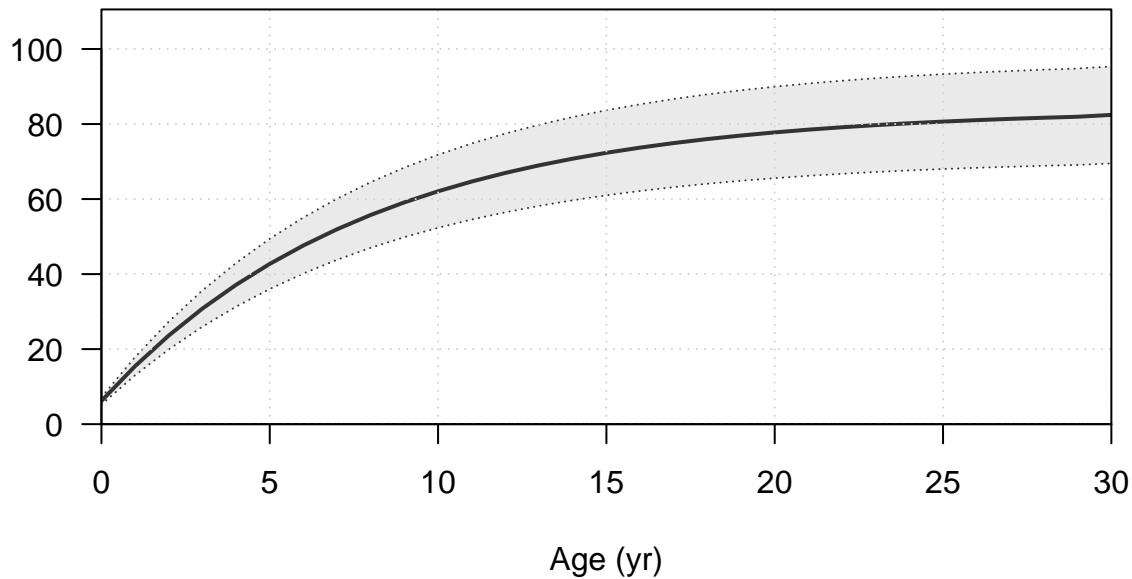
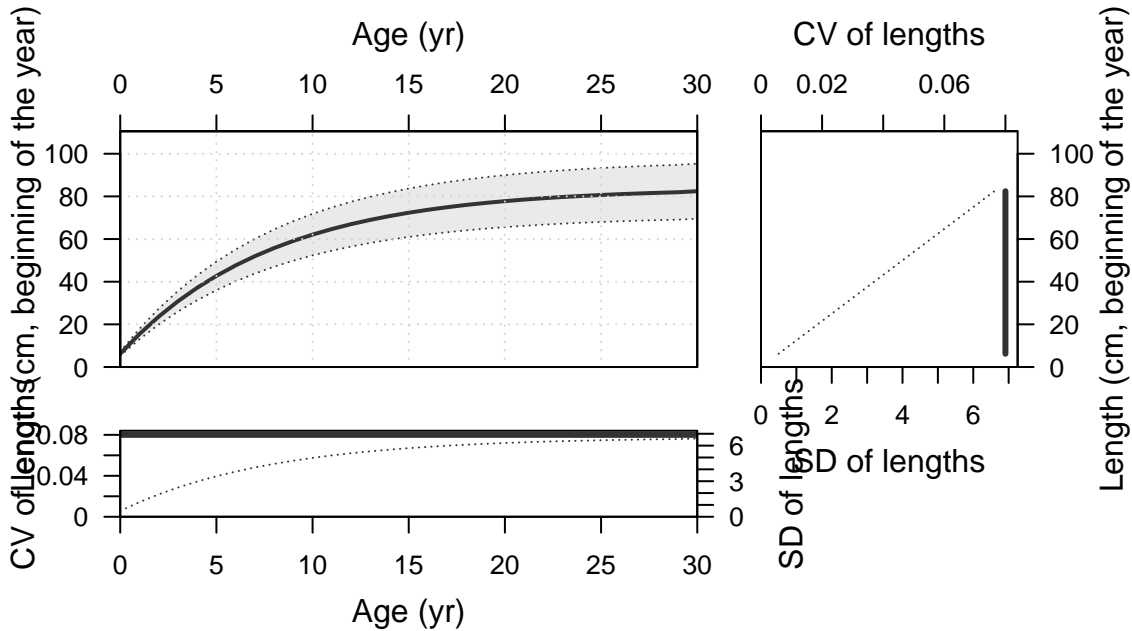
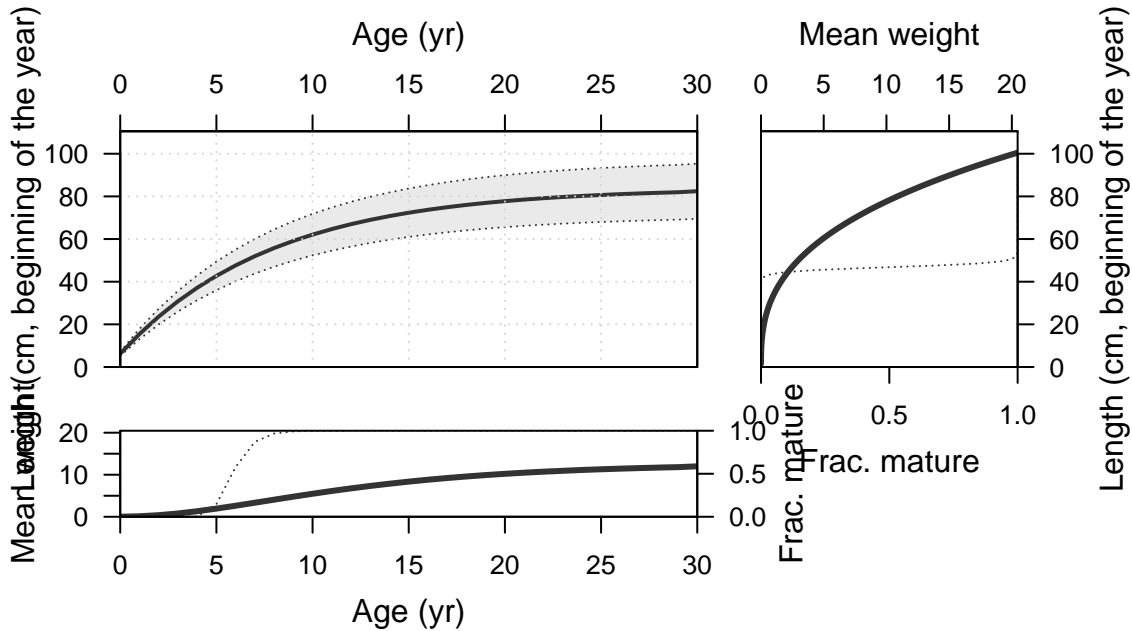


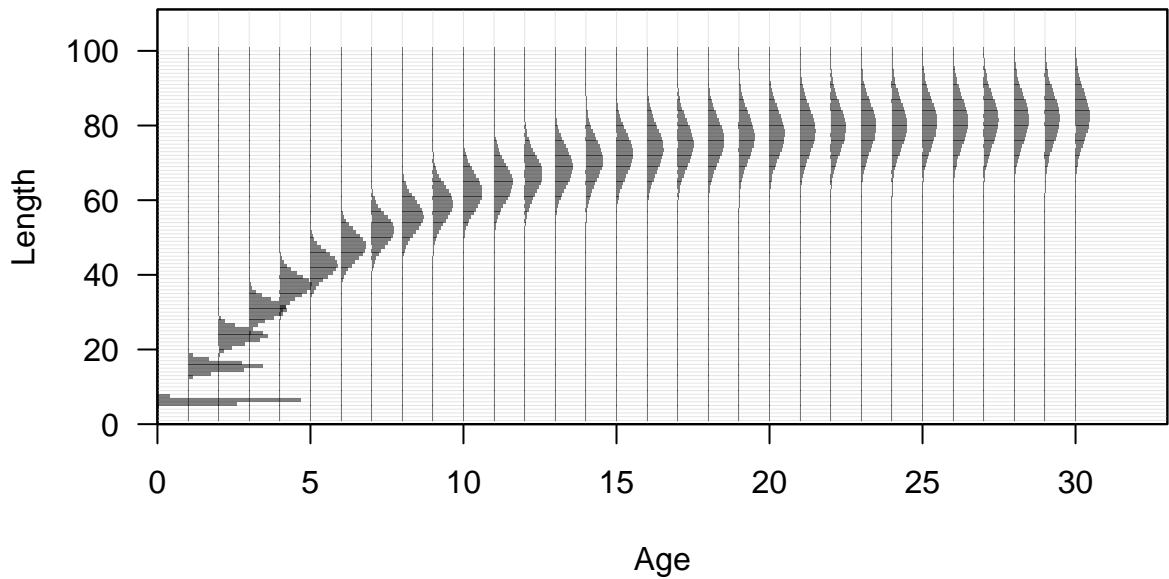
Plots created using the 'r4ss' package in R
Stock Synthesis version: 3.30.19.0
StartTime: Wed Aug 03 08:50:54 2022
Data_File: data.ss
Control_File: control.ss

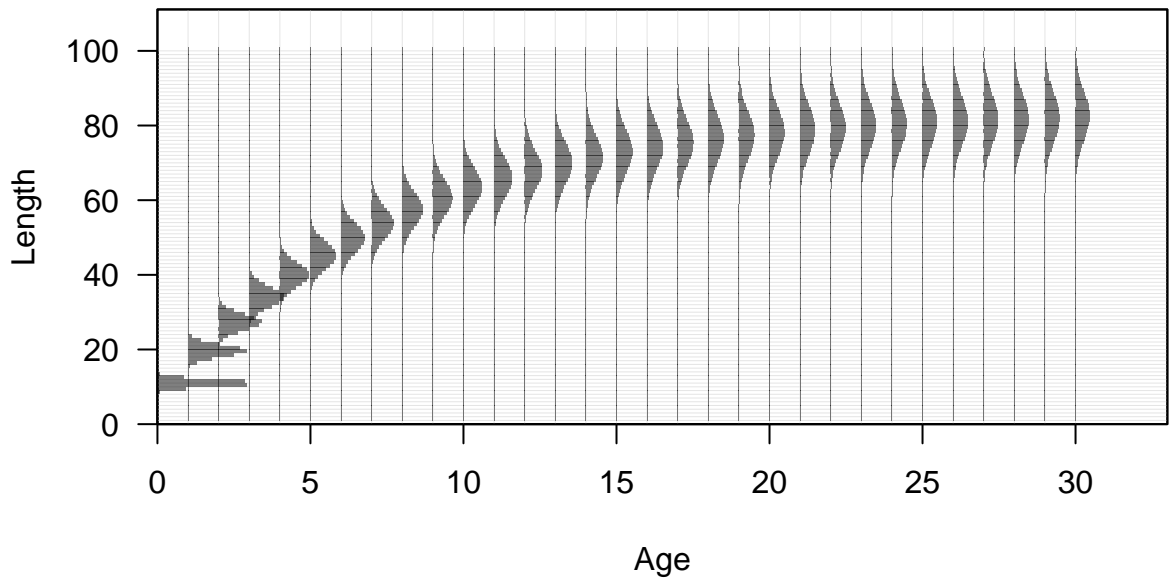
Length (cm, beginning of the year)

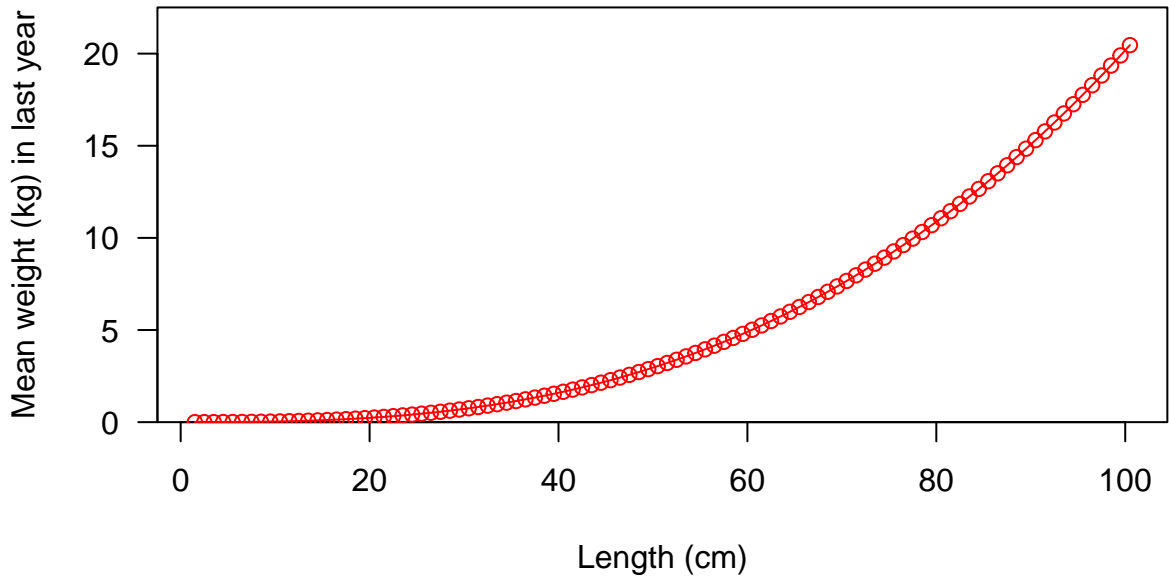


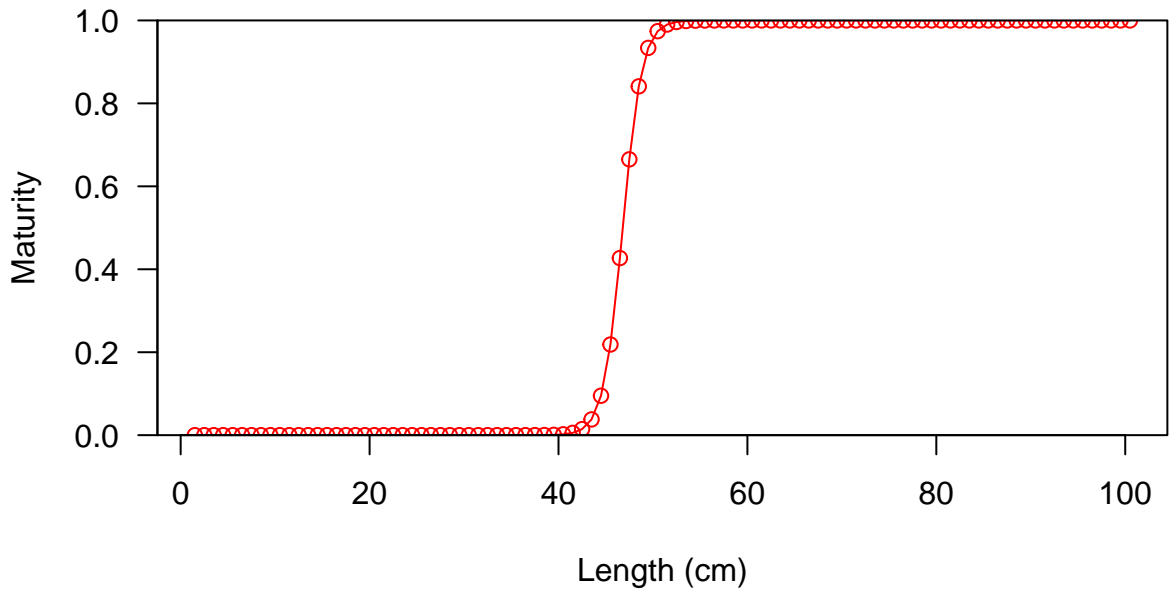


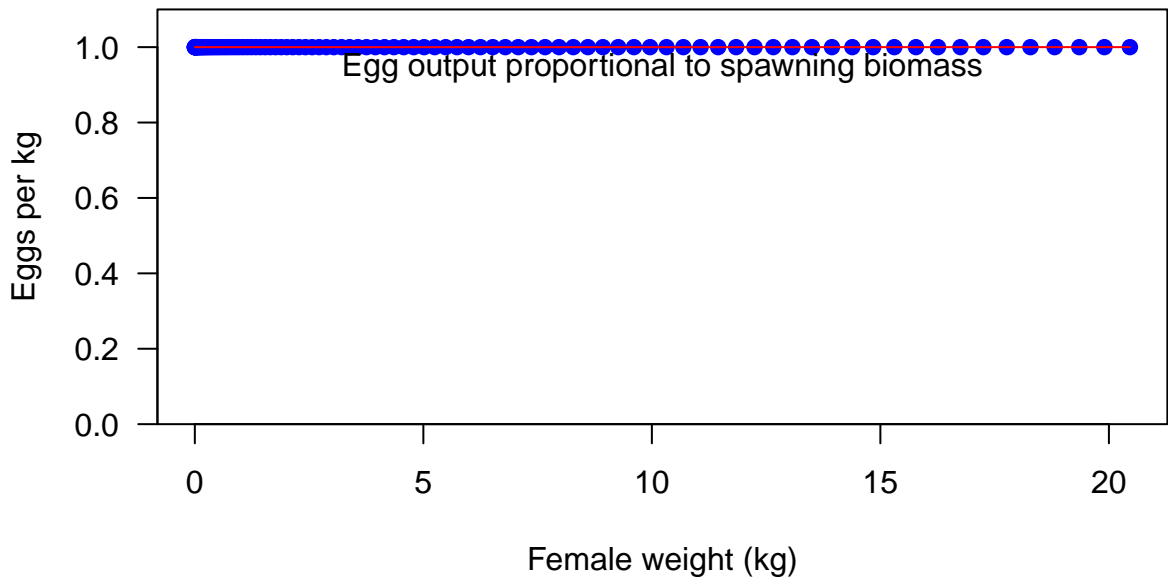




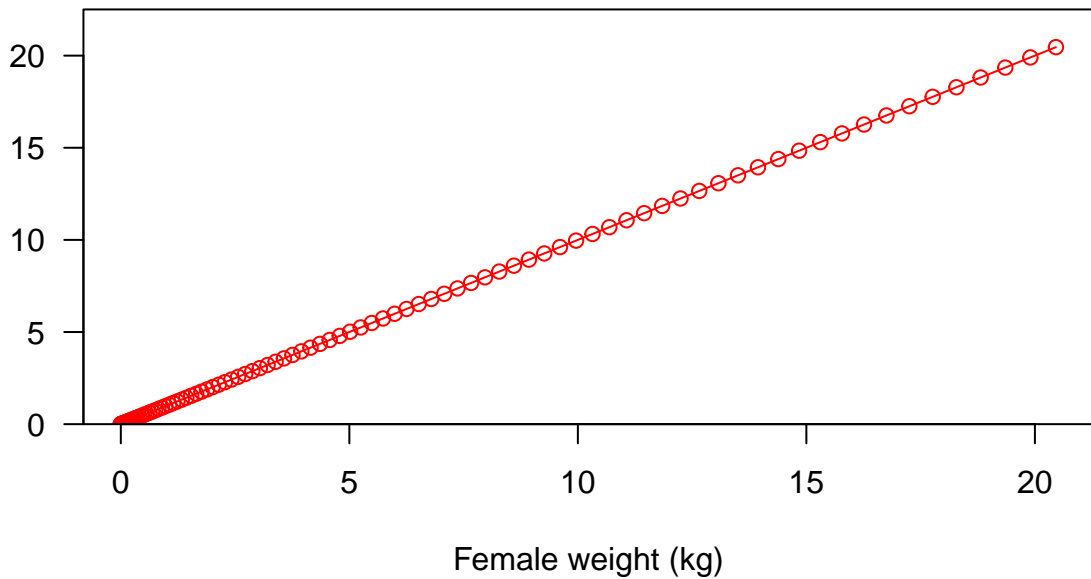








Fecundity



Fecundity

20

15

10

5

0

0

20

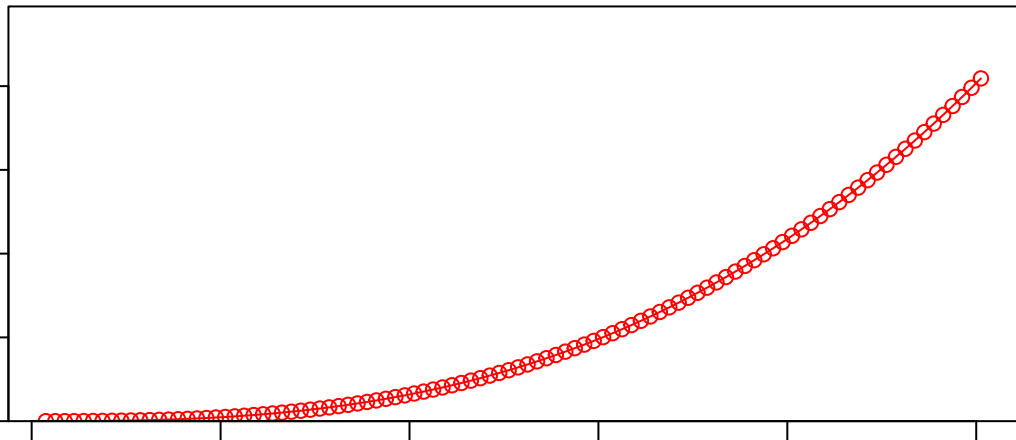
40

60

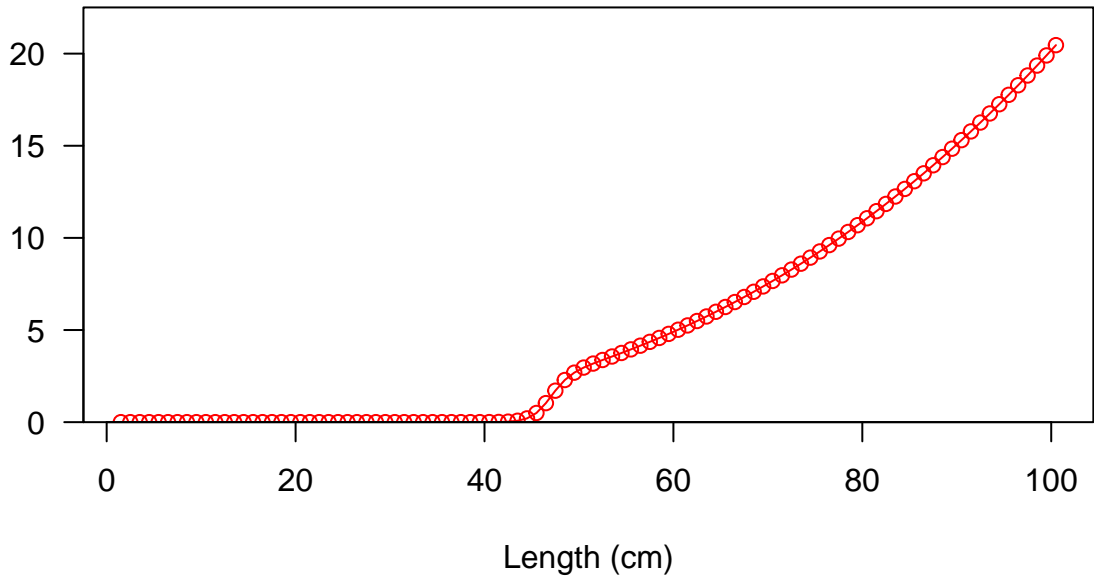
80

100

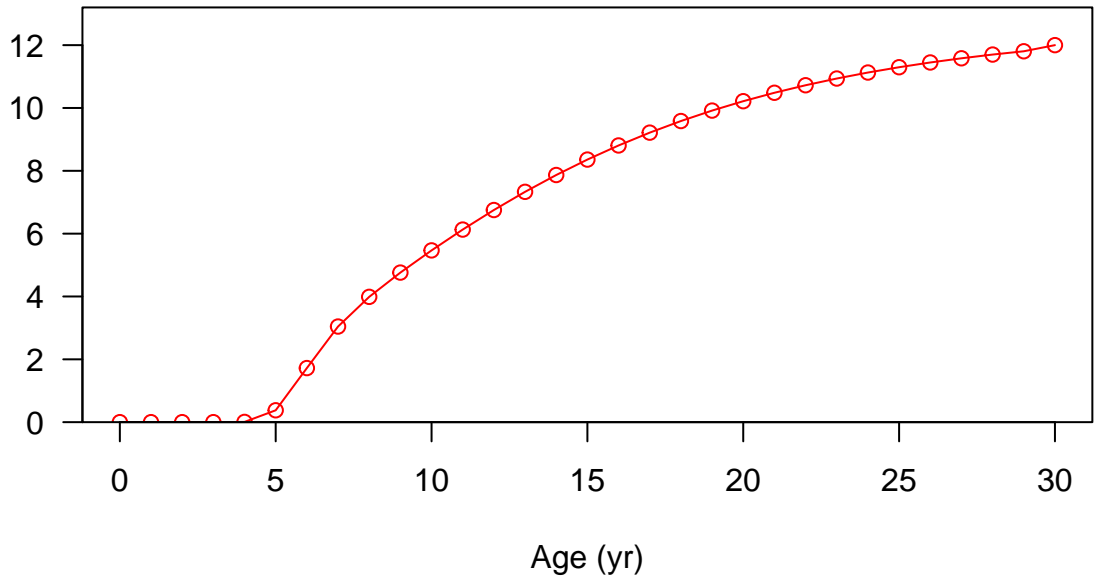
Female length (cm)



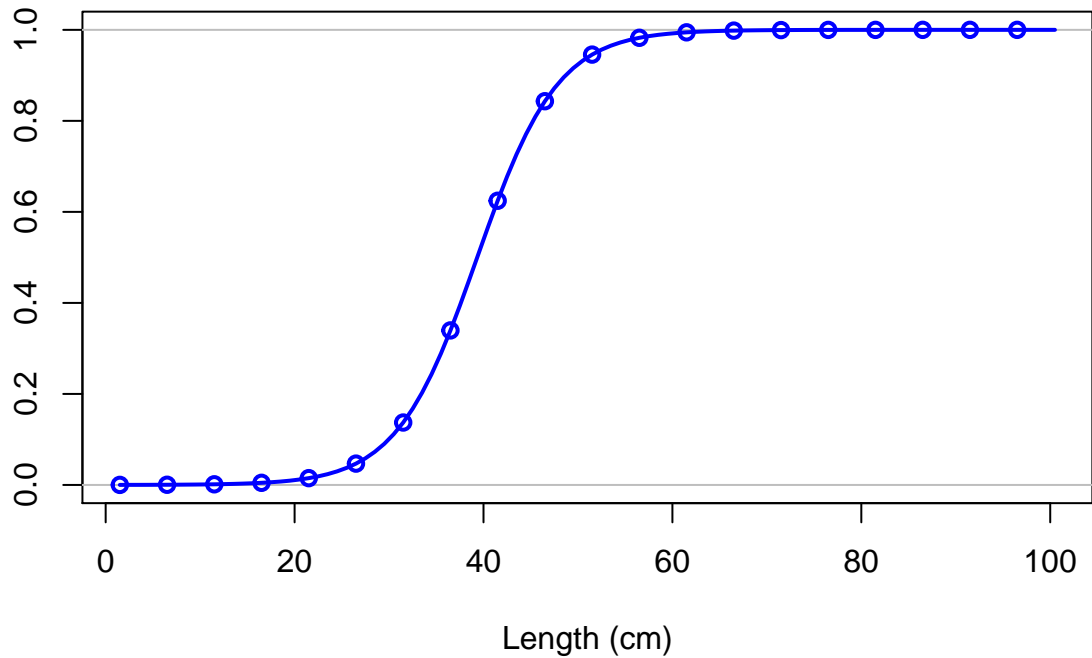
Spawning output



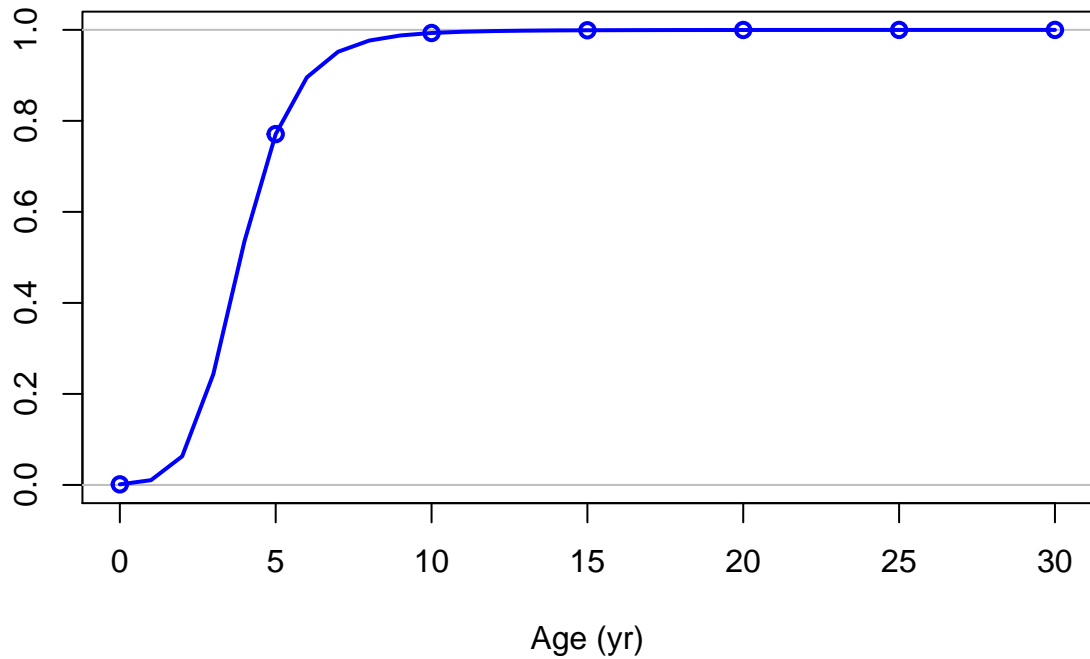
Spawning output



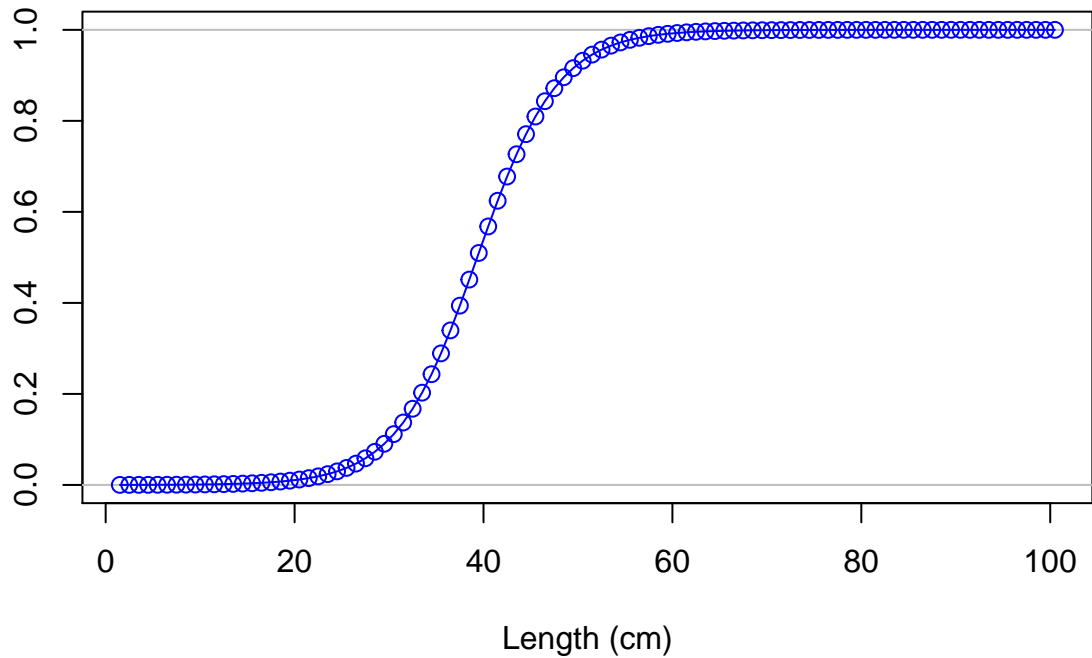
Selectivity

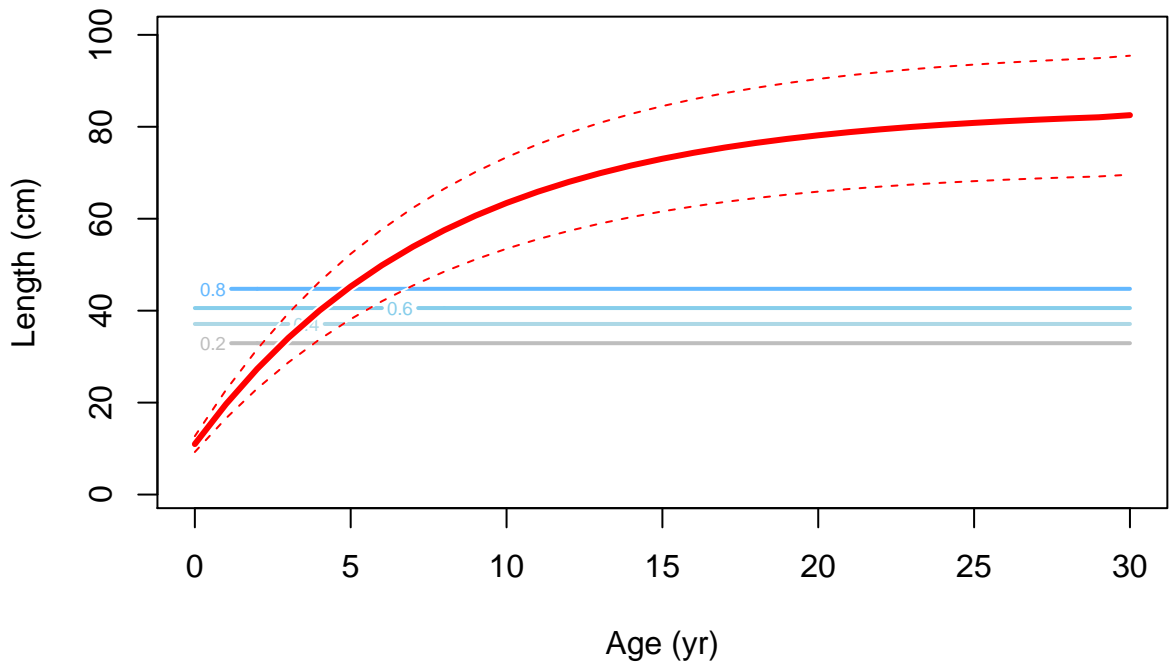


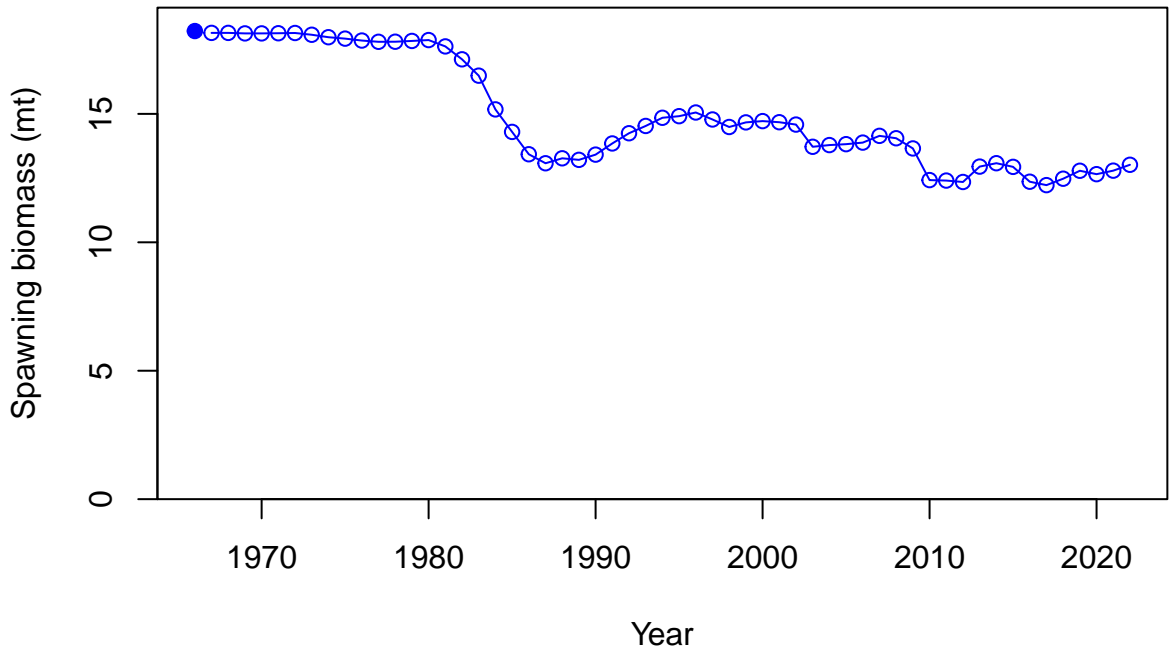
Selectivity

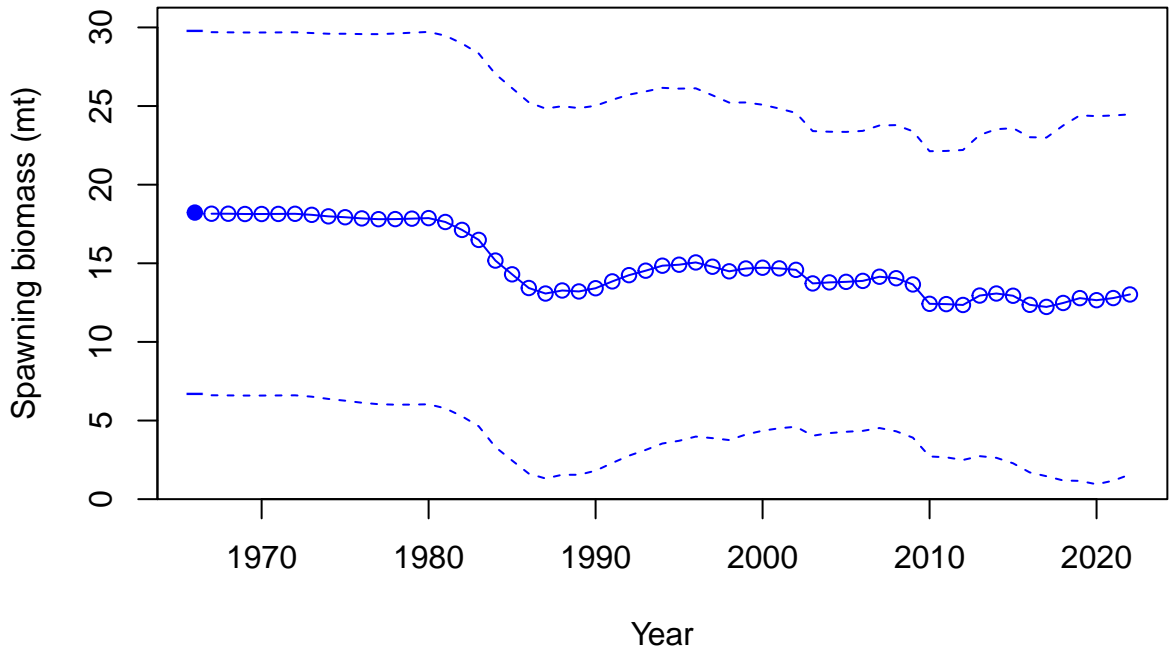


Selectivity

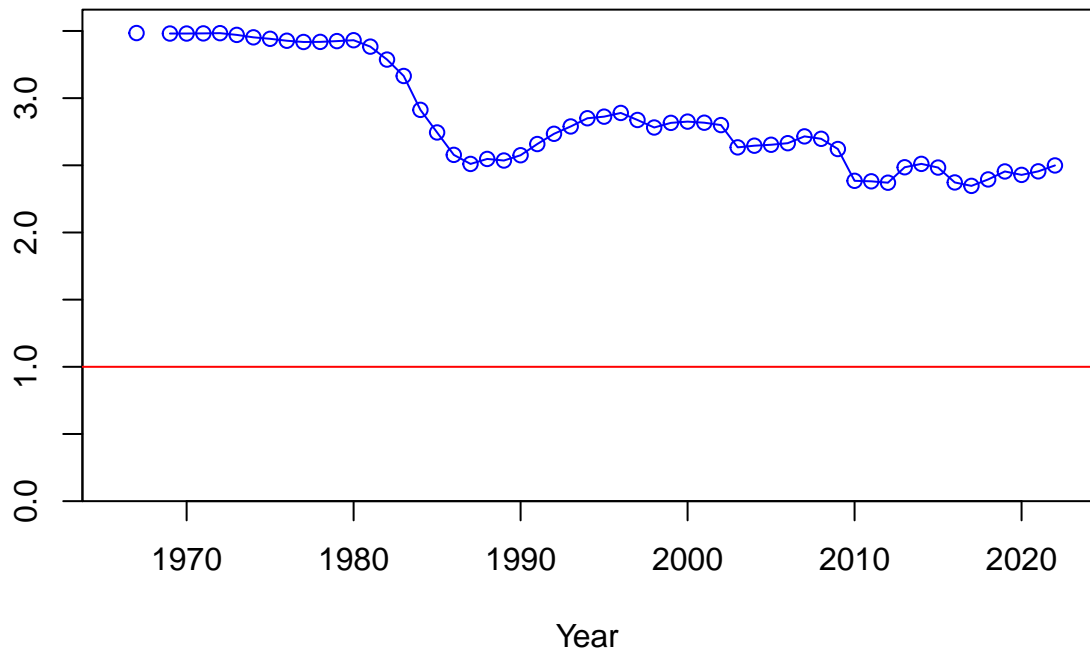




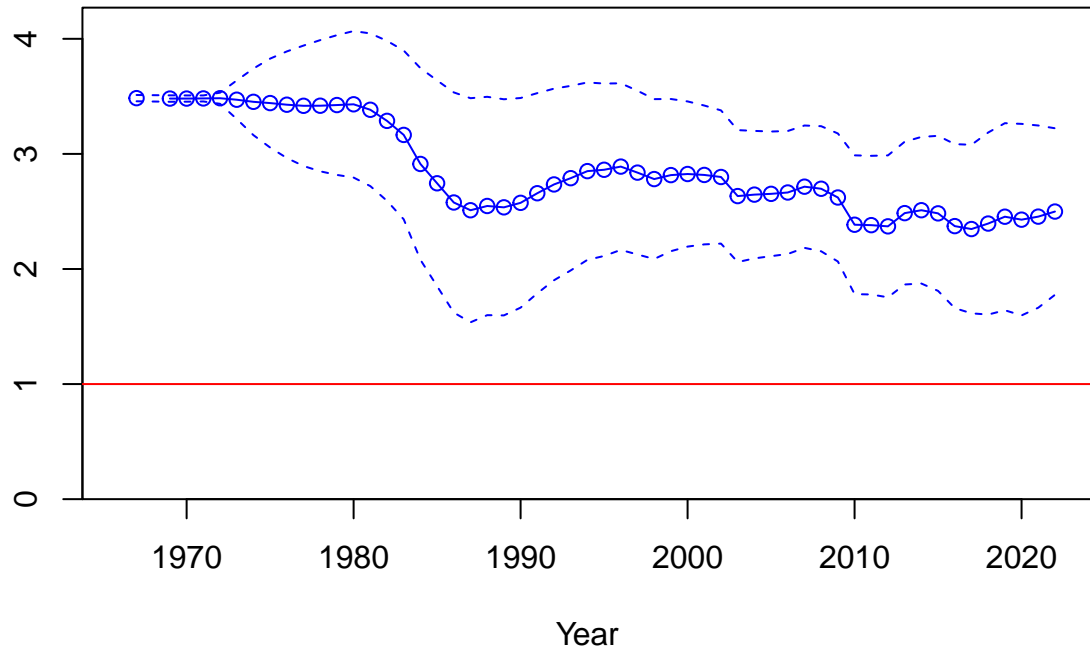


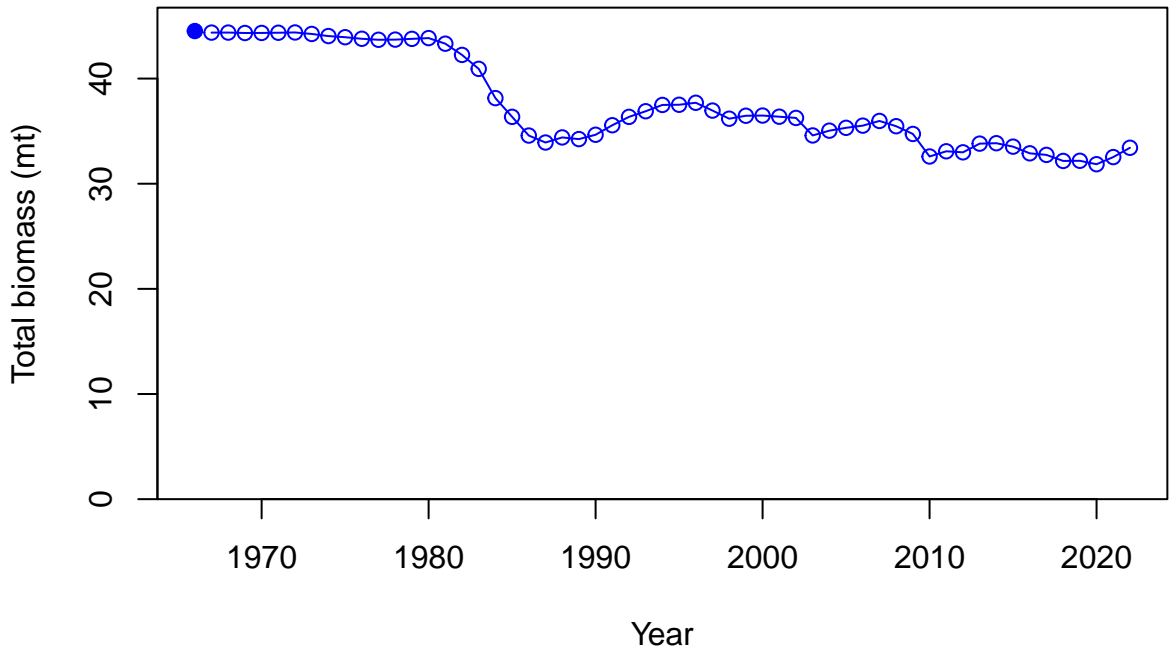


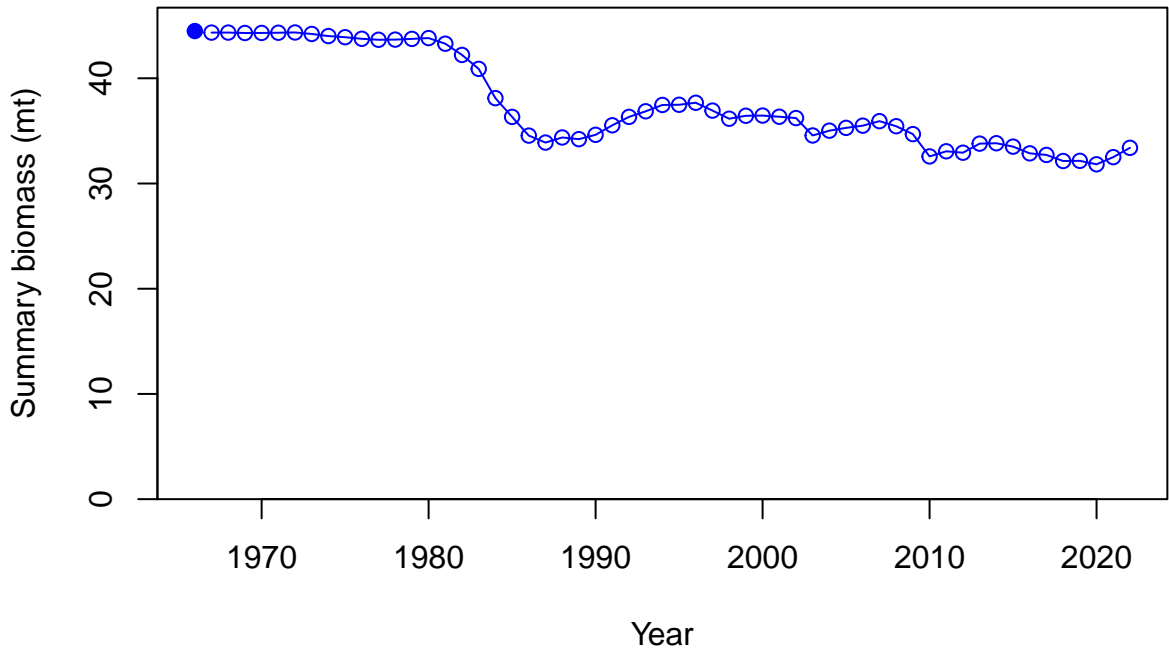
Relative spawning biomass: B/B_{MSY}



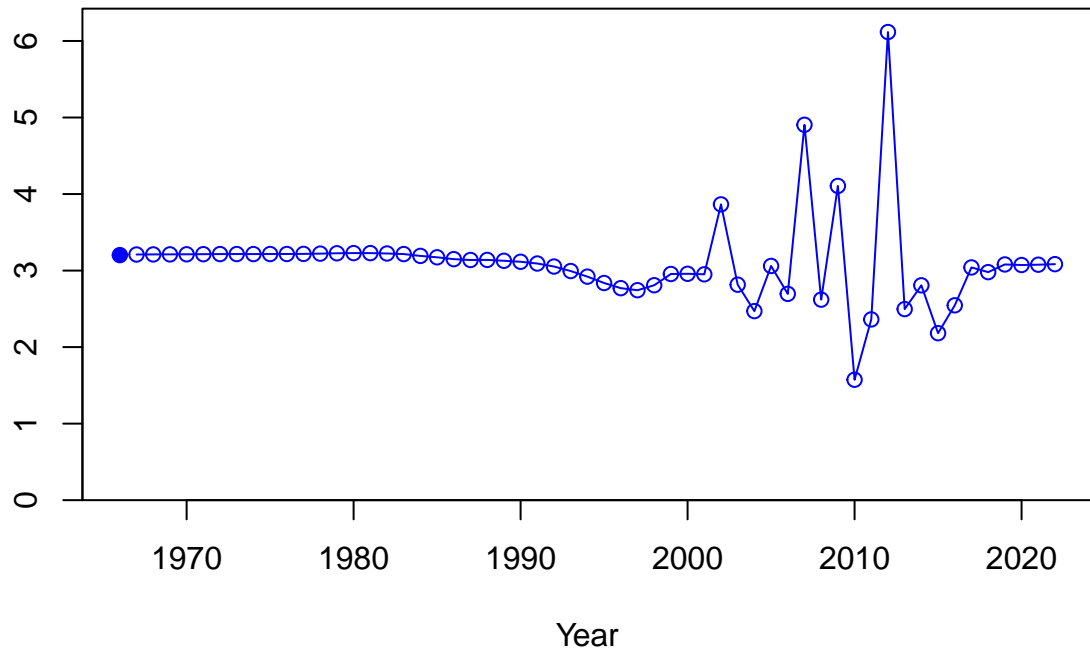
Relative spawning biomass: B/B_{MSY}

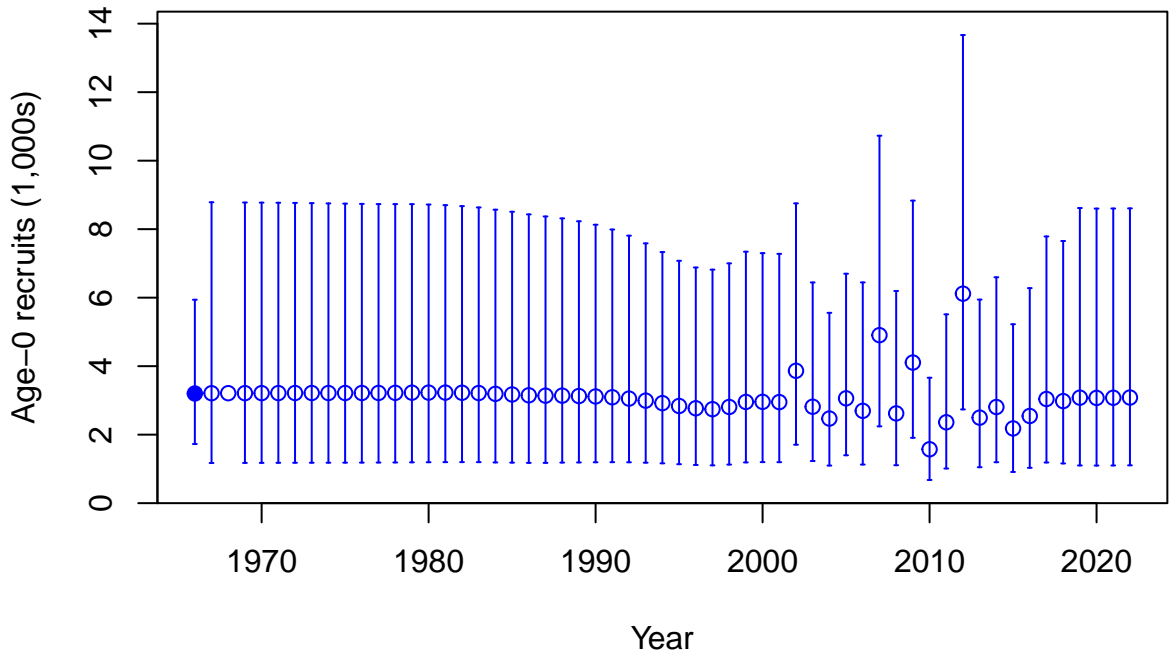




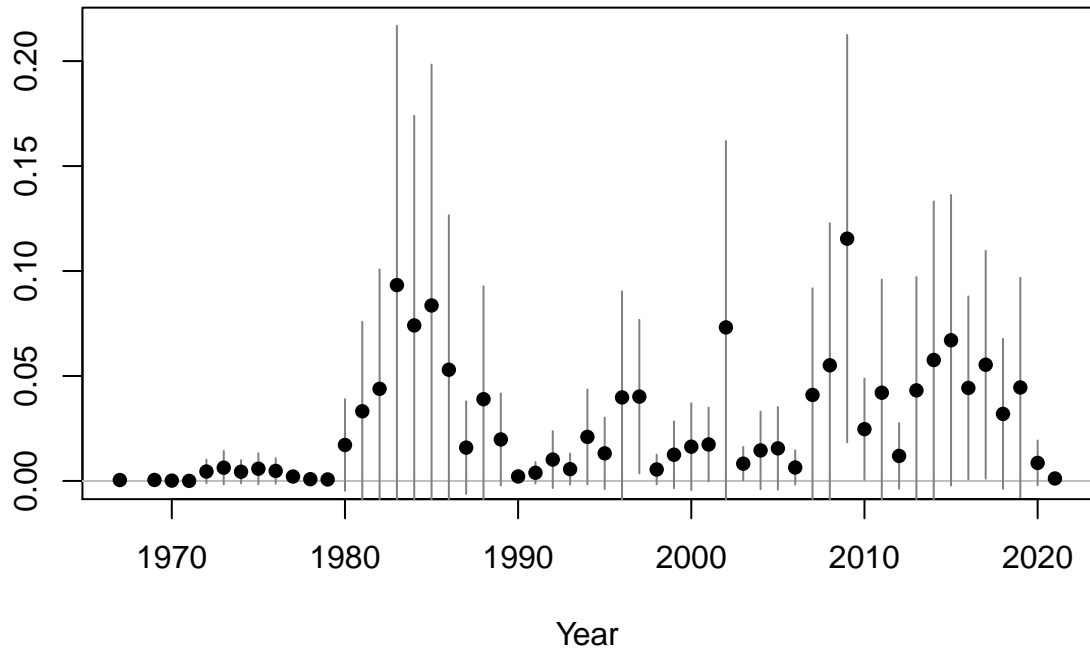


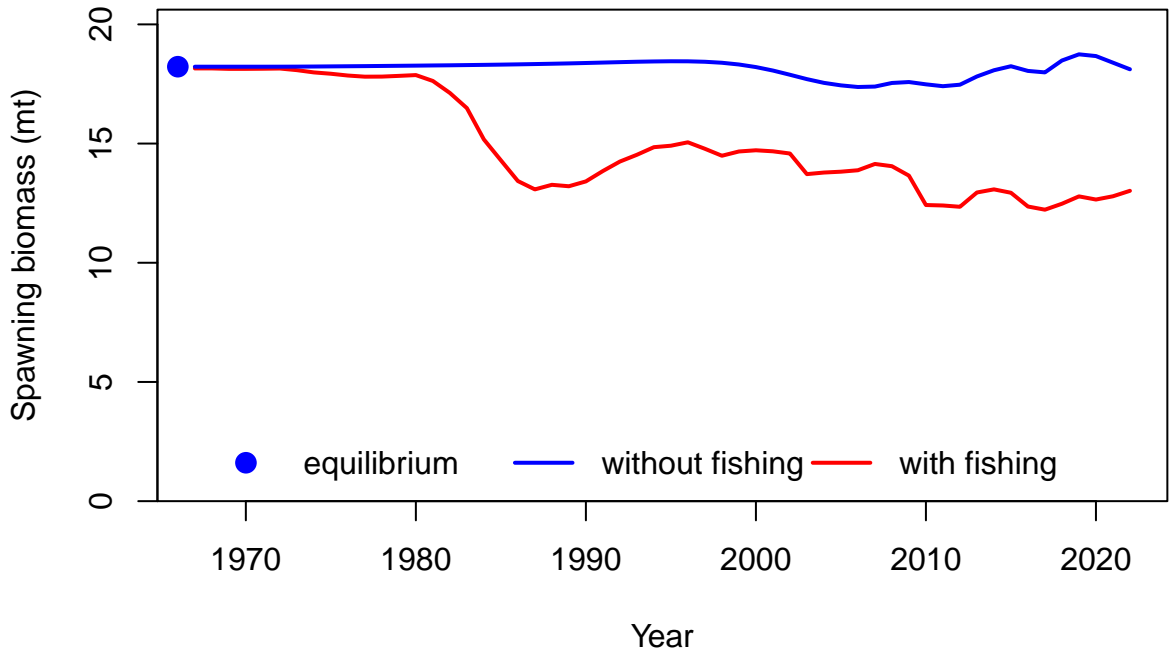
Age-0 recruits (1,000s)



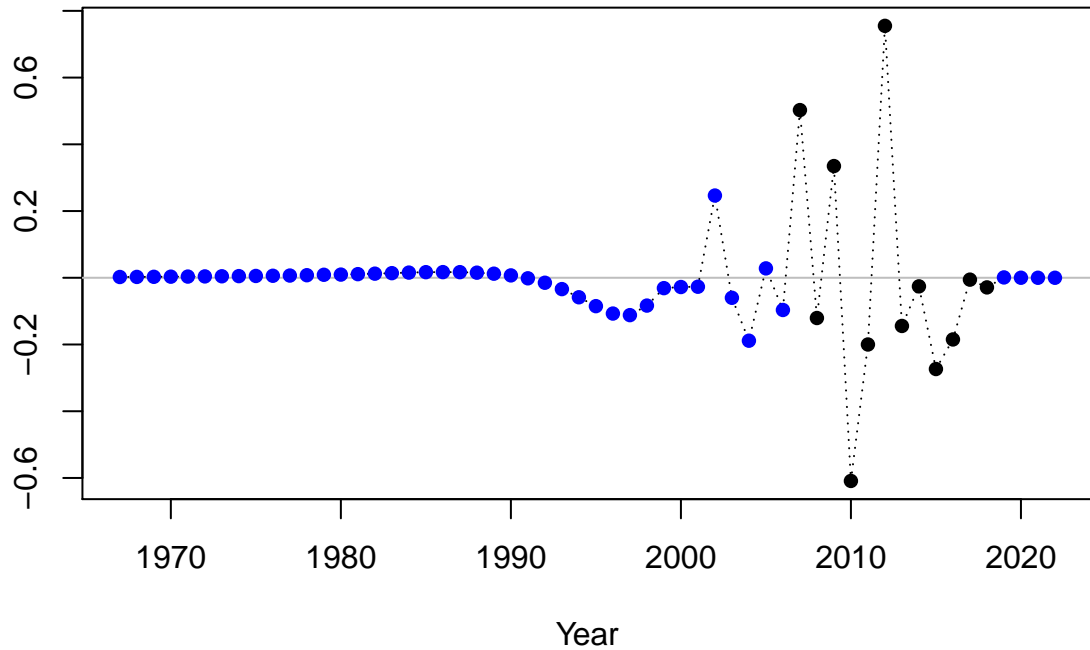


Summary Fishing Mortality





Log recruitment deviation



Log recruitment deviation

1.0
0.5
0.0
-0.5
-1.0

1970

1980

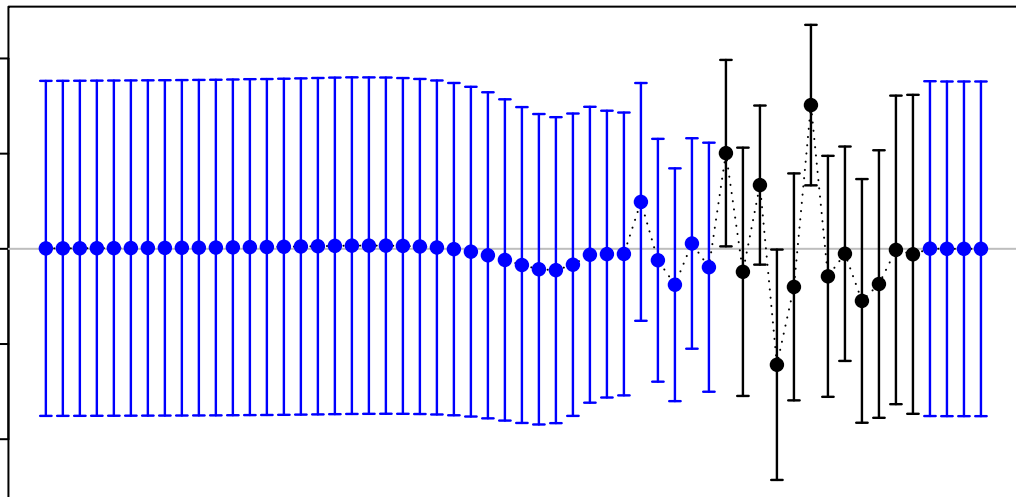
1990

2000

2010

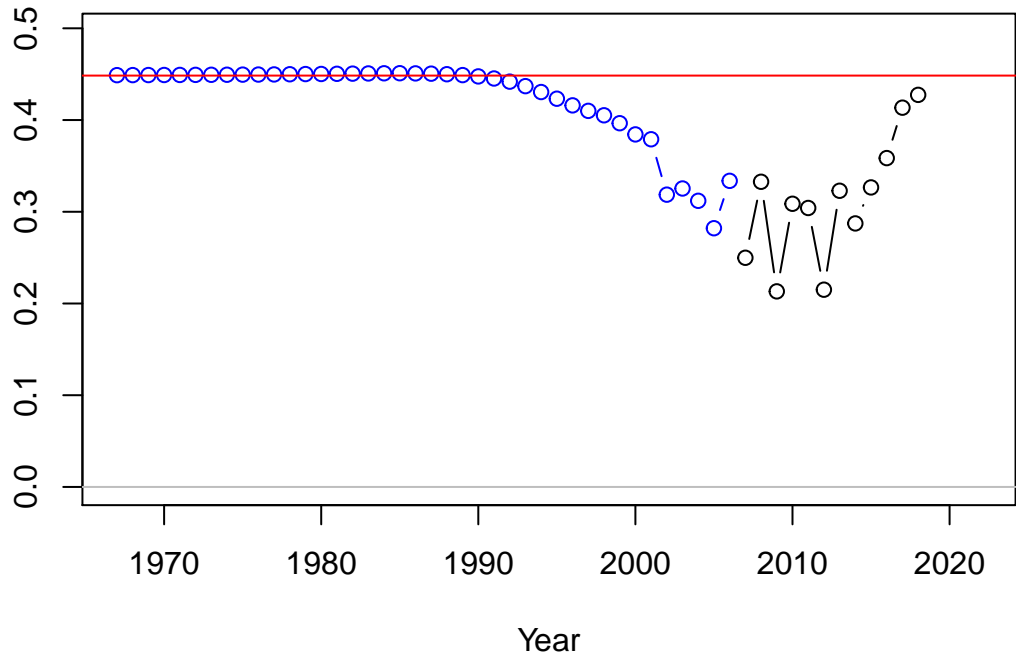
2020

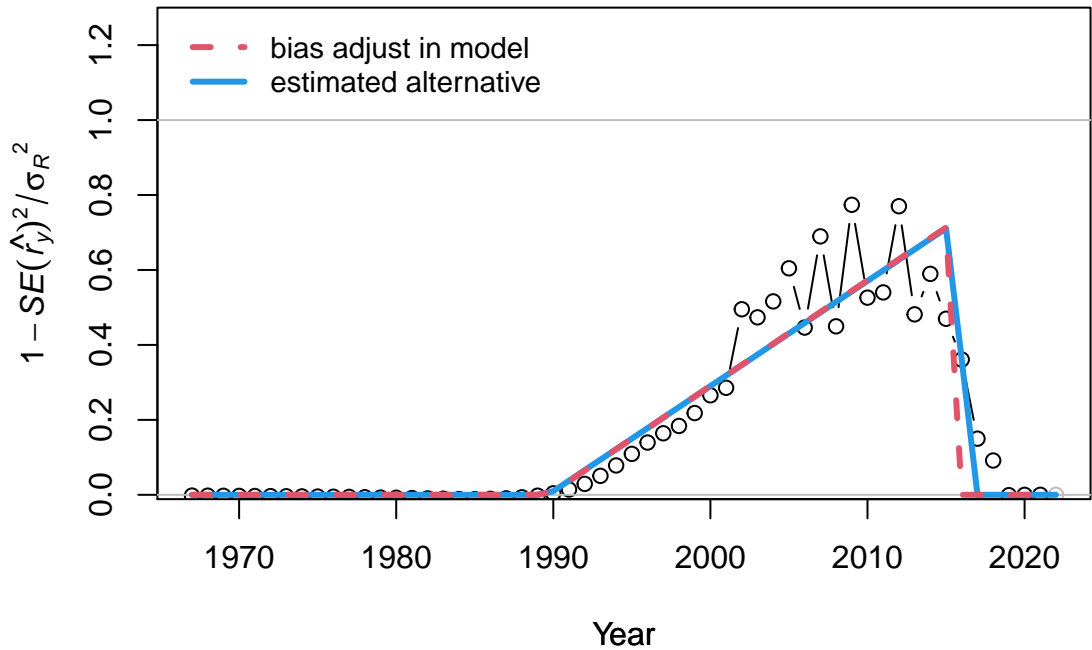
Year

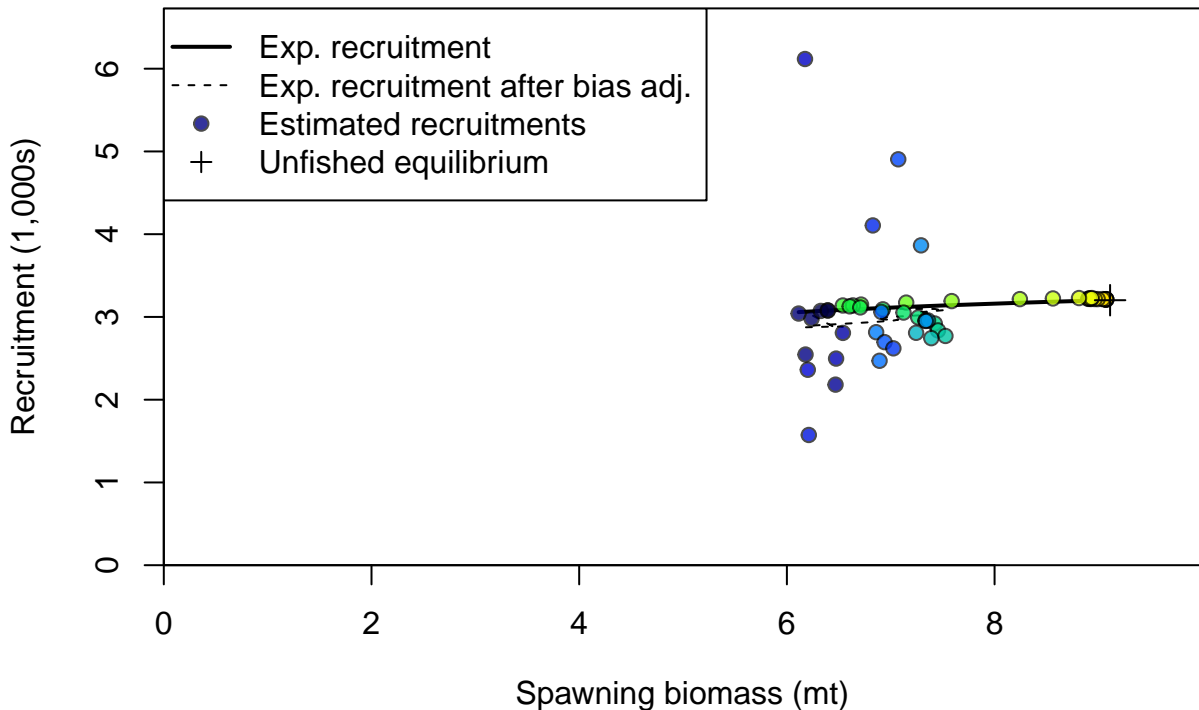


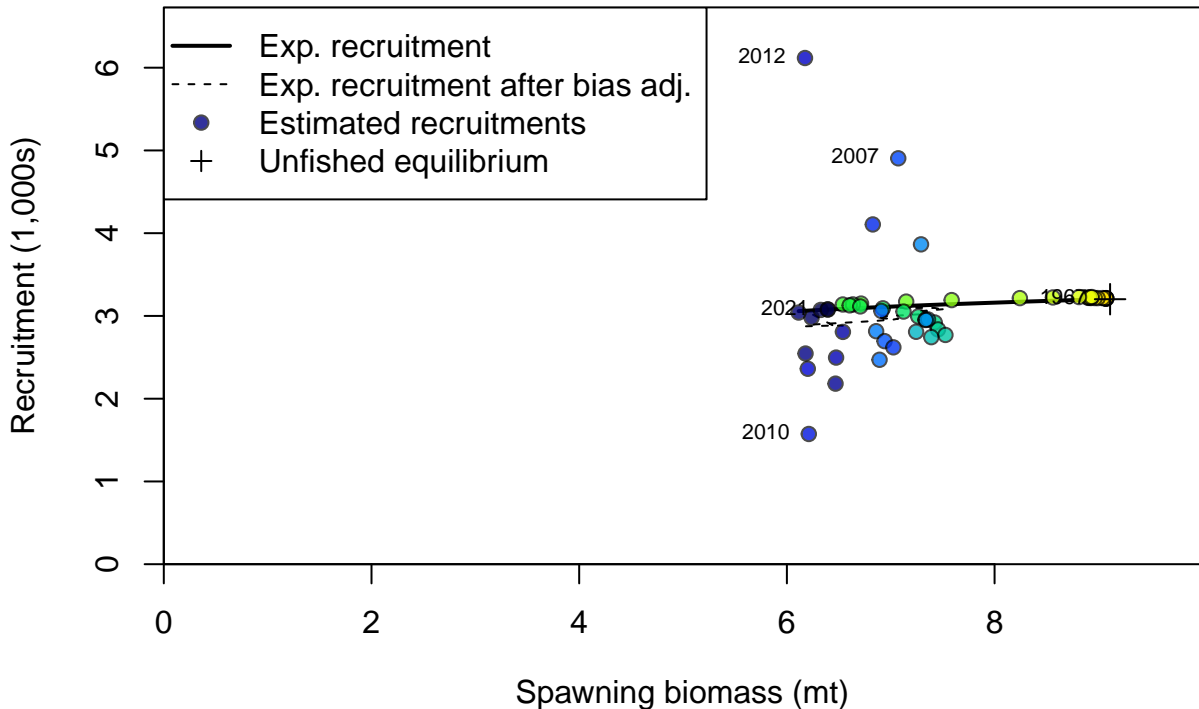
Recruitment deviation variance

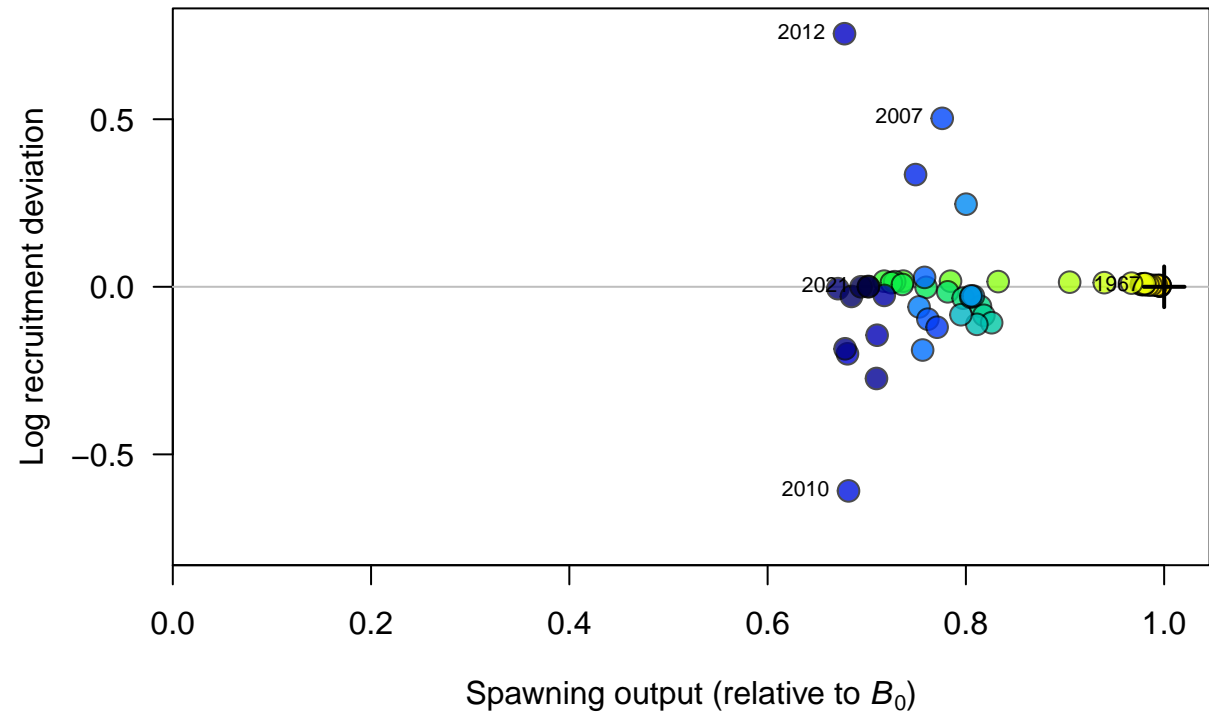
Asymptotic standard error estimate

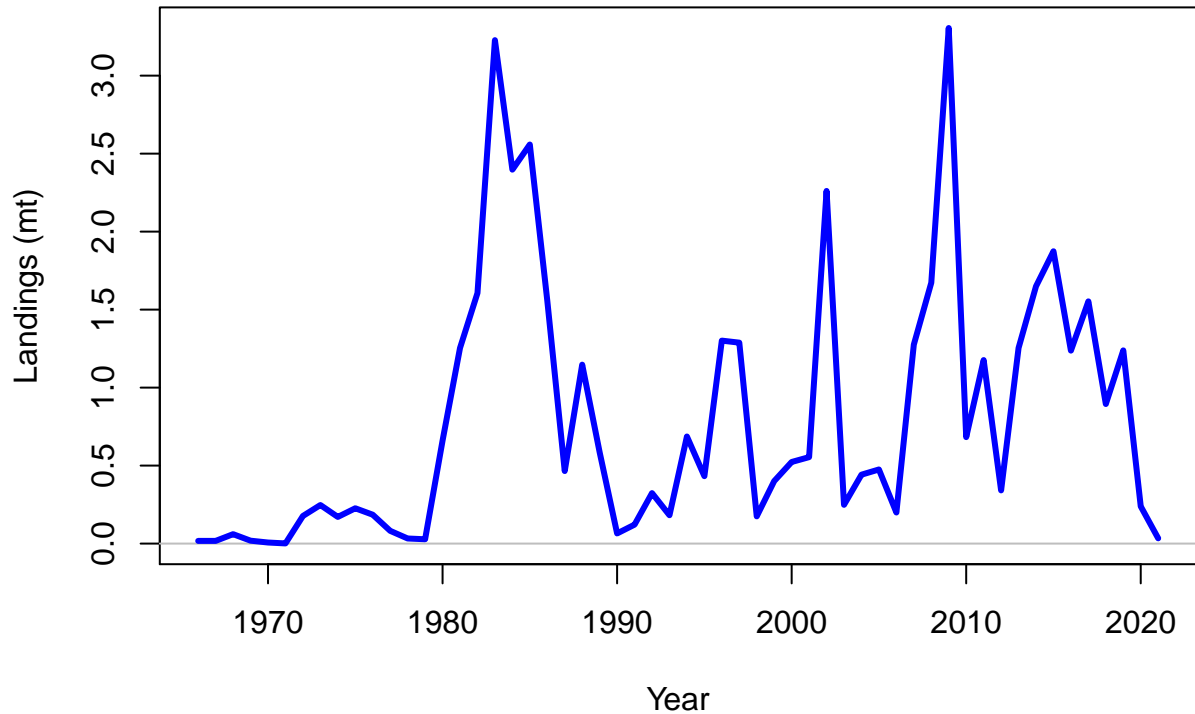


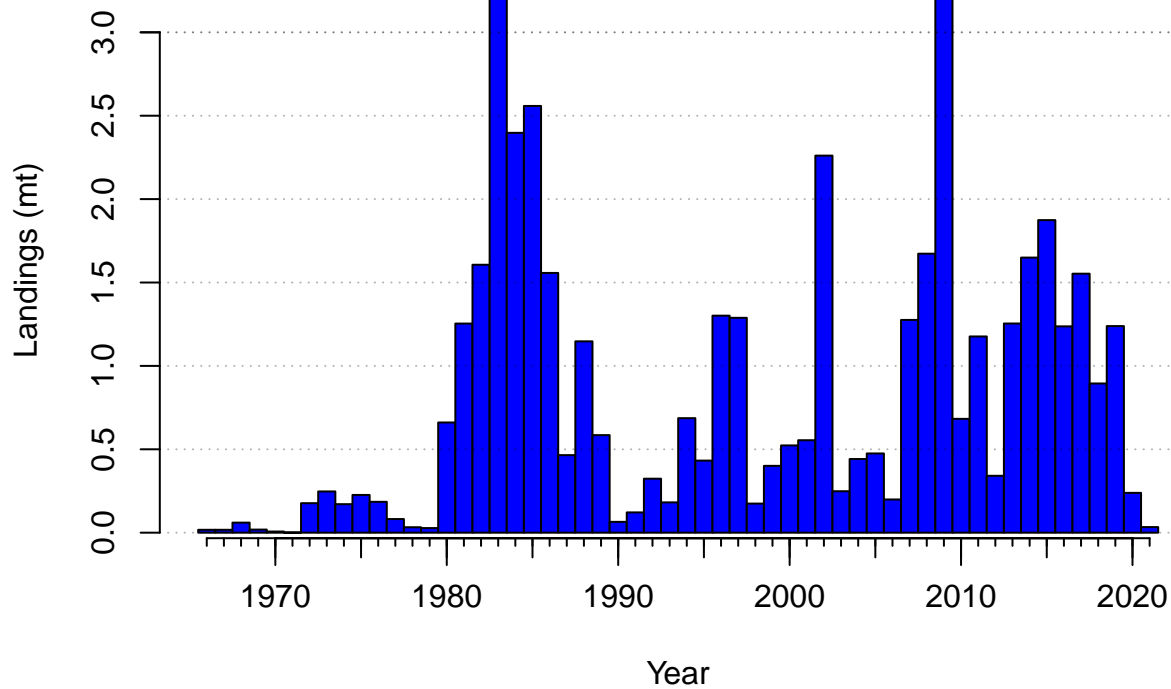






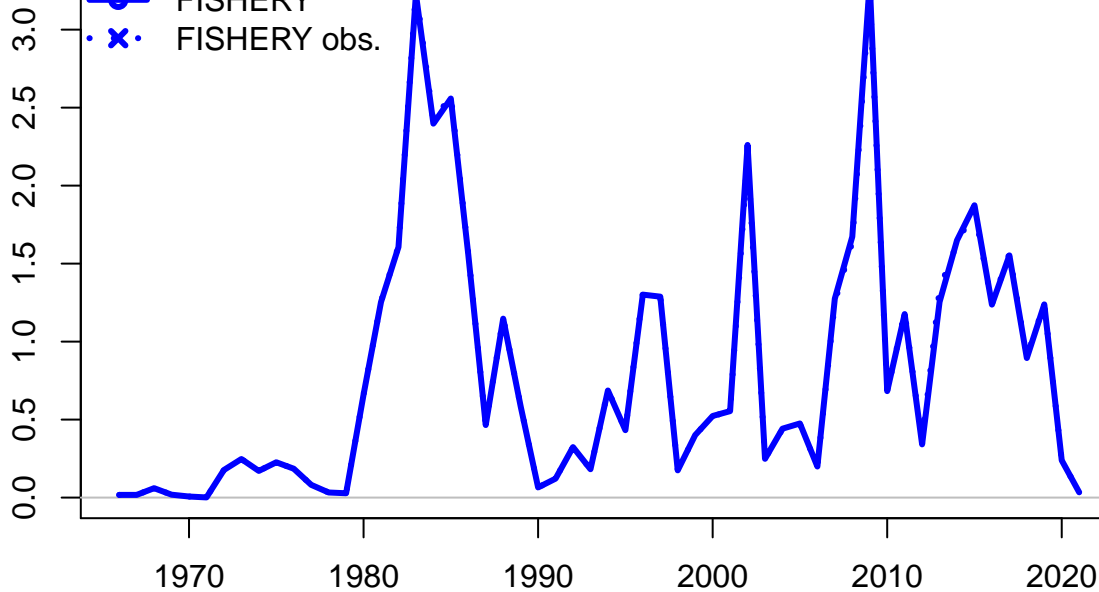




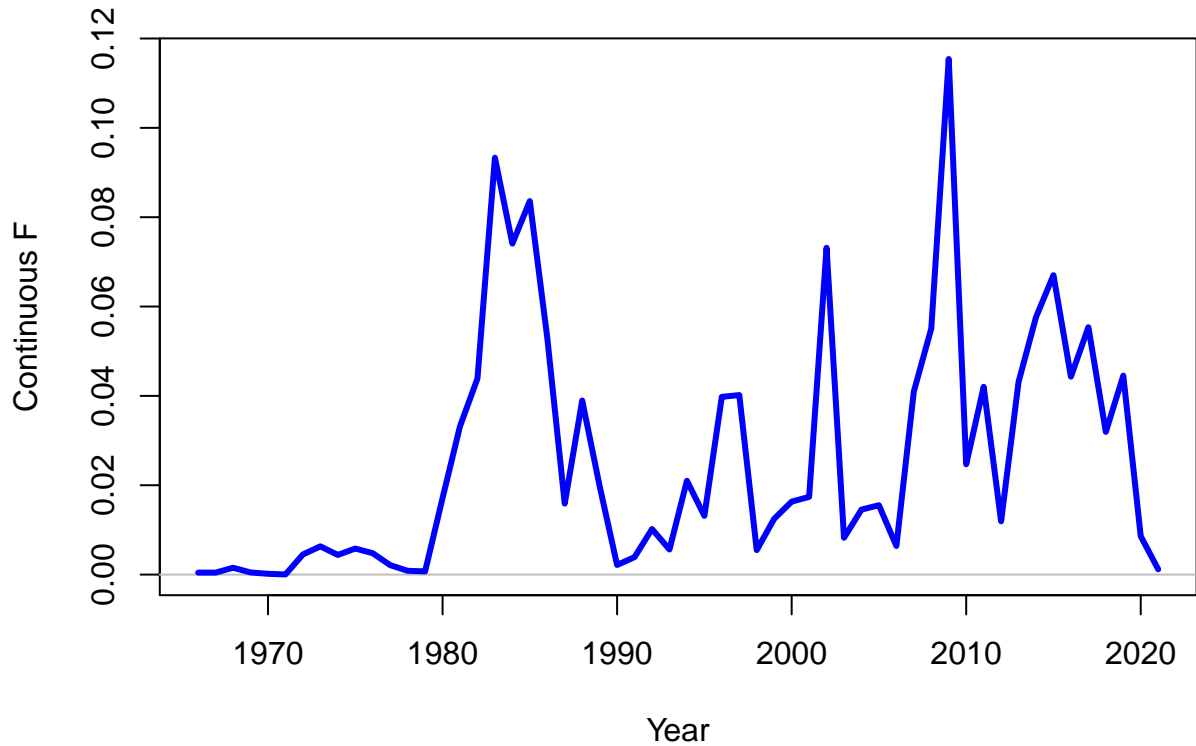


Observed and expected Landings (mt)

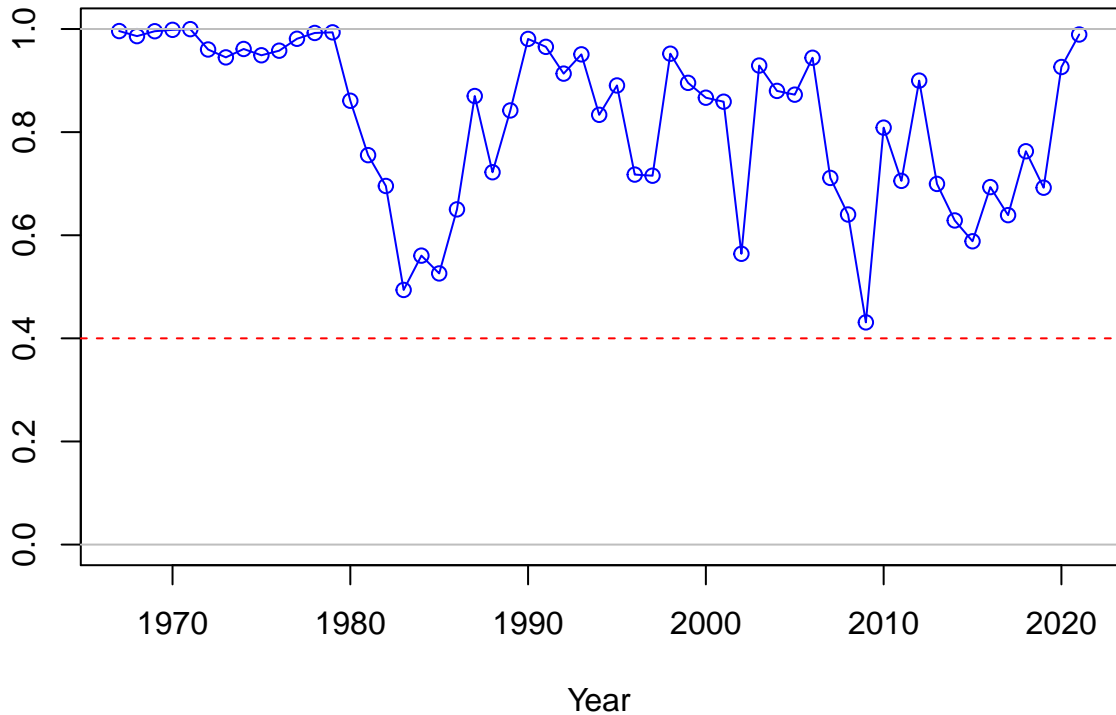
FISHERY
FISHERY obs.

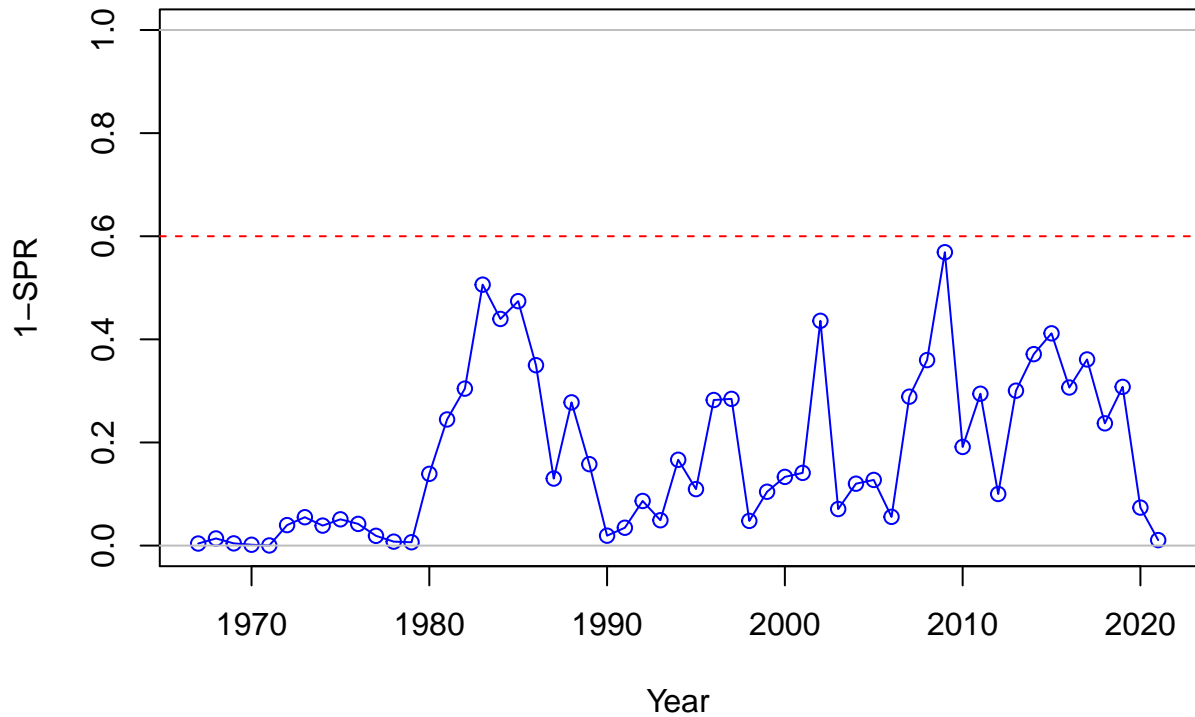


Year

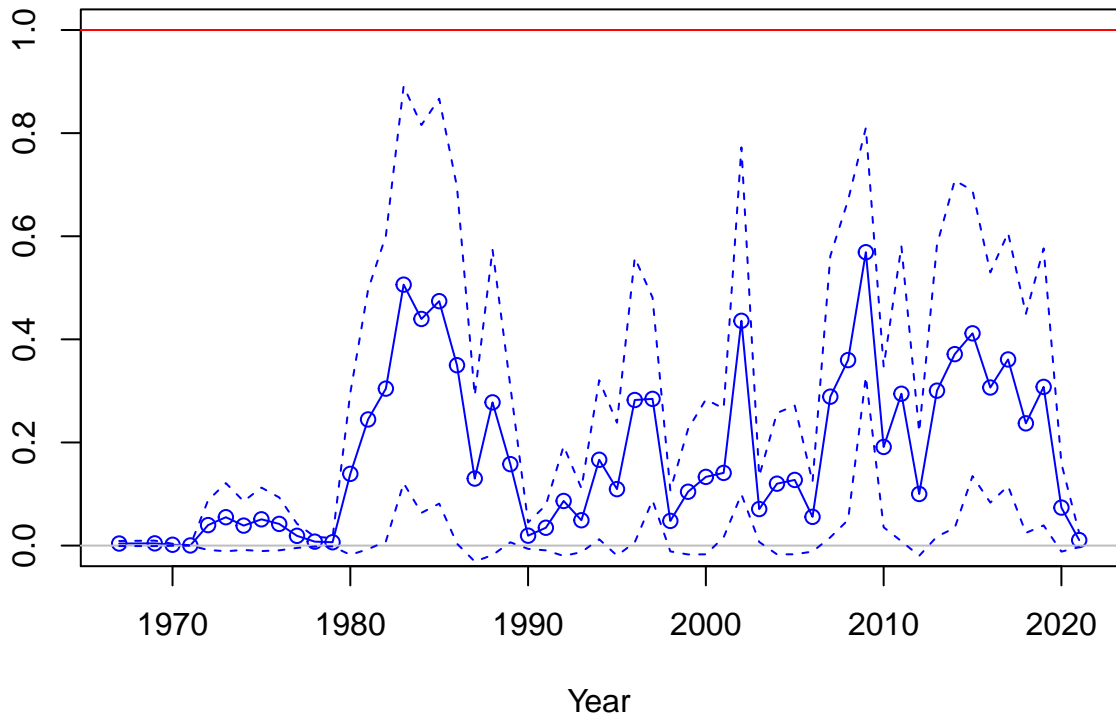


SPR

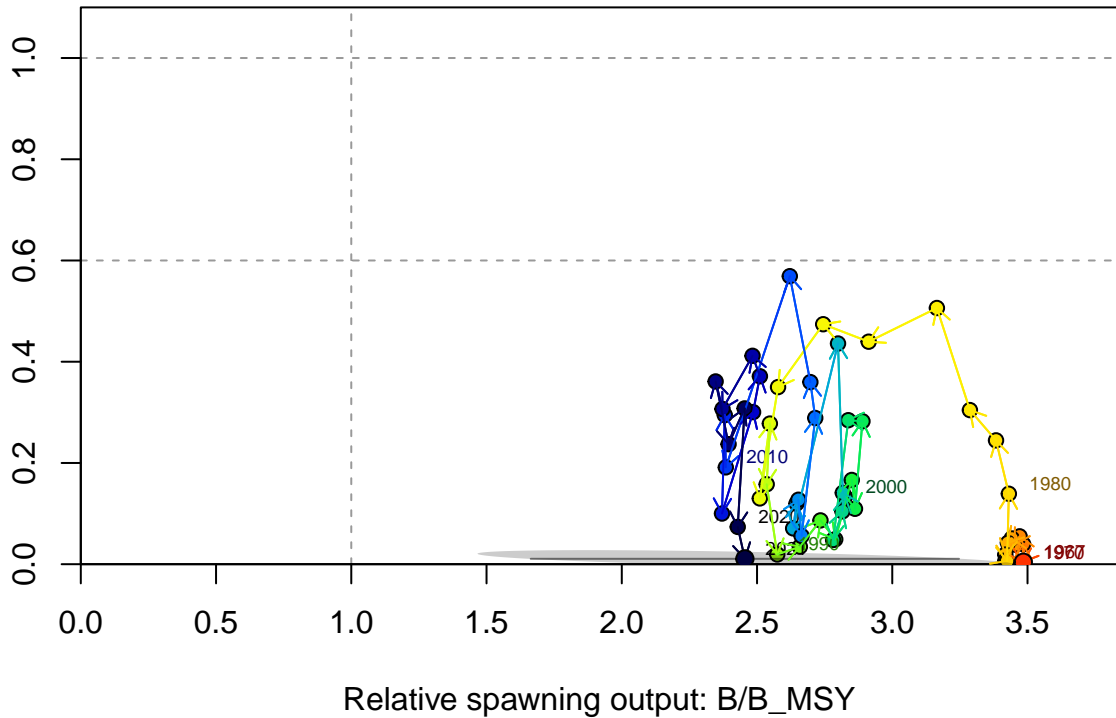




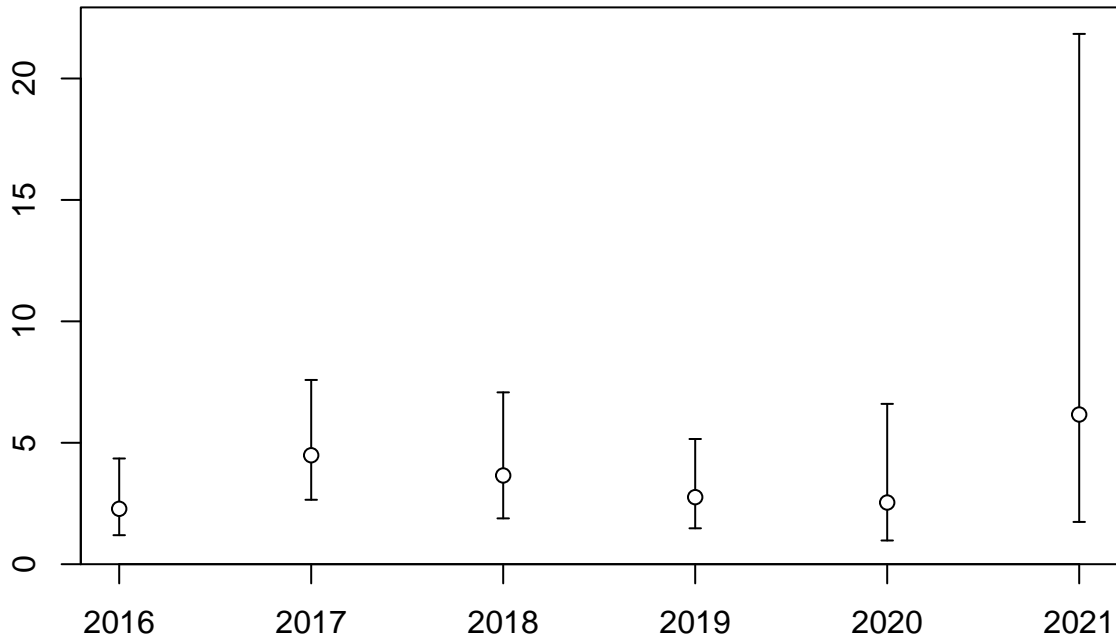
Fishing intensity: 1-SPR



Fishing intensity: 1-SPR

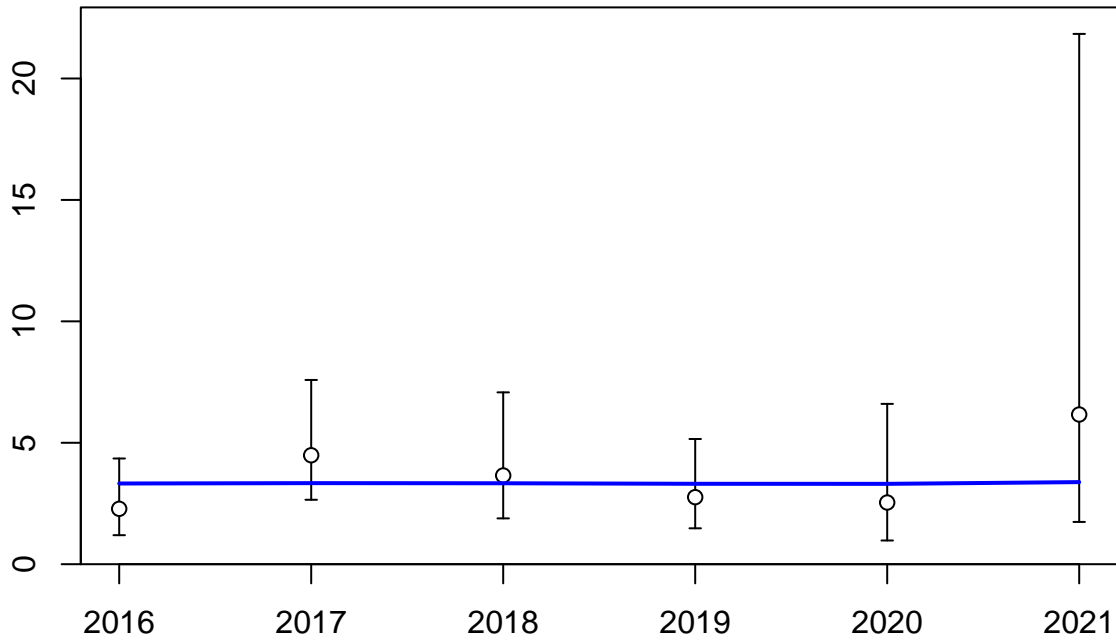


Index



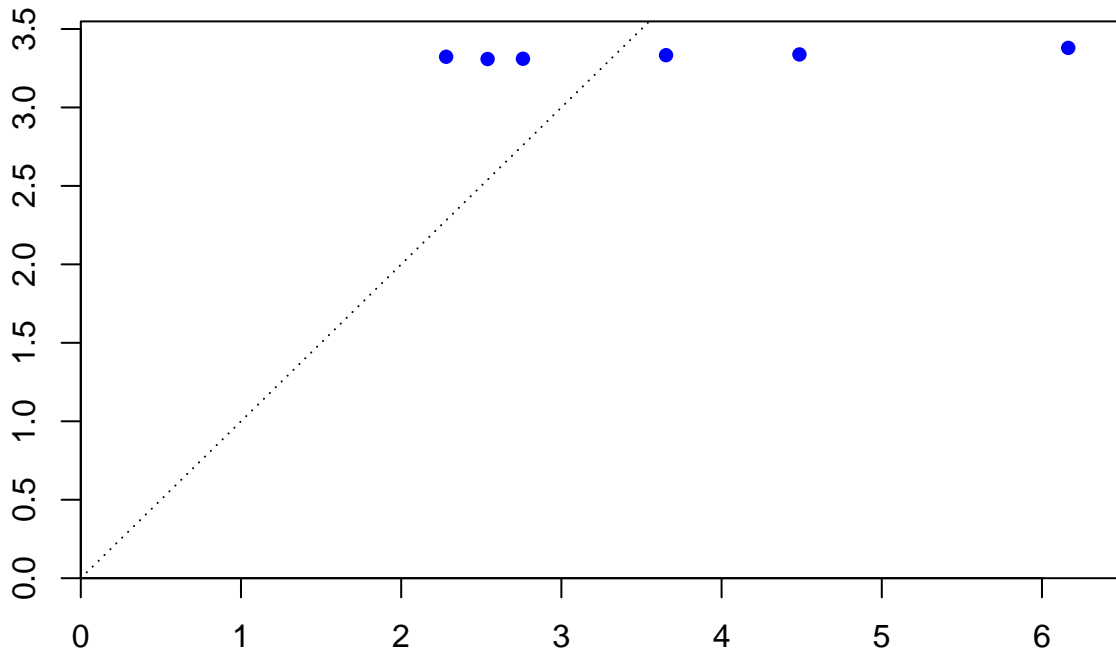
Year

Index



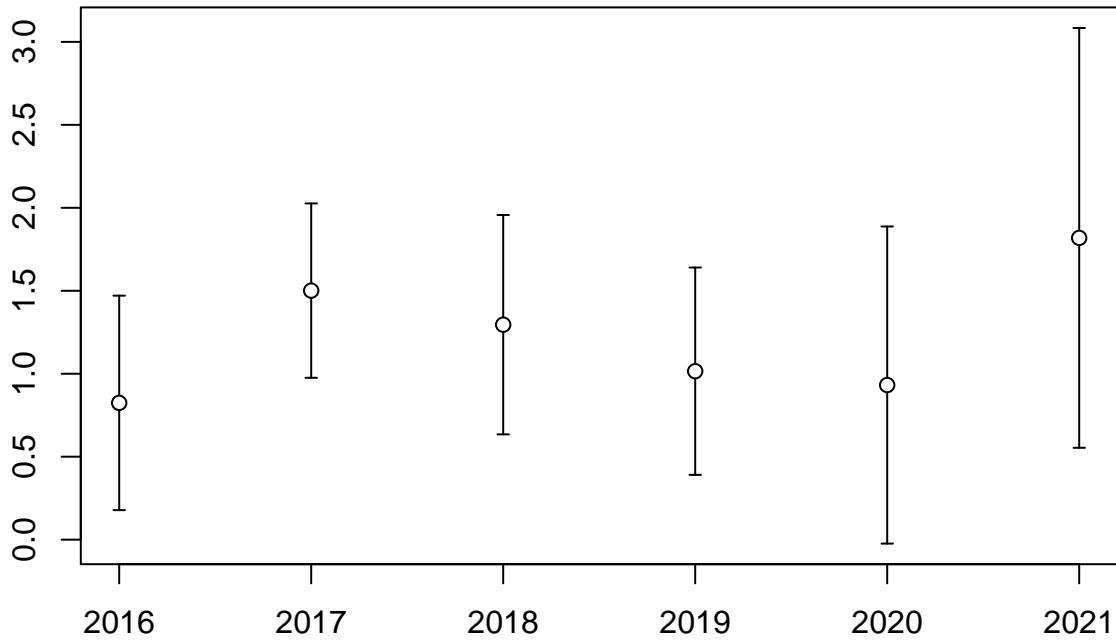
Year

Expected index

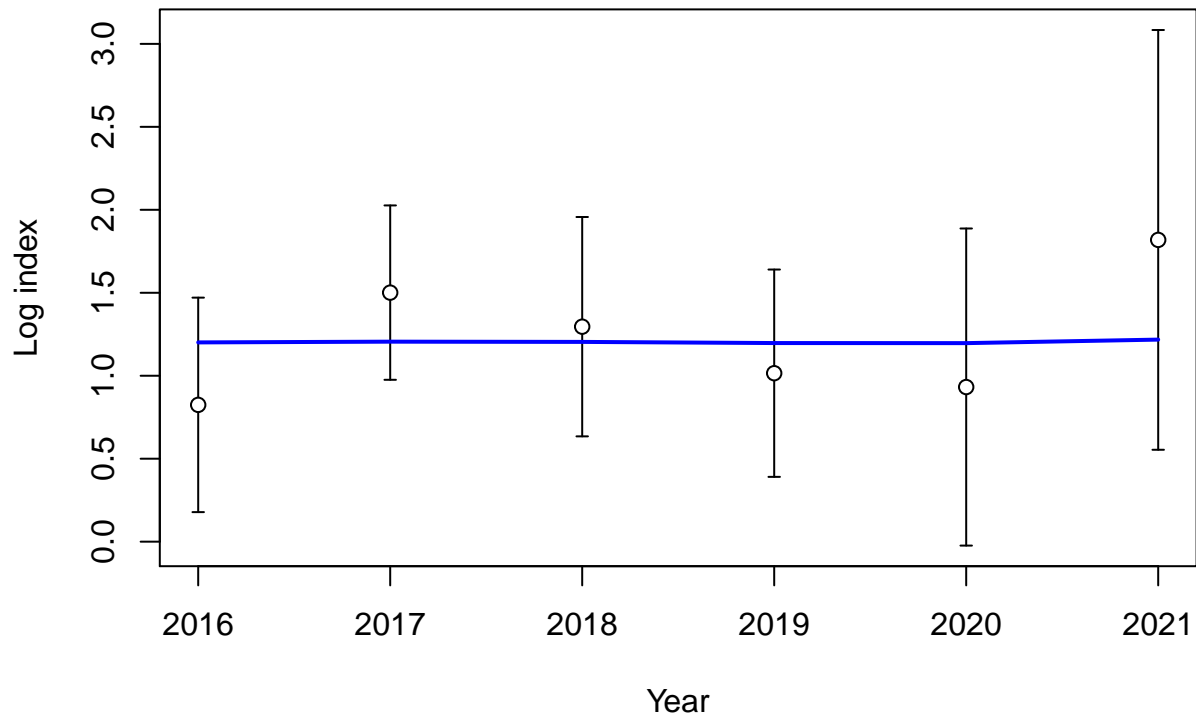


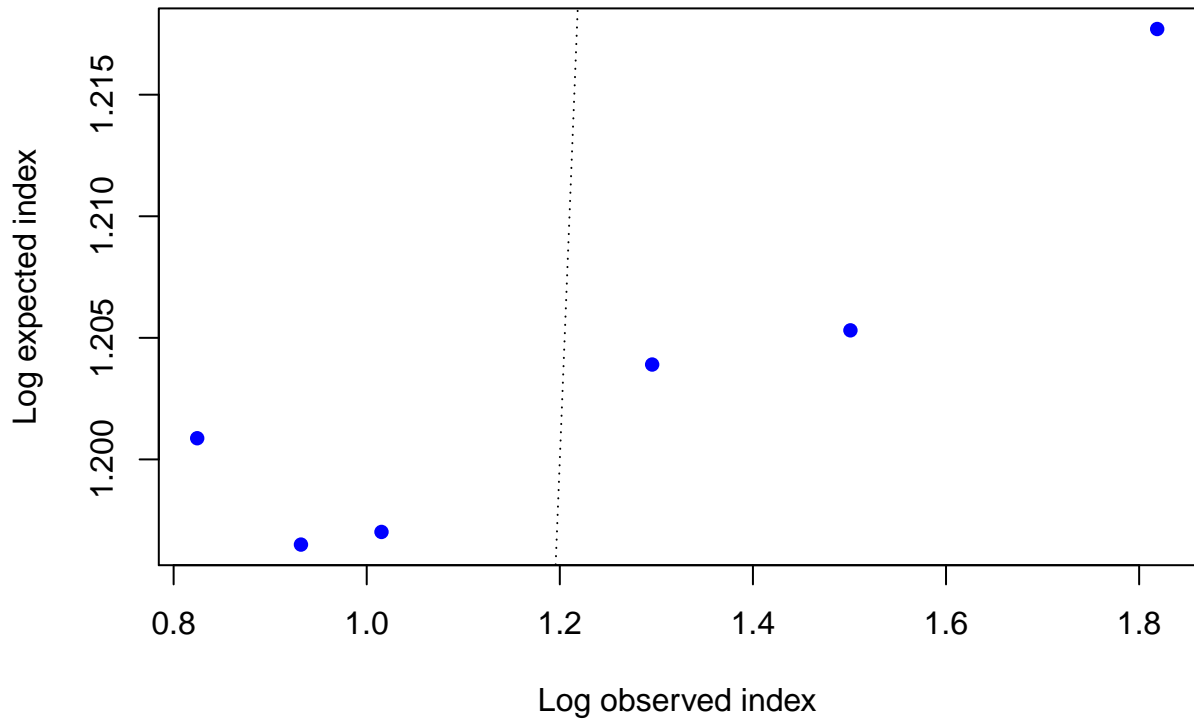
Observed index

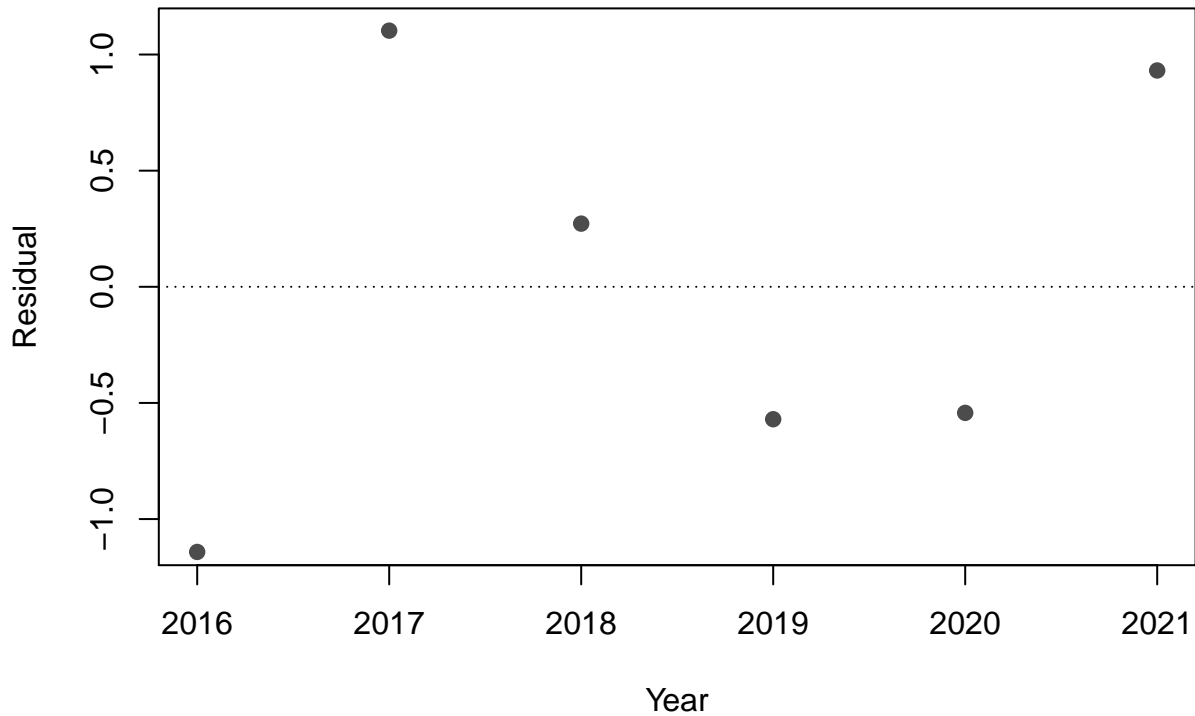
Log index



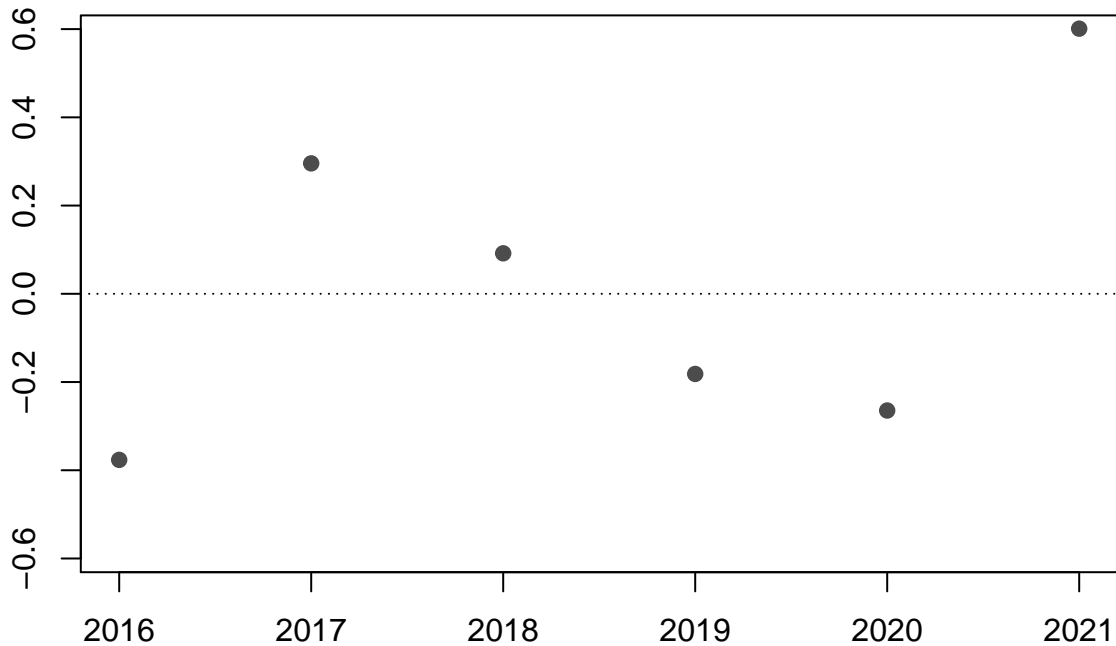
Year



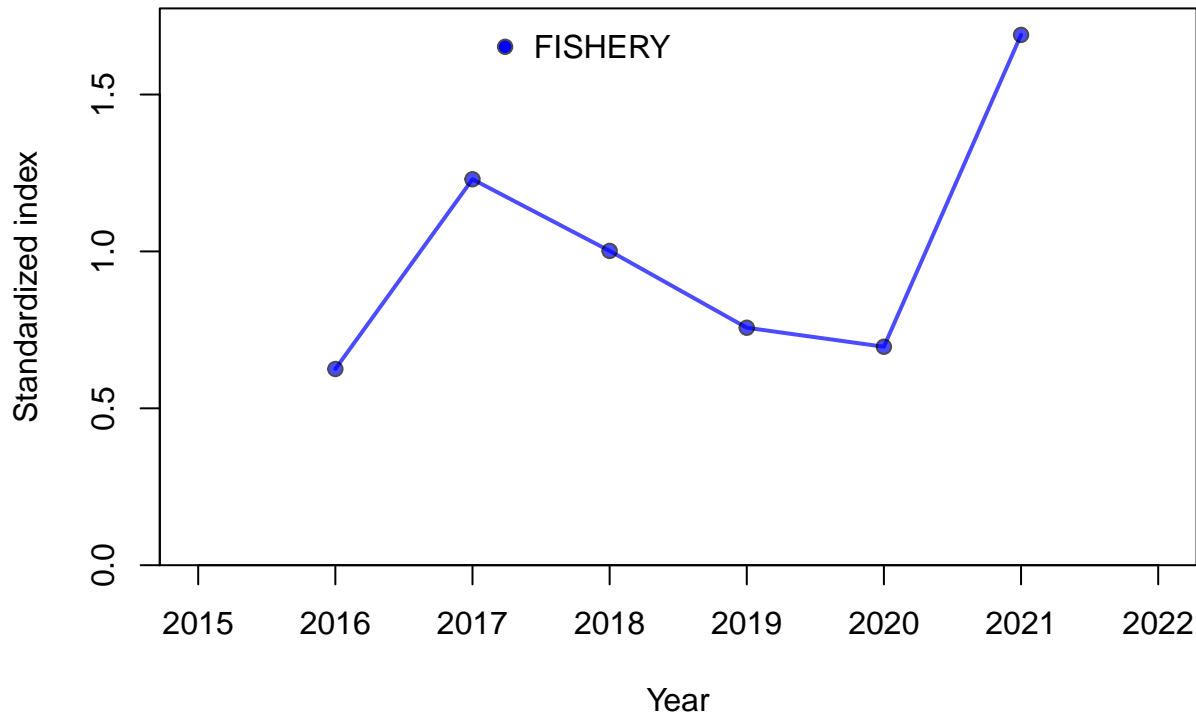


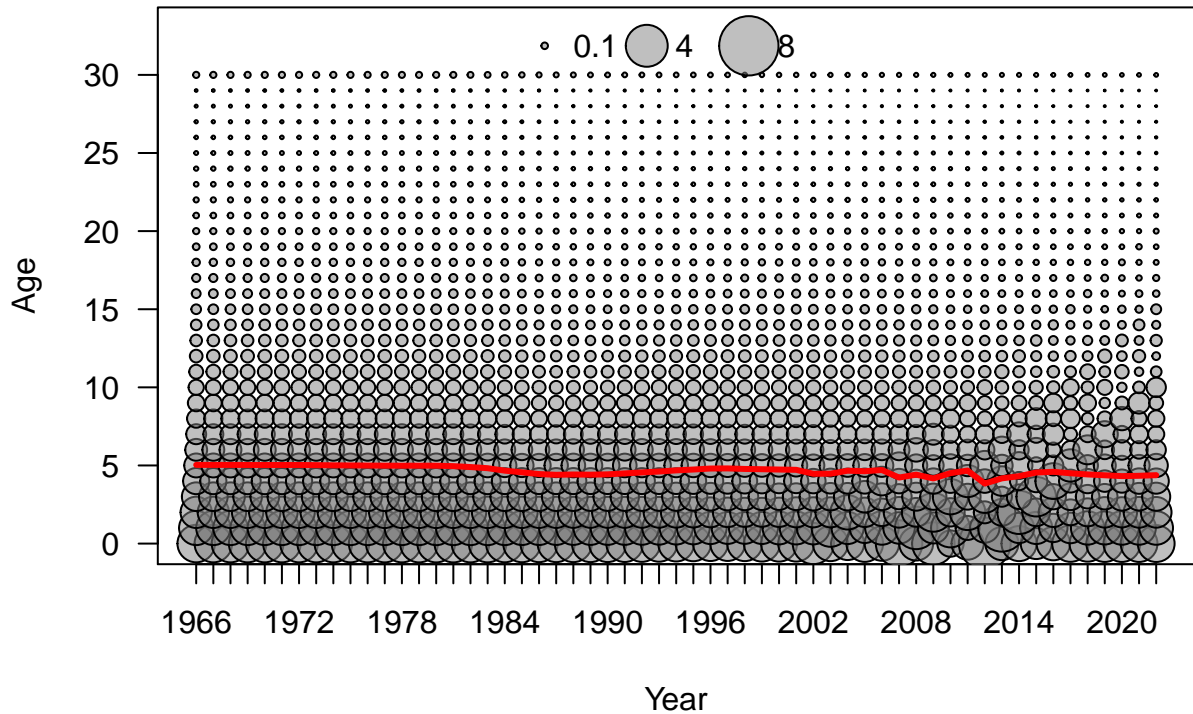


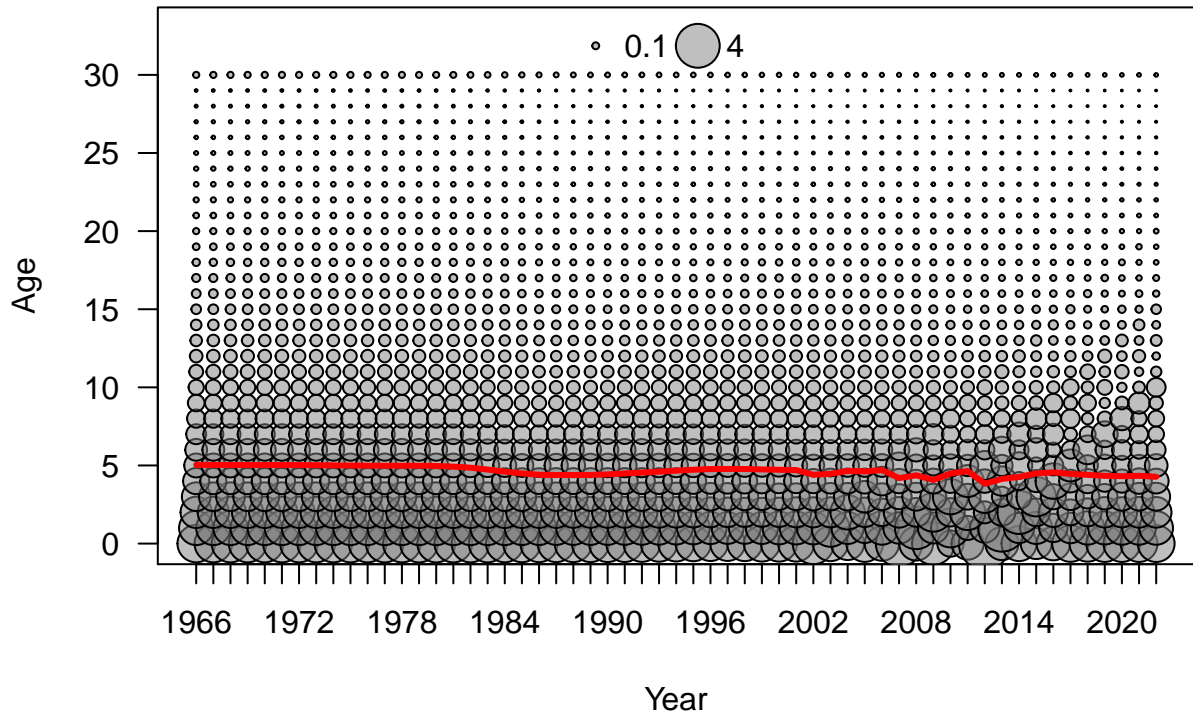
Deviation

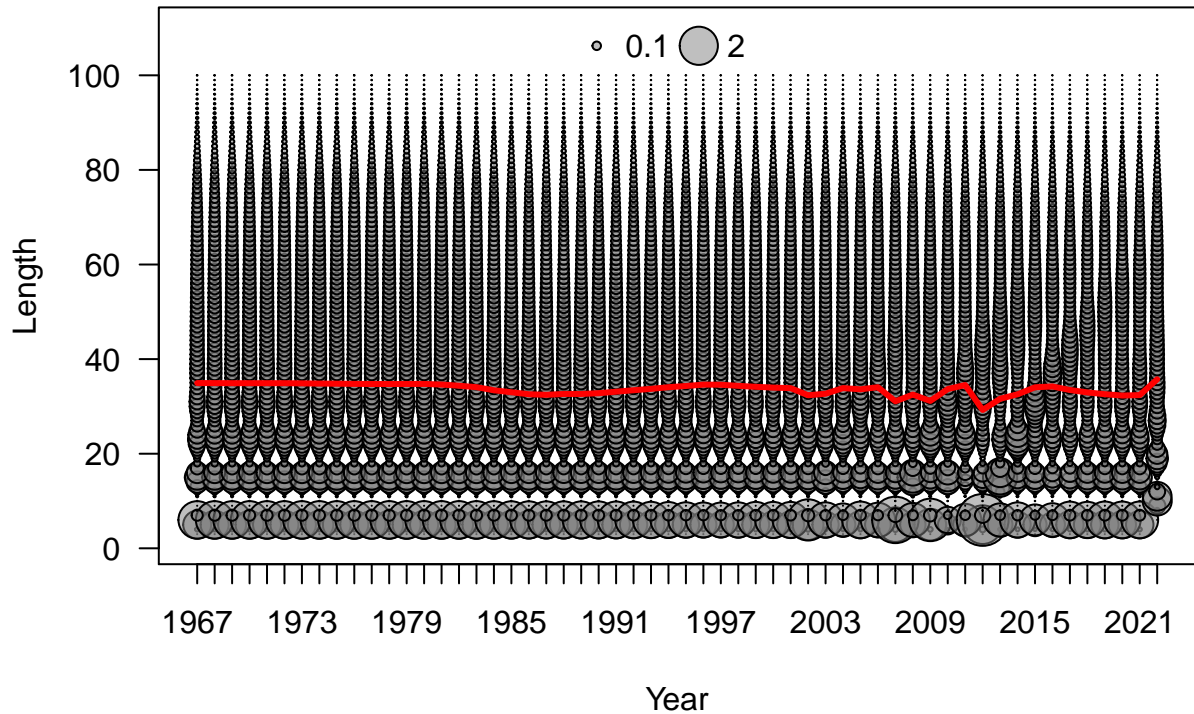


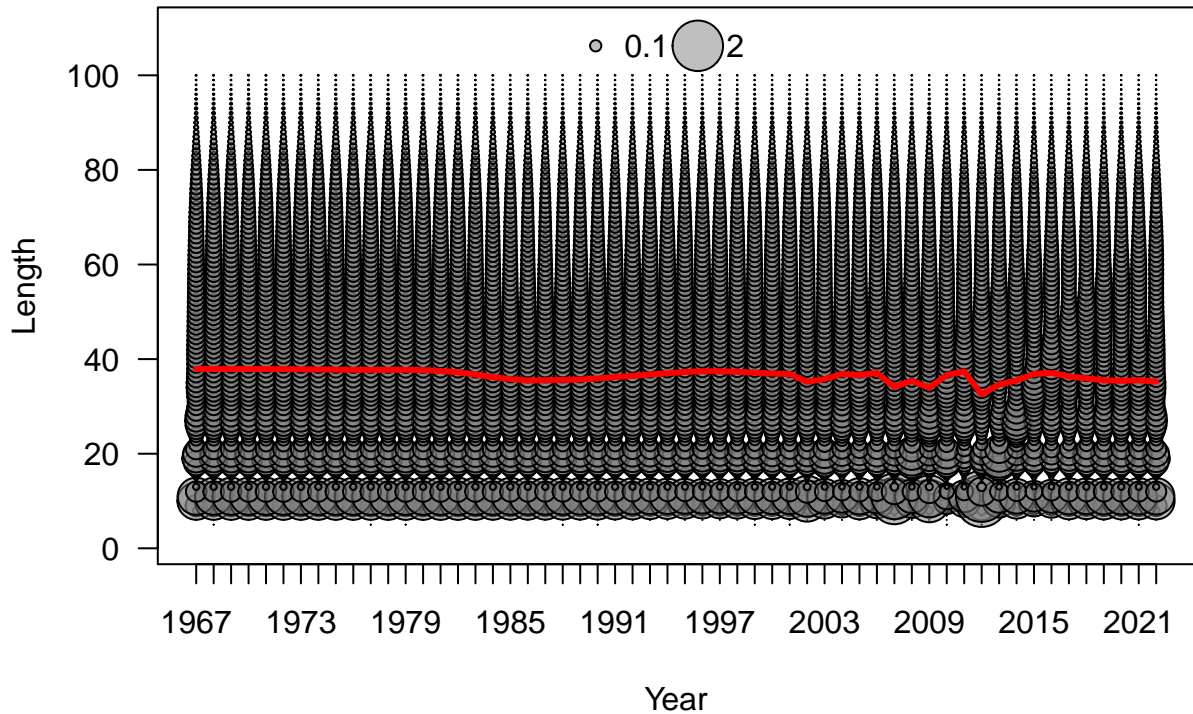
Year

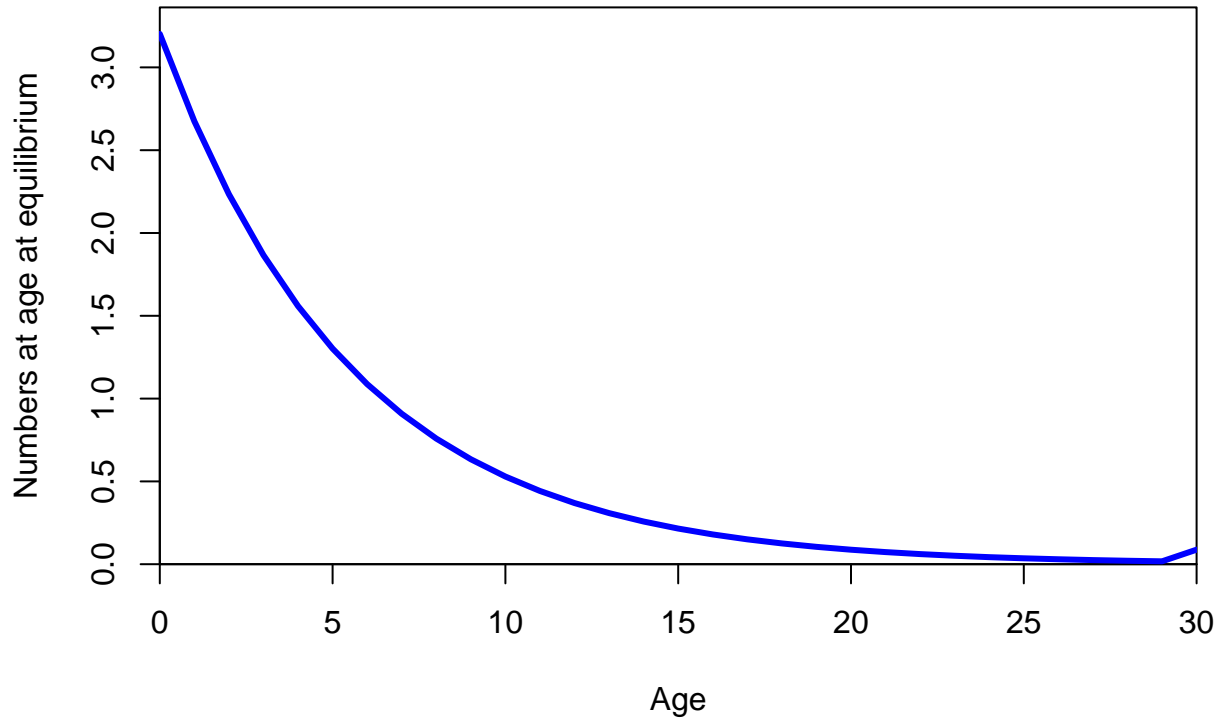






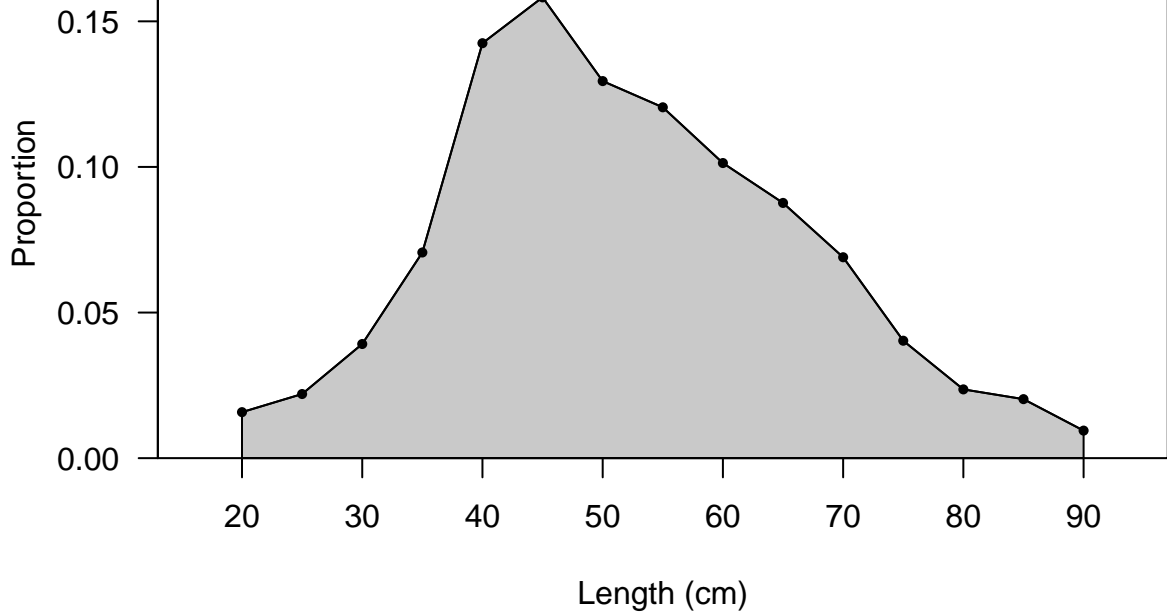






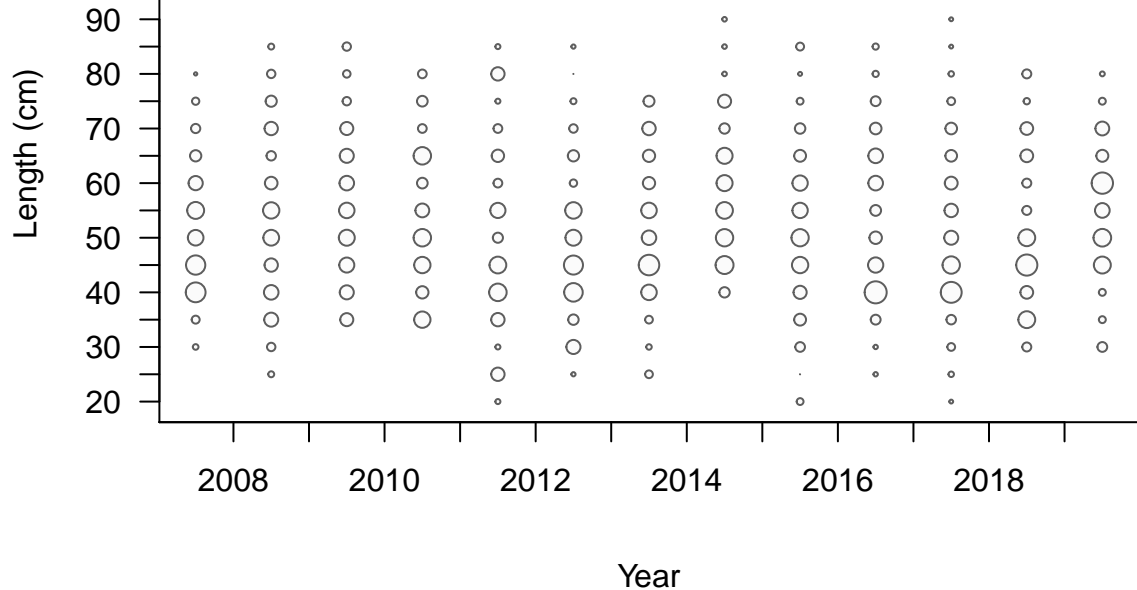
FISHERY

Sum of N adj.=983.4

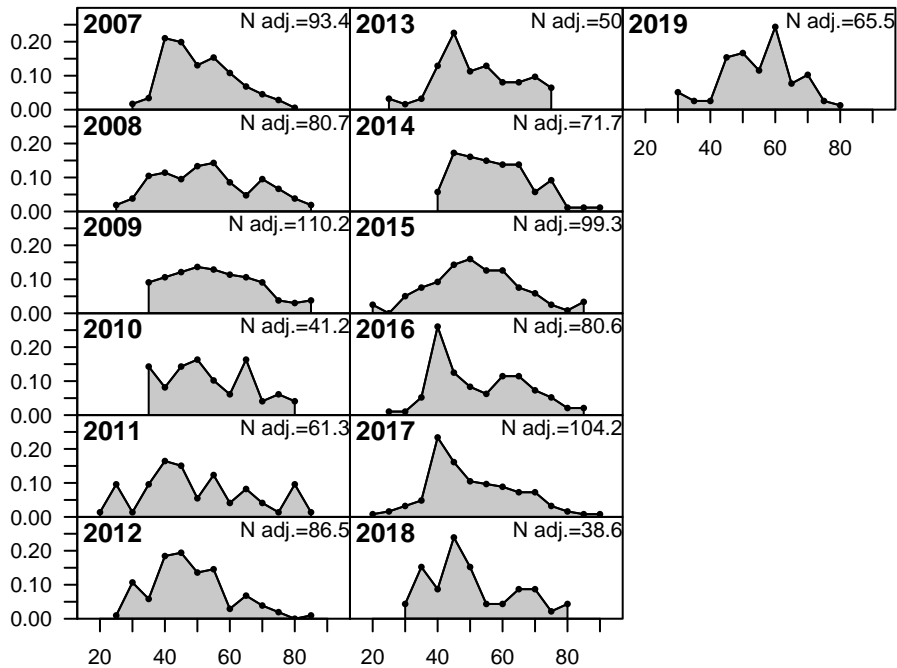


FISHERY

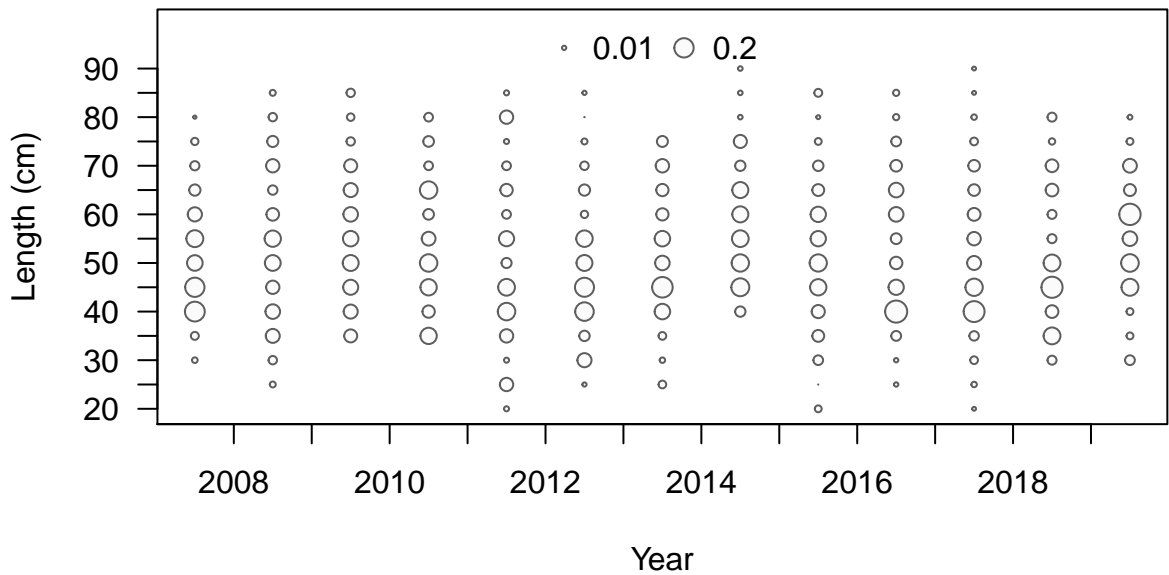
◦ 0.01 ○ 0.2



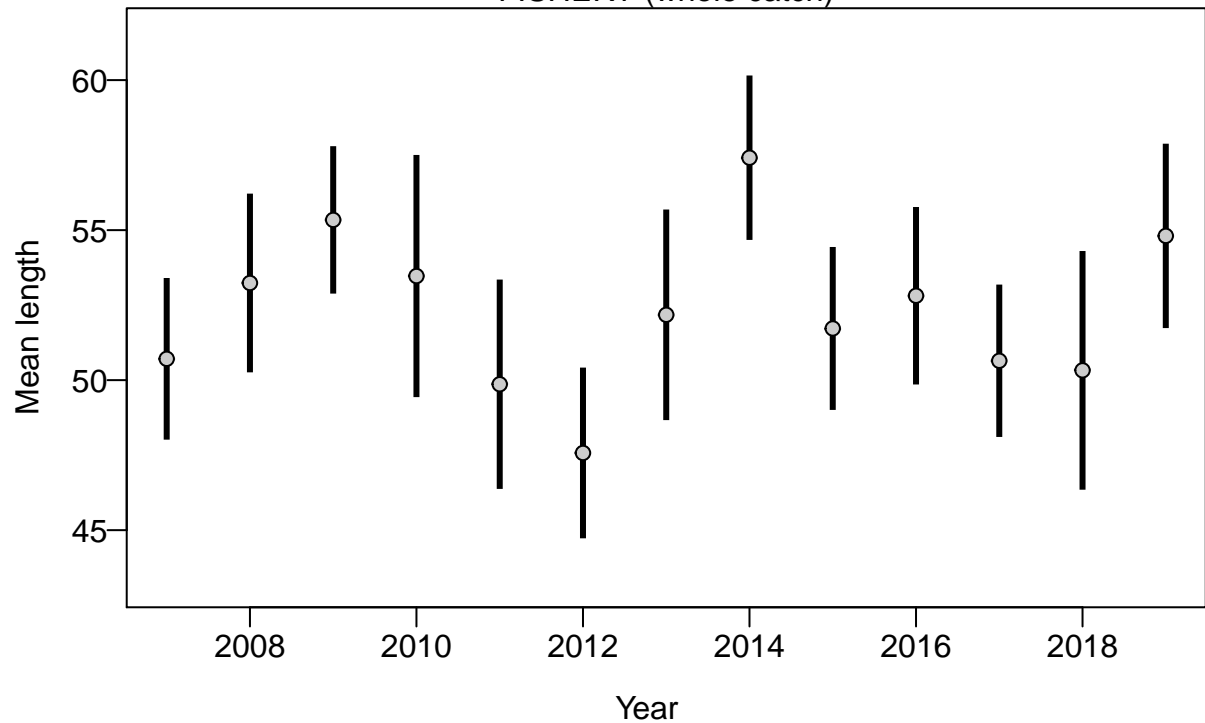
Proportion



Length (cm)

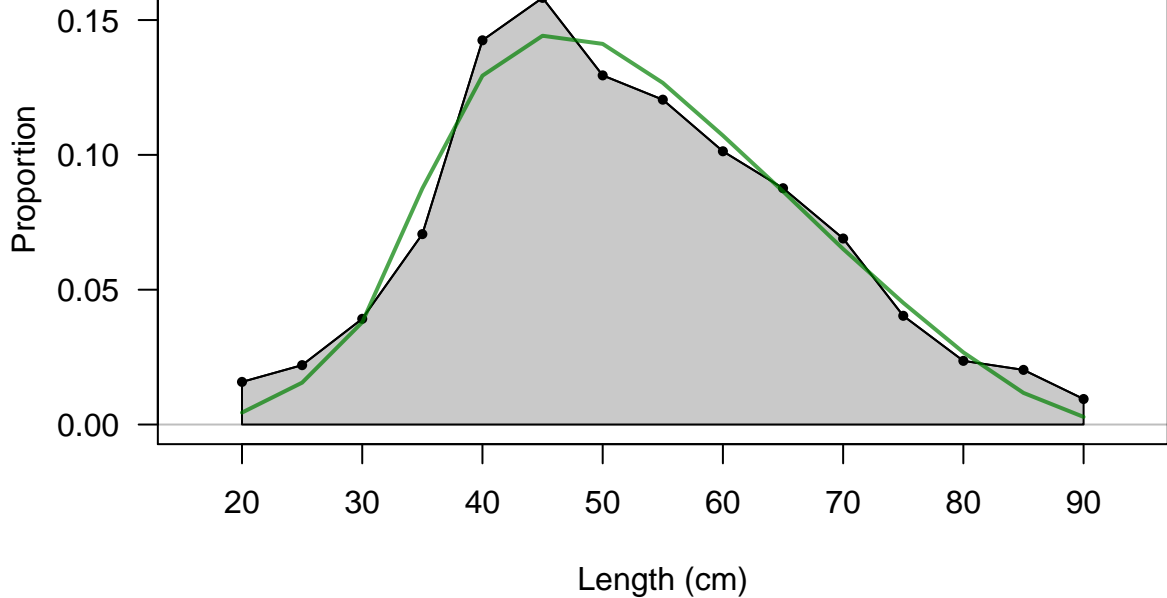


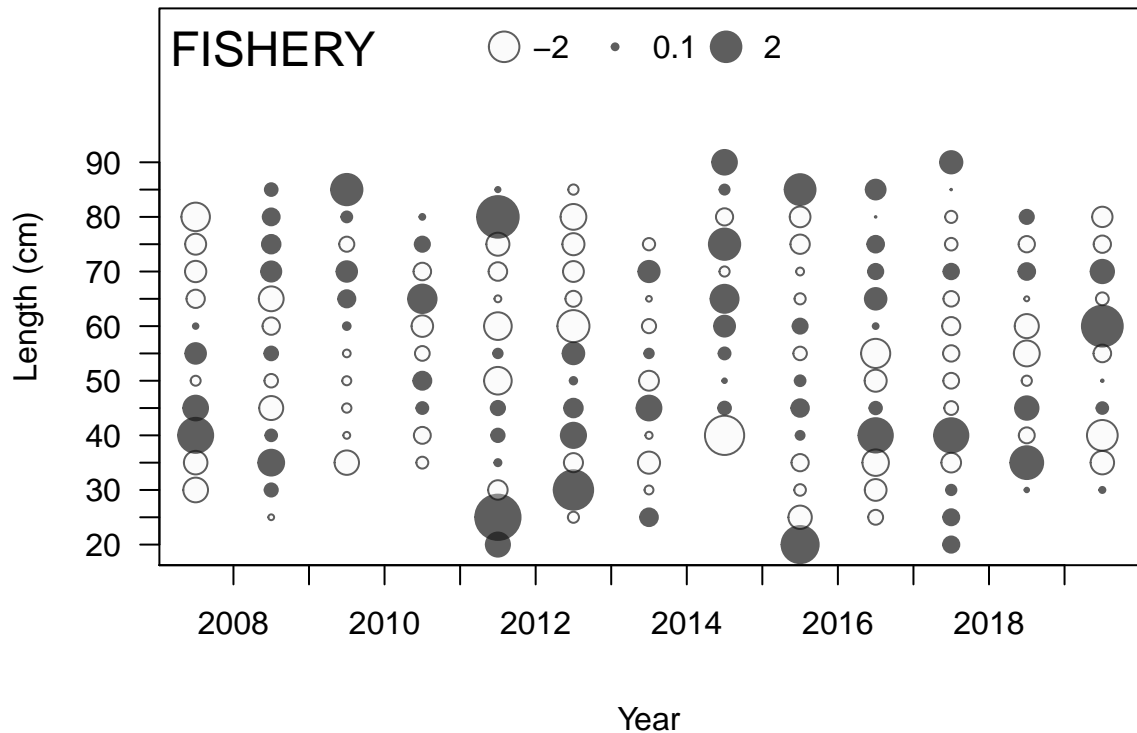
FISHERY (whole catch)



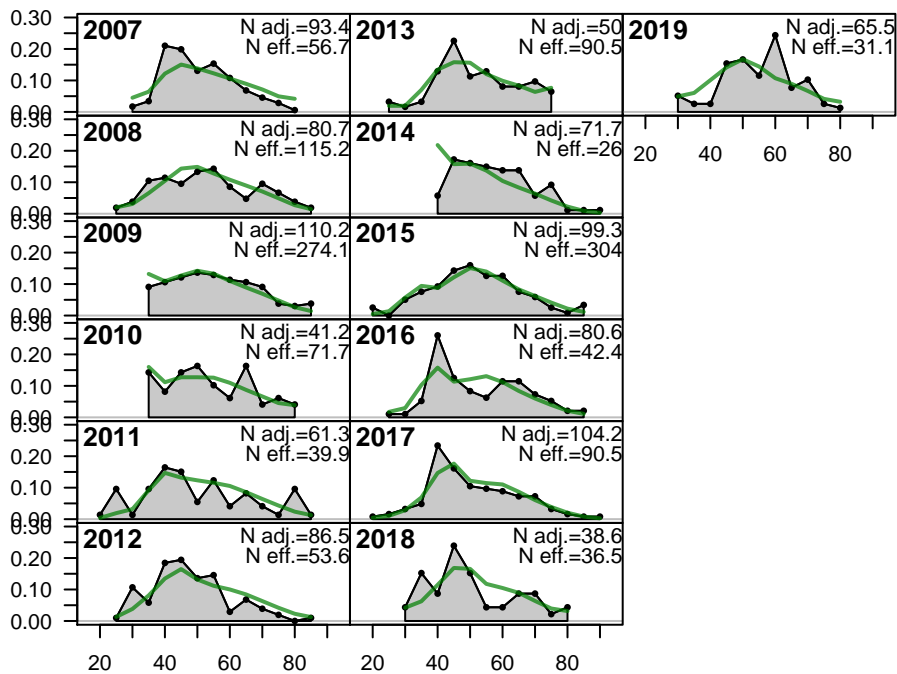
FISHERY

Sum of N adj.=983.4
Sum of N eff.=1232.1

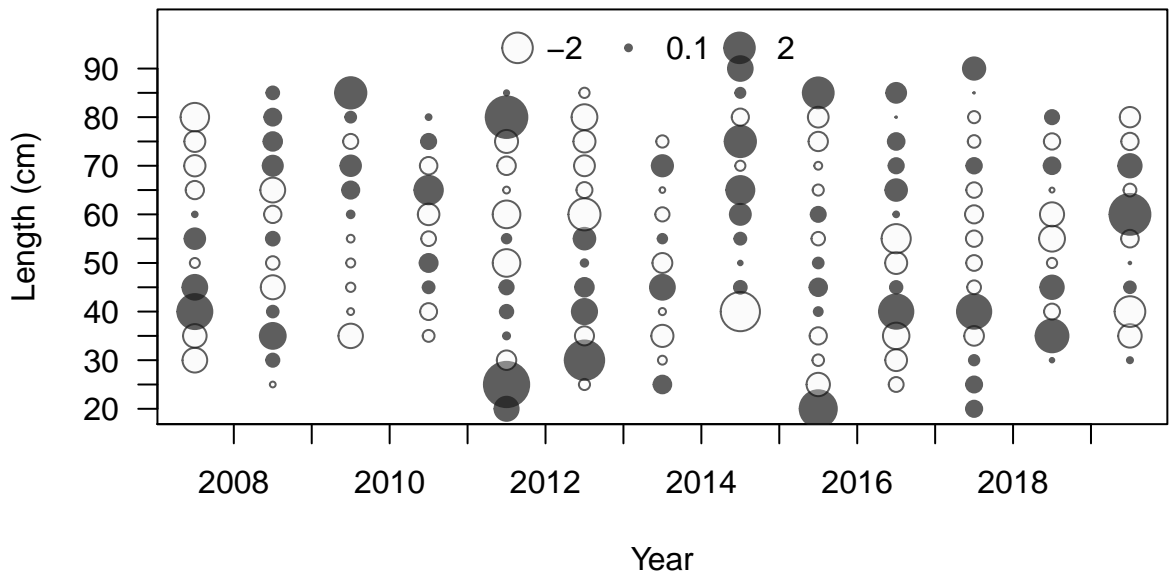




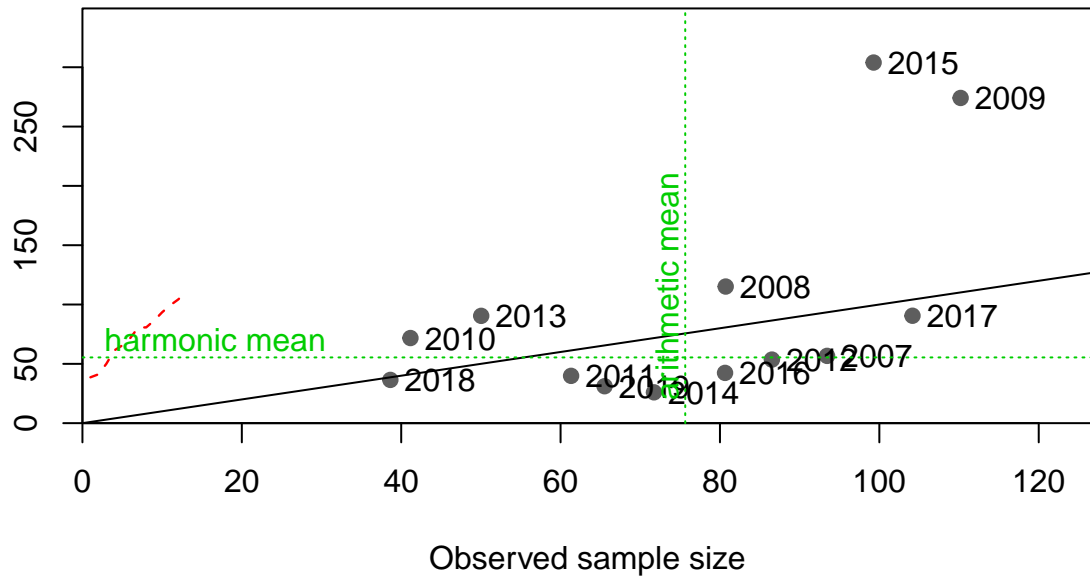
Proportion



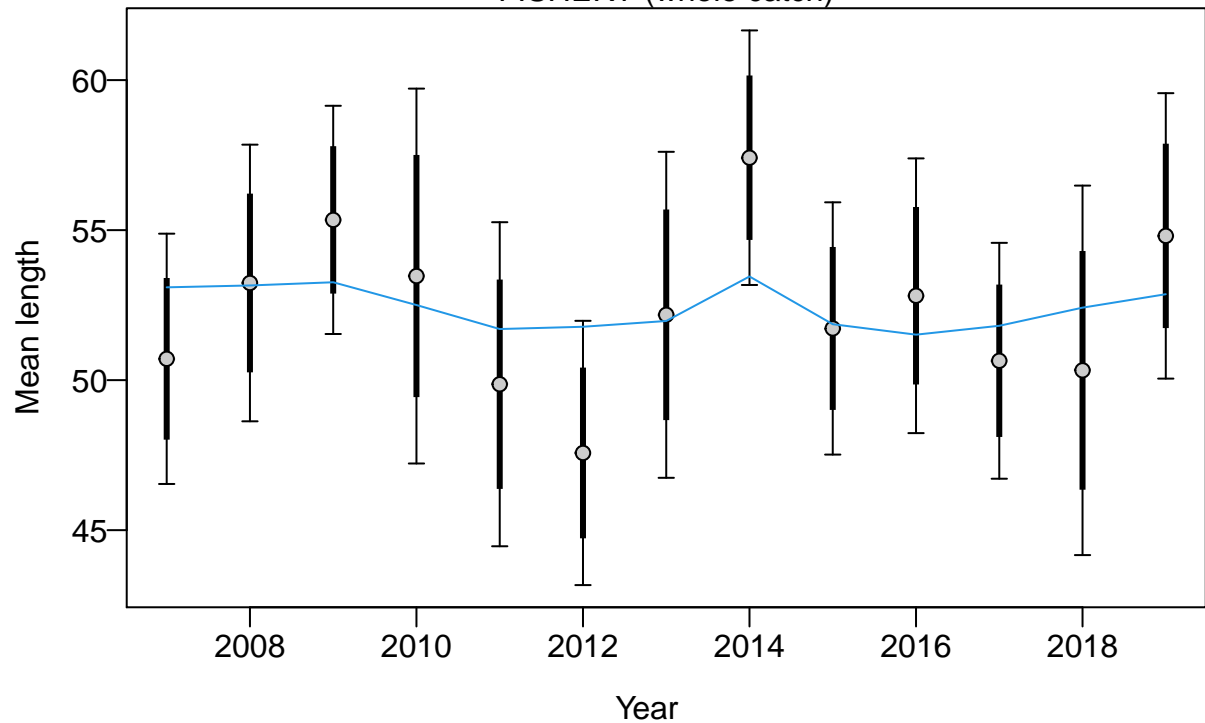
Length (cm)

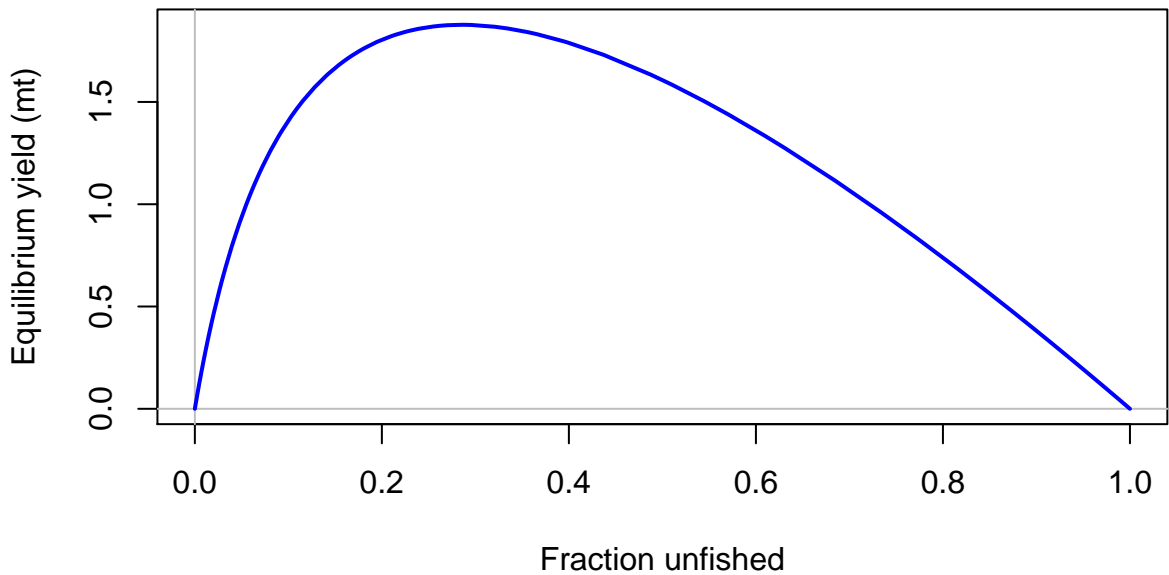


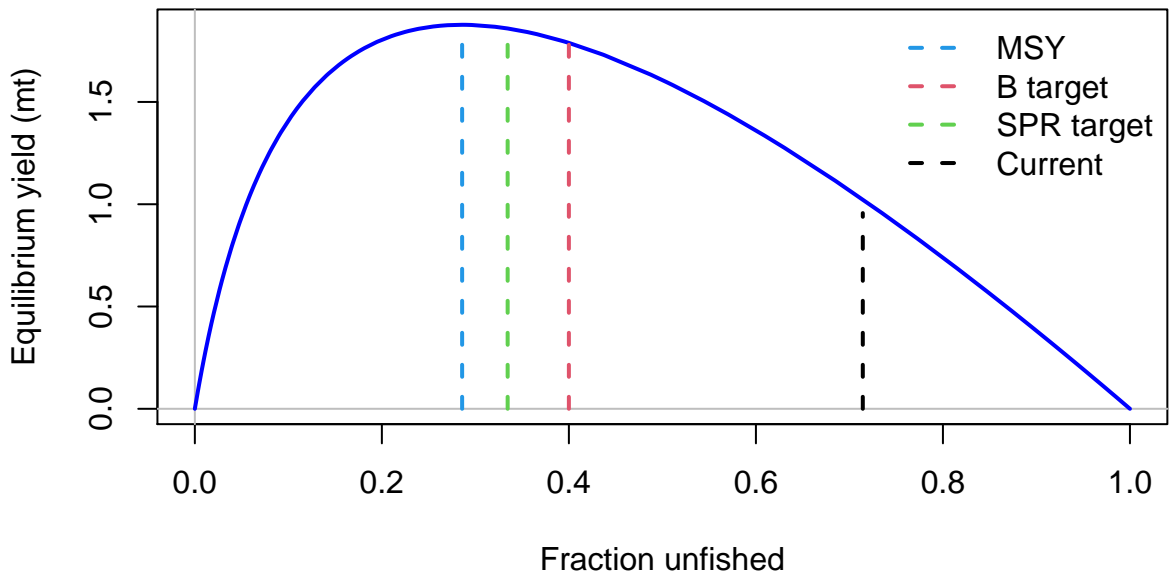
Effective sample size

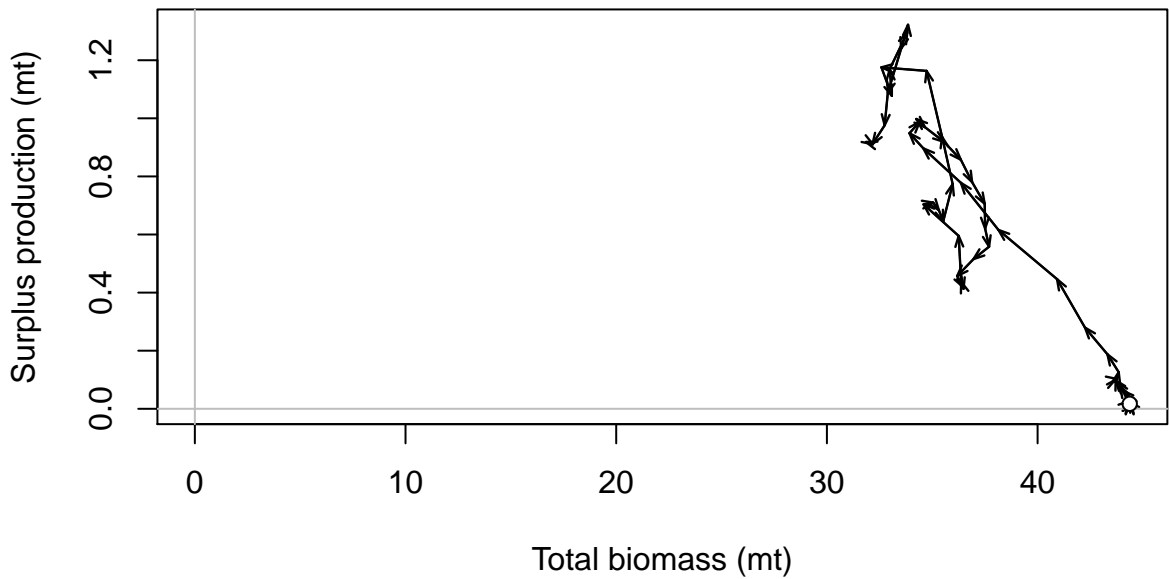


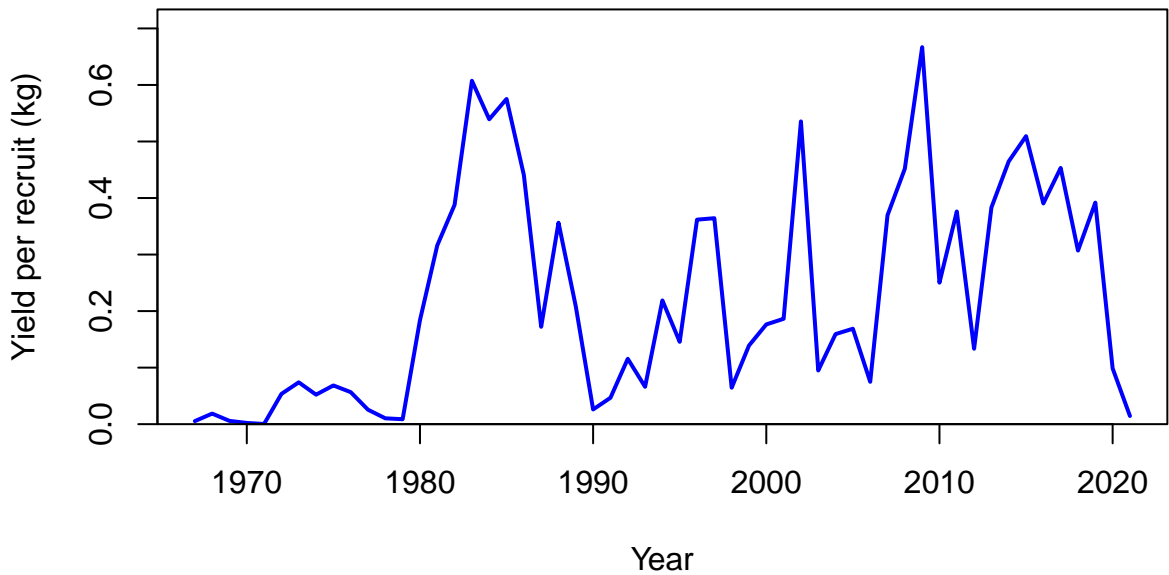
FISHERY (whole catch)

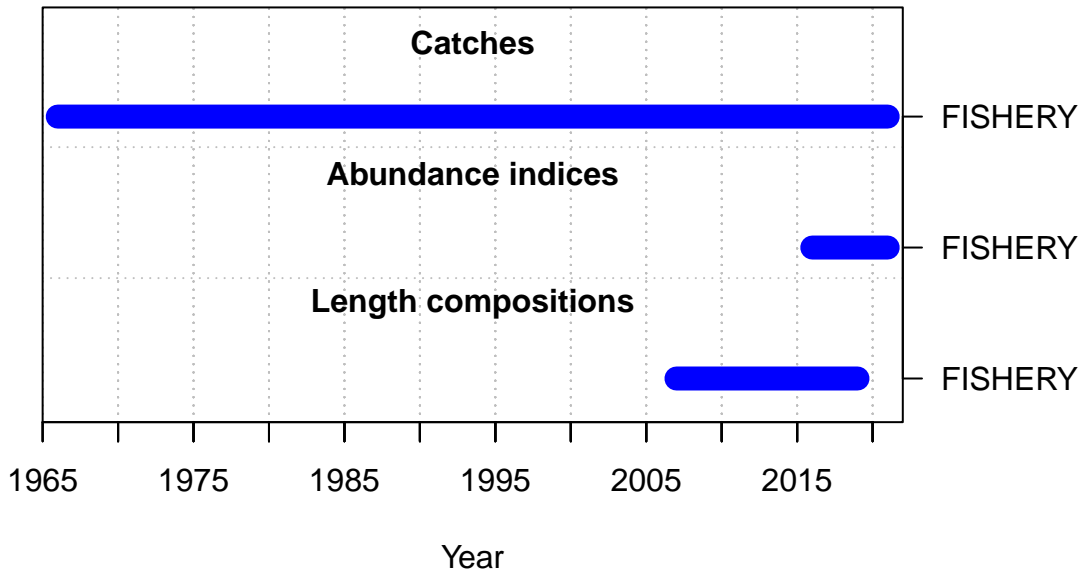


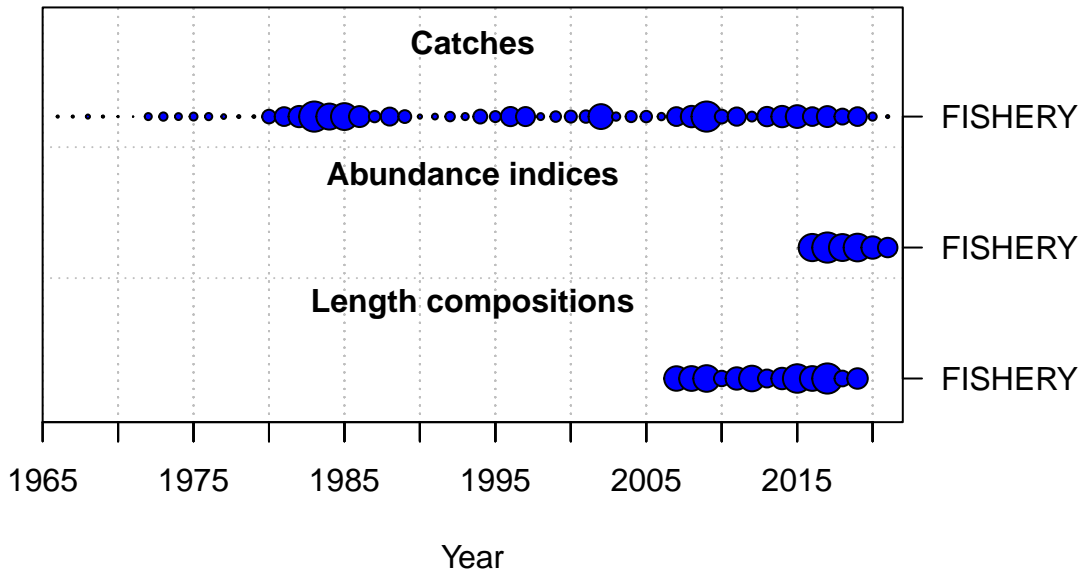








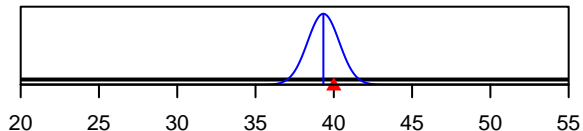




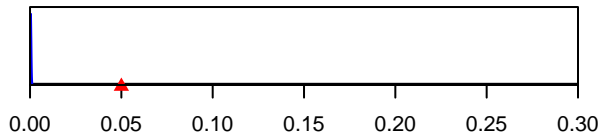
SR_LN(R0)



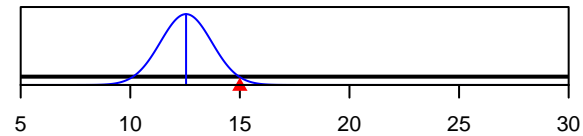
Size_inflection_FISHERY(1)



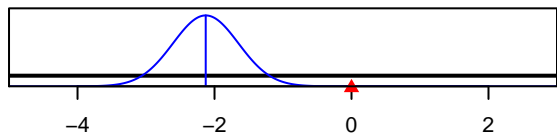
InitF_seas_1flt_1FISHERY



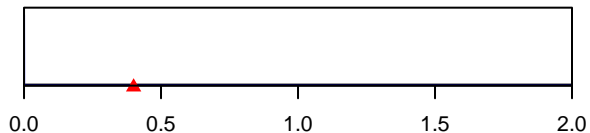
Size_95%width_FISHERY(1)



LnQ_base_FISHERY(1)



Q_extraSD_FISHERY(1)



Parameter value