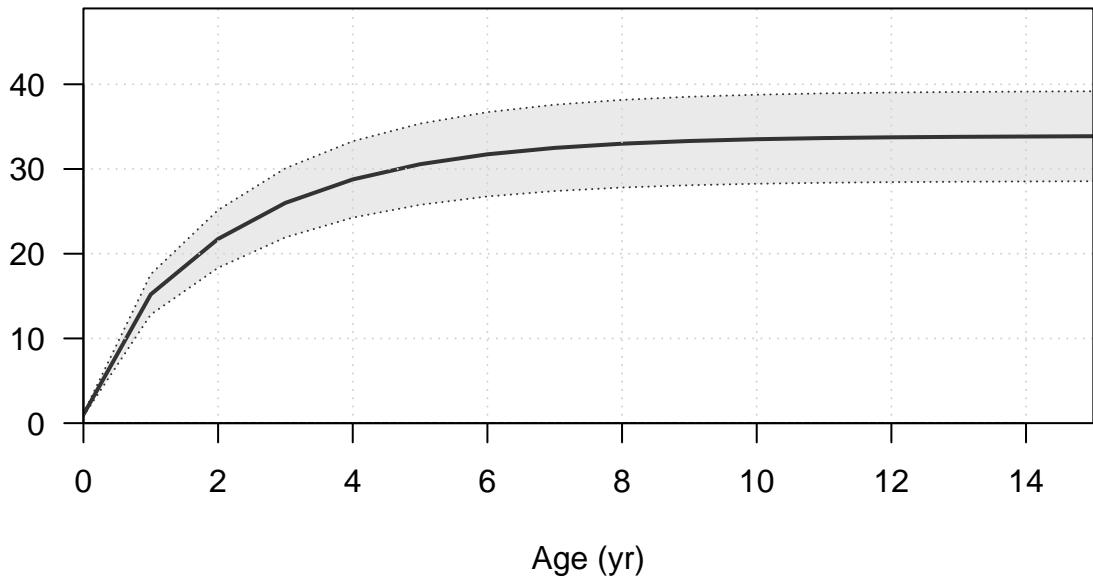
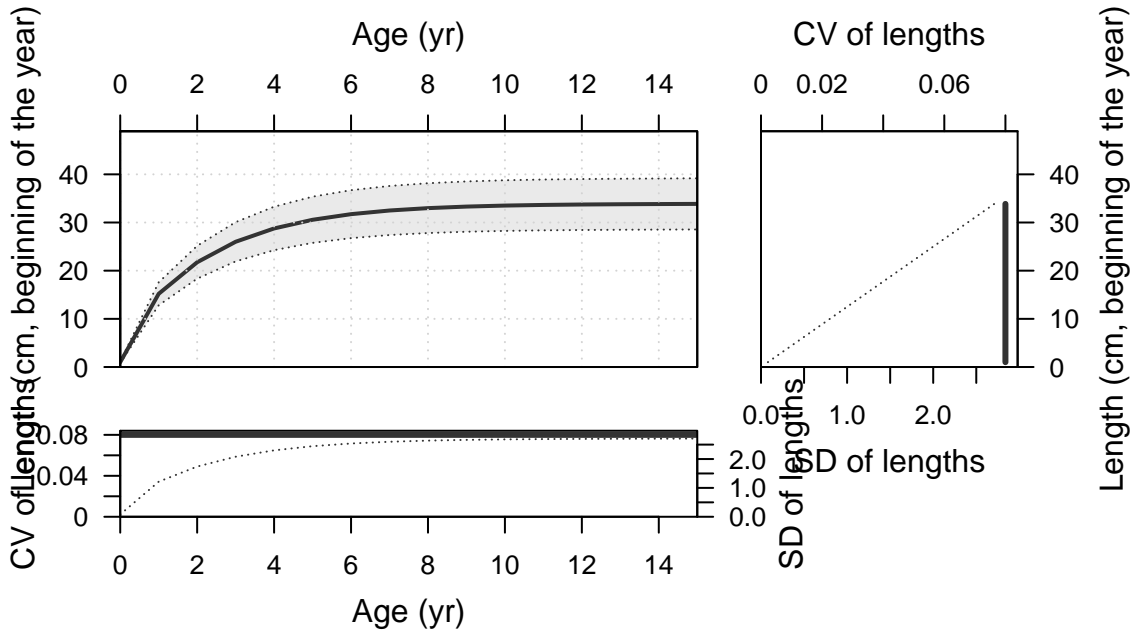
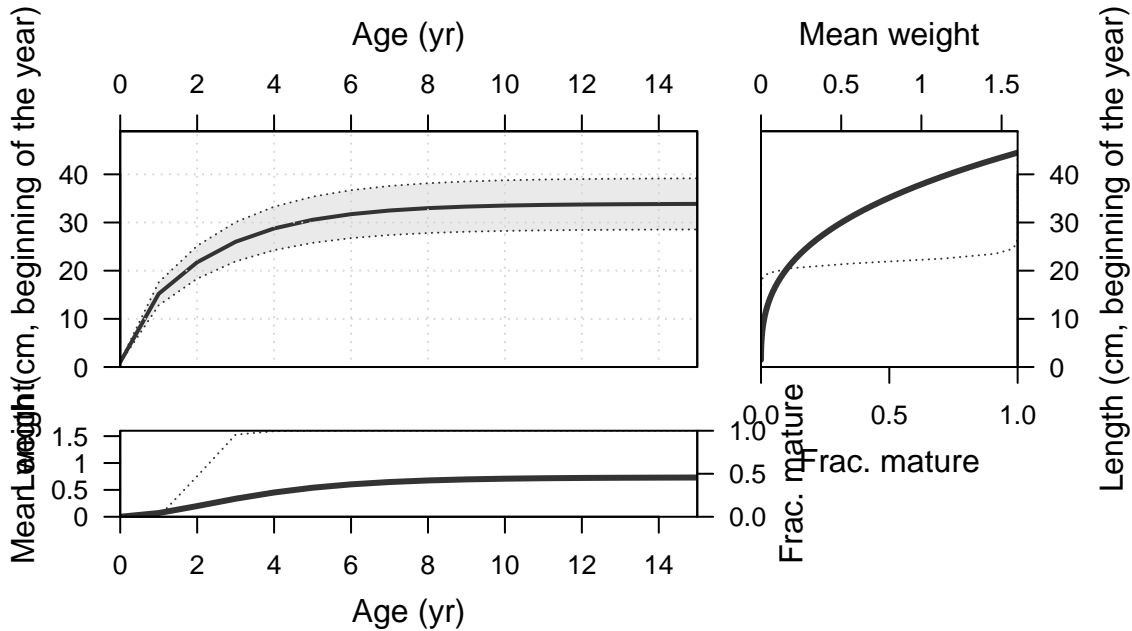


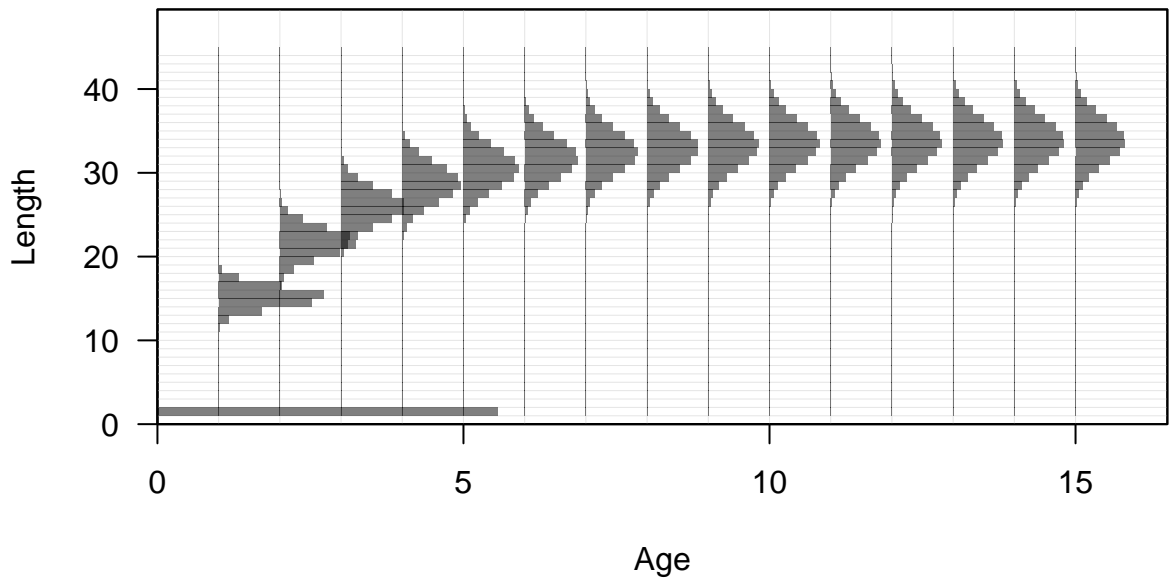
Plots created using the 'r4ss' package in R
Stock Synthesis version: 3.30.19.0
StartTime: Fri Jul 29 14:31:48 2022
Data_File: data.ss
Control_File: control.ss

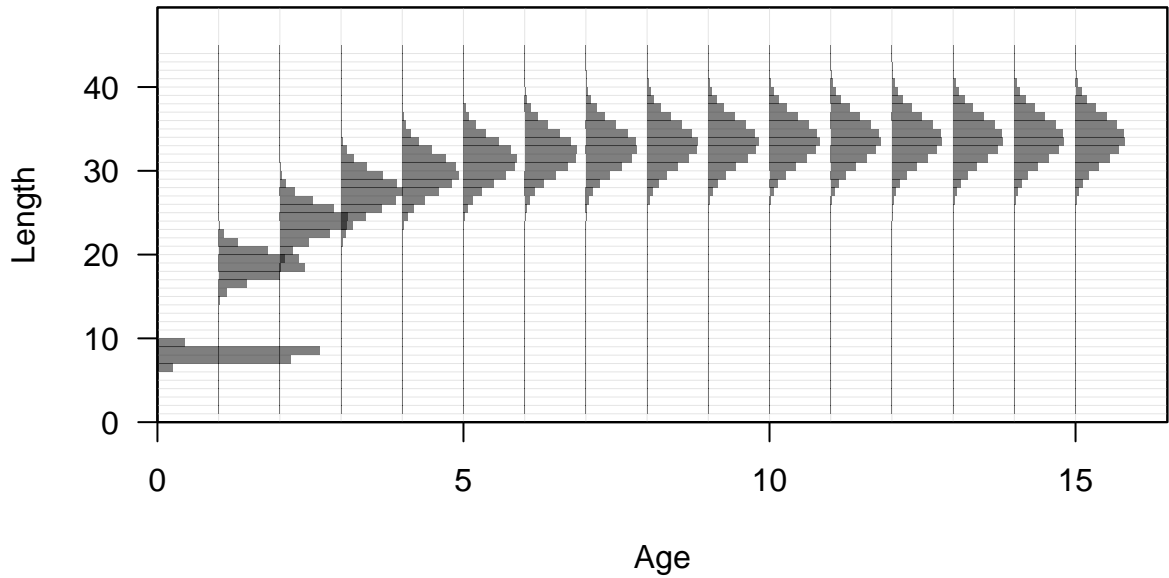
Length (cm, beginning of the year)

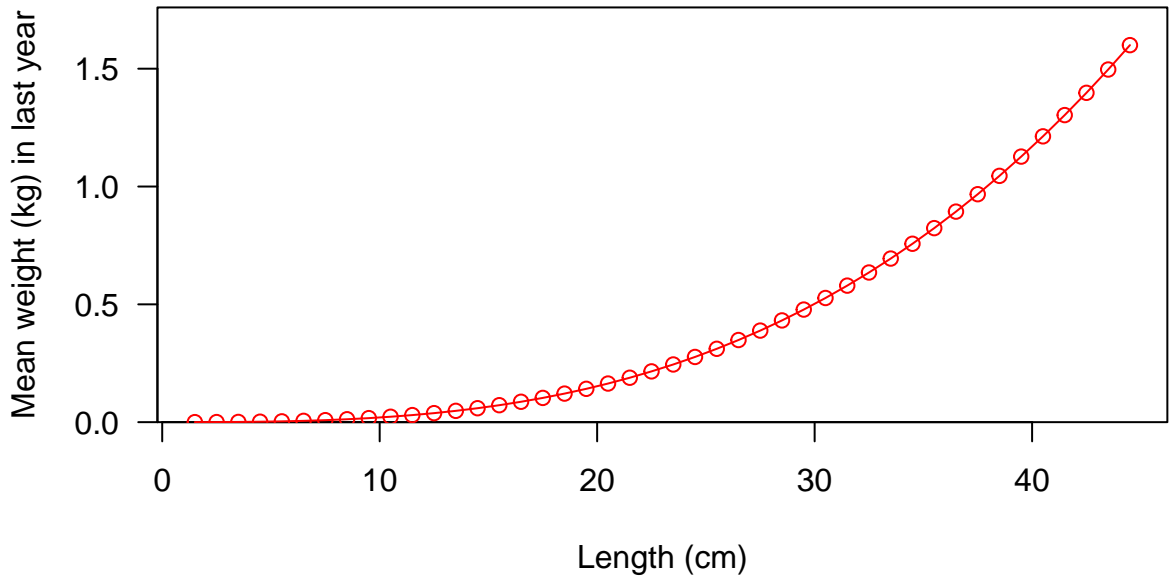


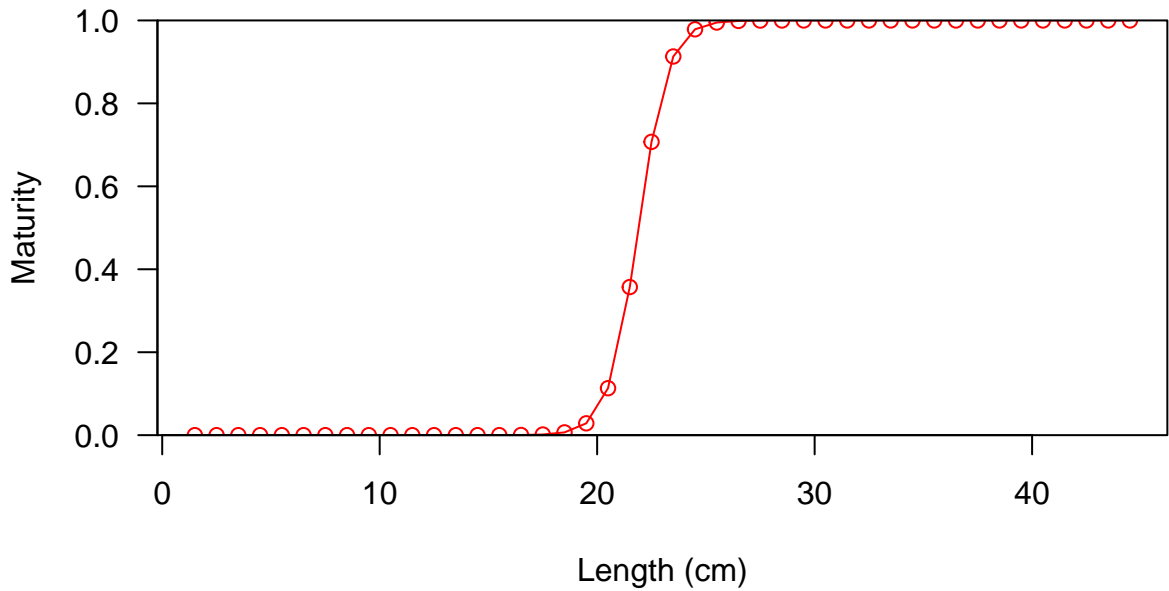


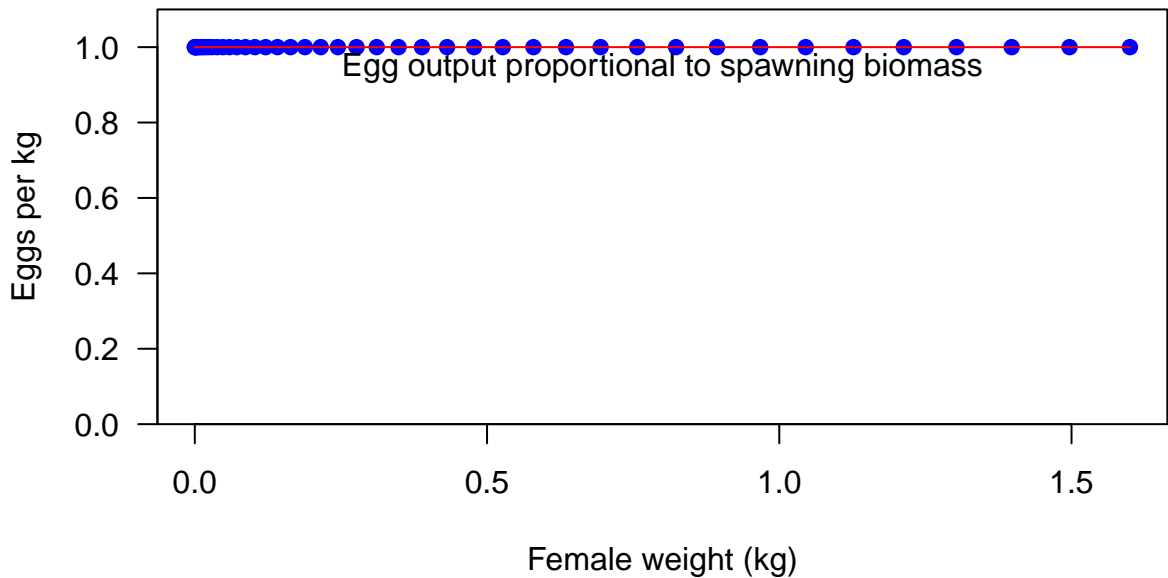


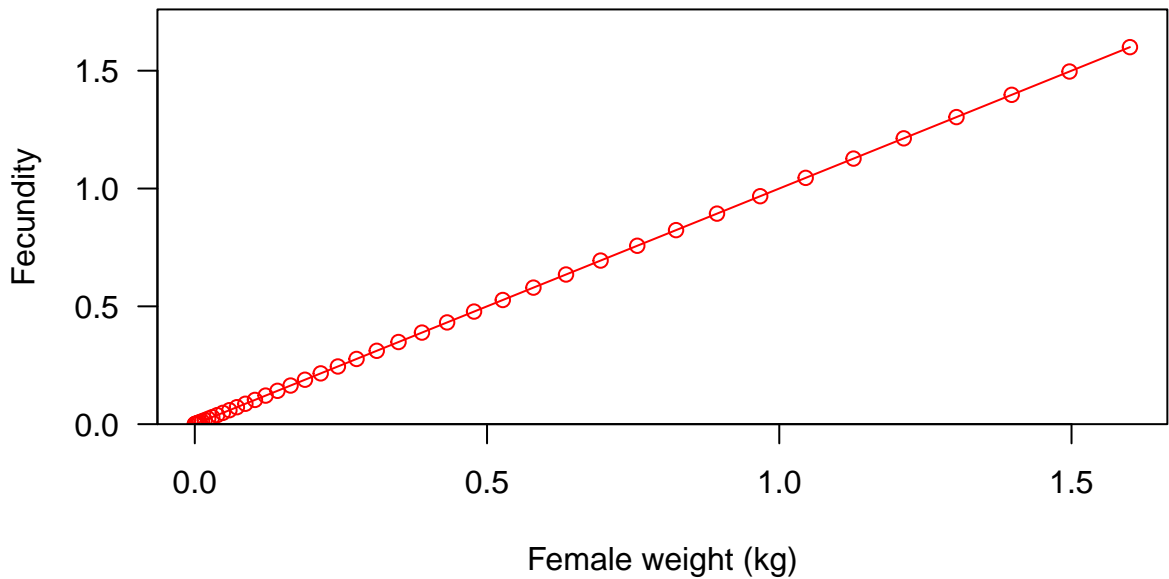


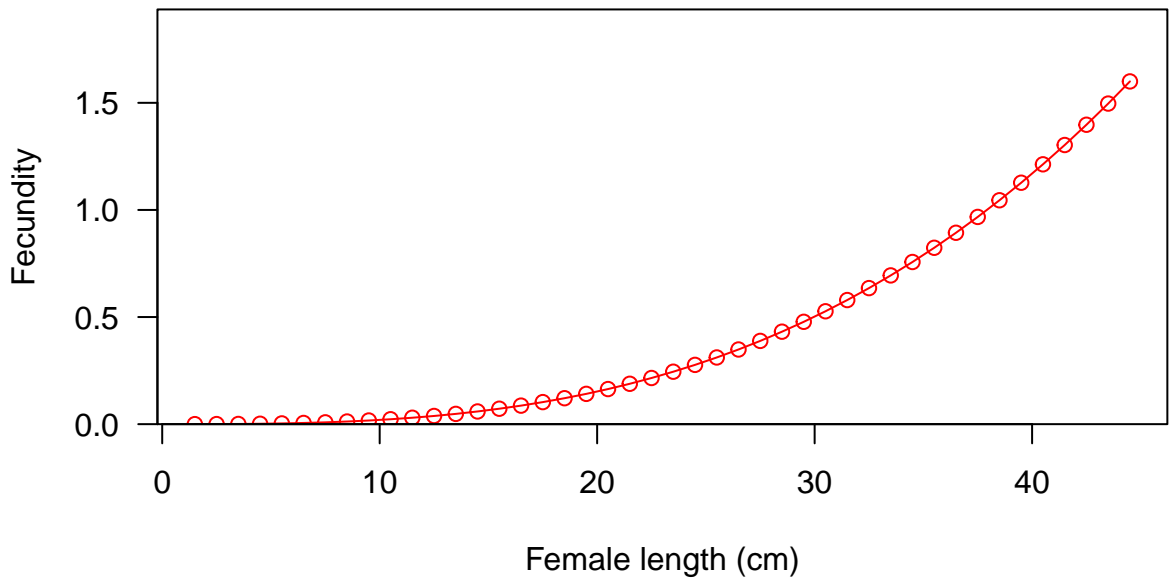


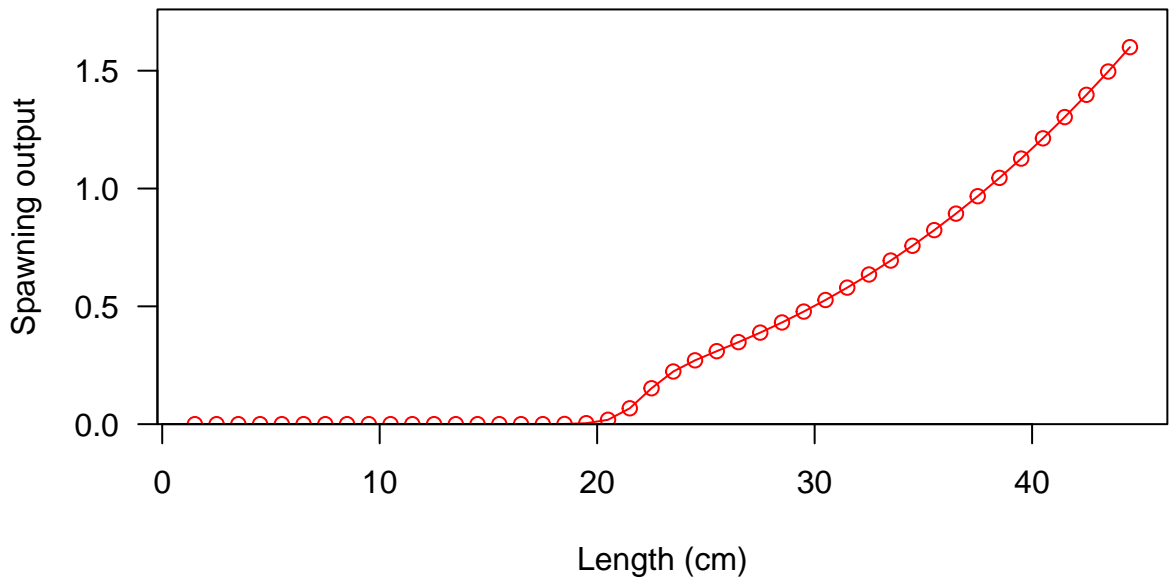


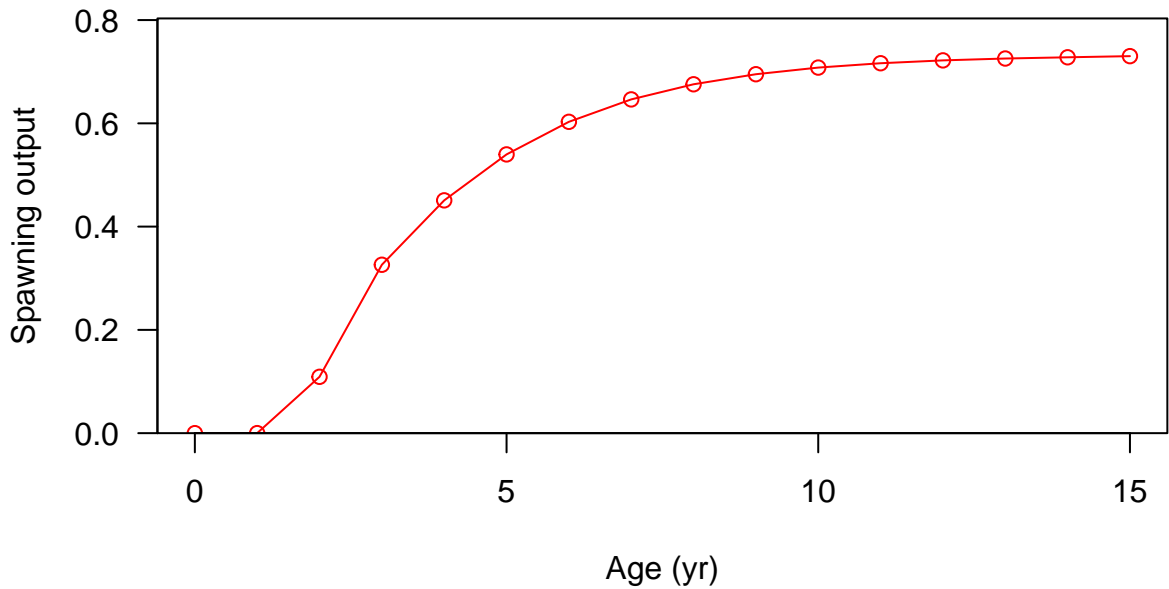








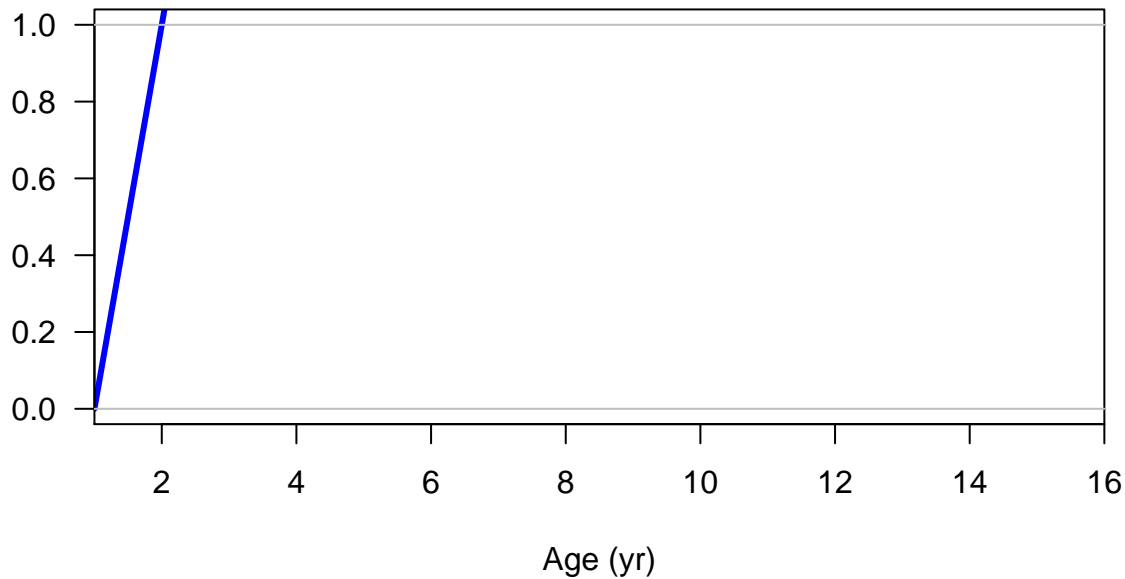




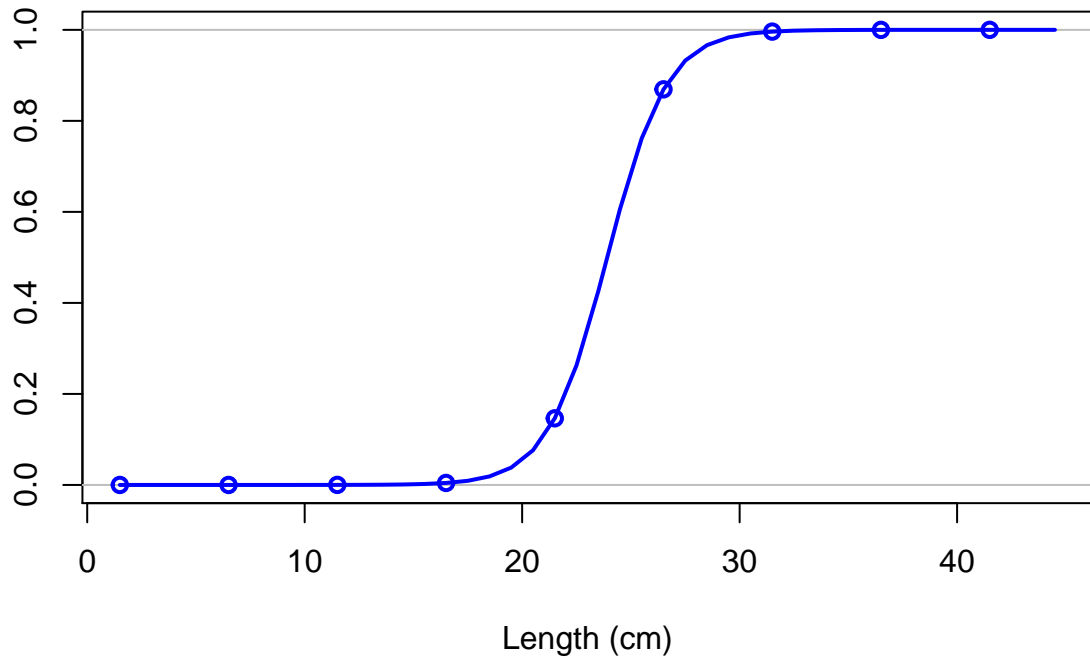
Hermaphroditism transition rate



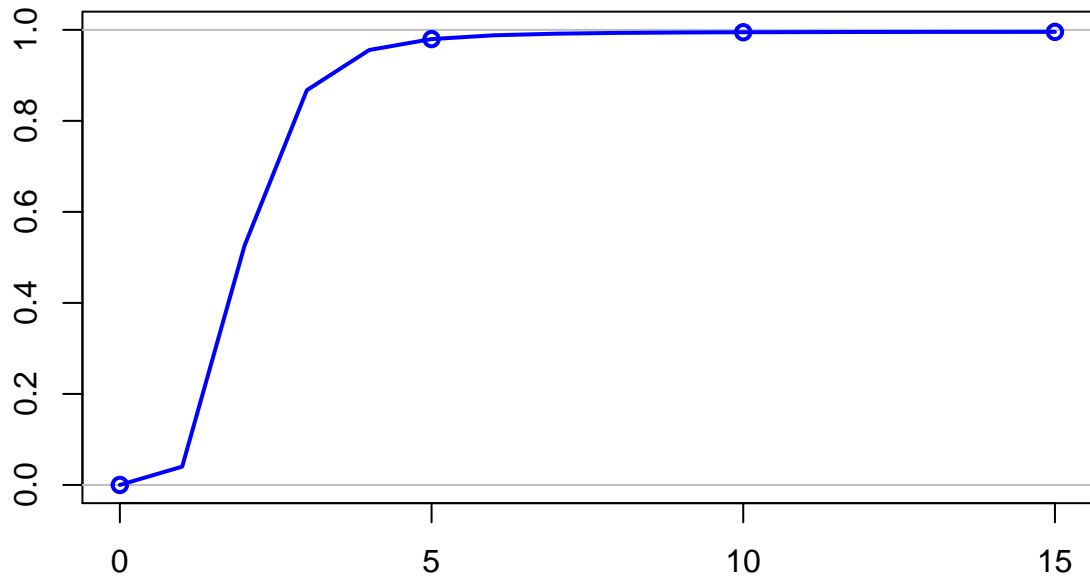
Fraction females by age at equilibrium



Selectivity

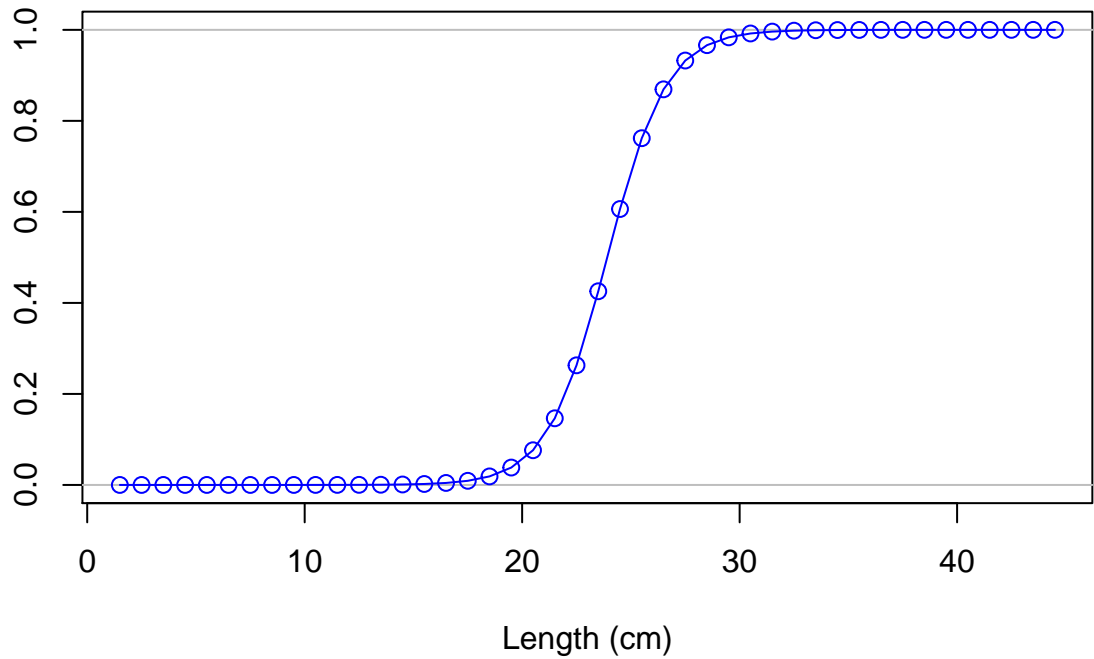


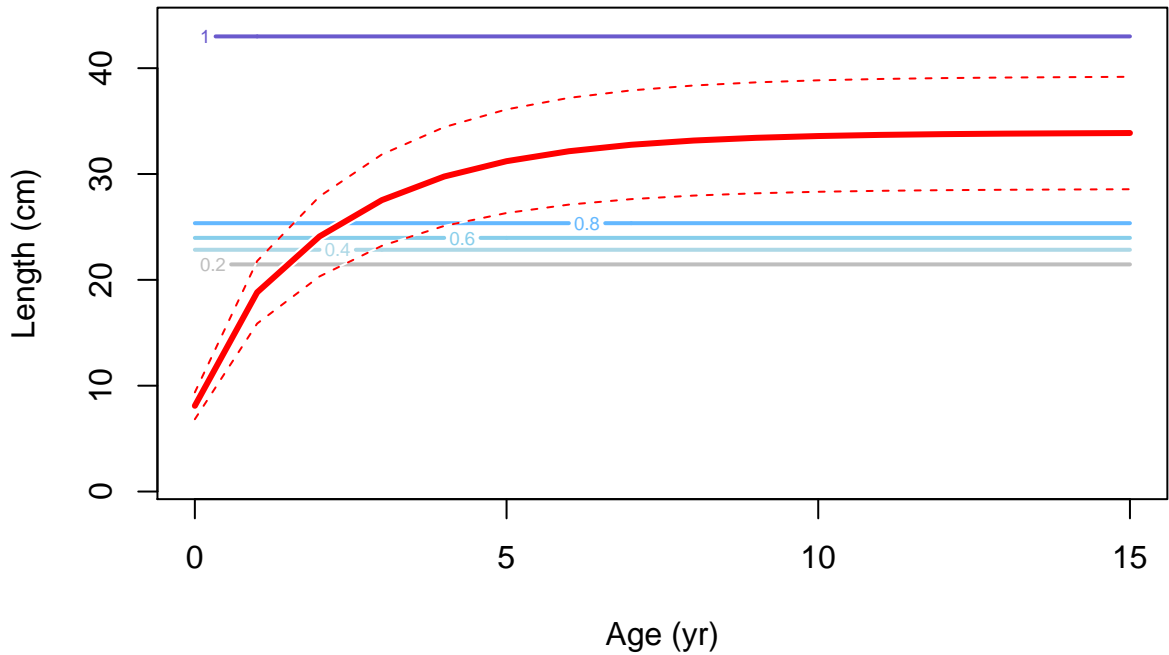
Selectivity



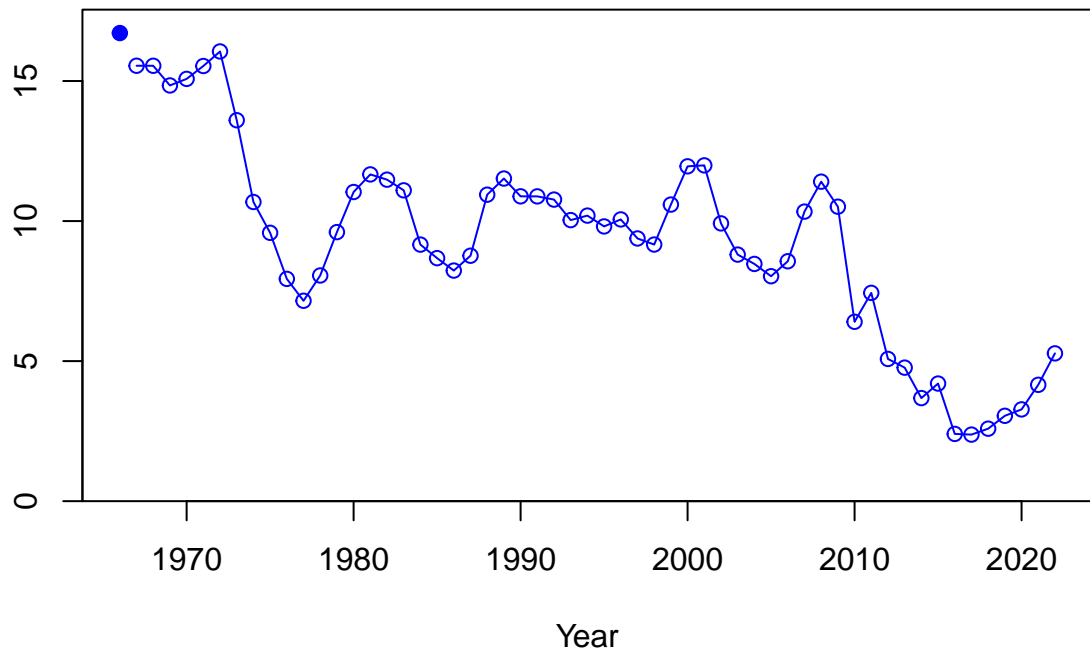
Age (yr)

Selectivity

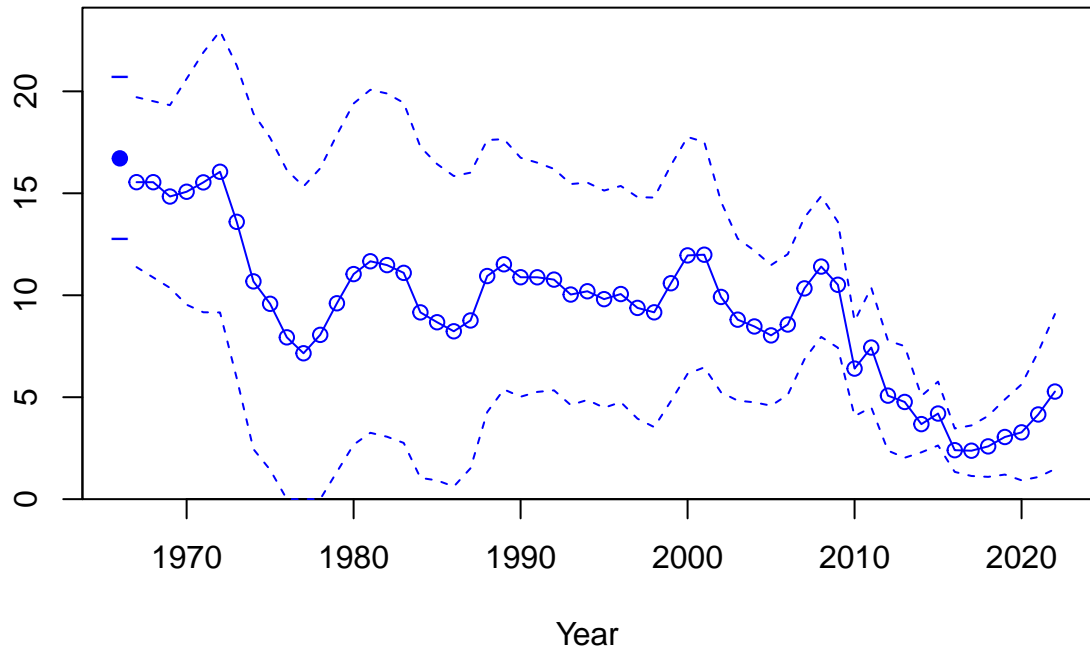




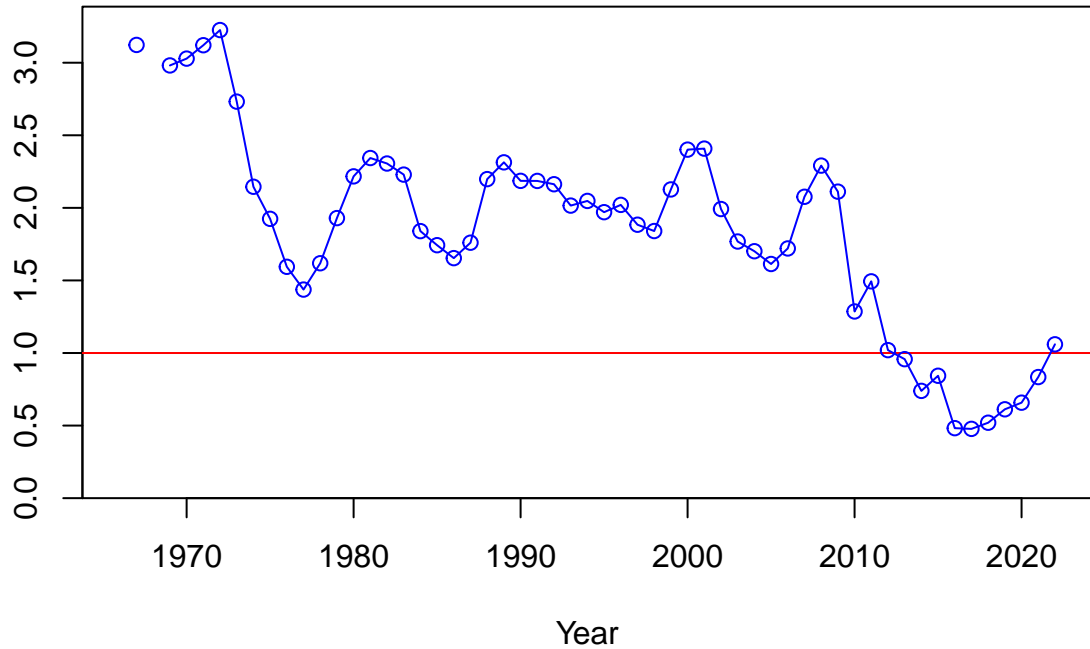
Spawning biomass (mt)



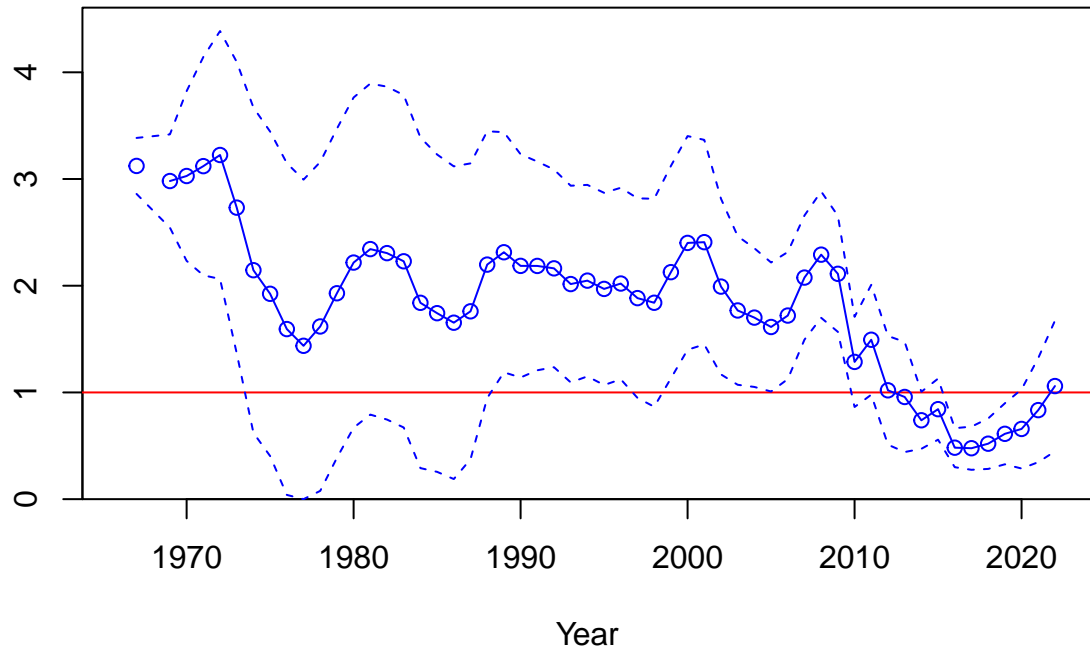
Spawning biomass (mt)

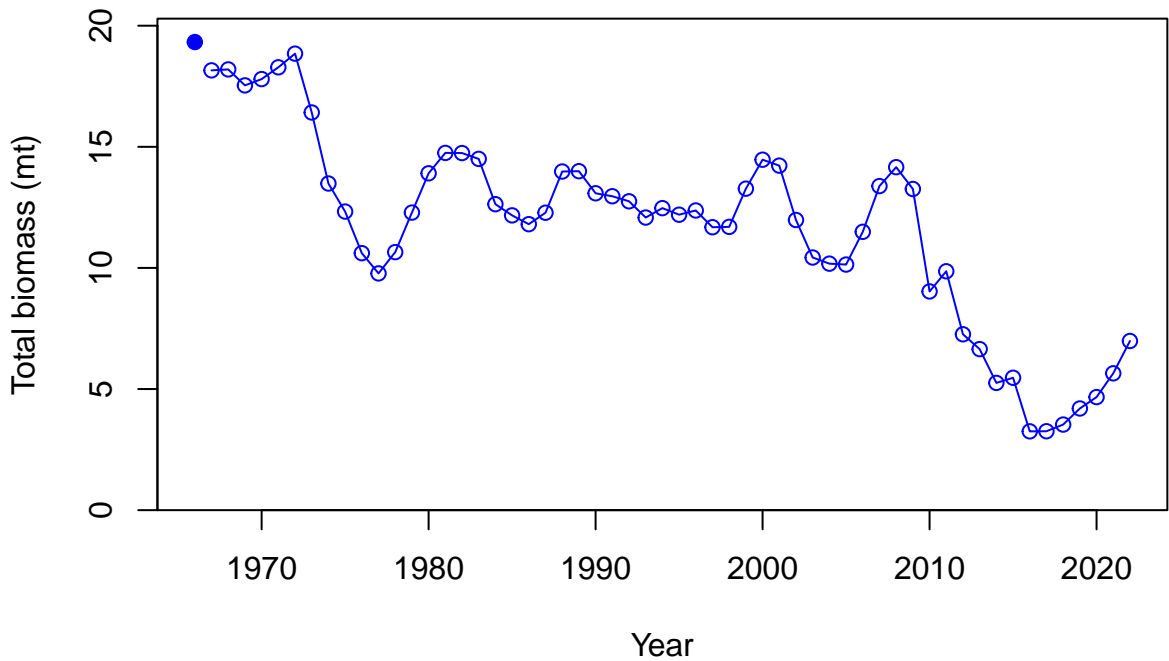


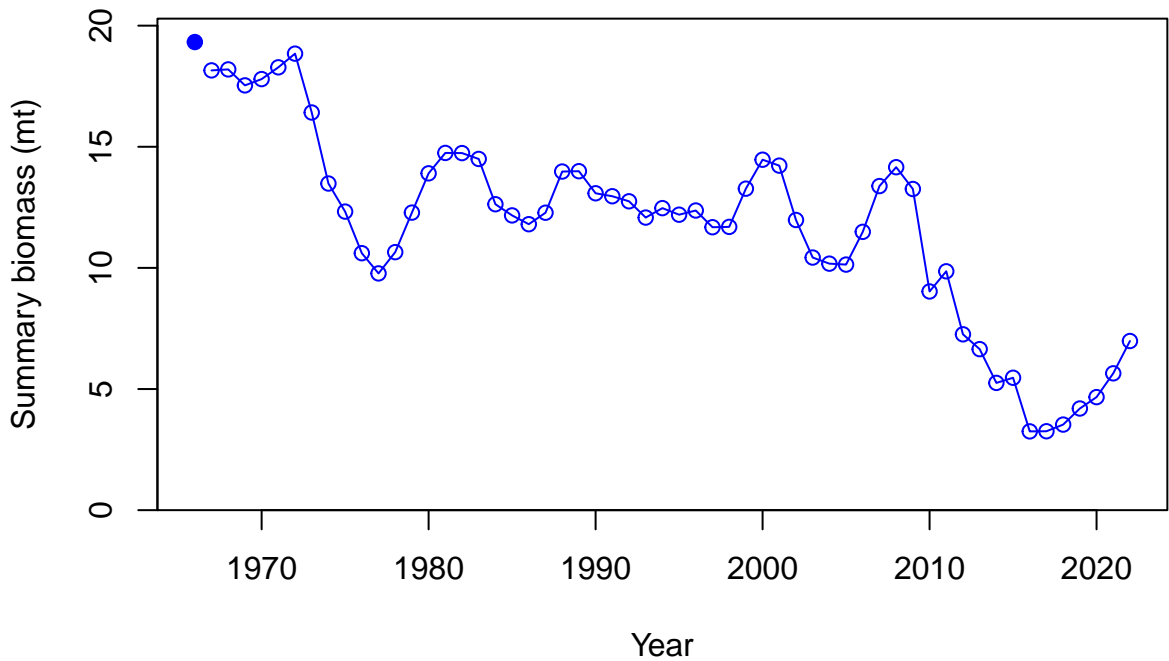
Relative spawning biomass: B/B_{MSY}

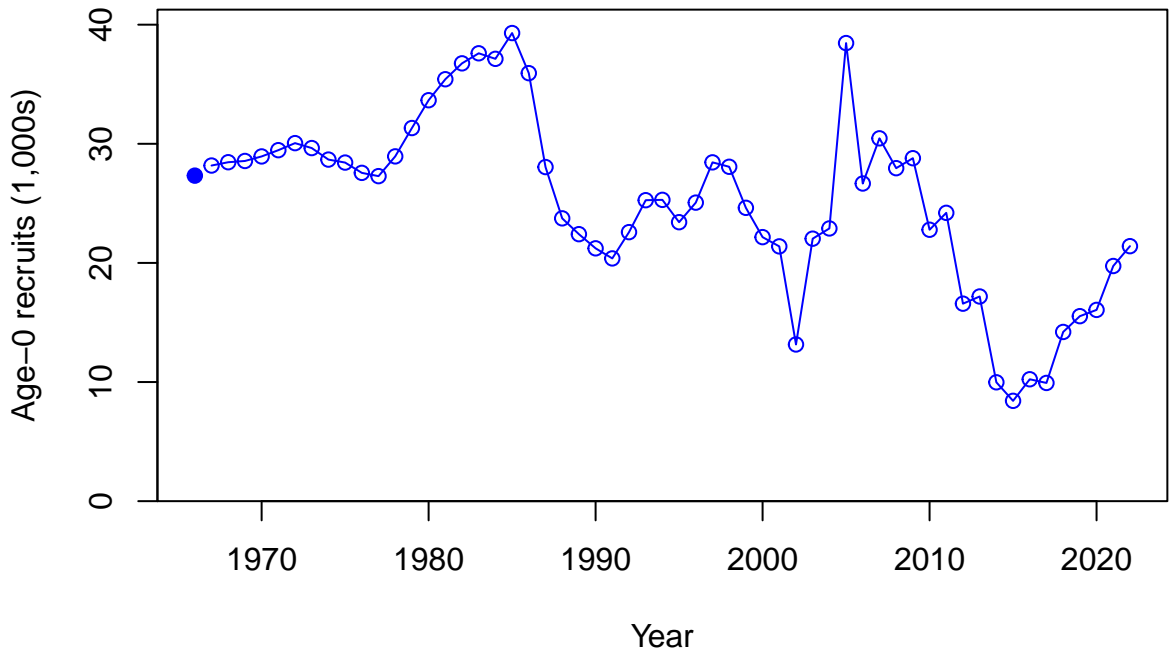


Relative spawning biomass: B/B_{MSY}

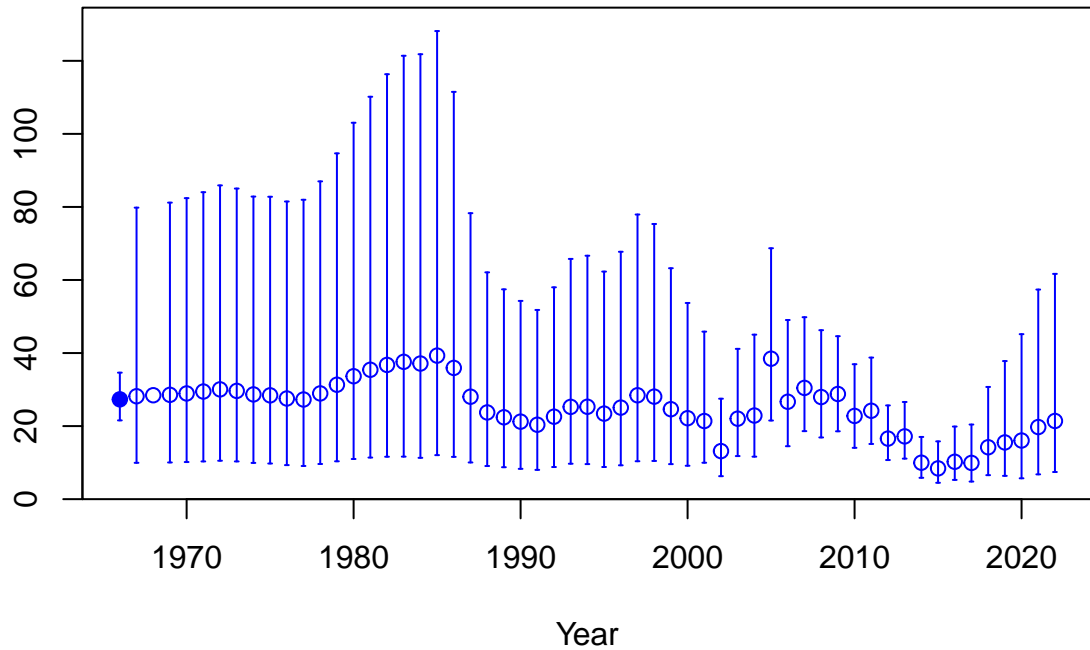




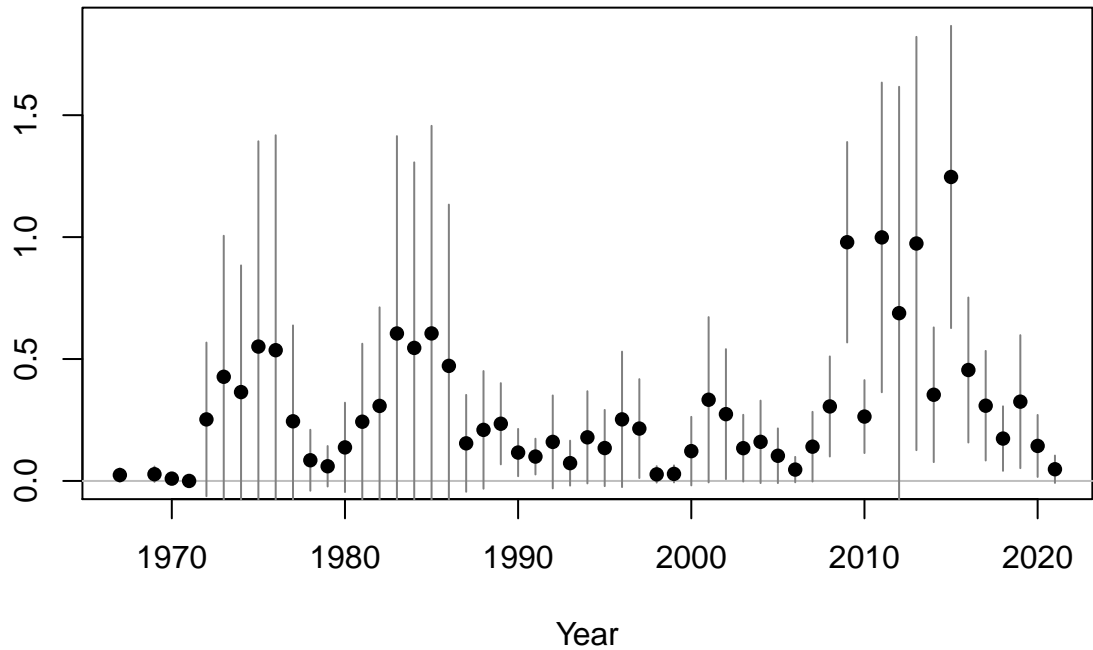


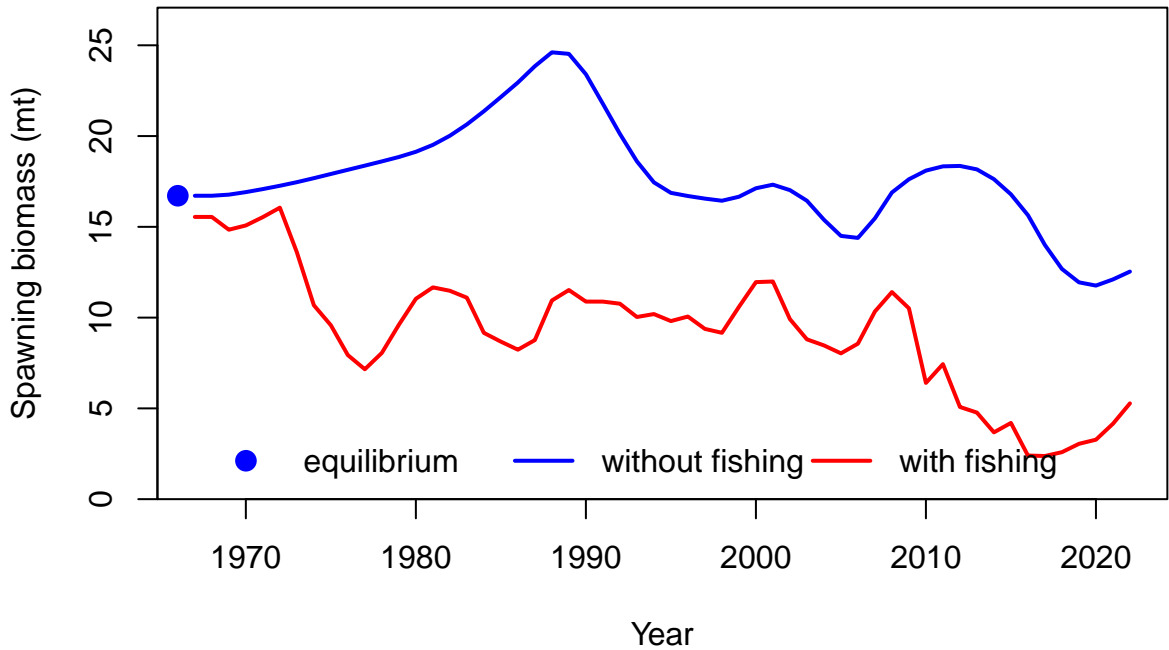


Age-0 recruits (1,000s)

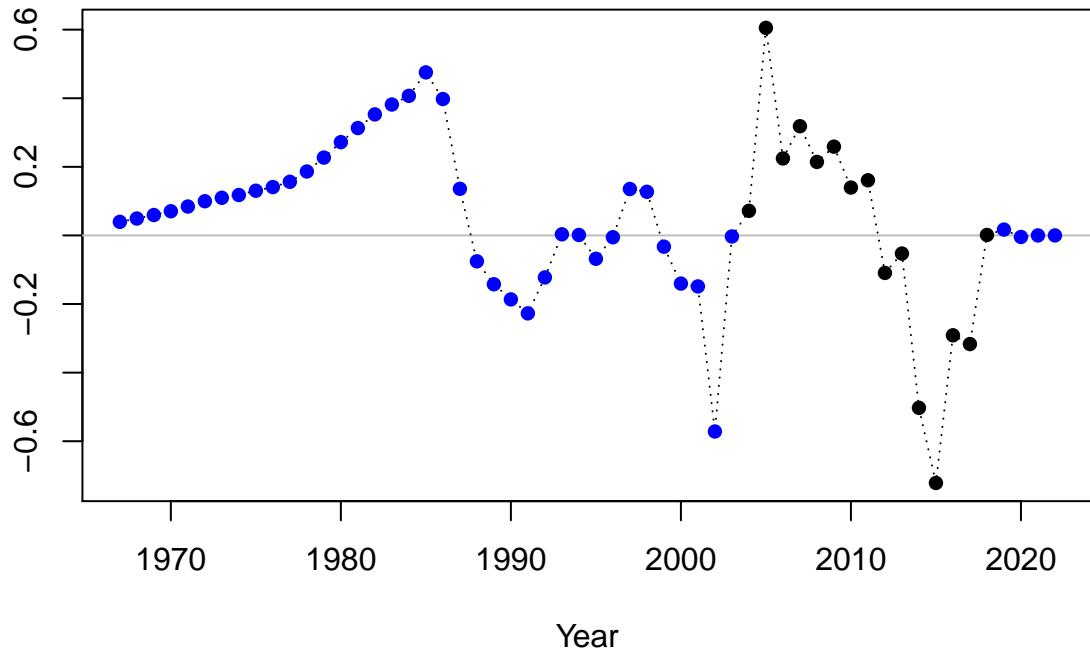


Summary Fishing Mortality





Log recruitment deviation



Log recruitment deviation

-1.0
0.0
0.5
1.0
1.5

1970

1980

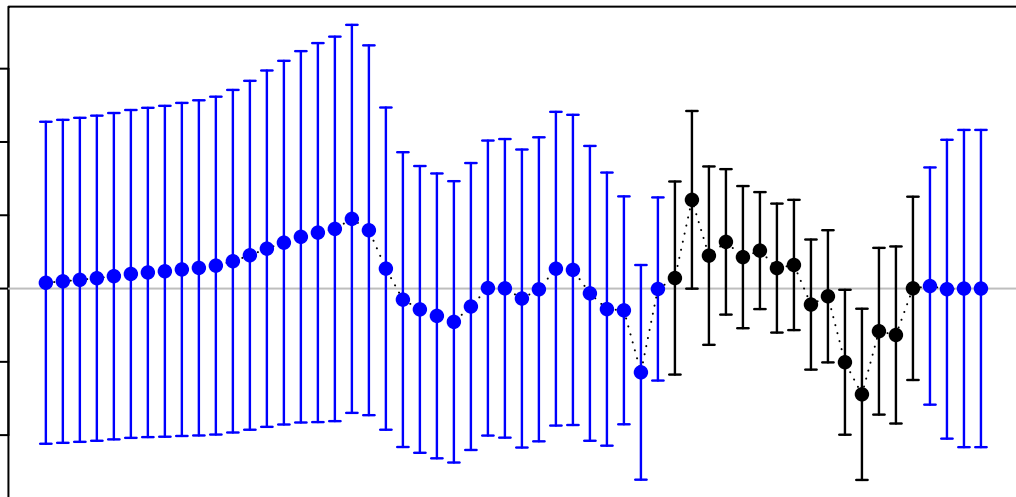
1990

2000

2010

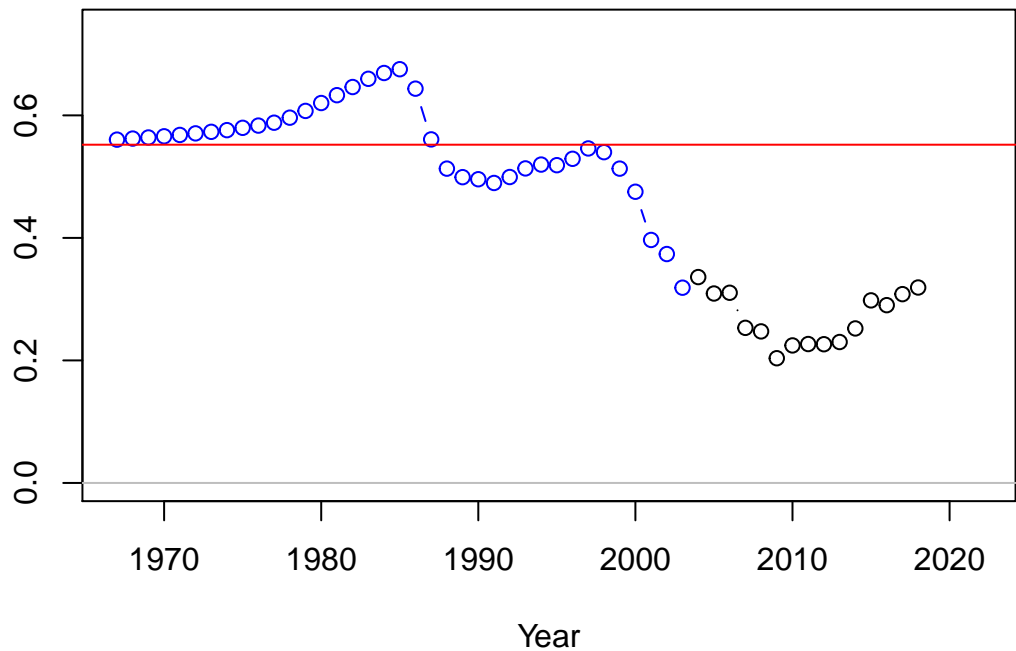
2020

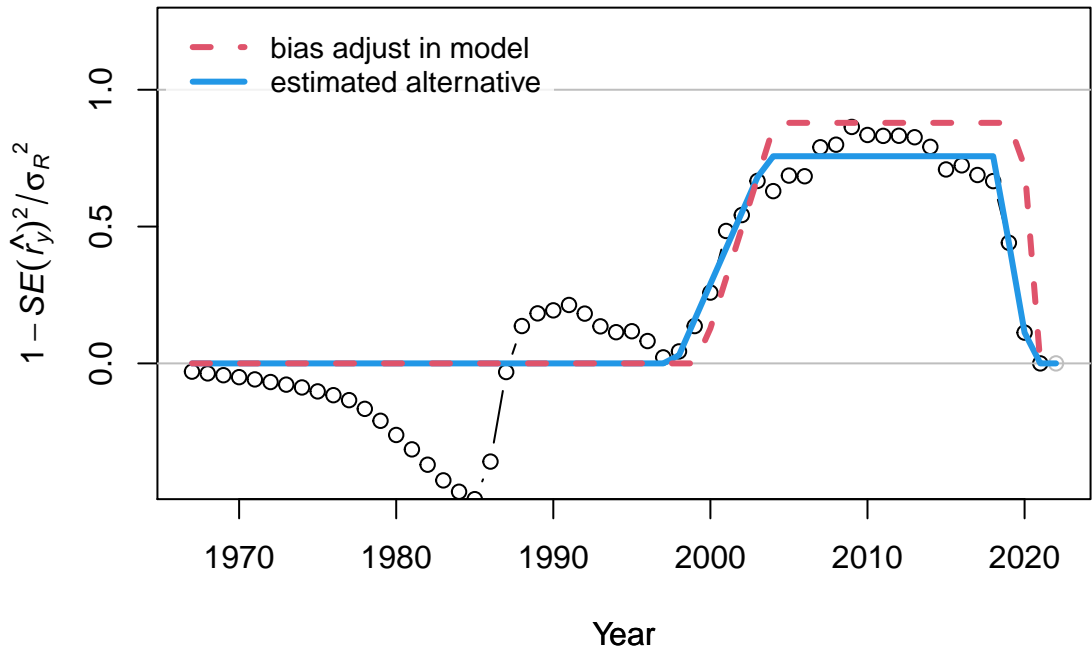
Year

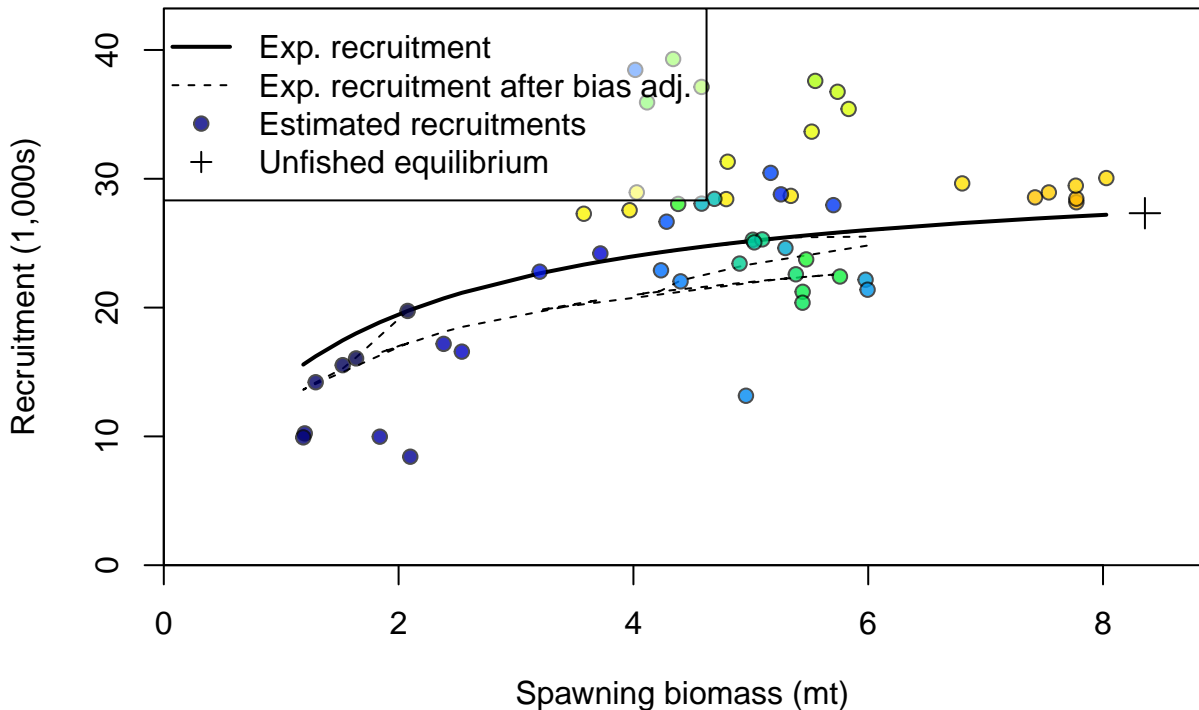


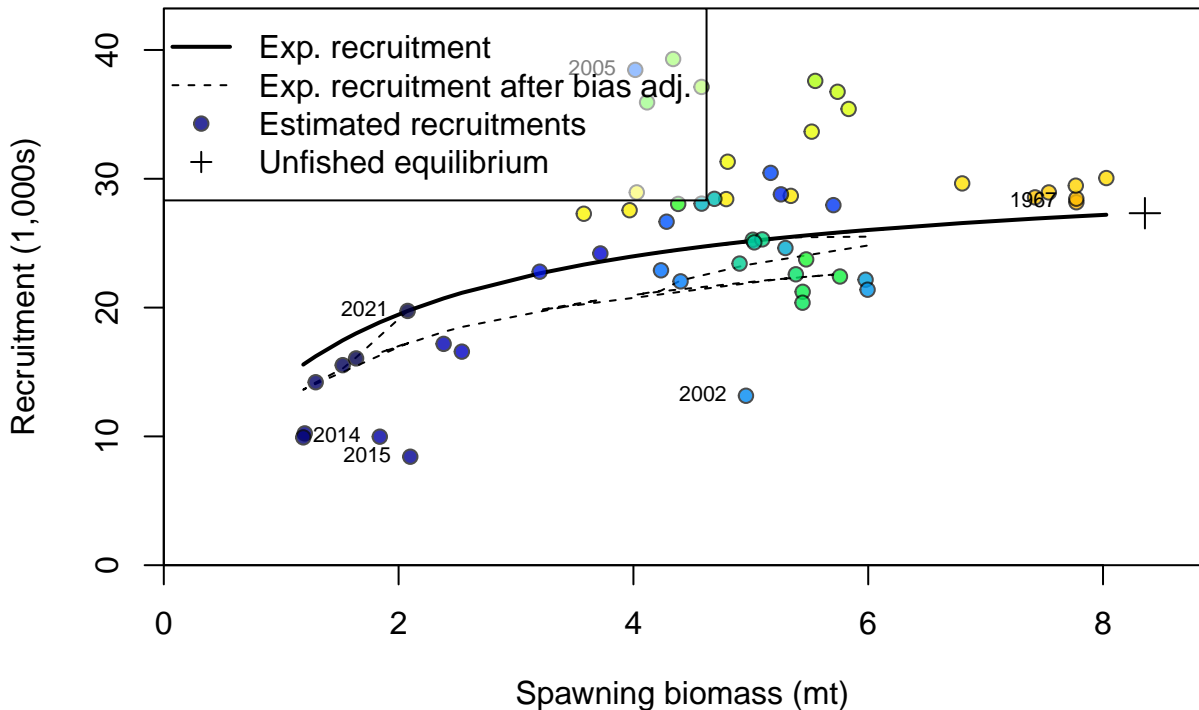
Recruitment deviation variance

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)

2005

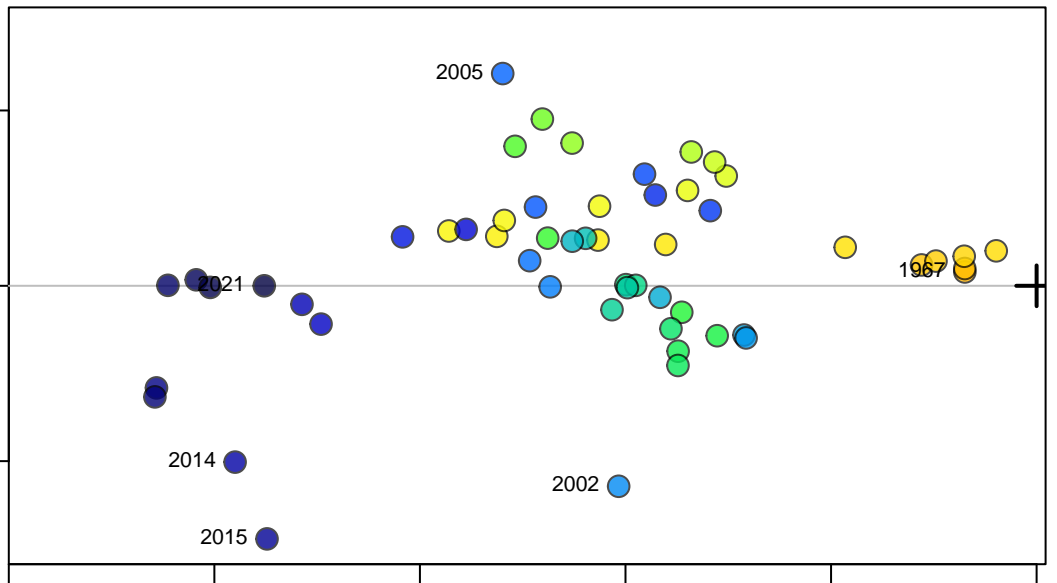
2021

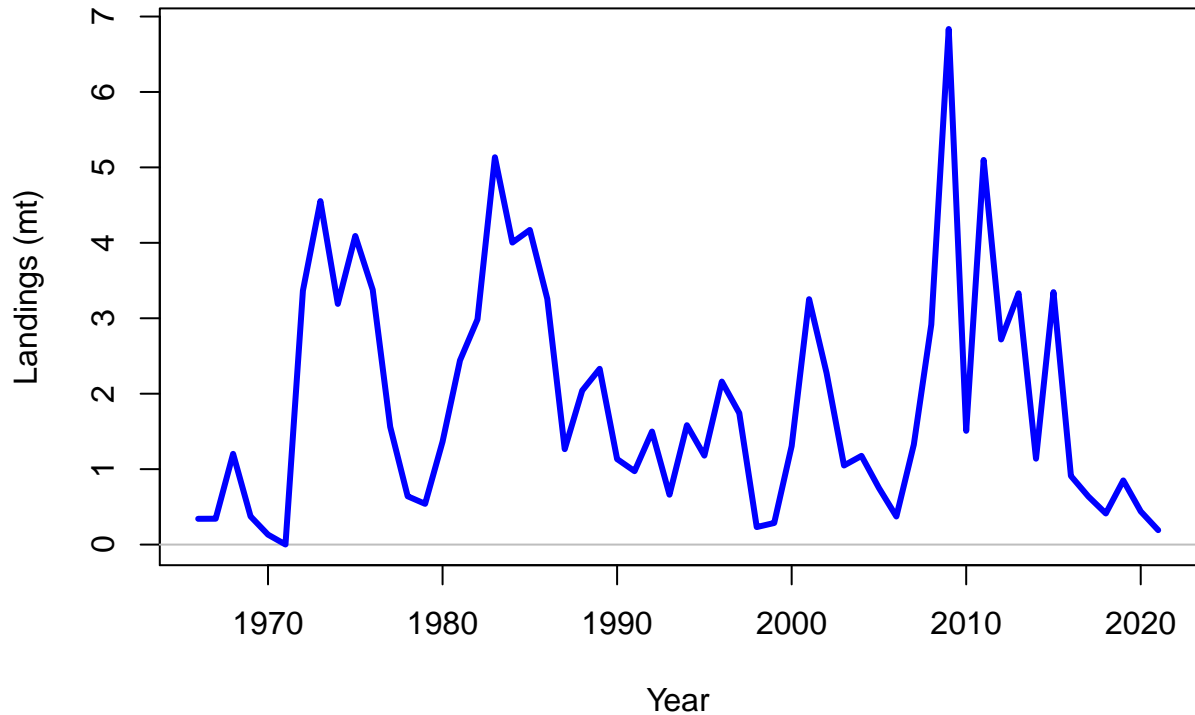
2014

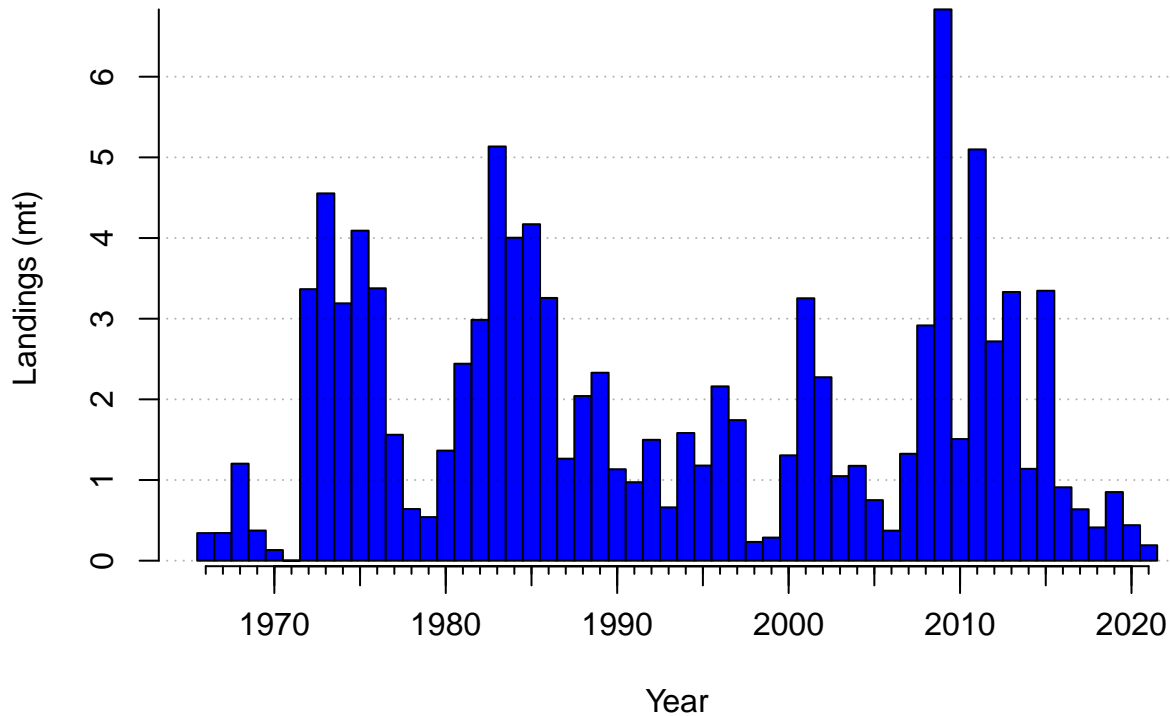
2015

2002

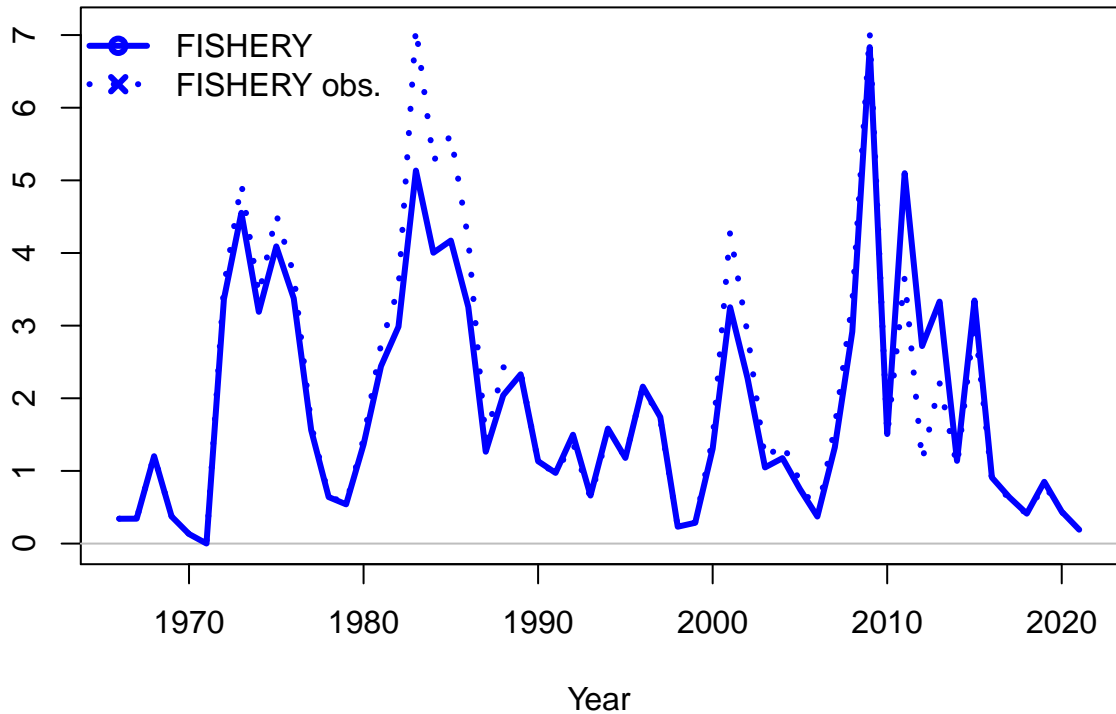
1967

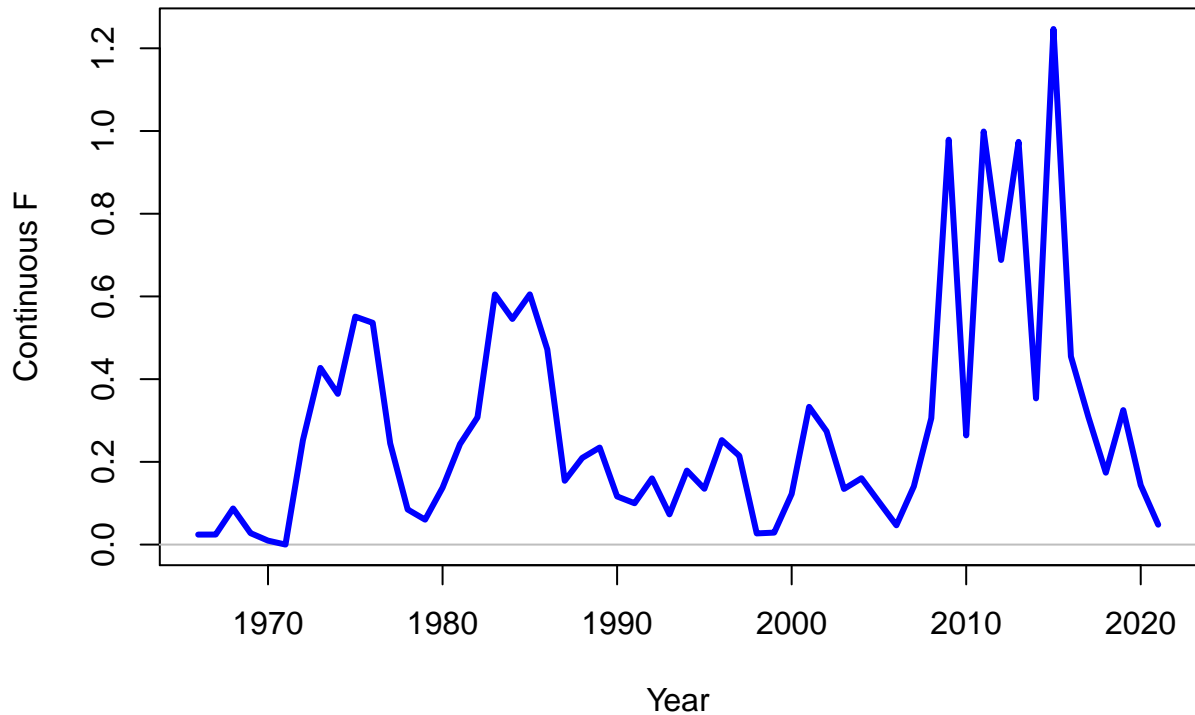




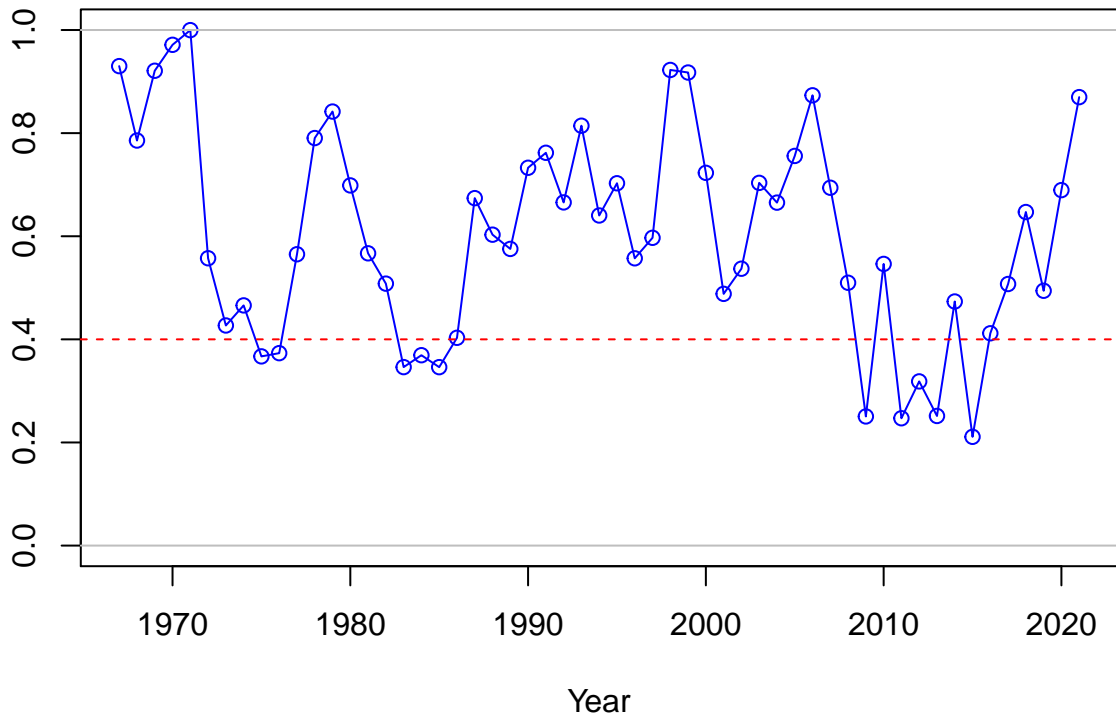


Observed and expected Landings (mt)

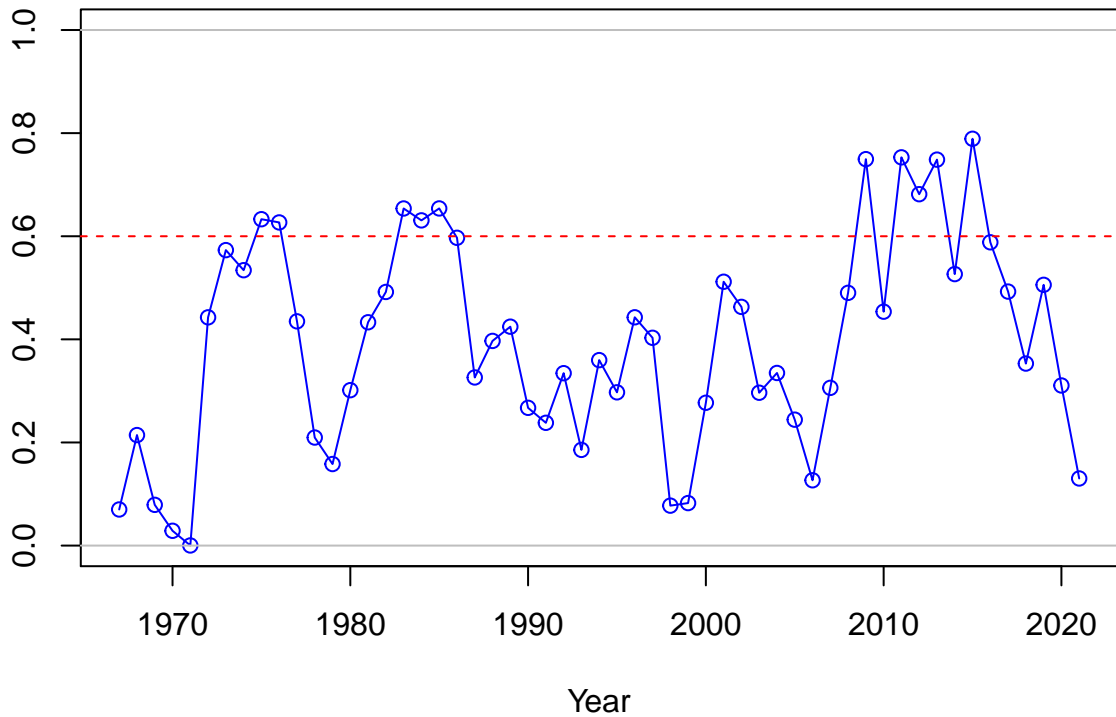




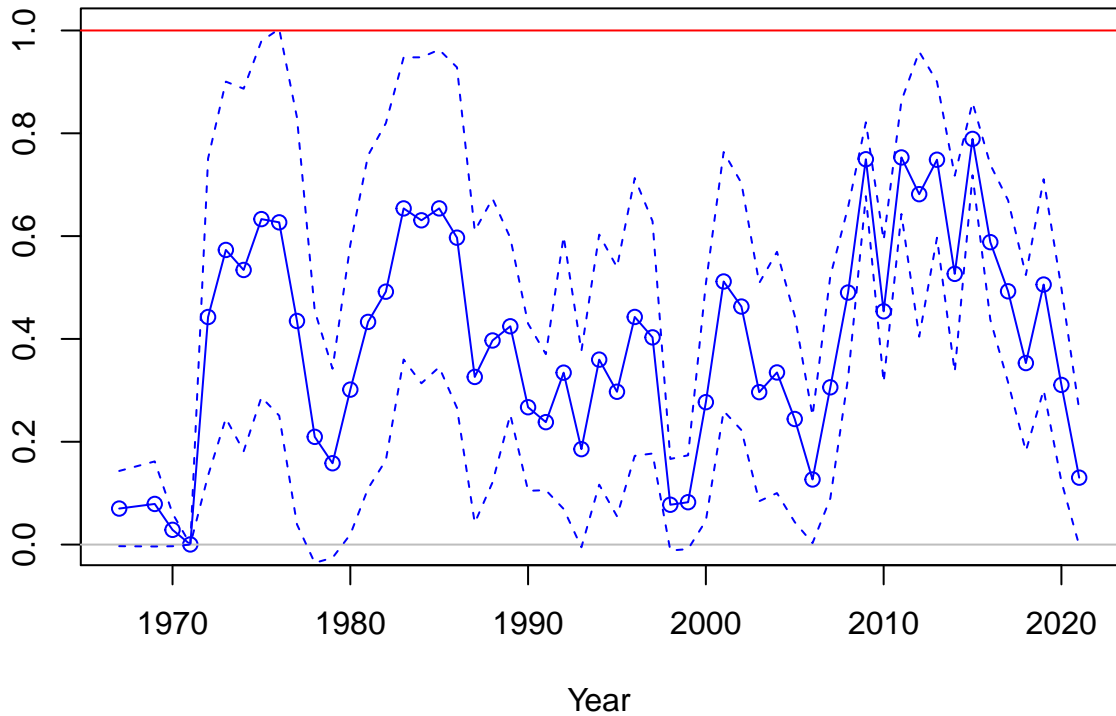
SPR



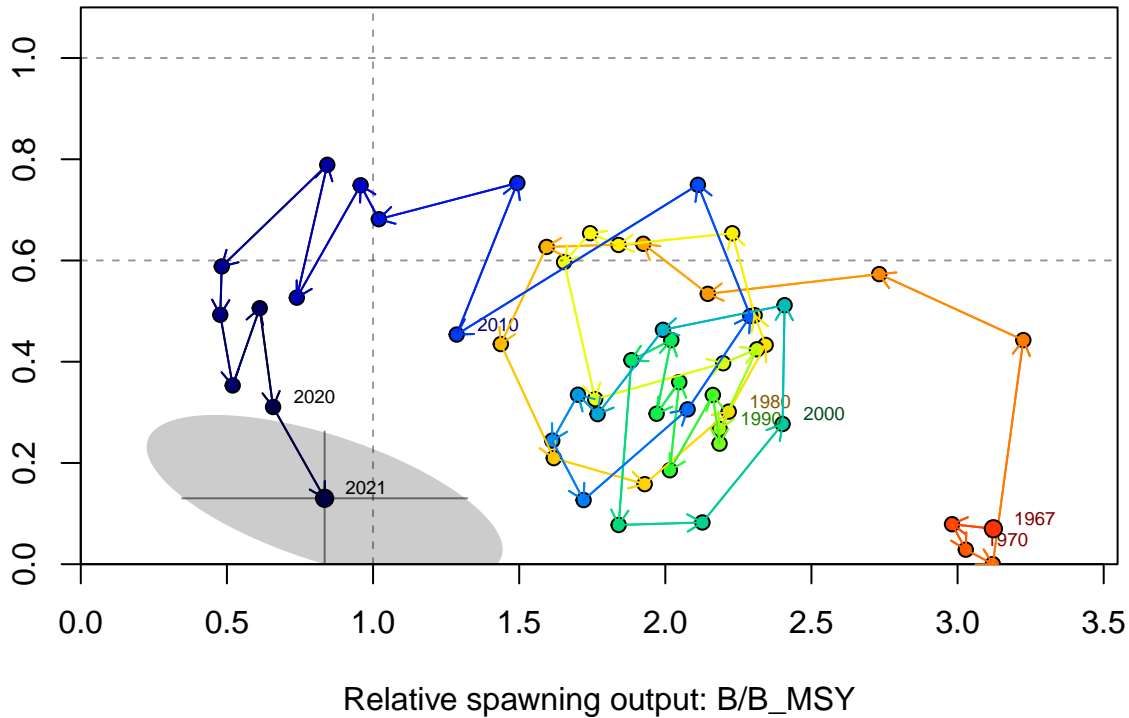
1-SPR



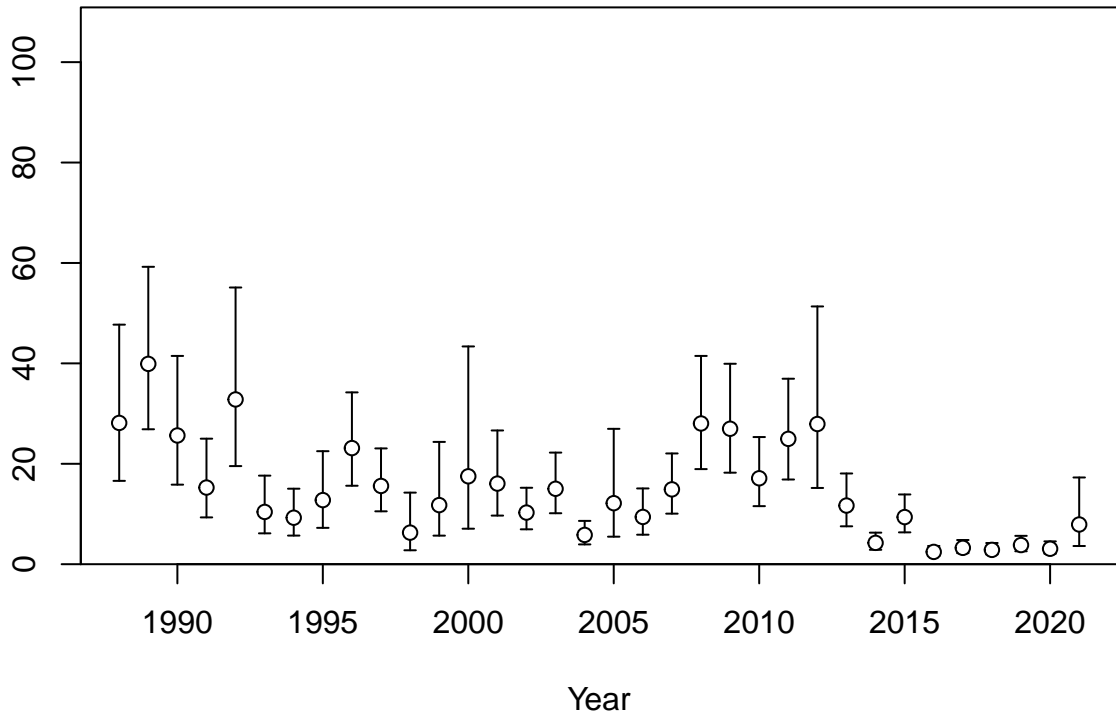
Fishing intensity: 1-SPR



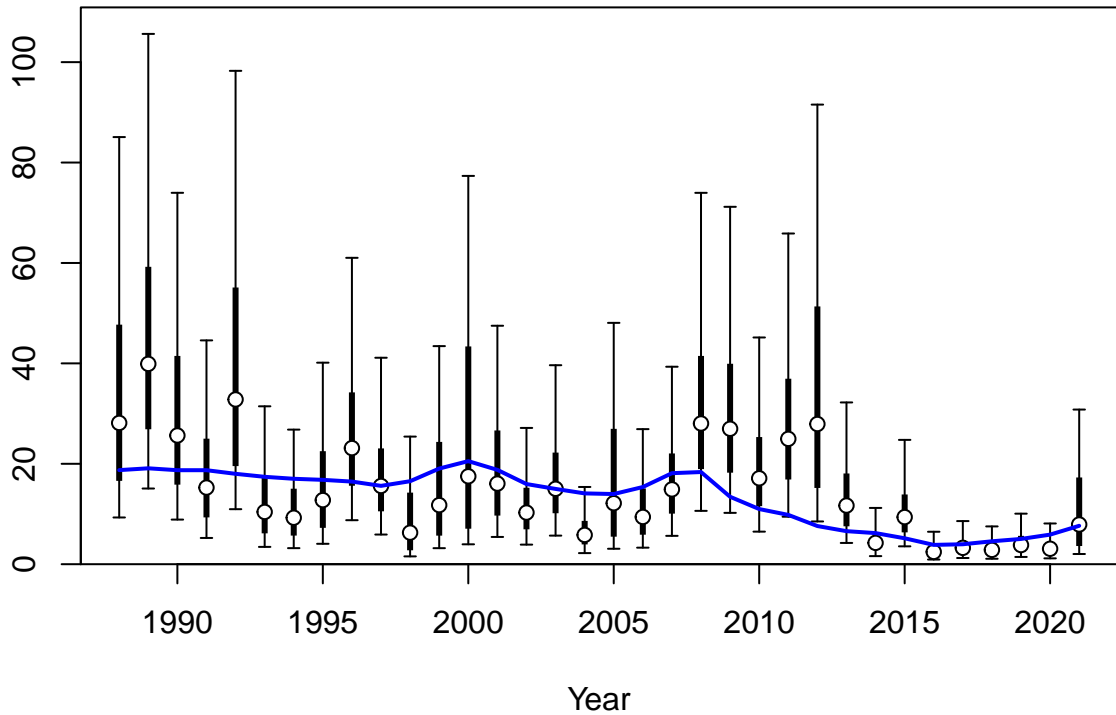
Fishing intensity: 1-SPR

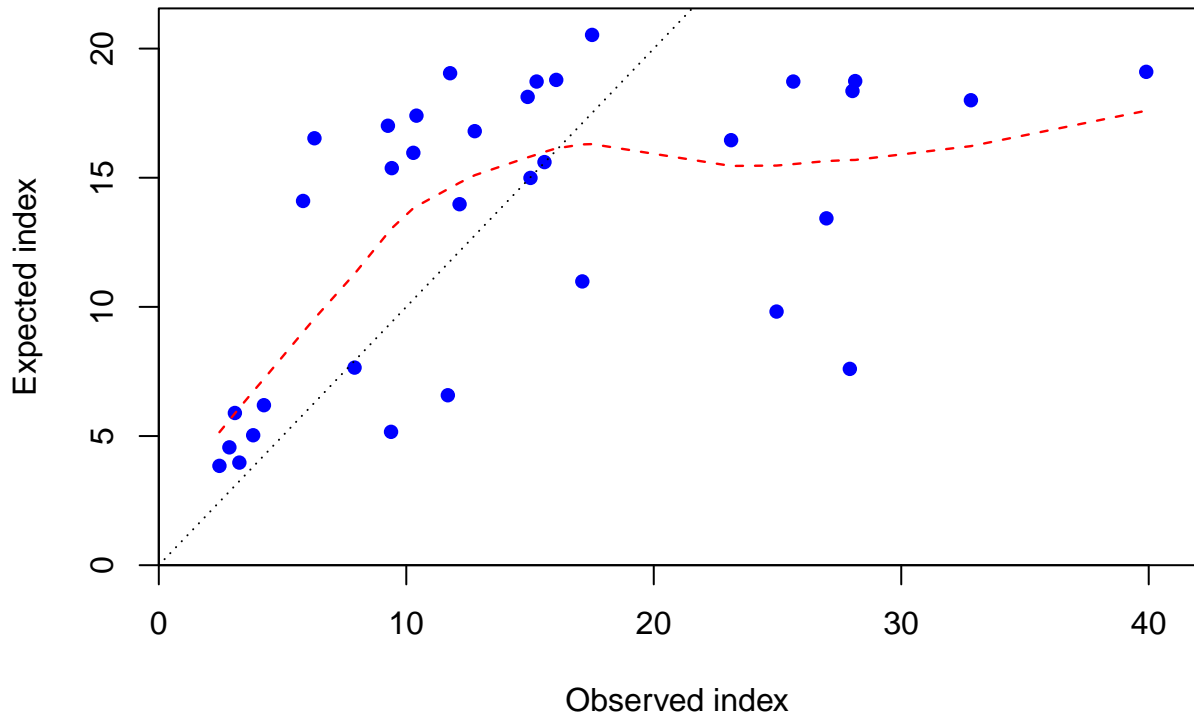


Index



Index





Log index

4
3
2
1
0

1990

1995

2000

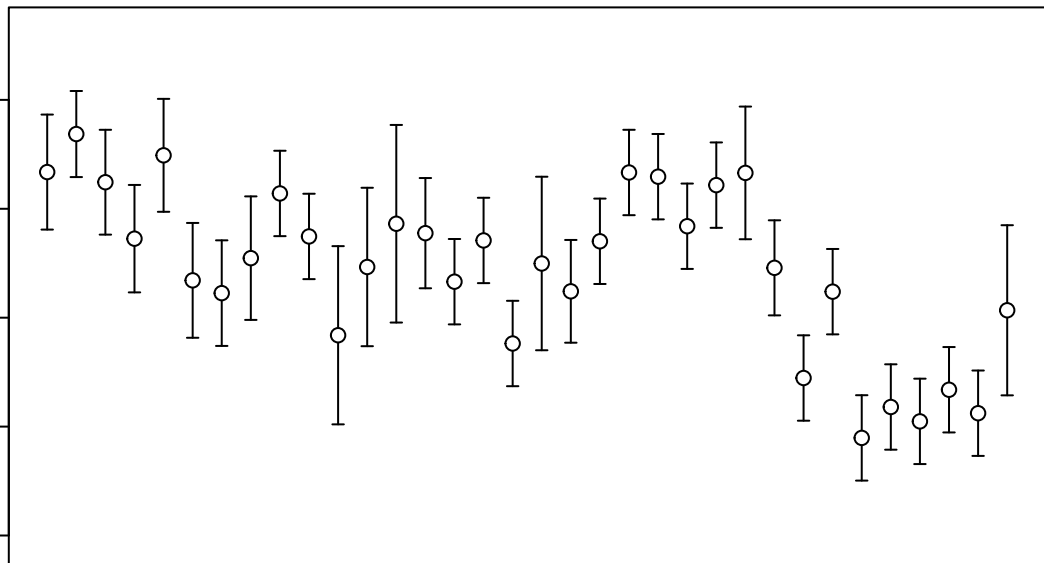
2005

2010

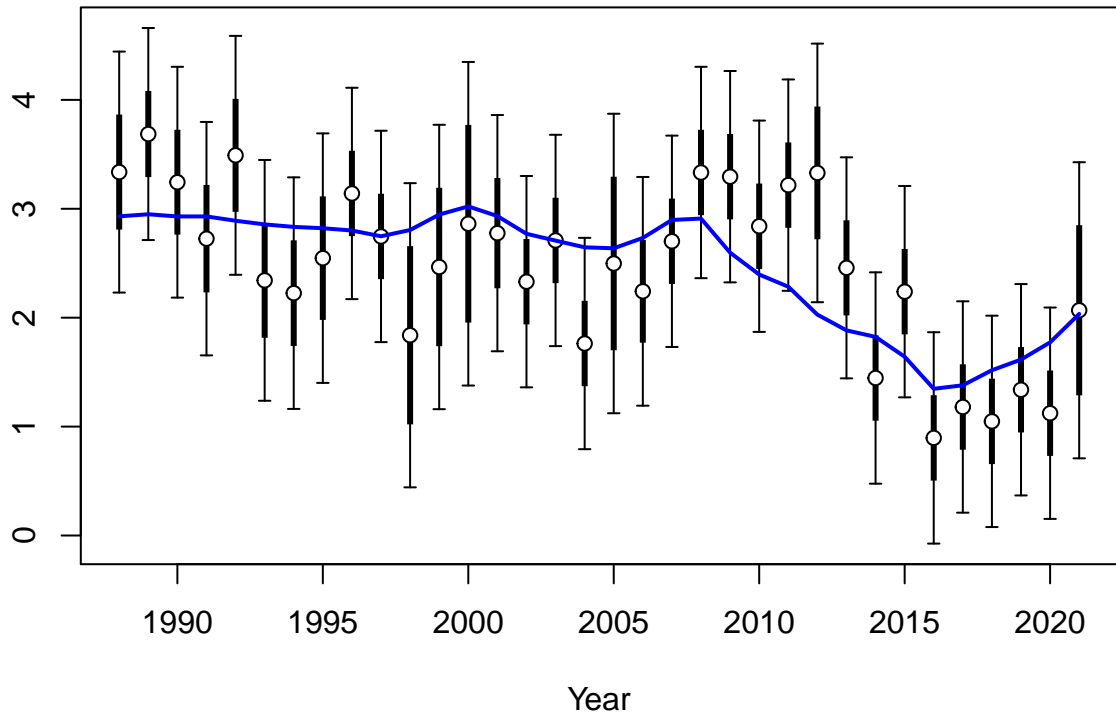
2015

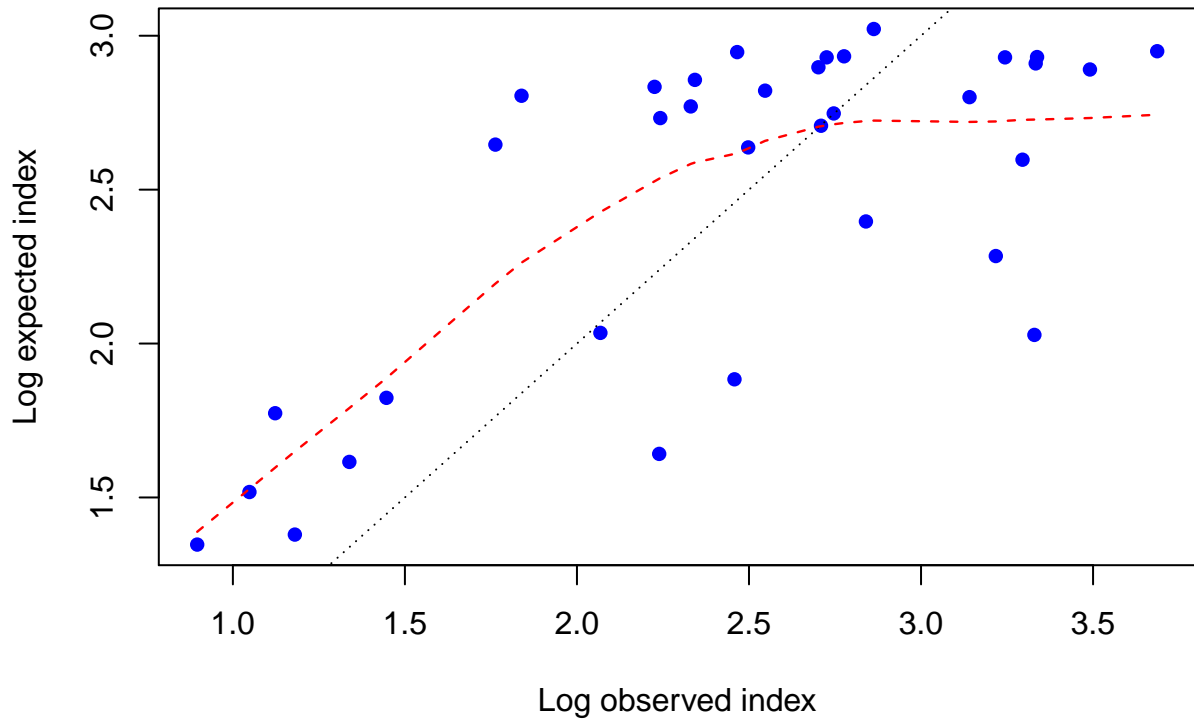
2020

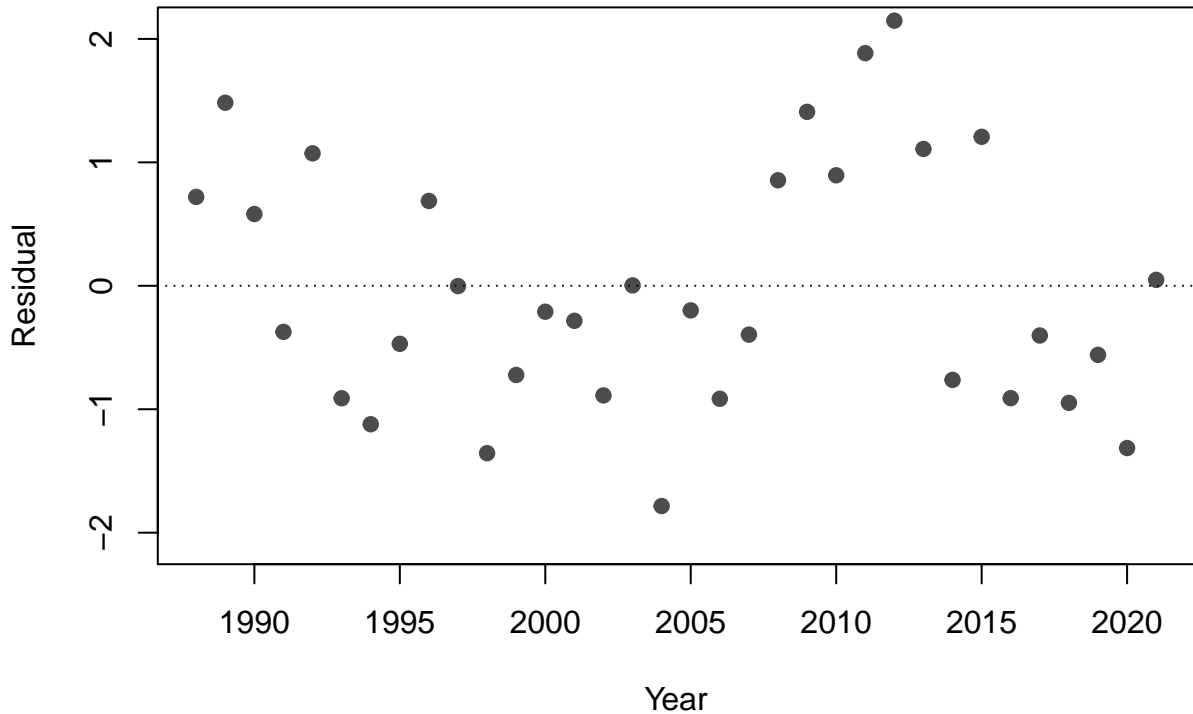
Year

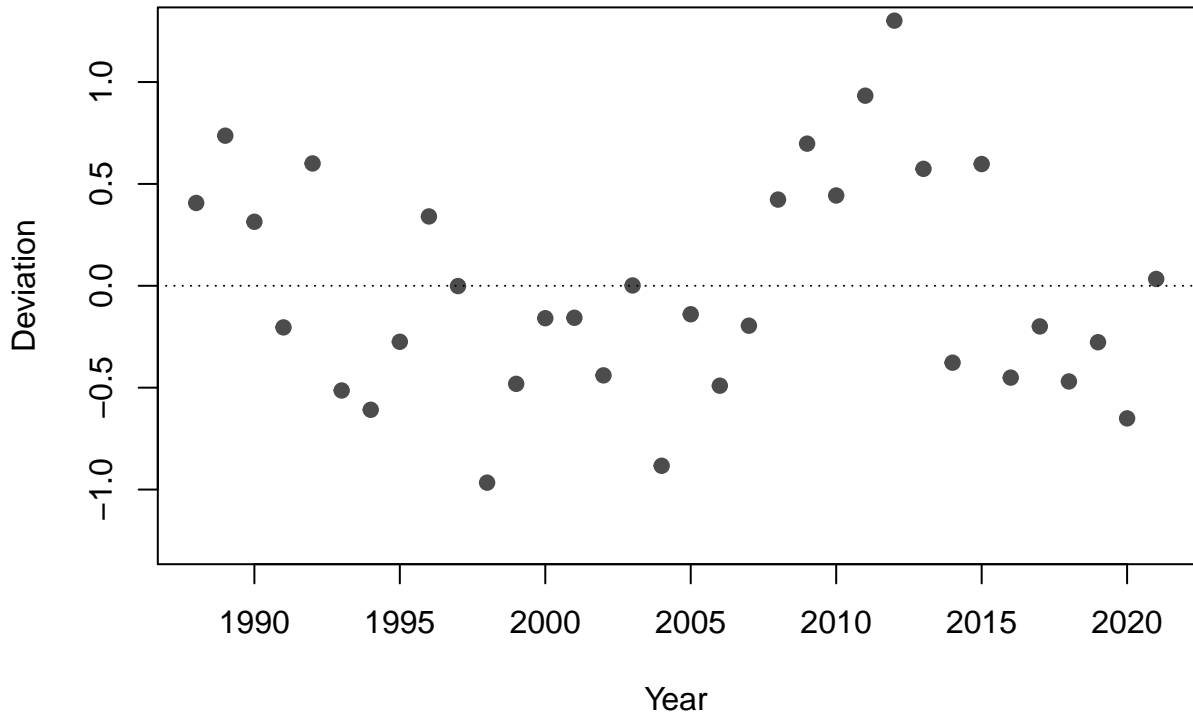


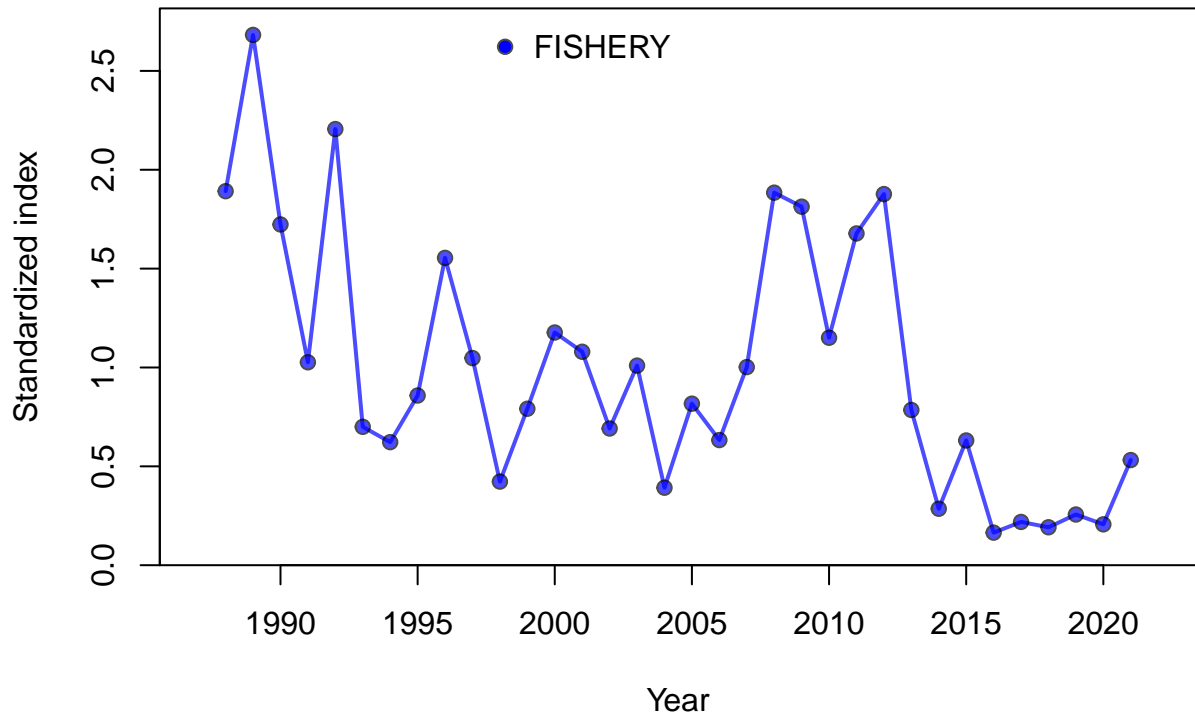
Log index

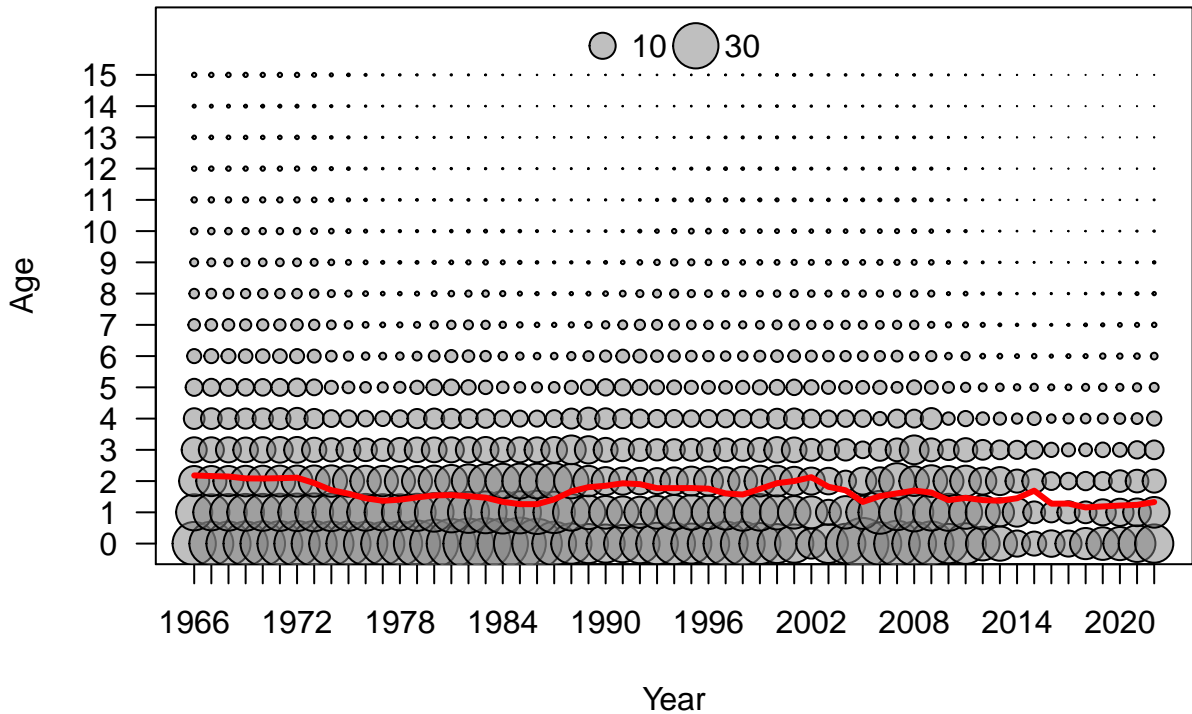


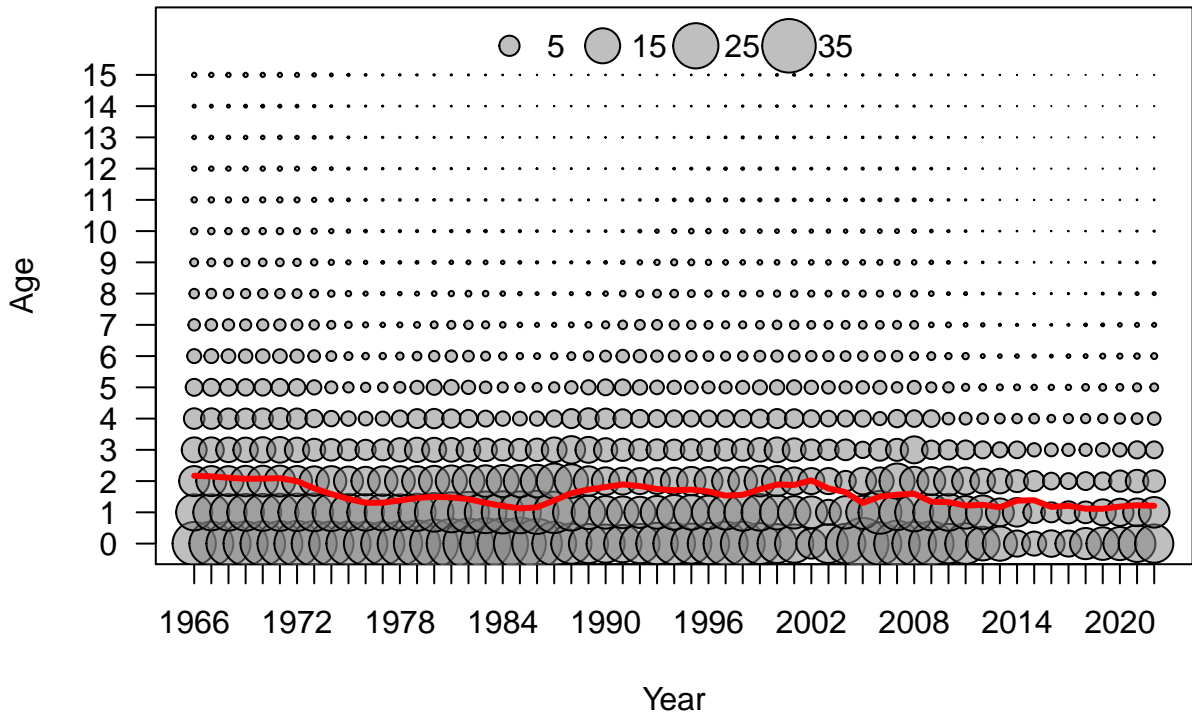


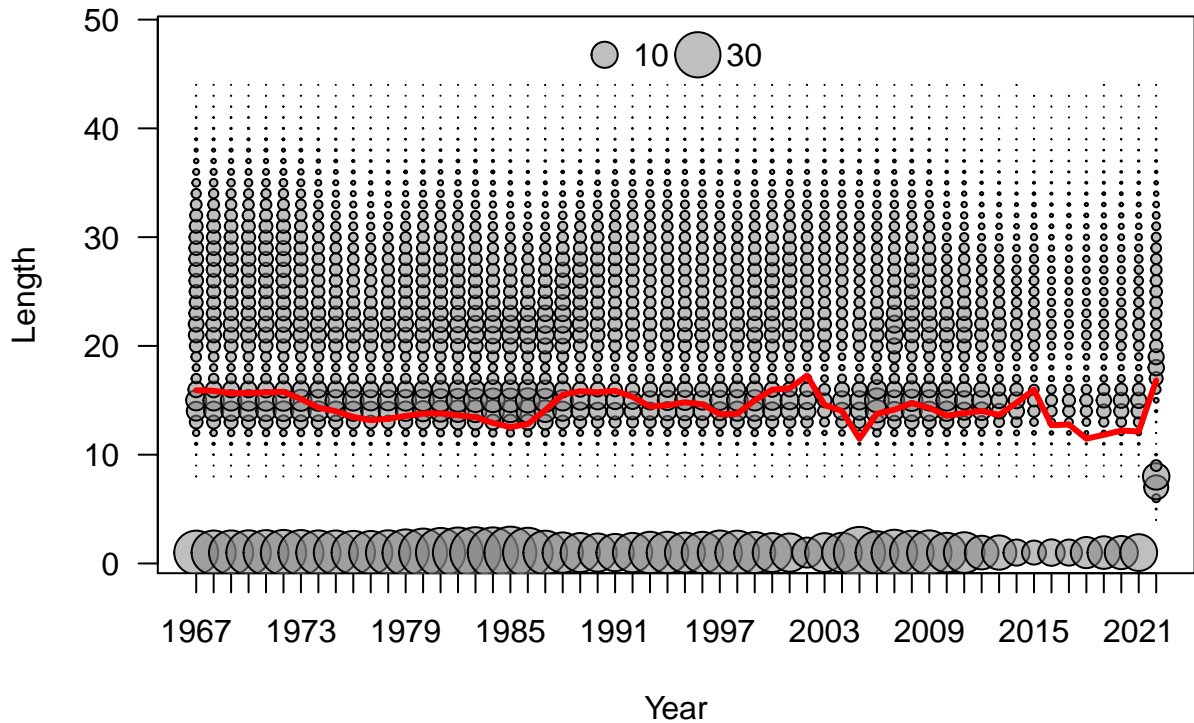


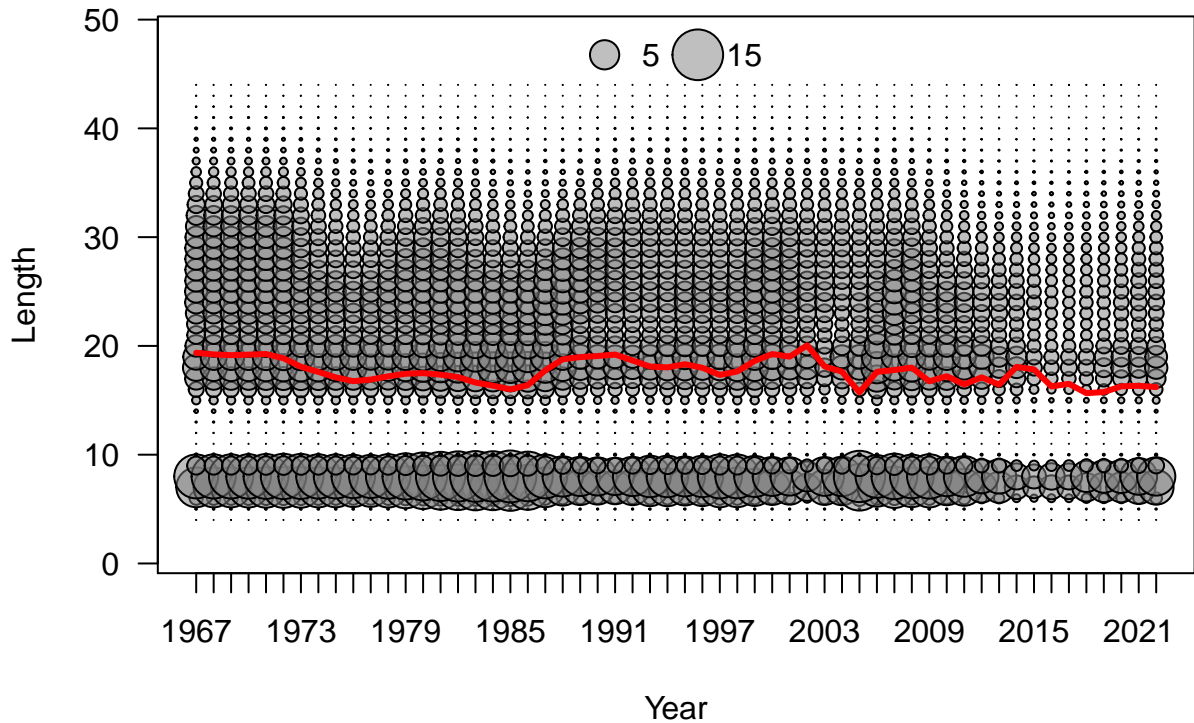


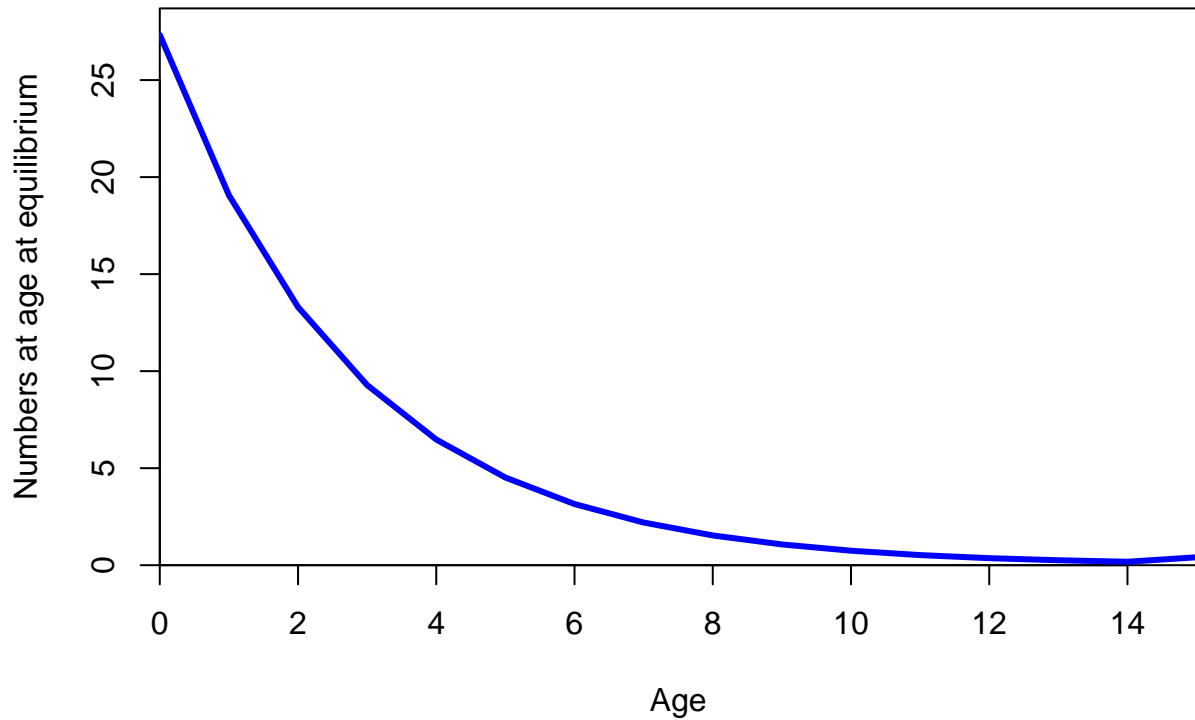






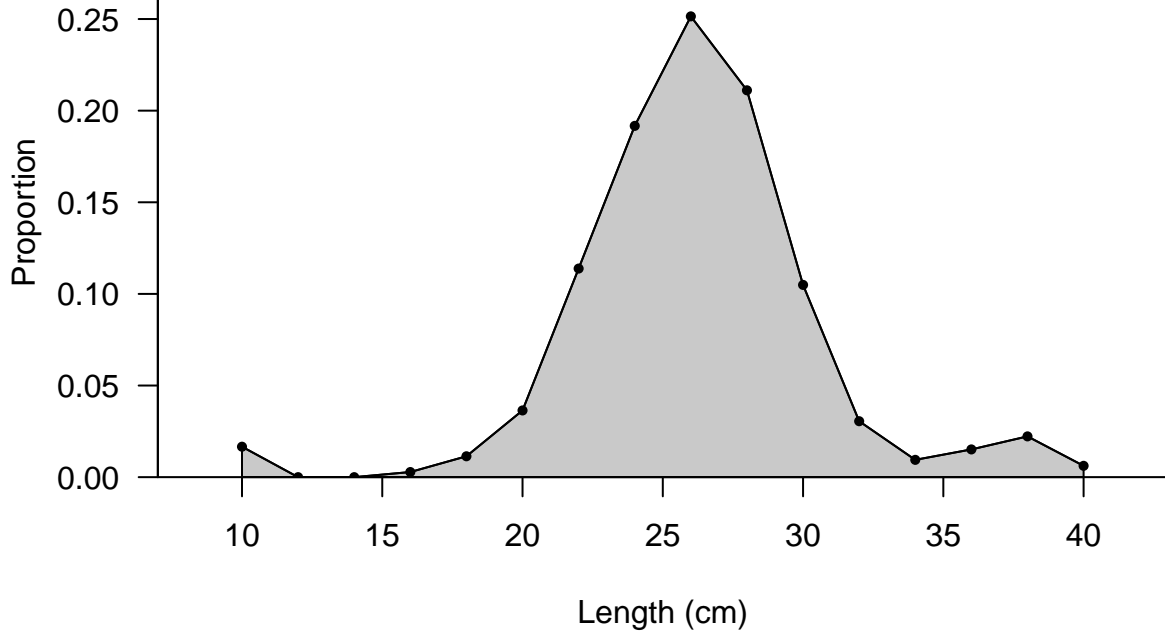


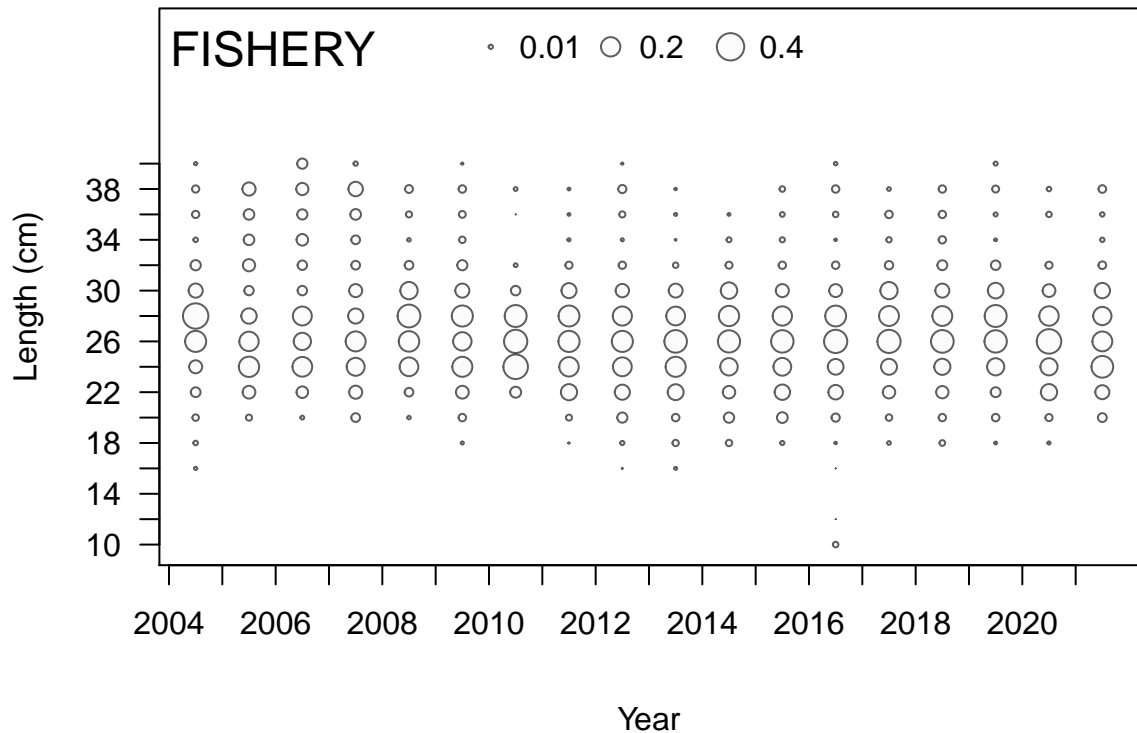


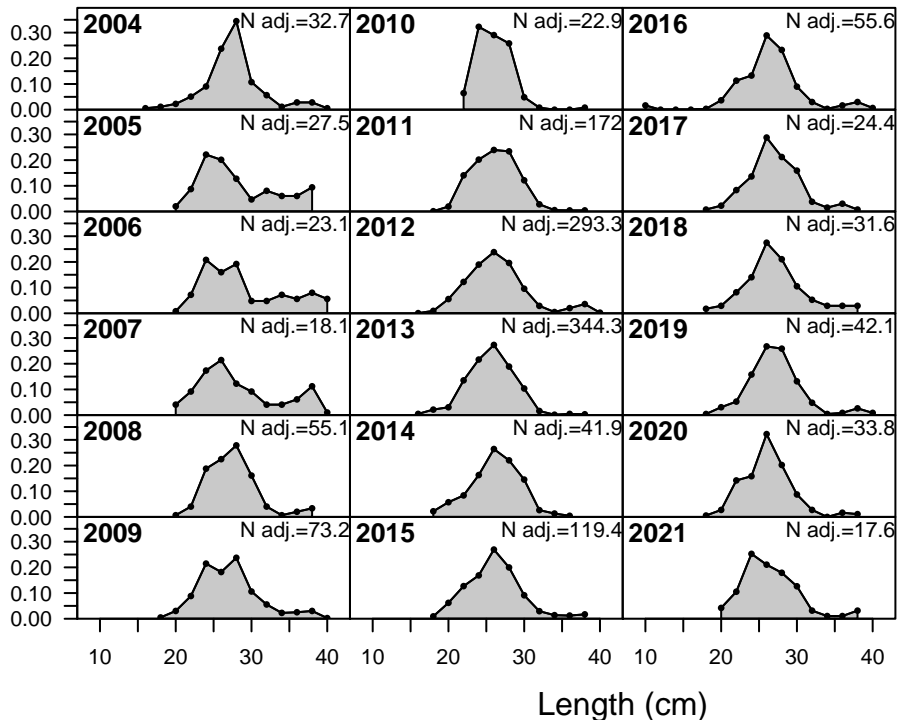


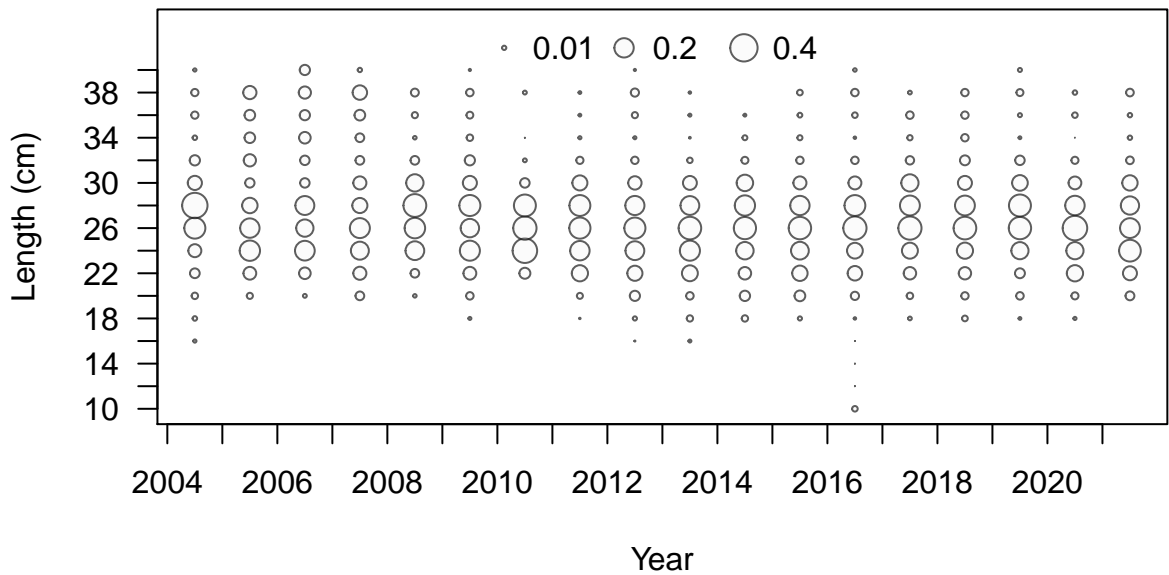
FISHERY

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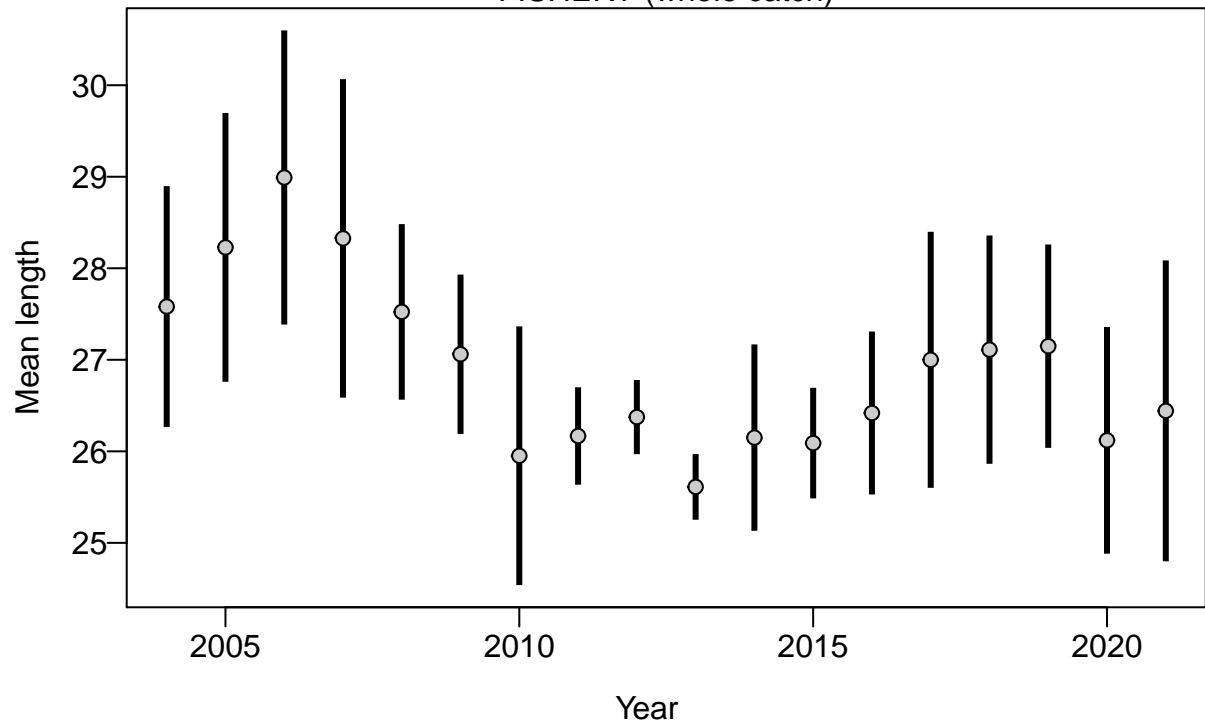


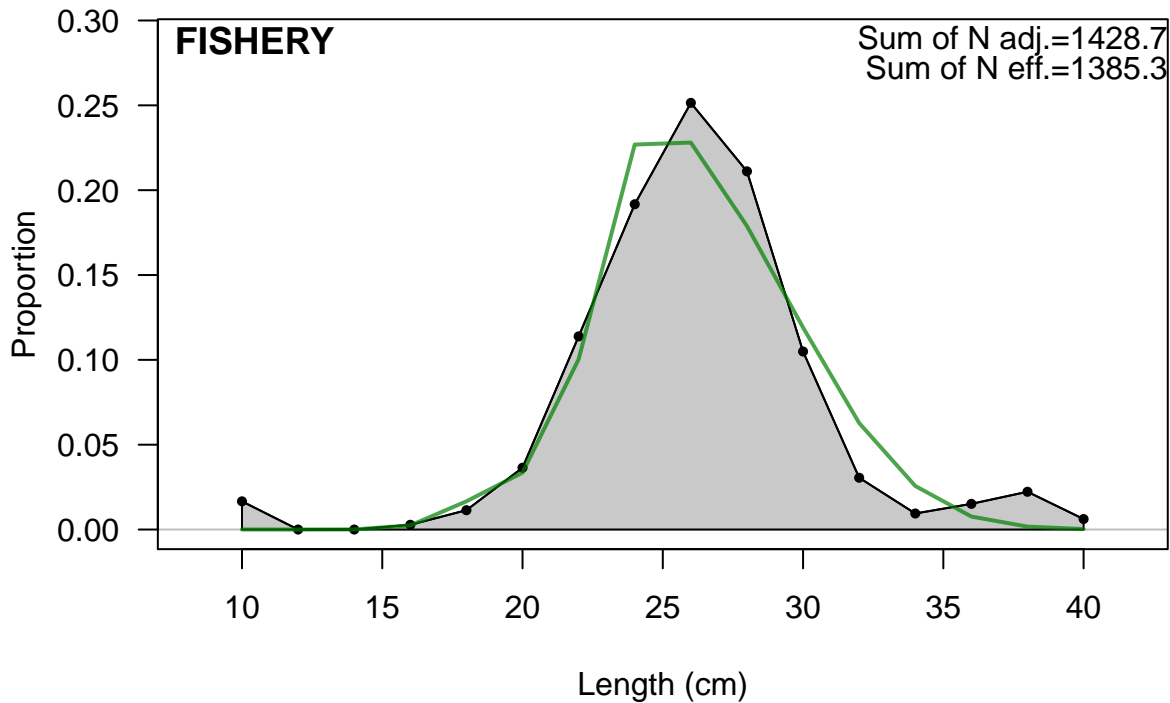


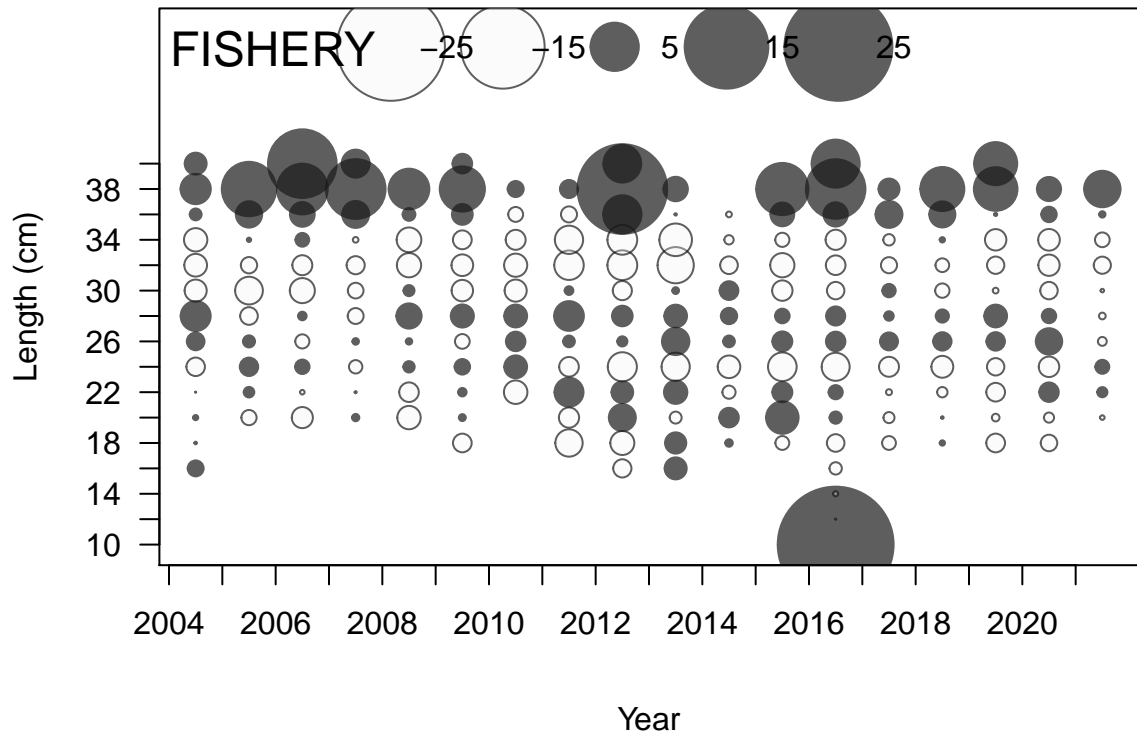


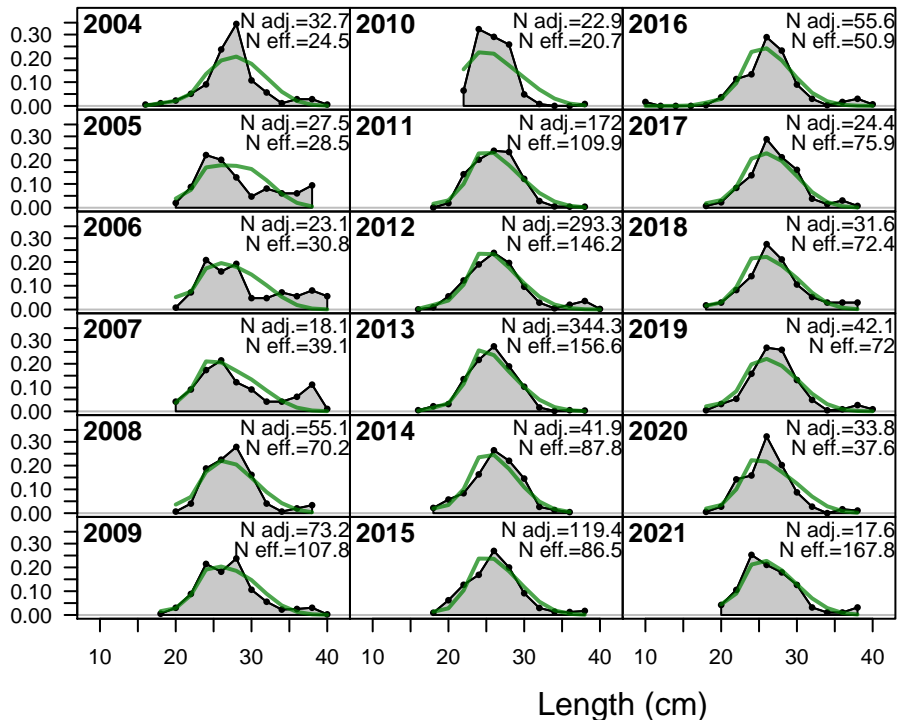


FISHERY (whole catch)

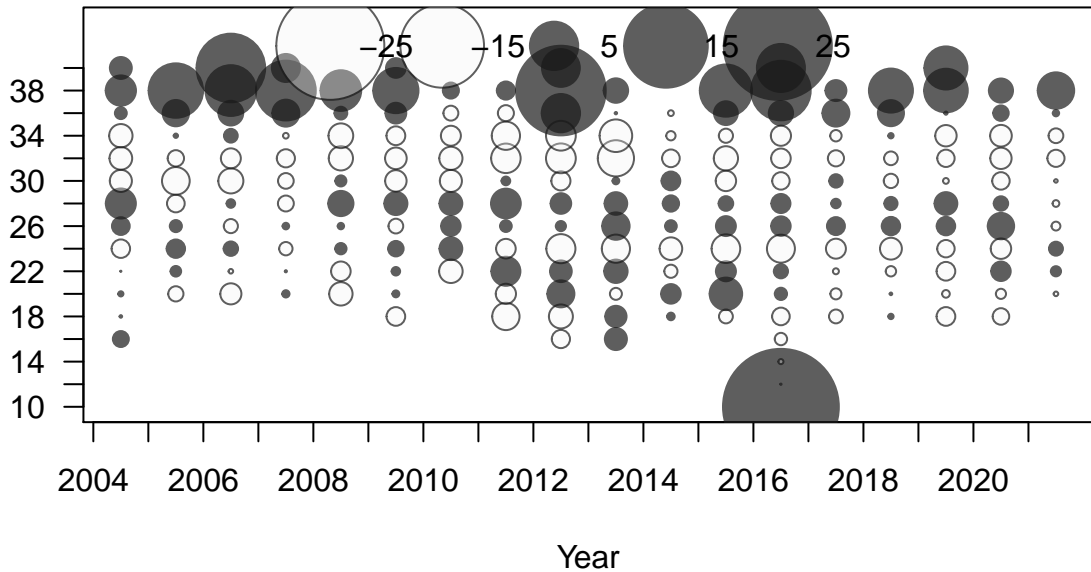




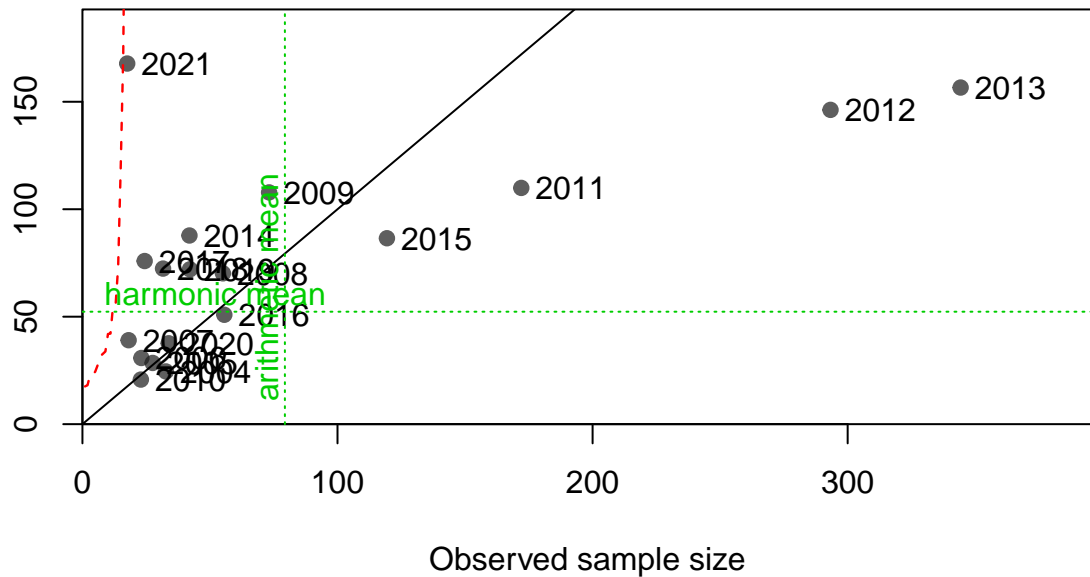




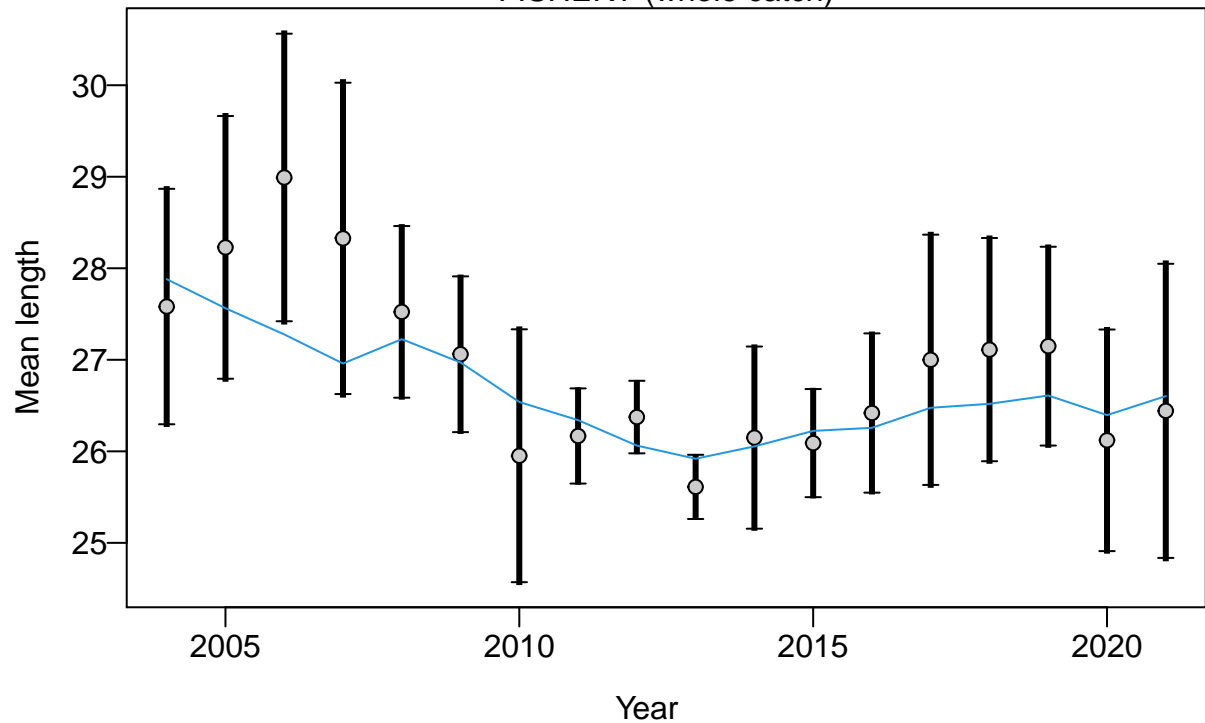
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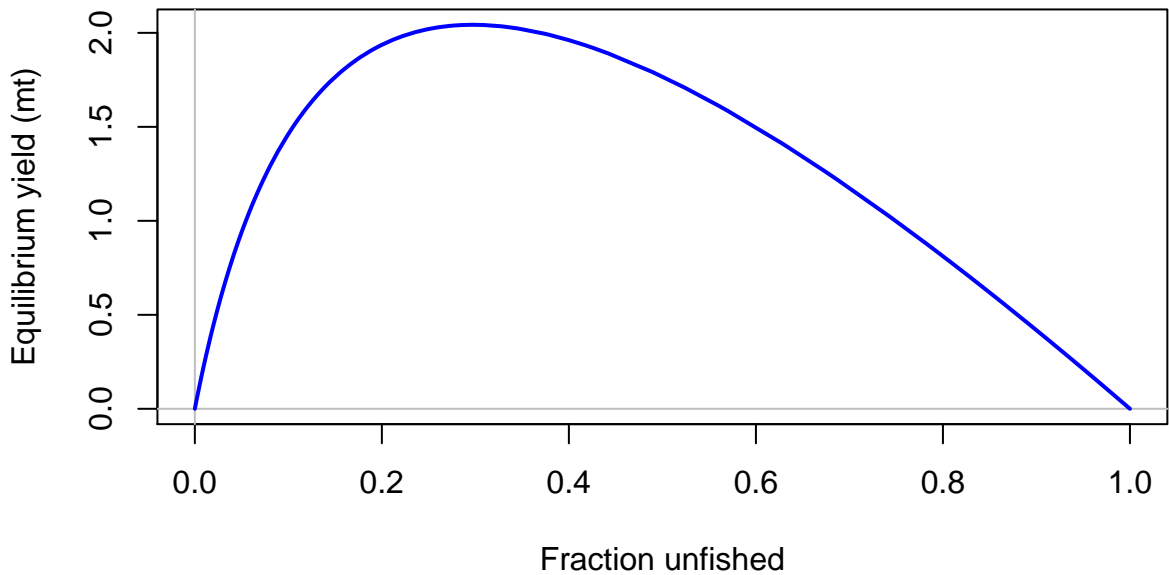


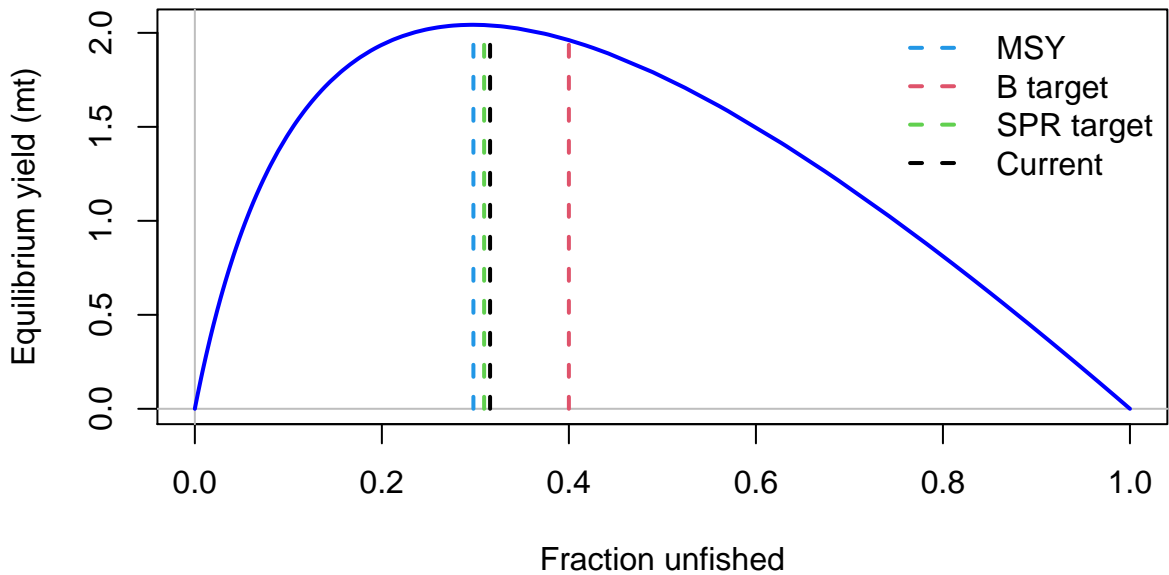
Effective sample size



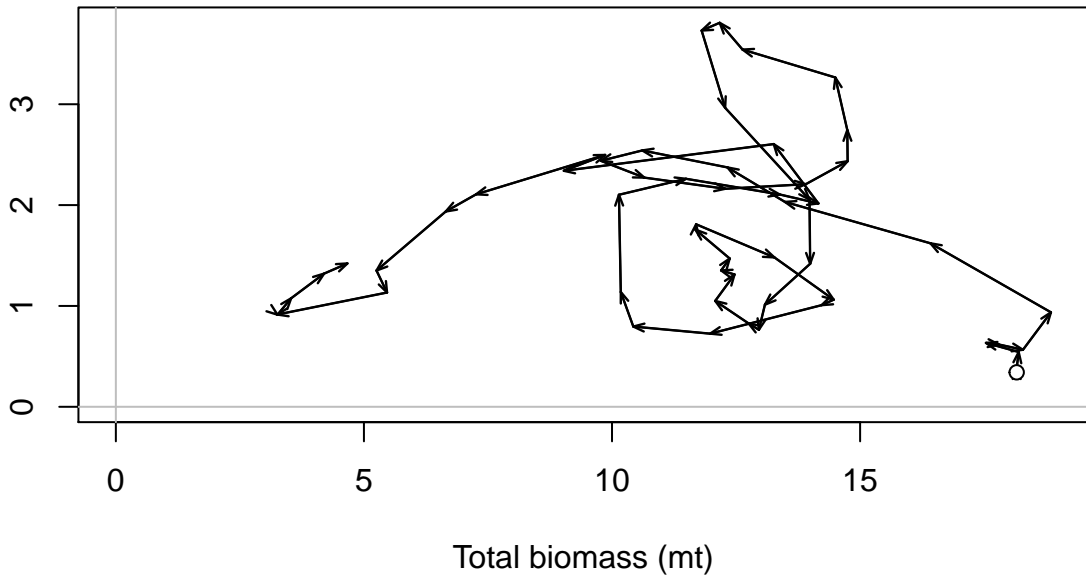
FISHERY (whole catch)

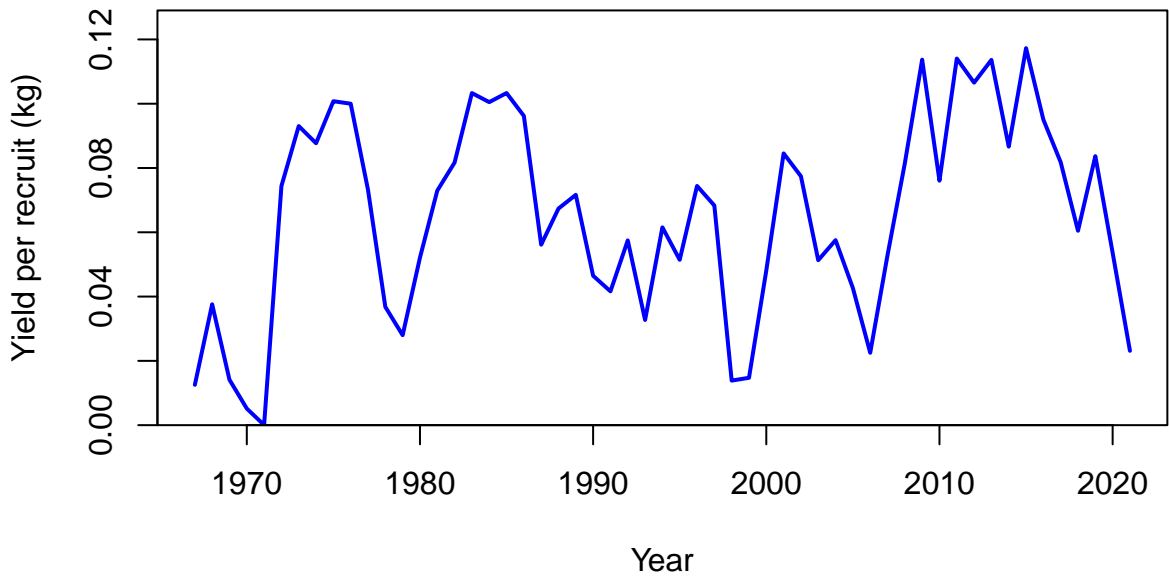


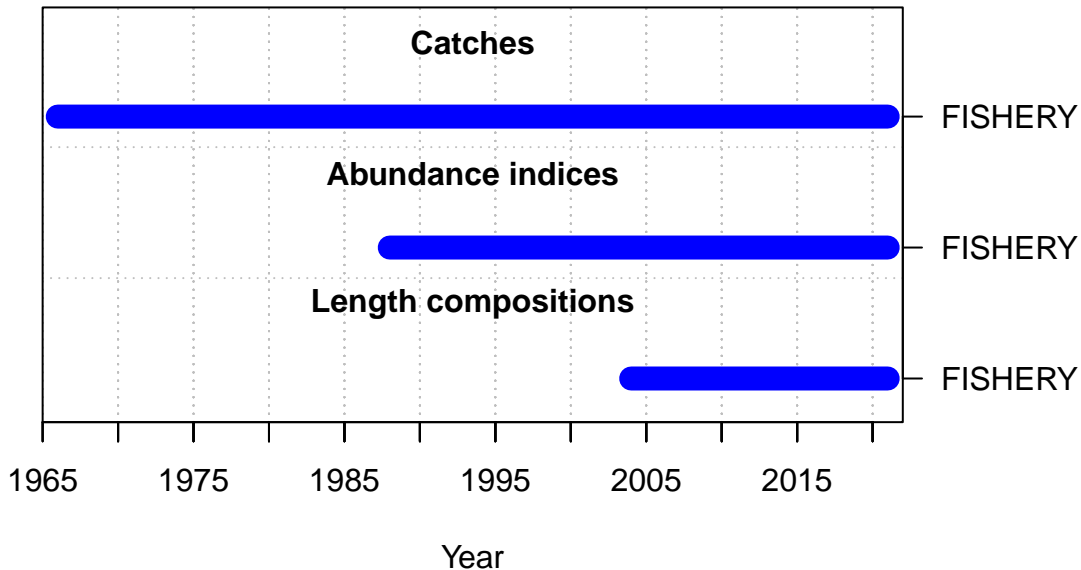


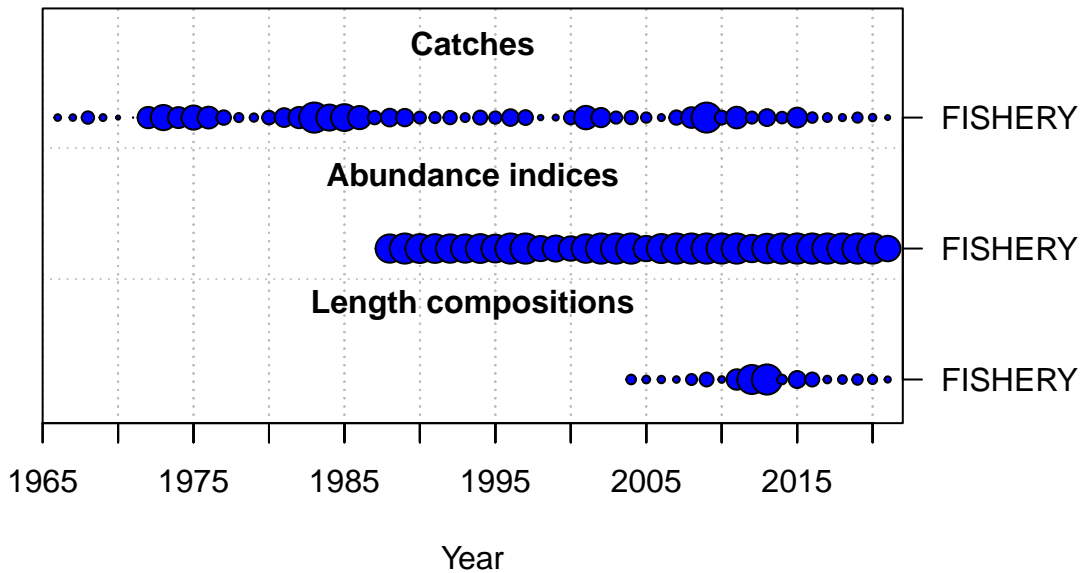


Surplus production (mt)

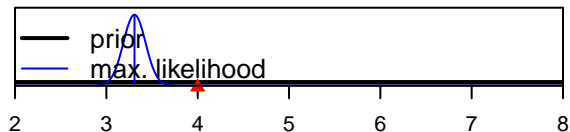




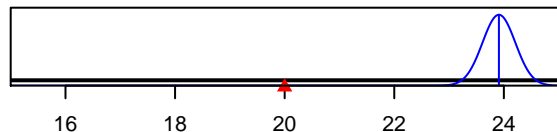




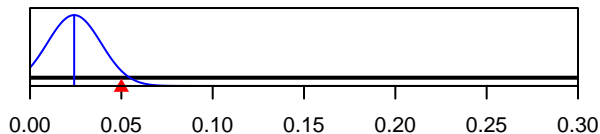
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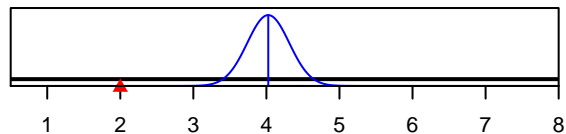
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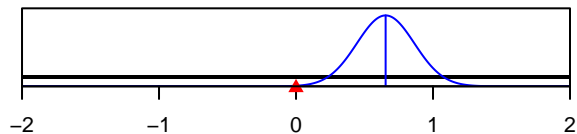
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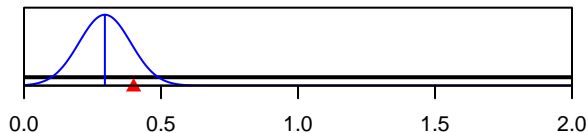
Size_95%width_FISHERY(1)



LnQ_base_FISHERY(1)



Q_extraSD_FISHERY(1)



Parameter value