

Plots created using the 'r4ss' package in R

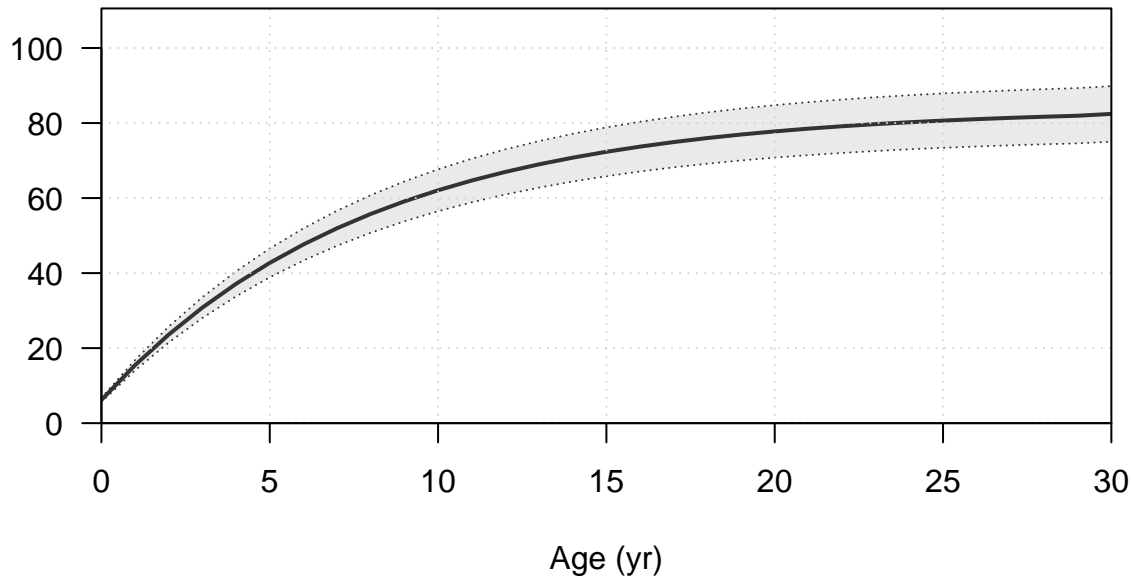
Stock Synthesis version: 3.30.19.0

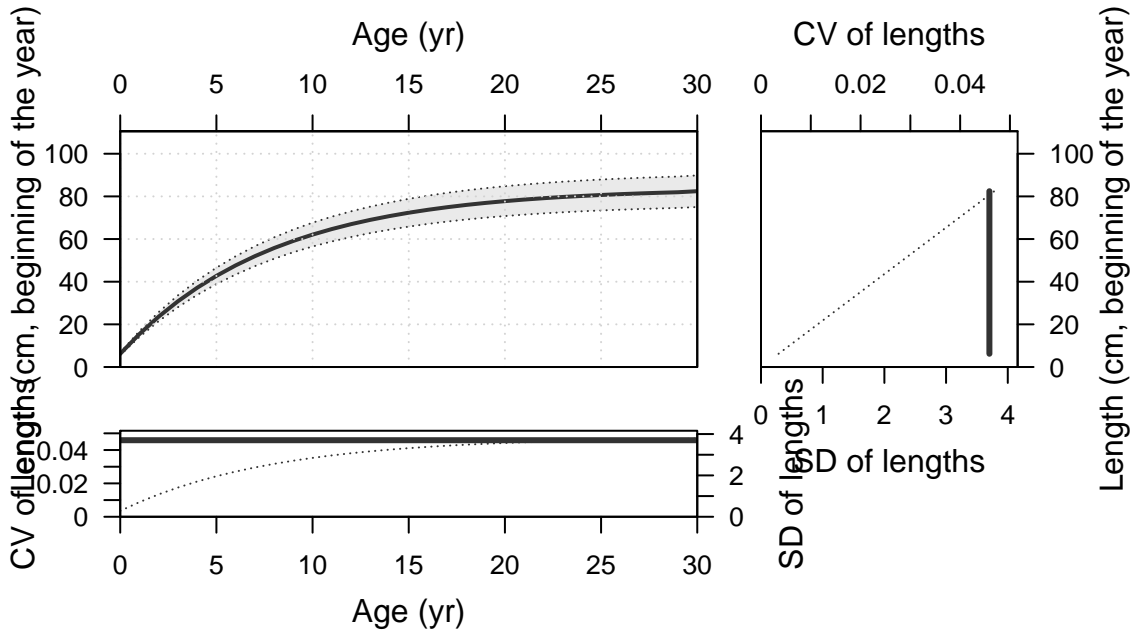
StartTime: Thu Aug 11 11:17:05 2022

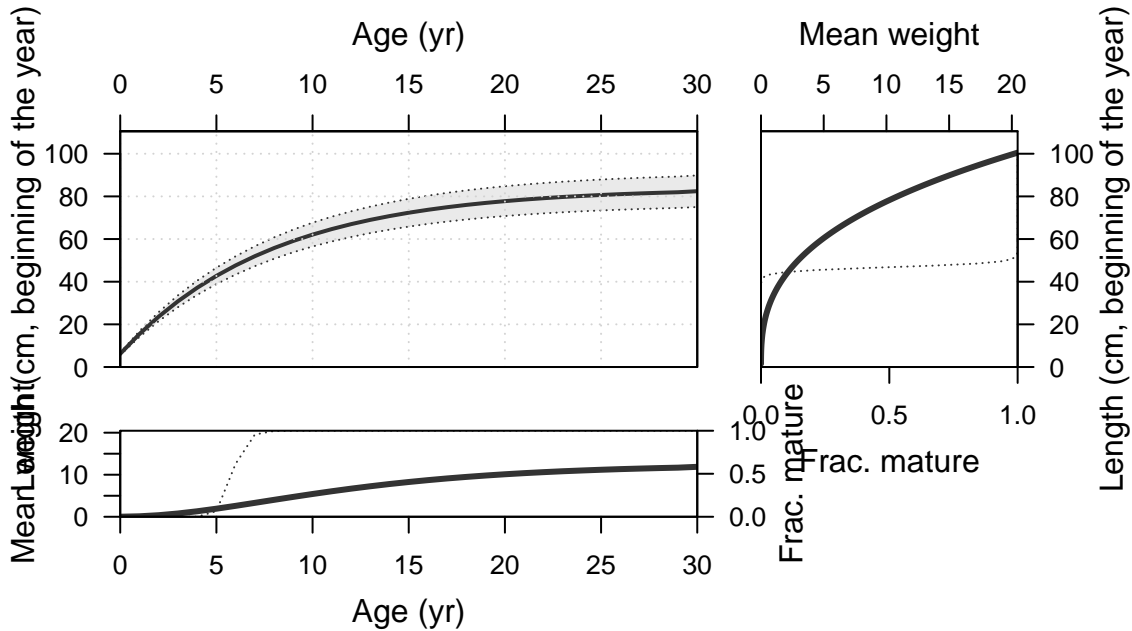
Data_File: data.ss

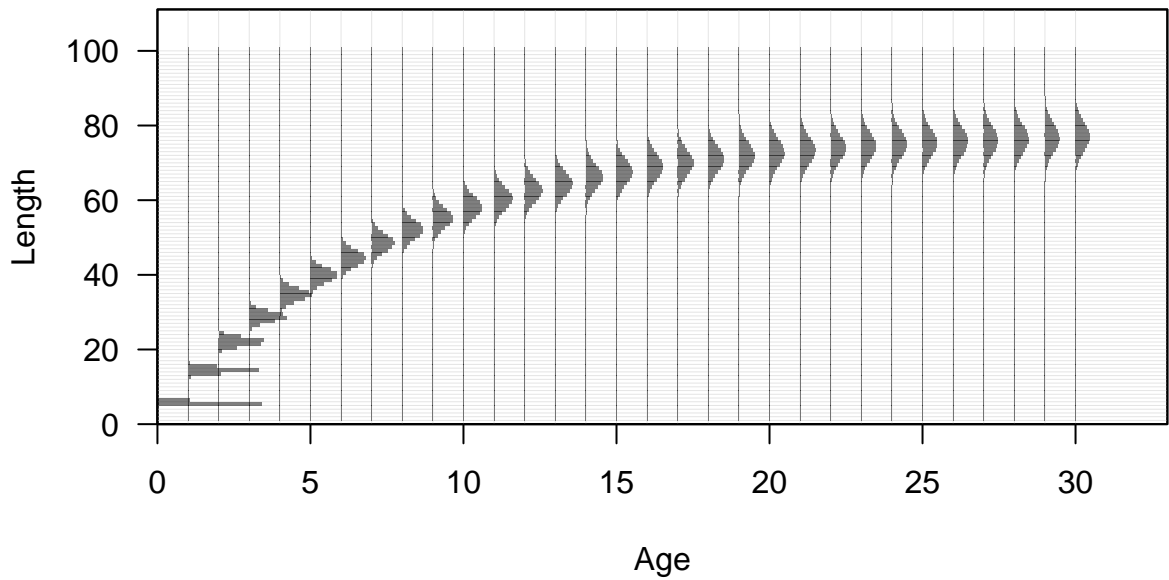
Control_File: control.ss

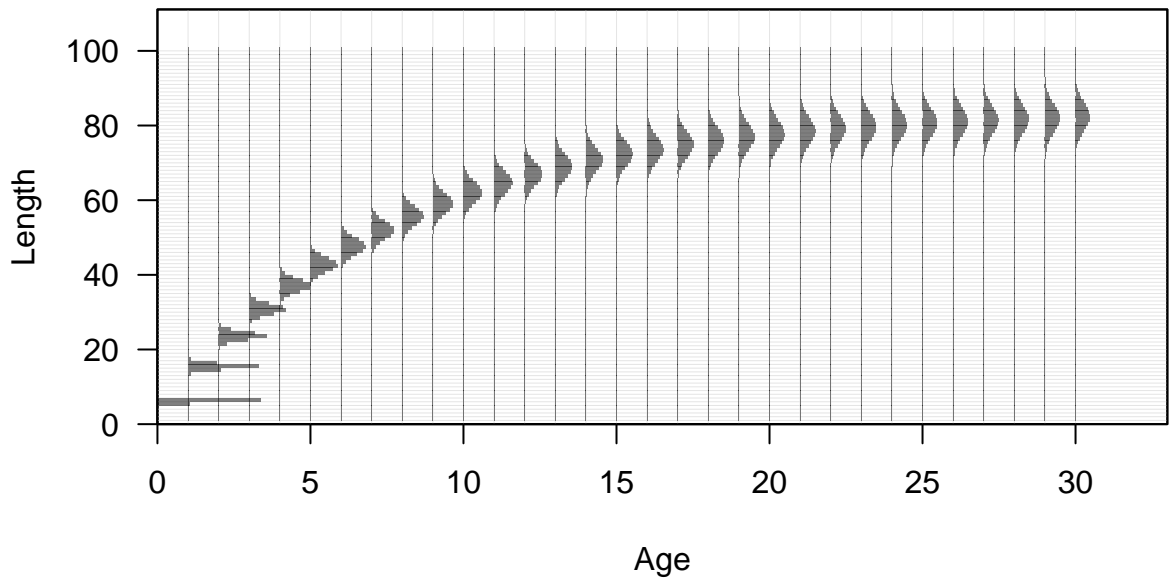
Length (cm, beginning of the year)

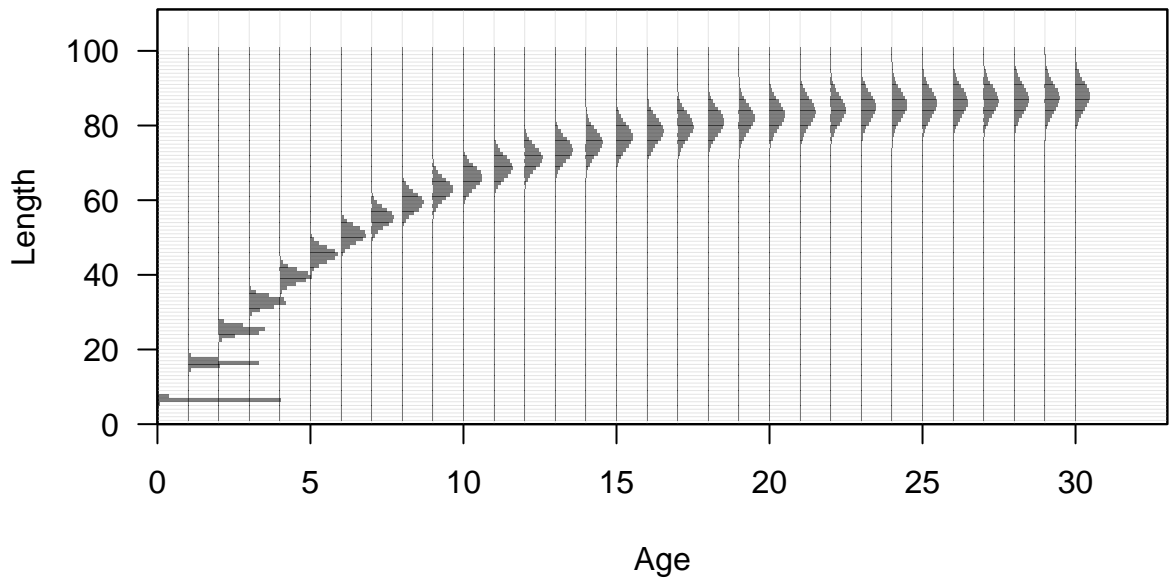


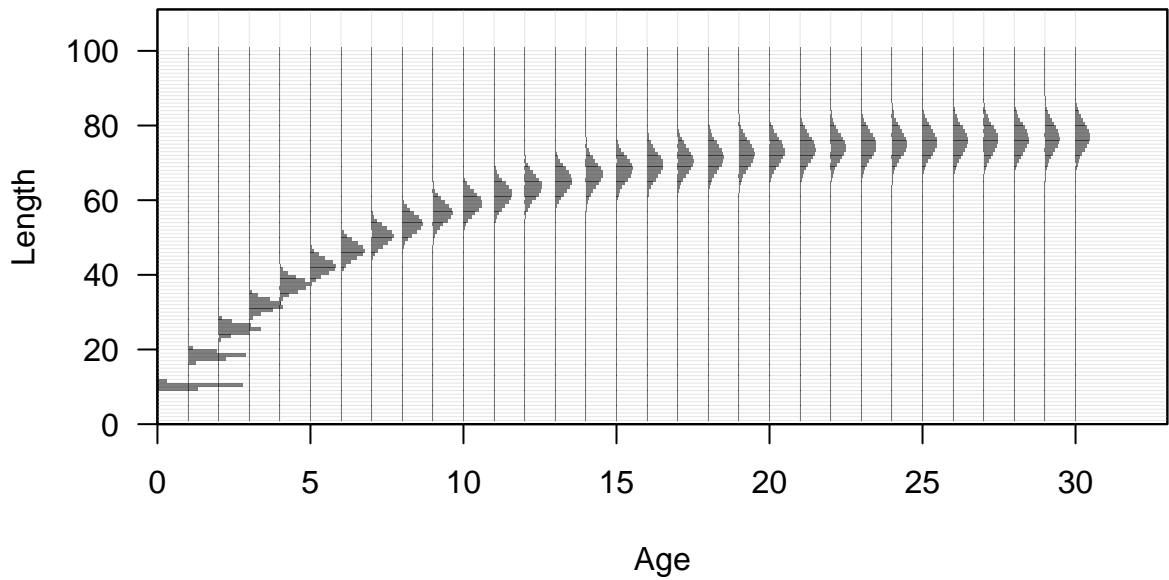


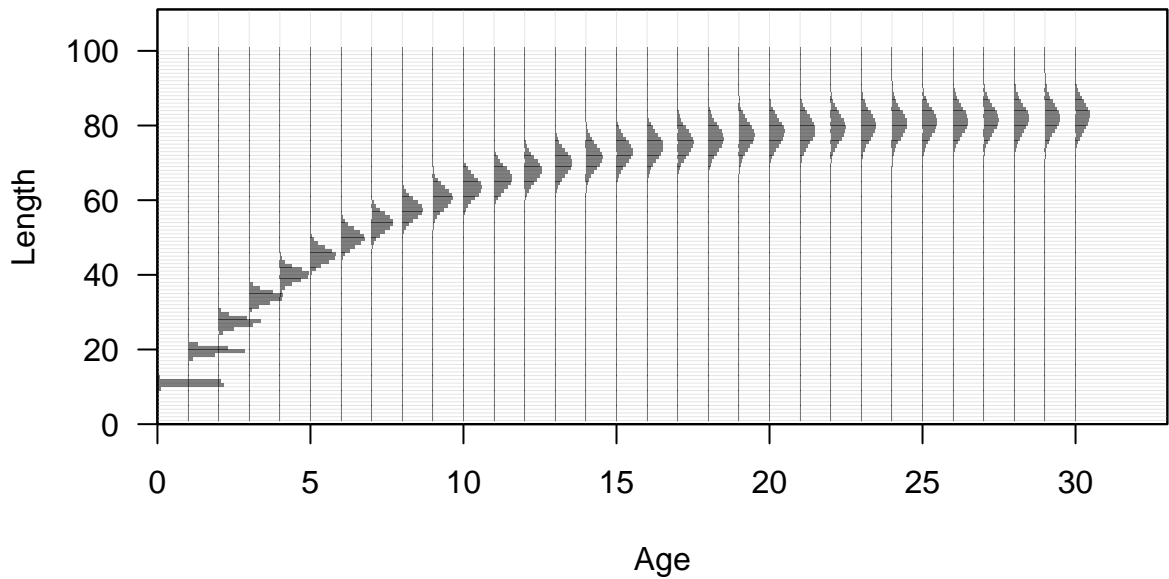


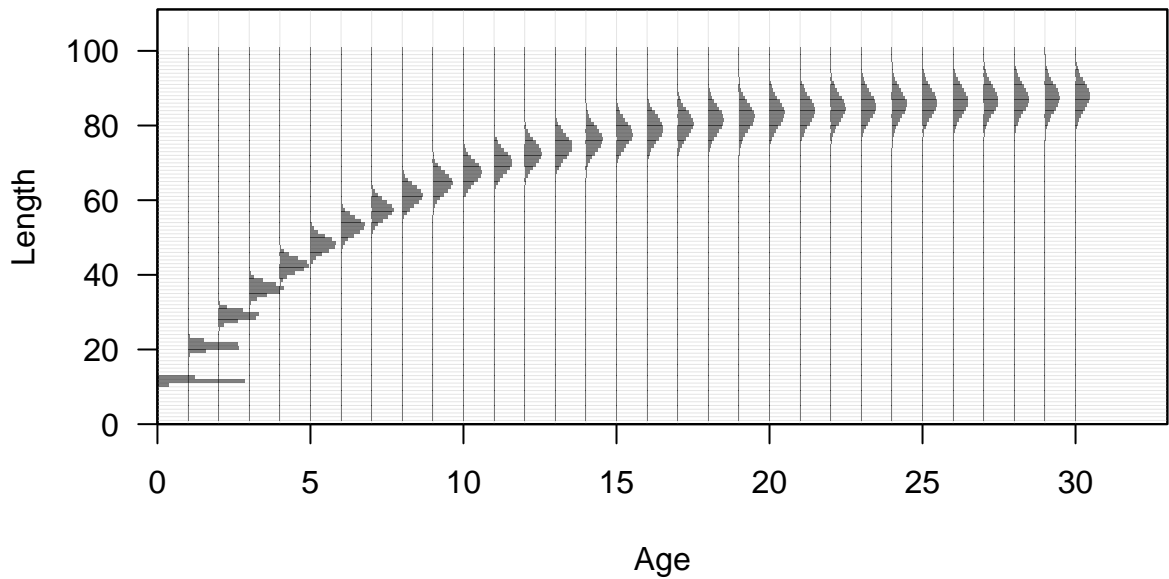


















Fecundity



Fecundity

20

15

10

5

0

0

20

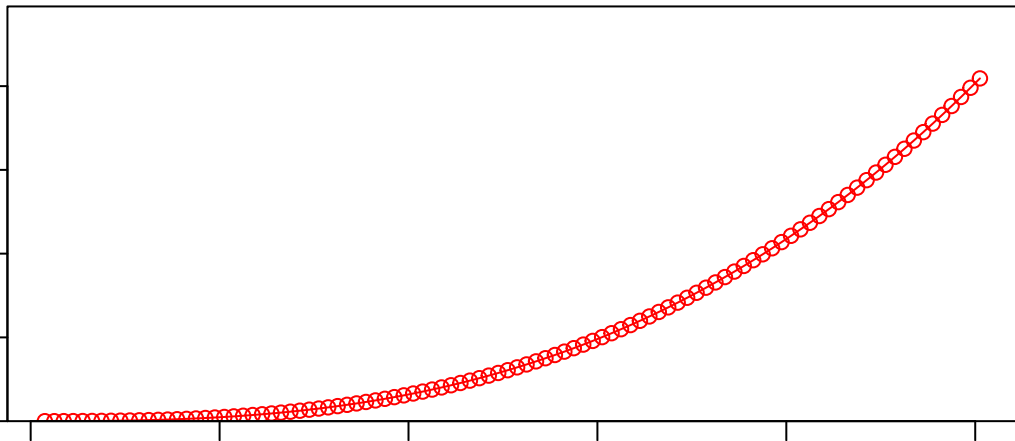
40

60

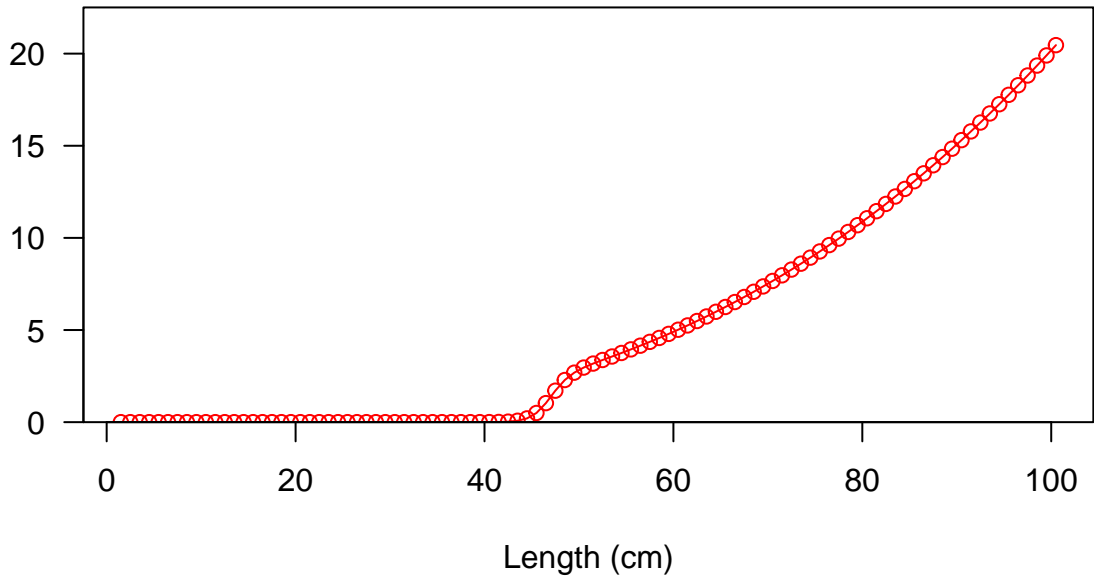
80

100

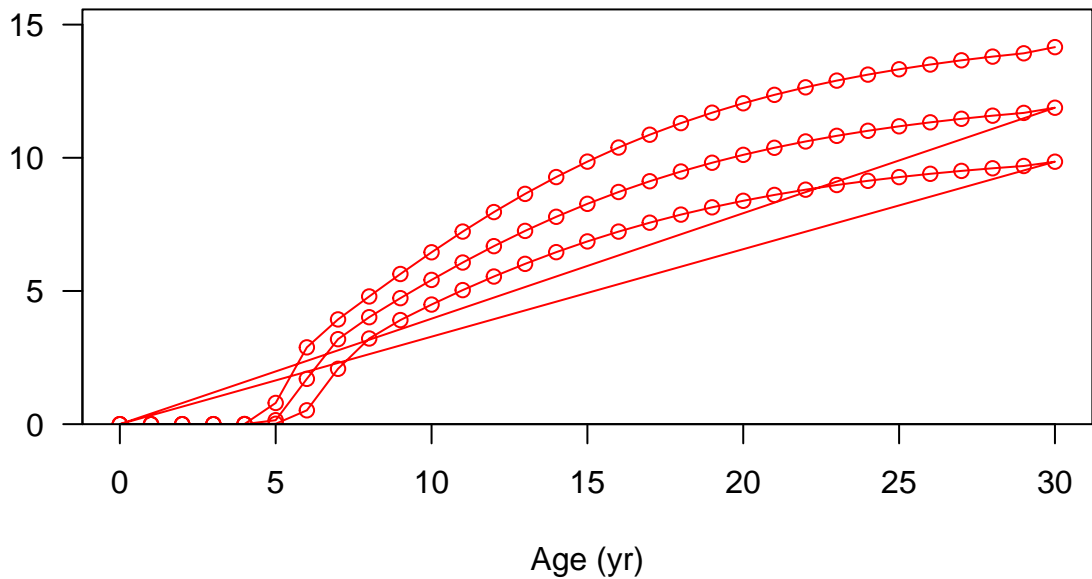
Female length (cm)



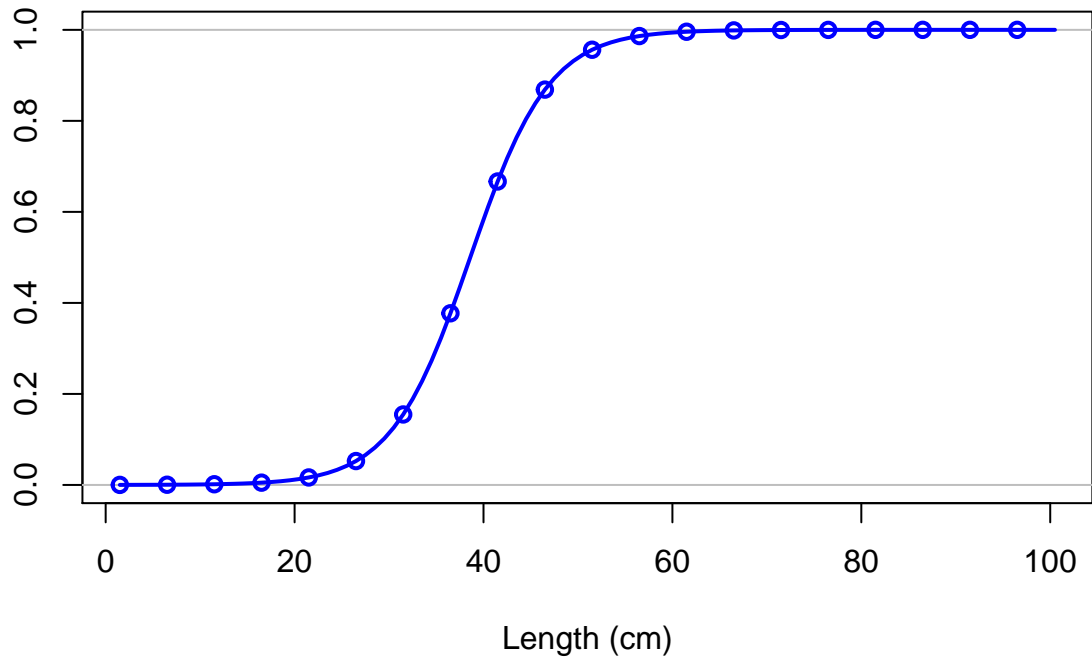
Spawning output



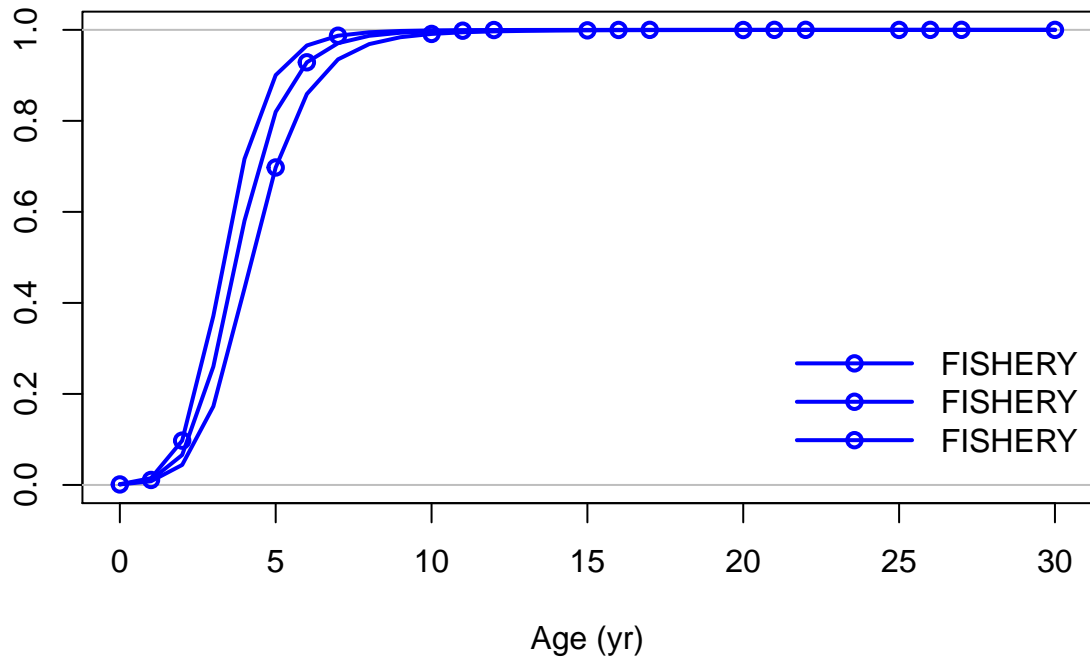
Spawning output



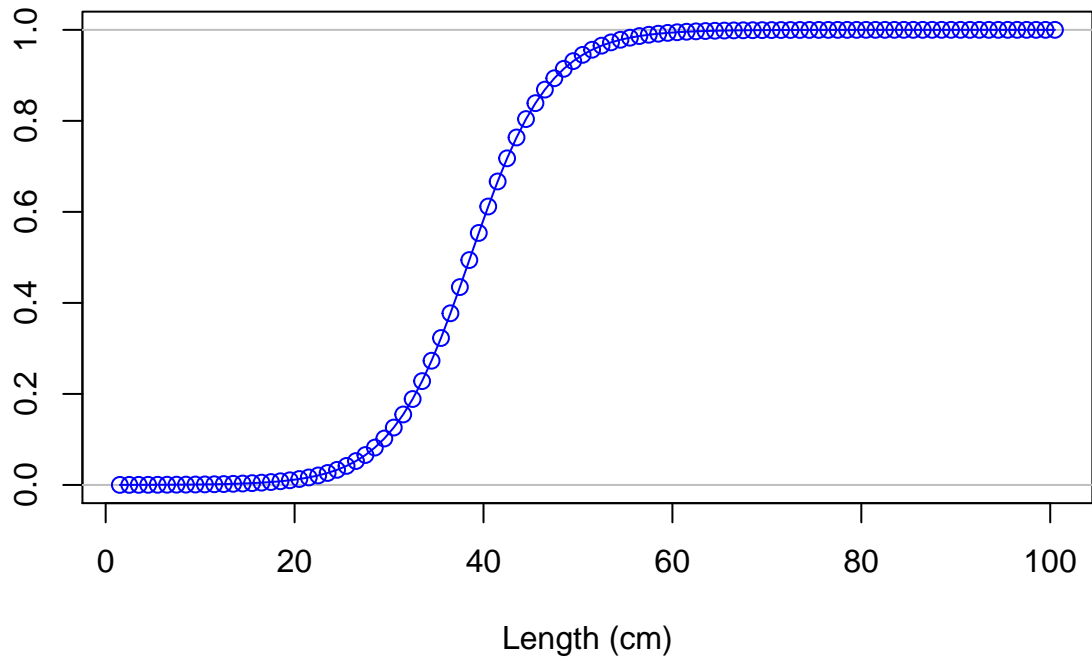
Selectivity

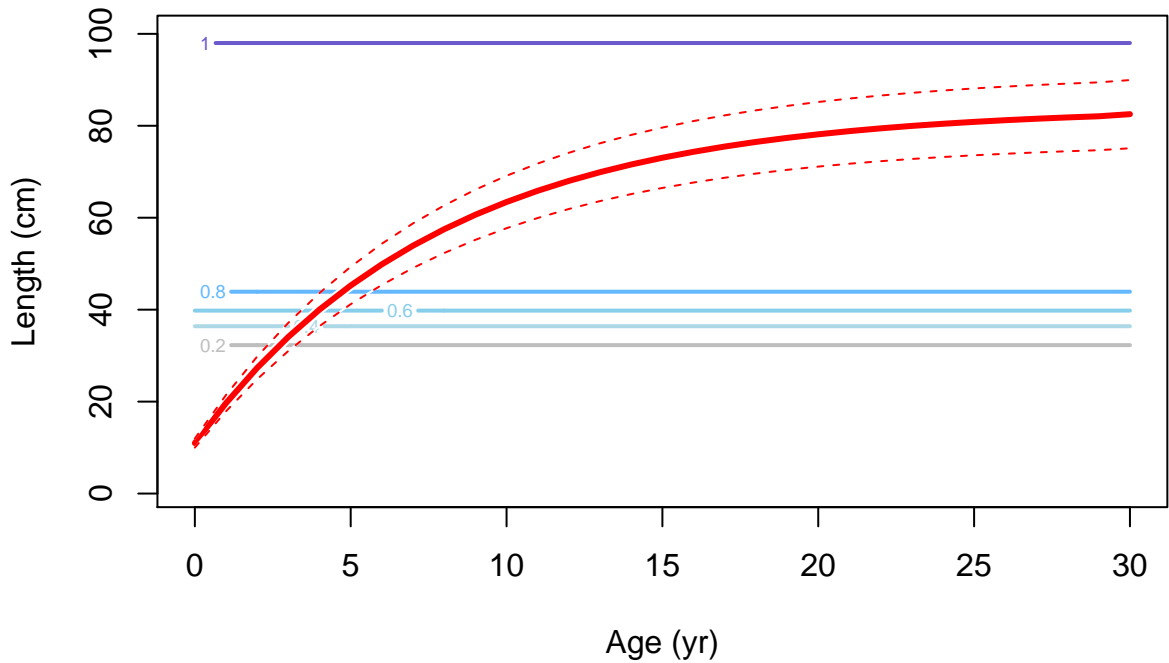


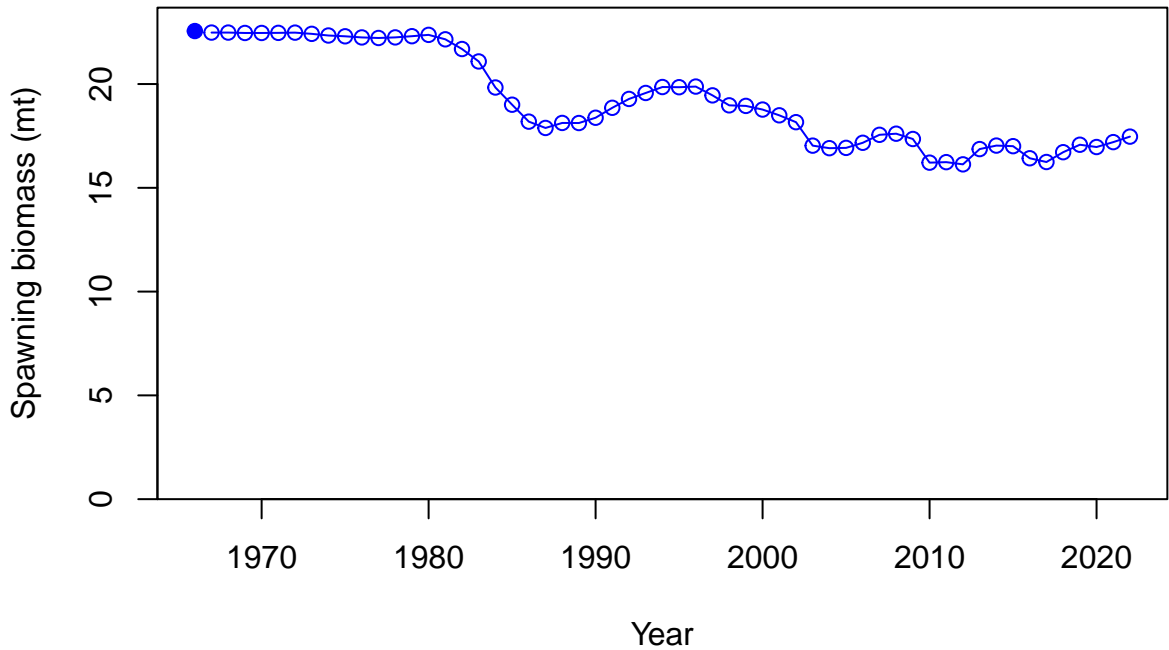
Selectivity



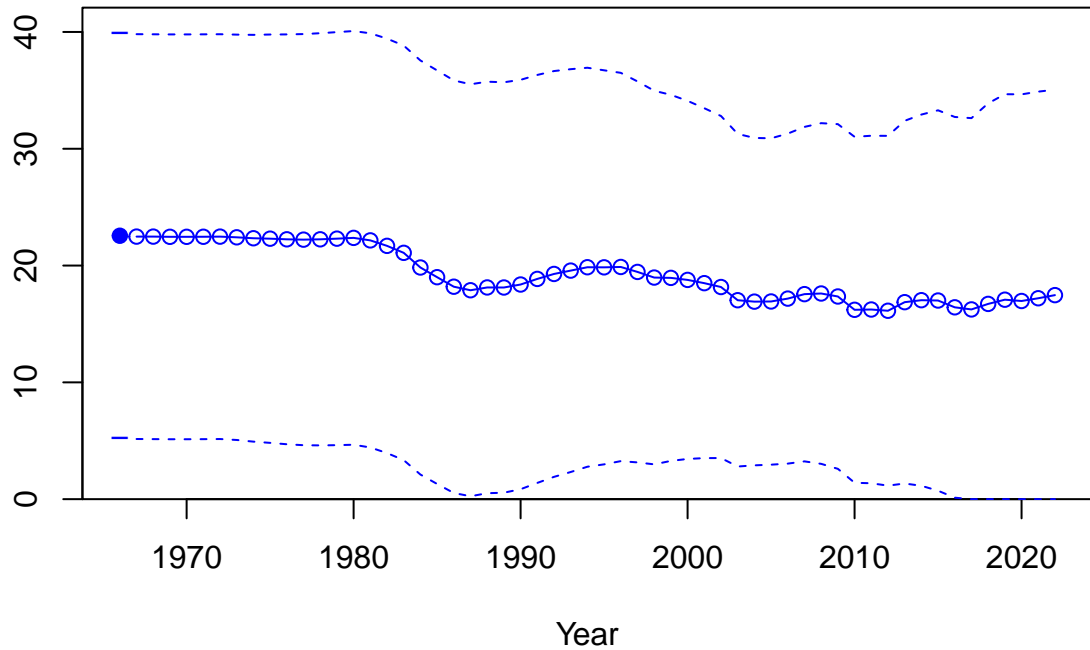
Selectivity



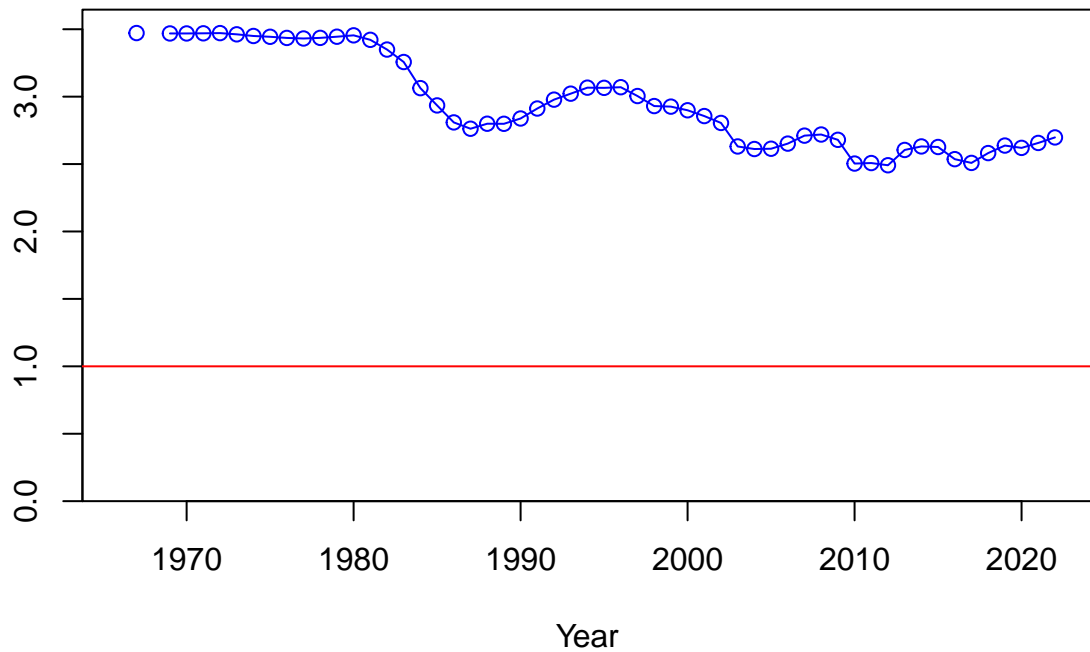




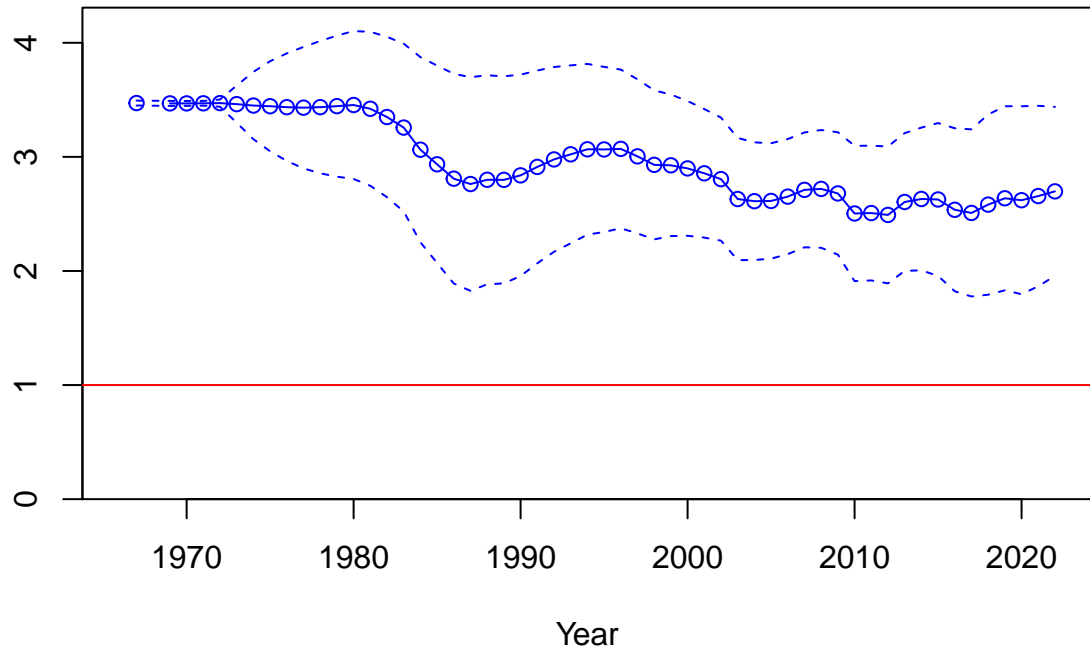
Spawning biomass (mt)

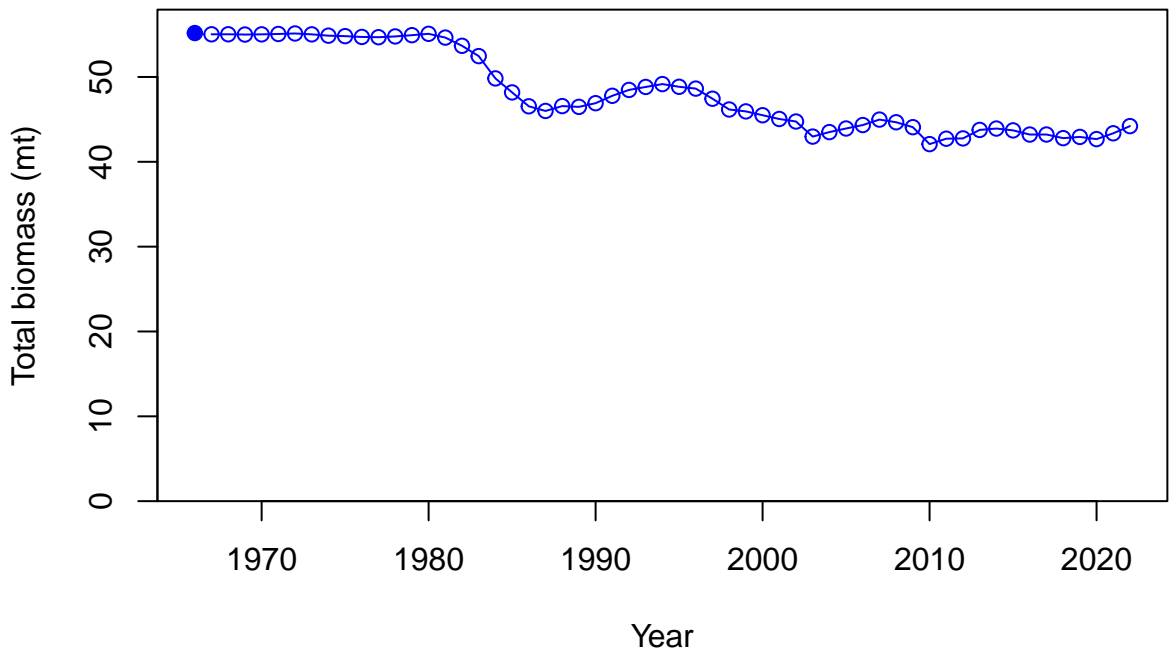


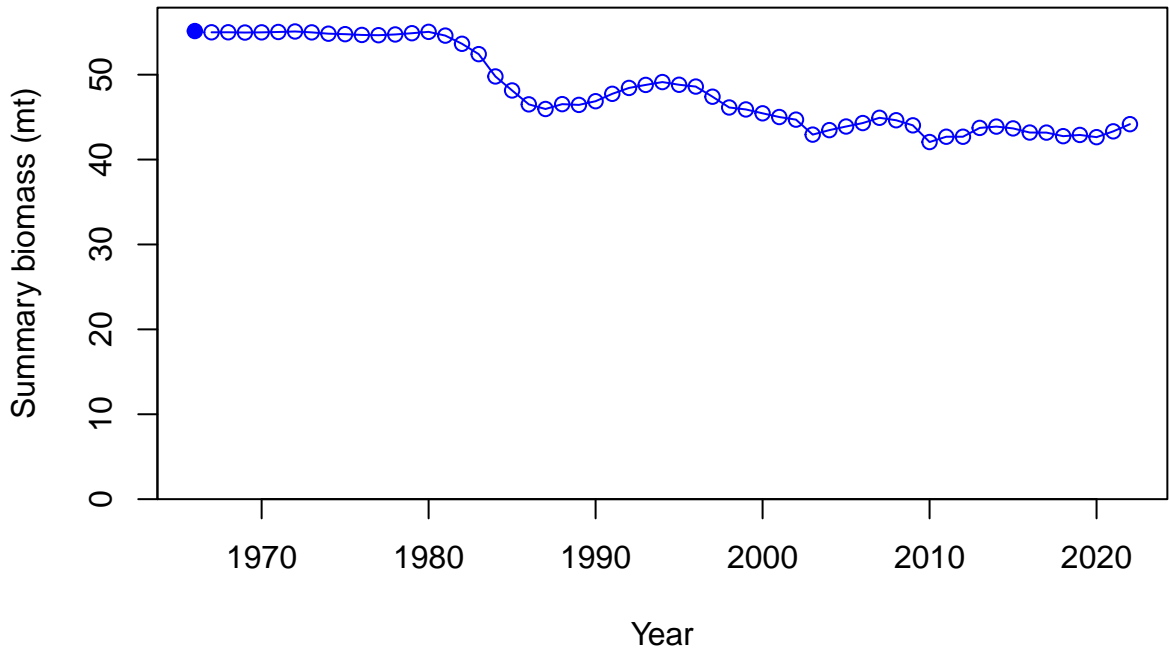
Relative spawning biomass: B/B_{MSY}



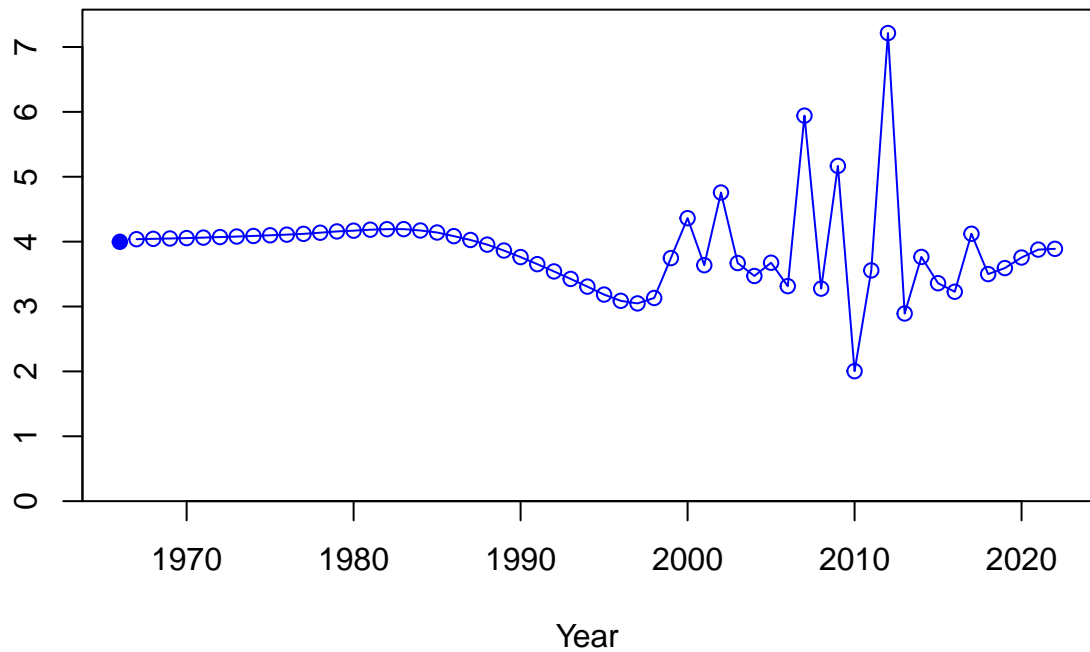
Relative spawning biomass: B/B_{MSY}



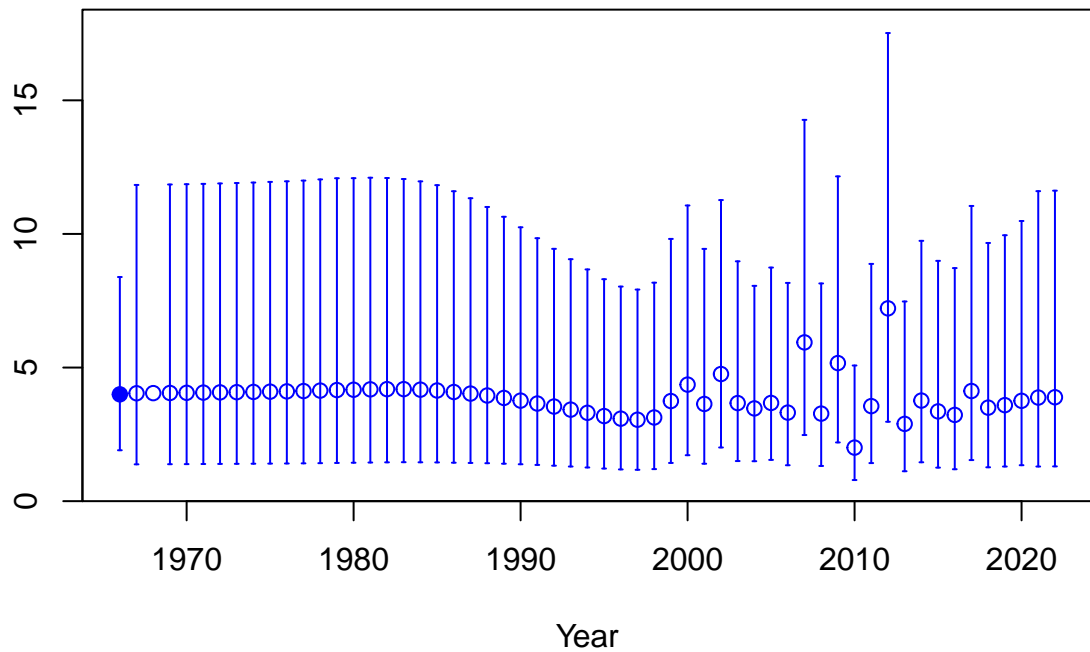




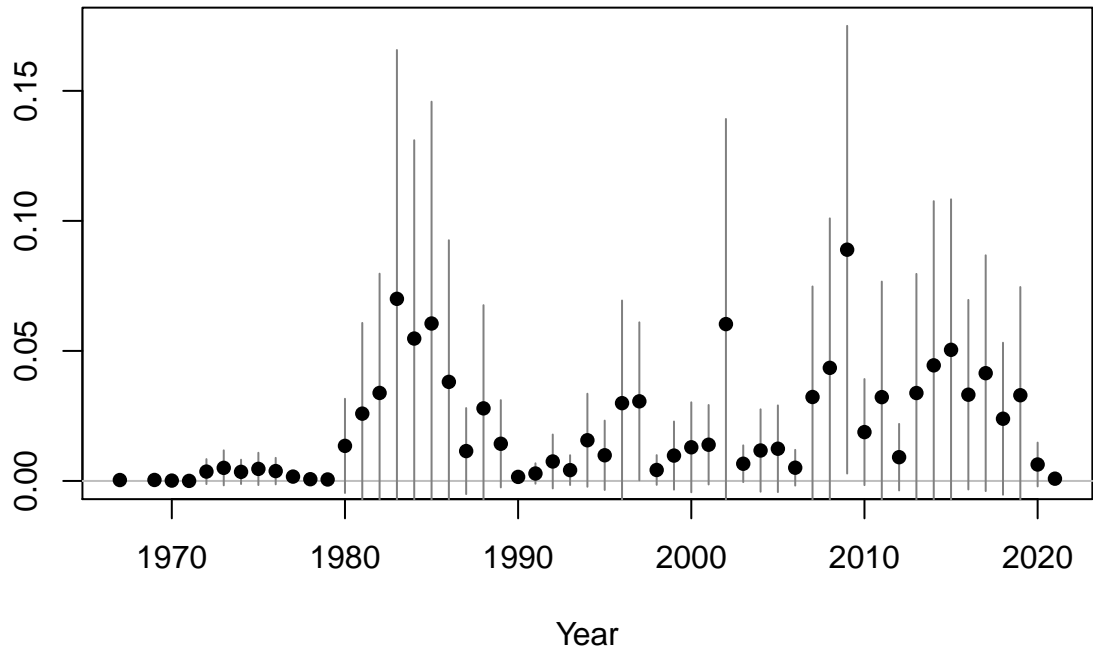
Age-0 recruits (1,000s)

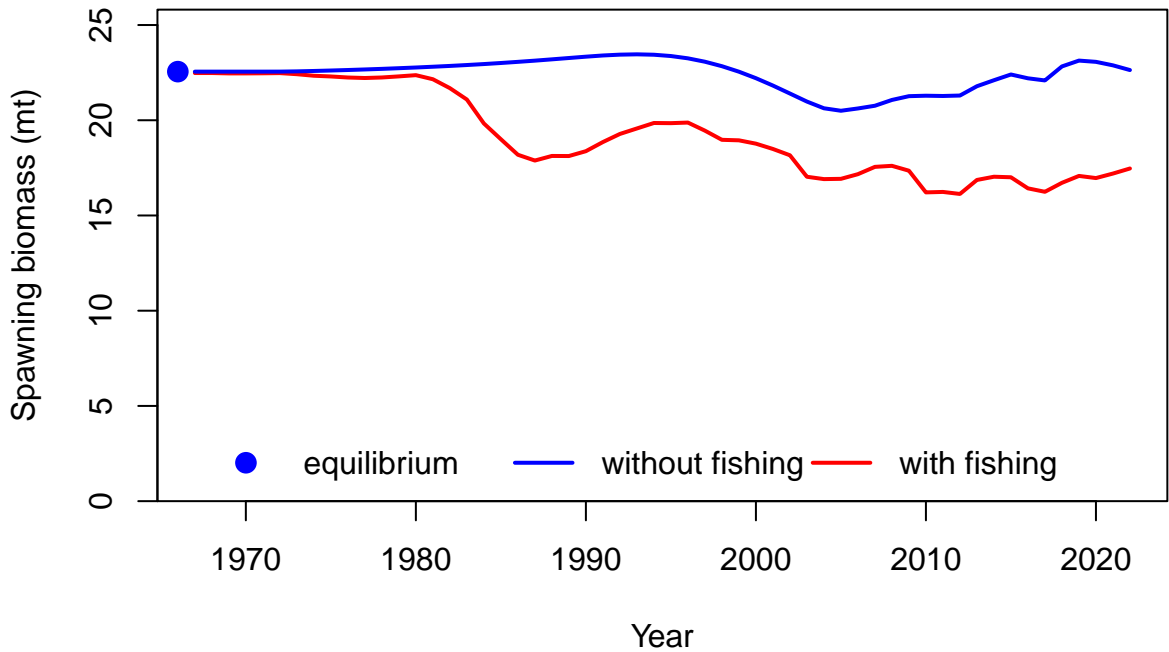


Age-0 recruits (1,000s)

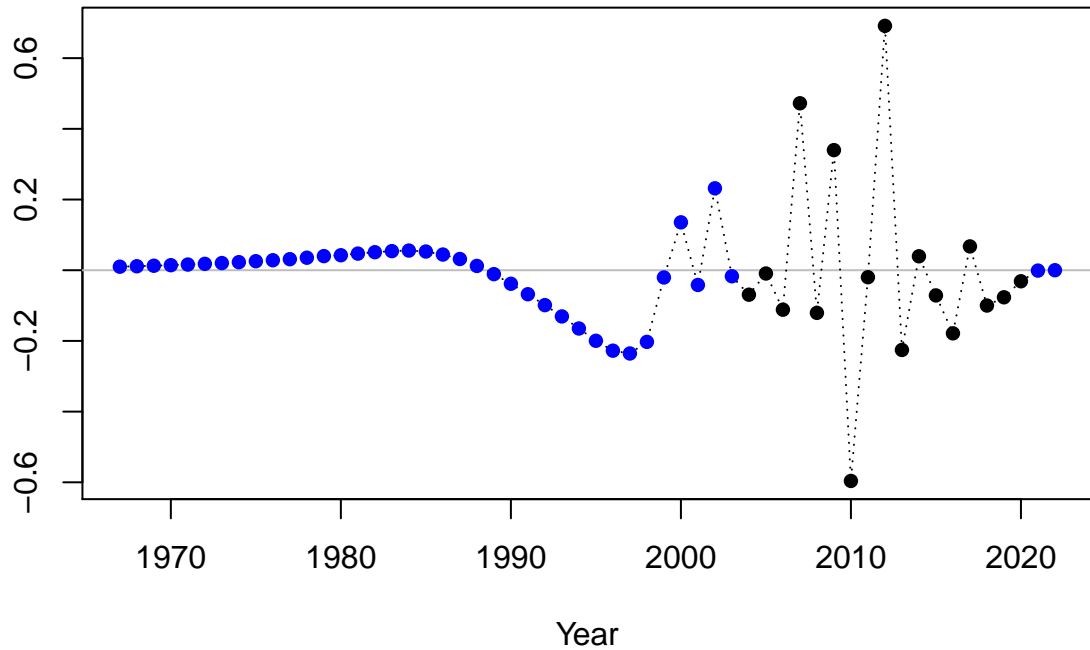


Summary Fishing Mortality

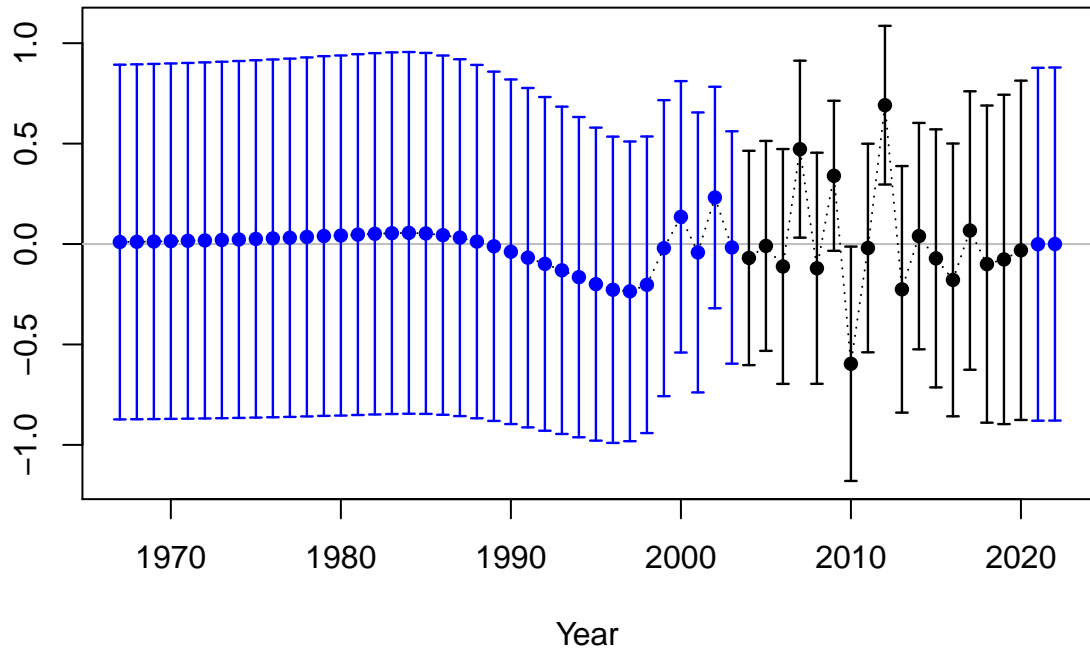




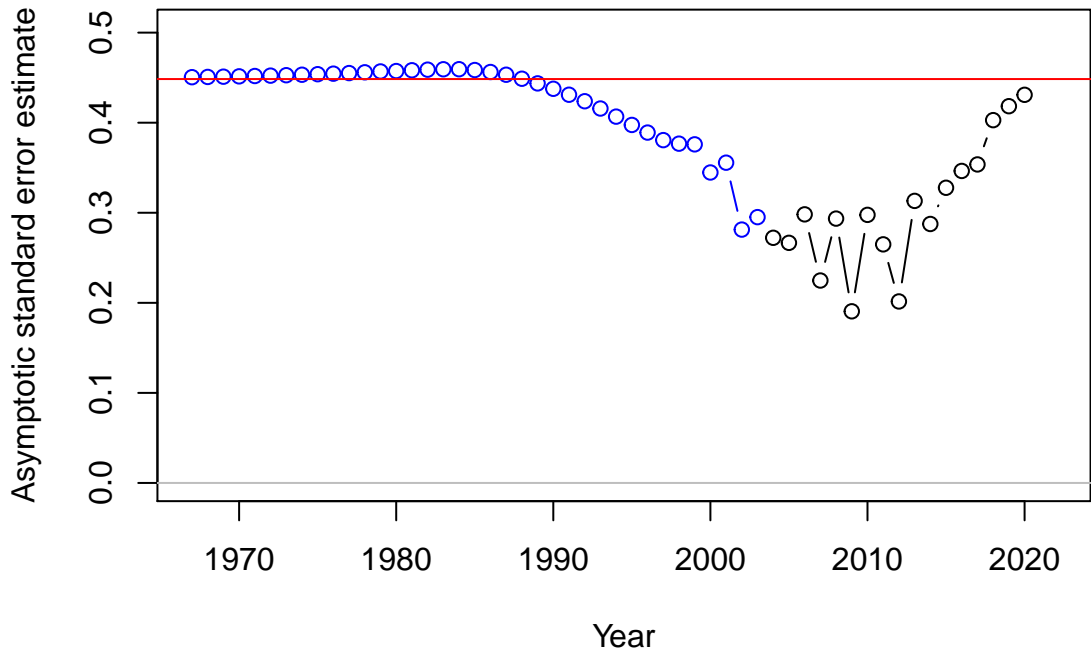
Log recruitment deviation

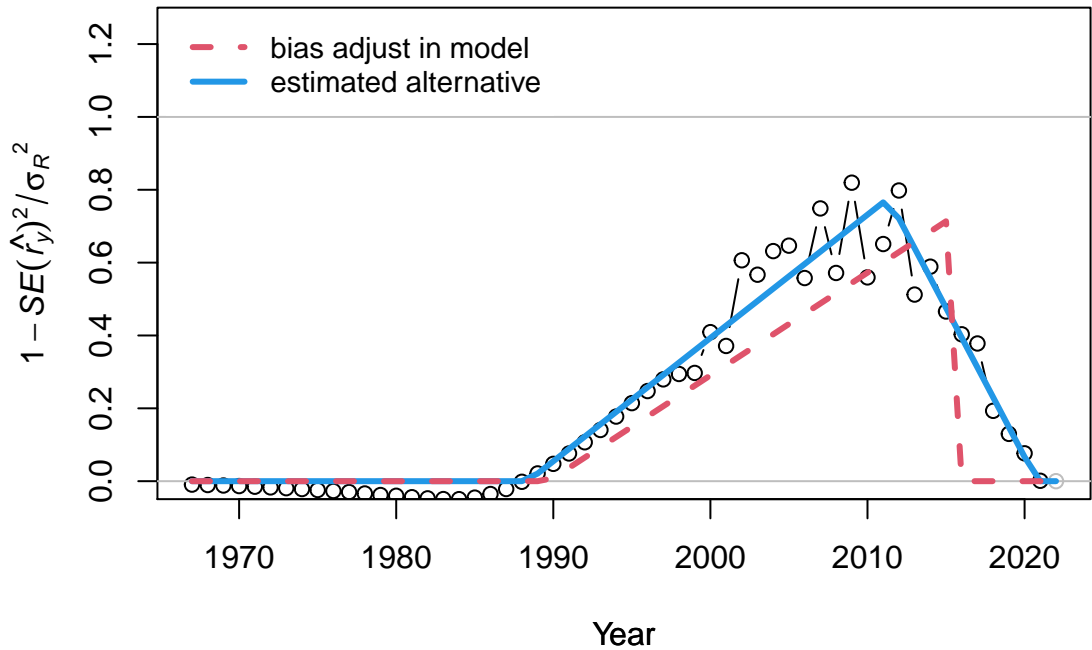


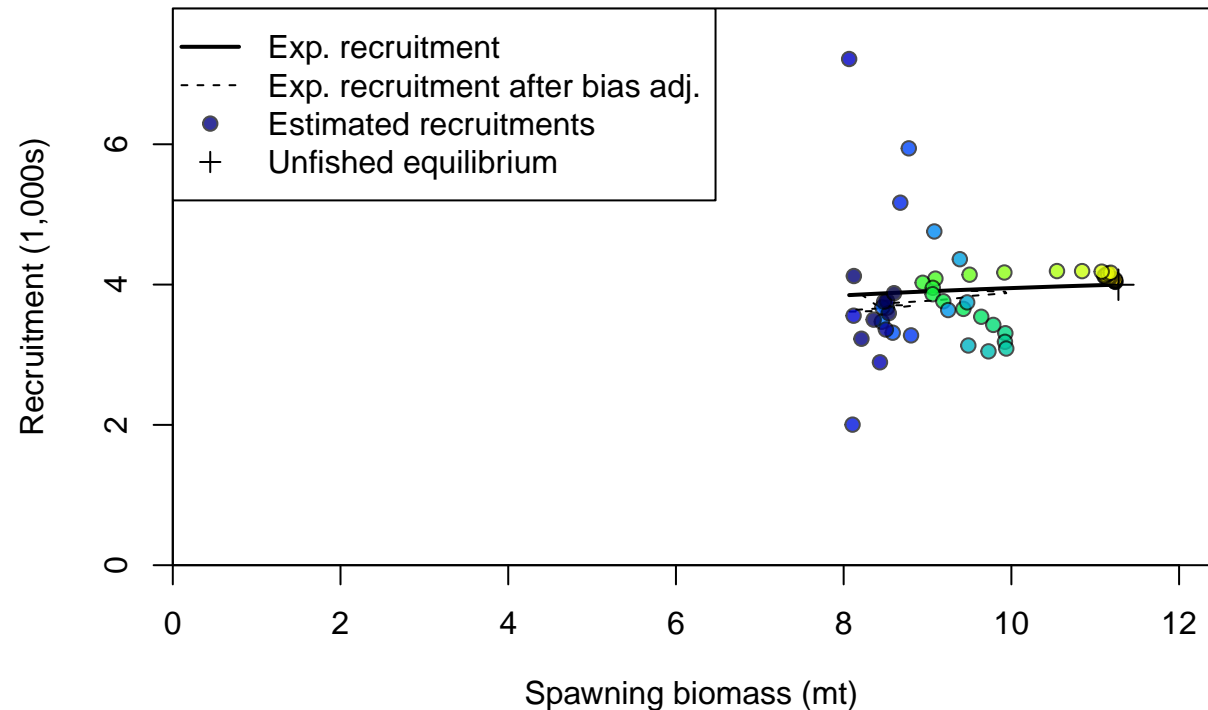
Log recruitment deviation

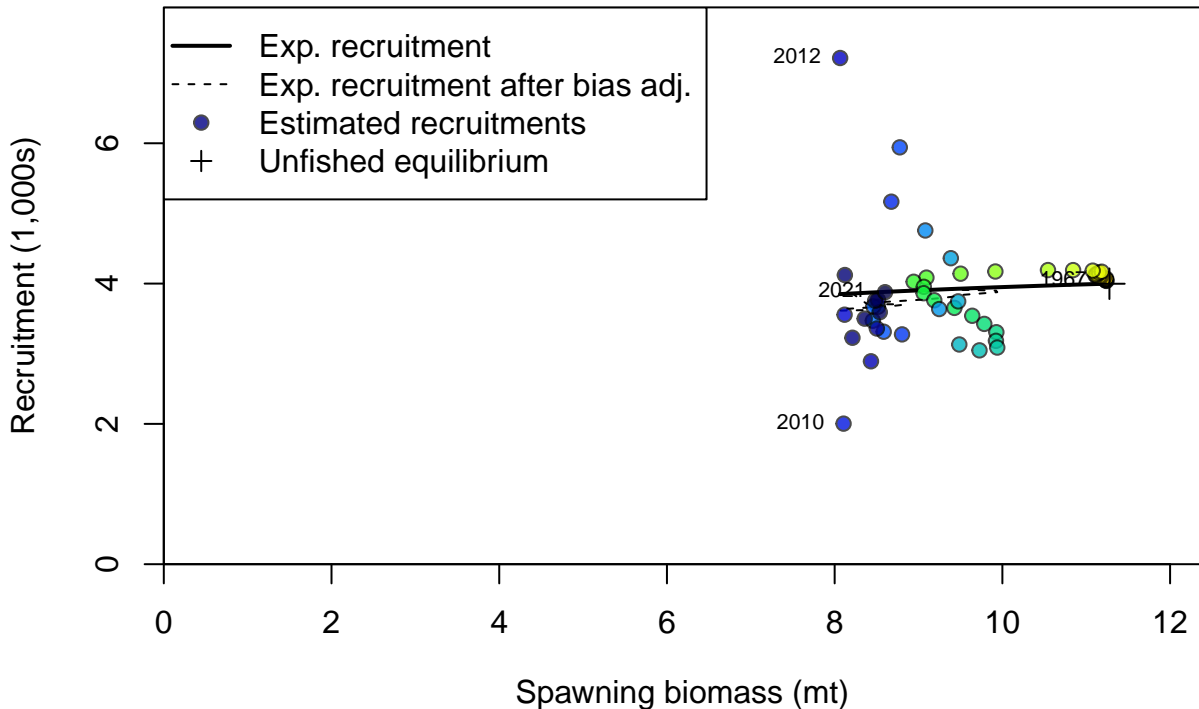


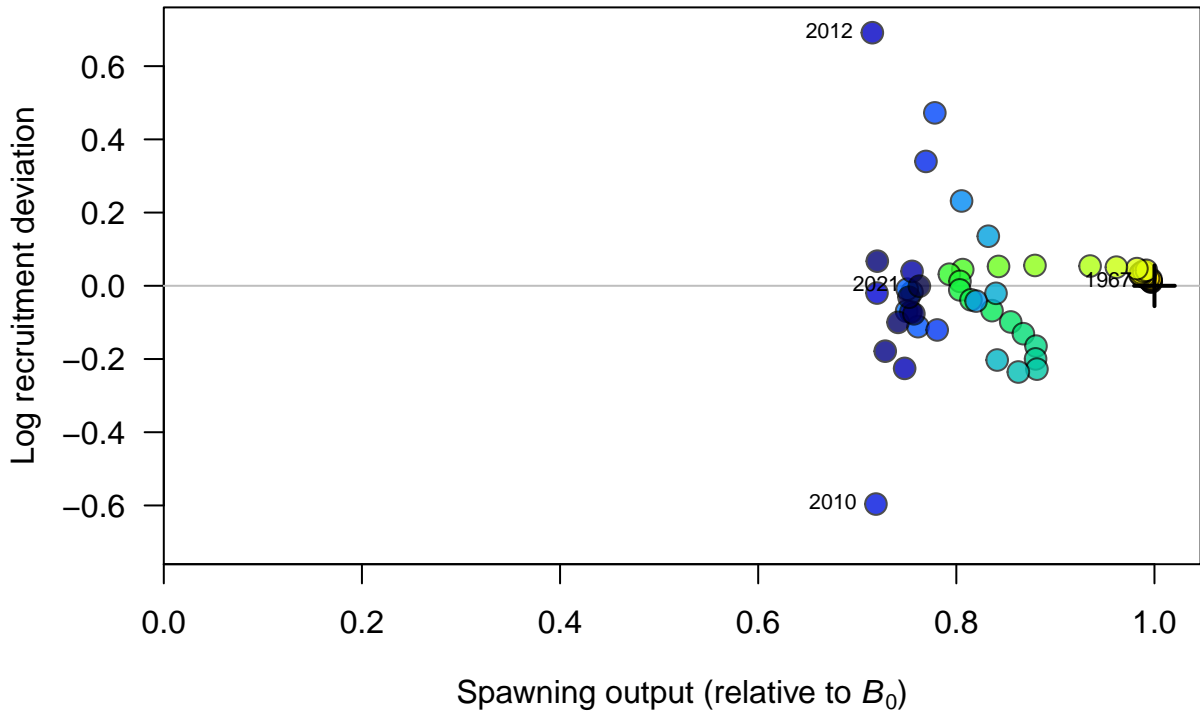
Recruitment deviation variance

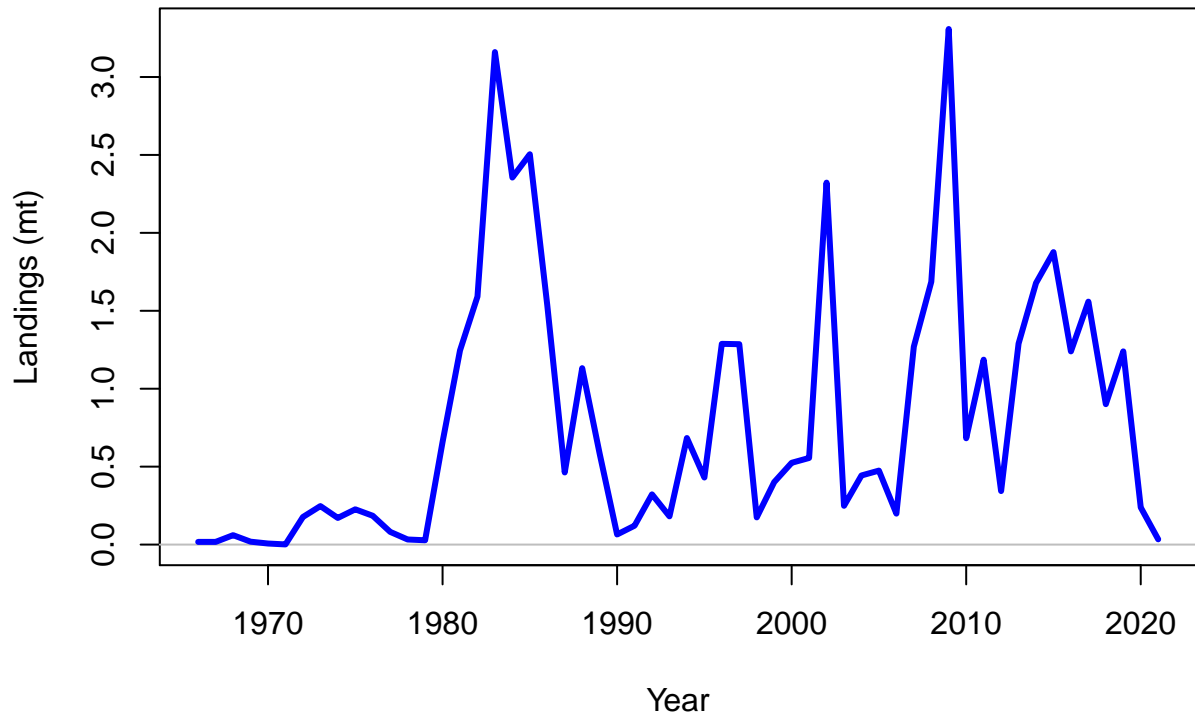


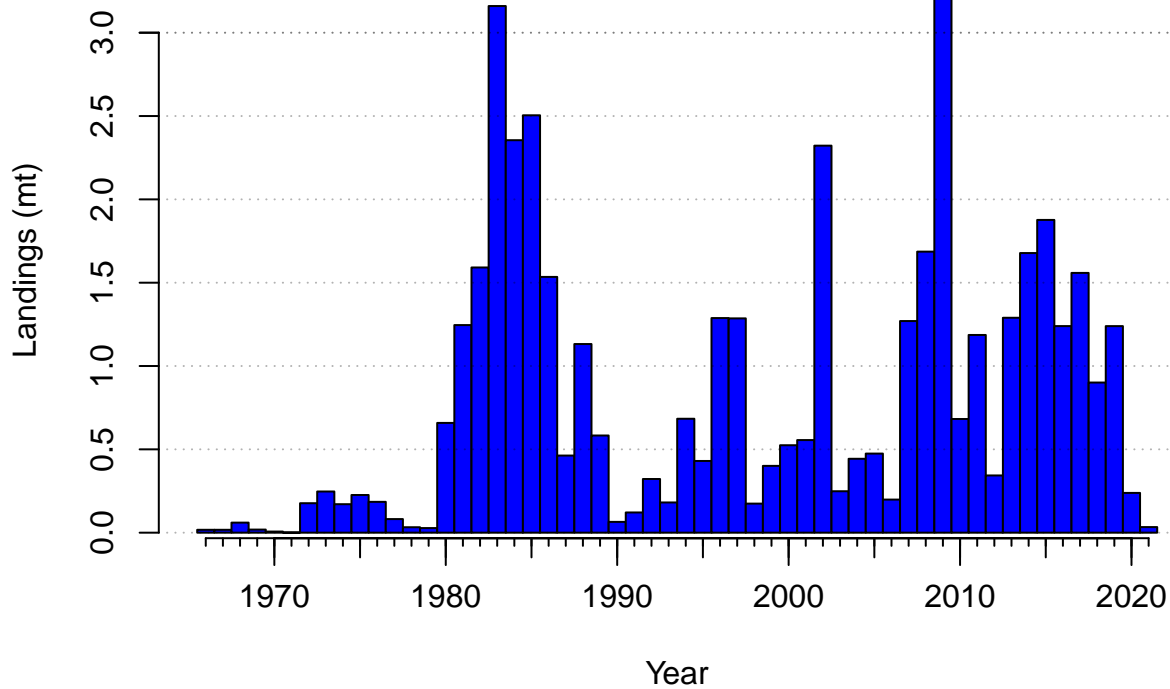






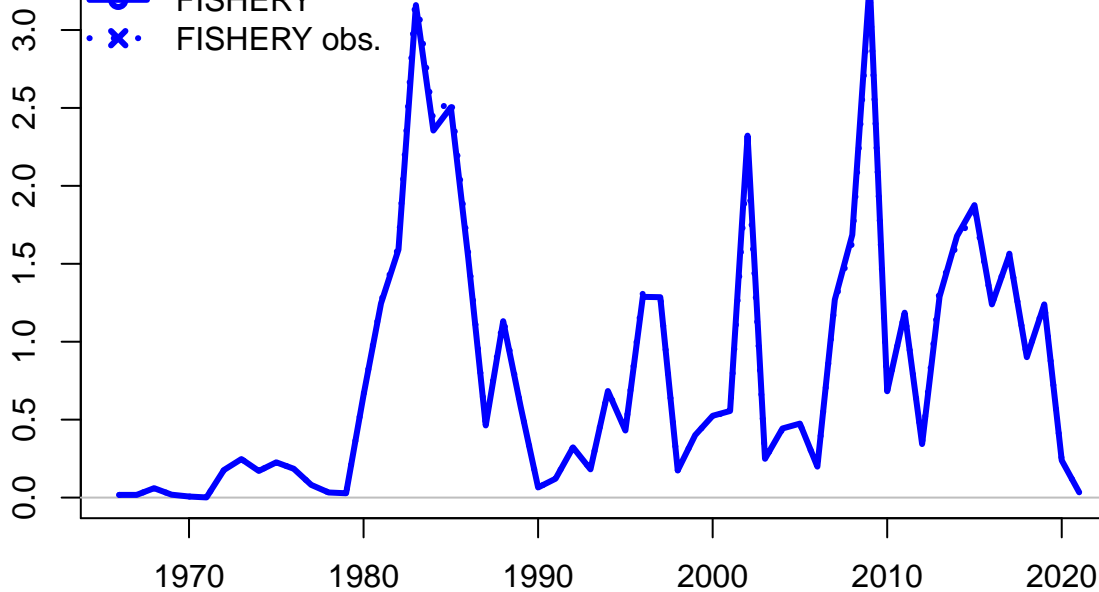




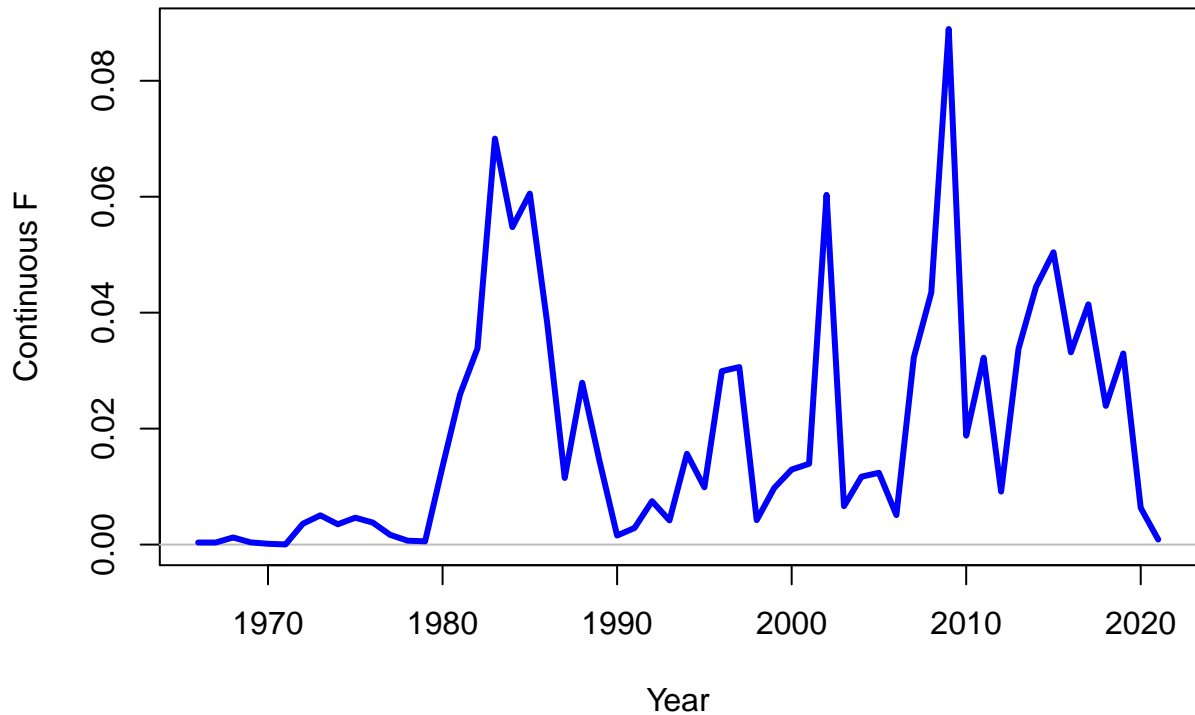


Observed and expected Landings (mt)

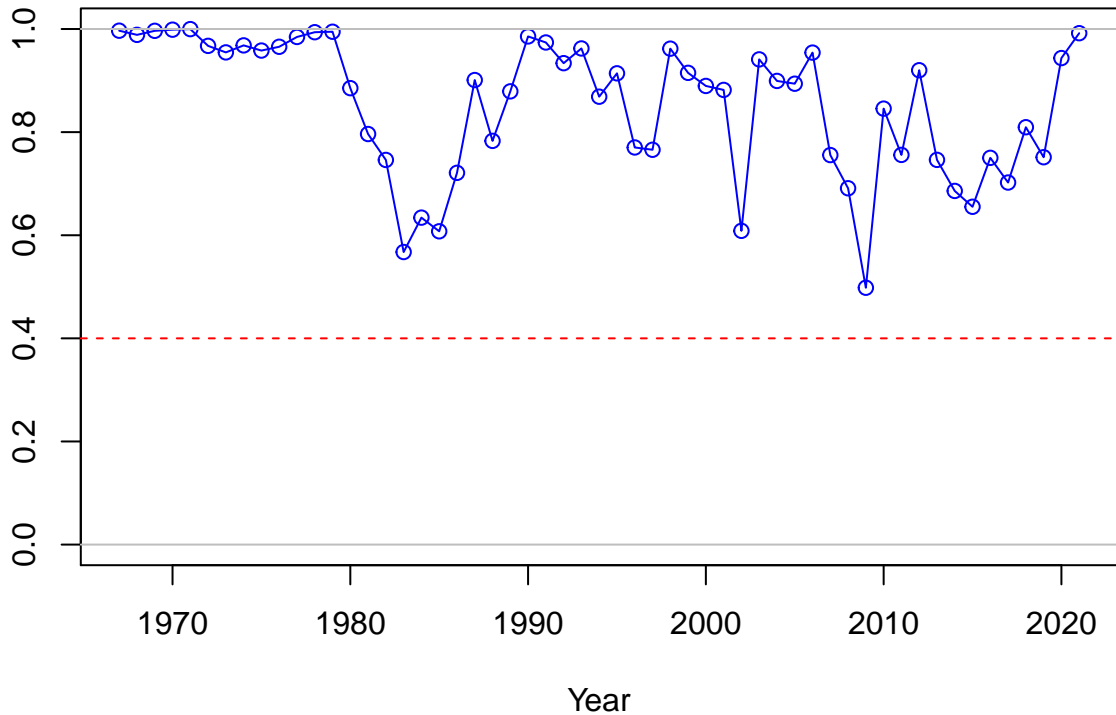
FISHERY
FISHERY obs.



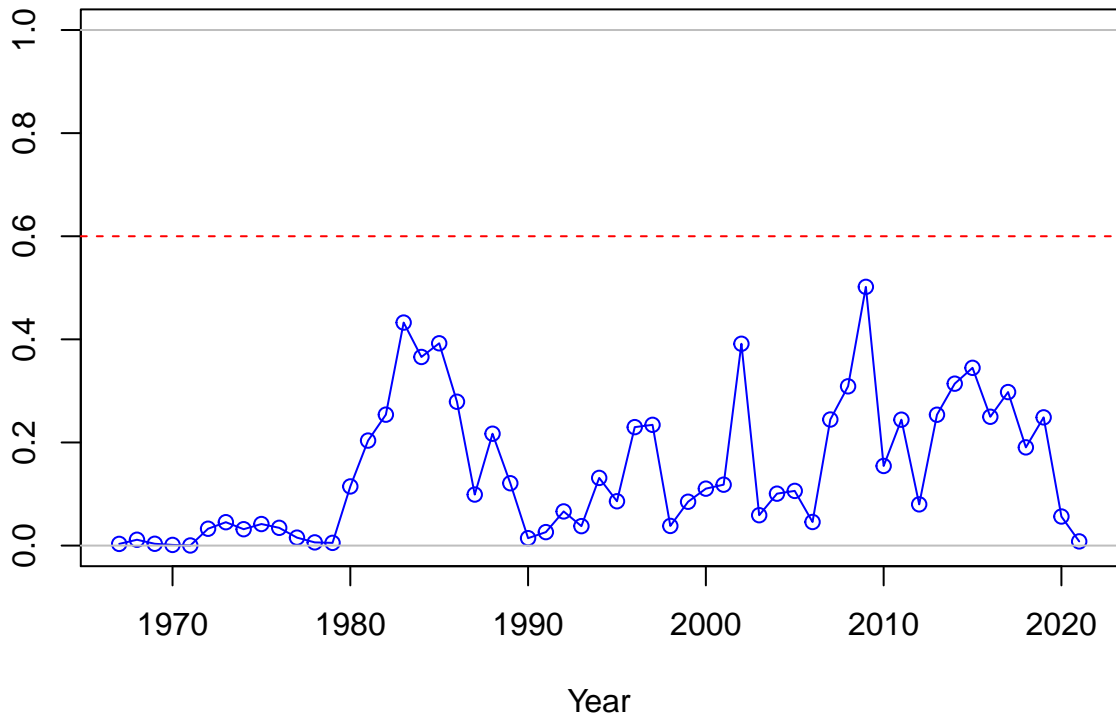
Year



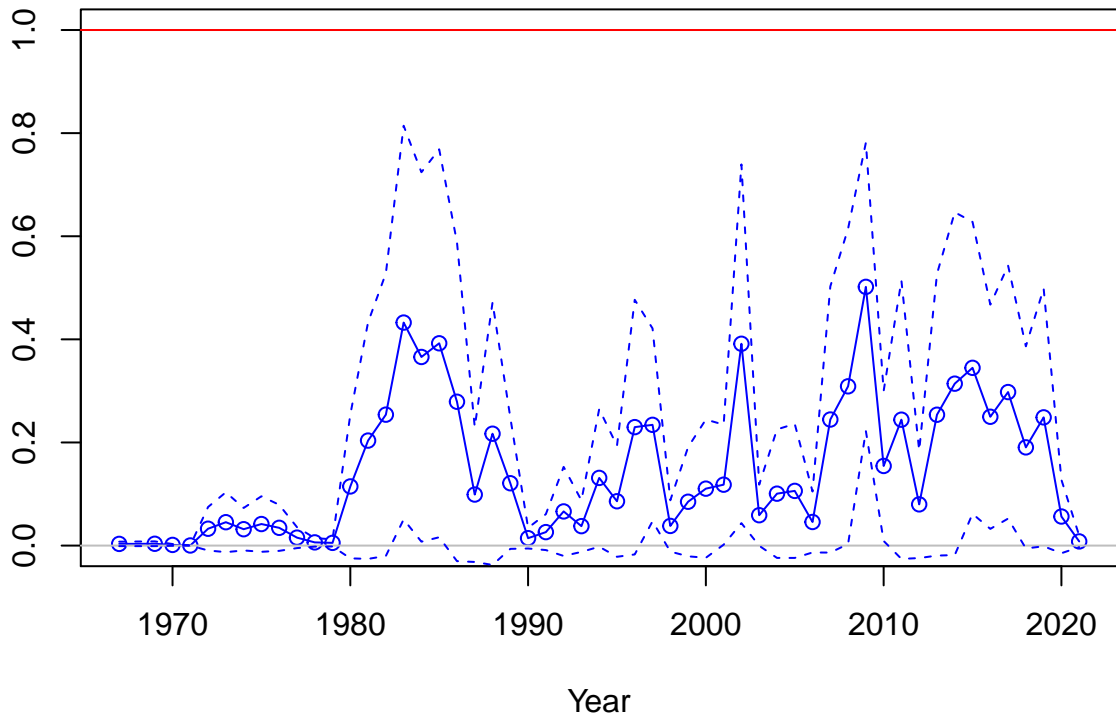
SPR



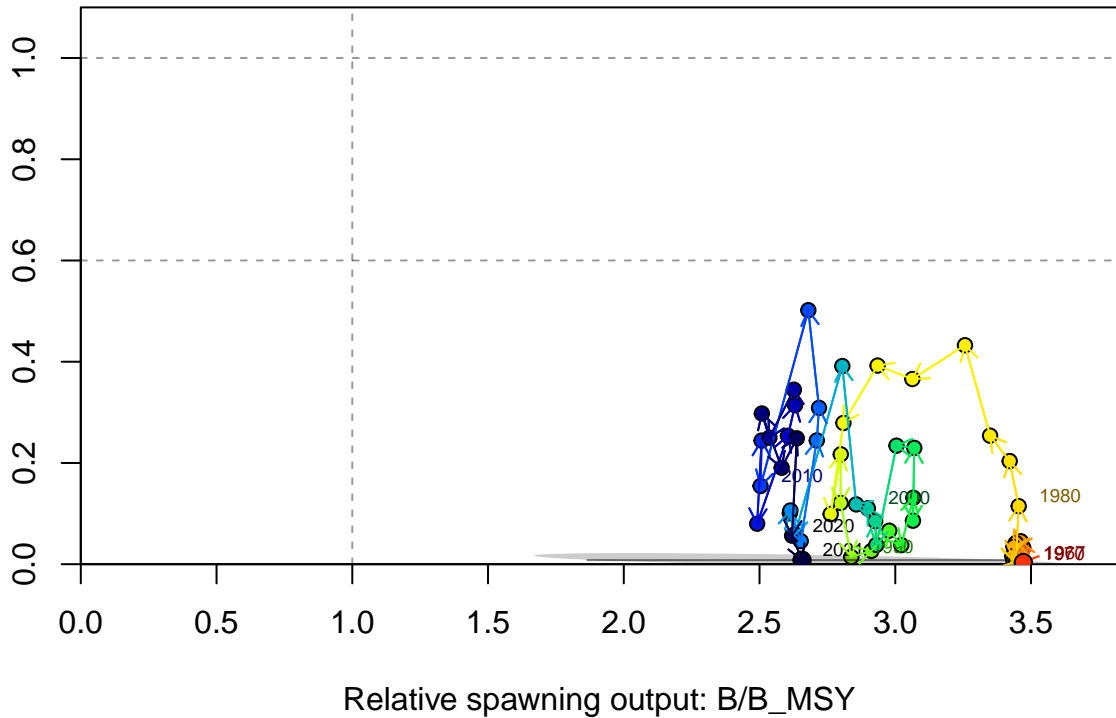
1-SPR



Fishing intensity: 1-SPR



Fishing intensity: 1-SPR



Index

20
15
10
5
0

2016

2017

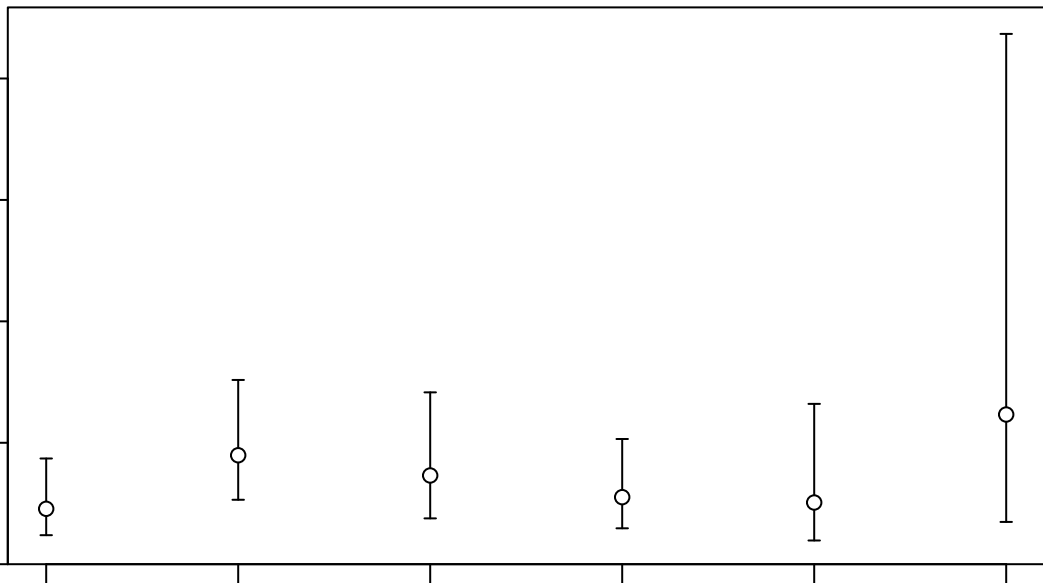
2018

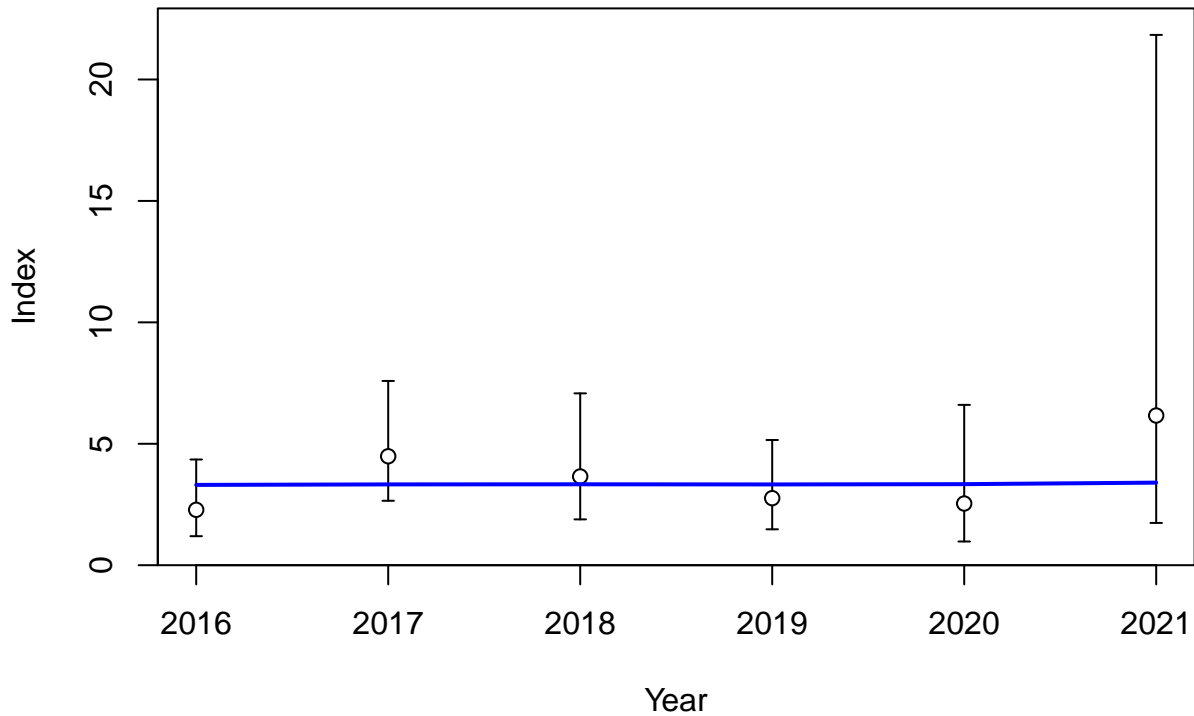
2019

2020

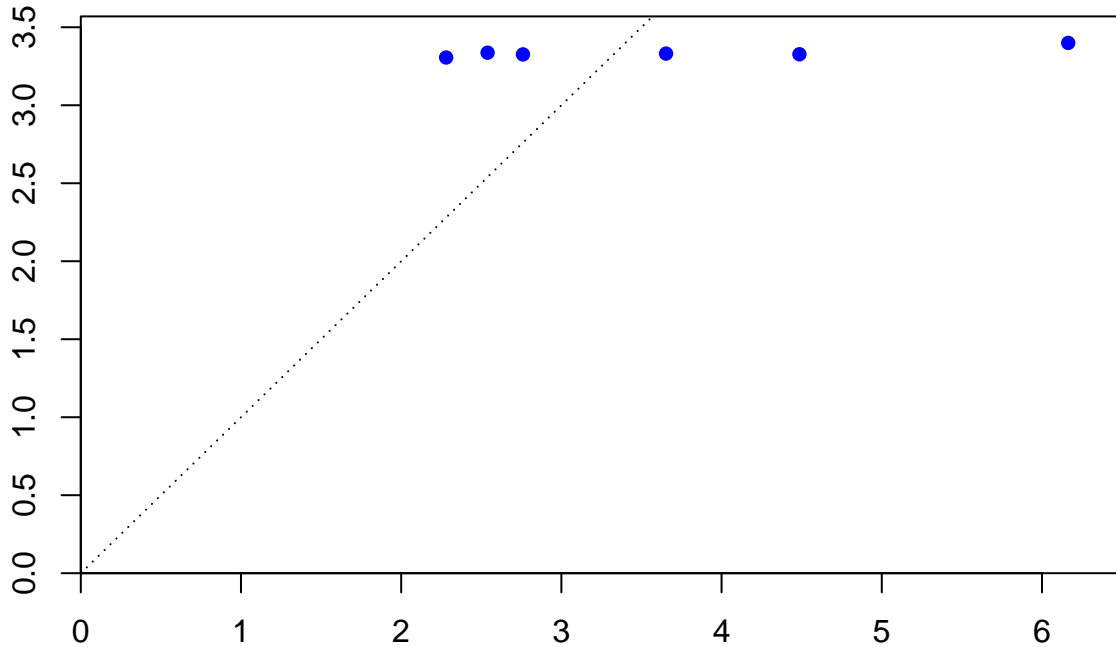
2021

Year



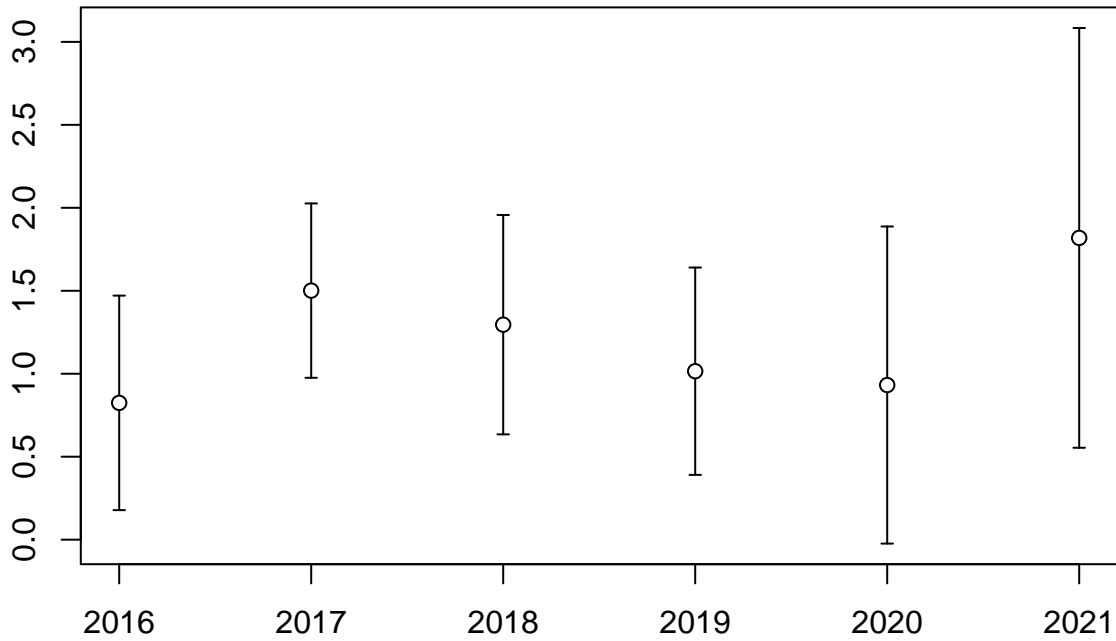


Expected index

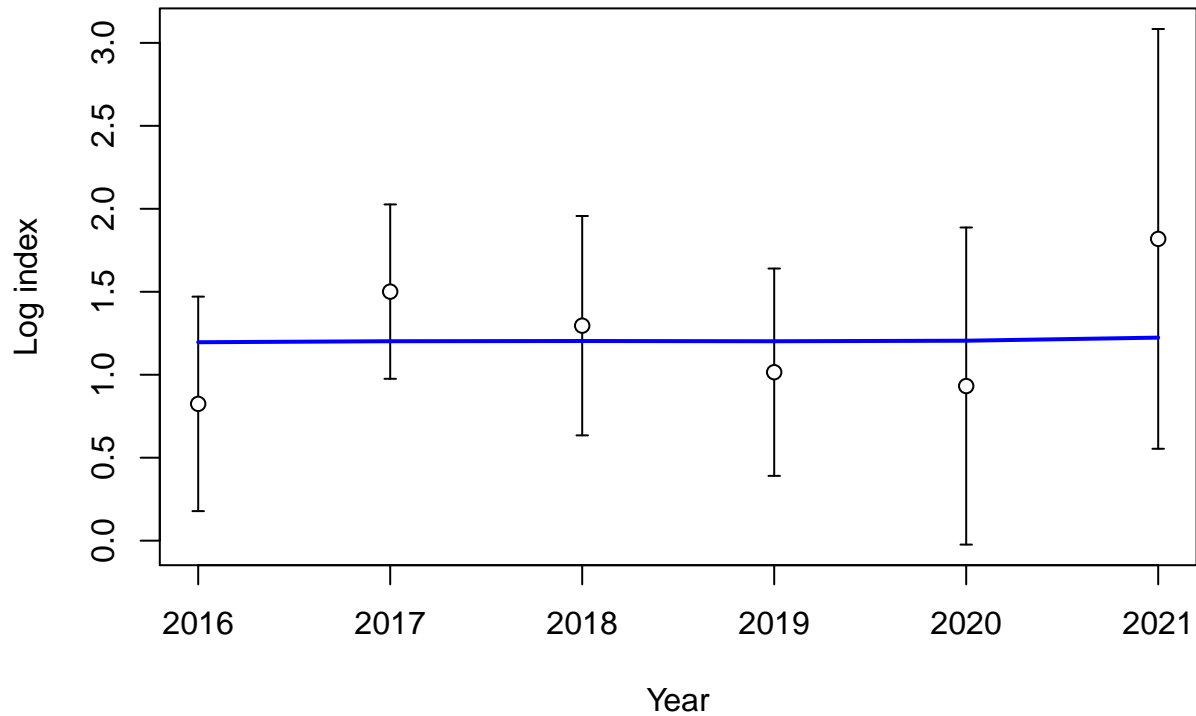


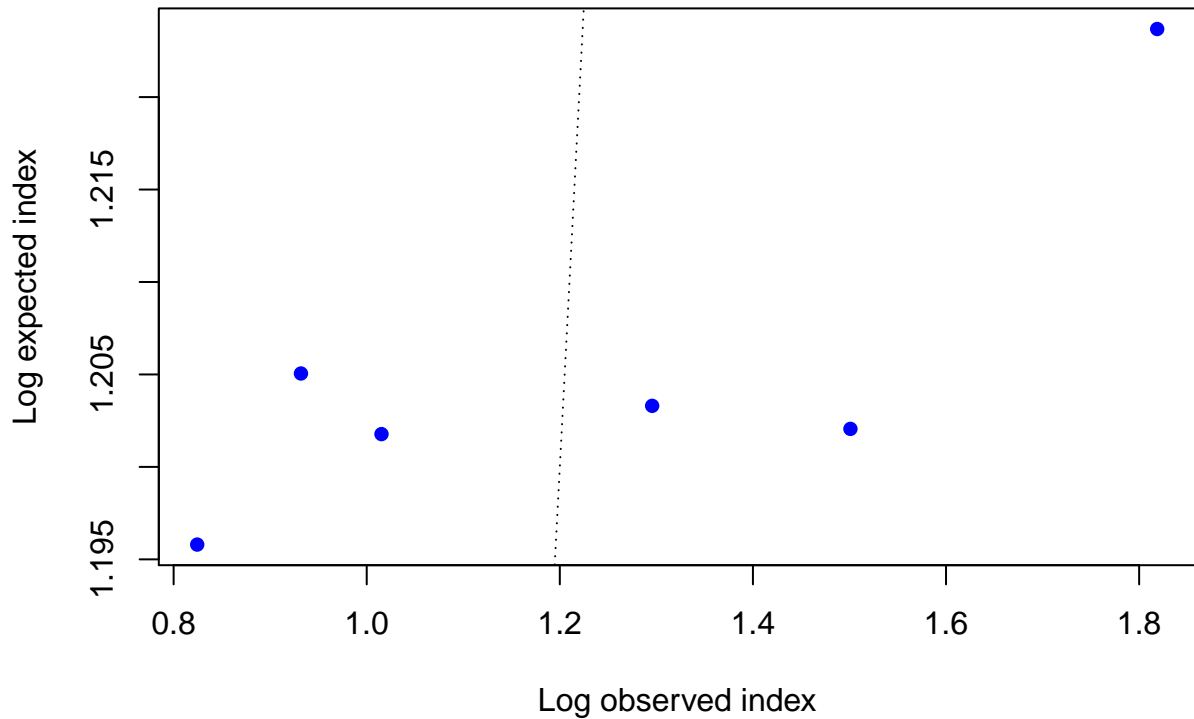
Observed index

Log index

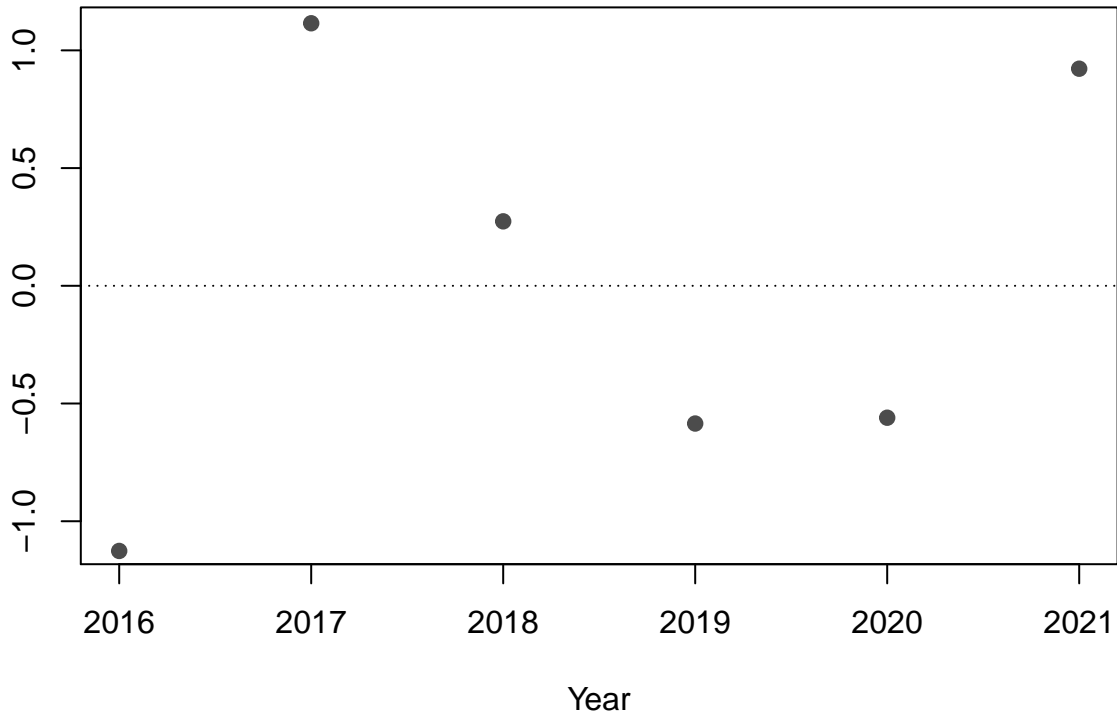


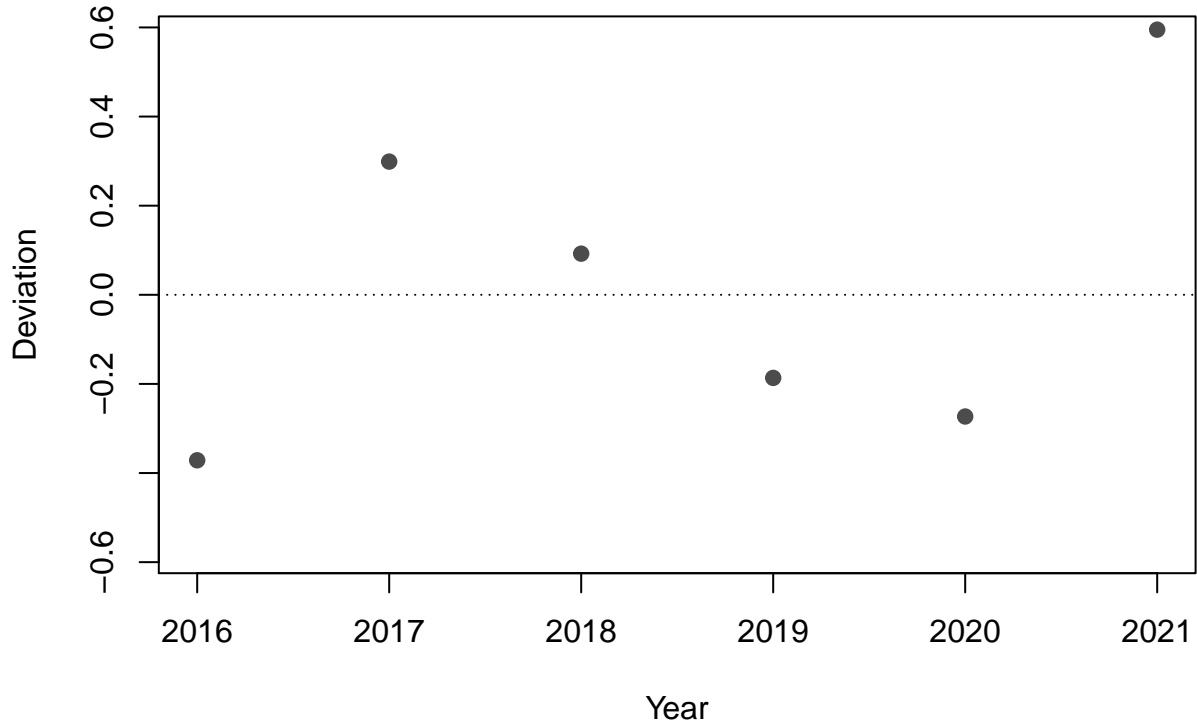
Year

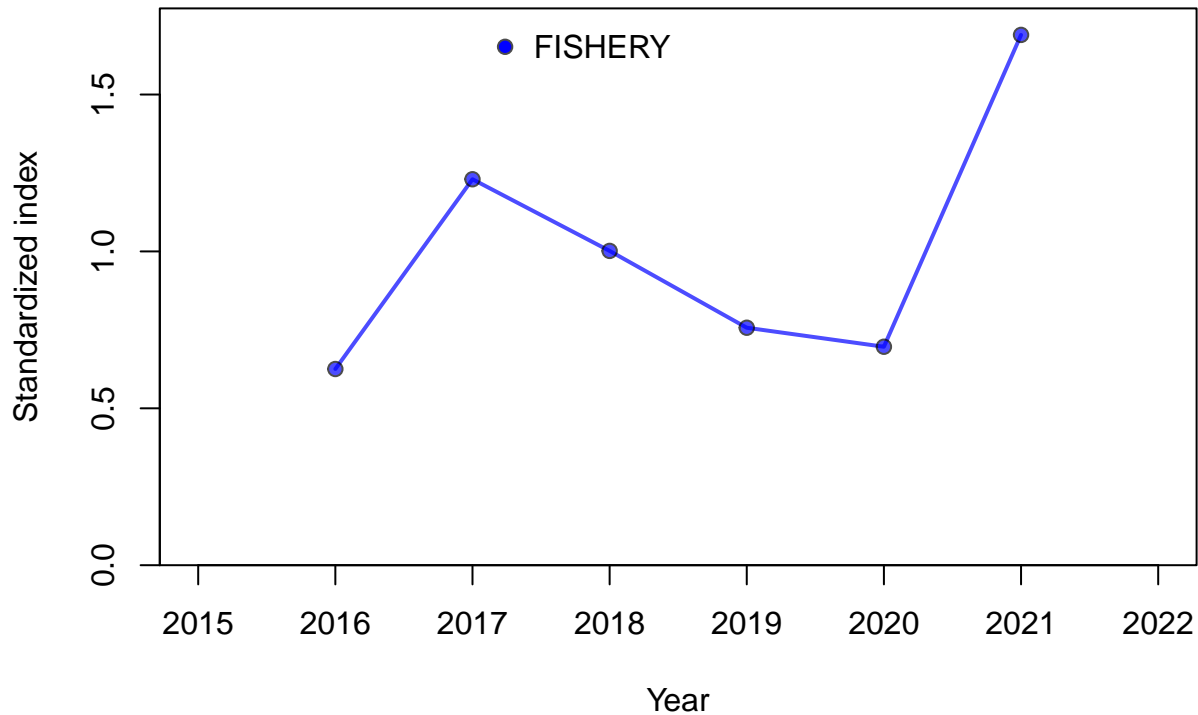


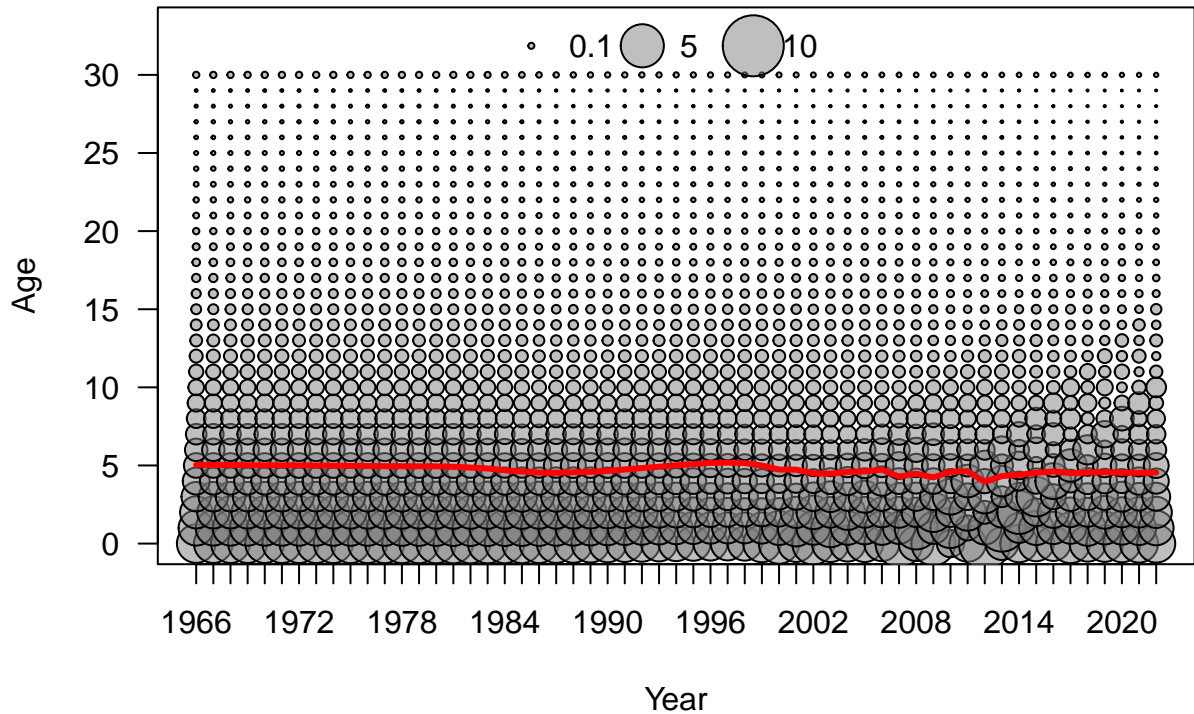


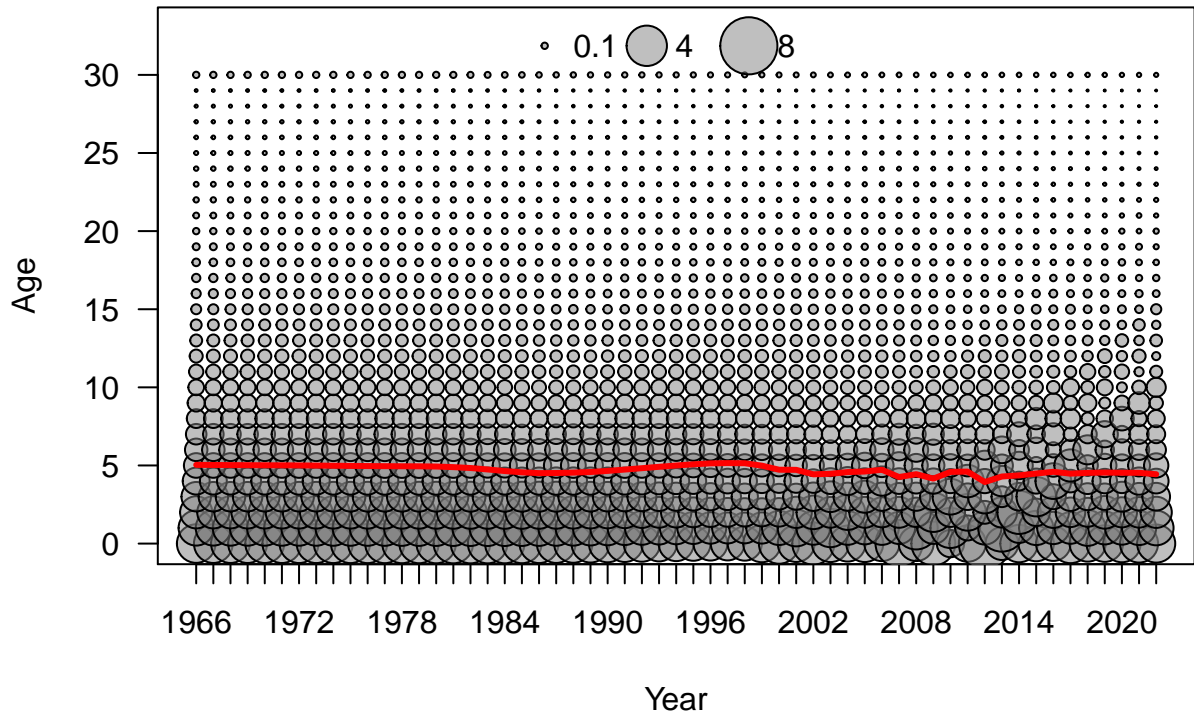
Residual

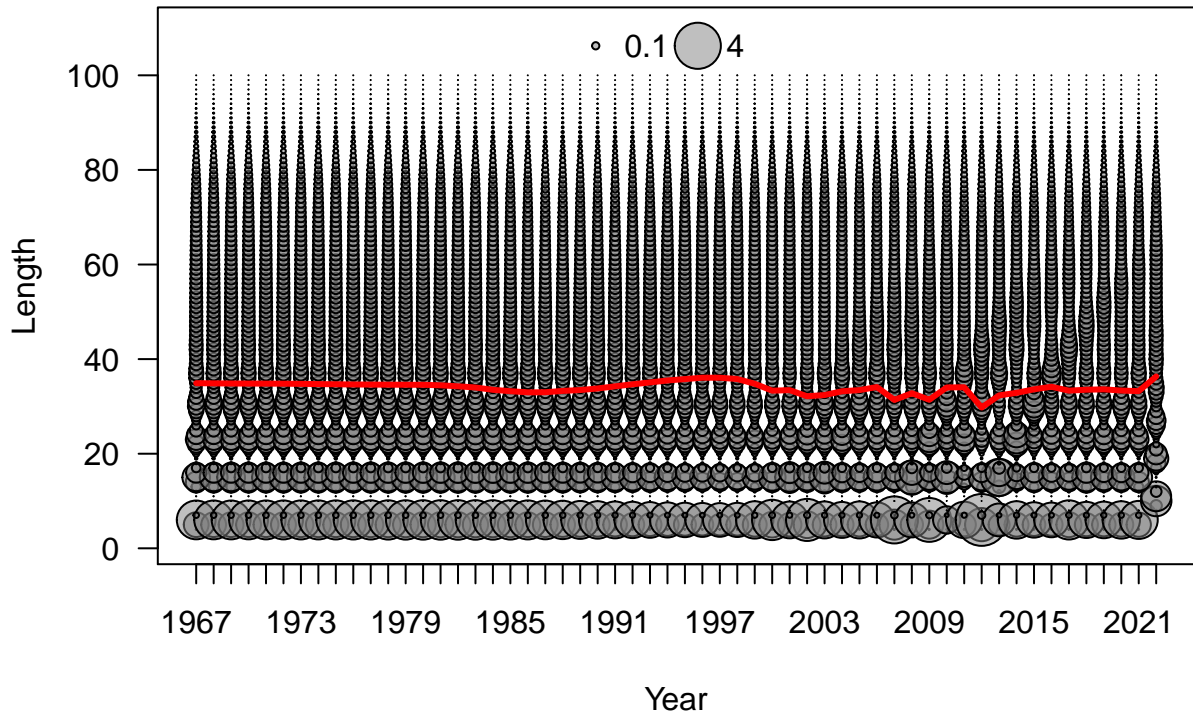


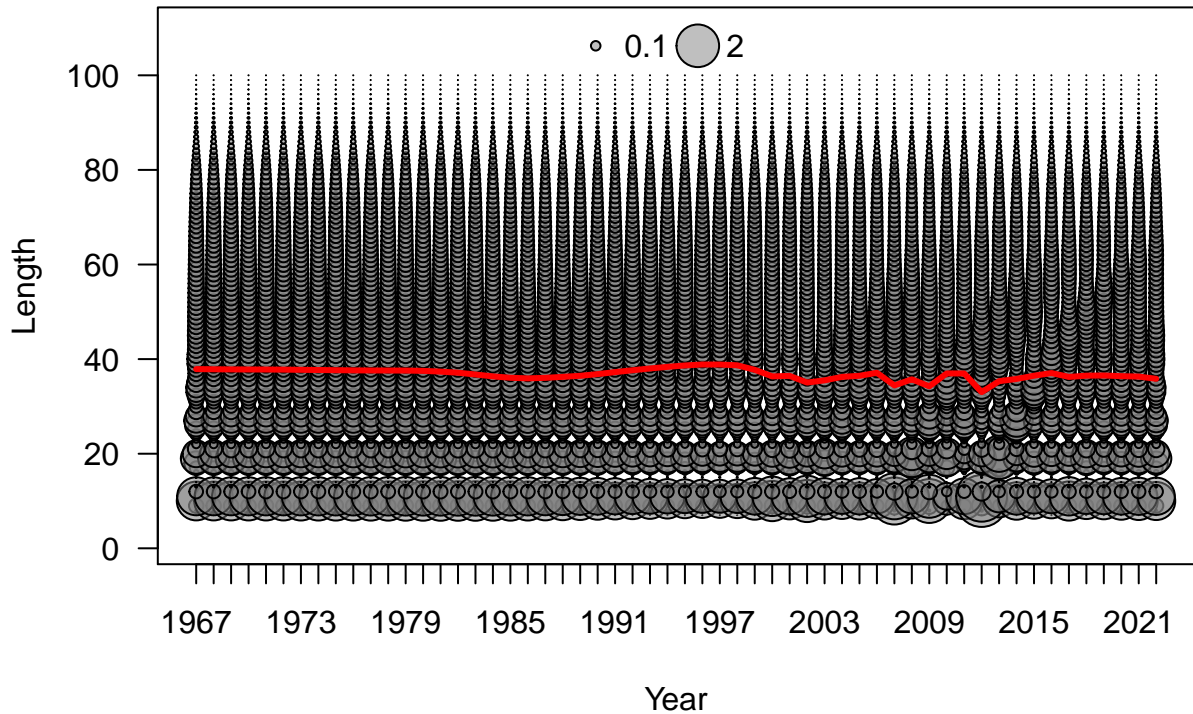


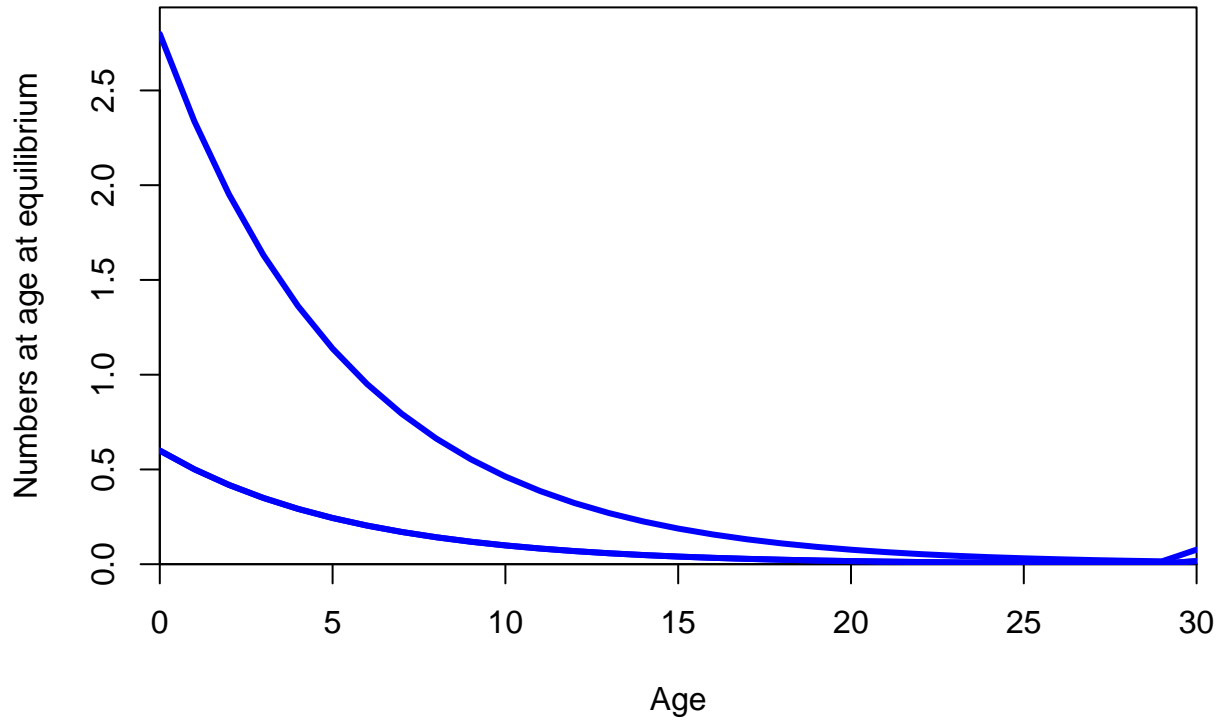






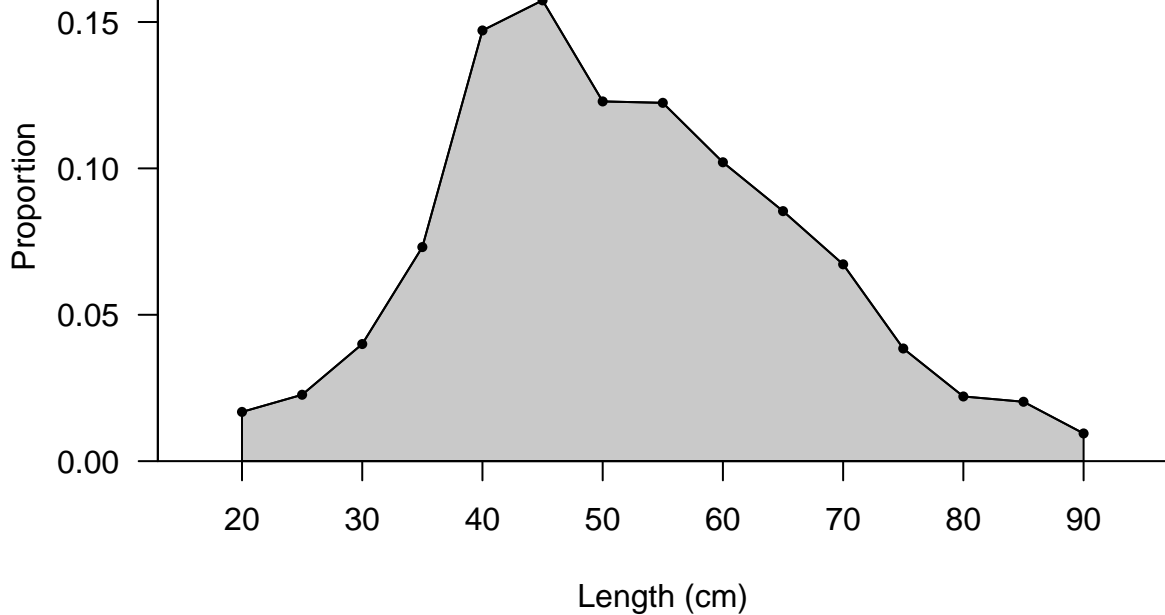






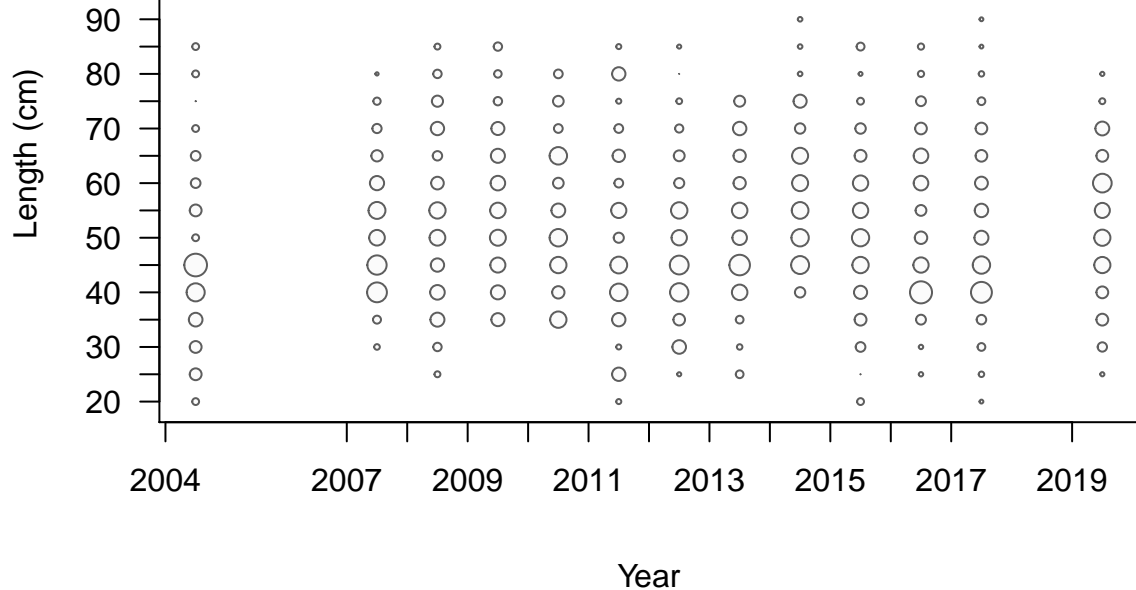
FISHERY

Sum of N adj.=1008.7

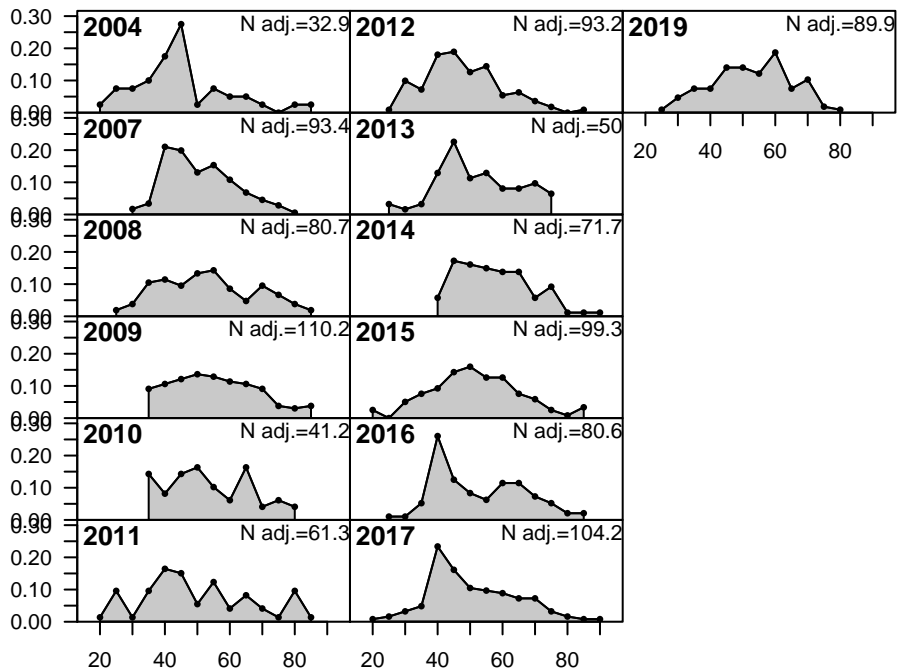


FISHERY

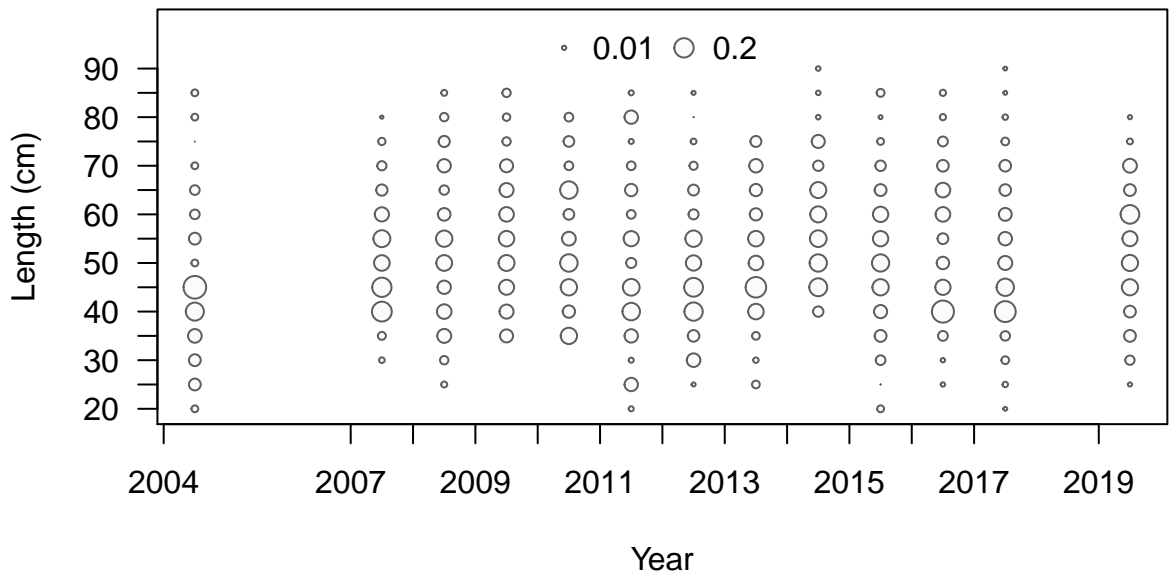
◦ 0.01 ○ 0.2



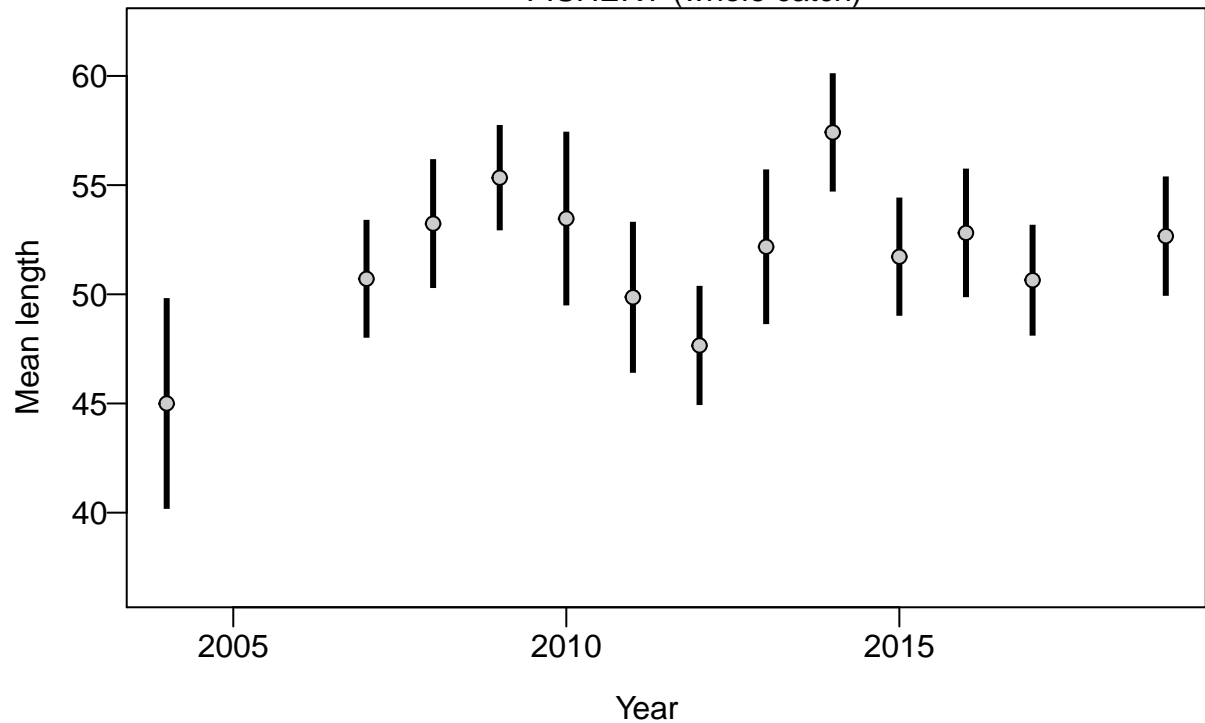
Proportion



Length (cm)

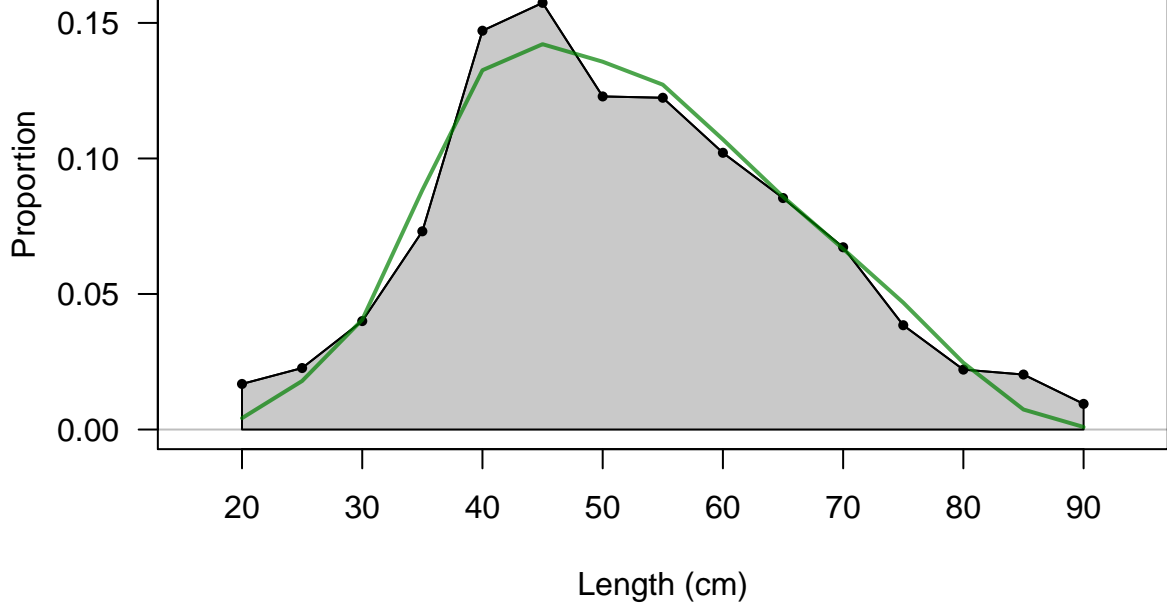


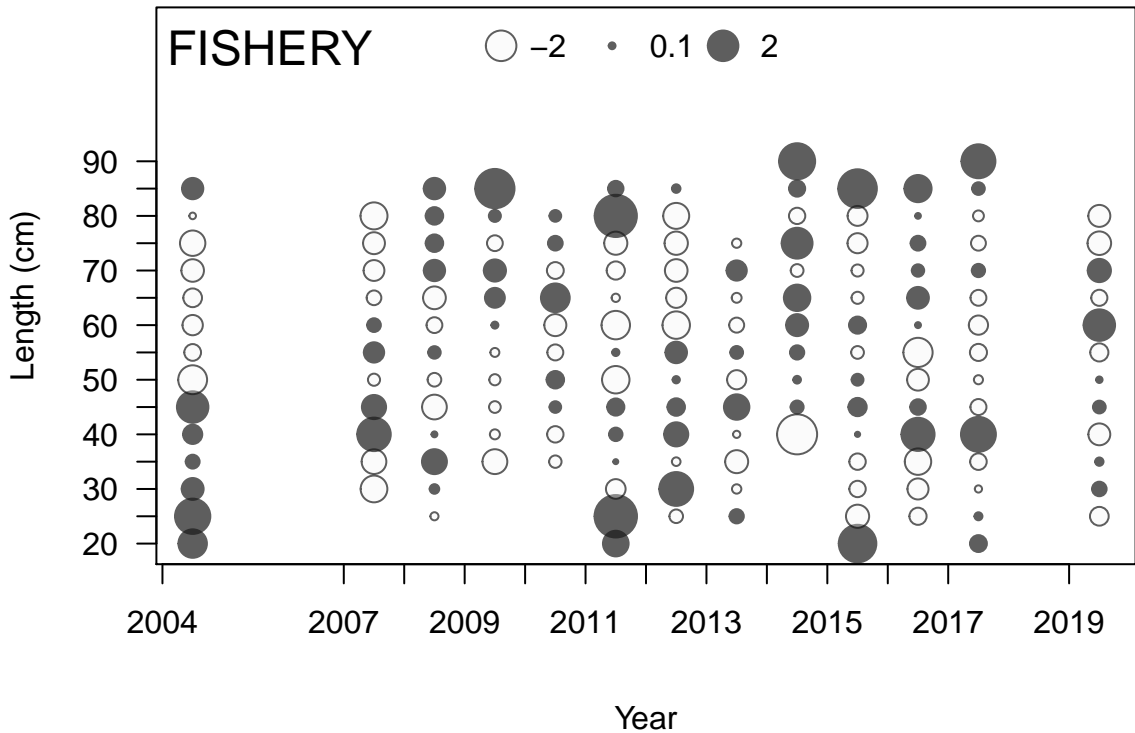
FISHERY (whole catch)



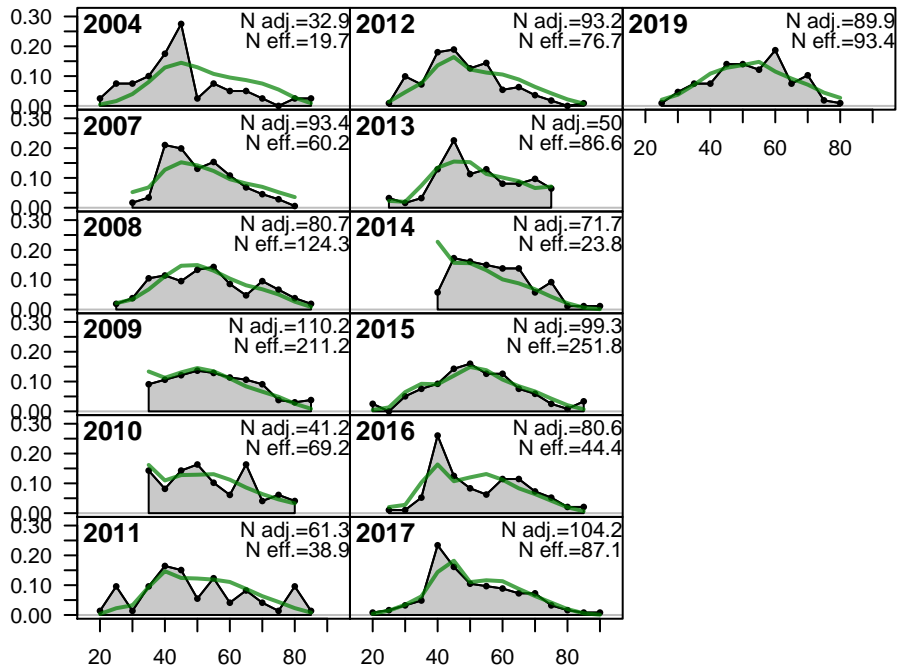
FISHERY

Sum of N adj.=1008.7
Sum of N eff.=1187.2

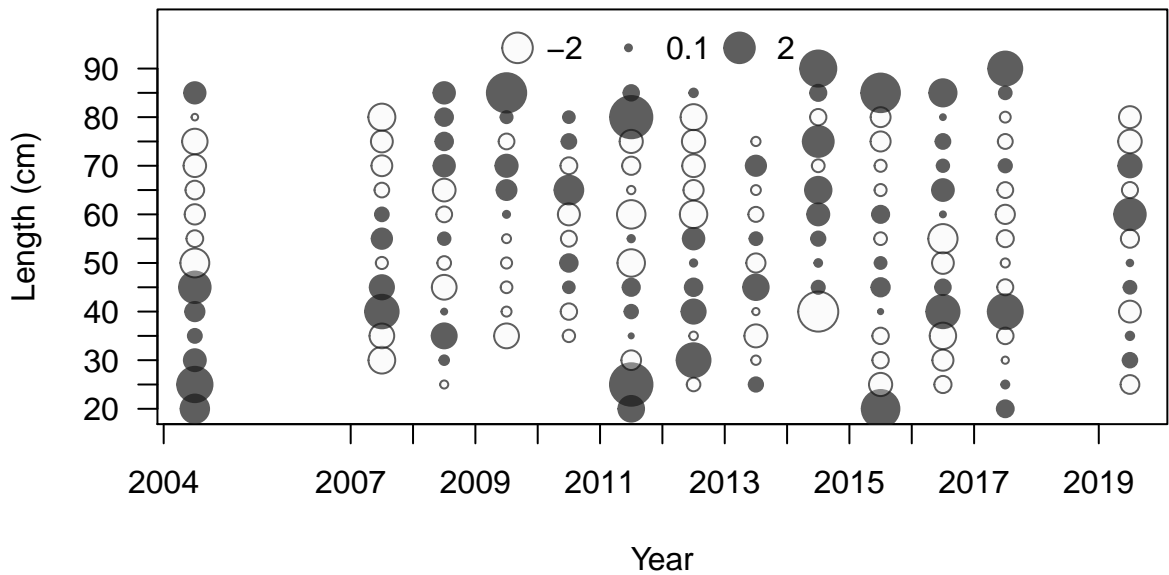




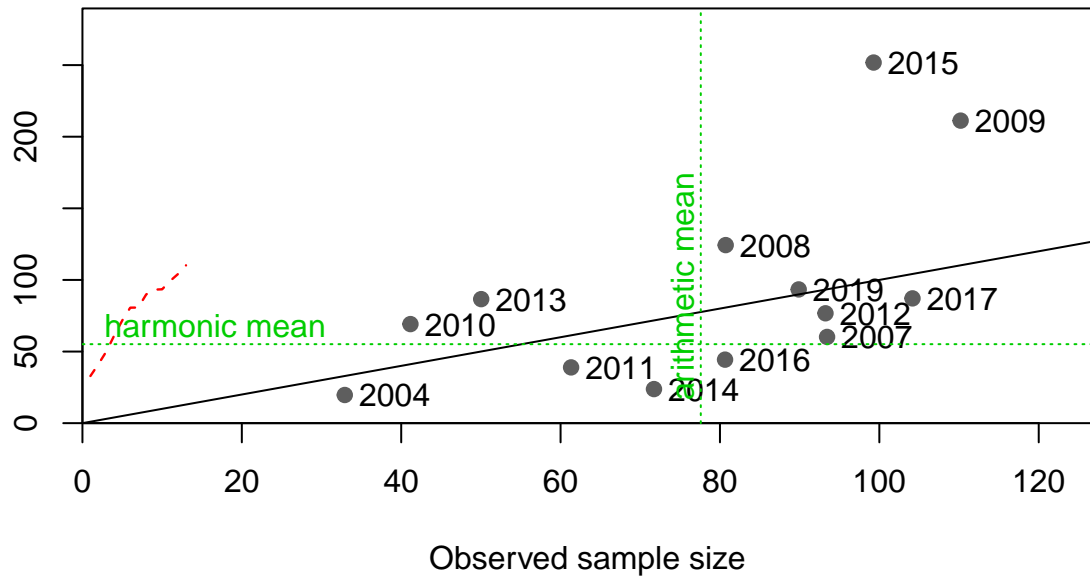
Proportion



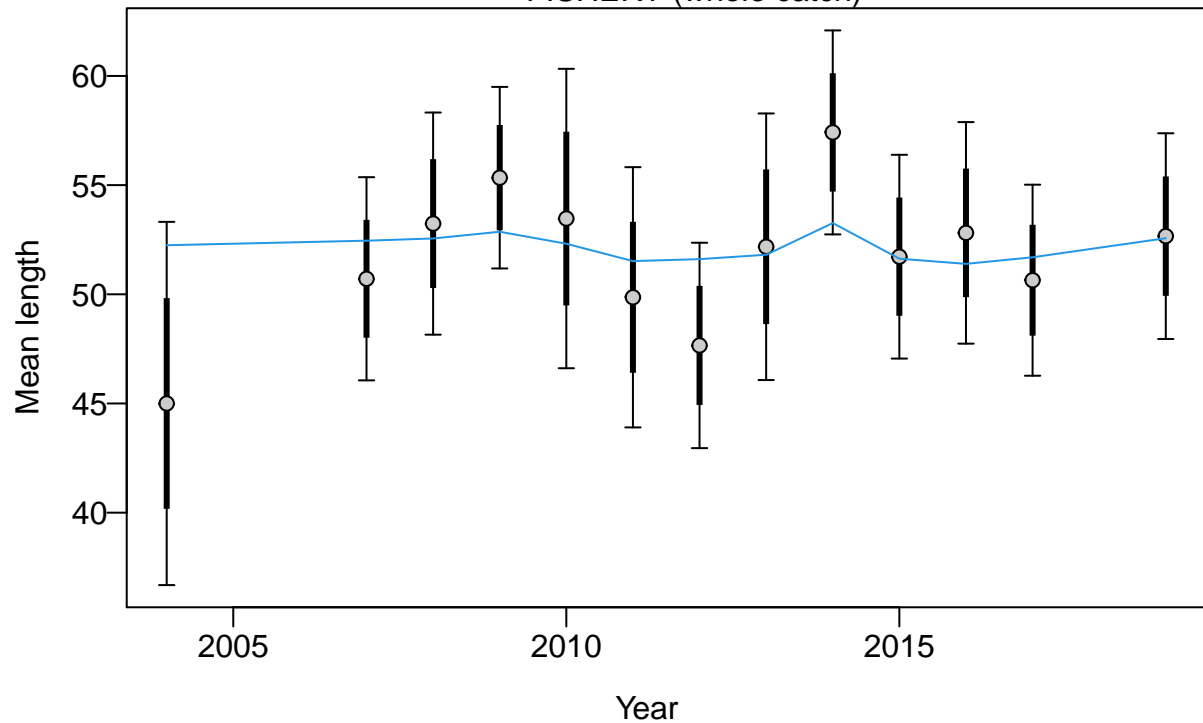
Length (cm)

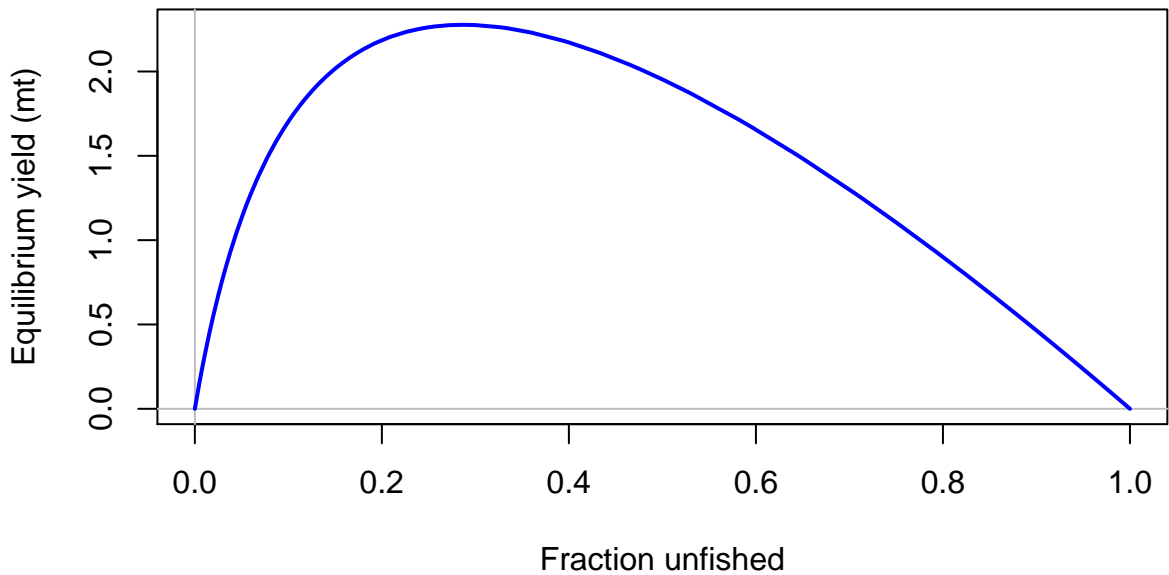


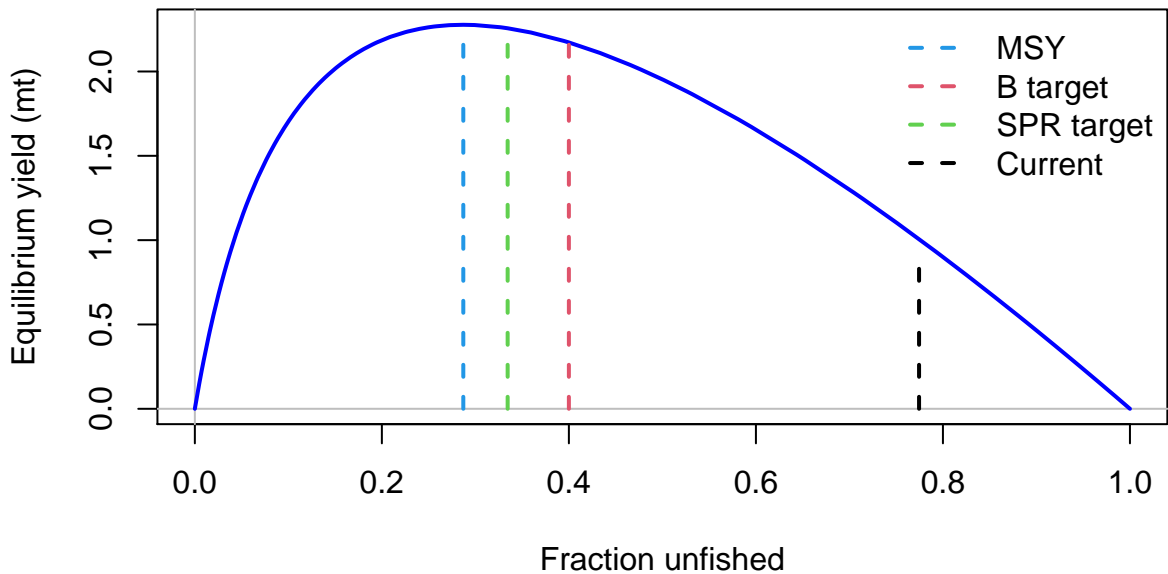
Effective sample size

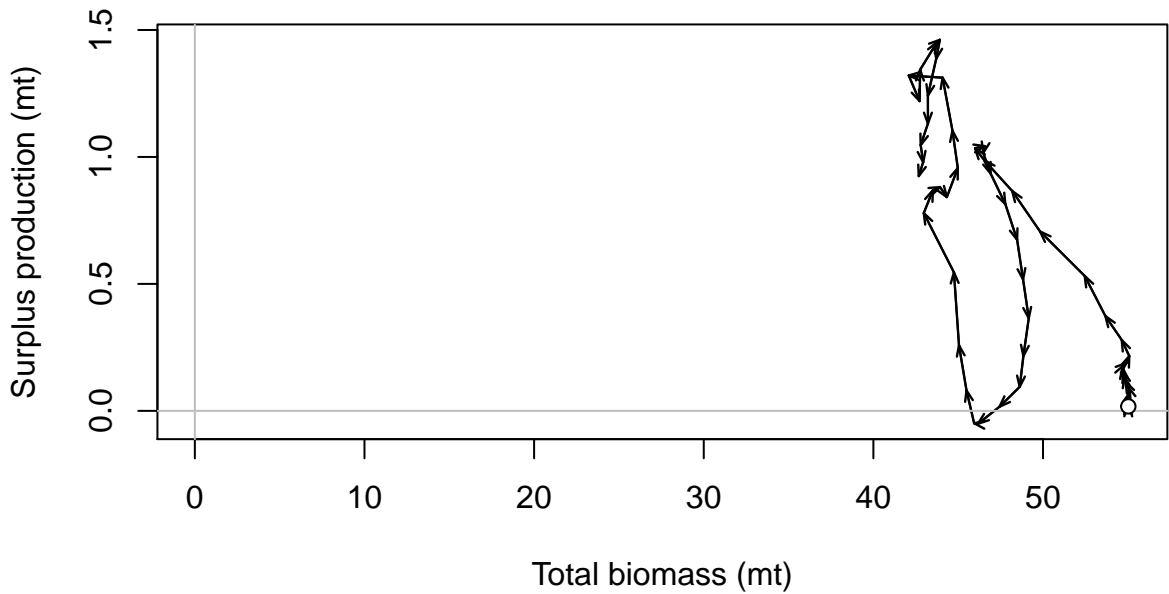


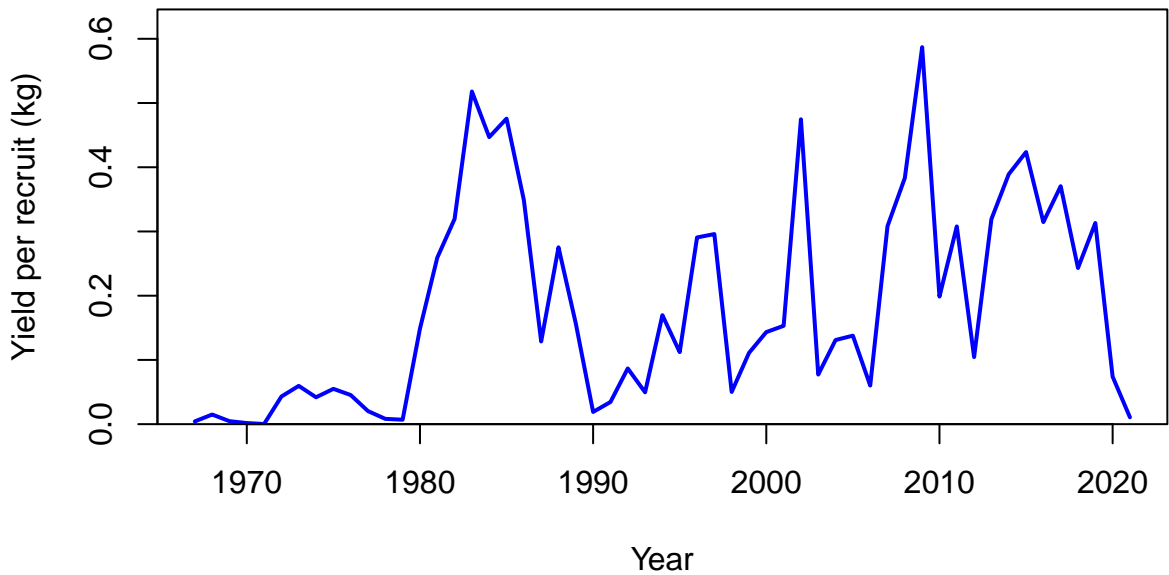
FISHERY (whole catch)

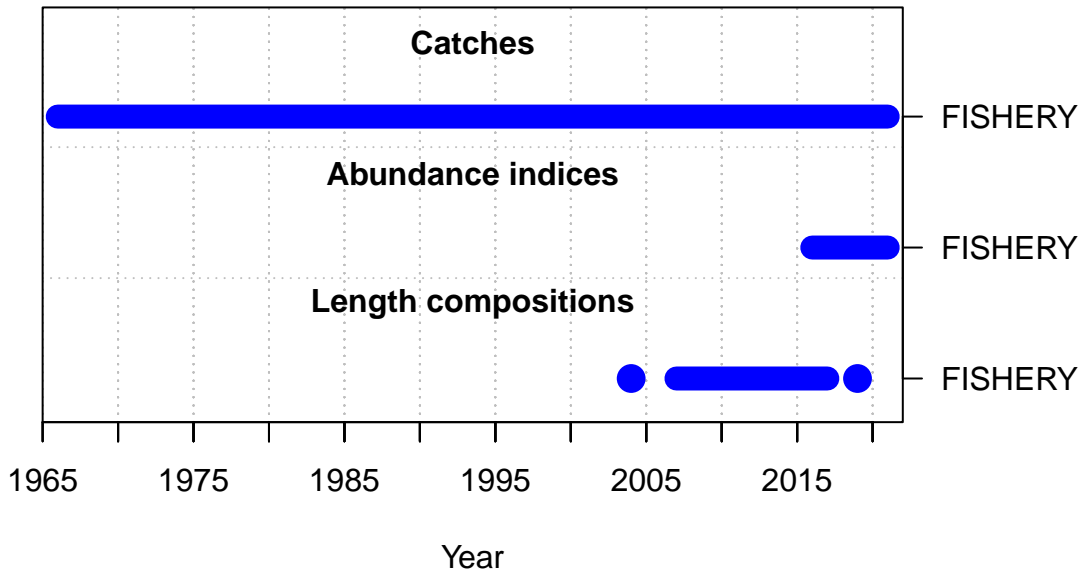


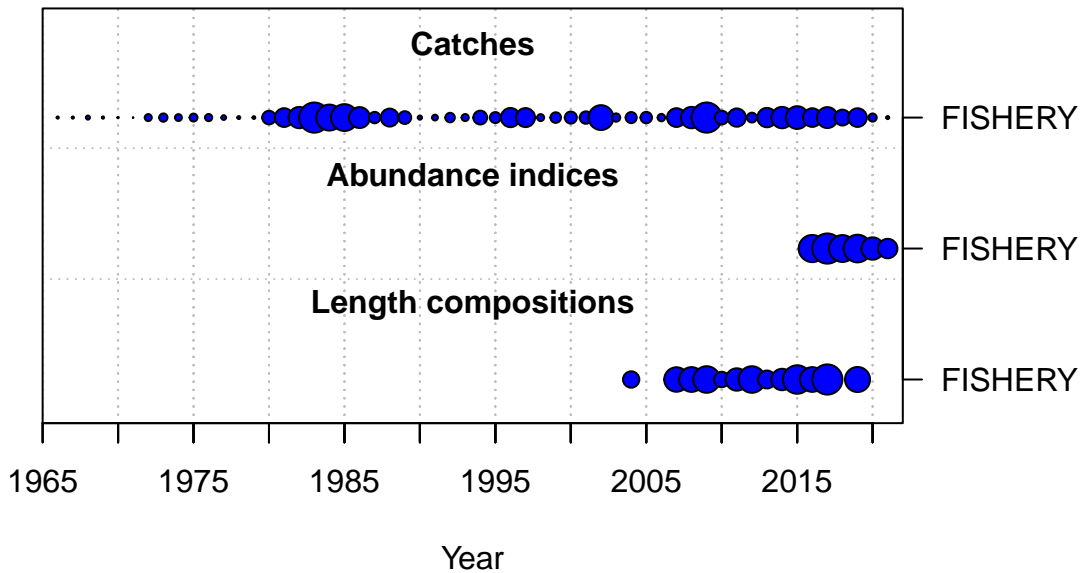




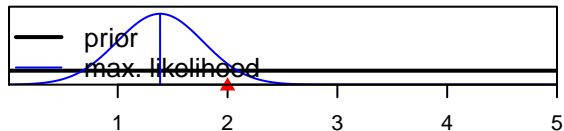




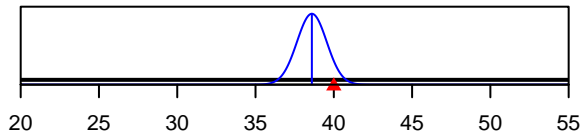




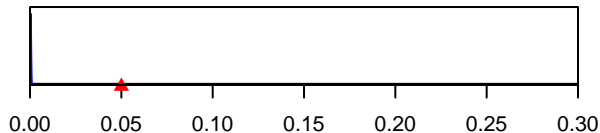
SR_LN(R0)



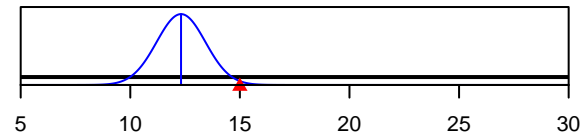
Size_inflection_FISHERY(1)



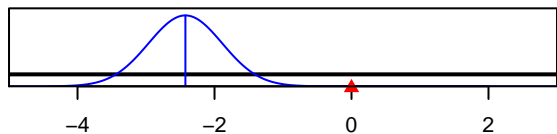
InitF_seas_1flt_1FISHERY



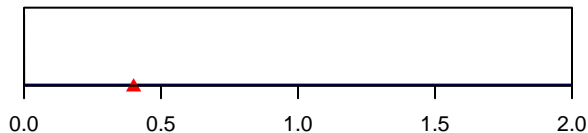
Size_95%width_FISHERY(1)



LnQ_base_FISHERY(1)



Q_extraSD_FISHERY(1)



Parameter value