

Plots created using the 'r4ss' package in R
Stock Synthesis version: 3.30.19.0
StartTime: Wed Jun 29 08:27:55 2022
Data_File: data.ss
Control_File: control.ss

Length (cm, beginning of the year)

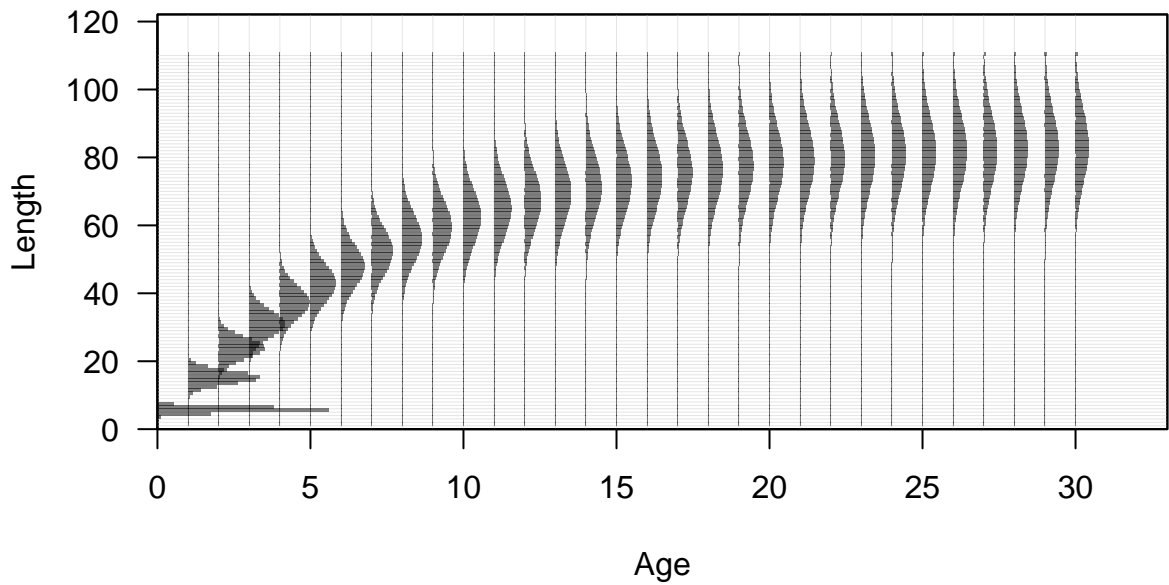


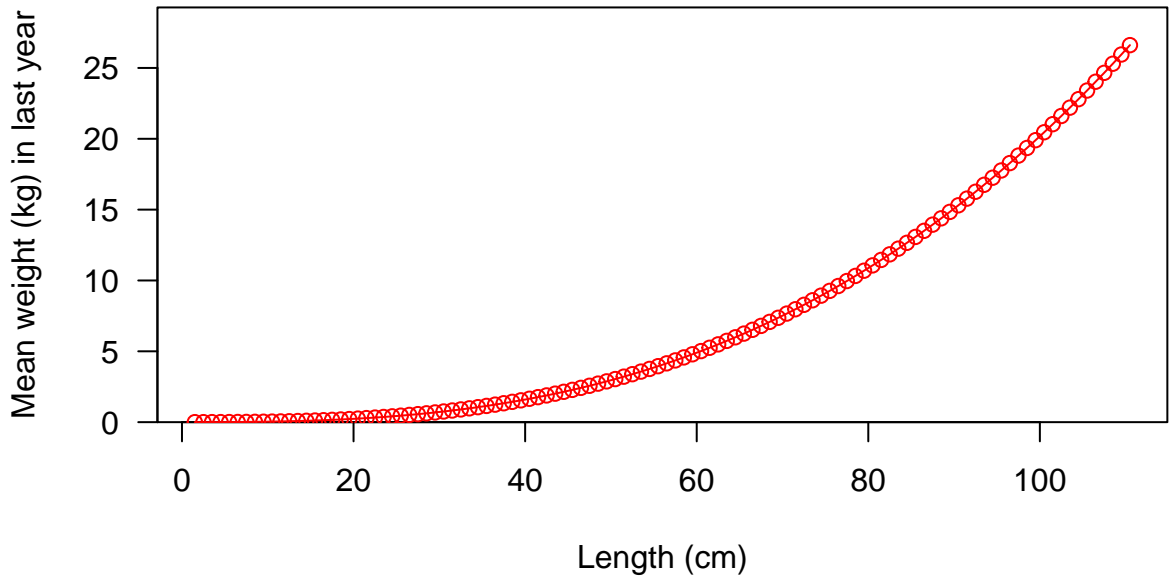
Age (yr)





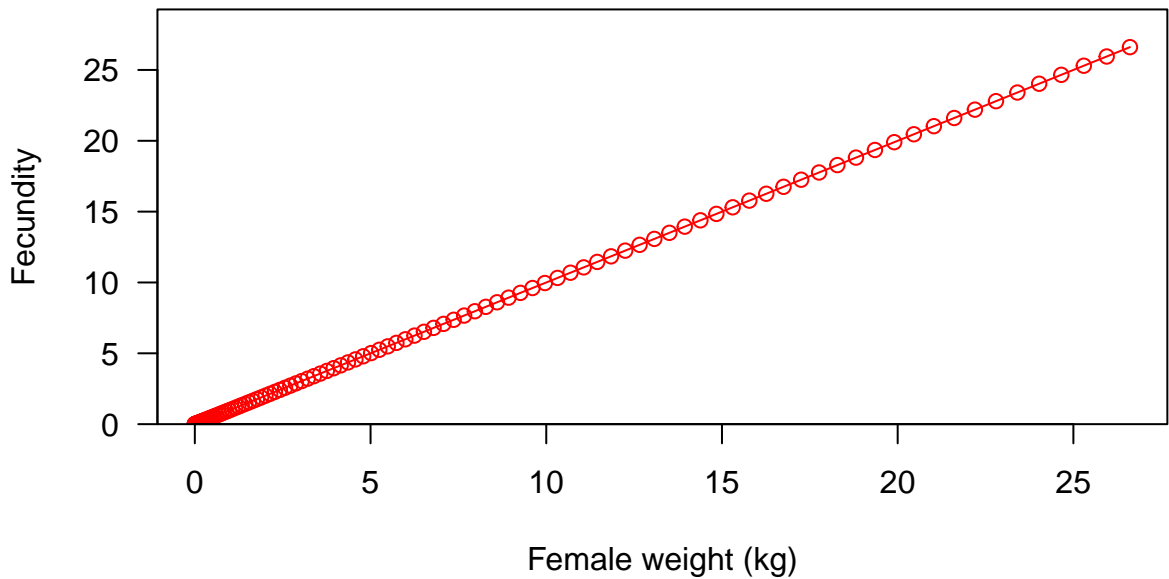




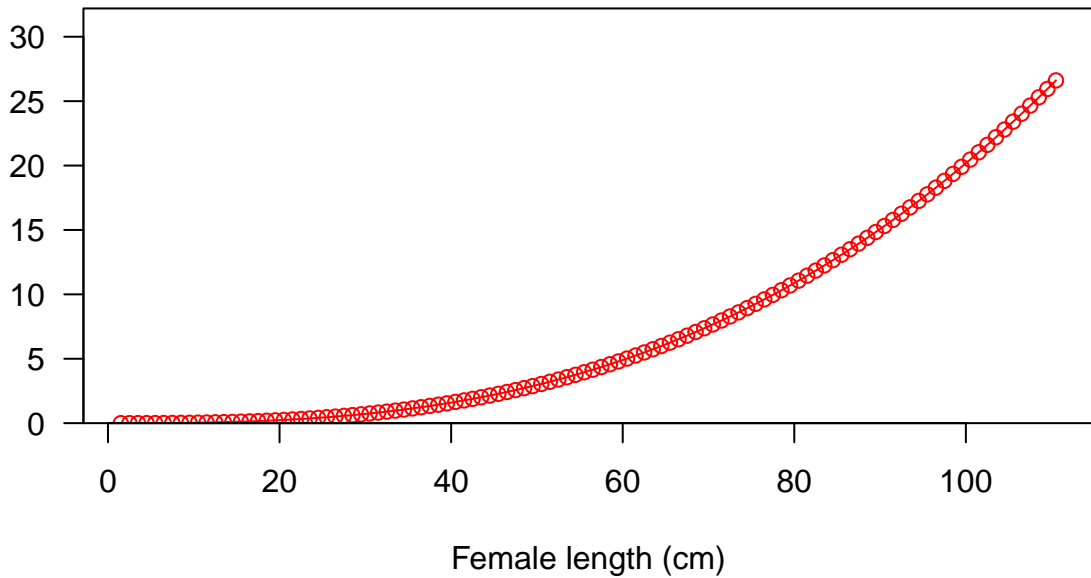








Fecundity



Spawning output

25
20
15
10
5
0

0

20

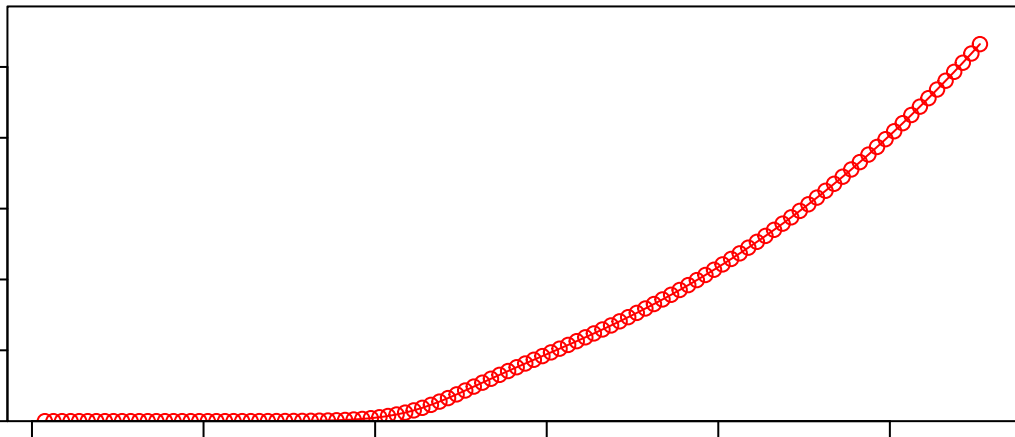
40

60

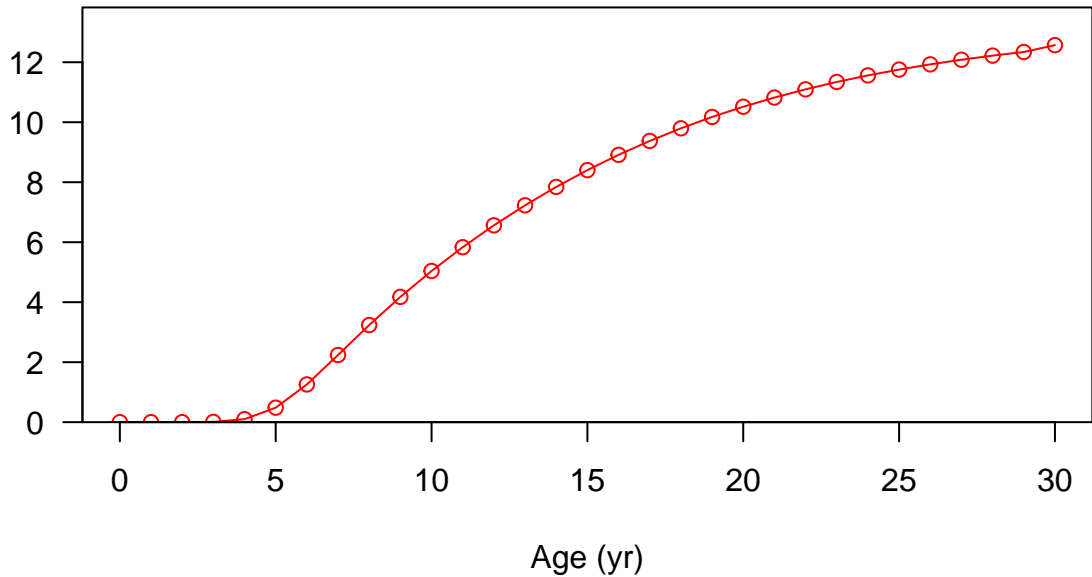
80

100

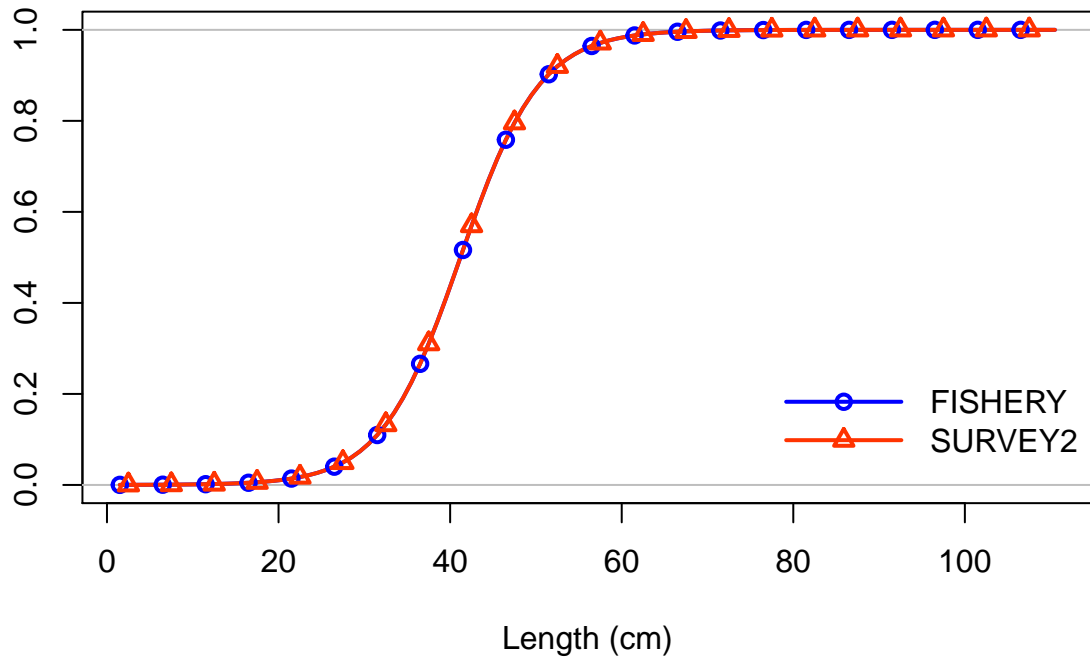
Length (cm)



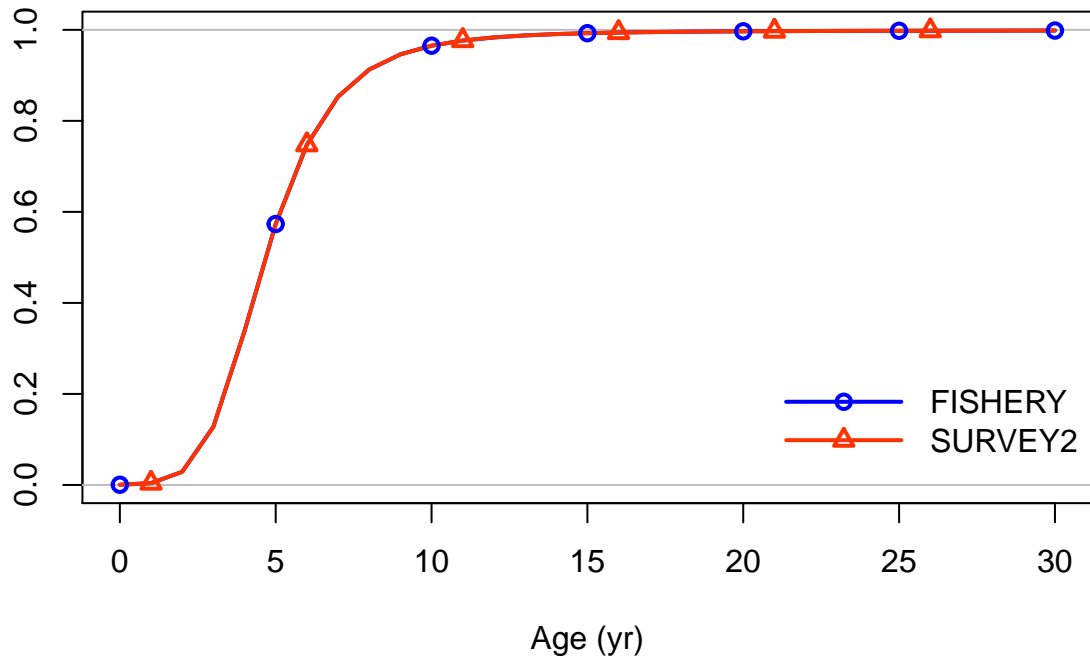
Spawning output



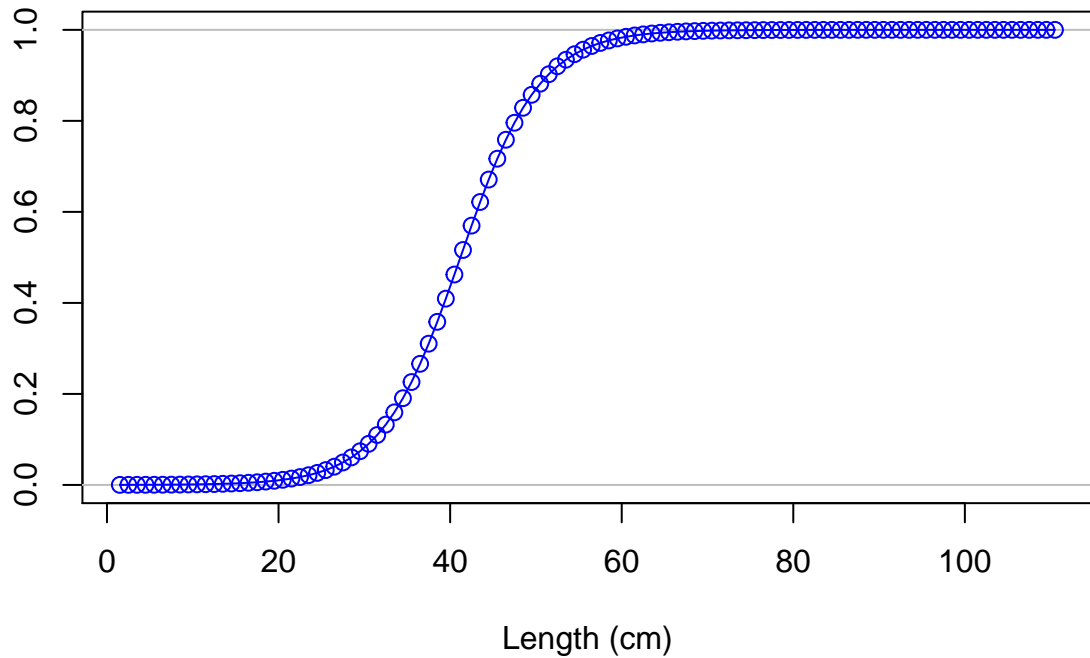
Selectivity



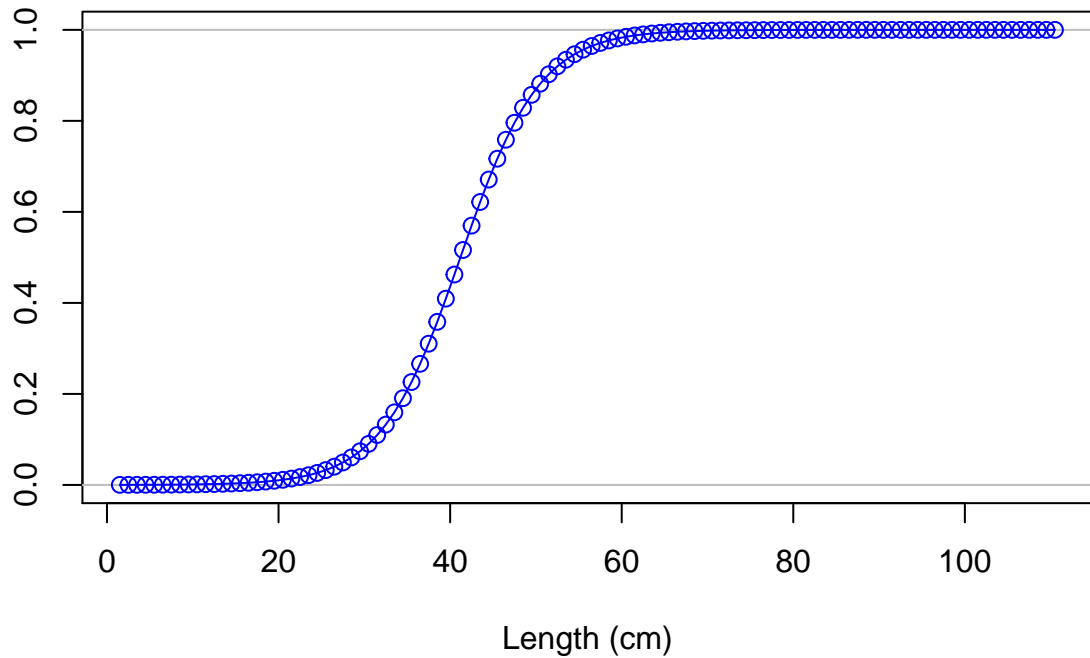
Selectivity

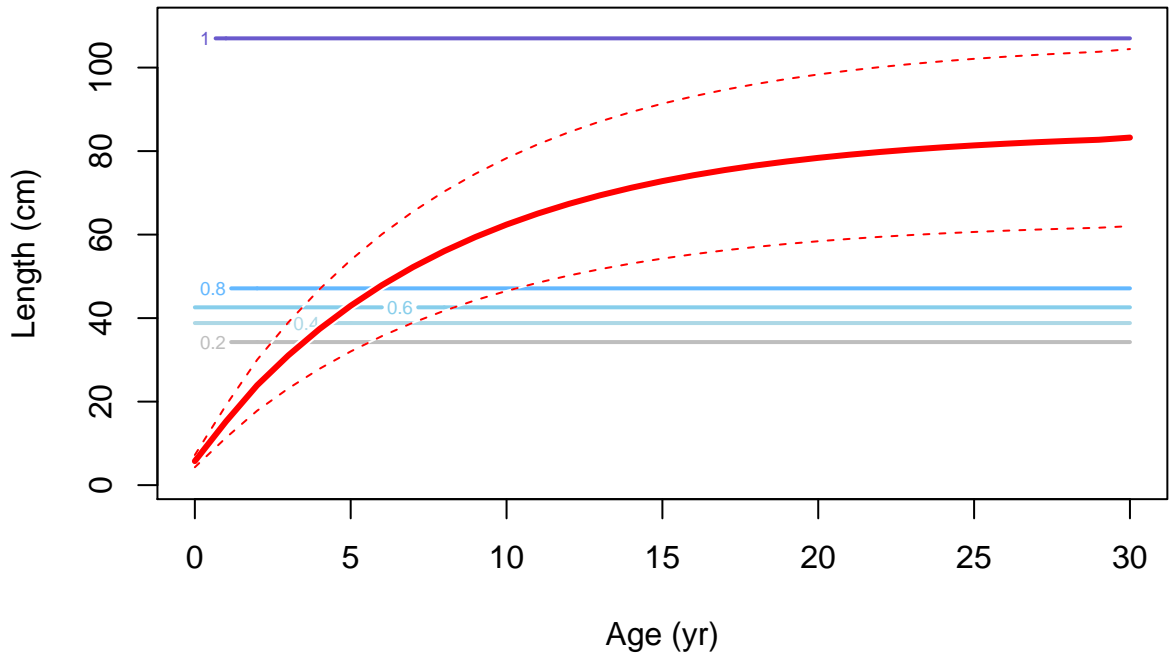


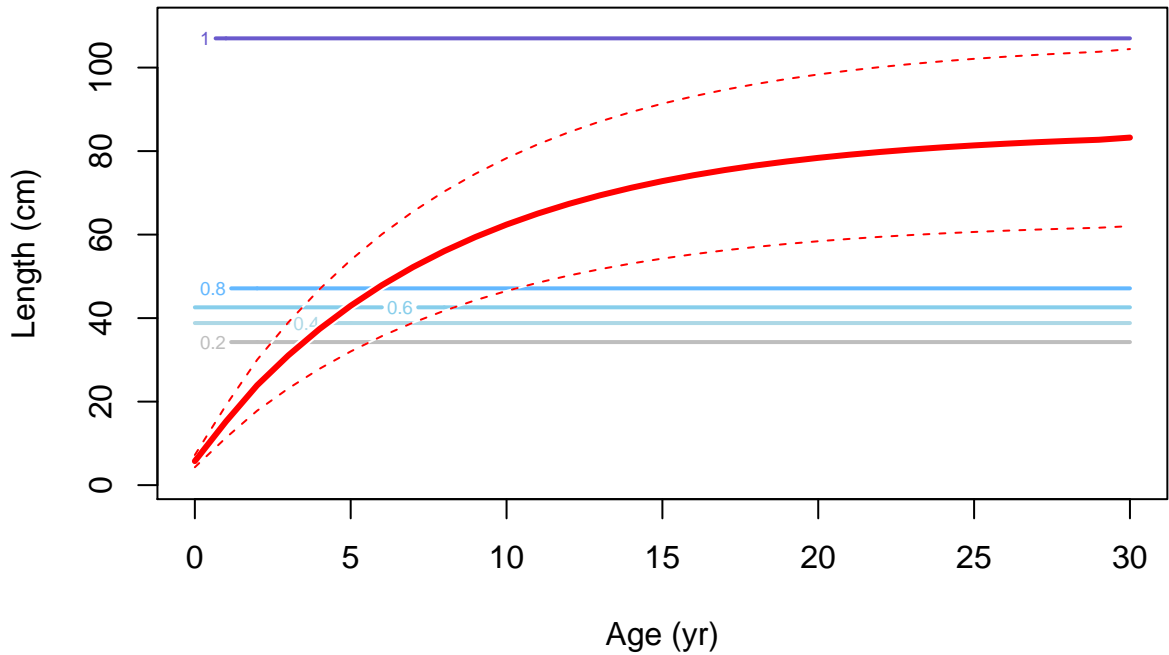
Selectivity



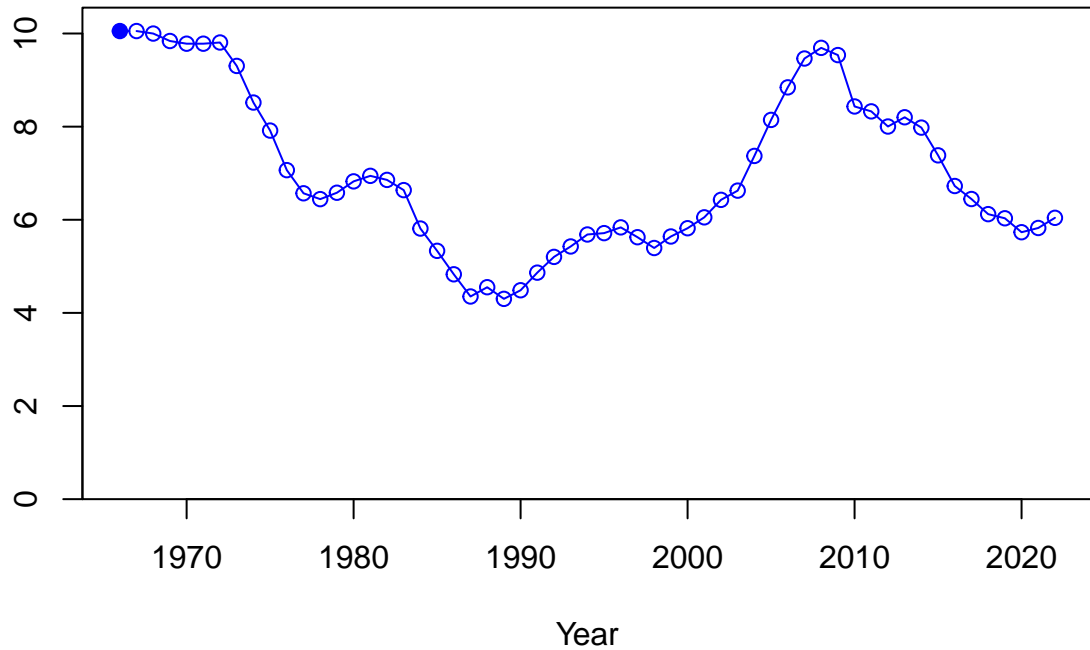
Selectivity



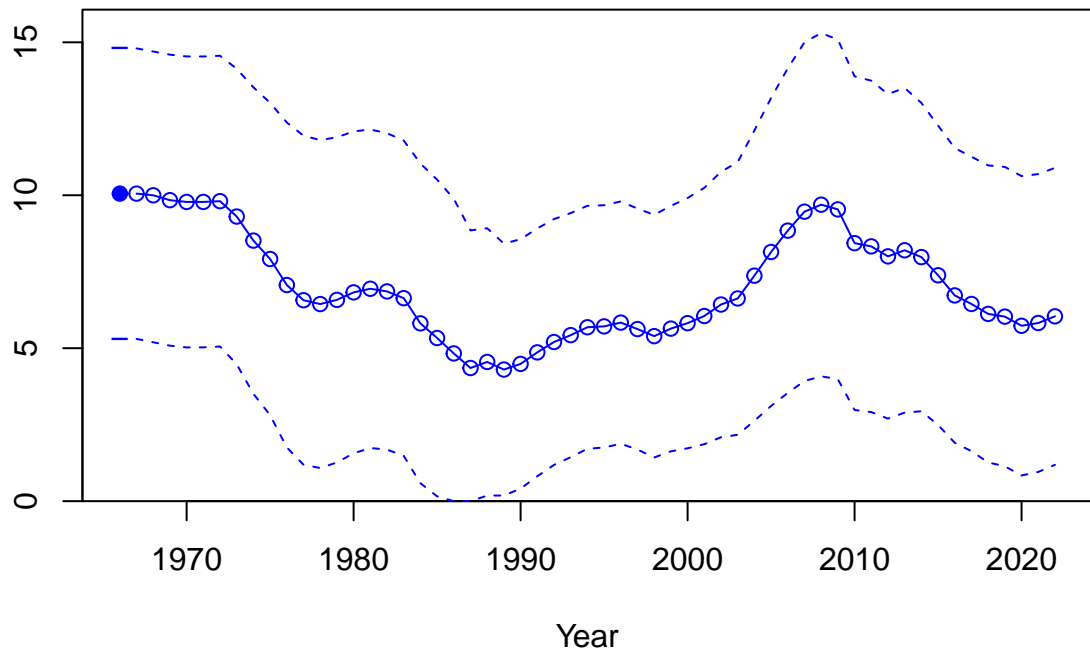




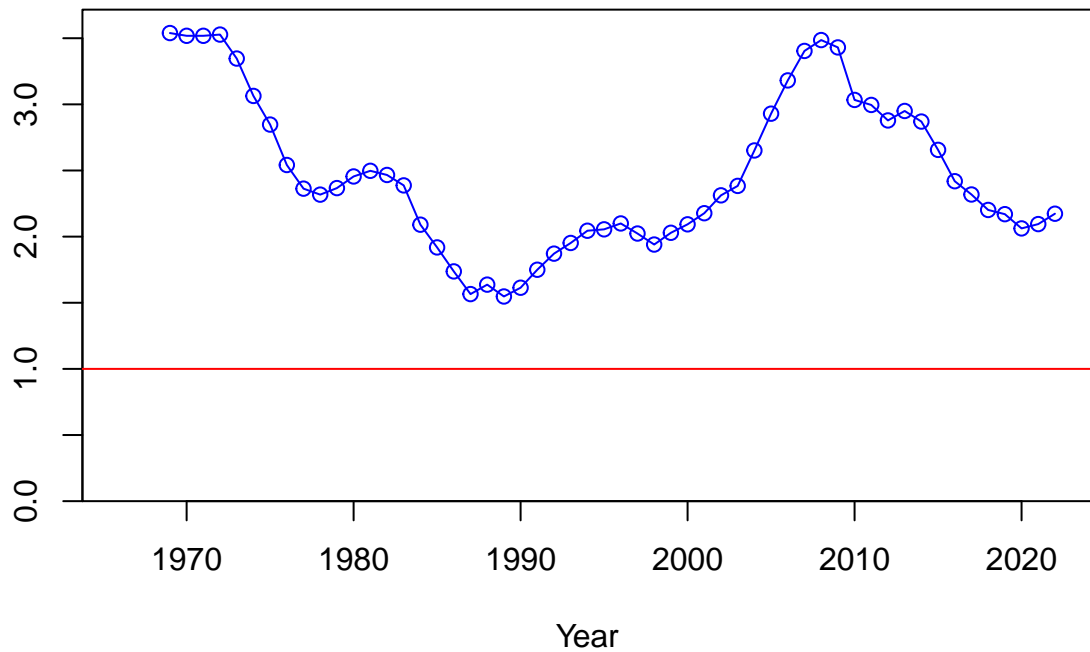
Spawning biomass (mt)



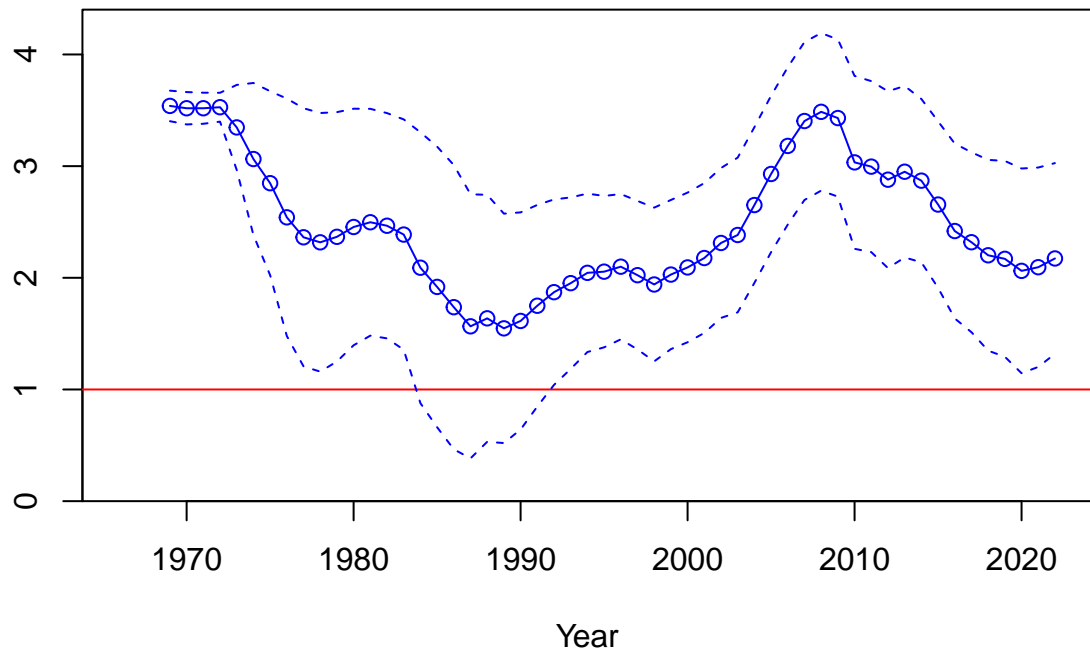
Spawning biomass (mt)

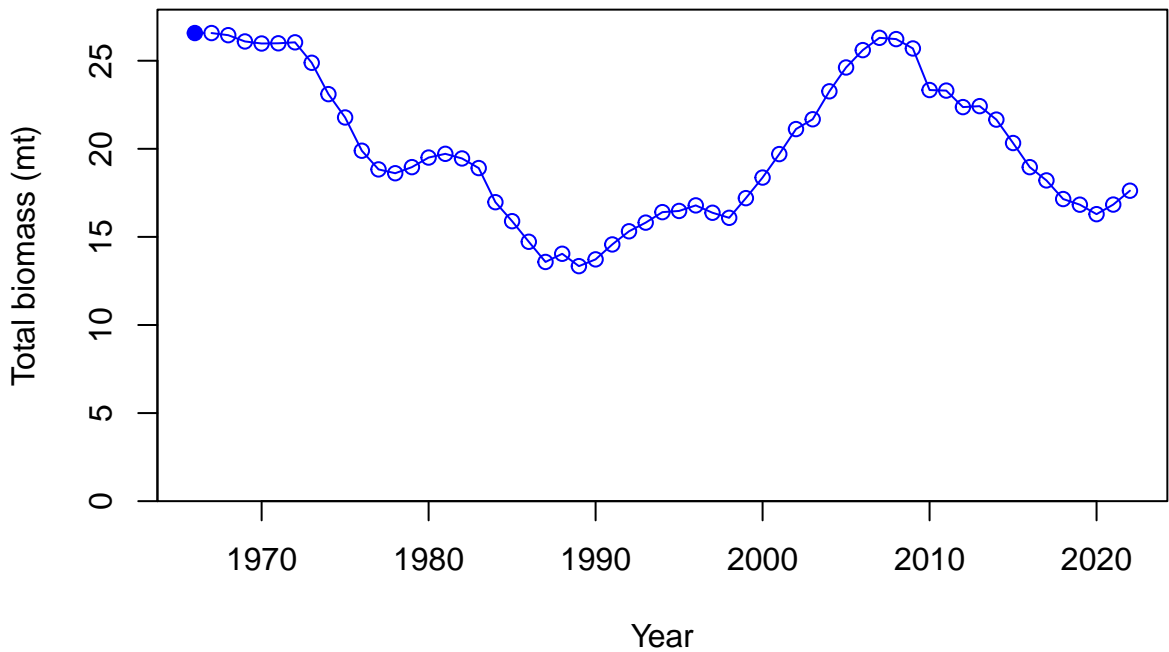


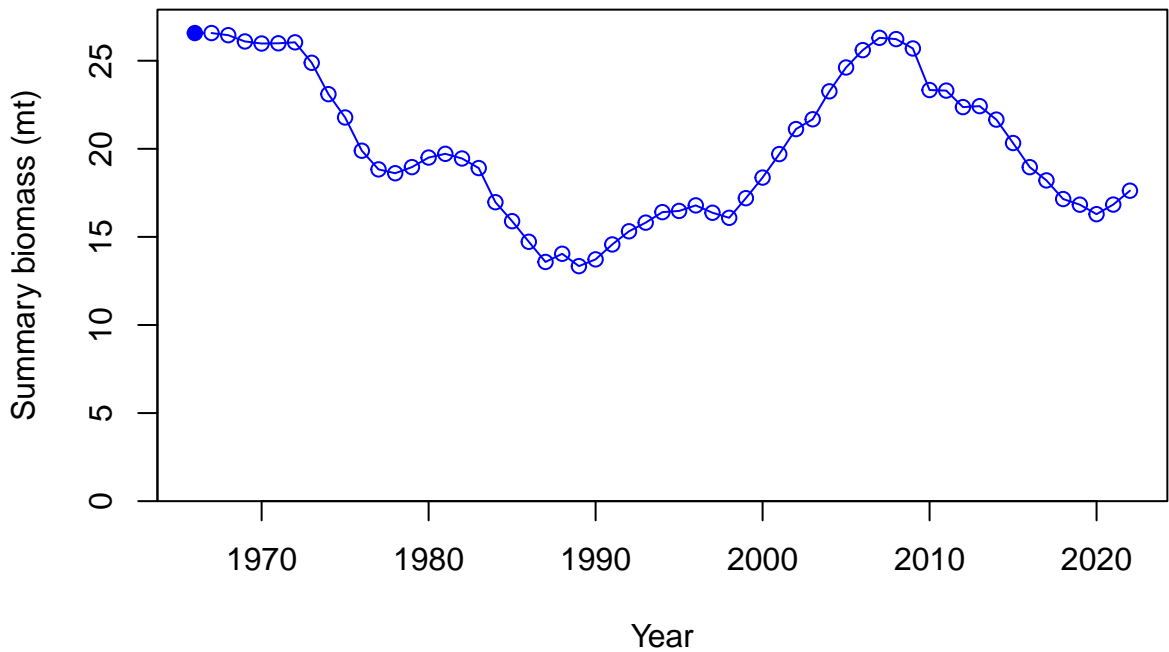
Relative spawning biomass: B/B_{MSY}



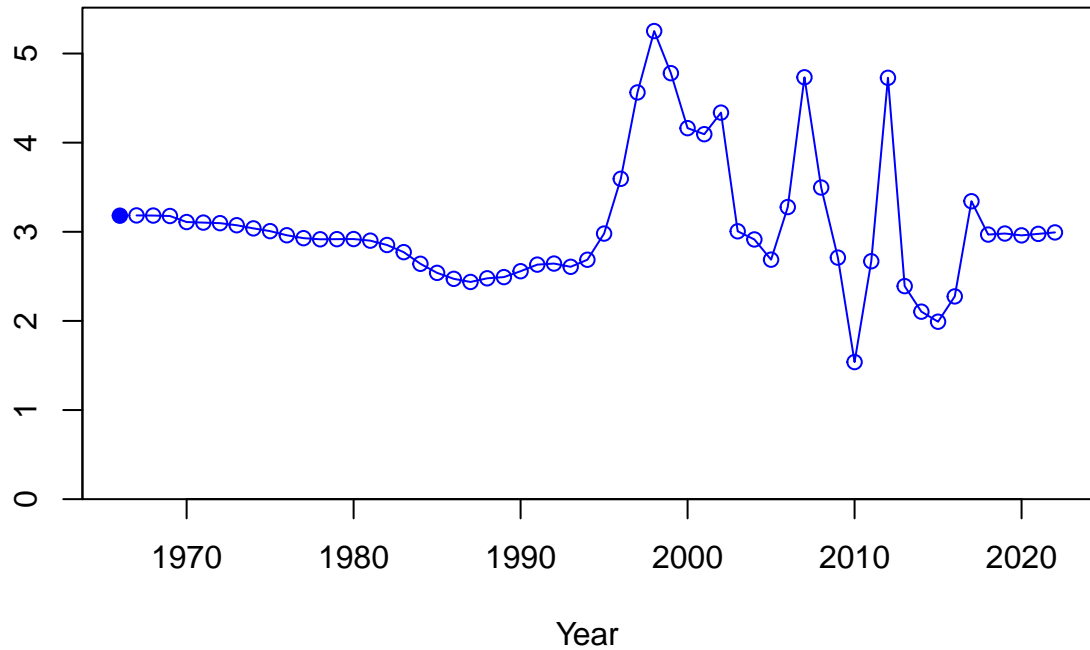
Relative spawning biomass: B/B_{MSY}



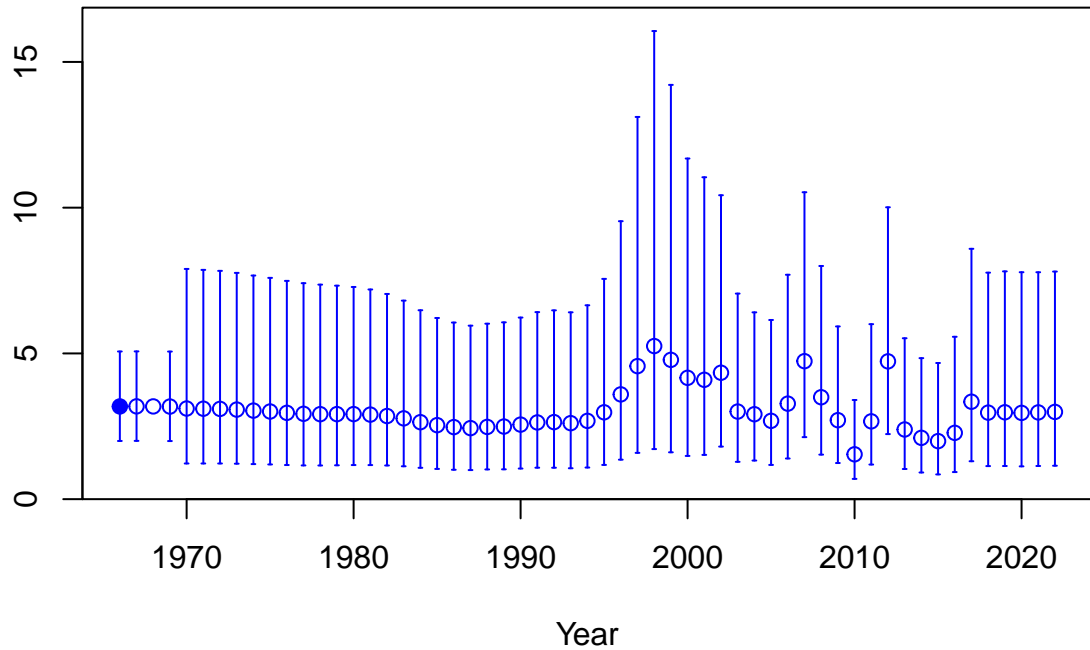




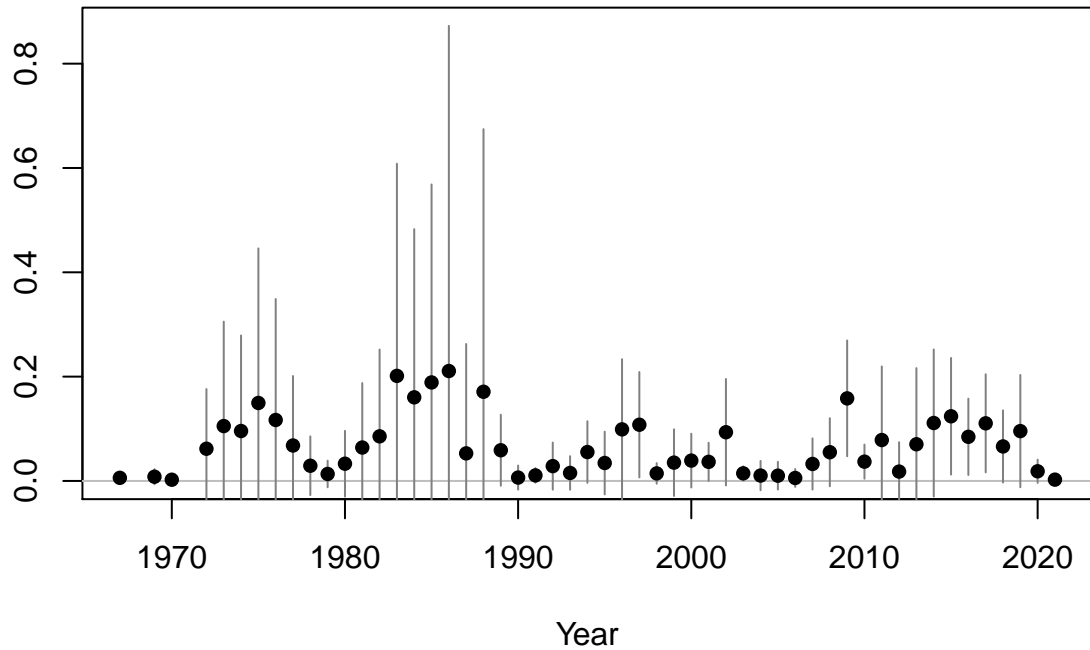
Age-0 recruits (1,000s)

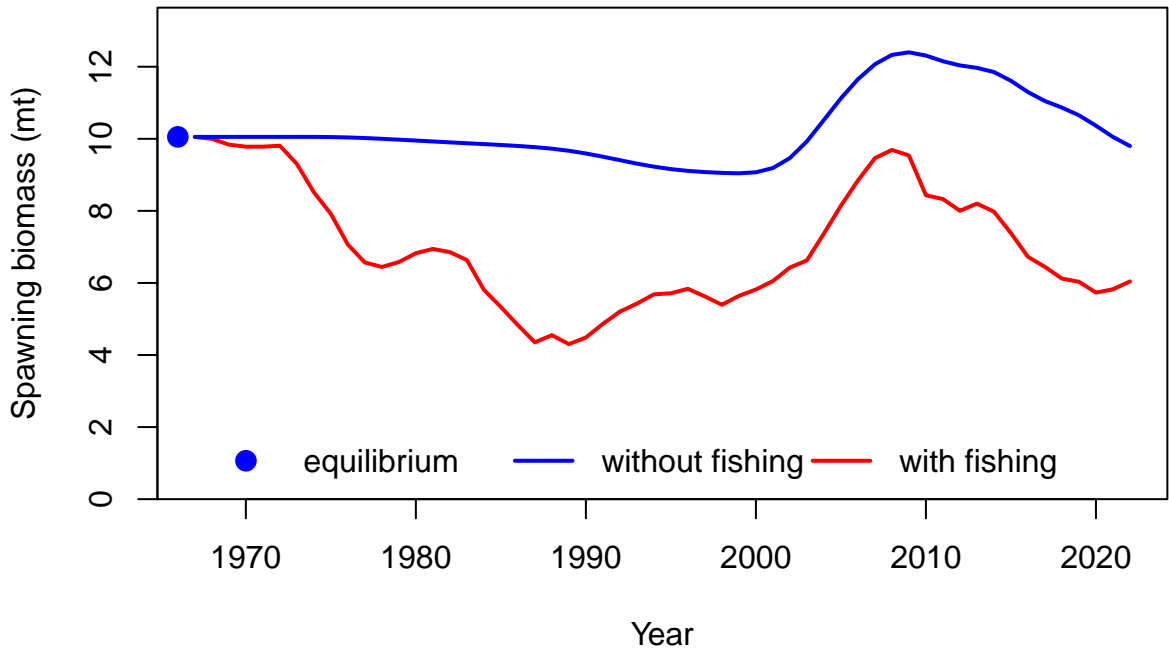


Age-0 recruits (1,000s)

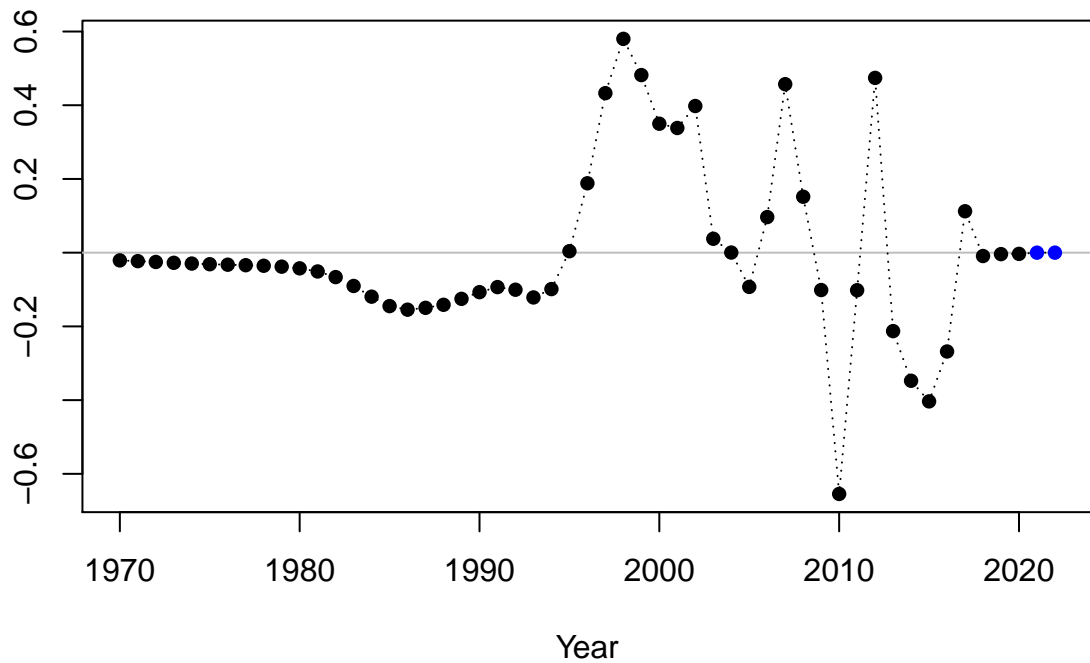


Summary Fishing Mortality





Log recruitment deviation



Log recruitment deviation

-1.0 0.0 0.5 1.0 1.5

1970

1980

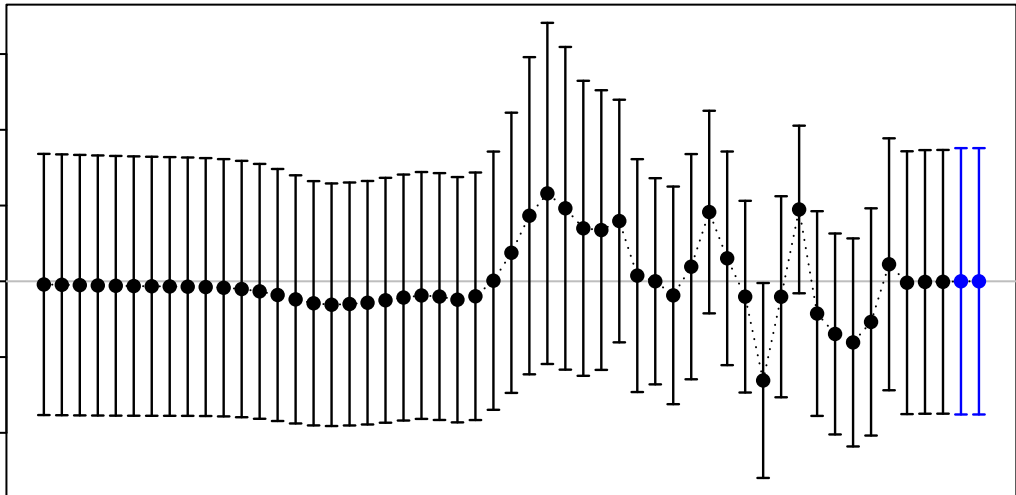
1990

2000

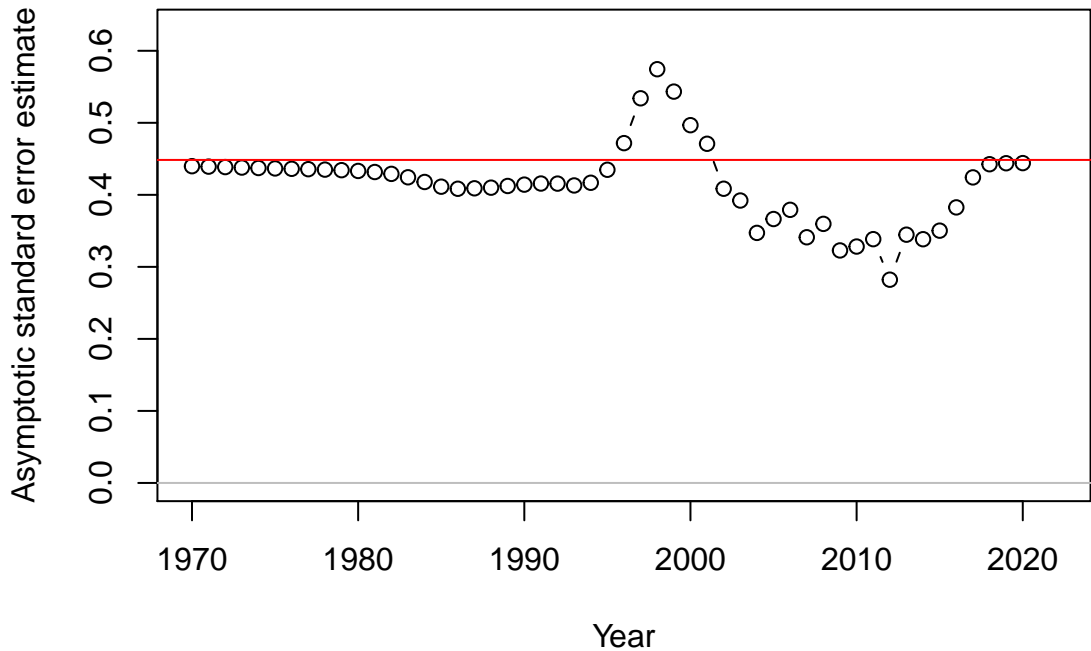
2010

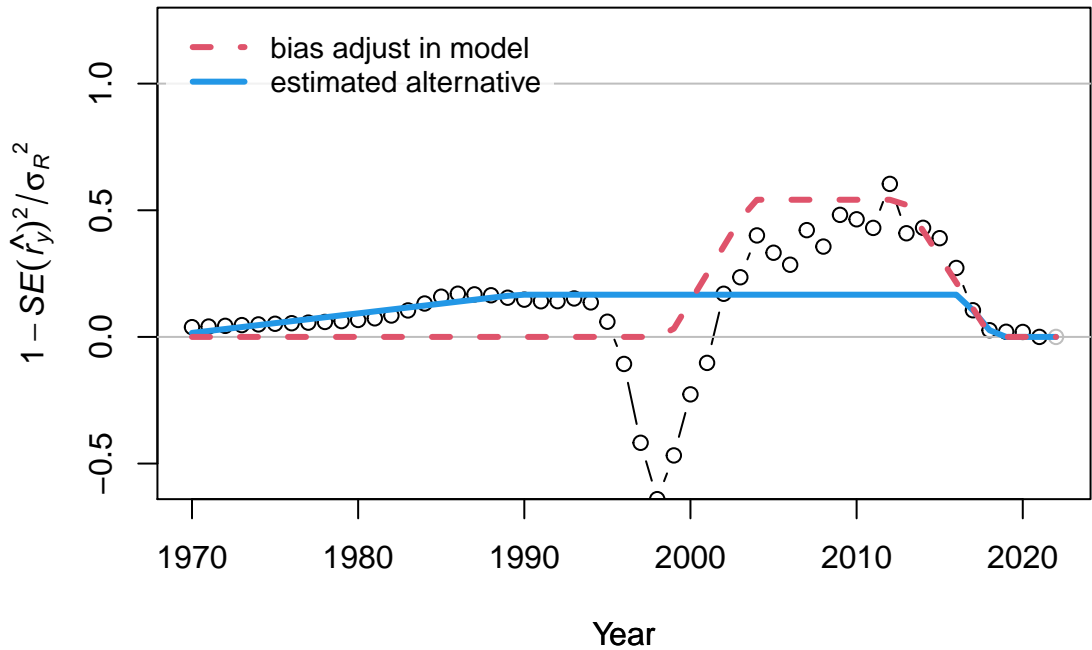
2020

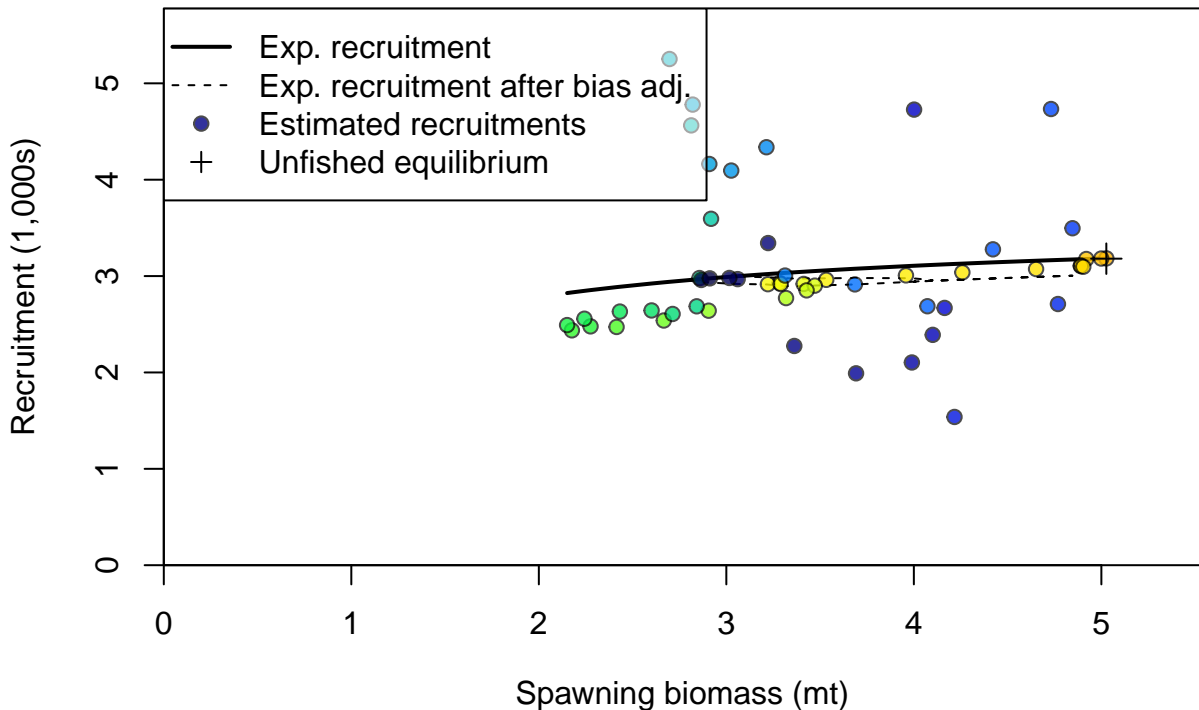
Year

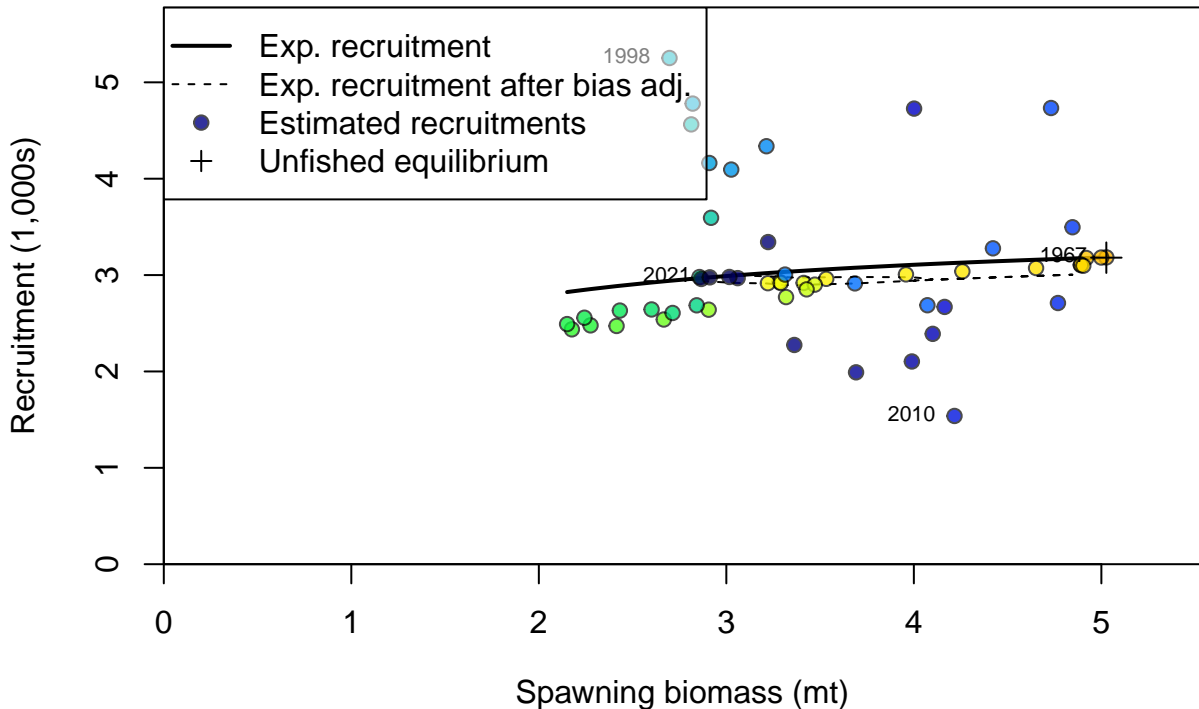


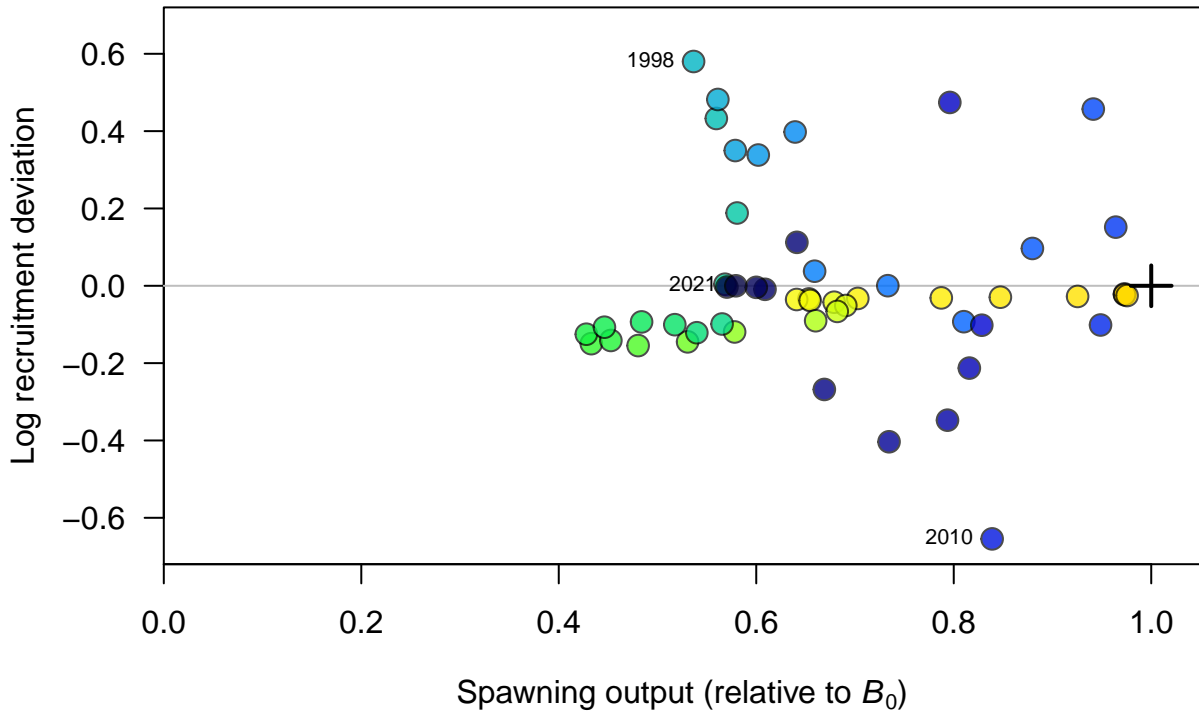
Recruitment deviation variance

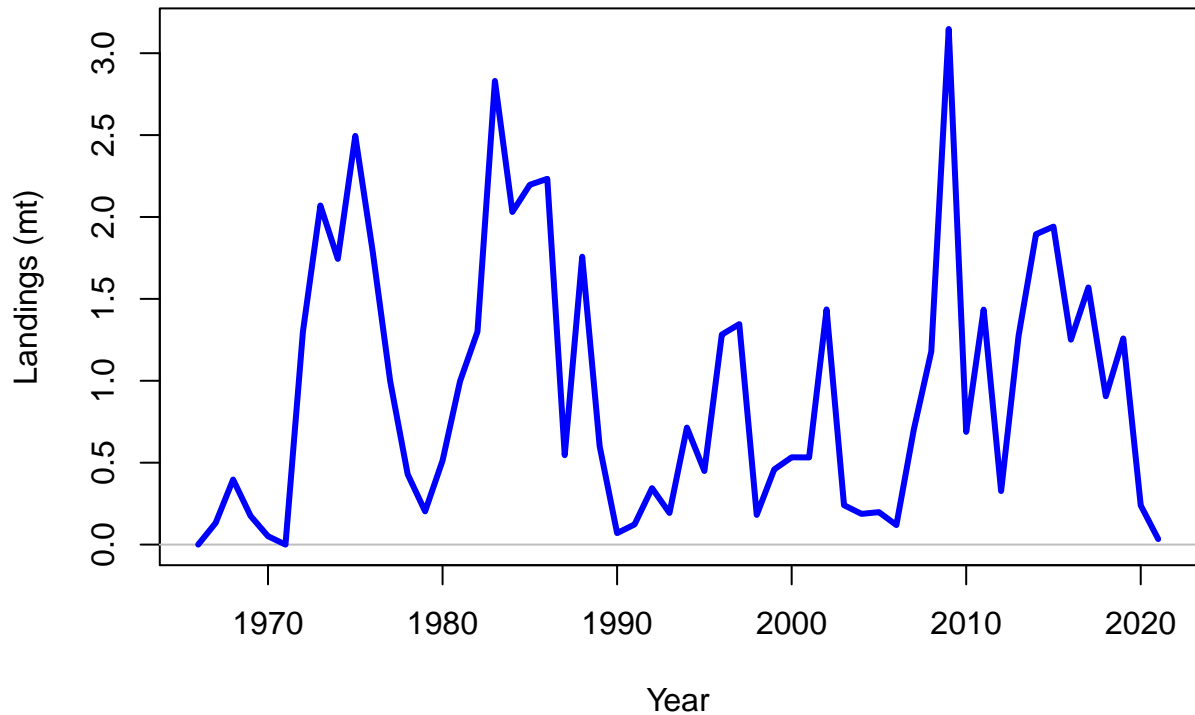


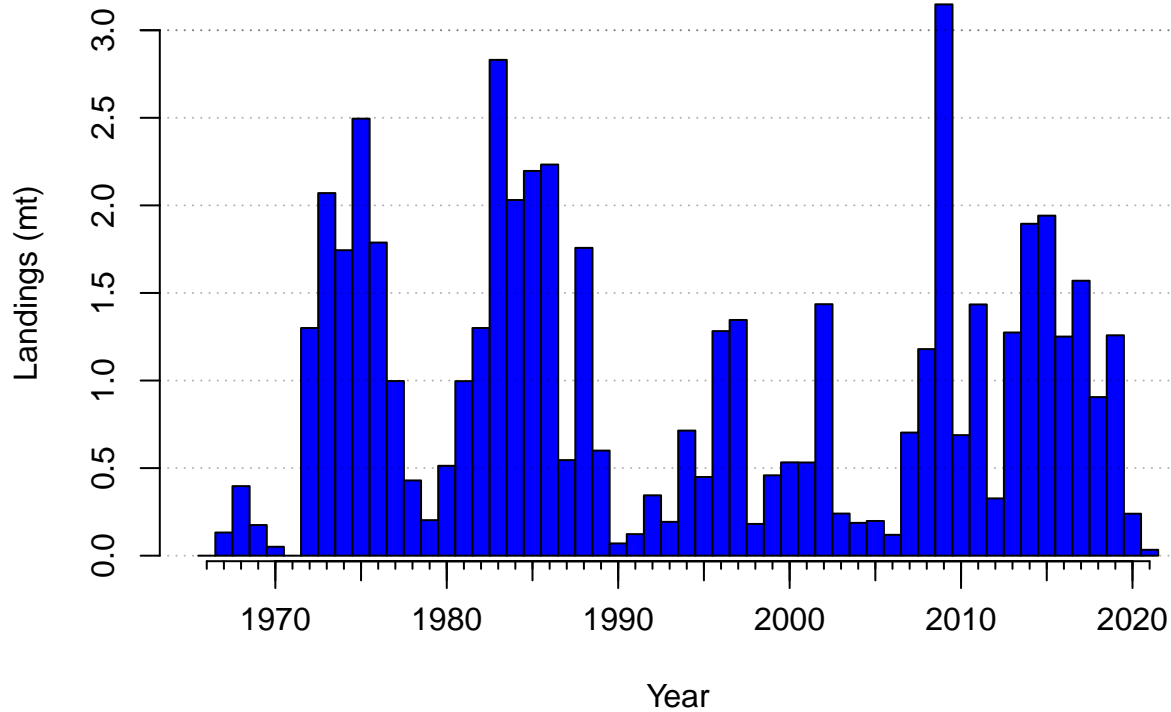


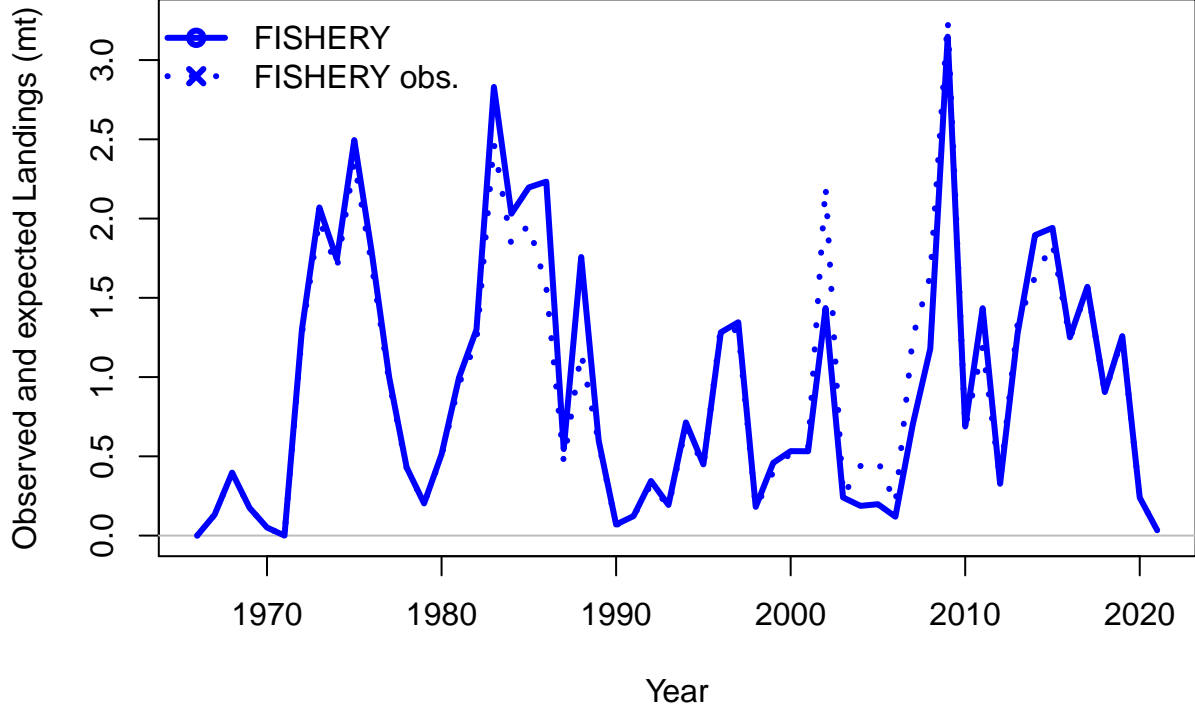


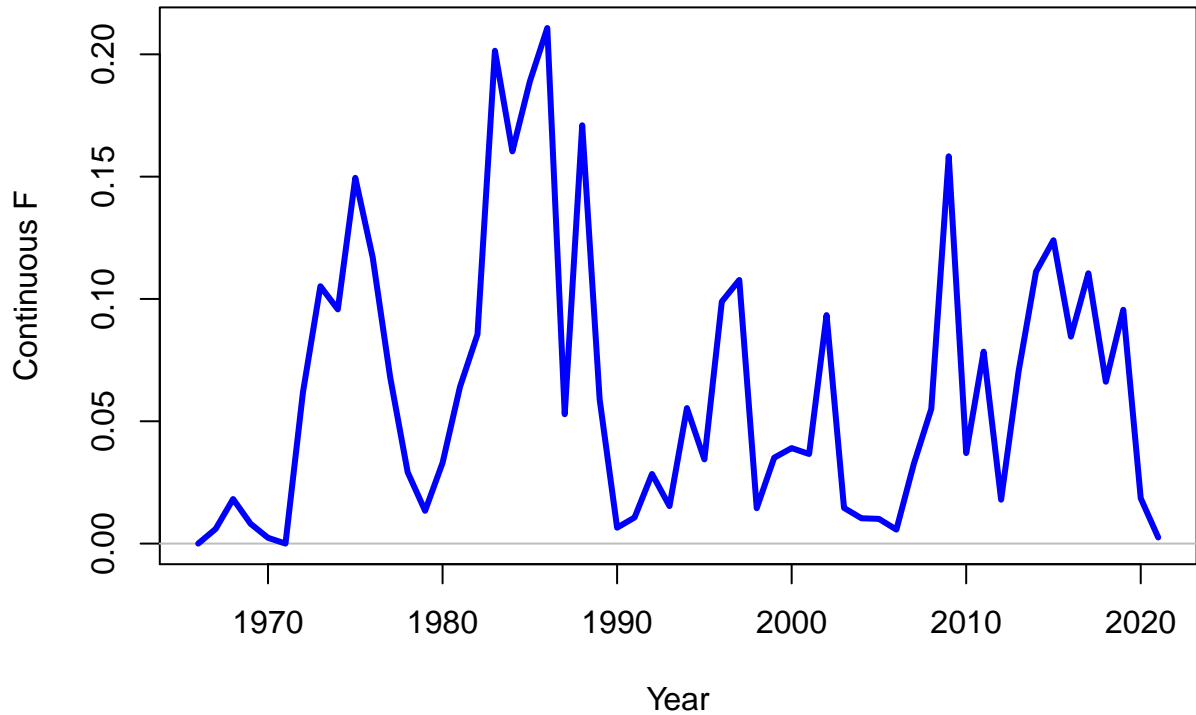




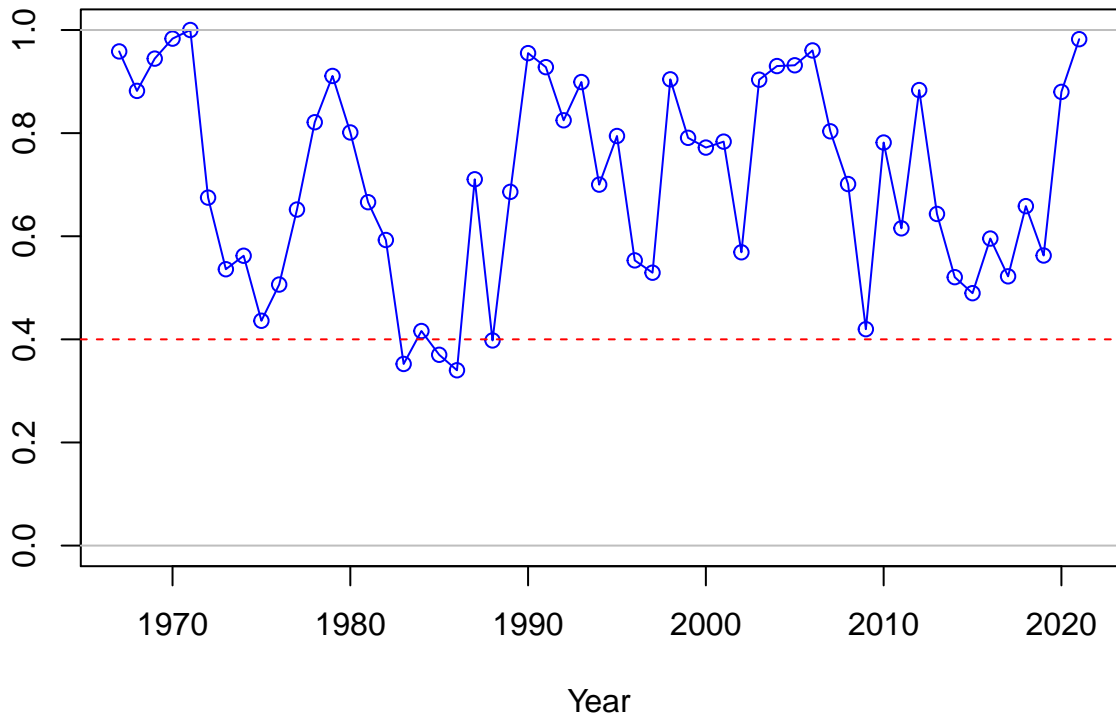


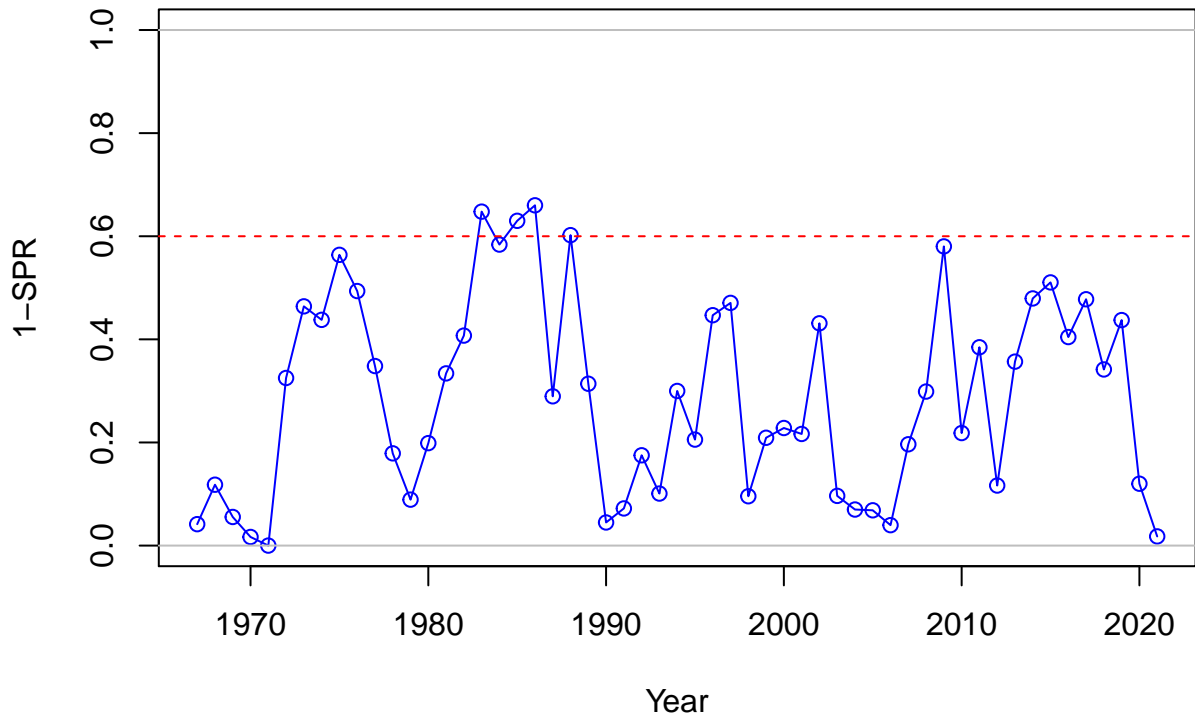




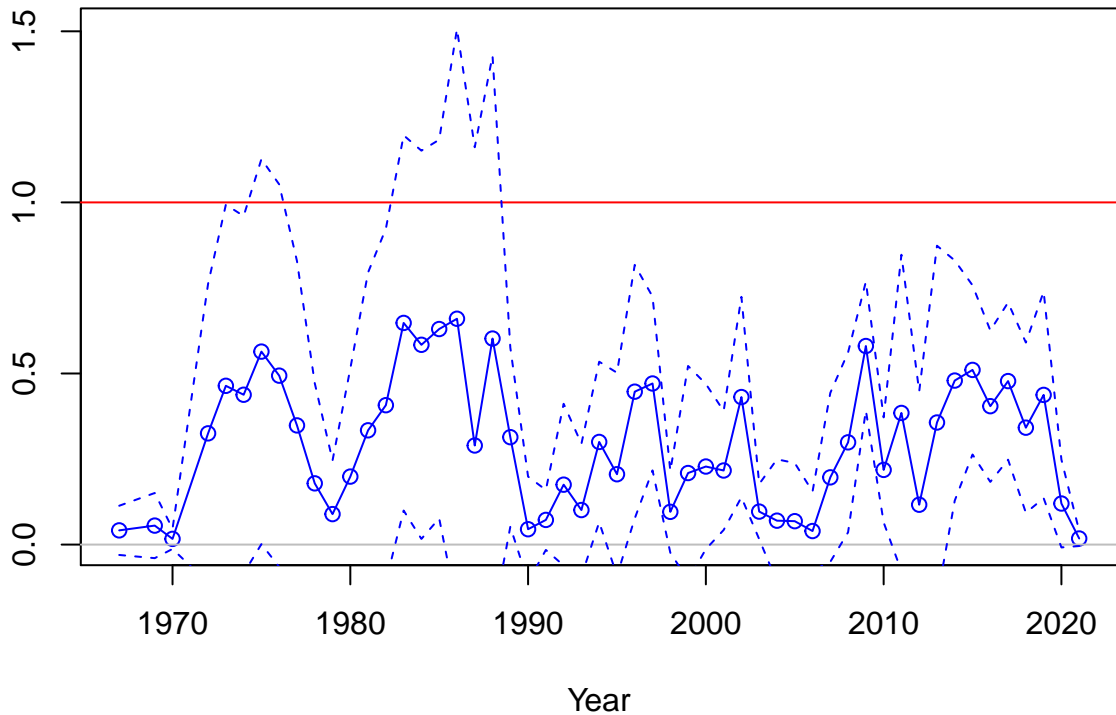


SPR

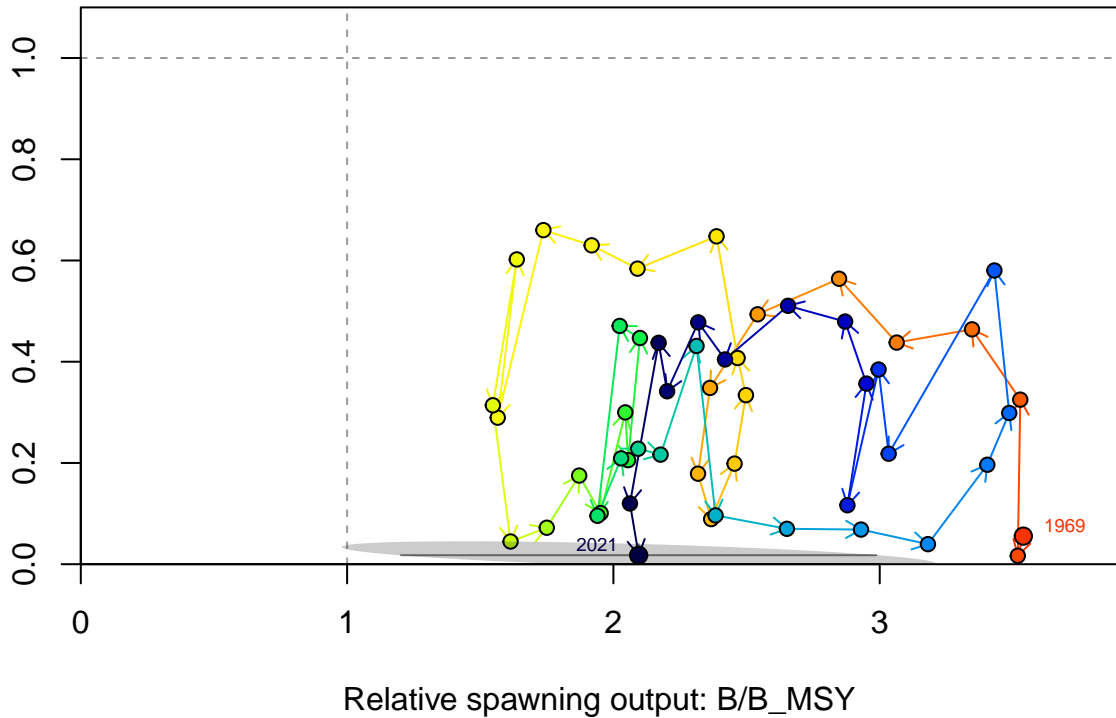




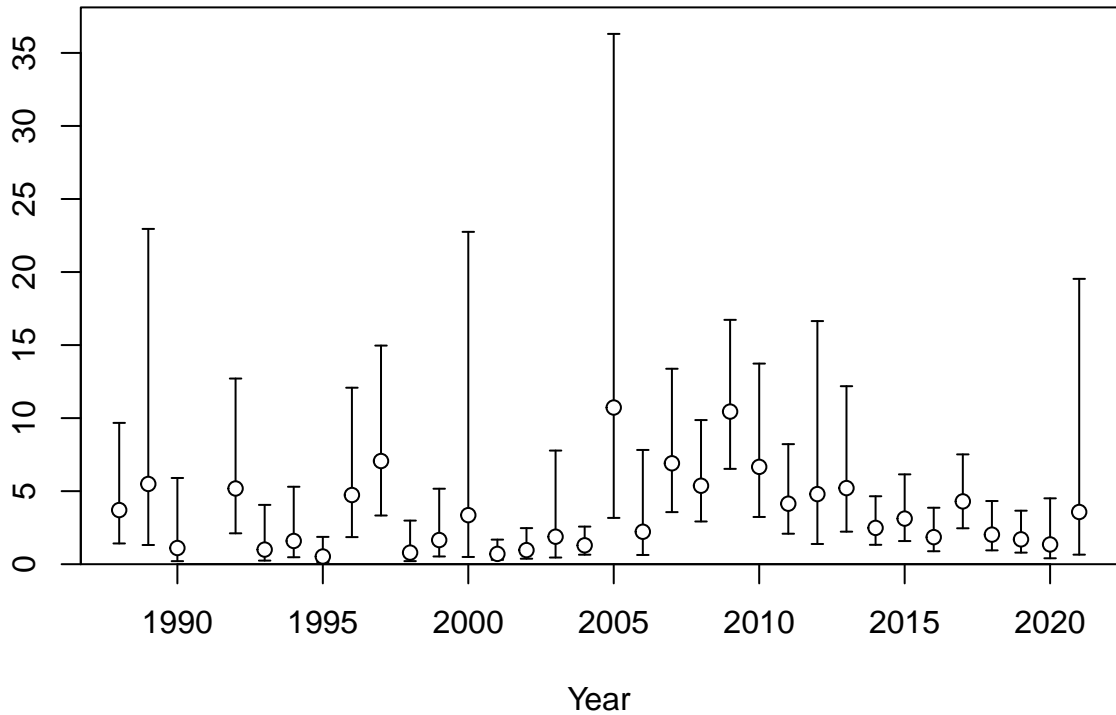
Fishing intensity: 1-SPR



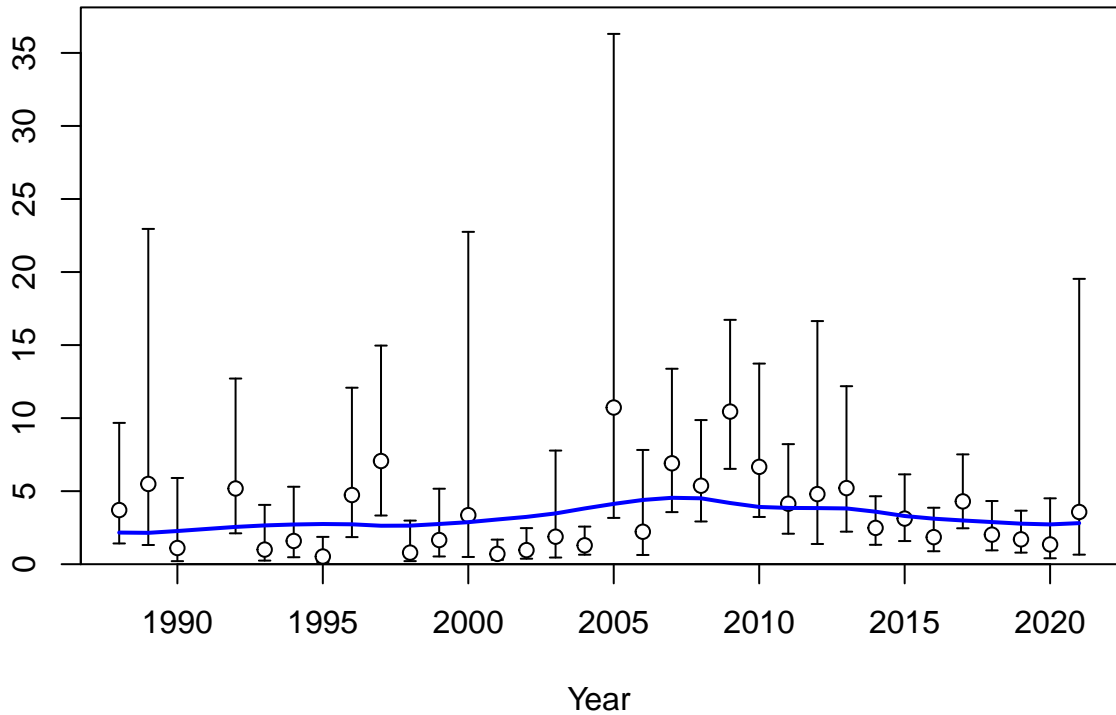
Fishing intensity: 1-SPR

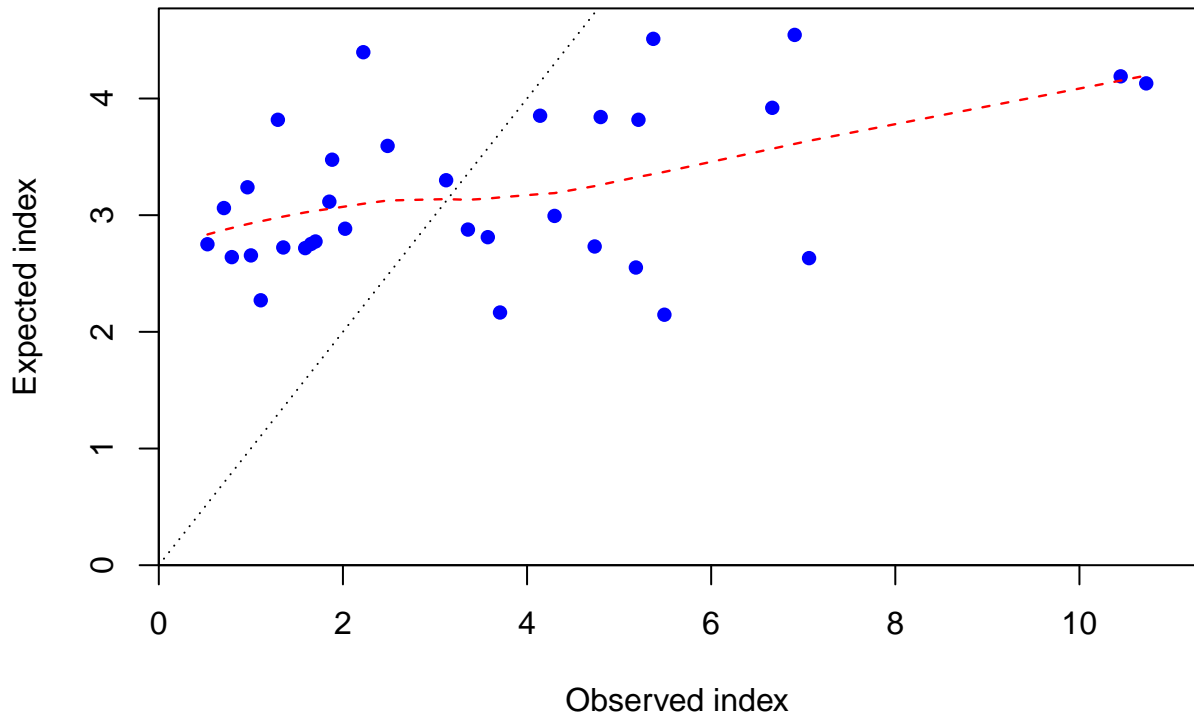


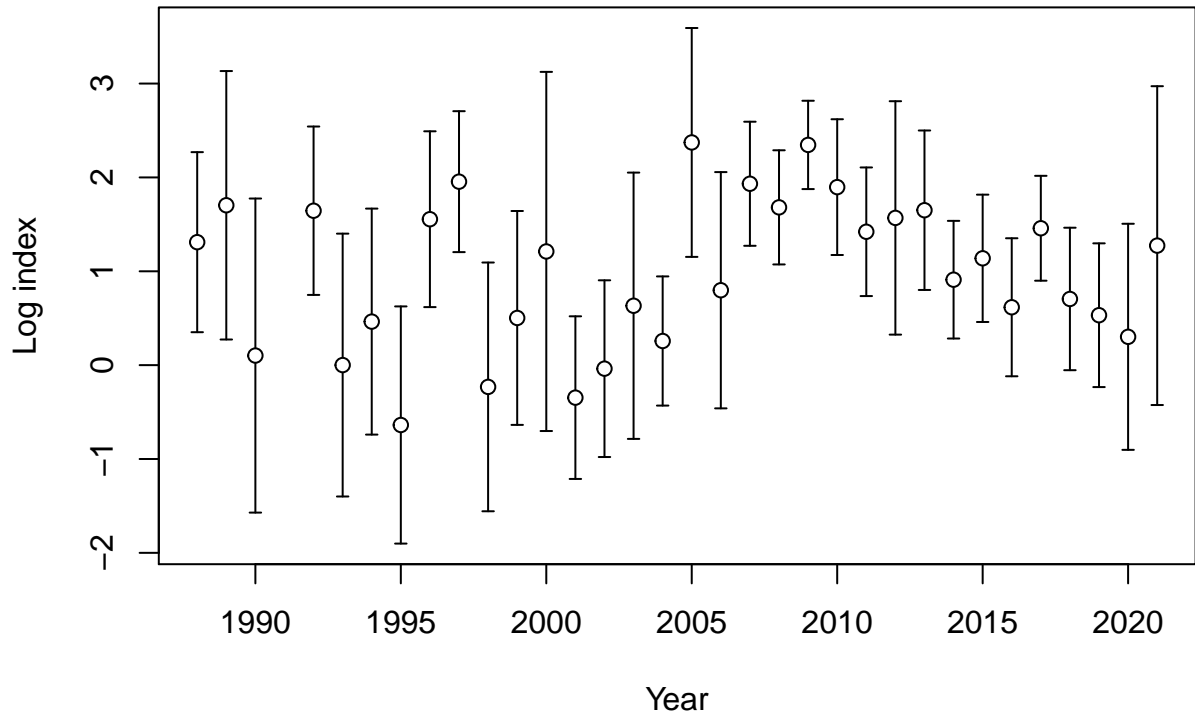
Index

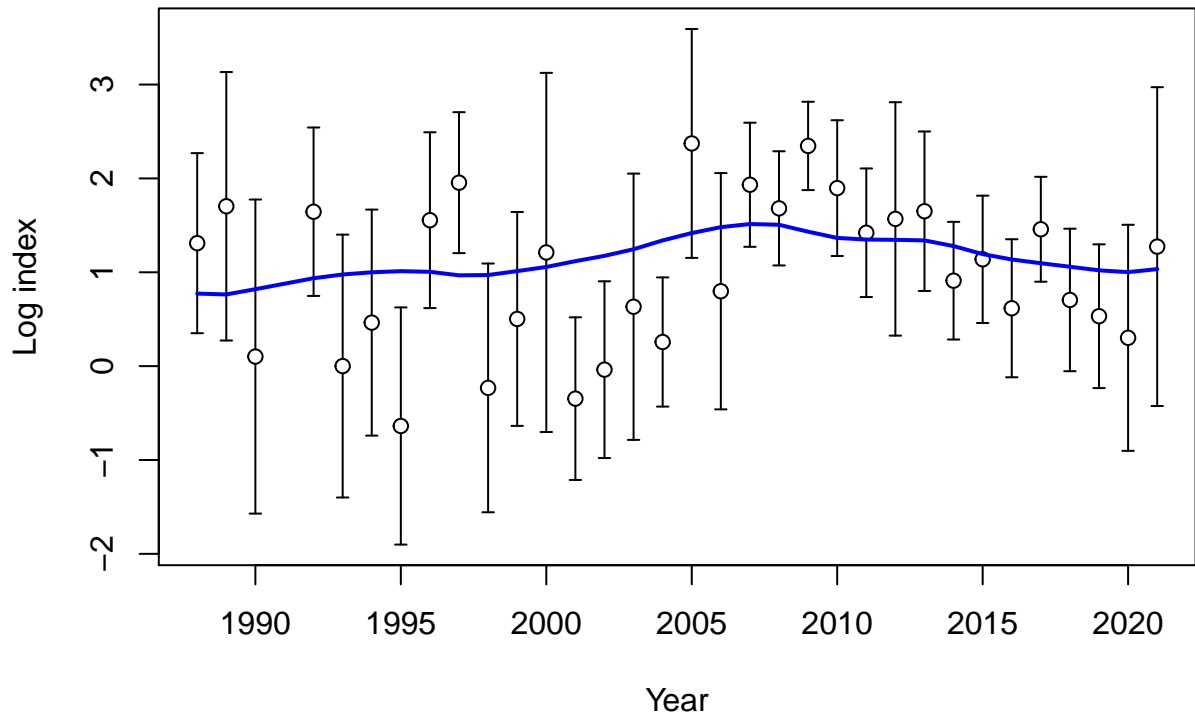


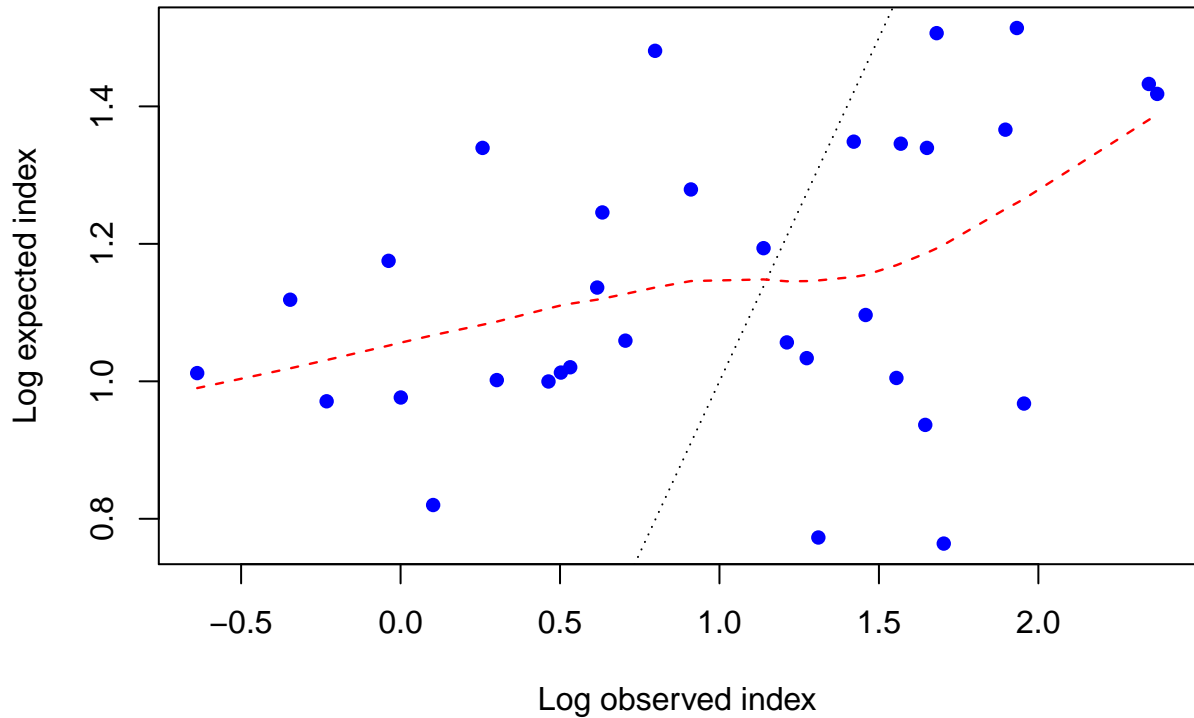
Index

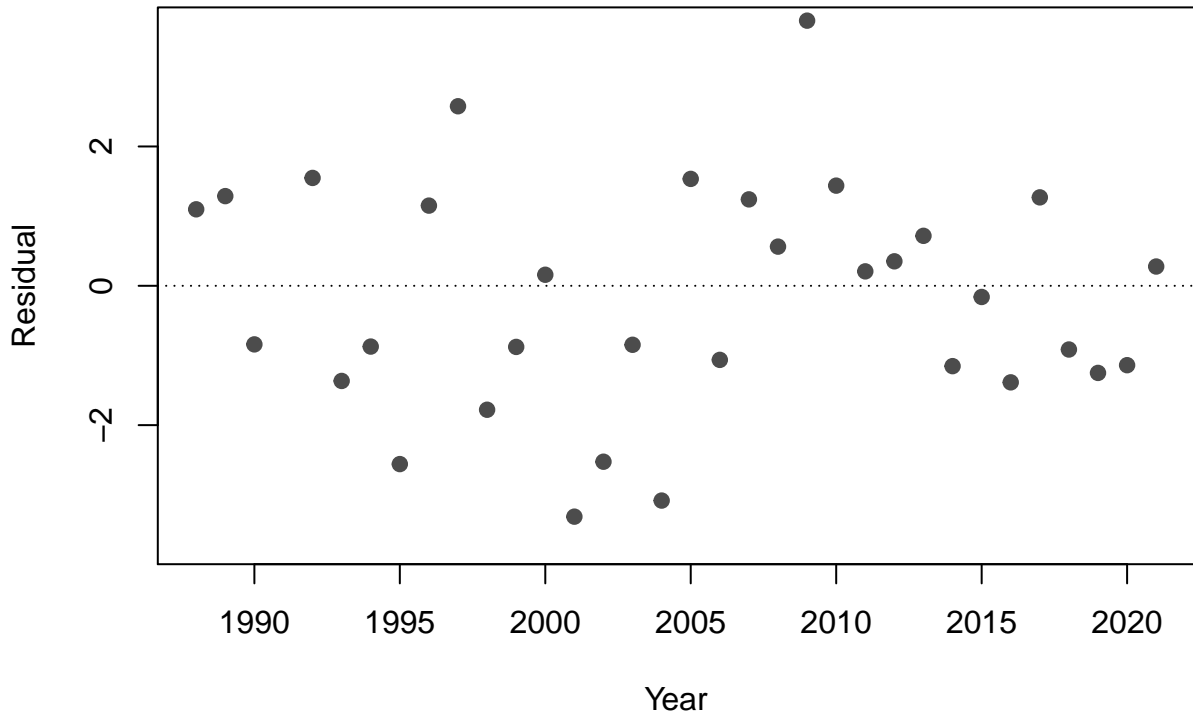


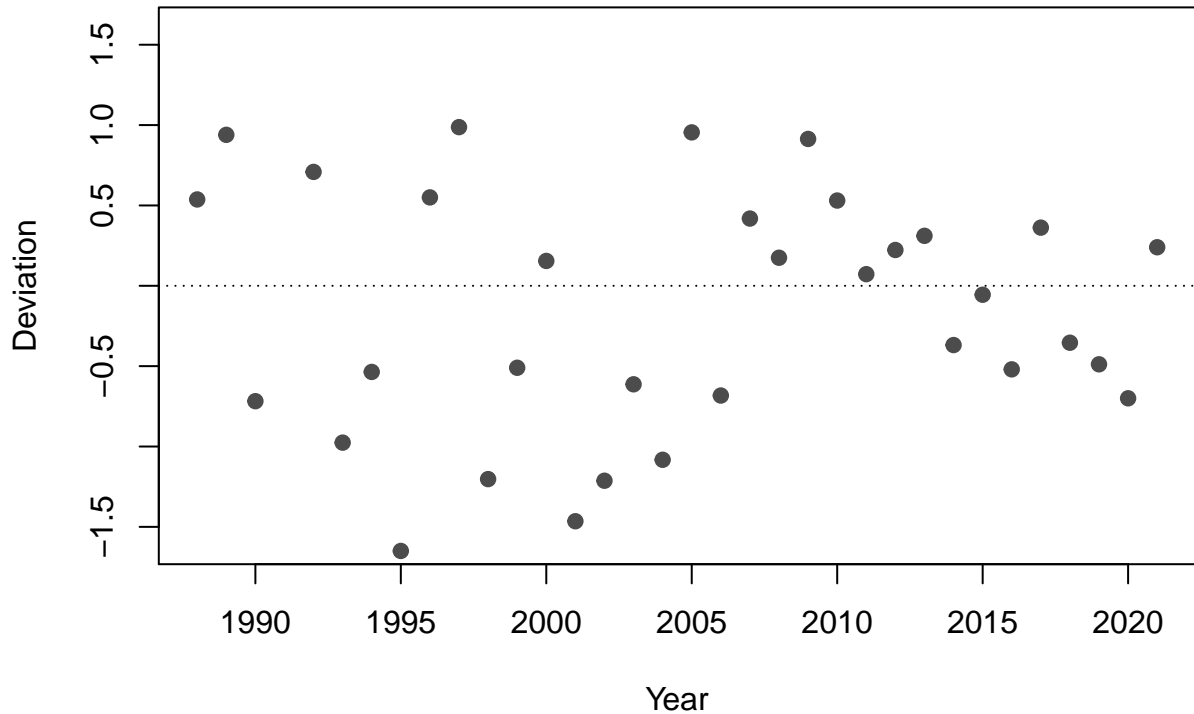


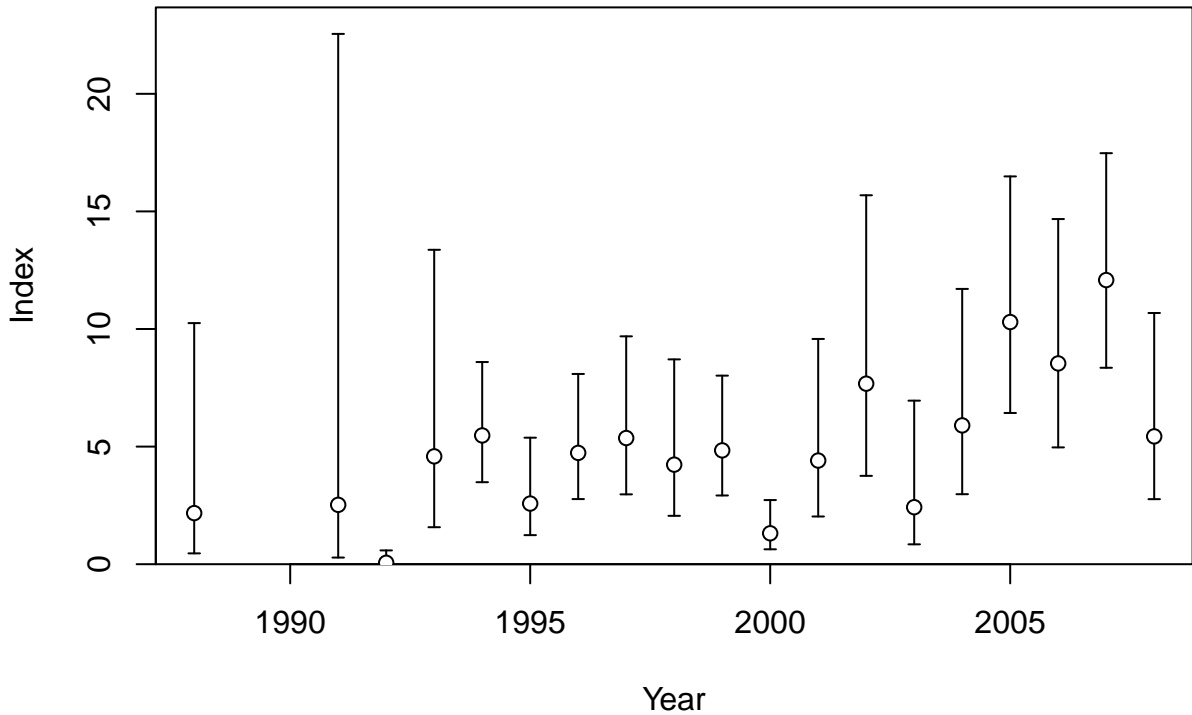


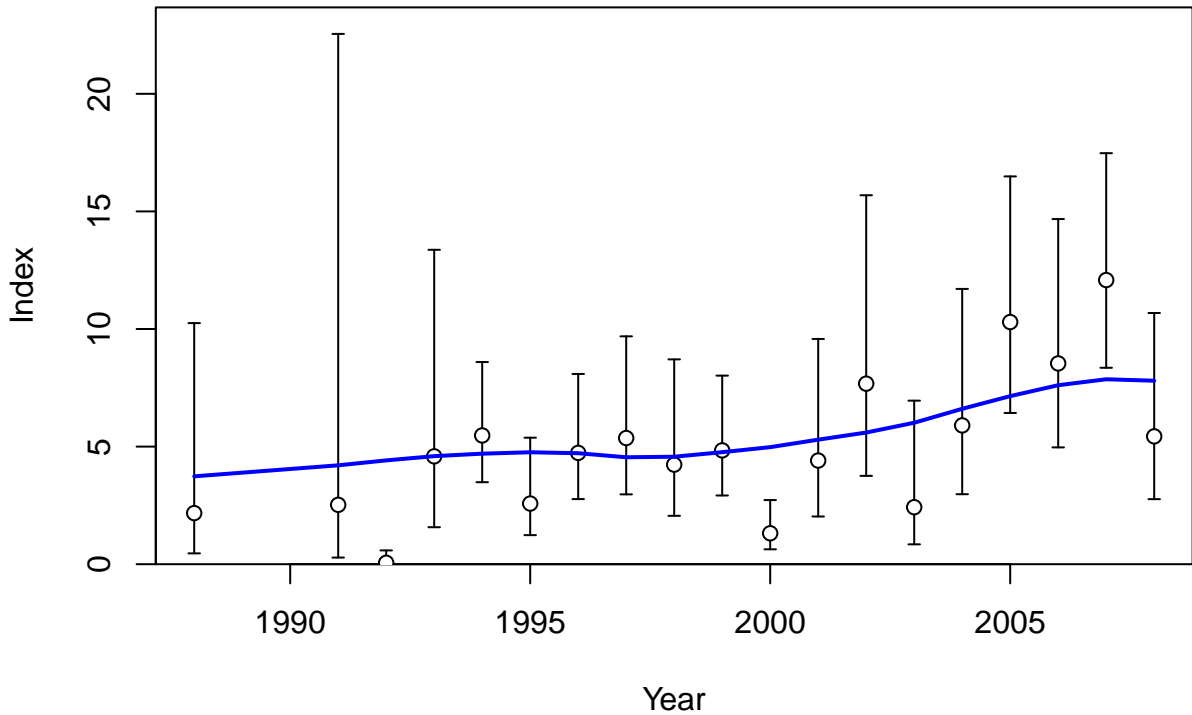


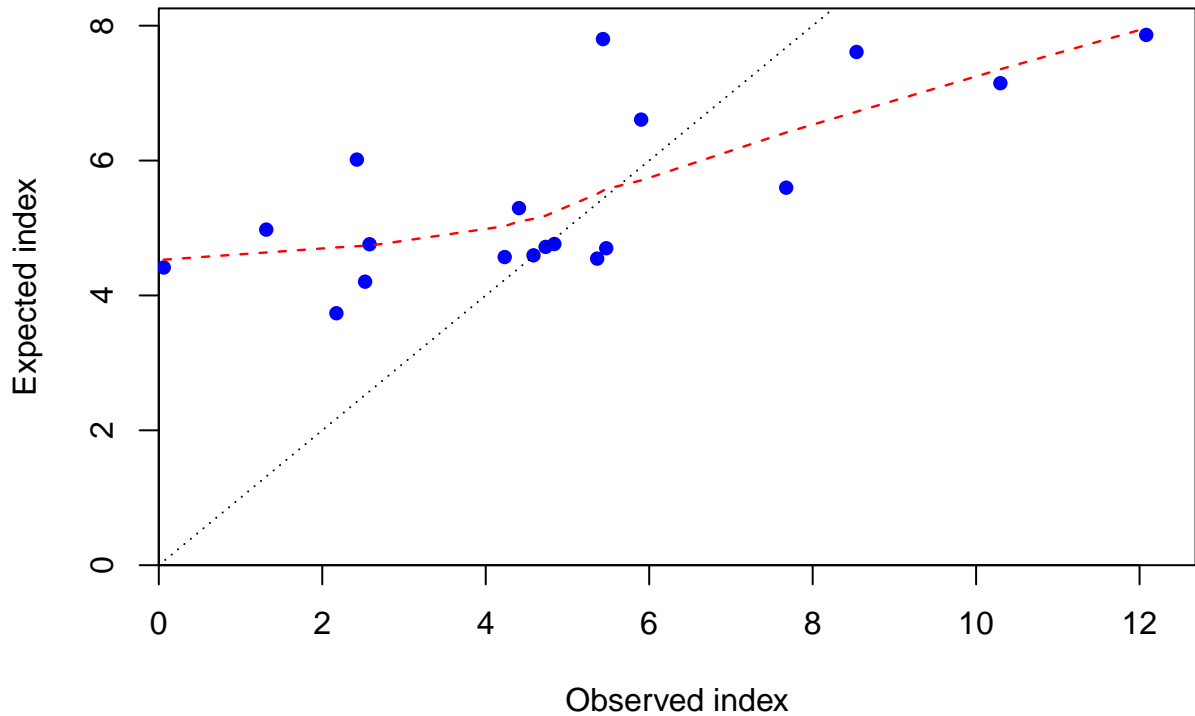


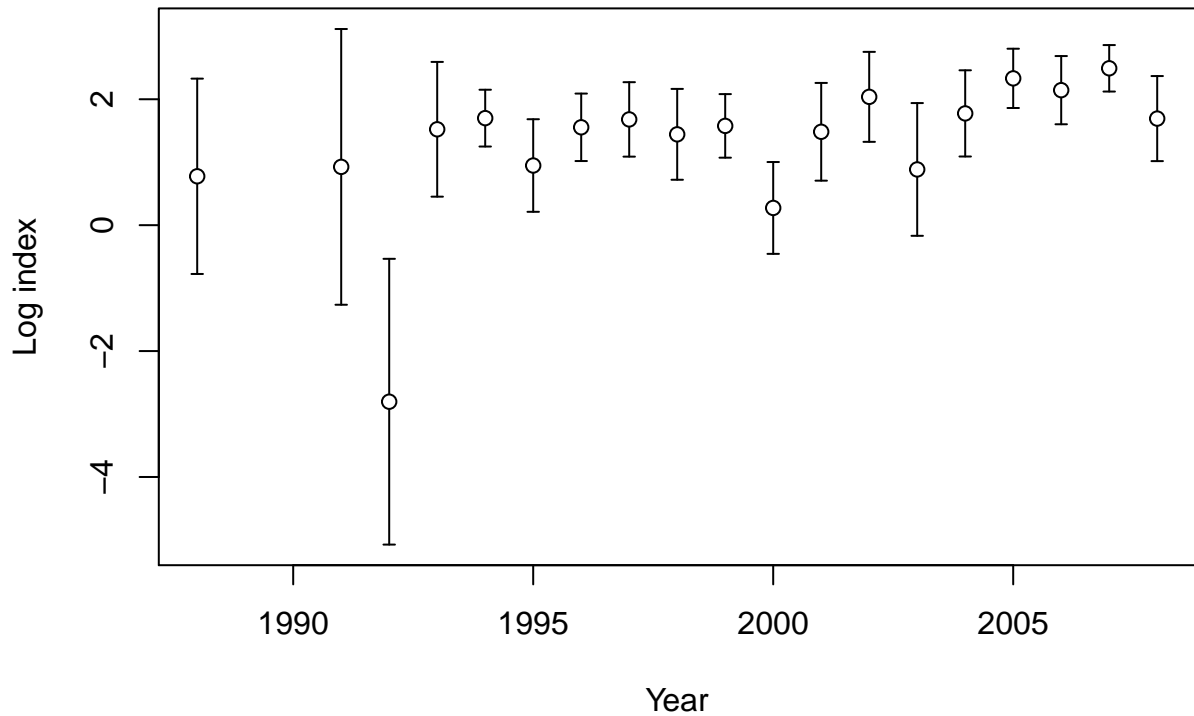


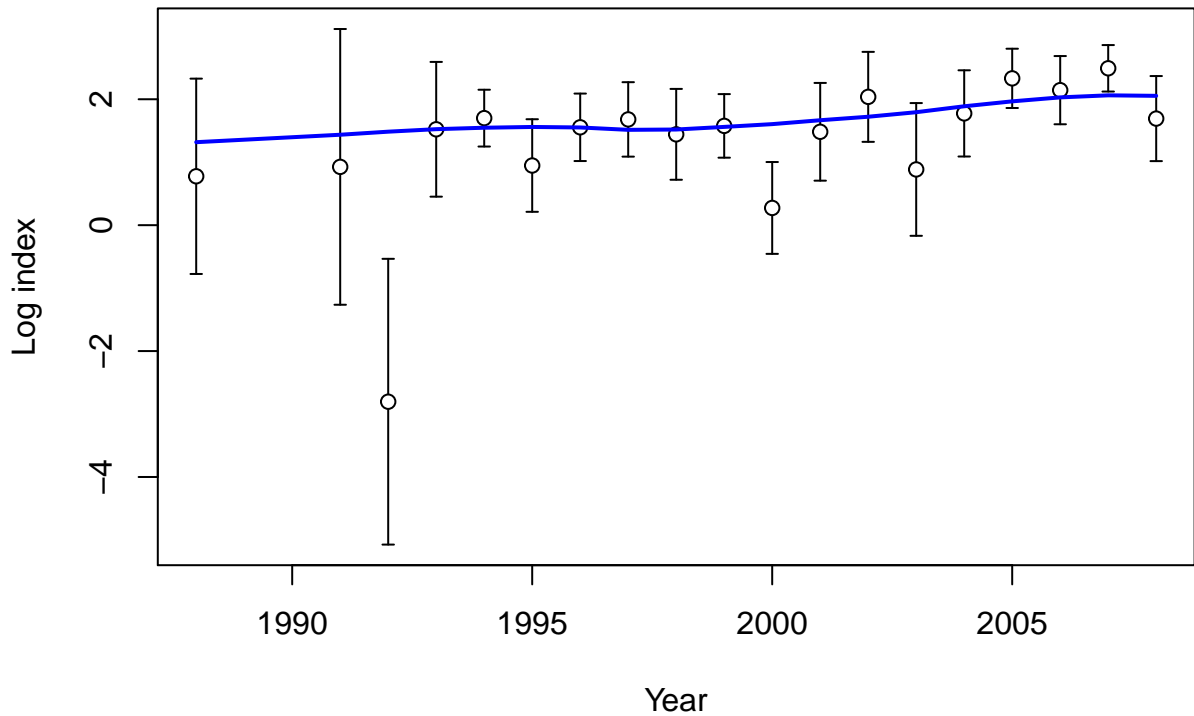


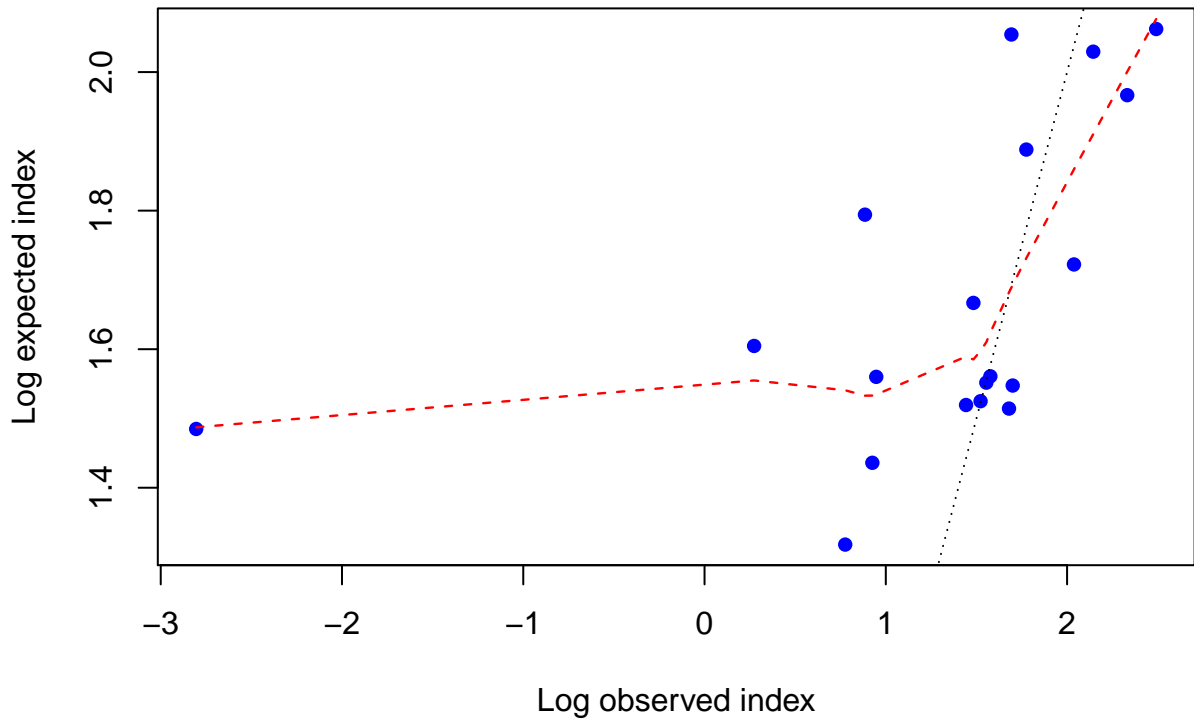


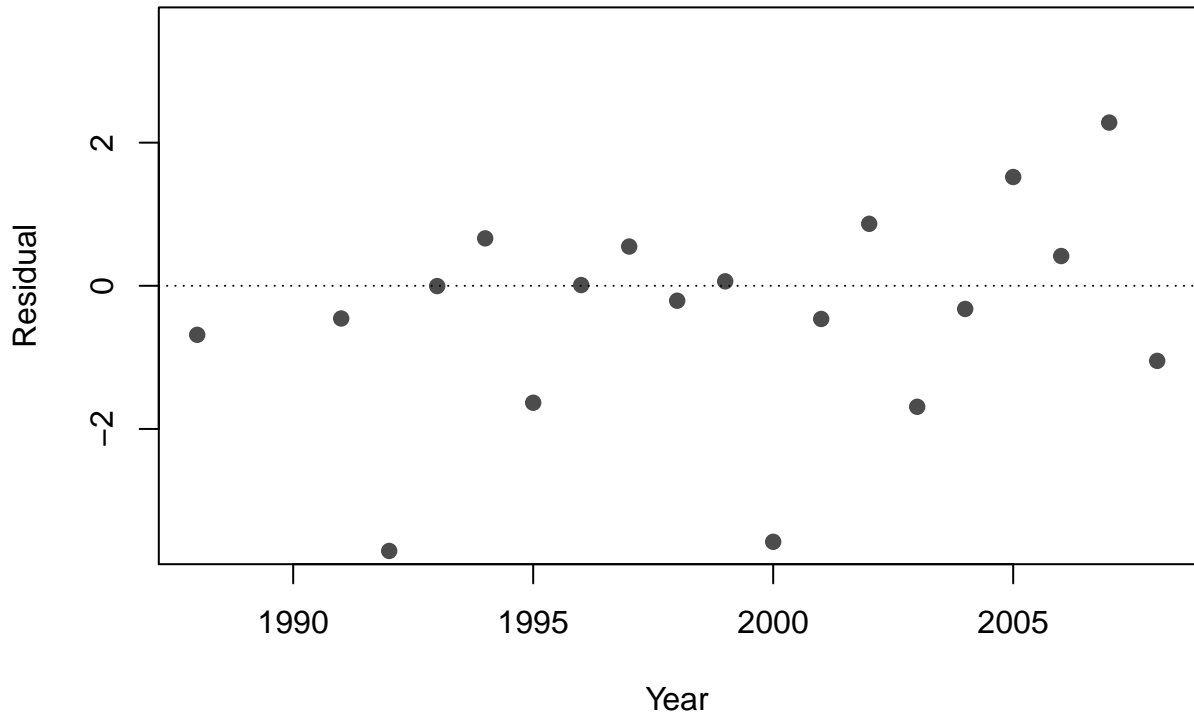


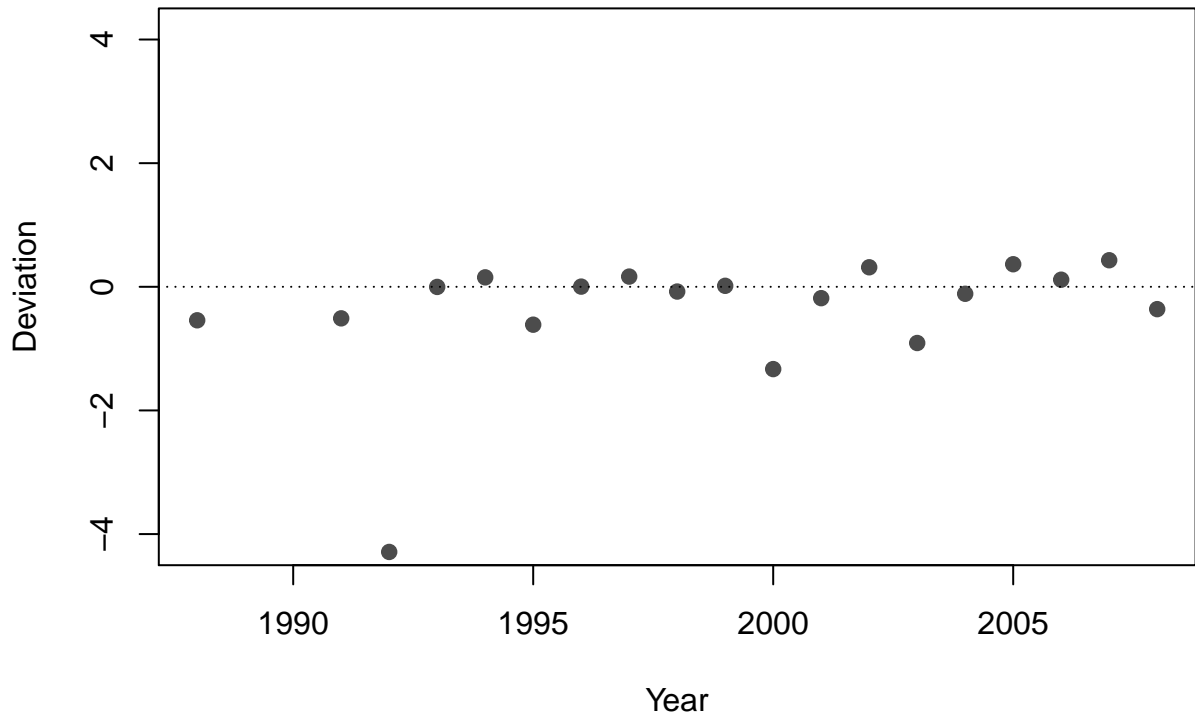




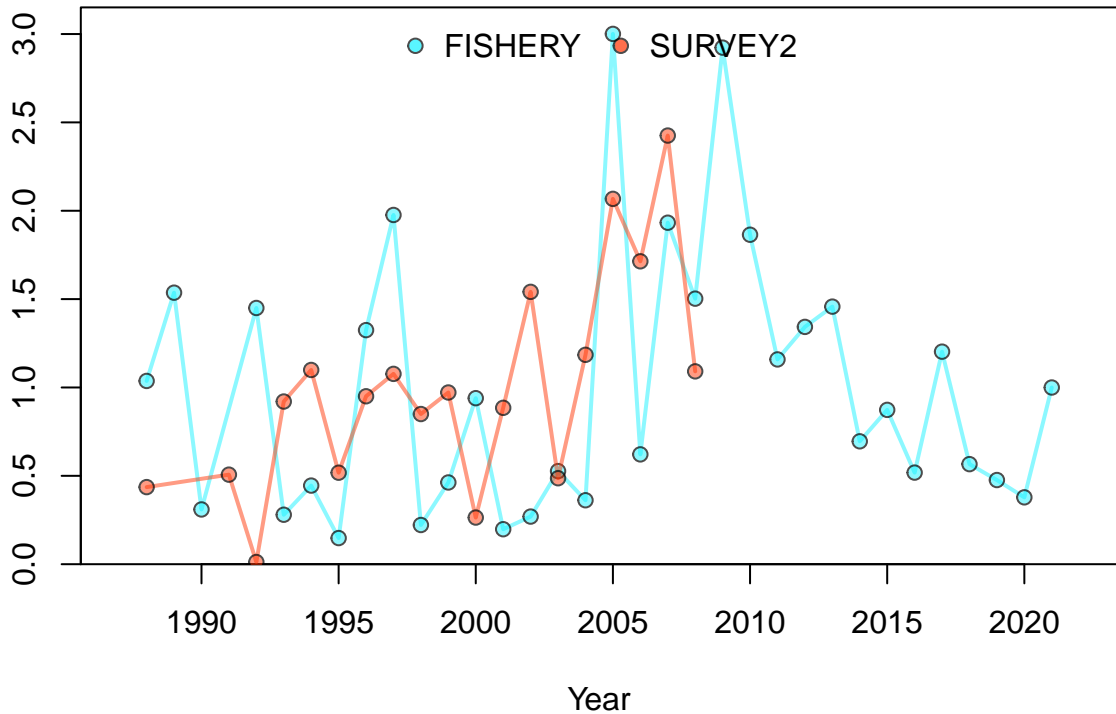


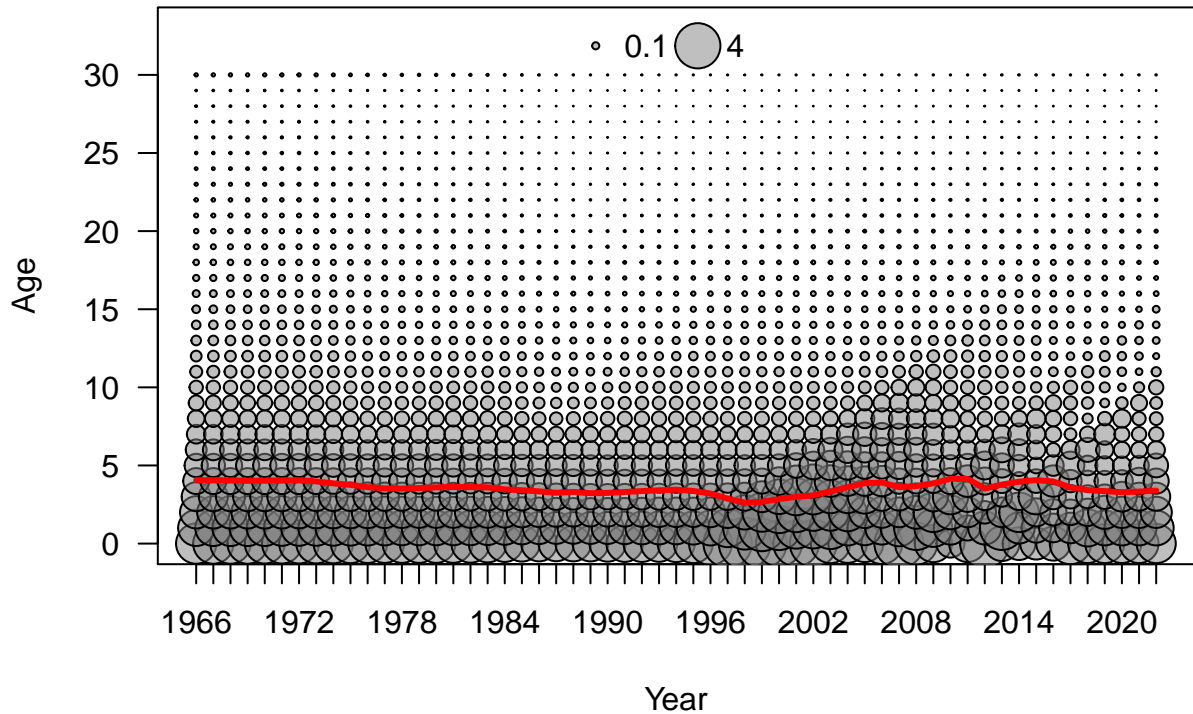


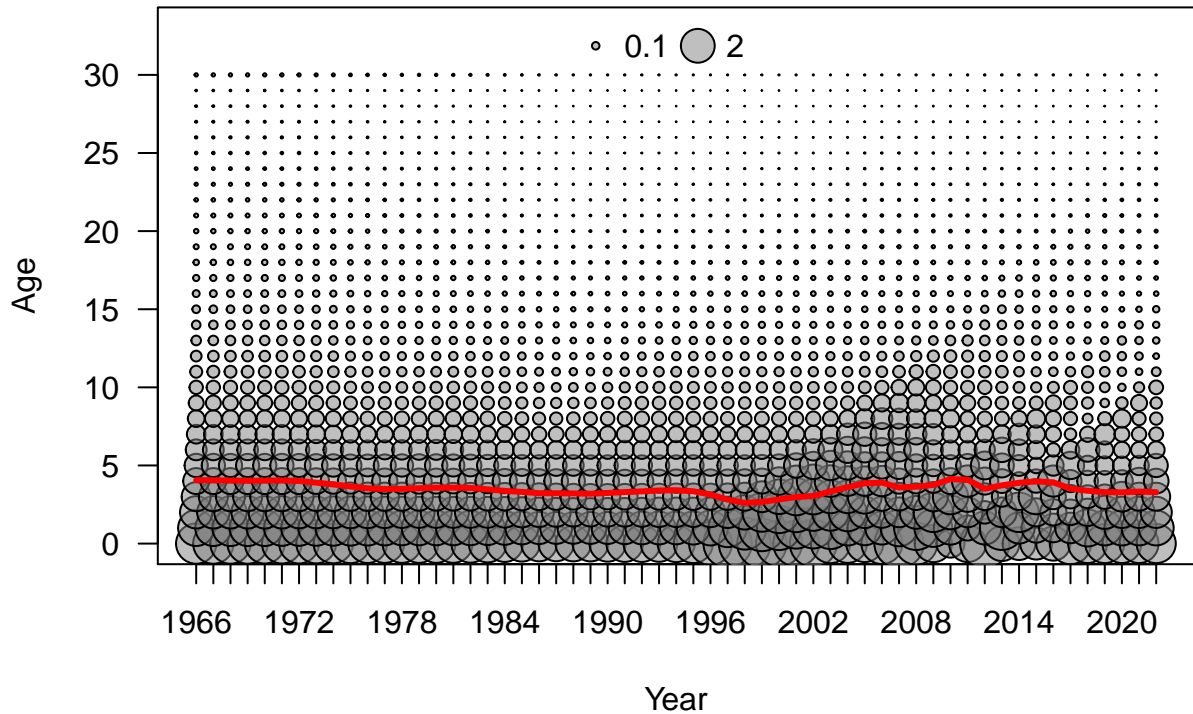




Standardized index







Length

120

100

80

60

40

20

0

◦ 0.1  4

1967

1973

1979

1985

1991

1997

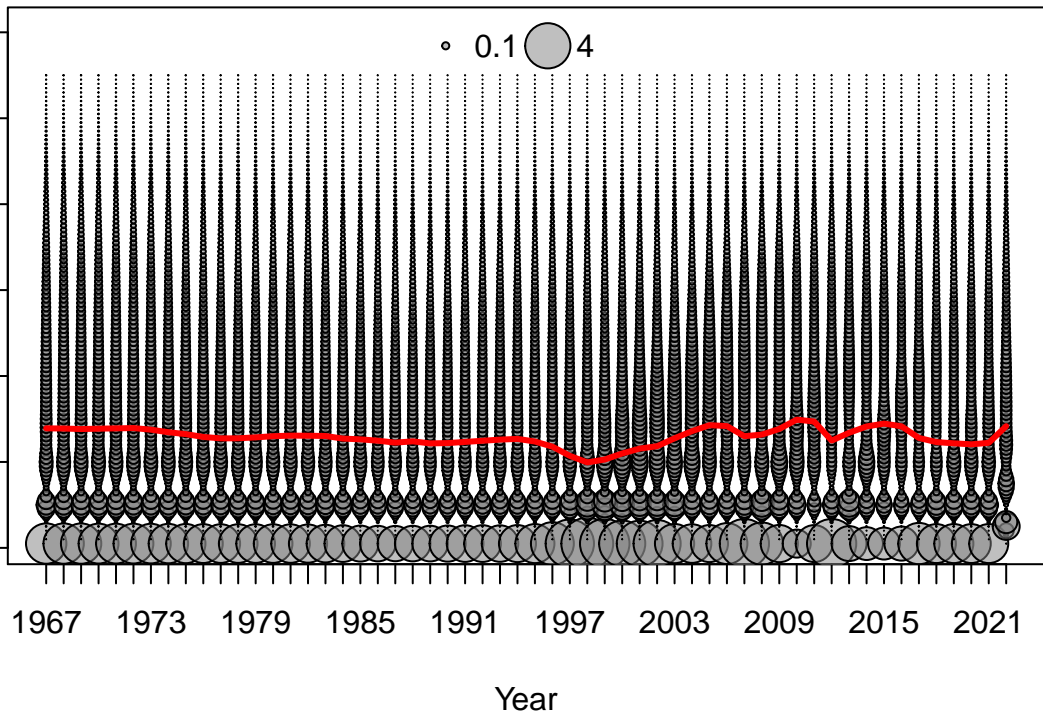
2003

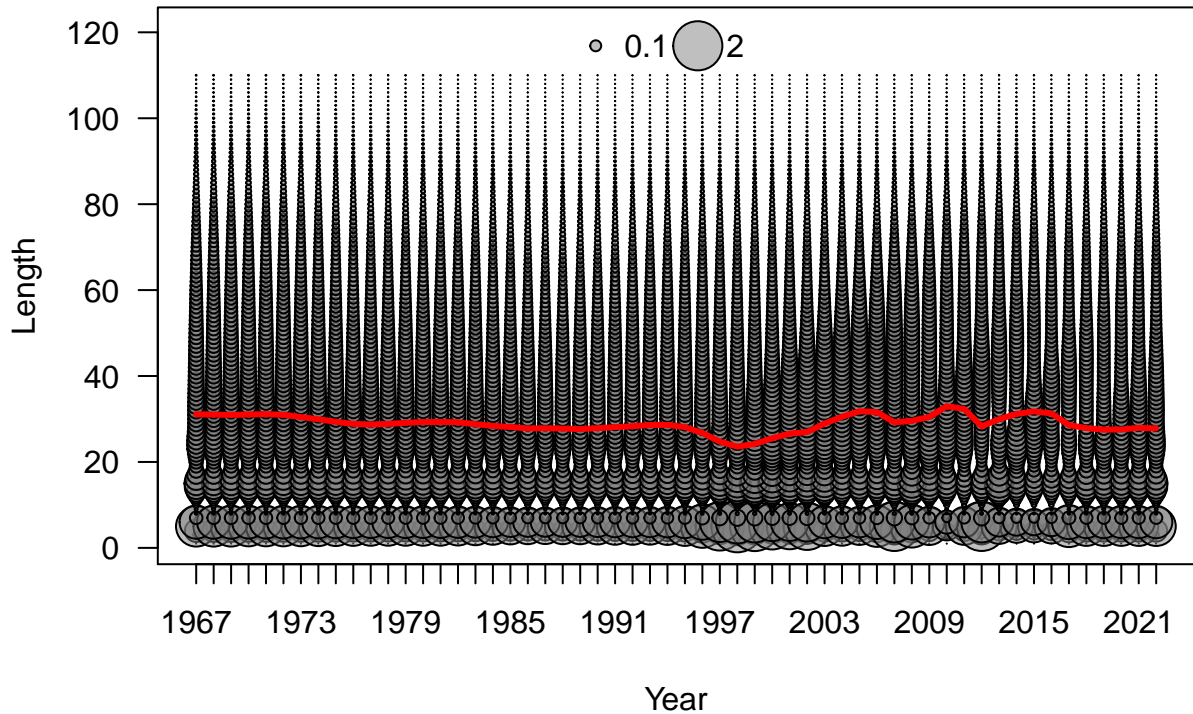
2009

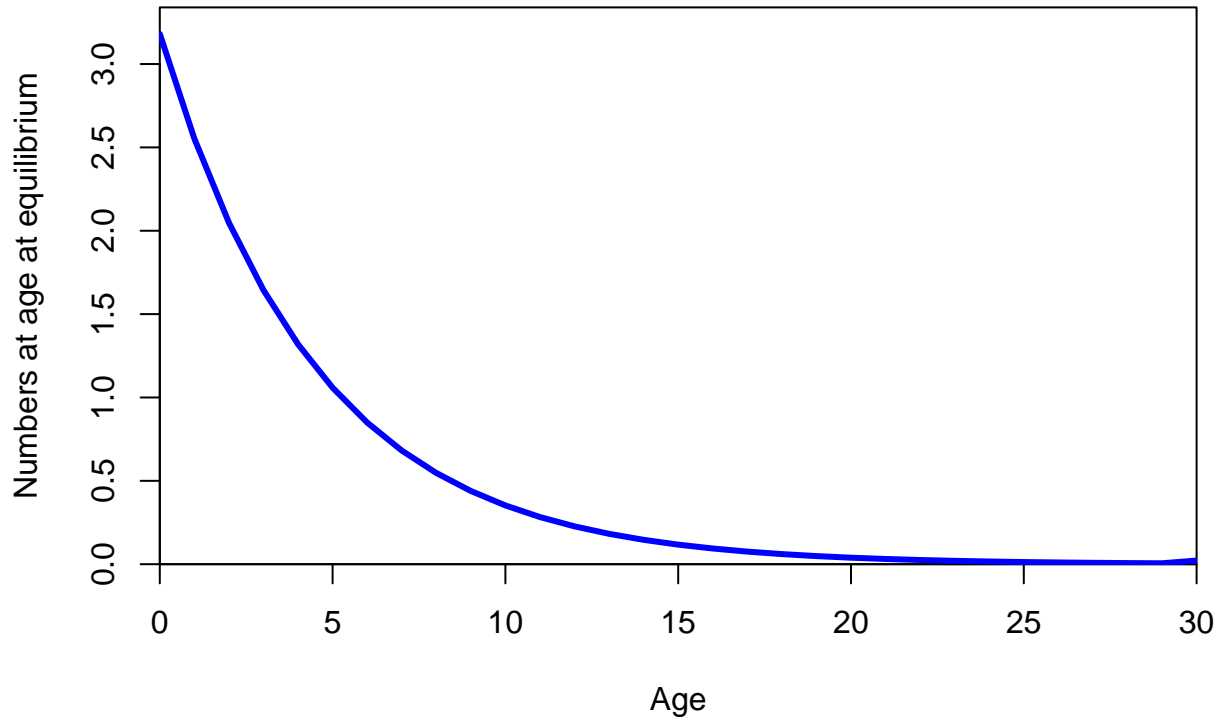
2015

2021

Year

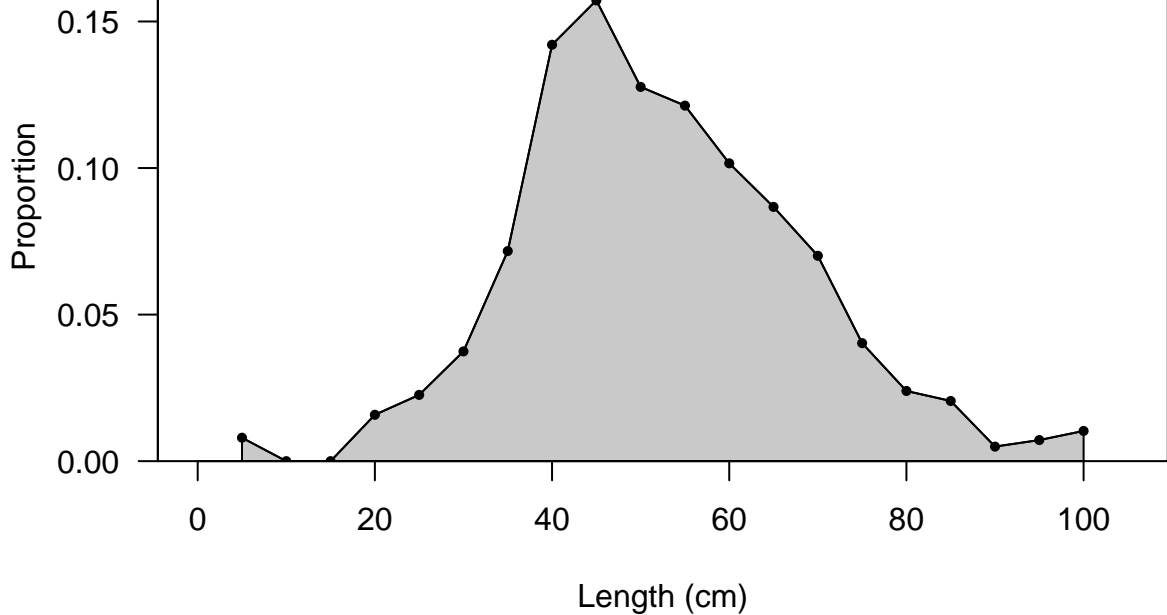


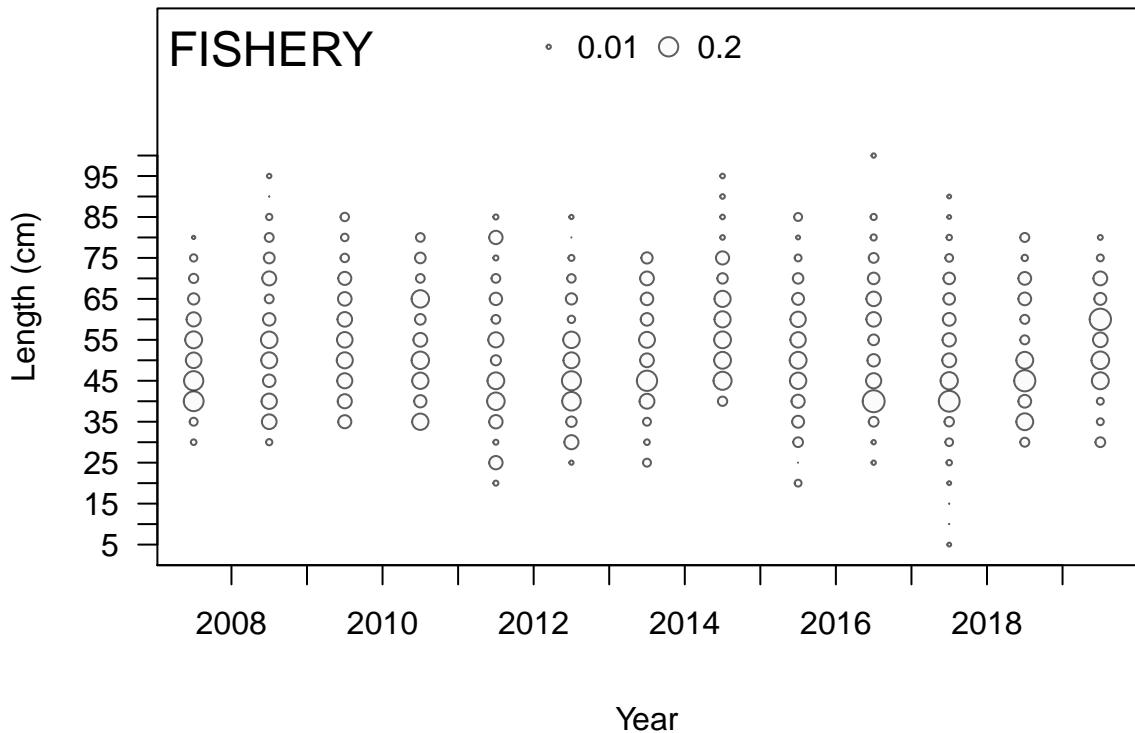




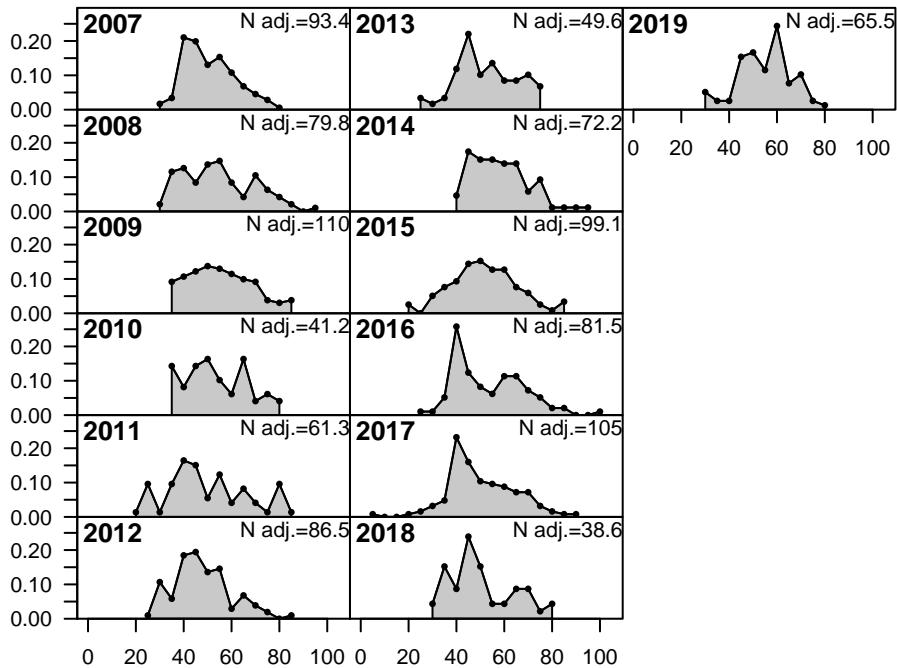
FISHERY

Sum of N adj.=983.8

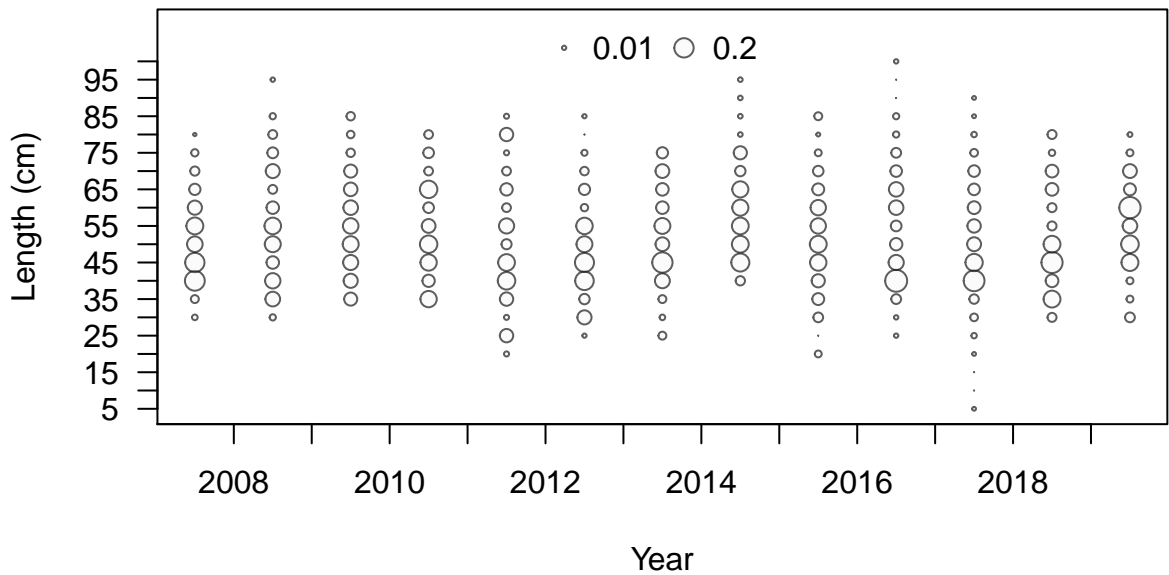




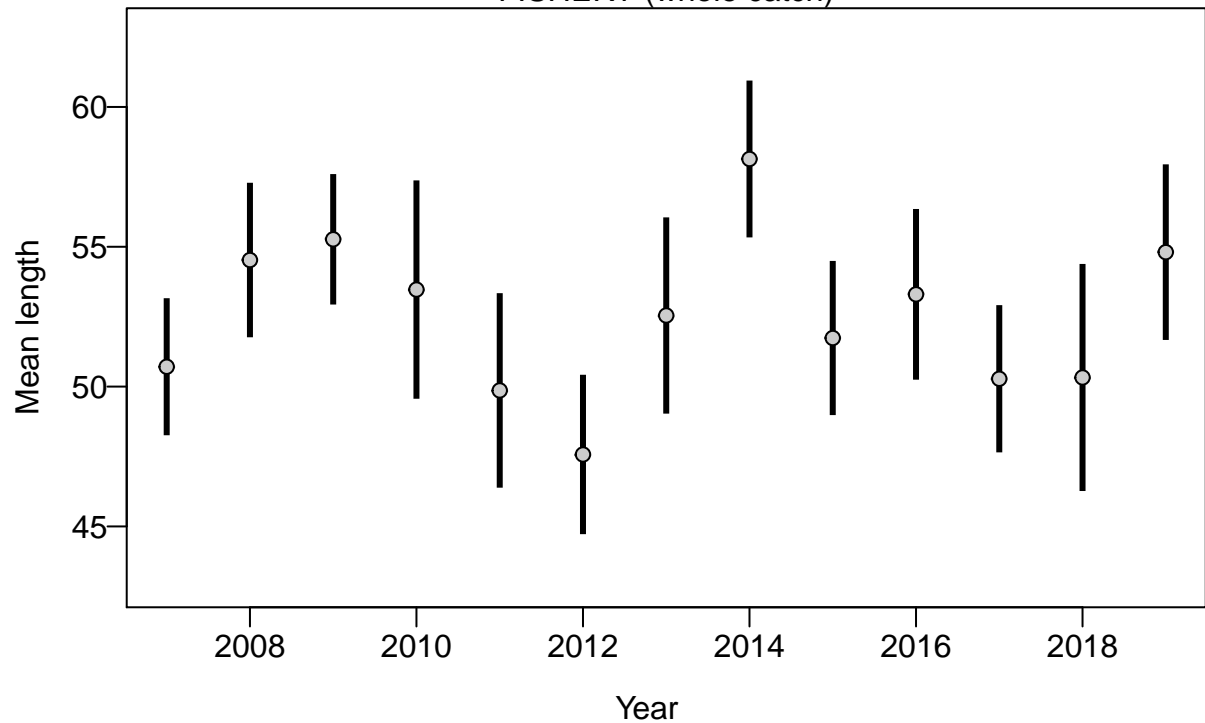
Proportion



Length (cm)

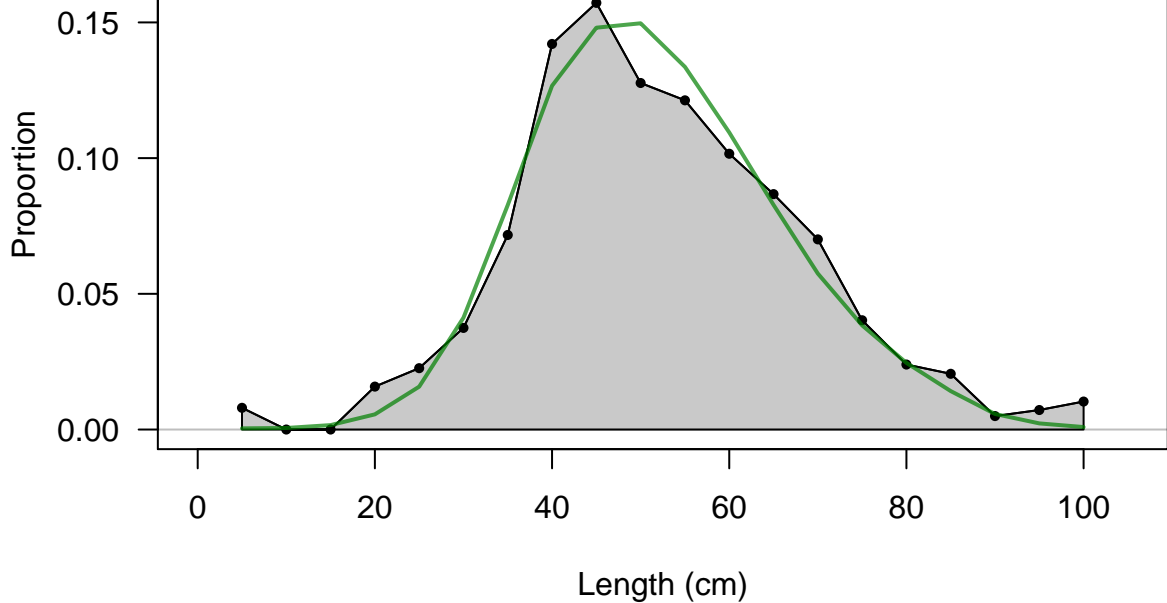


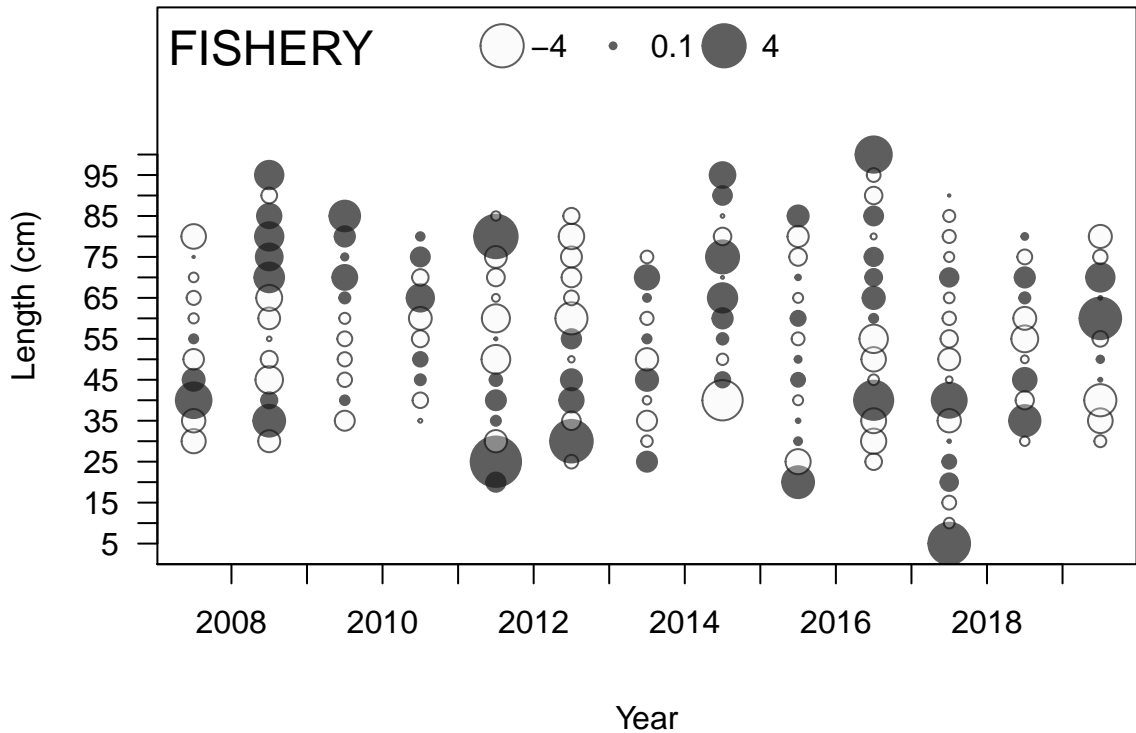
FISHERY (whole catch)



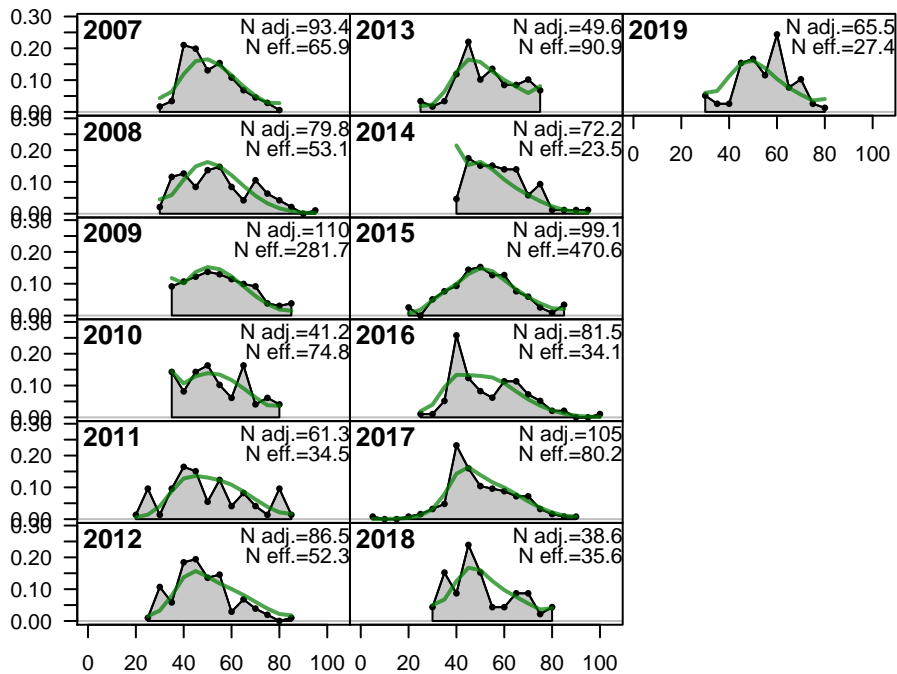
FISHERY

Sum of N adj.=983.8
Sum of N eff.=1324.4

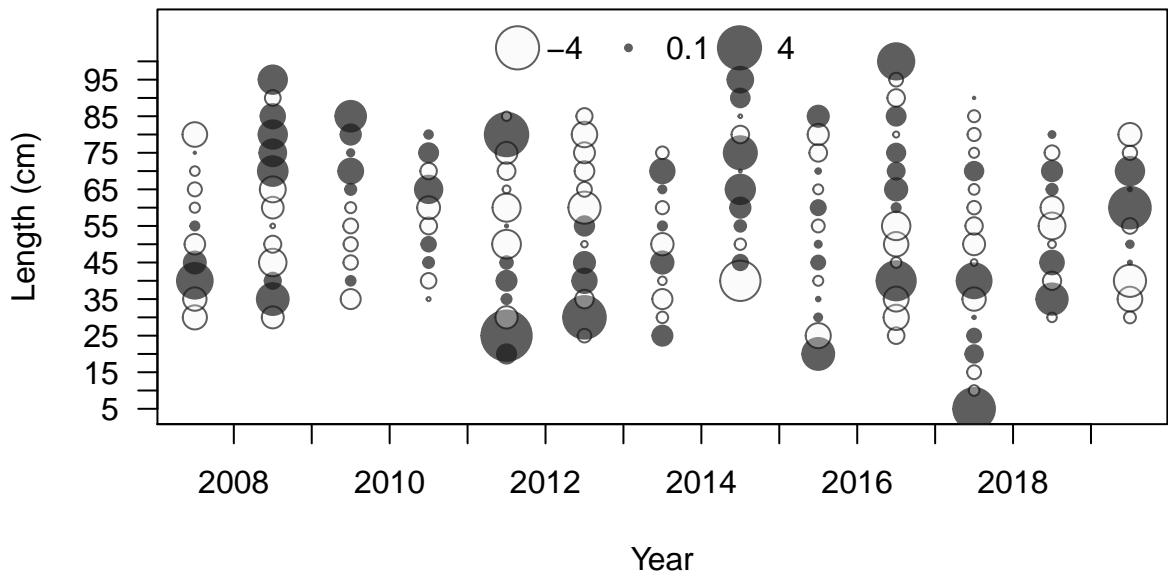




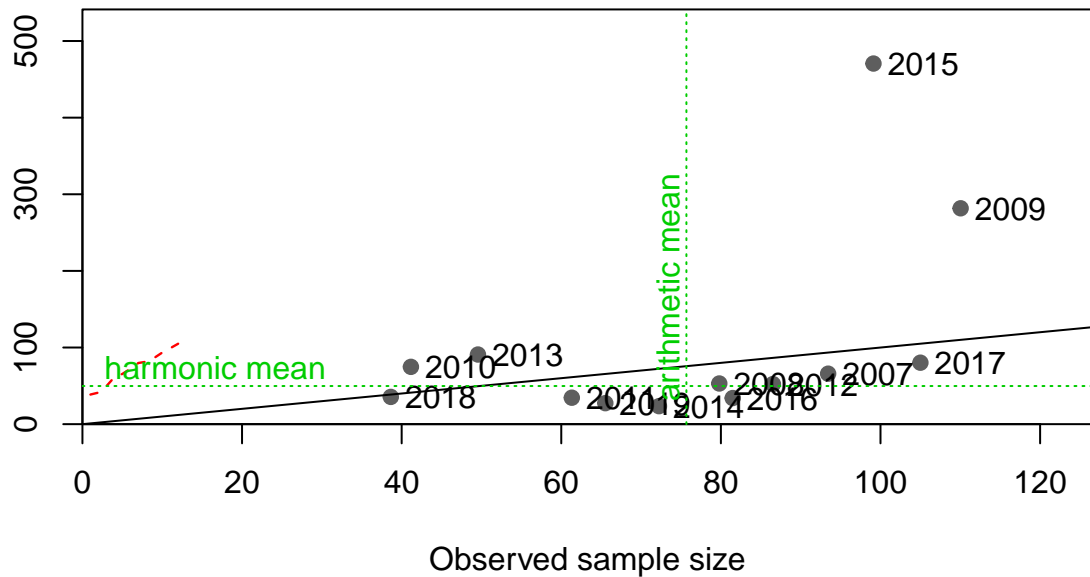
Proportion



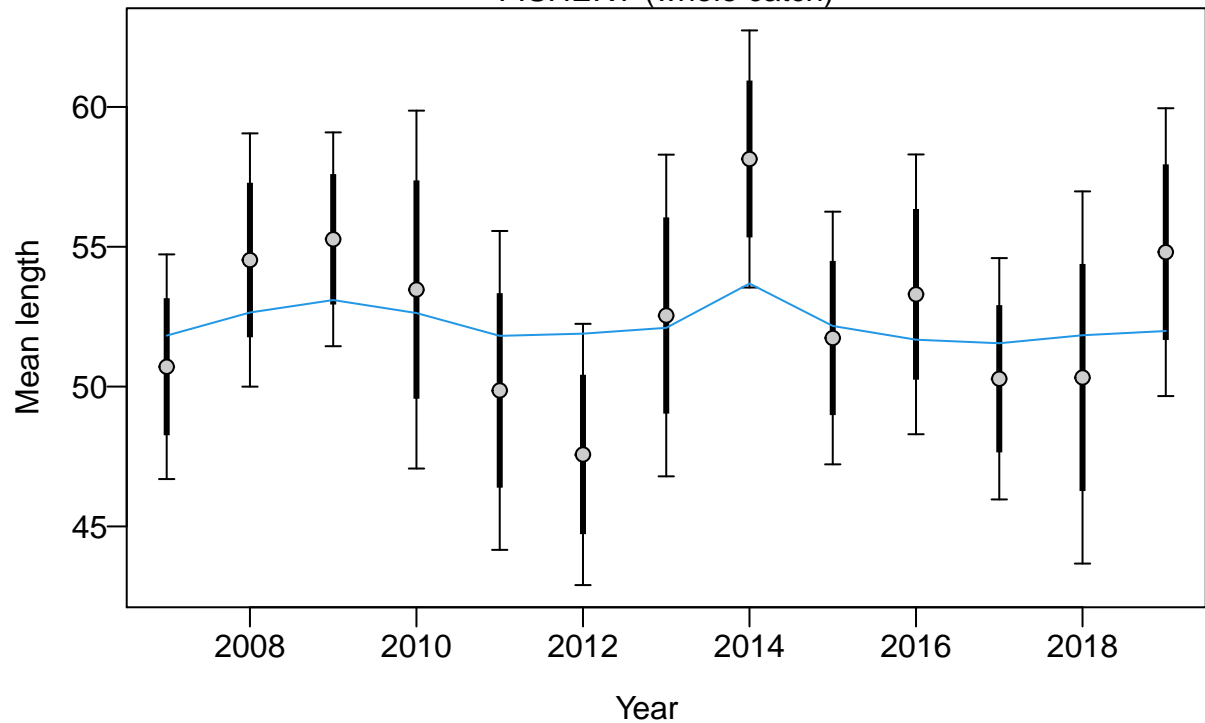
Length (cm)

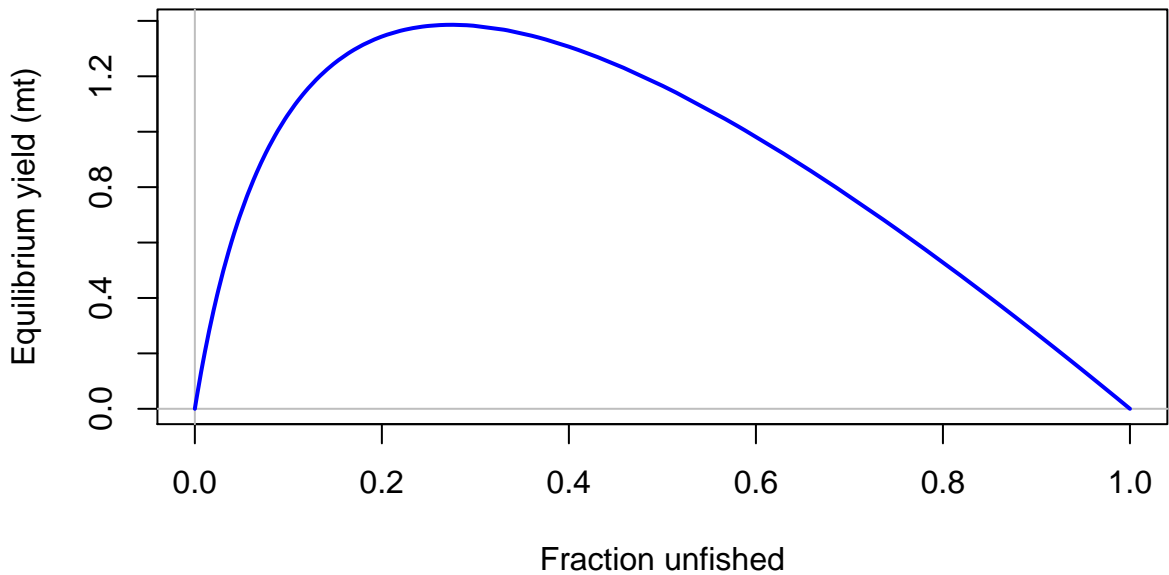


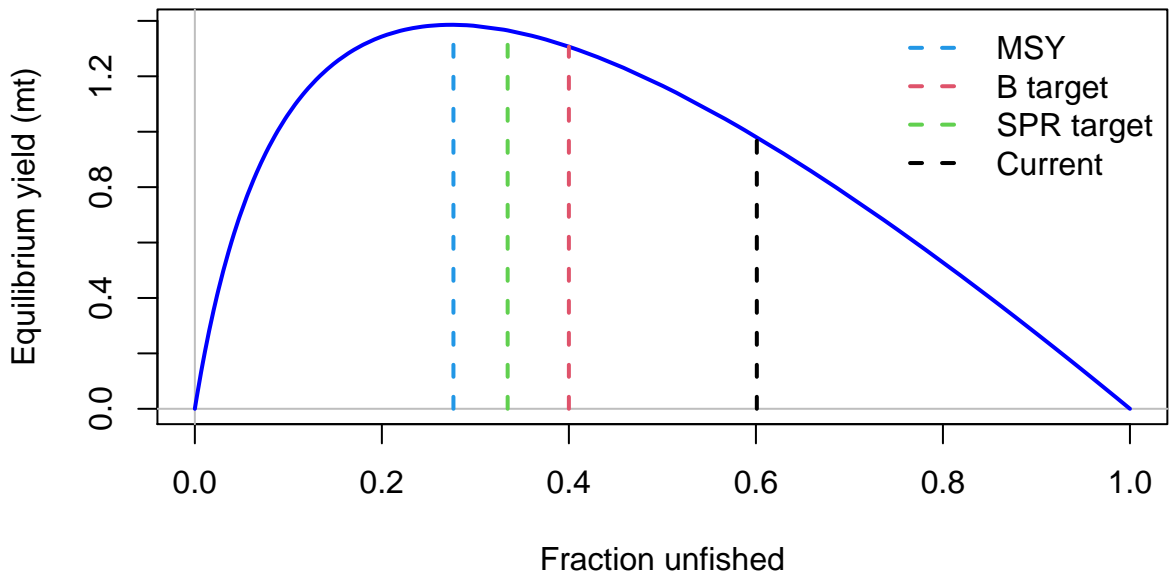
Effective sample size

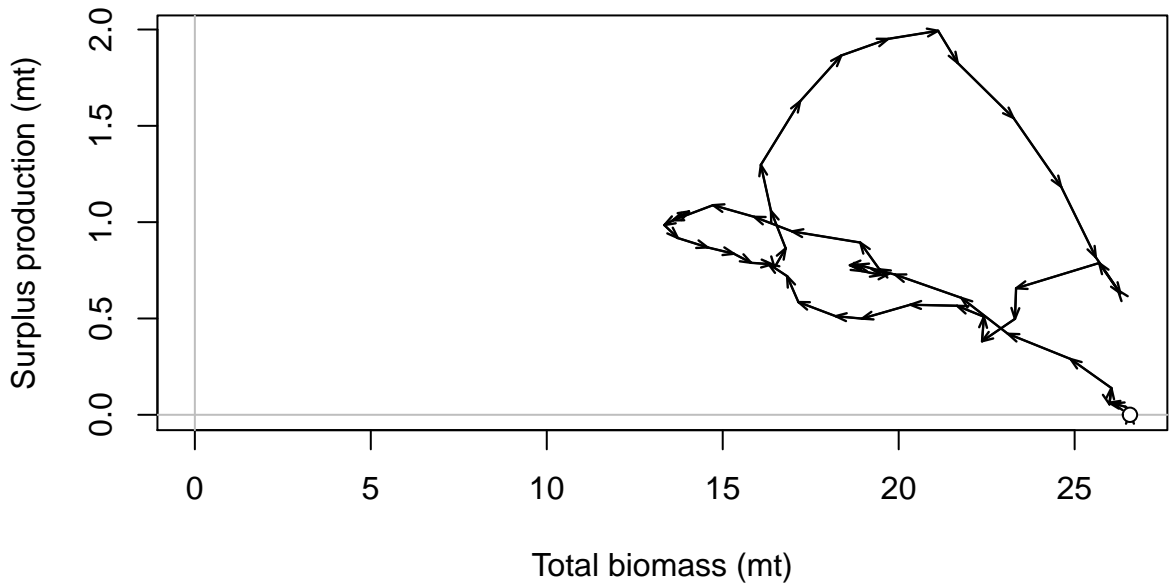


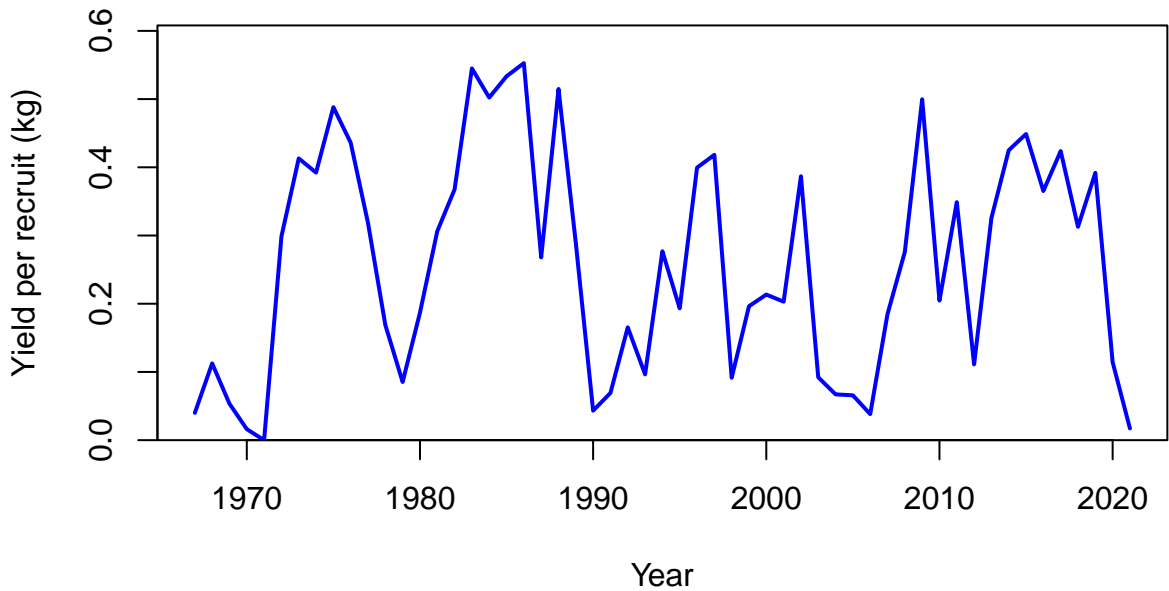
FISHERY (whole catch)

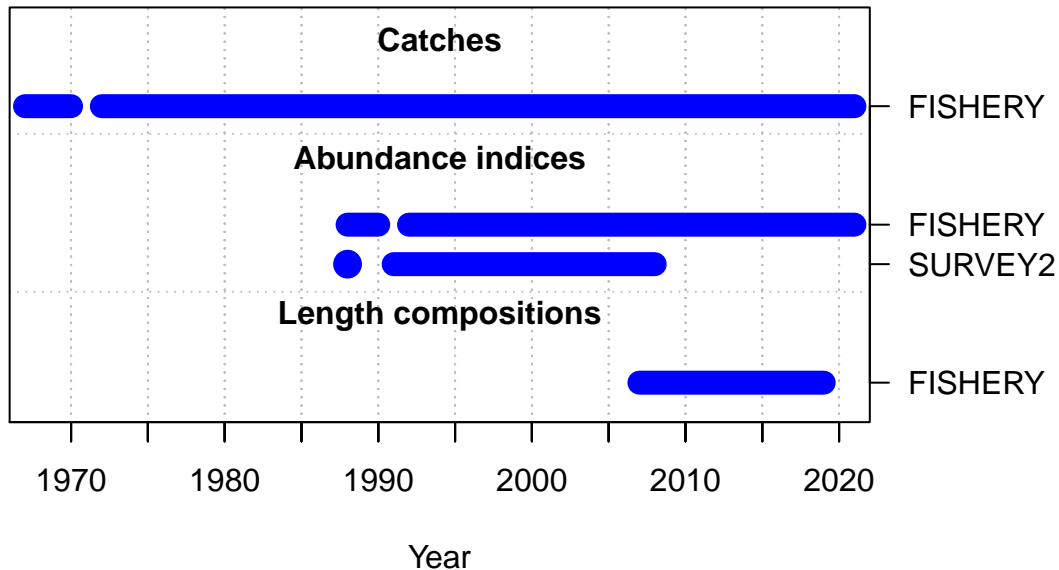


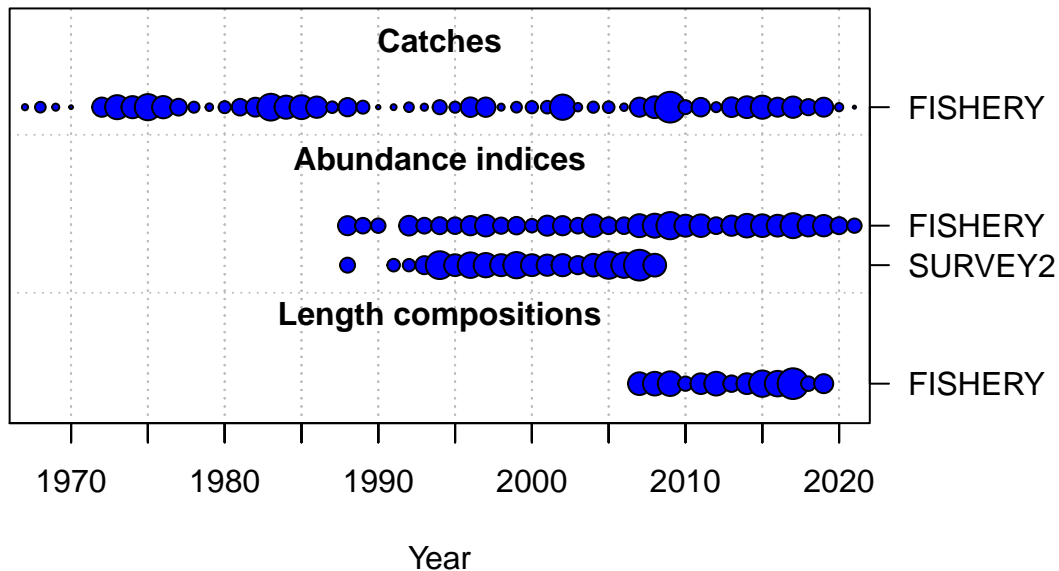




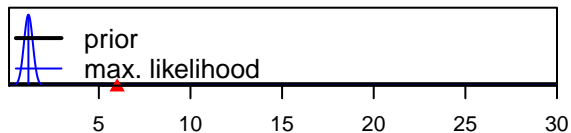




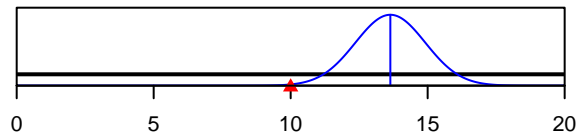




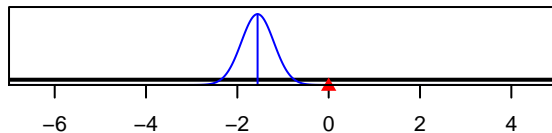
SR_LN(R0)



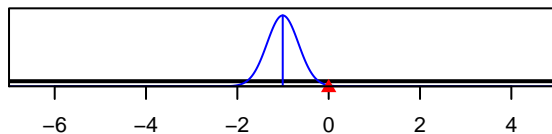
Size_95%width_FISHERY(1)



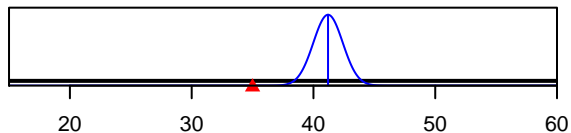
LnQ_base_FISHERY(1)



LnQ_base_SURVEY2(2)



Size_inflection_FISHERY(1)



Parameter value