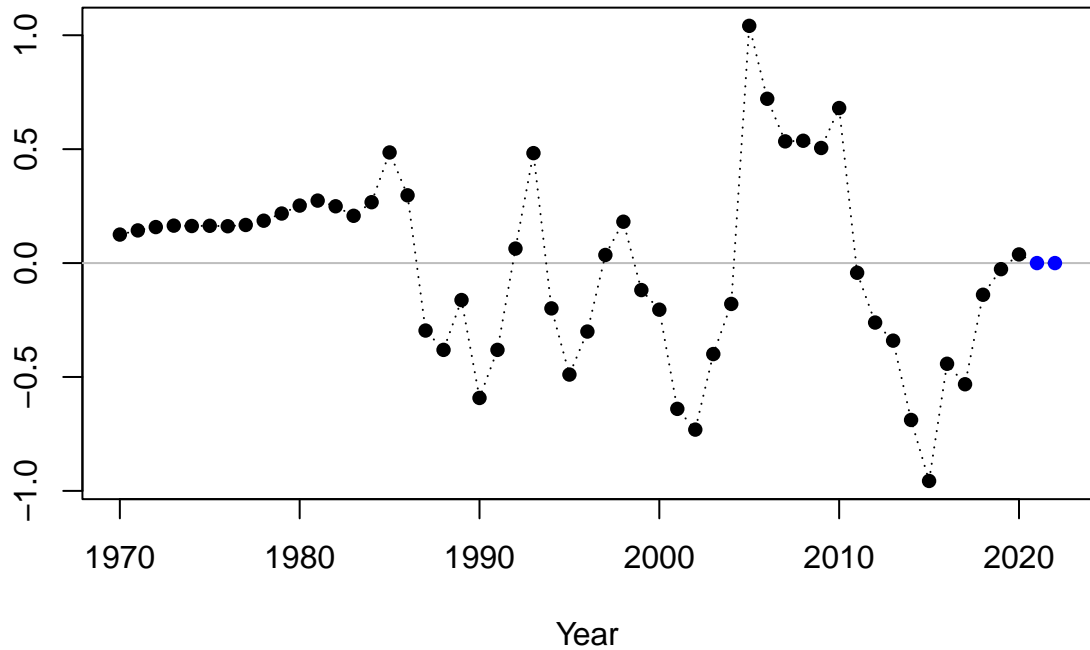
Summary Fishing Mortality



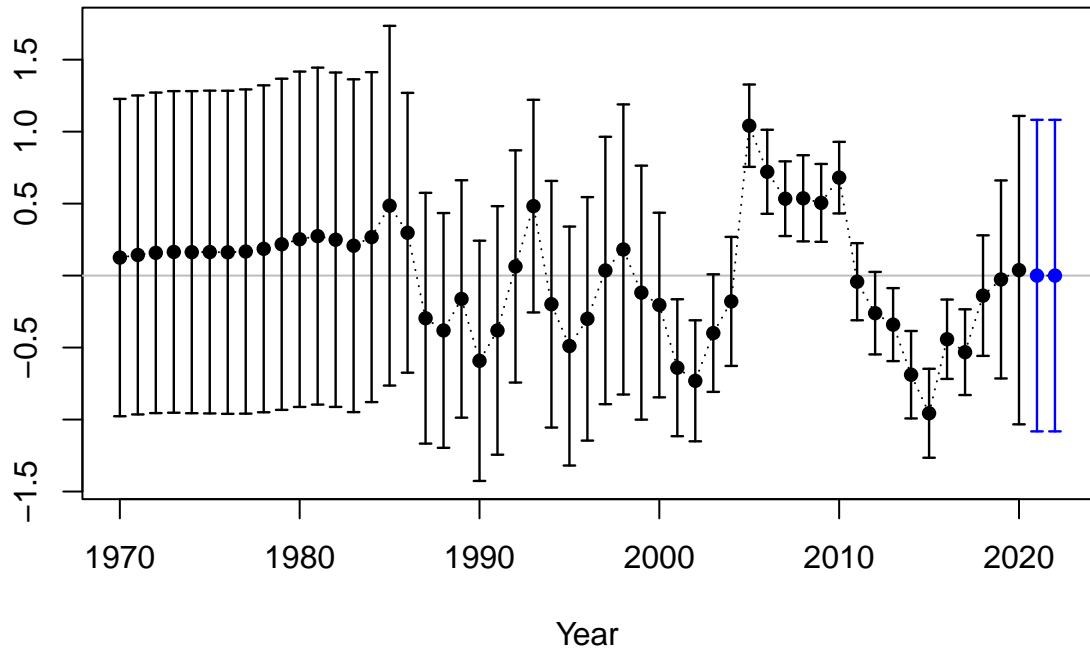
Spawning biomass (mt)



Log recruitment deviation

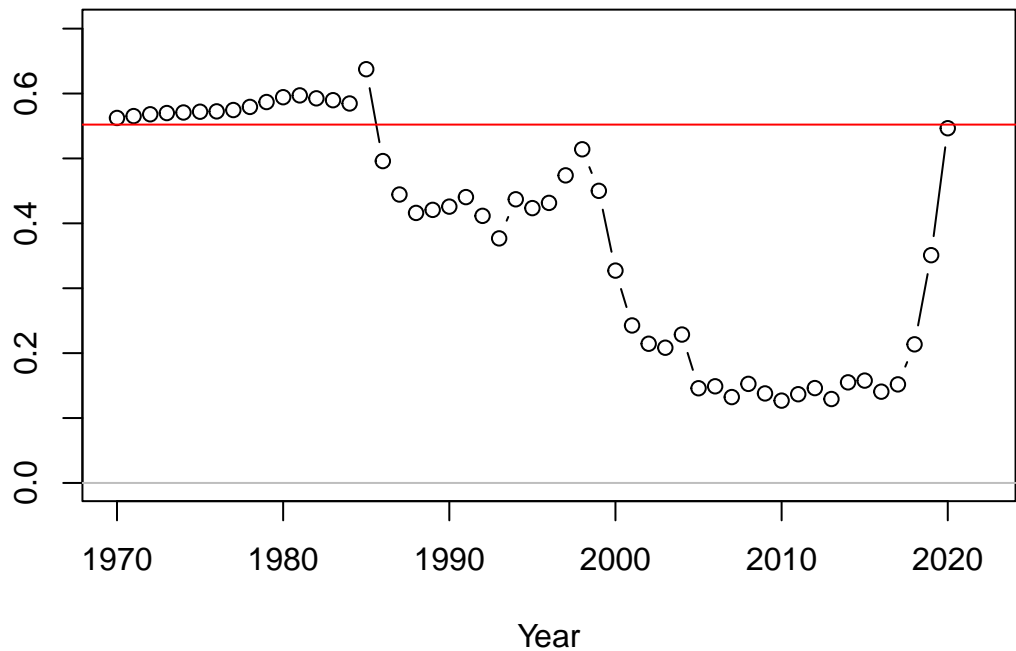


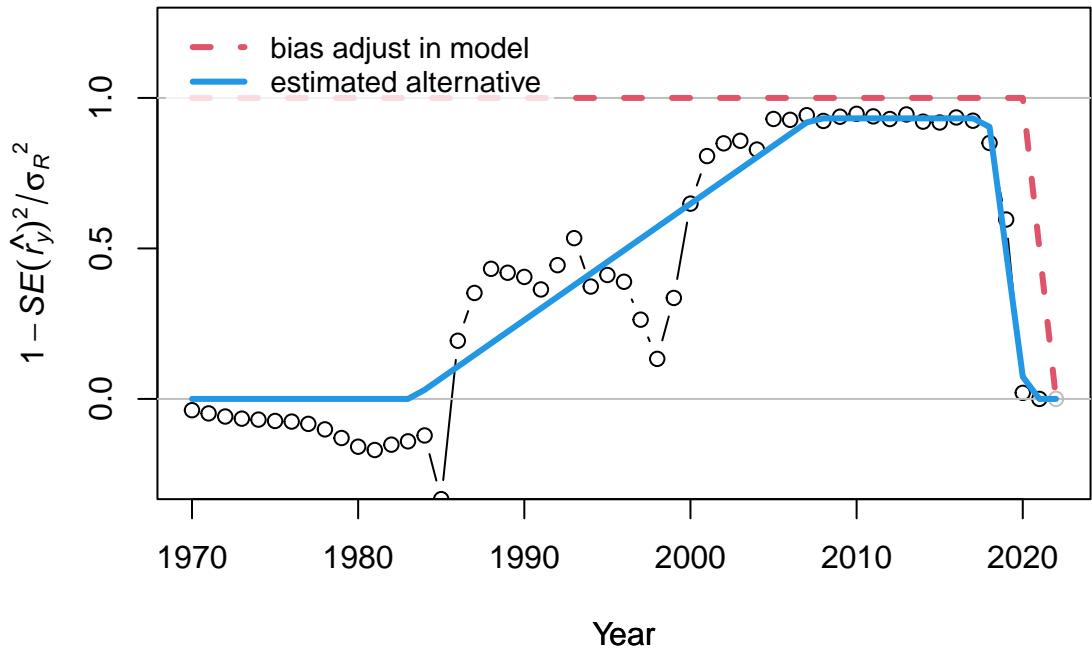
Log recruitment deviation

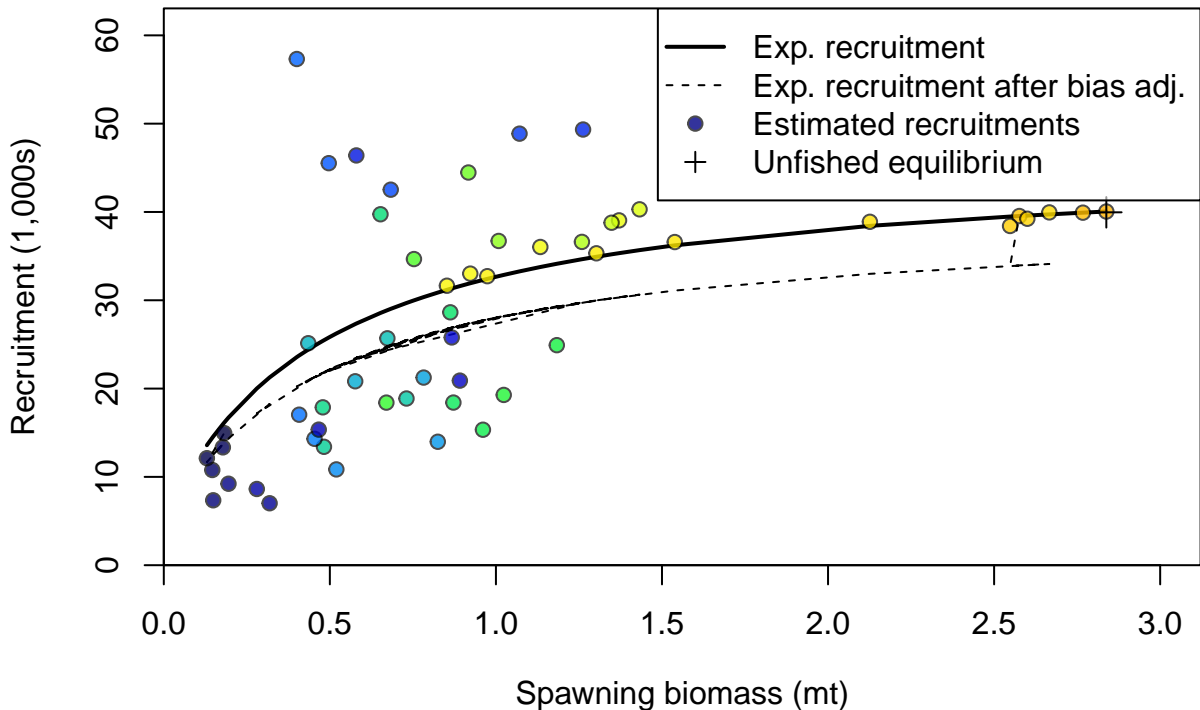


## Recruitment deviation variance

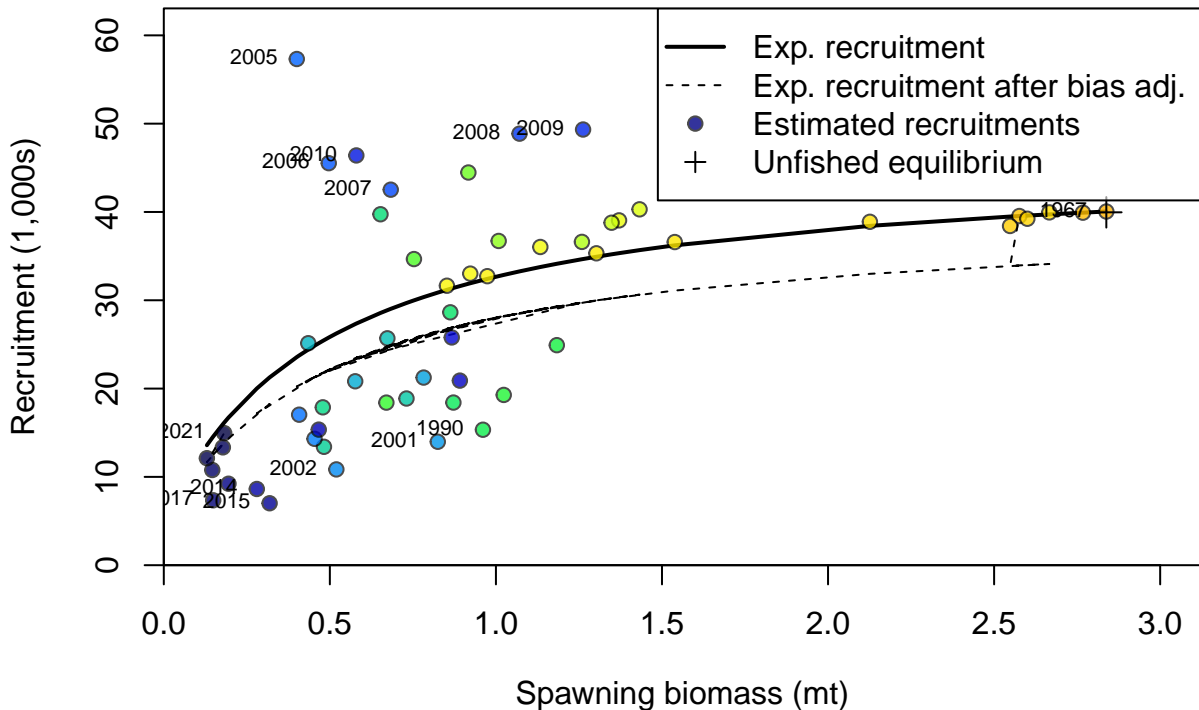
Asymptotic standard error estimate



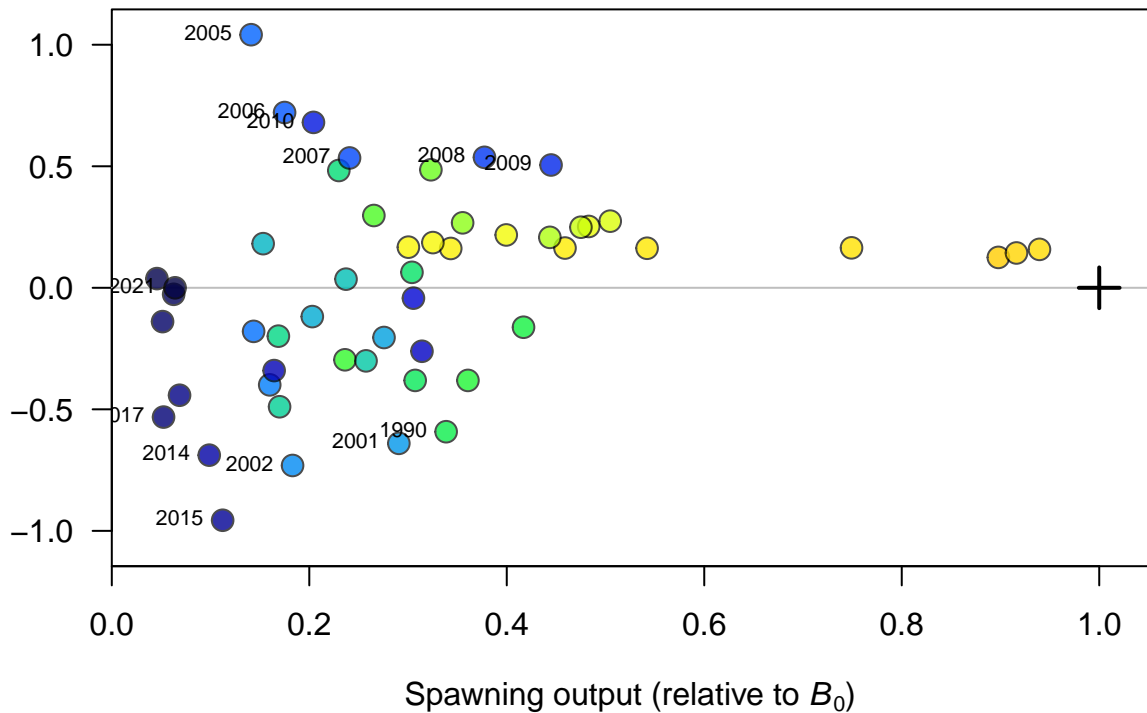


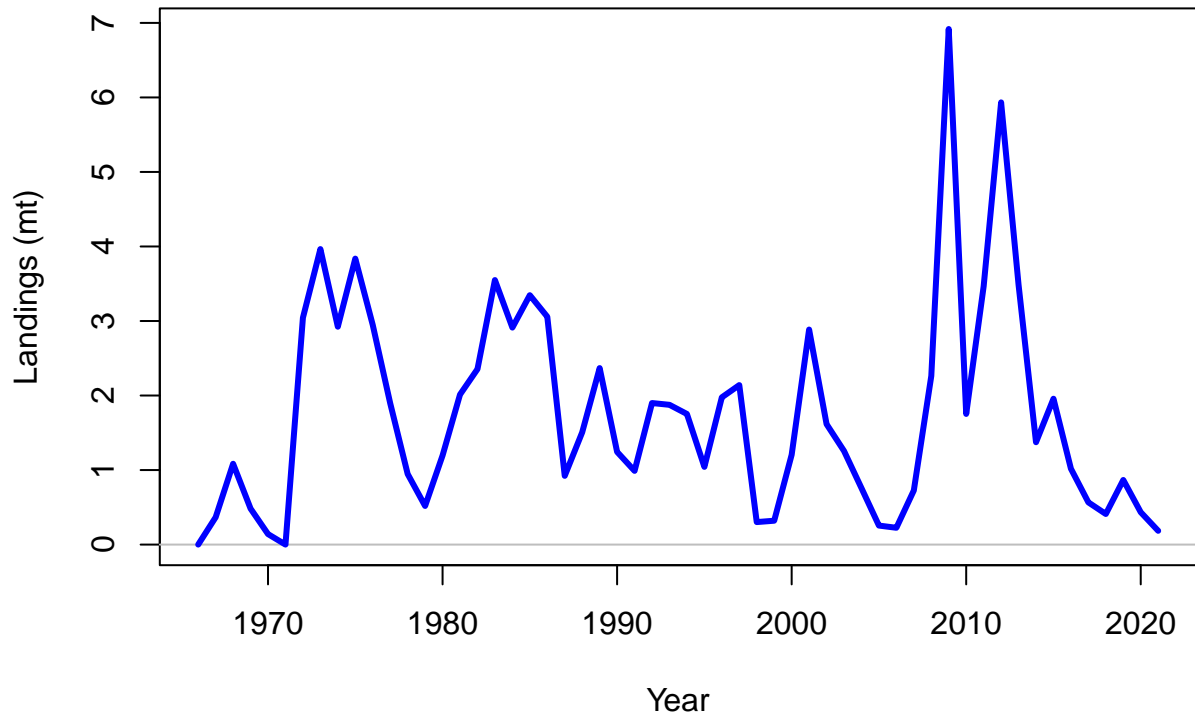


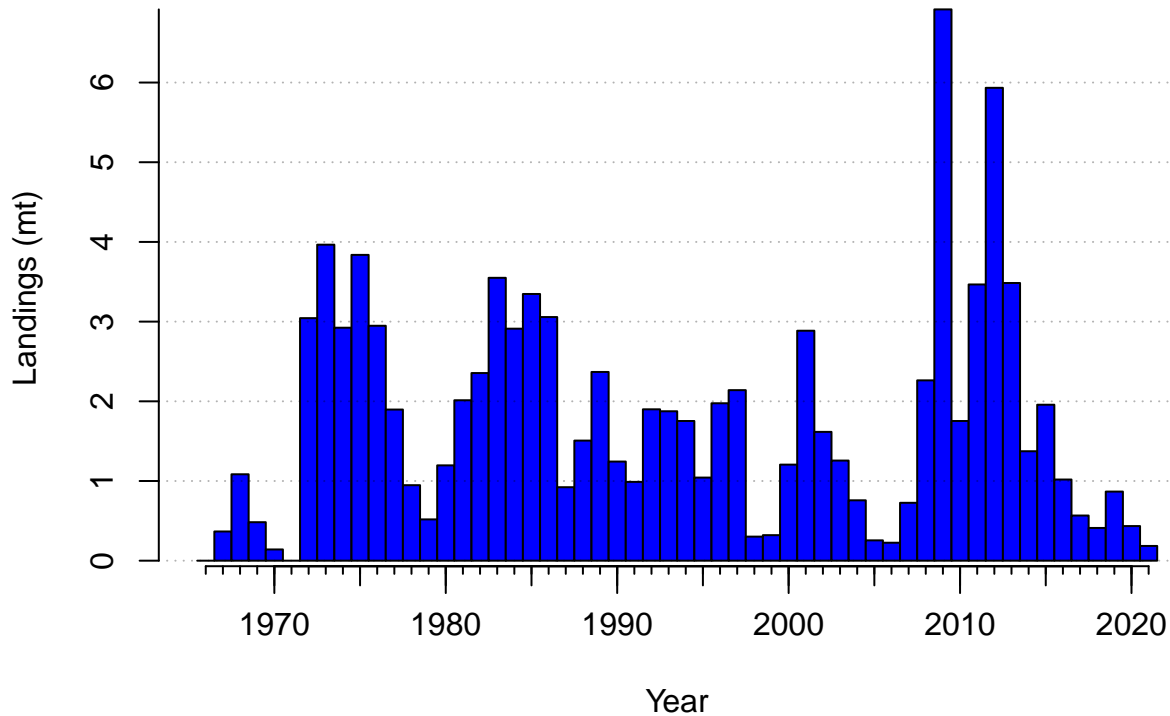




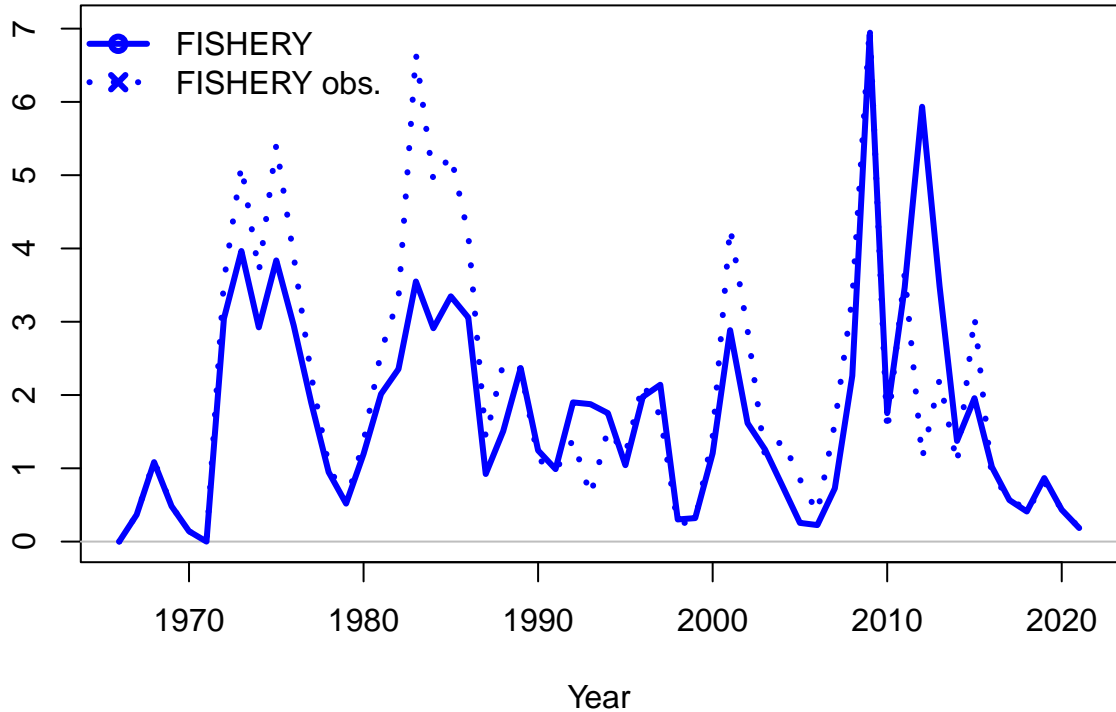
Log recruitment deviation

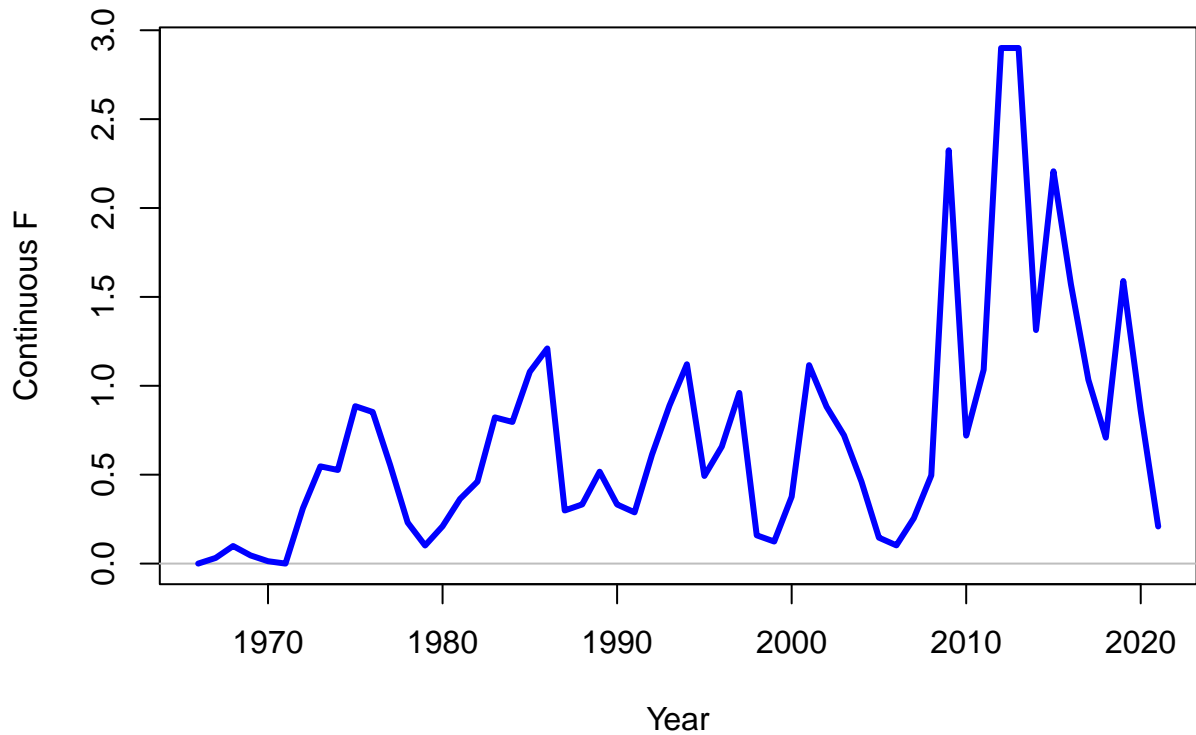




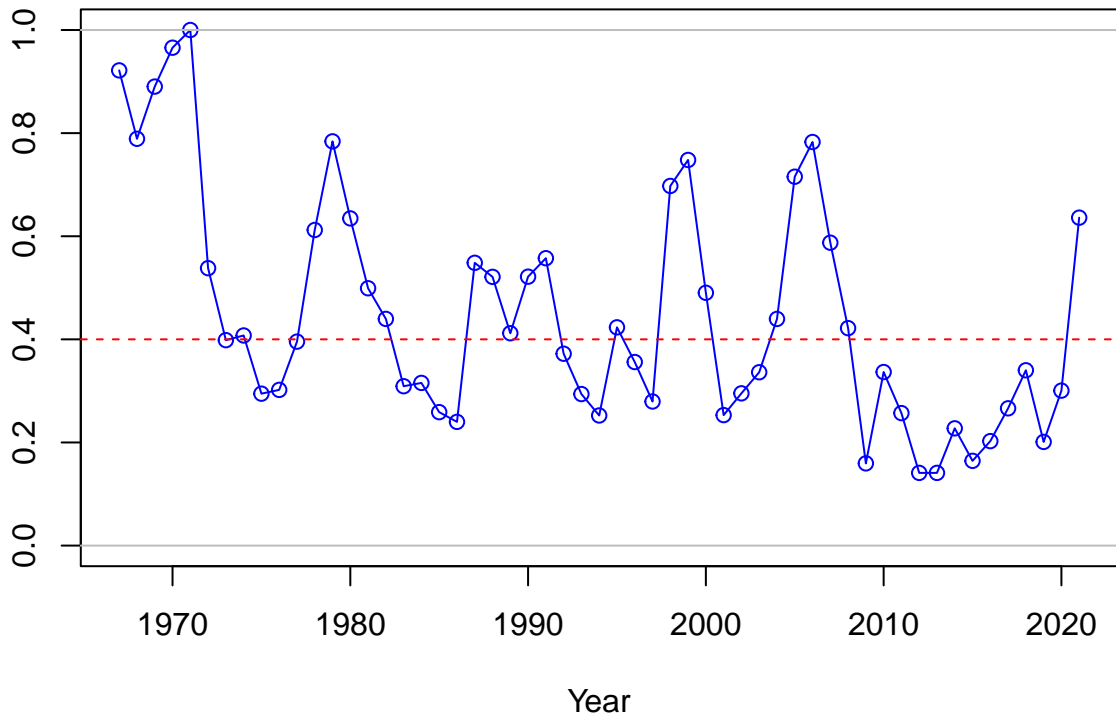


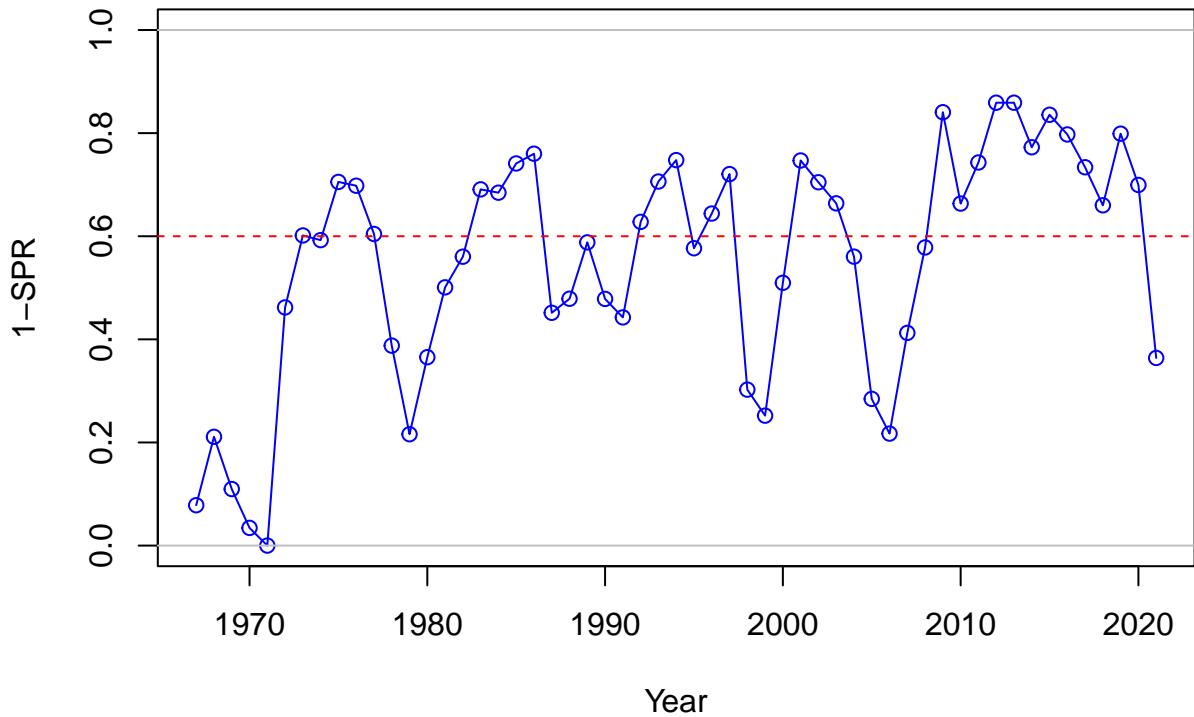
Observed and expected Landings (mt)





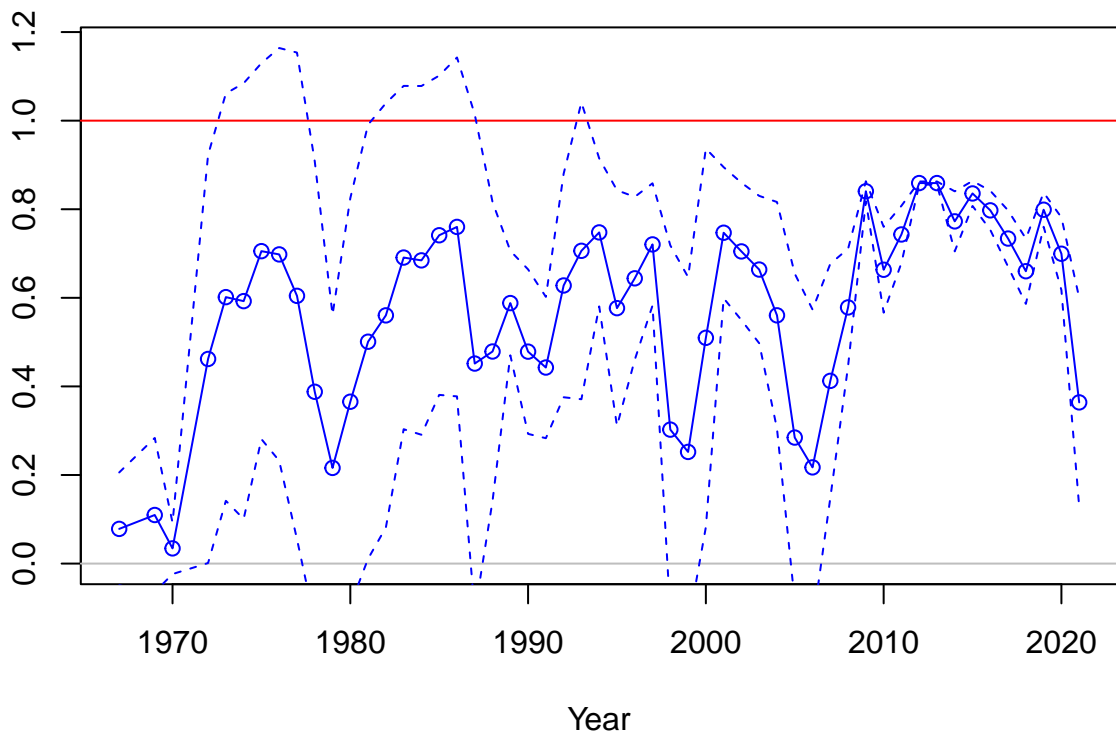
SPR



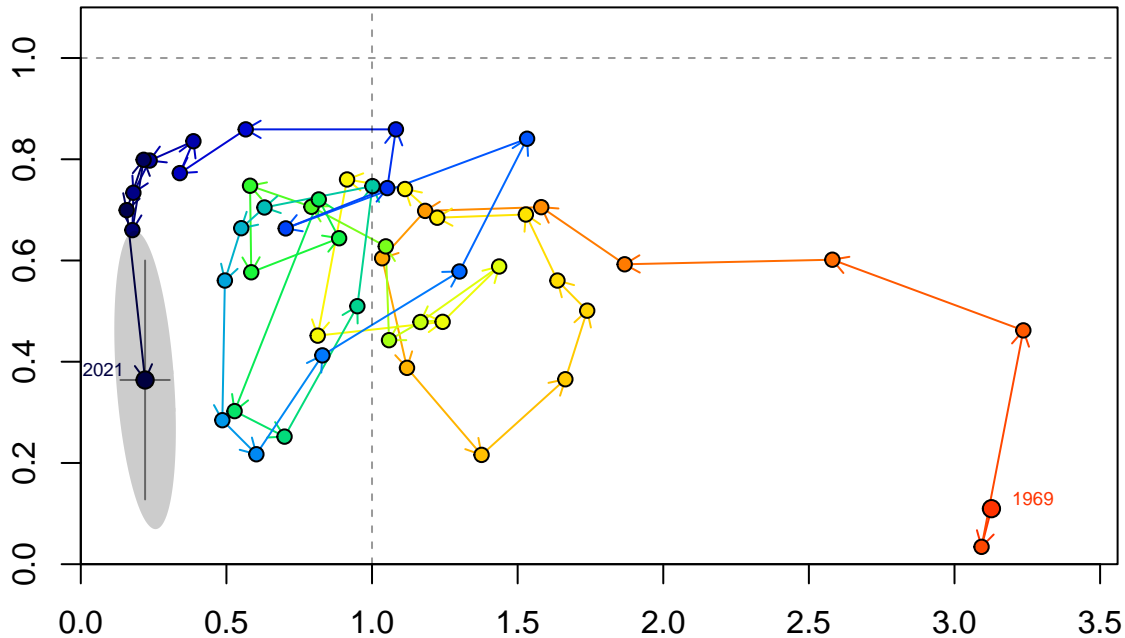




Fishing intensity: 1-SPR

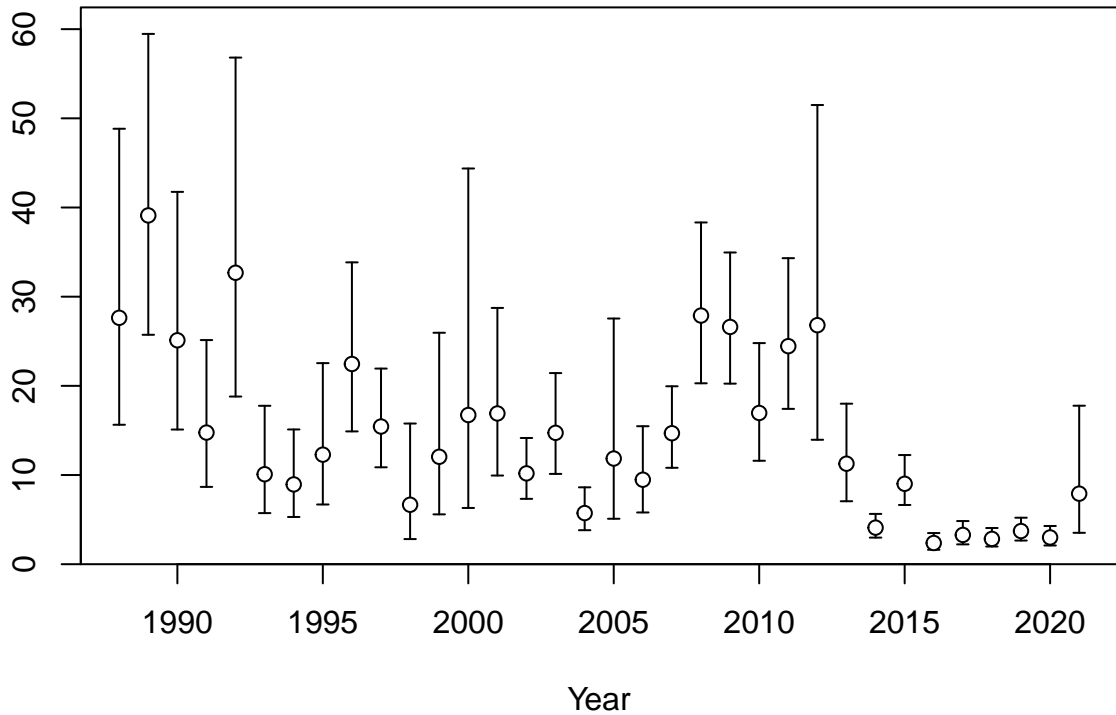


Fishing intensity: 1-SPR

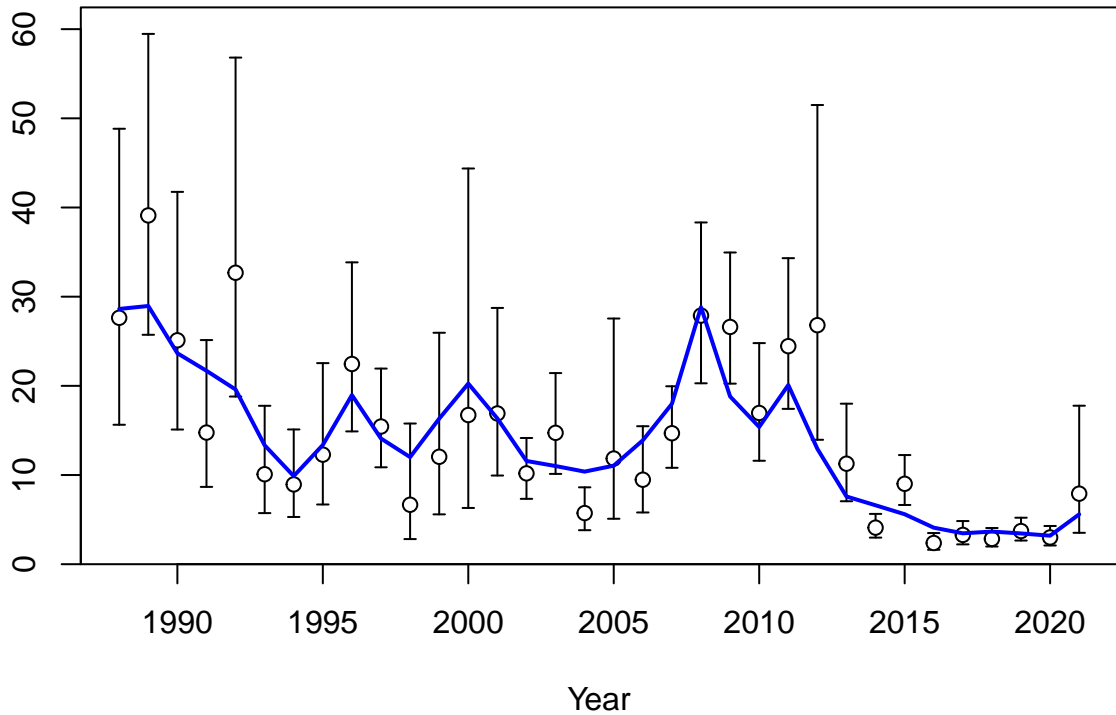


Relative spawning output:  $B/B_{MSY}$

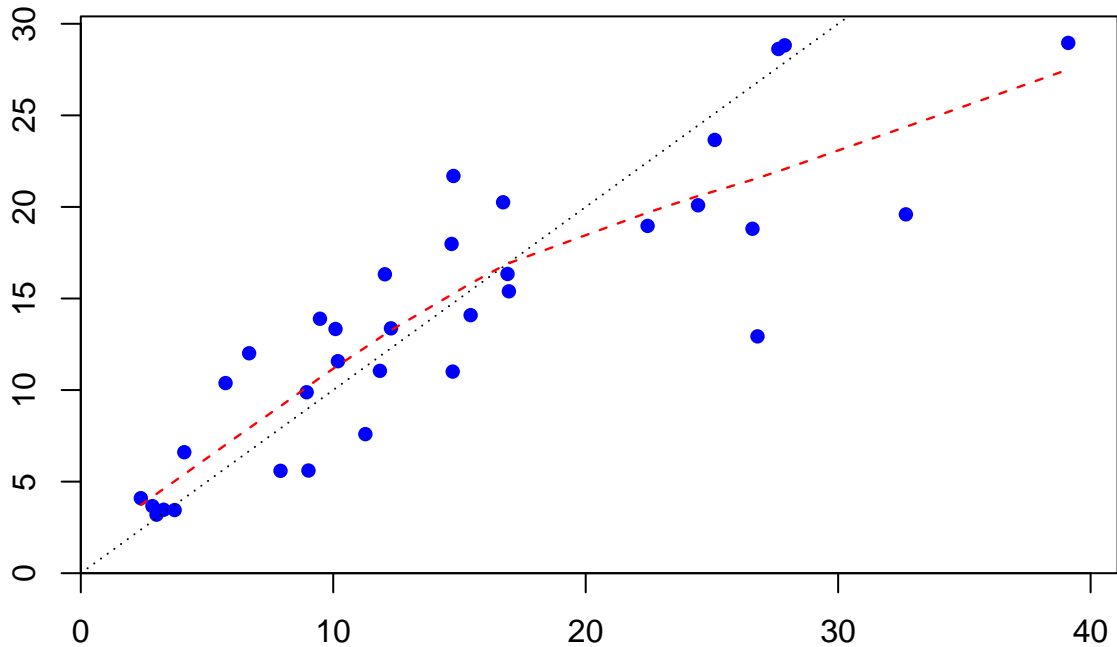
Index



Index

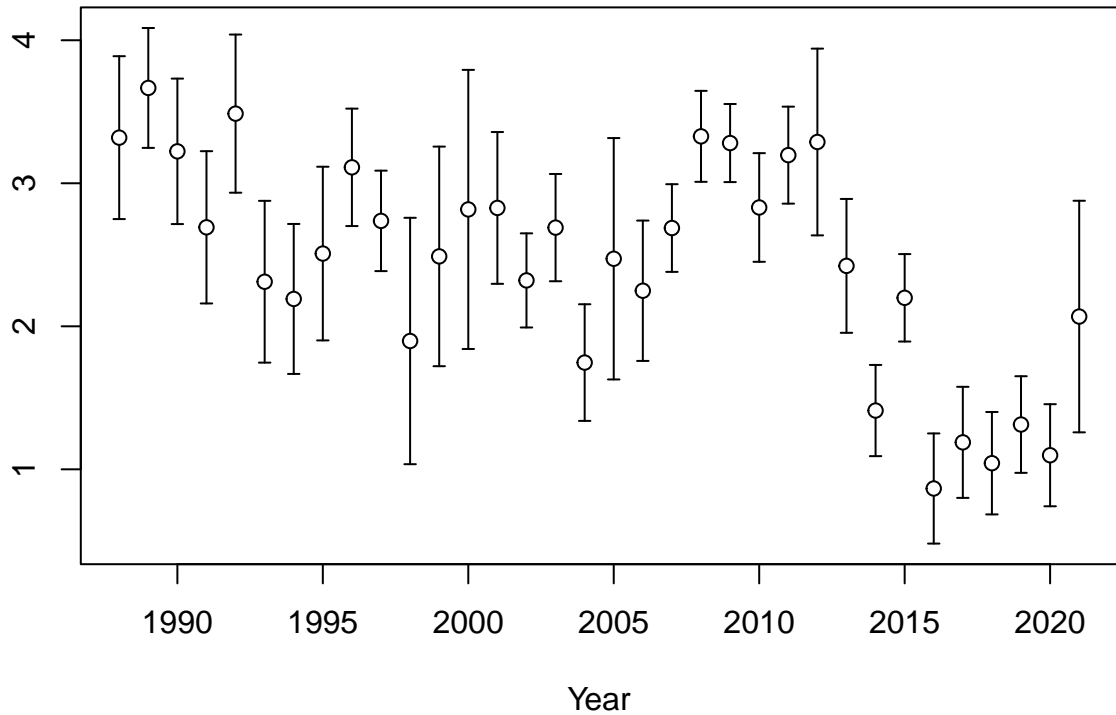


Expected index

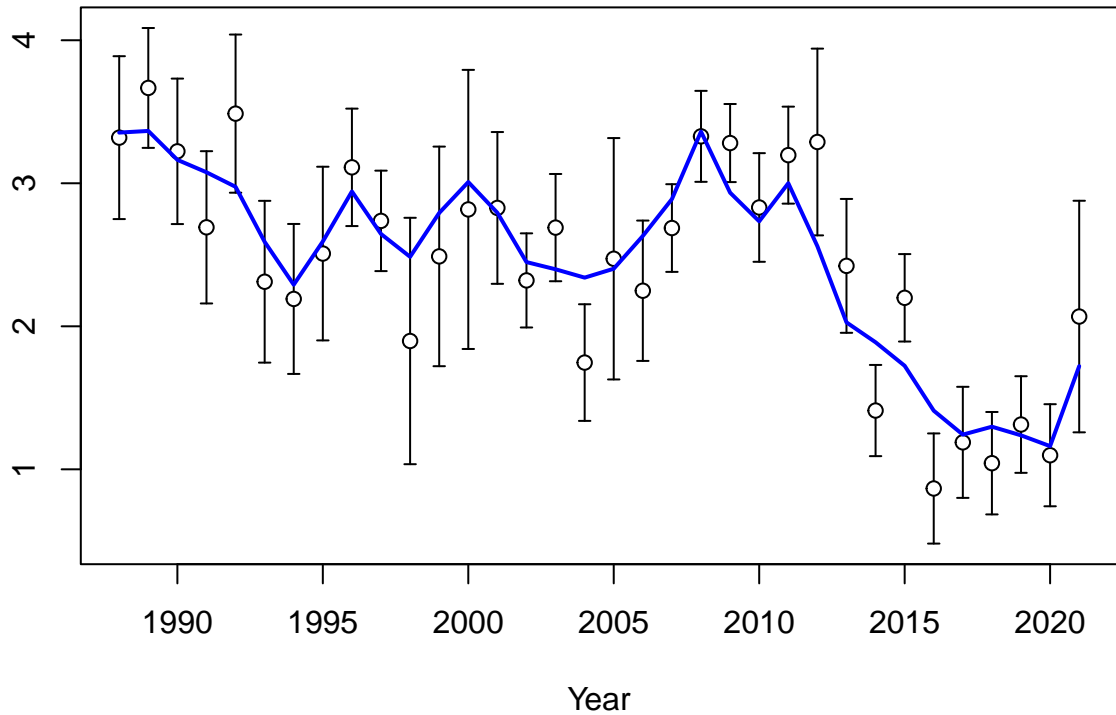


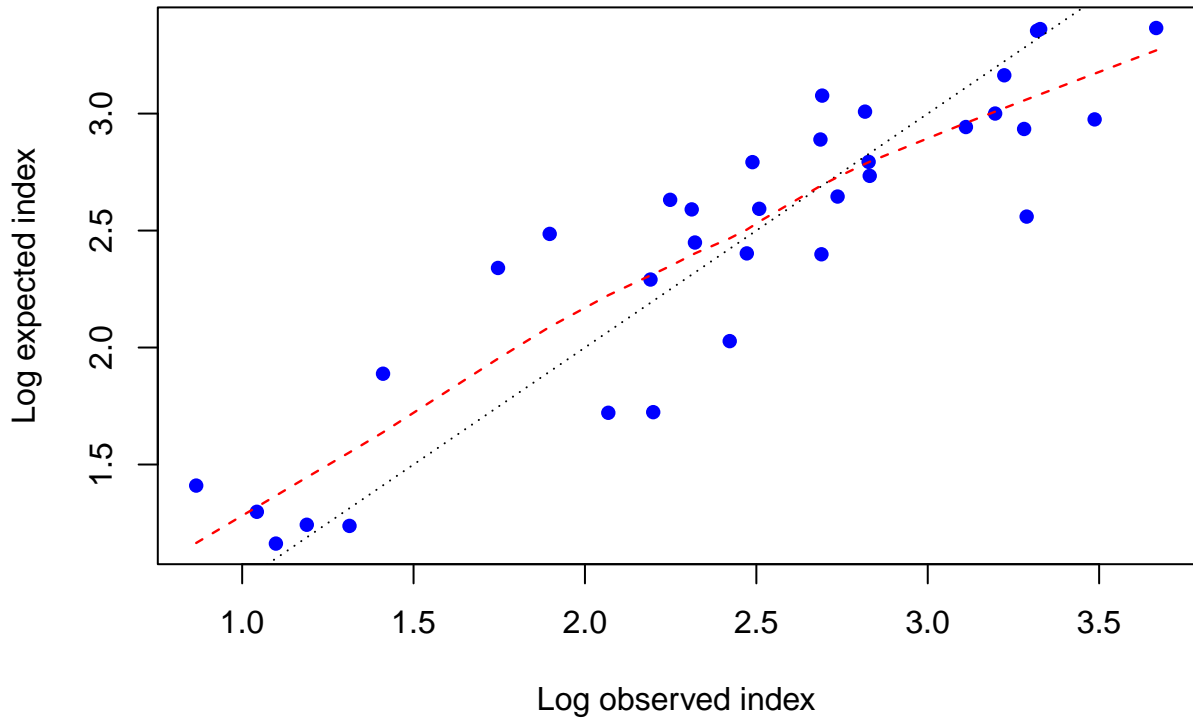
Observed index

Log index

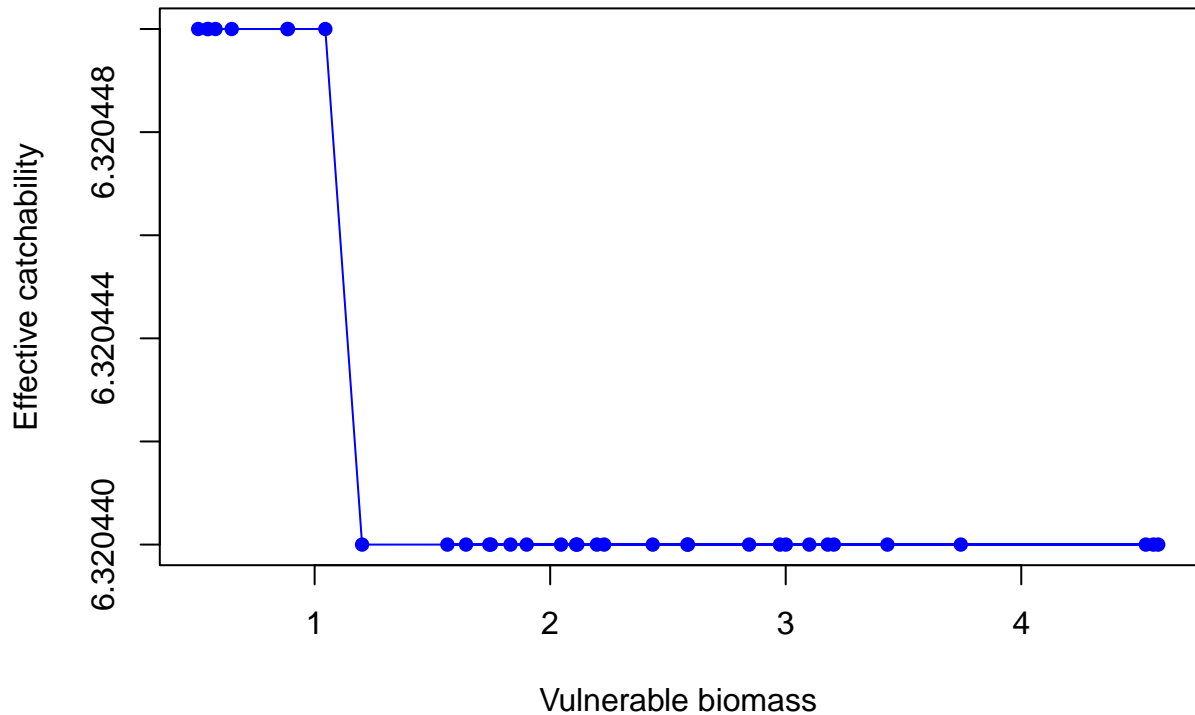


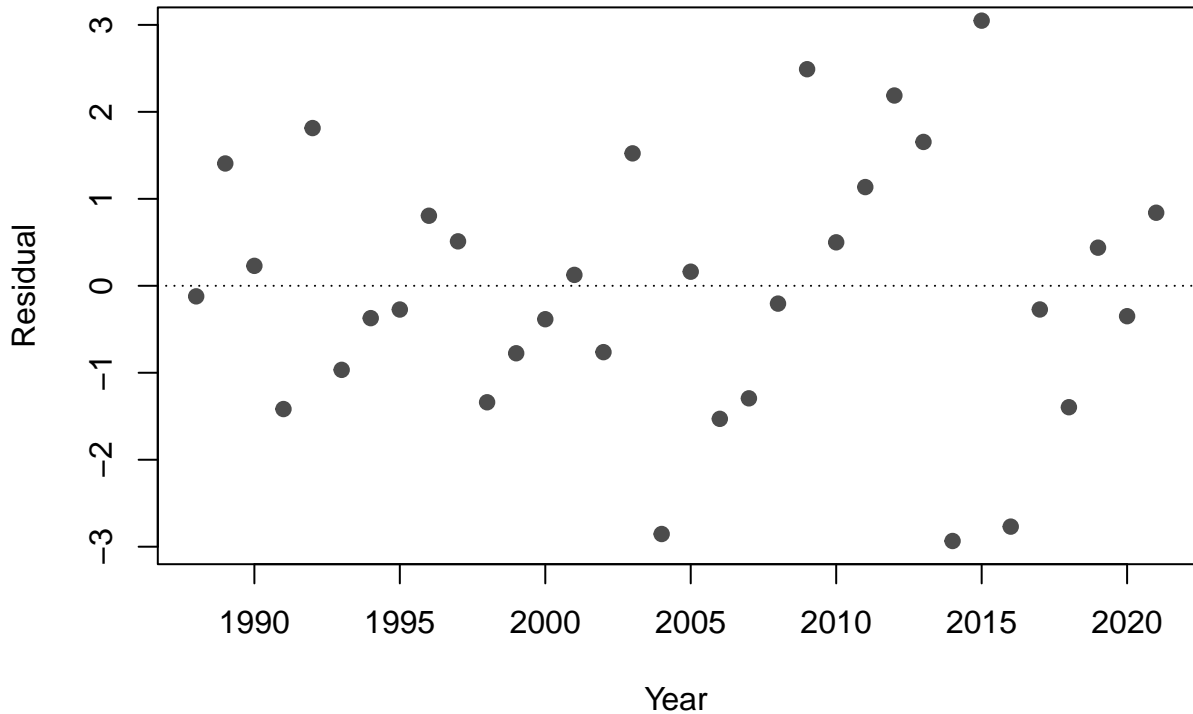
Log index

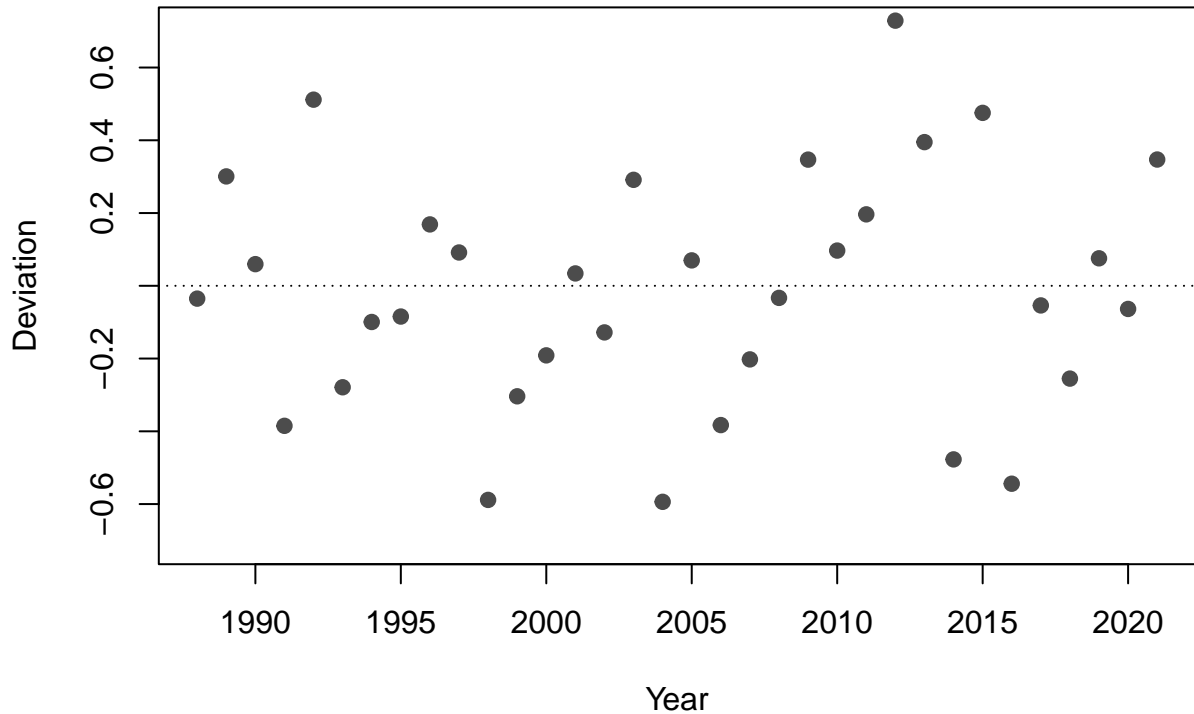


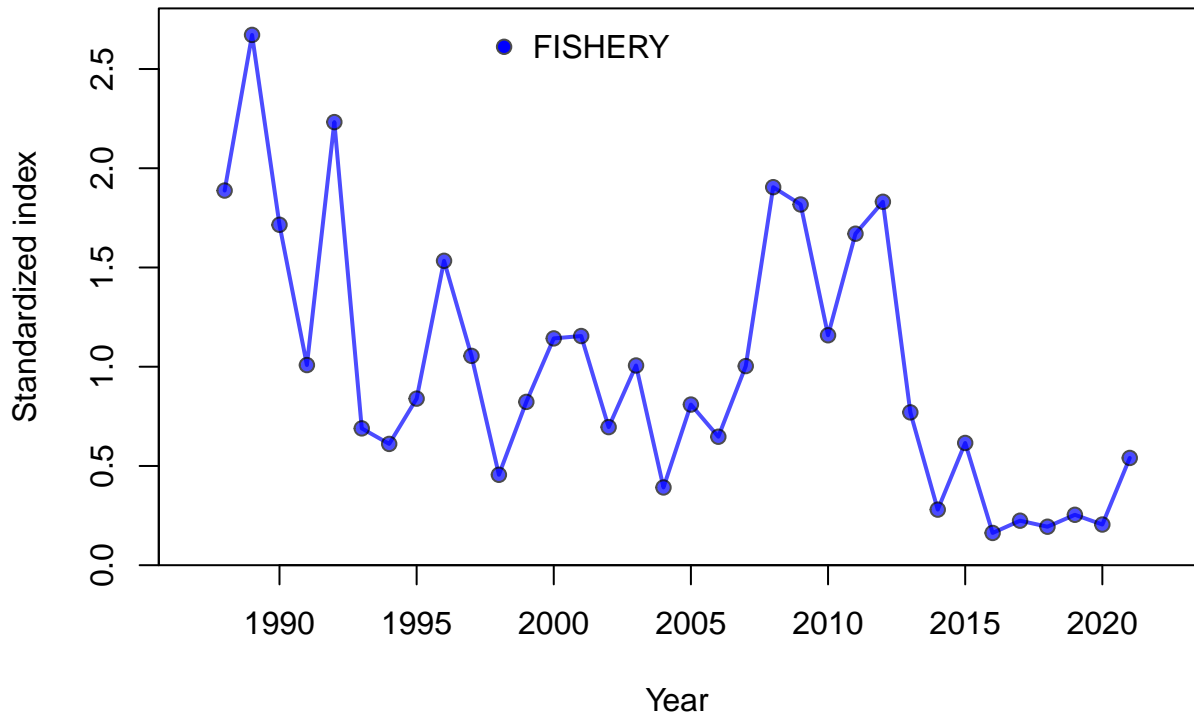


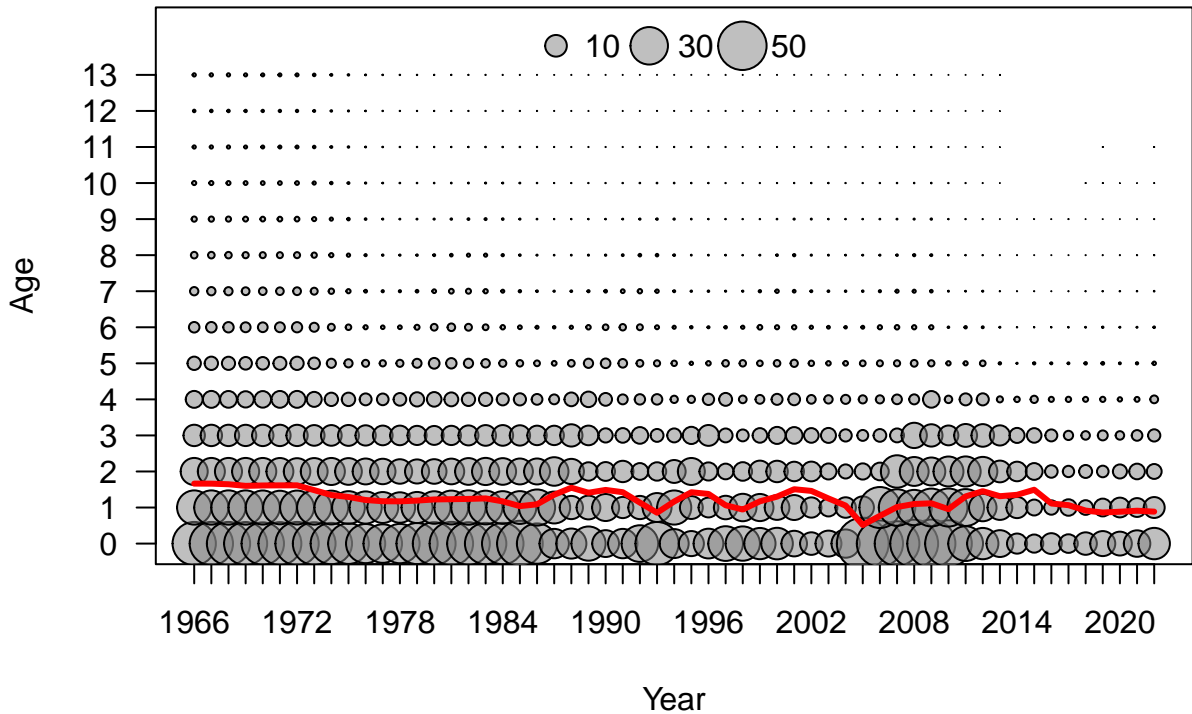




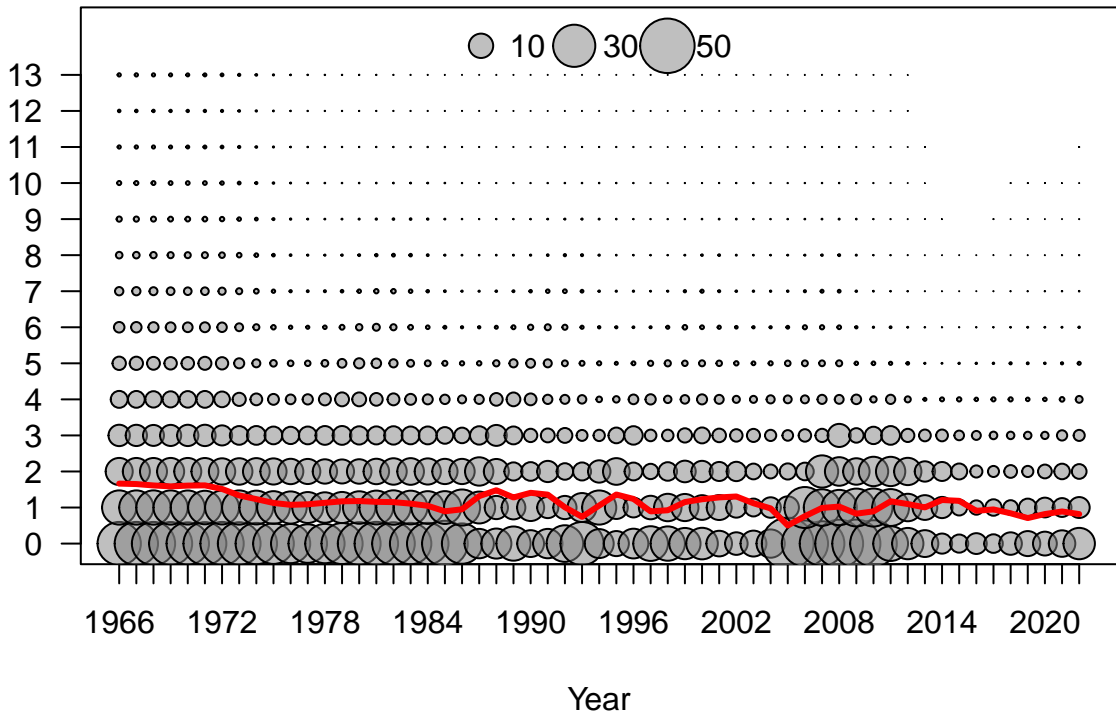


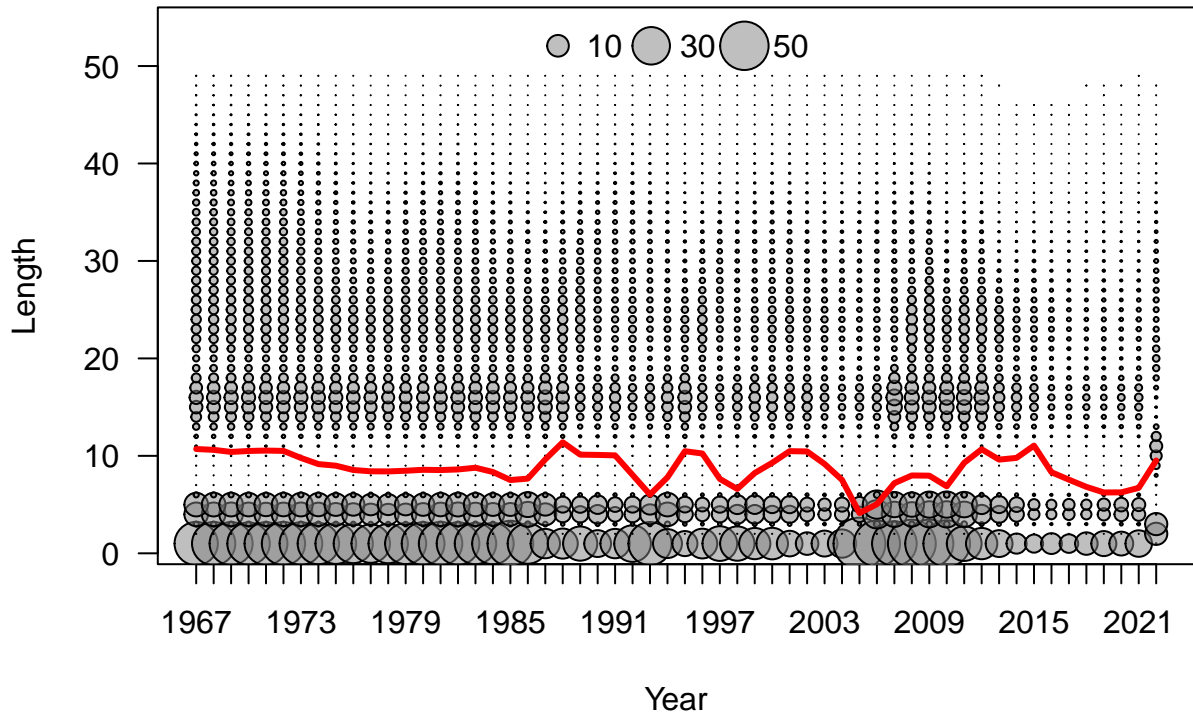


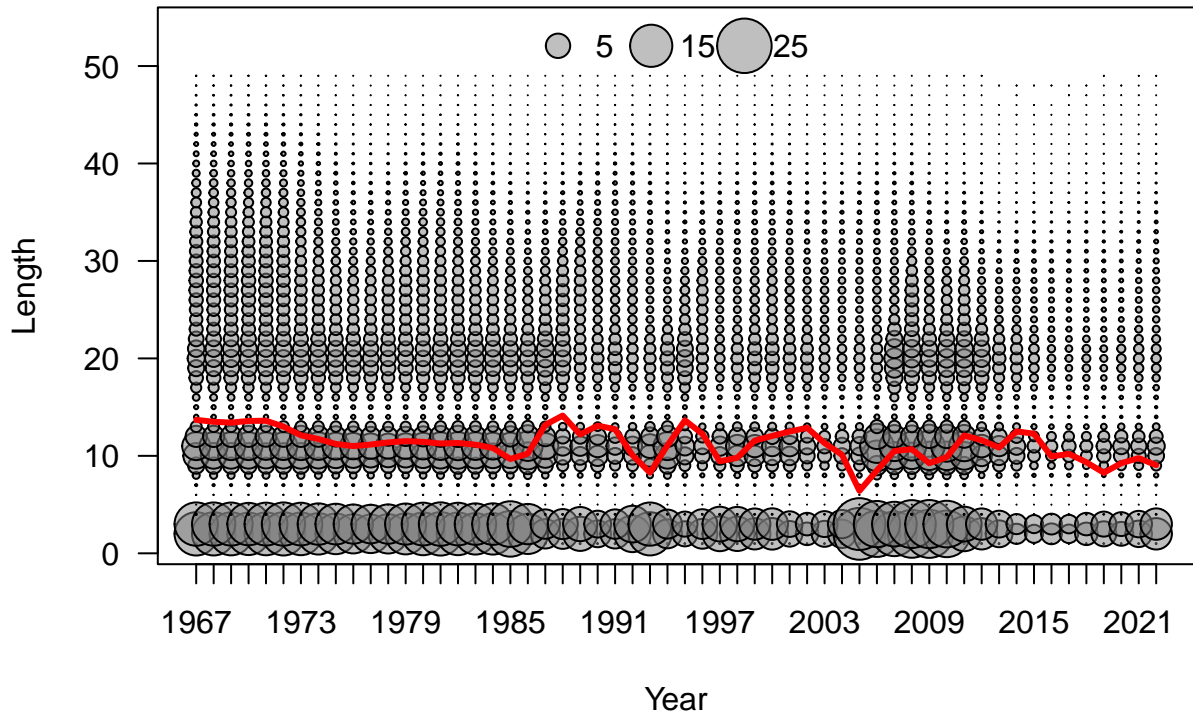




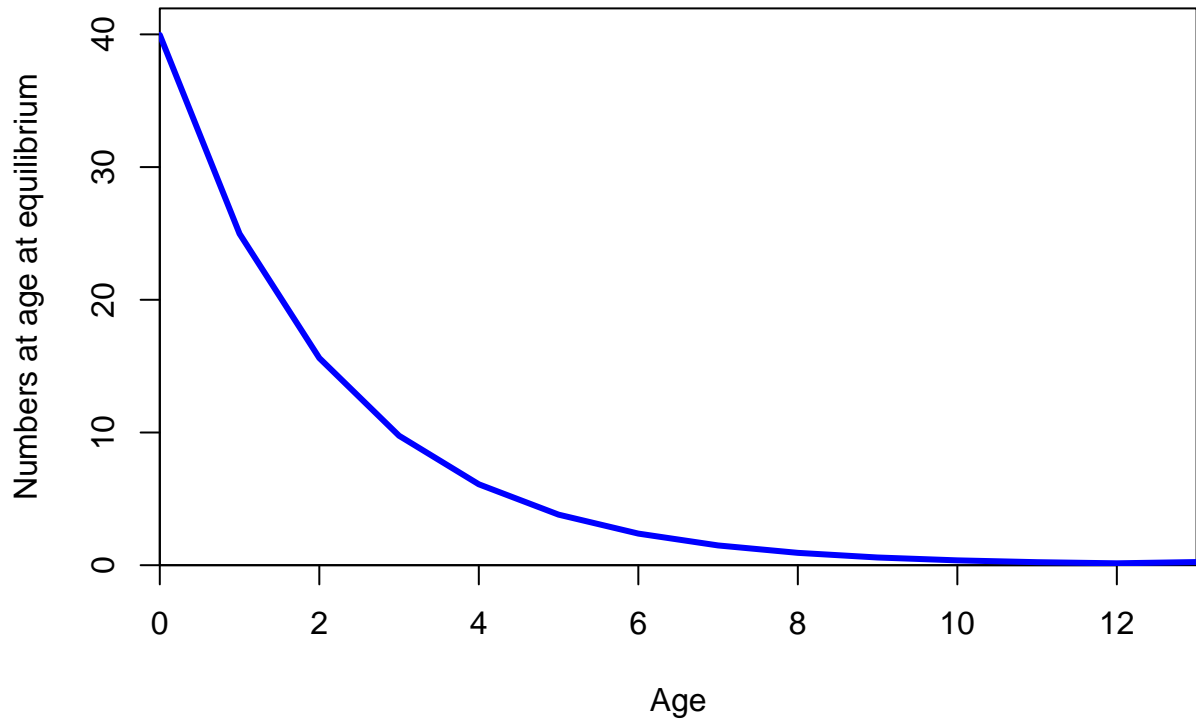
Age

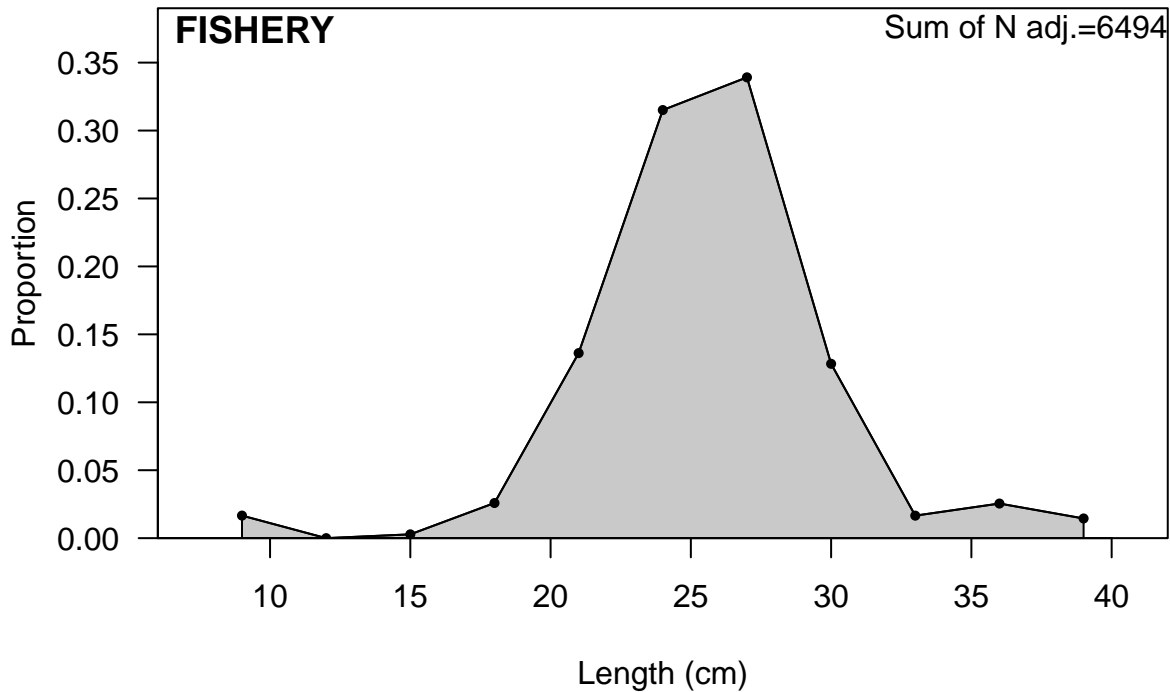


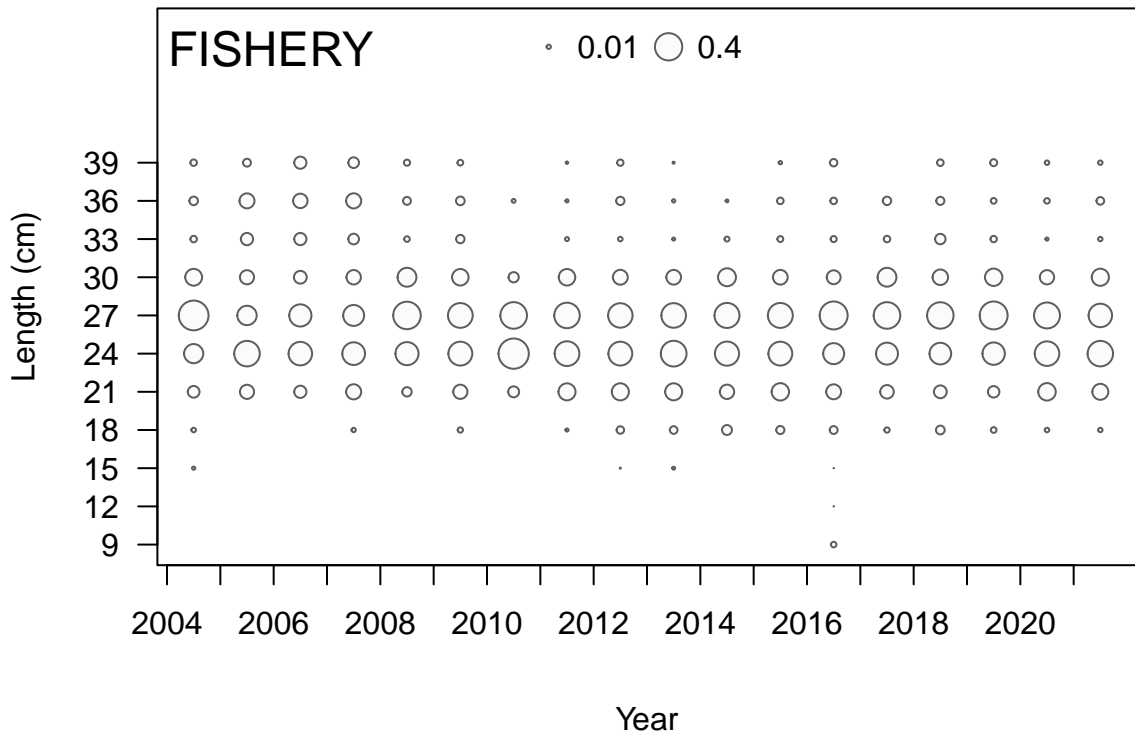


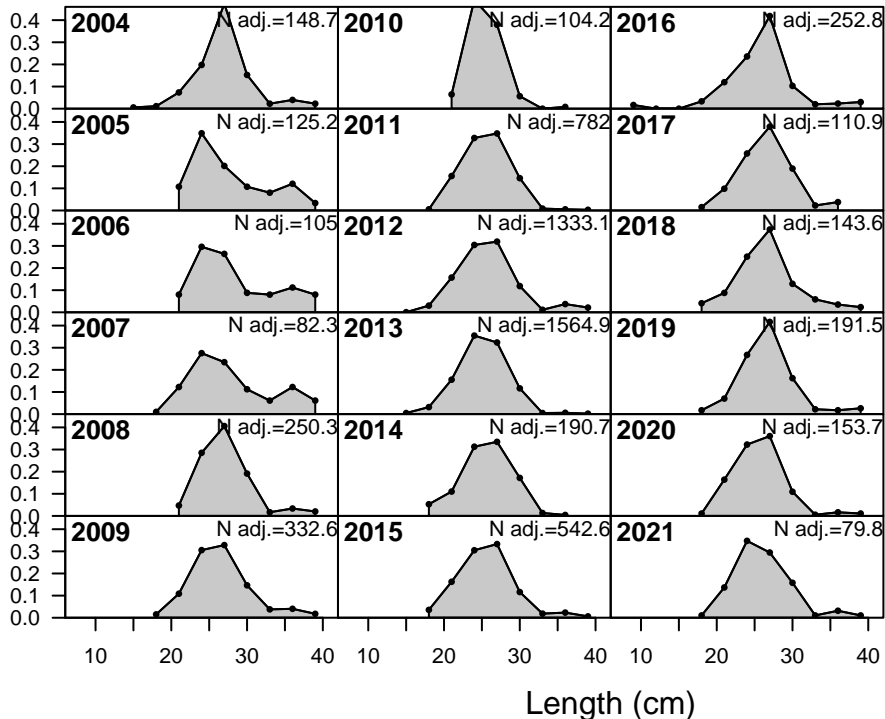


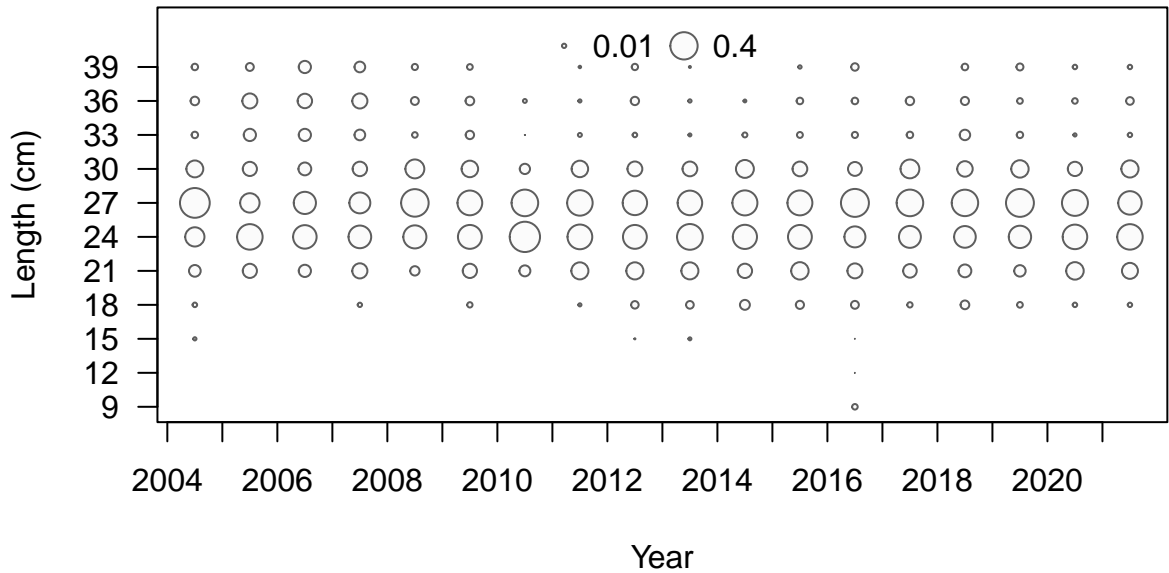




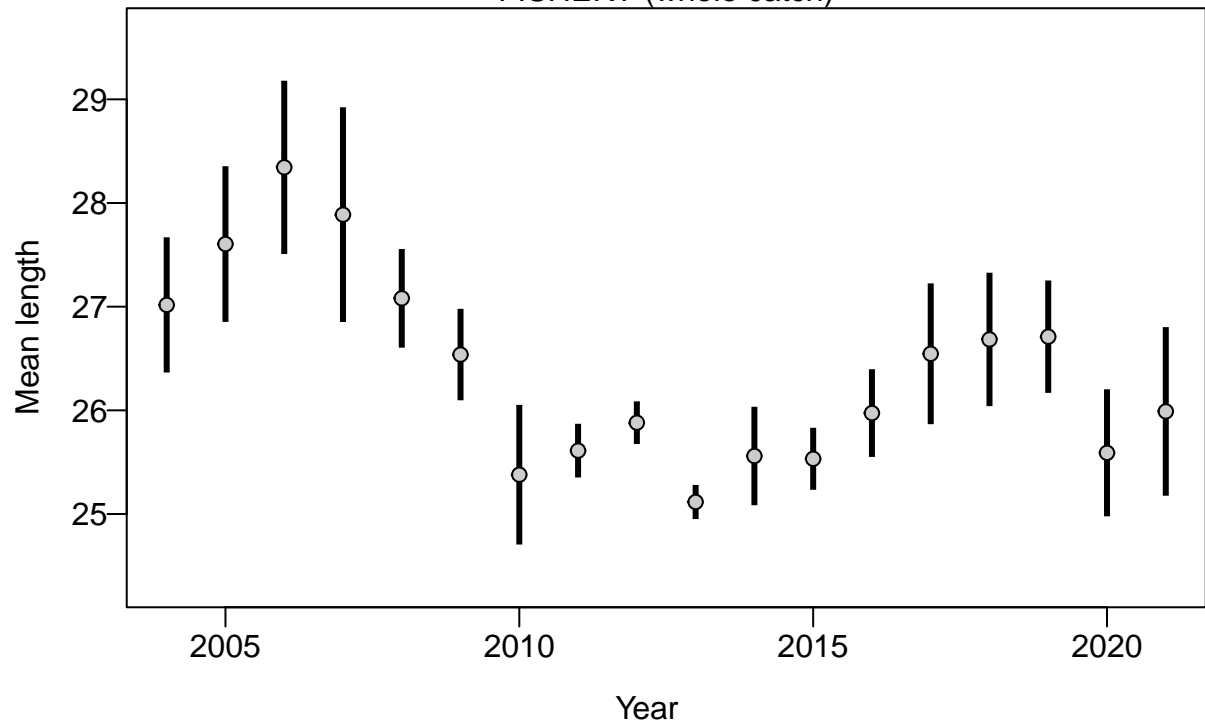






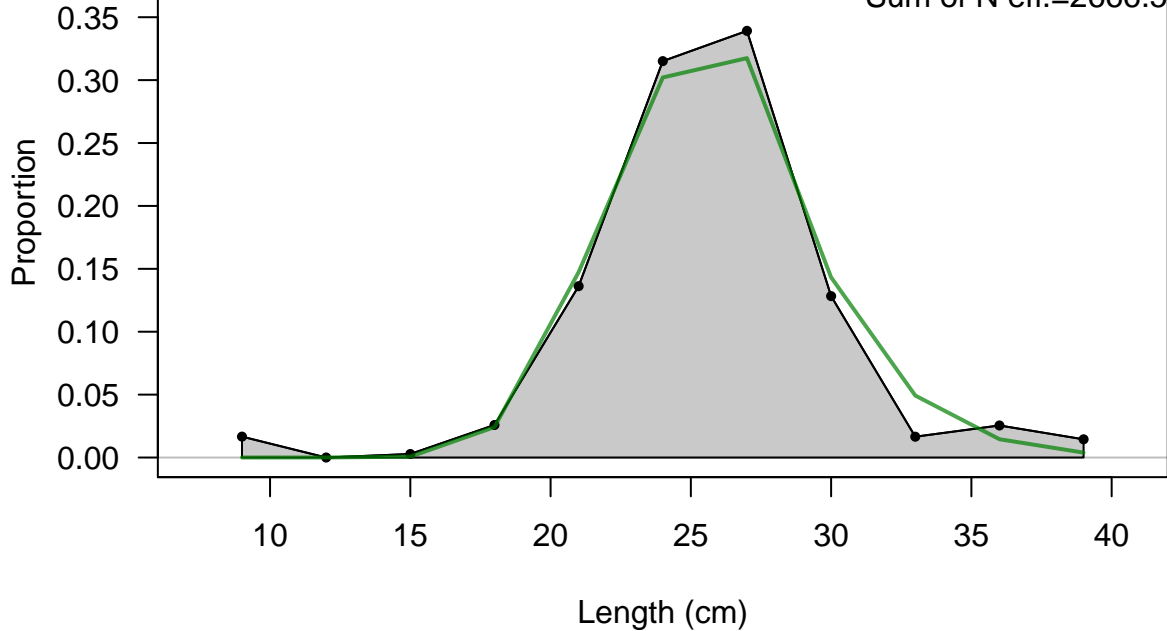


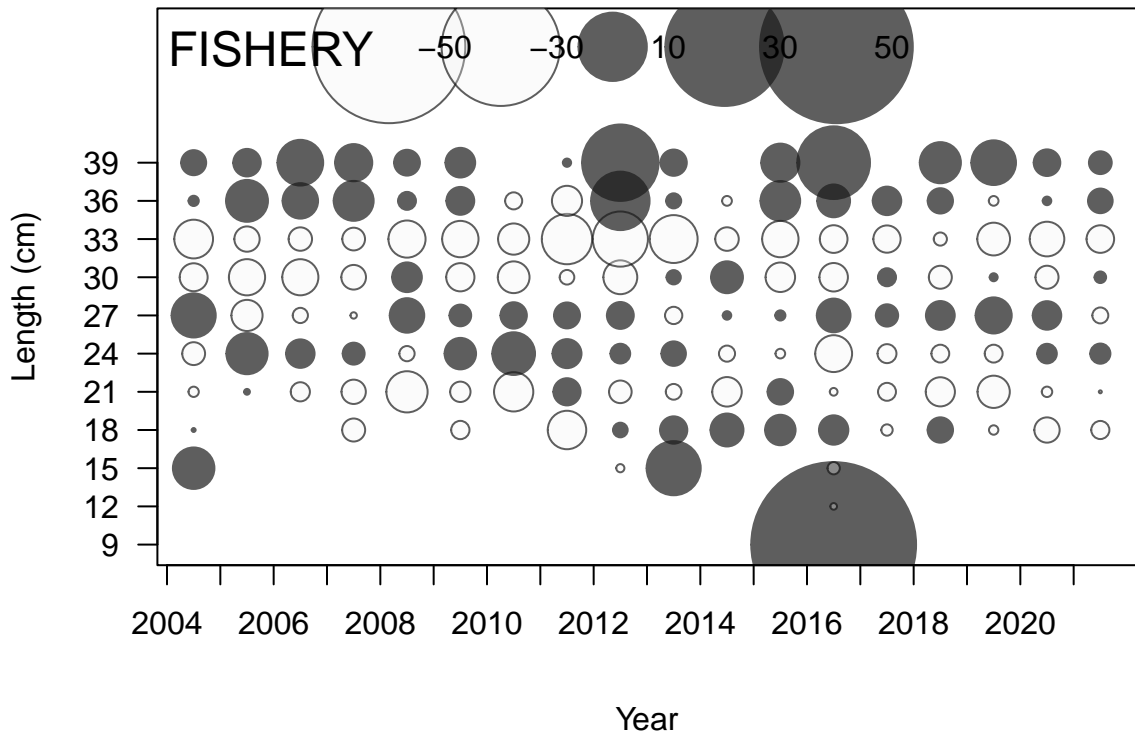
FISHERY (whole catch)



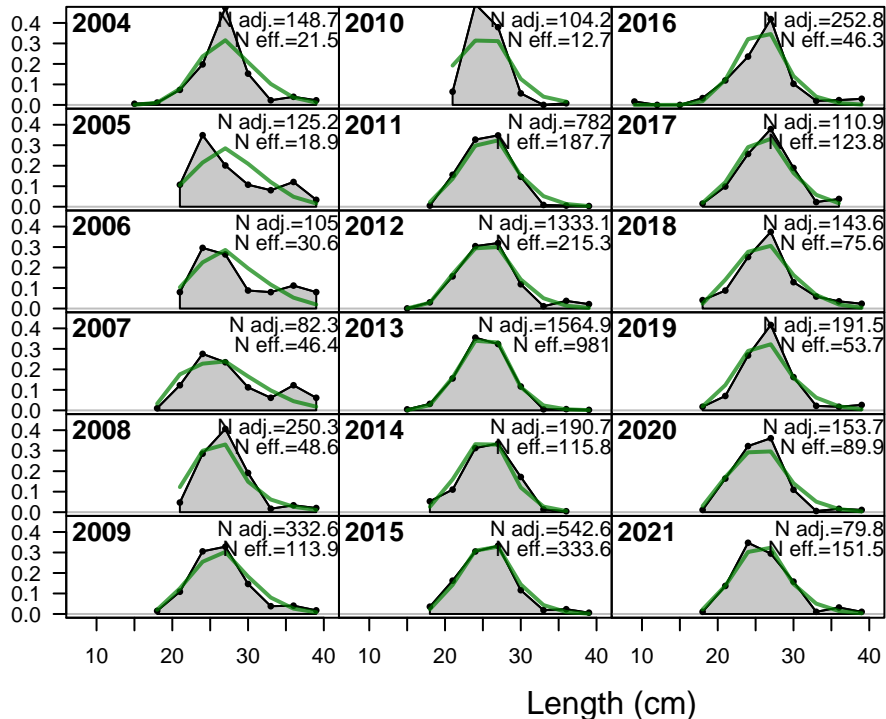
# FISHERY

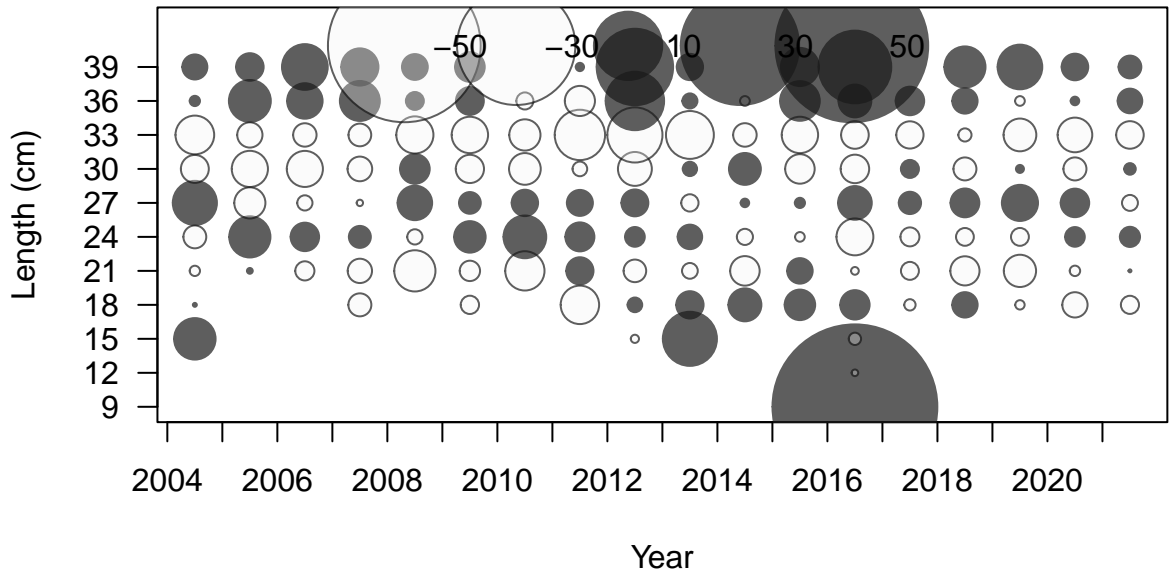
Sum of N adj.=6494  
Sum of N eff.=2666.5



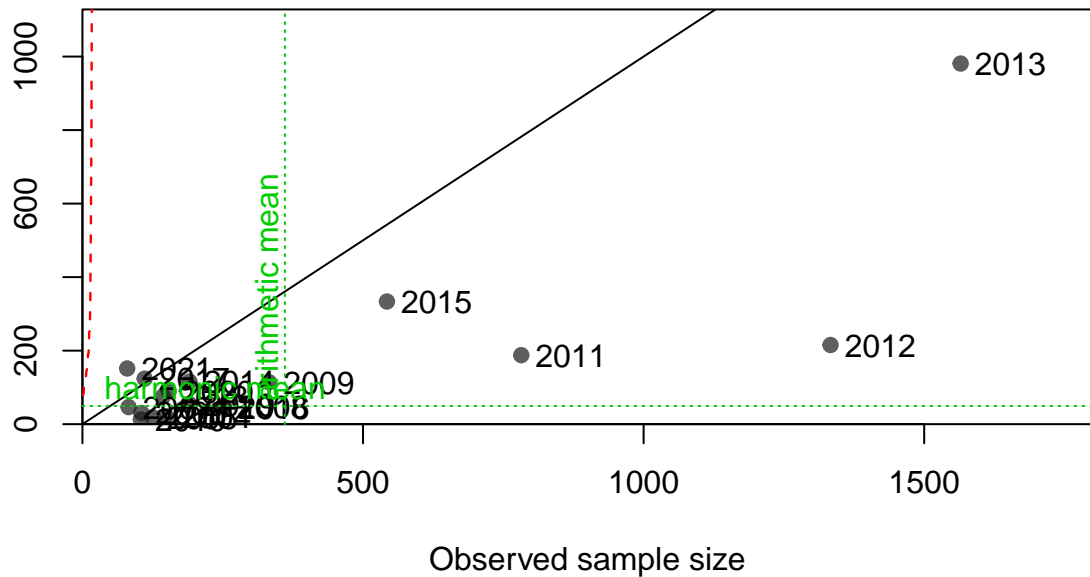




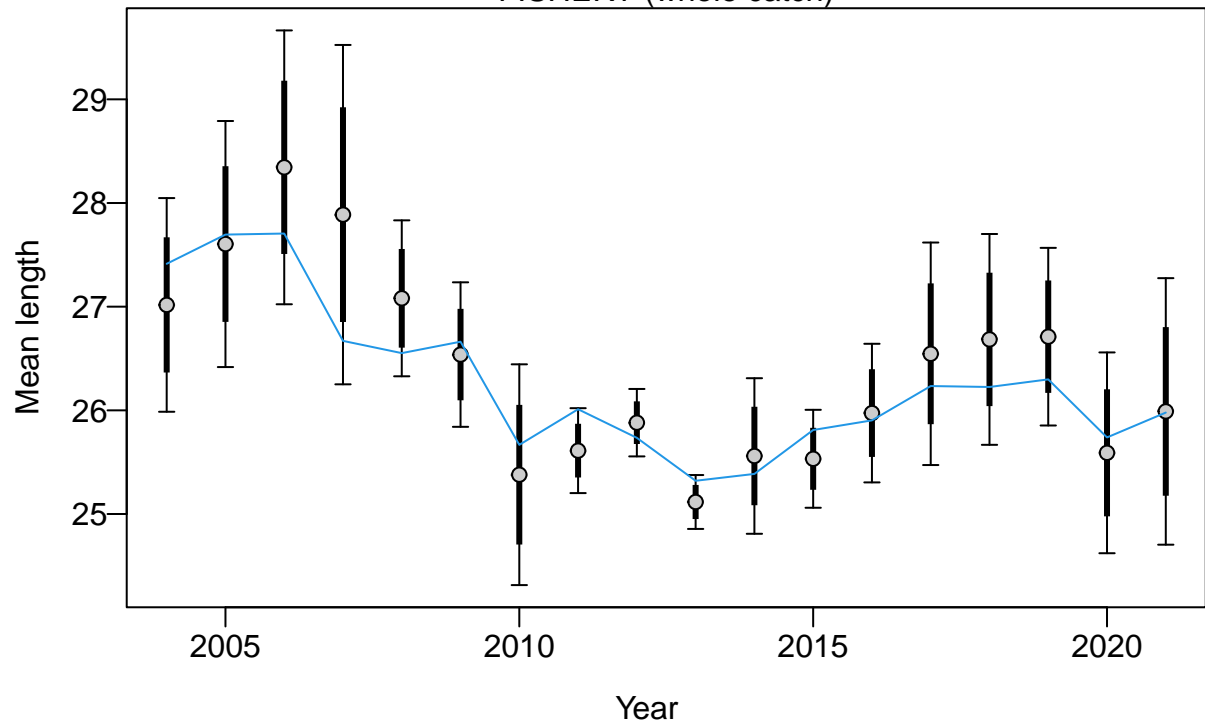


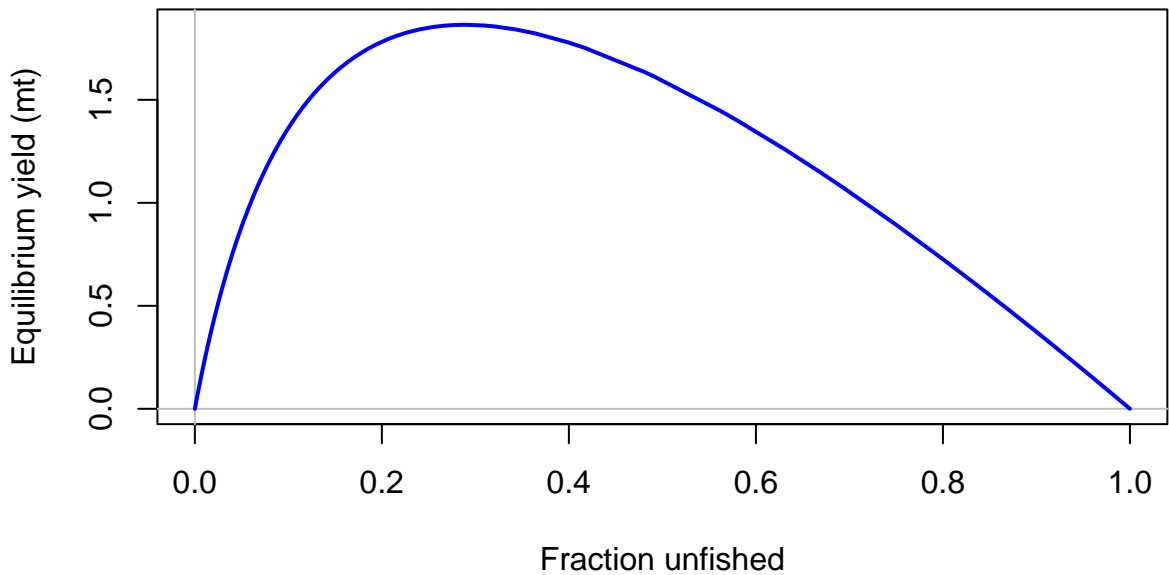


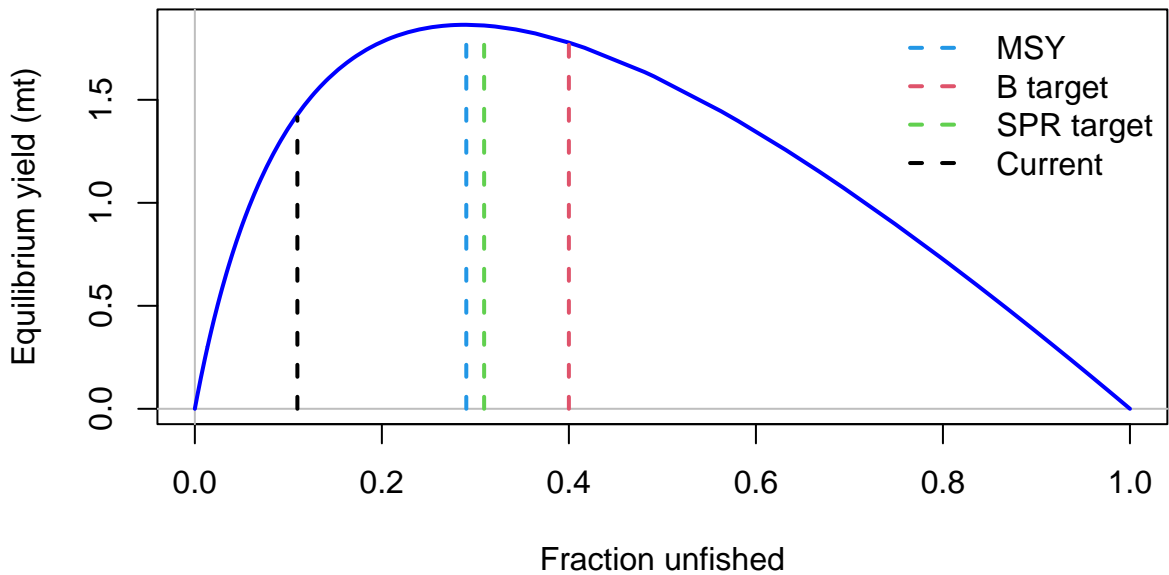
Effective sample size



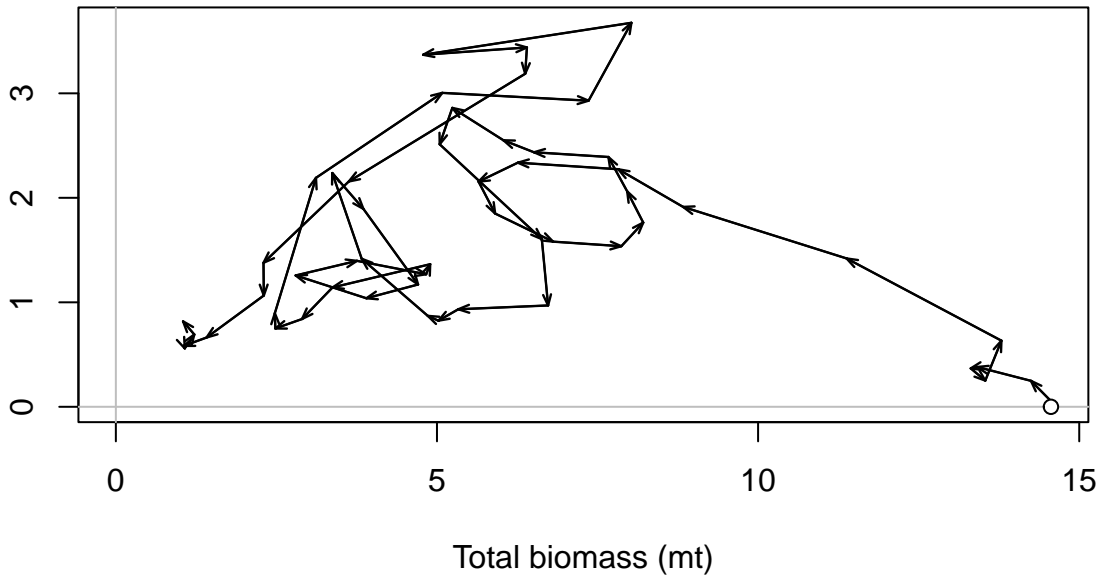
FISHERY (whole catch)

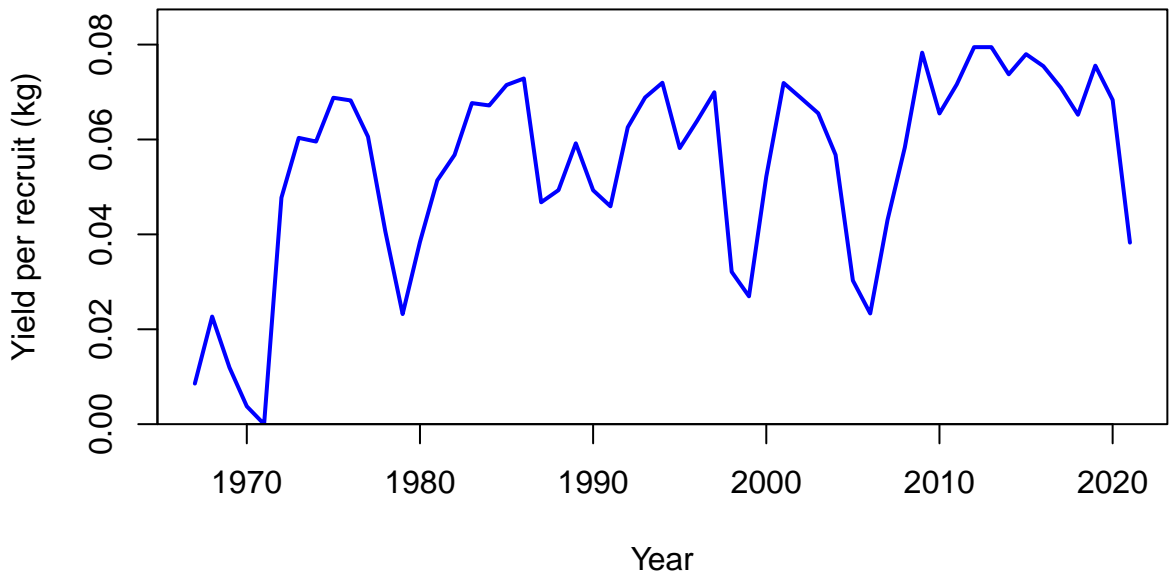




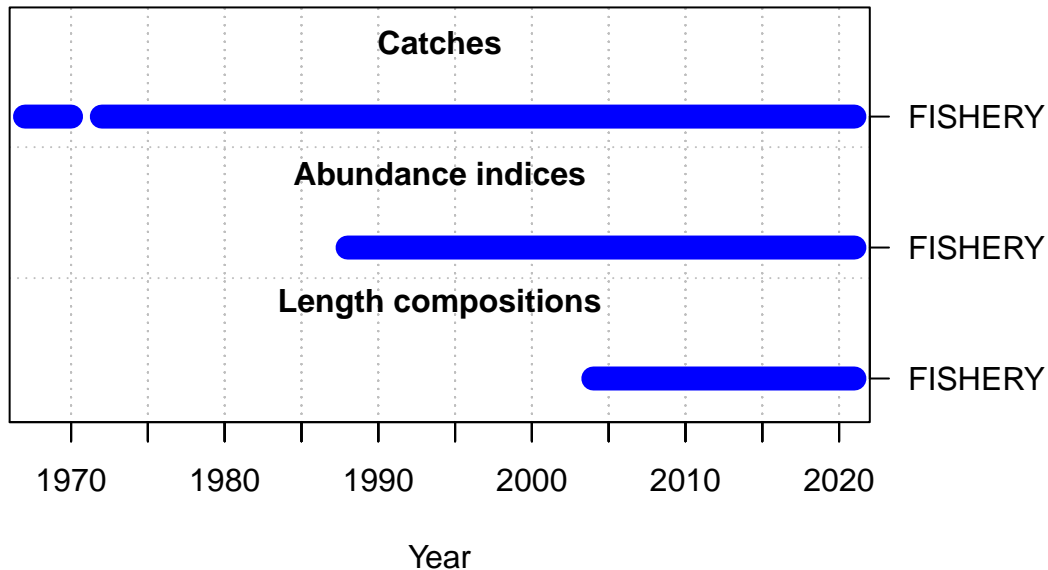


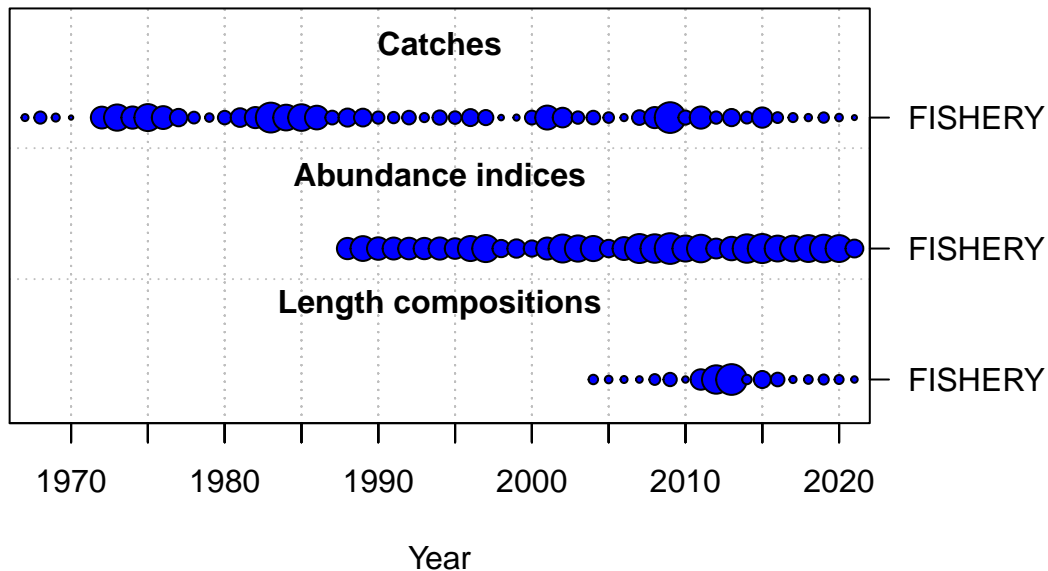
Surplus production (mt)



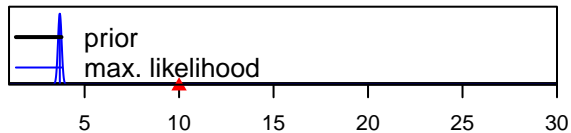




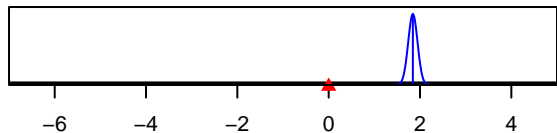




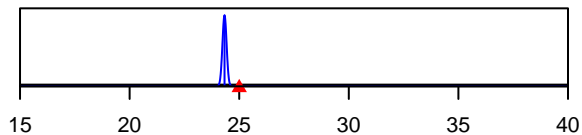
SR\_LN(R0)



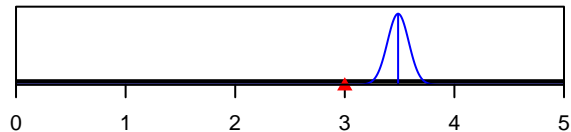
LnQ\_base\_FISHERY(1)



Size\_inflection\_FISHERY(1)



Size\_95%width\_FISHERY(1)



Parameter value