

Plots created using the 'r4ss' package in R

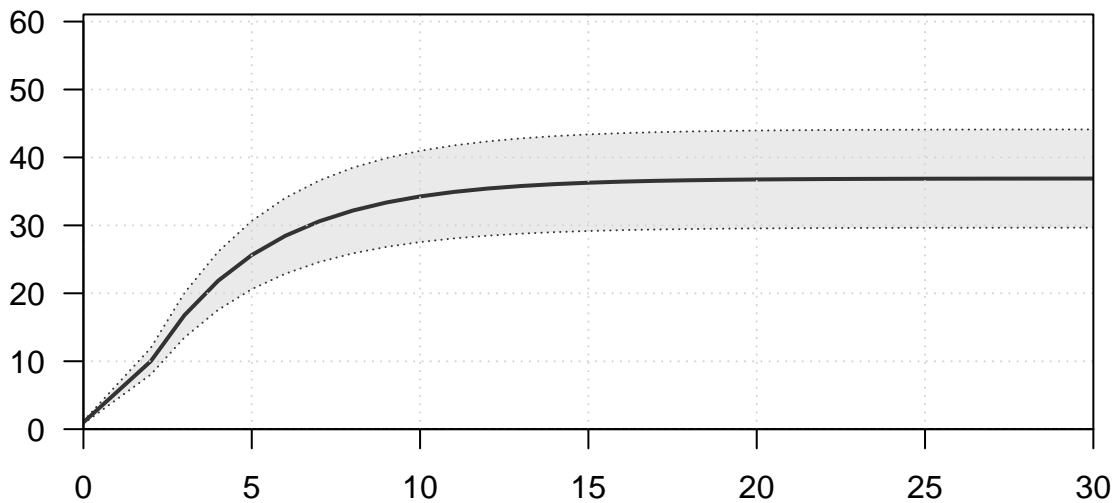
Stock Synthesis version: 3.30.19.0

StartTime: Wed Jun 29 15:42:43 2022

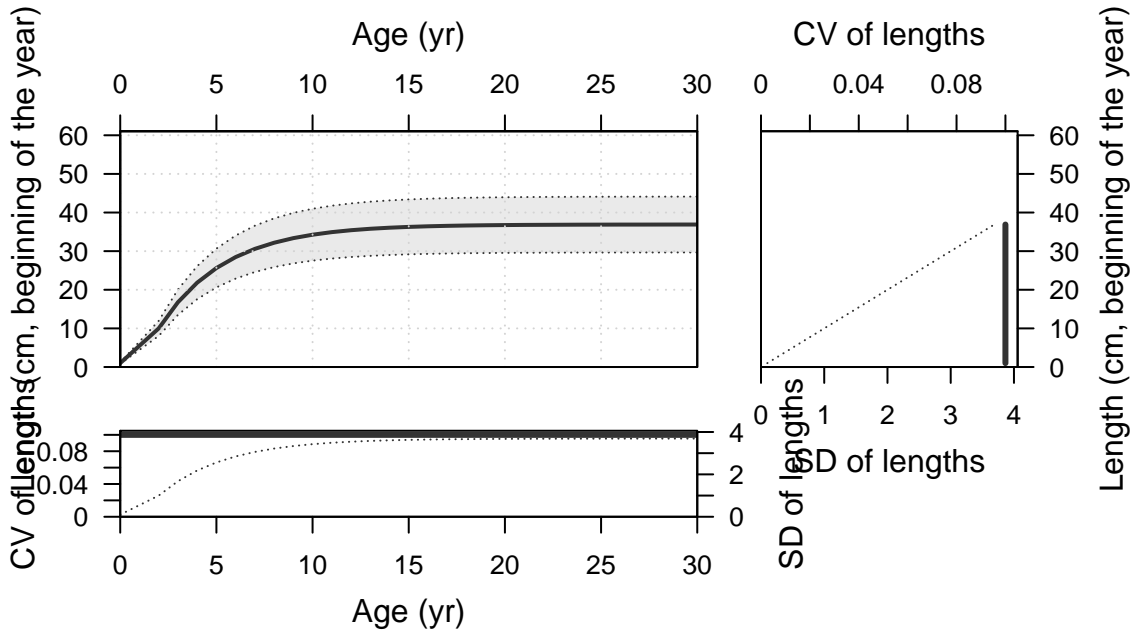
Data_File: data.ss

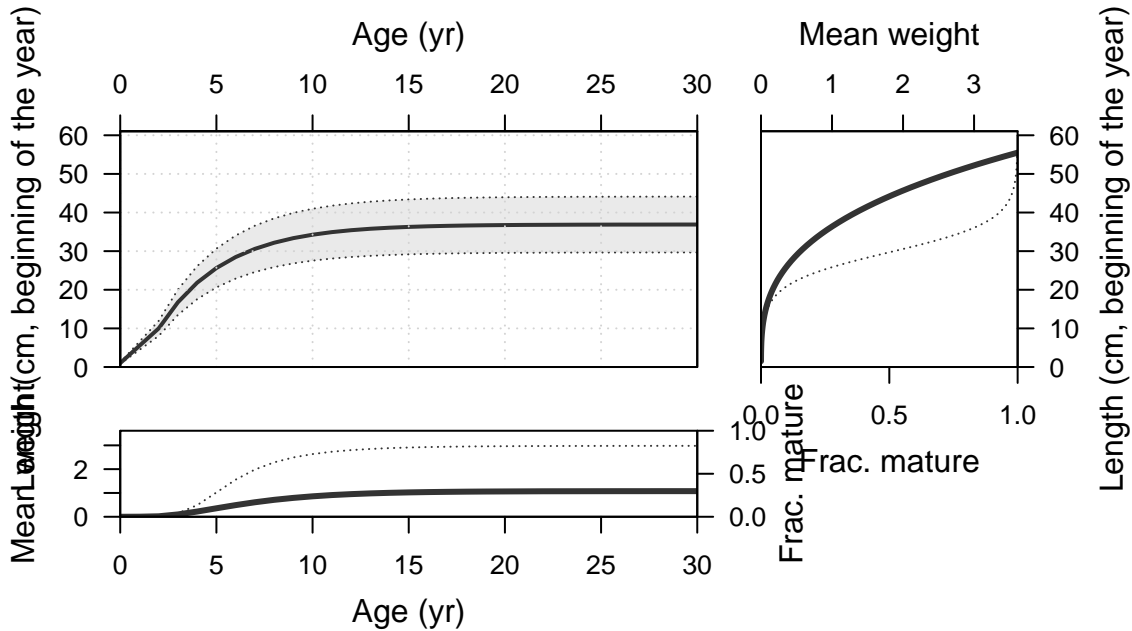
Control_File: control.ss

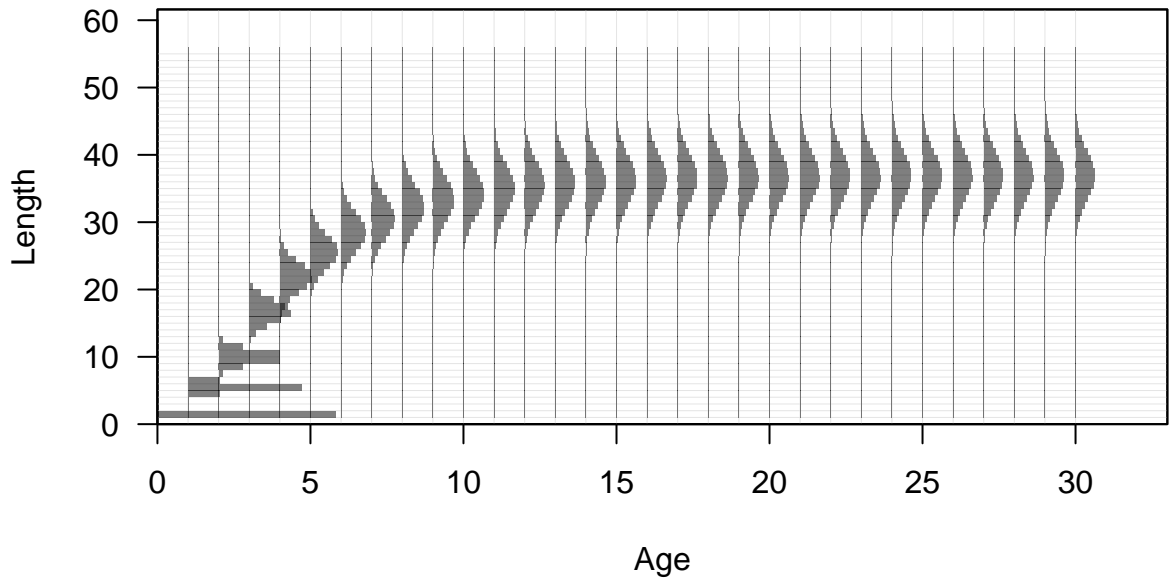
Length (cm, beginning of the year)

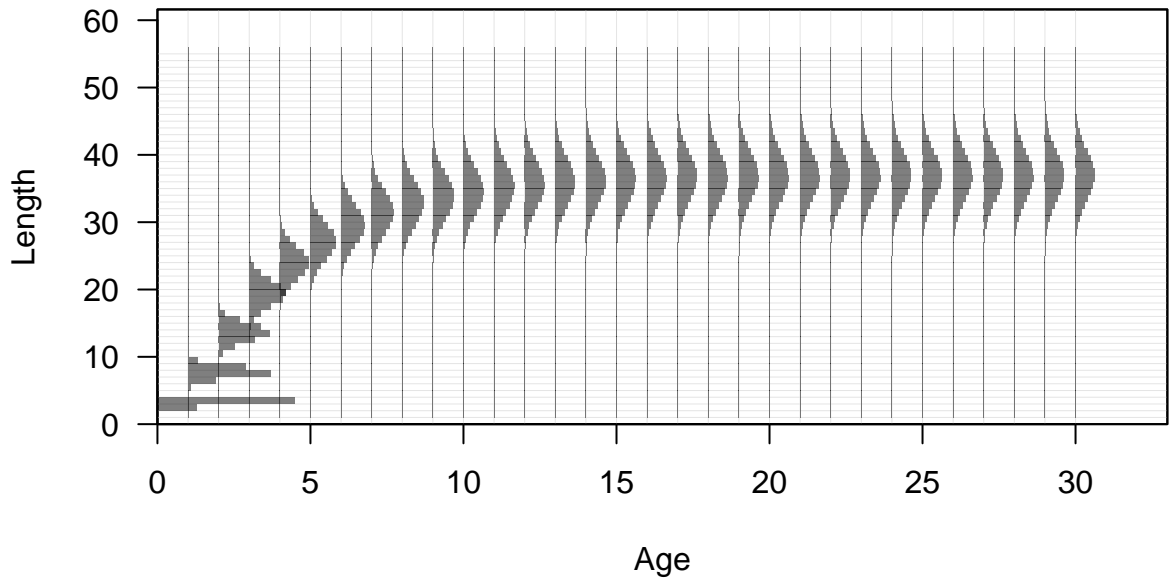


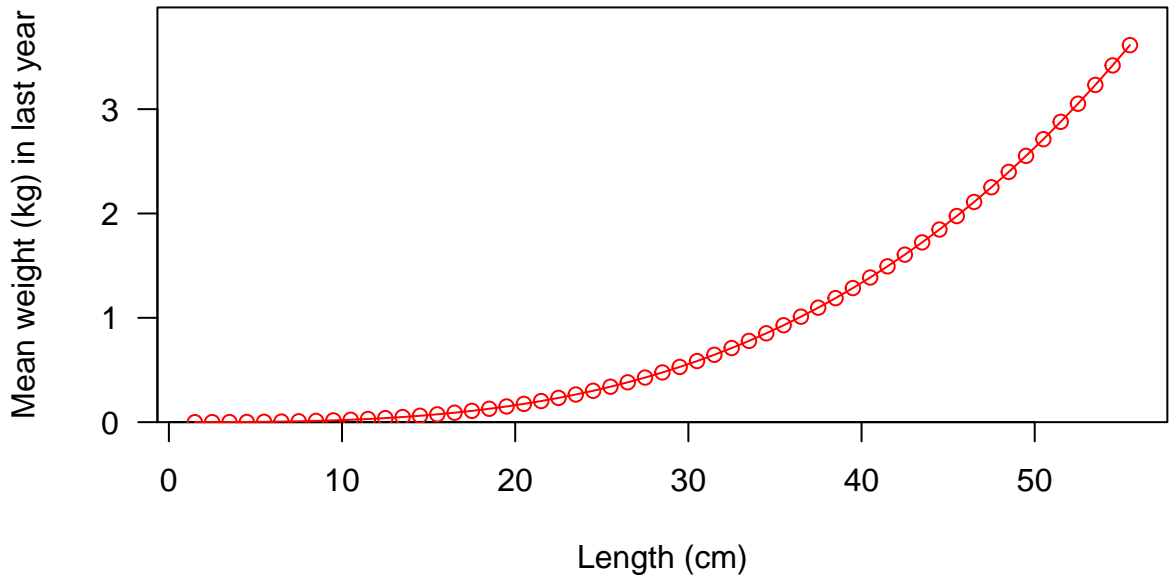
Age (yr)

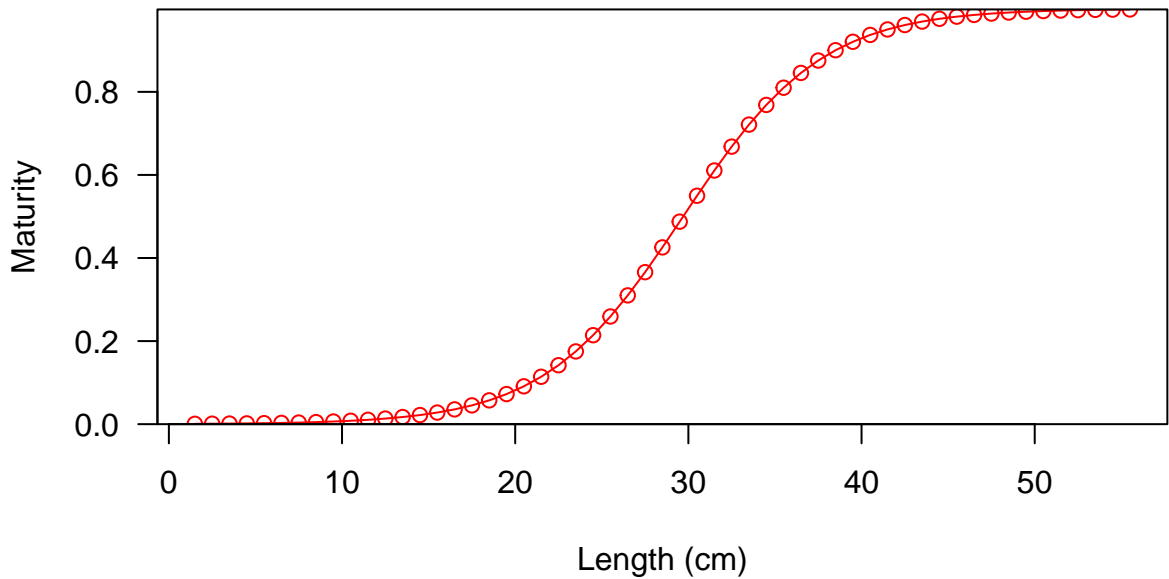


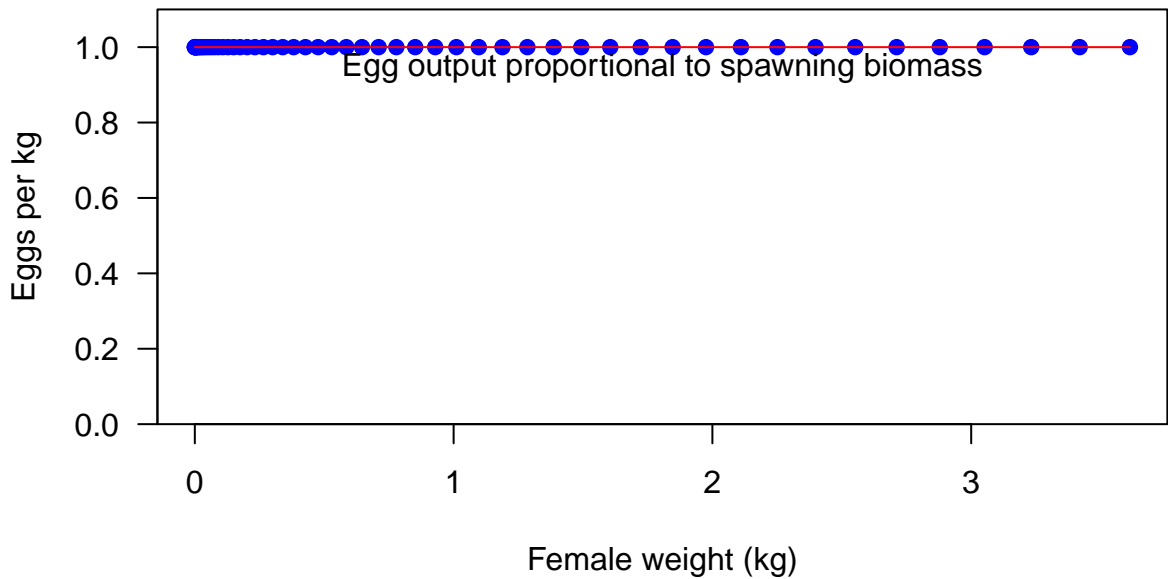




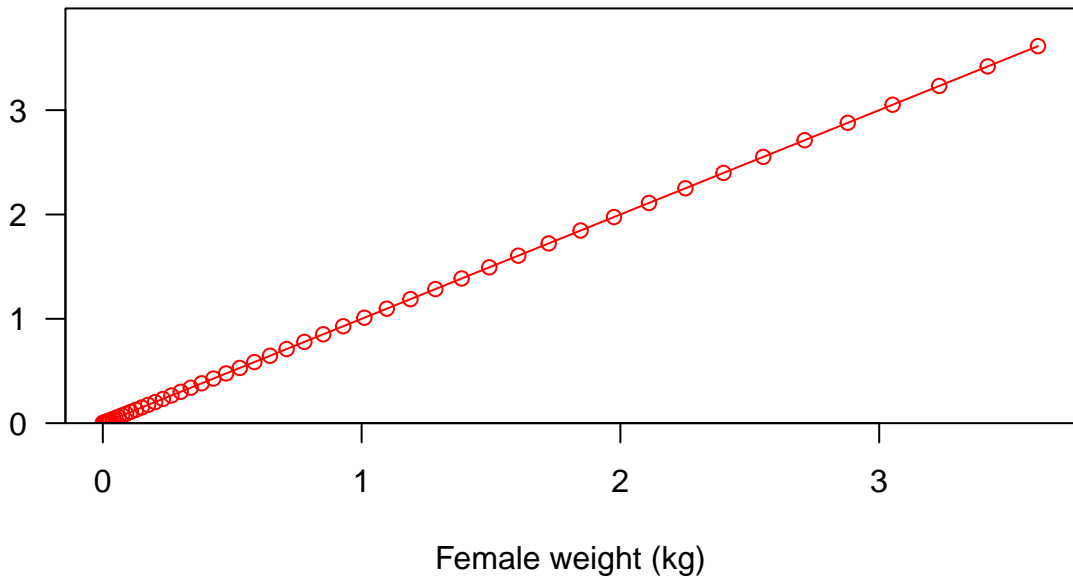




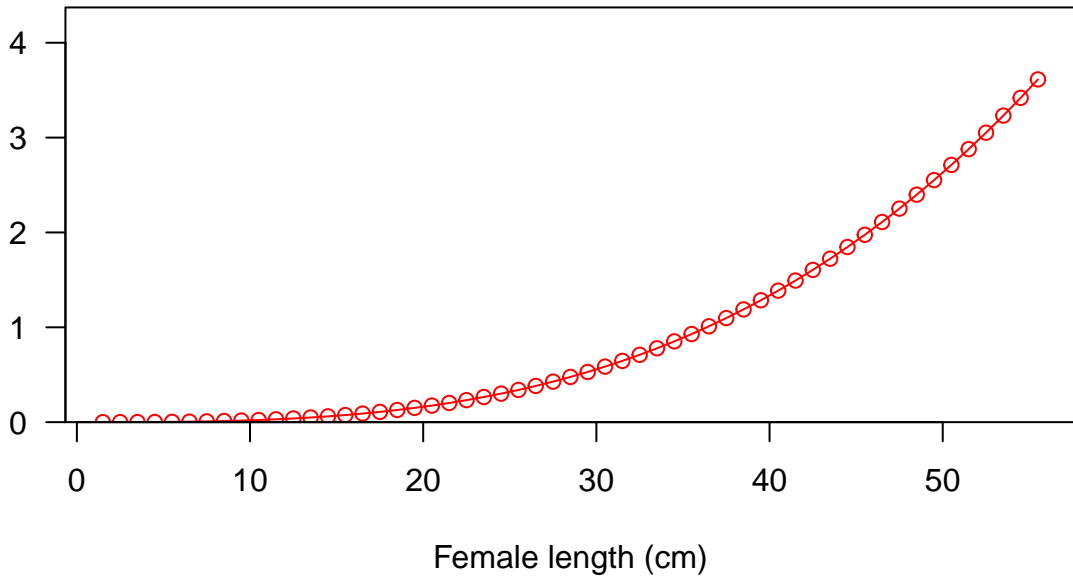




Fecundity



Fecundity



Spawning output

3
2
1
0

0

10

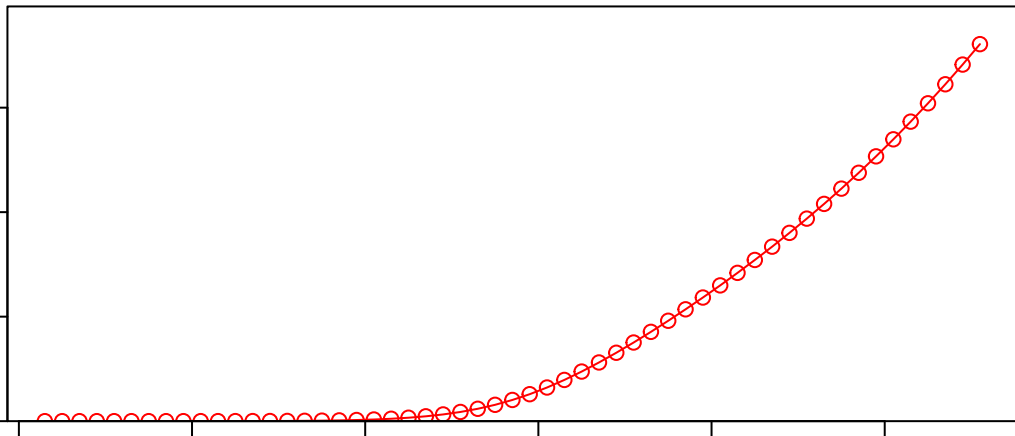
20

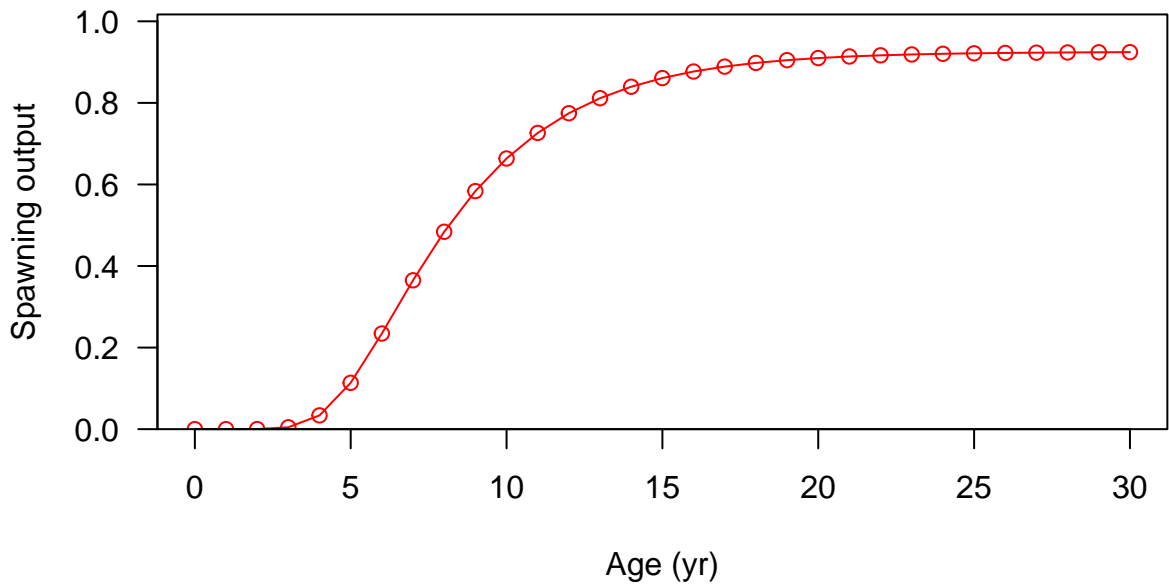
30

40

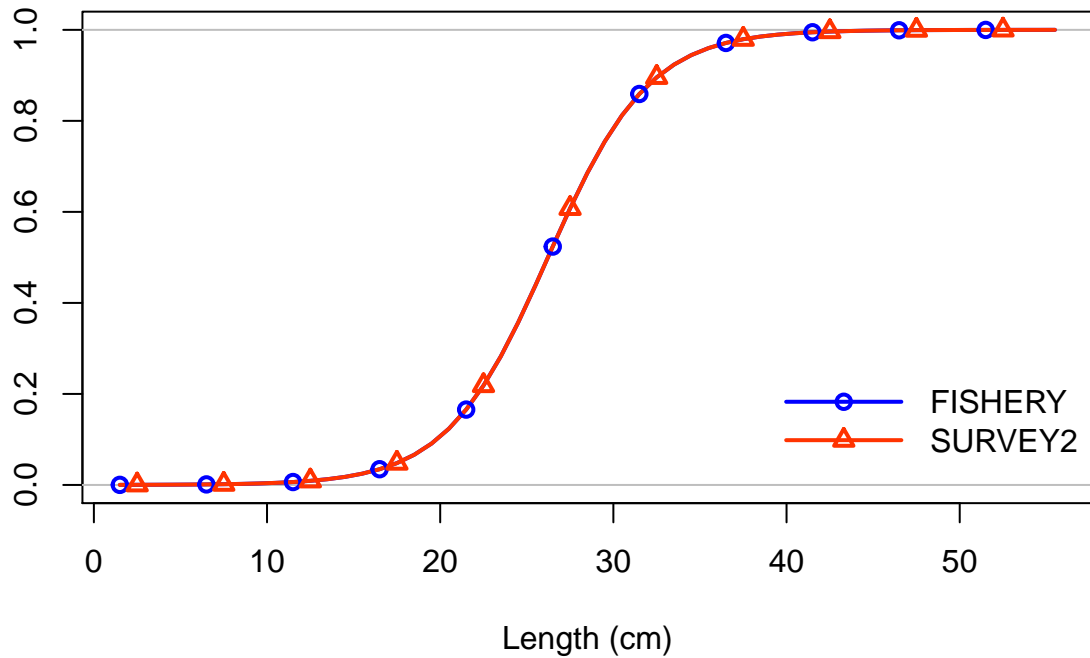
50

Length (cm)

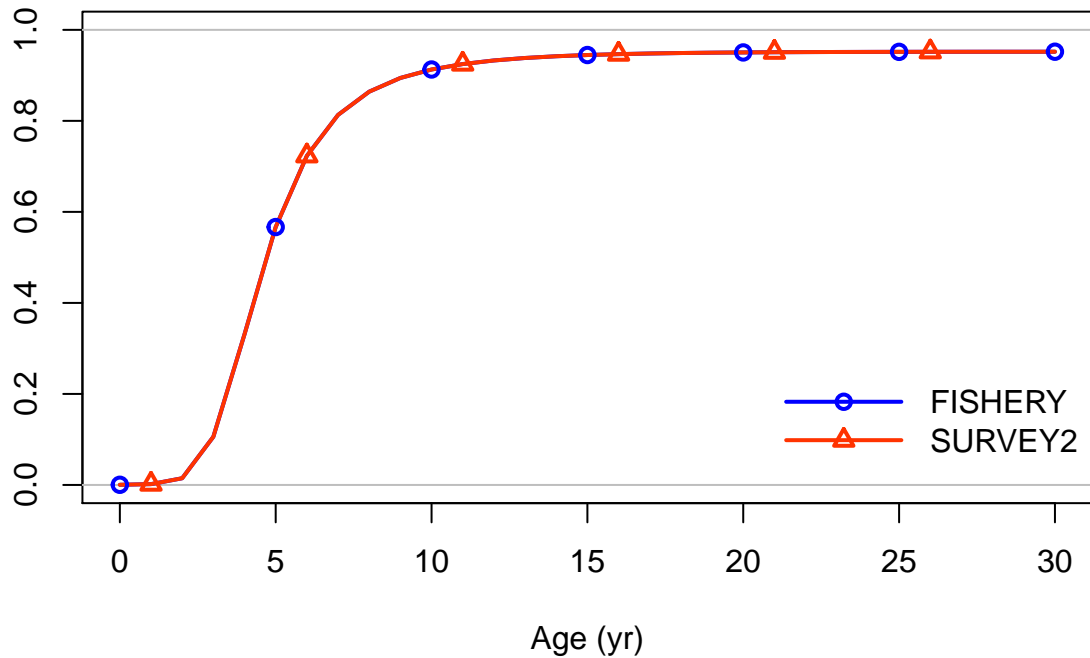




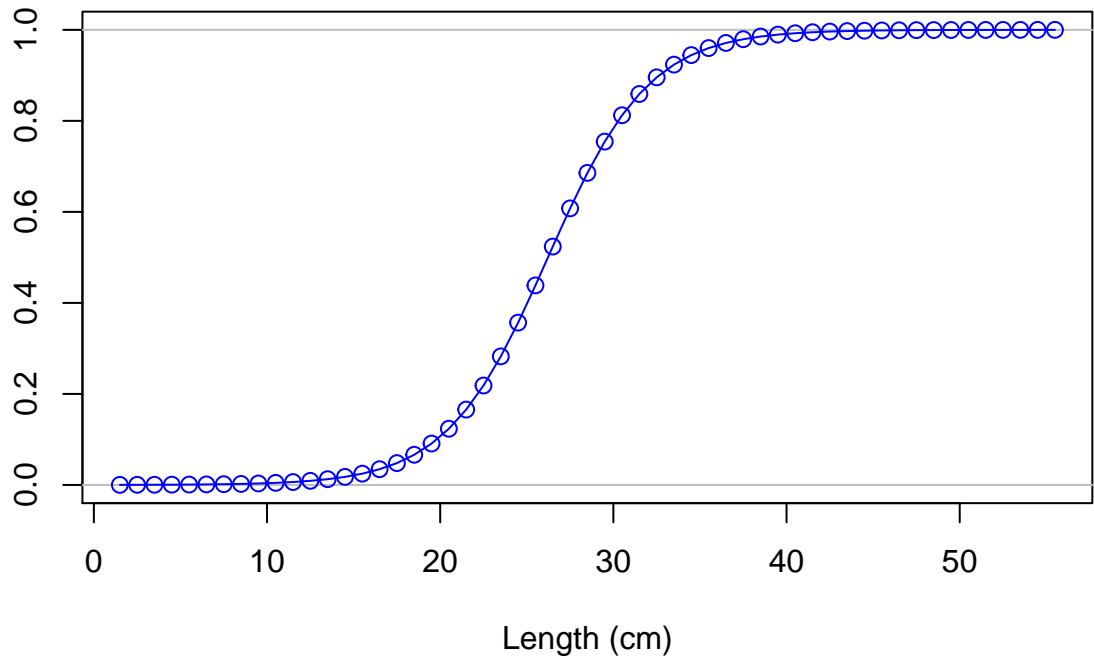
Selectivity



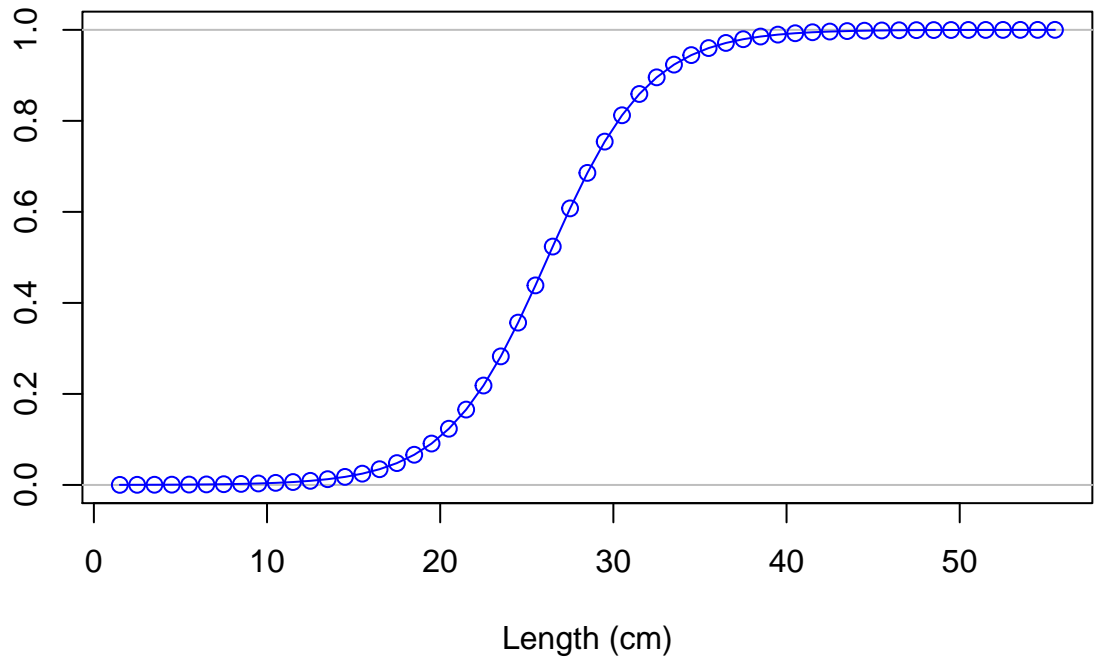
Selectivity

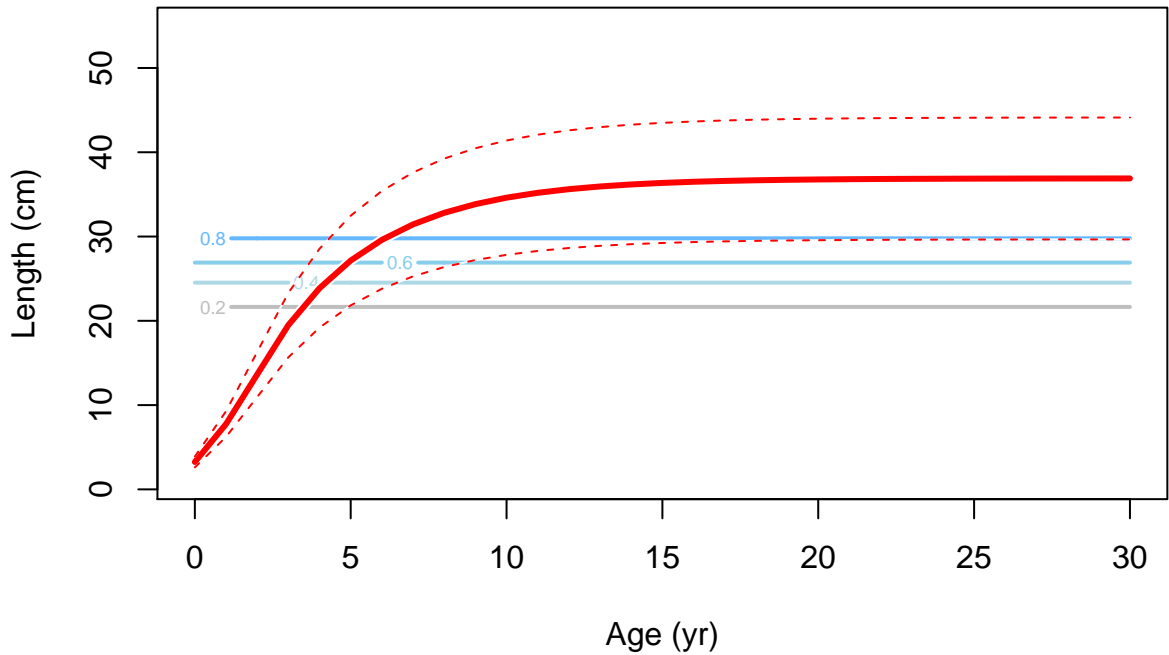


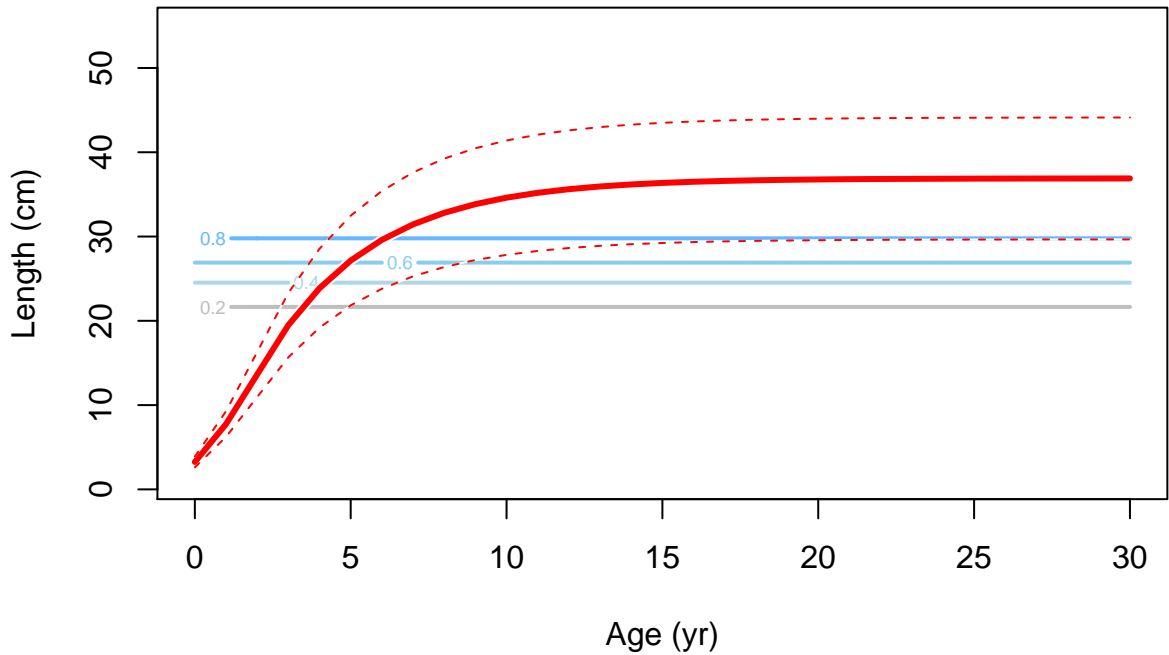
Selectivity

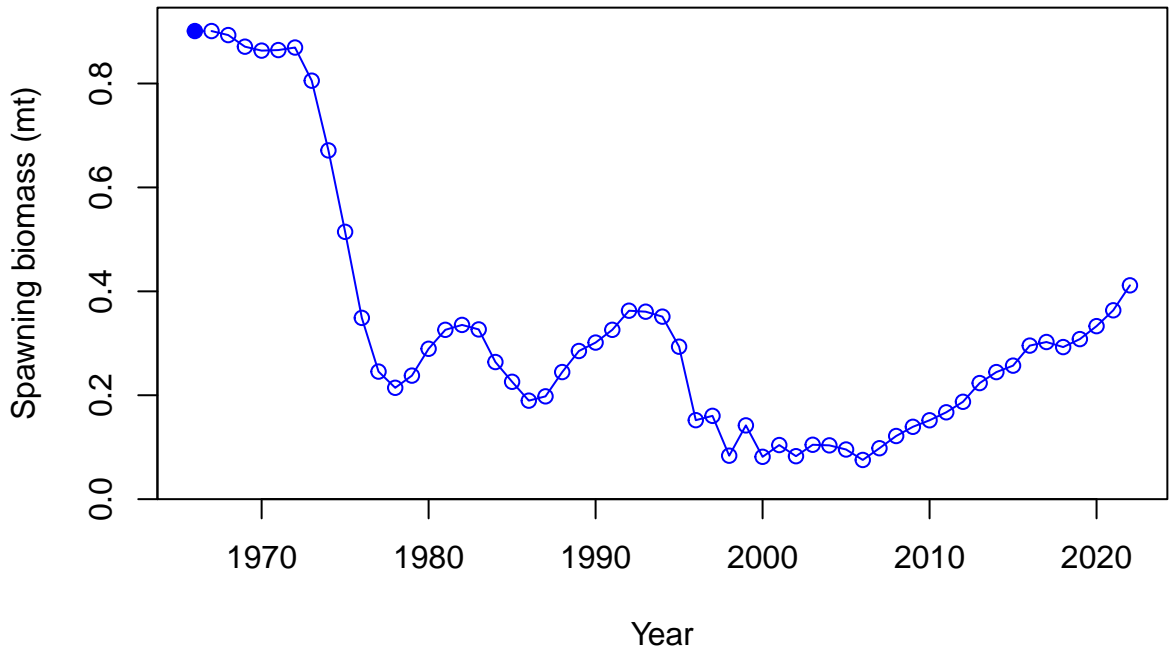


Selectivity

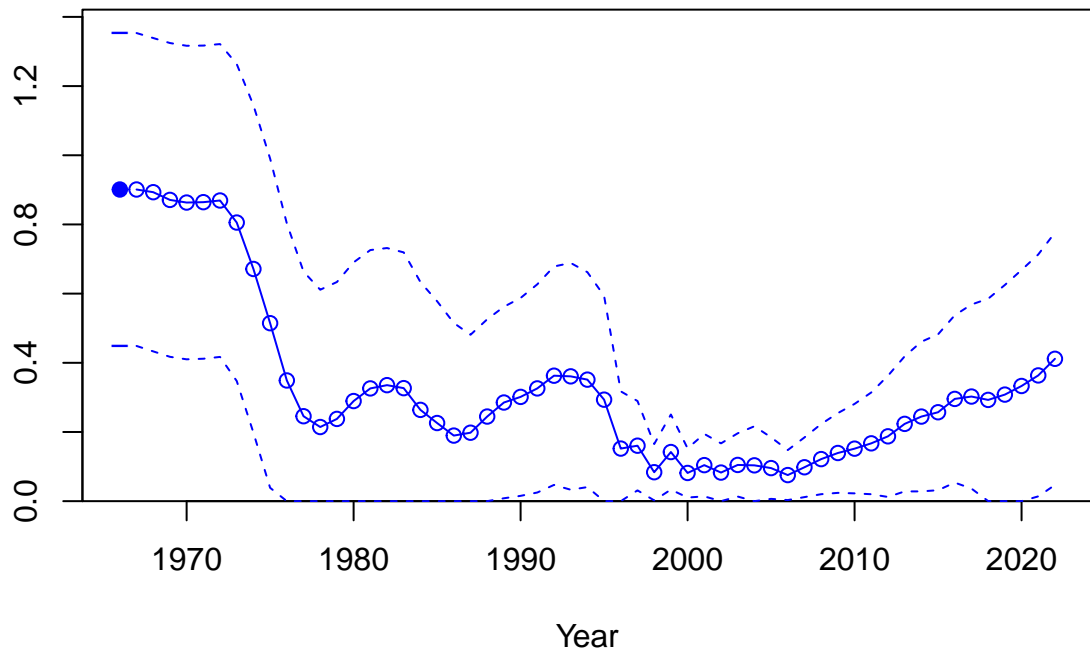




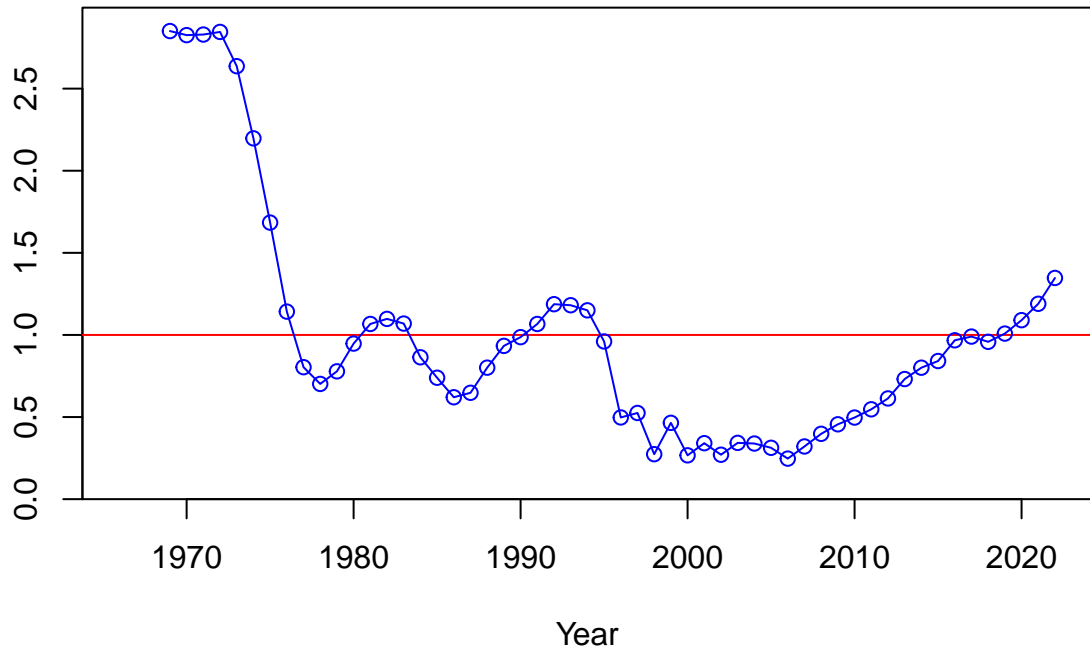




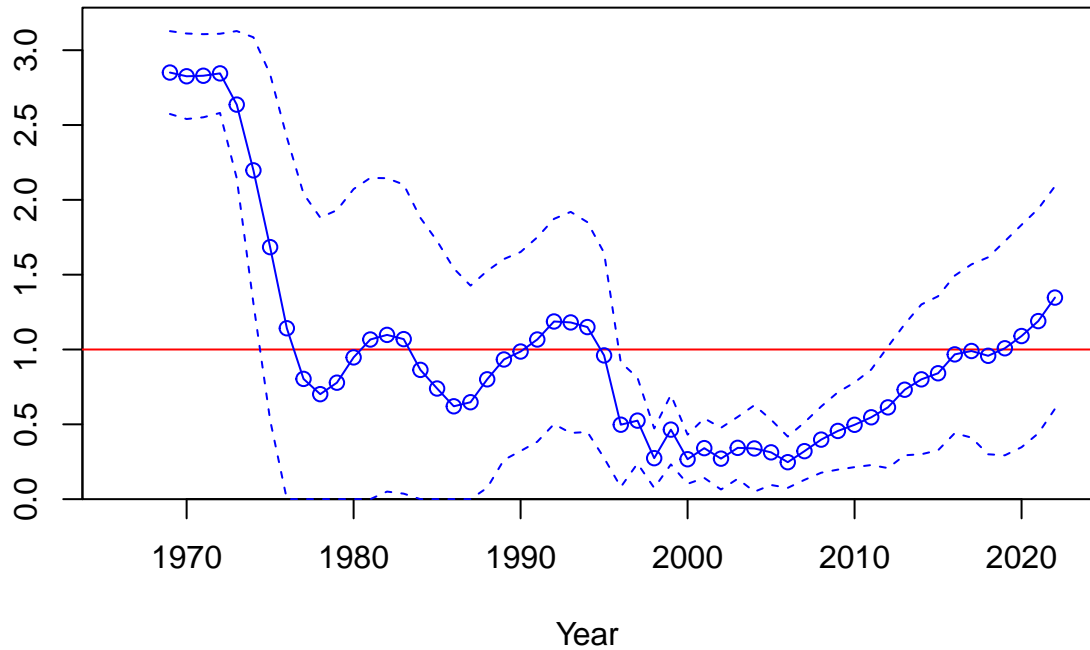
Spawning biomass (mt)

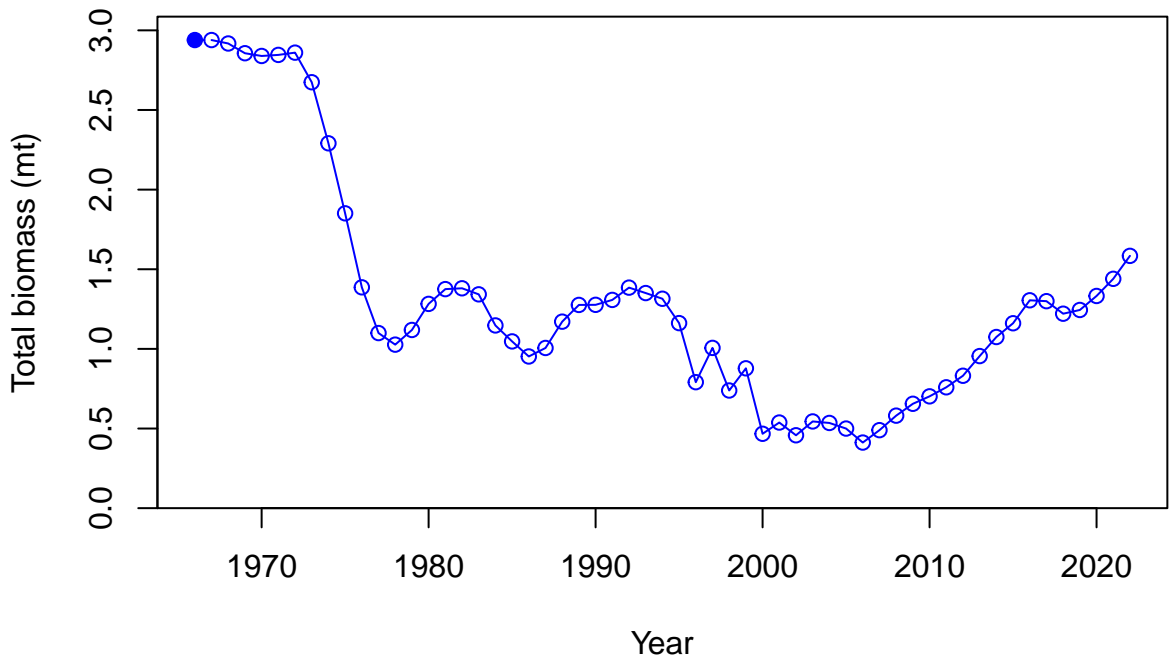


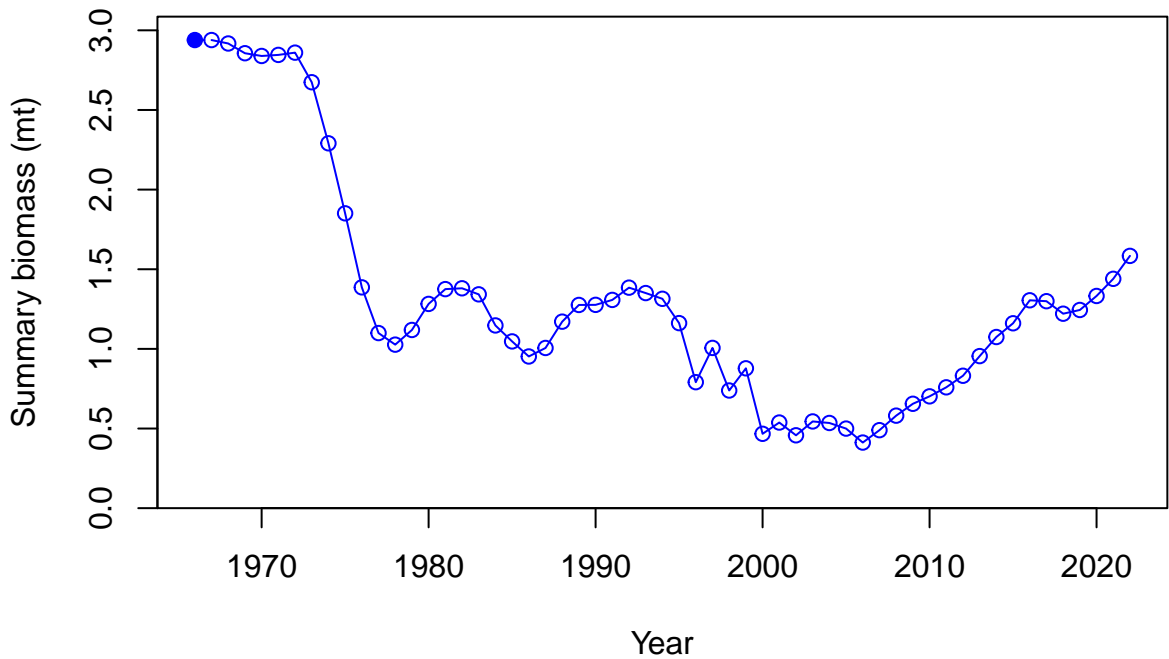
Relative spawning biomass: B/B_{MSY}



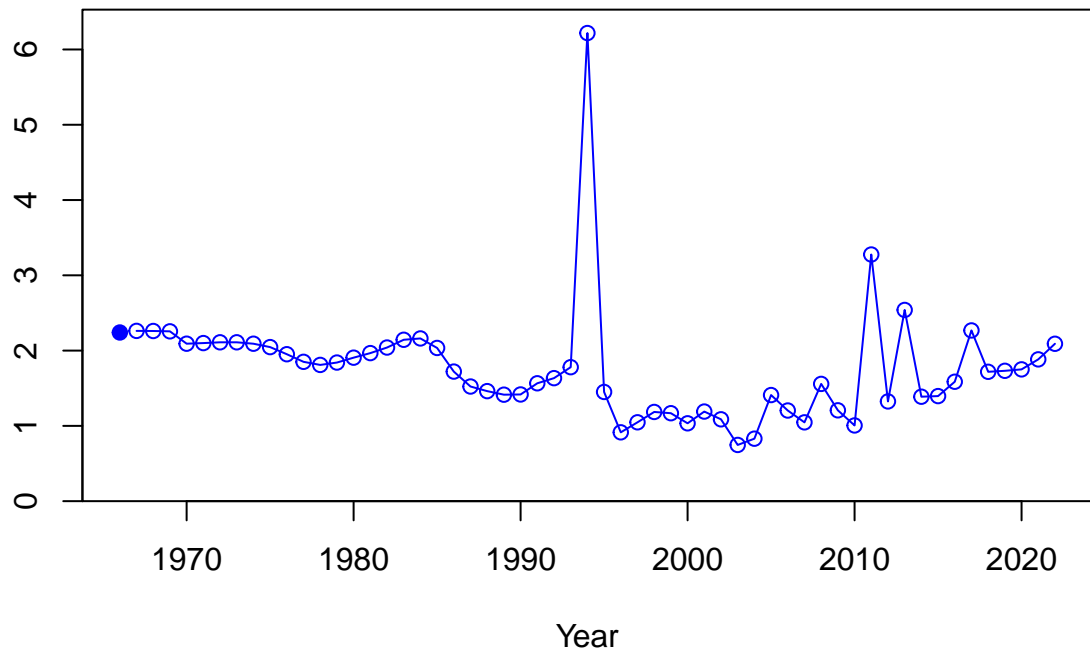
Relative spawning biomass: B/B_{MSY}



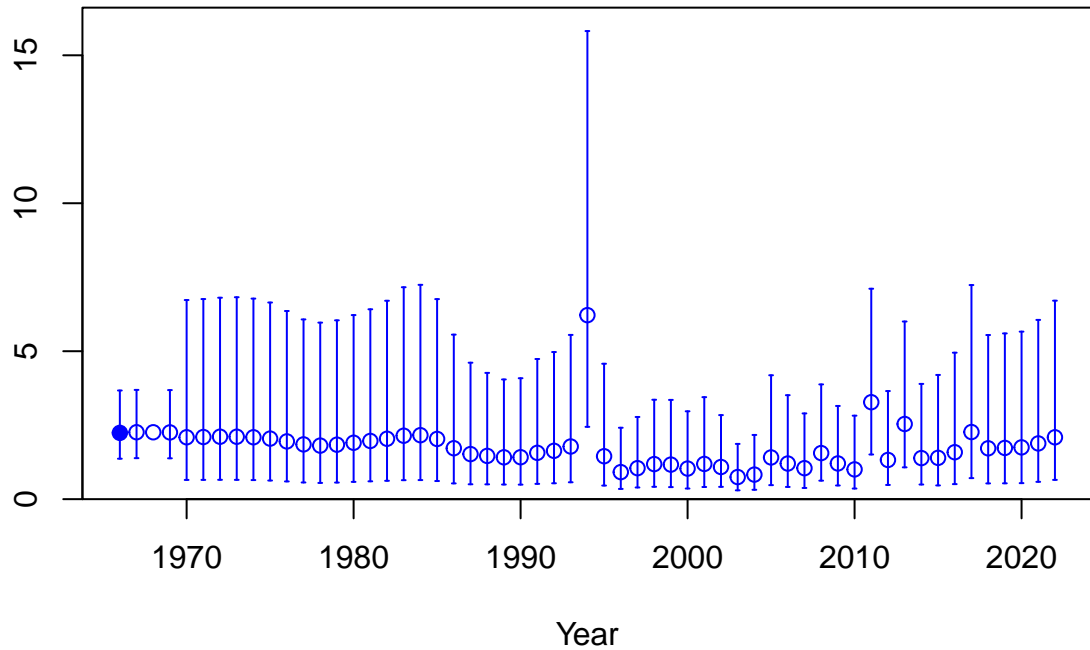




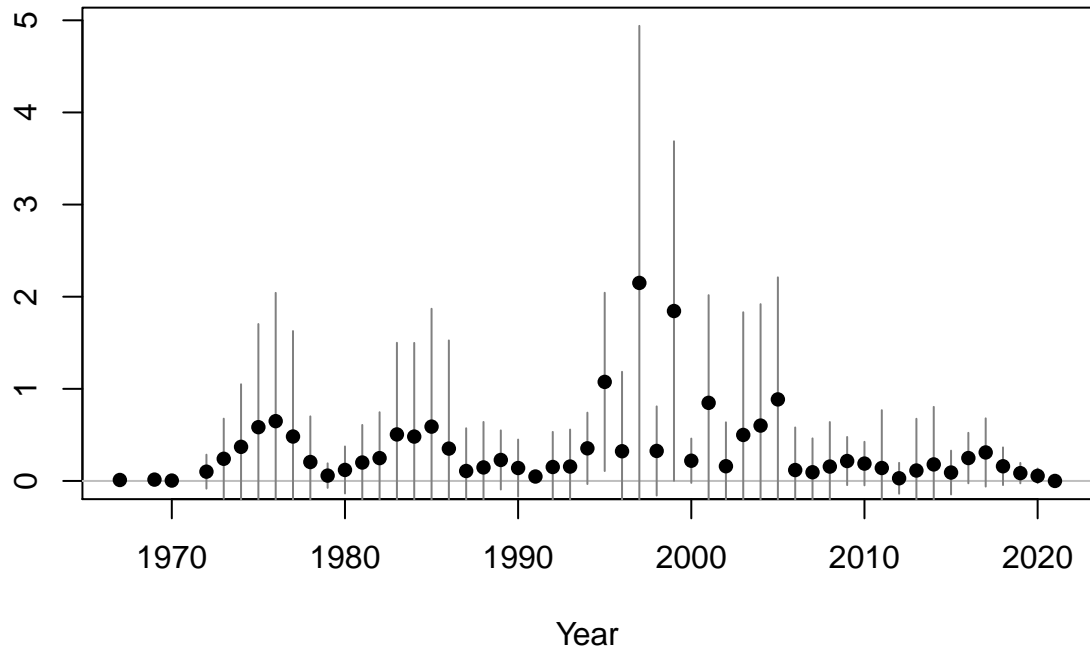
Age-0 recruits (1,000s)

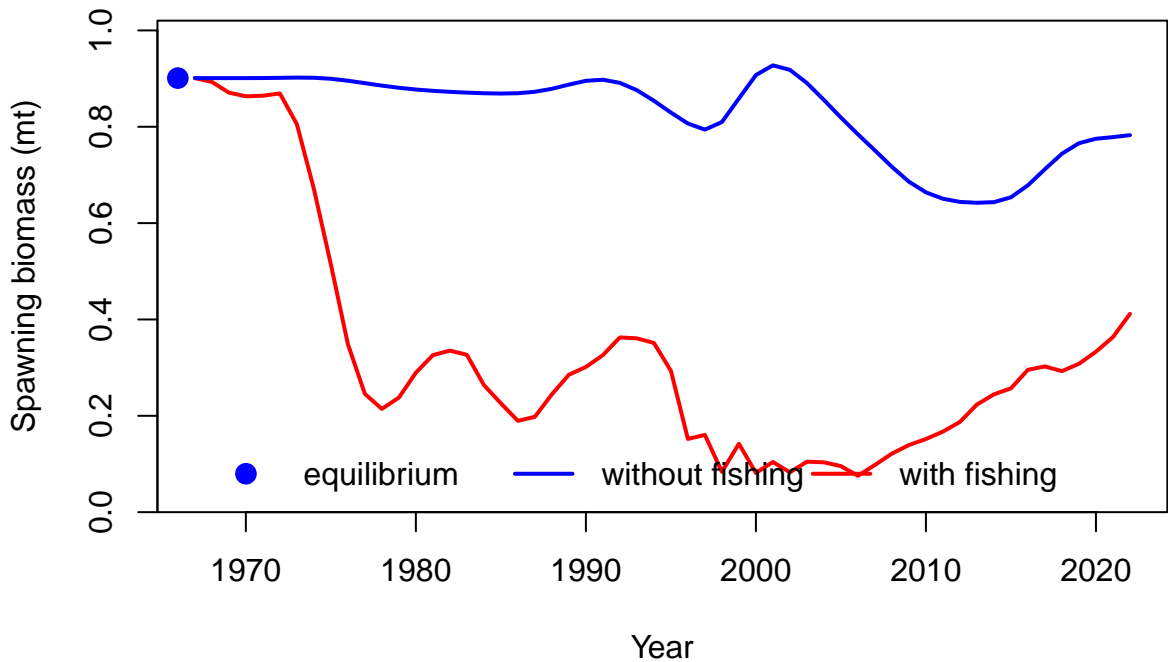


Age-0 recruits (1,000s)

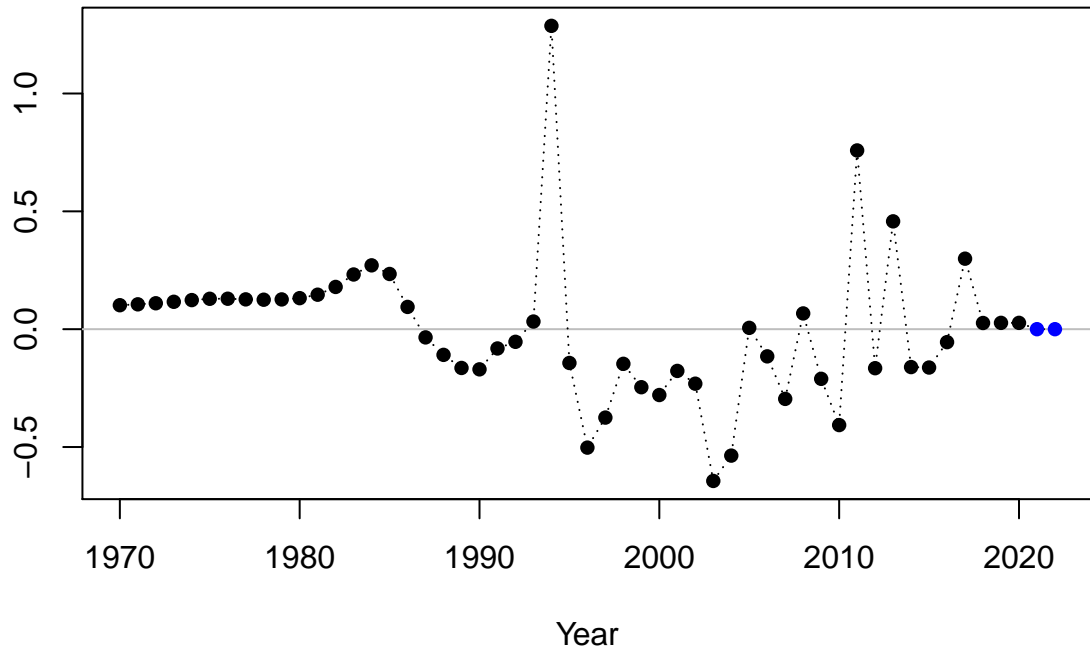


Summary Fishing Mortality



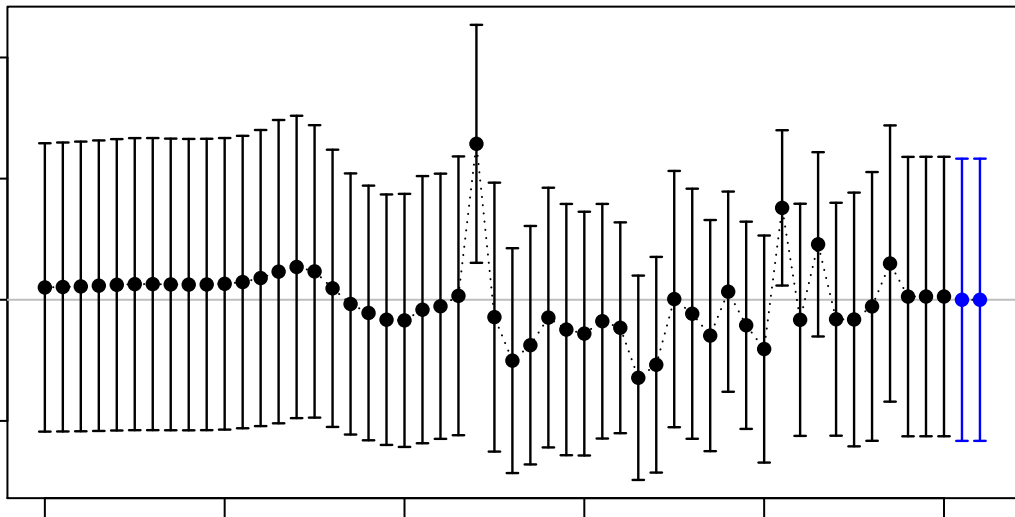


Log recruitment deviation



Log recruitment deviation

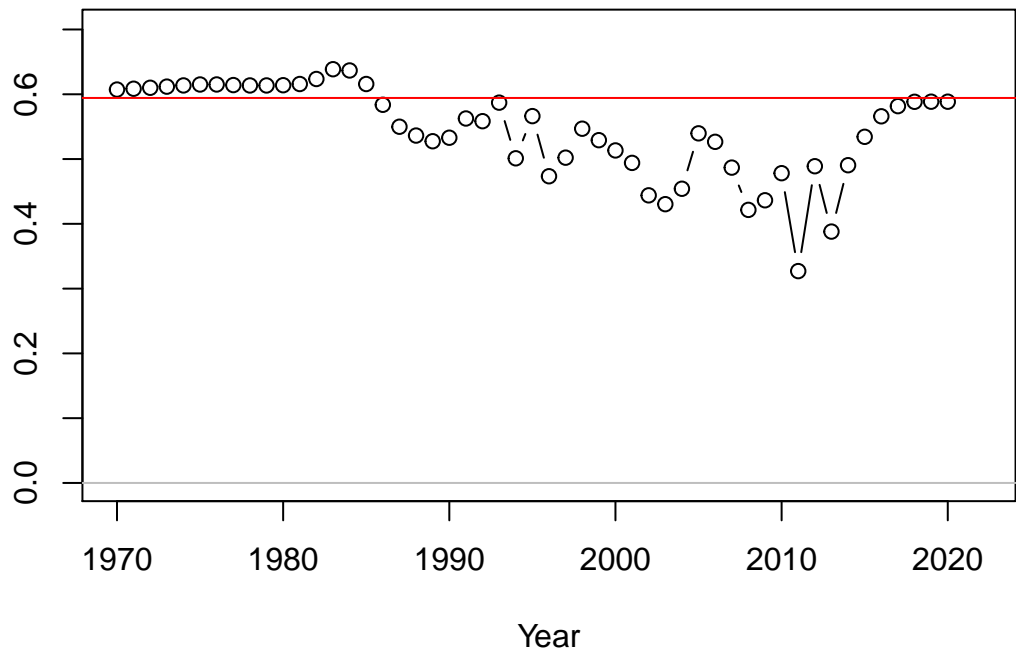
2
1
0
-1

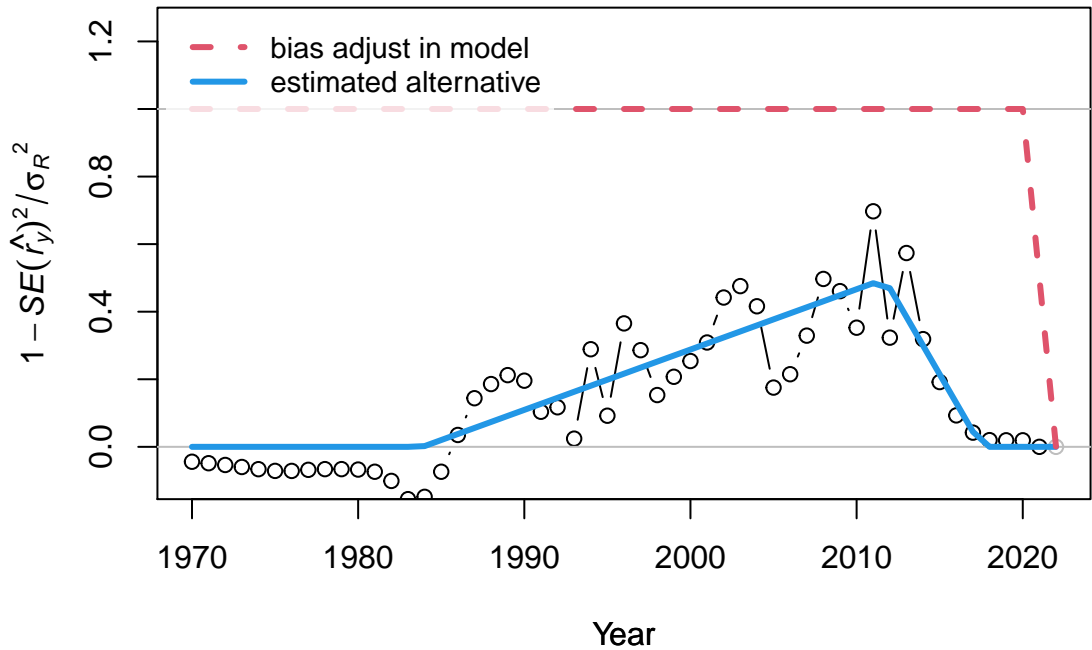


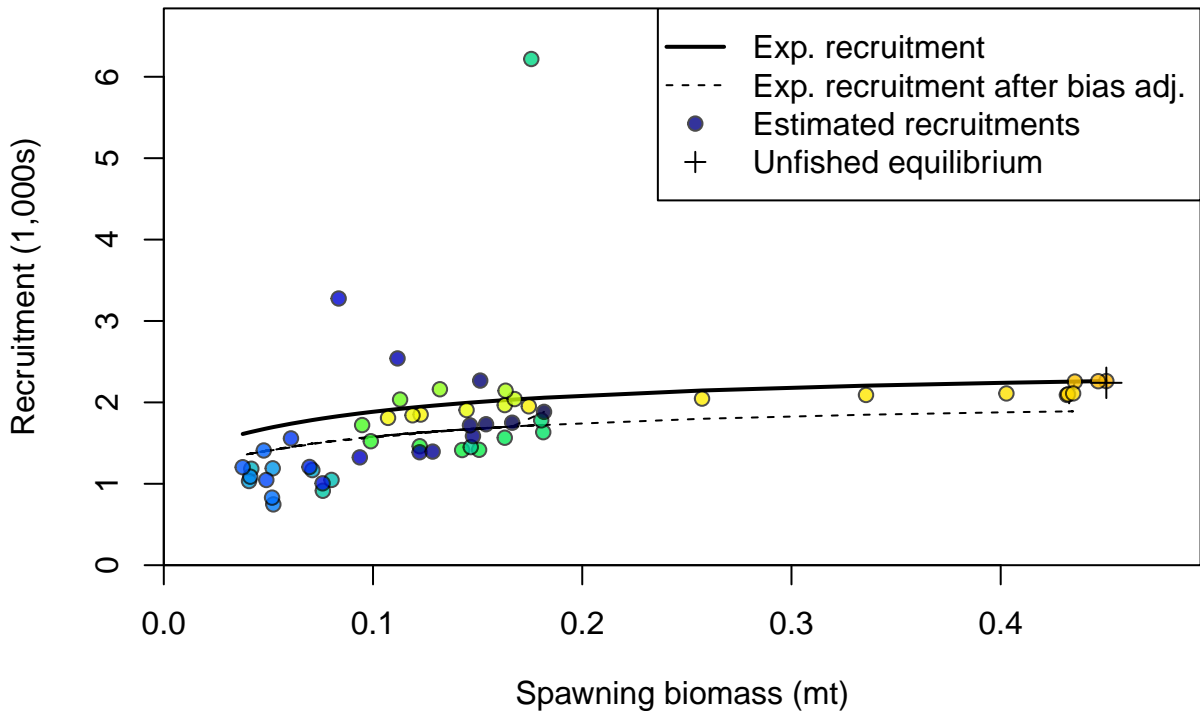
Year

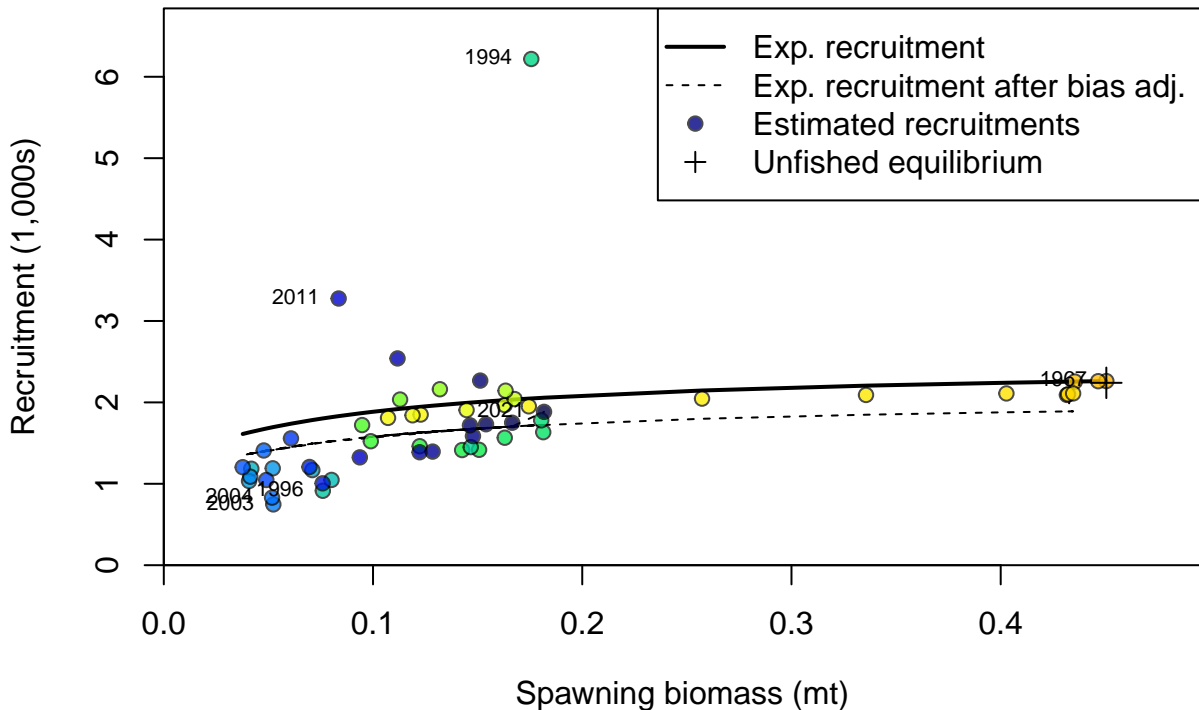
Recruitment deviation variance

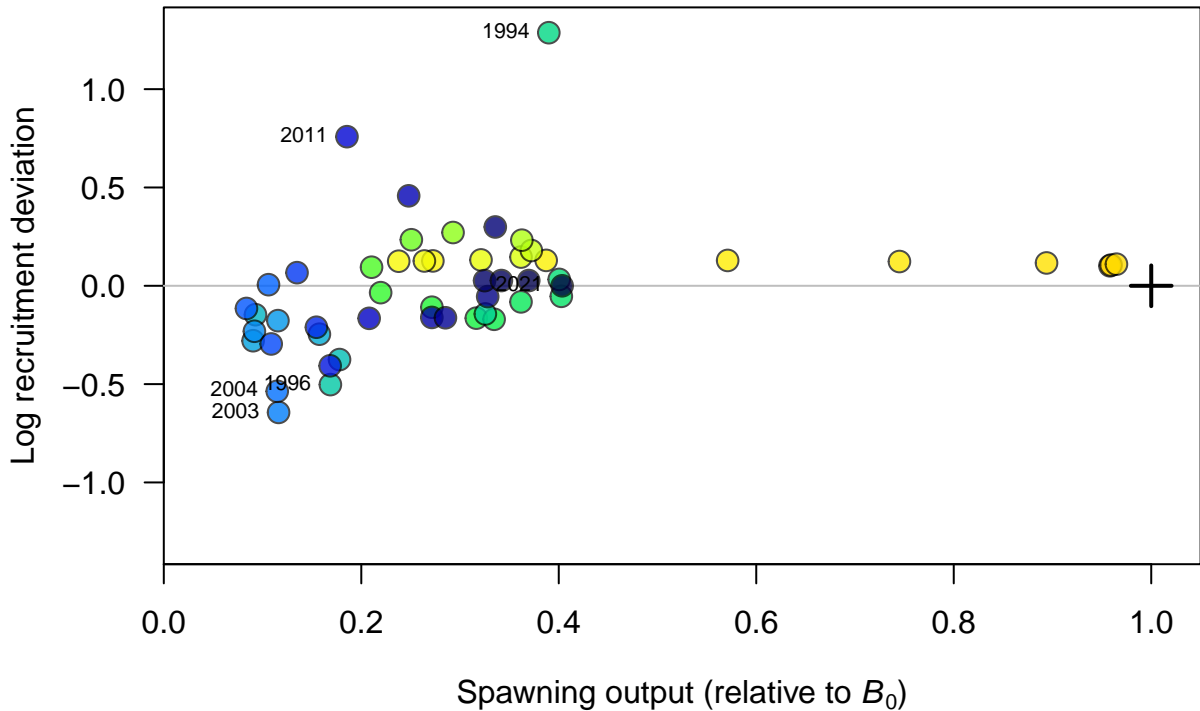
Asymptotic standard error estimate

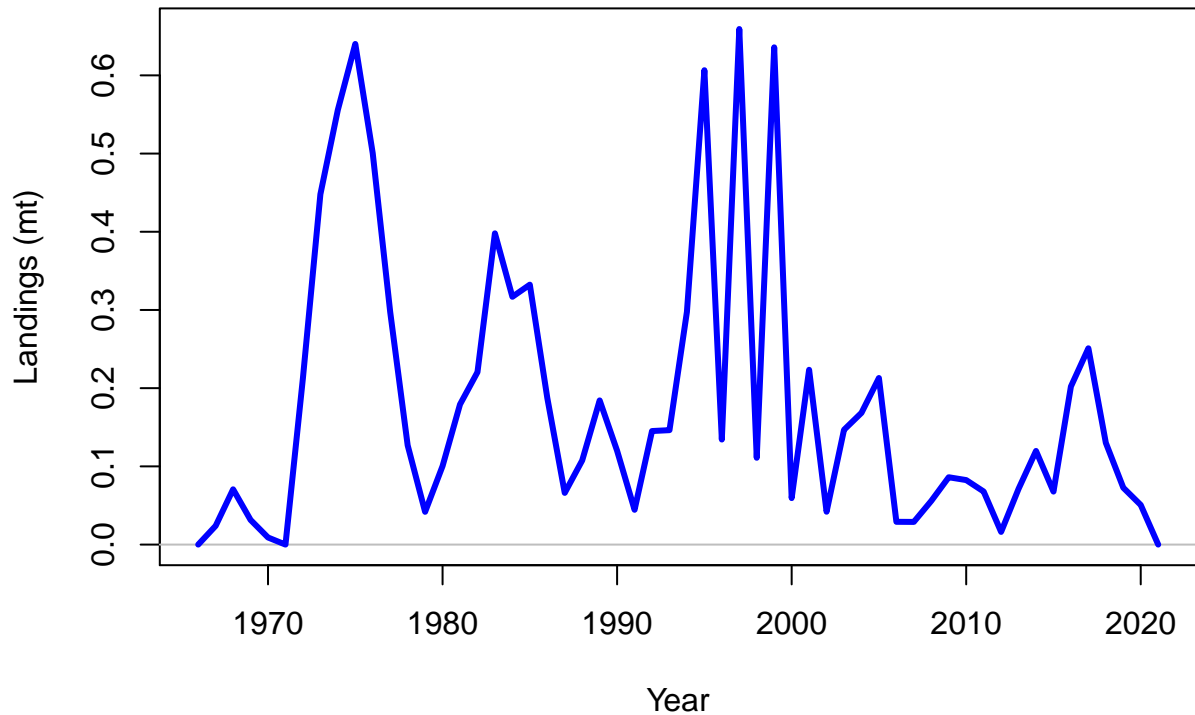


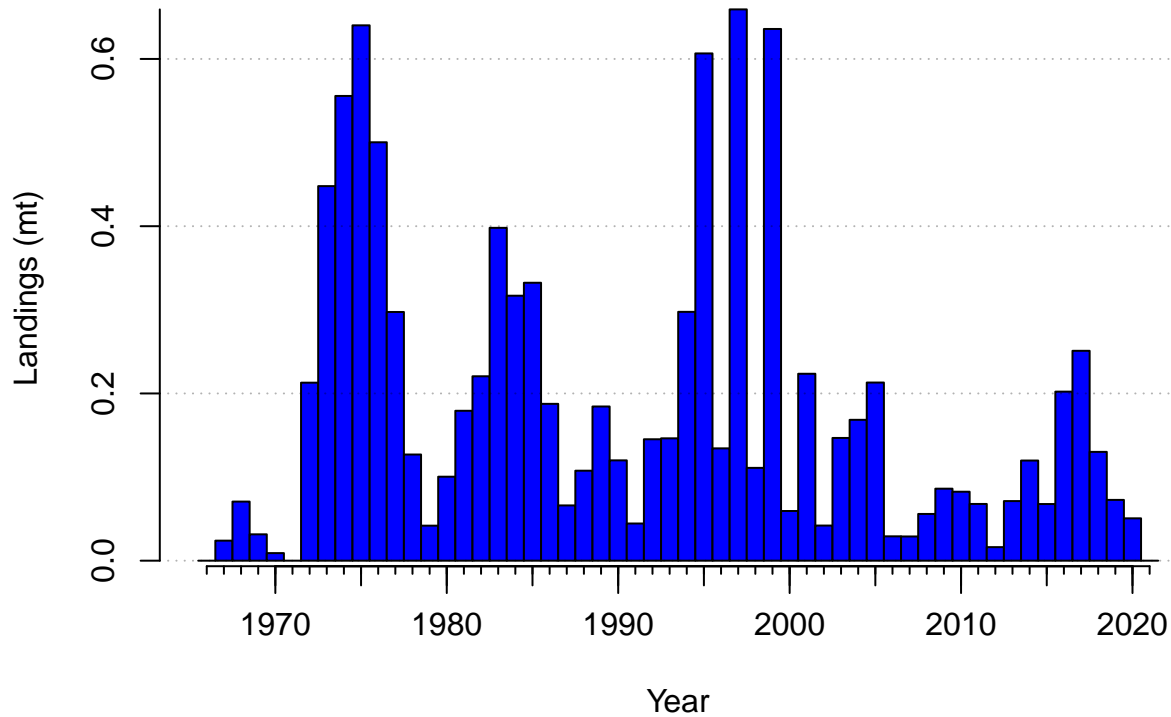


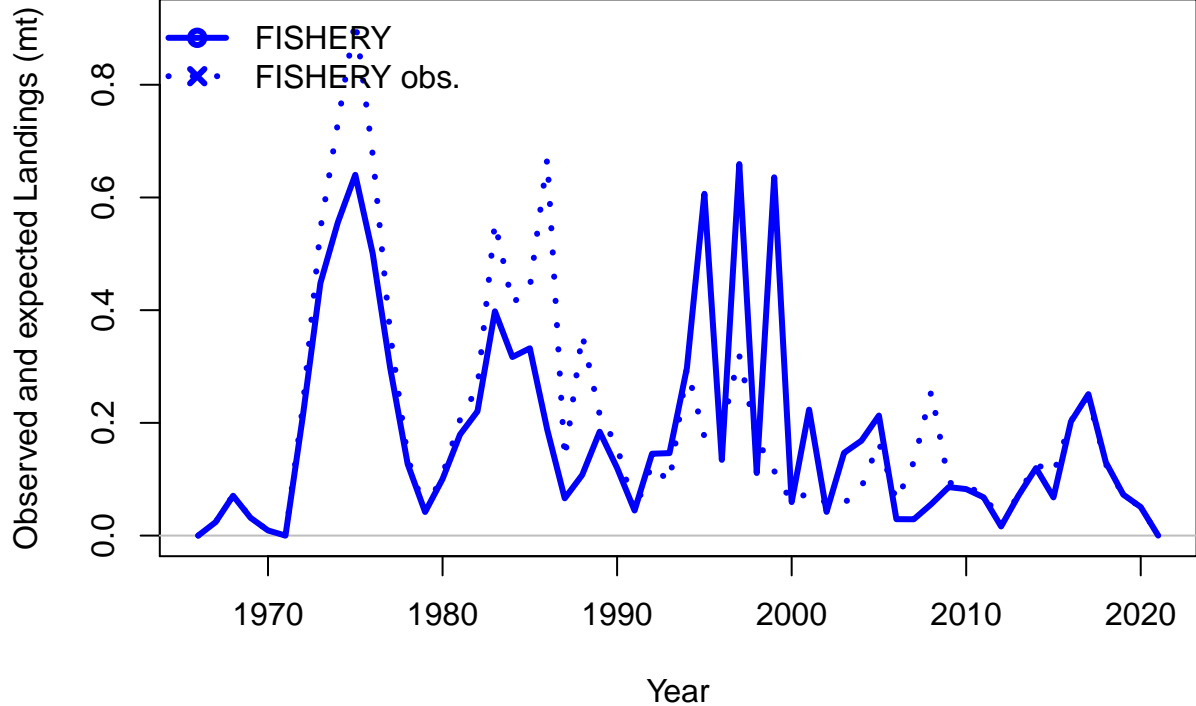


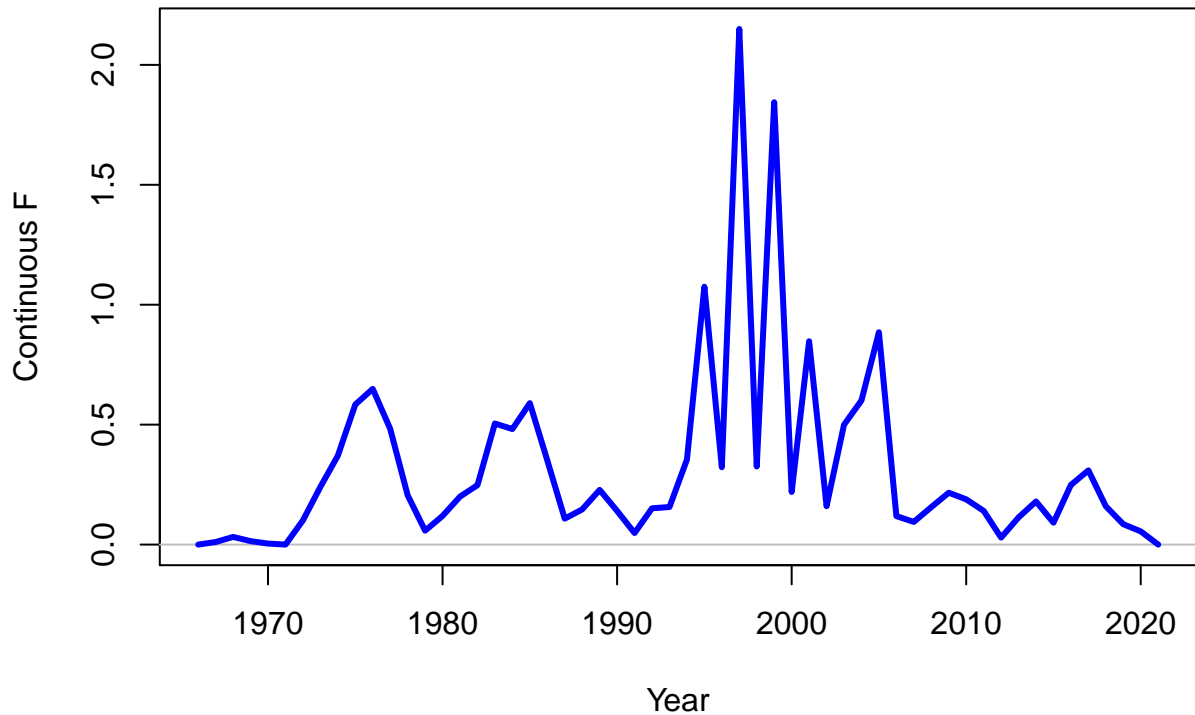




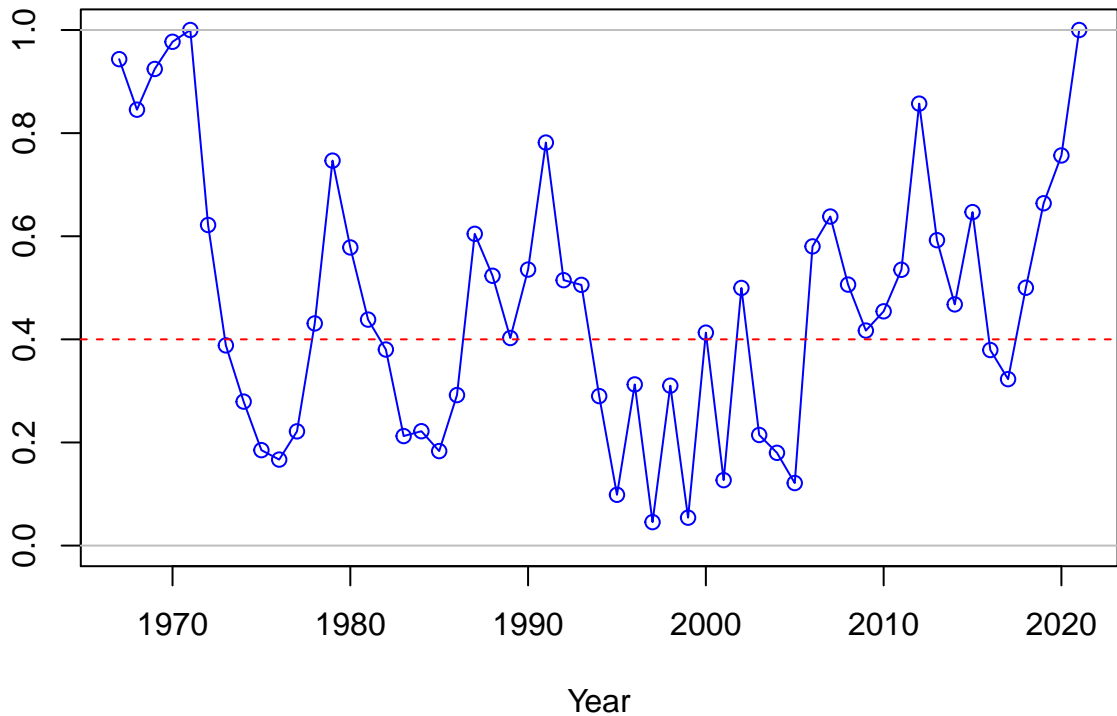


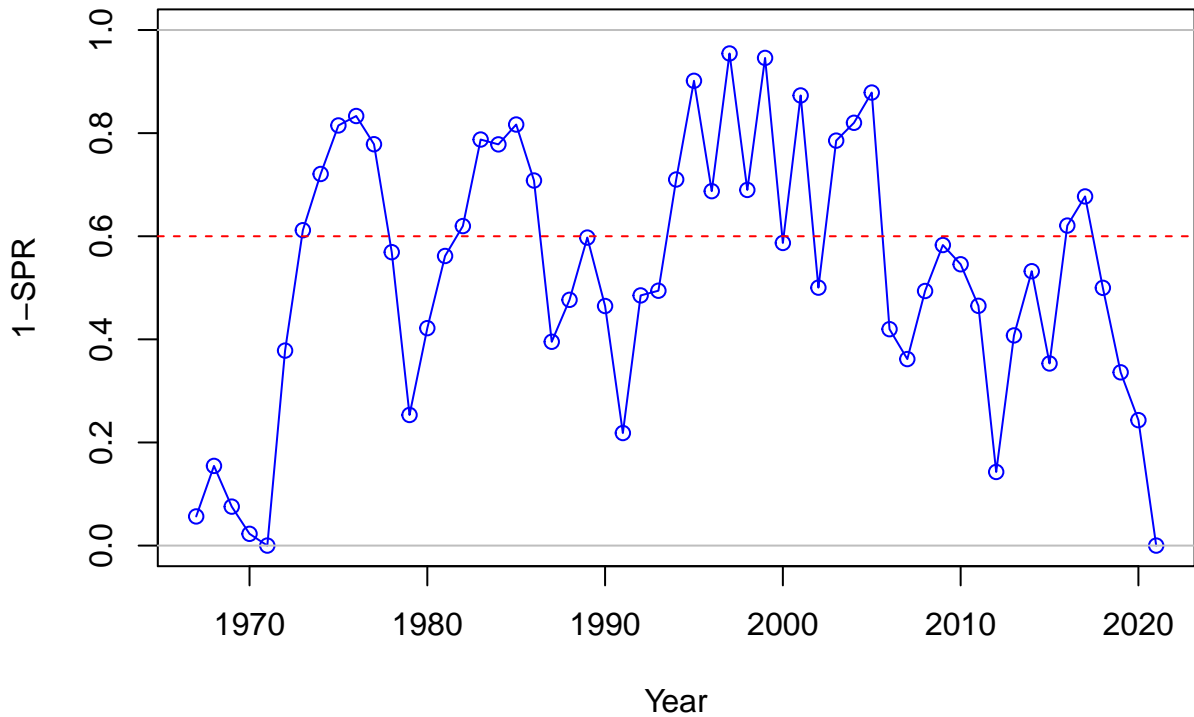




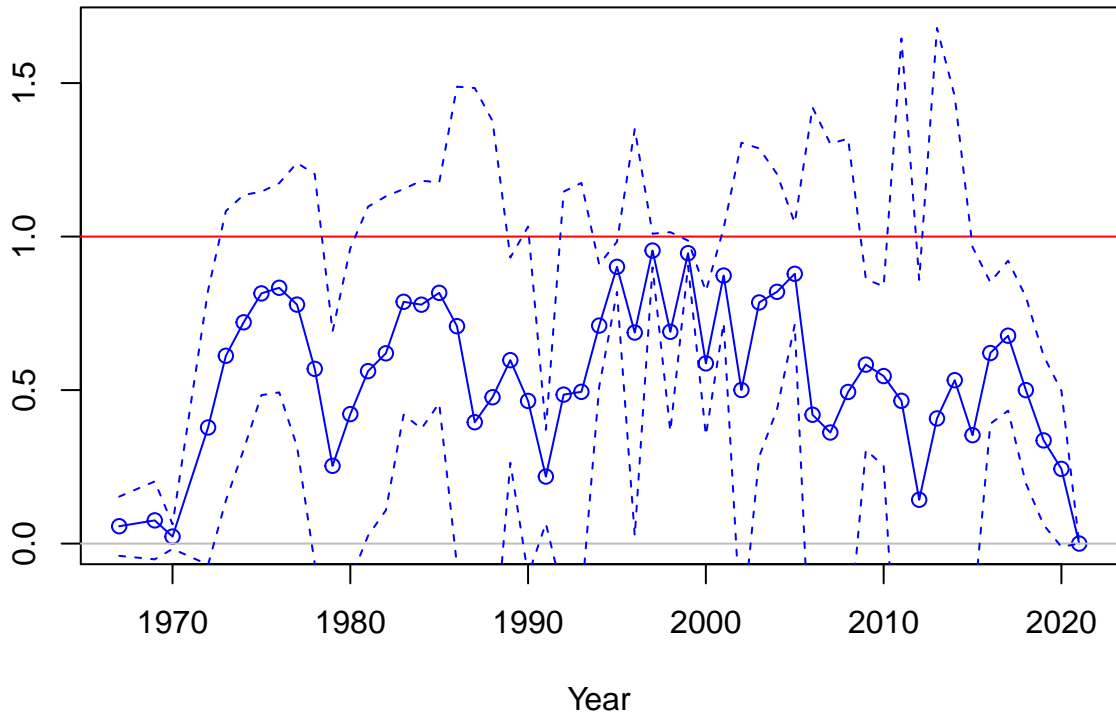


SPR

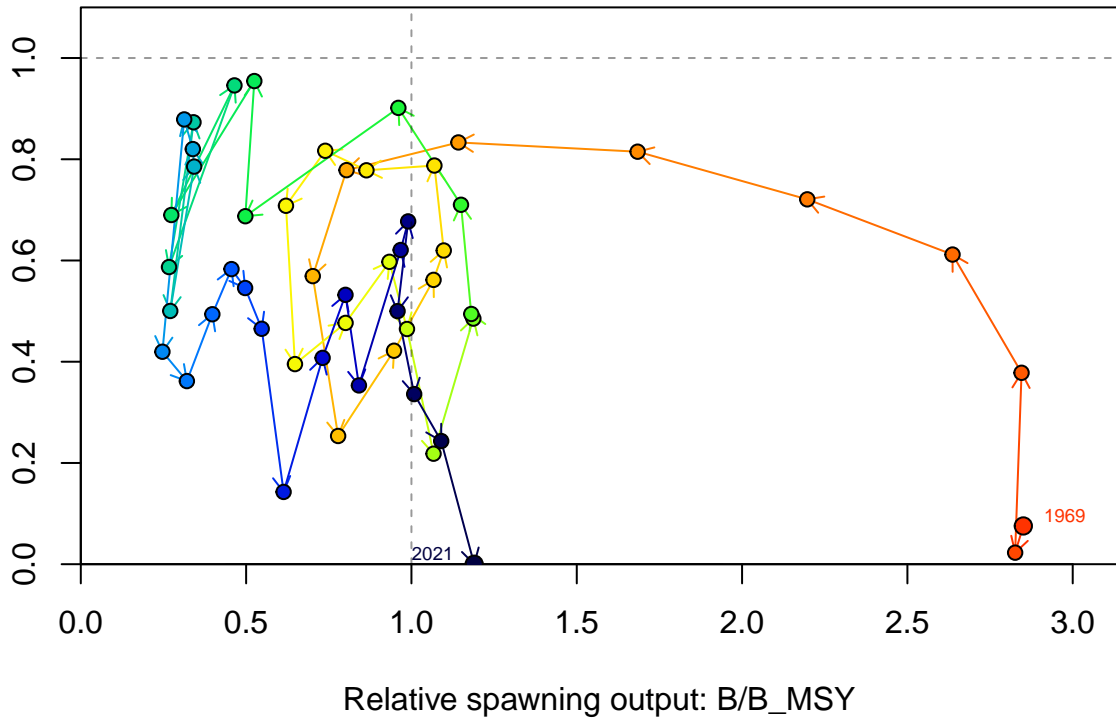




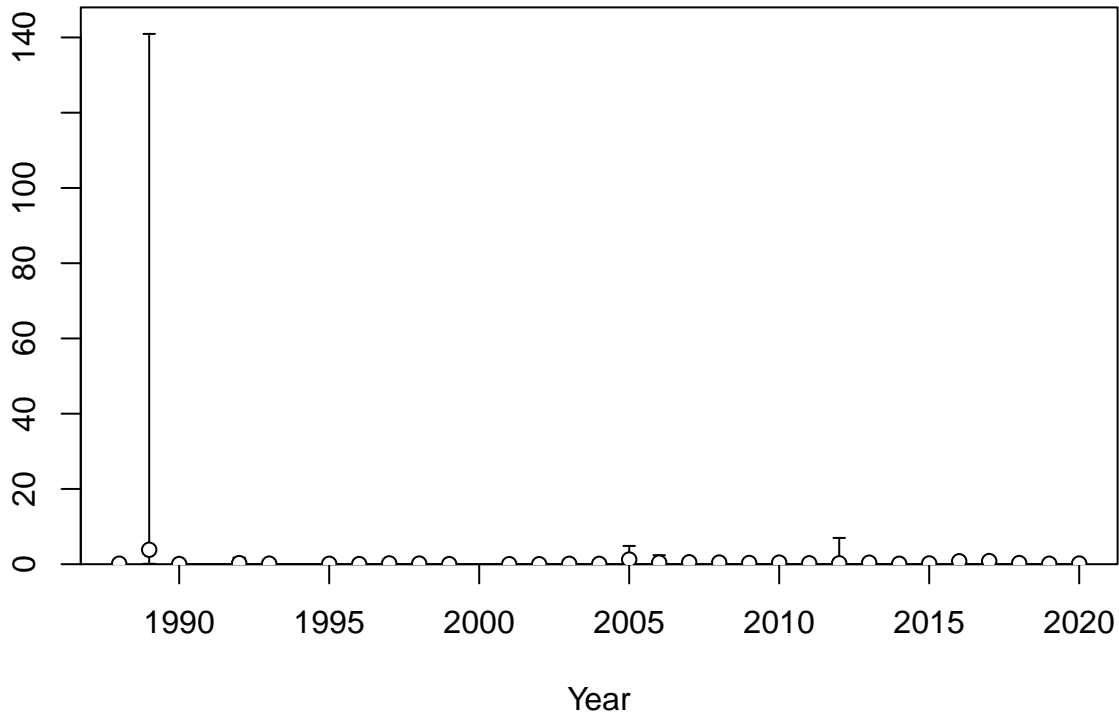
Fishing intensity: 1-SPR



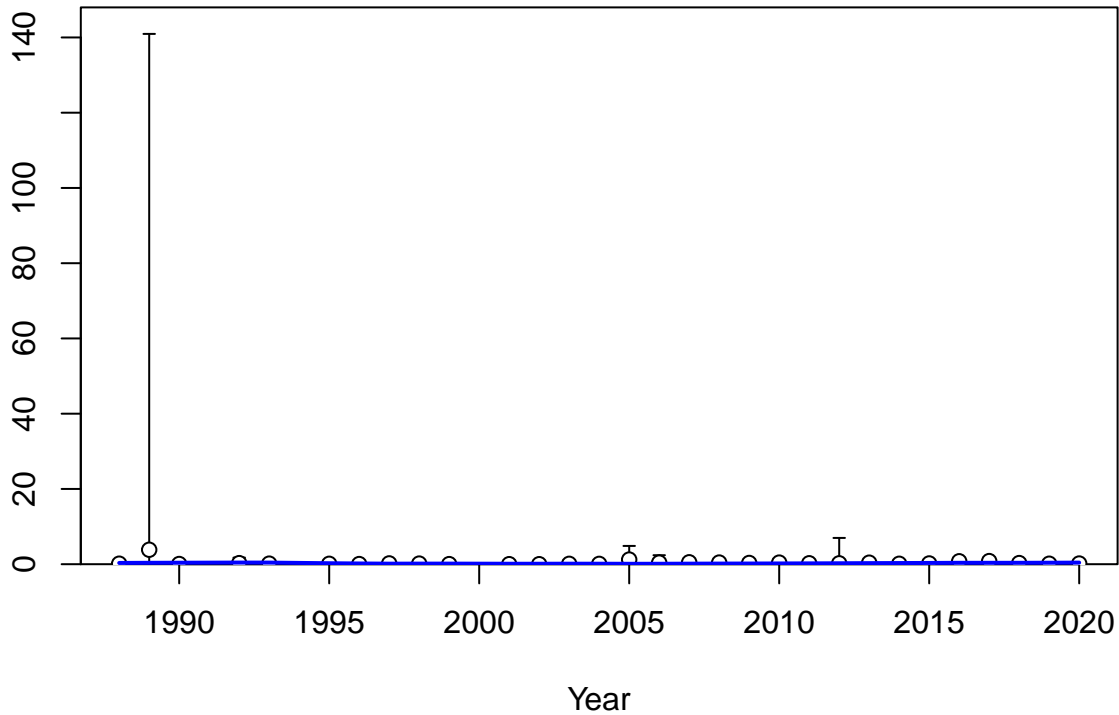
Fishing intensity: 1-SPR

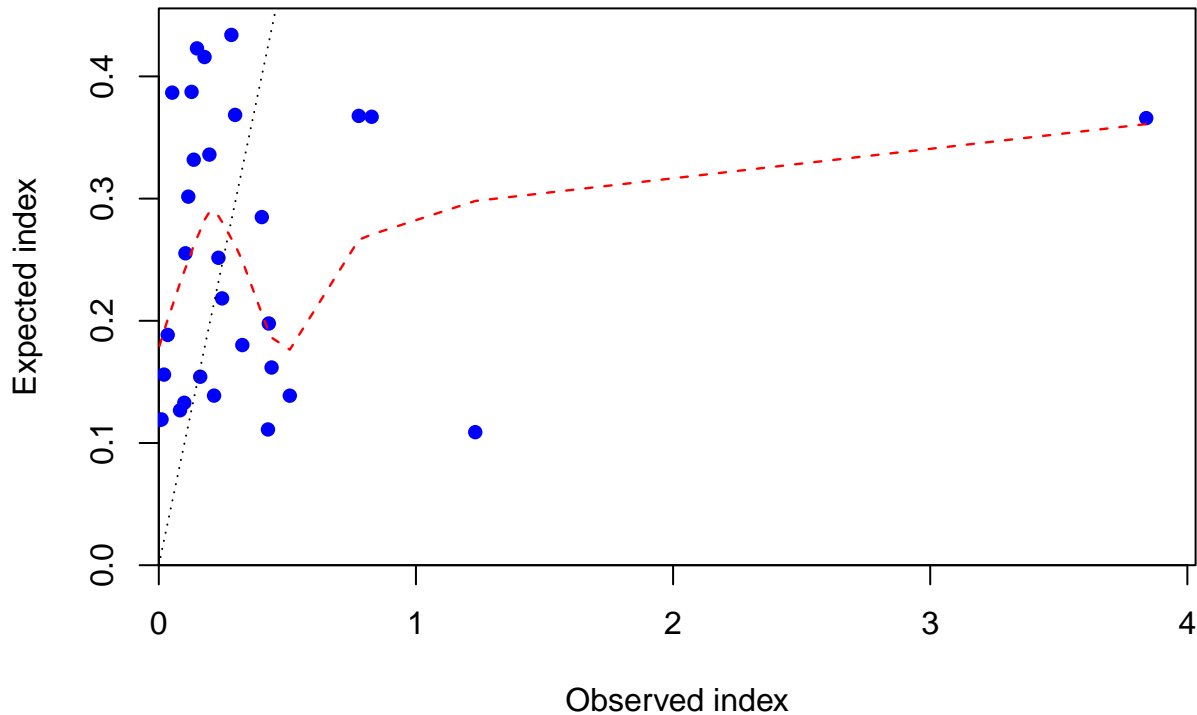


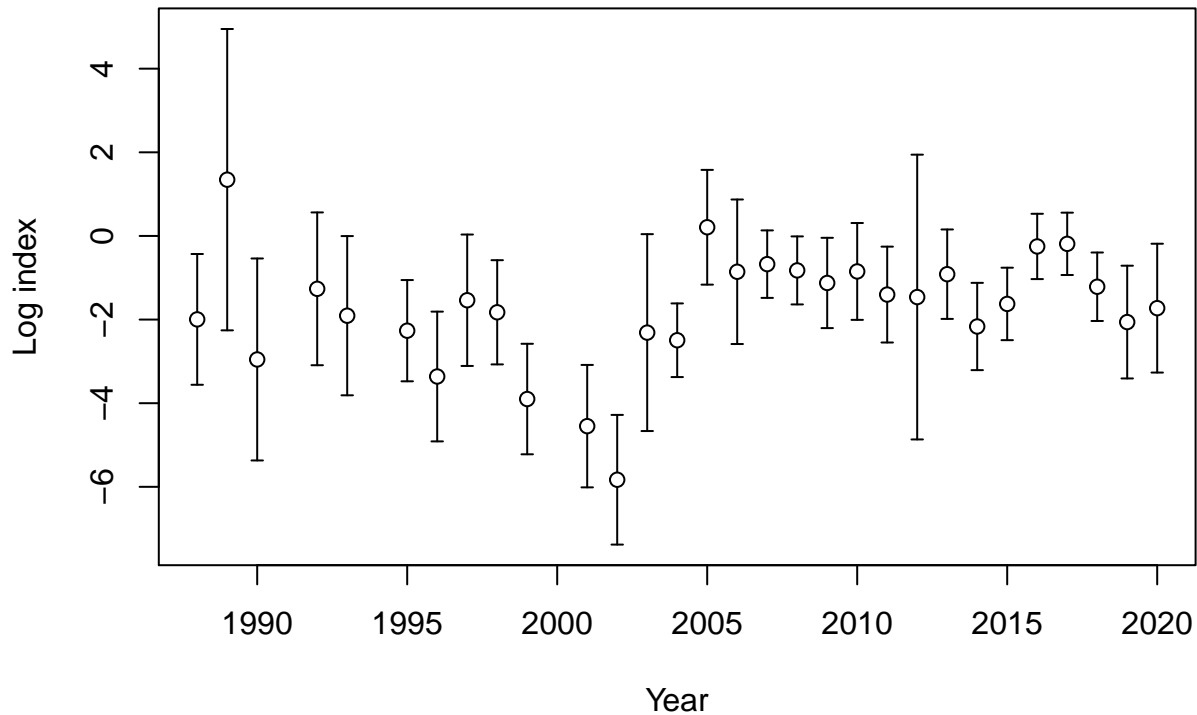
Index

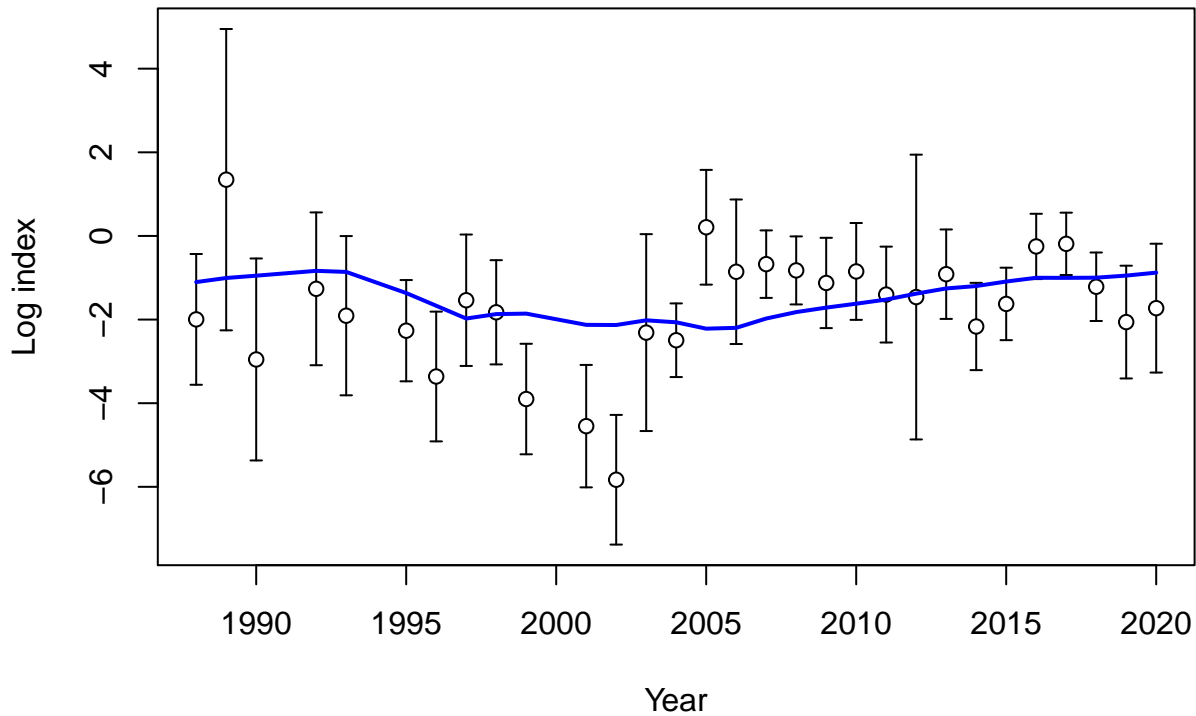


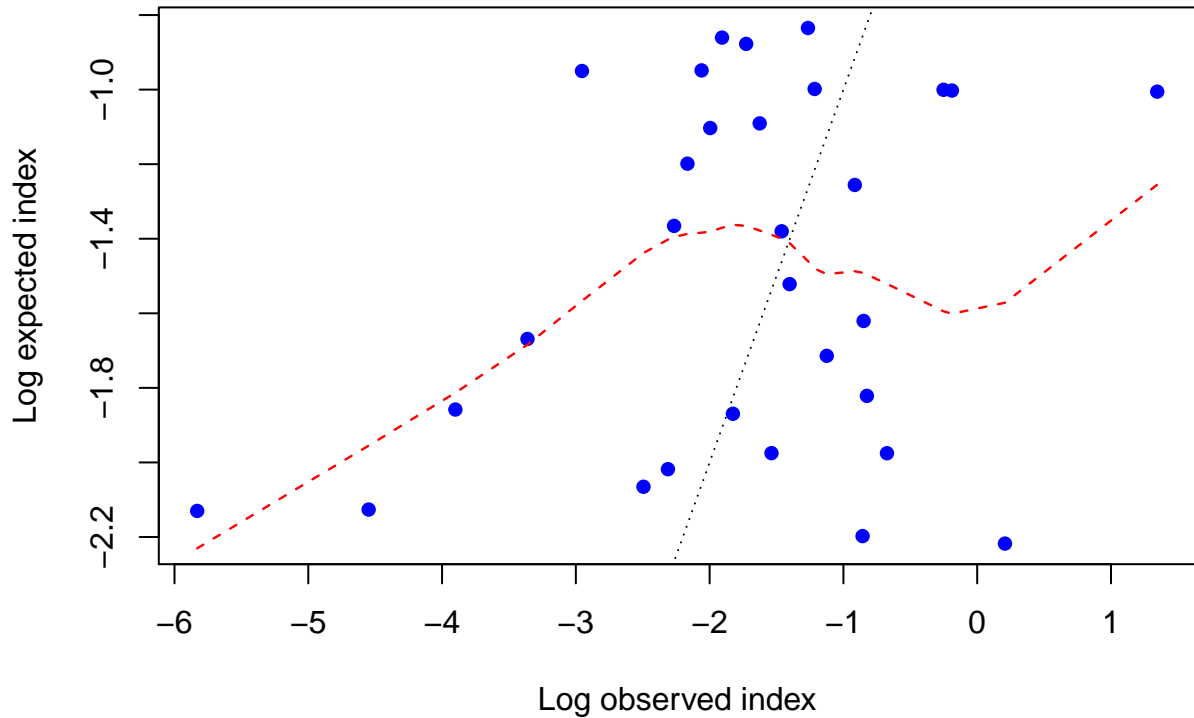
Index



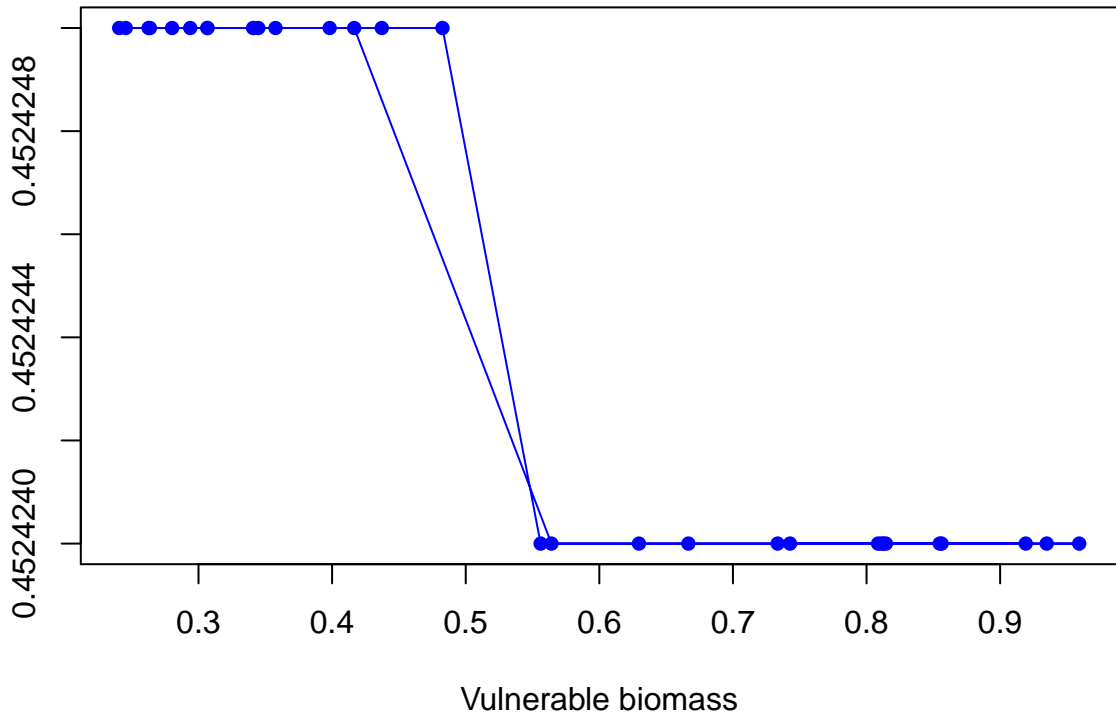


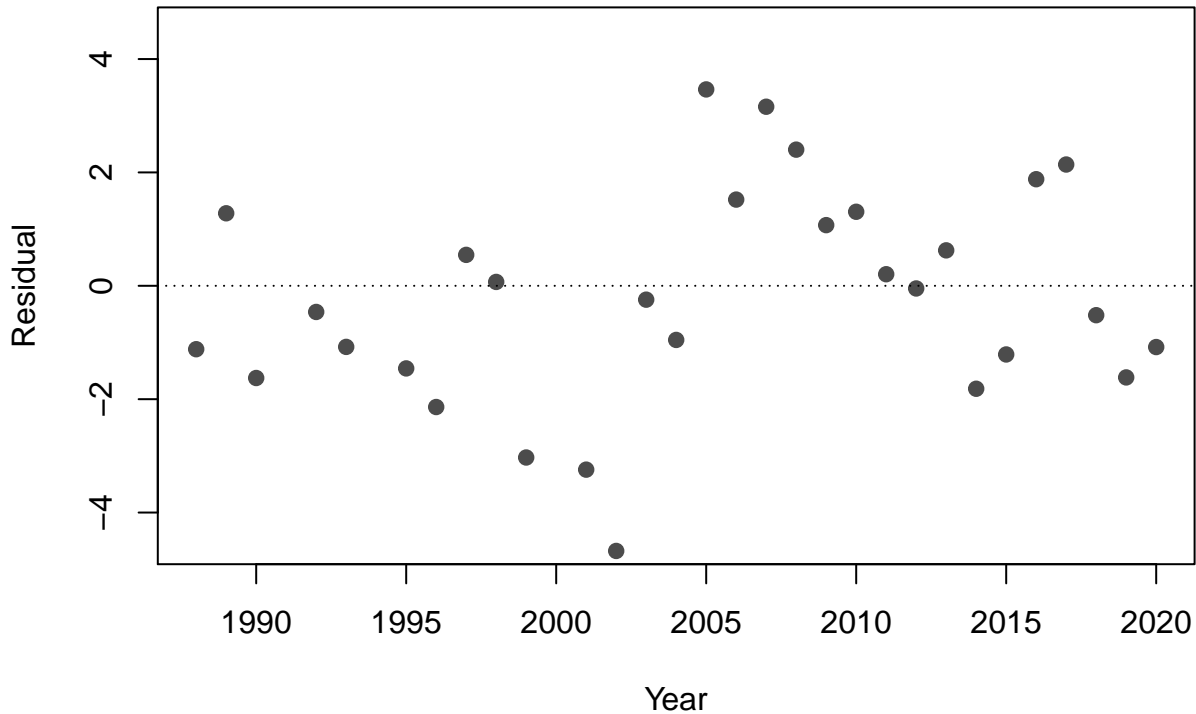


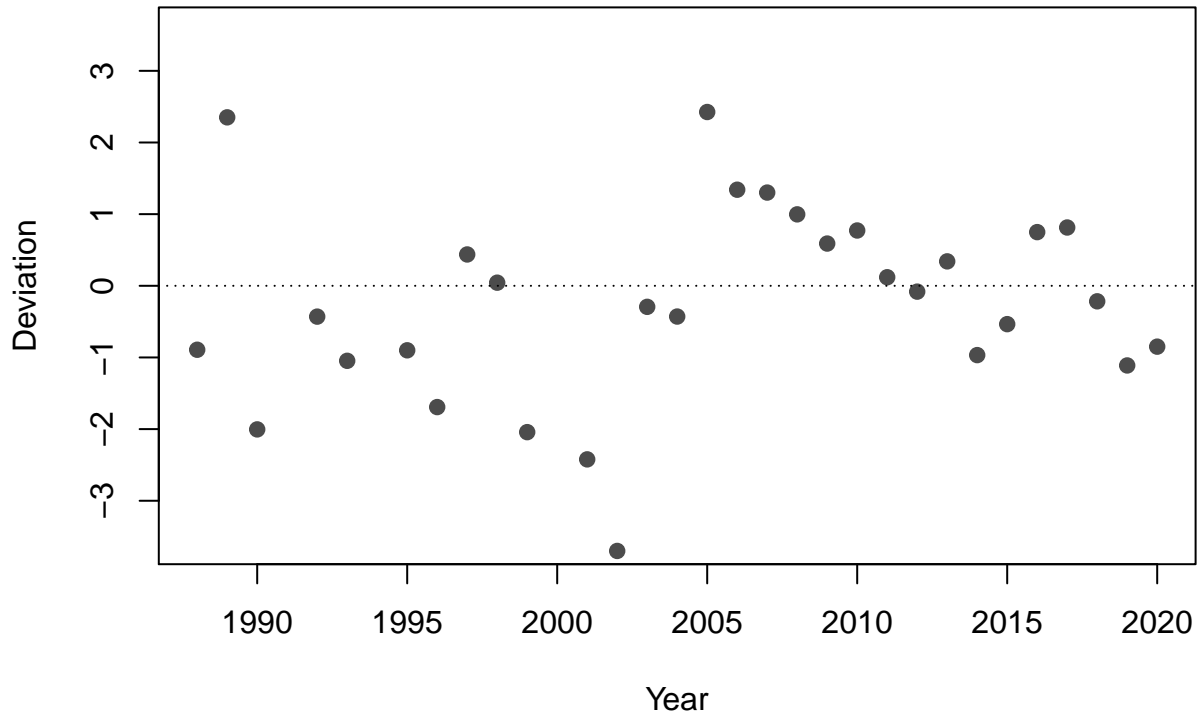


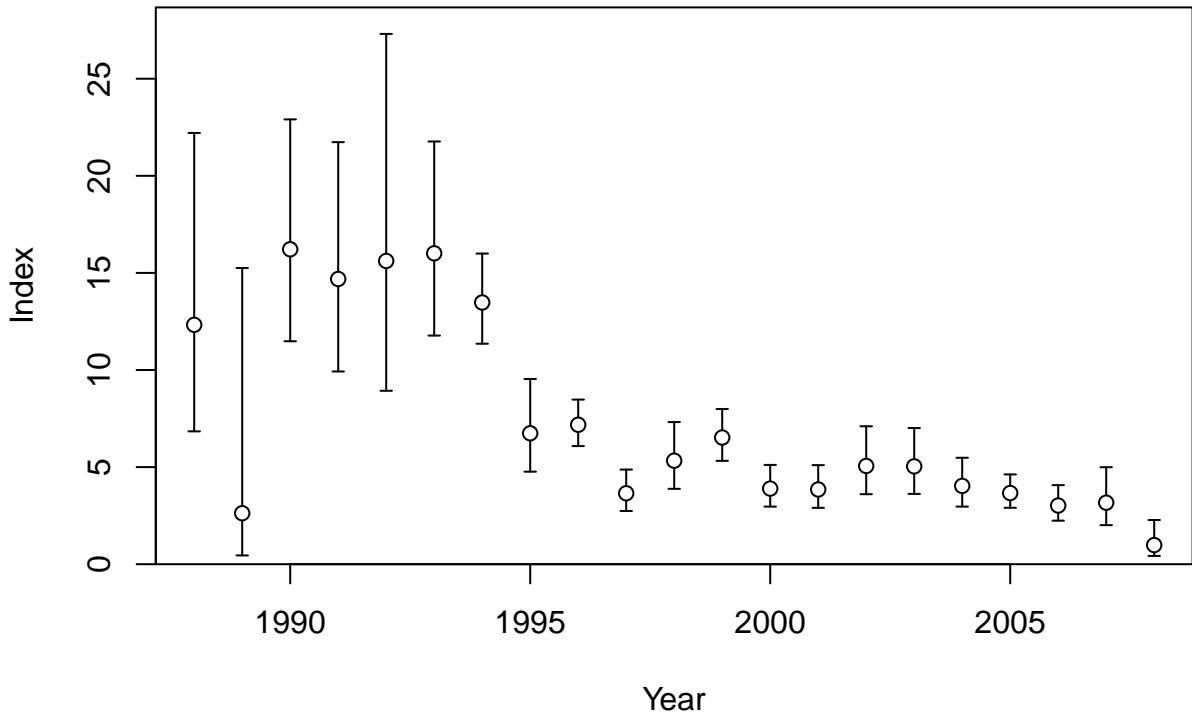


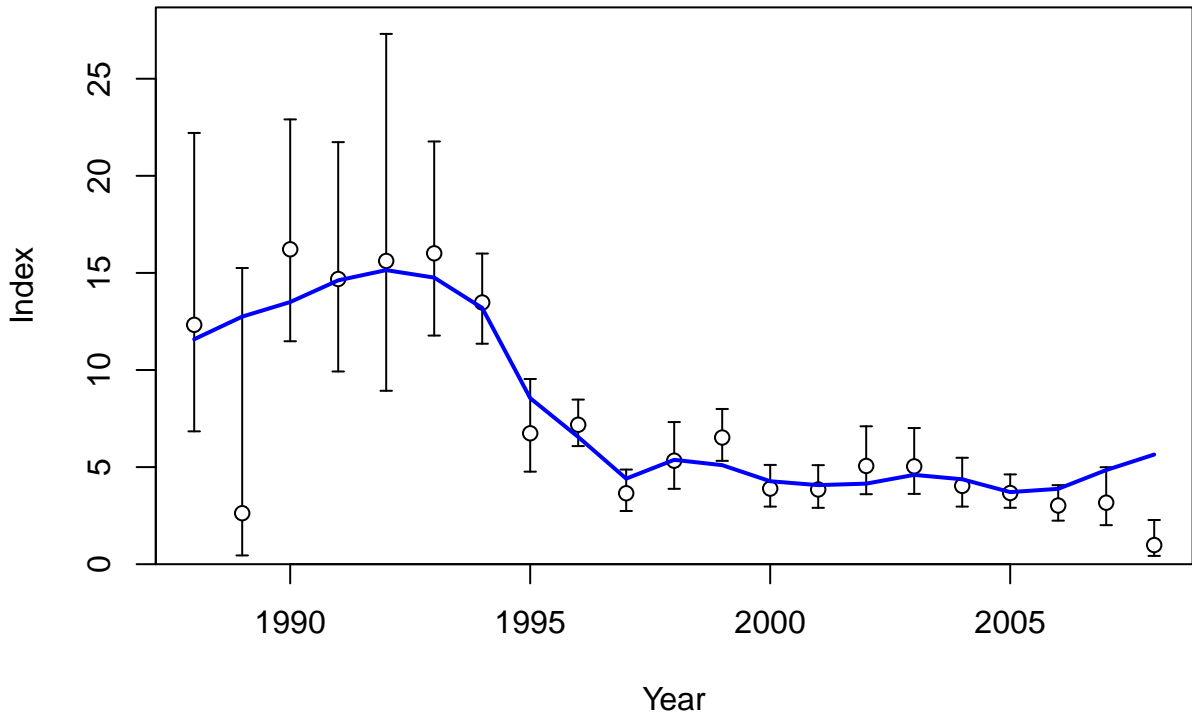
Effective catchability

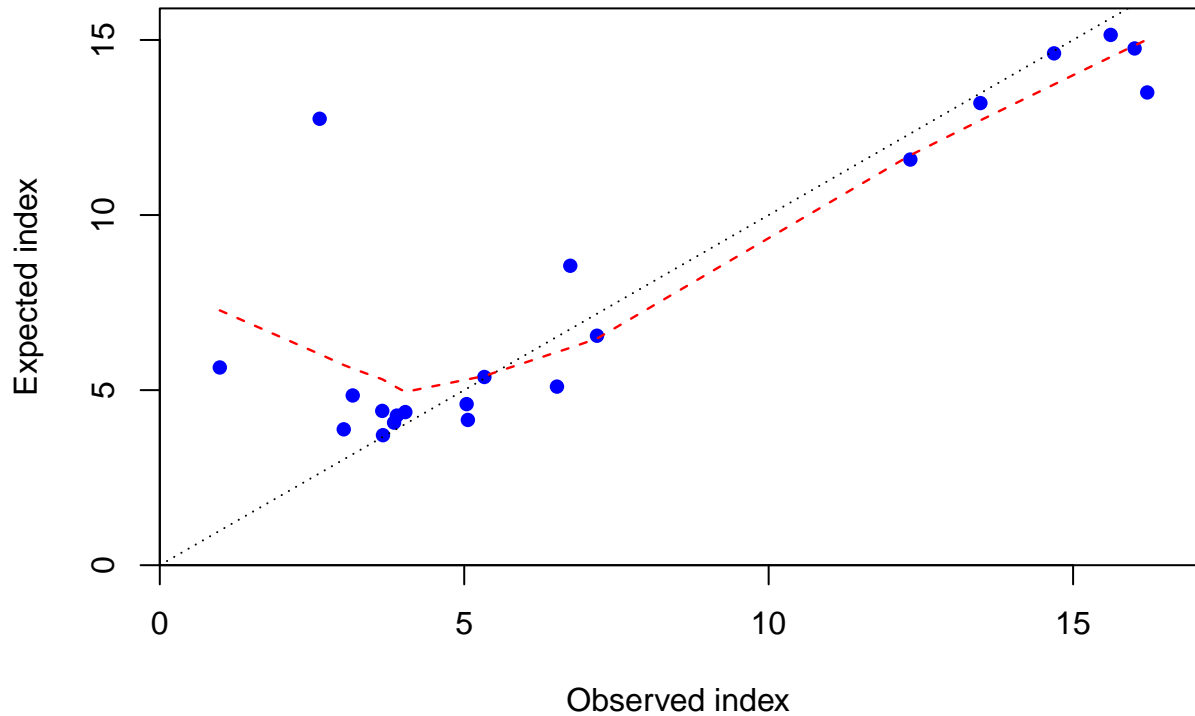


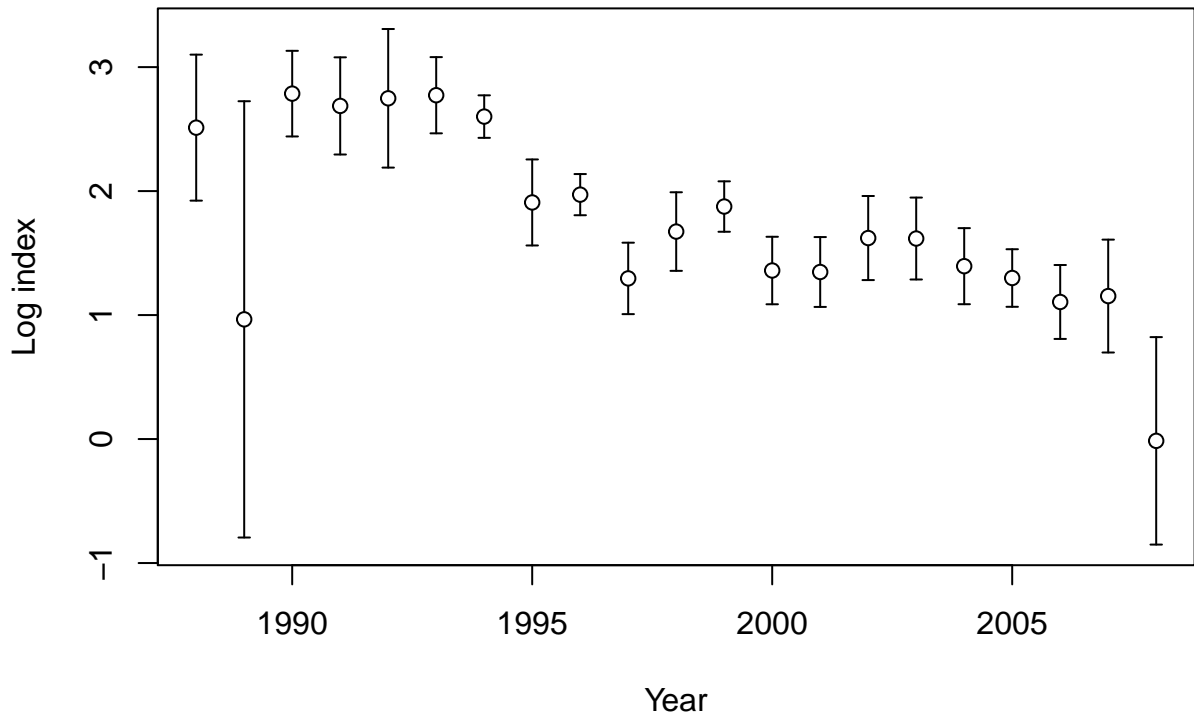


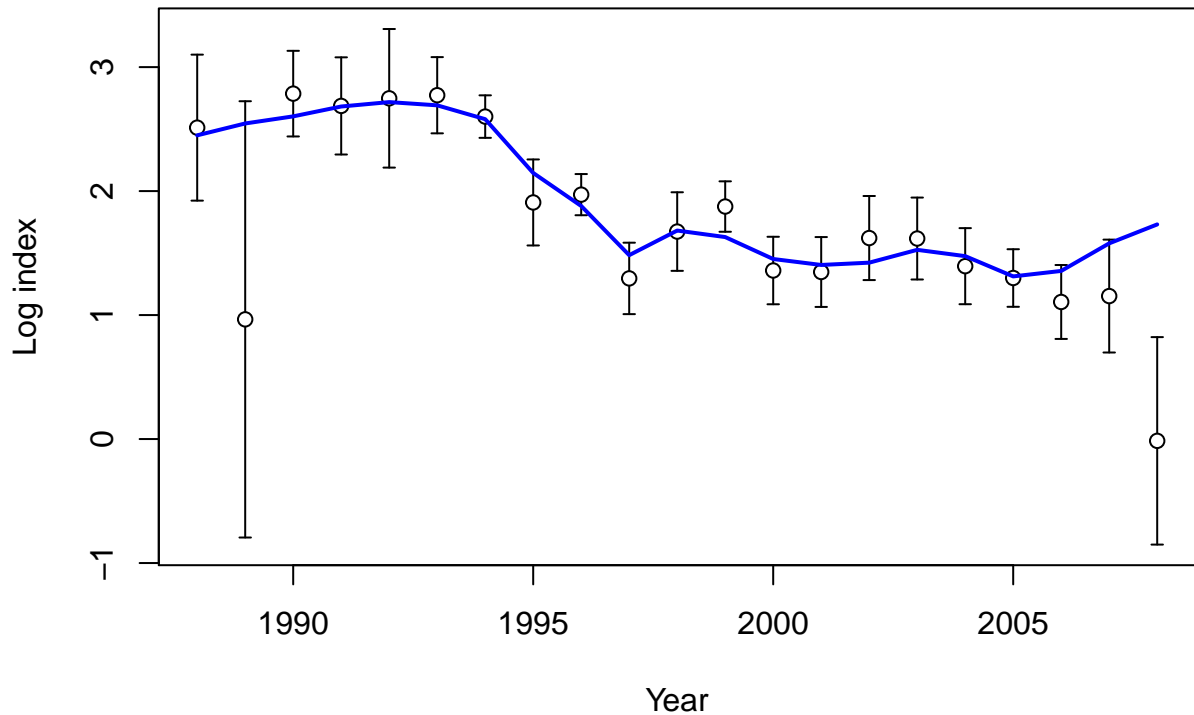


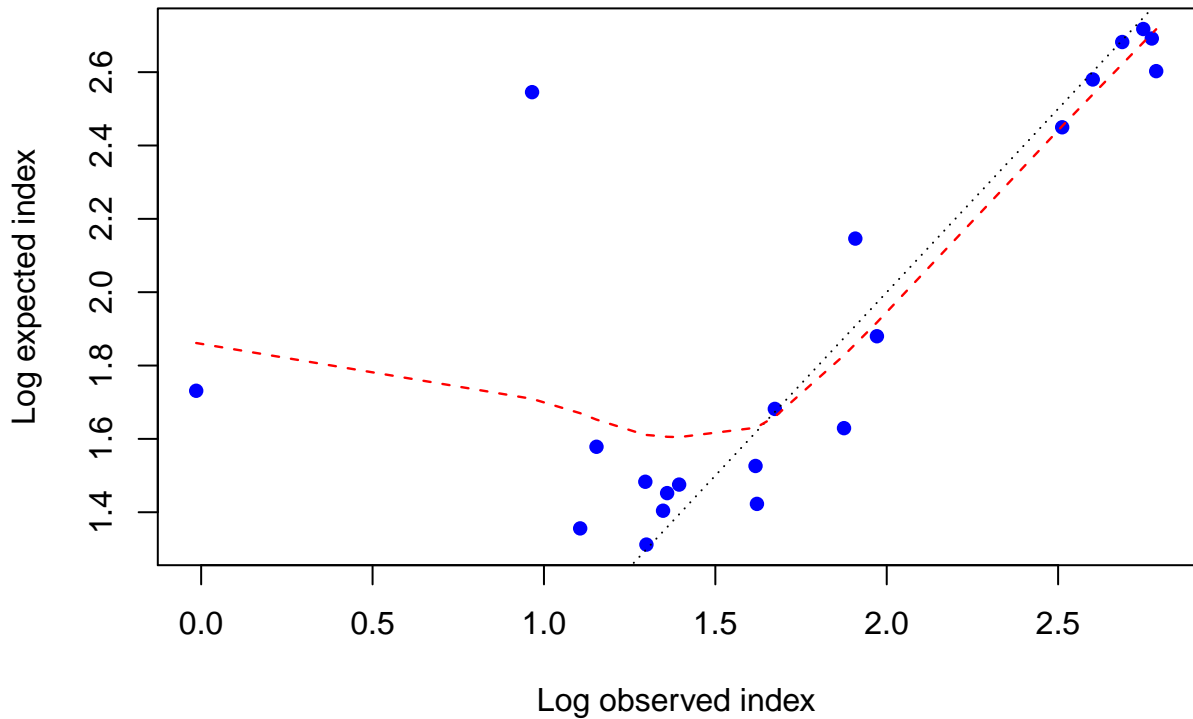


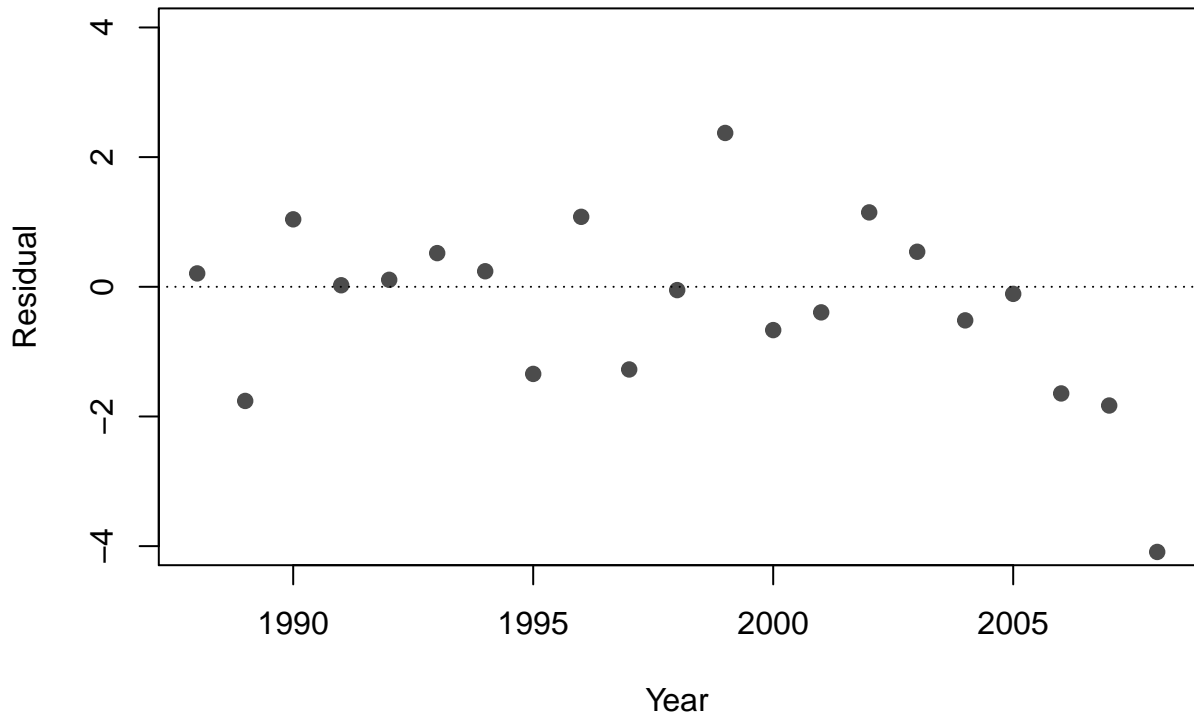


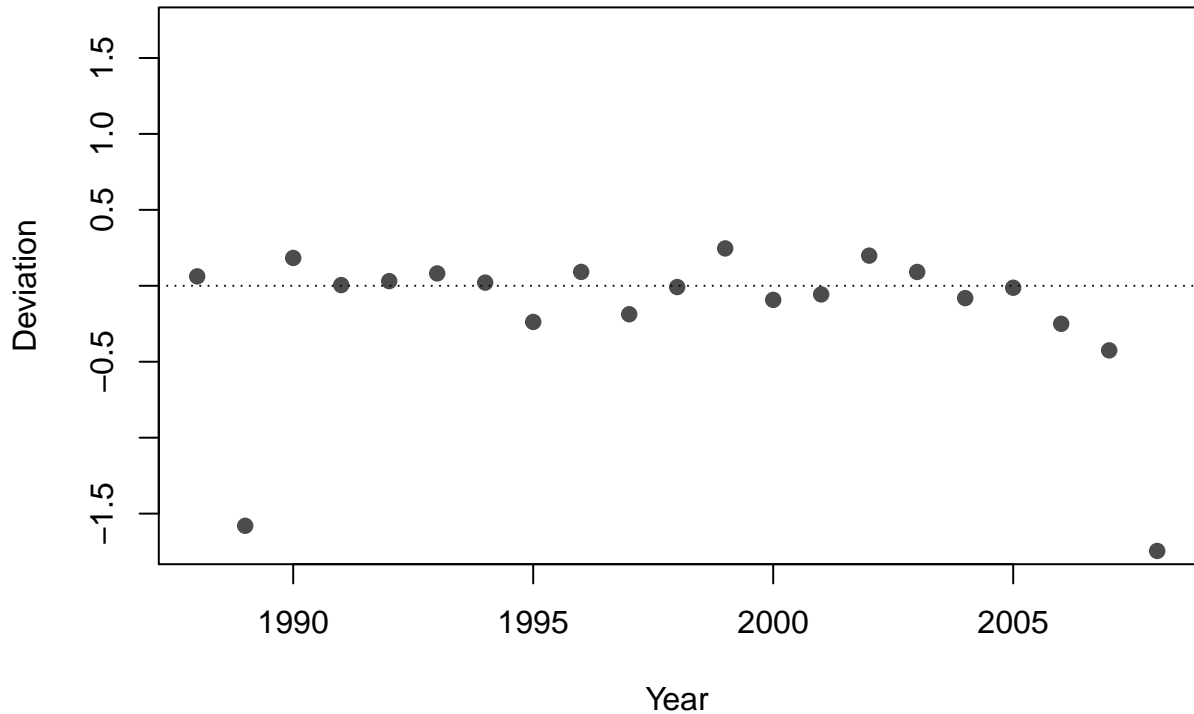




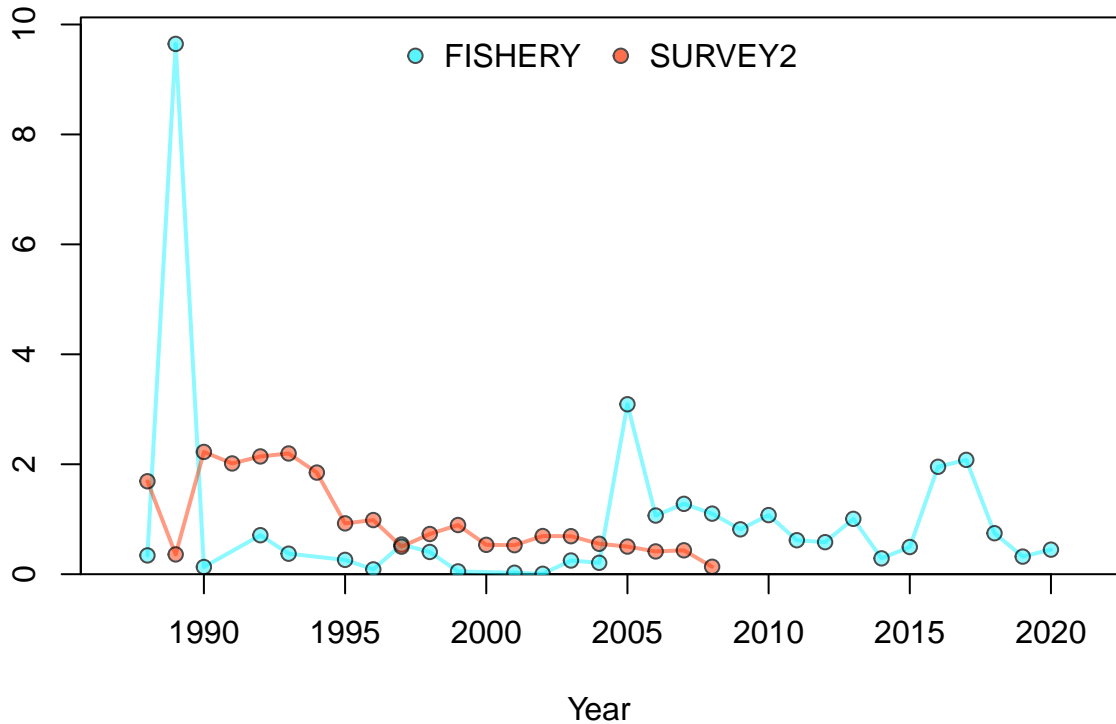


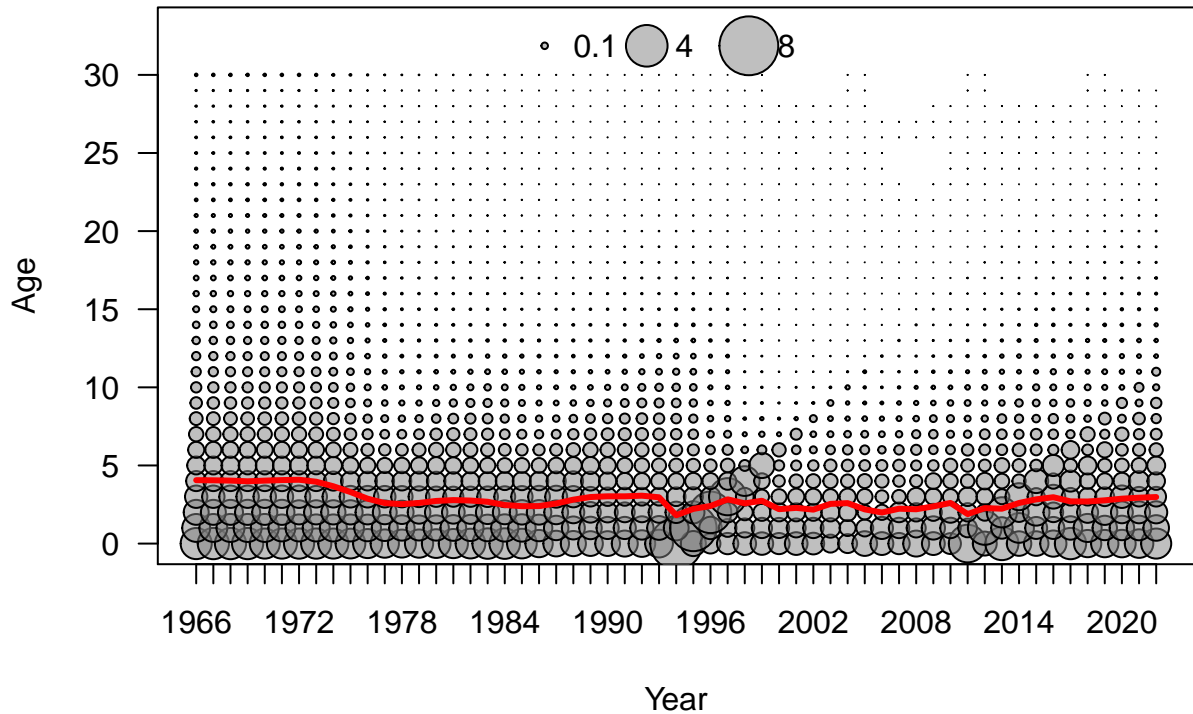


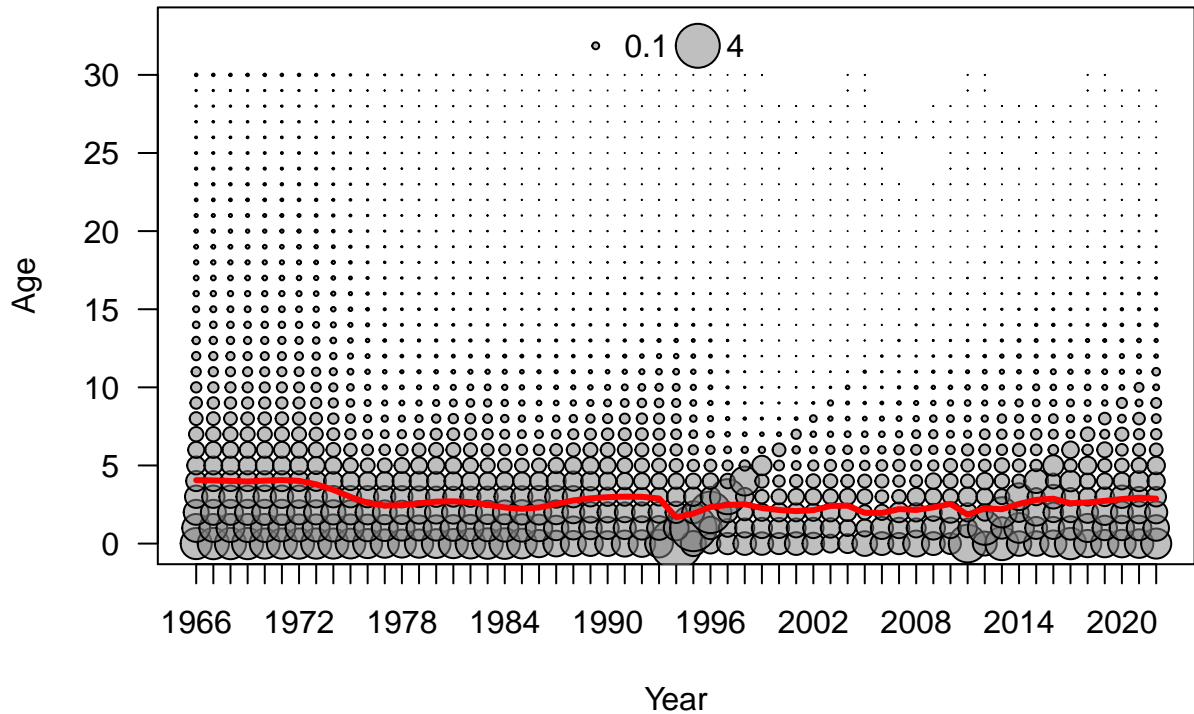


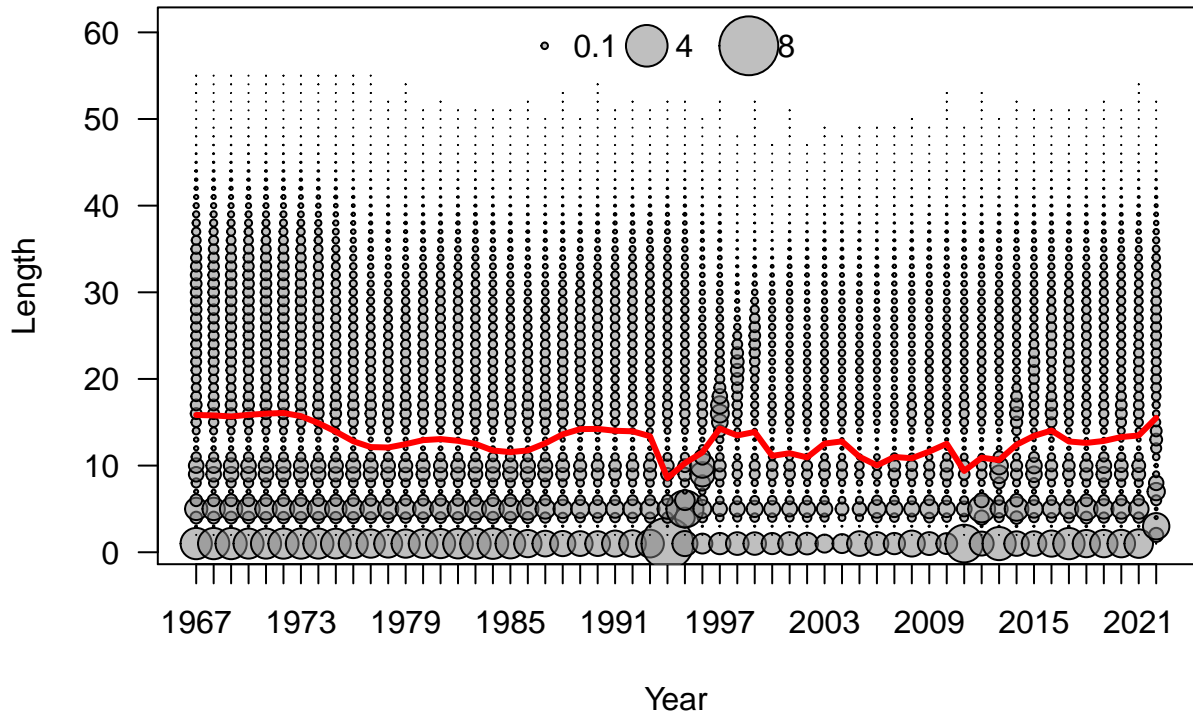


Standardized index









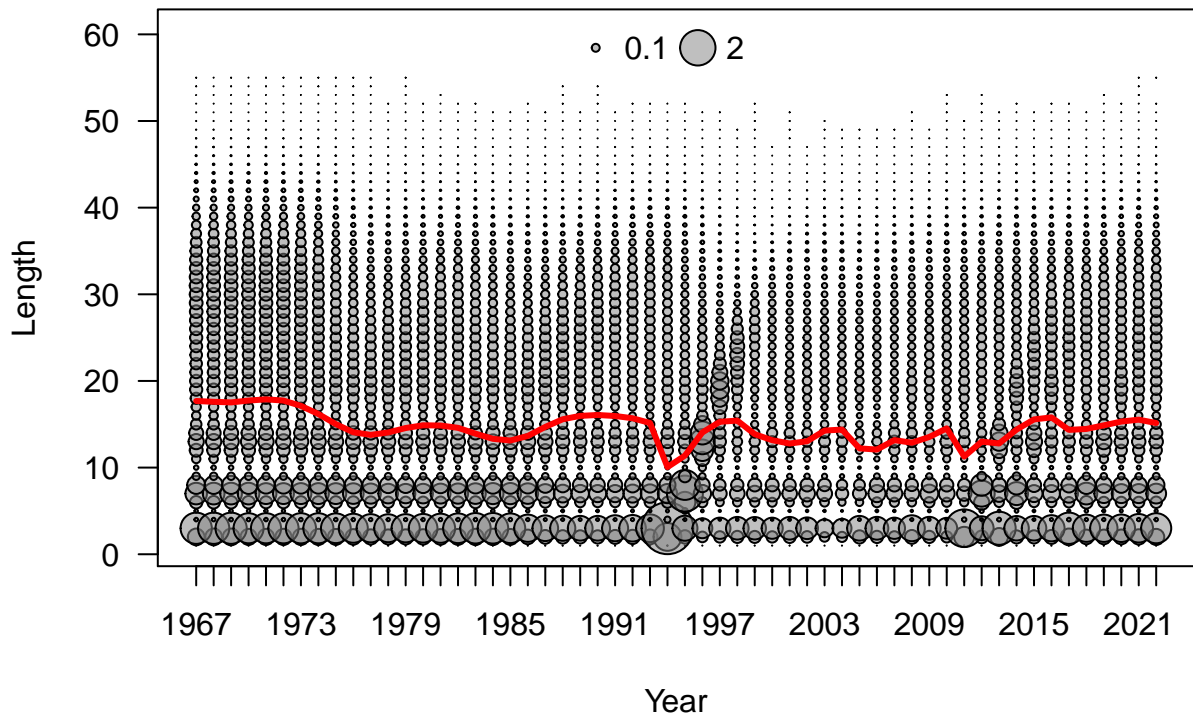
Length

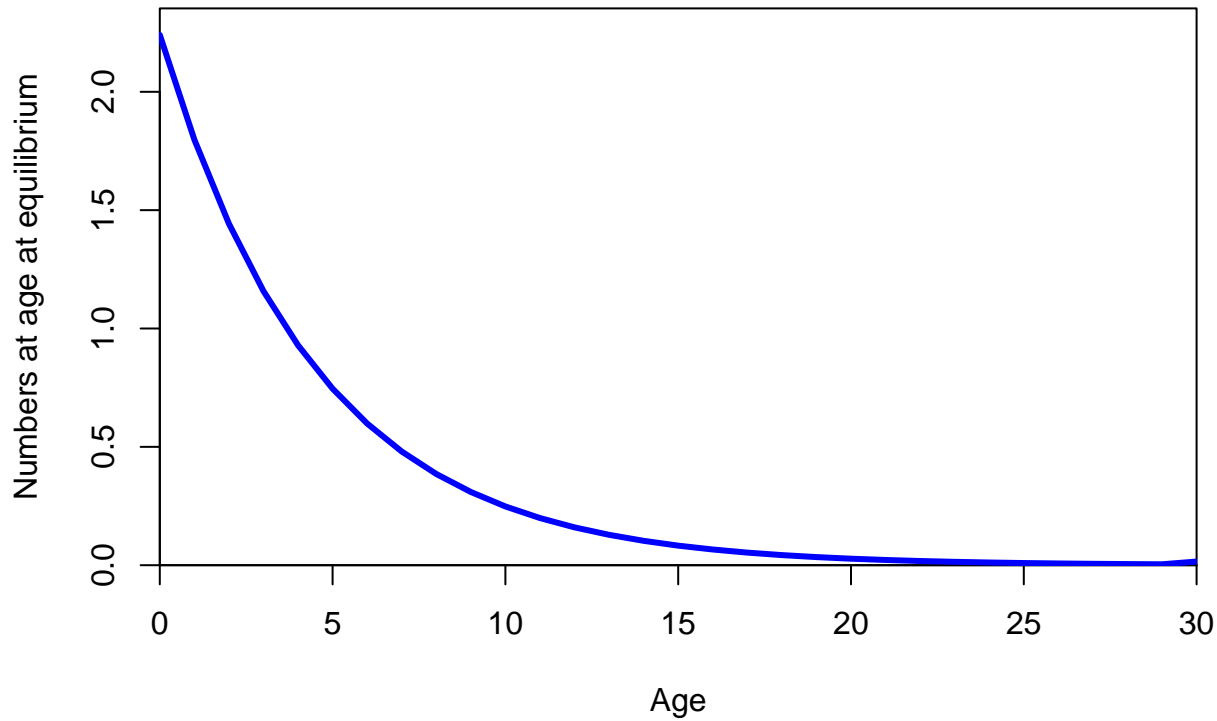
60
50
40
30
20
10
0

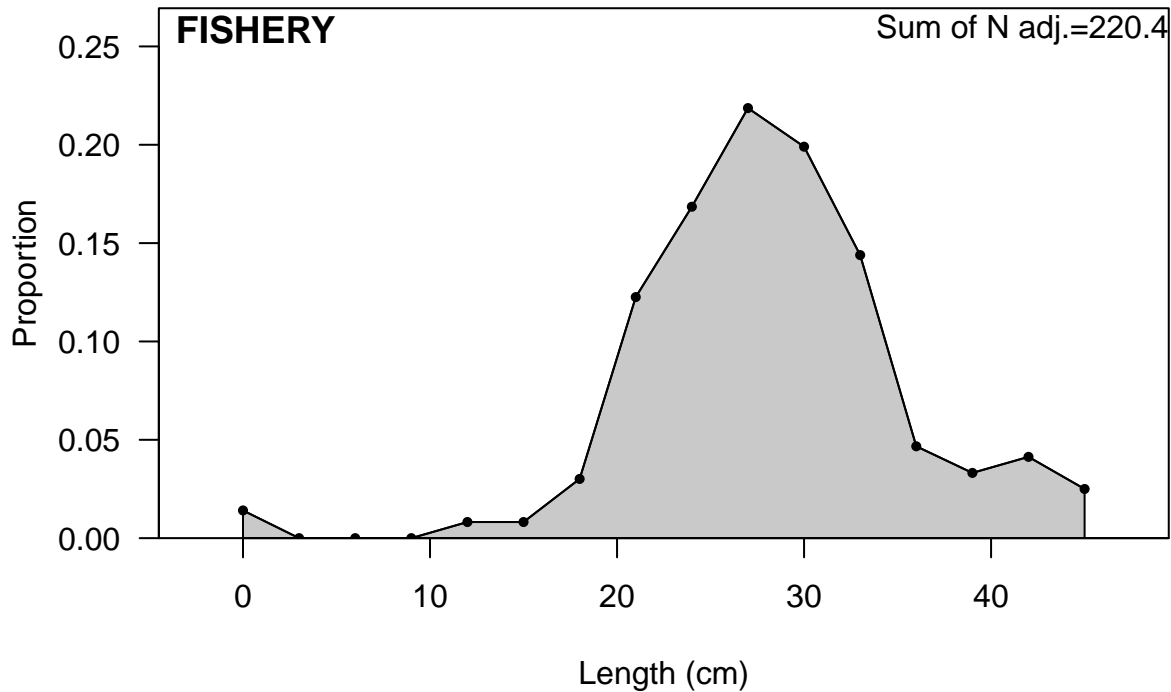
◦ 0.1 ● 2

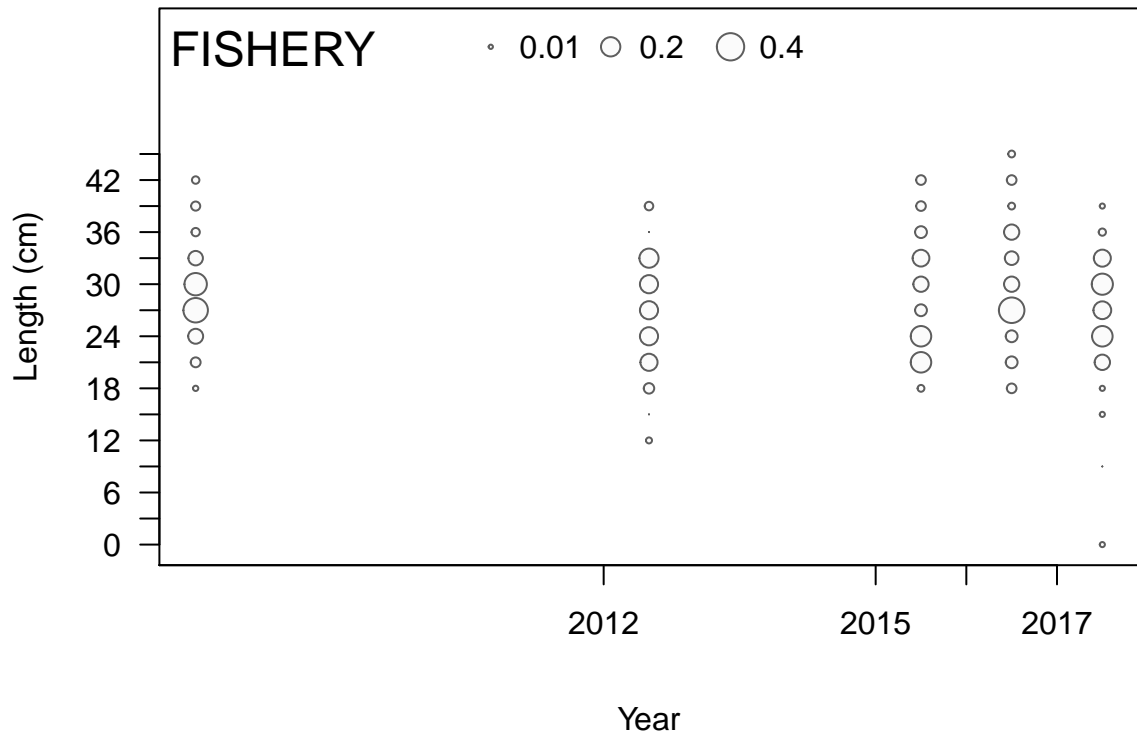
1967 1973 1979 1985 1991 1997 2003 2009 2015 2021

Year

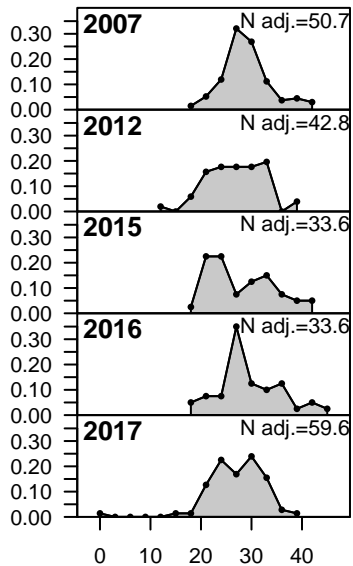




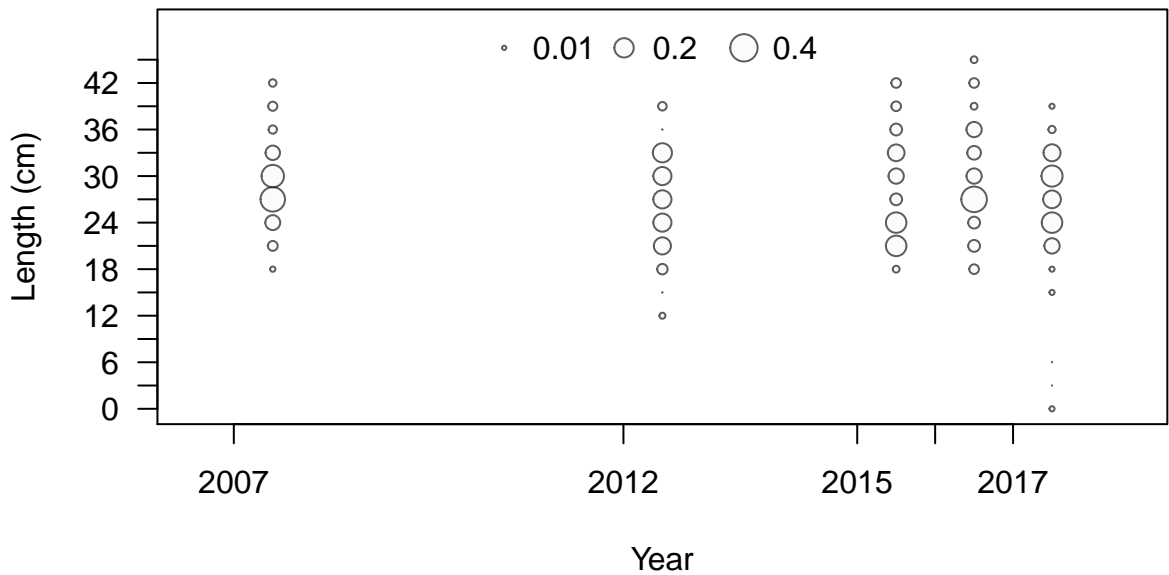




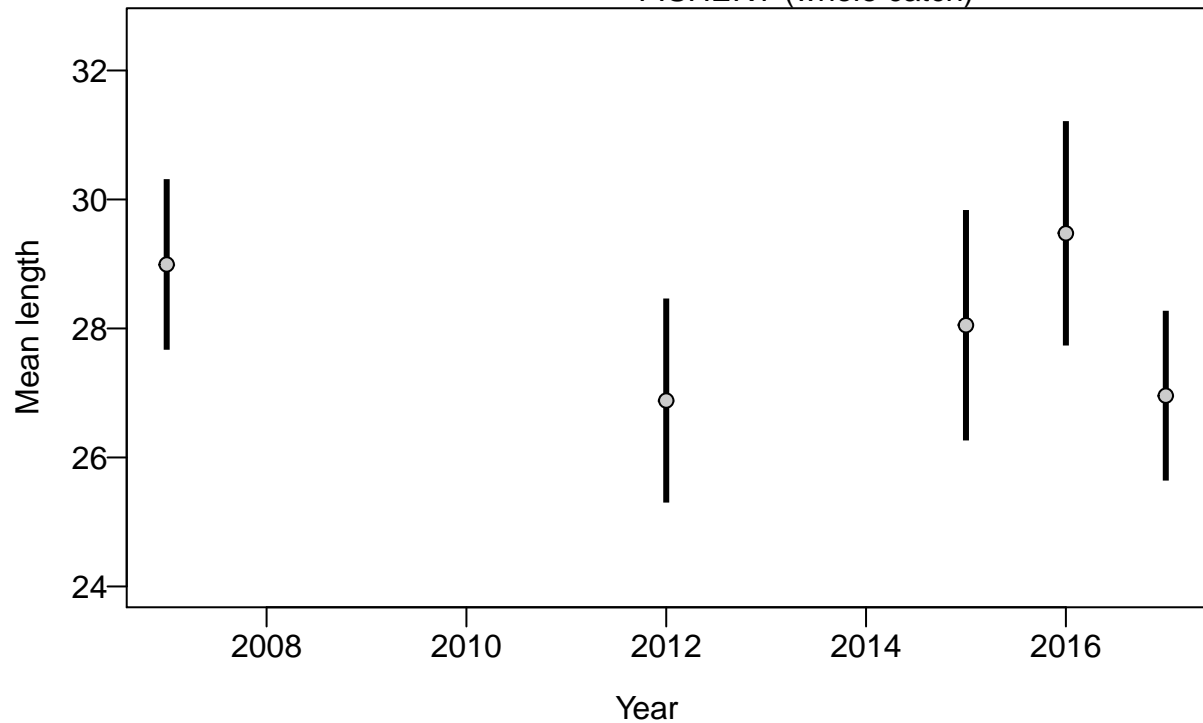
Proportion



Length (cm)

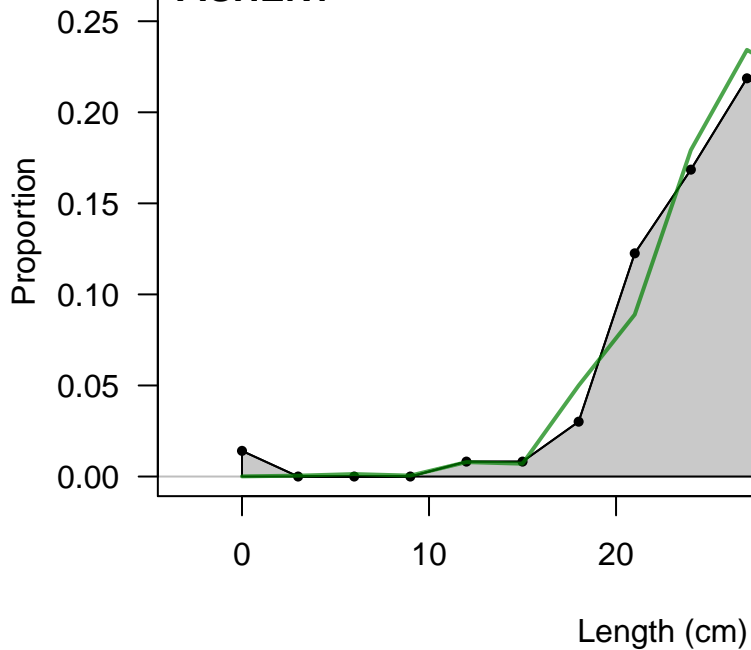


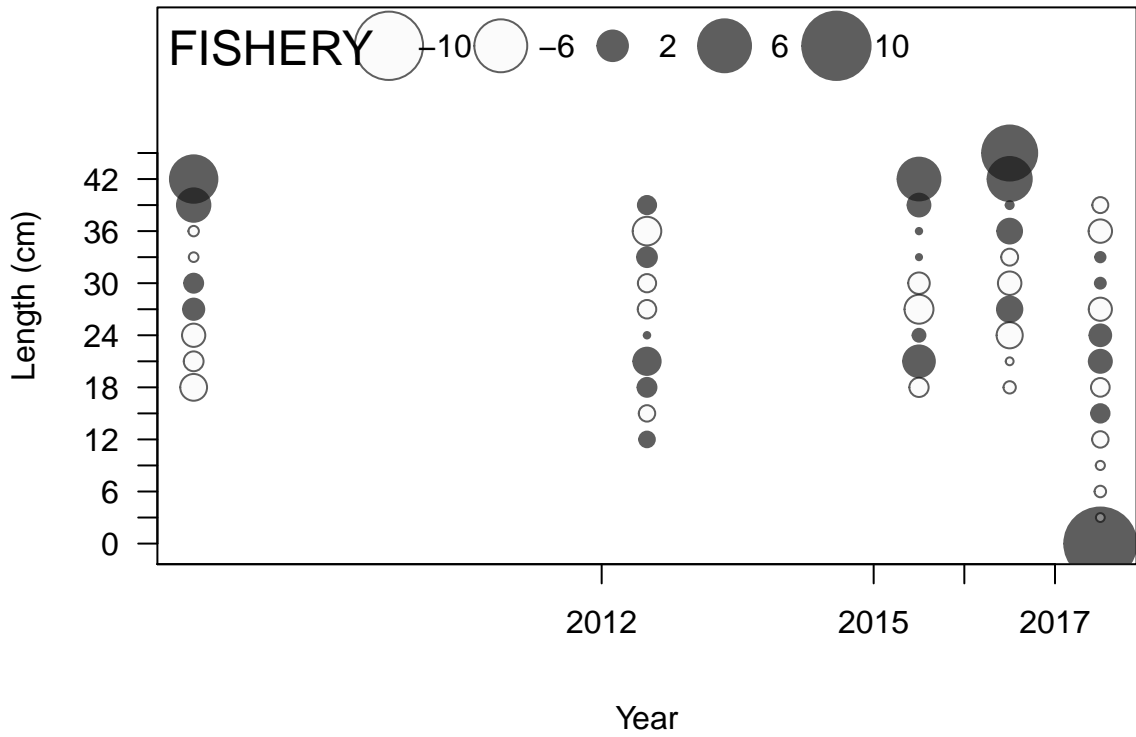
FISHERY (whole catch)



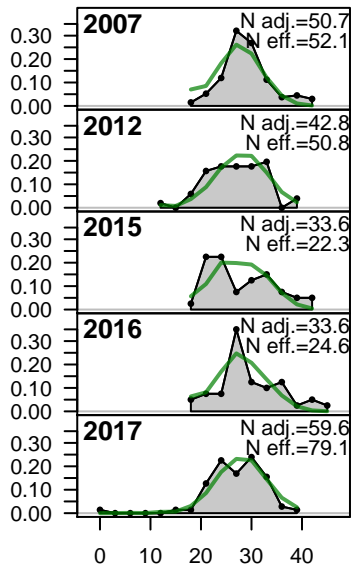
FISHERY

Sum of N adj.=220.4
Sum of N eff.=229

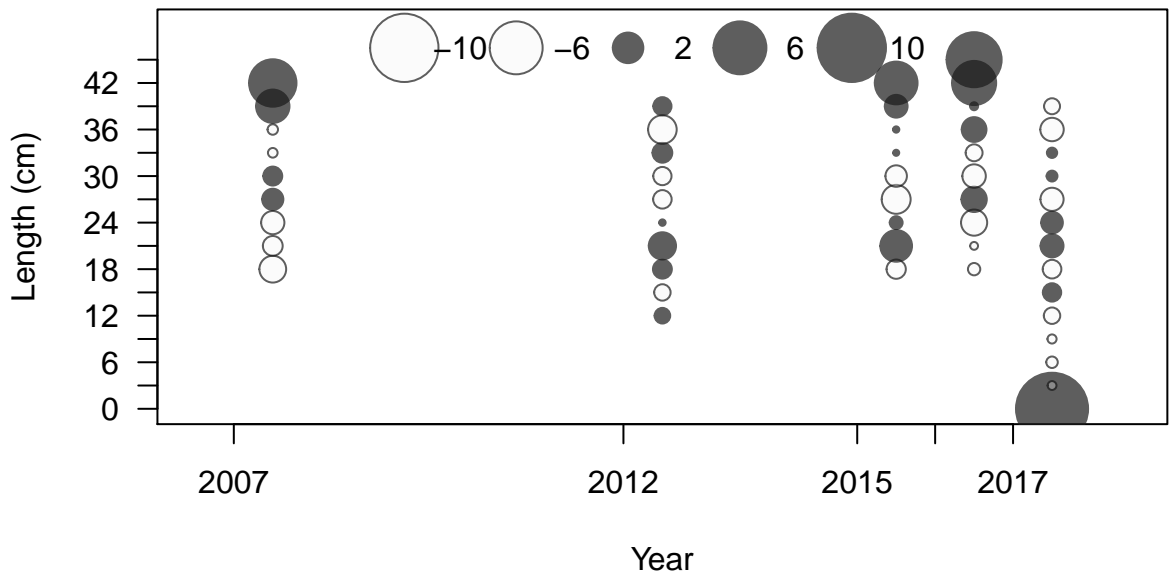




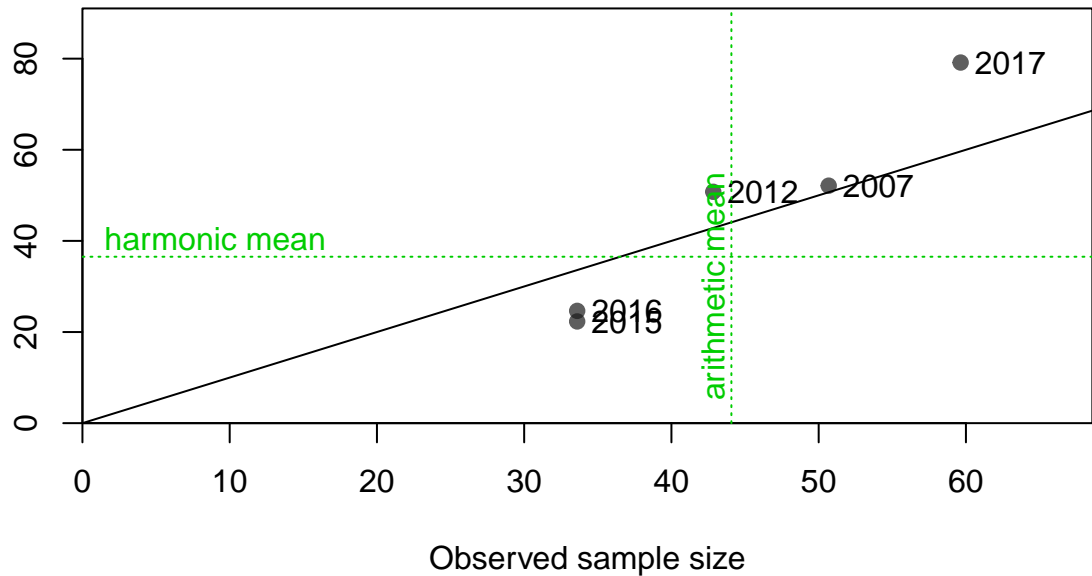
Proportion



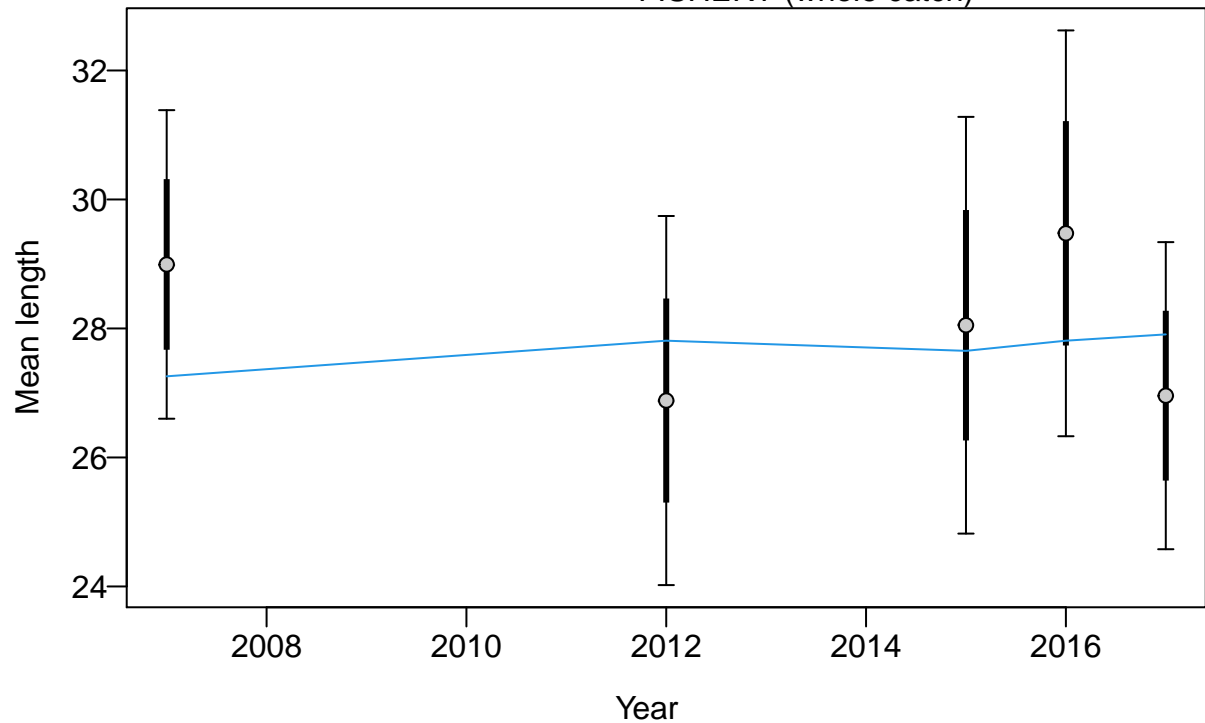
Length (cm)

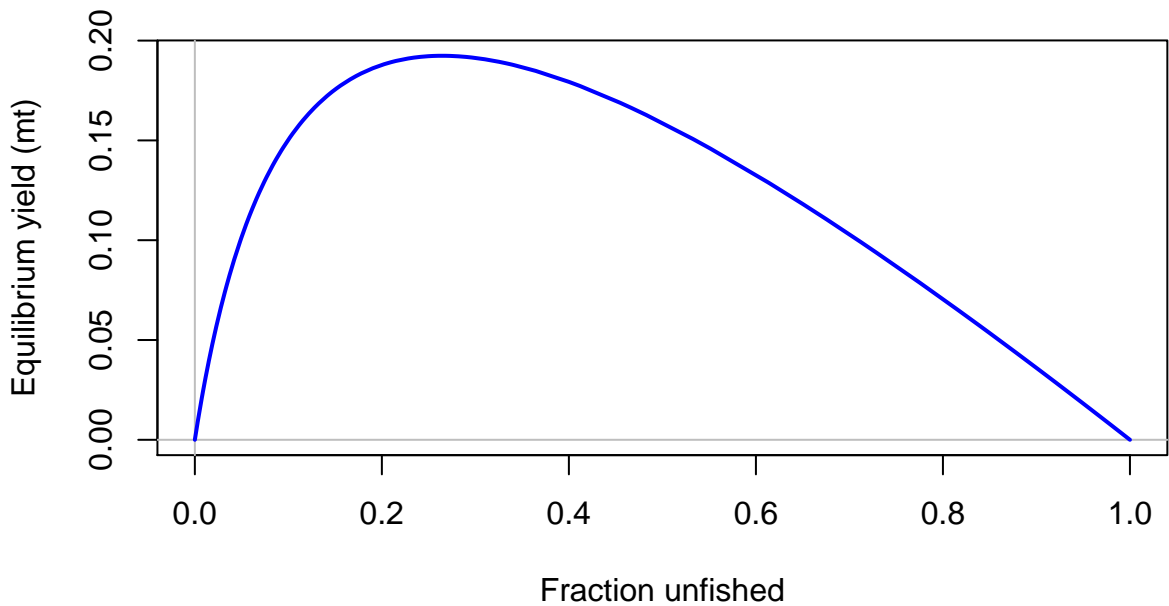


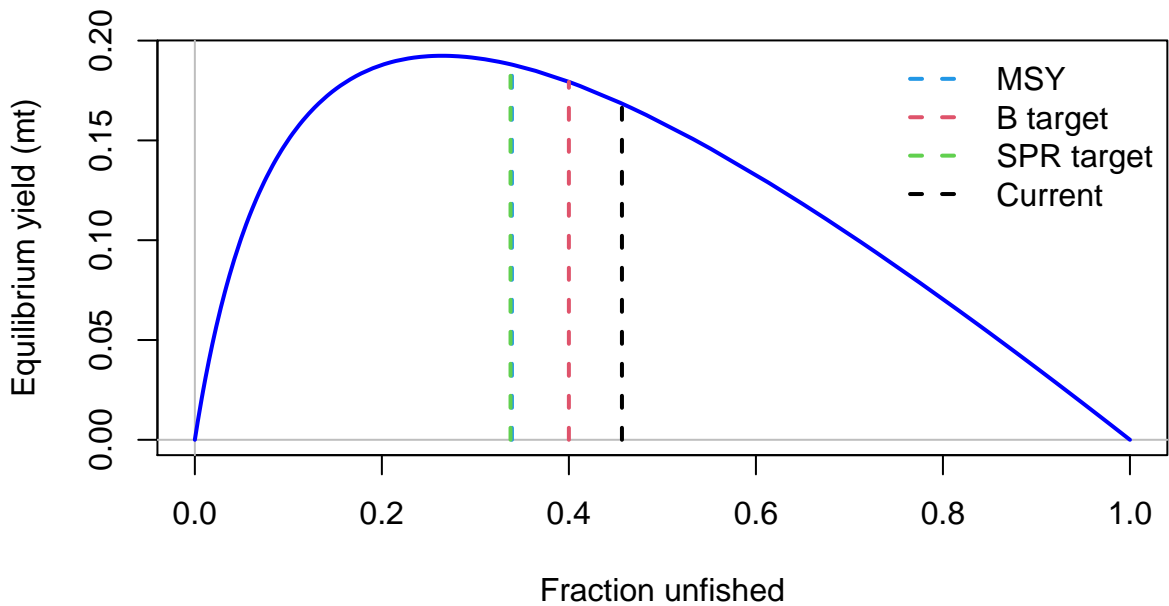
Effective sample size

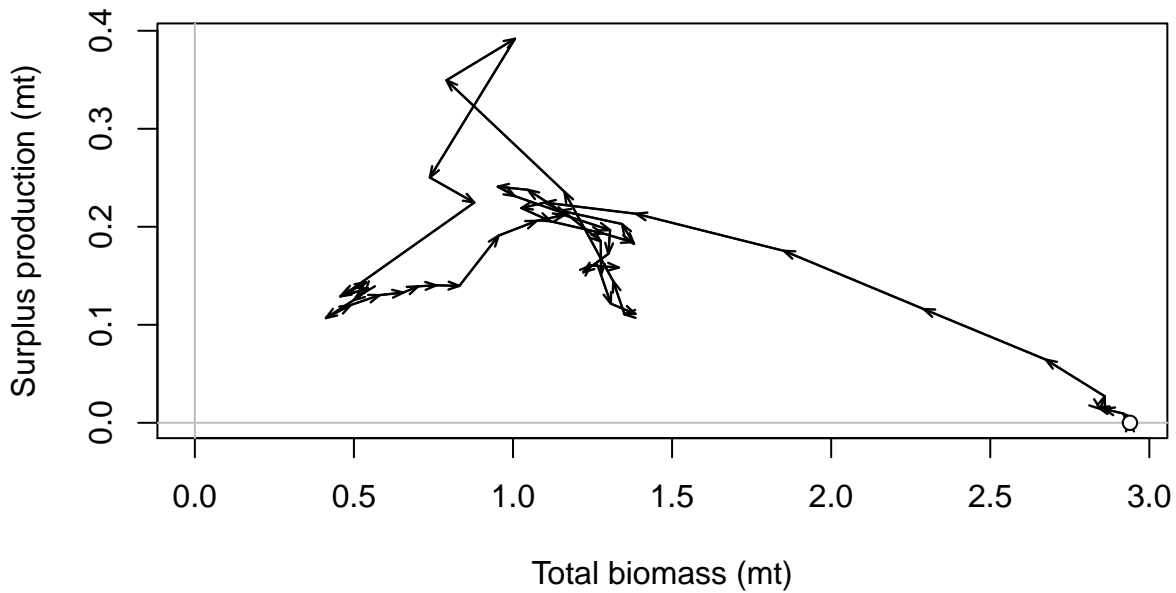


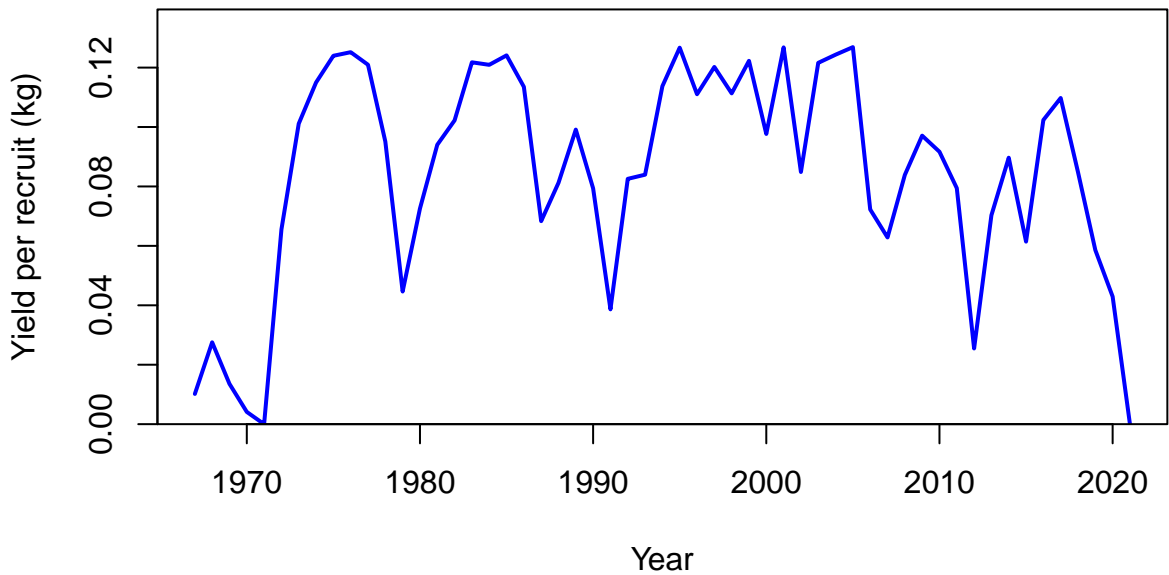
FISHERY (whole catch)

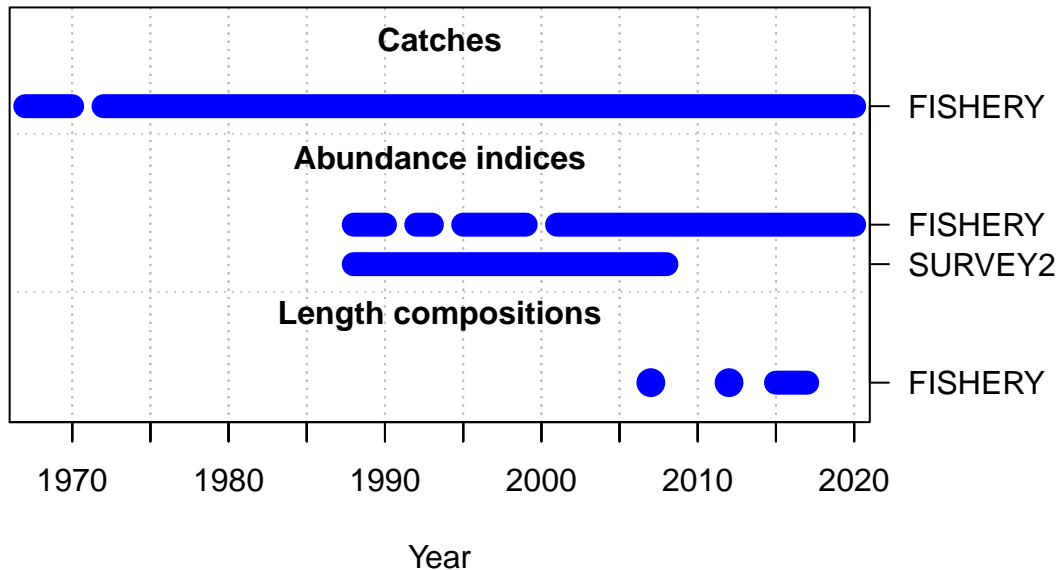


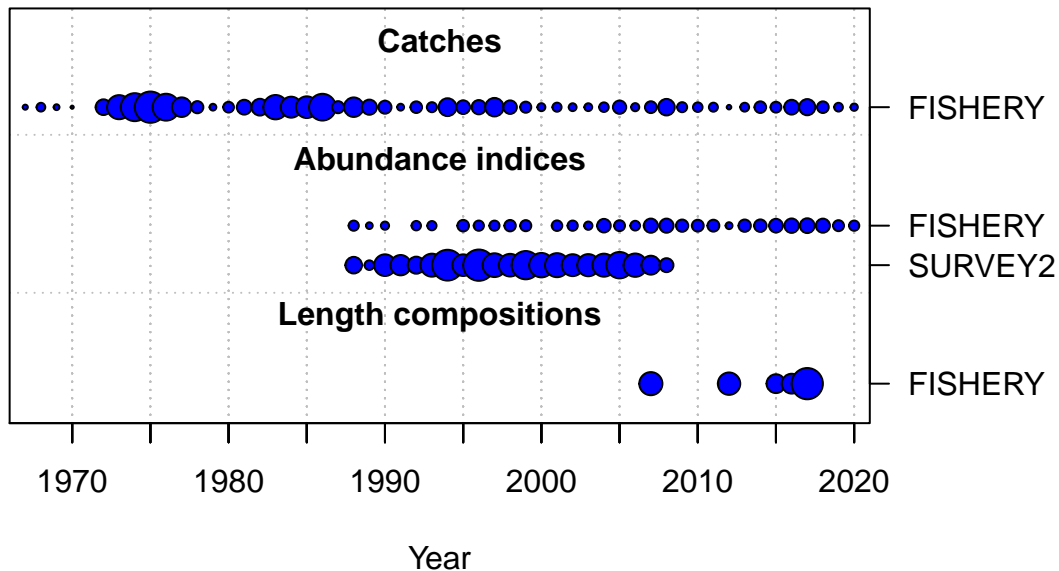




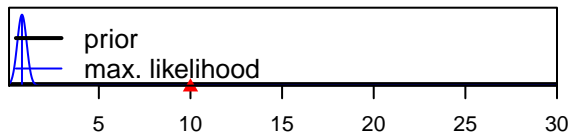




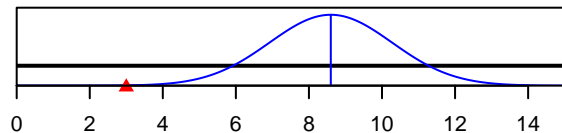




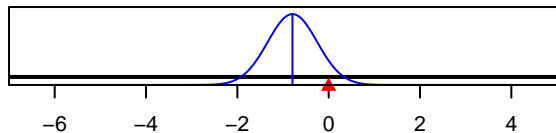
SR_LN(R0)



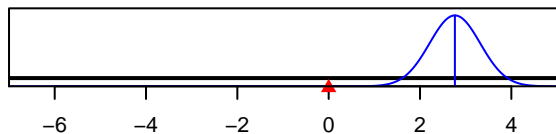
Size_95%width_FISHERY(1)



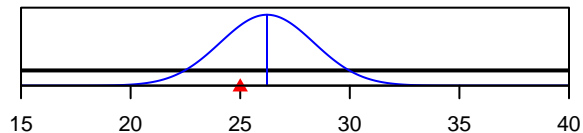
LnQ_base_FISHERY(1)



LnQ_base_SURVEY2(2)



Size_inflection_FISHERY(1)



Parameter value