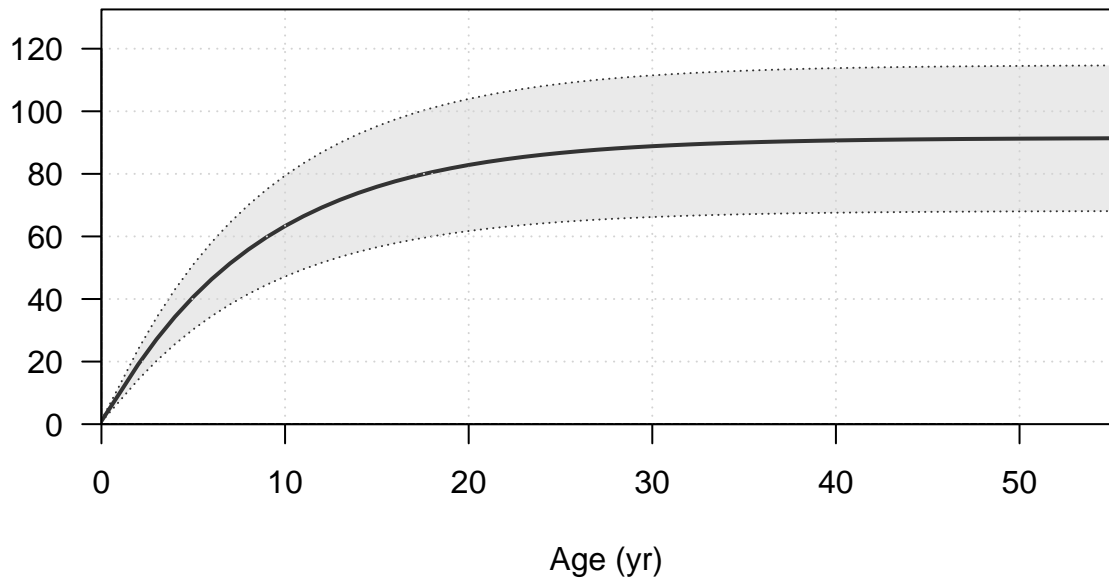
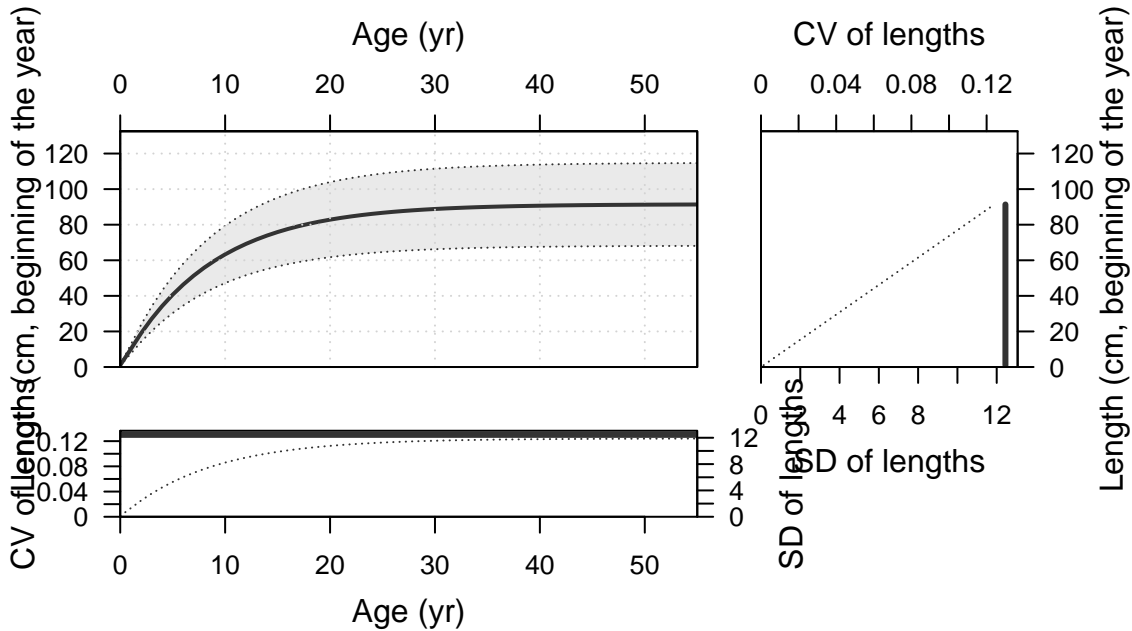
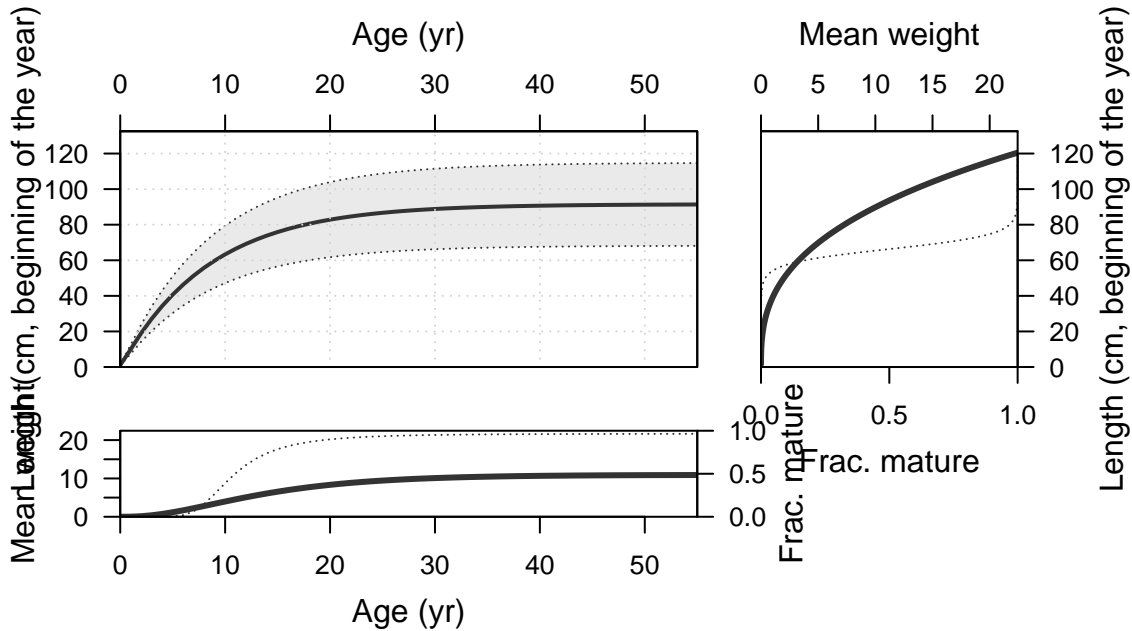


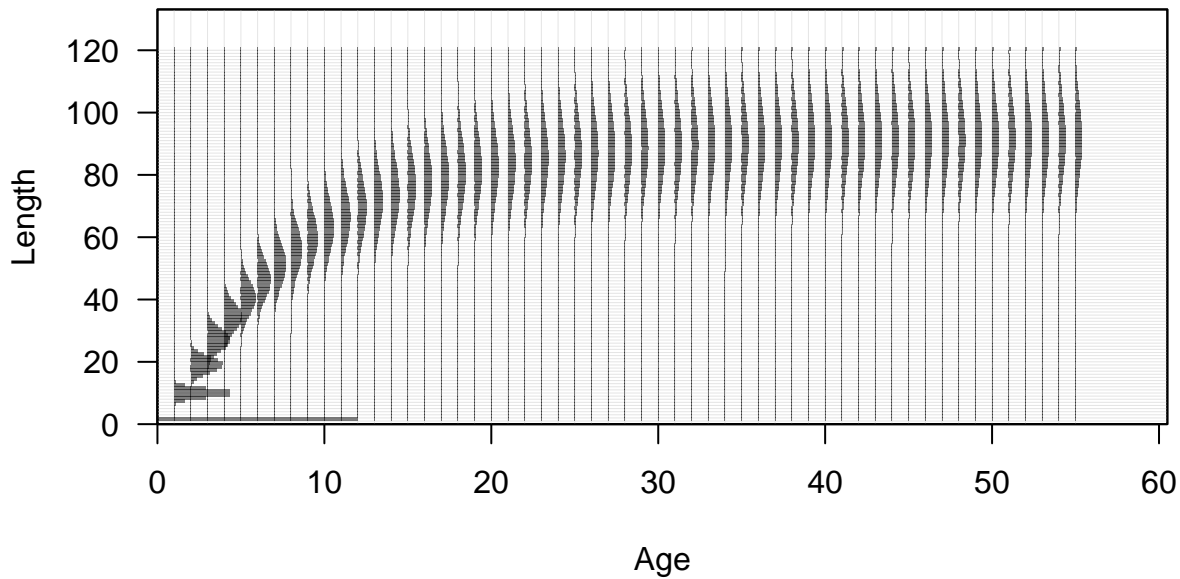
Plots created using the 'r4ss' package in R
Stock Synthesis version: 3.30.19.0
StartTime: Tue Jul 05 11:27:44 2022
Data_File: data.ss
Control_File: control.ss

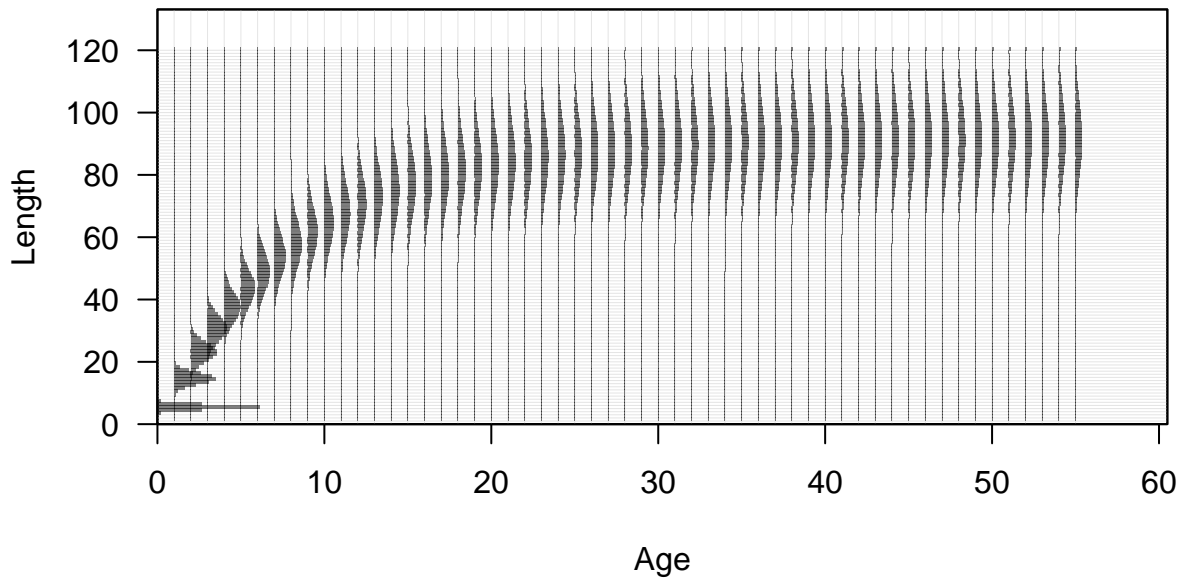
Length (cm, beginning of the year)



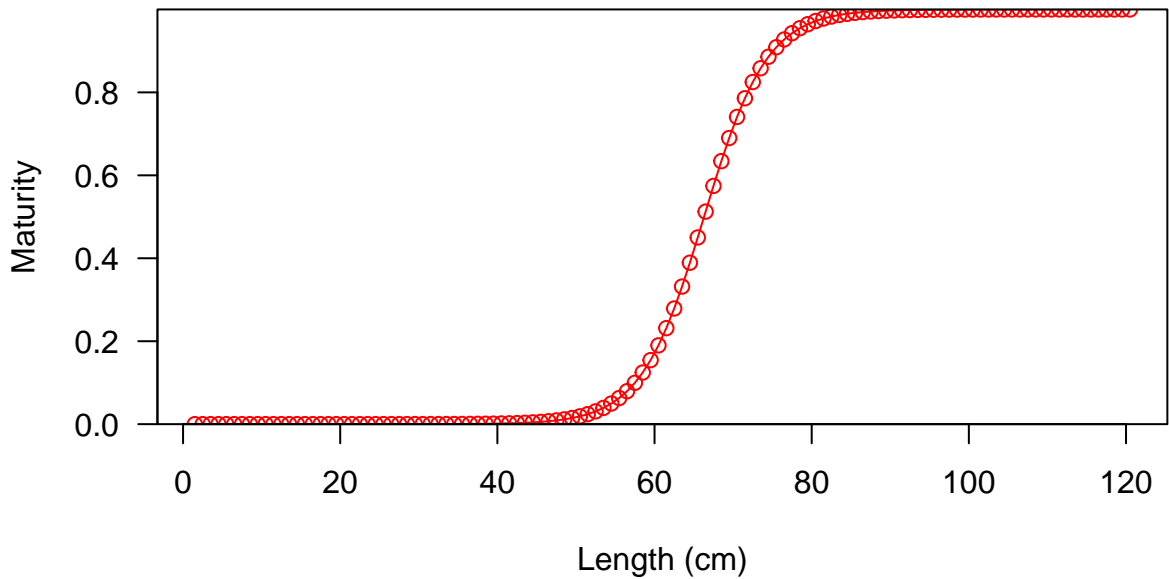








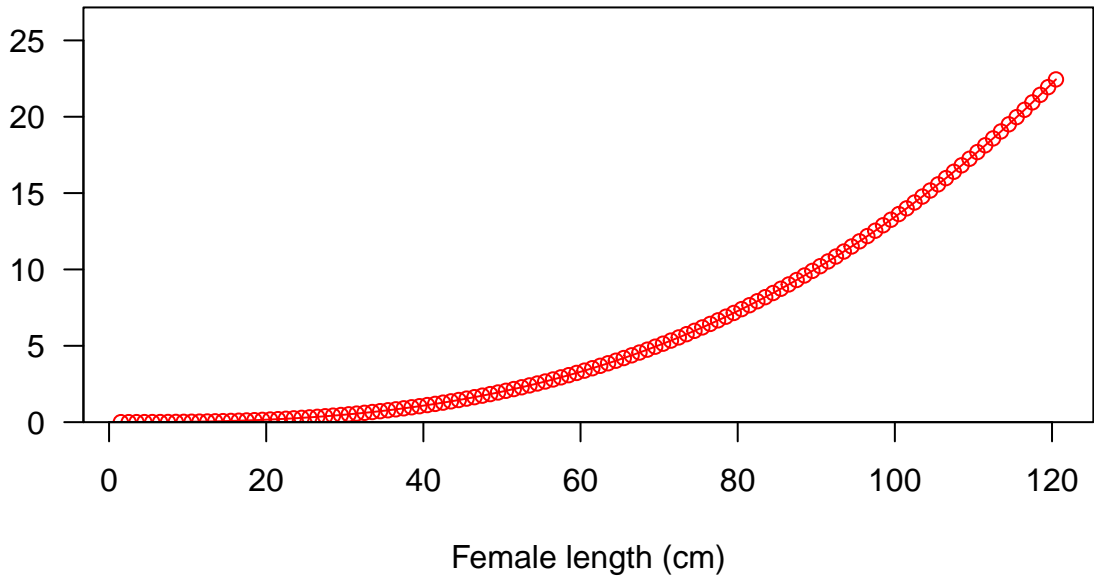


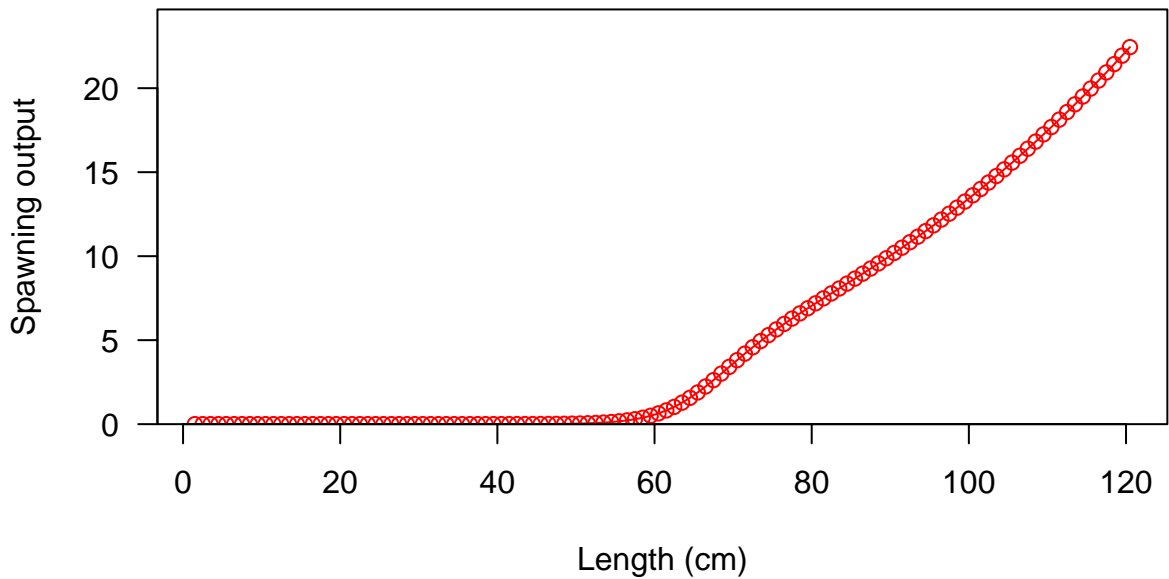




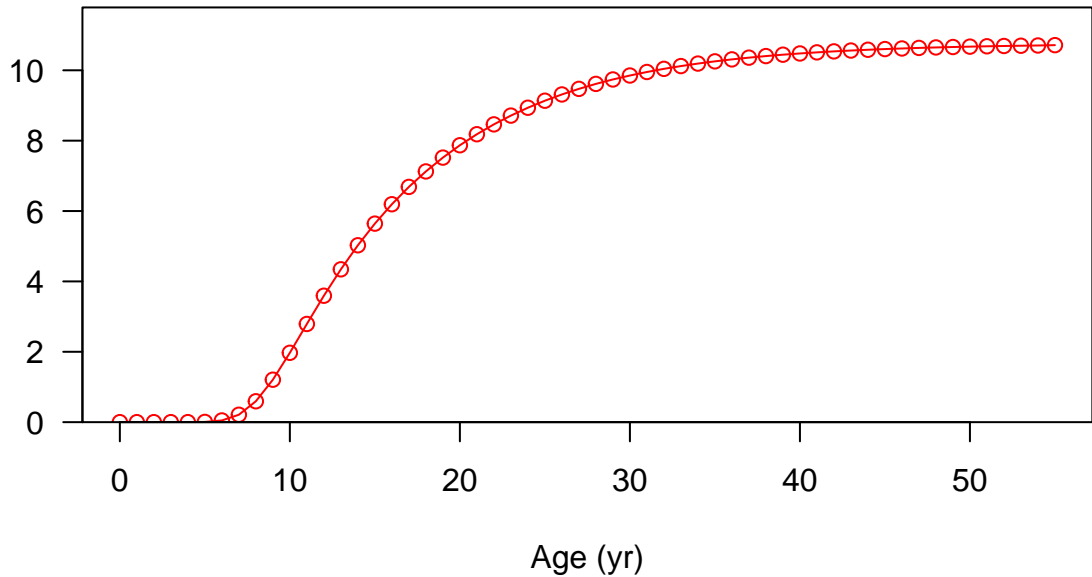


Fecundity

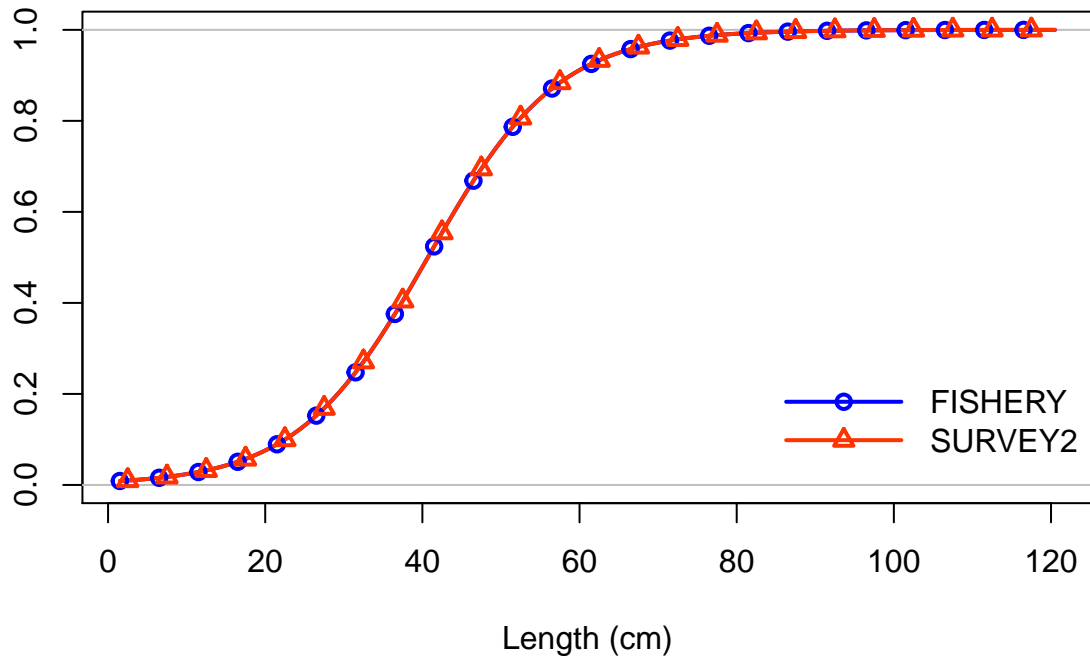




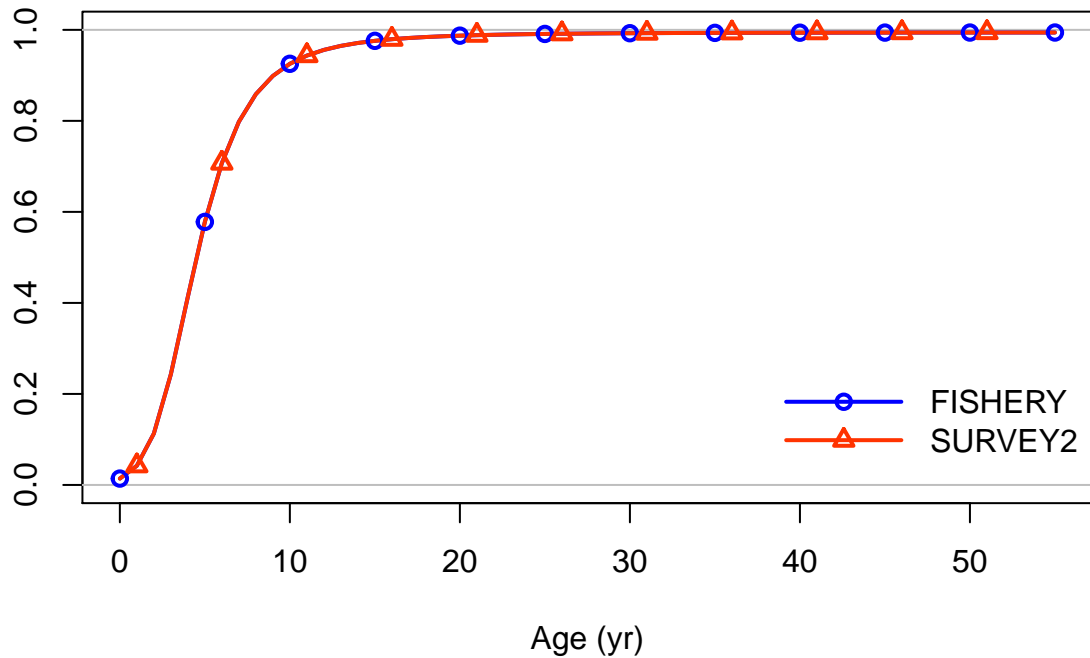
Spawning output



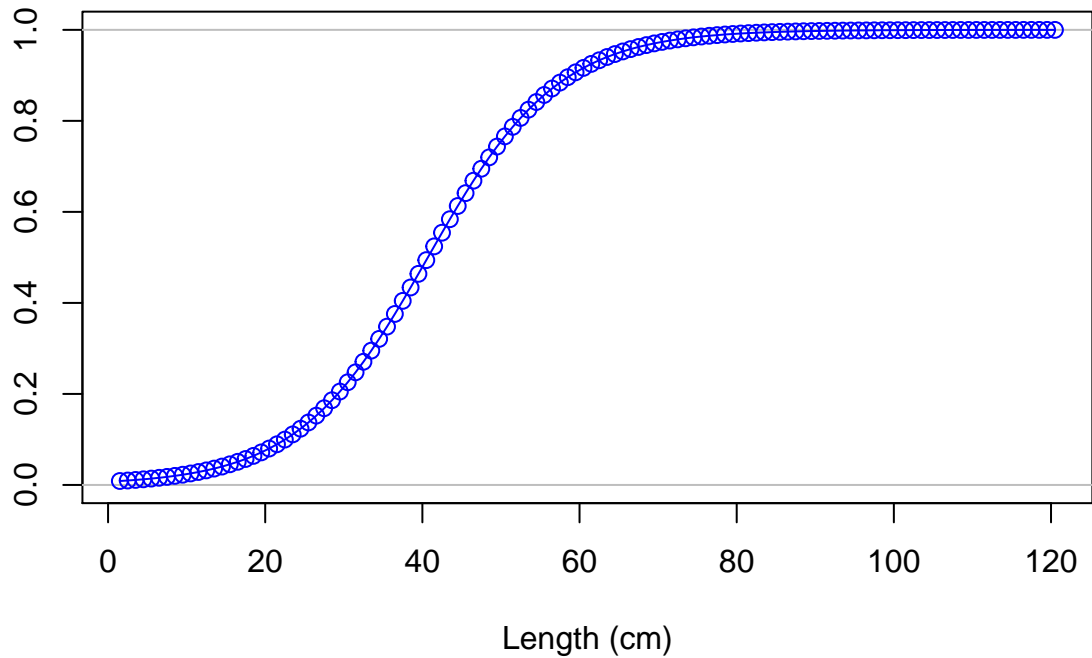
Selectivity



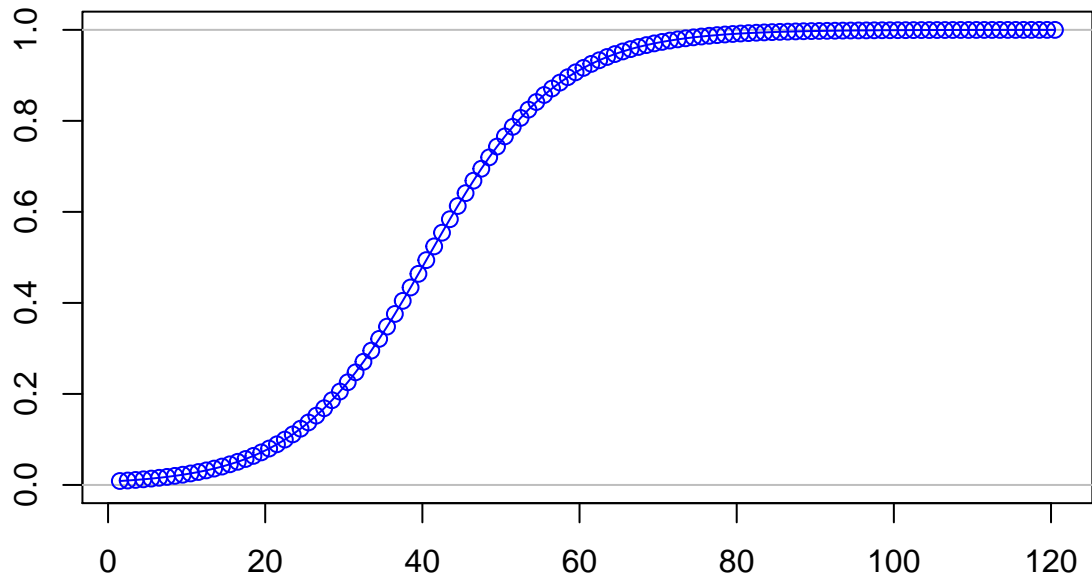
Selectivity



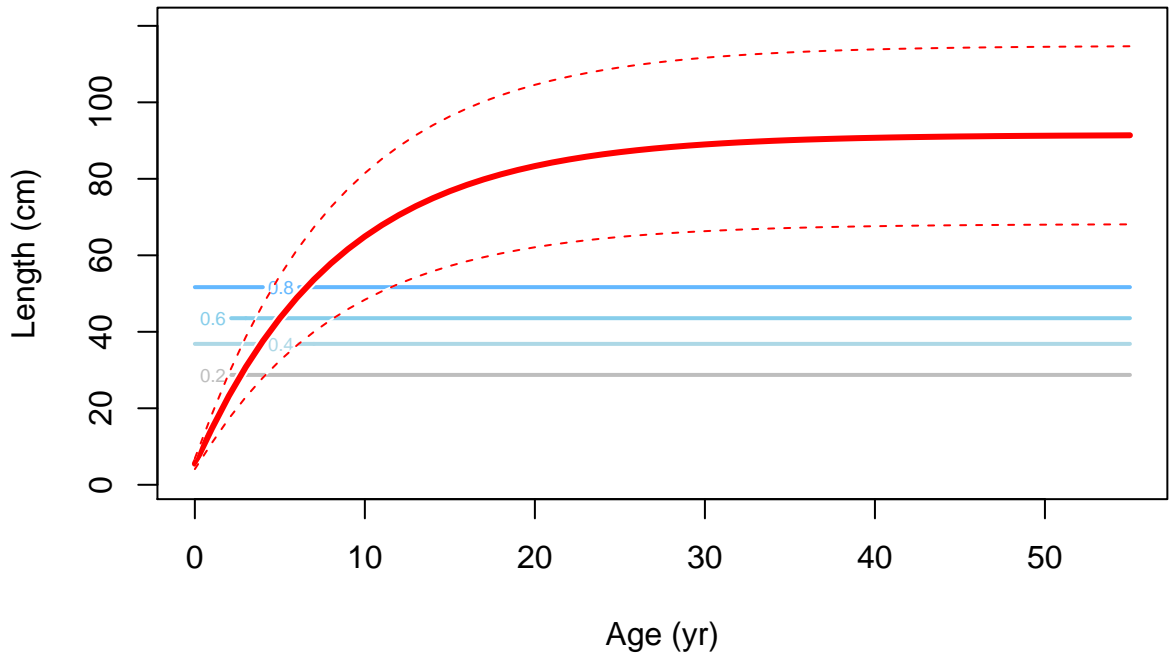
Selectivity

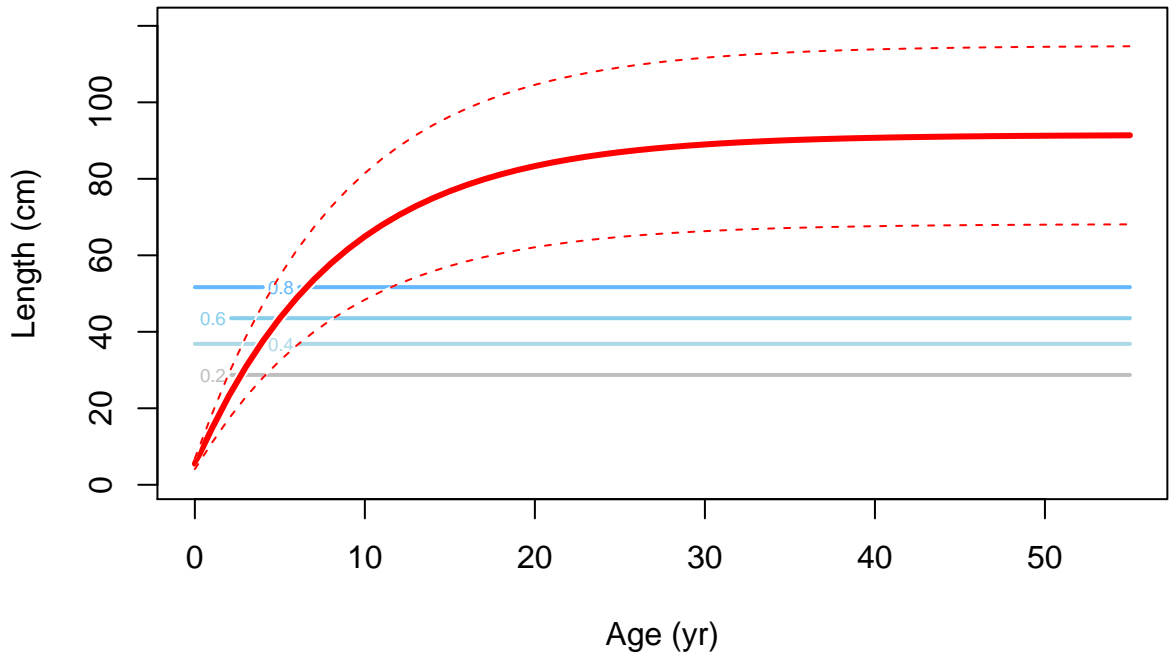


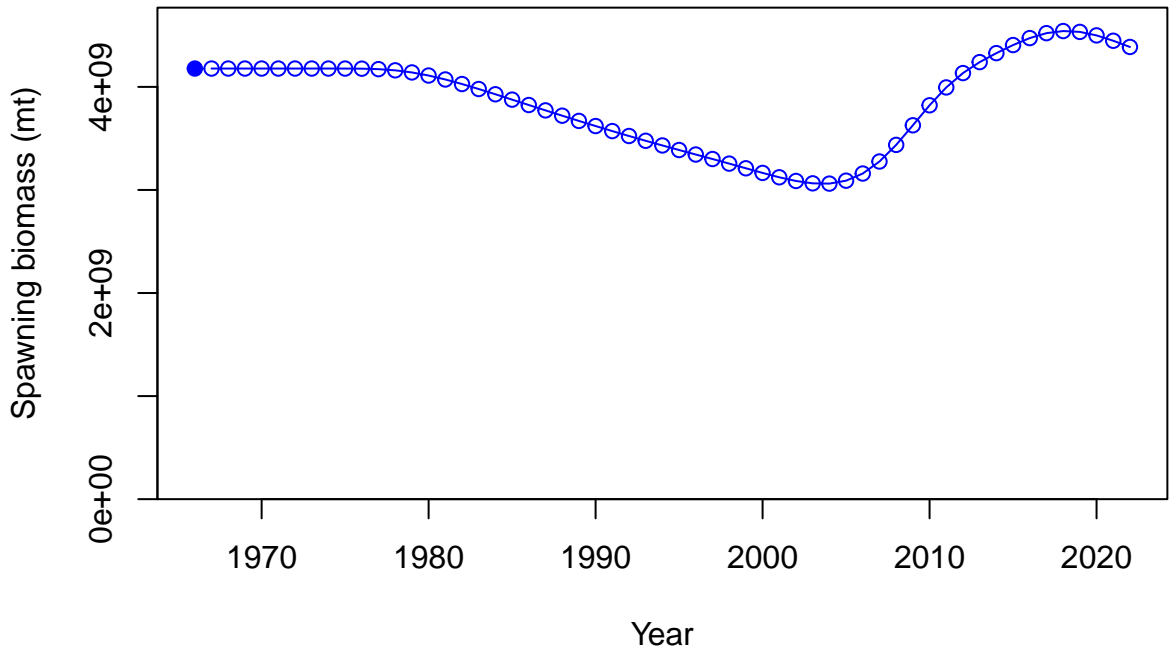
Selectivity



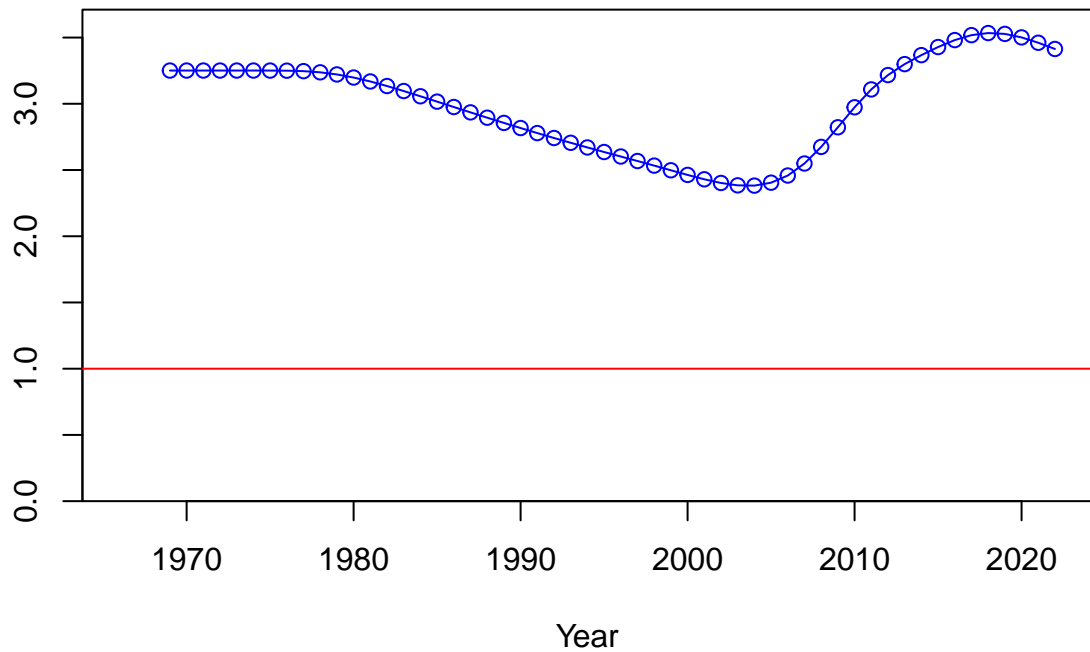
Length (cm)

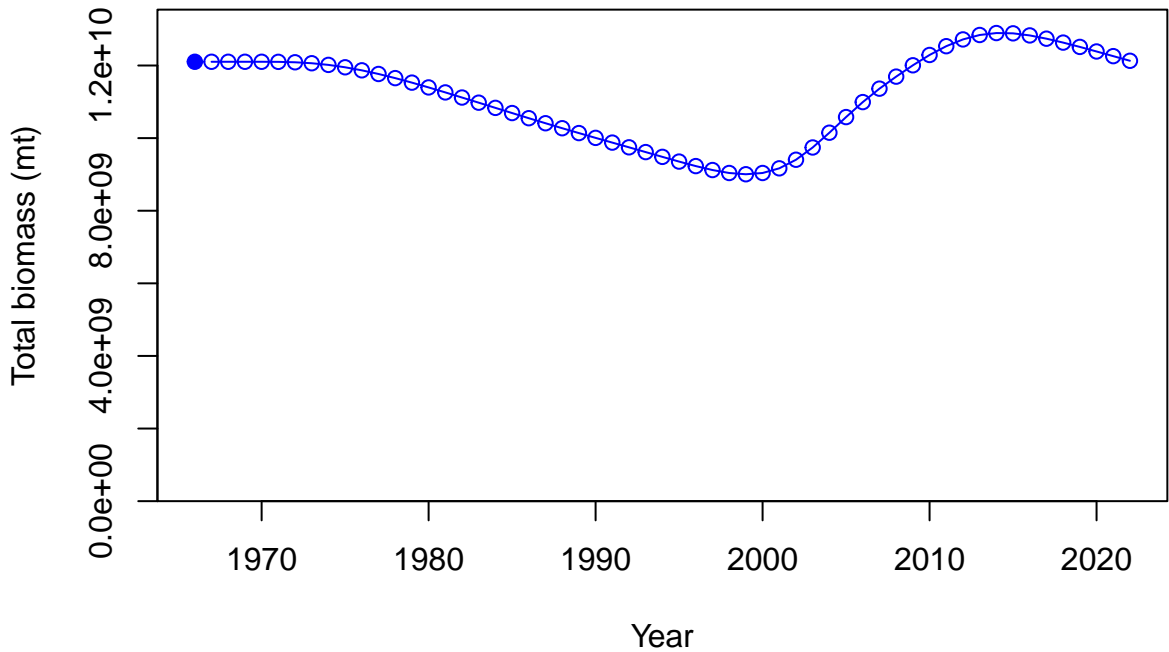


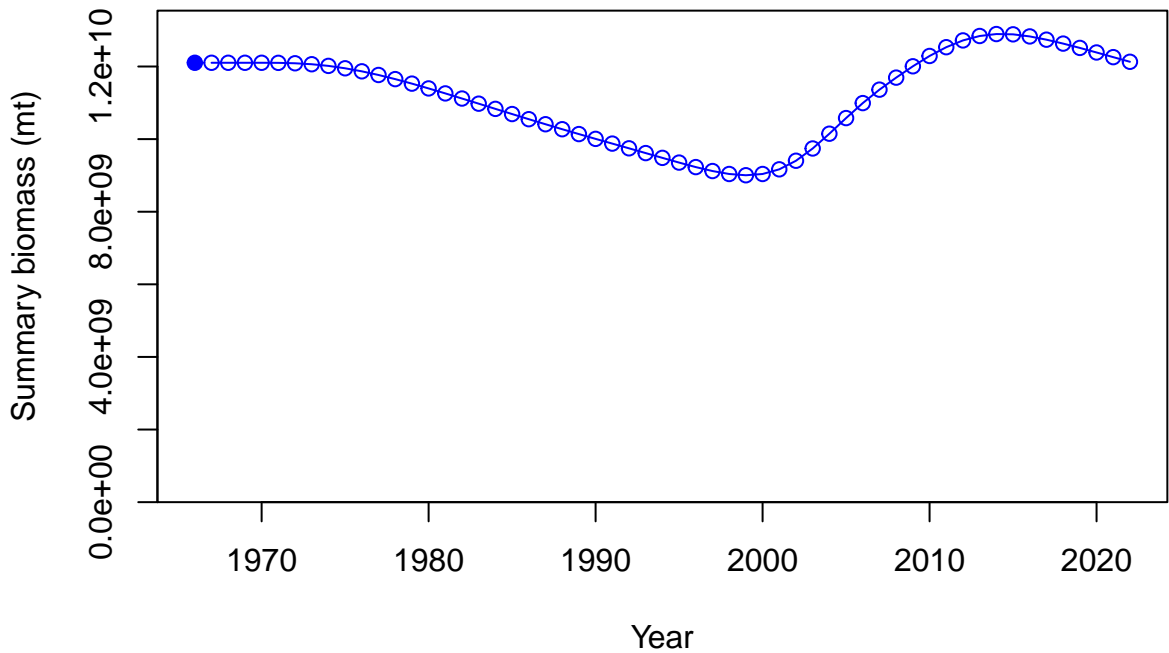




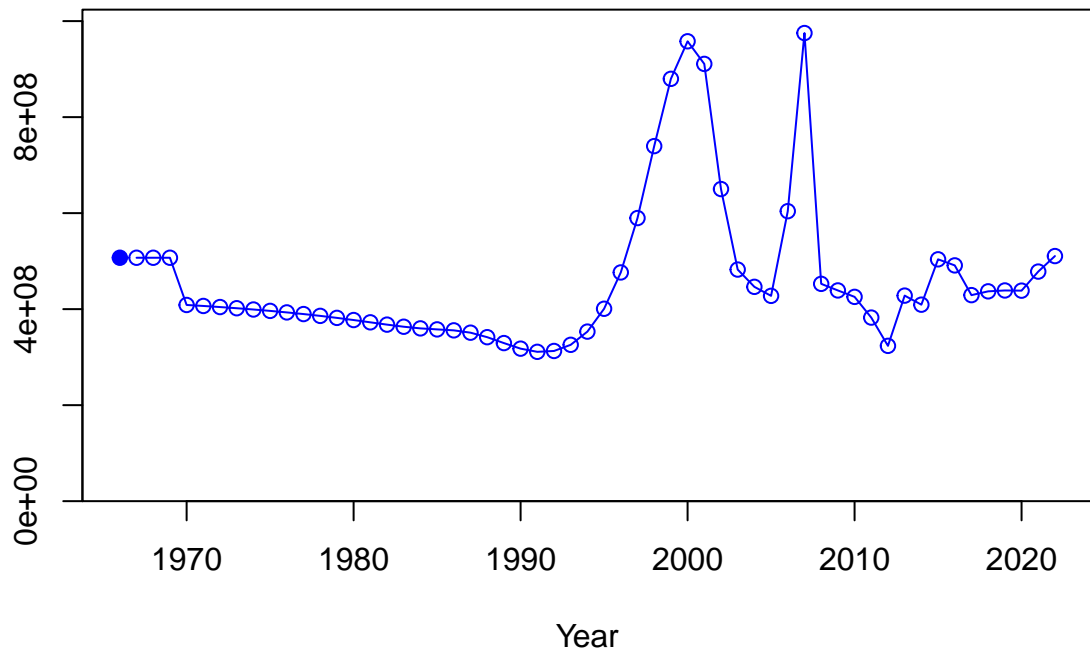
Relative spawning biomass: B/B_{MSY}



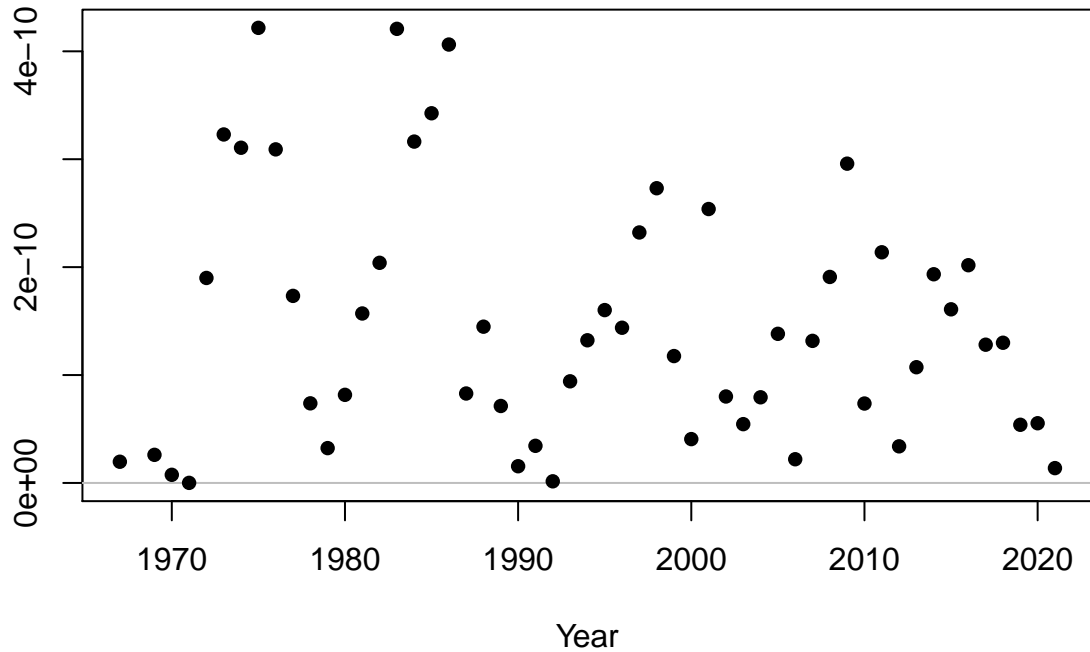


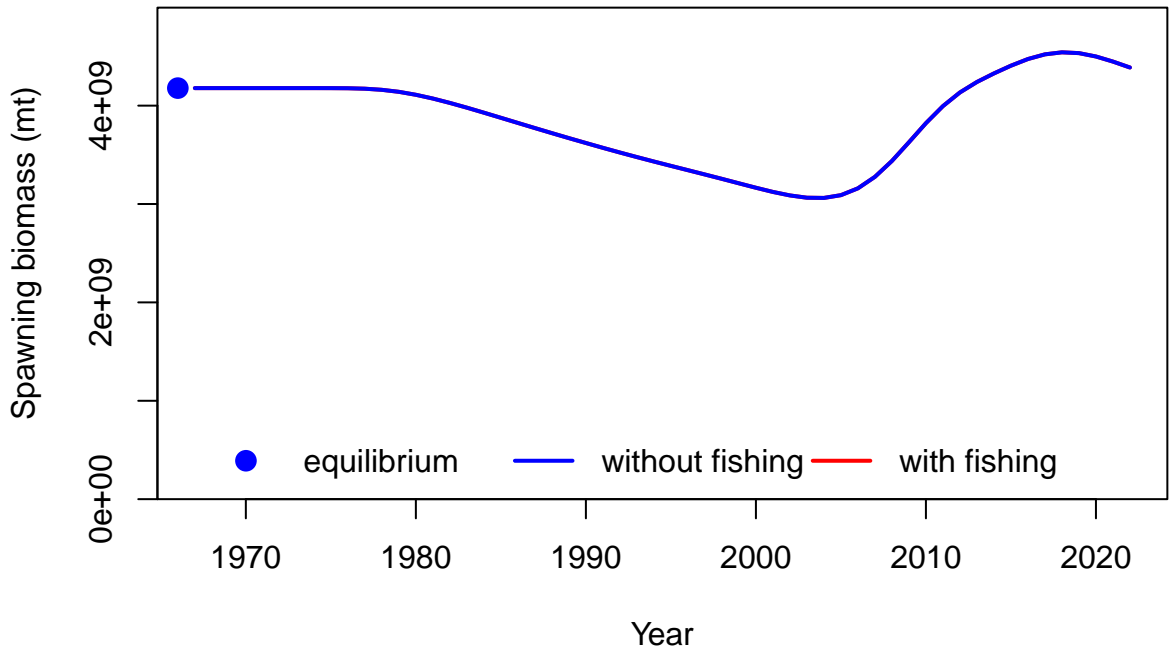


Age-0 recruits (1,000s)

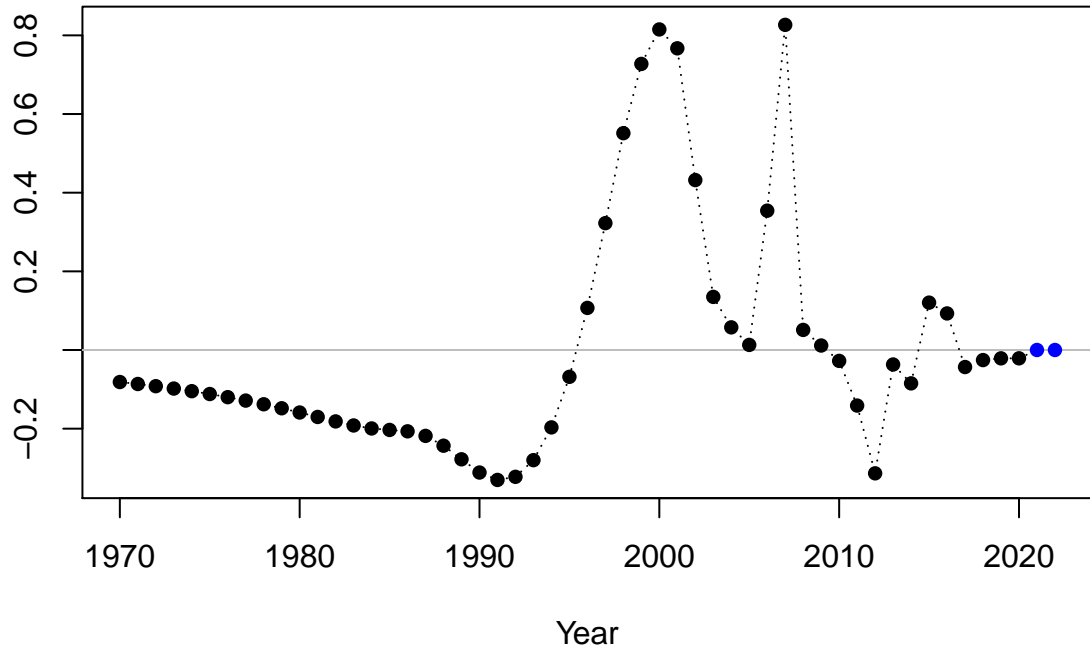


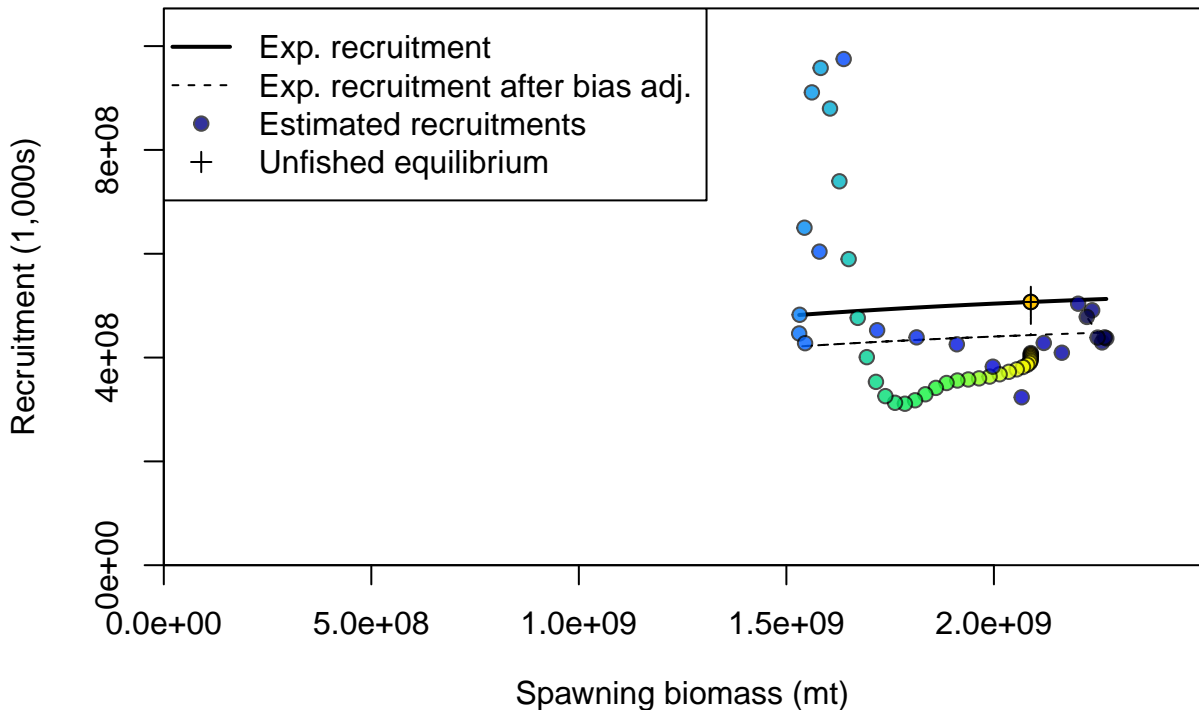
Summary Fishing Mortality

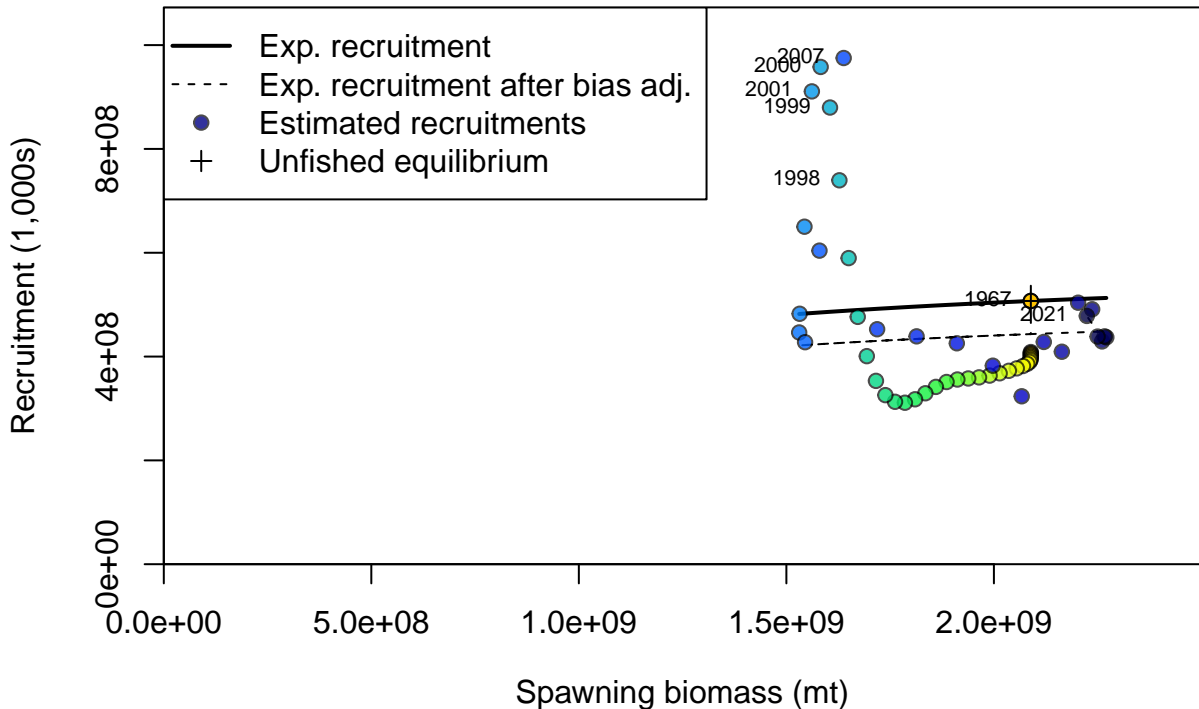




Log recruitment deviation







Log recruitment deviation

0.5
0.0
-0.5

0.0

0.2

0.4

0.6

0.8

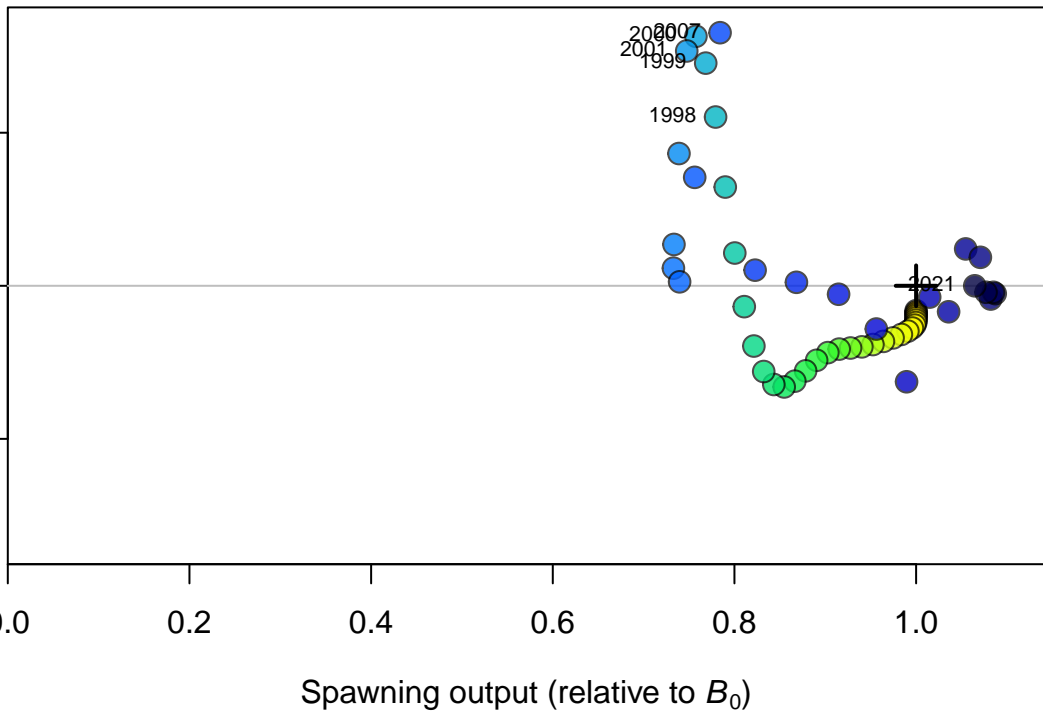
1.0

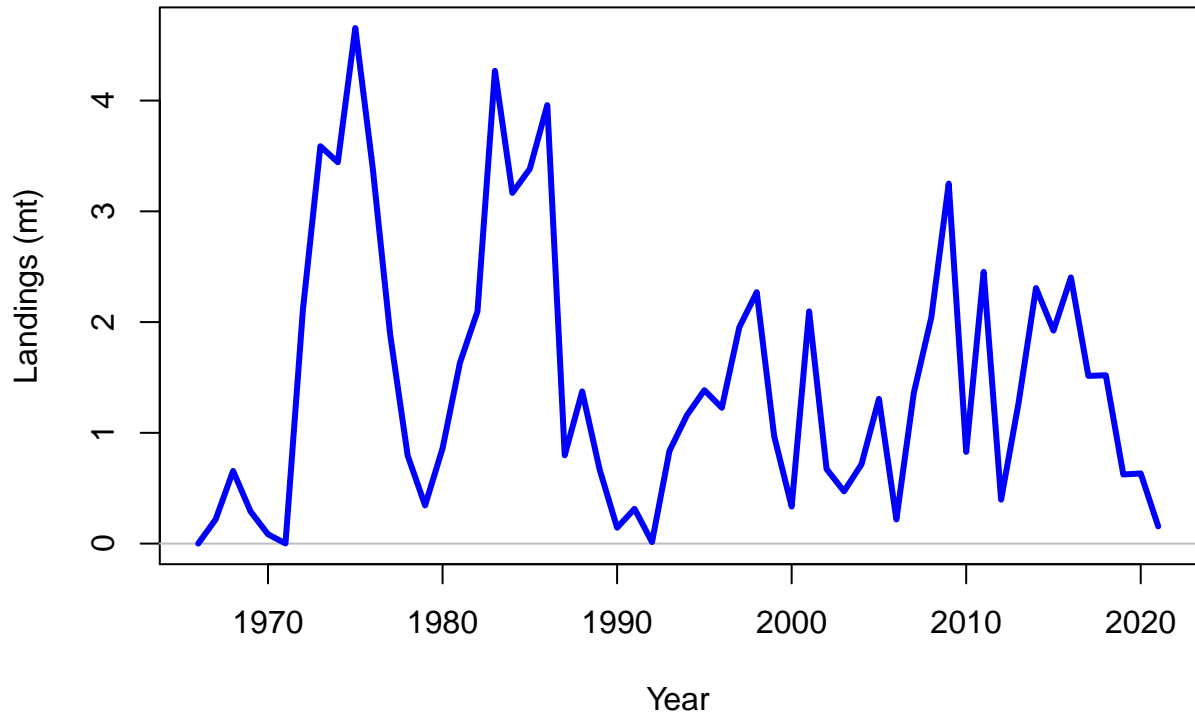
Spawning output (relative to B_0)

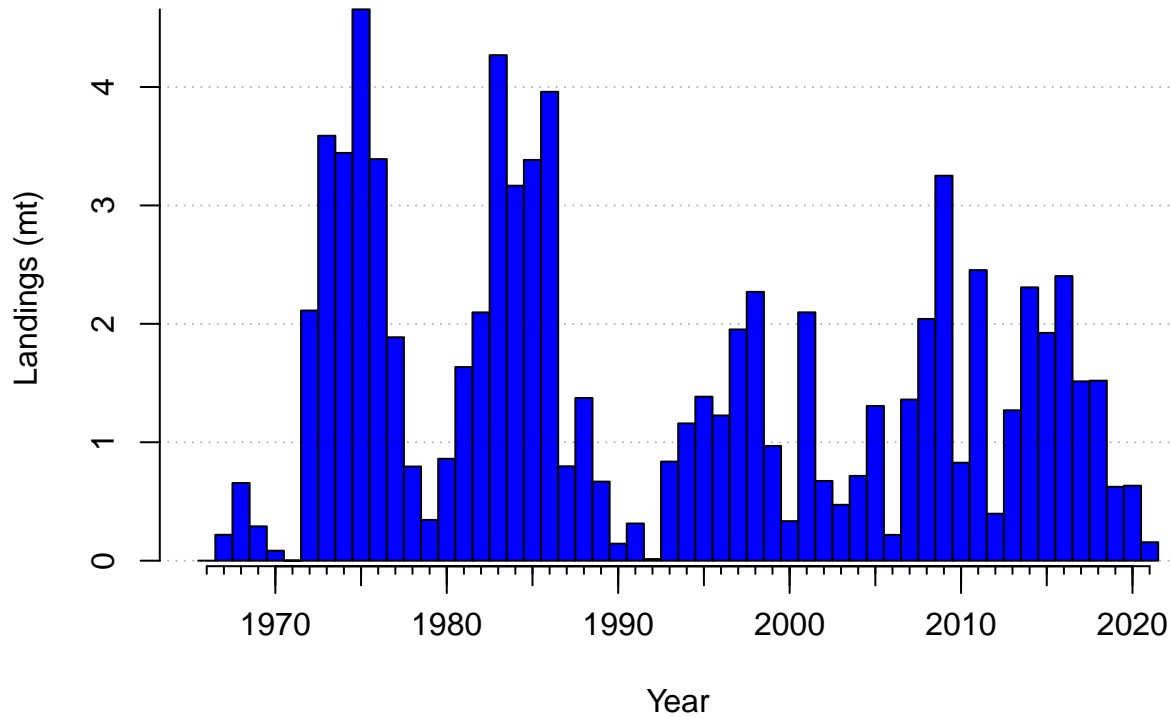
2007
2001
1999

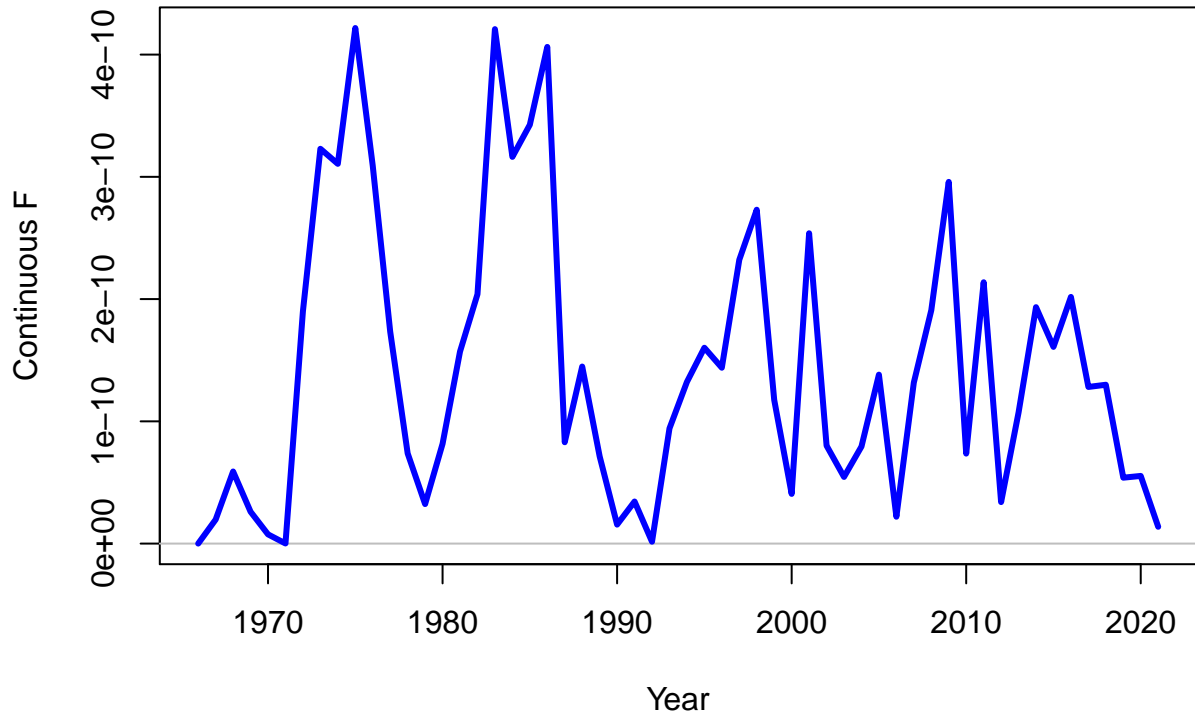
1998

2021

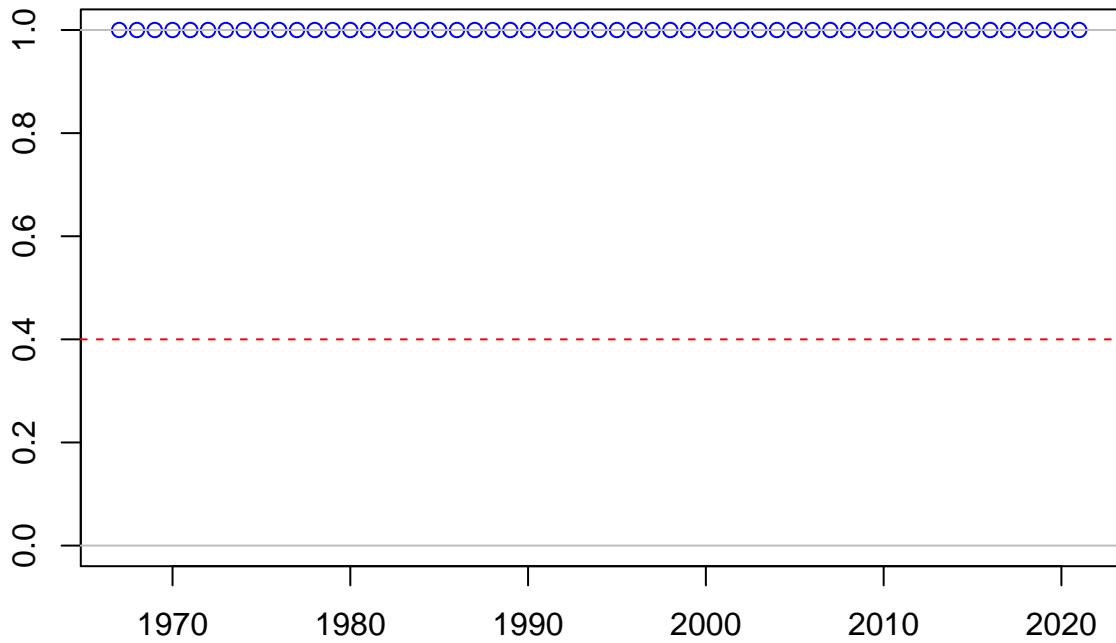




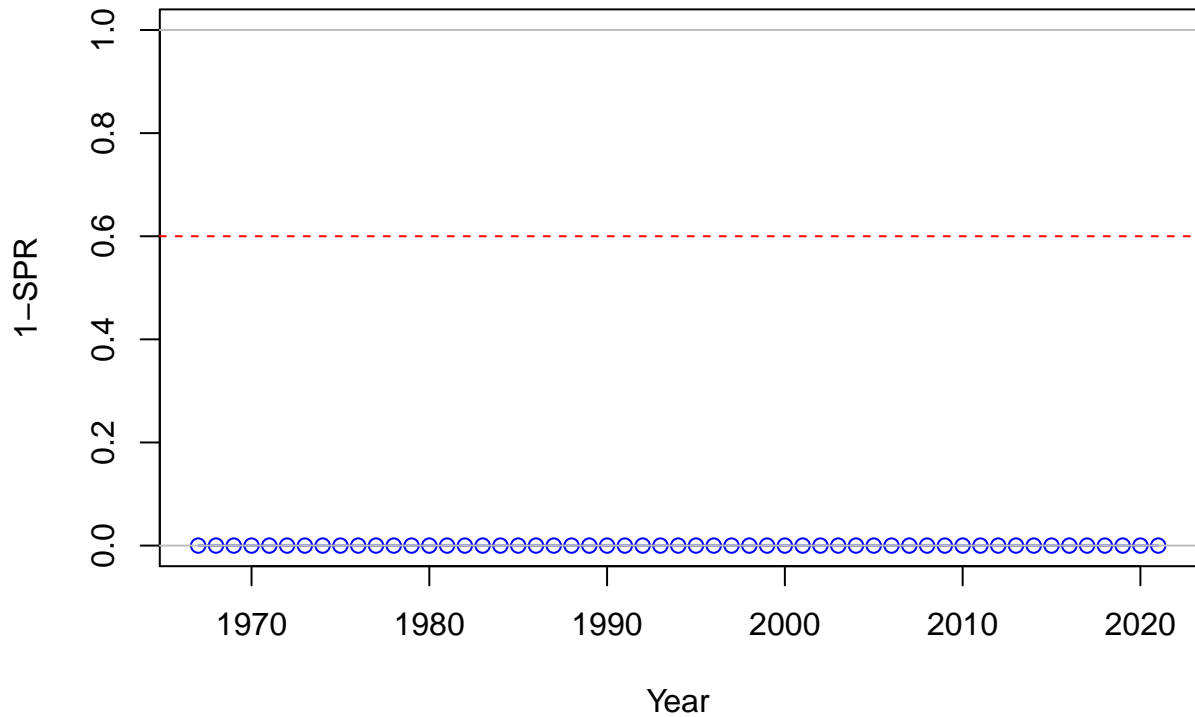




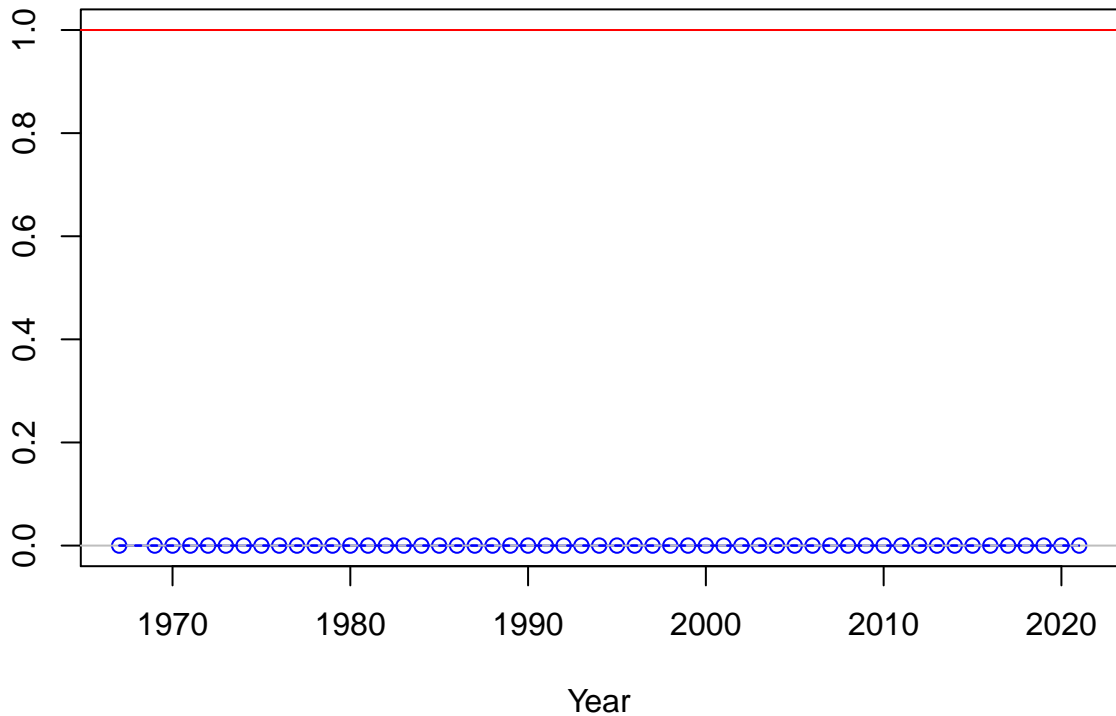
SPR



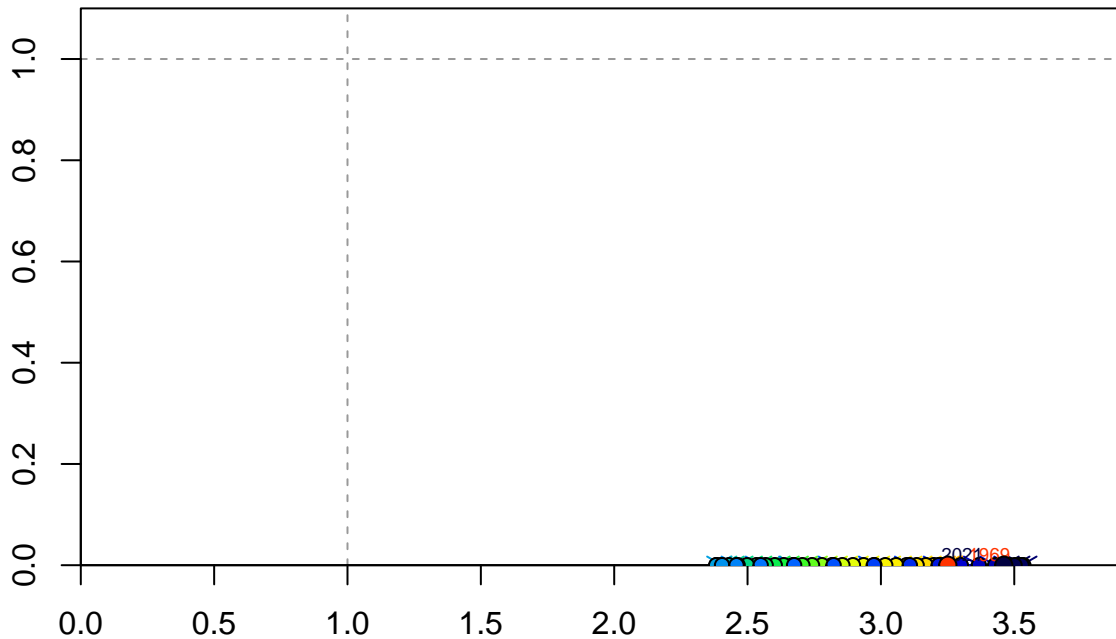
Year



Fishing intensity: 1-SPR

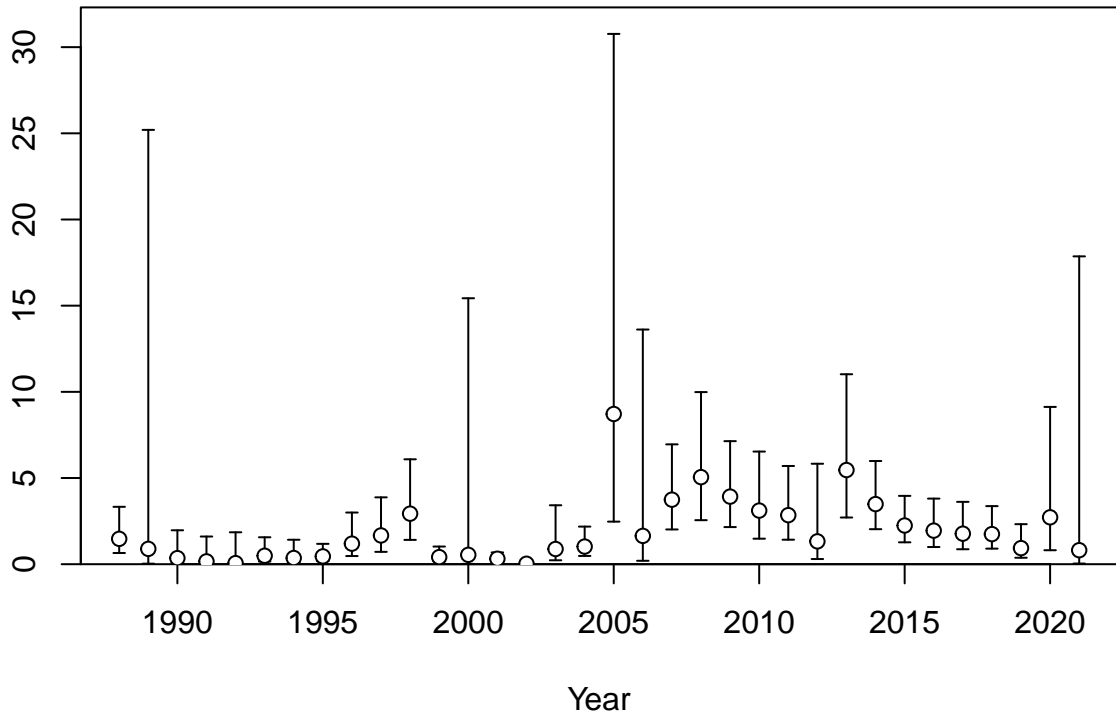


Fishing intensity: 1-SPR

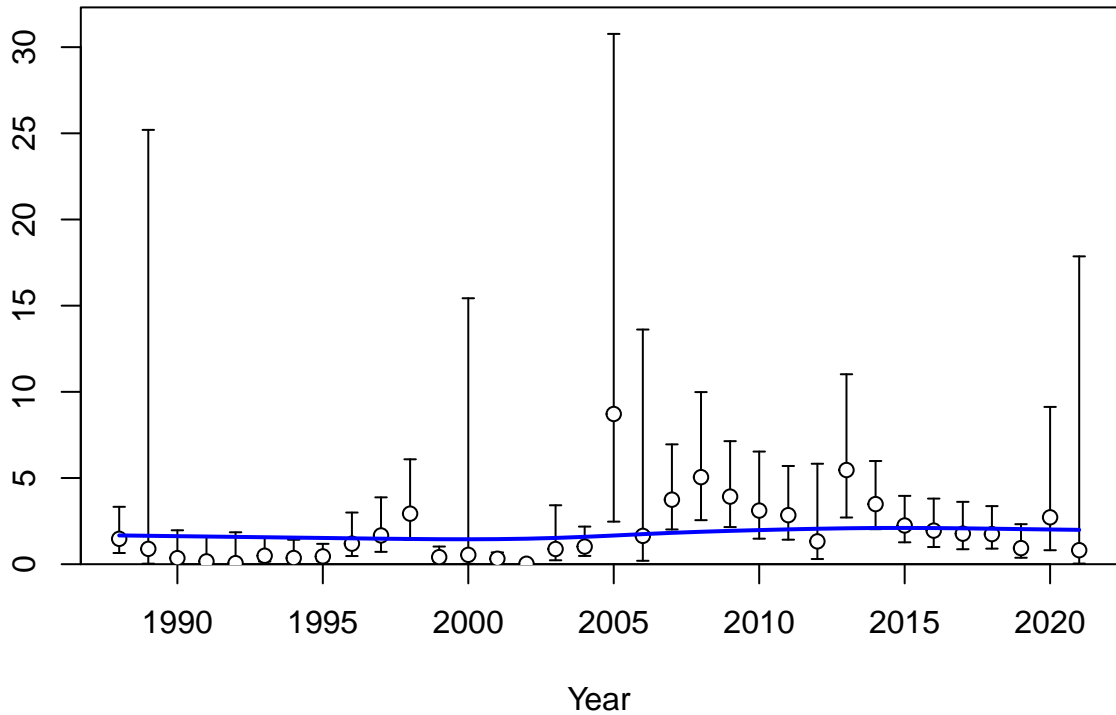


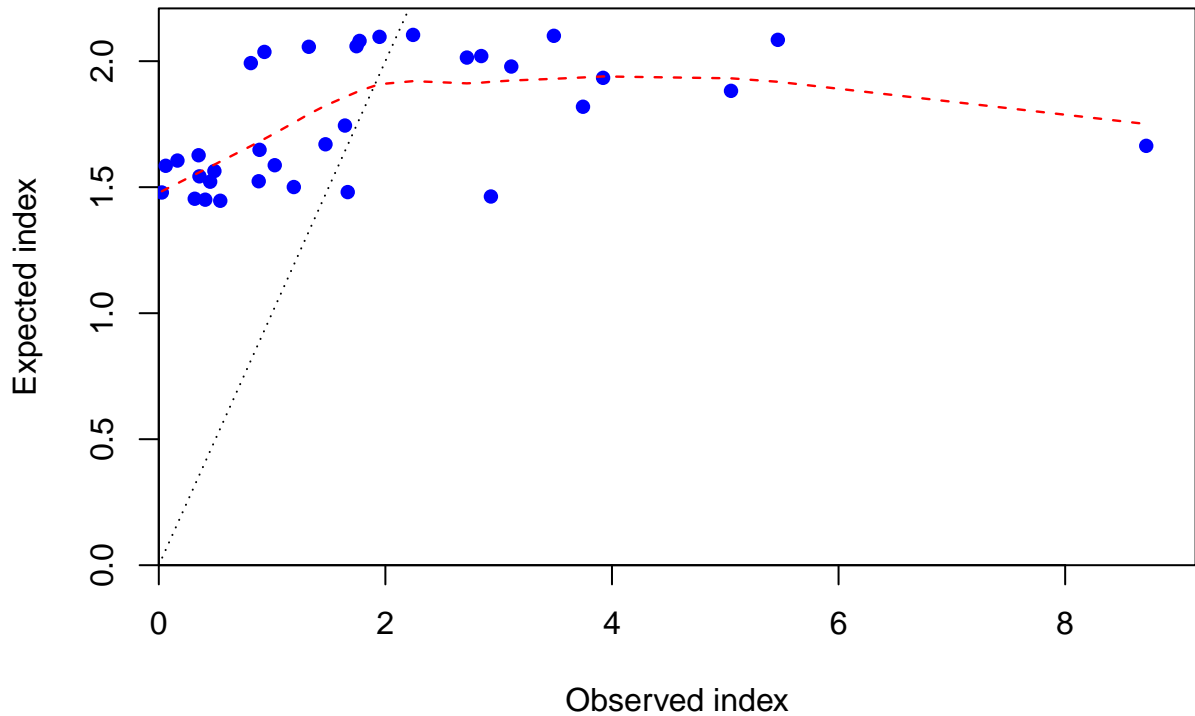
Relative spawning output: B/B_{MSY}

Index



Index





Log index

2
0
-2
-4
-6

1990

1995

2000

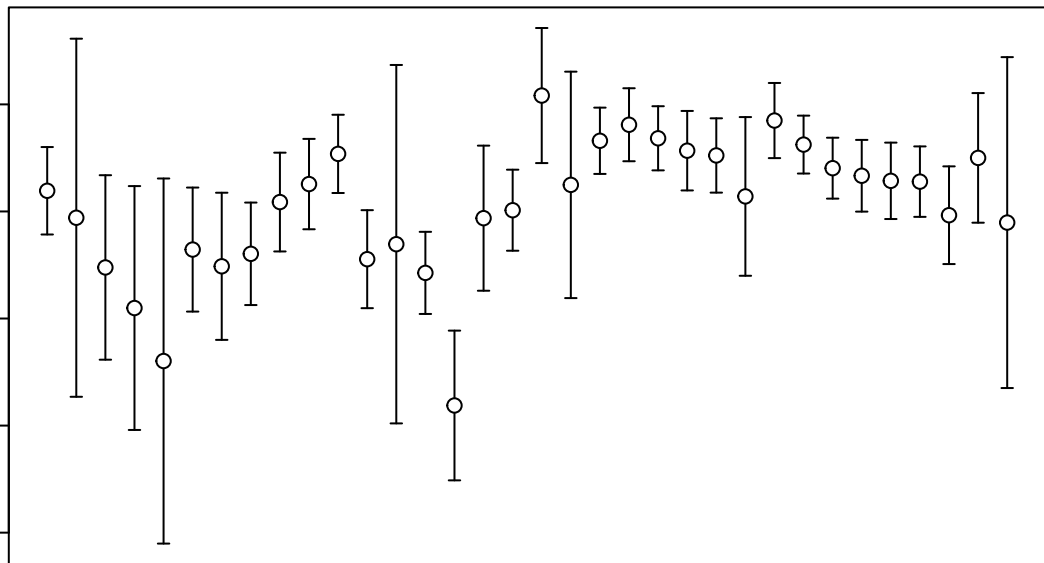
2005

2010

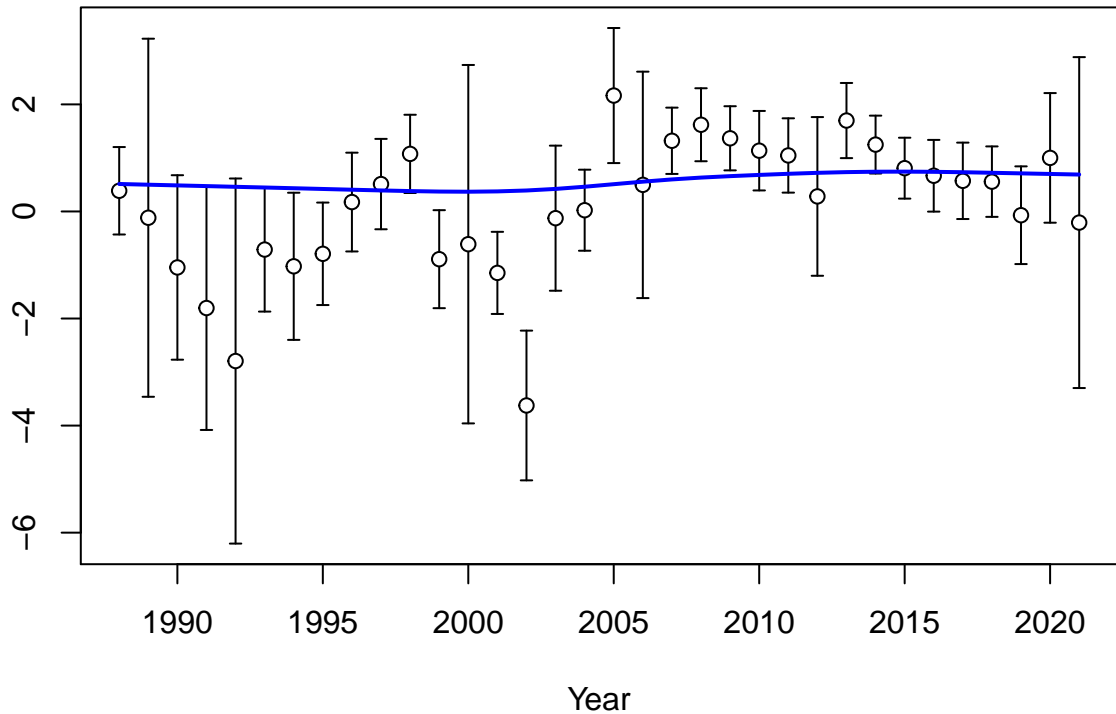
2015

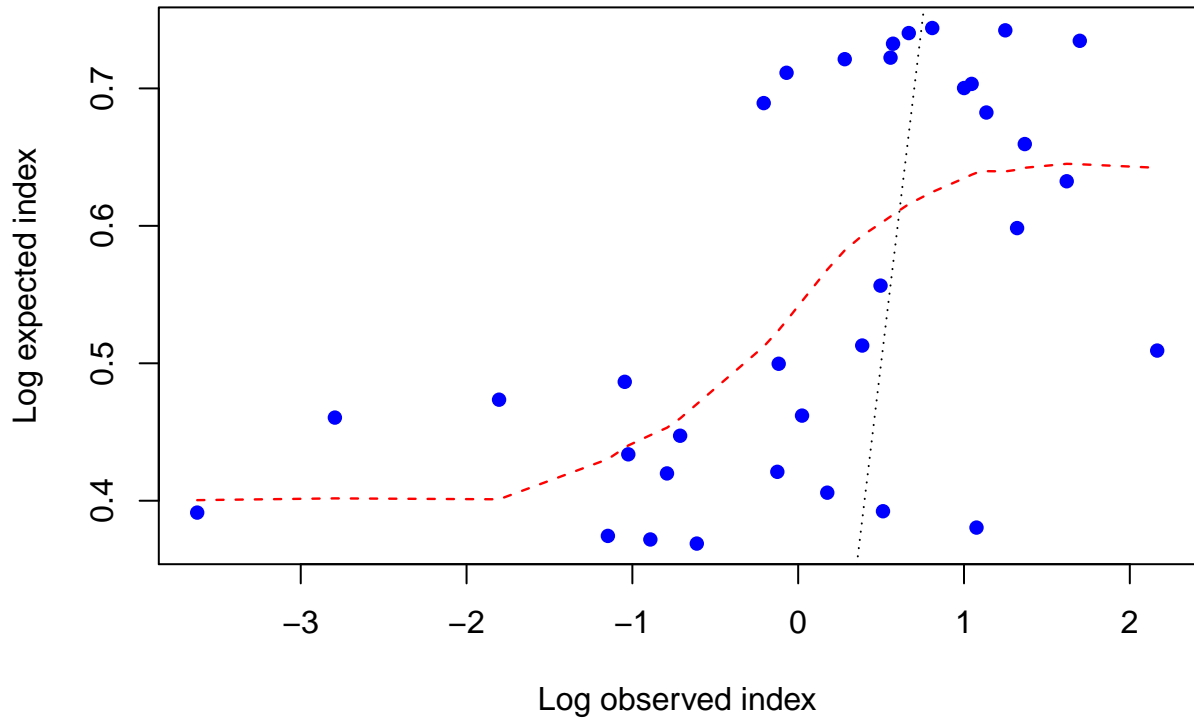
2020

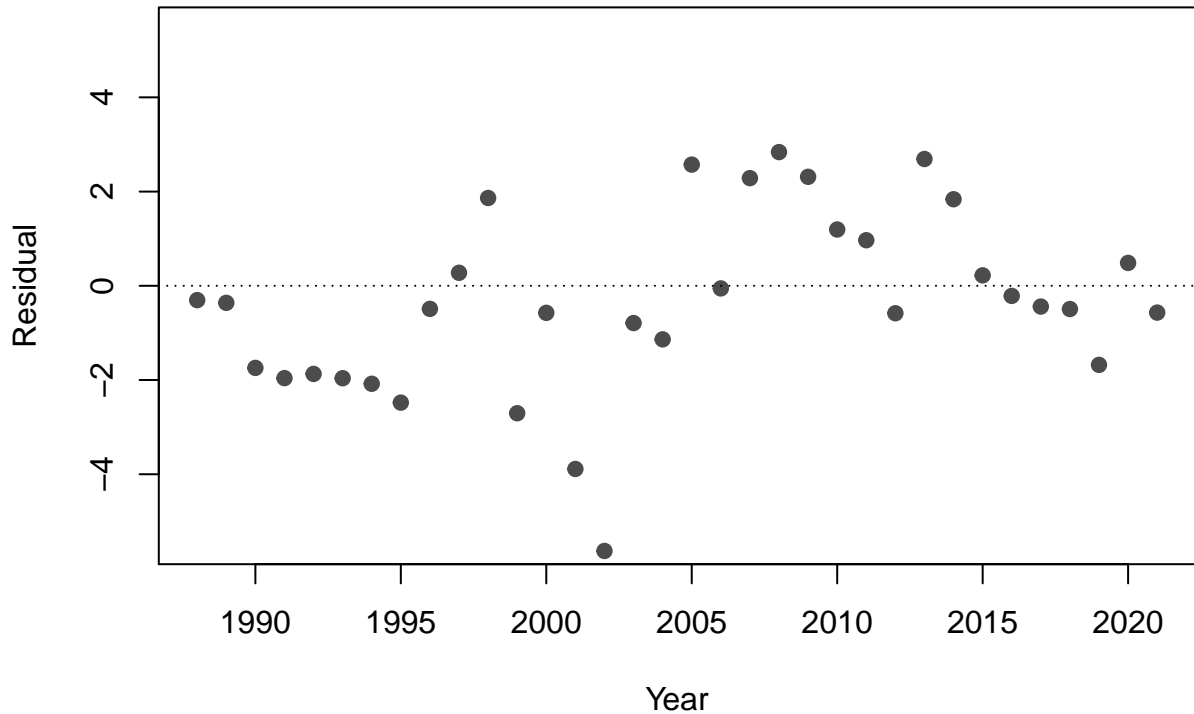
Year

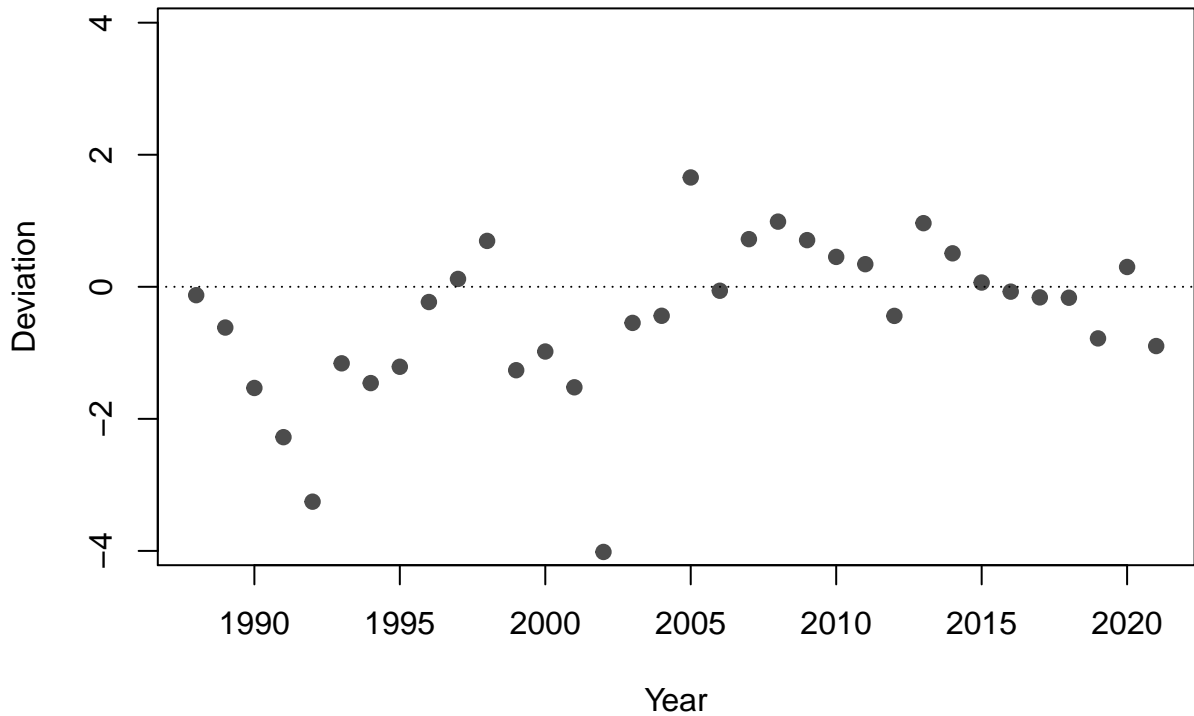


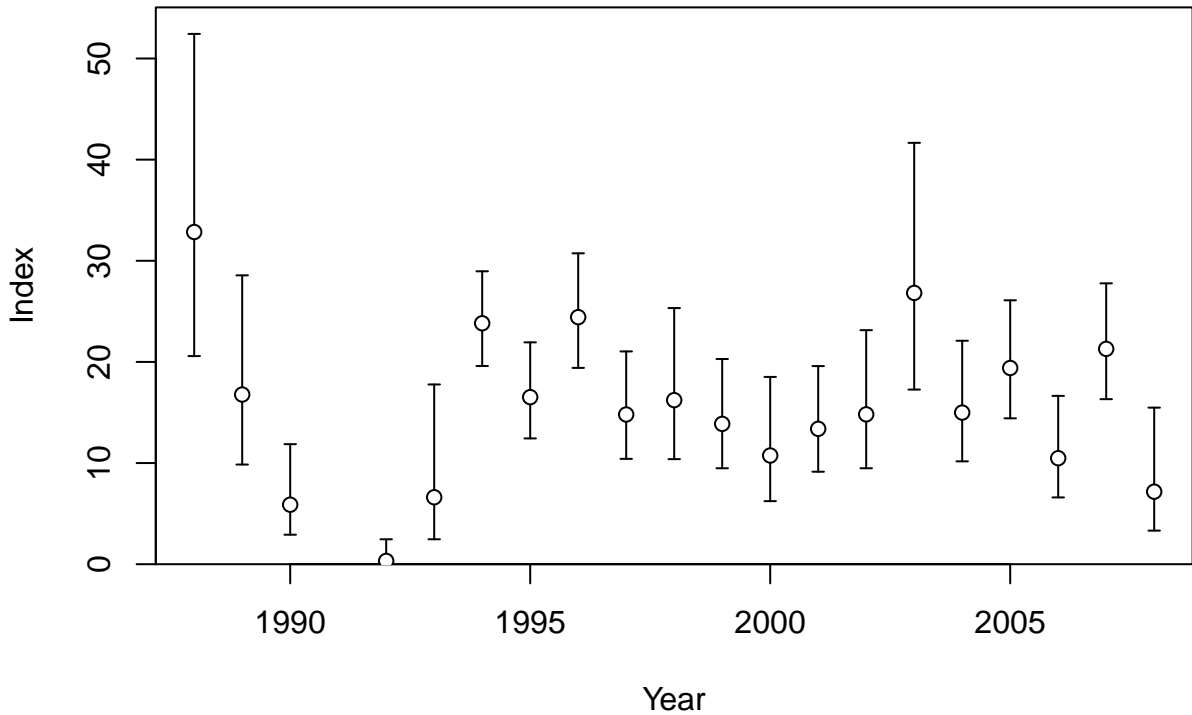
Log index

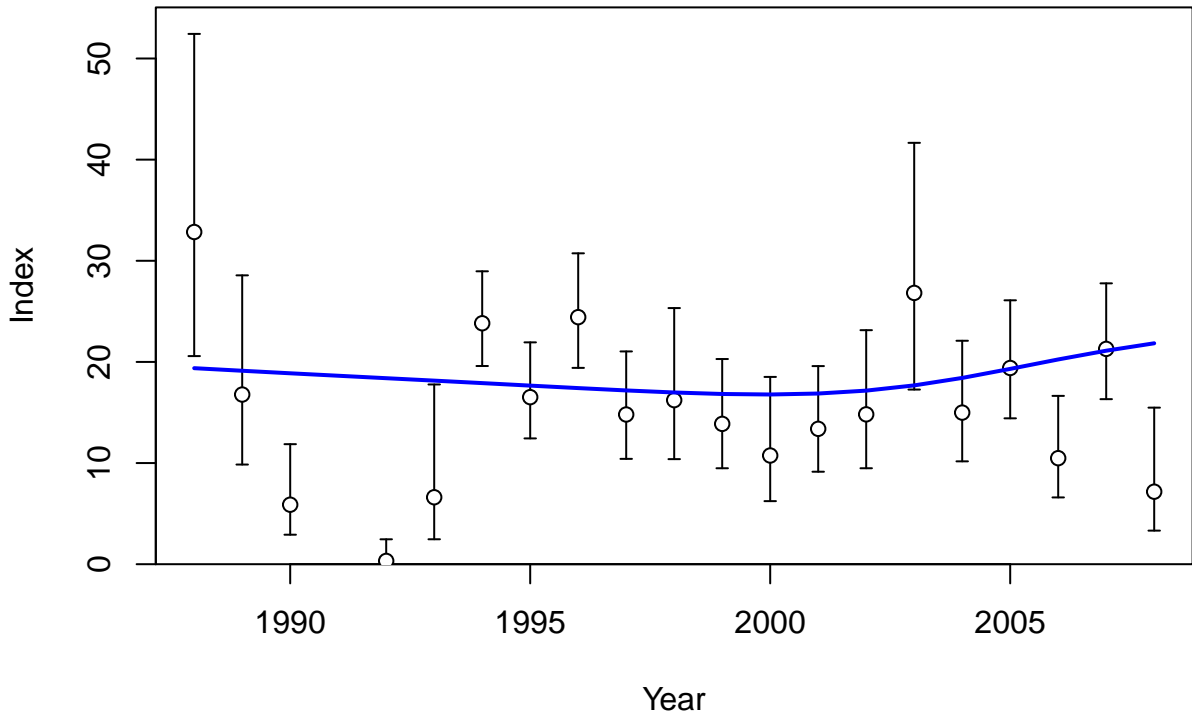


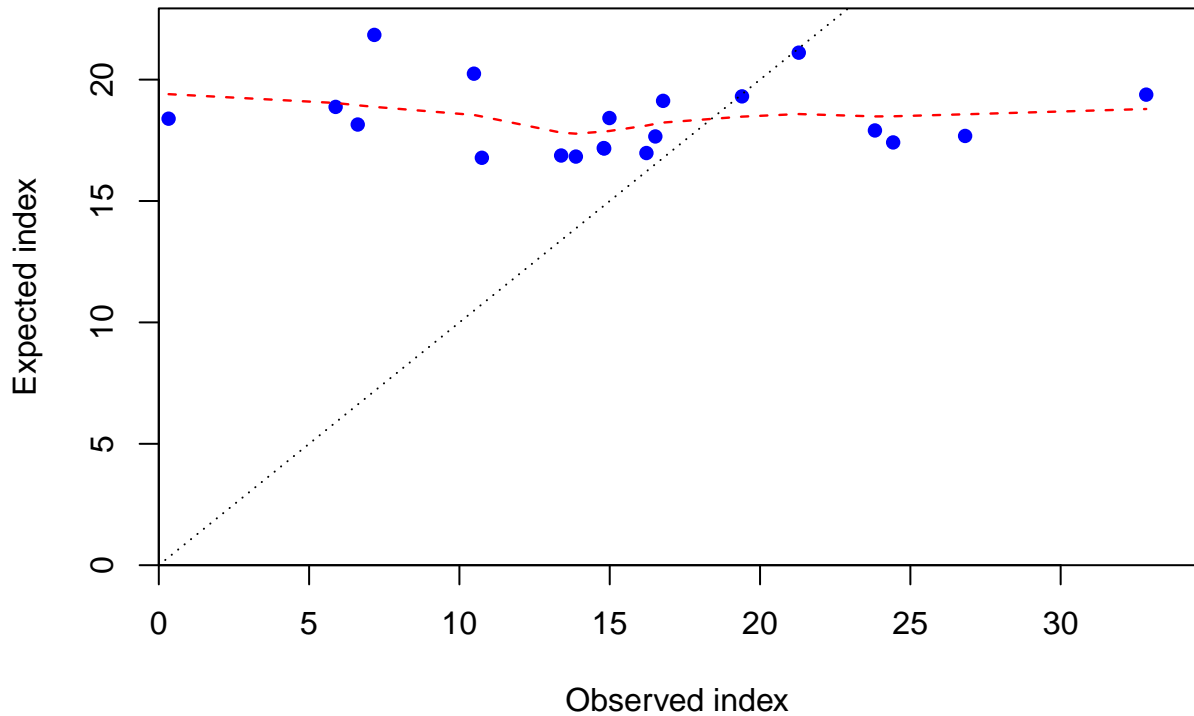




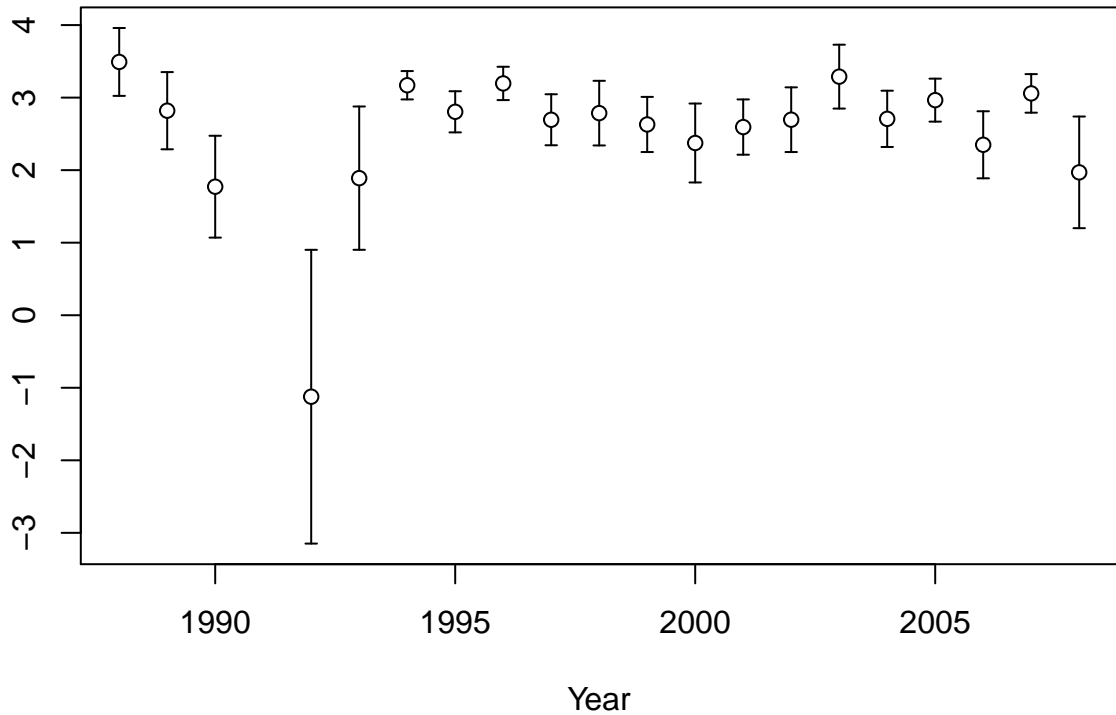


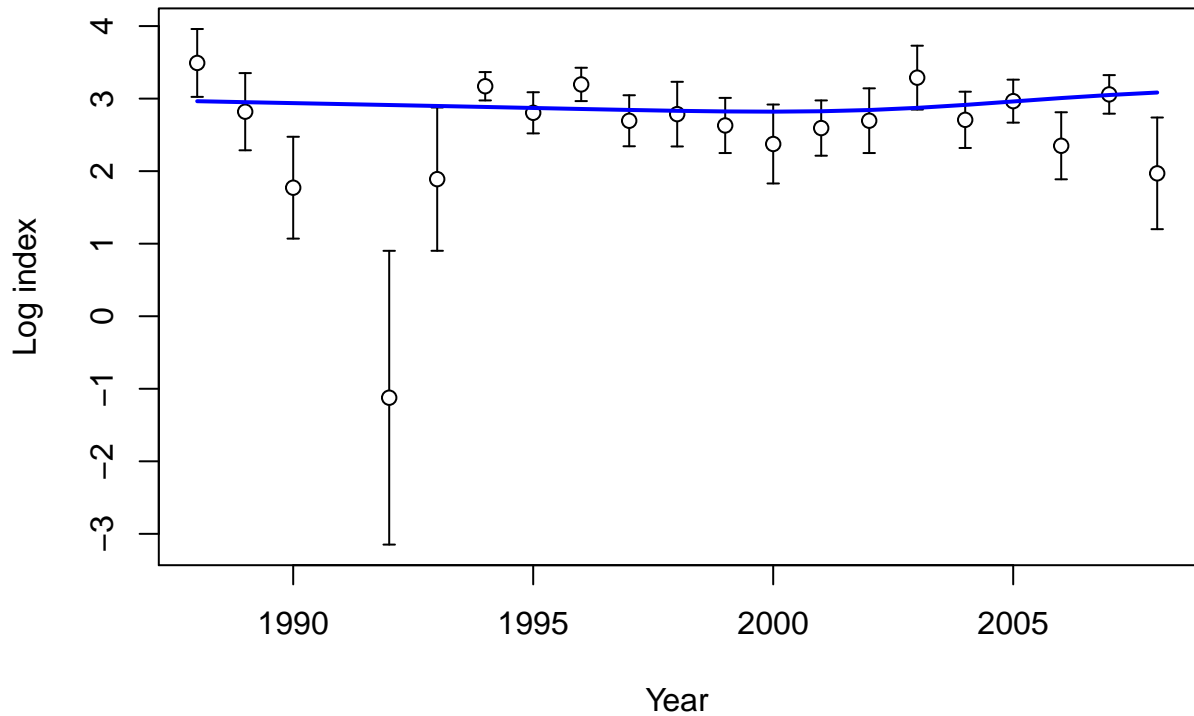


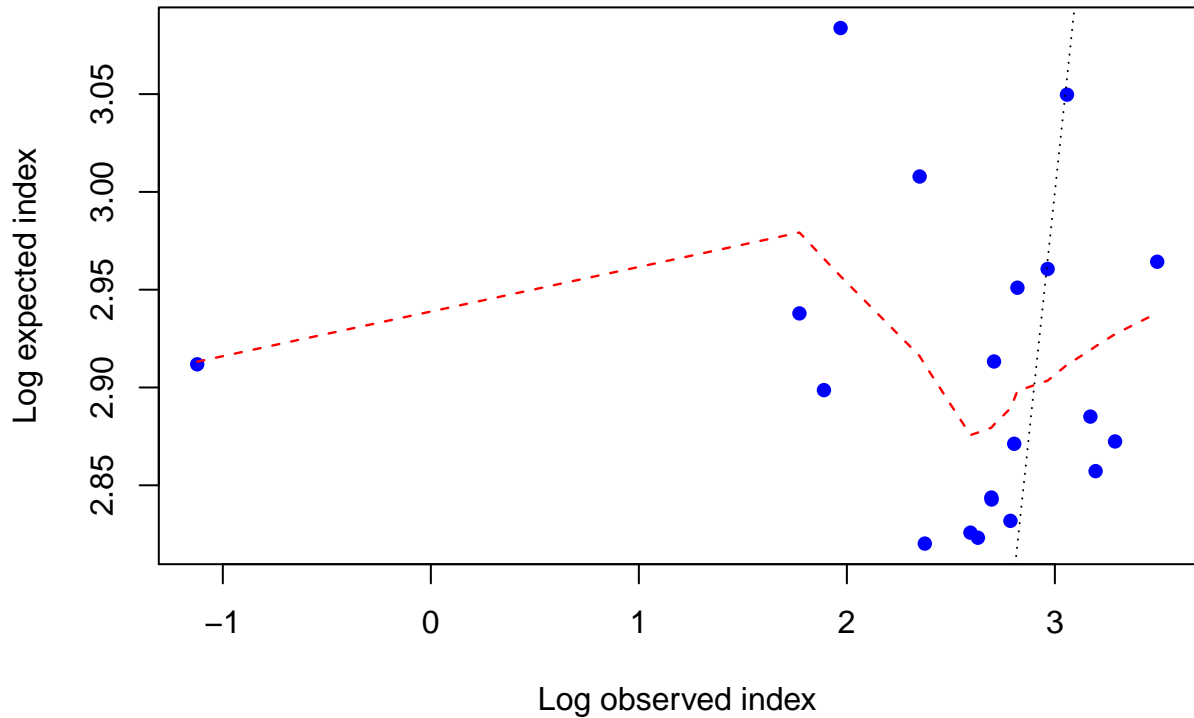




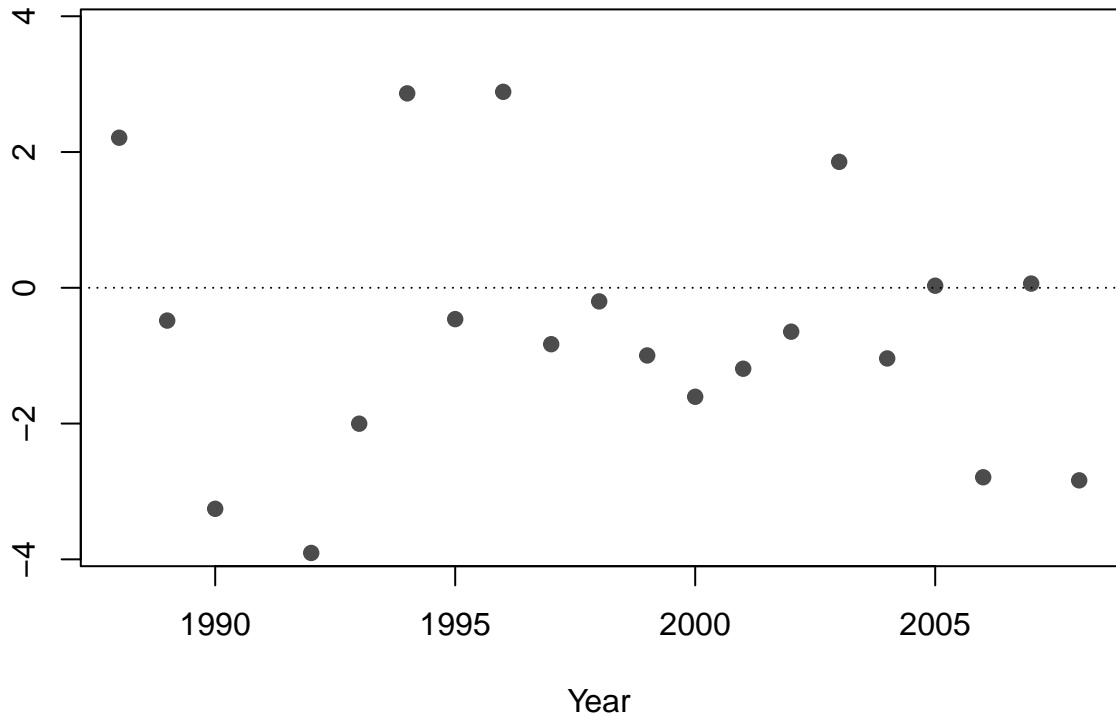
Log index

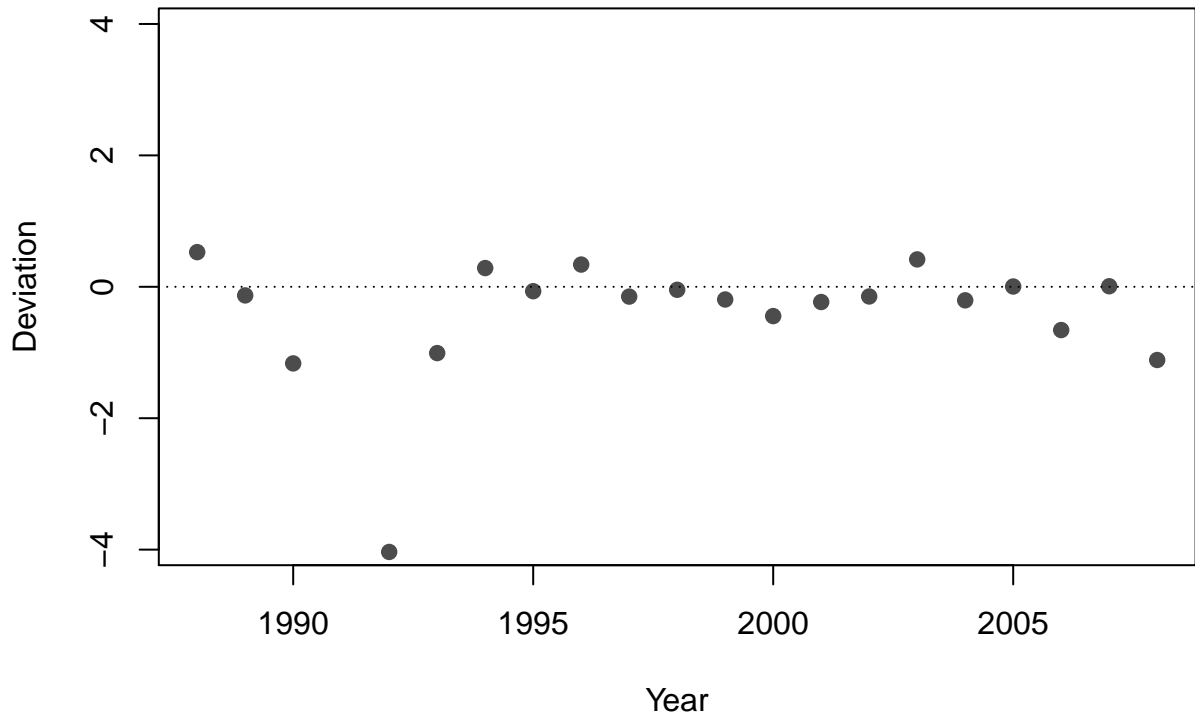


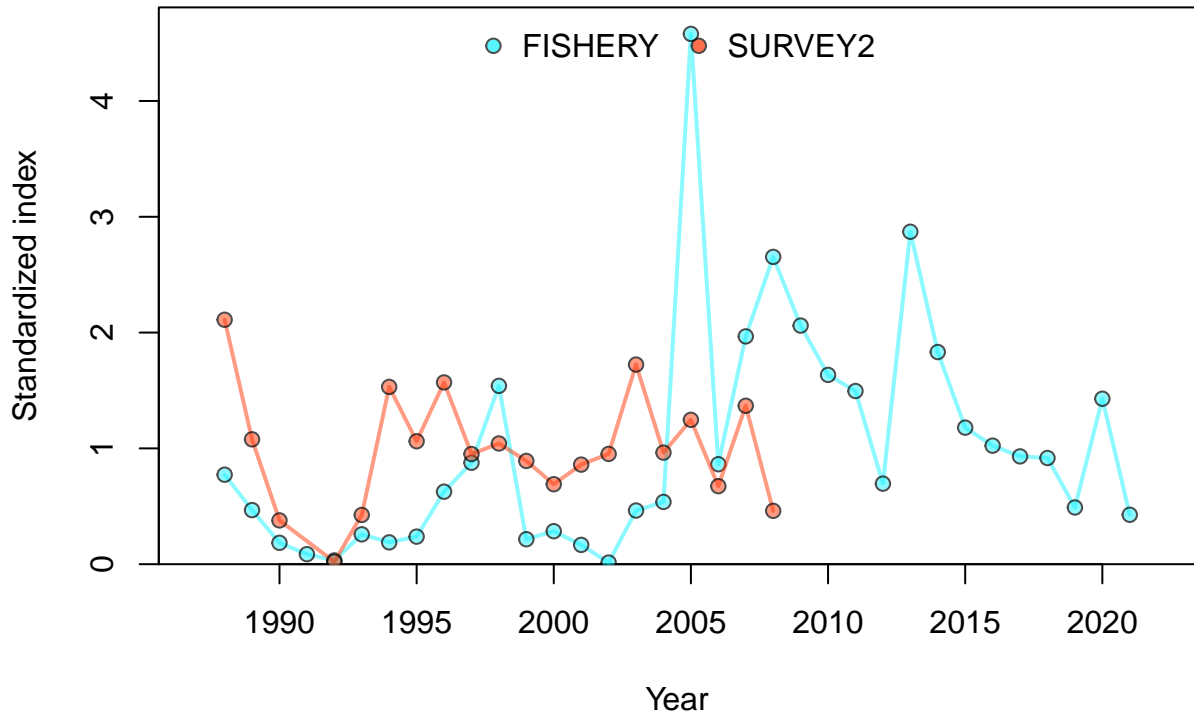


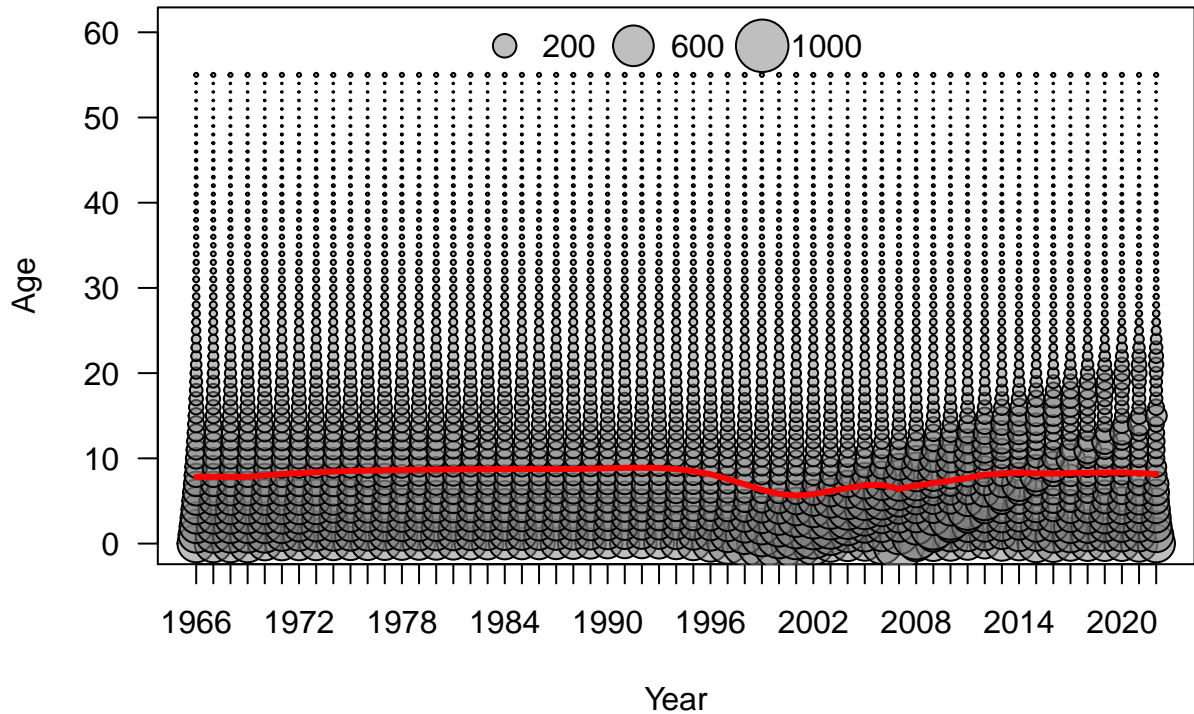


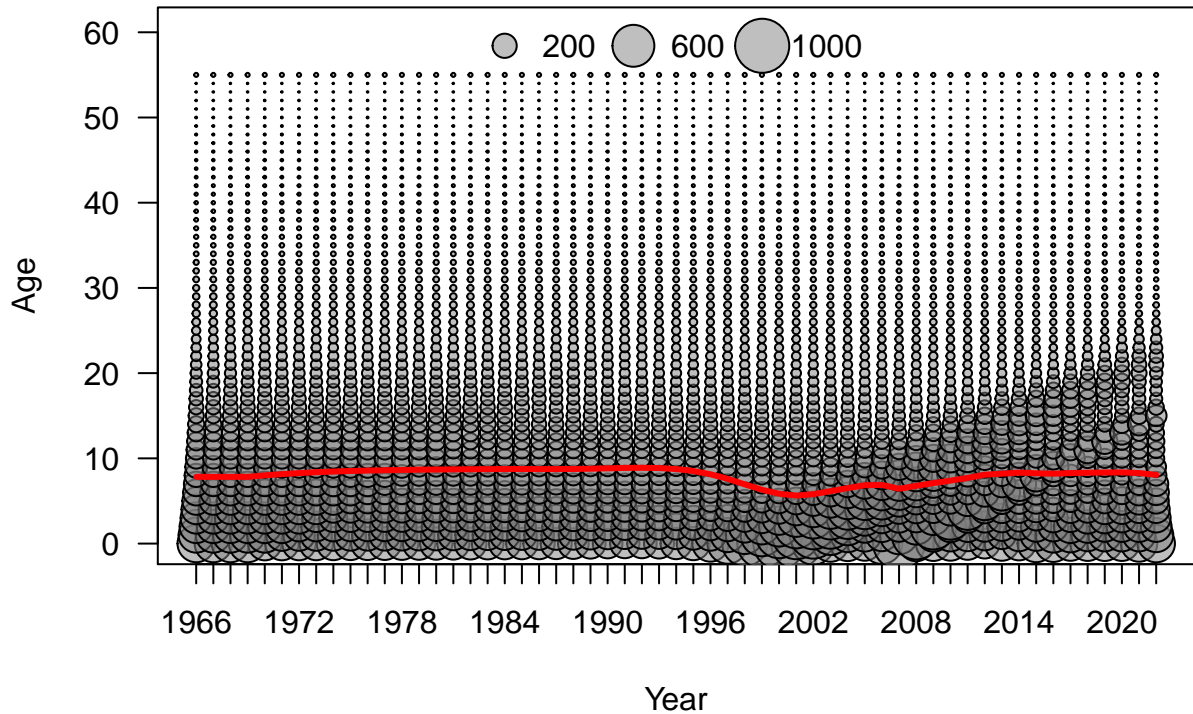
Residual

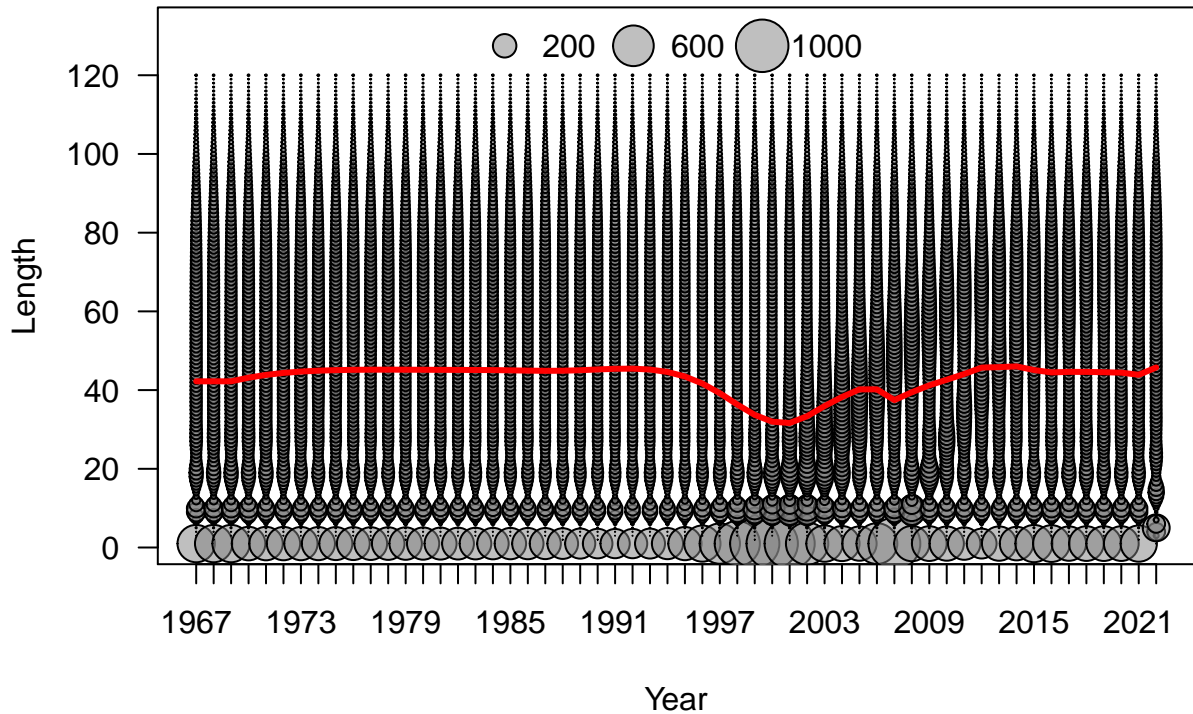


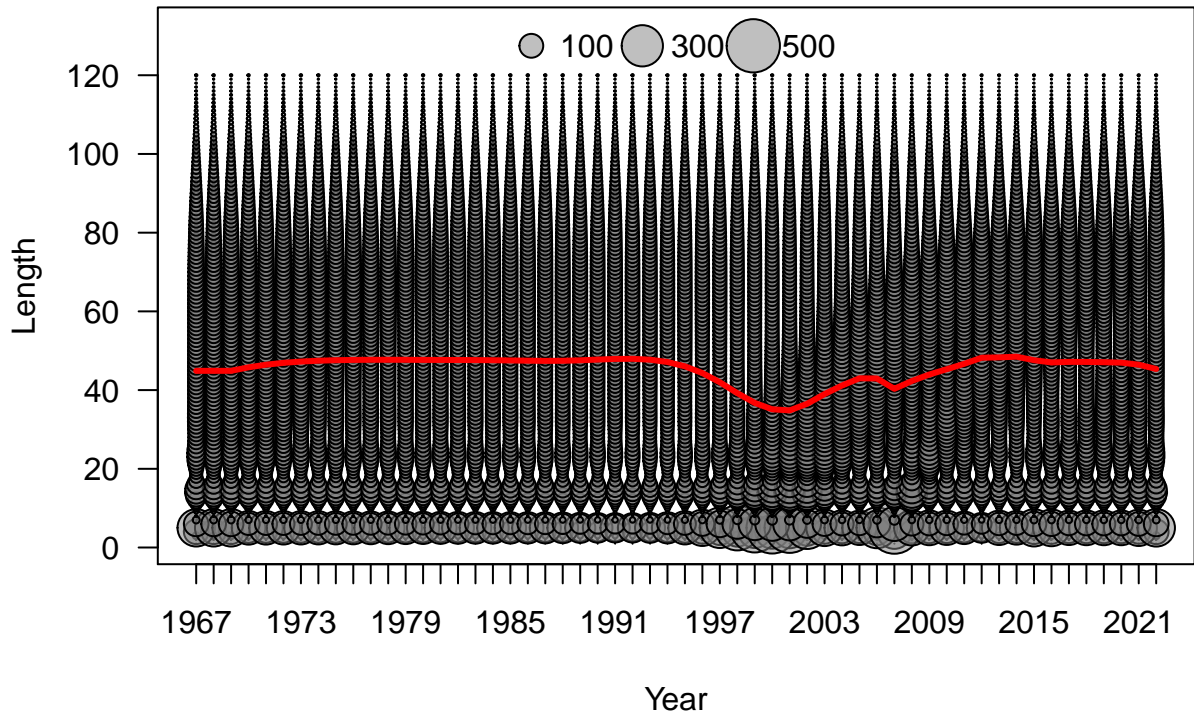












Numbers at age at equilibrium

4e+08
2e+08
0e+00

0

10

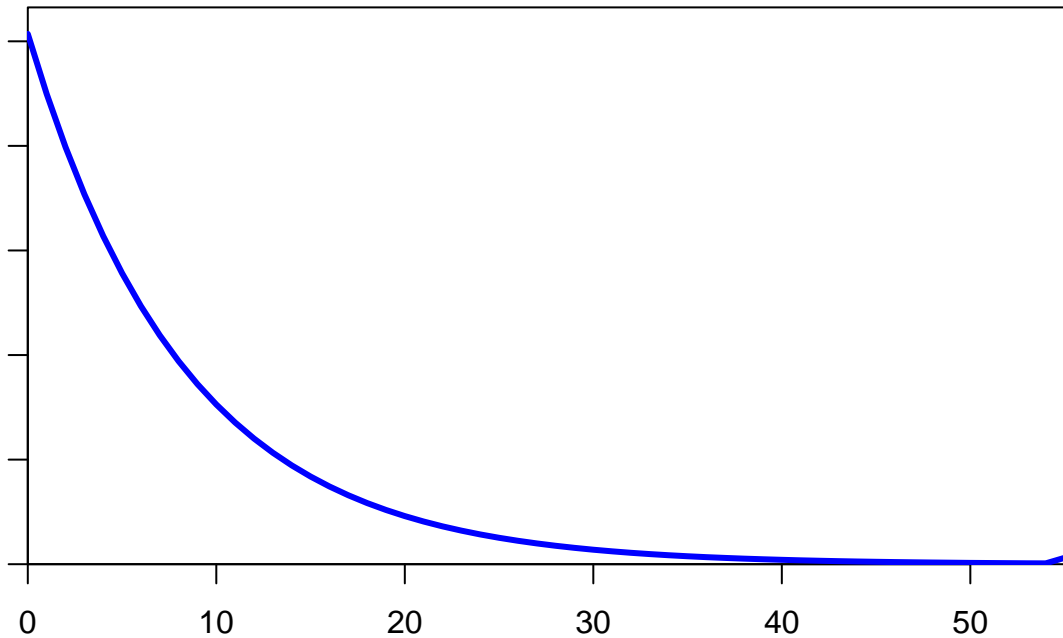
20

30

40

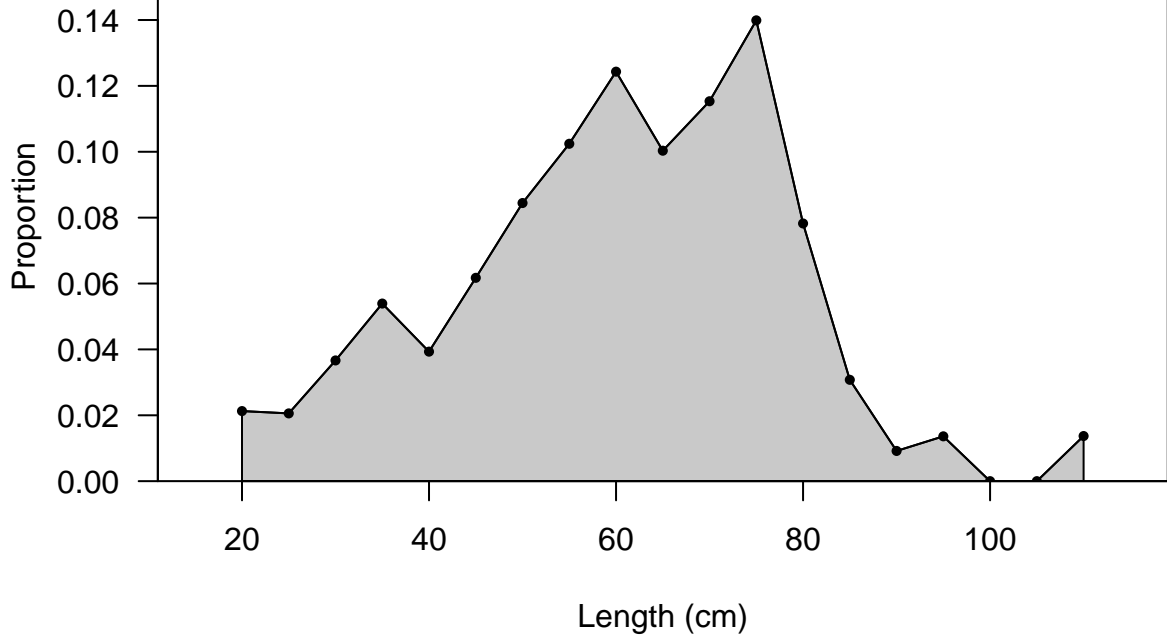
50

Age



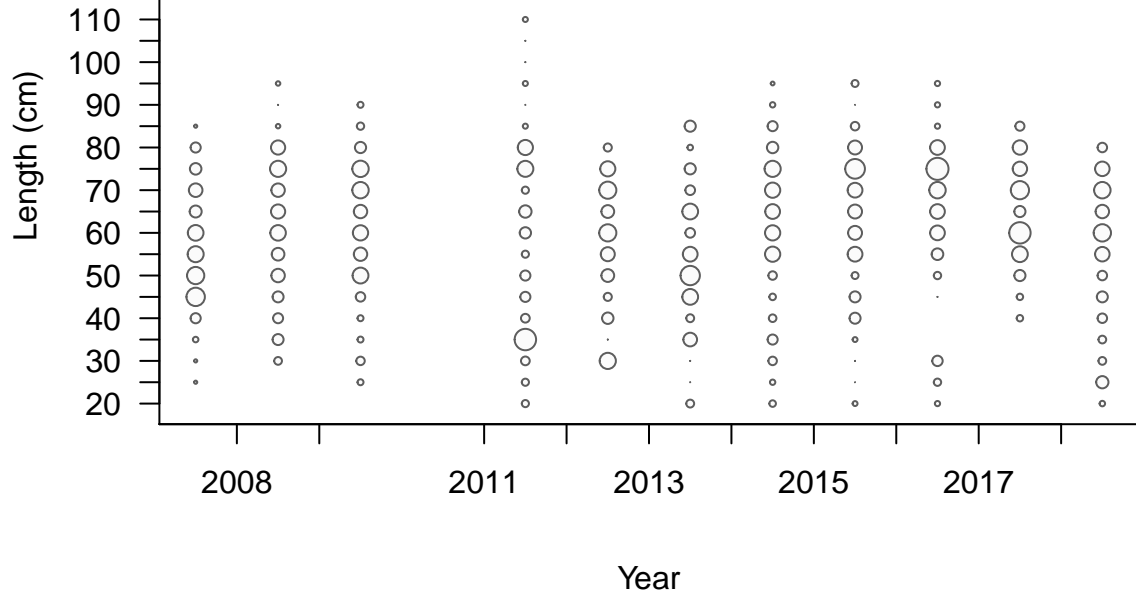
FISHERY

Sum of N adj.=345.8

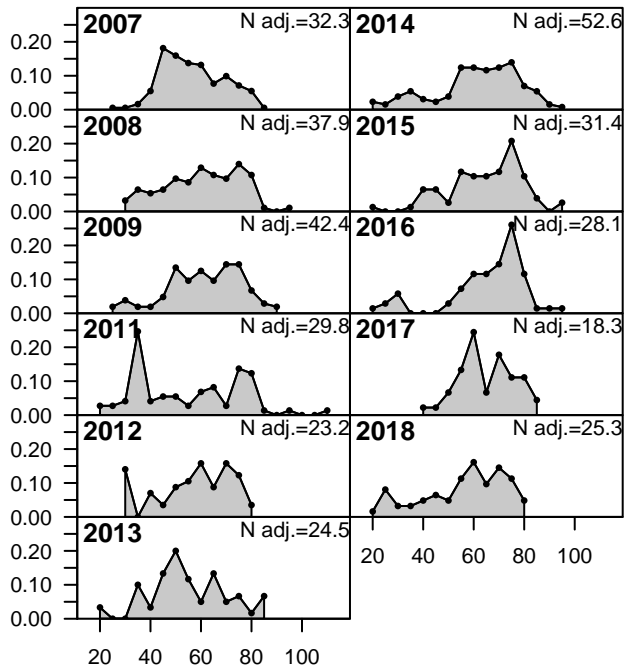


FISHERY

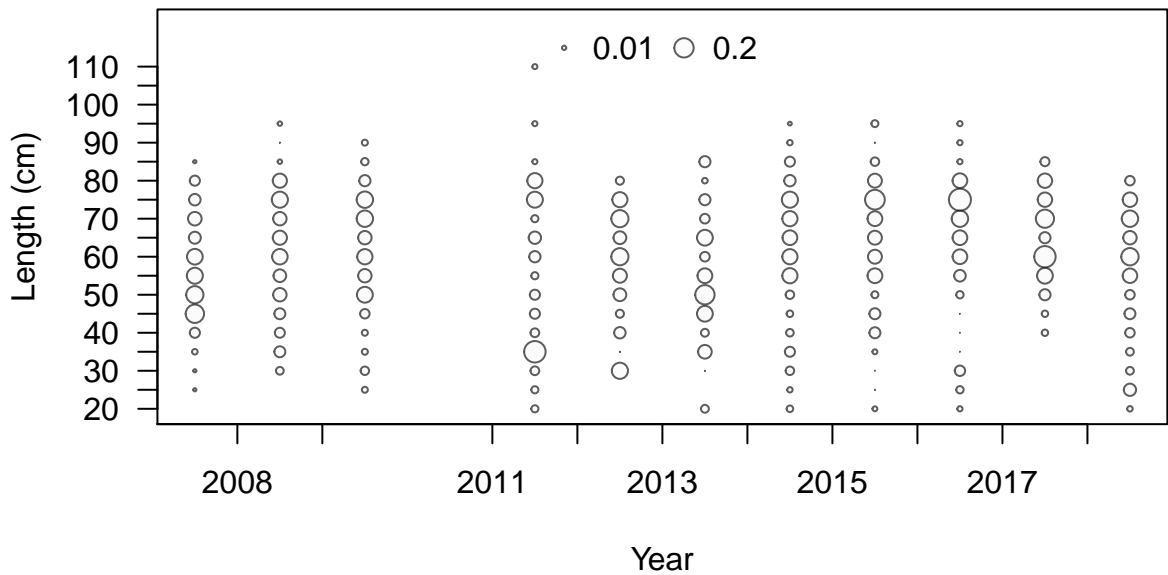
◦ 0.01 ○ 0.2



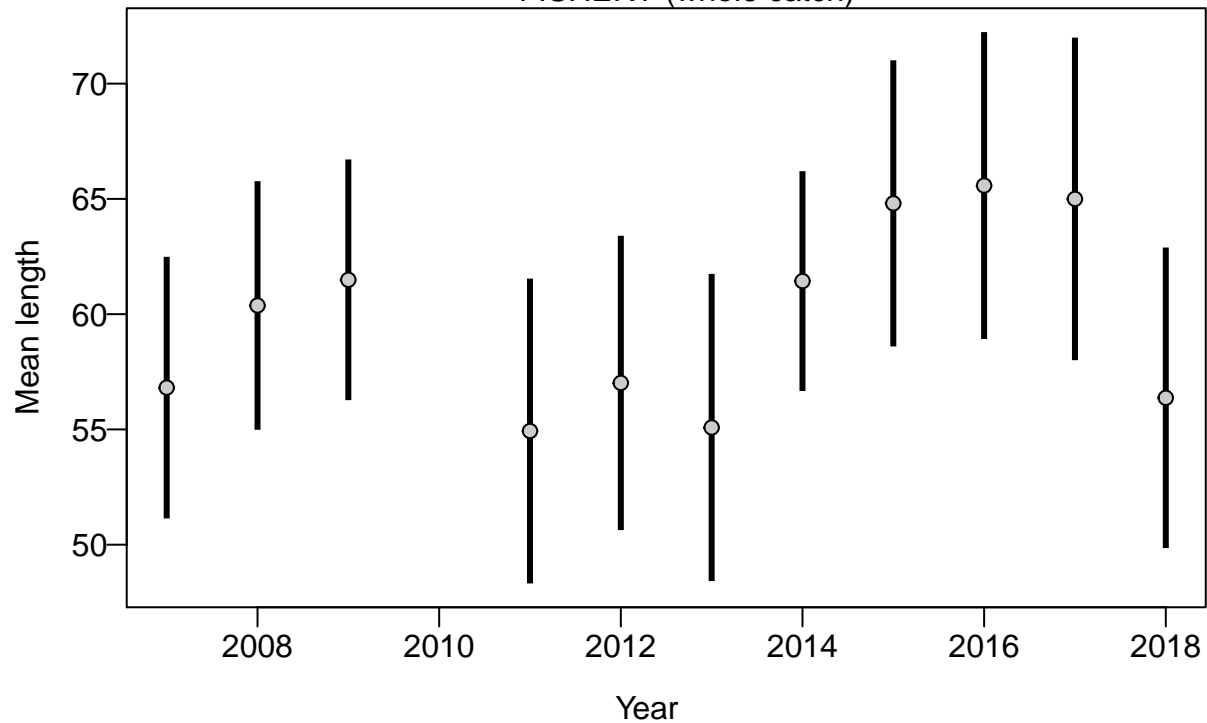
Proportion



Length (cm)

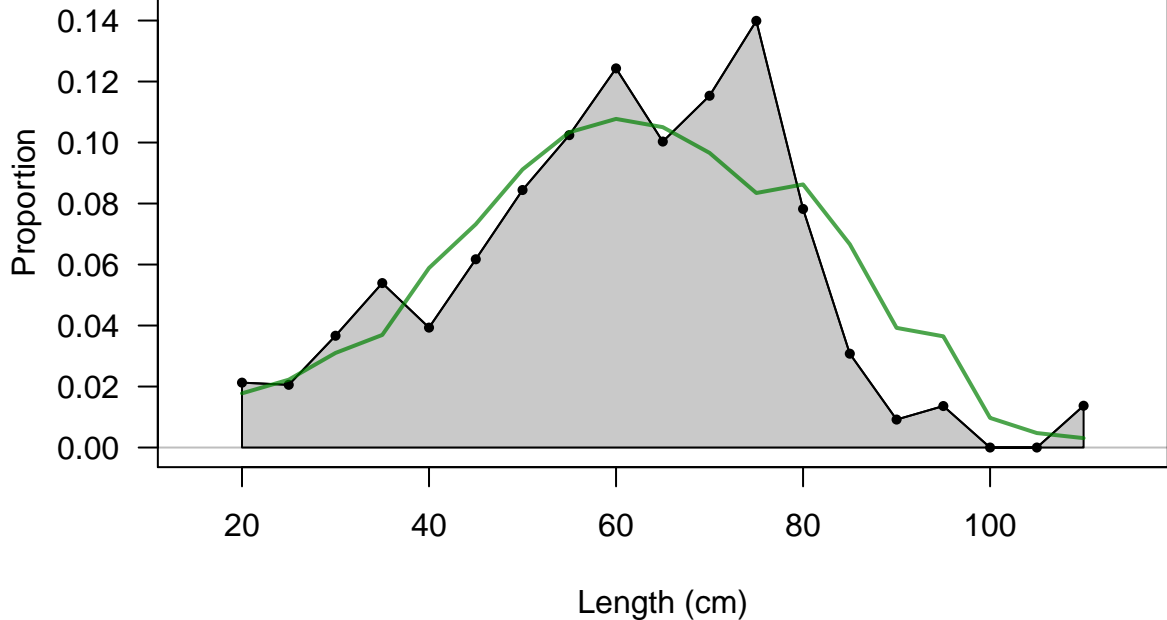


FISHERY (whole catch)



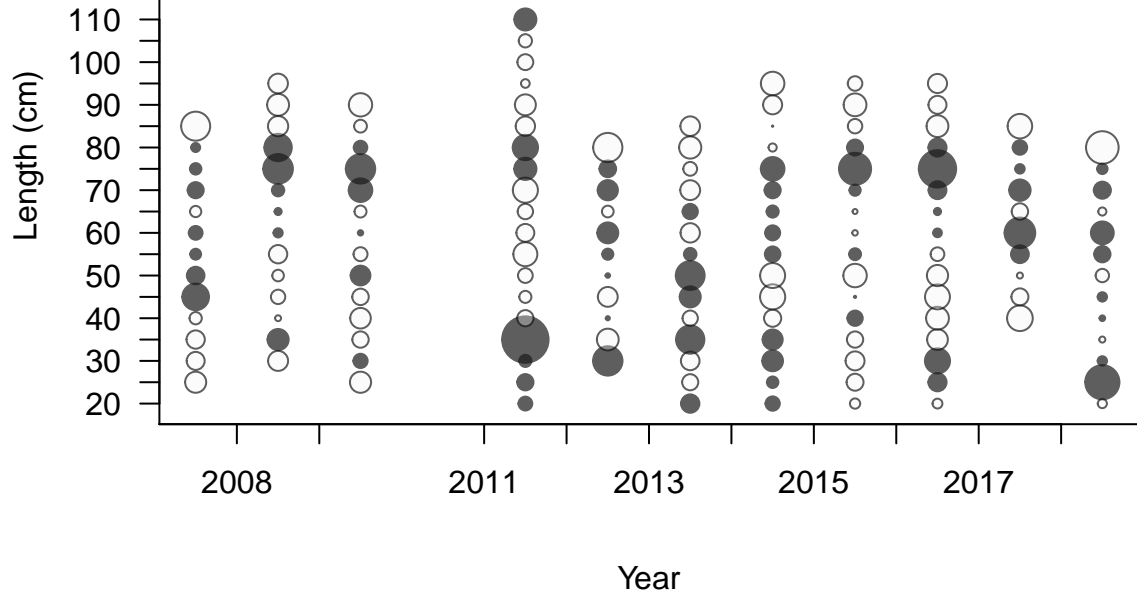
FISHERY

Sum of N adj.=345.8
Sum of N eff.=404.6

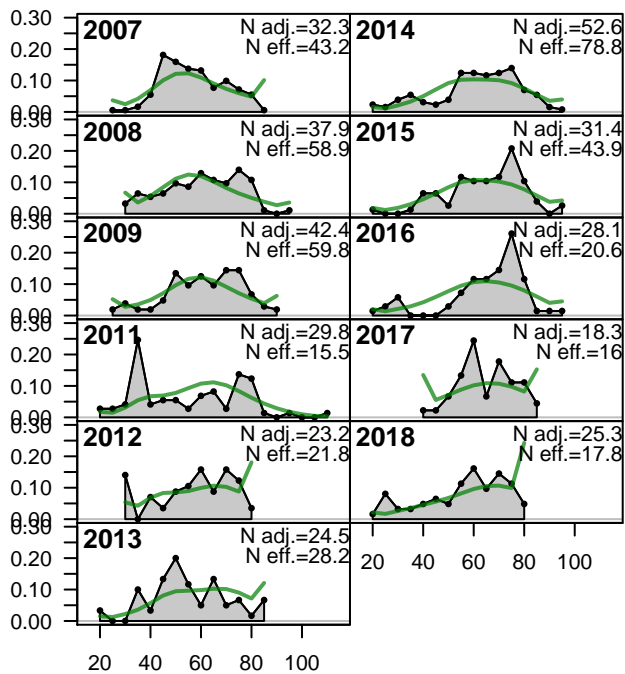


FISHERY

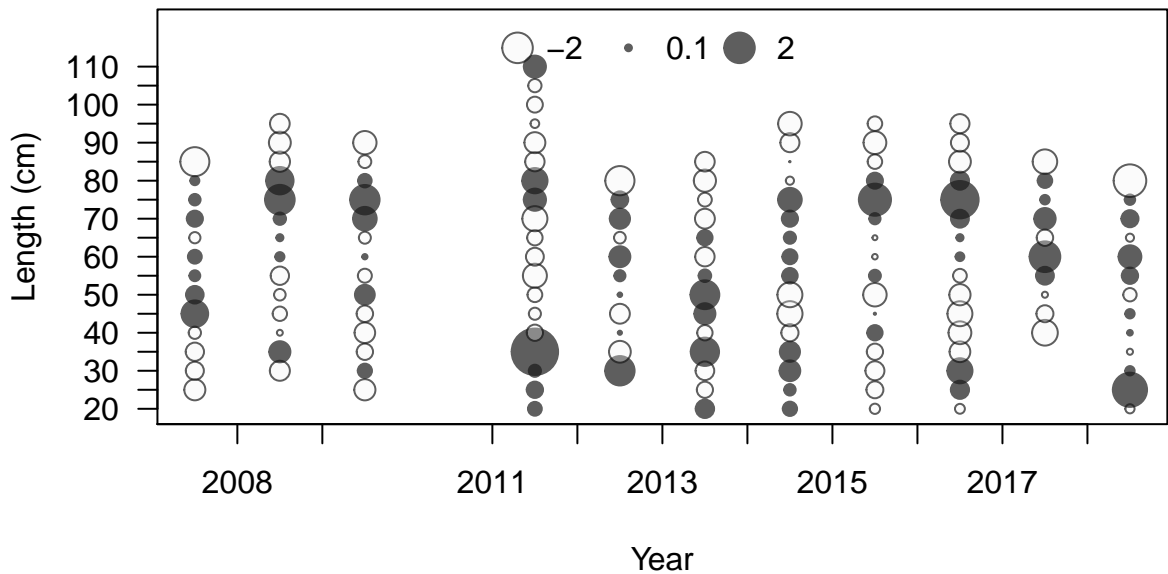
○ -2 • 0.1 ● 2



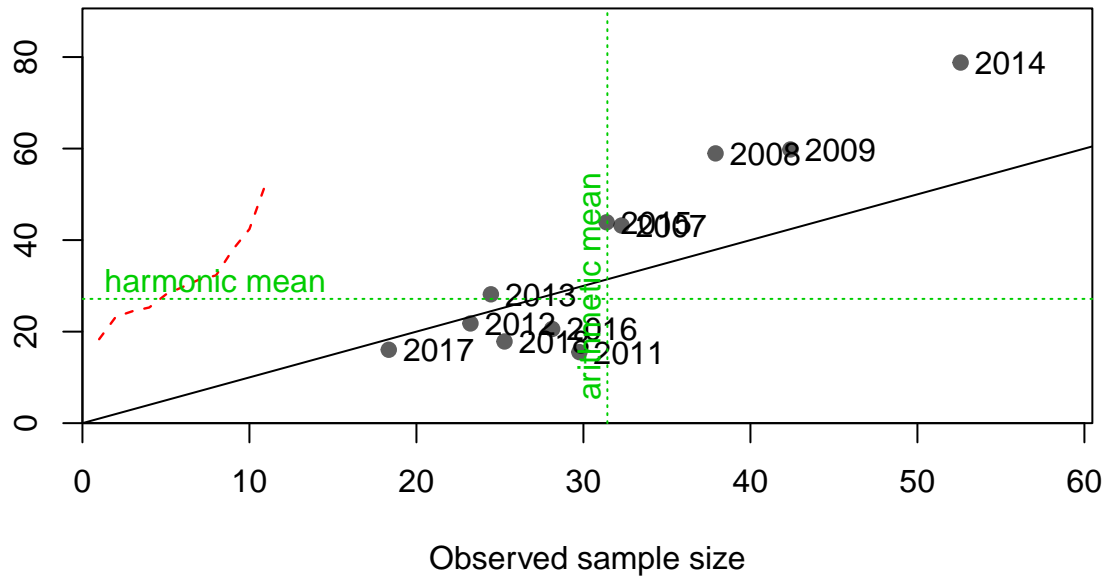
Proportion



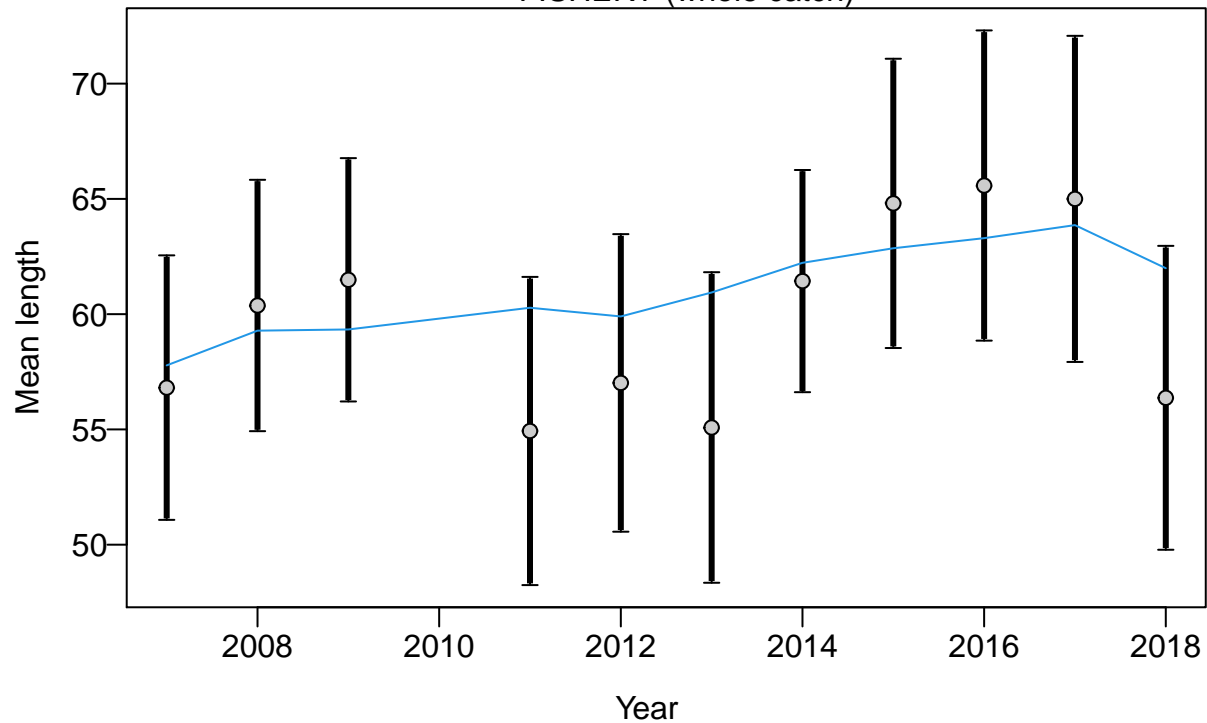
Length (cm)

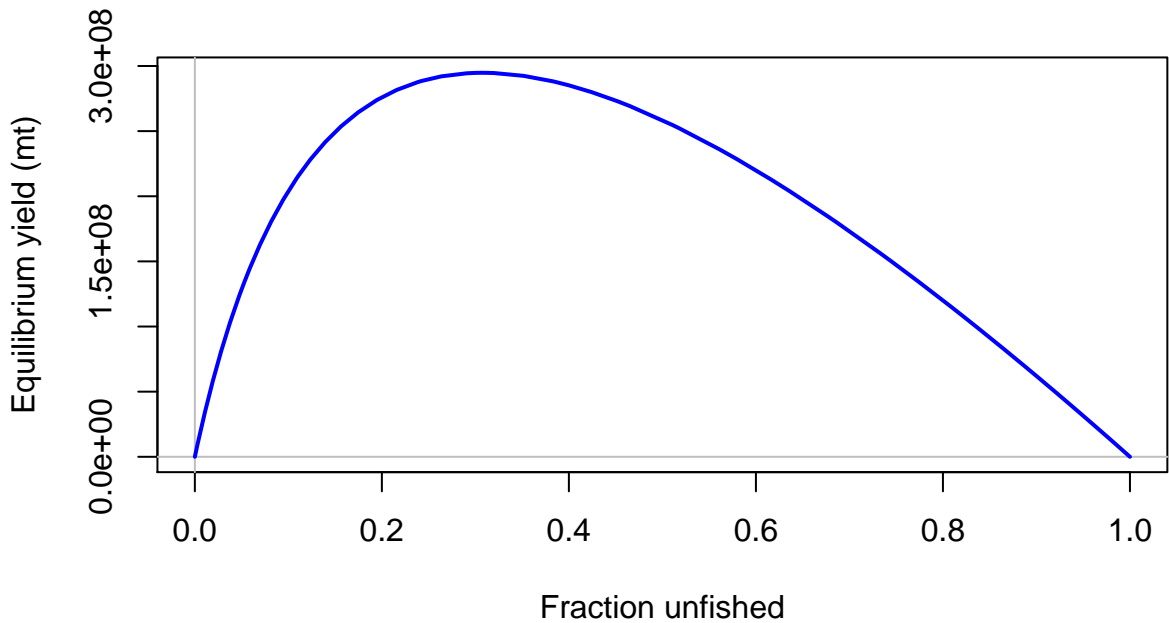


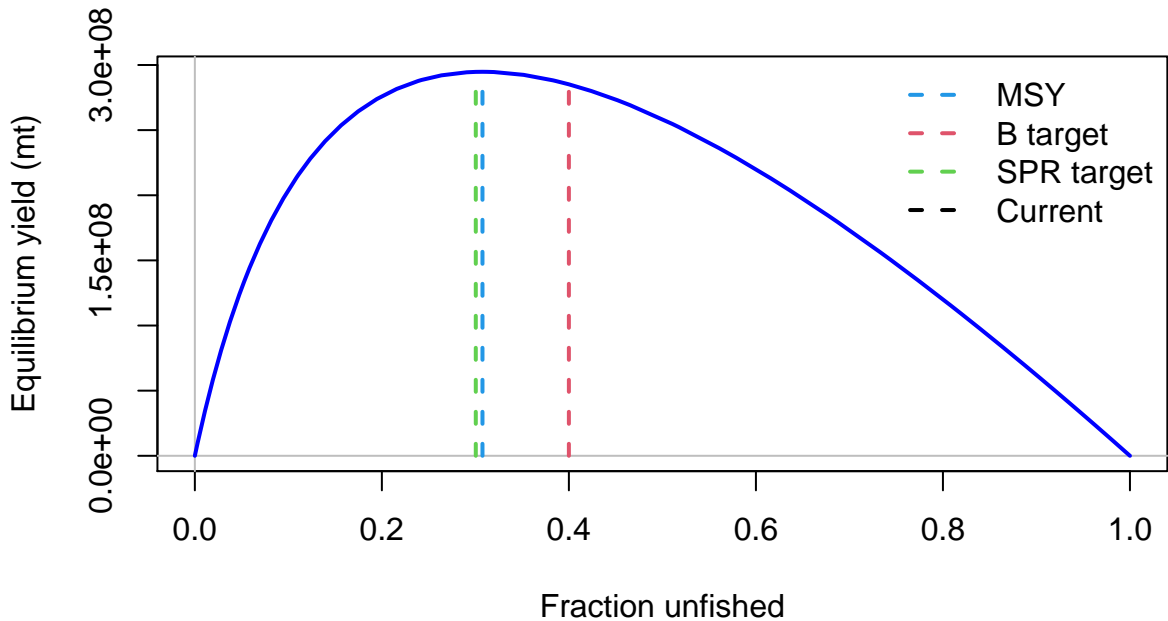
Effective sample size

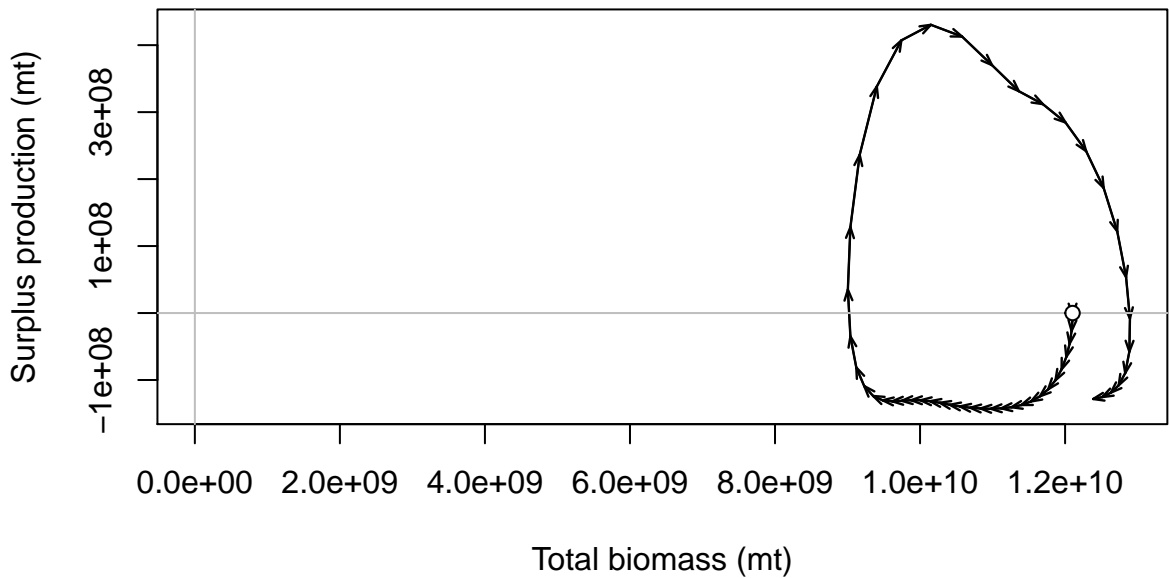


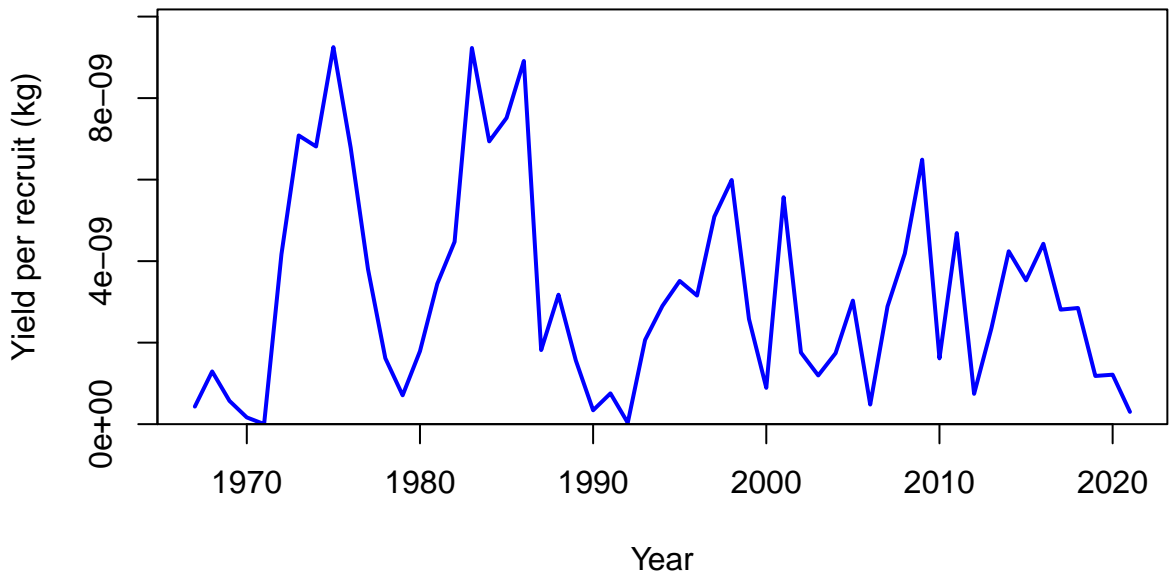
FISHERY (whole catch)

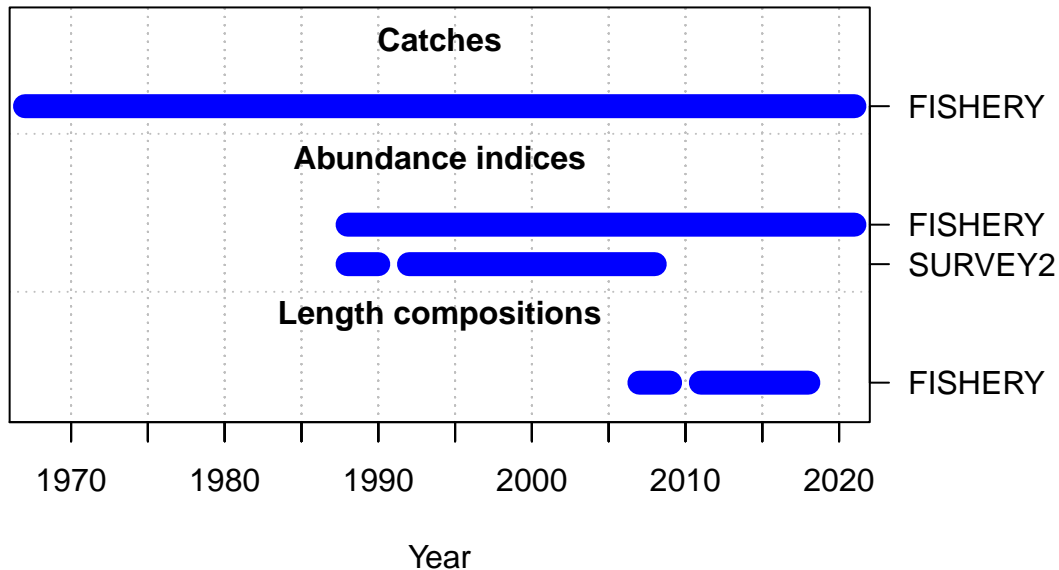


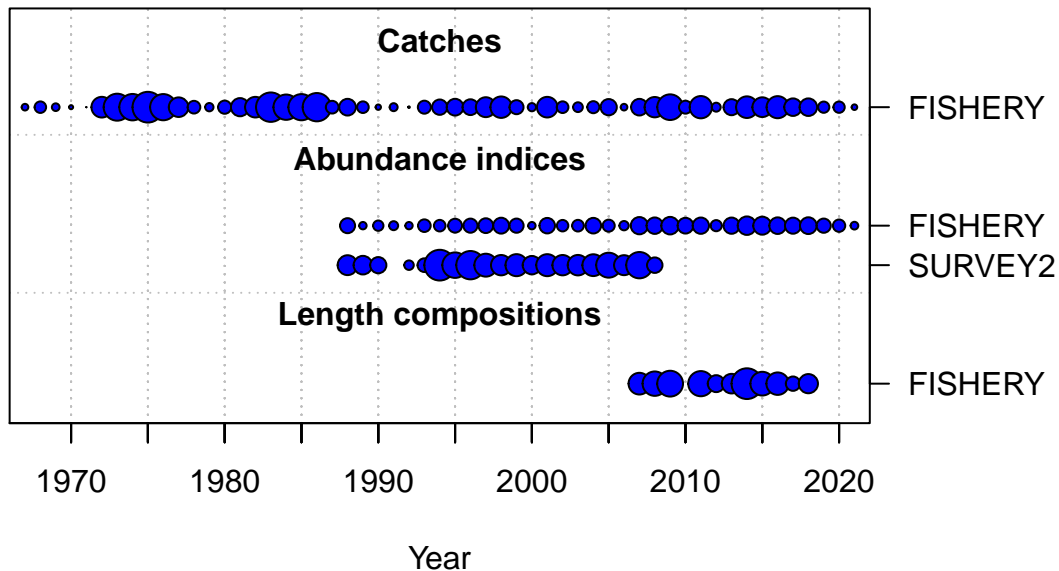




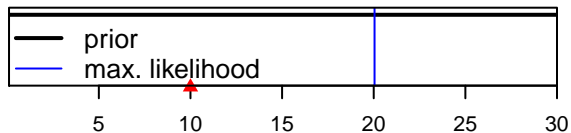




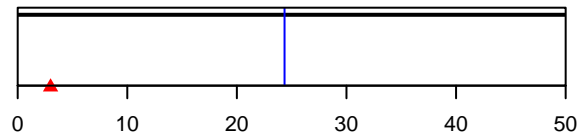




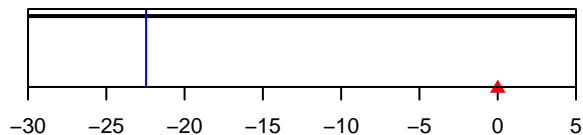
SR_LN(R0)



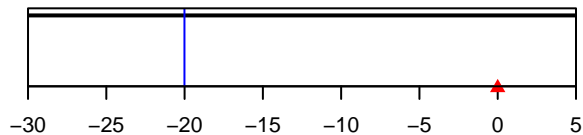
Size_95%width_FISHERY(1)



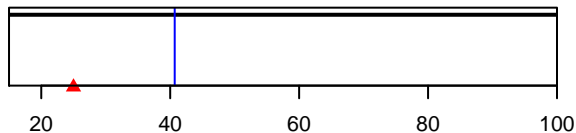
LnQ_base_FISHERY(1)



LnQ_base_SURVEY2(2)



Size_inflection_FISHERY(1)



Parameter value