

Plots created using the 'r4ss' package in R

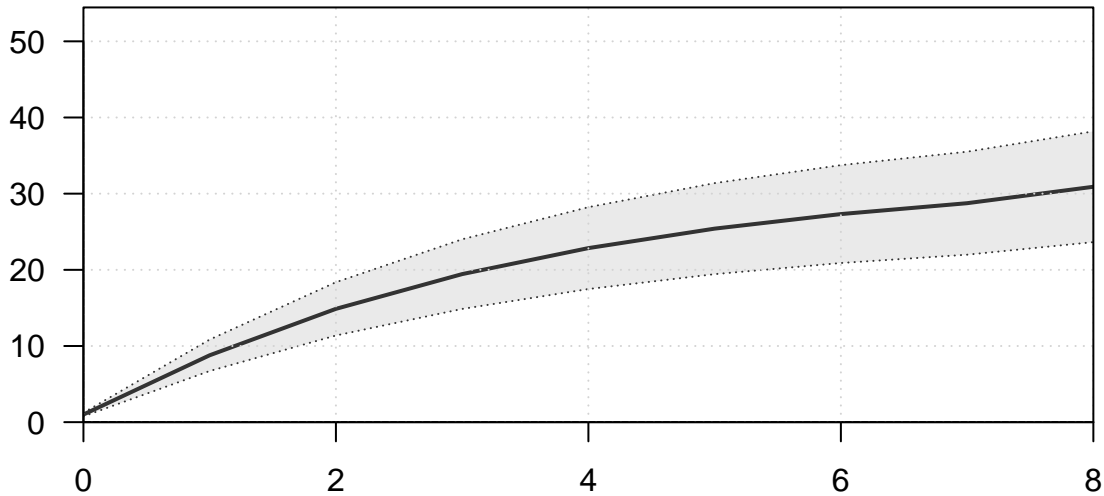
Stock Synthesis version: 3.30.19.0

StartTime: Wed Jun 29 13:48:40 2022

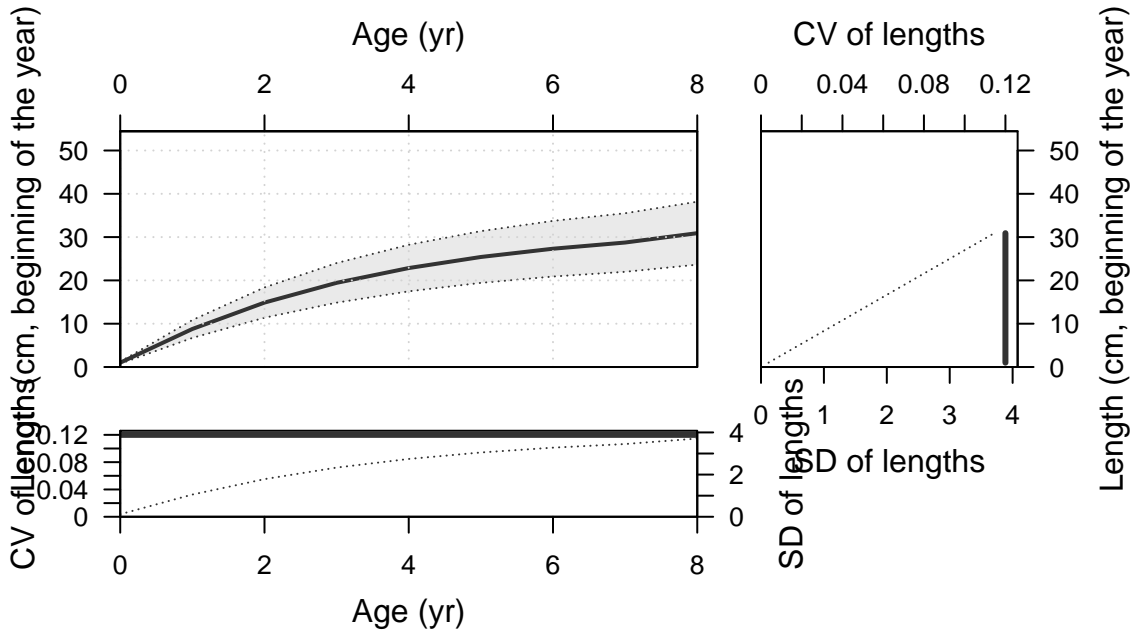
Data\_File: data.ss

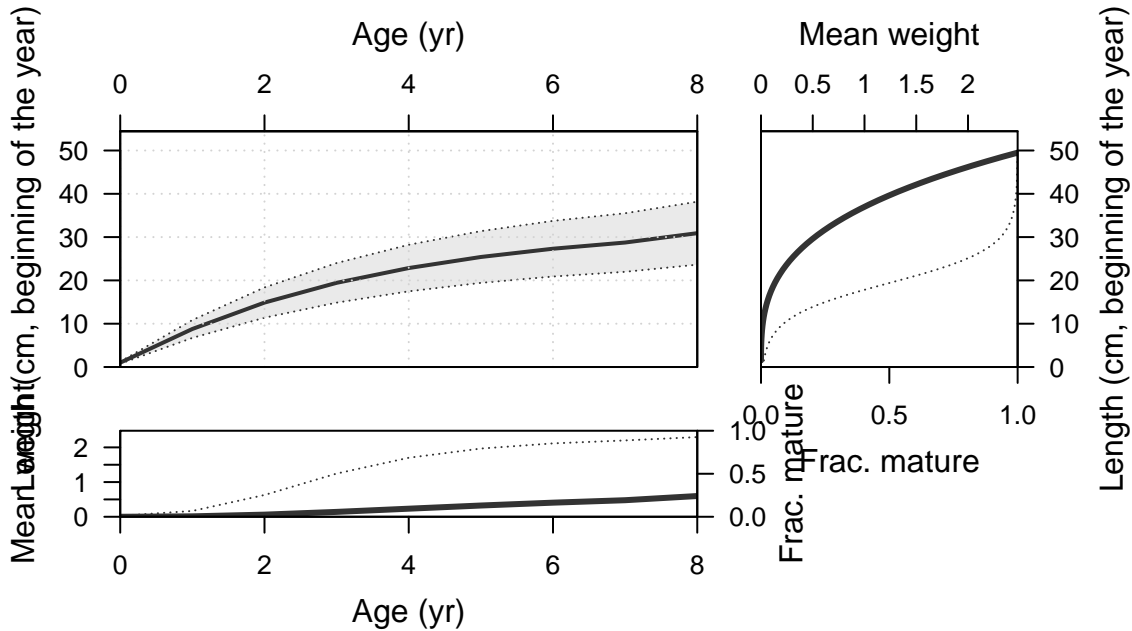
Control\_File: control.ss

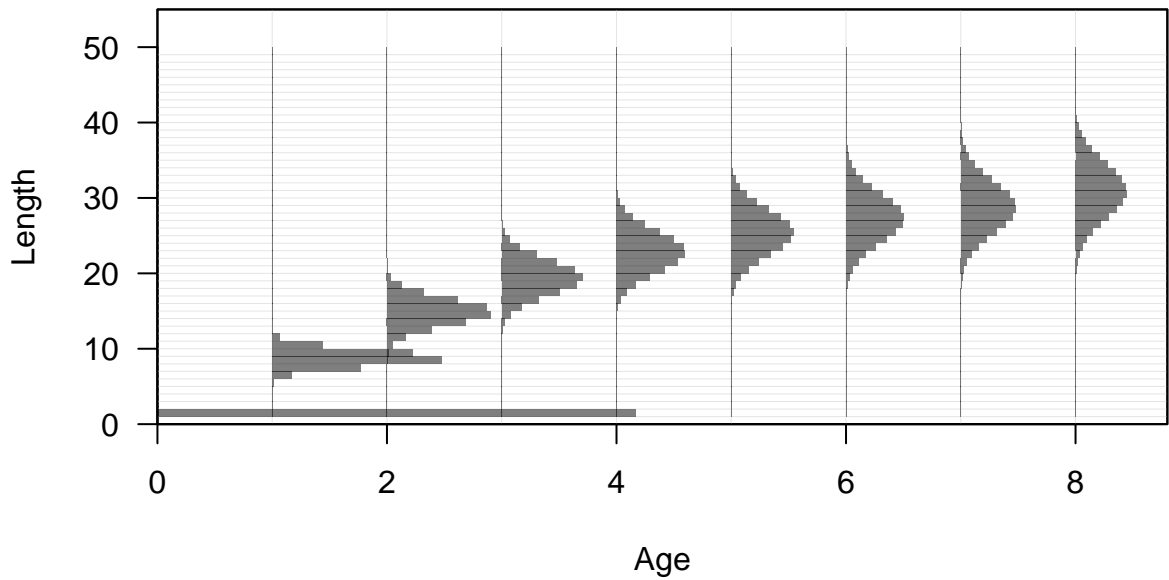
Length (cm, beginning of the year)

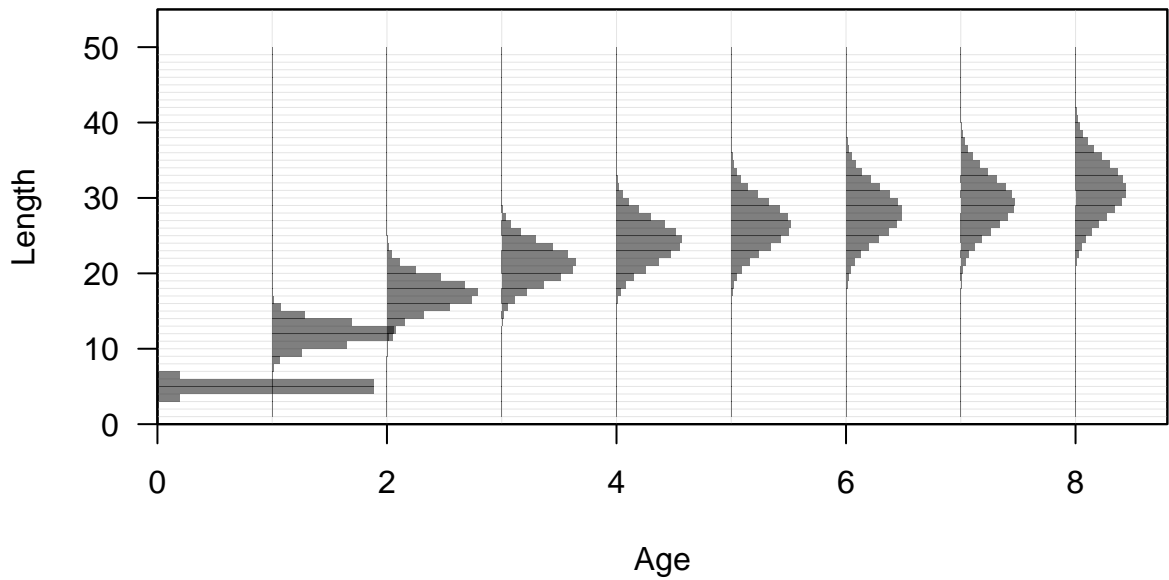


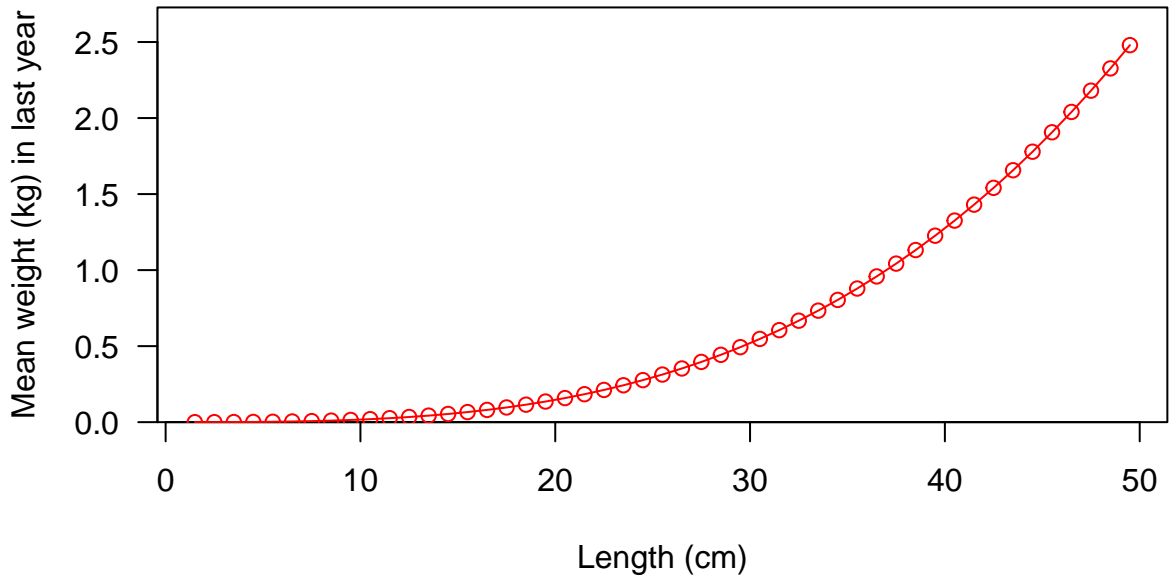
Age (yr)

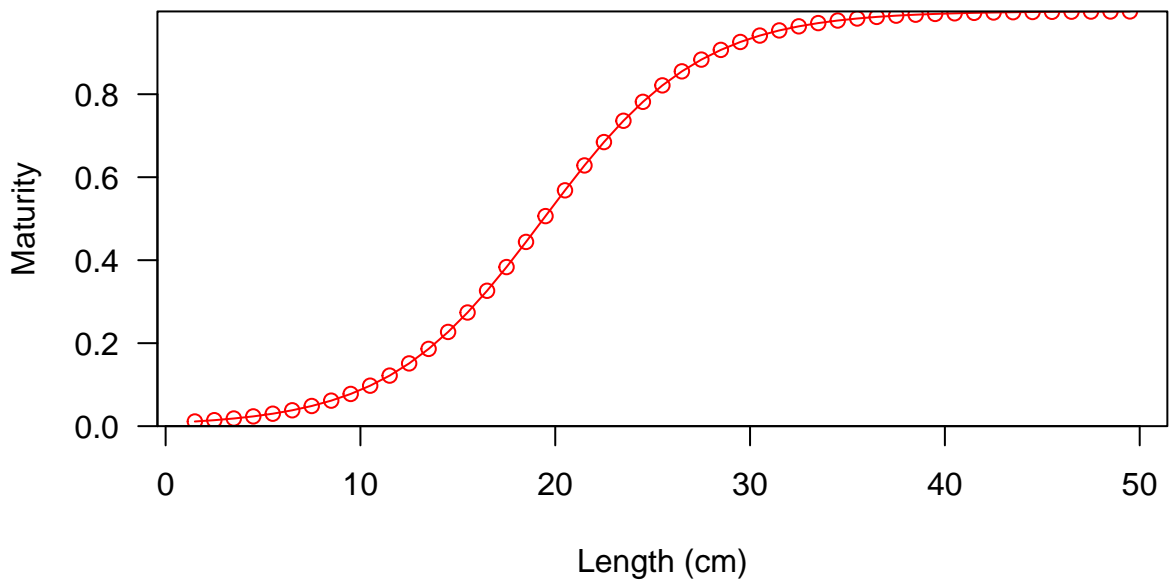




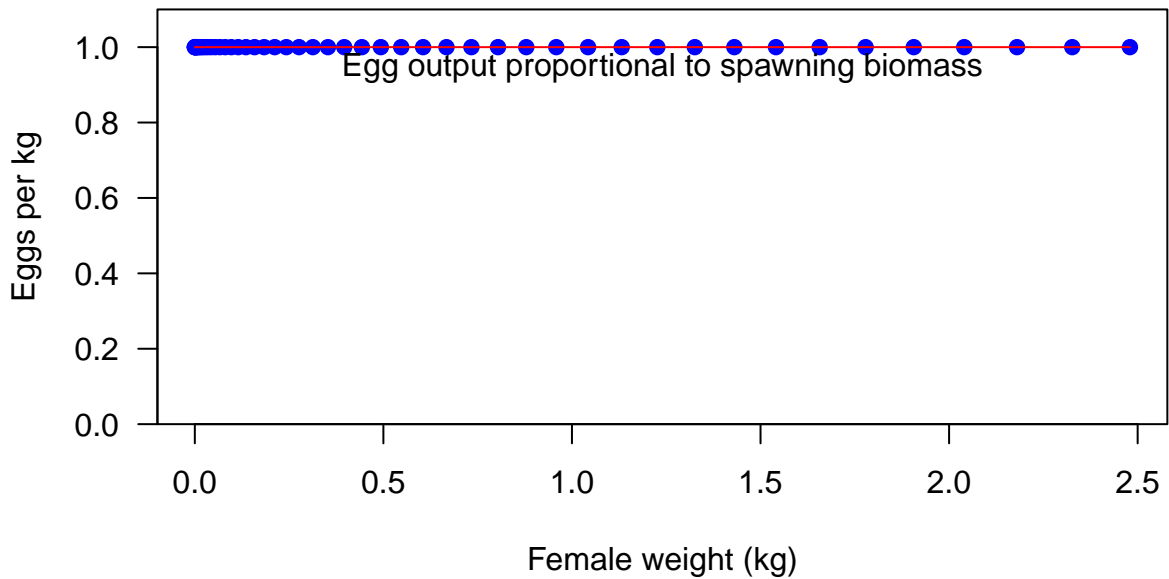


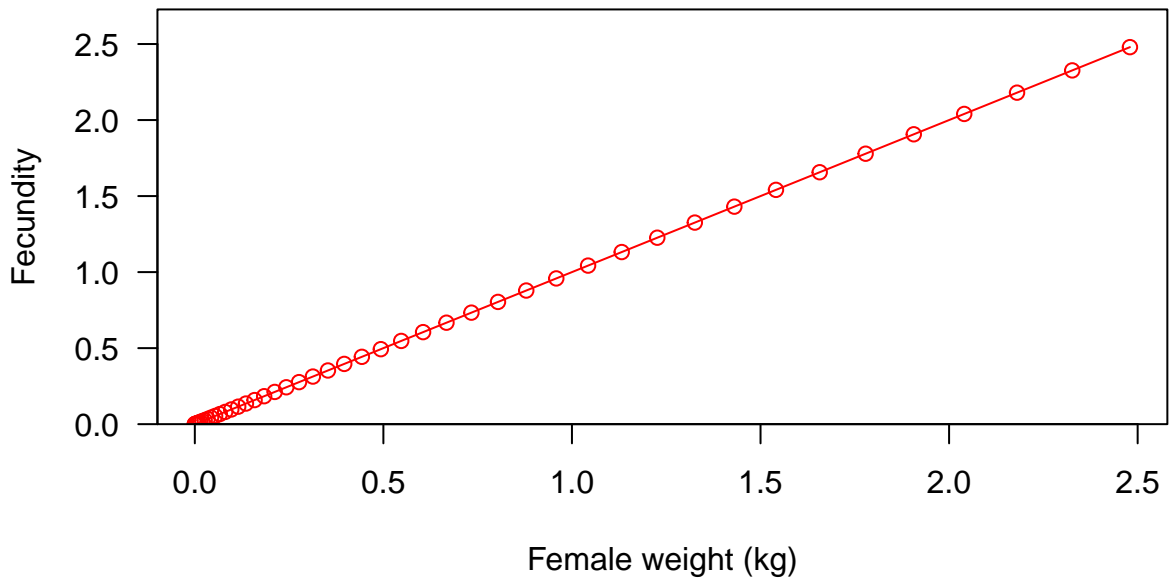


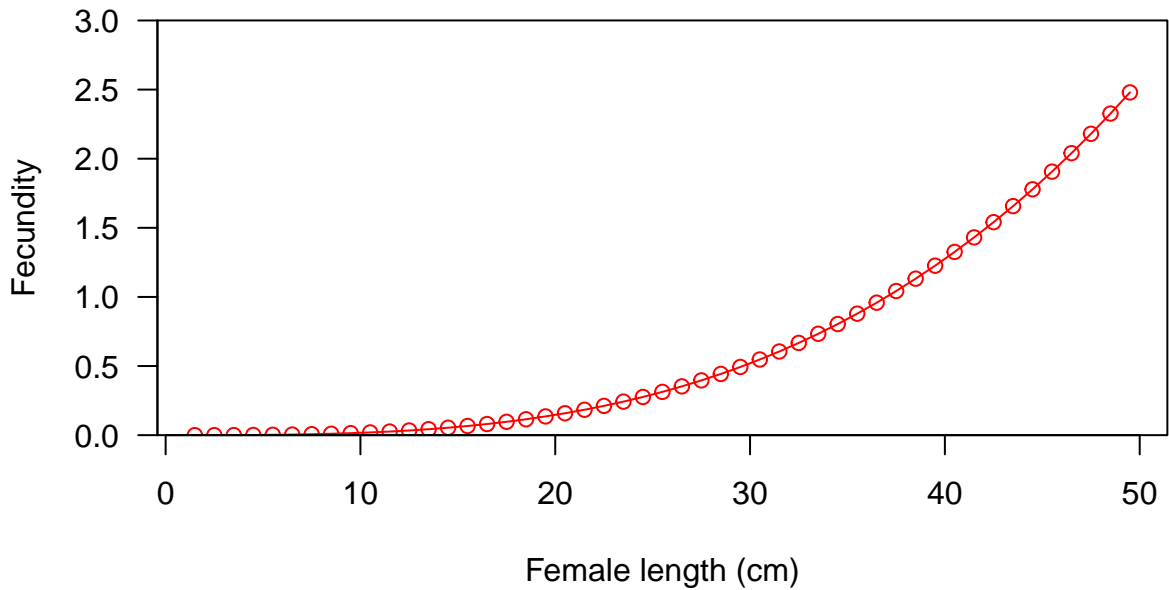


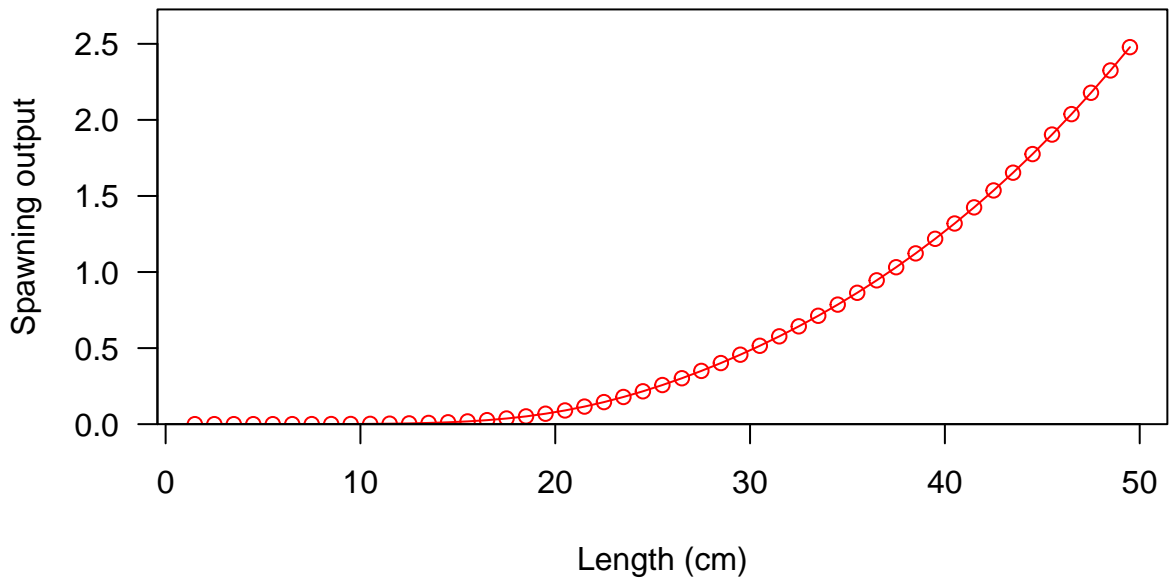


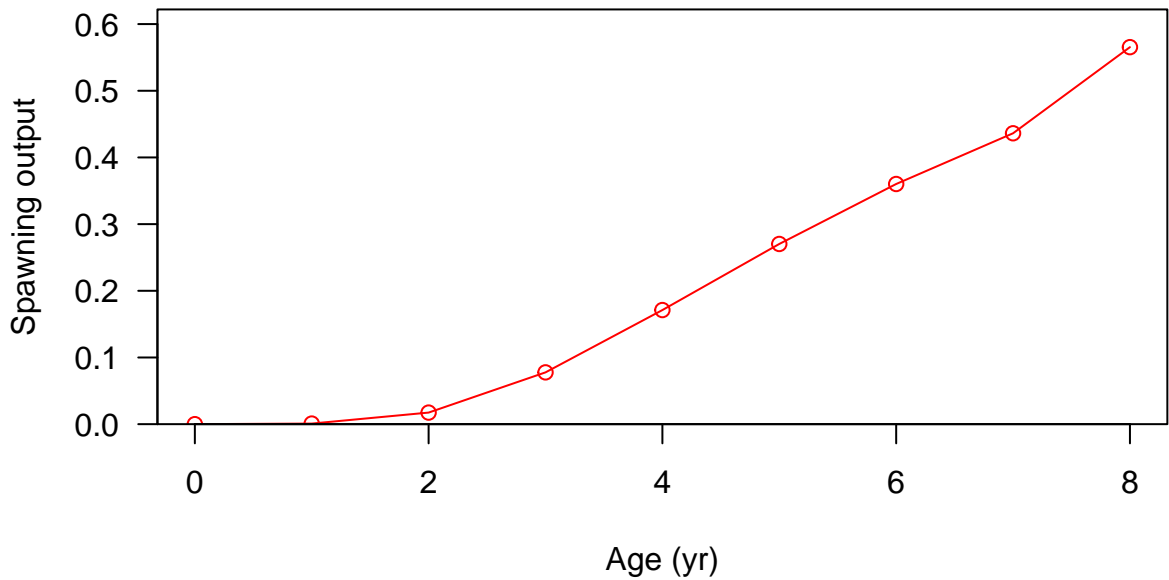




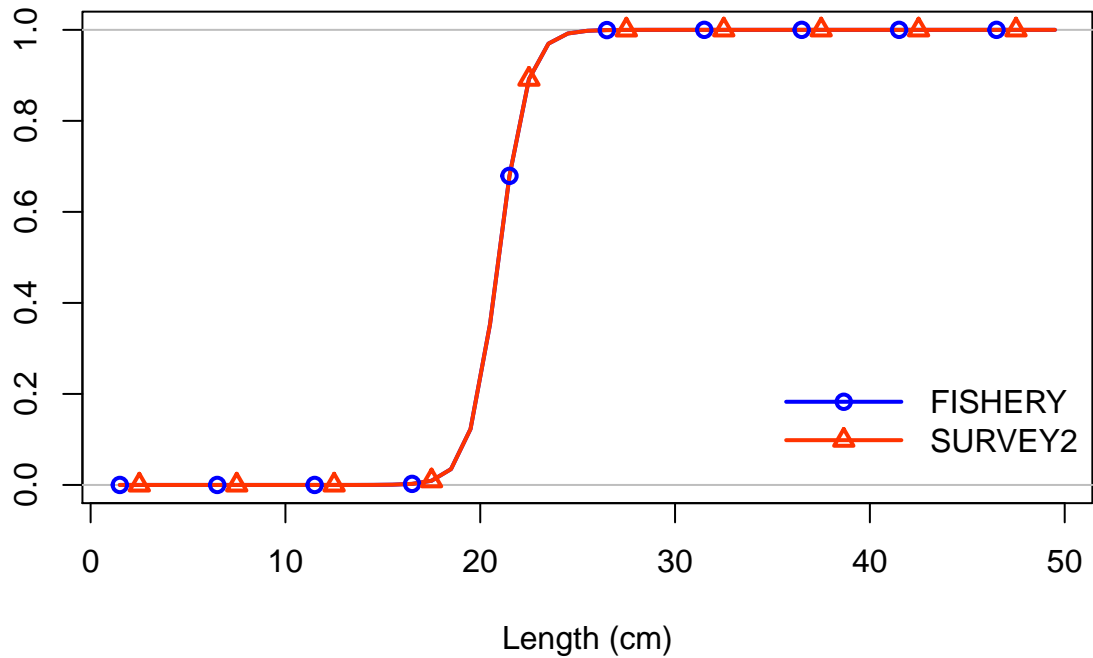




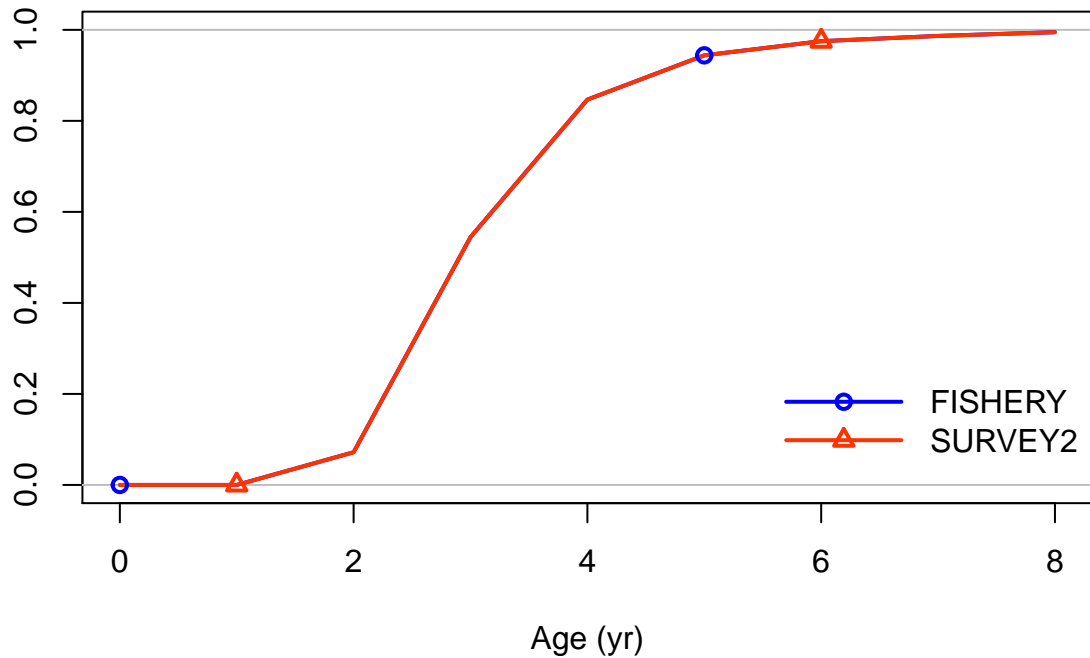




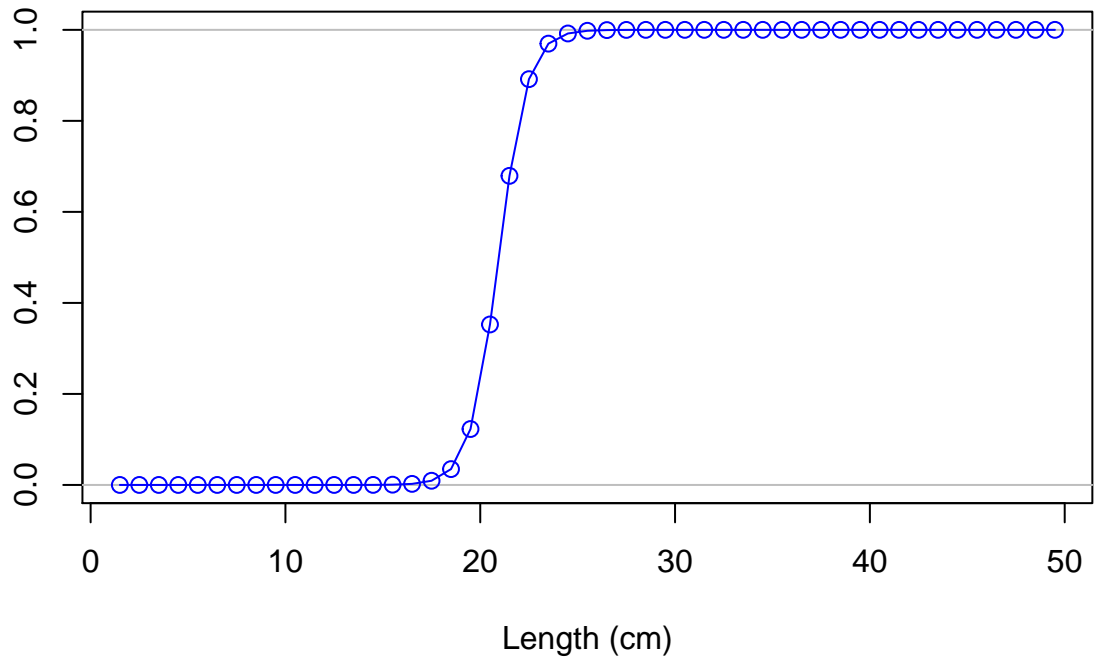
Selectivity



Selectivity

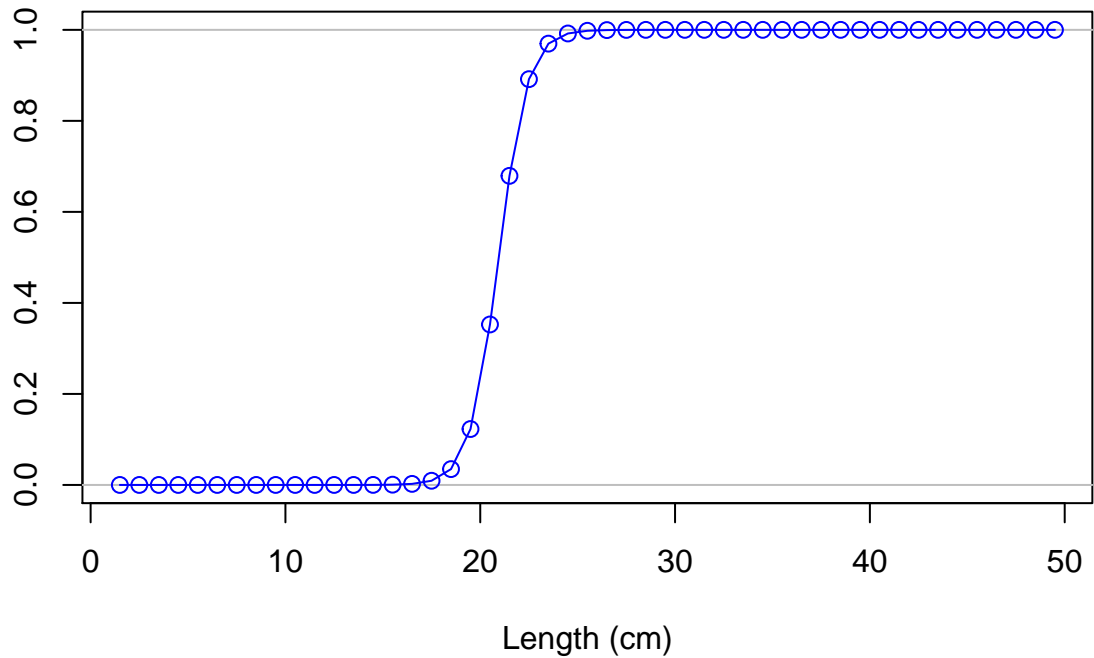


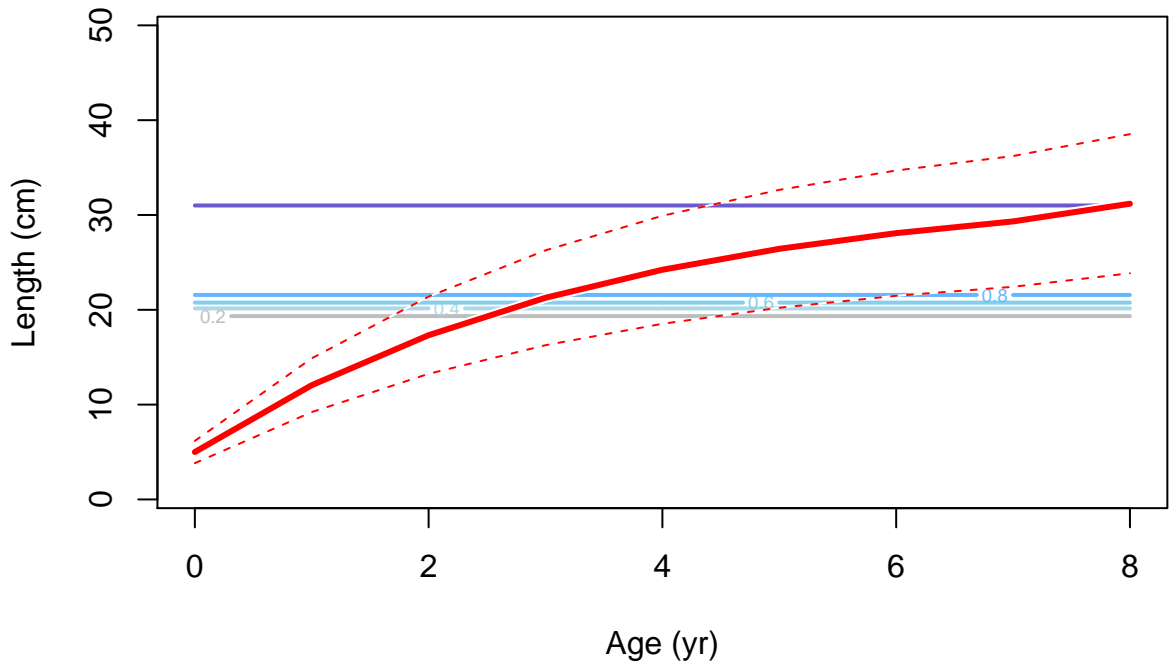
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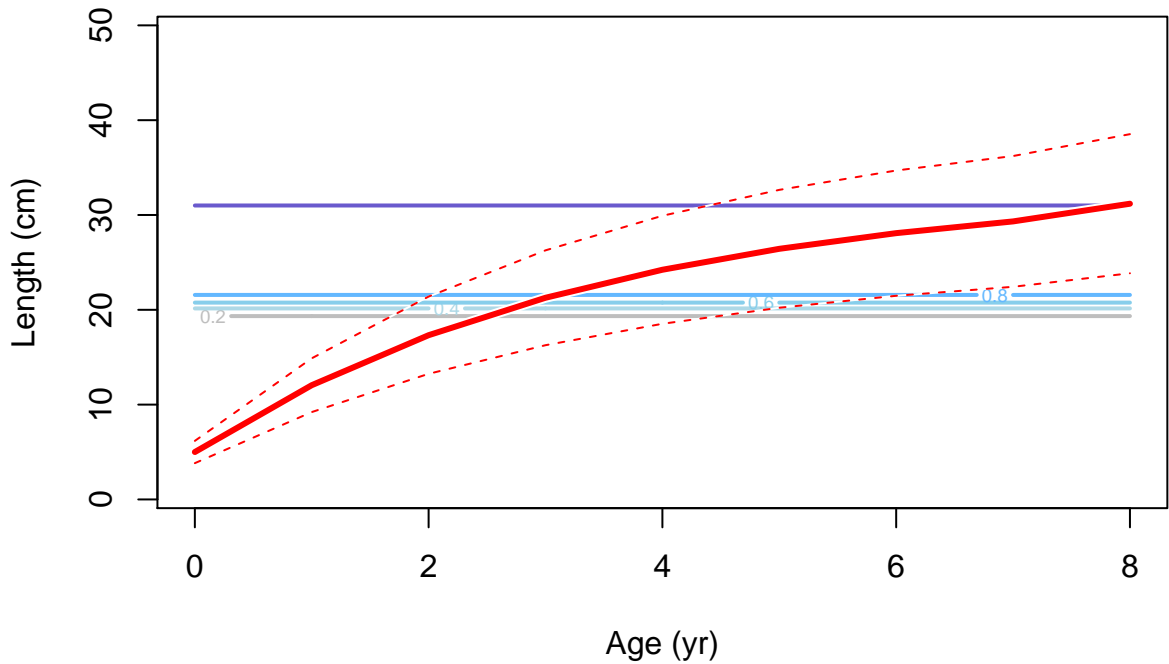


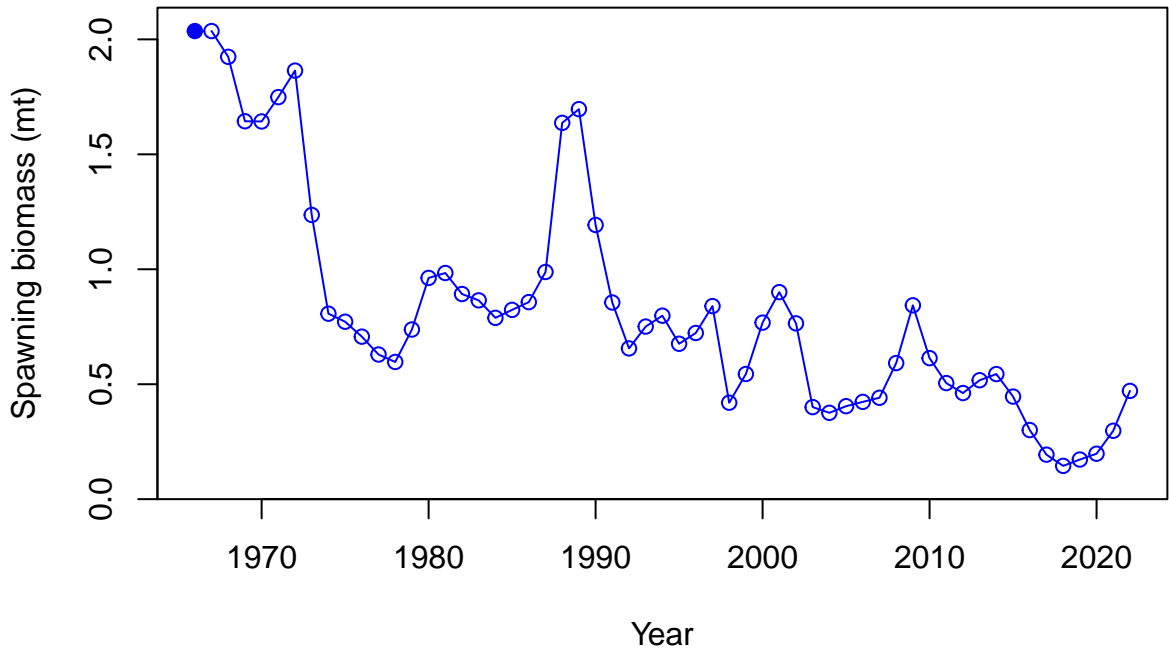


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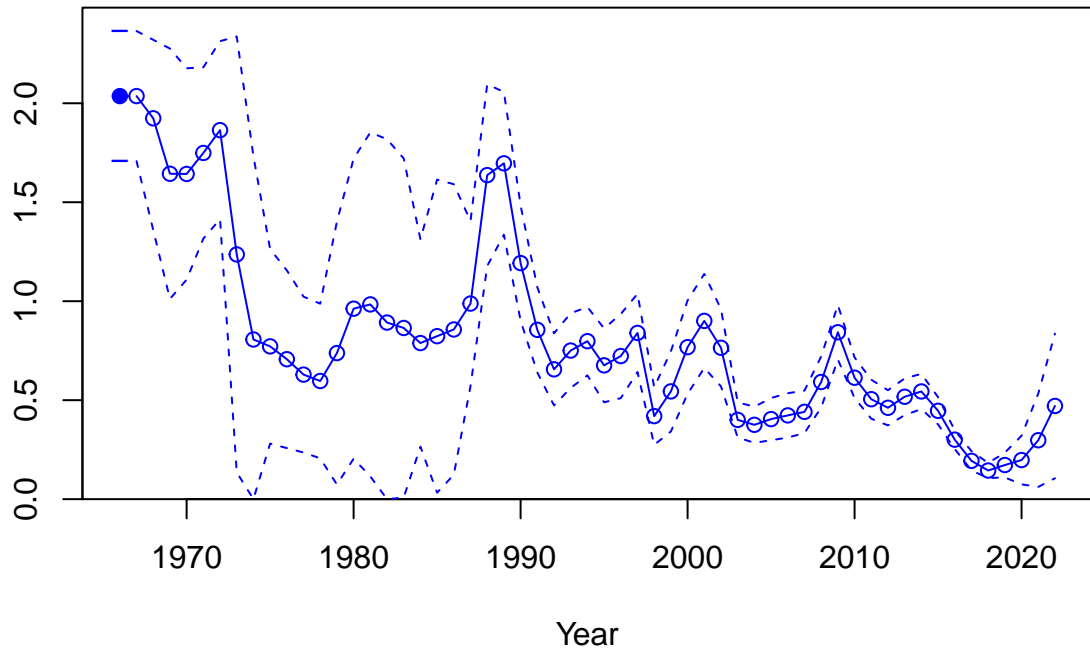




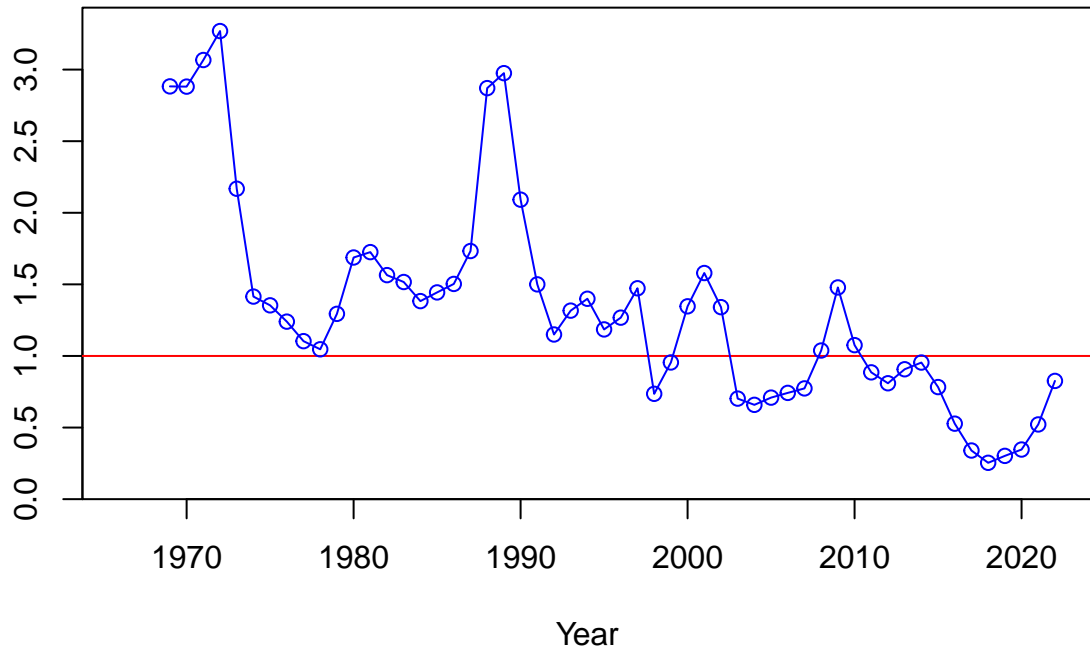




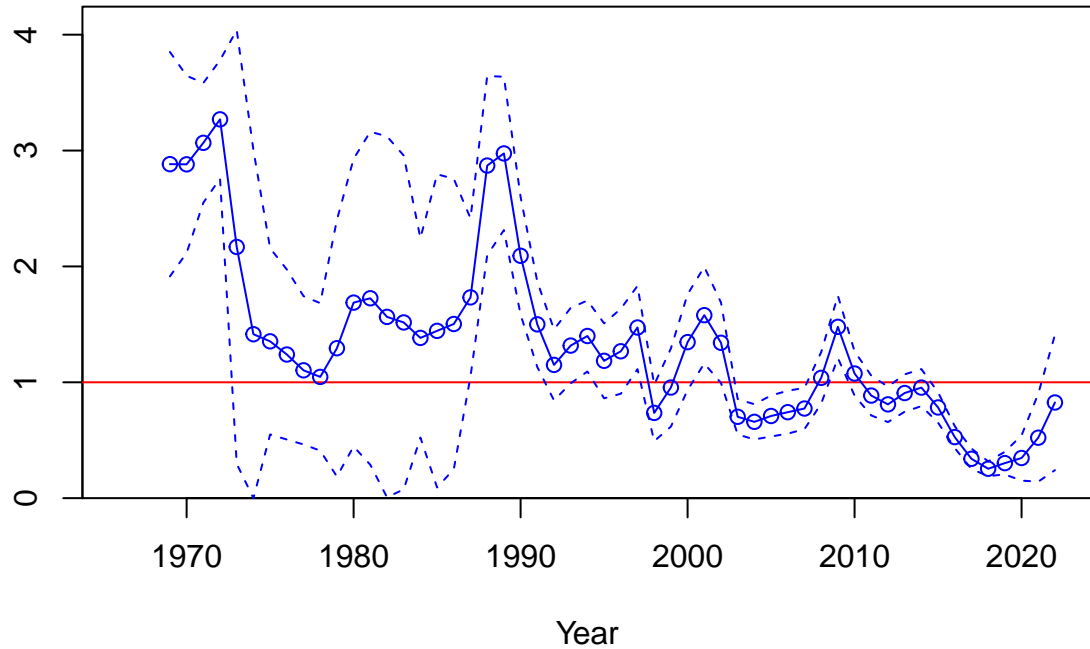
Spawning biomass (mt)

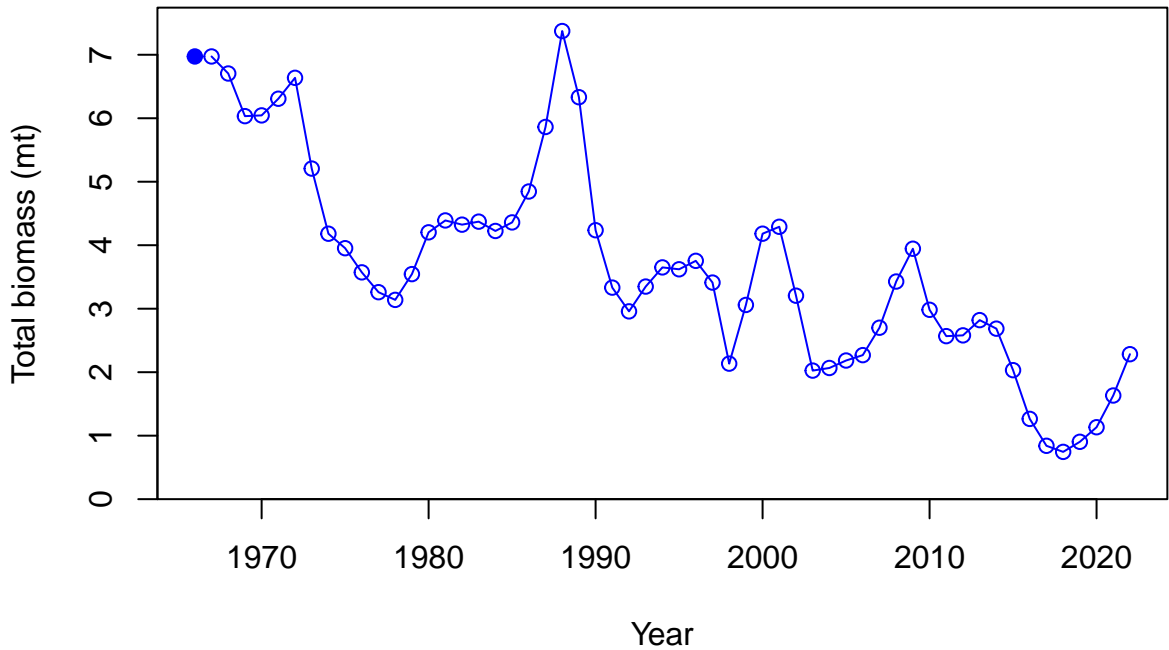


Relative spawning biomass:  $B/B_{MSY}$



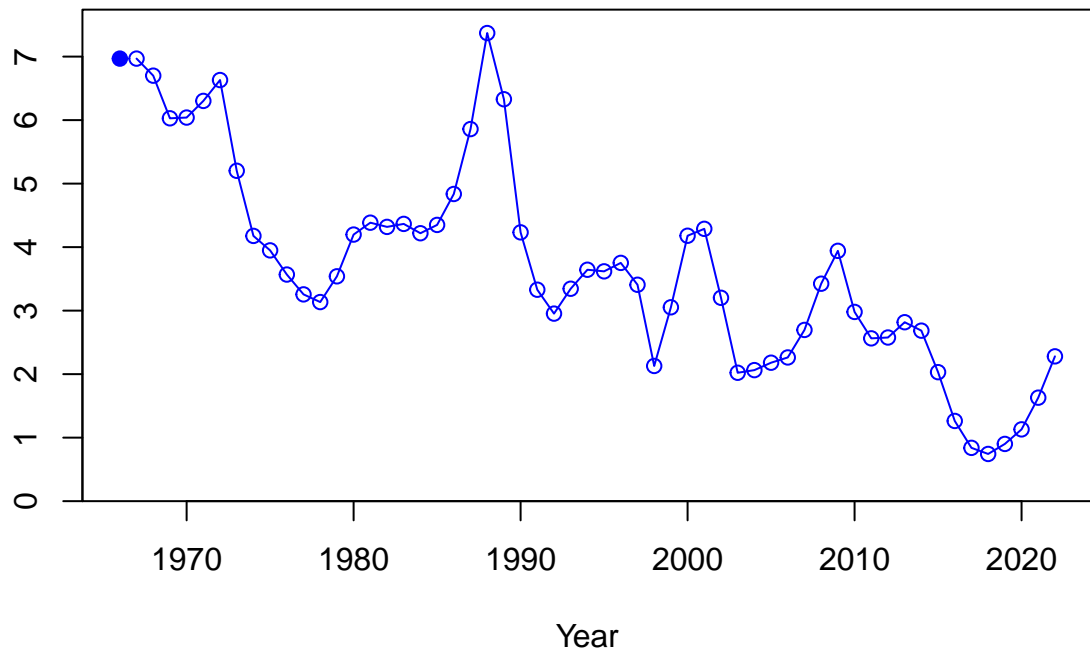
Relative spawning biomass:  $B/B_{MSY}$



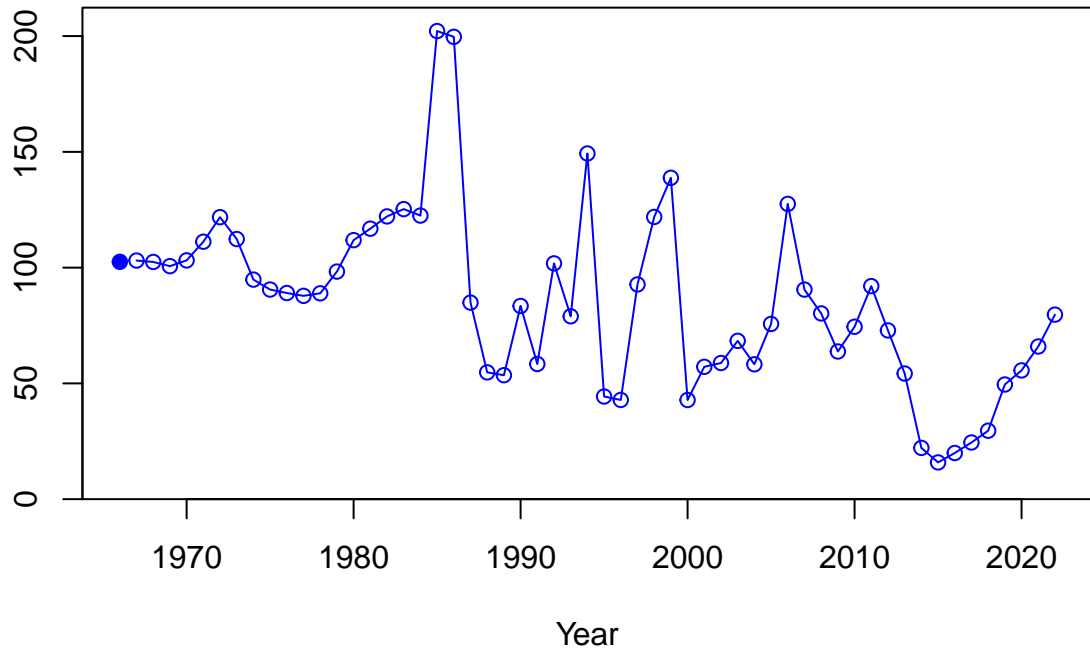




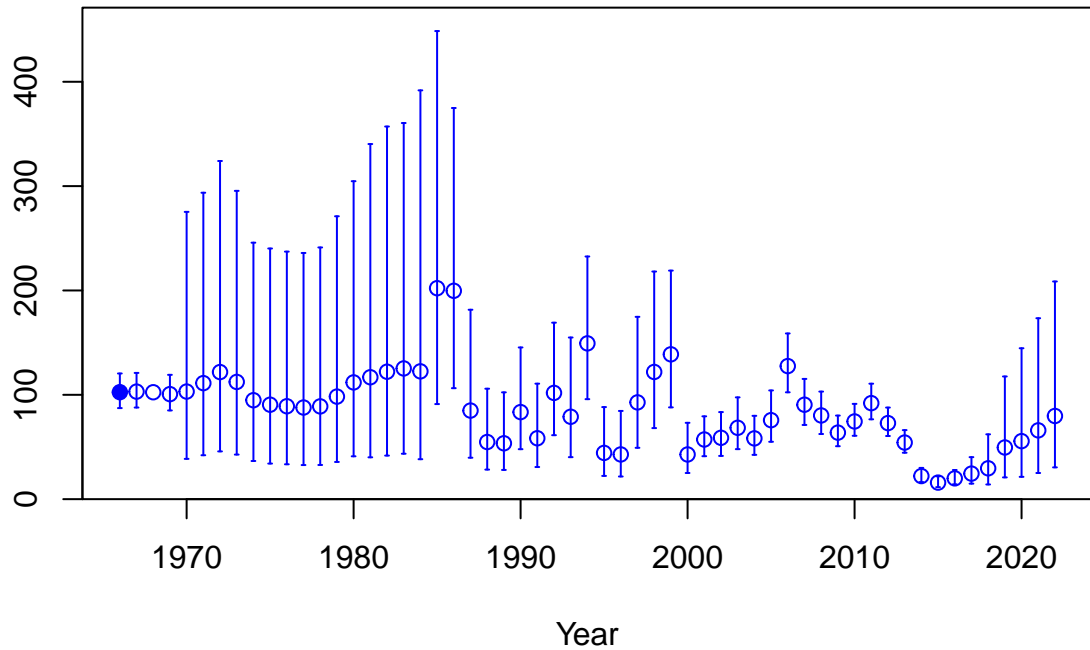
Summary biomass (mt)



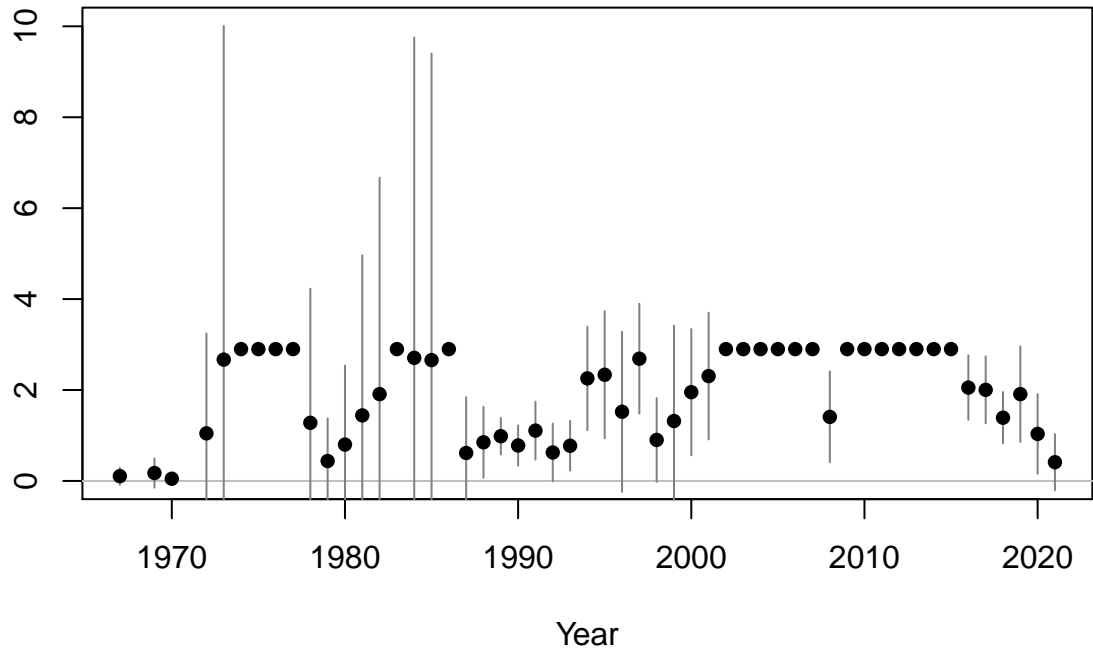
Age-0 recruits (1,000s)

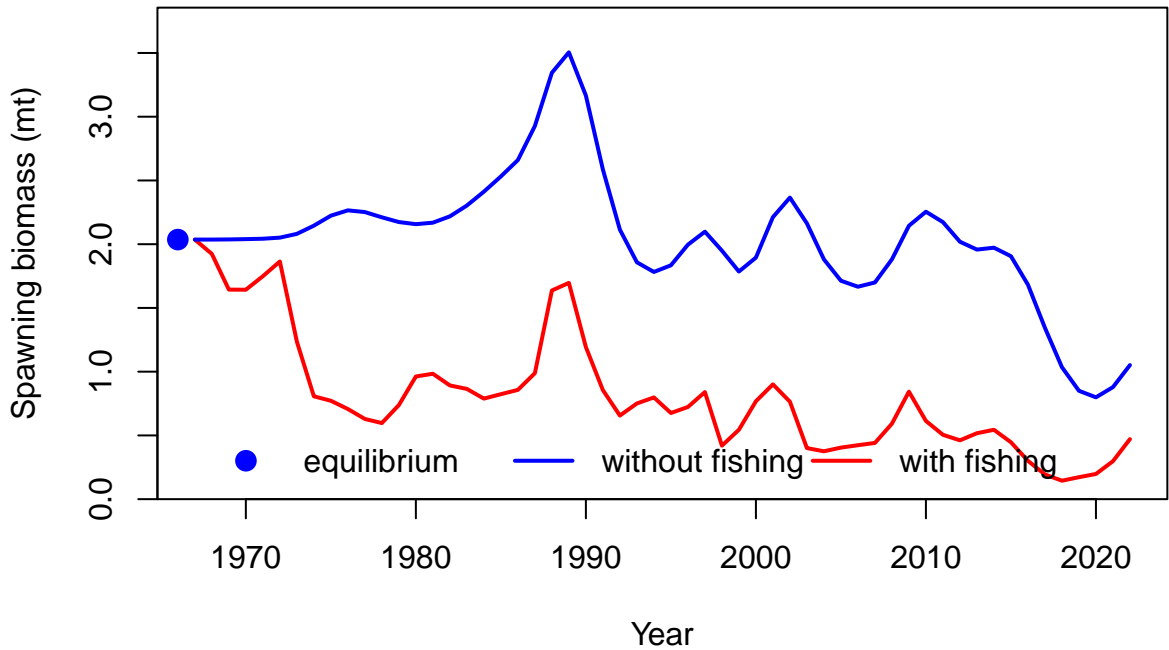


Age-0 recruits (1,000s)

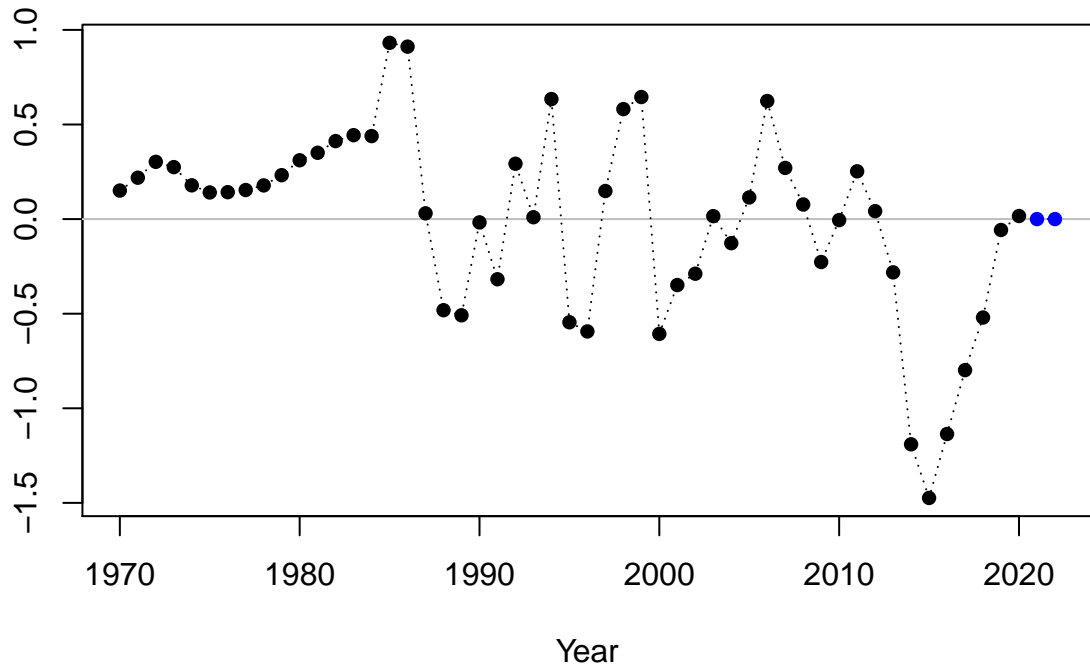


Summary Fishing Mortality





Log recruitment deviation



Log recruitment deviation

1.5  
0.5  
-0.5  
-1.5

1970

1980

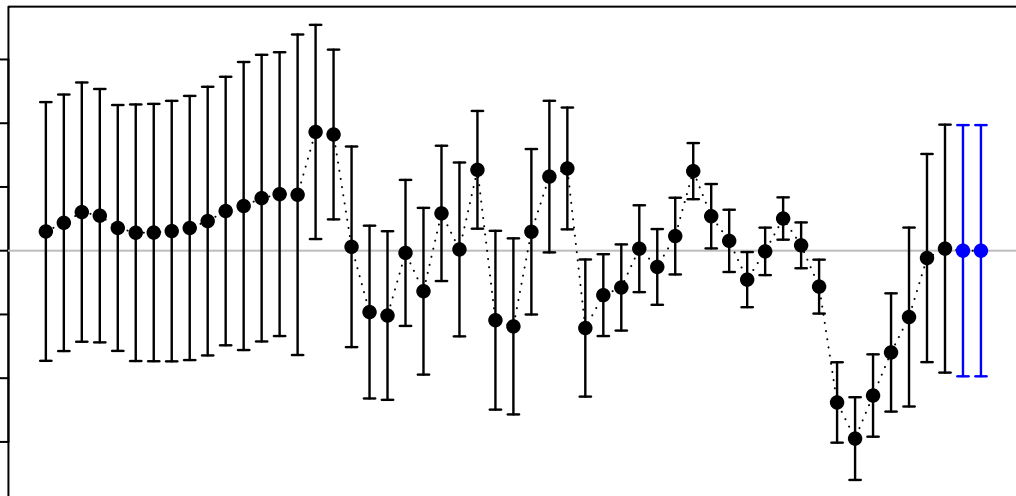
1990

2000

2010

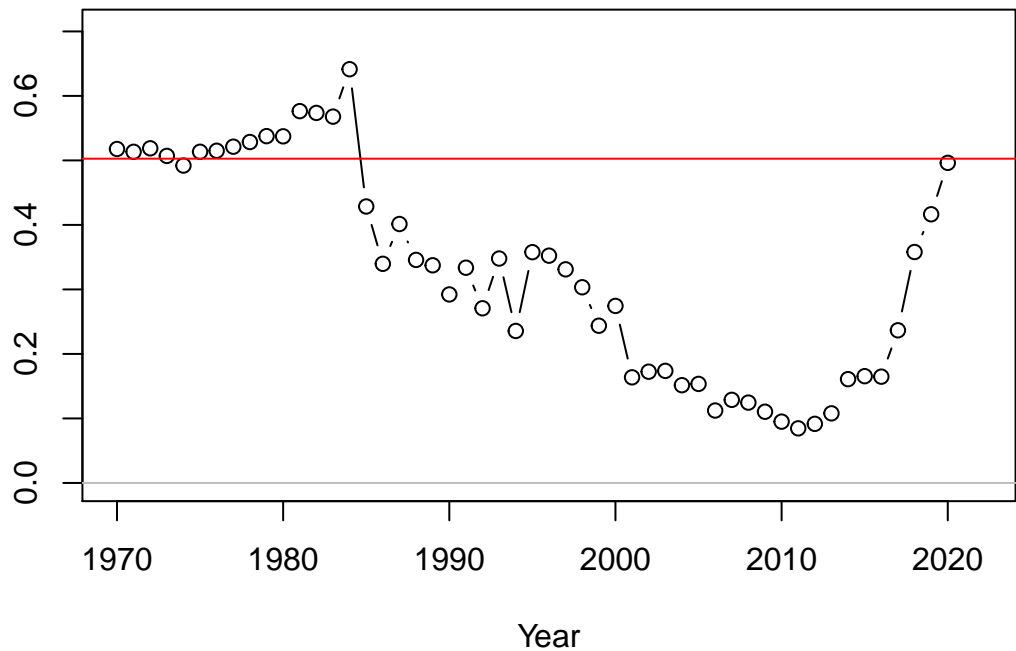
2020

Year

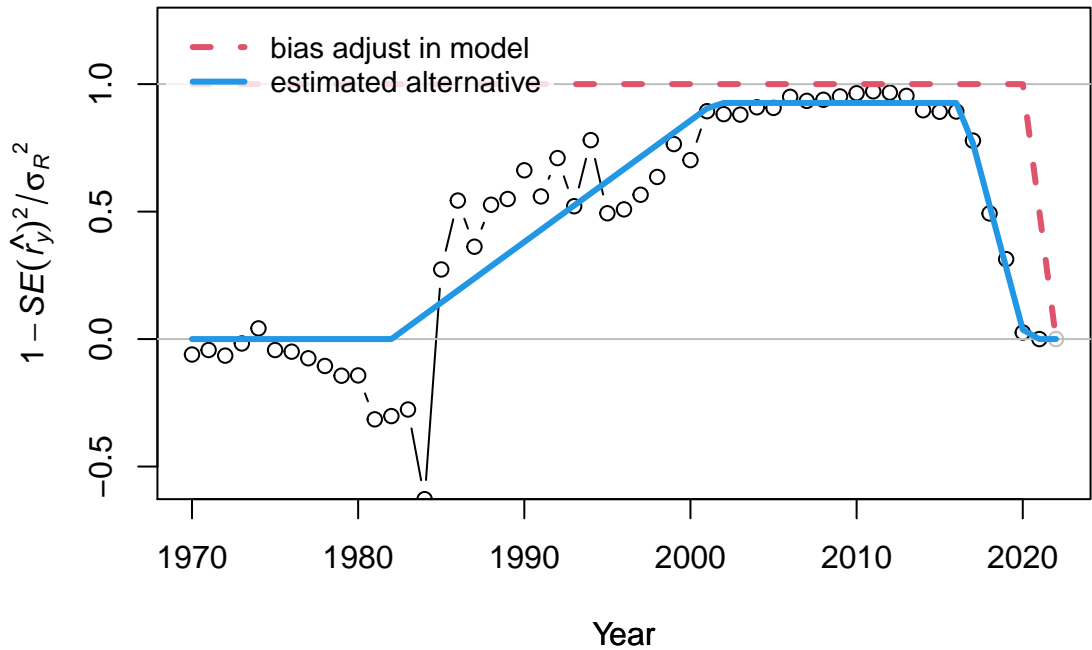


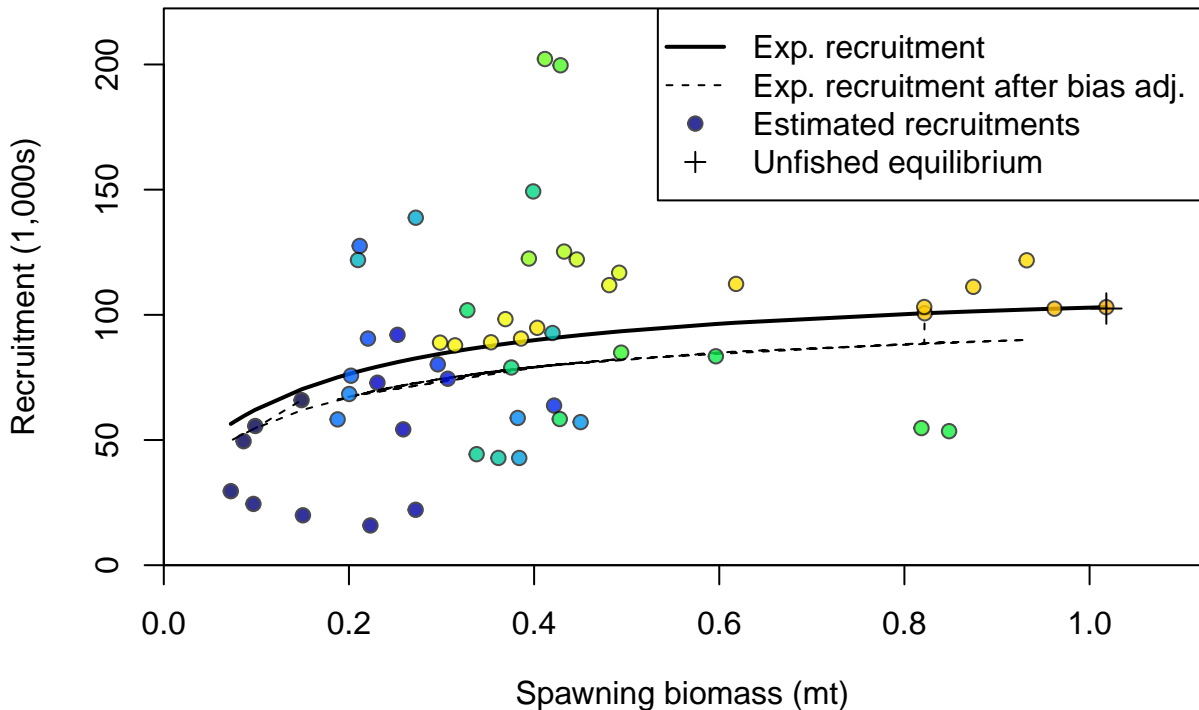
## Recruitment deviation variance

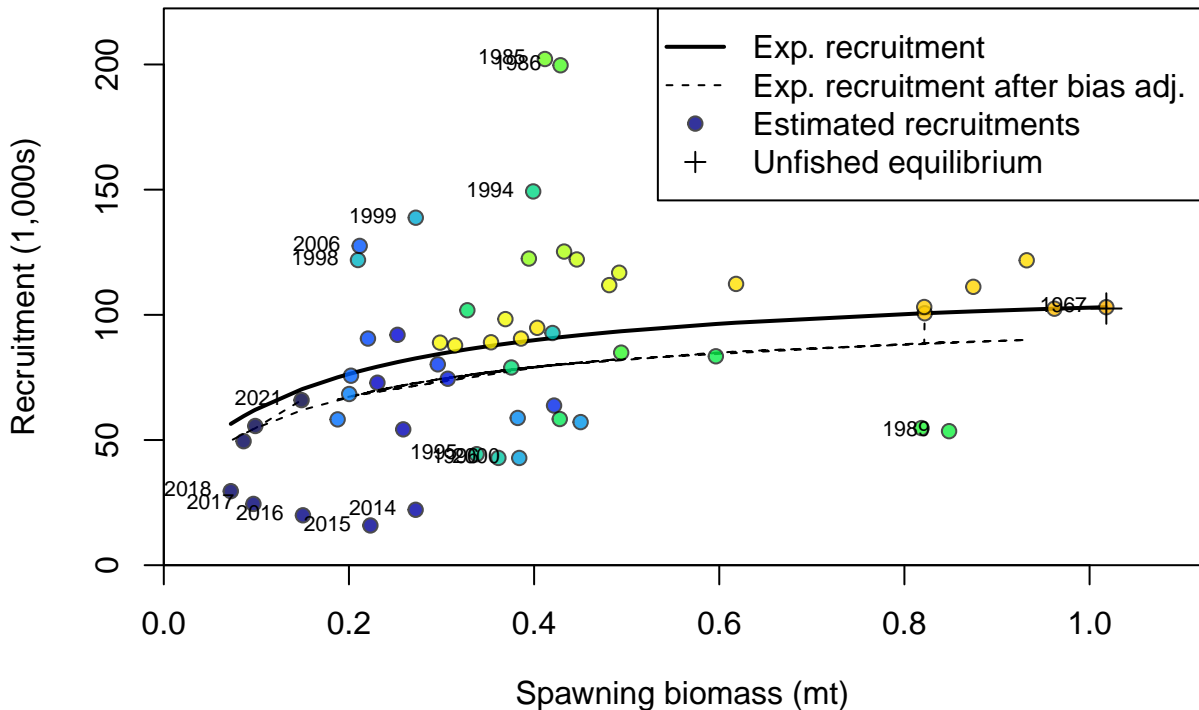
Asymptotic standard error estimate



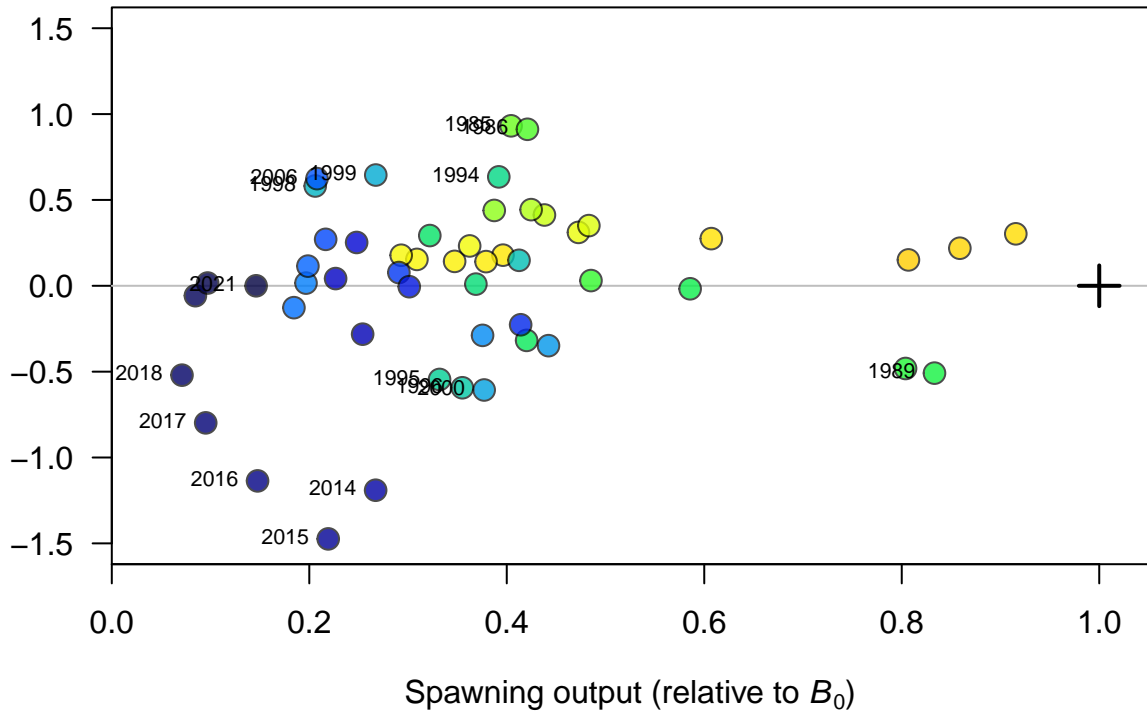


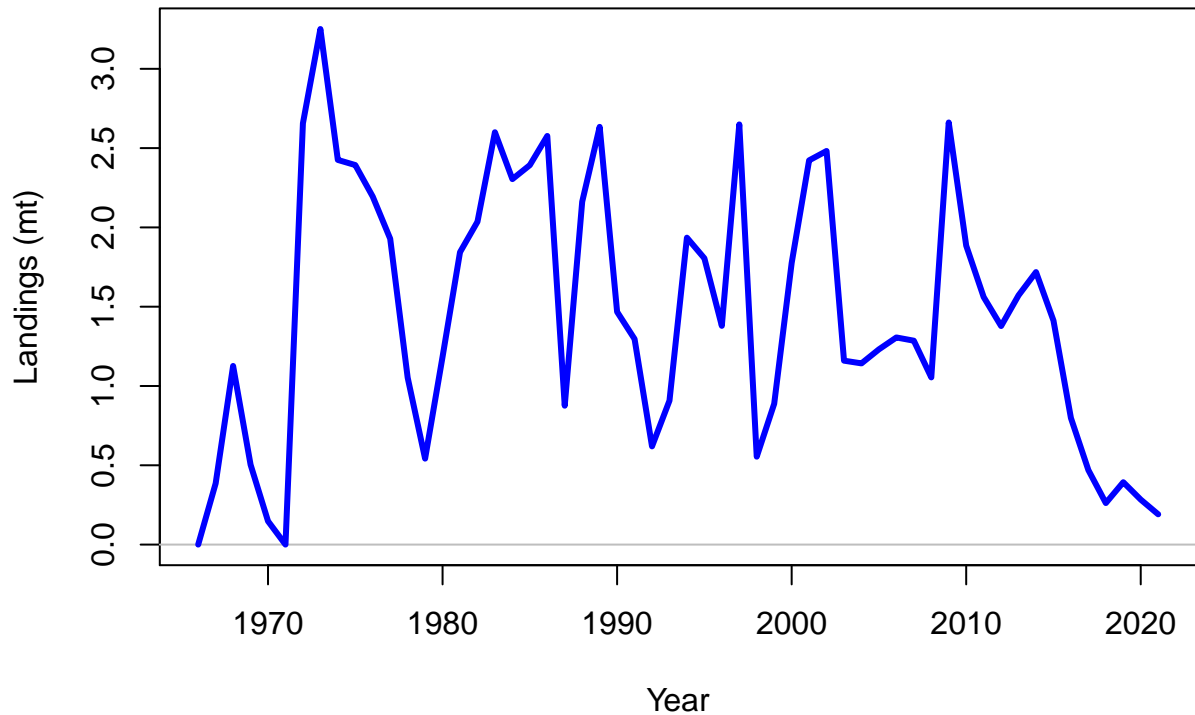


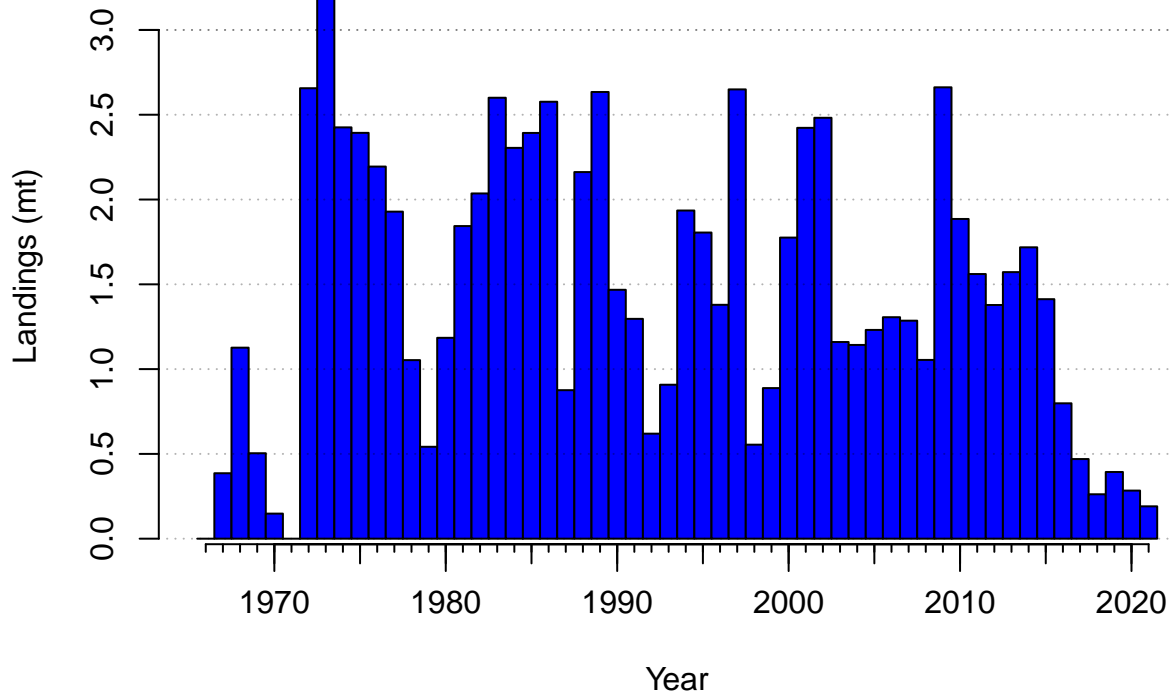




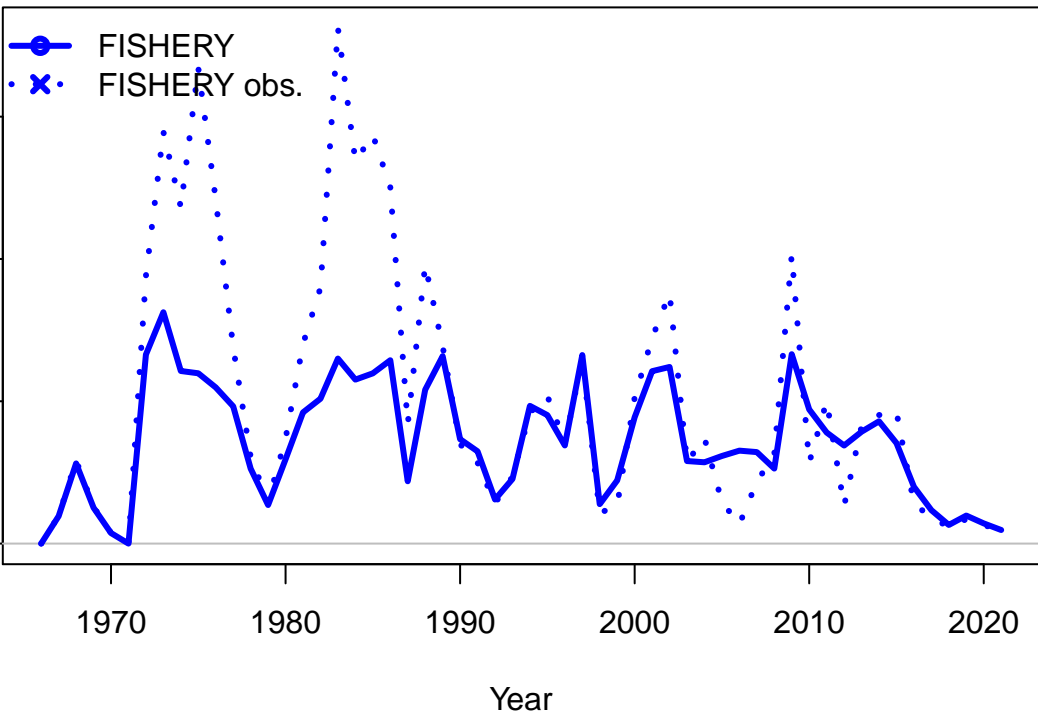
Log recruitment deviation

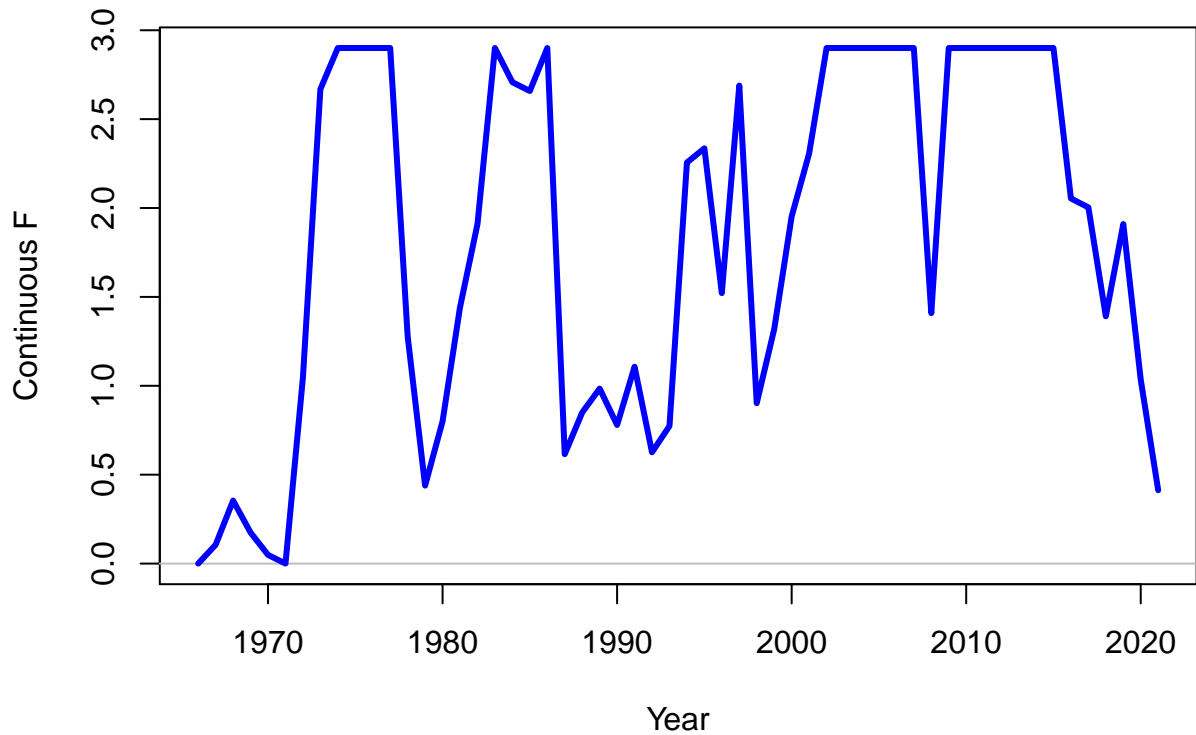






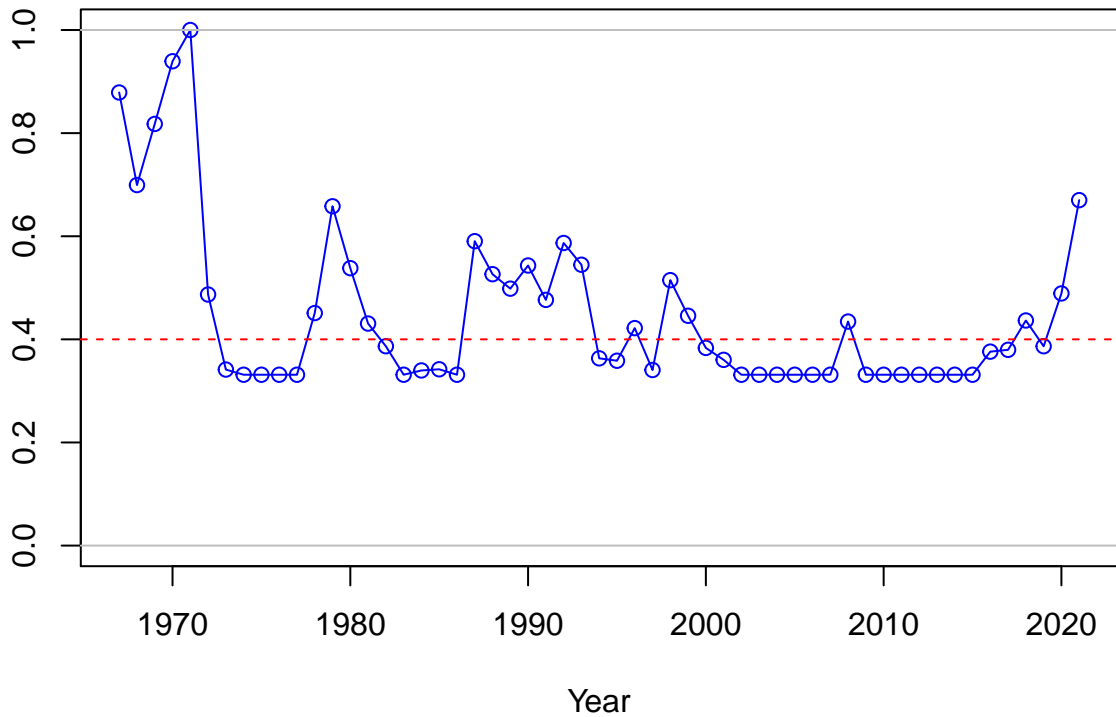
Observed and expected Landings (mt)

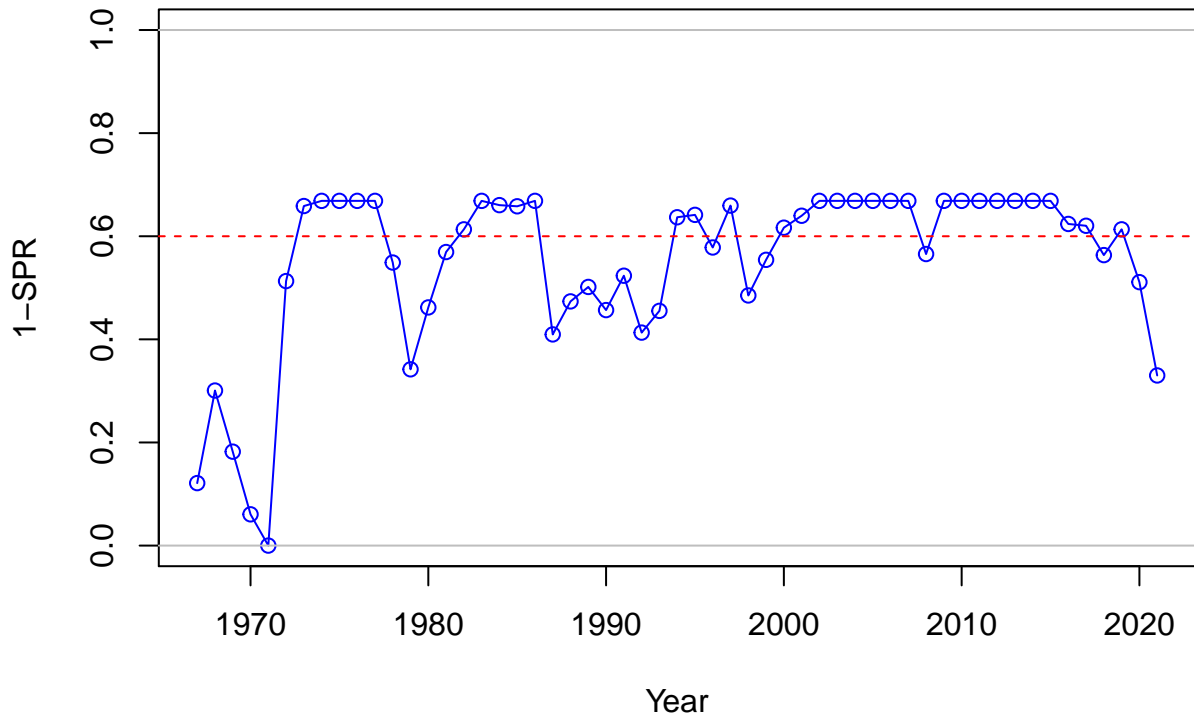




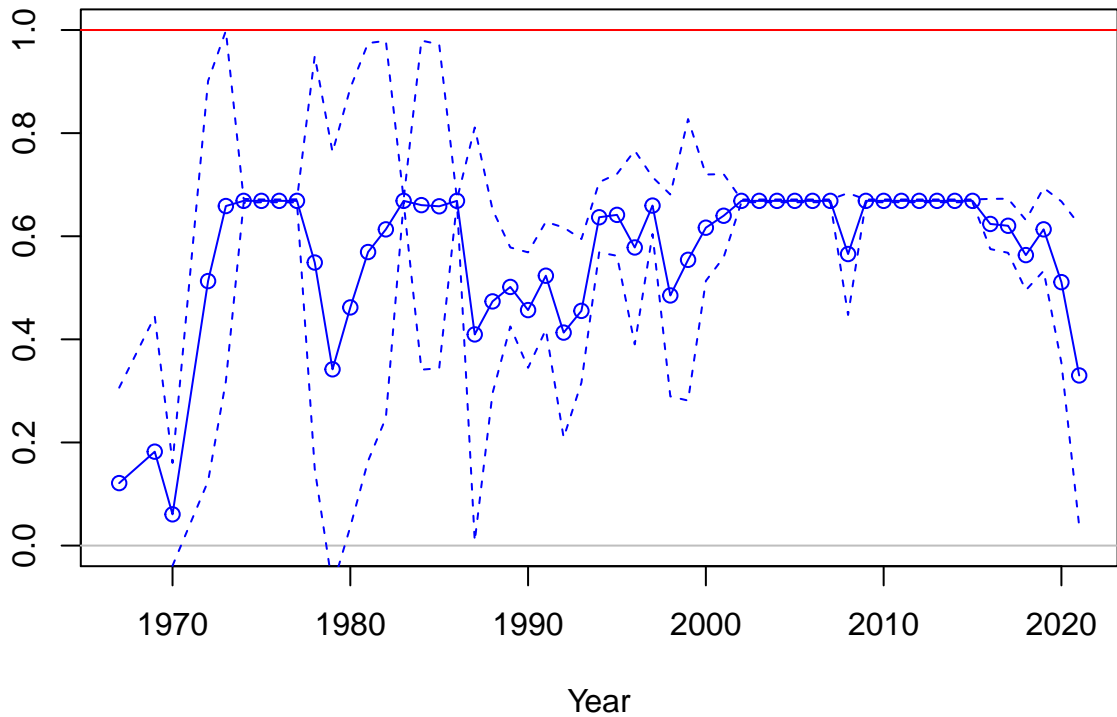


SPR

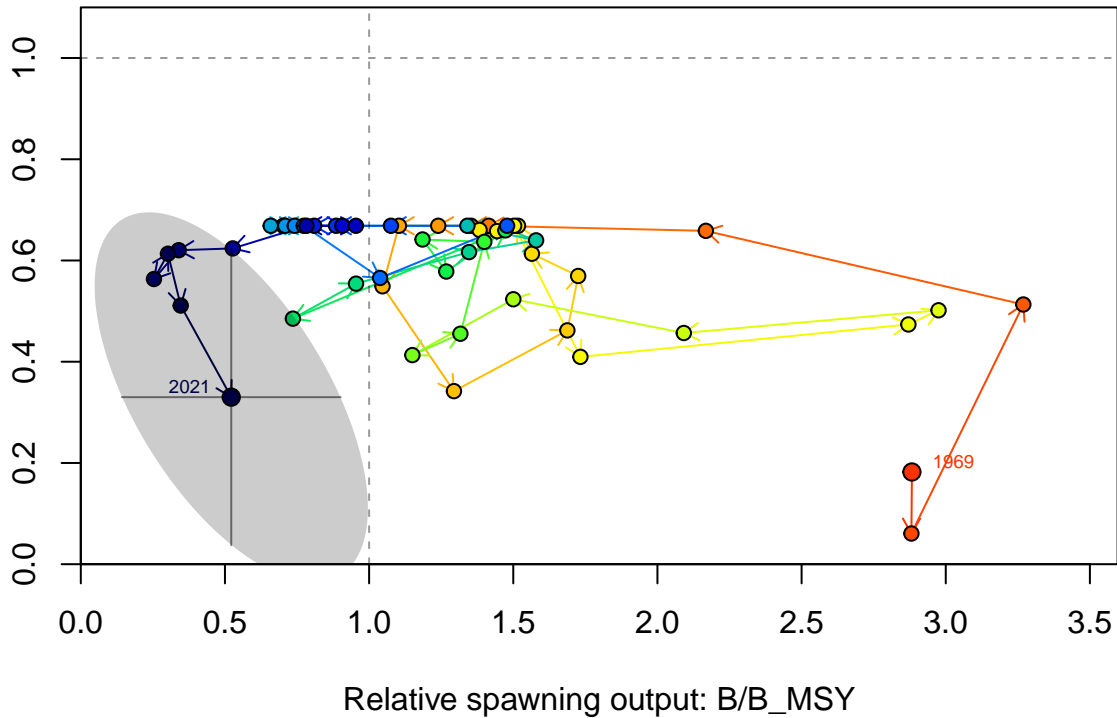




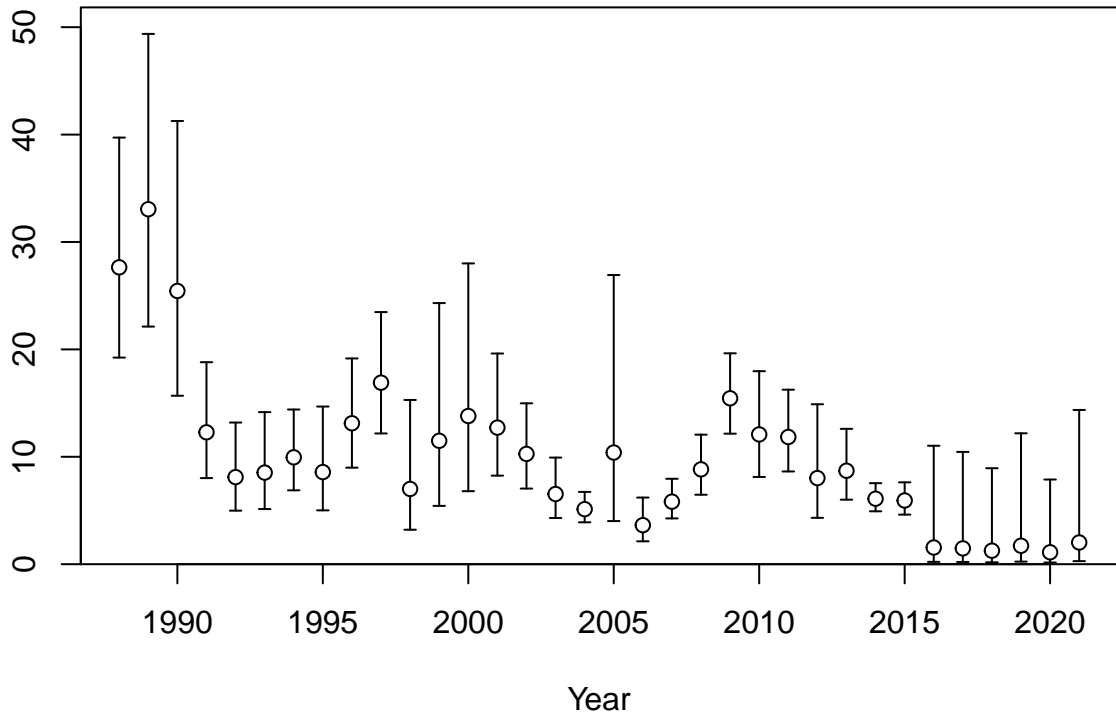
Fishing intensity: 1-SPR



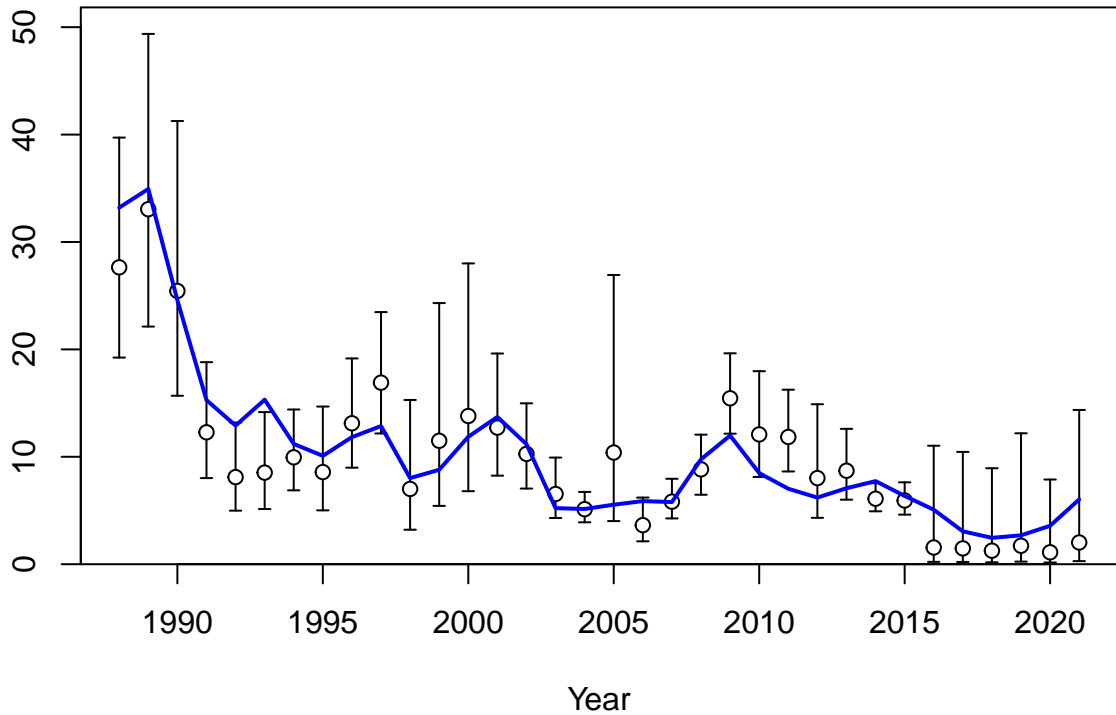
Fishing intensity: 1-SPR

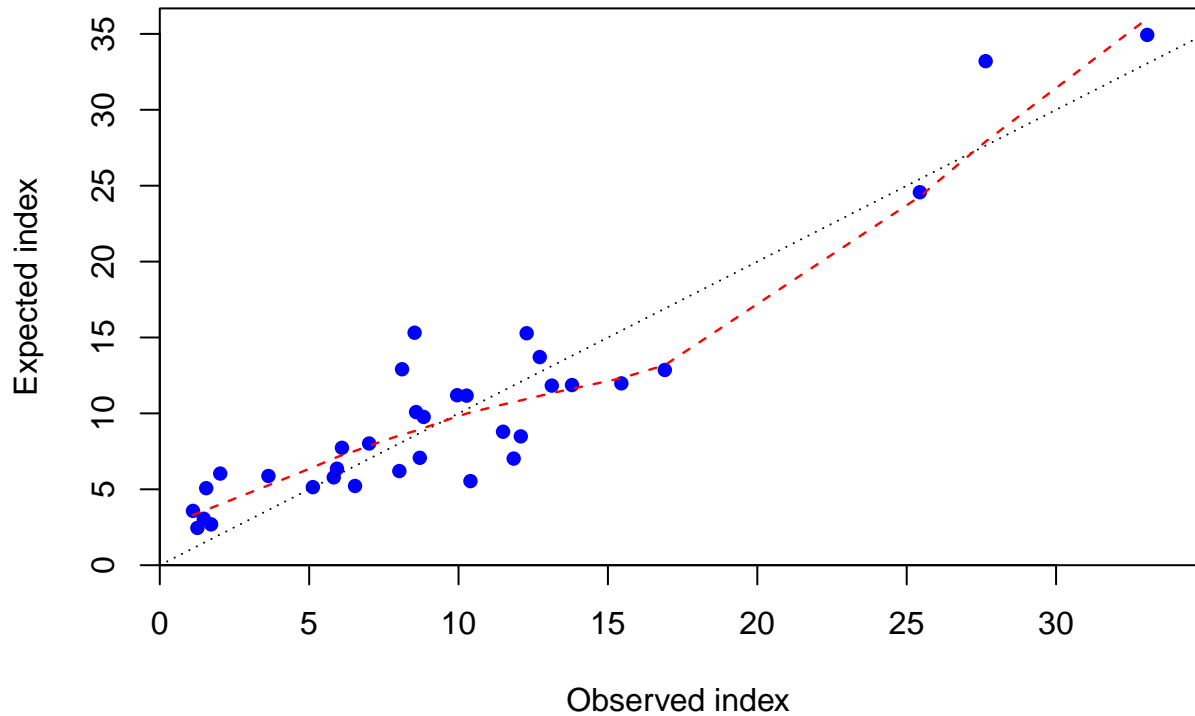


Index

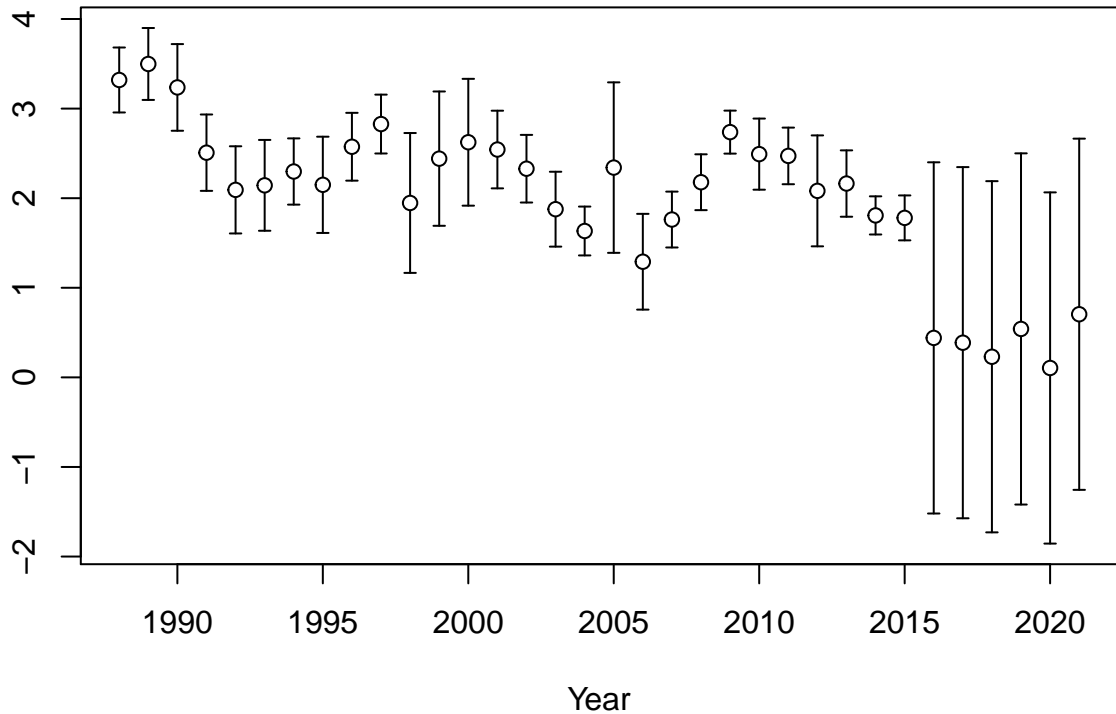


Index



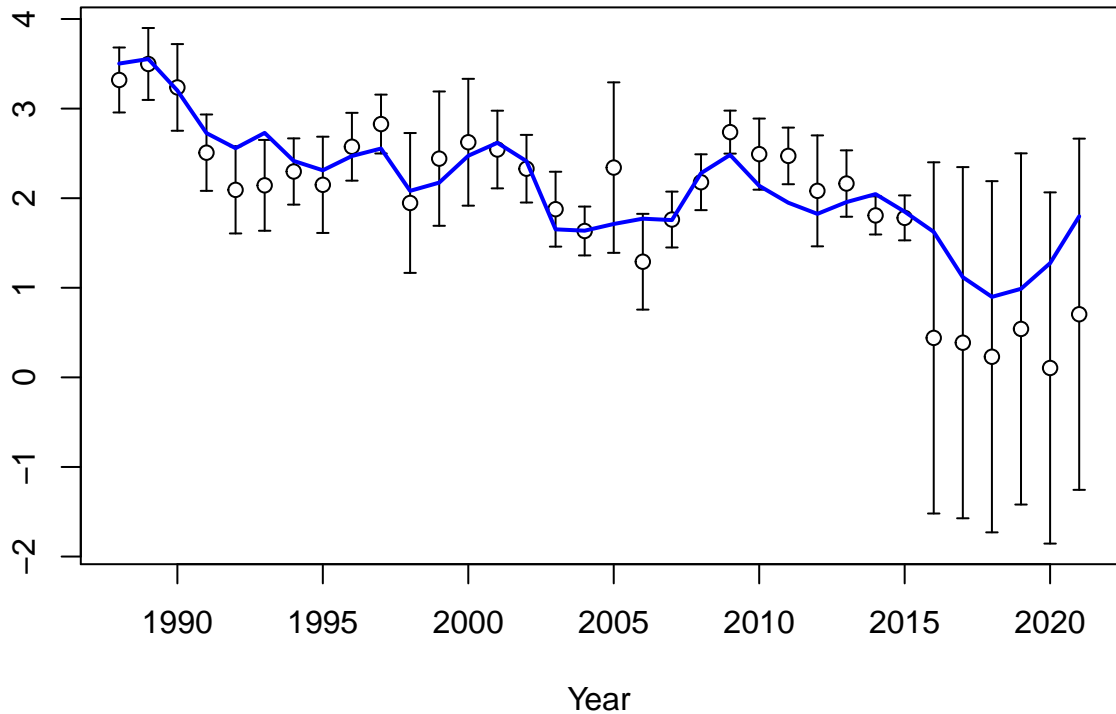


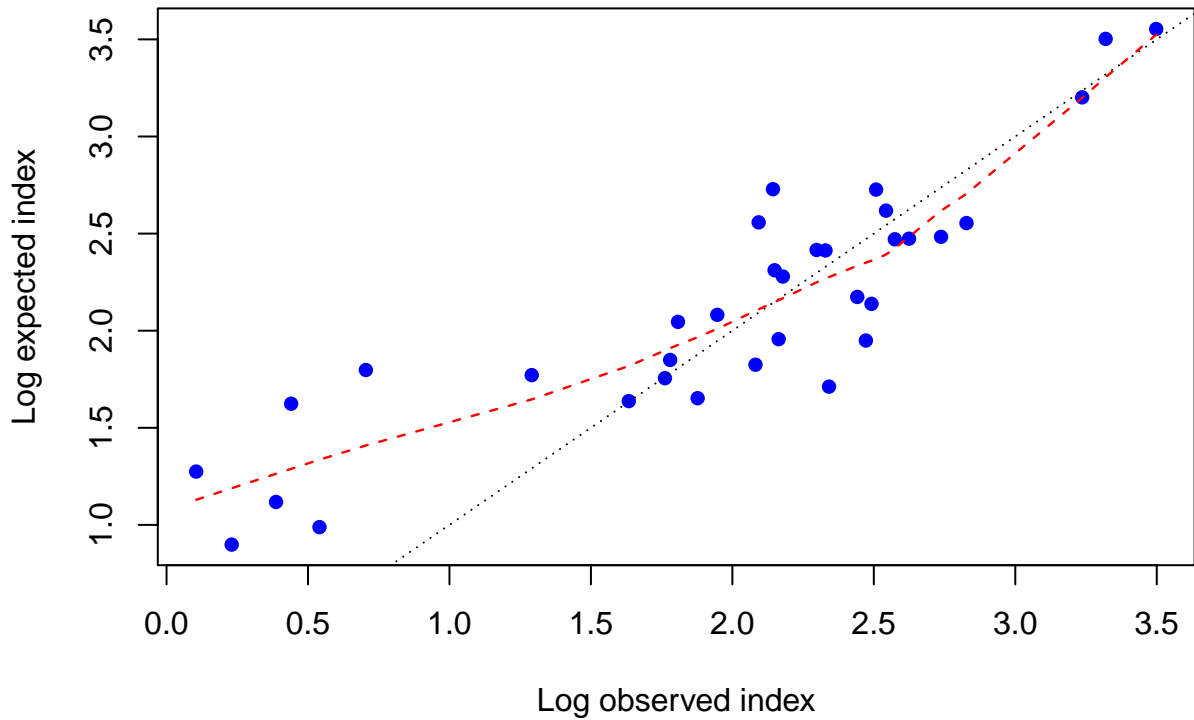
Log index

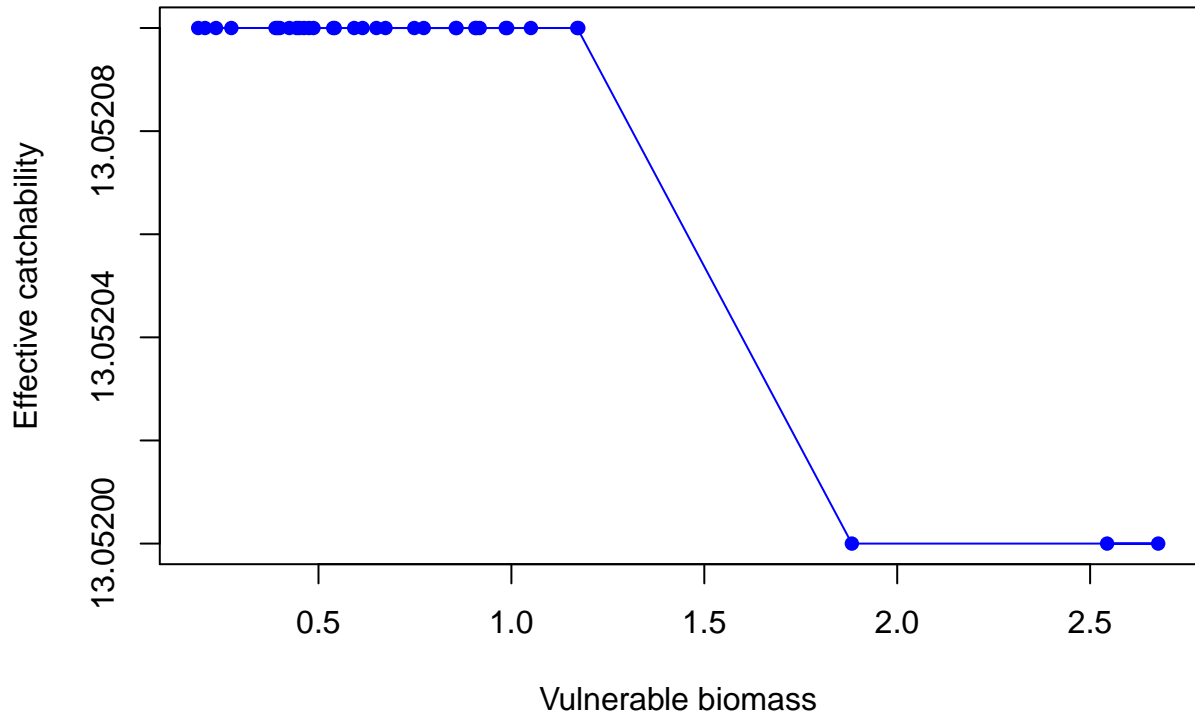


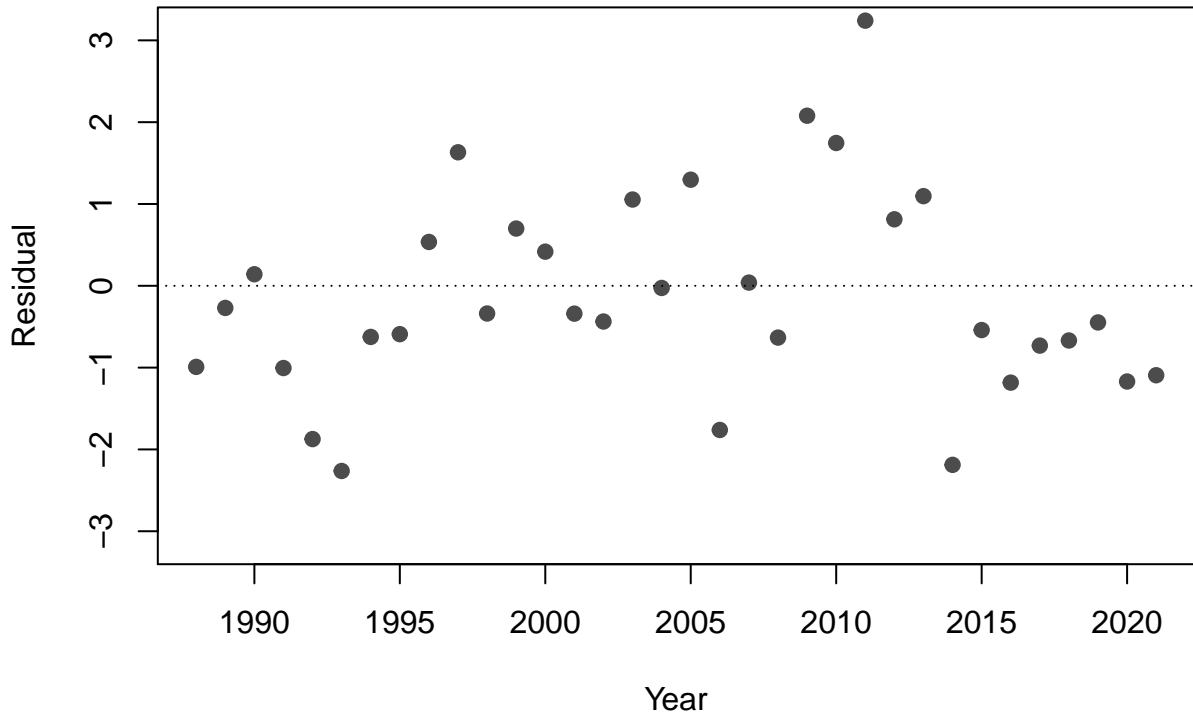


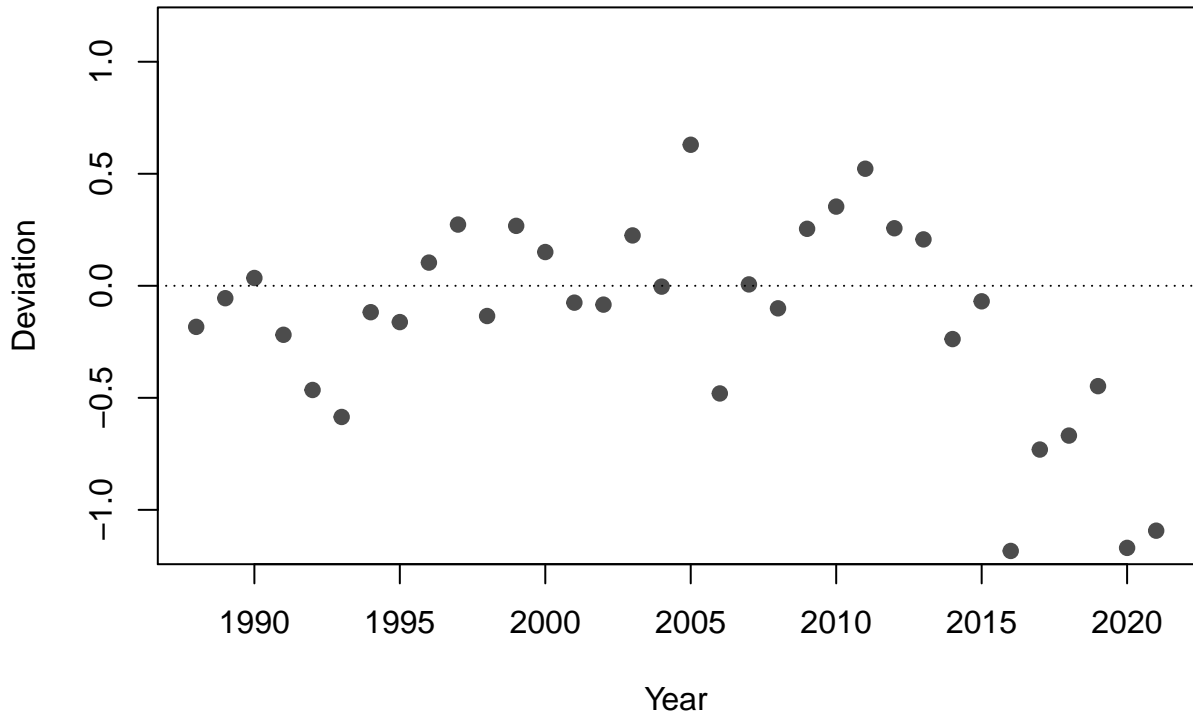
Log index



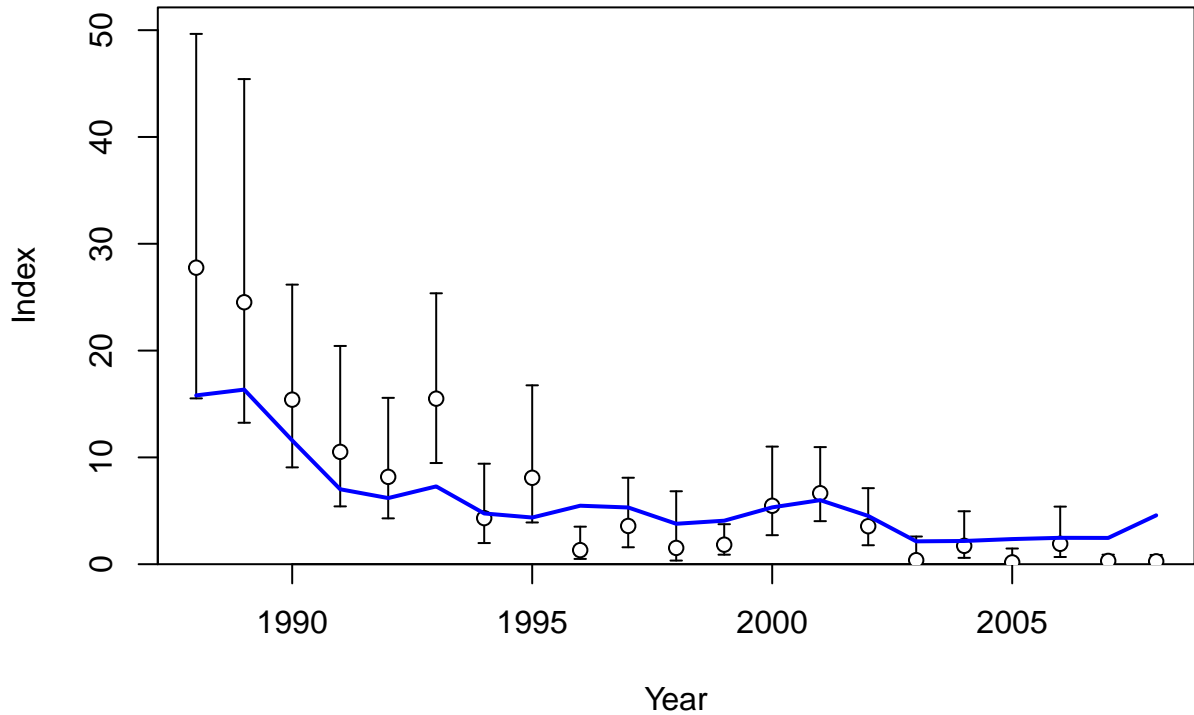


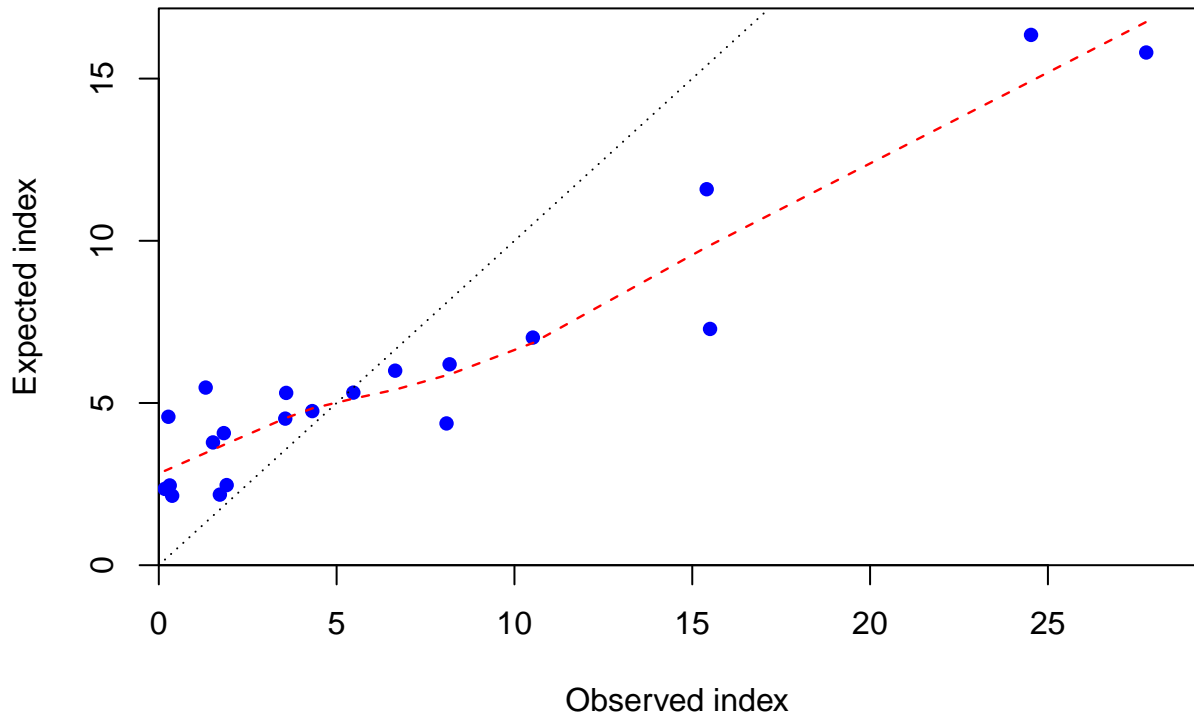




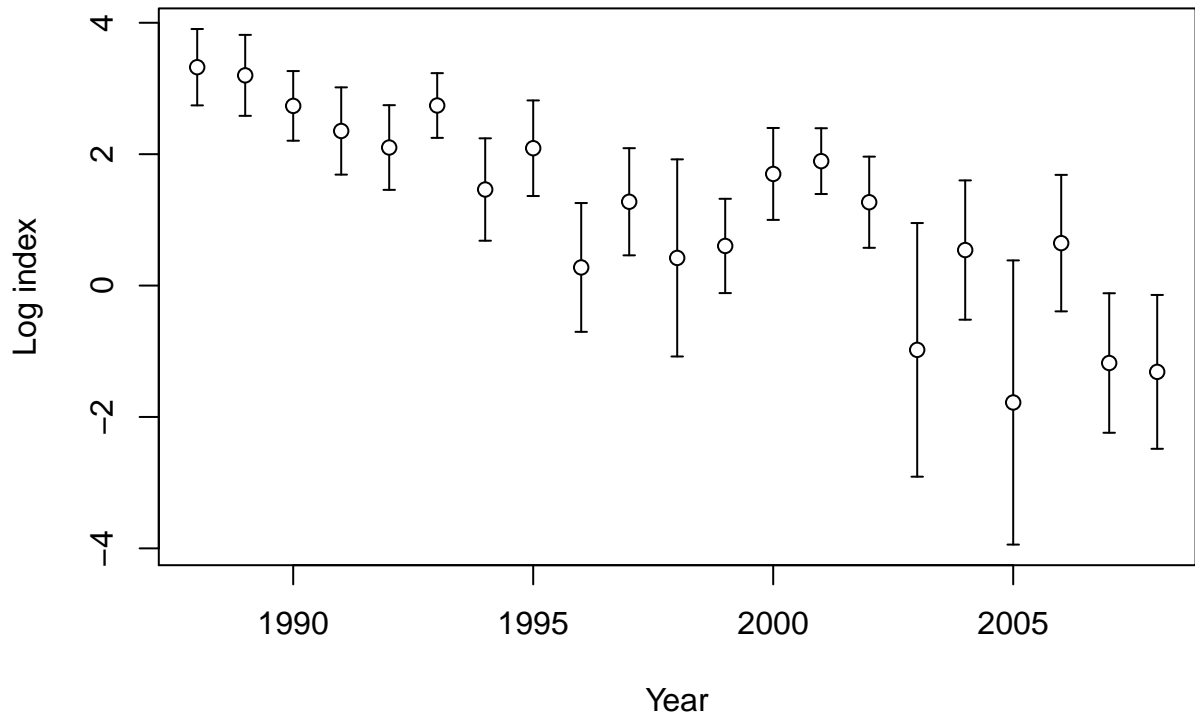


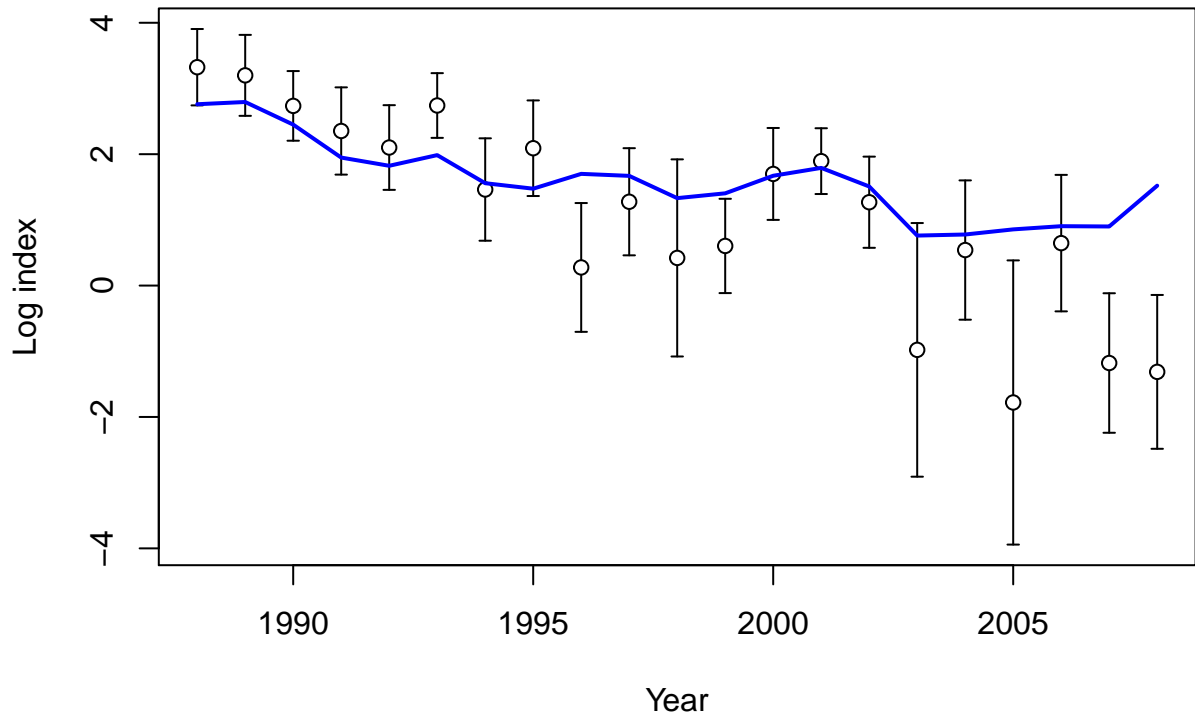


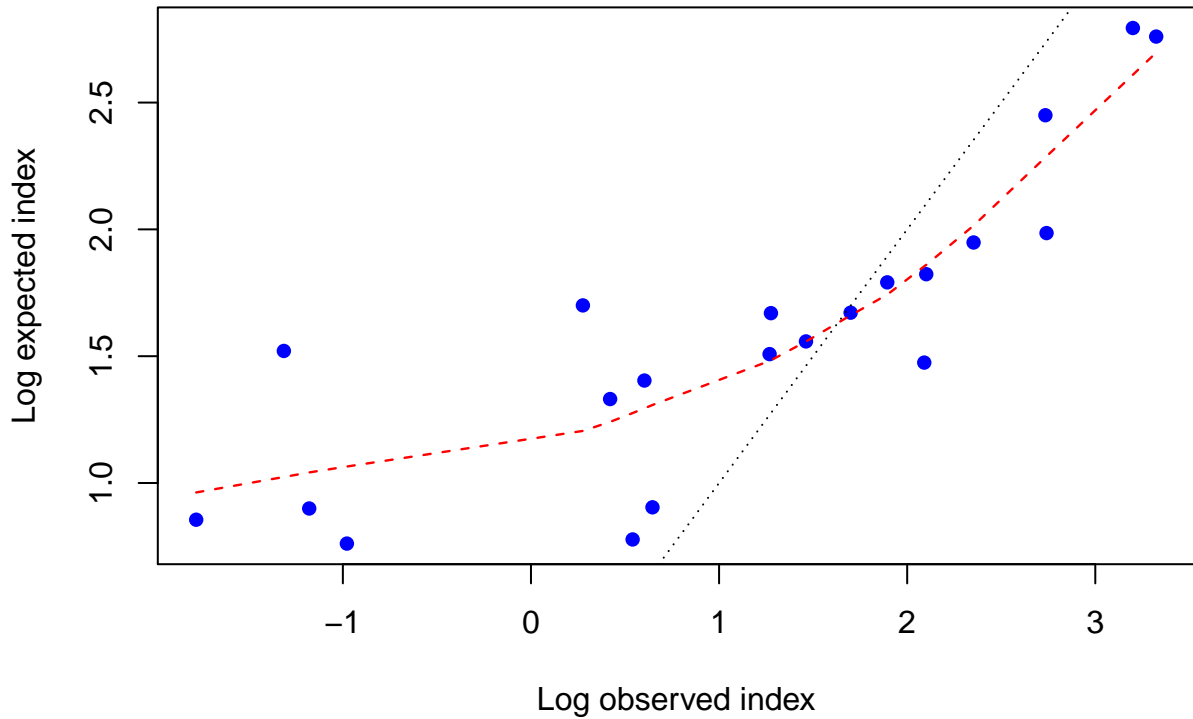


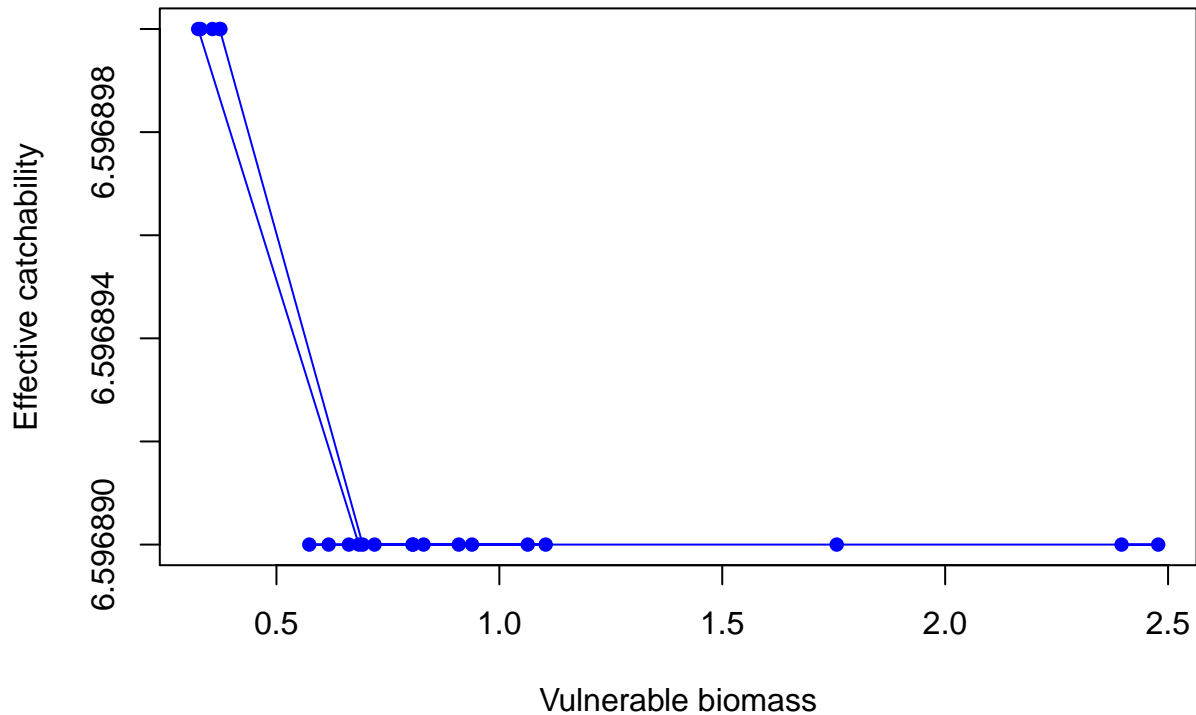


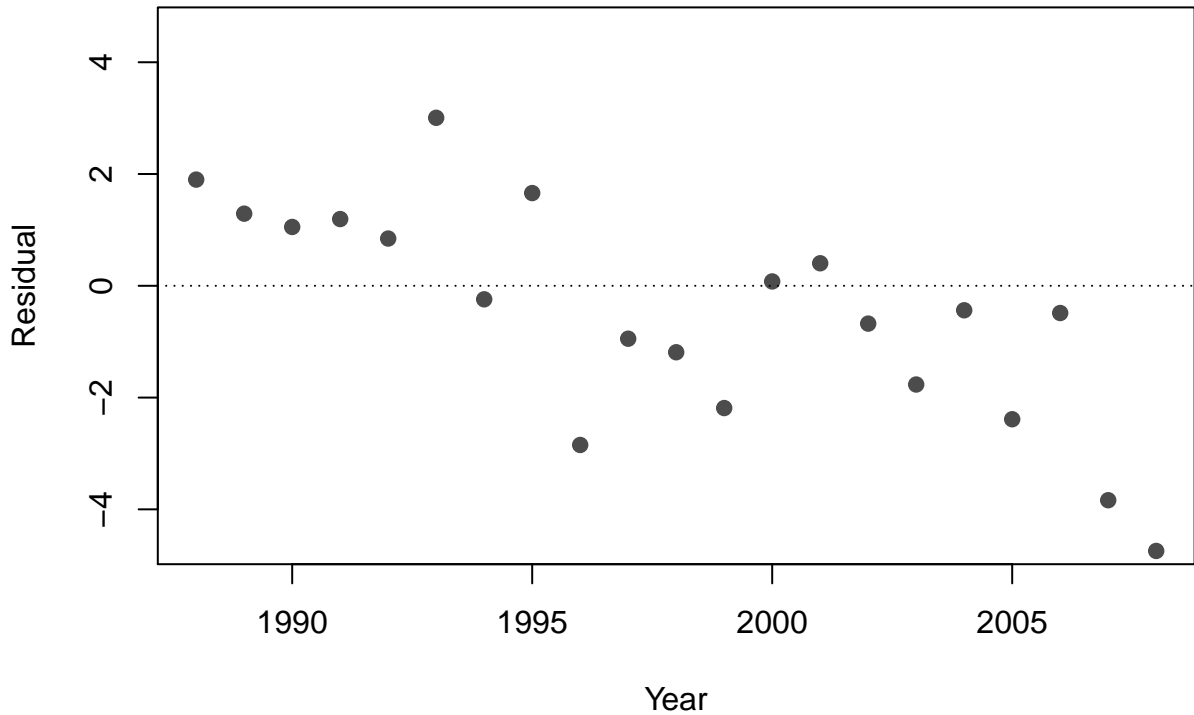


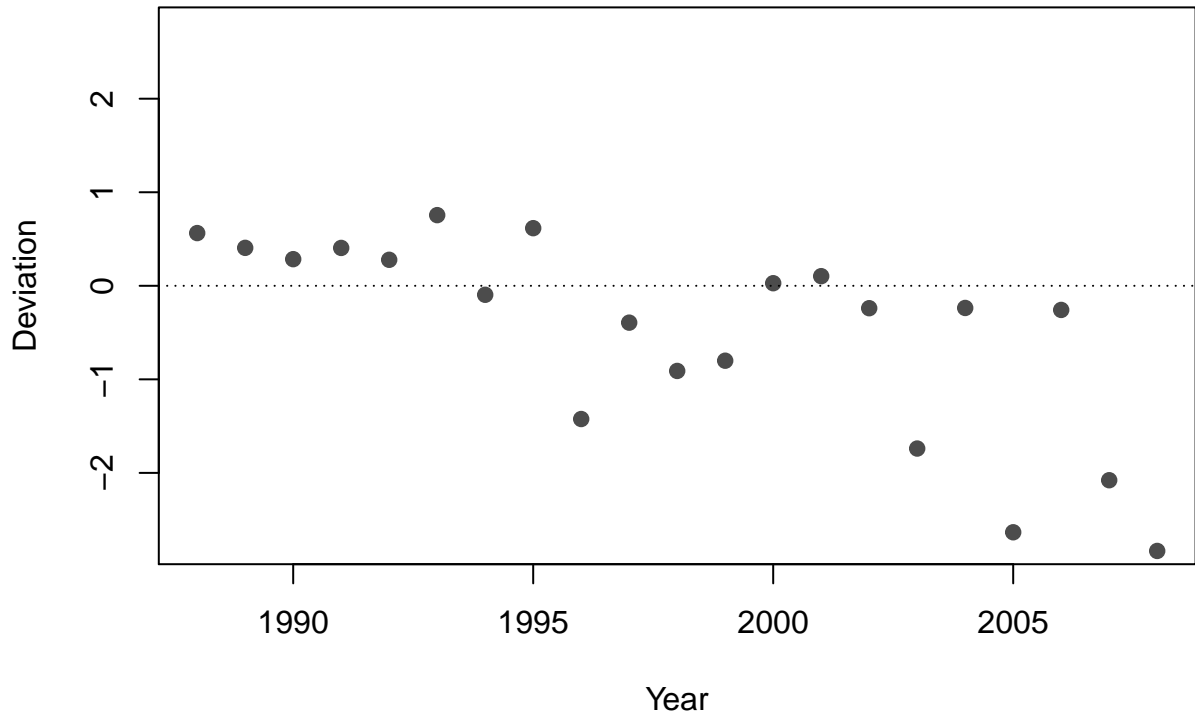




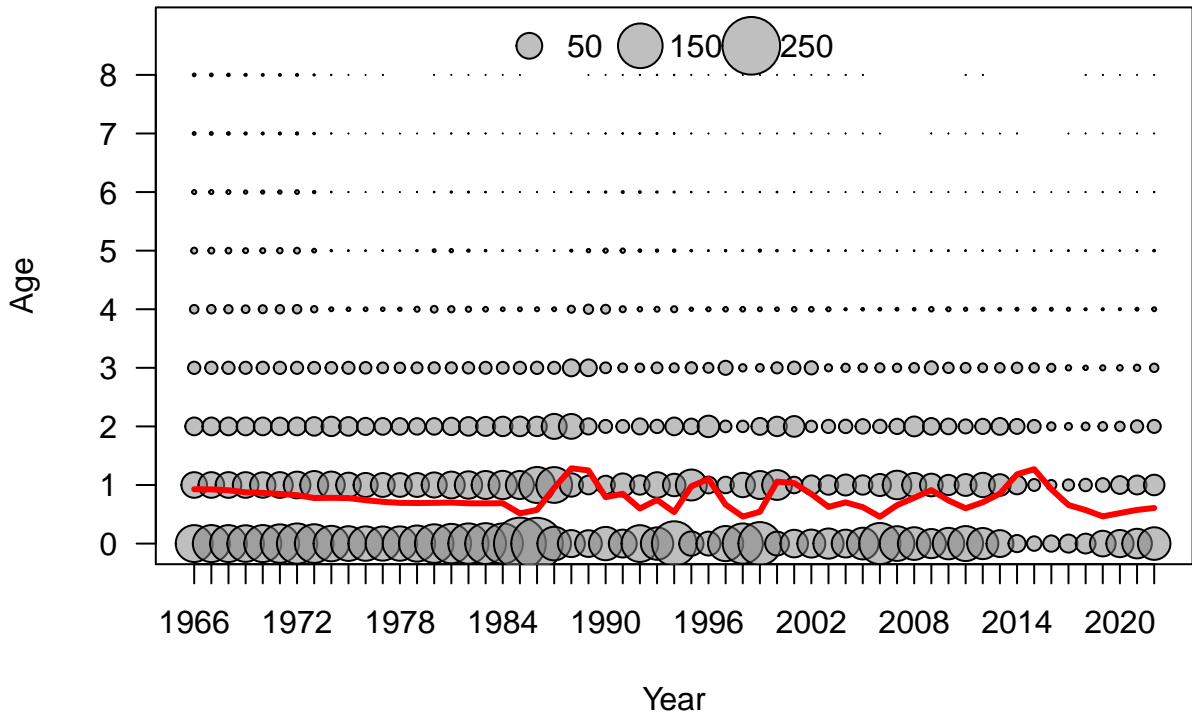






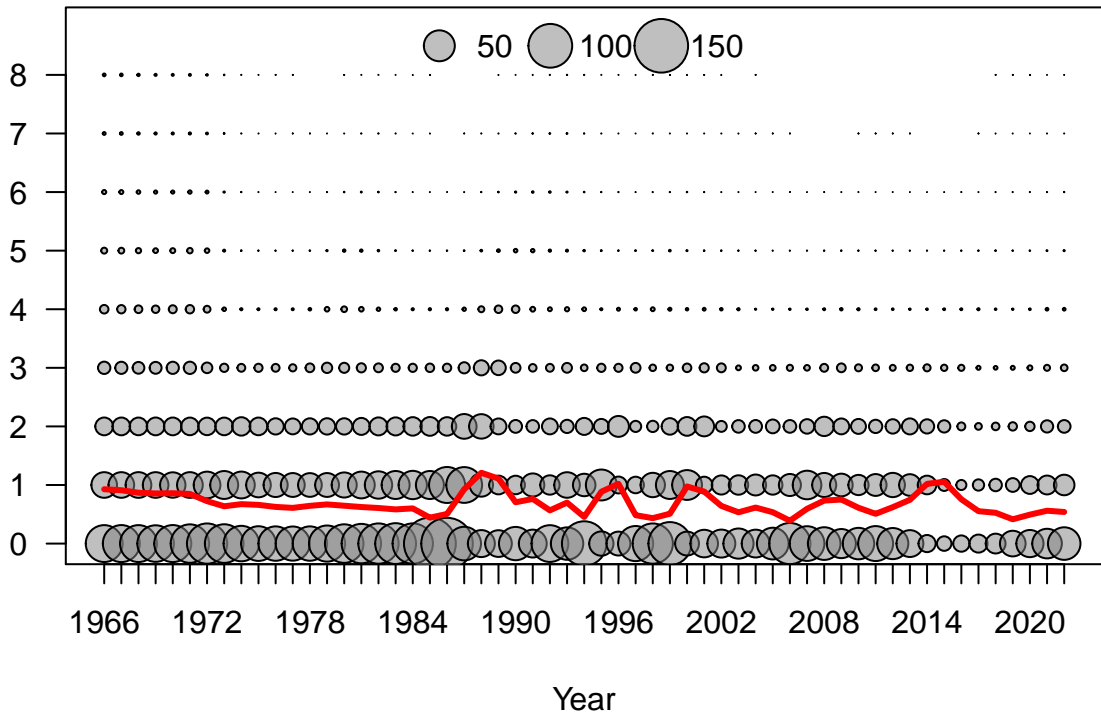


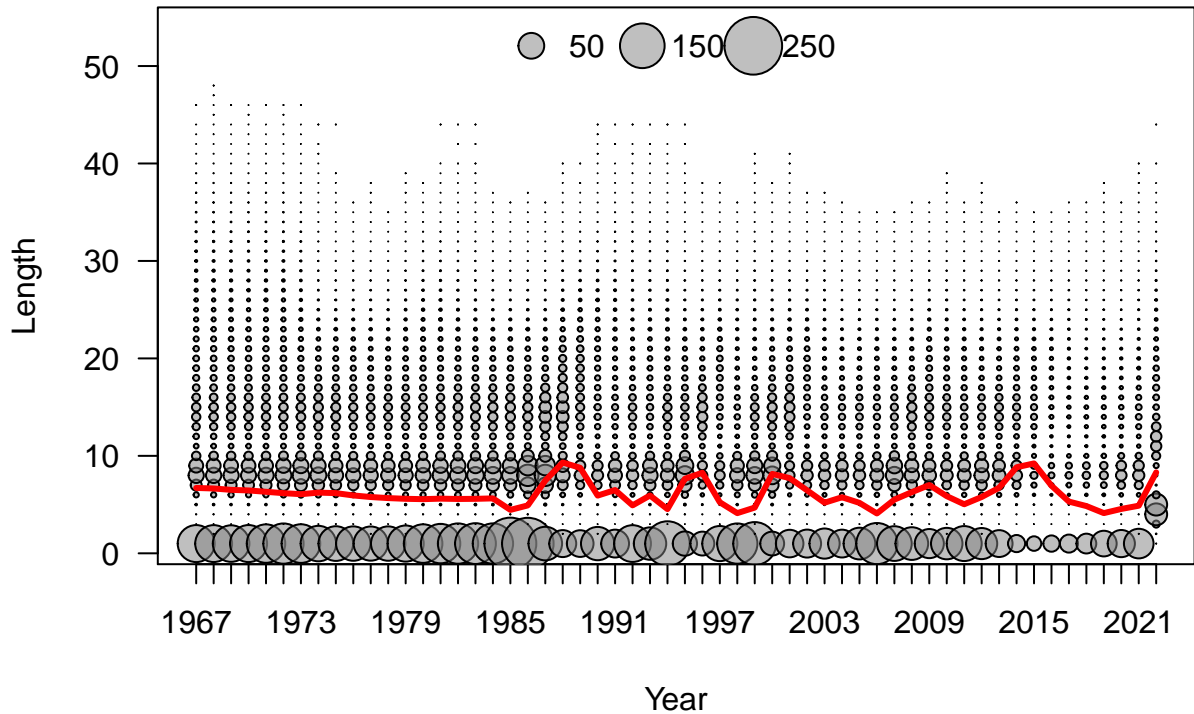


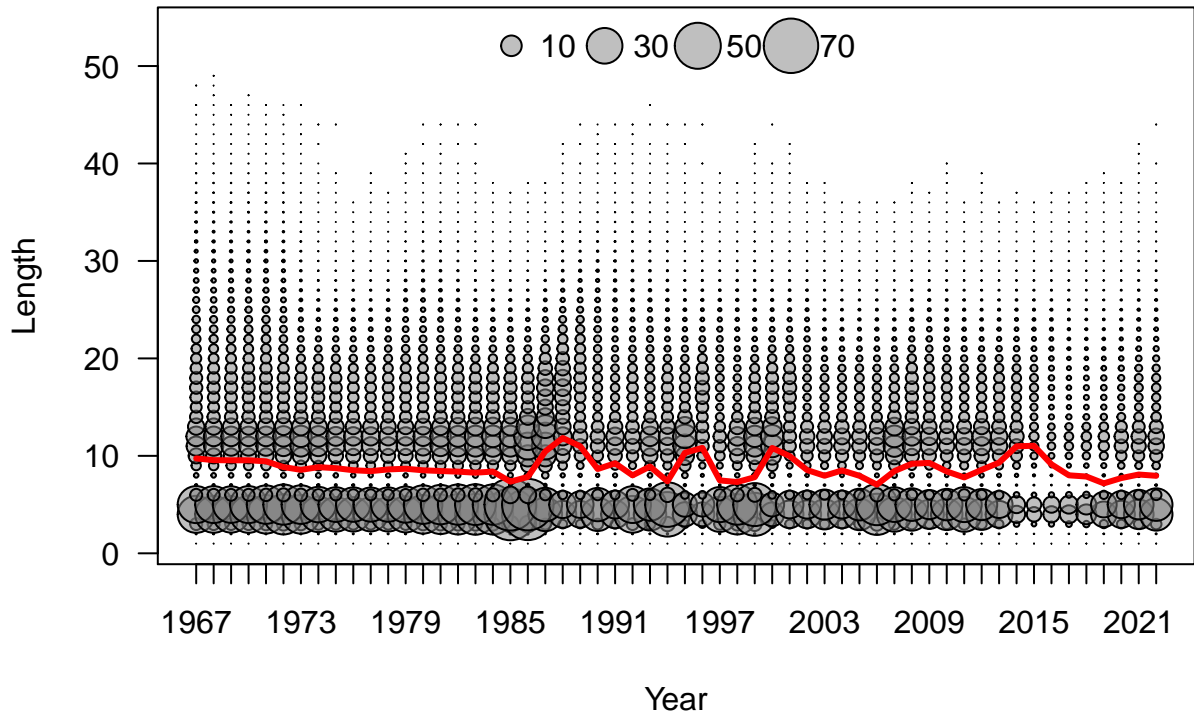


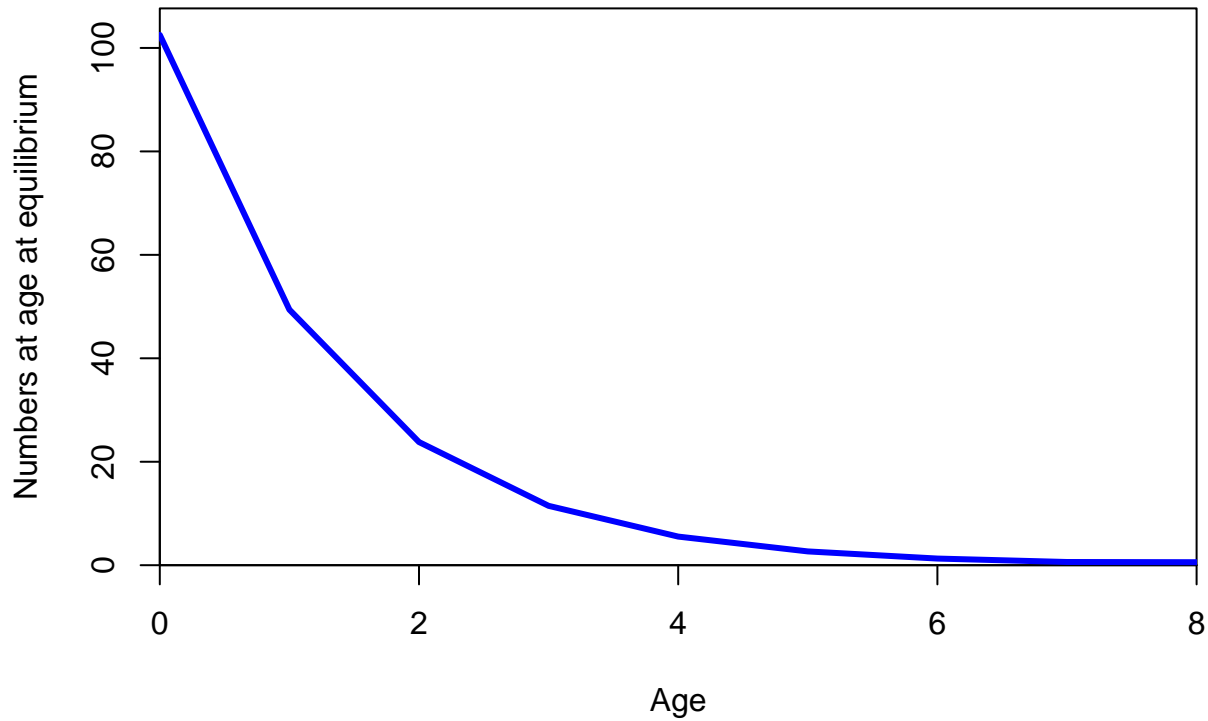


Age



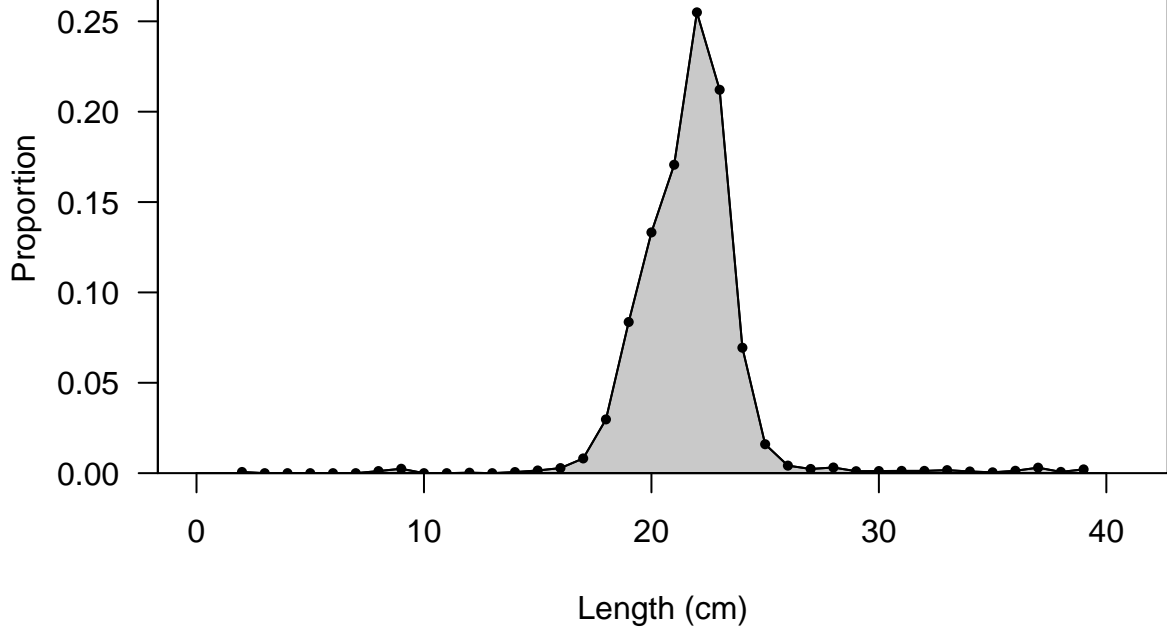


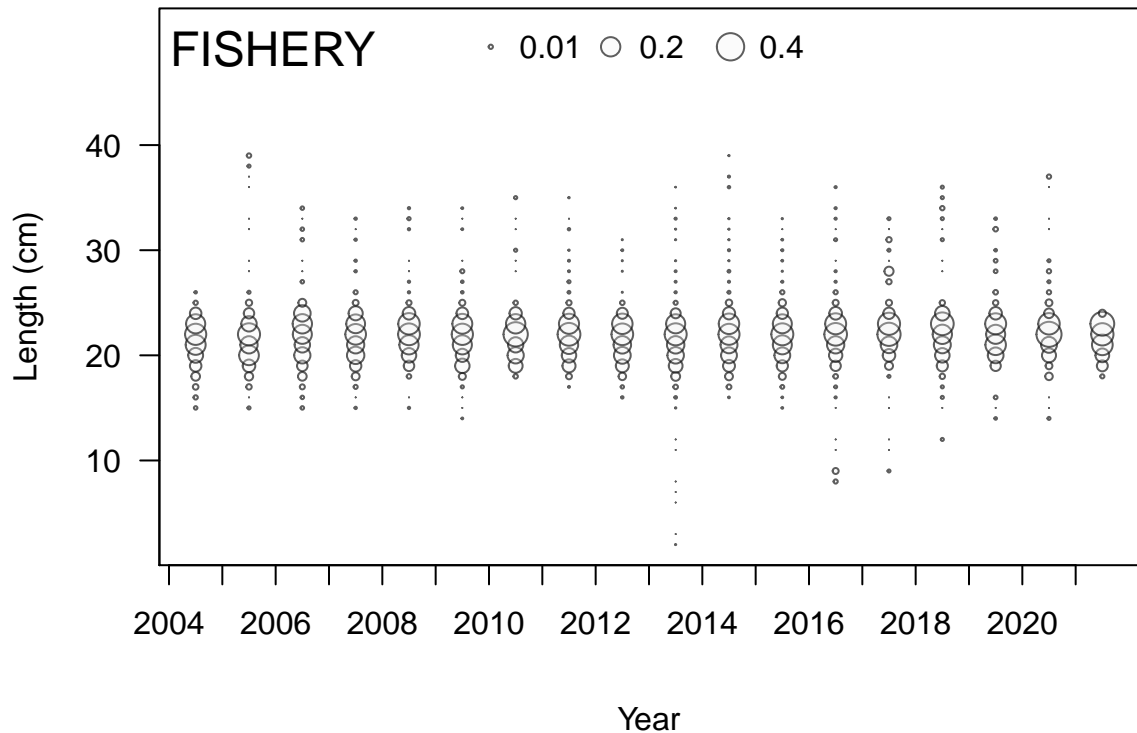


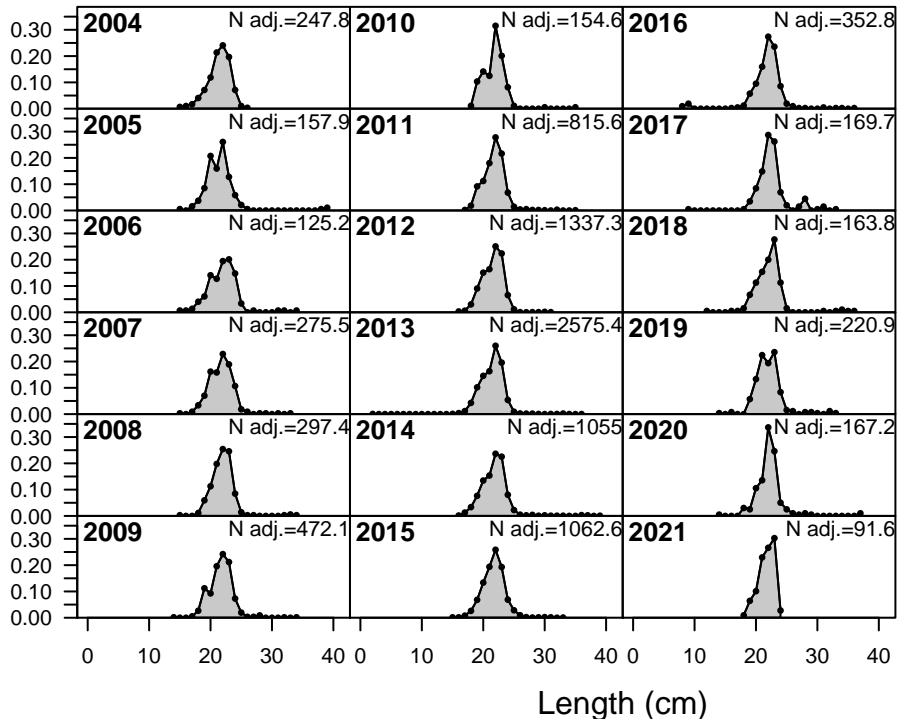


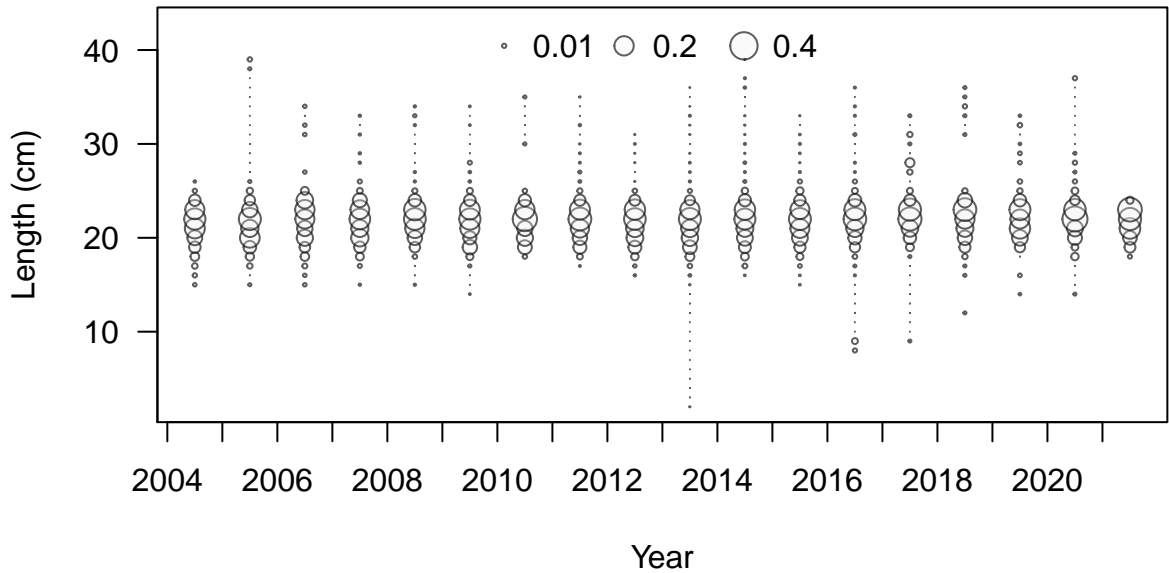
**FISHERY**

Sum of N adj.=9742.3



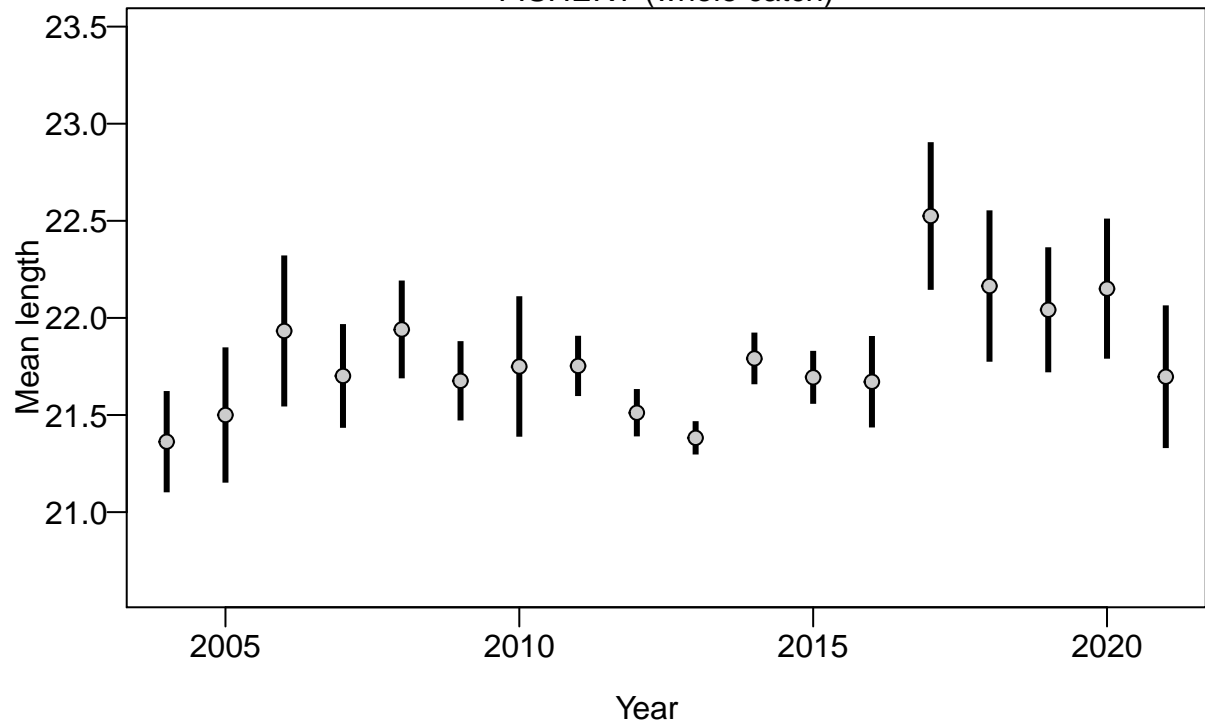


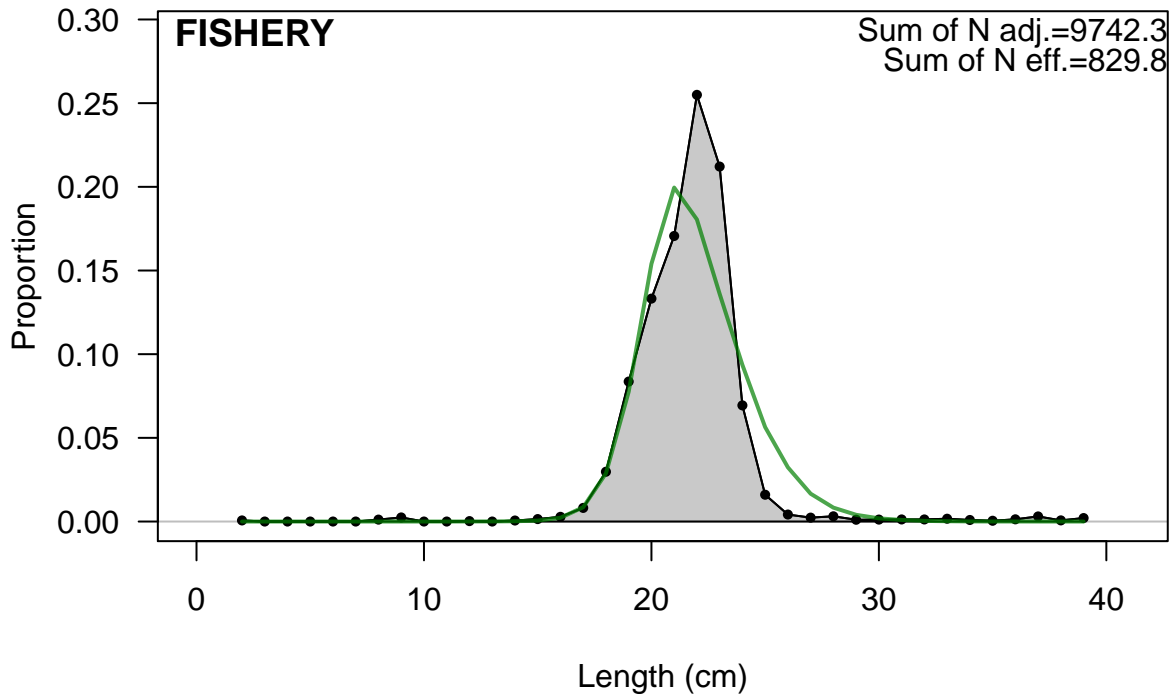


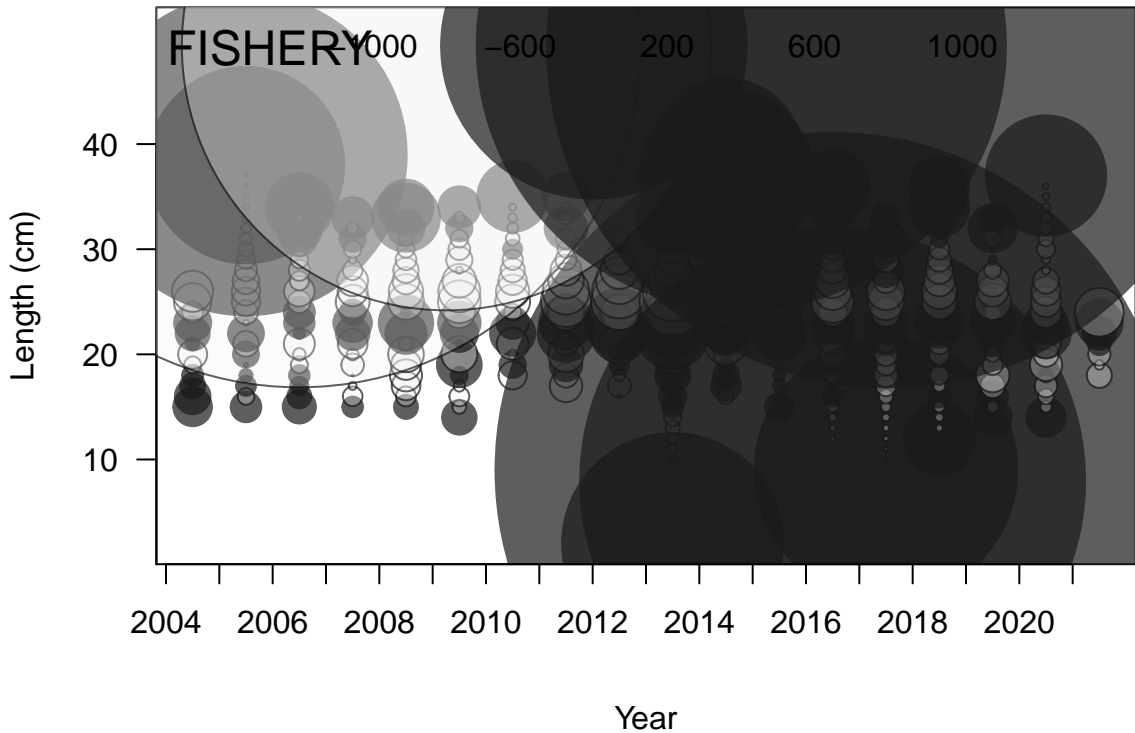


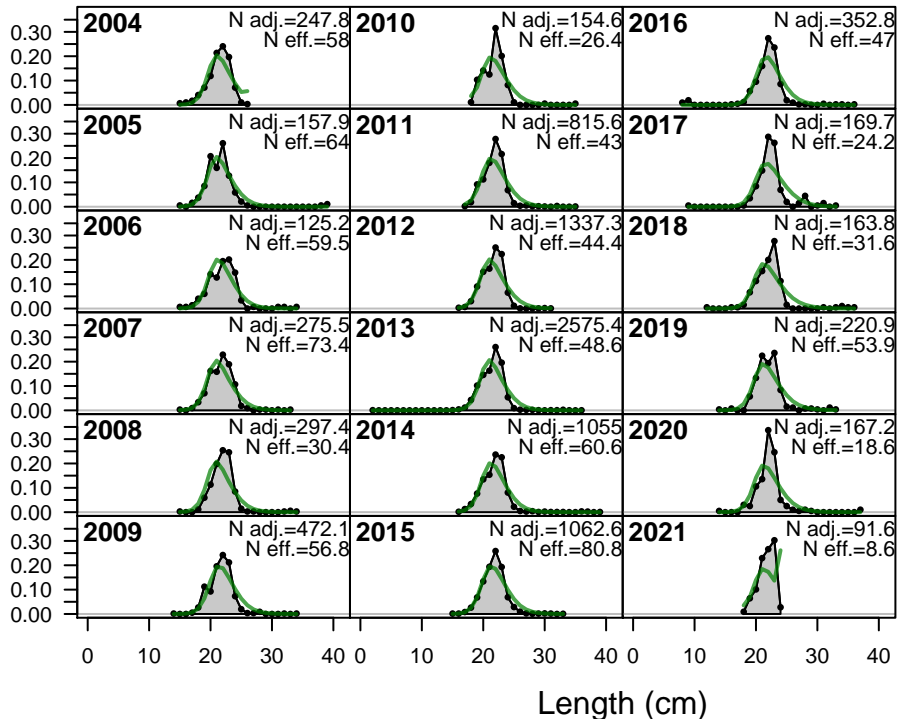


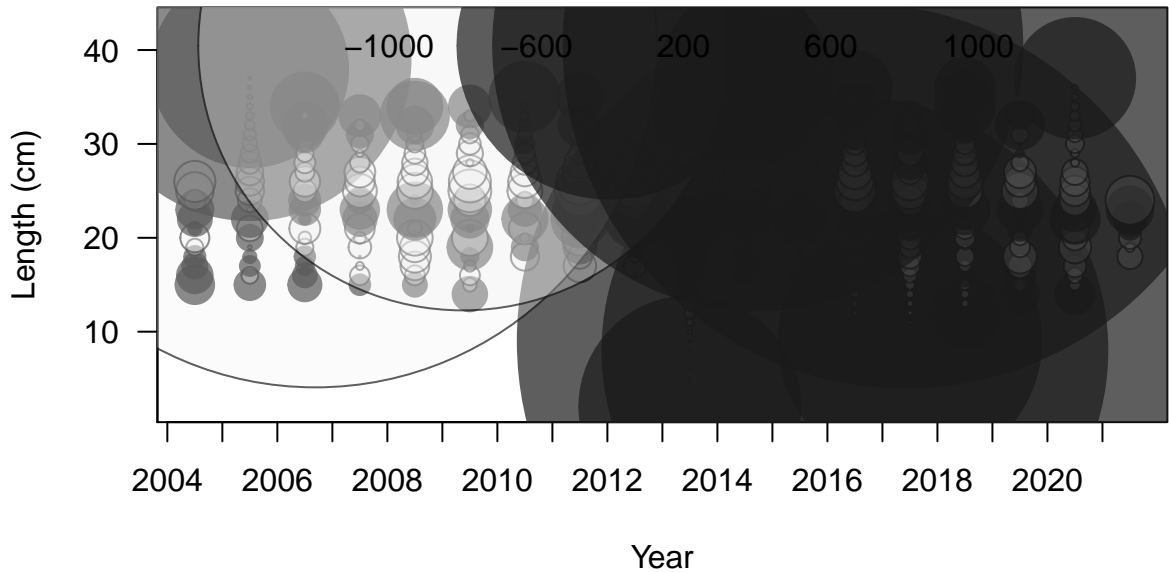
FISHERY (whole catch)



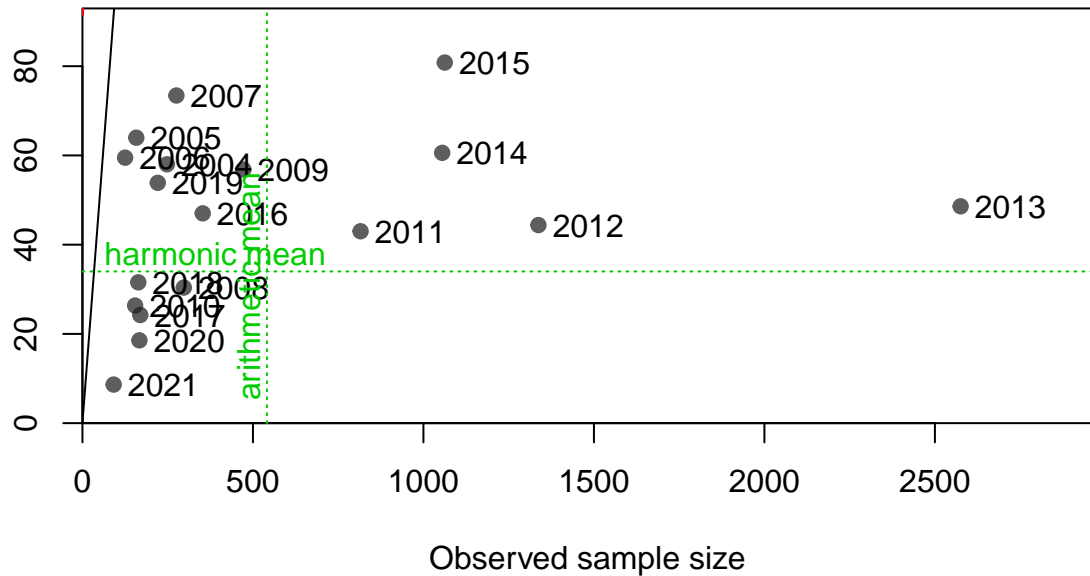




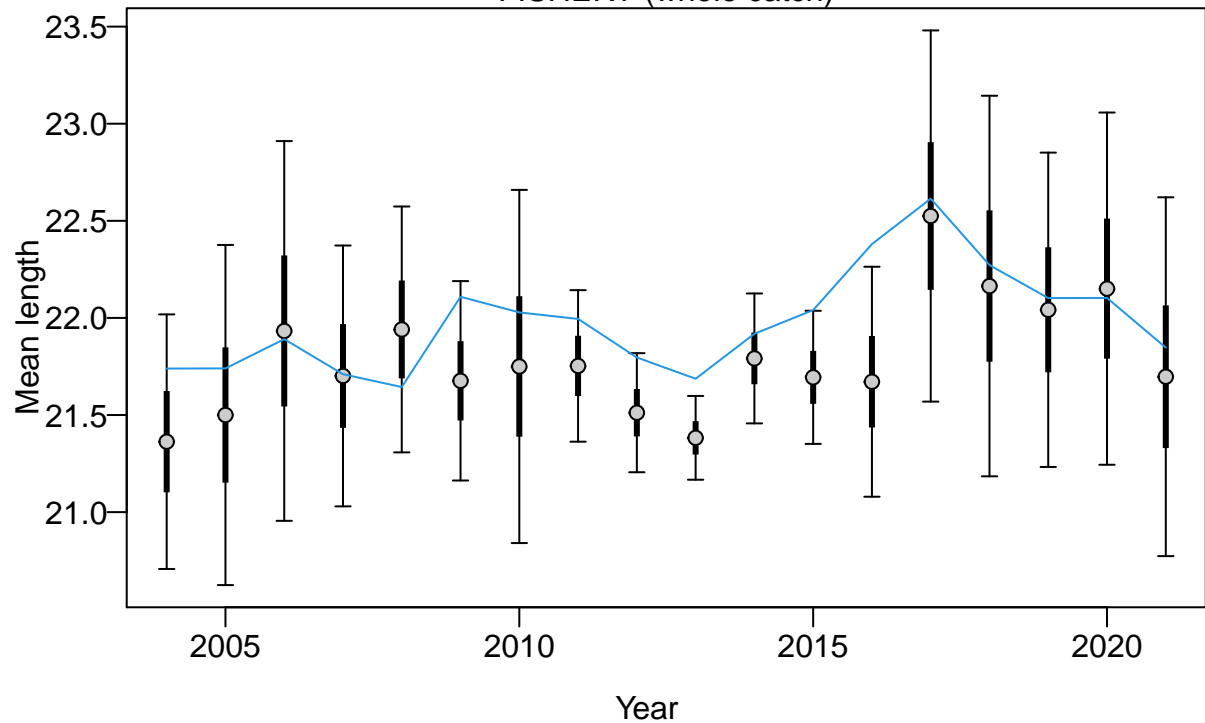


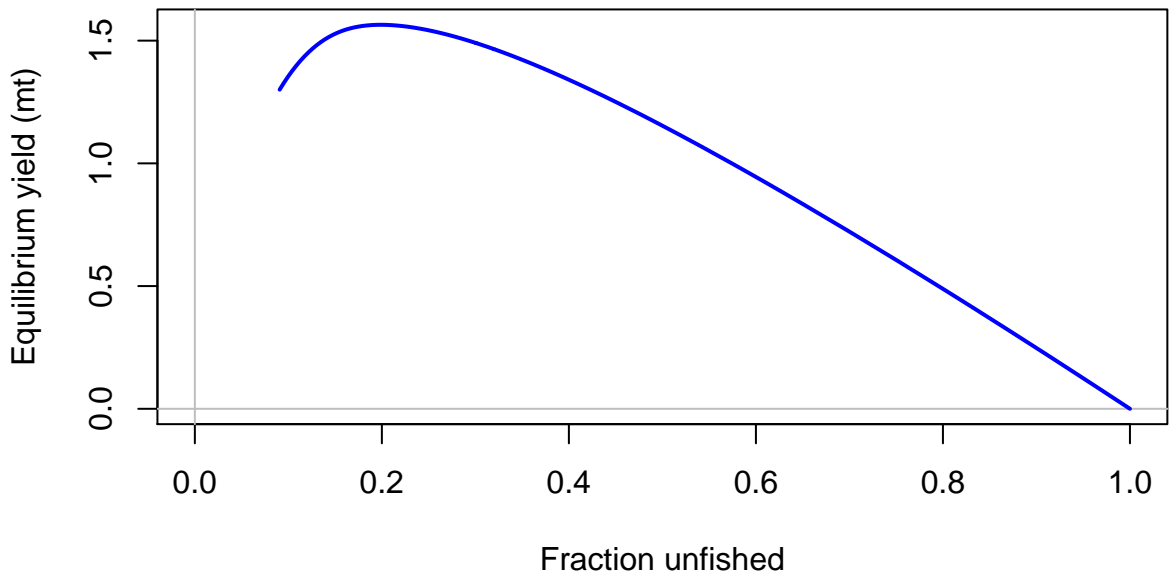


Effective sample size

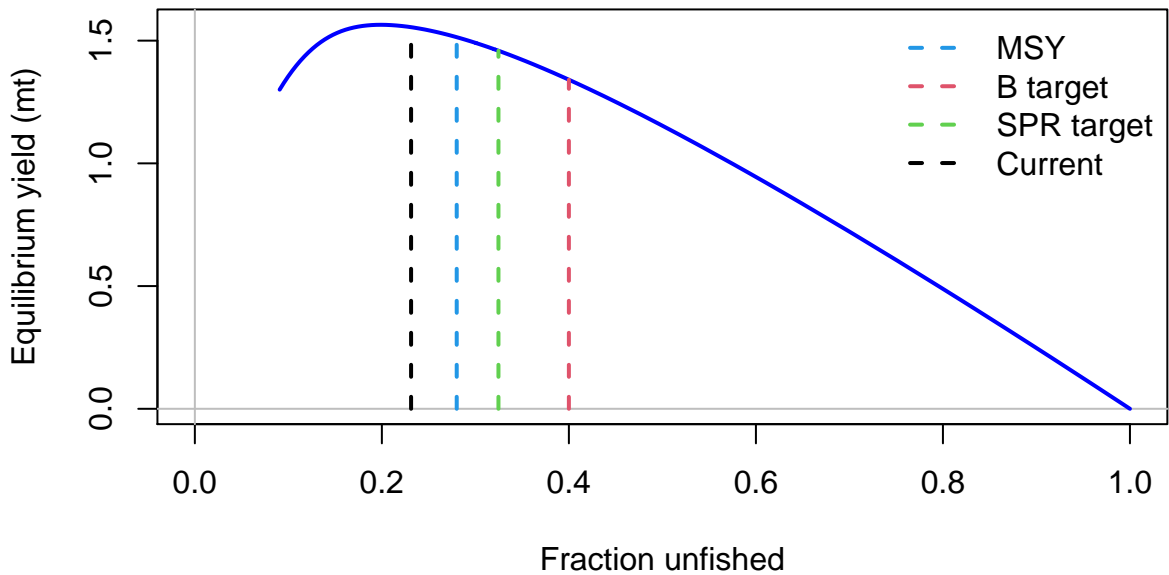


FISHERY (whole catch)

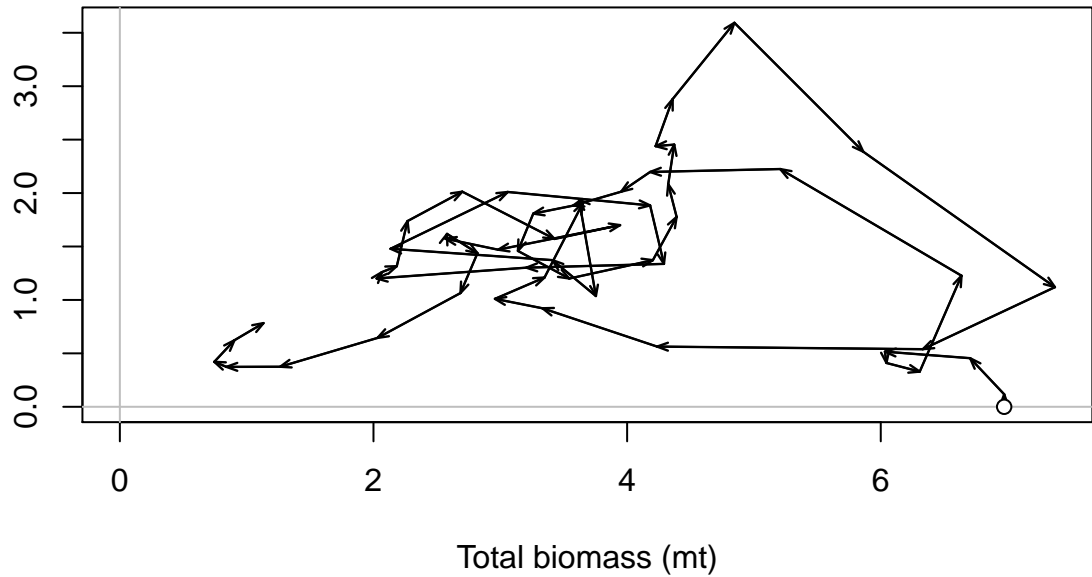


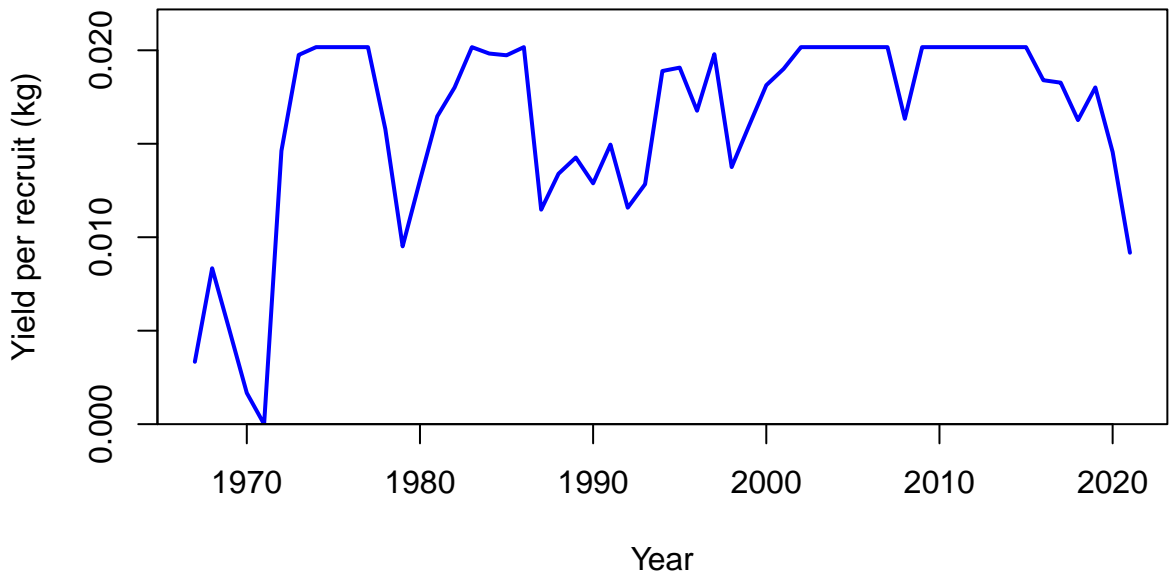


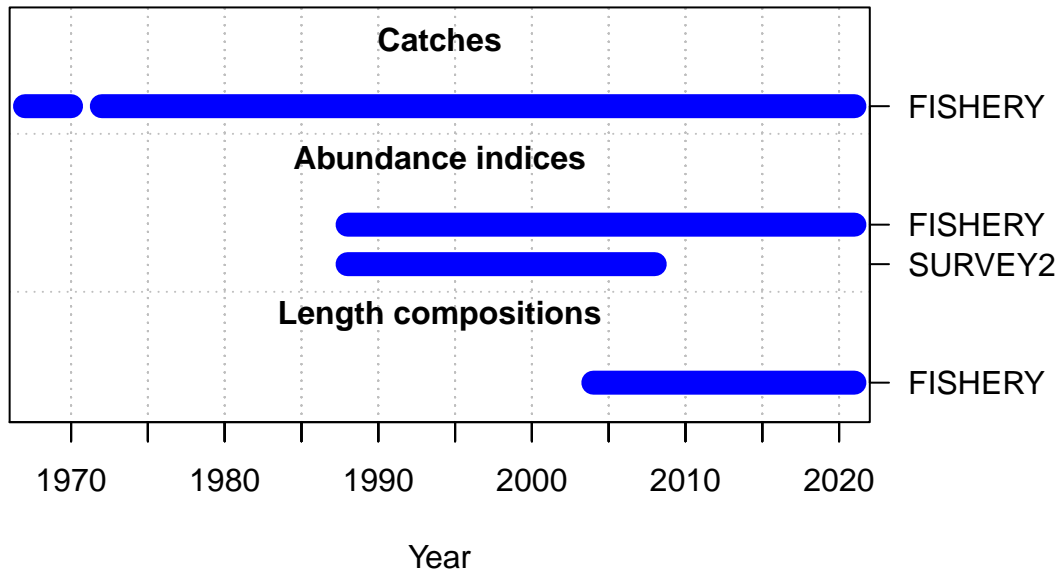


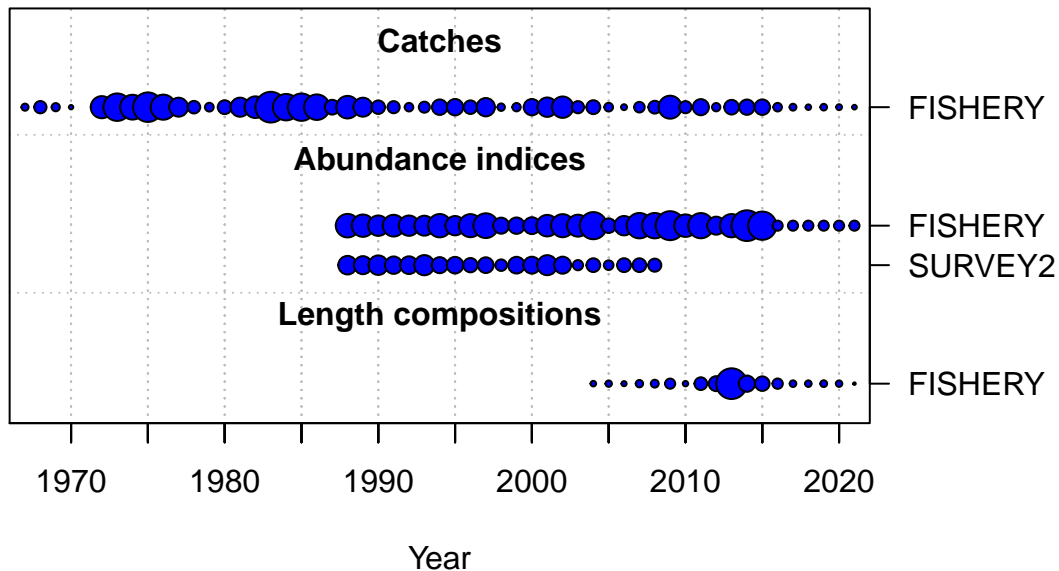


Surplus production (mt)

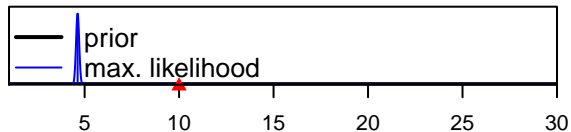




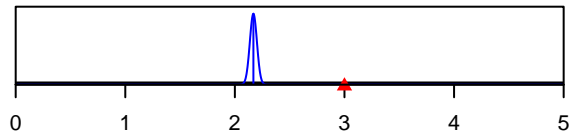




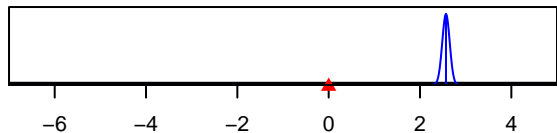
SR\_LN(R0)



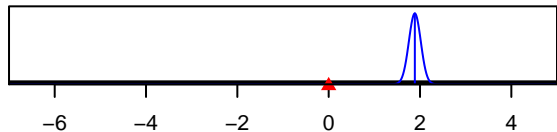
Size\_95%width\_FISHERY(1)



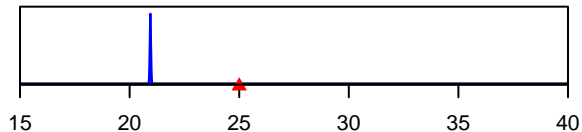
LnQ\_base\_FISHERY(1)



LnQ\_base\_SURVEY2(2)



Size\_inflection\_FISHERY(1)



Parameter value