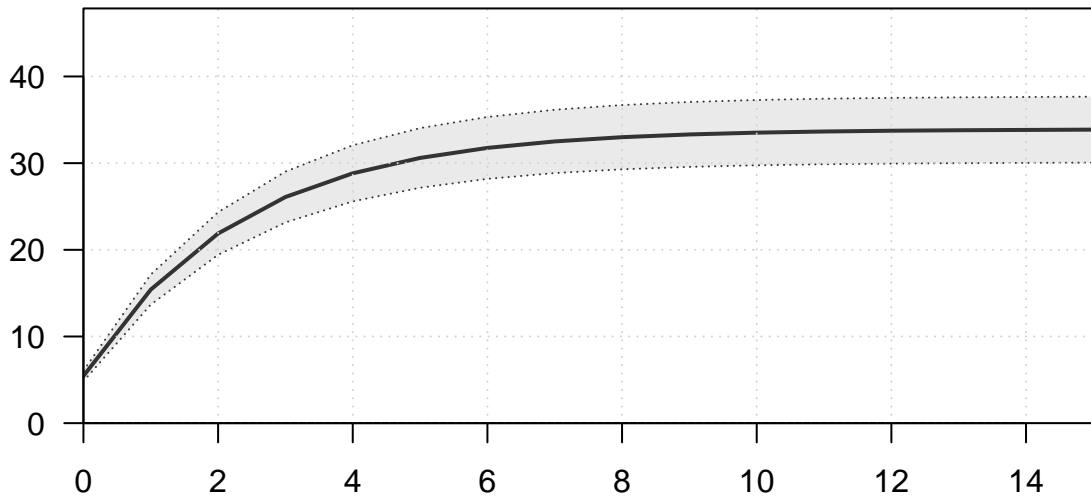
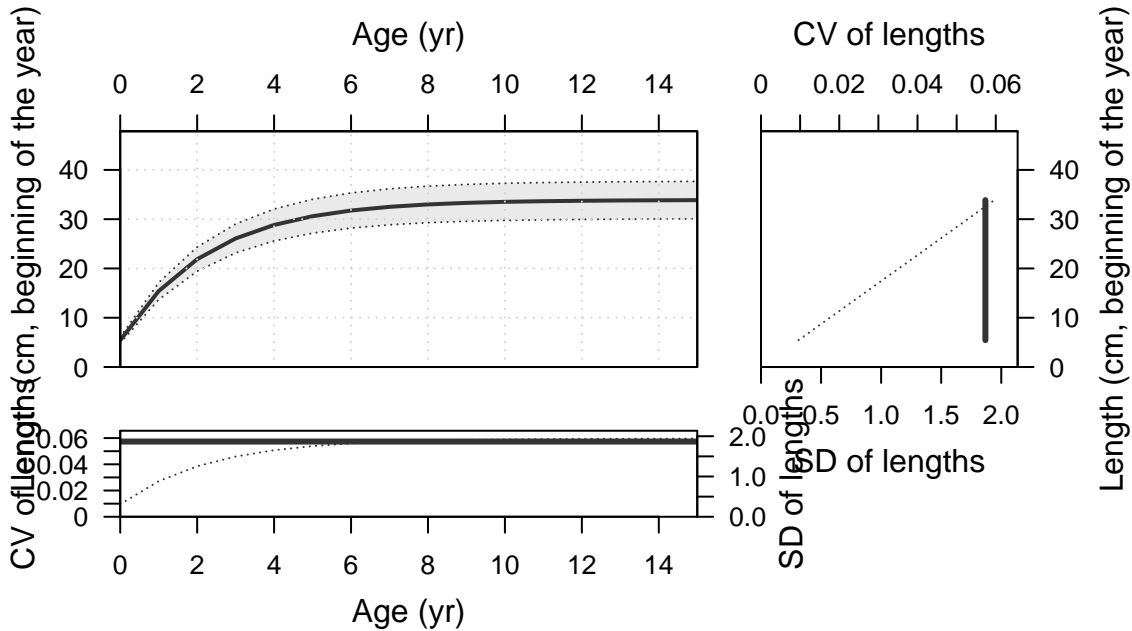


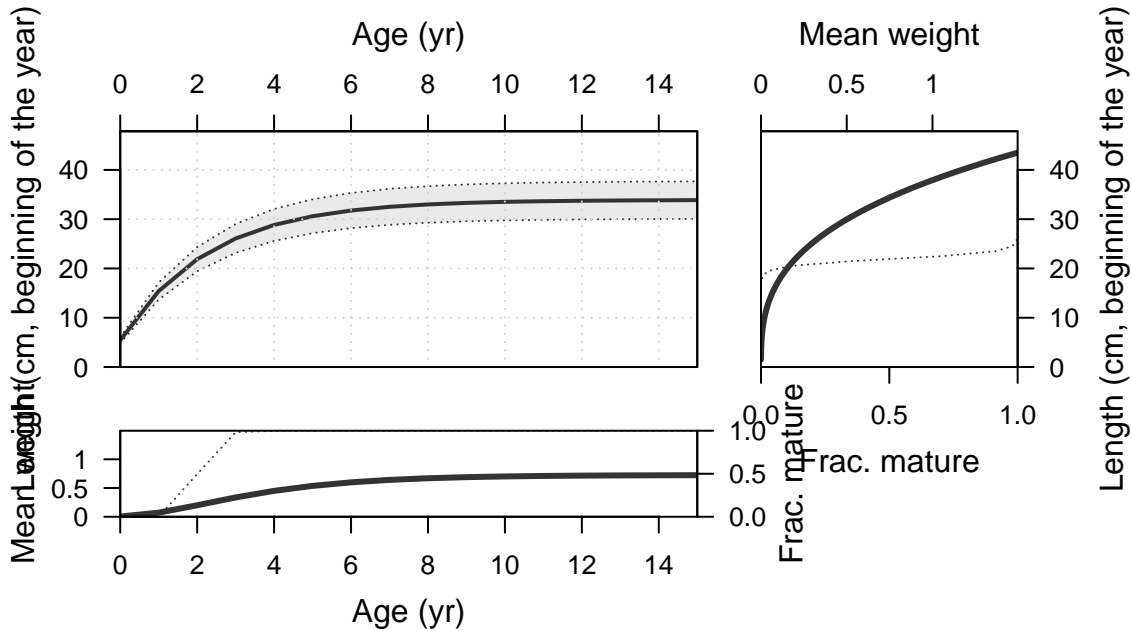
Plots created using the 'r4ss' package in R
Stock Synthesis version: 3.30.19.0
StartTime: Thu Aug 11 16:17:09 2022
Data_File: data.ss
Control_File: control.ss

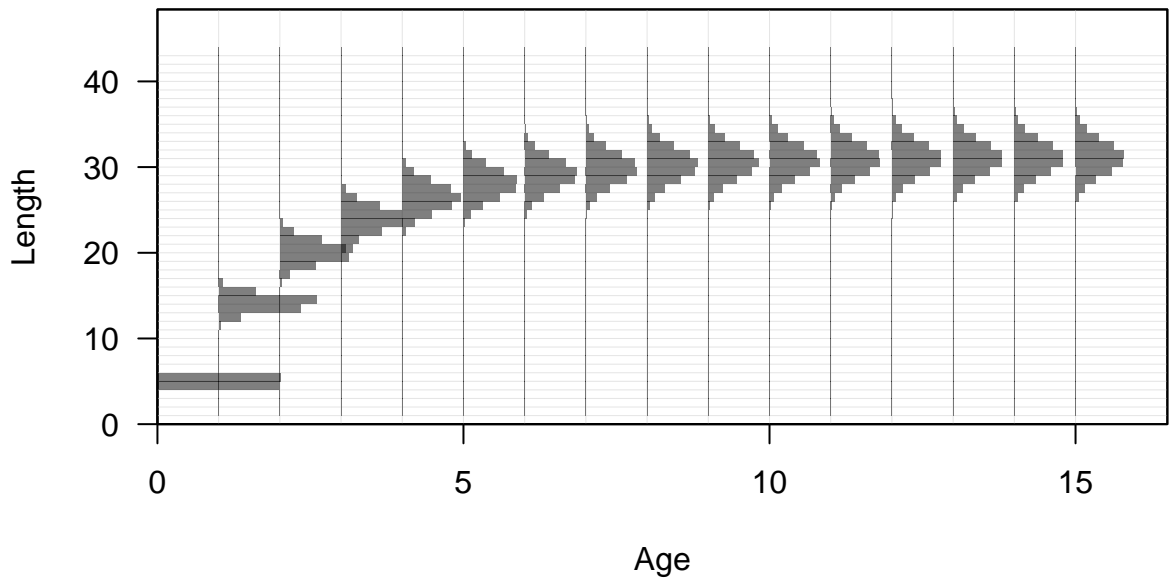
Length (cm, beginning of the year)

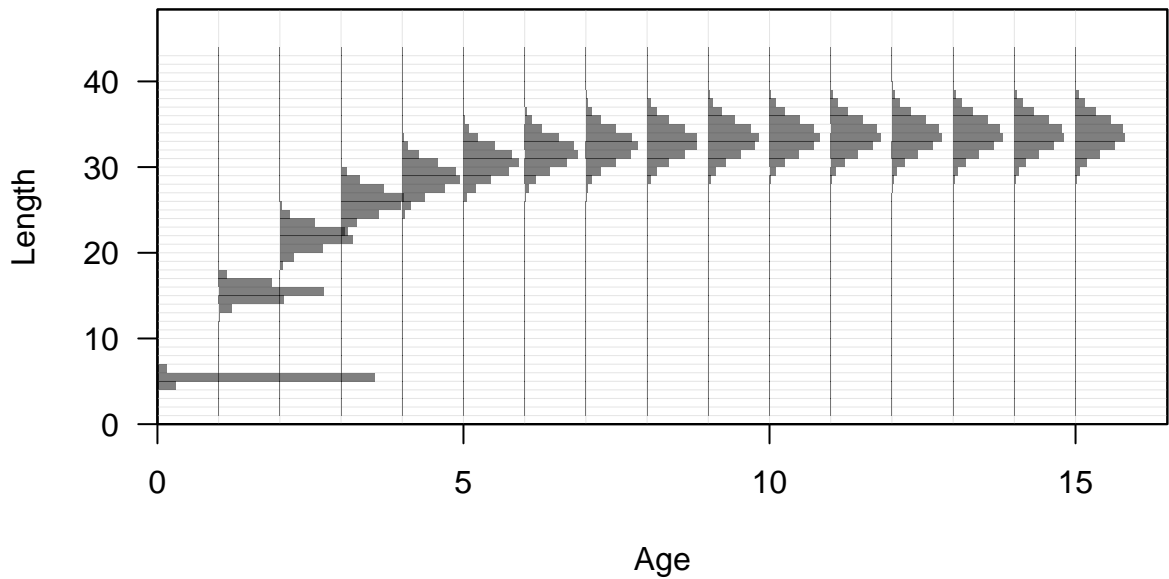


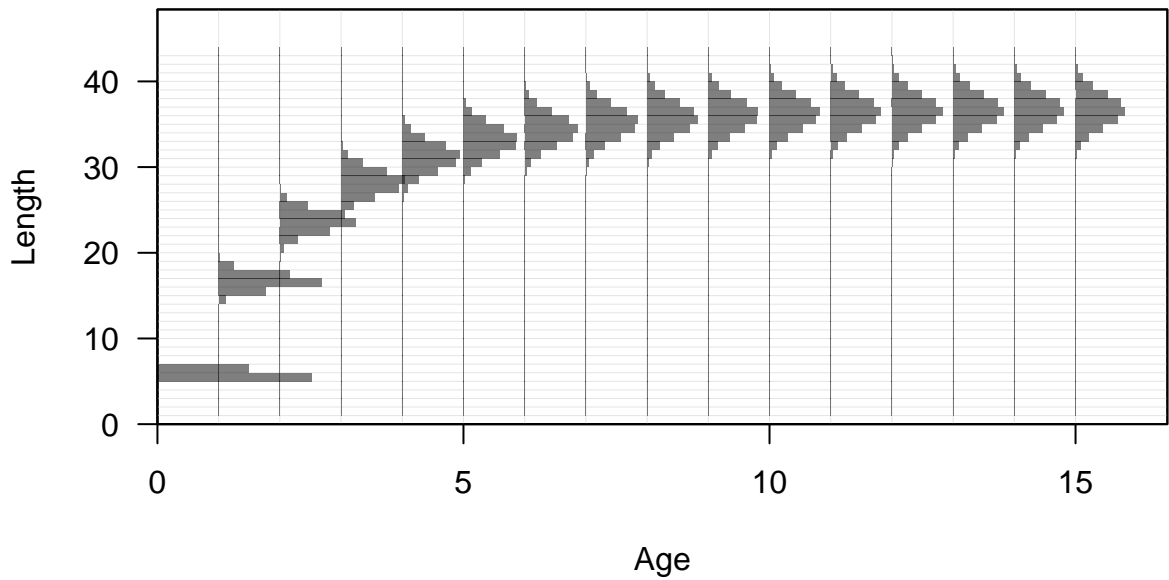
Age (yr)

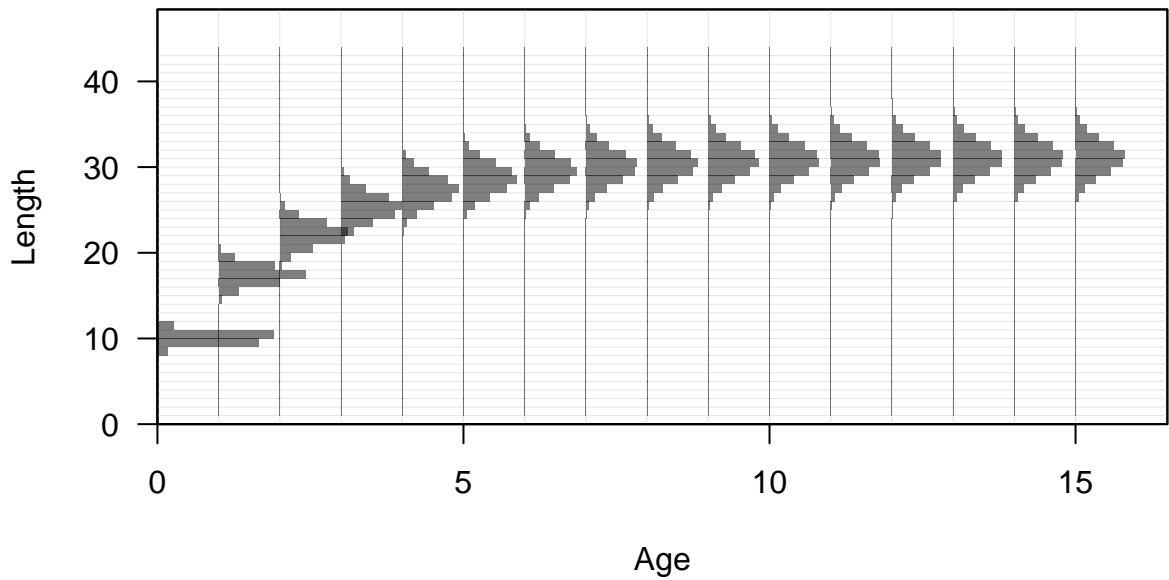


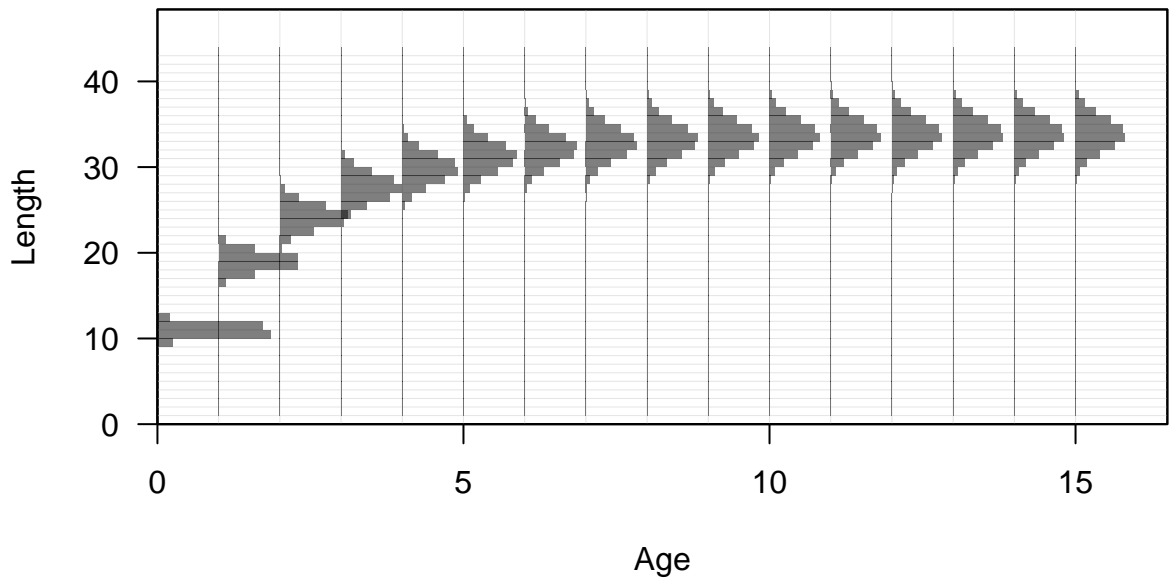


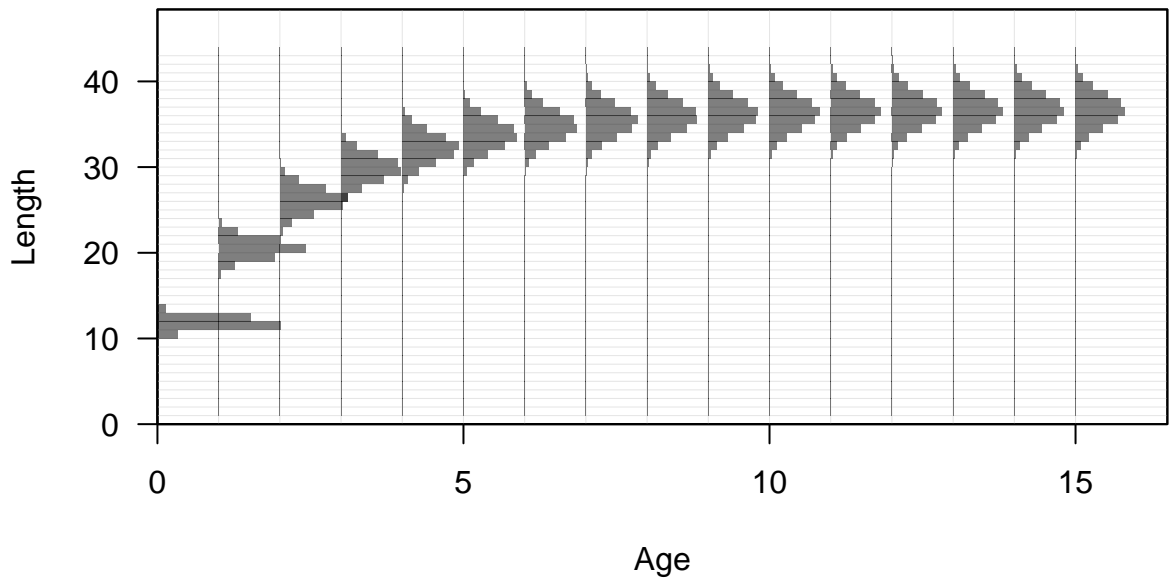


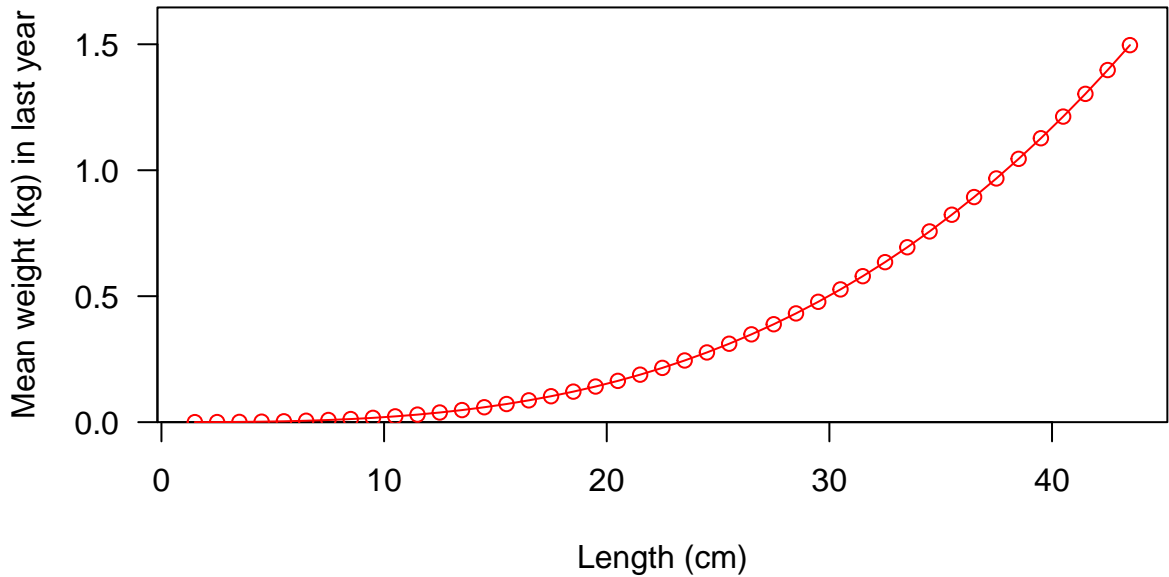


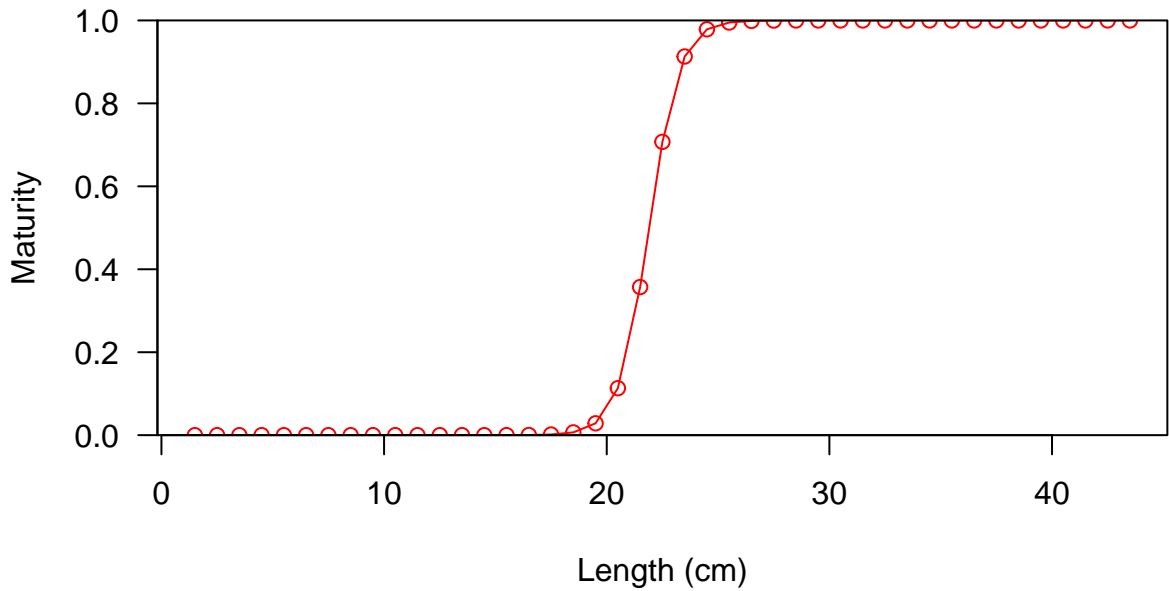


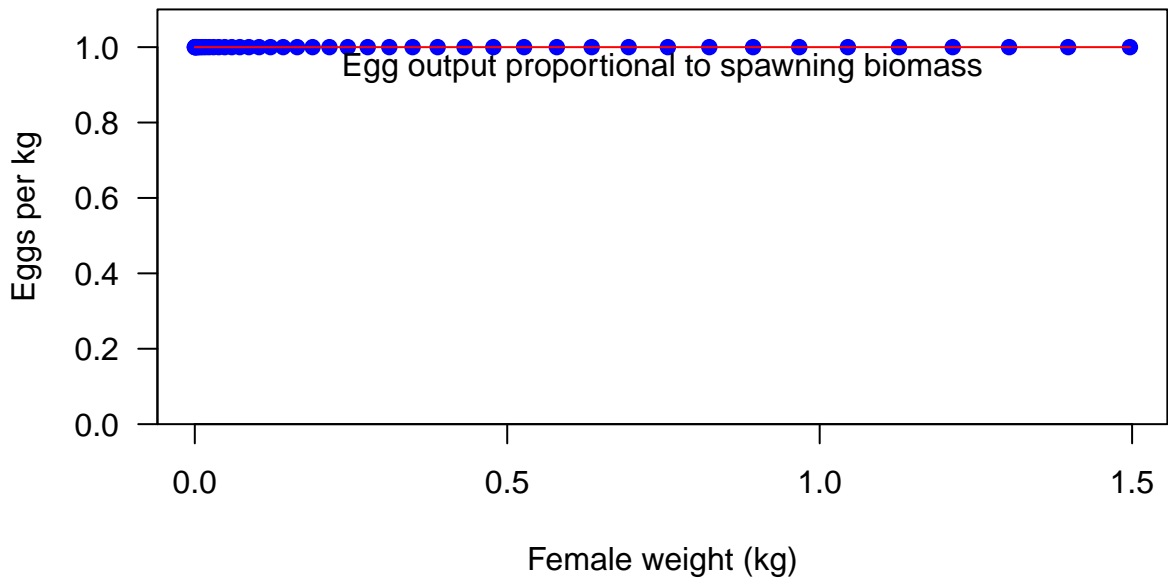


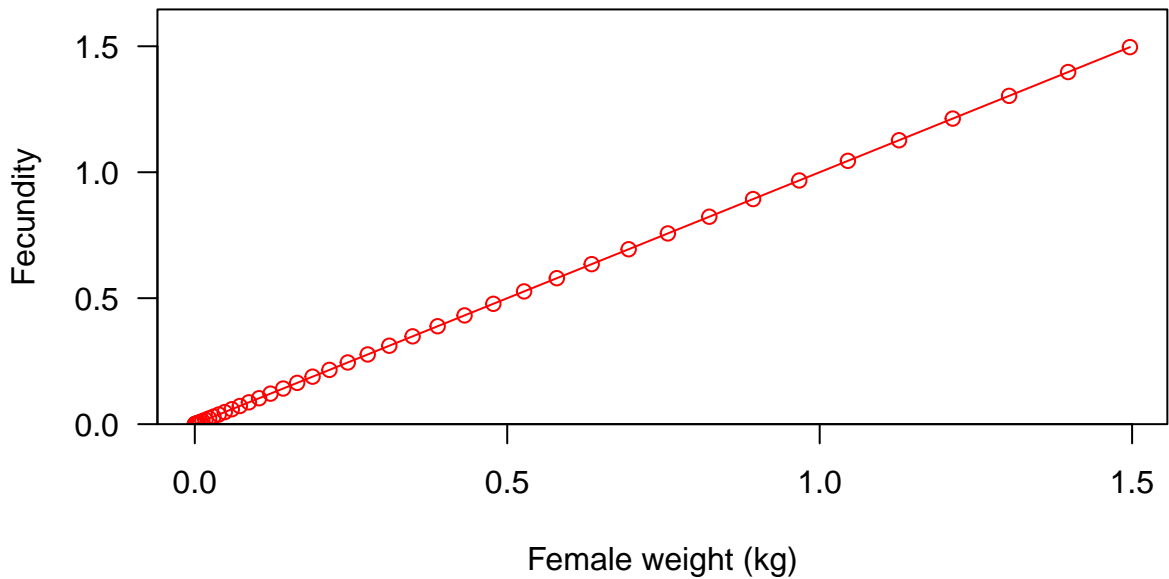


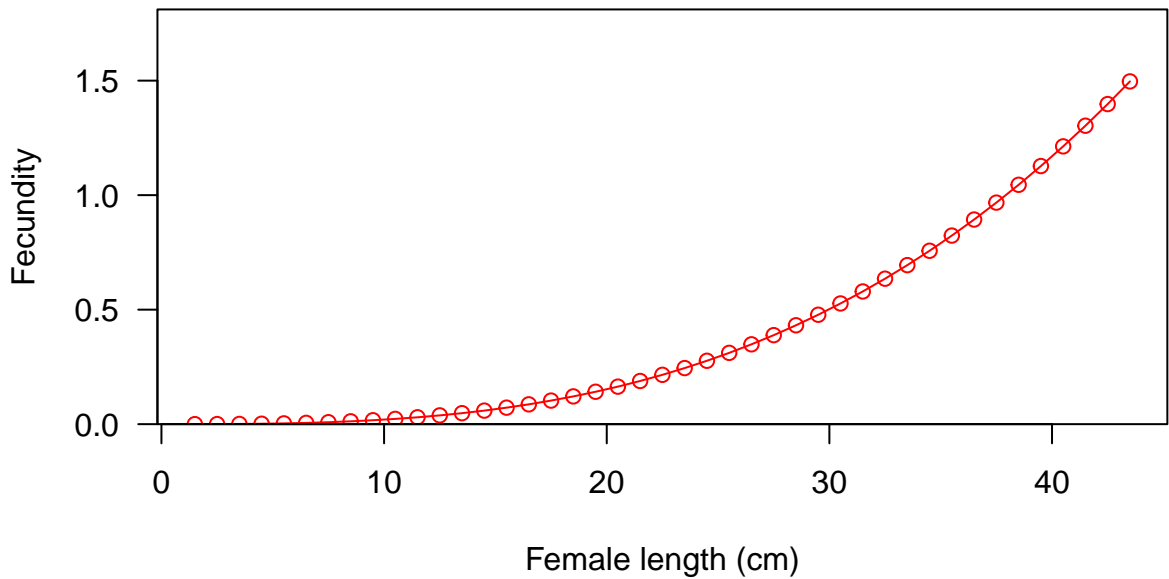


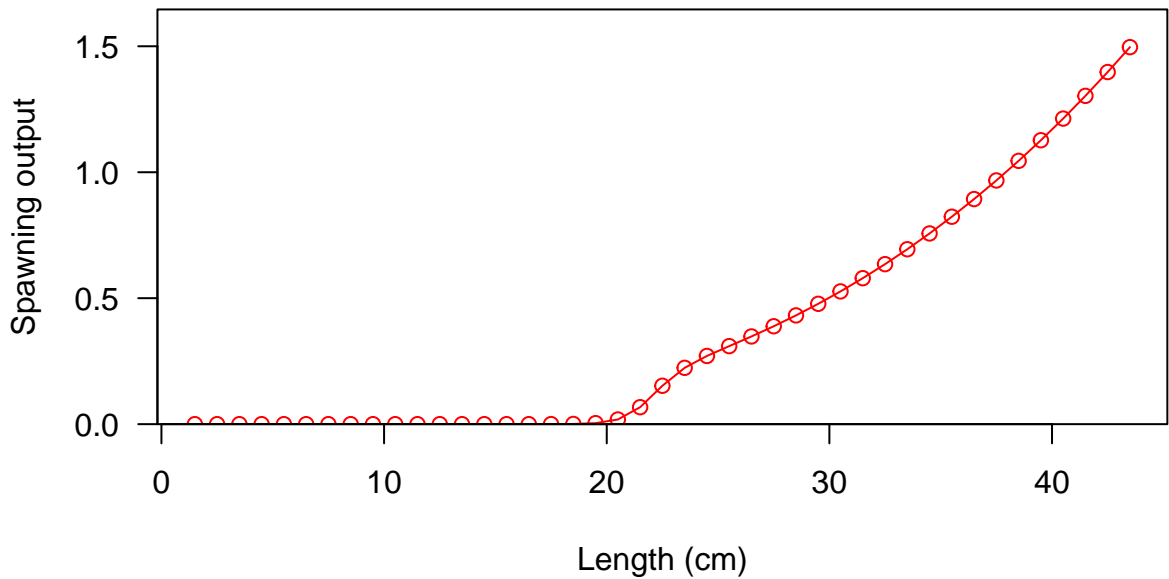


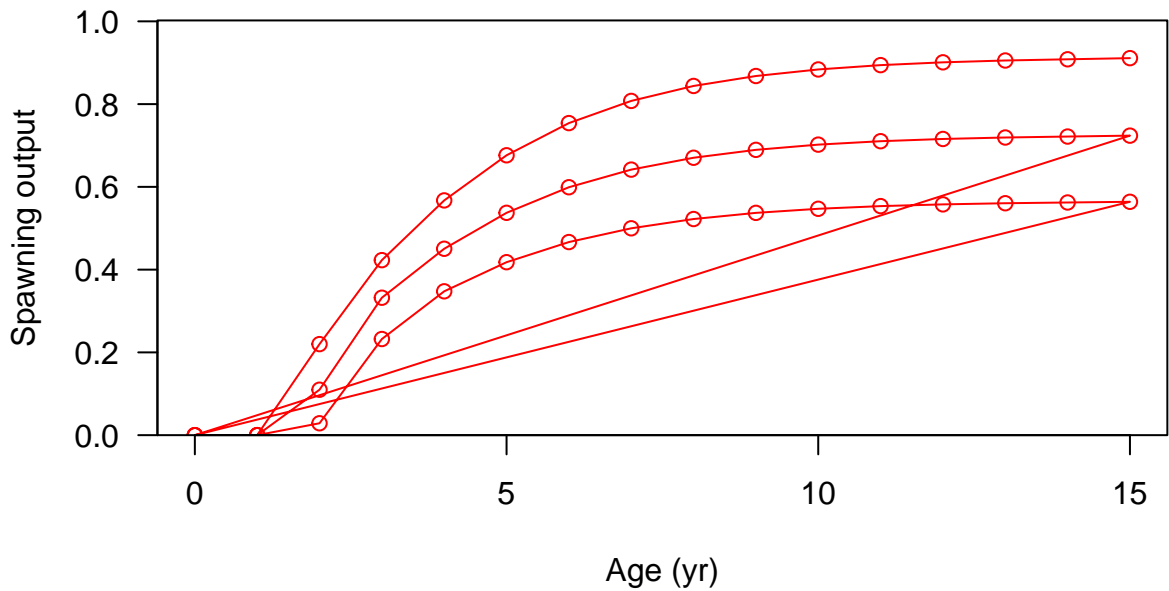




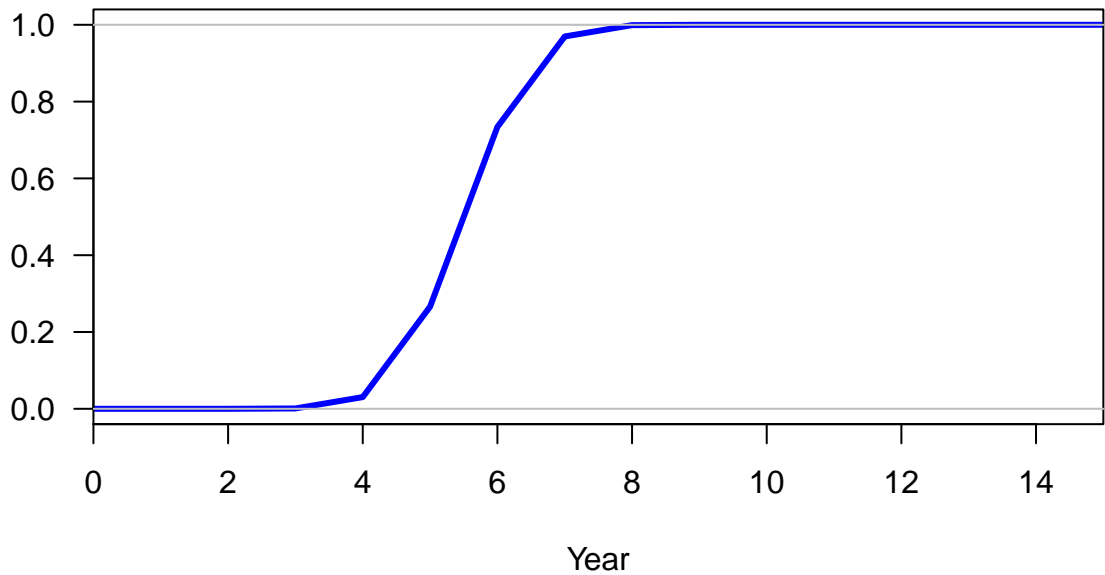




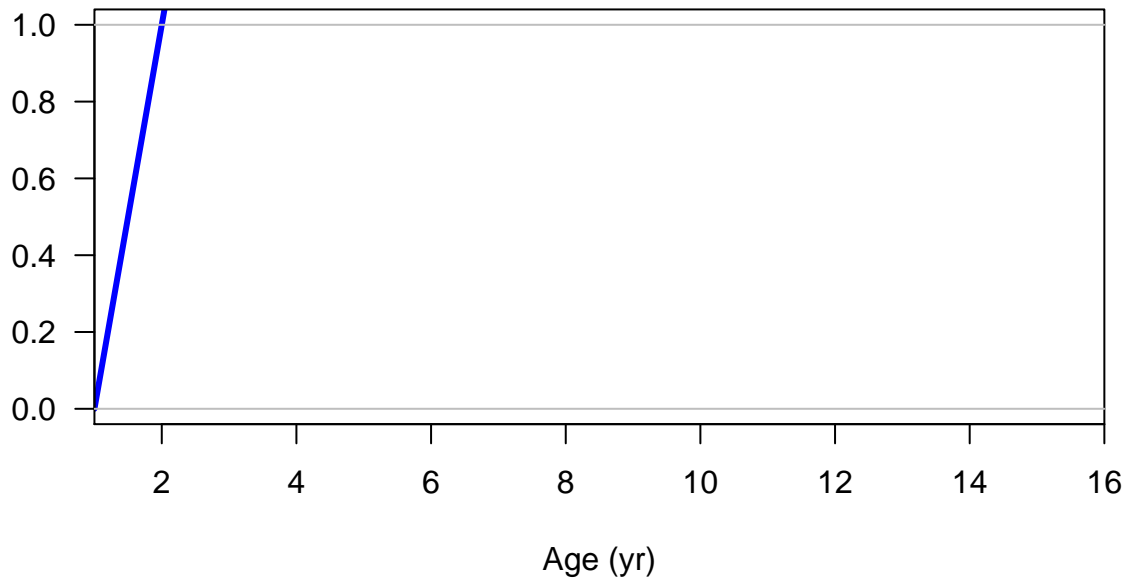




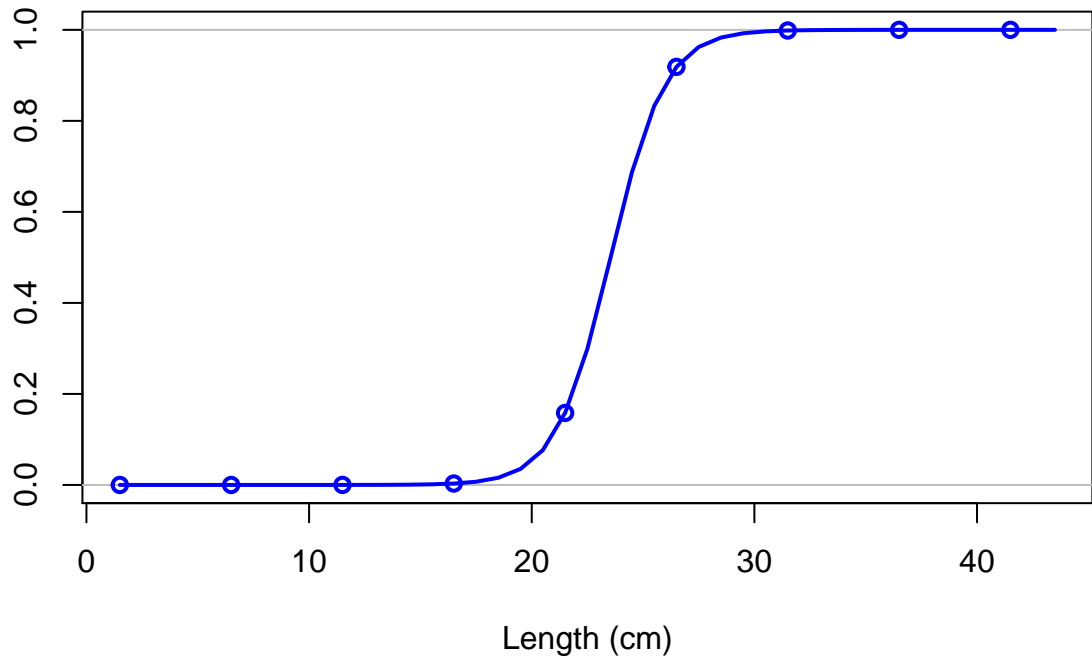
Hermaphroditism transition rate



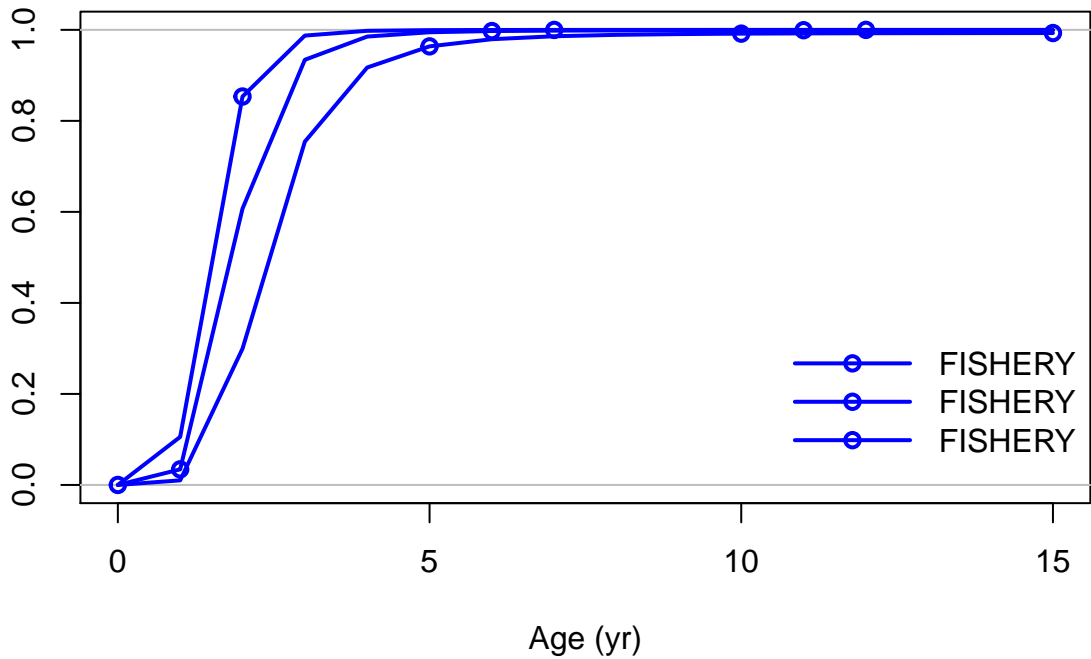
Fraction females by age at equilibrium



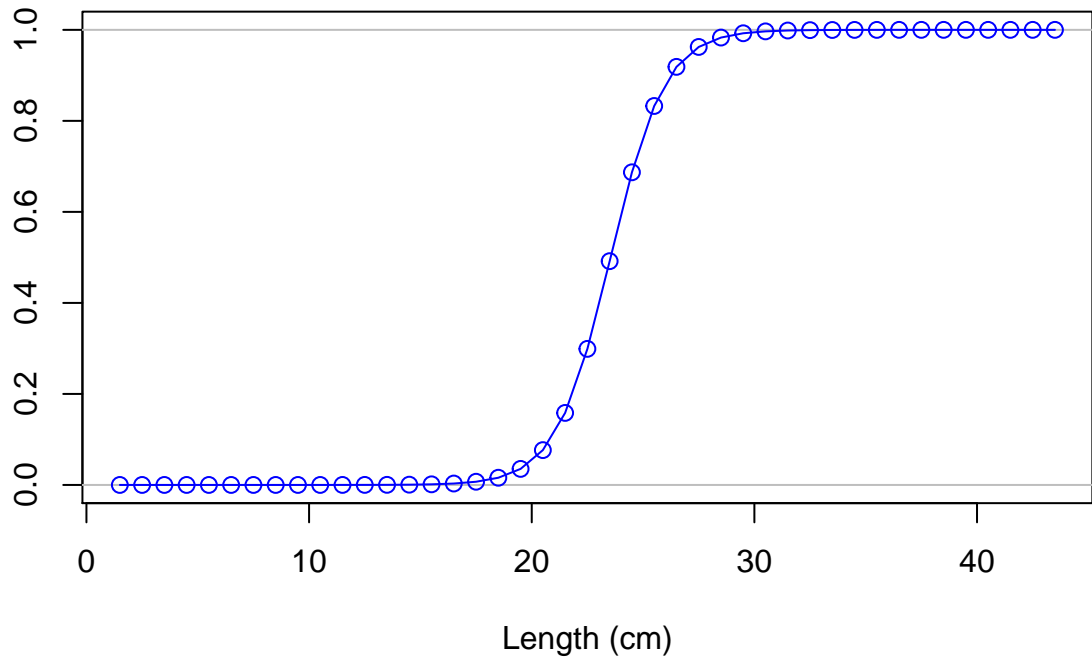
Selectivity

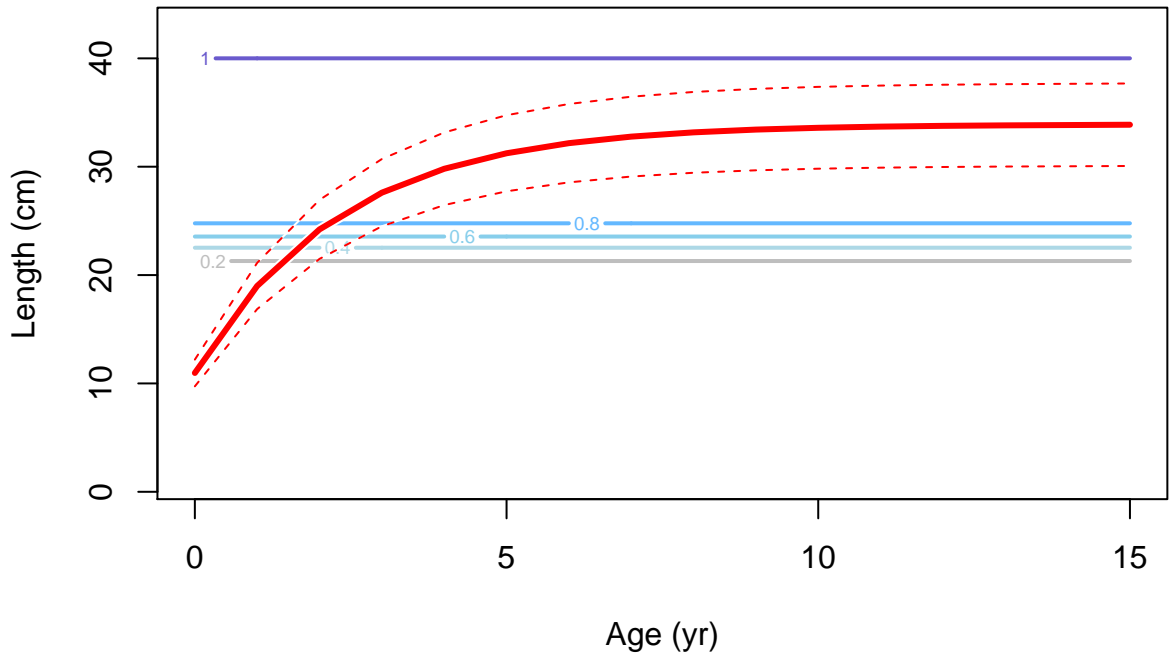


Selectivity

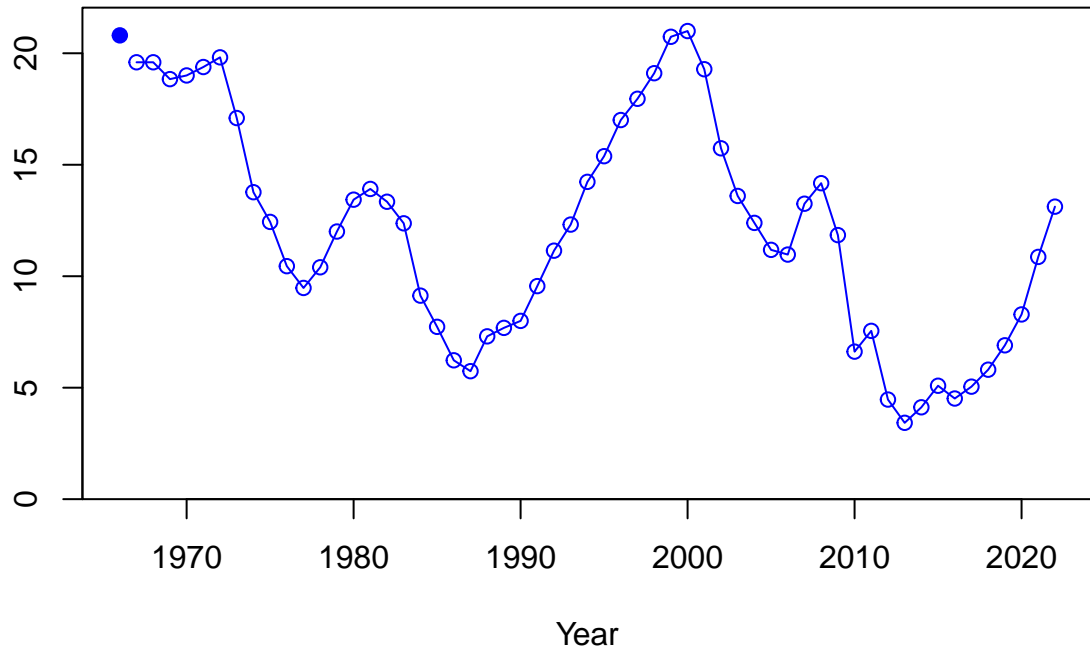


Selectivity

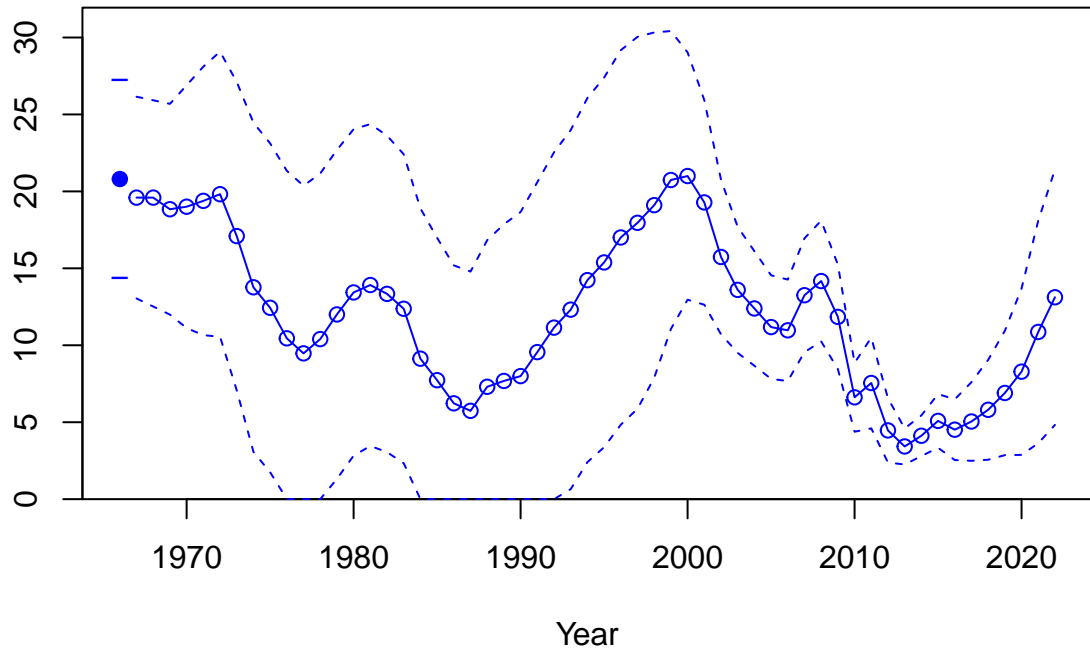




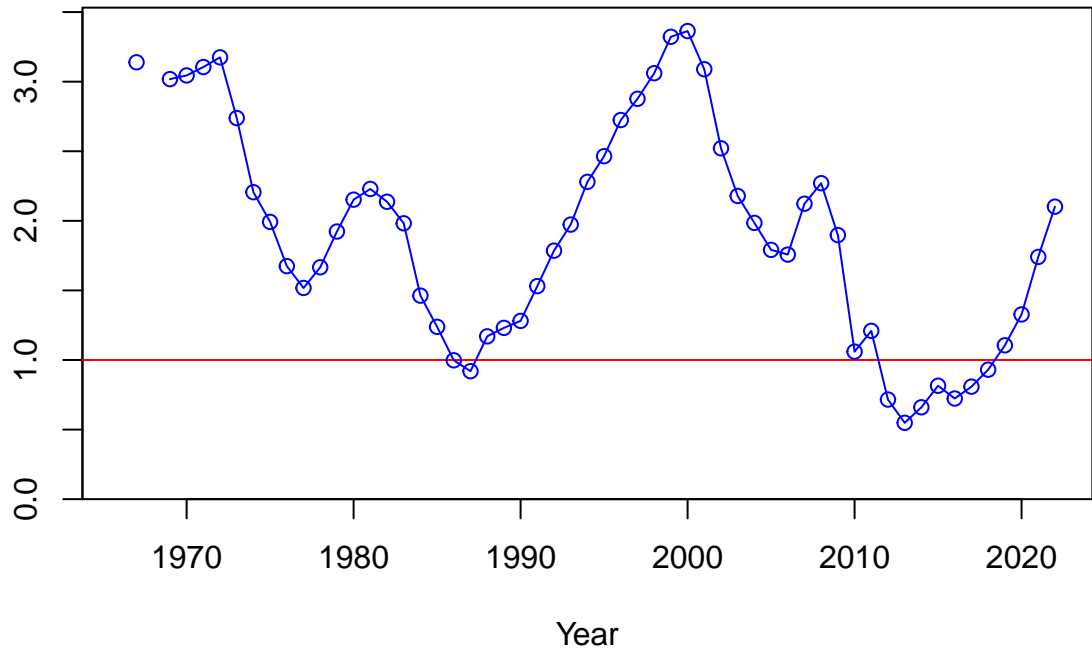
Spawning biomass (mt)



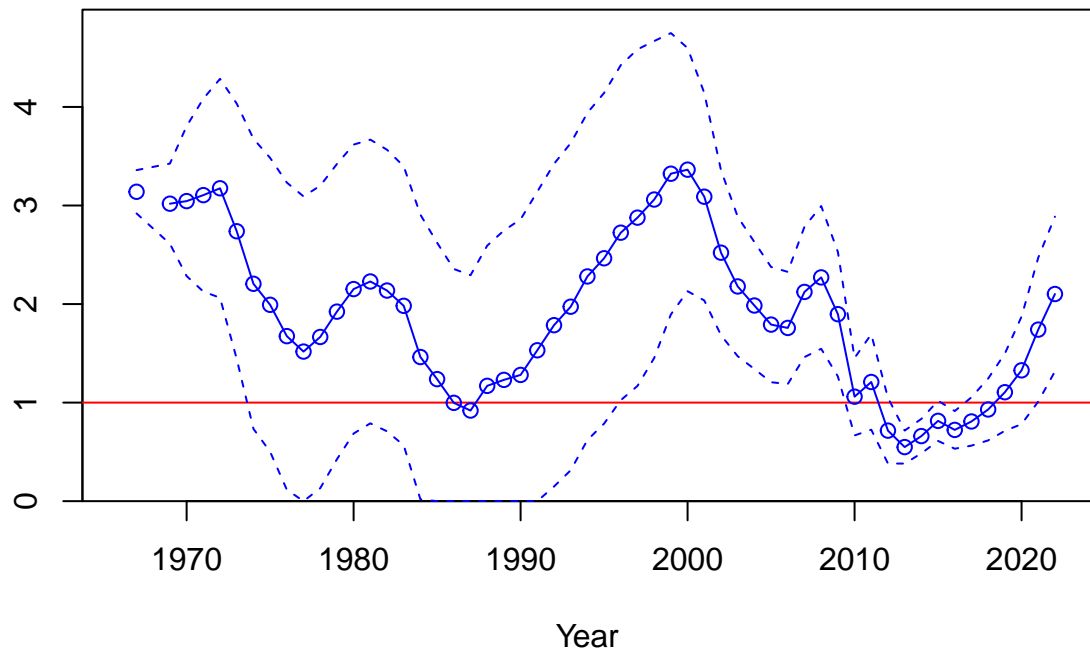
Spawning biomass (mt)

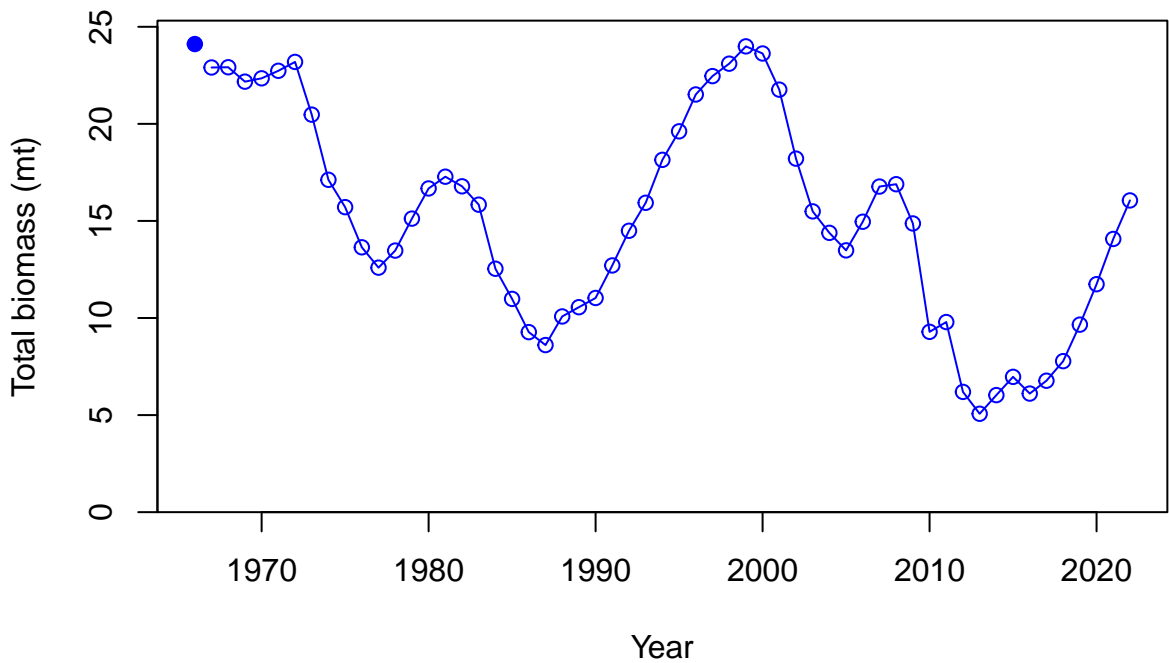


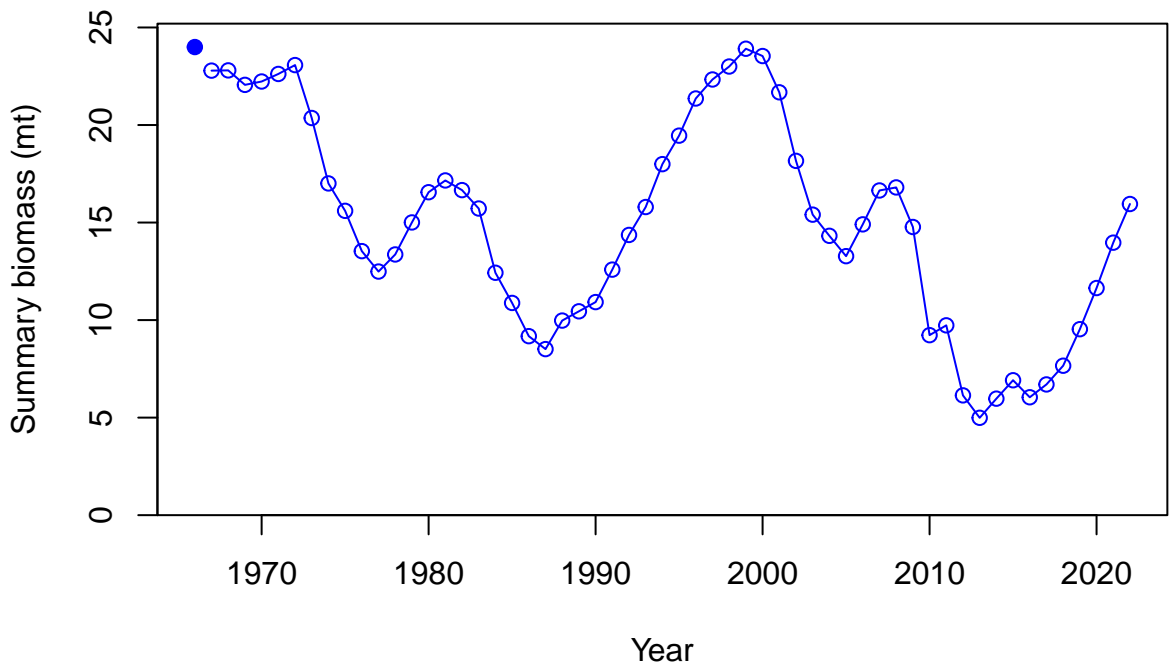
Relative spawning biomass: B/B_{MSY}



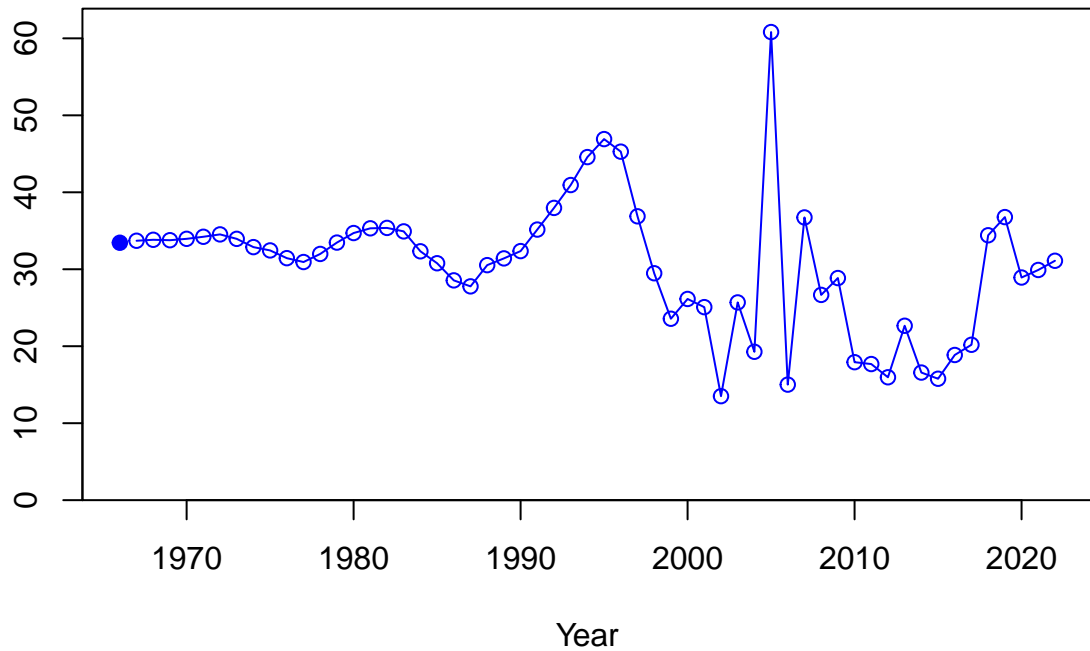
Relative spawning biomass: B/B_{MSY}

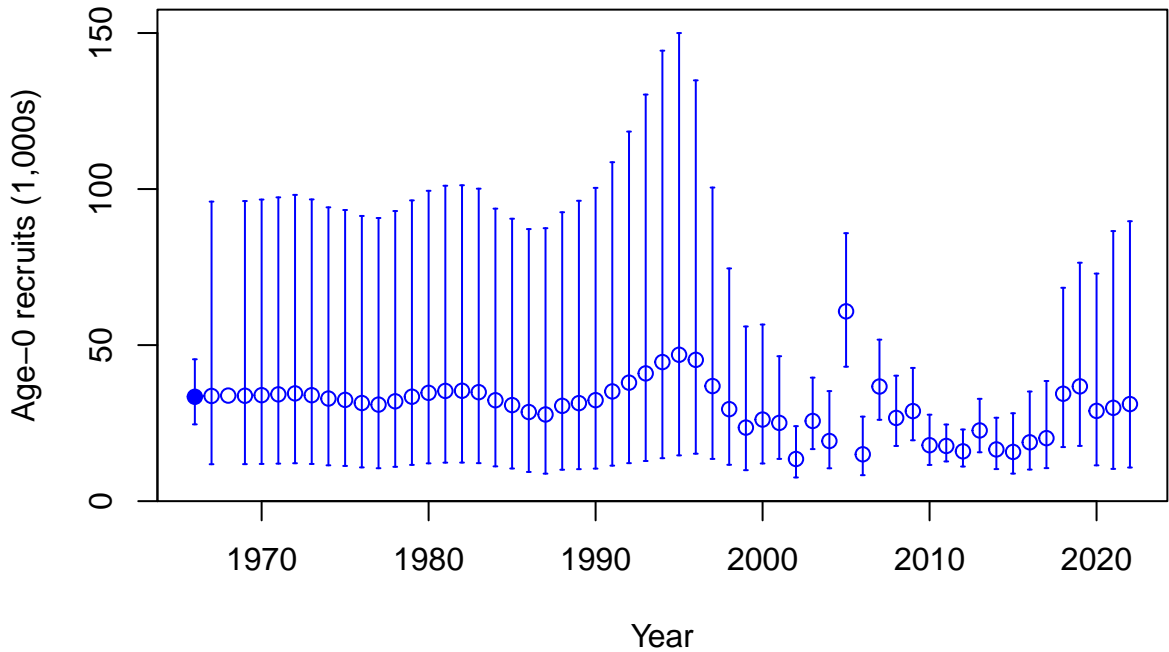




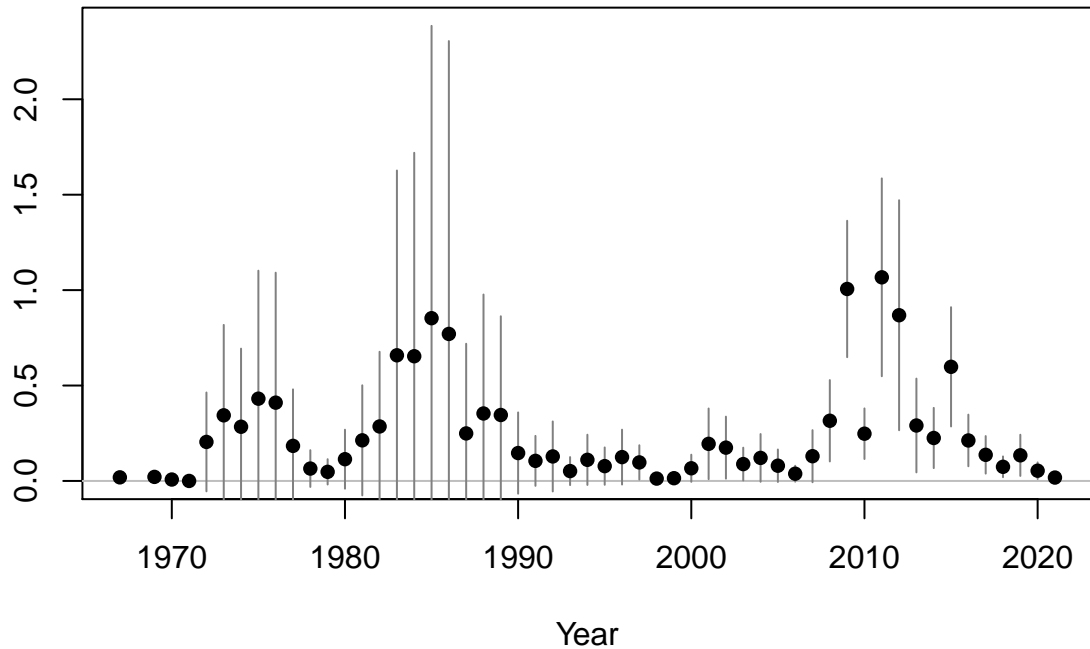


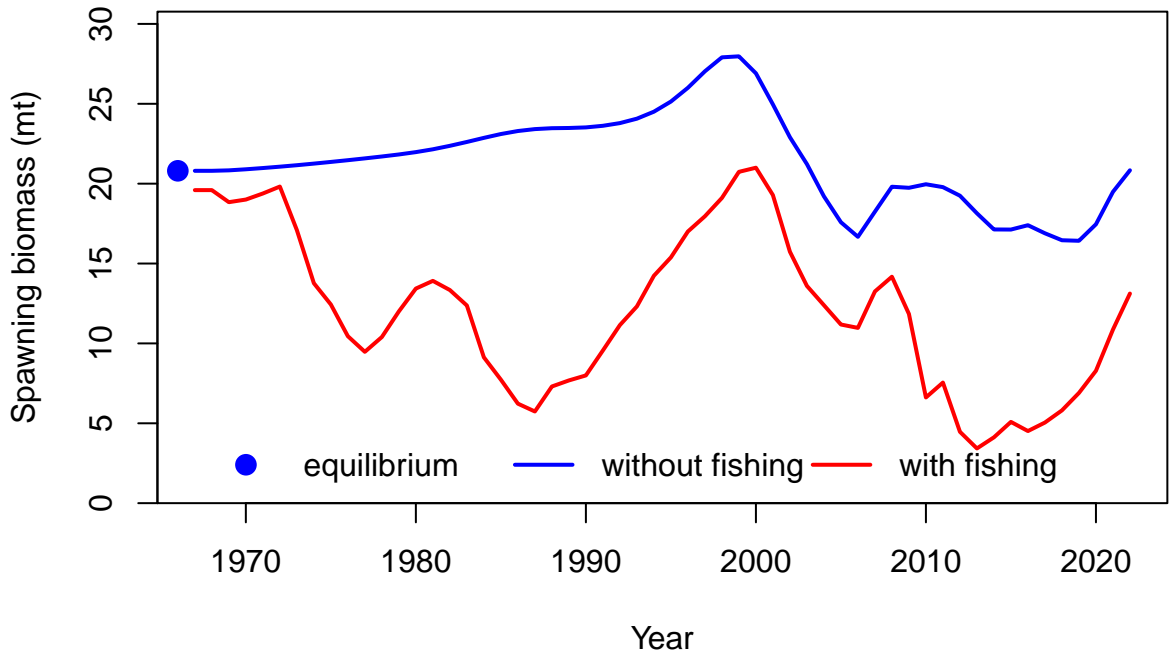
Age-0 recruits (1,000s)





Summary Fishing Mortality





Log recruitment deviation

0.5
0.0
-0.5

1970

1980

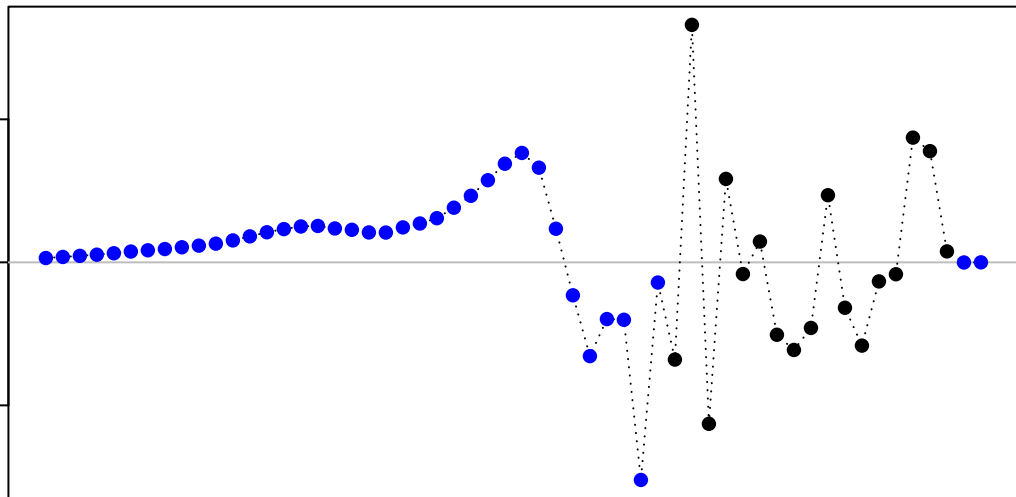
1990

2000

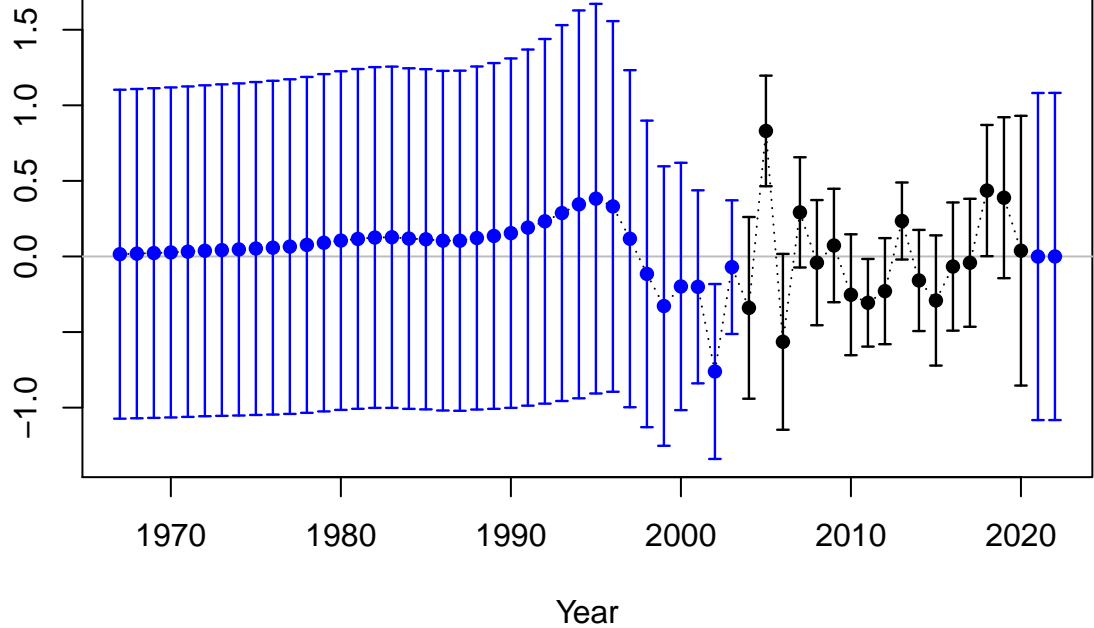
2010

2020

Year

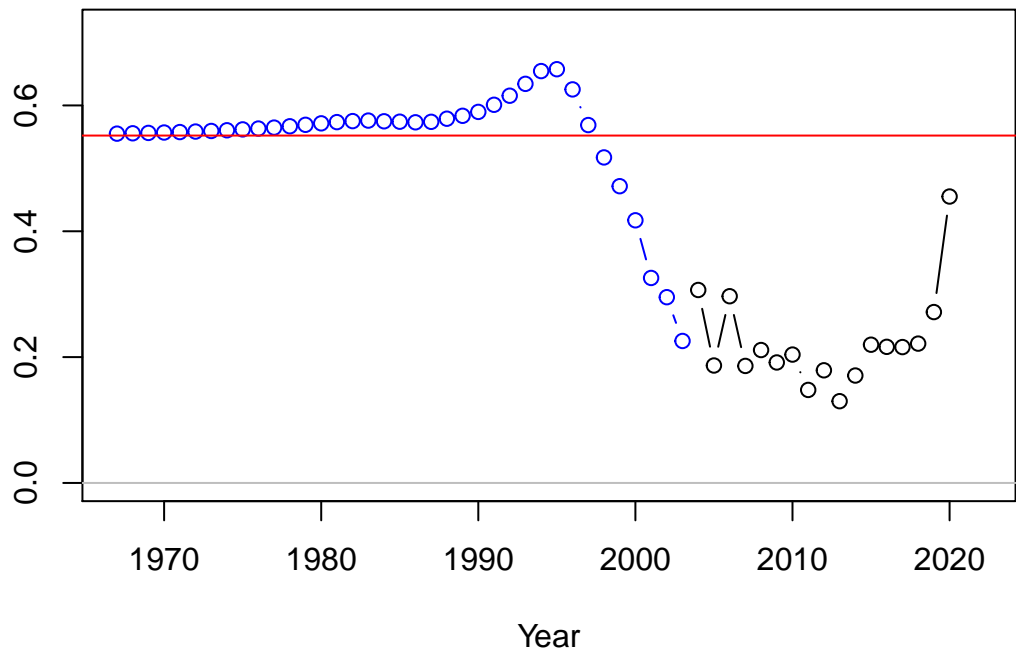


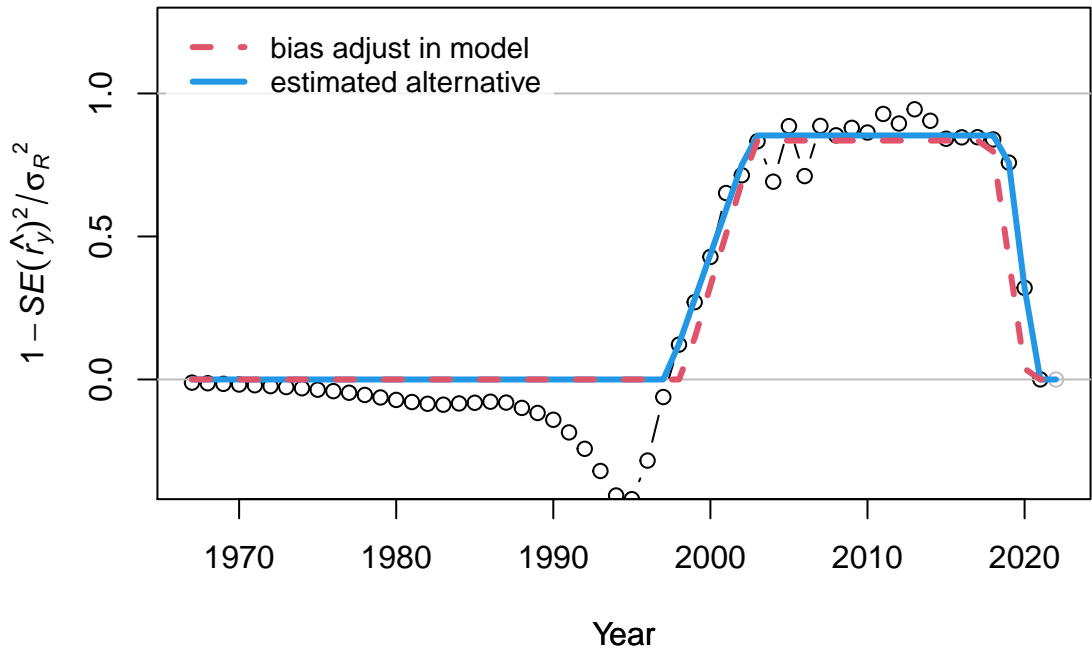
Log recruitment deviation

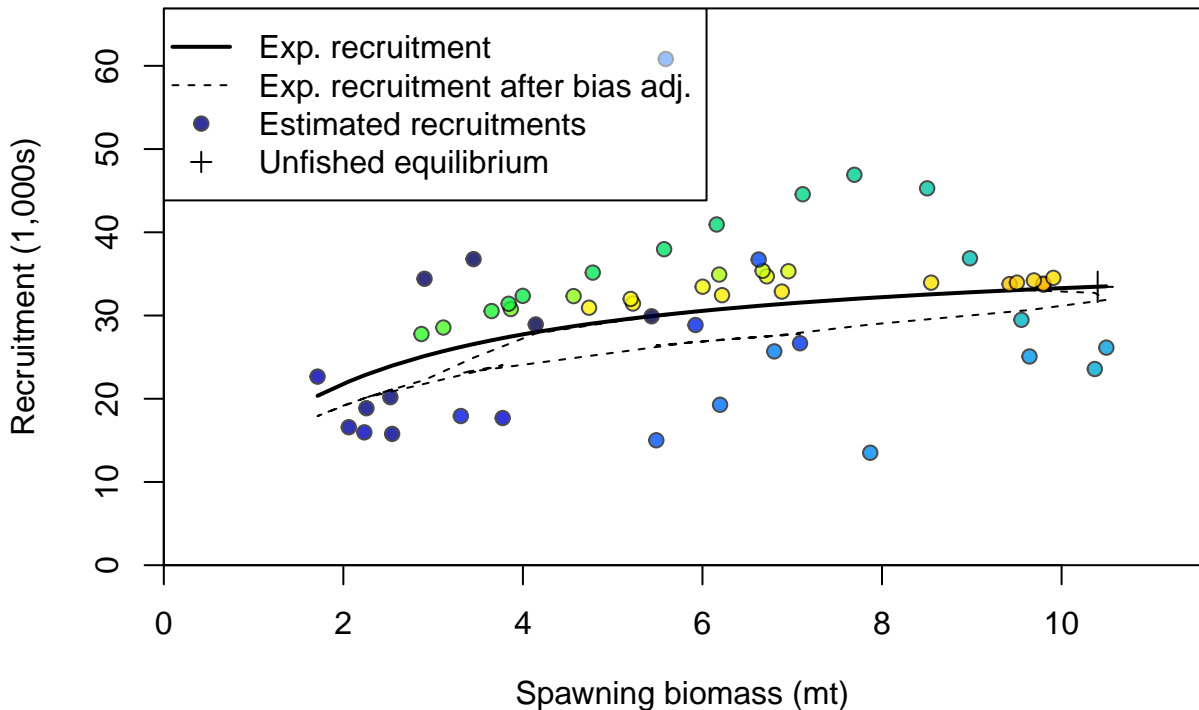


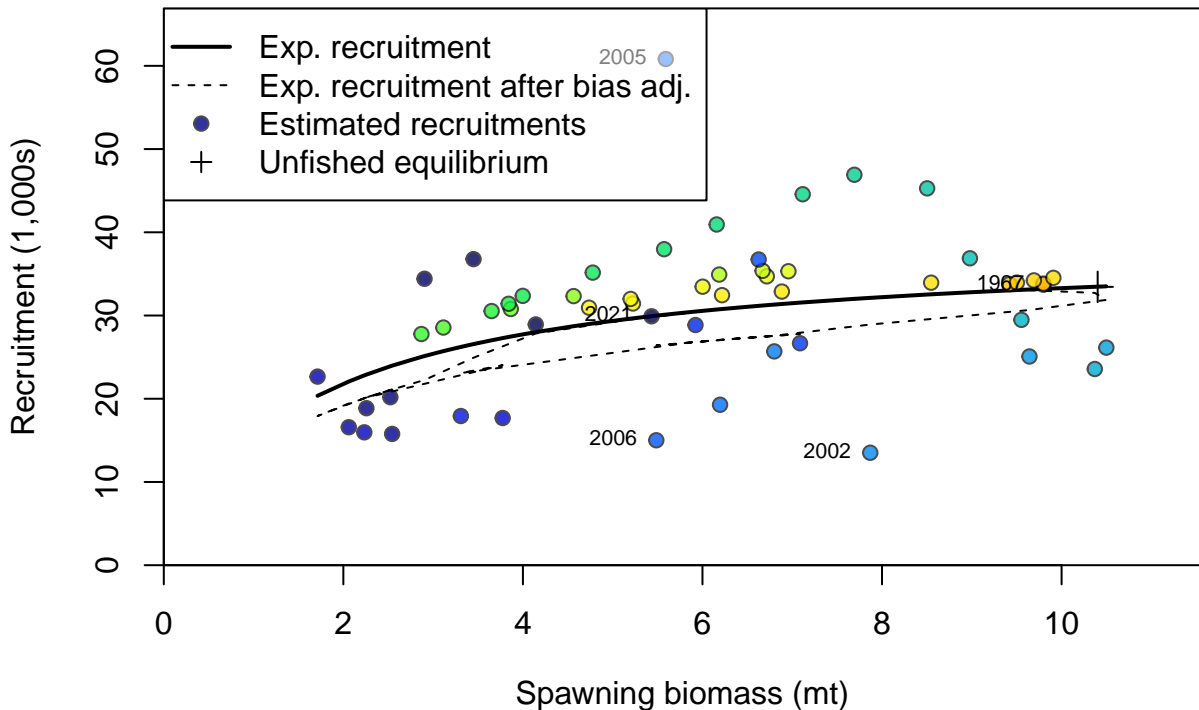
Recruitment deviation variance

Asymptotic standard error estimate









Log recruitment deviation

0.5
0.0
-0.5

0.0

0.2

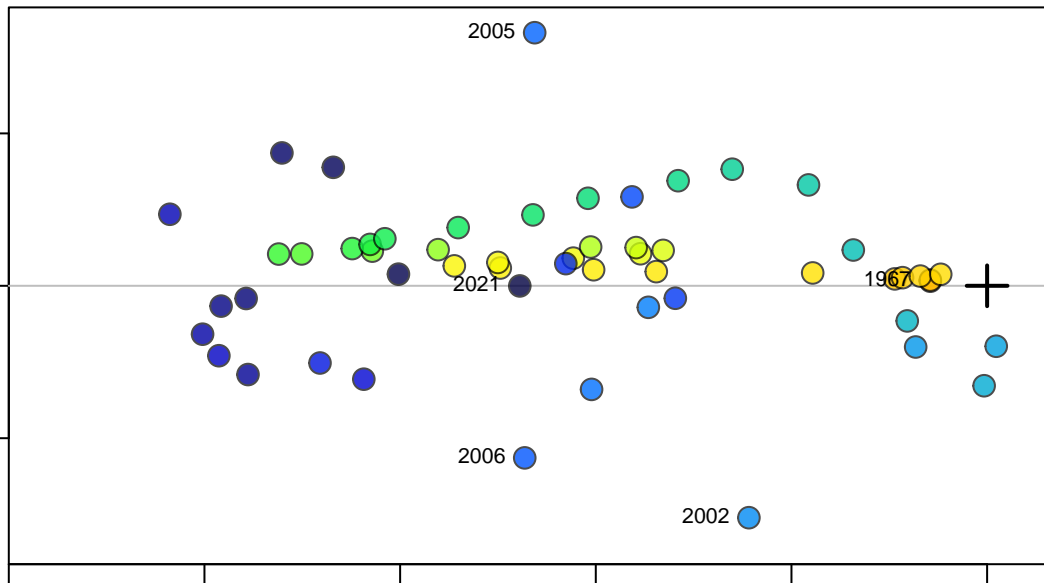
0.4

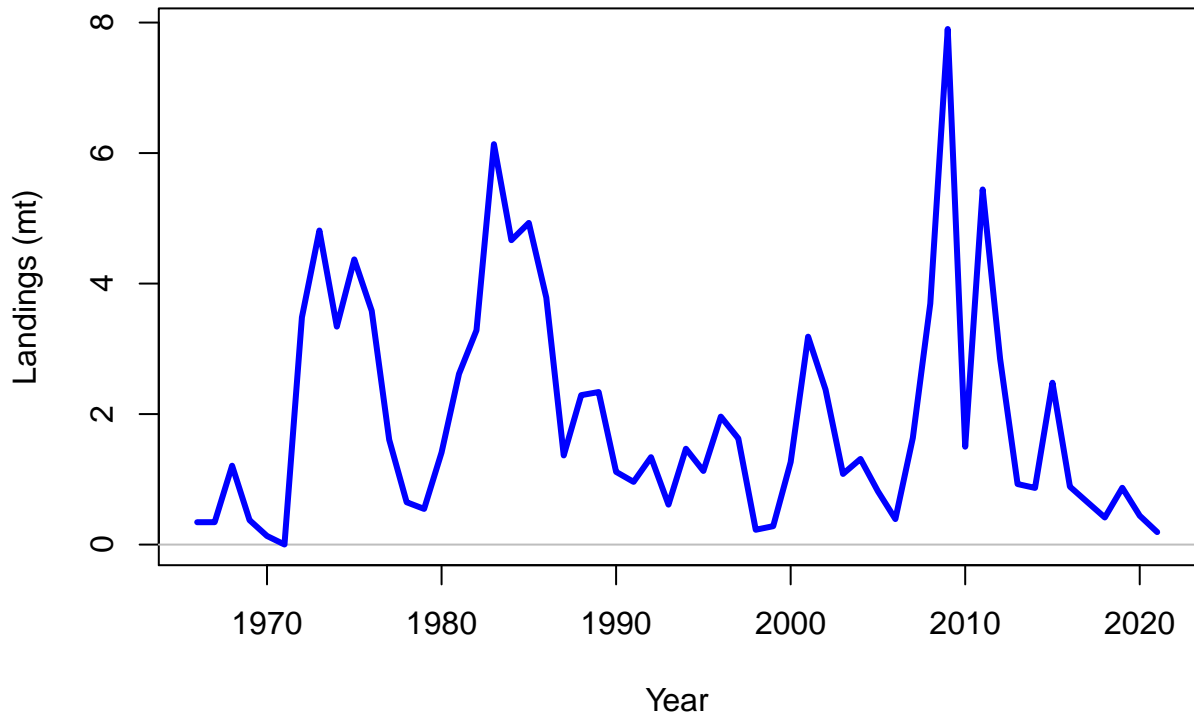
0.6

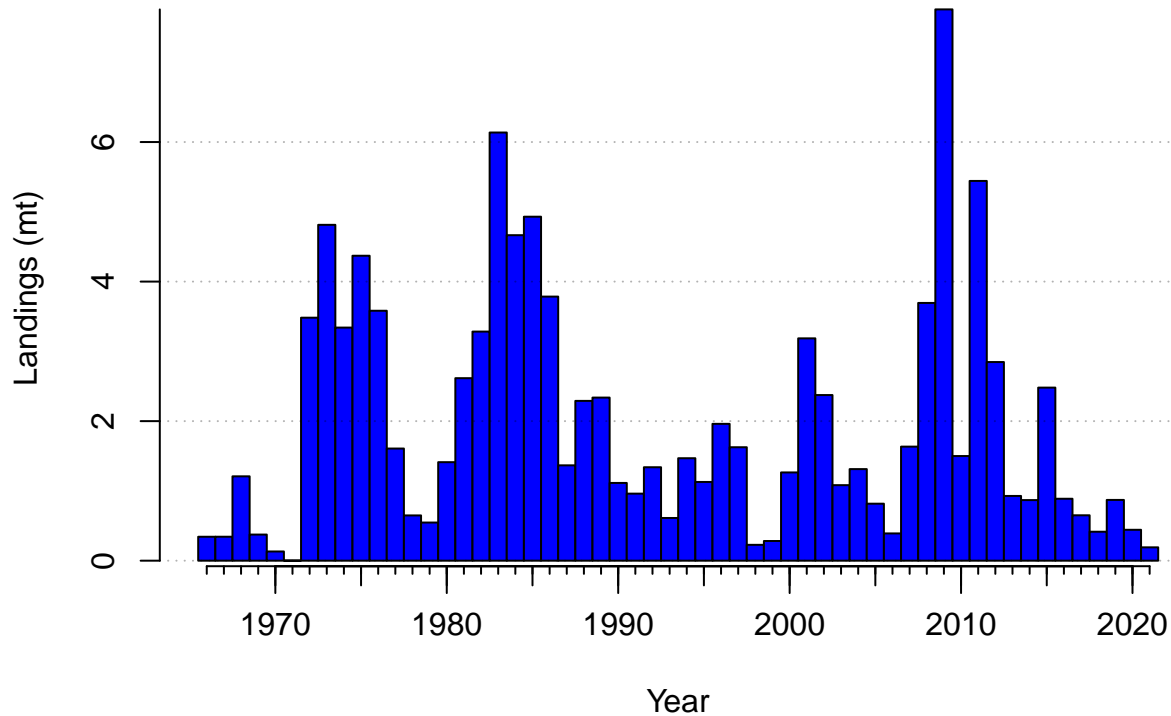
0.8

1.0

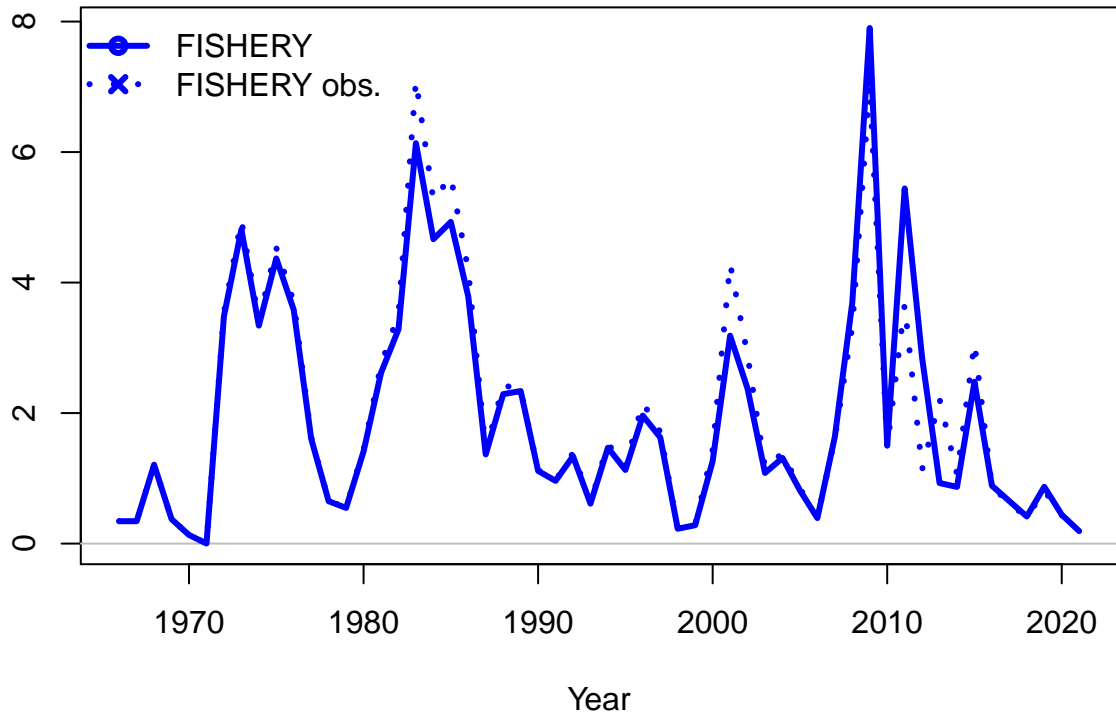
Spawning output (relative to B_0)

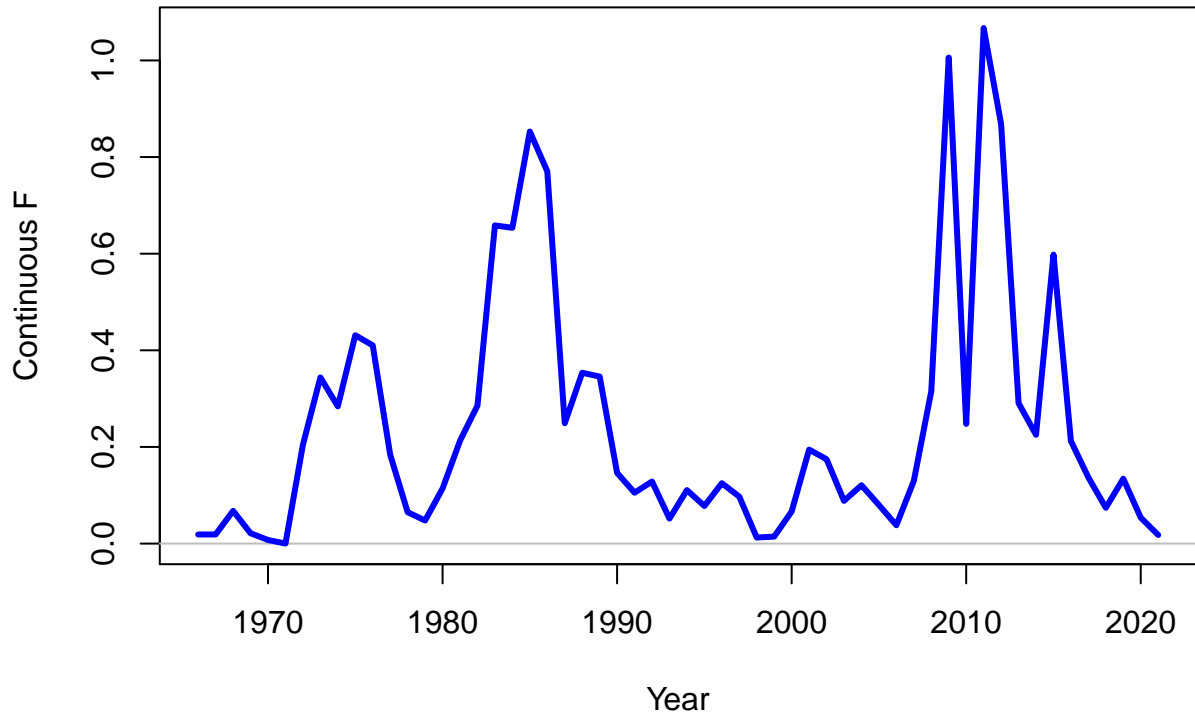




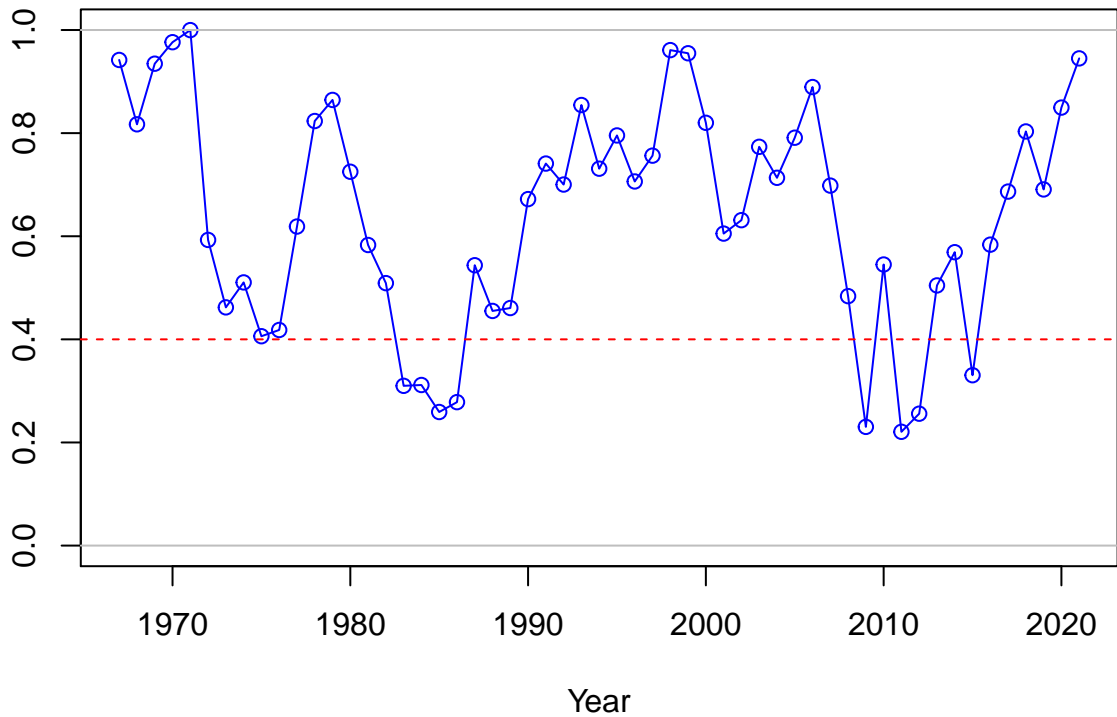


Observed and expected Landings (mt)

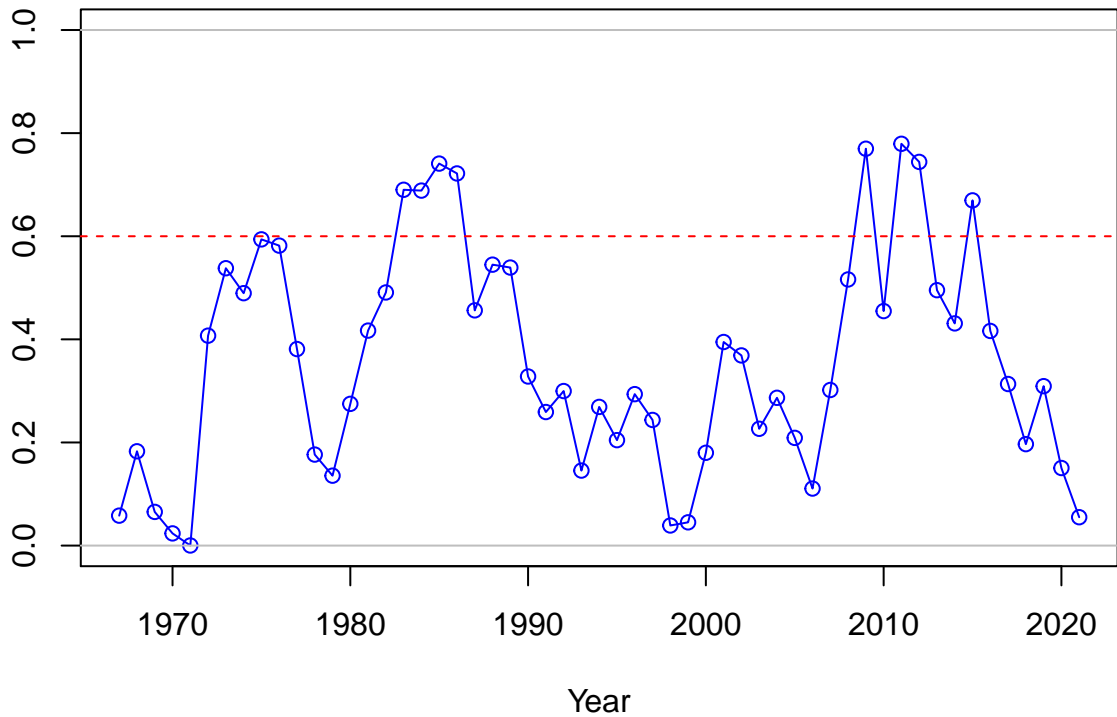




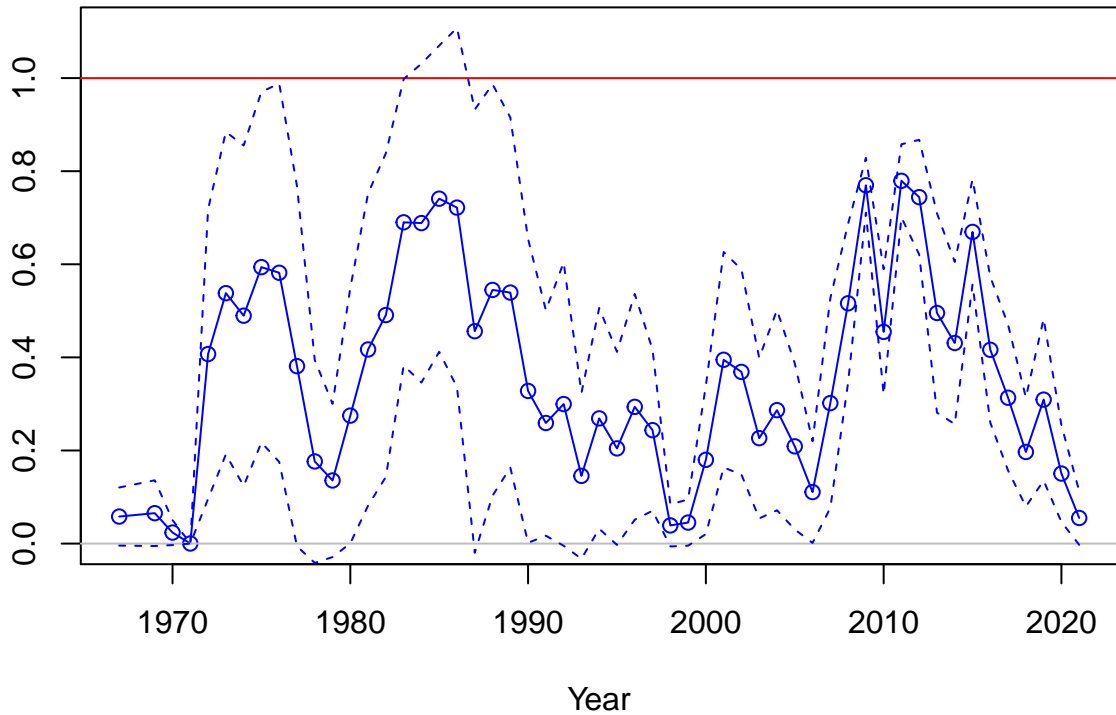
SPR



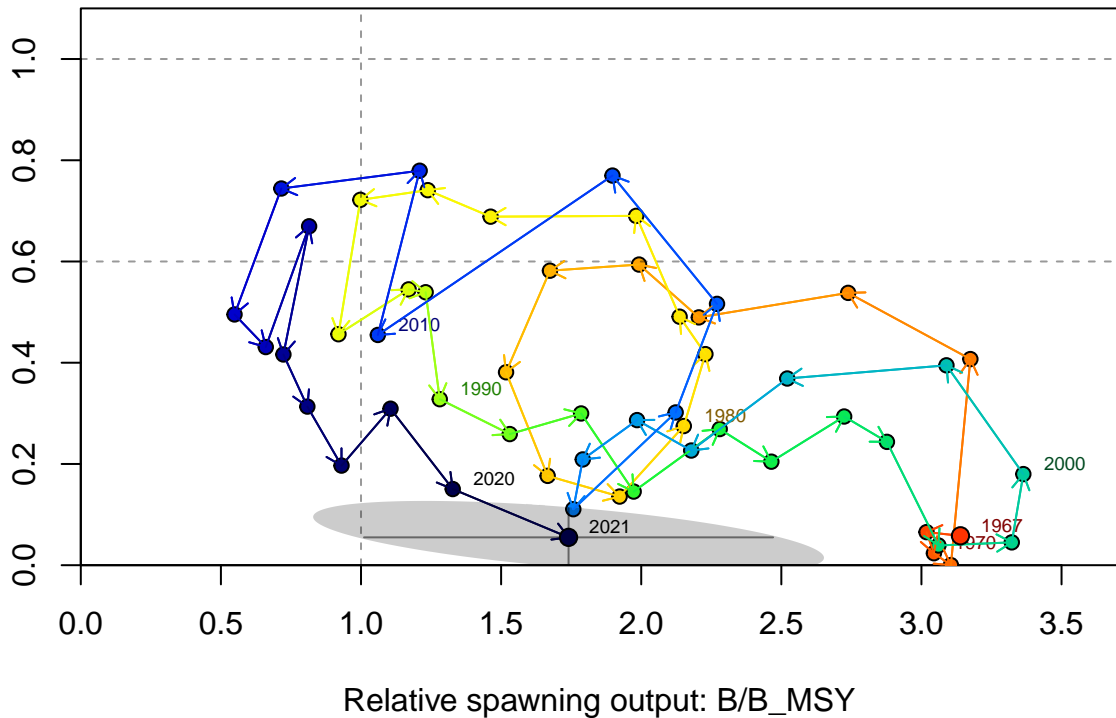
1-SPR

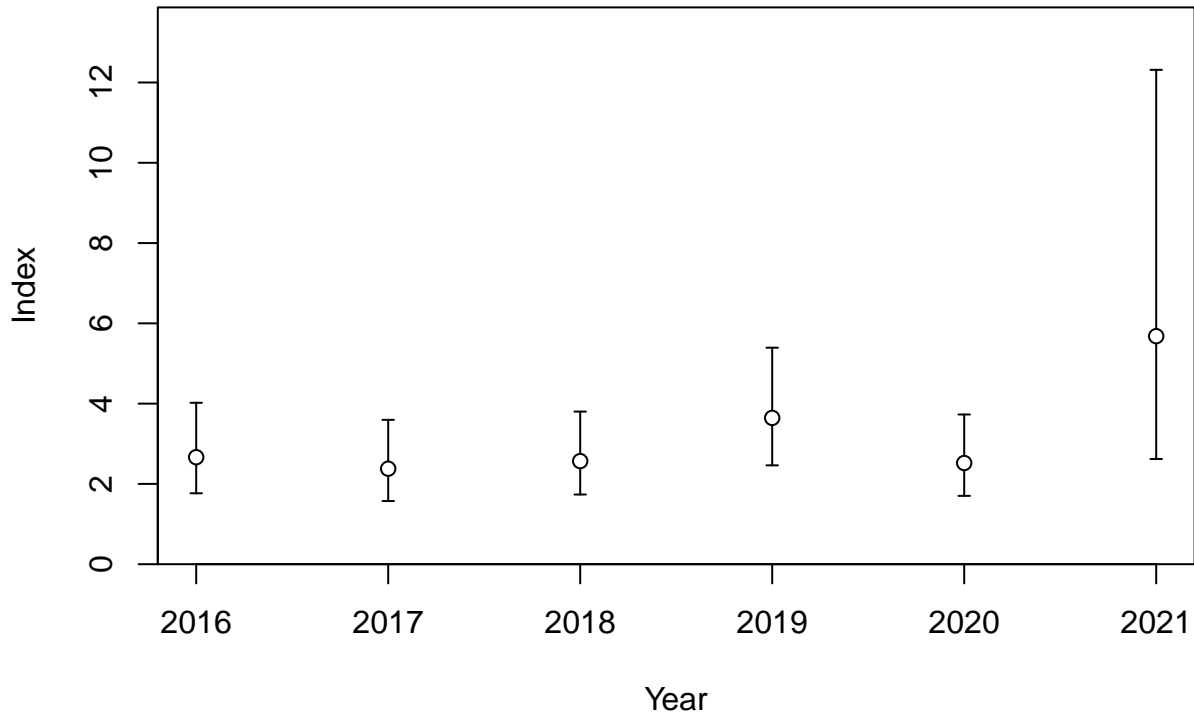


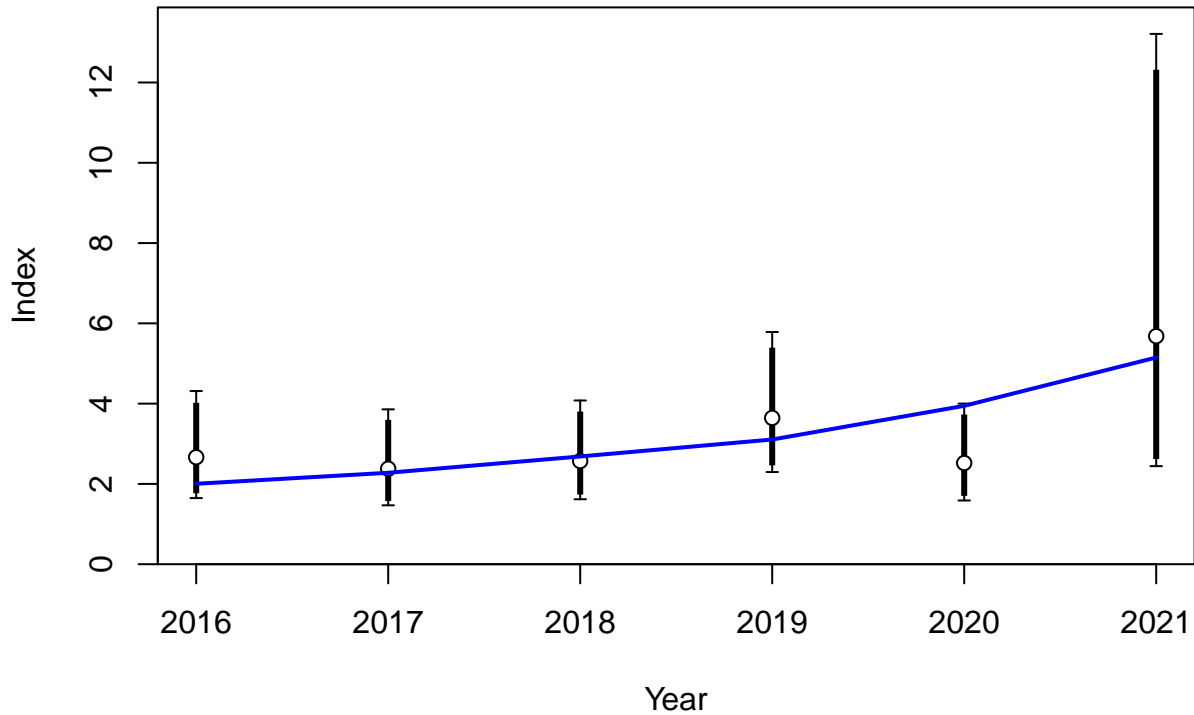
Fishing intensity: 1-SPR

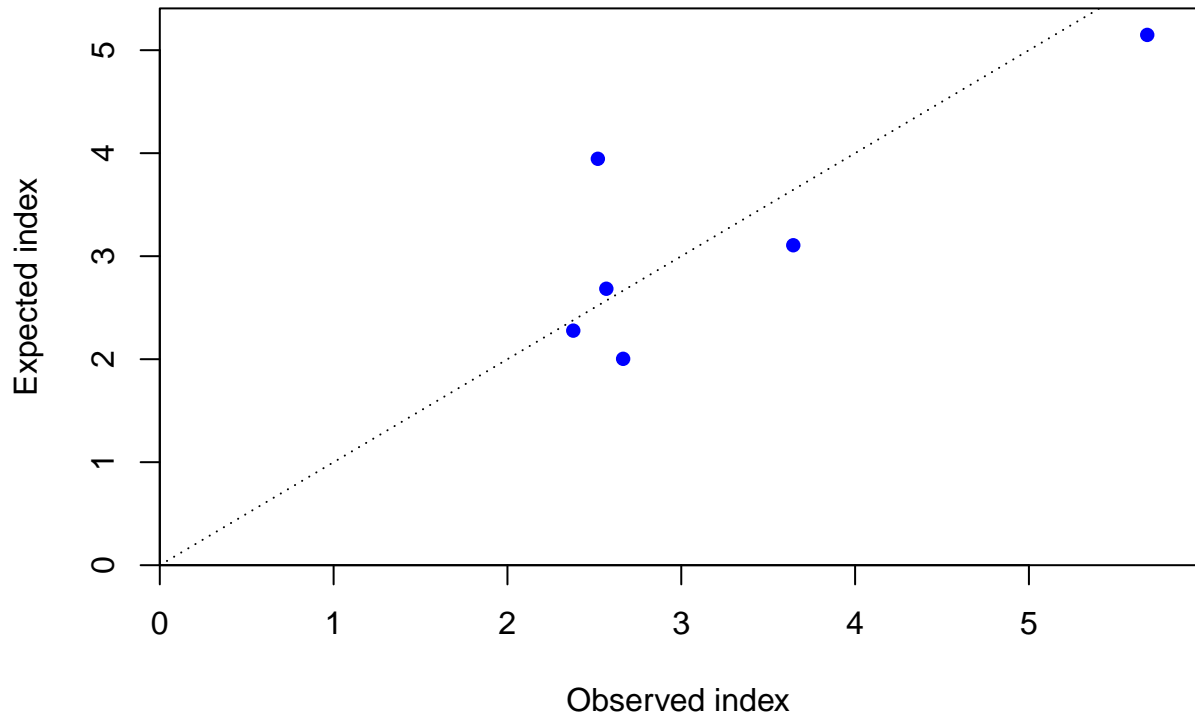


Fishing intensity: 1-SPR









Log index

2.5
2.0
1.5
1.0
0.5

2016

2017

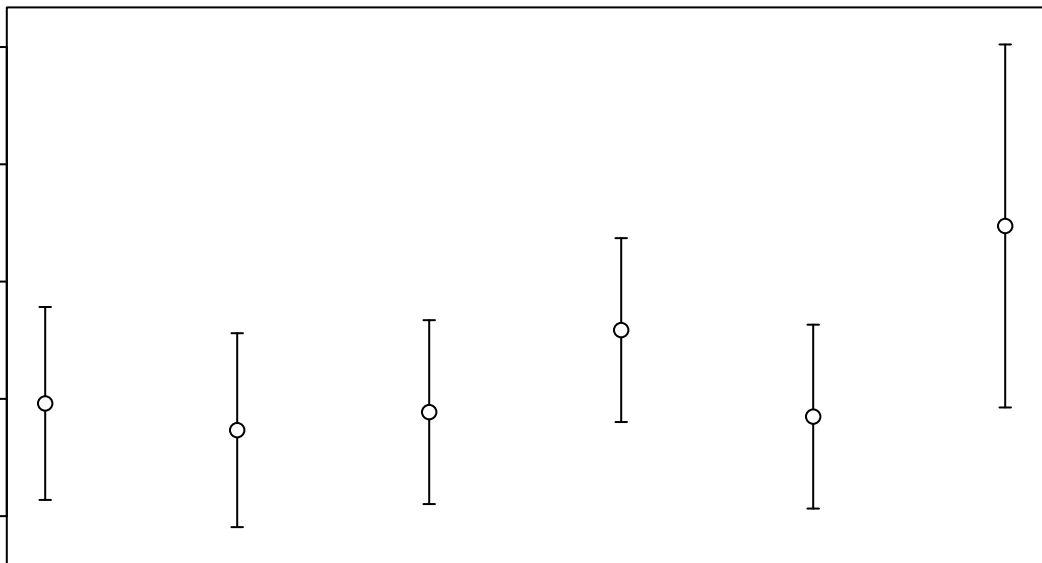
2018

2019

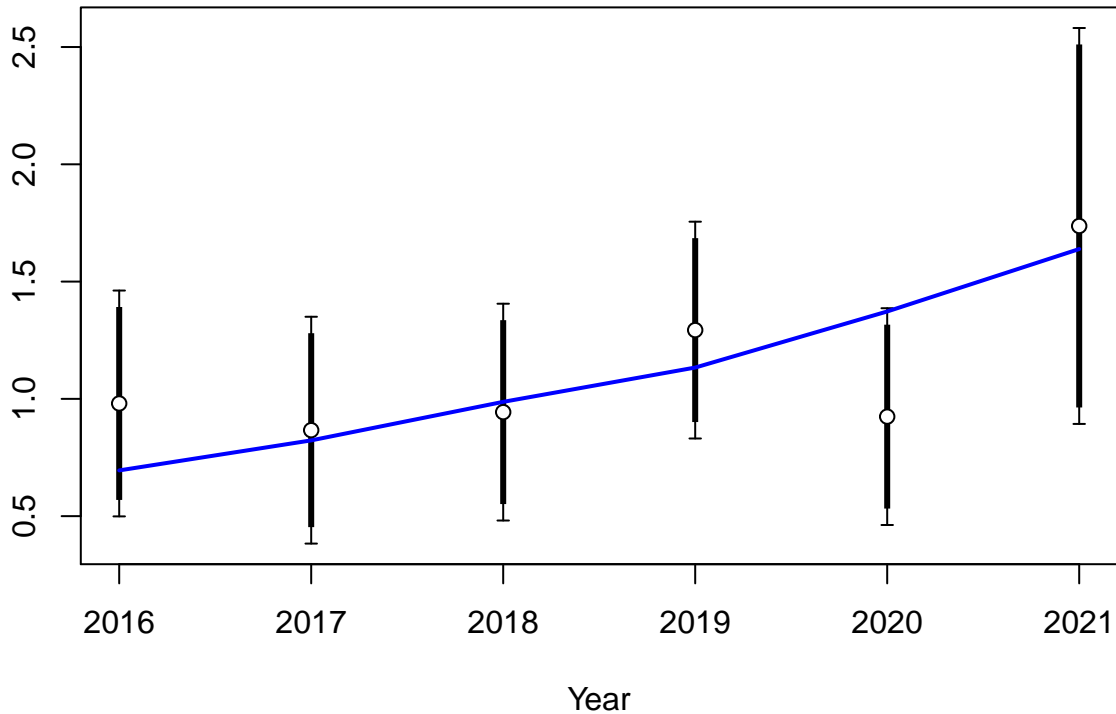
2020

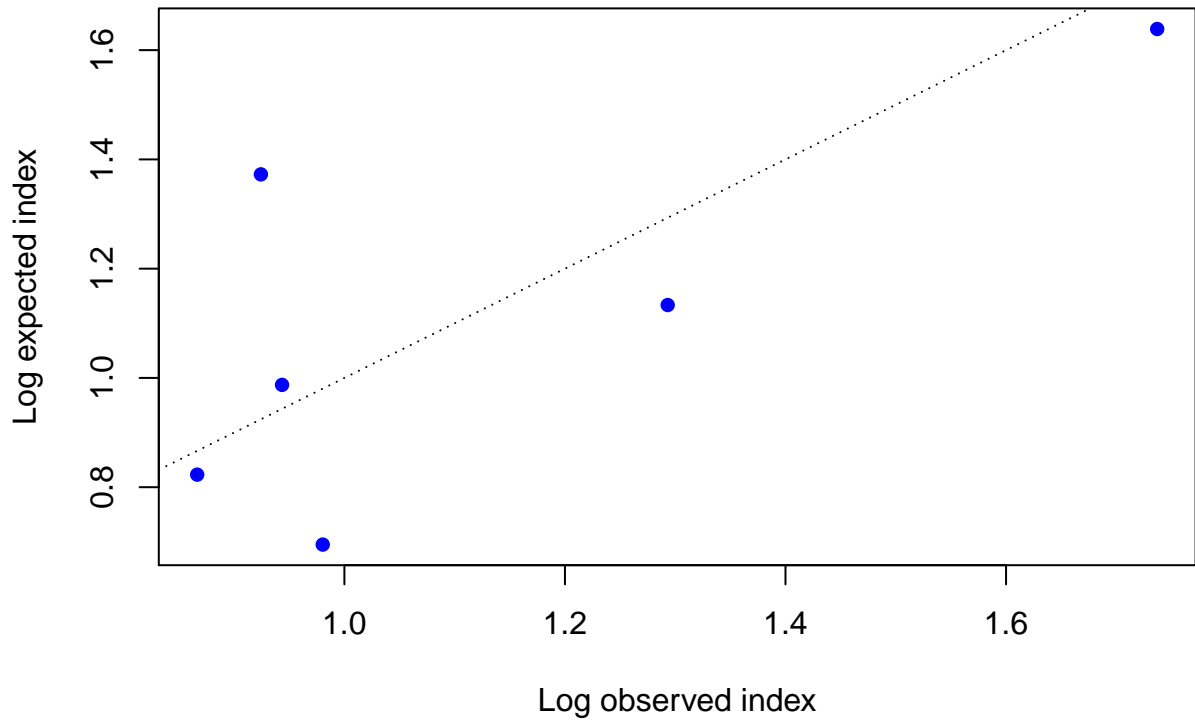
2021

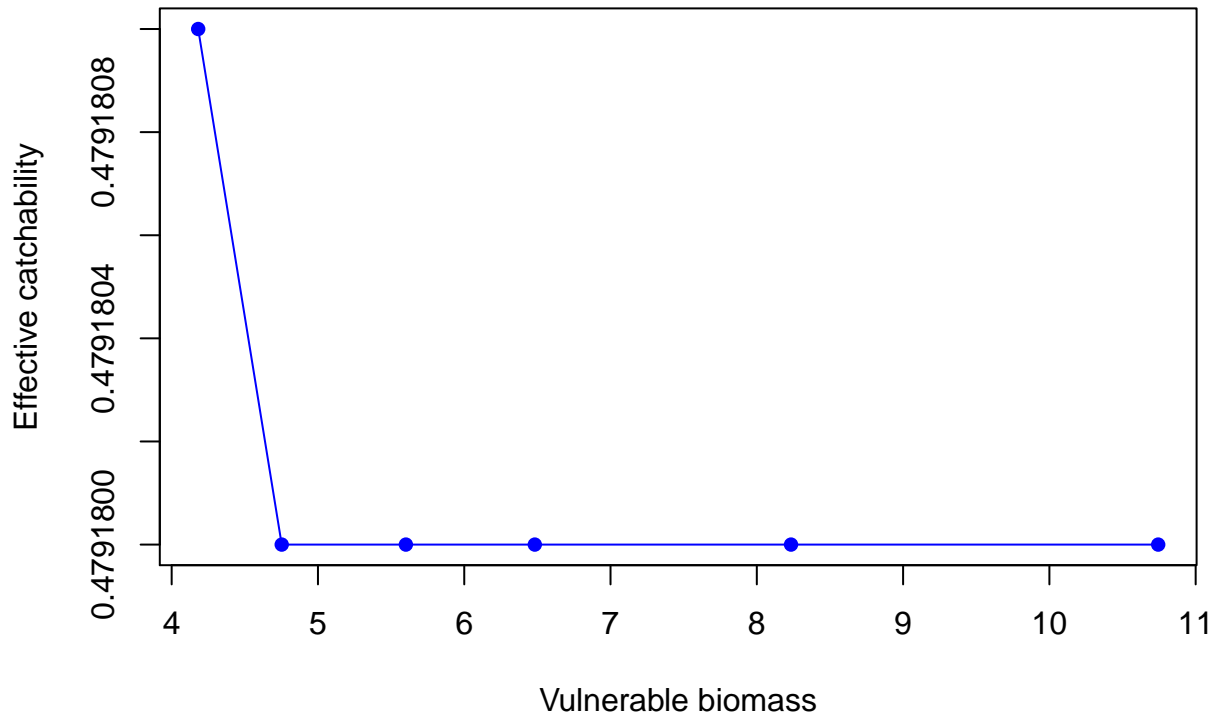
Year

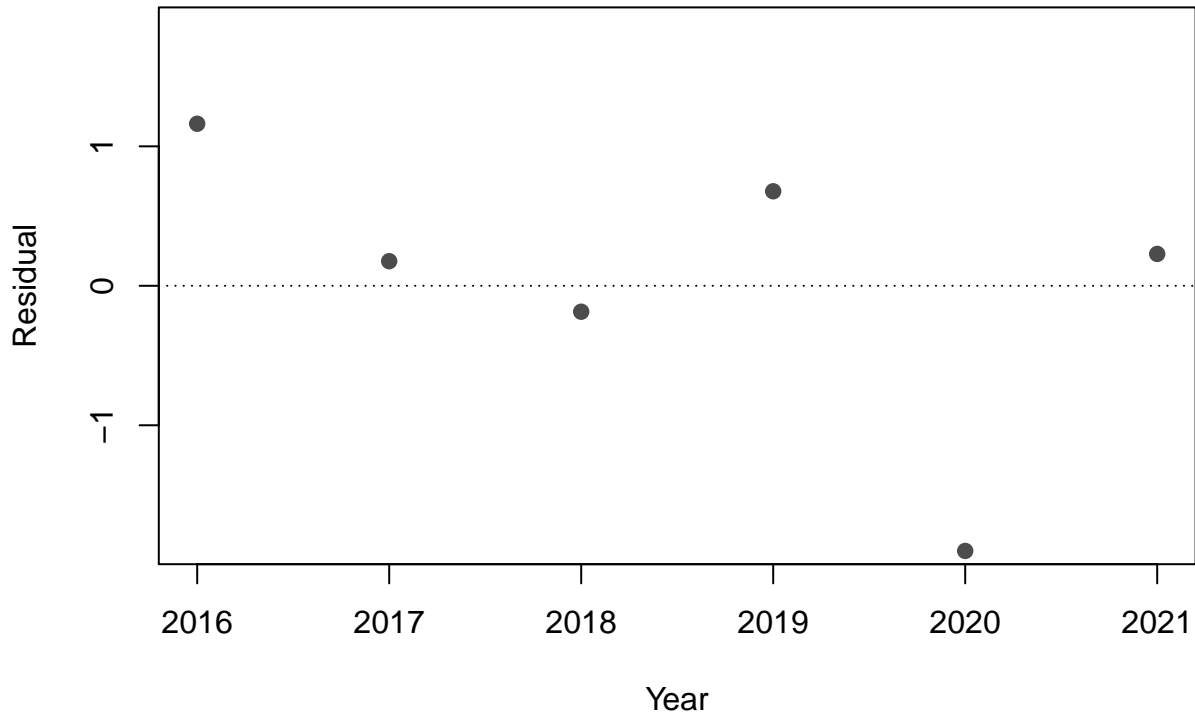


Log index

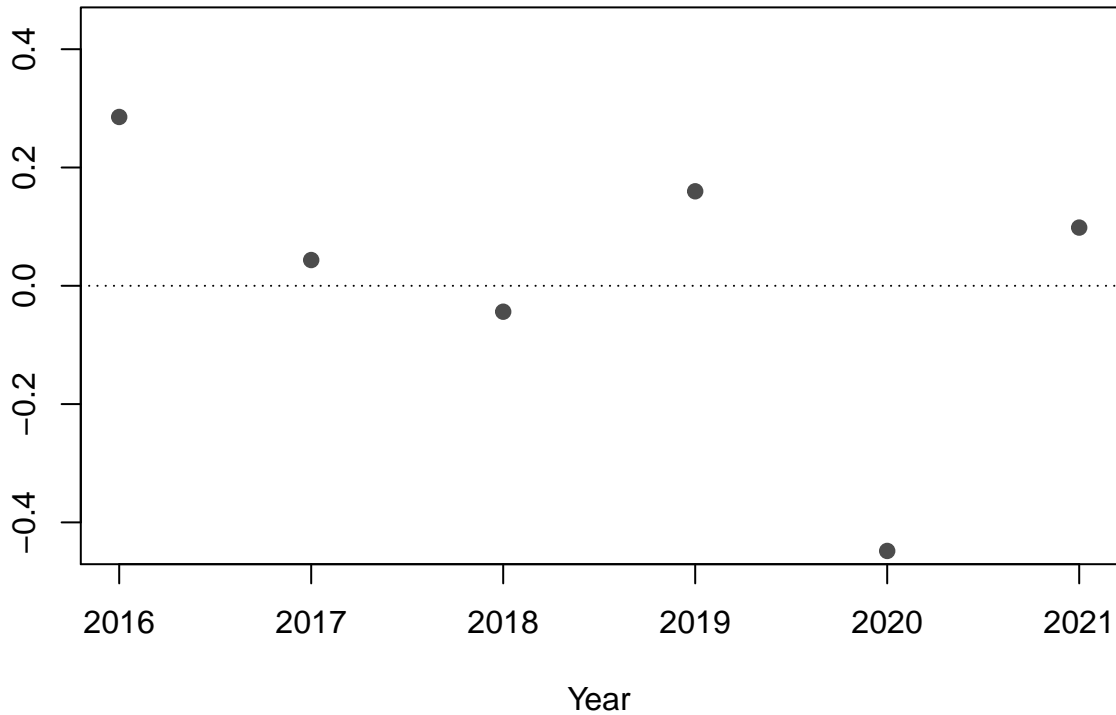


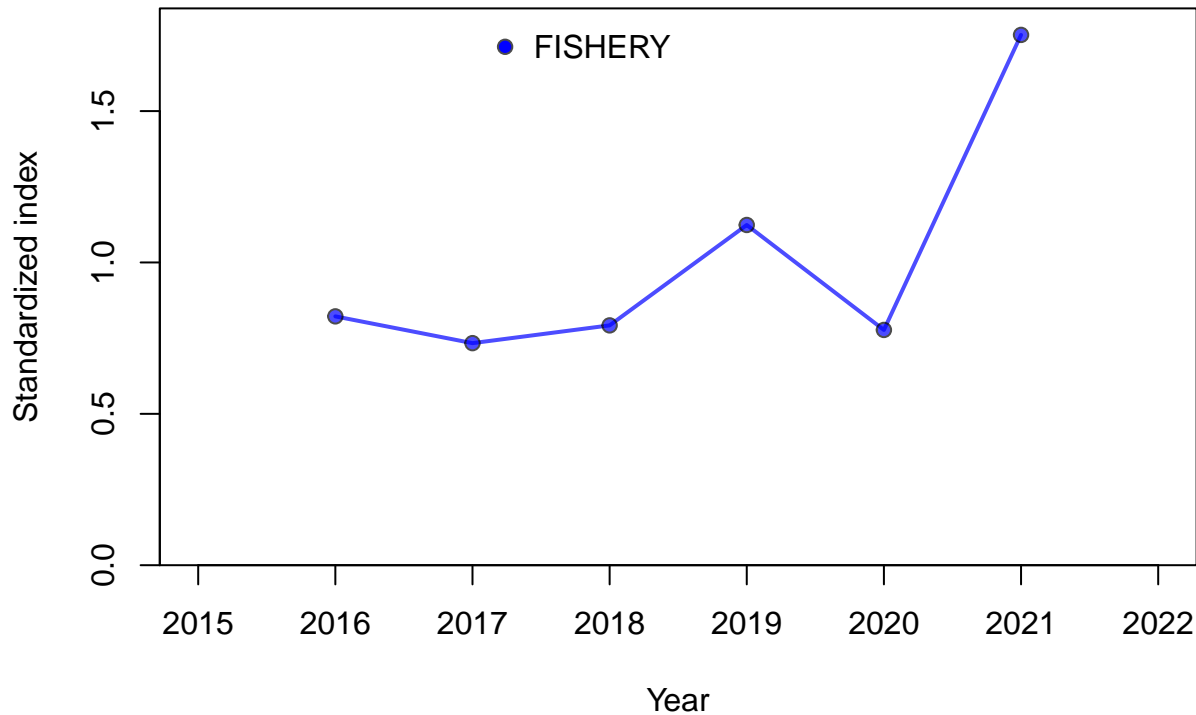




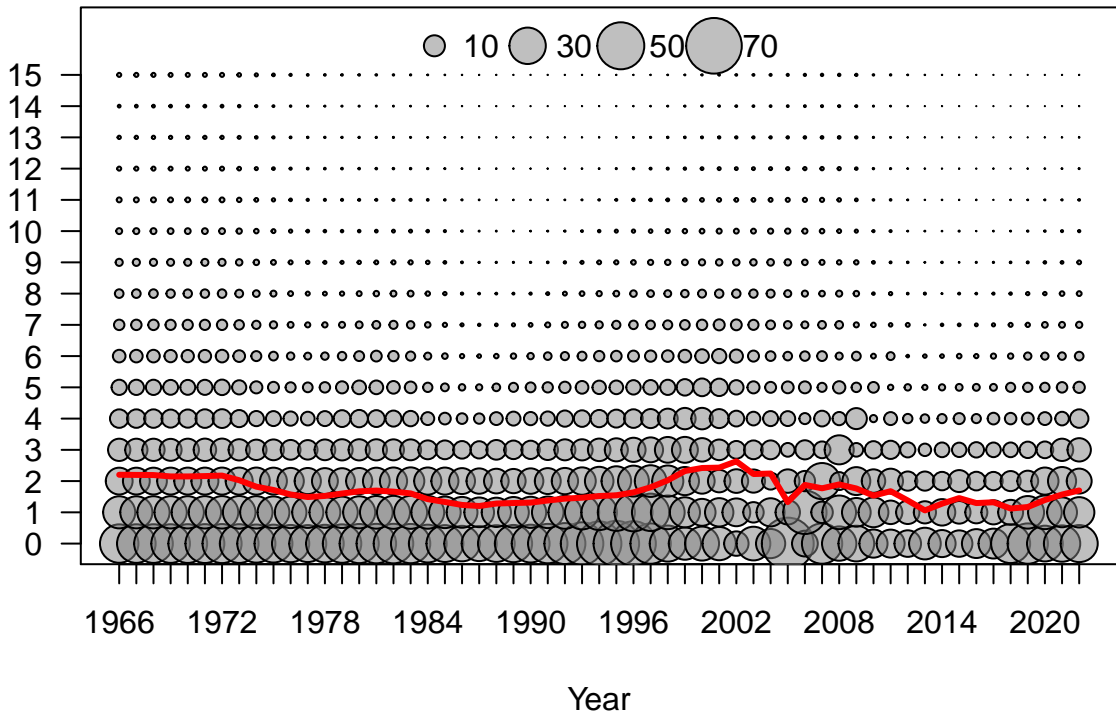


Deviation

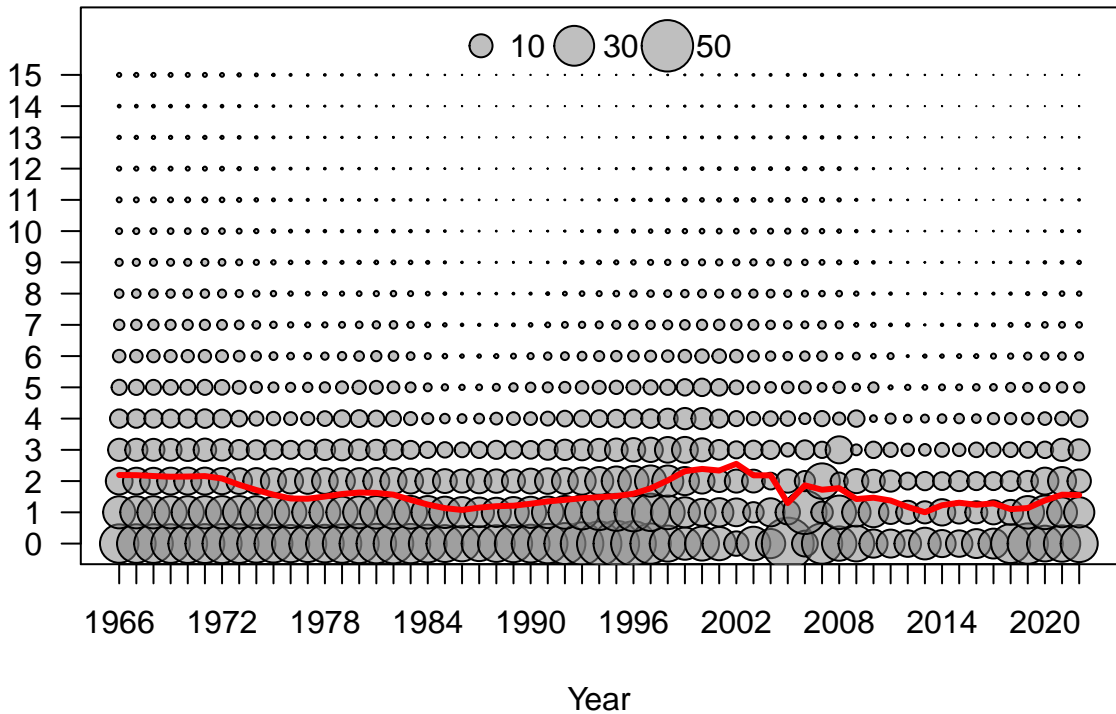


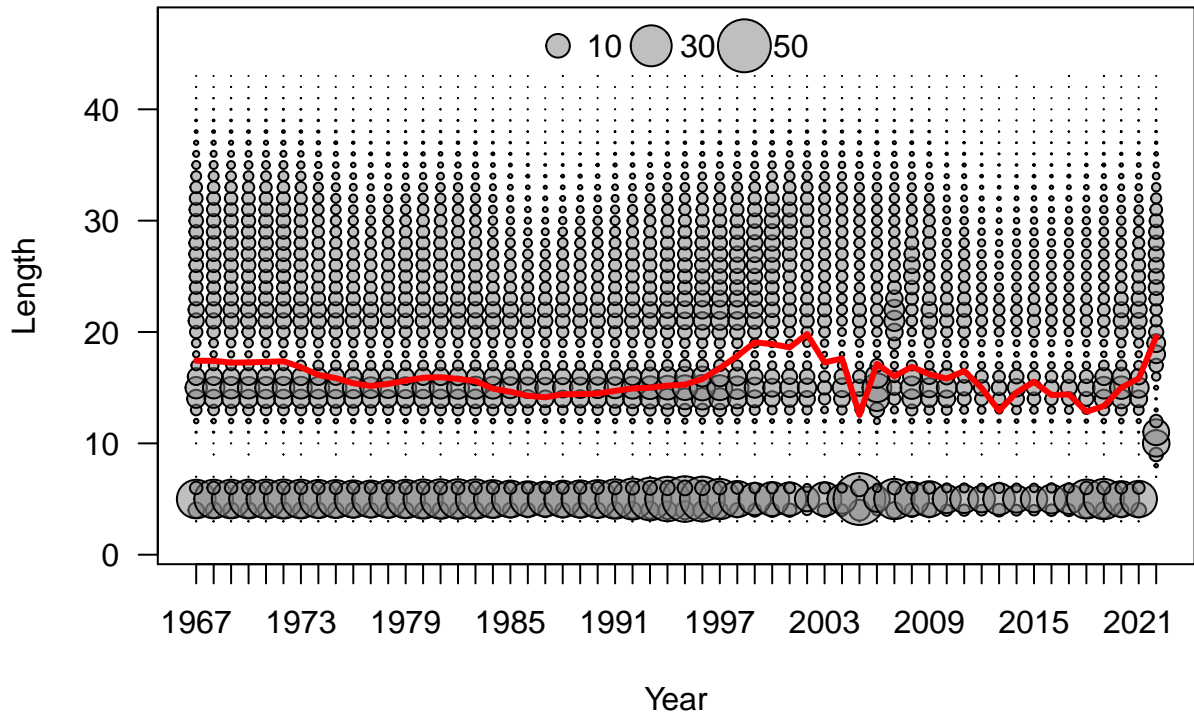


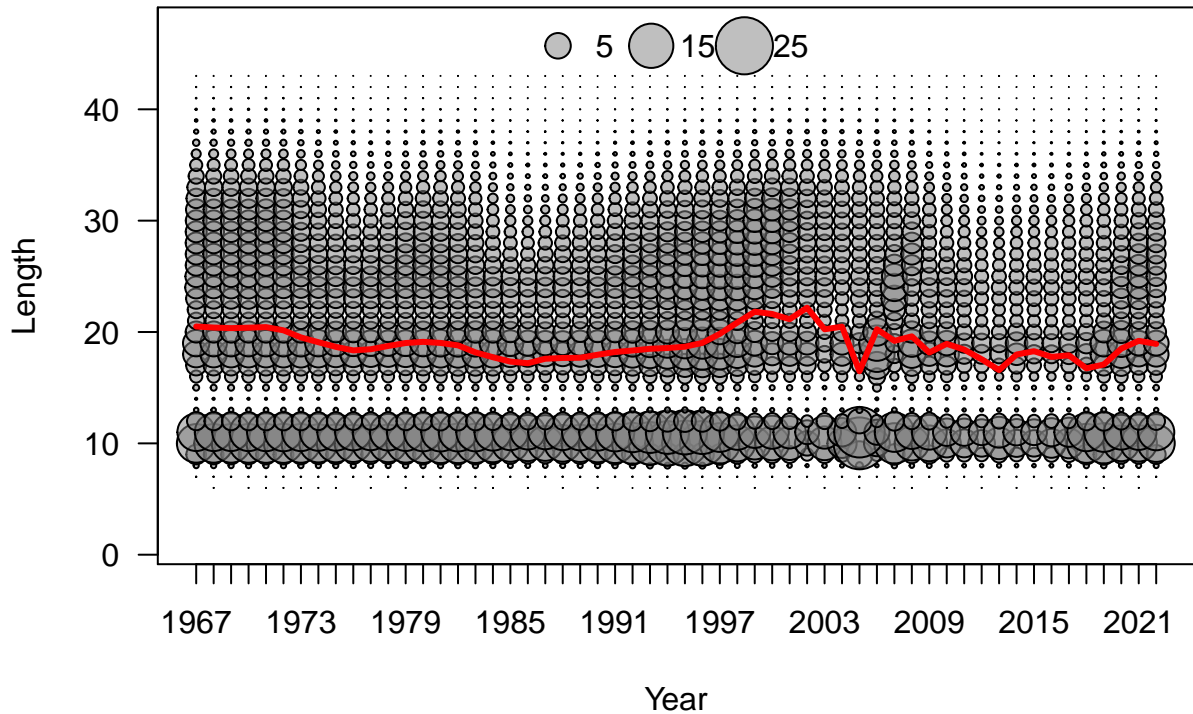
Age

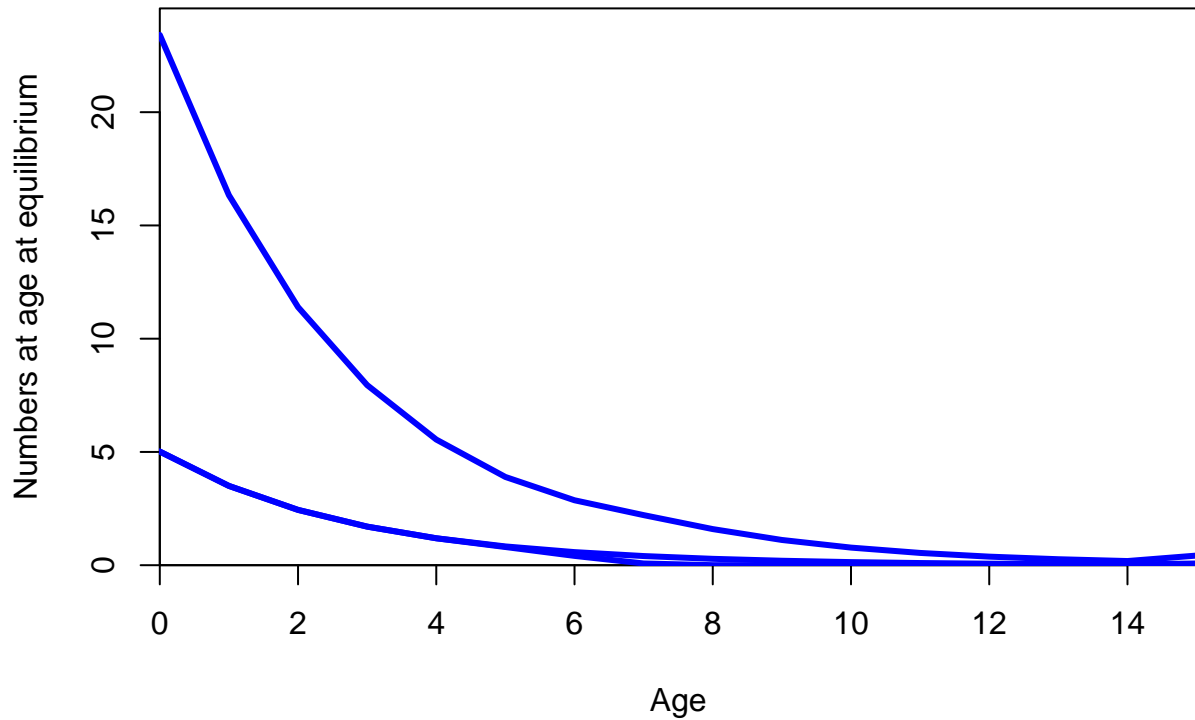


Age



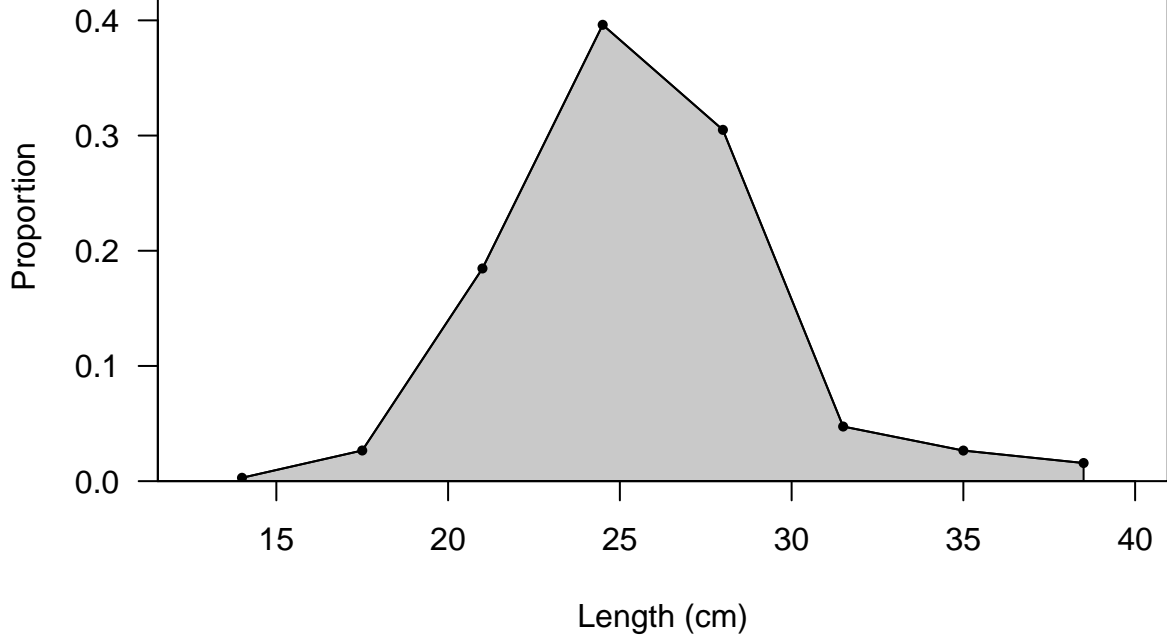


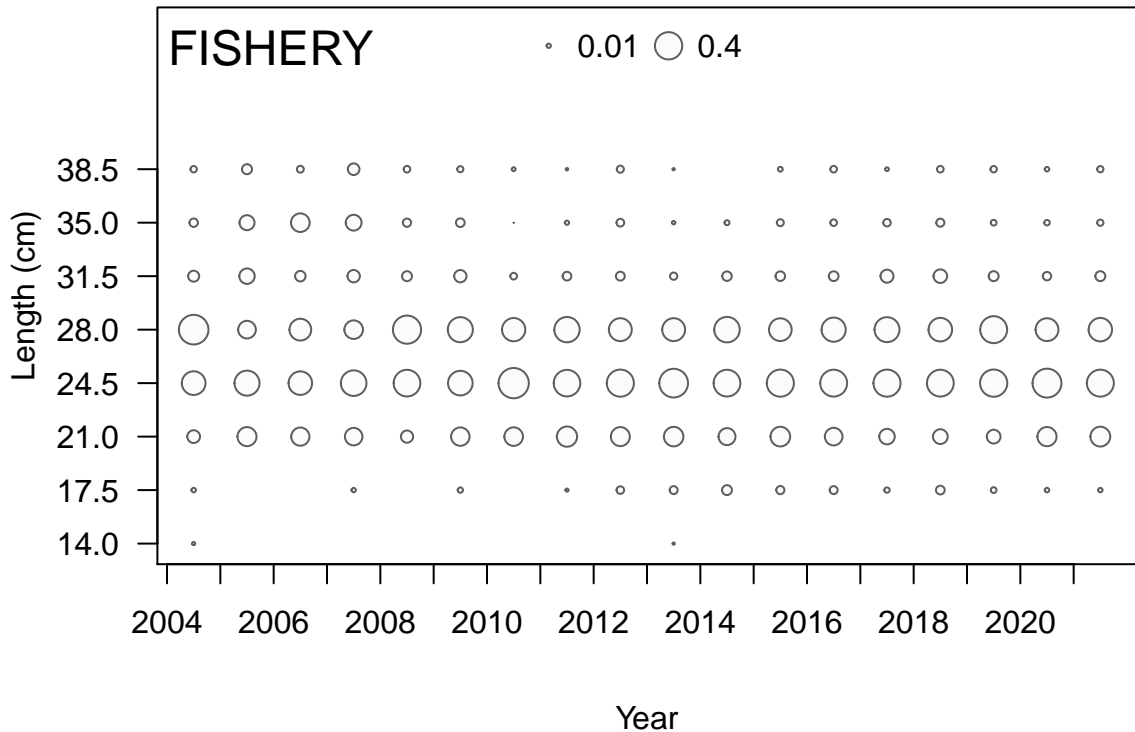


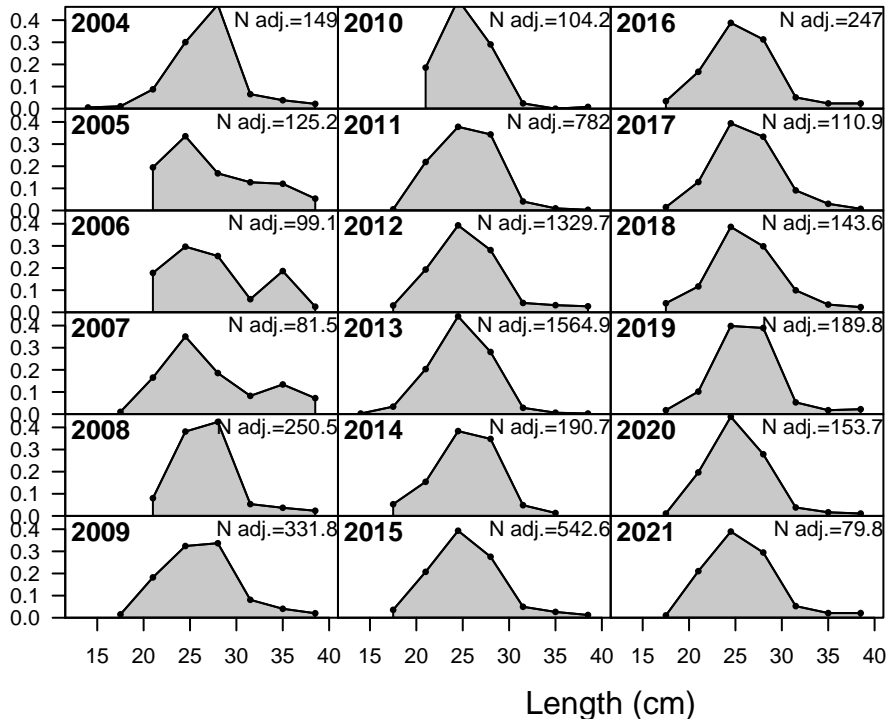


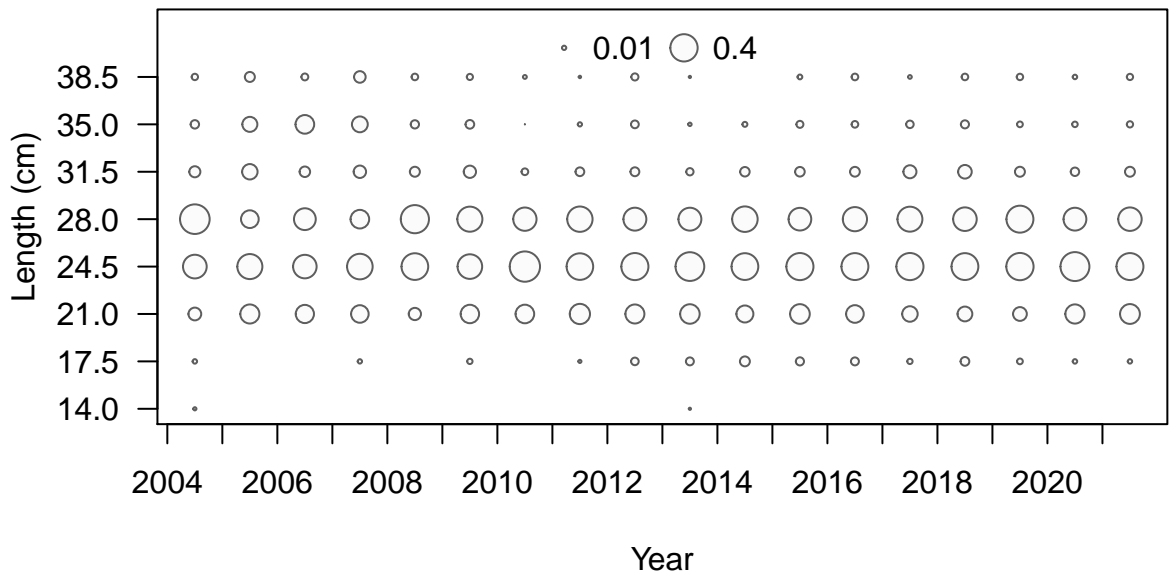
FISHERY

Sum of N adj.=6476

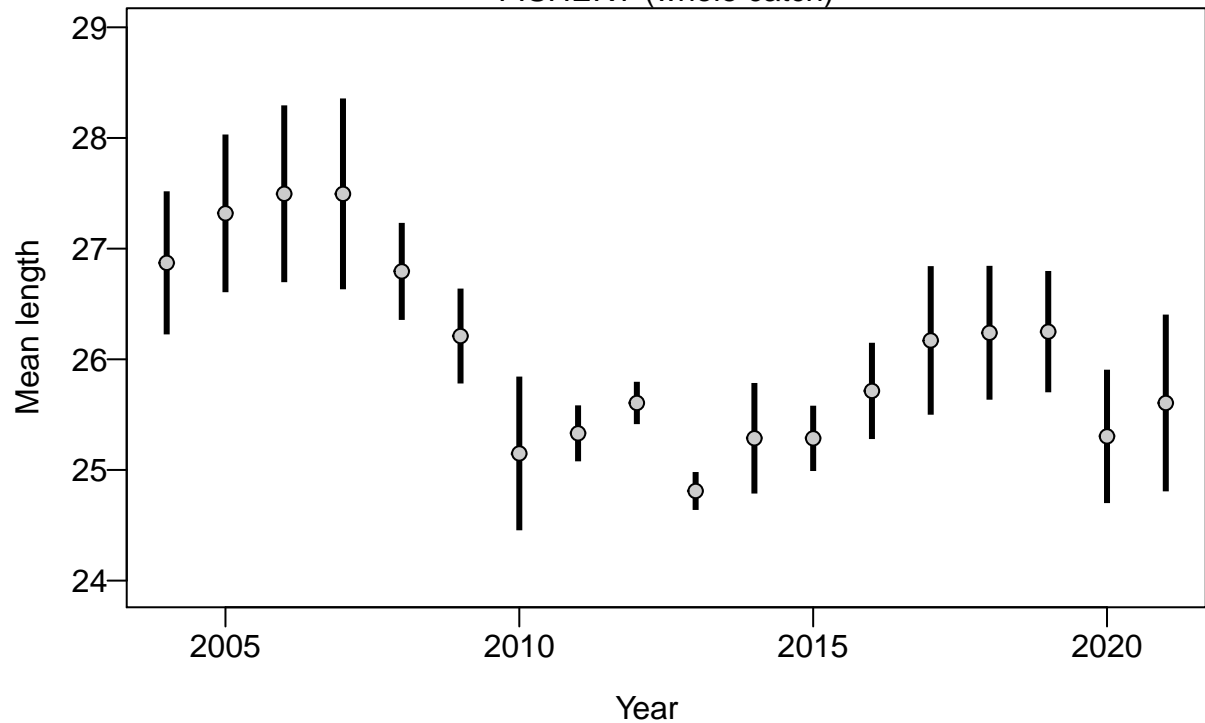






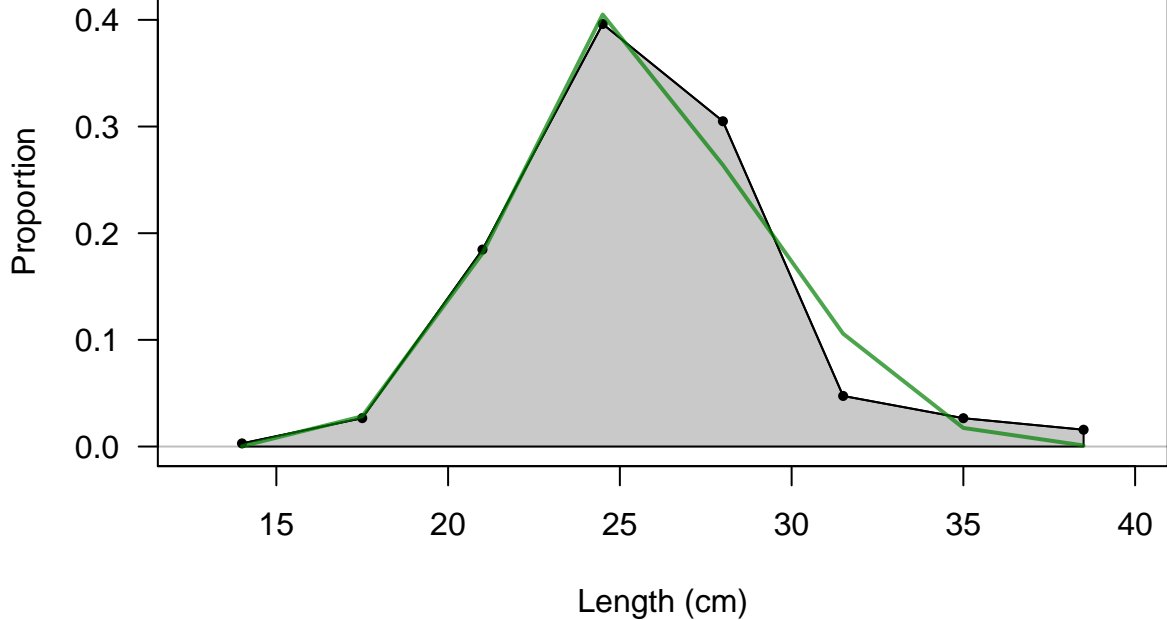


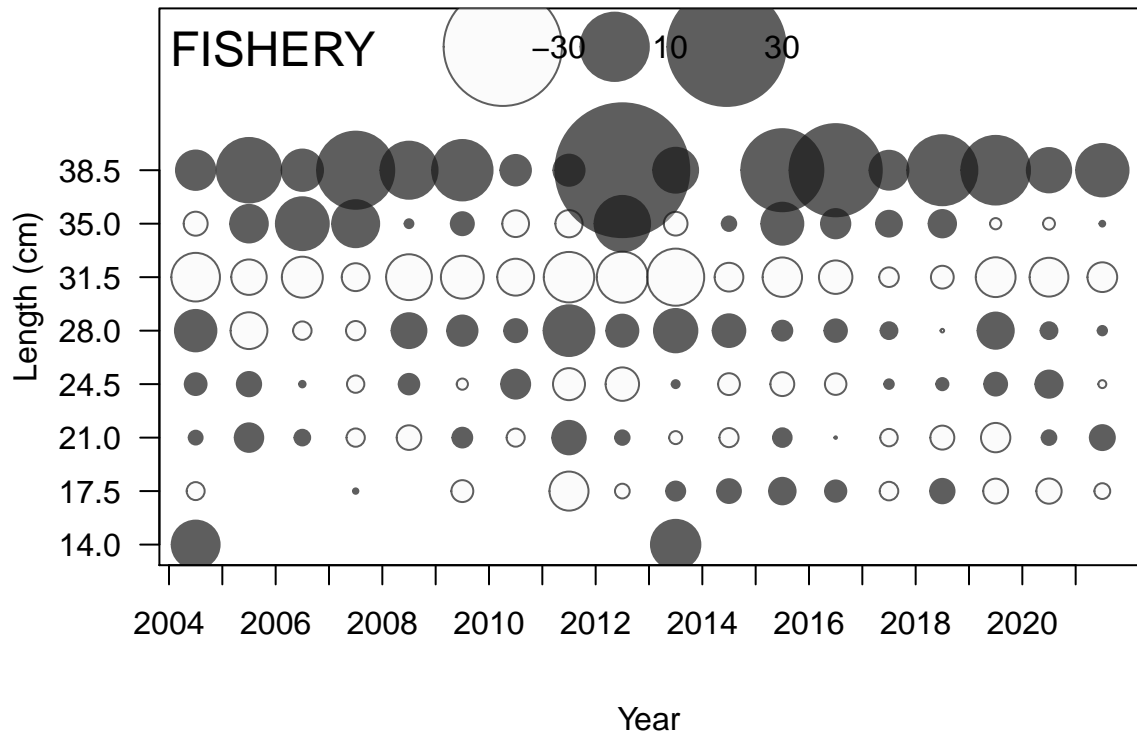
FISHERY (whole catch)



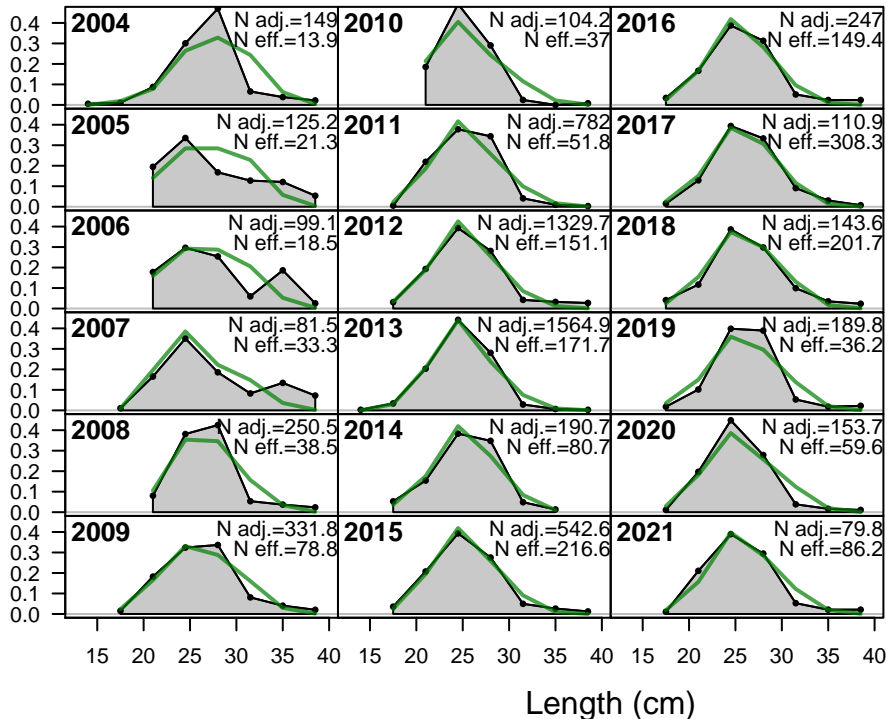
FISHERY

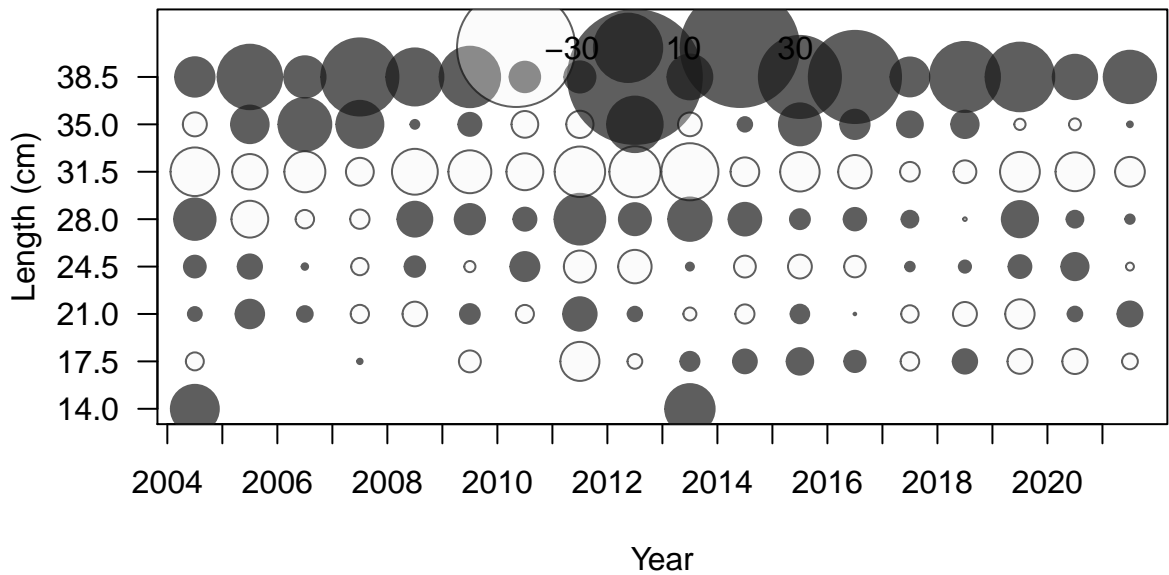
Sum of N adj.=6476
Sum of N eff.=1754.7

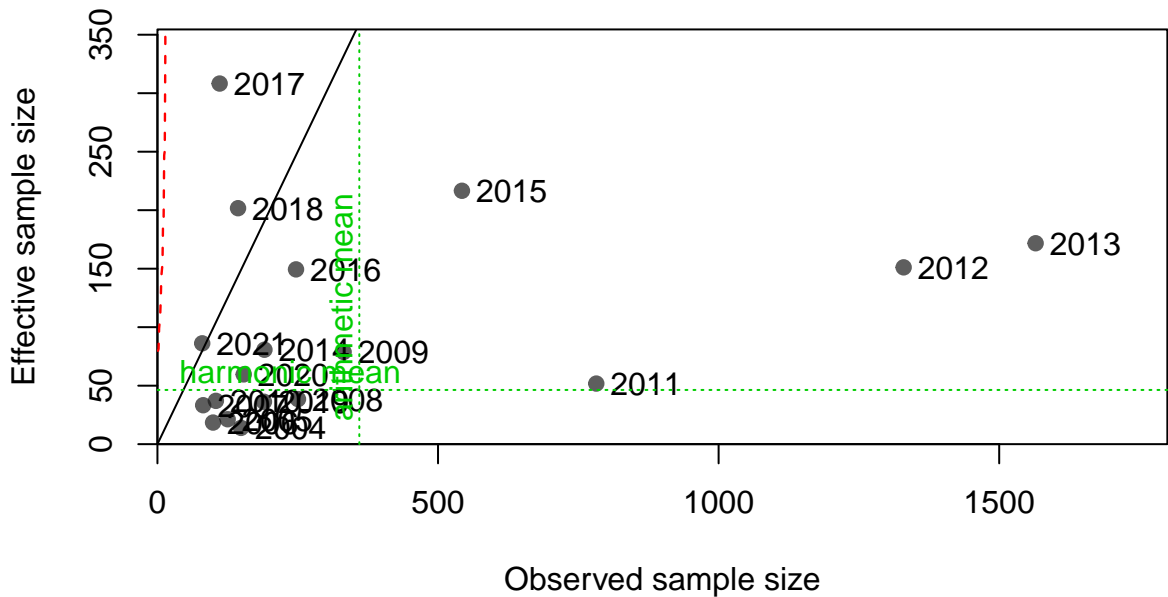




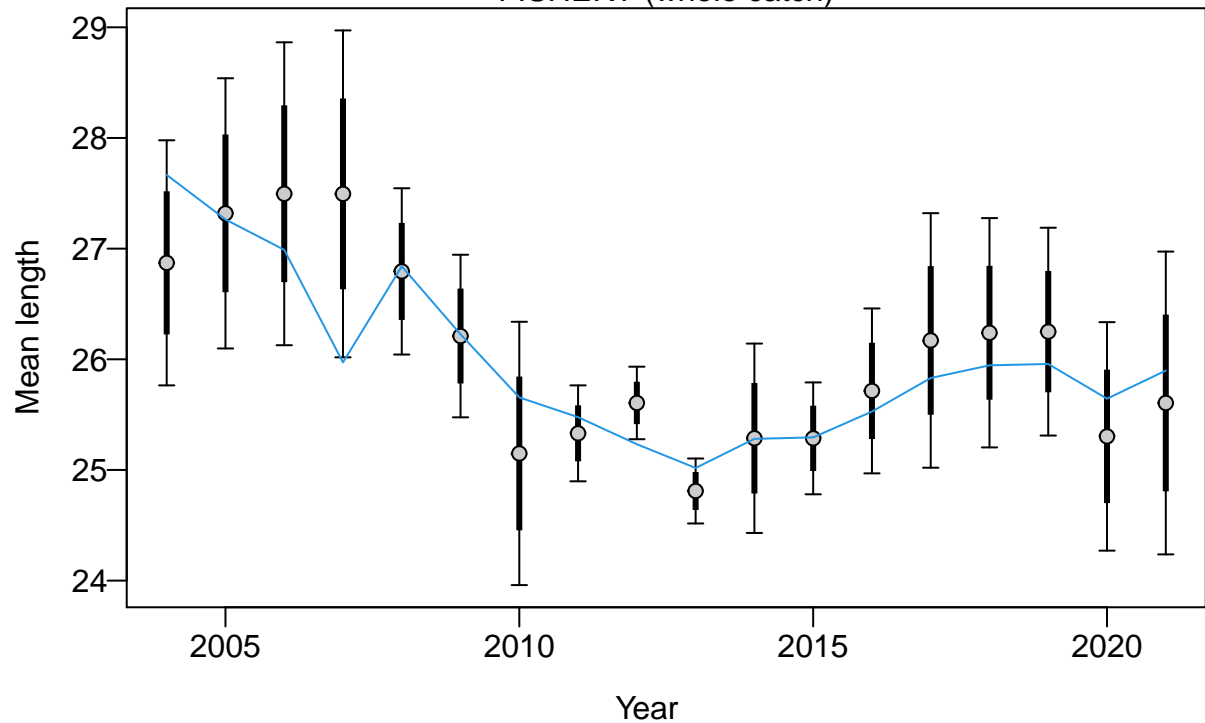
Proportion

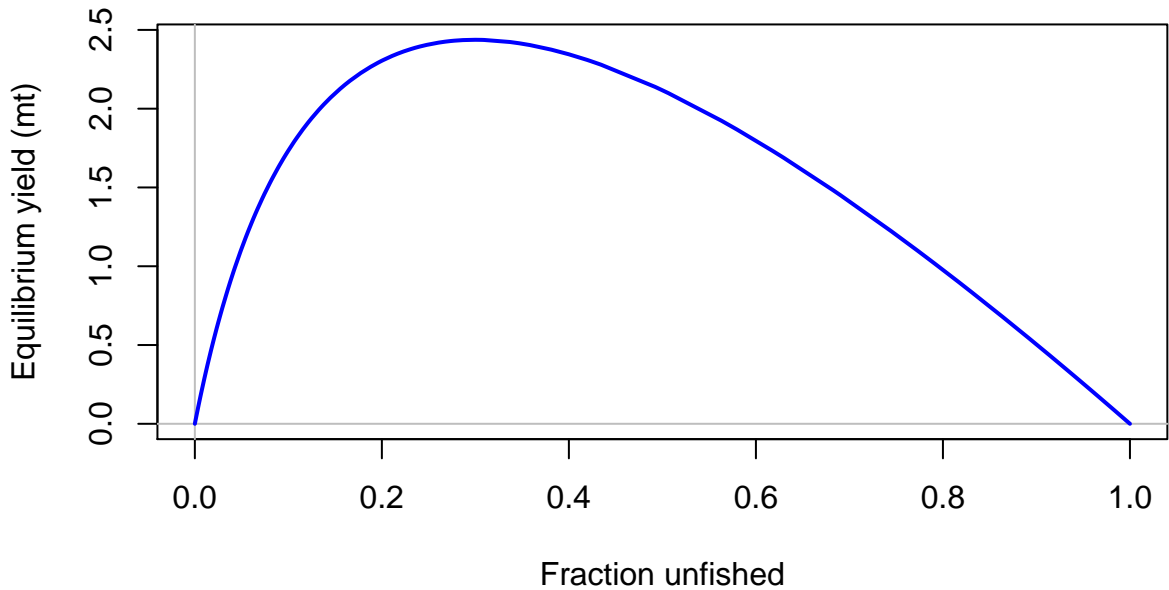


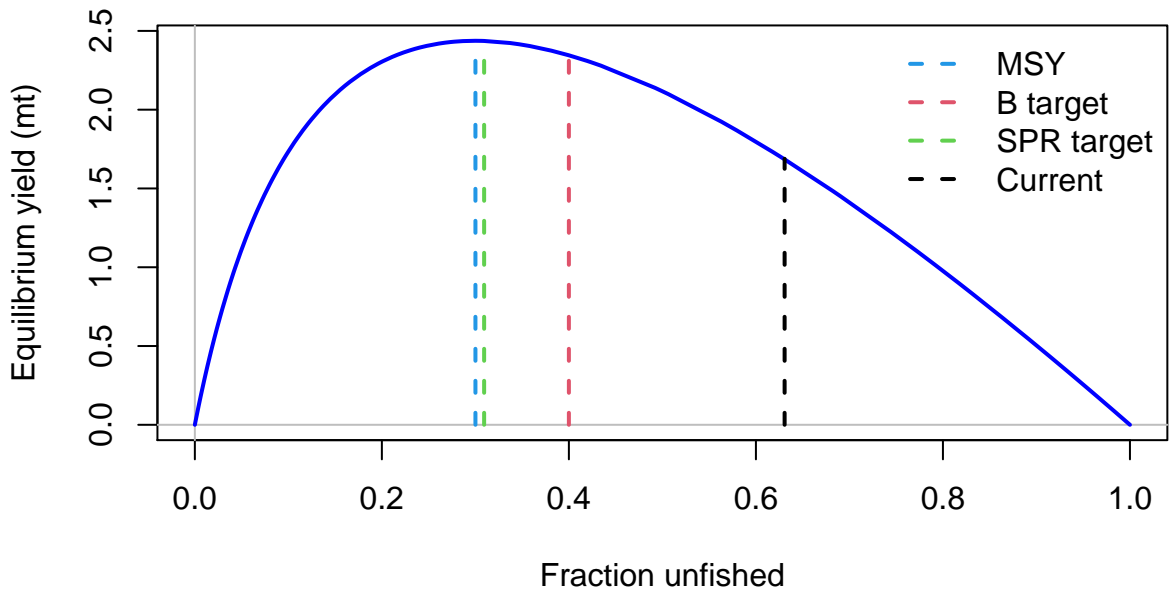


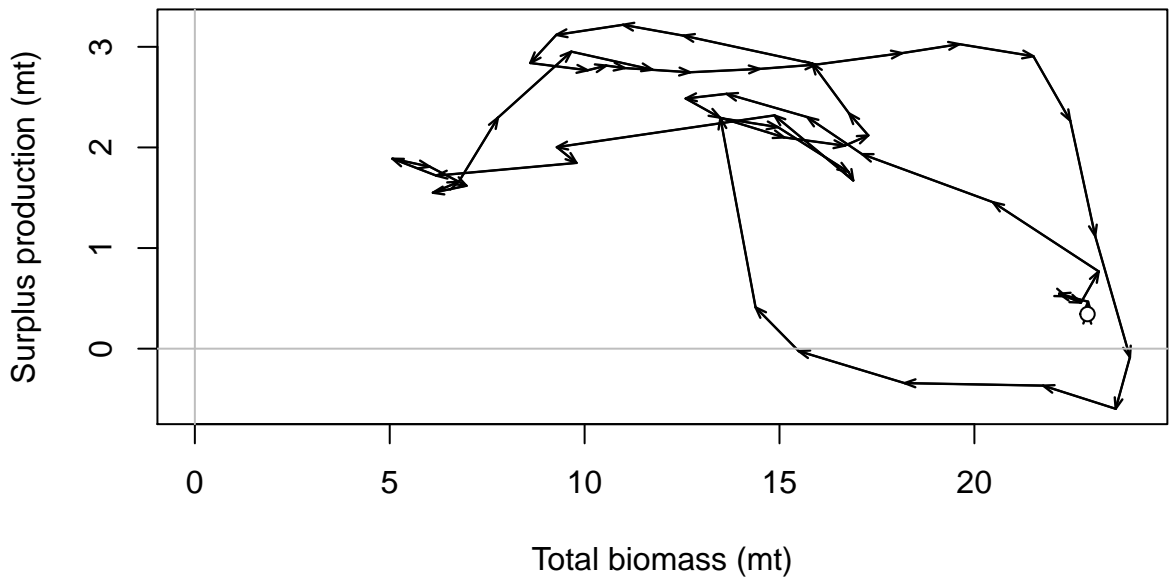


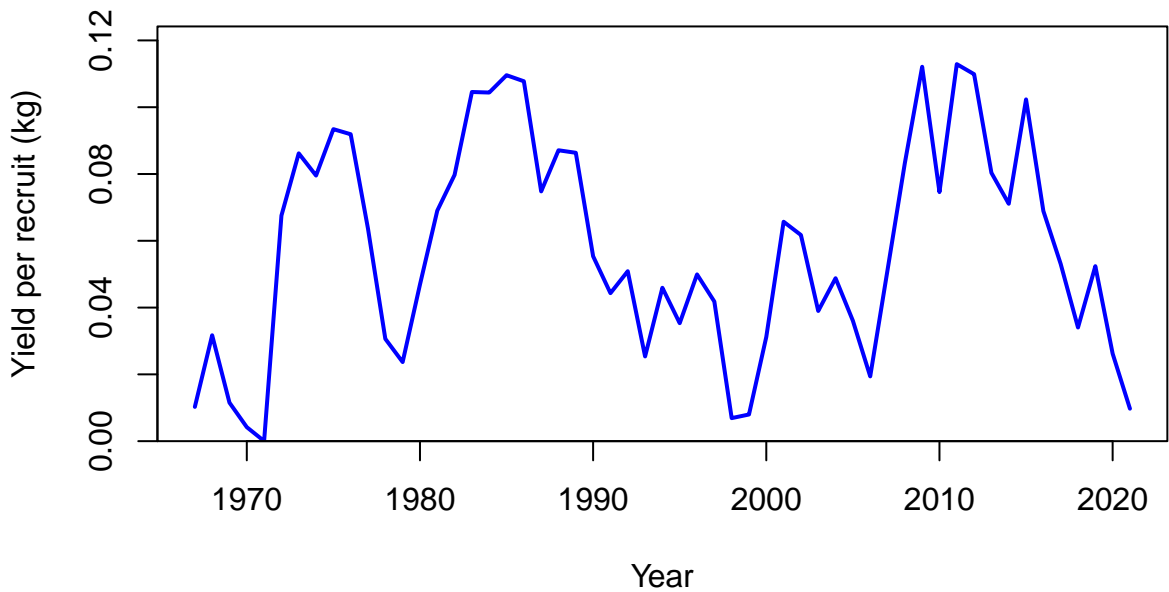
FISHERY (whole catch)

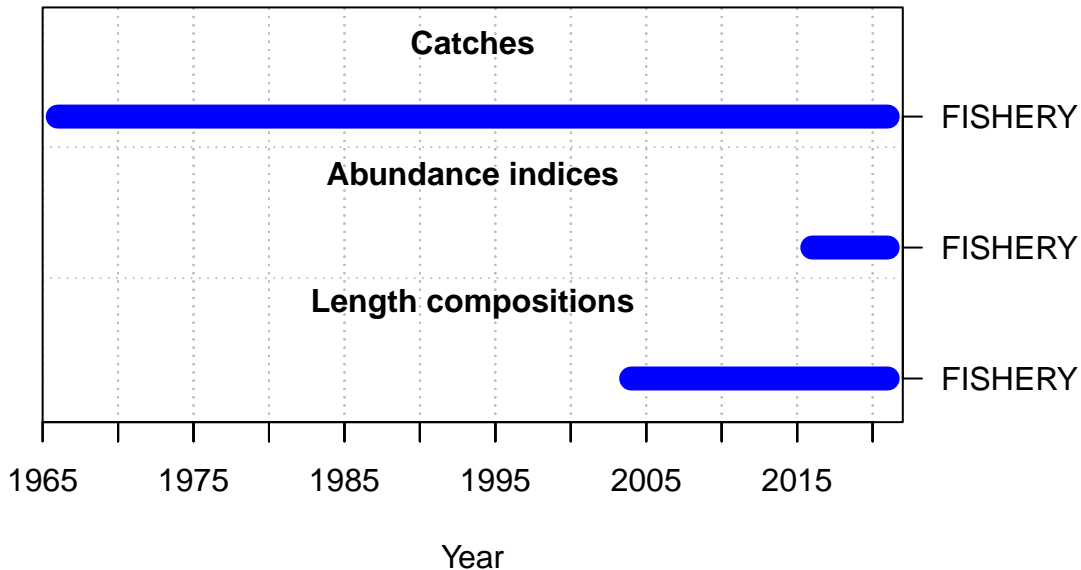


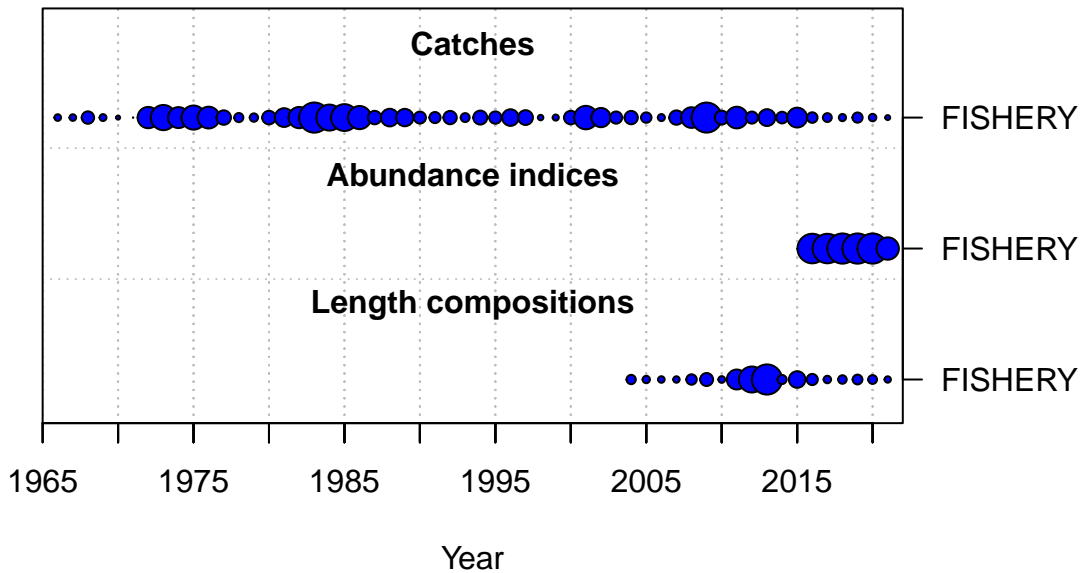




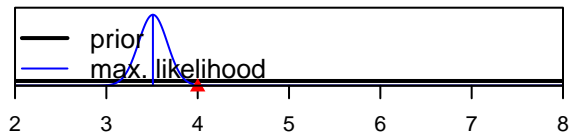








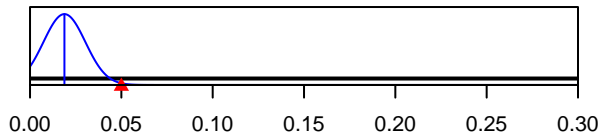
SR_LN(R0)



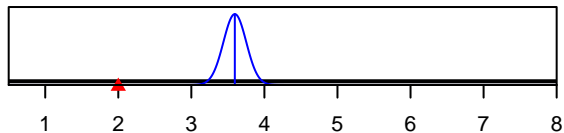
Size_inflection_FISHERY(1)



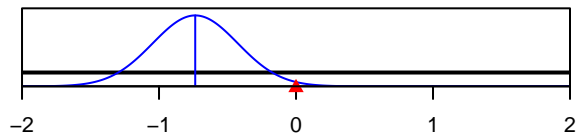
InitF_seas_1_flt_1FISHERY



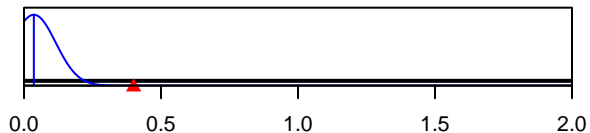
Size_95%width_FISHERY(1)



LnQ_base_FISHERY(1)



Q_extraSD_FISHERY(1)



Parameter value