

Plots created using the 'r4ss' package in R
Stock Synthesis version: 3.30.19.0
StartTime: Thu Aug 11 10:50:45 2022
Data_File: data.ss
Control_File: control.ss

Length (cm, beginning of the year)











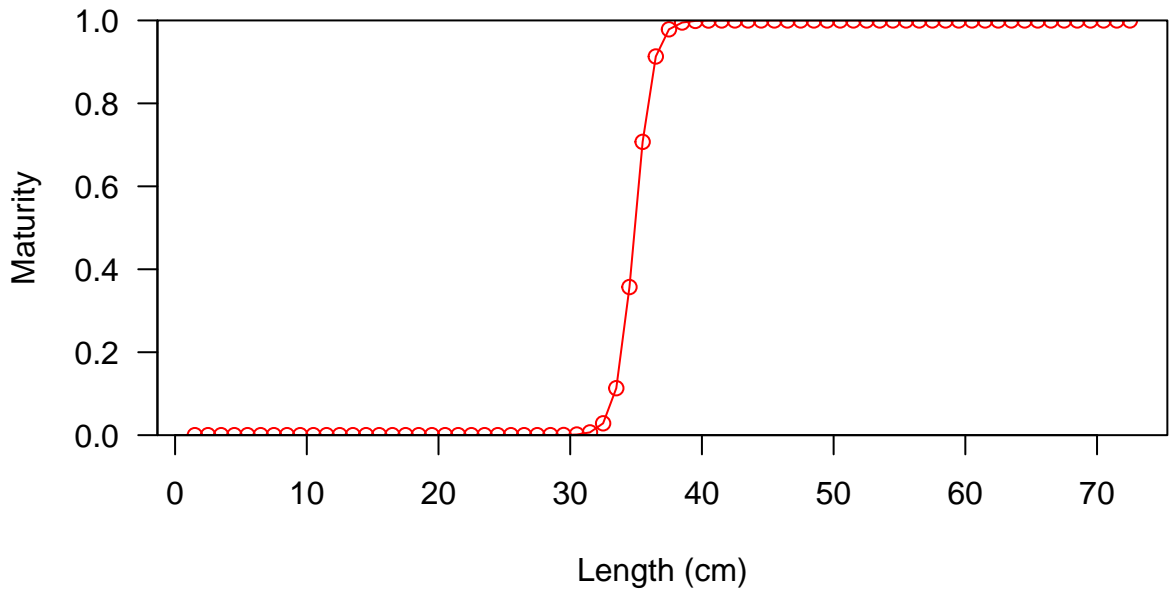






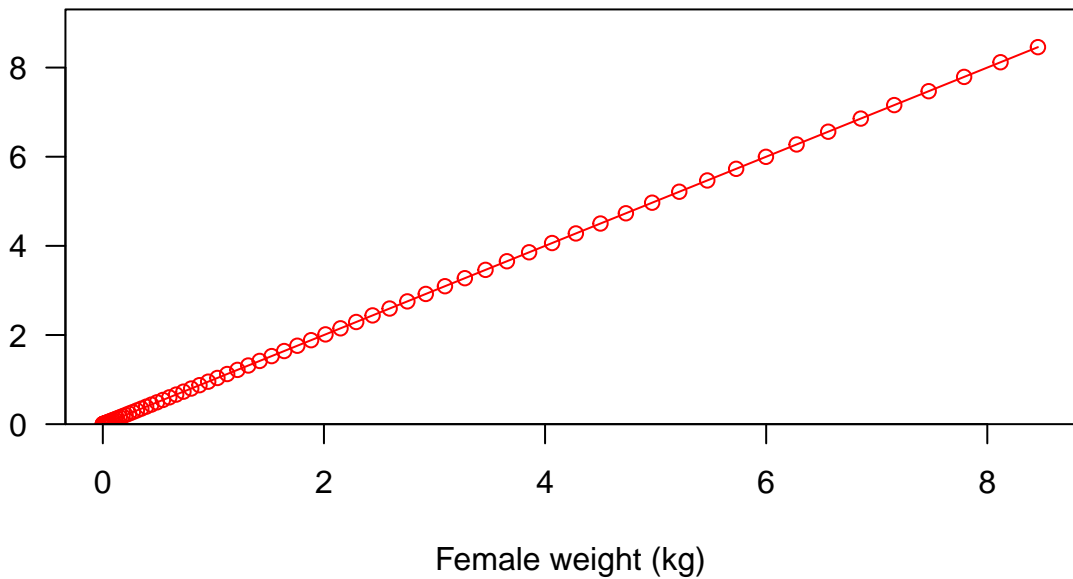








Fecundity



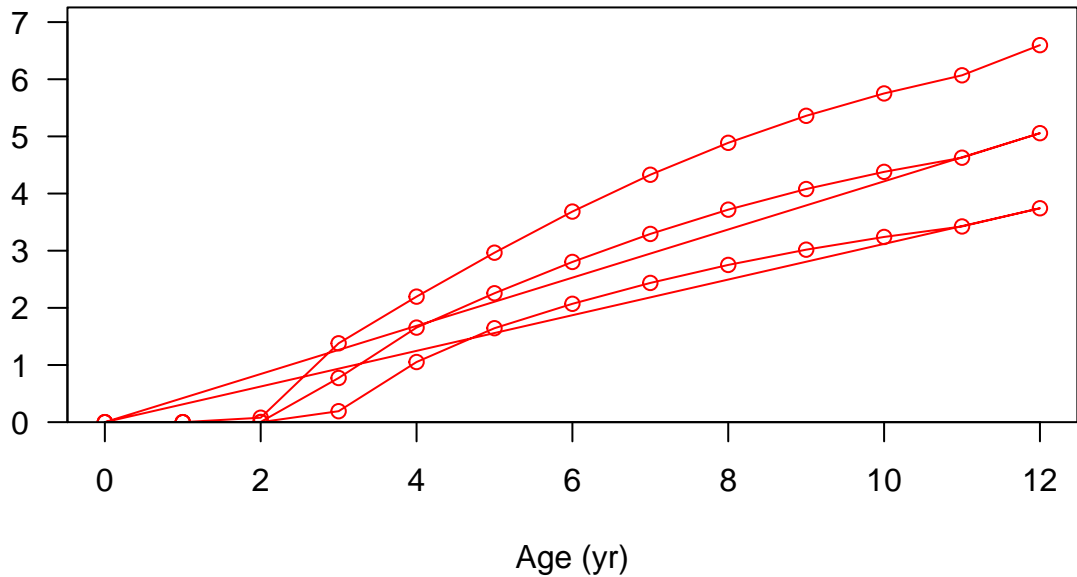
Fecundity



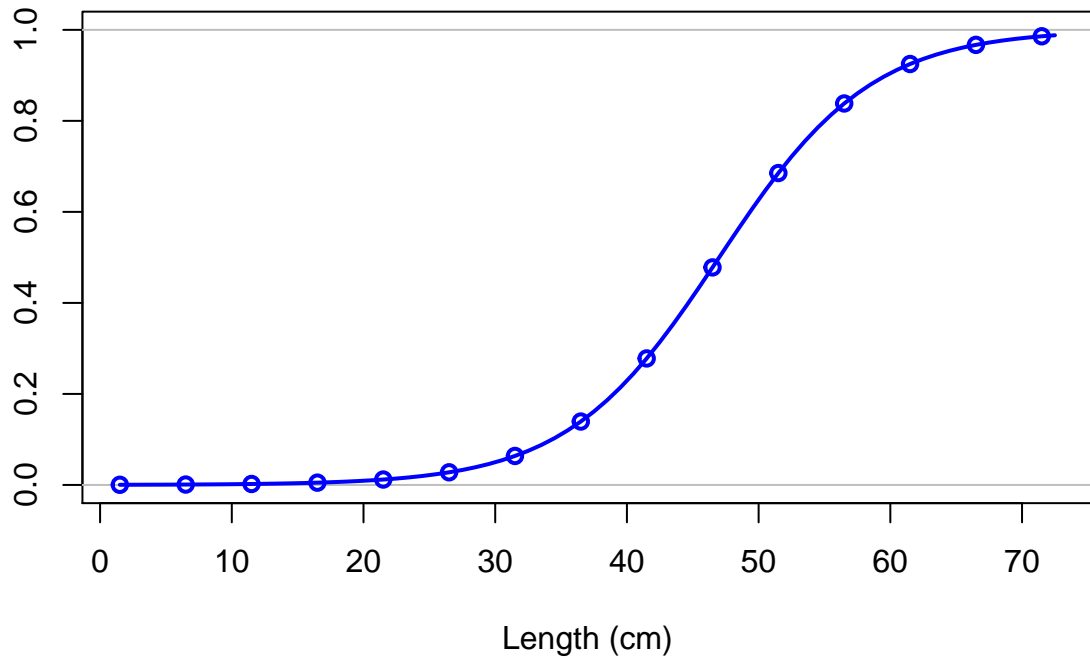
Spawning output



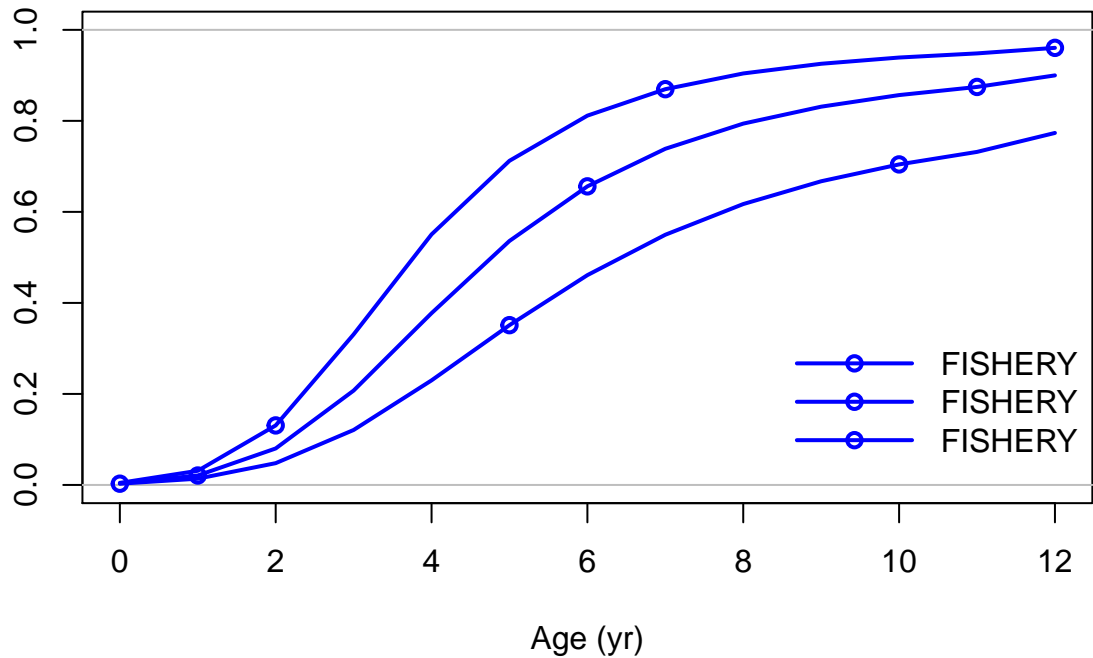
Spawning output



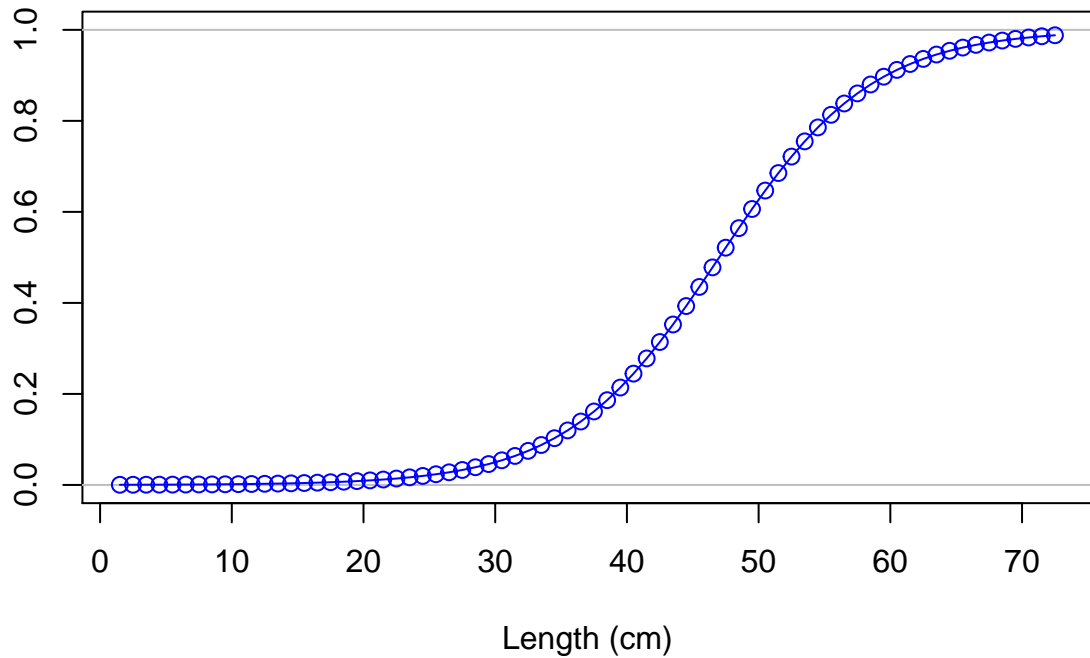
Selectivity

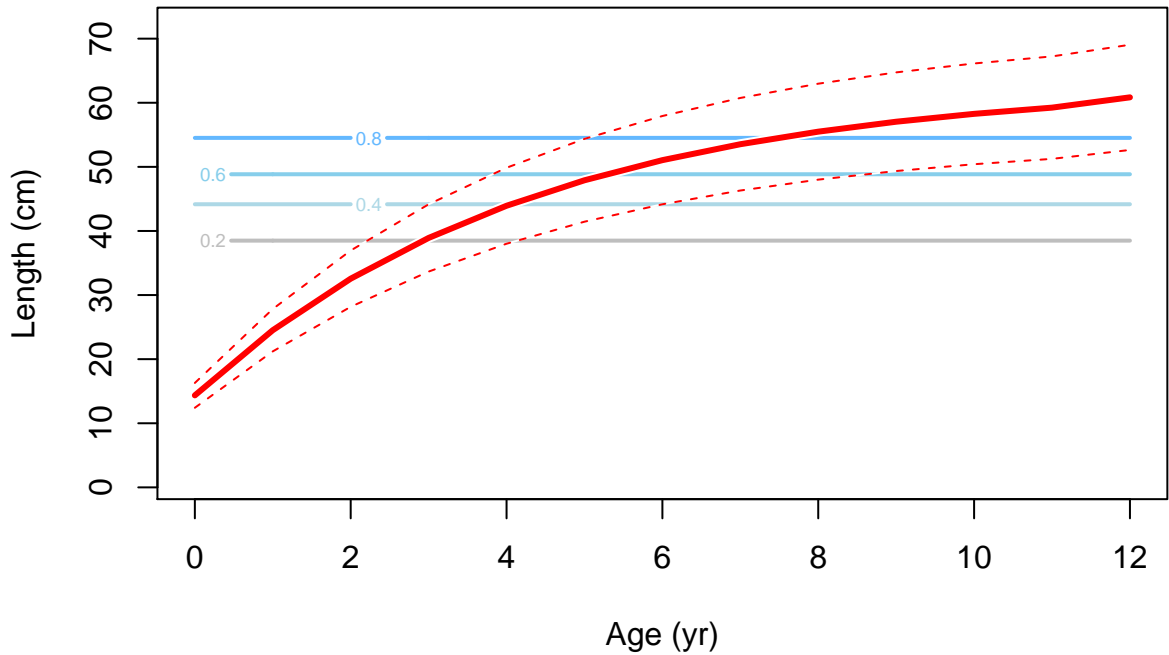


Selectivity

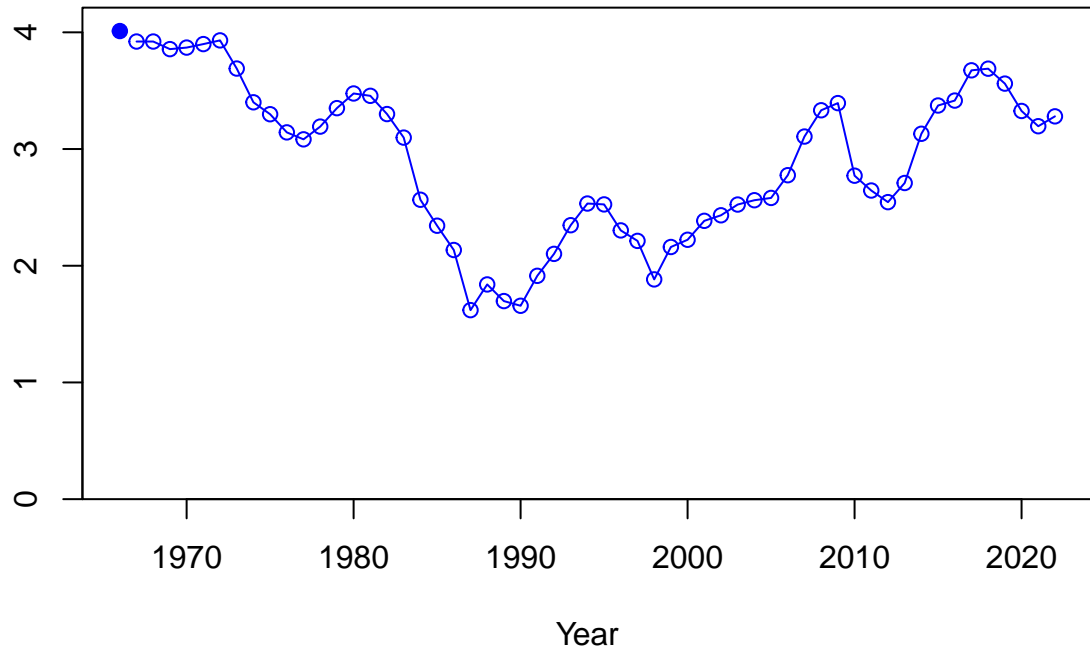


Selectivity

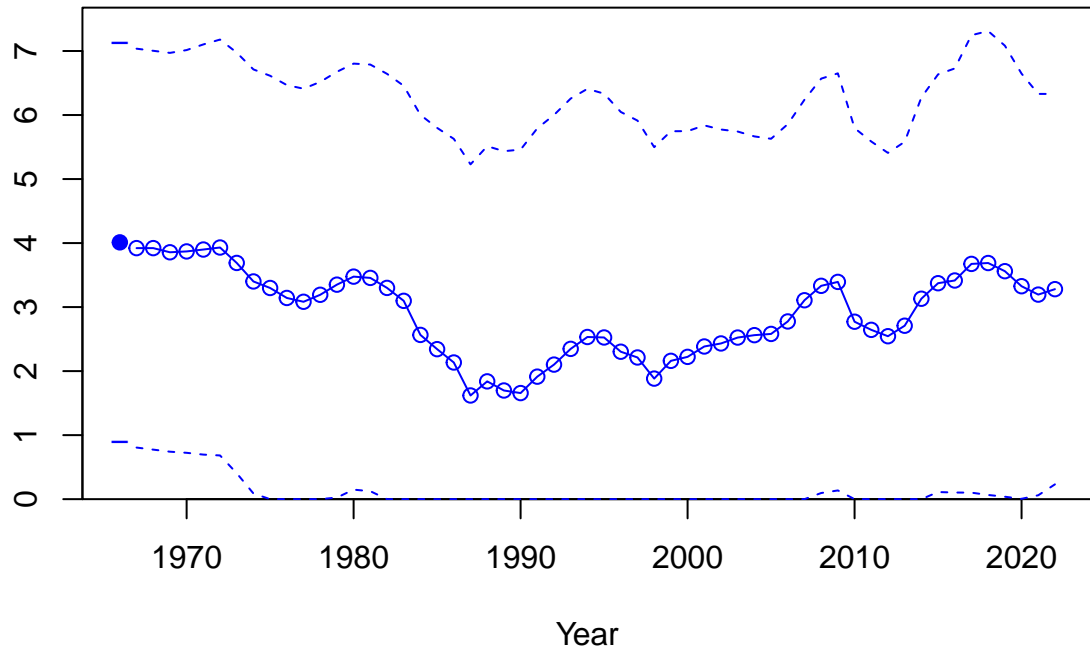




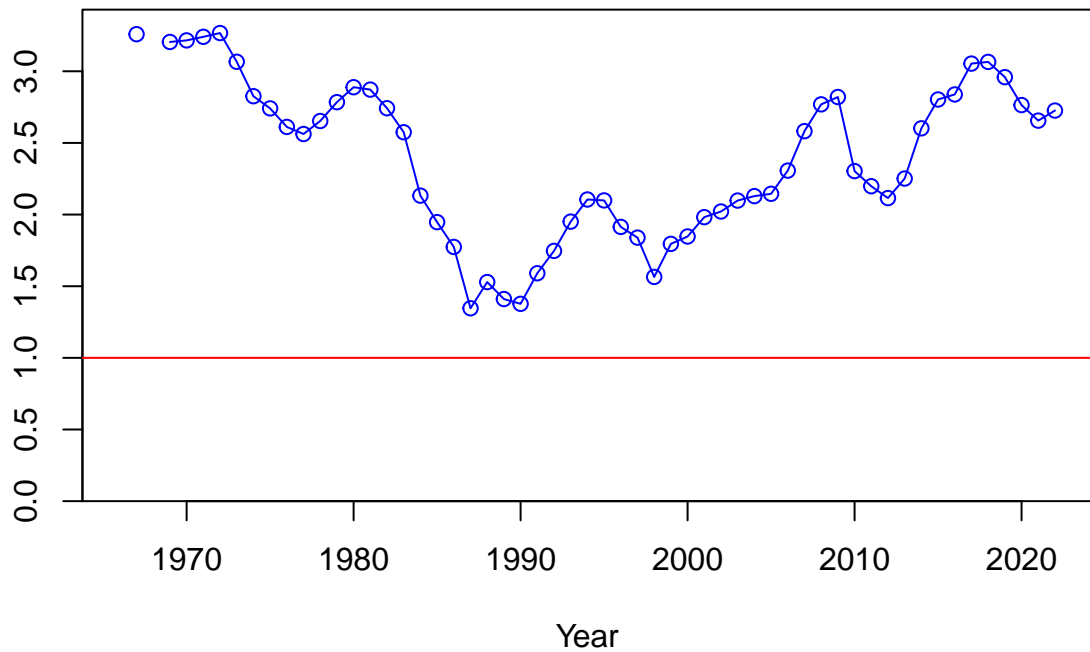
Spawning biomass (mt)



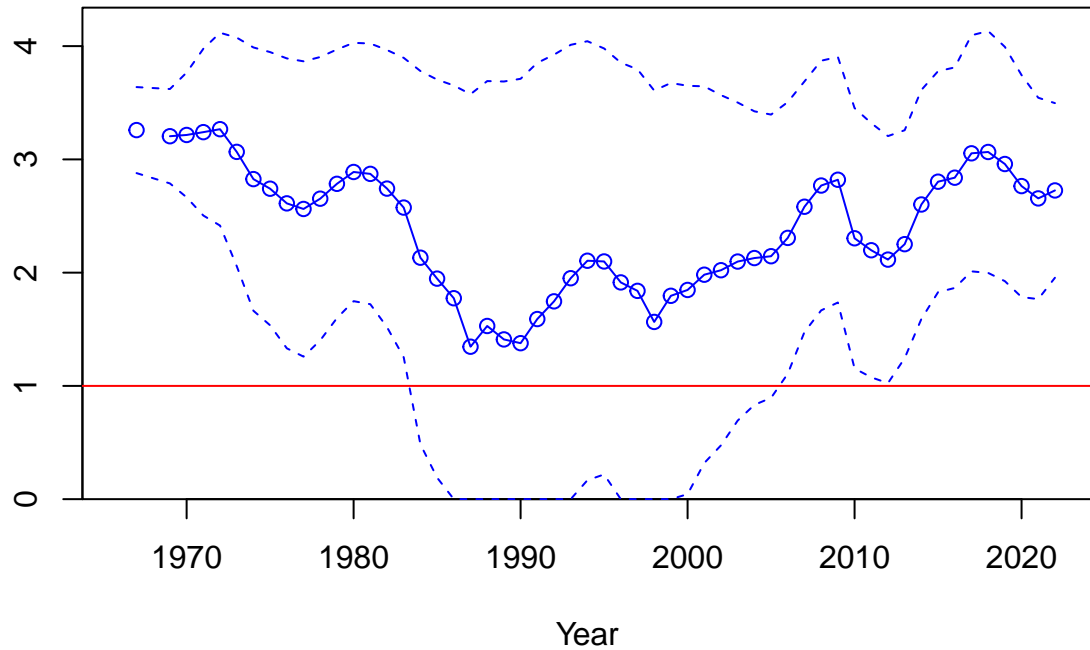
Spawning biomass (mt)

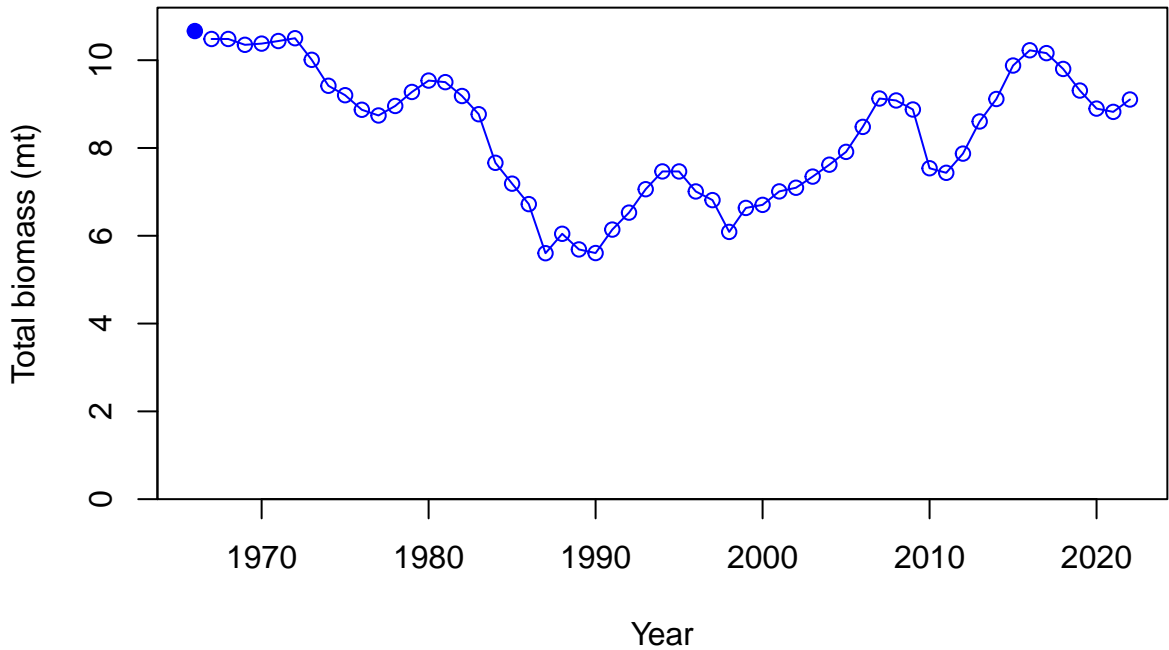


Relative spawning biomass: B/B_{MSY}

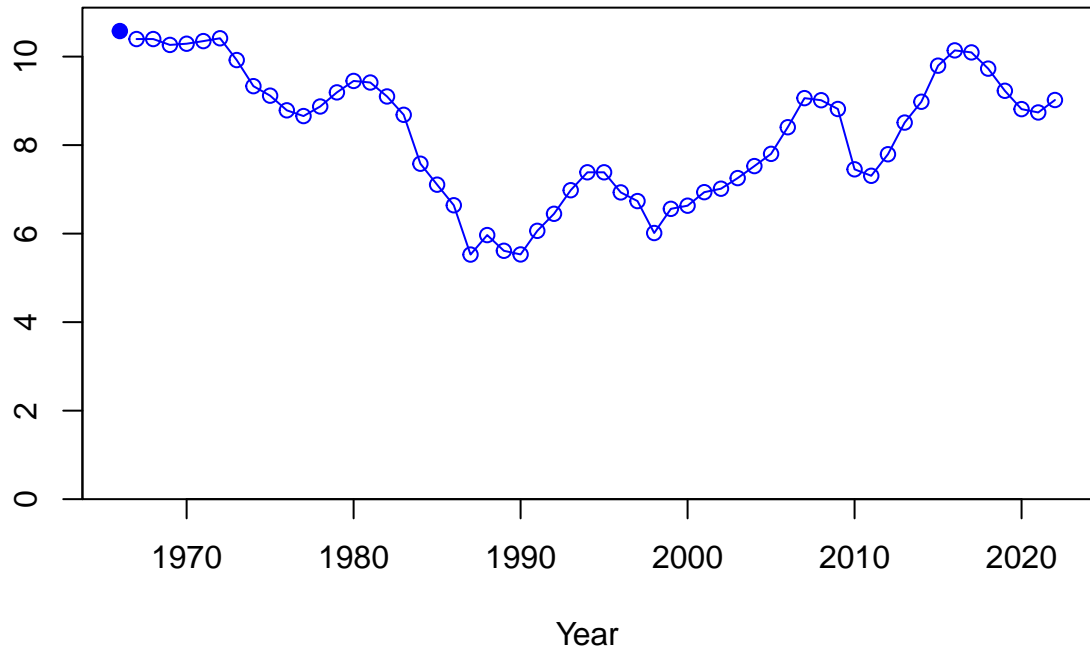


Relative spawning biomass: B/B_{MSY}

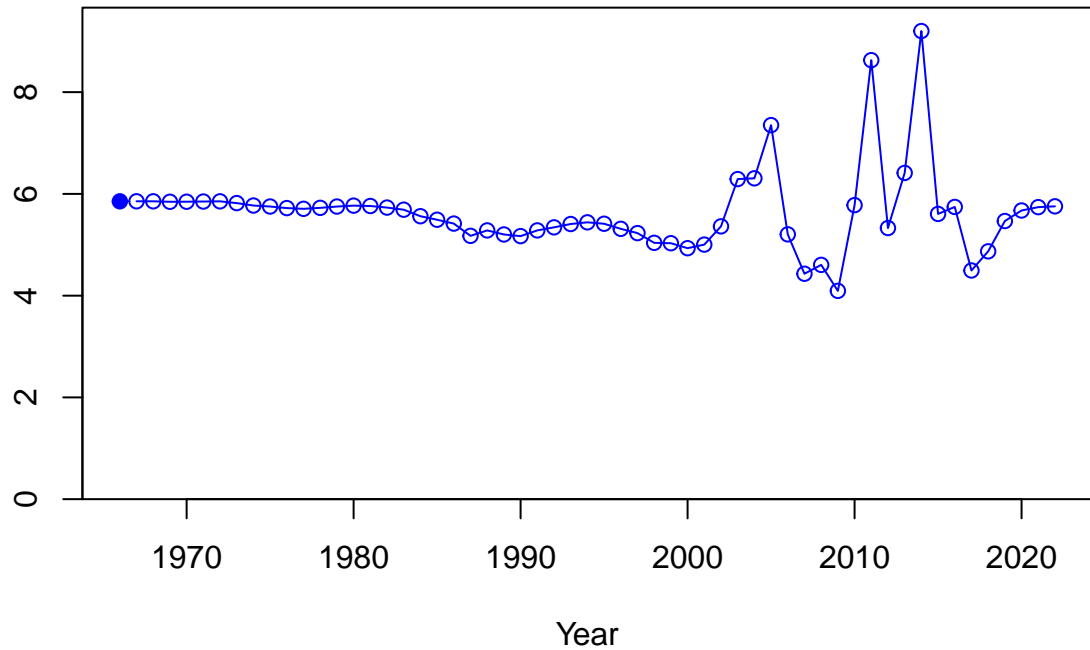




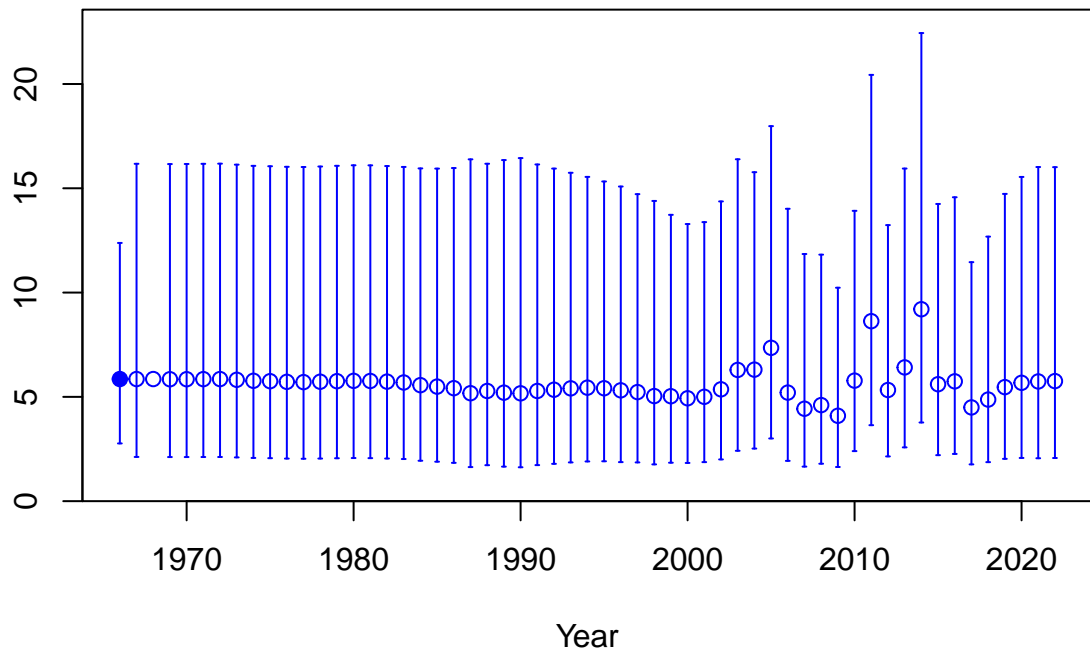
Summary biomass (mt)



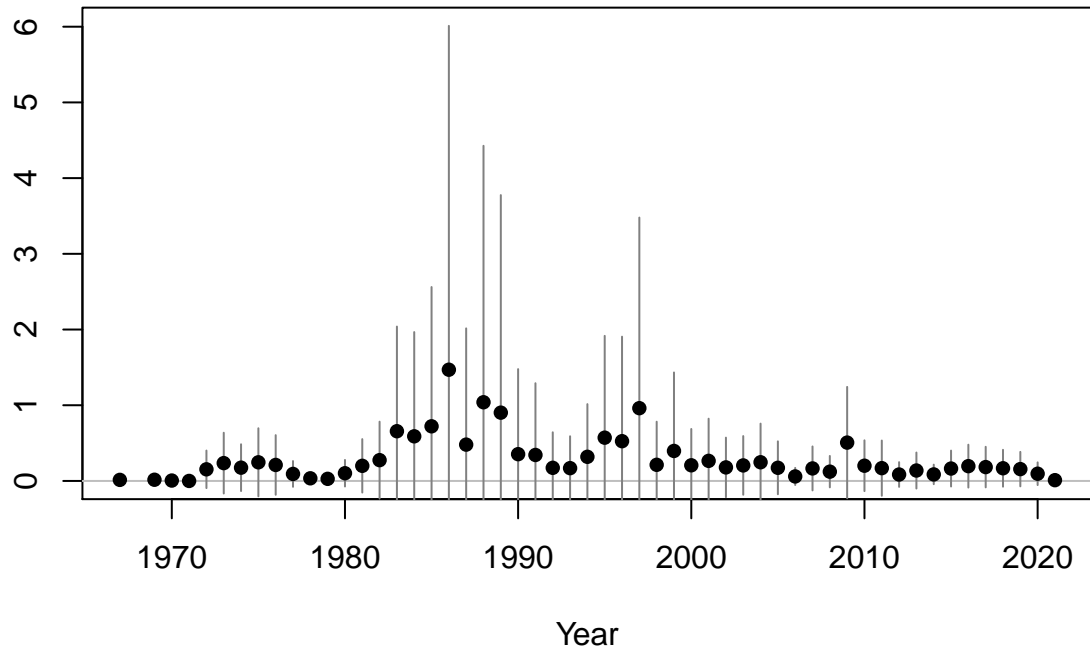
Age-0 recruits (1,000s)

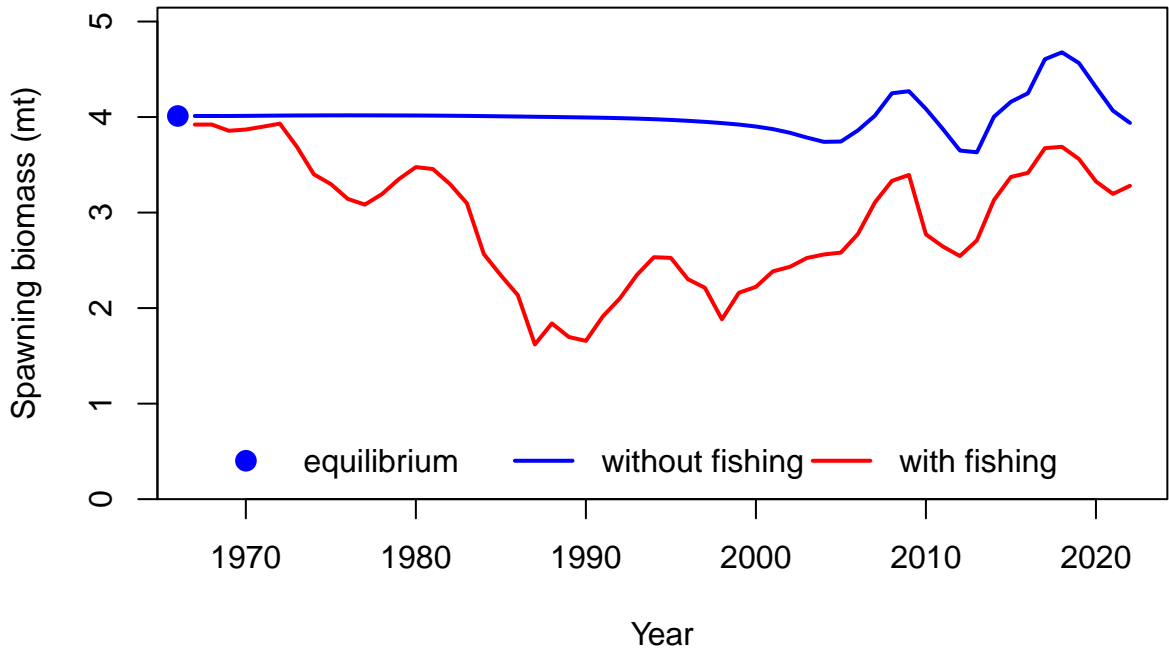


Age-0 recruits (1,000s)



Summary Fishing Mortality





Log recruitment deviation

0.4
0.2
0.0
-0.2

1970

1980

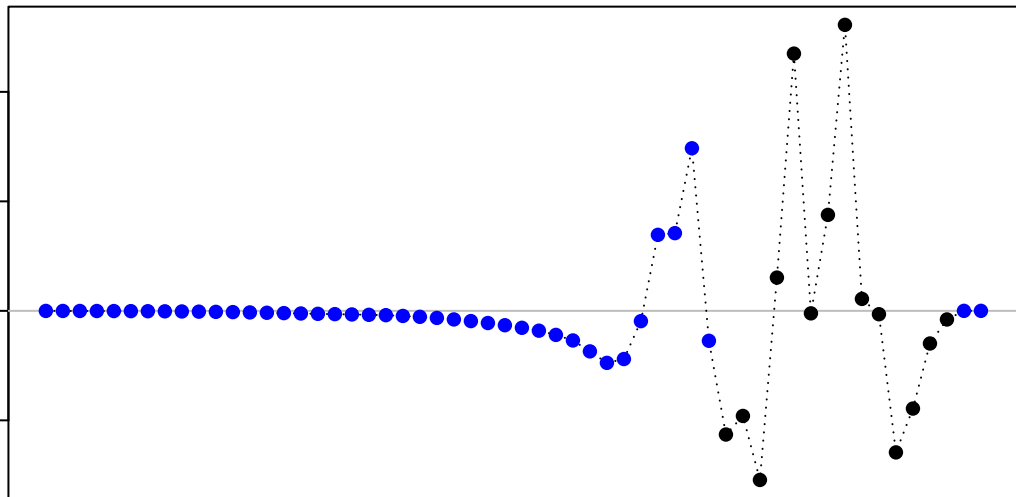
1990

2000

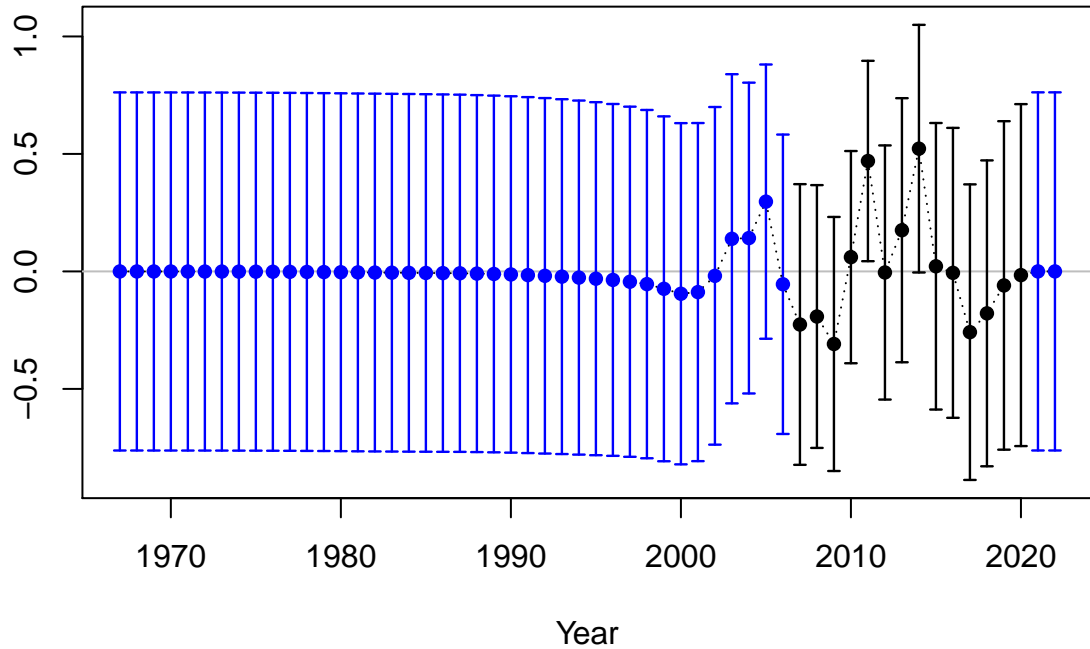
2010

2020

Year

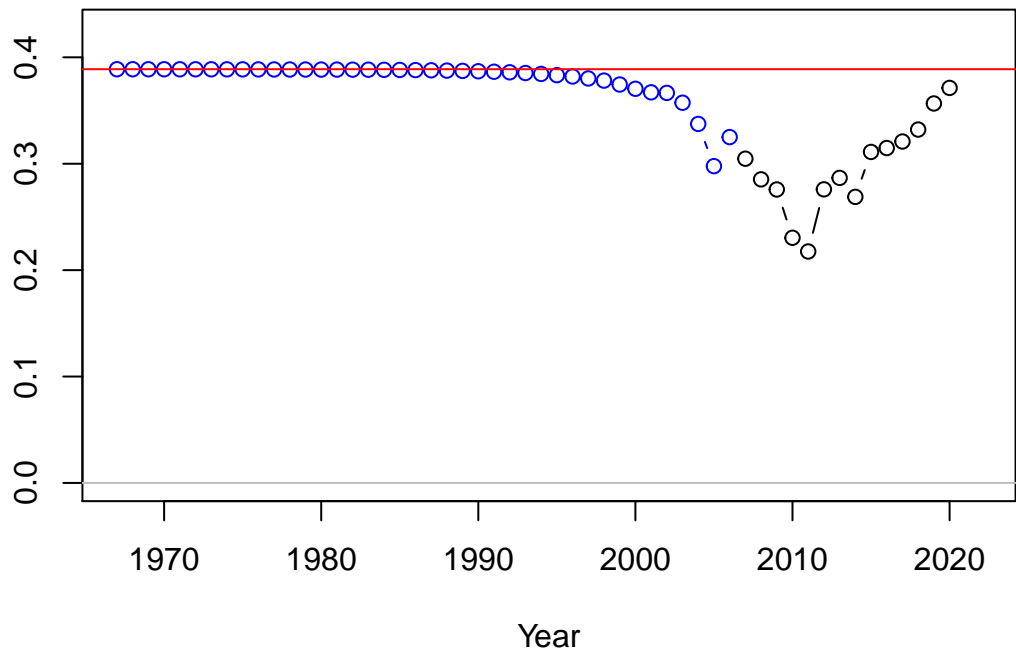


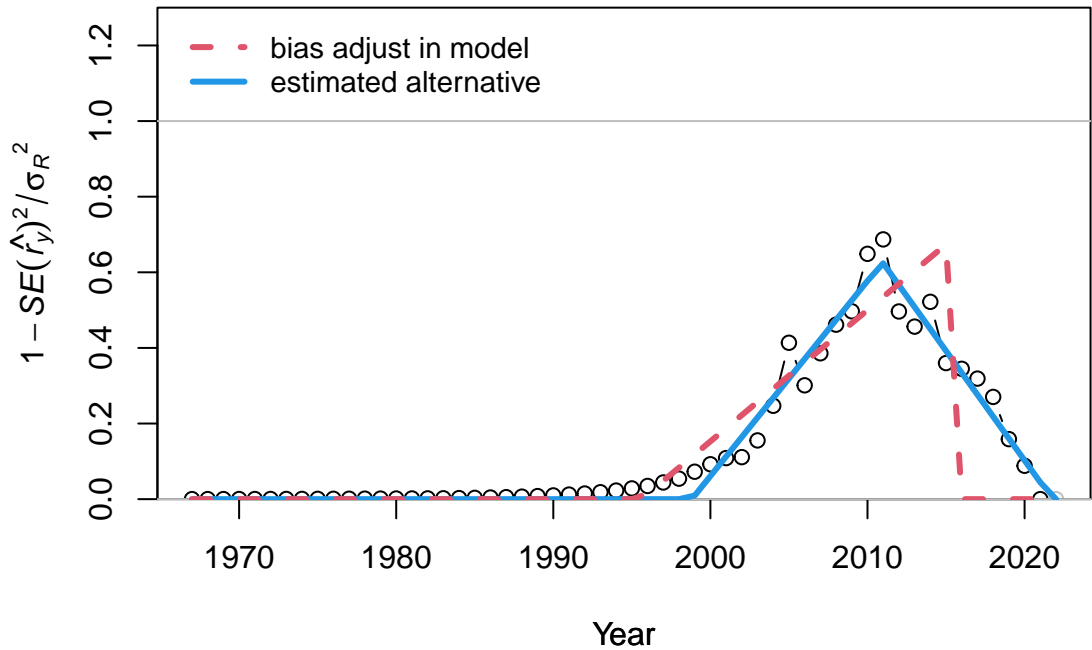
Log recruitment deviation



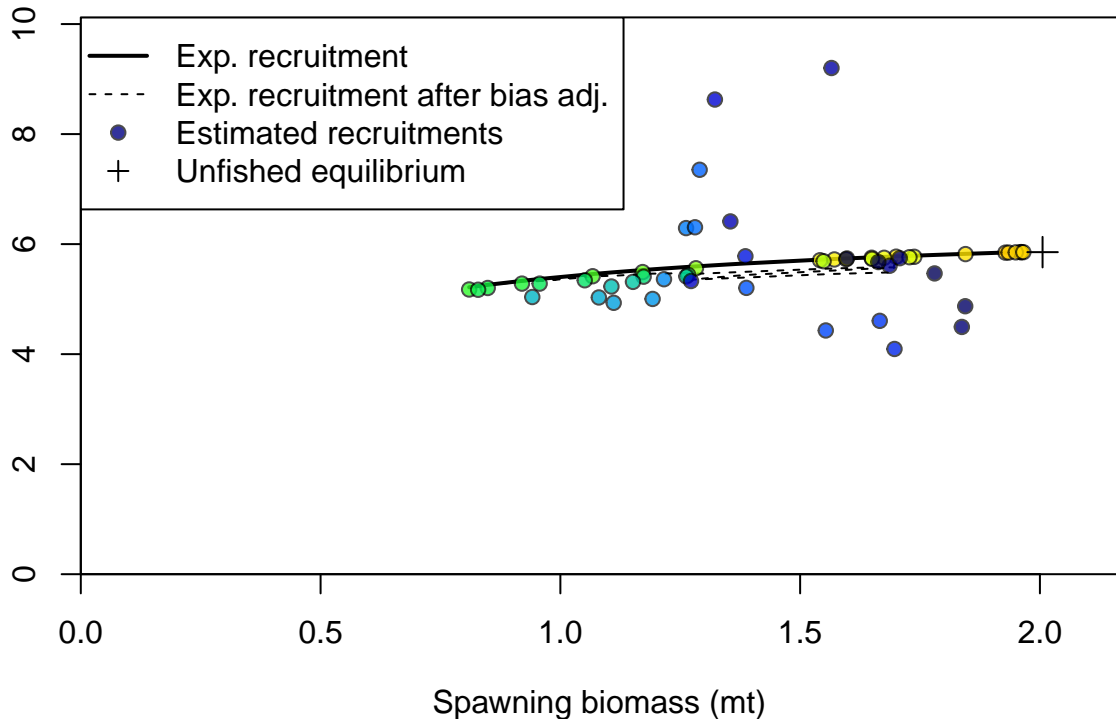
Recruitment deviation variance

Asymptotic standard error estimate

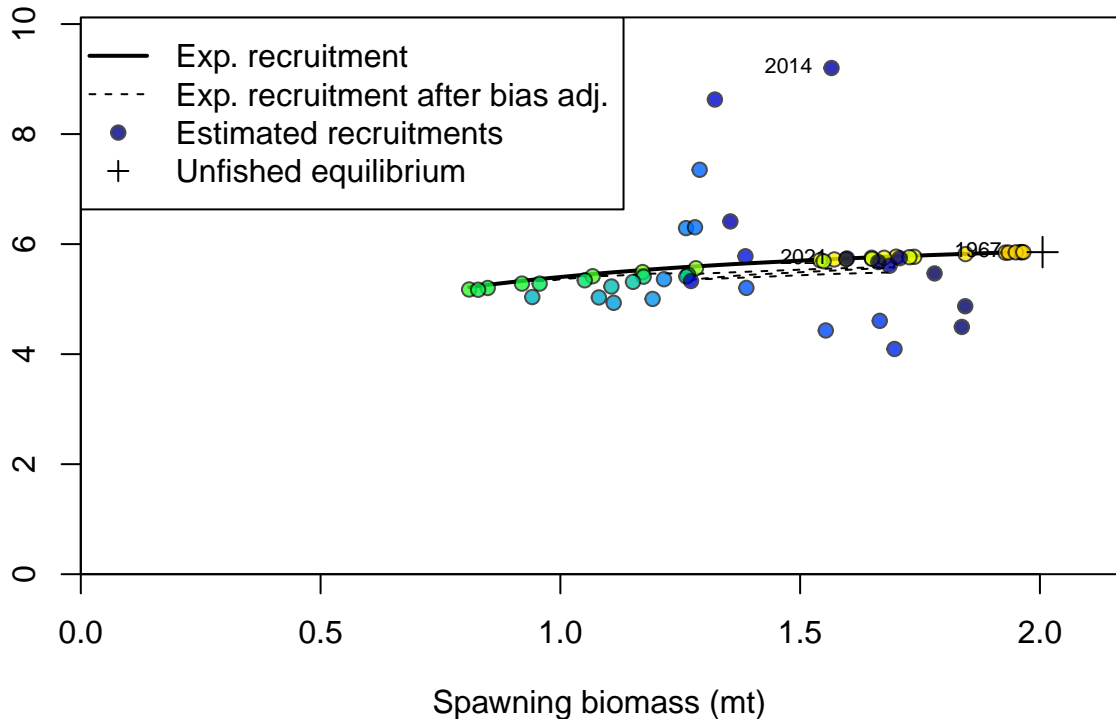


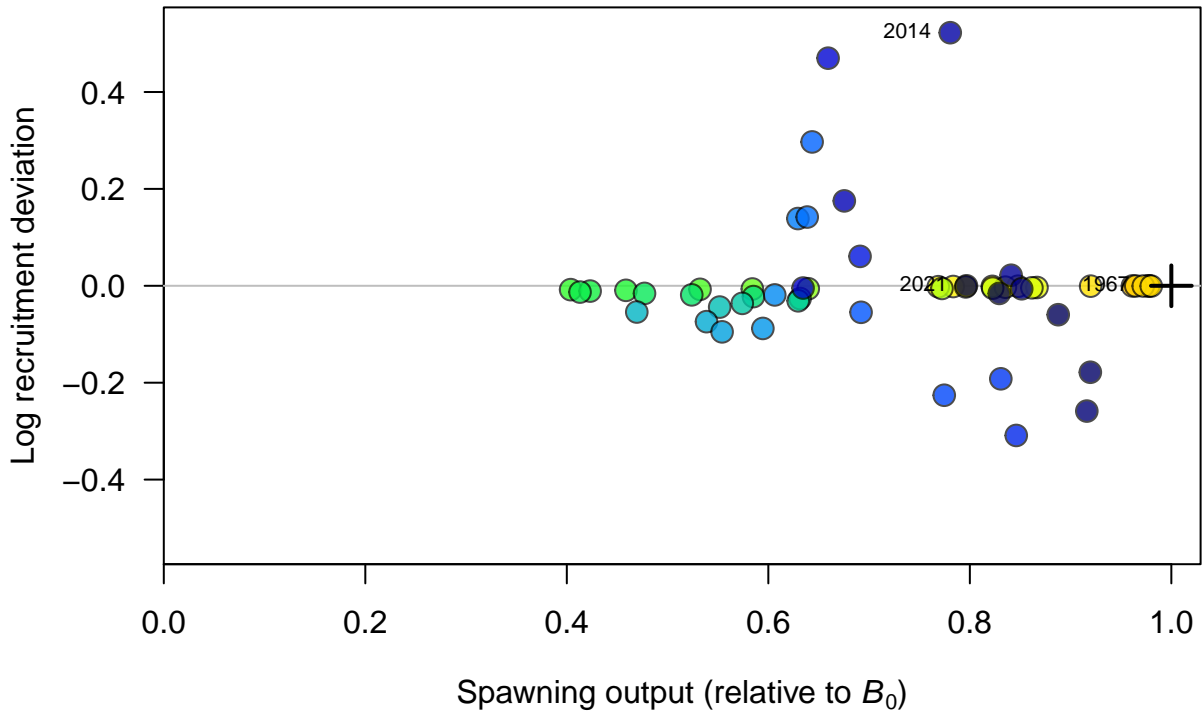


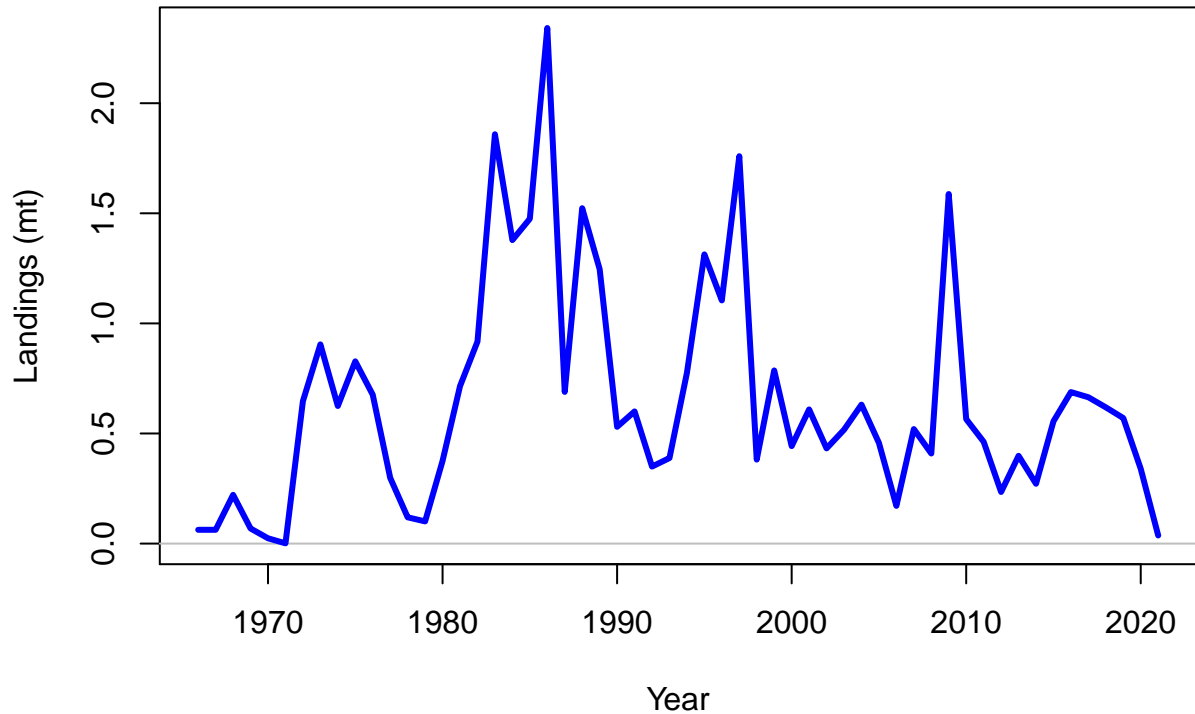
Recruitment (1,000s)

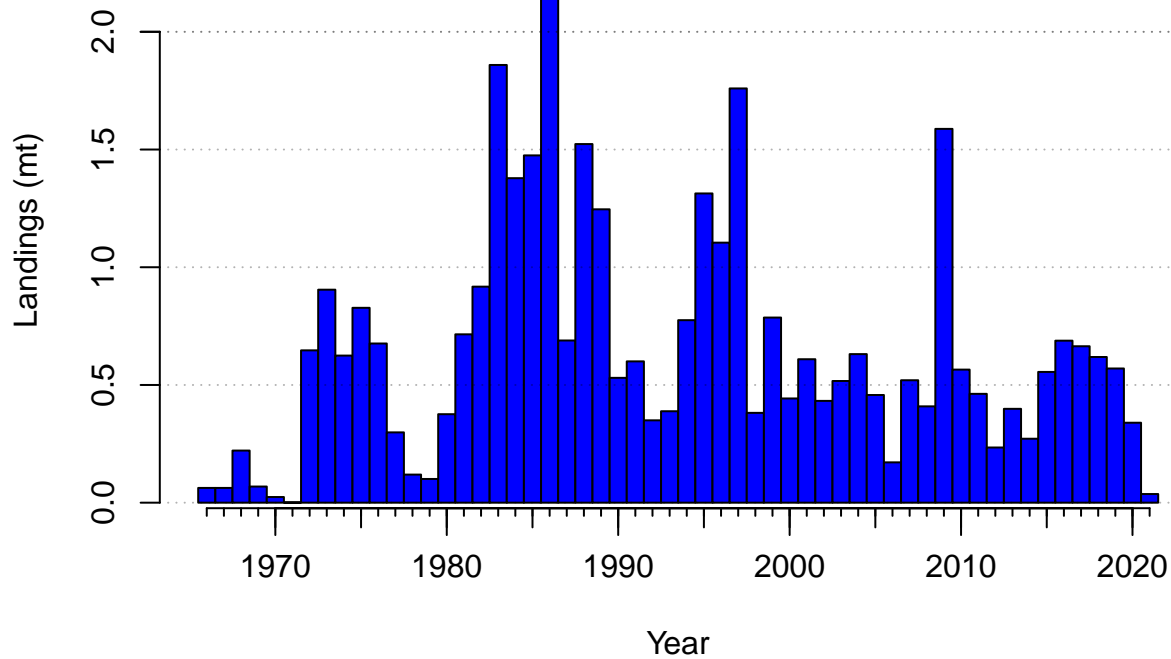


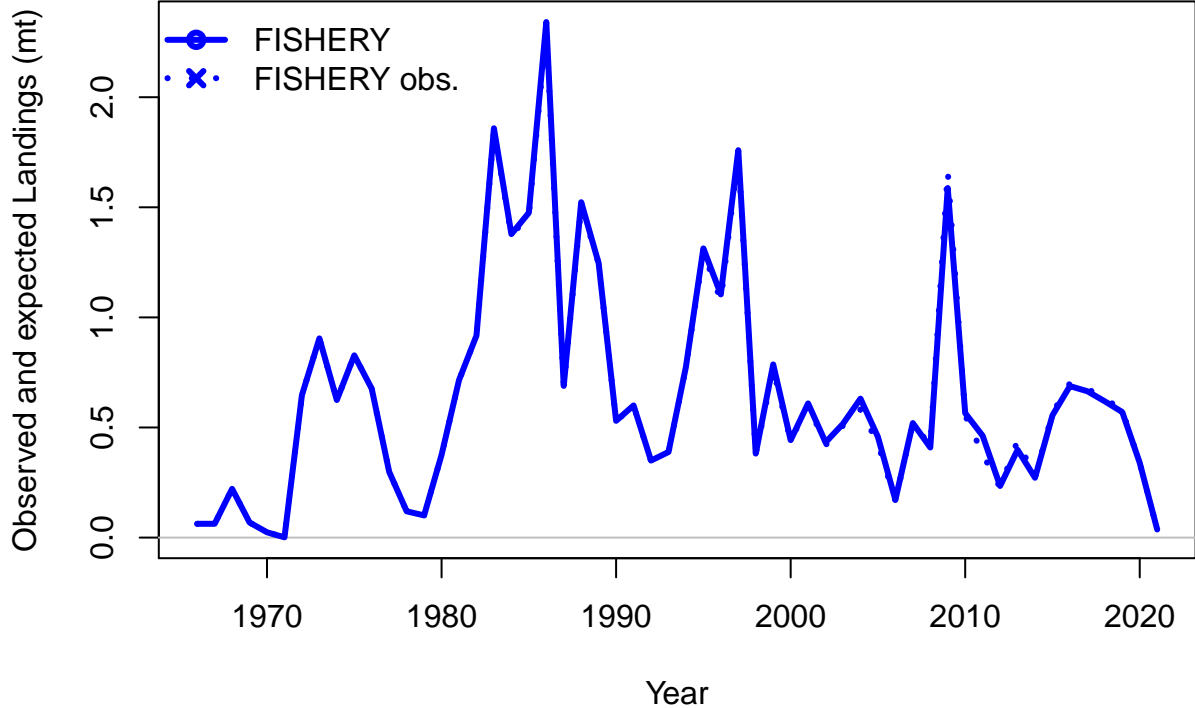
Recruitment (1,000s)



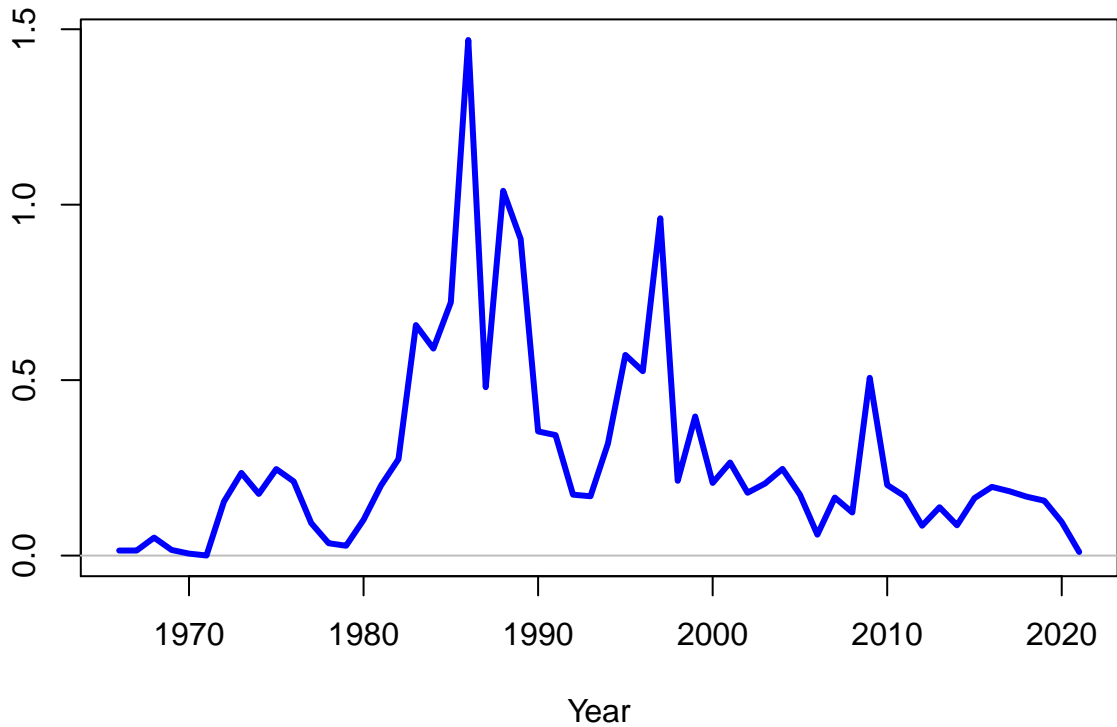




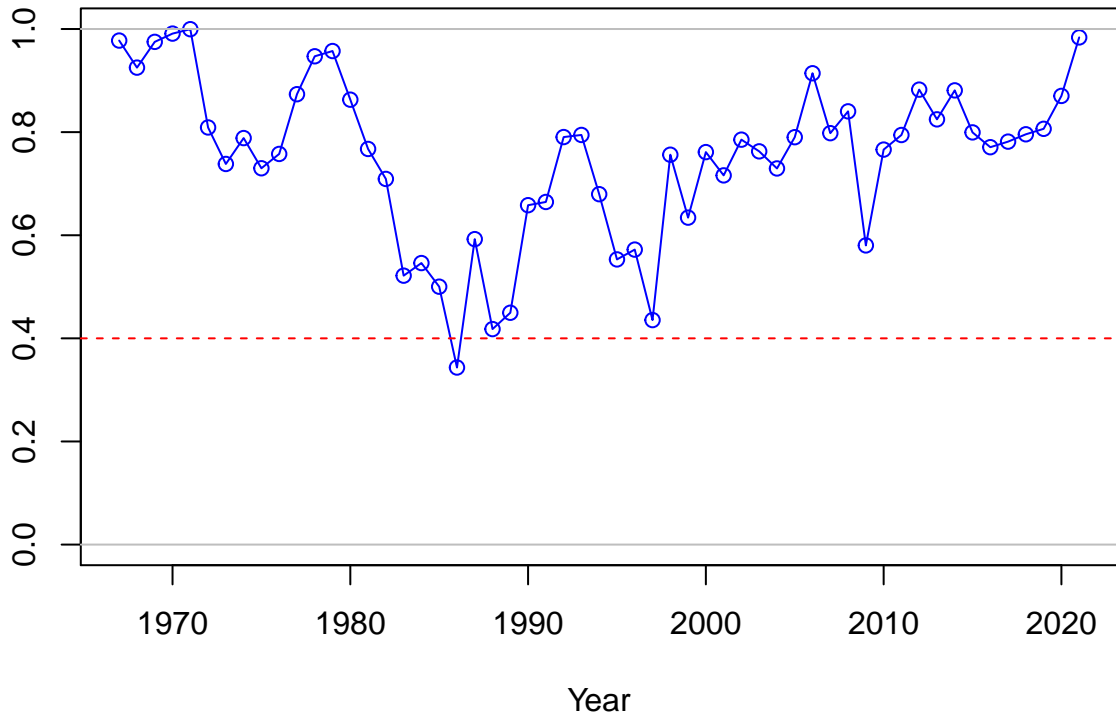




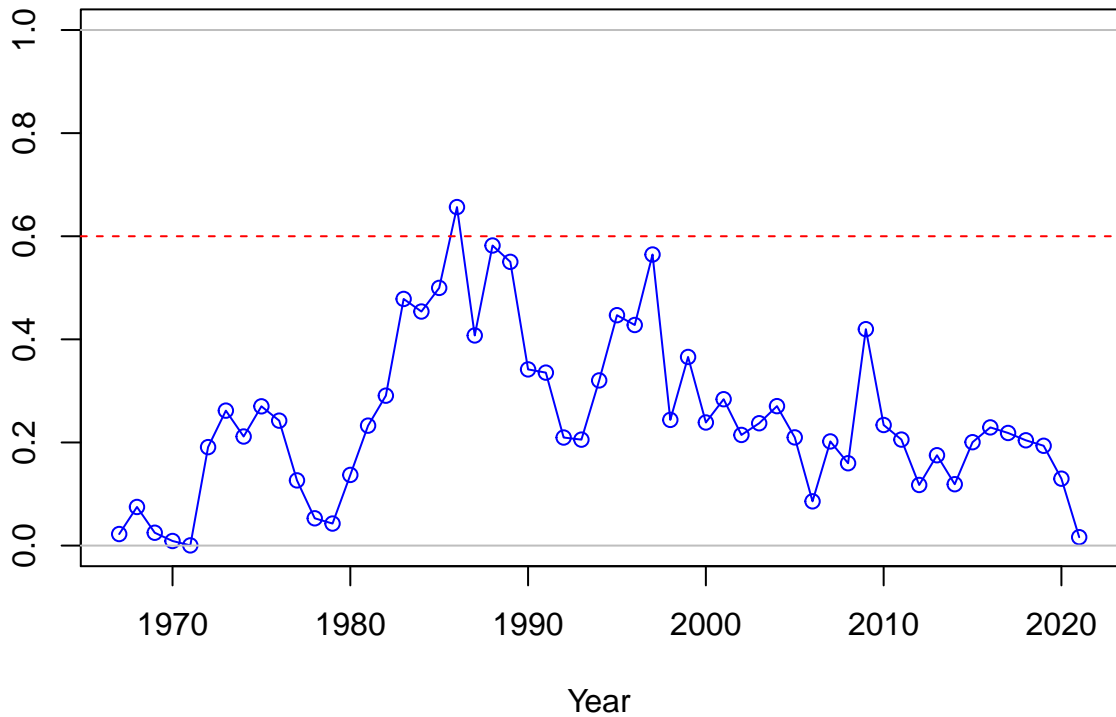
Continuous F



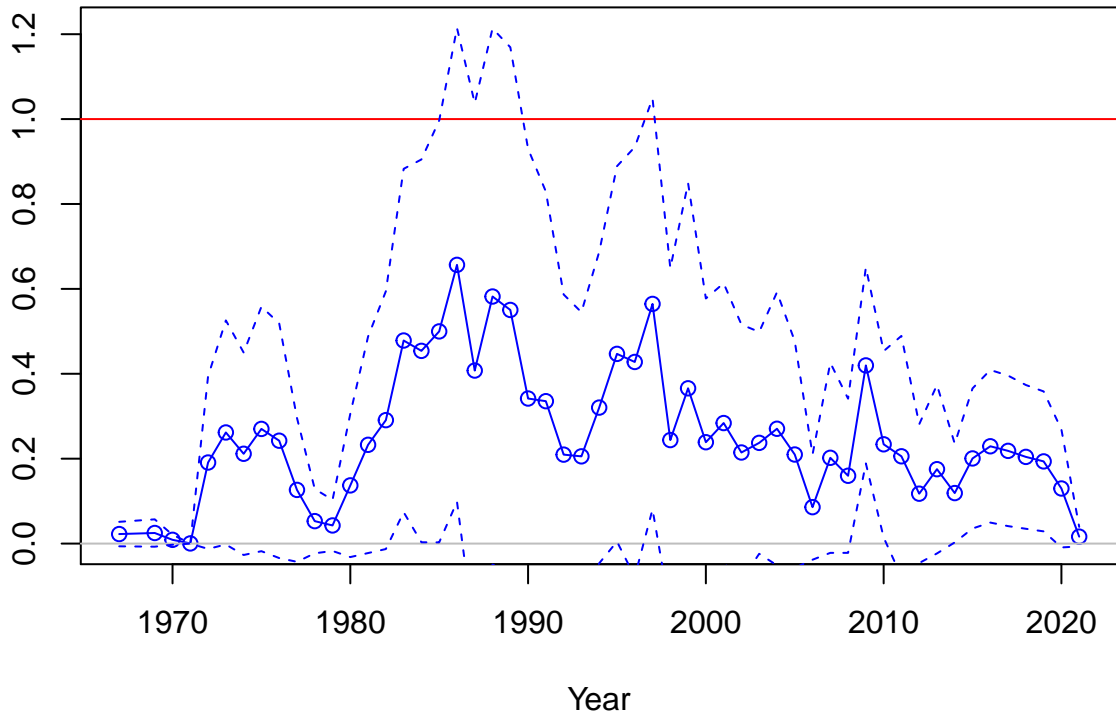
SPR



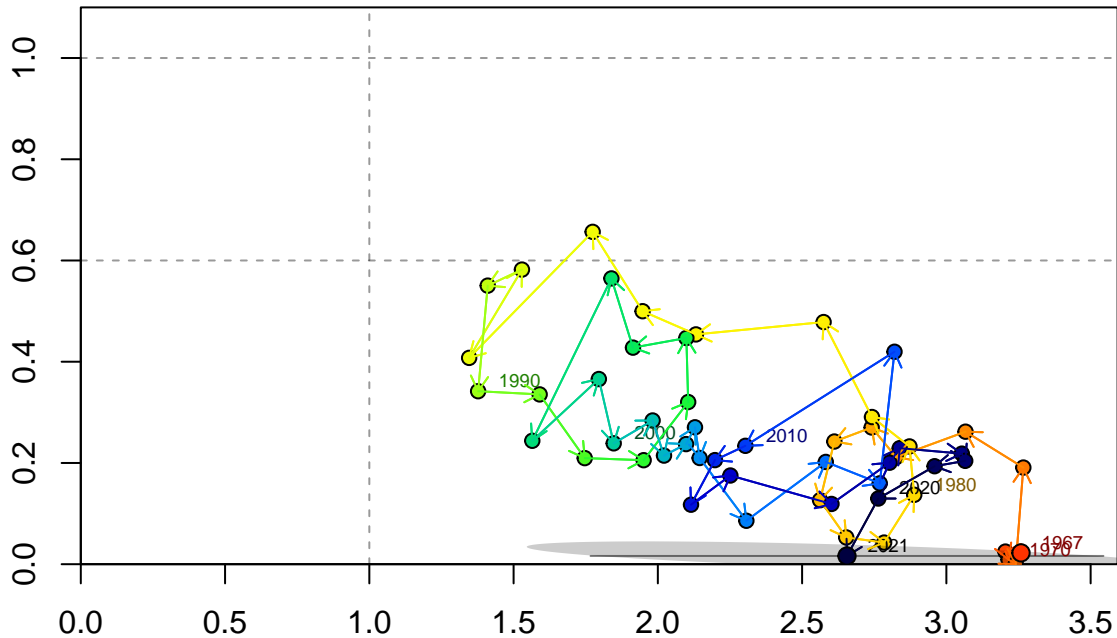
1-SPR



Fishing intensity: 1-SPR



Fishing intensity: 1-SPR



Relative spawning output: B/B_{MSY}

Index

5
4
3
2
1
0

2016

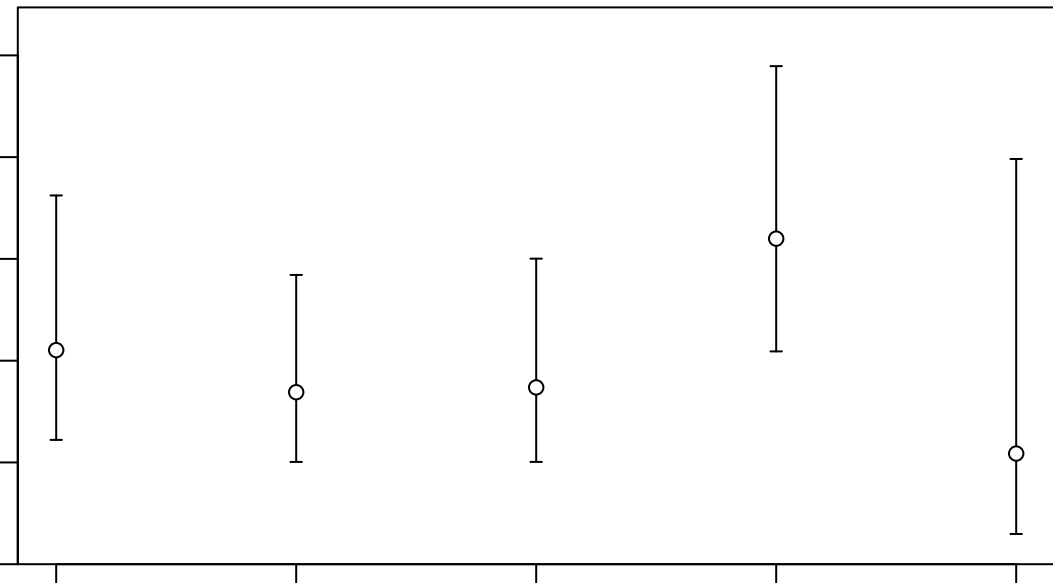
2017

2018

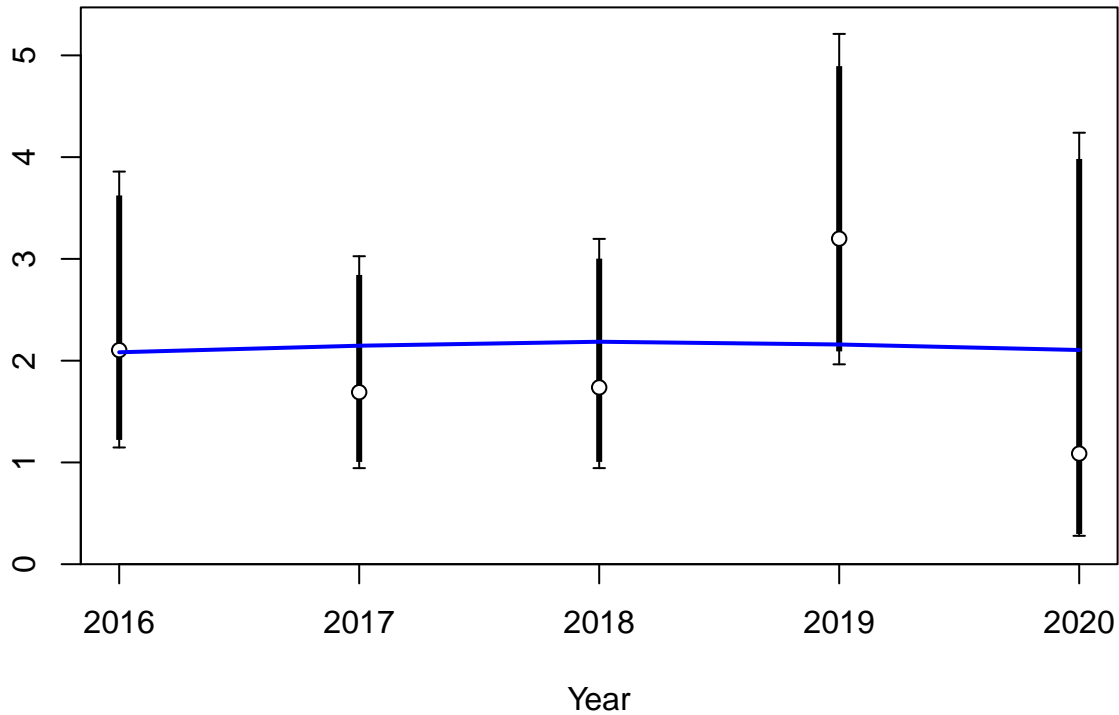
2019

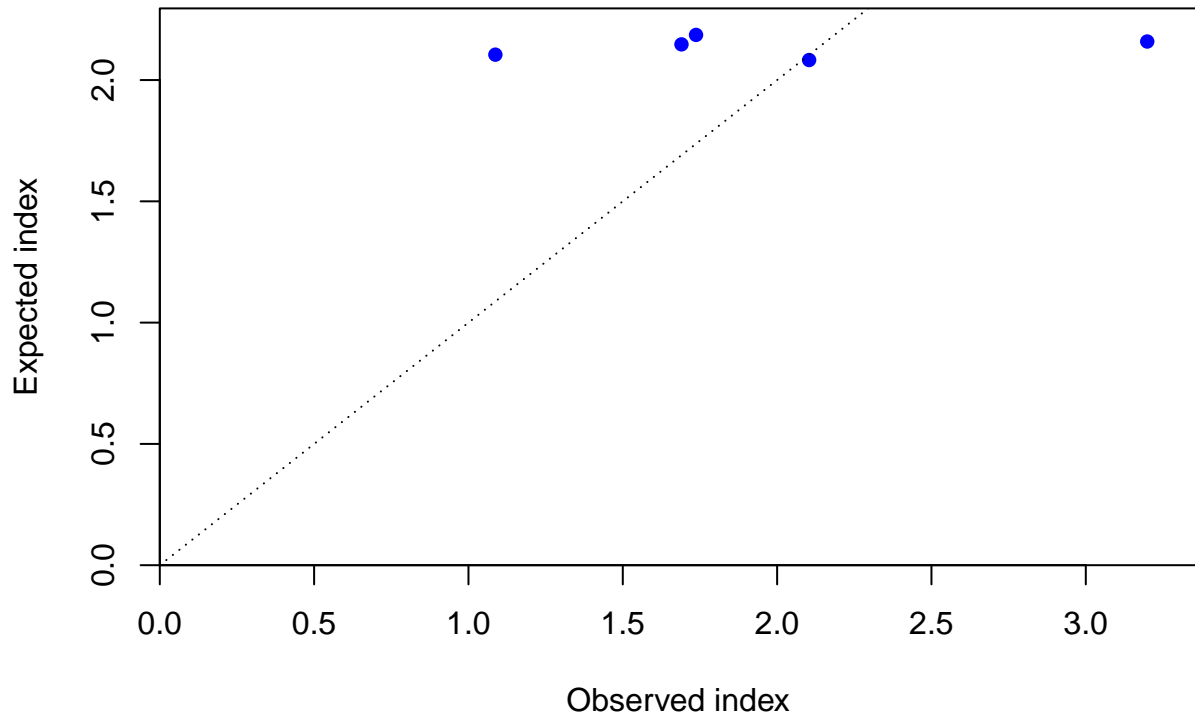
2020

Year



Index





Log index

1.5
1.0
0.5
0.0
-1.0

2016

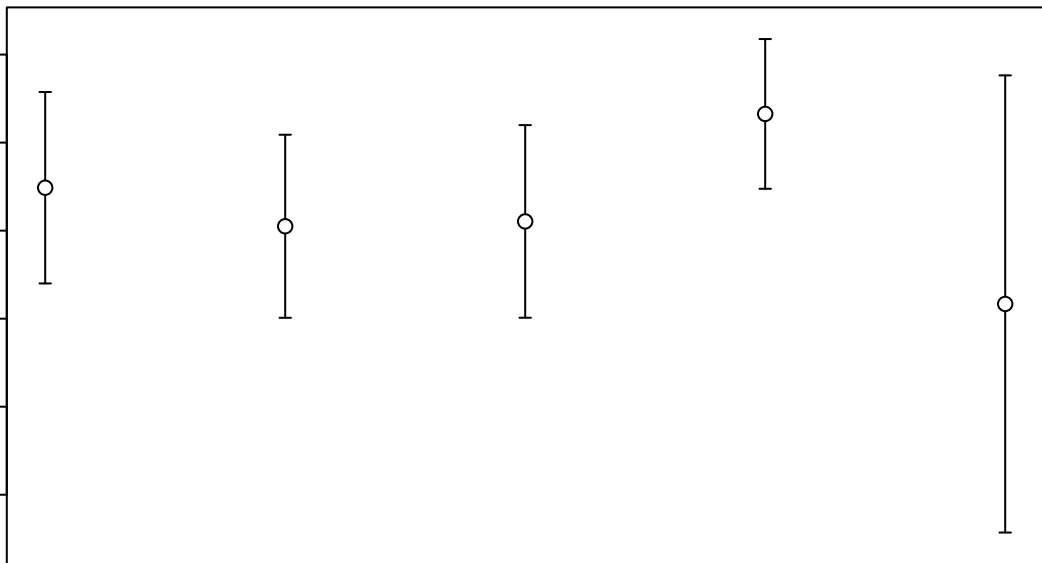
2017

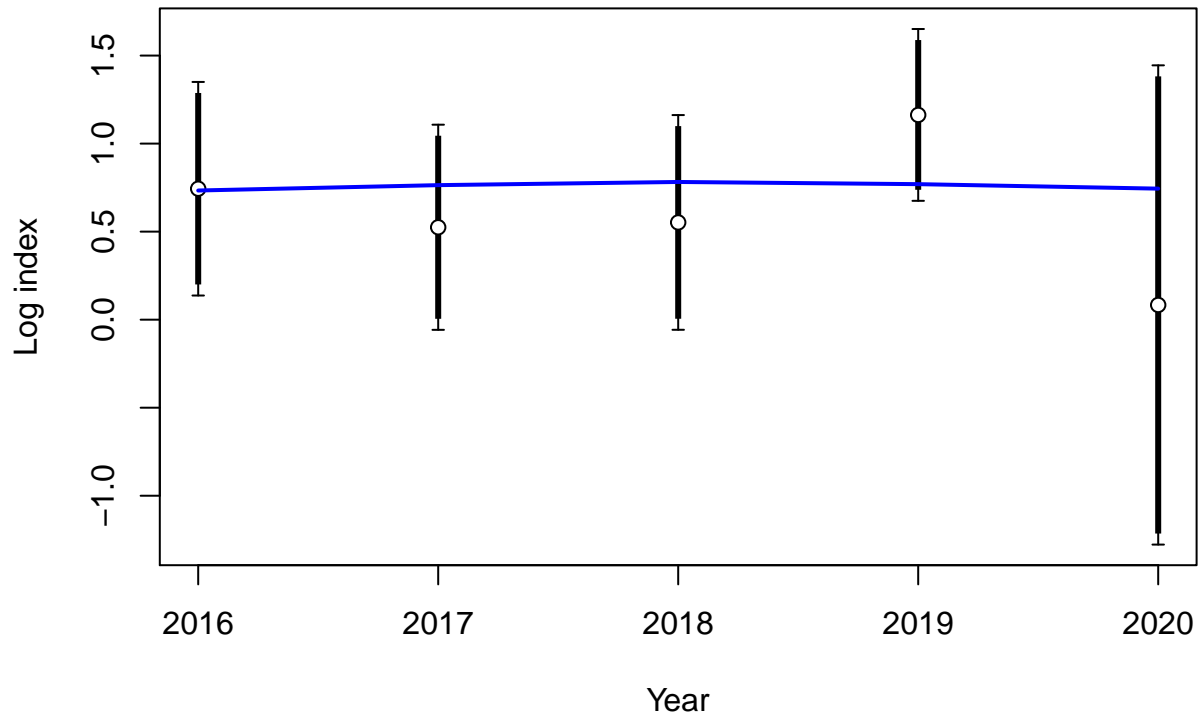
2018

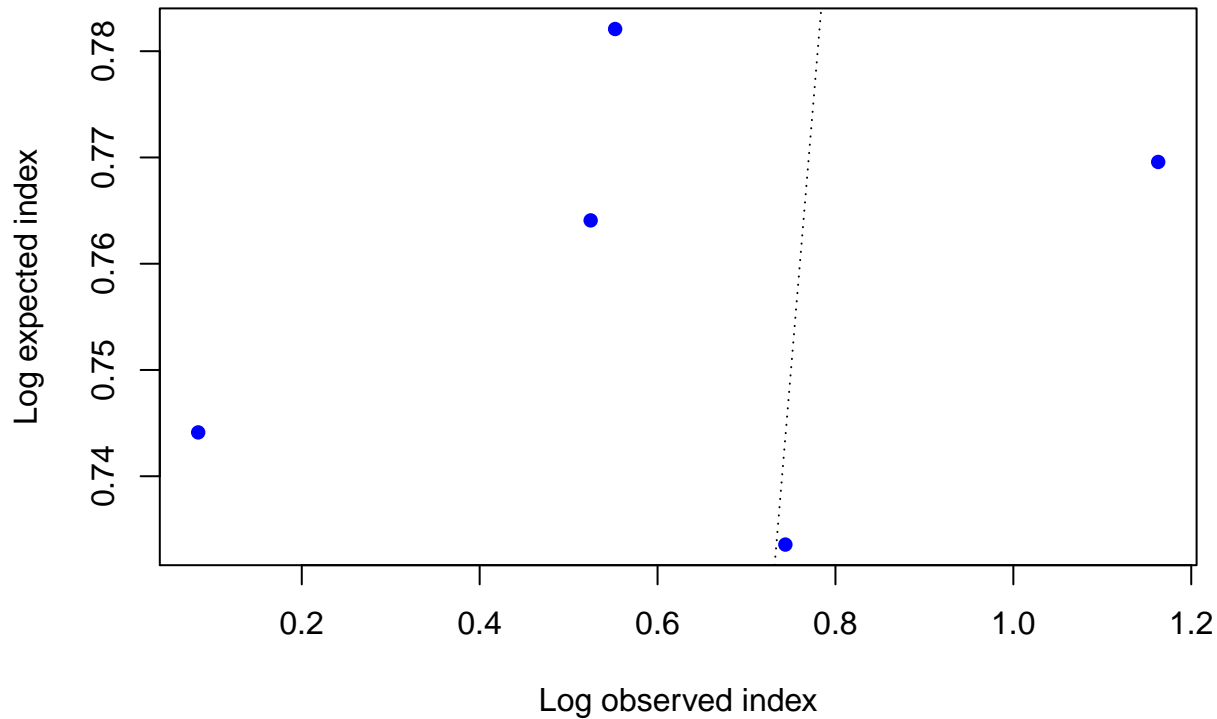
2019

2020

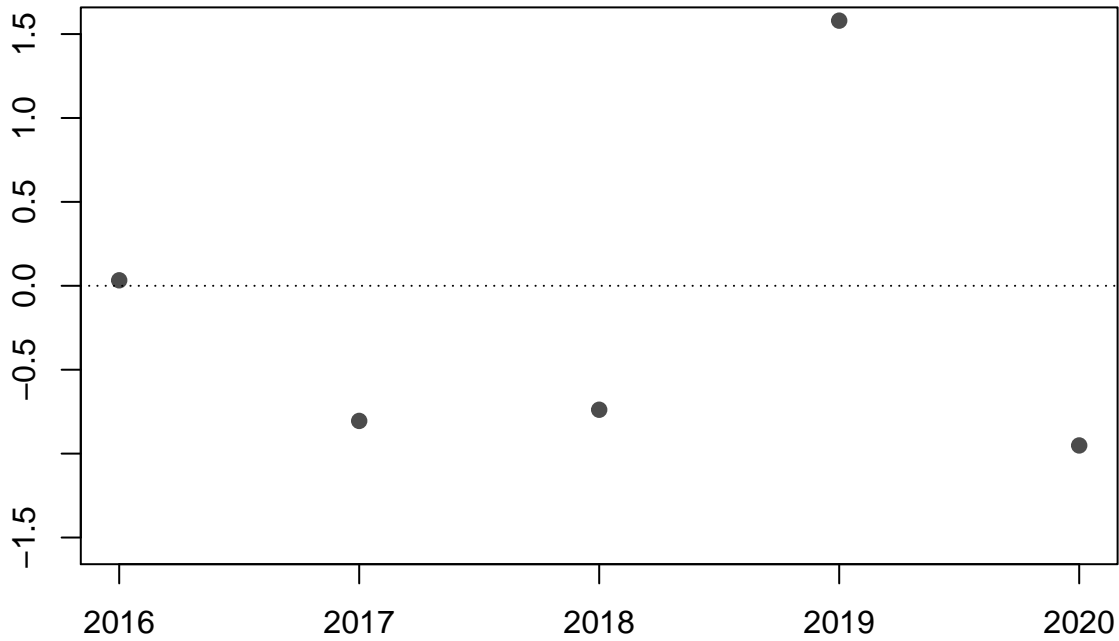
Year





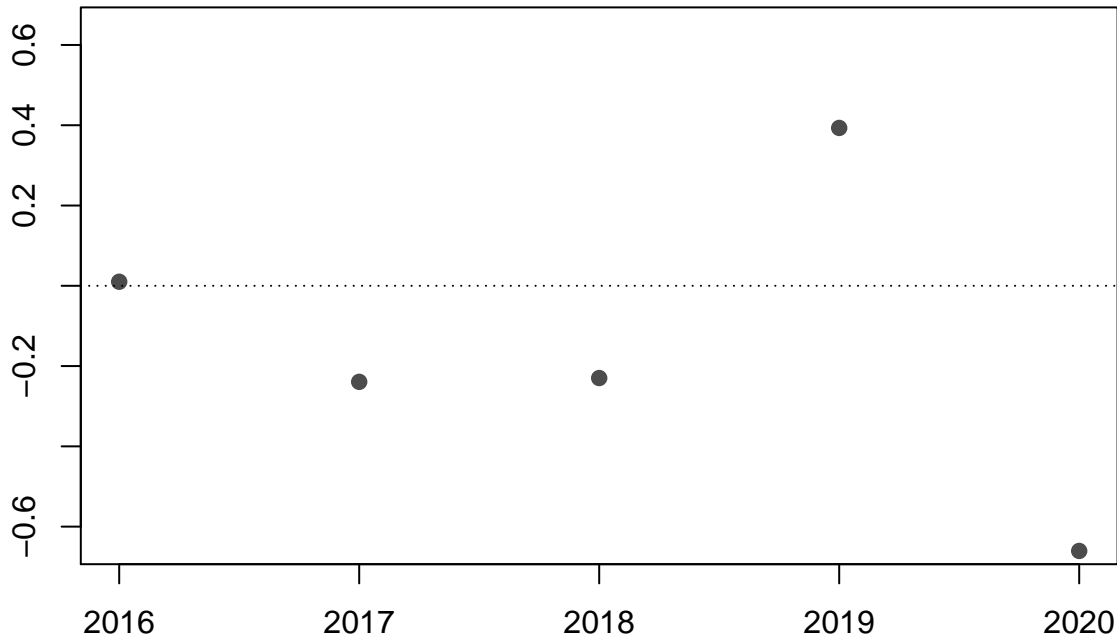


Residual

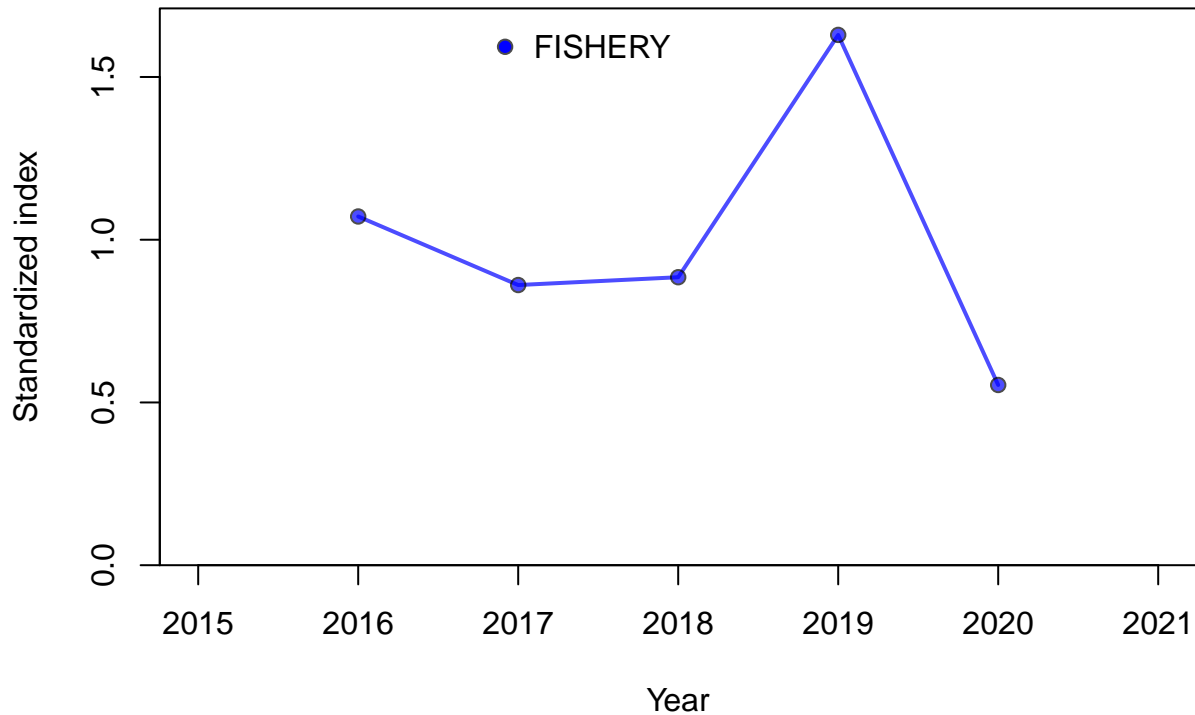


Year

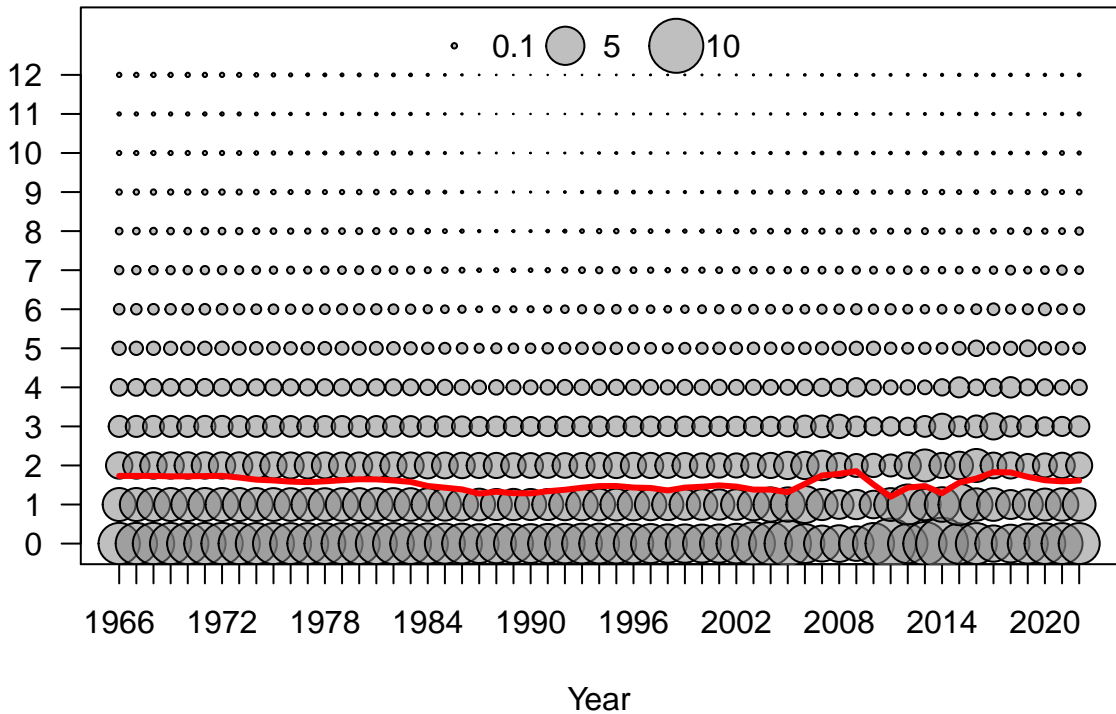
Deviation



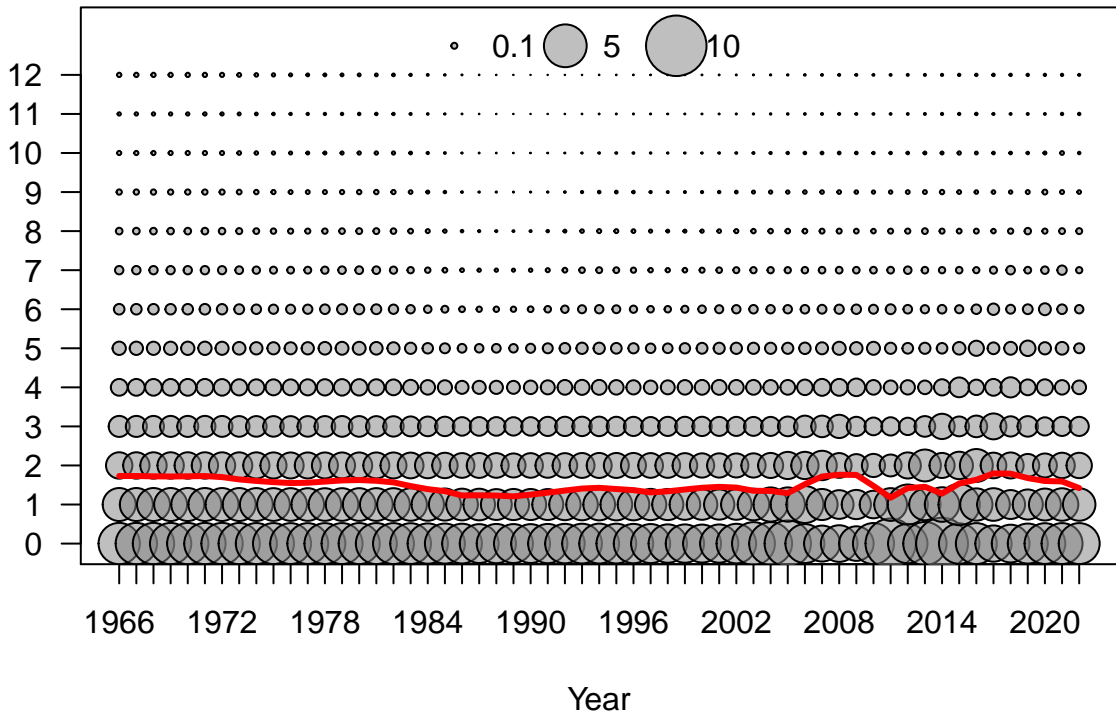
Year

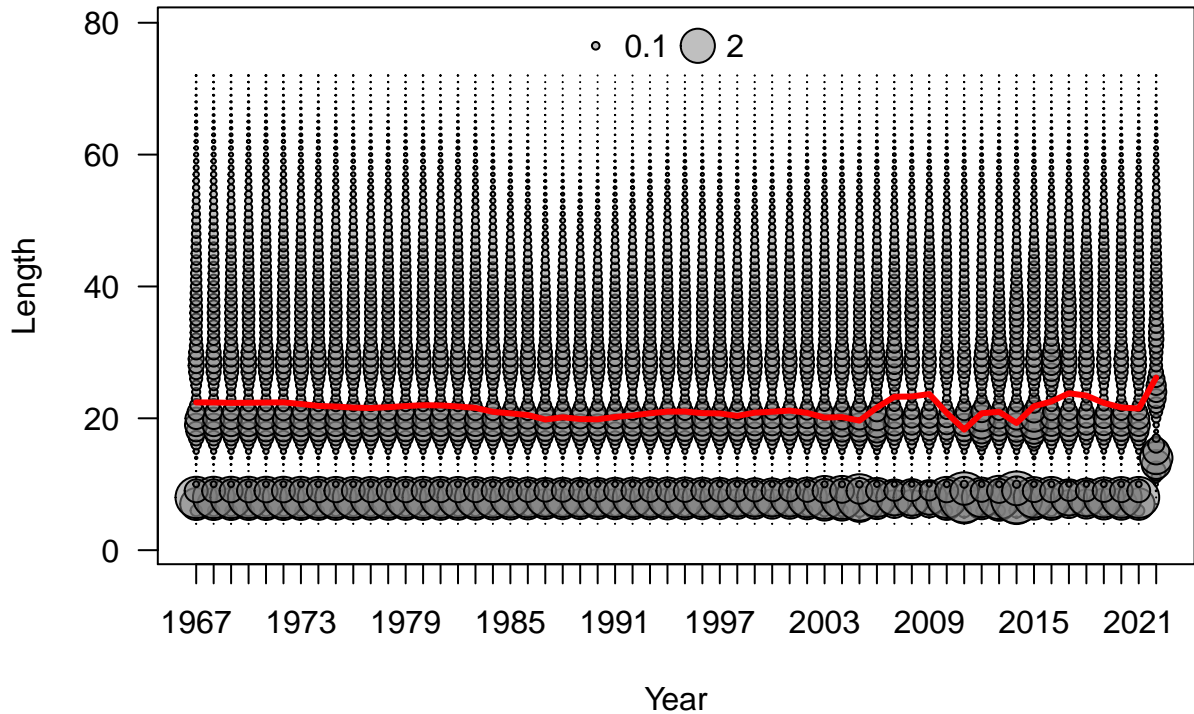


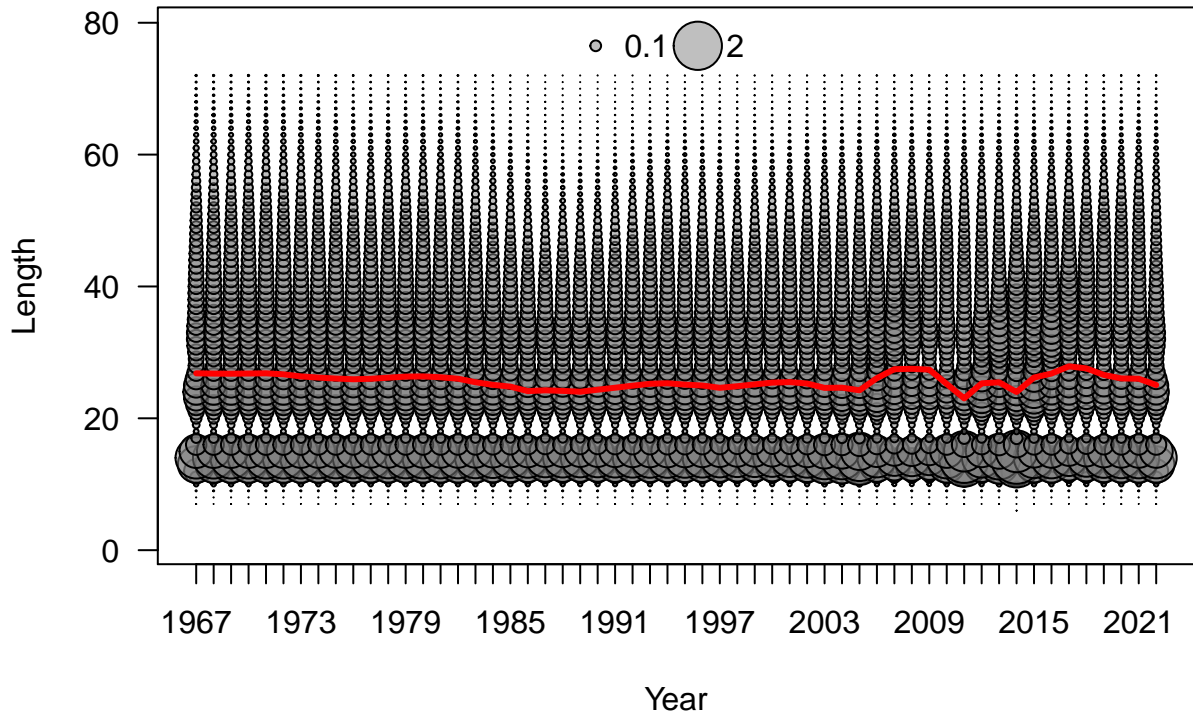
Age

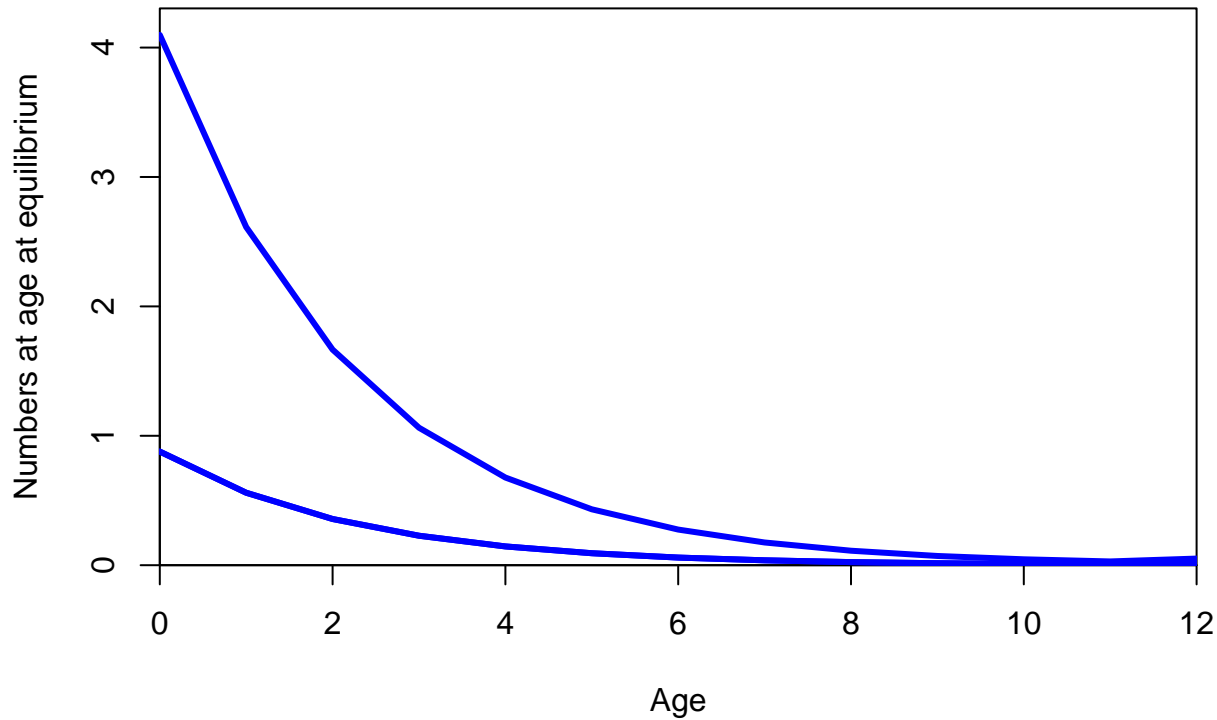


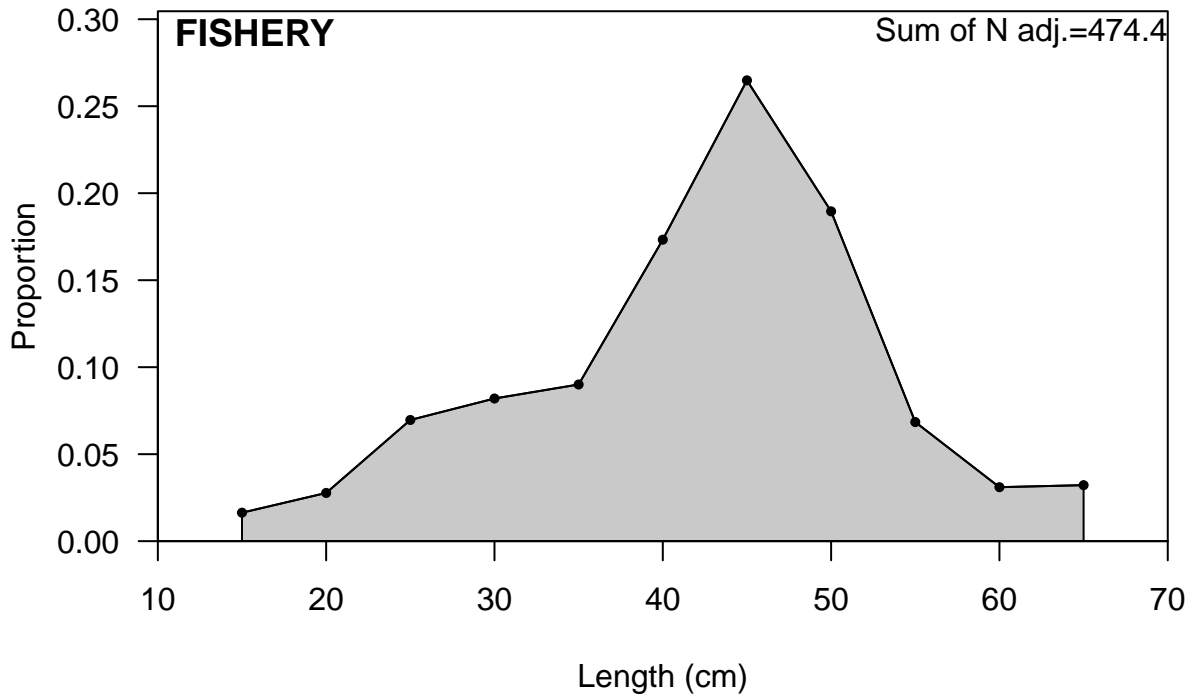
Age





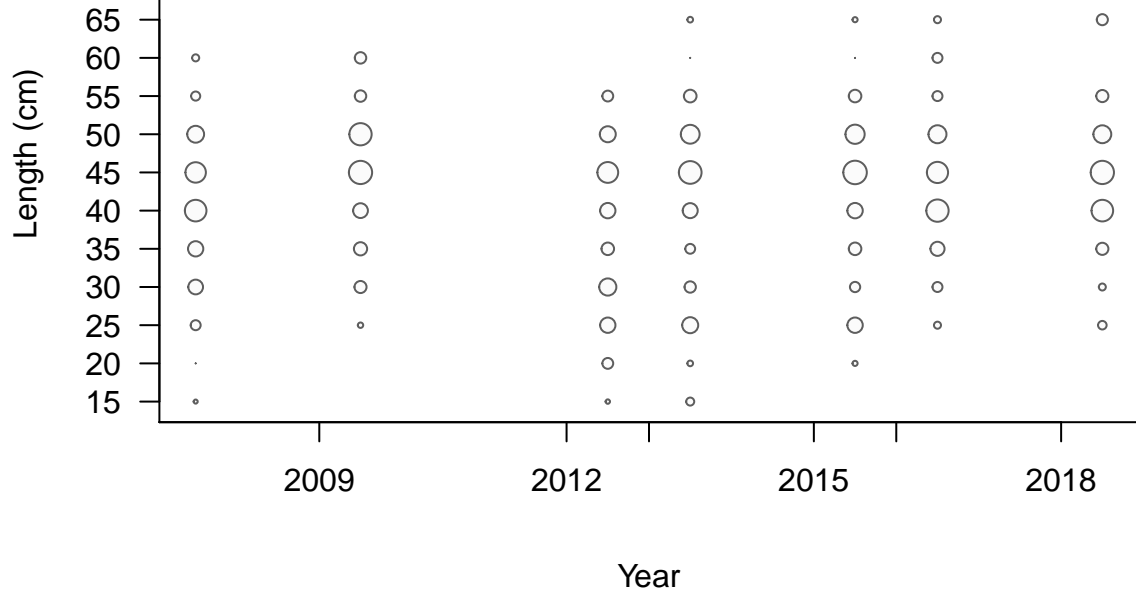




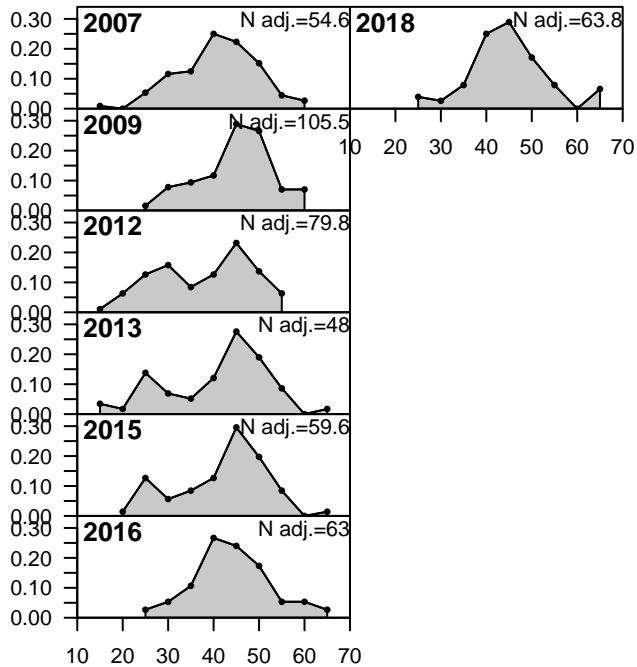


FISHERY

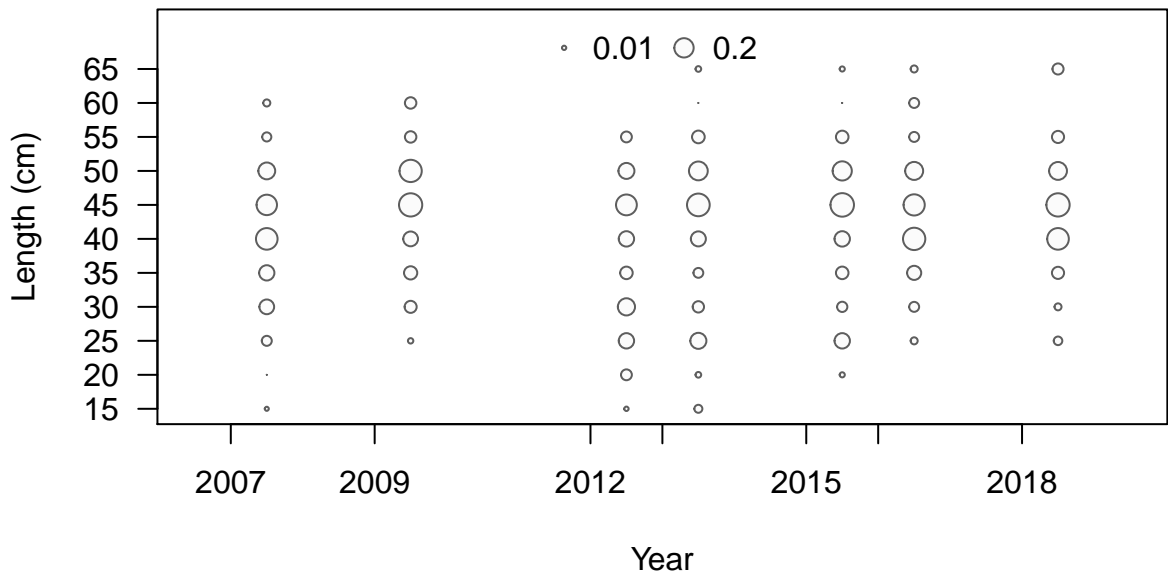
• 0.01 ○ 0.2



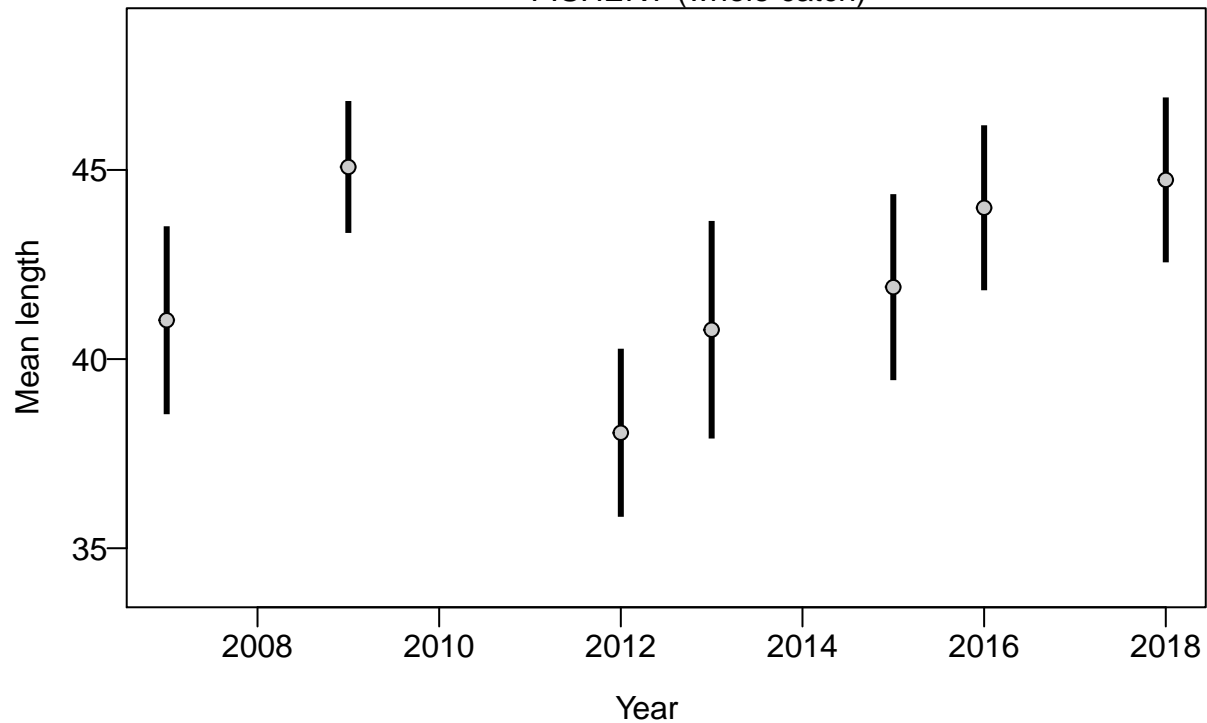
Proportion

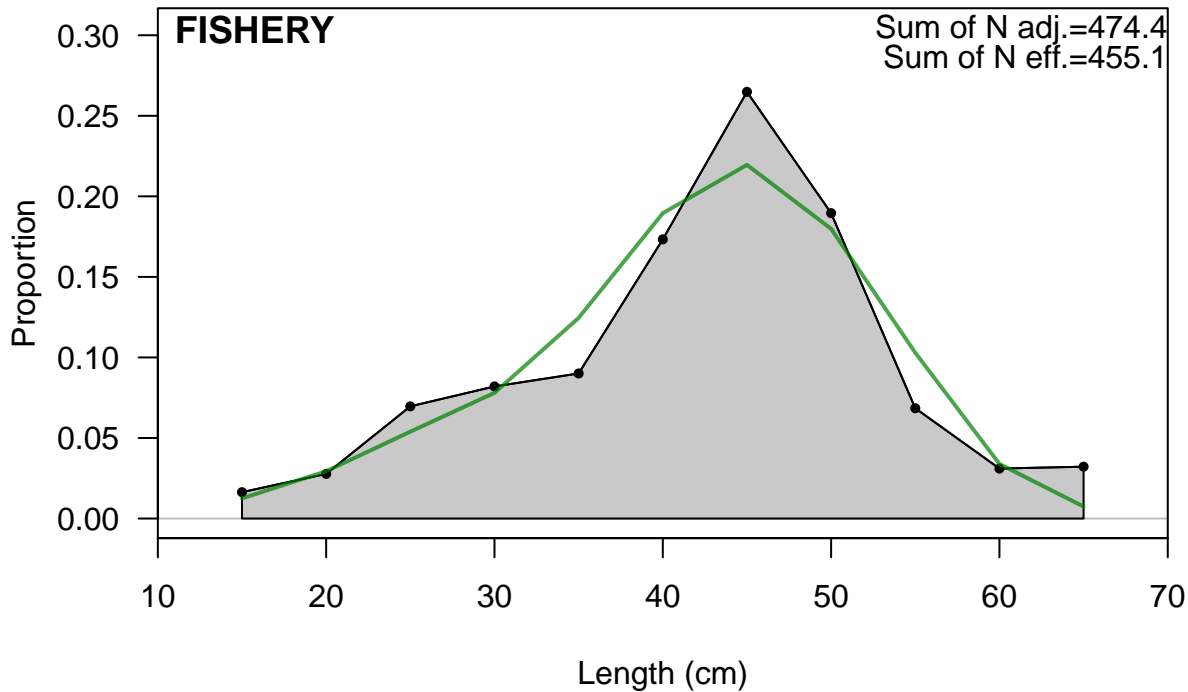


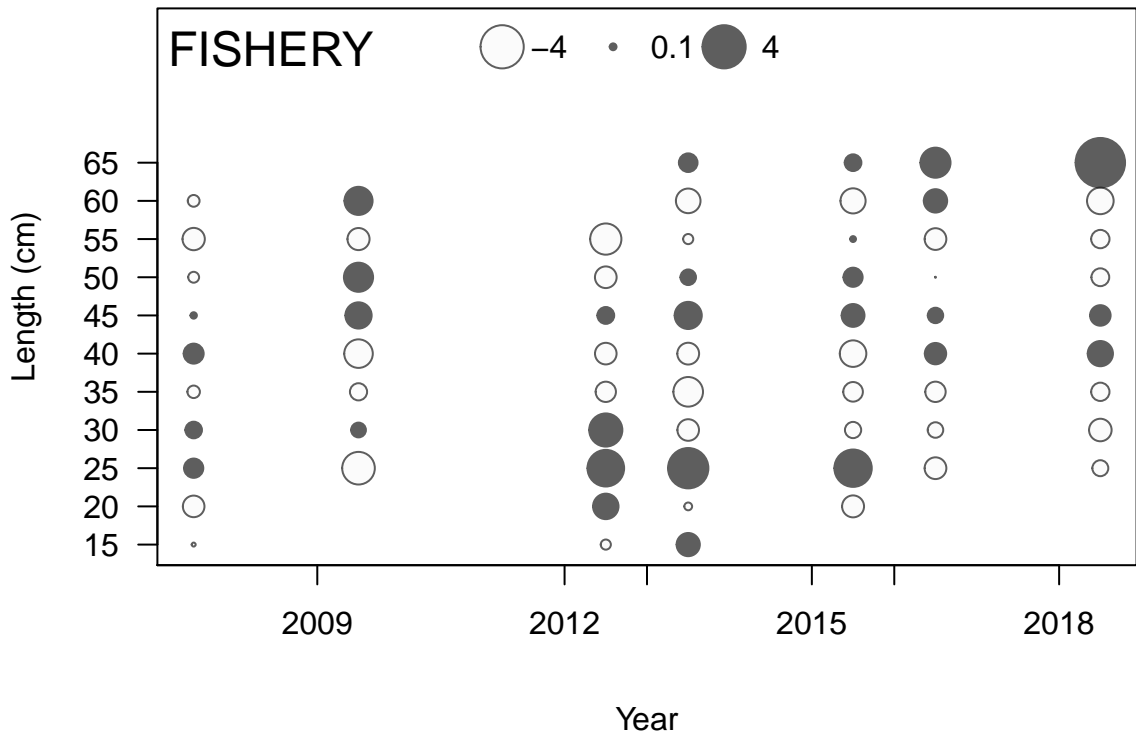
Length (cm)



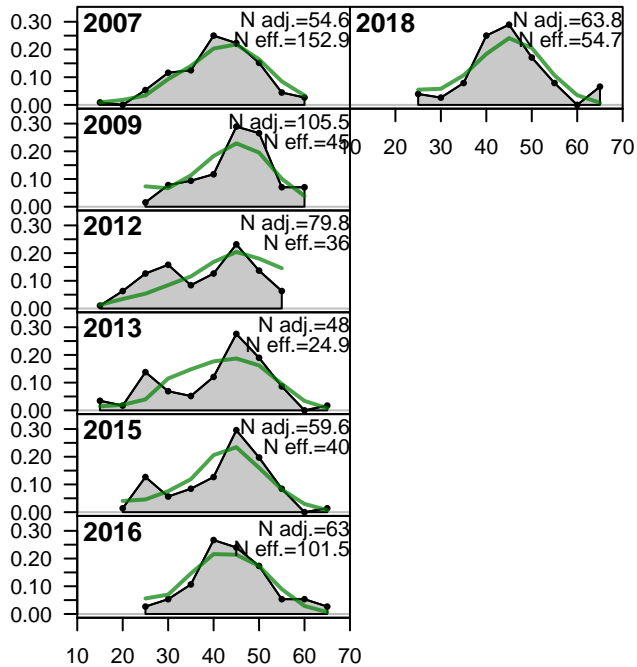
FISHERY (whole catch)

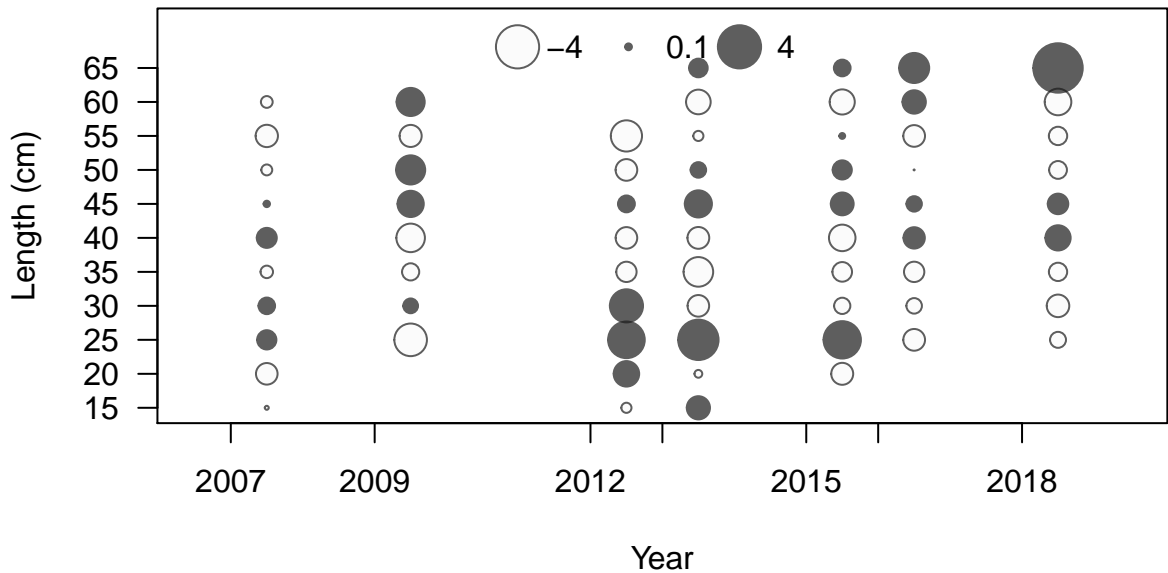




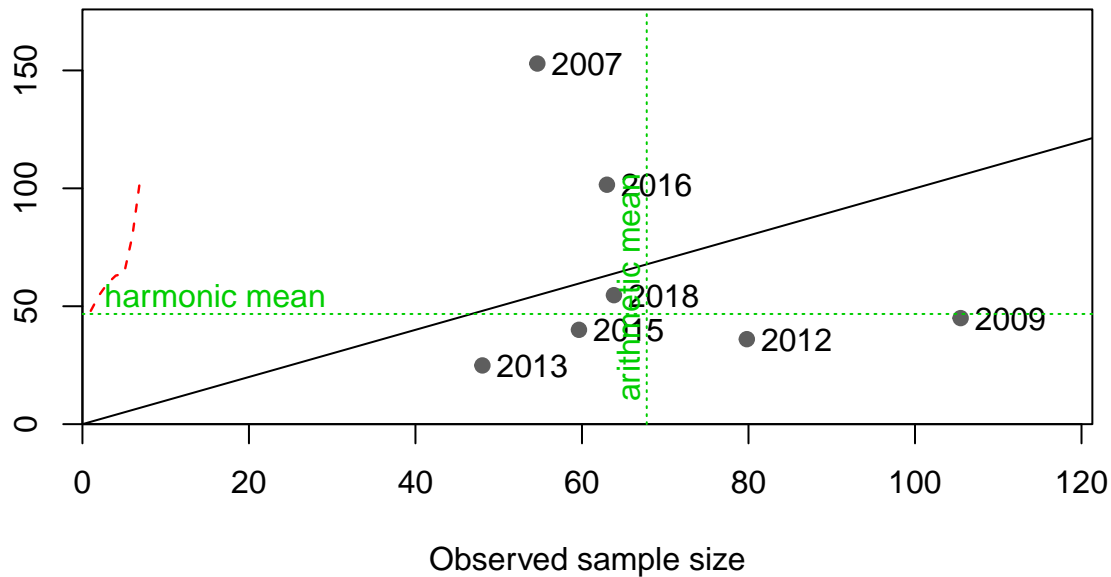


Proportion

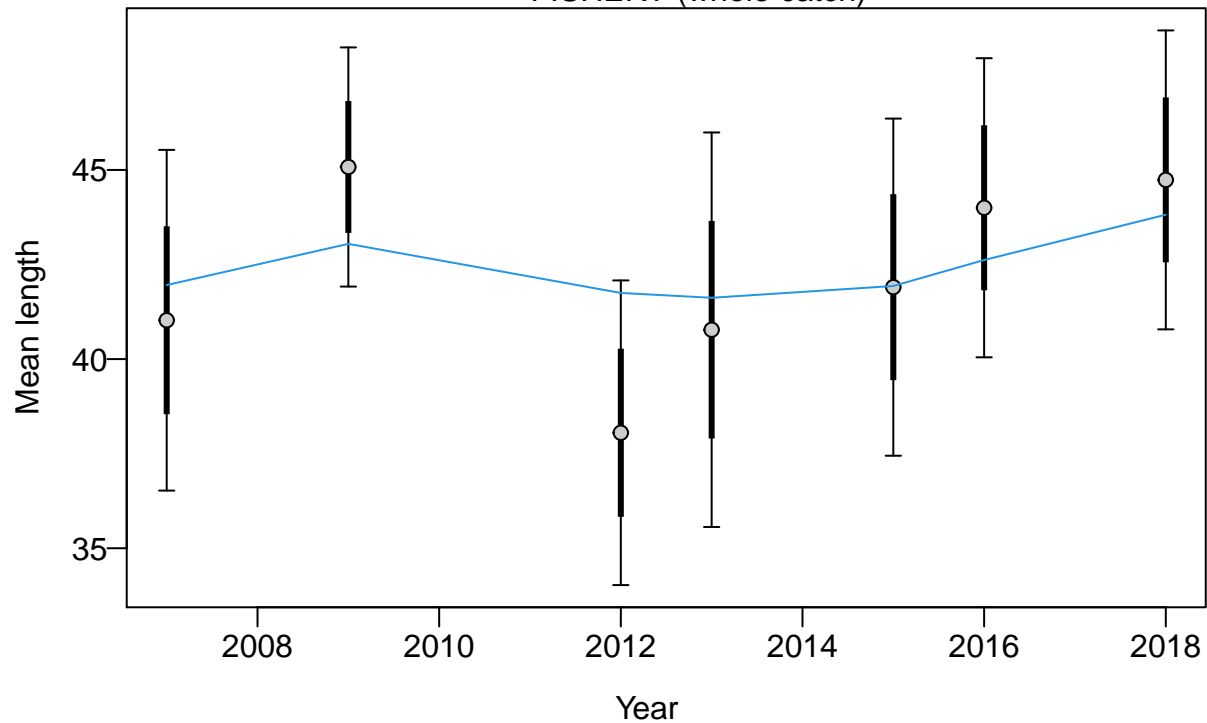


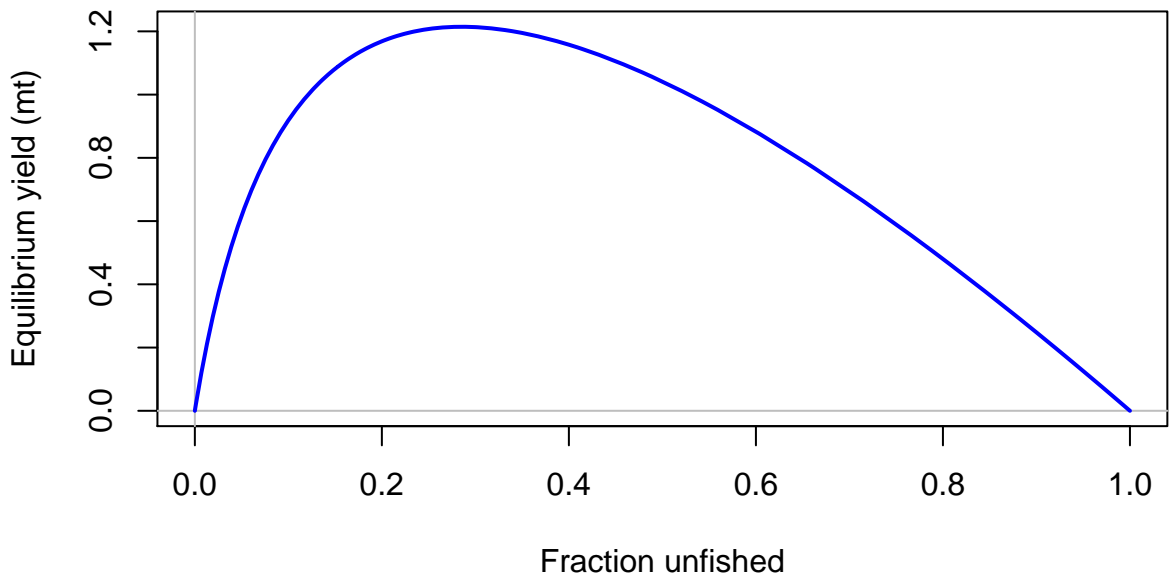


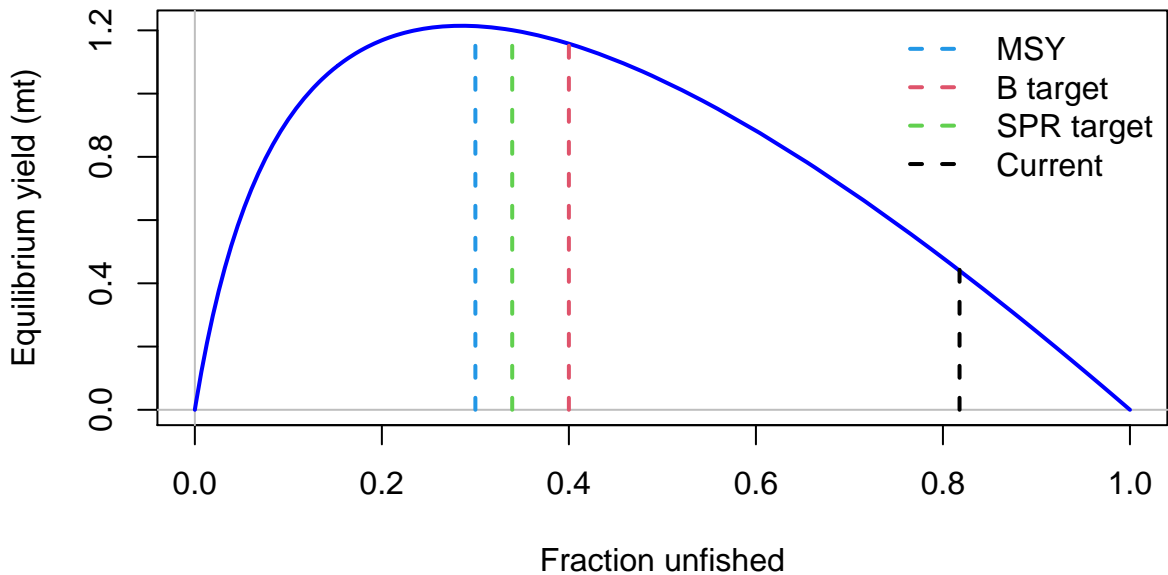
Effective sample size

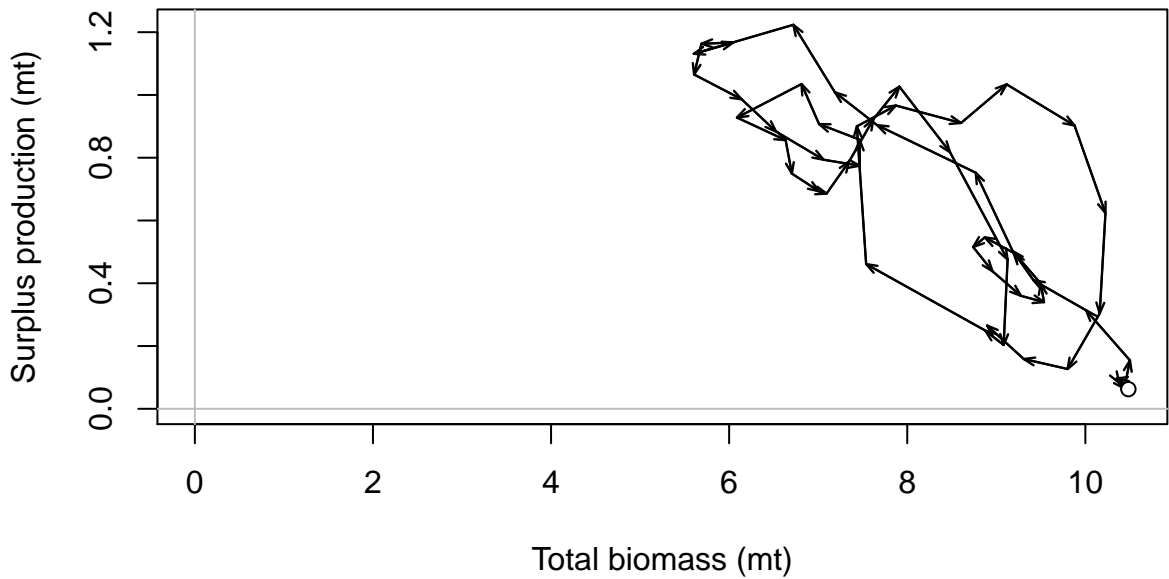


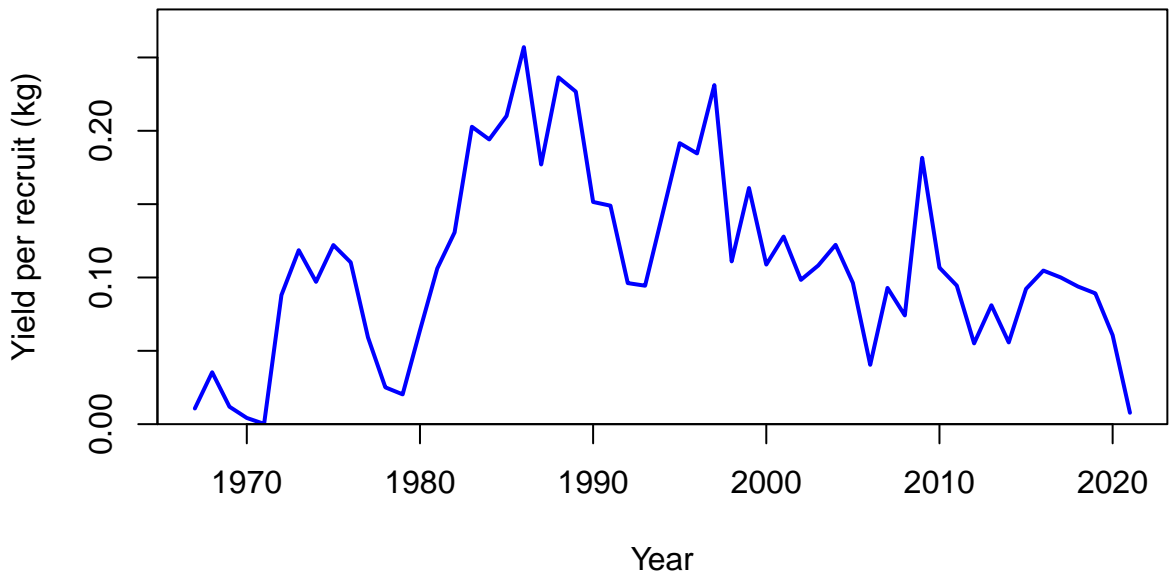
FISHERY (whole catch)

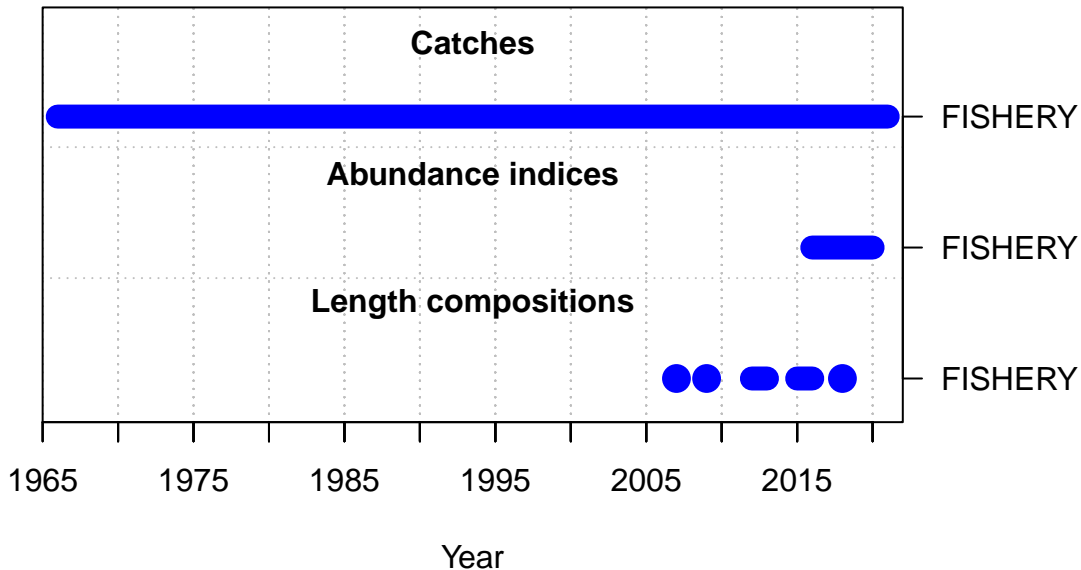


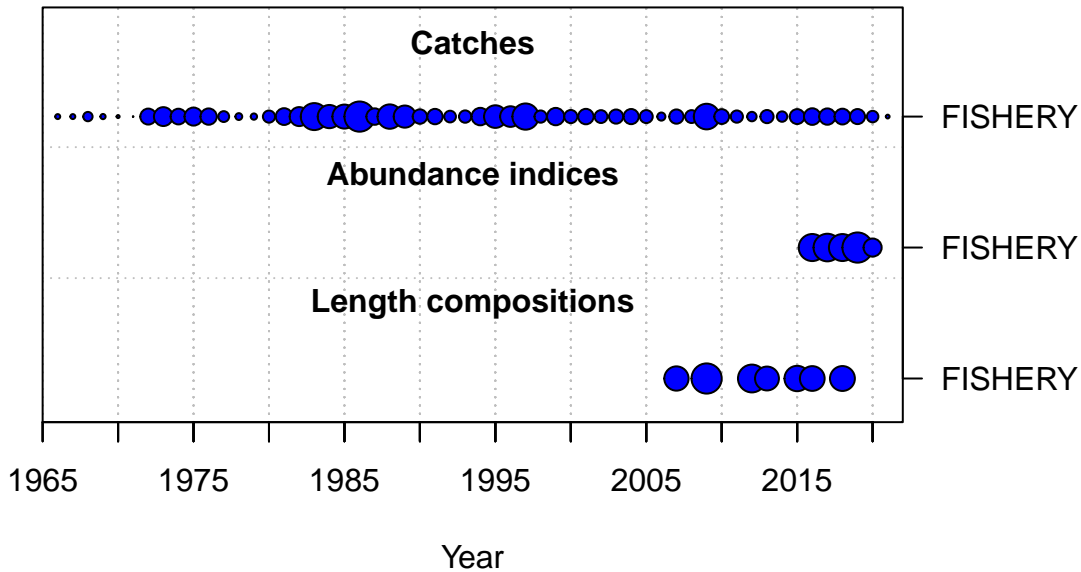




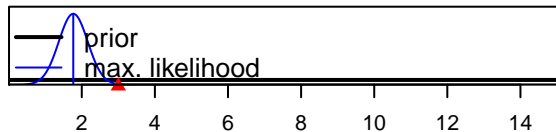




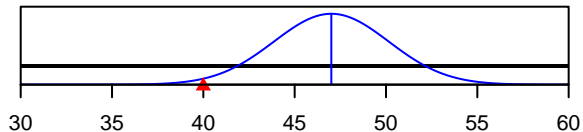




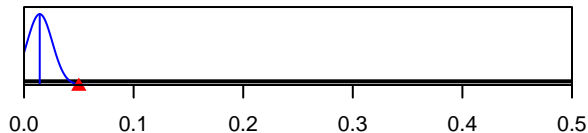
SR_LN(R0)



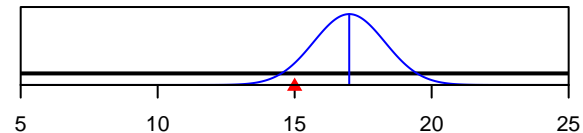
Size_inflection_FISHERY(1)



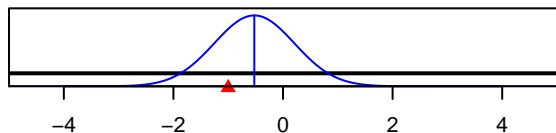
InitF_seas_1_flt_1FISHERY



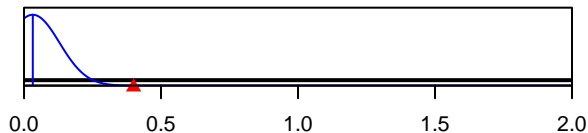
Size_95%width_FISHERY(1)



LnQ_base_FISHERY(1)



Q_extraSD_FISHERY(1)



Parameter value