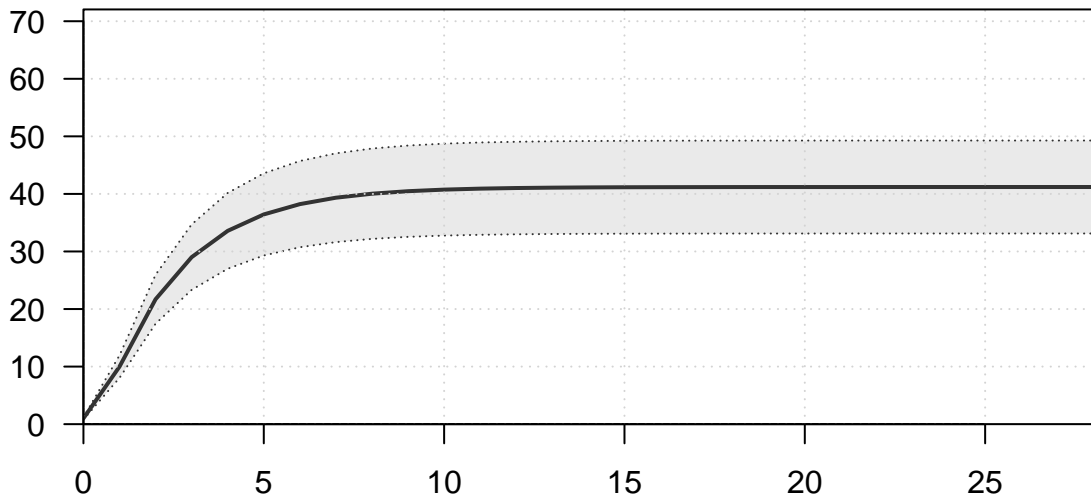
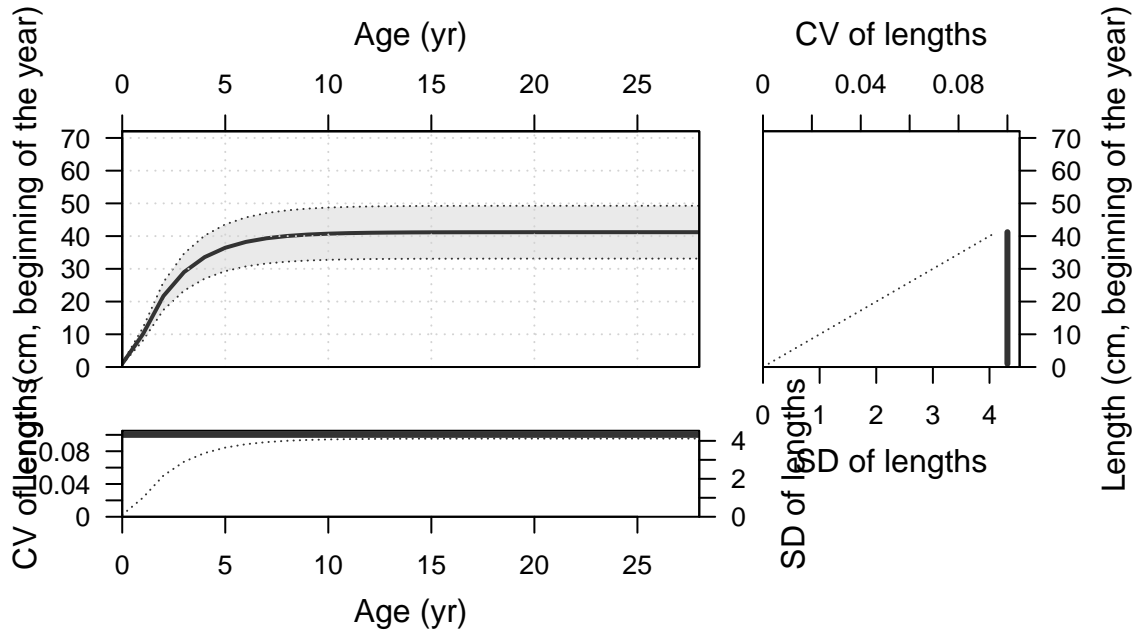


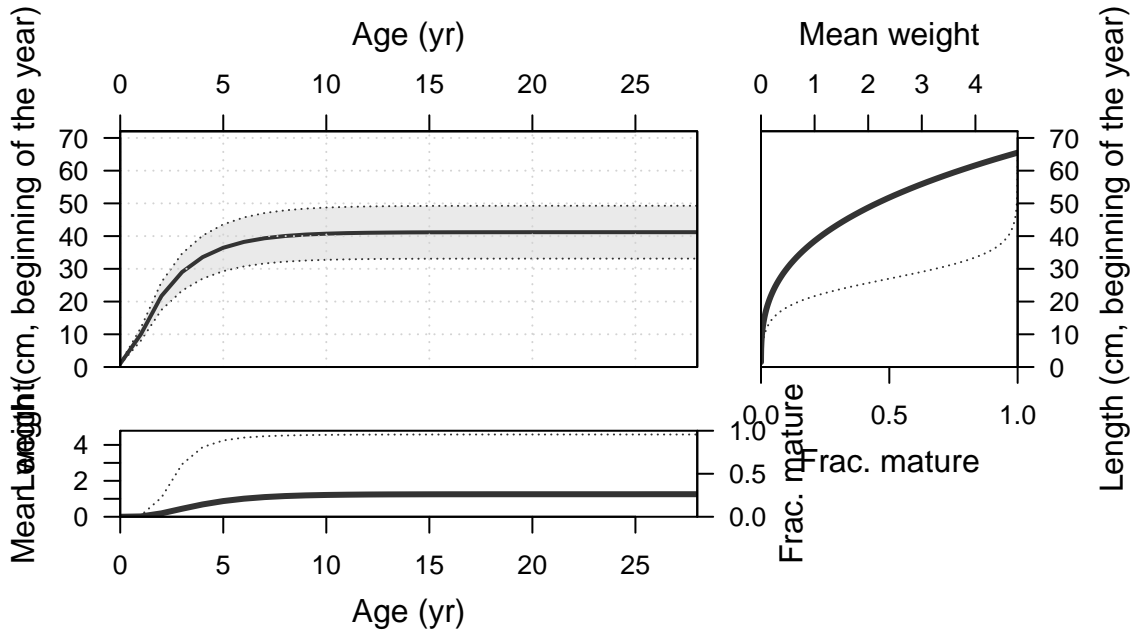
Plots created using the 'r4ss' package in R  
Stock Synthesis version: 3.30.19.0  
StartTime: Fri Jul 01 08:13:02 2022  
Data\_File: data.ss  
Control\_File: control.ss

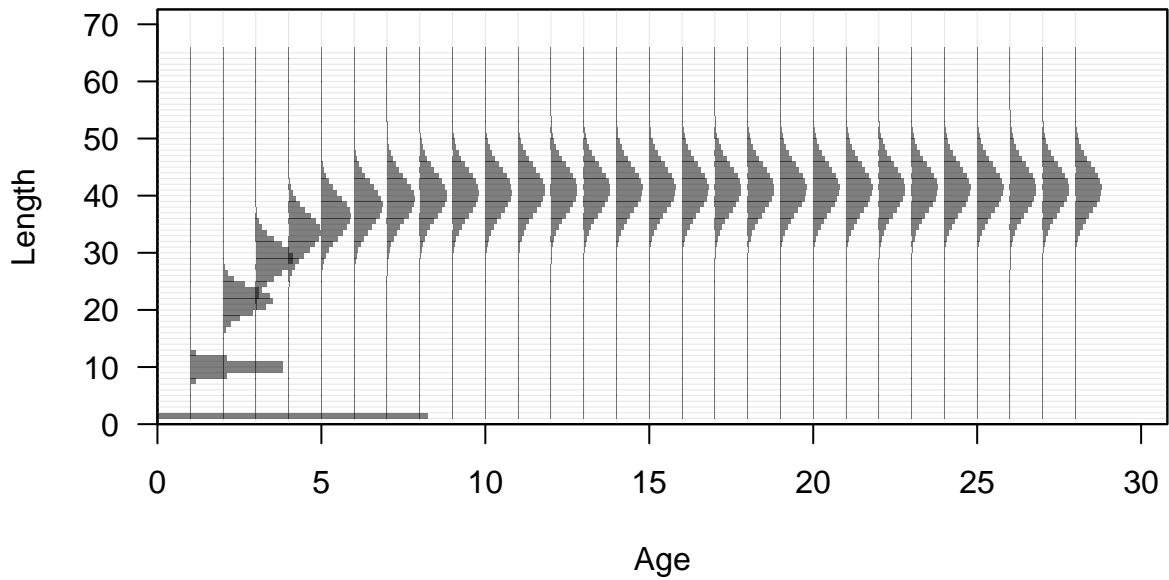
Length (cm, beginning of the year)

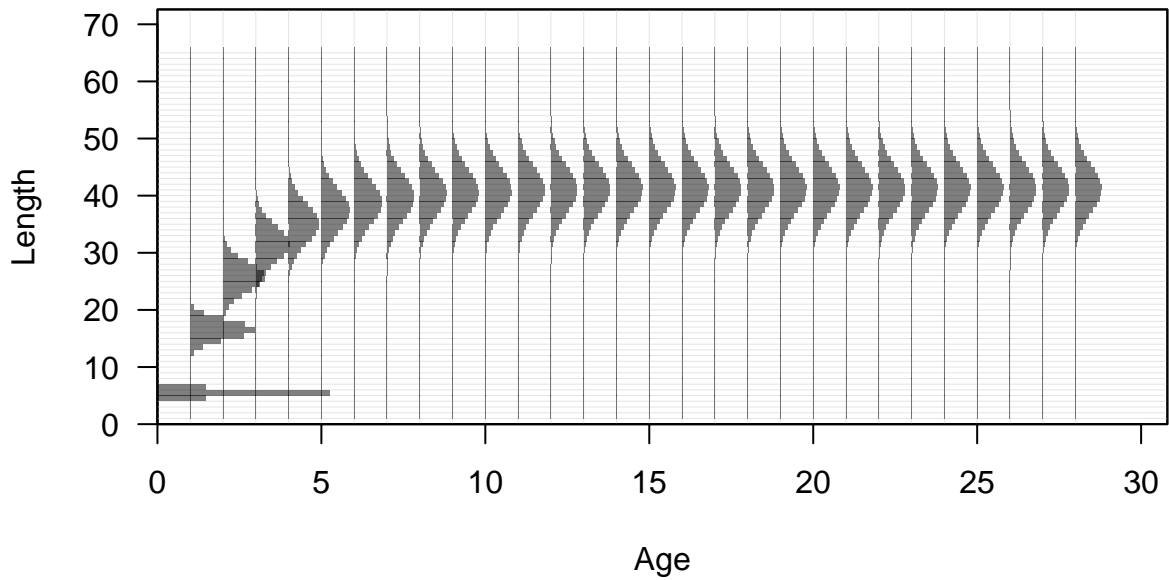


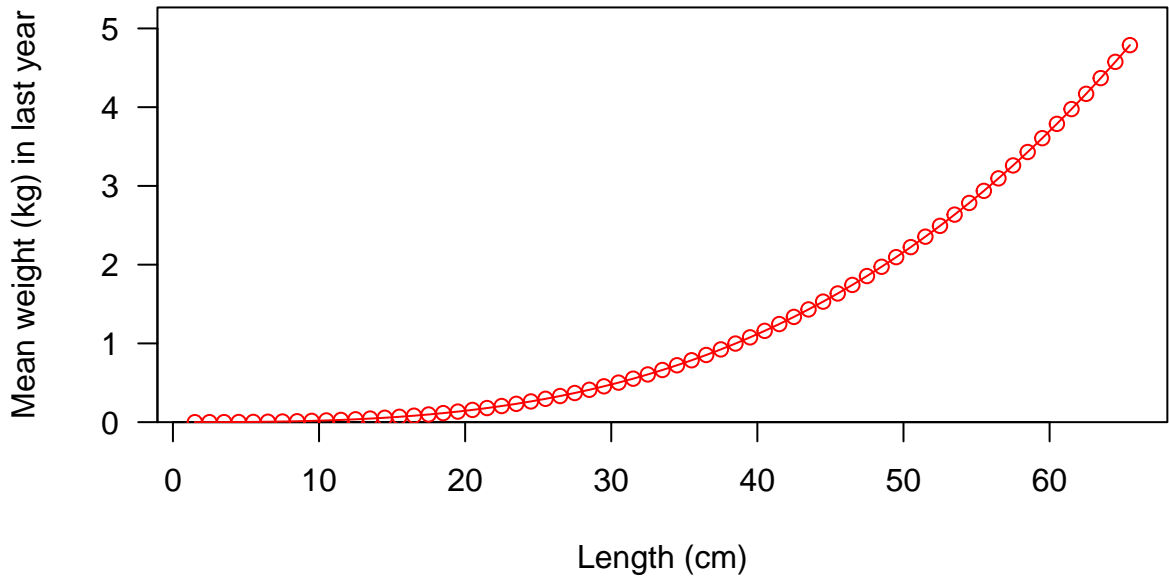
Age (yr)

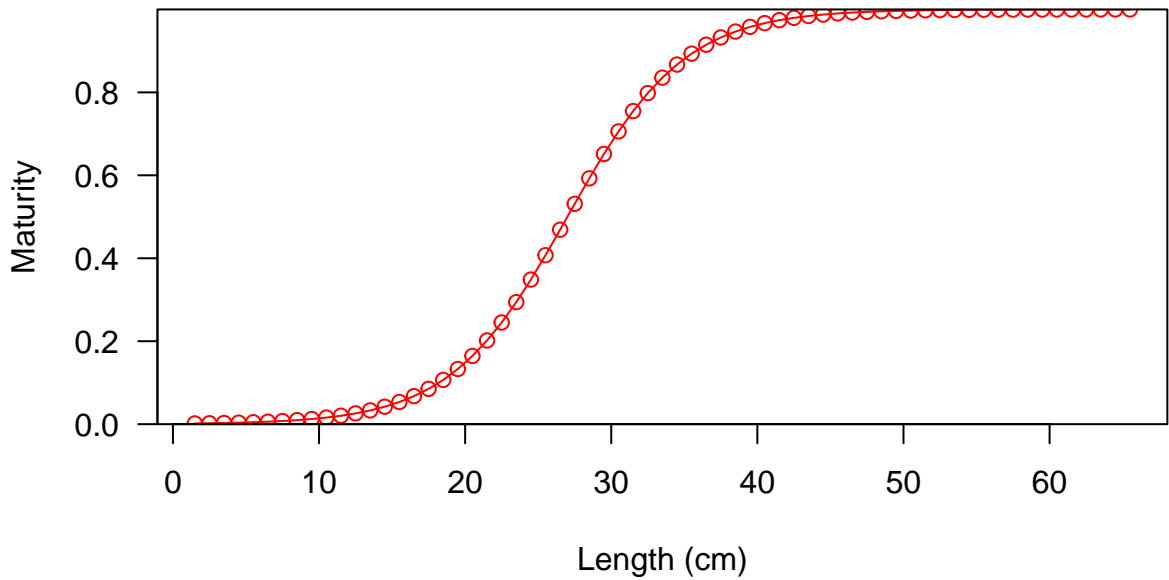




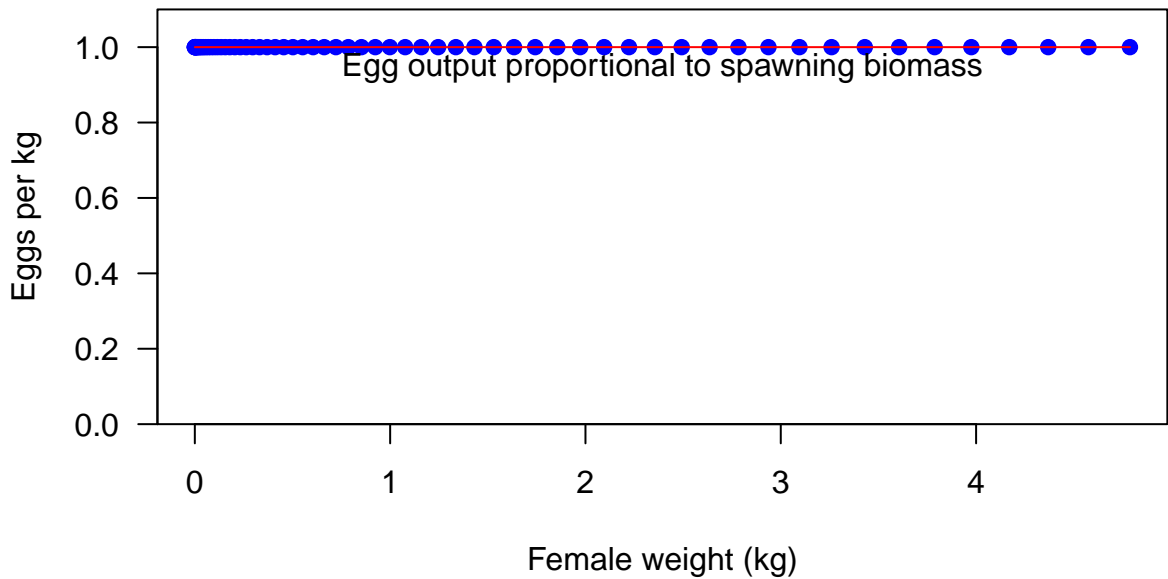




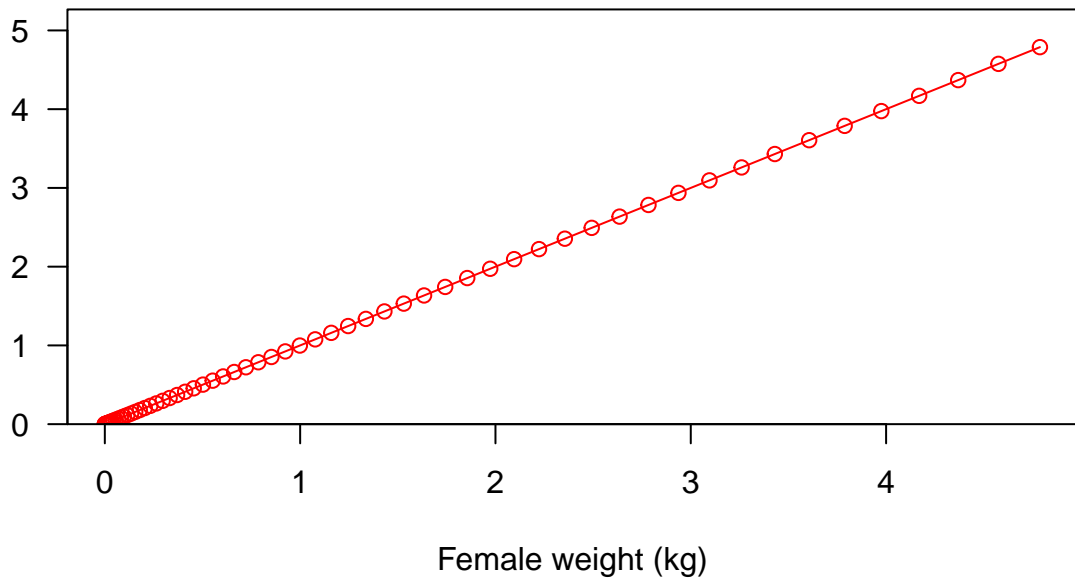




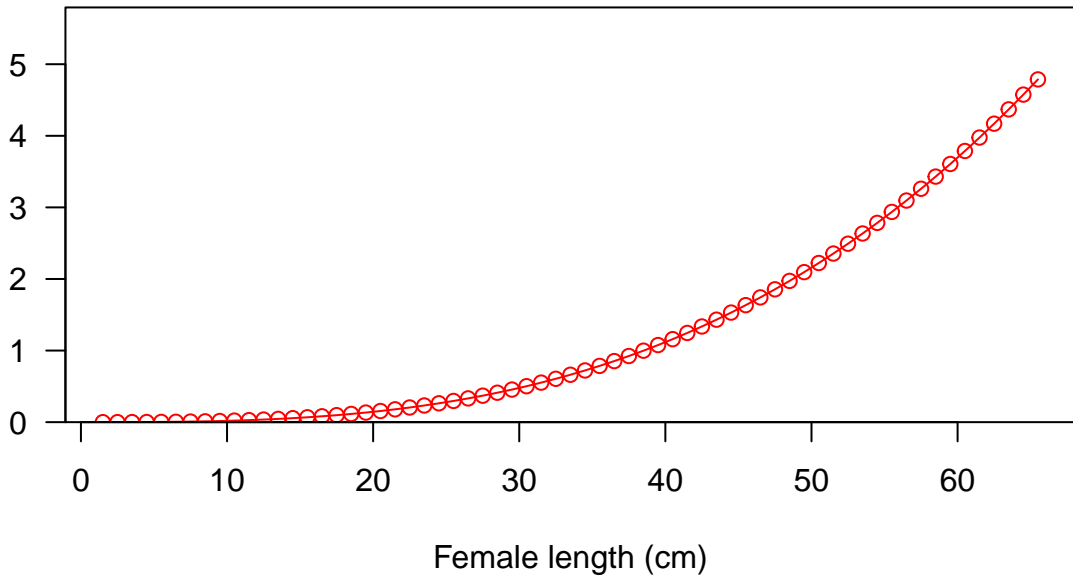




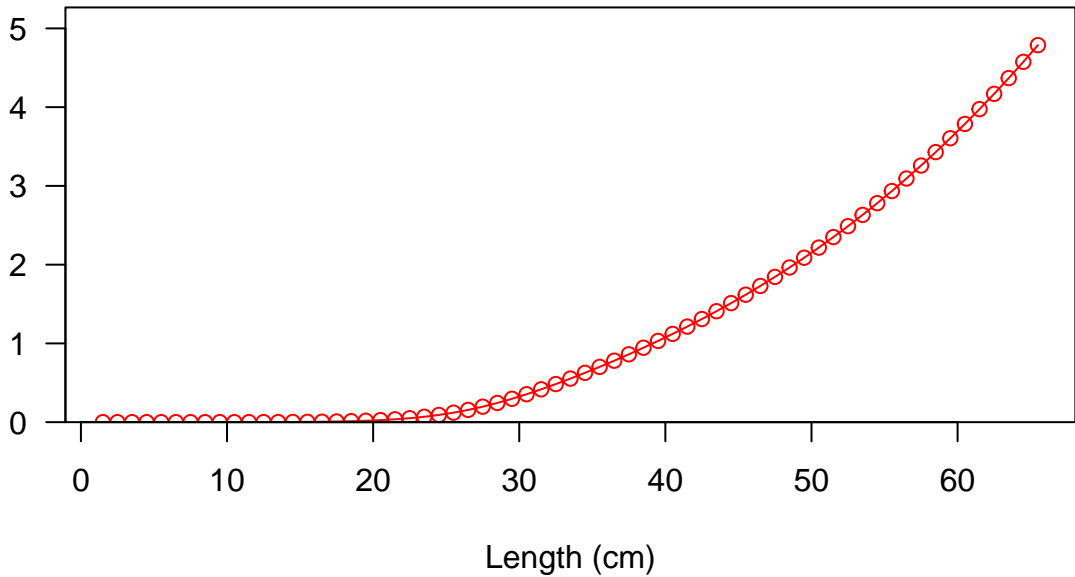
Fecundity

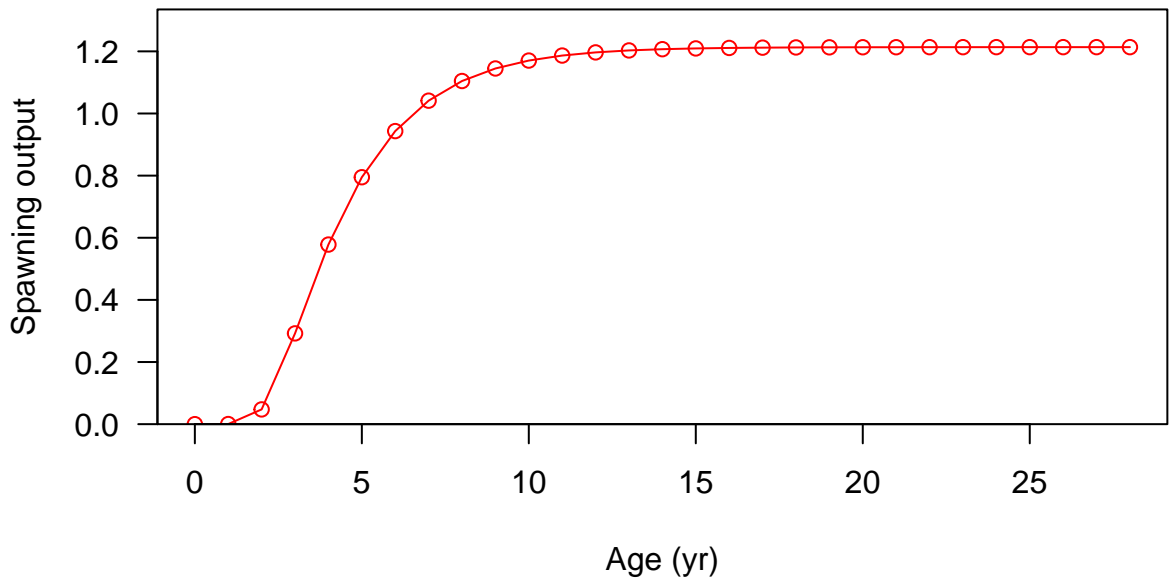


Fecundity

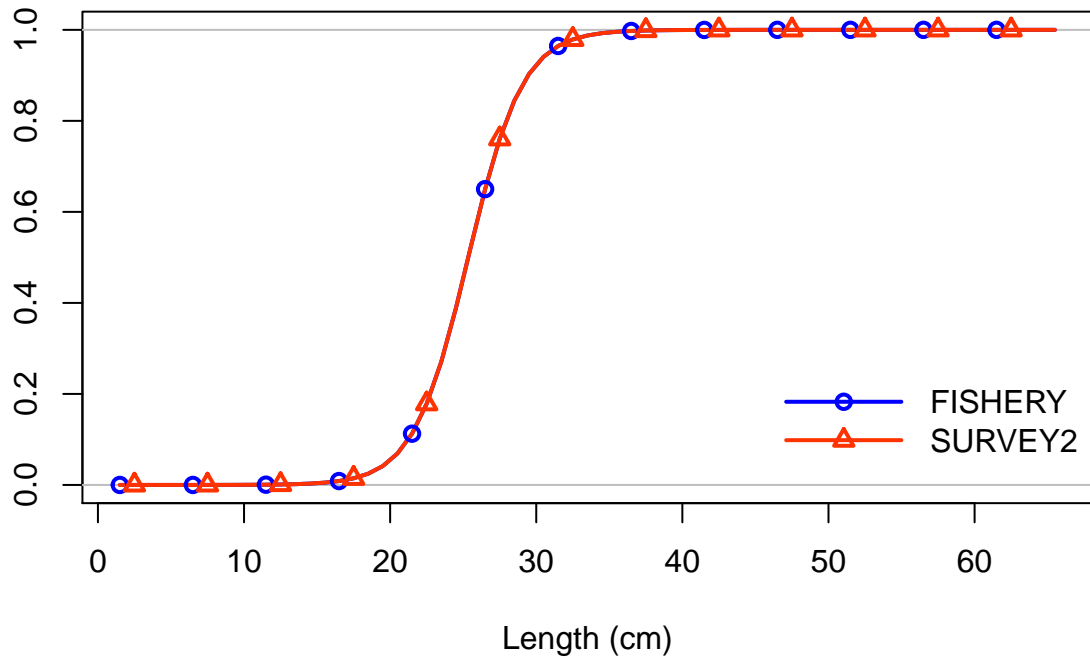


Spawning output

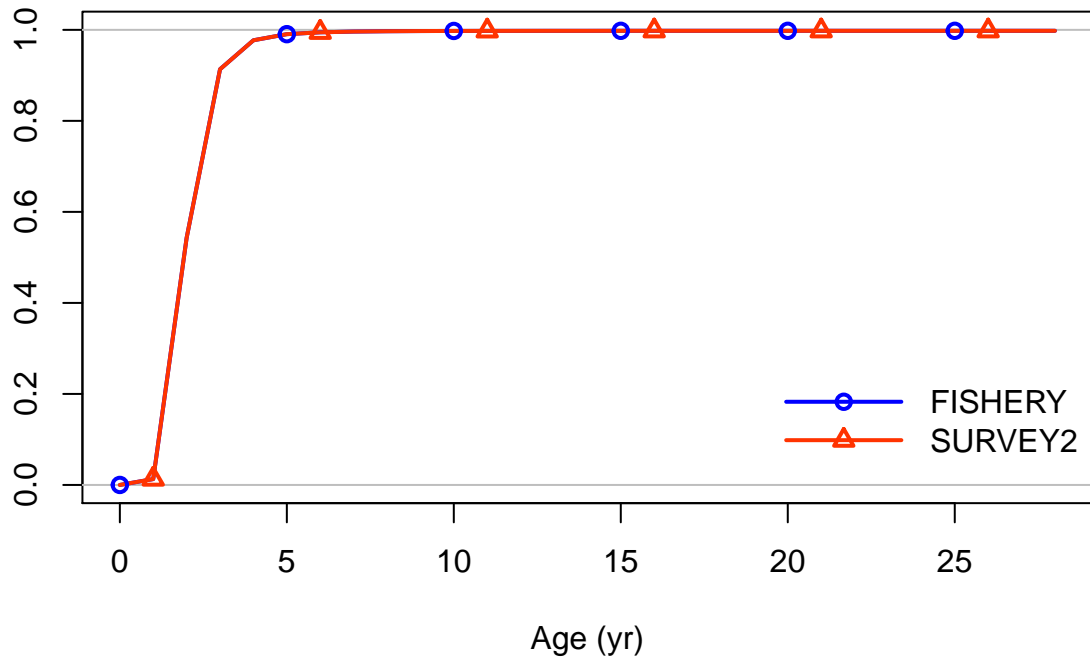




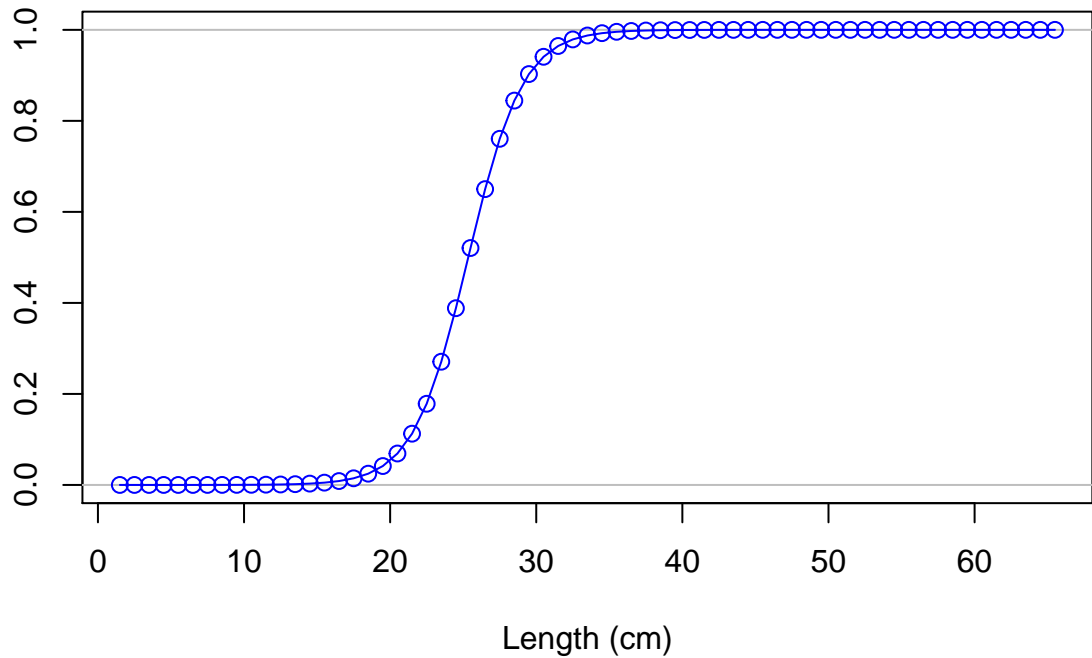
Selectivity



Selectivity

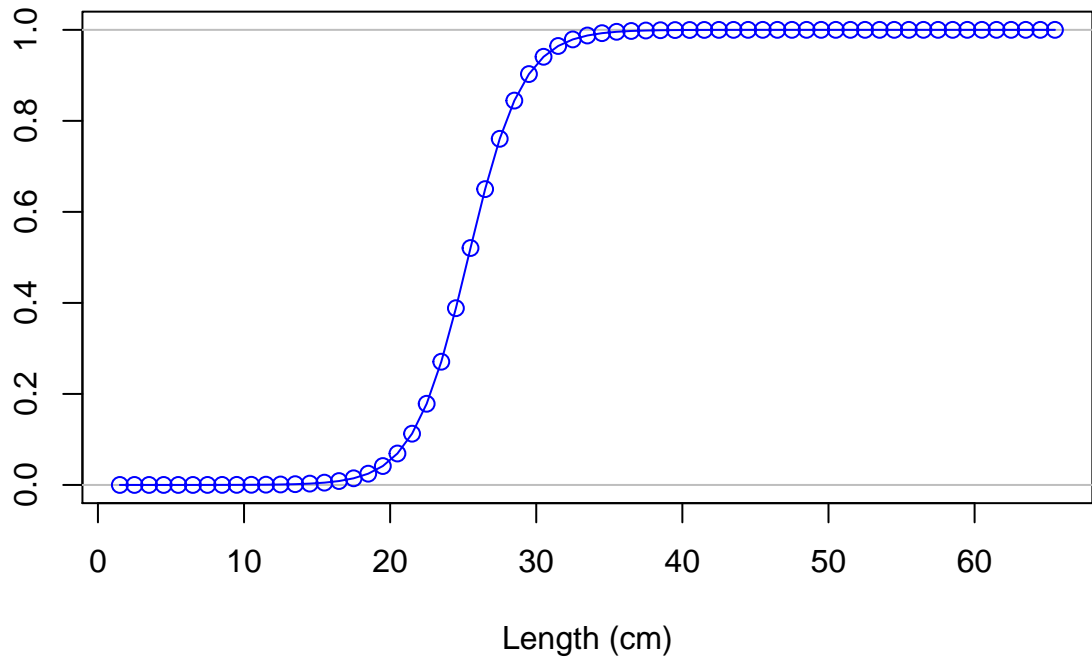


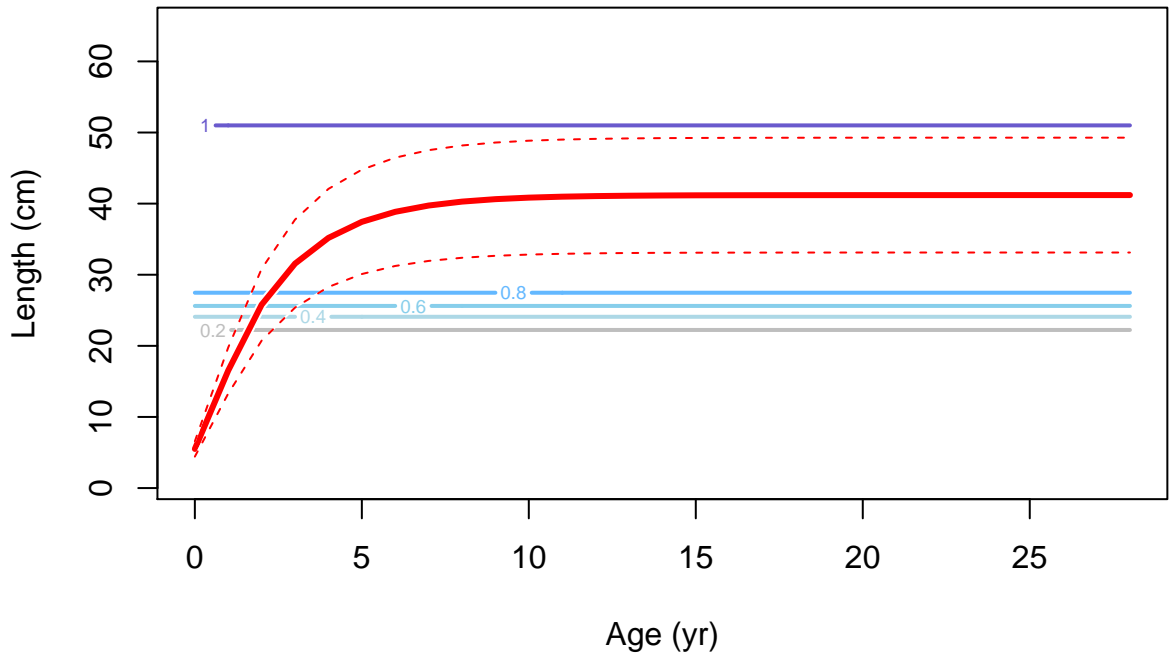
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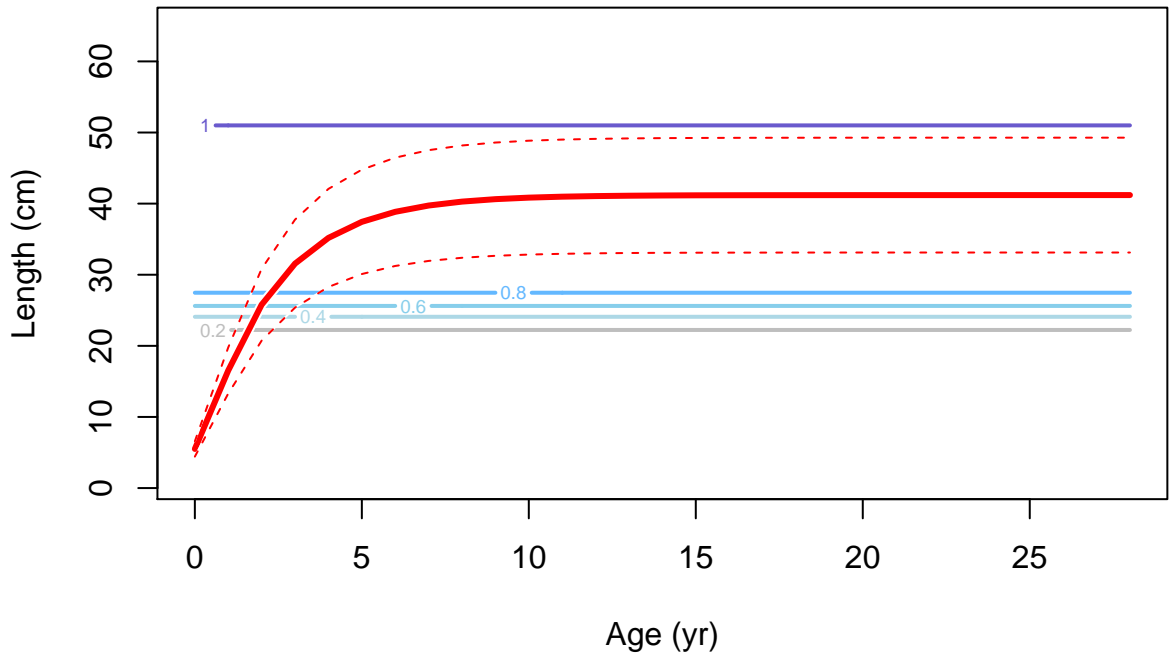


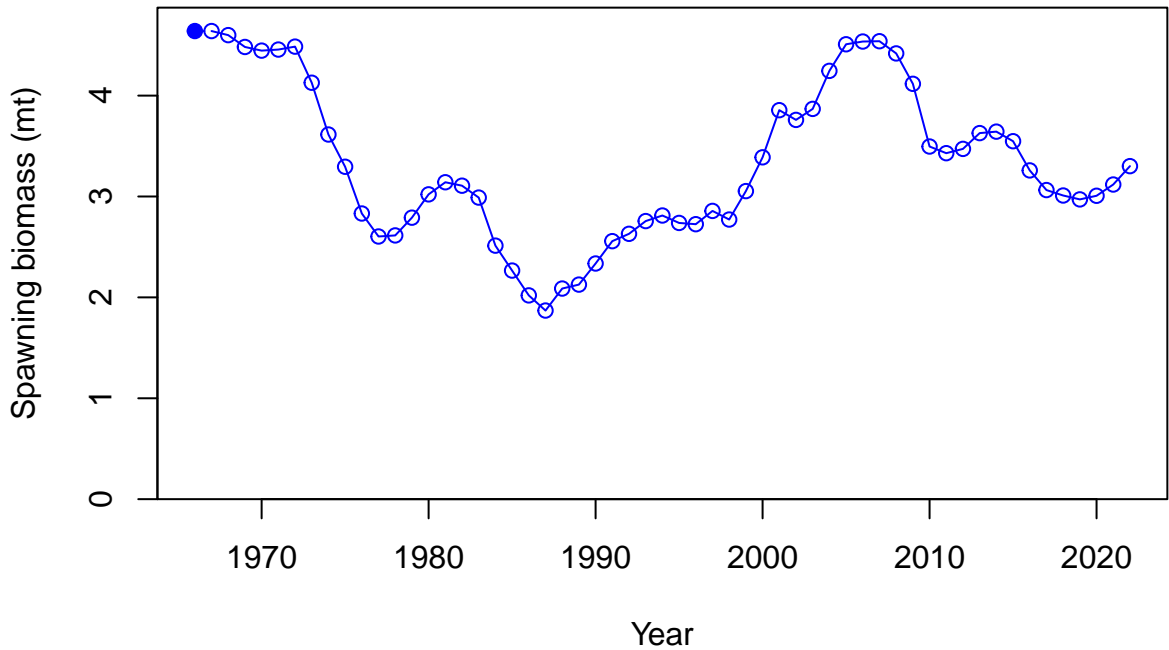


Selectivity

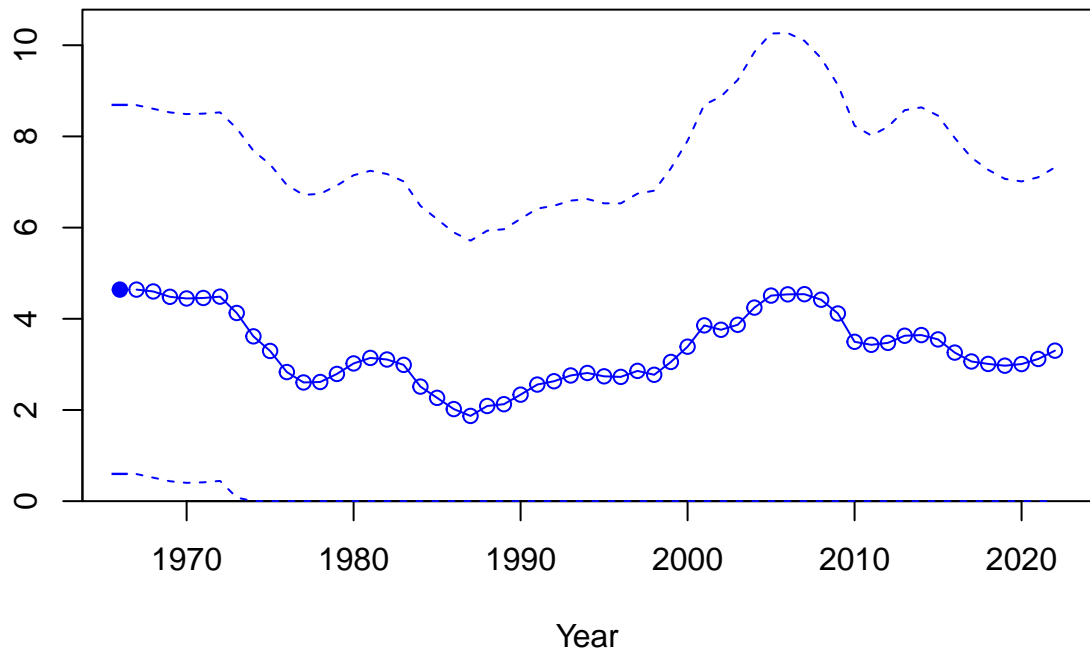




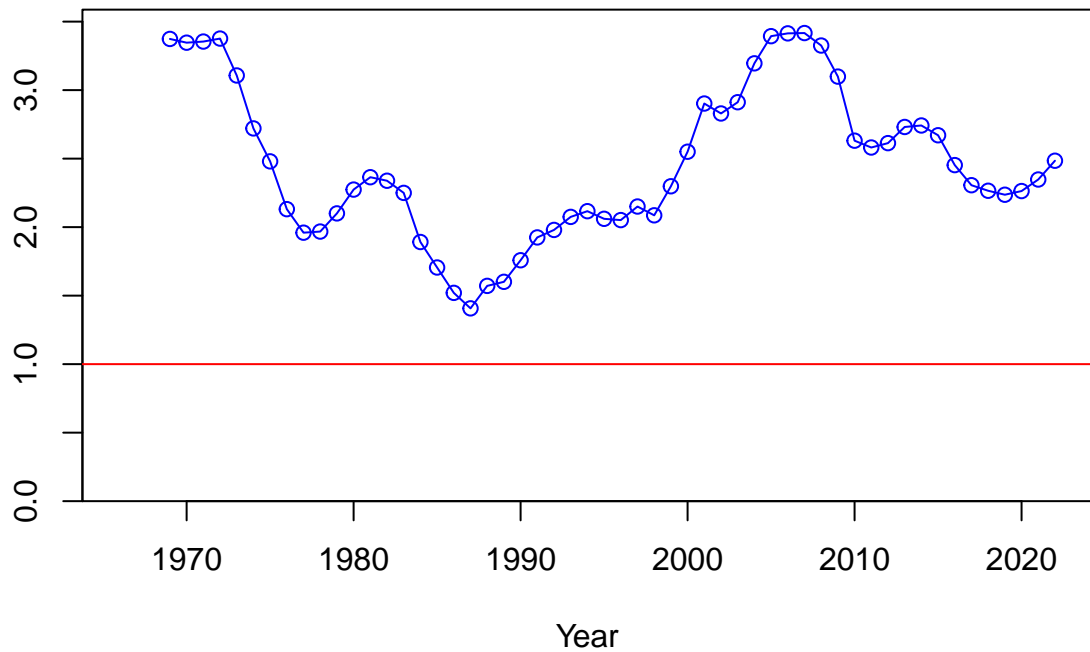




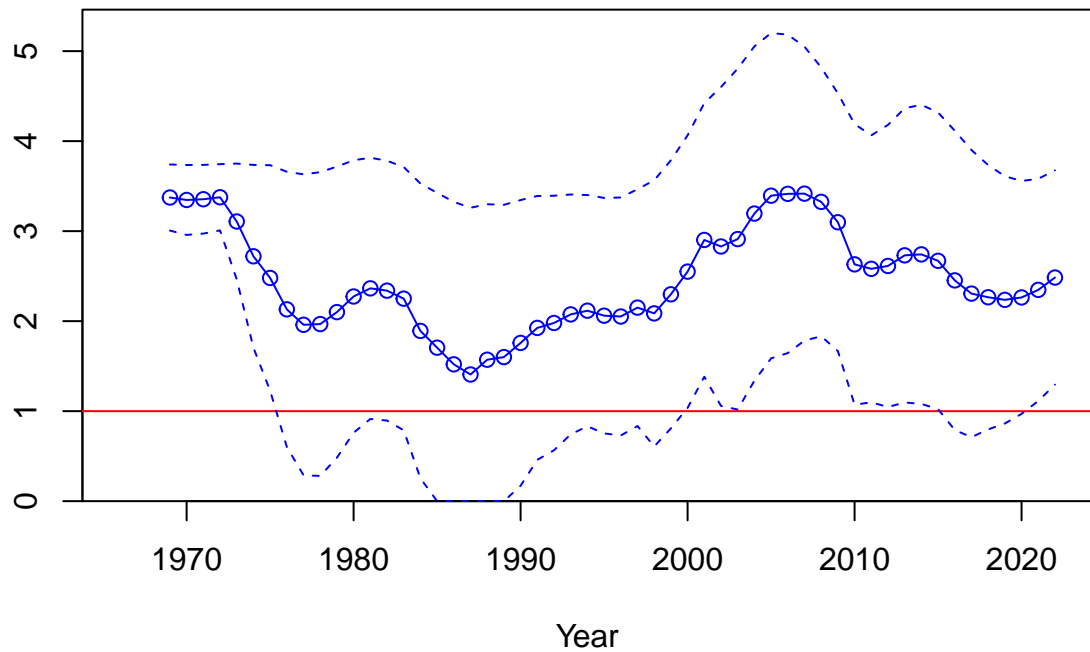
Spawning biomass (mt)

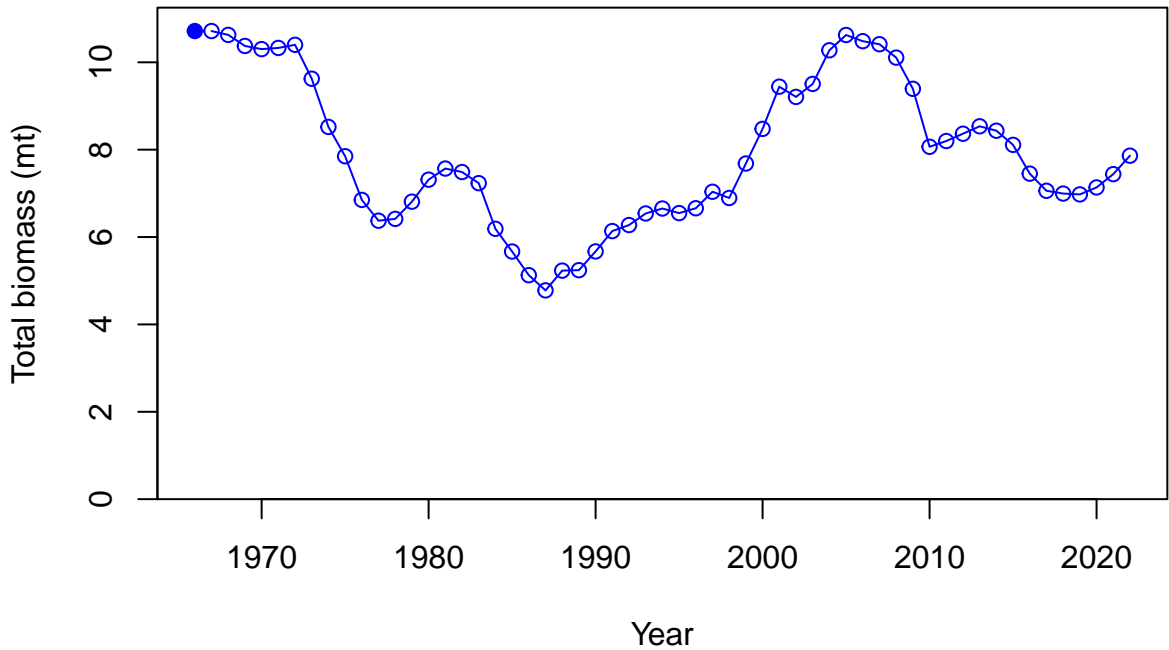


Relative spawning biomass:  $B/B_{MSY}$

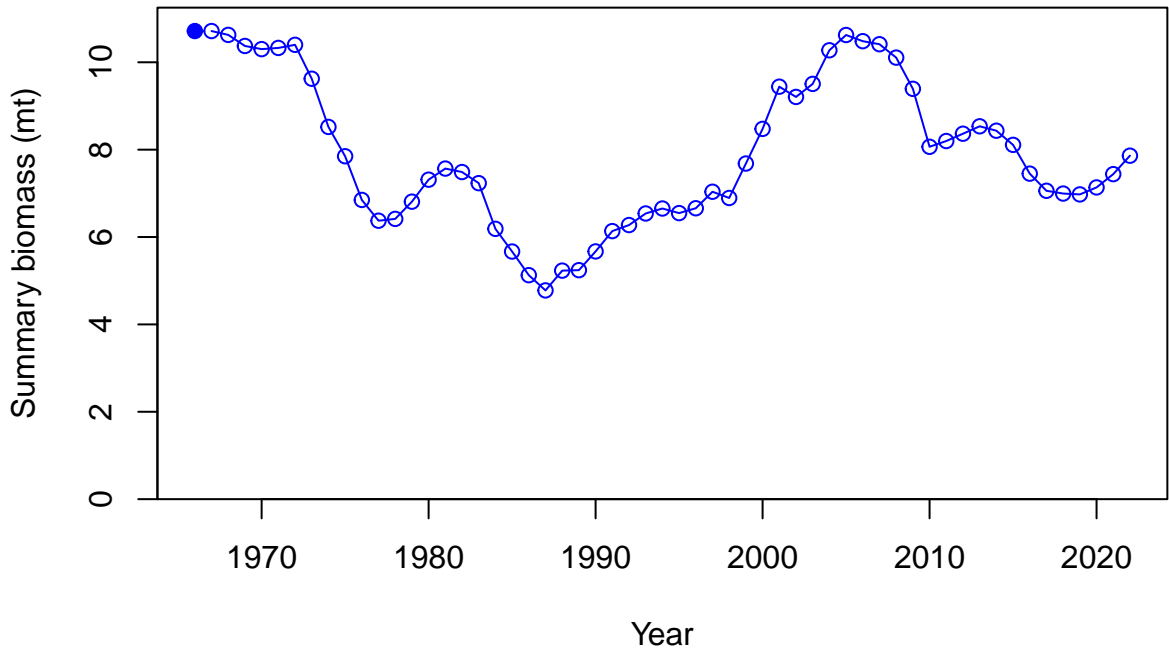


Relative spawning biomass: B/B\_MSY

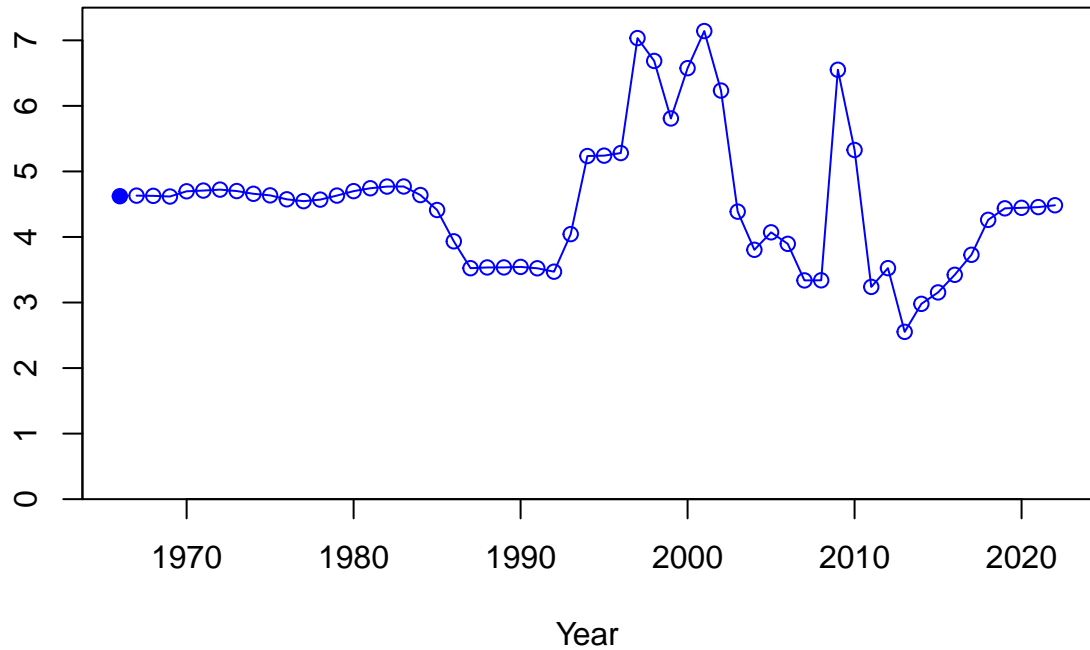




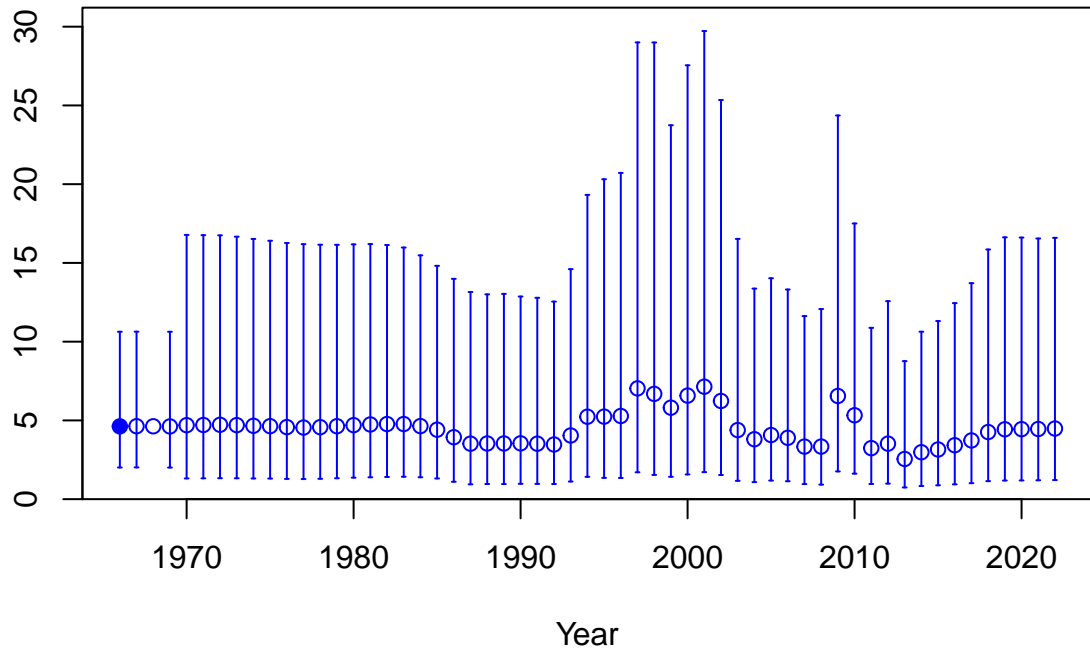




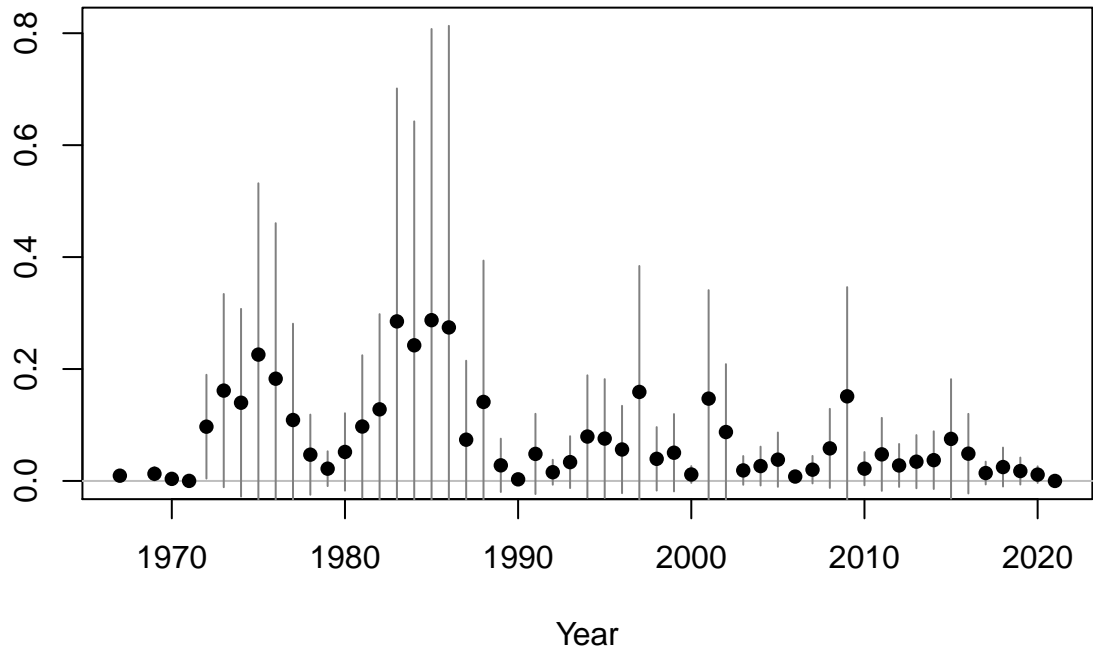
Age-0 recruits (1,000s)

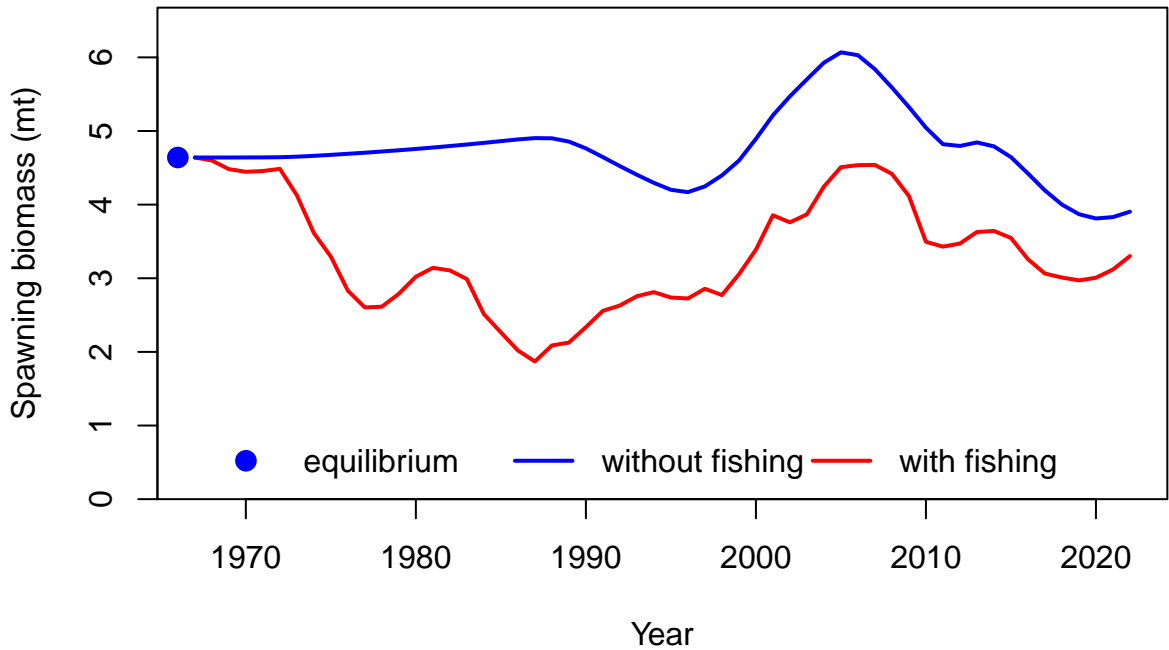


Age-0 recruits (1,000s)

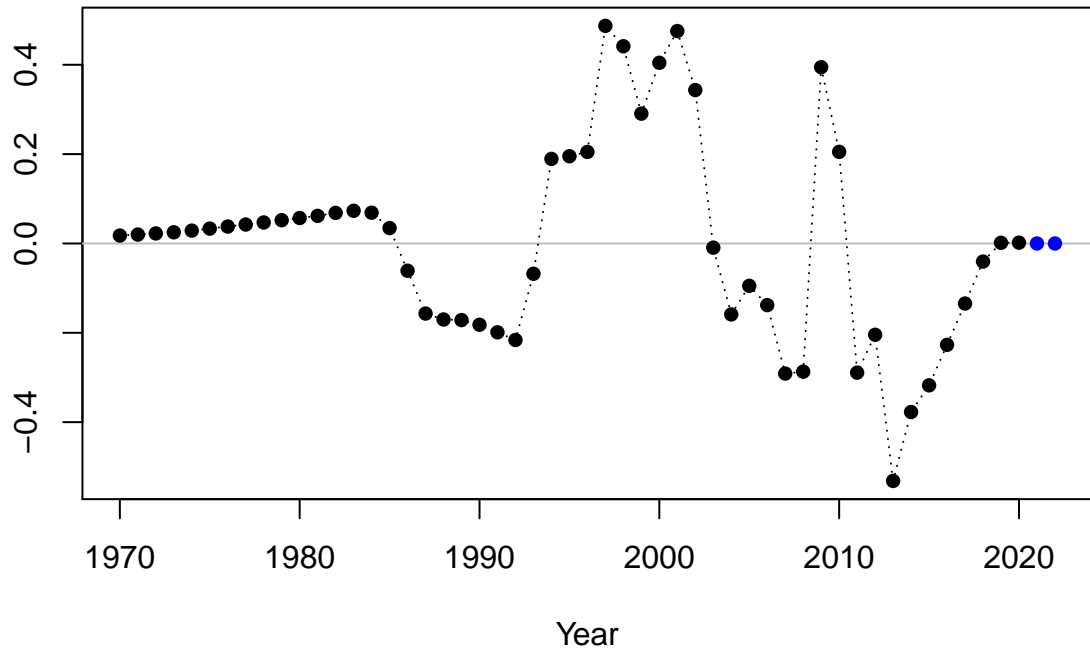


Summary Fishing Mortality

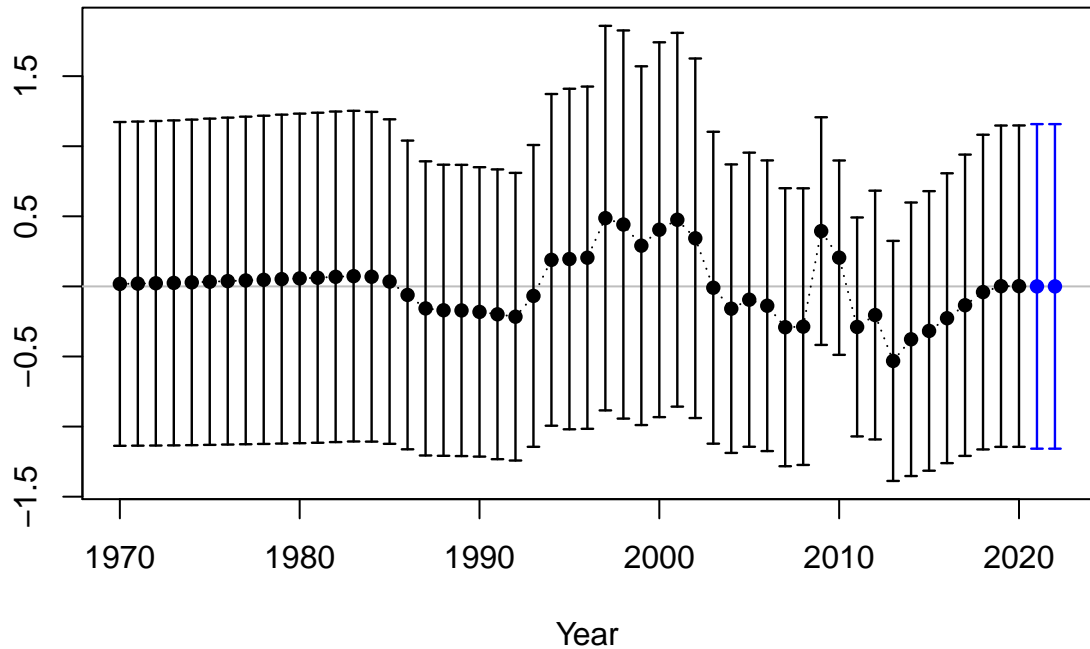




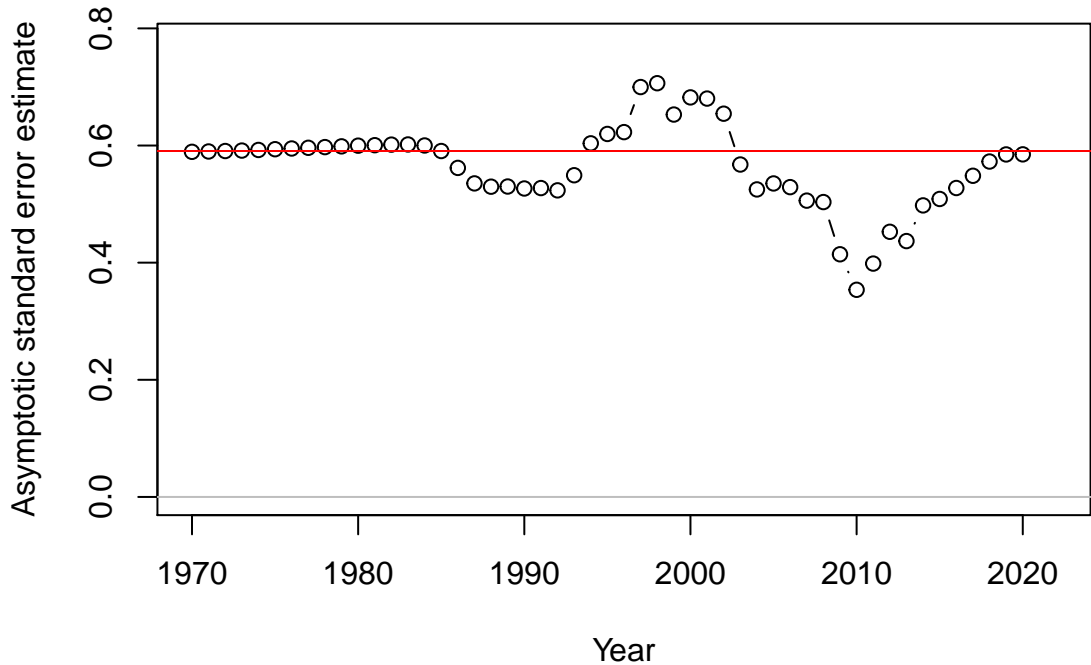
Log recruitment deviation



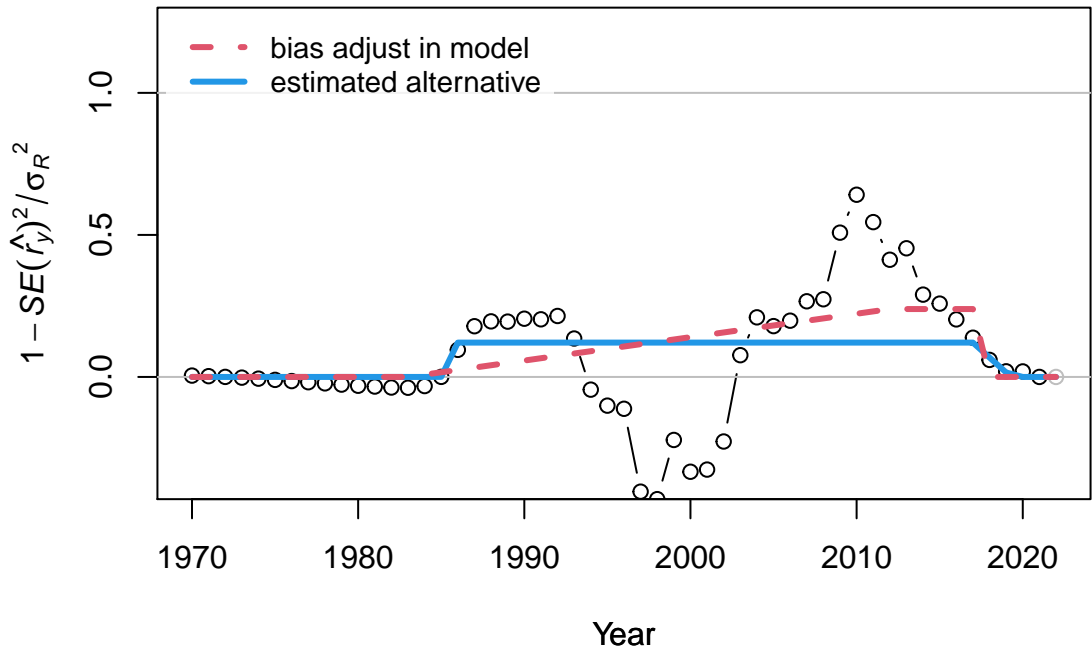
Log recruitment deviation

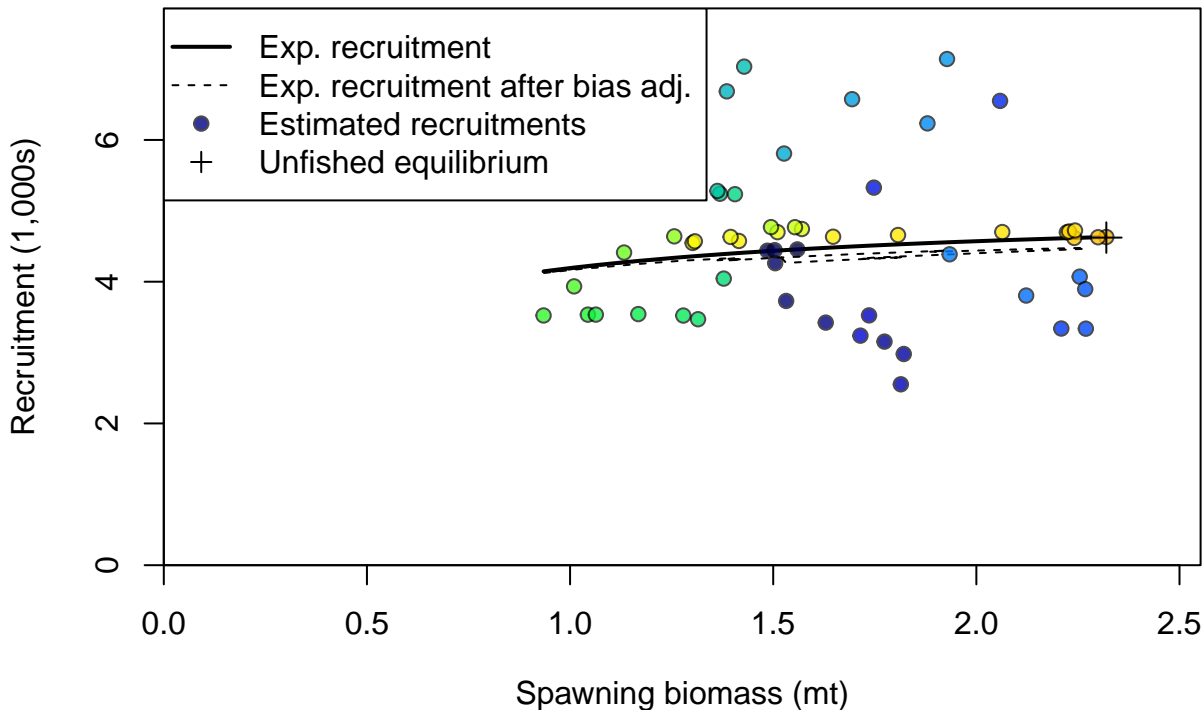


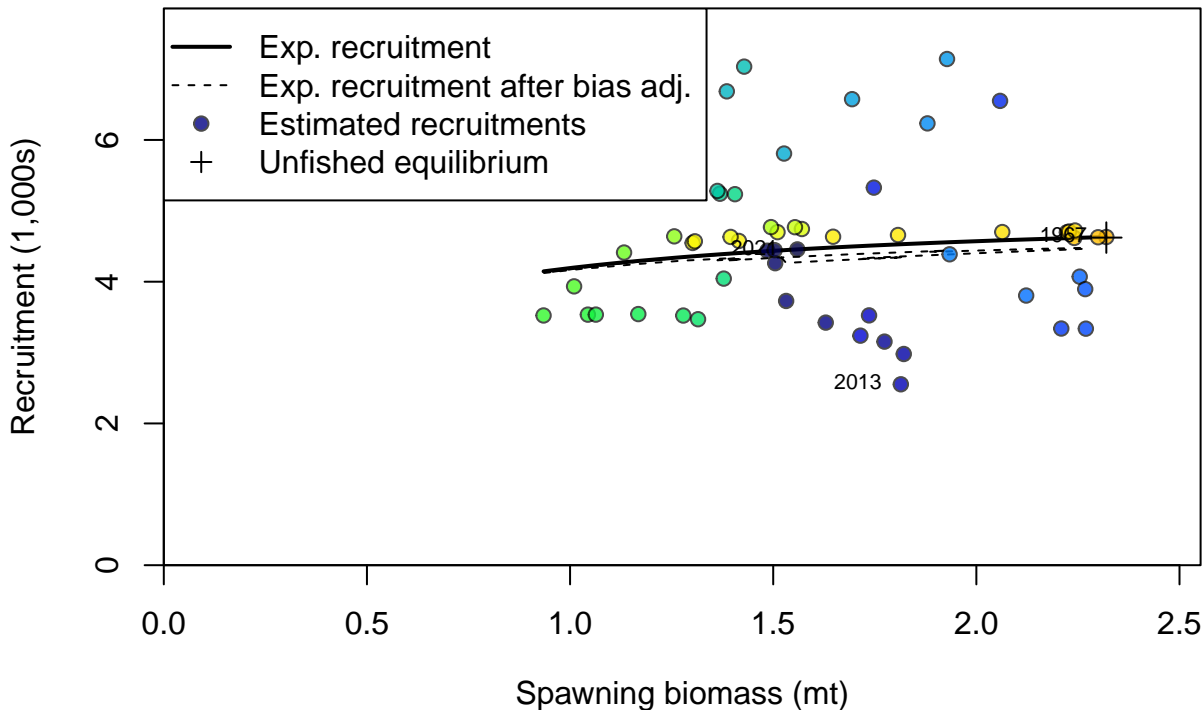
## Recruitment deviation variance



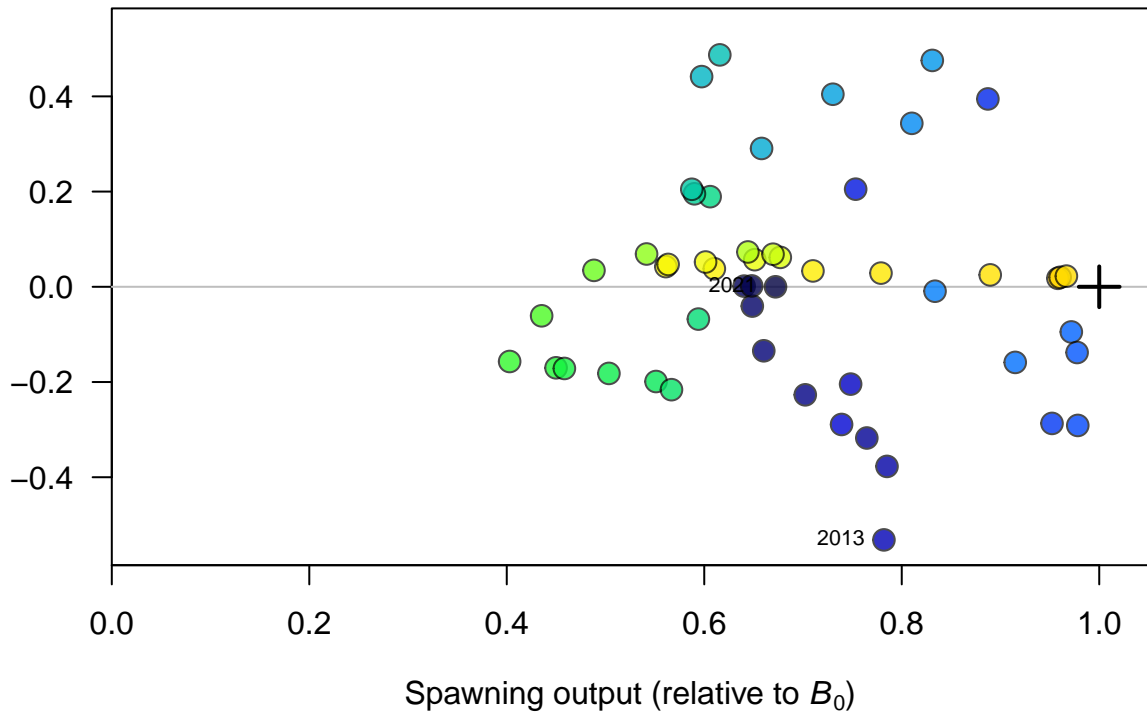


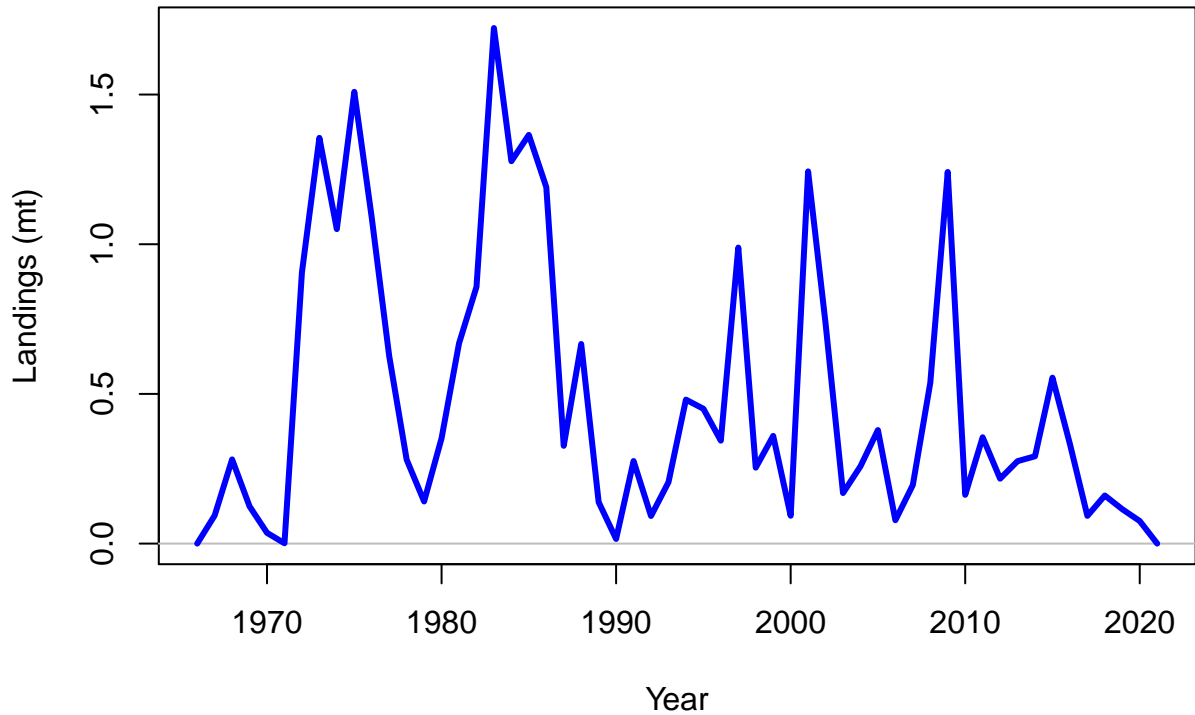


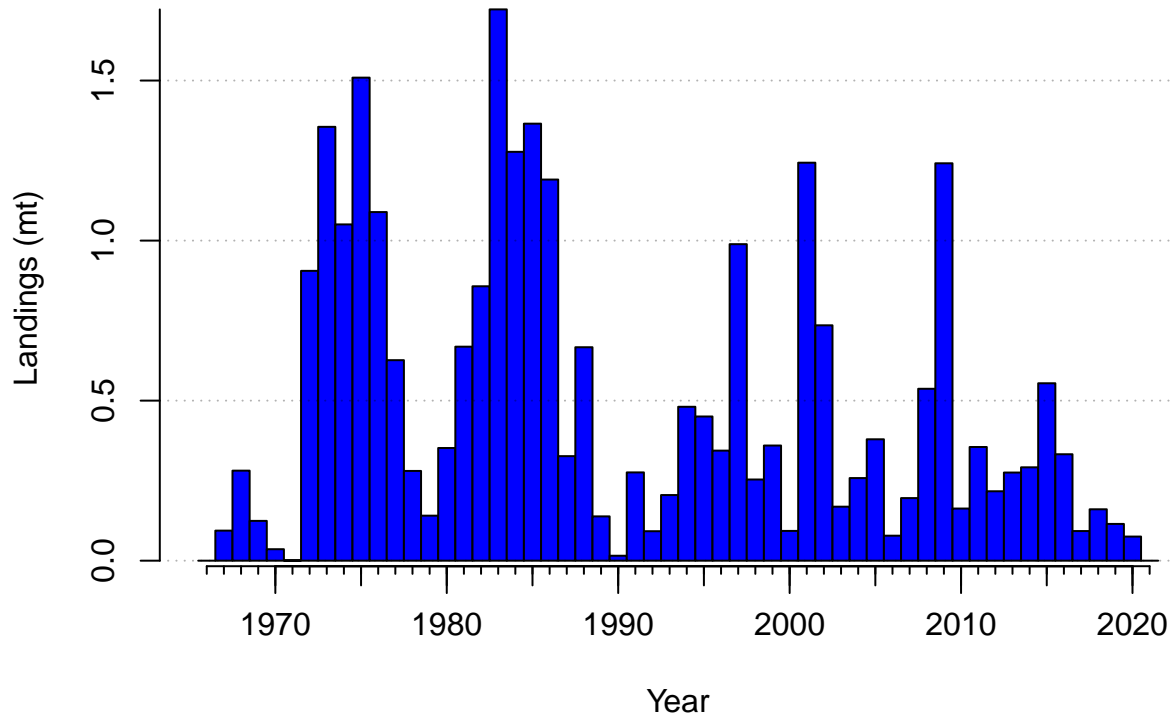


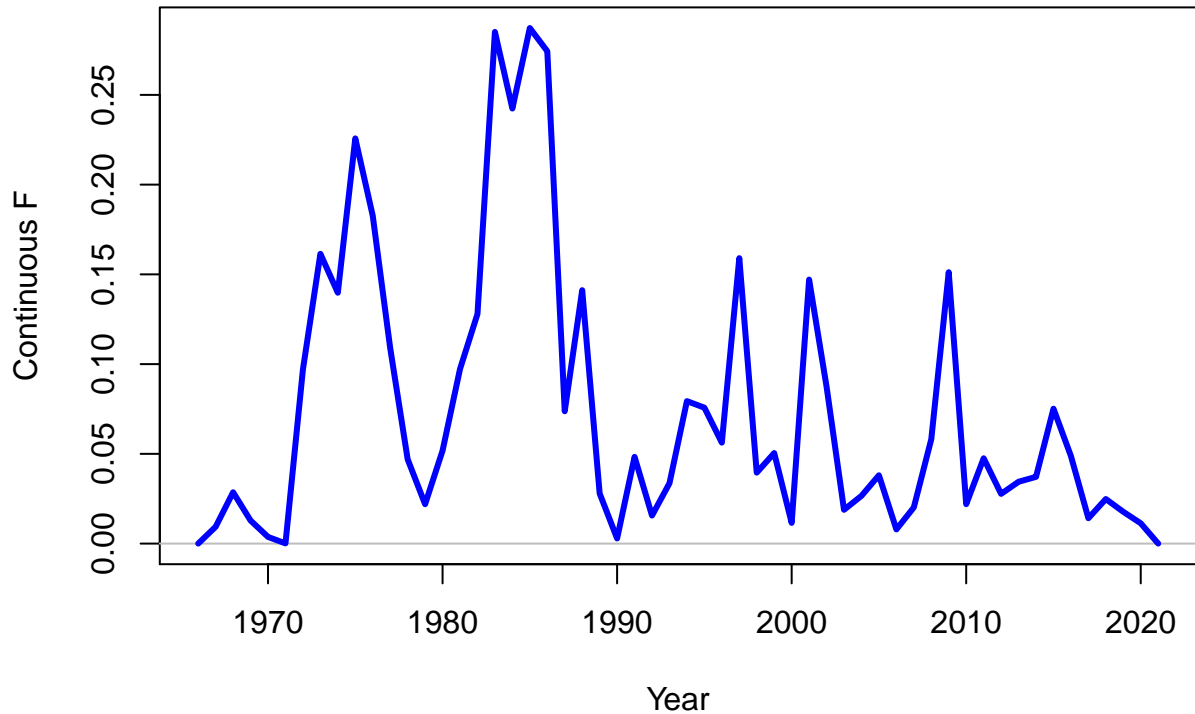


Log recruitment deviation

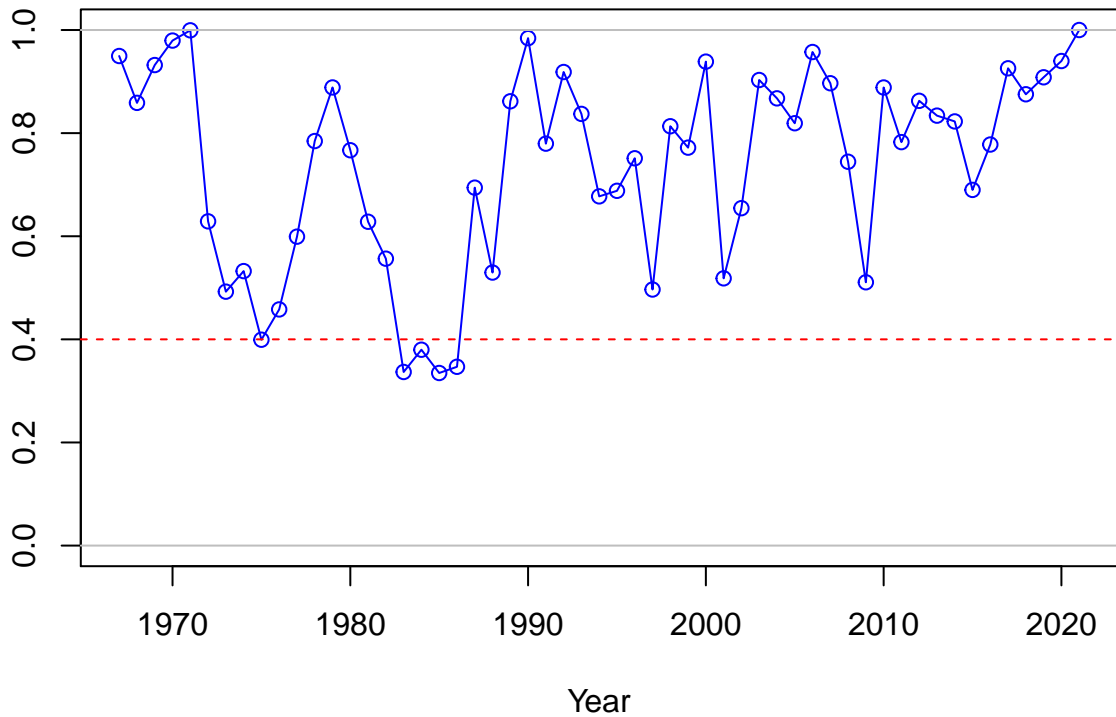






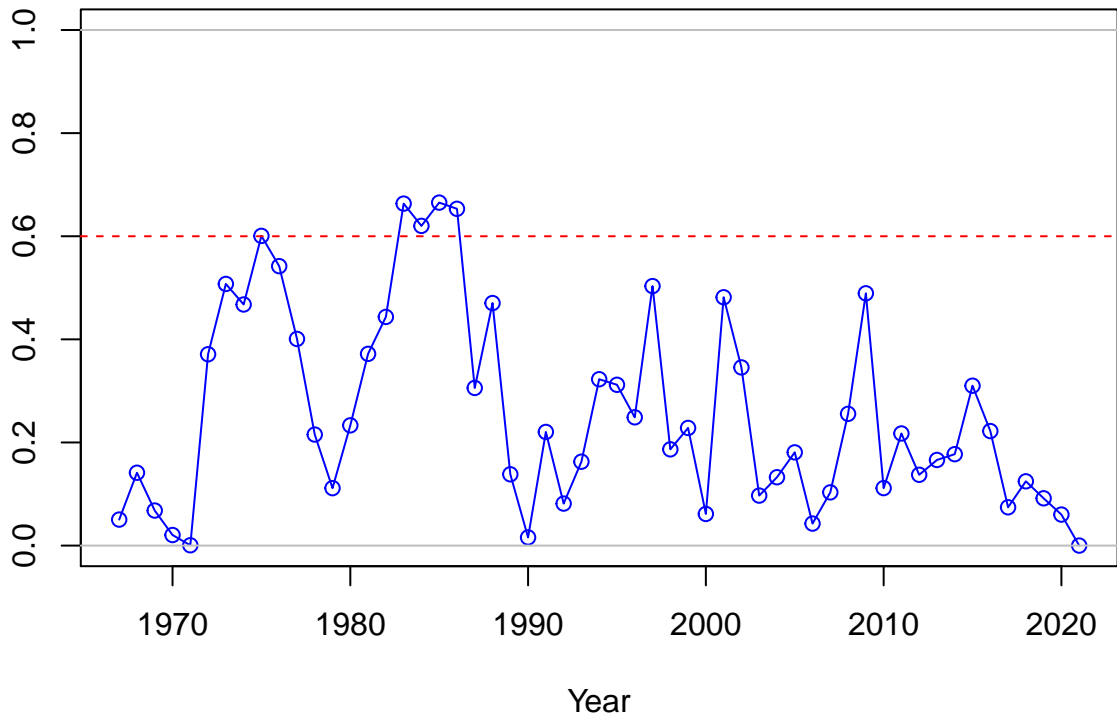


SPR

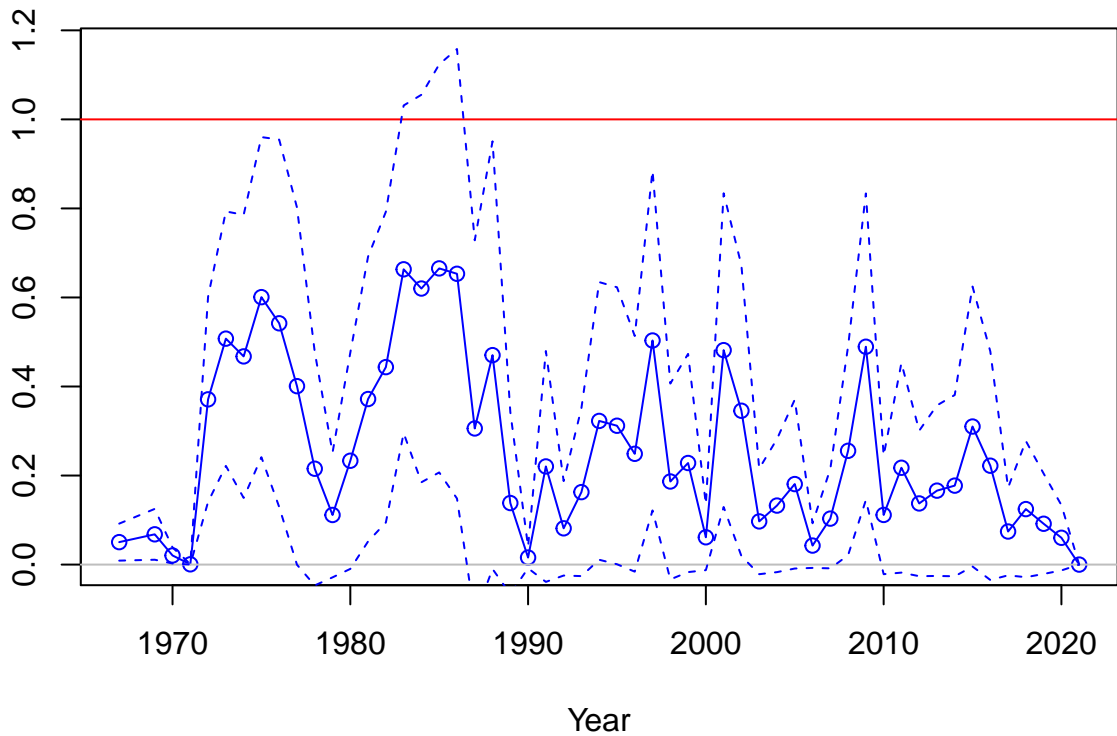




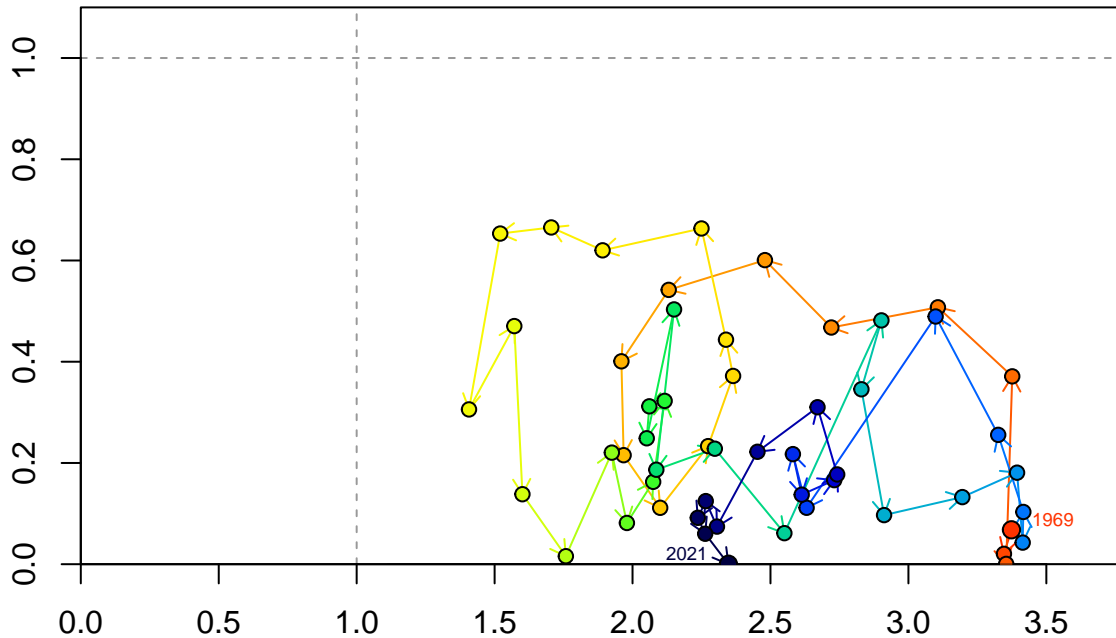
1-SPR



Fishing intensity: 1-SPR

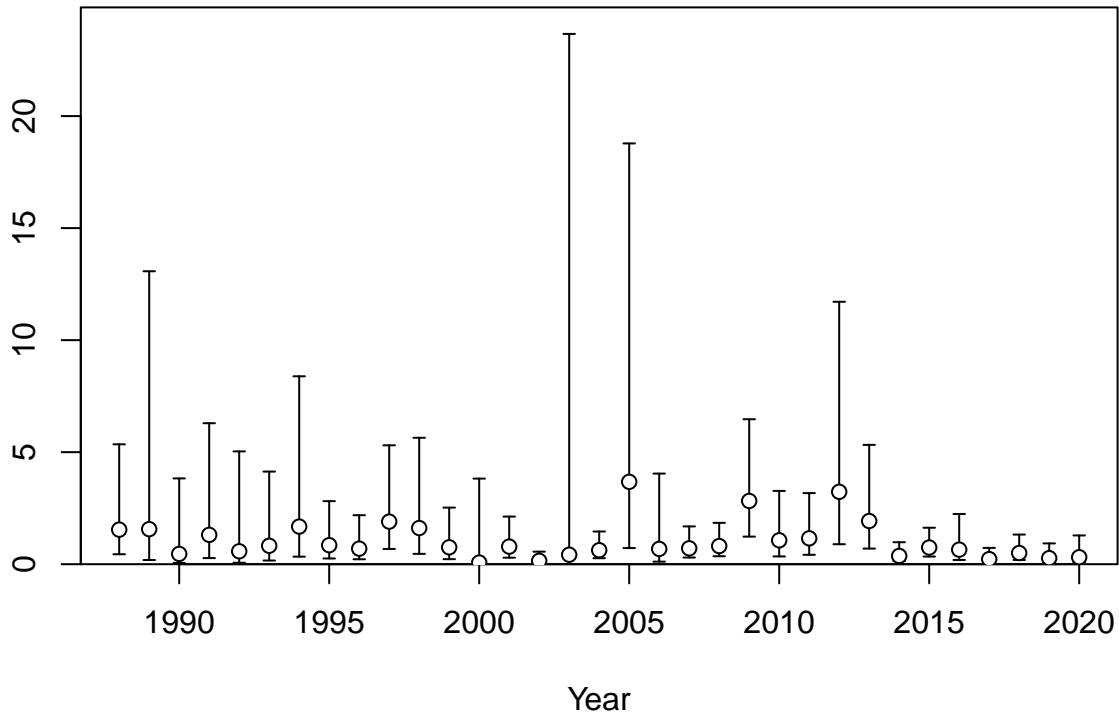


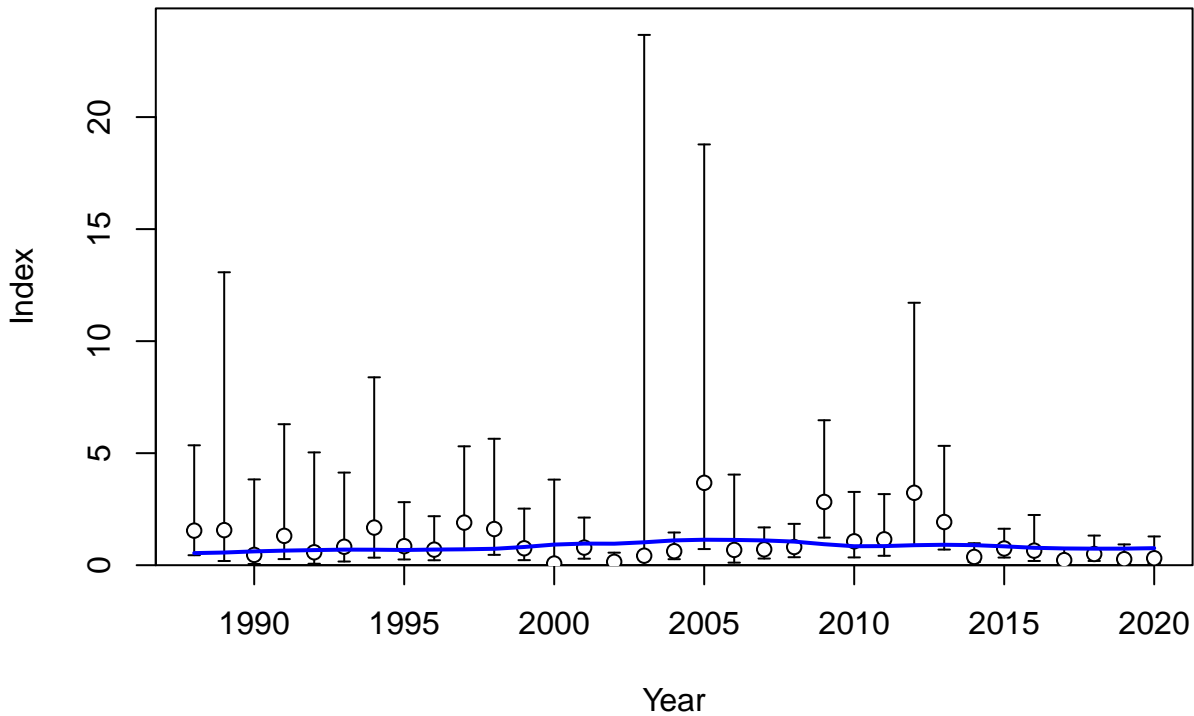
Fishing intensity: 1-SPR

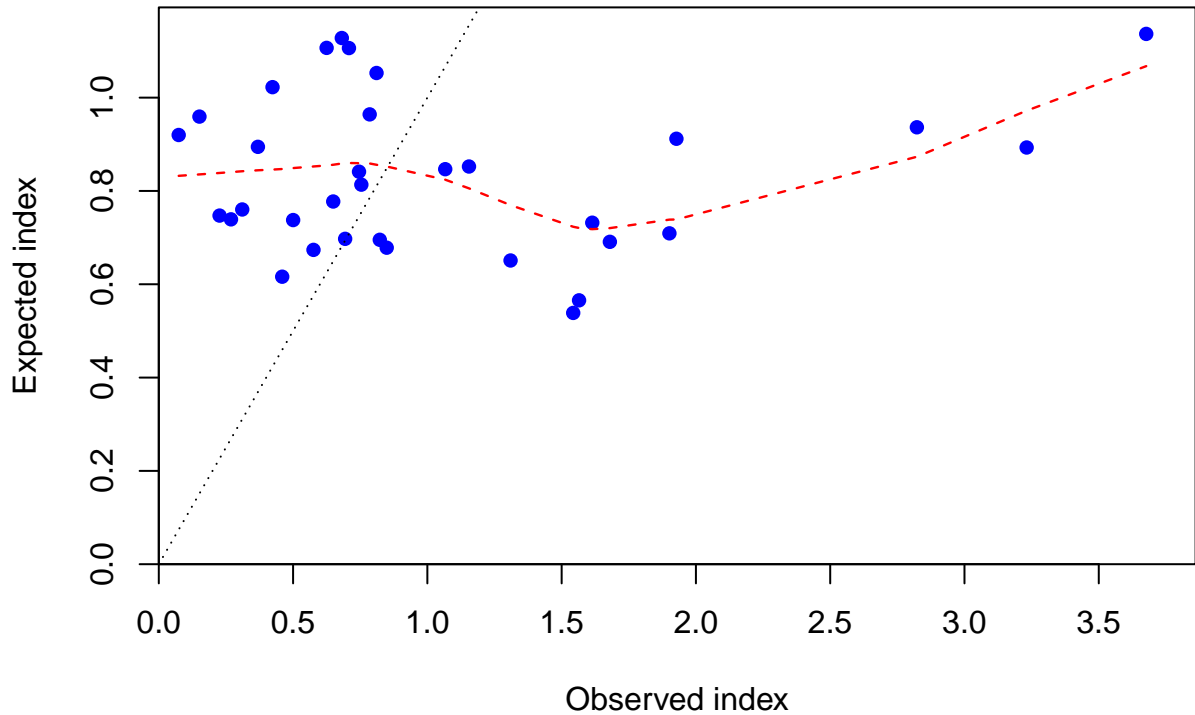


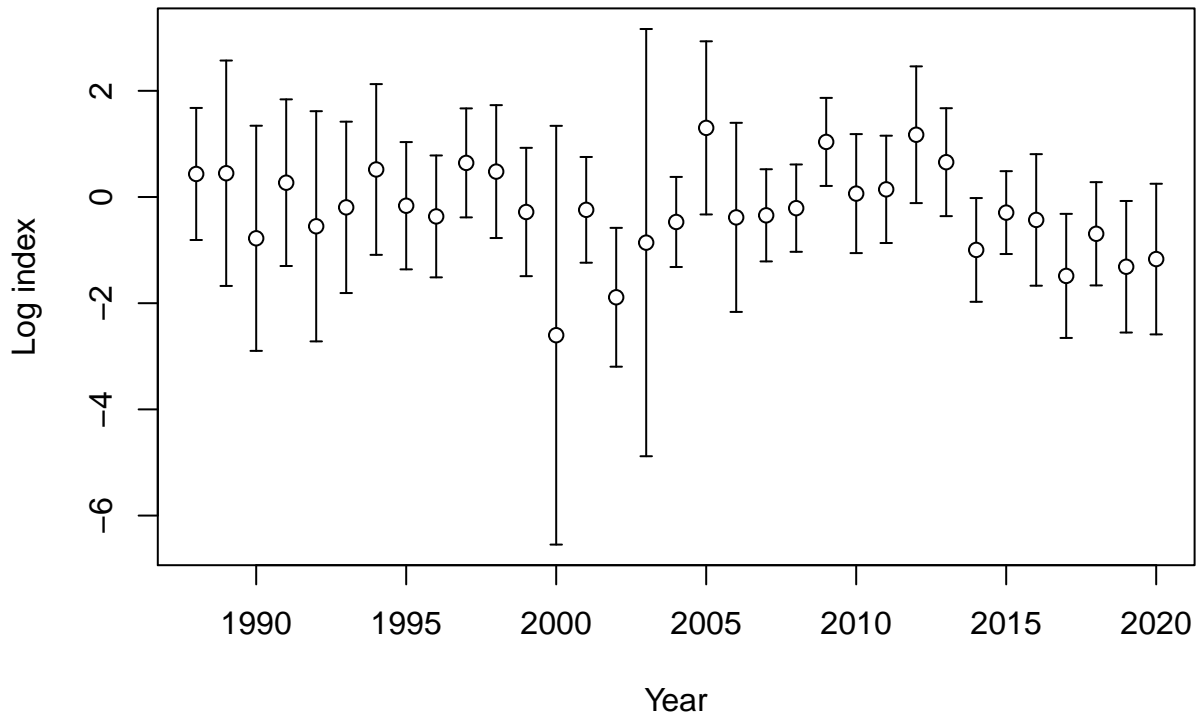
Relative spawning output: B/B\_MSY

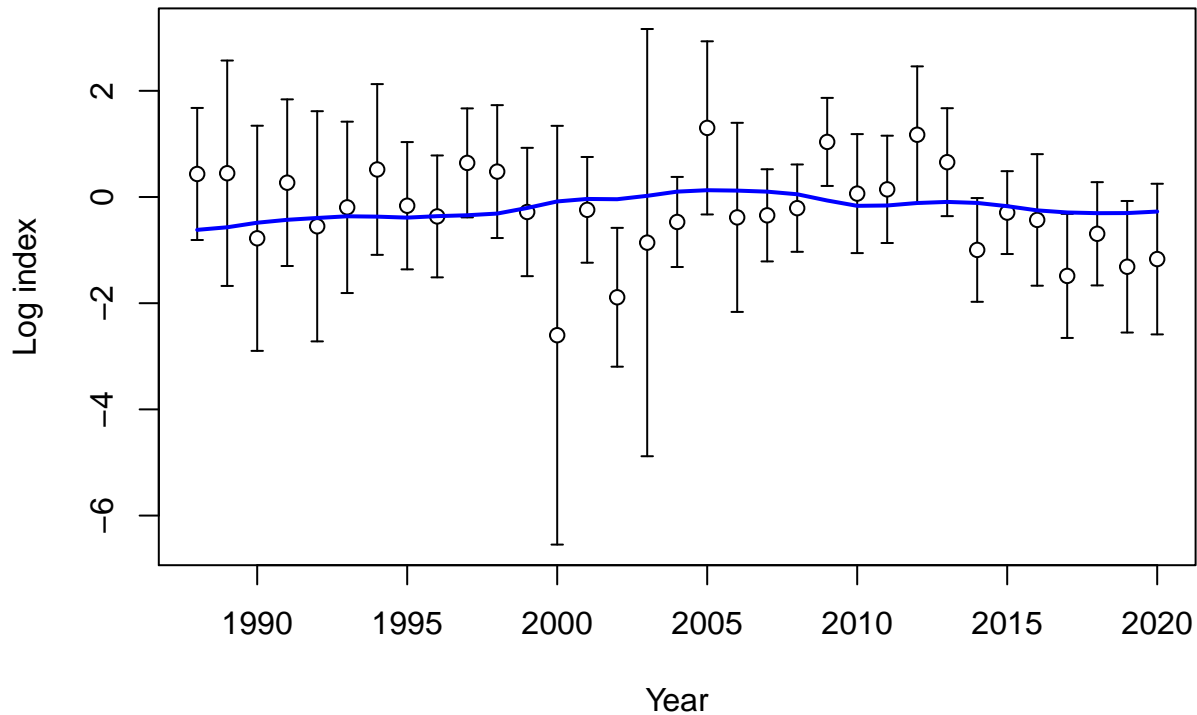
Index



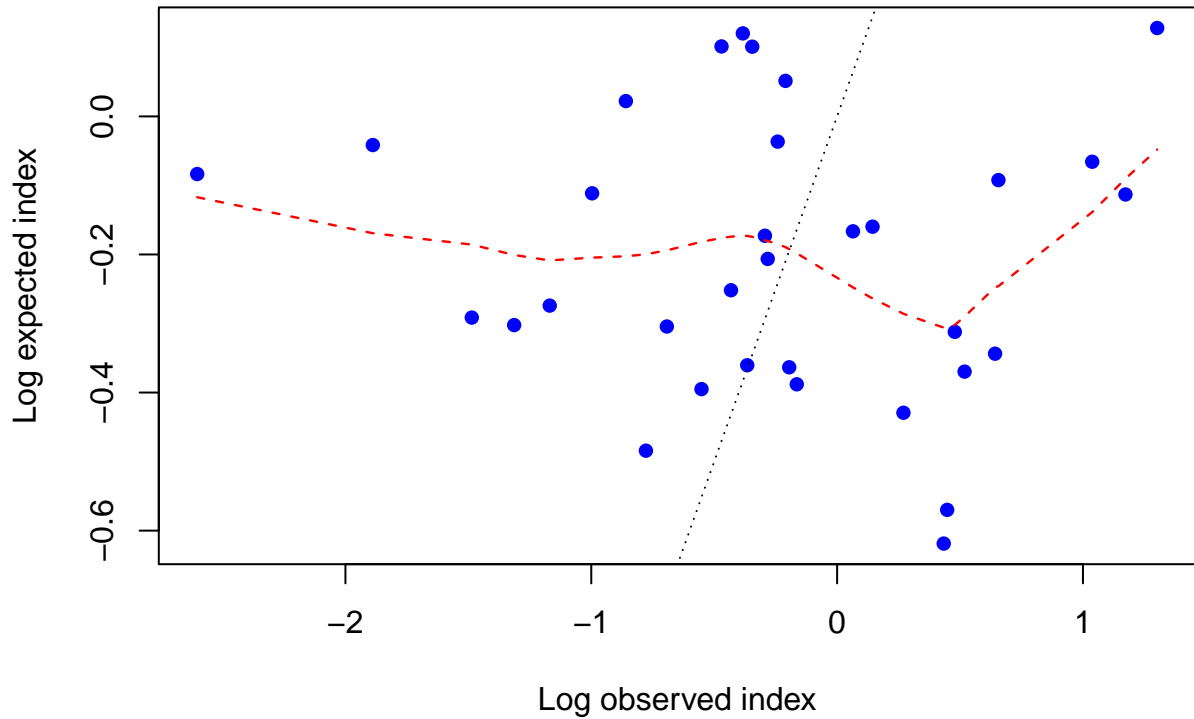


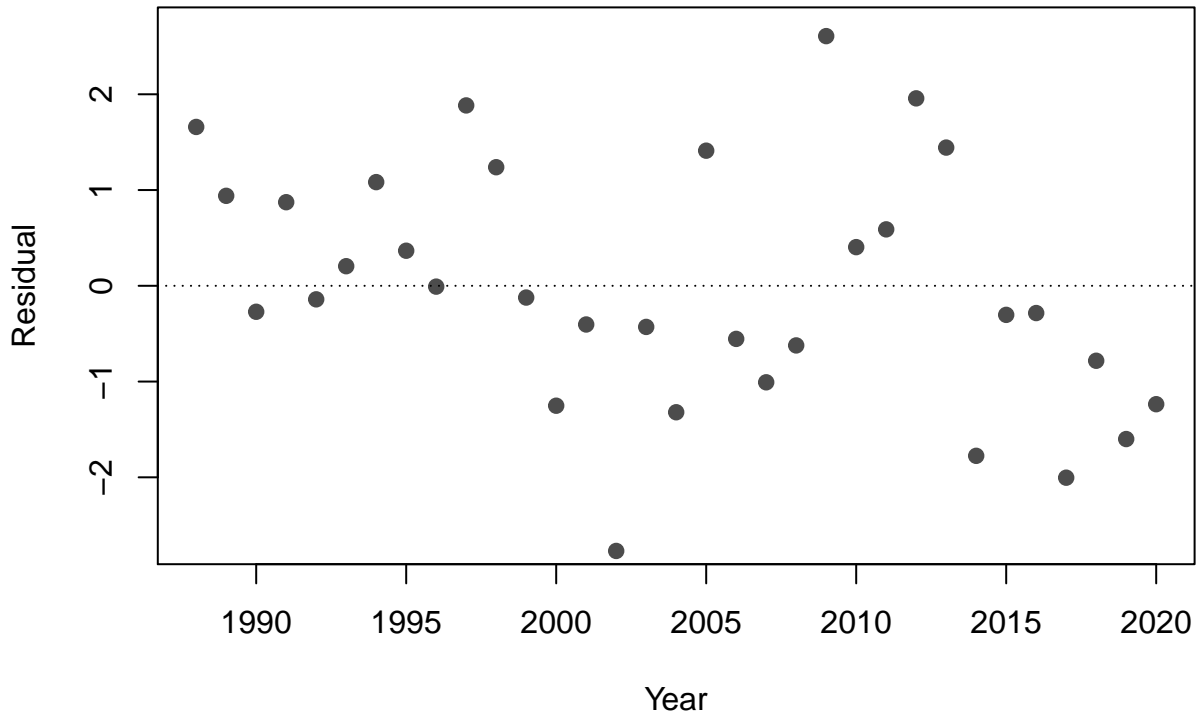


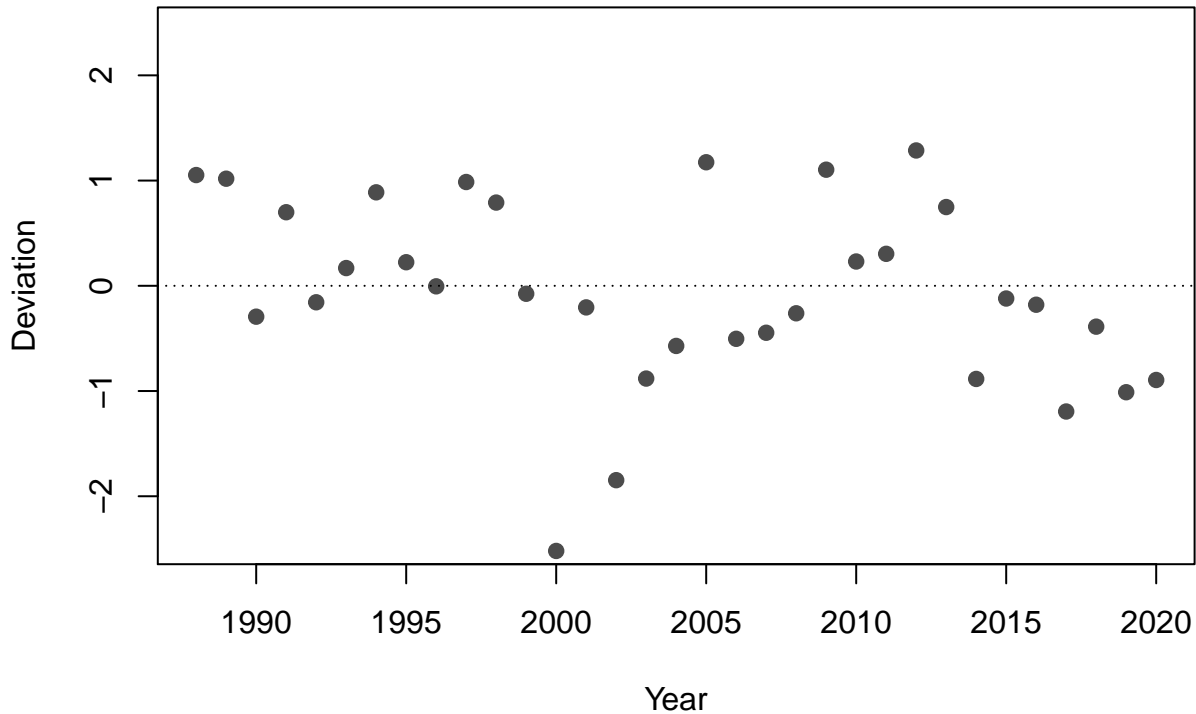


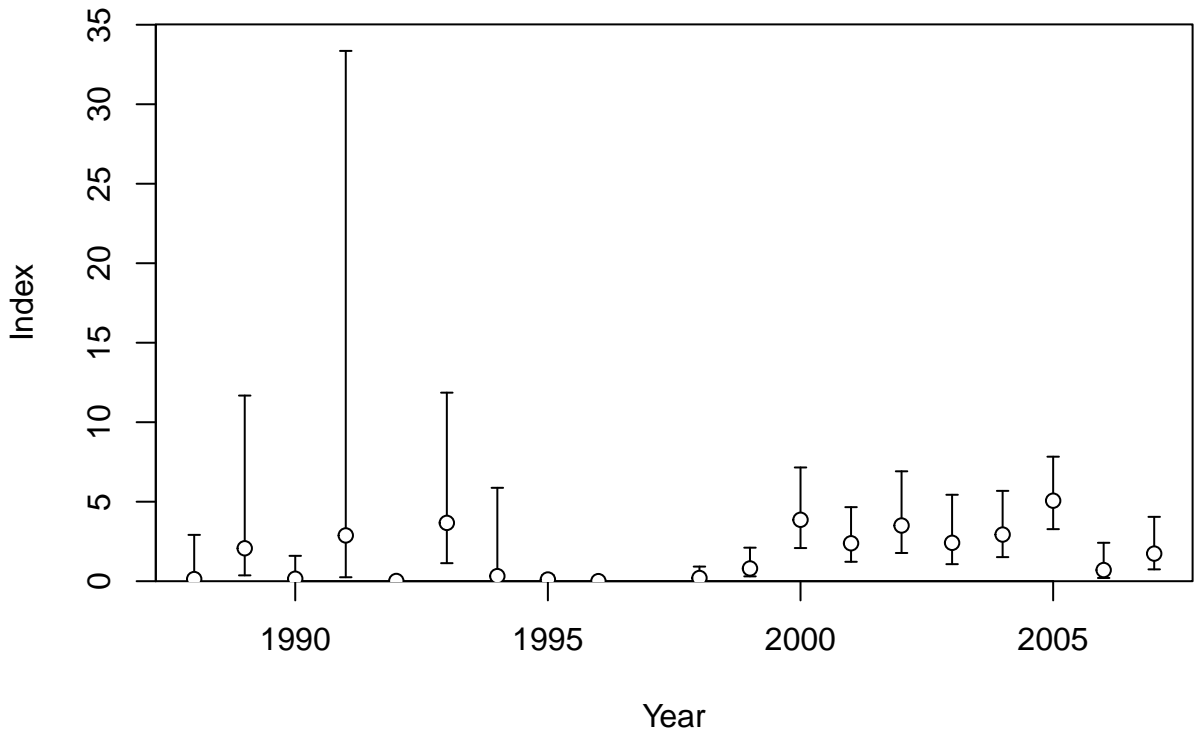


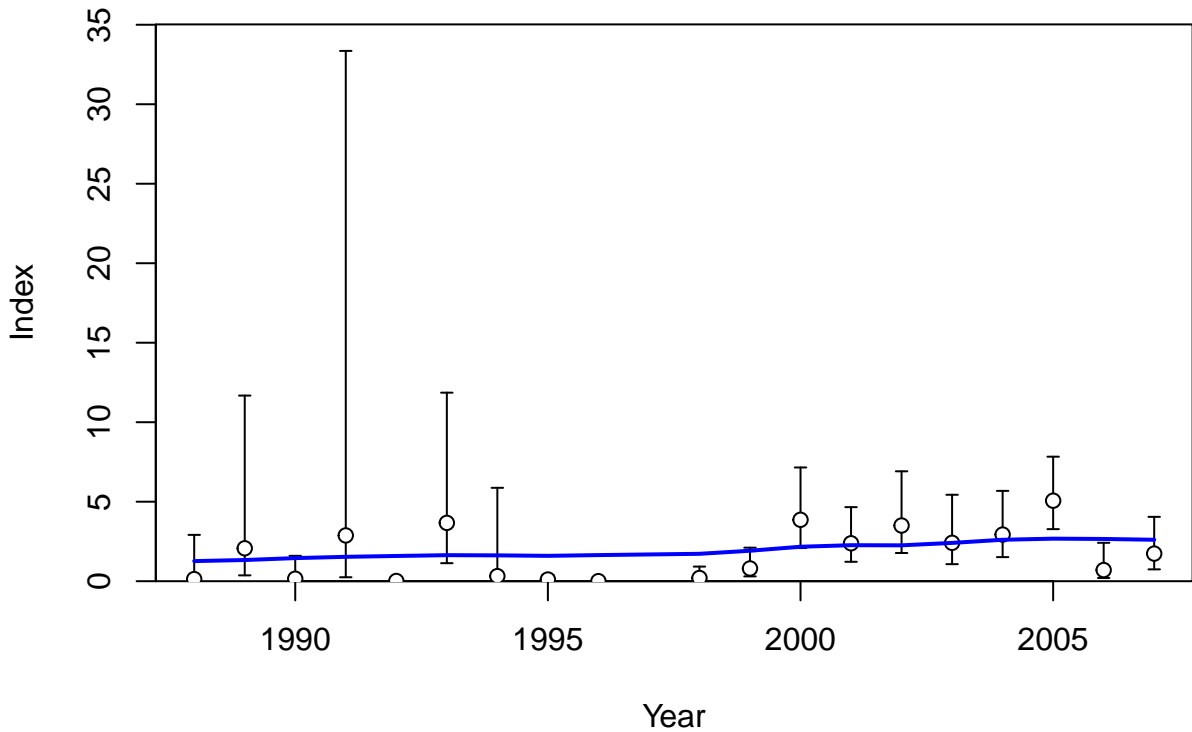


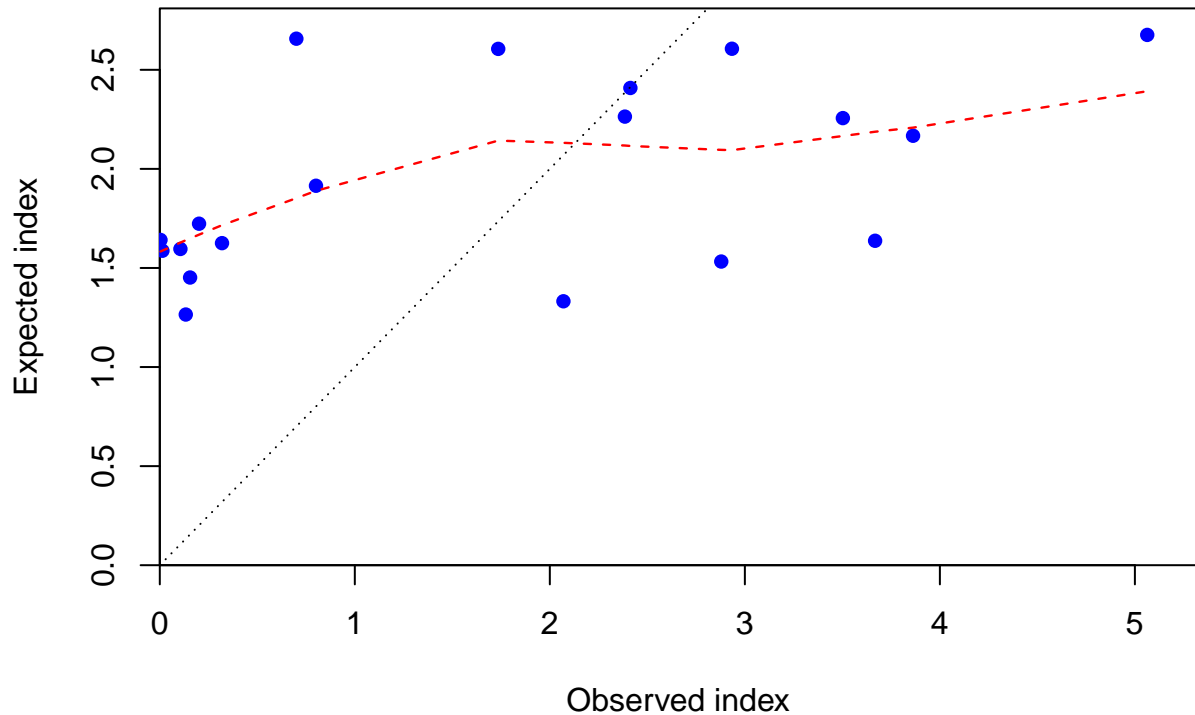


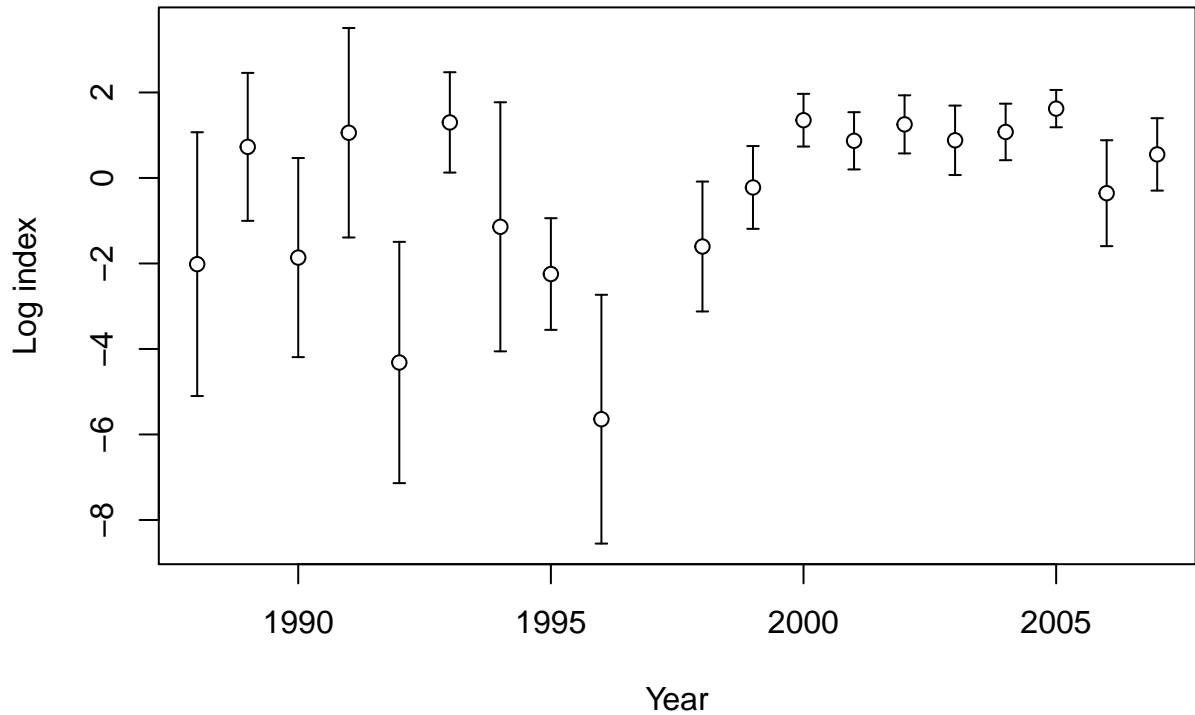












Log index

2  
0  
-2  
-4  
-6  
-8

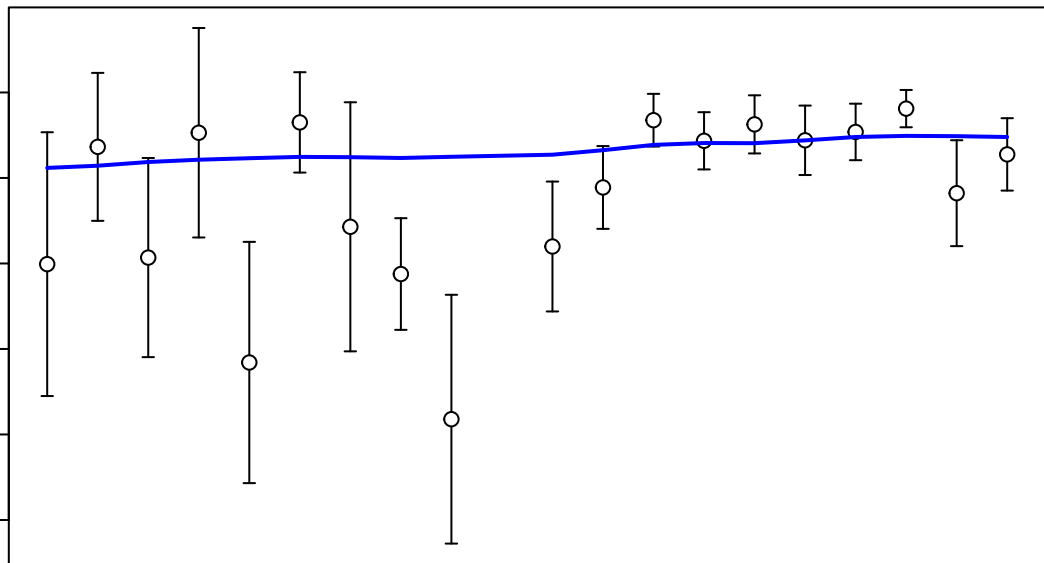
1990

1995

2000

2005

Year





Log expected index

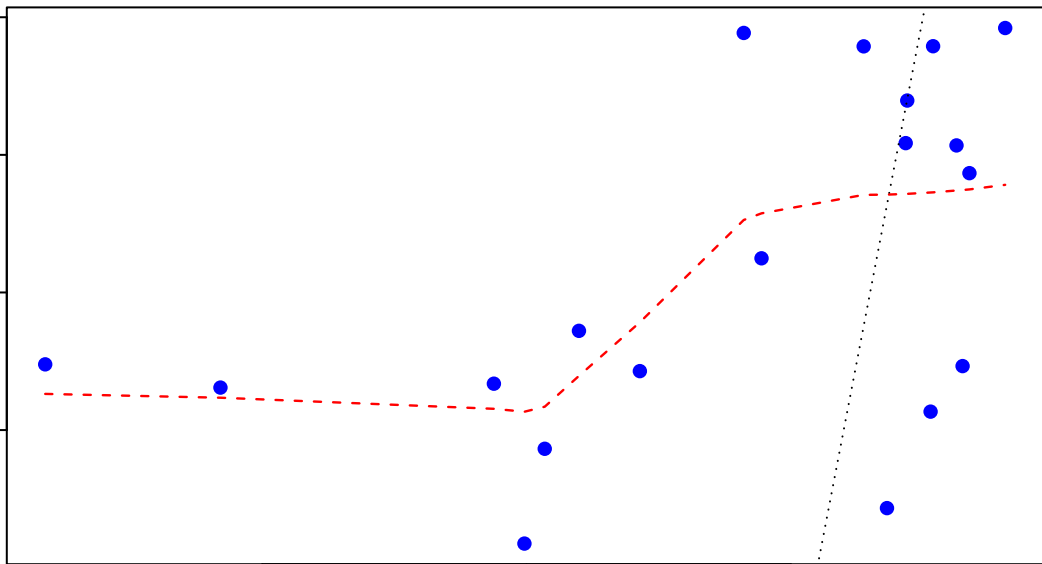
1.0  
0.8  
0.6  
0.4

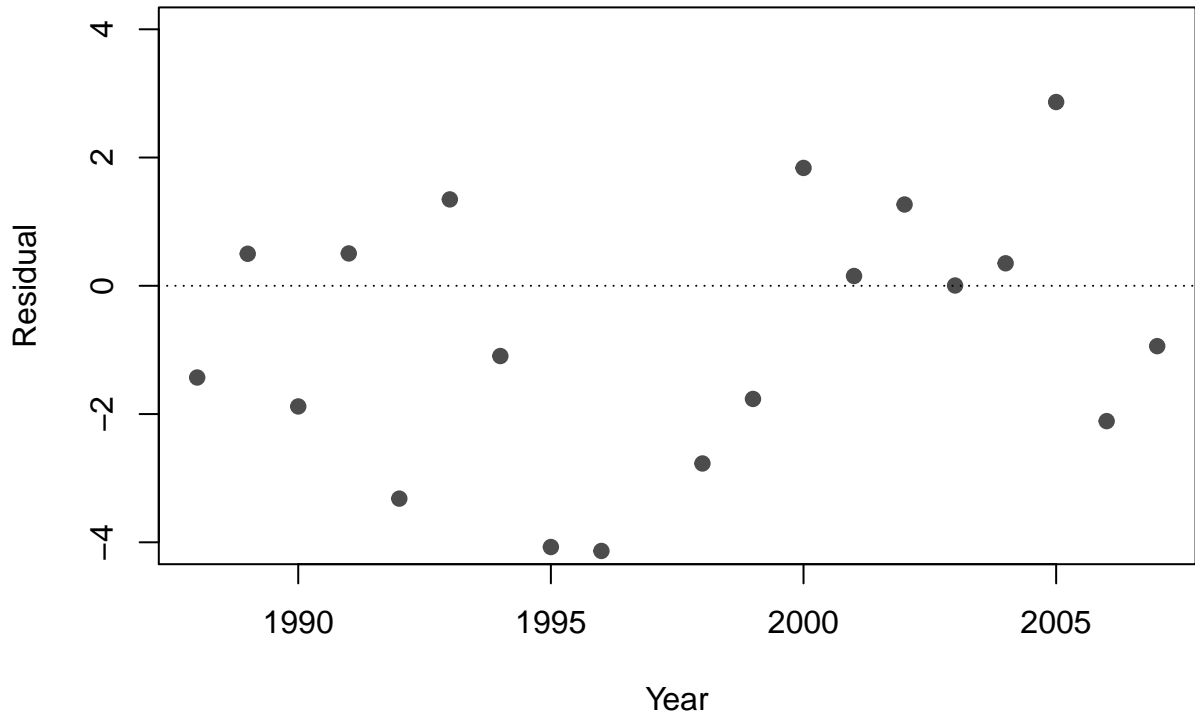
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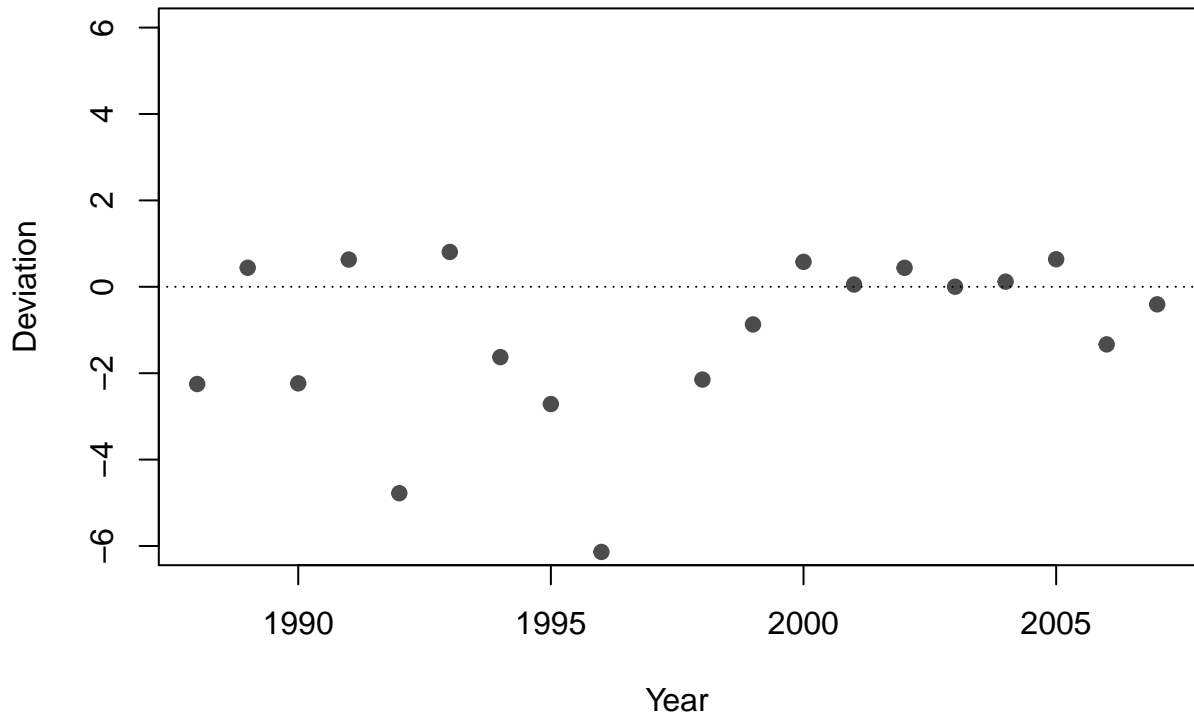
-2

0

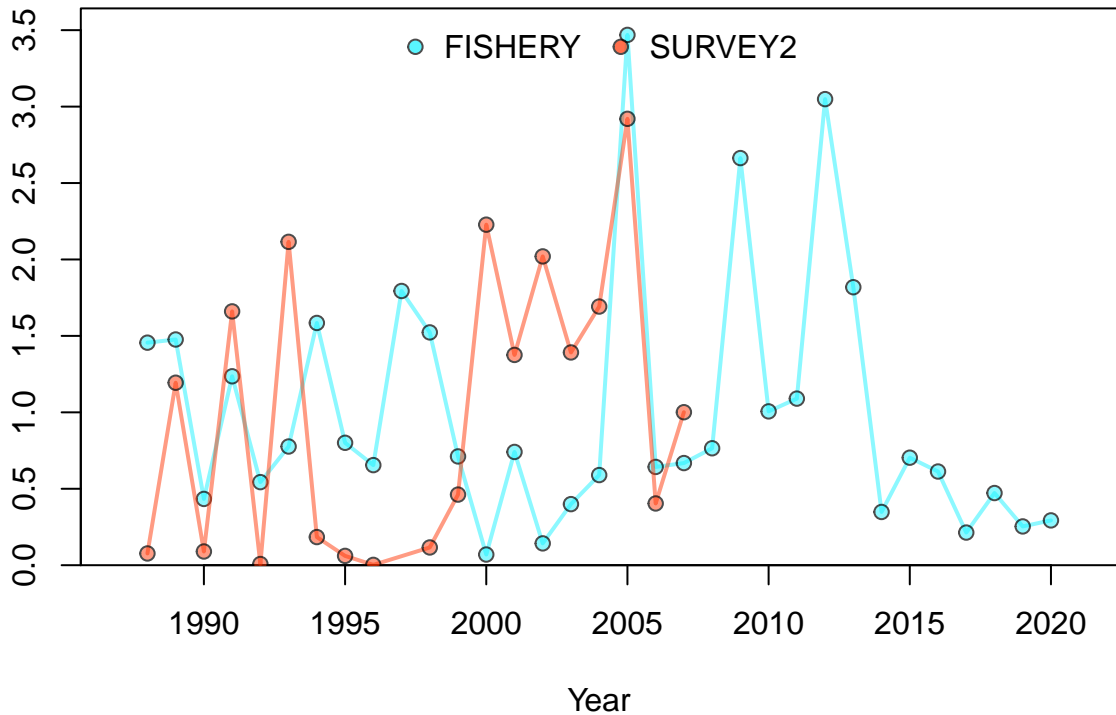
Log observed index

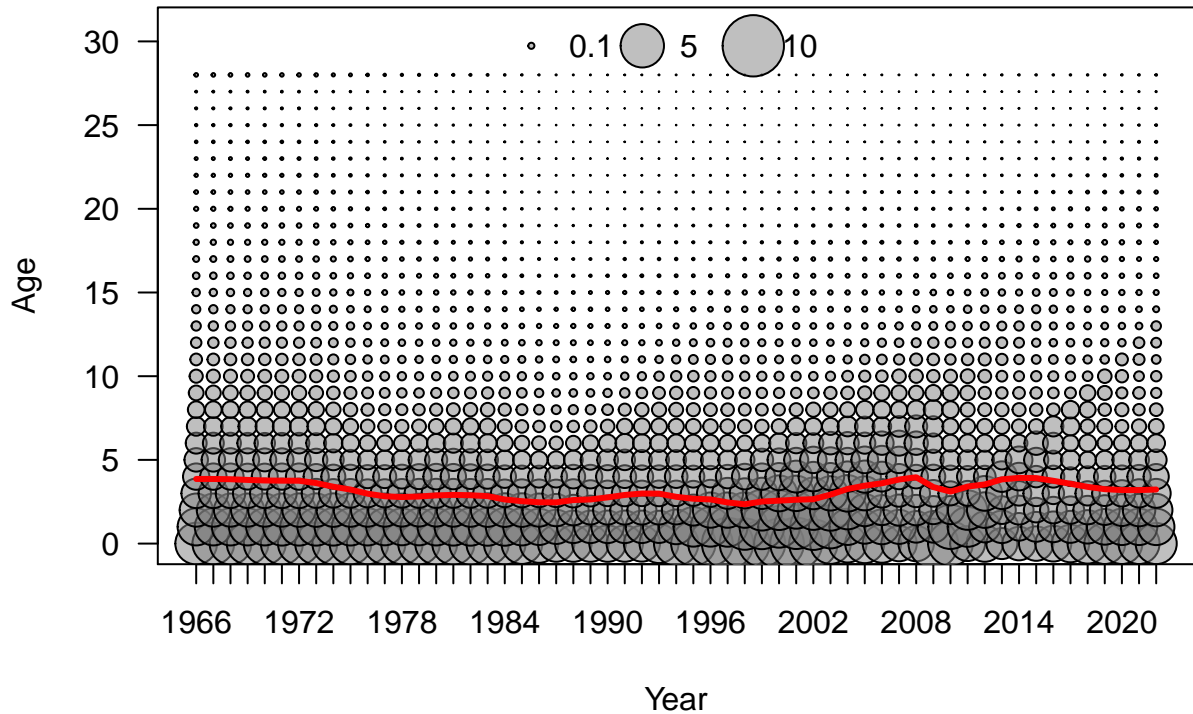


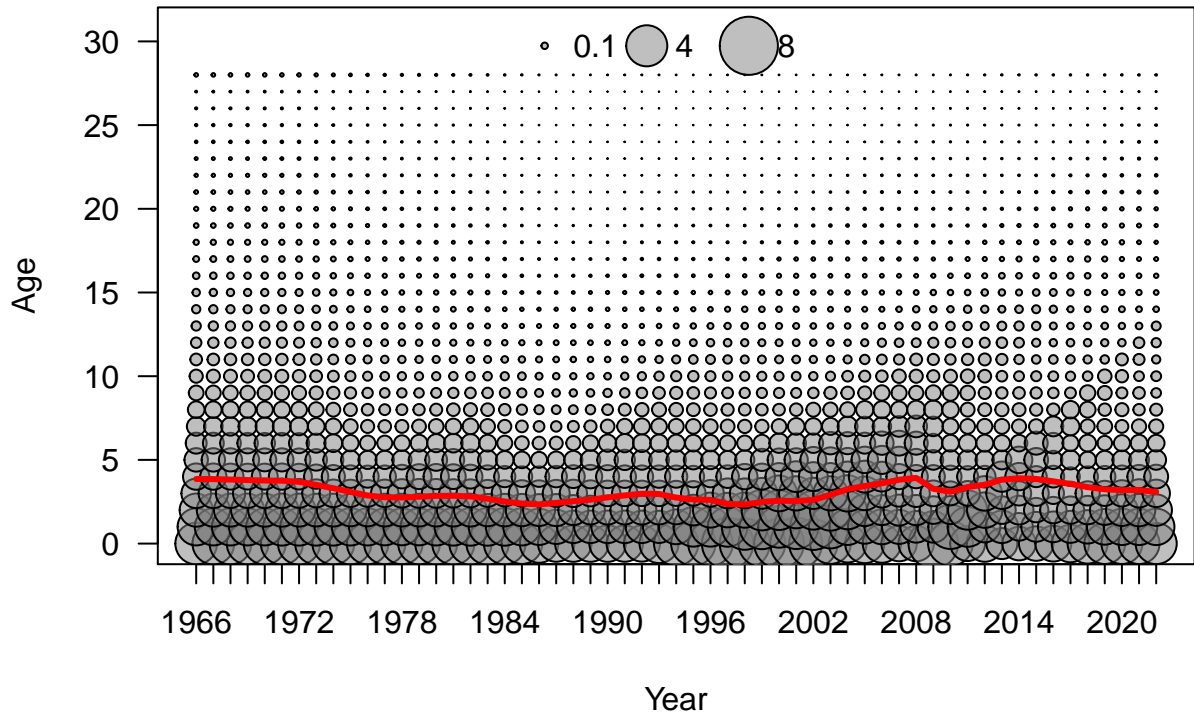


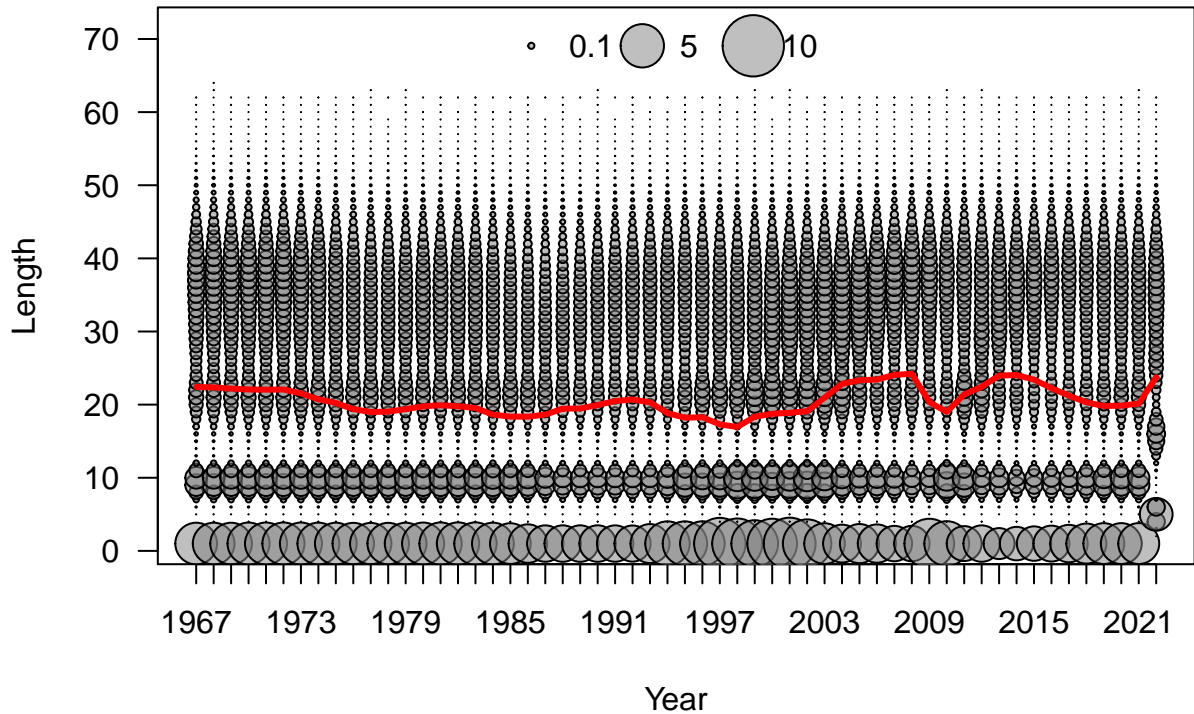


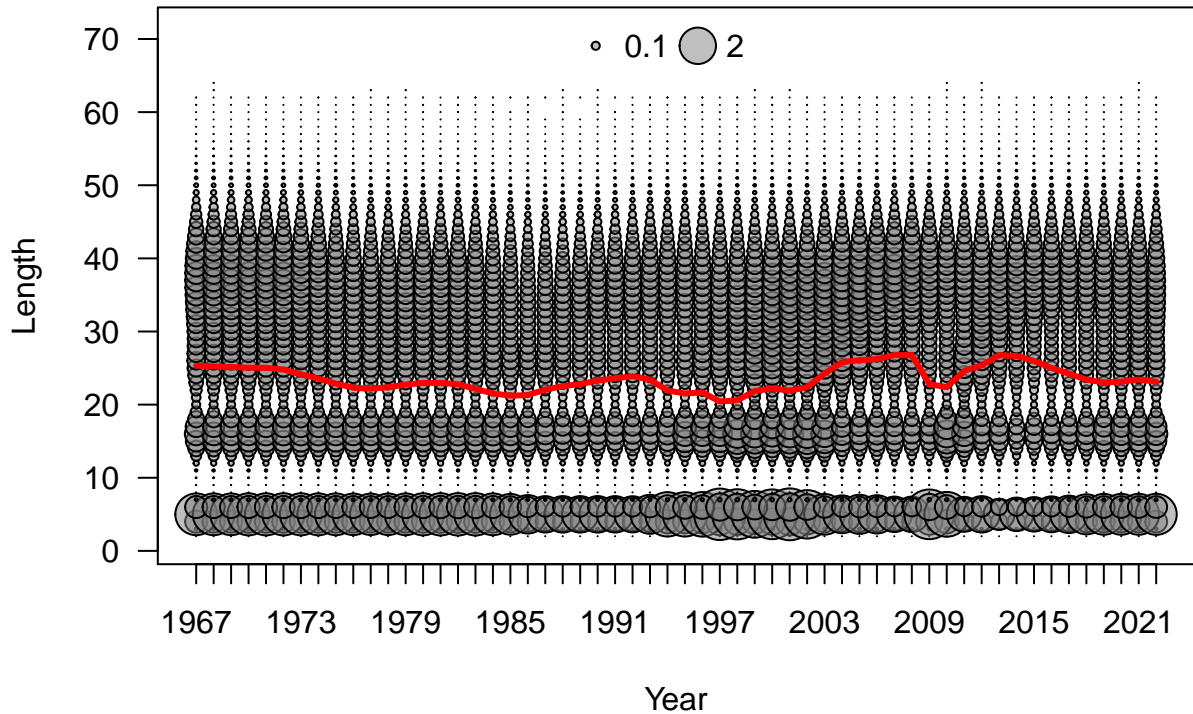
Standardized index



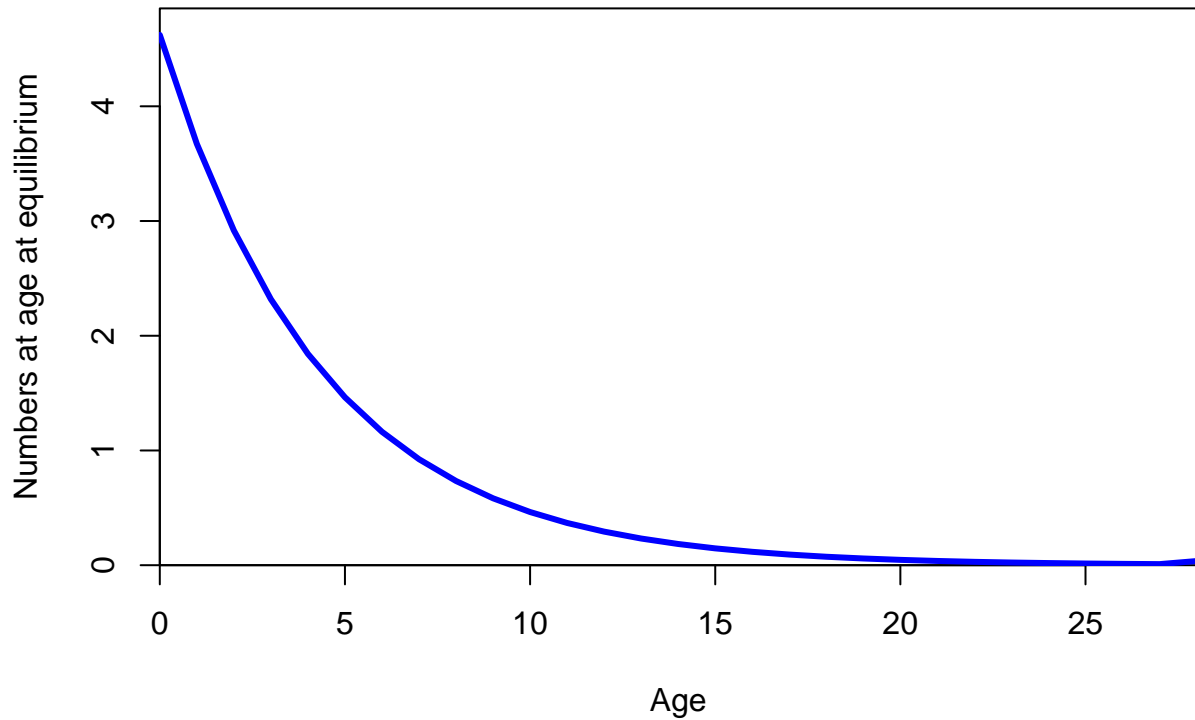


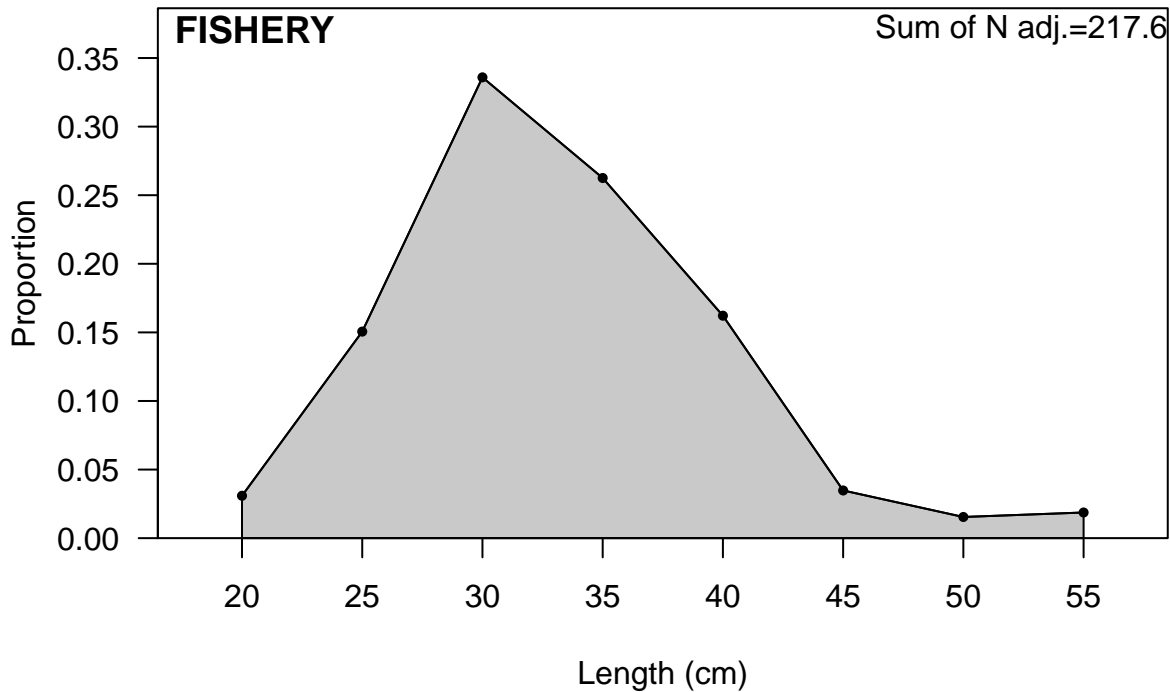


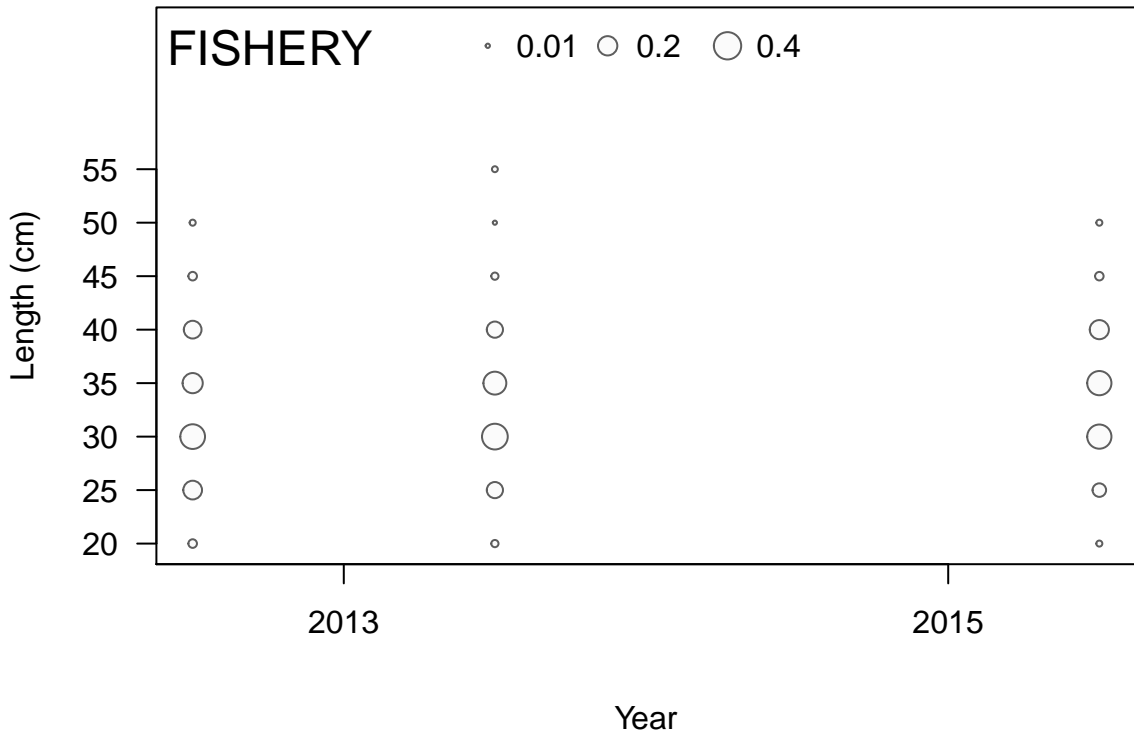


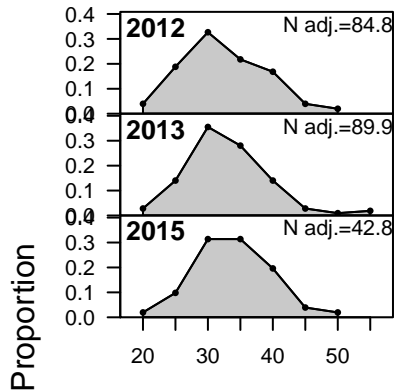




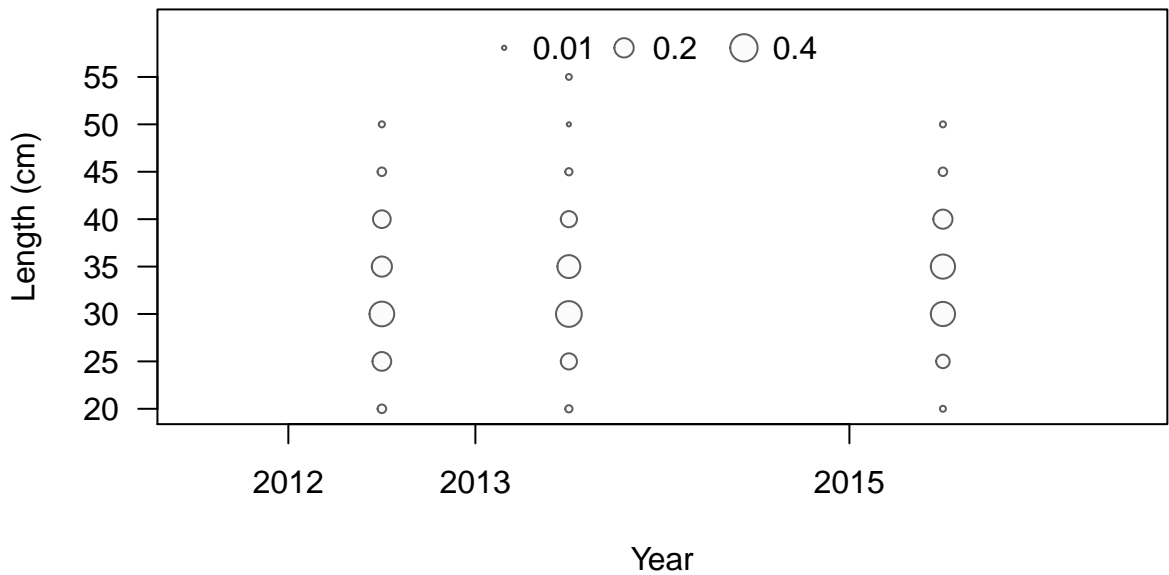




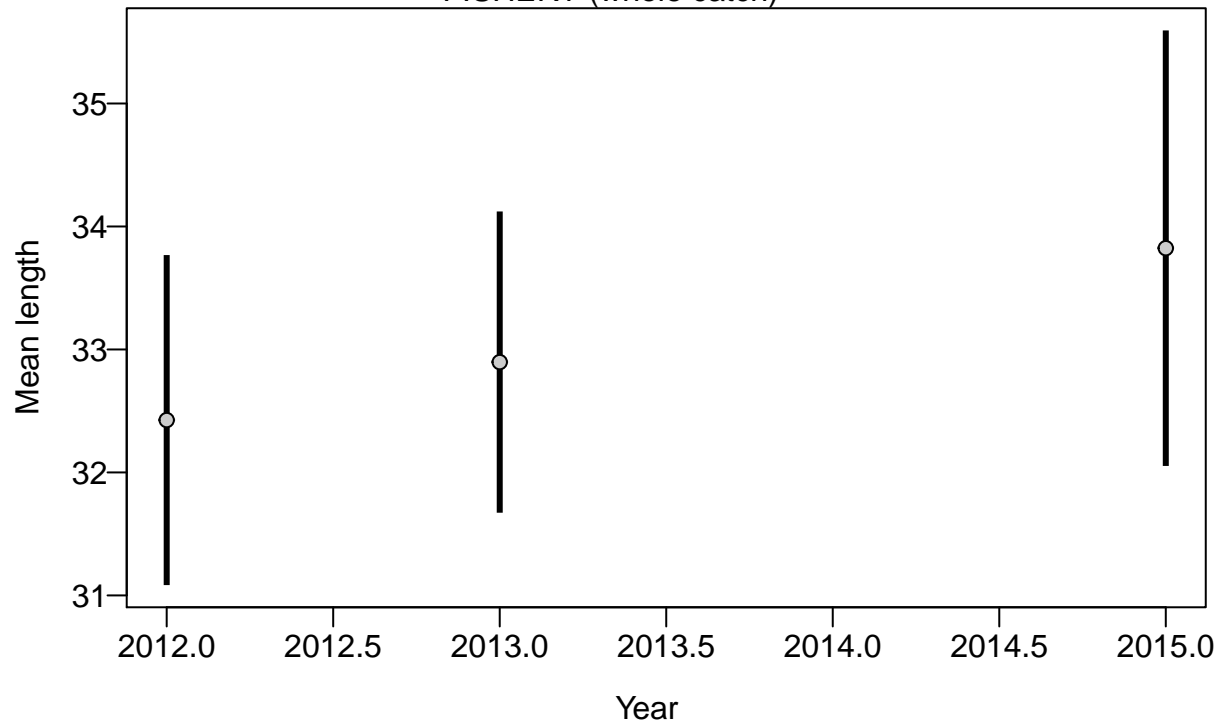


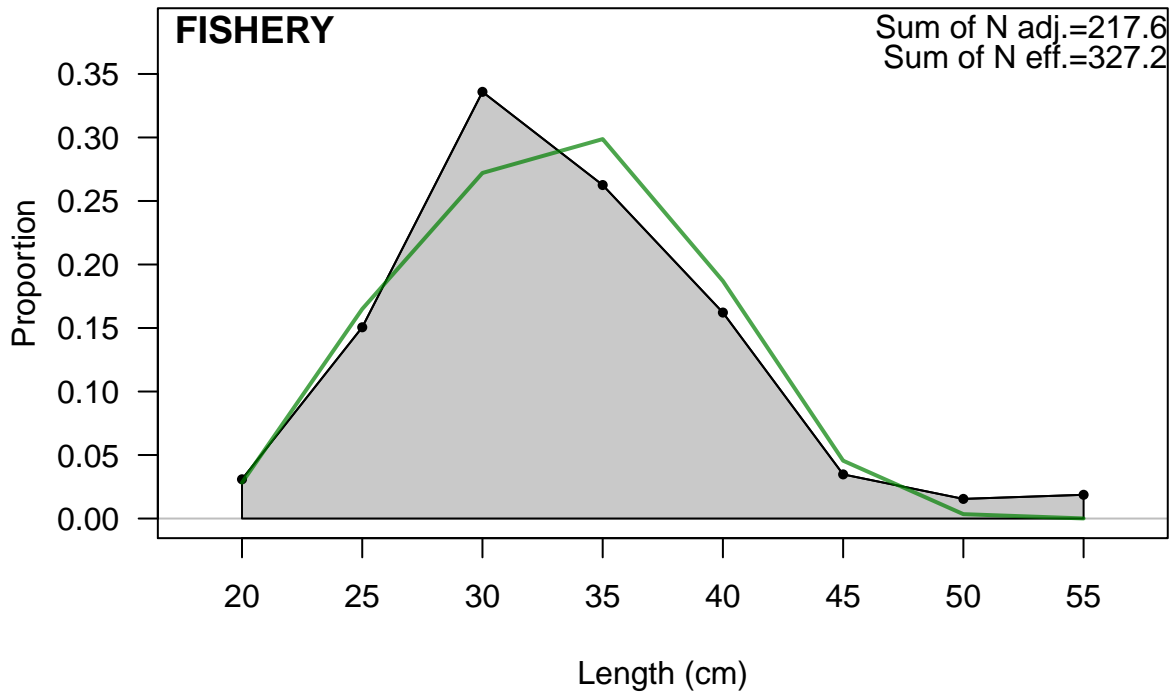


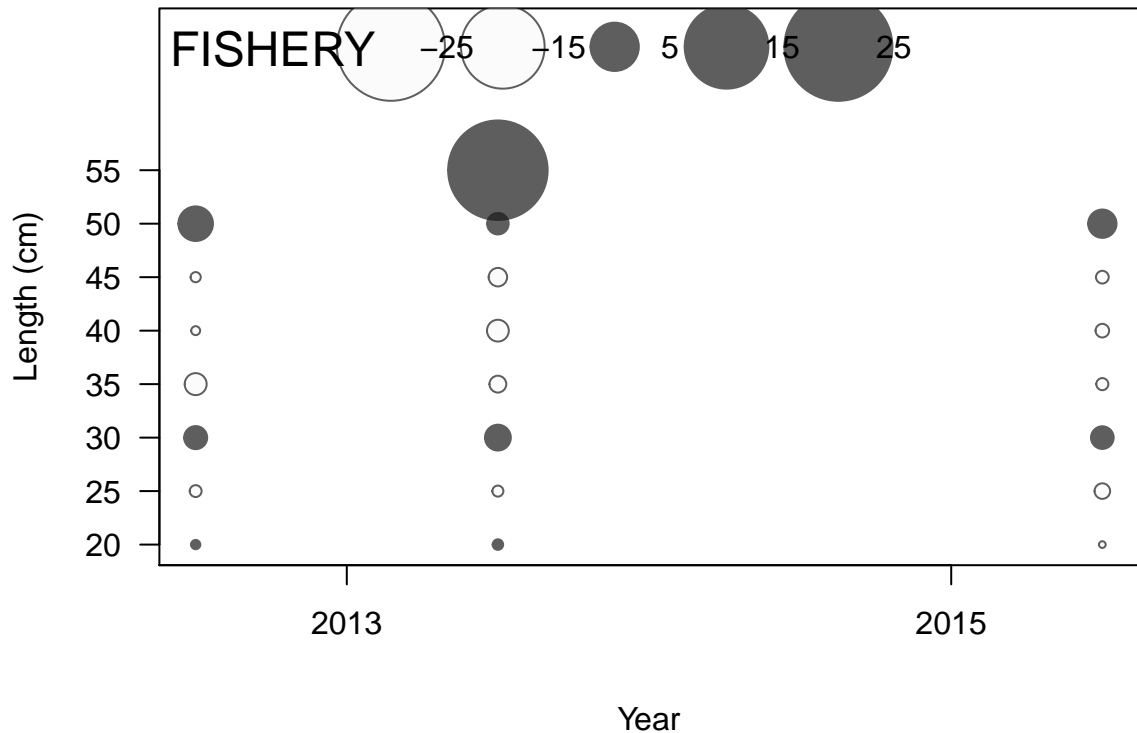
Length (cm)



FISHERY (whole catch)

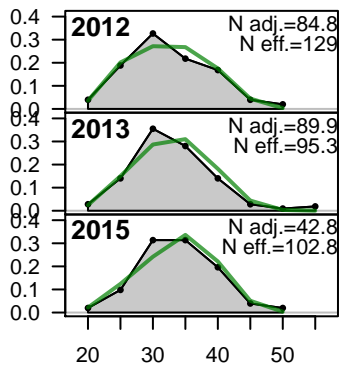




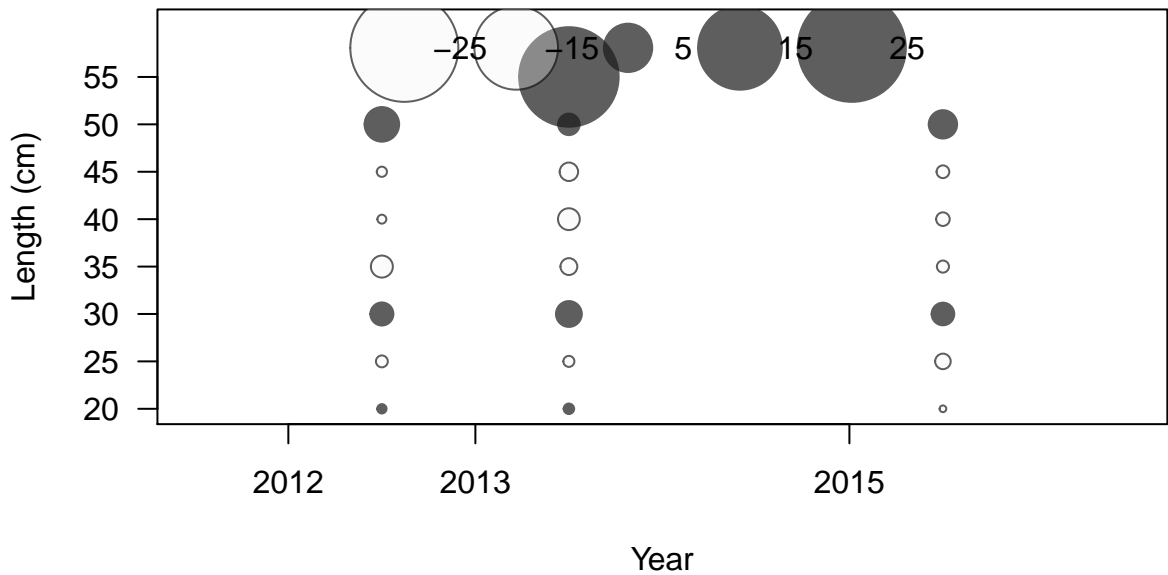


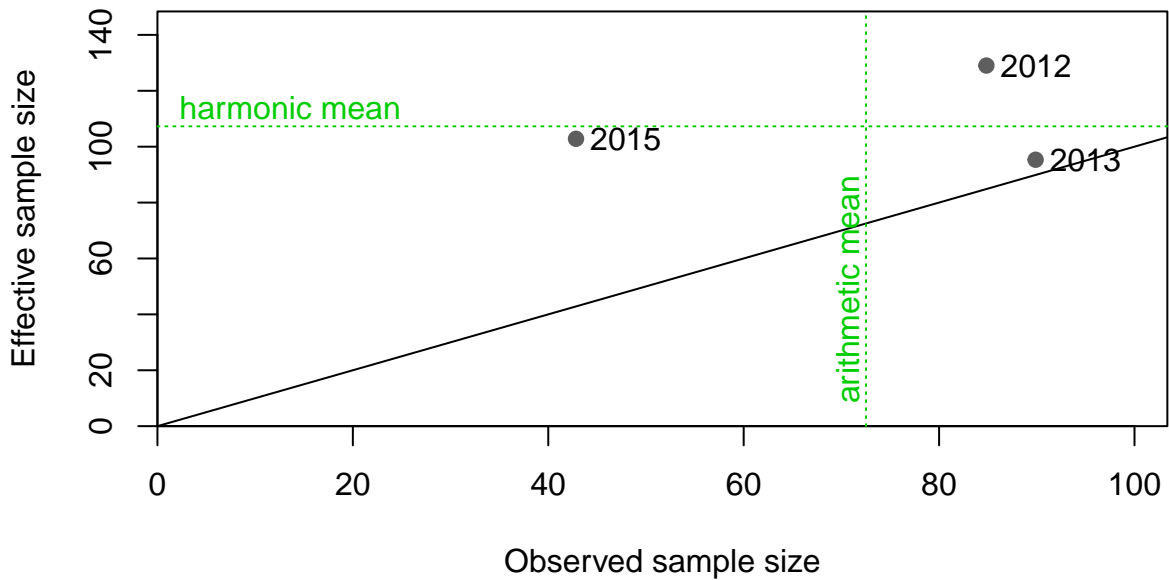


Proportion

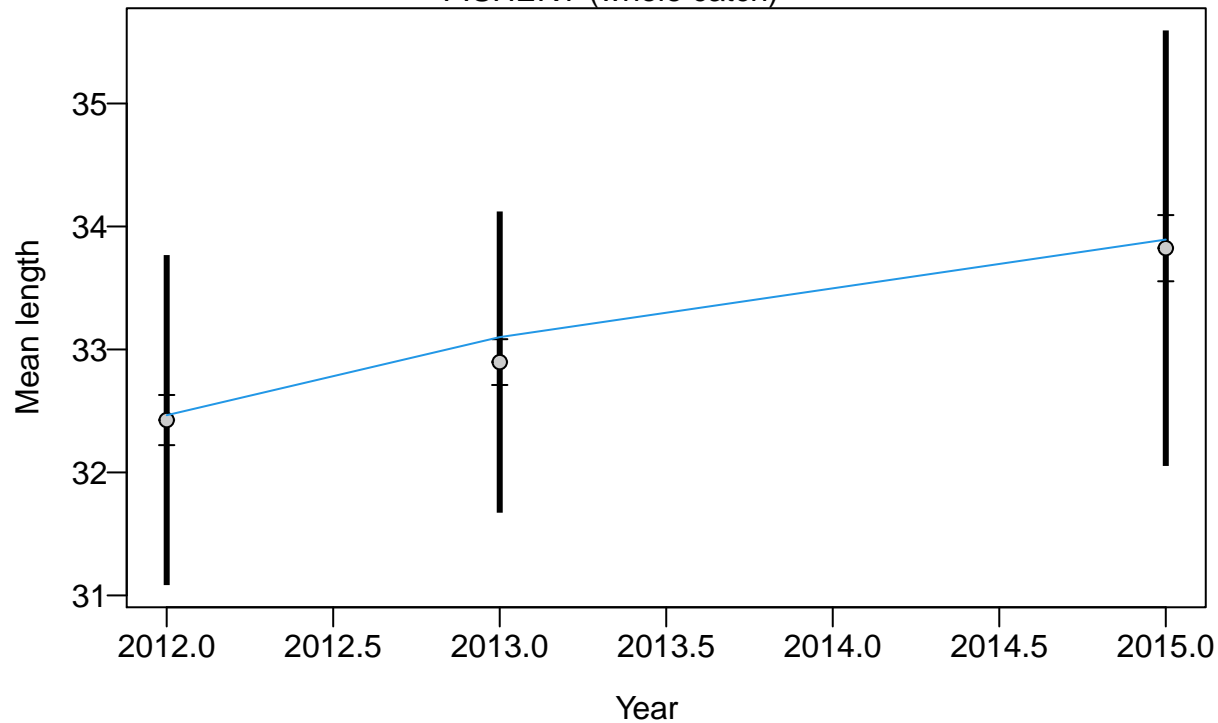


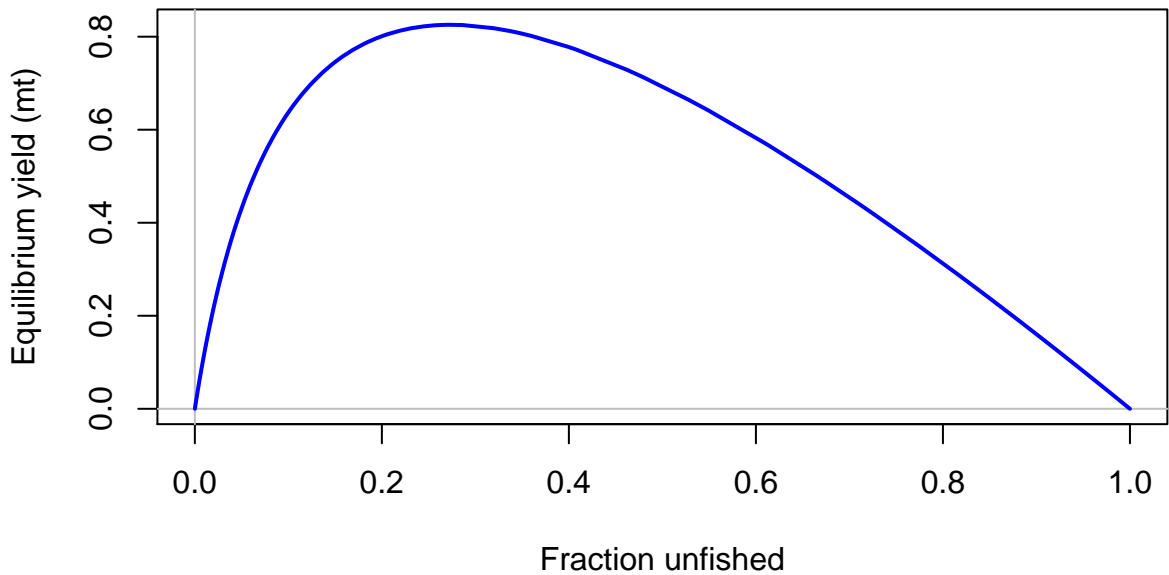
Length (cm)

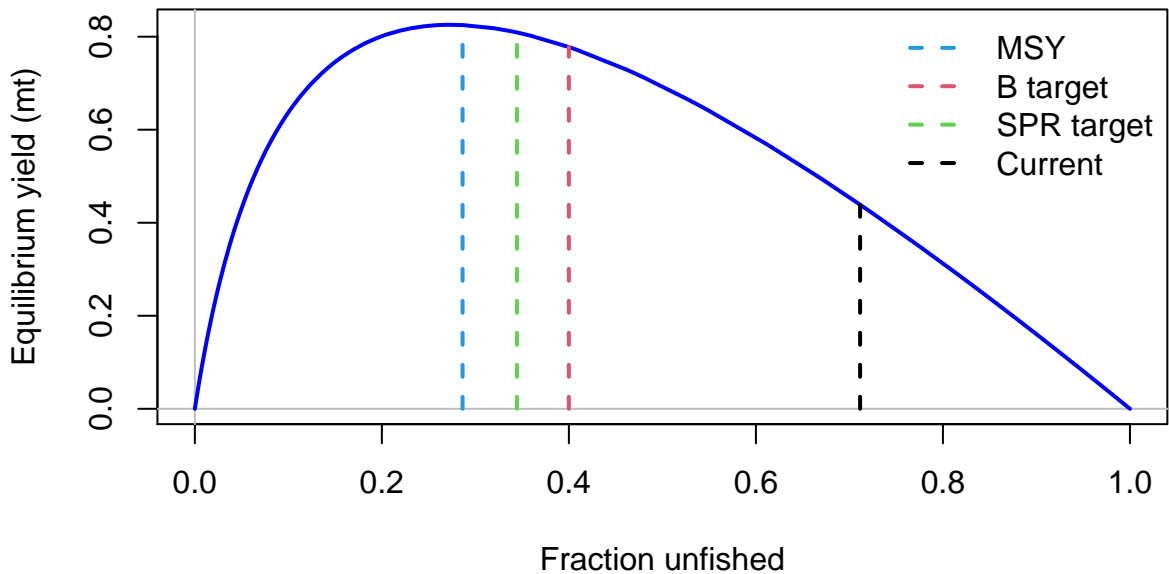


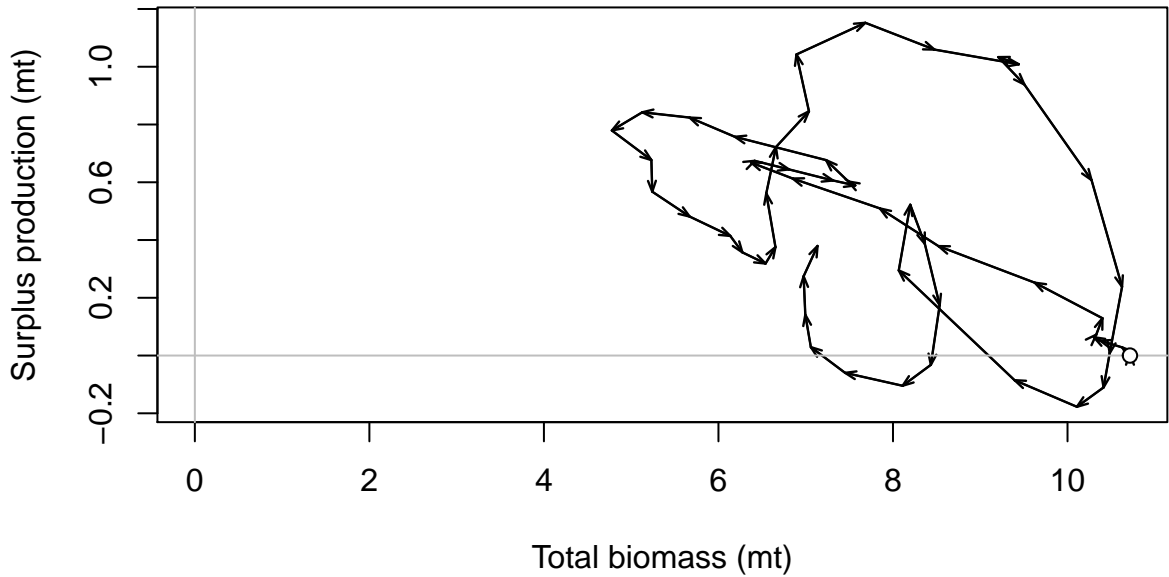


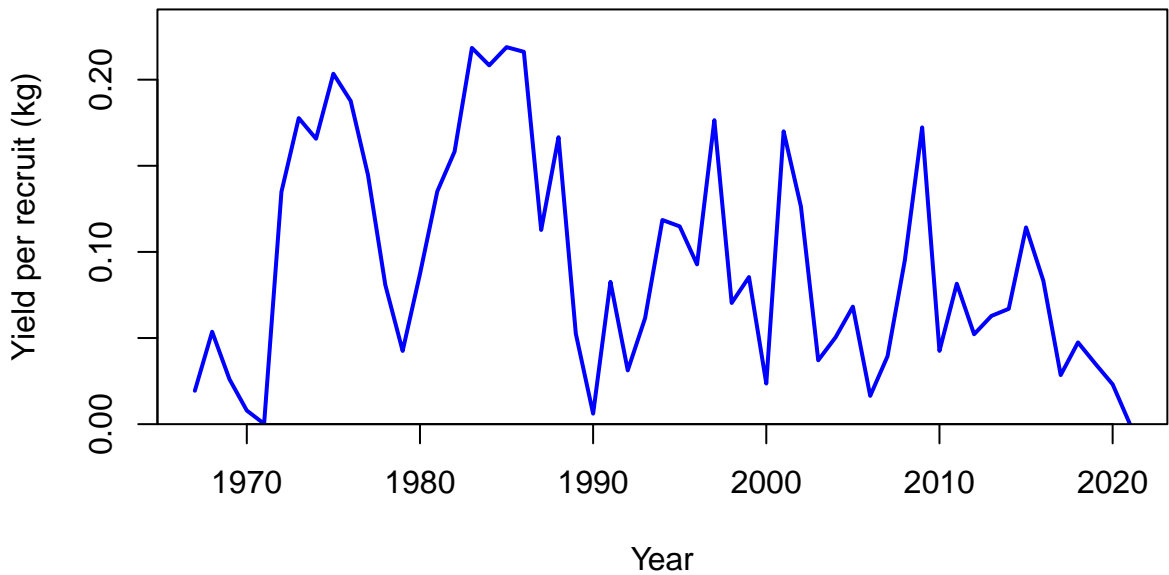
## FISHERY (whole catch)



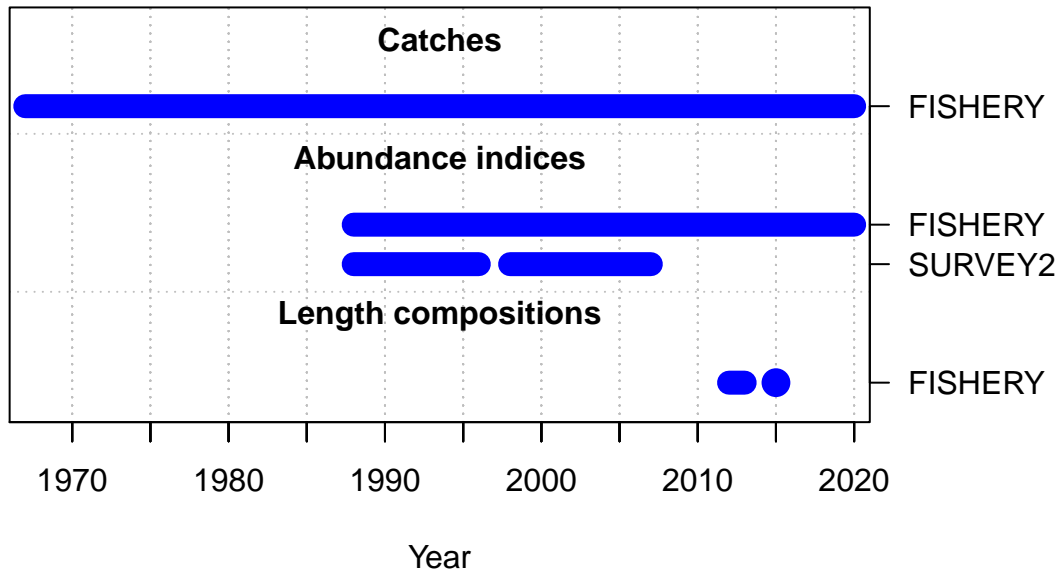


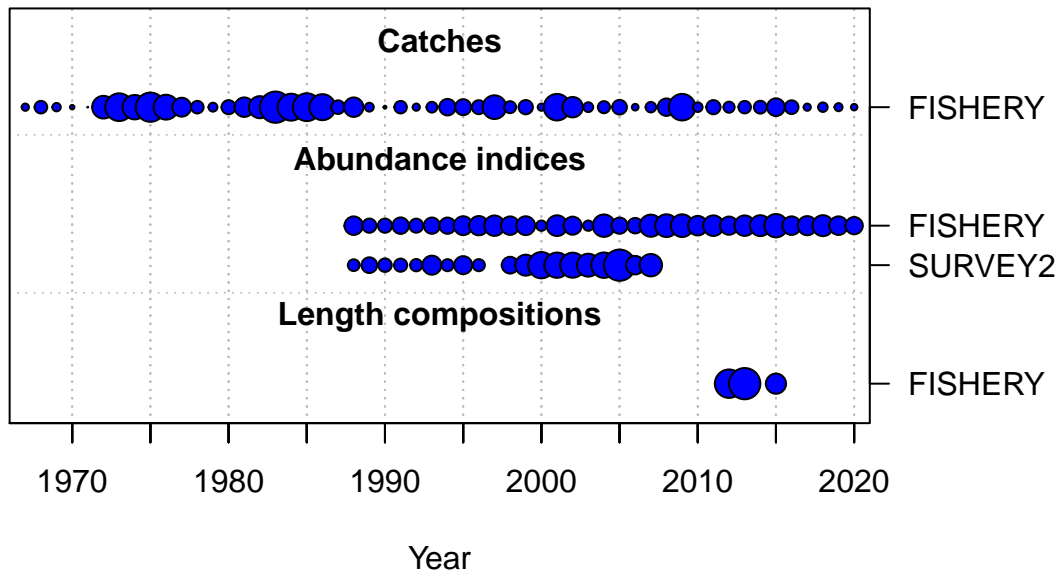




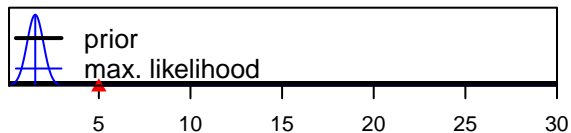




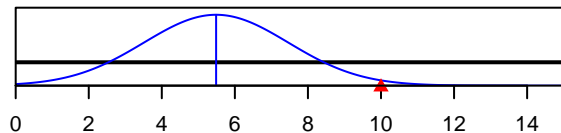




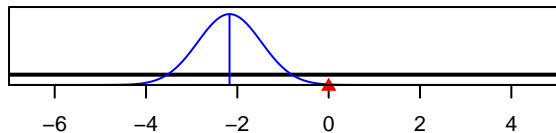
SR\_LN(R0)



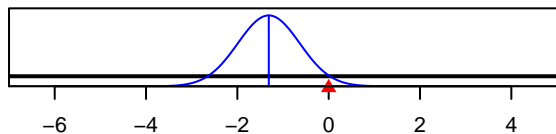
Size\_95%width\_FISHERY(1)



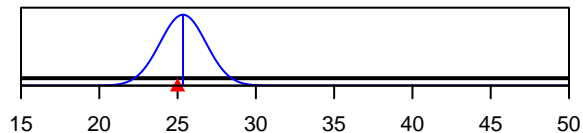
LnQ\_base\_FISHERY(1)



LnQ\_base\_SURVEY2(2)



Size\_inflection\_FISHERY(1)



Parameter value