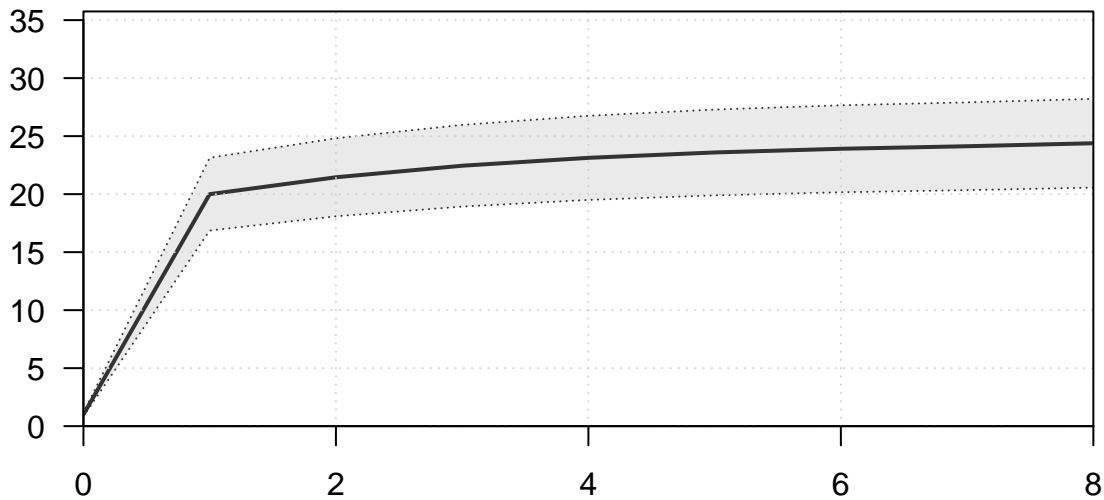
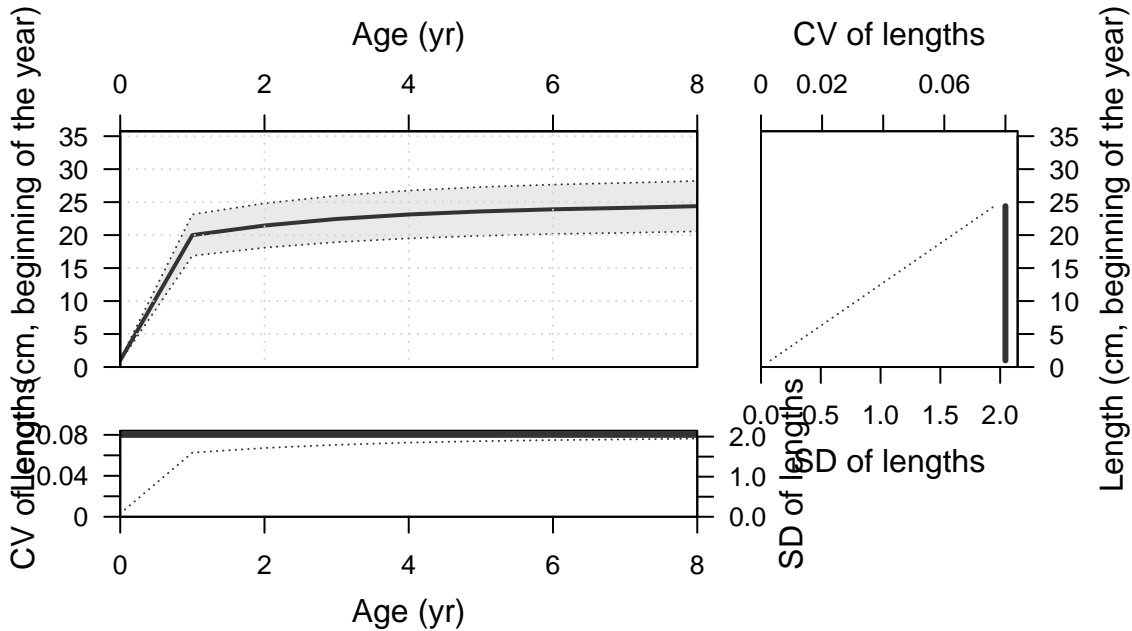


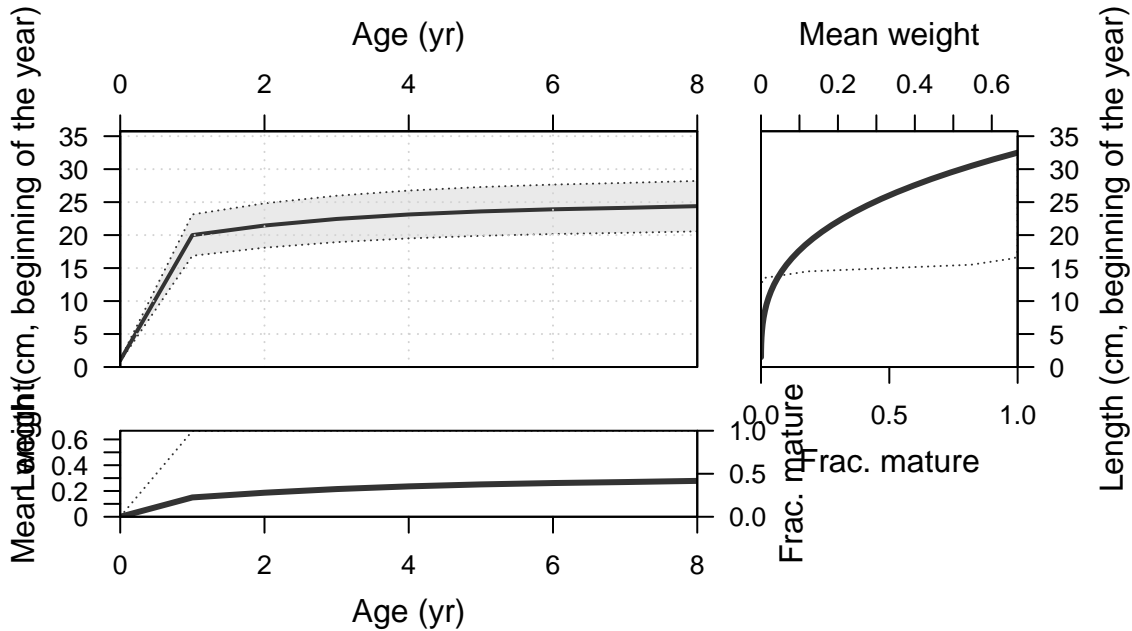
Plots created using the 'r4ss' package in R
Stock Synthesis version: 3.30.19.0
StartTime: Mon Aug 01 13:24:18 2022
Data_File: data.ss
Control_File: control.ss

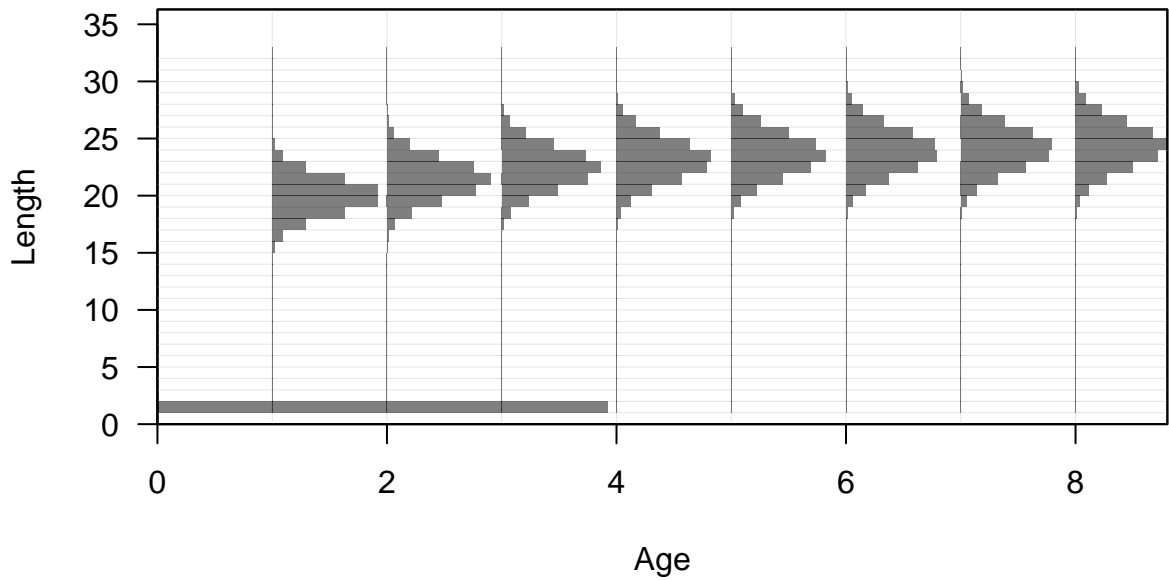
Length (cm, beginning of the year)

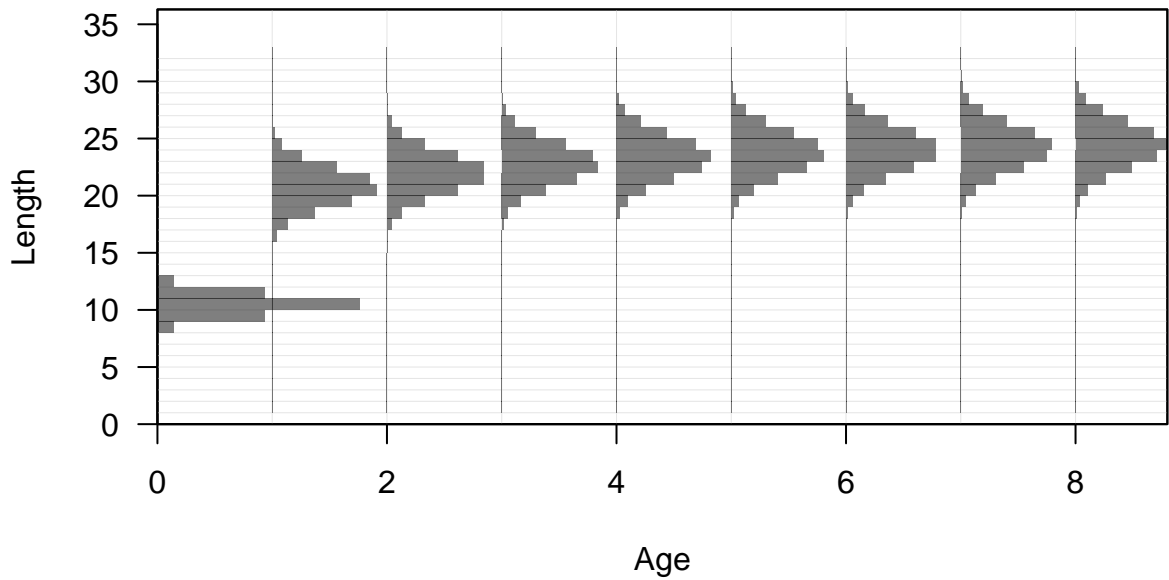


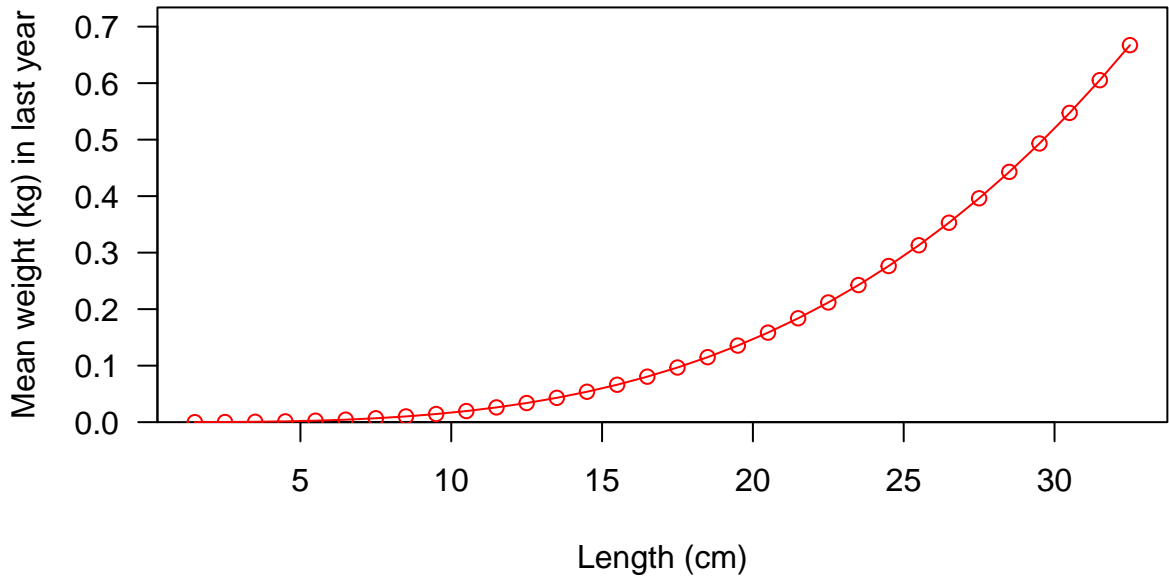
Age (yr)

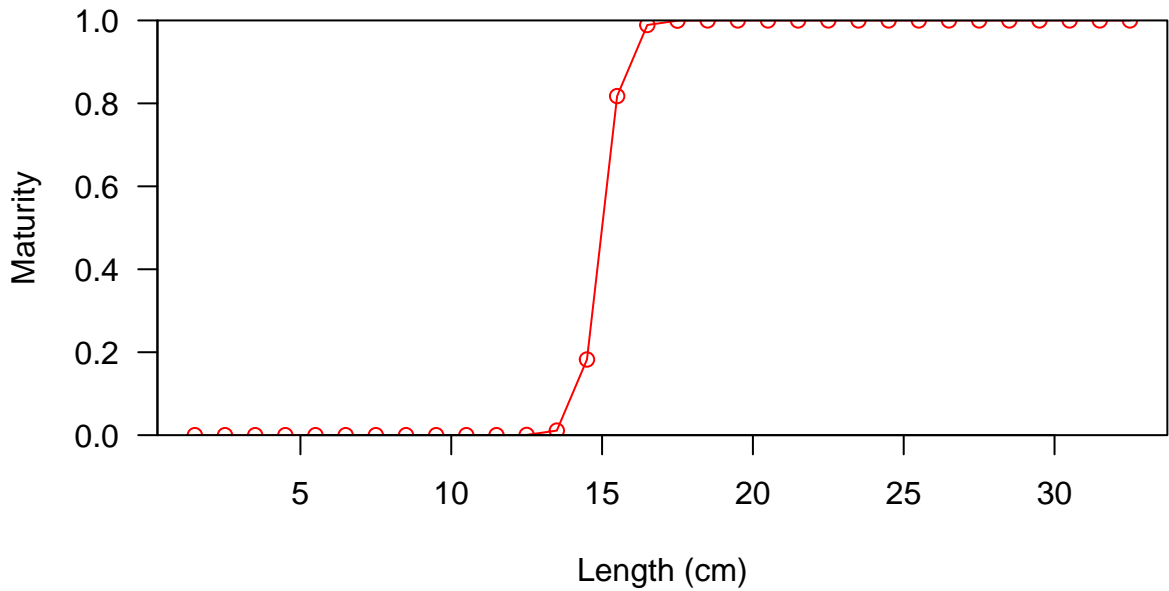


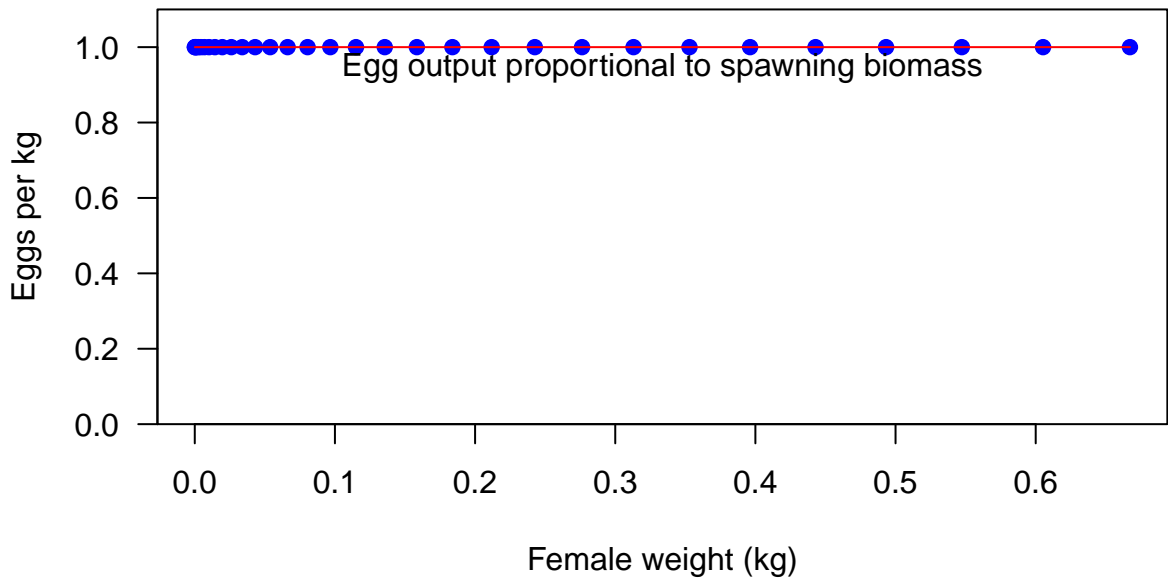




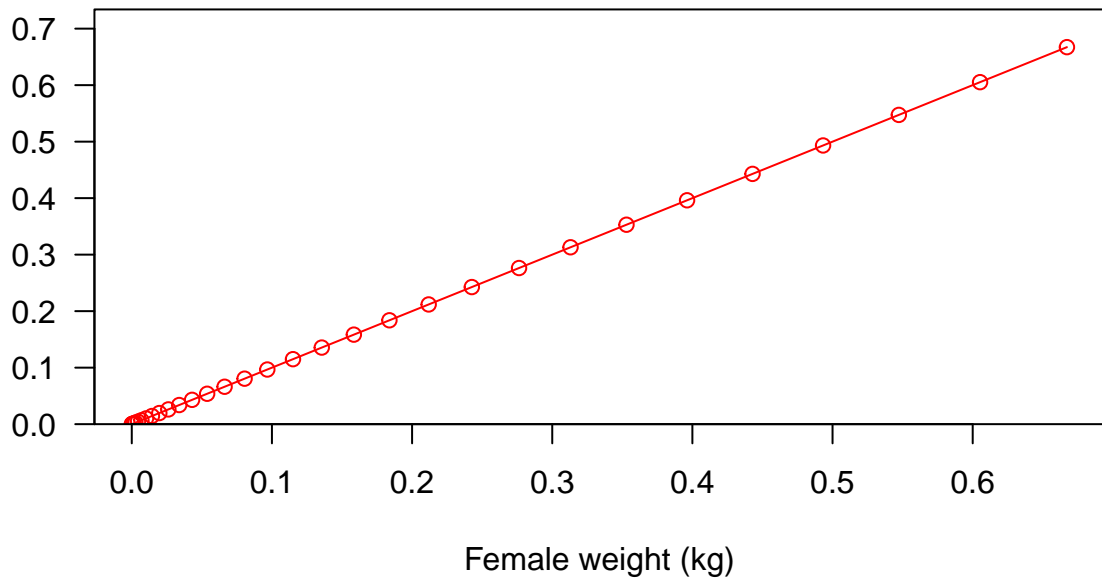


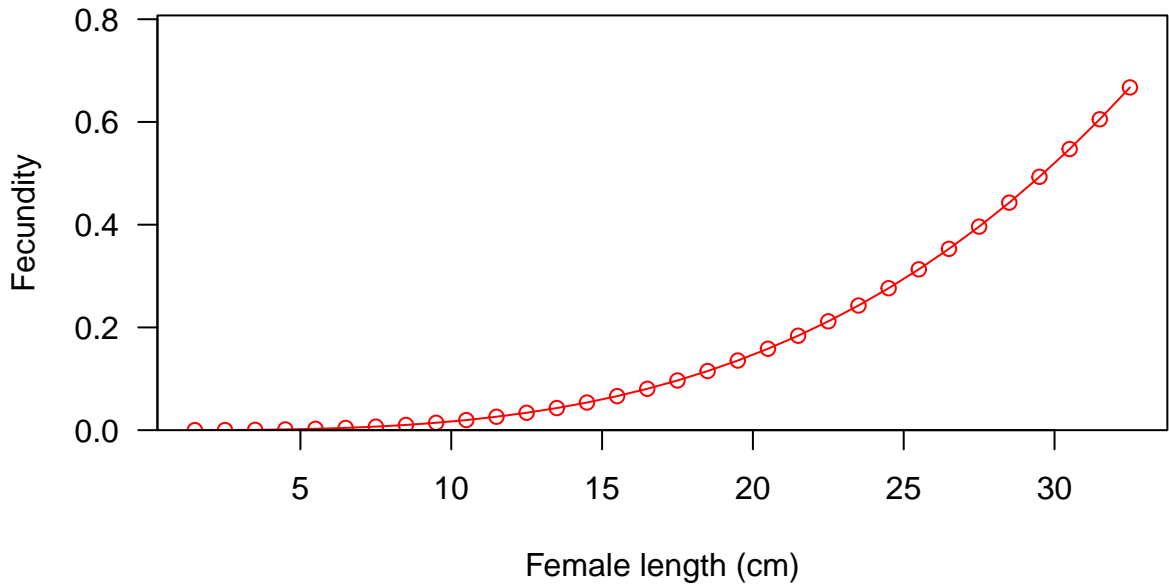


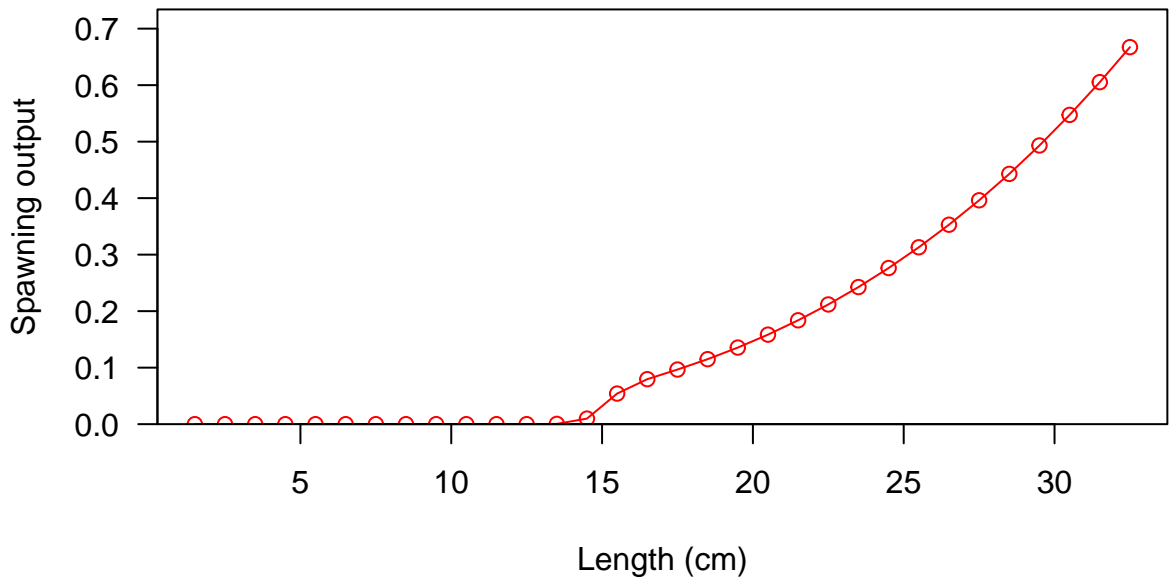


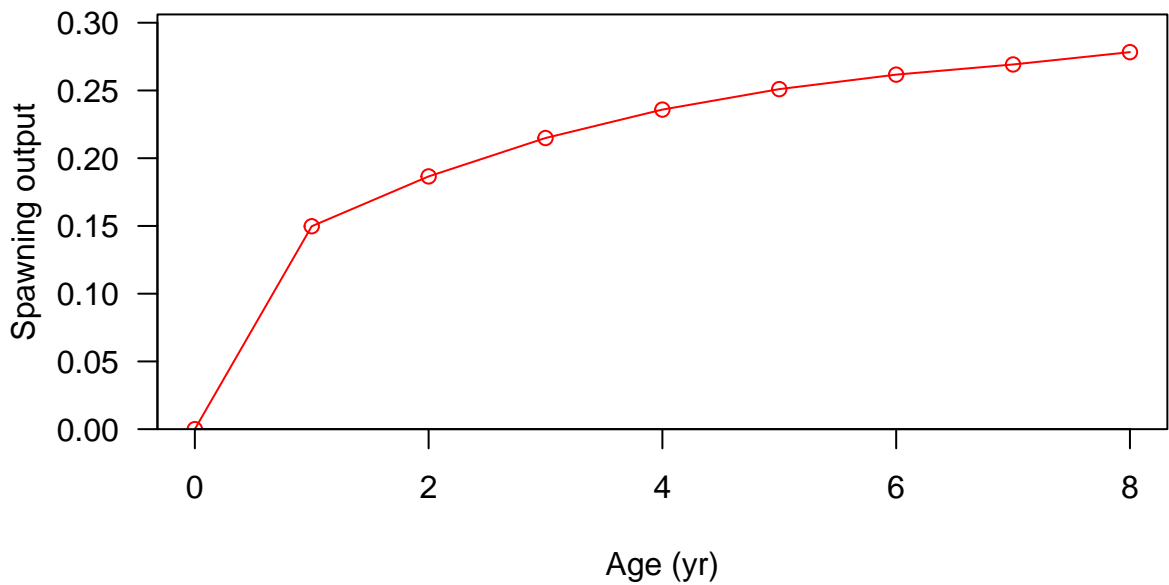


Fecundity

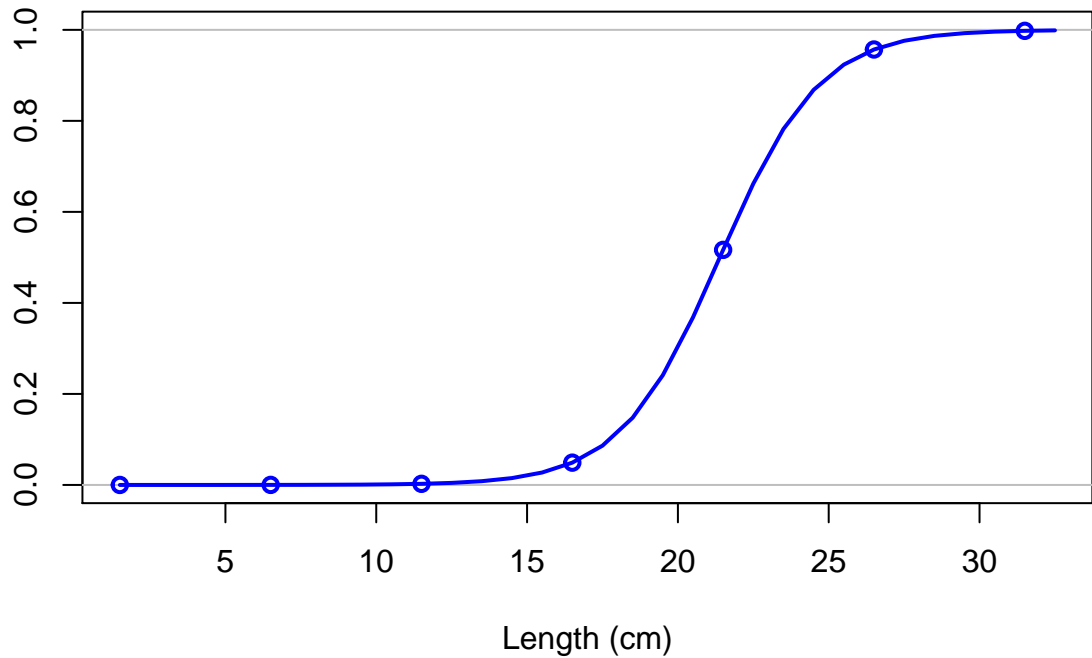




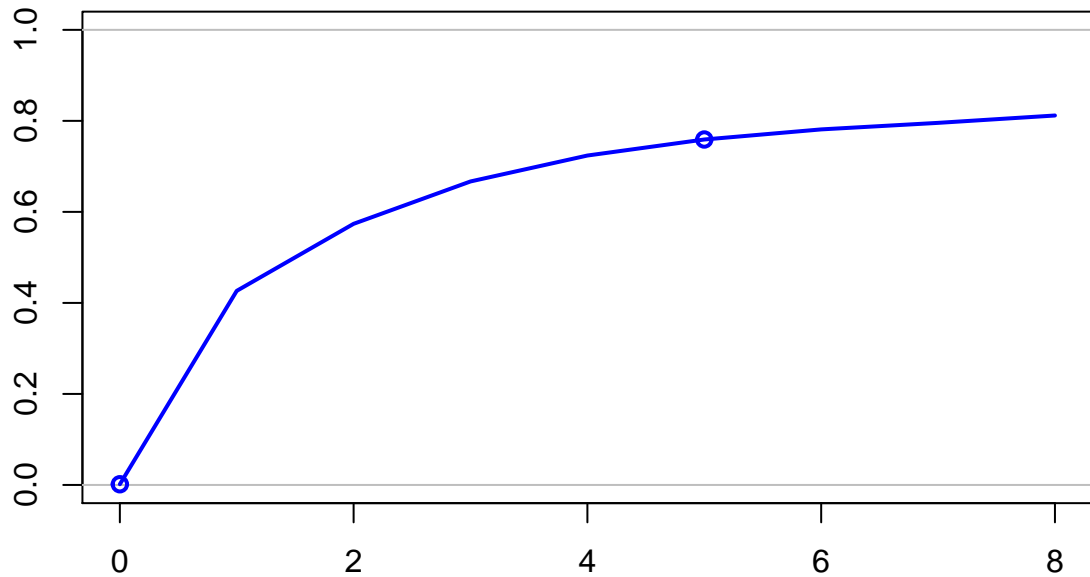




Selectivity

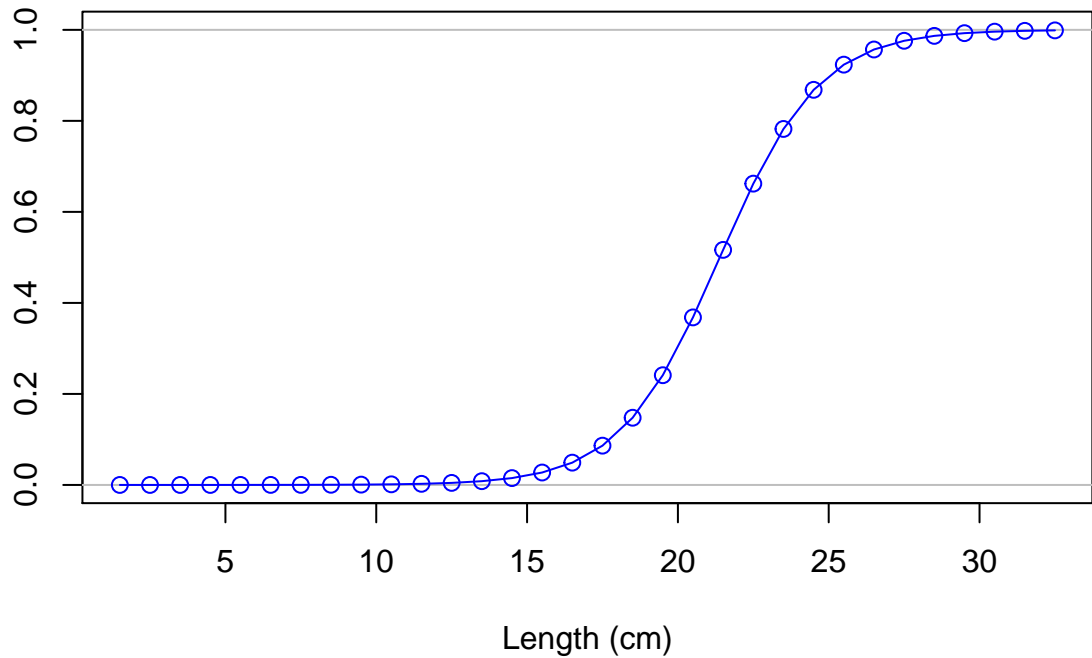


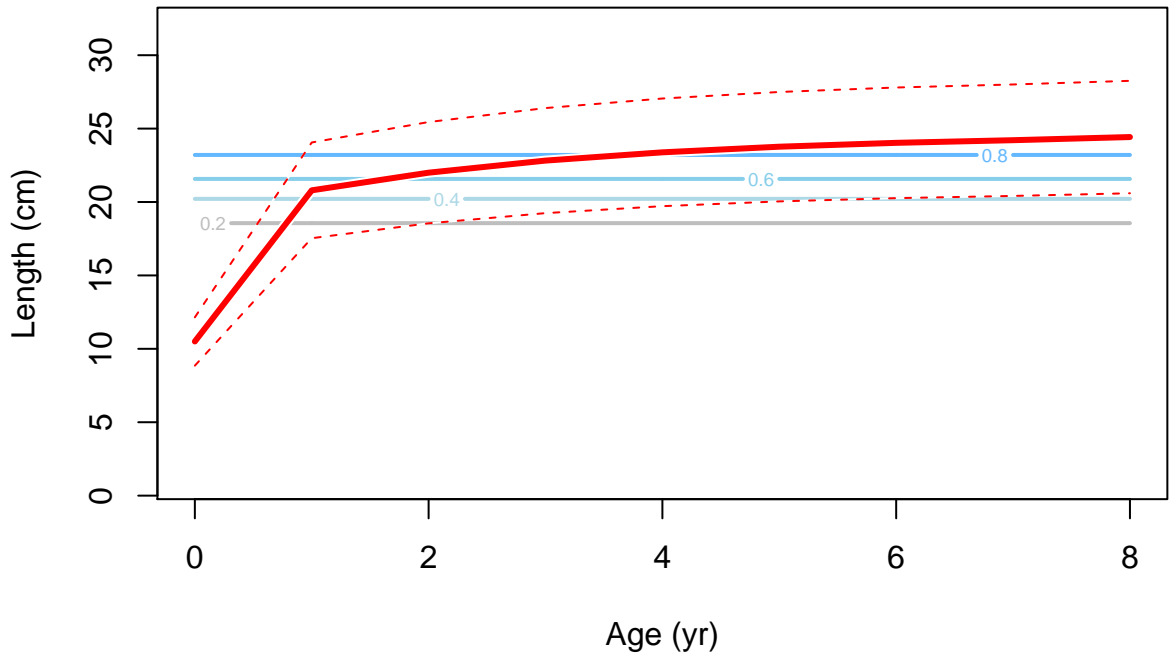
Selectivity

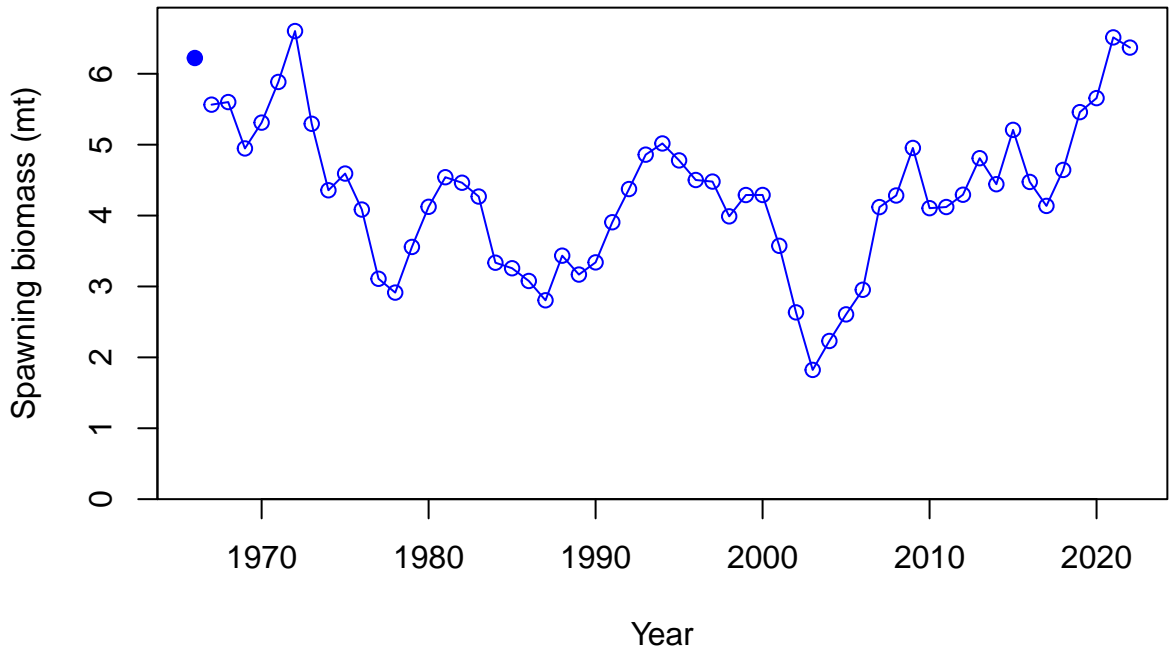


Age (yr)

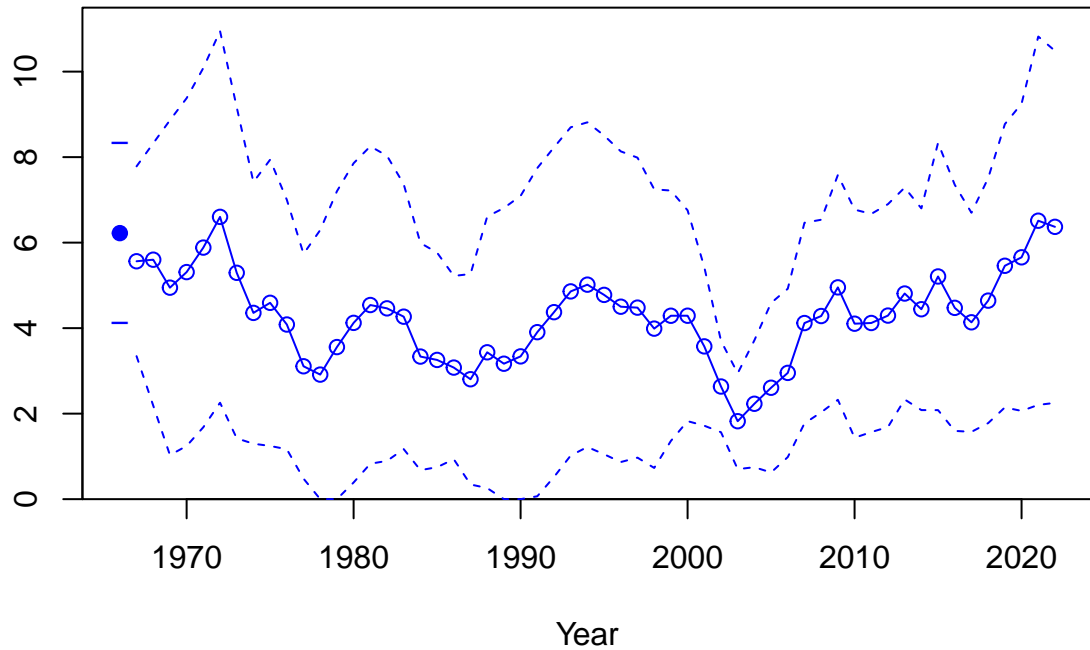
Selectivity



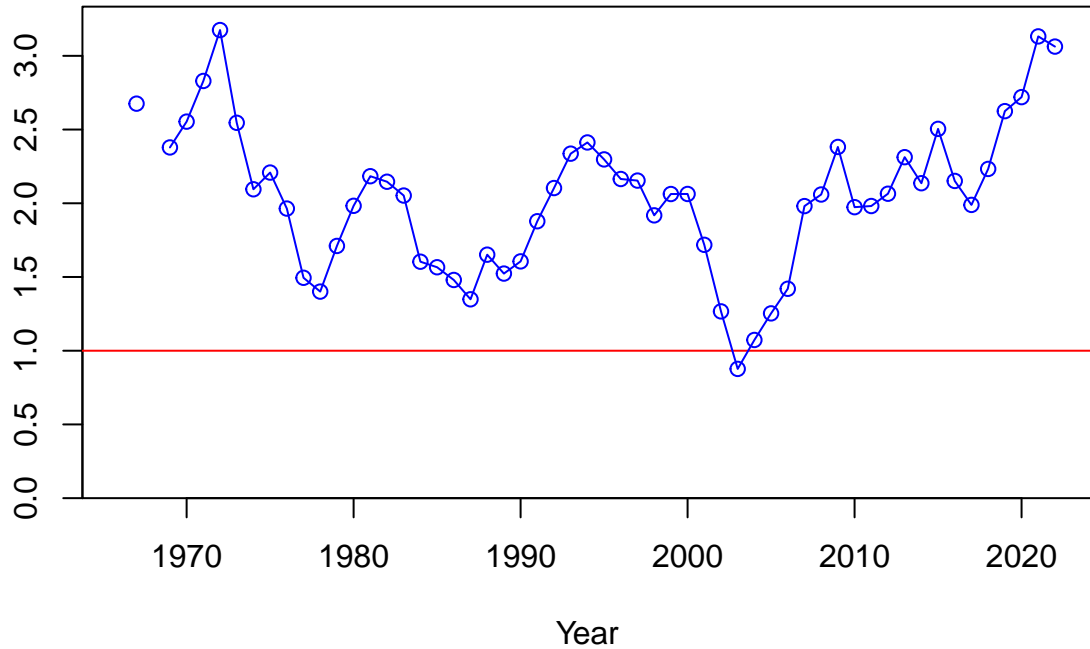




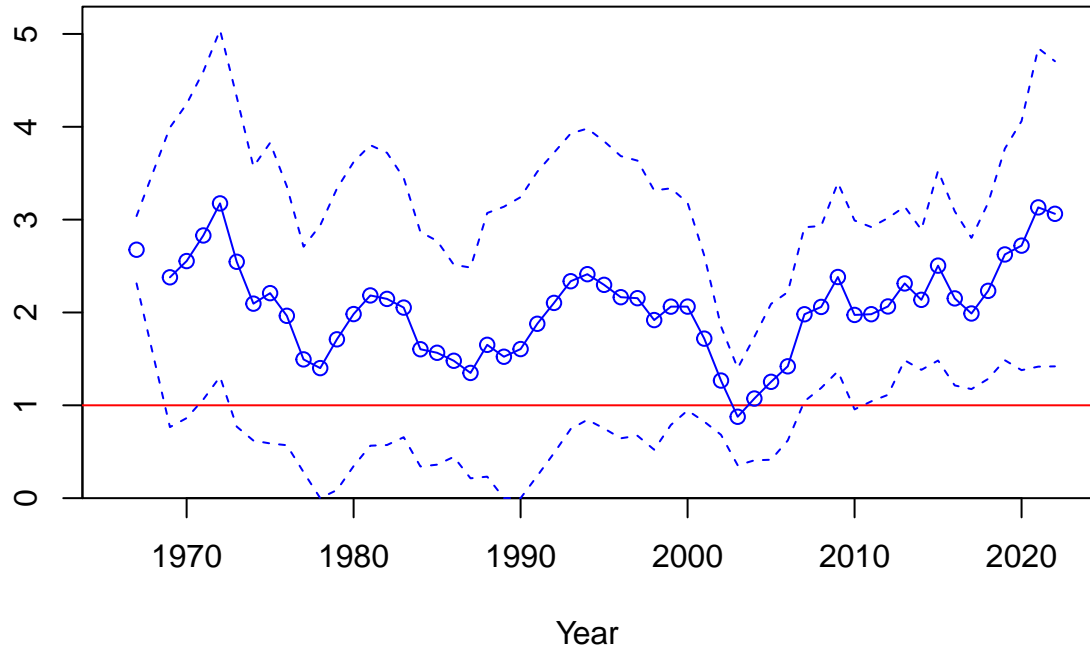
Spawning biomass (mt)

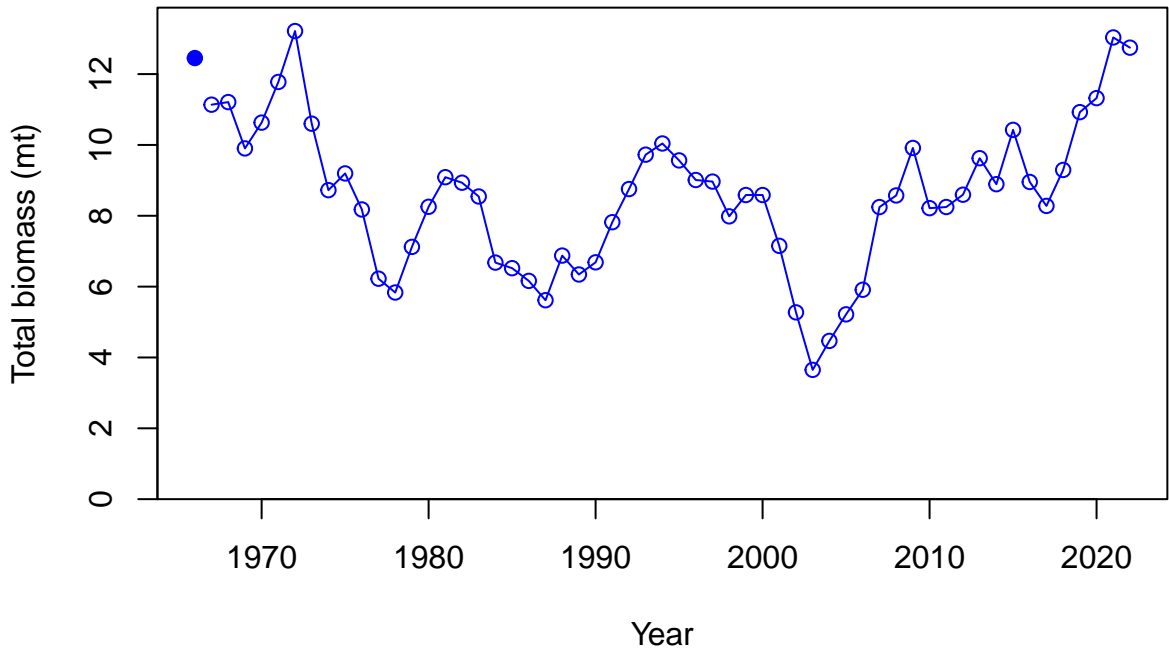


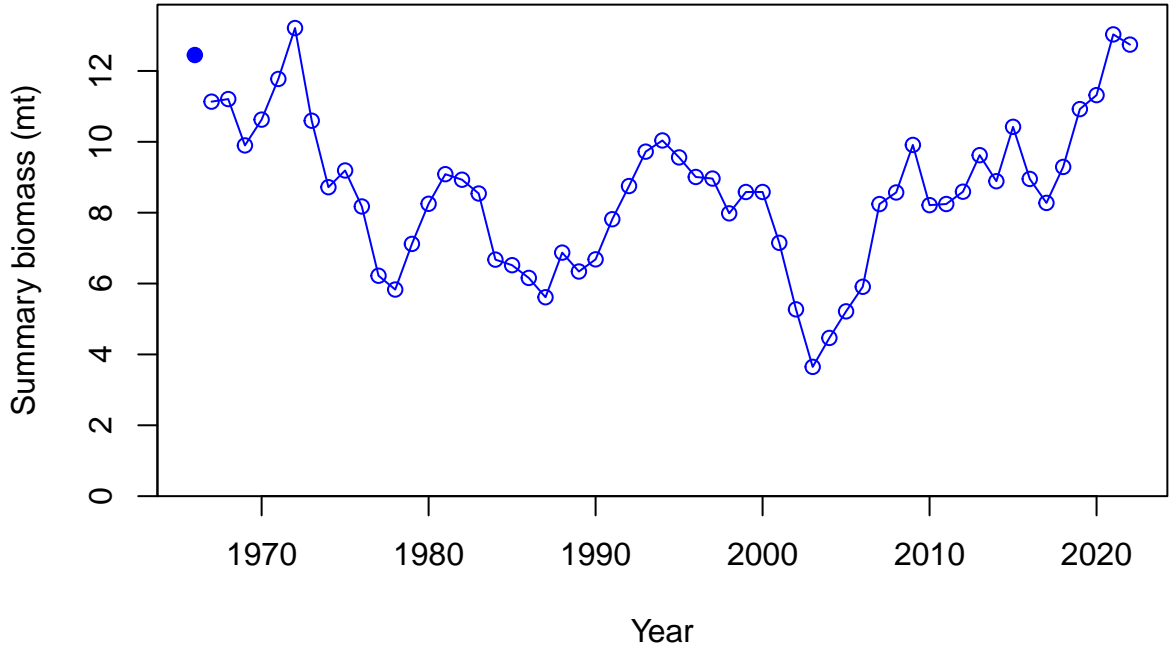
Relative spawning biomass: B/B_{MSY}

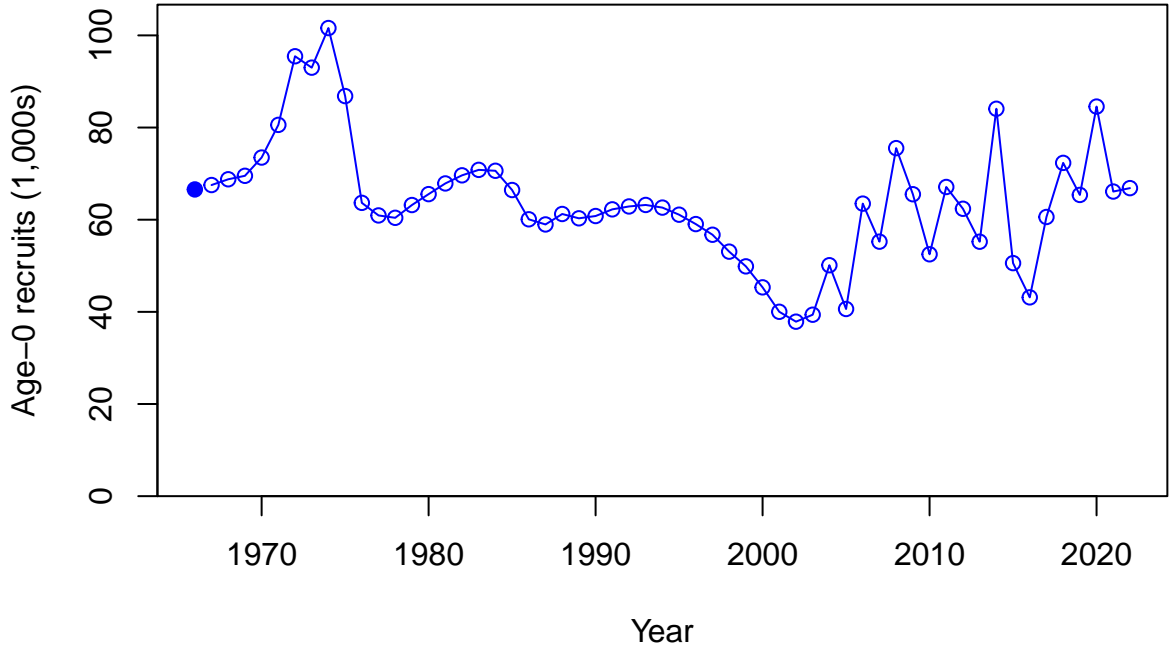


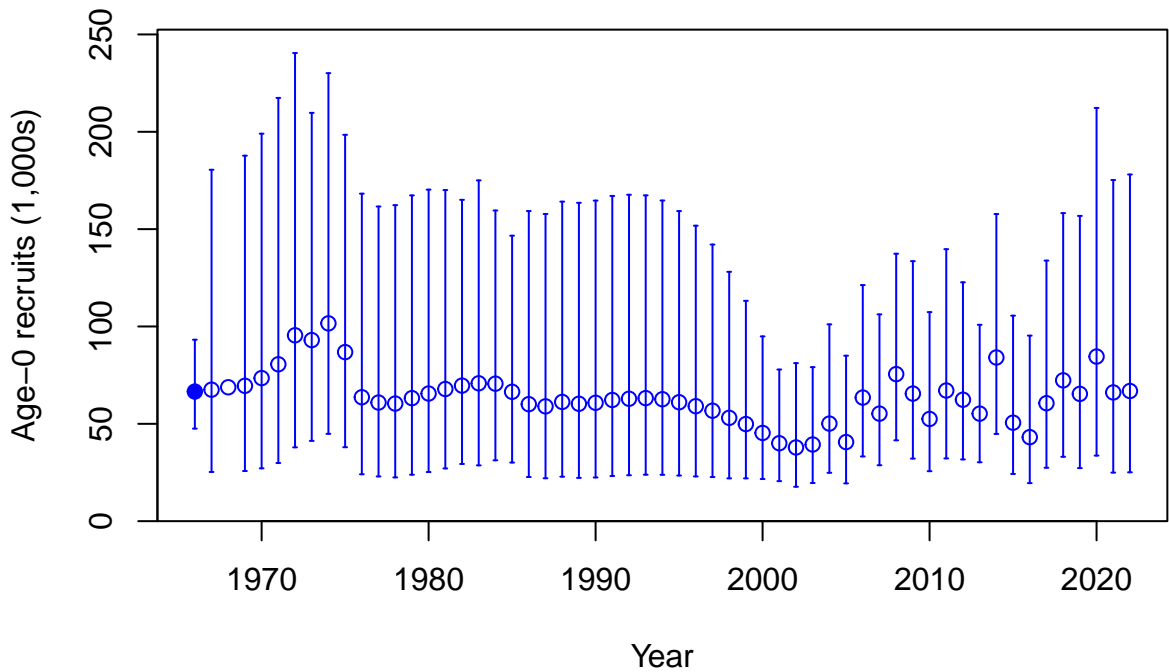
Relative spawning biomass: B/B_{MSY}



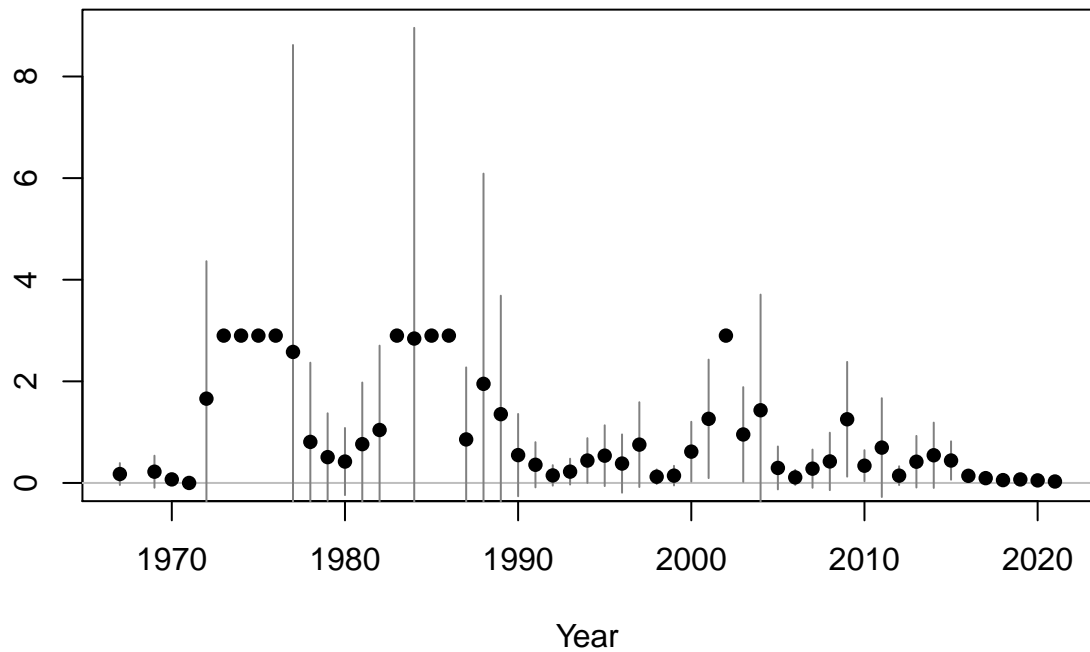


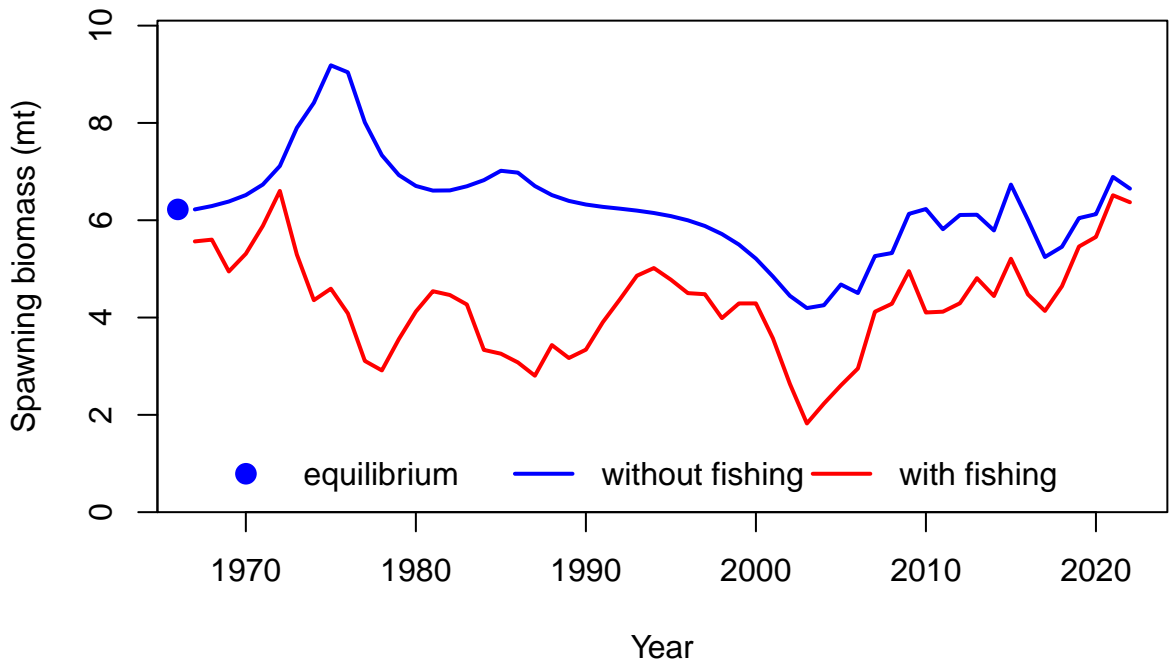




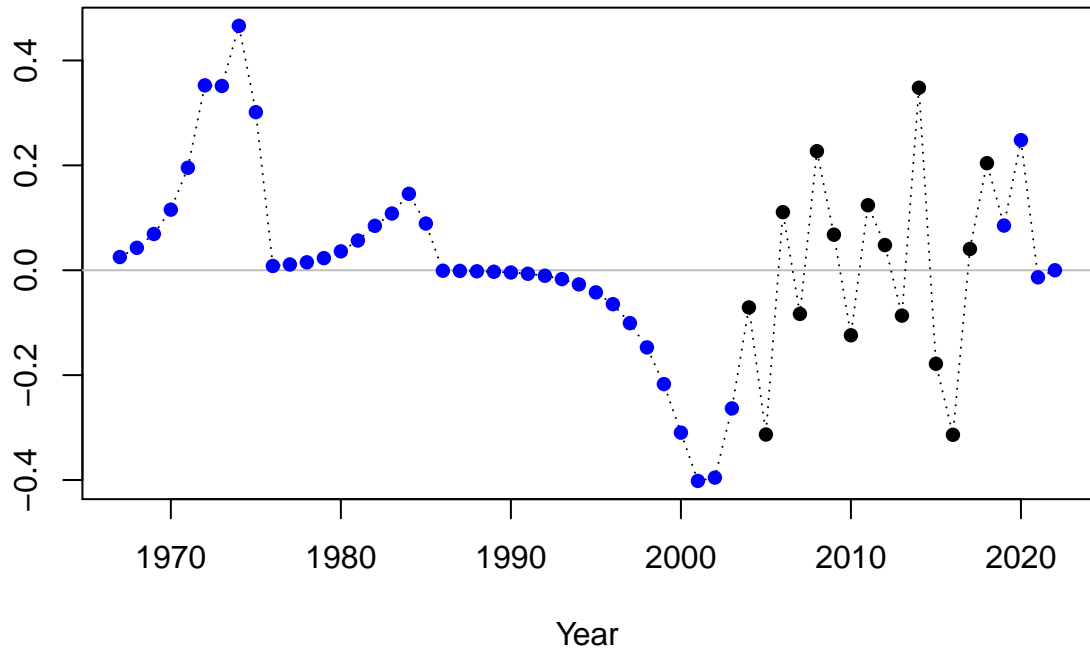


Summary Fishing Mortality





Log recruitment deviation



Log recruitment deviation

1.0
0.5
0.0
-0.5
-1.0

1970

1980

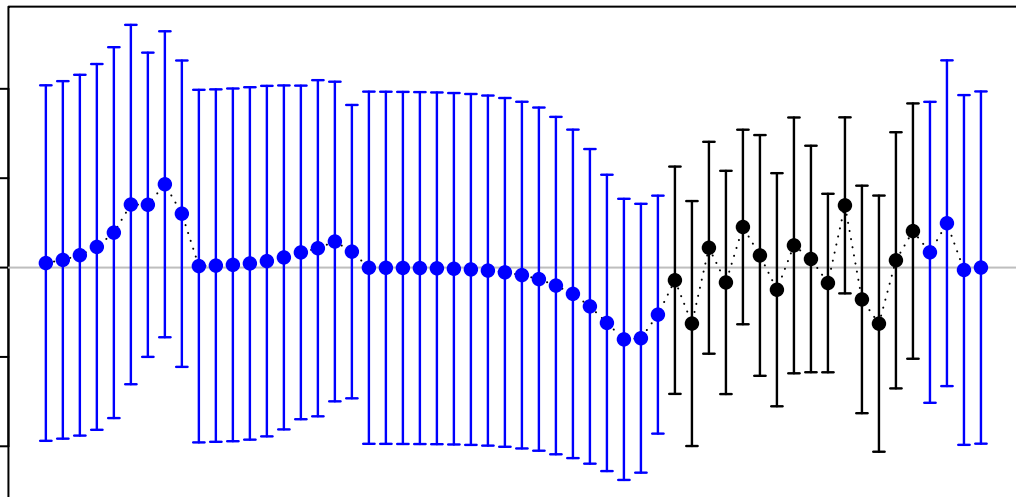
1990

2000

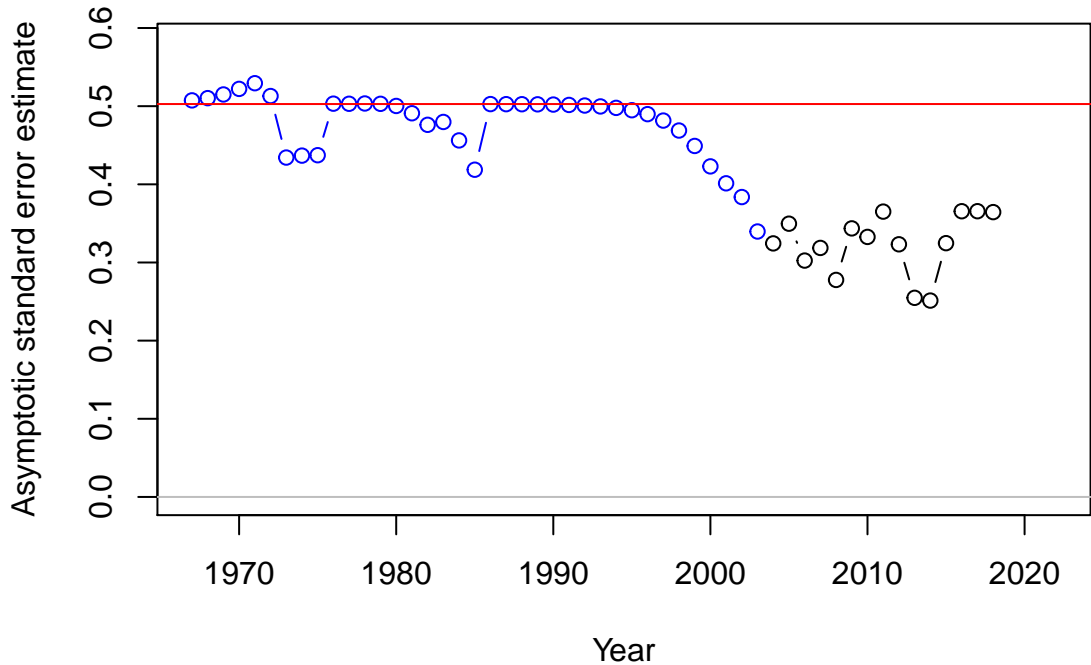
2010

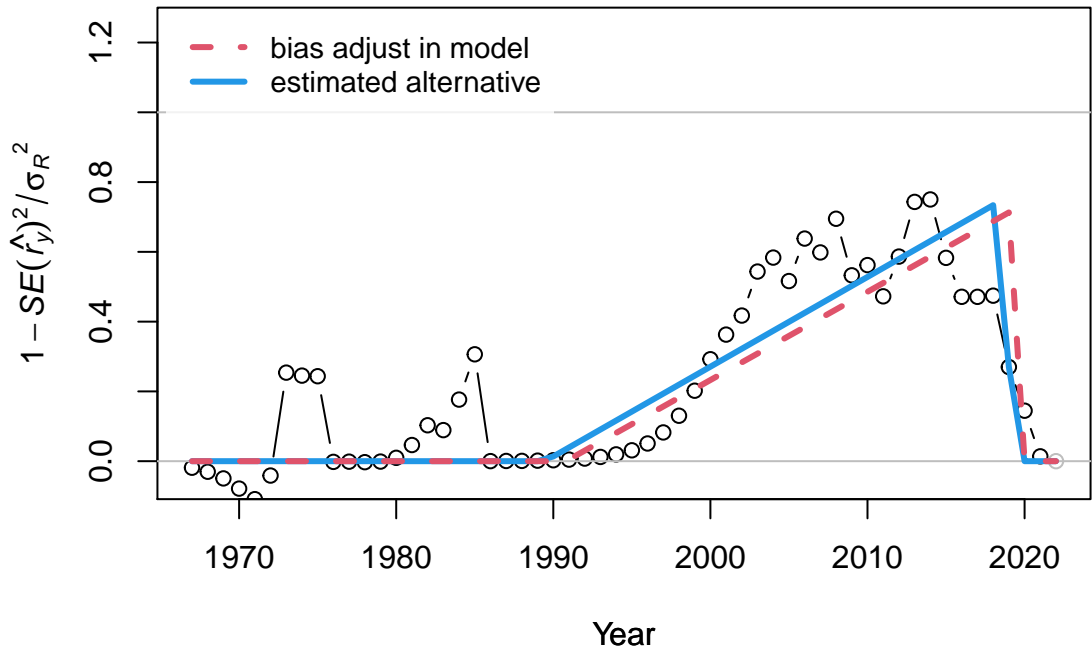
2020

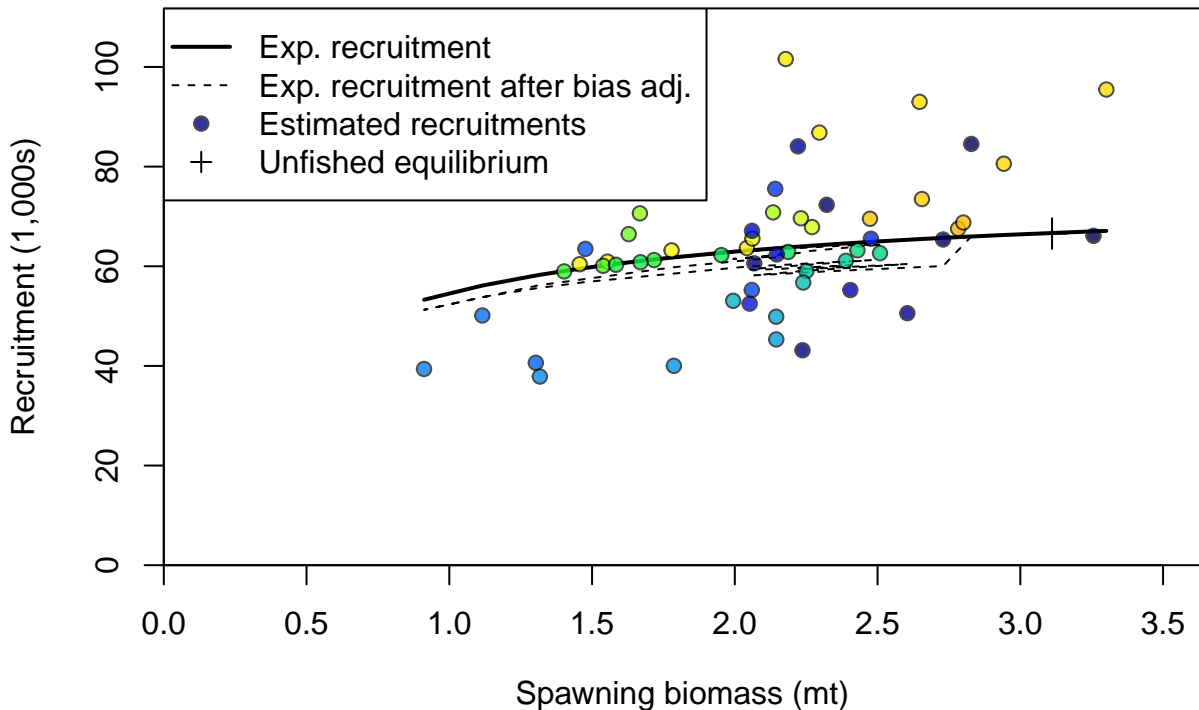
Year

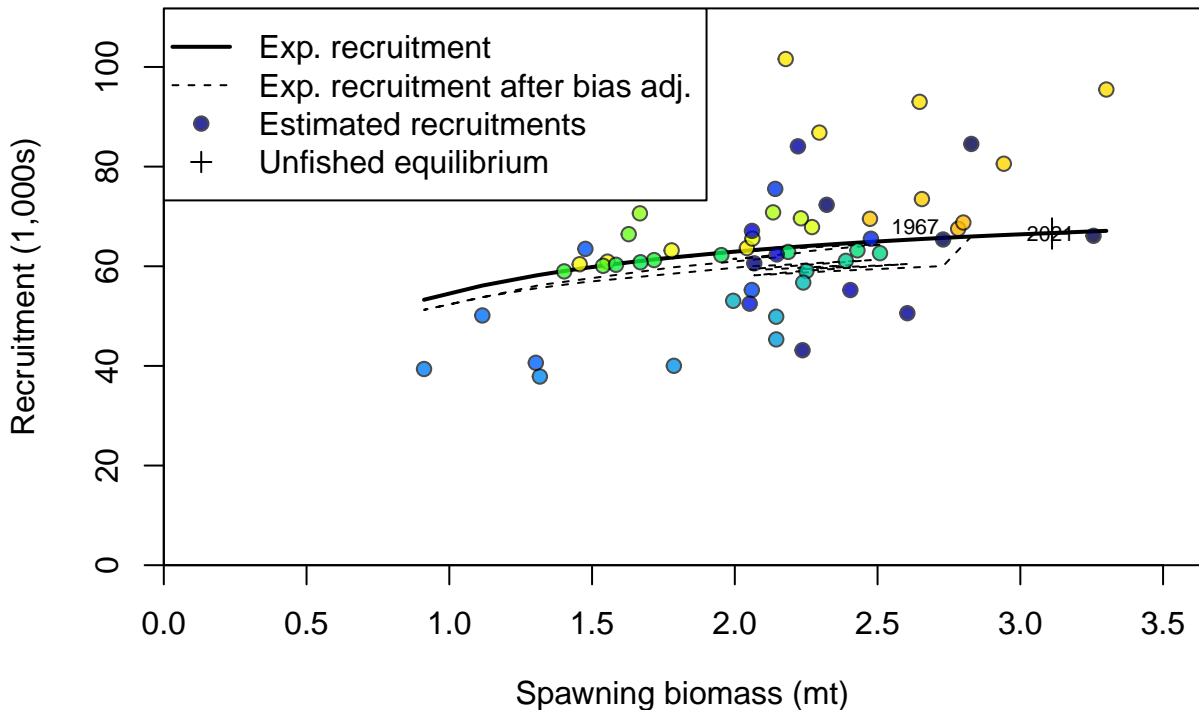


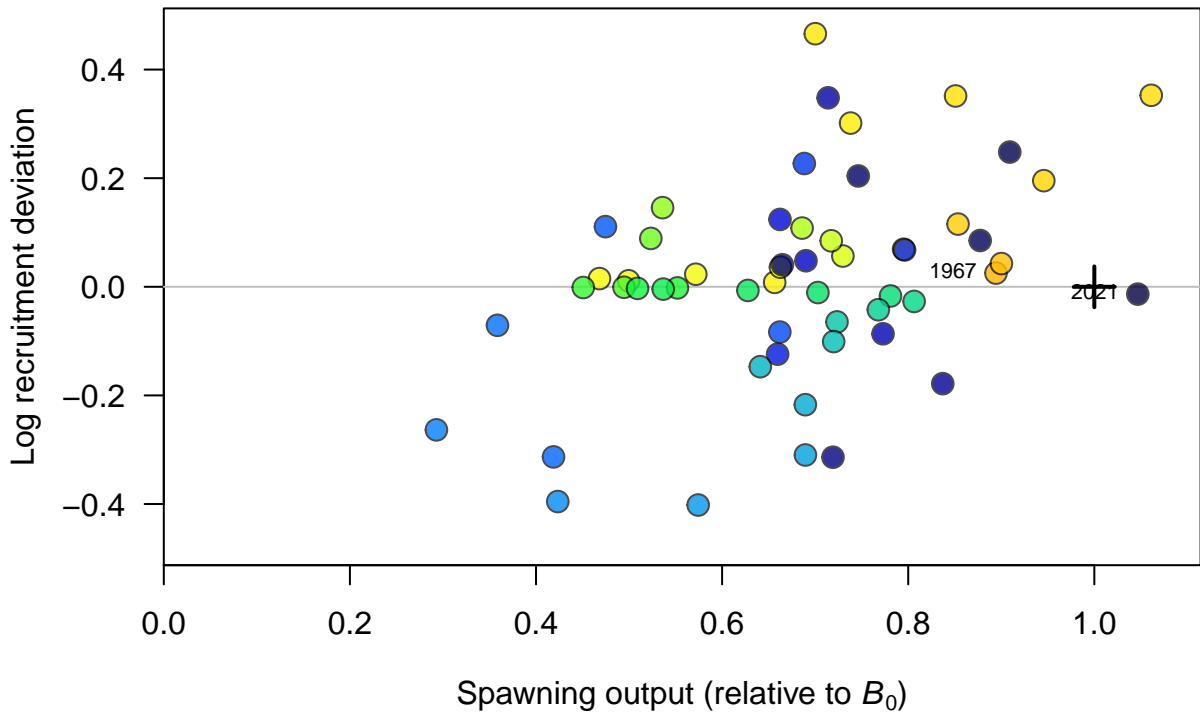
Recruitment deviation variance

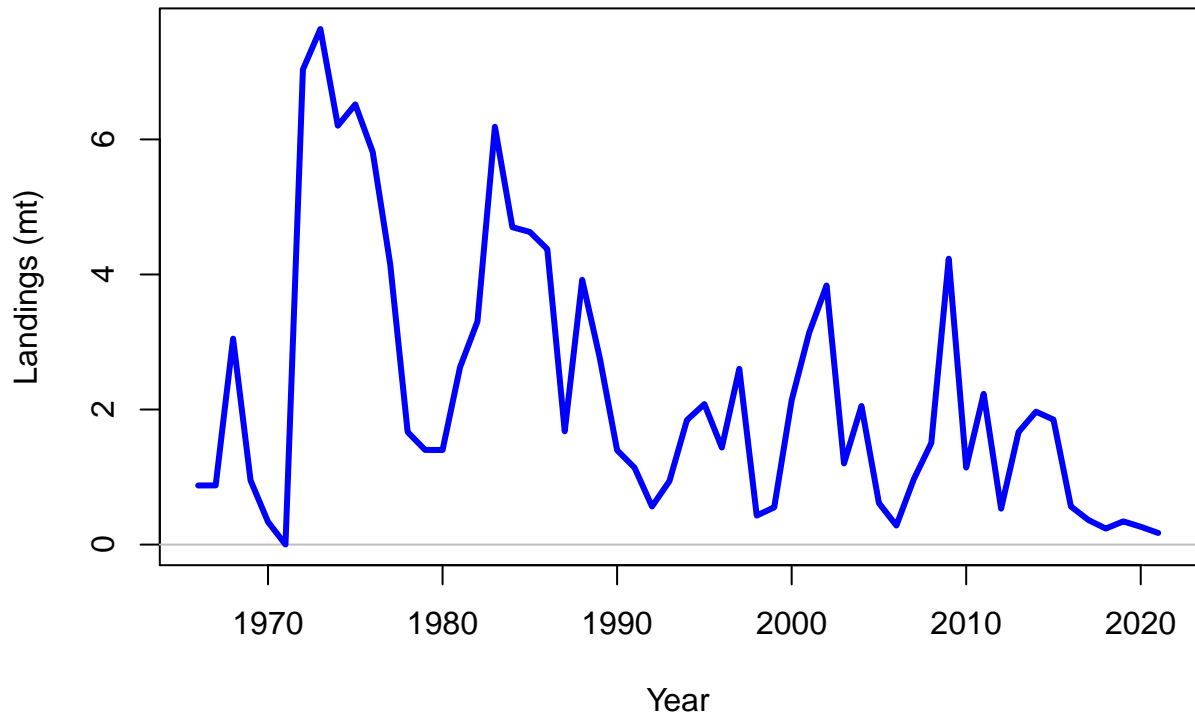


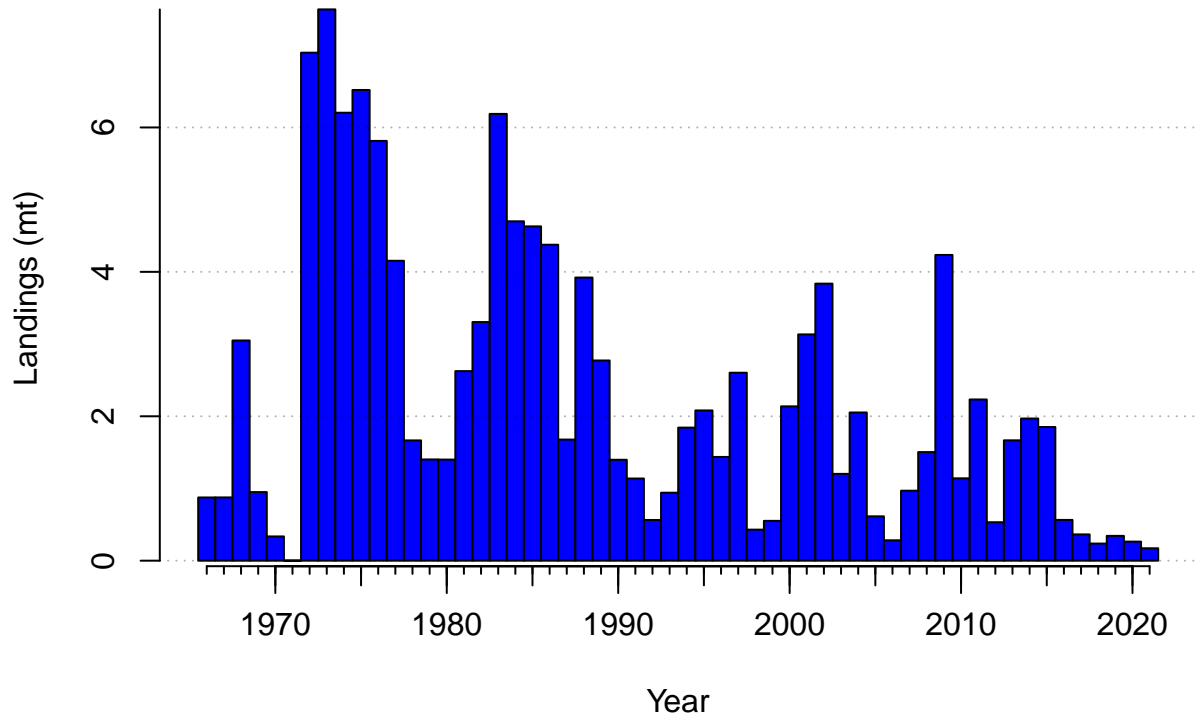




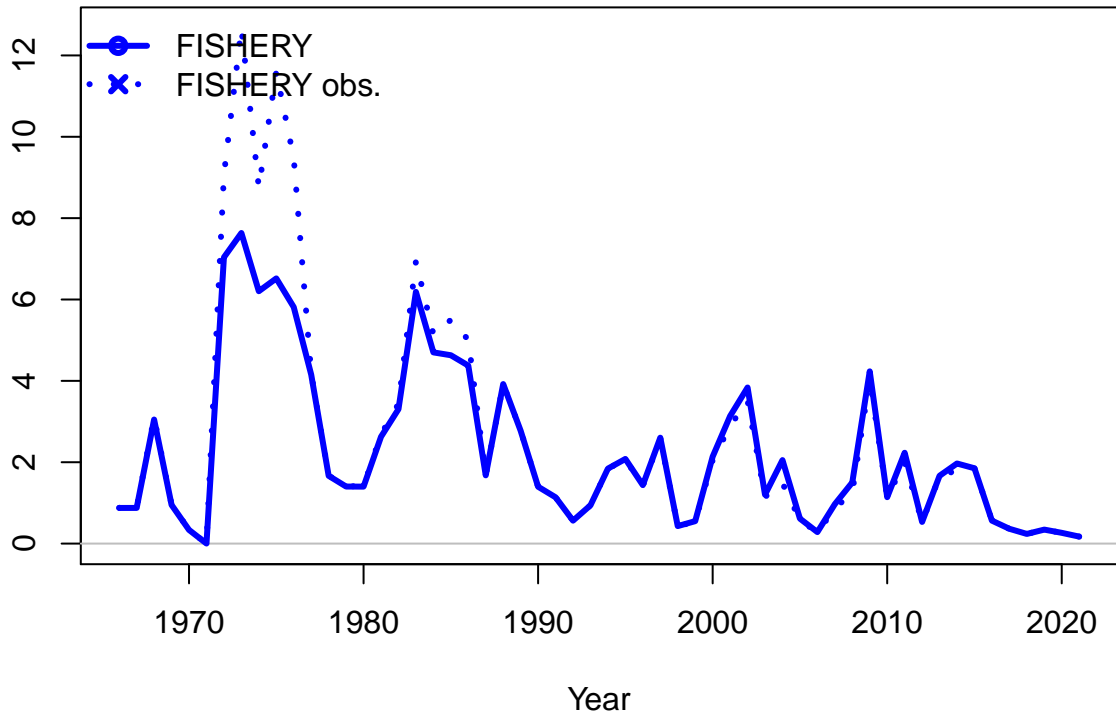


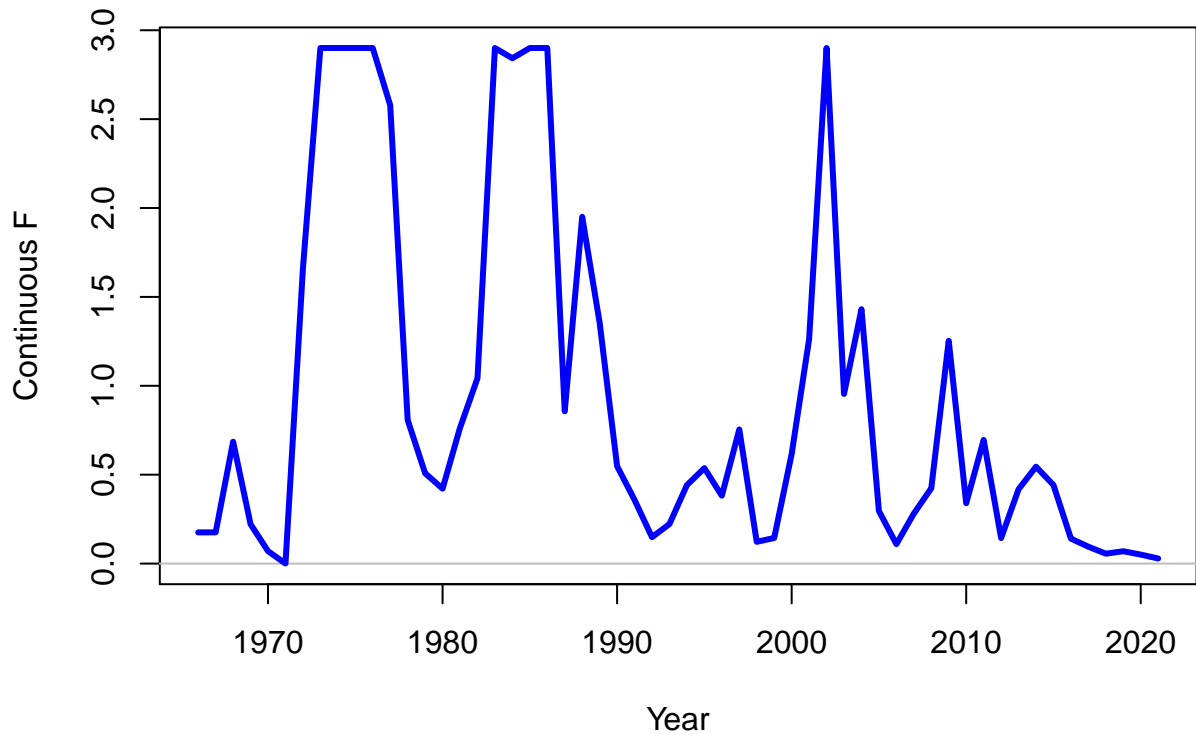




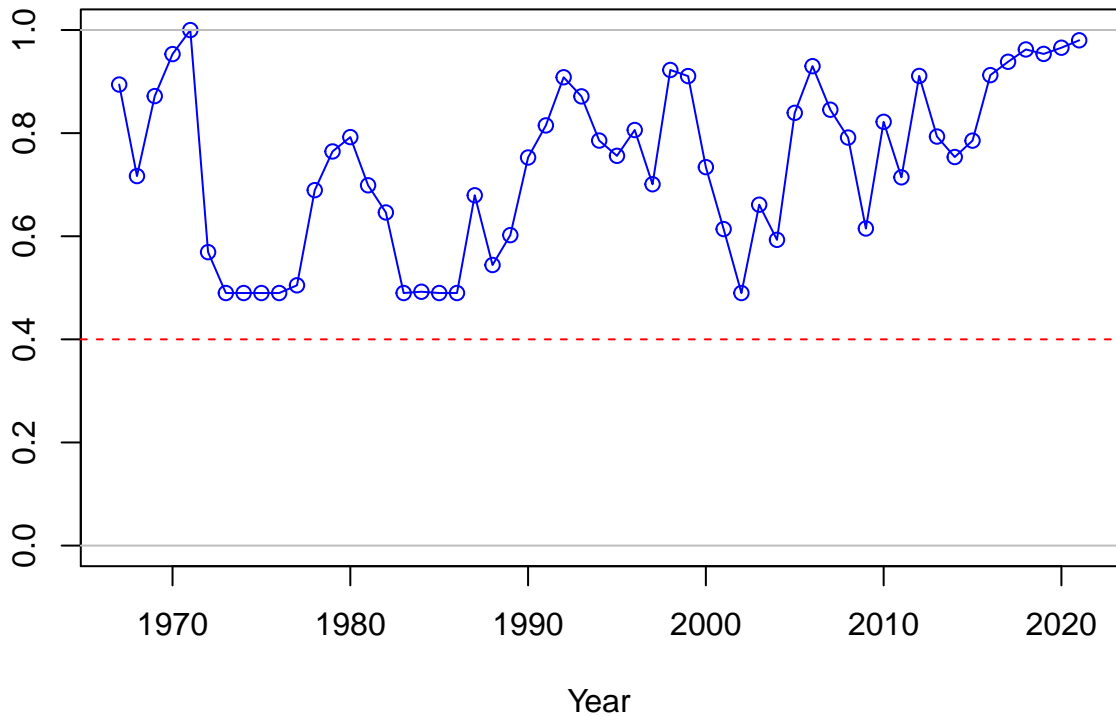


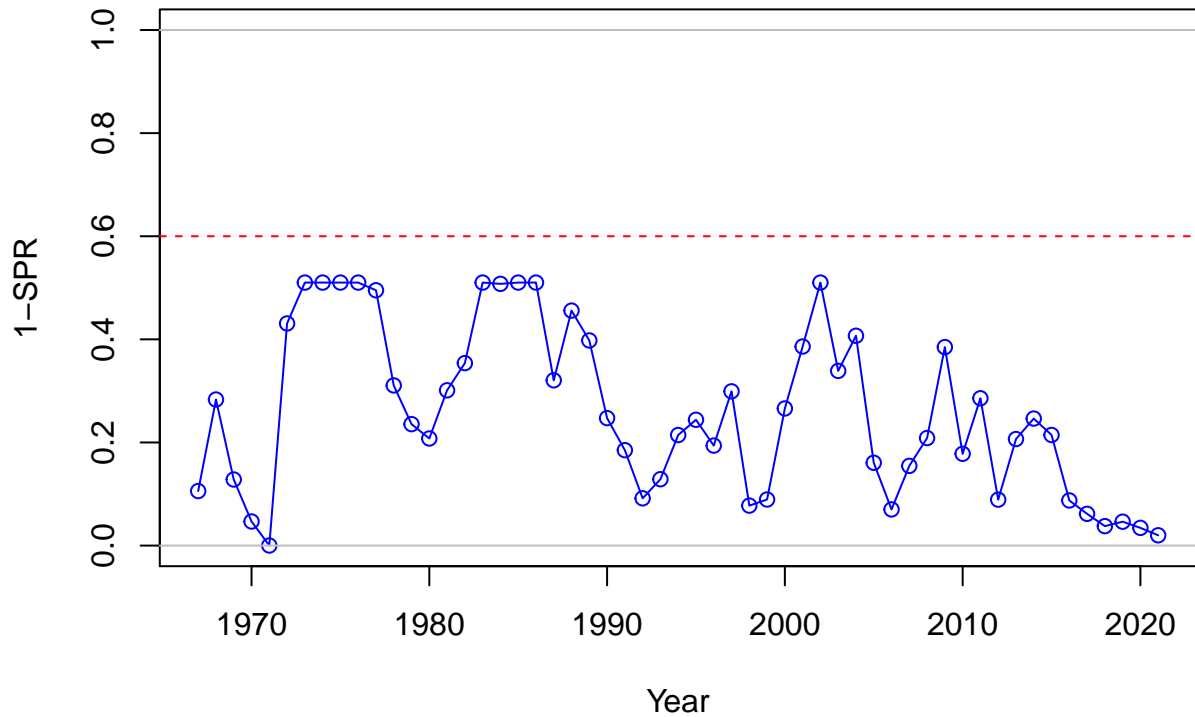
Observed and expected Landings (mt)



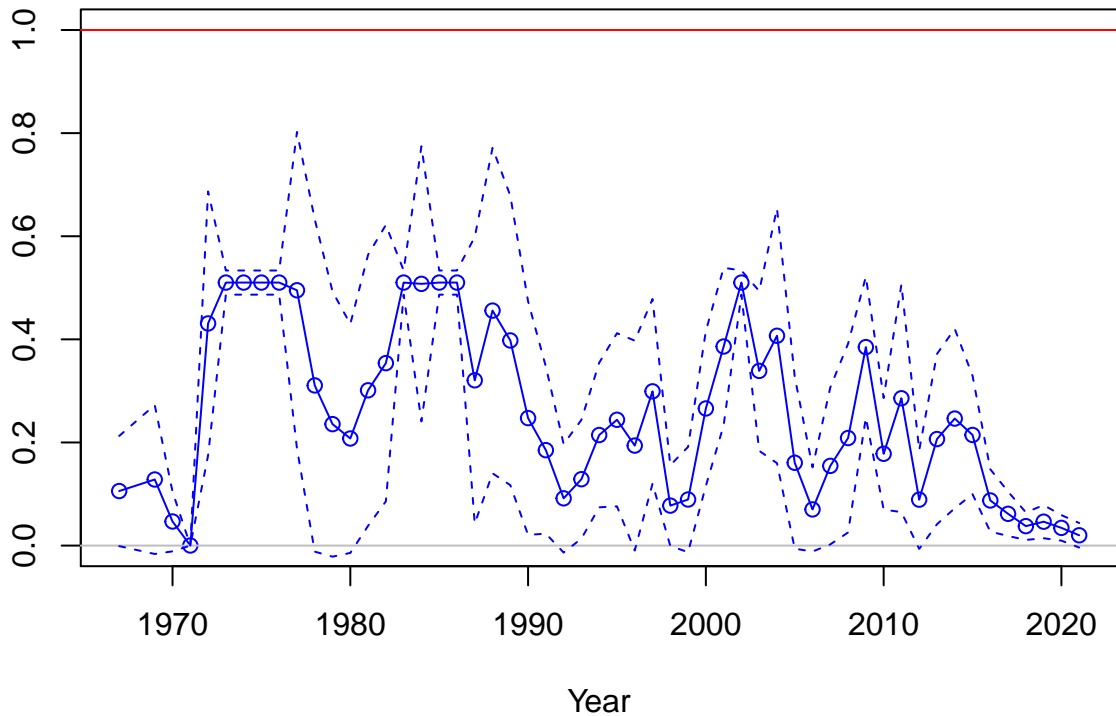


SPR

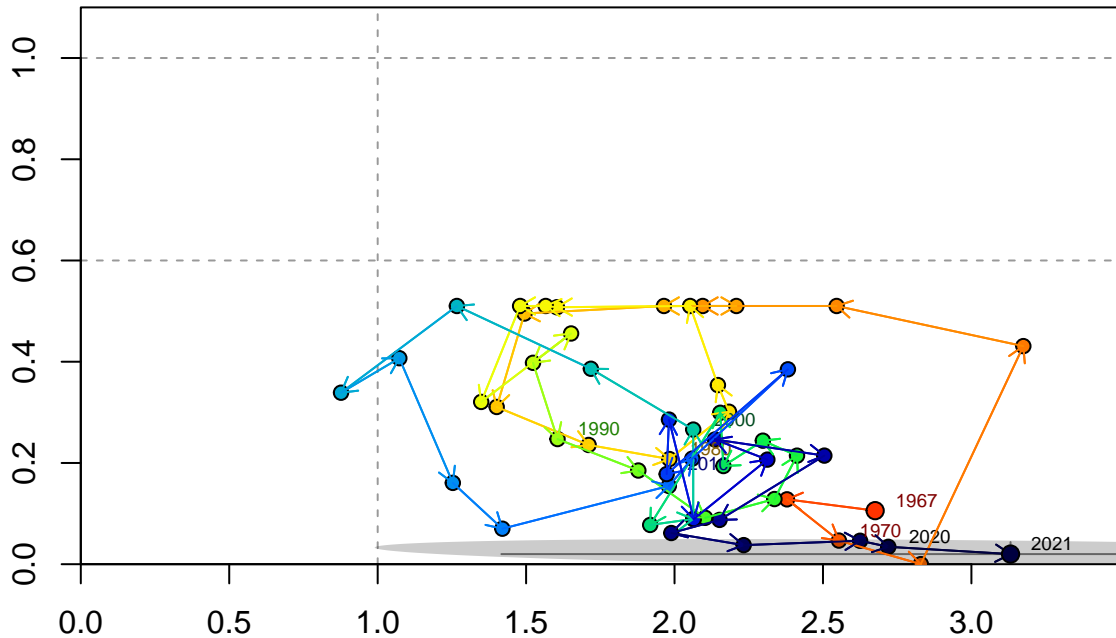




Fishing intensity: 1-SPR

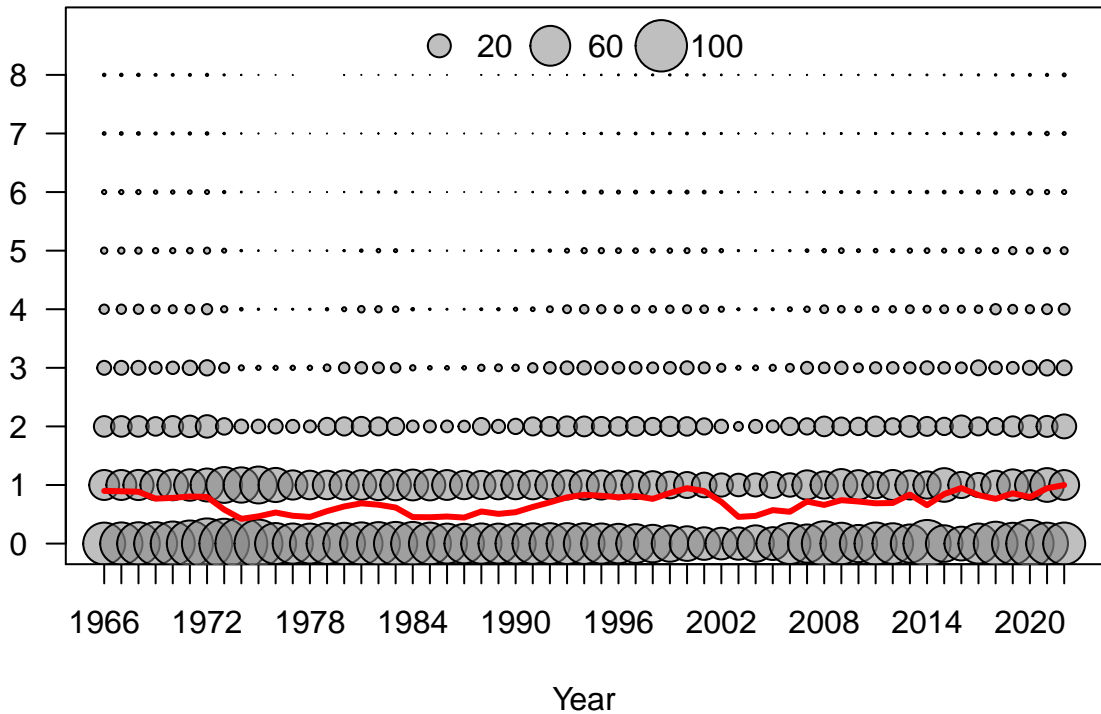


Fishing intensity: 1-SPR

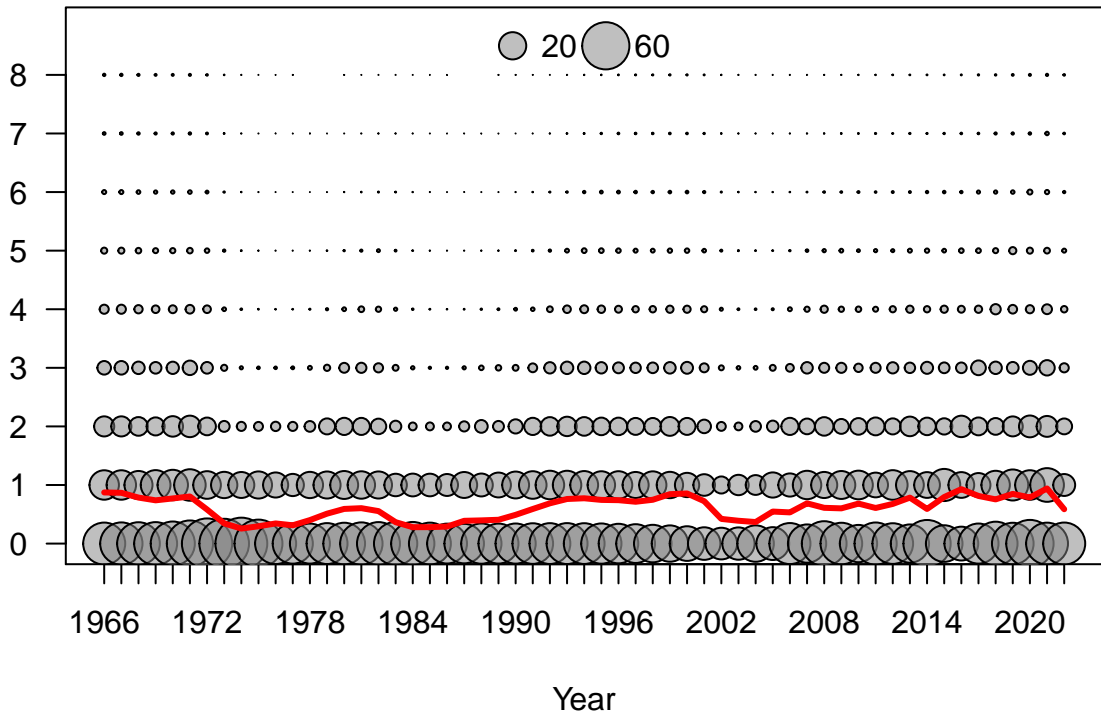


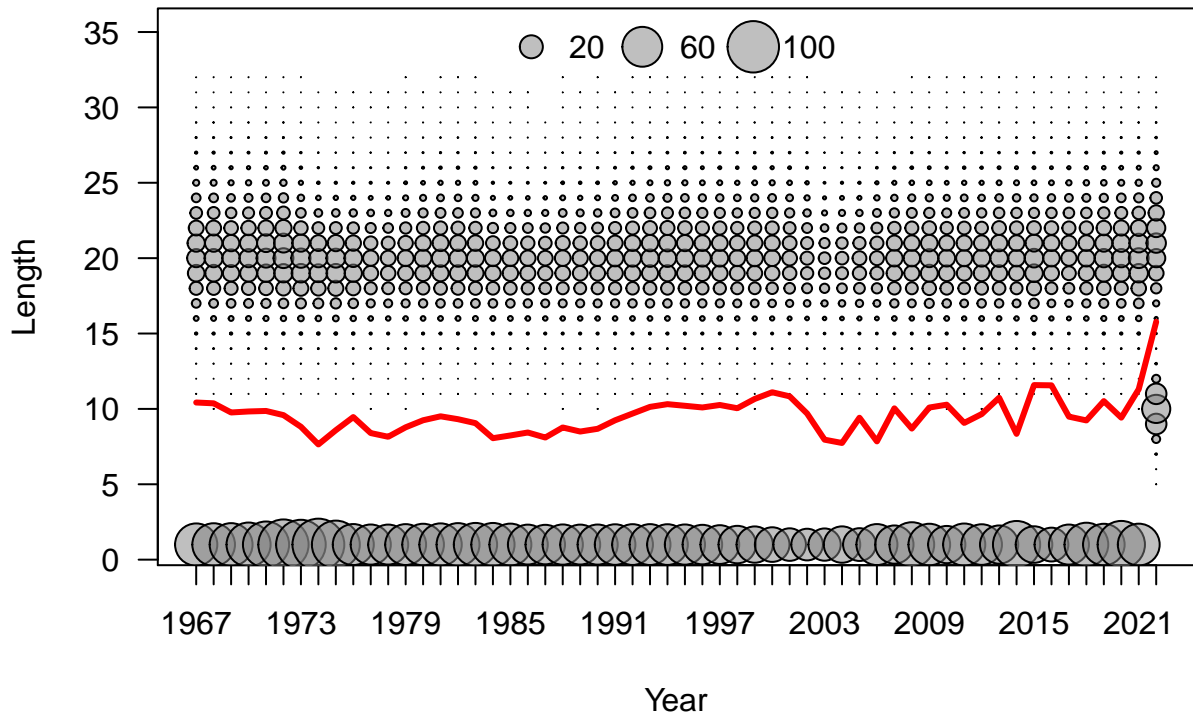
Relative spawning output: B/B_MS

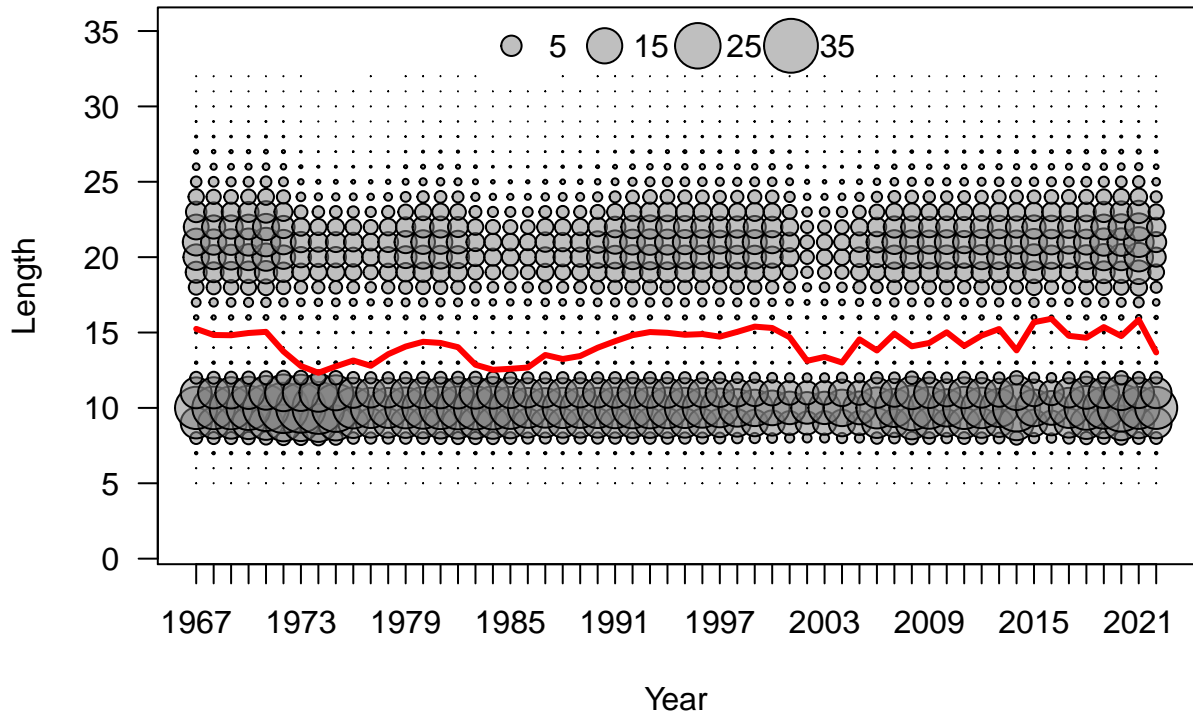
Age

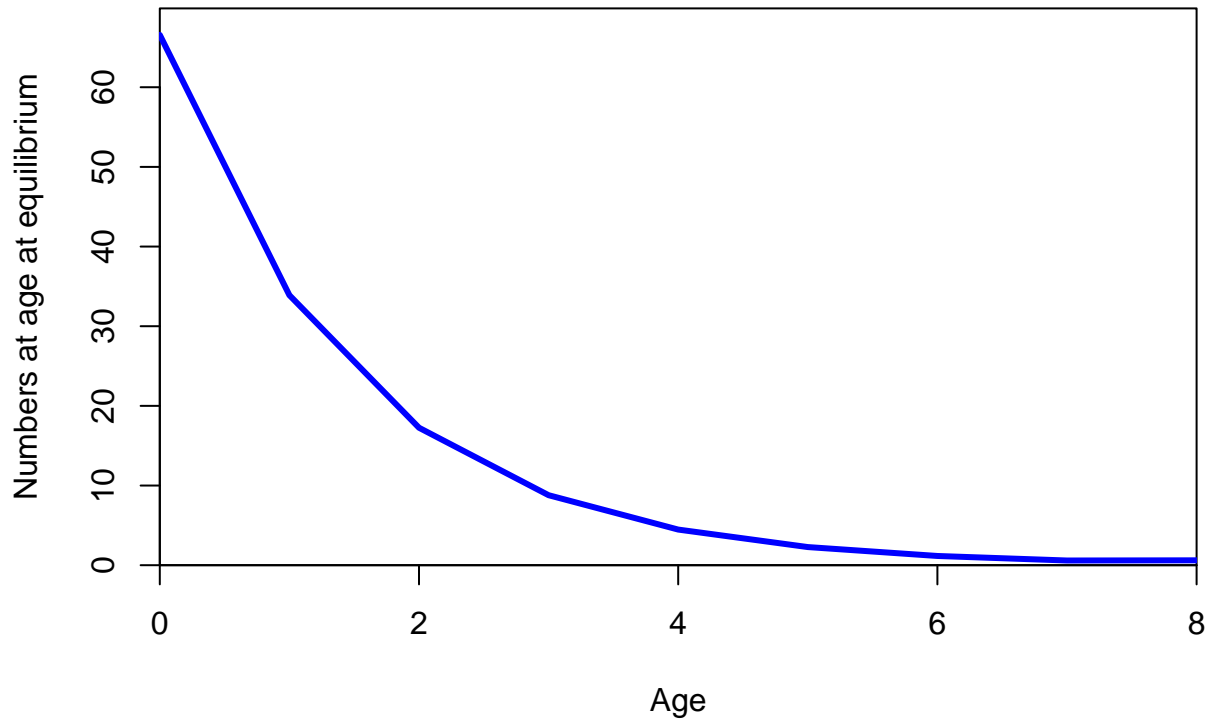


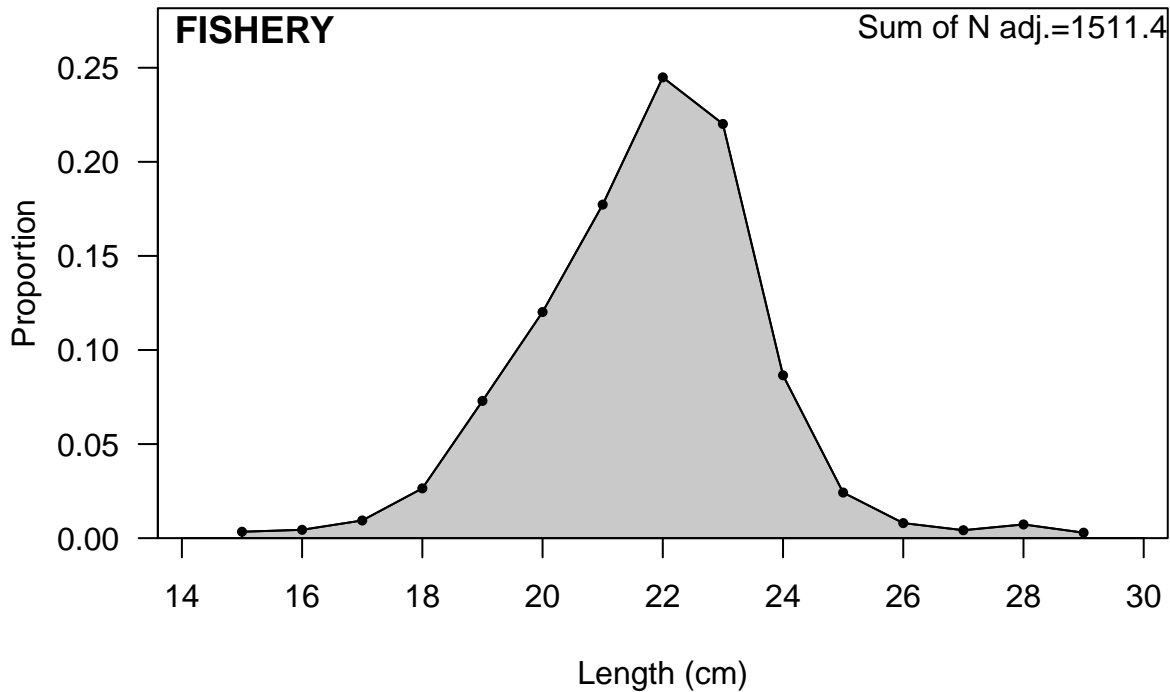
Age





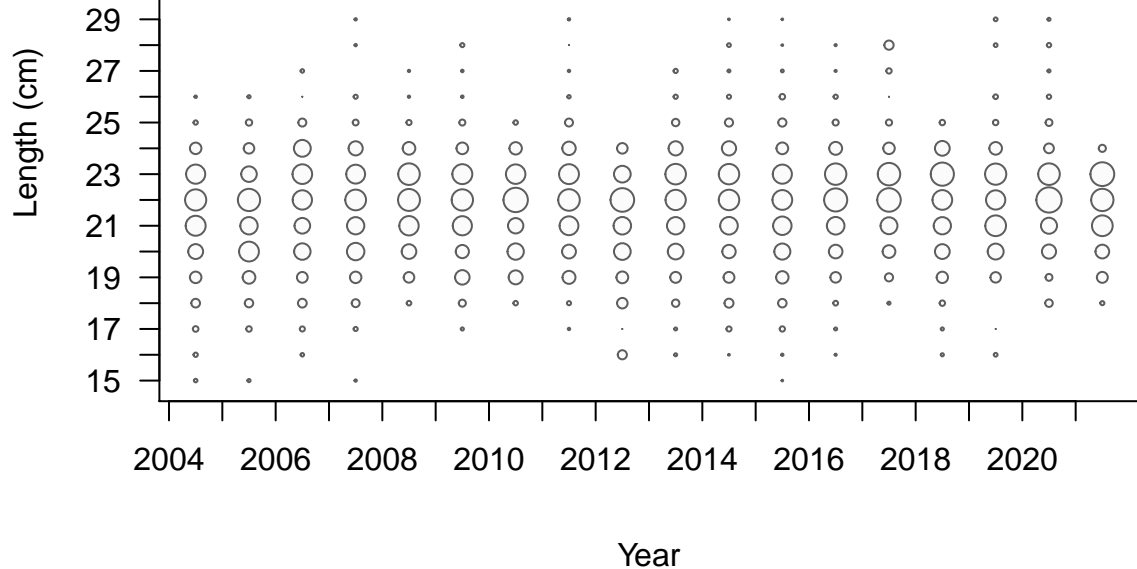


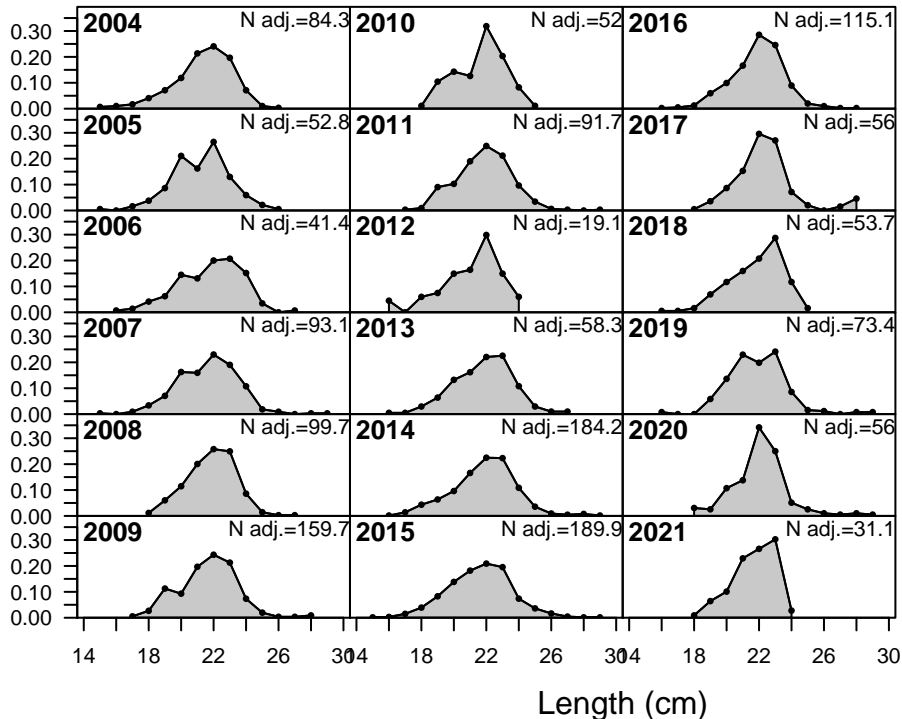


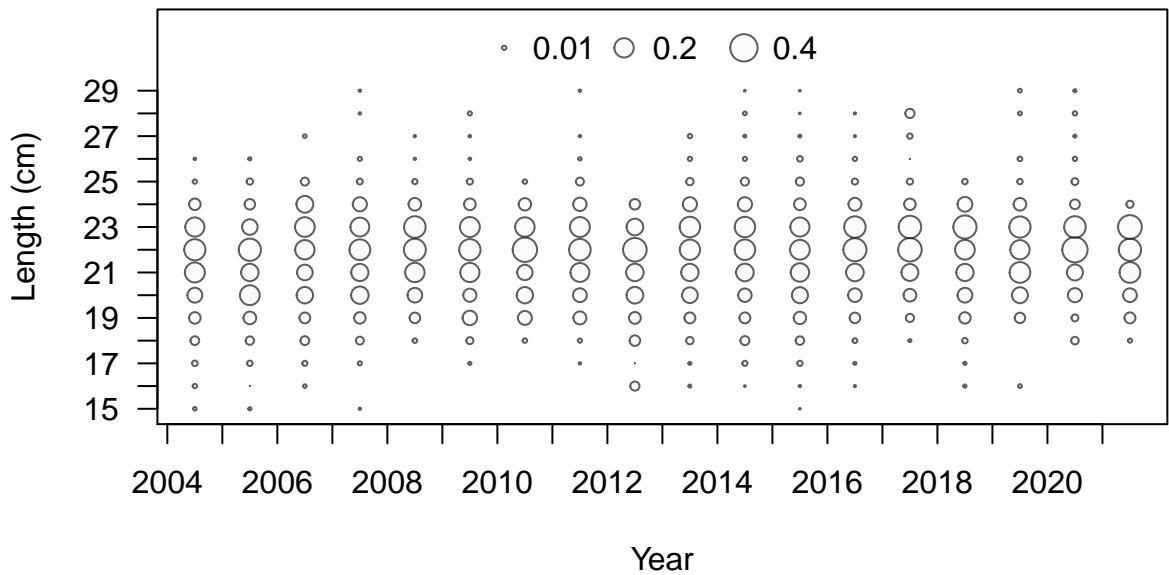


FISHERY

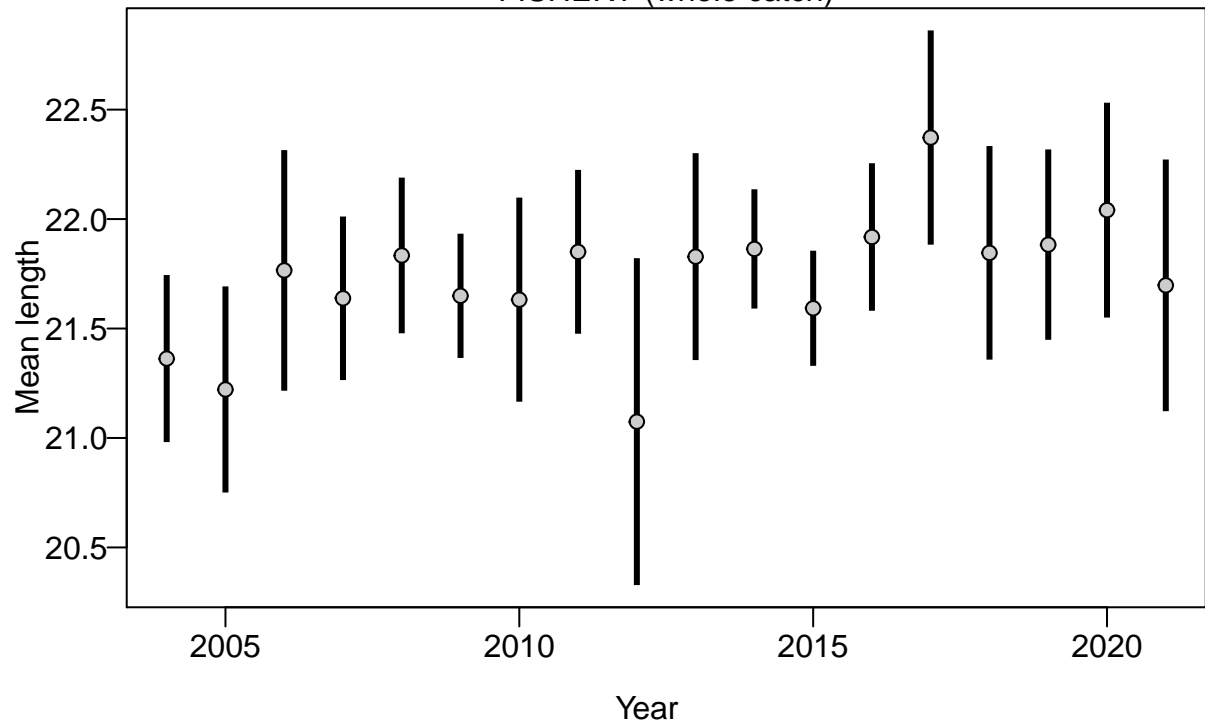
• 0.01 ○ 0.2 ○ 0.4





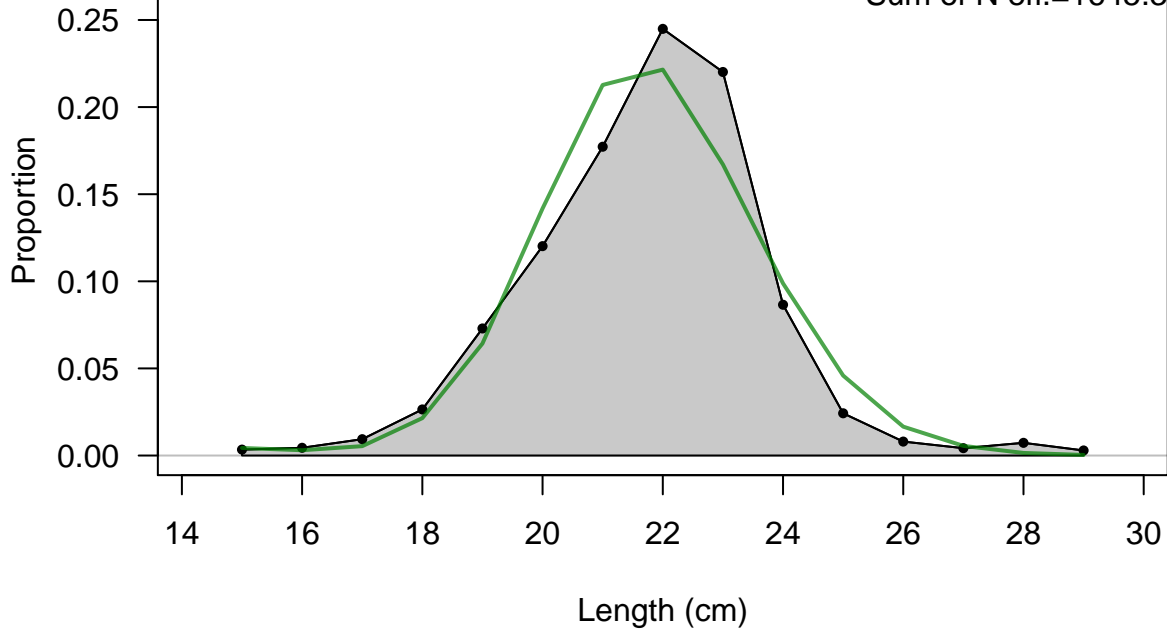


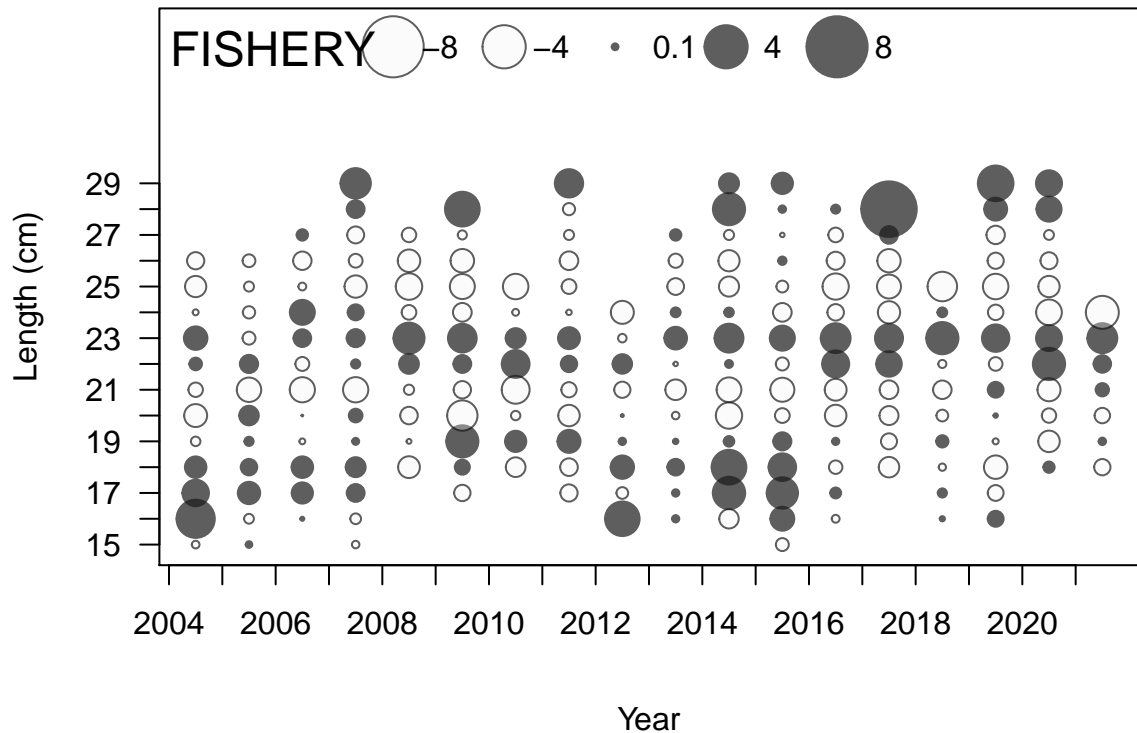
FISHERY (whole catch)

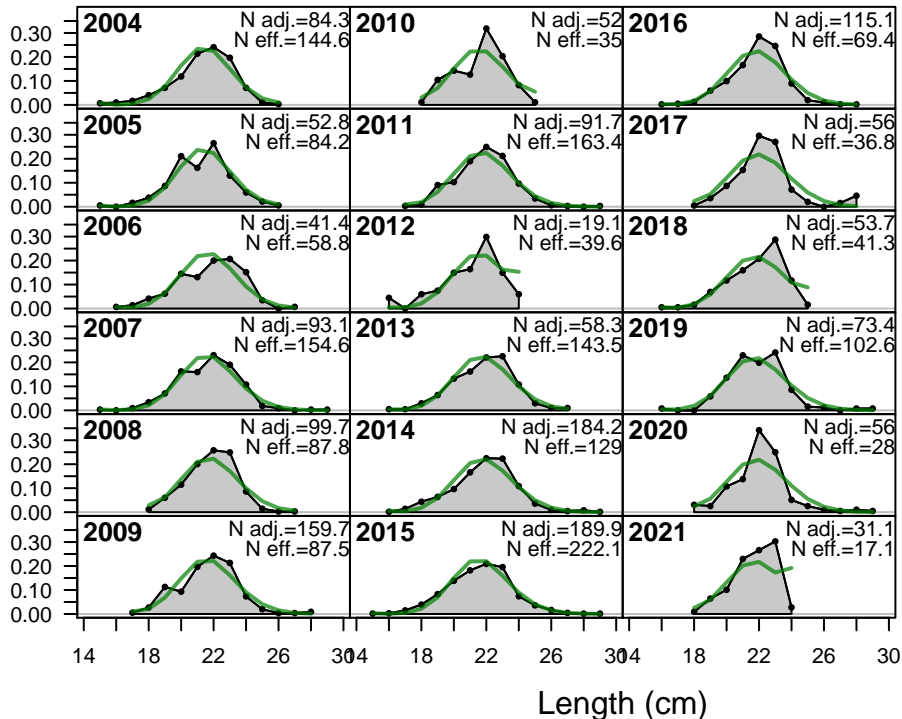


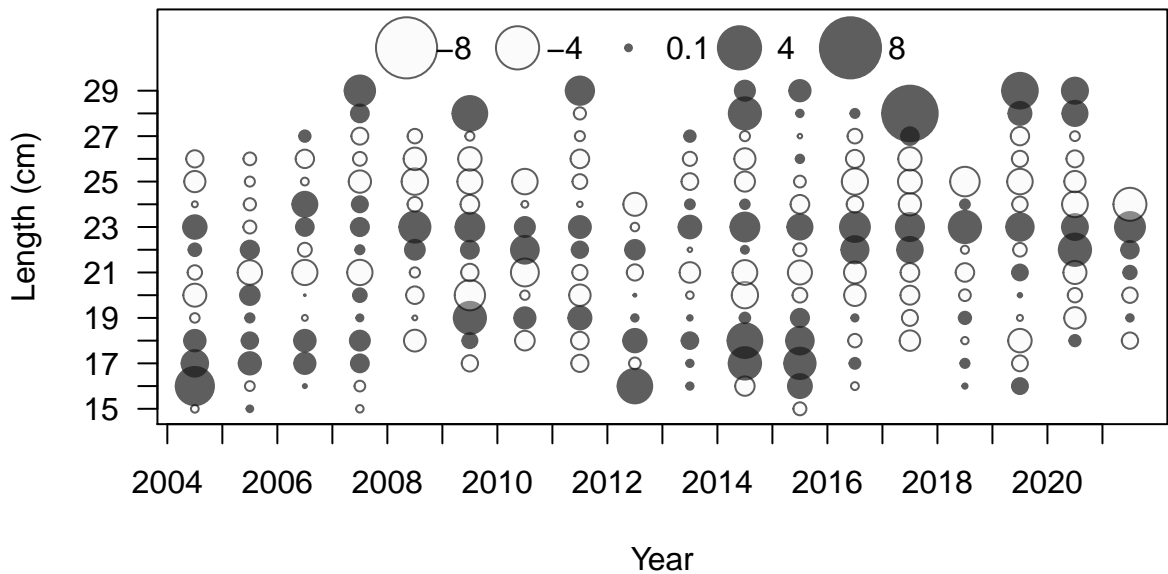
FISHERY

Sum of N adj.=1511.4
Sum of N eff.=1645.3

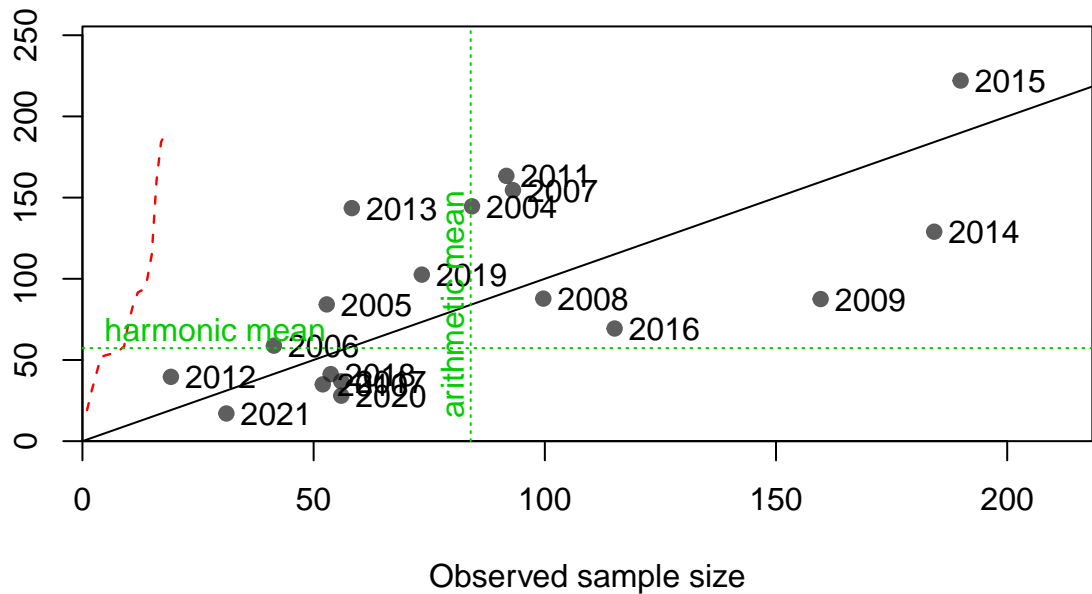




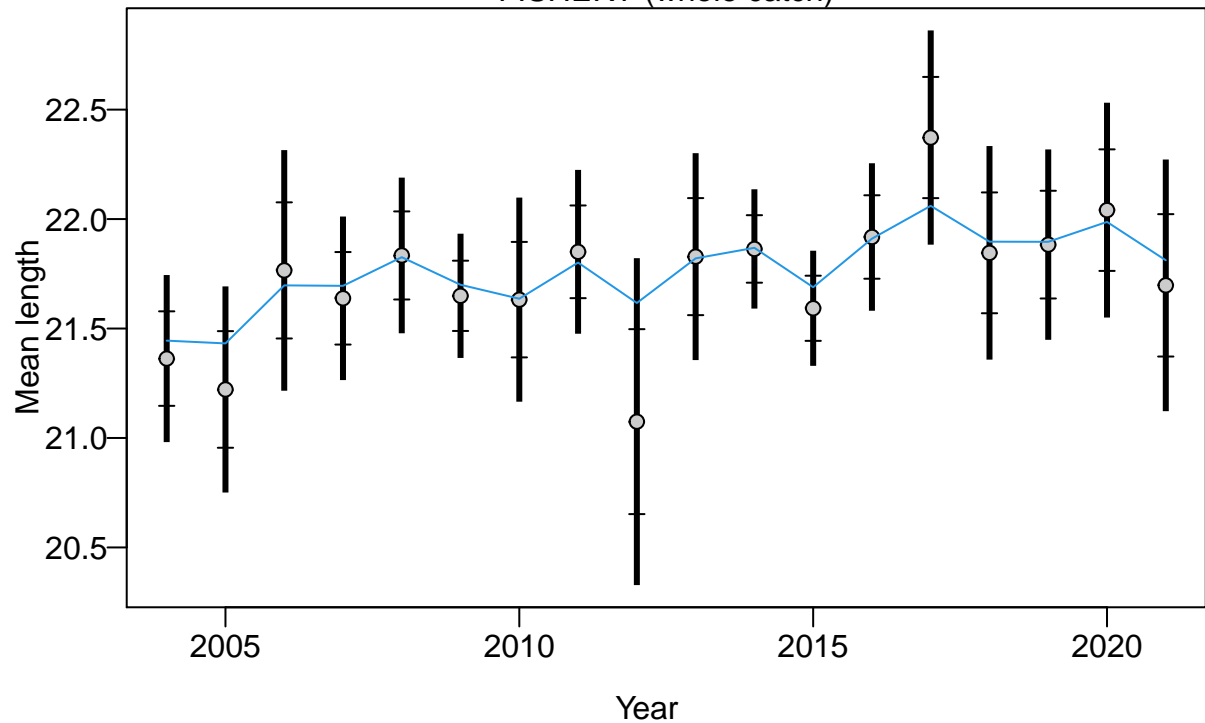


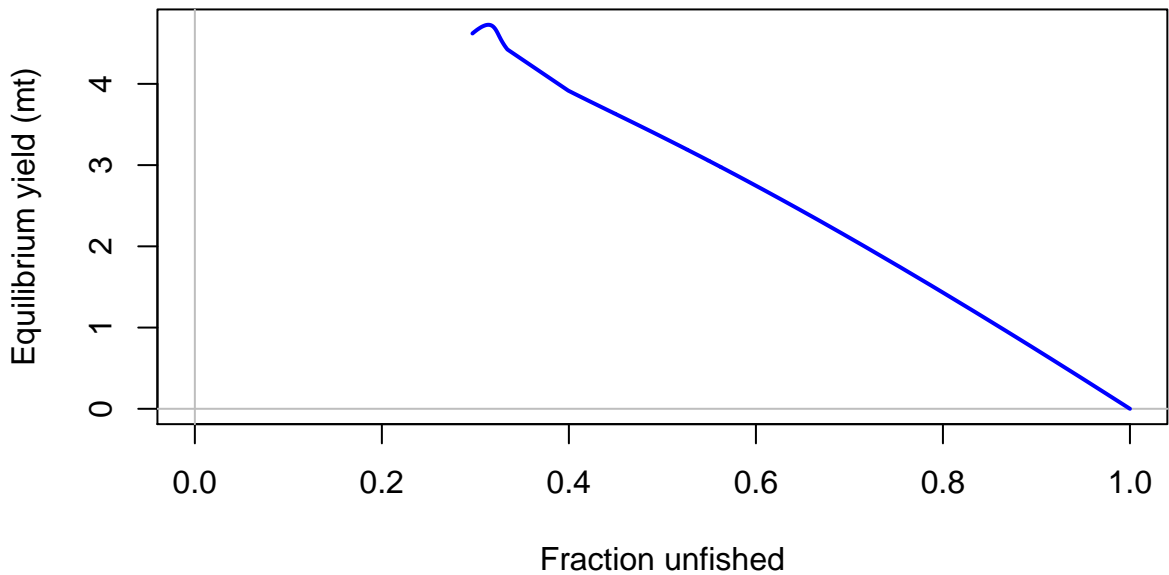


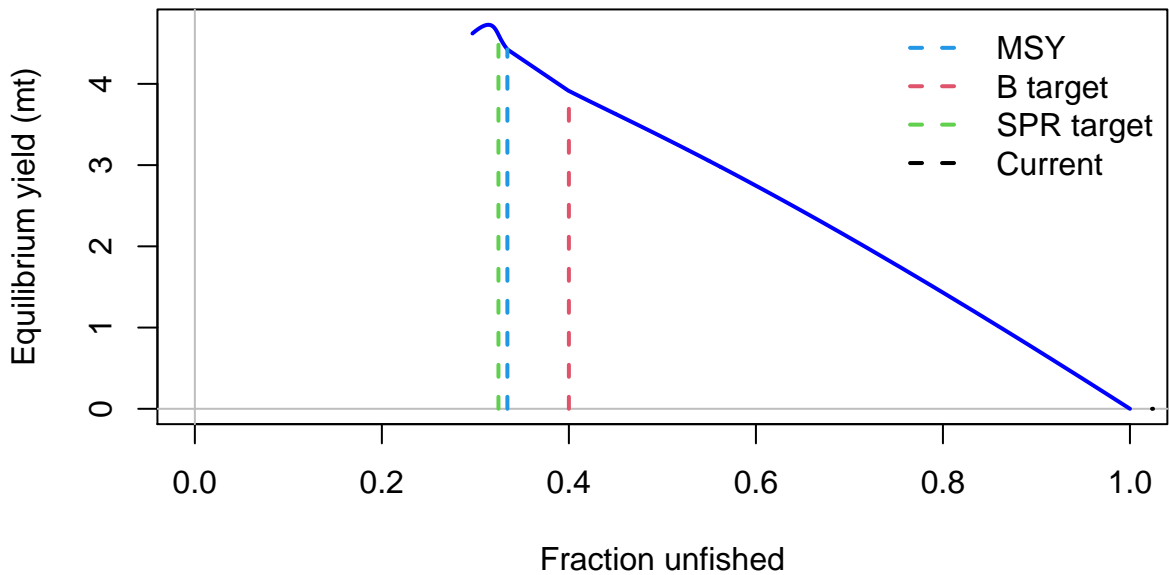
Effective sample size



FISHERY (whole catch)







Surplus production (mt)

6
5
4
3
2
1
0

0

2

4

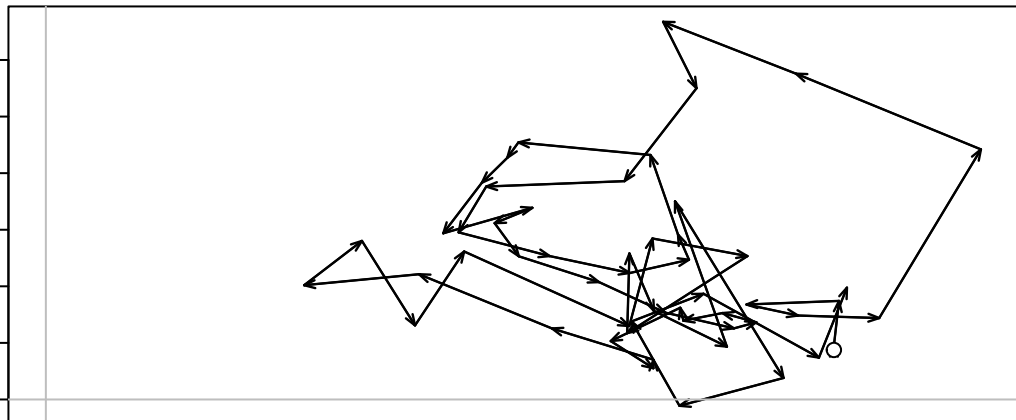
6

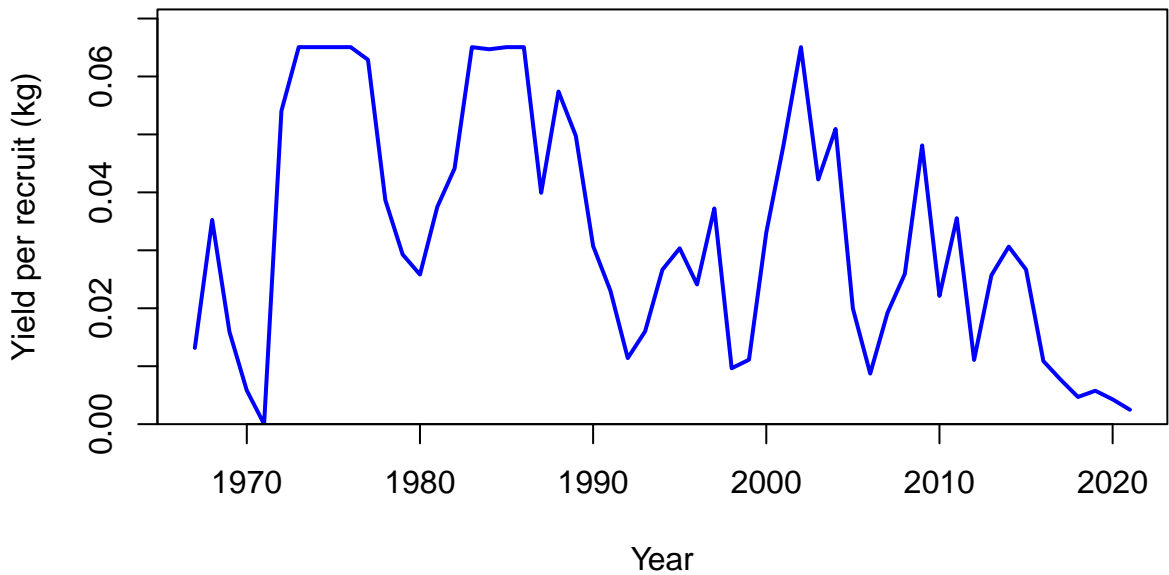
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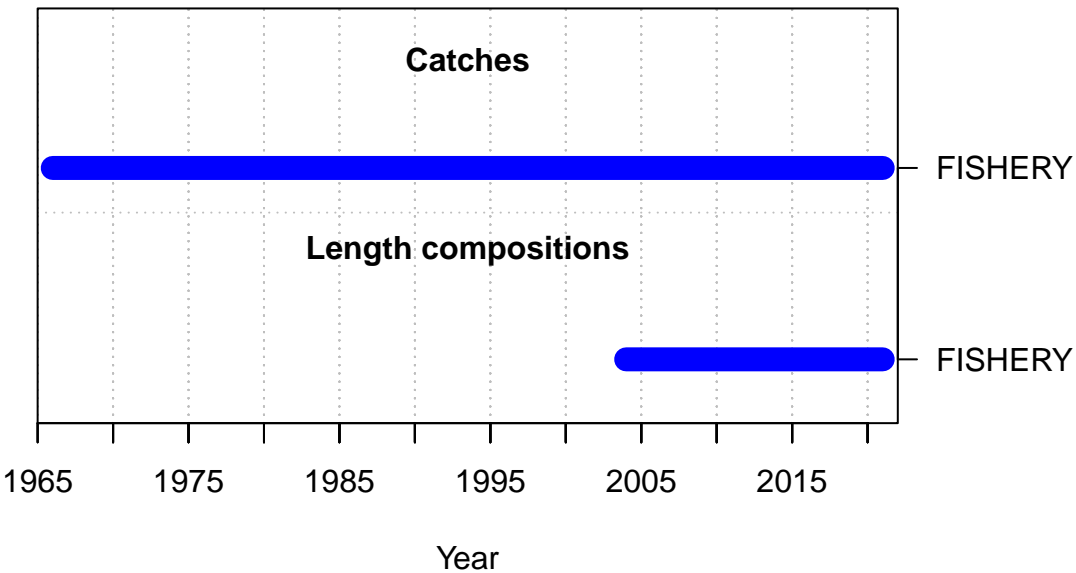
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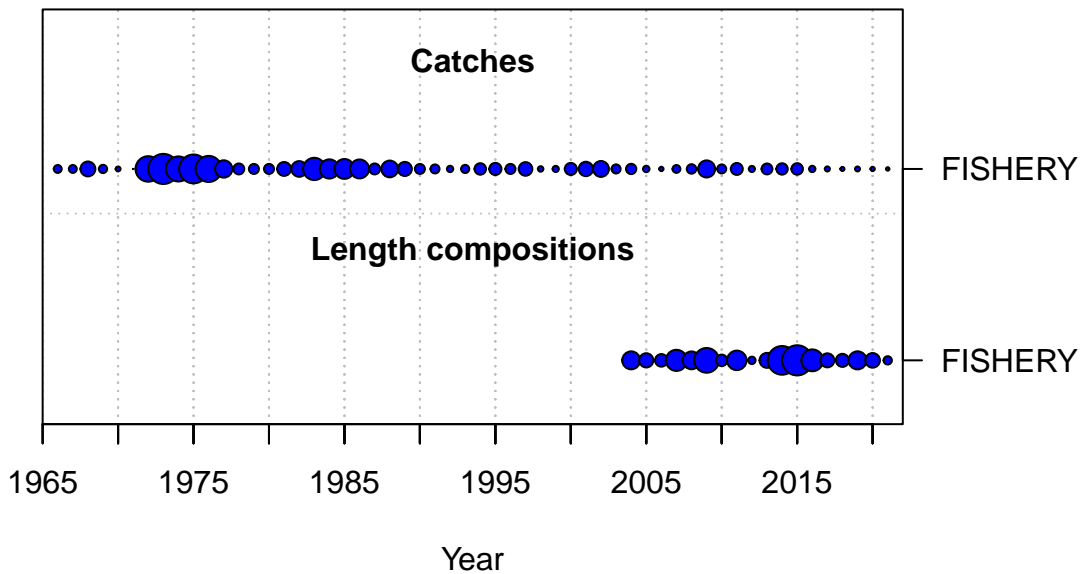
12

Total biomass (mt)

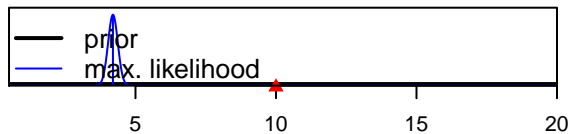




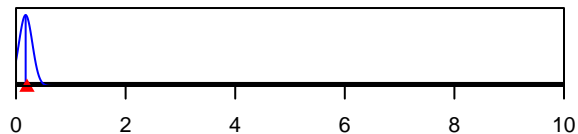




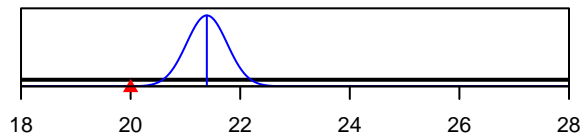
SR_LN(R0)



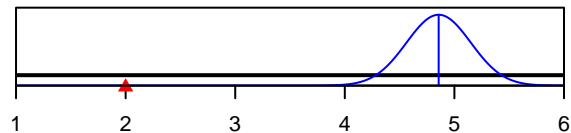
InitF_seas_1_flt_1FISHERY



Size_inflection_FISHERY(1)



Size_95%width_FISHERY(1)



Parameter value