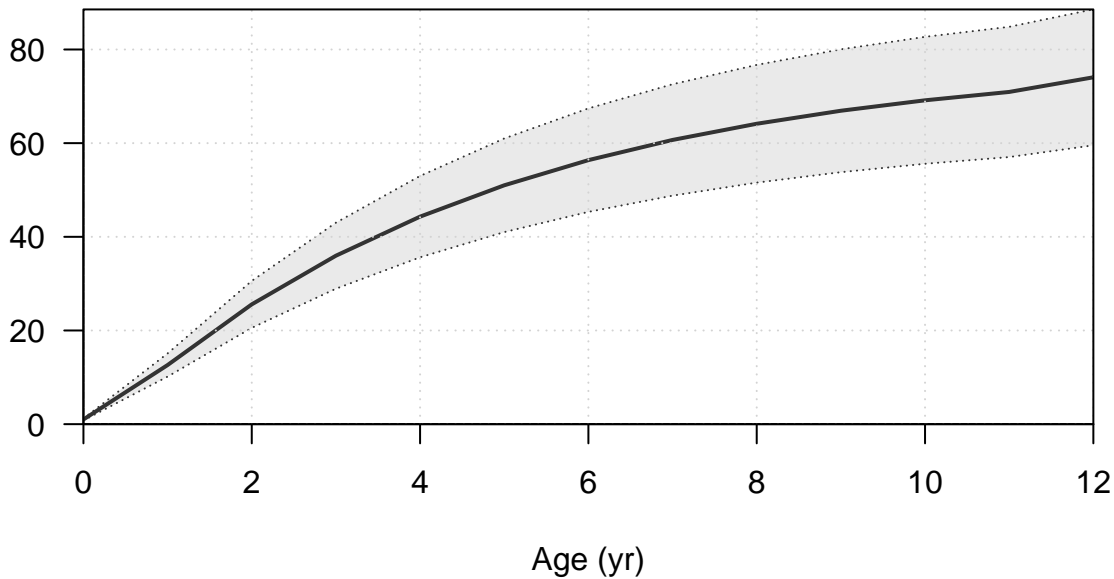
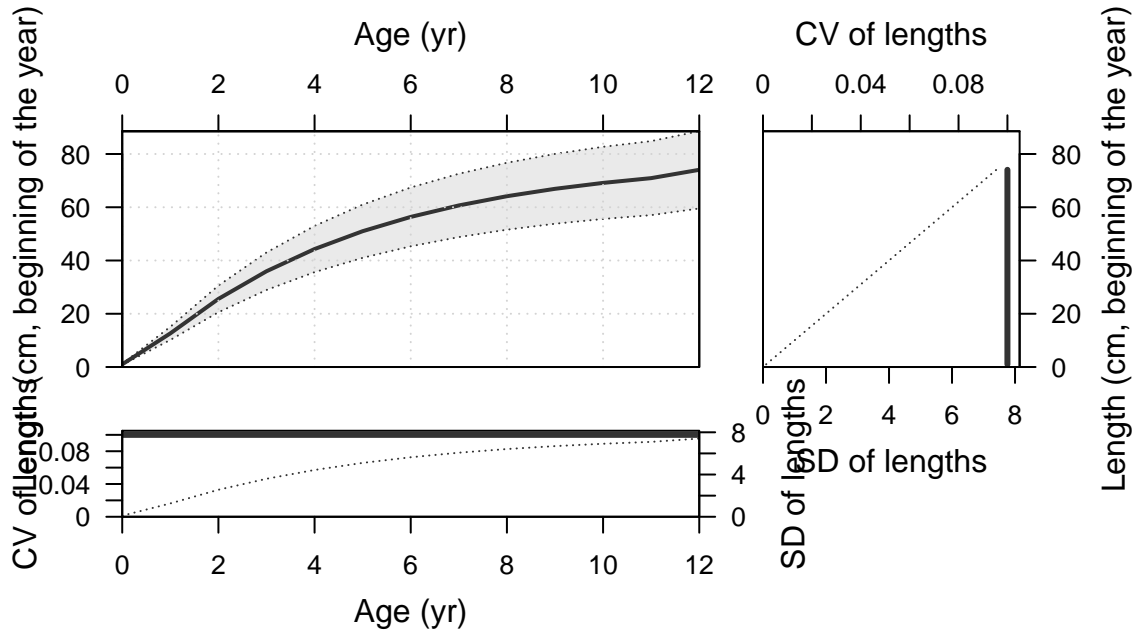
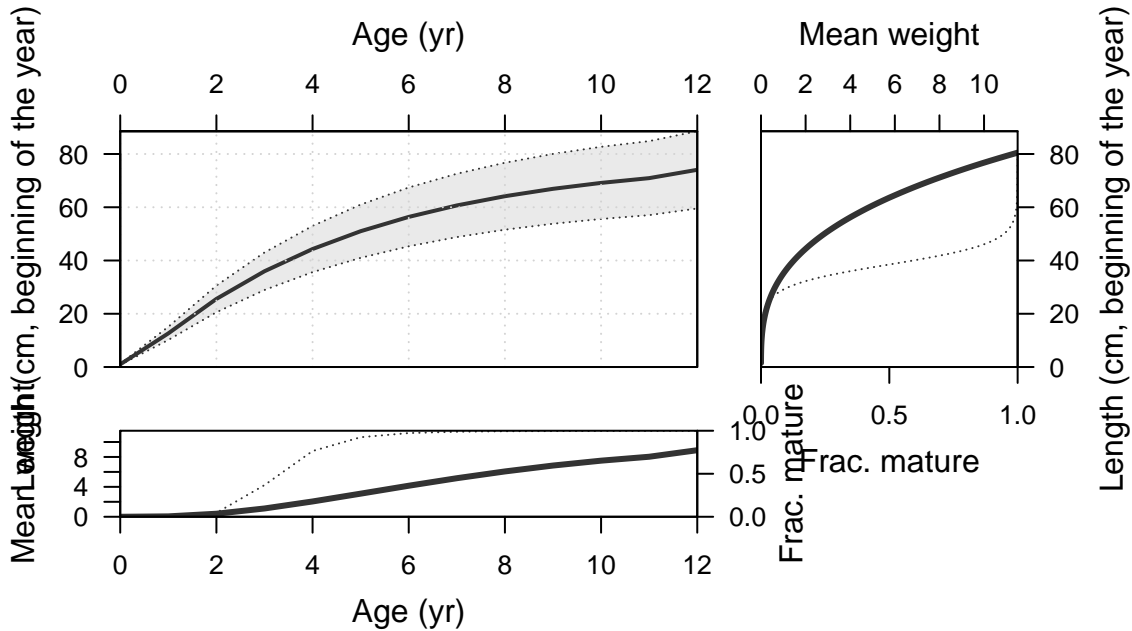


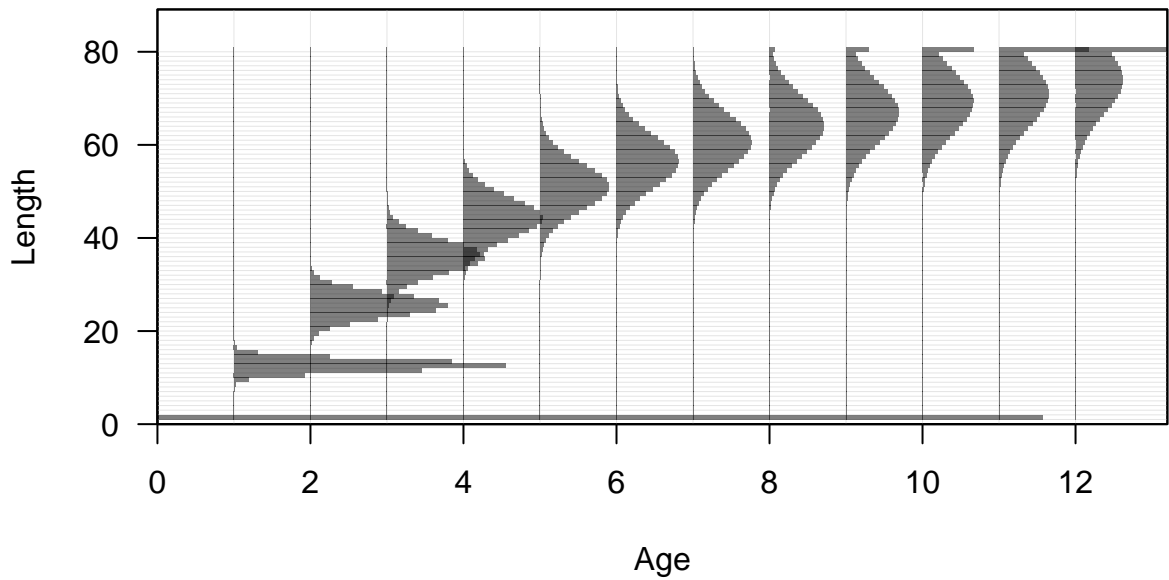
Plots created using the 'r4ss' package in R  
Stock Synthesis version: 3.30.19.0  
StartTime: Tue Jul 12 08:58:07 2022  
Data\_File: data.ss  
Control\_File: control.ss

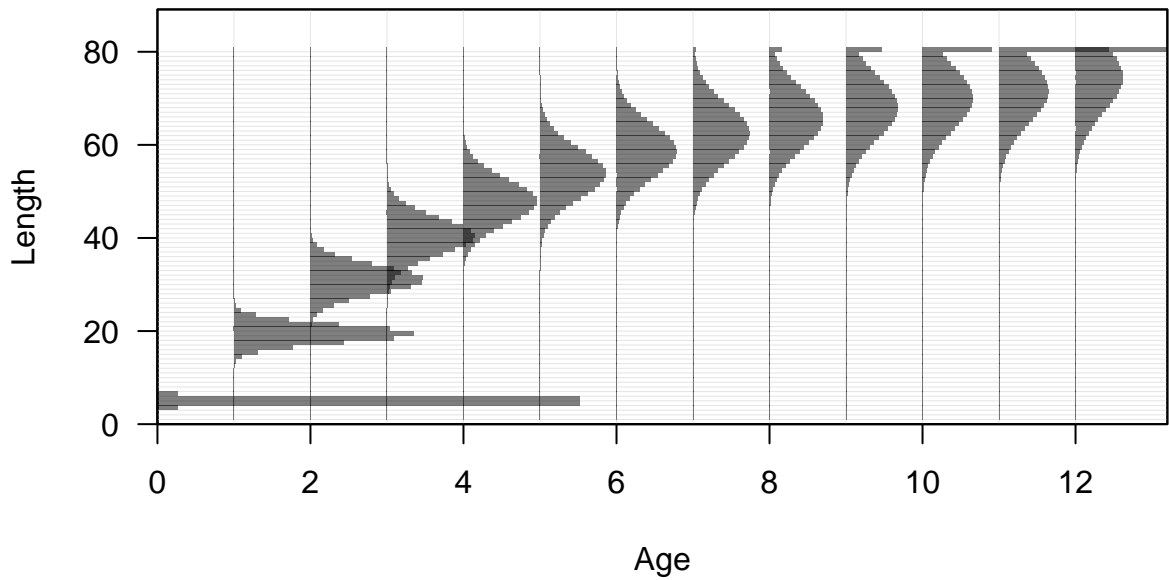
Length (cm, beginning of the year)

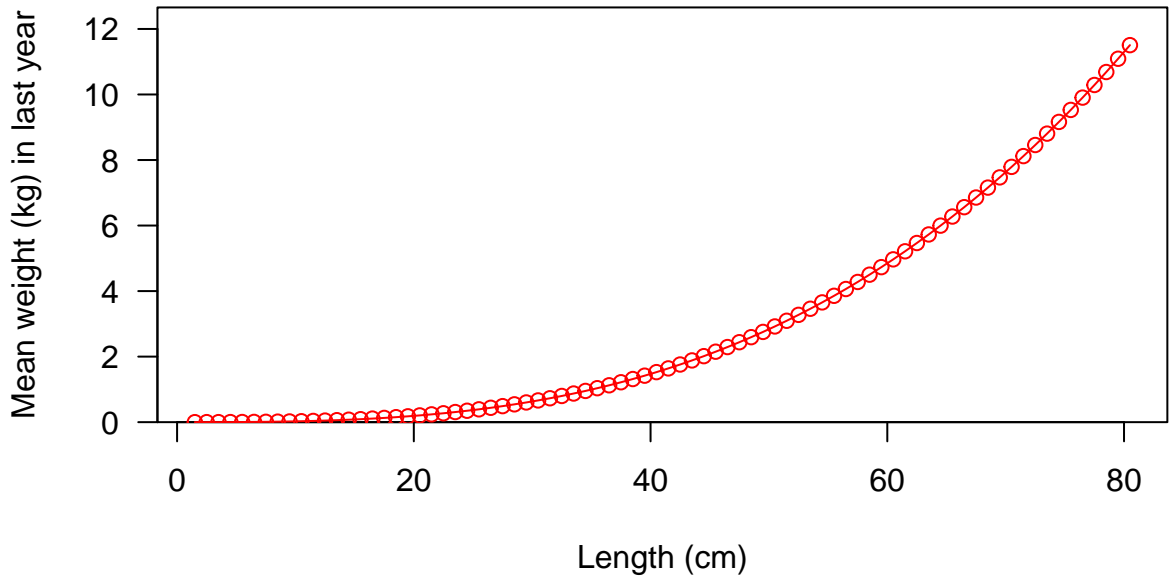


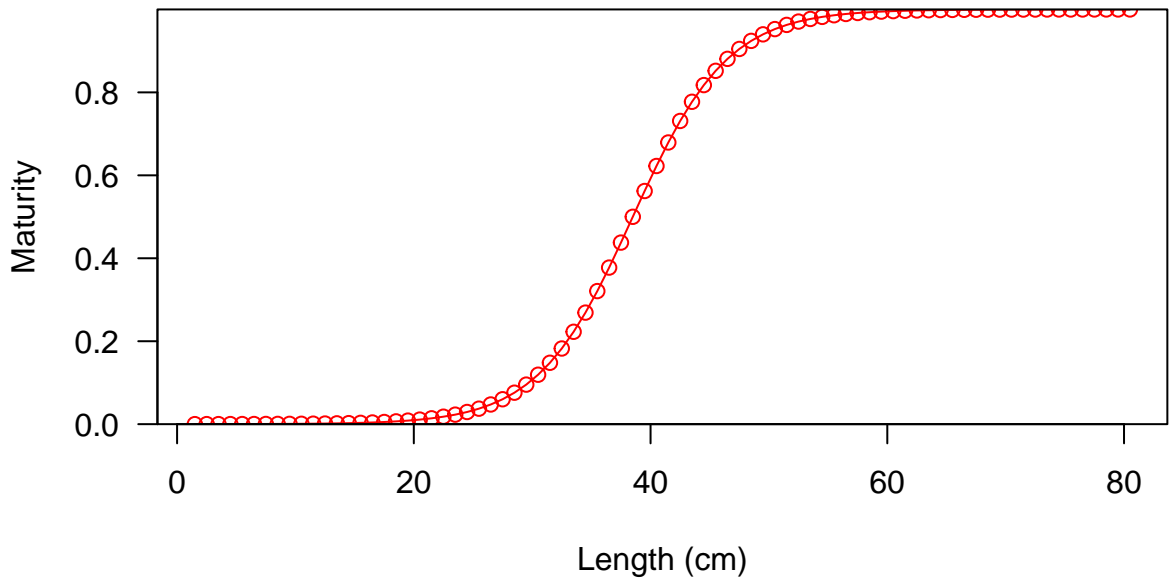




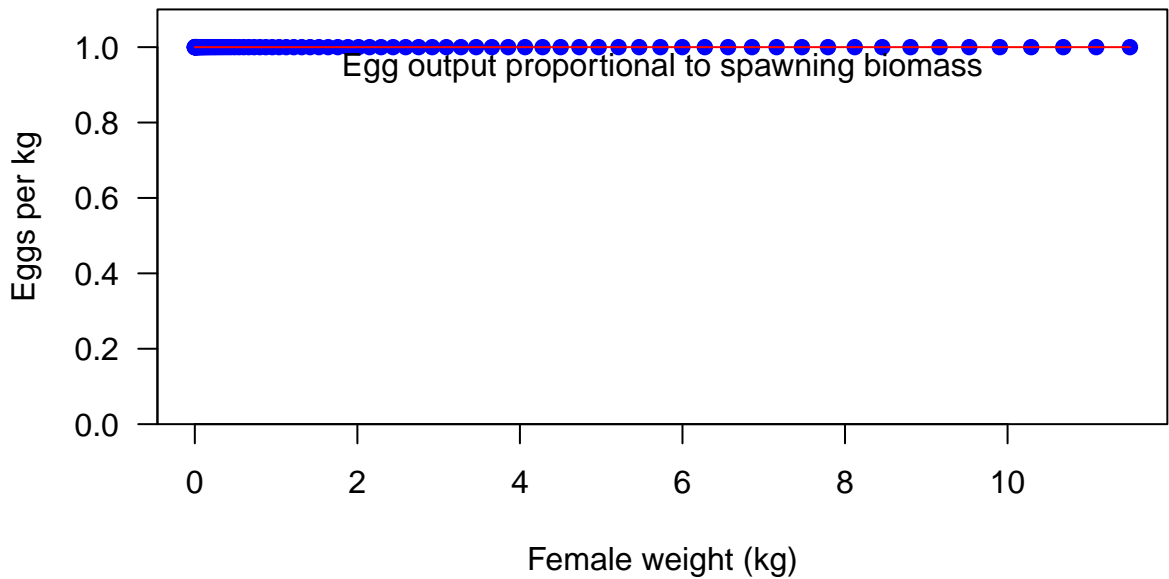




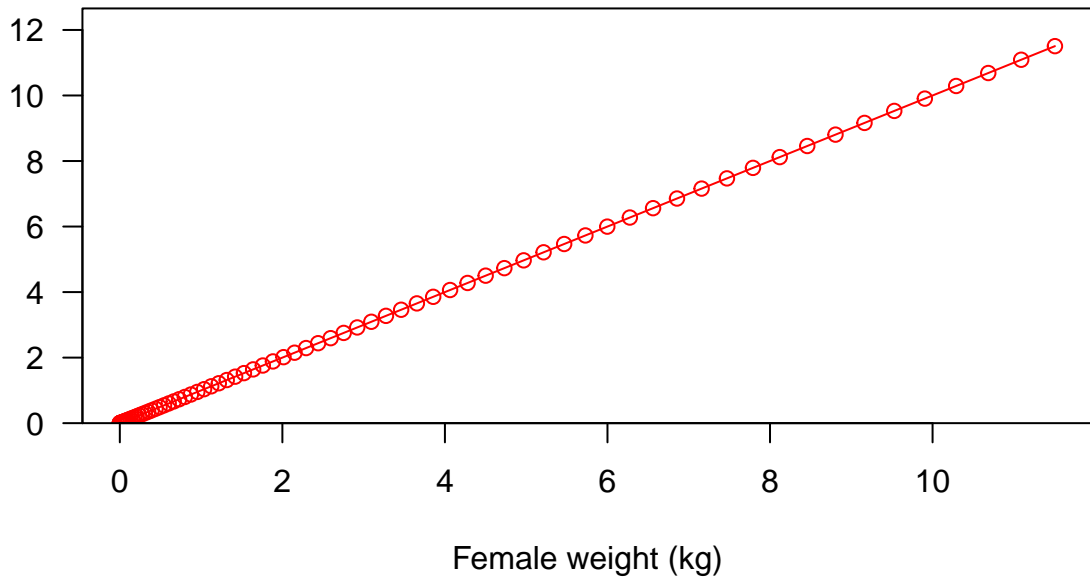




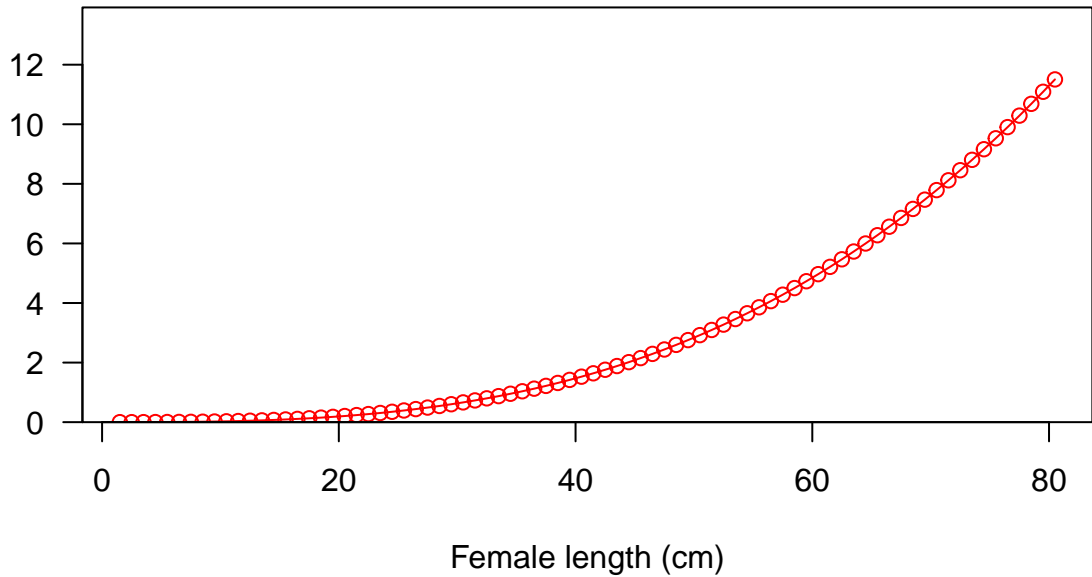


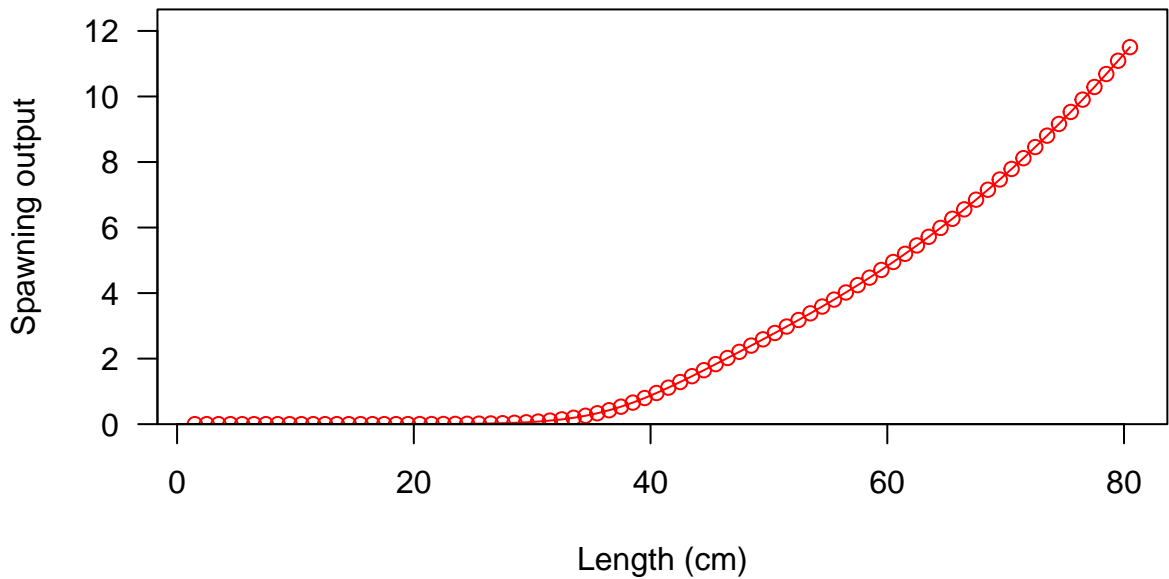


Fecundity

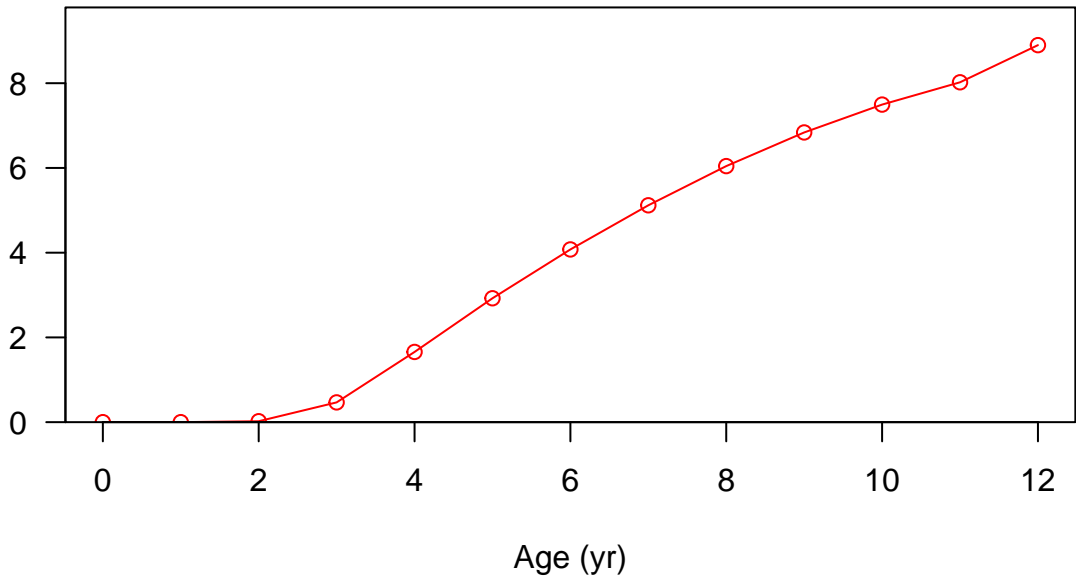


Fecundity

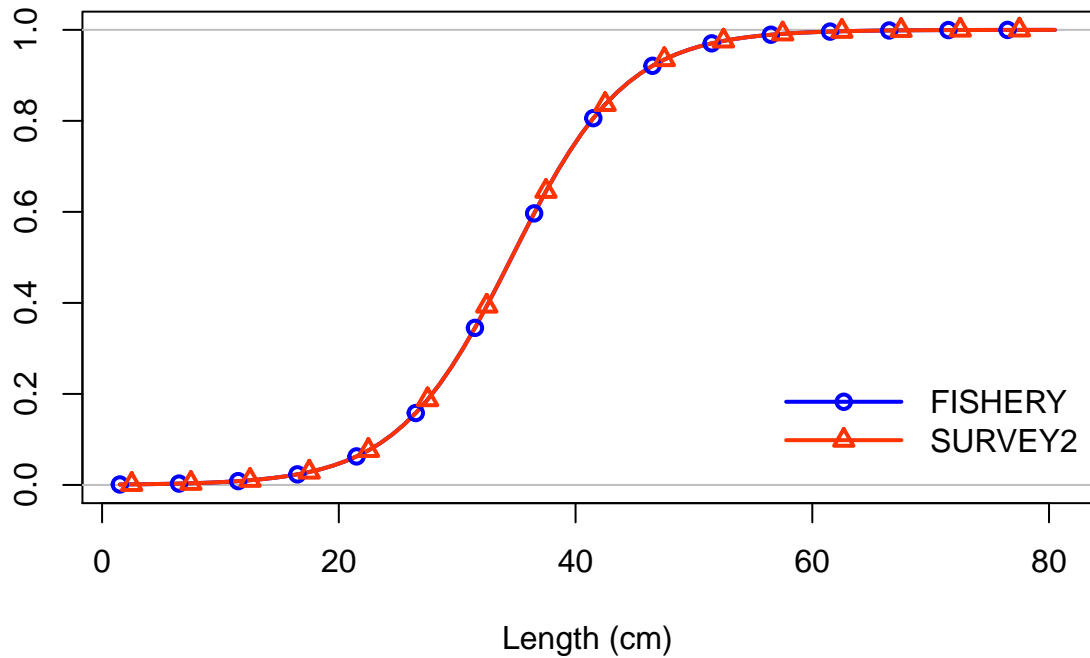




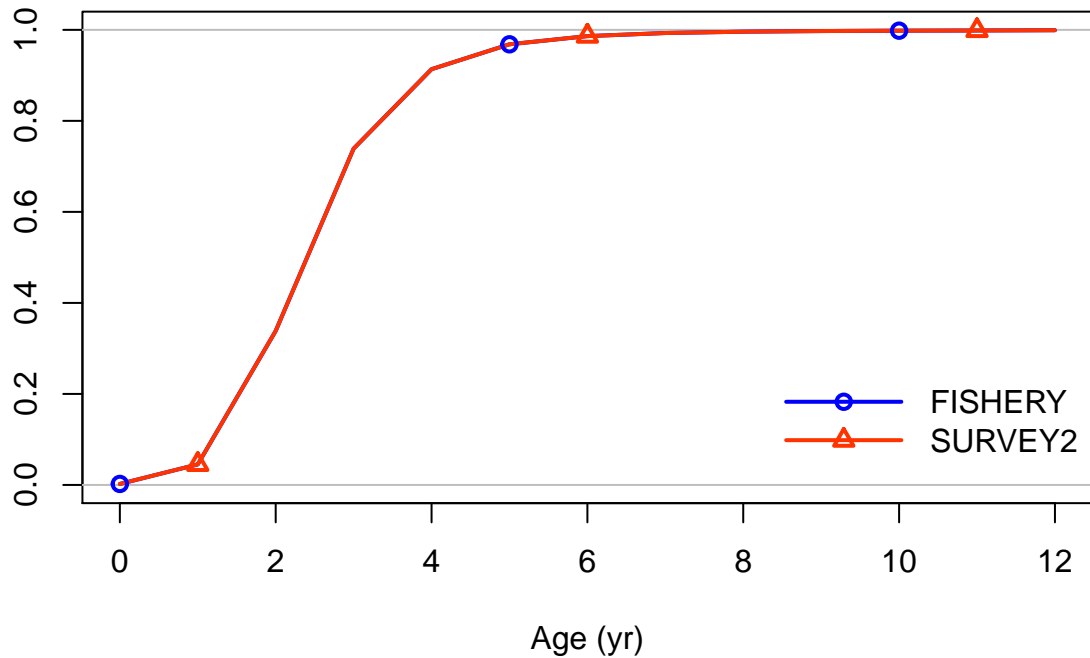
Spawning output



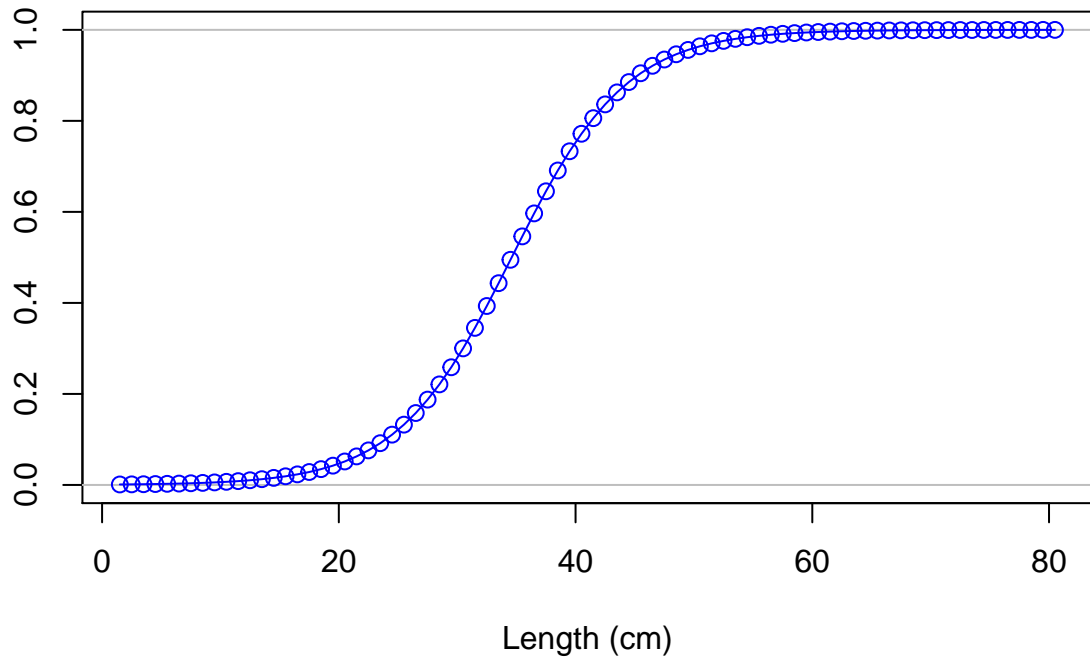
Selectivity



Selectivity

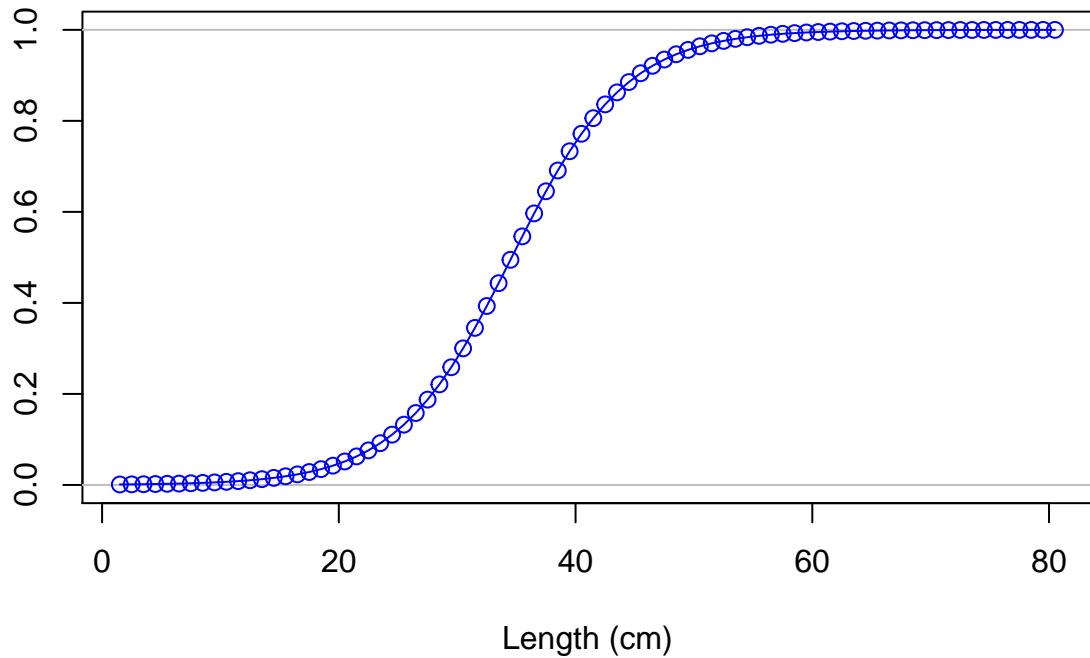


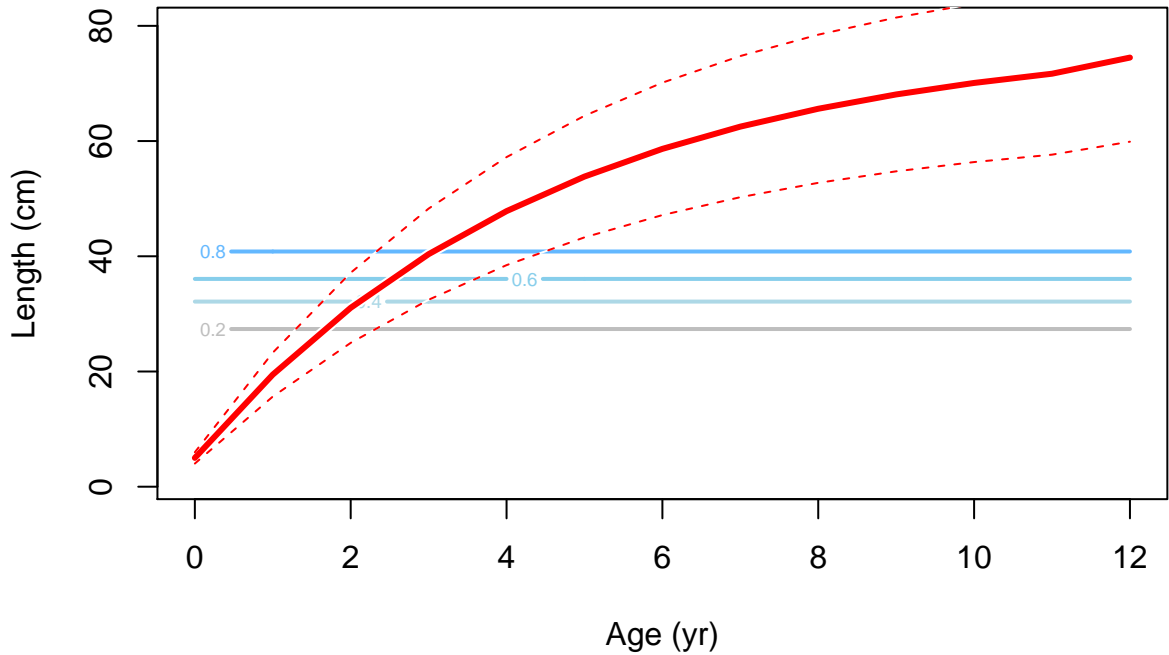
Selectivity

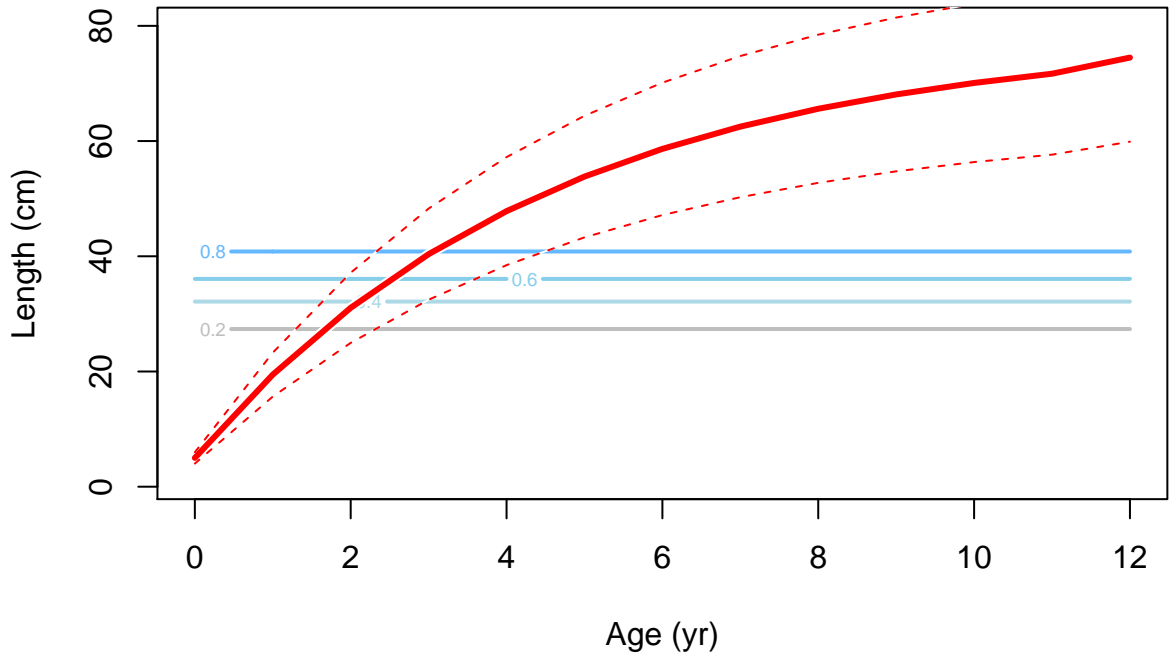


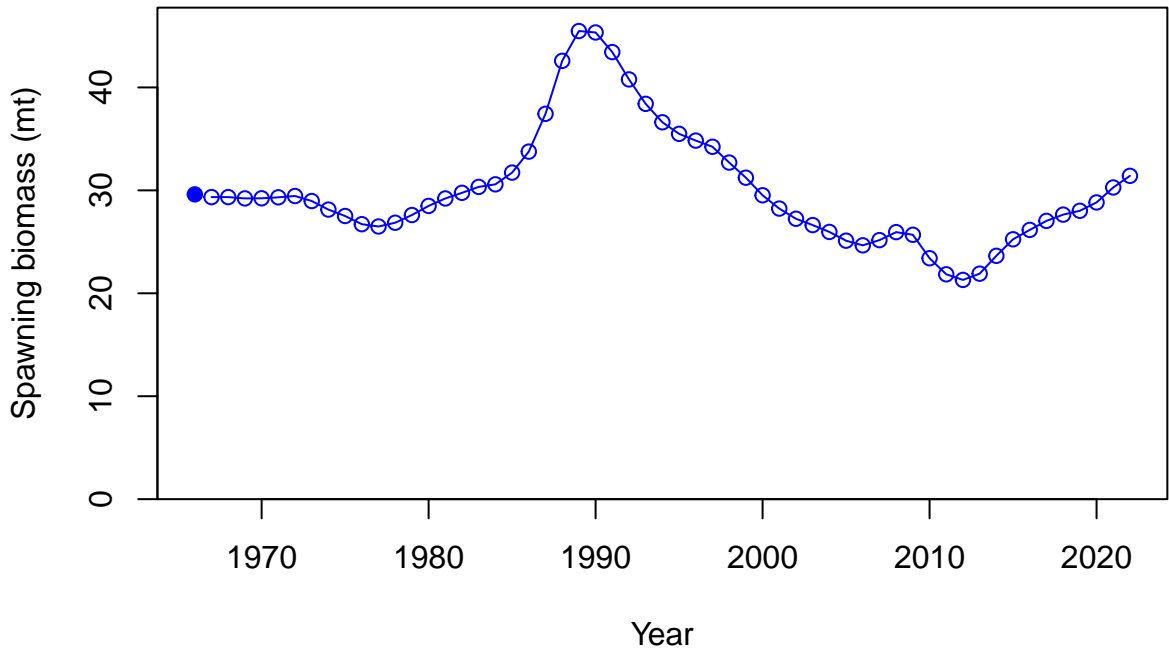


Selectivity

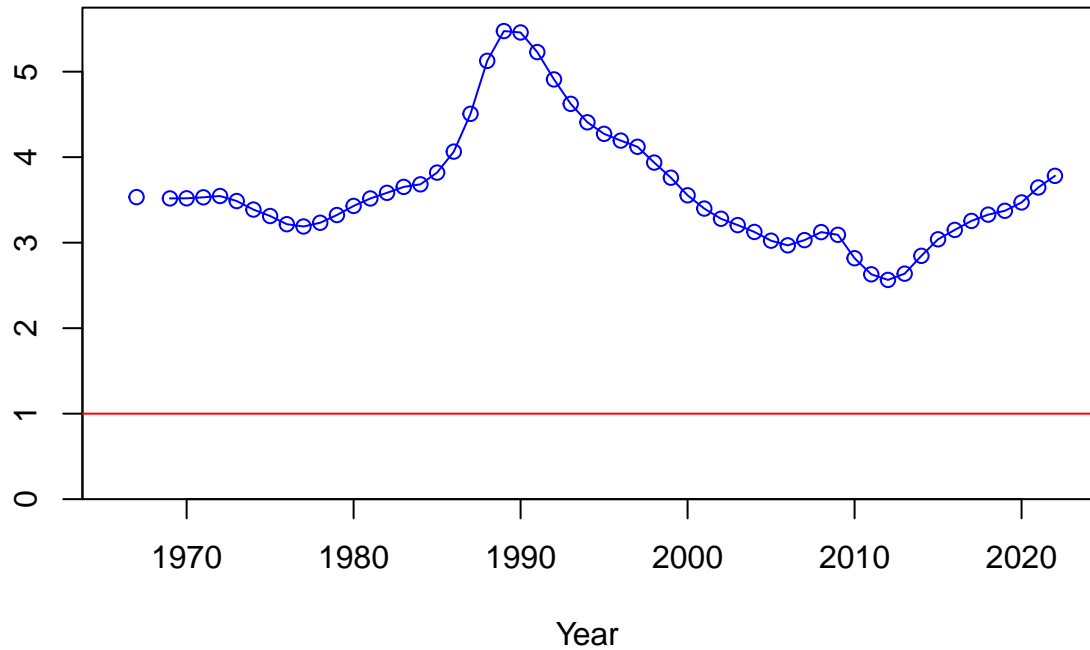


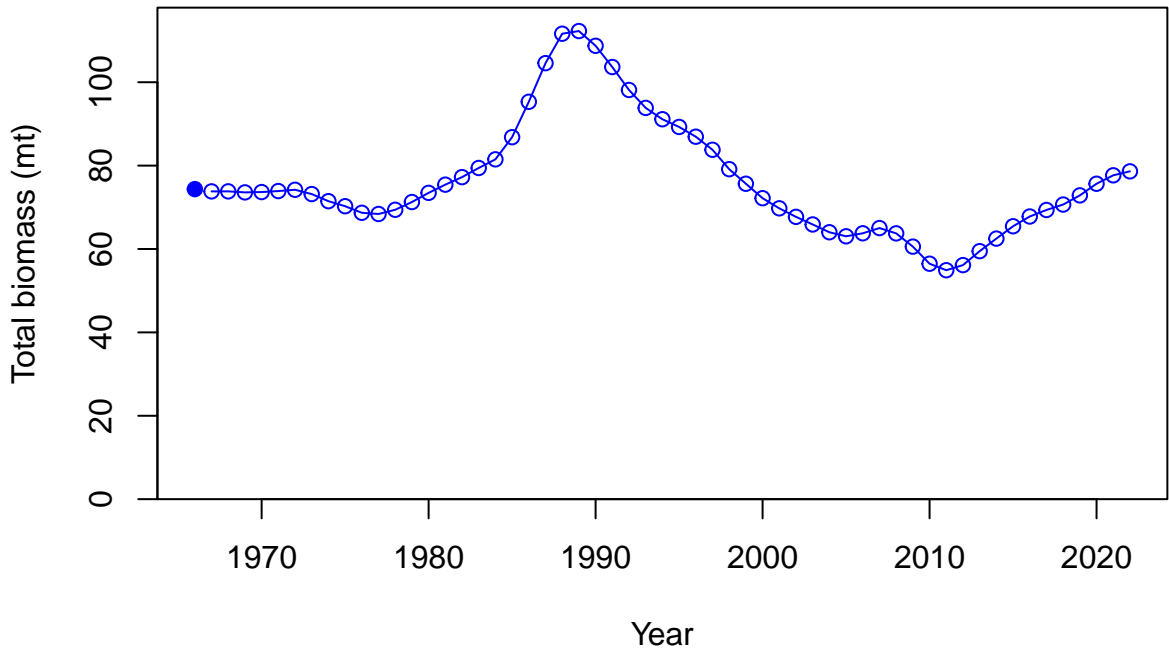




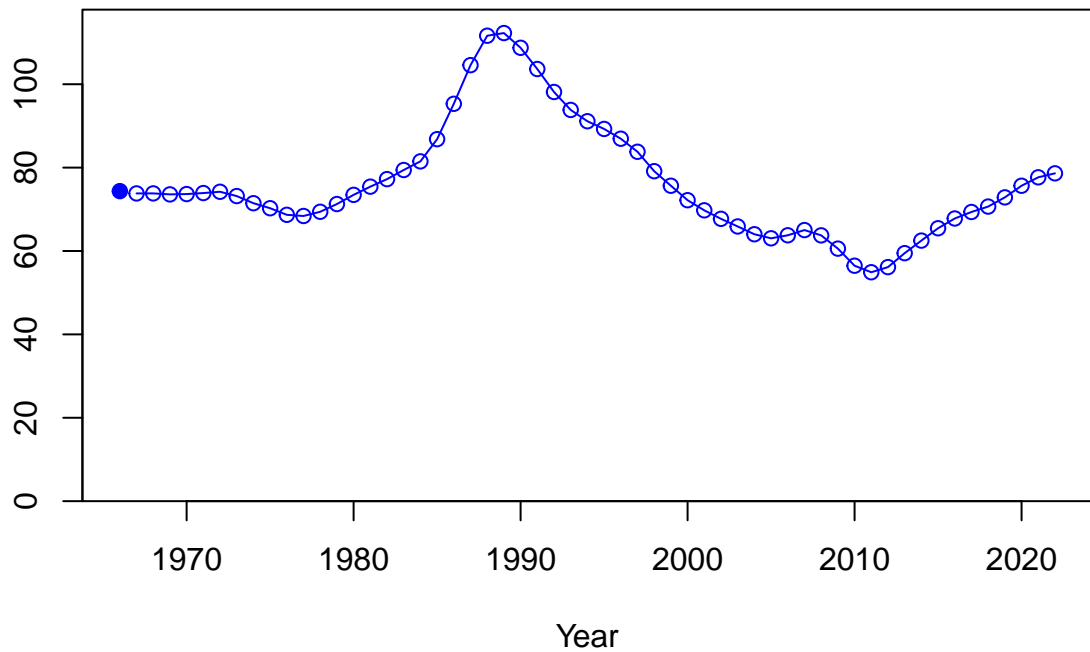


Relative spawning biomass:  $B/B_{MSY}$

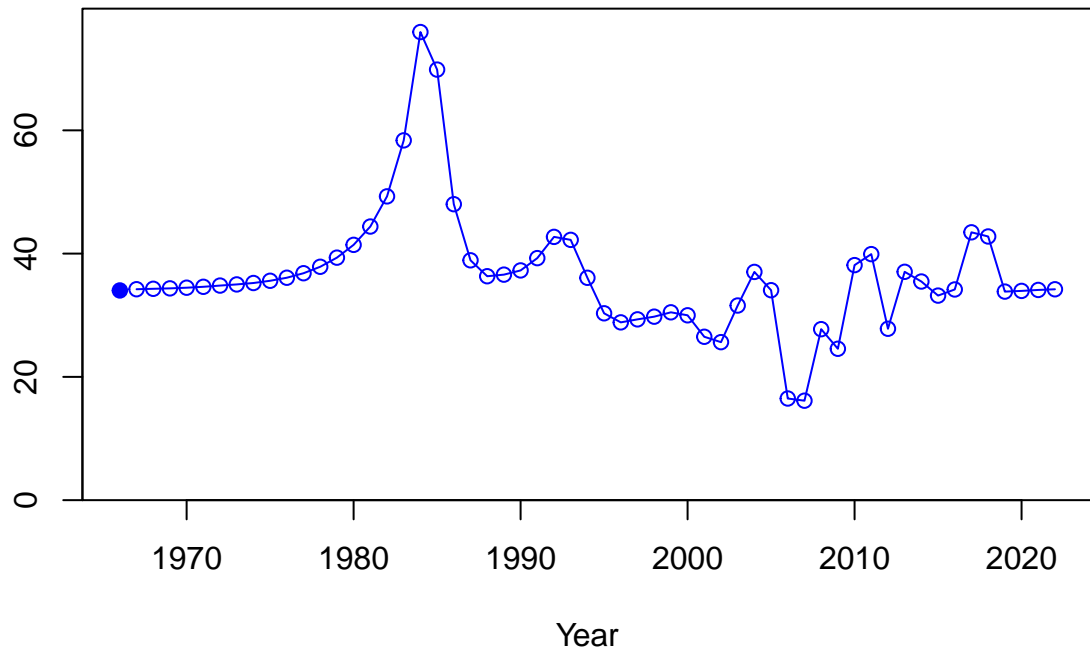




Summary biomass (mt)

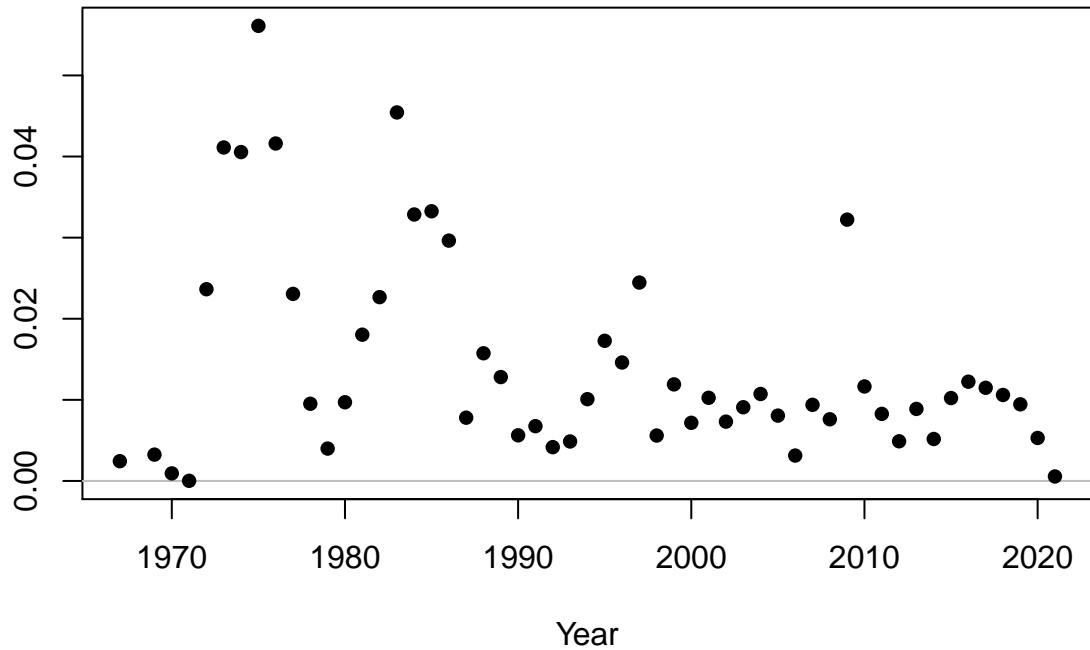


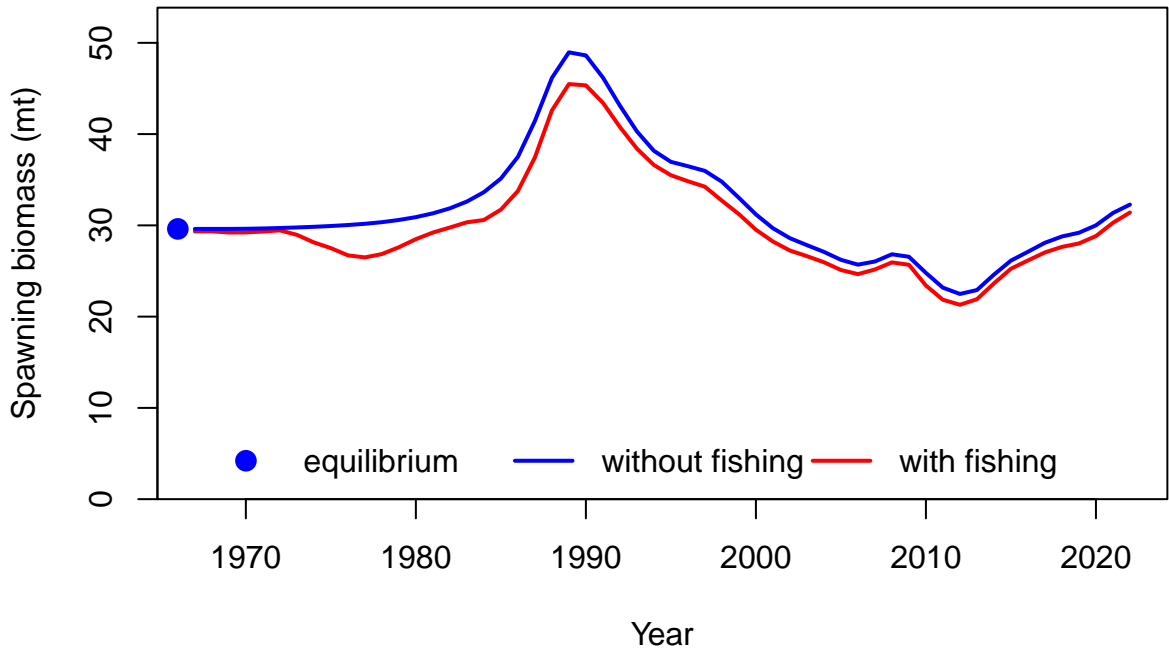
Age-0 recruits (1,000s)



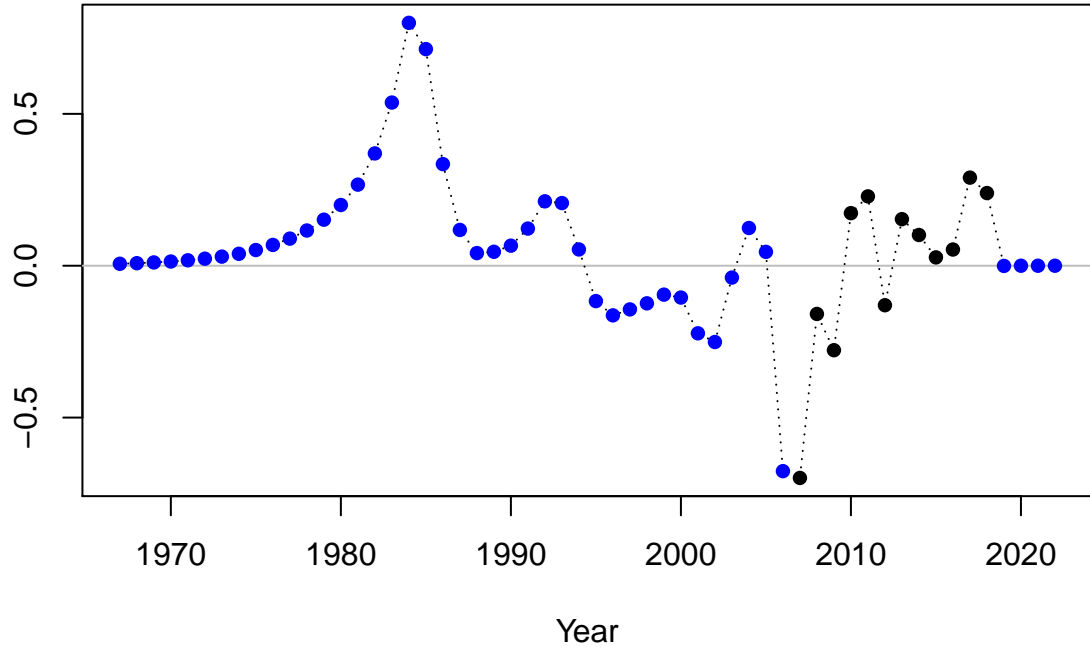


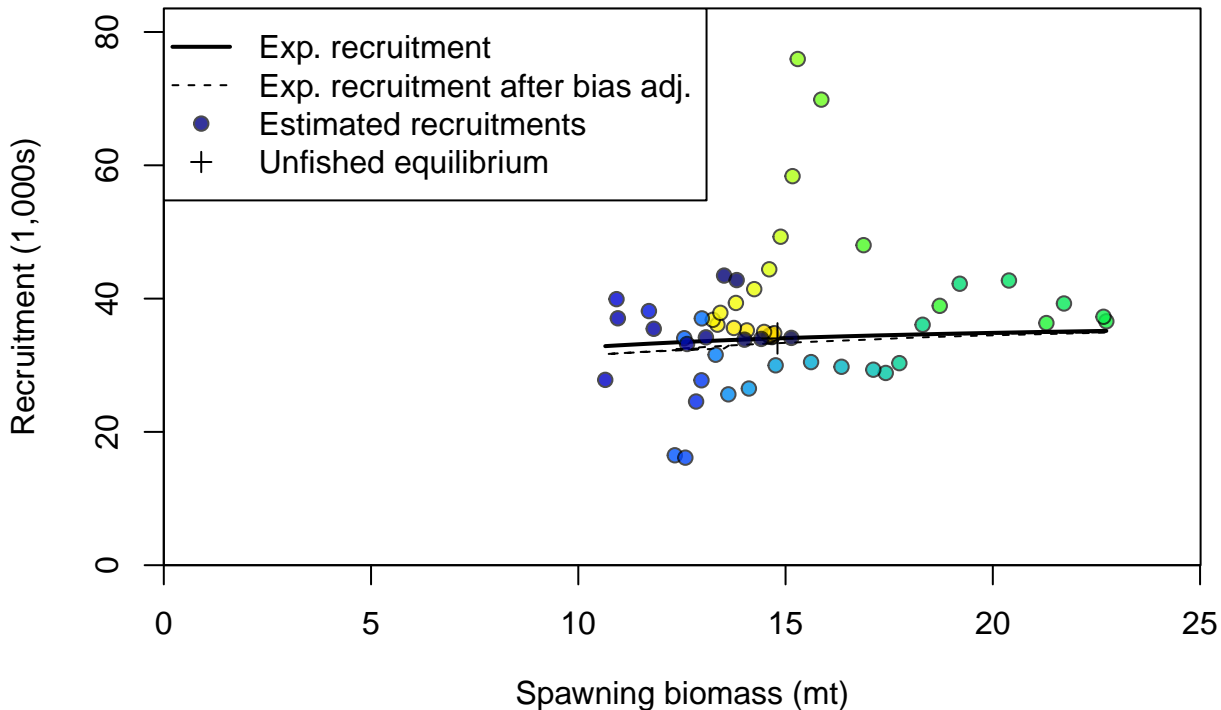
Summary Fishing Mortality

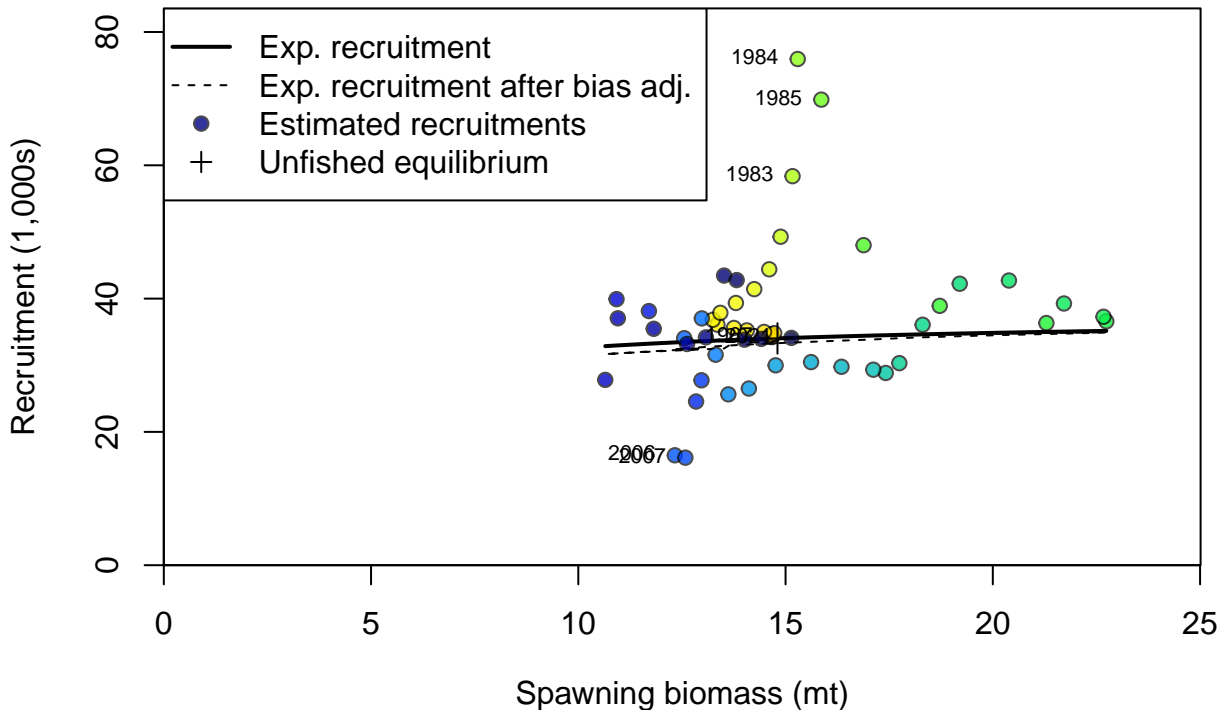




Log recruitment deviation







Log recruitment deviation

0.5  
0.0  
-0.5

0.0

0.5

1.0

1.5

Spawning output (relative to  $B_0$ )

1984

1985

1983

2006

2007

1980

1981

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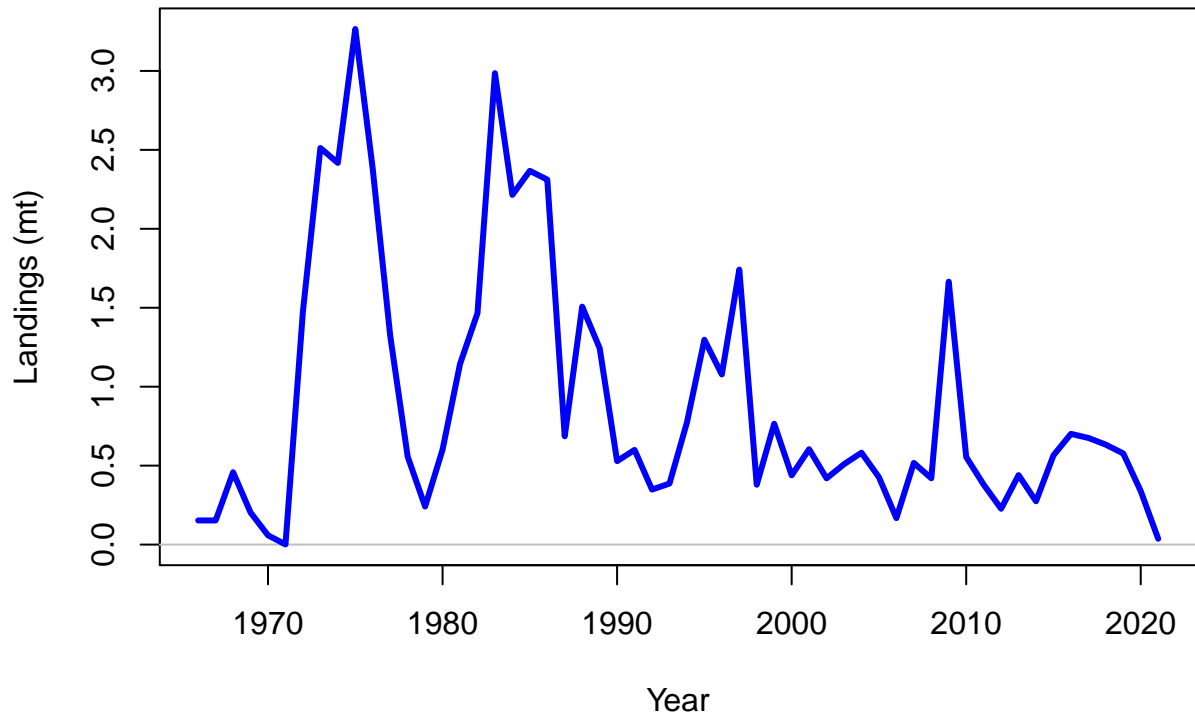
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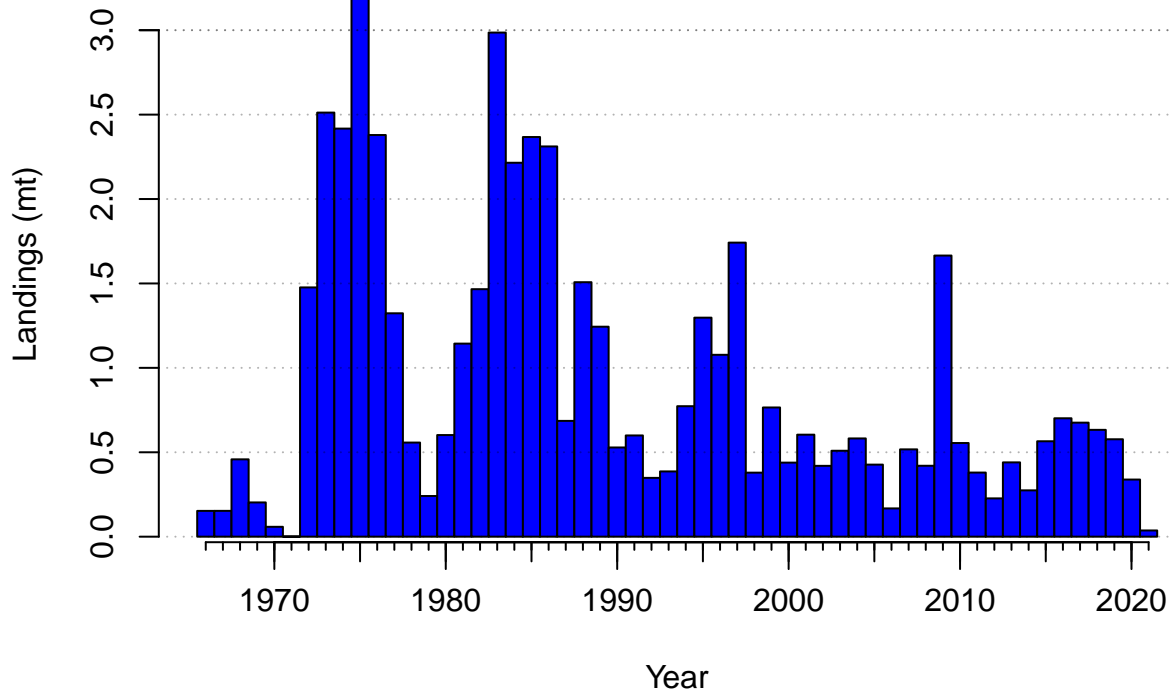
2162

2163

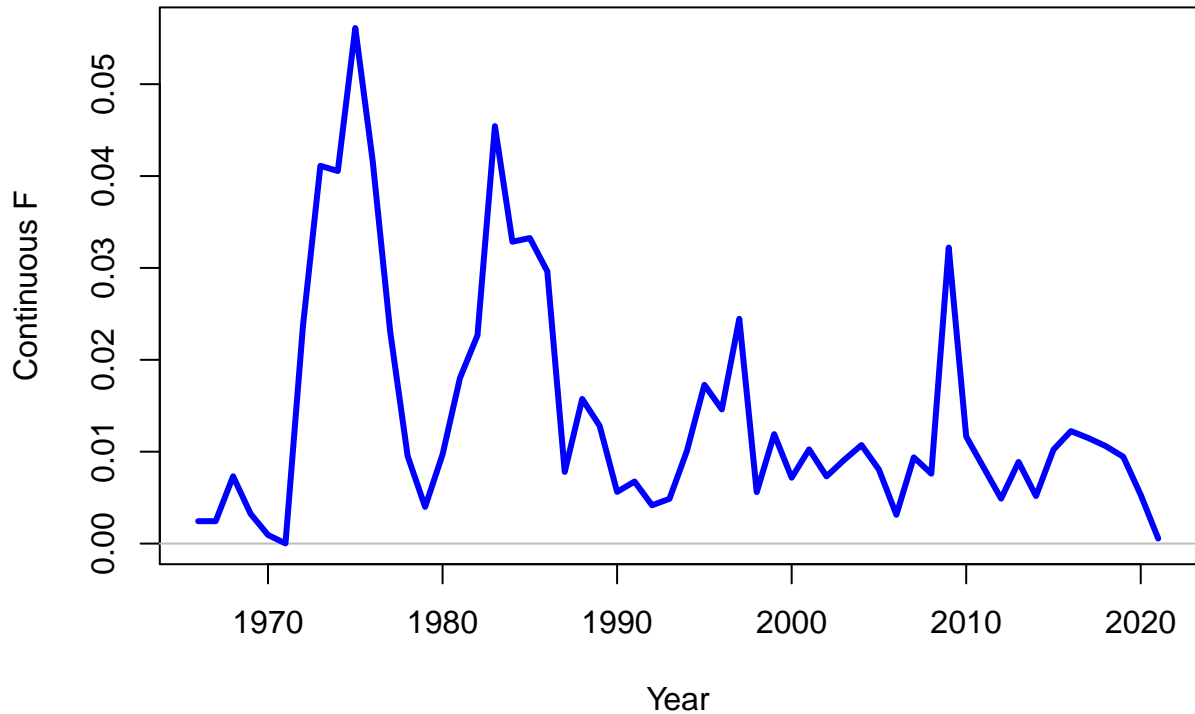
2164

2165

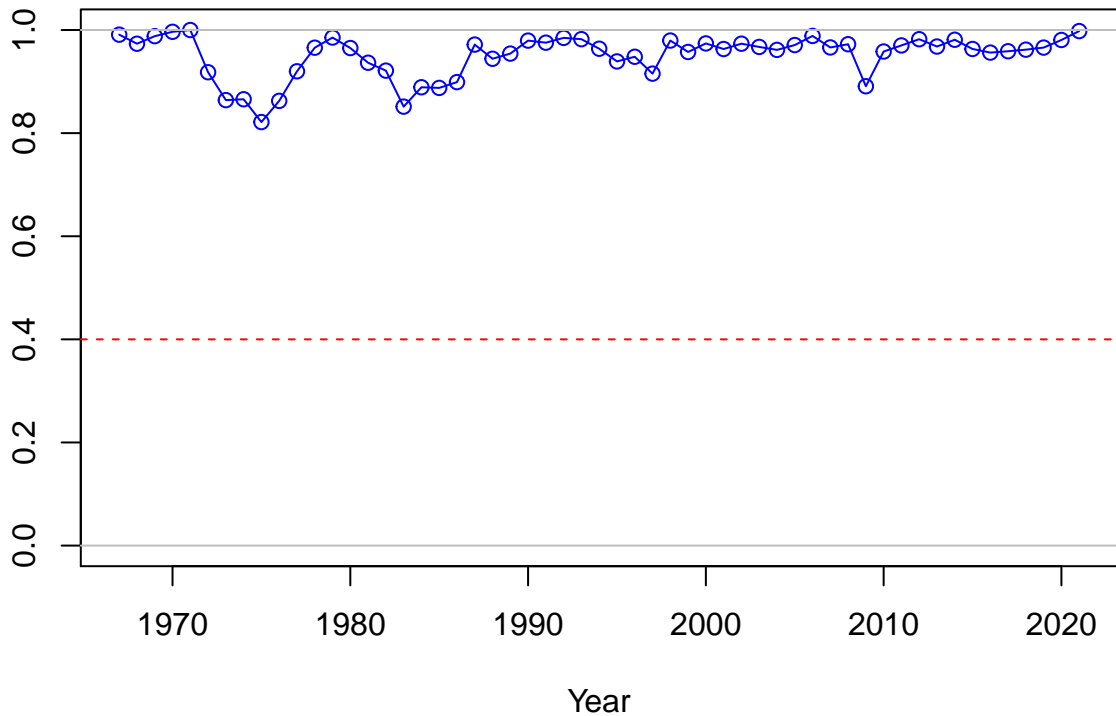




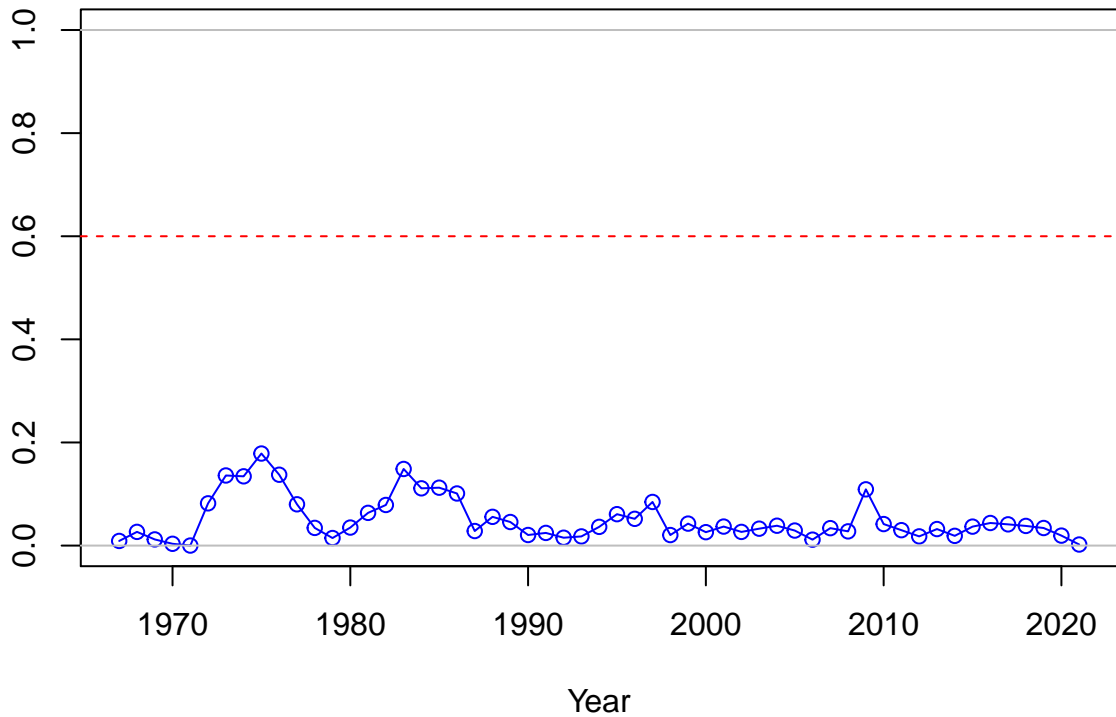




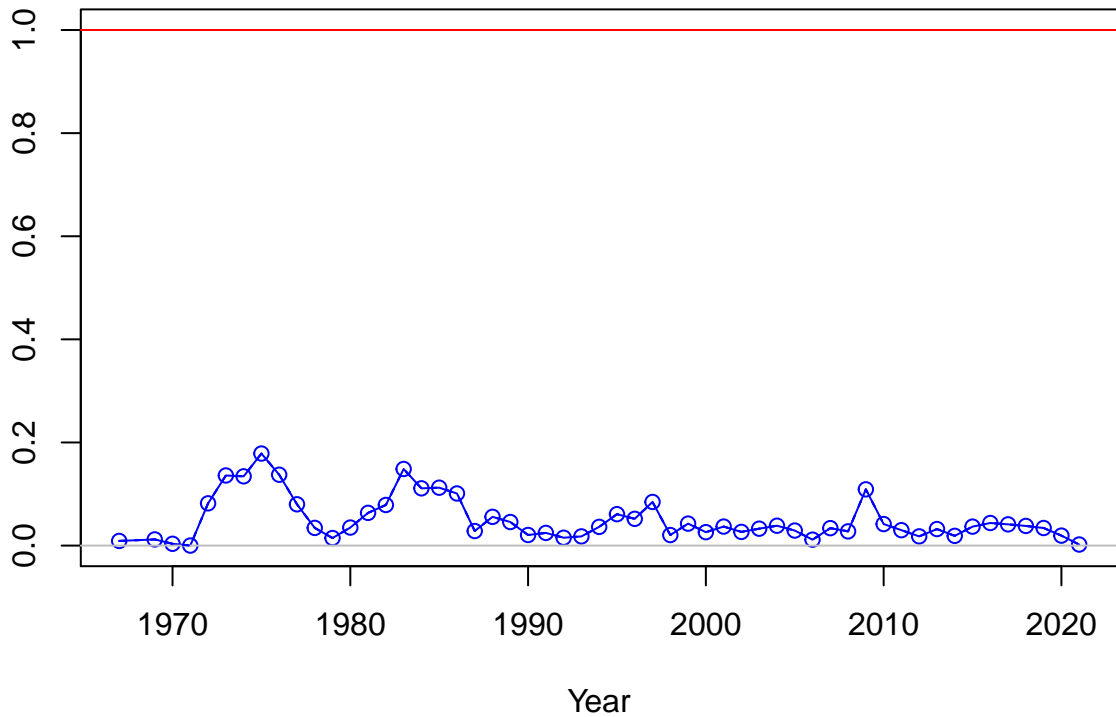
SPR



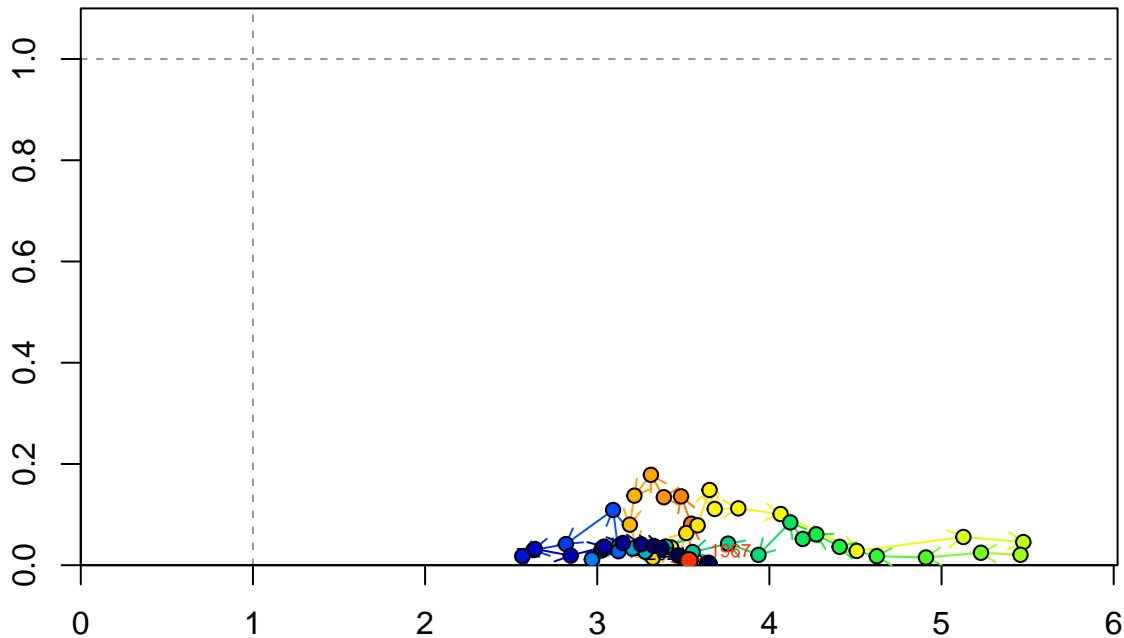
1-SPR



Fishing intensity: 1-SPR

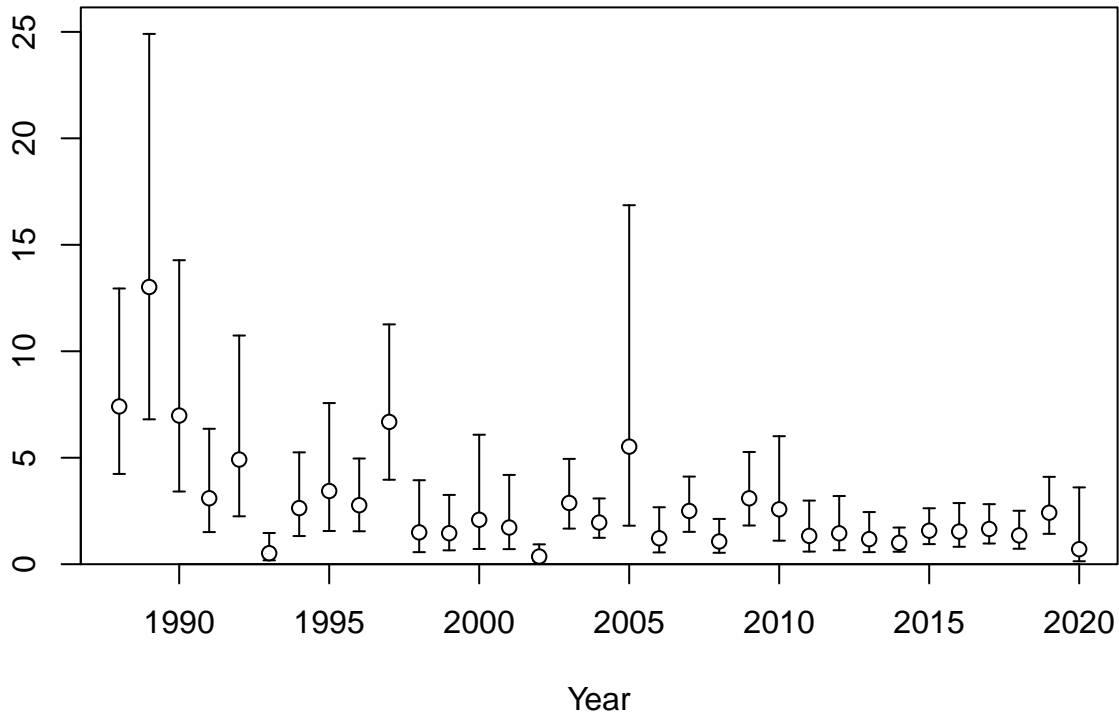


Fishing intensity: 1-SPR

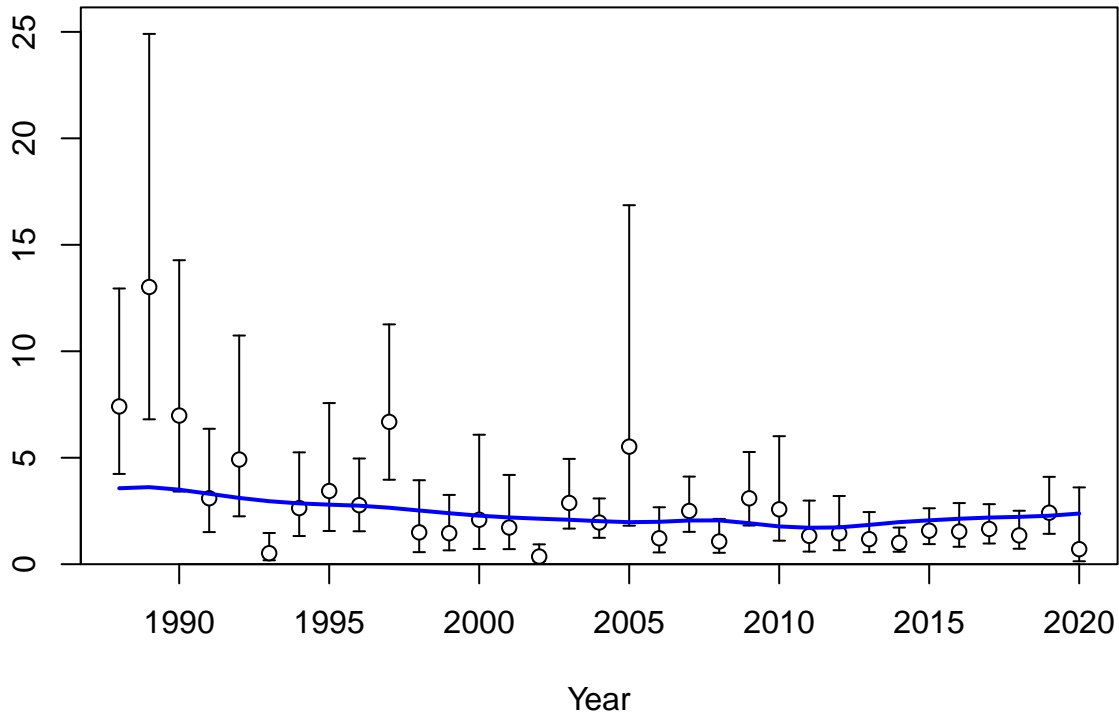


Relative spawning output:  $B/B_{MSY}$

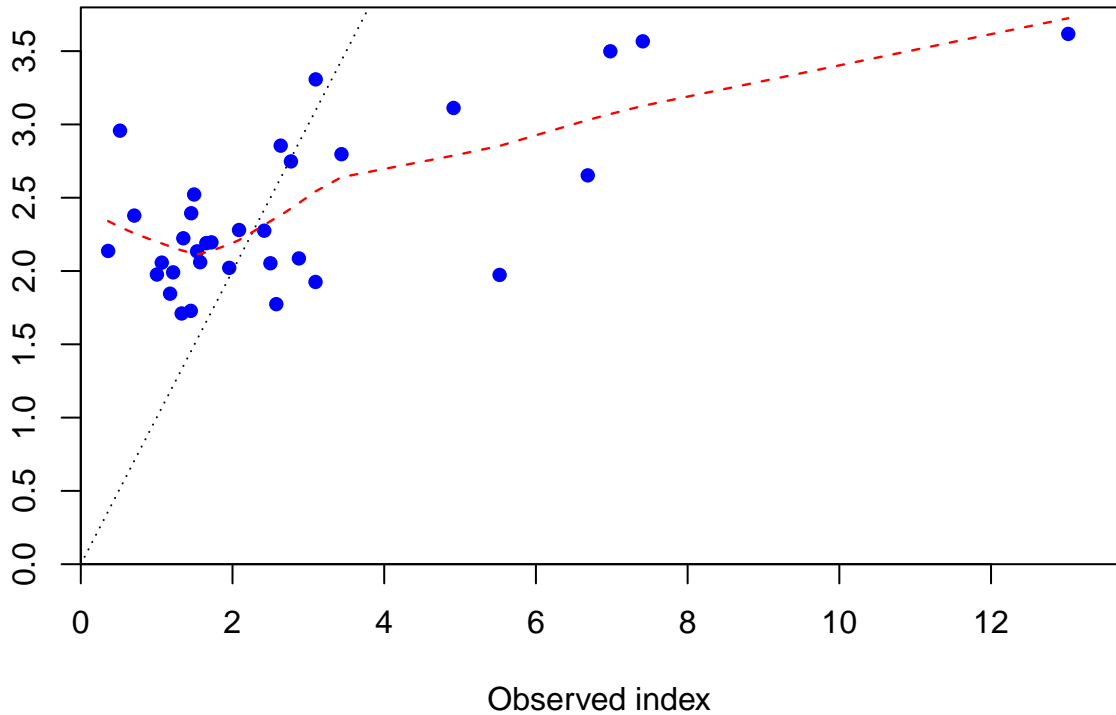
Index



Index

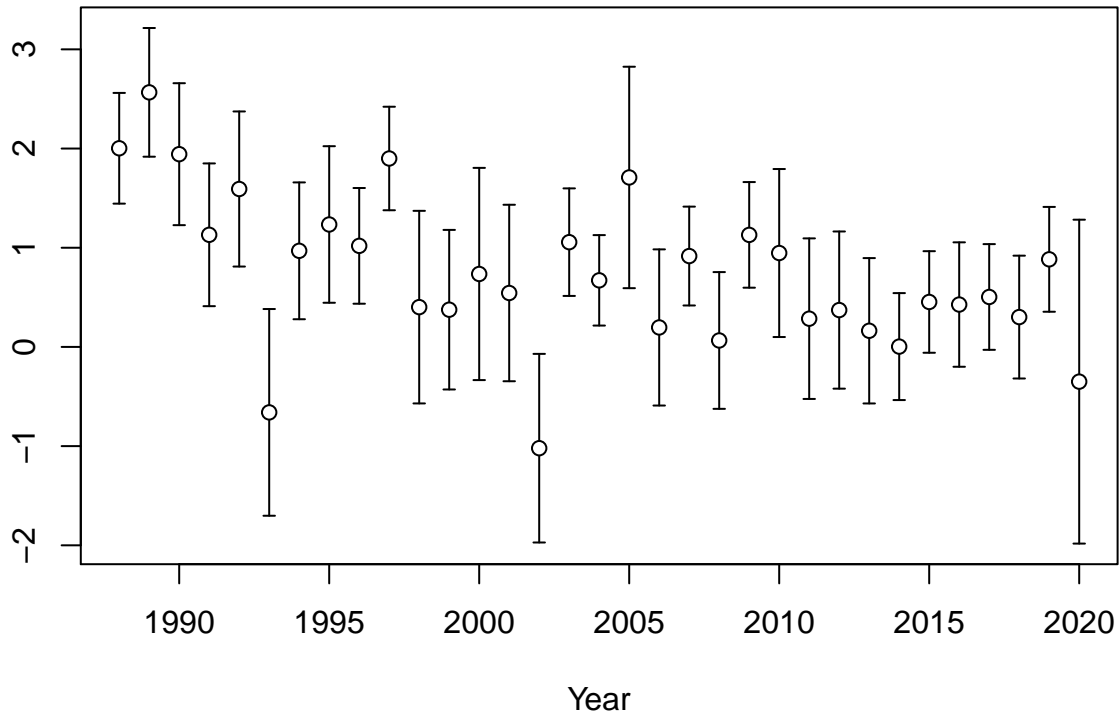


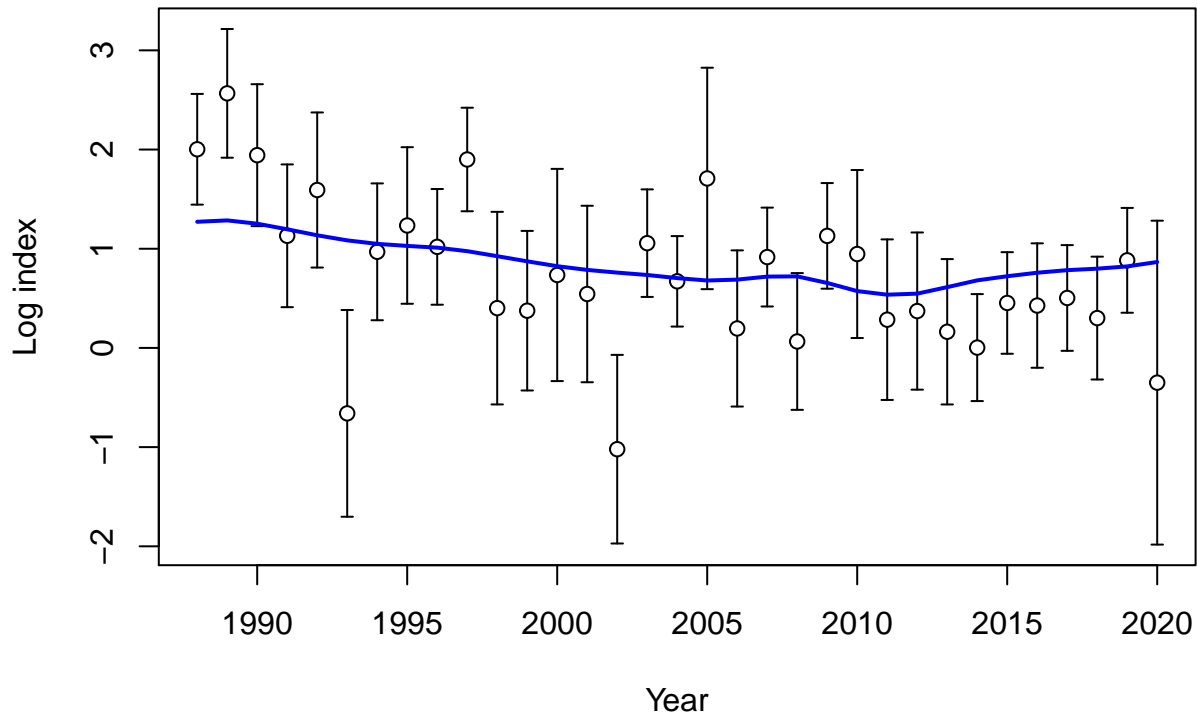
Expected index

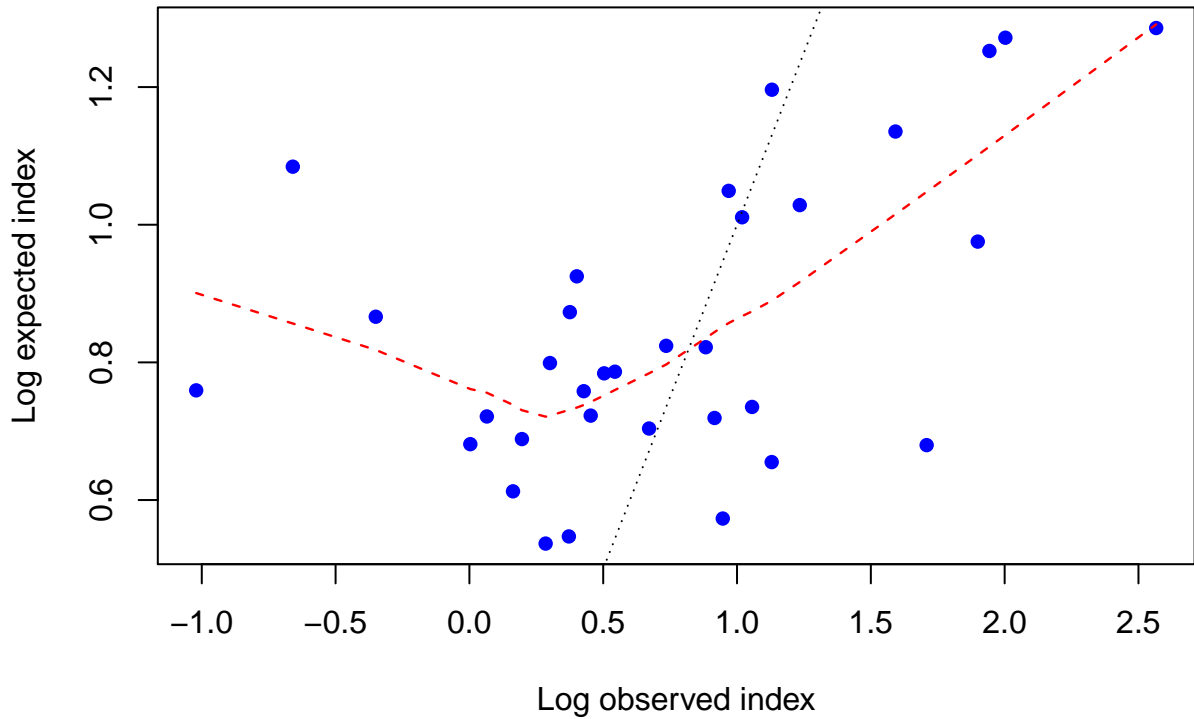




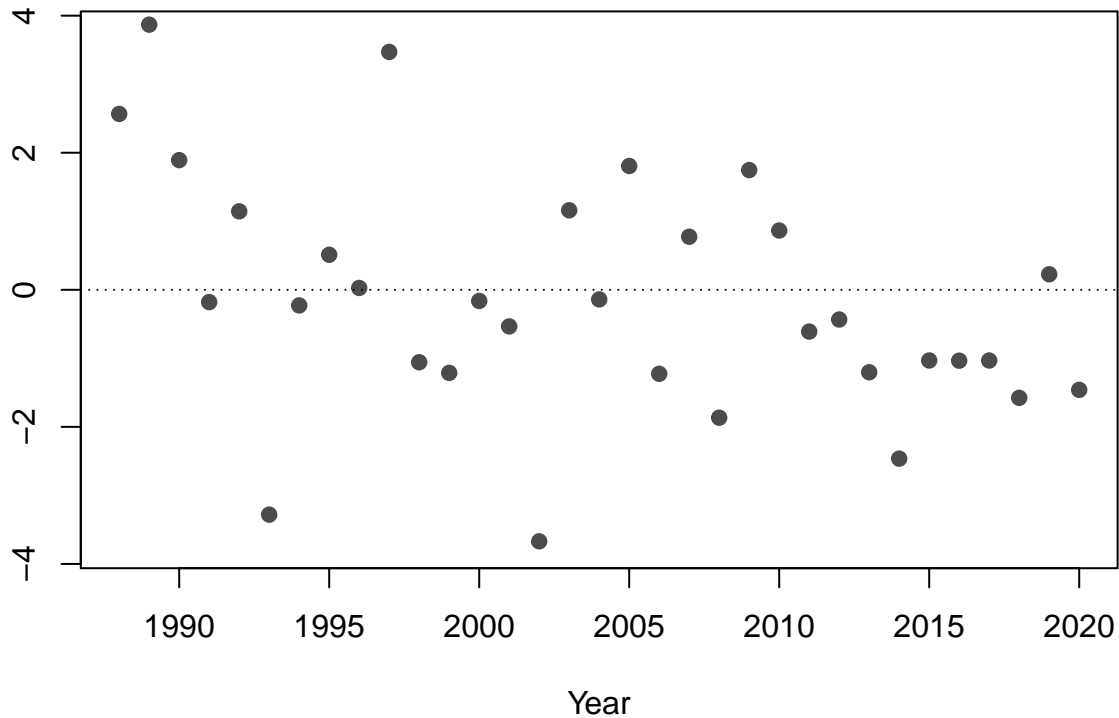
Log index

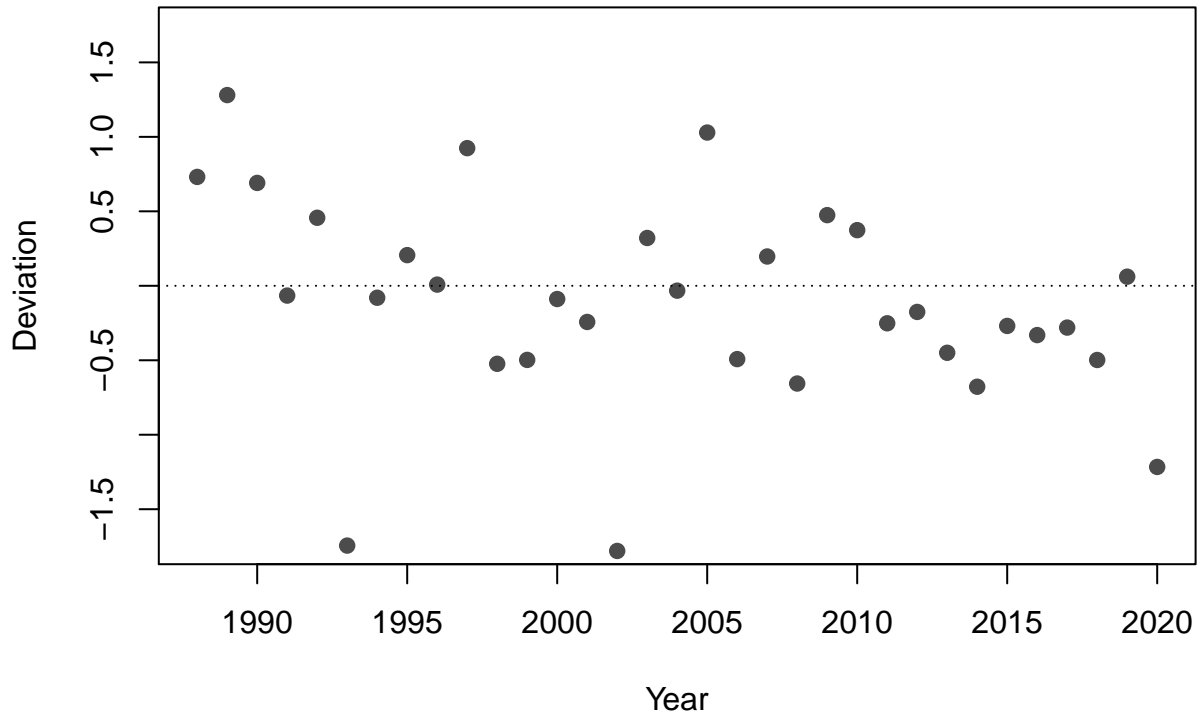




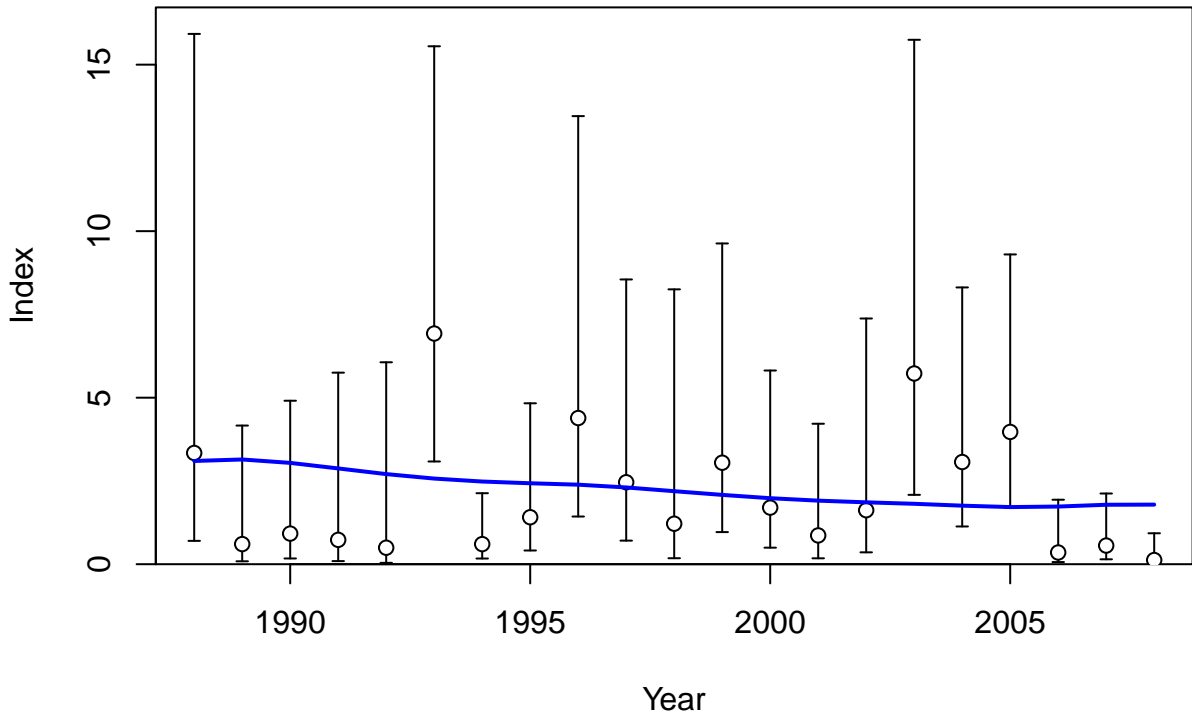


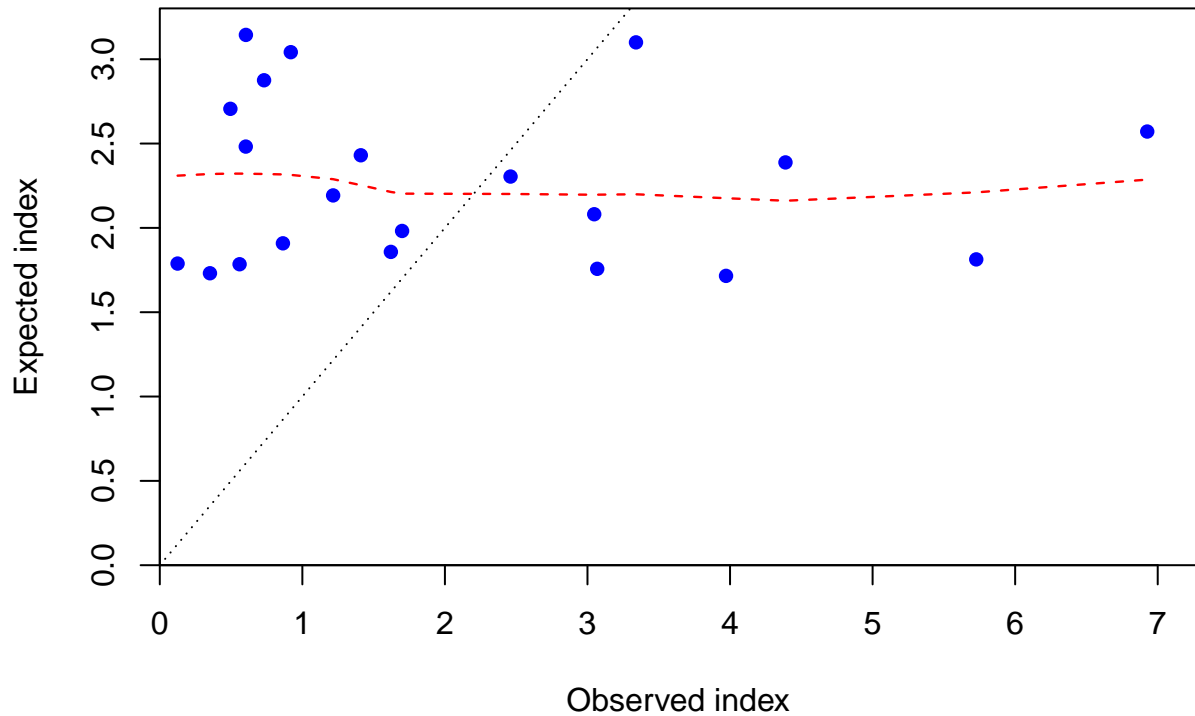
Residual









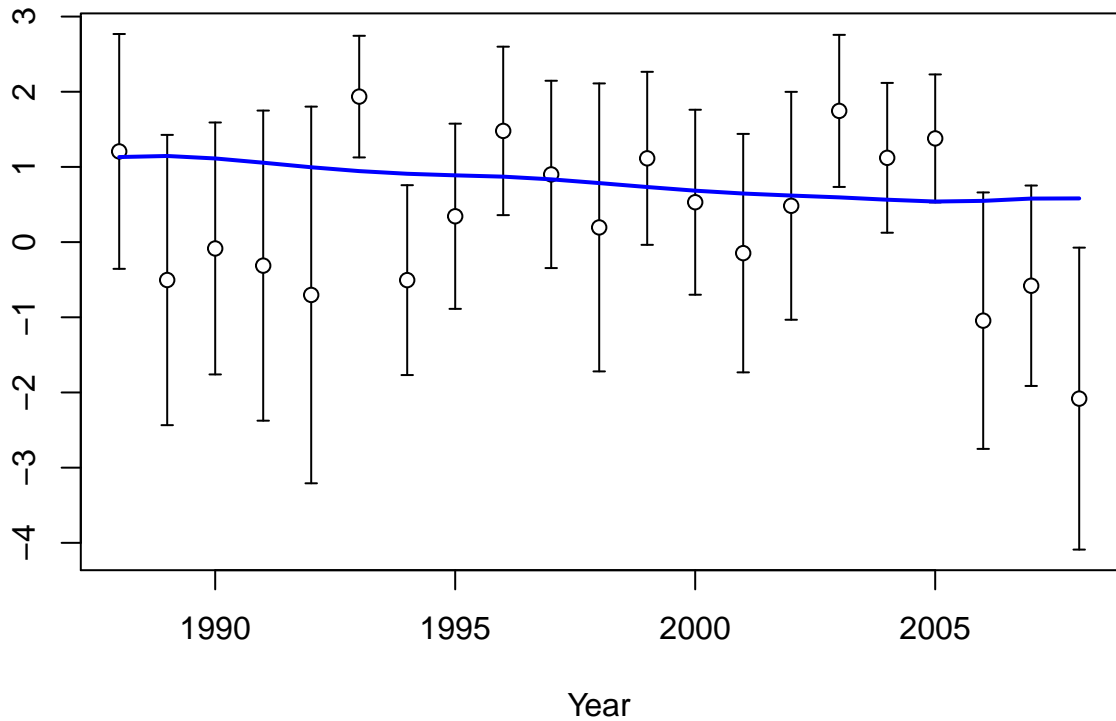


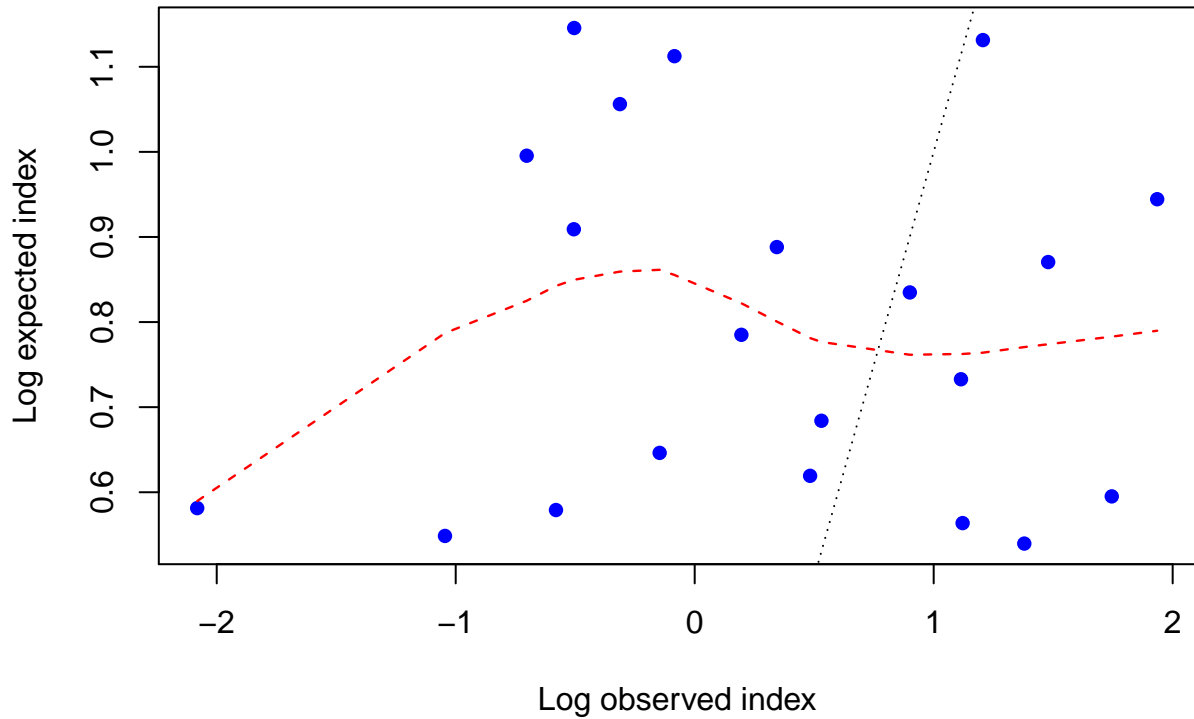


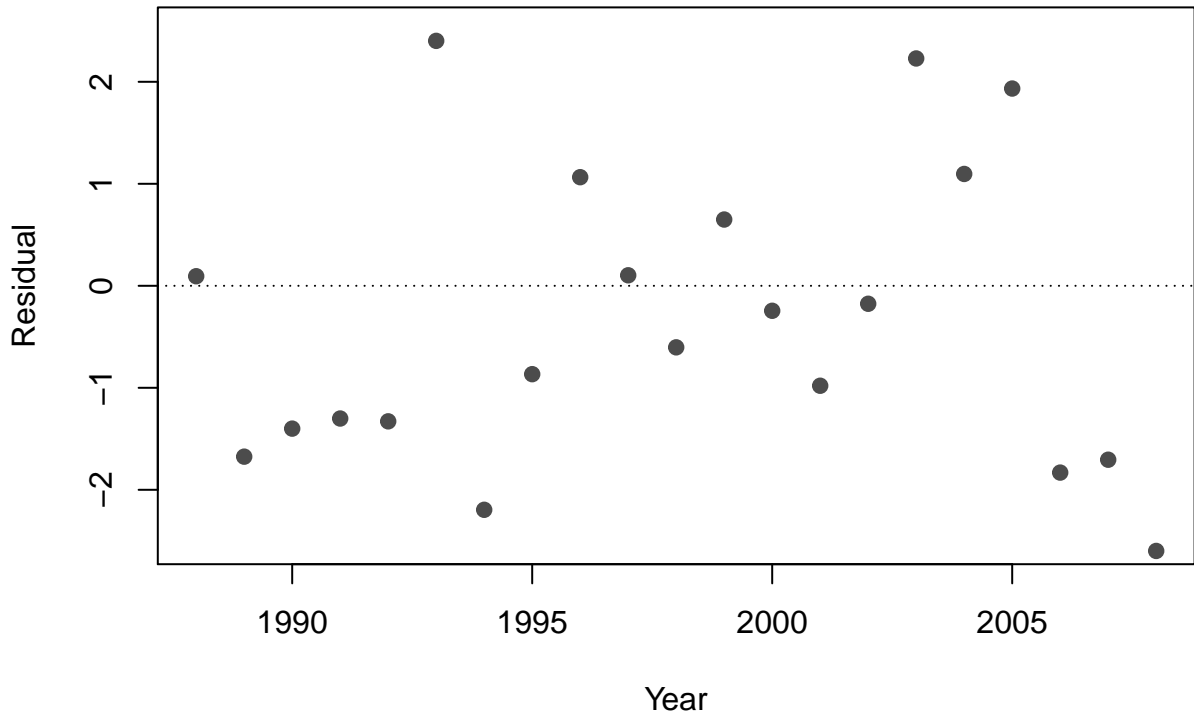
Log index

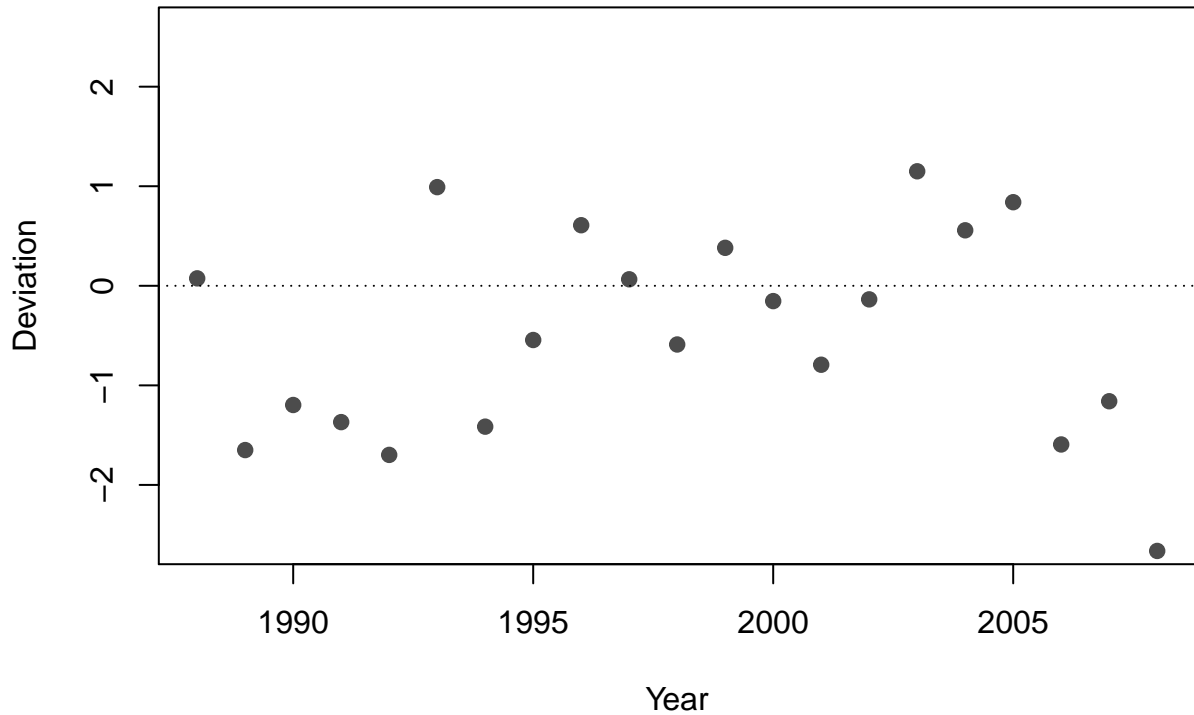


Log index

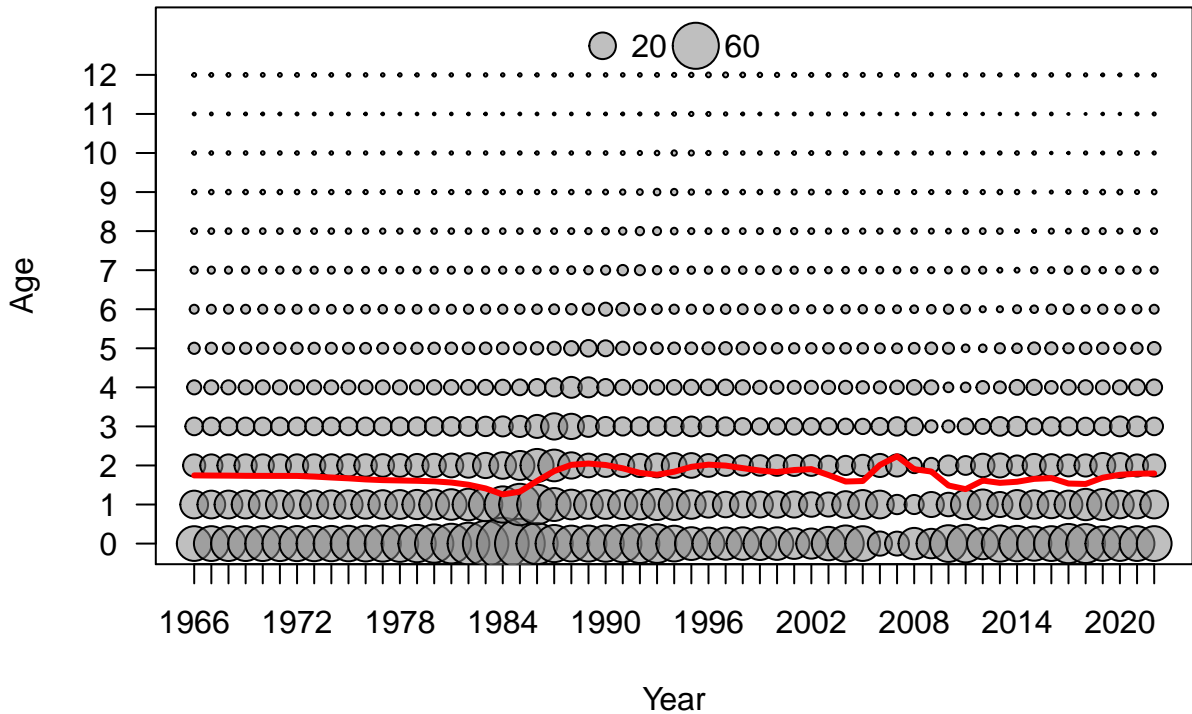


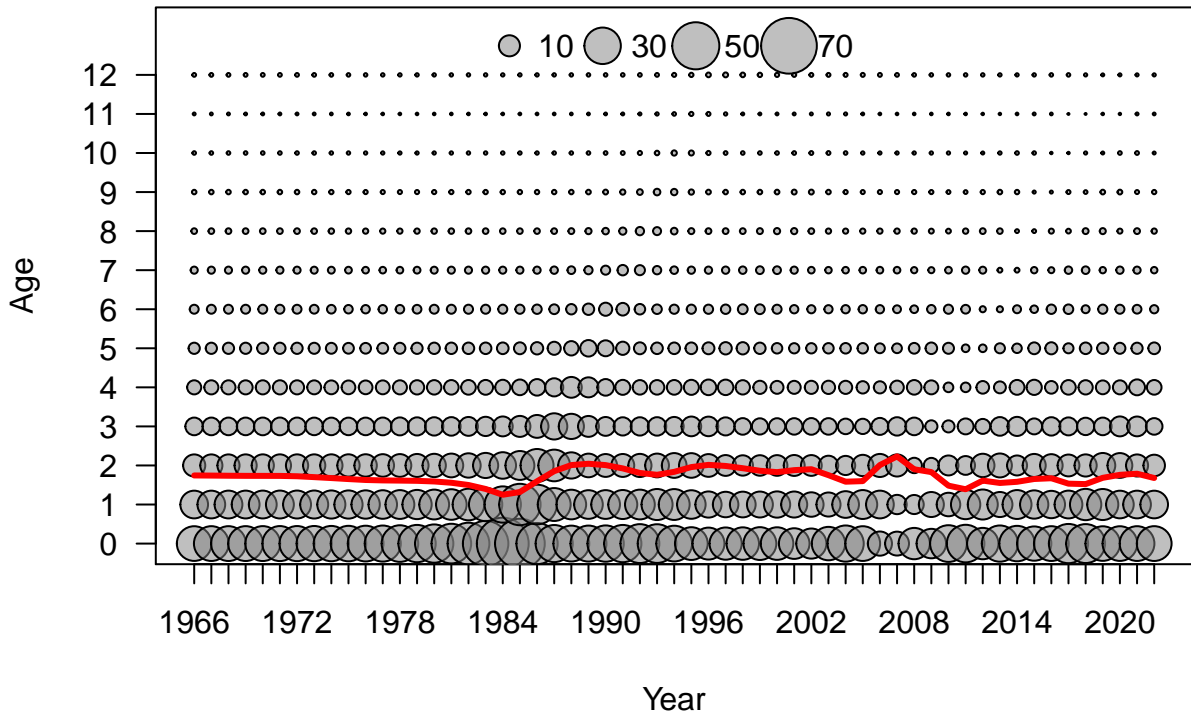




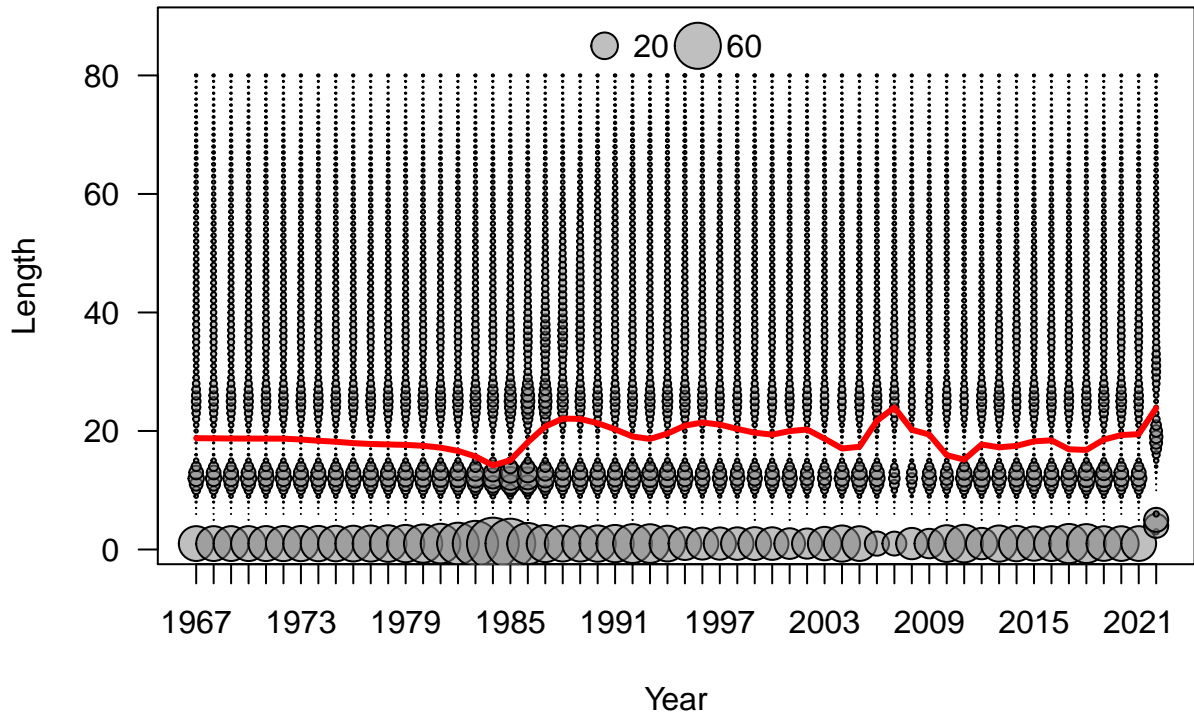


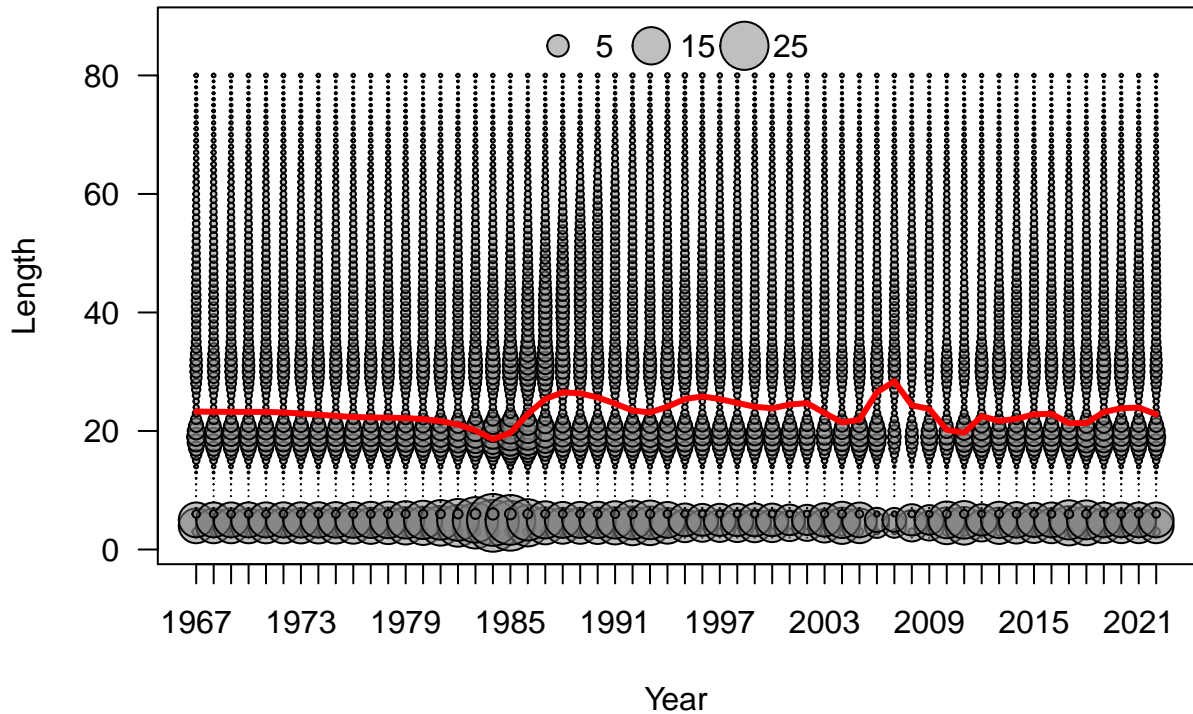


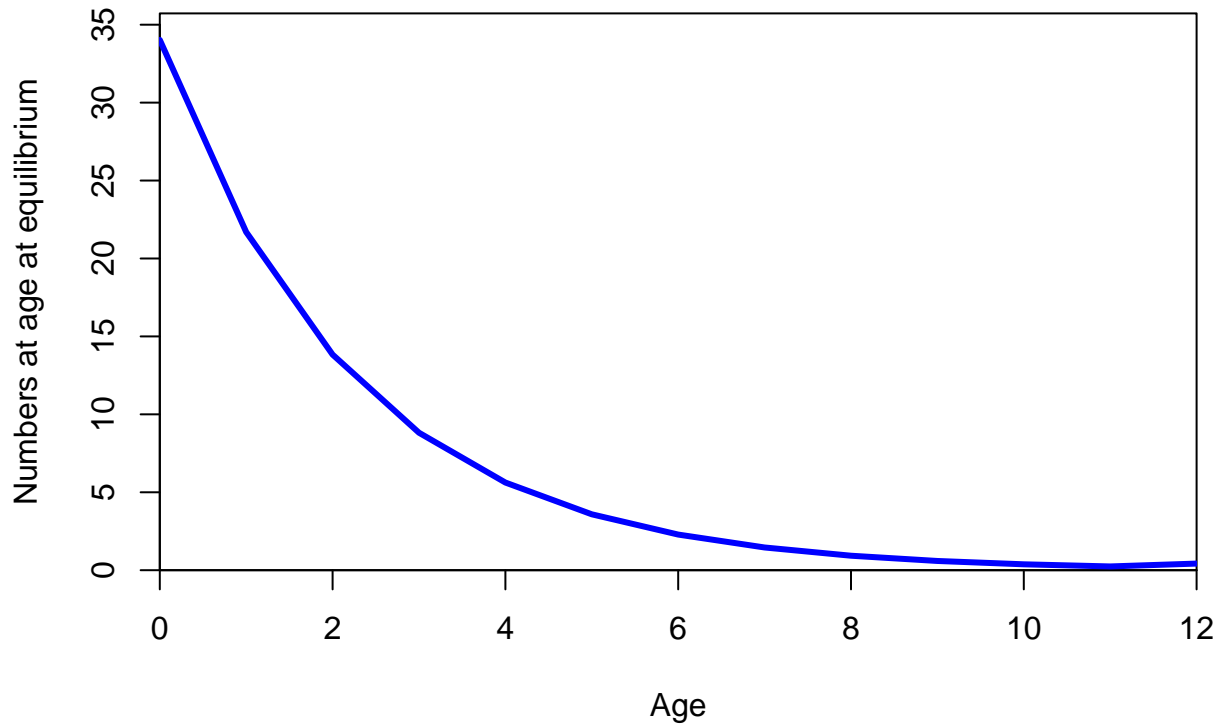






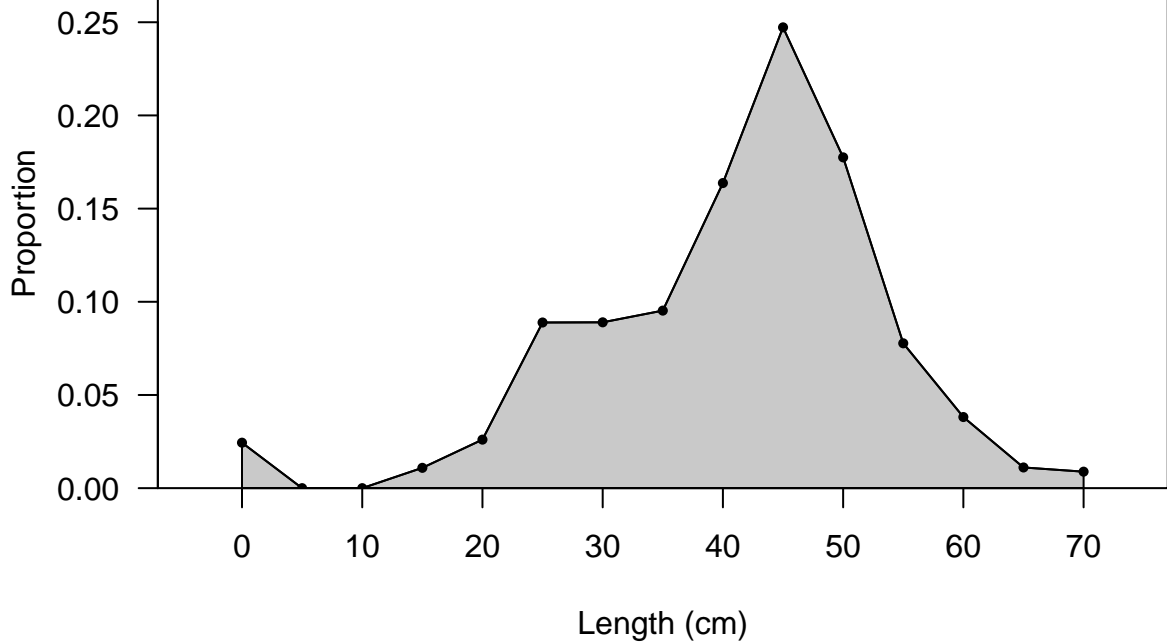


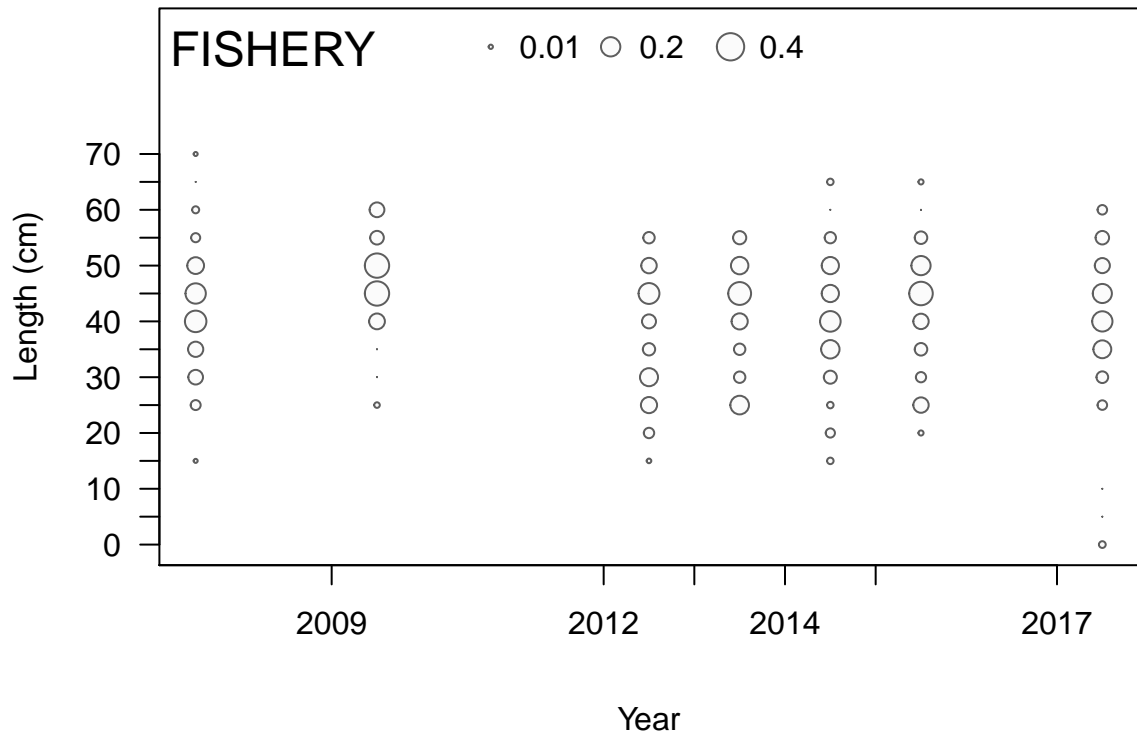




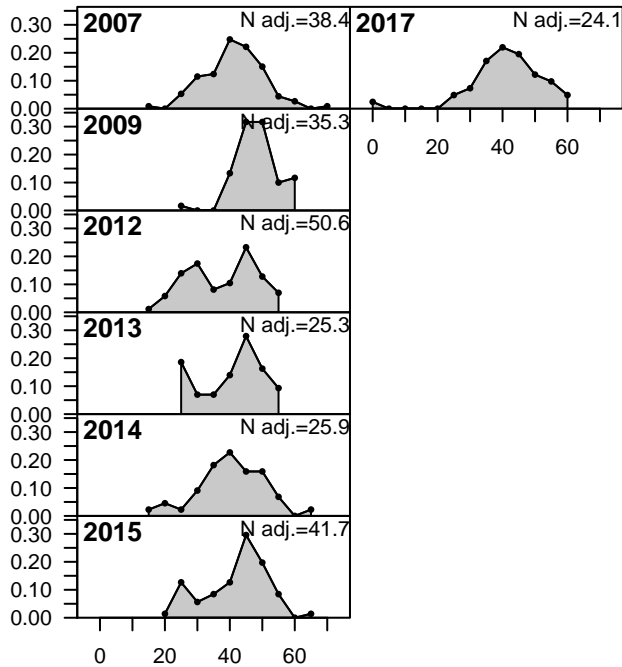
# FISHERY

Sum of N adj.=241.2

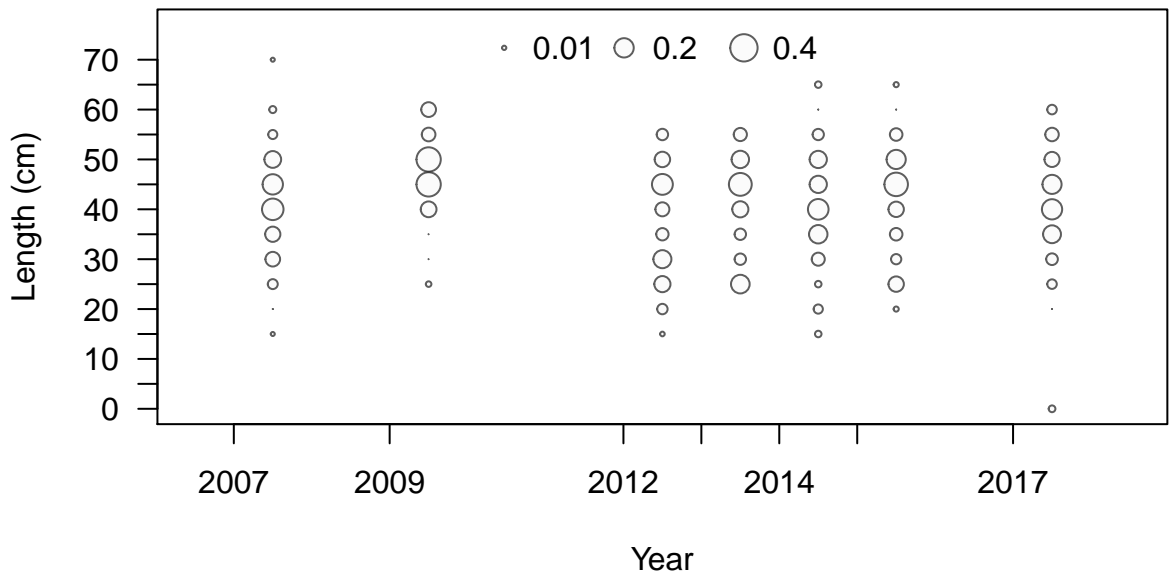




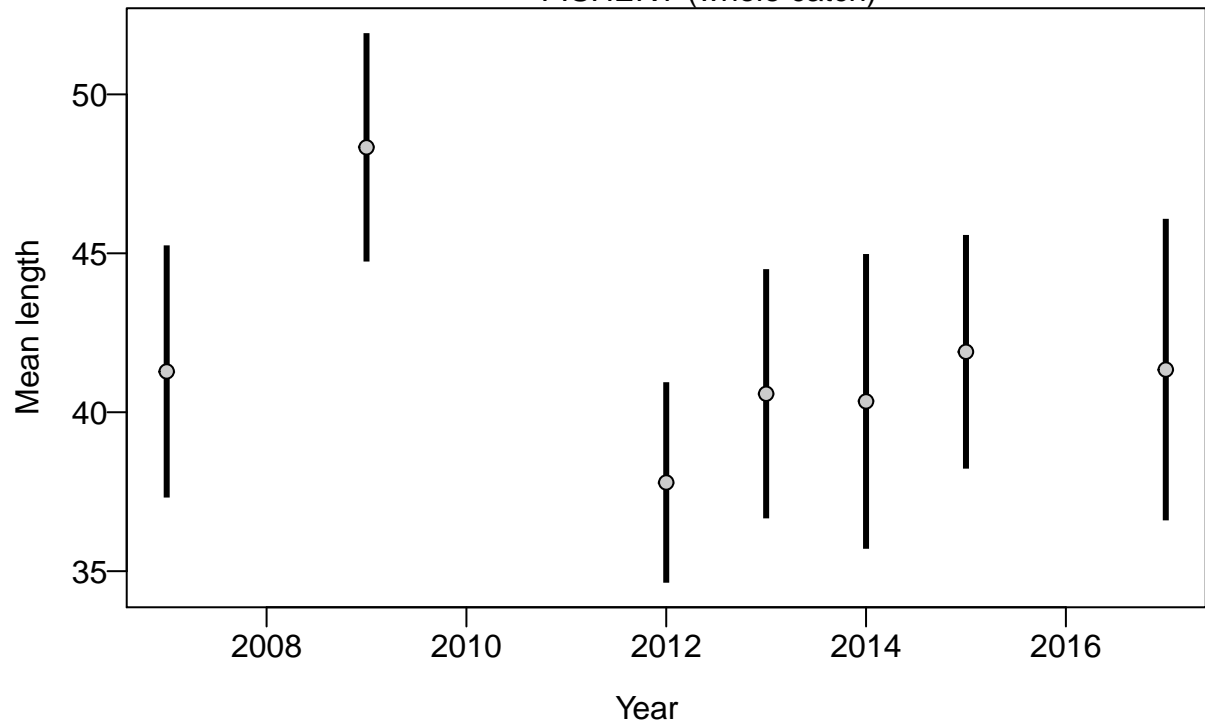
Proportion



Length (cm)



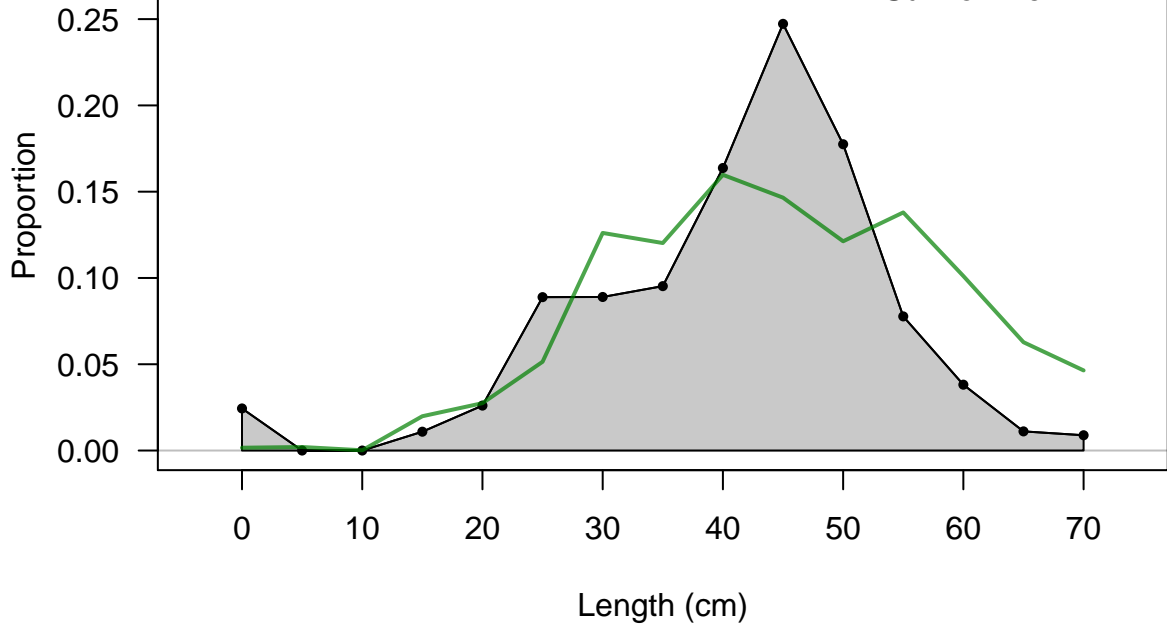
FISHERY (whole catch)





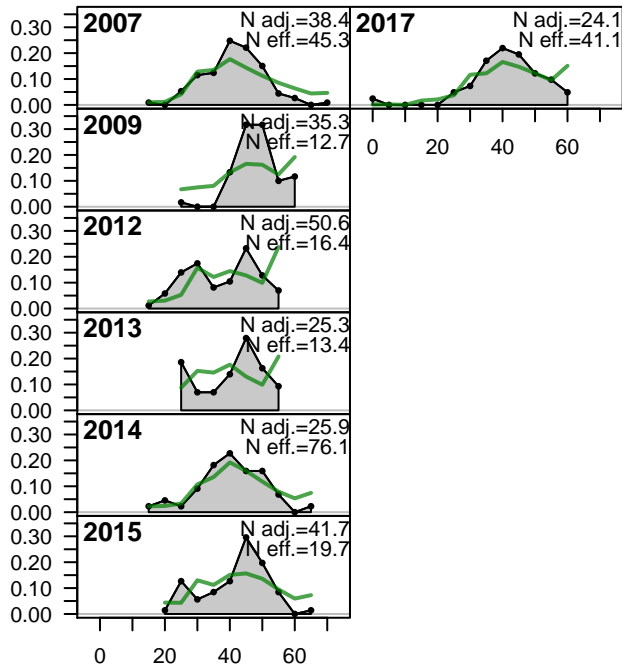
# FISHERY

Sum of N adj.=241.2  
Sum of N eff.=224.7

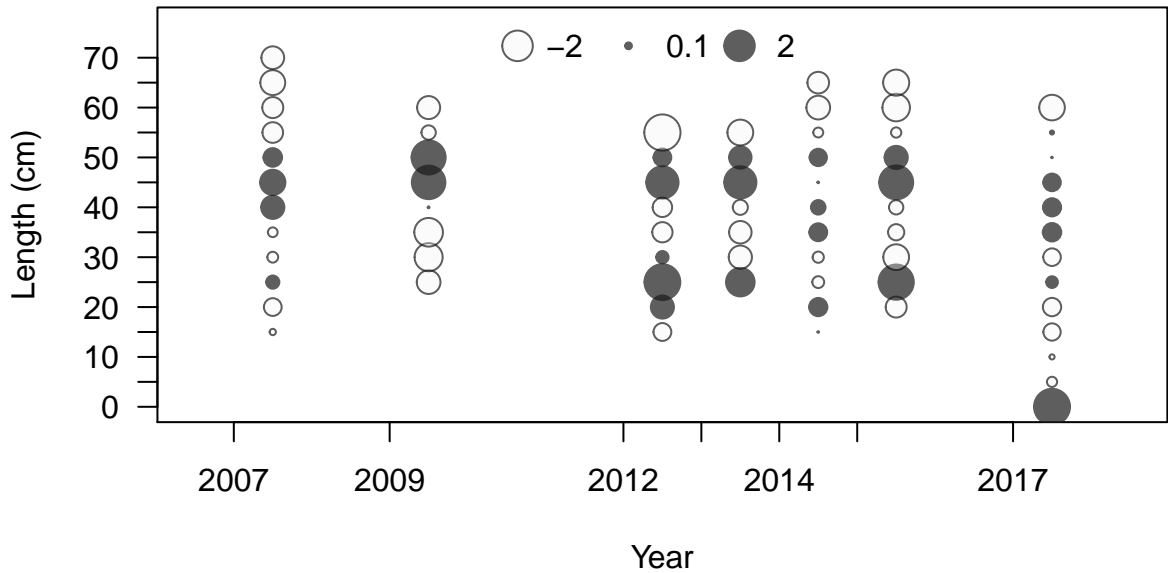




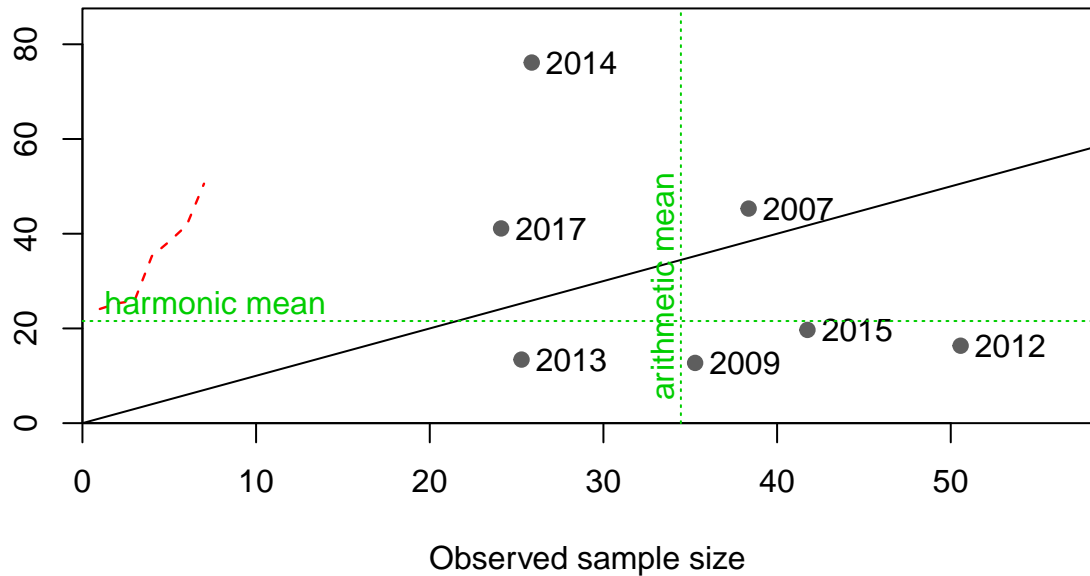
Proportion



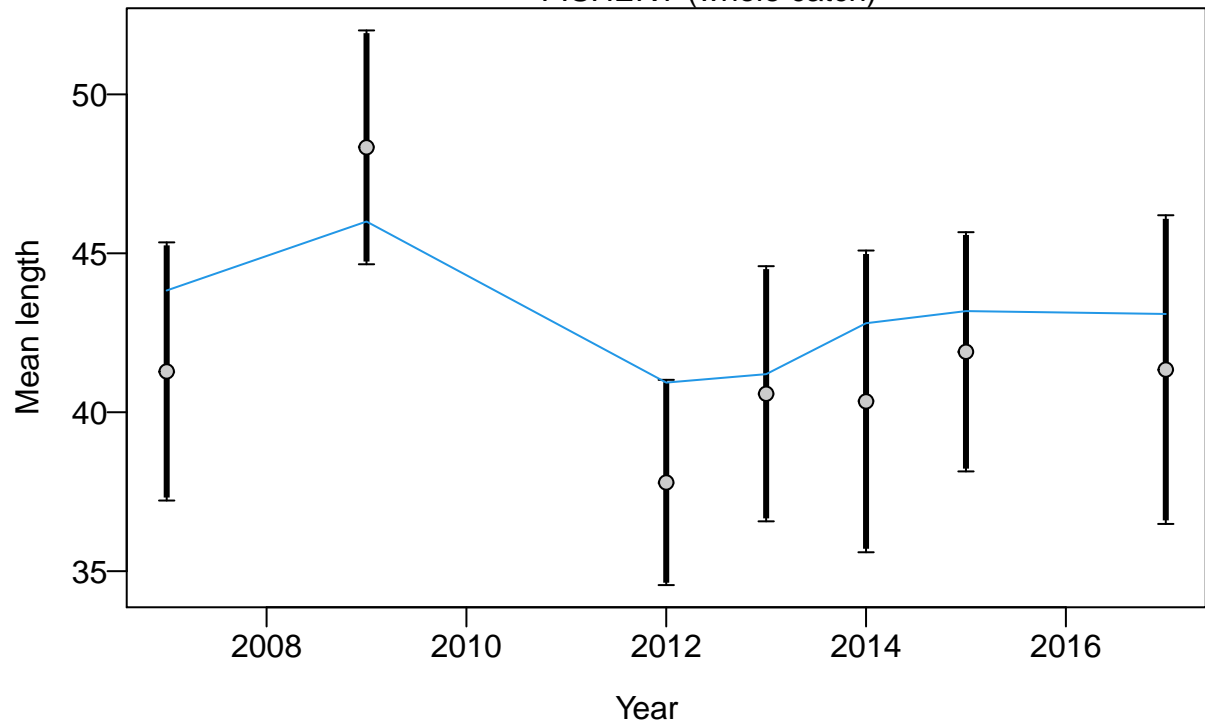
Length (cm)

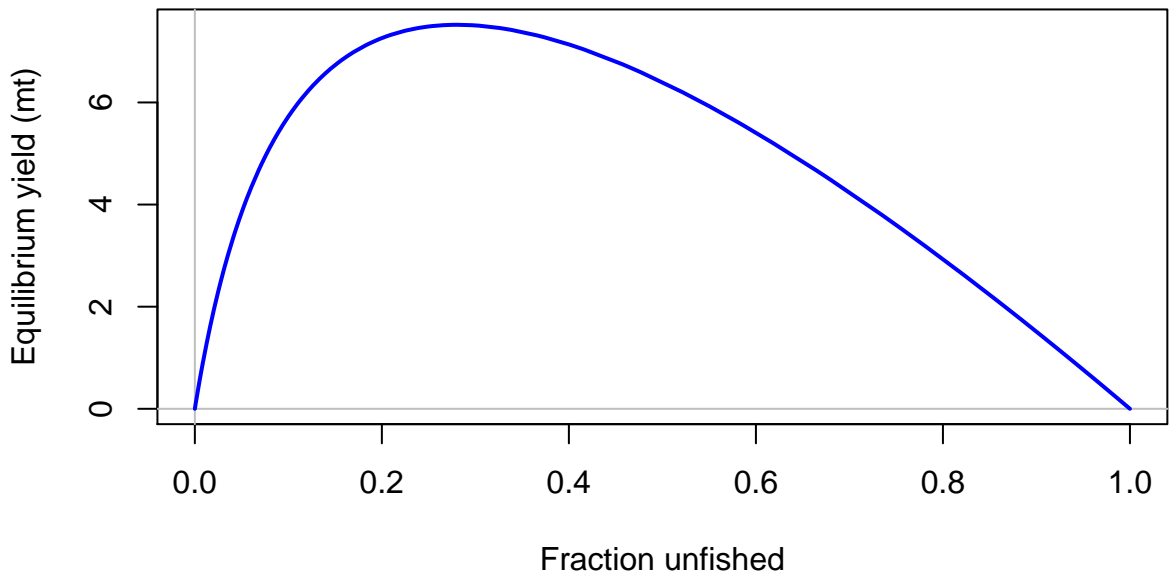


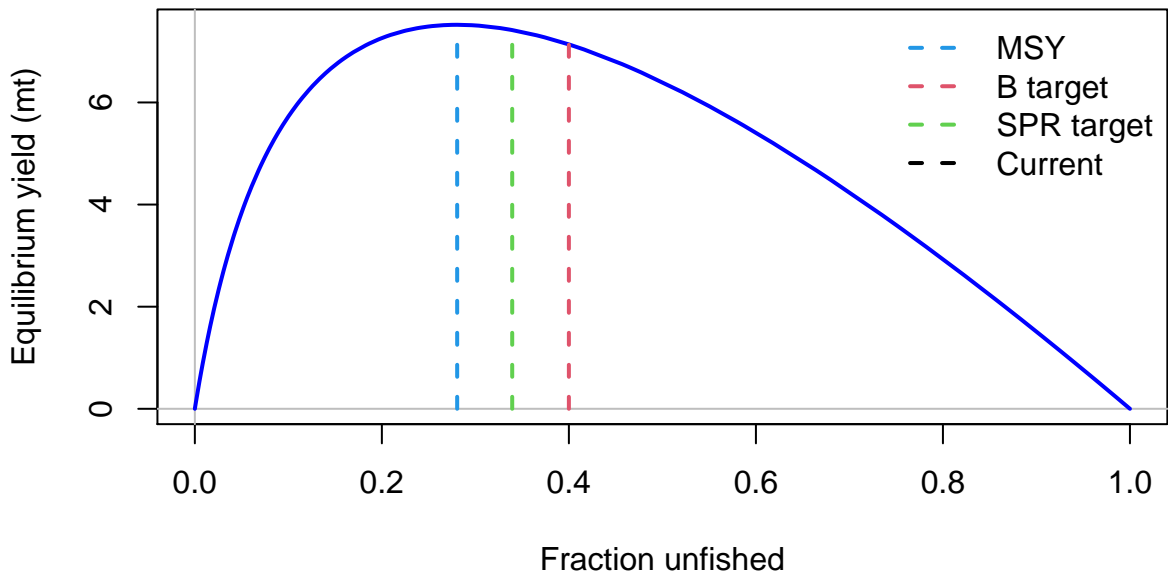
Effective sample size



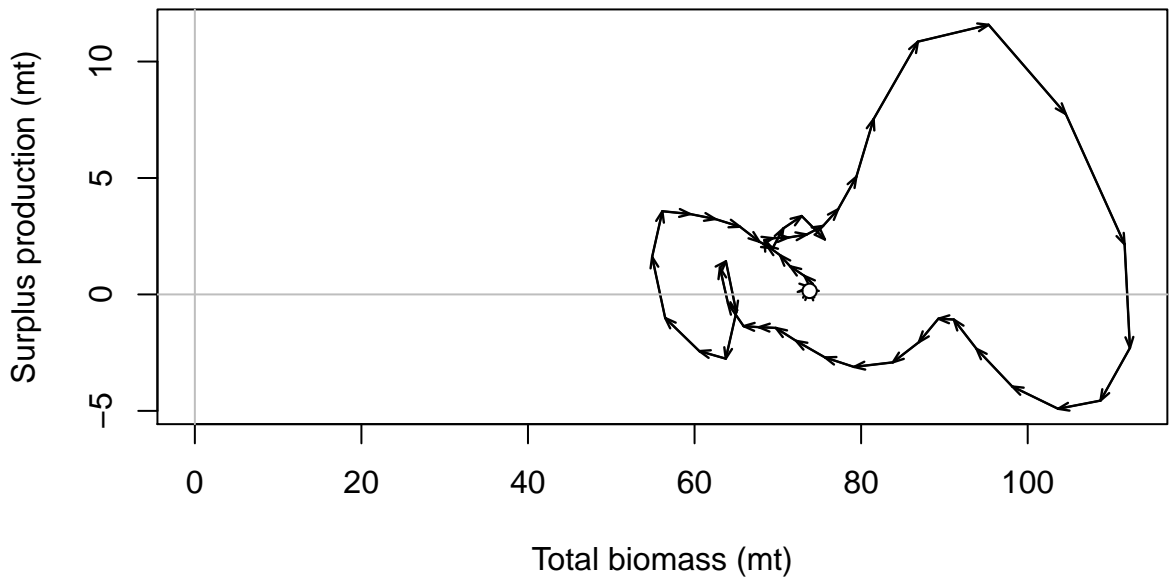
FISHERY (whole catch)

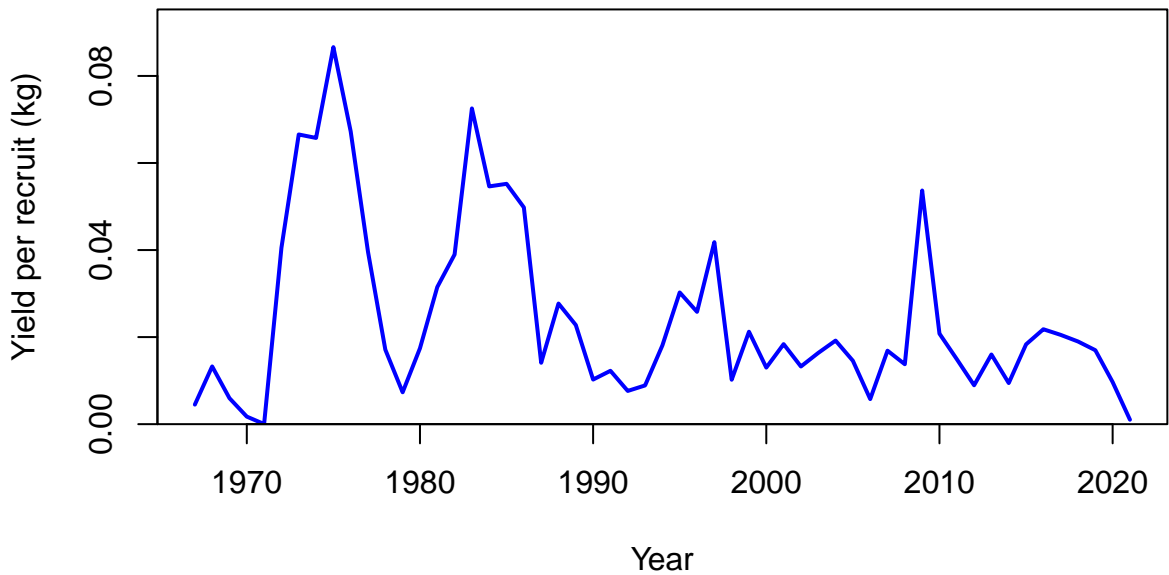




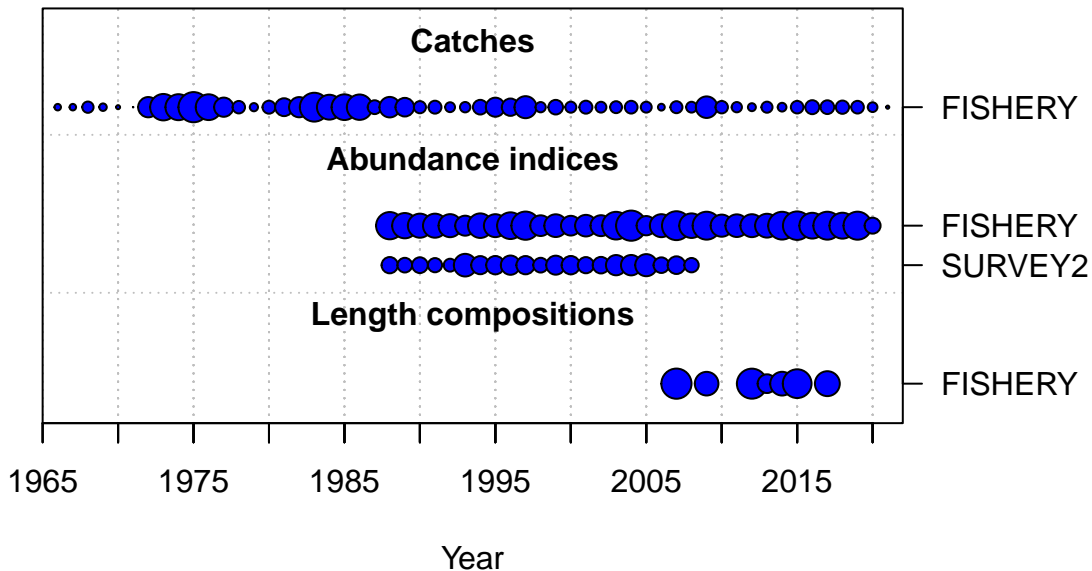






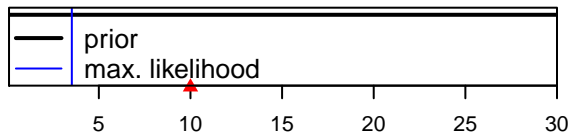




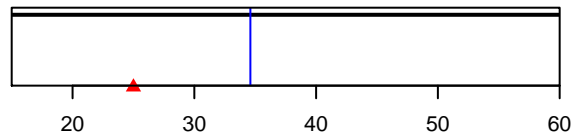


Density

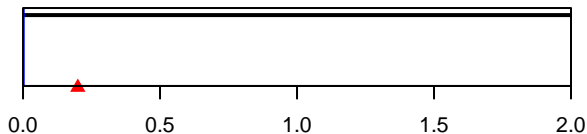
SR\_LN(R0)



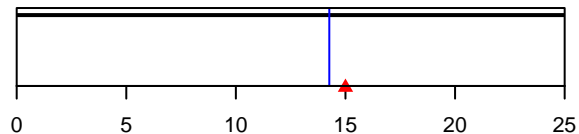
Size\_inflection\_FISHERY(1)



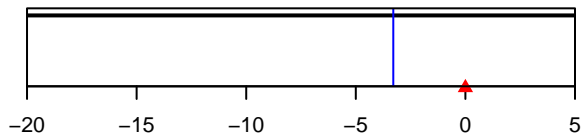
InitF\_seas\_1\_flt\_1FISHERY



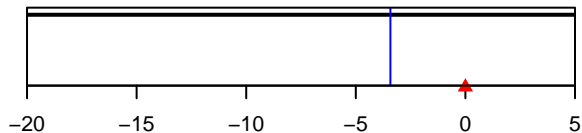
Size\_95%width\_FISHERY(1)



LnQ\_base\_FISHERY(1)



LnQ\_base\_SURVEY2(2)



Parameter value