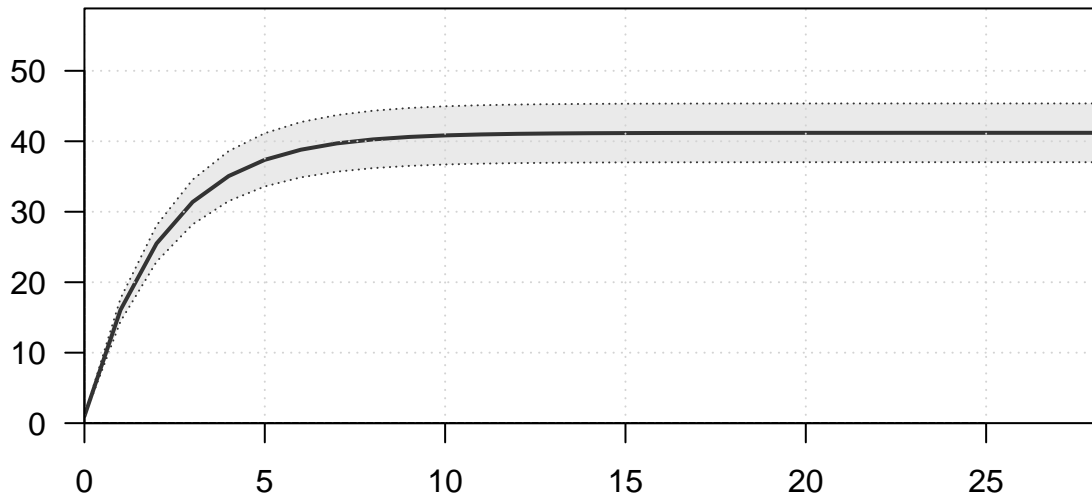
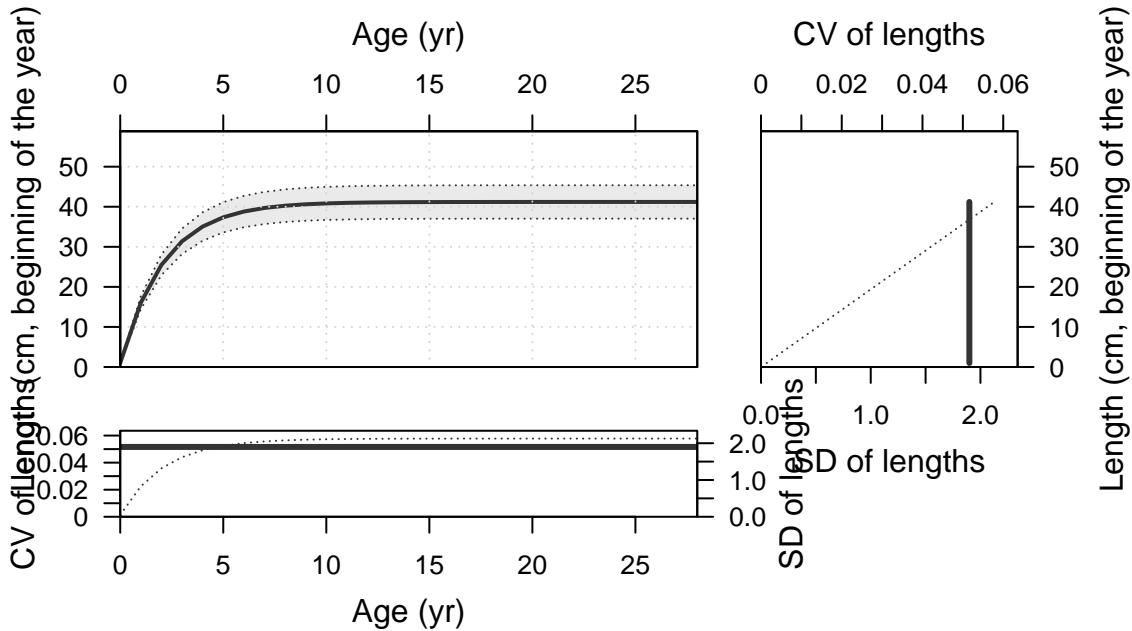


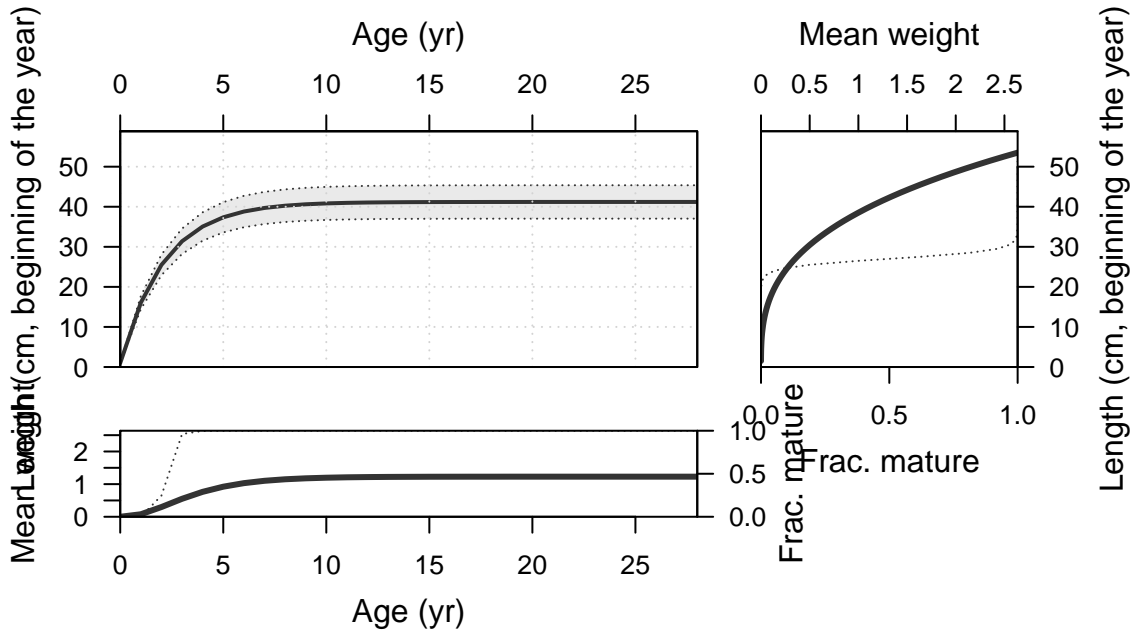
Plots created using the 'r4ss' package in R
Stock Synthesis version: 3.30.19.0
StartTime: Wed Aug 10 17:49:30 2022
Data_File: data.ss
Control_File: control.ss

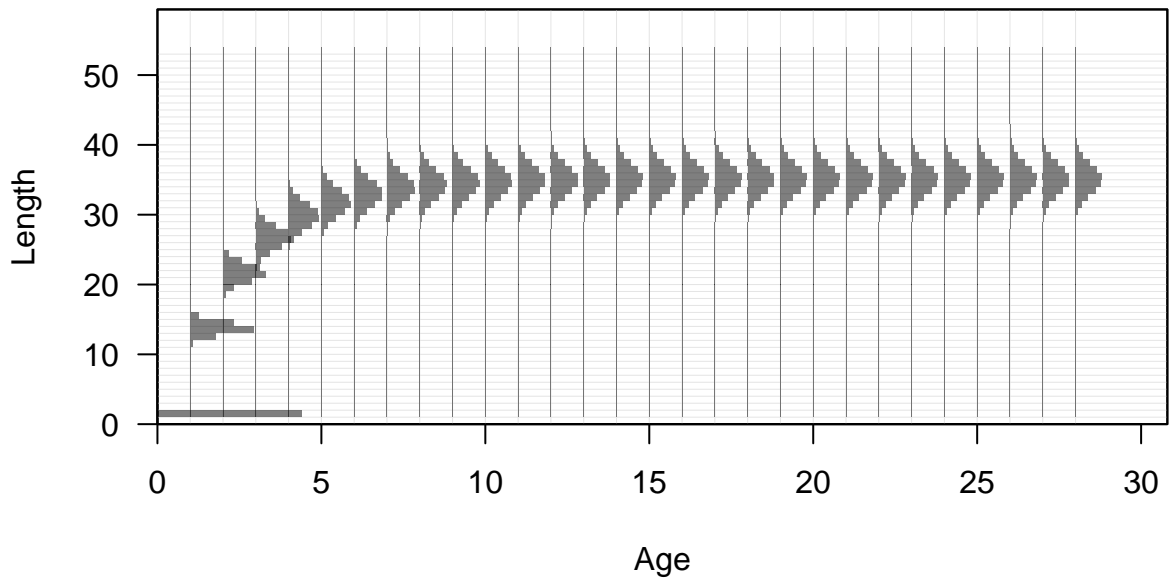
Length (cm, beginning of the year)

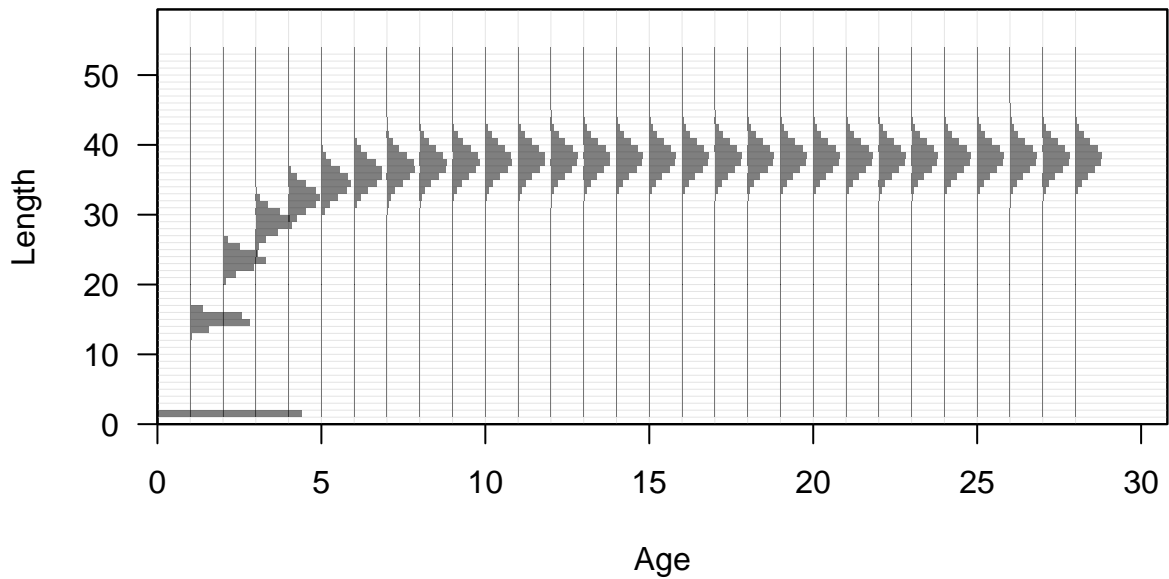


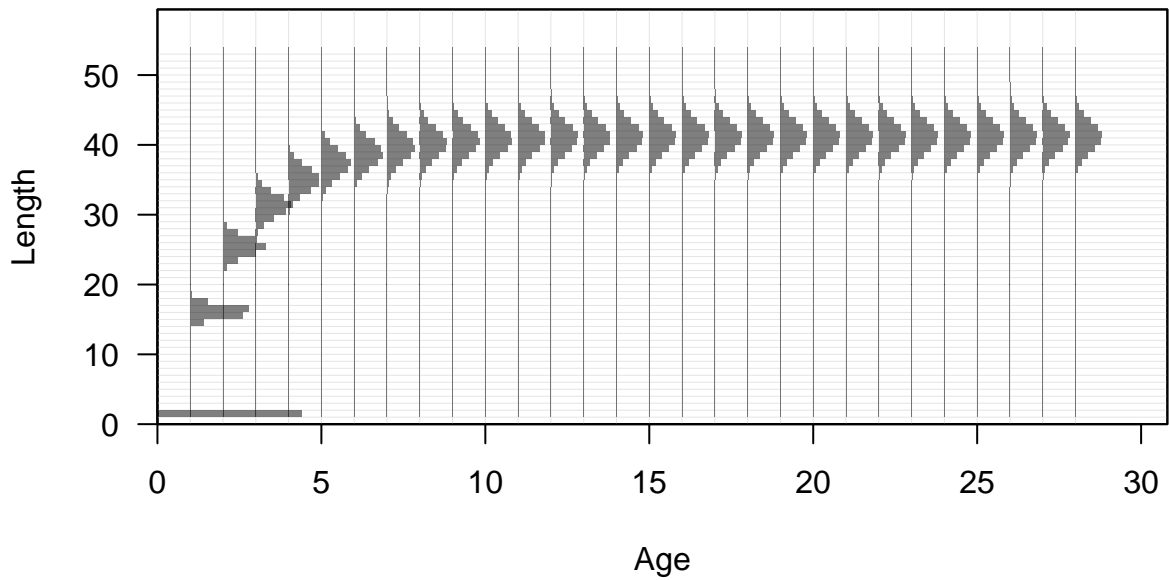
Age (yr)

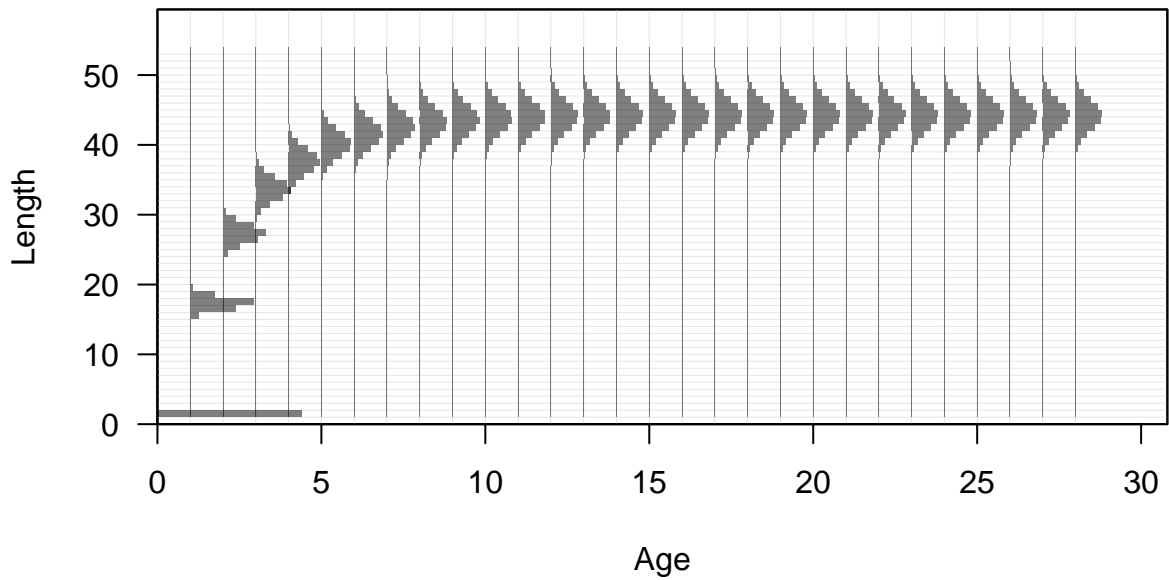


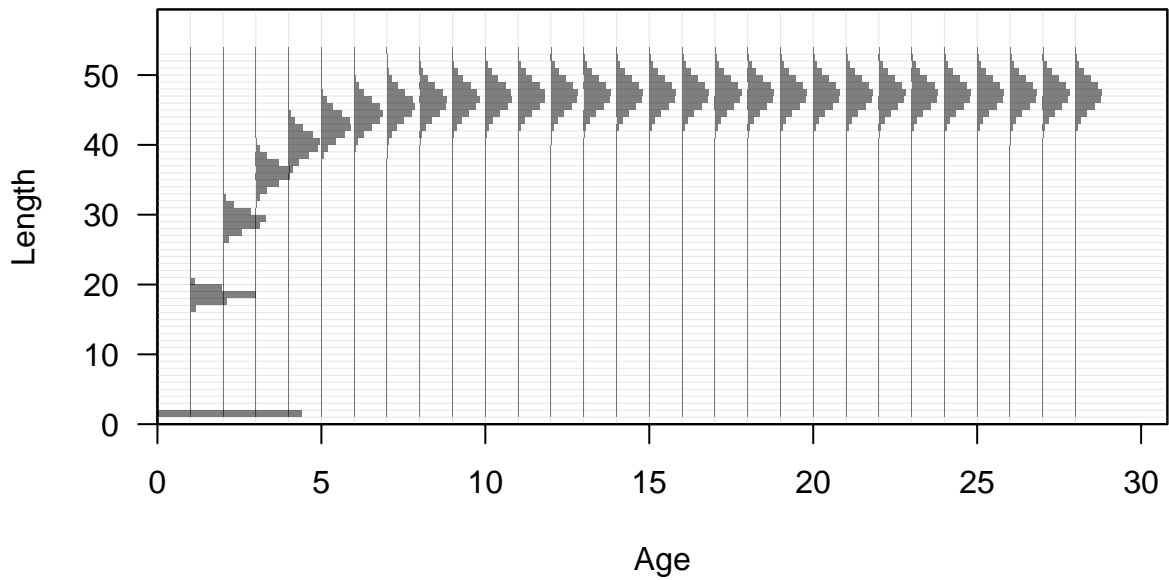


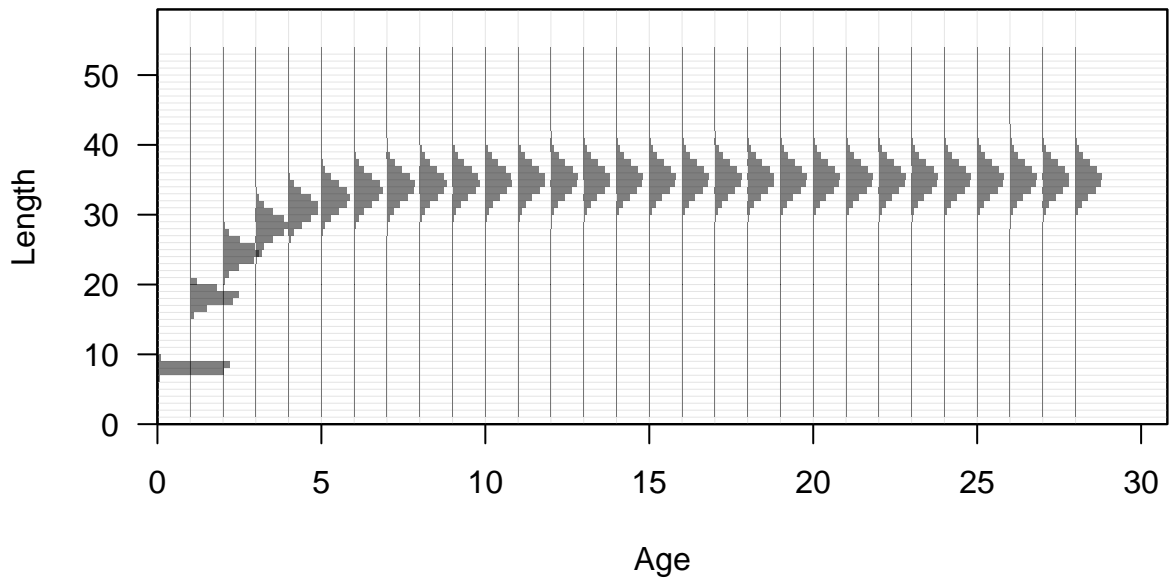


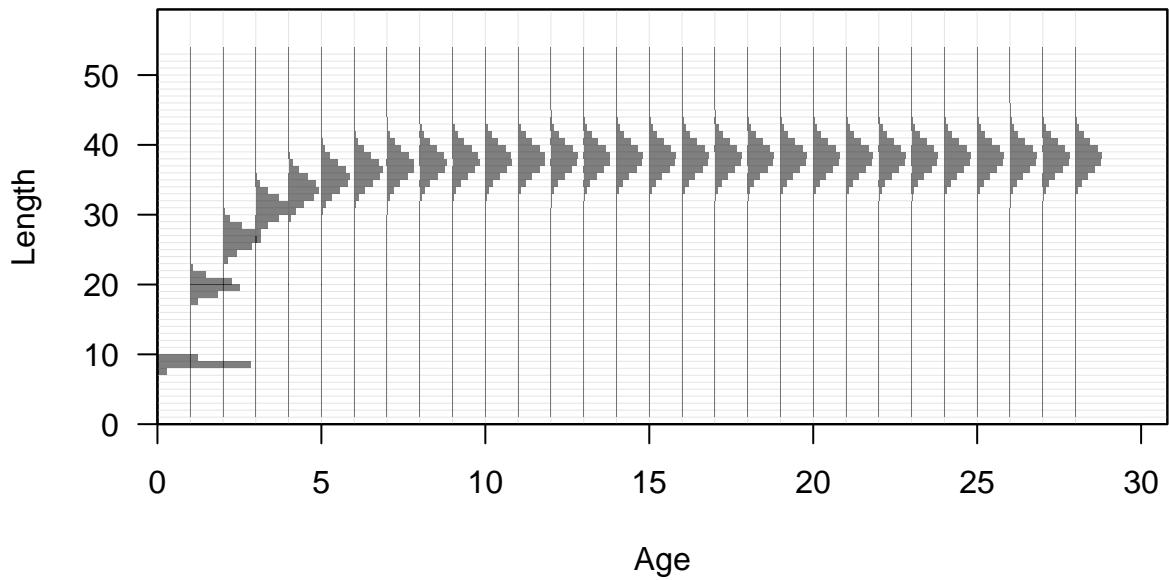


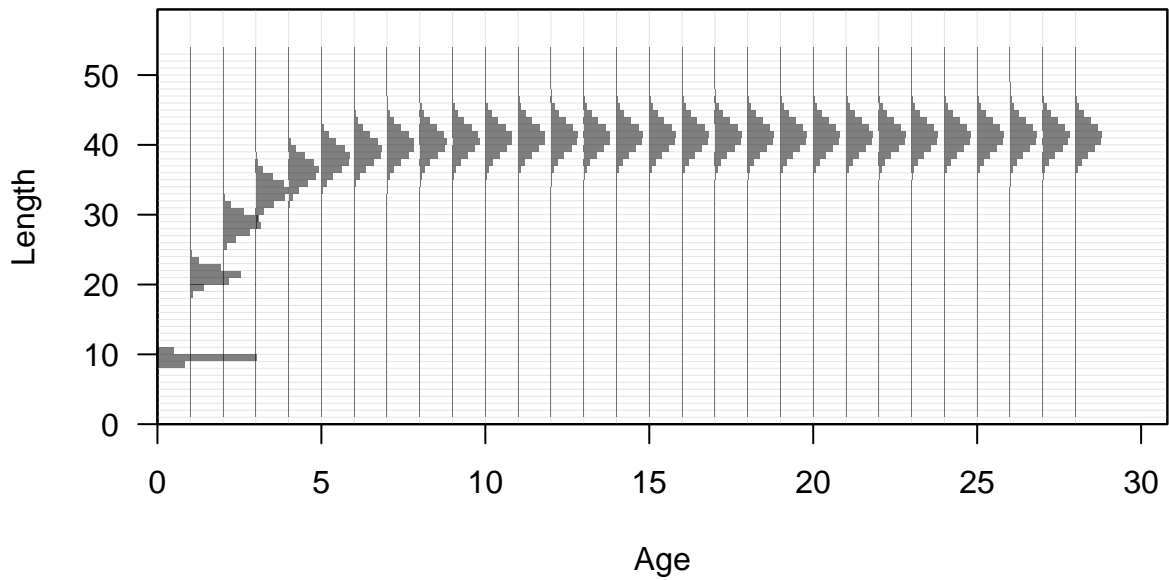


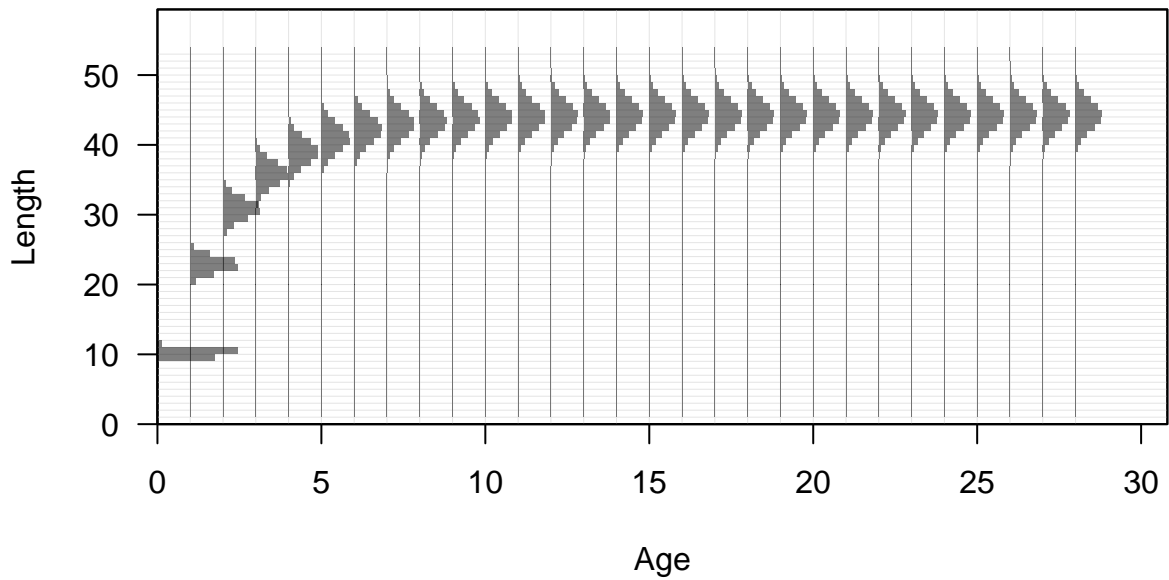


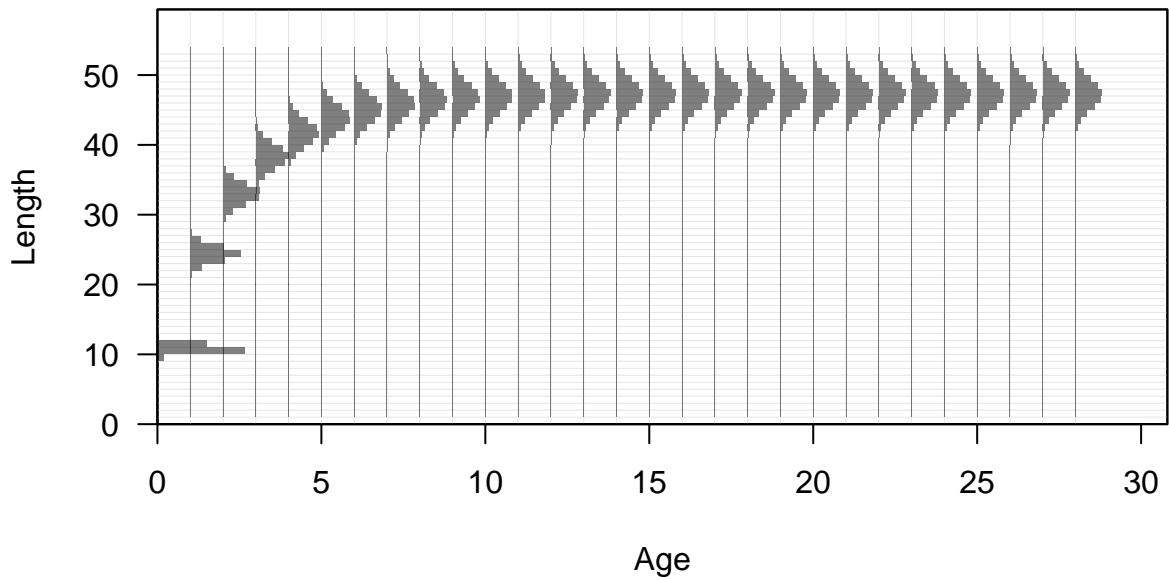


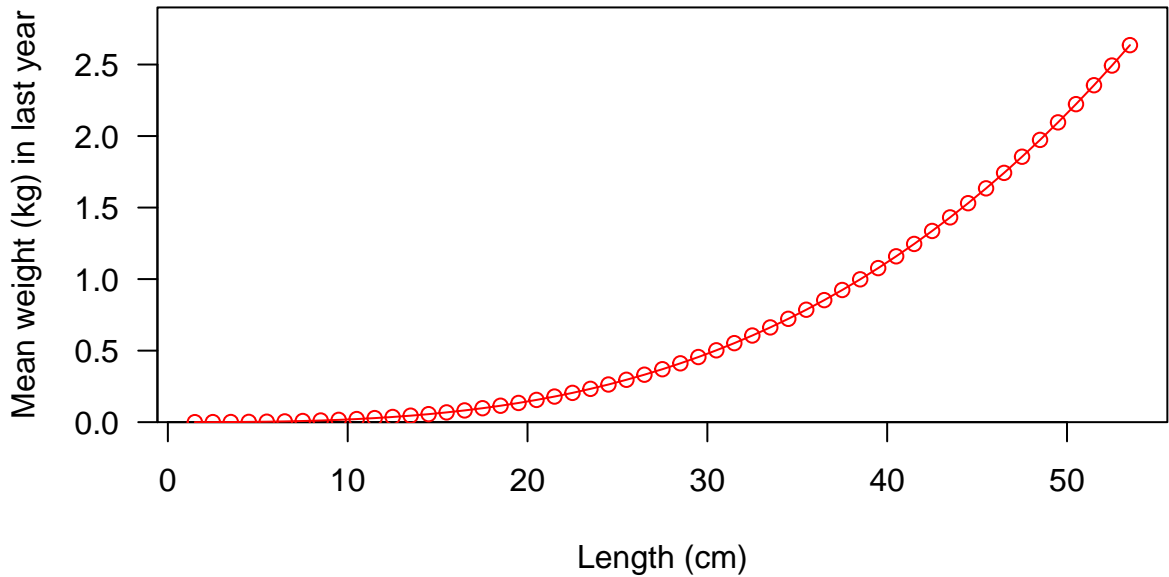


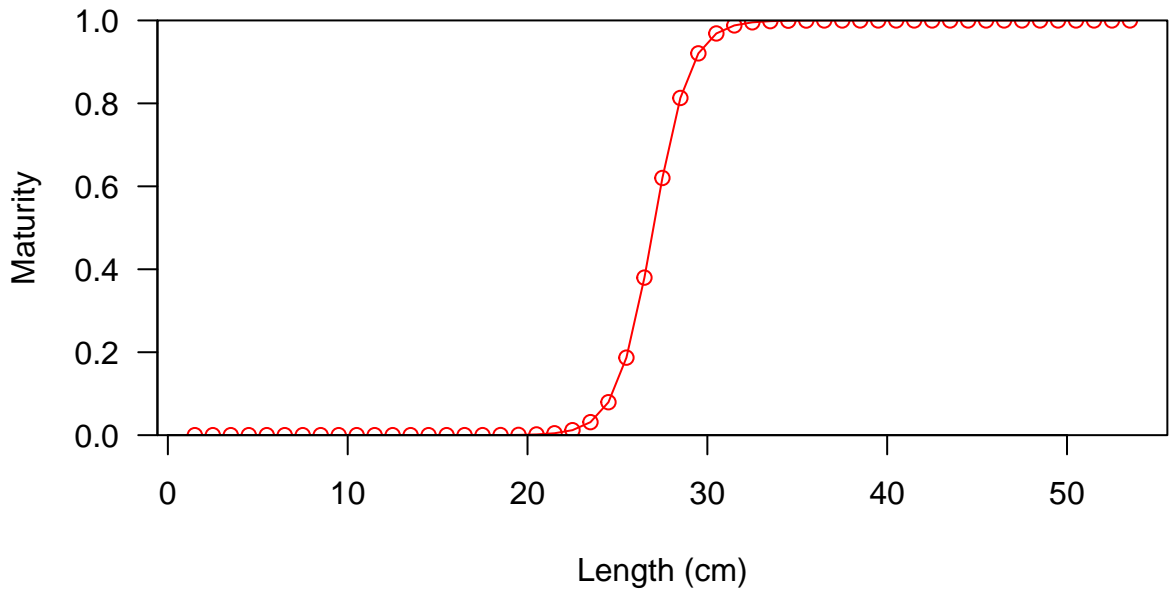


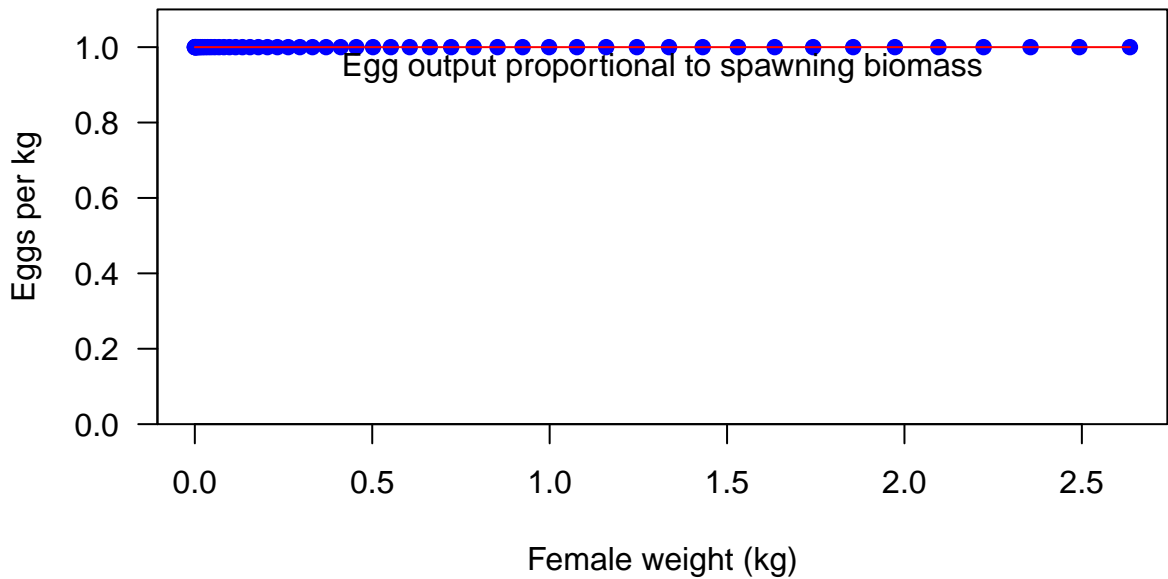


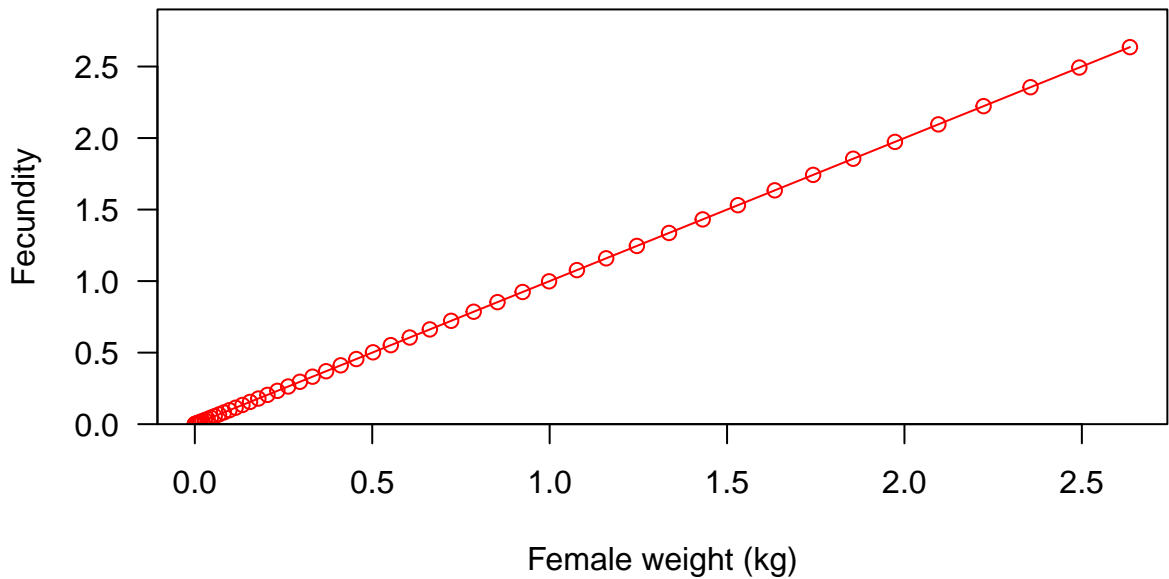


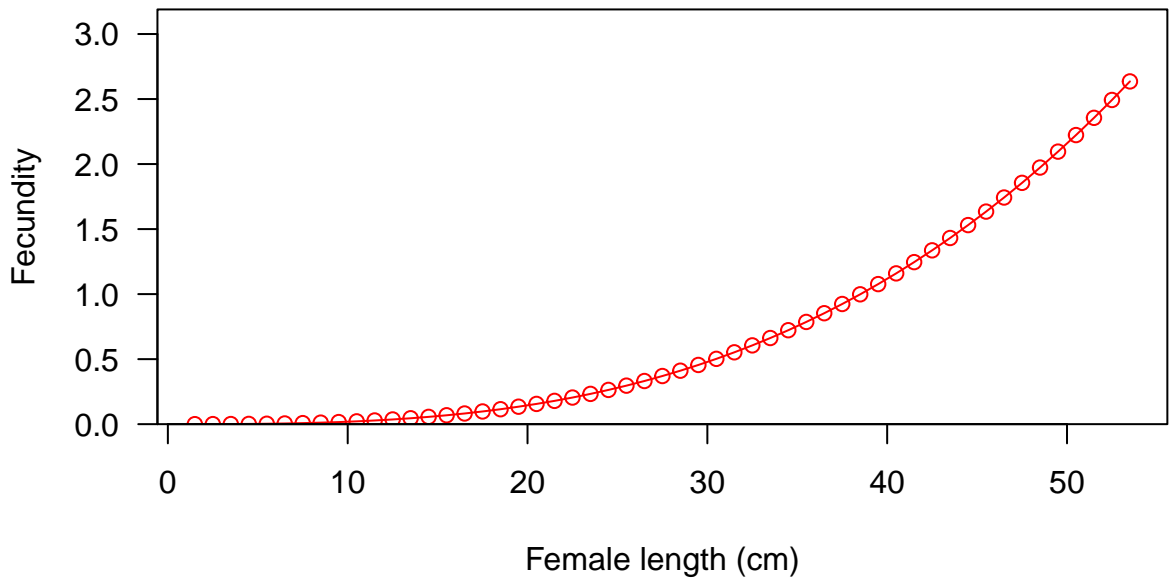


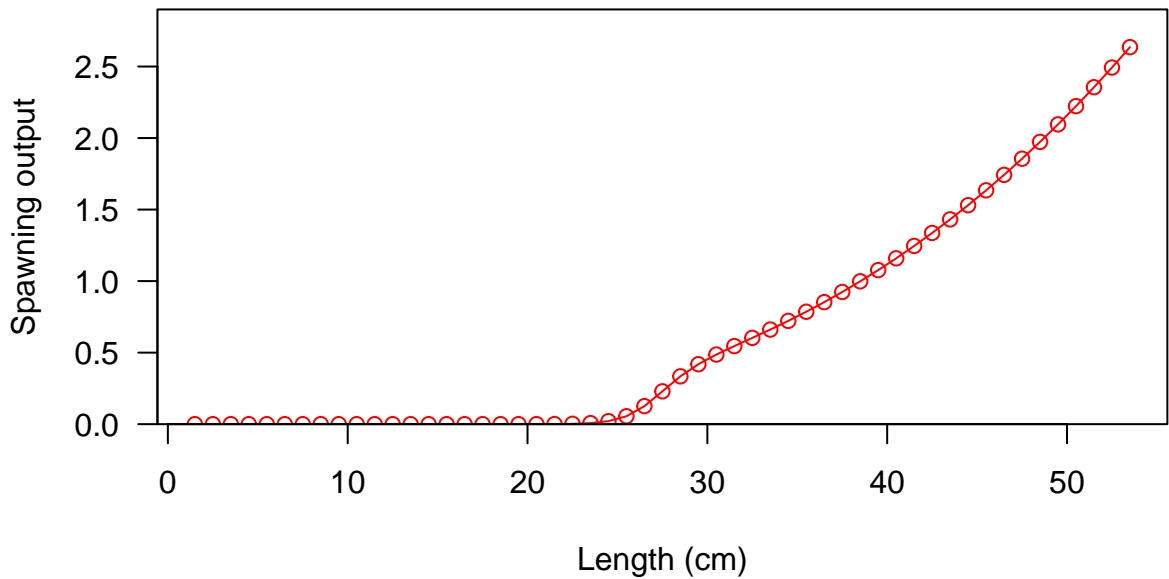


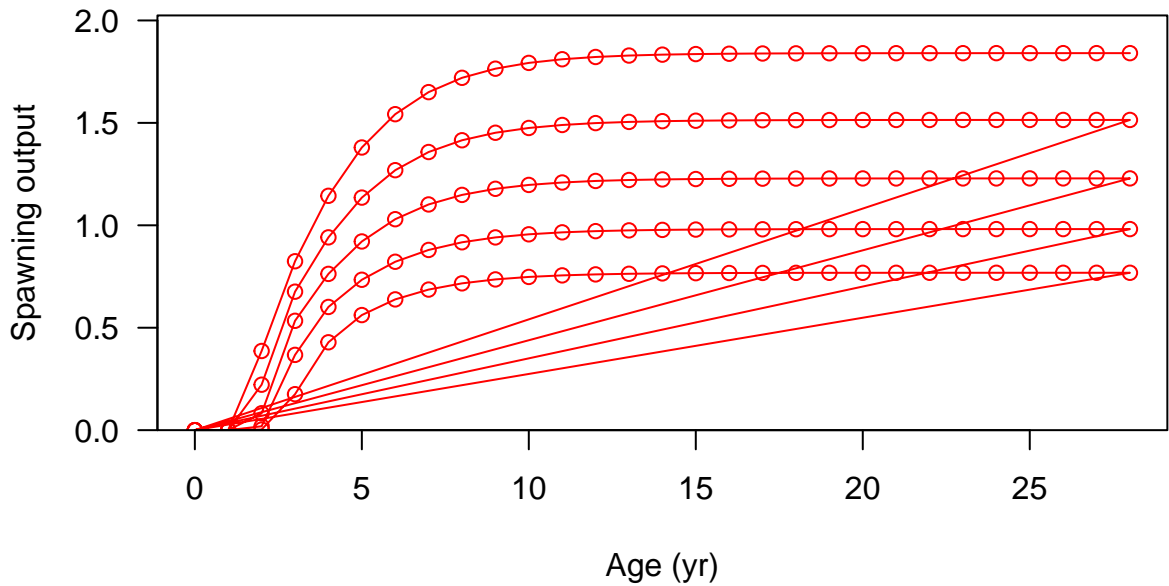




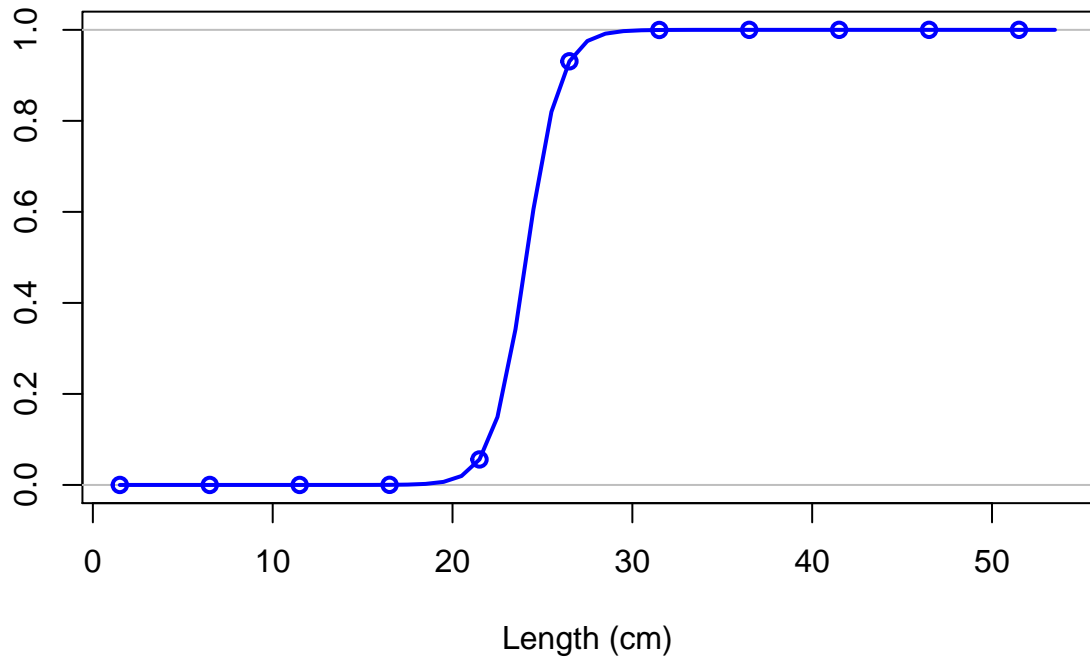




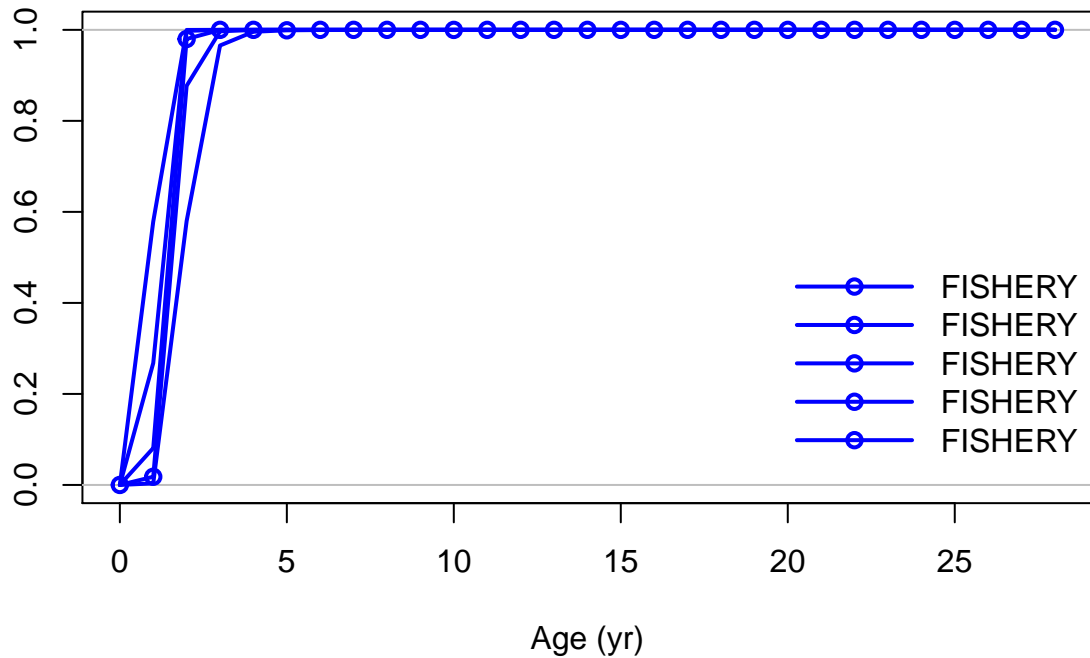




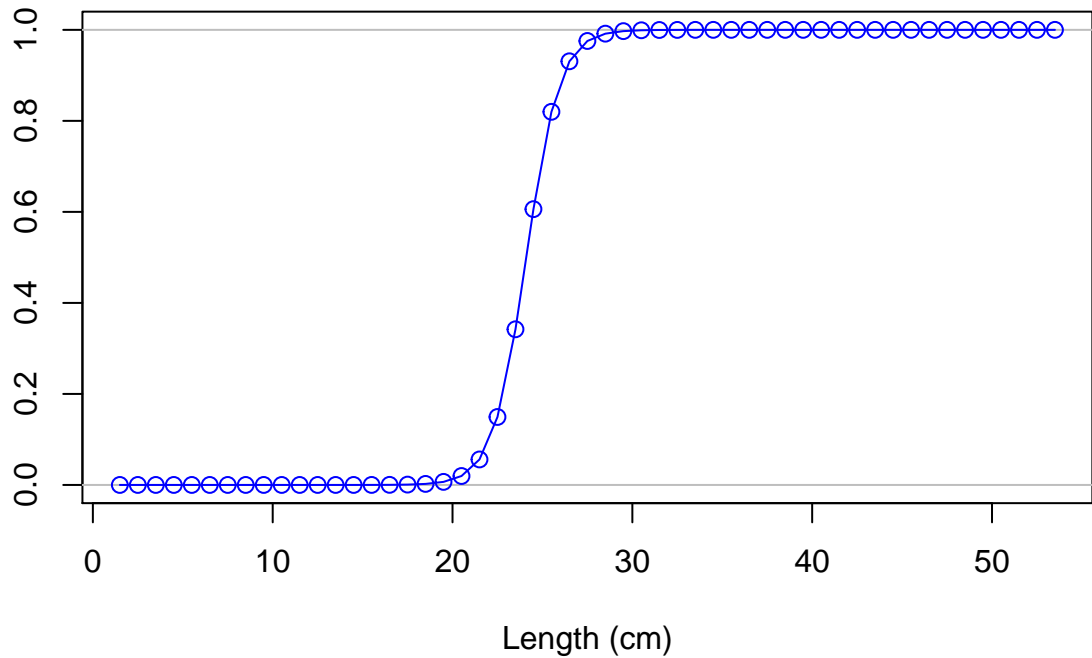
Selectivity

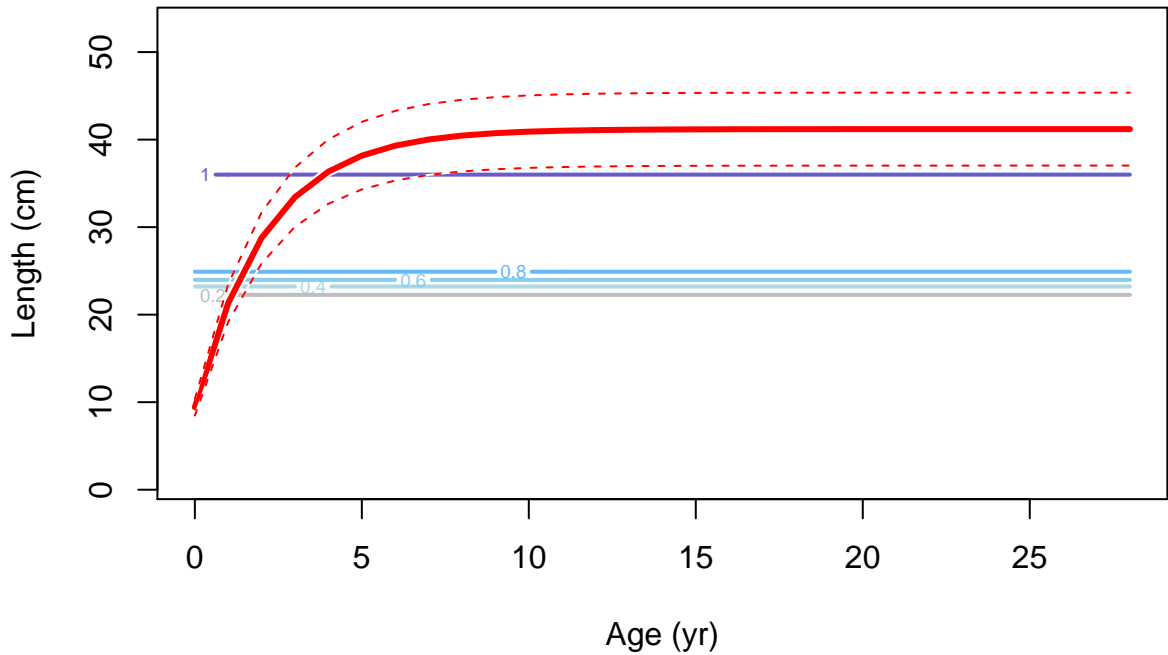


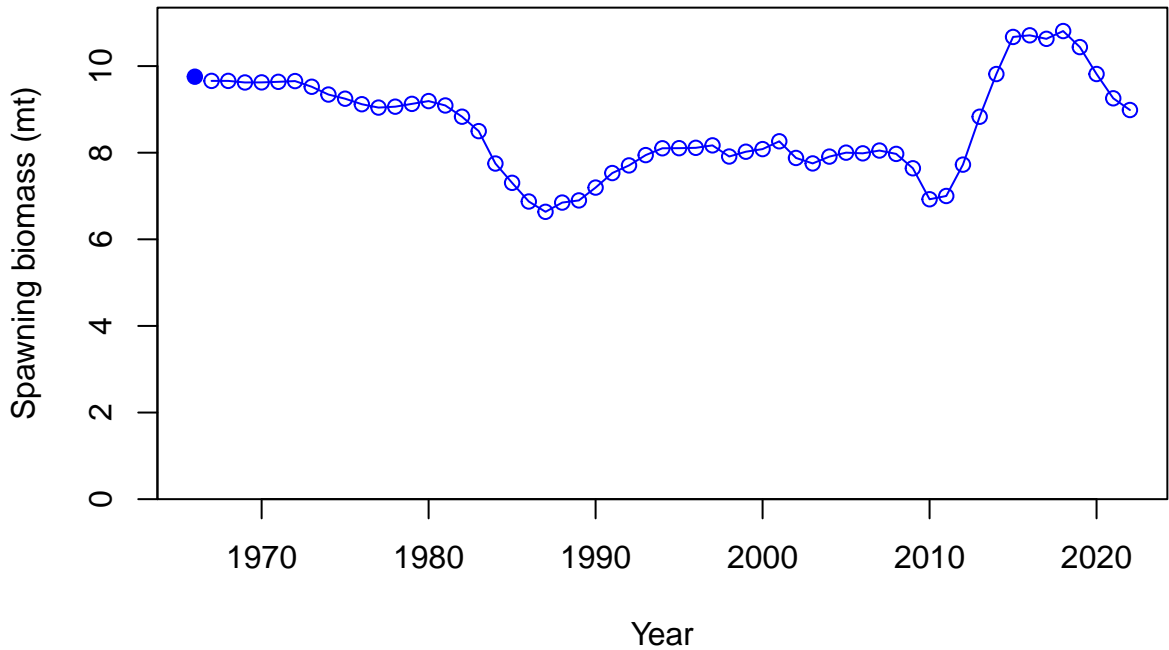
Selectivity

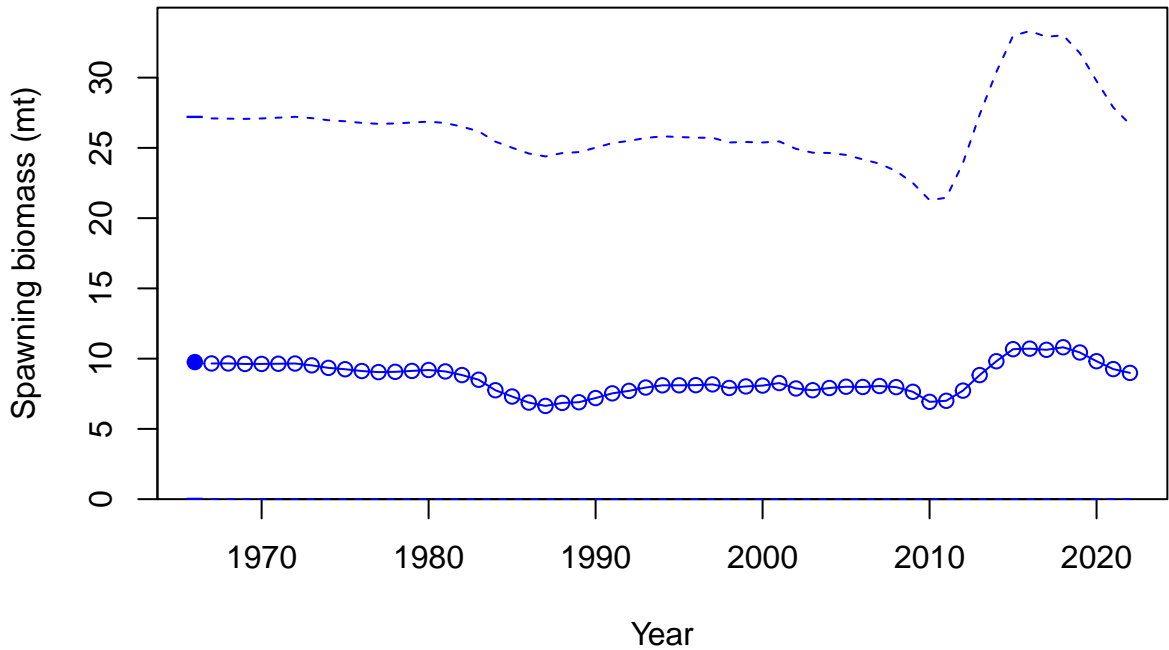


Selectivity

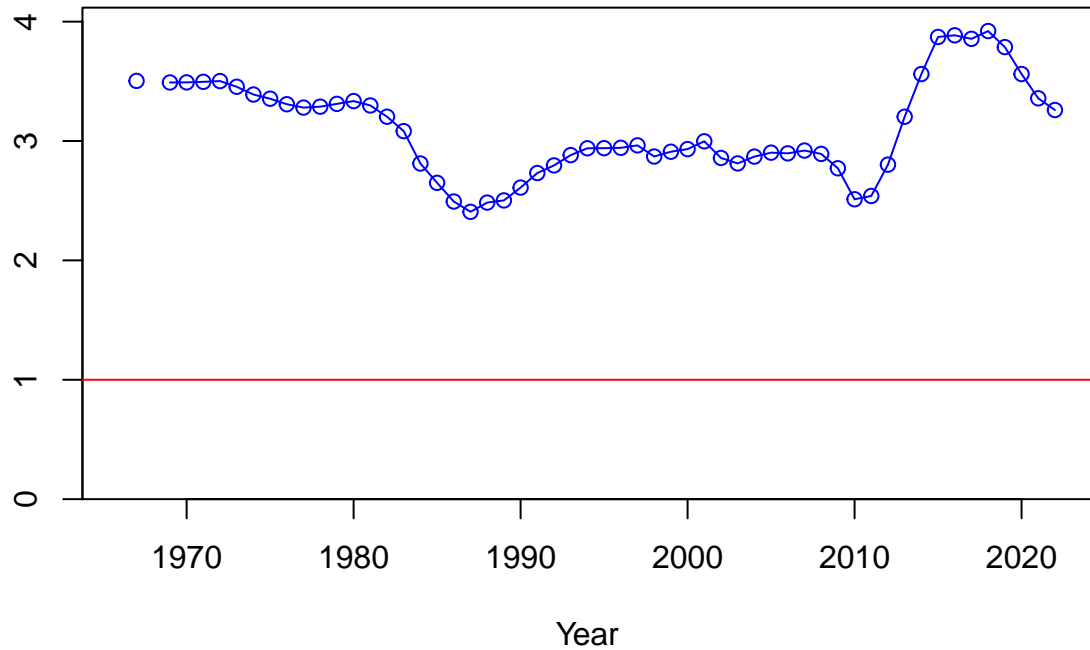




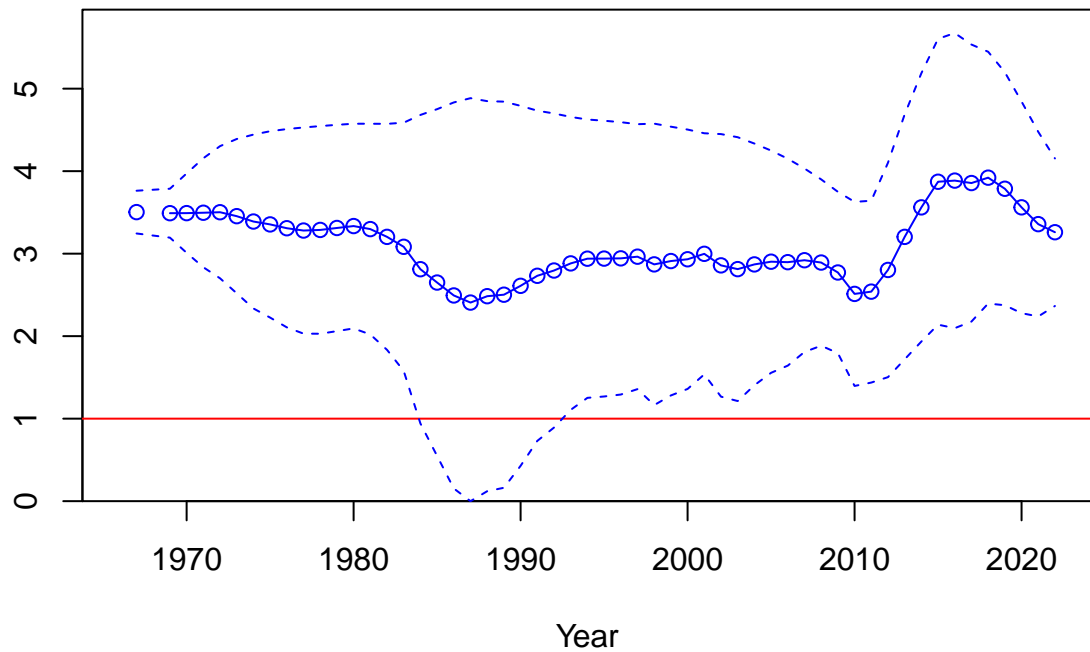


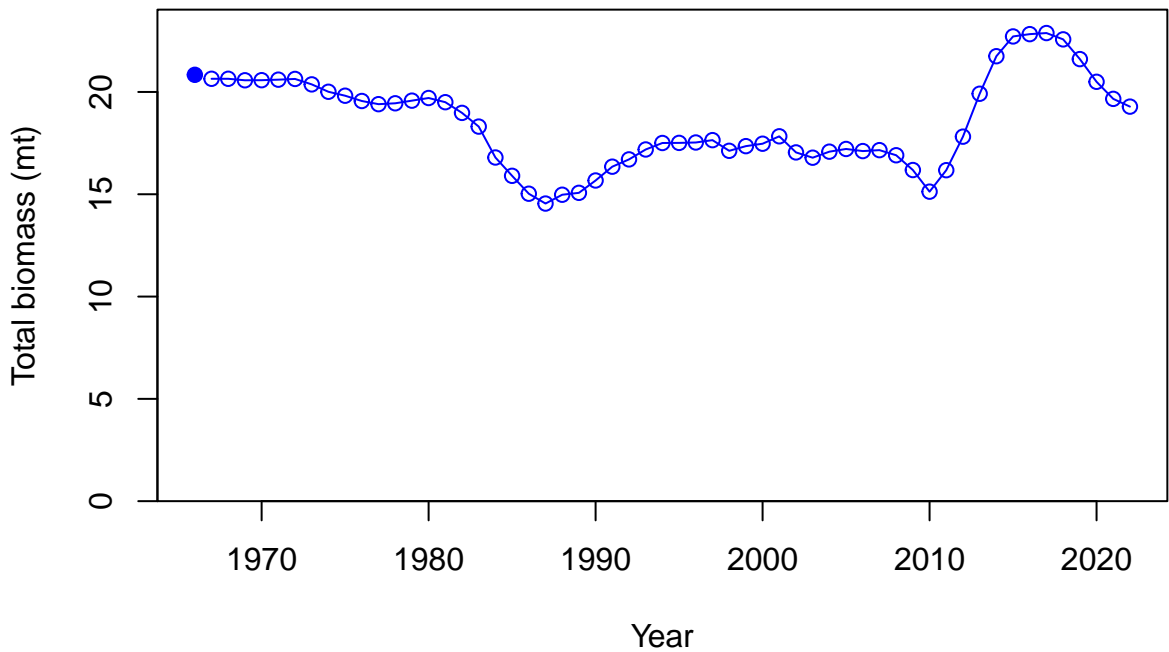


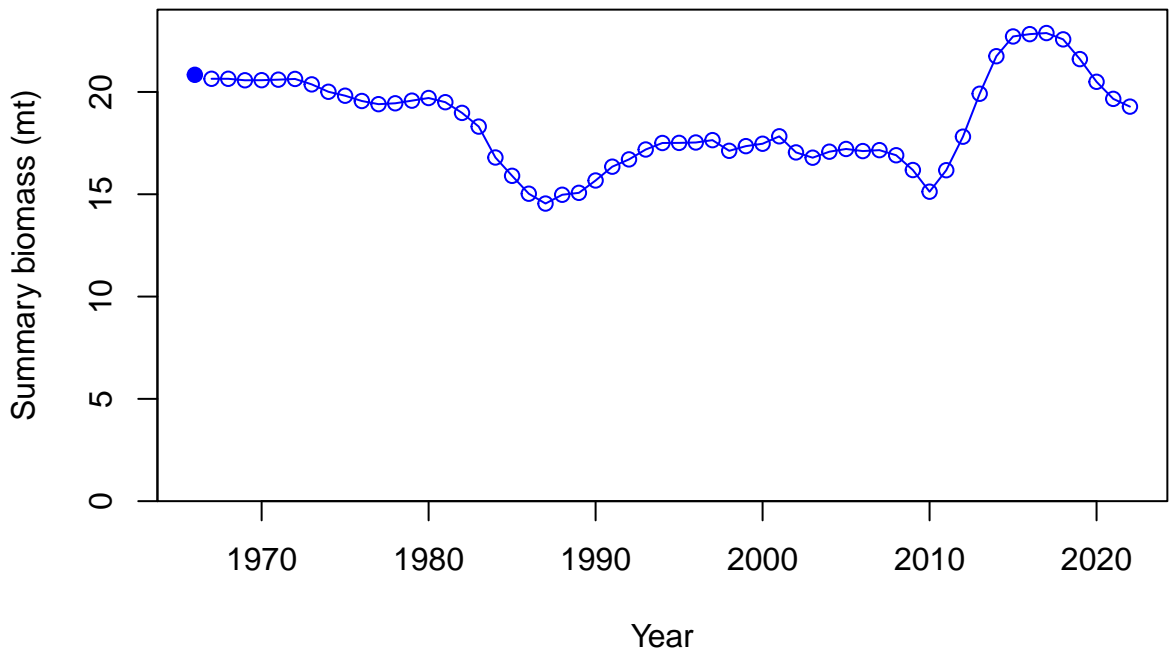
Relative spawning biomass: B/B_{MSY}

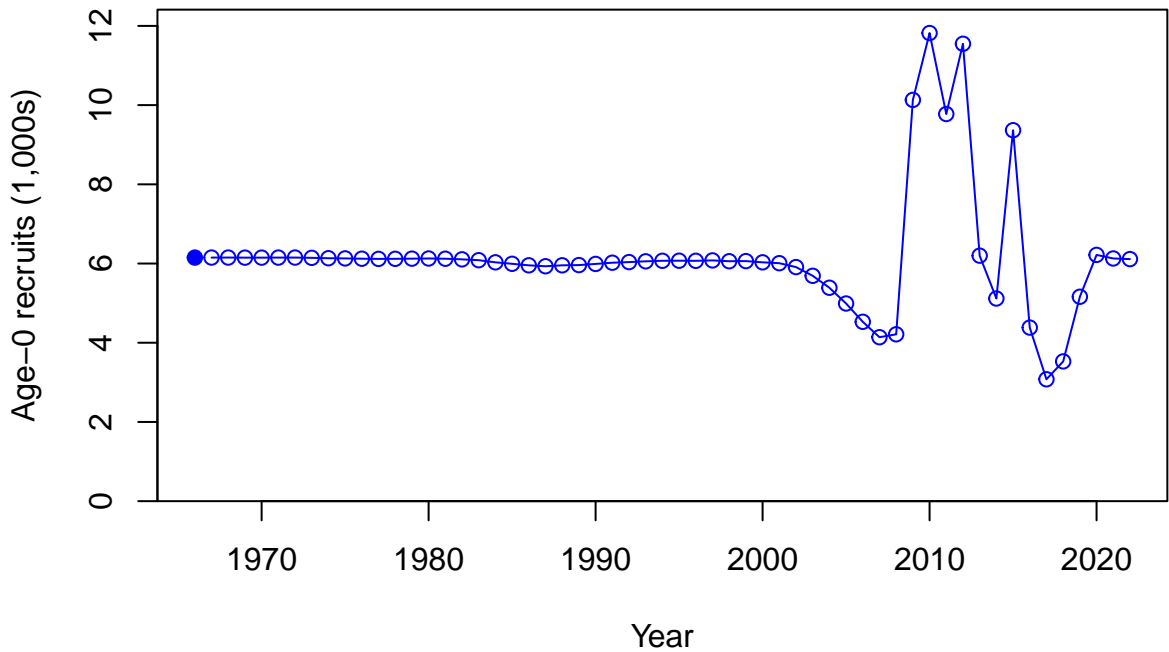


Relative spawning biomass: B/B_{MSY}

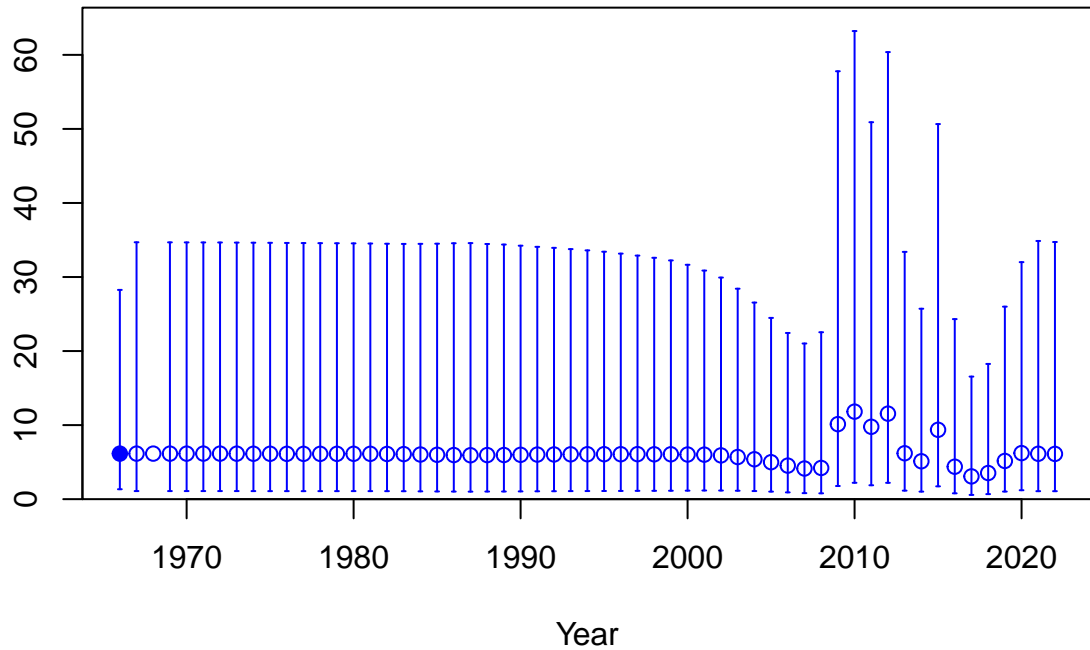




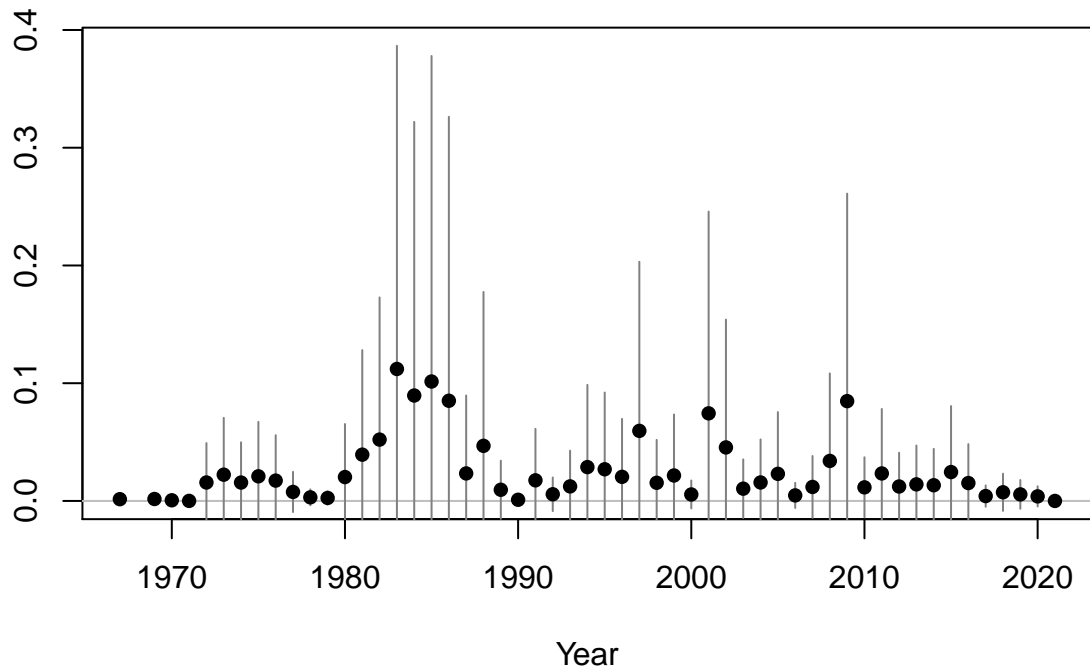


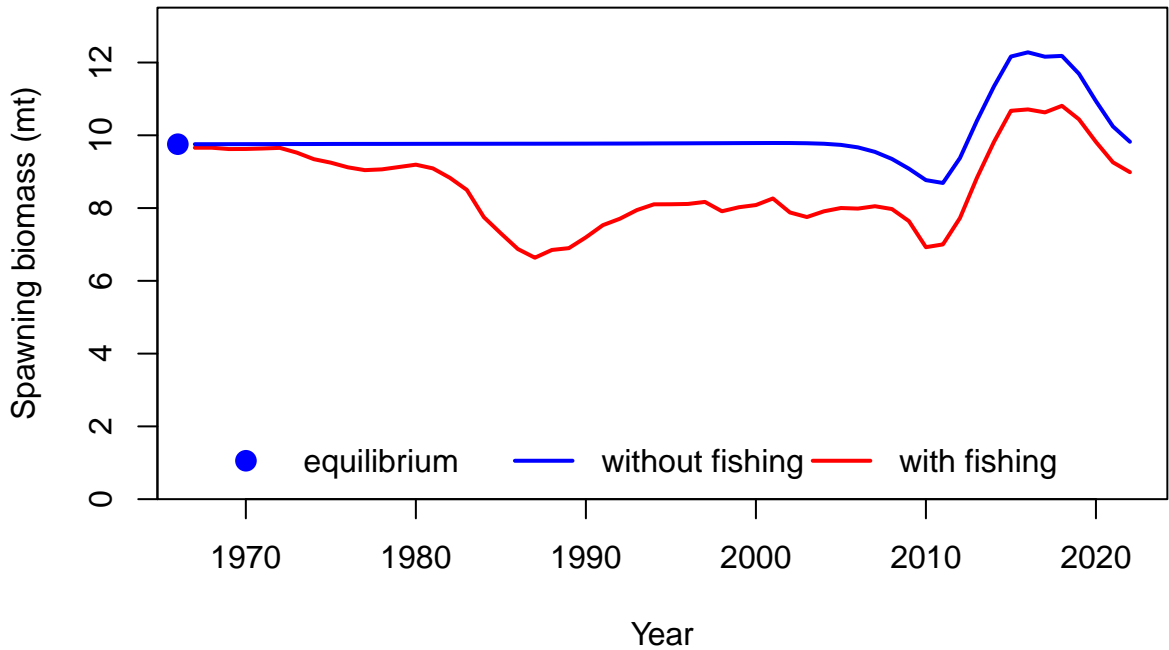


Age-0 recruits (1,000s)



Summary Fishing Mortality





Log recruitment deviation

0.5
0.0
-0.5

1970

1980

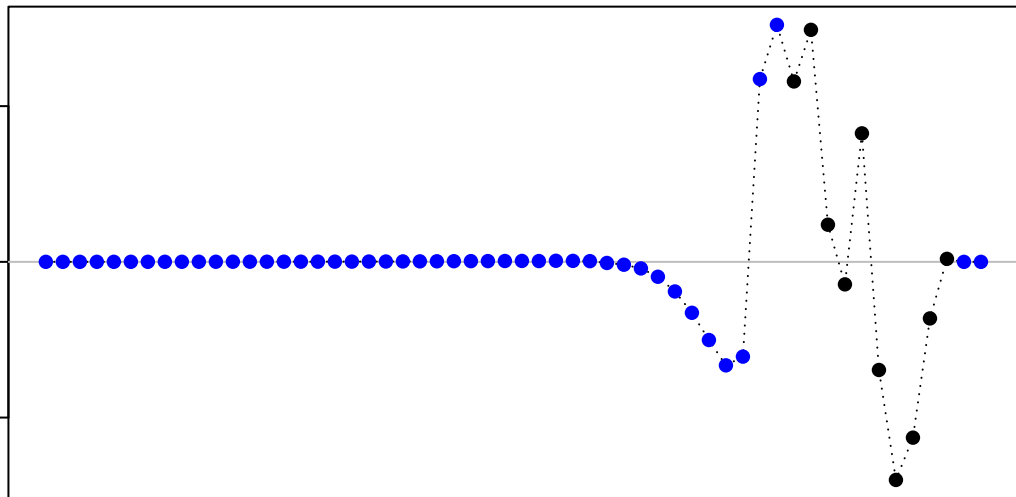
1990

2000

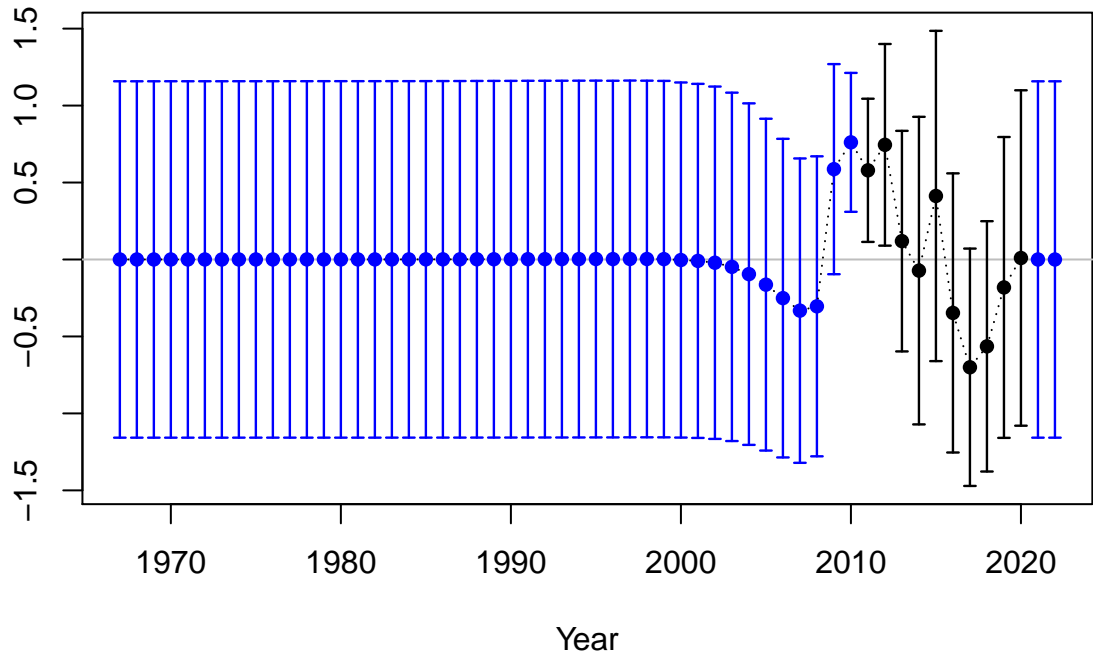
2010

2020

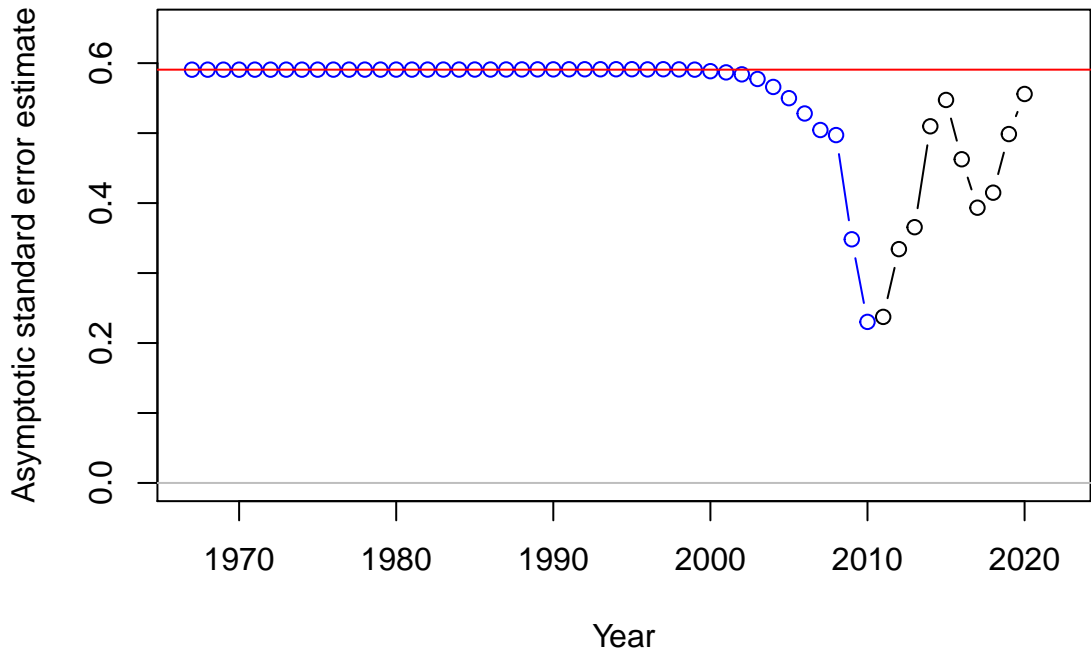
Year

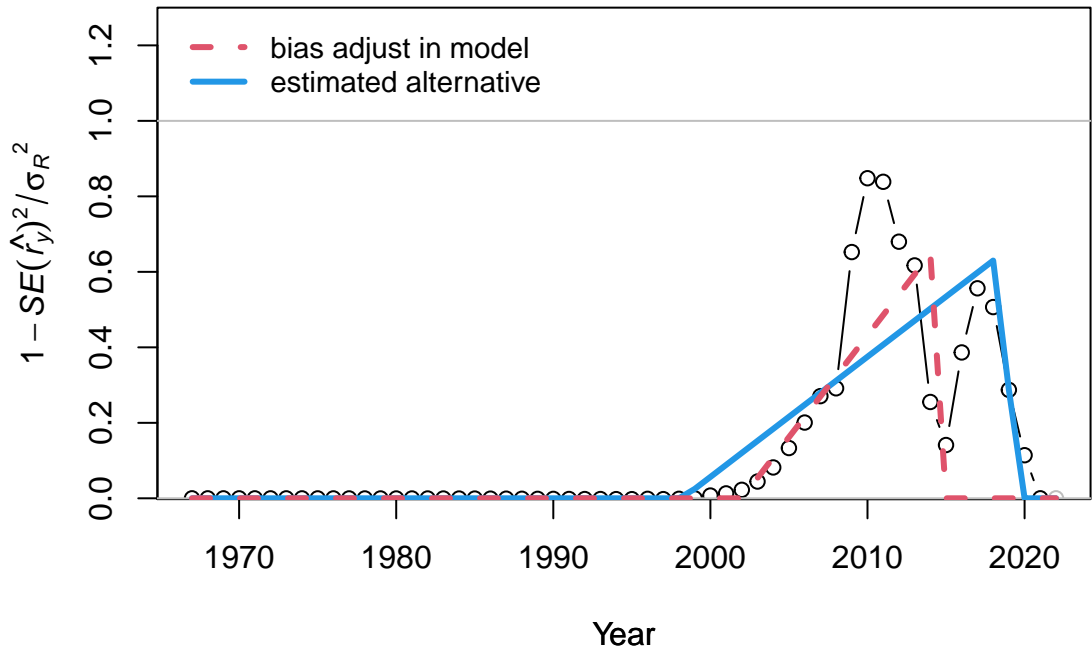


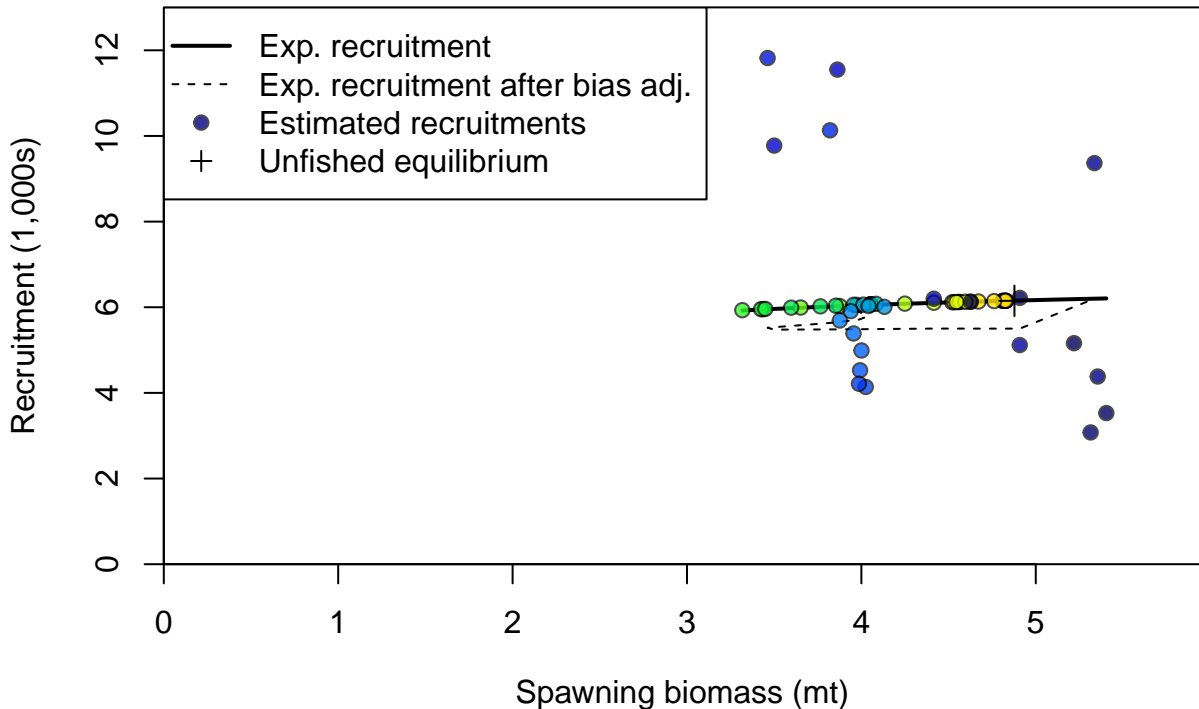
Log recruitment deviation

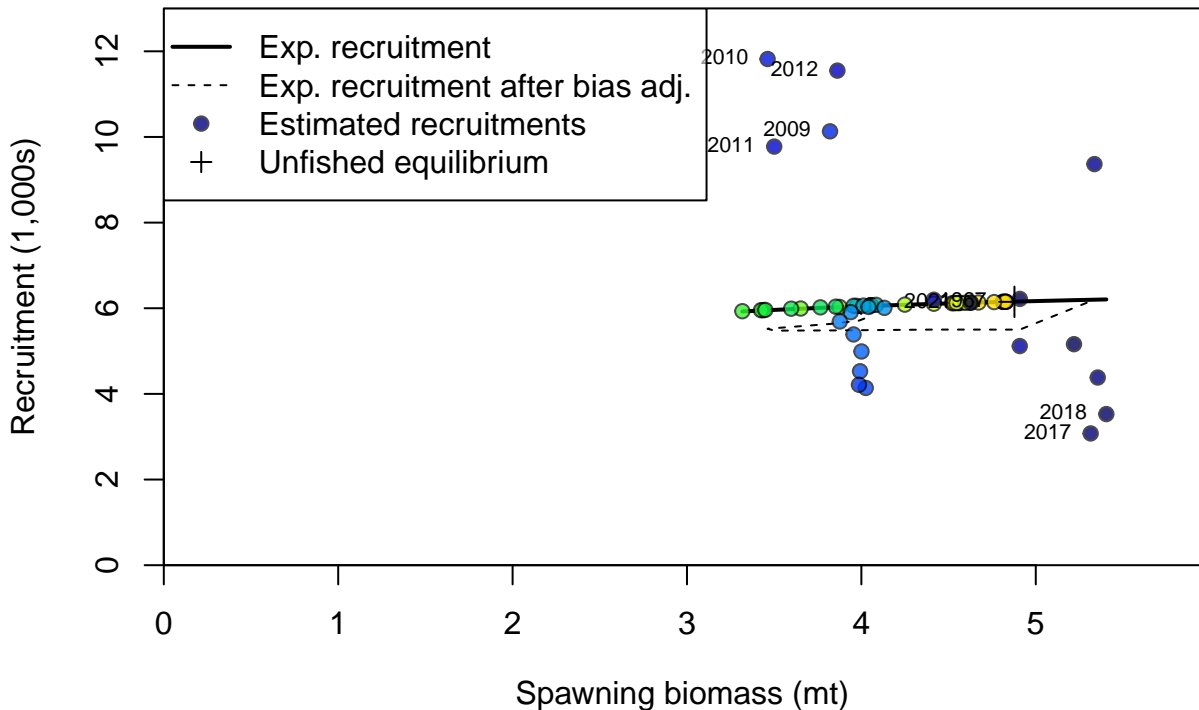


Recruitment deviation variance









Log recruitment deviation

0.5

0.0

-0.5

0.0

0.2

0.4

0.6

0.8

1.0

Spawning output (relative to B_0)

2010

2012

2011

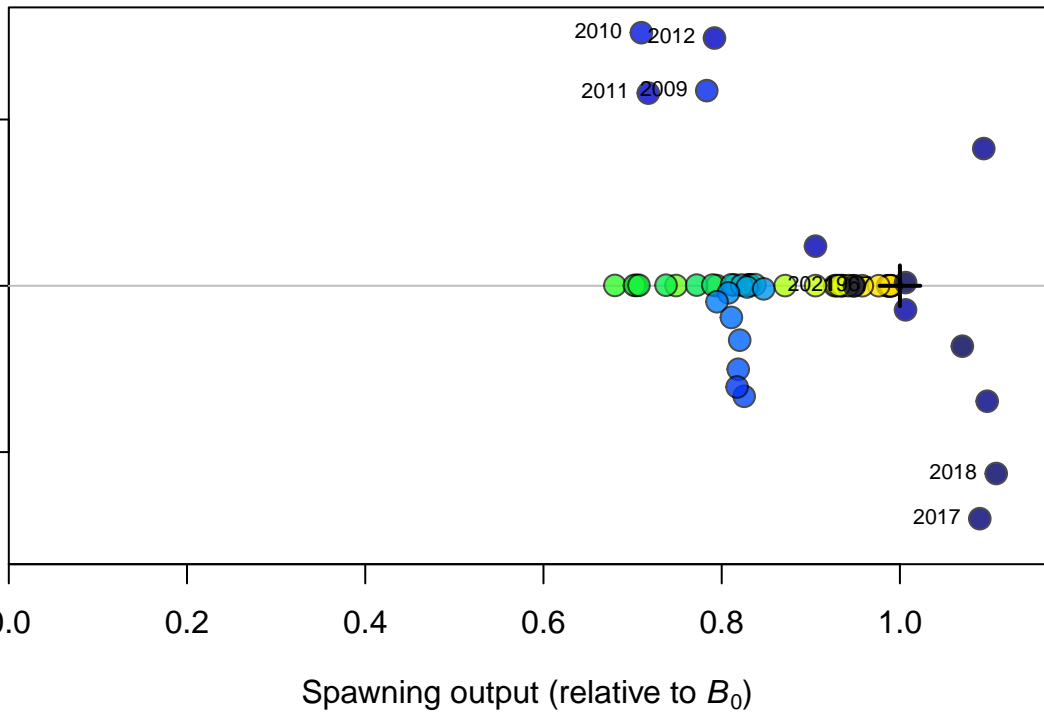
2009

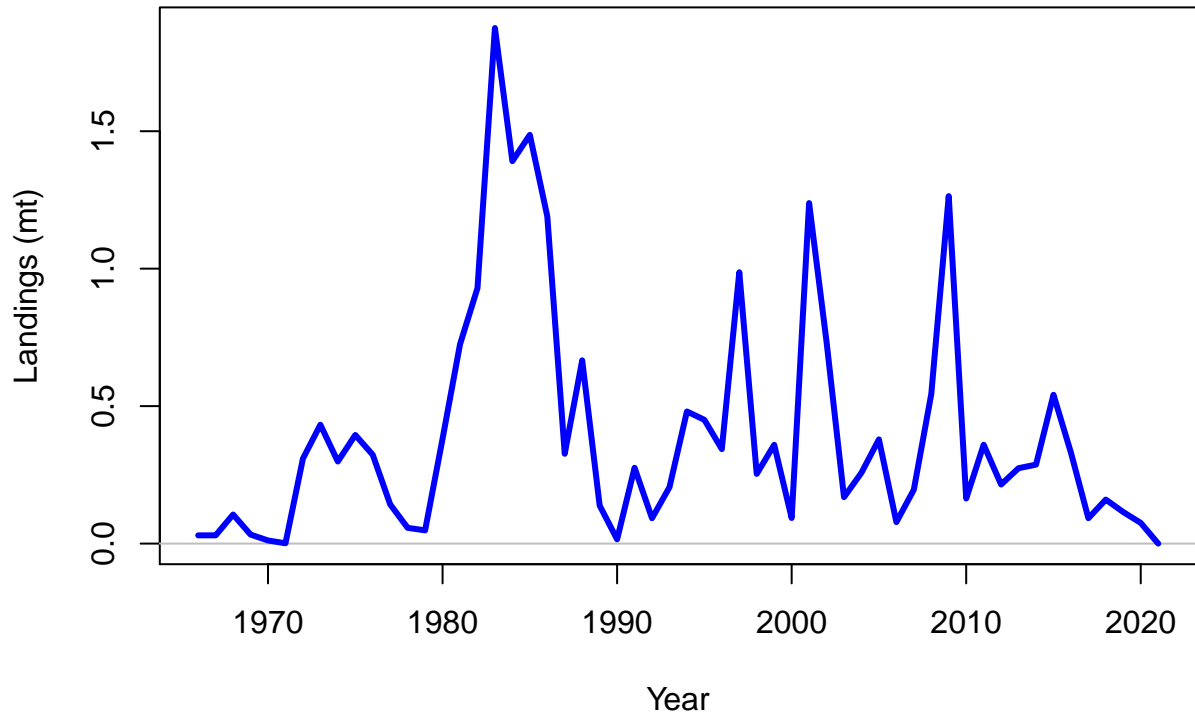
2020

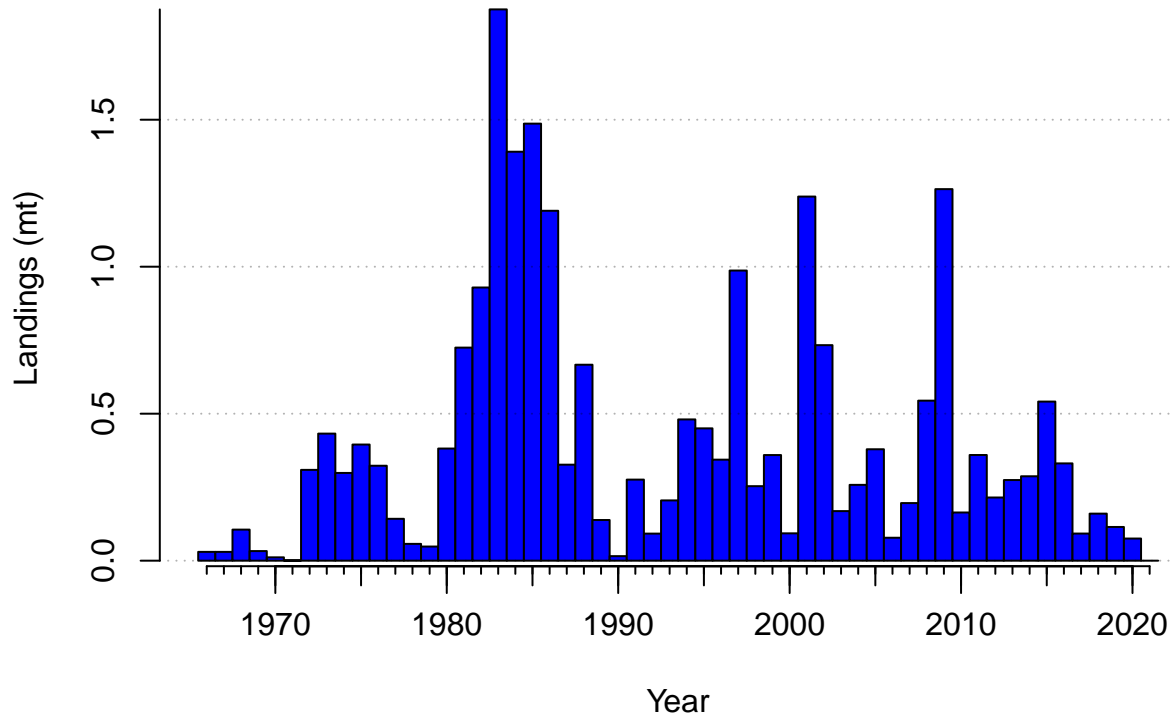
1997

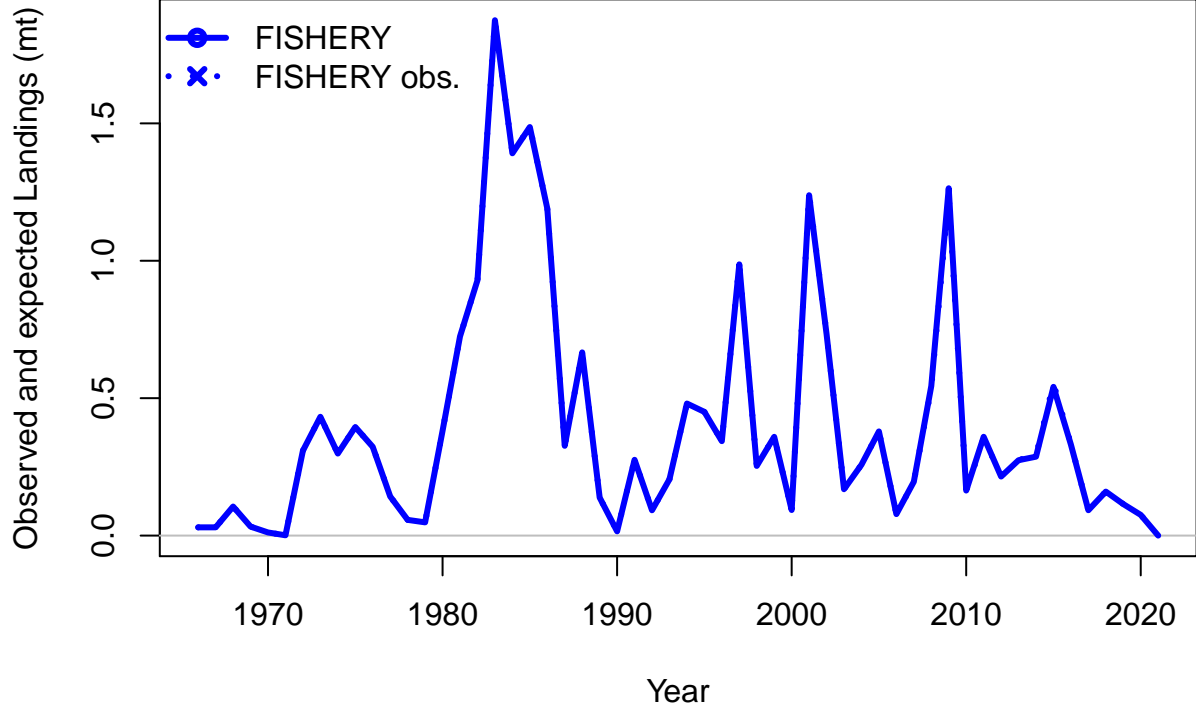
2018

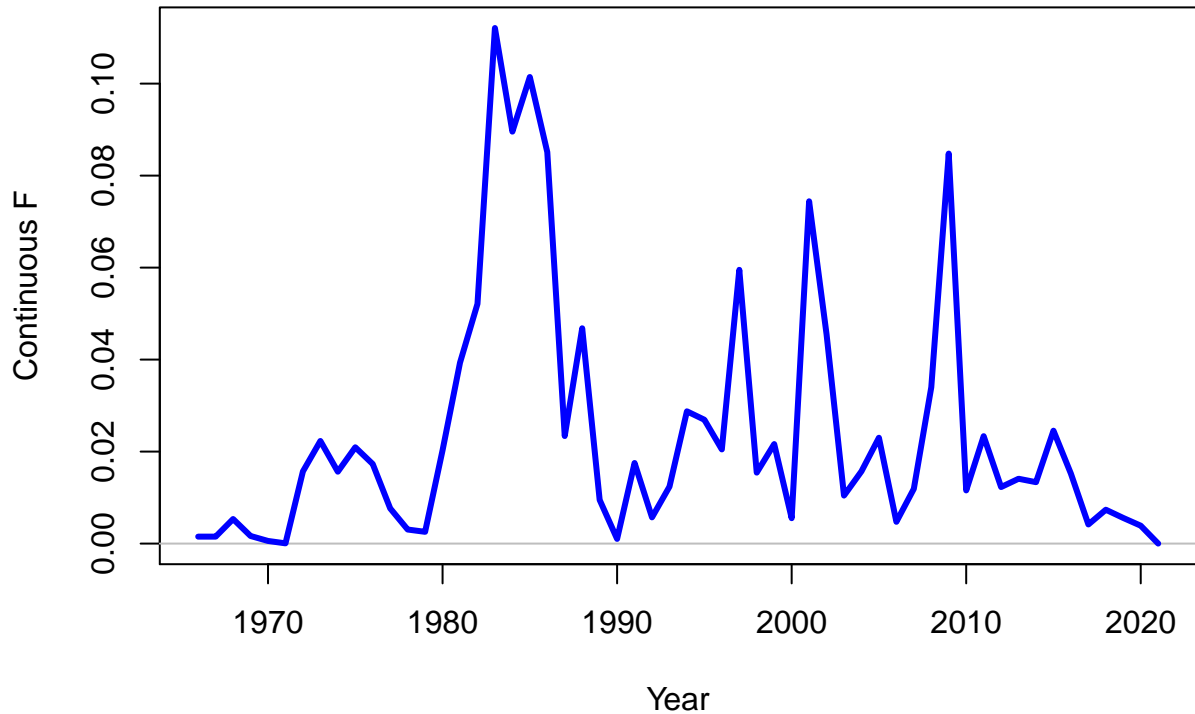
2017



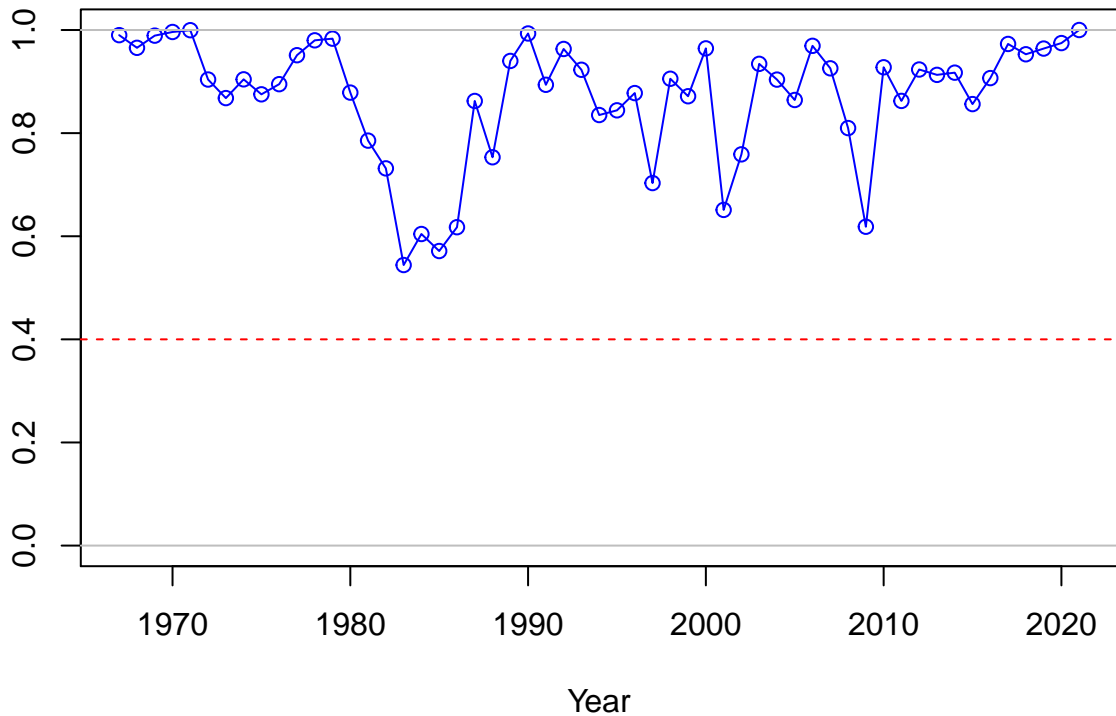




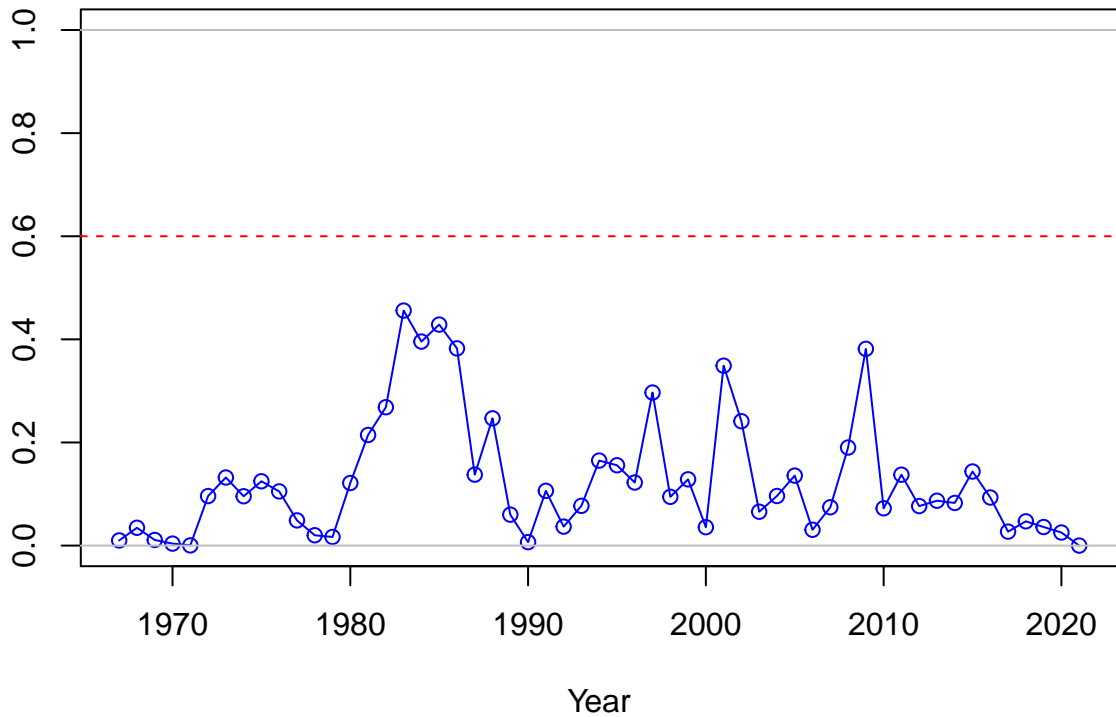




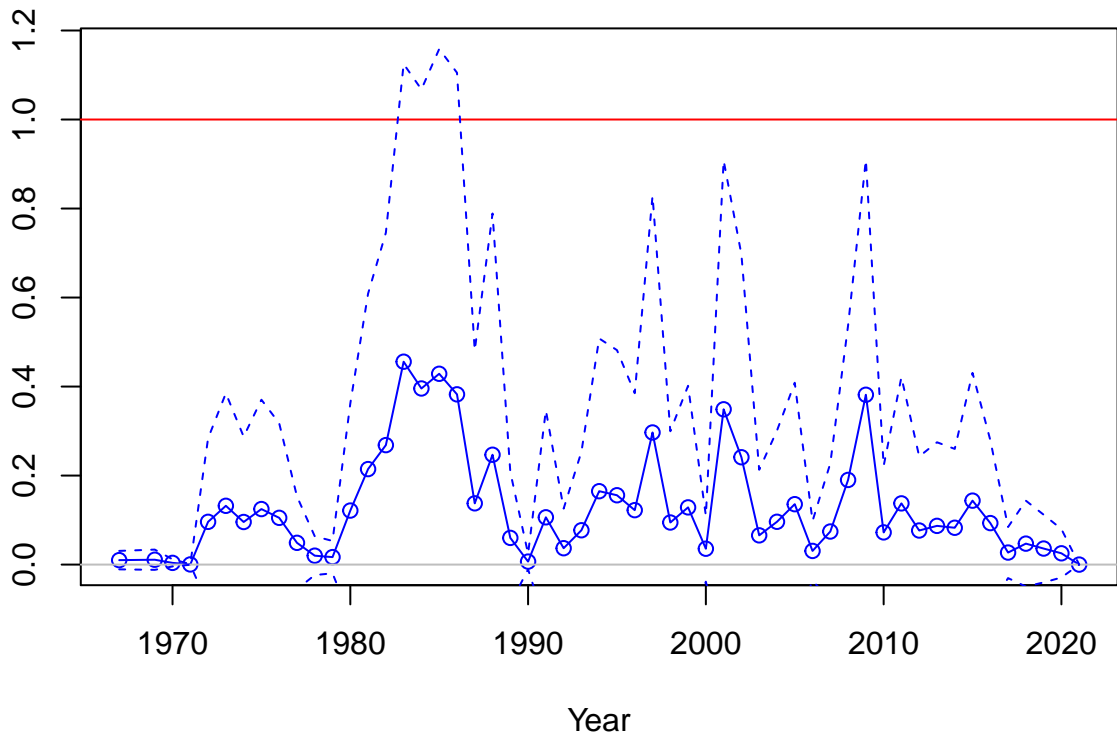
SPR



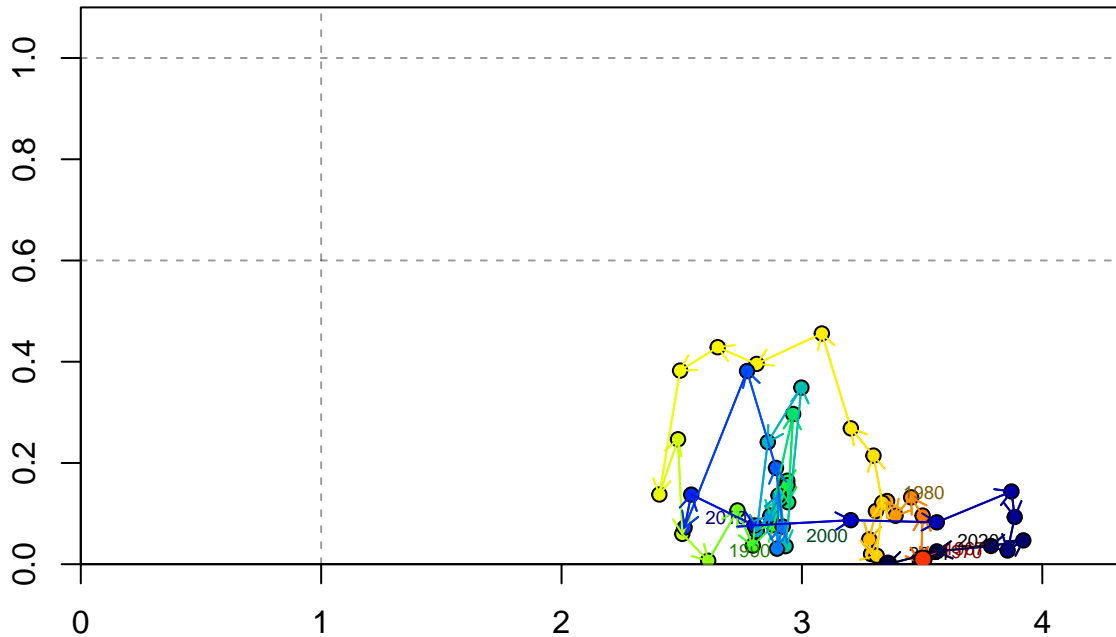
1-SPR



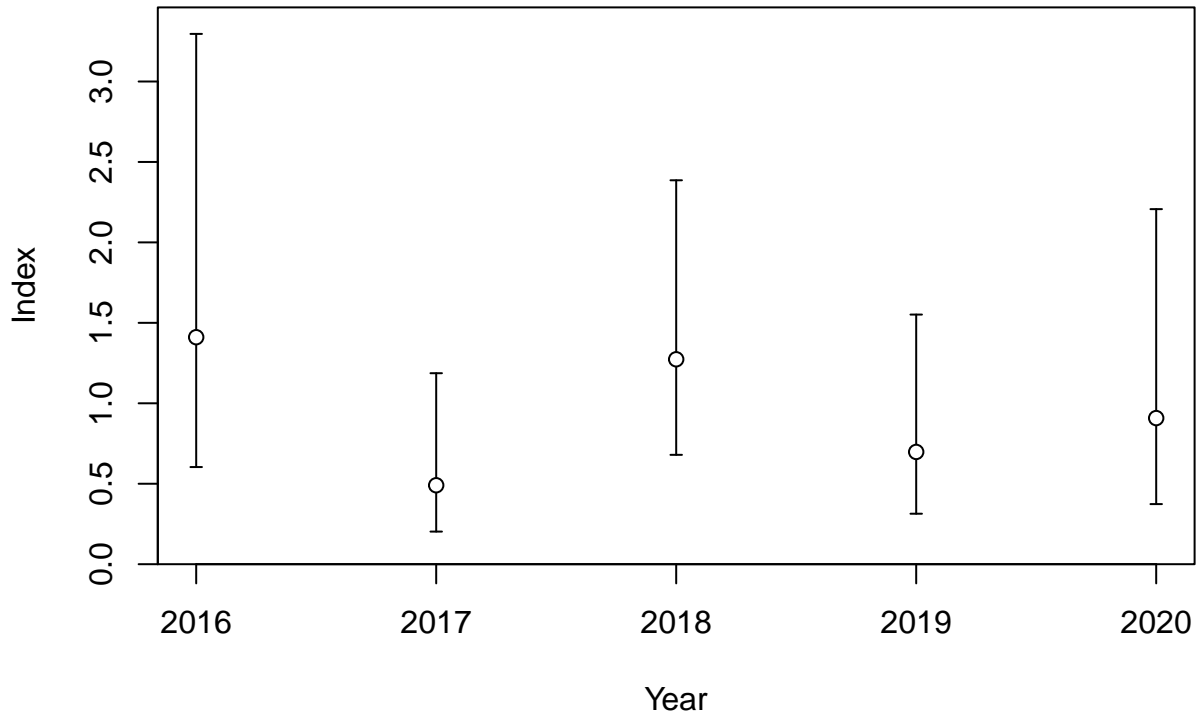
Fishing intensity: 1-SPR



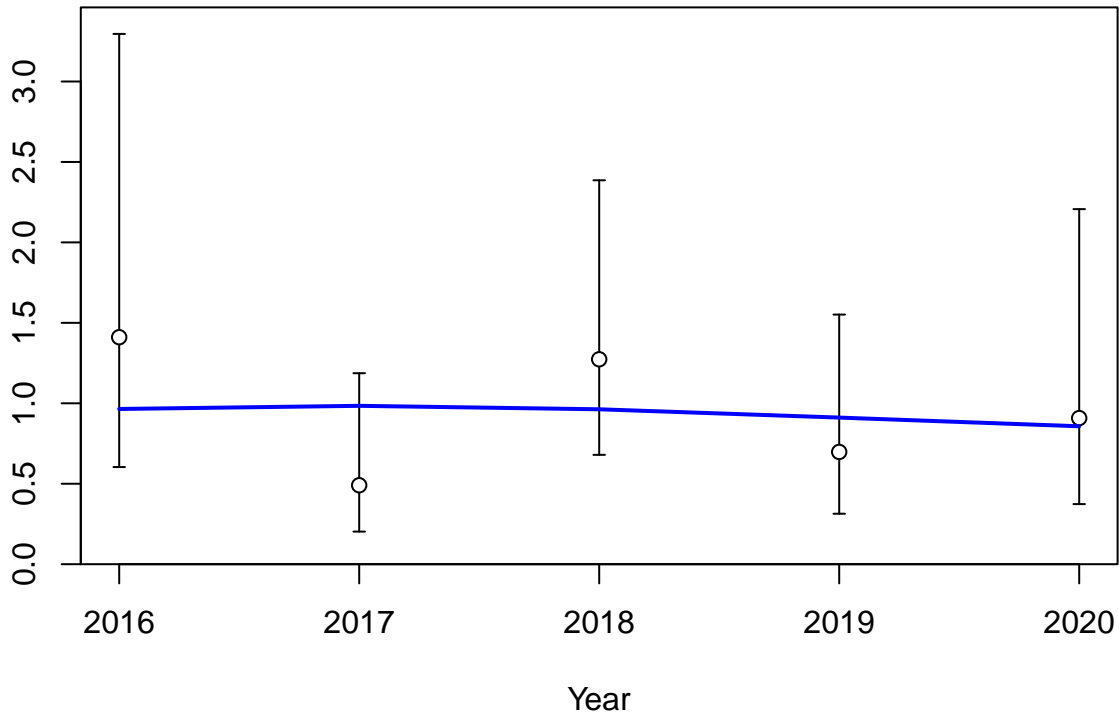
Fishing intensity: 1-SPR

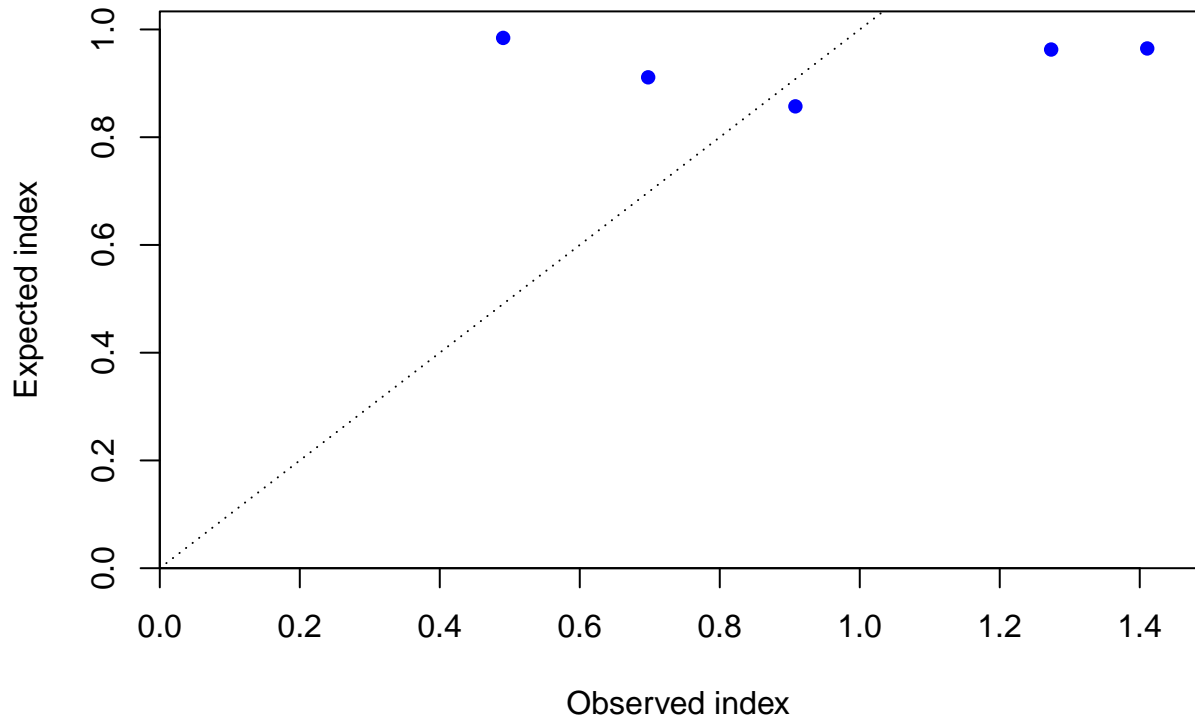


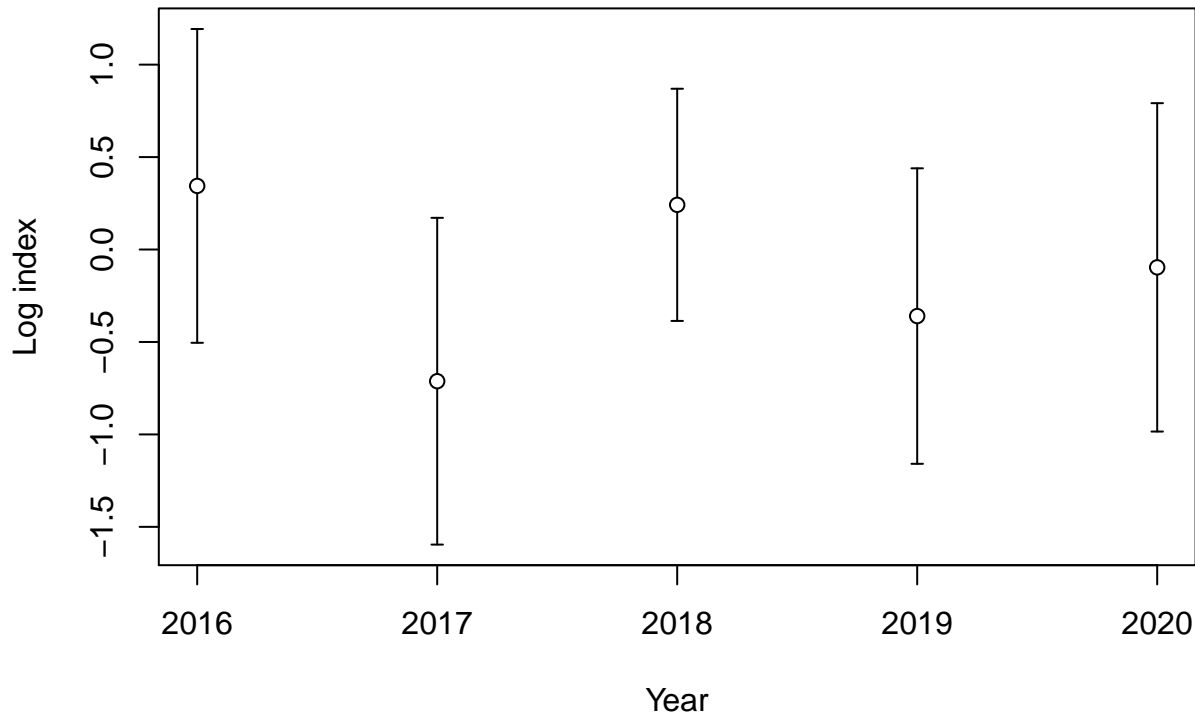
Relative spawning output: B/B_{MSY}

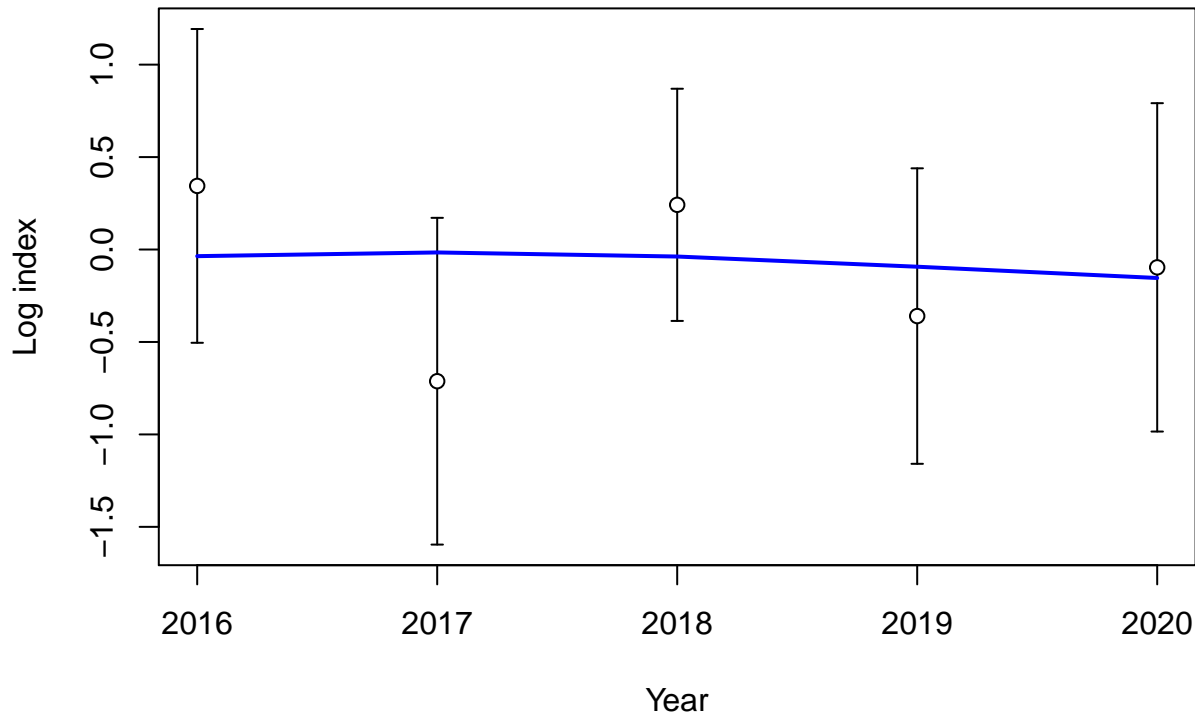


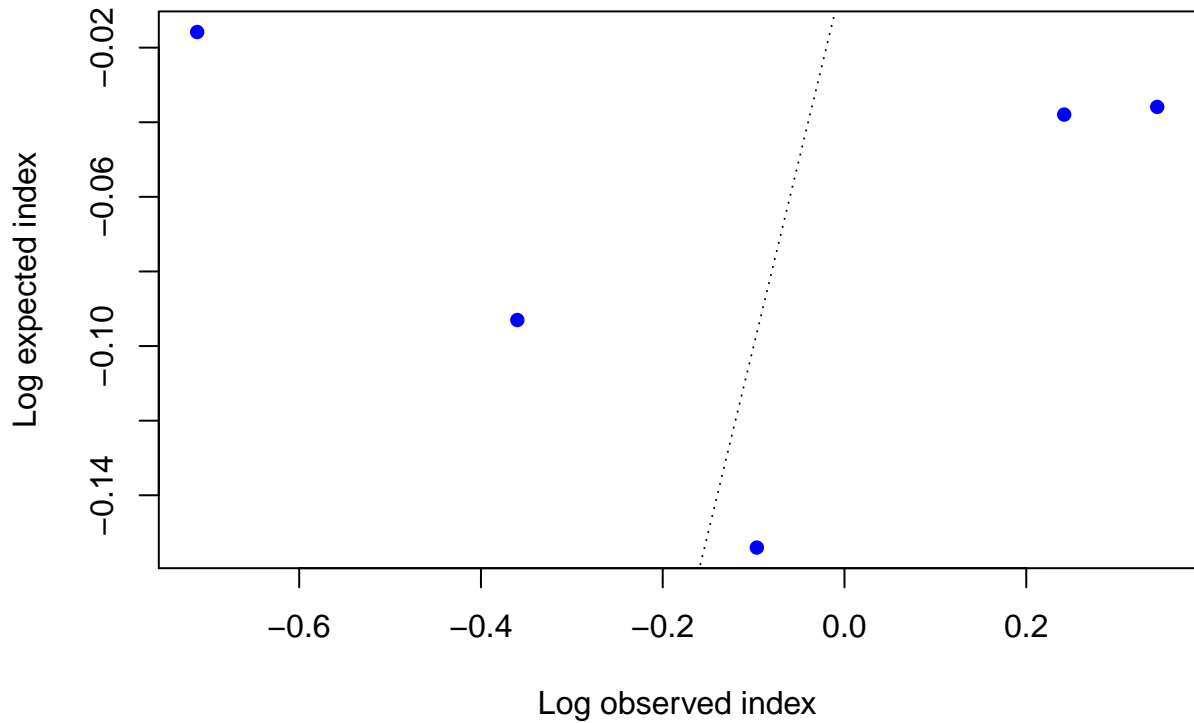
Index



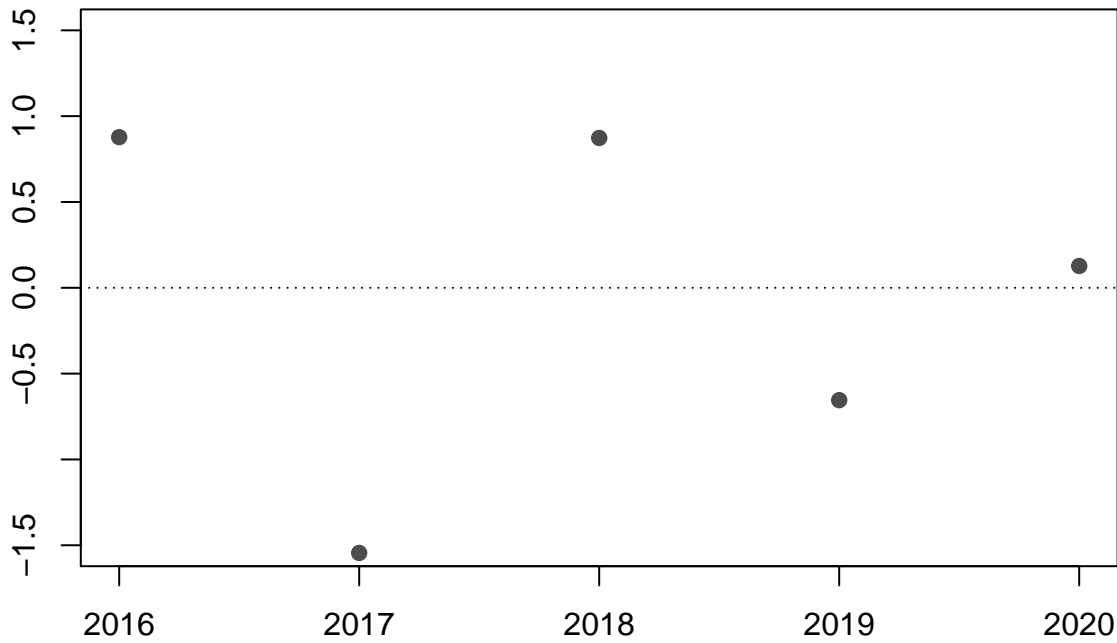




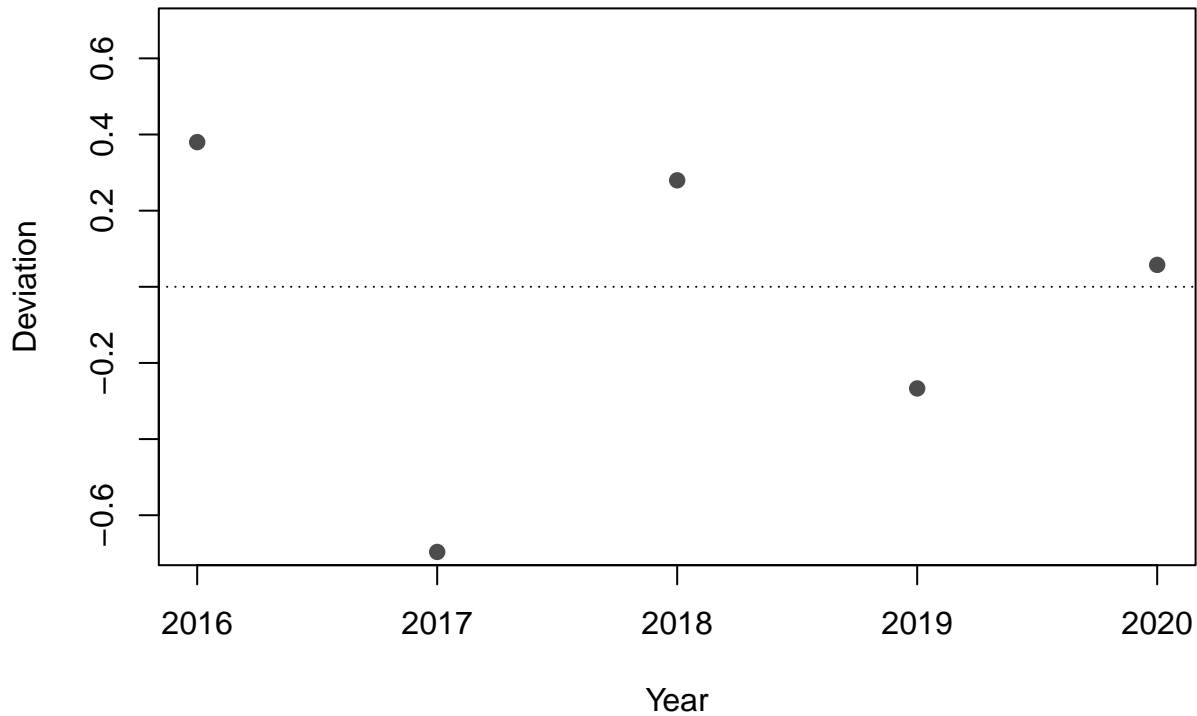


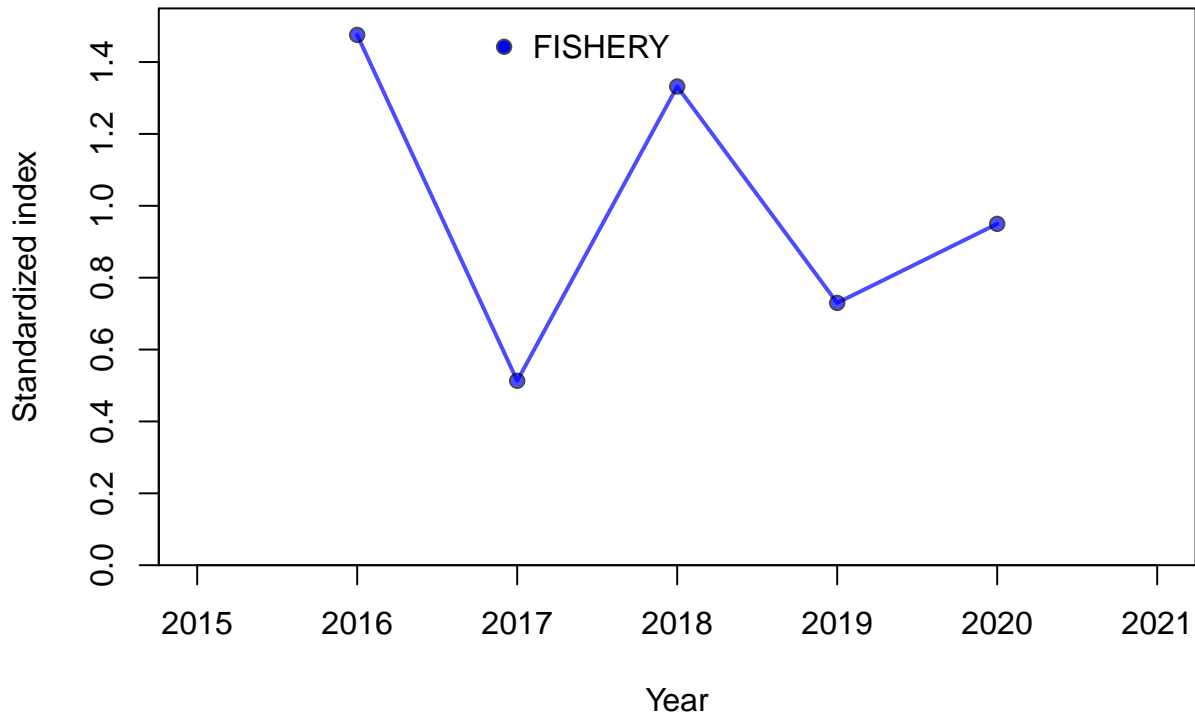


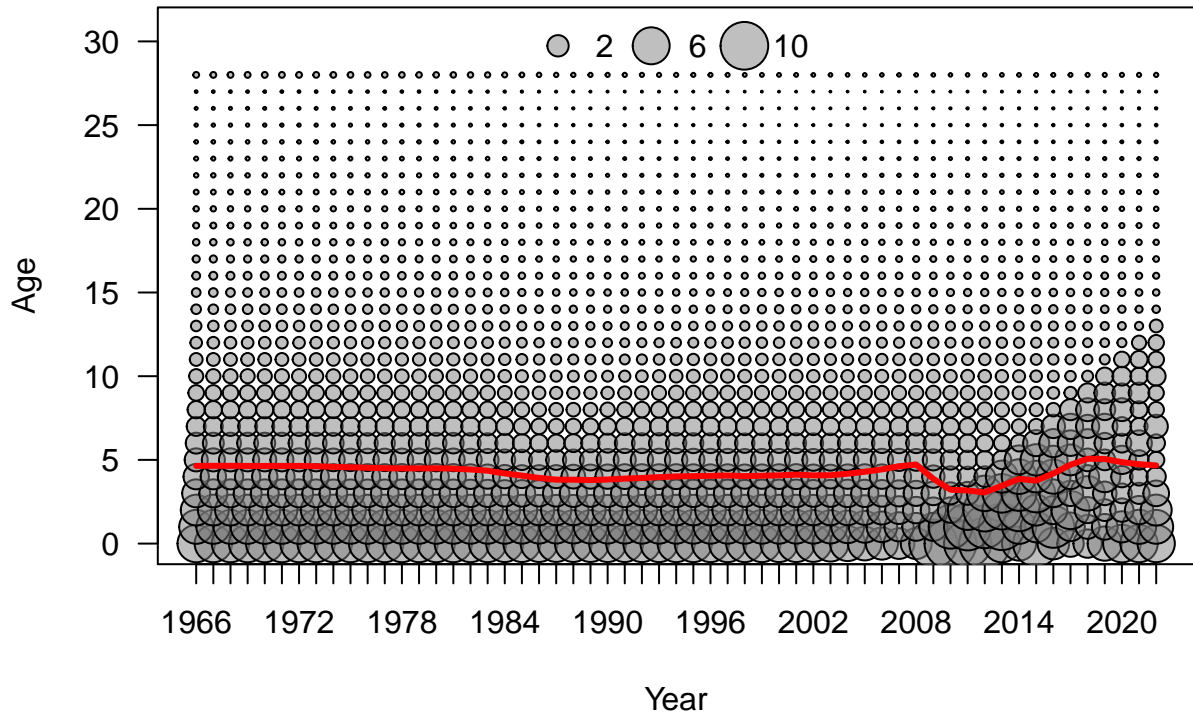
Residual

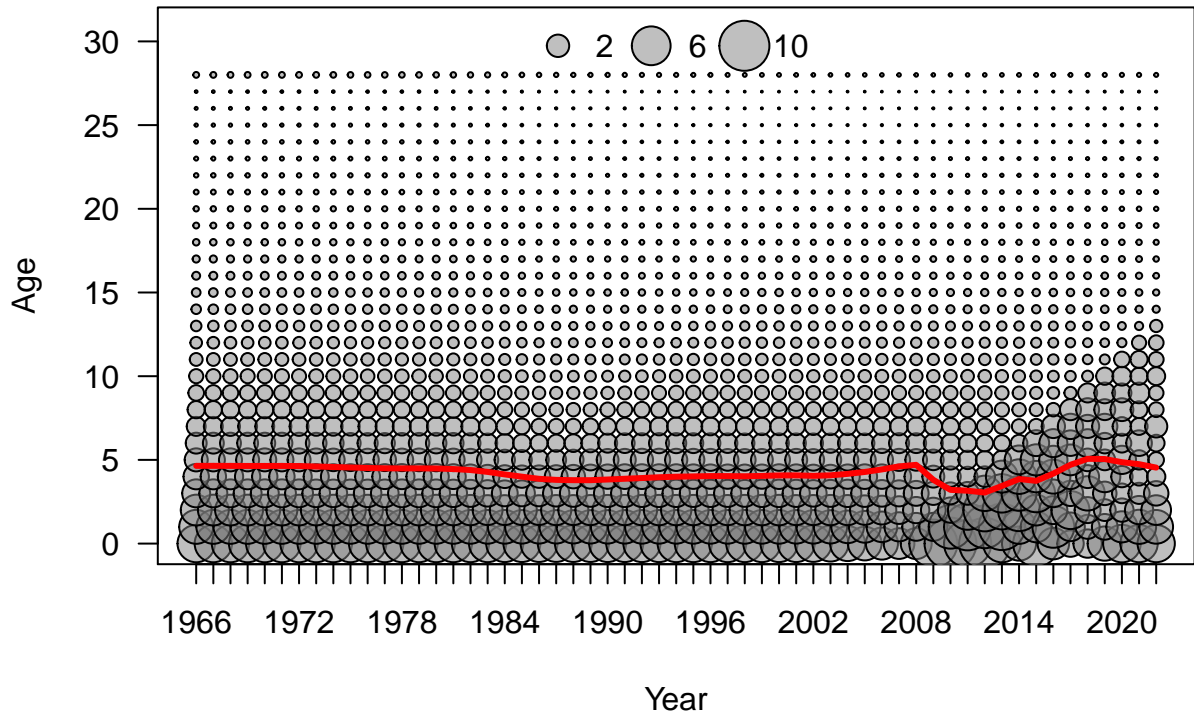


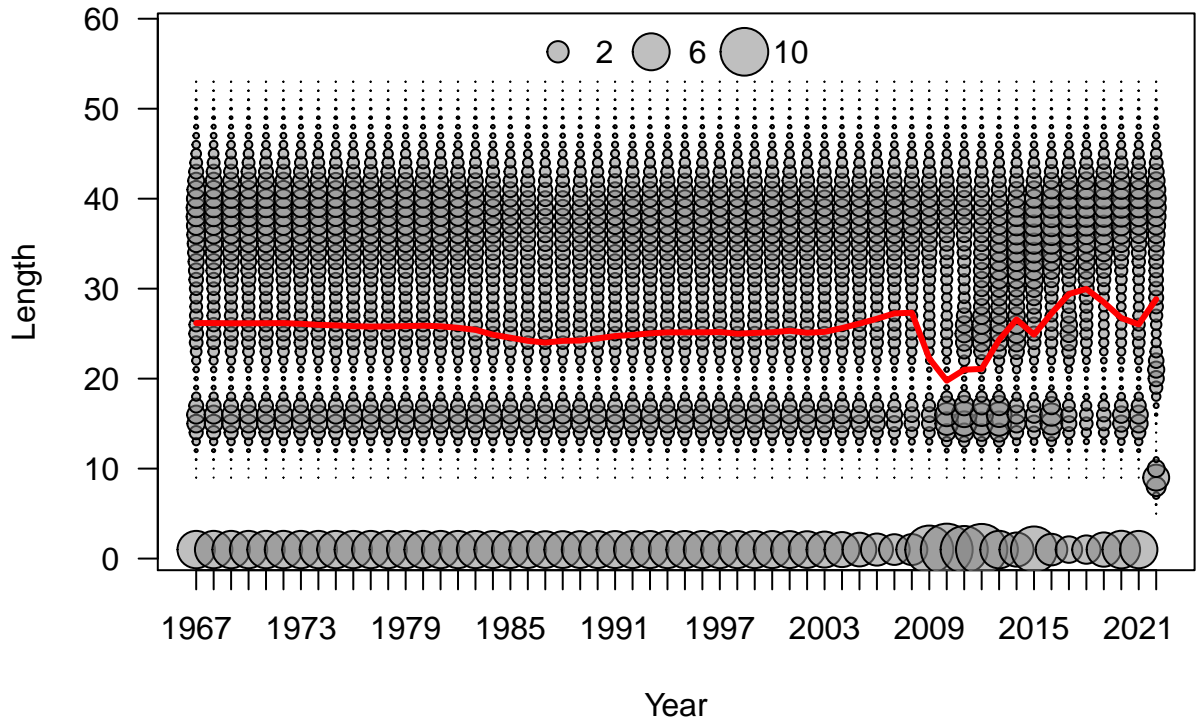
Year

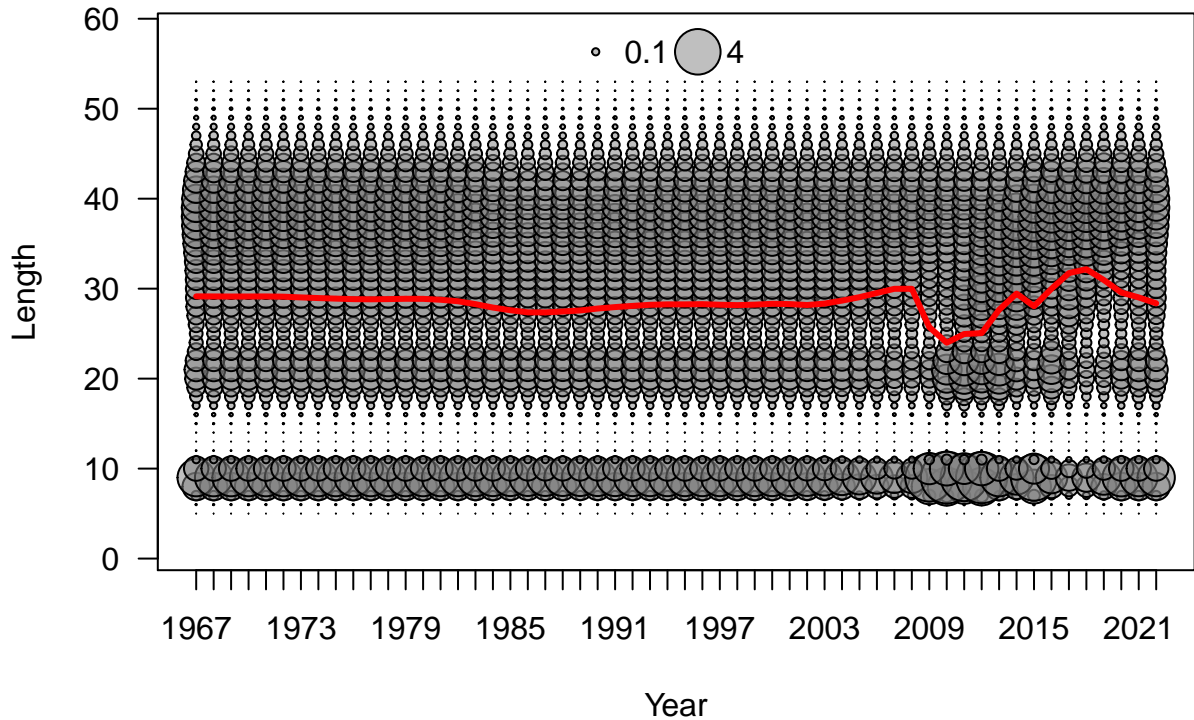


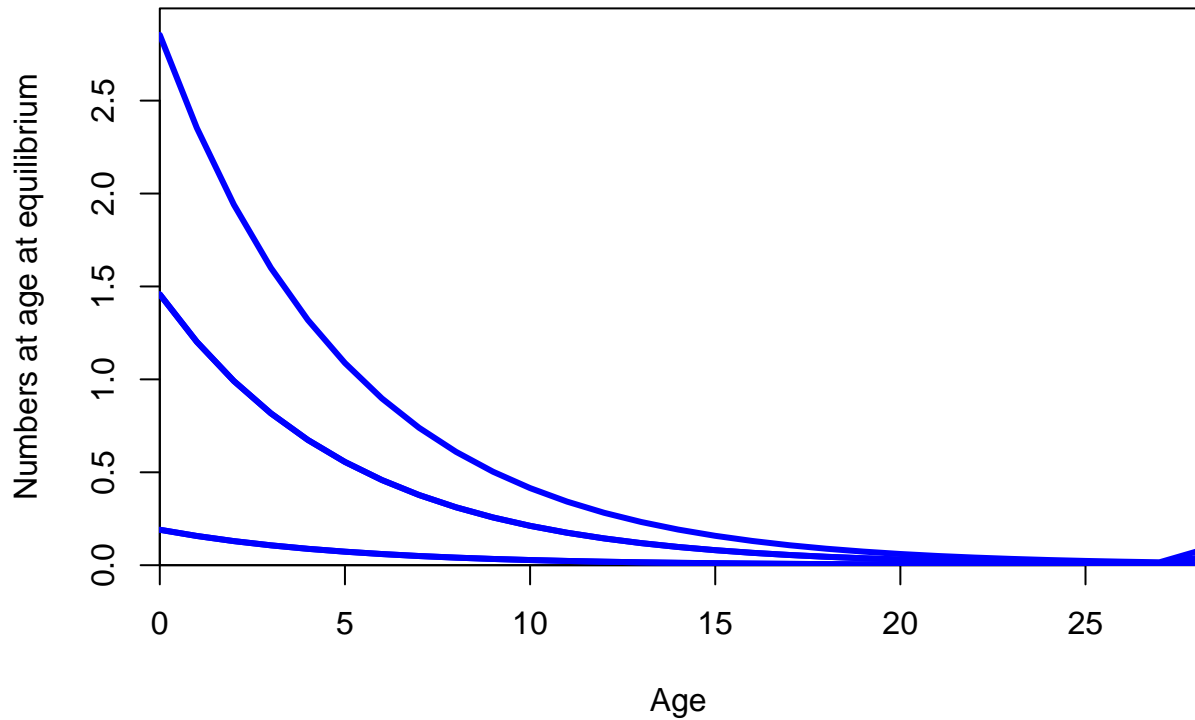






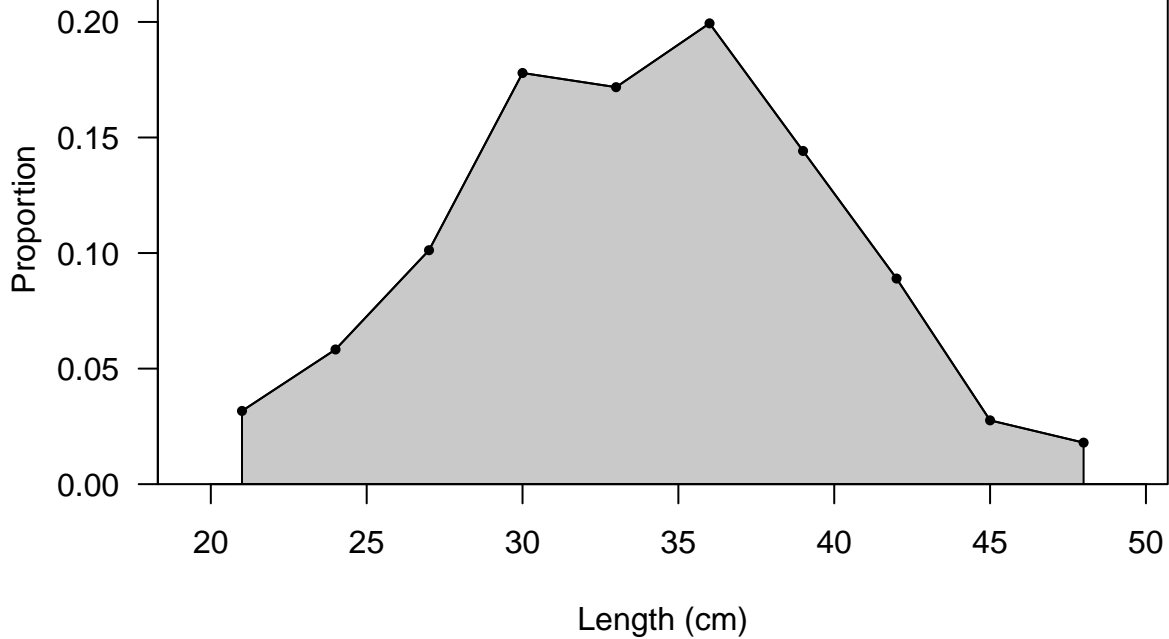


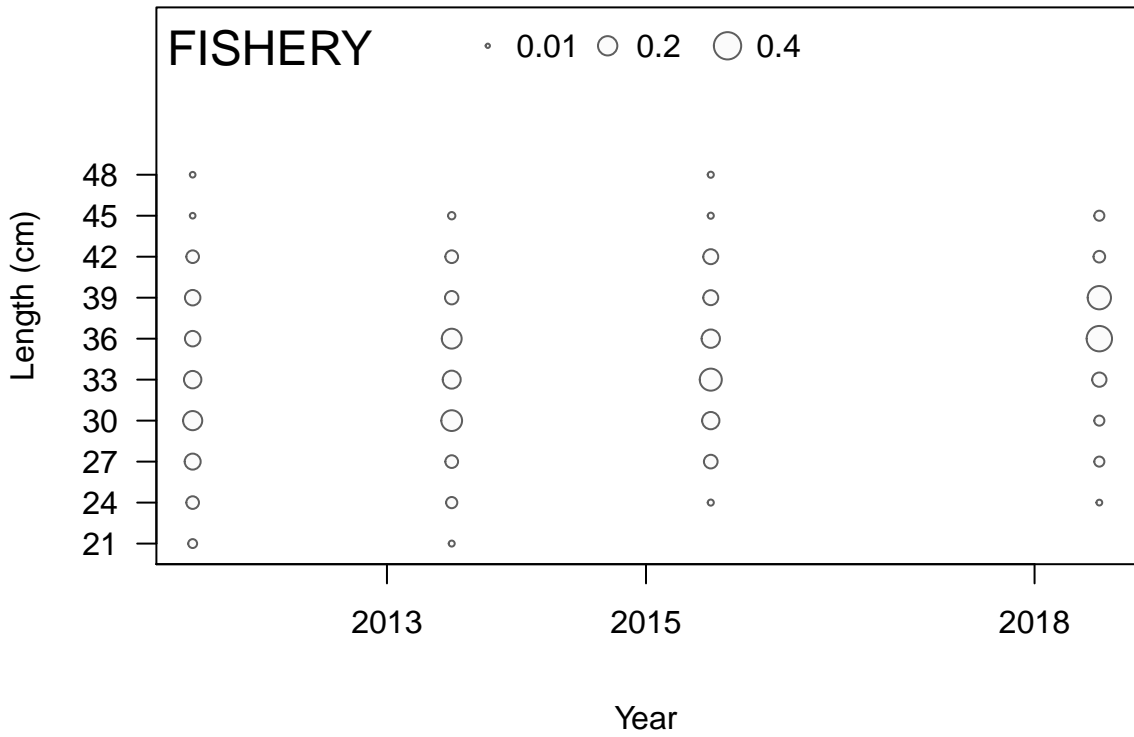




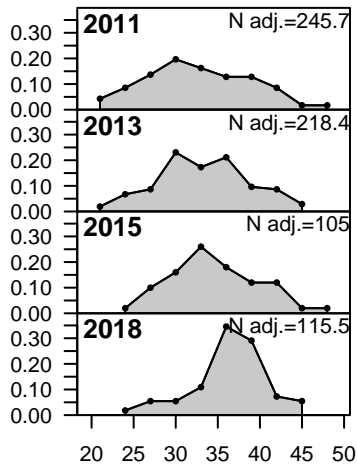
FISHERY

Sum of N adj.=684.6

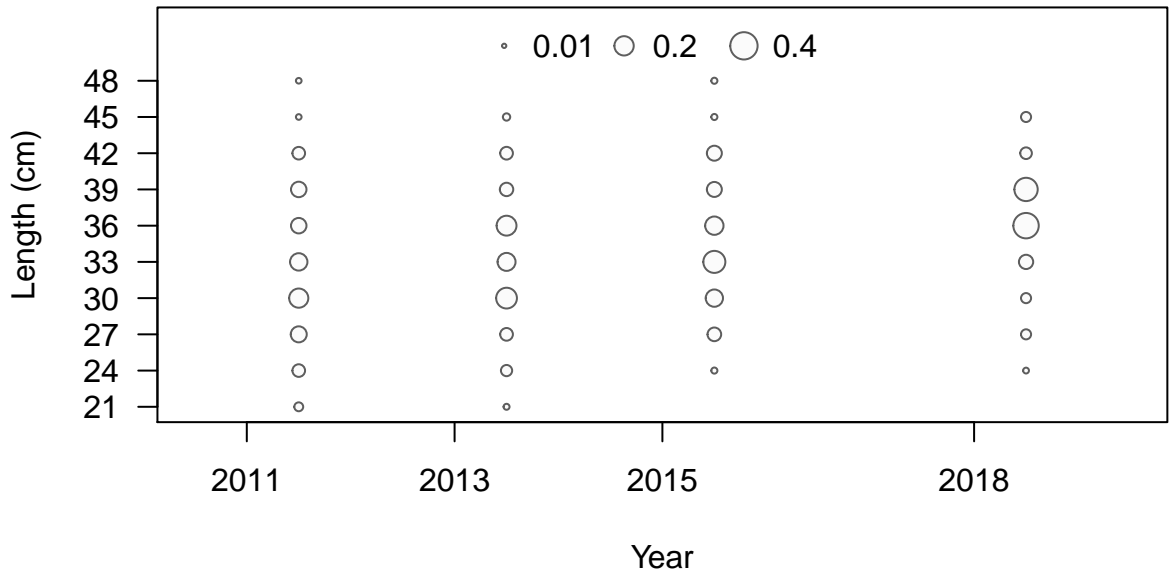




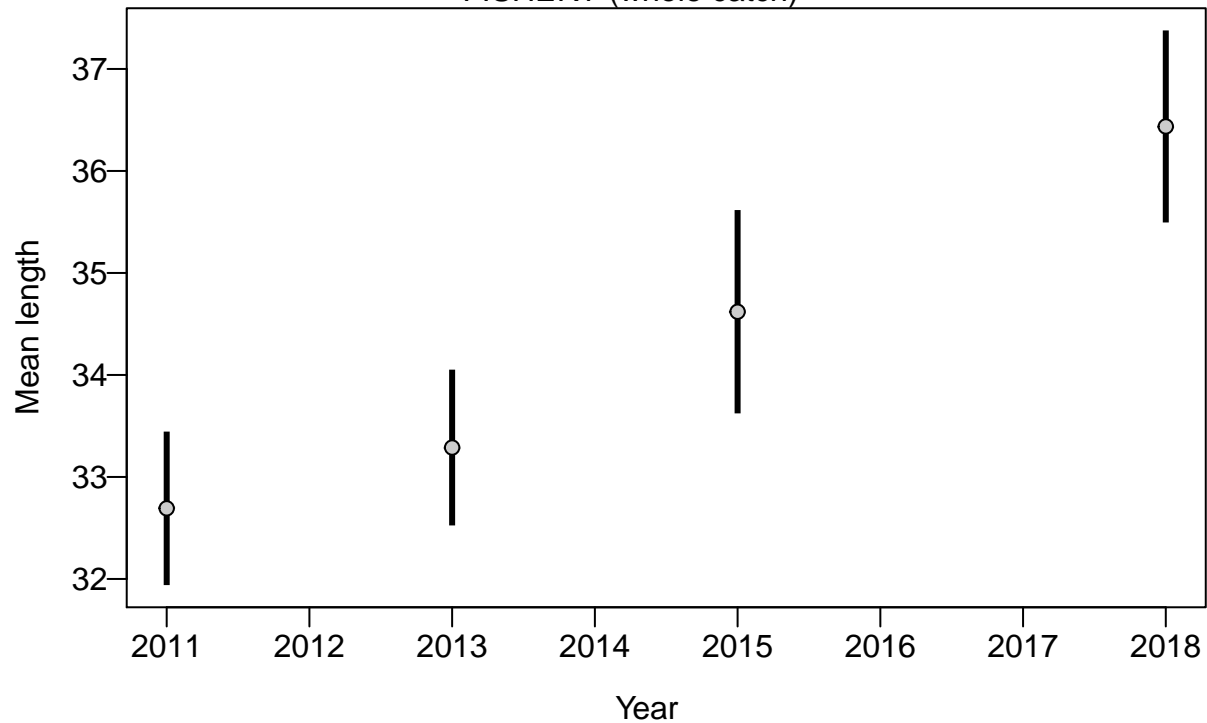
Proportion



Length (cm)

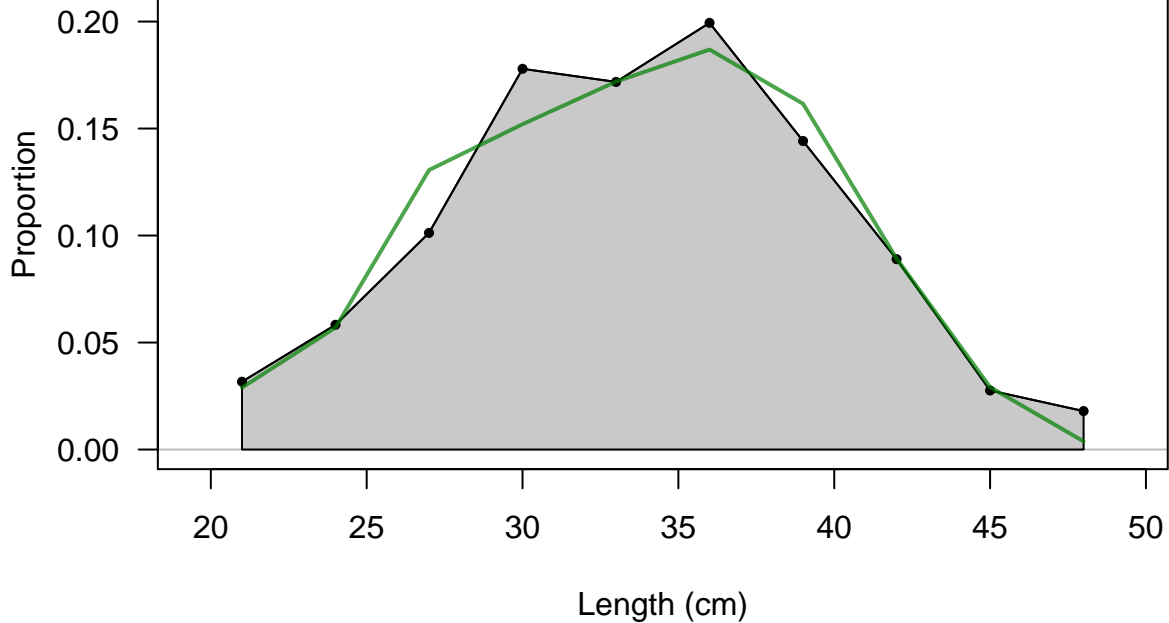


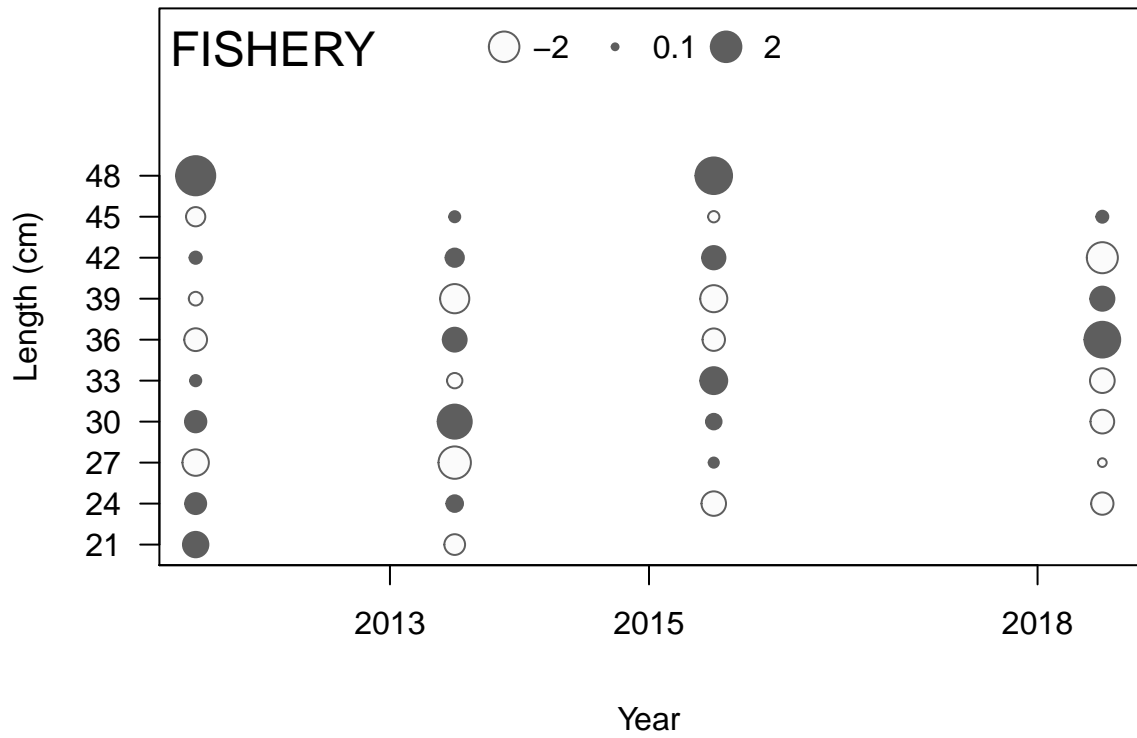
FISHERY (whole catch)



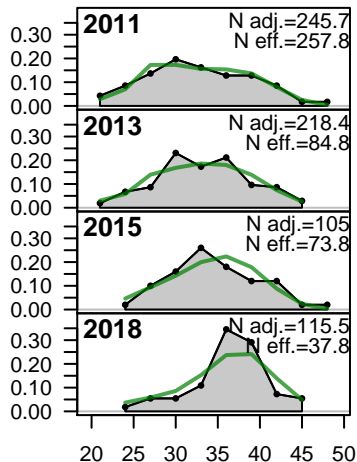
FISHERY

Sum of N adj.=684.6
Sum of N eff.=454.3

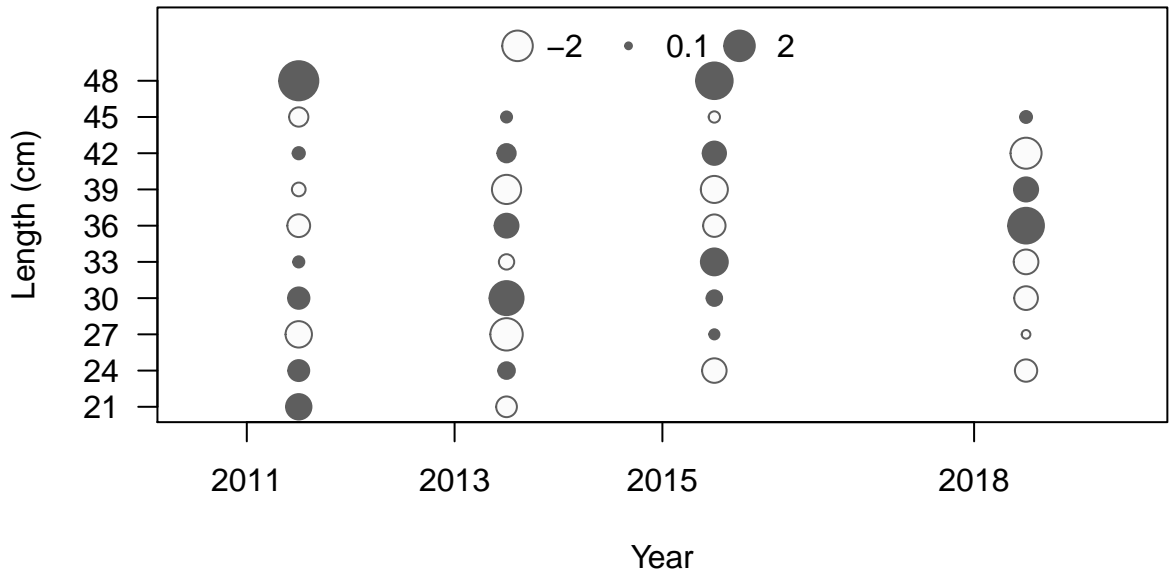




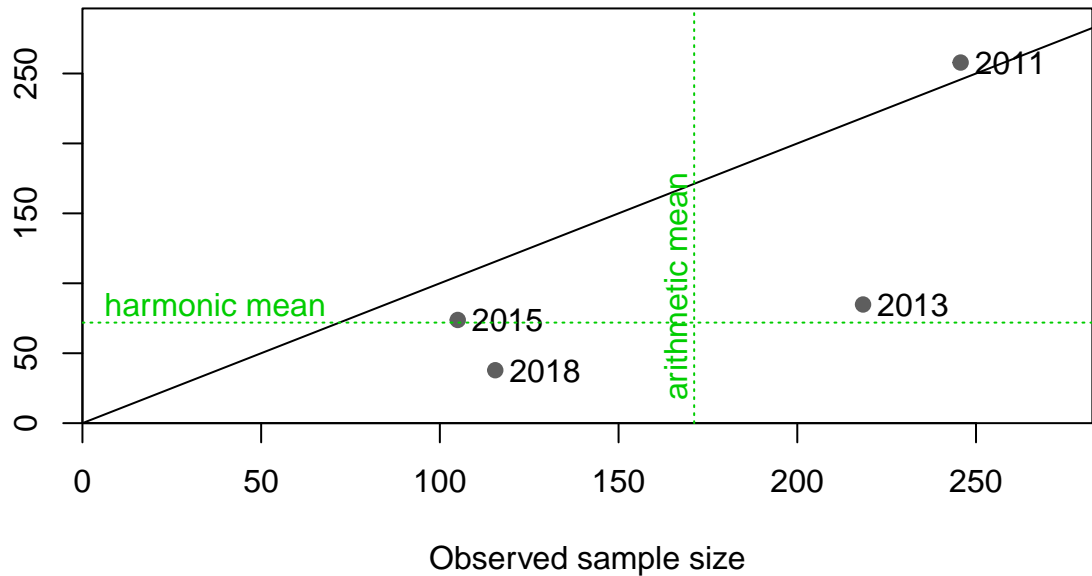
Proportion



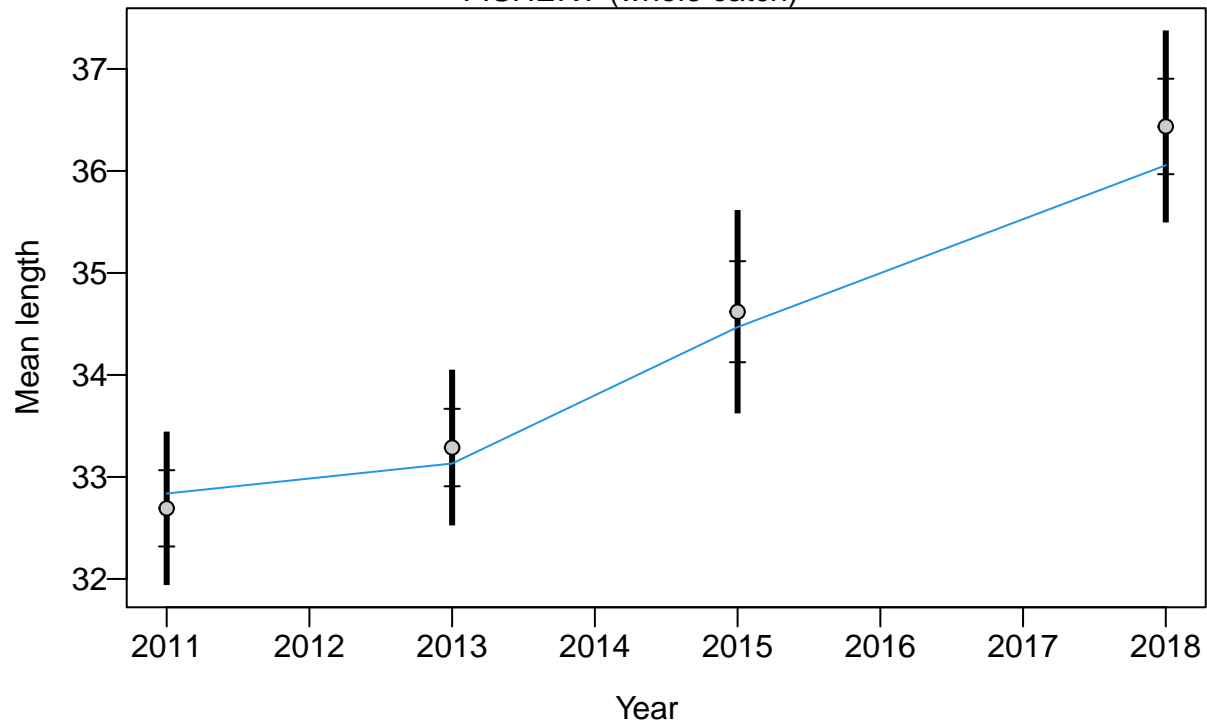
Length (cm)

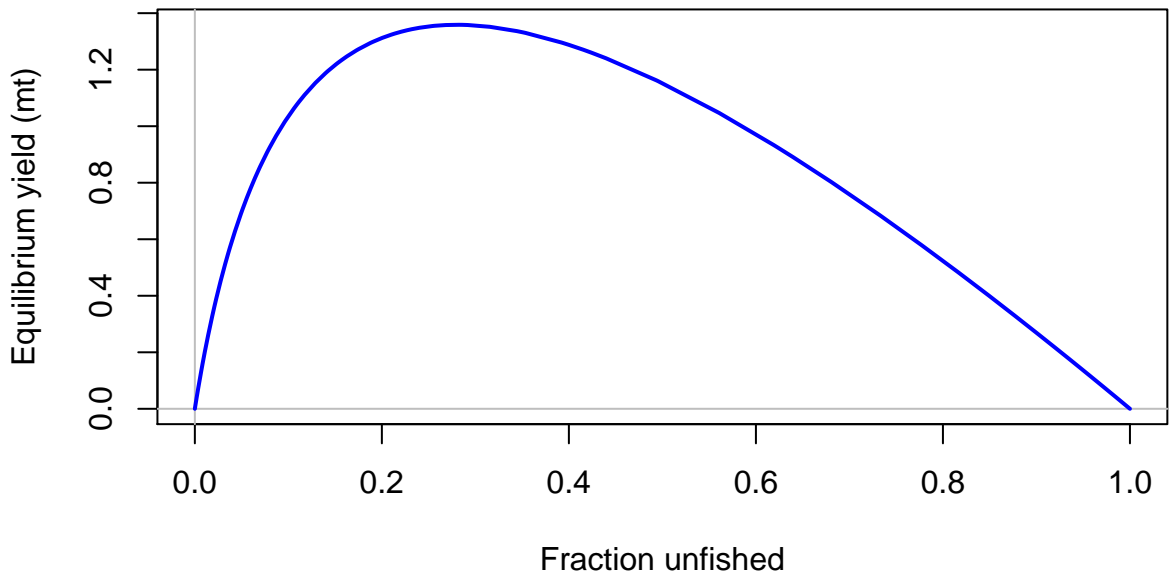


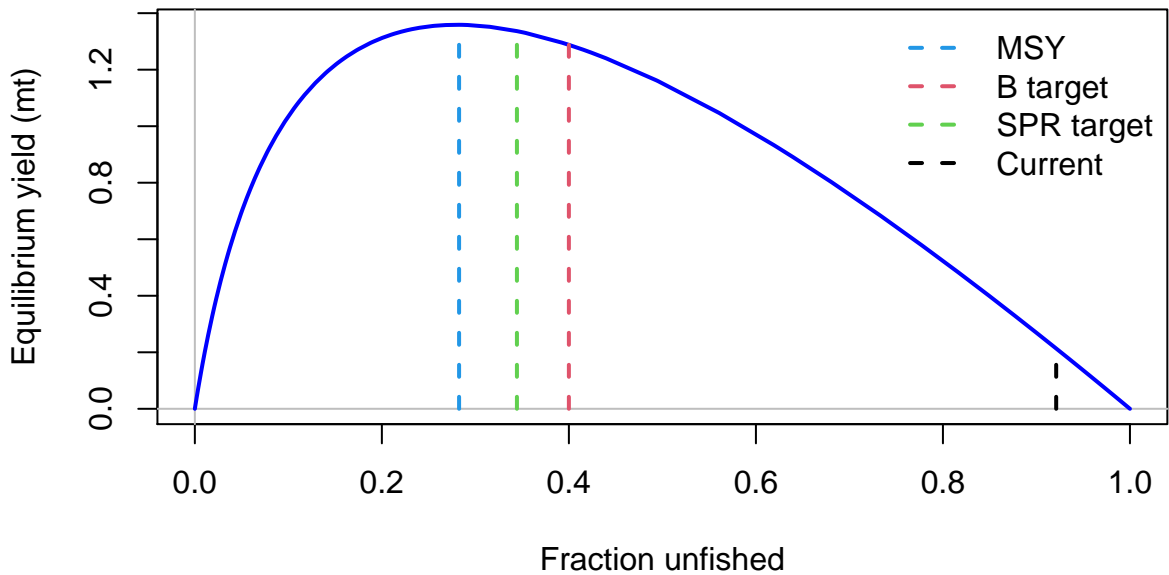
Effective sample size

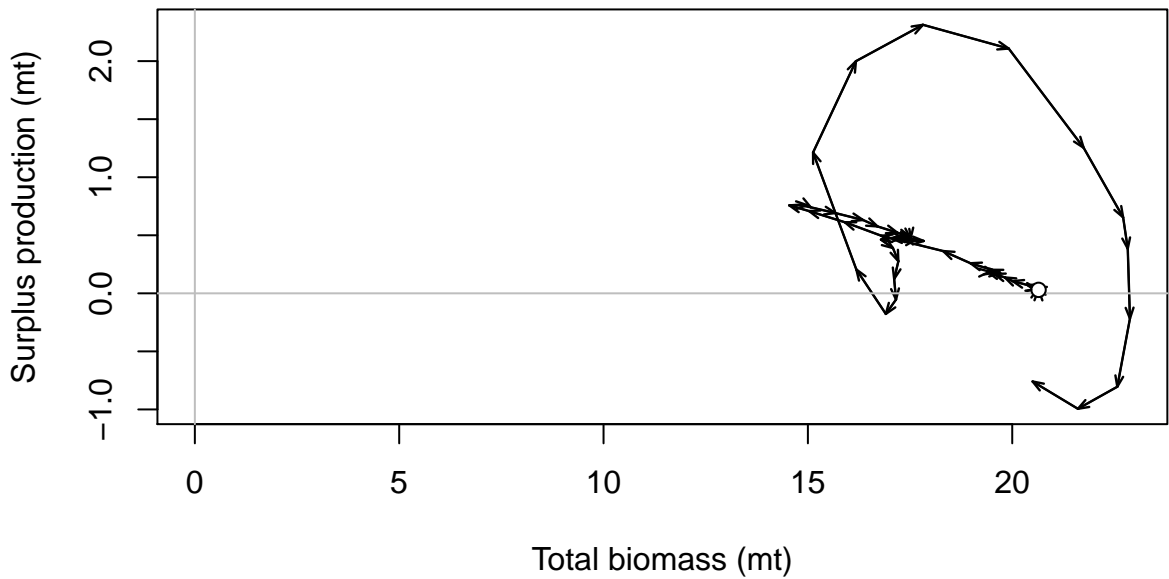


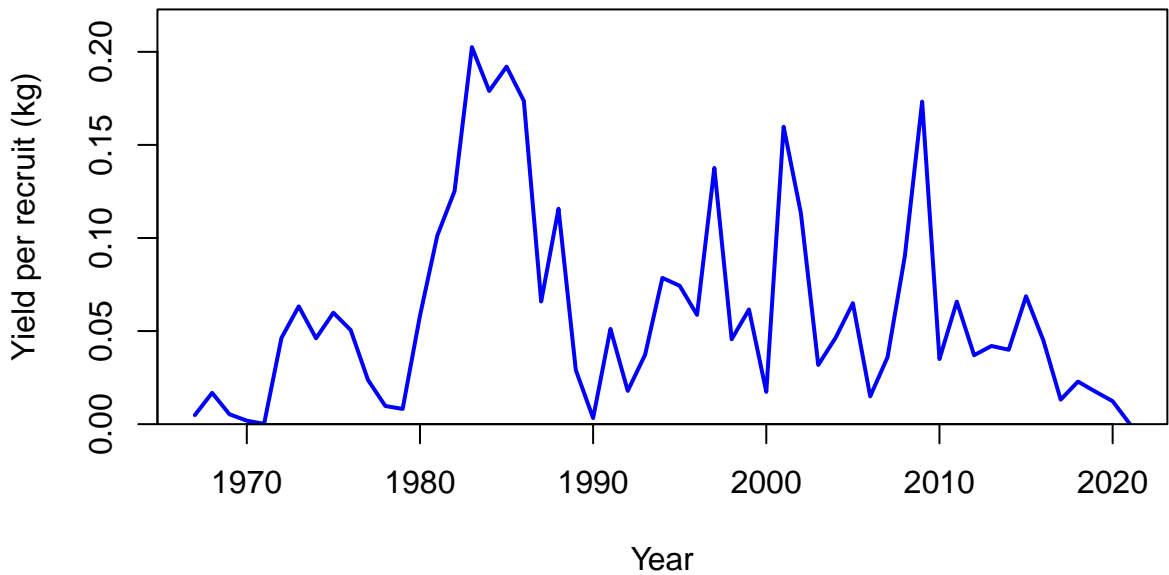
FISHERY (whole catch)

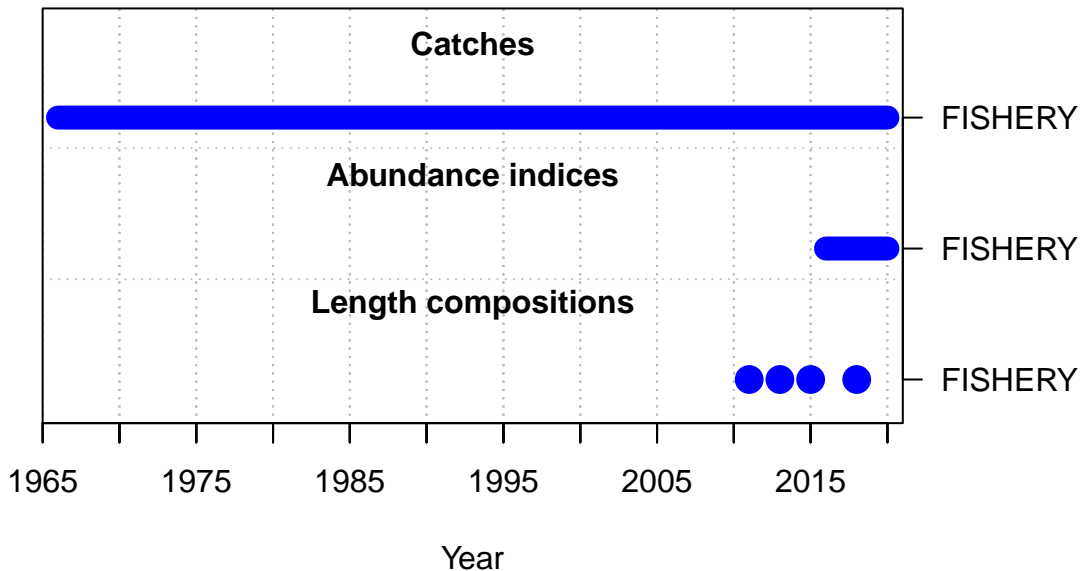


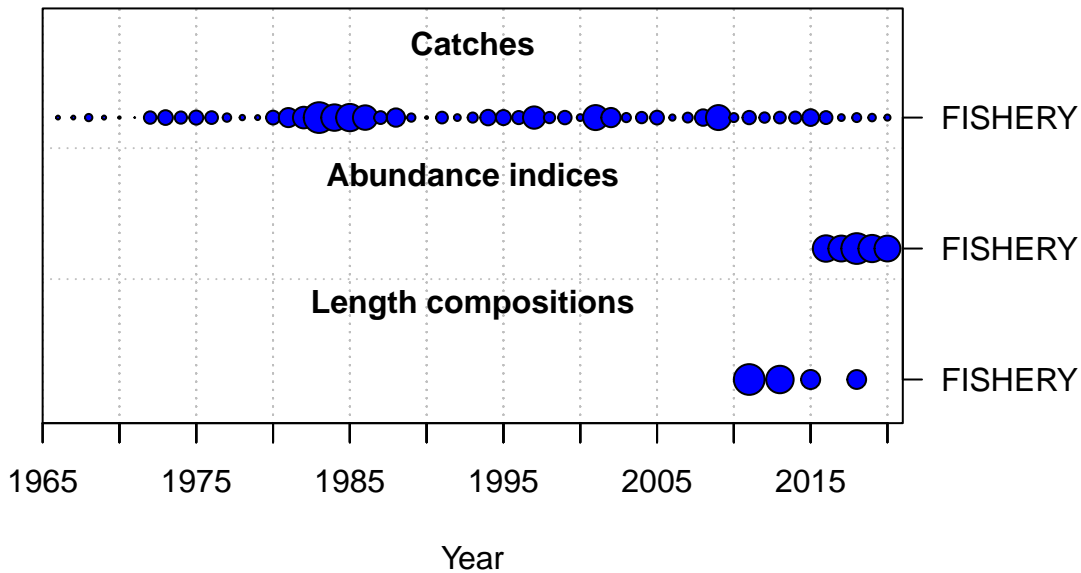




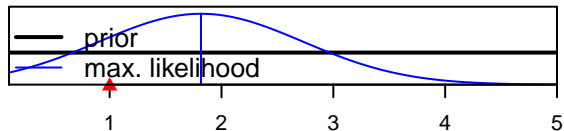




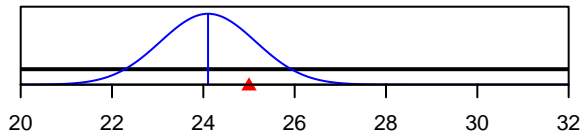




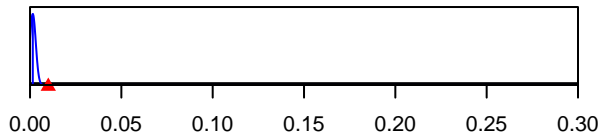
SR_LN(R0)



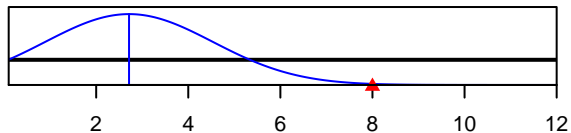
Size_inflection_FISHERY(1)



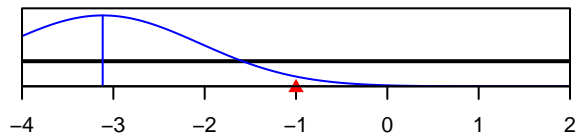
InitF_seas_1_flt_1FISHERY



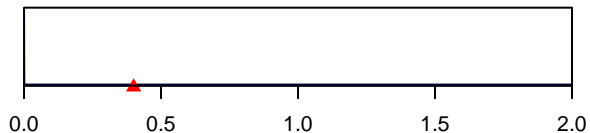
Size_95%width_FISHERY(1)



LnQ_base_FISHERY(1)



Q_extraSD_FISHERY(1)



Parameter value