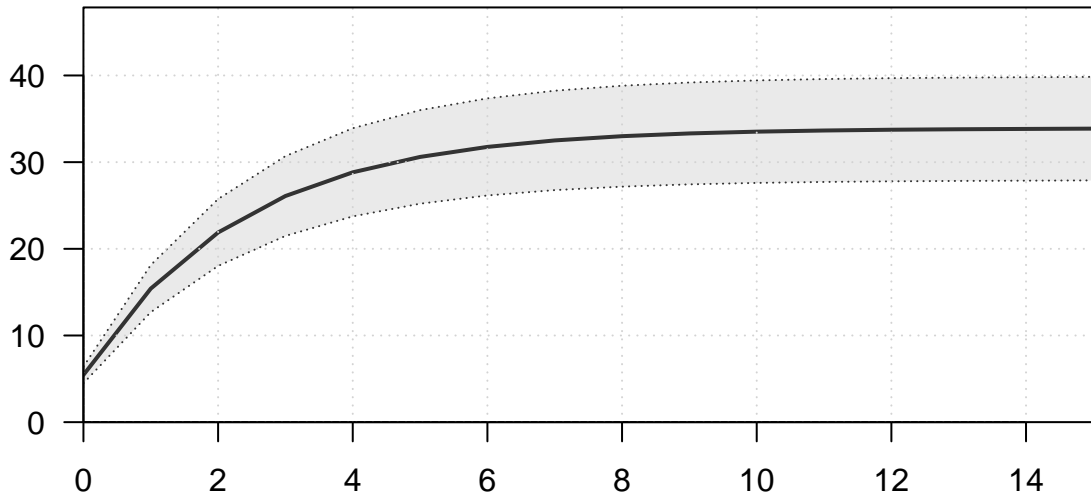
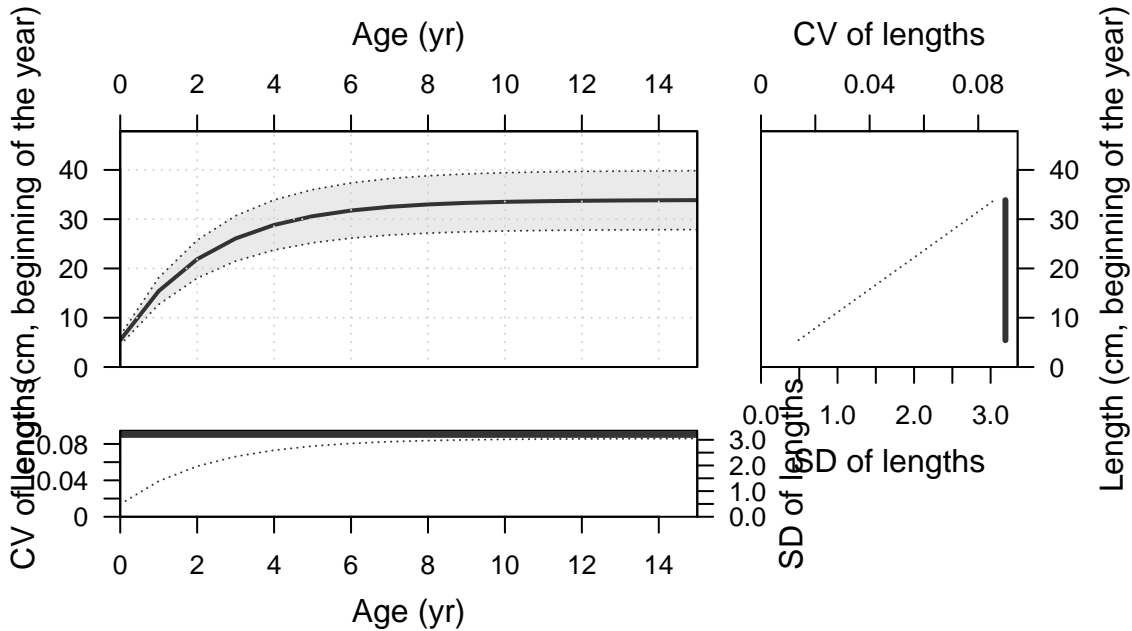


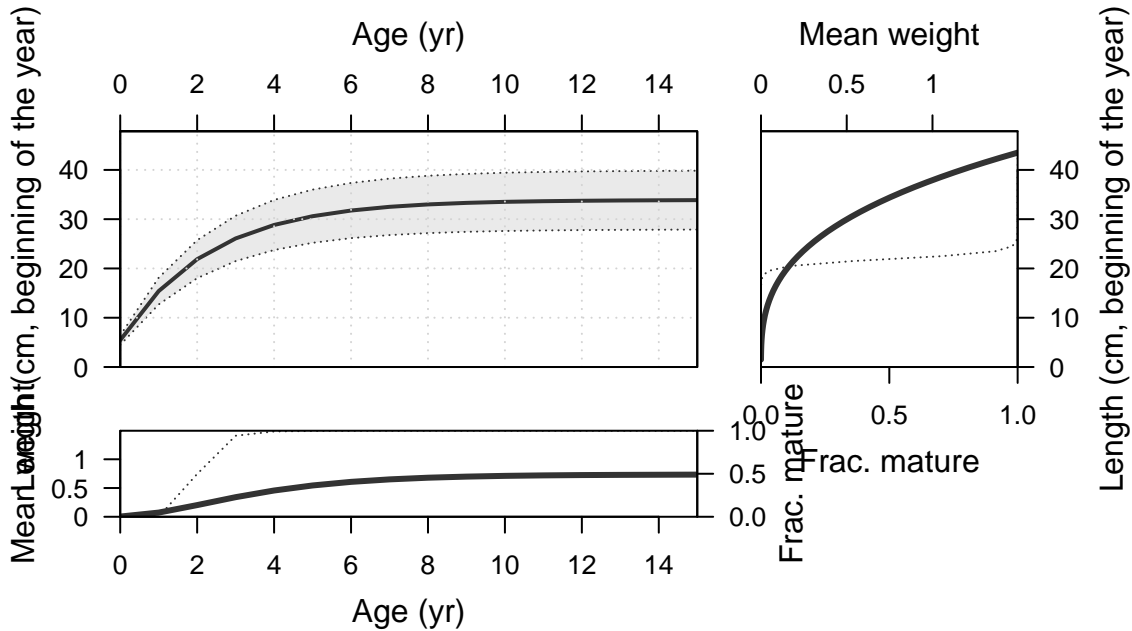
Plots created using the 'r4ss' package in R
Stock Synthesis version: 3.30.19.0
StartTime: Wed Aug 03 10:46:17 2022
Data_File: data.ss
Control_File: control.ss

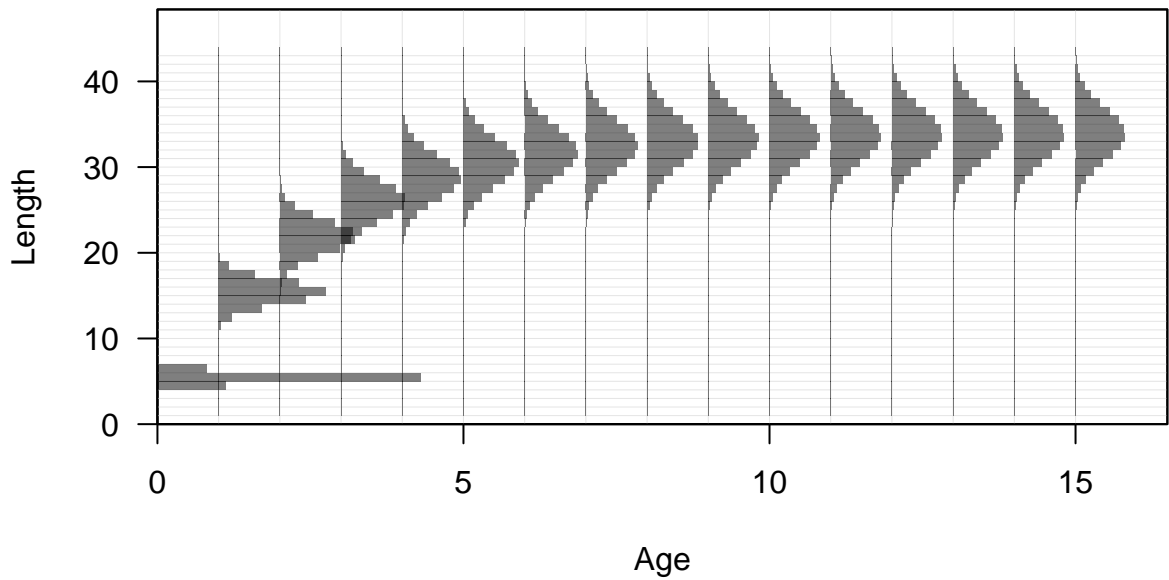
Length (cm, beginning of the year)

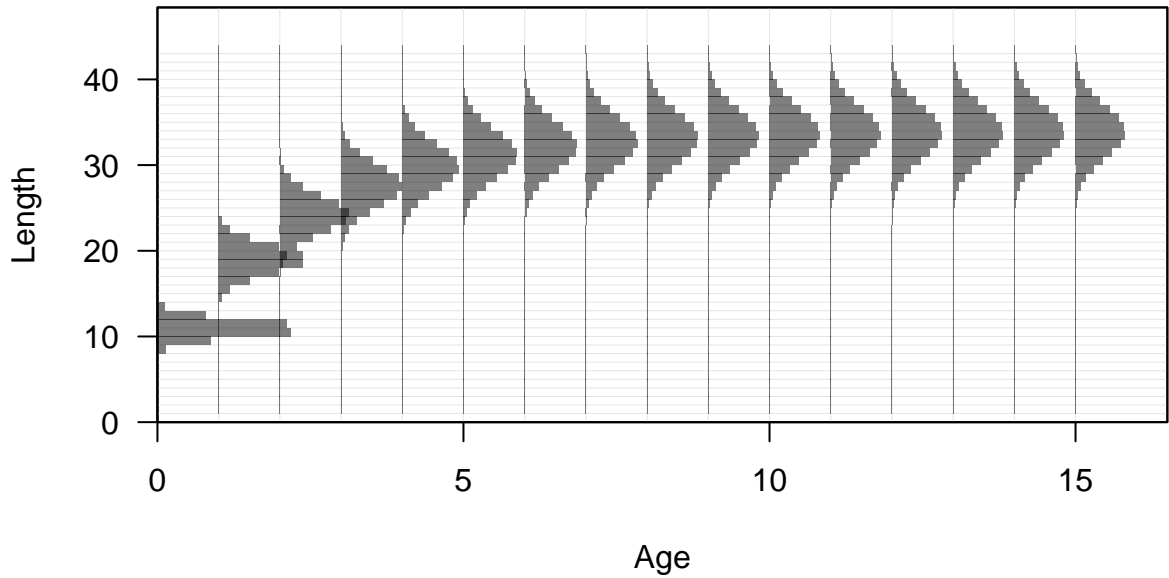


Age (yr)



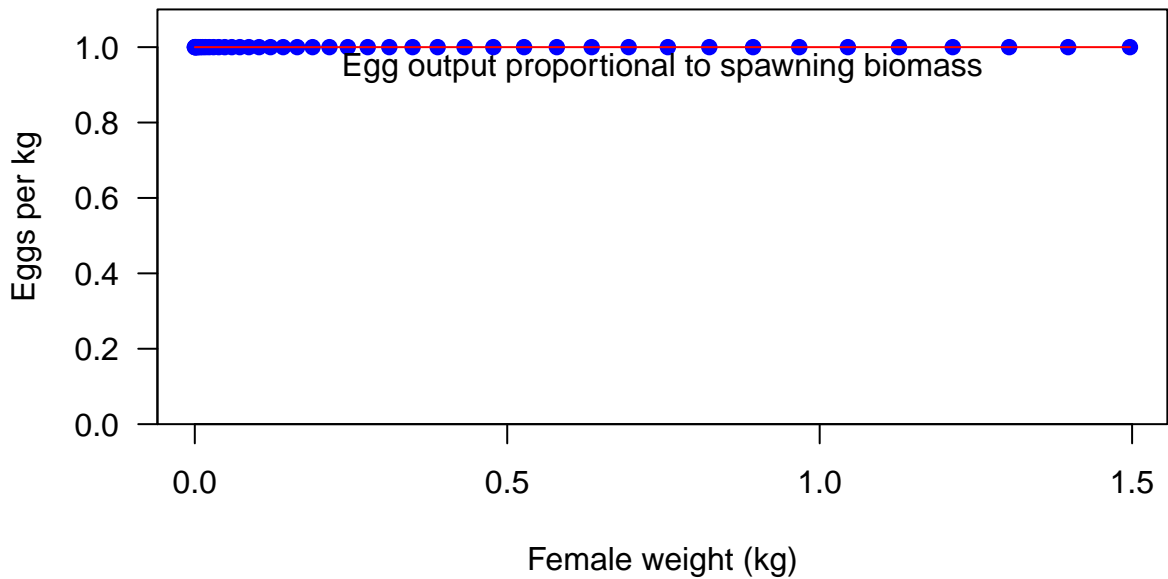








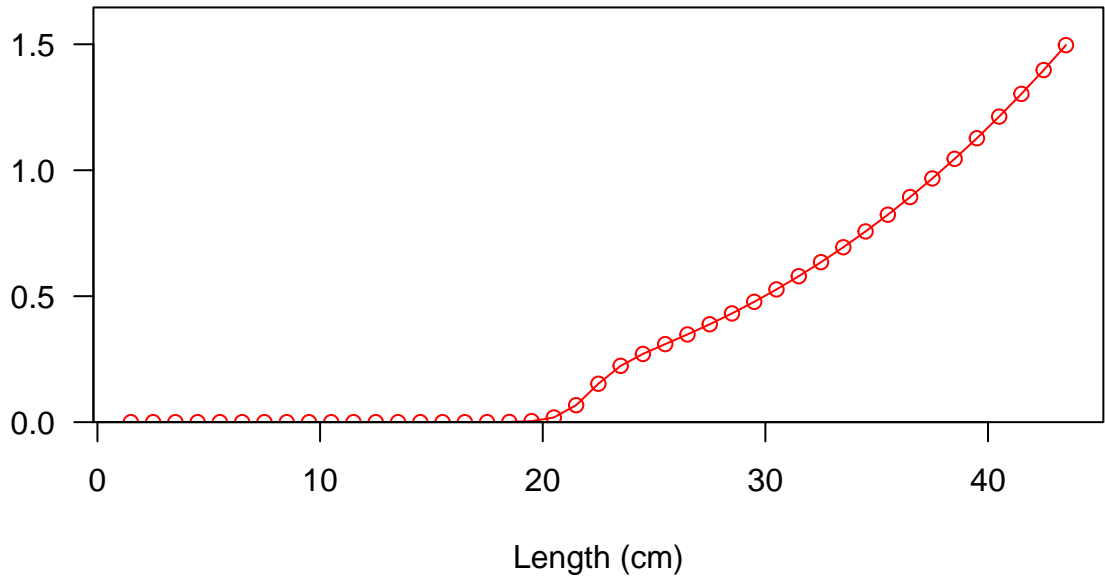


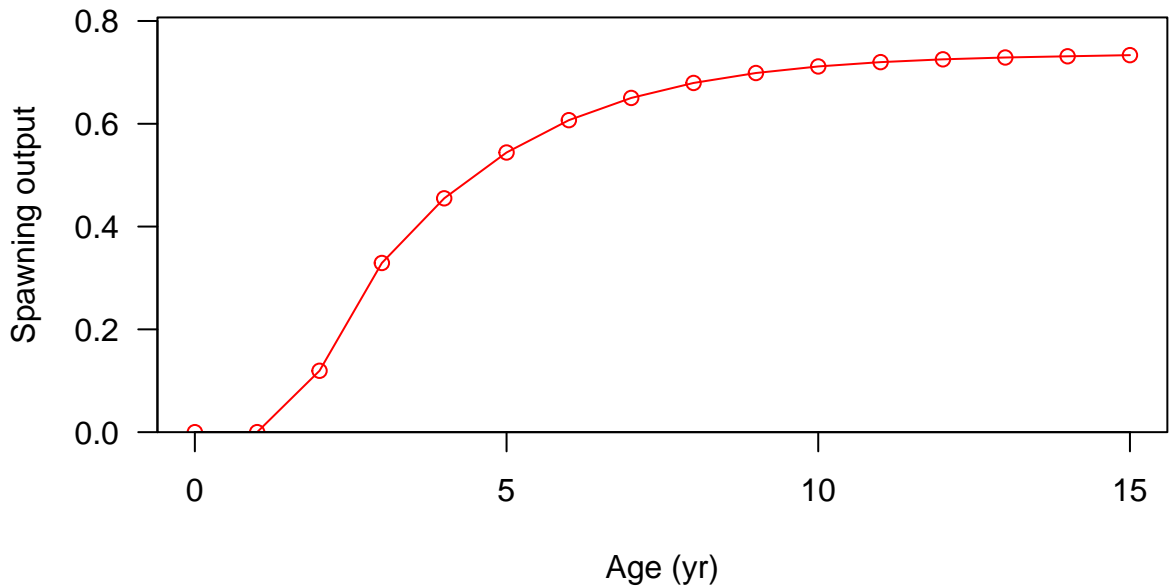






Spawning output

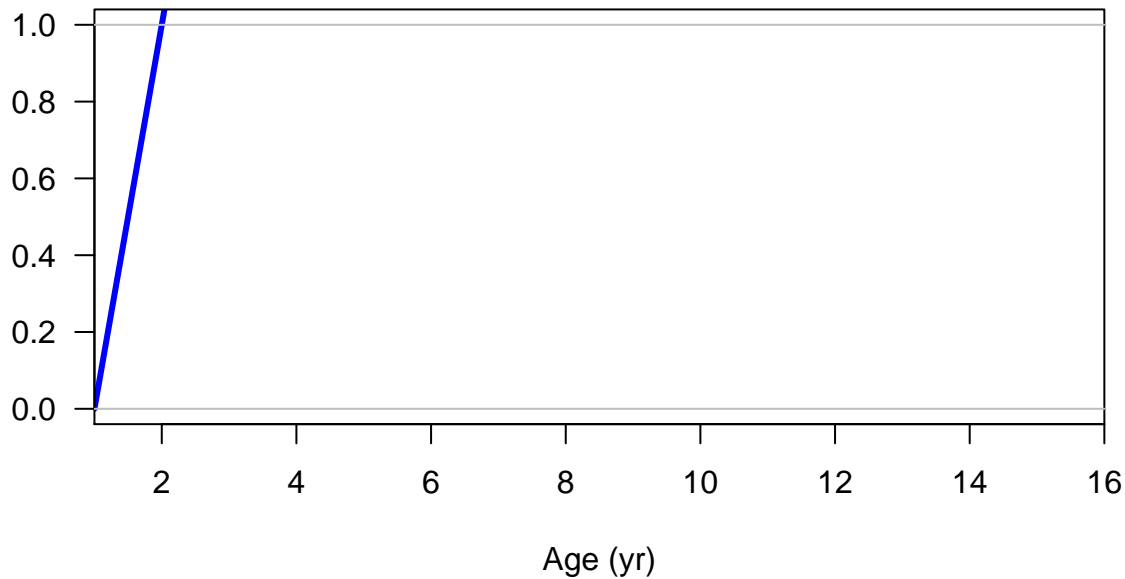




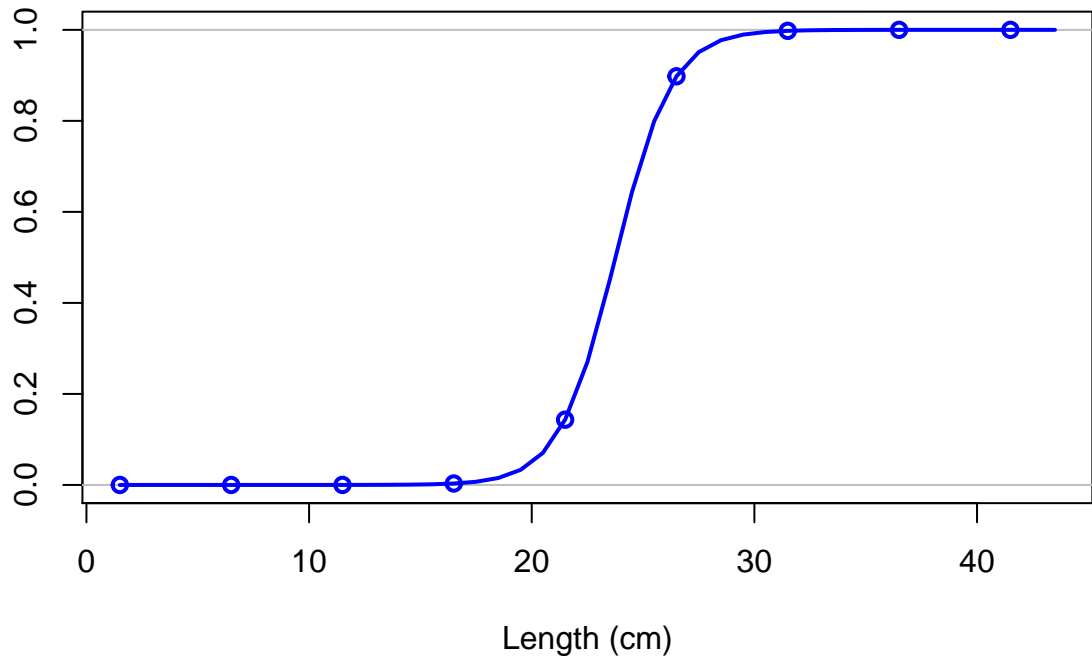
Hermaphroditism transition rate



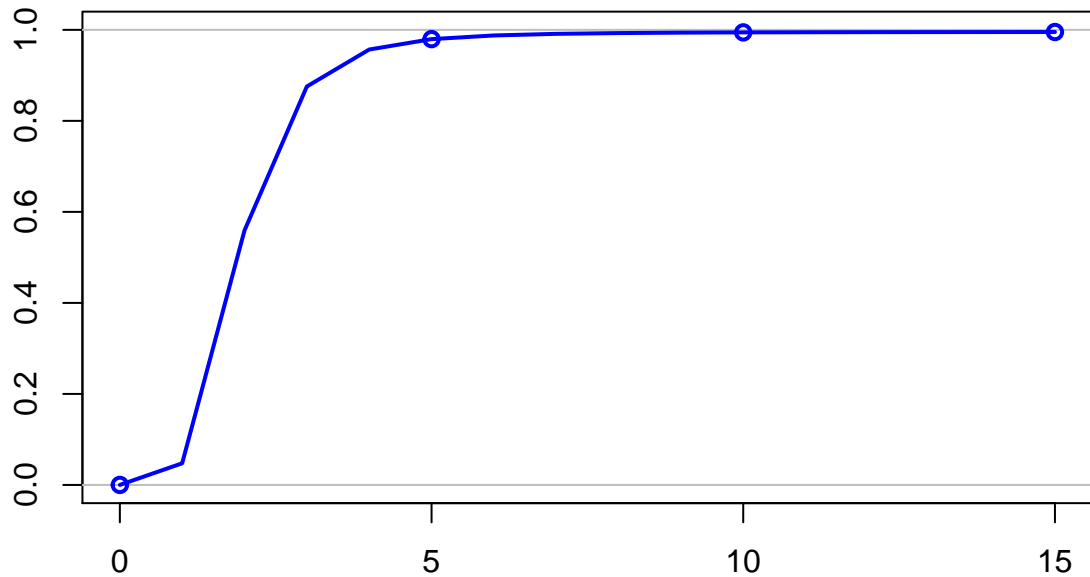
Fraction females by age at equilibrium



Selectivity

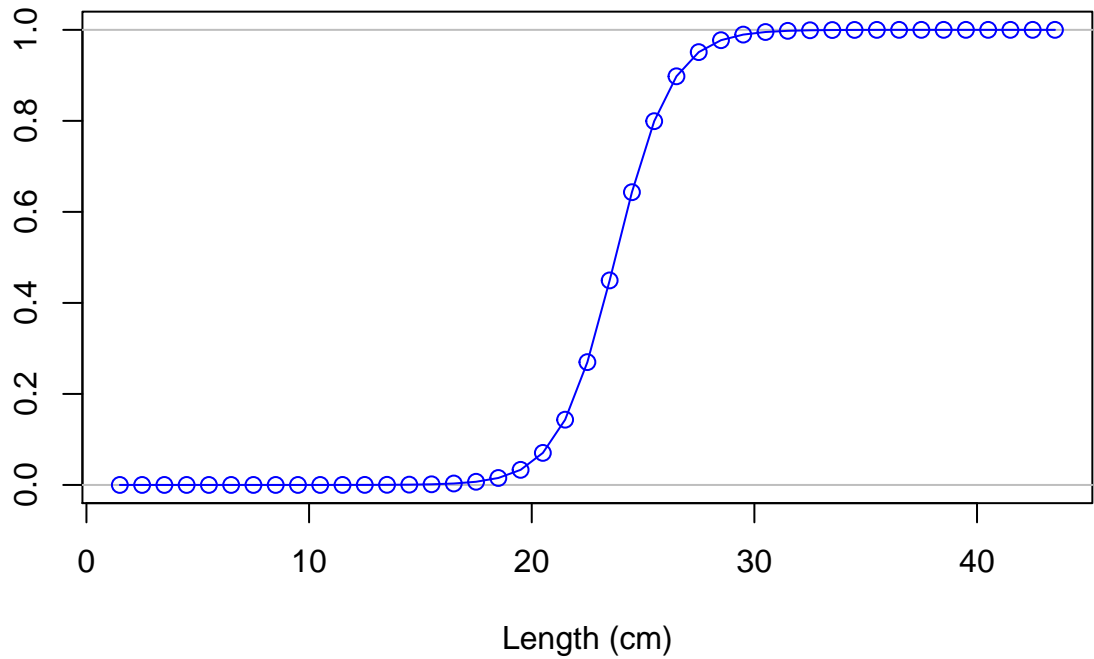


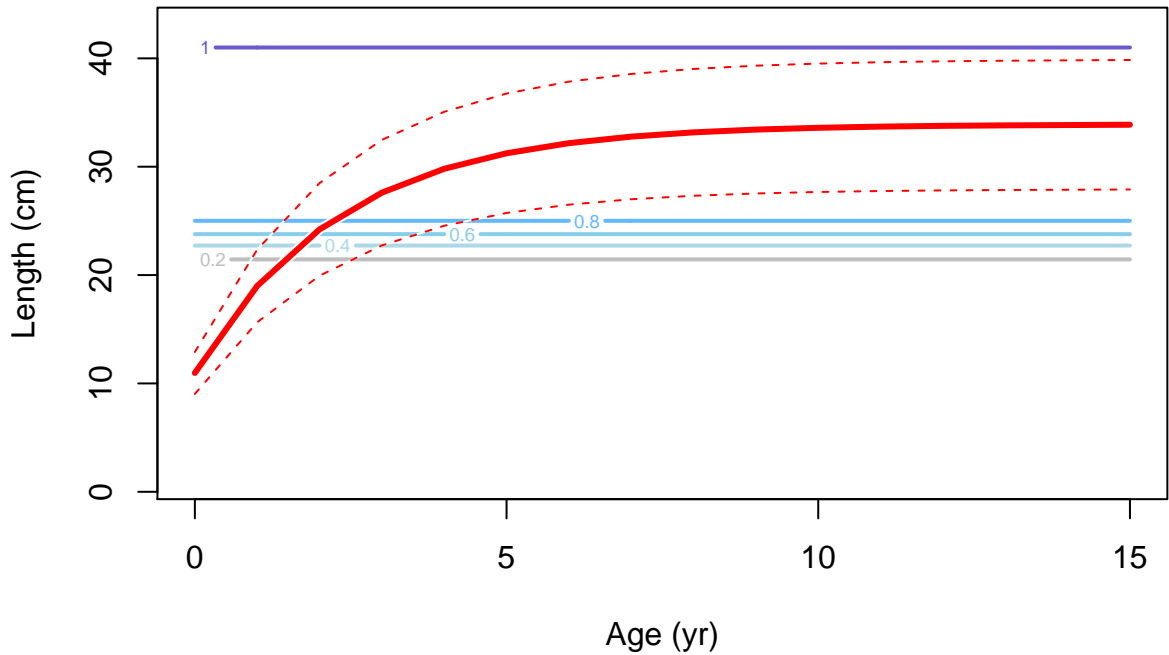
Selectivity

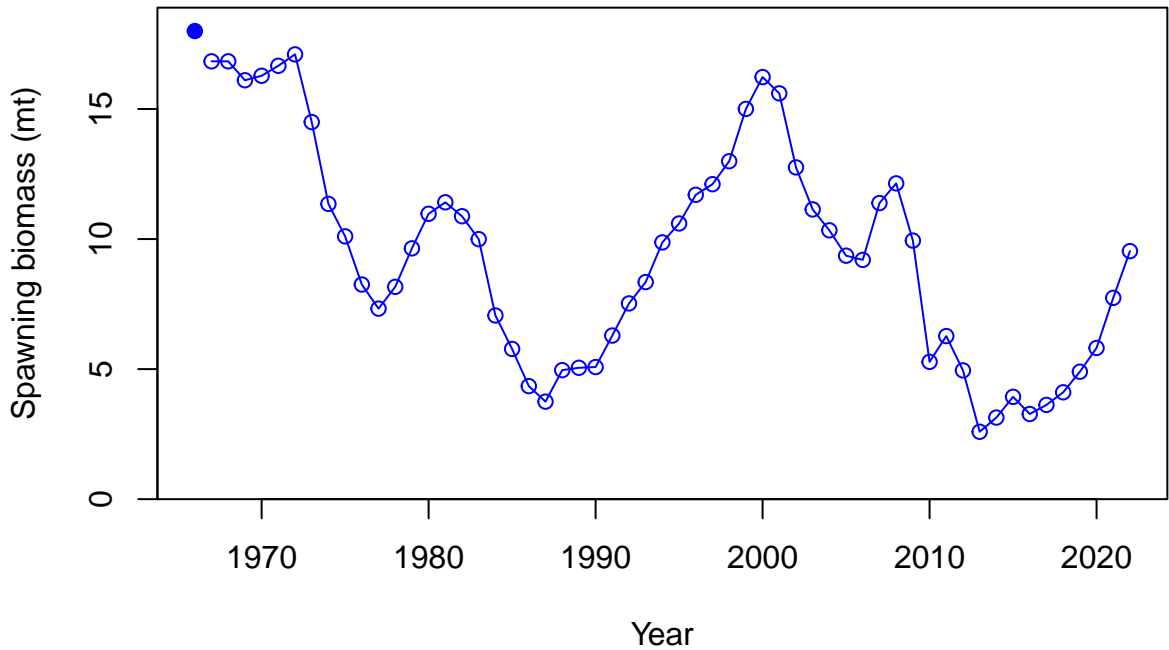


Age (yr)

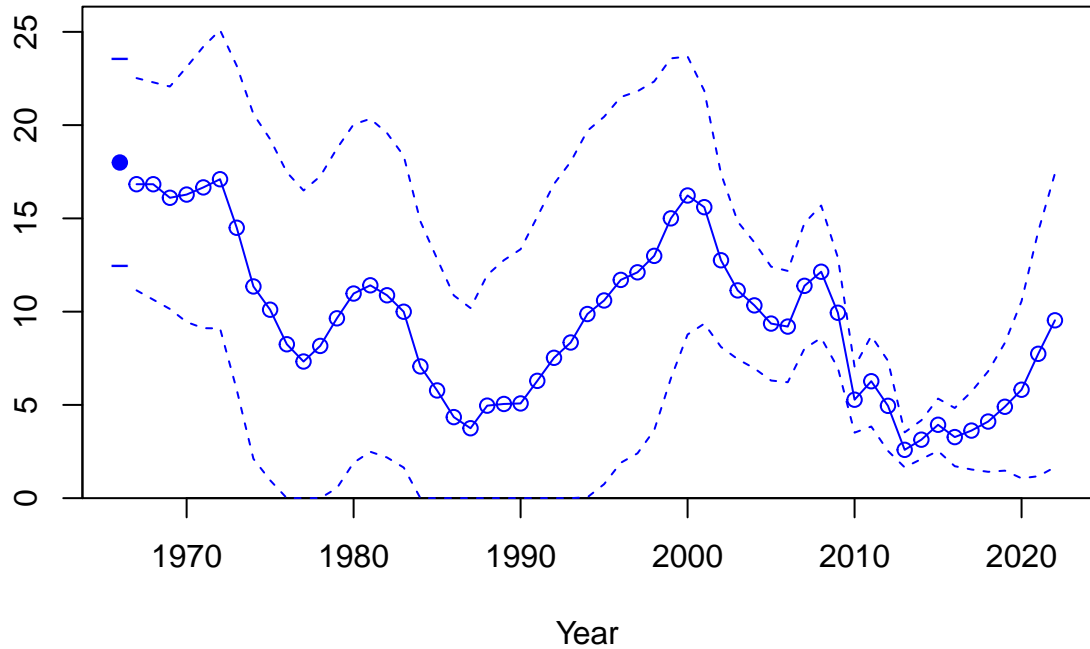
Selectivity



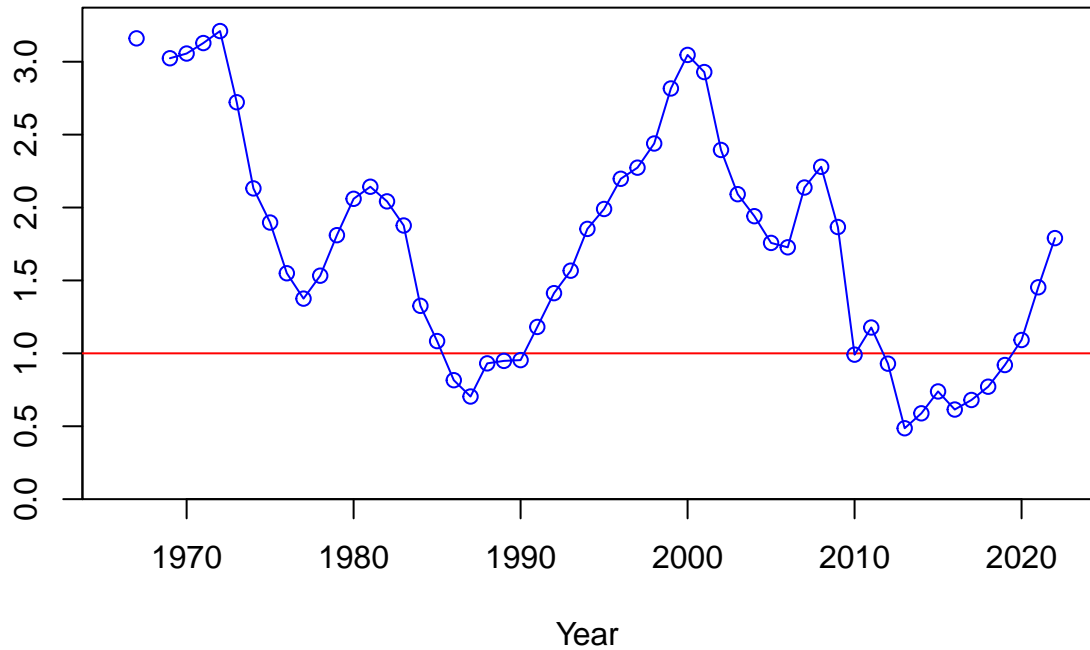




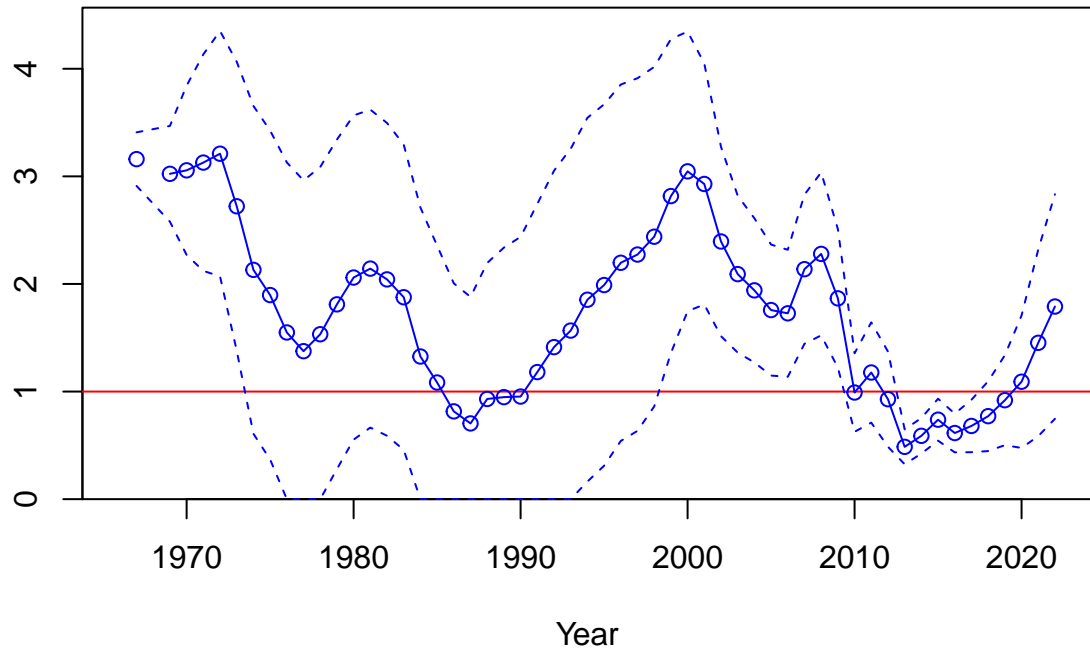
Spawning biomass (mt)

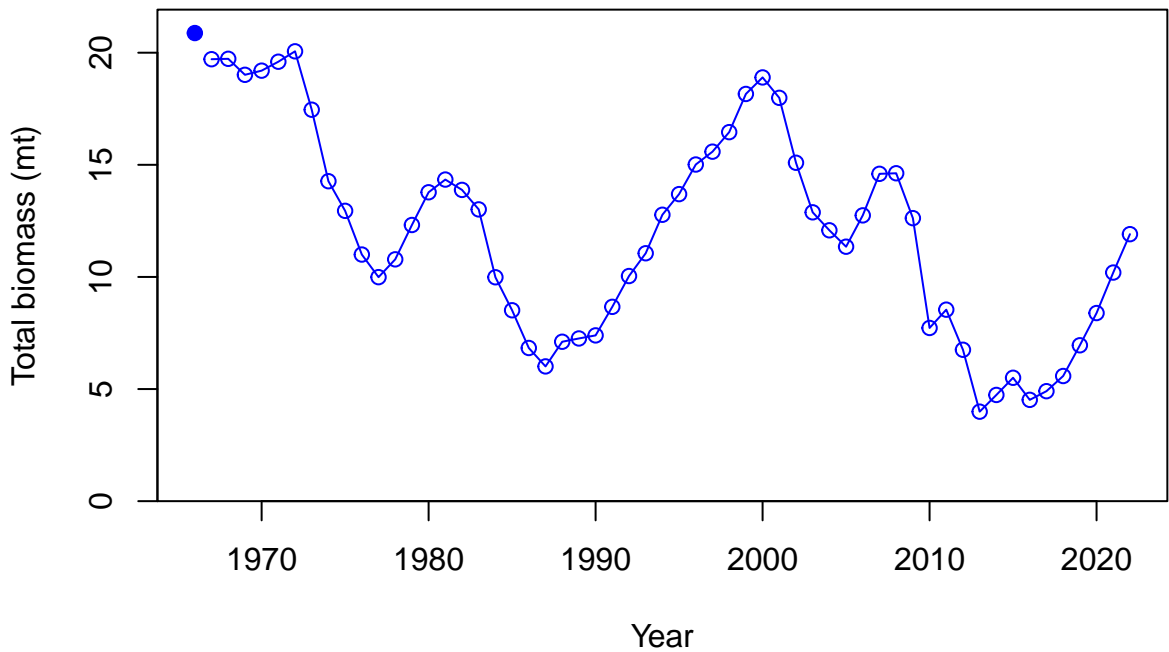


Relative spawning biomass: B/B_{MSY}

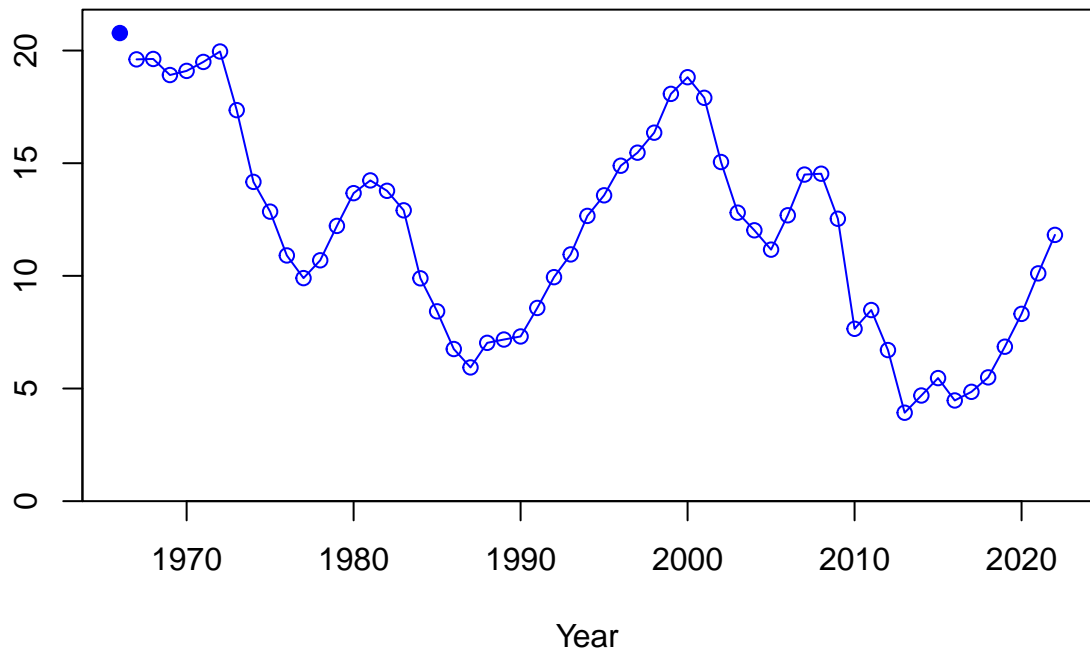


Relative spawning biomass: B/B_{MSY}

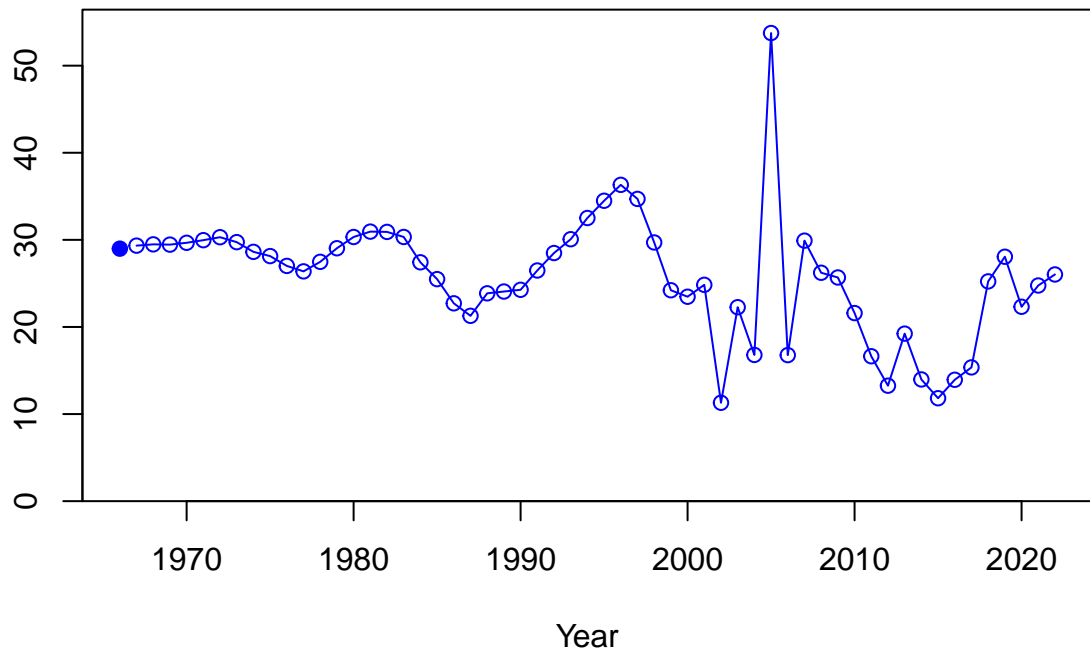




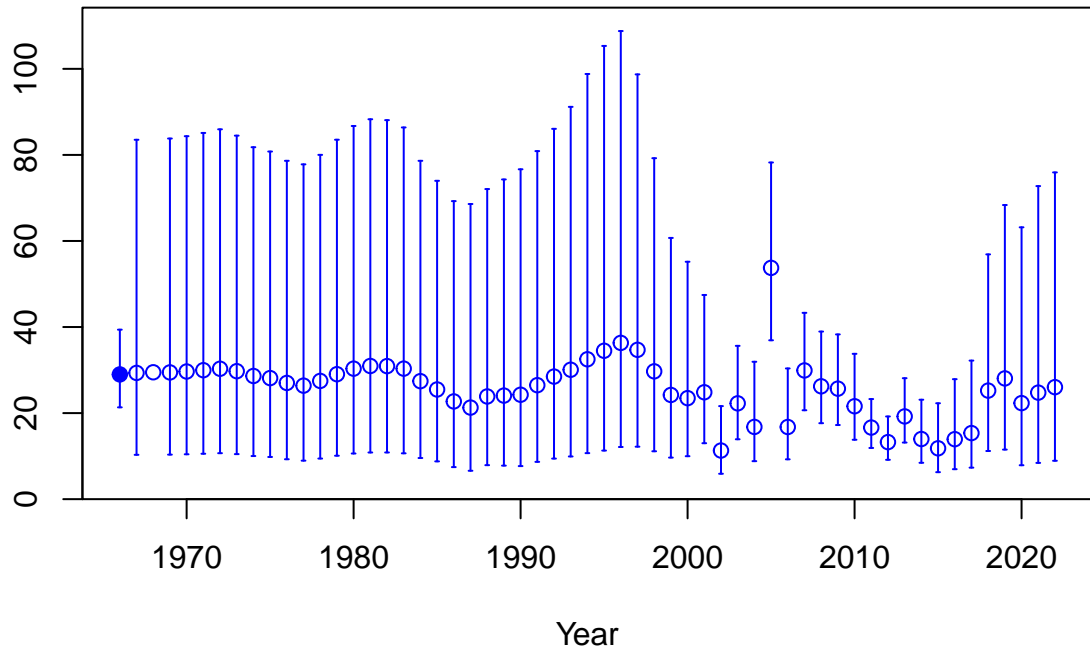
Summary biomass (mt)



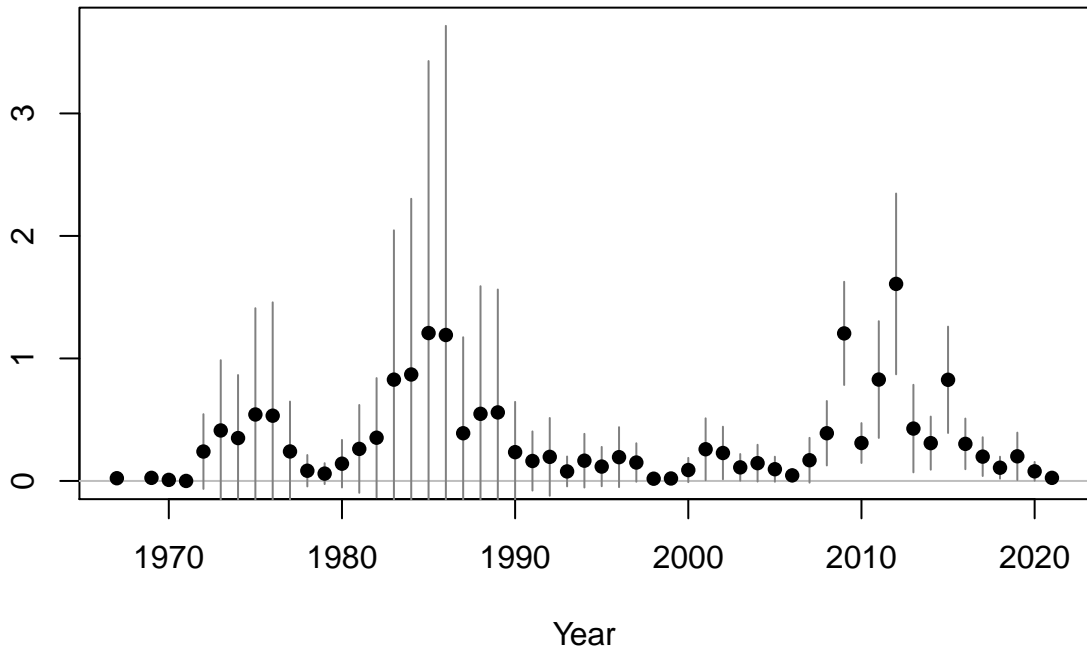
Age-0 recruits (1,000s)

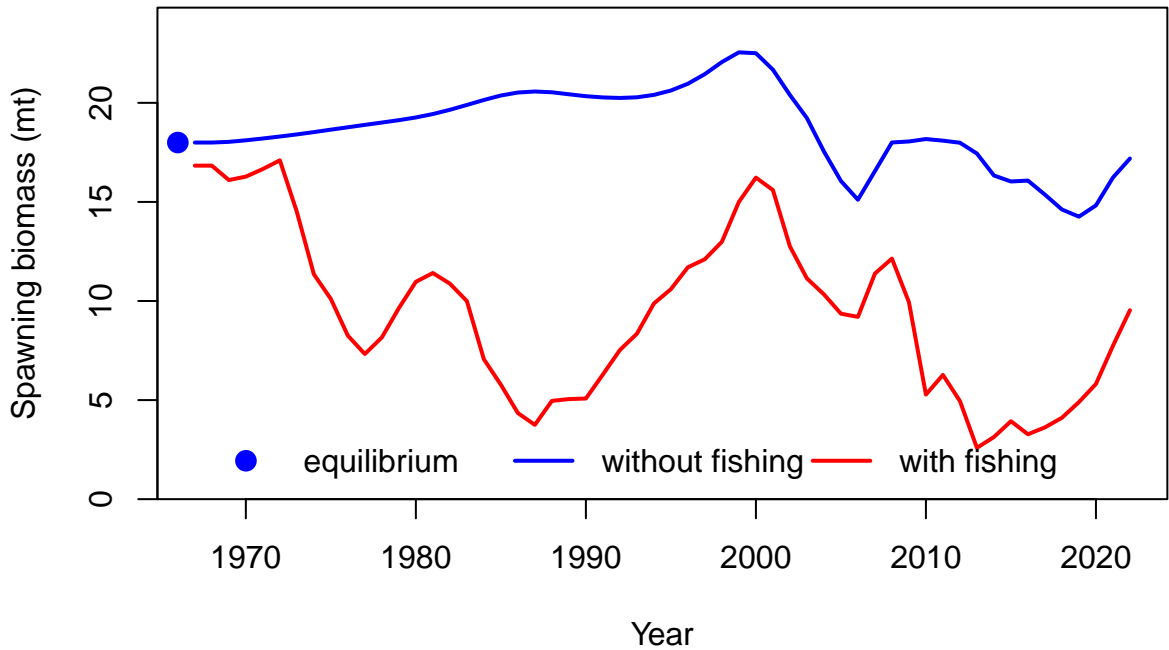


Age-0 recruits (1,000s)



Summary Fishing Mortality





Log recruitment deviation

0.5
0.0
-0.5

1970

1980

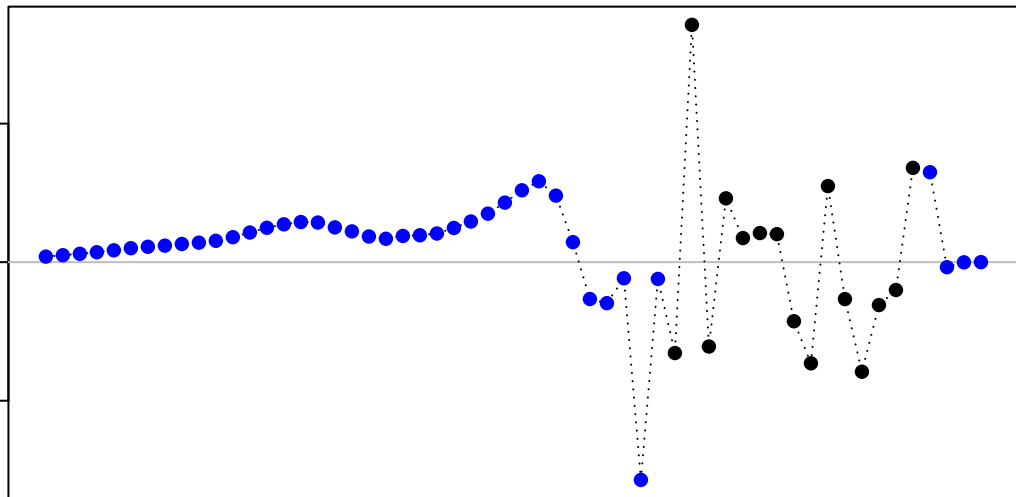
1990

2000

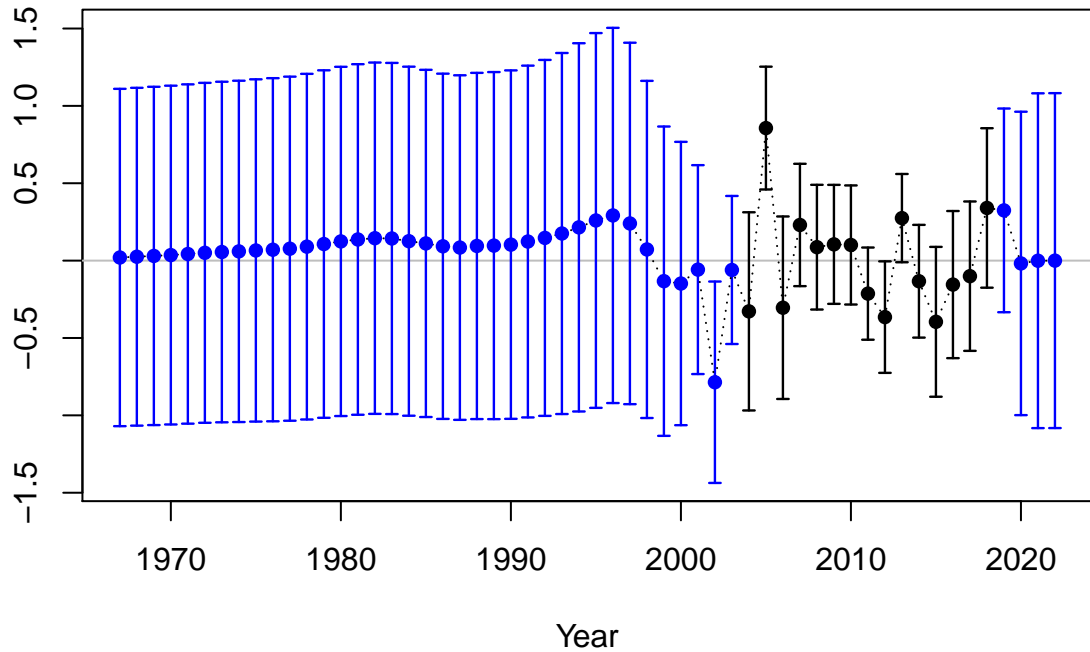
2010

2020

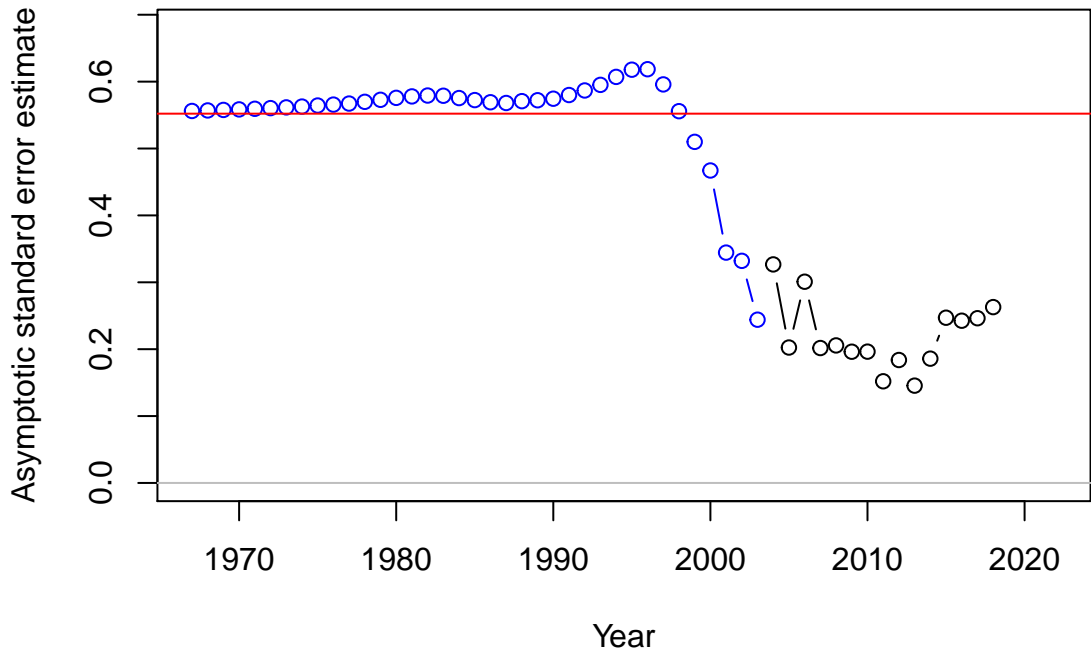
Year

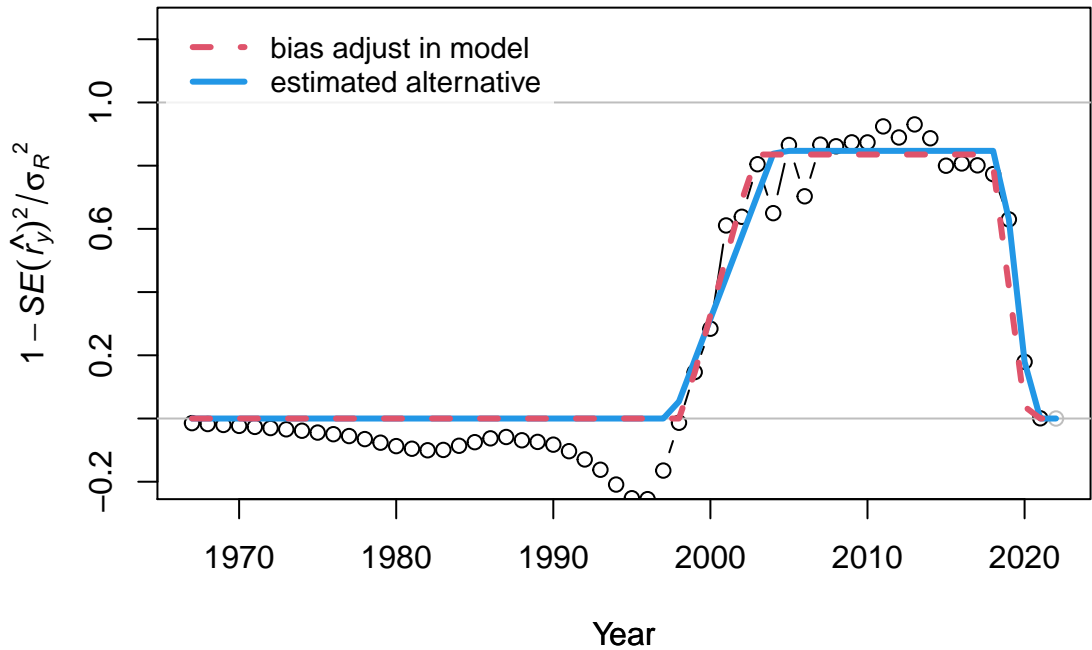


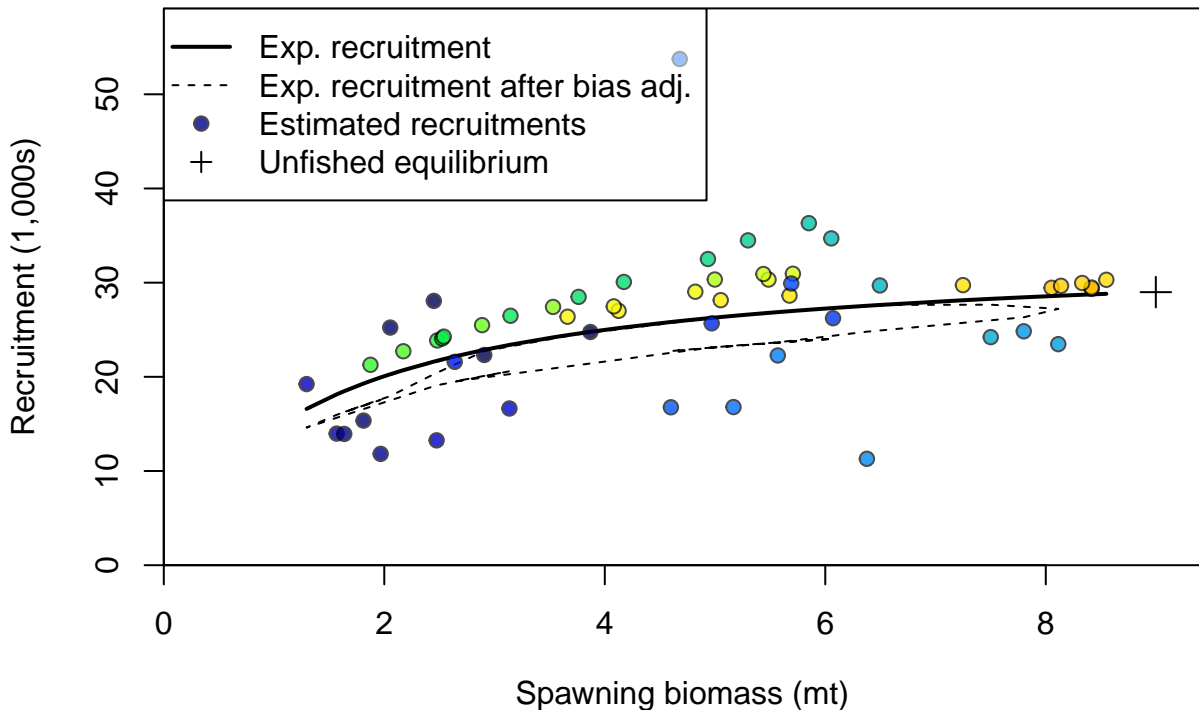
Log recruitment deviation

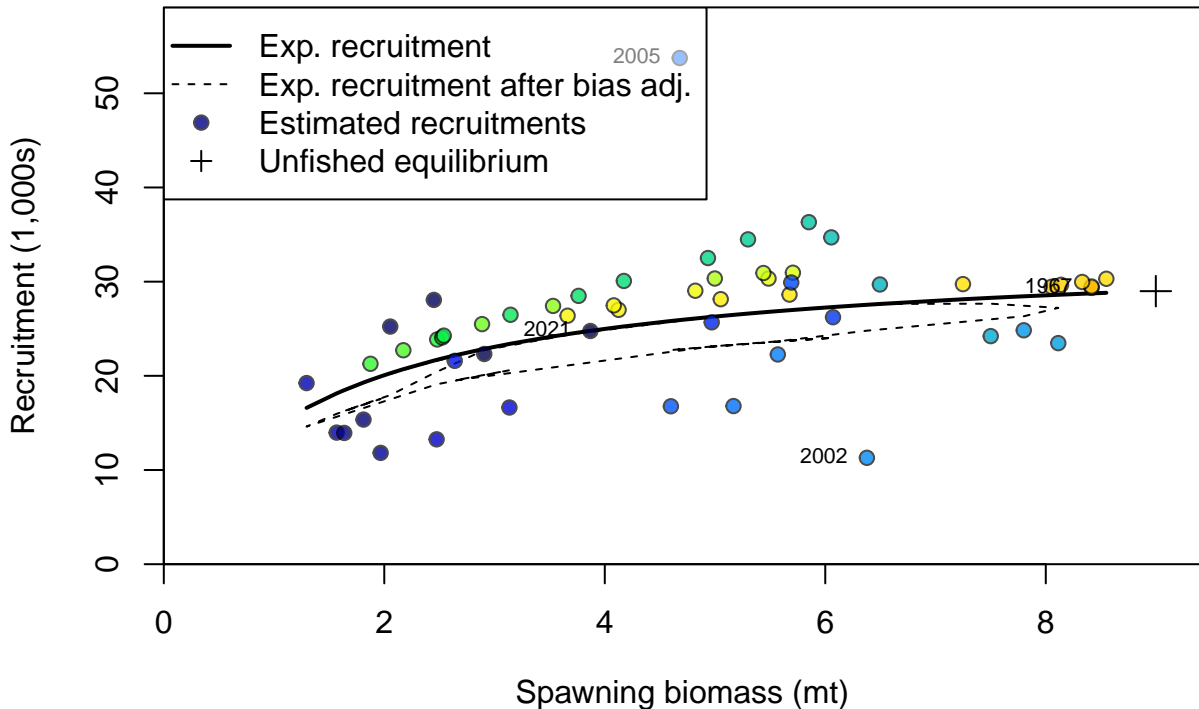


Recruitment deviation variance









Log recruitment deviation

0.5
0.0
-0.5

0.0

0.2

0.4

0.6

0.8

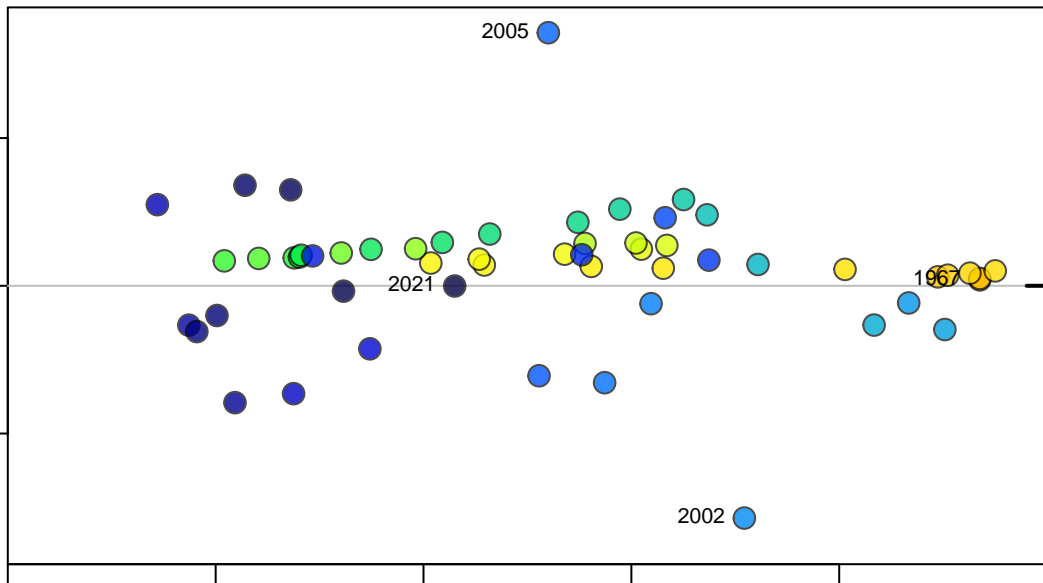
Spawning output (relative to B_0)

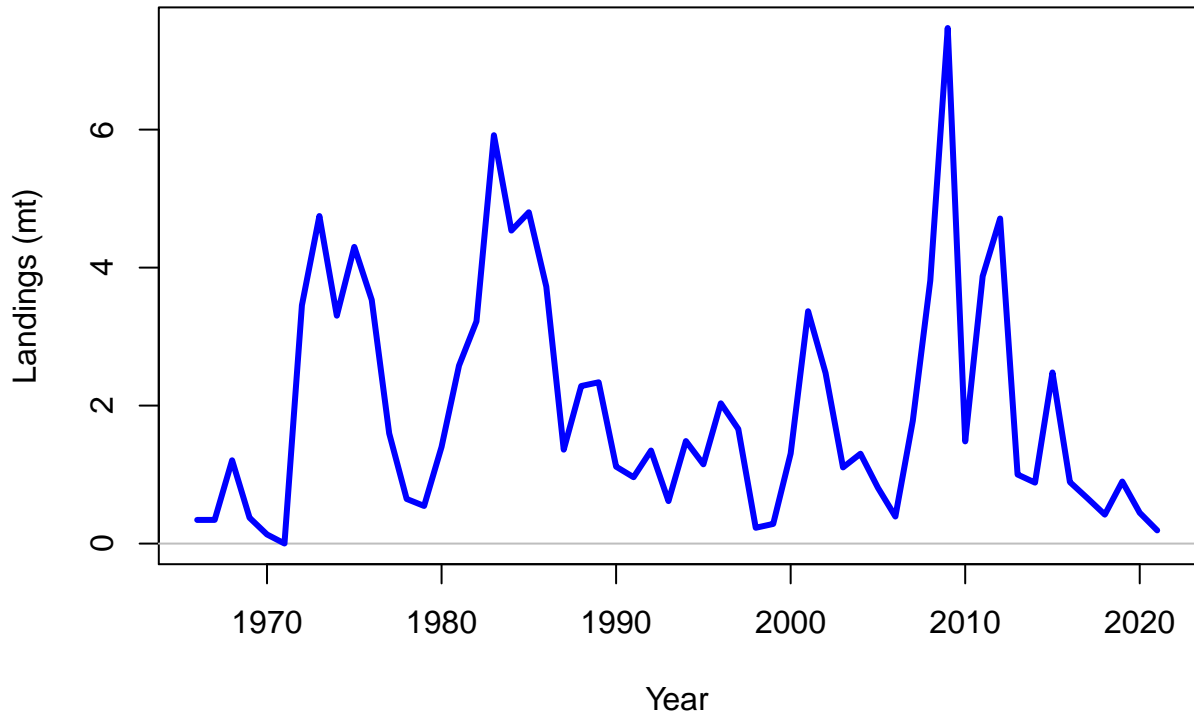
2005

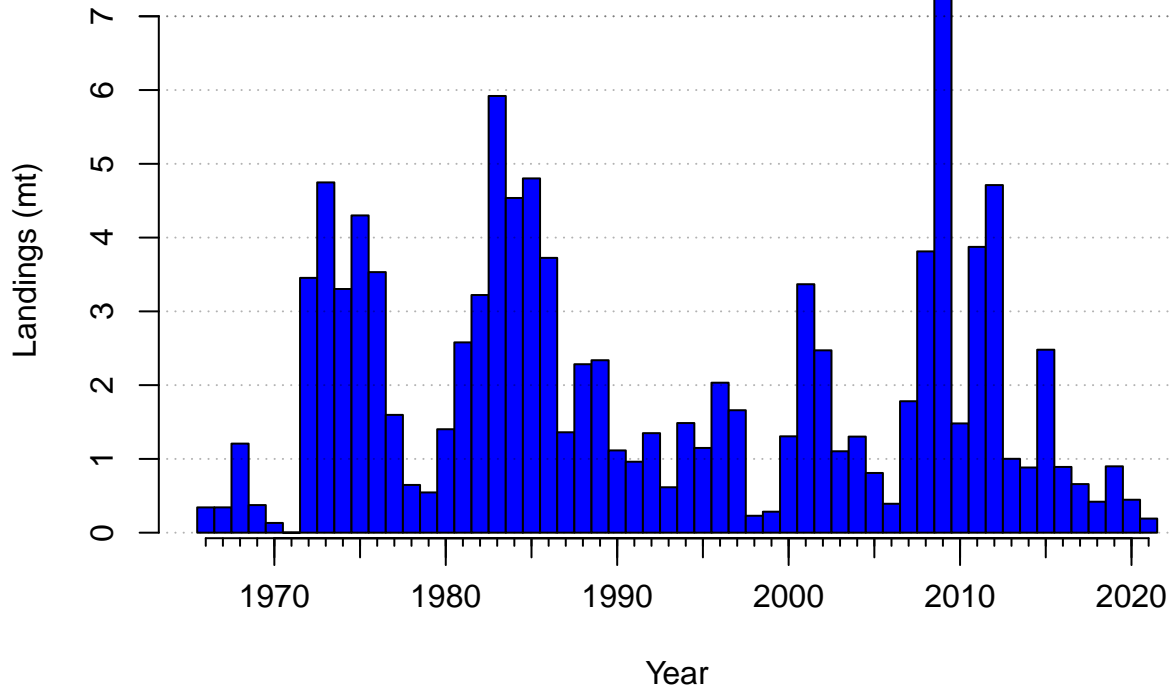
2021

2002

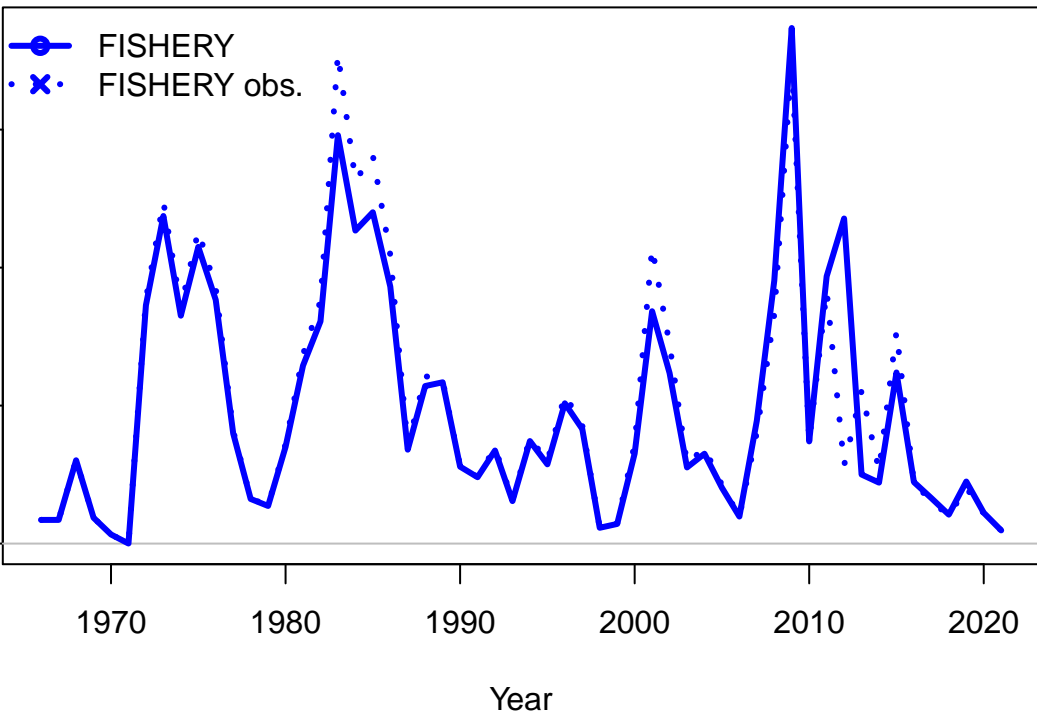
1967

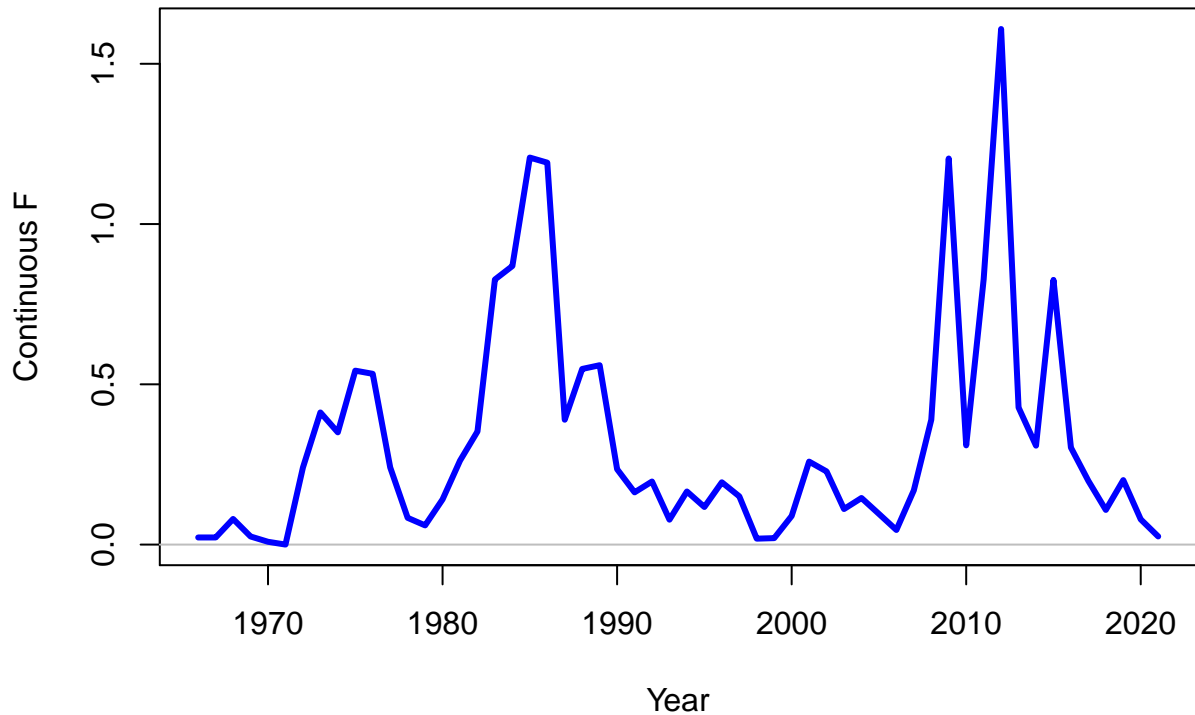




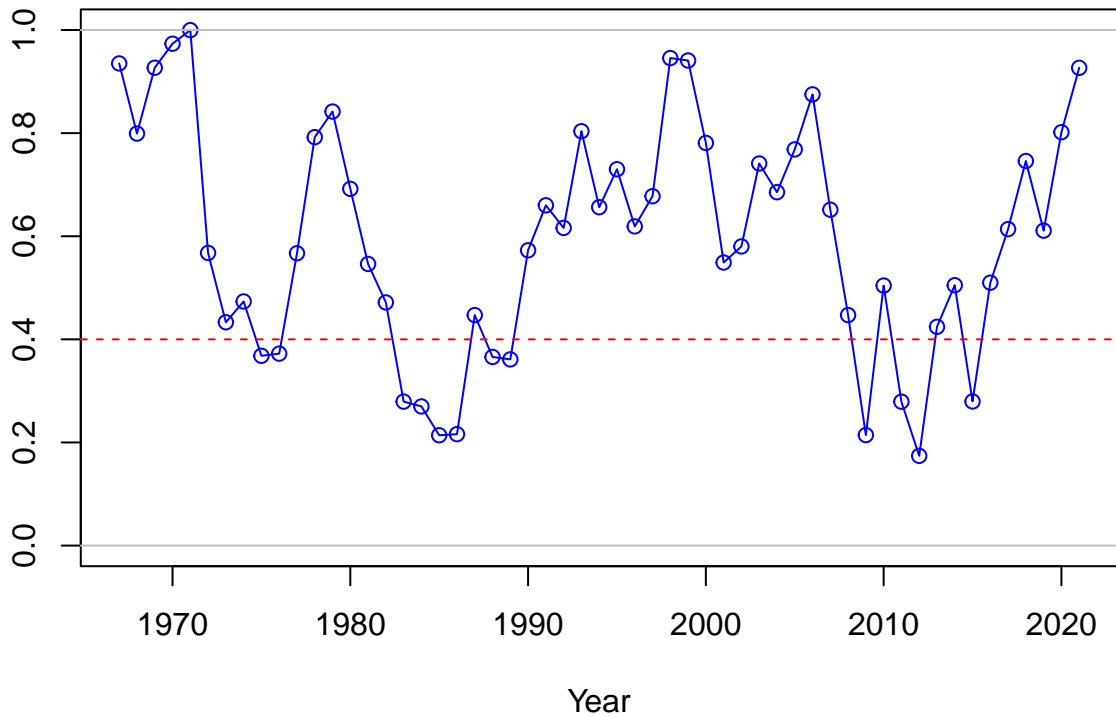


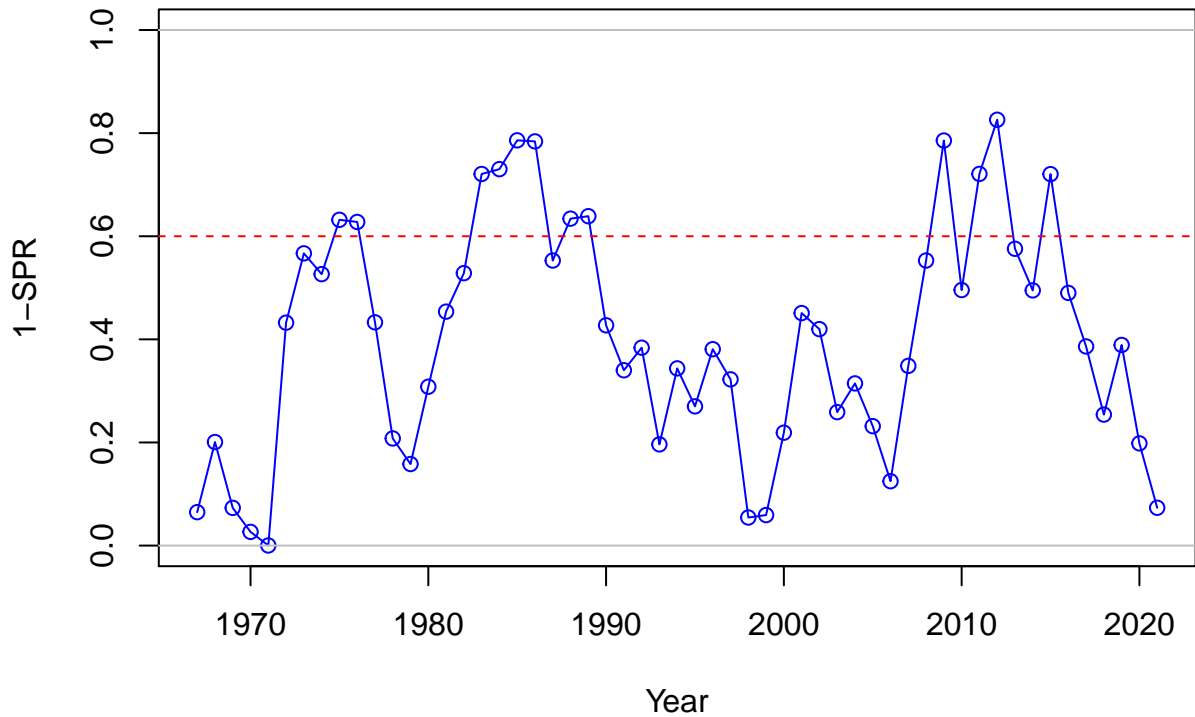
Observed and expected Landings (mt)



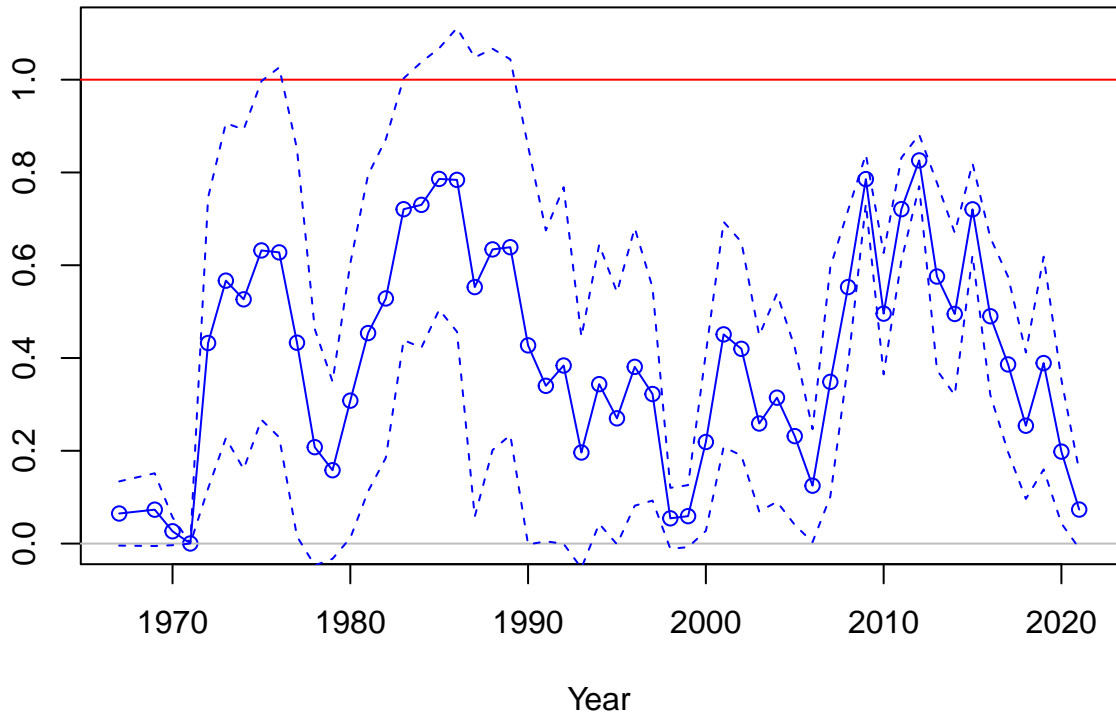


SPR

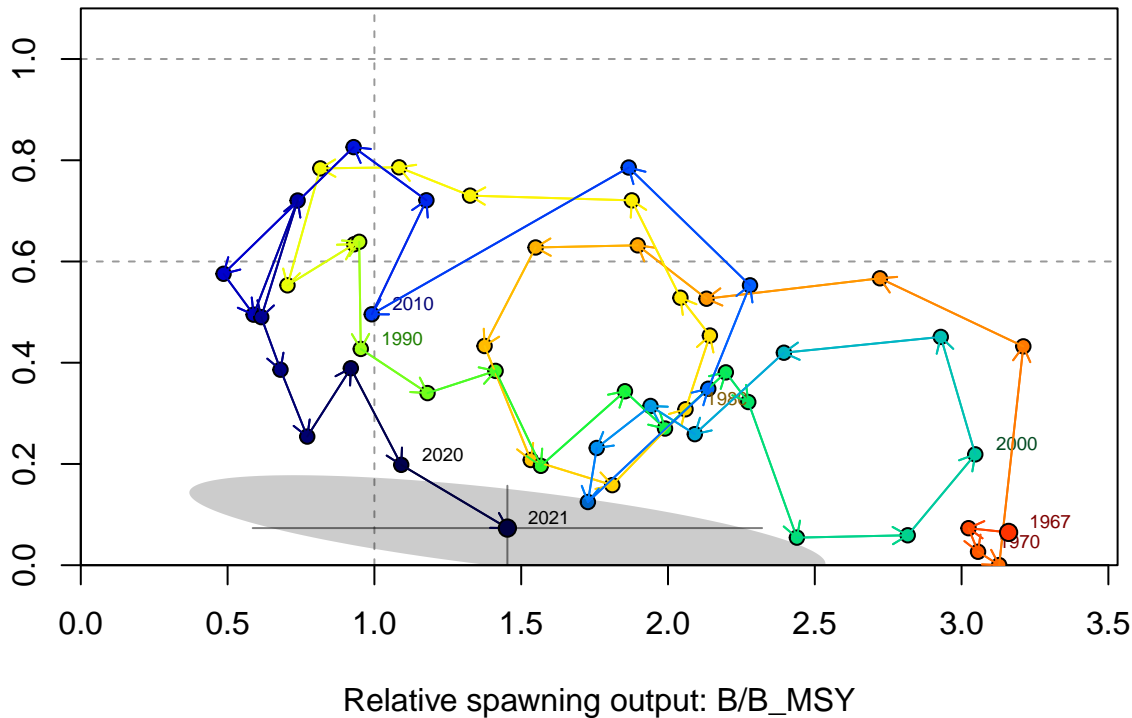




Fishing intensity: 1-SPR



Fishing intensity: 1-SPR



Index

0
2
4
6
8
10
12

2016

2017

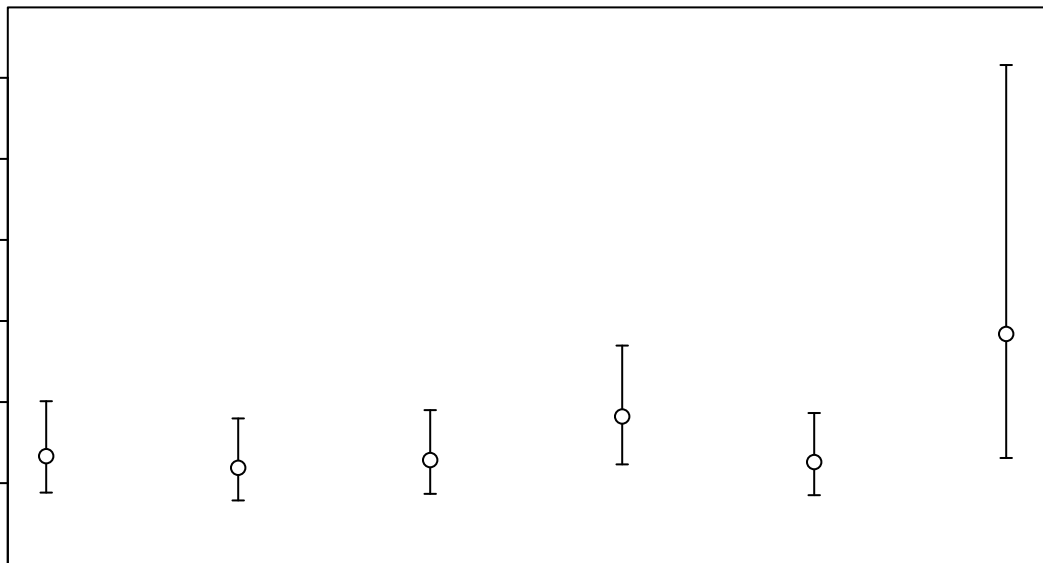
2018

2019

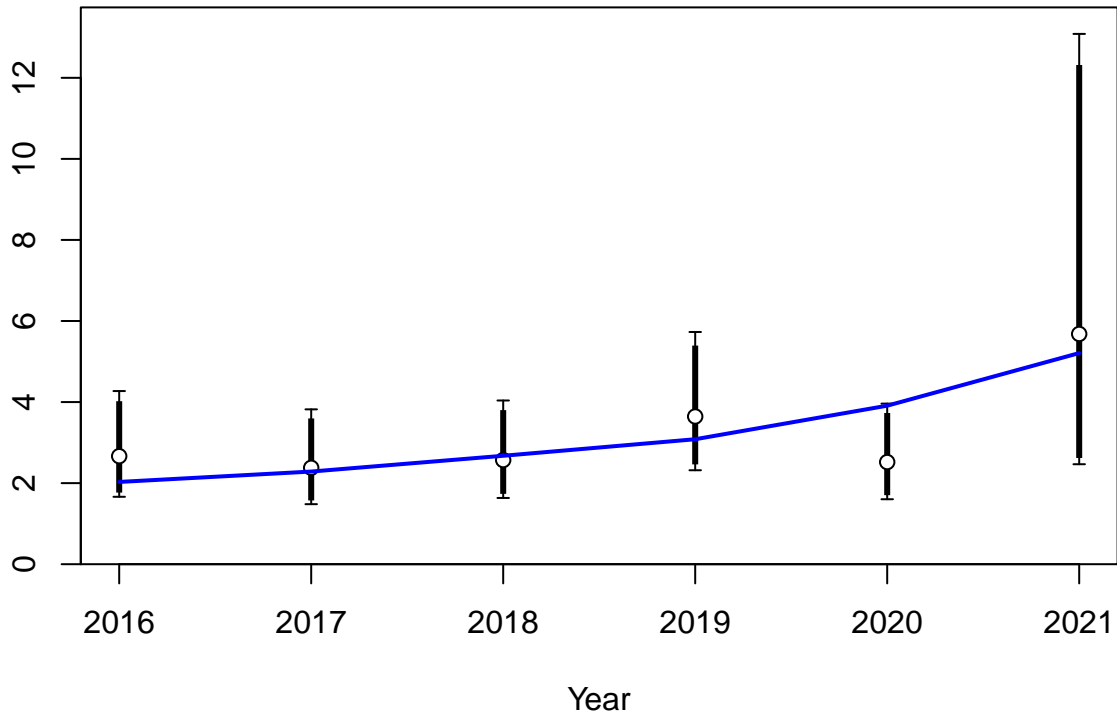
2020

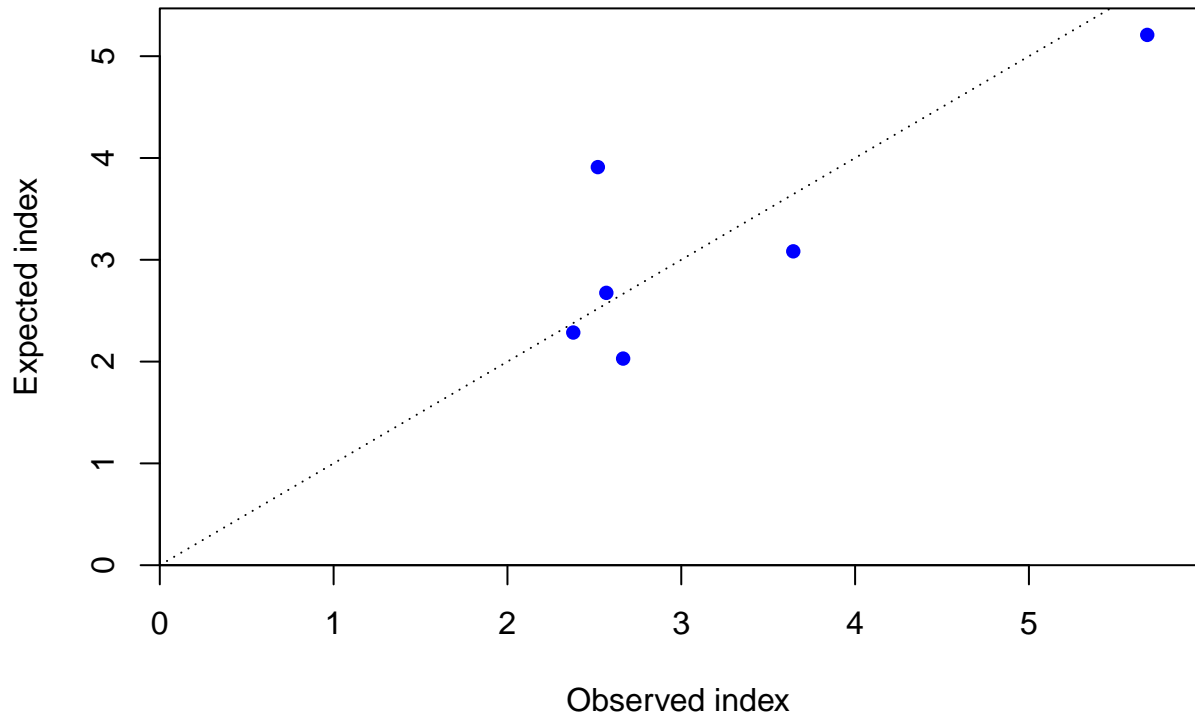
2021

Year

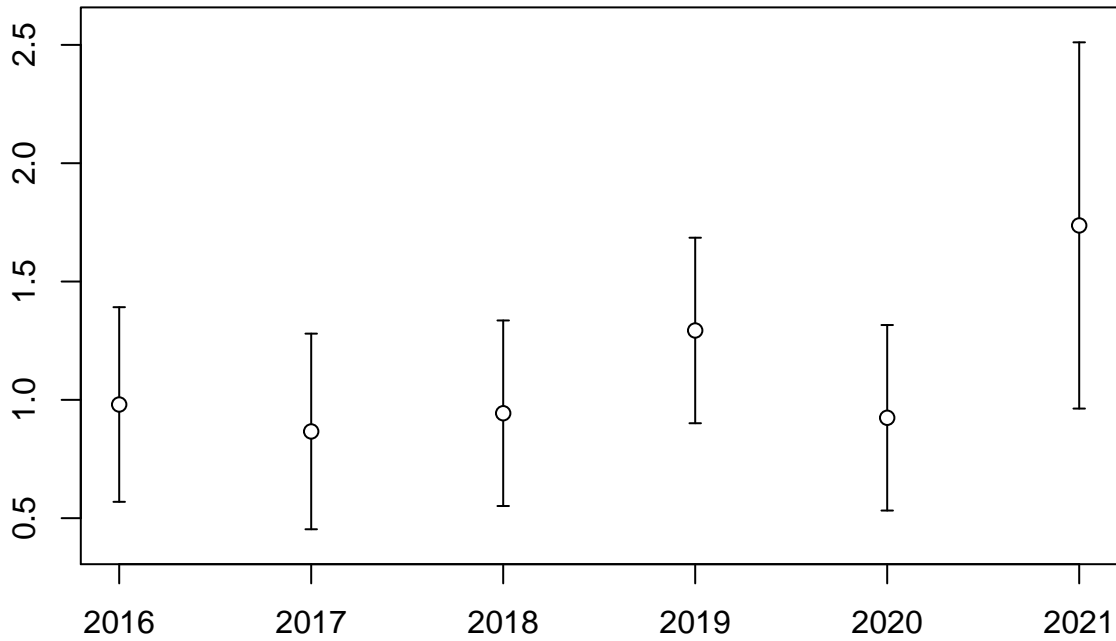


Index

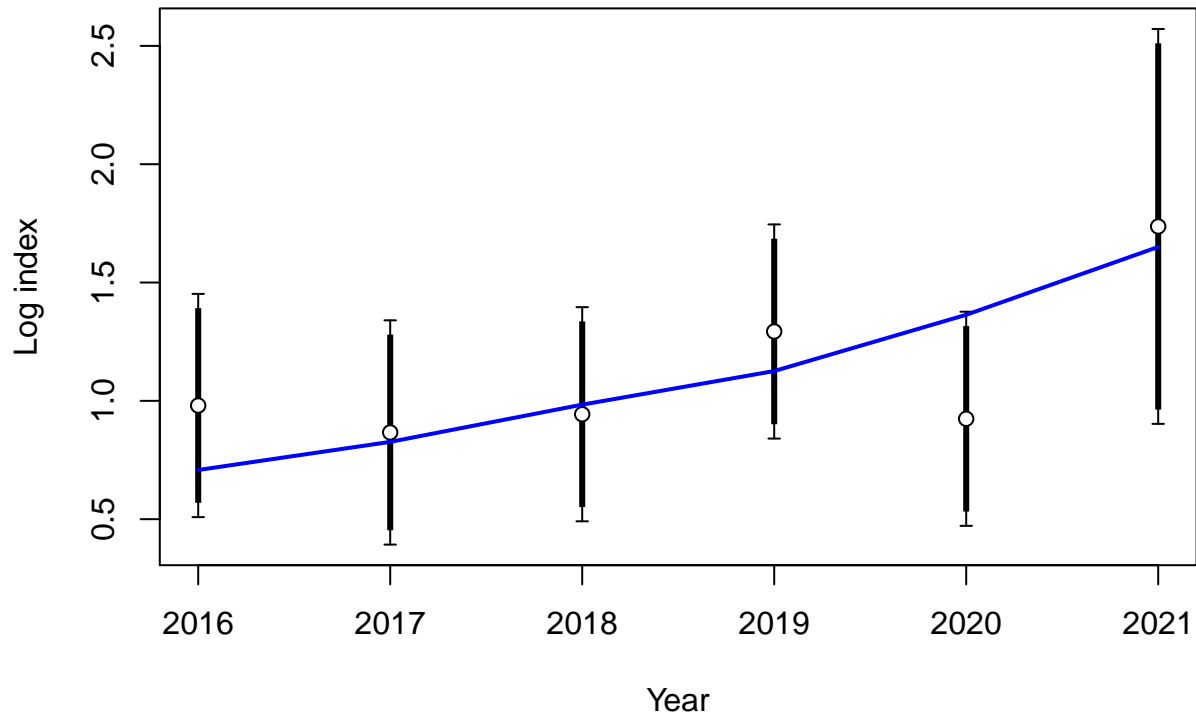


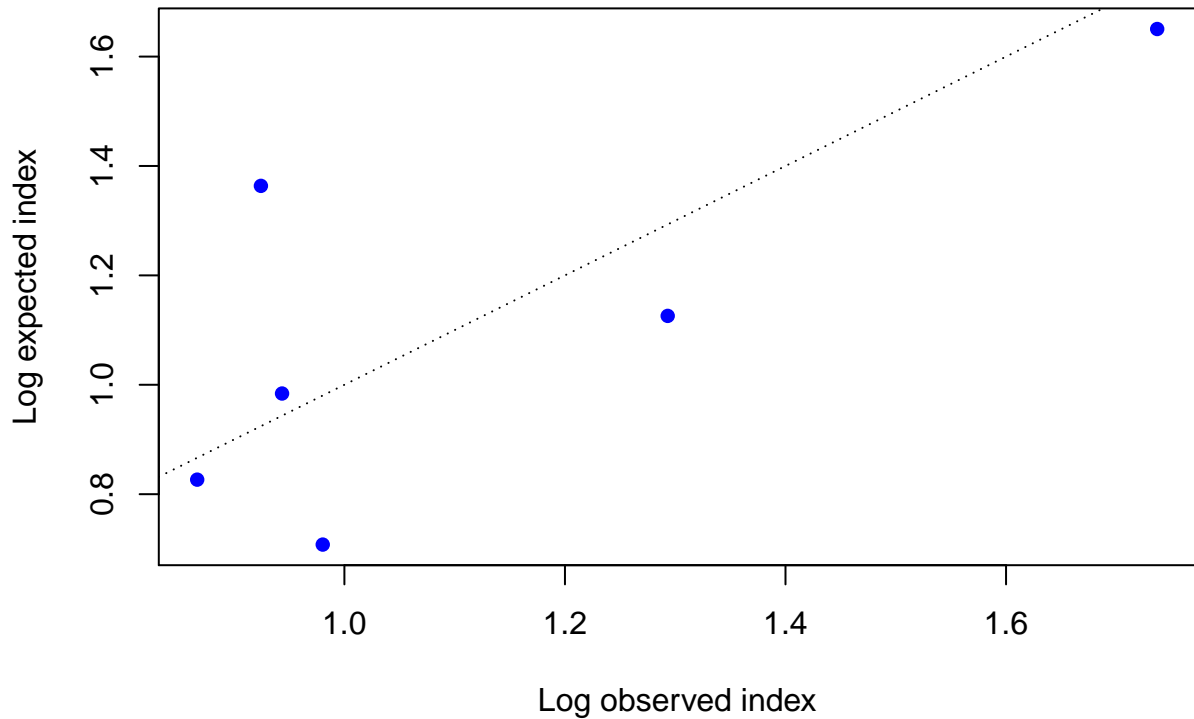


Log index



Year





Residual

1

0

-1

2016

2017

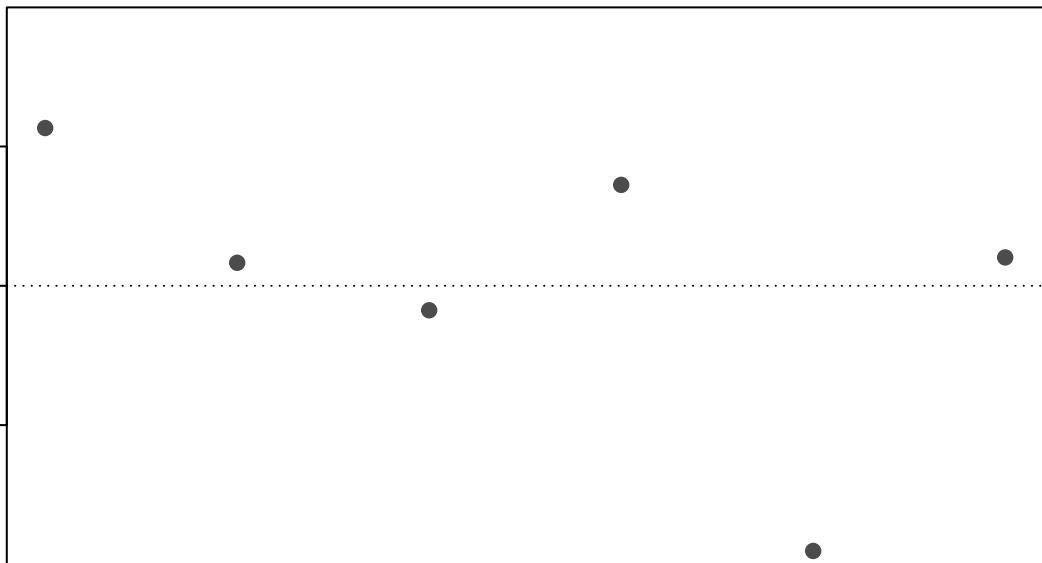
2018

2019

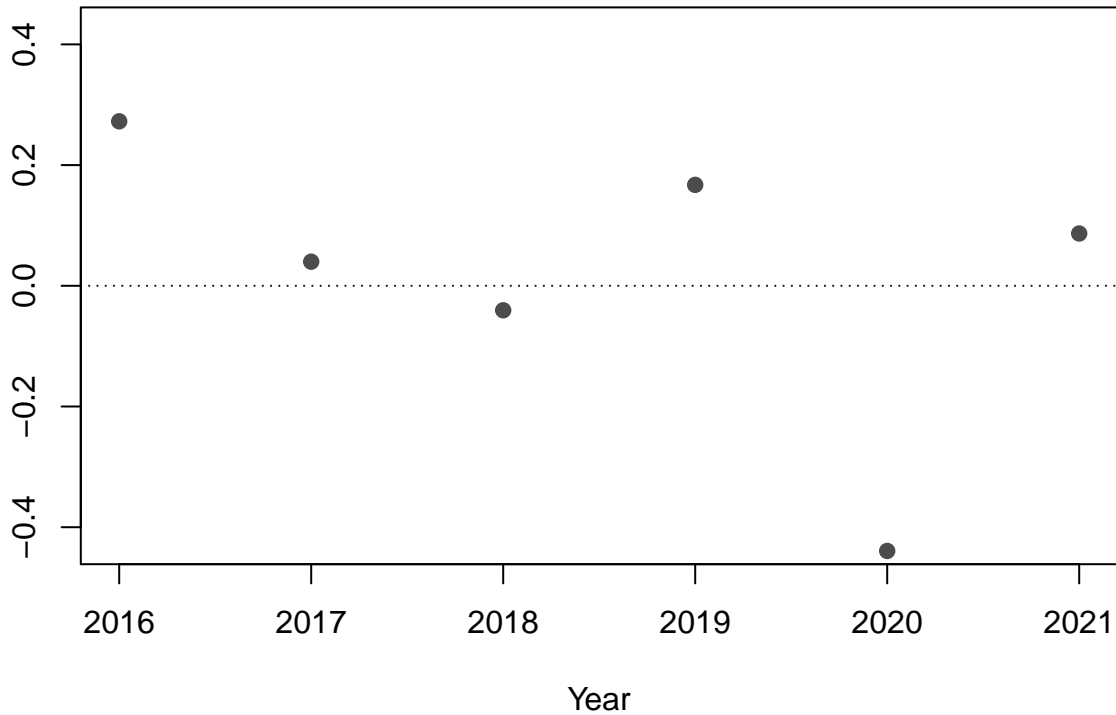
2020

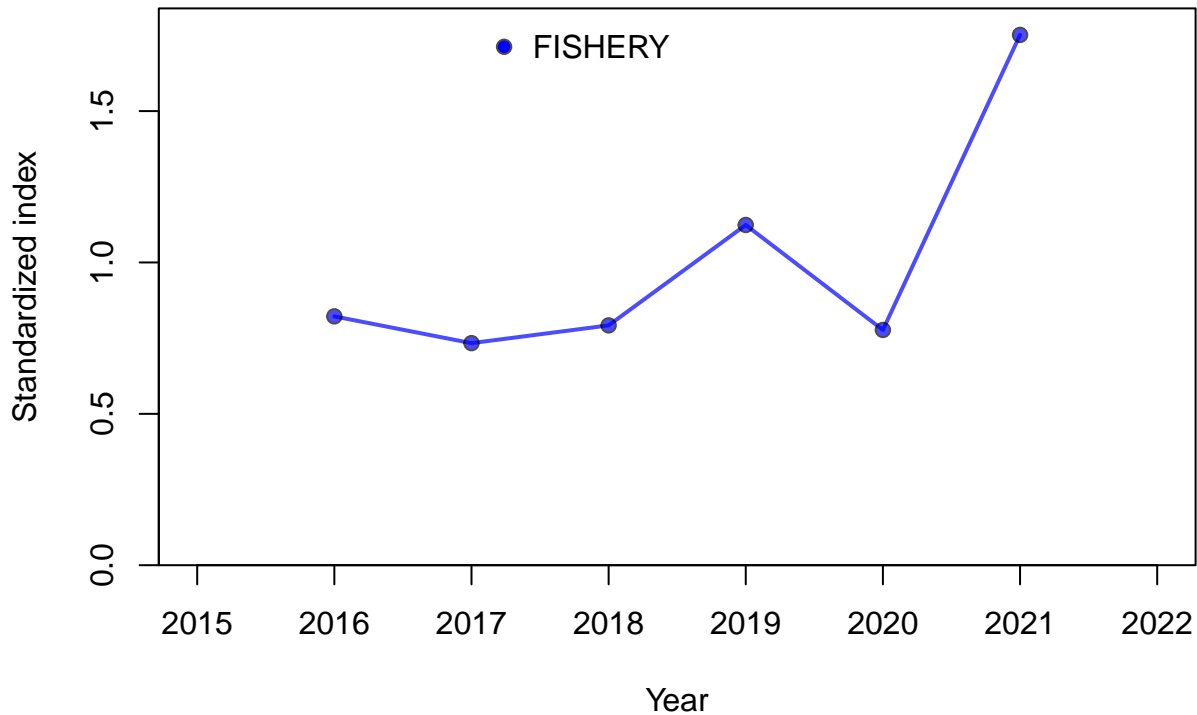
2021

Year

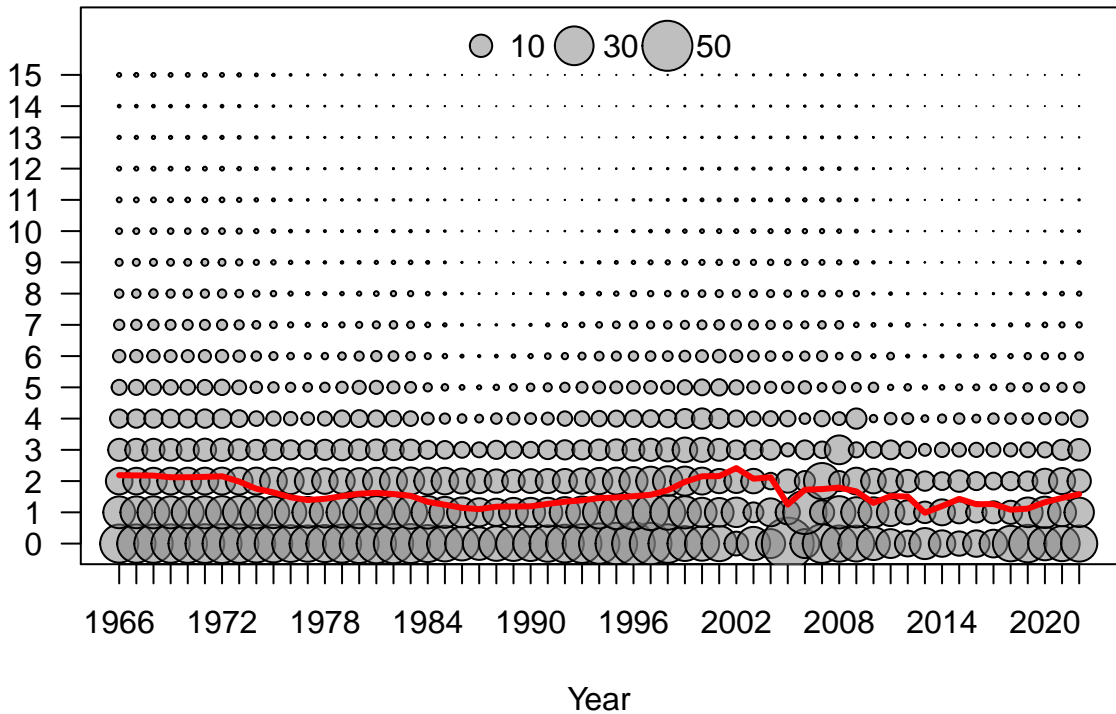


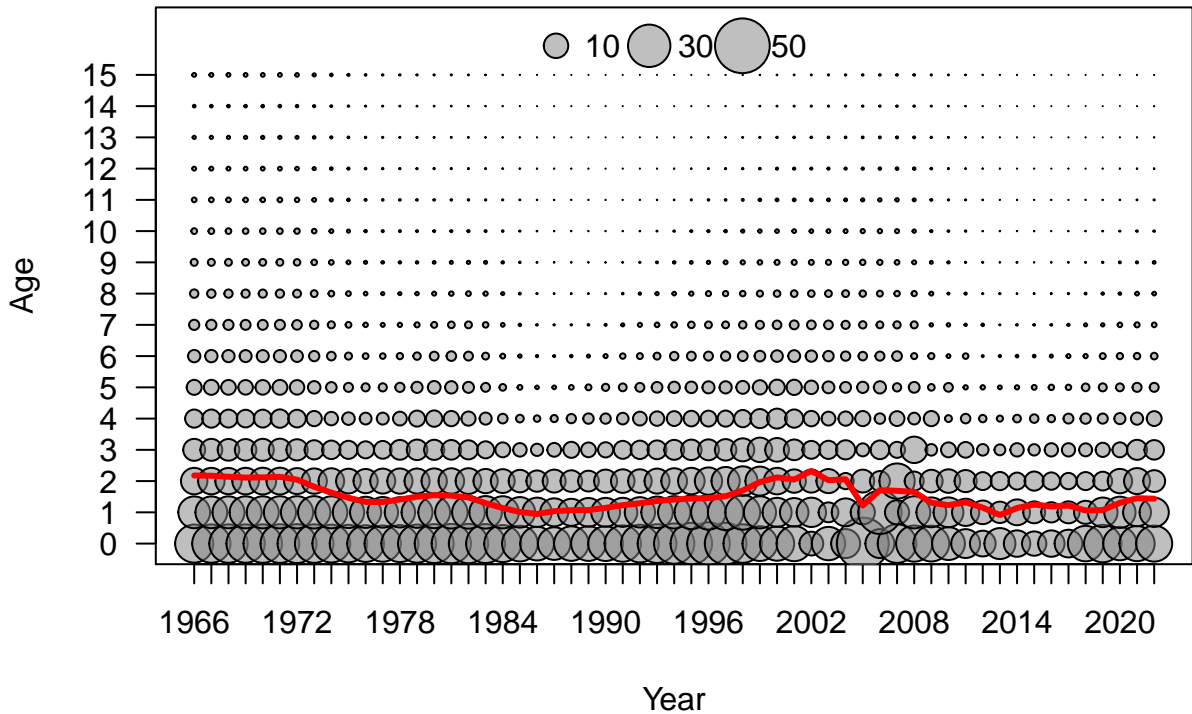
Deviation

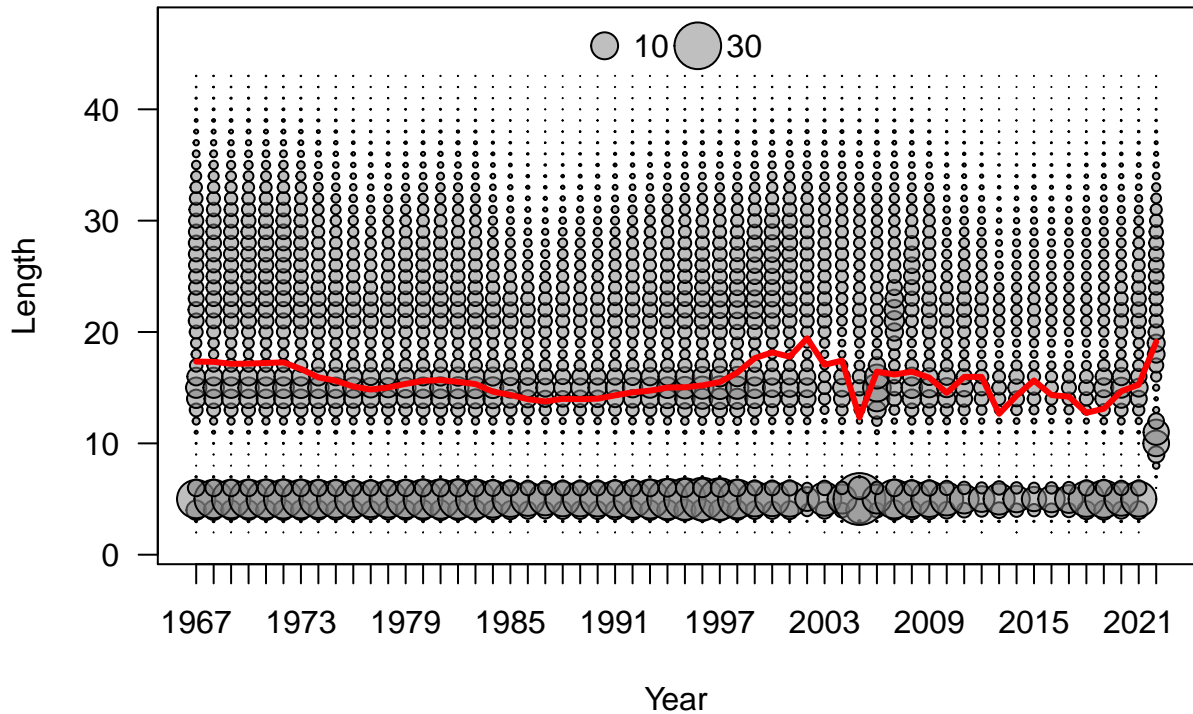


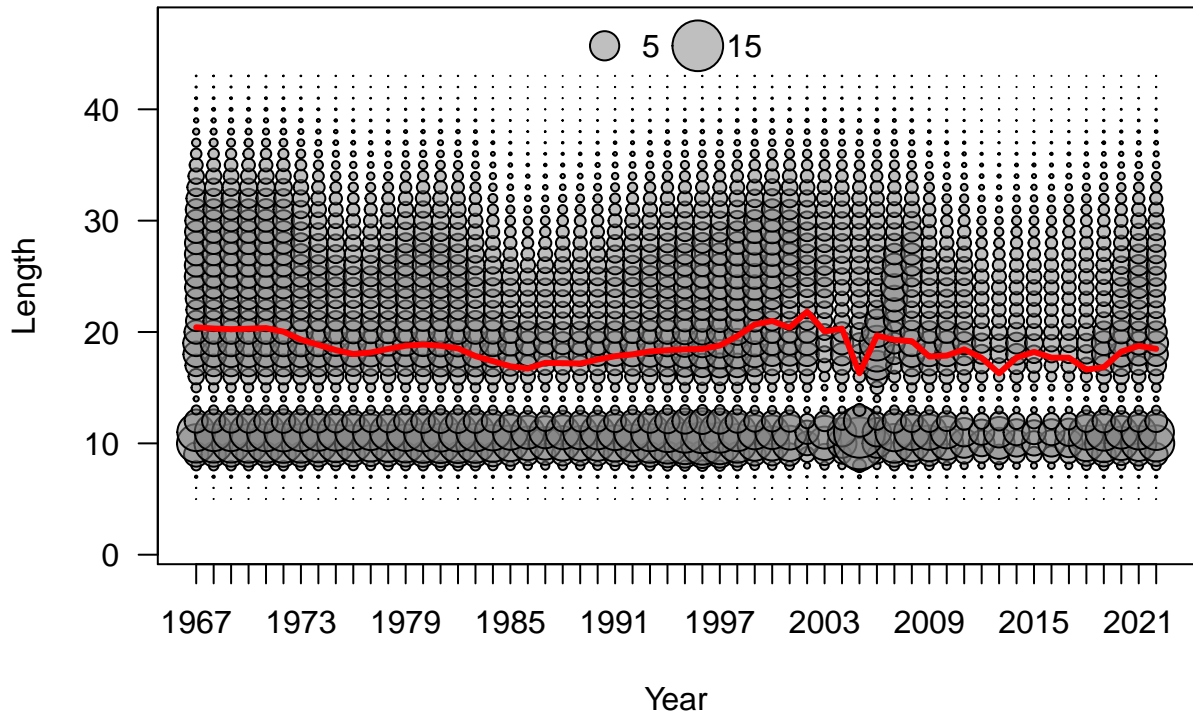


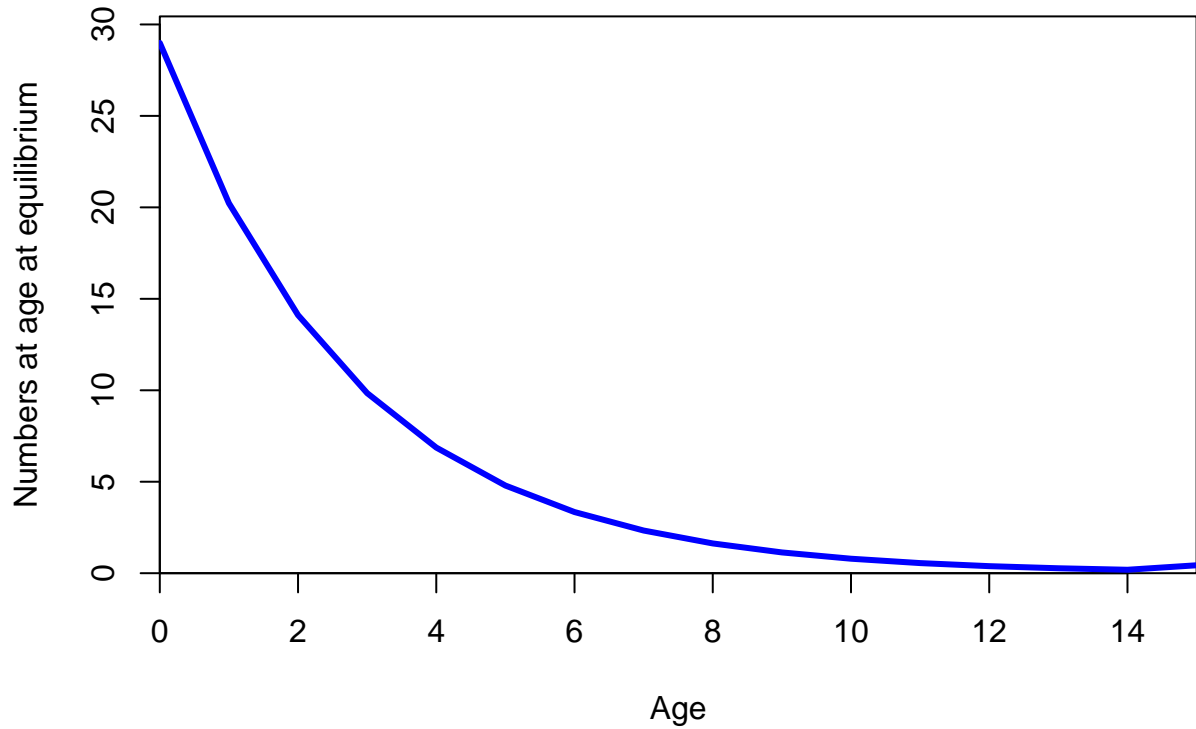
Age





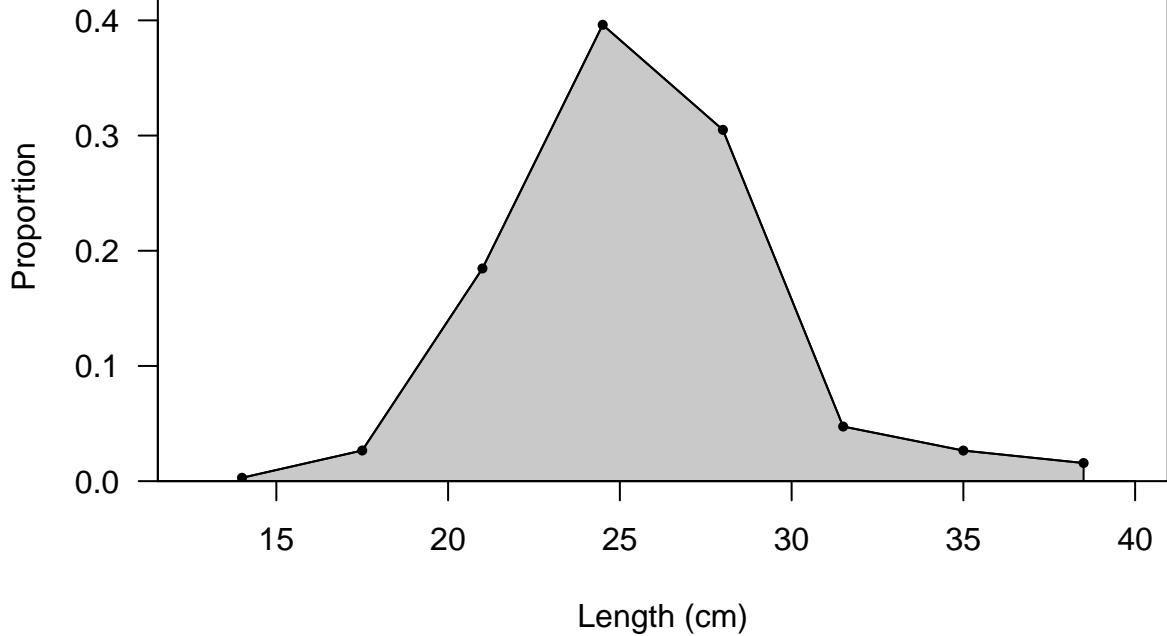


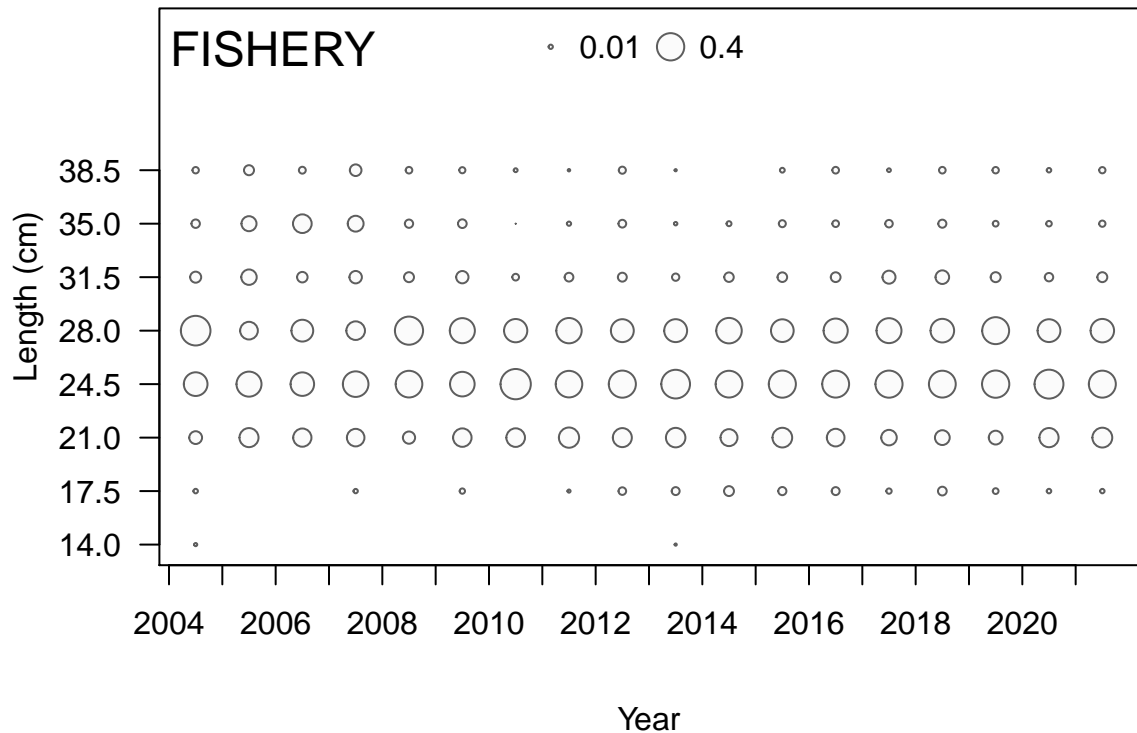




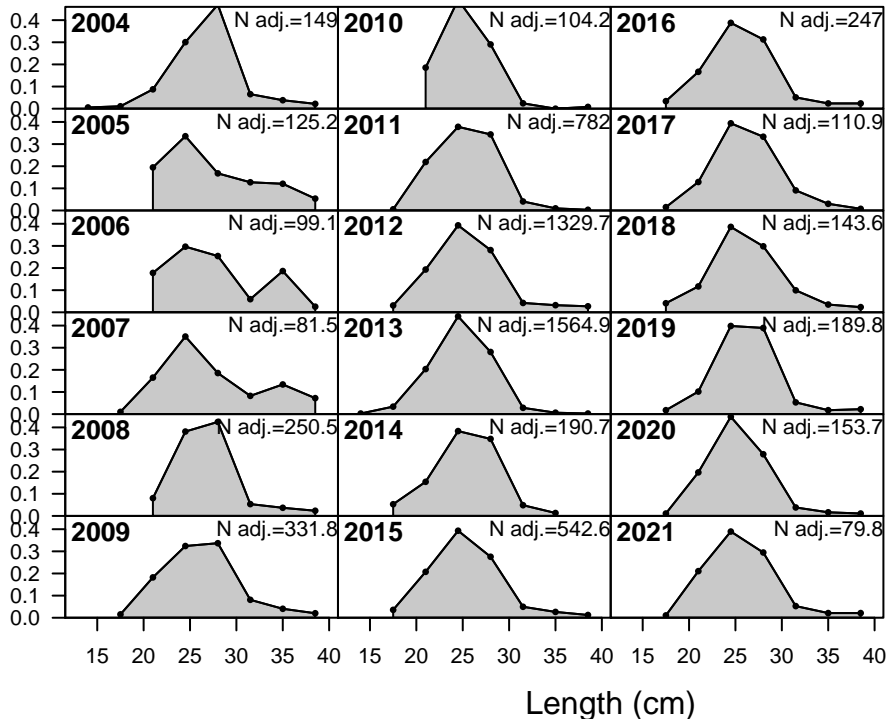
FISHERY

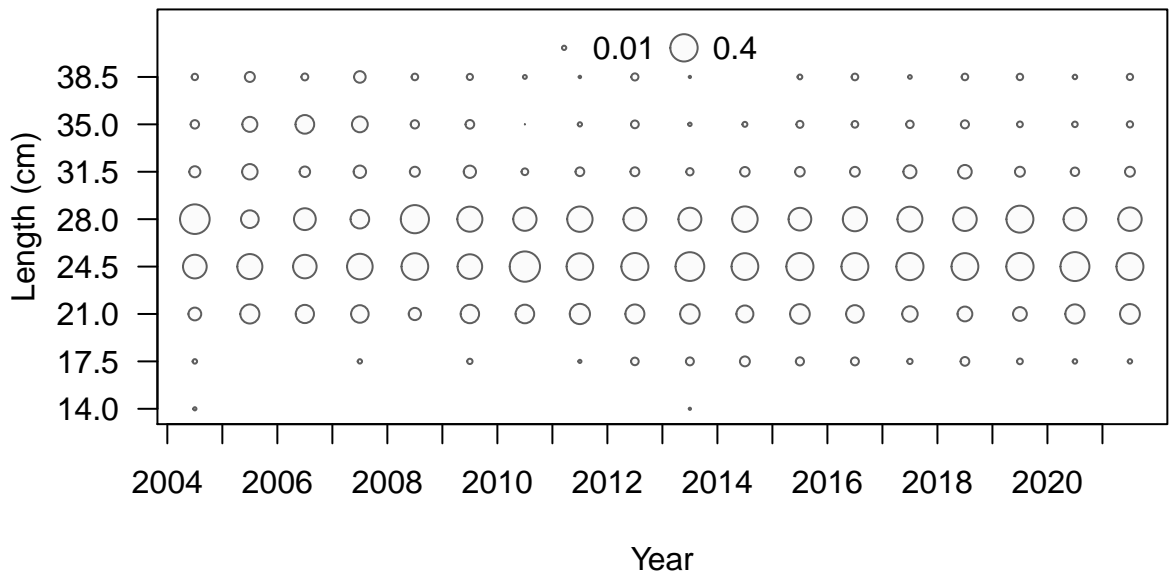
Sum of N adj.=6476



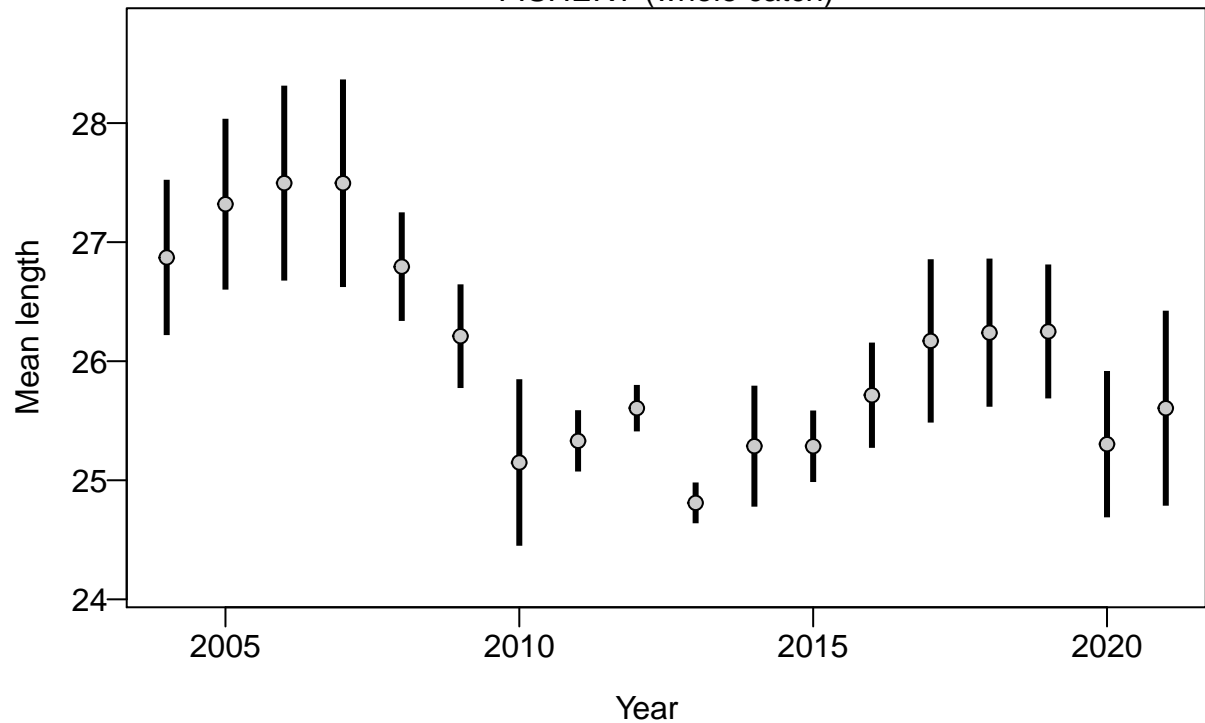


Proportion



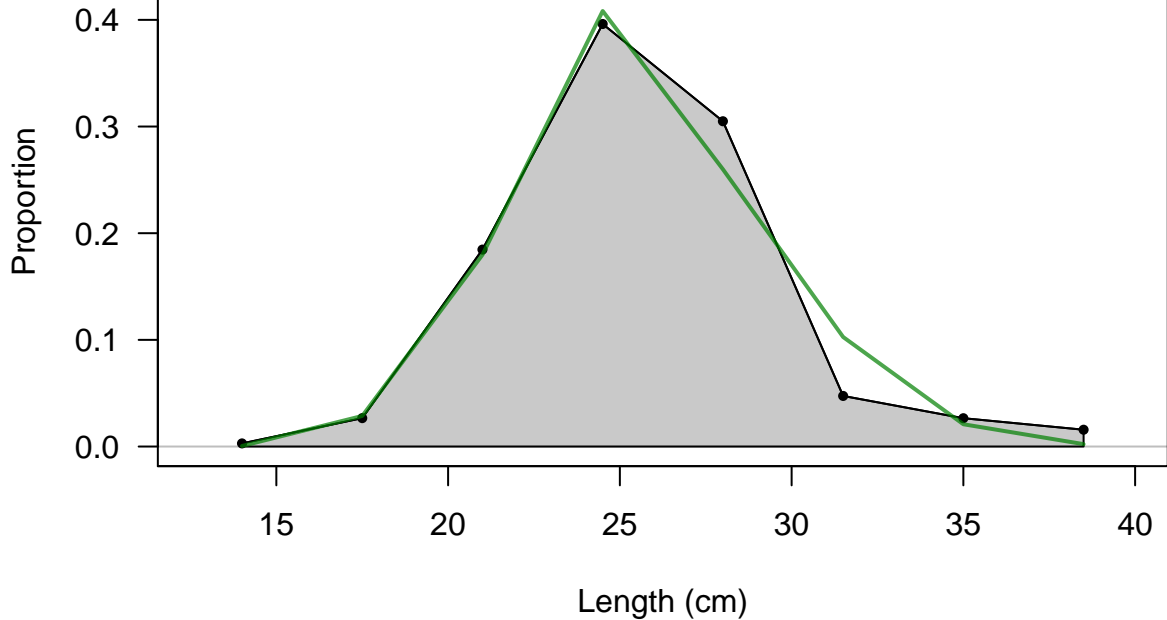


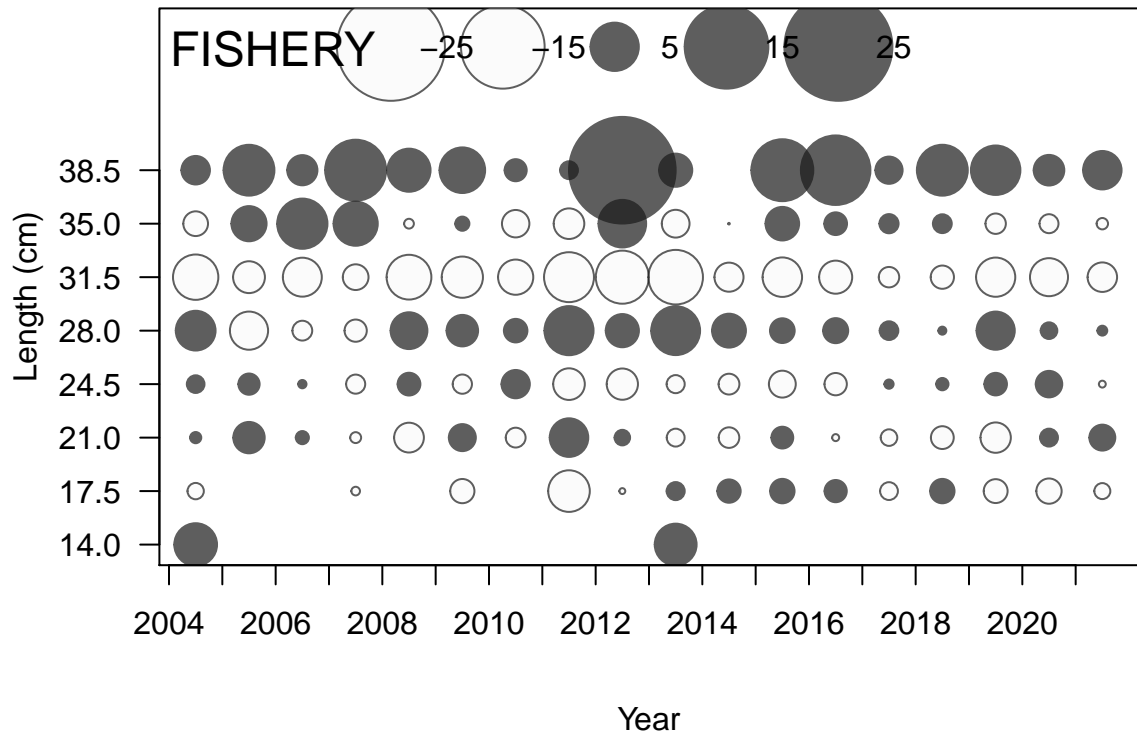
FISHERY (whole catch)



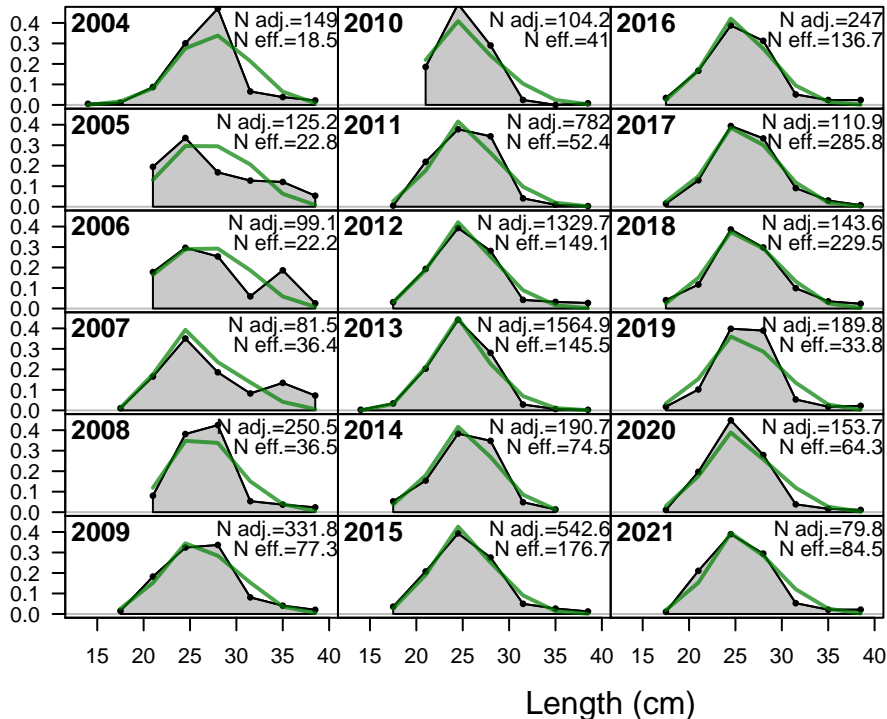
FISHERY

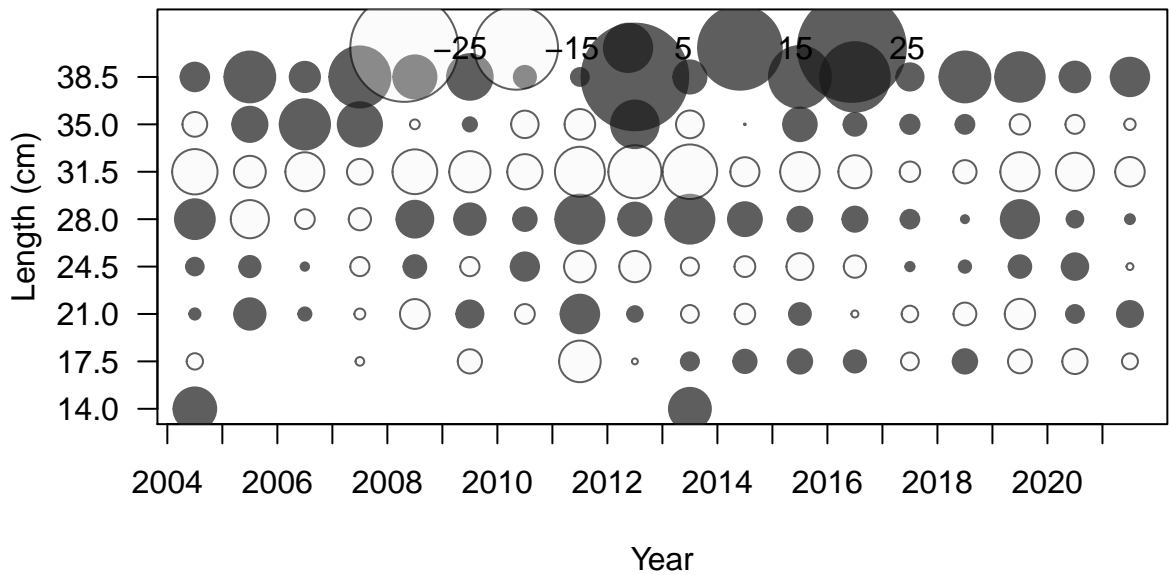
Sum of N adj.=6476
Sum of N eff.=1687.5



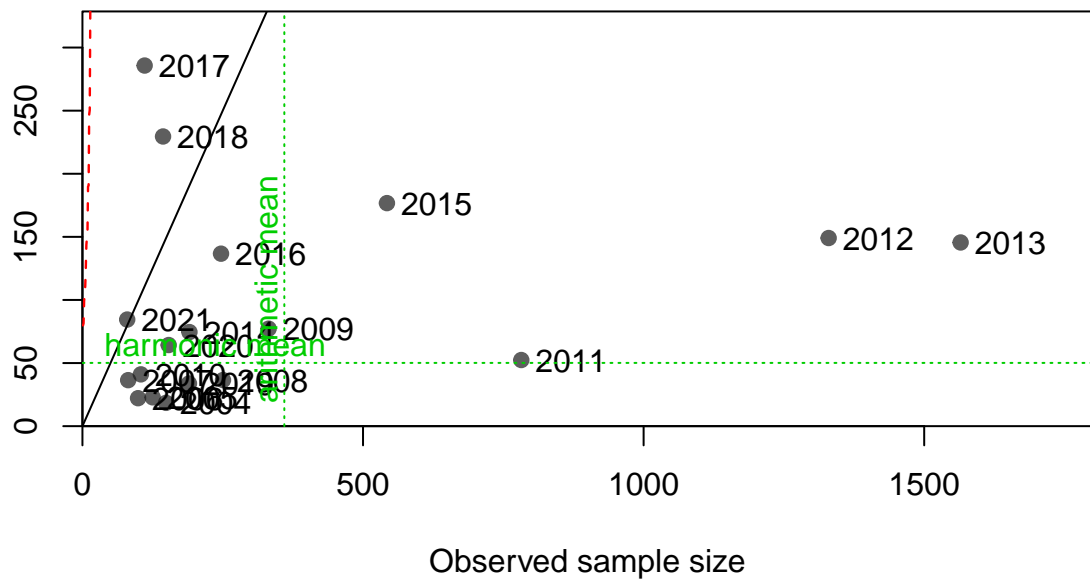


Proportion

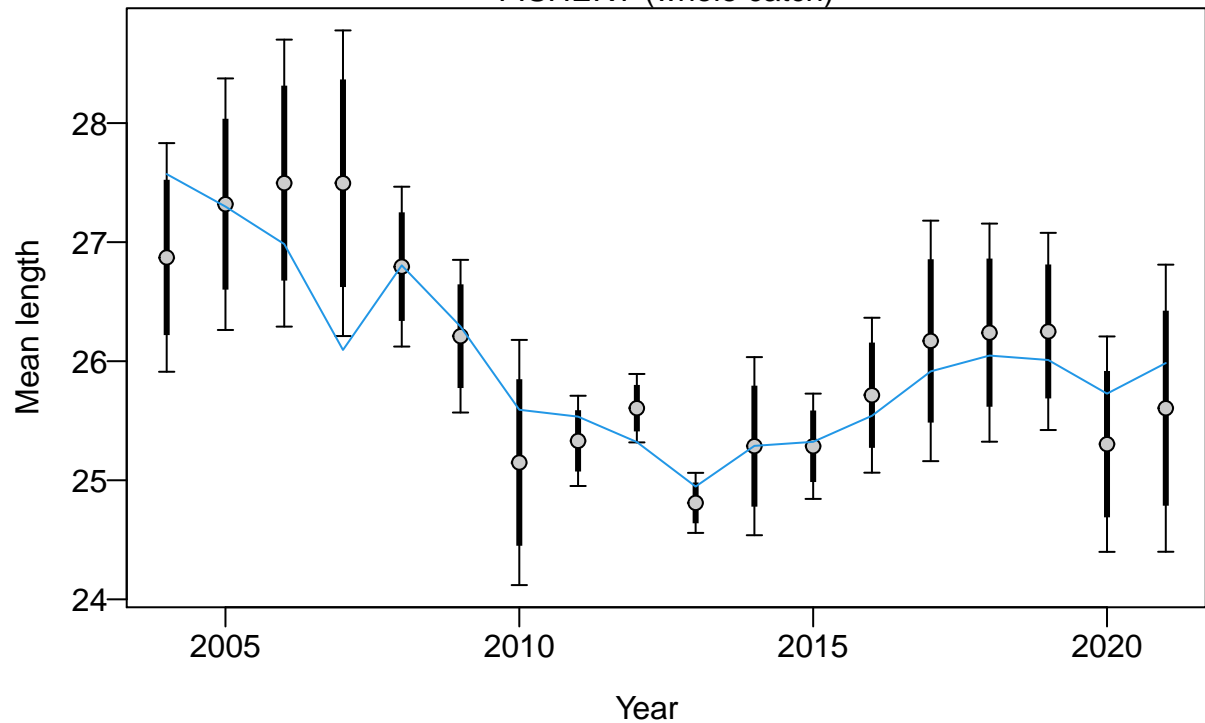


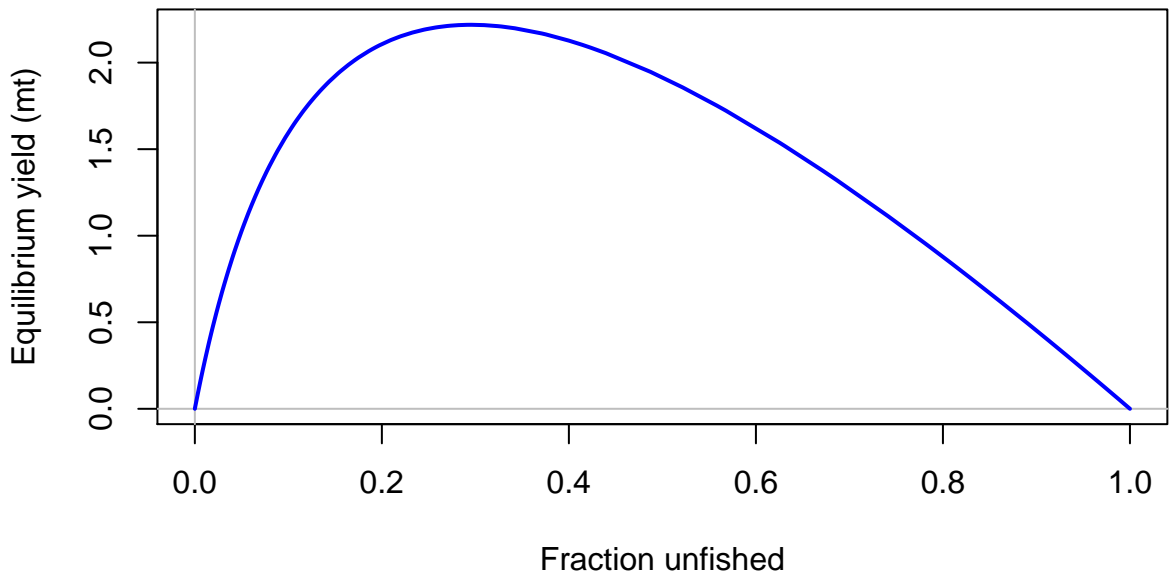


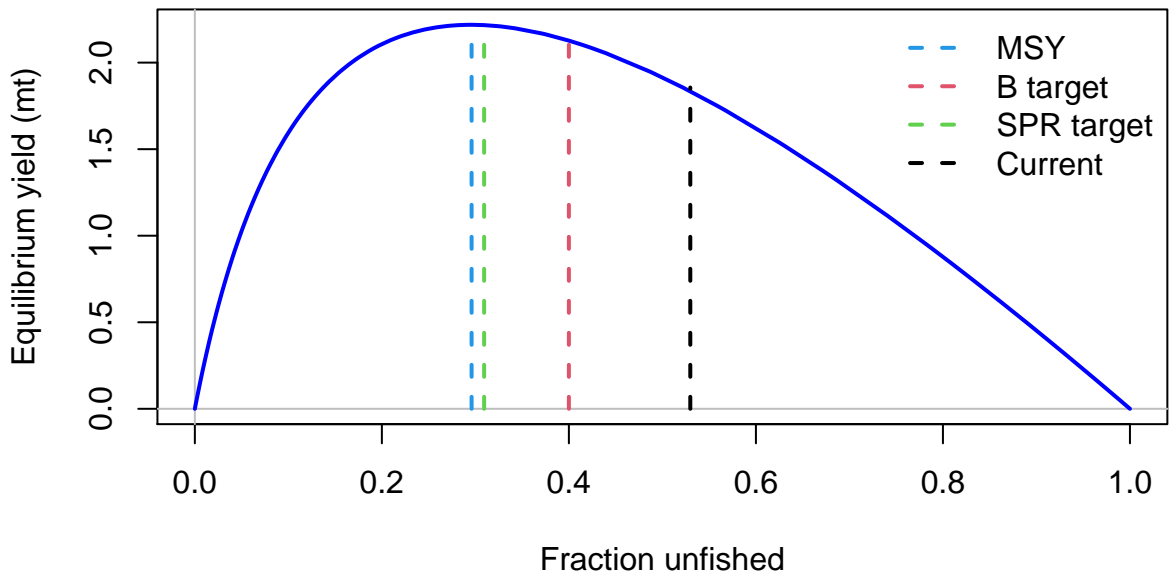
Effective sample size

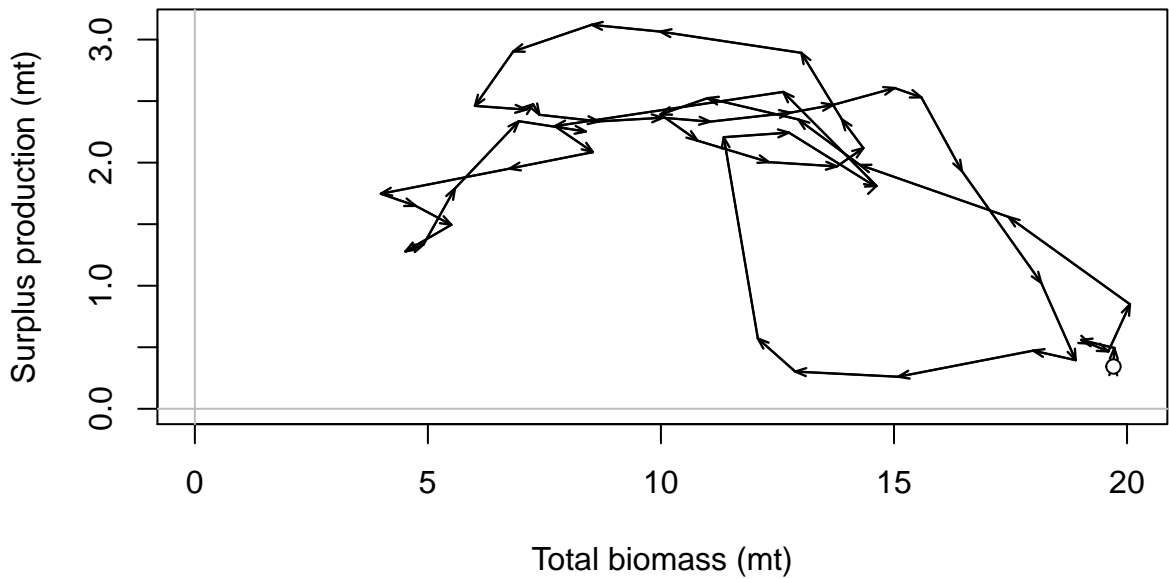


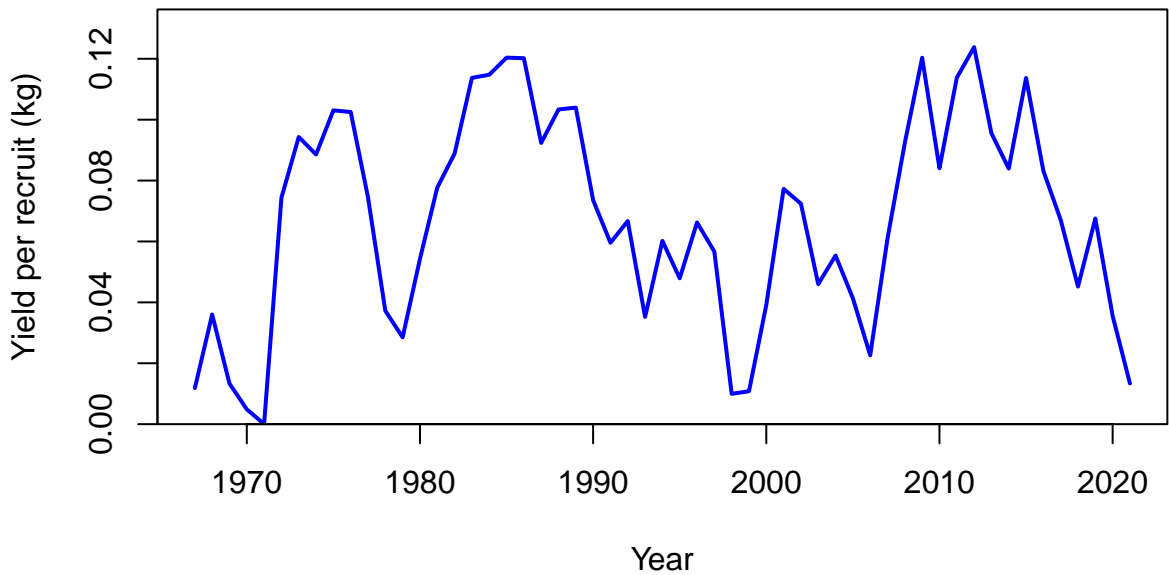
FISHERY (whole catch)

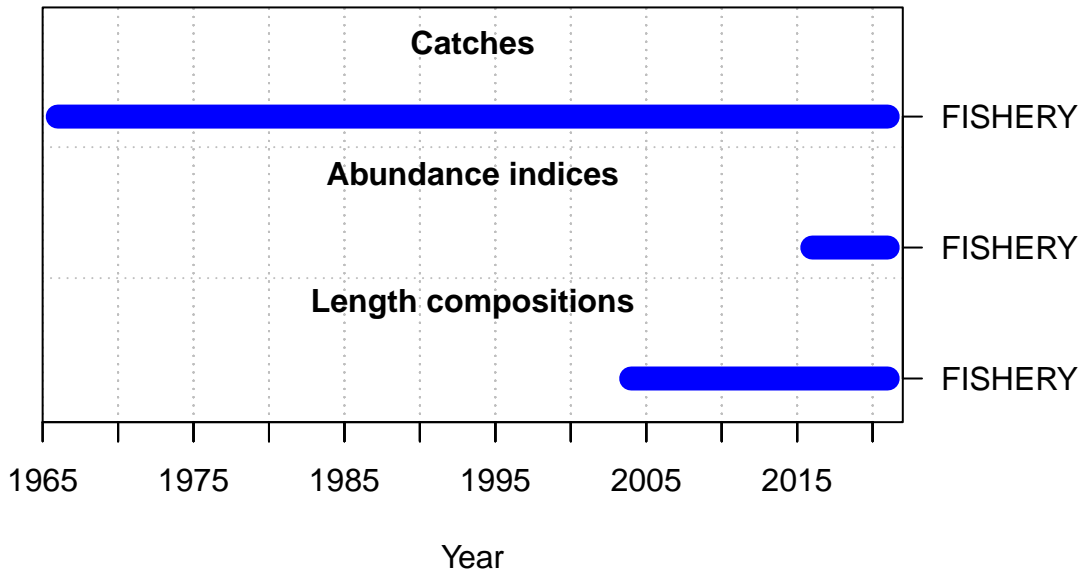


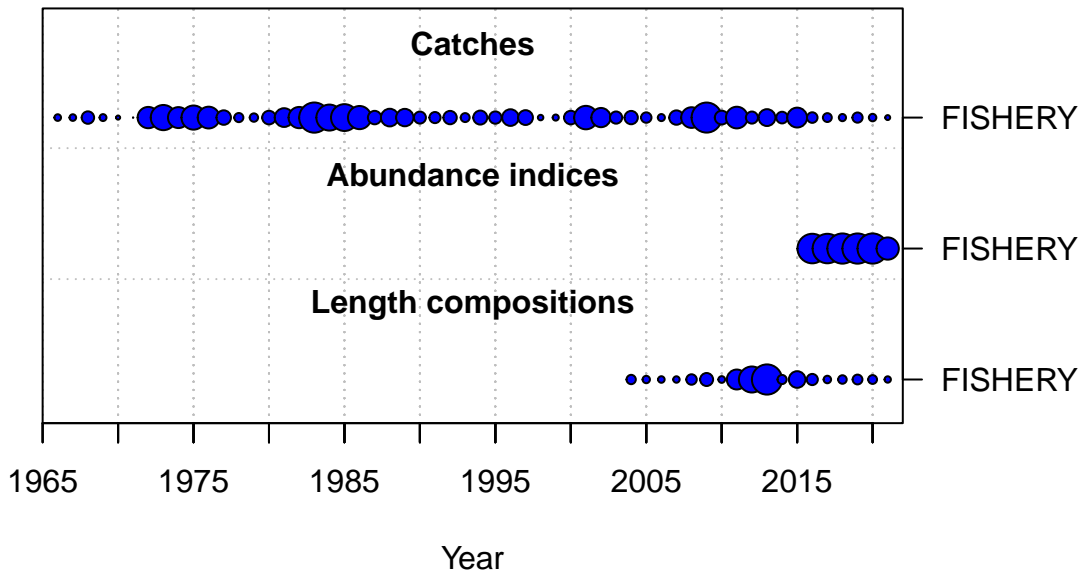




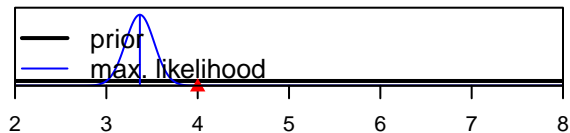








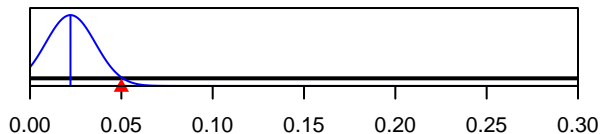
SR_LN(R0)



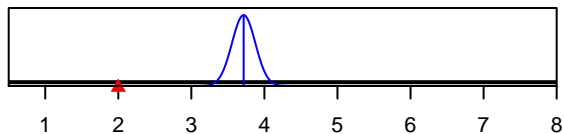
Size_inflection_FISHERY(1)



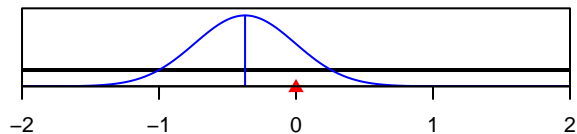
InitF_seas_1_flt_1FISHERY



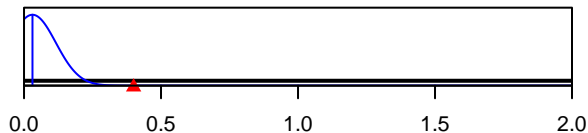
Size_95%width_FISHERY(1)



LnQ_base_FISHERY(1)



Q_extraSD_FISHERY(1)



Parameter value