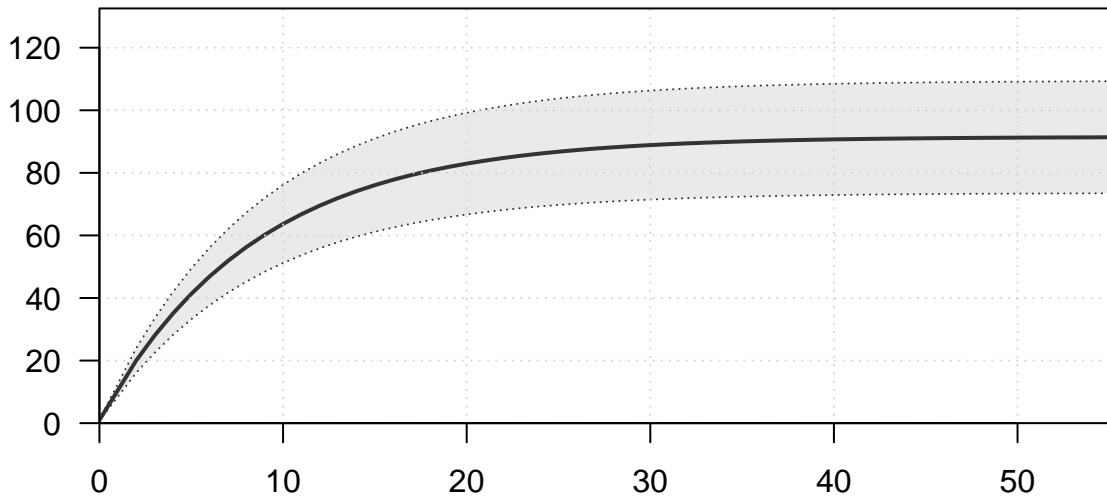
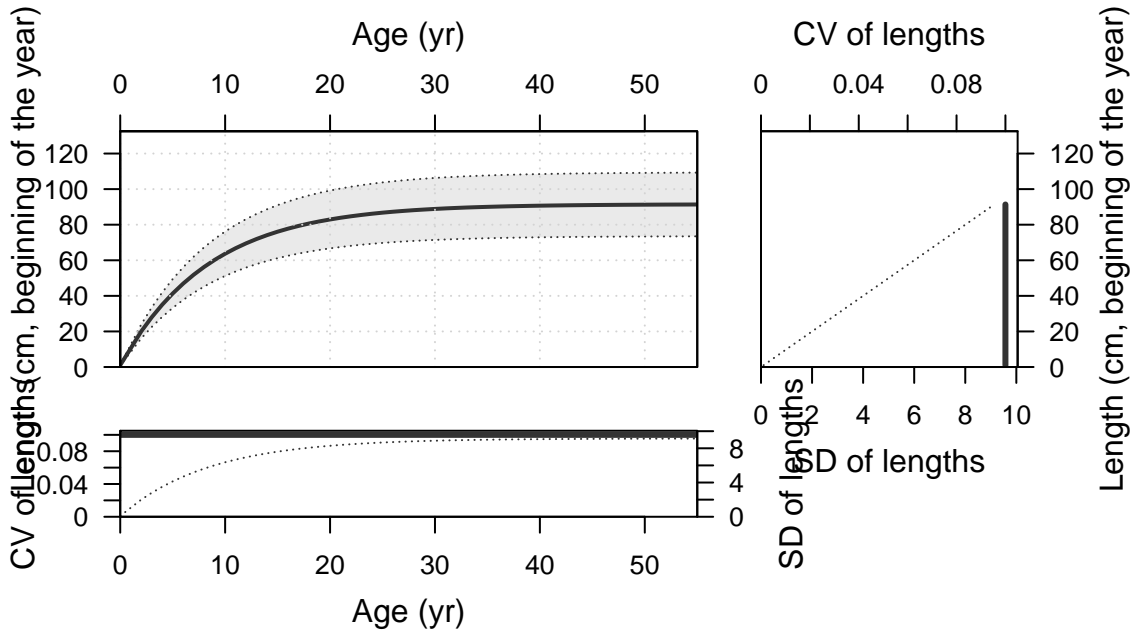


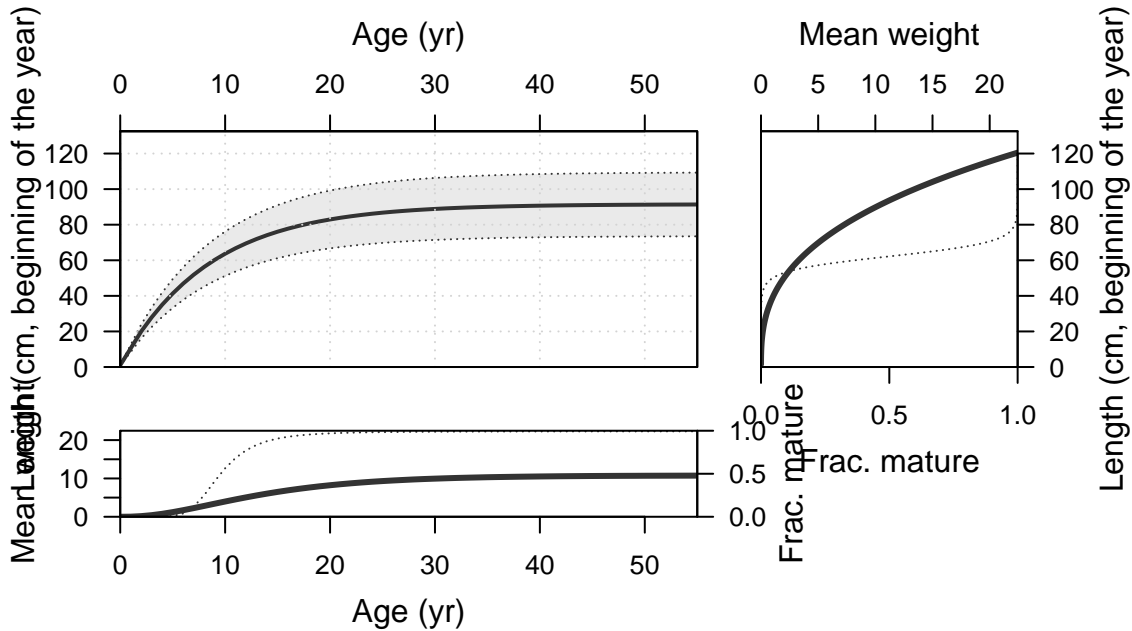
Plots created using the 'r4ss' package in R  
Stock Synthesis version: 3.30.19.0  
StartTime: Thu Jul 07 13:07:04 2022  
Data\_File: data.ss  
Control\_File: control.ss

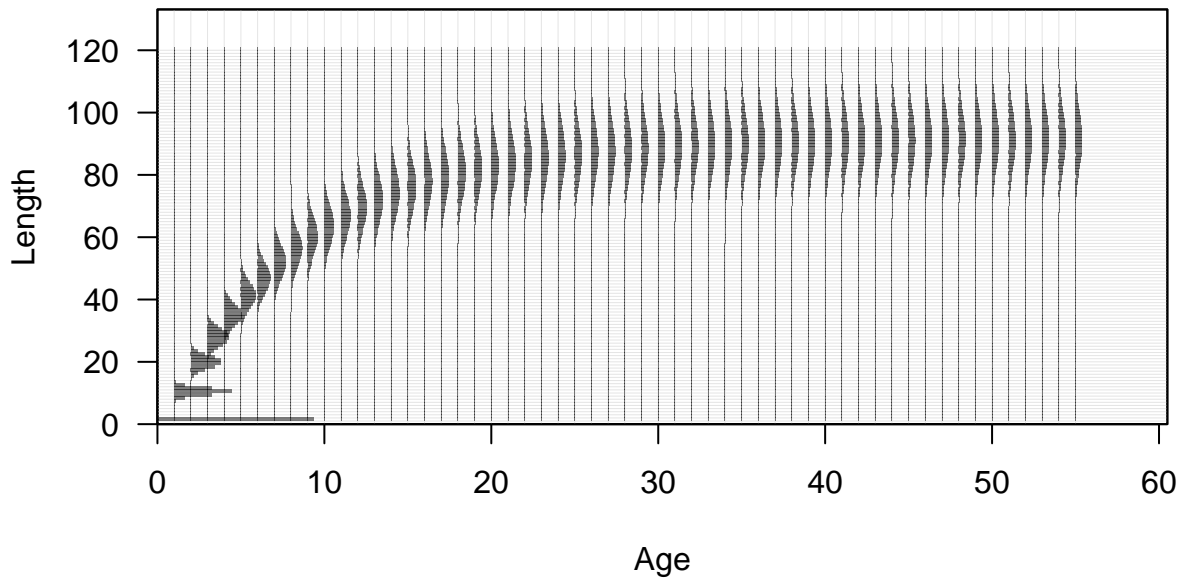
Length (cm, beginning of the year)

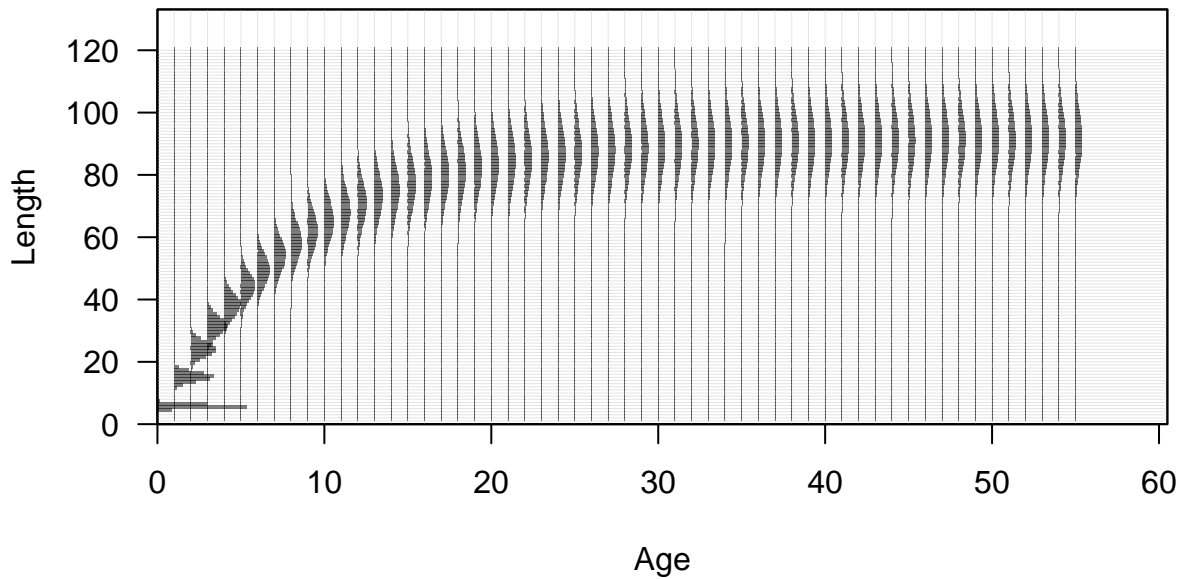


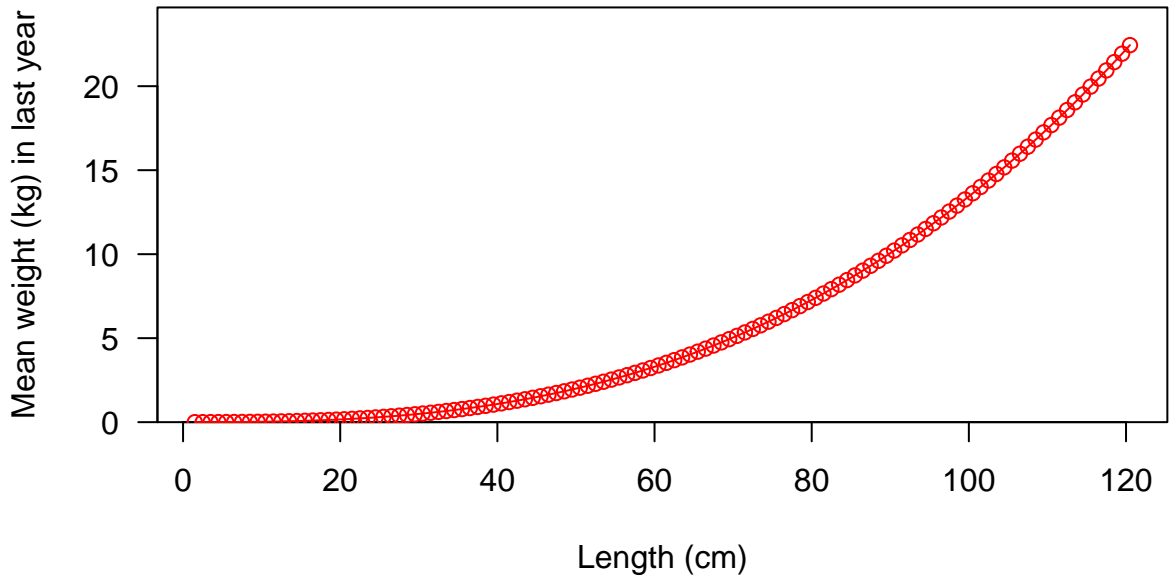
Age (yr)

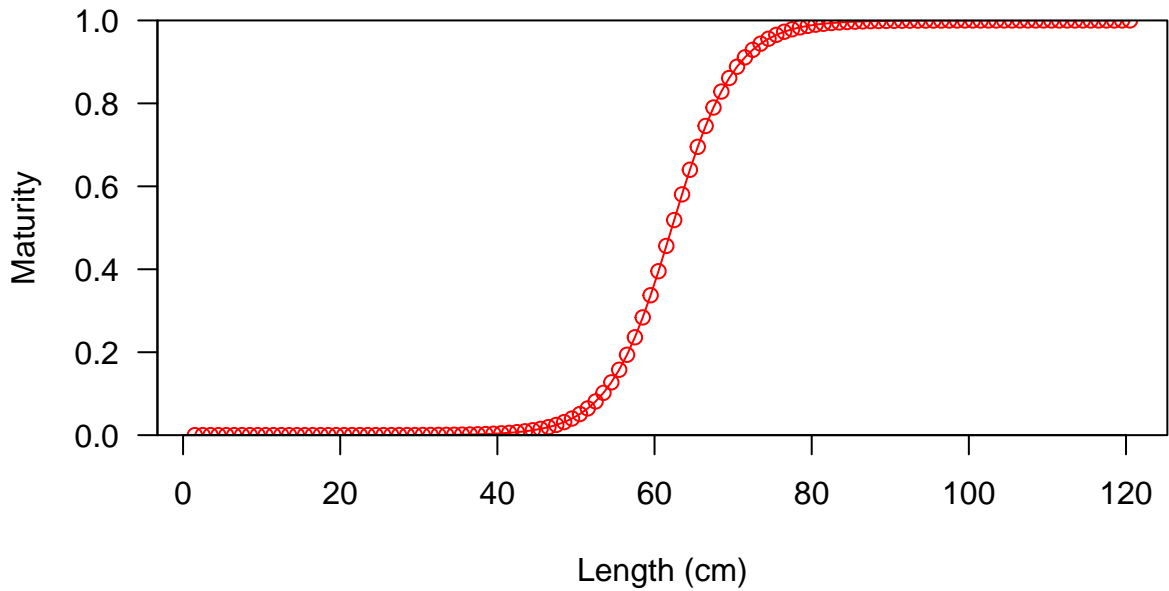




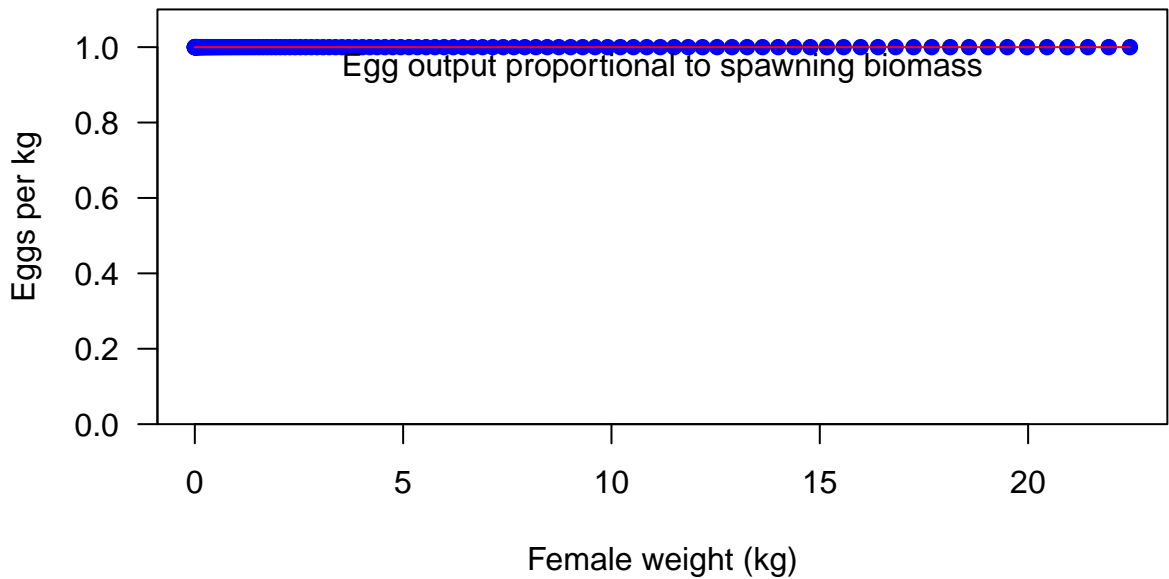












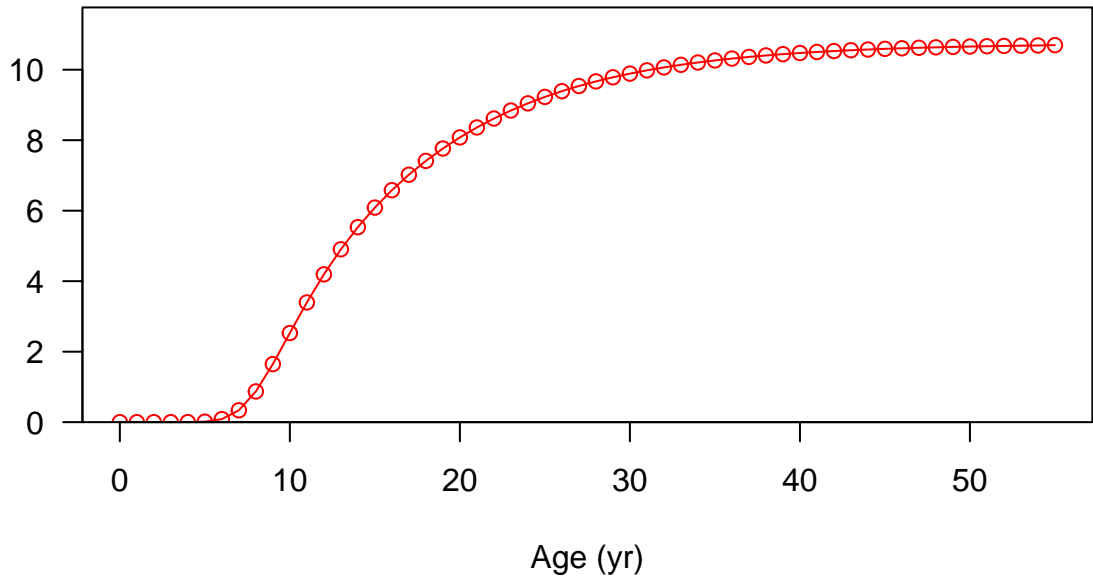


Fecundity

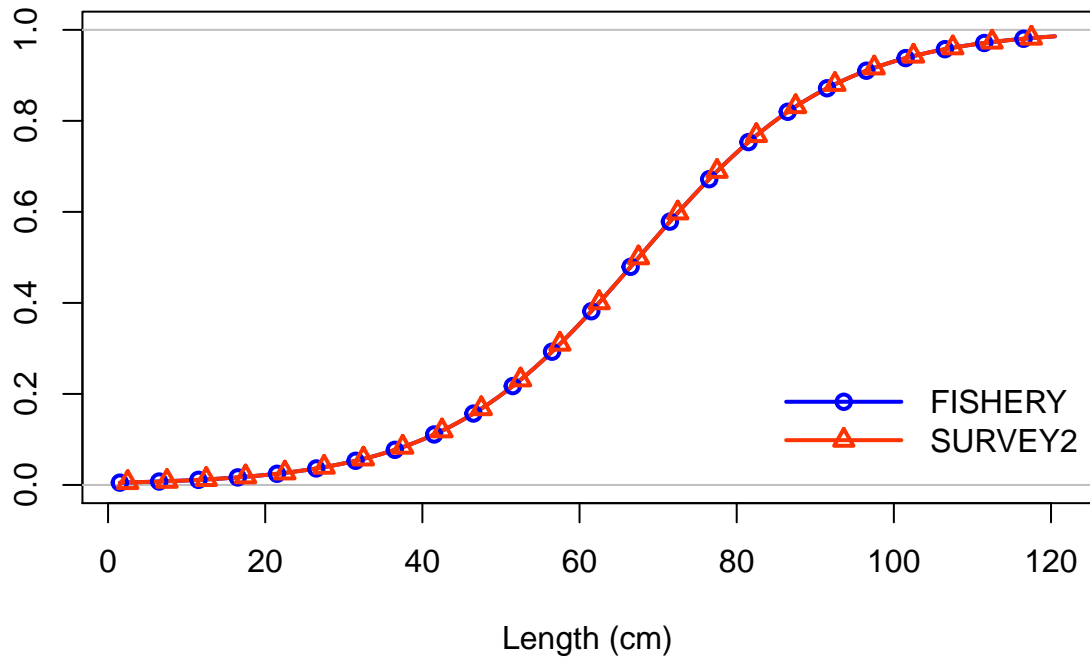




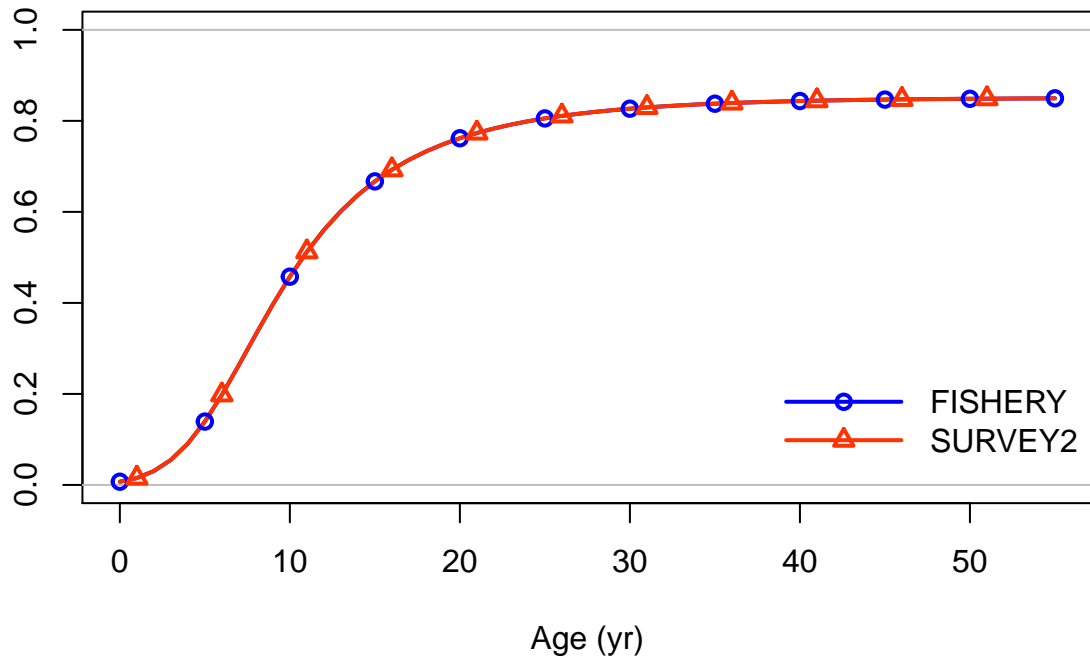
Spawning output



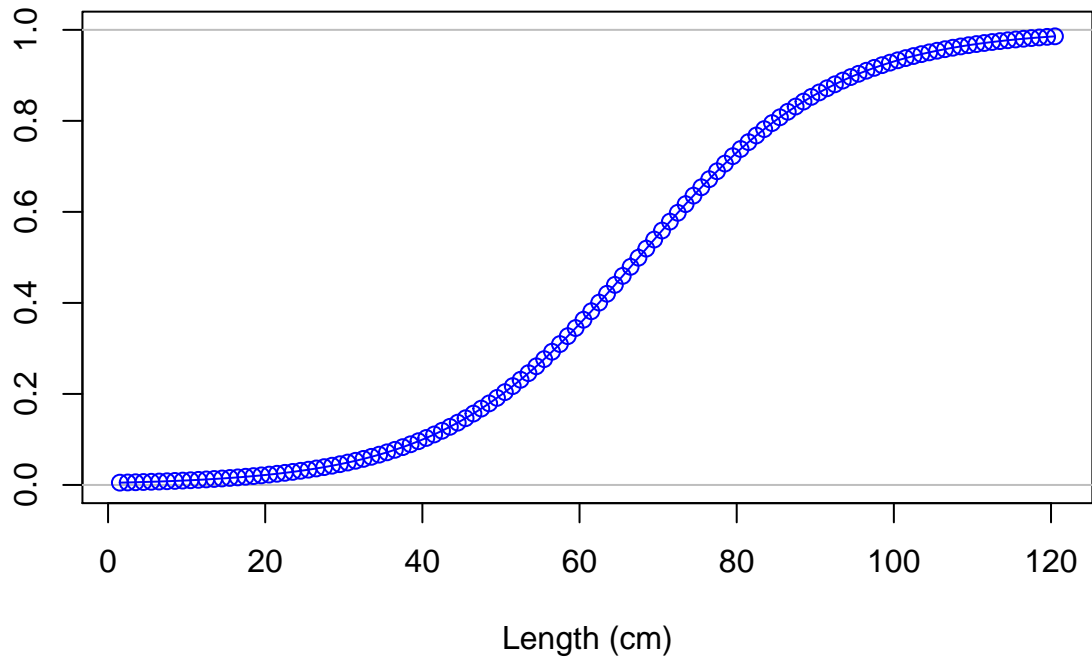
Selectivity



Selectivity

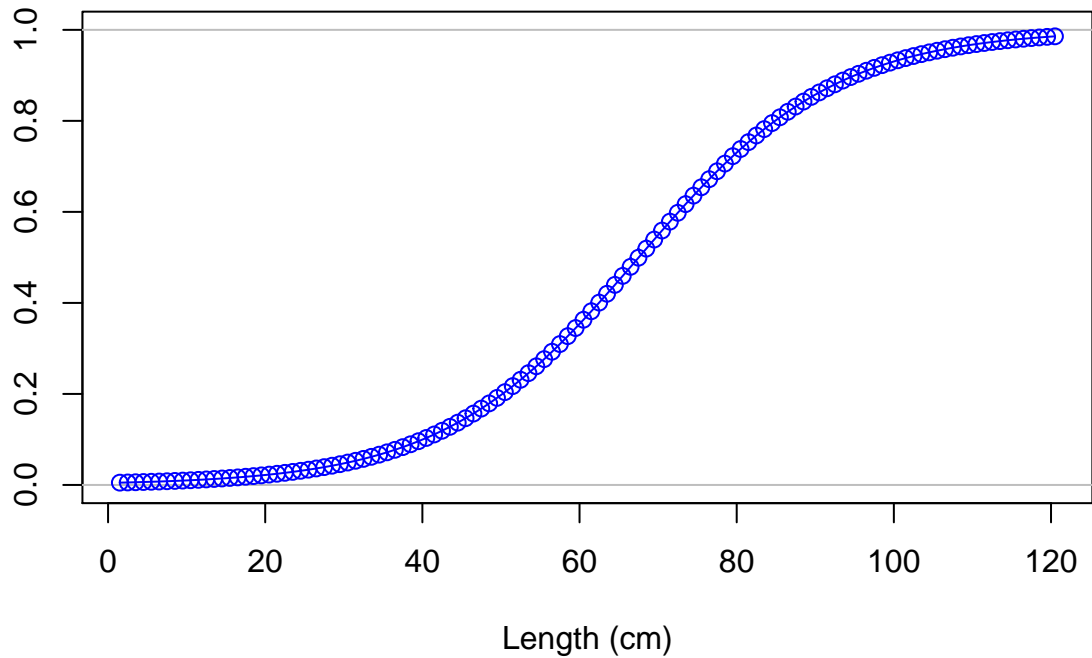


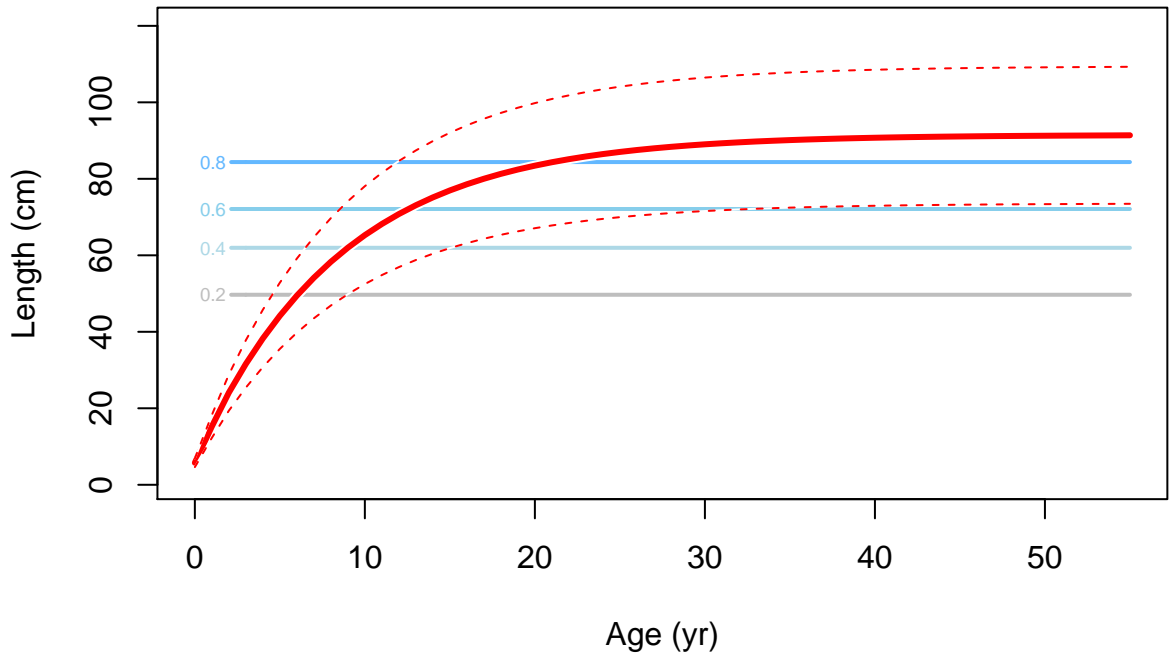
Selectivity

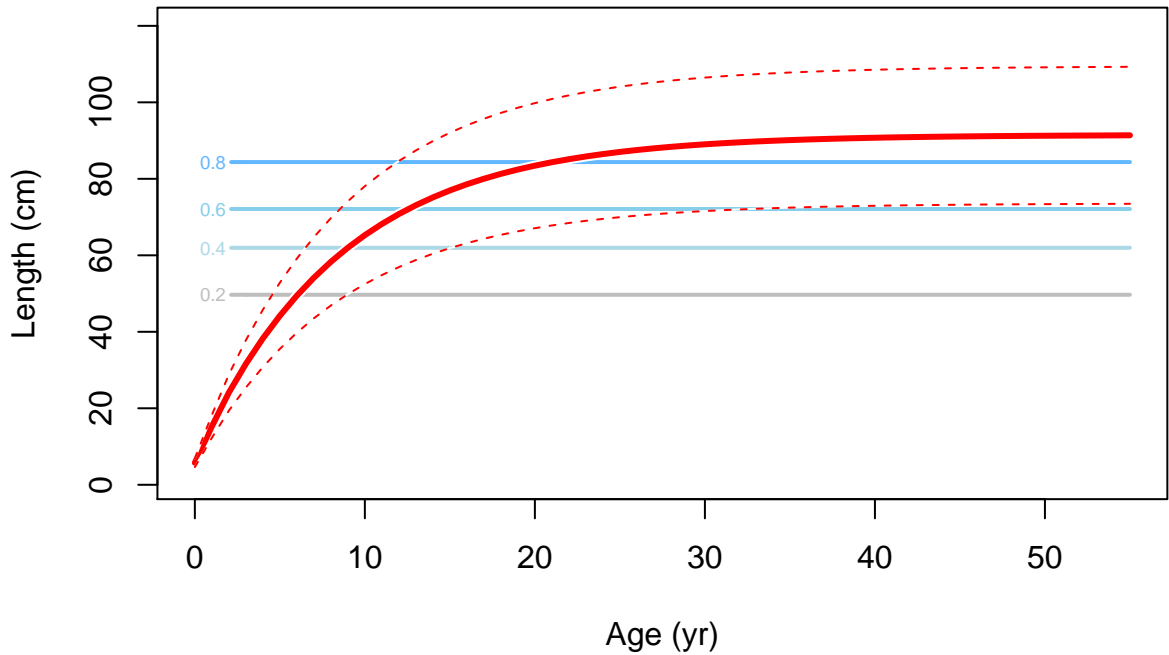


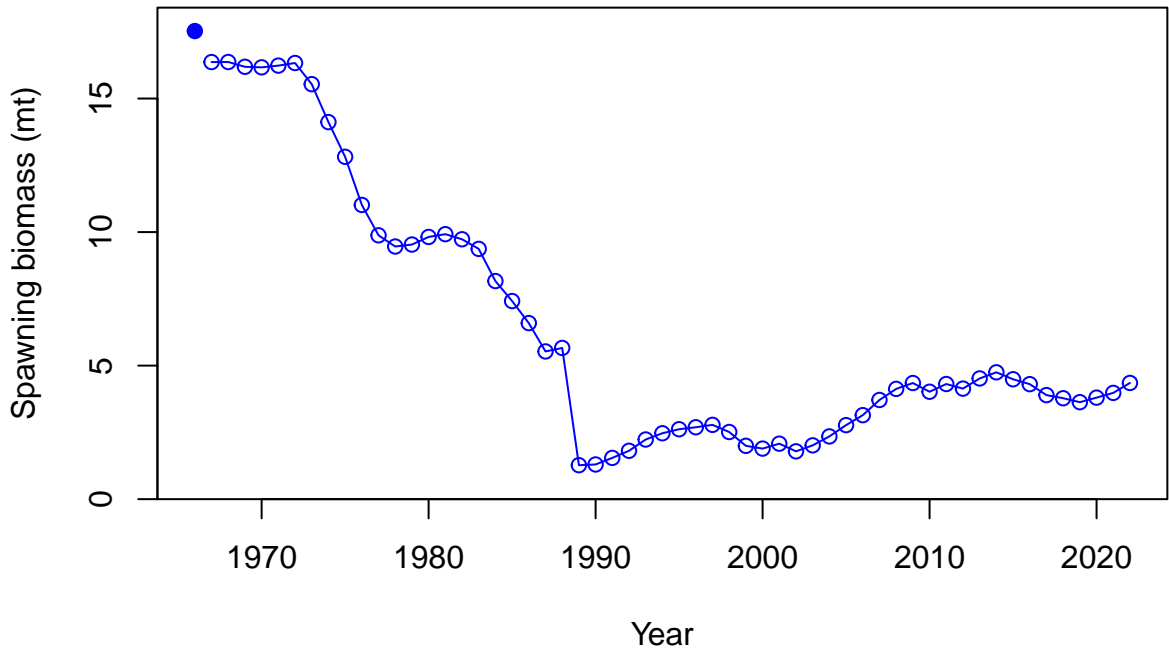


Selectivity

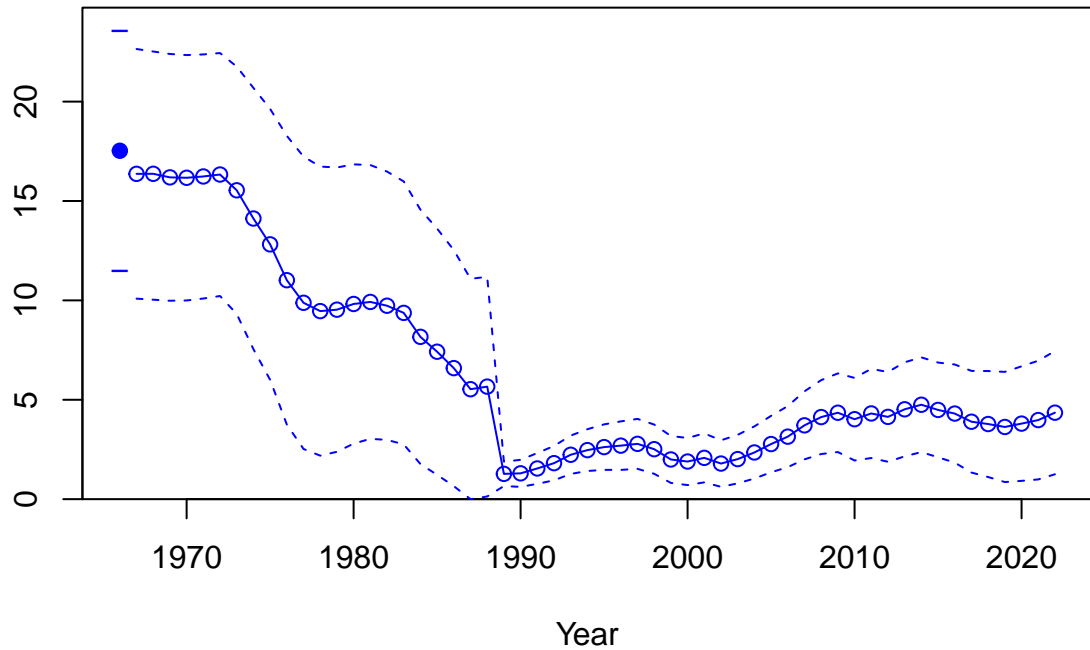




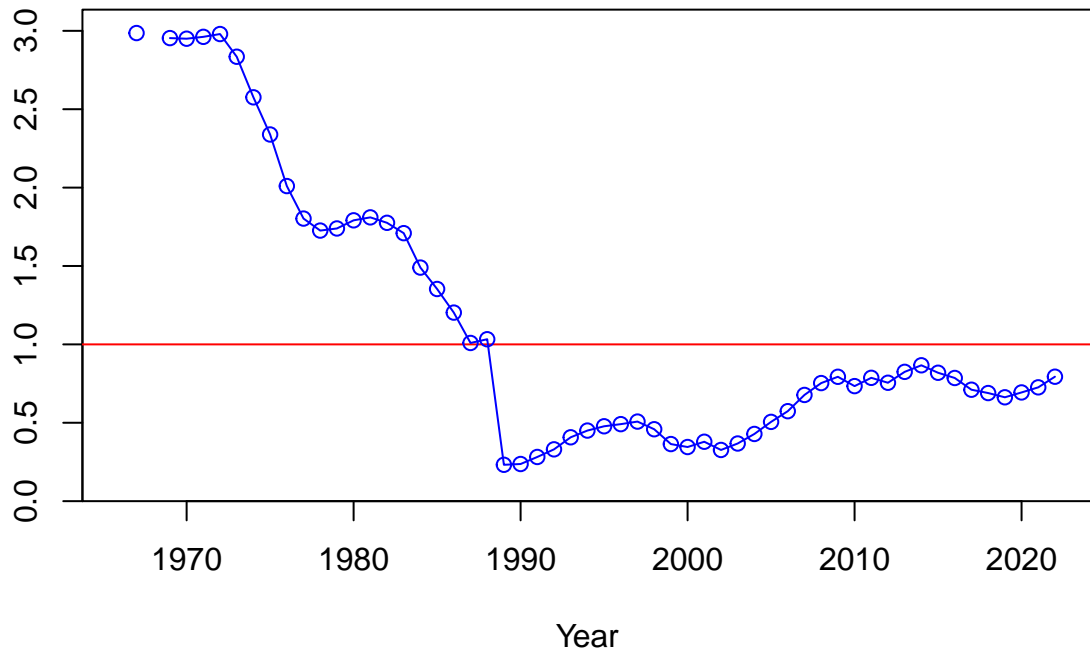




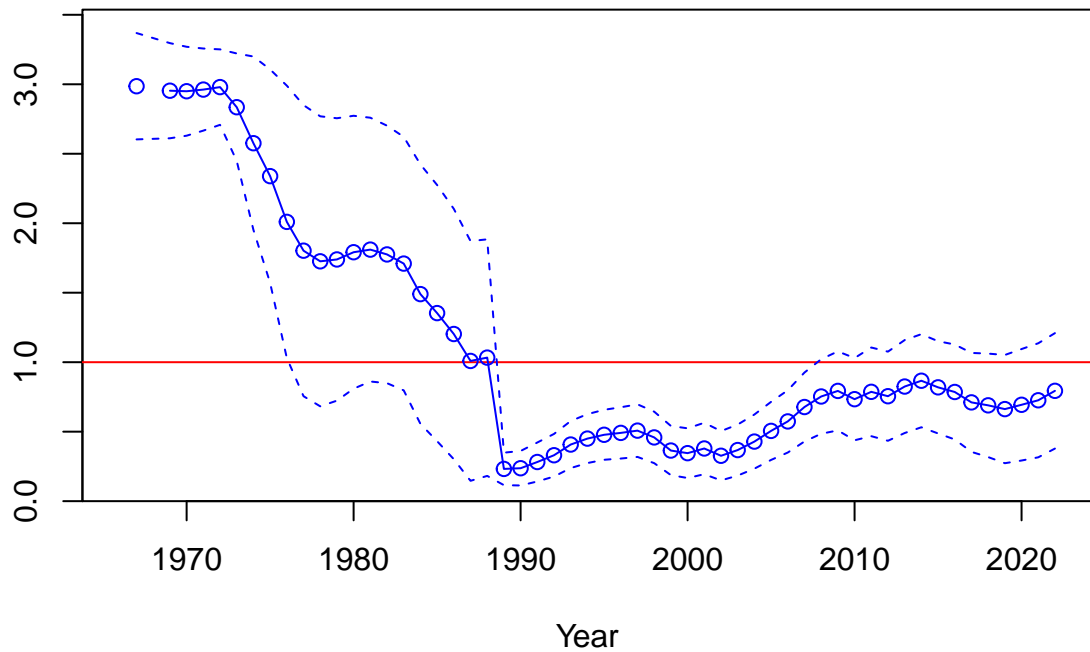
Spawning biomass (mt)

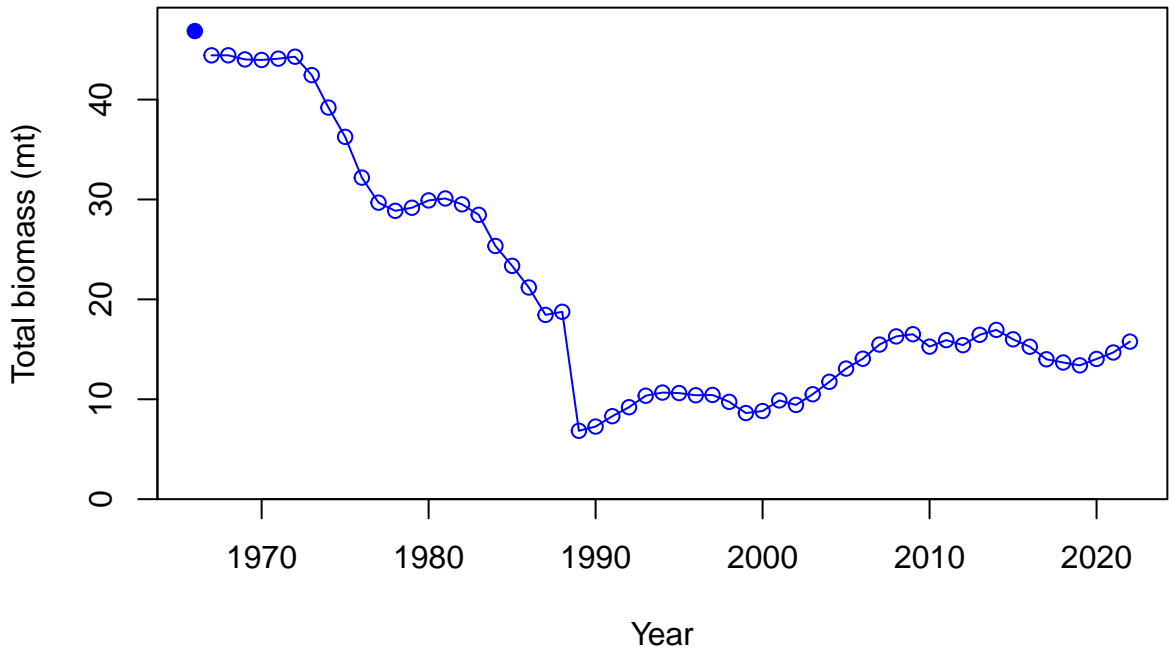


Relative spawning biomass: B/B\_MSY

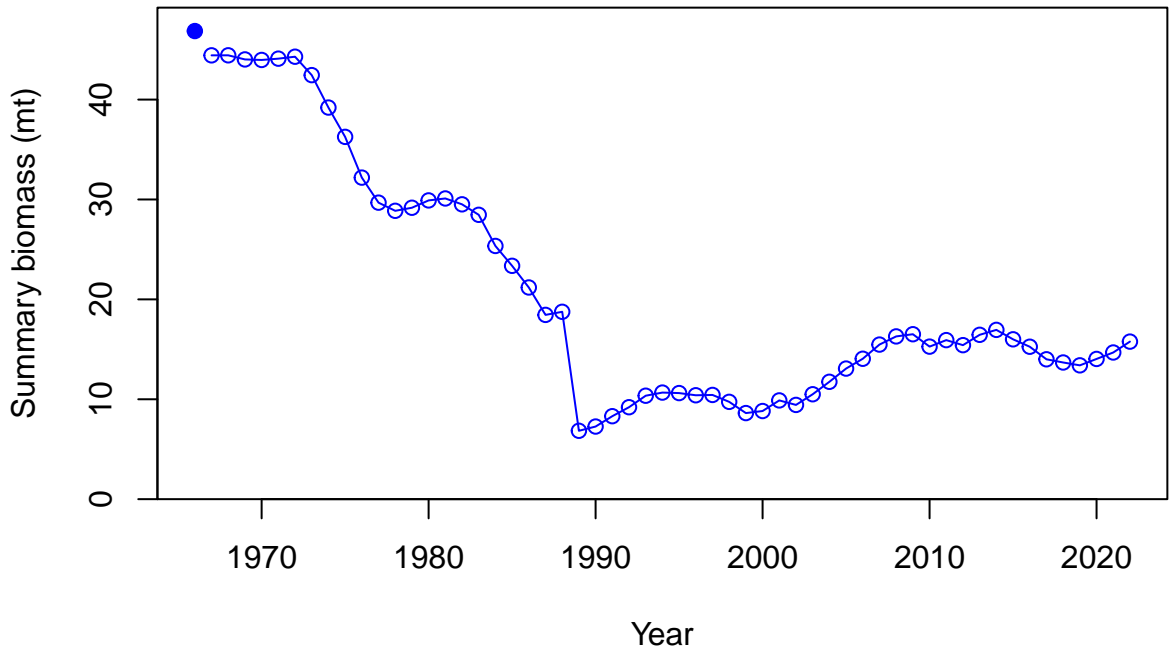


Relative spawning biomass:  $B/B_{MSY}$

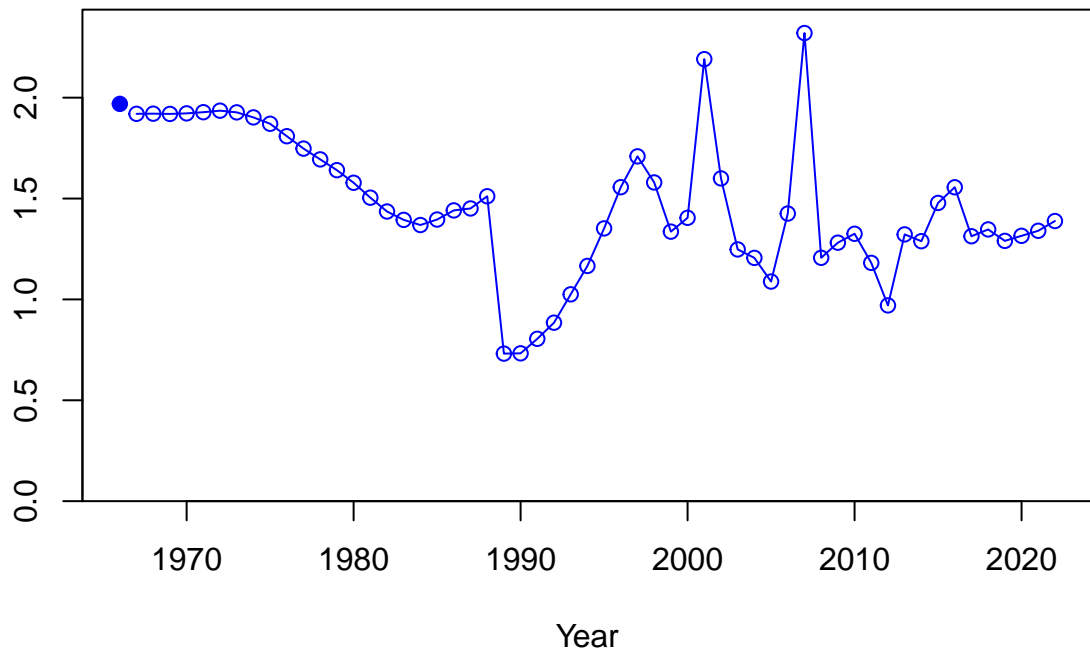




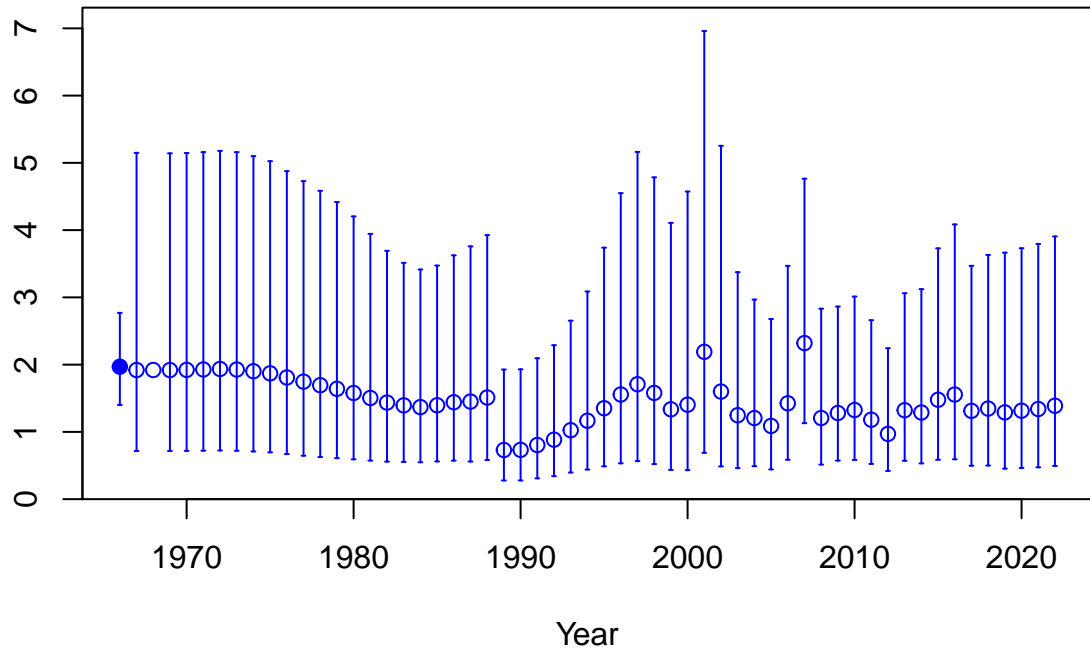




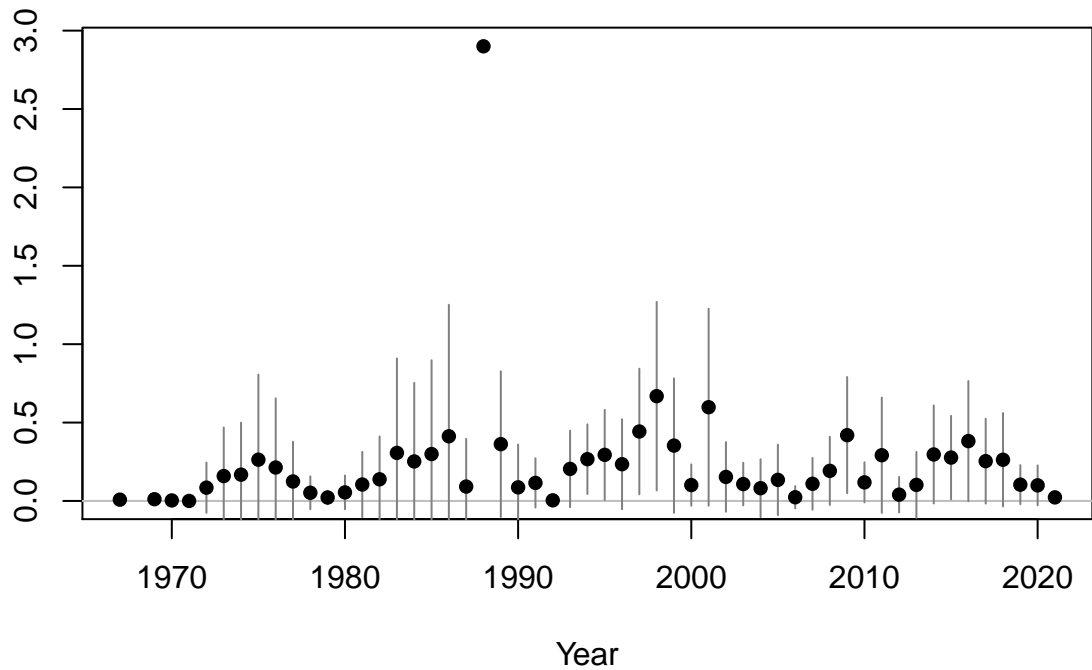
Age-0 recruits (1,000s)

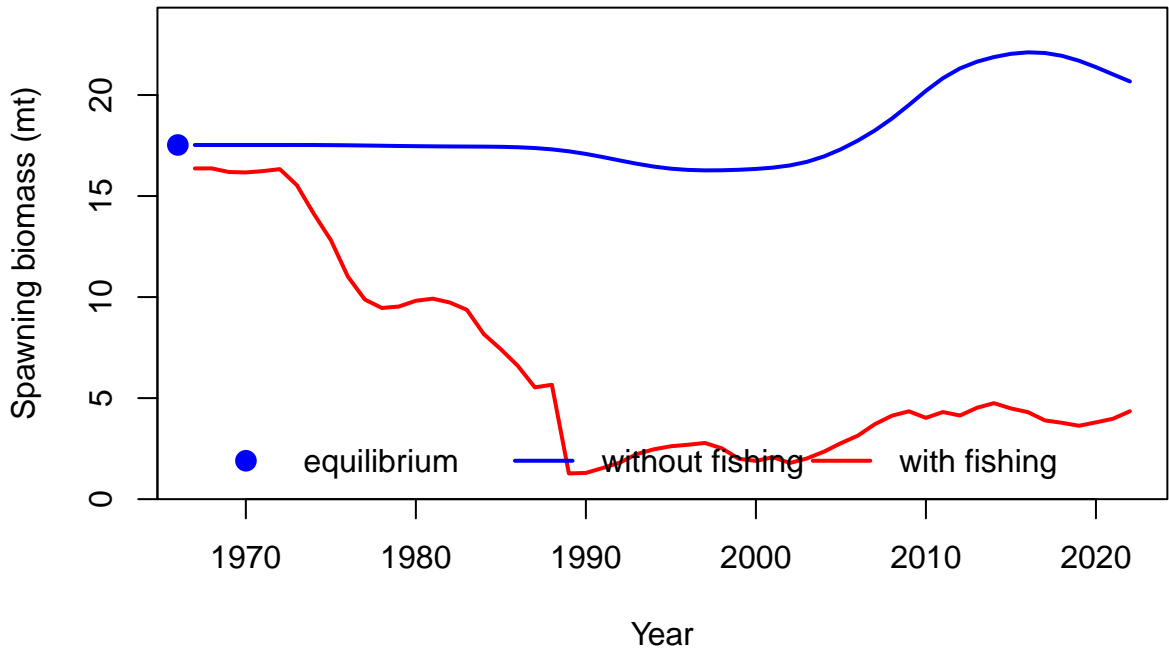


Age-0 recruits (1,000s)

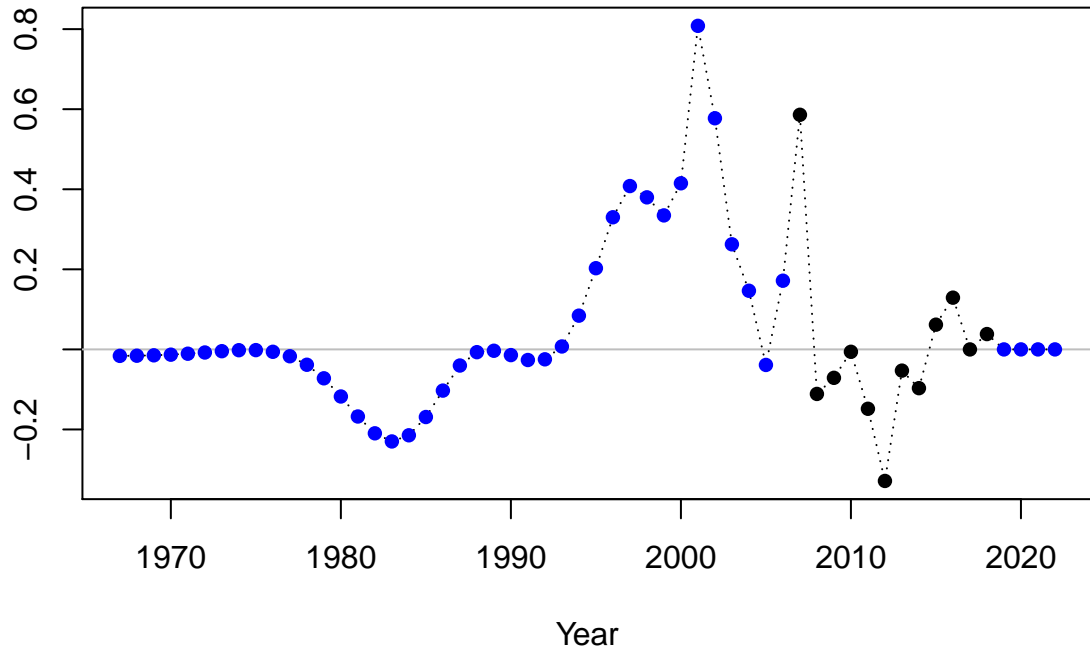


Summary Fishing Mortality

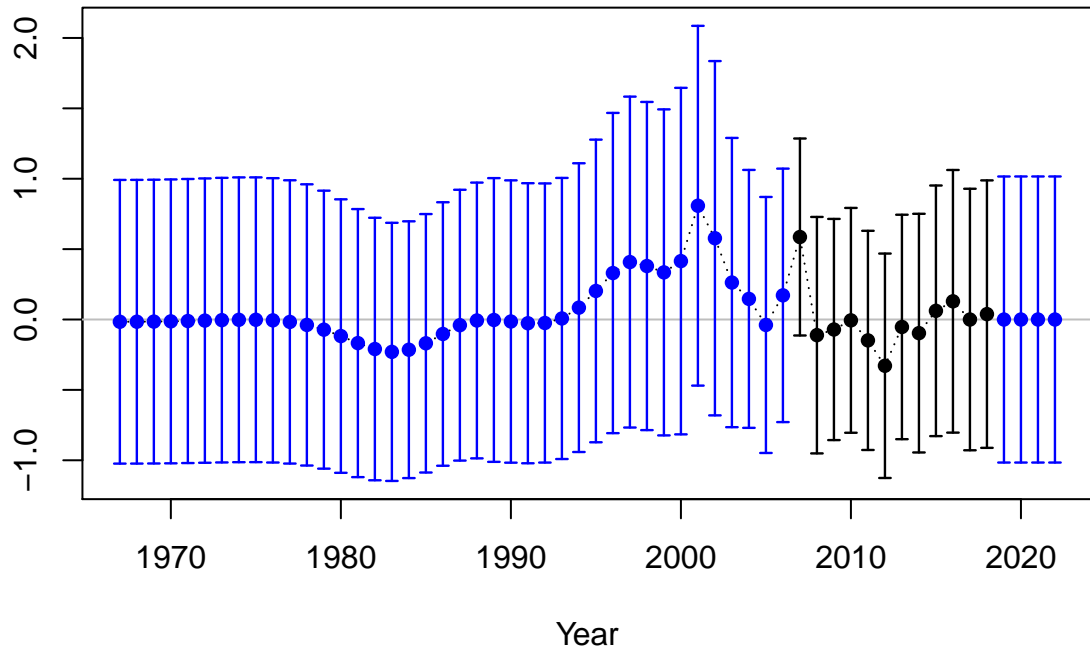




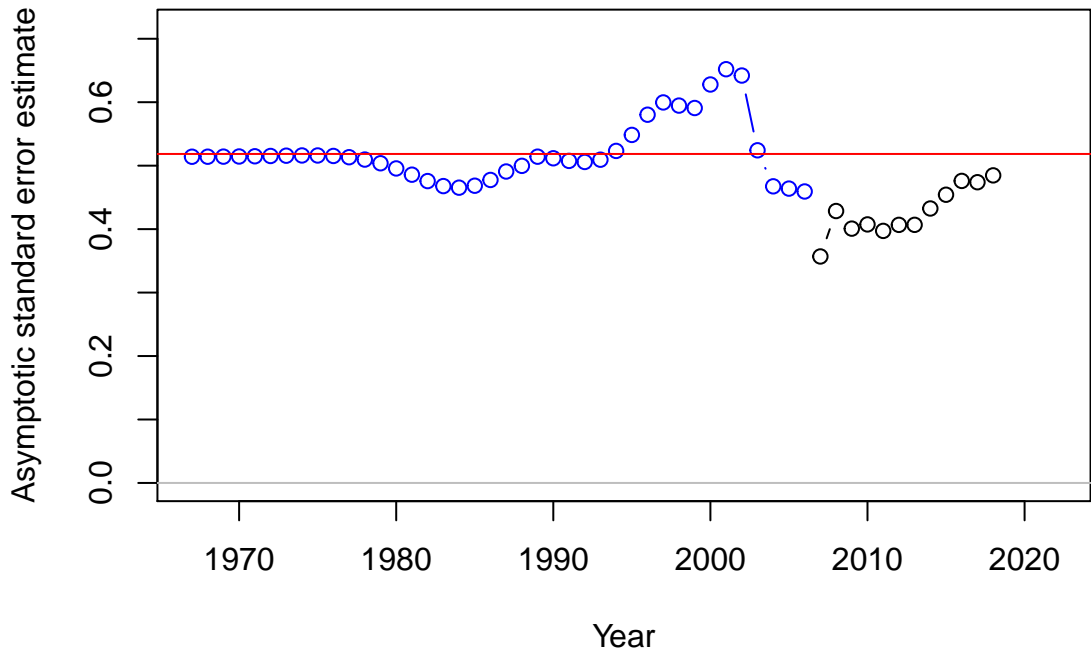
Log recruitment deviation



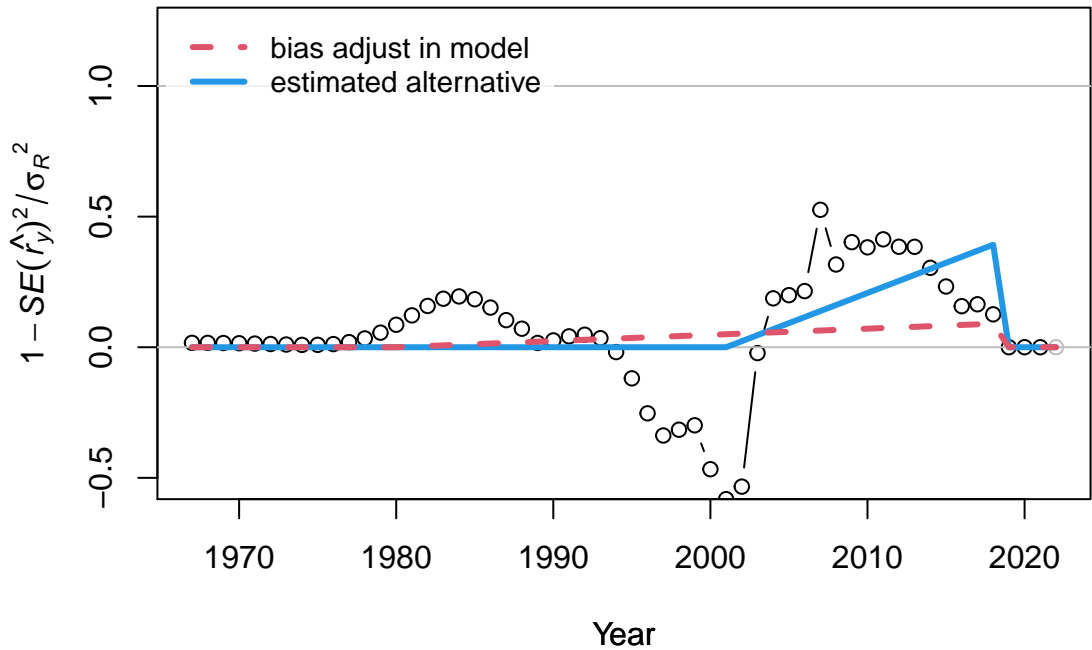
Log recruitment deviation



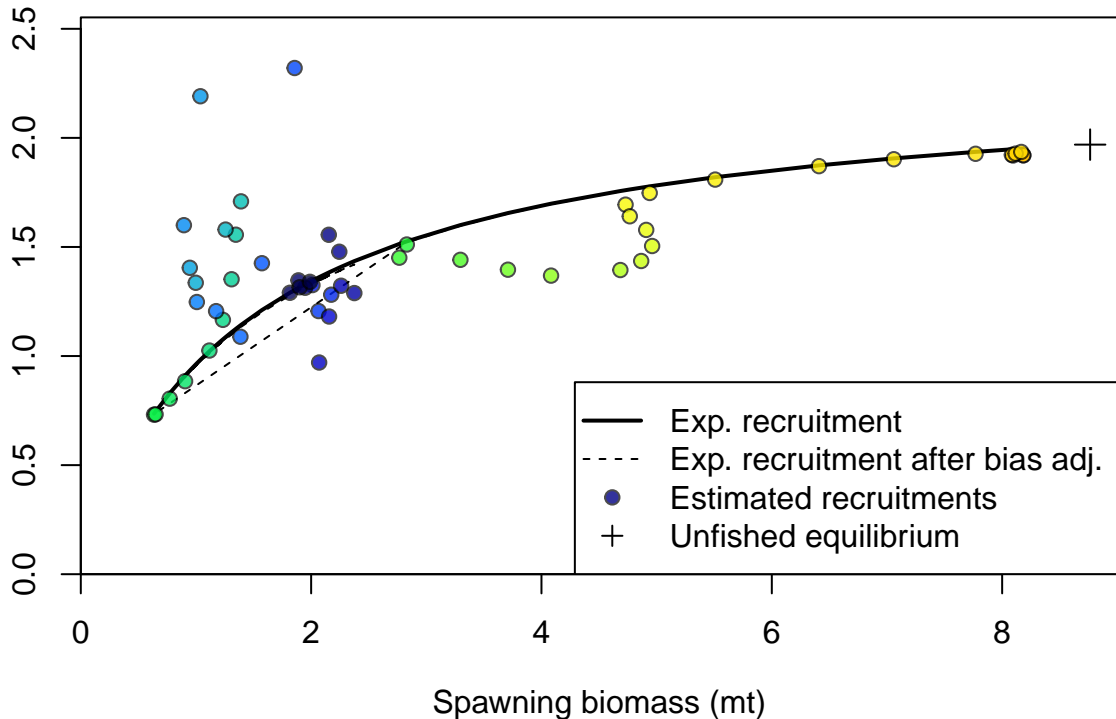
## Recruitment deviation variance

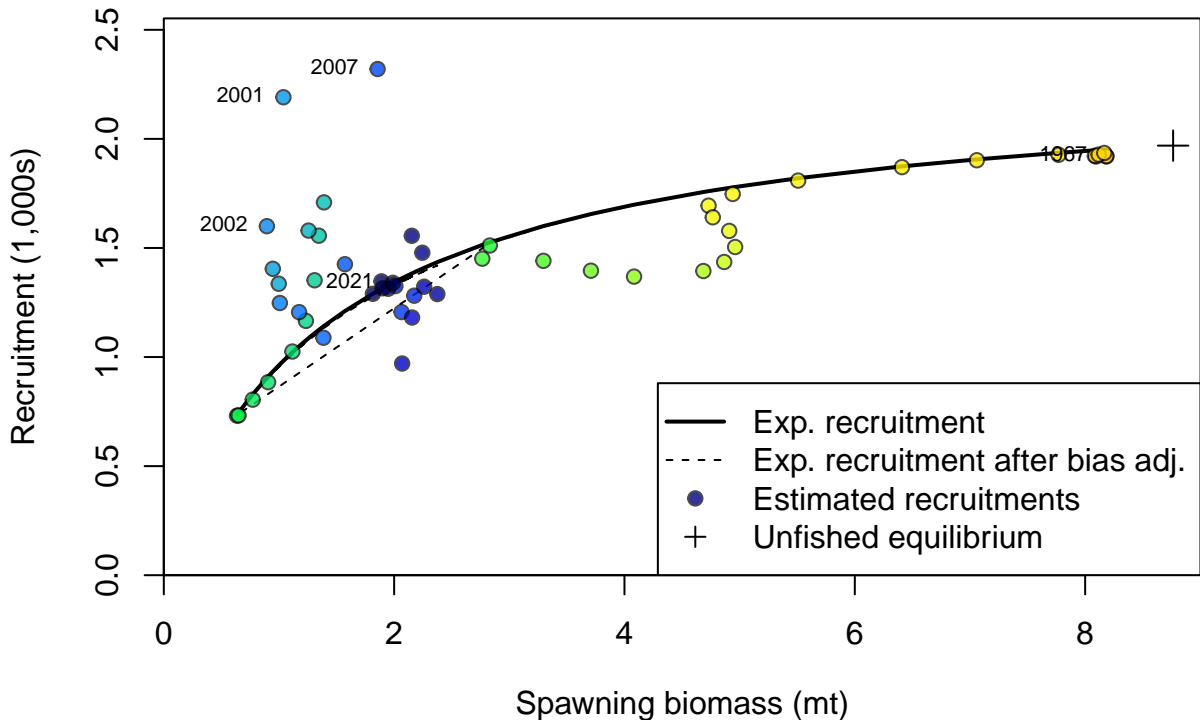


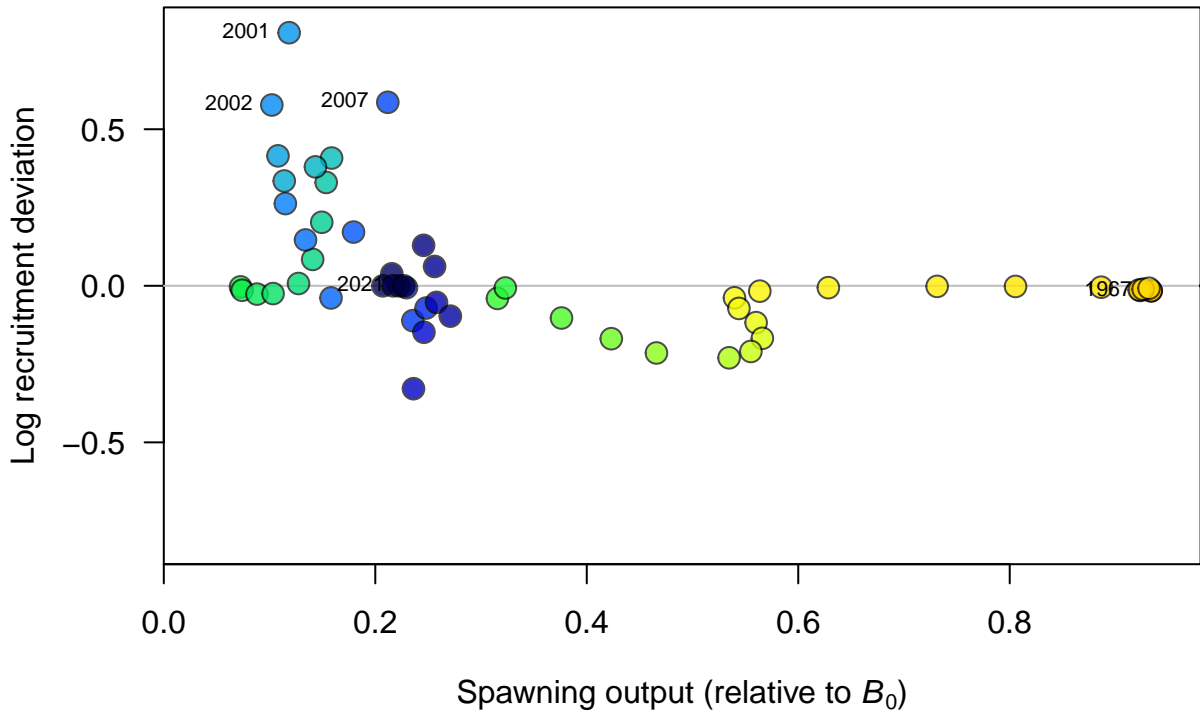


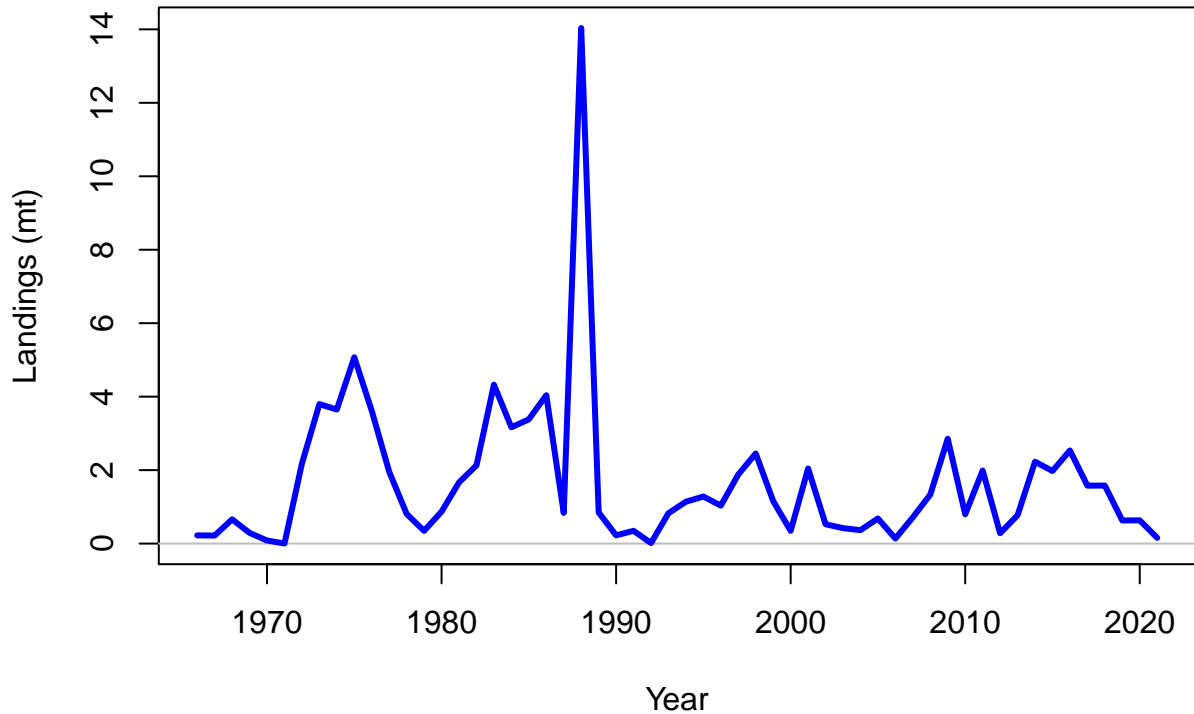


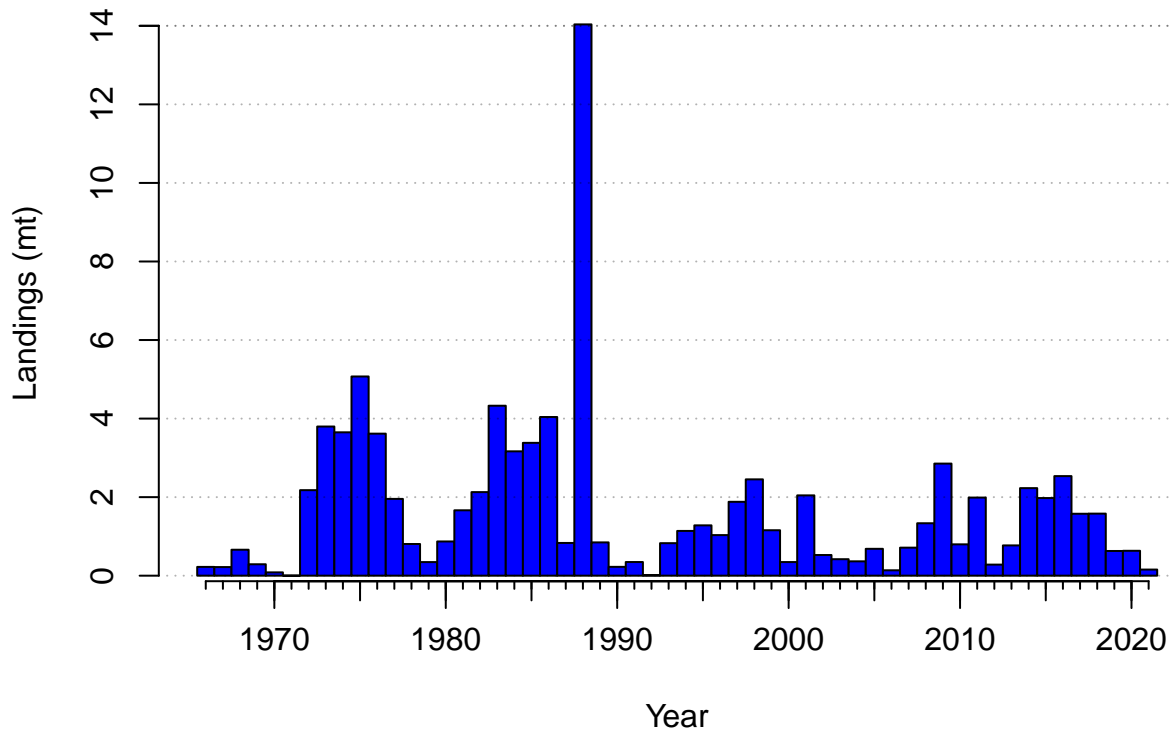
Recruitment (1,000s)

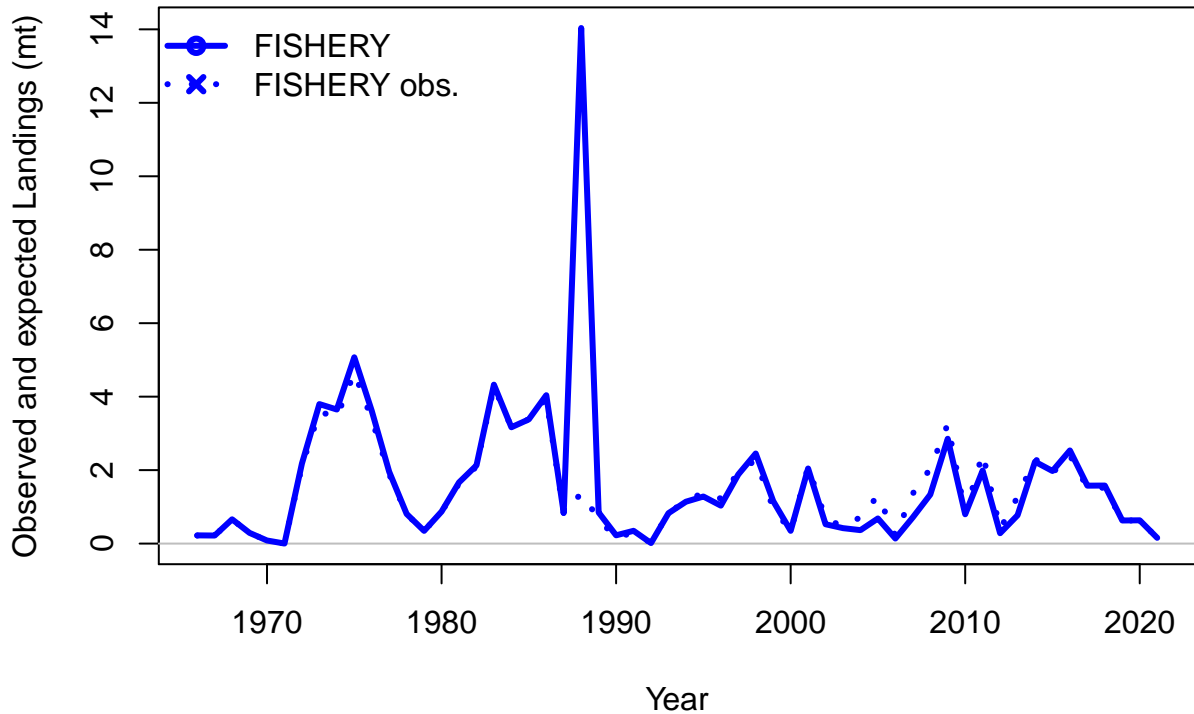


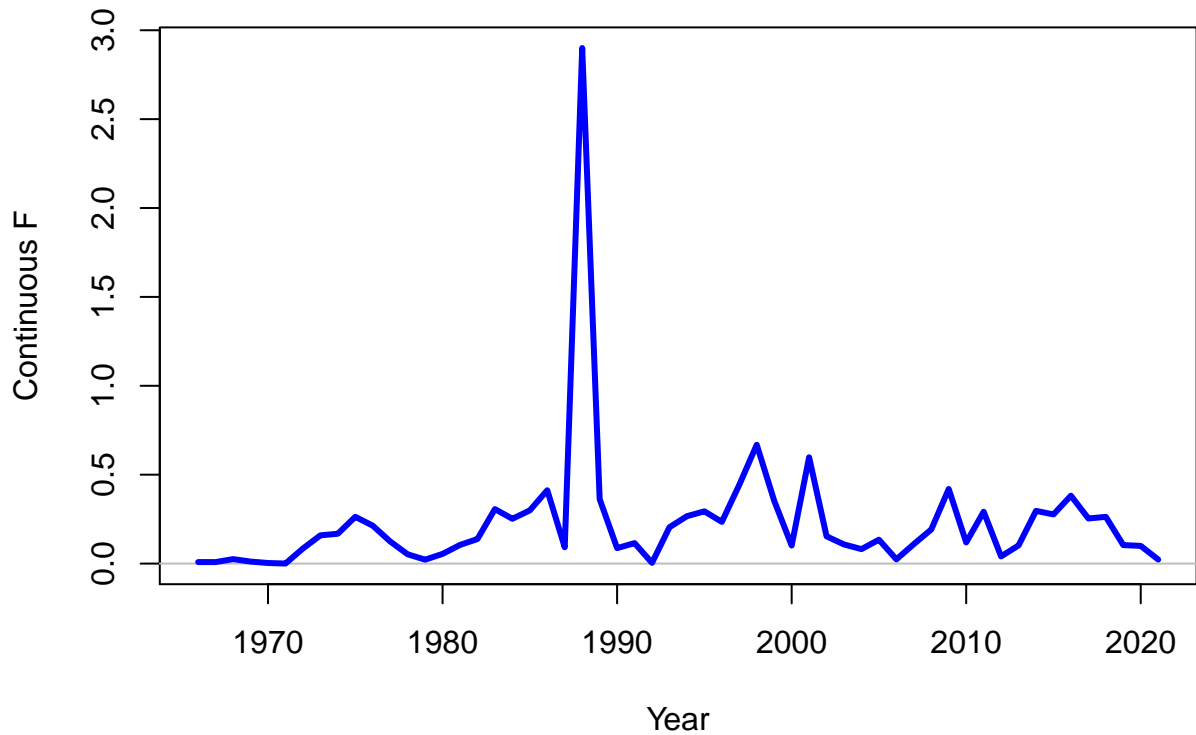






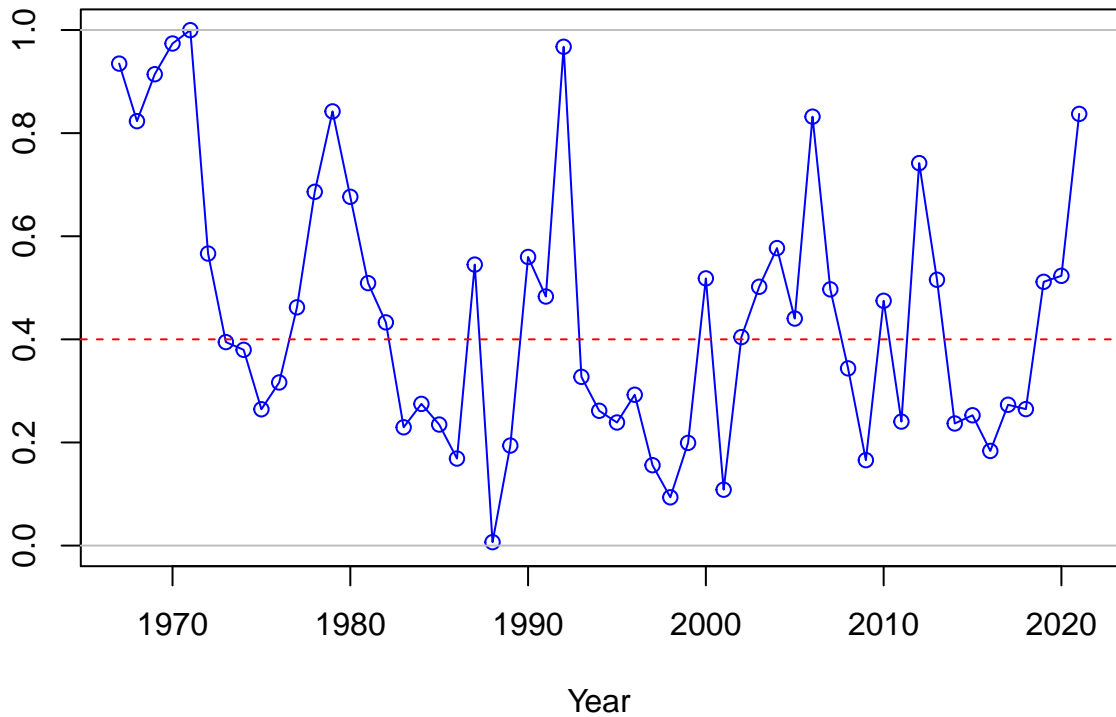


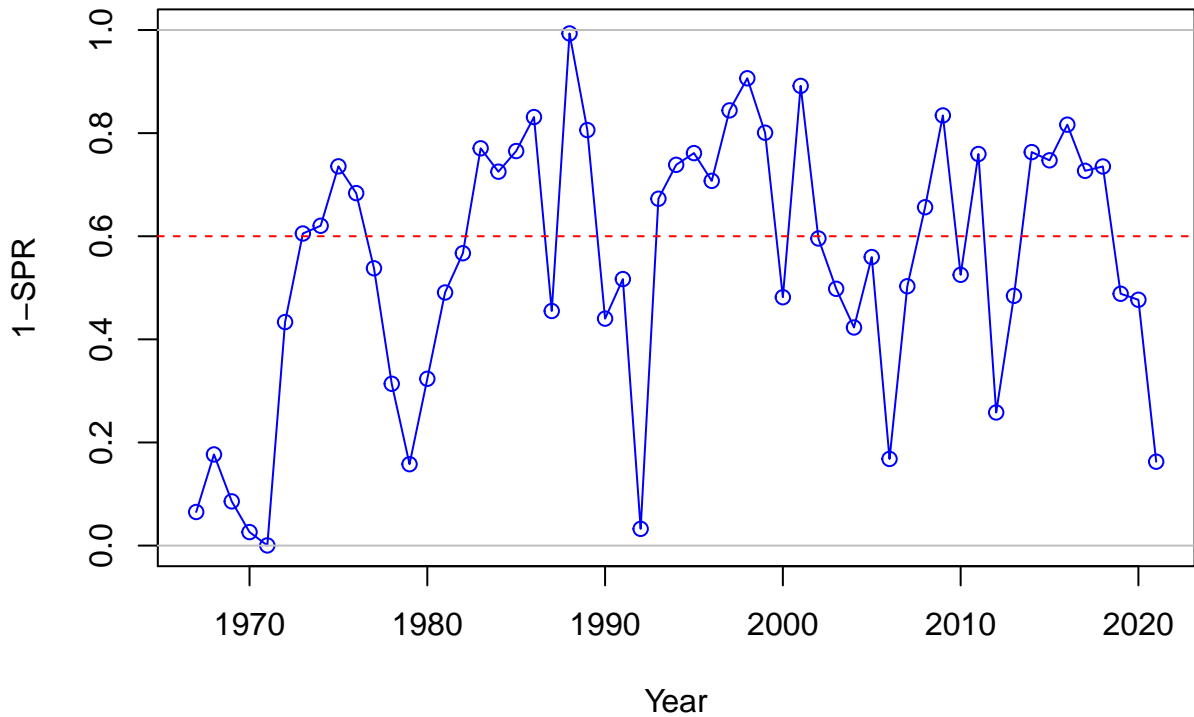




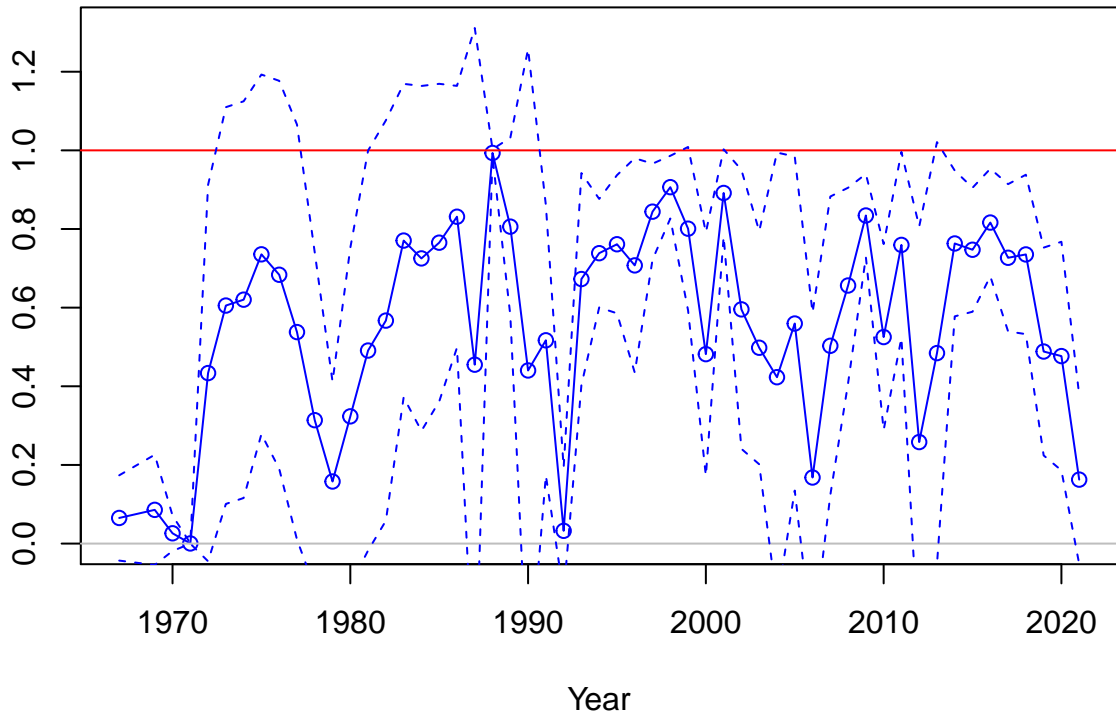


SPR

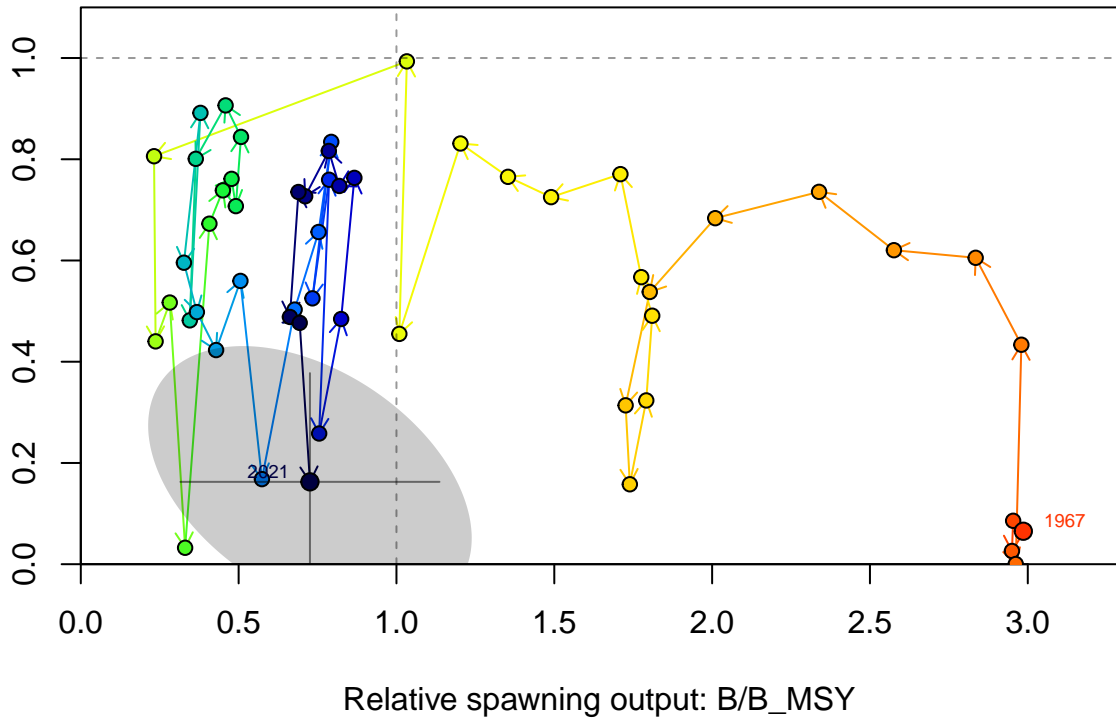




Fishing intensity: 1-SPR



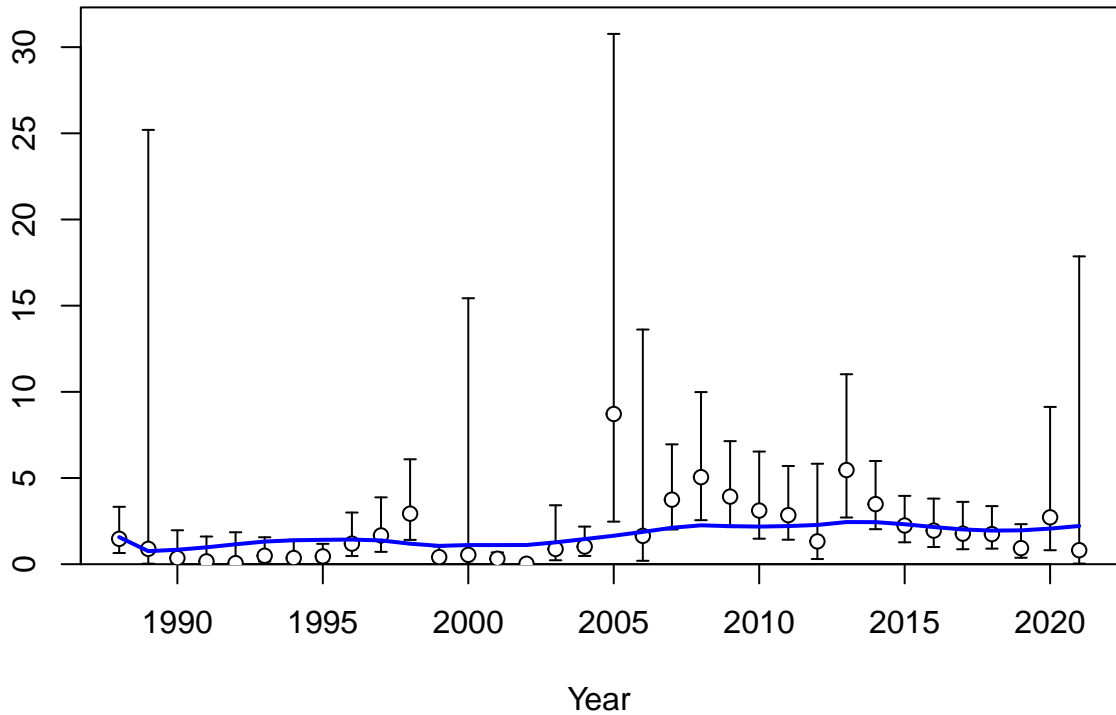
Fishing intensity: 1-SPR



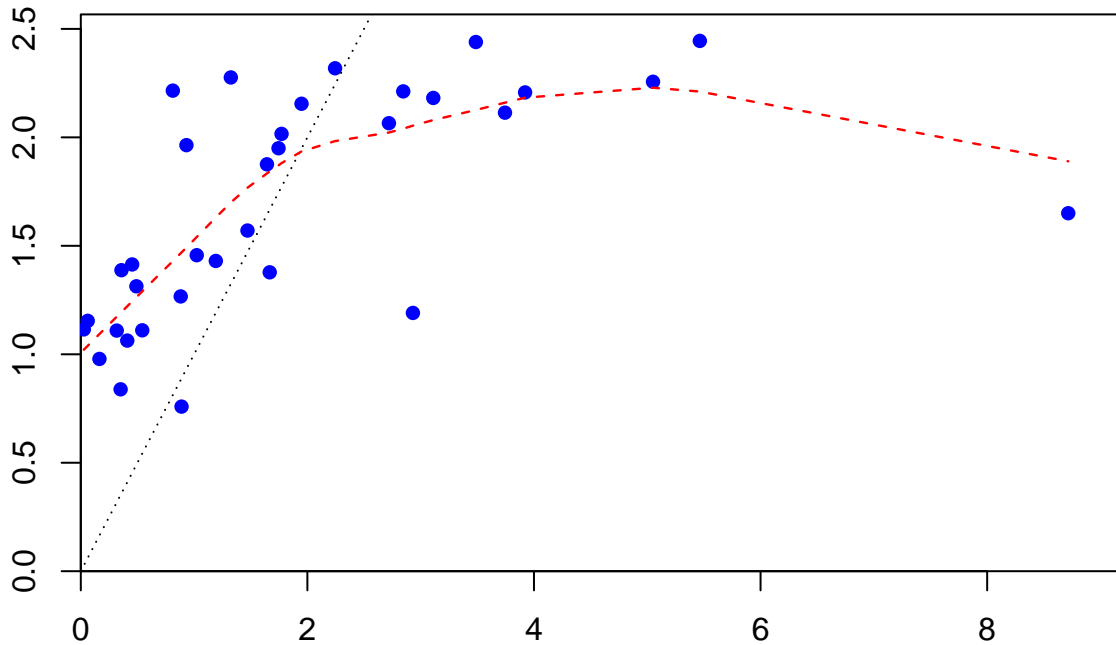
Index



Index



Expected index



Observed index

Log index

2  
0  
-2  
-4  
-6

1990

1995

2000

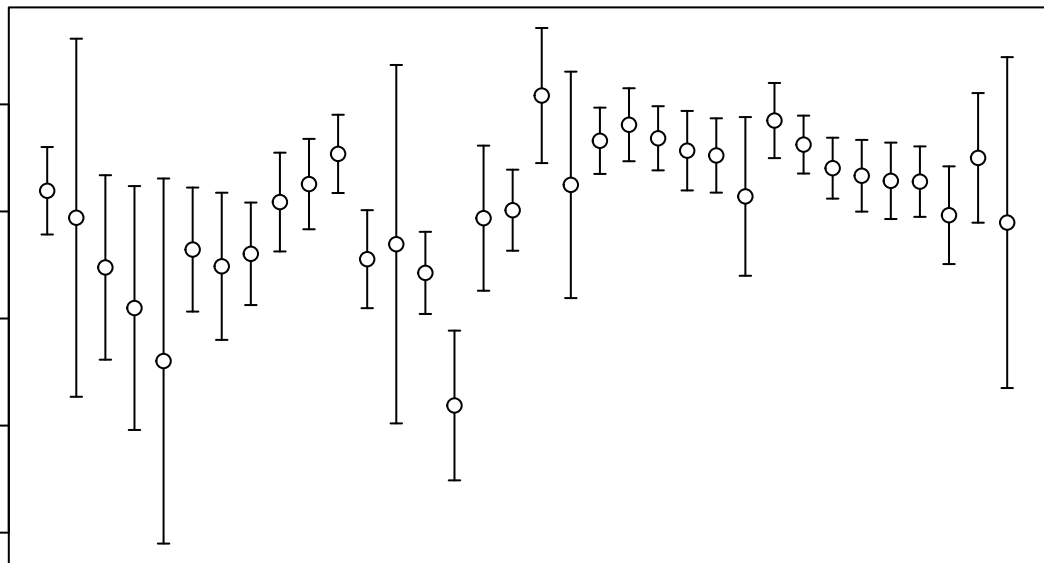
2005

2010

2015

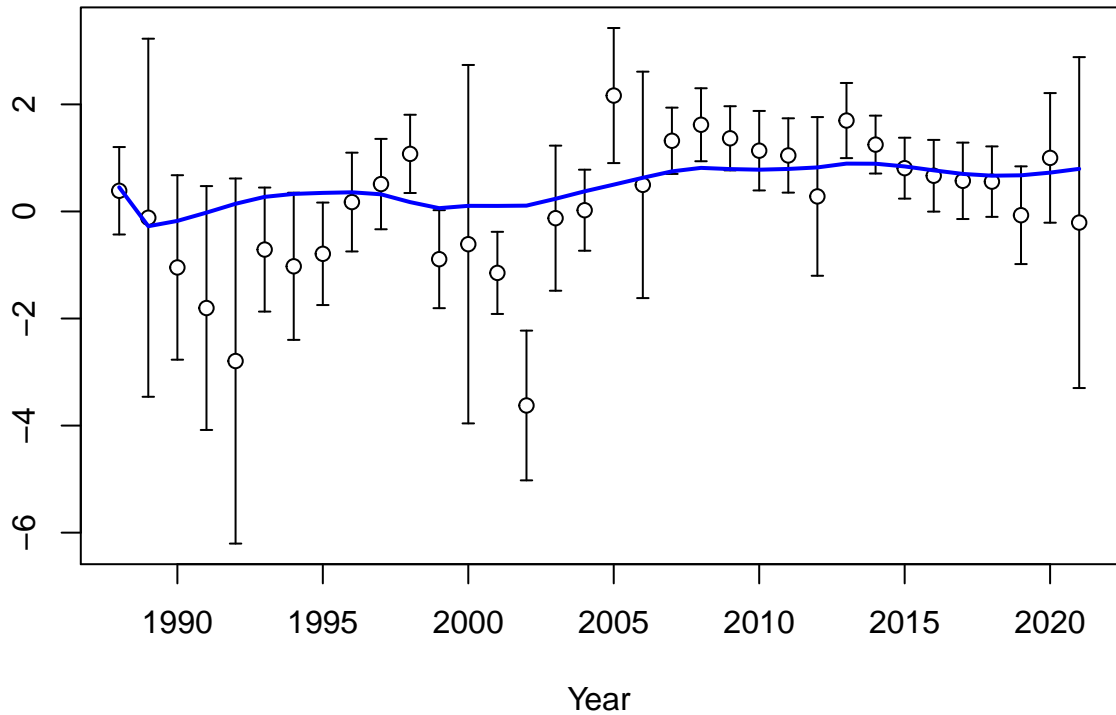
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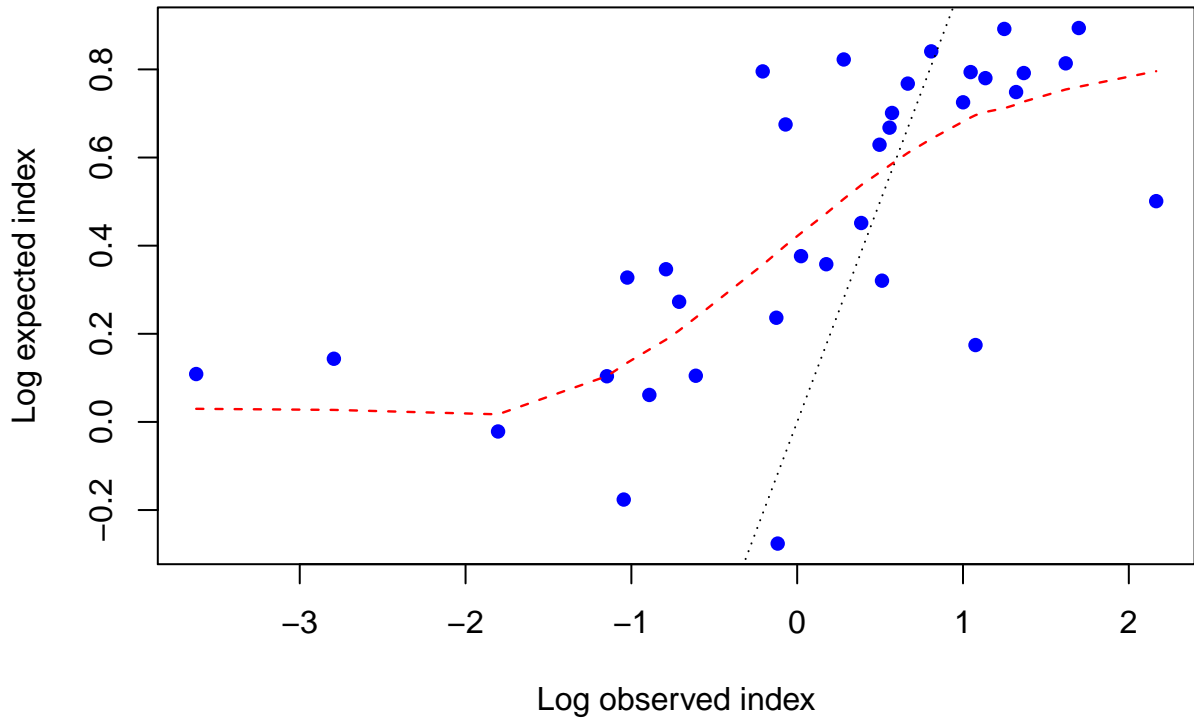
Year

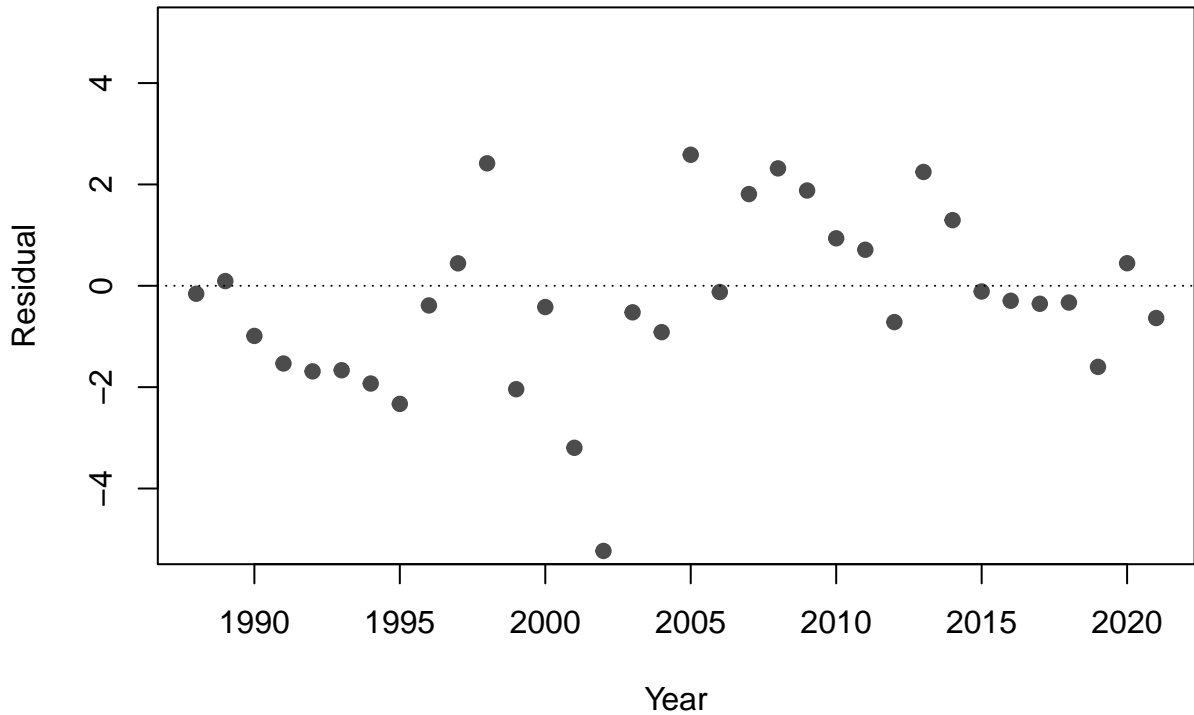


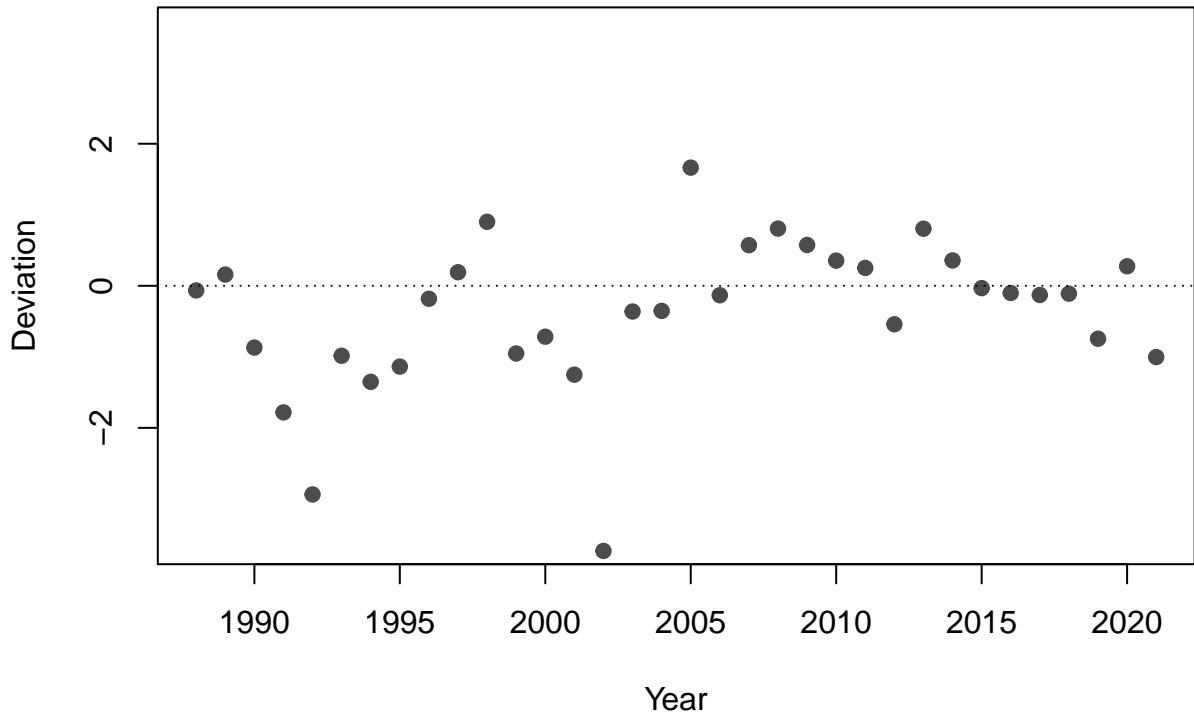


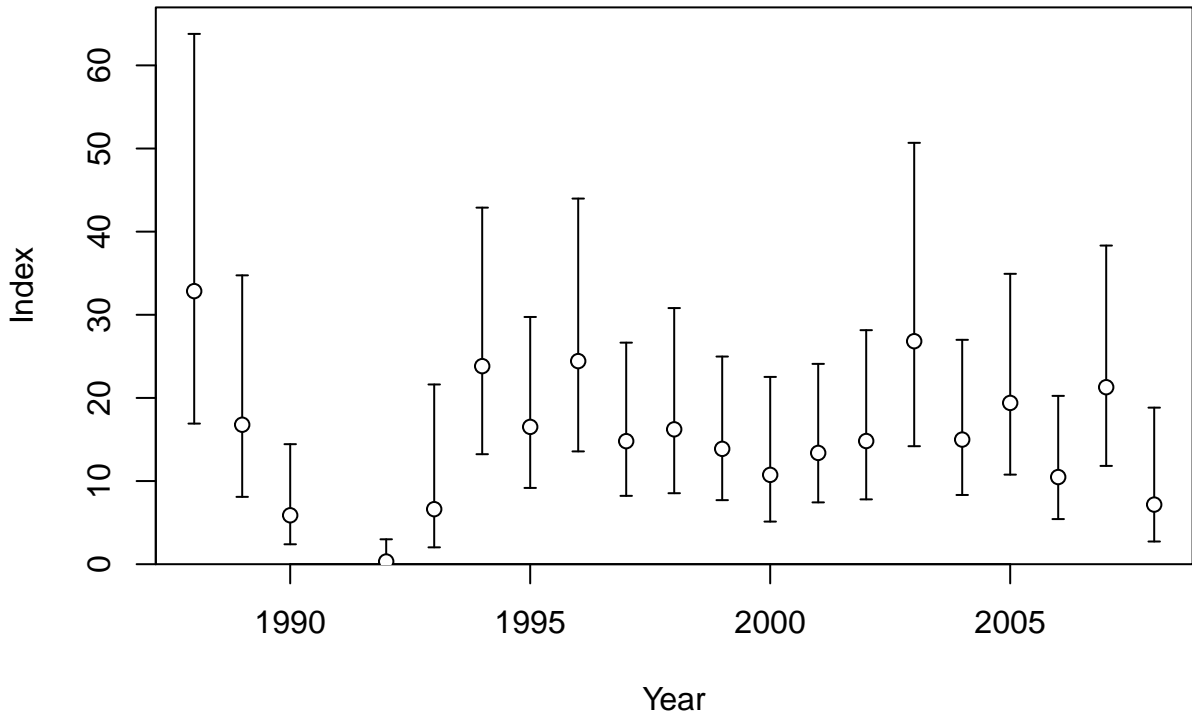
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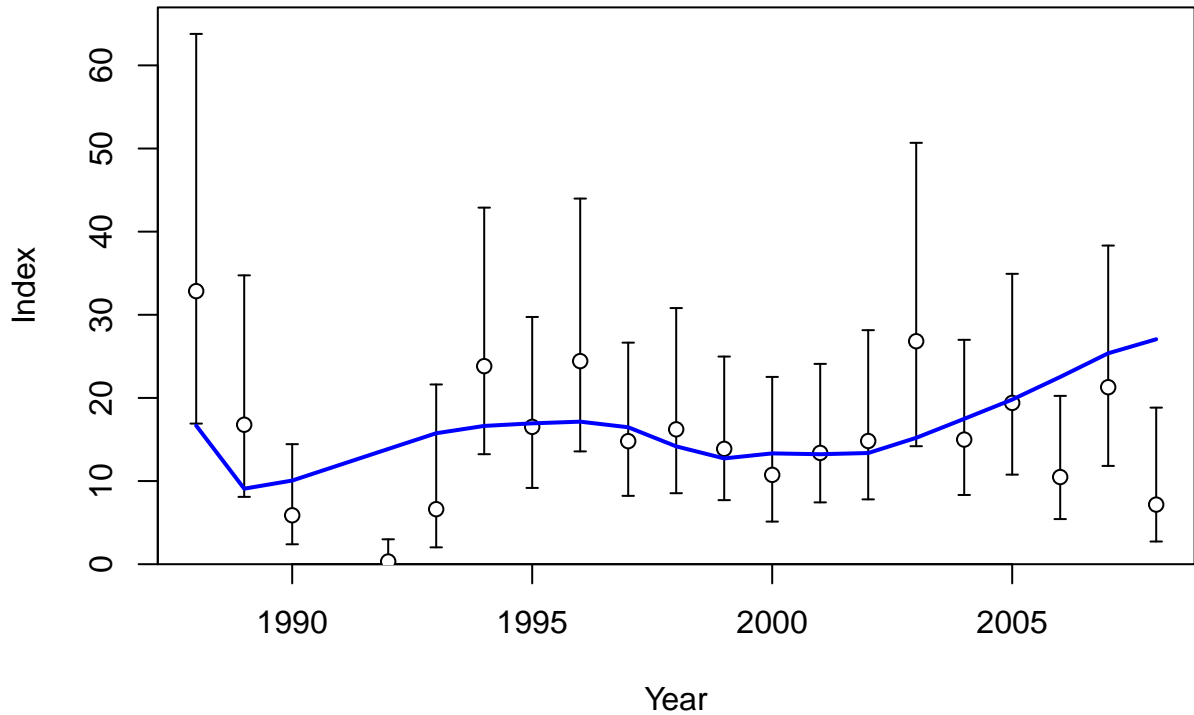


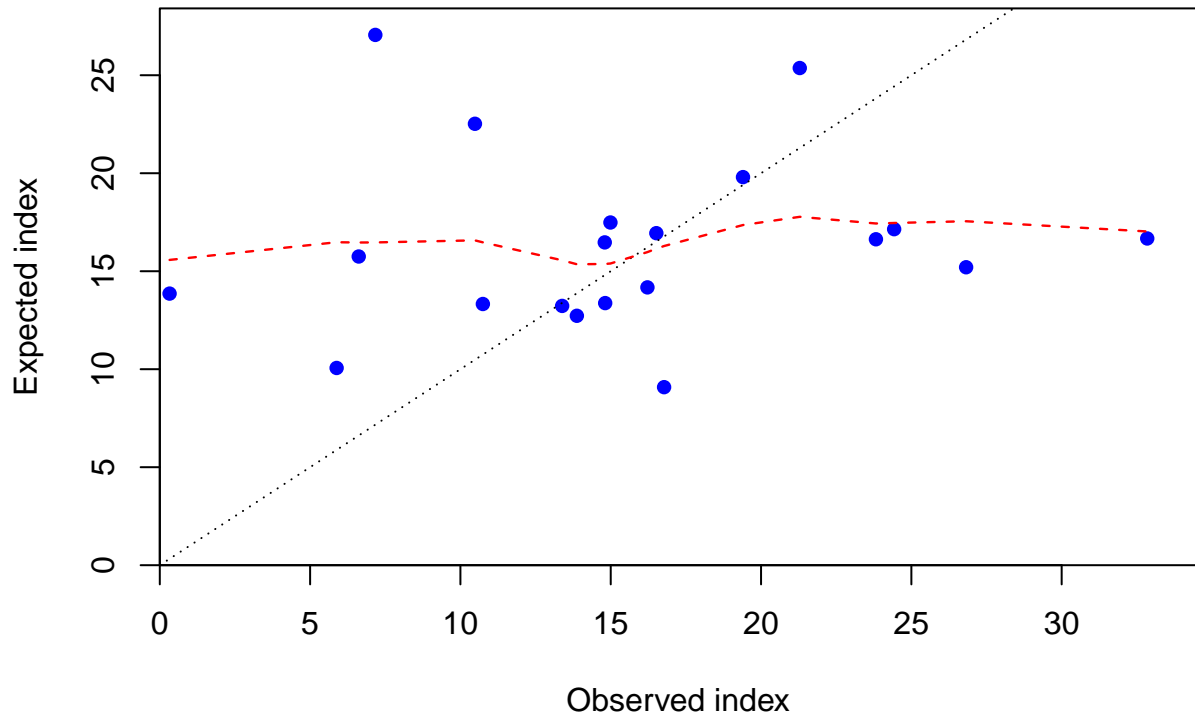


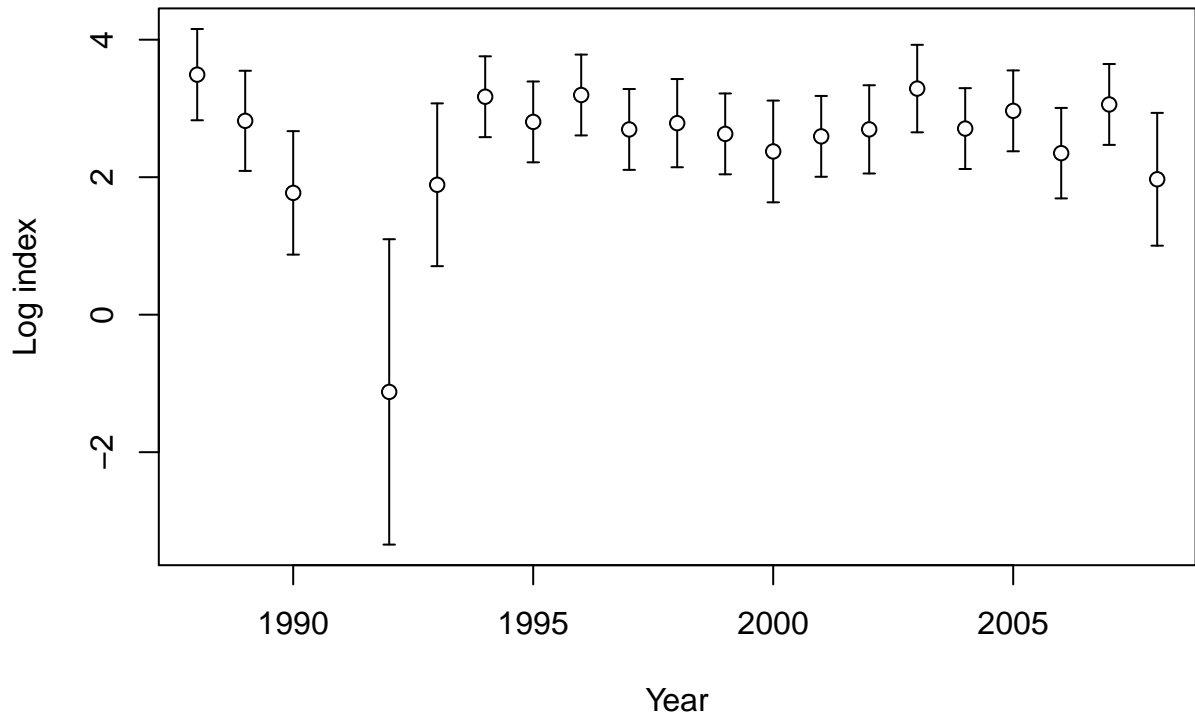






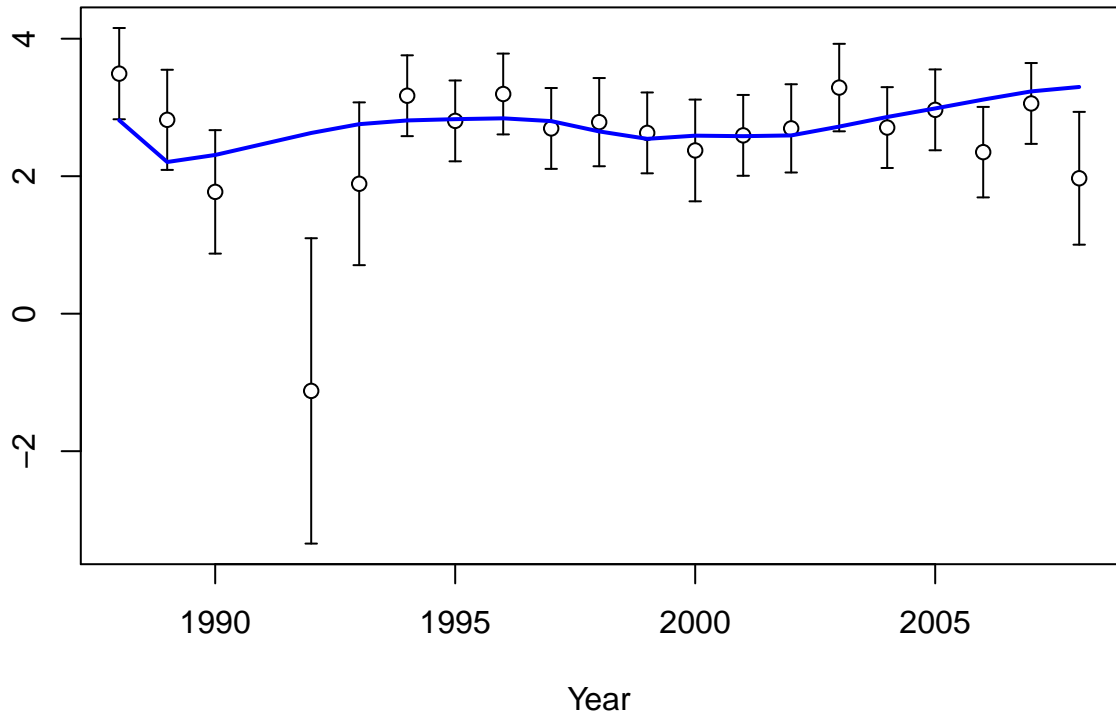


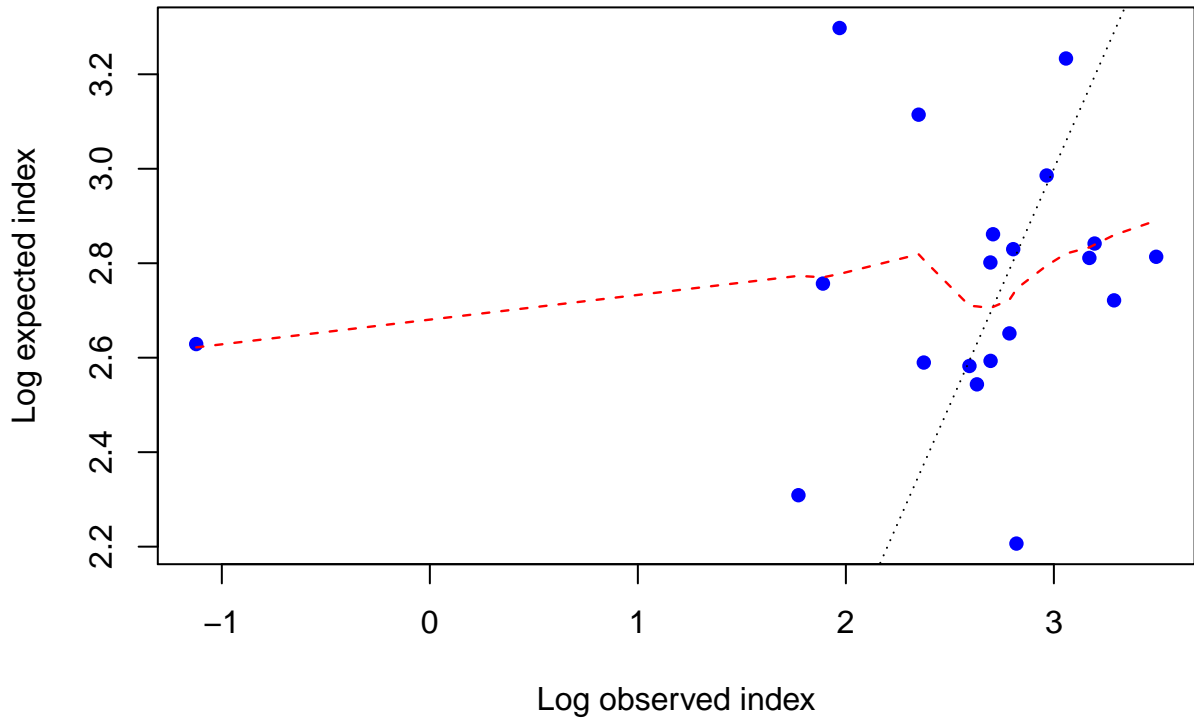


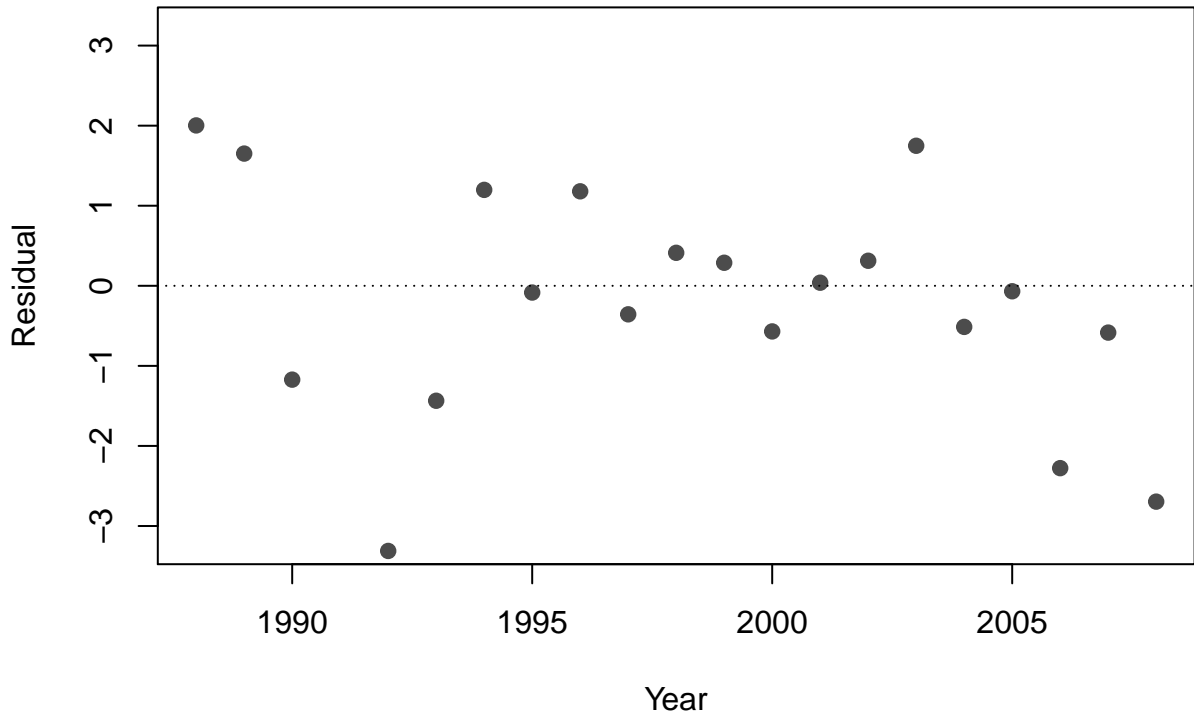


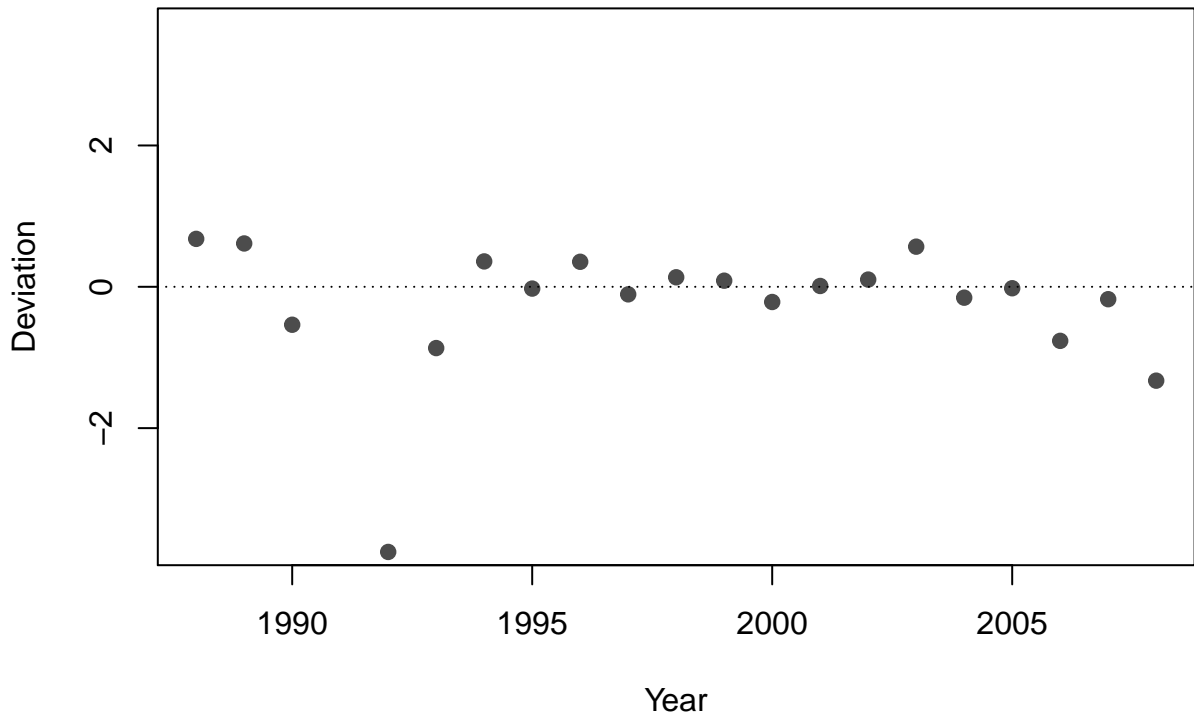


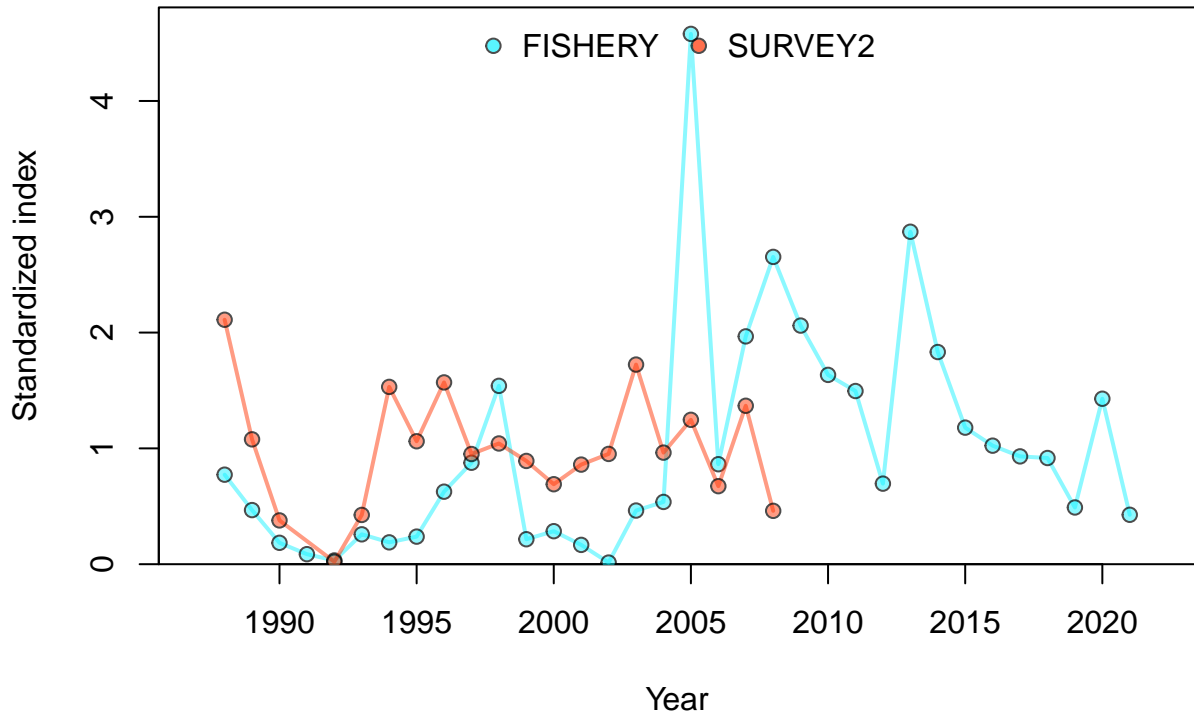
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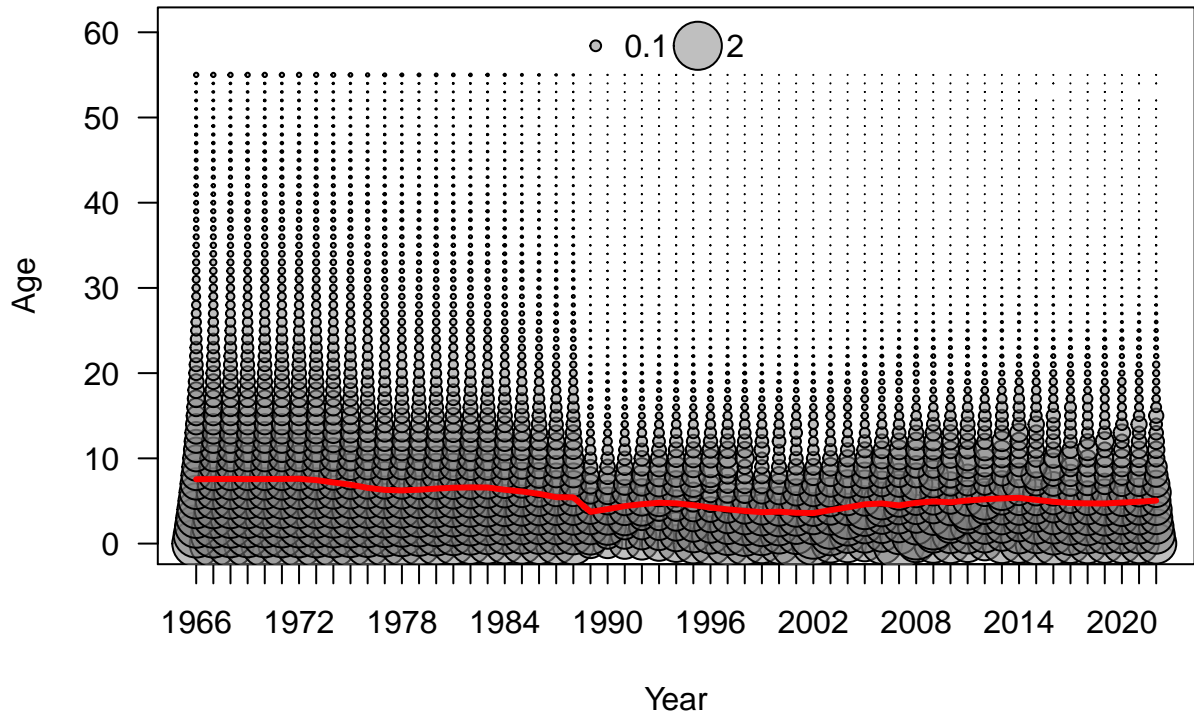


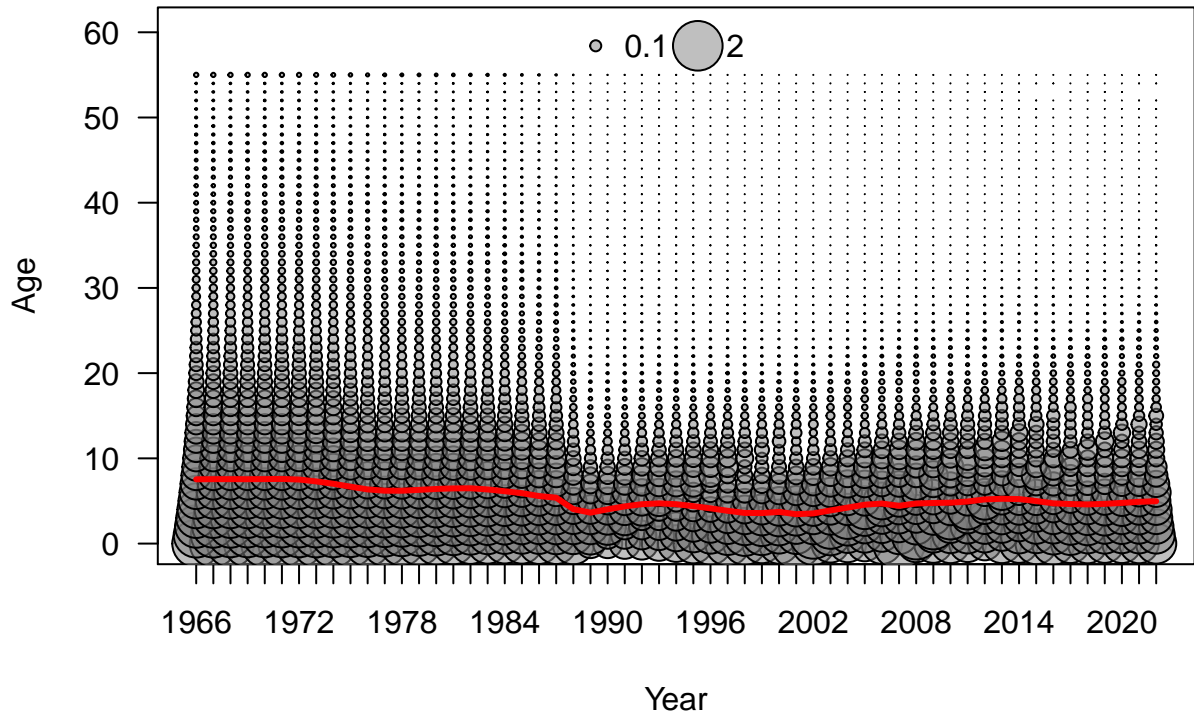


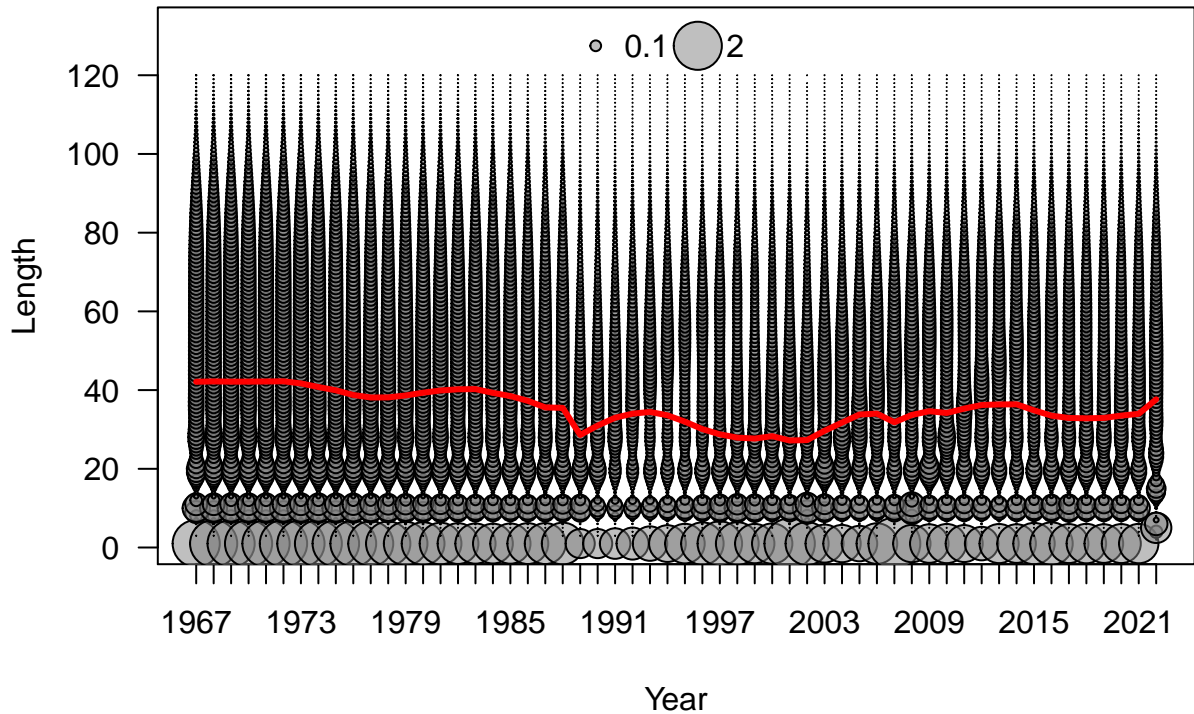




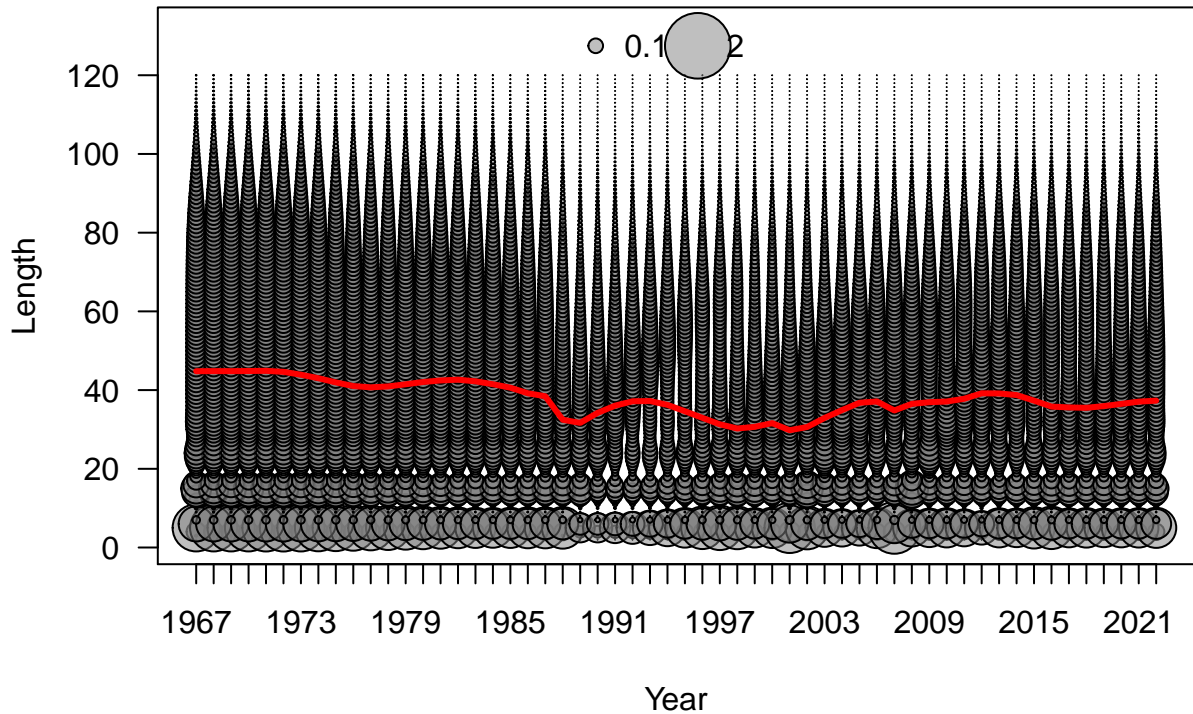


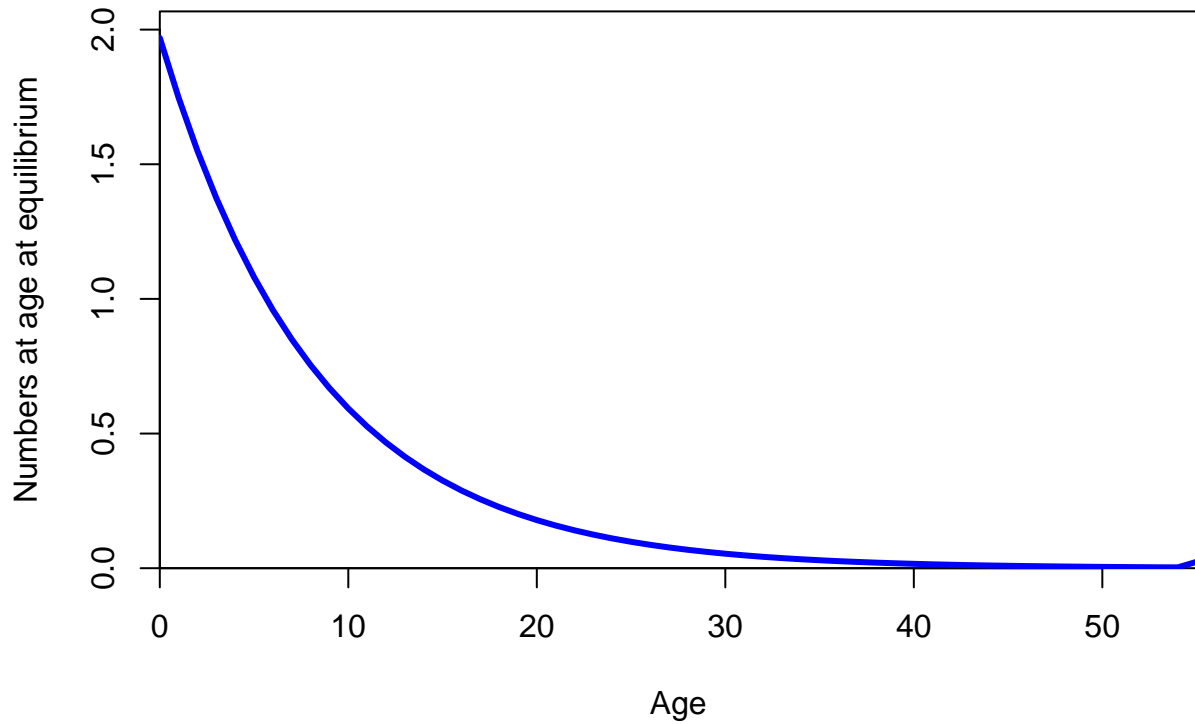






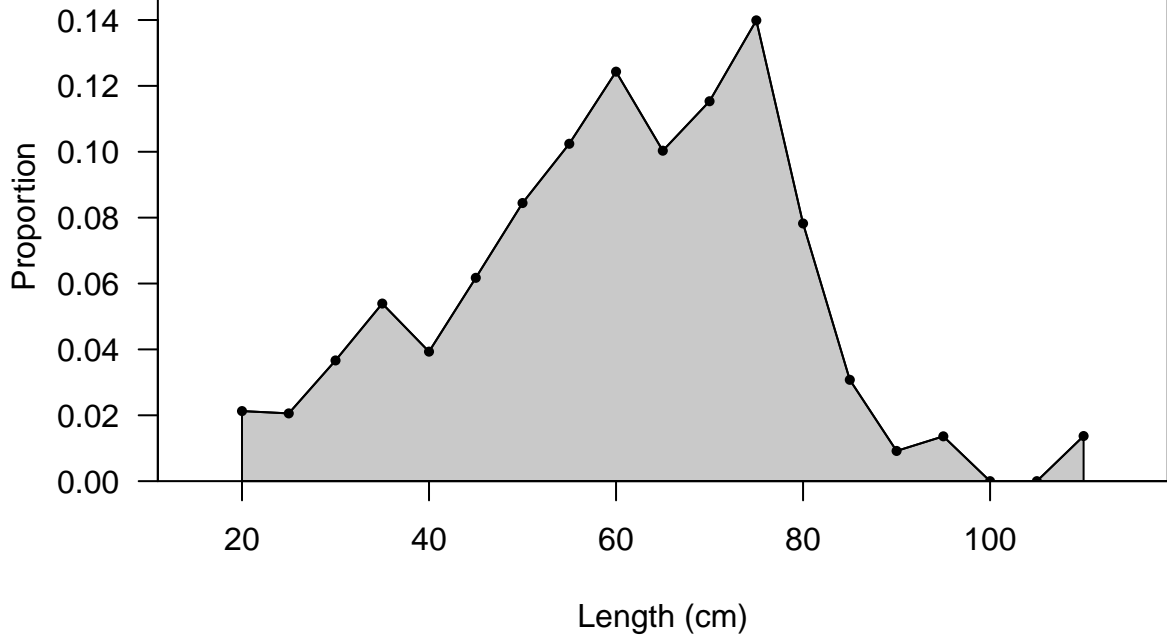






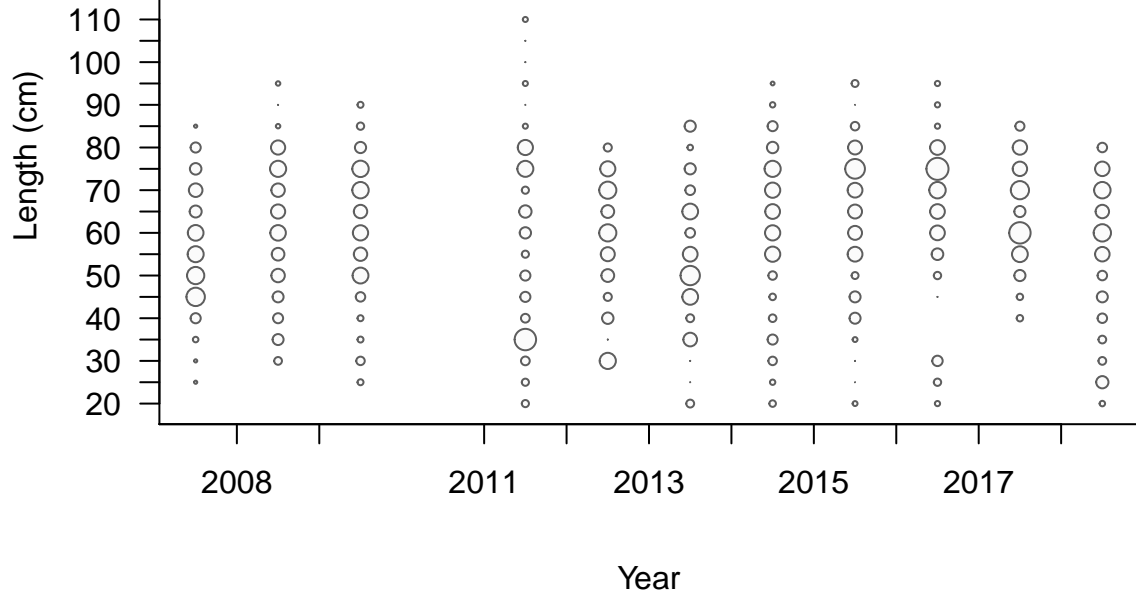
# FISHERY

Sum of N adj.=285

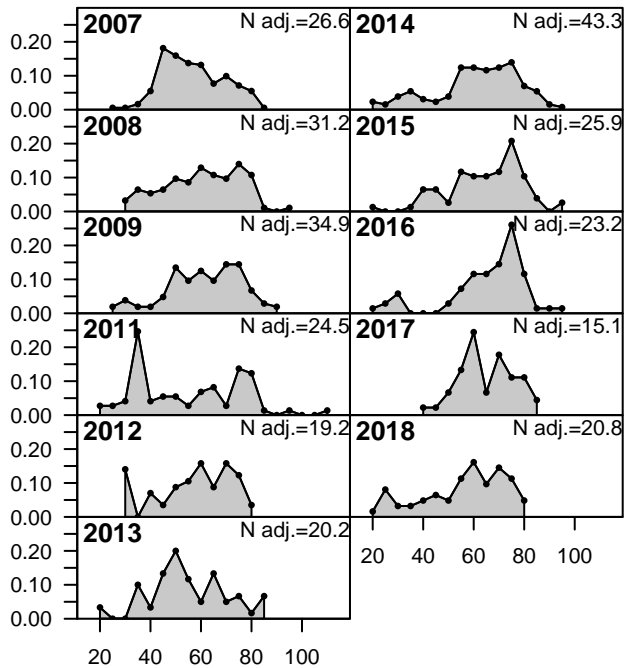


FISHERY

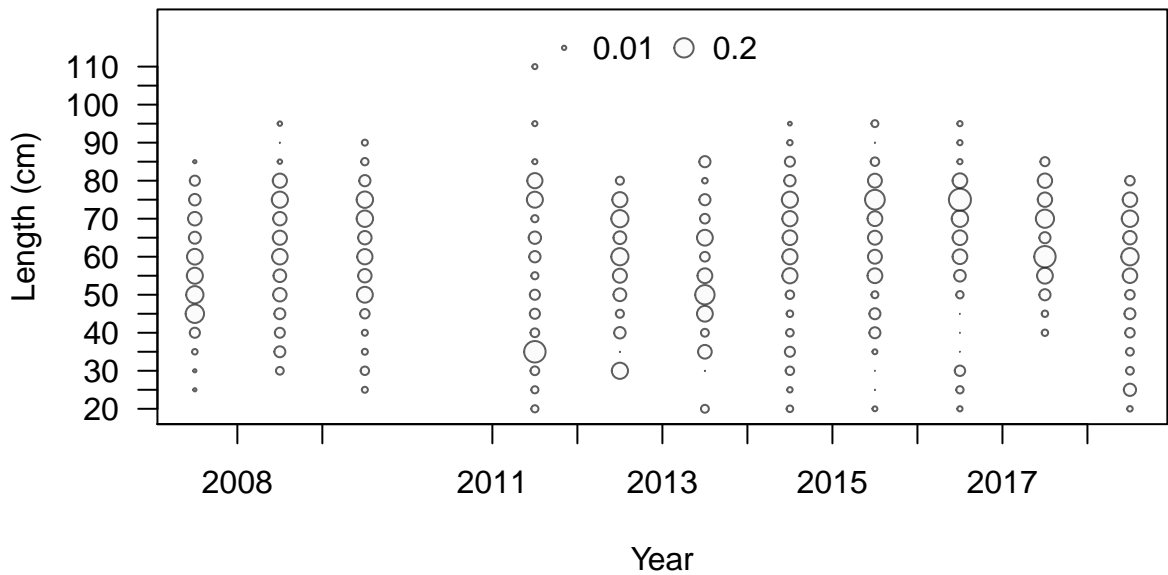
◦ 0.01 ○ 0.2



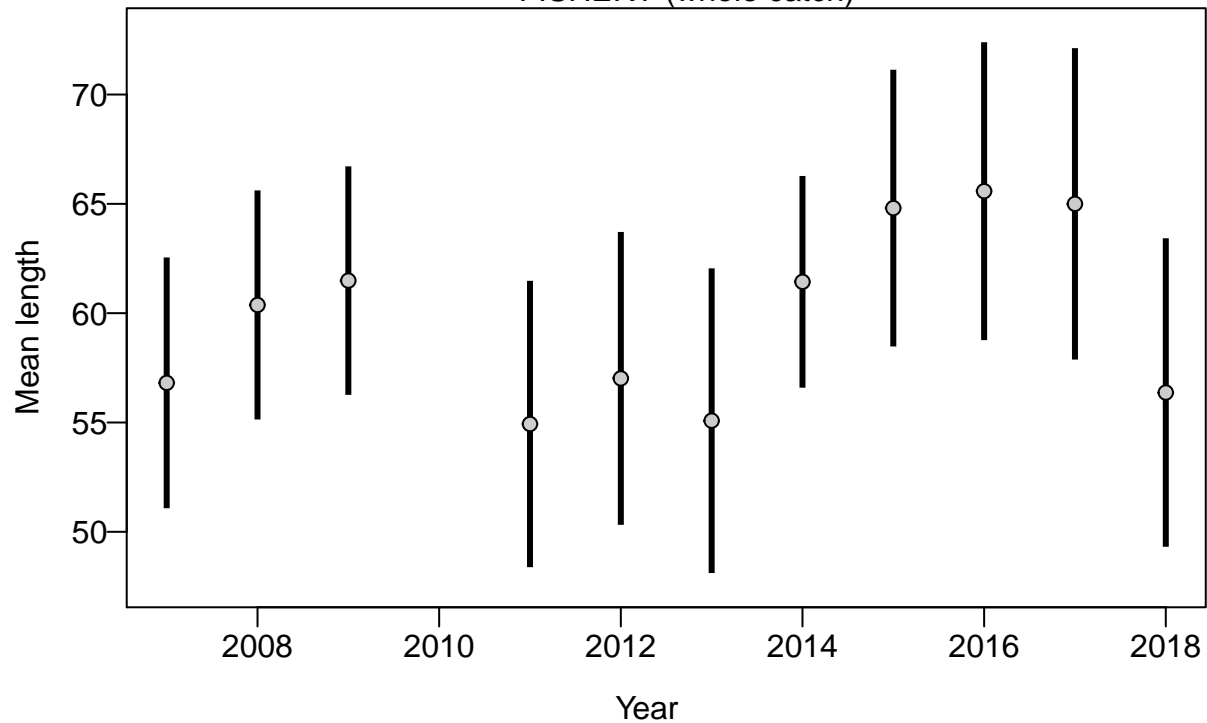
Proportion



Length (cm)

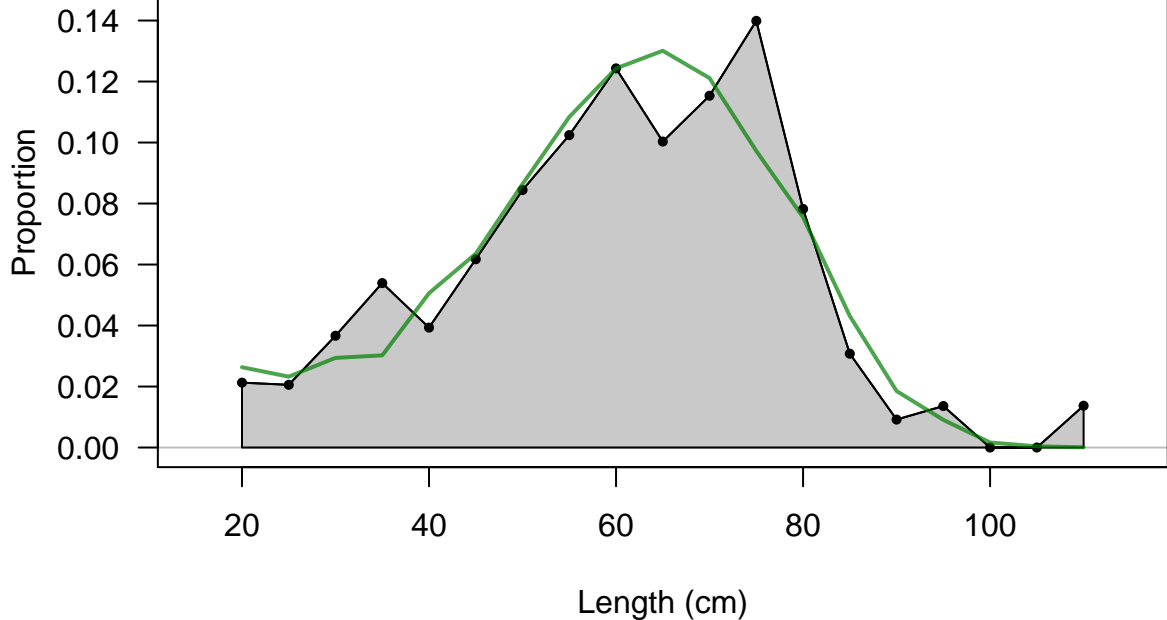


FISHERY (whole catch)

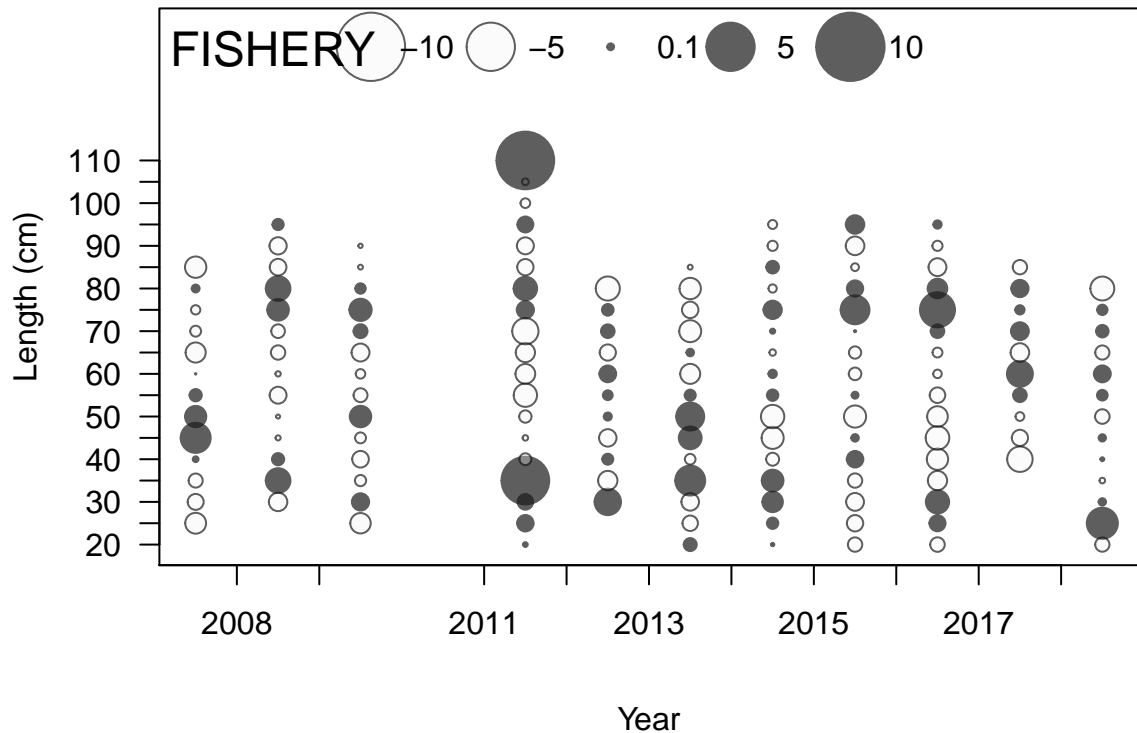


# FISHERY

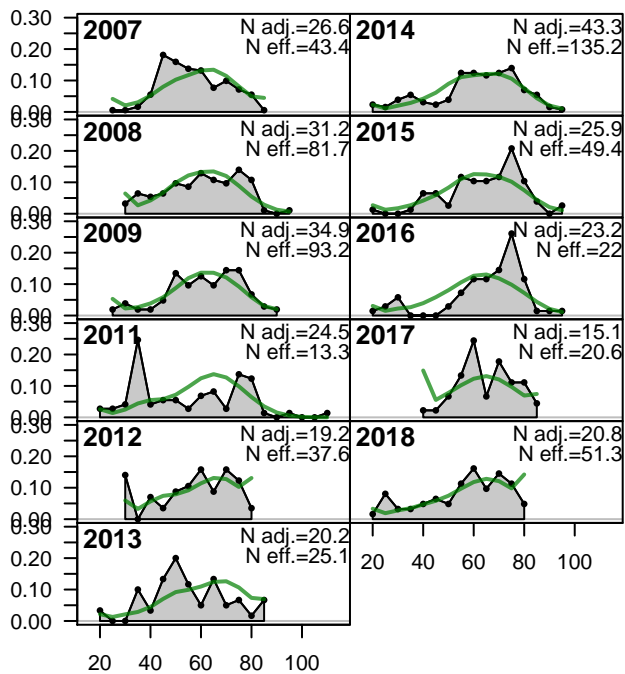
Sum of N adj.=285  
Sum of N eff.=572.5



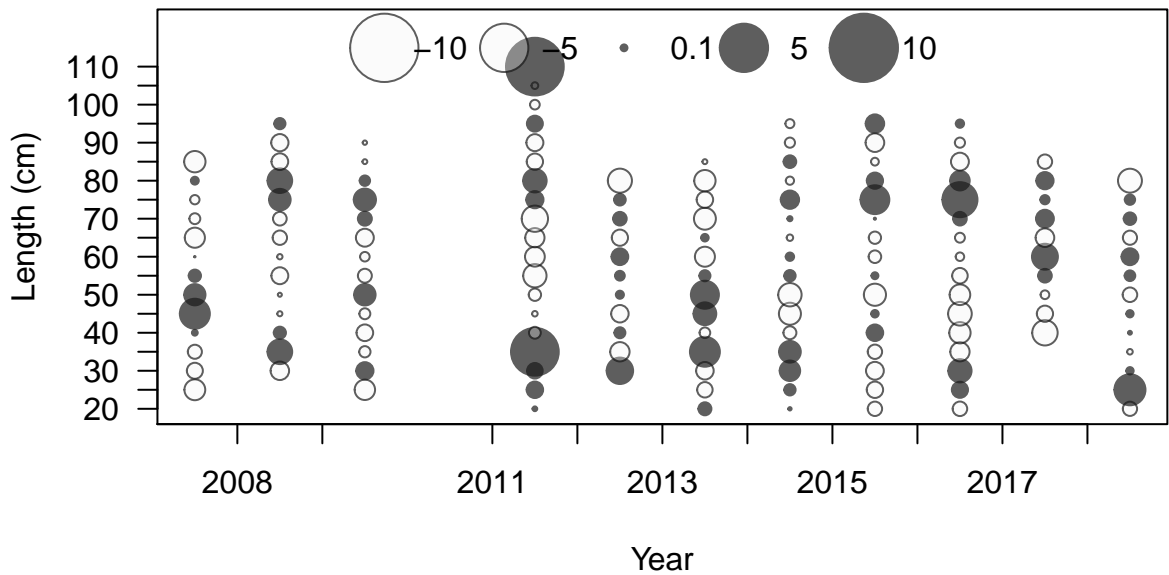




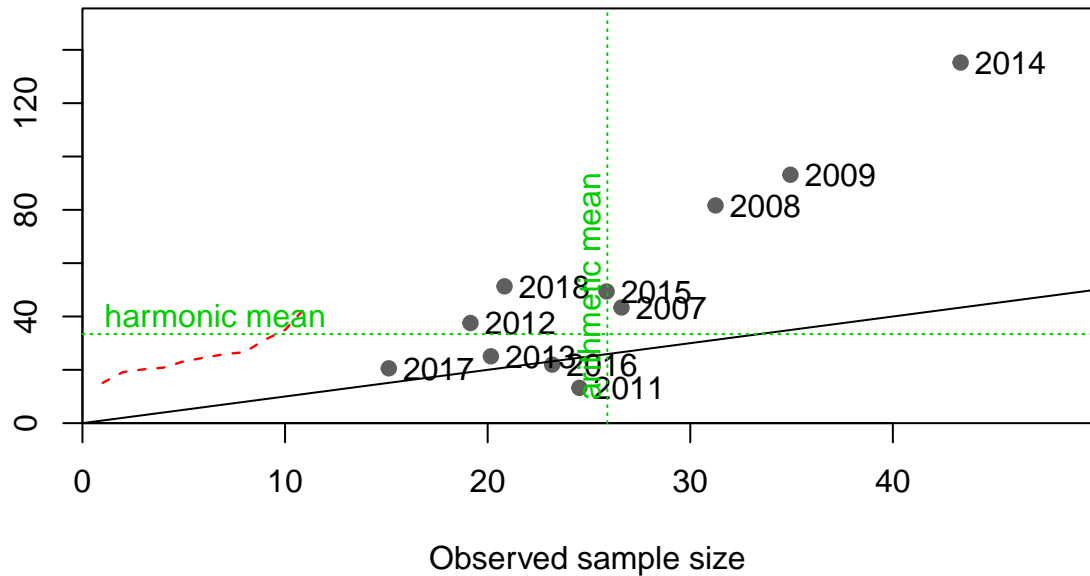
Proportion



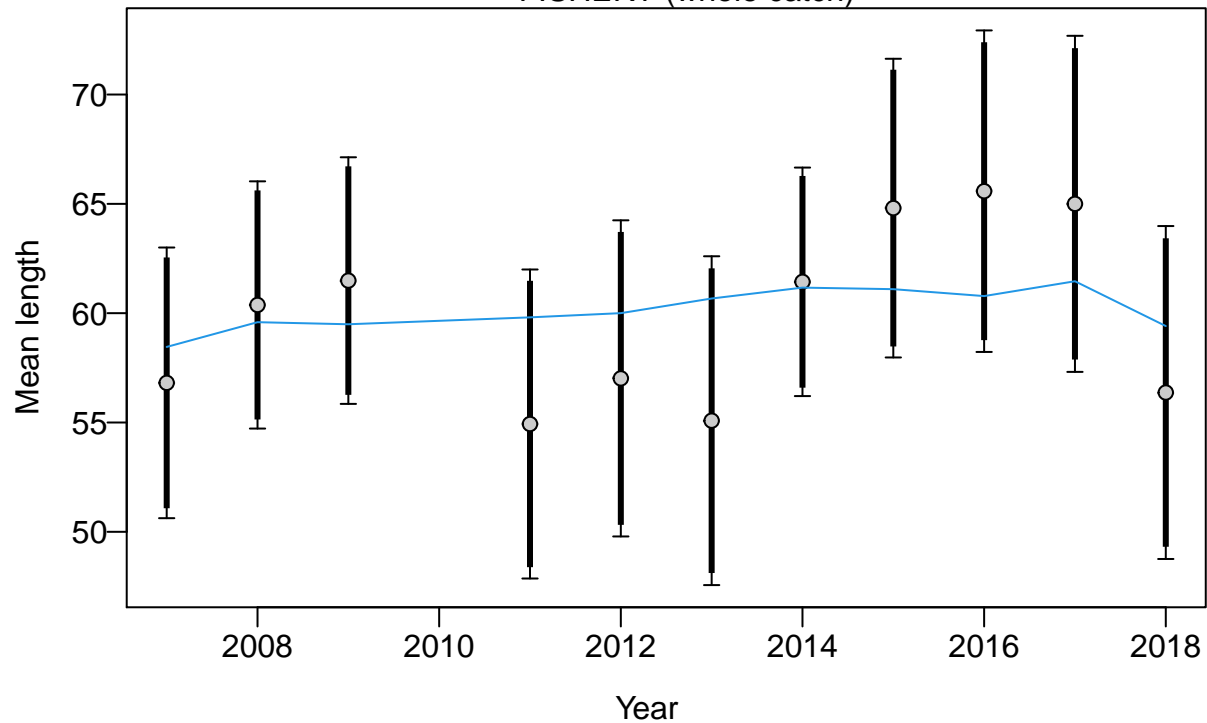
Length (cm)

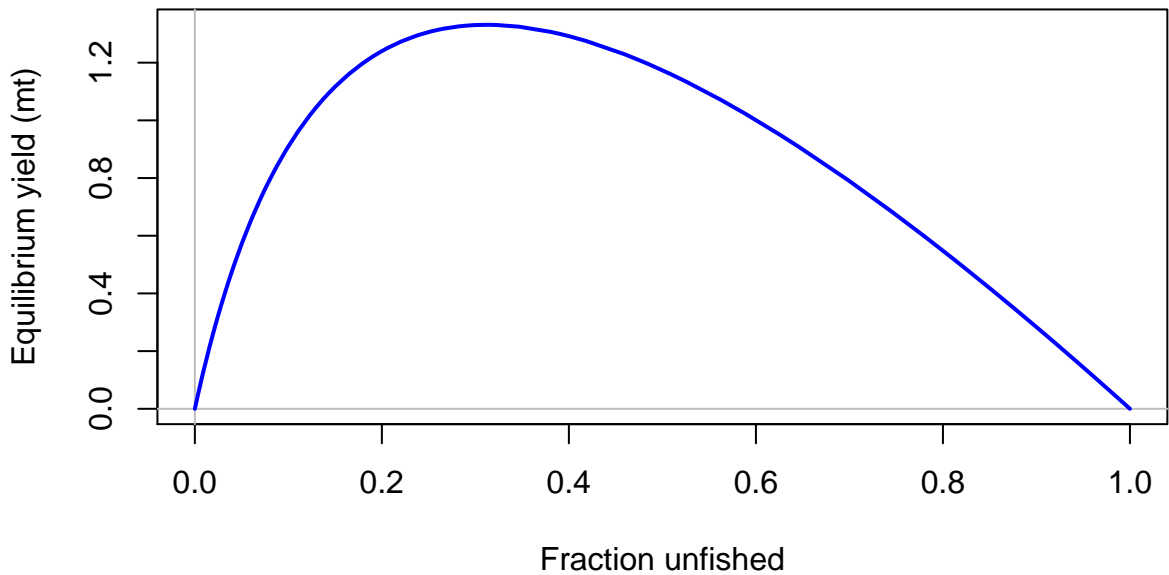


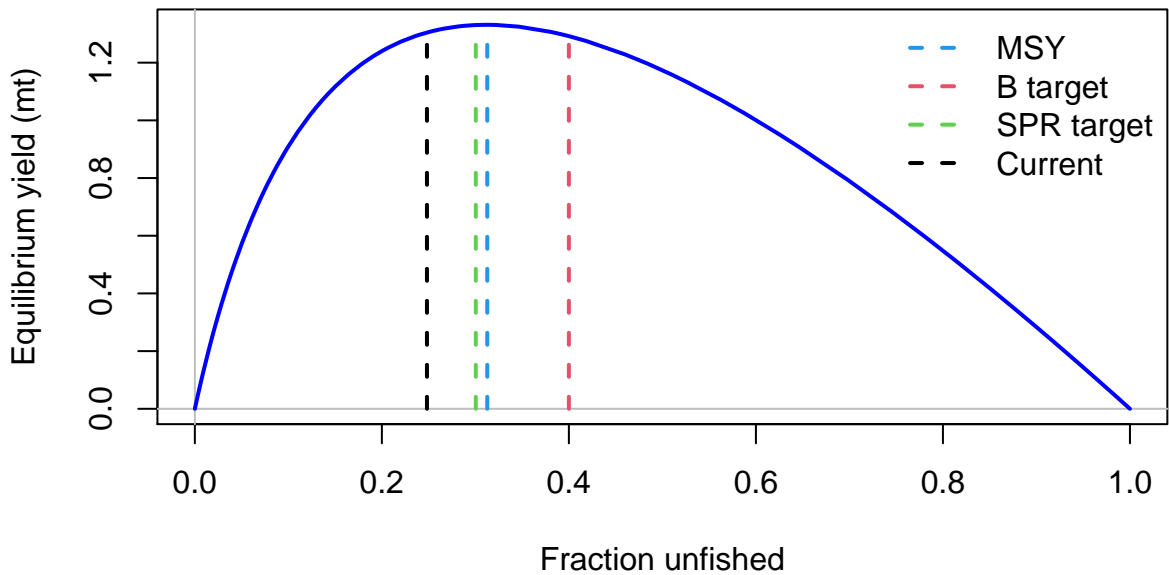
Effective sample size

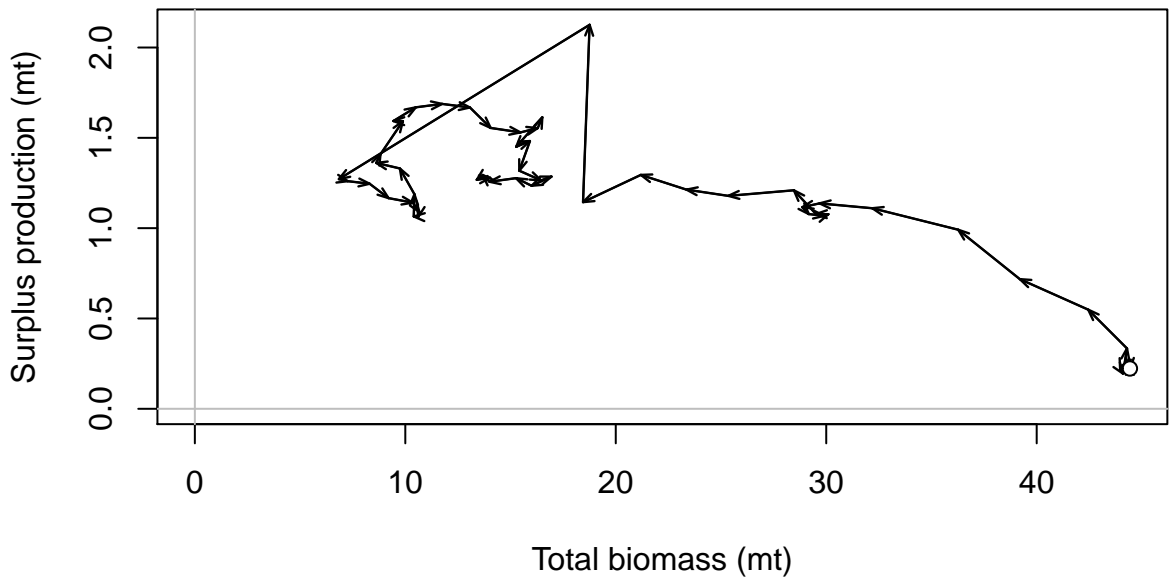


FISHERY (whole catch)

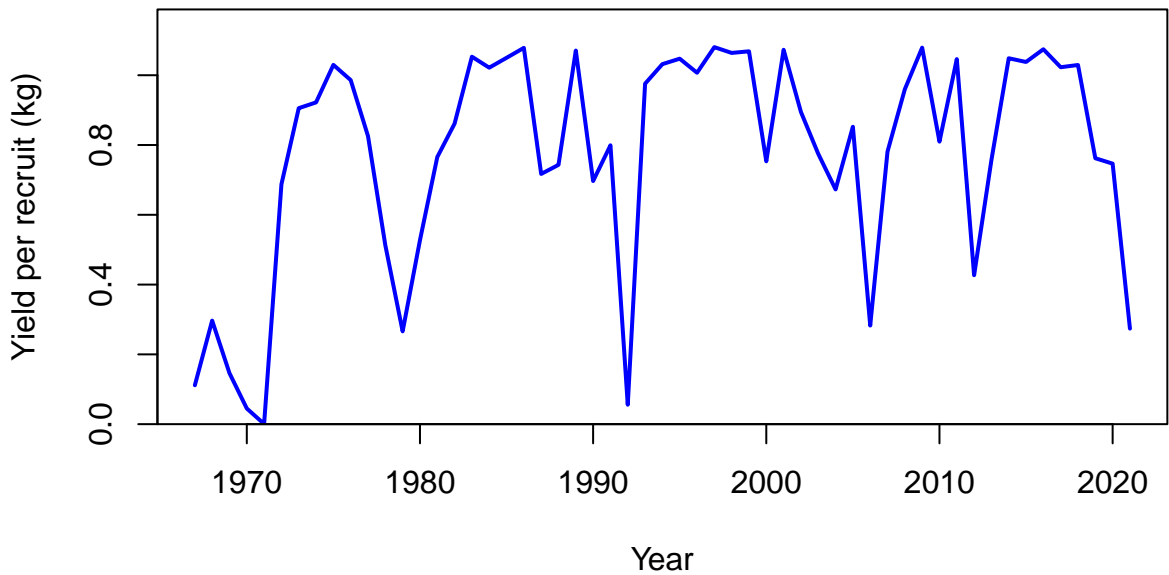


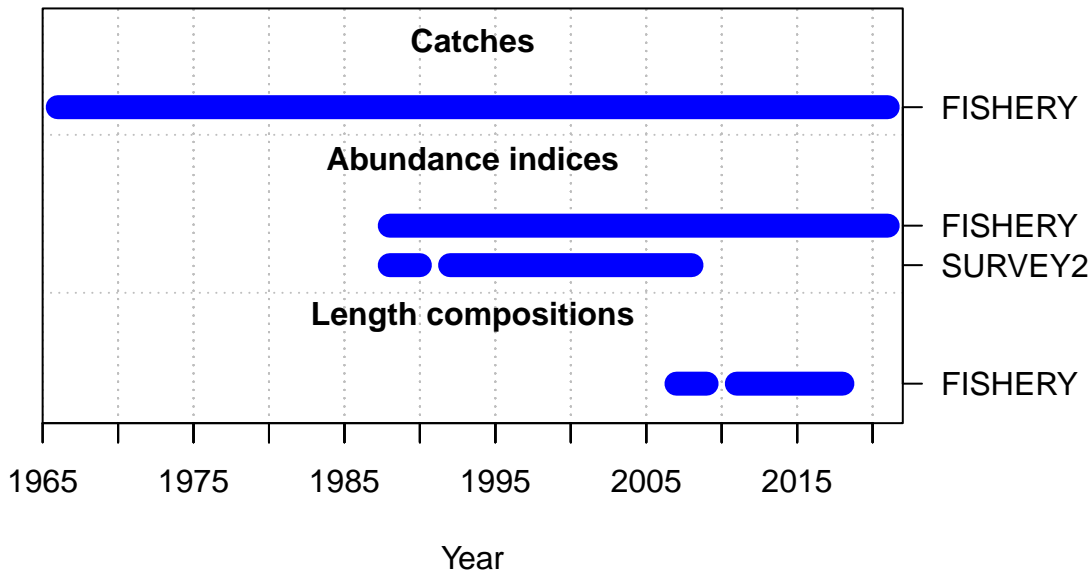


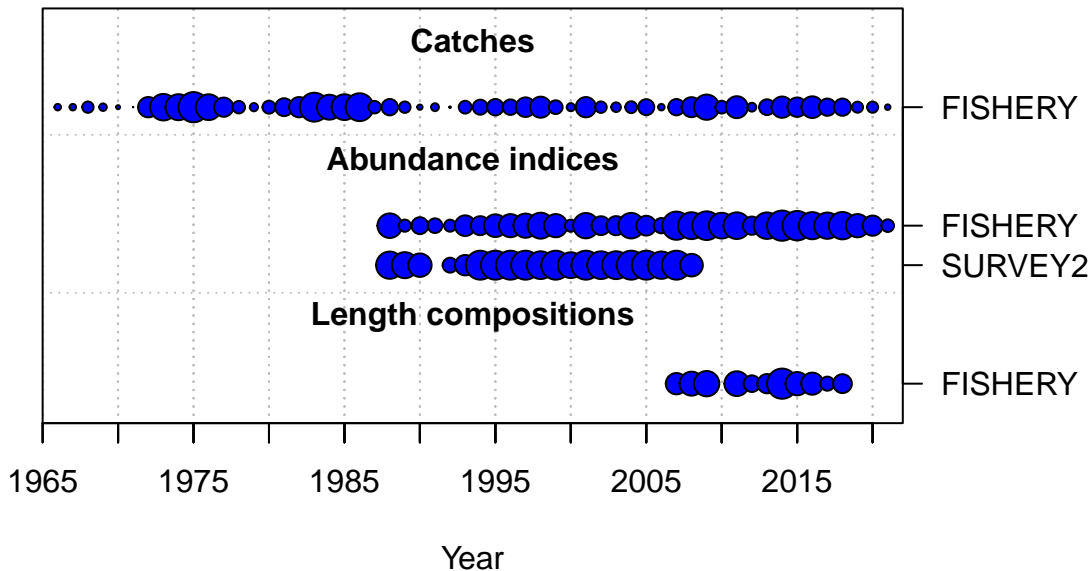




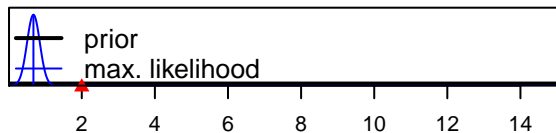




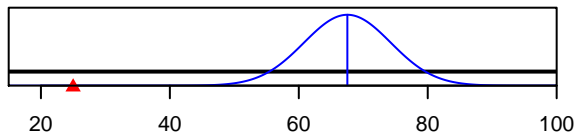




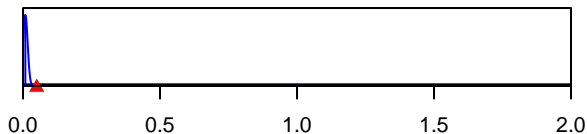
SR\_LN(R0)



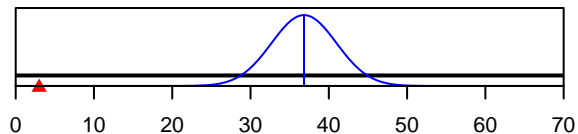
Size\_inflection\_FISHERY(1)



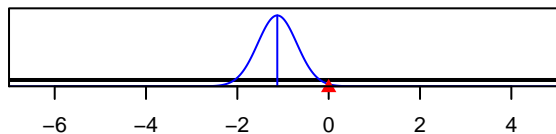
InitF\_seas\_1\_flt\_1FISHERY



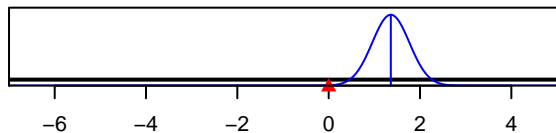
Size\_95%width\_FISHERY(1)



LnQ\_base\_FISHERY(1)



LnQ\_base\_SURVEY2(2)



Parameter value