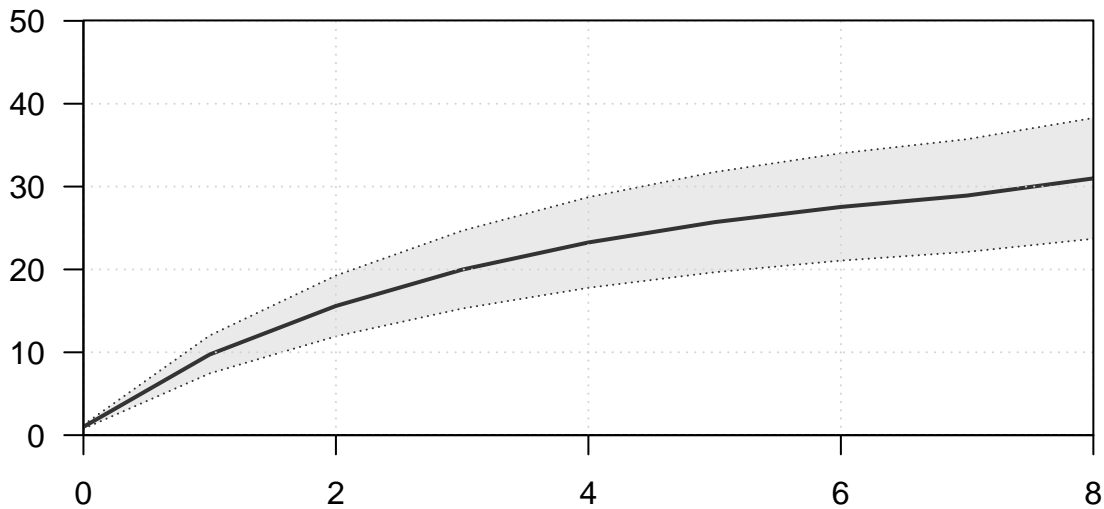
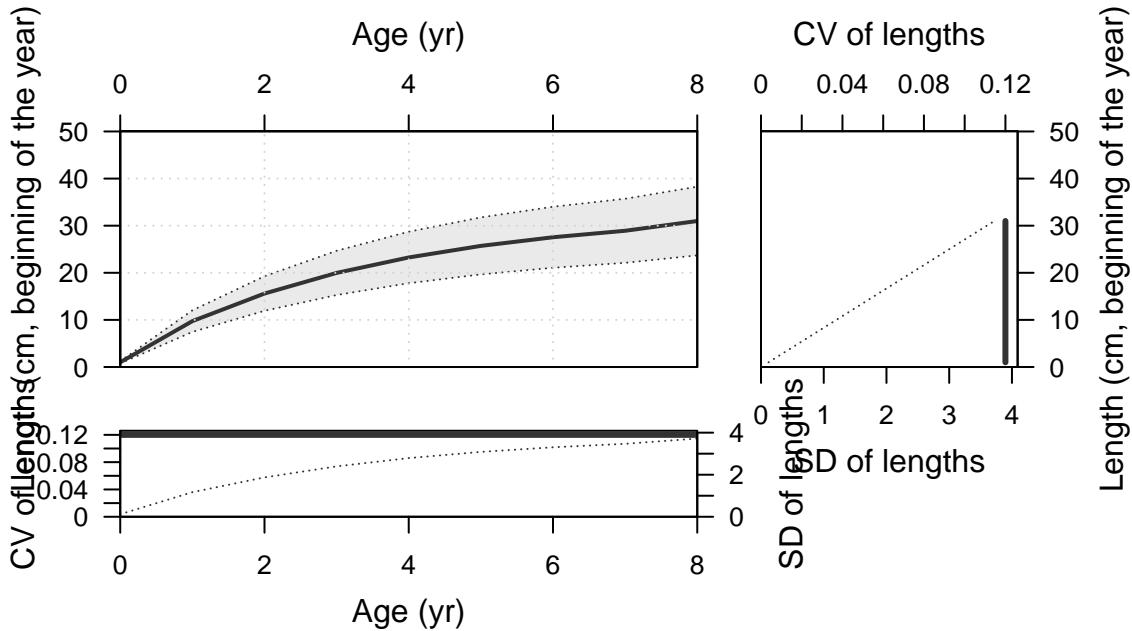


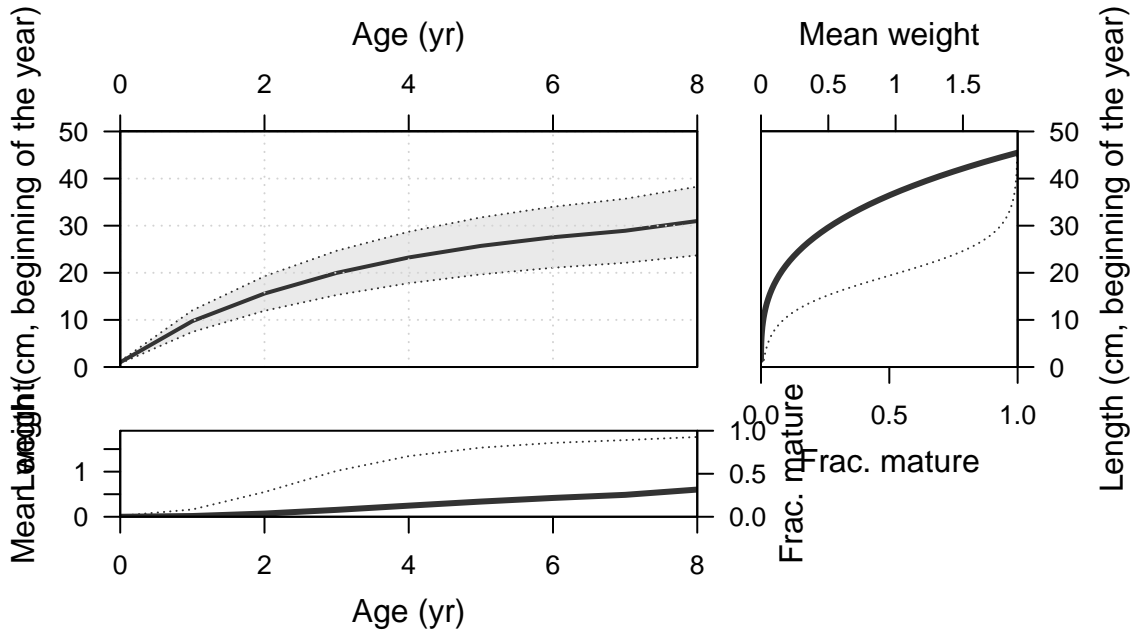
Plots created using the 'r4ss' package in R
Stock Synthesis version: 3.30.19.0
StartTime: Sat Jul 09 09:32:36 2022
Data_File: data.ss
Control_File: control.ss

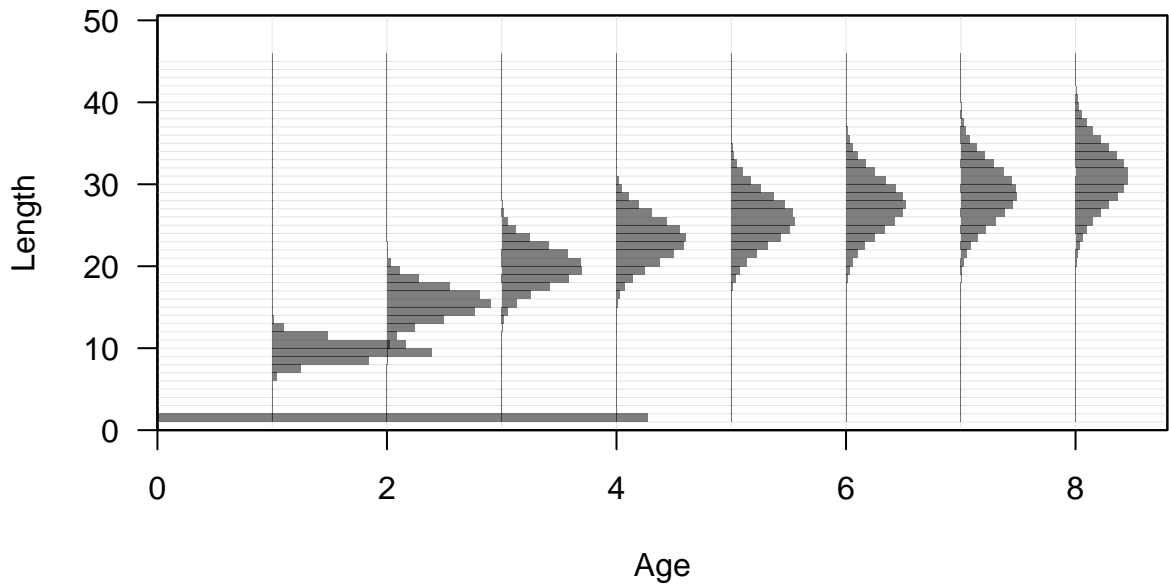
Length (cm, beginning of the year)

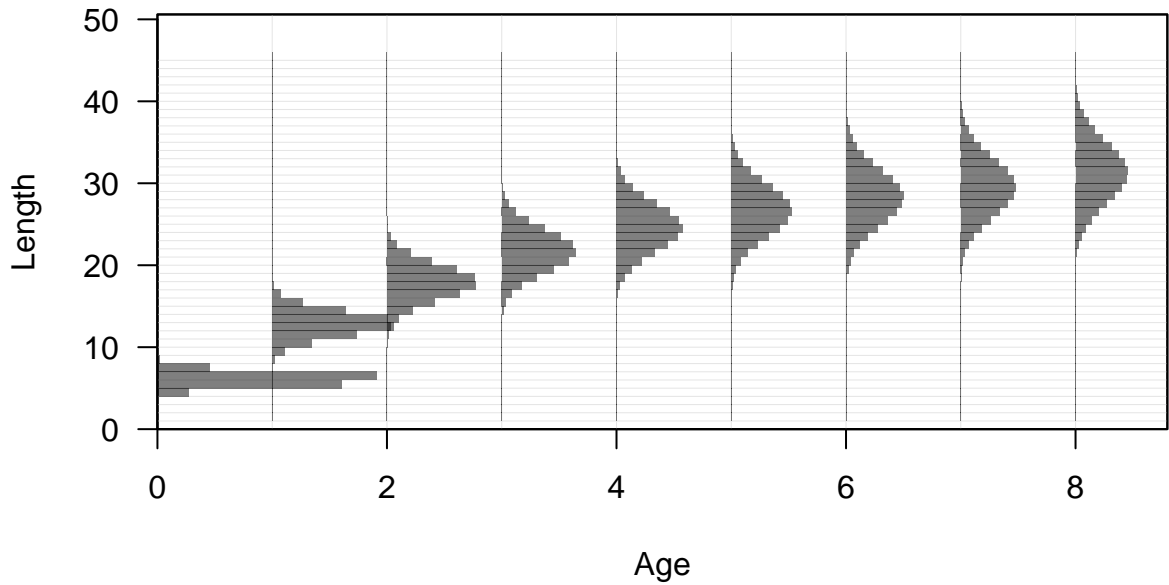


Age (yr)

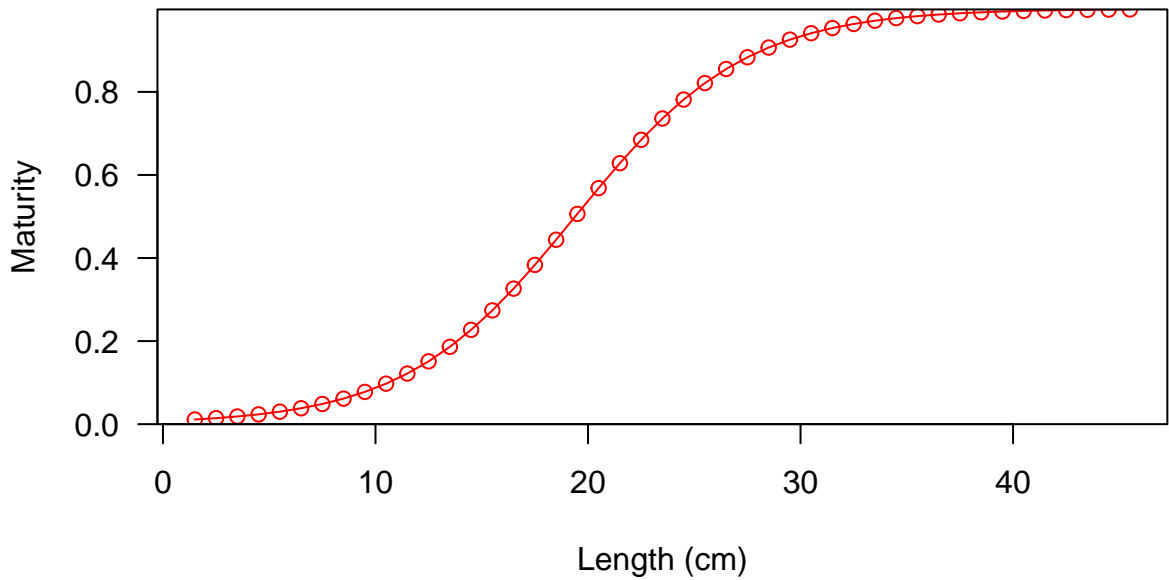




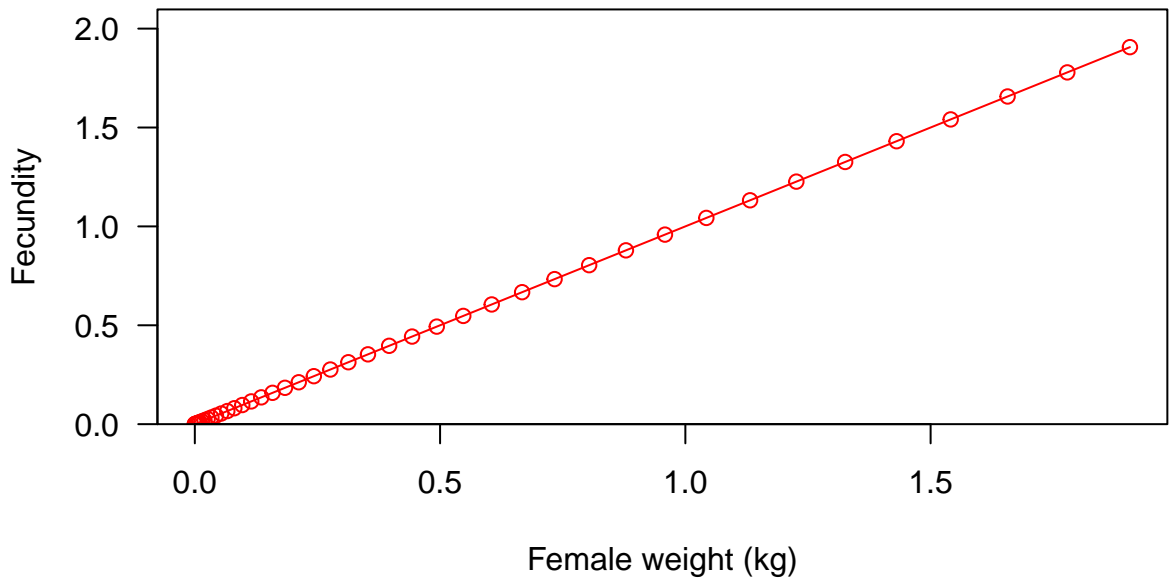




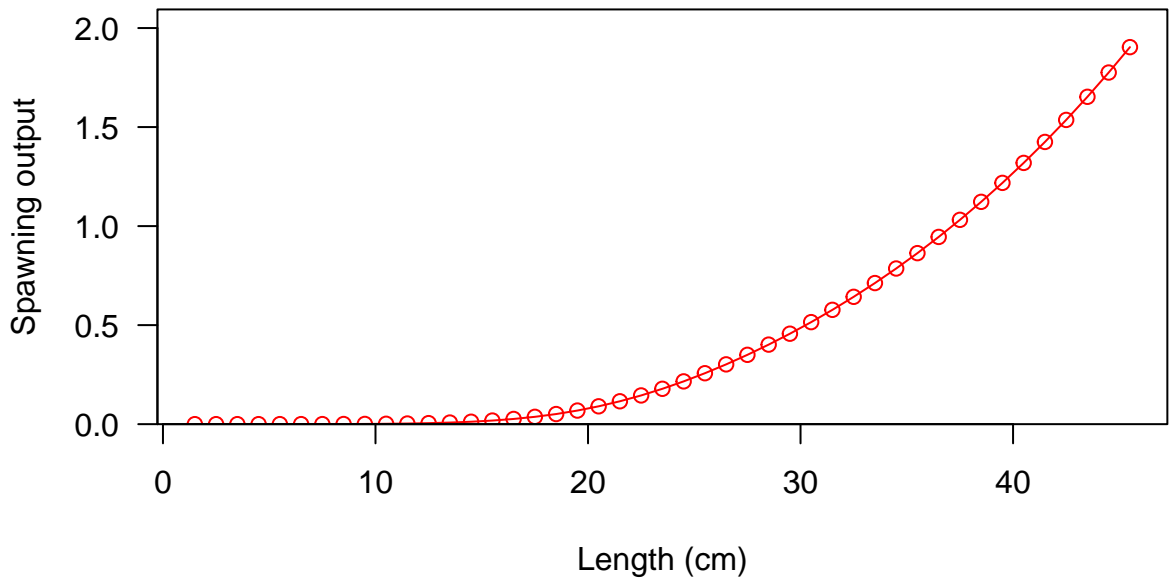


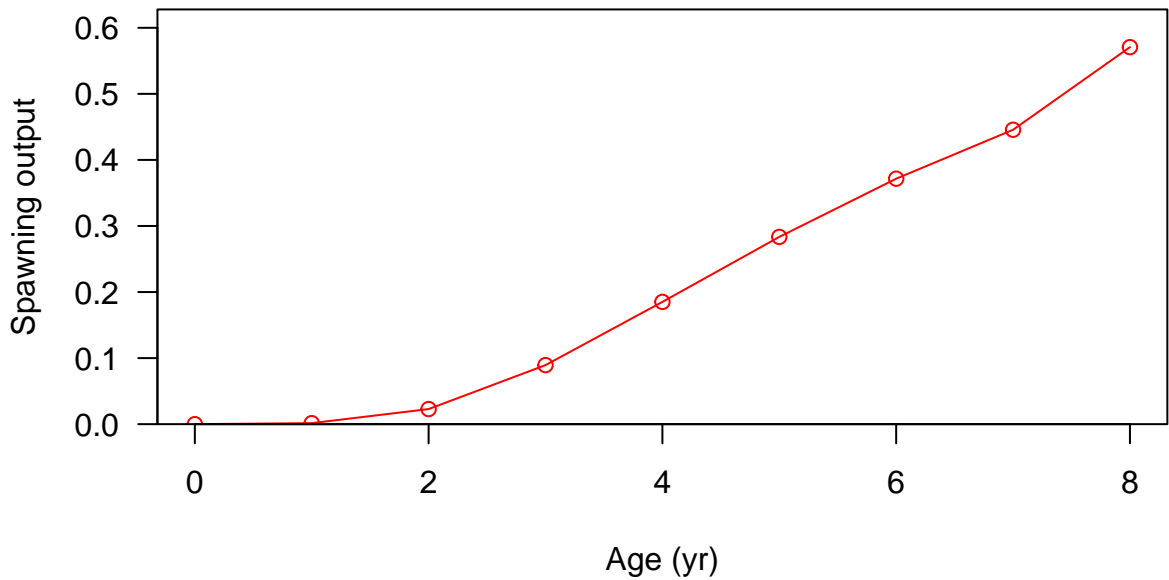




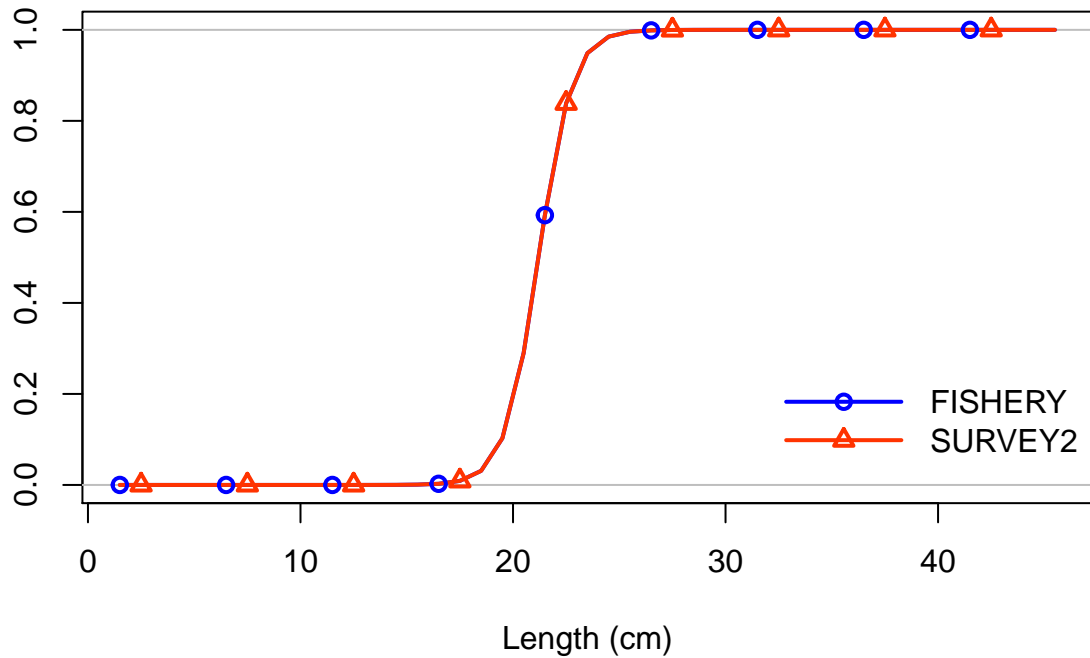




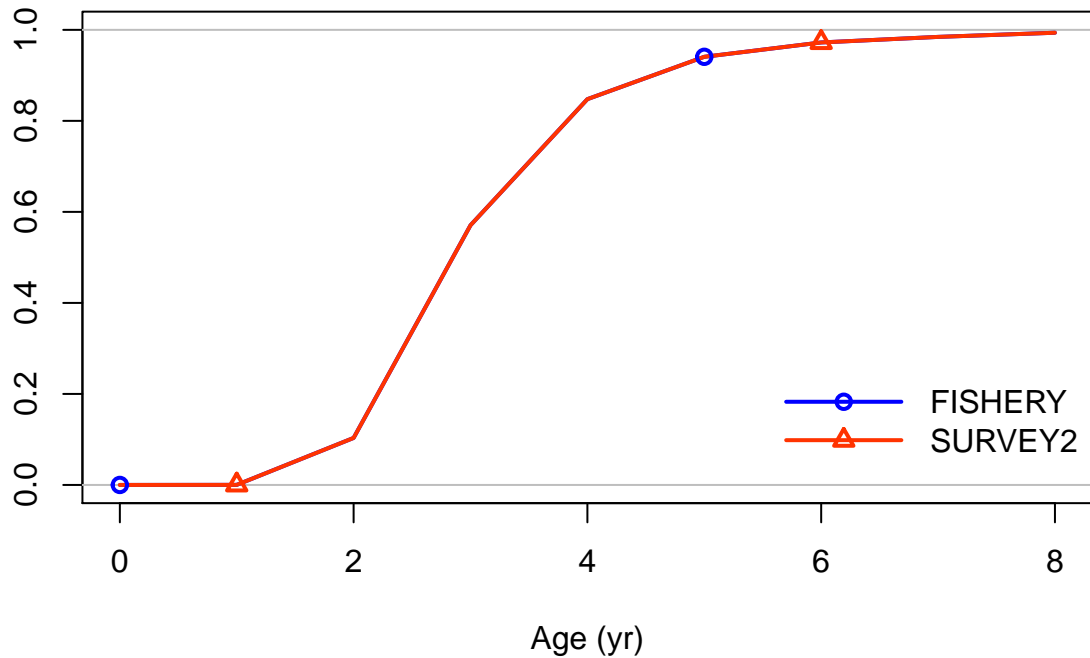




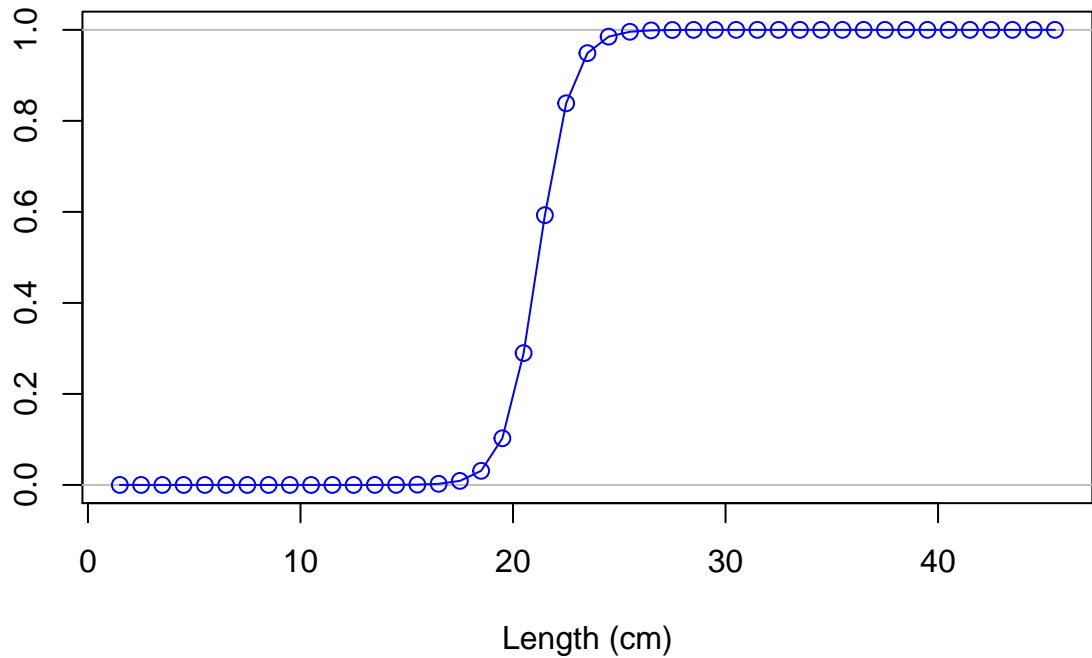
Selectivity



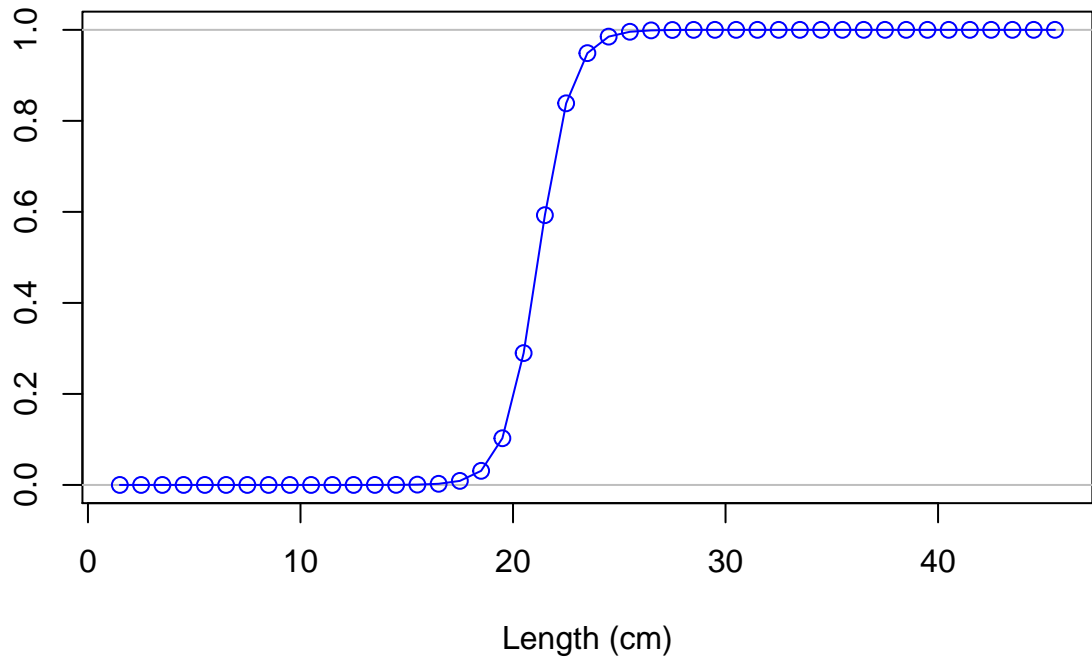
Selectivity

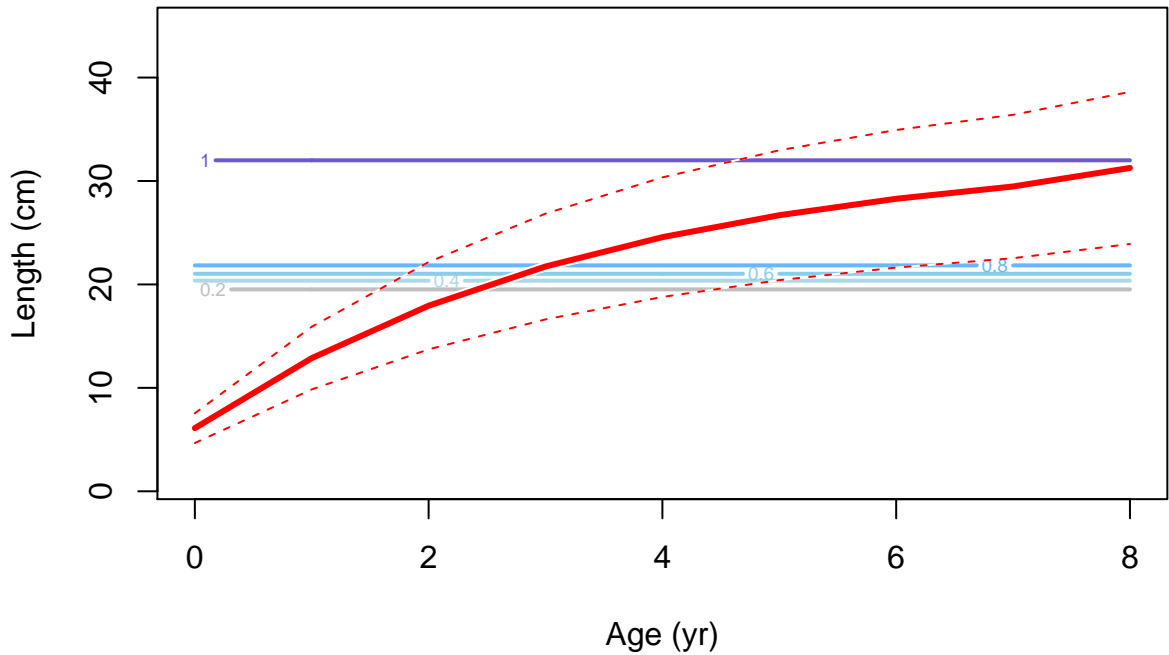


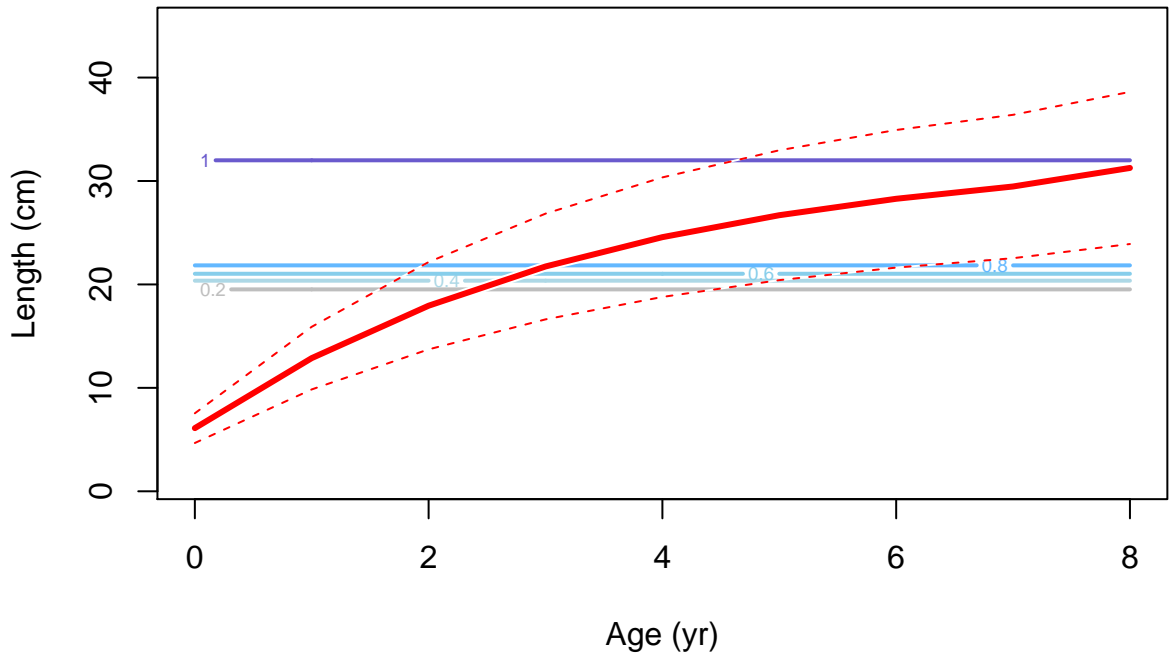
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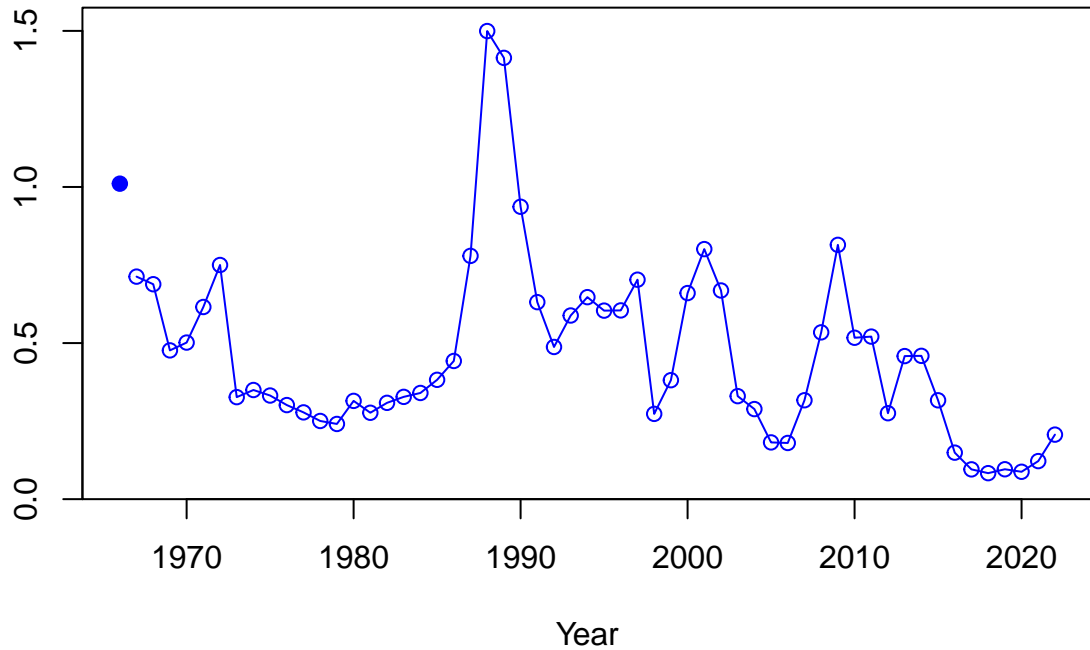
Selectivity



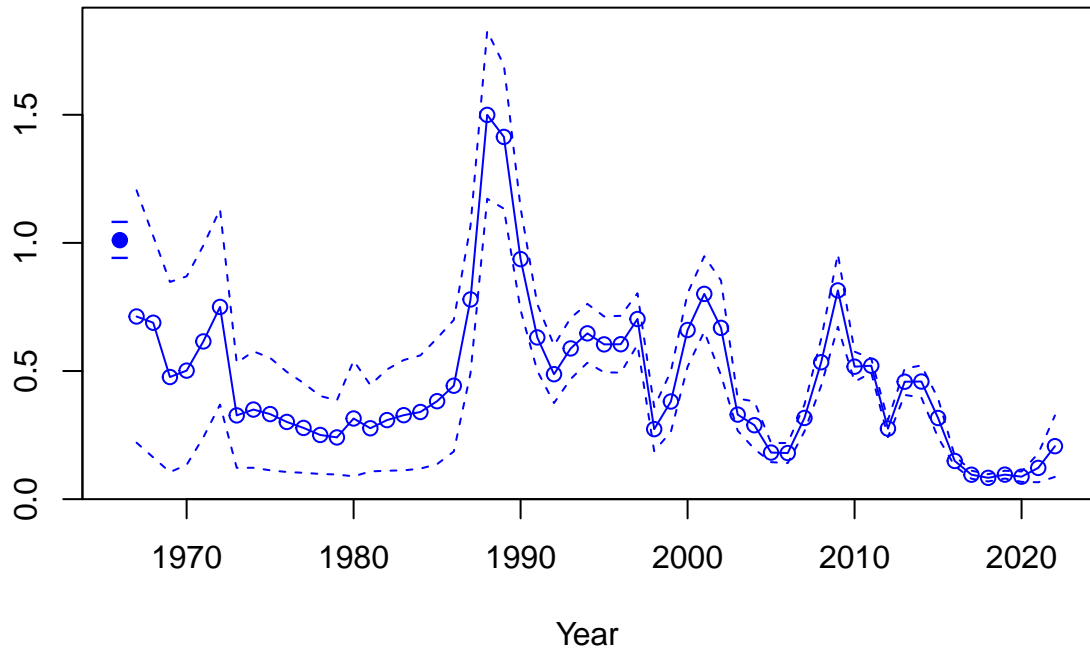




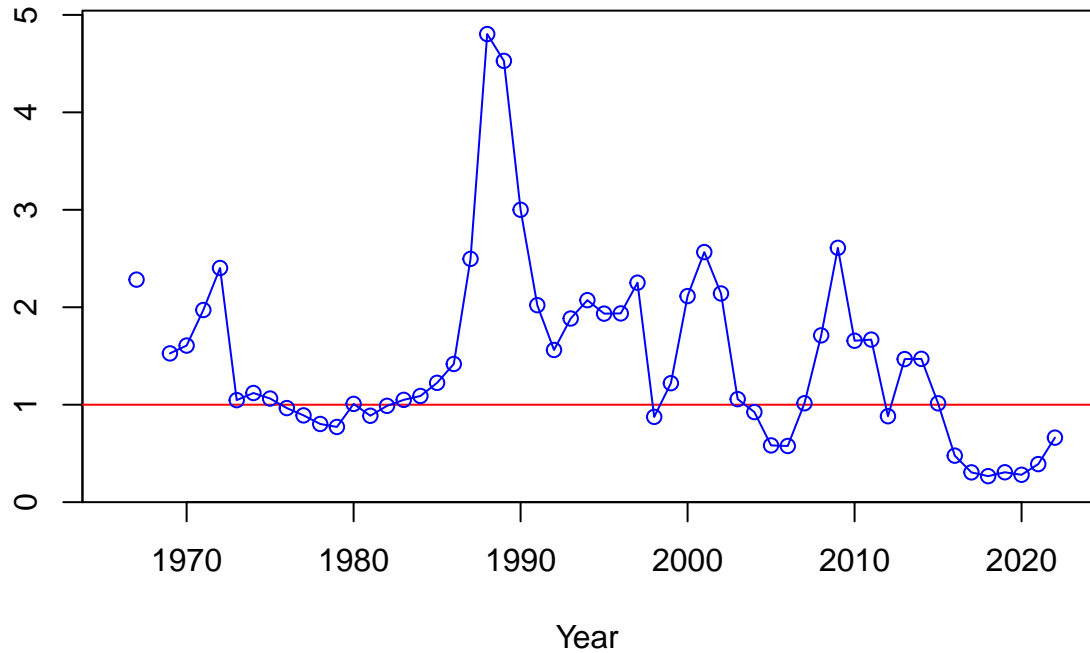
Spawning biomass (mt)



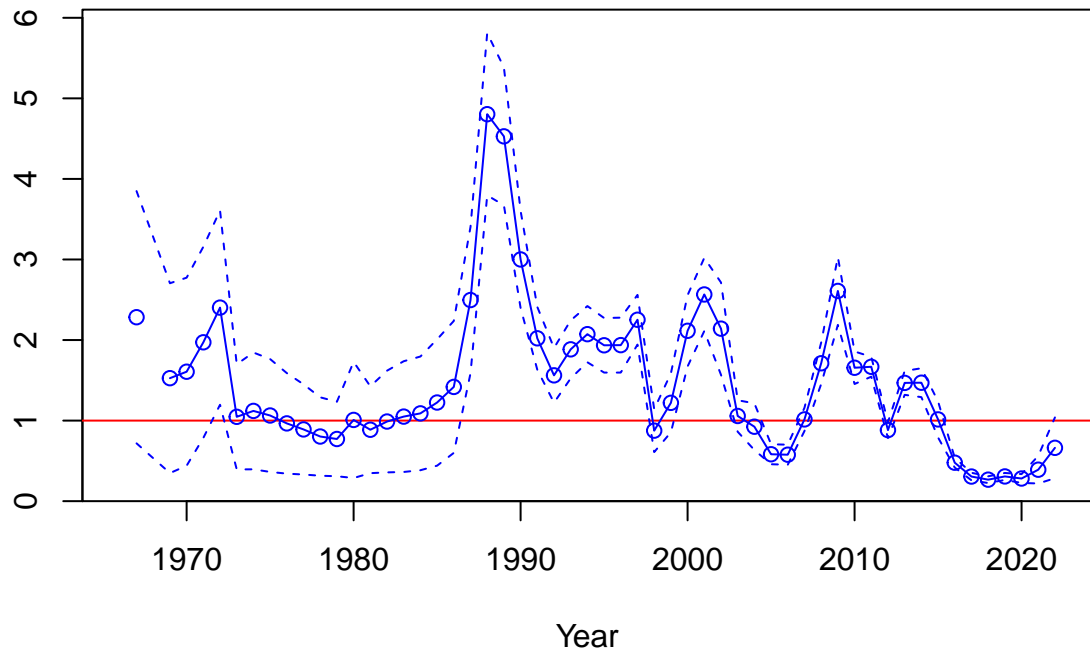
Spawning biomass (mt)

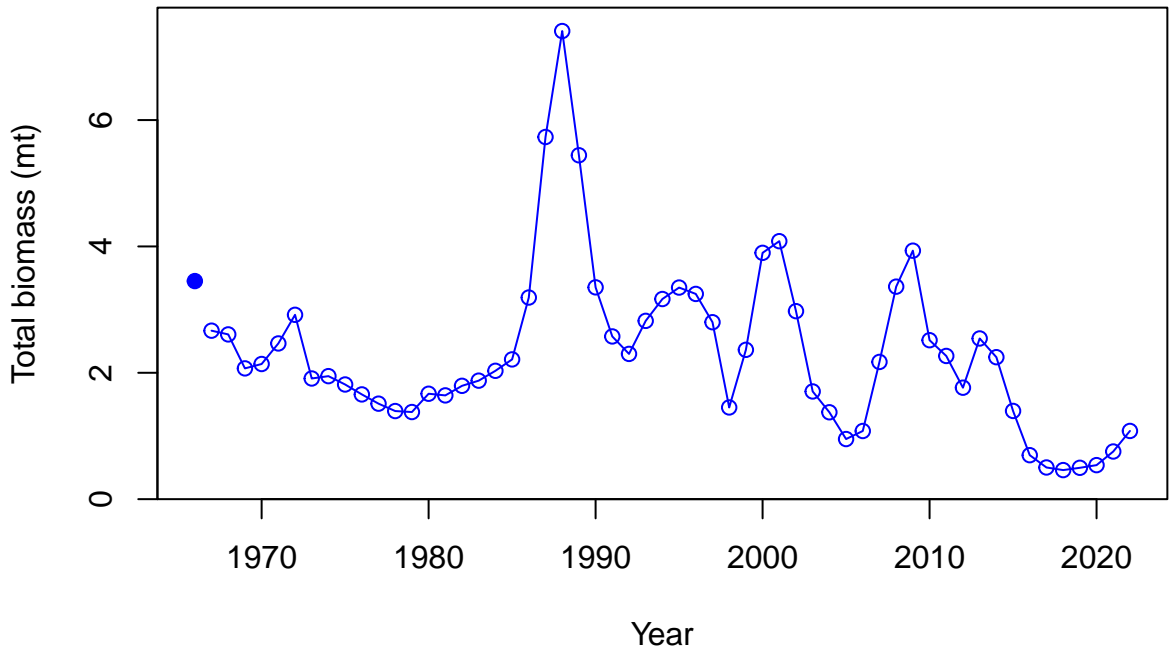


Relative spawning biomass: B/B_{MSY}

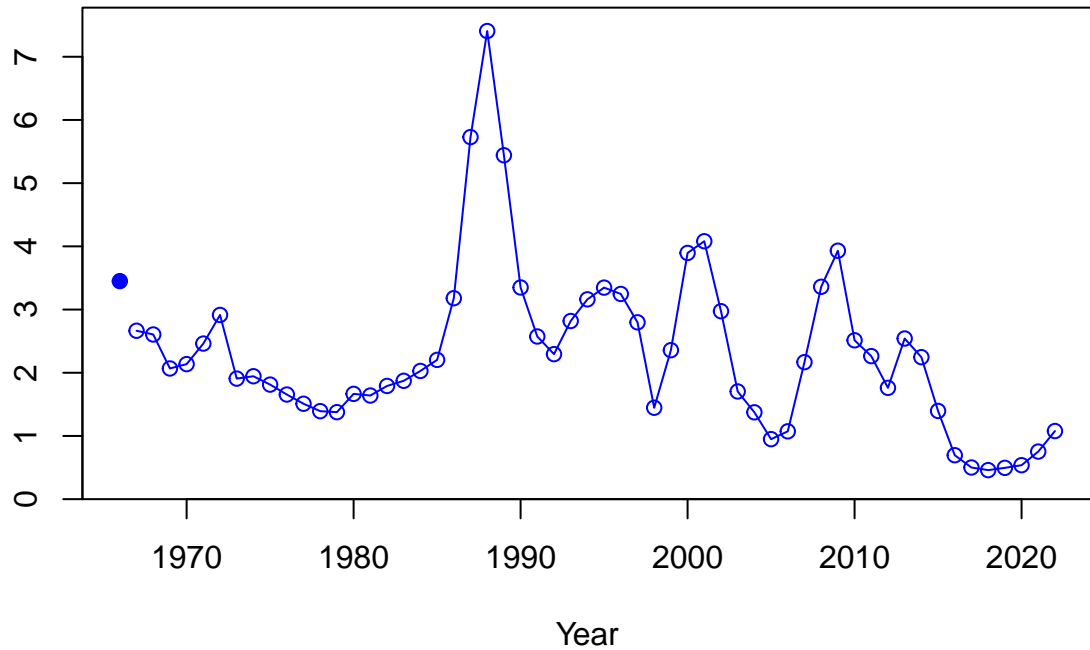


Relative spawning biomass: B/B_{MSY}

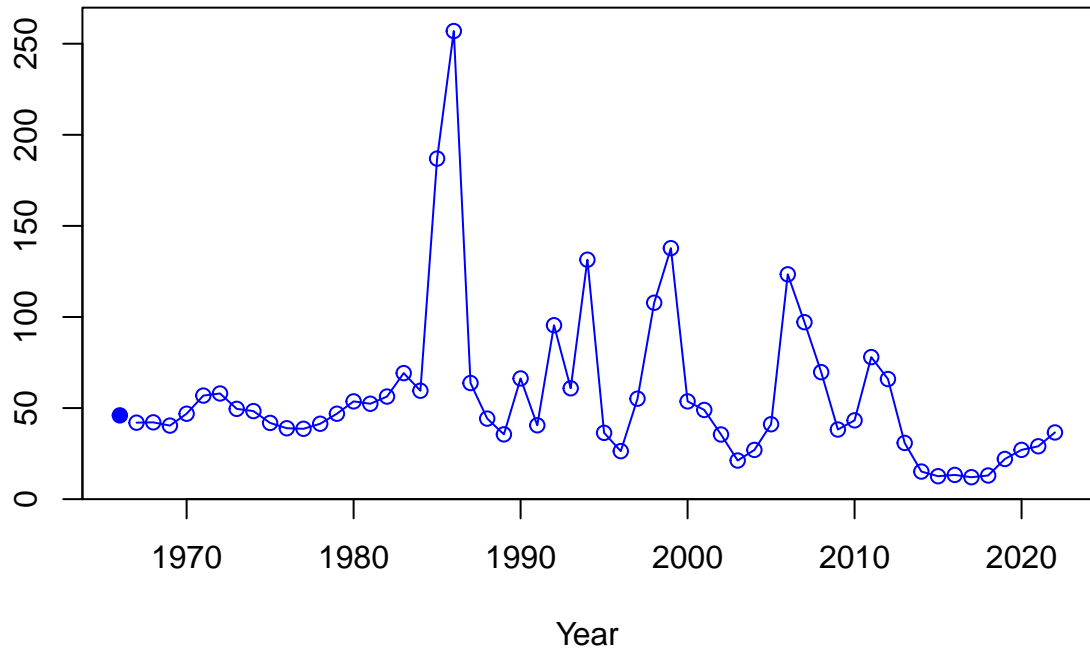




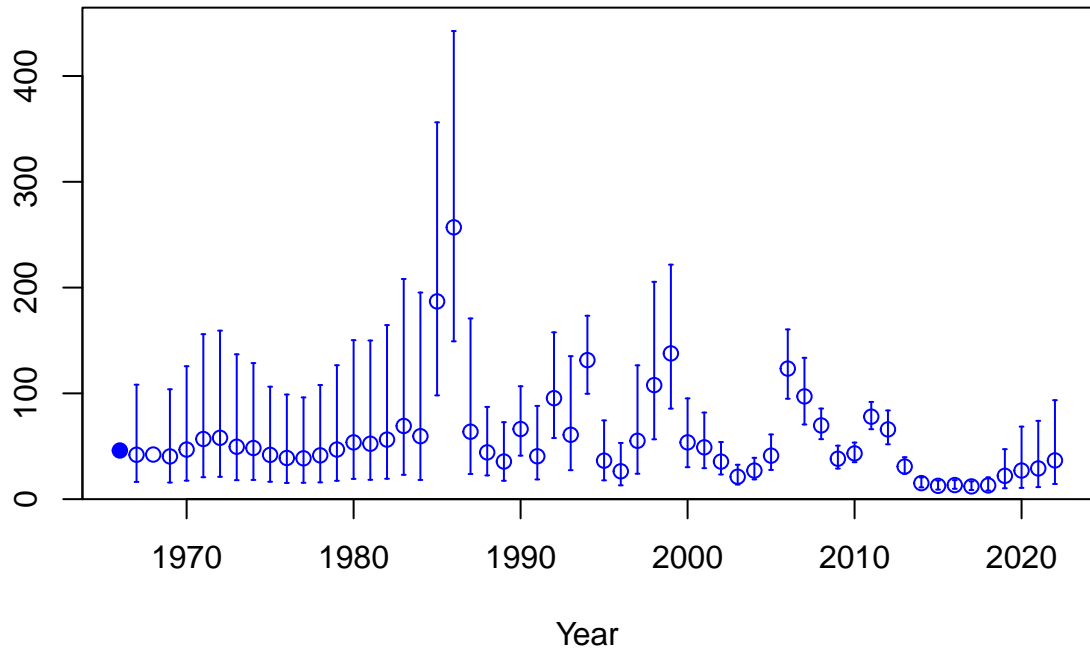
Summary biomass (mt)



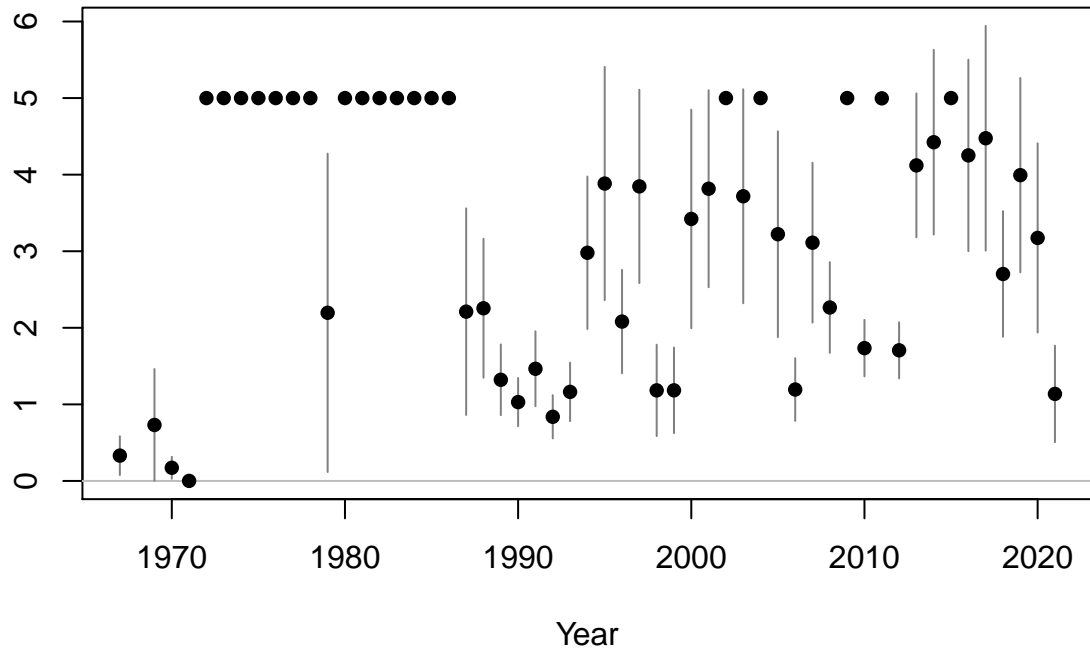
Age-0 recruits (1,000s)

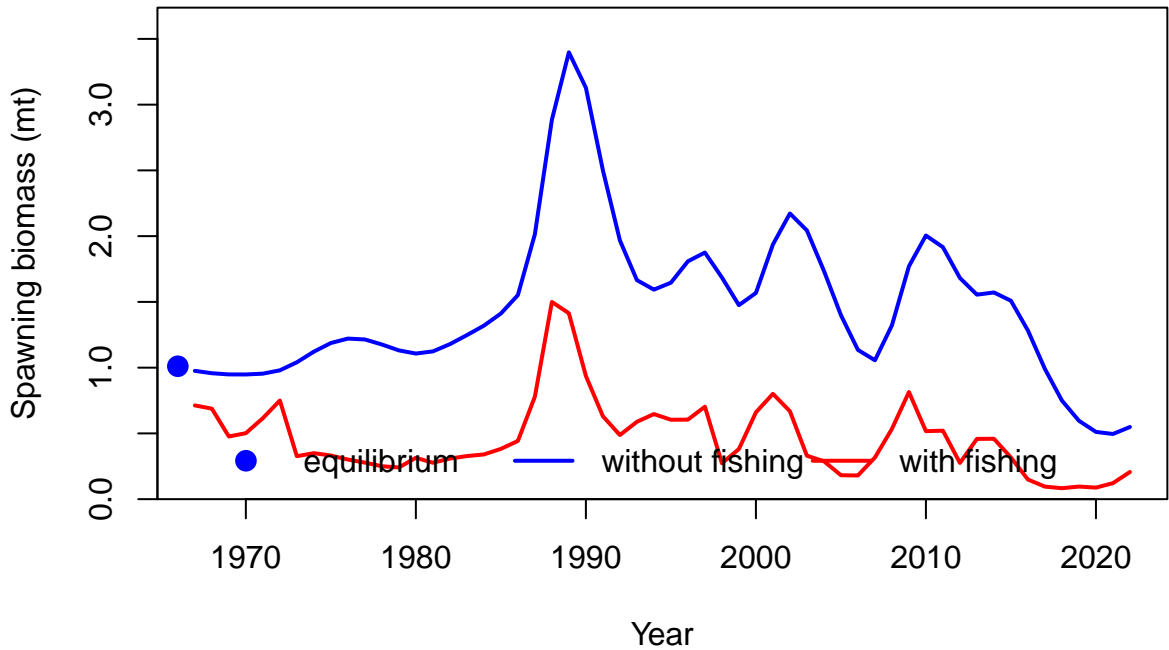


Age-0 recruits (1,000s)

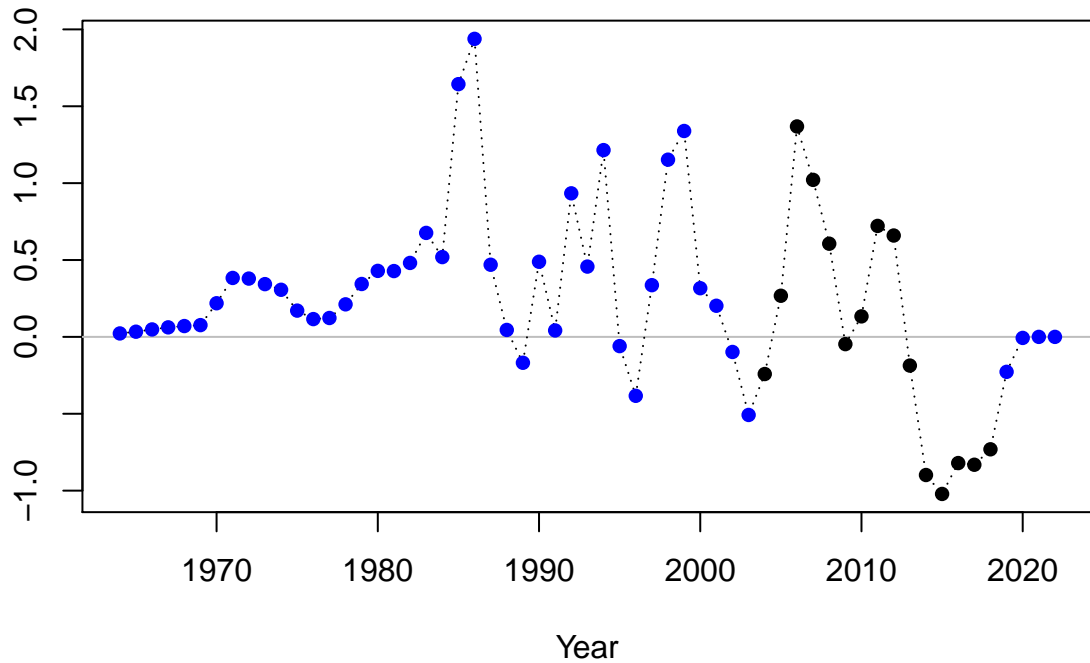


Summary Fishing Mortality





Log recruitment deviation



Log recruitment deviation

2
1
0
-1

1970

1980

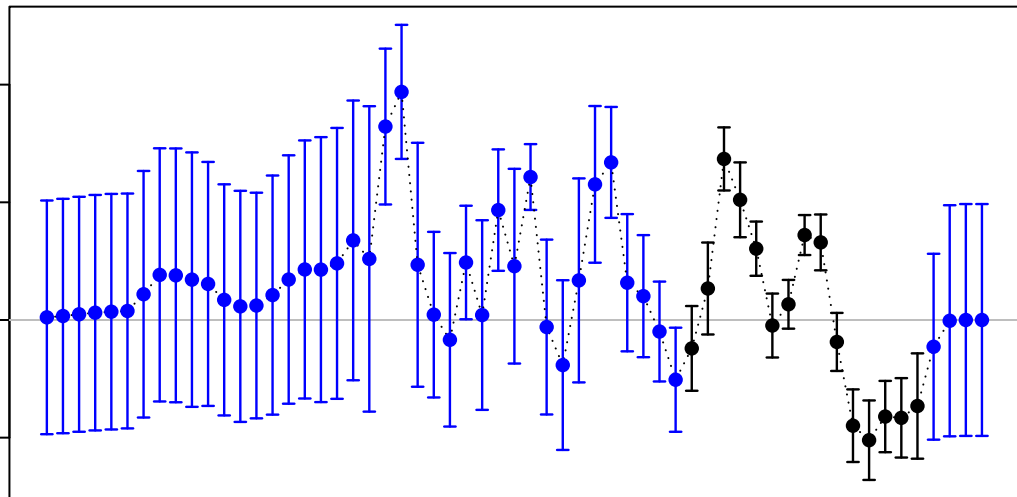
1990

2000

2010

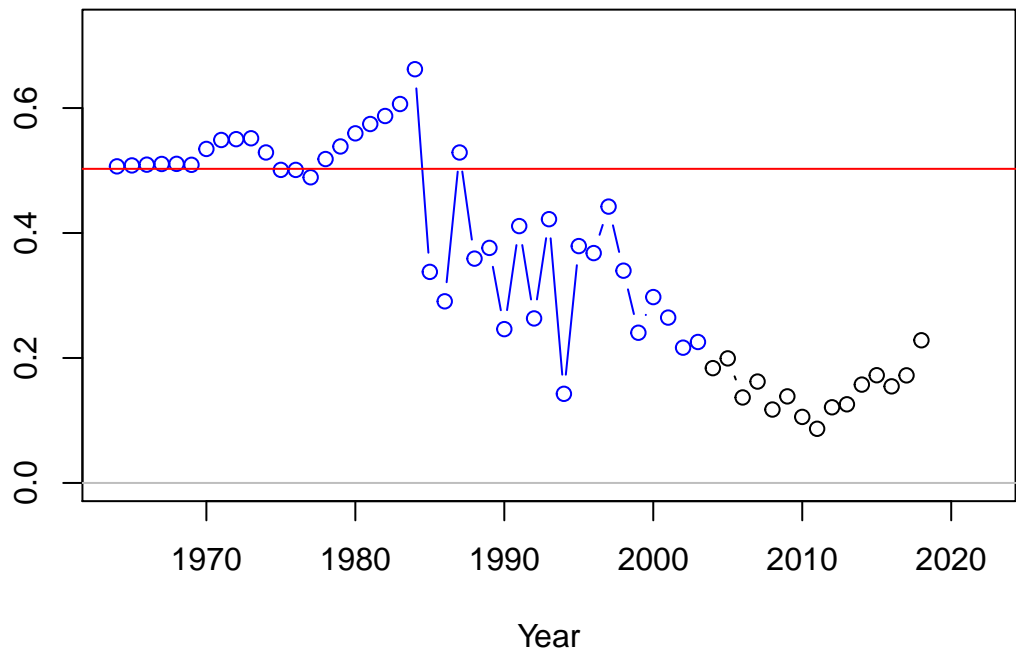
2020

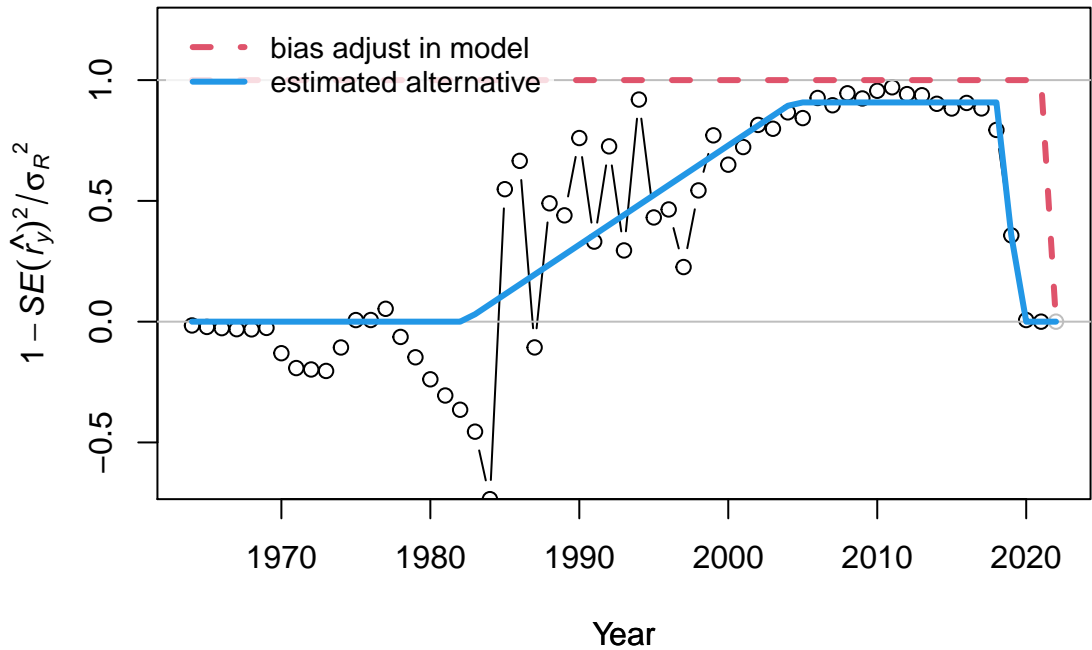
Year

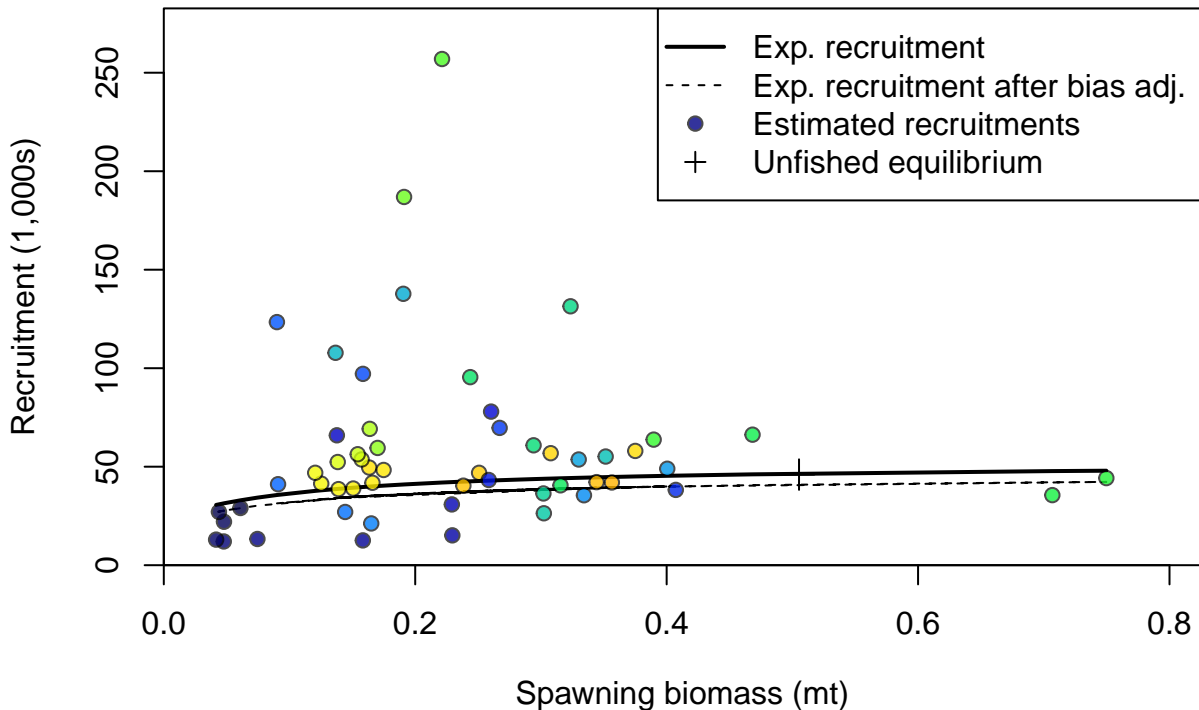


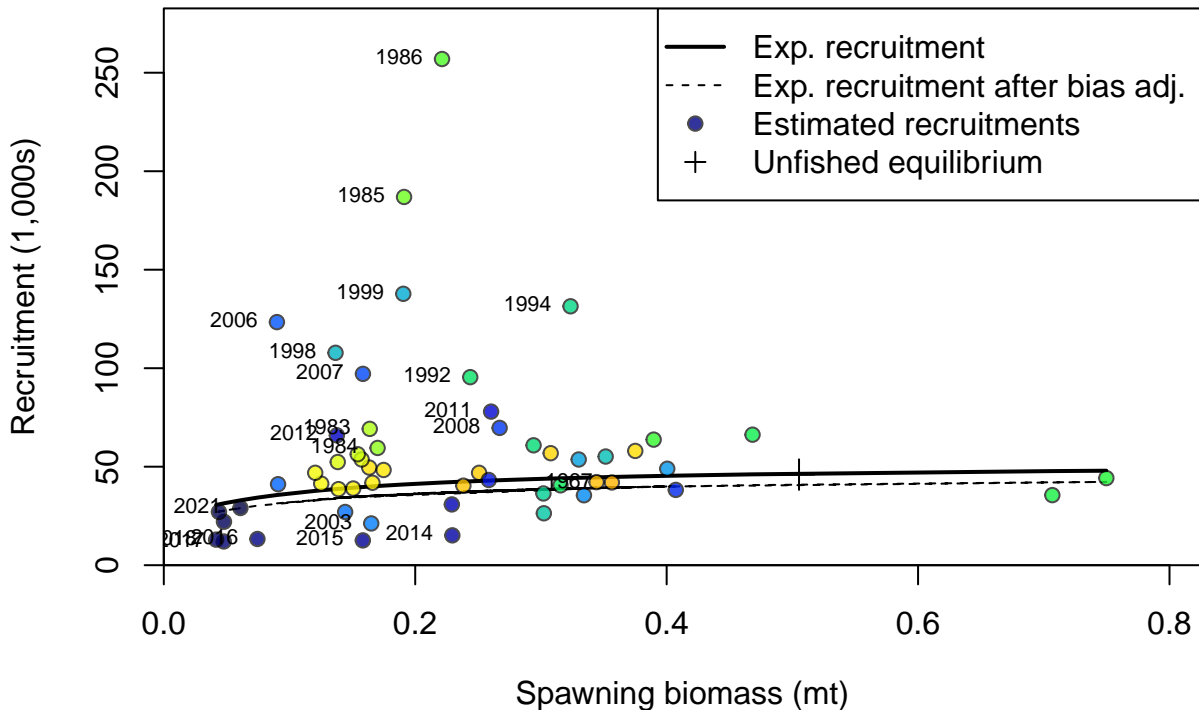
Recruitment deviation variance

Asymptotic standard error estimate

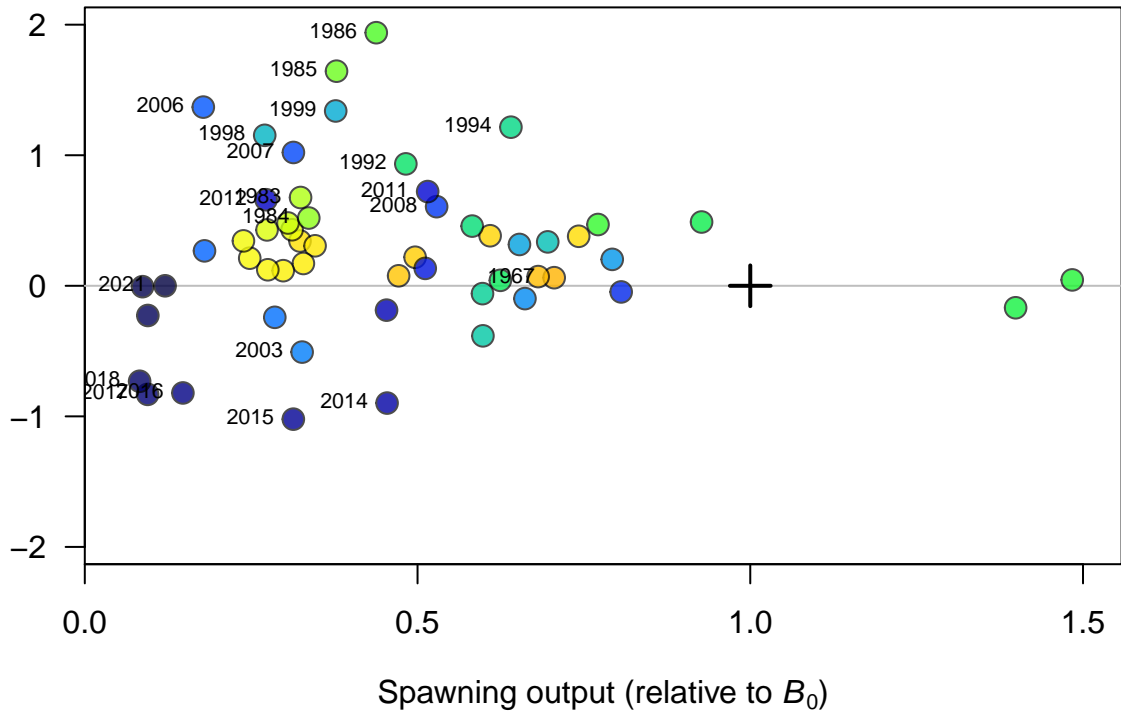


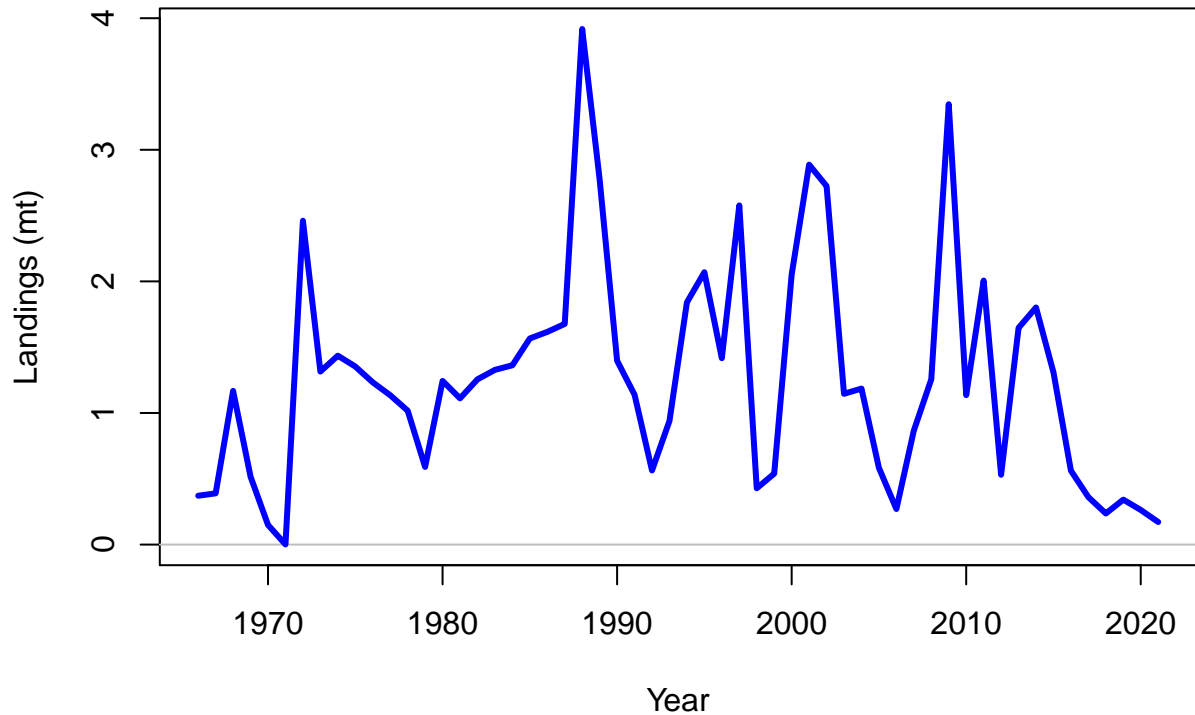


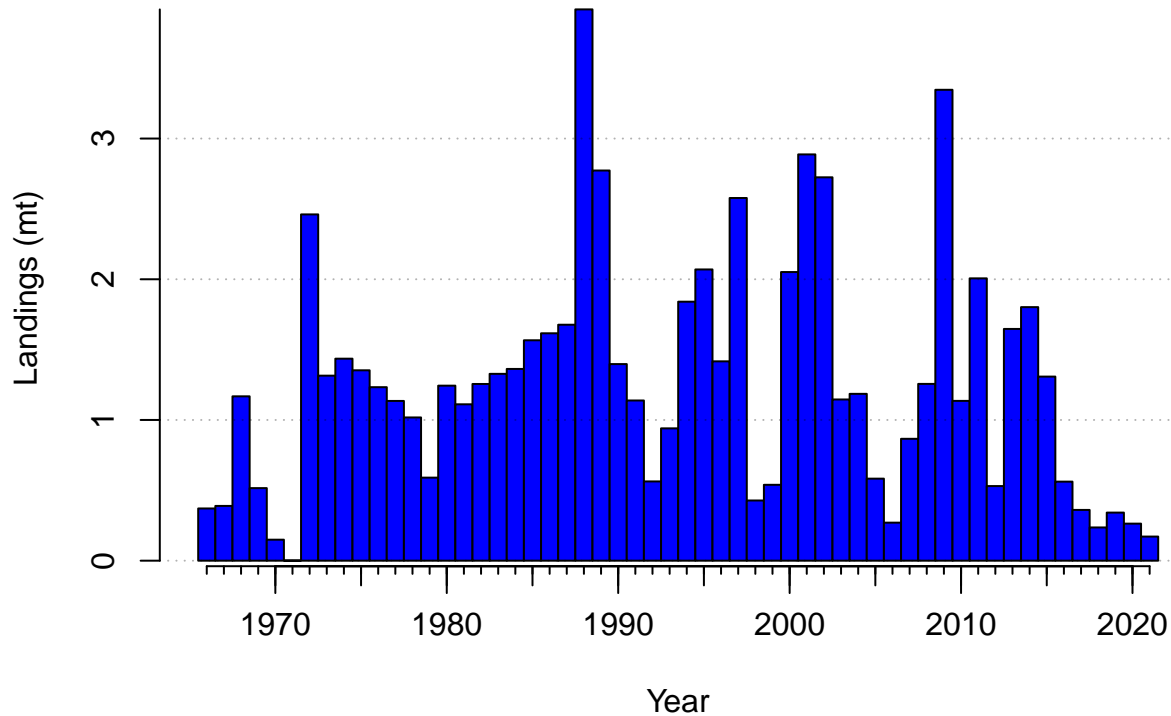




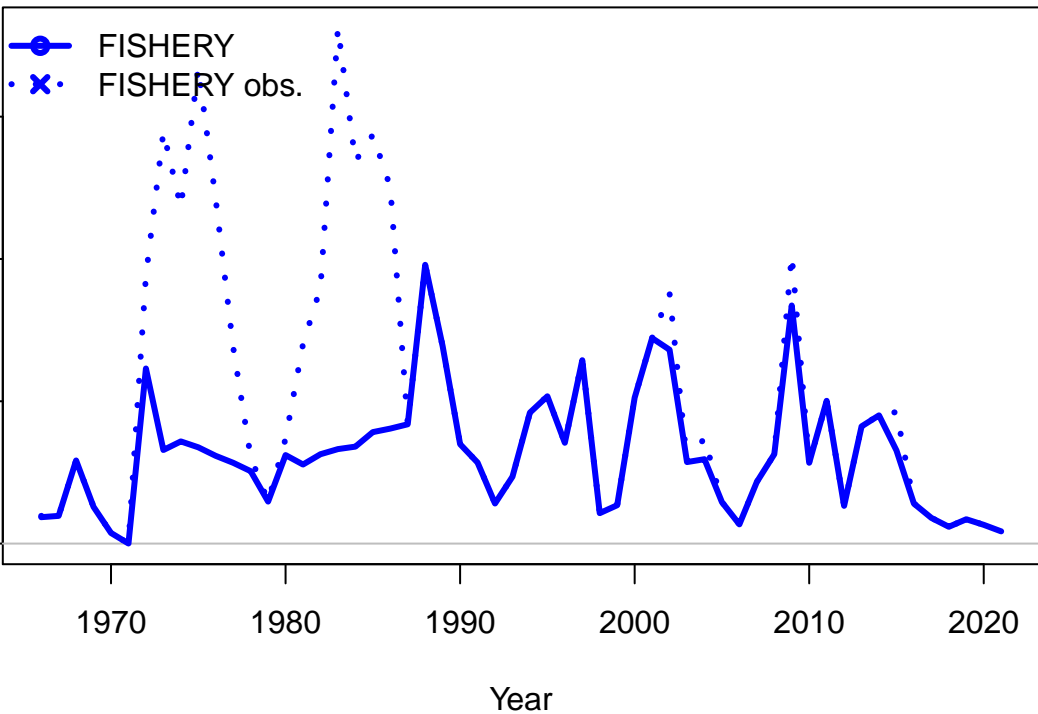
Log recruitment deviation

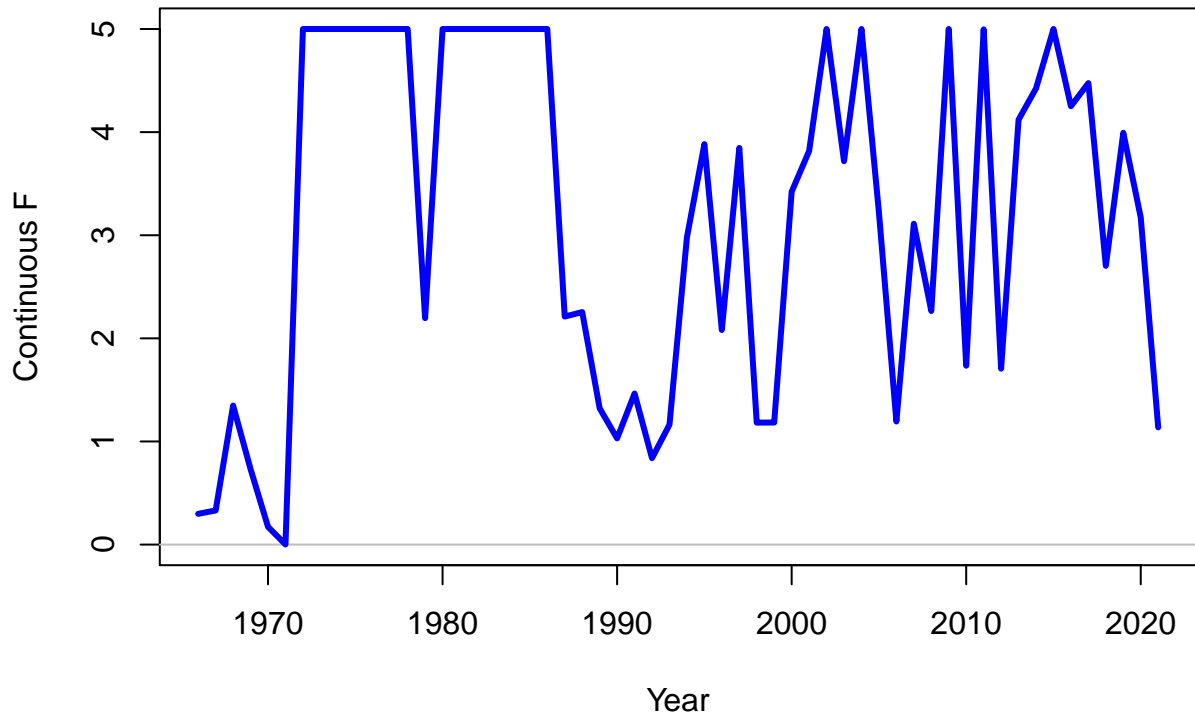




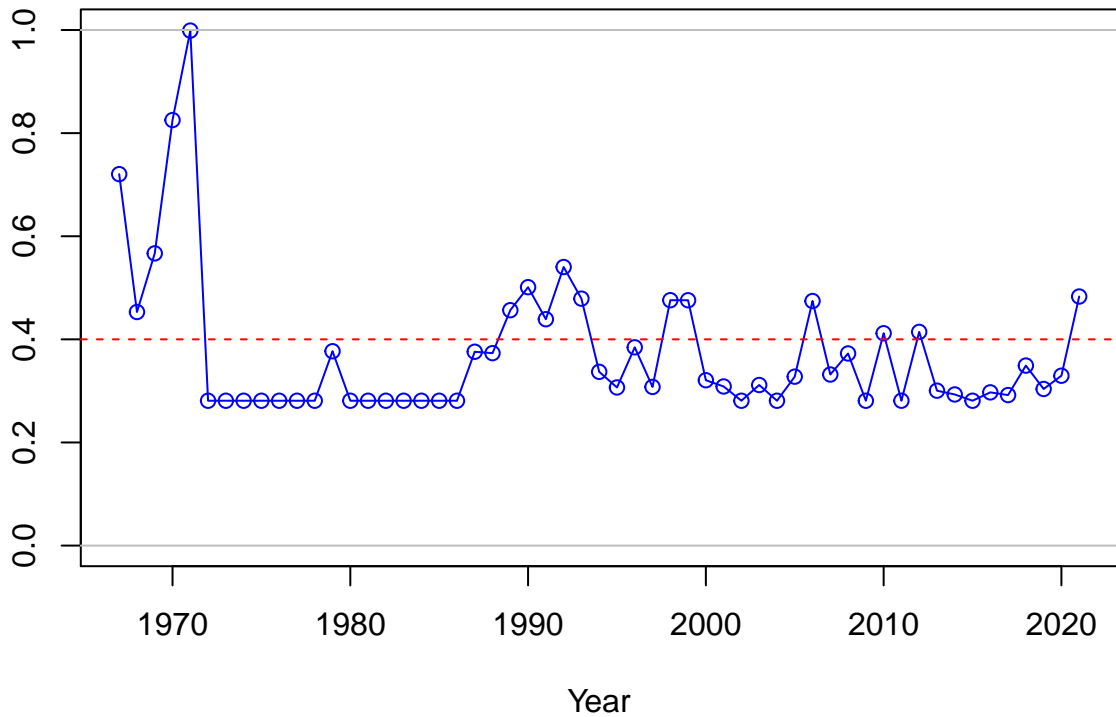


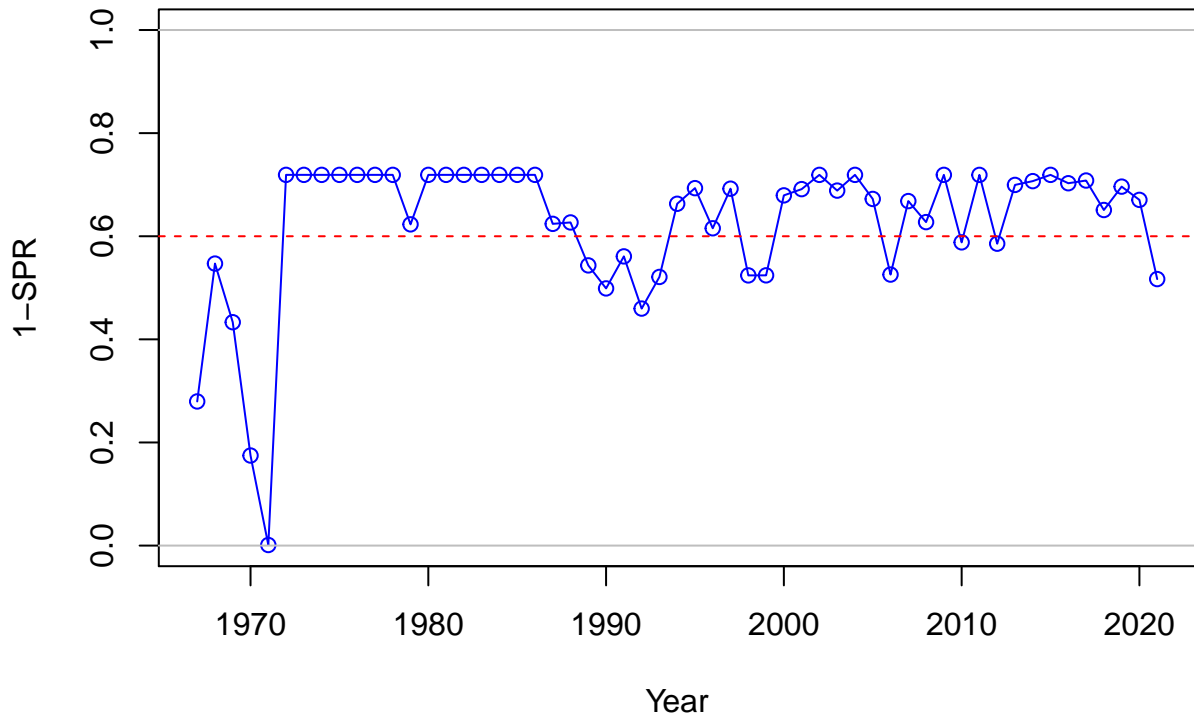
Observed and expected Landings (mt)



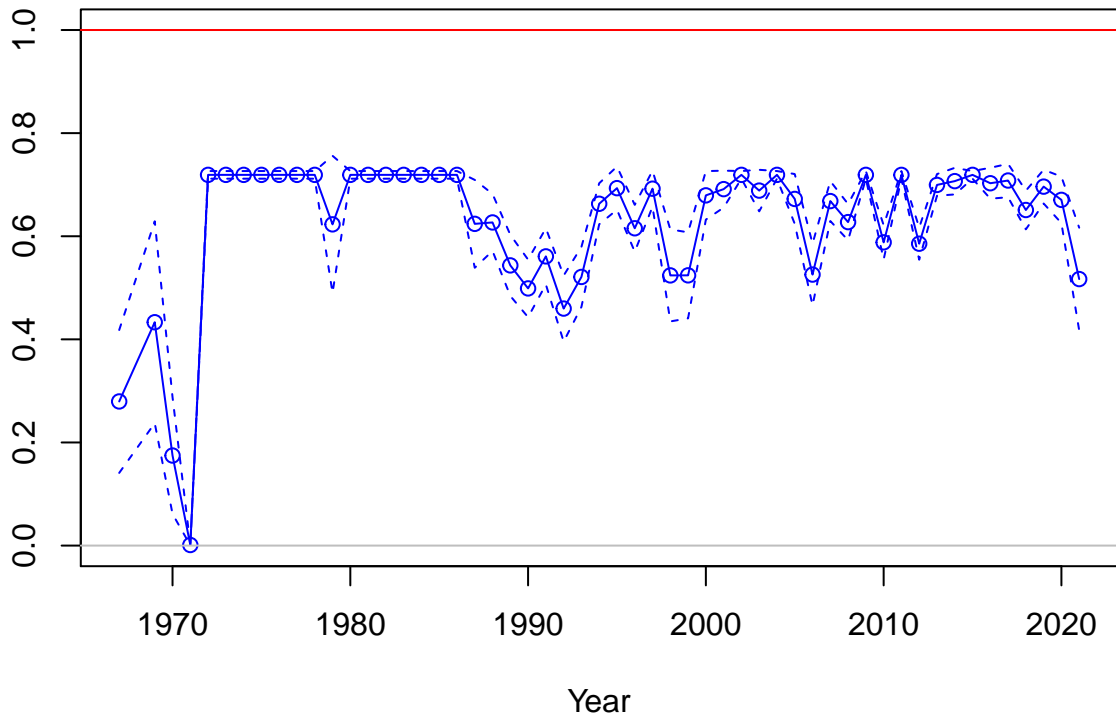


SPR

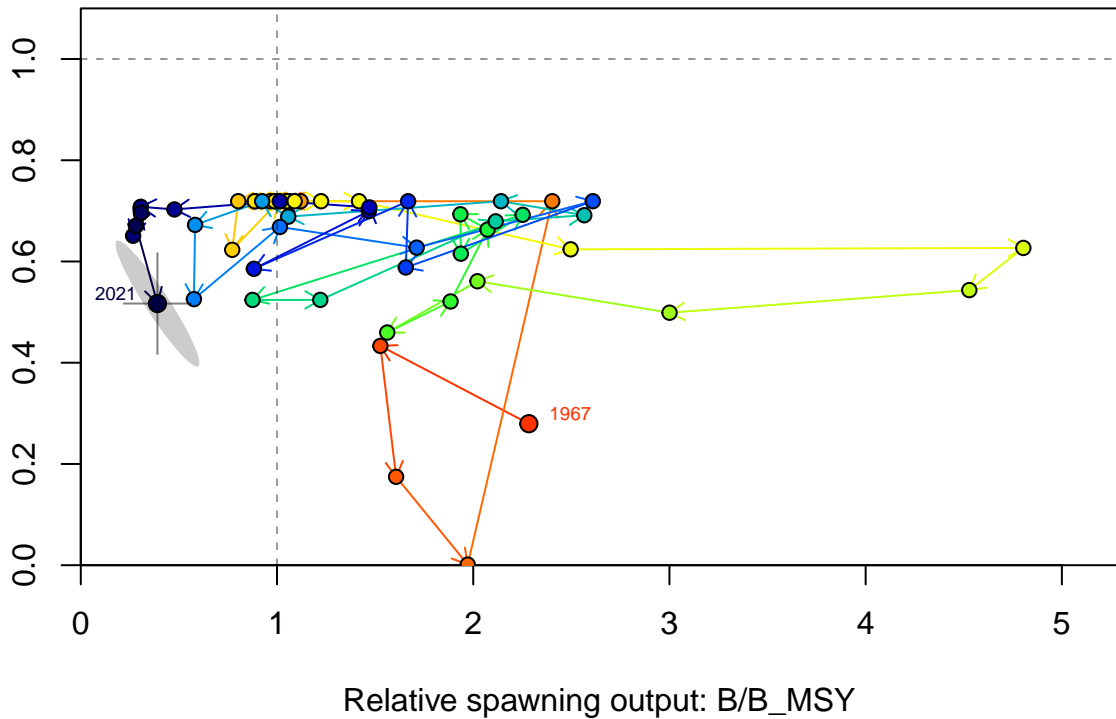




Fishing intensity: 1-SPR



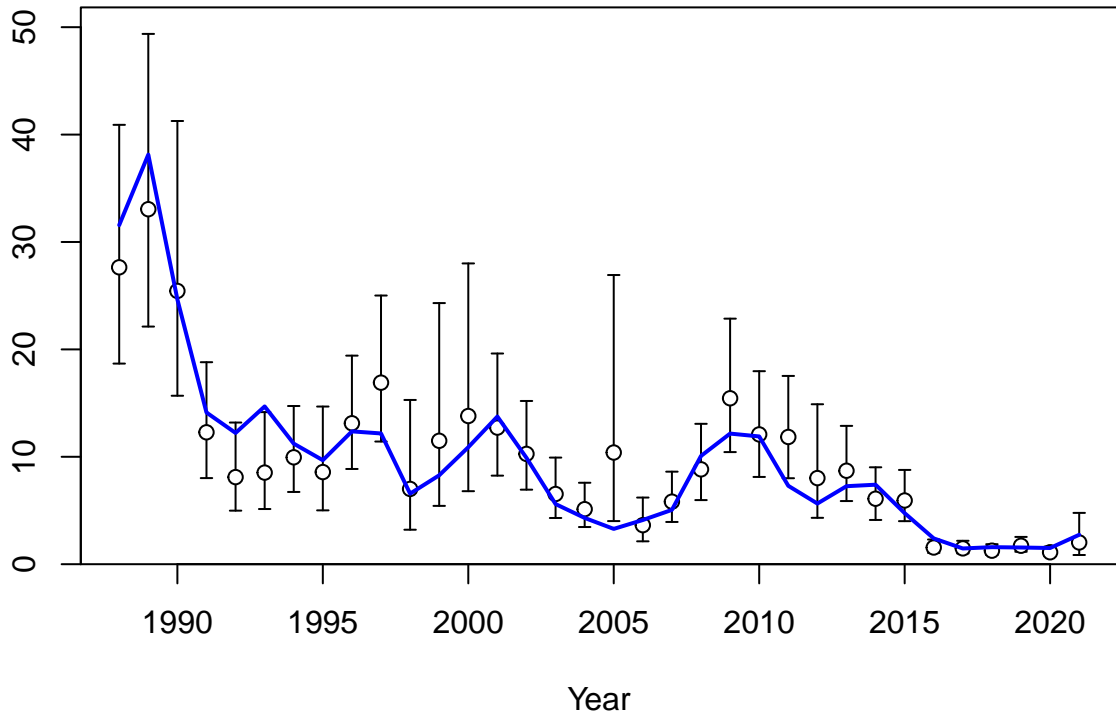
Fishing intensity: 1-SPR

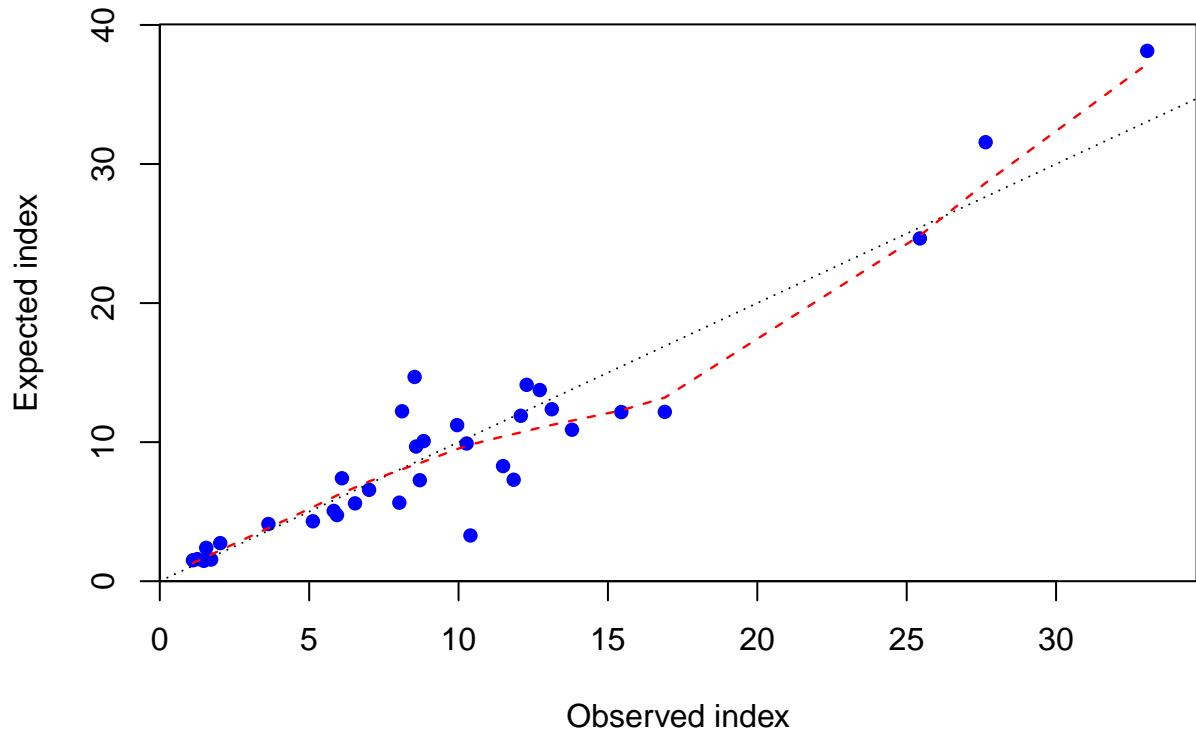


Index



Index

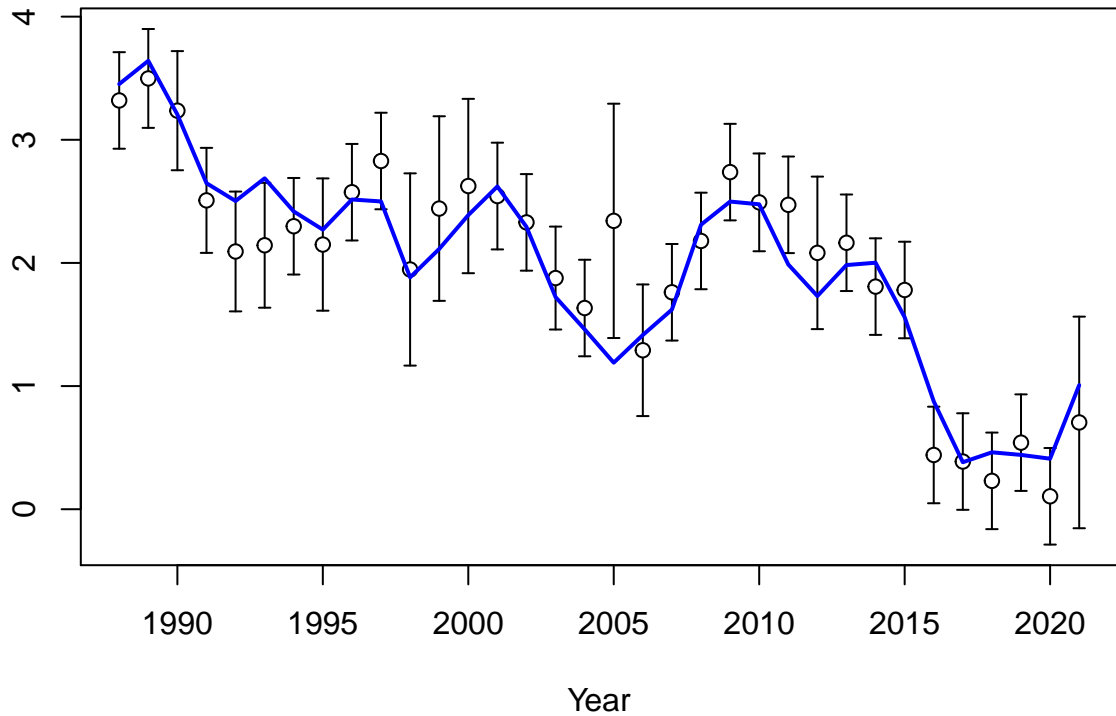


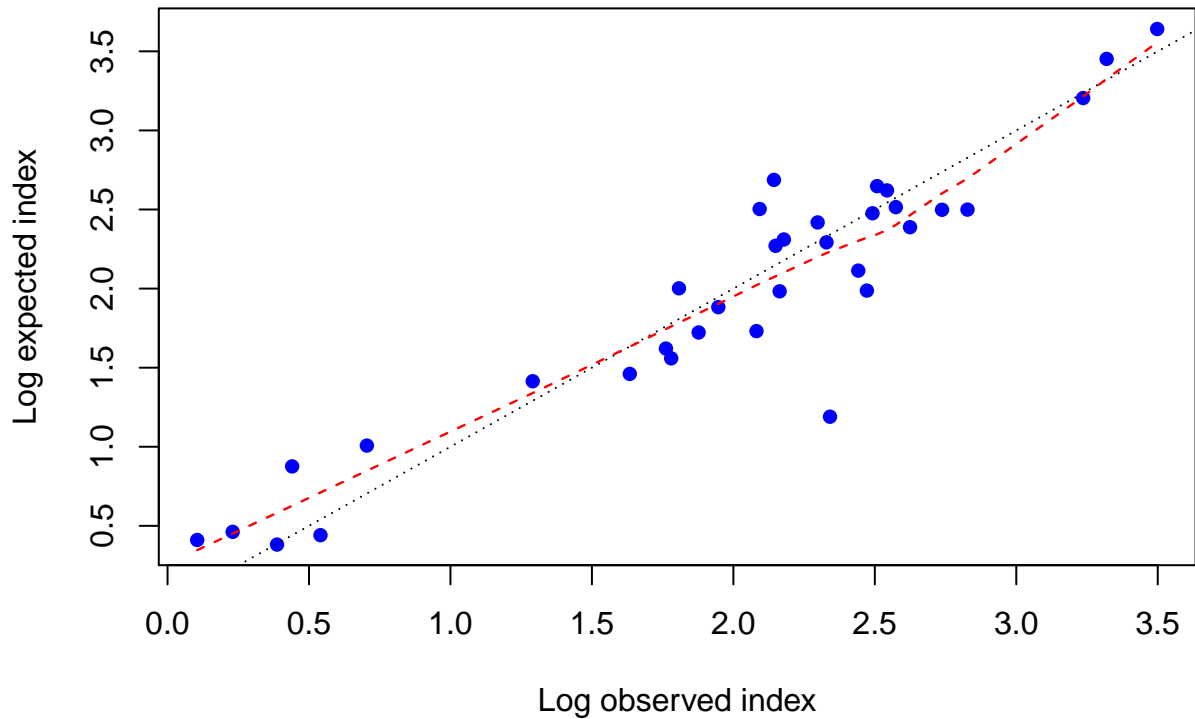


Log index

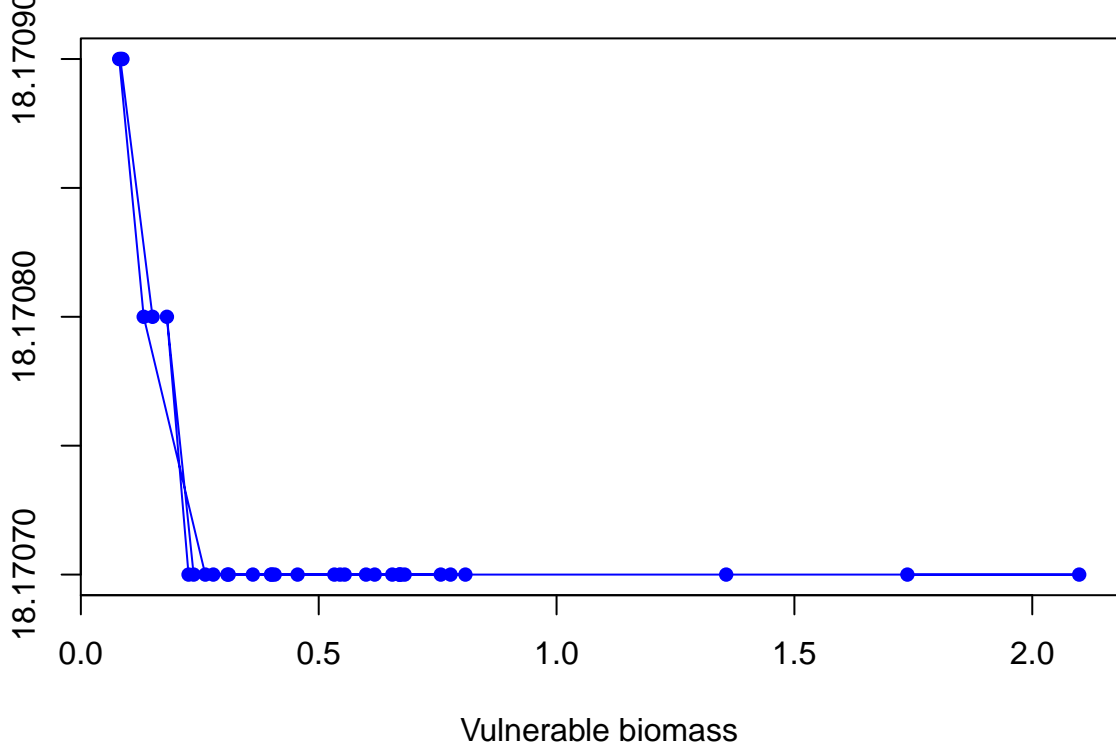


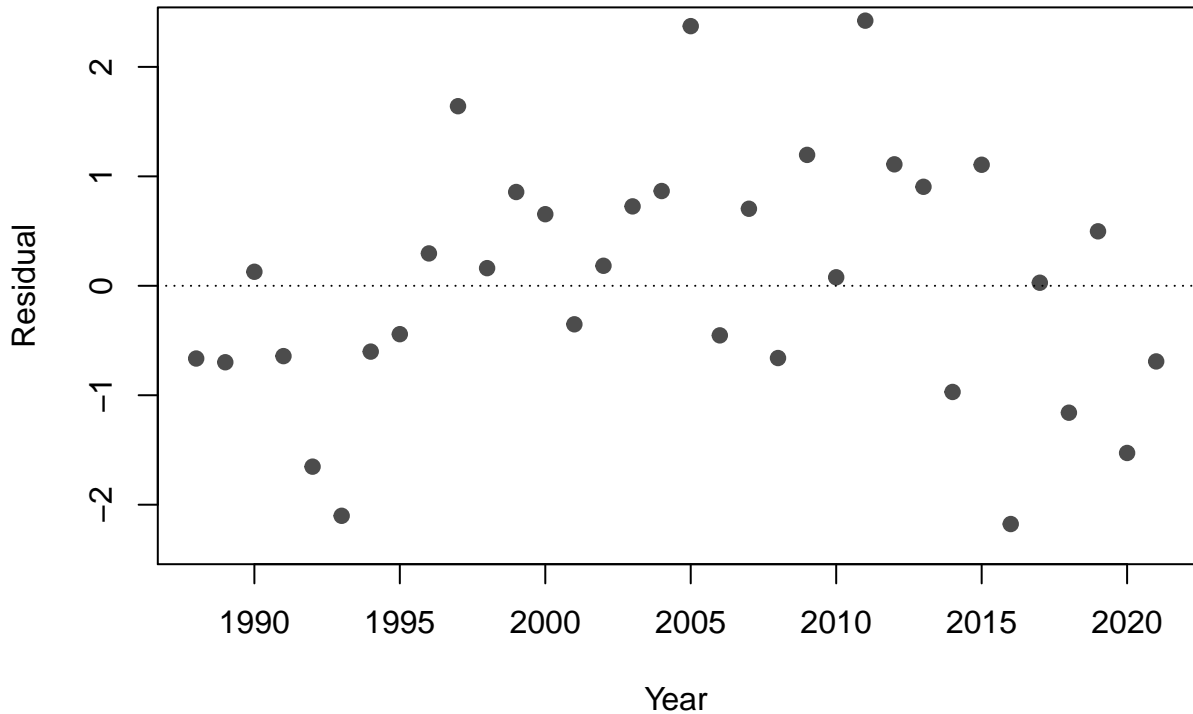
Log index

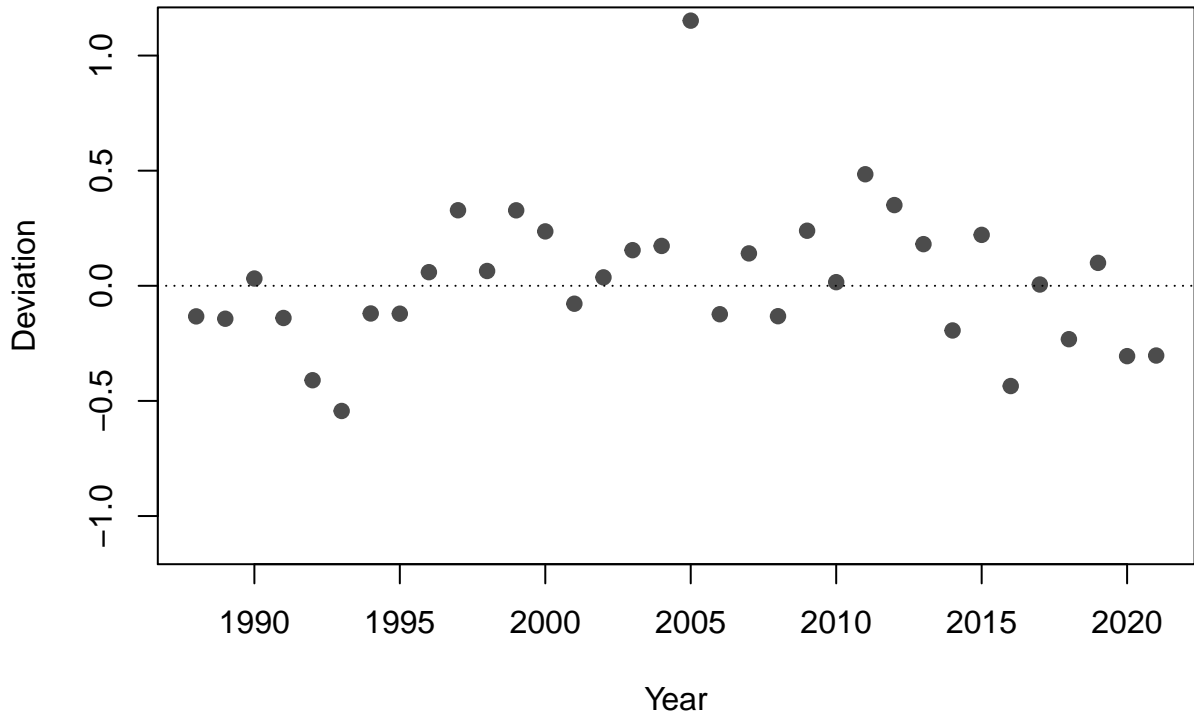


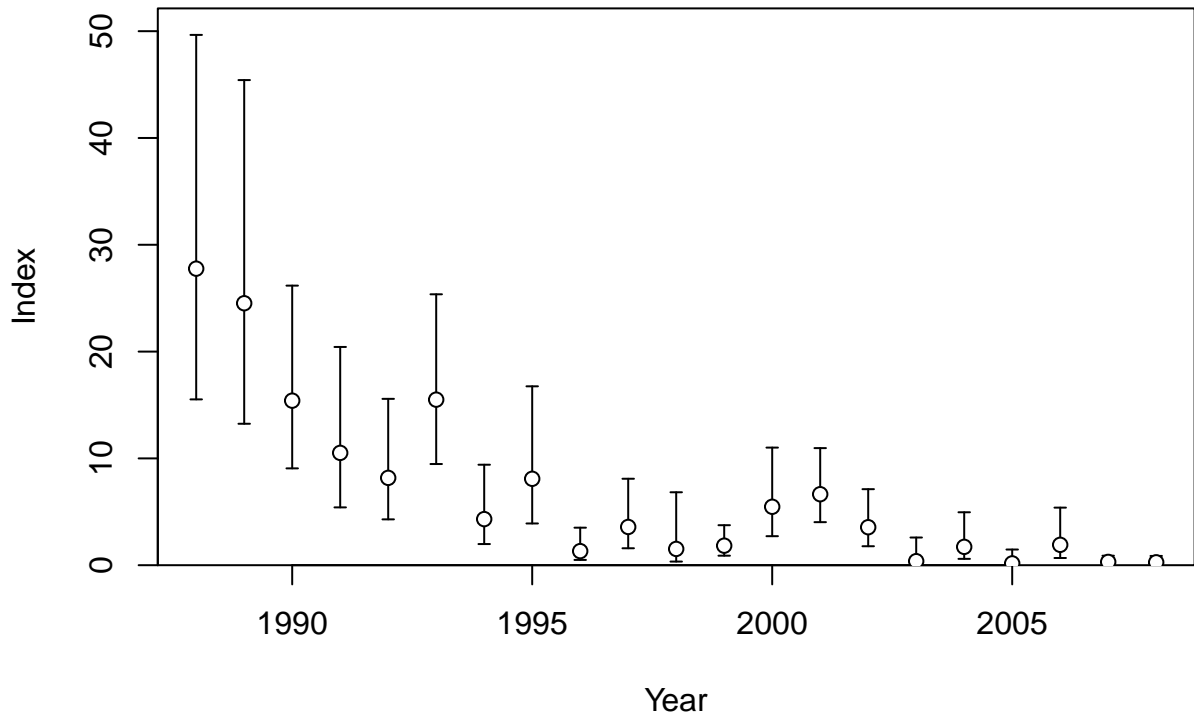


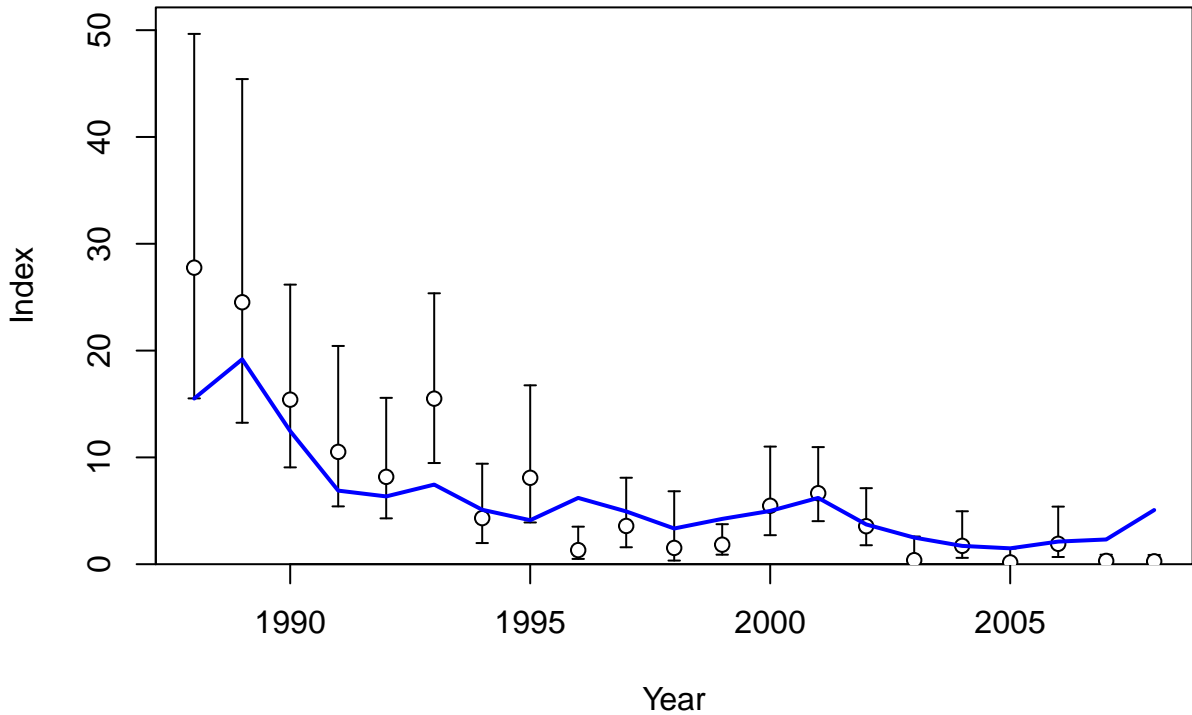
Effective catchability



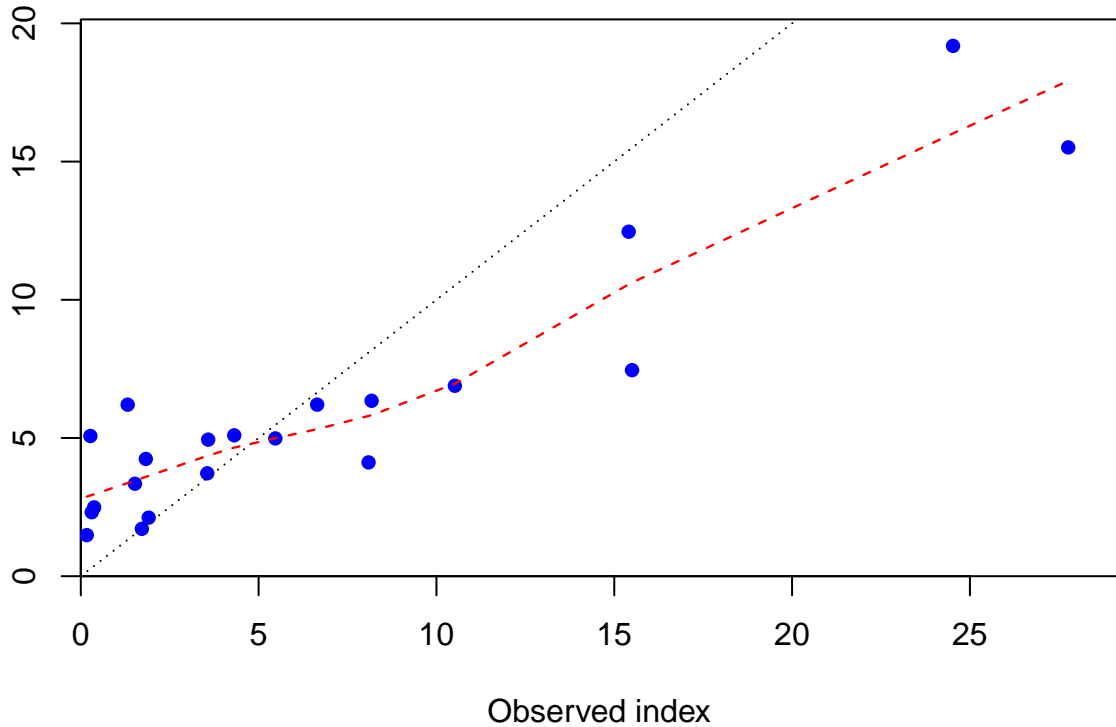




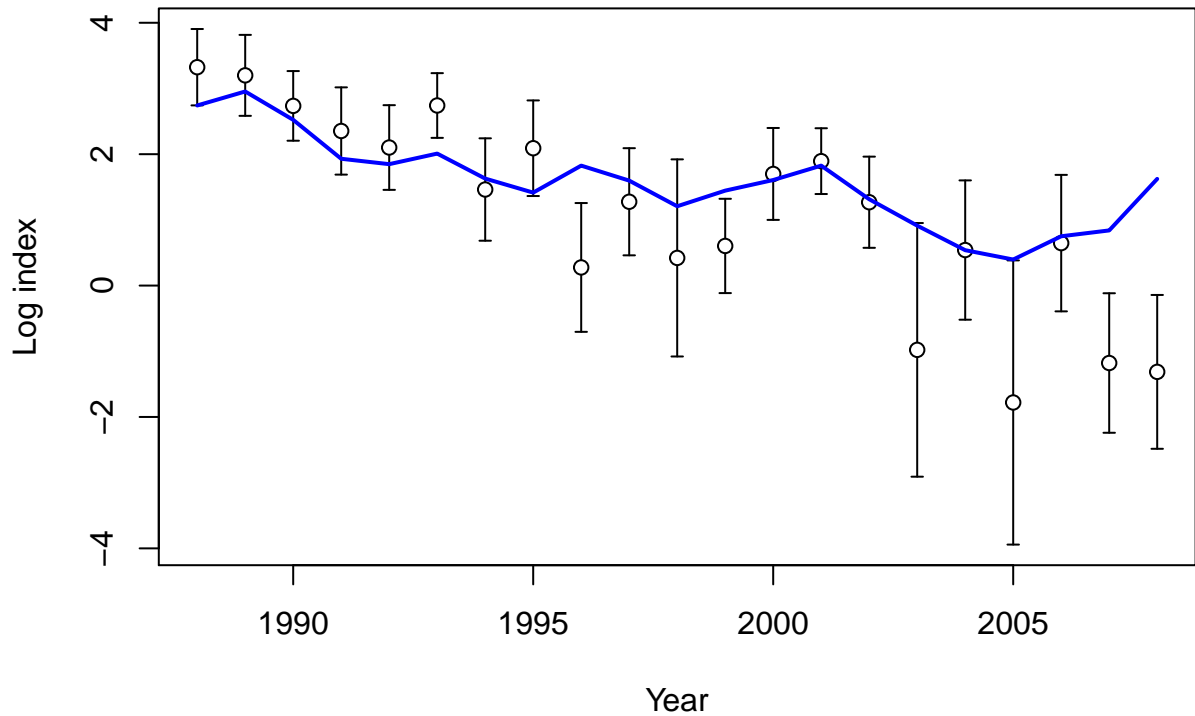




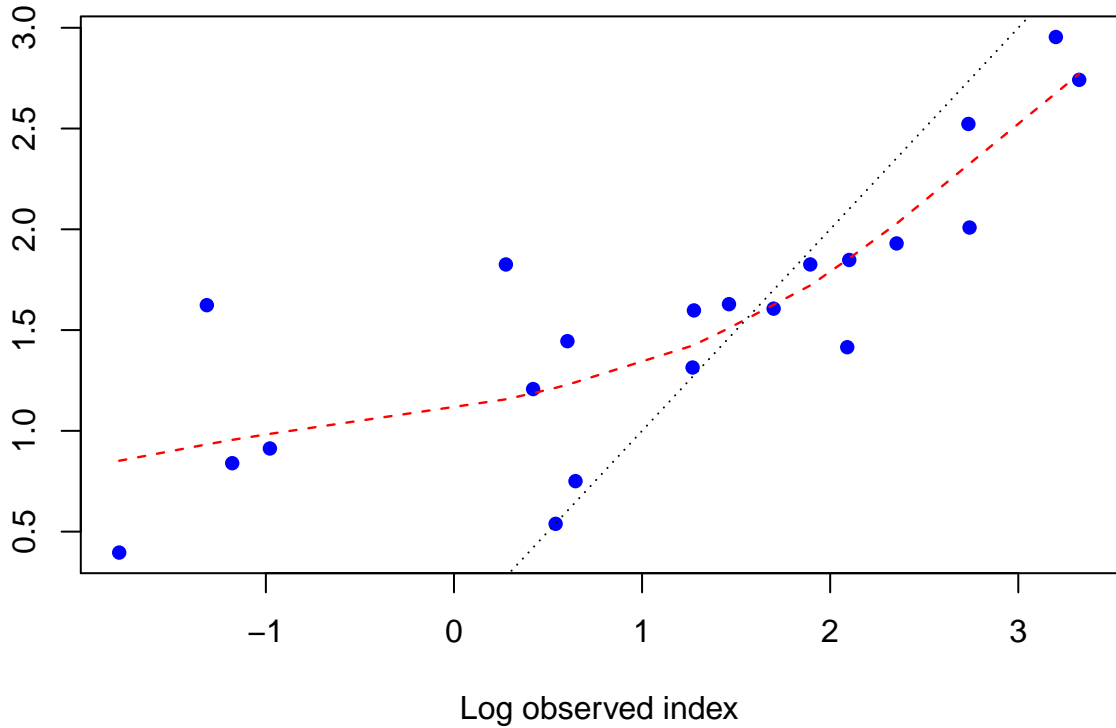
Expected index

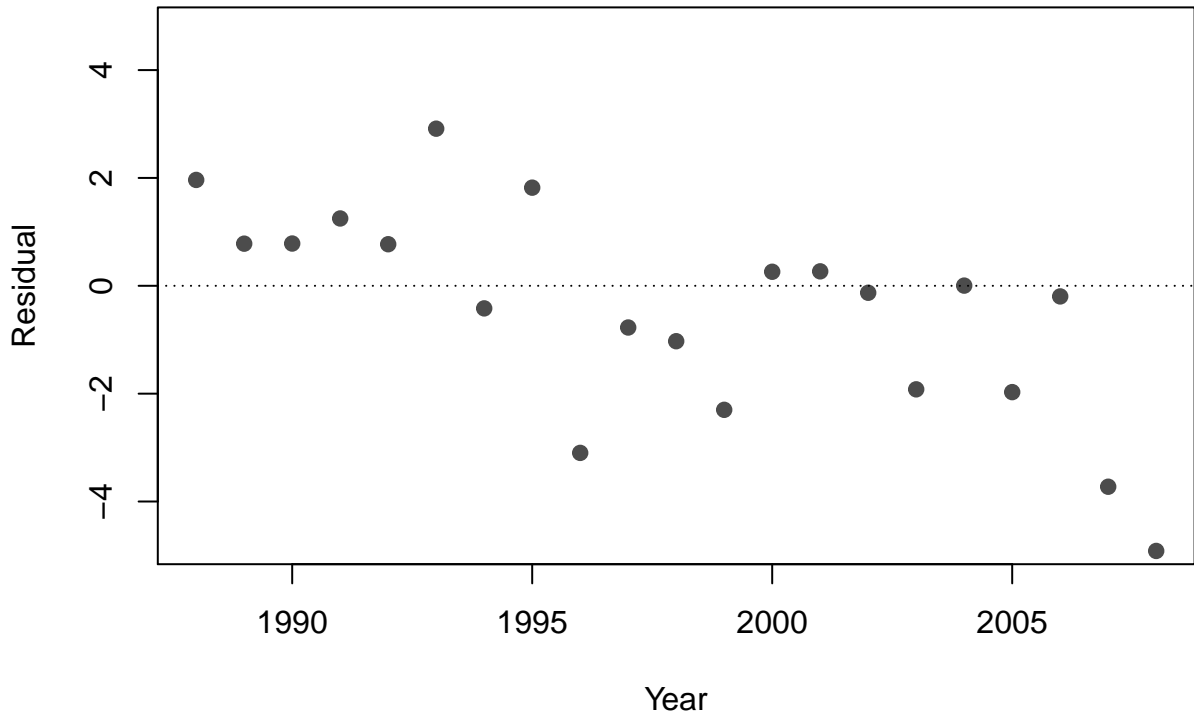




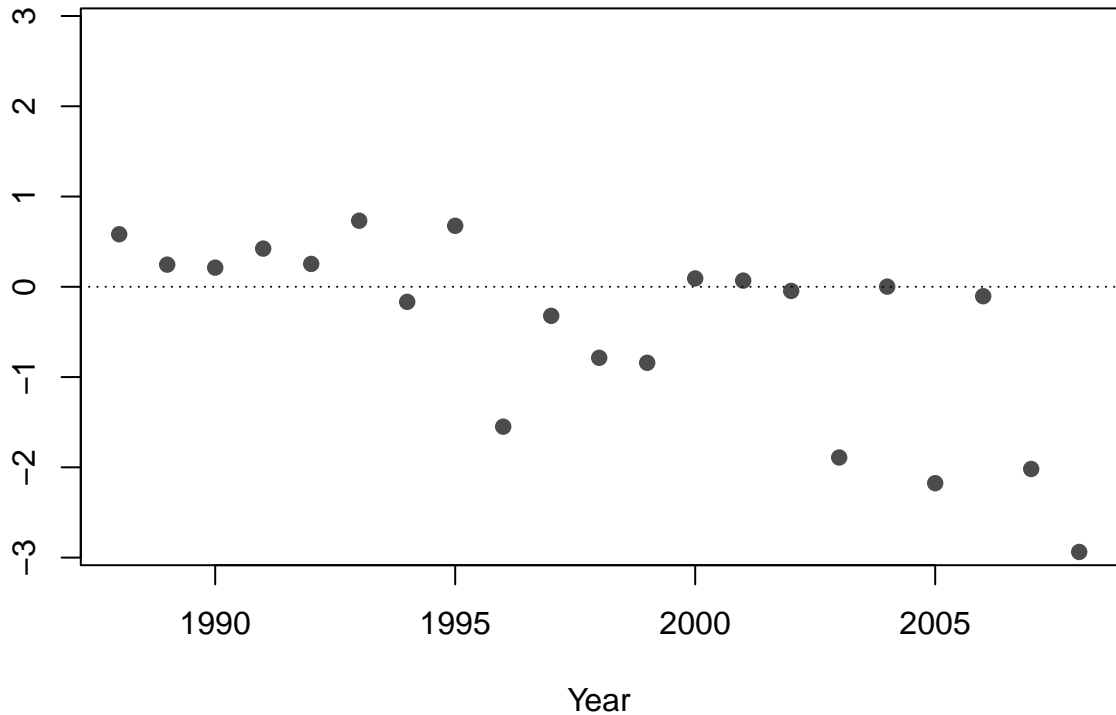


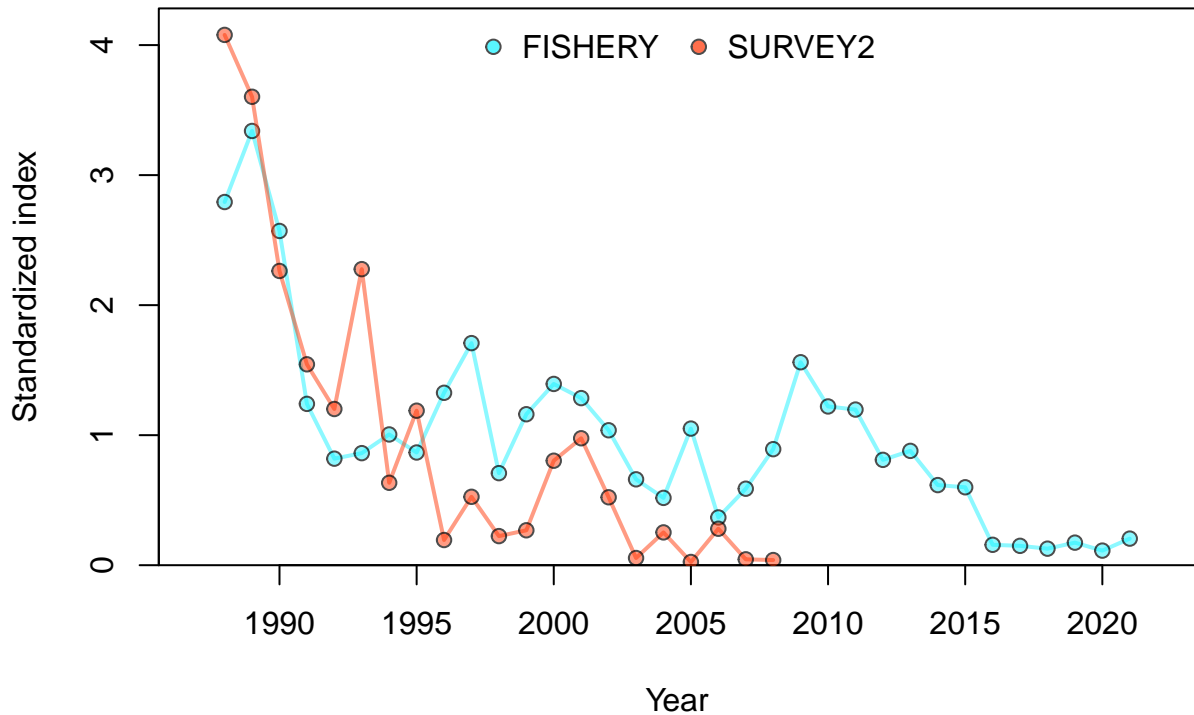
Log expected index



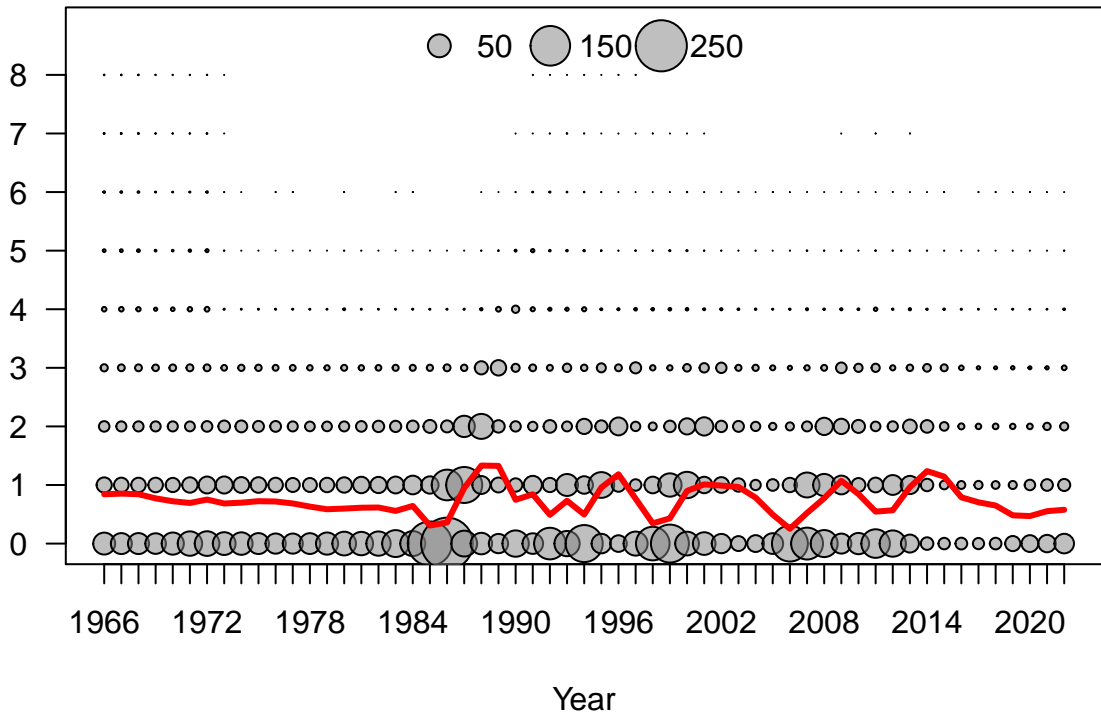


Deviation

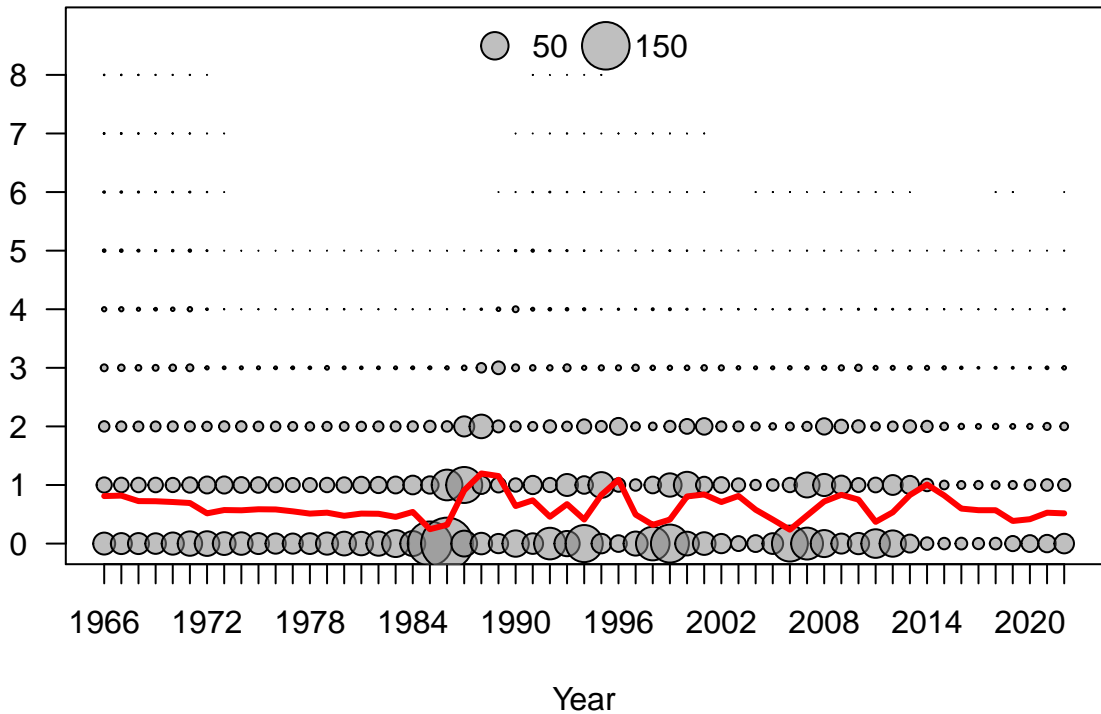


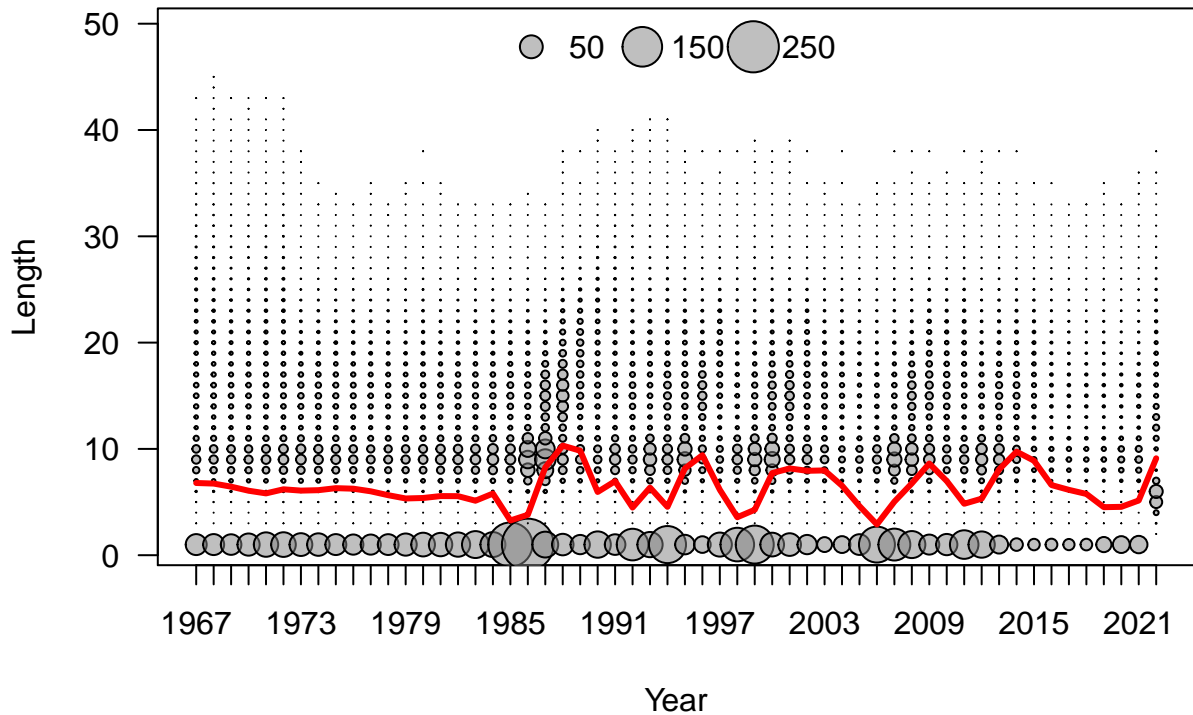


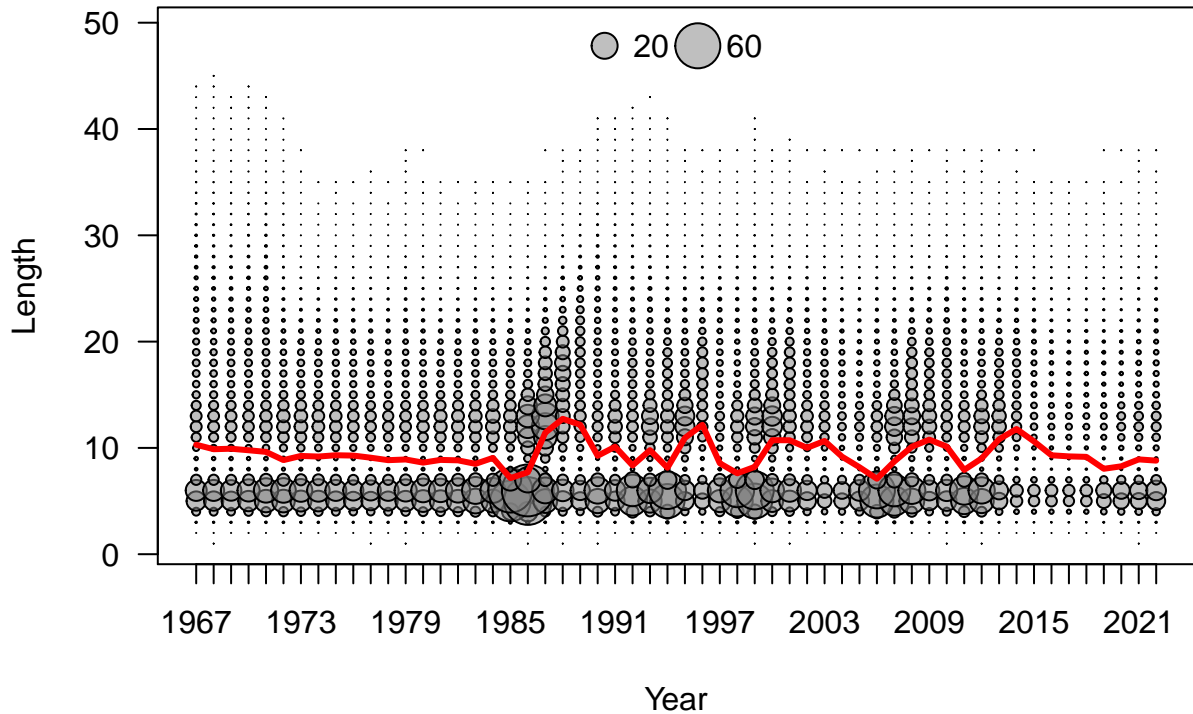
Age

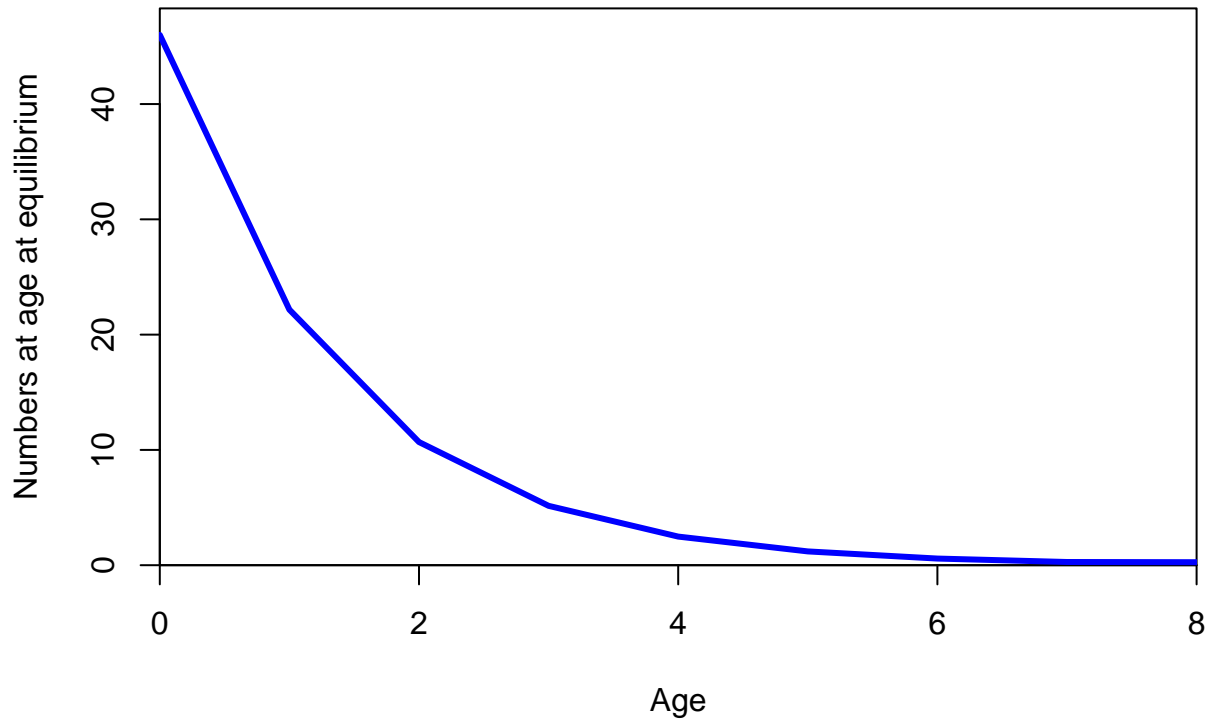


Age



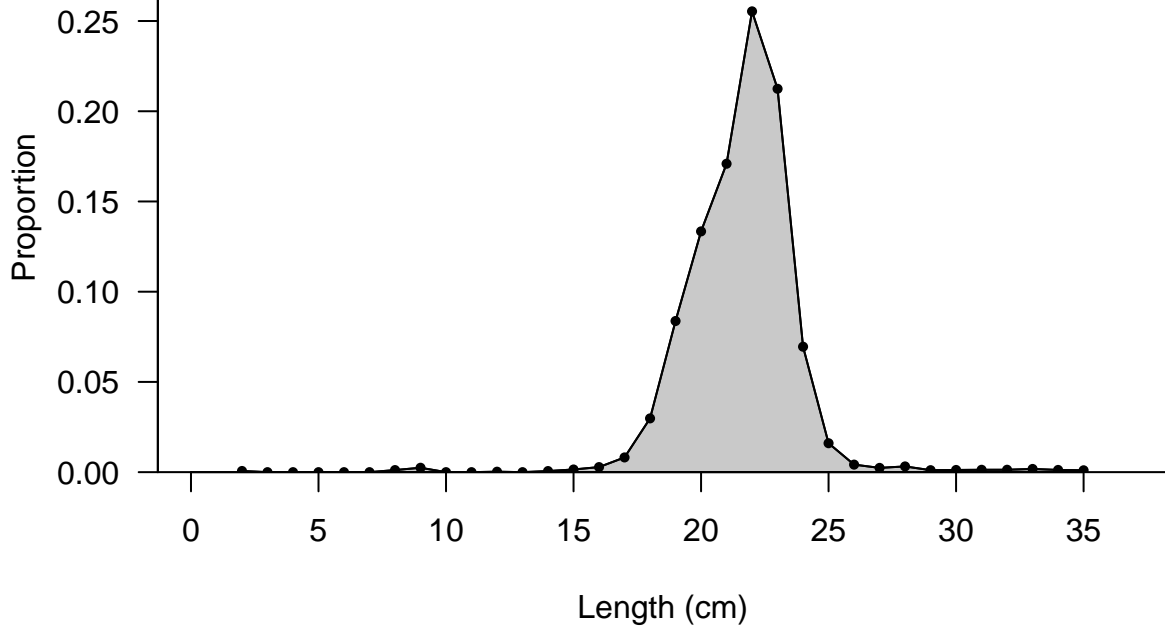


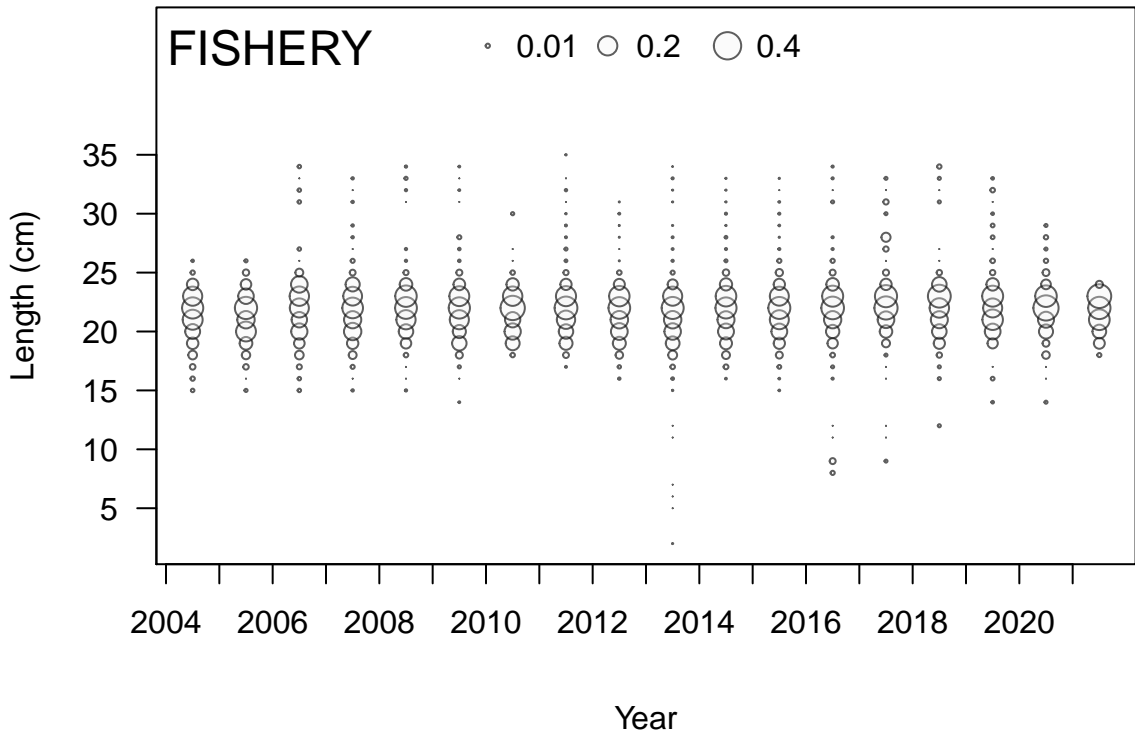


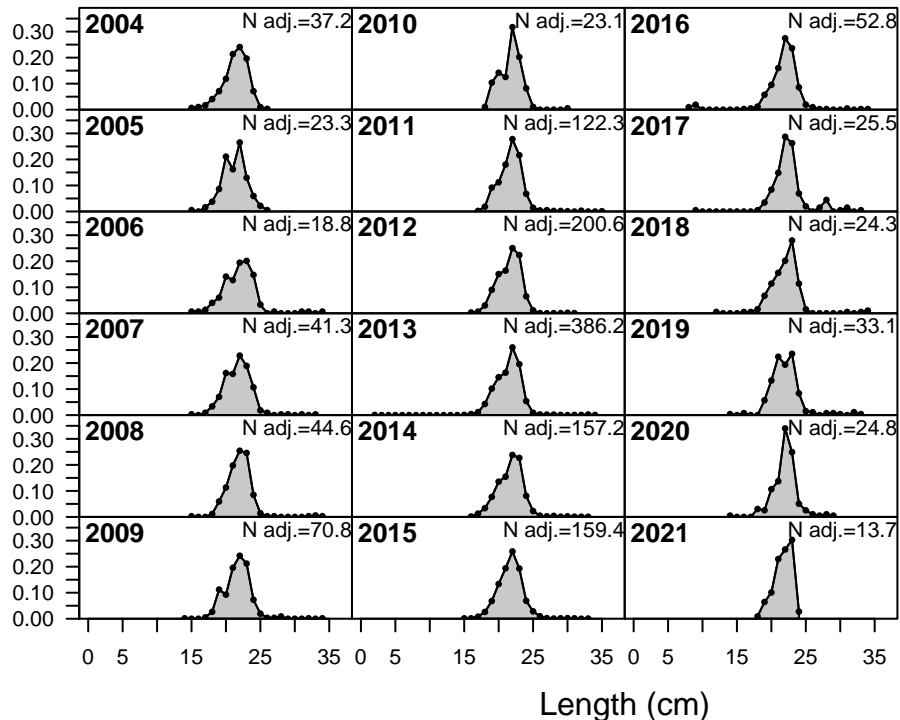


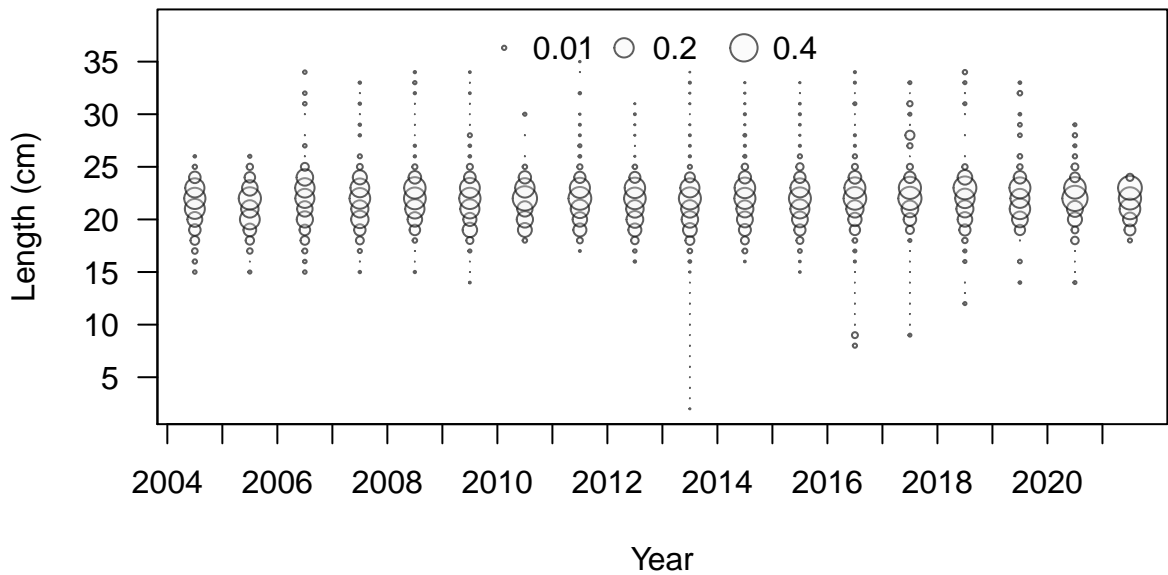
FISHERY

Sum of N adj.=1459.1

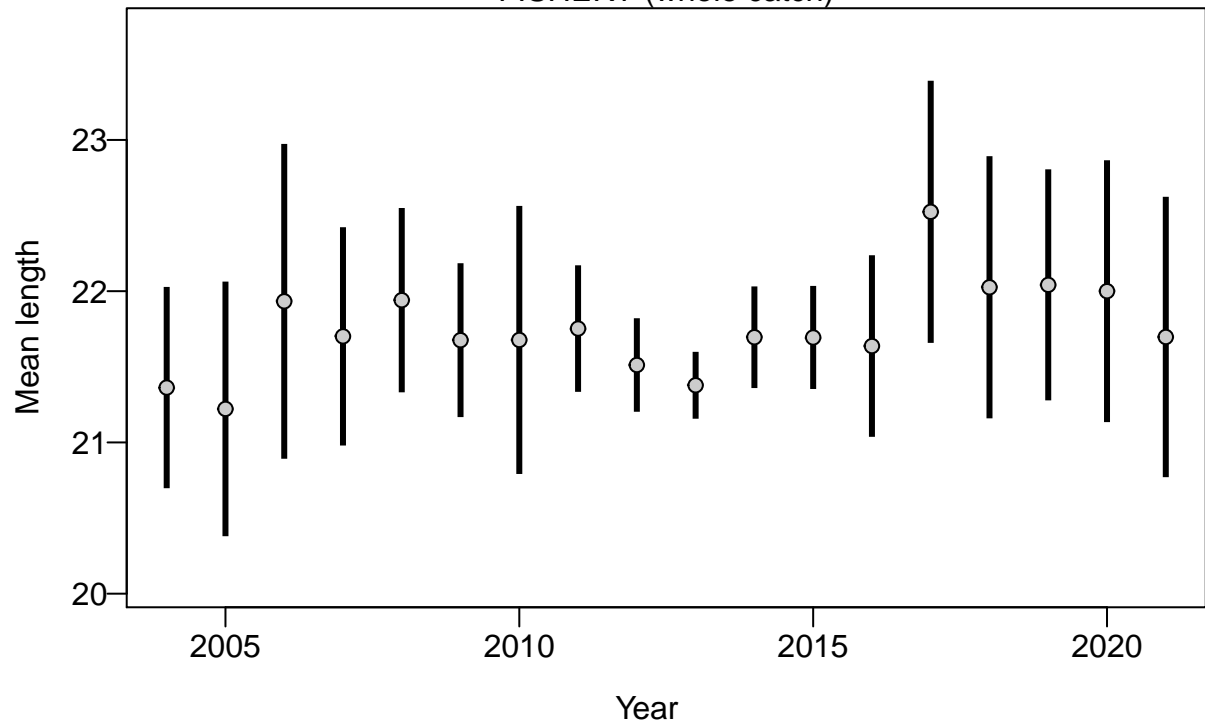


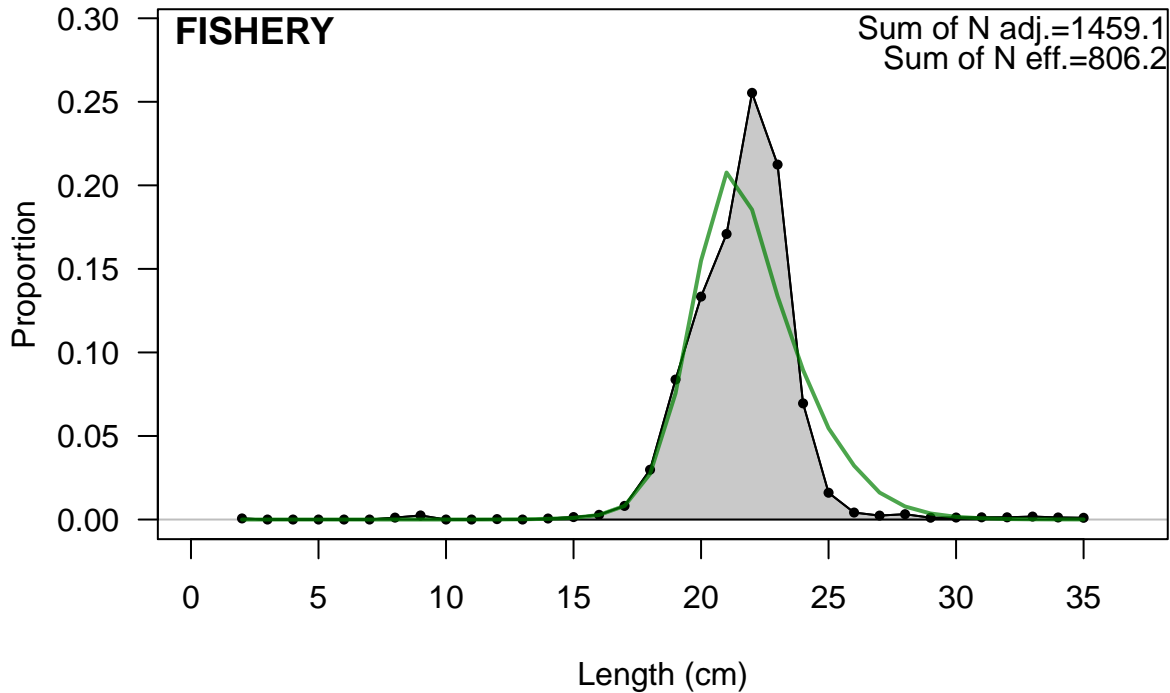


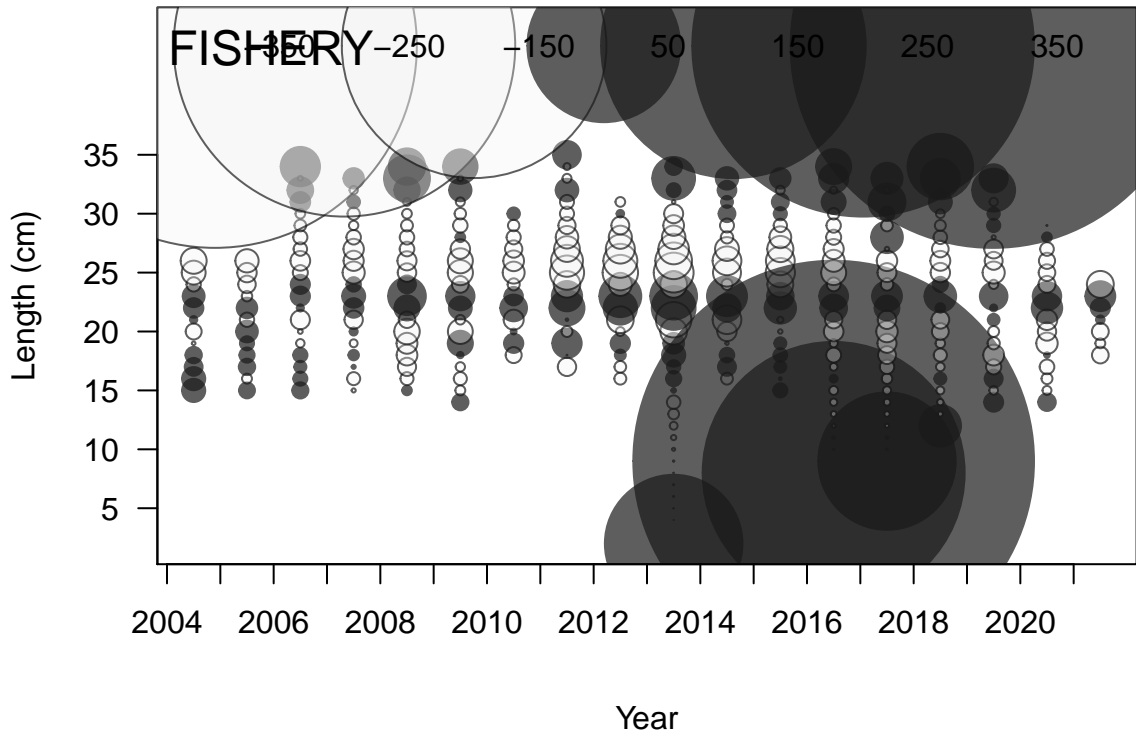


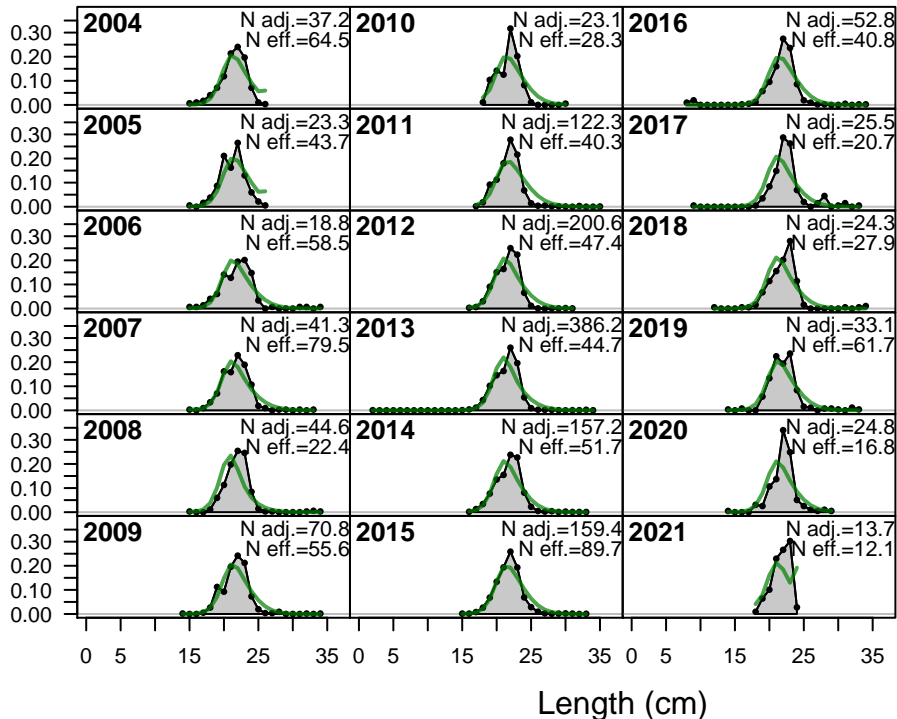


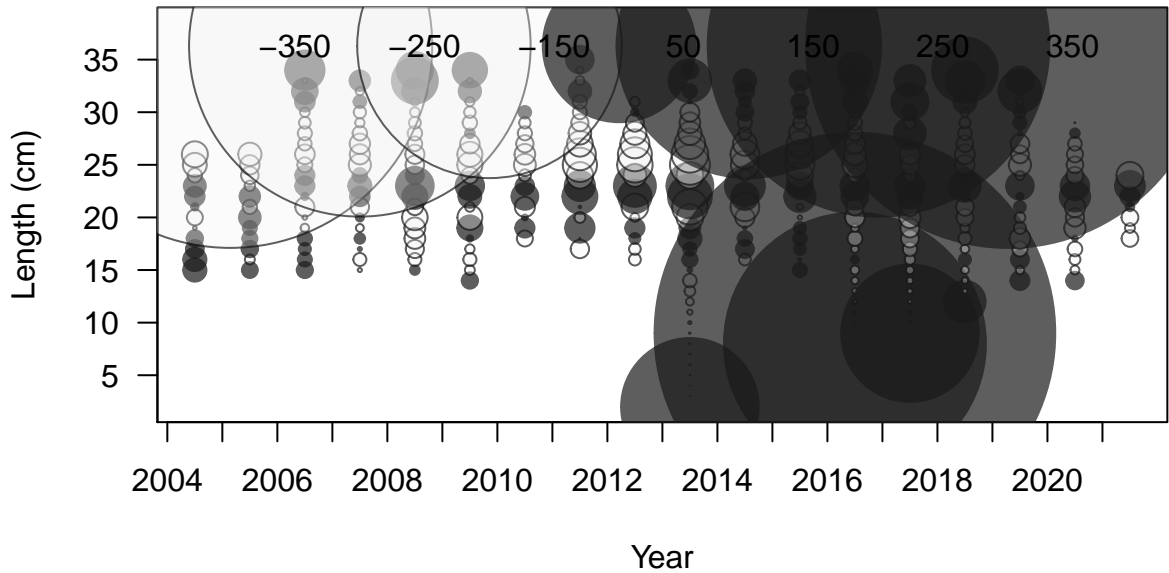
FISHERY (whole catch)



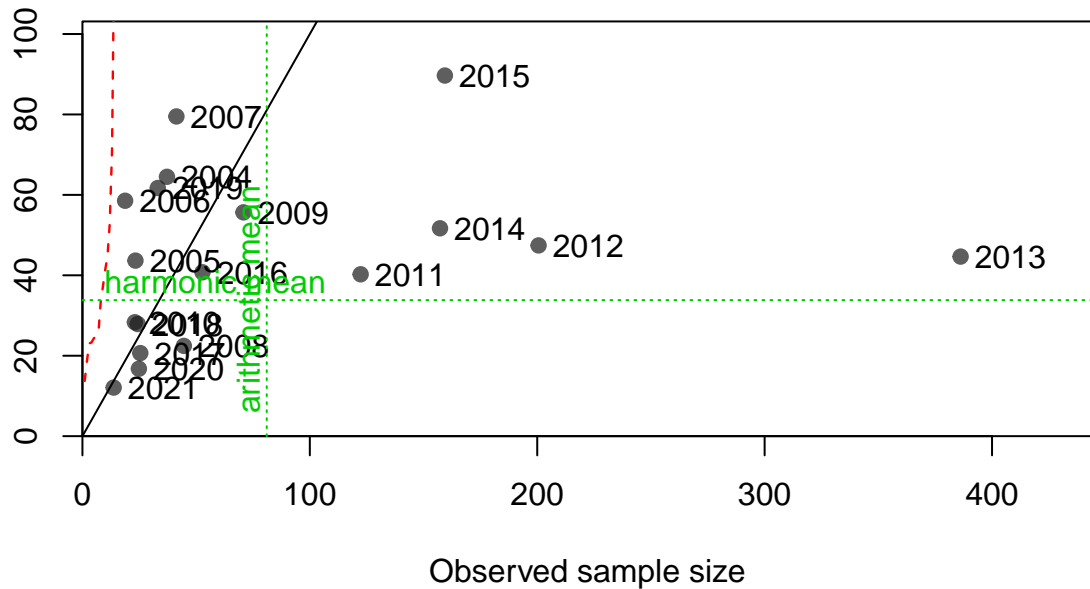




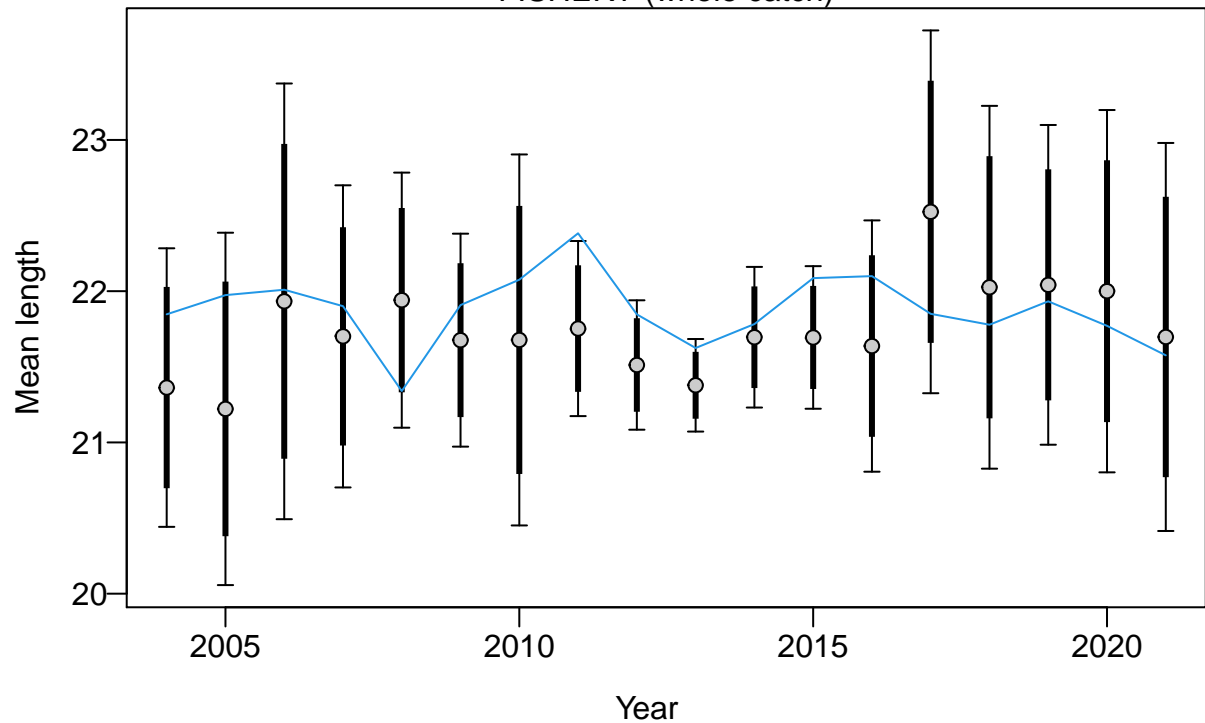


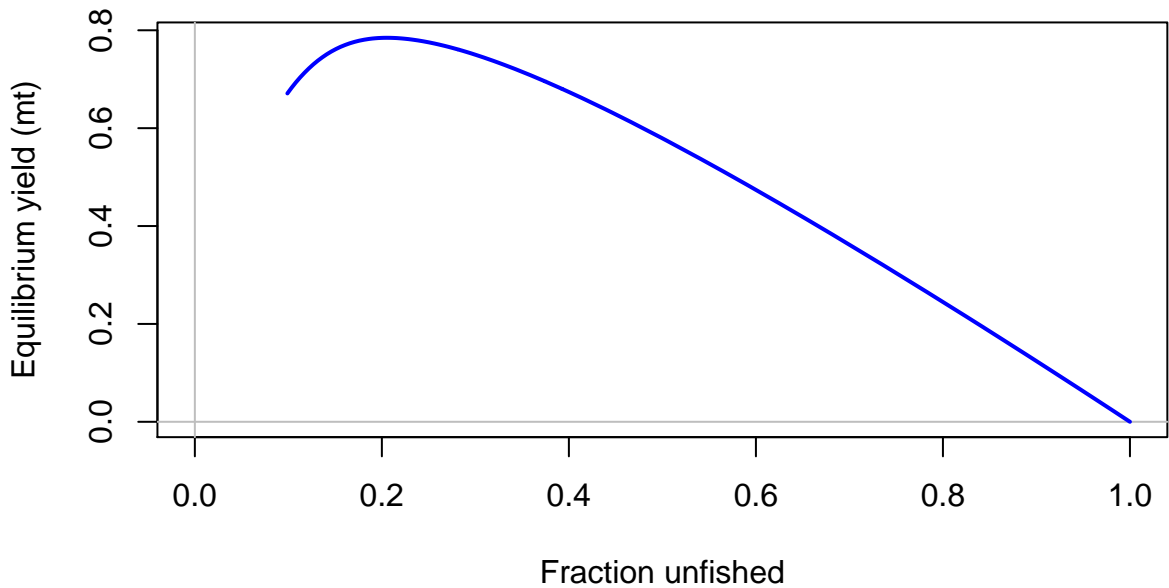


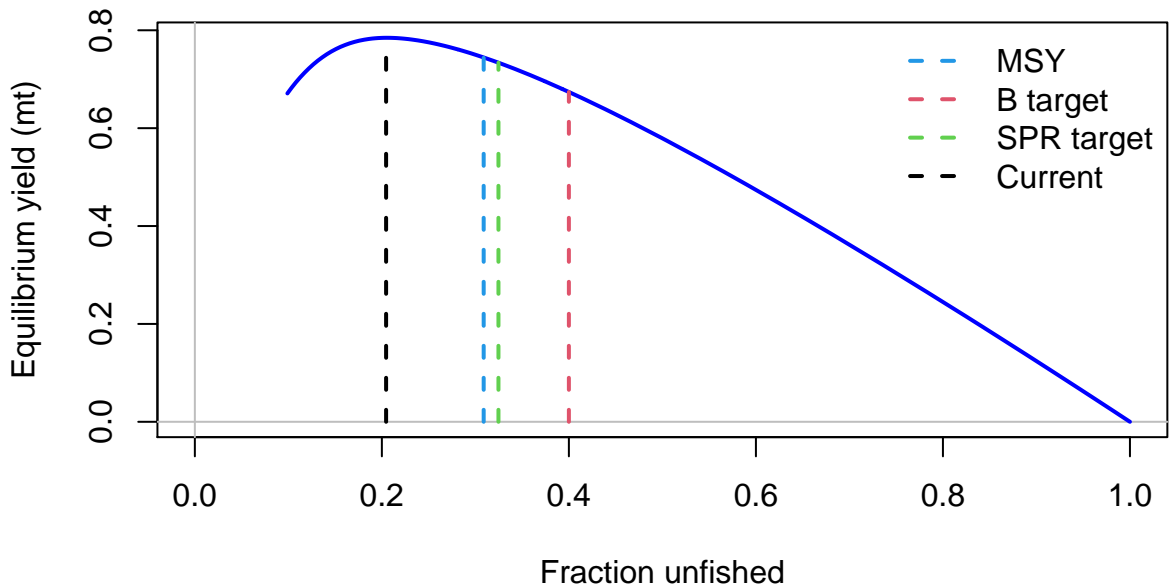
Effective sample size



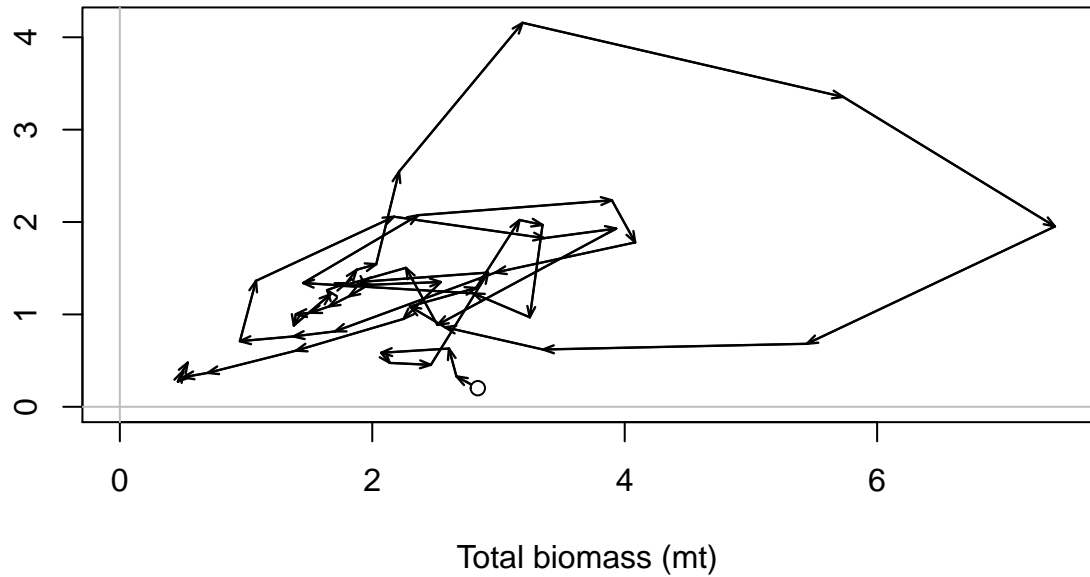
FISHERY (whole catch)

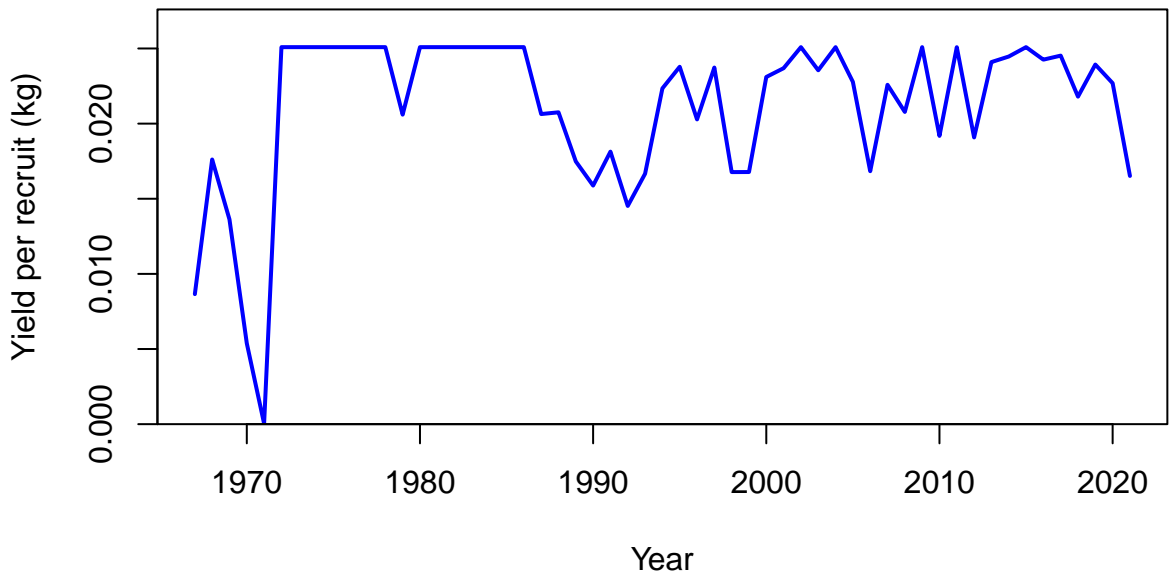


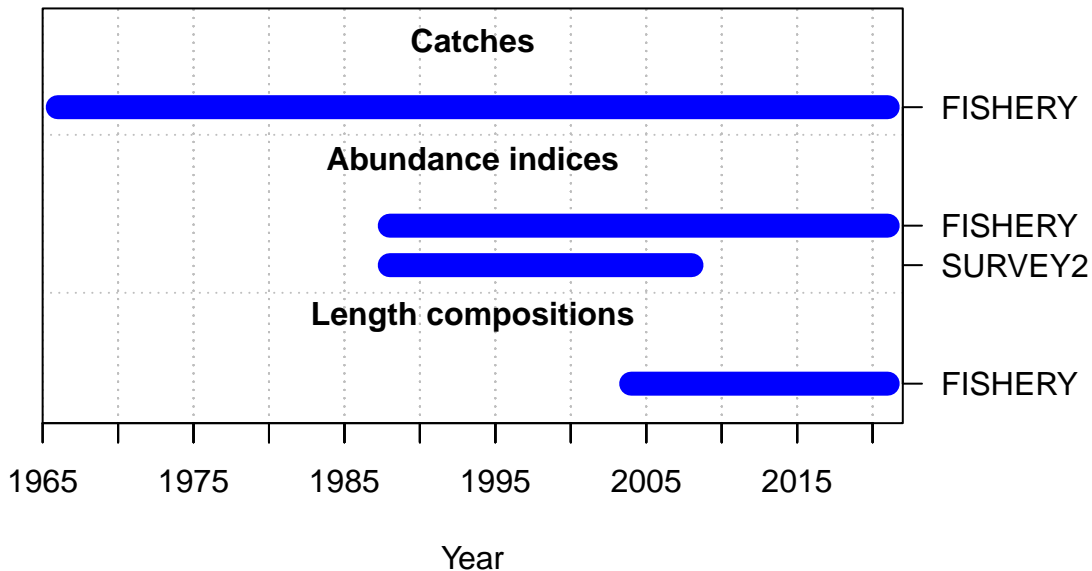


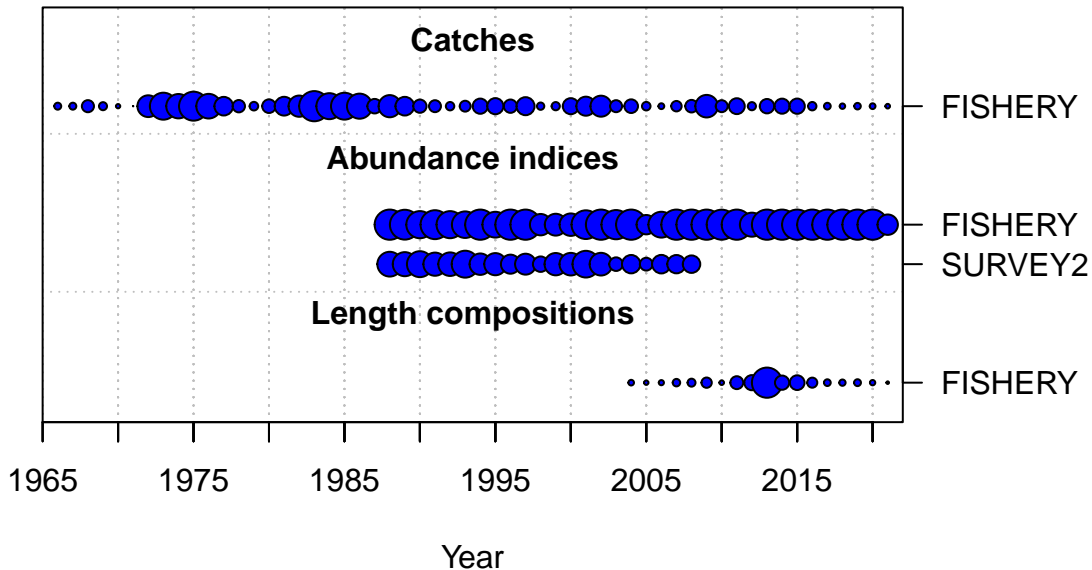


Surplus production (mt)

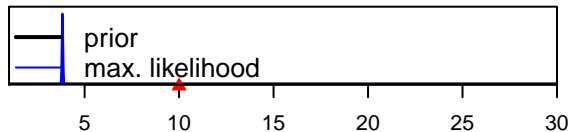




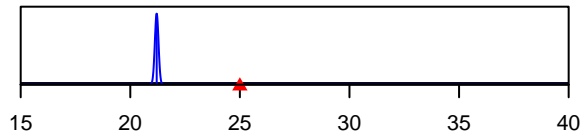




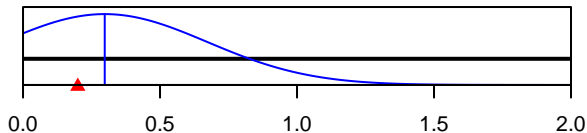
SR_LN(R0)



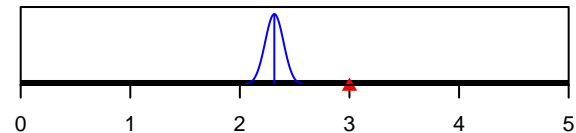
Size_inflection_FISHERY(1)



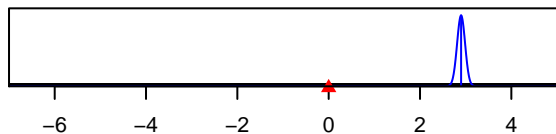
InitF_seas_1flt_1FISHERY



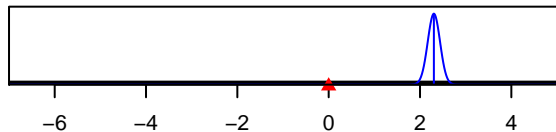
Size_95%width_FISHERY(1)



LnQ_base_FISHERY(1)



LnQ_base_SURVEY2(2)



Parameter value