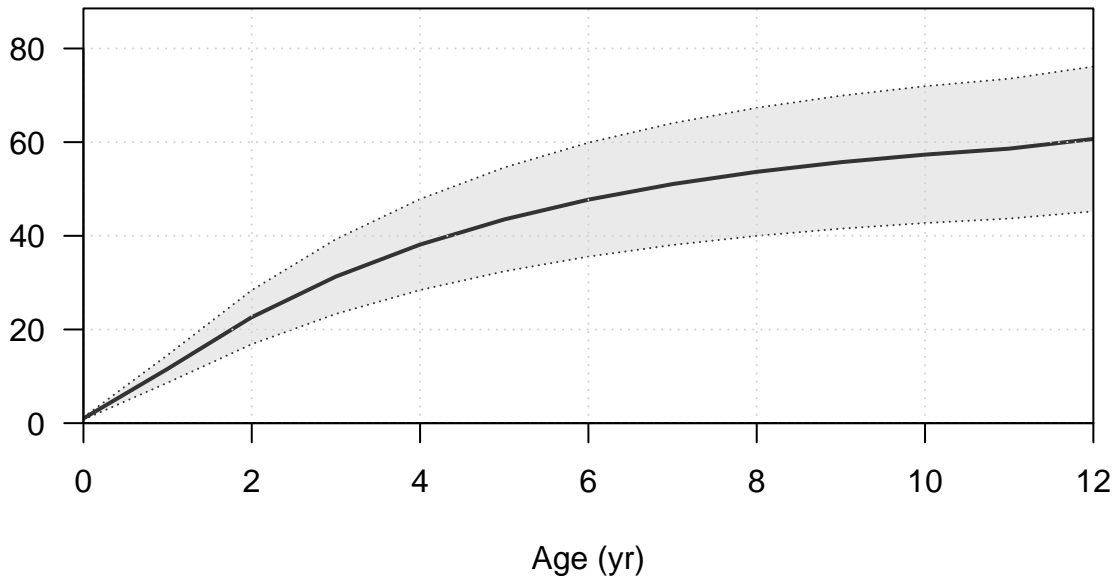
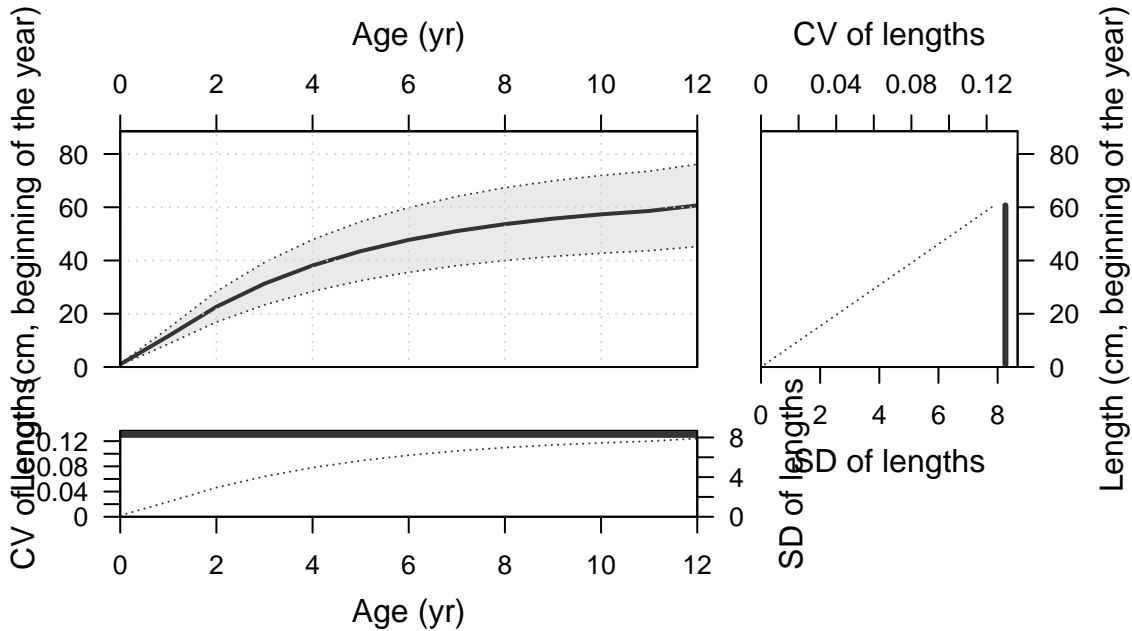
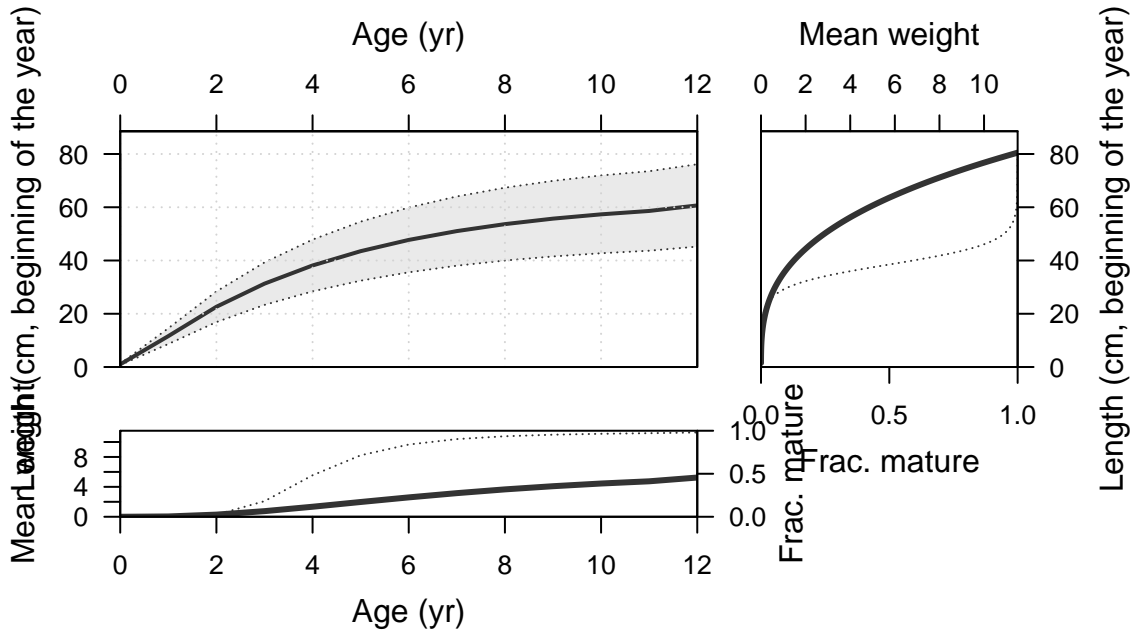


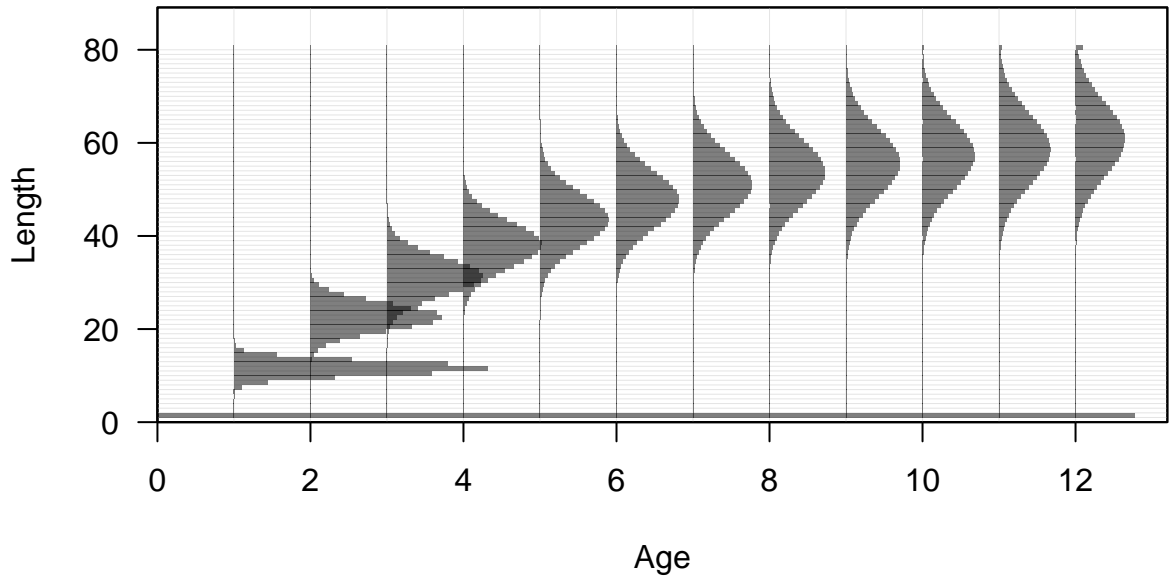
Plots created using the 'r4ss' package in R
Stock Synthesis version: 3.30.19.0
StartTime: Tue Jul 12 09:21:37 2022
Data_File: data.ss
Control_File: control.ss

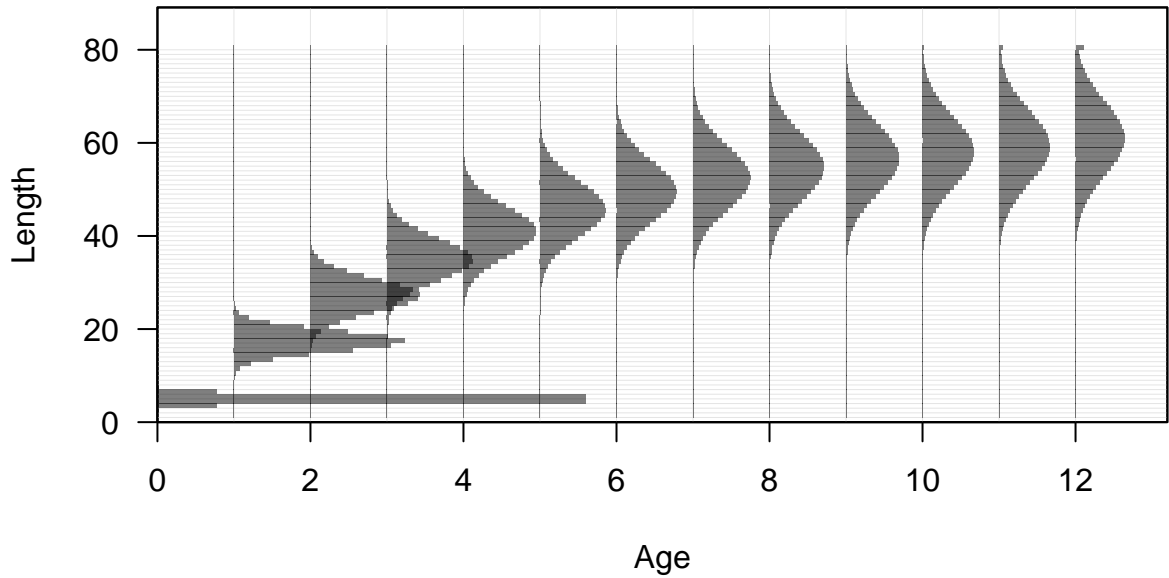
Length (cm, beginning of the year)

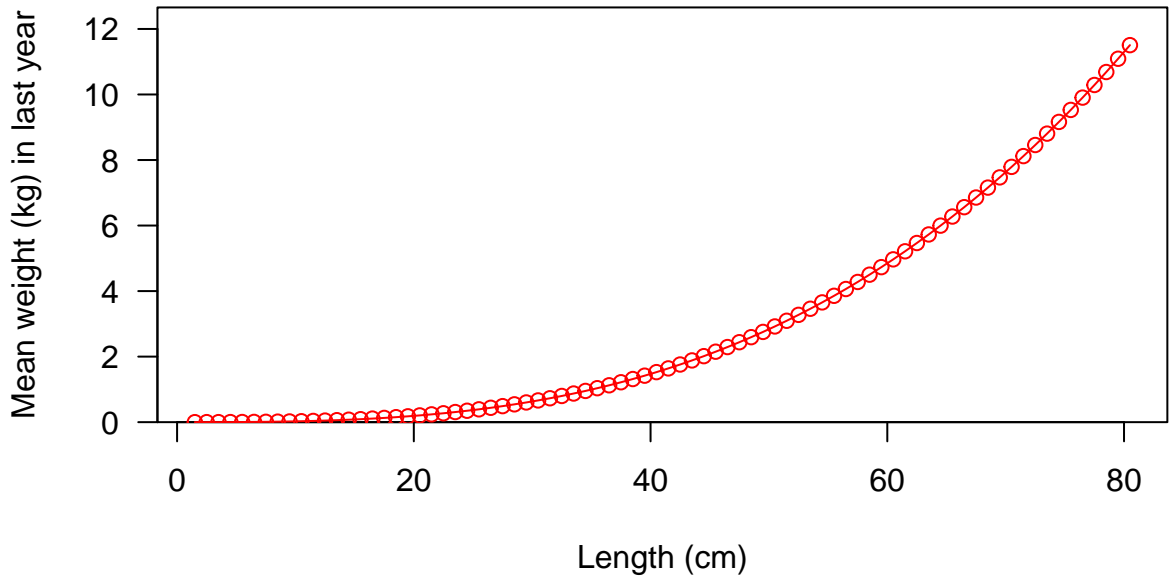


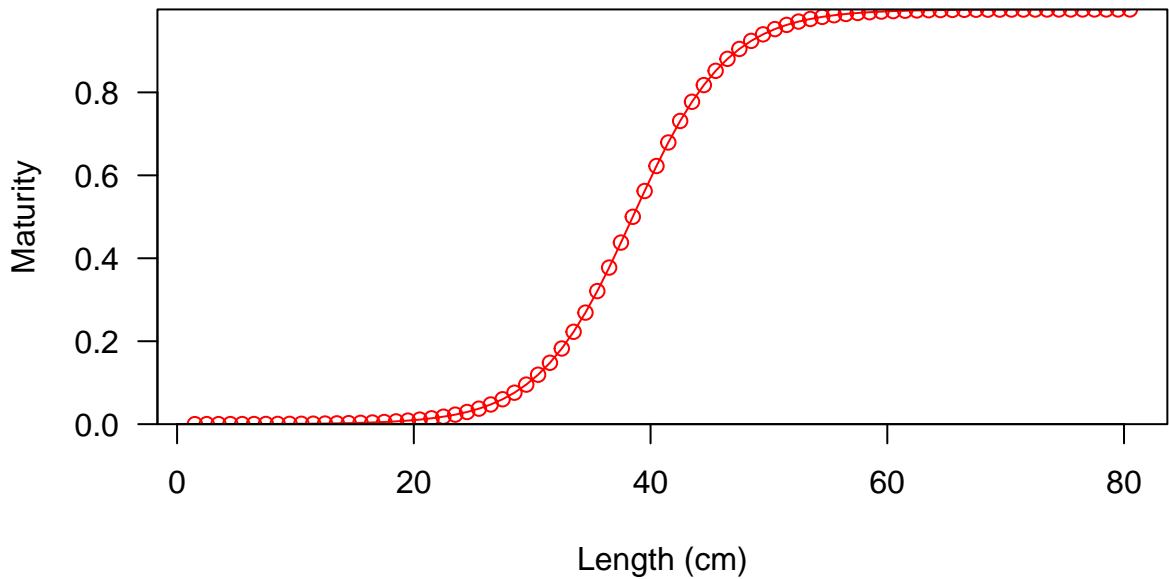


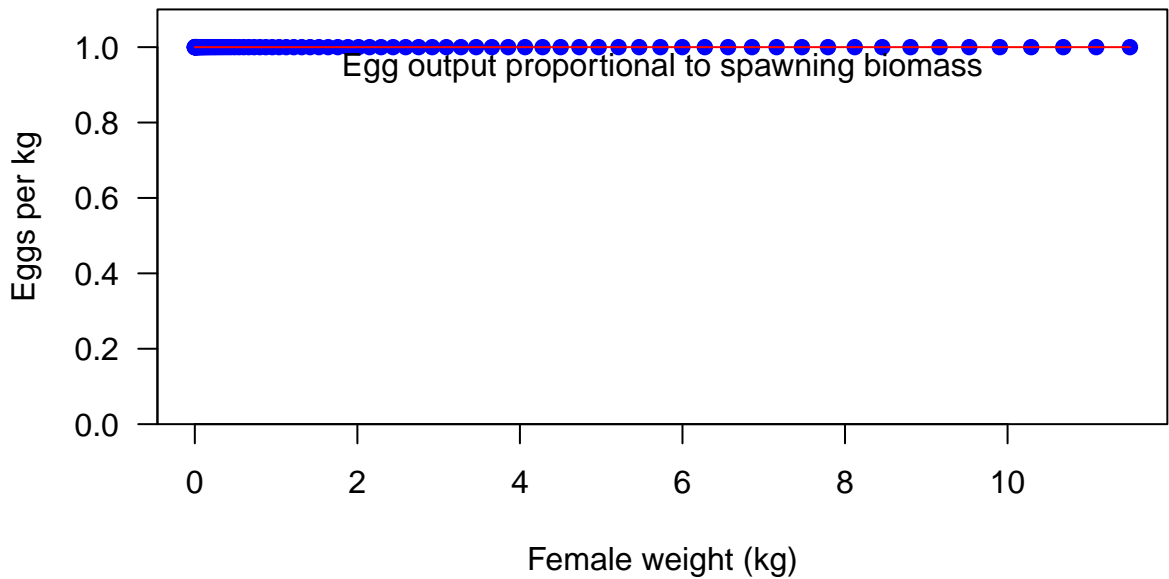




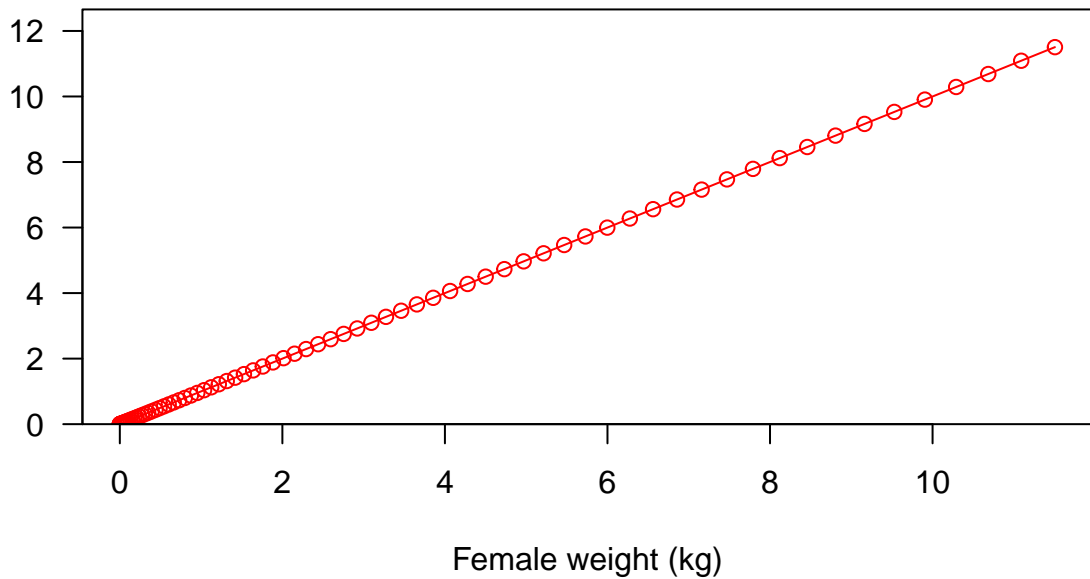




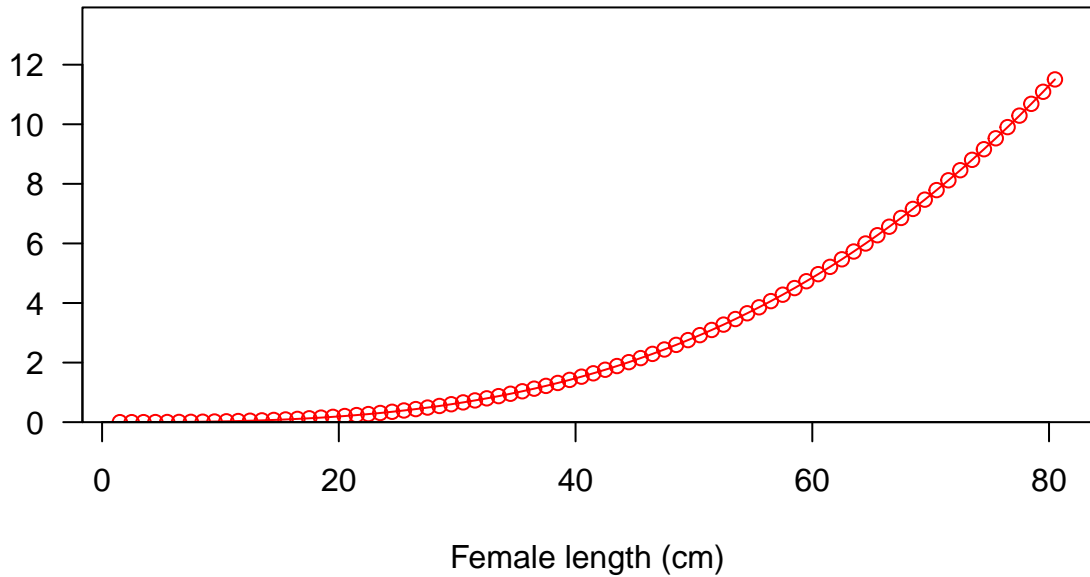


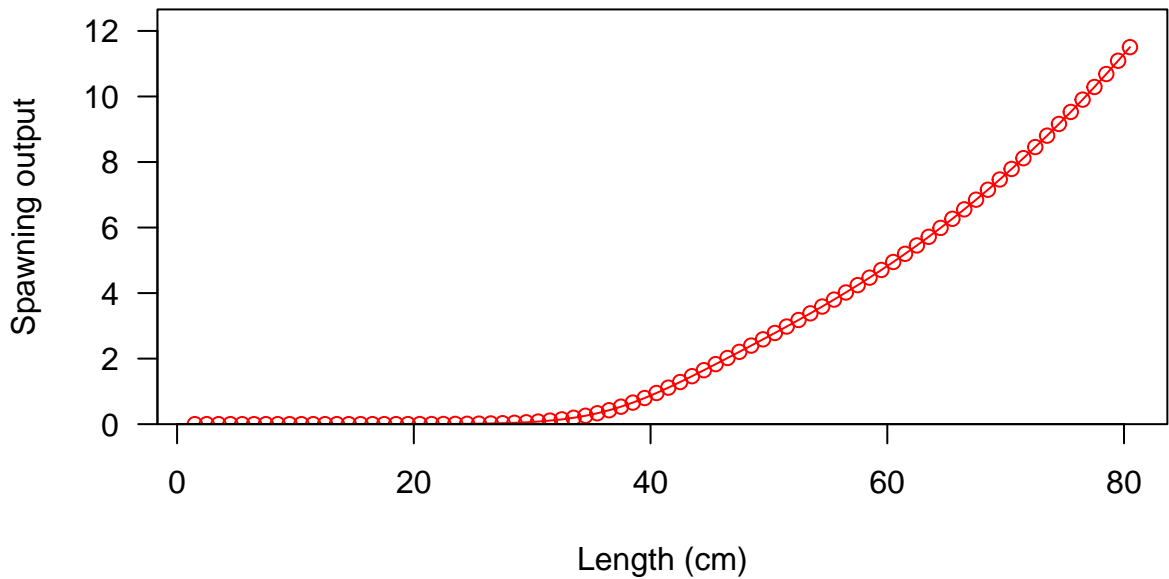


Fecundity

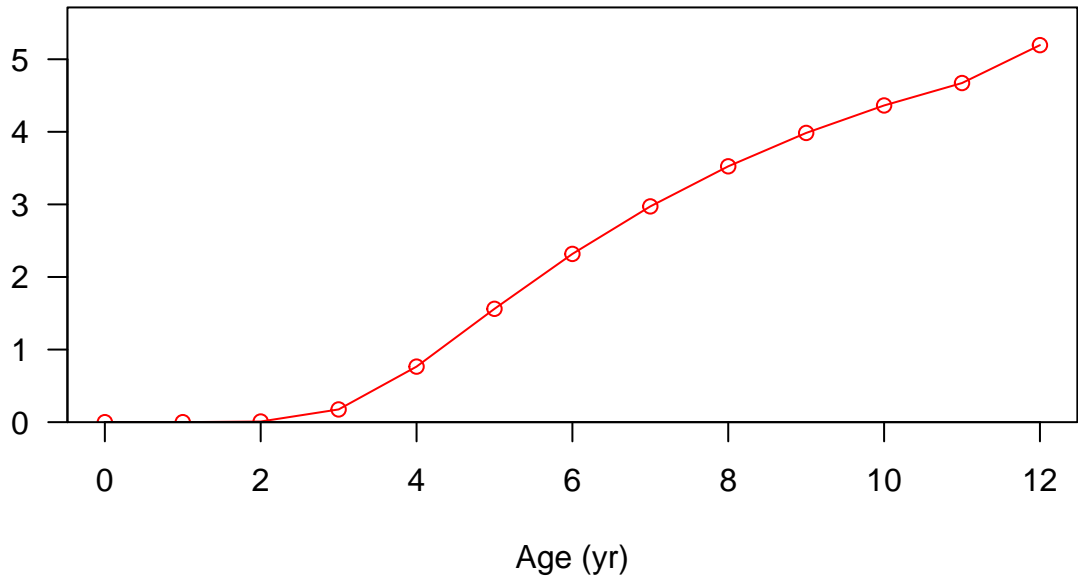


Fecundity

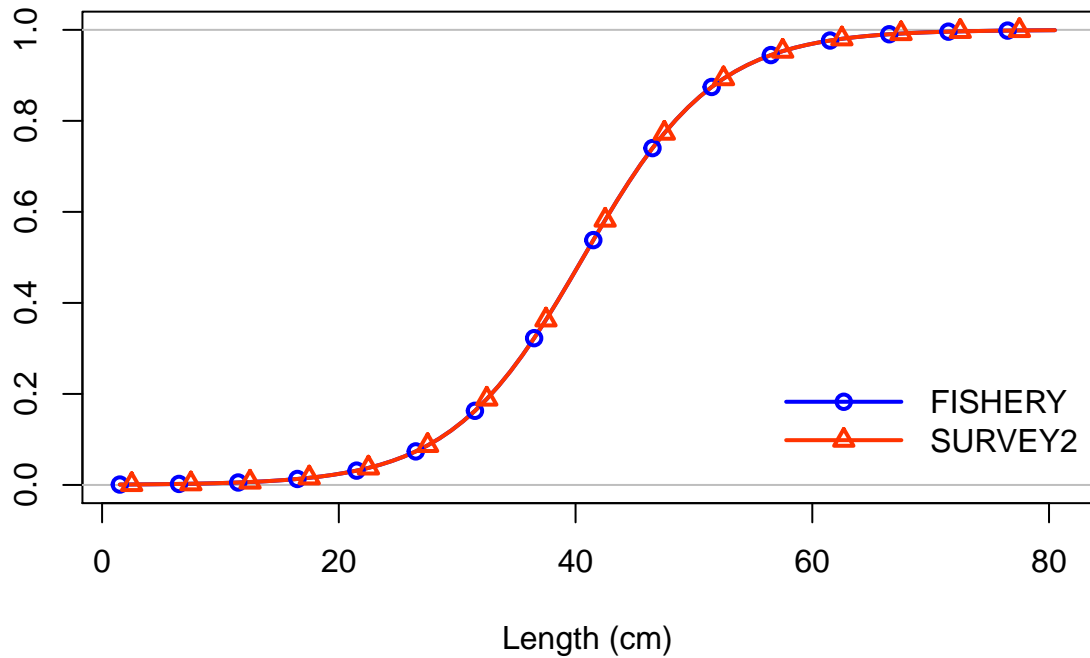




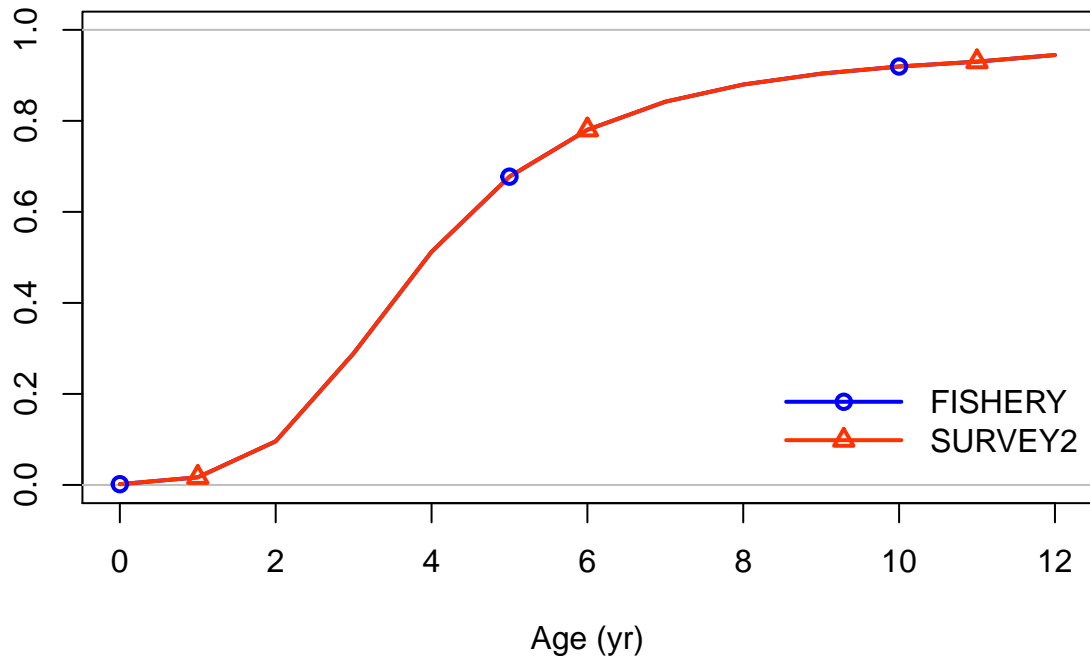
Spawning output



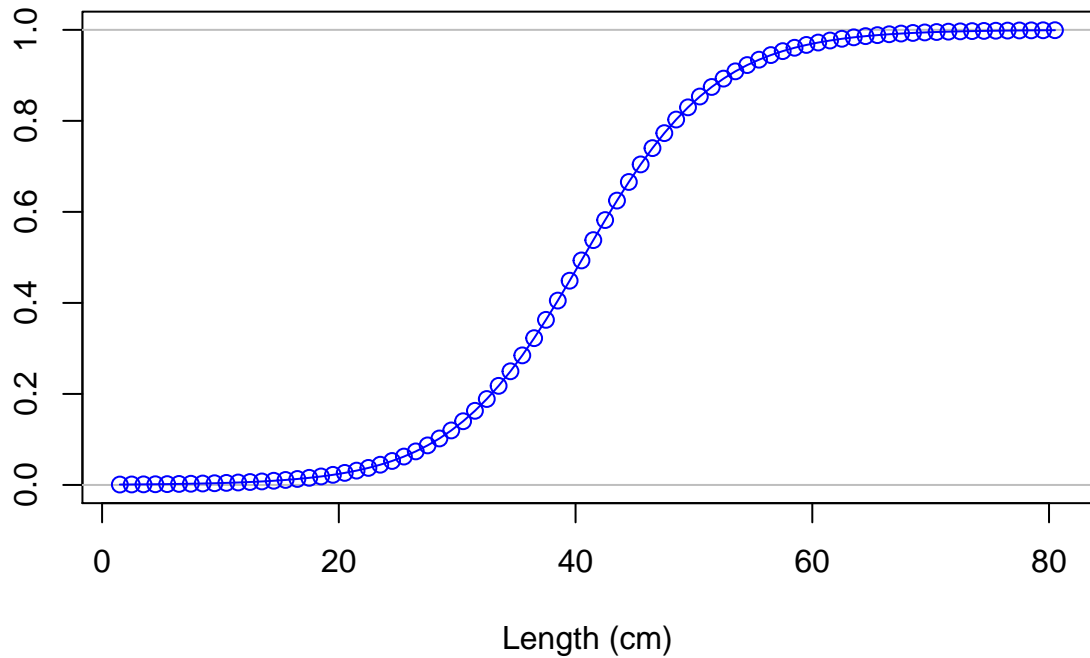
Selectivity



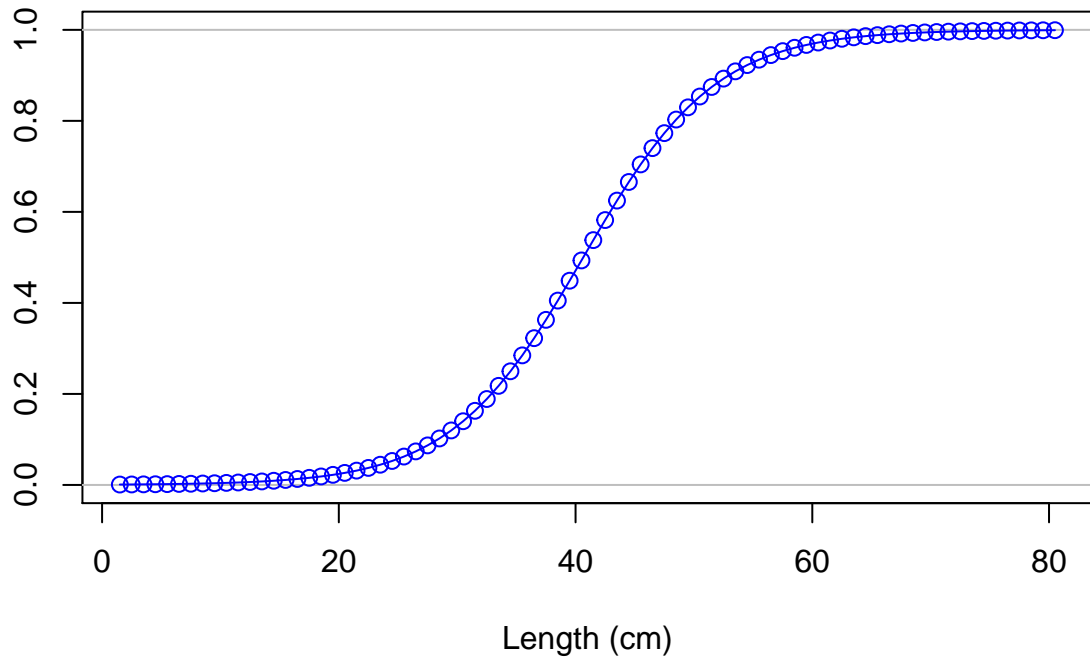
Selectivity

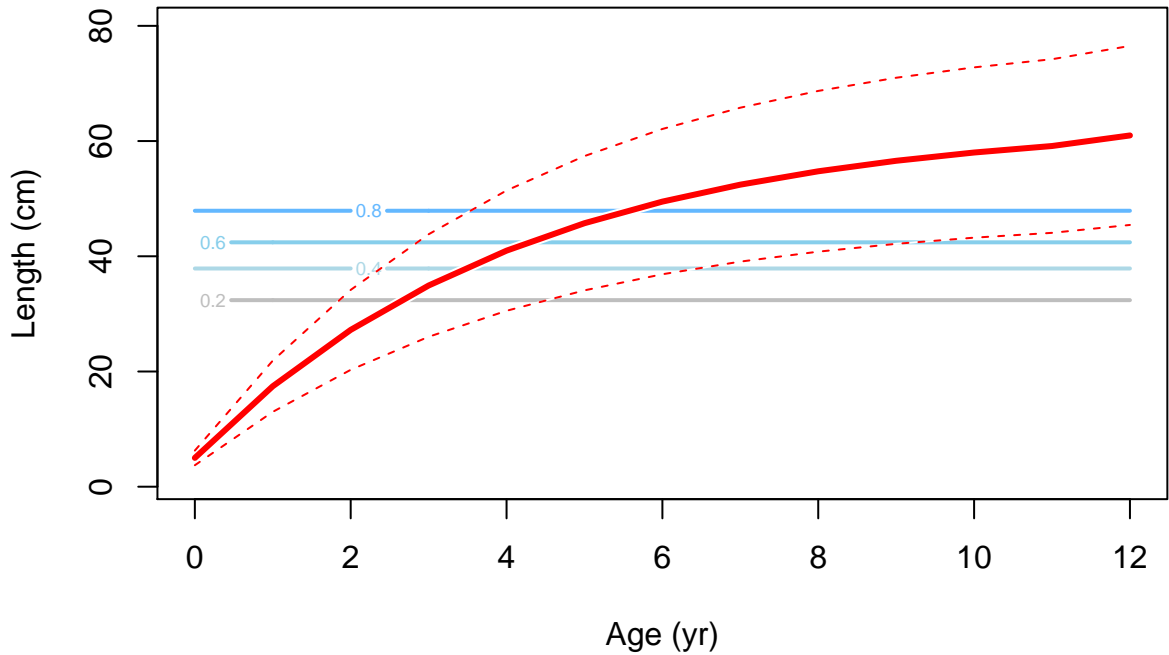


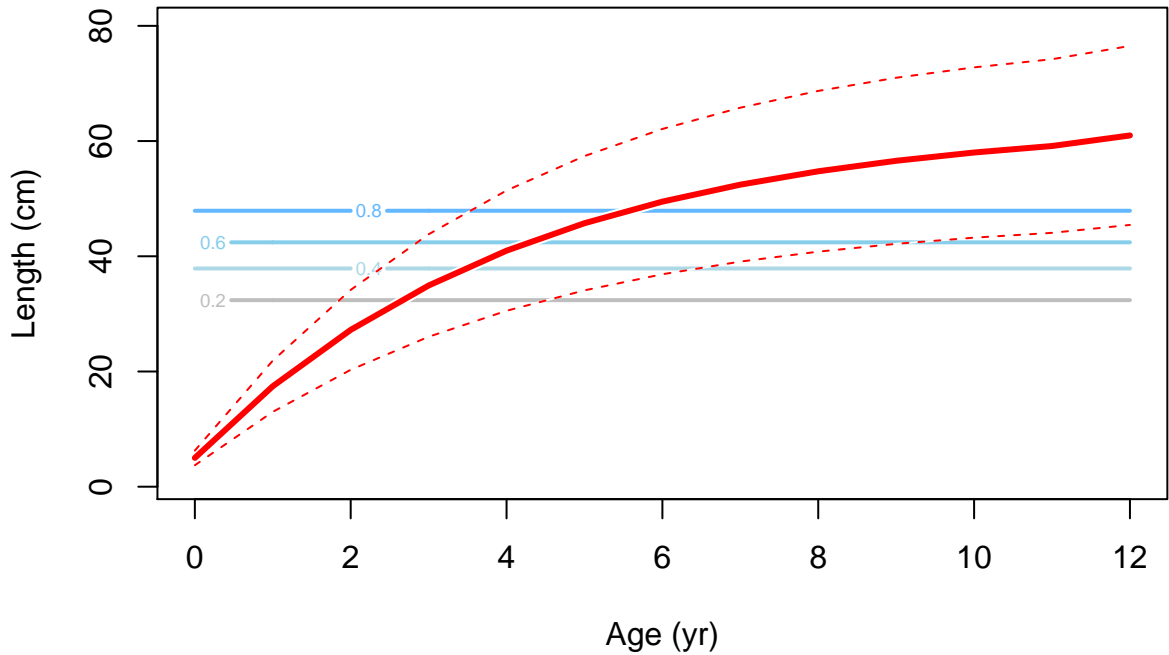
Selectivity

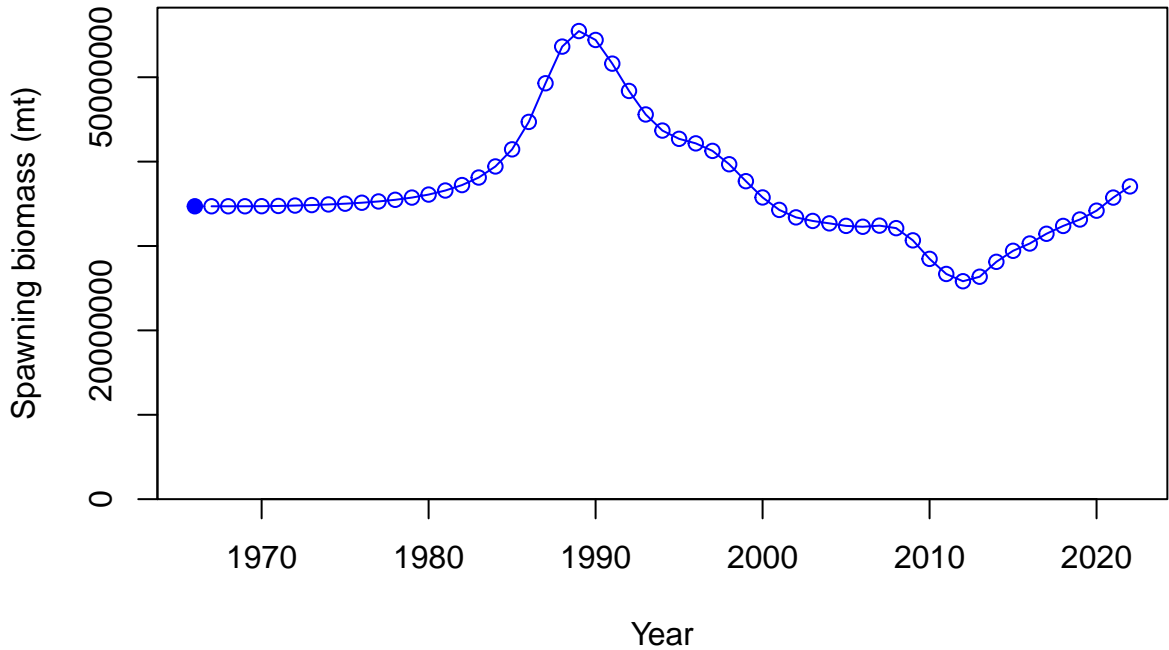


Selectivity

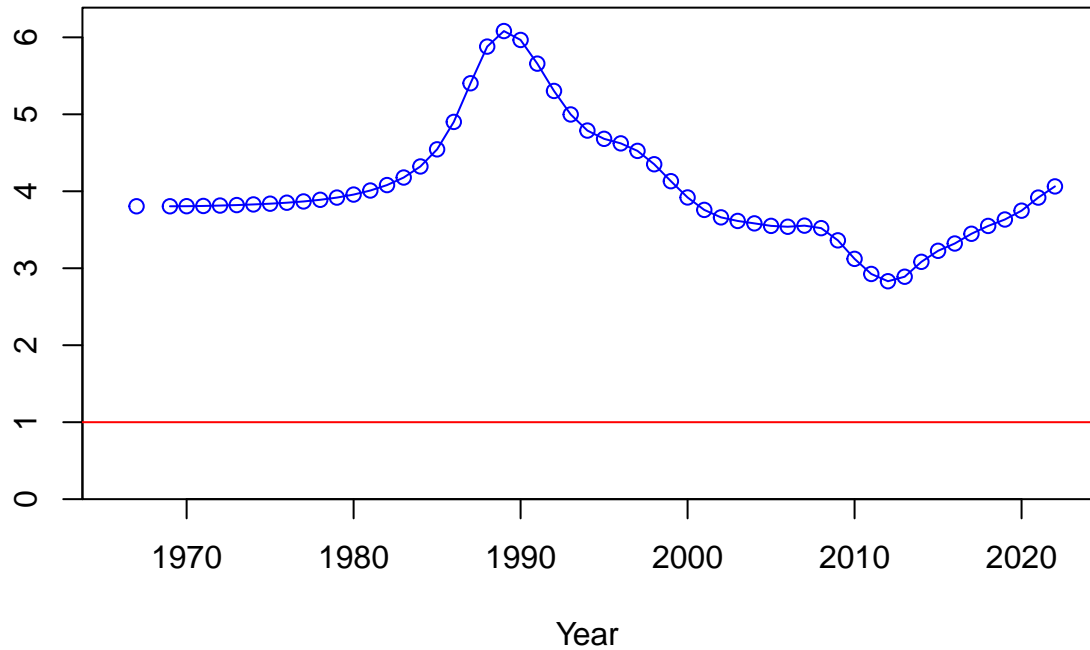


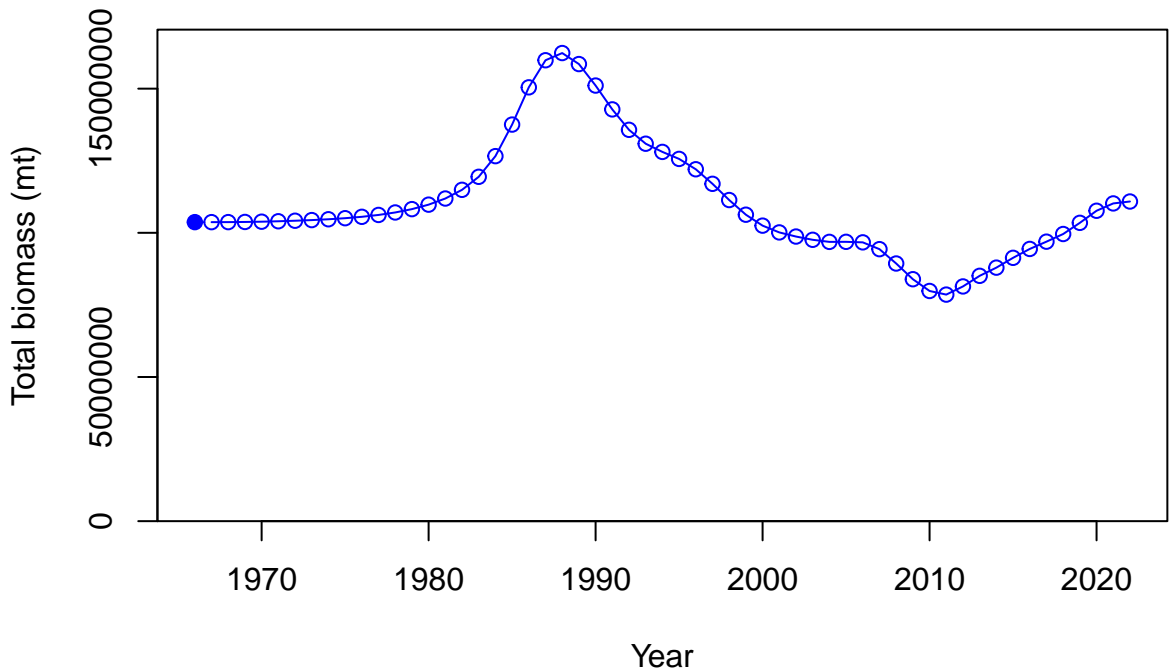


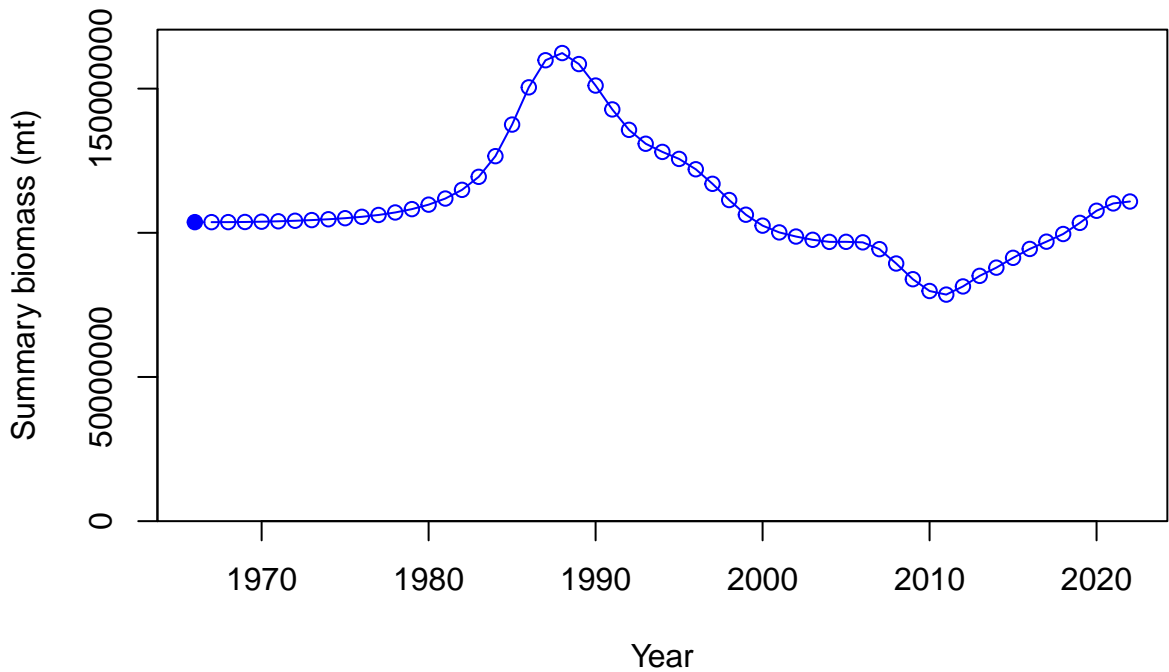


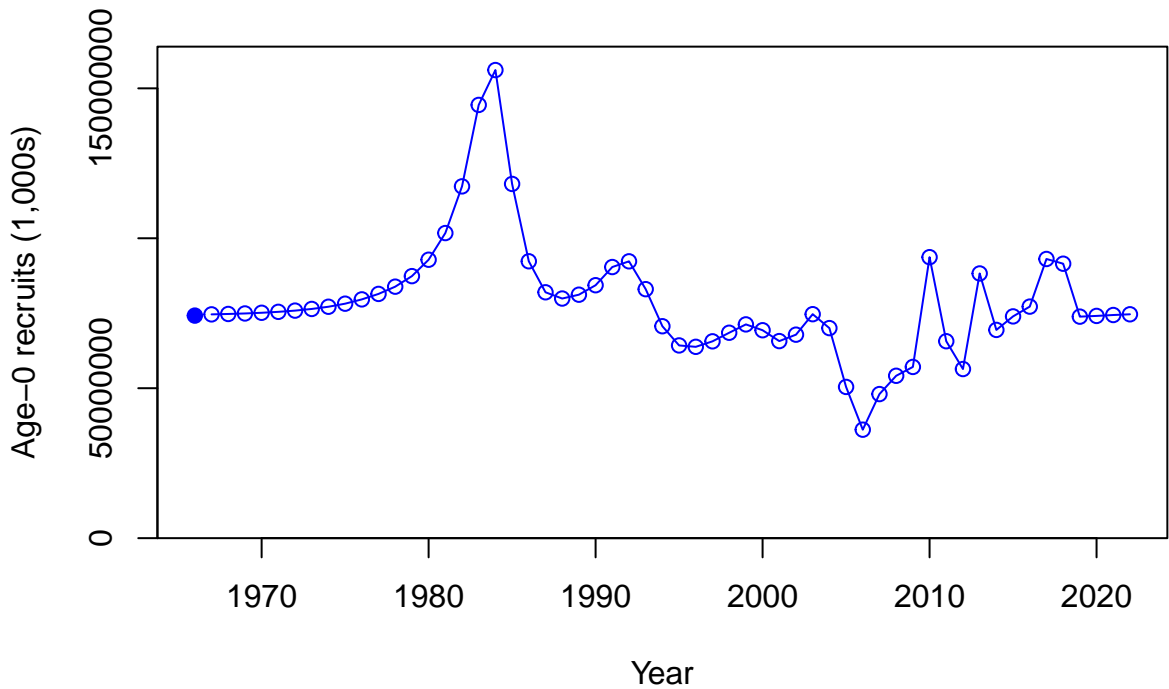


Relative spawning biomass: B/B_{MSY}

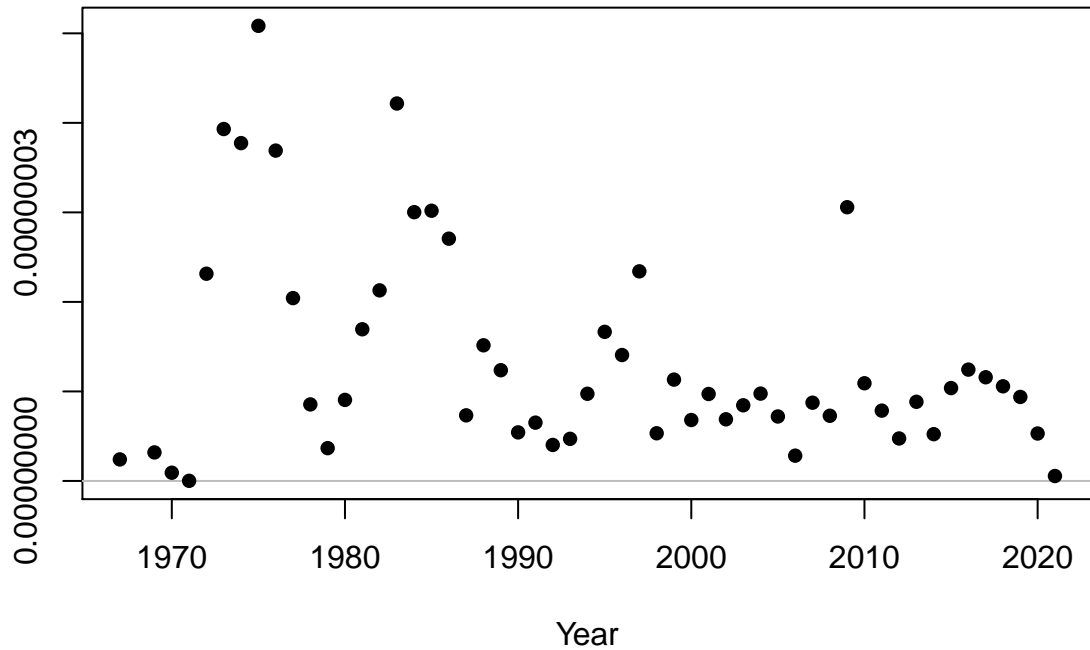


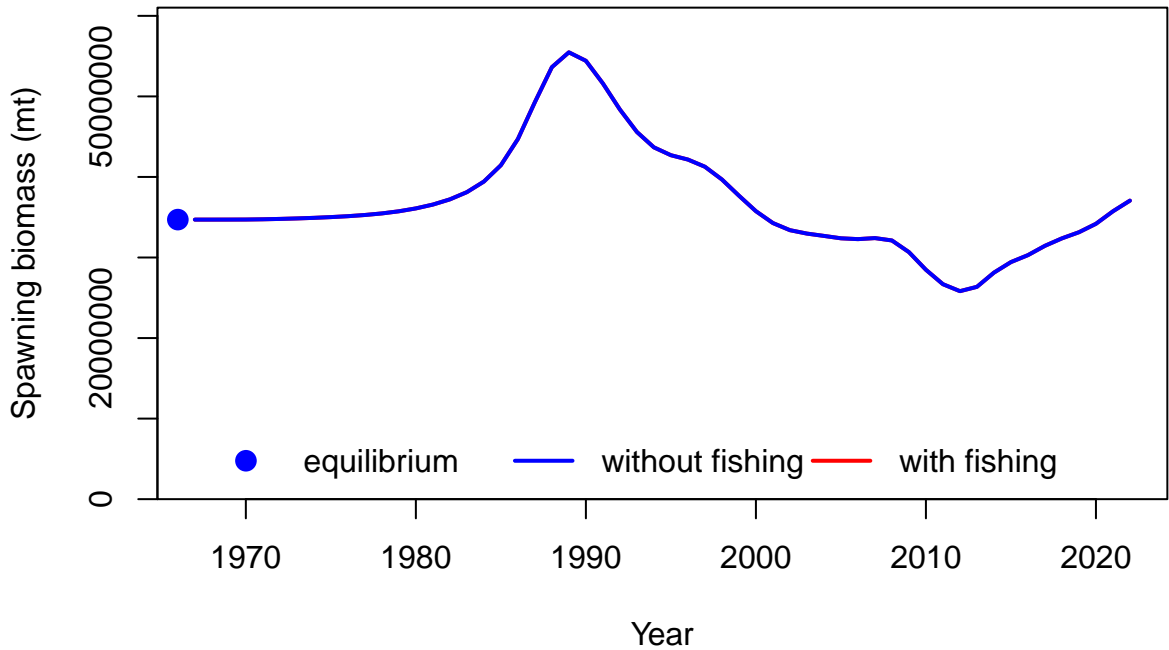




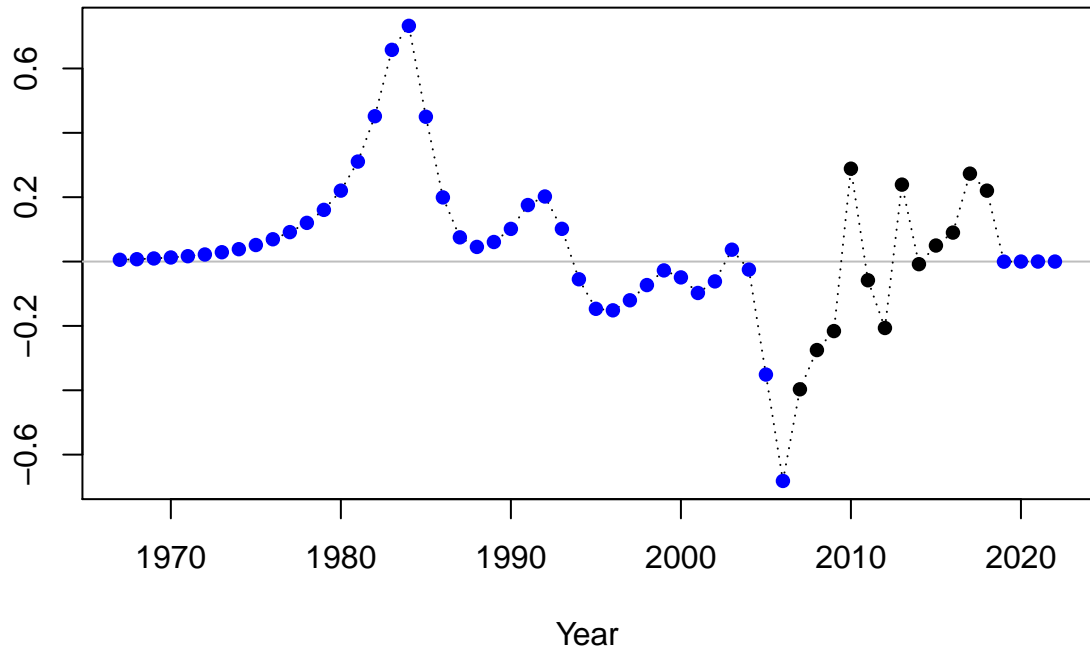


Summary Fishing Mortality



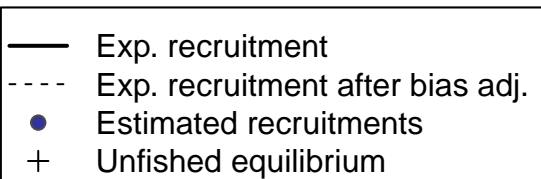


Log recruitment deviation



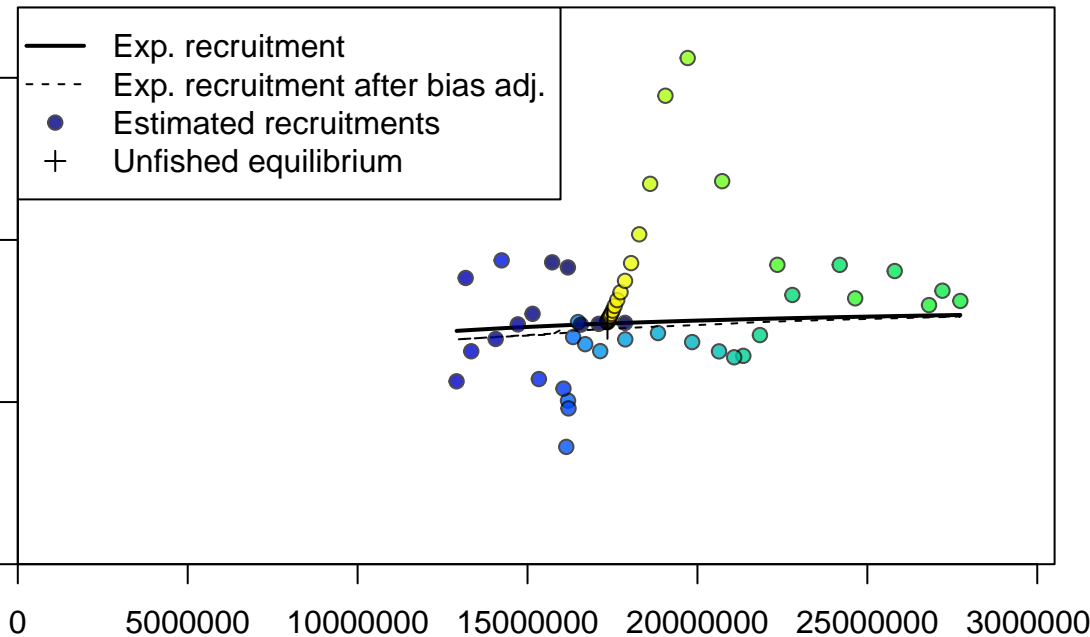
Recruitment (1,000s)

150000000
50000000
0



0 5000000 10000000 15000000 20000000 25000000 30000000

Spawning biomass (mt)



Recruitment (1,000s)

150000000
50000000
0

- Exp. recruitment
- - - Exp. recruitment after bias adj.
- Estimated recruitments
- + Unfished equilibrium

1984
1983

2006

Spawning biomass (mt)

0

5000000

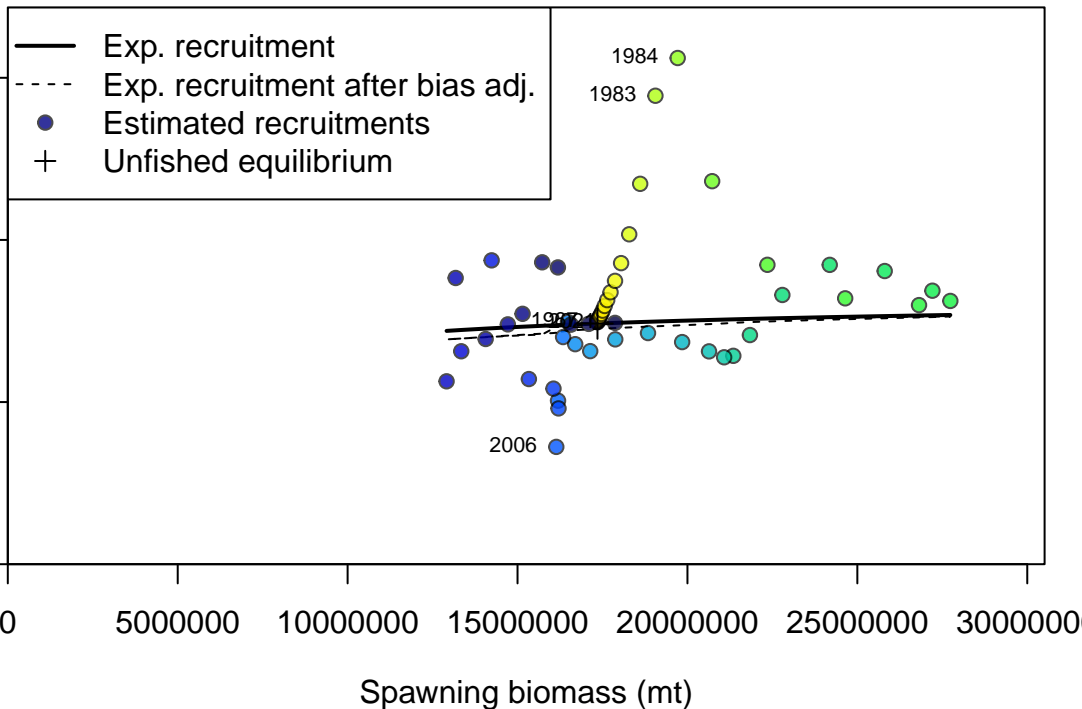
10000000

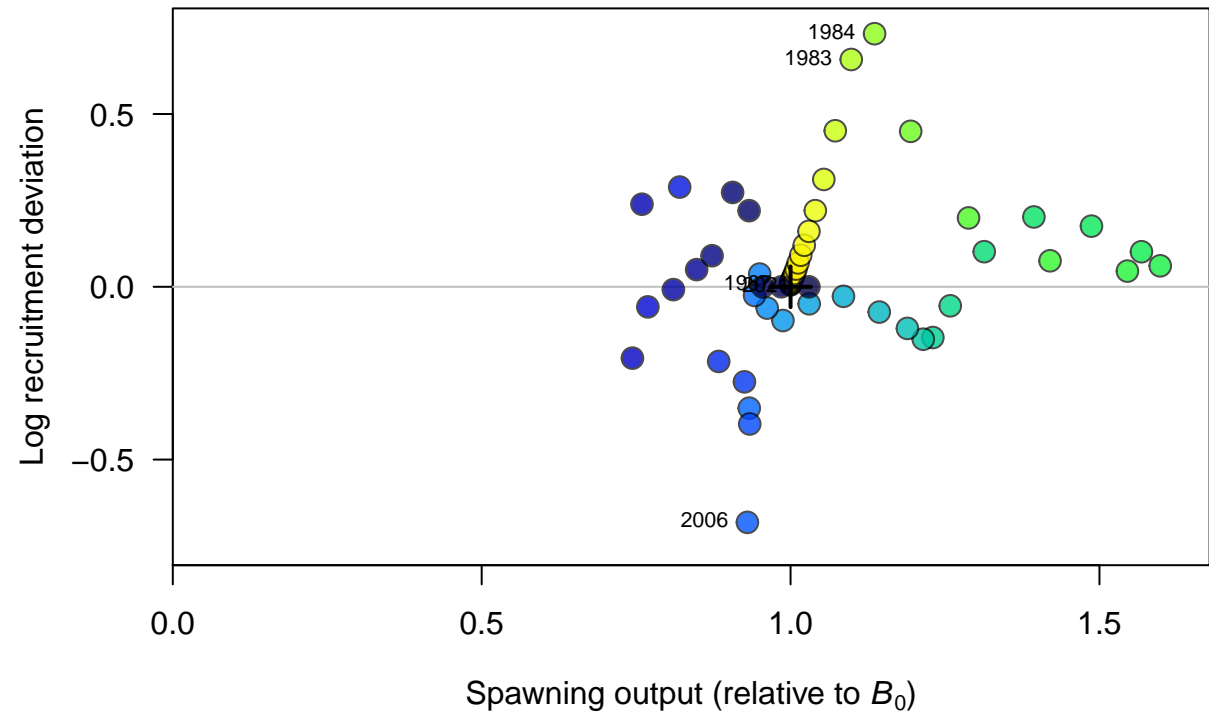
15000000

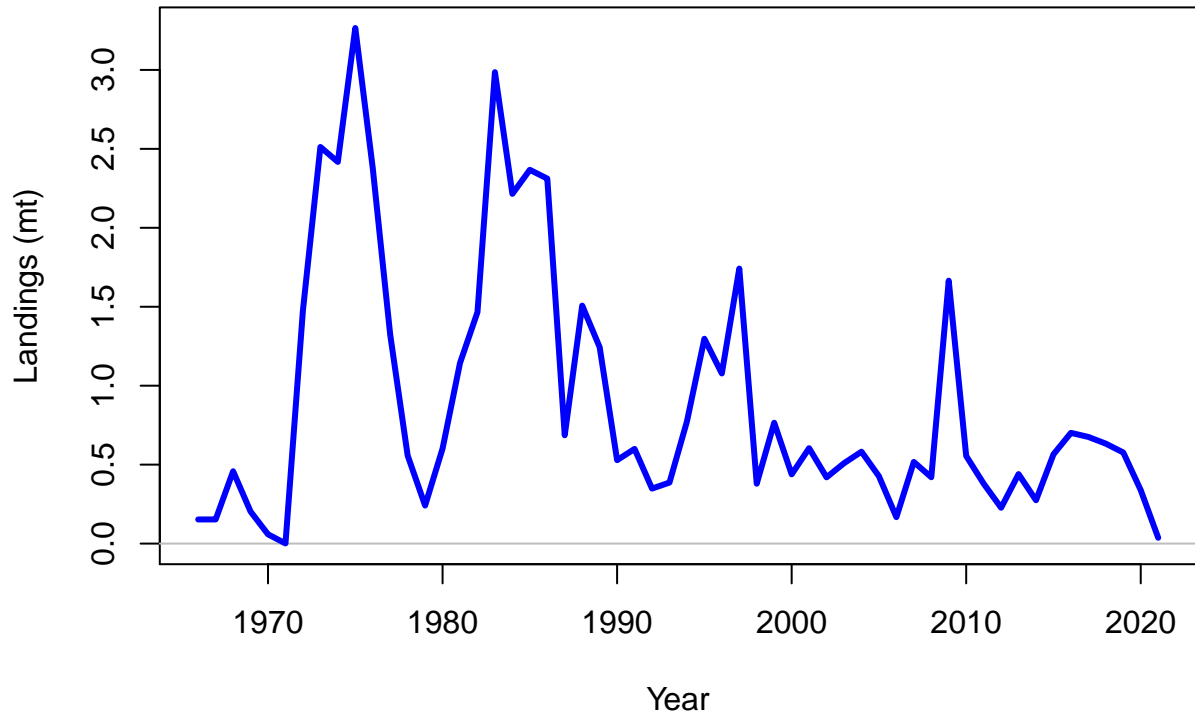
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25000000

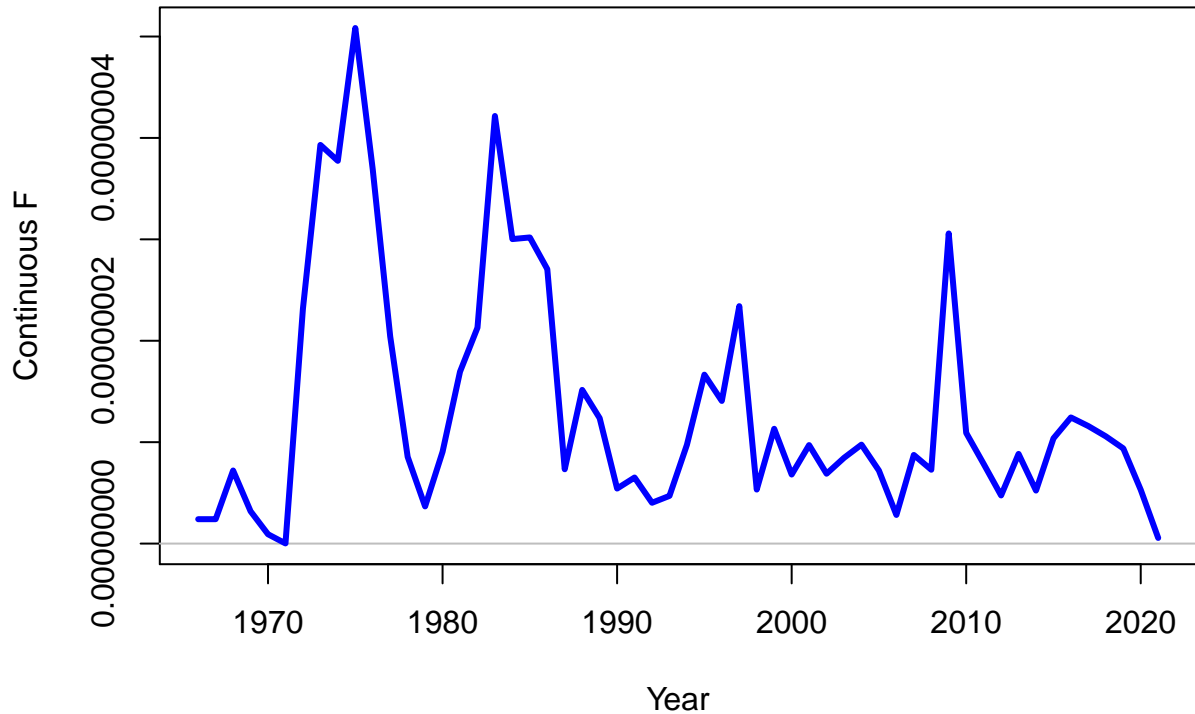
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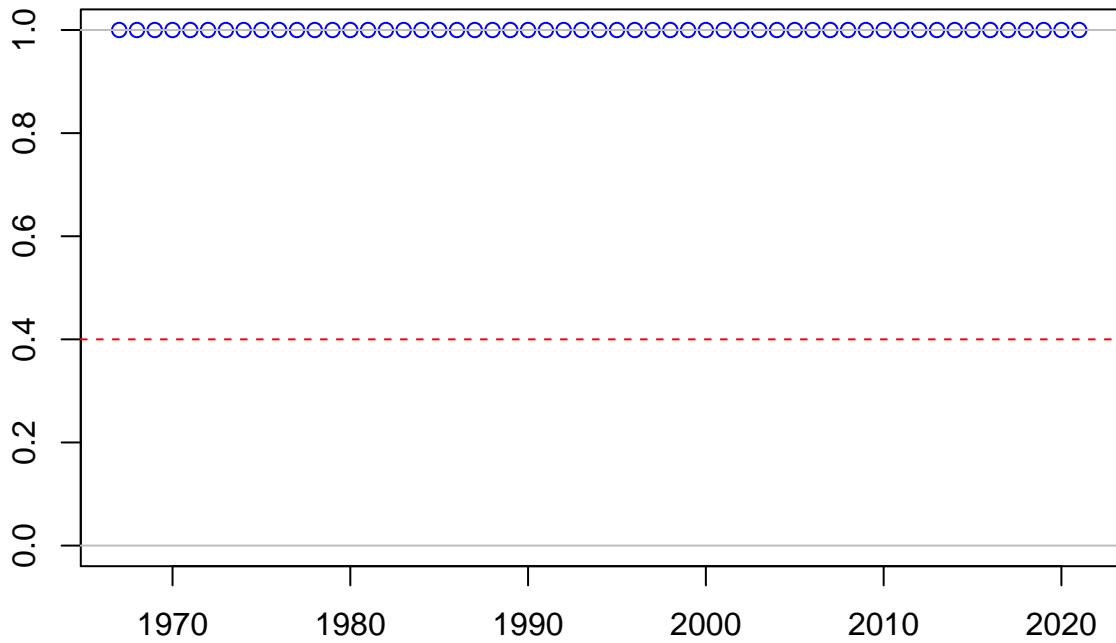




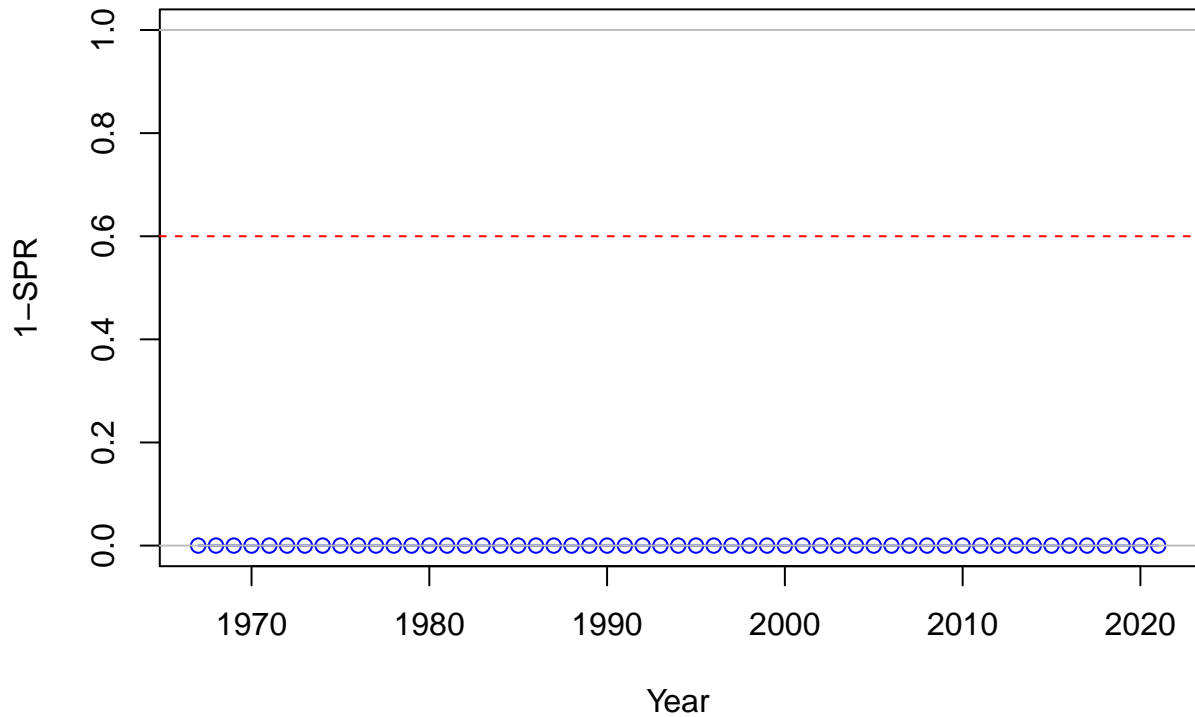




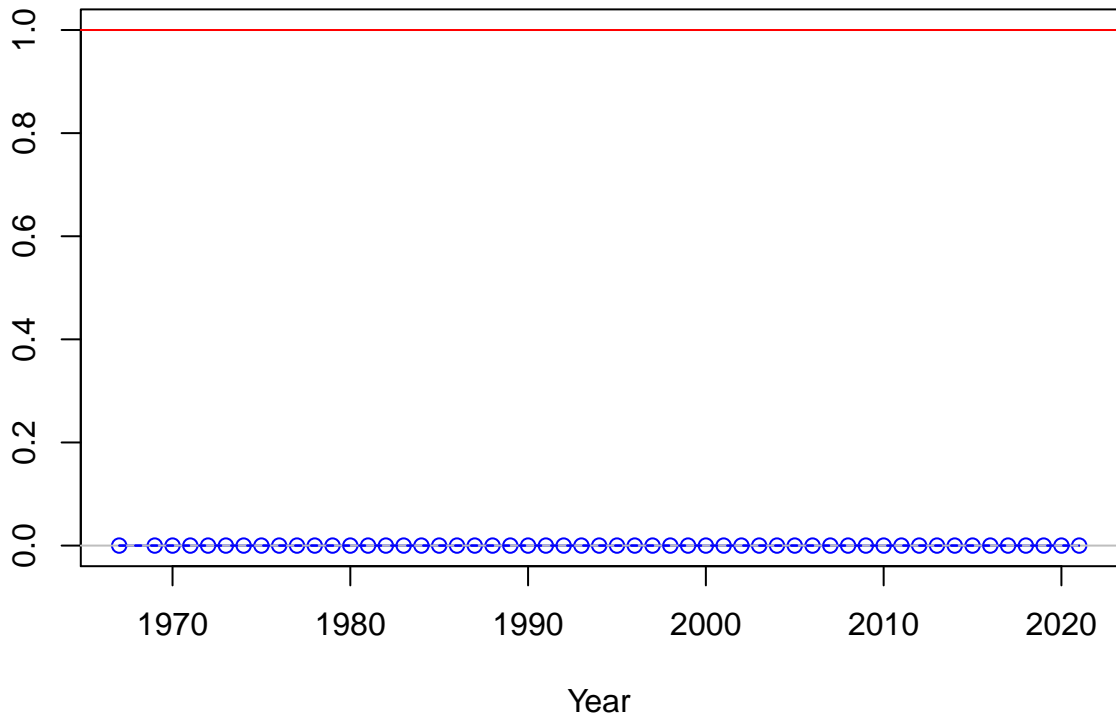
SPR



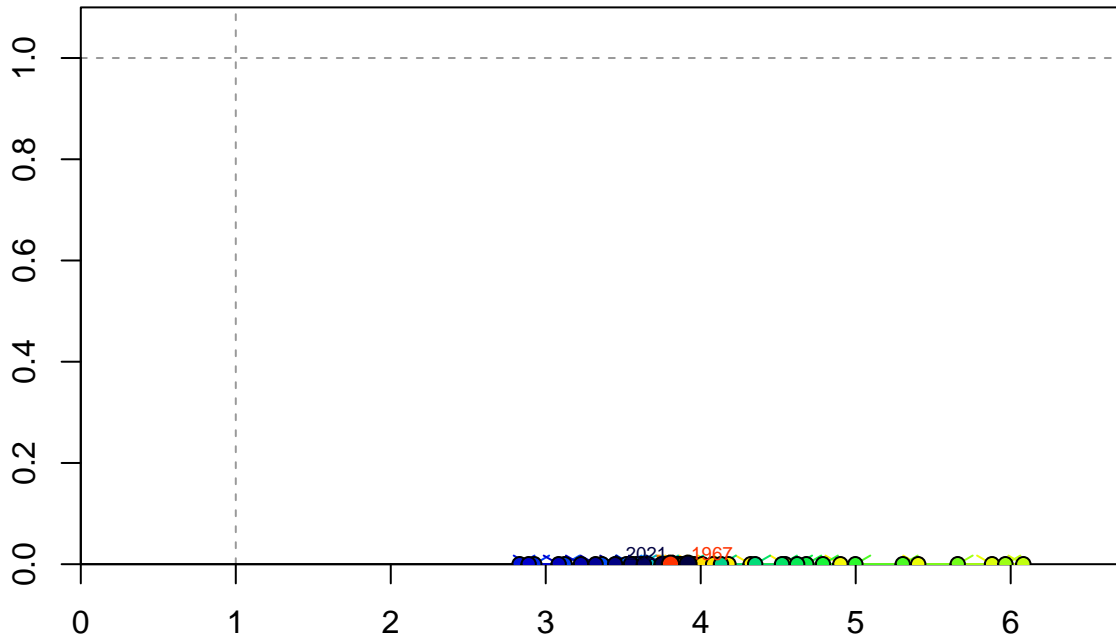
Year



Fishing intensity: 1-SPR

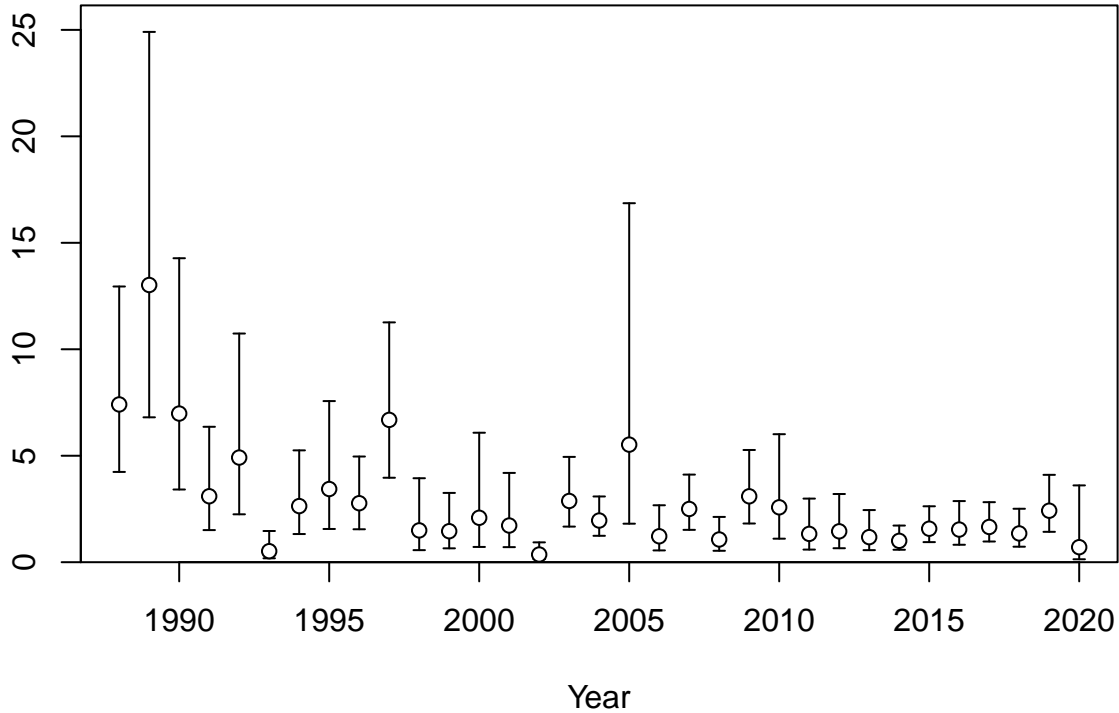


Fishing intensity: 1-SPR

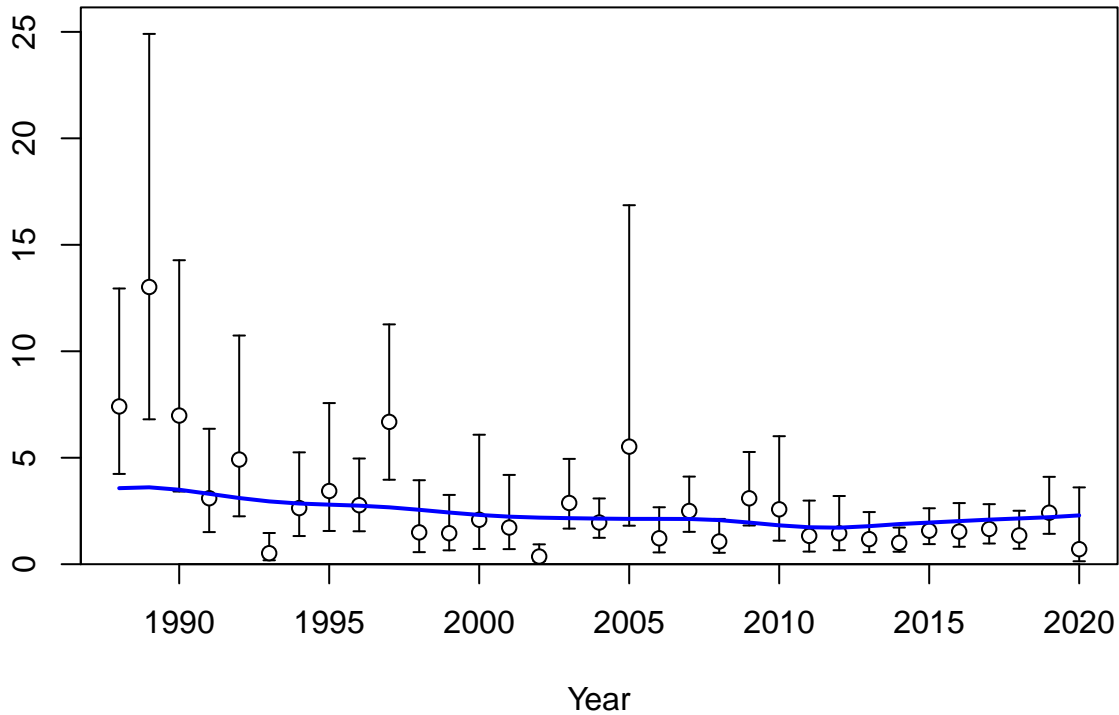


Relative spawning output: B/B_{MSY}

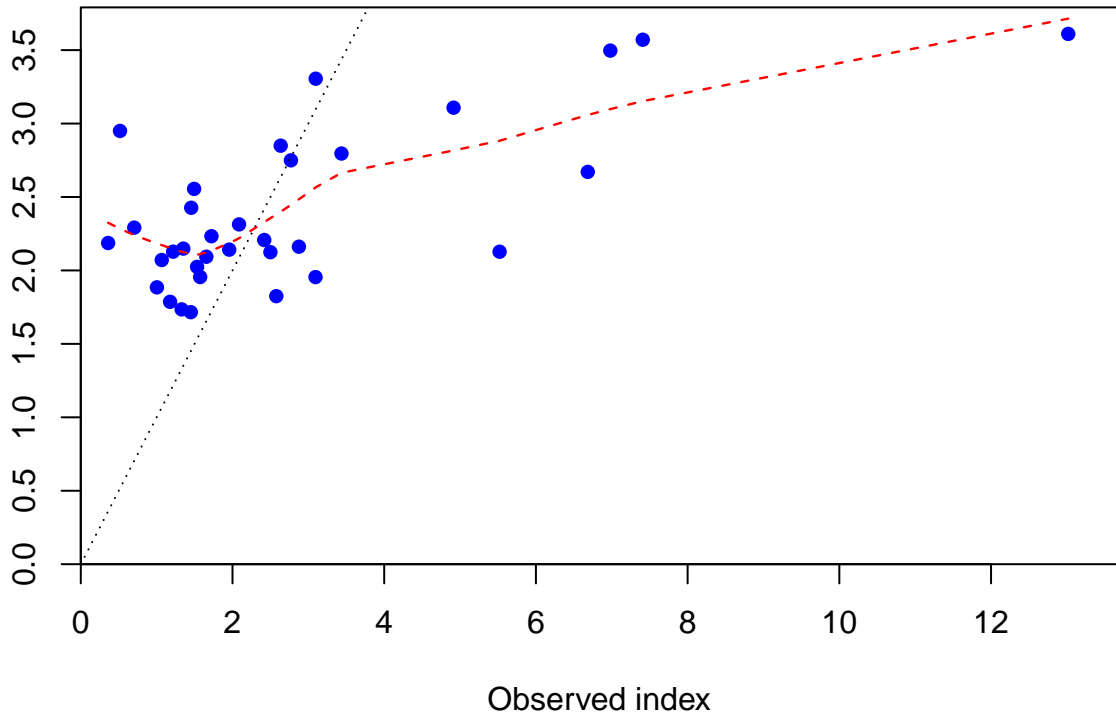
Index

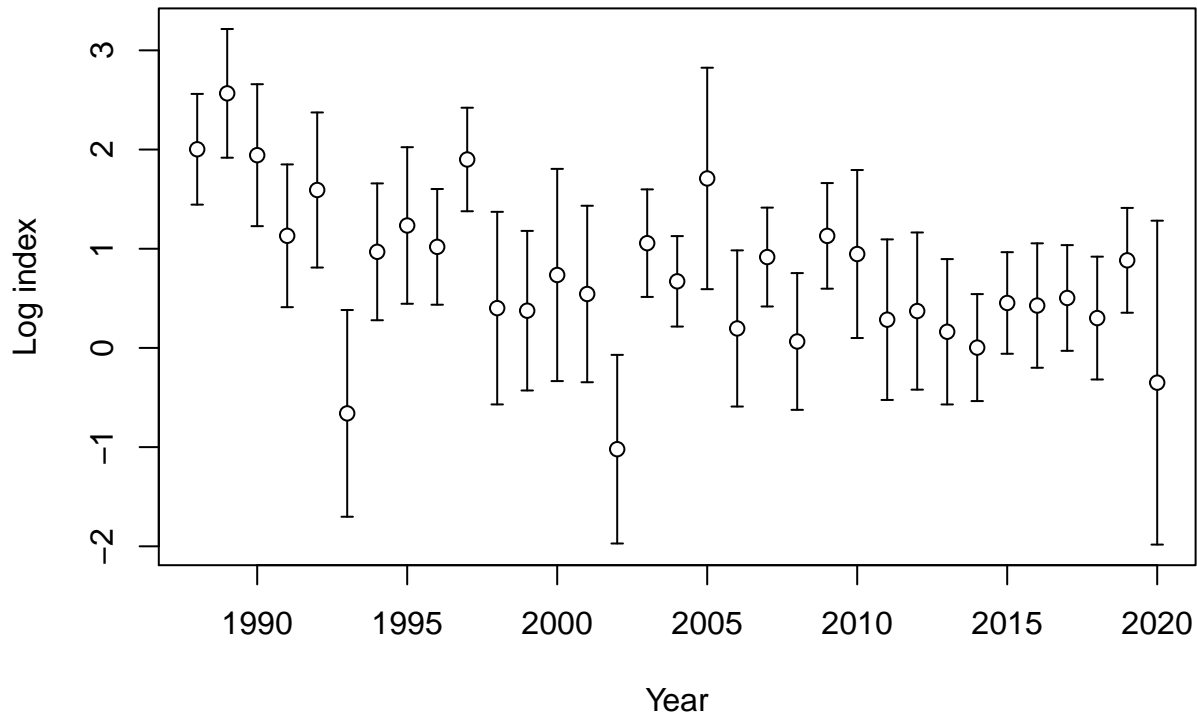


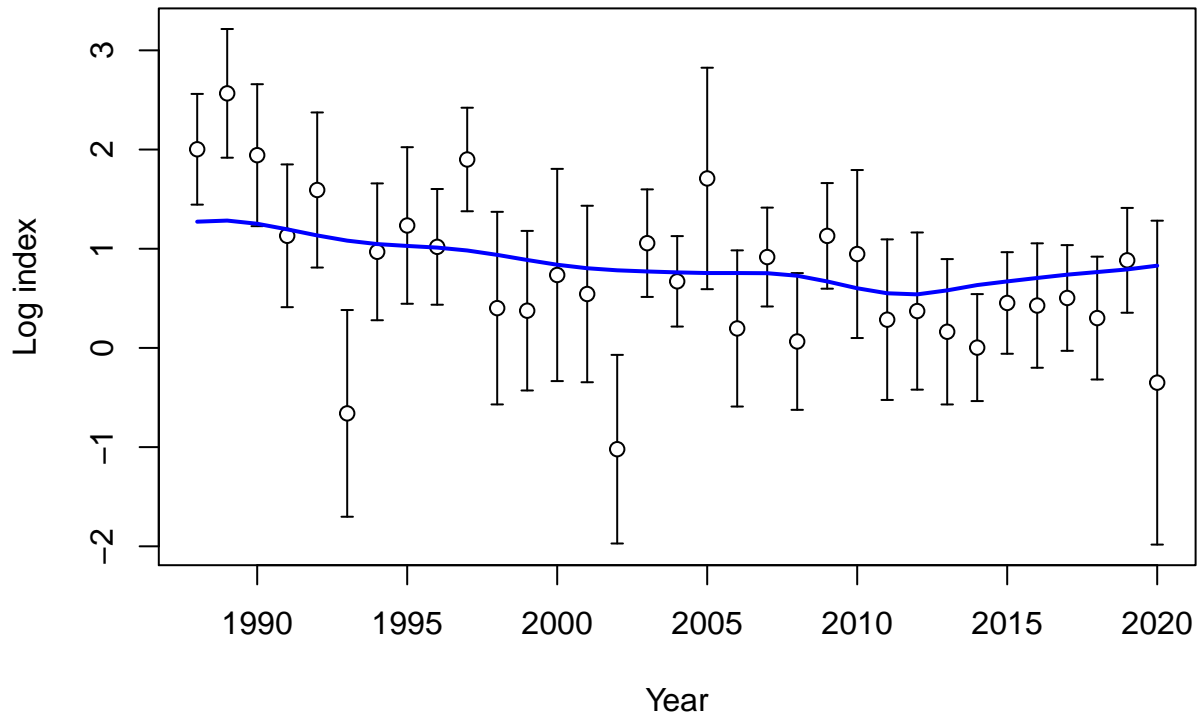
Index

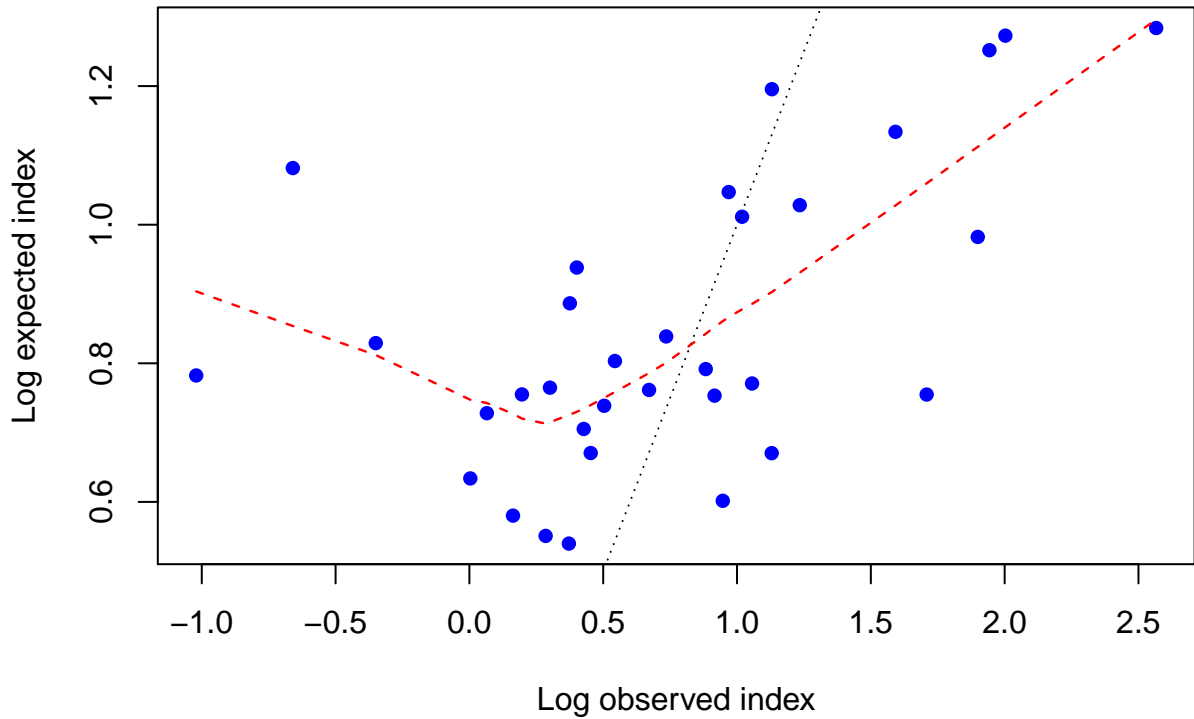


Expected index

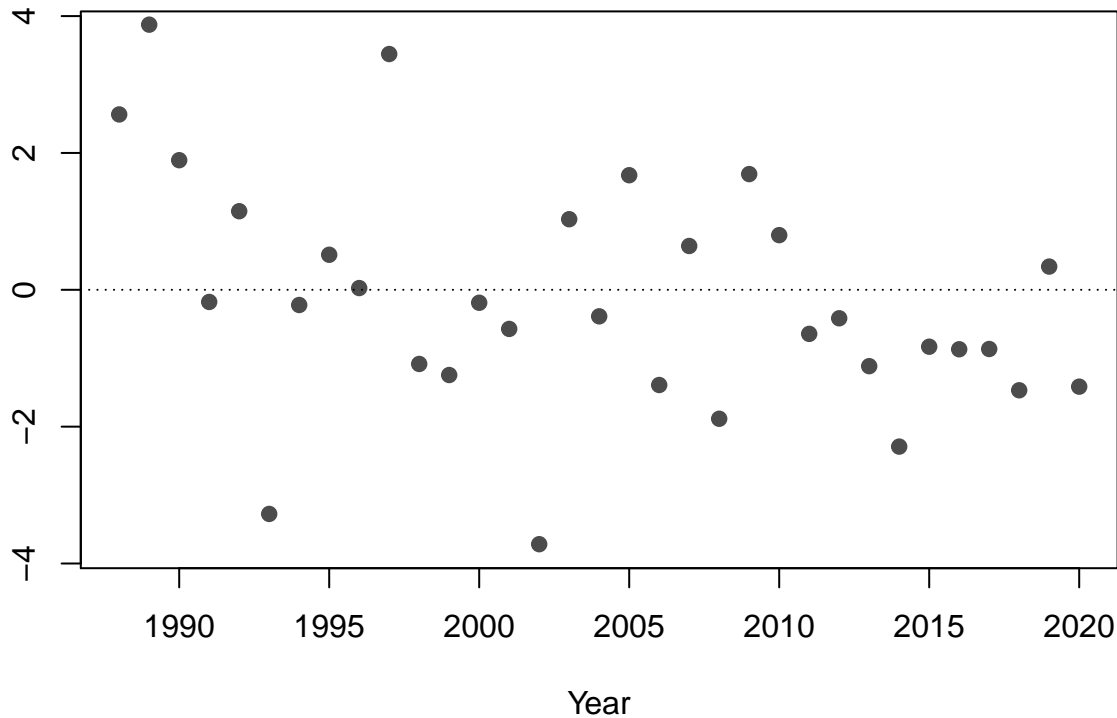


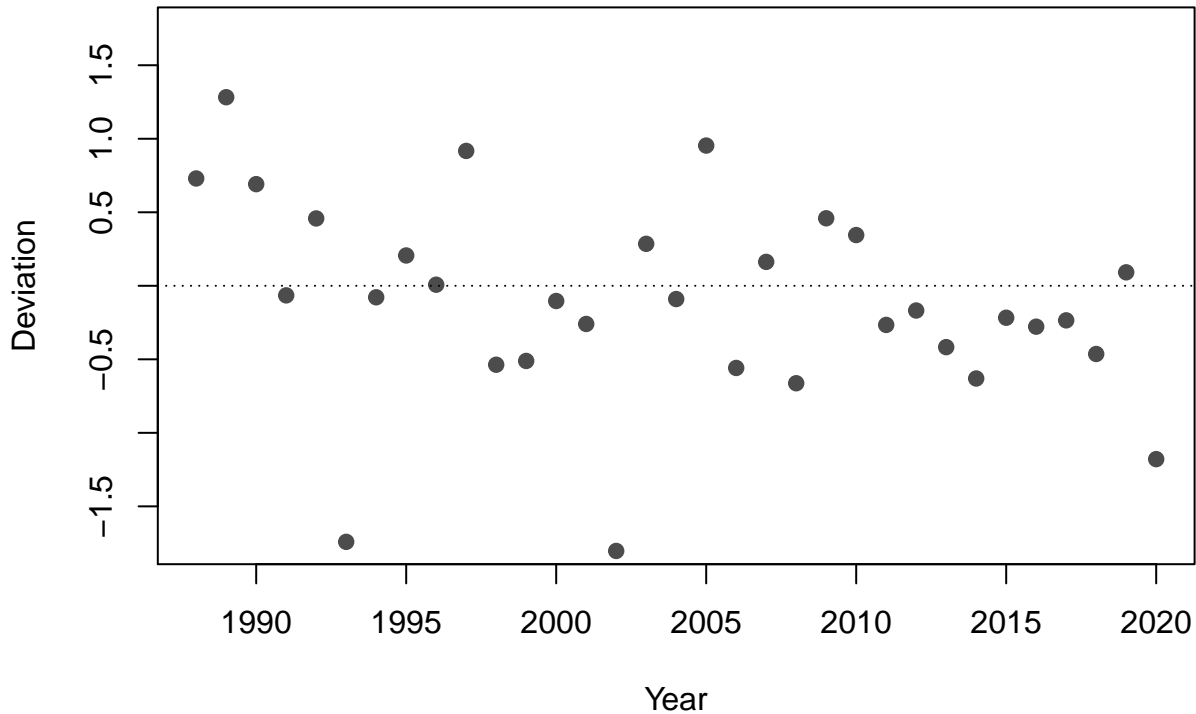




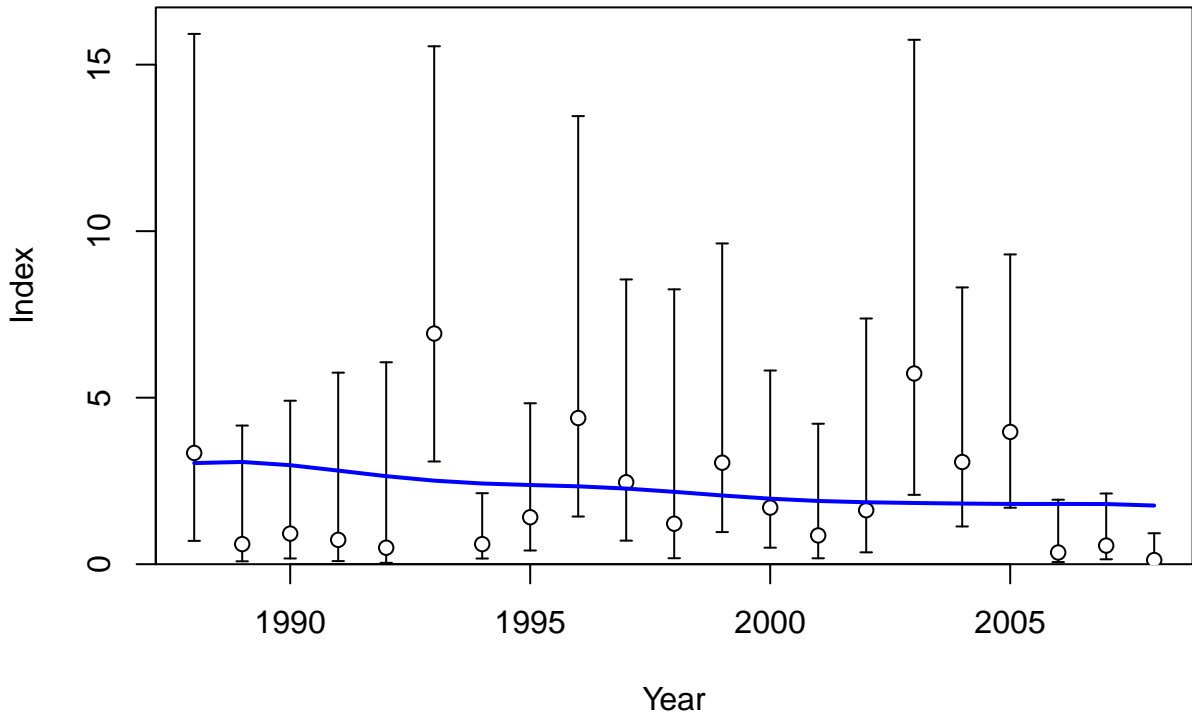


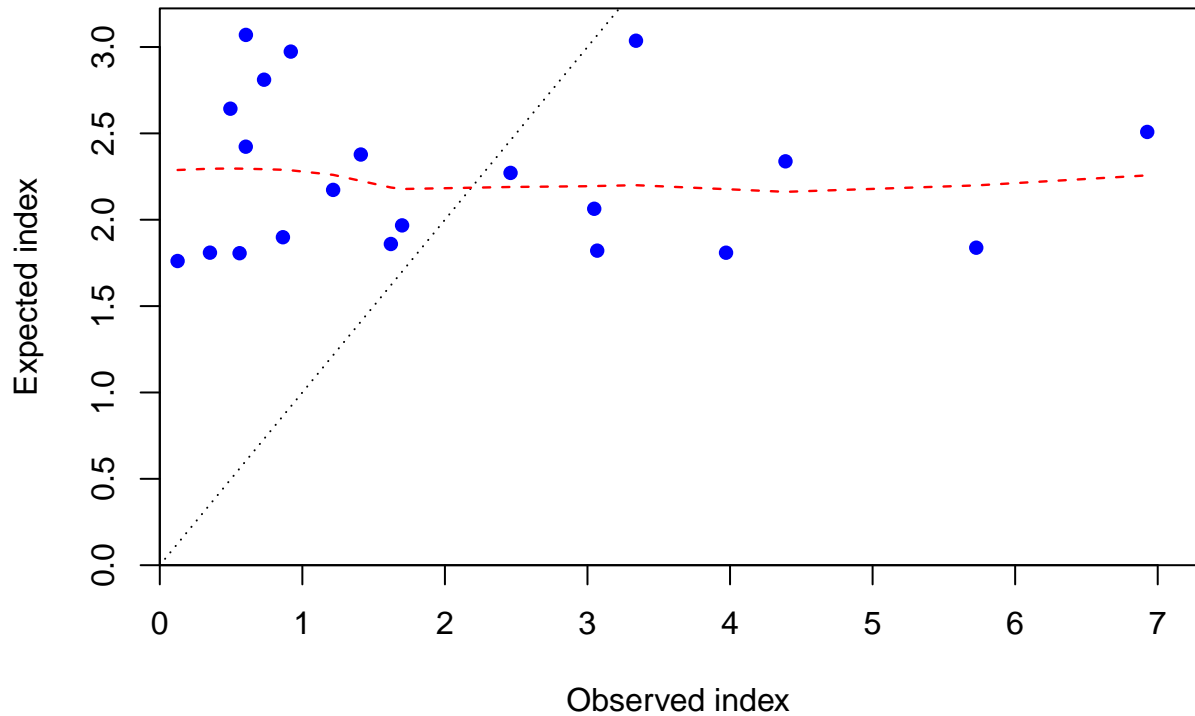
Residual







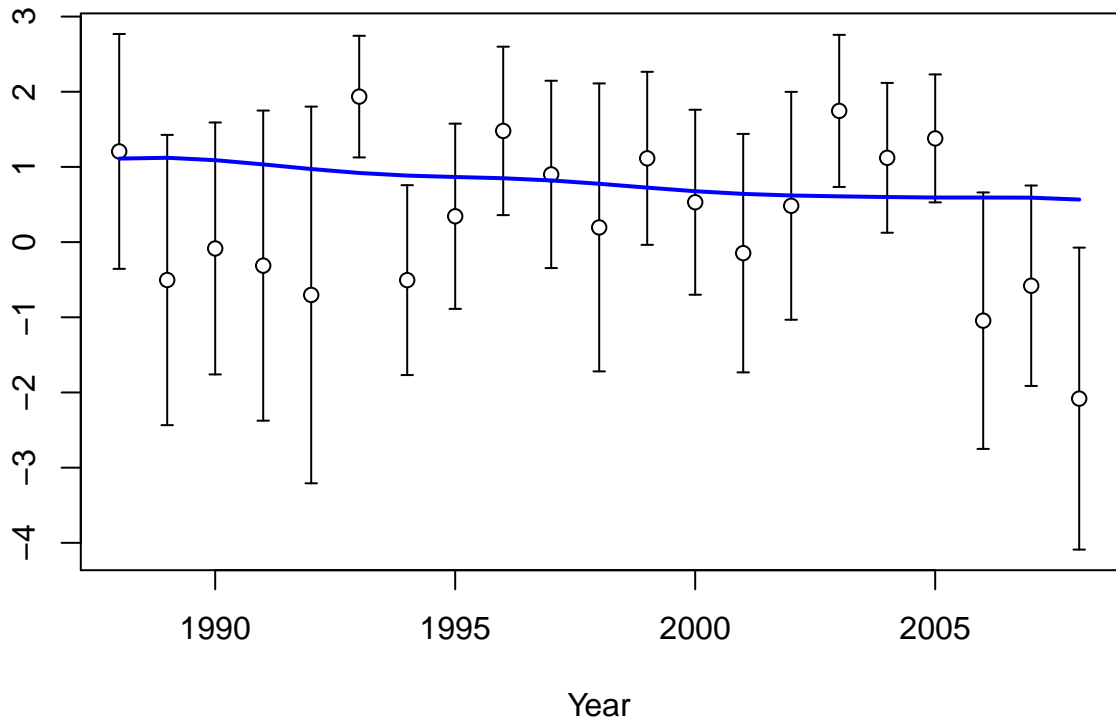


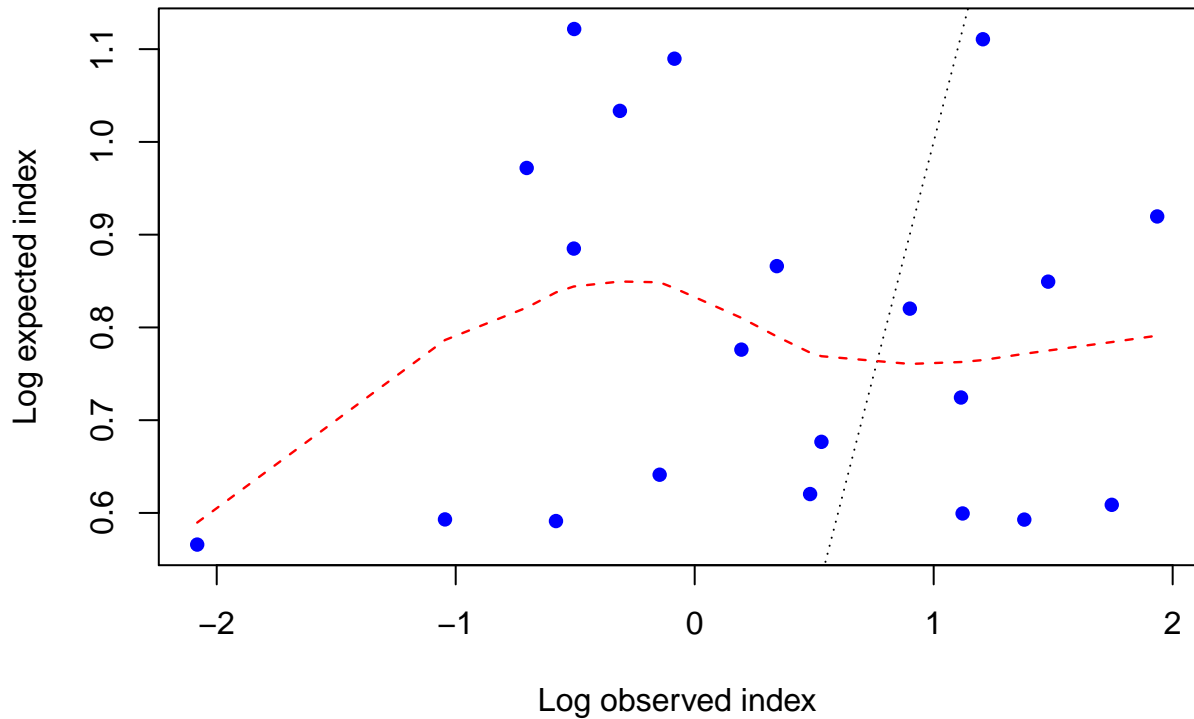


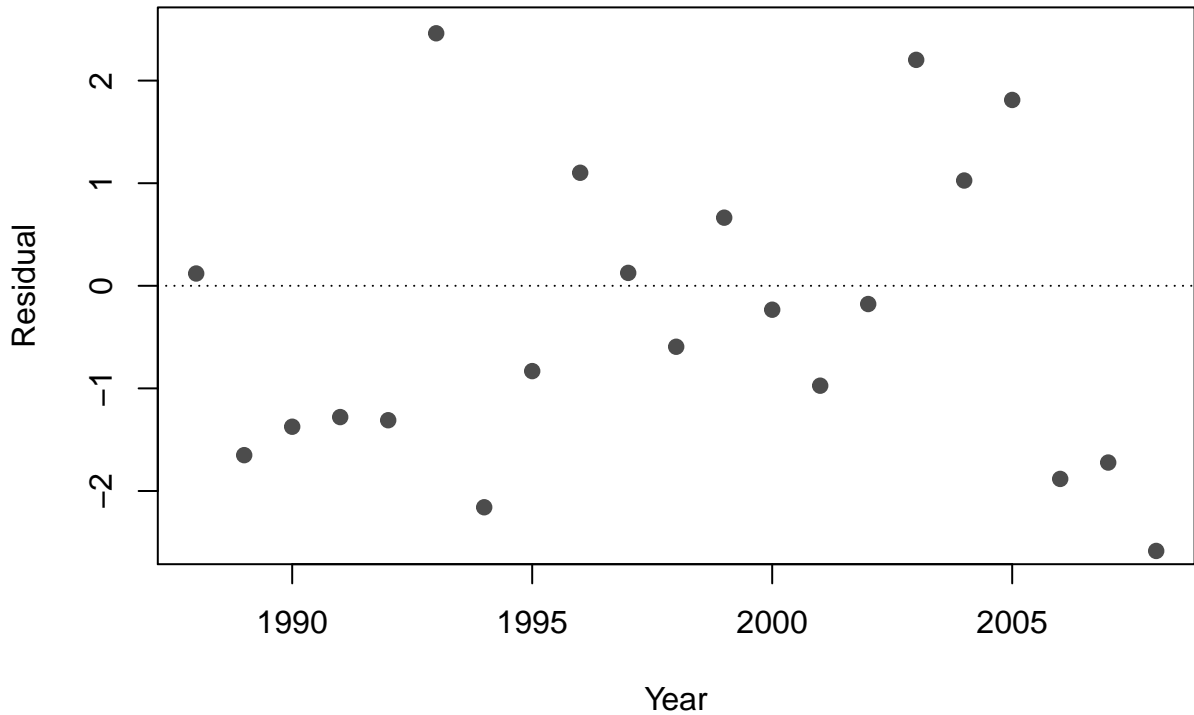
Log index

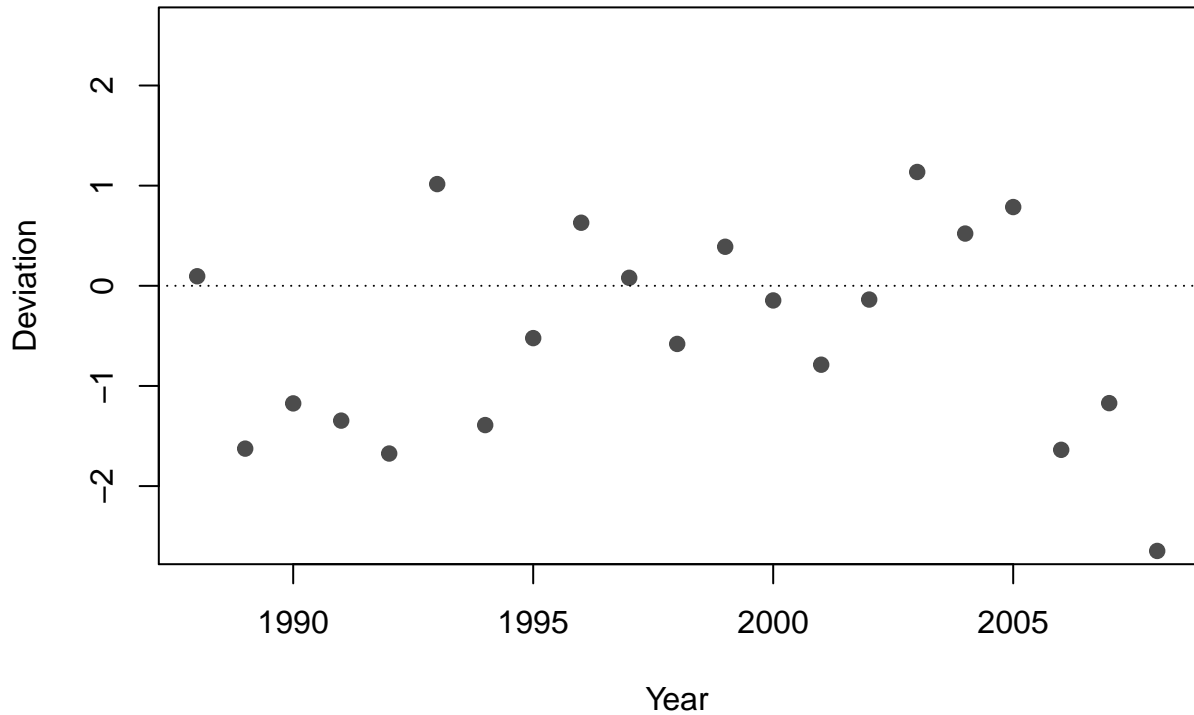


Log index



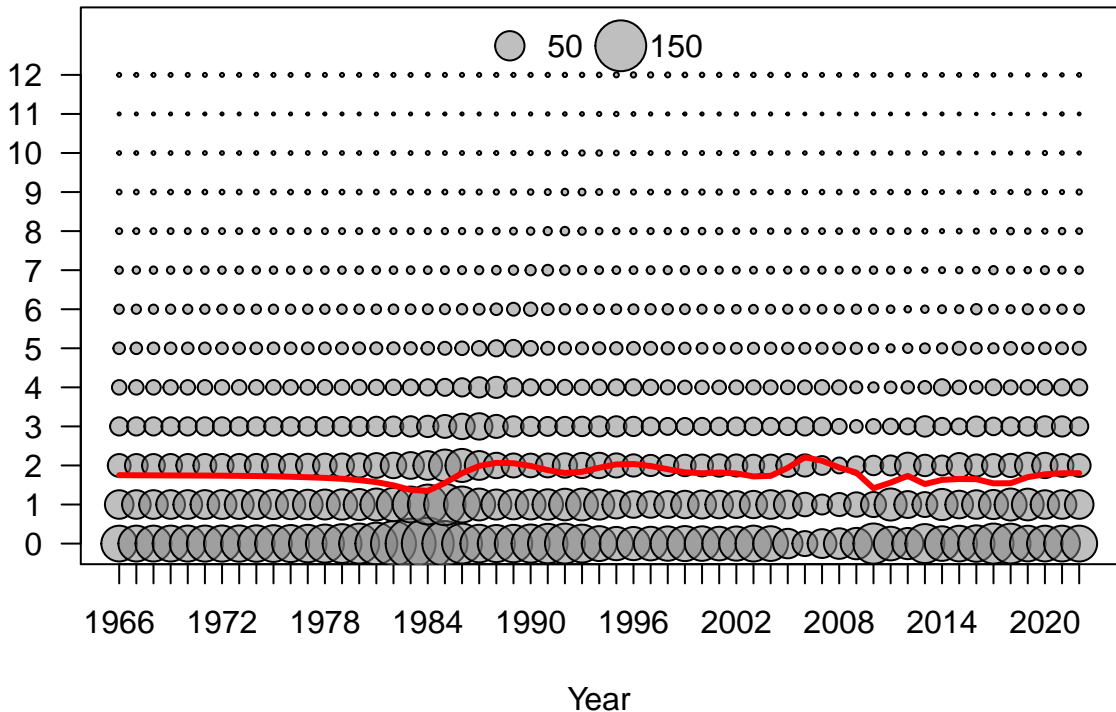




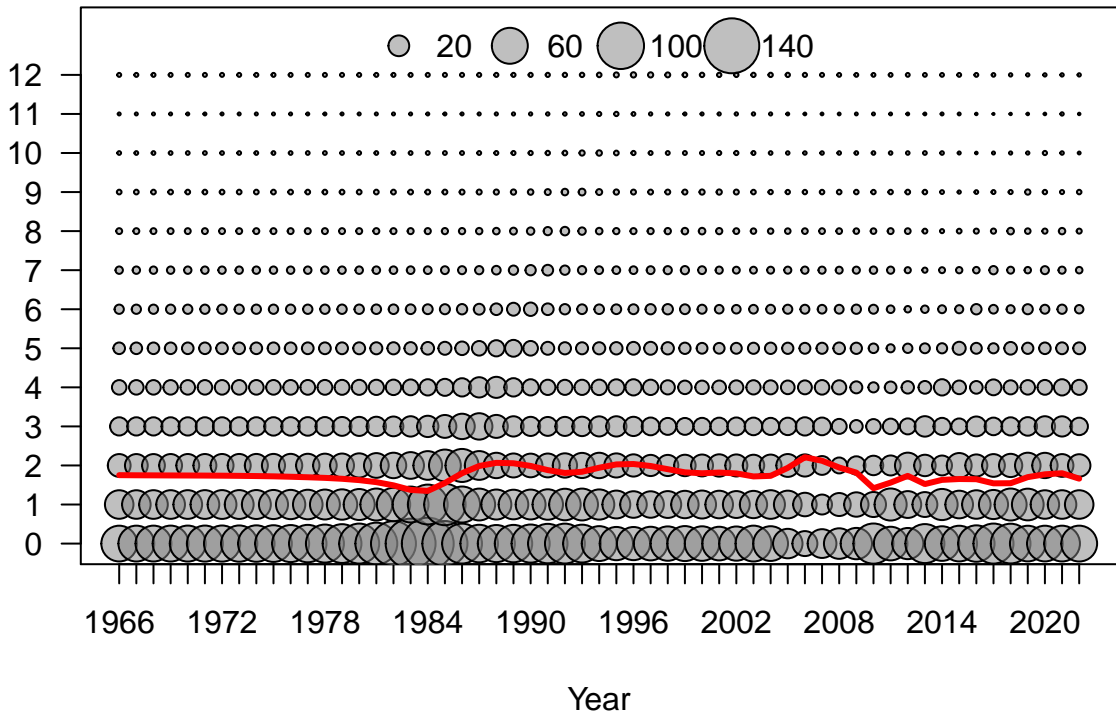


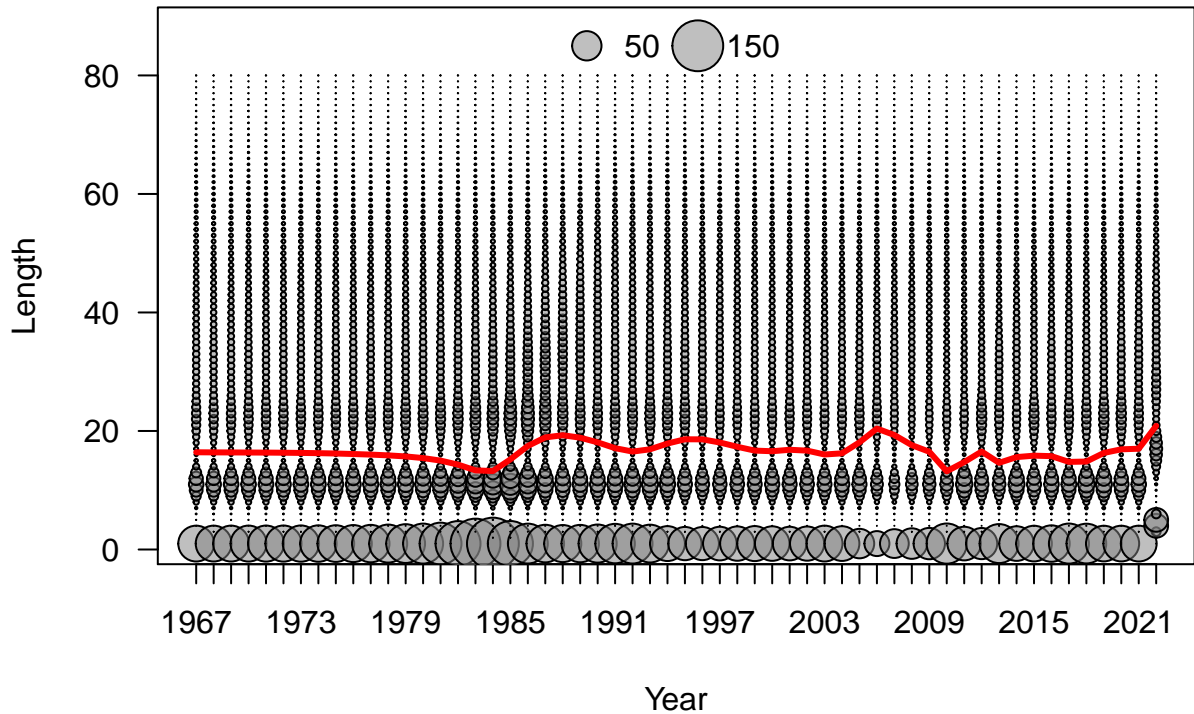


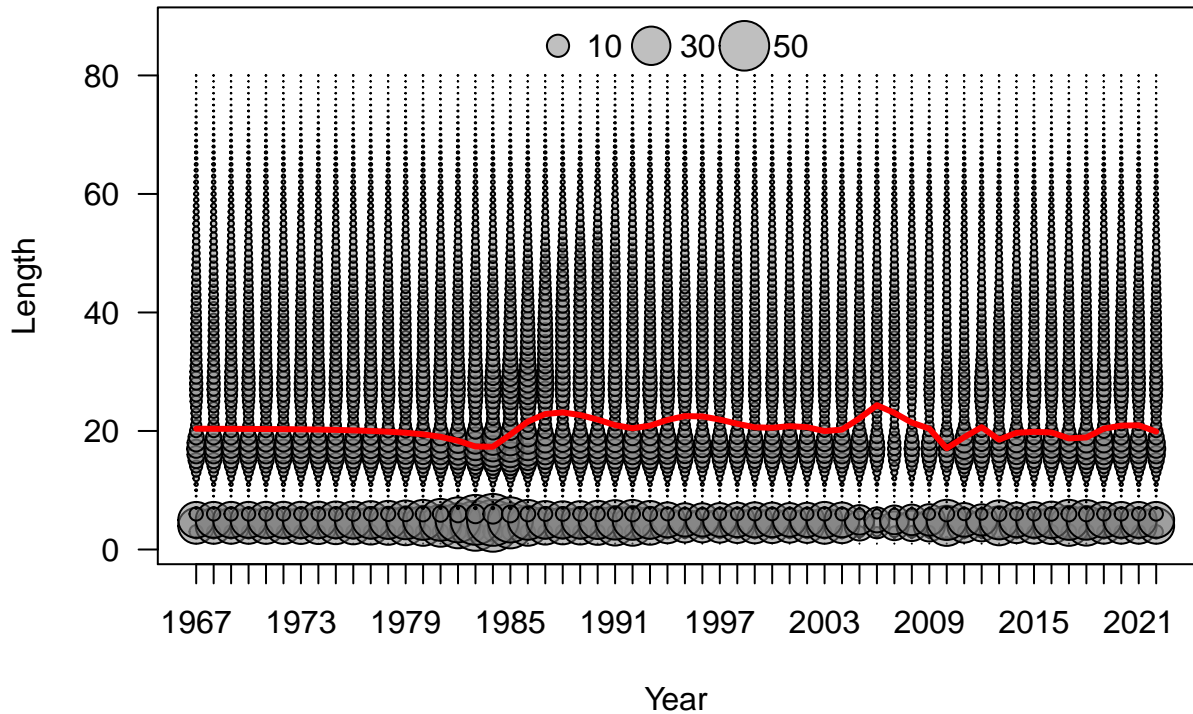
Age

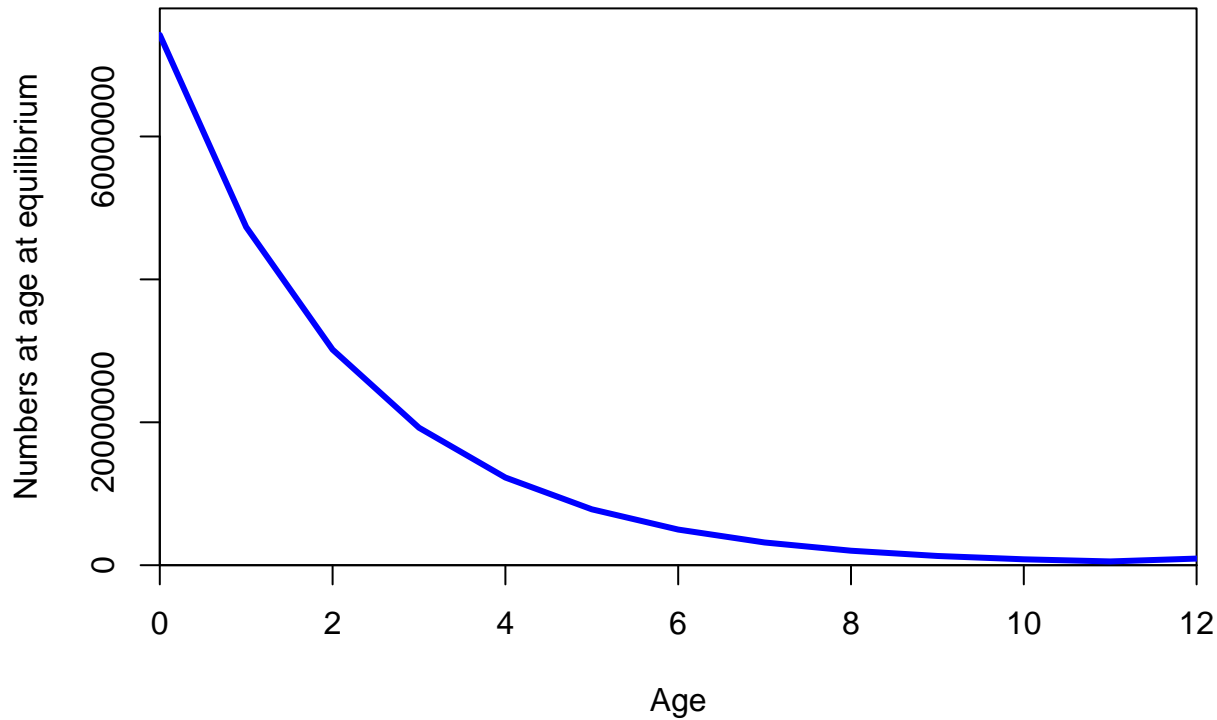


Age



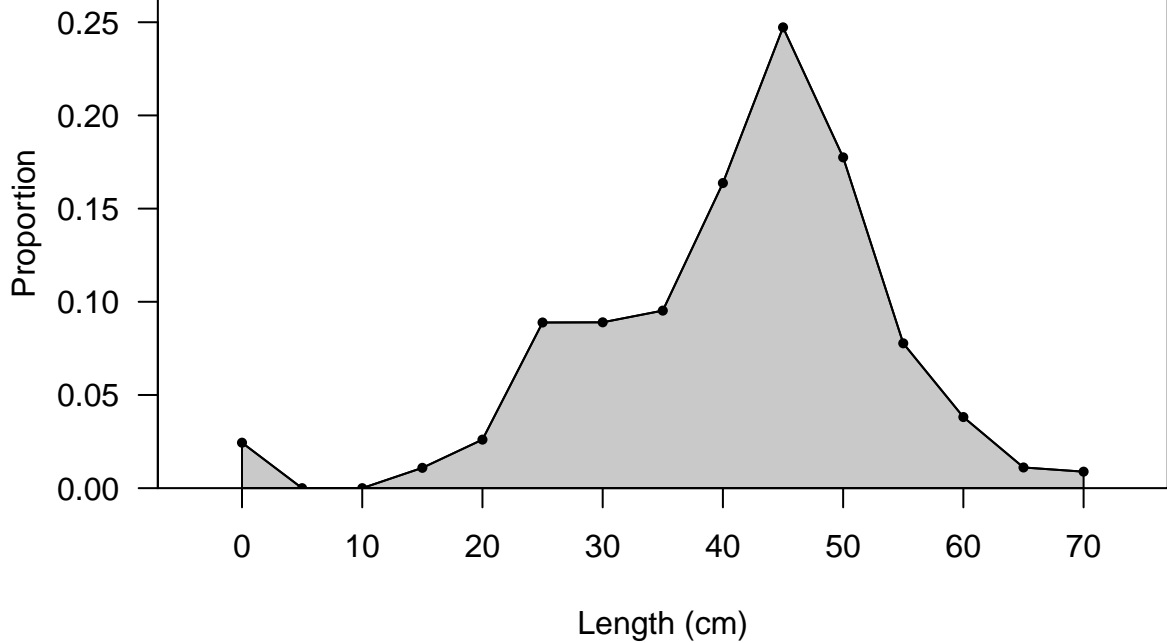


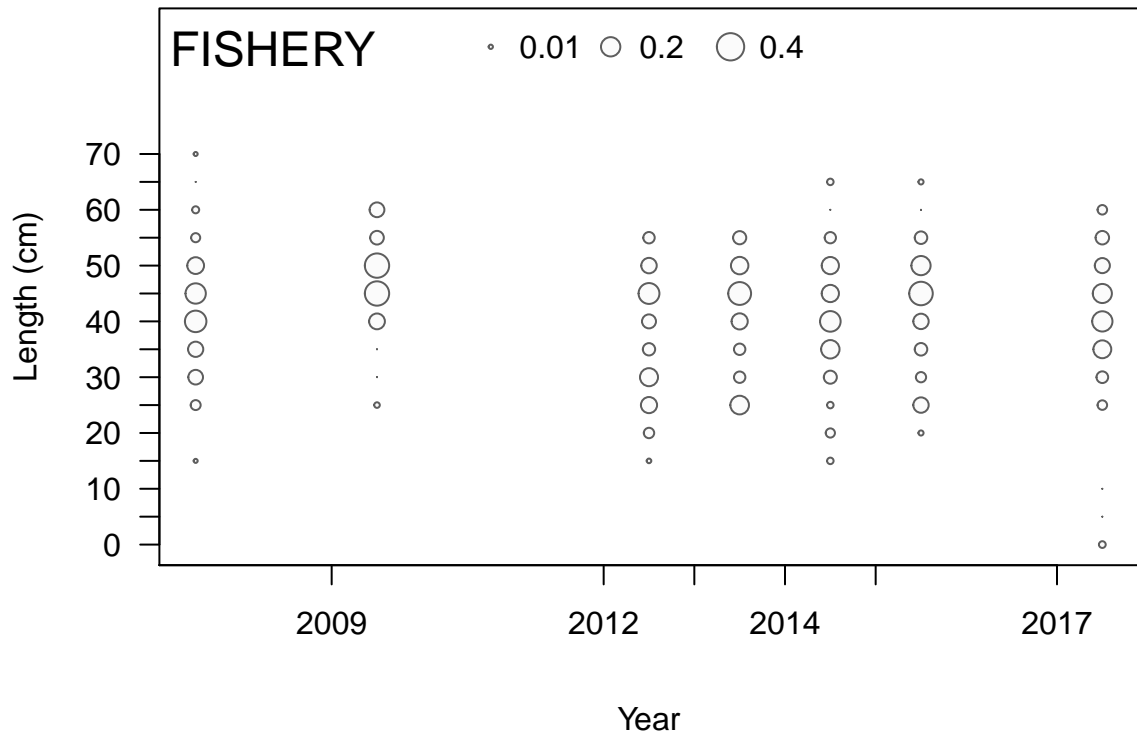




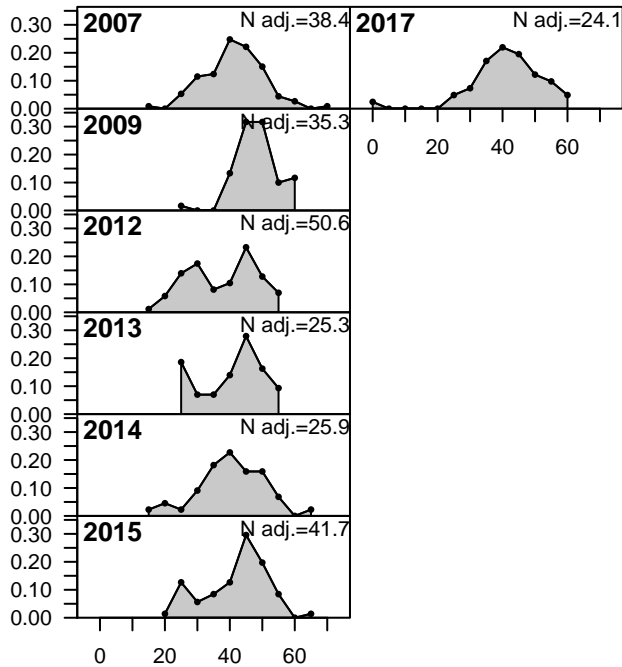
FISHERY

Sum of N adj.=241.2

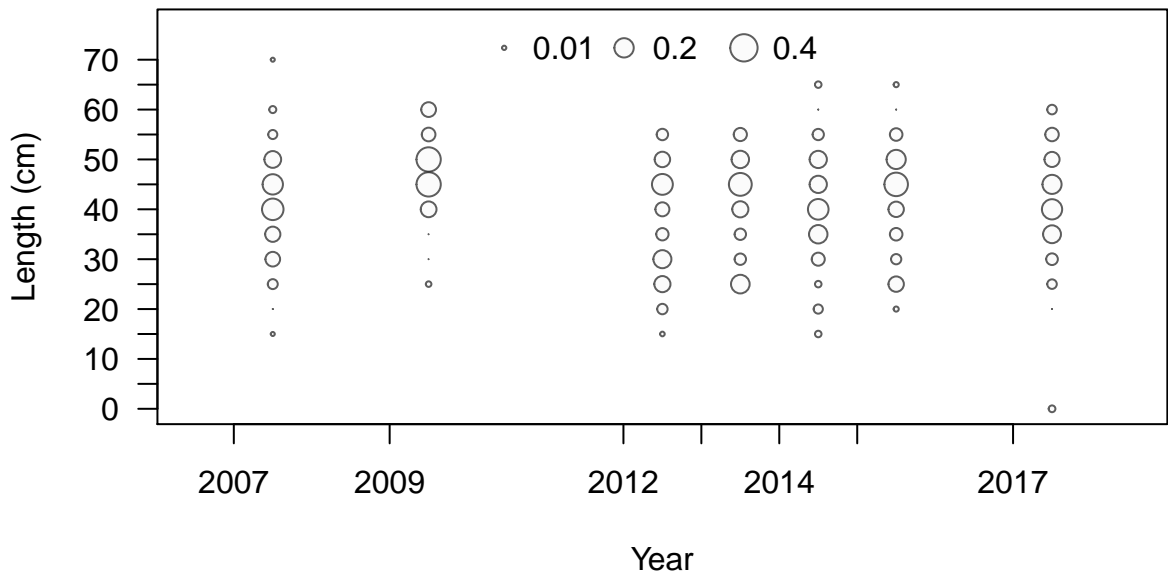




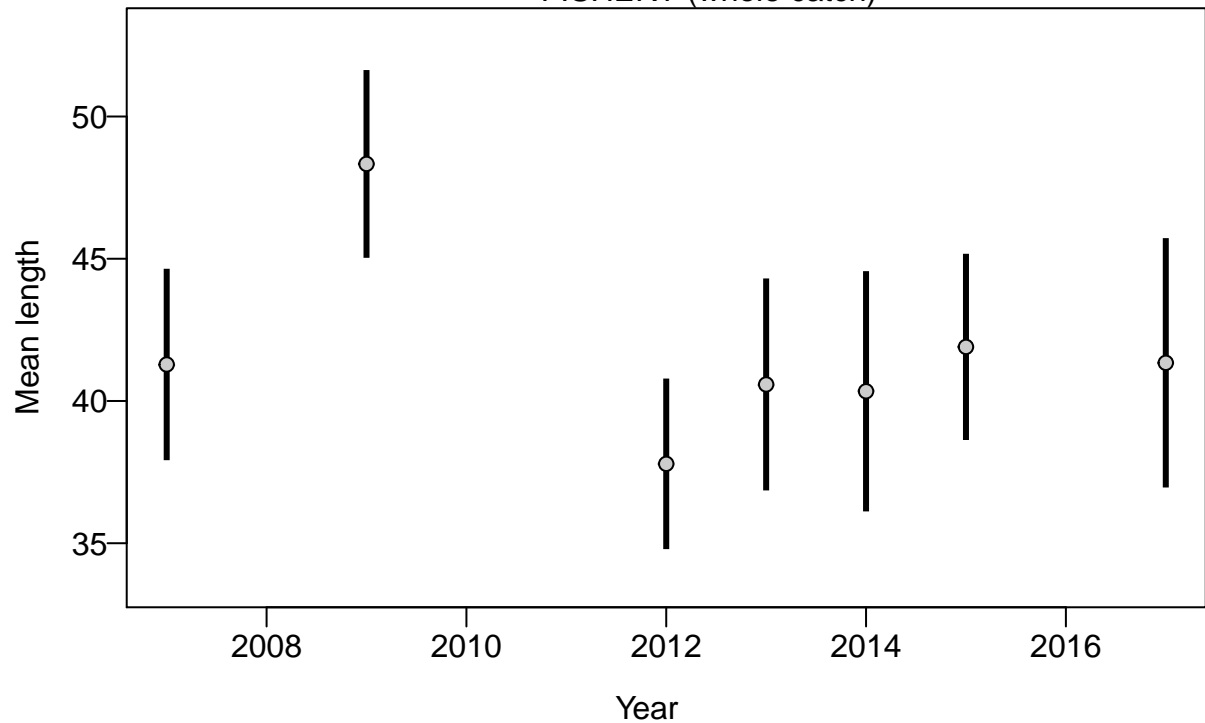
Proportion



Length (cm)

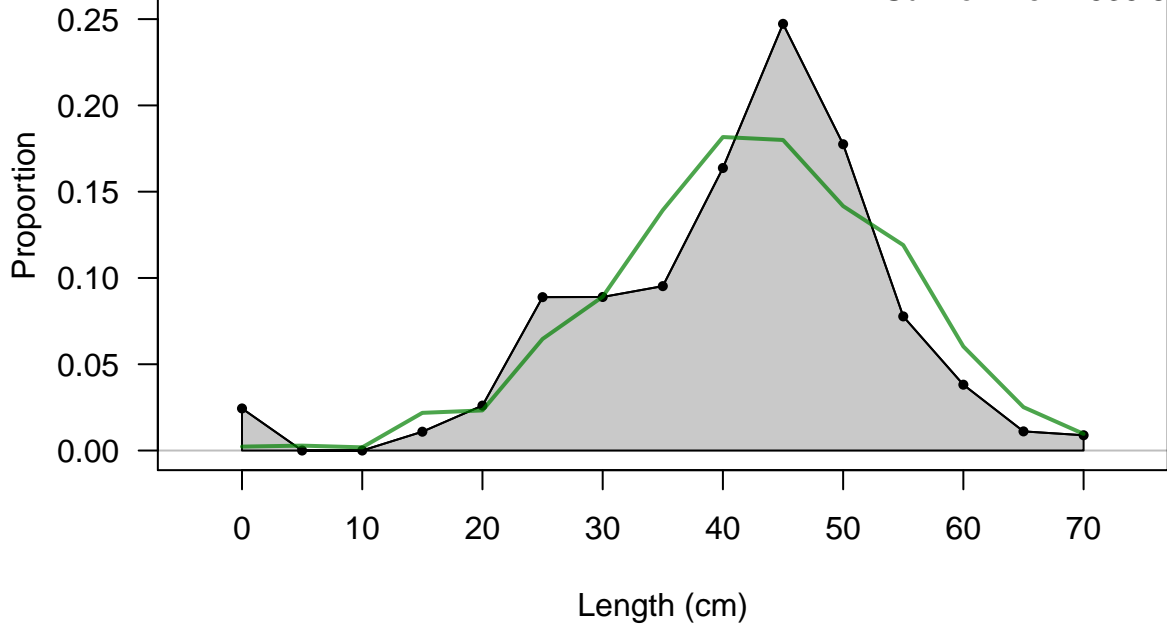


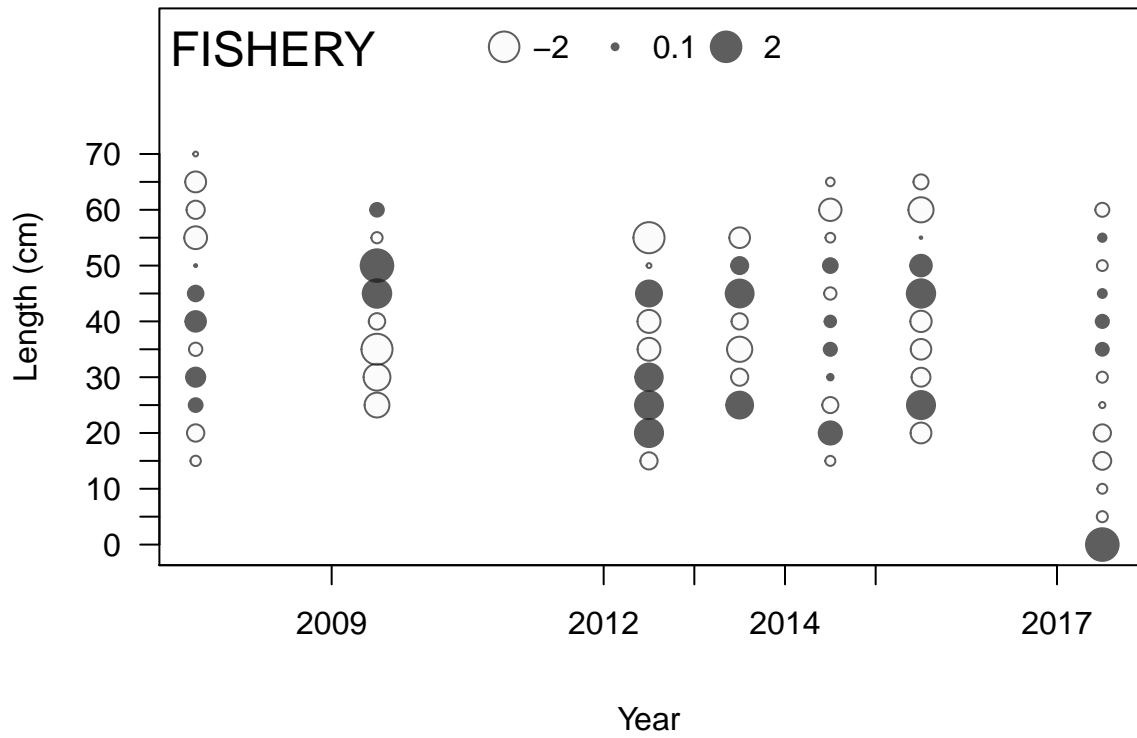
FISHERY (whole catch)



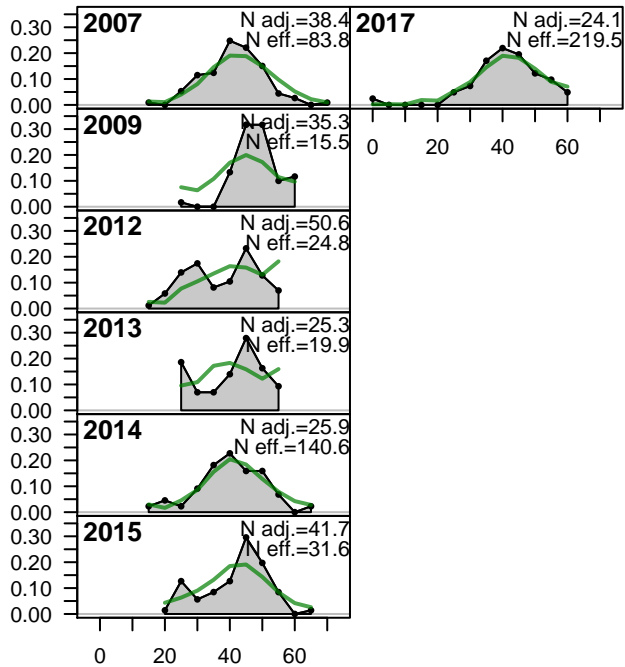
FISHERY

Sum of N adj.=241.2
Sum of N eff.=535.8

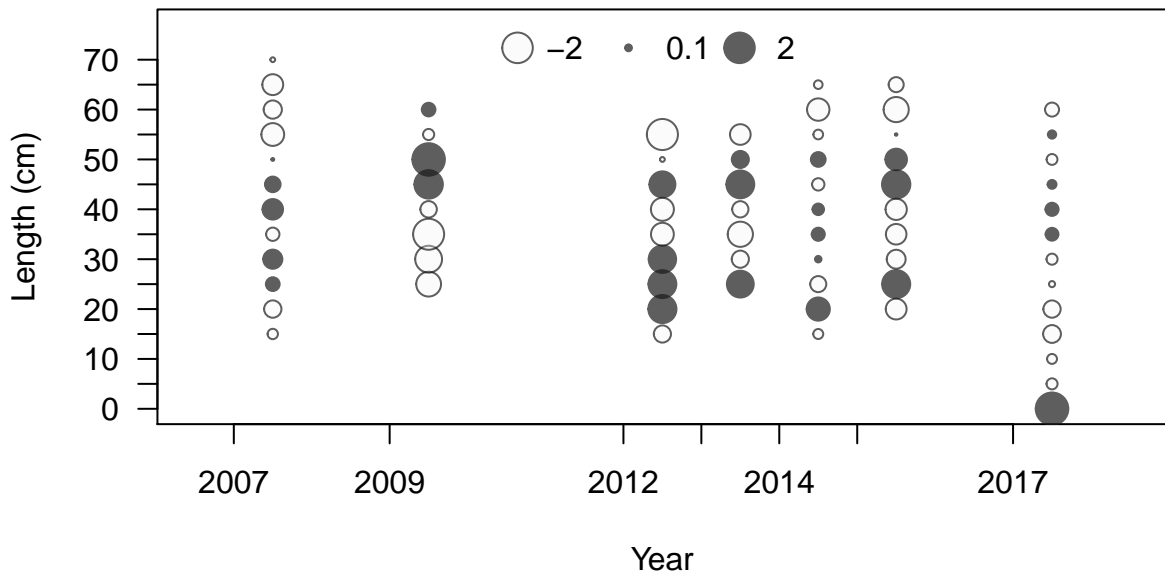


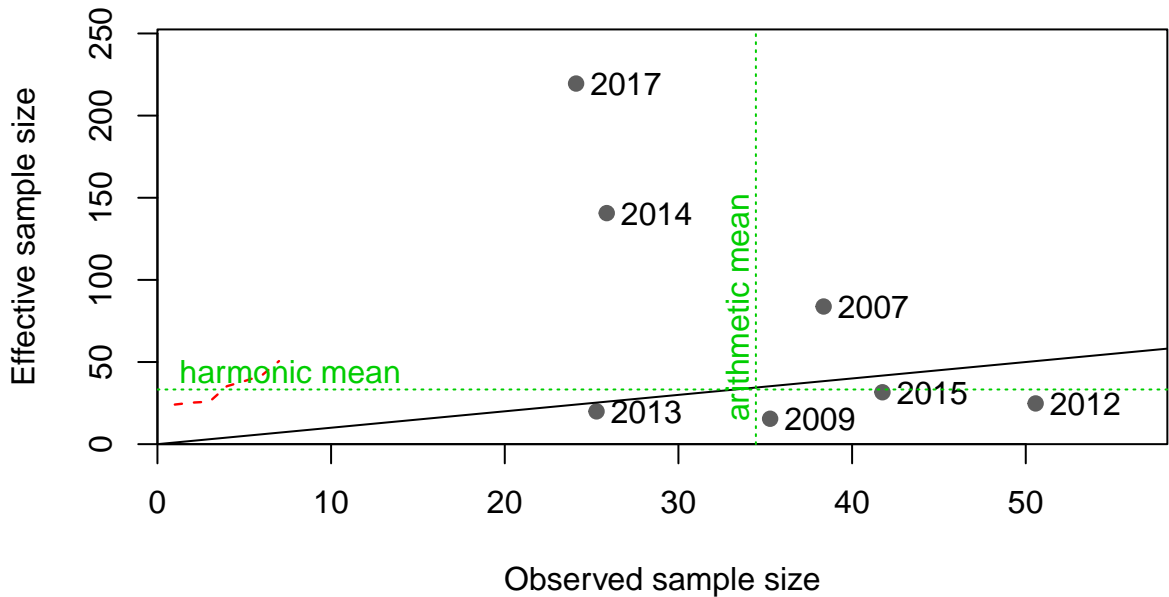


Proportion

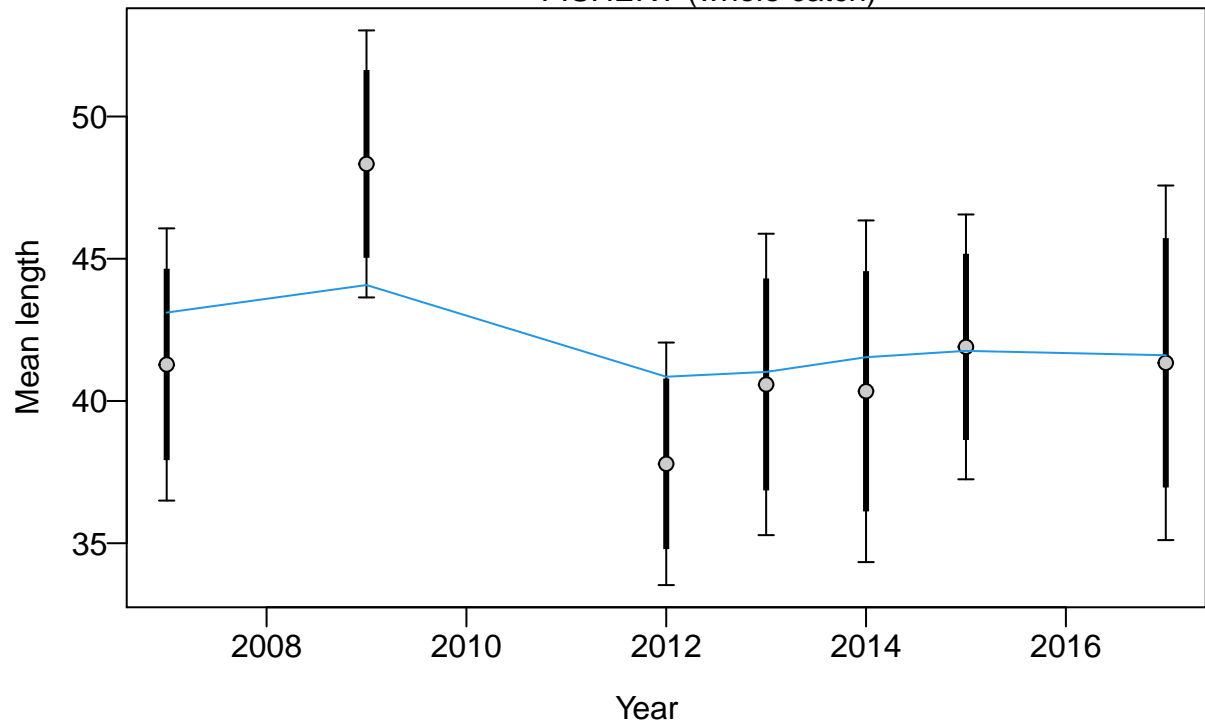


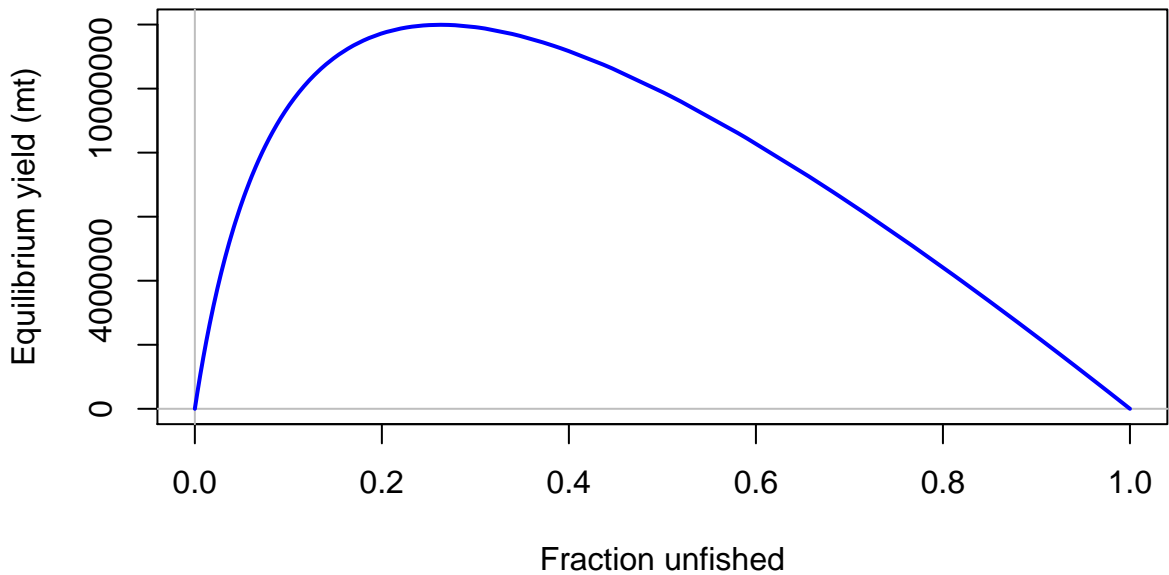
Length (cm)

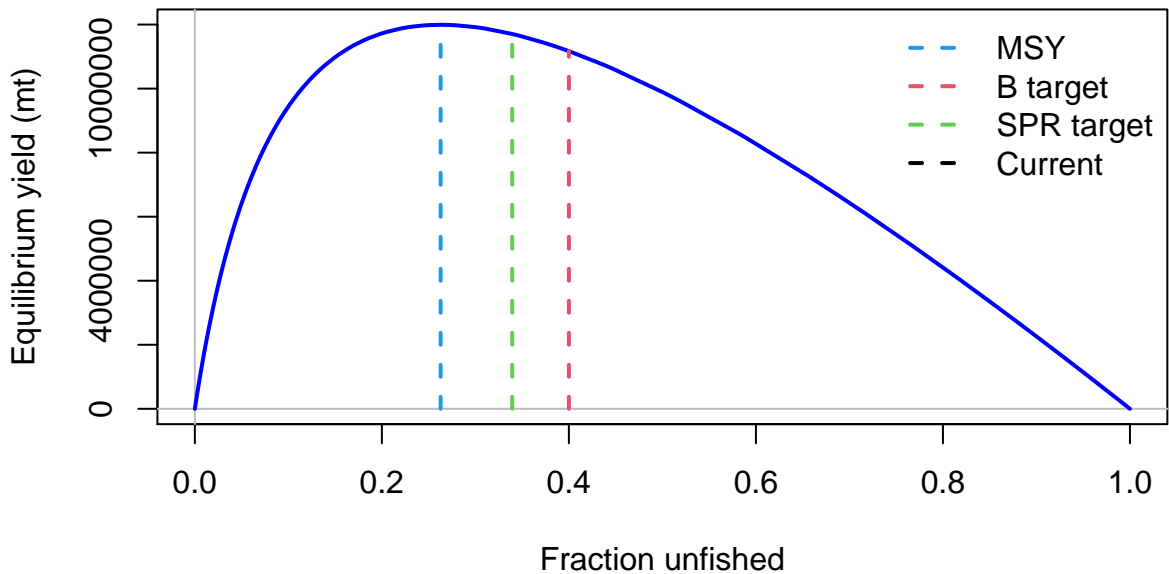


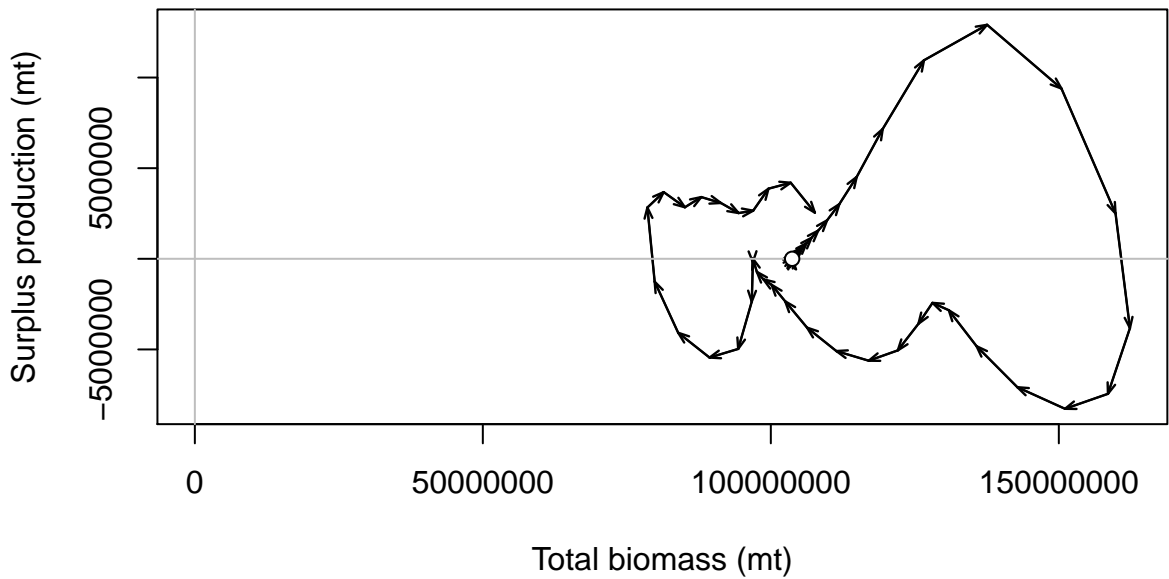


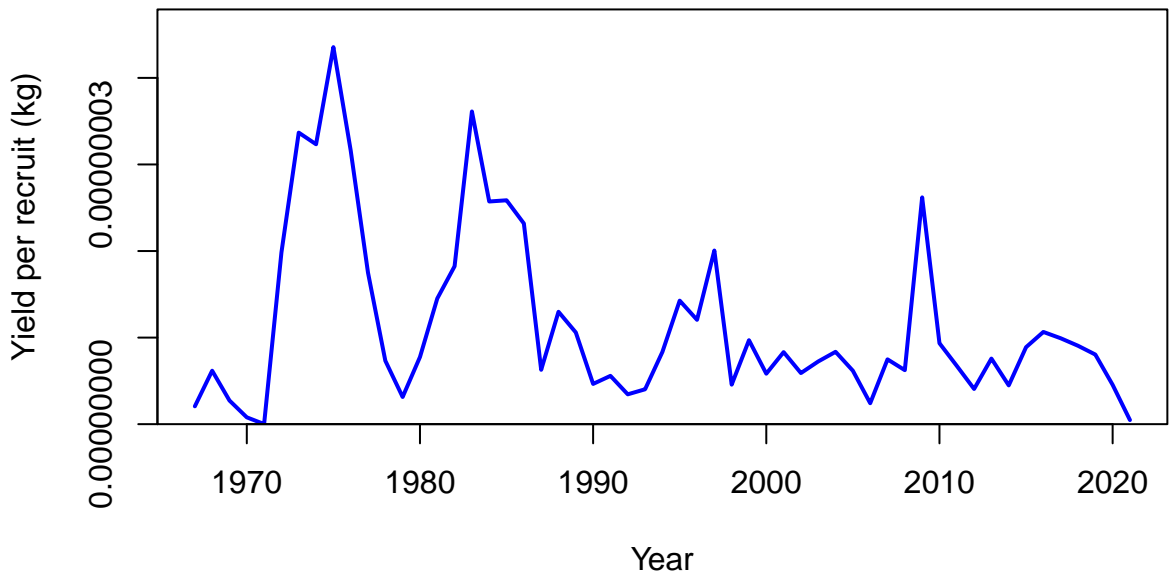
FISHERY (whole catch)



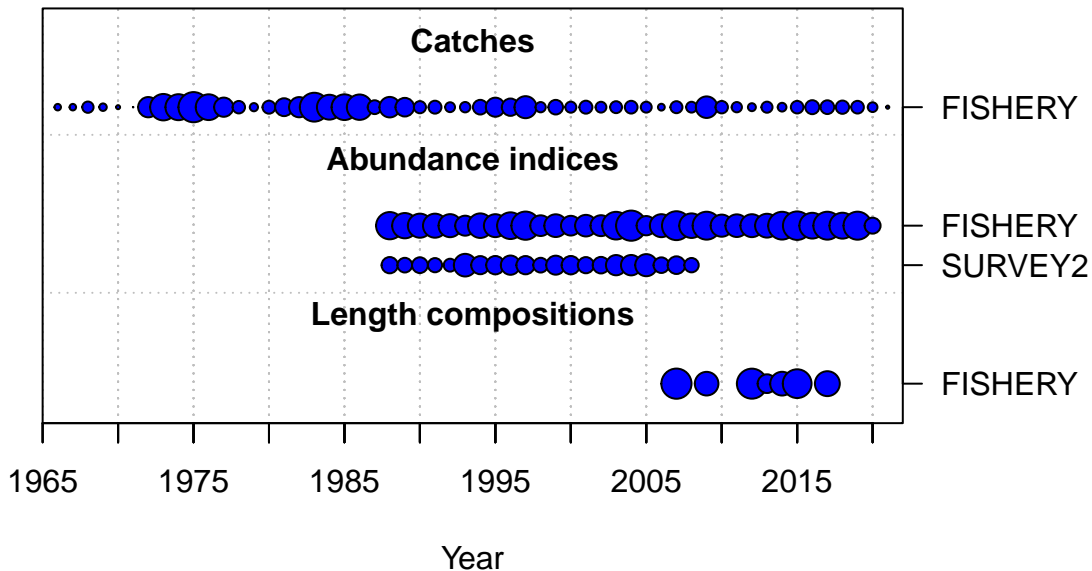






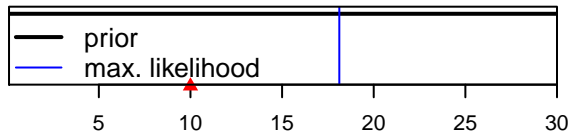




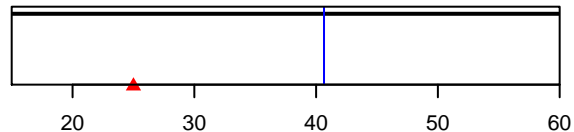


Density

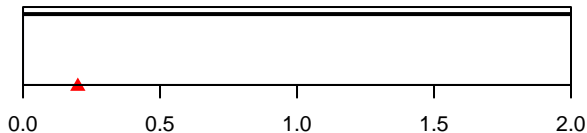
SR_LN(R0)



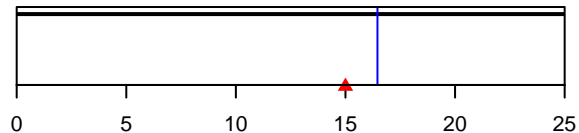
Size_inflection_FISHERY(1)



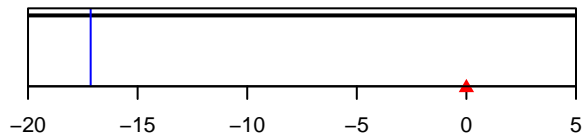
InitF_seas_1_flt_1FISHERY



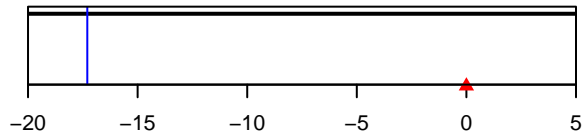
Size_95%width_FISHERY(1)



LnQ_base_FISHERY(1)



LnQ_base_SURVEY2(2)



Parameter value