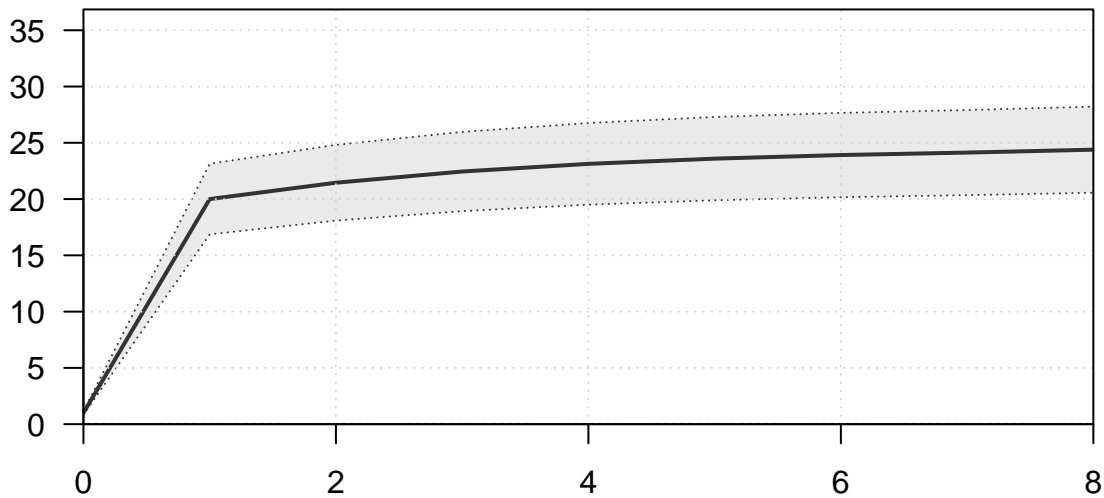
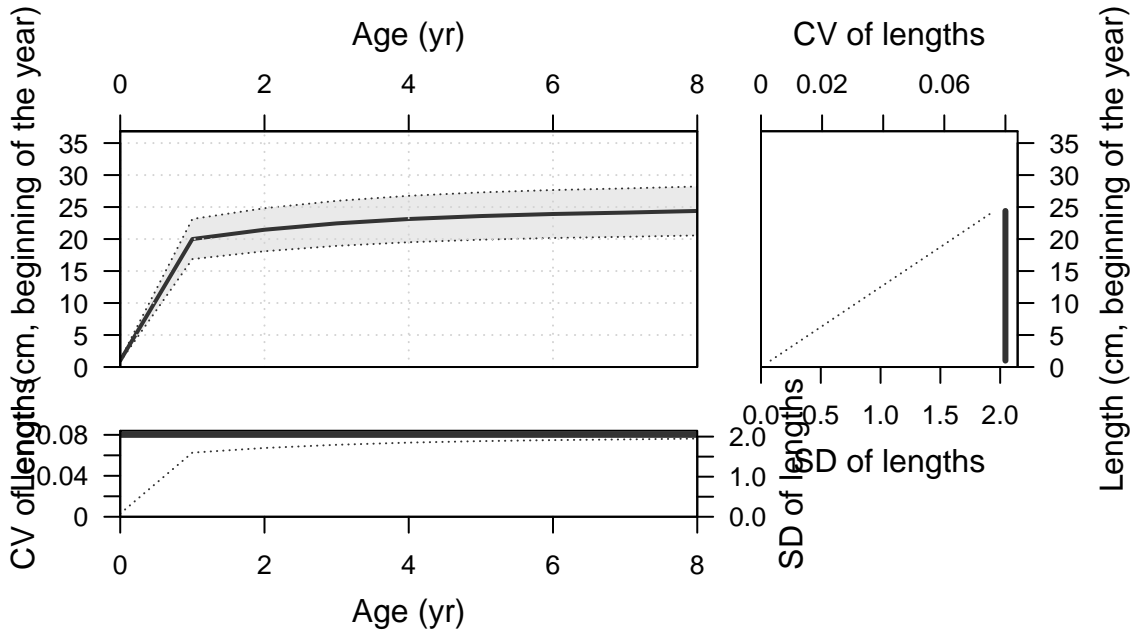


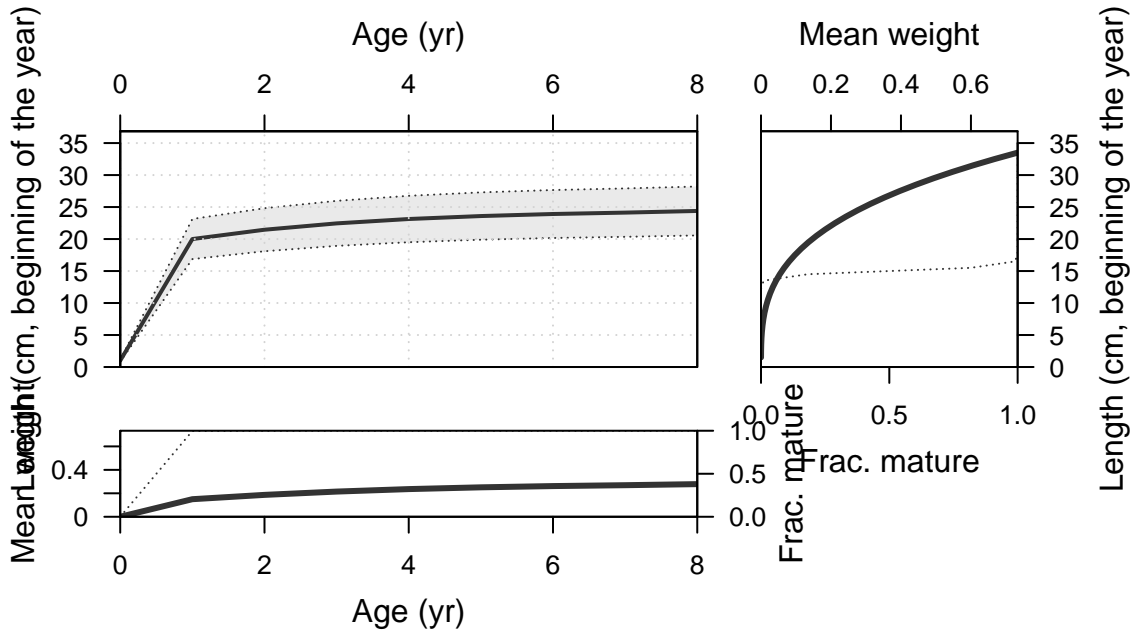
Plots created using the 'r4ss' package in R
Stock Synthesis version: 3.30.19.0
StartTime: Fri Jul 29 14:56:15 2022
Data_File: data.ss
Control_File: control.ss

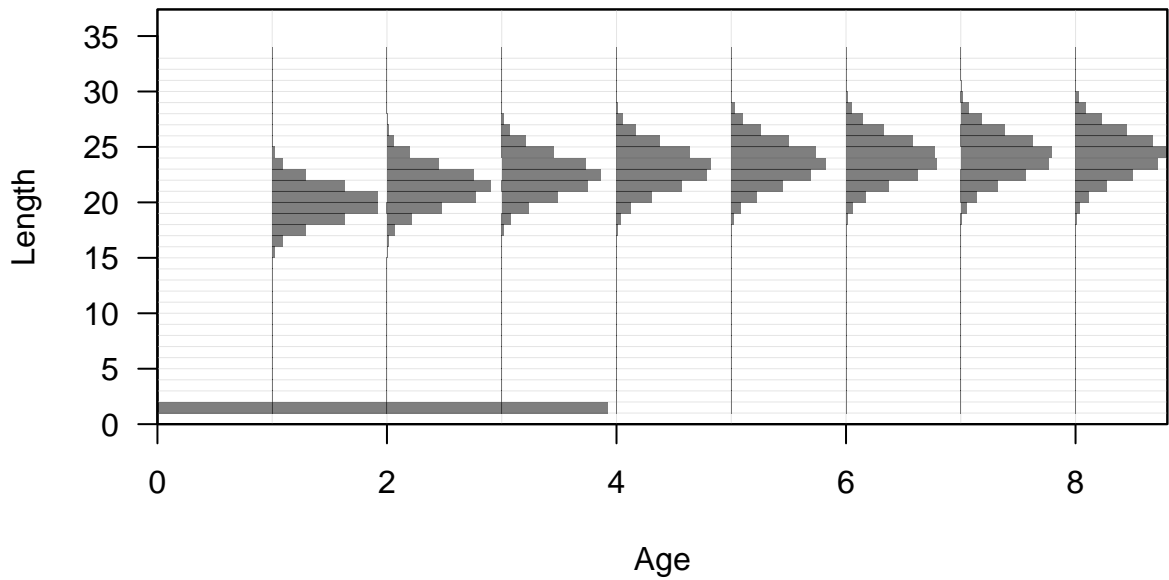
Length (cm, beginning of the year)

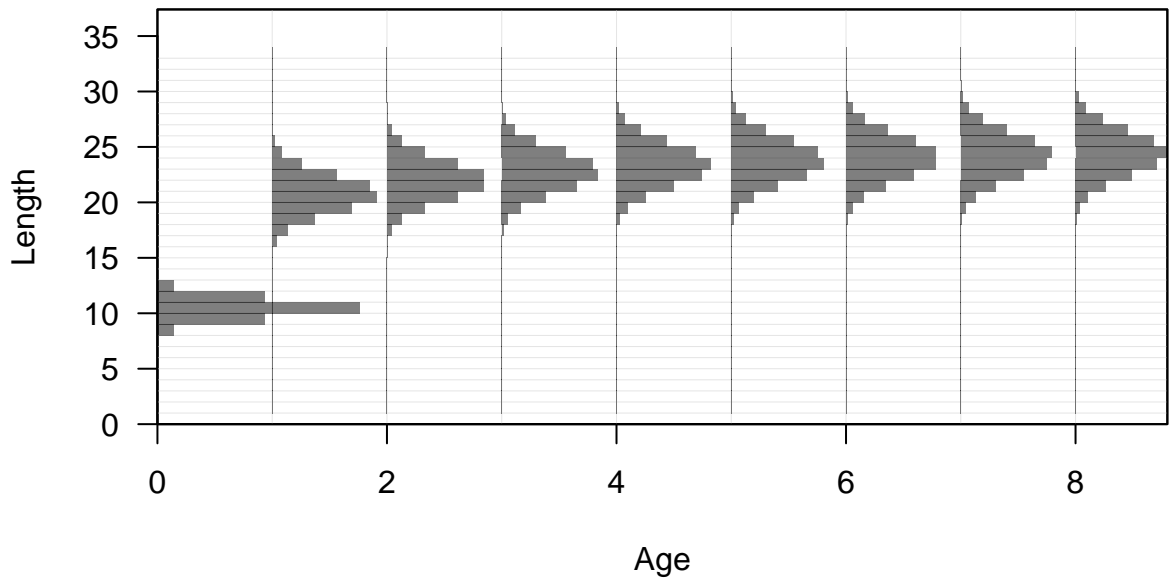


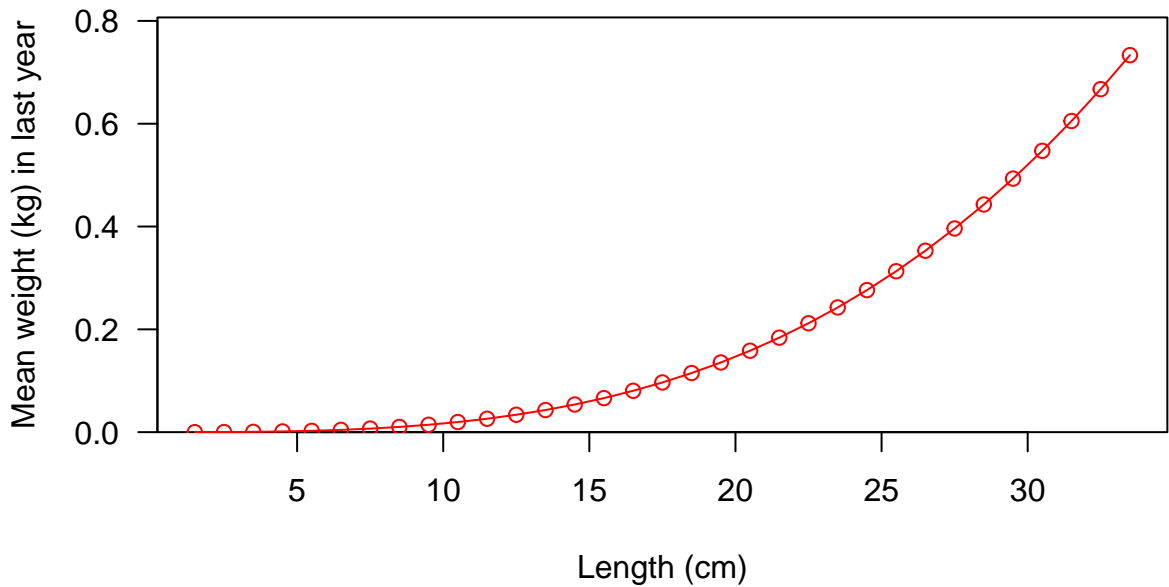
Age (yr)

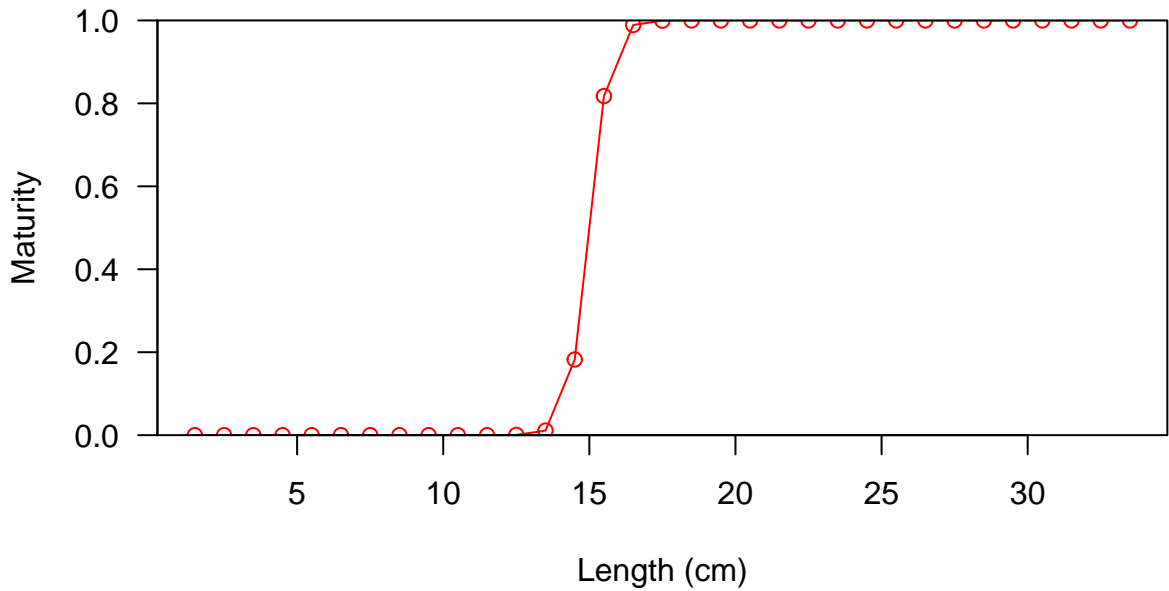


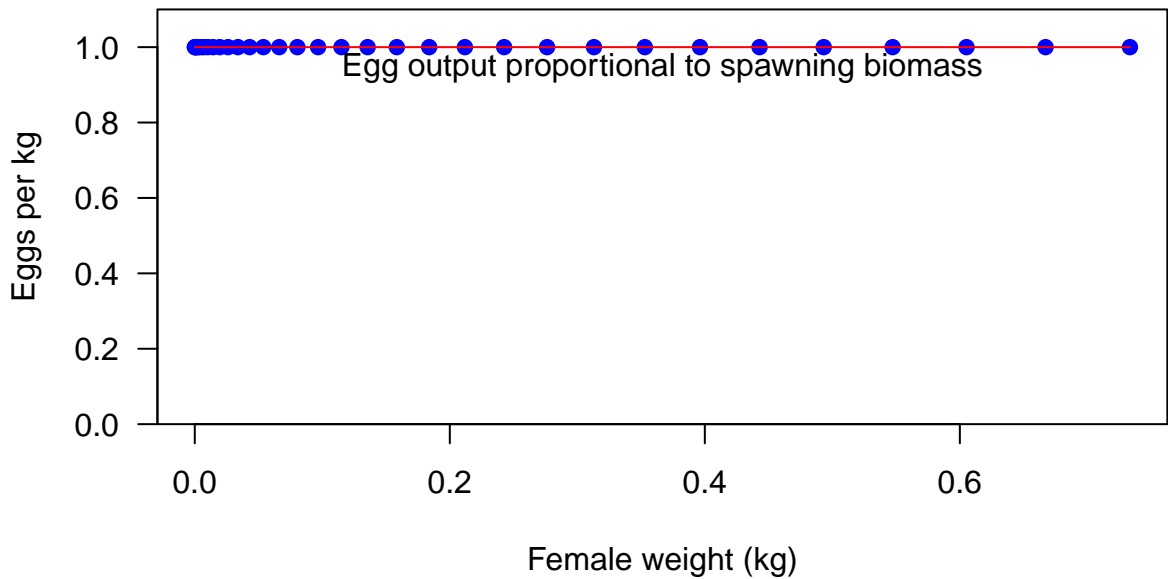


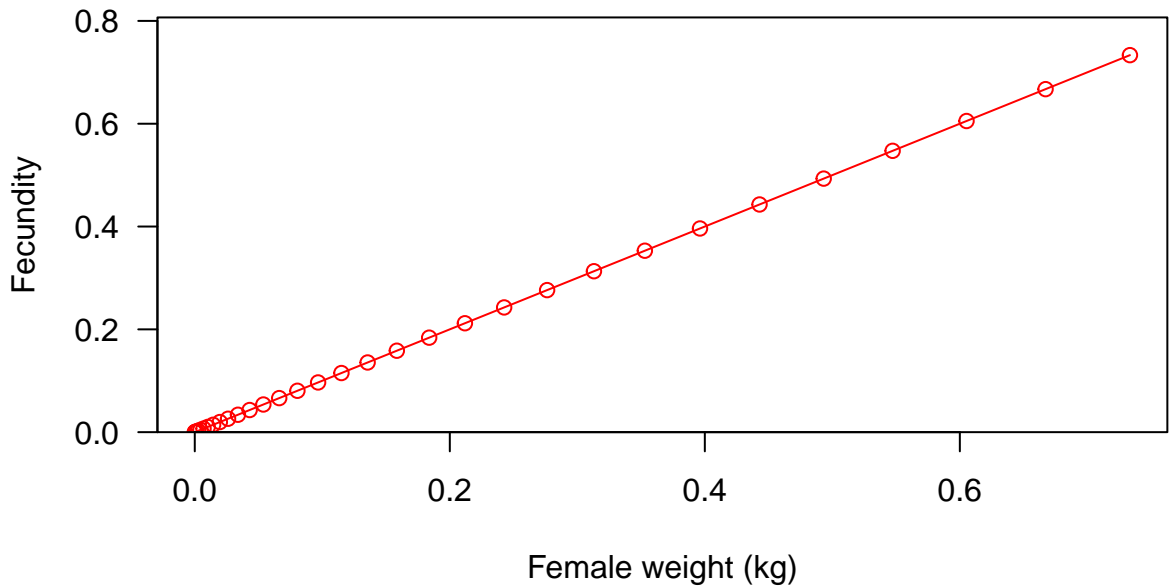


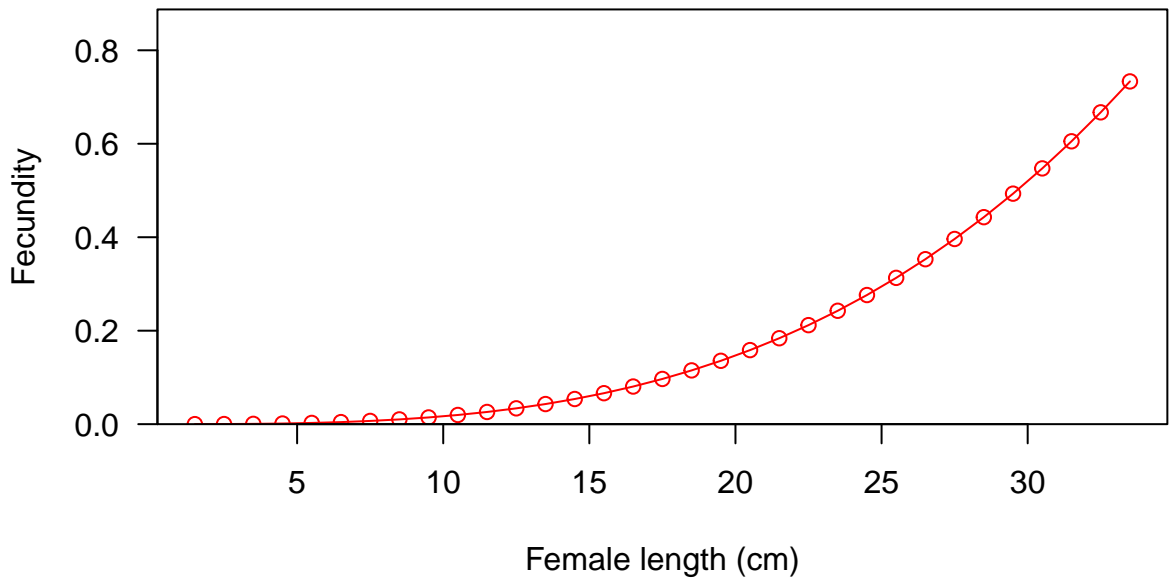


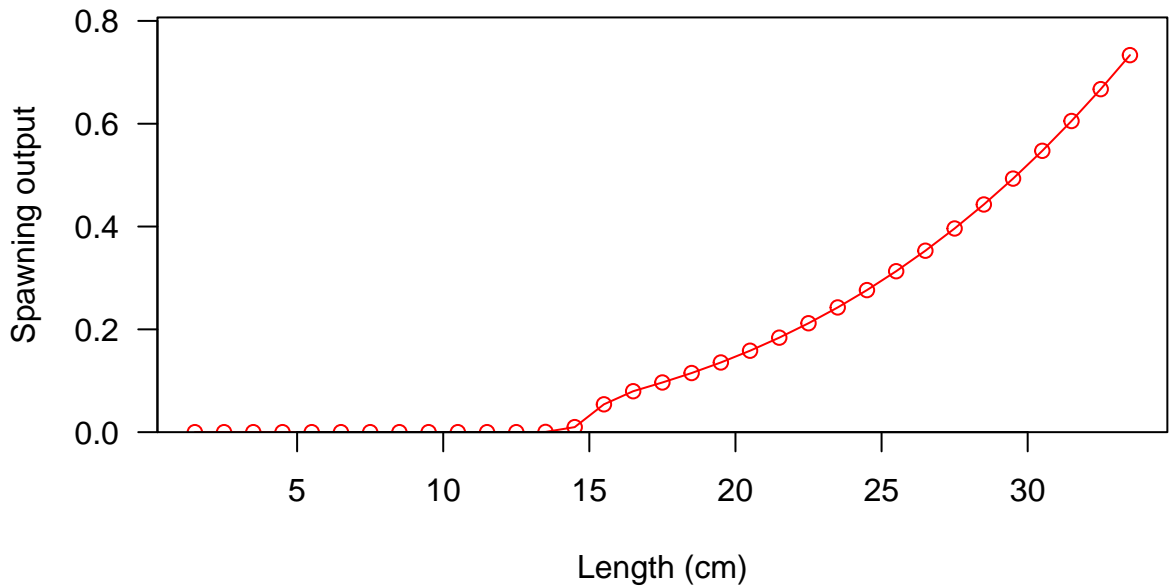


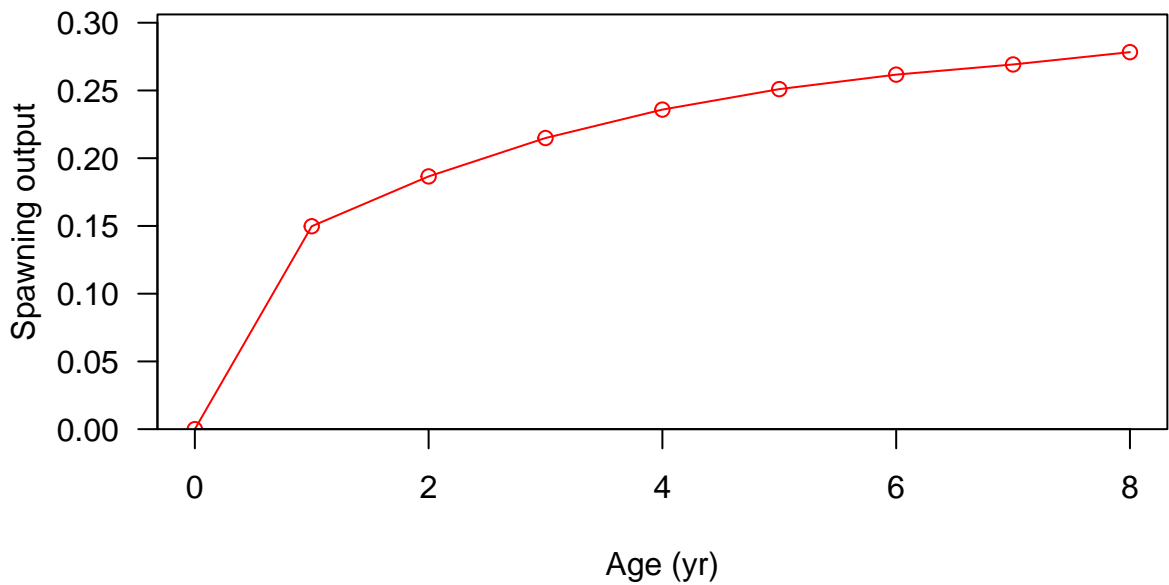




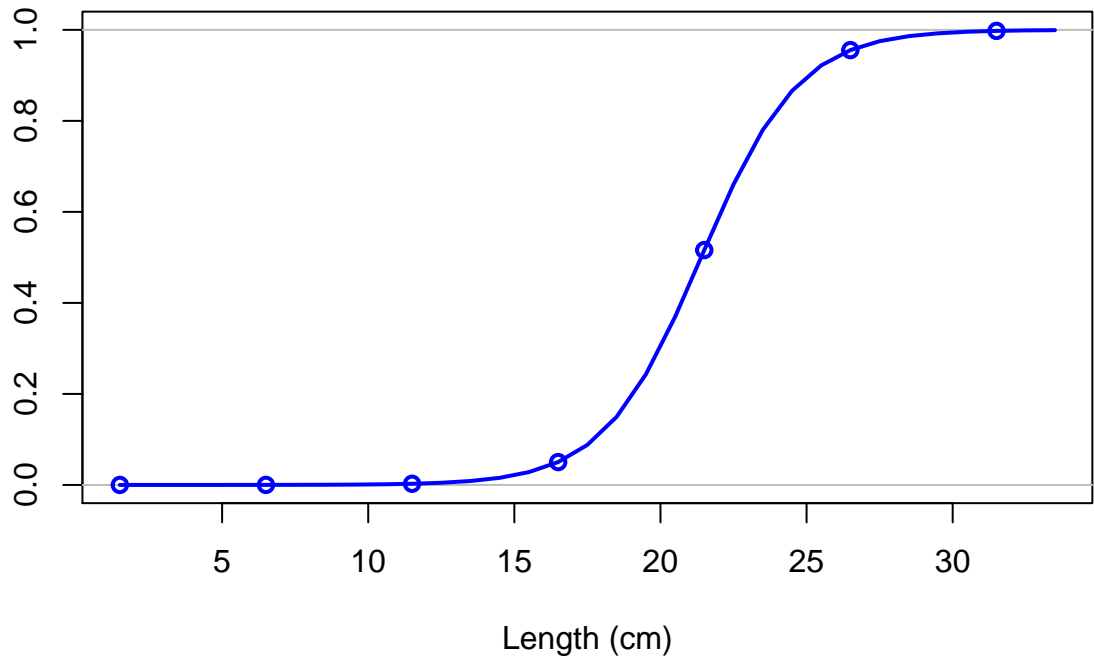


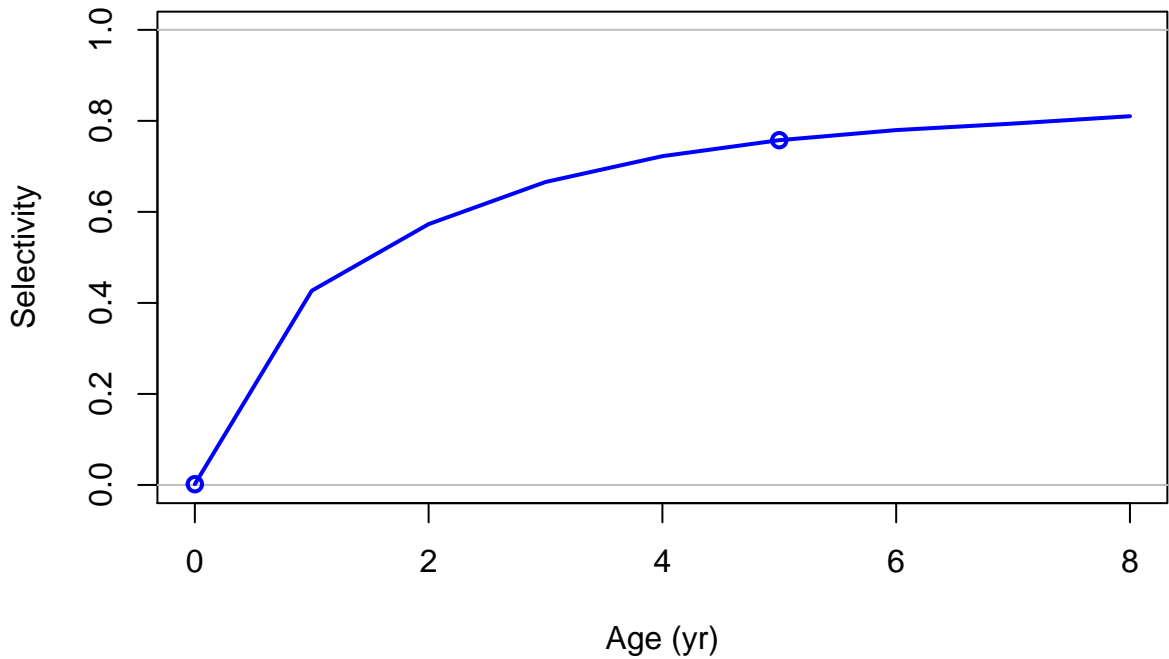




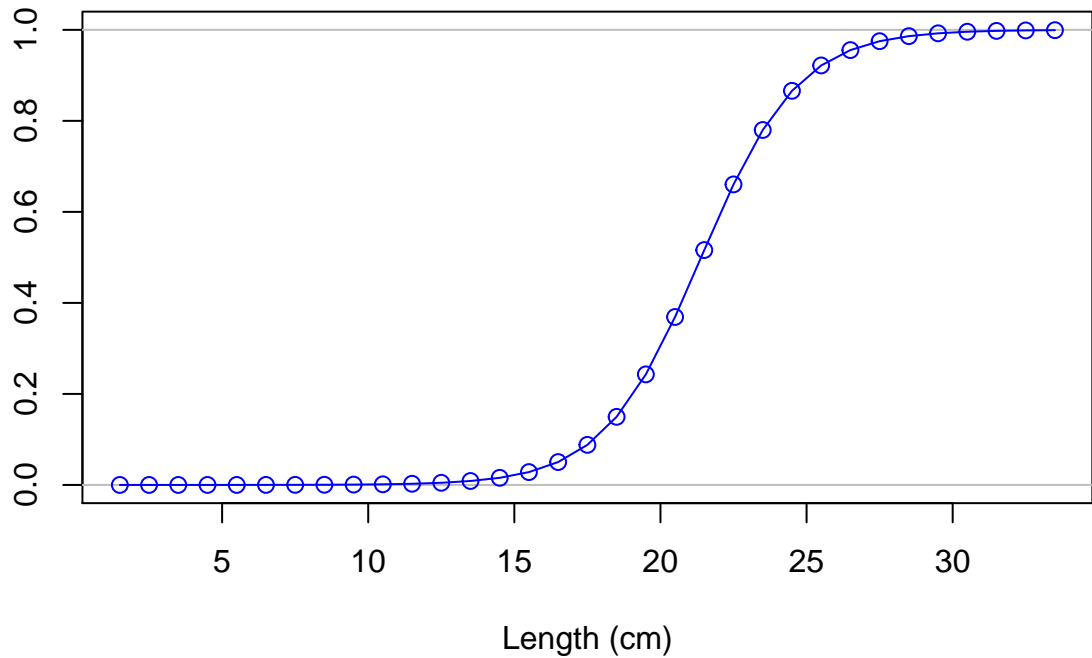


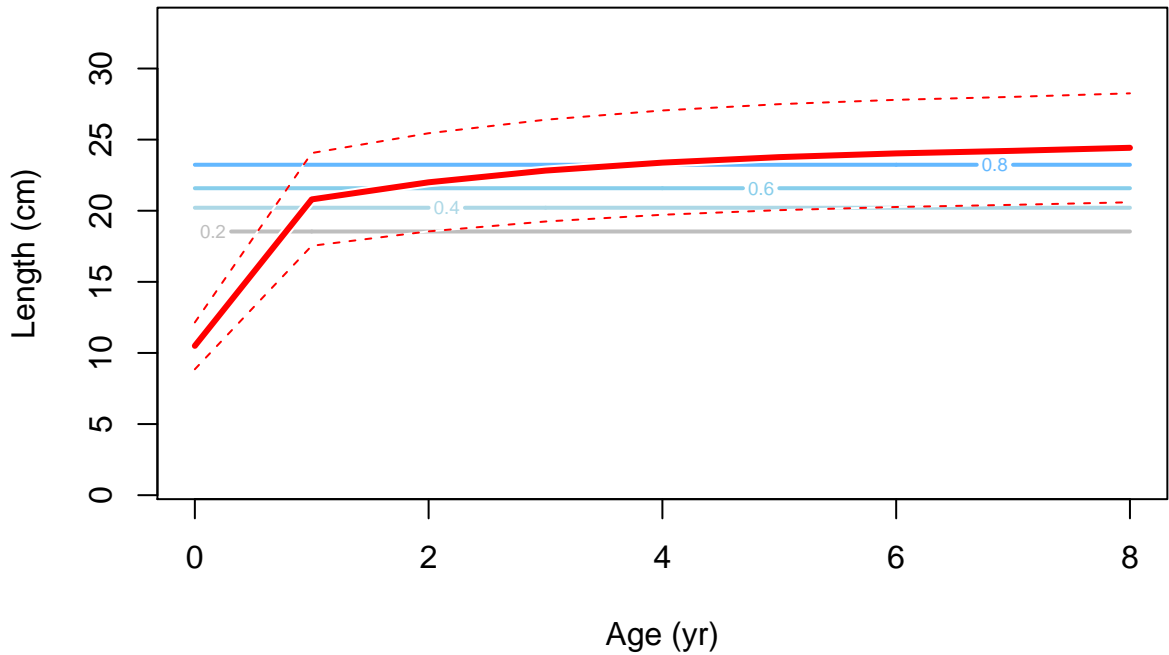
Selectivity

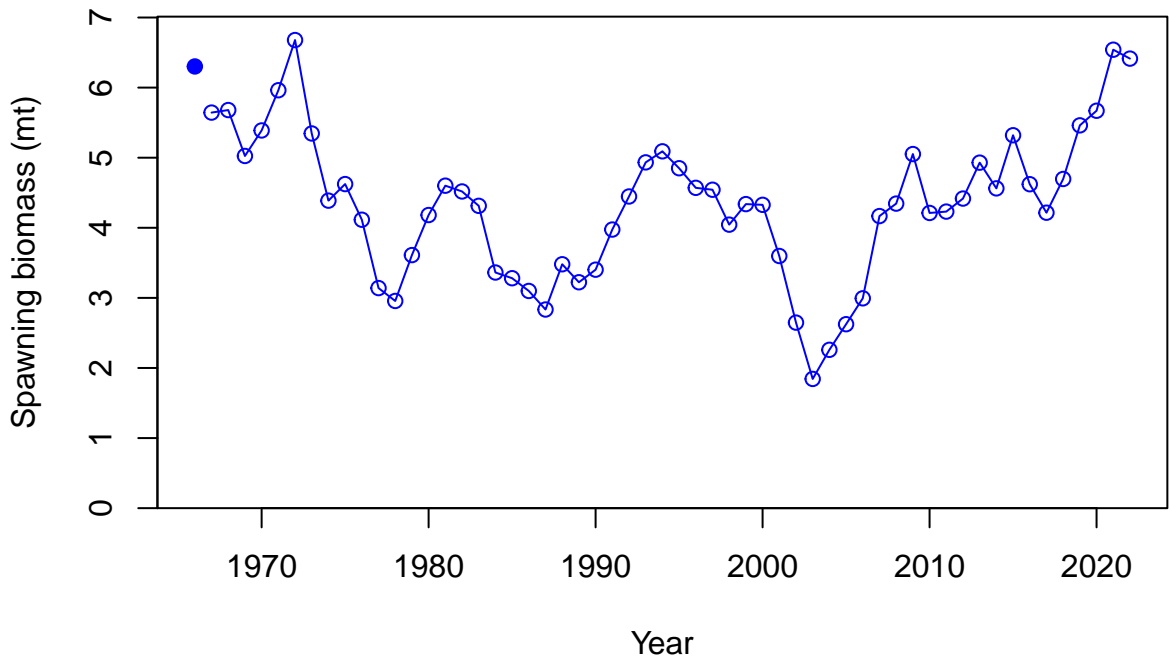




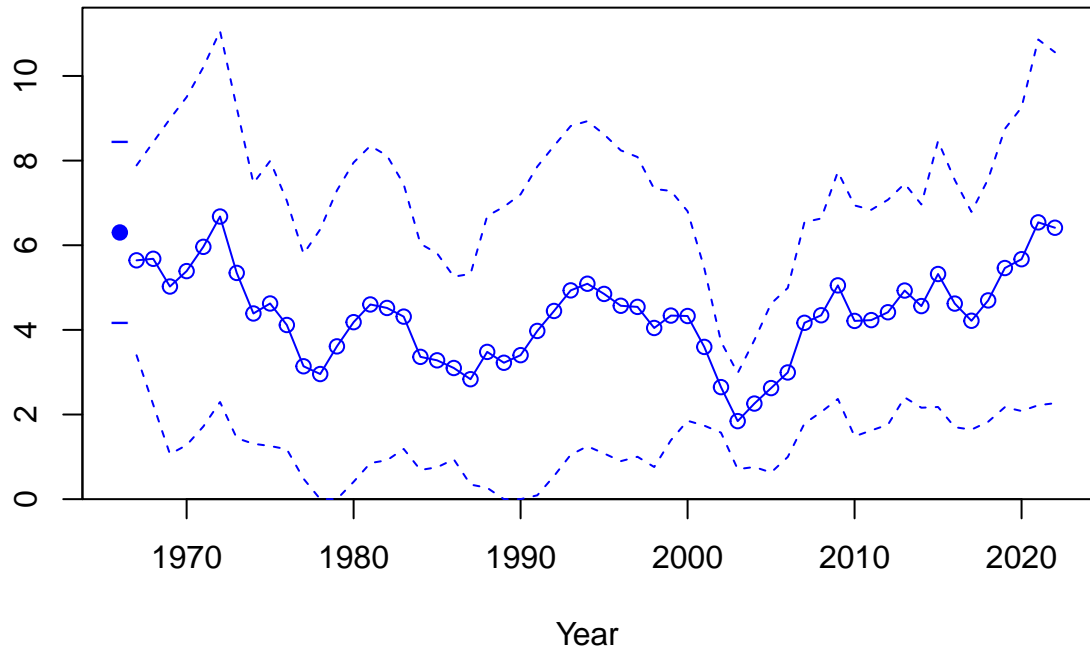
Selectivity



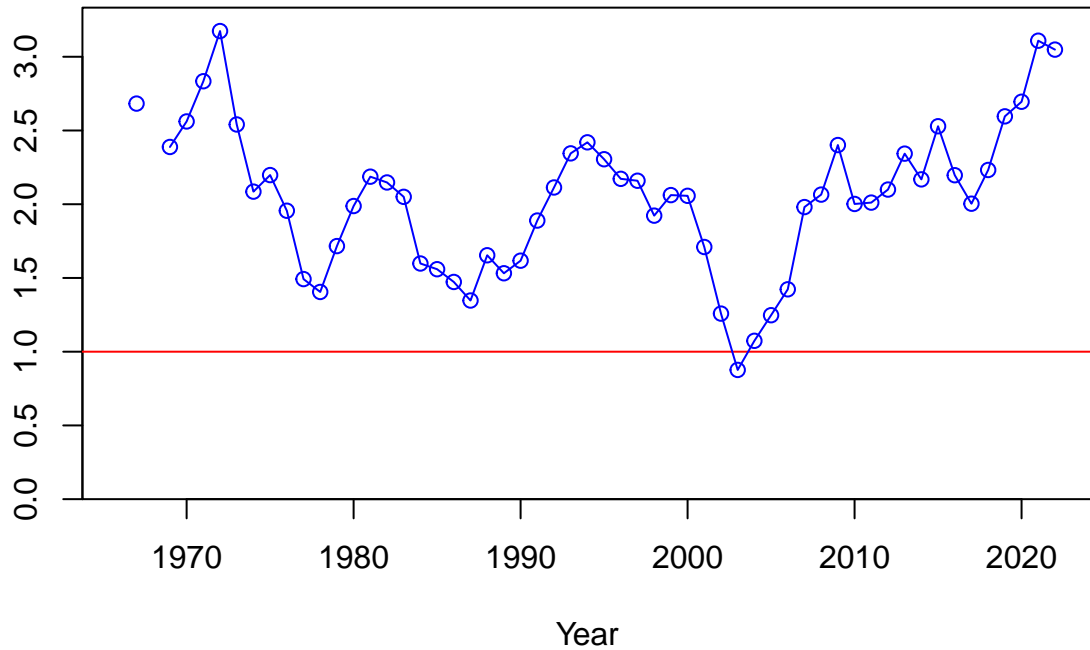




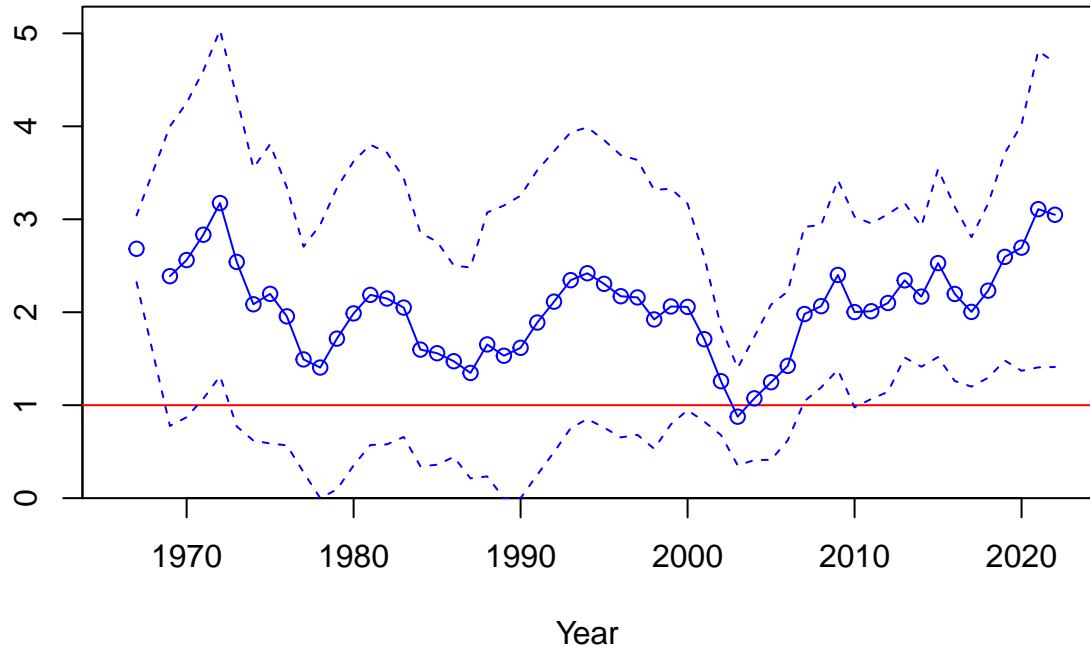
Spawning biomass (mt)

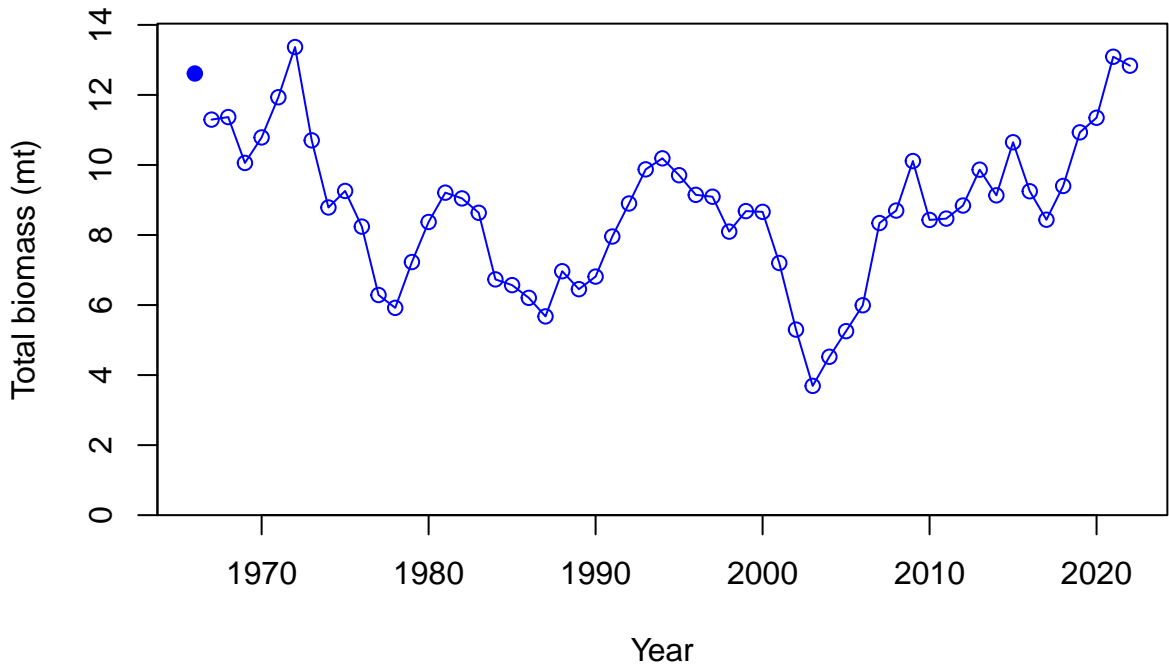


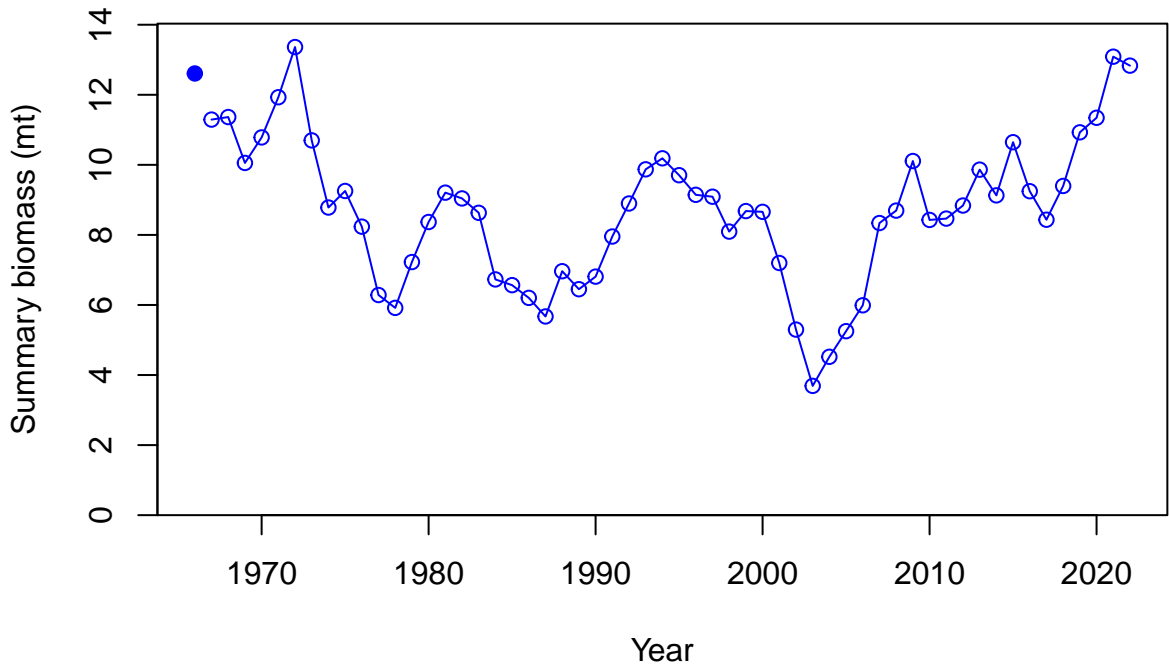
Relative spawning biomass: B/B_{MSY}

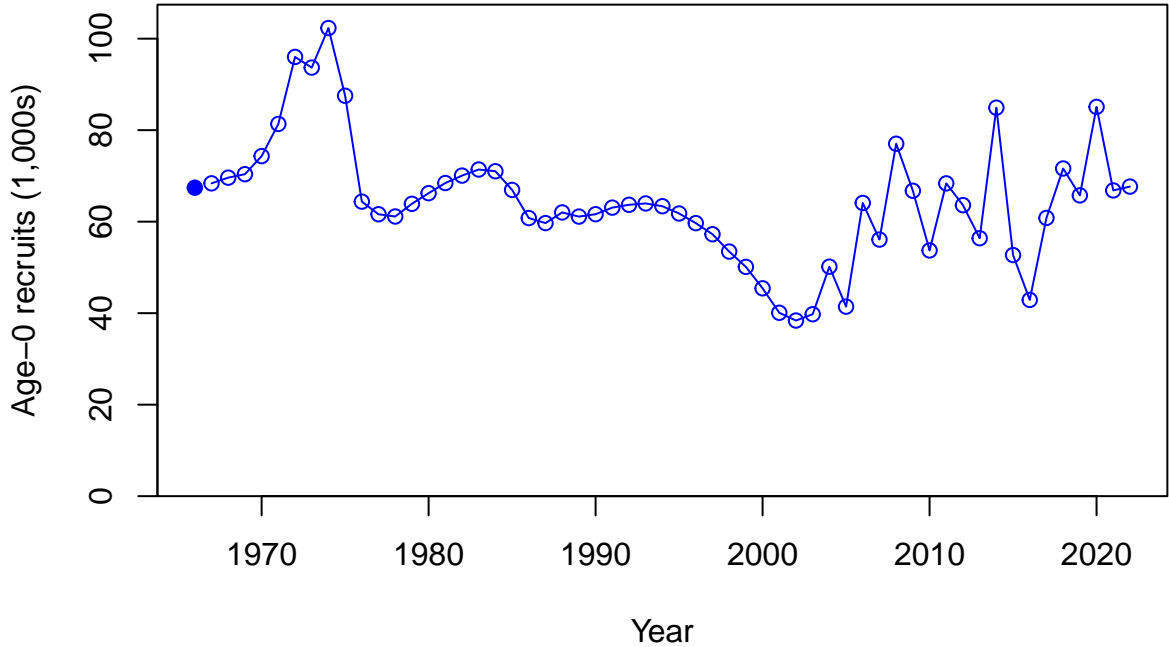


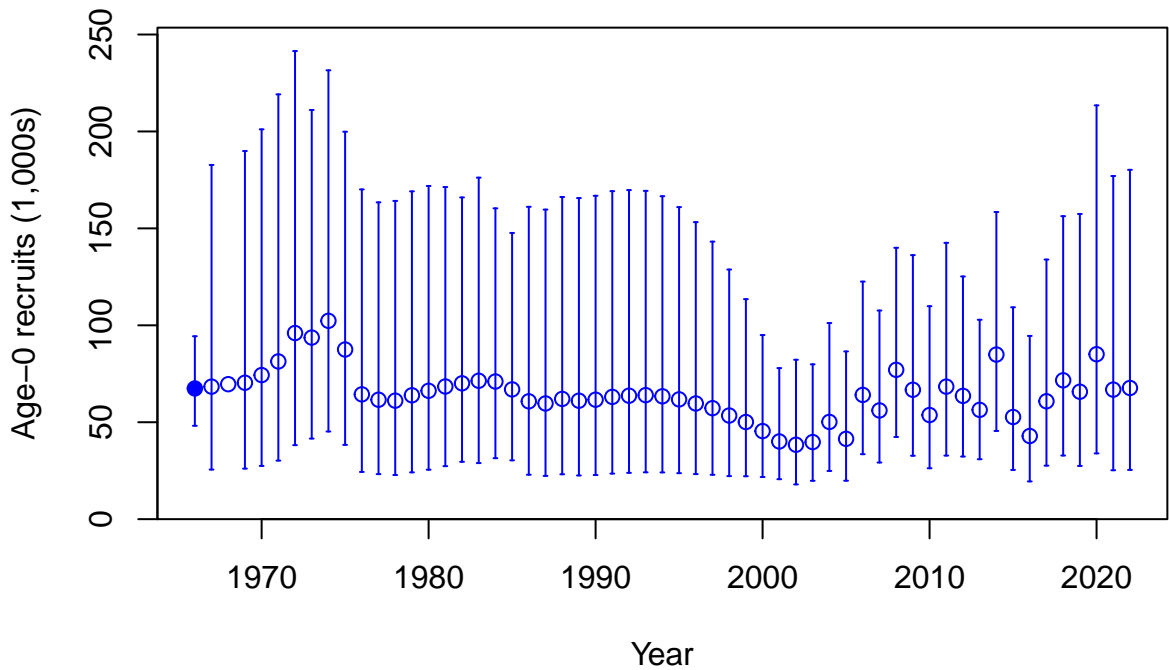
Relative spawning biomass: B/B_{MSY}



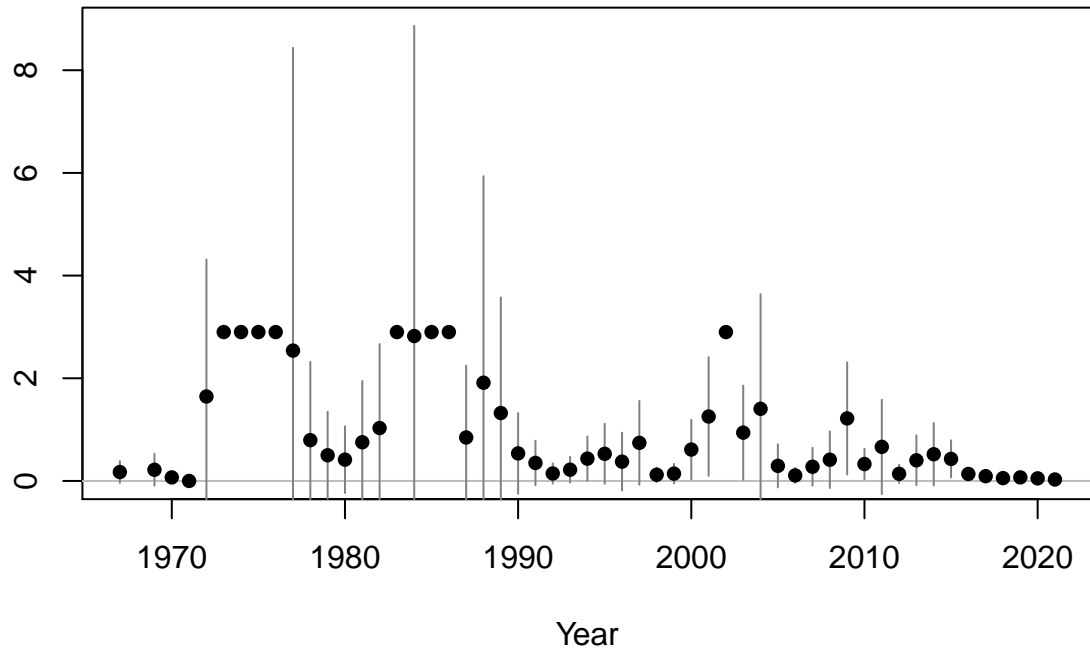


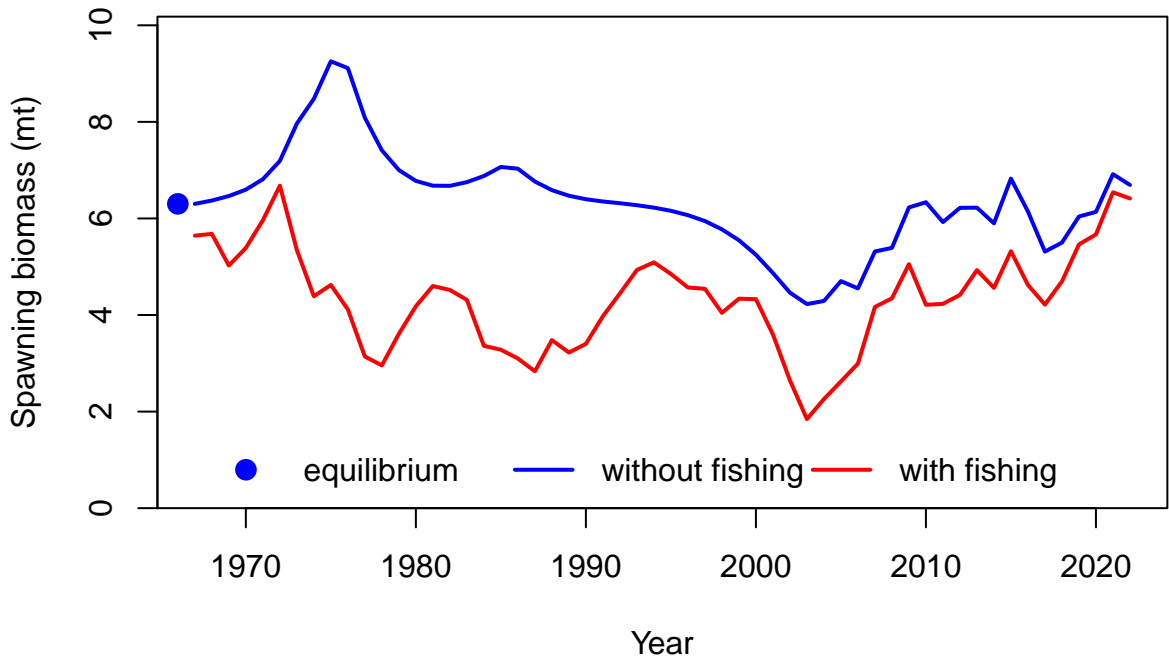




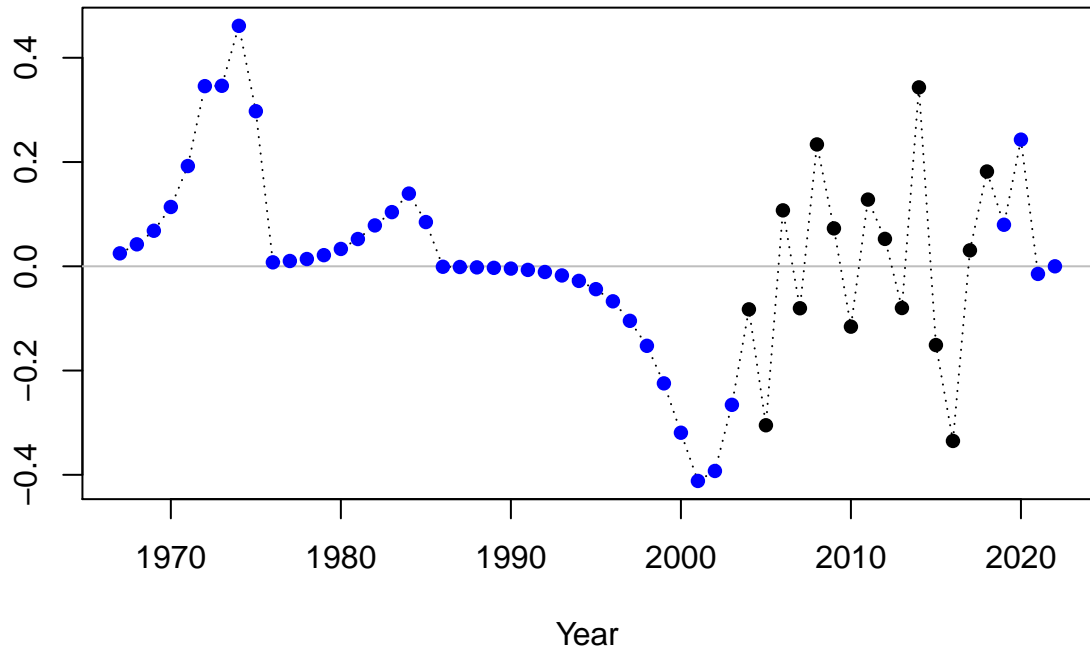


Summary Fishing Mortality





Log recruitment deviation



Log recruitment deviation

1.0
0.5
0.0
-0.5
-1.0

1970

1980

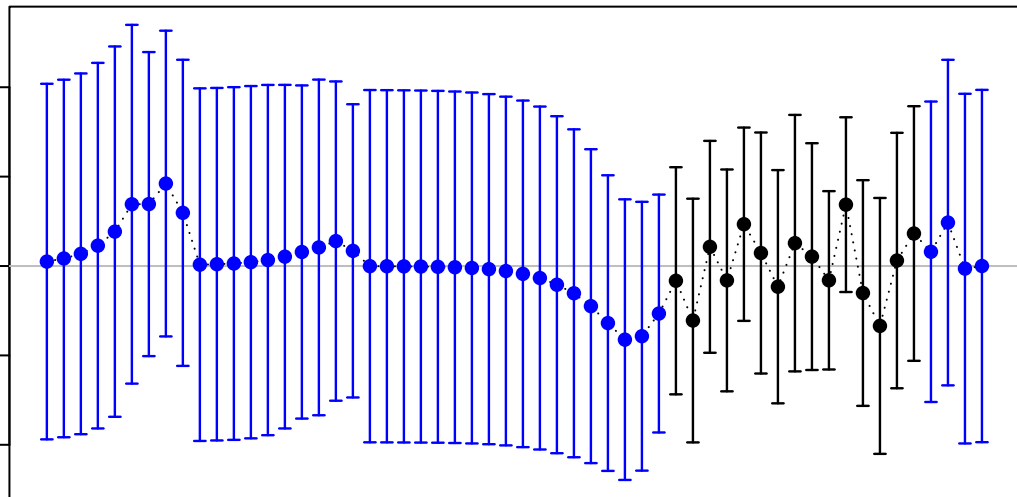
1990

2000

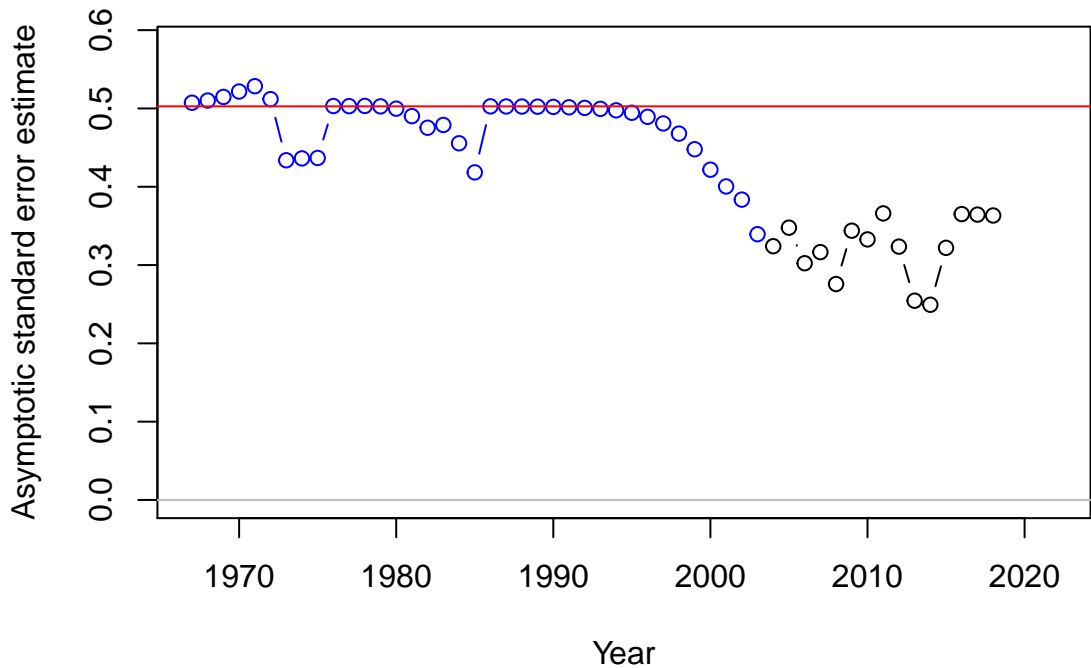
2010

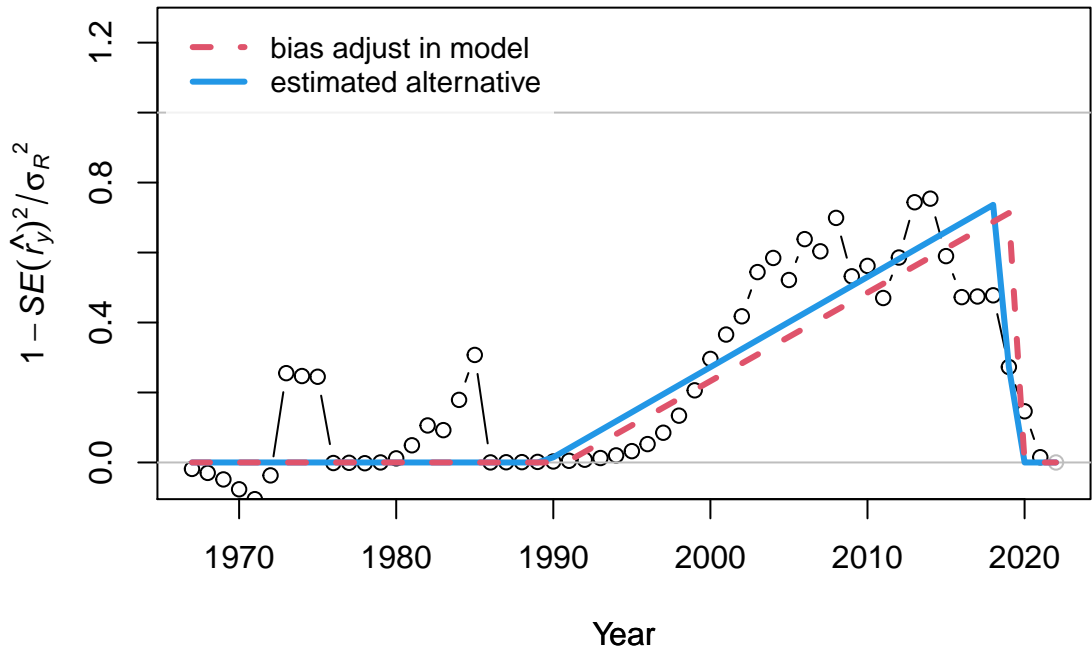
2020

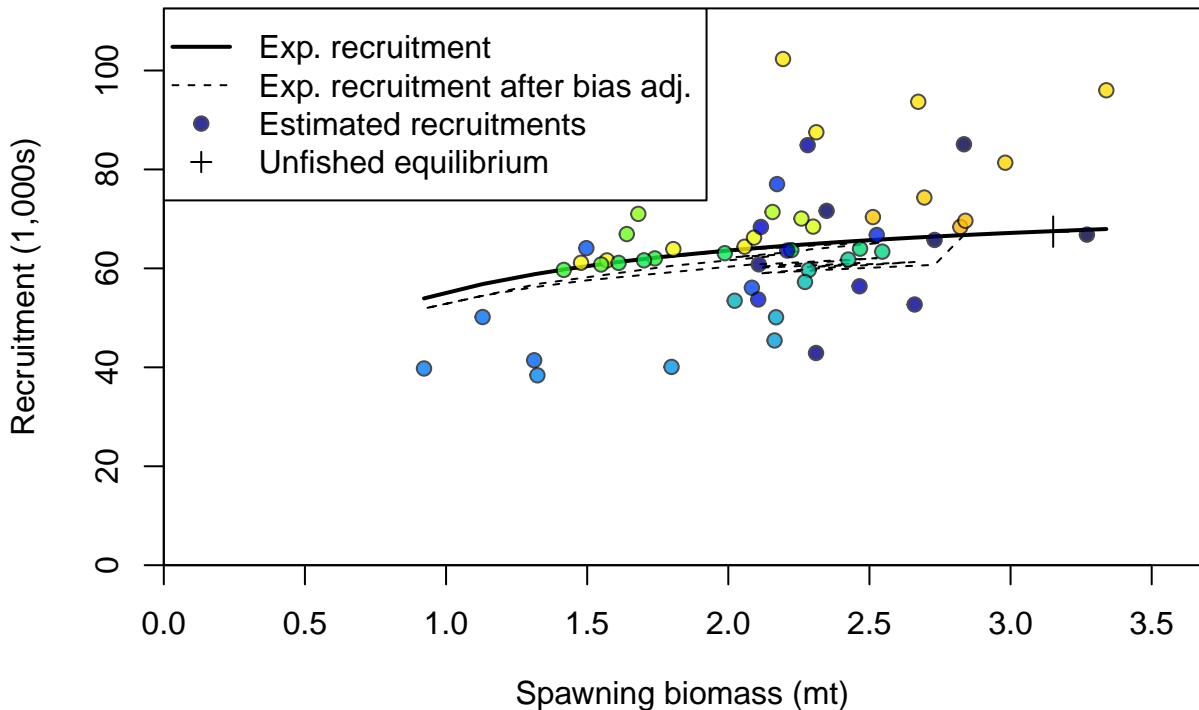
Year

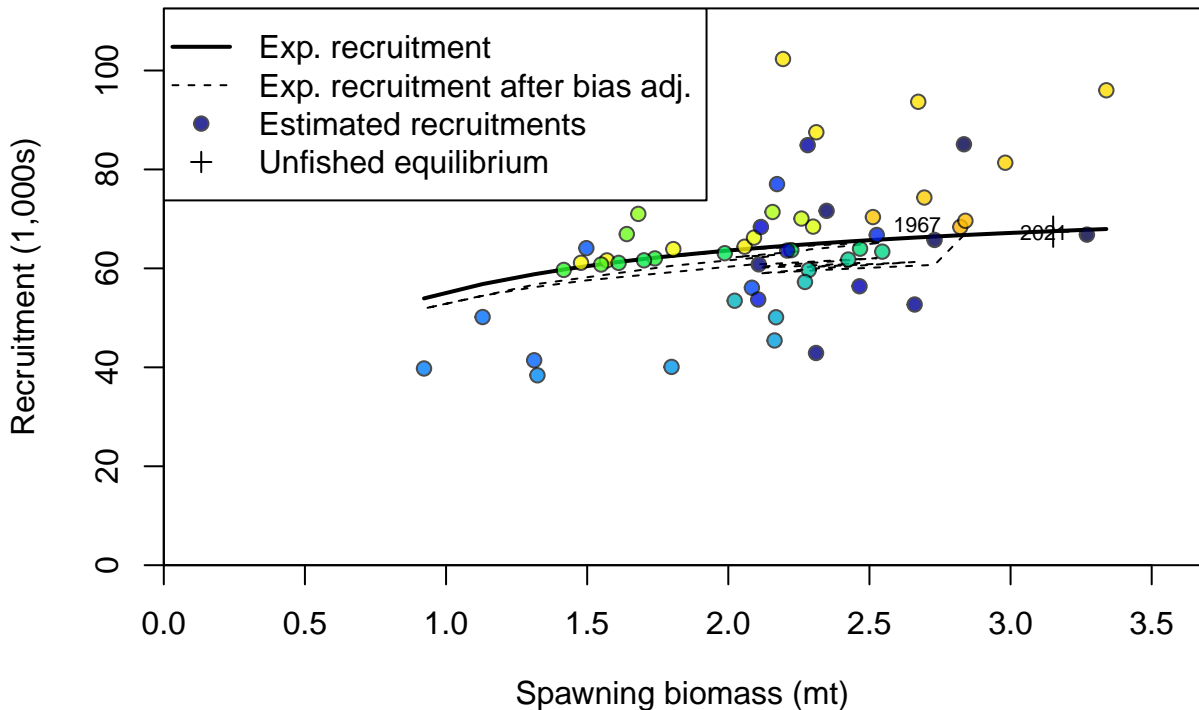


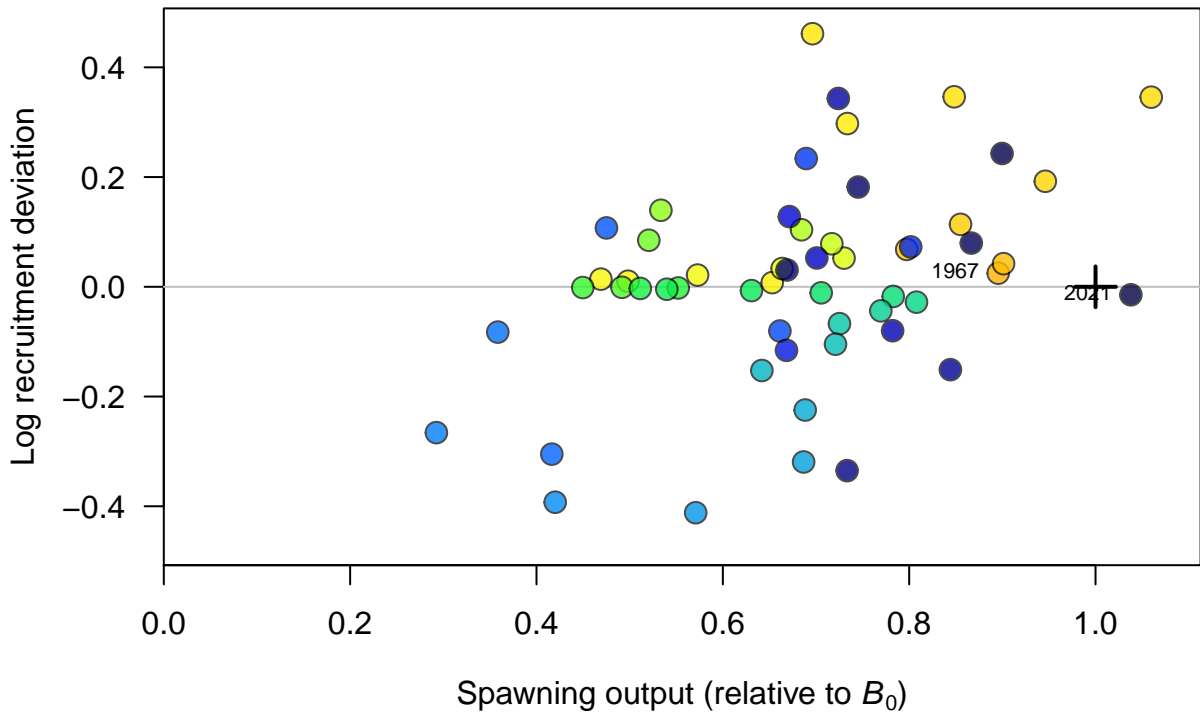
Recruitment deviation variance

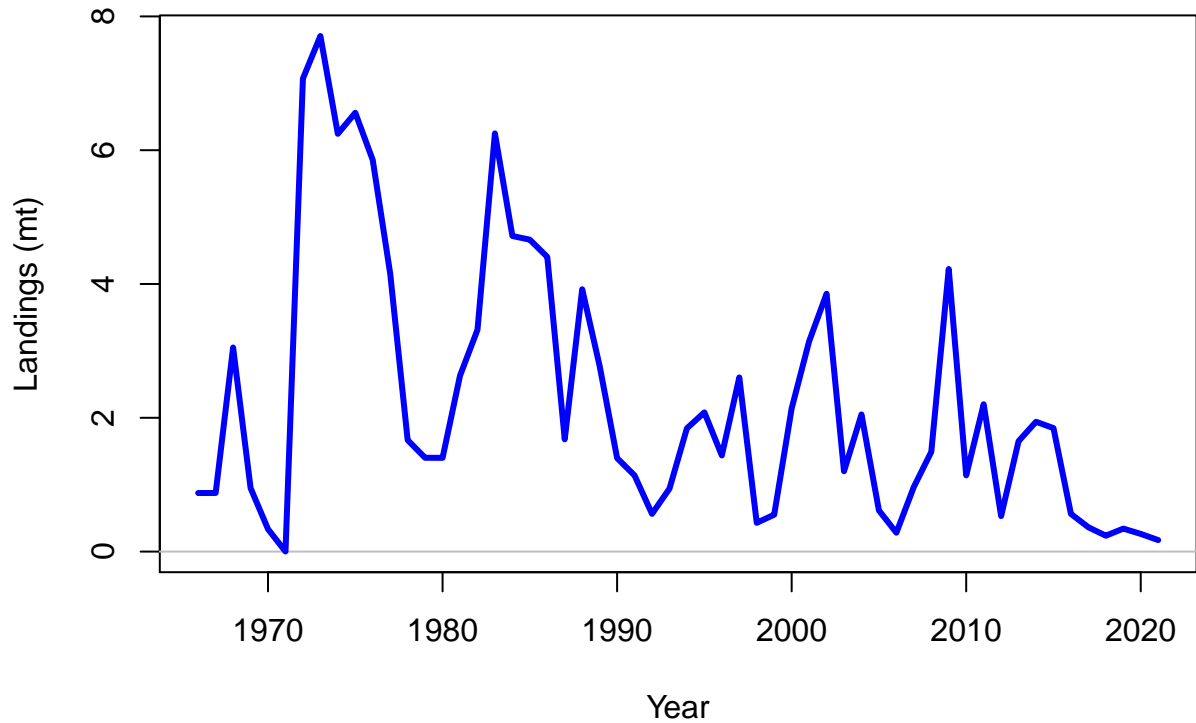


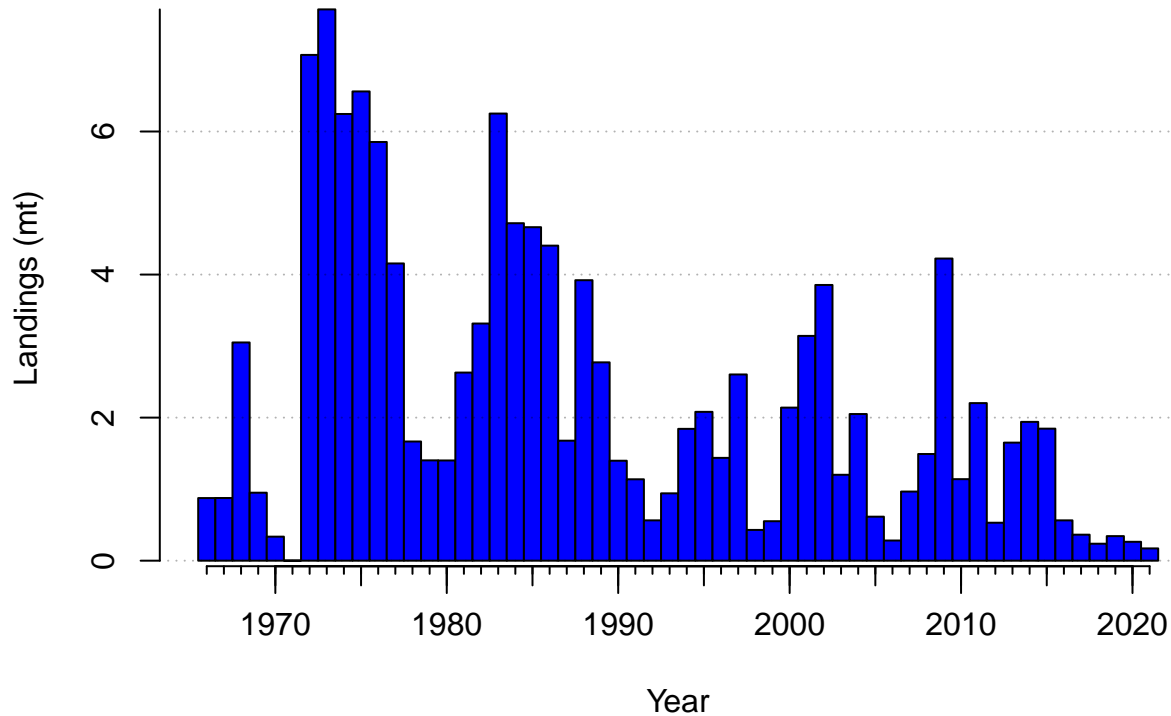




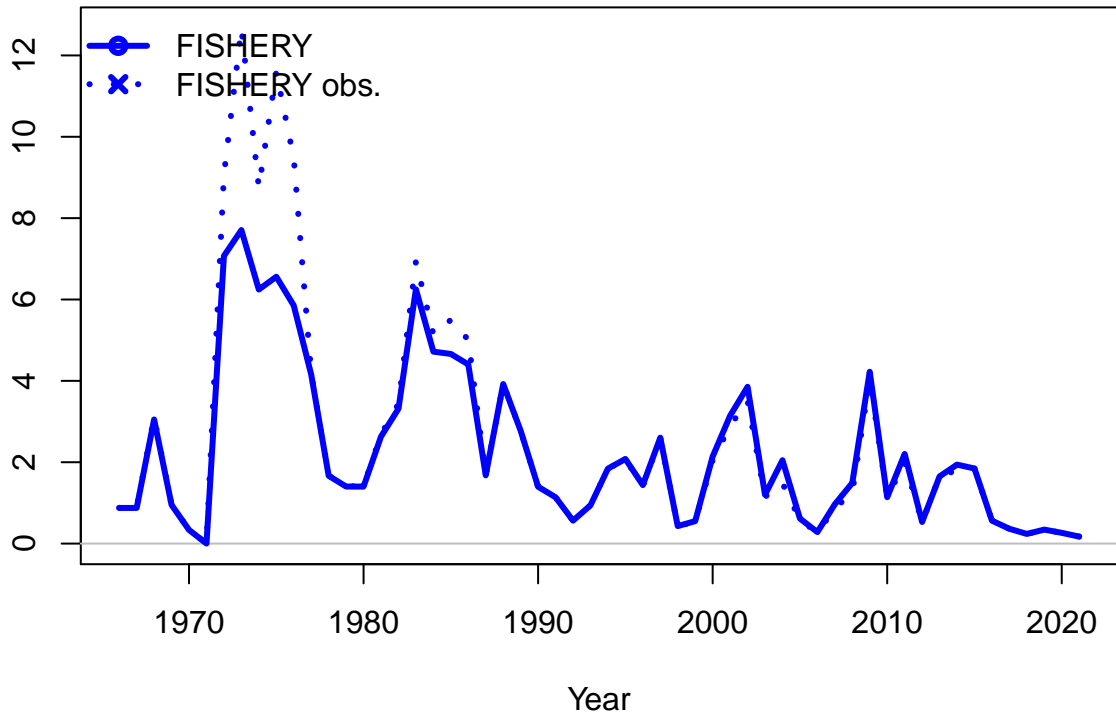


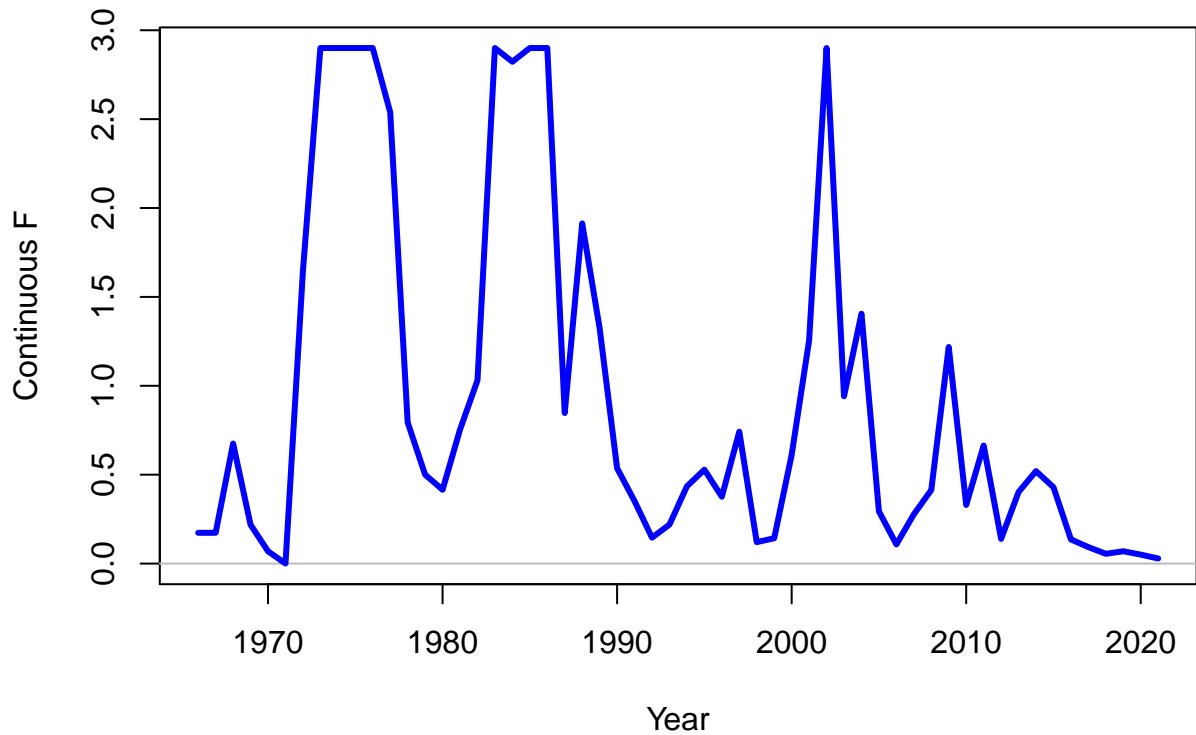




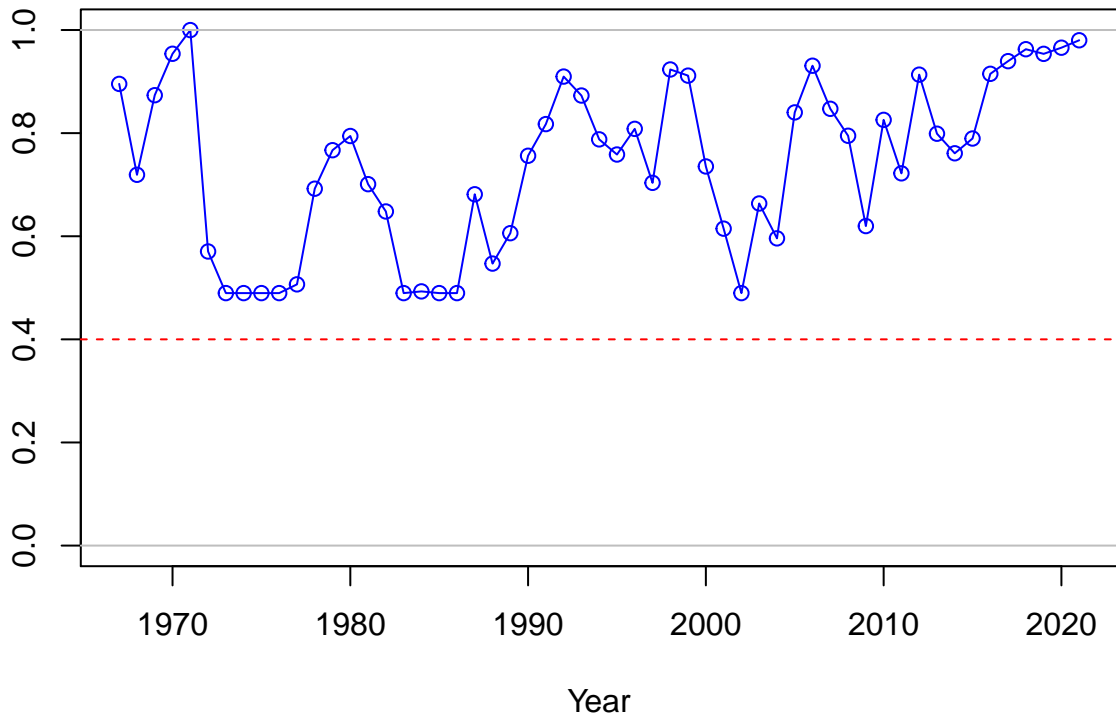


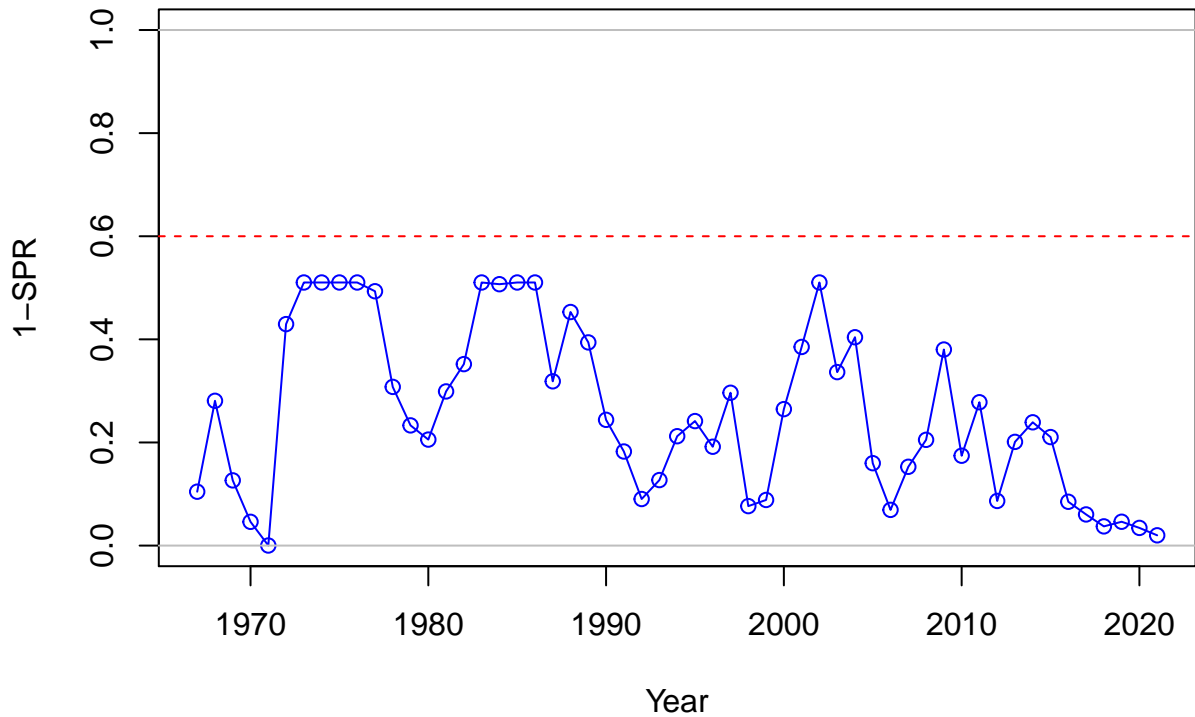
Observed and expected Landings (mt)



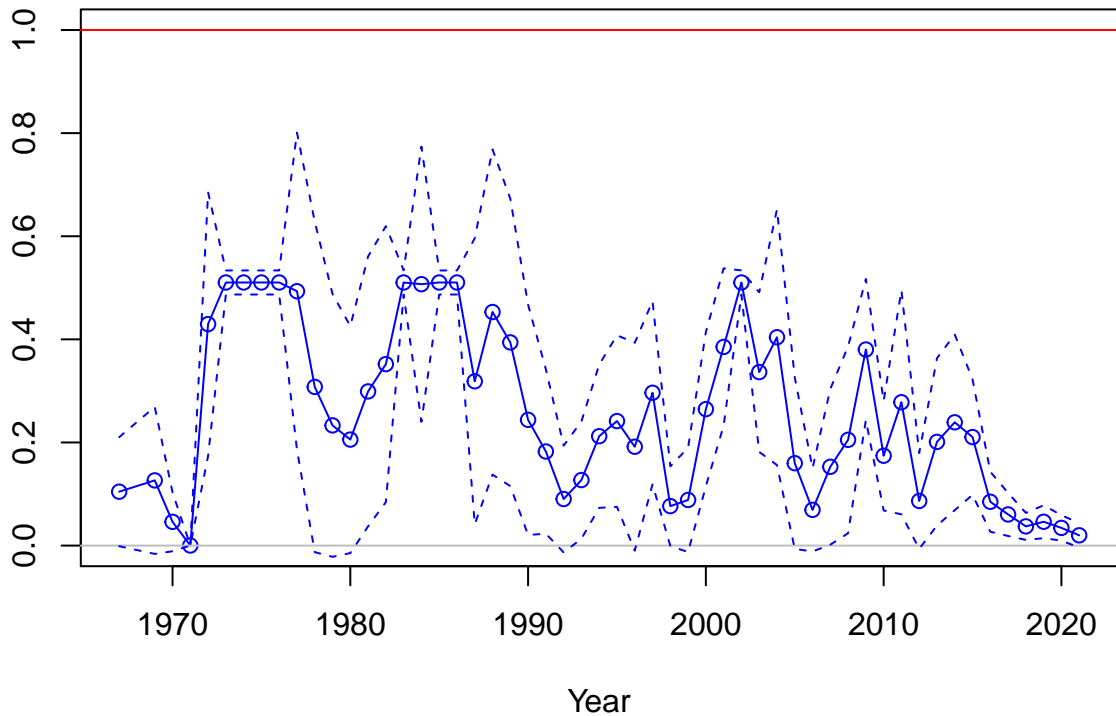


SPR

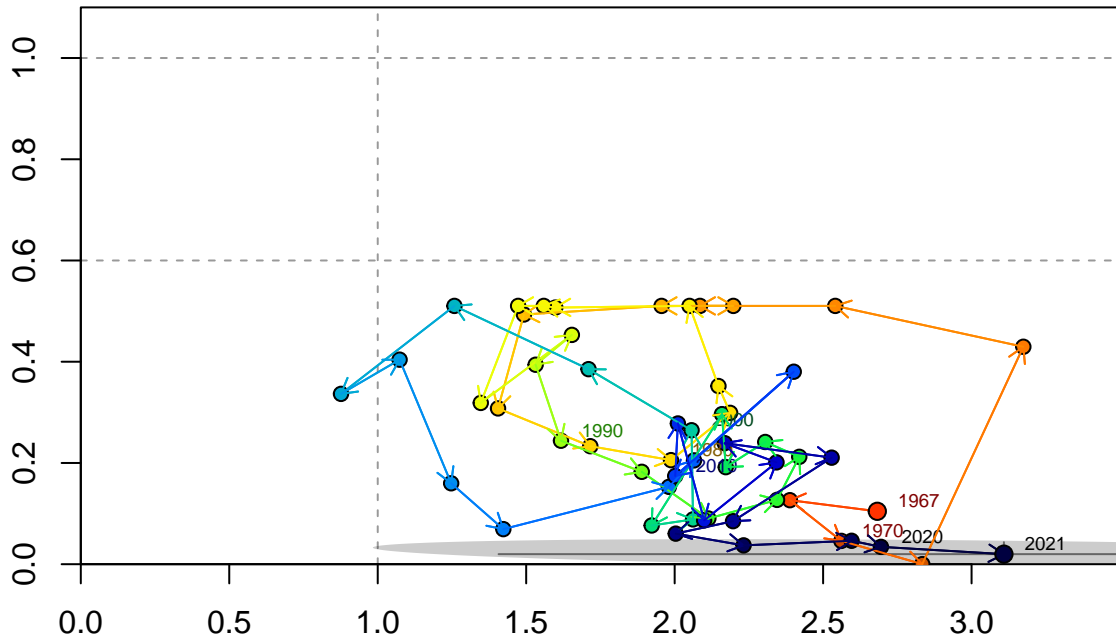




Fishing intensity: 1-SPR

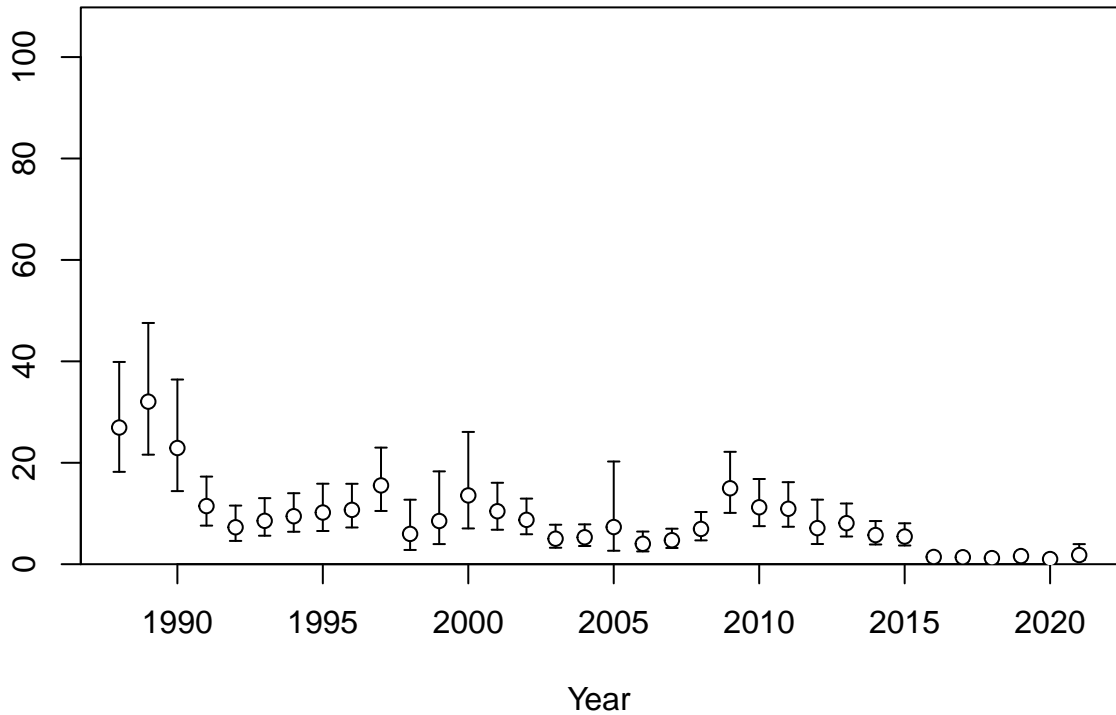


Fishing intensity: 1-SPR

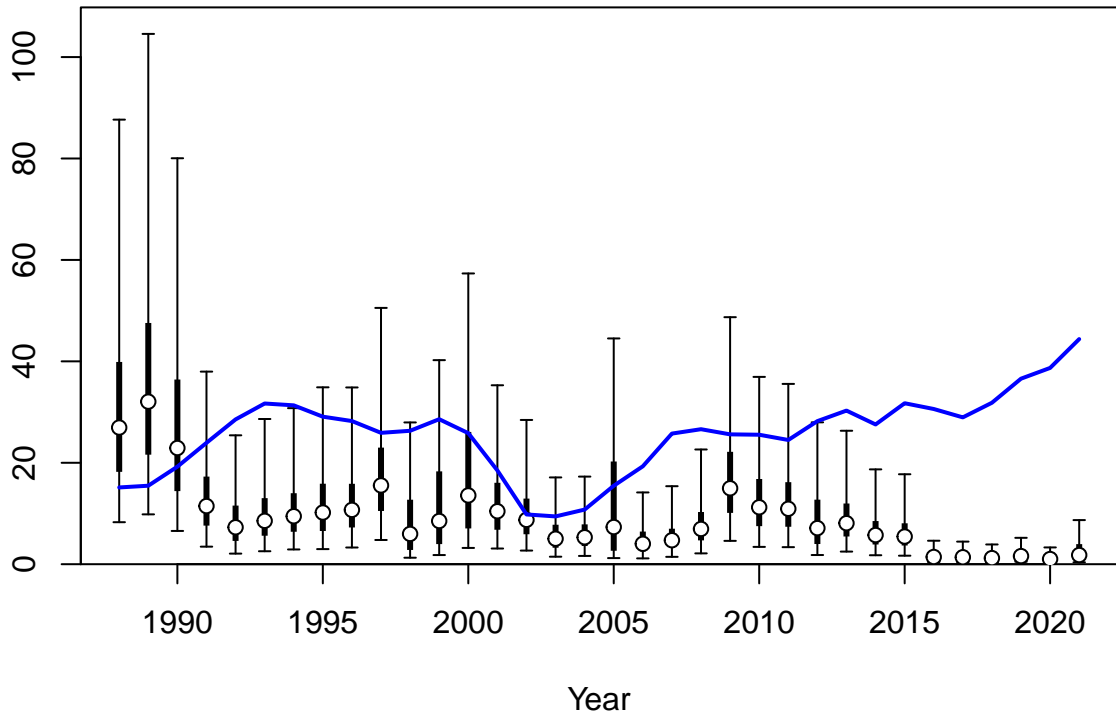


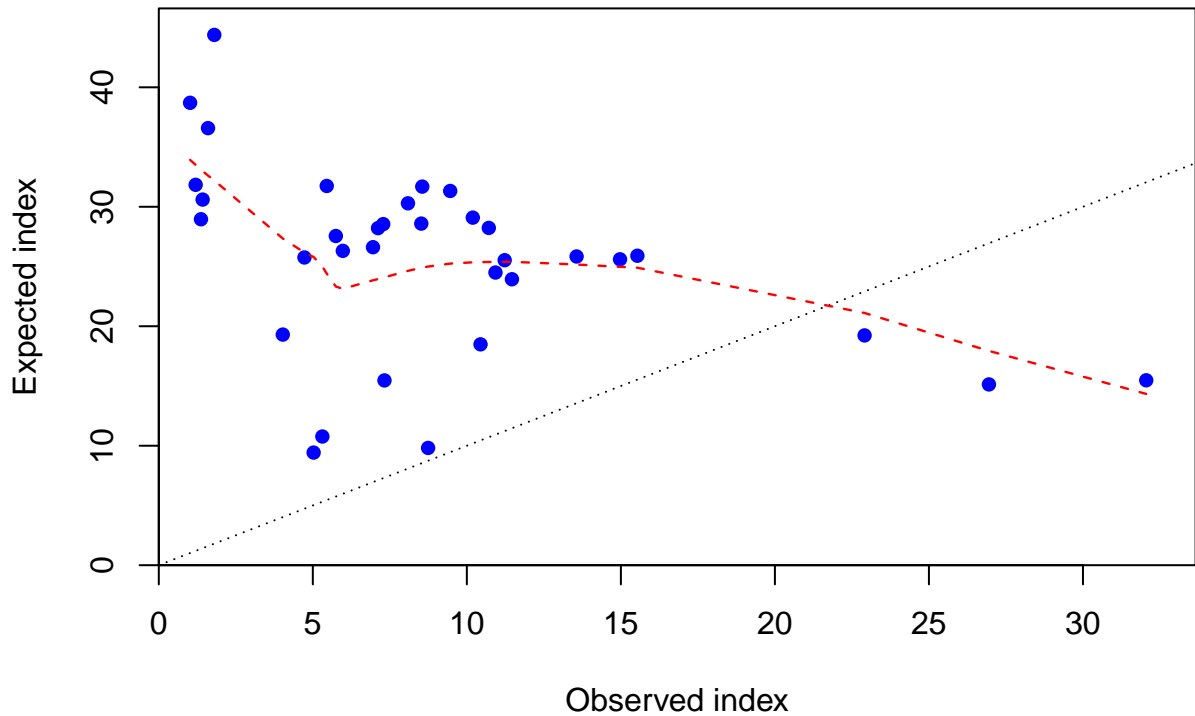
Relative spawning output: B/B_{MSY}

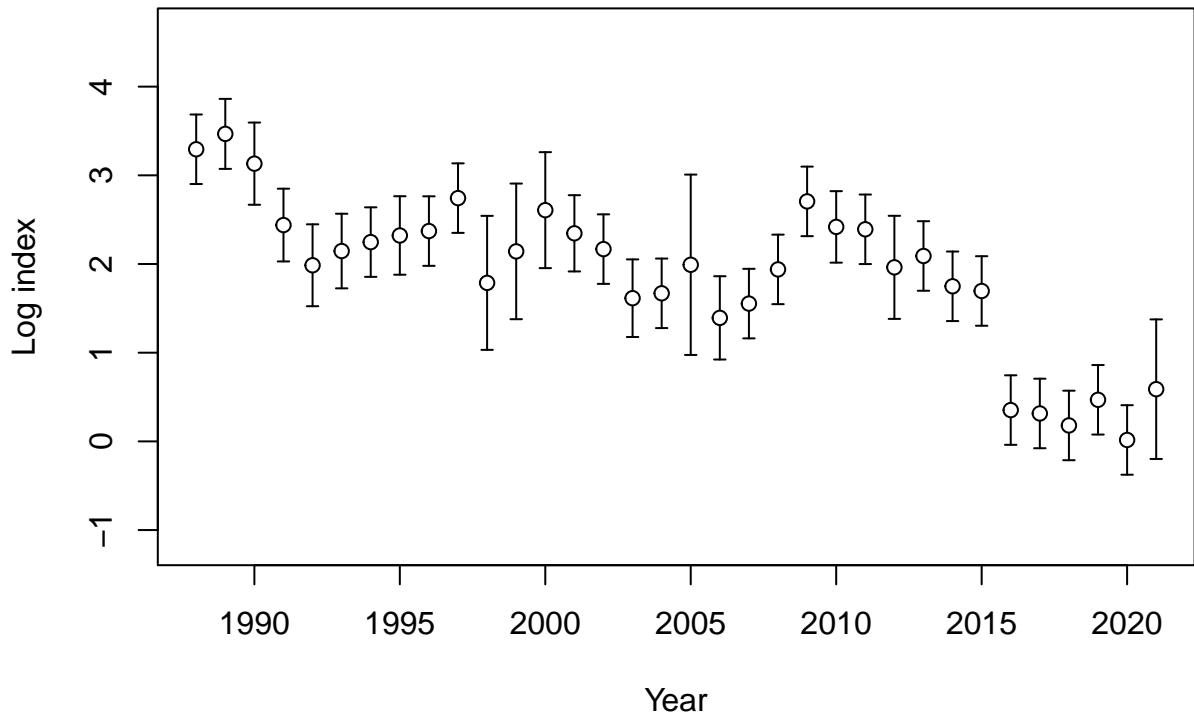
Index



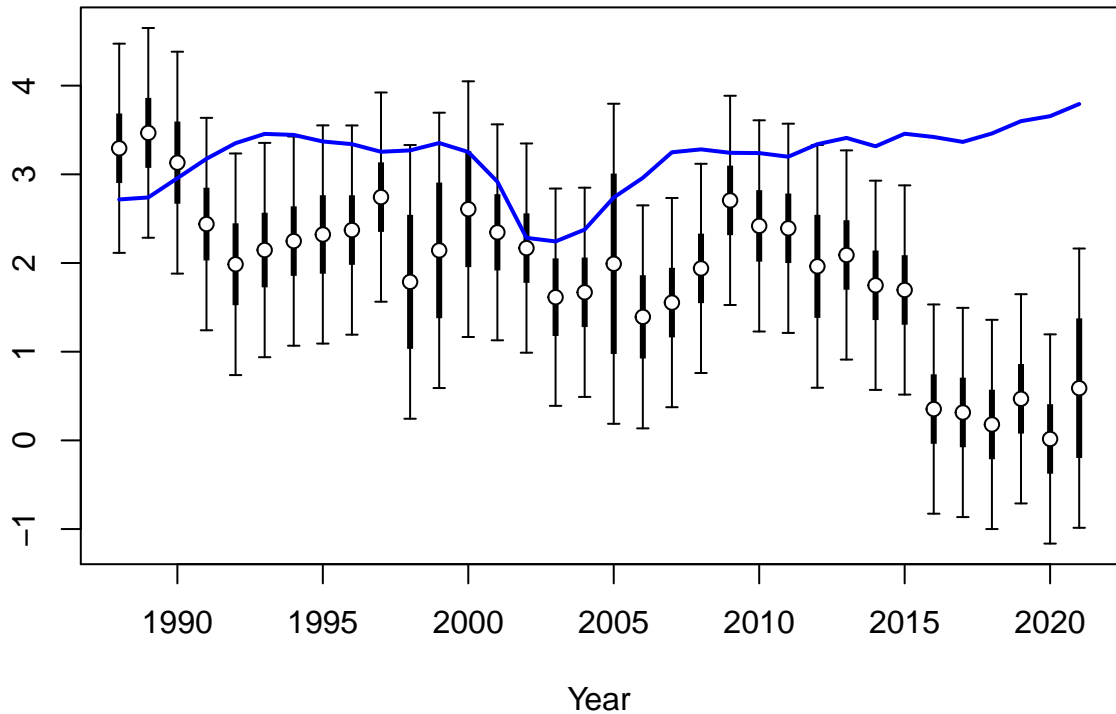
Index

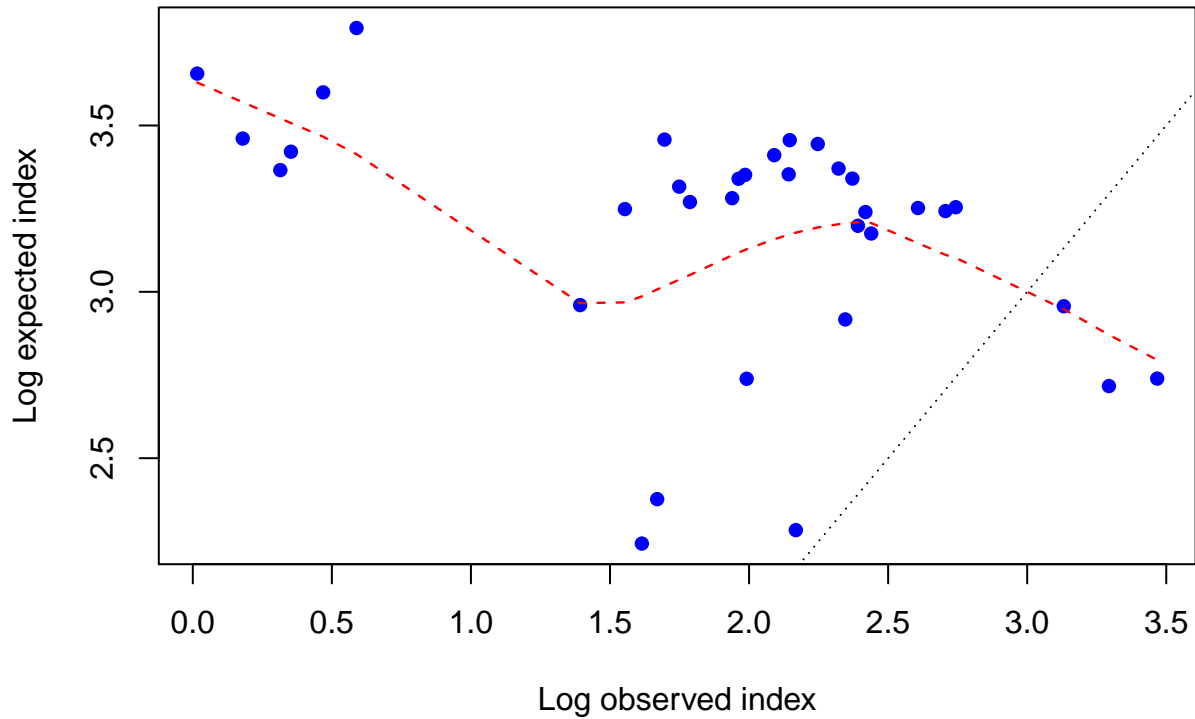


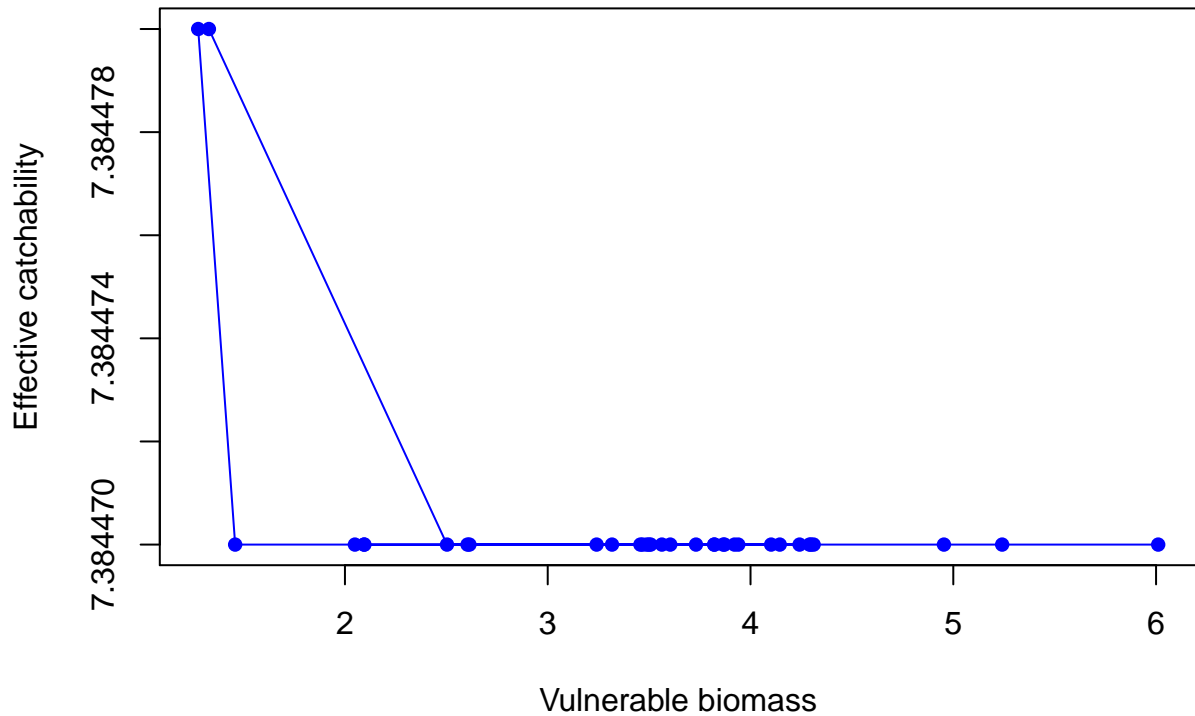


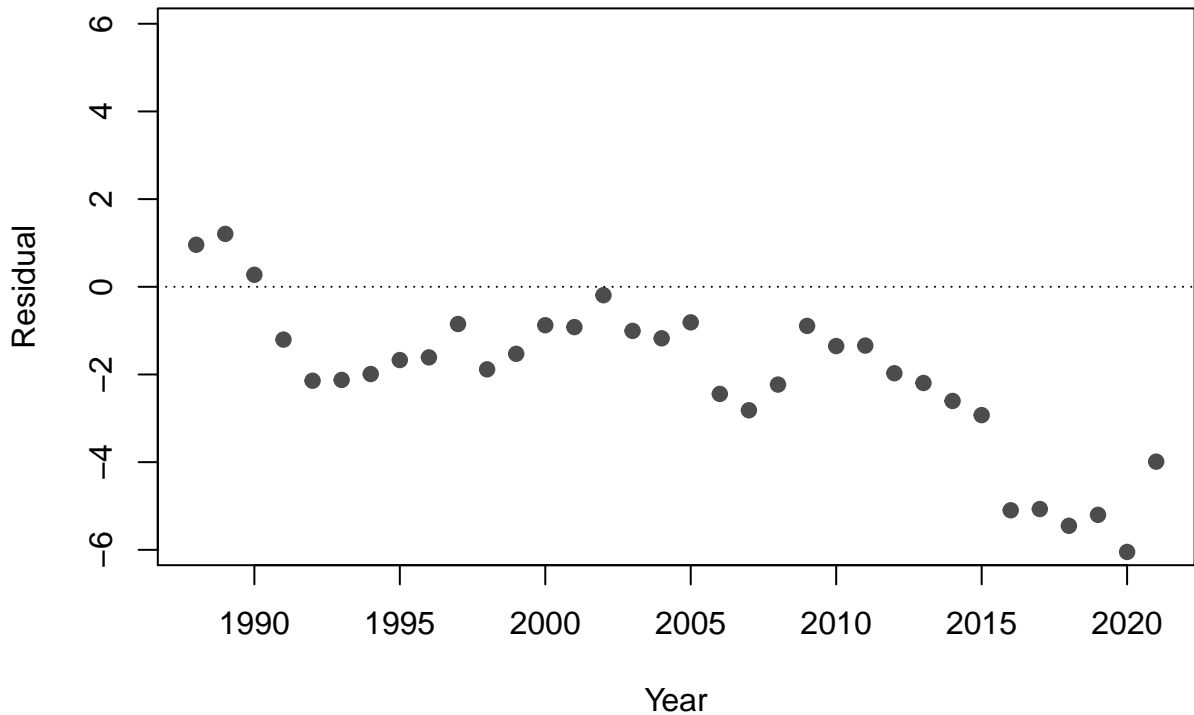


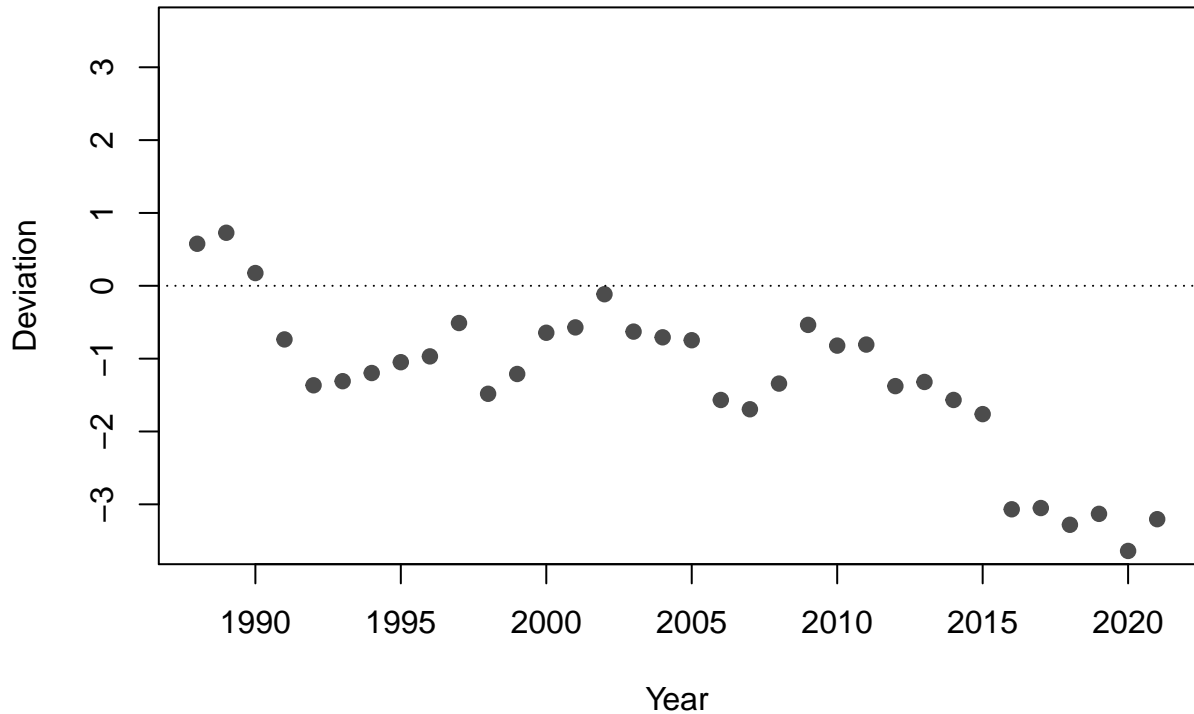
Log index

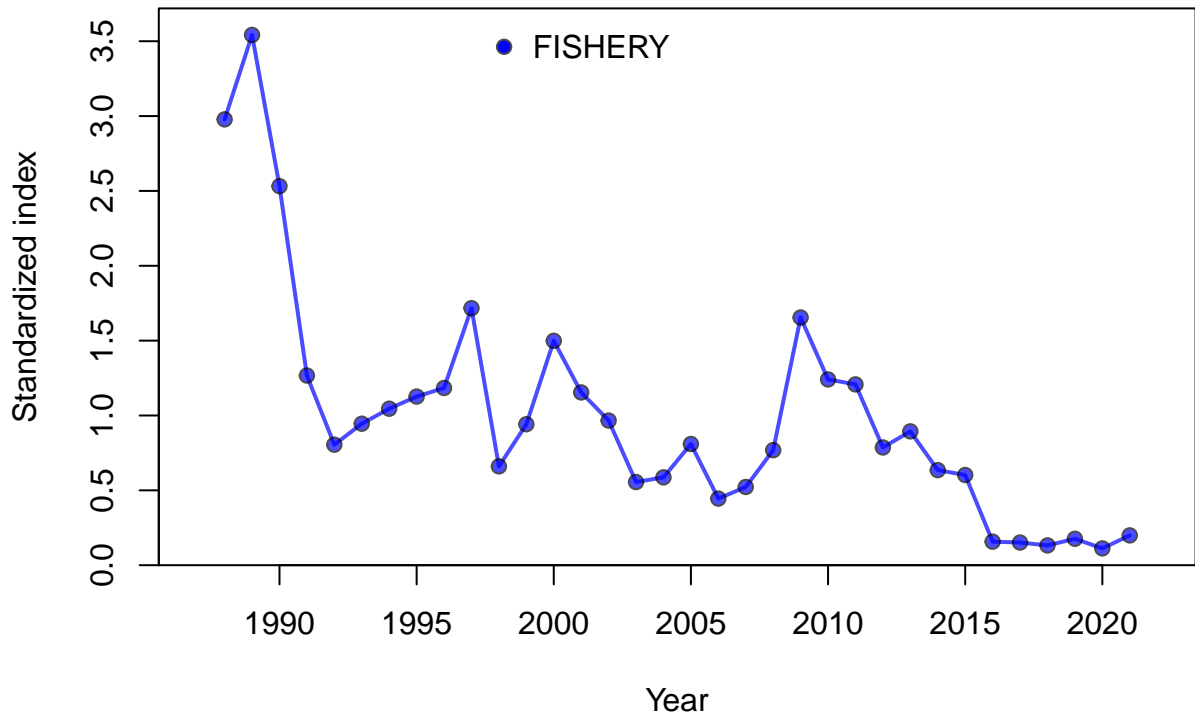




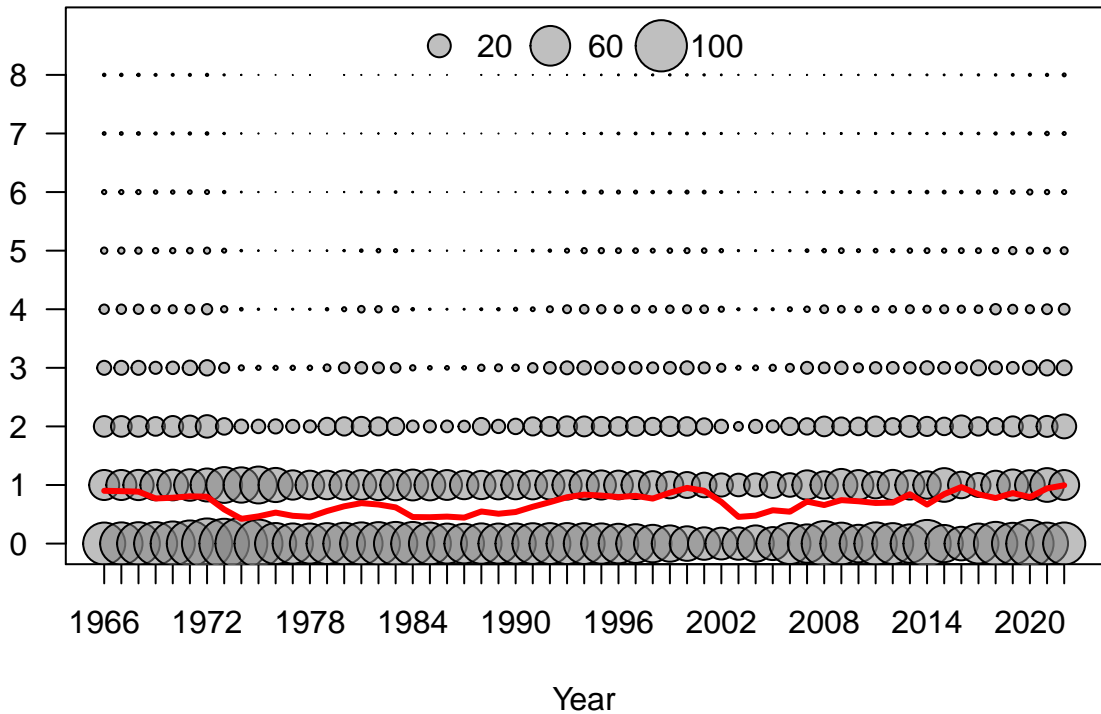




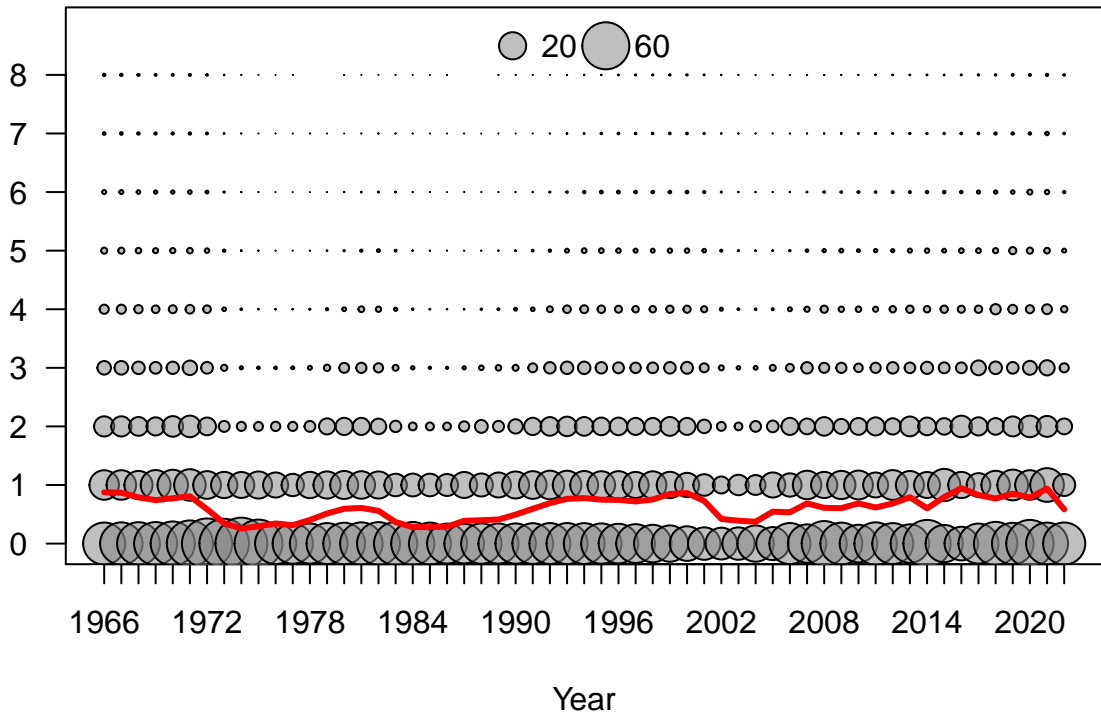


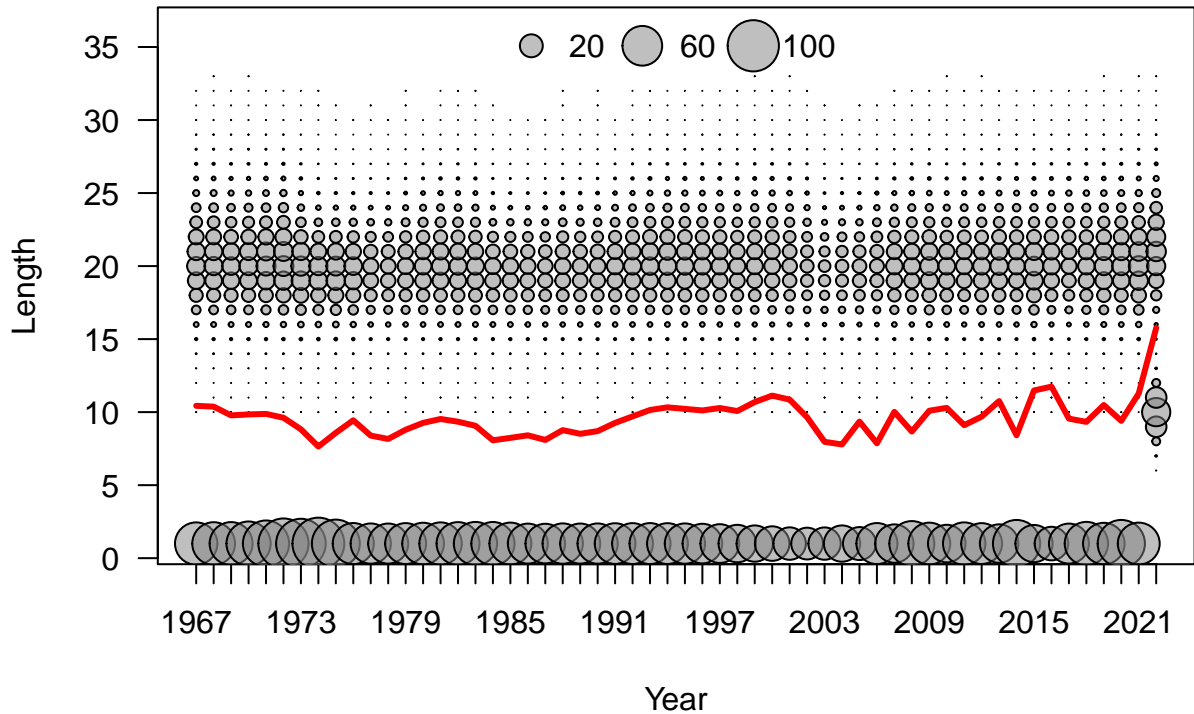


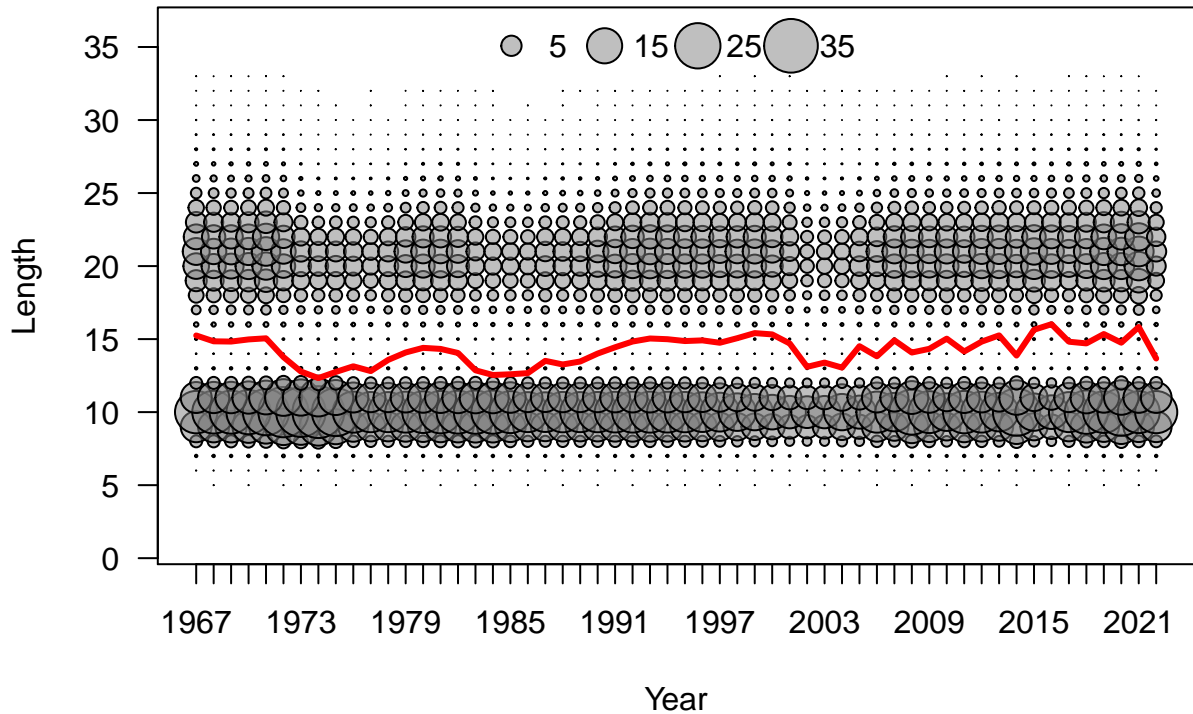
Age

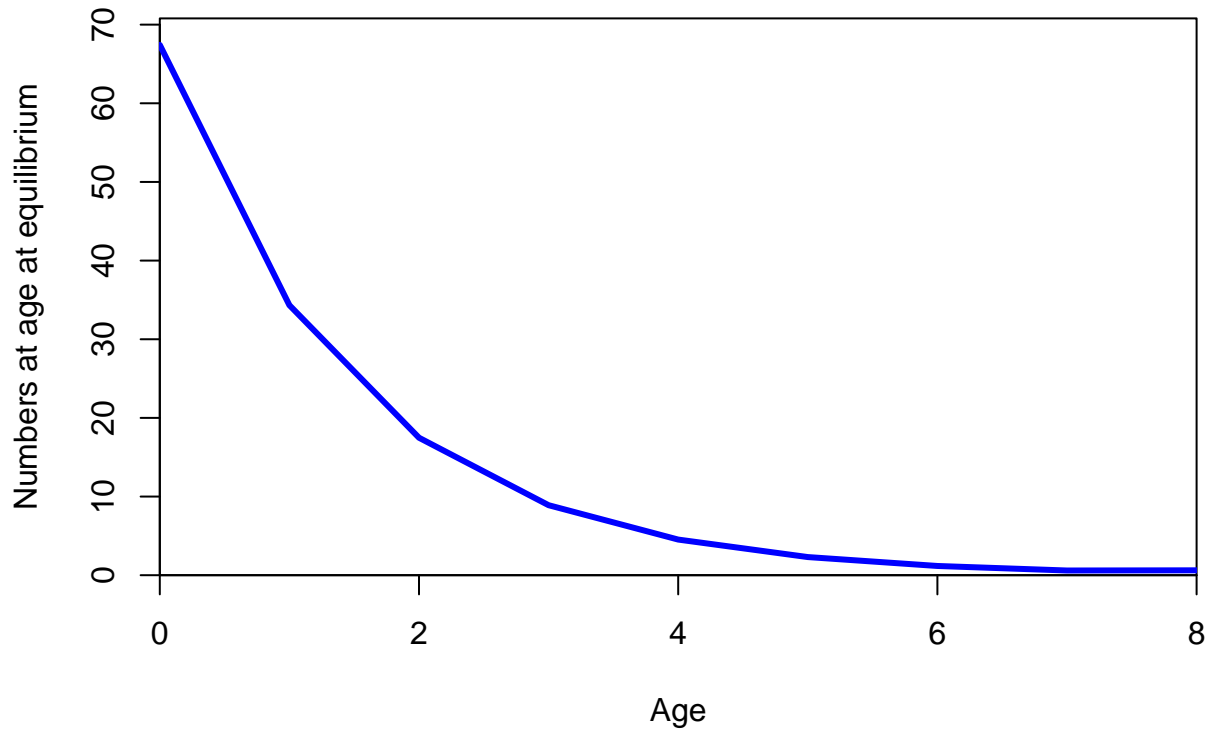


Age



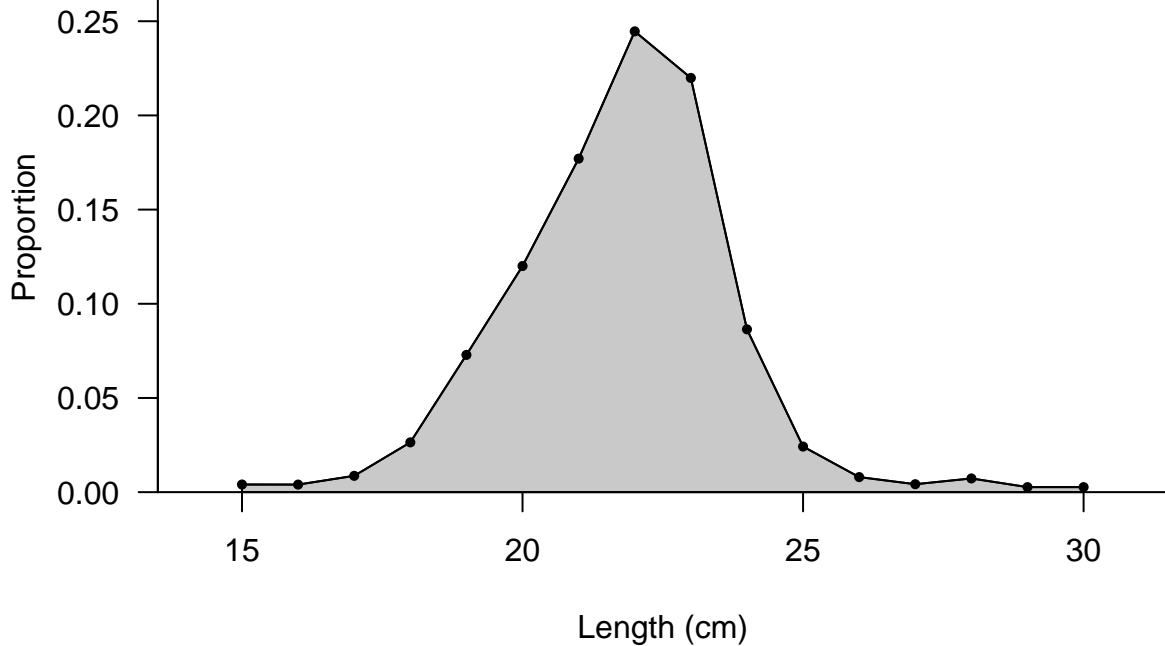


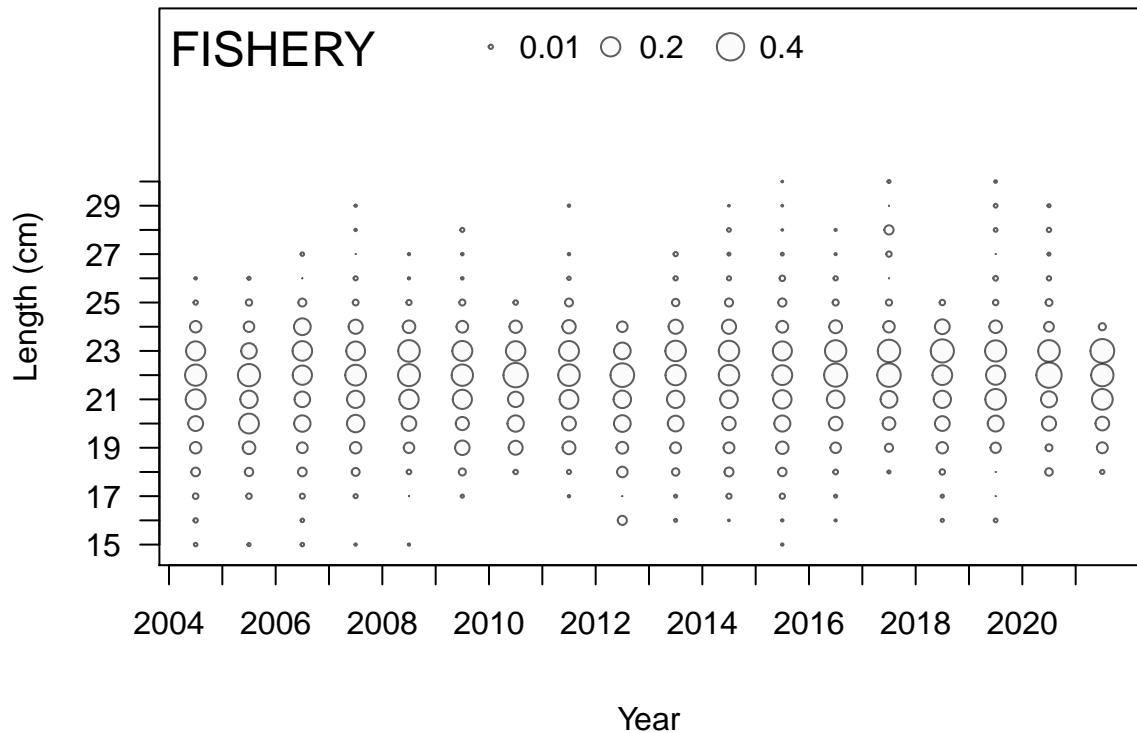


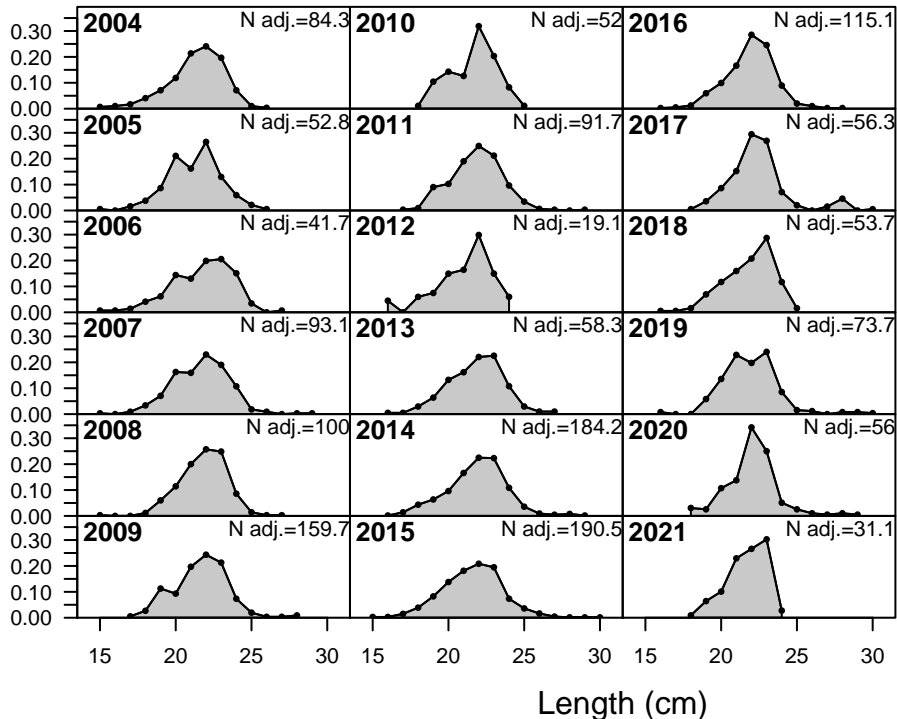


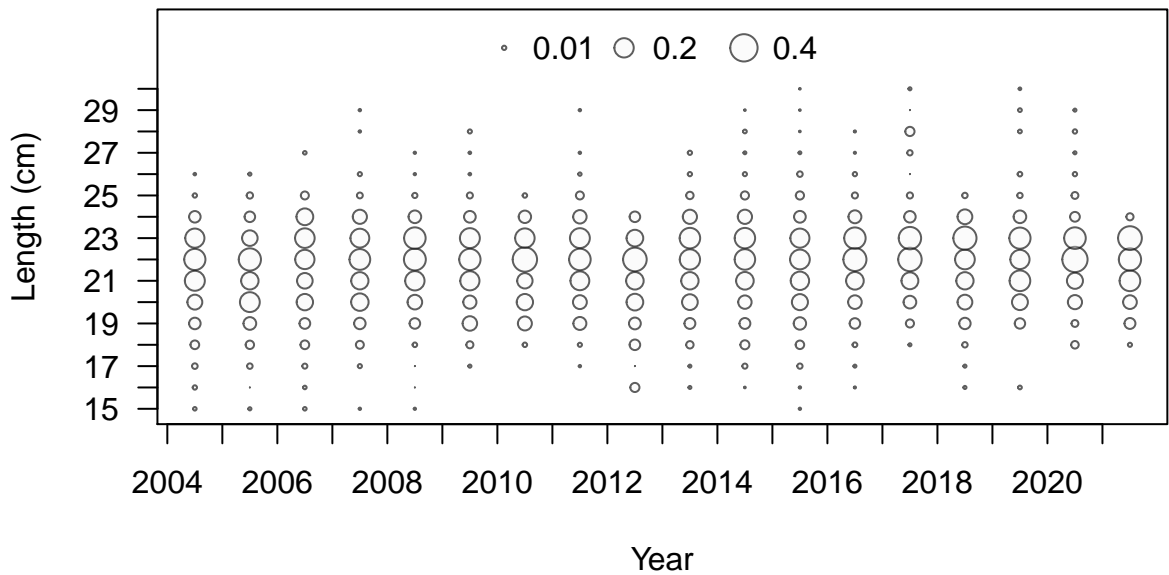
FISHERY

Sum of N adj.=1513.1

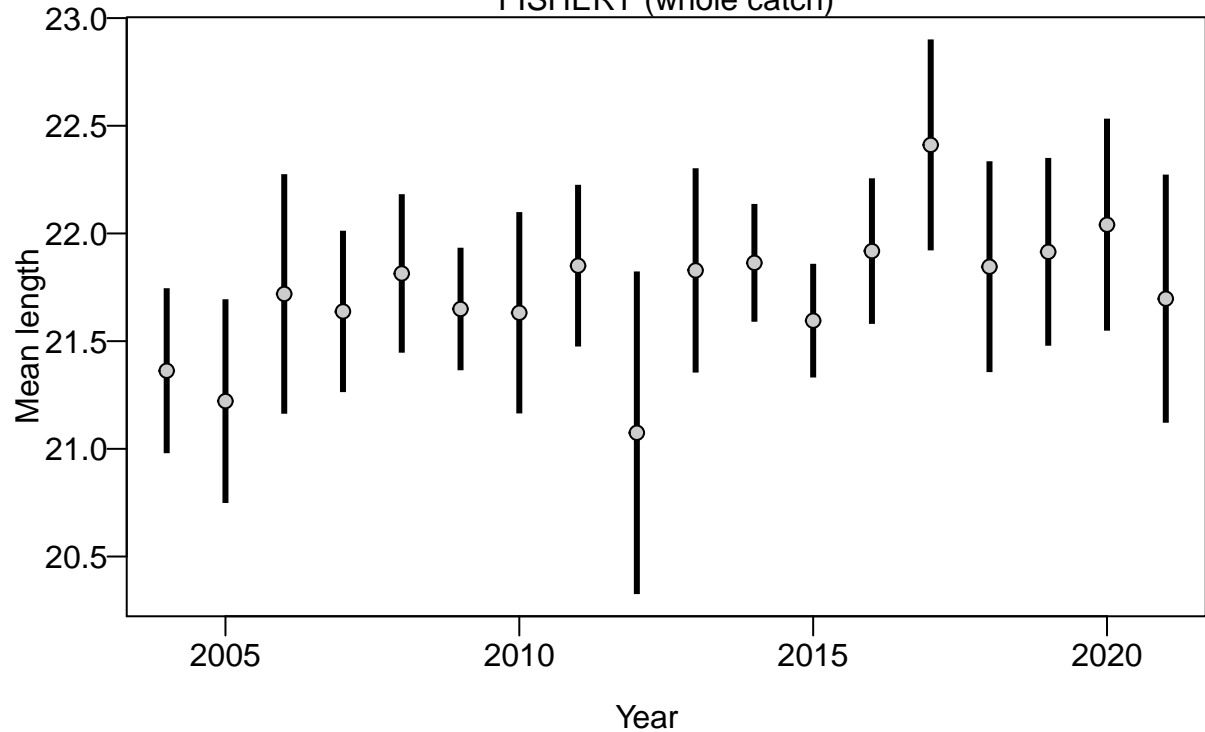






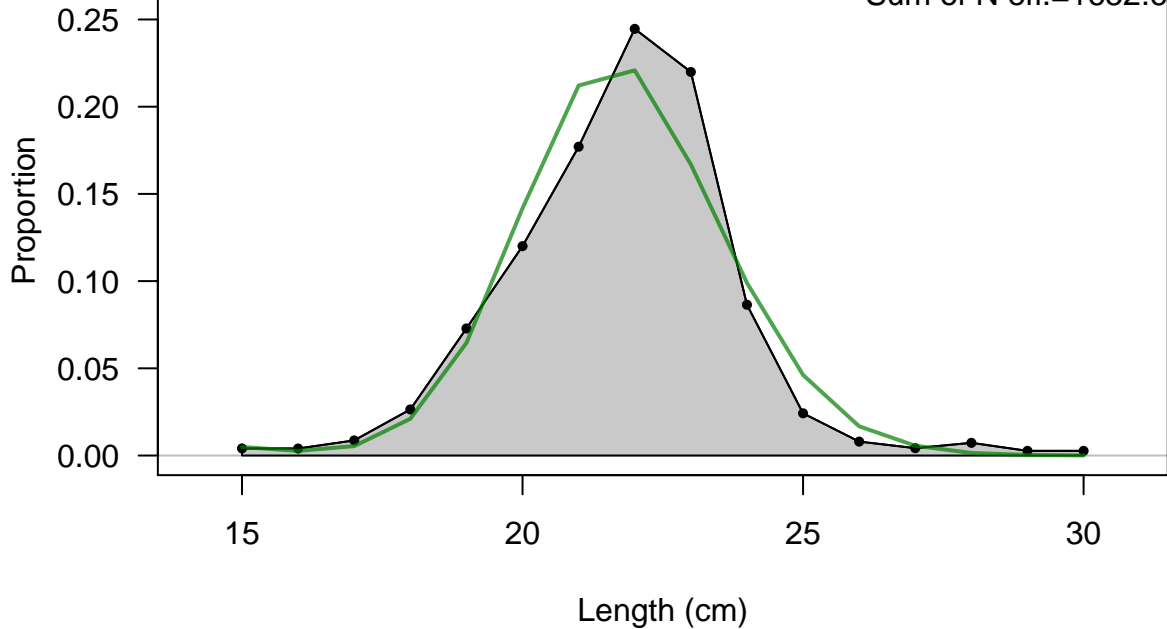


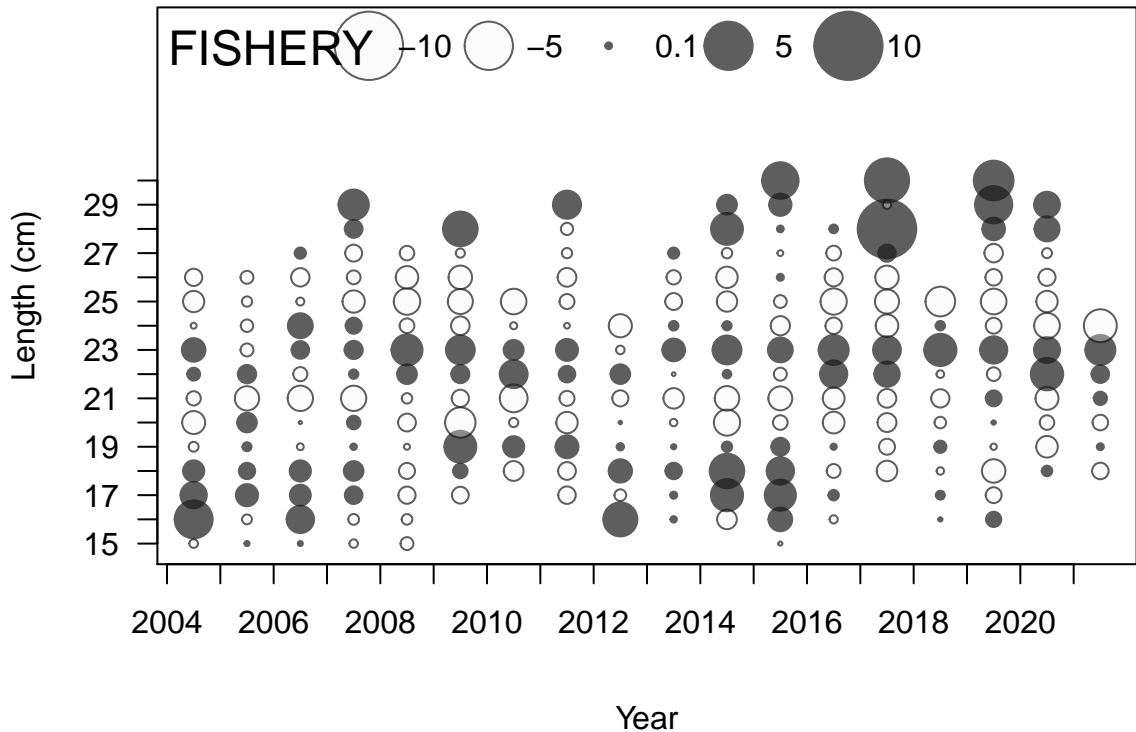
FISHERY (whole catch)

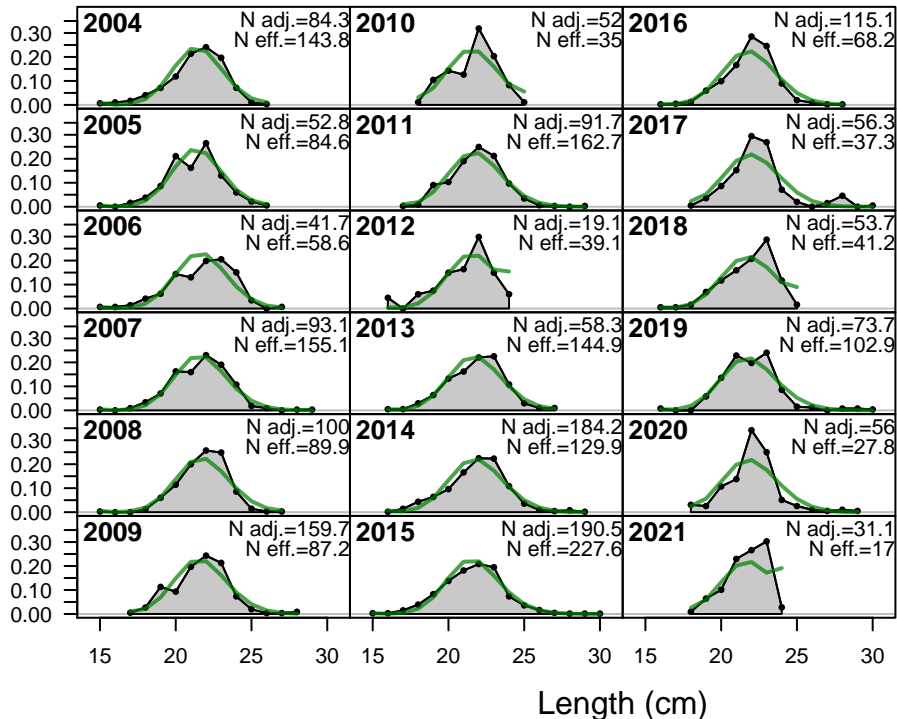


FISHERY

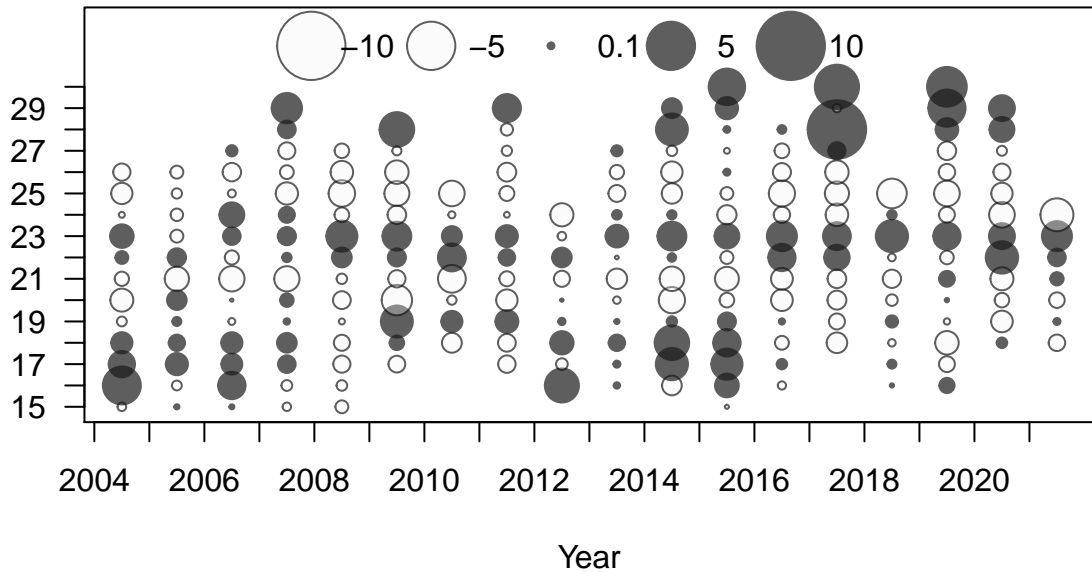
Sum of N adj.=1513.1
Sum of N eff.=1652.6



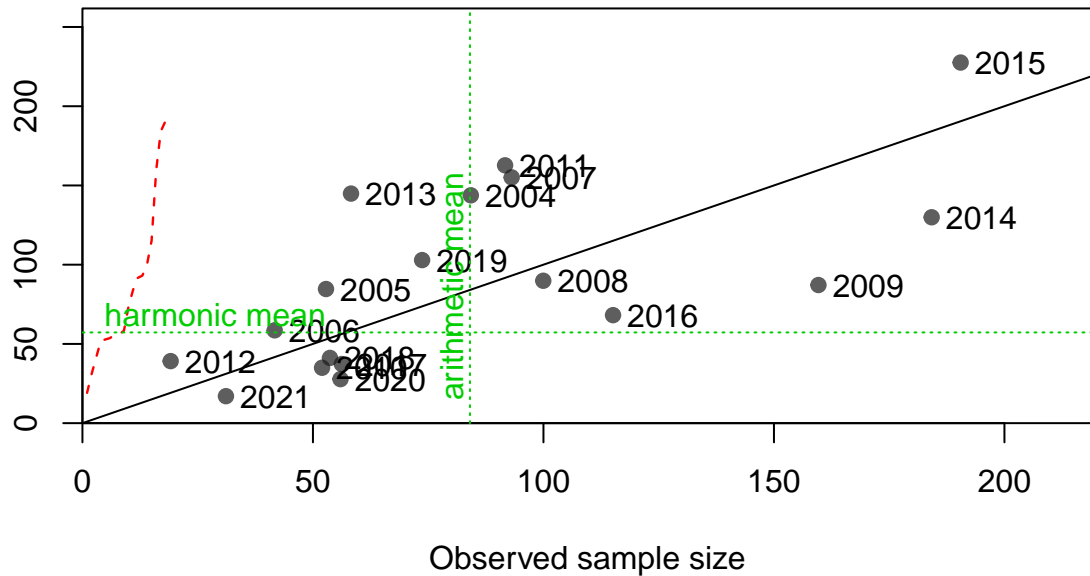




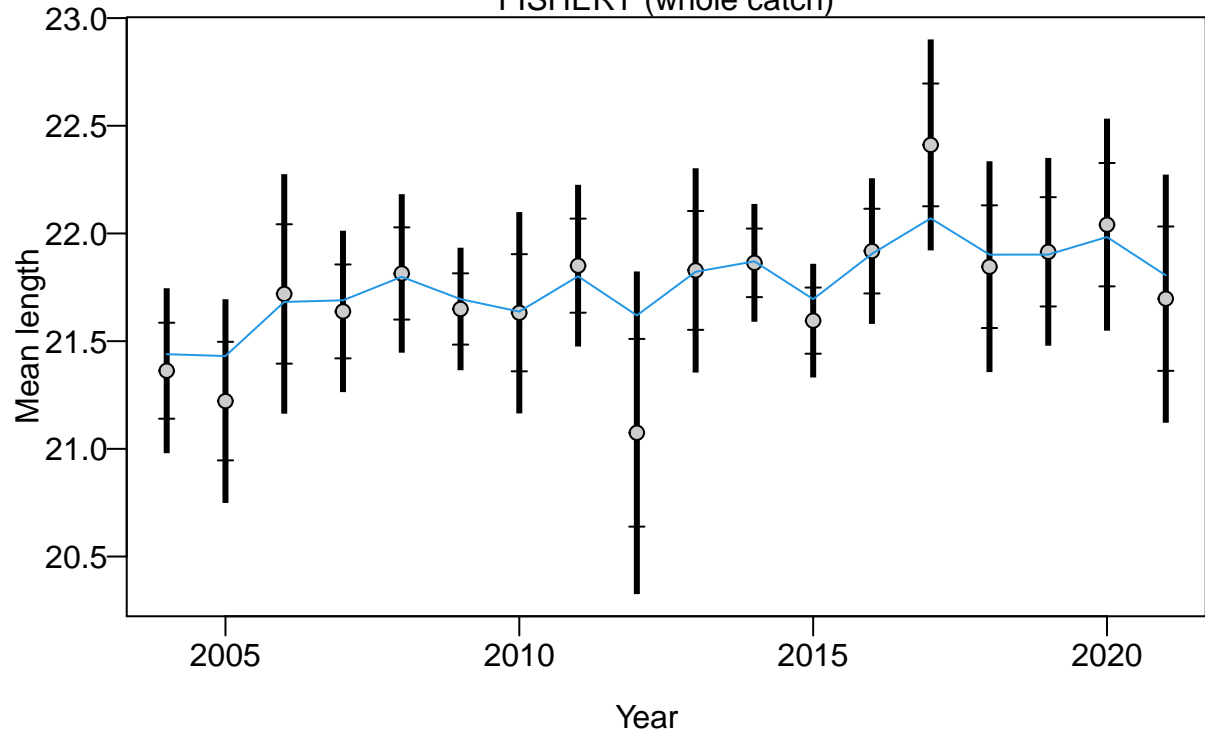
Length (cm)

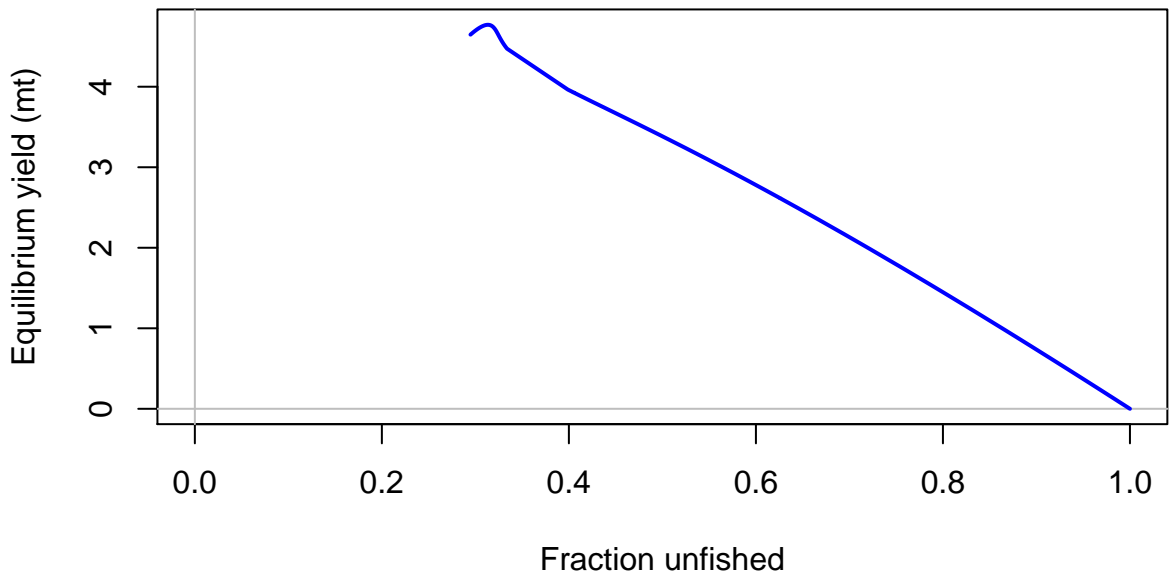


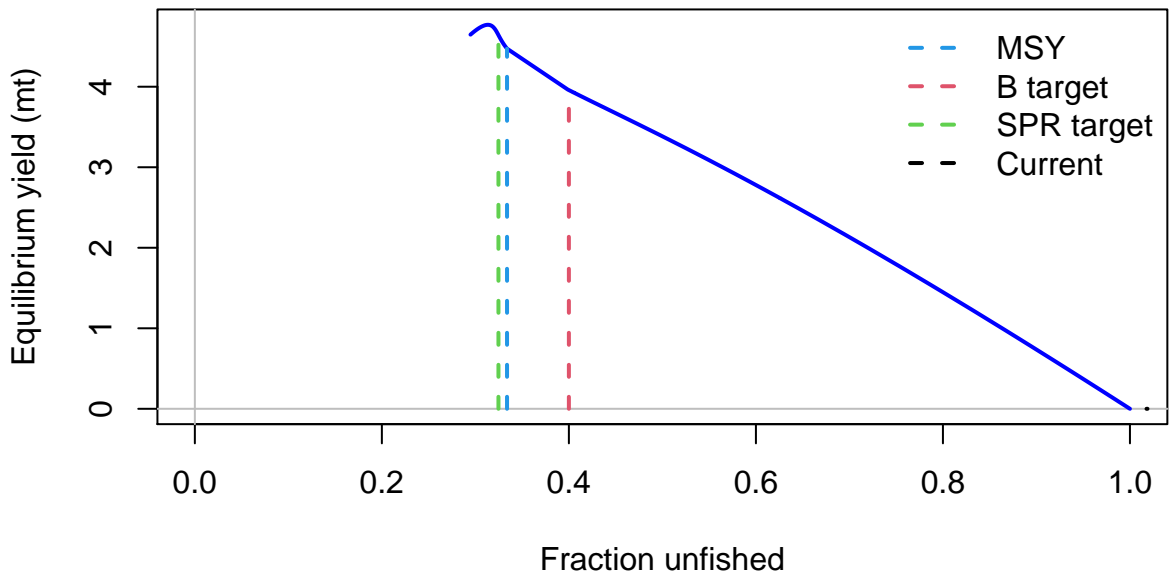
Effective sample size



FISHERY (whole catch)







Surplus production (mt)

6
5
4
3
2
1
0

0

2

4

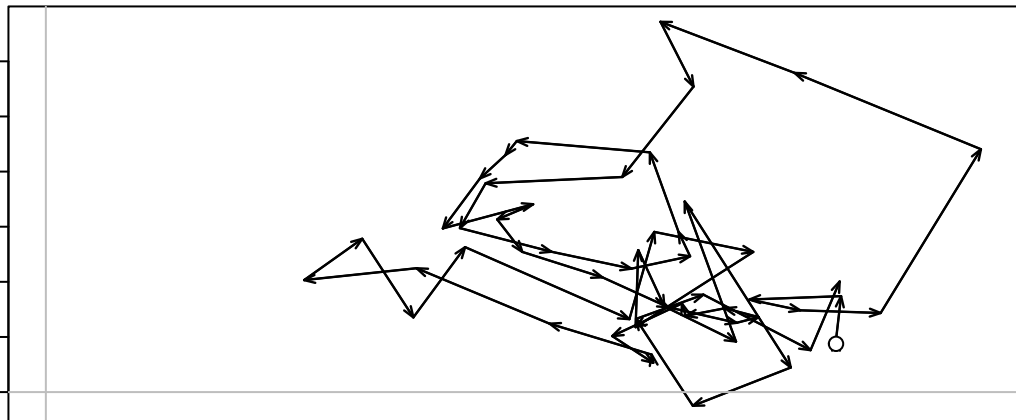
6

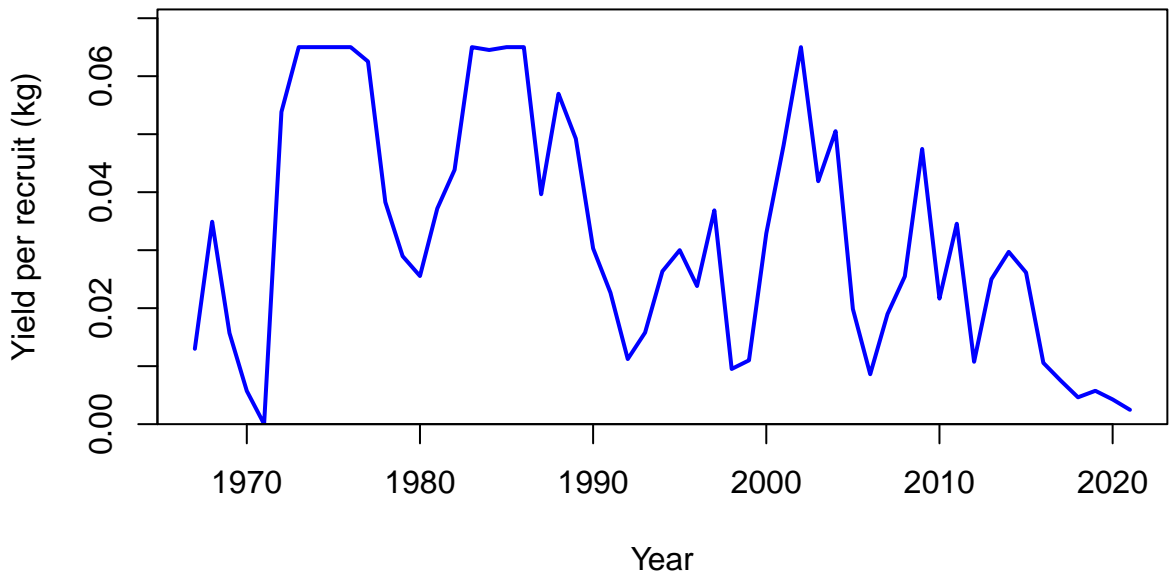
8

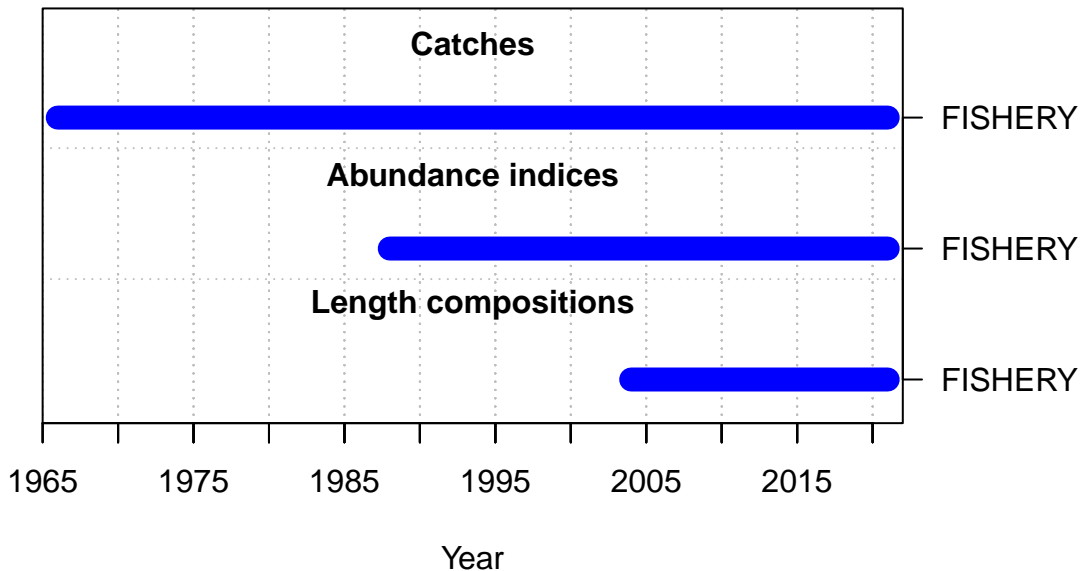
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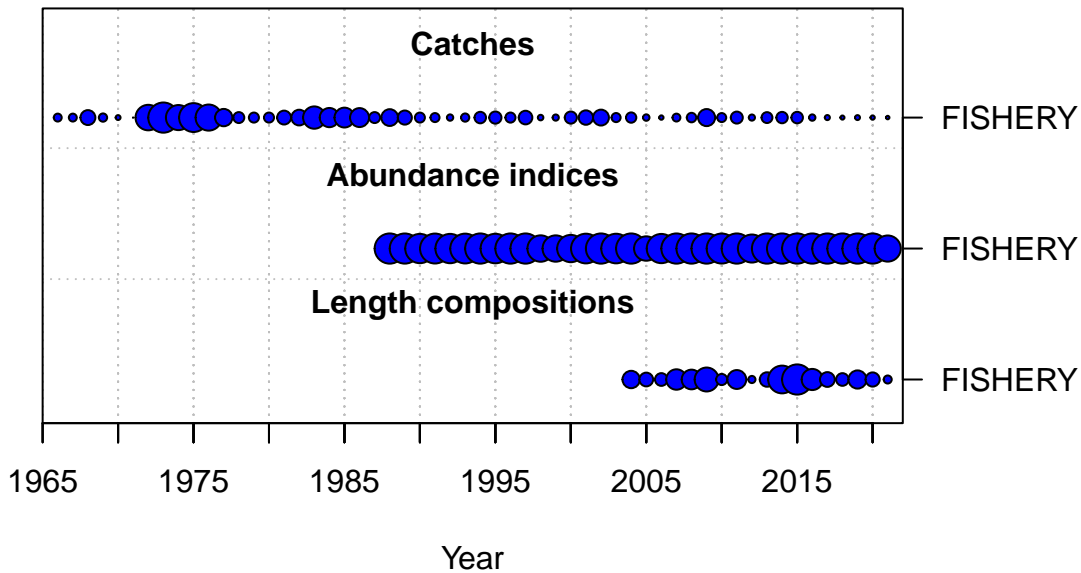
12

Total biomass (mt)

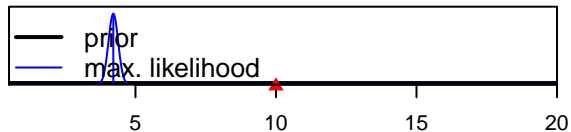




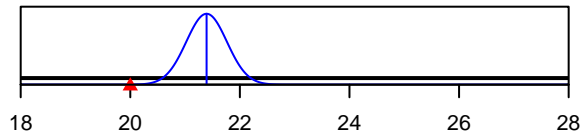




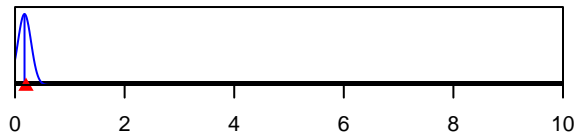
SR_LN(R0)



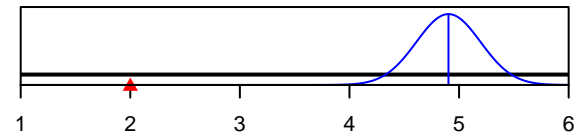
Size_inflection_FISHERY(1)



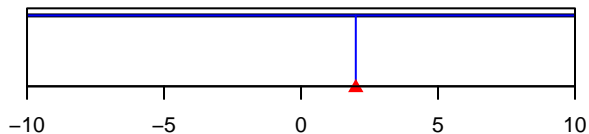
InitF_seas_1_flt_1FISHERY



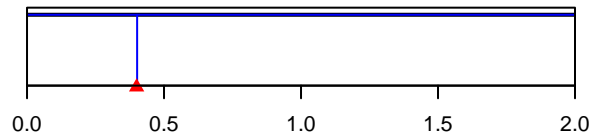
Size_95%width_FISHERY(1)



LnQ_base_FISHERY(1)



Q_extraSD_FISHERY(1)



Parameter value