

Plots created using the 'r4ss' package in R

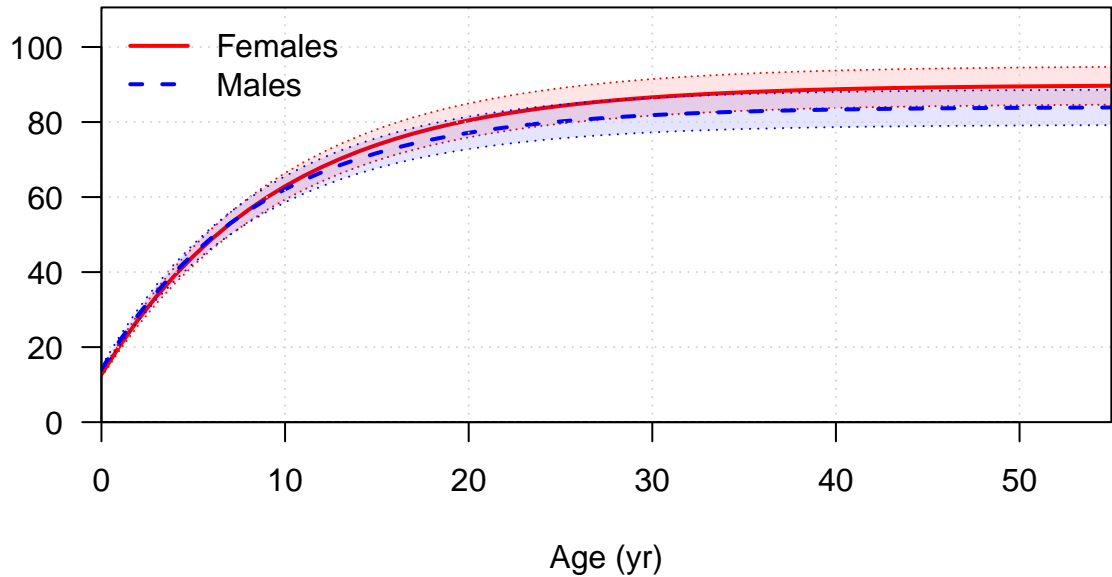
Stock Synthesis version: 3.30.19.0

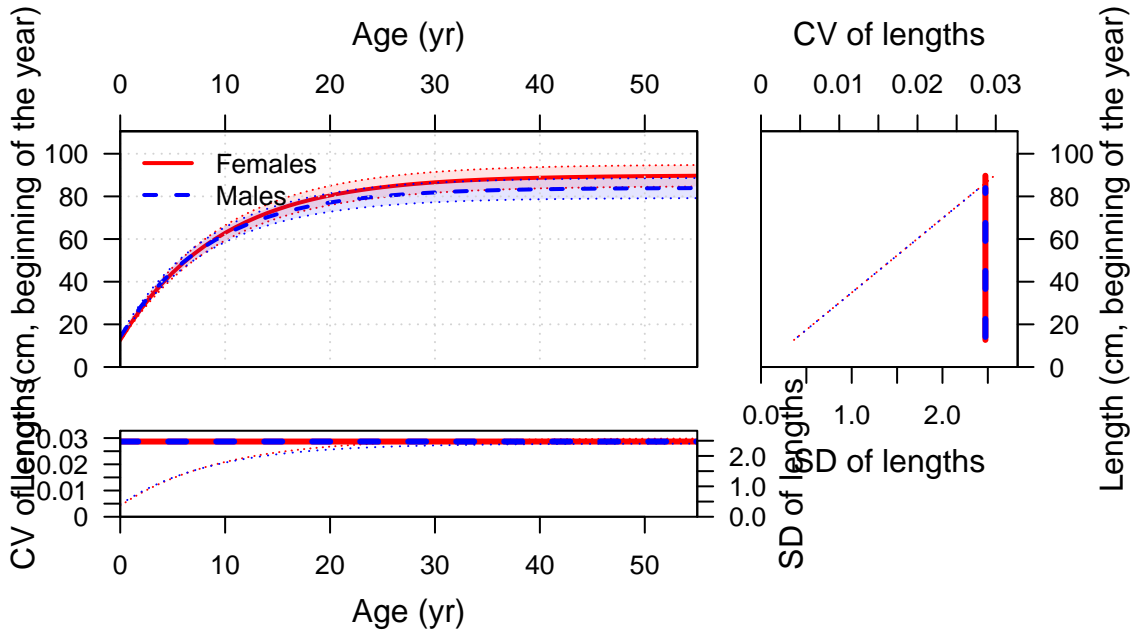
StartTime: Thu Aug 11 08:59:25 2022

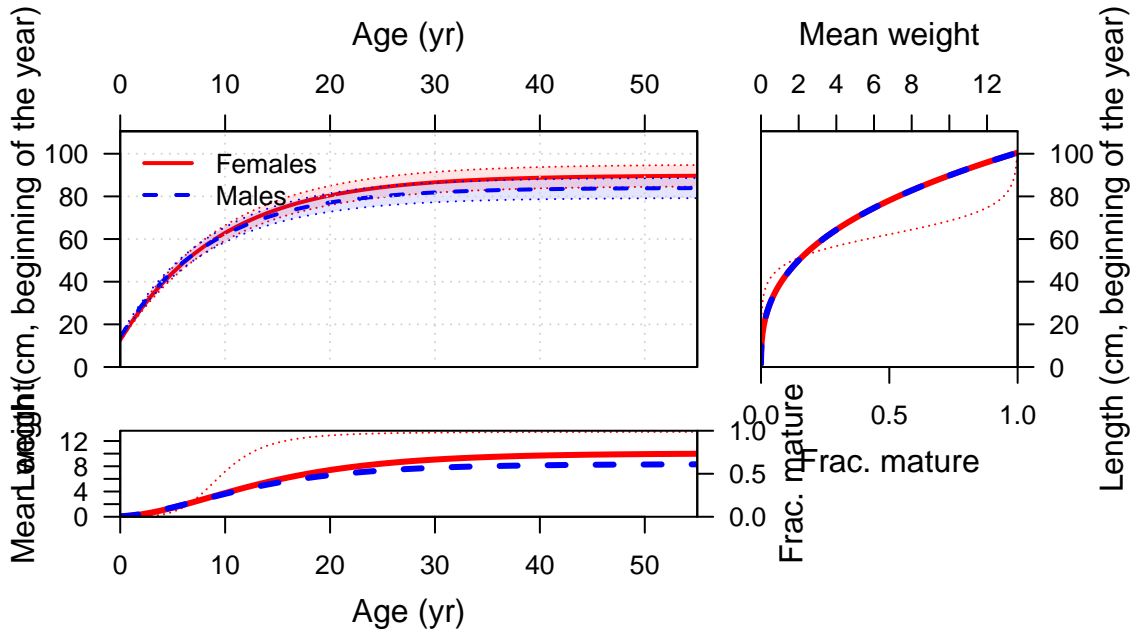
Data\_File: data.ss

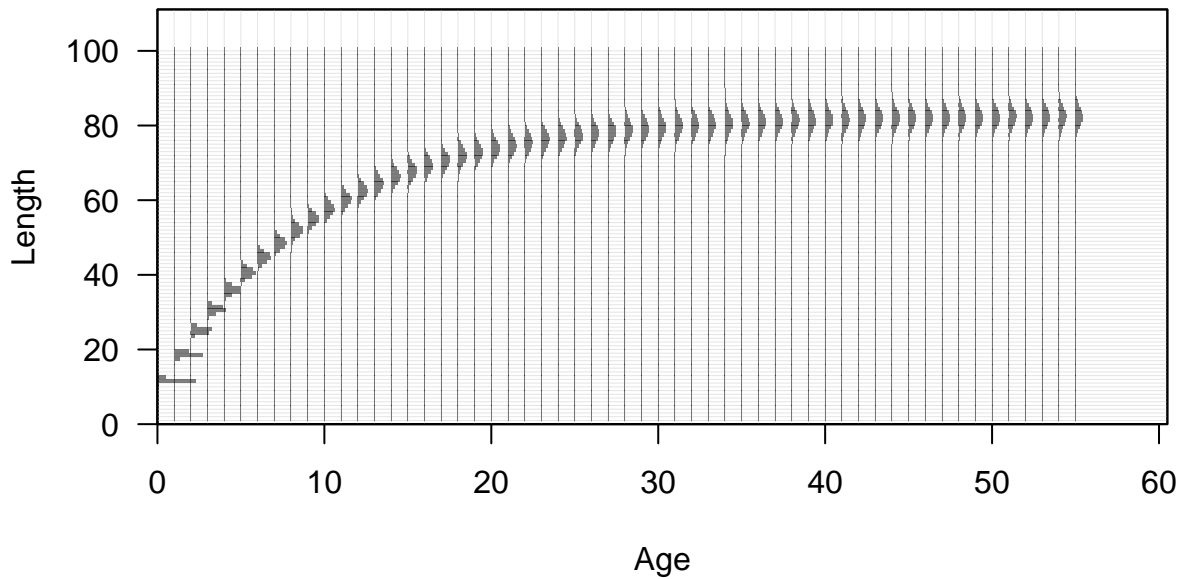
Control\_File: control.ss

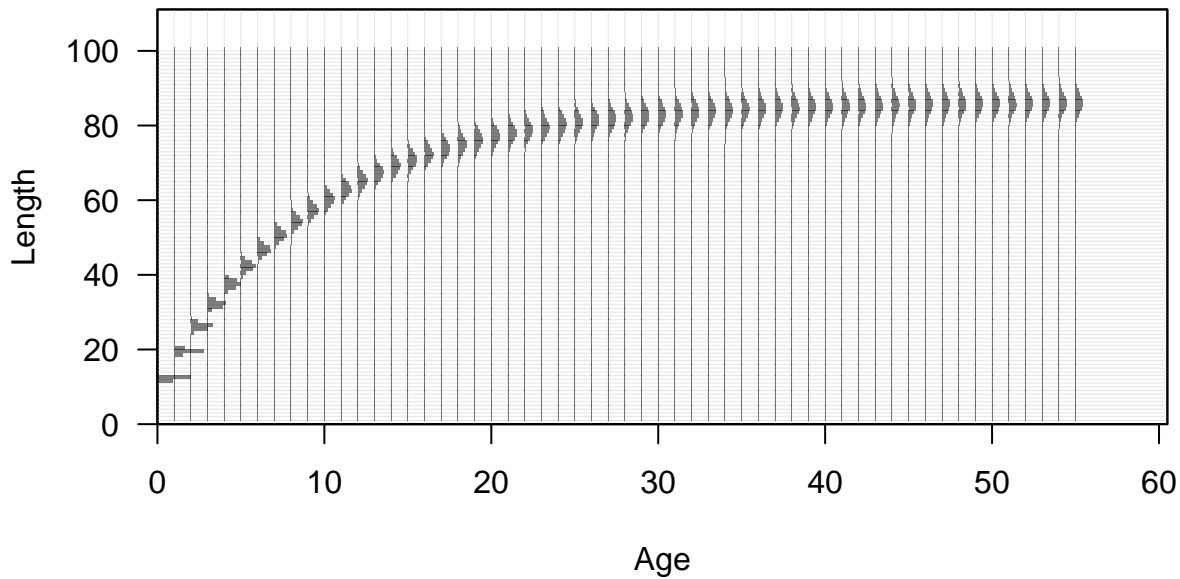
Length (cm, beginning of the year)

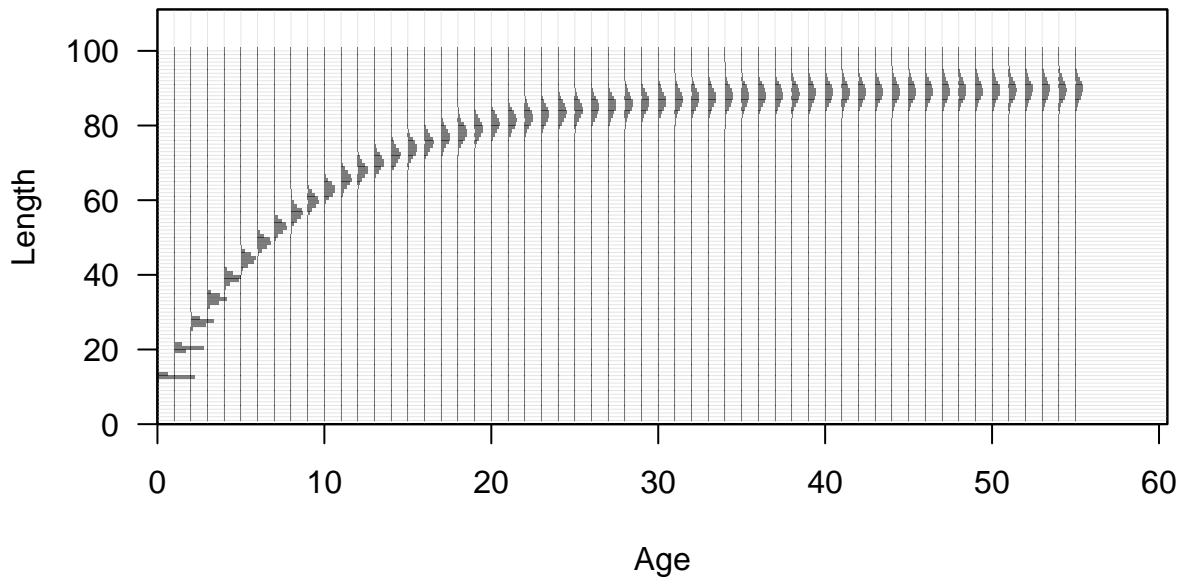


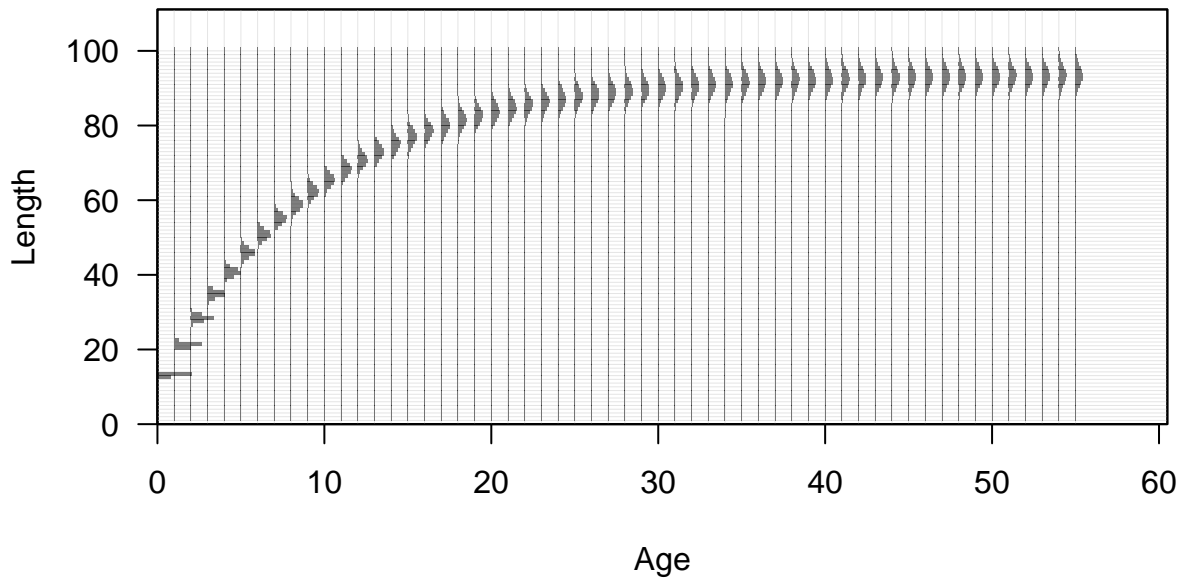




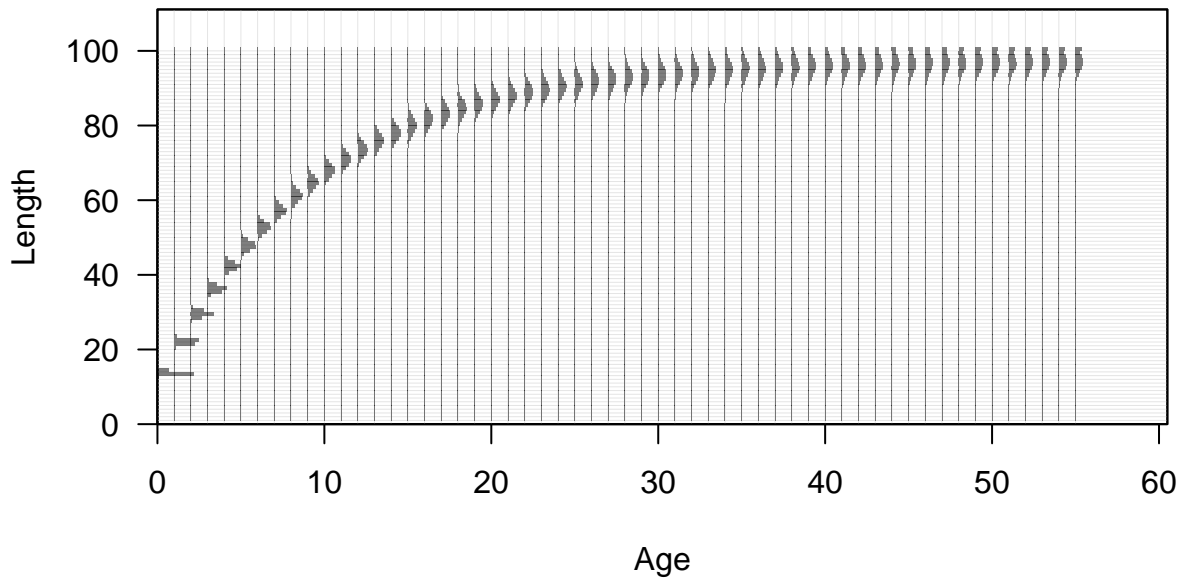


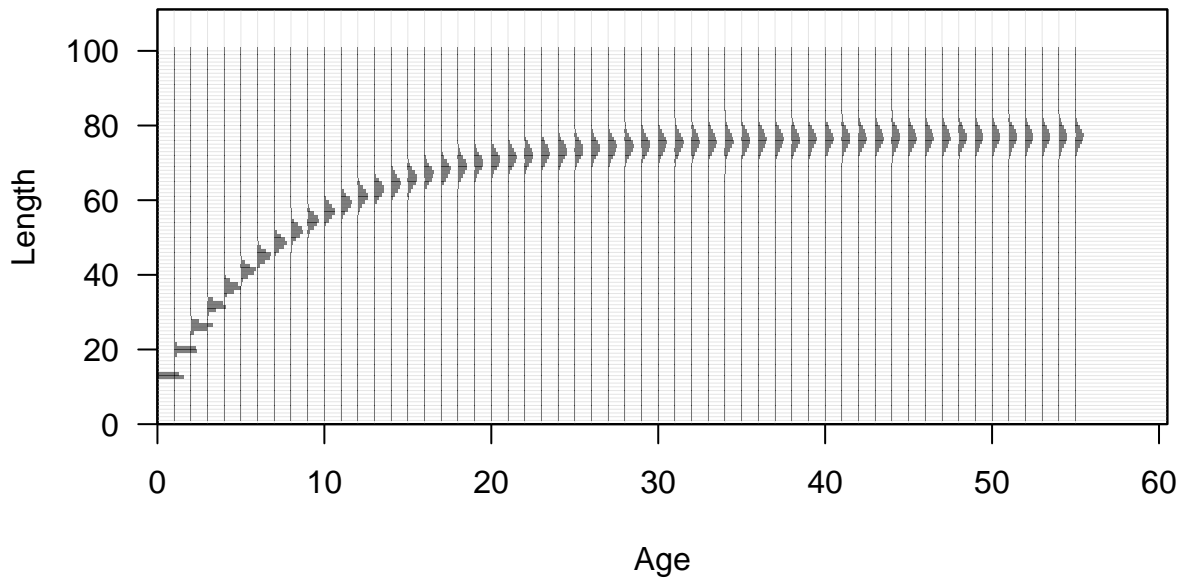


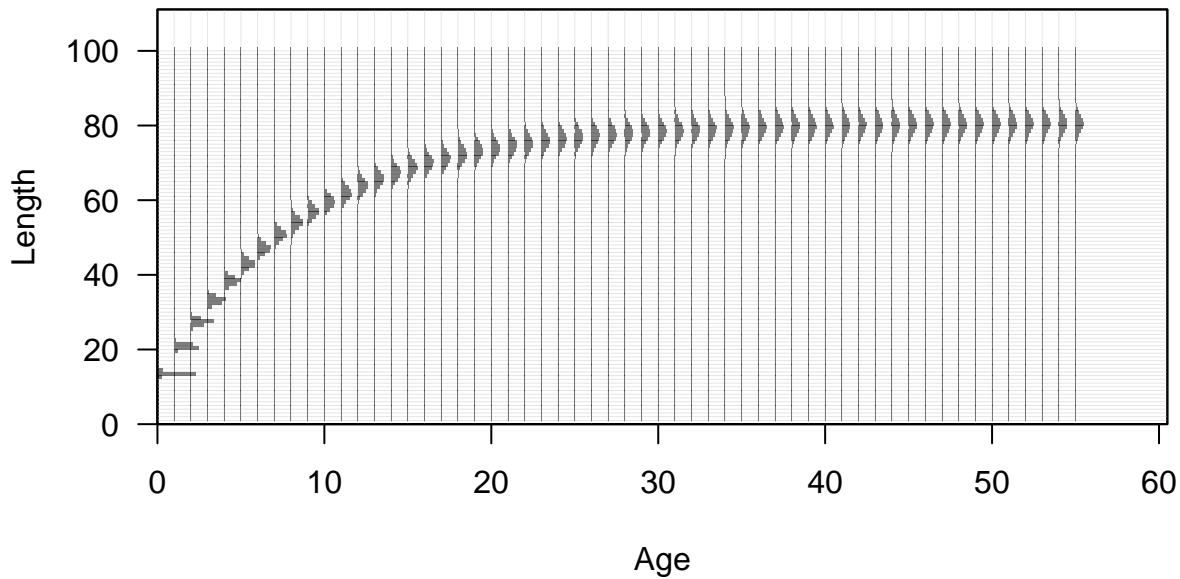


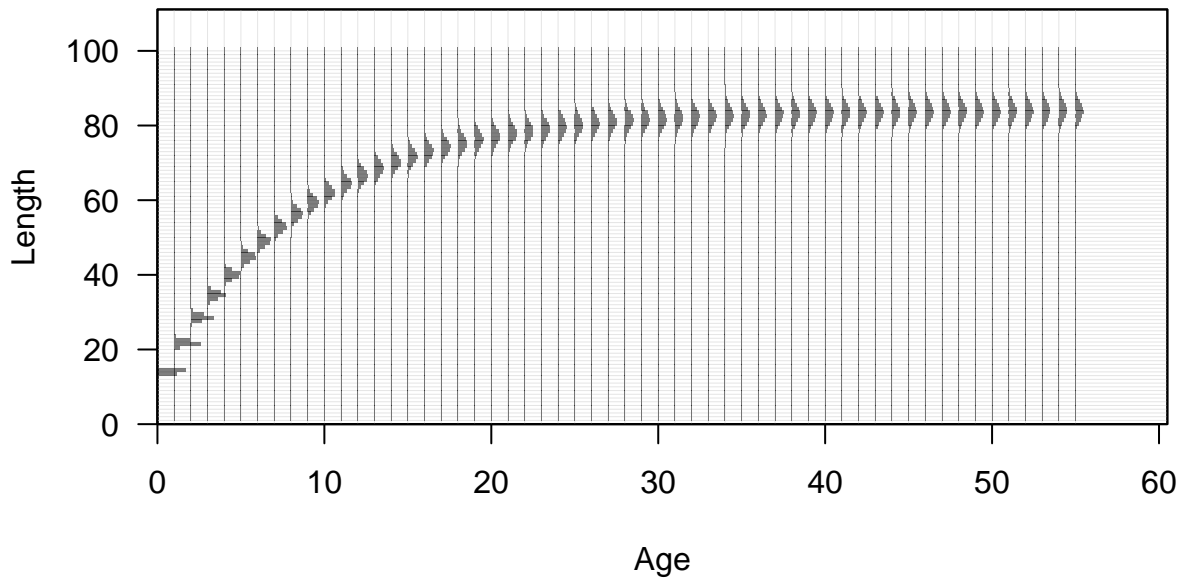


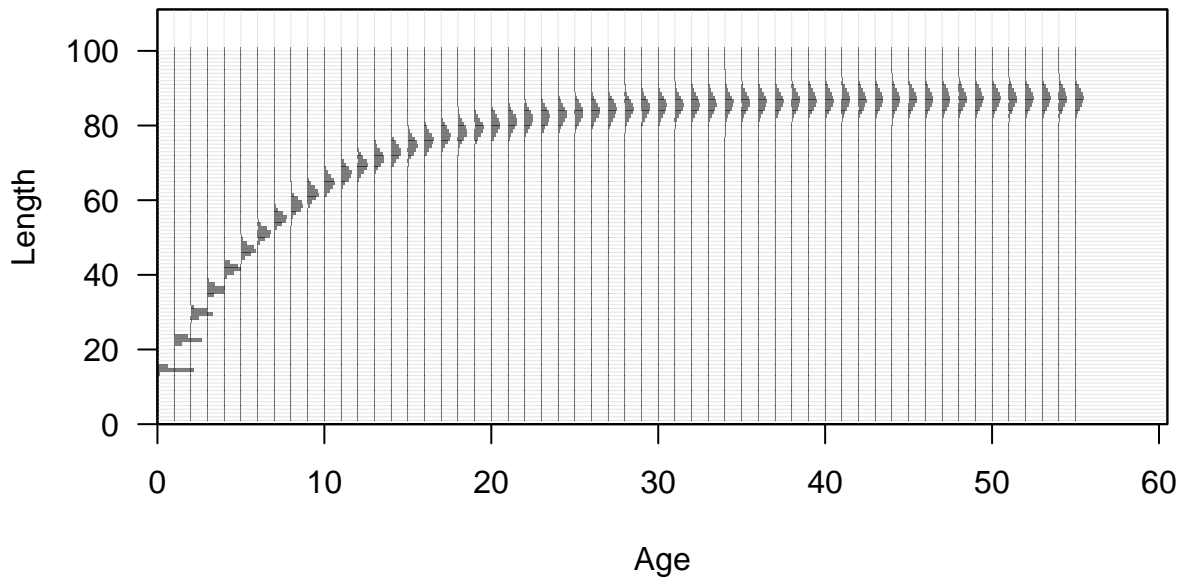


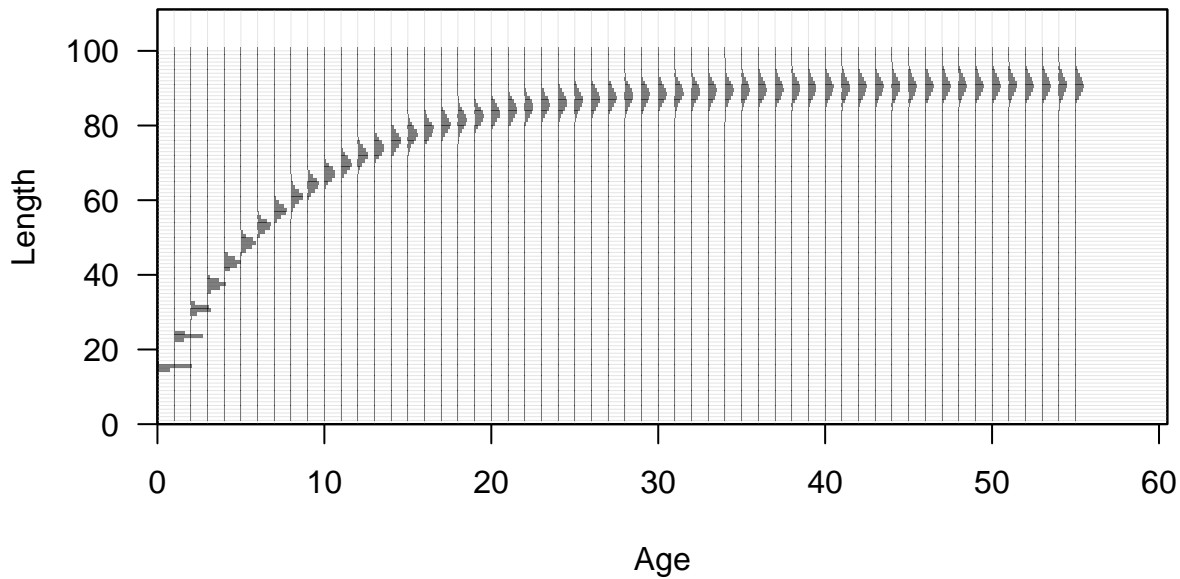


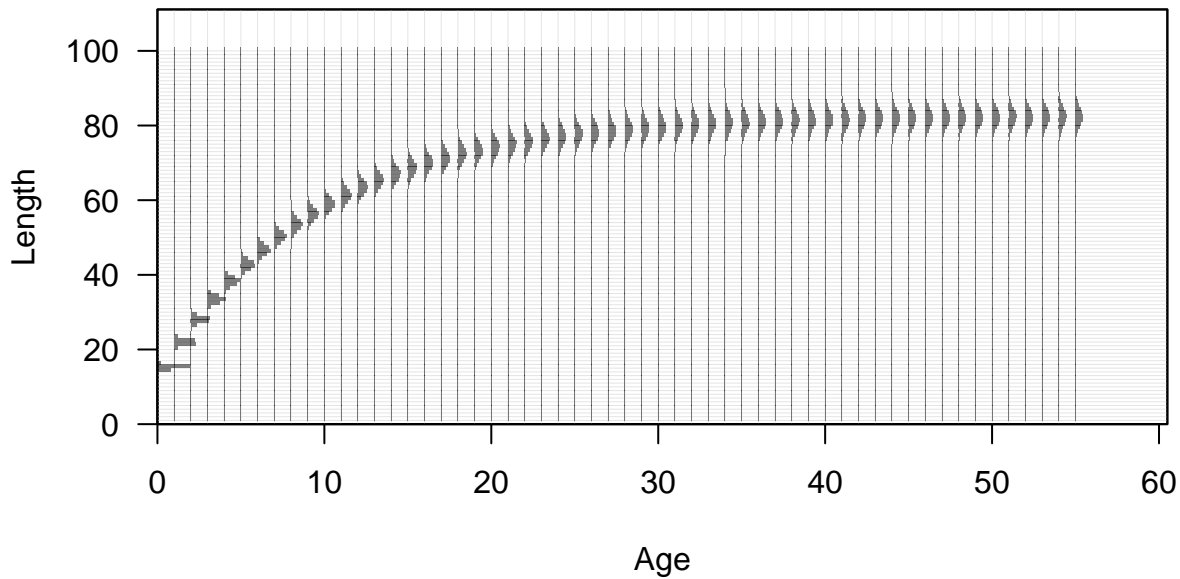


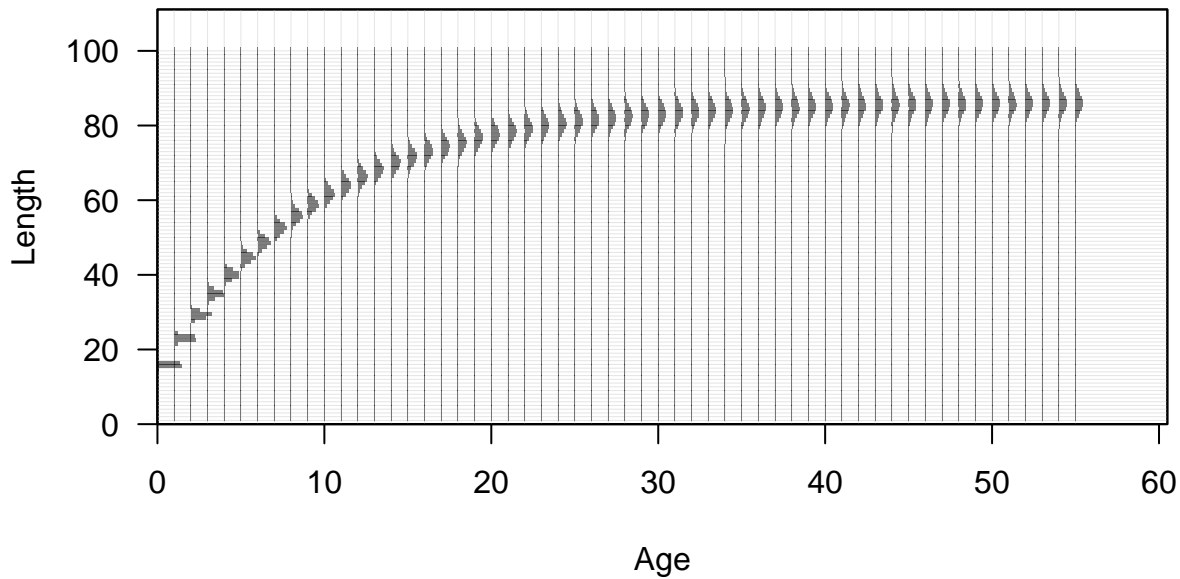




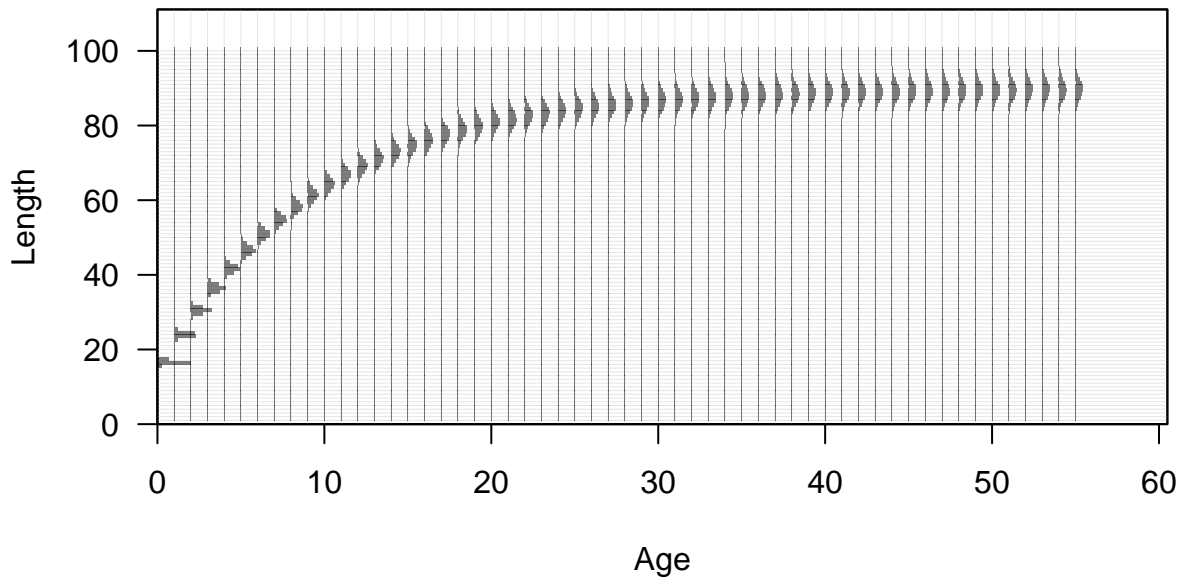


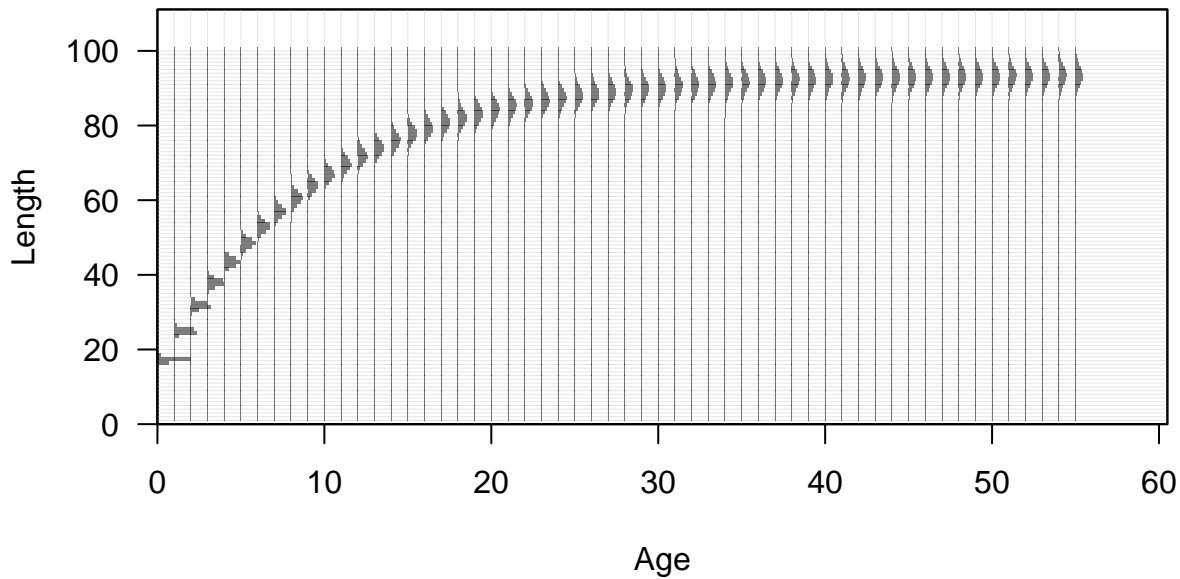


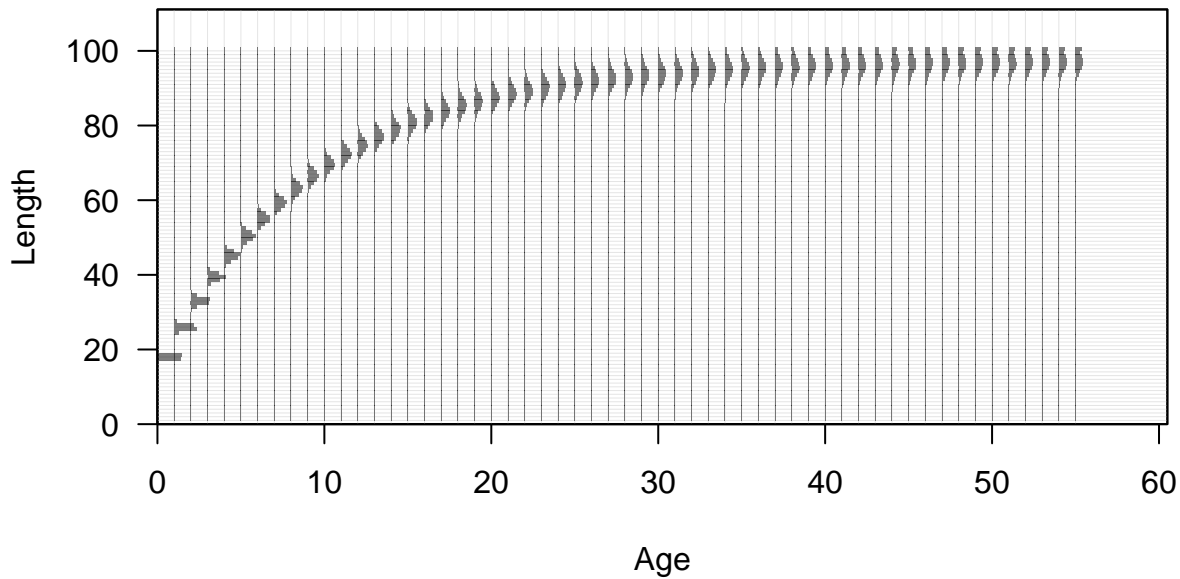


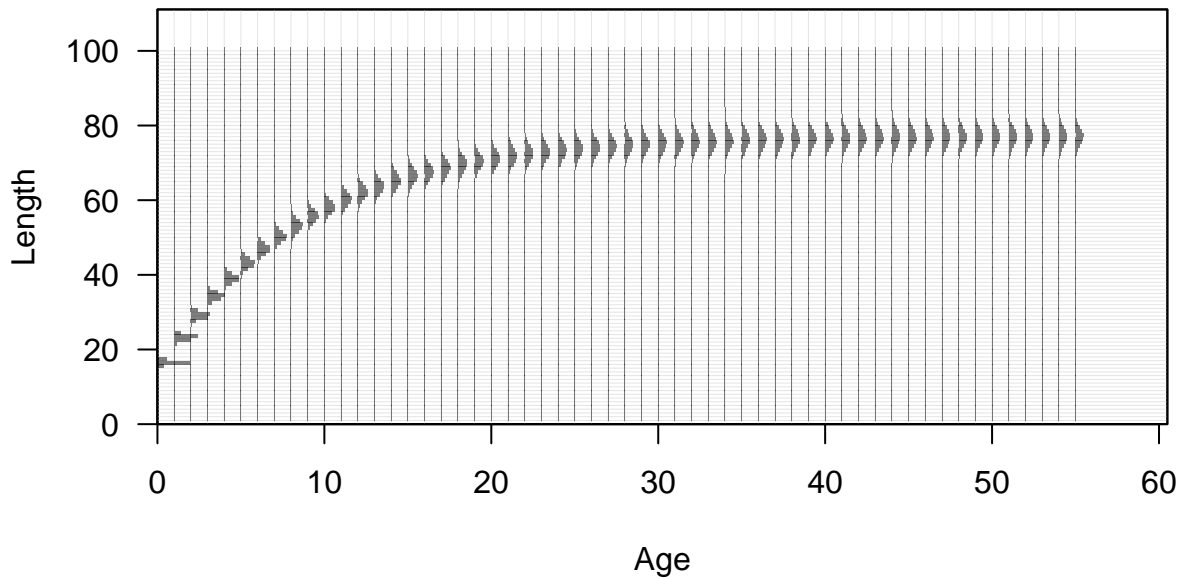


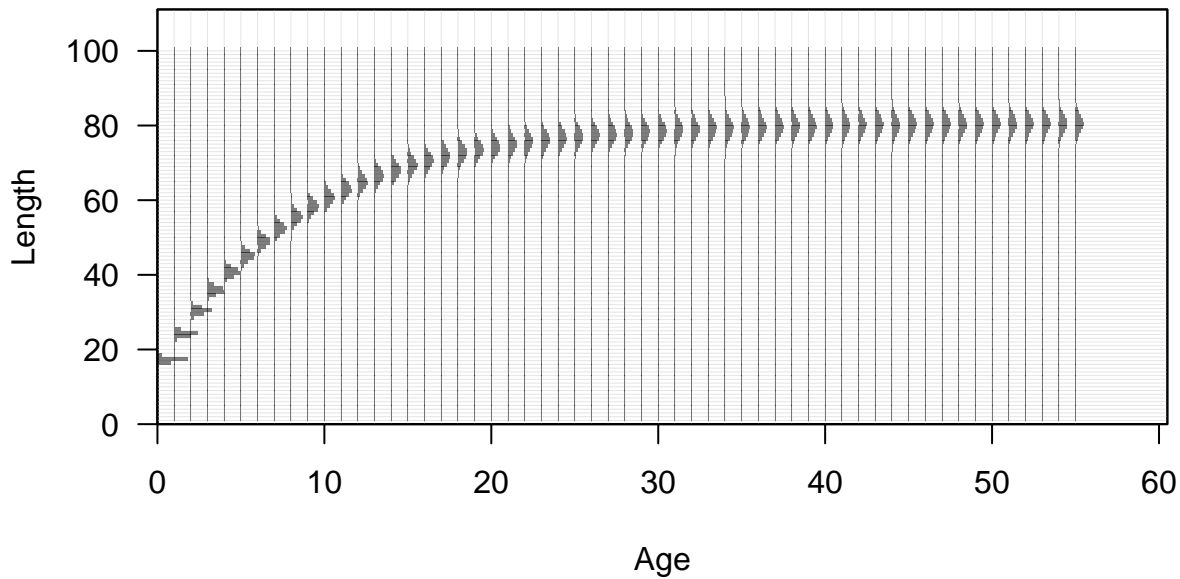


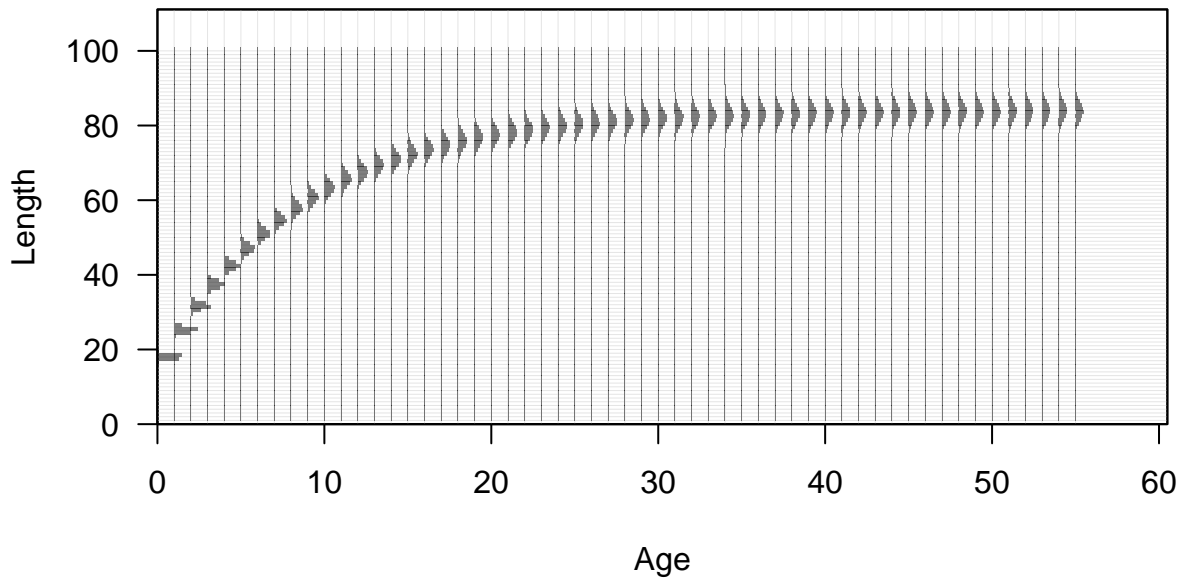


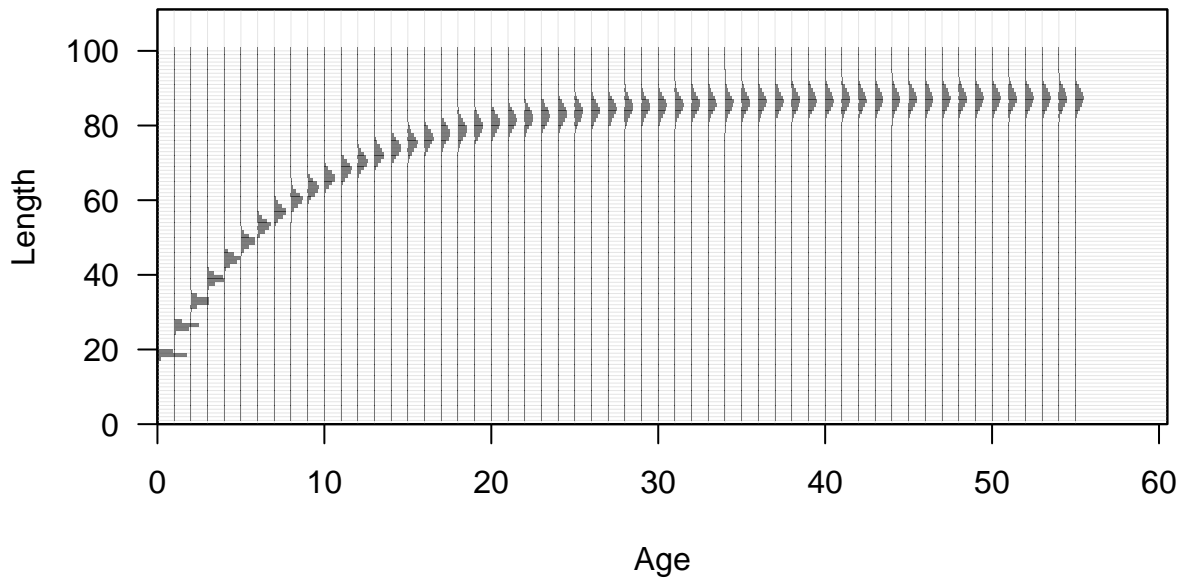


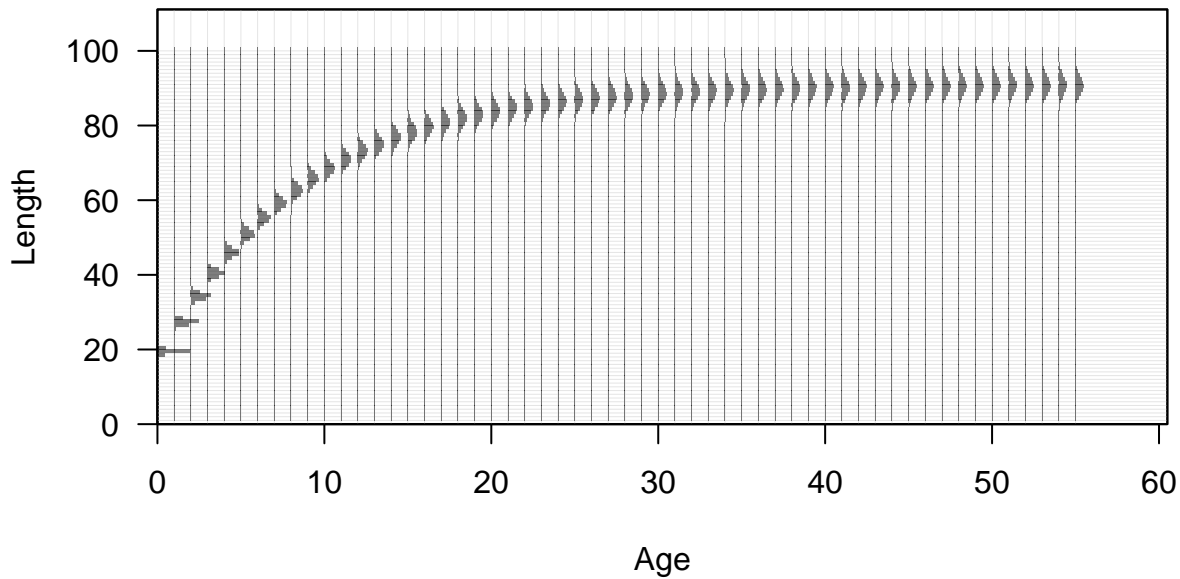






















Fecundity



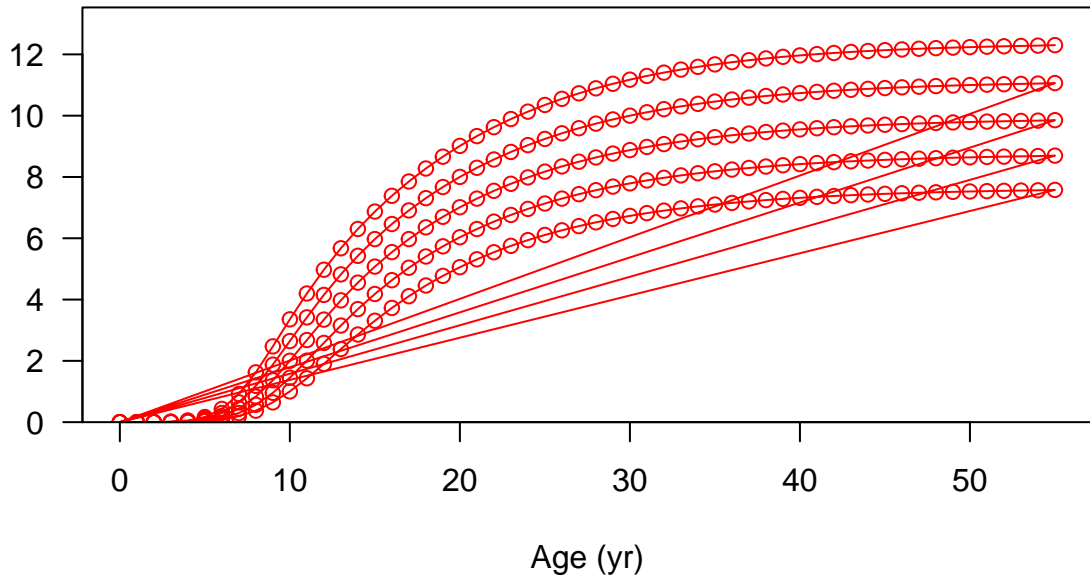
Fecundity



Spawning output

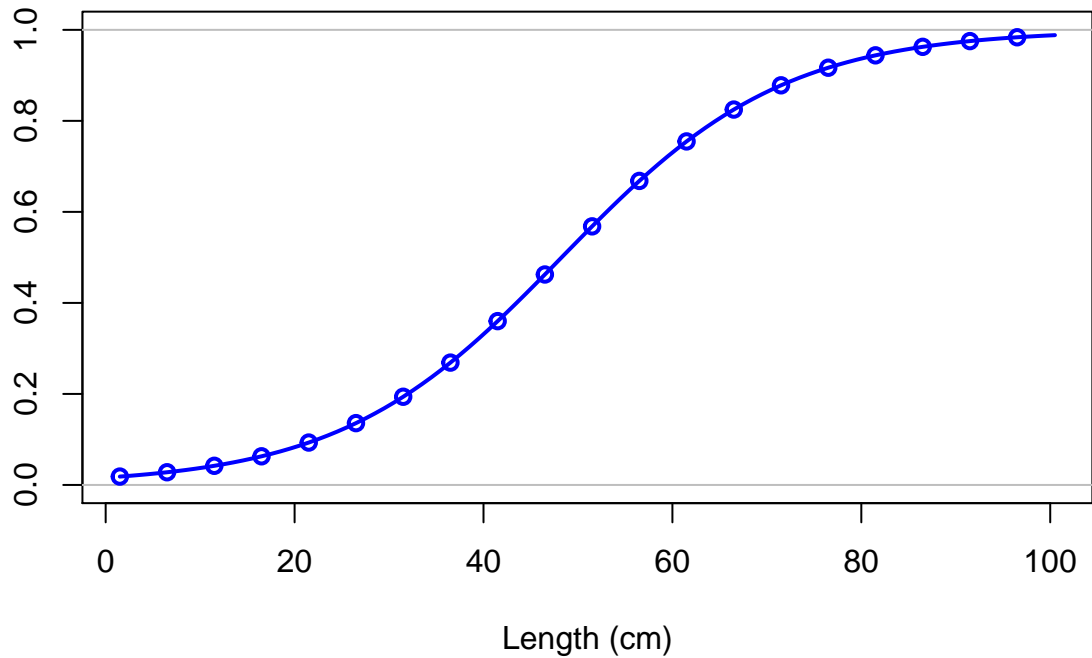


Spawning output

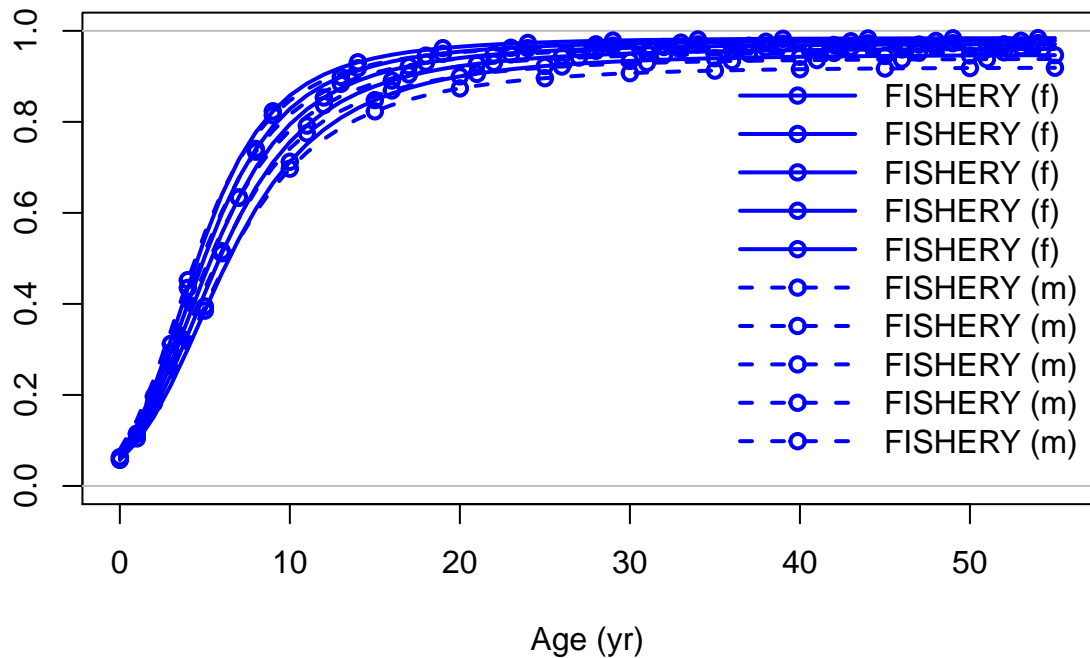




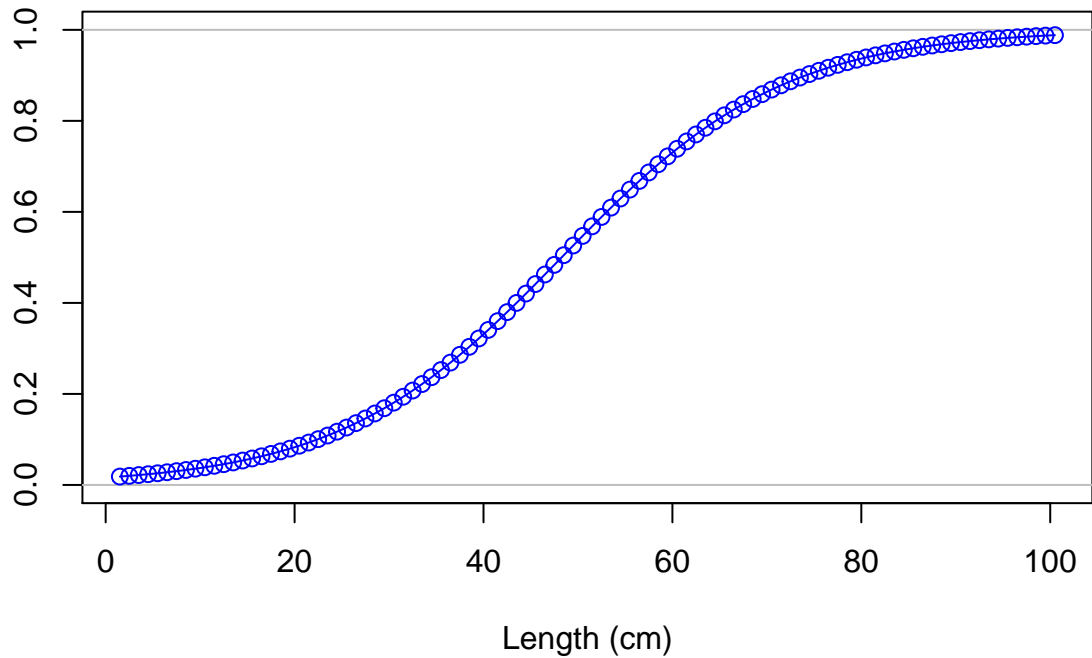
Selectivity



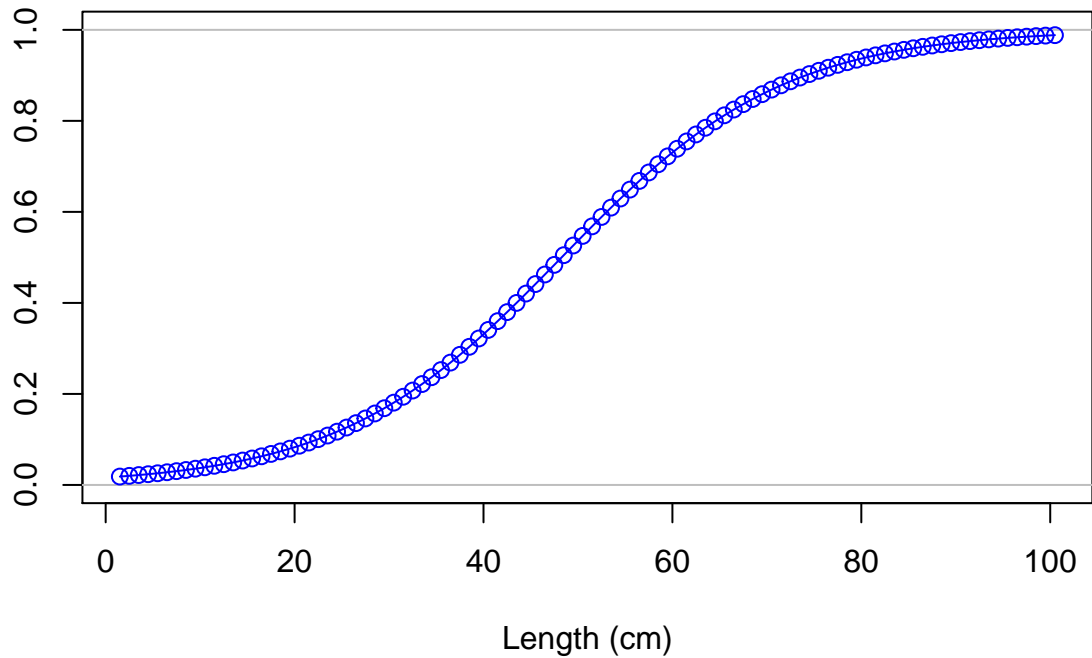
Selectivity

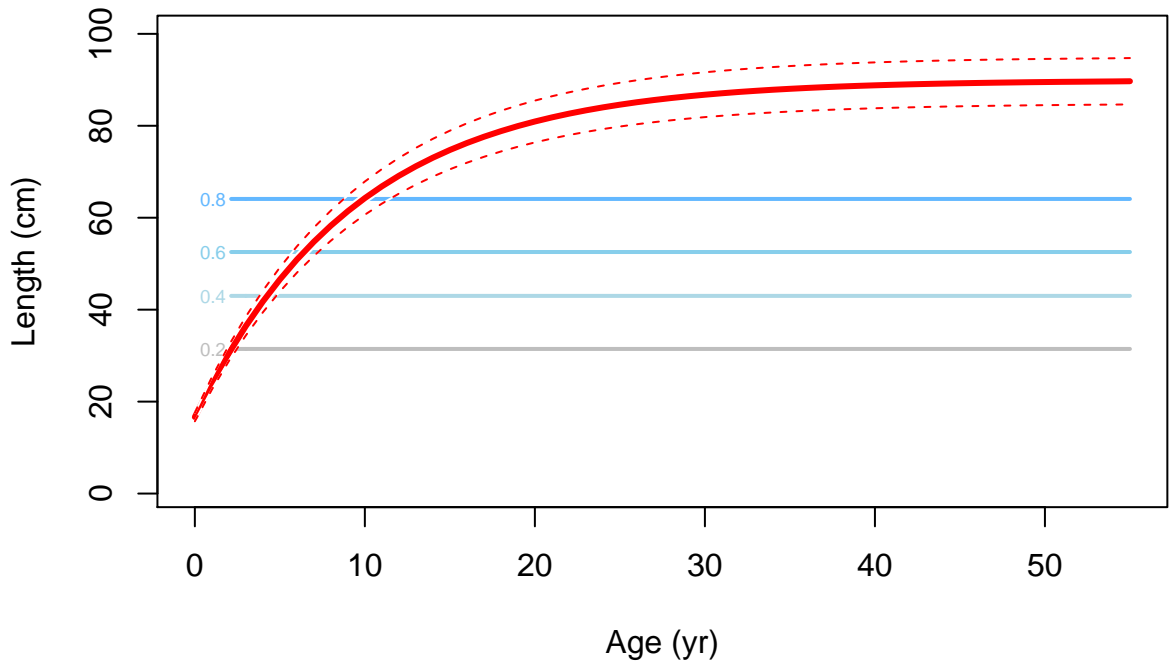


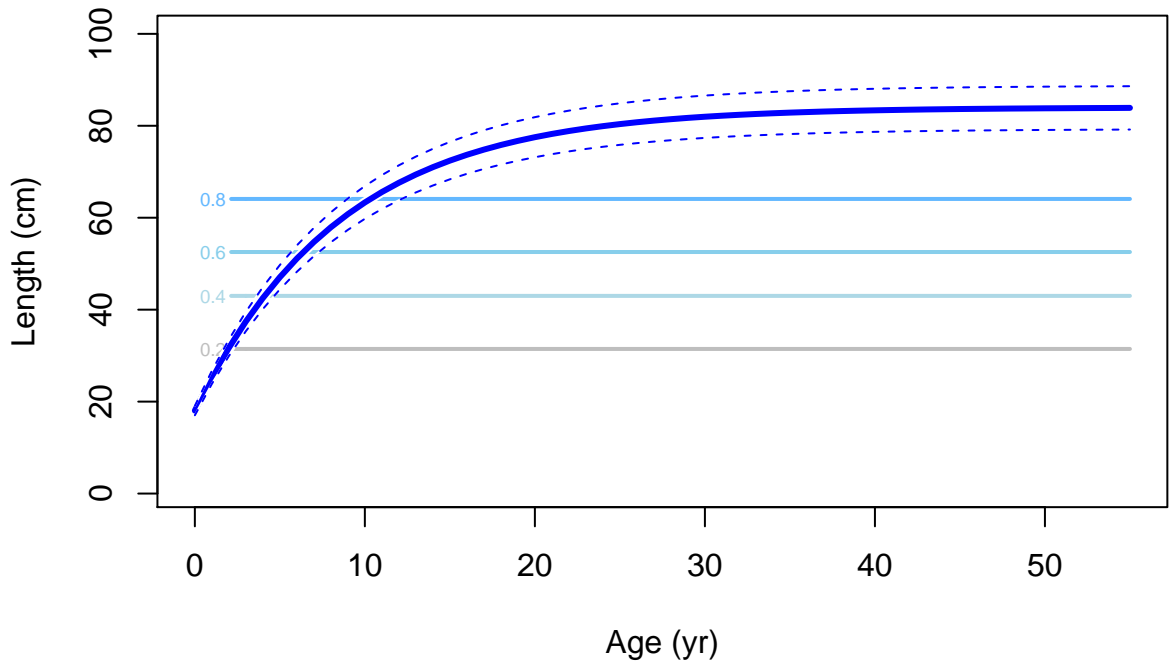
Selectivity

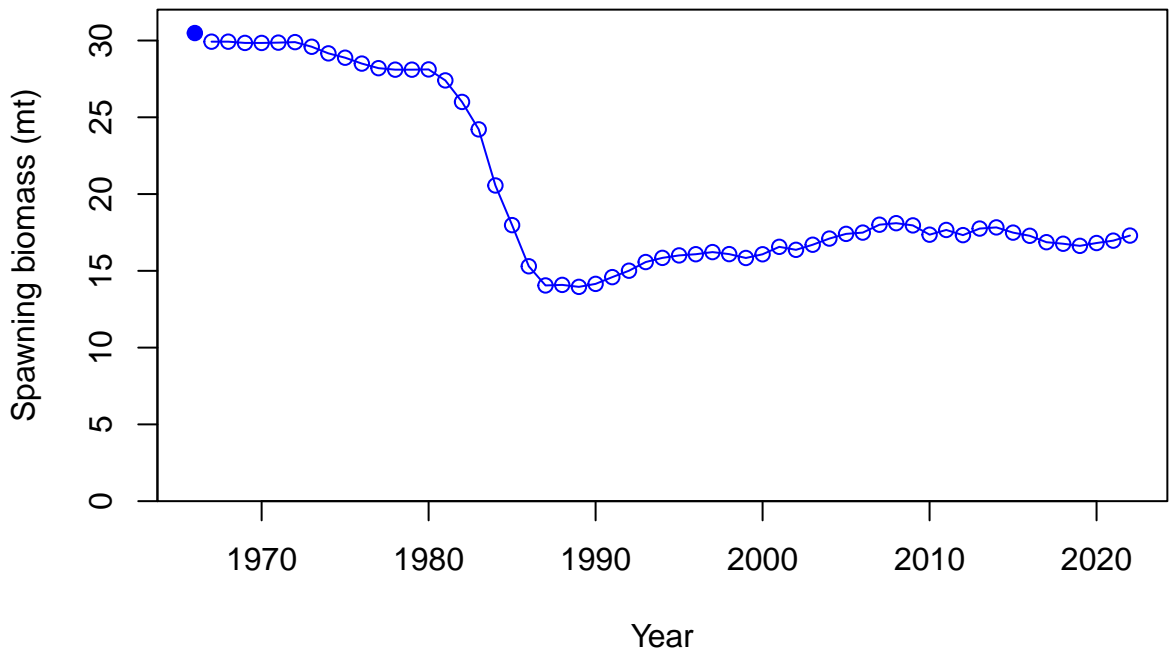


Selectivity

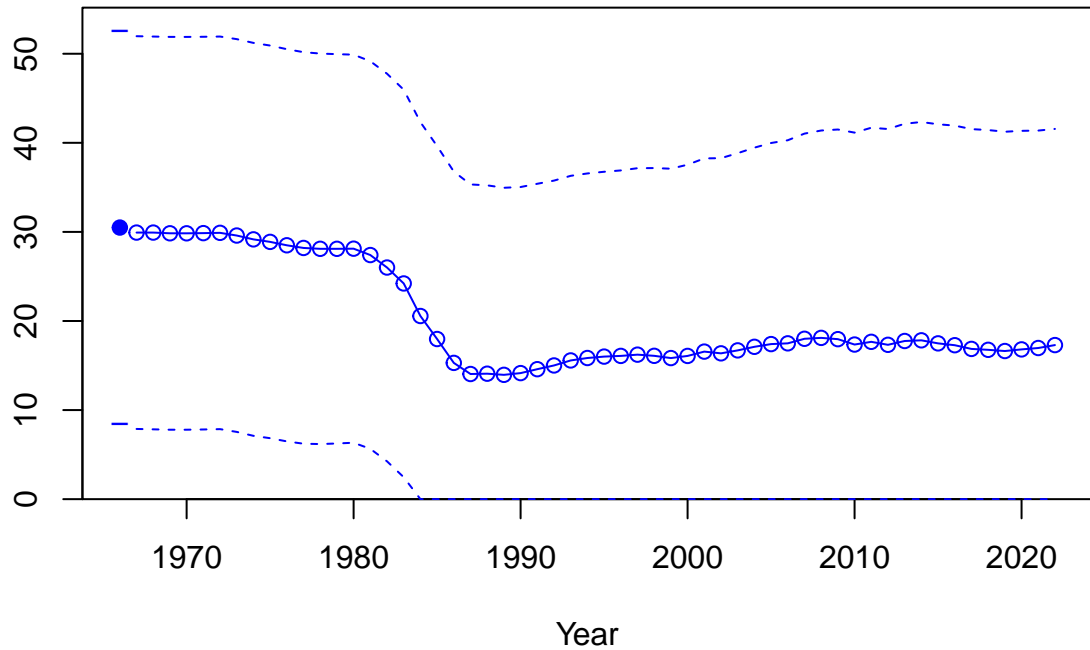






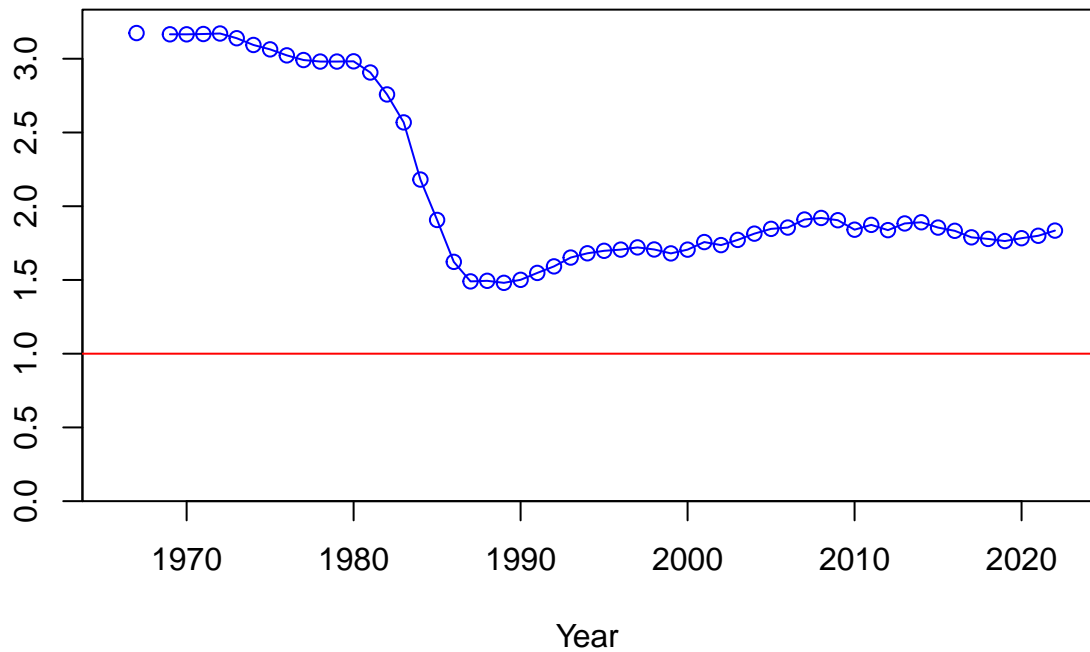


Spawning biomass (mt)

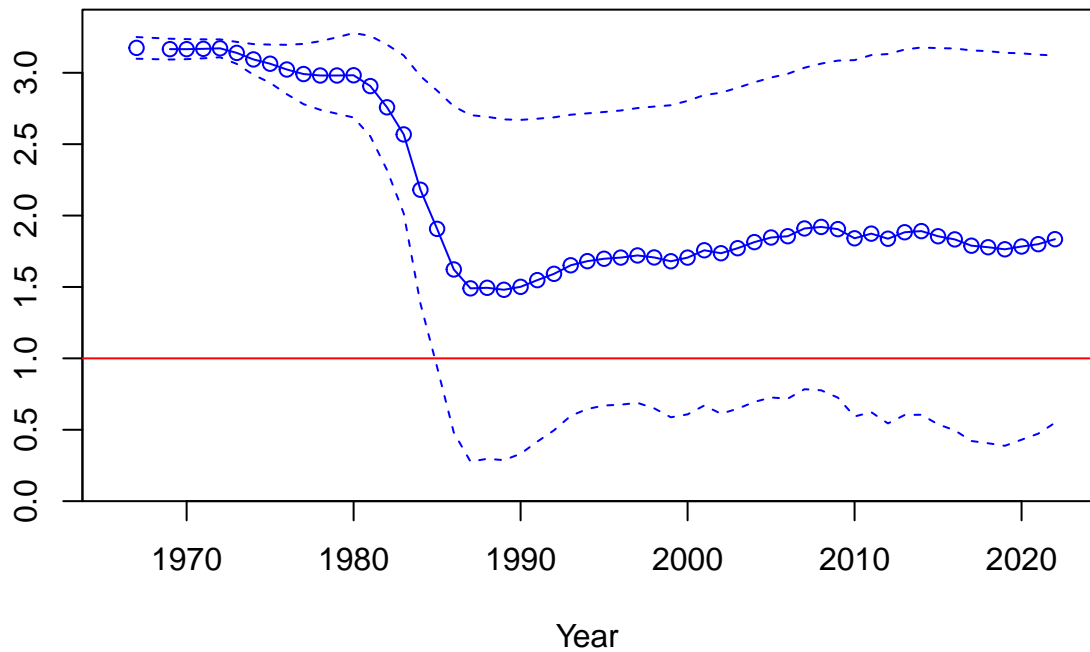


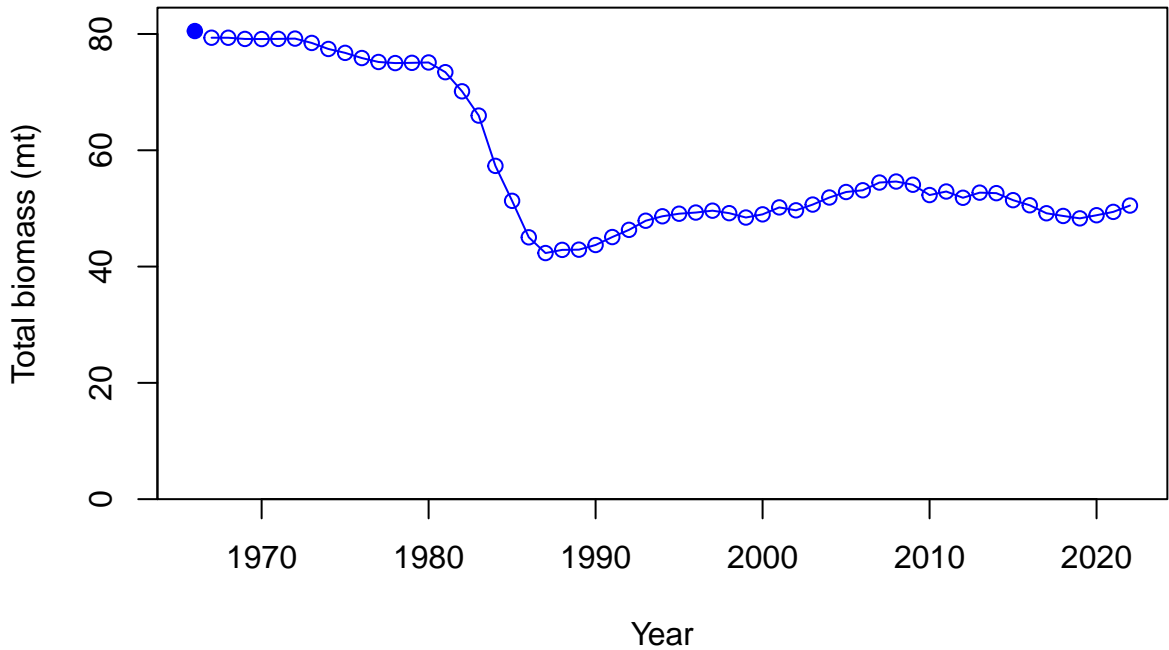


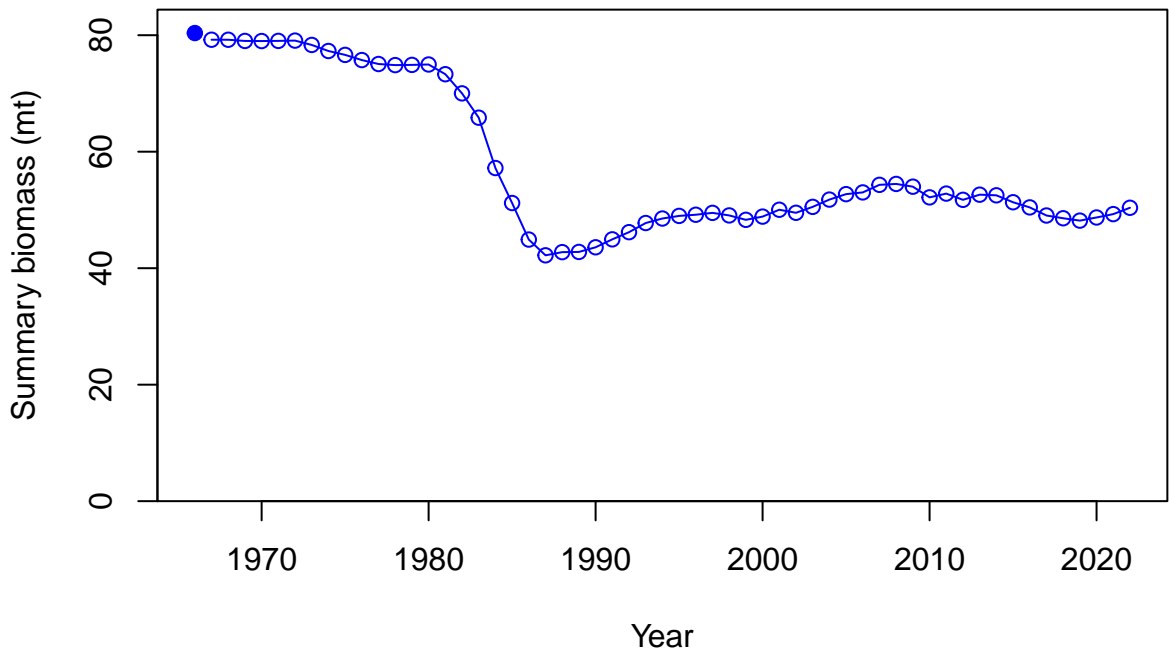
Relative spawning biomass:  $B/B_{MSY}$



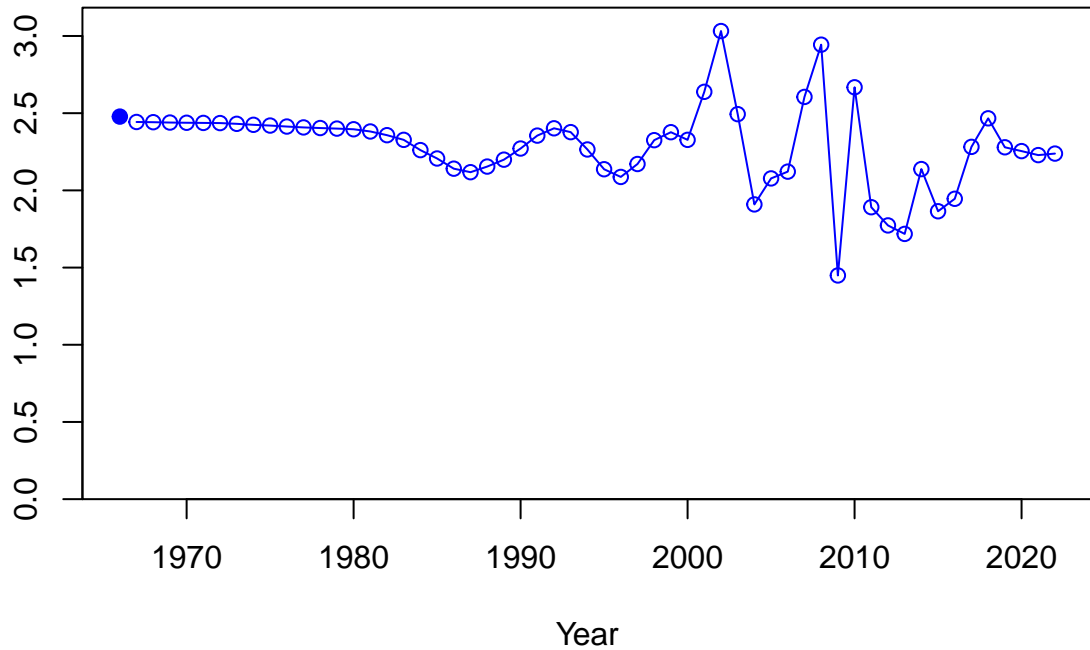
Relative spawning biomass:  $B/B_{MSY}$



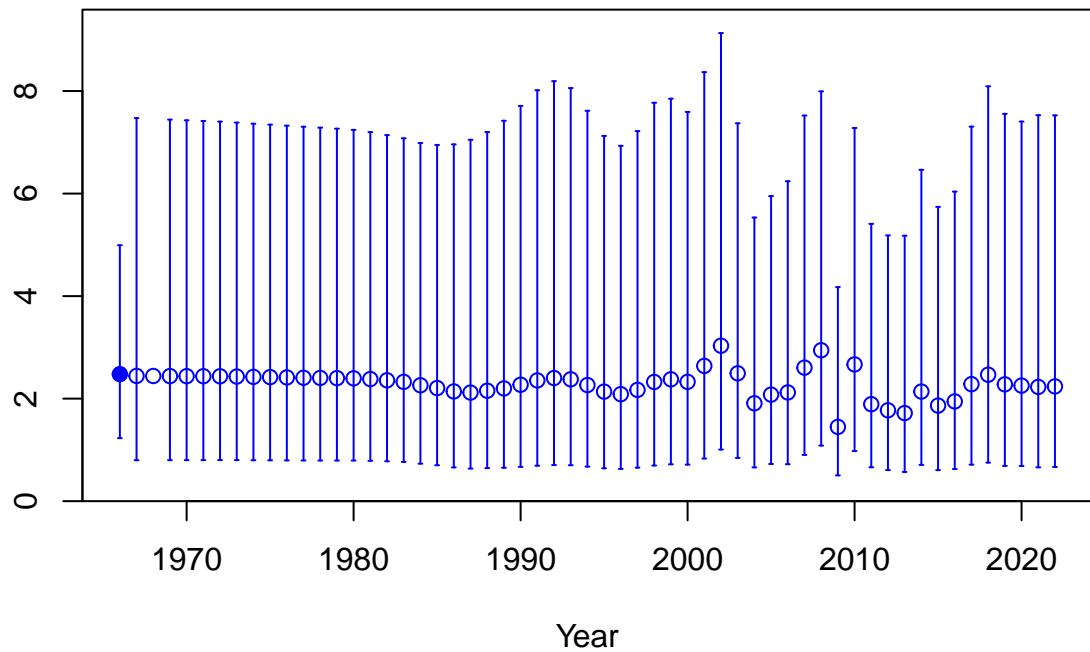




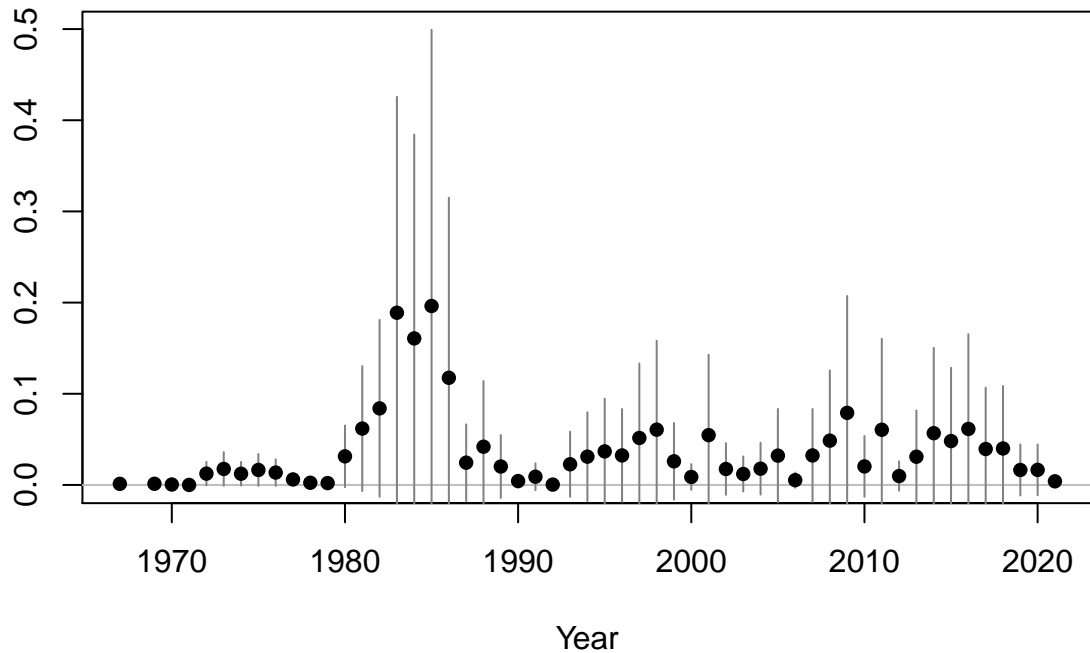
Age-0 recruits (1,000s)

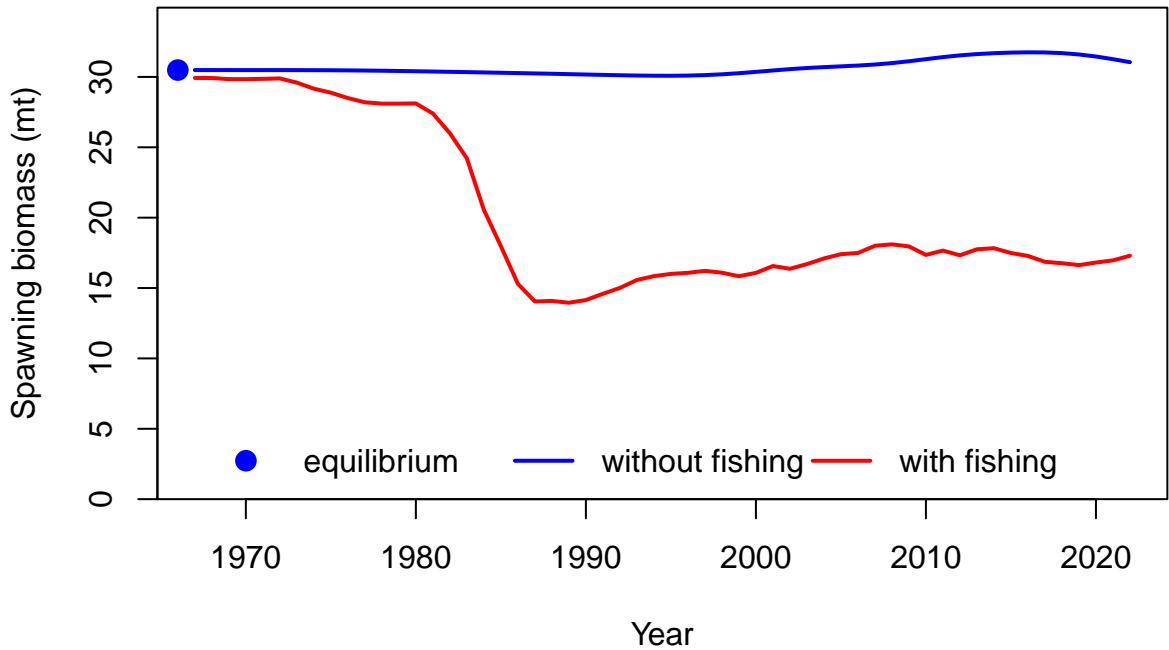


Age-0 recruits (1,000s)



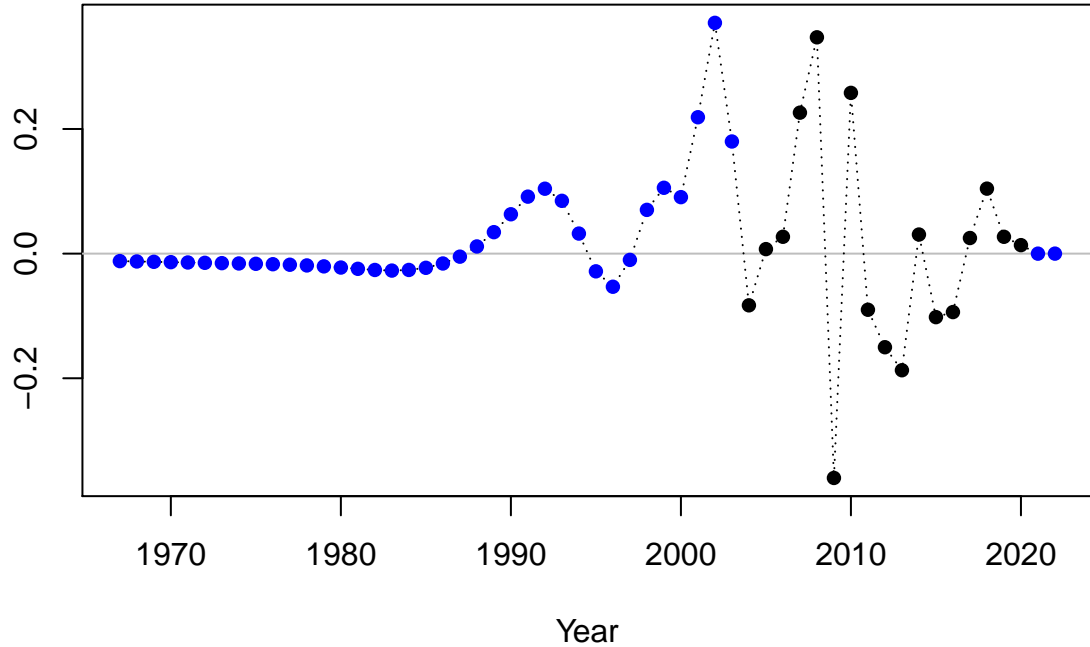
Summary Fishing Mortality







Log recruitment deviation



Log recruitment deviation

1.0  
0.5  
0.0  
-0.5  
-1.0

1970

1980

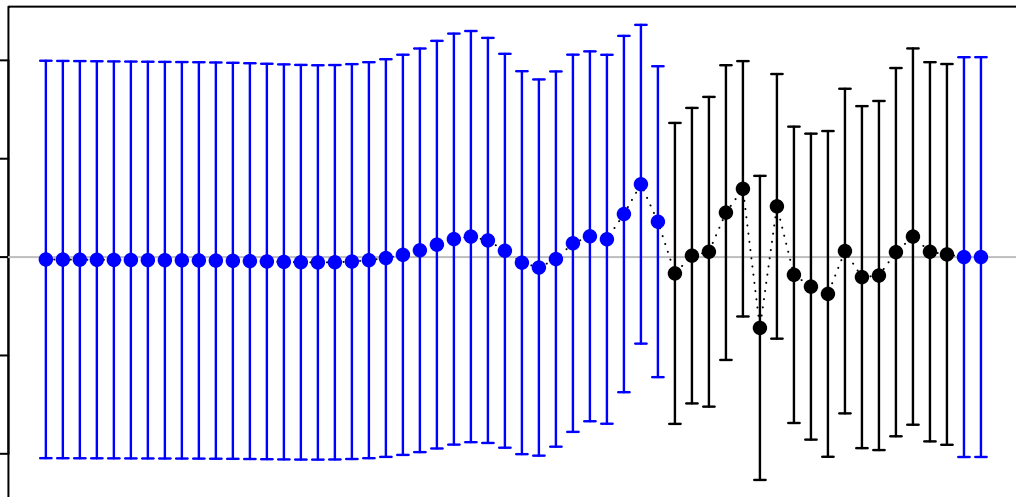
1990

2000

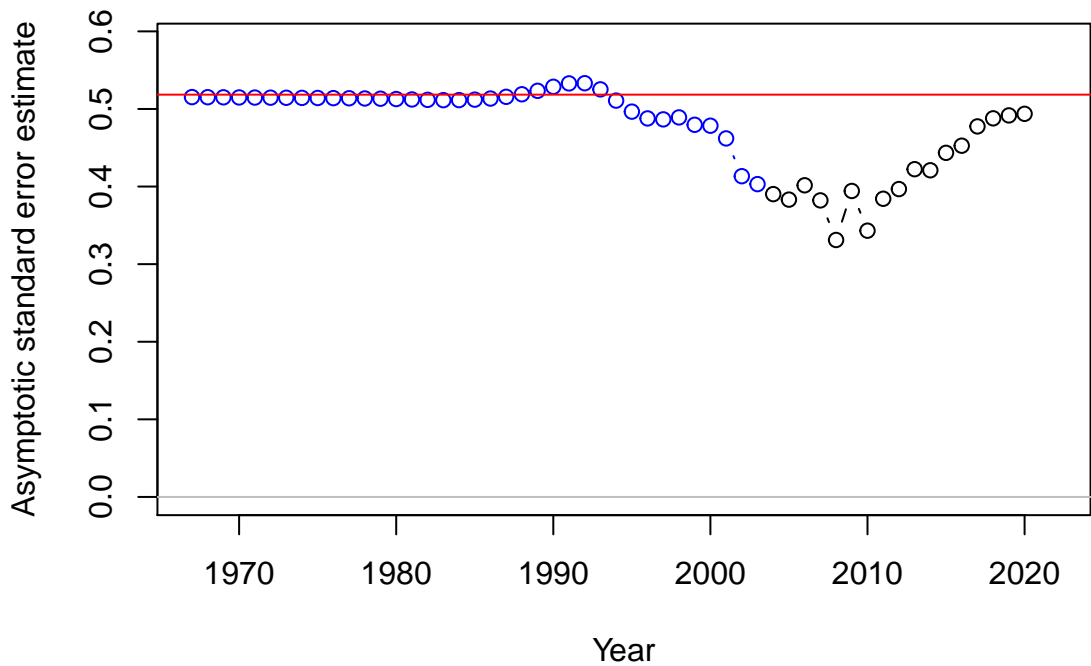
2010

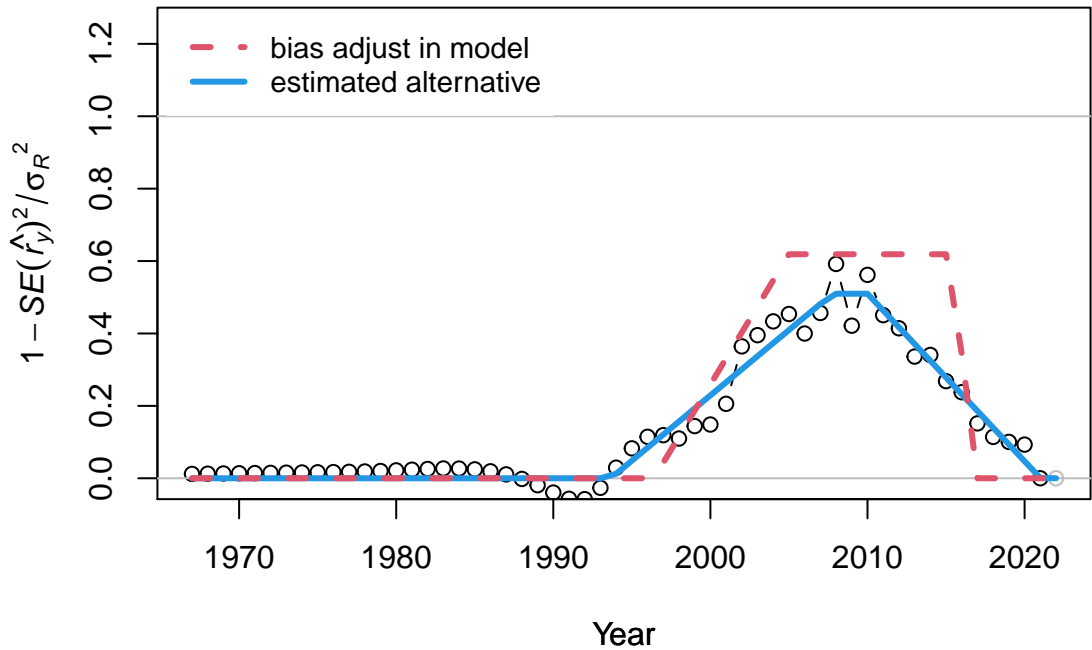
2020

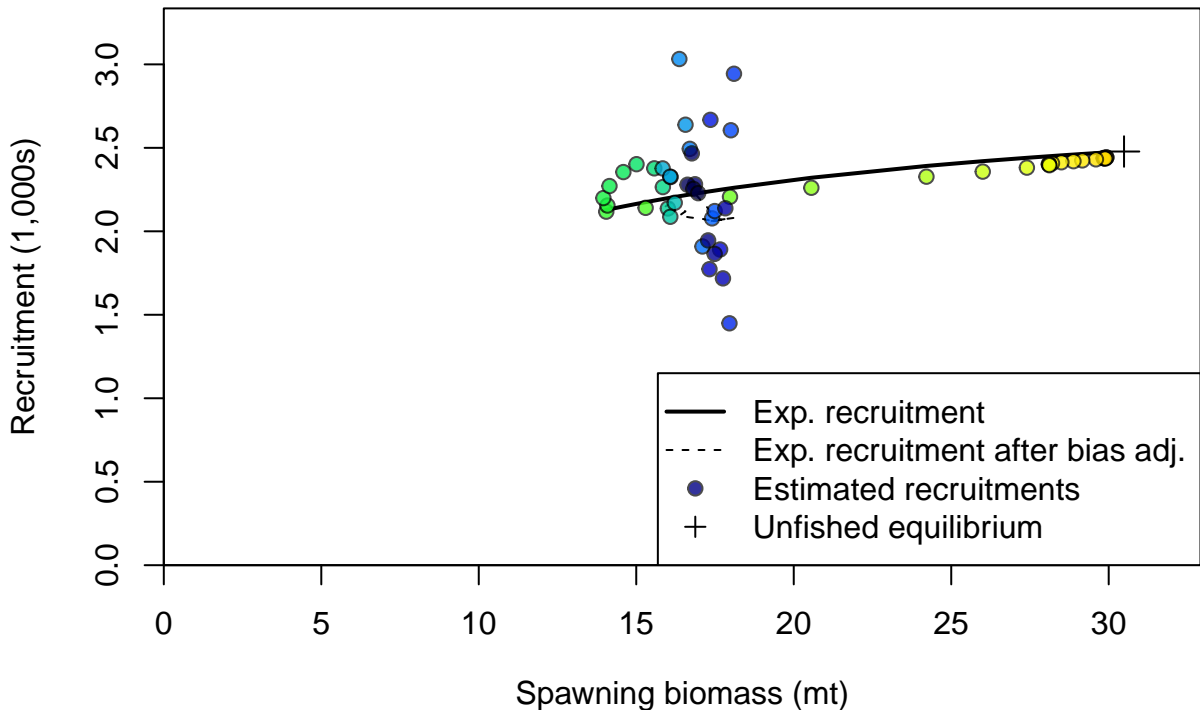
Year

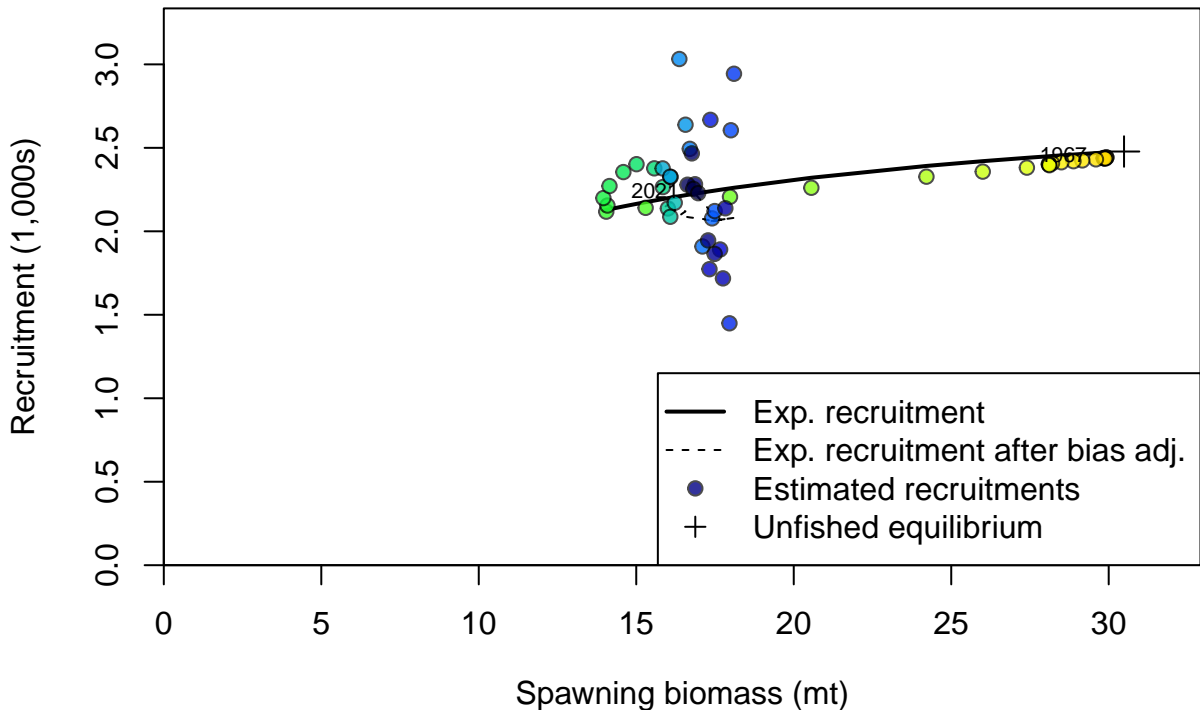


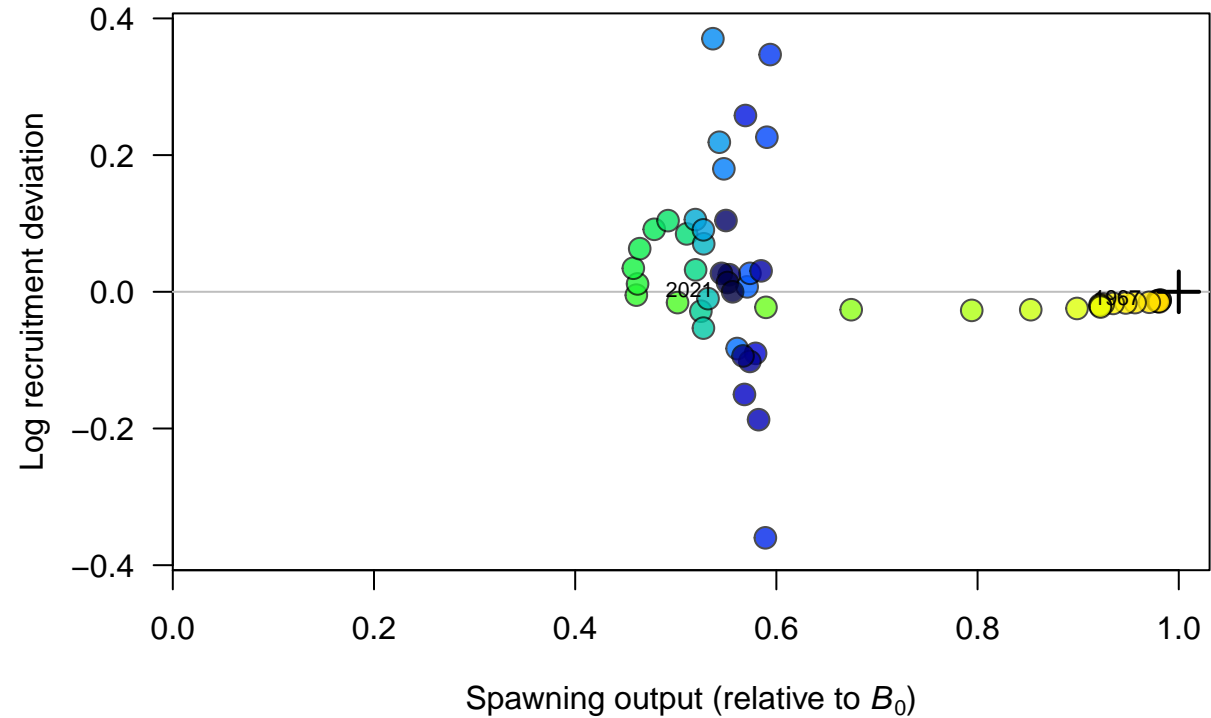
## Recruitment deviation variance

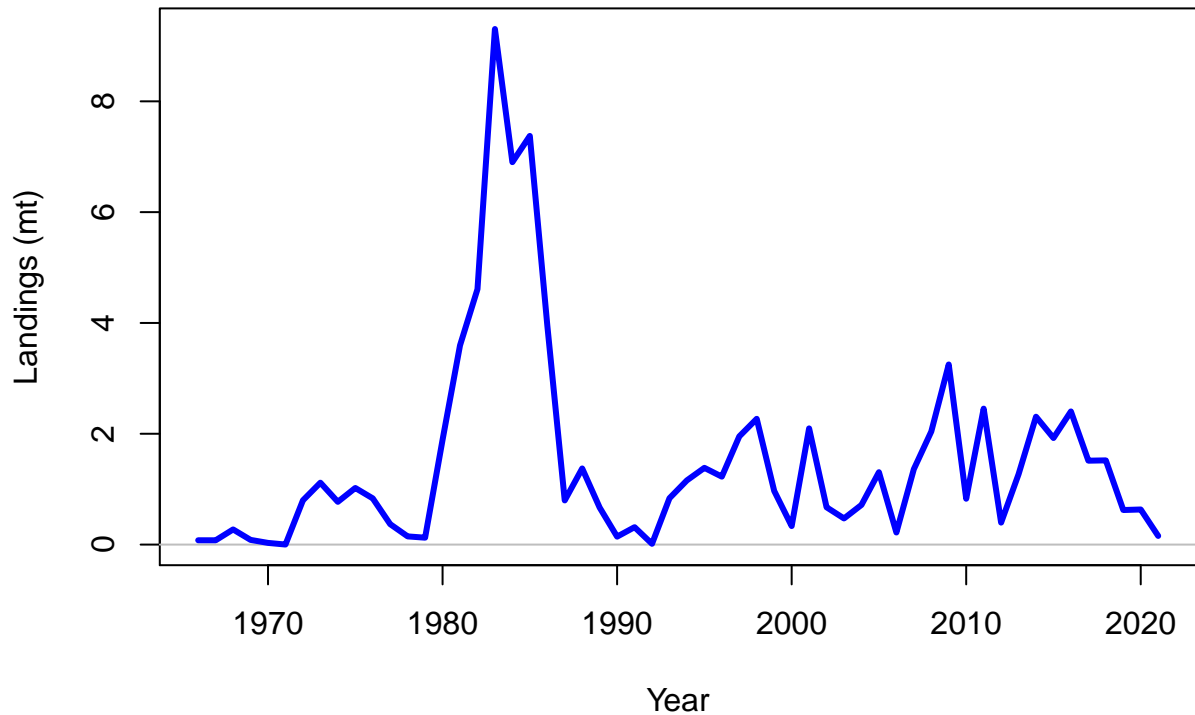




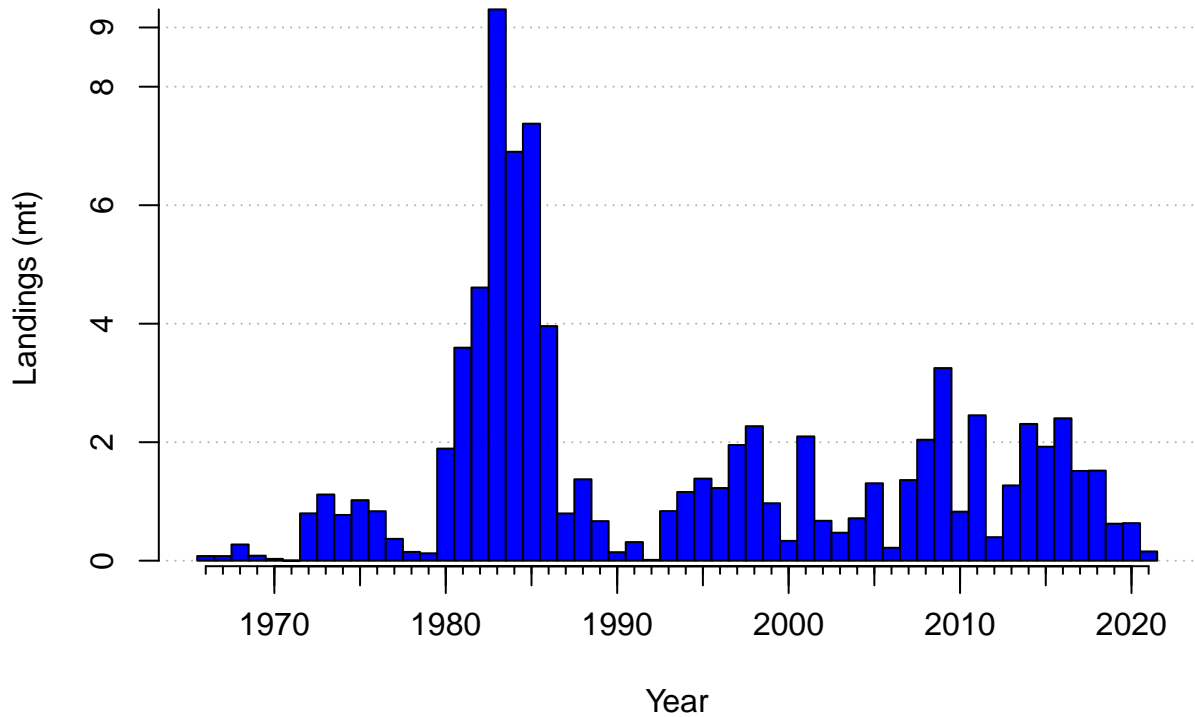


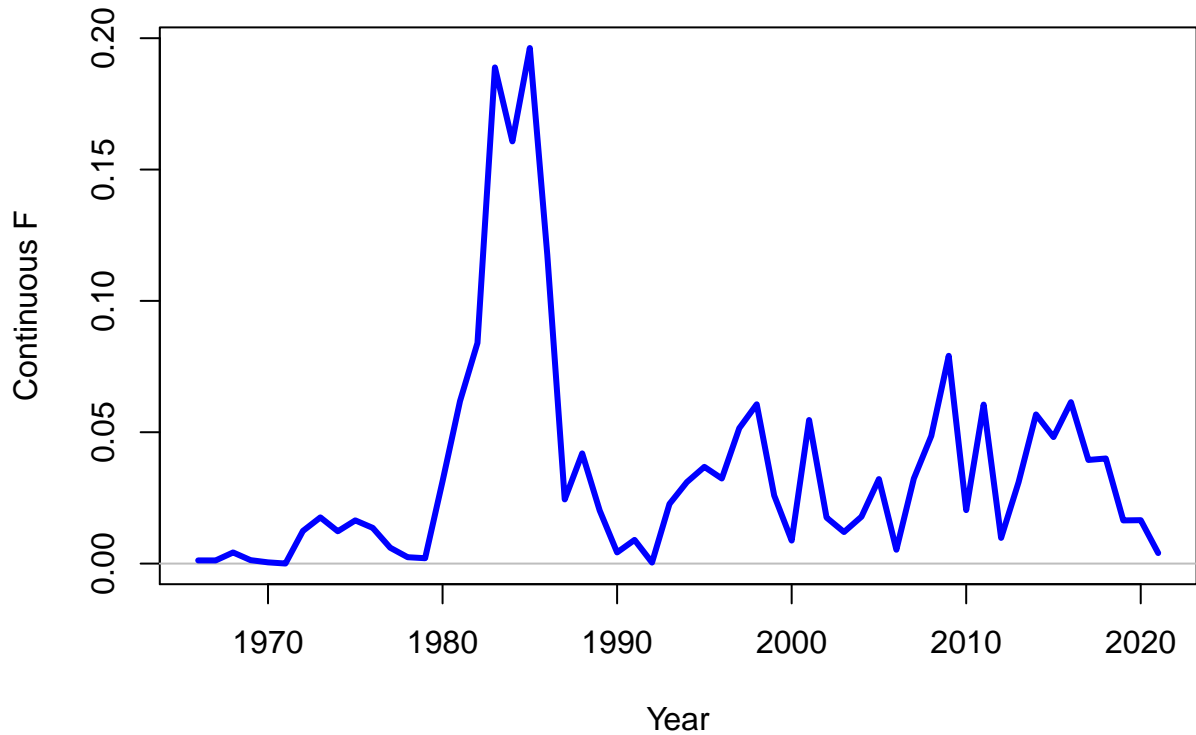




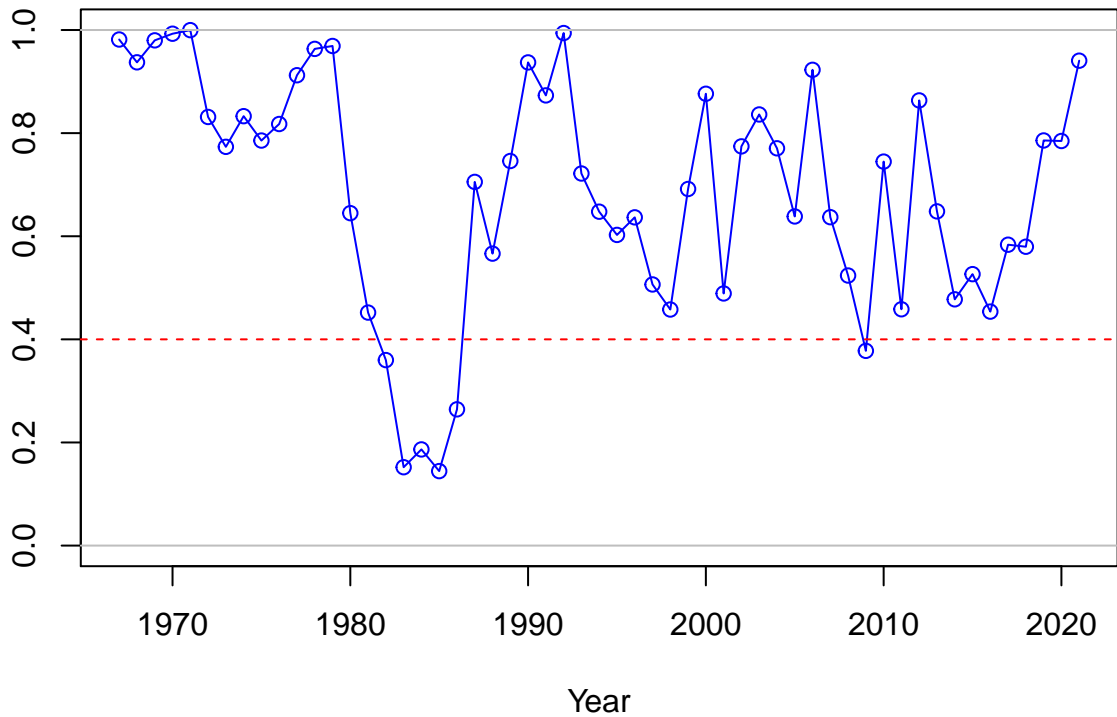




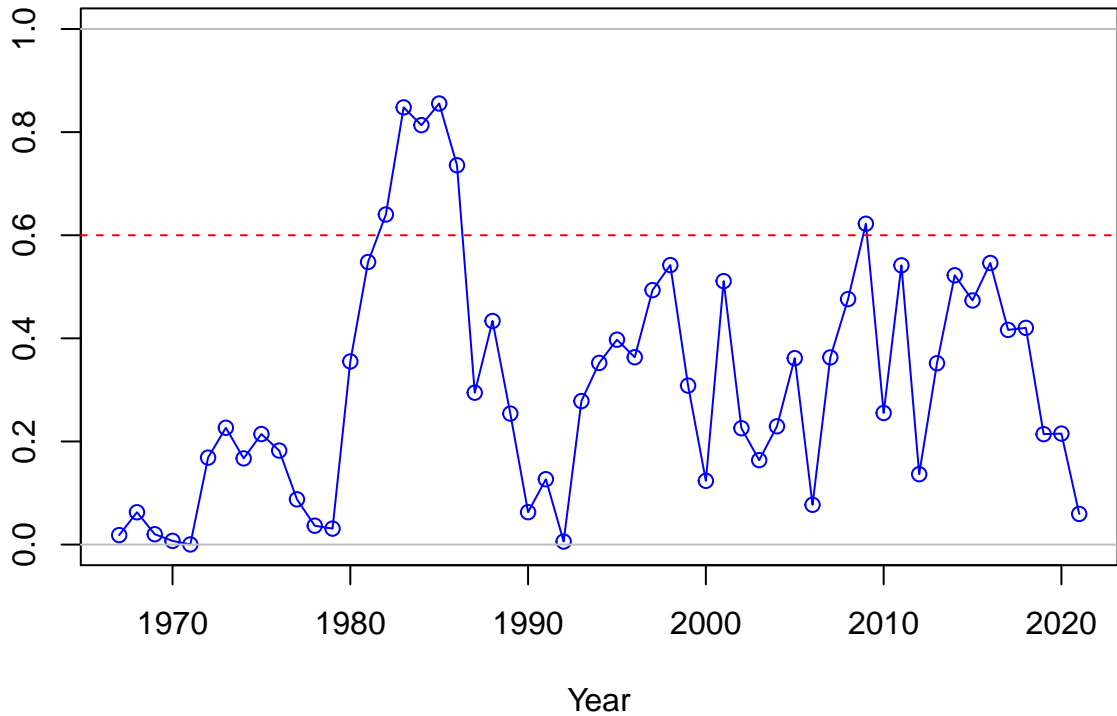




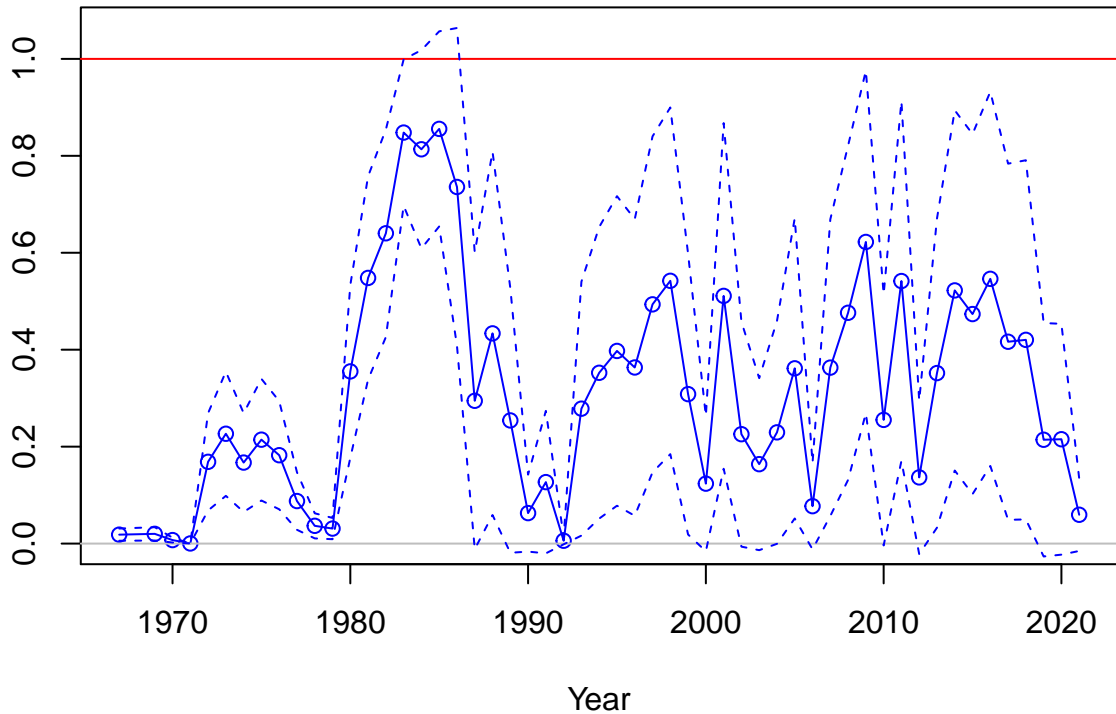
SPR



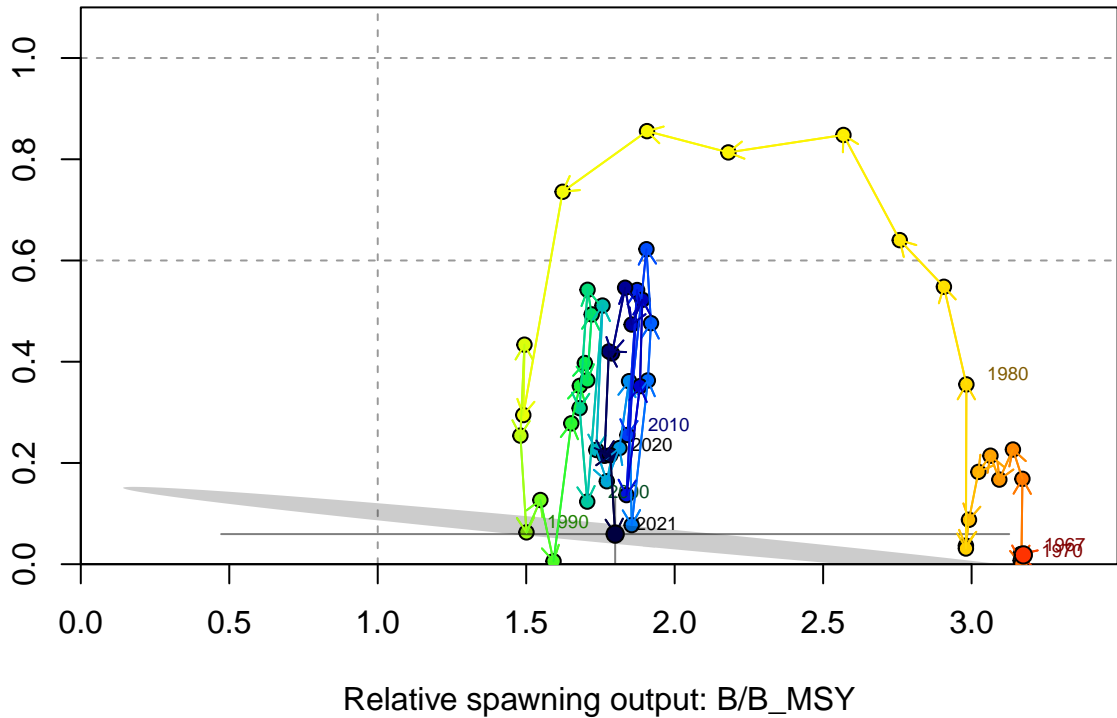
1-SPR



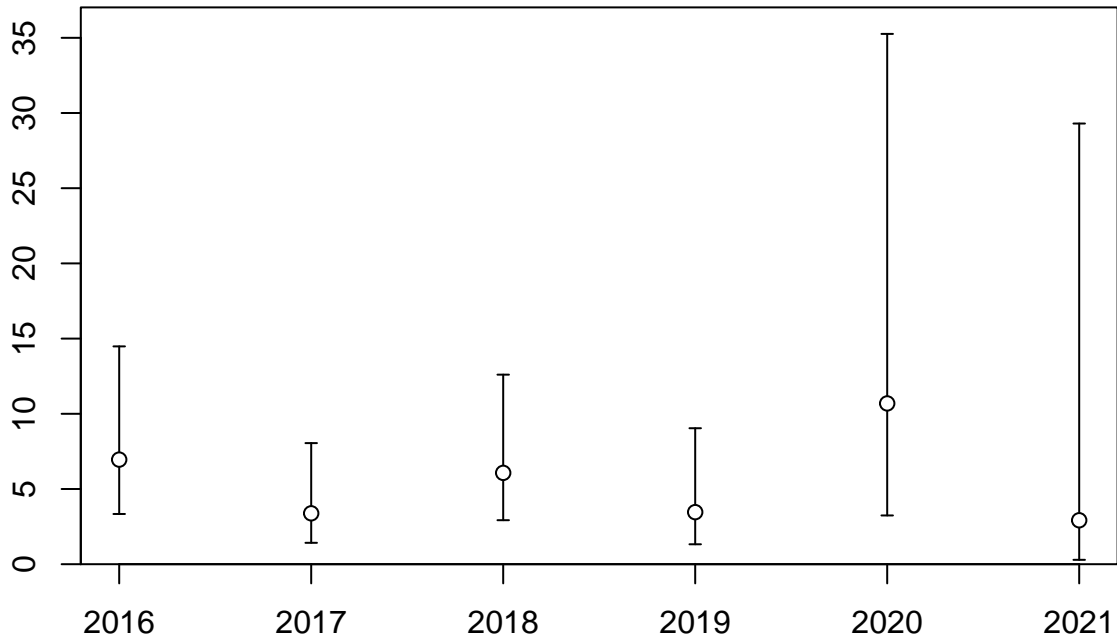
Fishing intensity: 1-SPR



Fishing intensity: 1-SPR

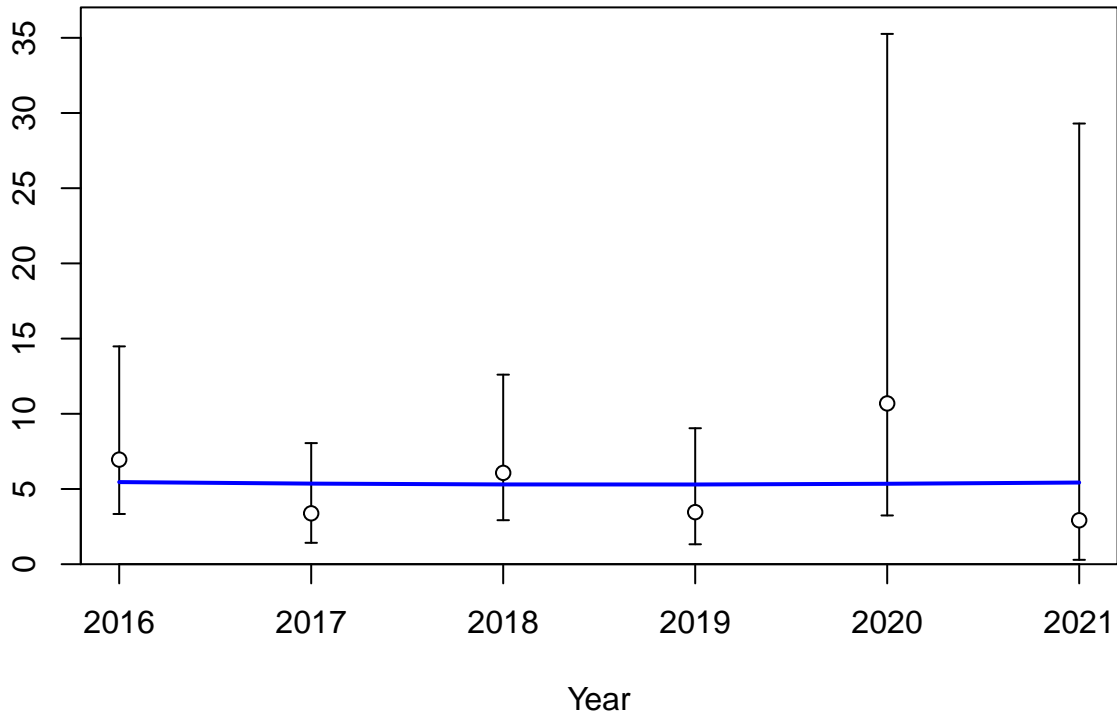


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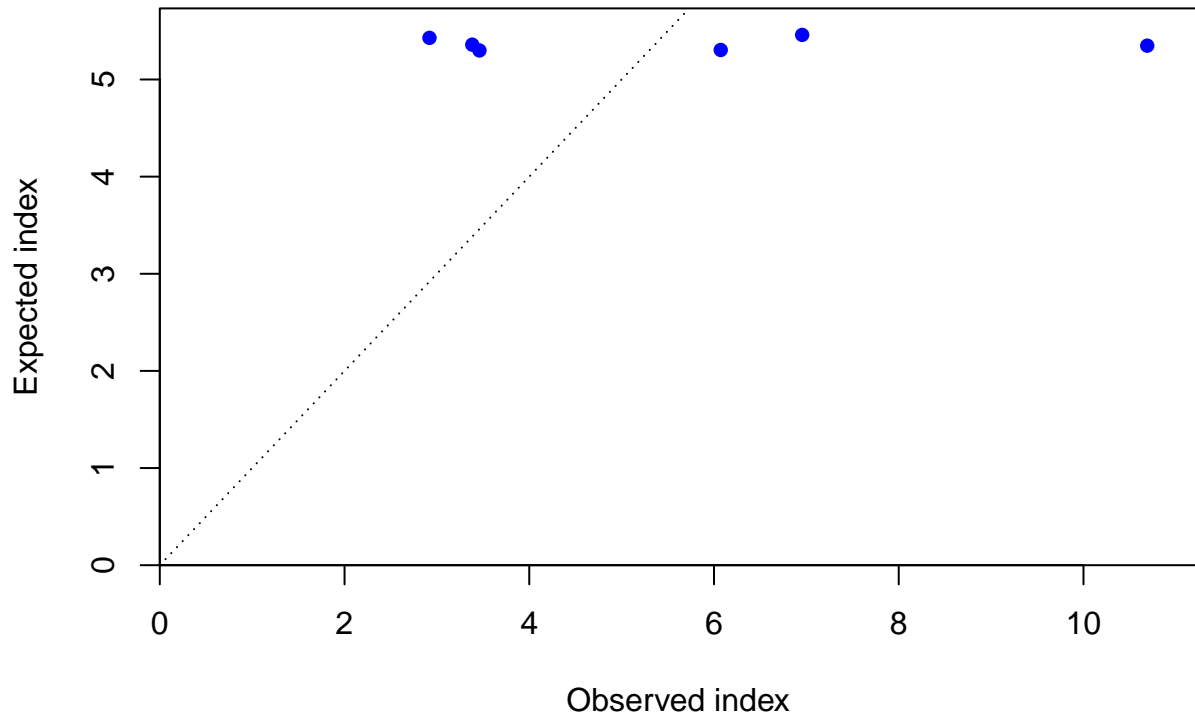


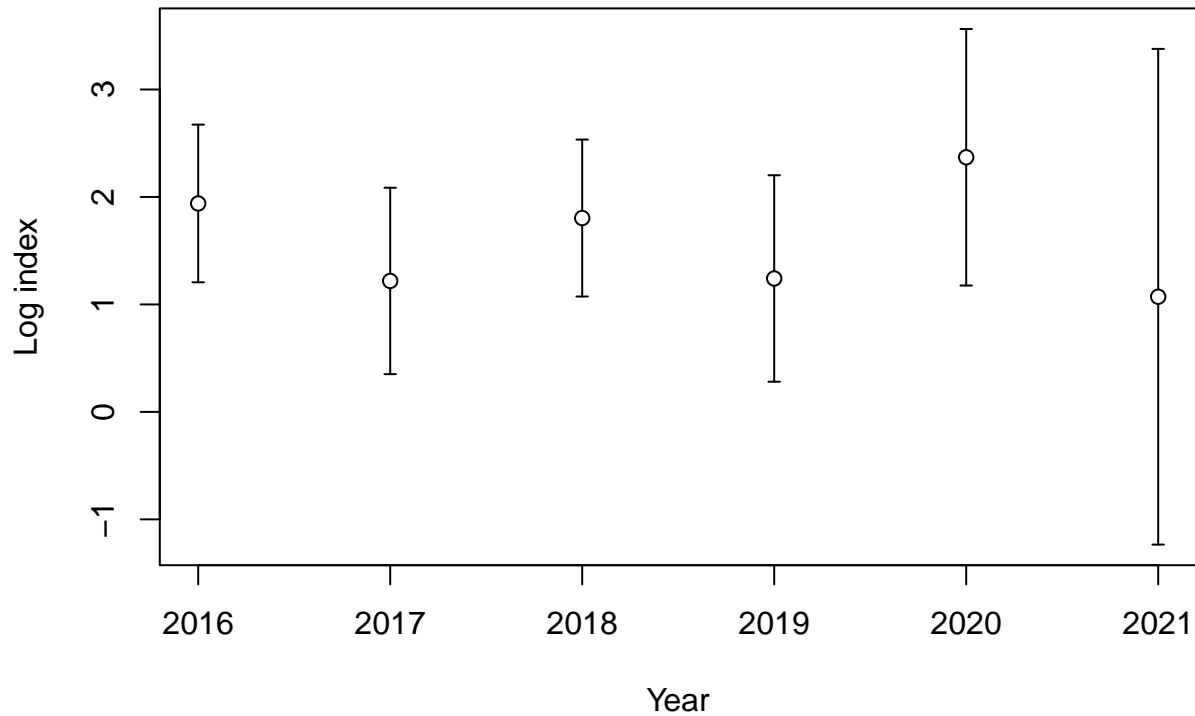
Year

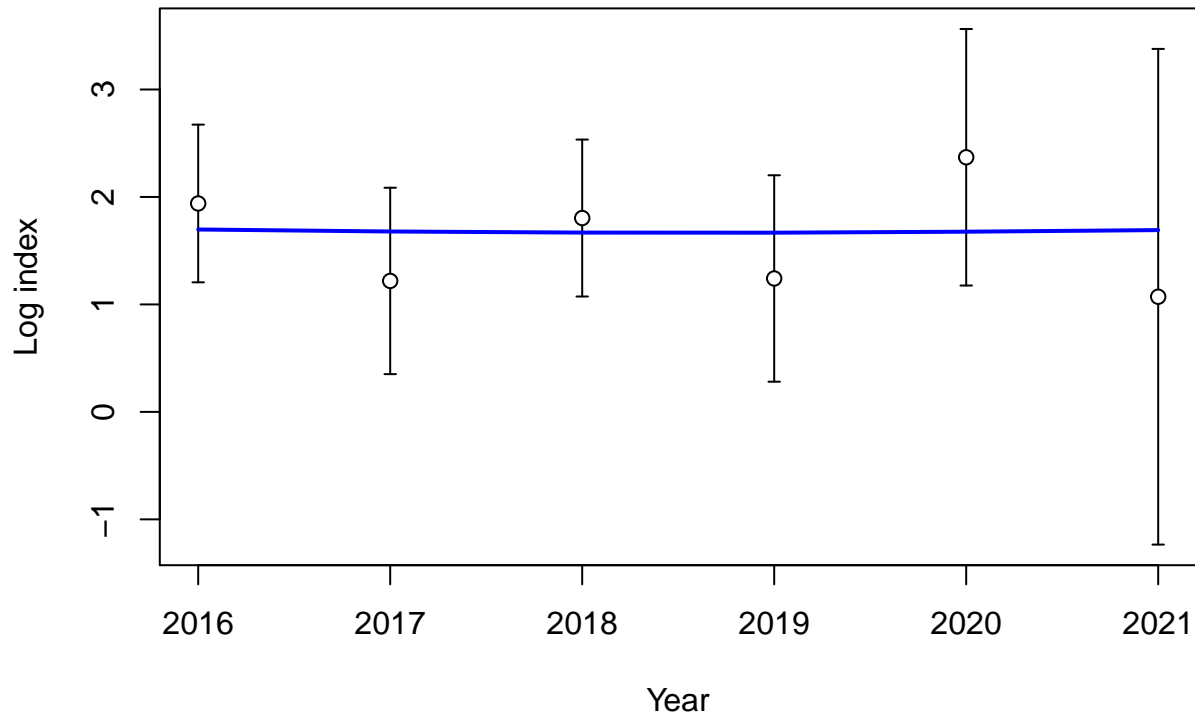
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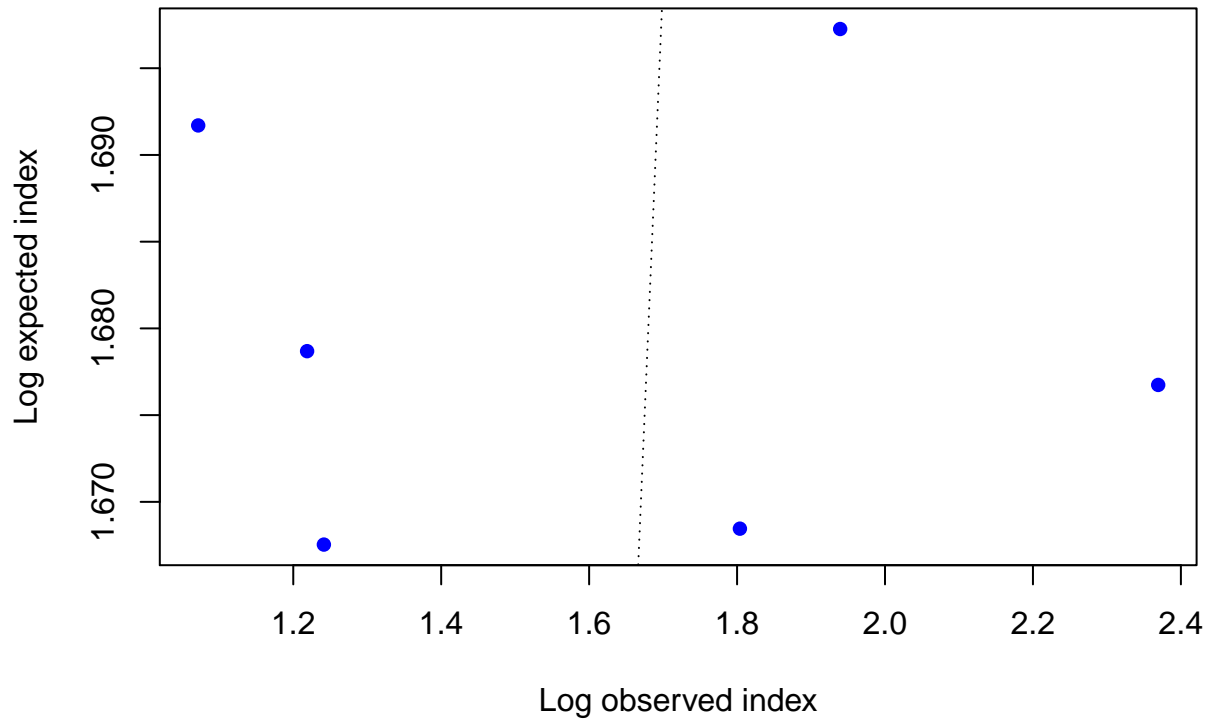


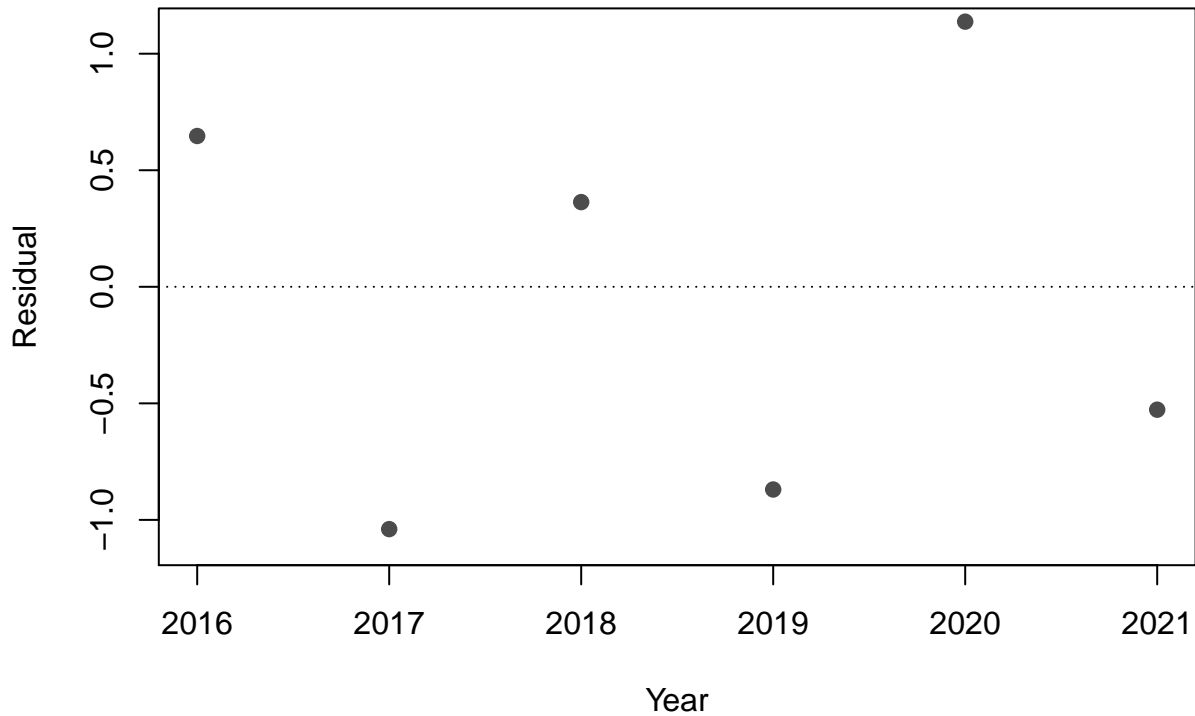


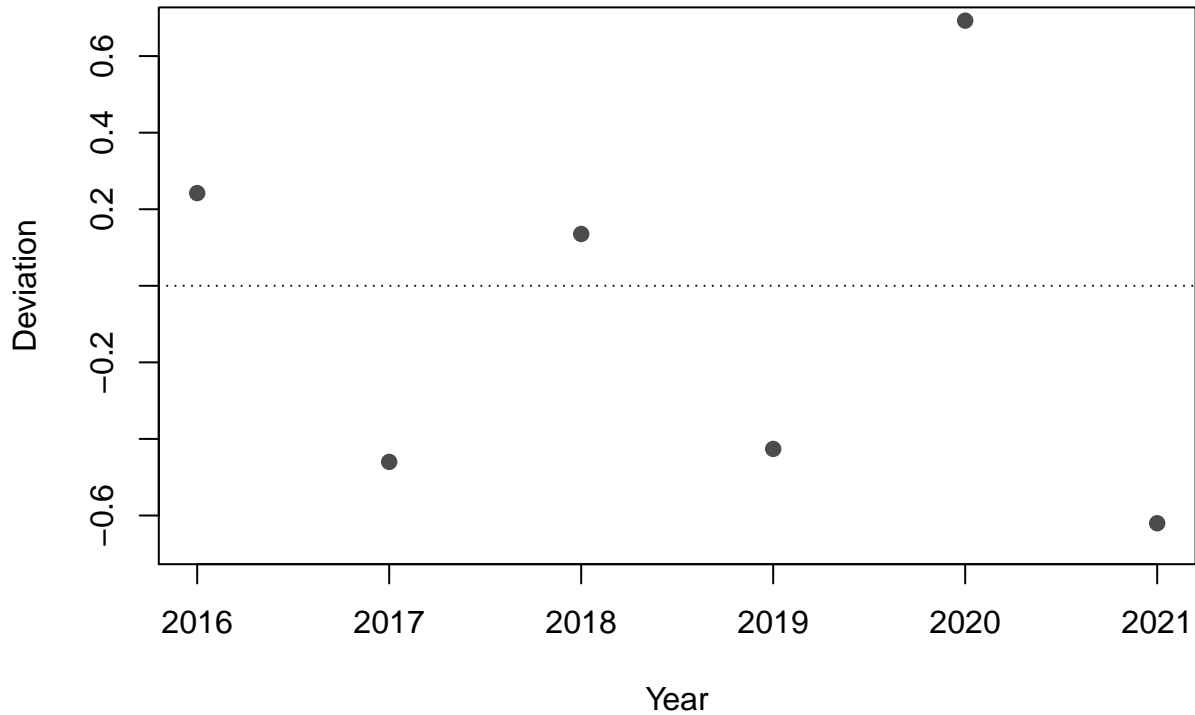


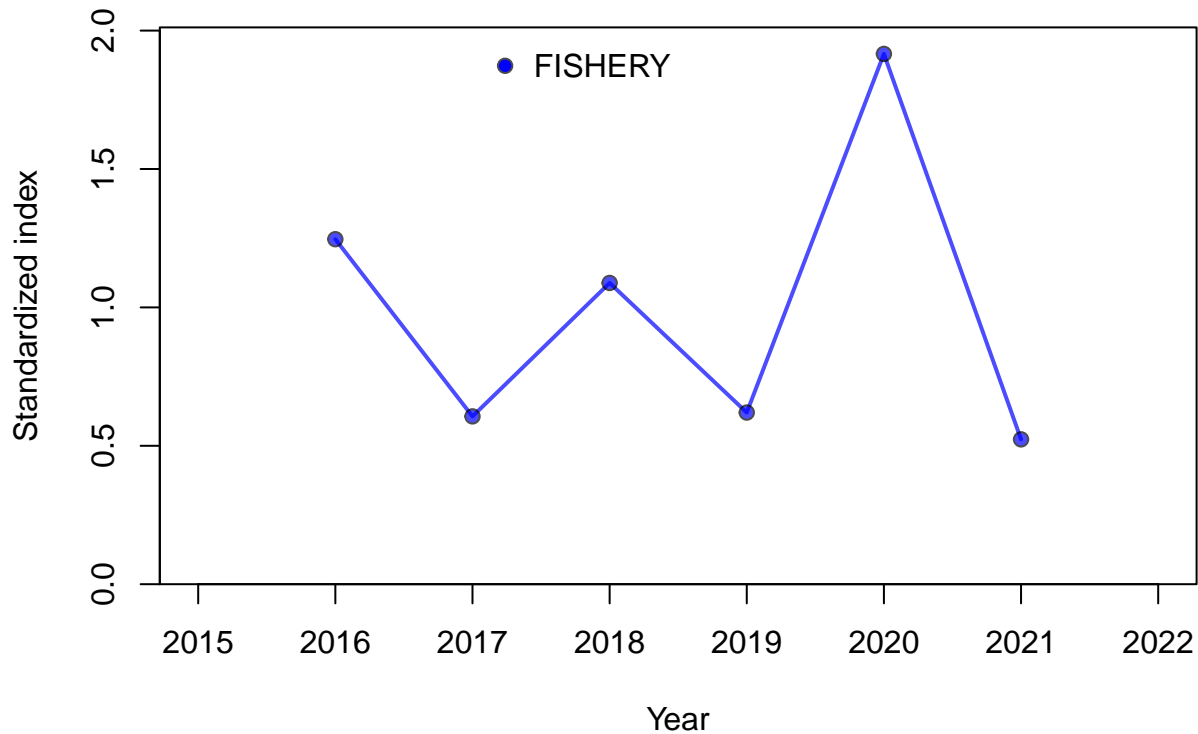


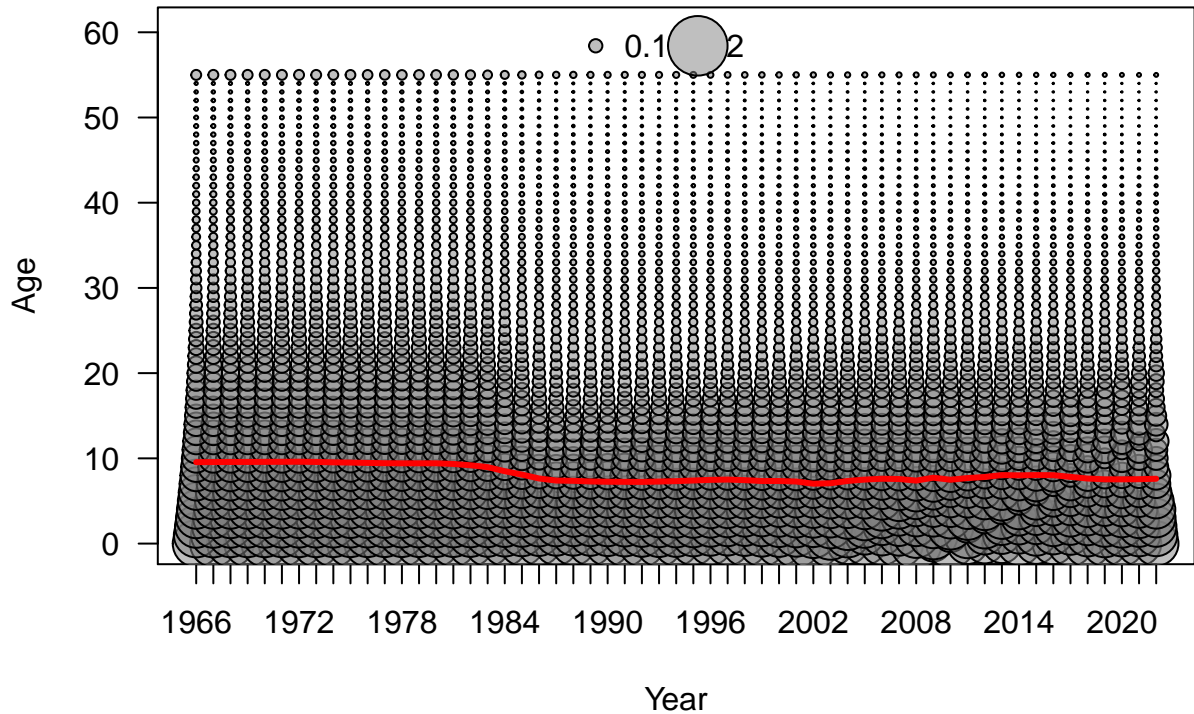




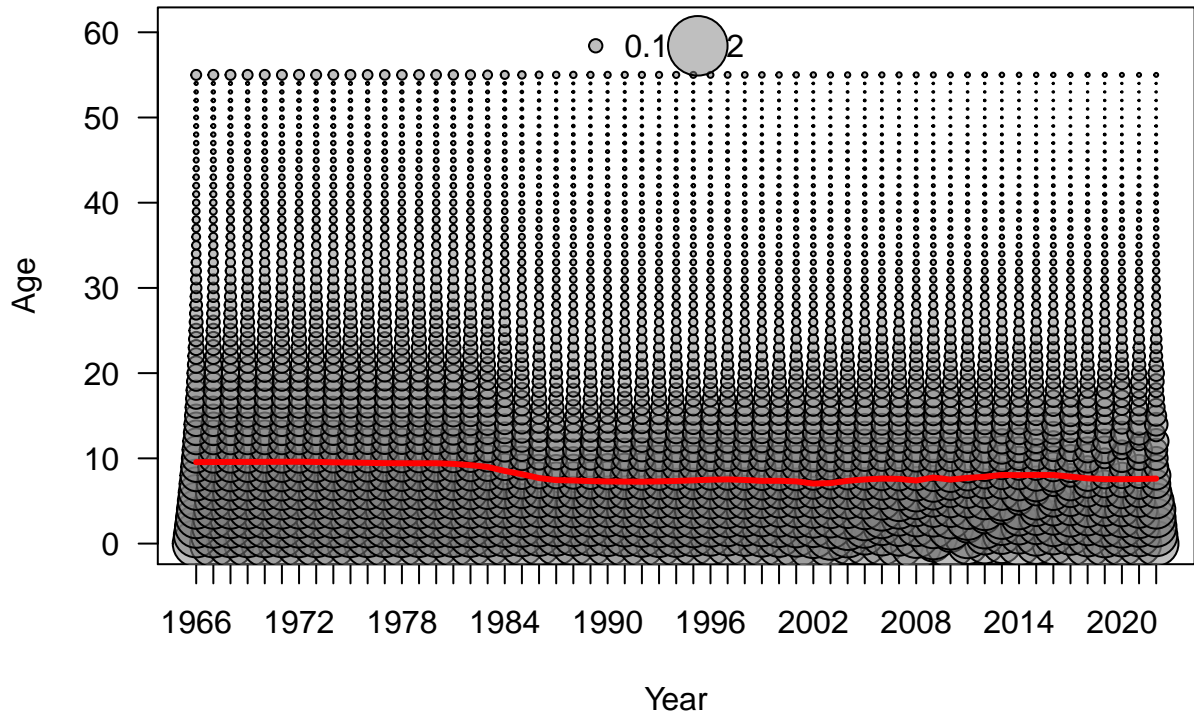


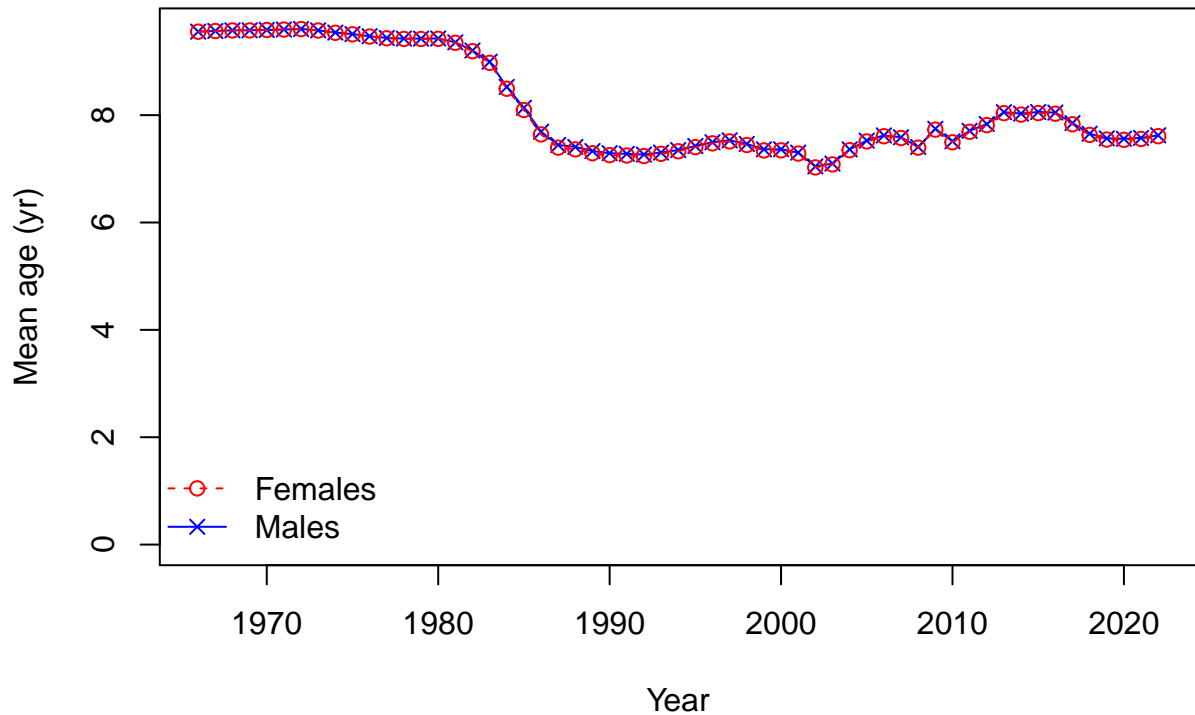


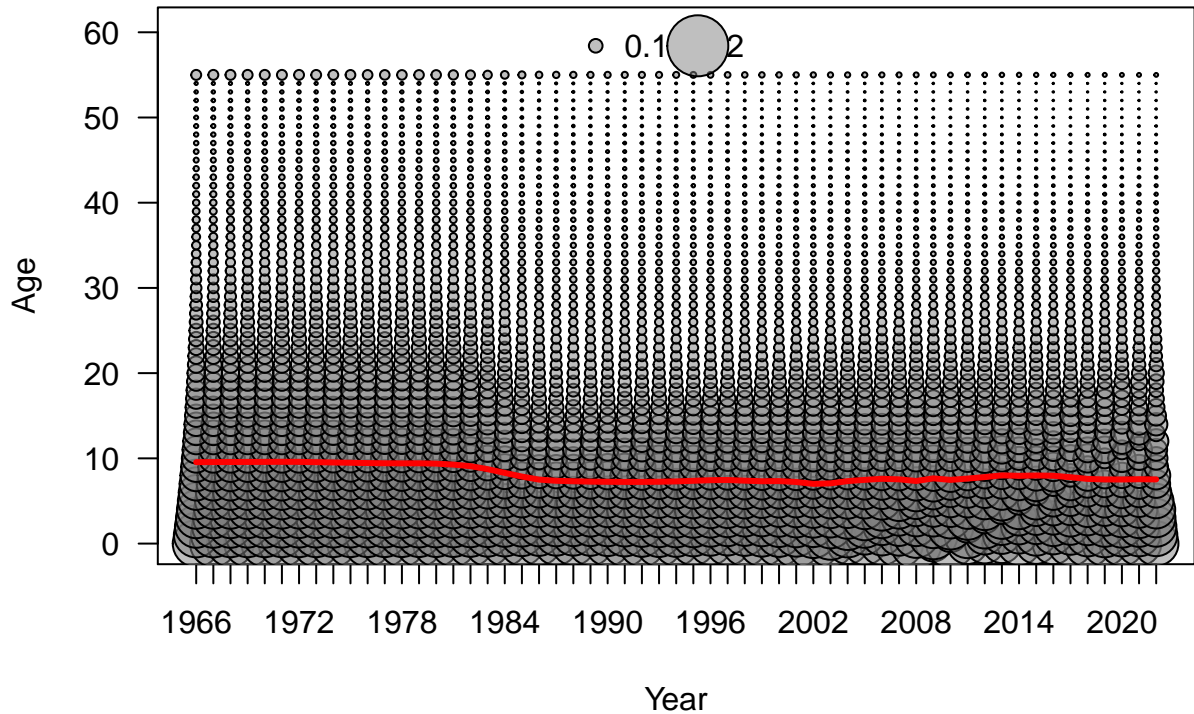


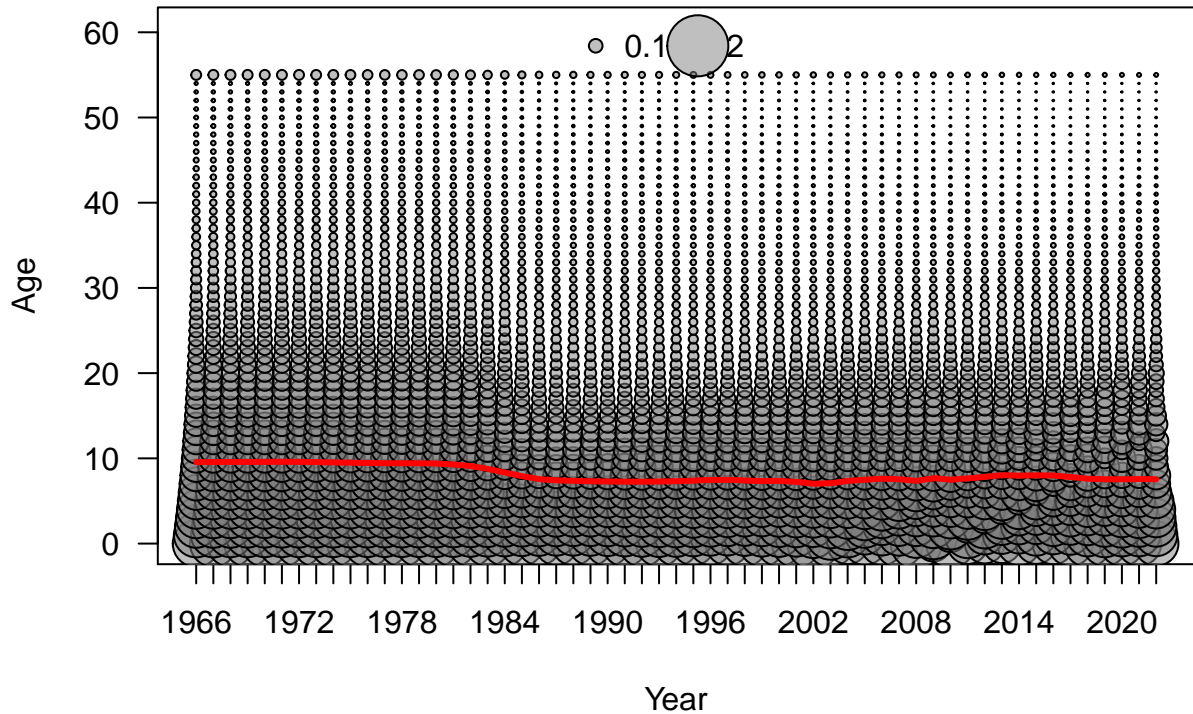


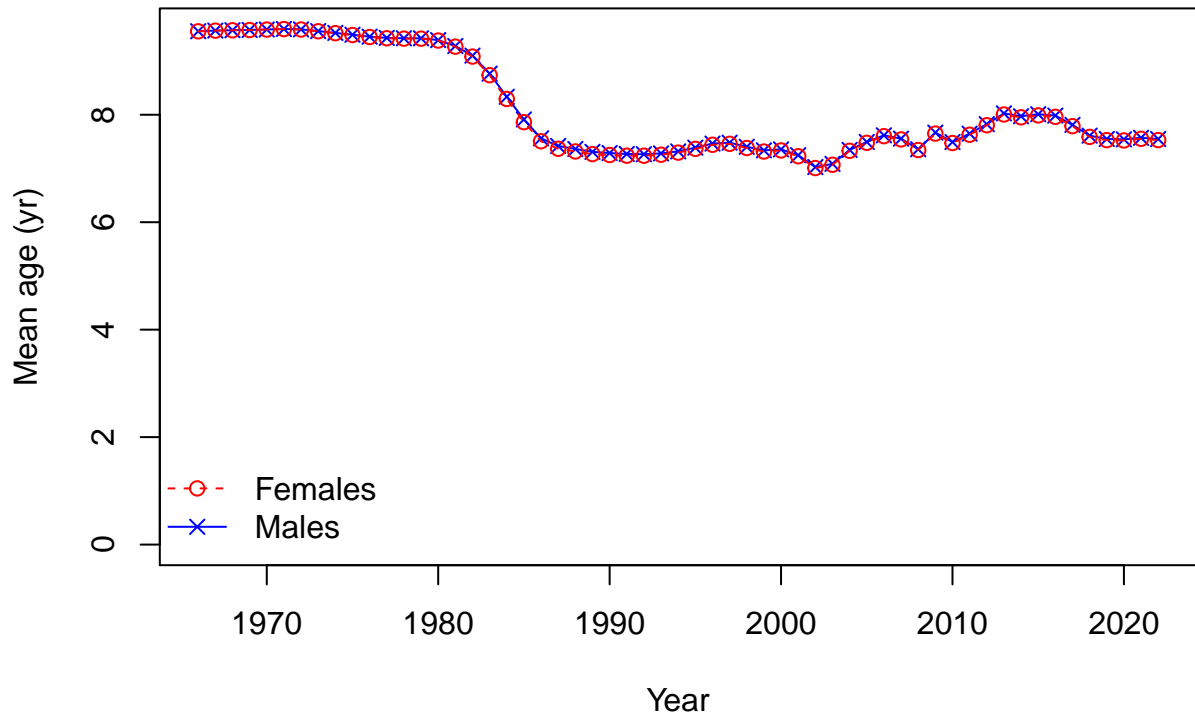


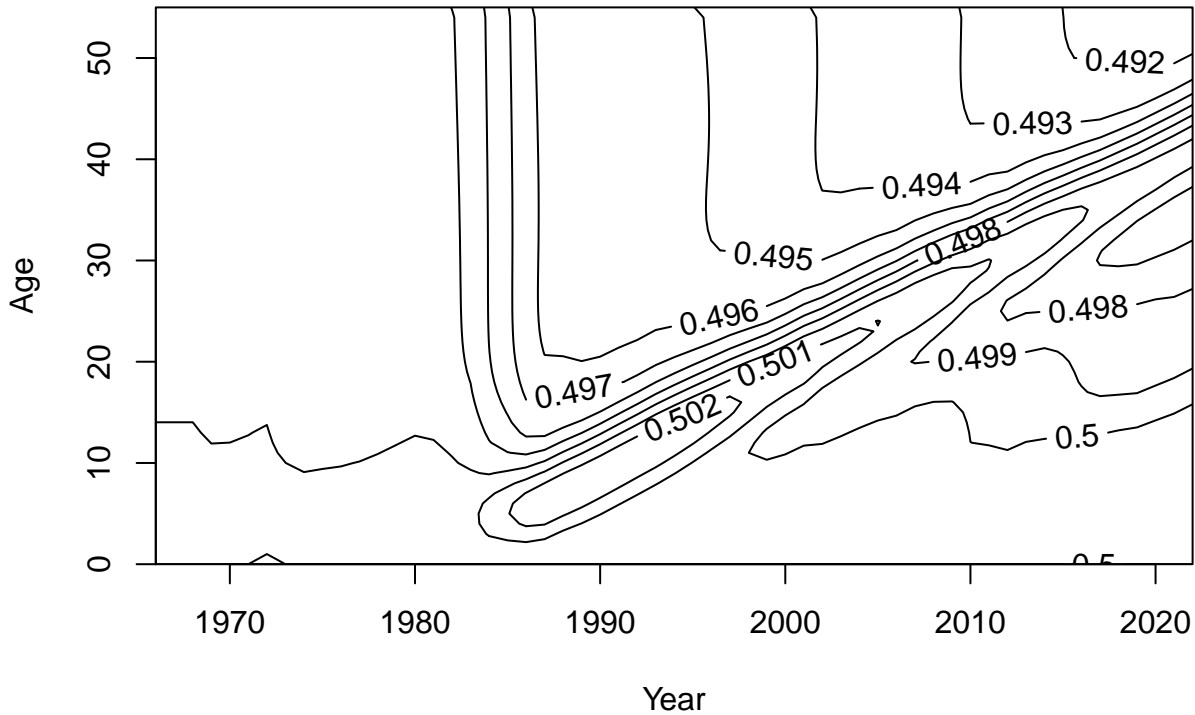


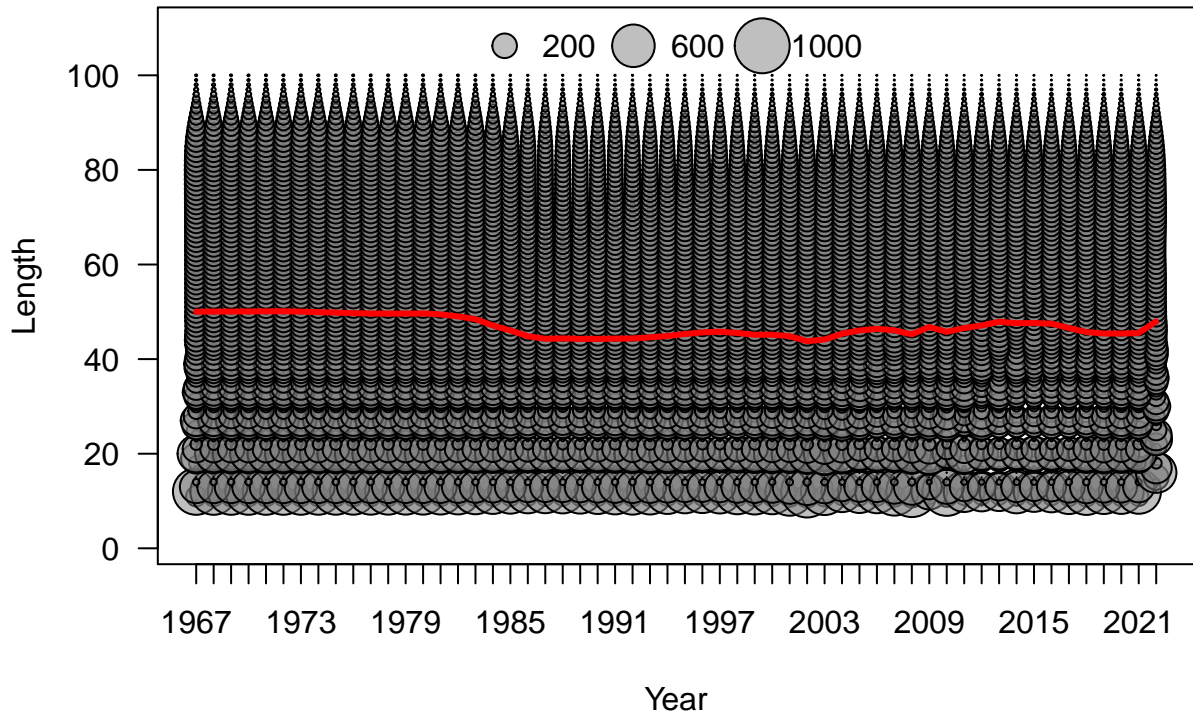


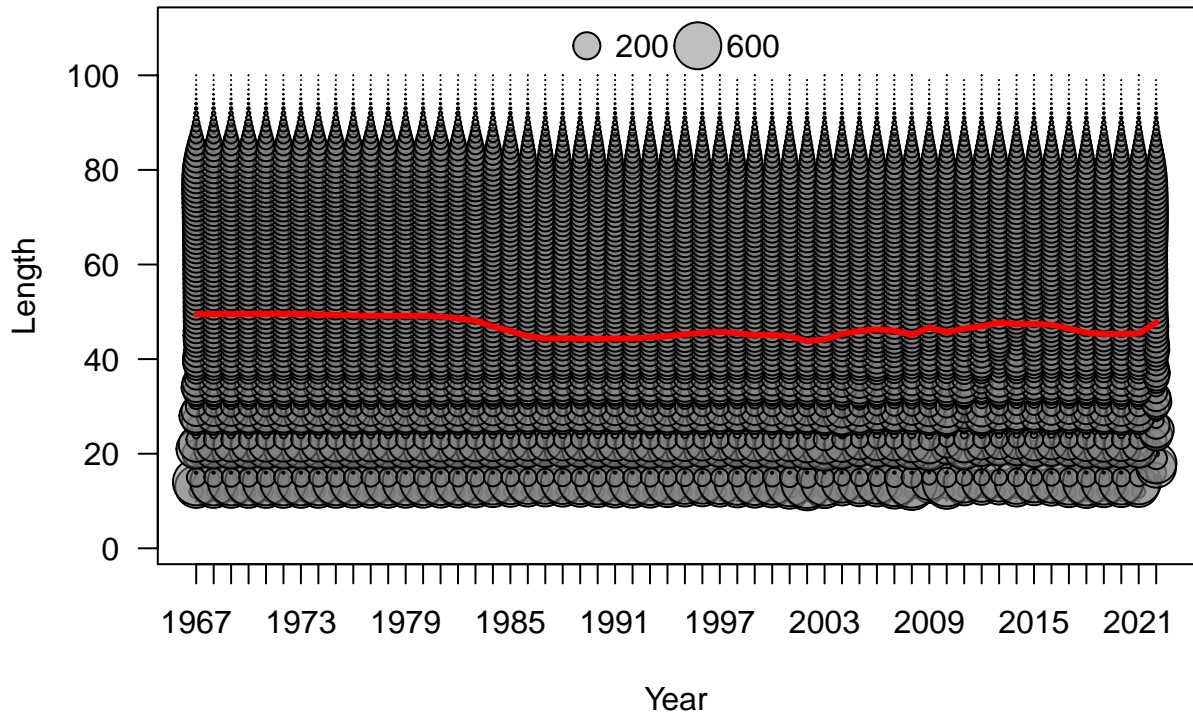




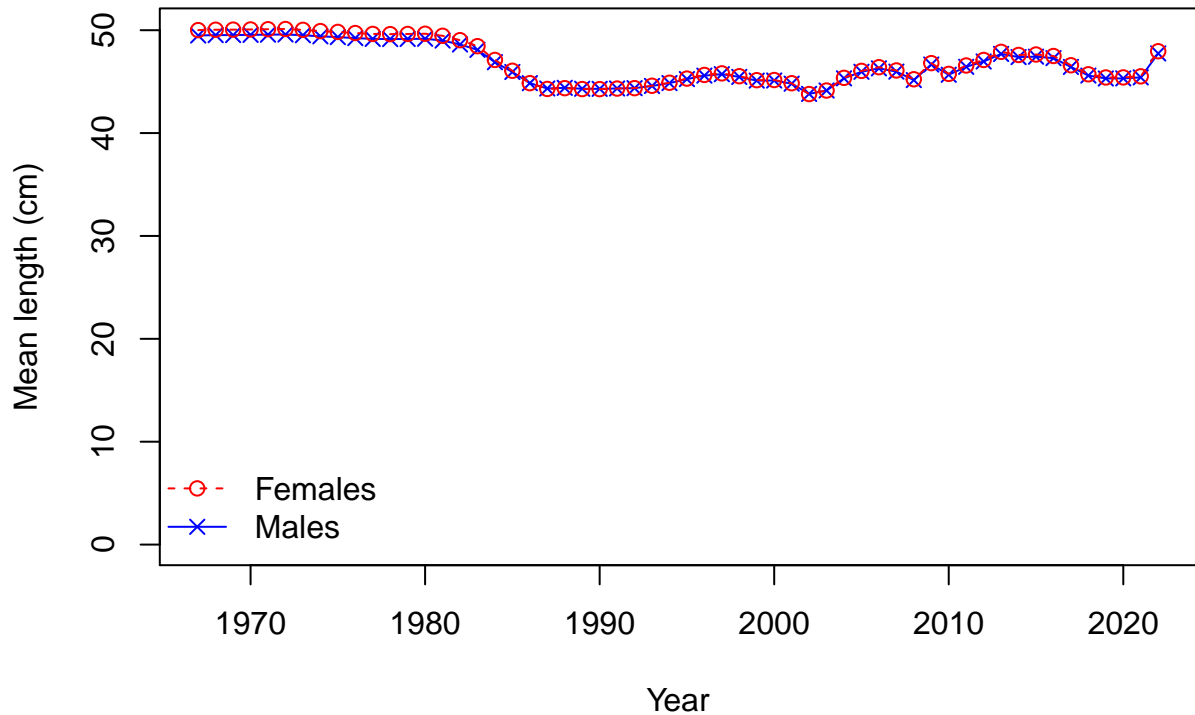


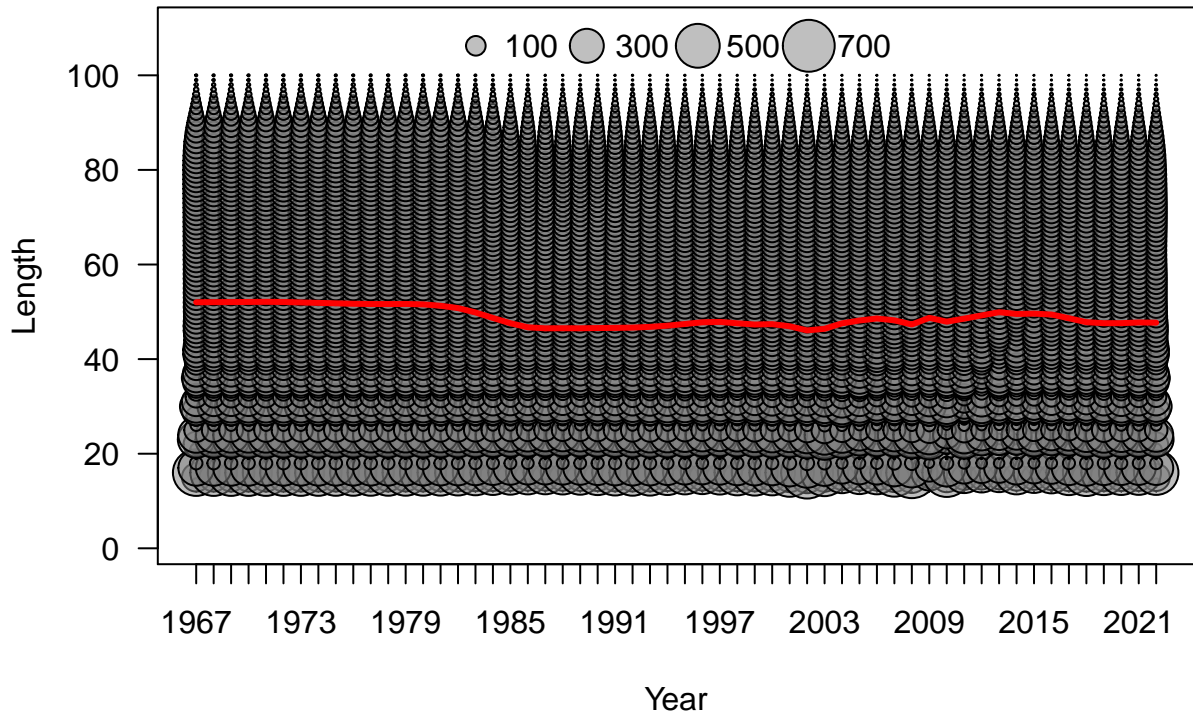


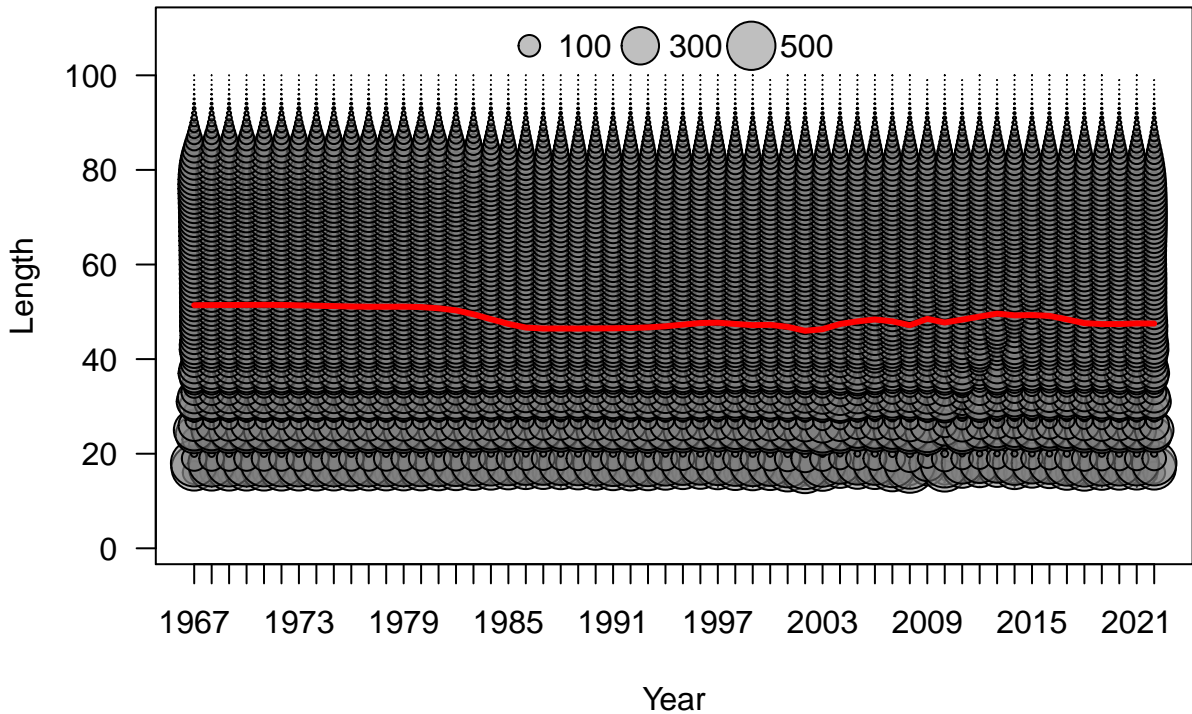


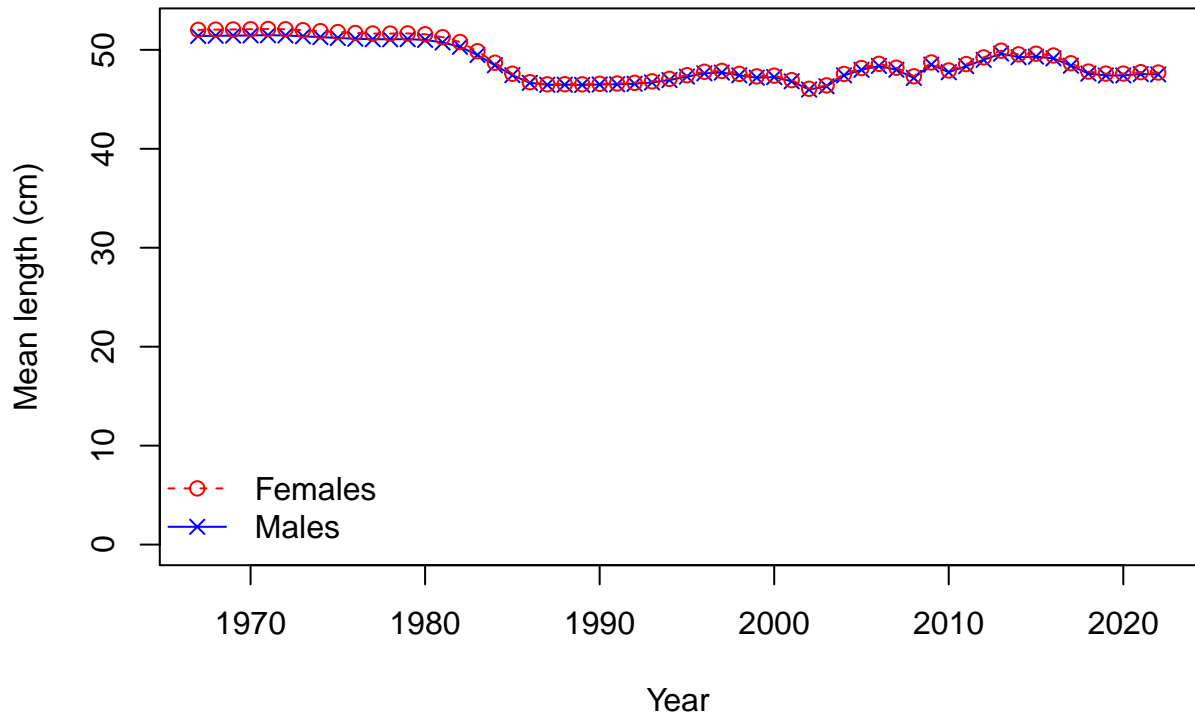


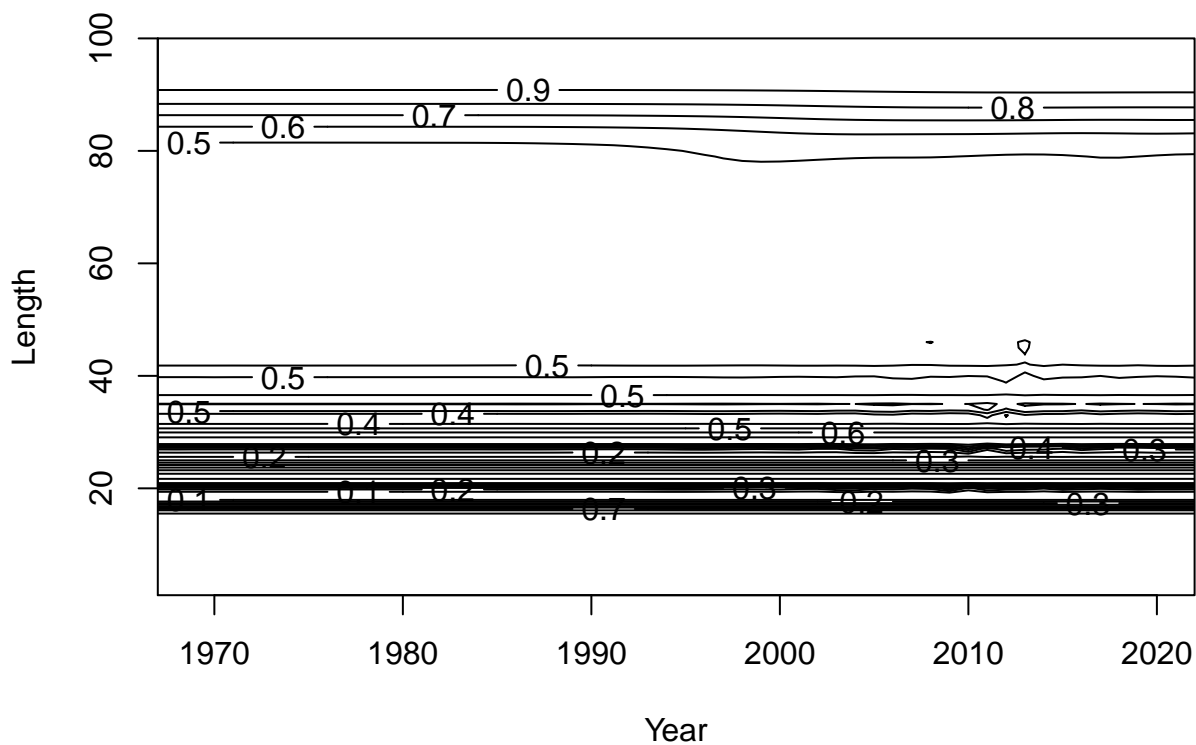




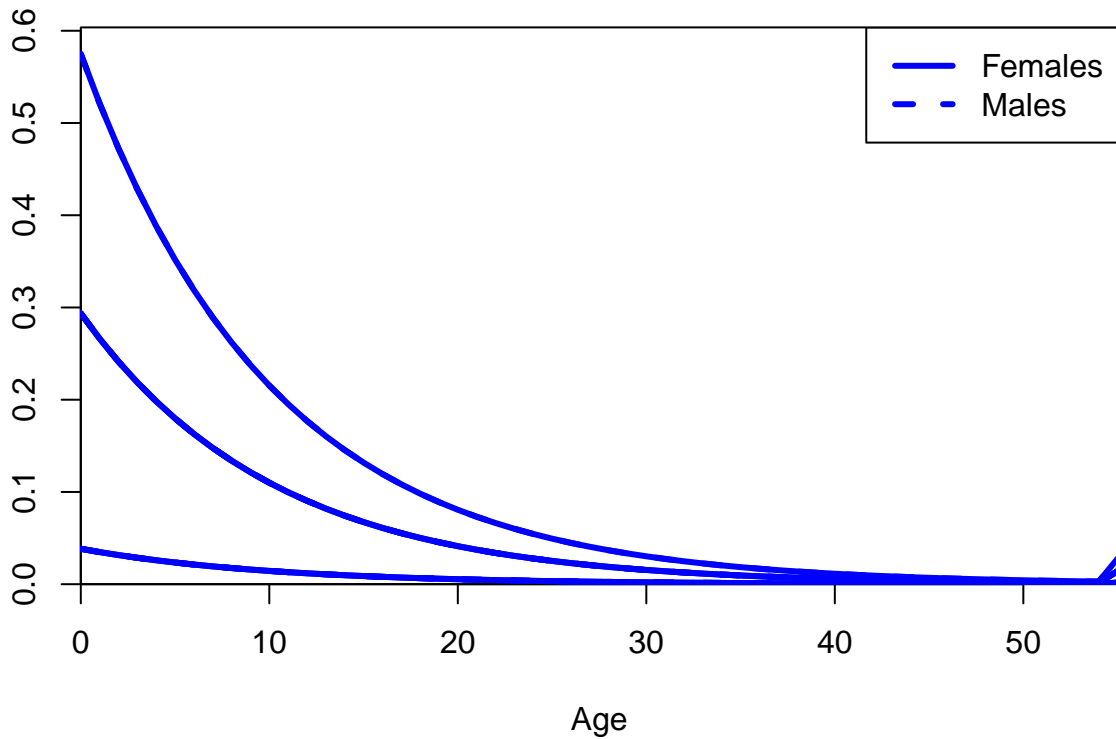


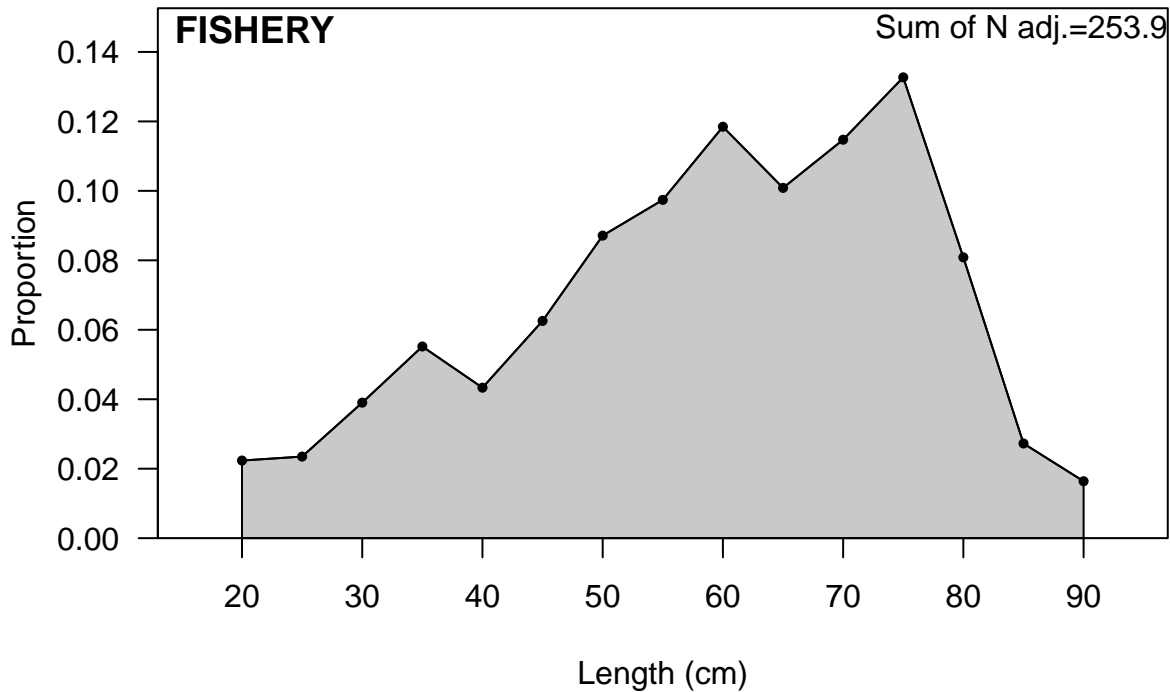


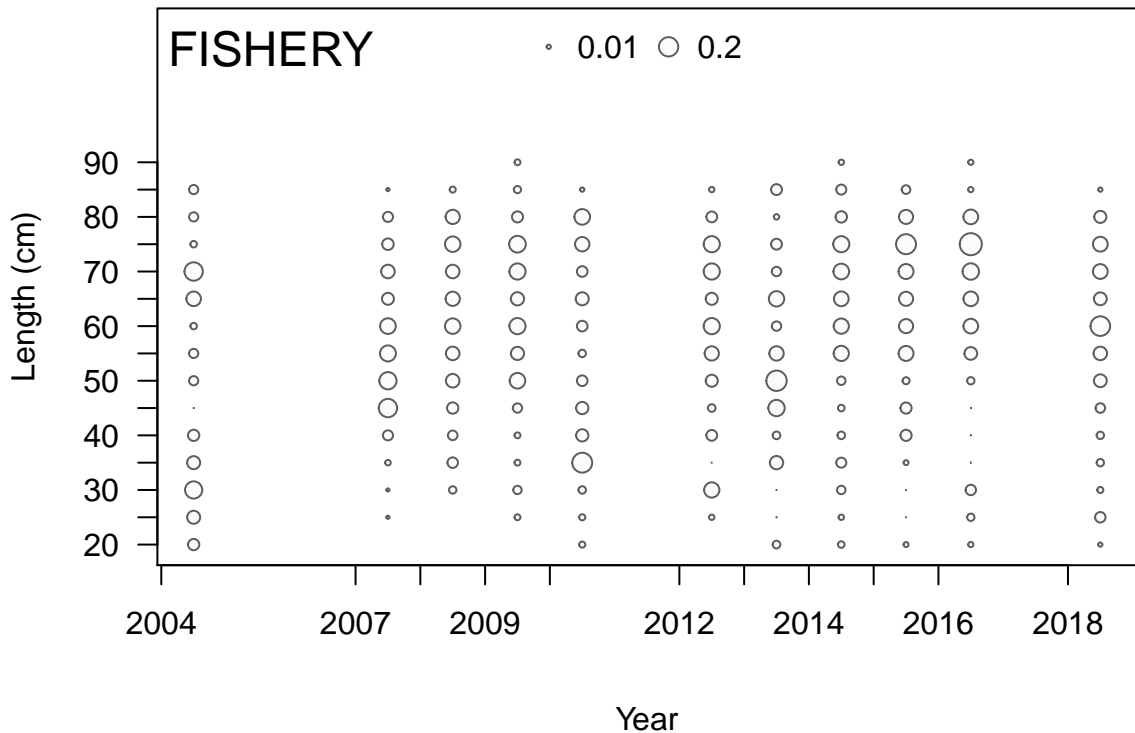




Numbers at age at equilibrium

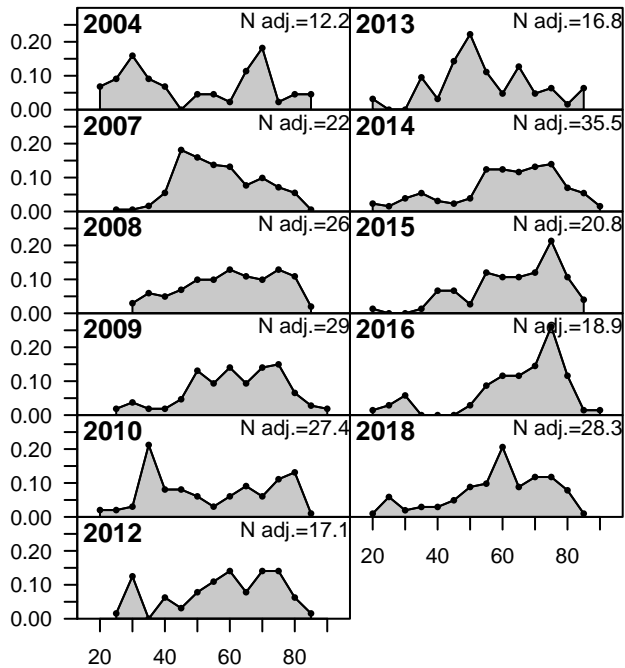




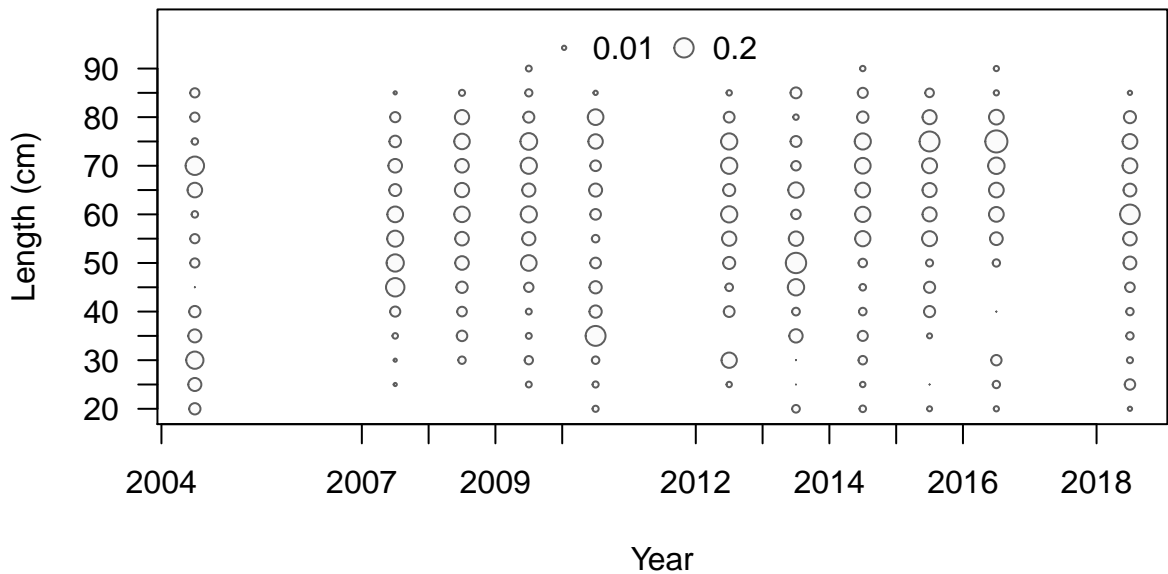




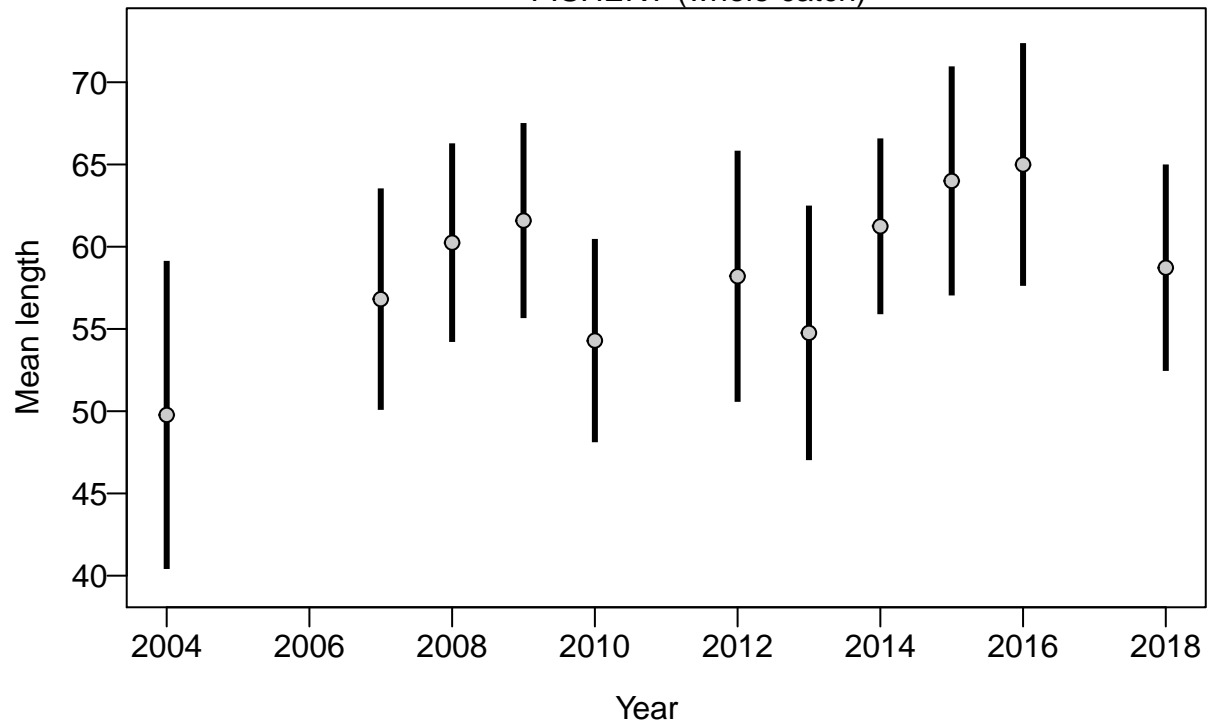
Proportion

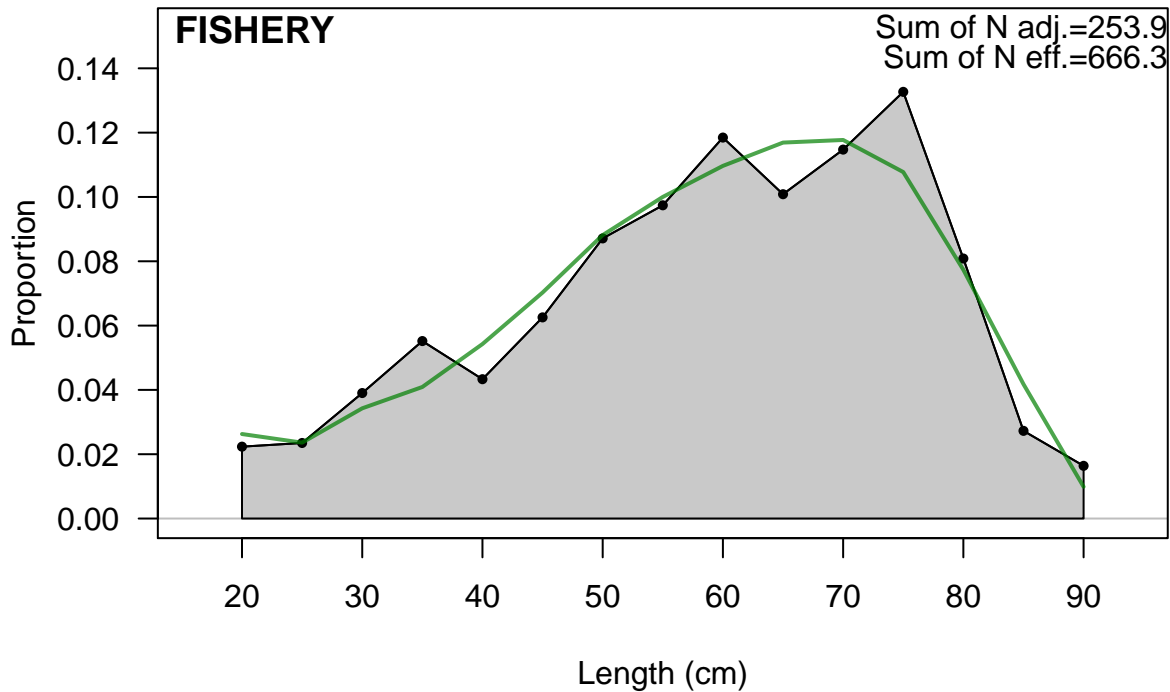


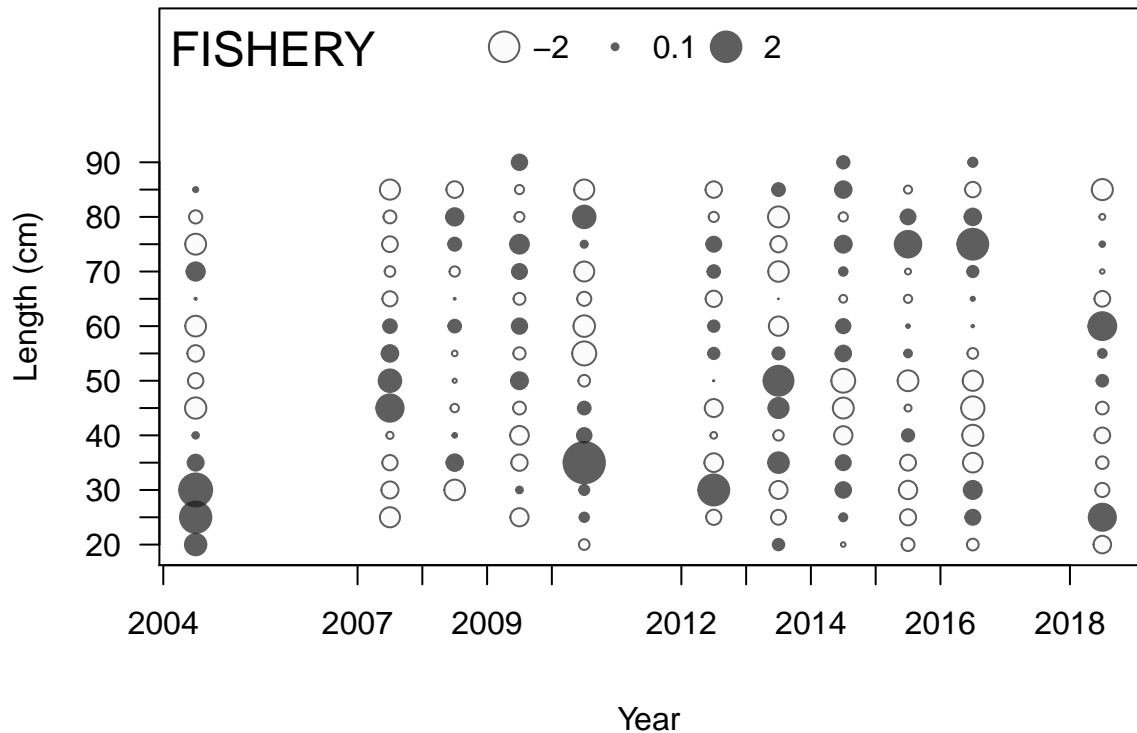
Length (cm)



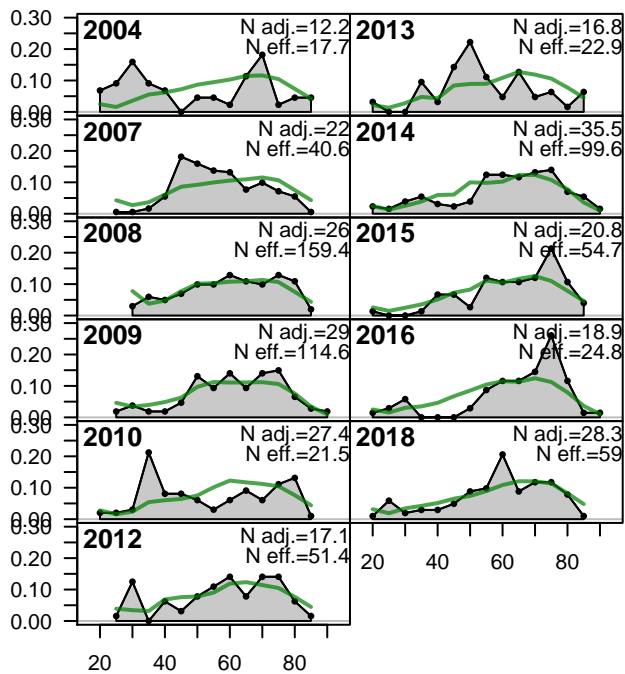
FISHERY (whole catch)



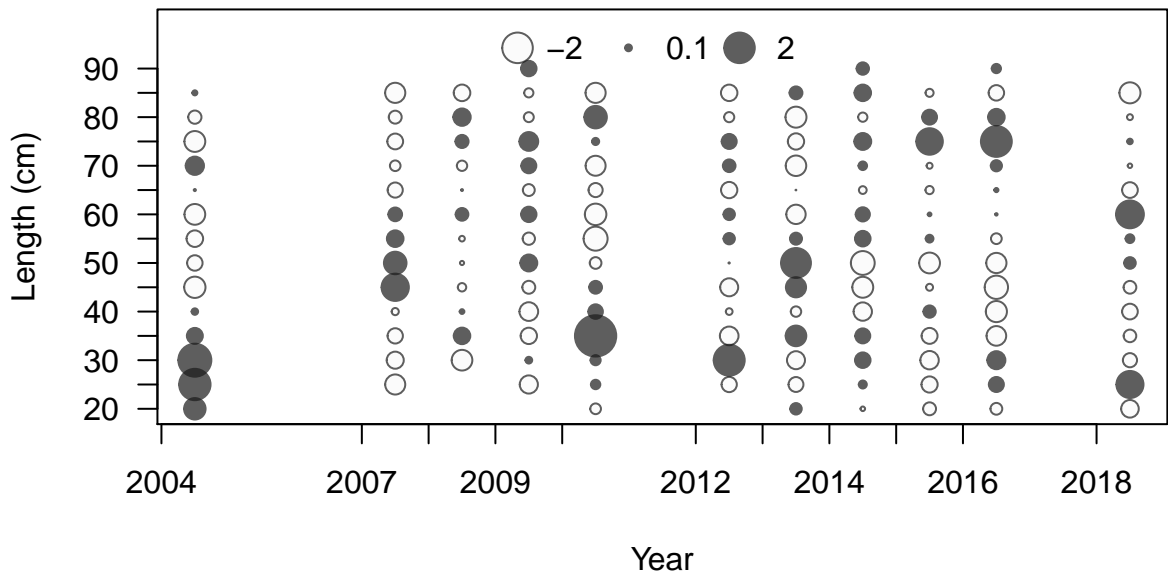




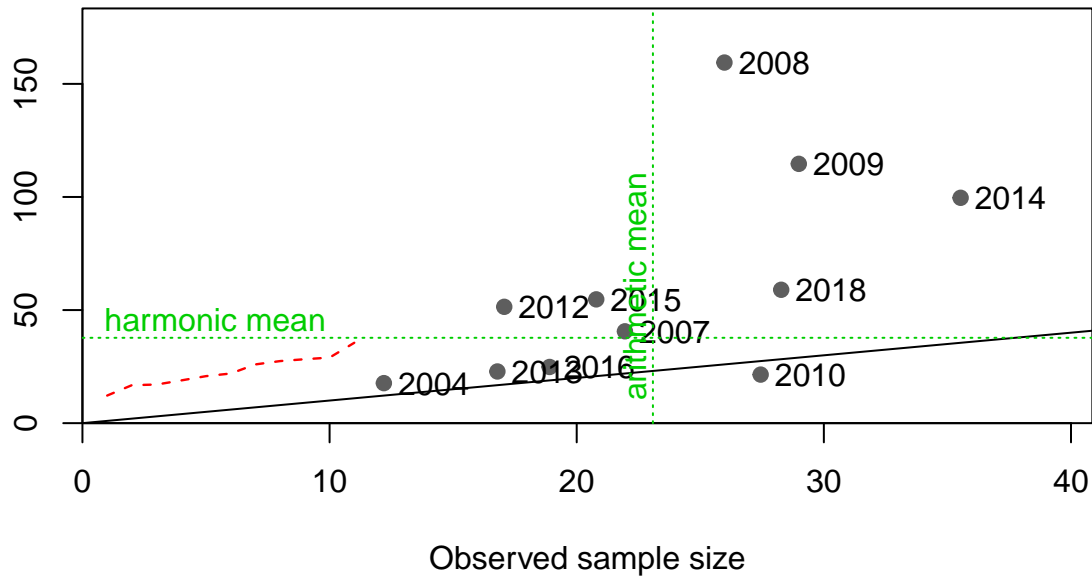
Proportion



Length (cm)

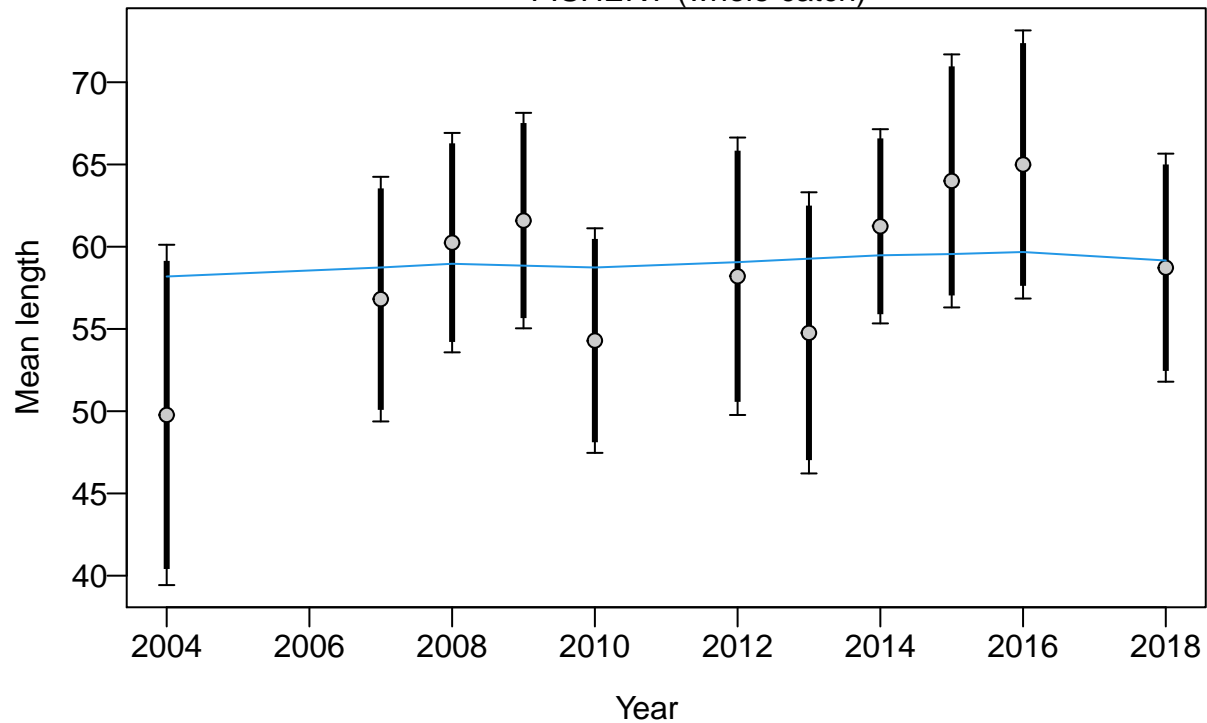


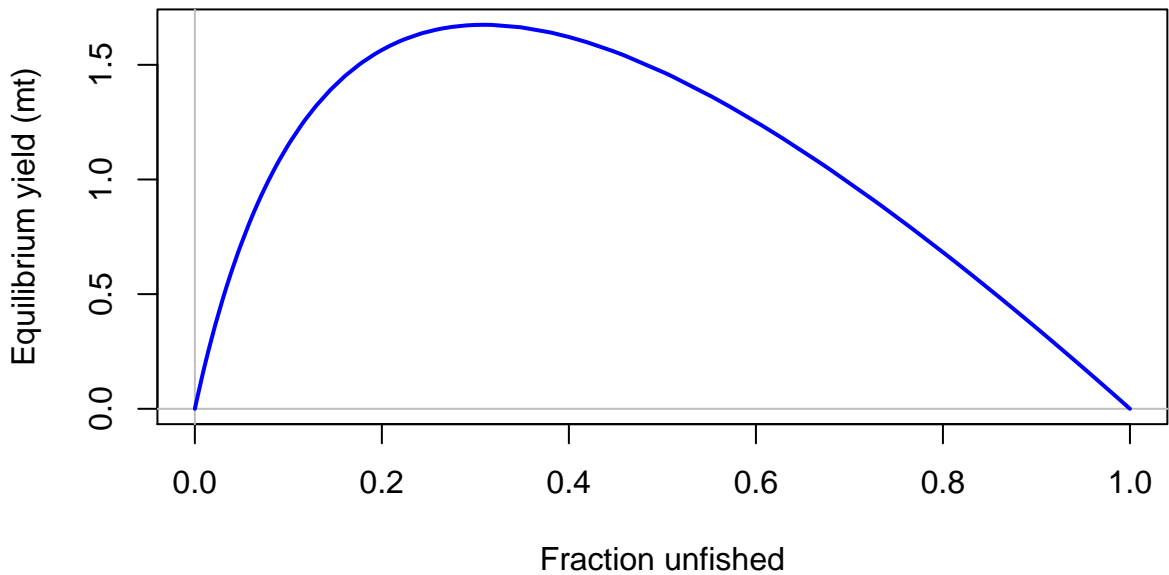
Effective sample size

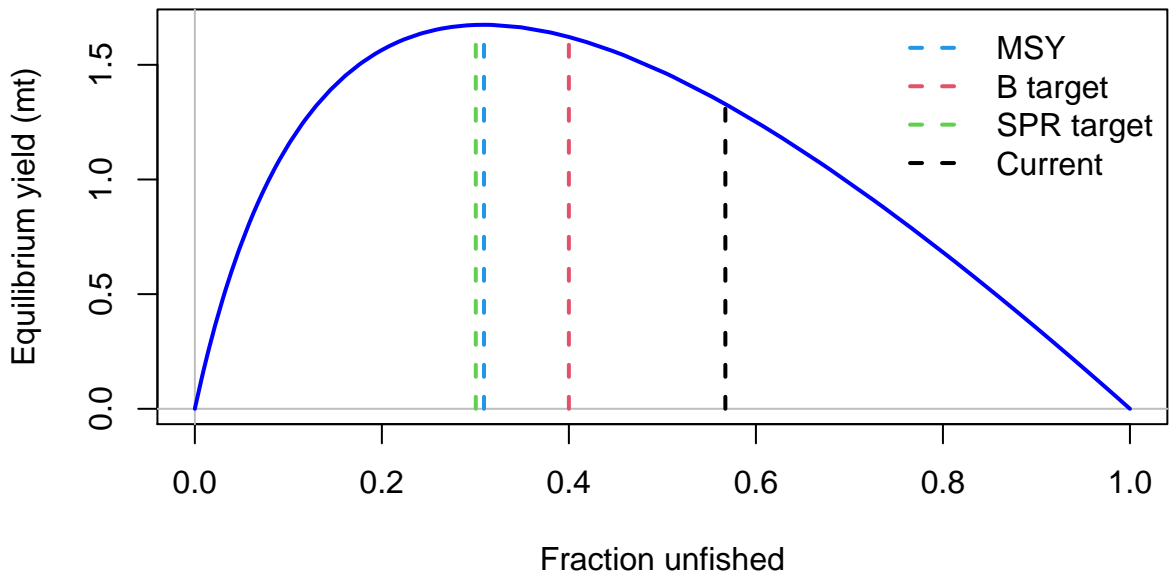


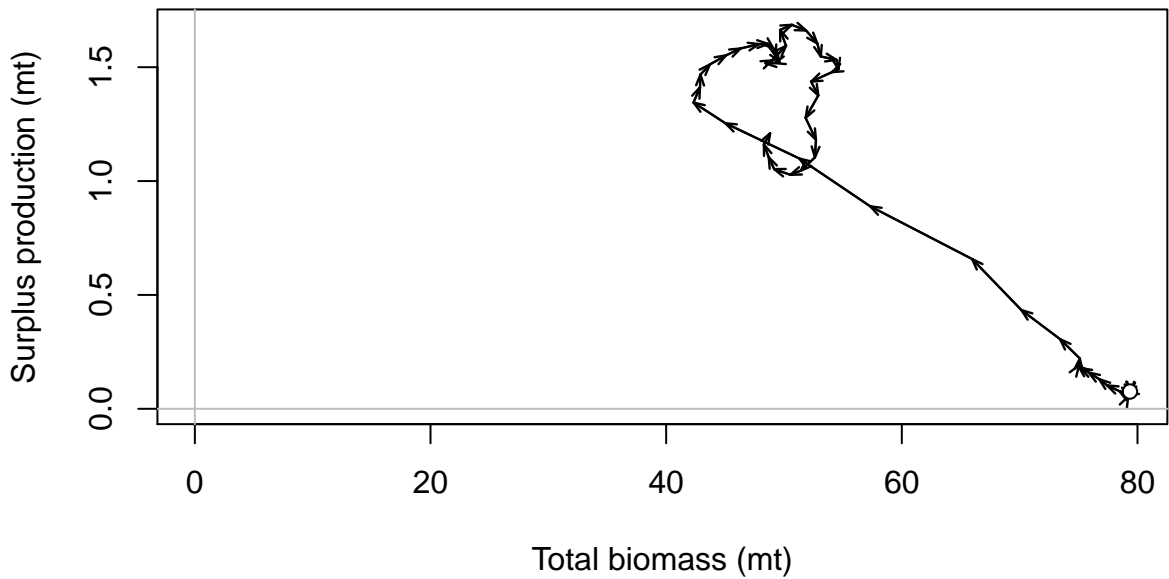


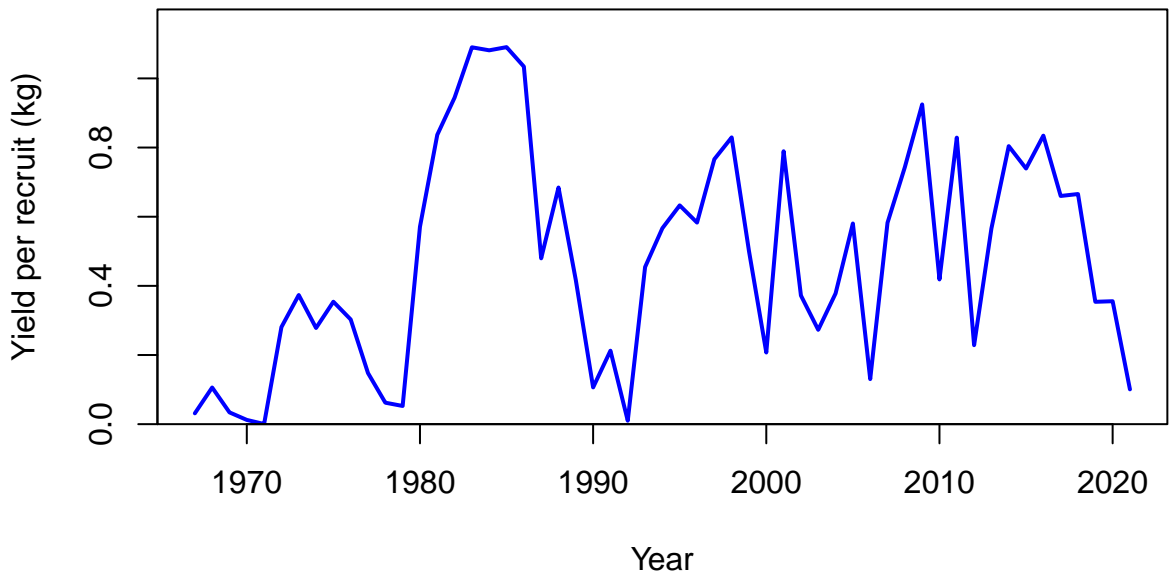
FISHERY (whole catch)

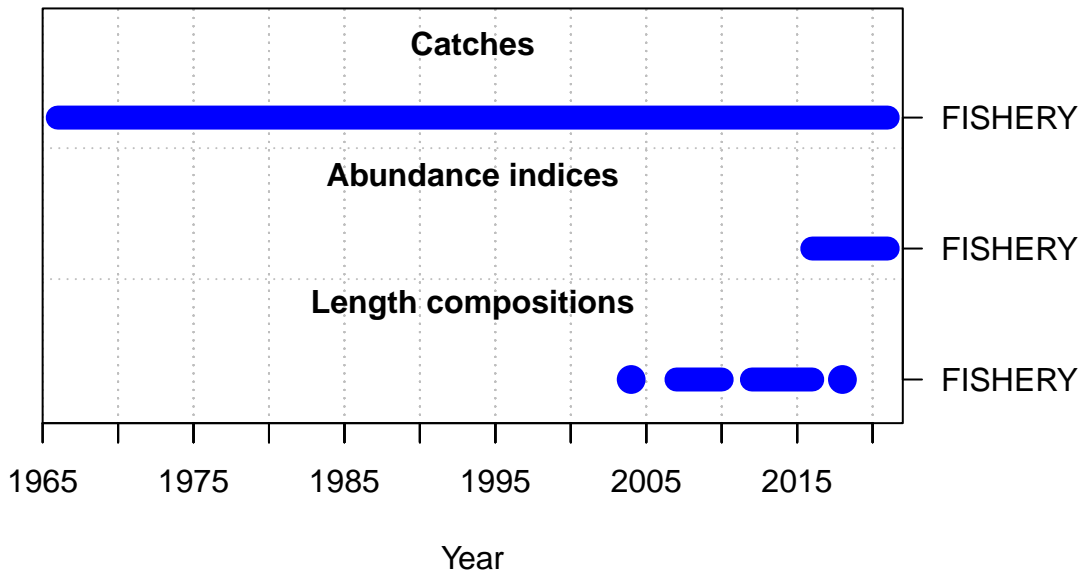


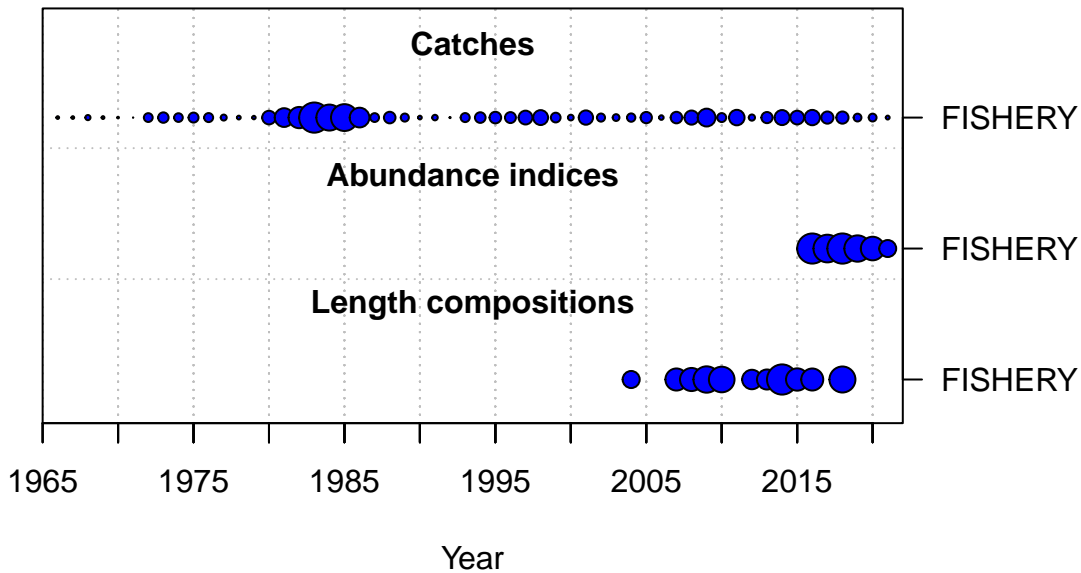




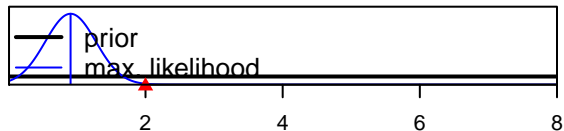




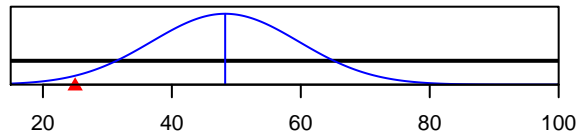




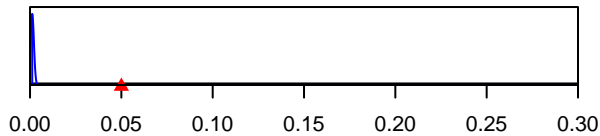
SR\_LN(R0)



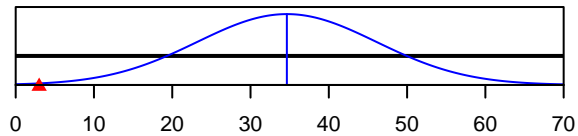
Size\_inflection\_FISHERY(1)



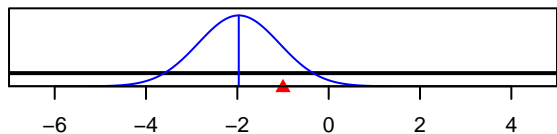
InitF\_seas\_1\_flt\_1FISHERY



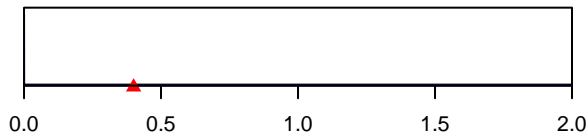
Size\_95%width\_FISHERY(1)



LnQ\_base\_FISHERY(1)



Q\_extraSD\_FISHERY(1)



Parameter value