

Plots created using the 'r4ss' package in R
Stock Synthesis version: 3.30.19.0
StartTime: Mon Jun 27 12:42:37 2022
Data_File: data.ss
Control_File: control.ss

Length (cm, beginning of the year)

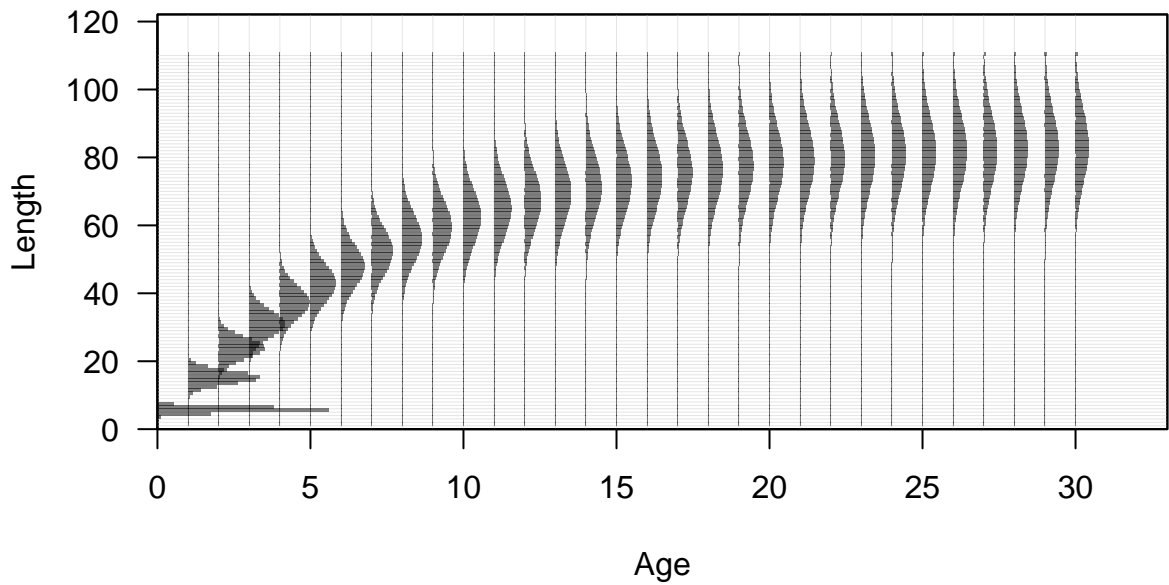


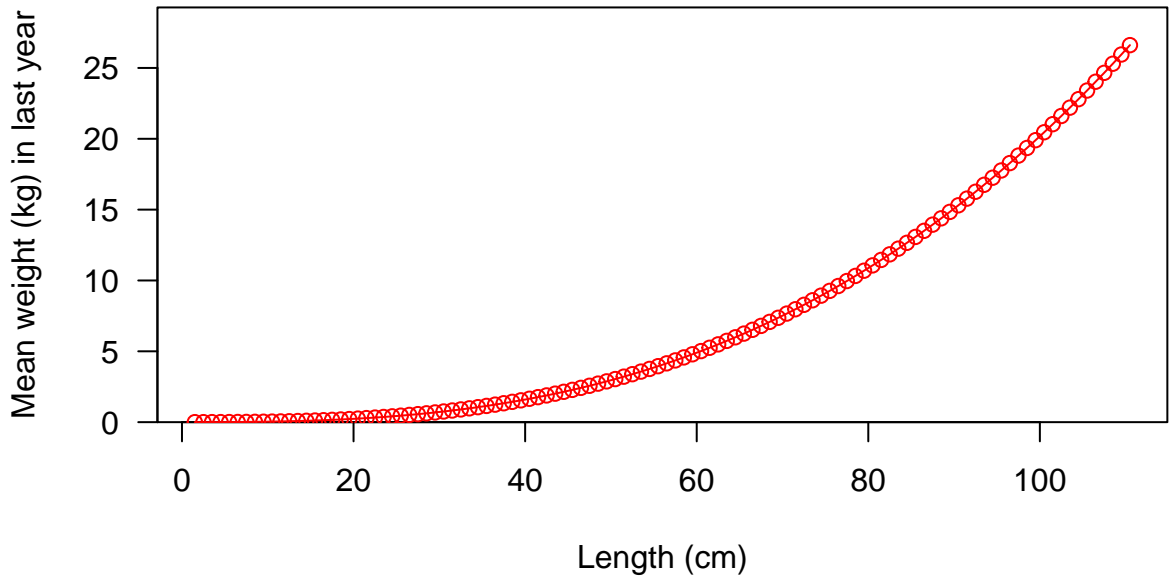
Age (yr)





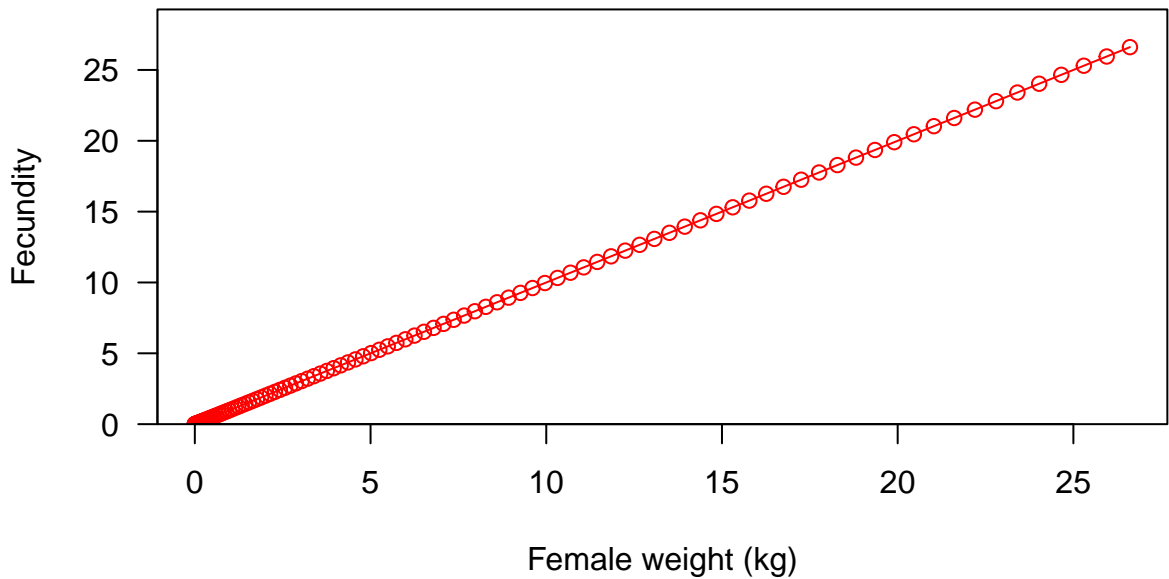




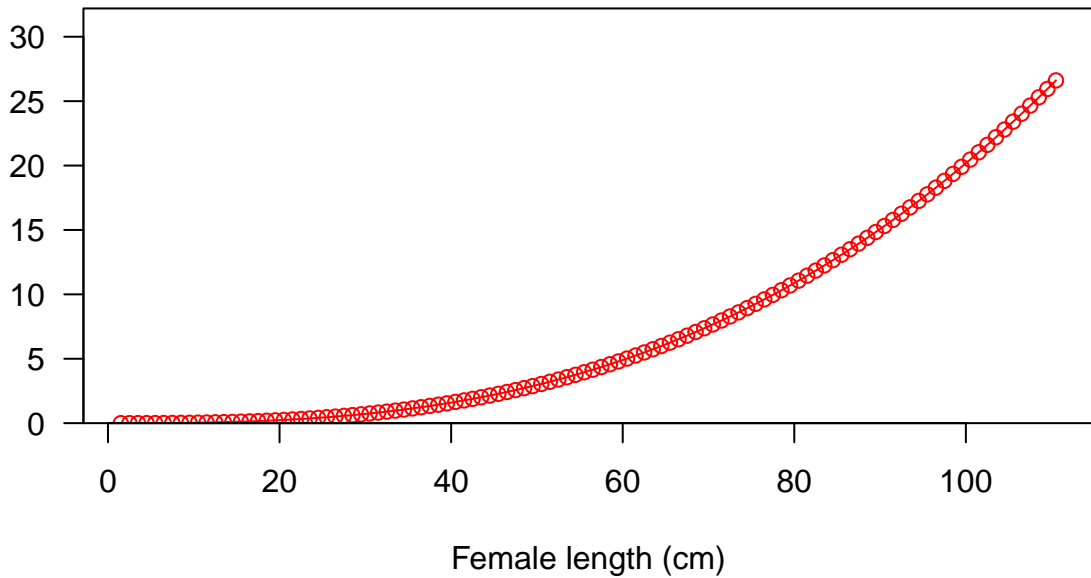








Fecundity



Spawning output

25
20
15
10
5
0

0

20

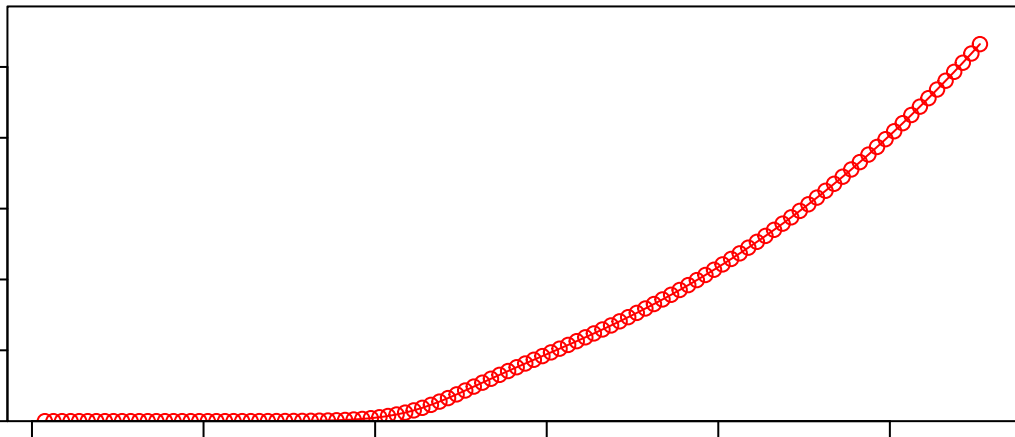
40

60

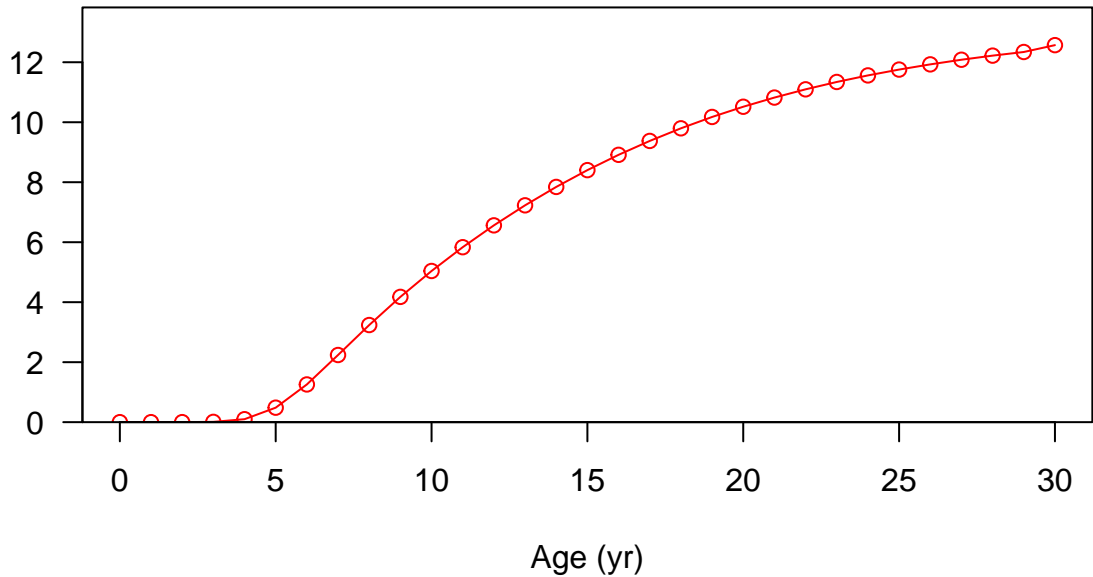
80

100

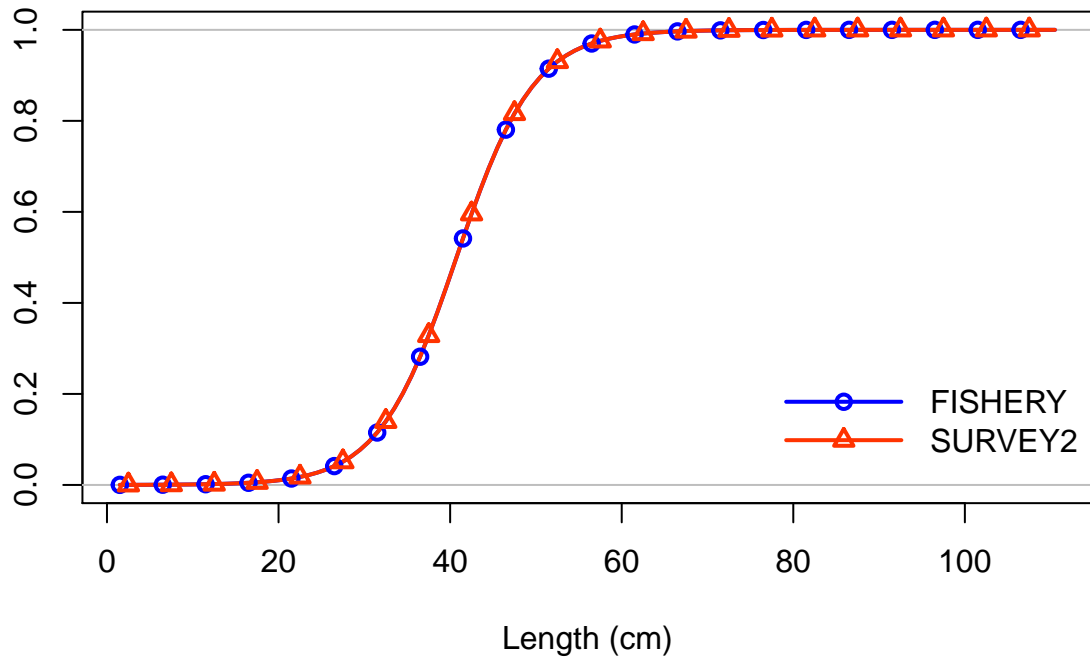
Length (cm)



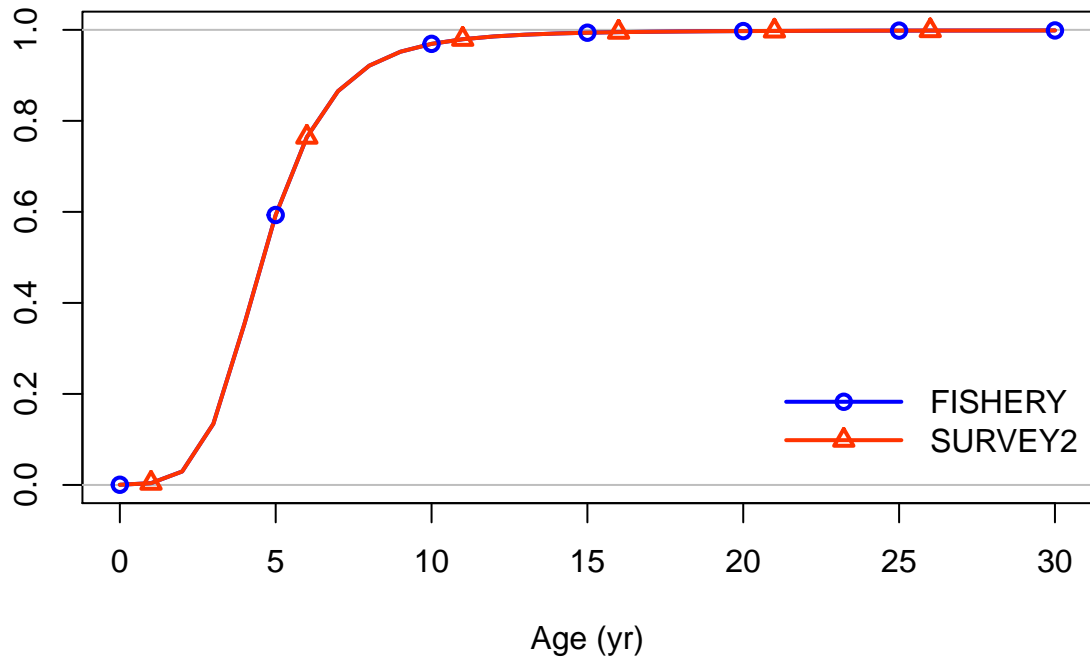
Spawning output



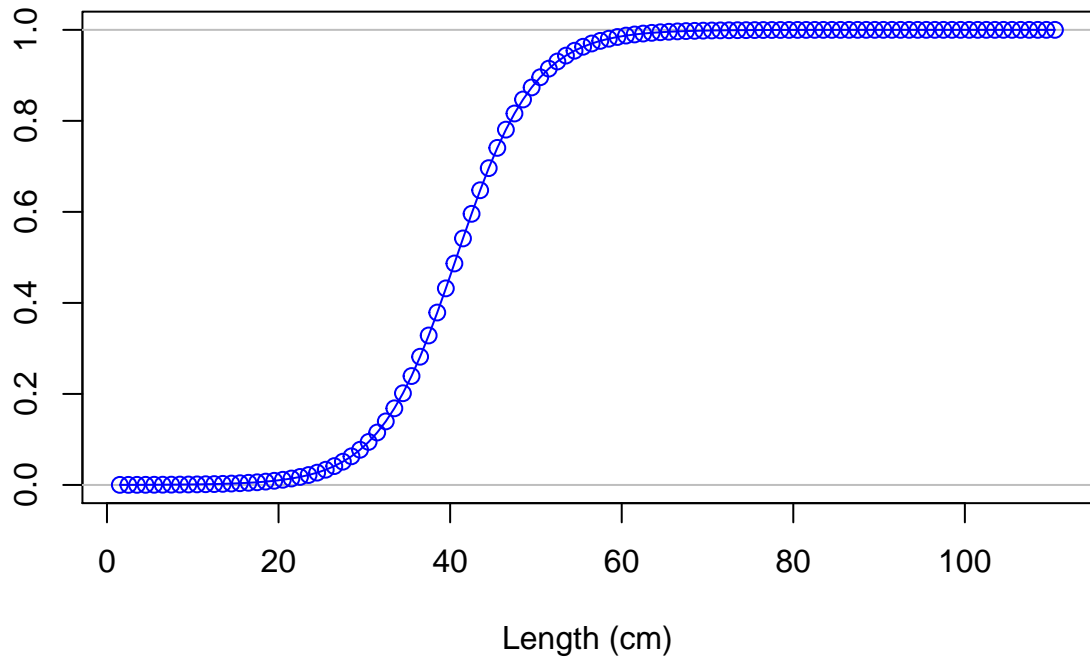
Selectivity



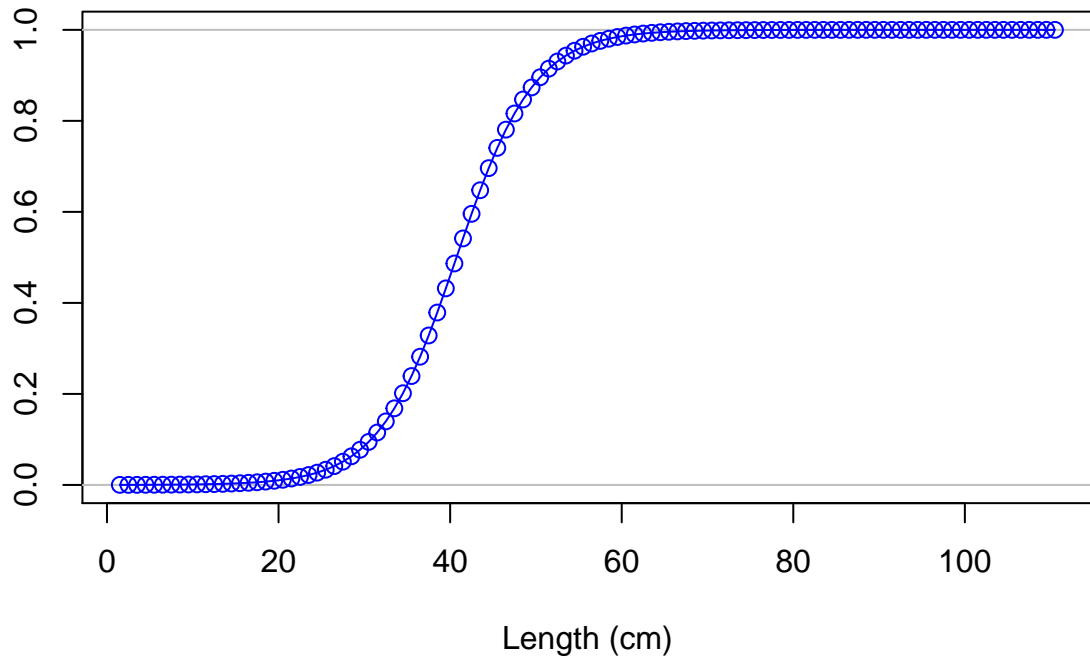
Selectivity

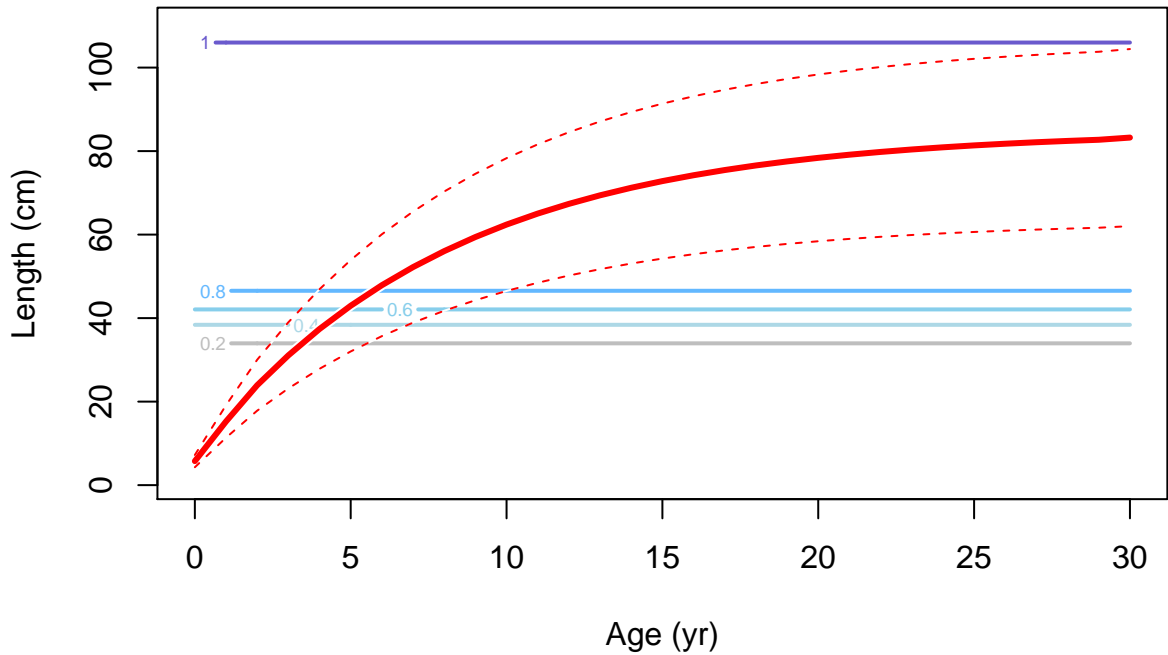


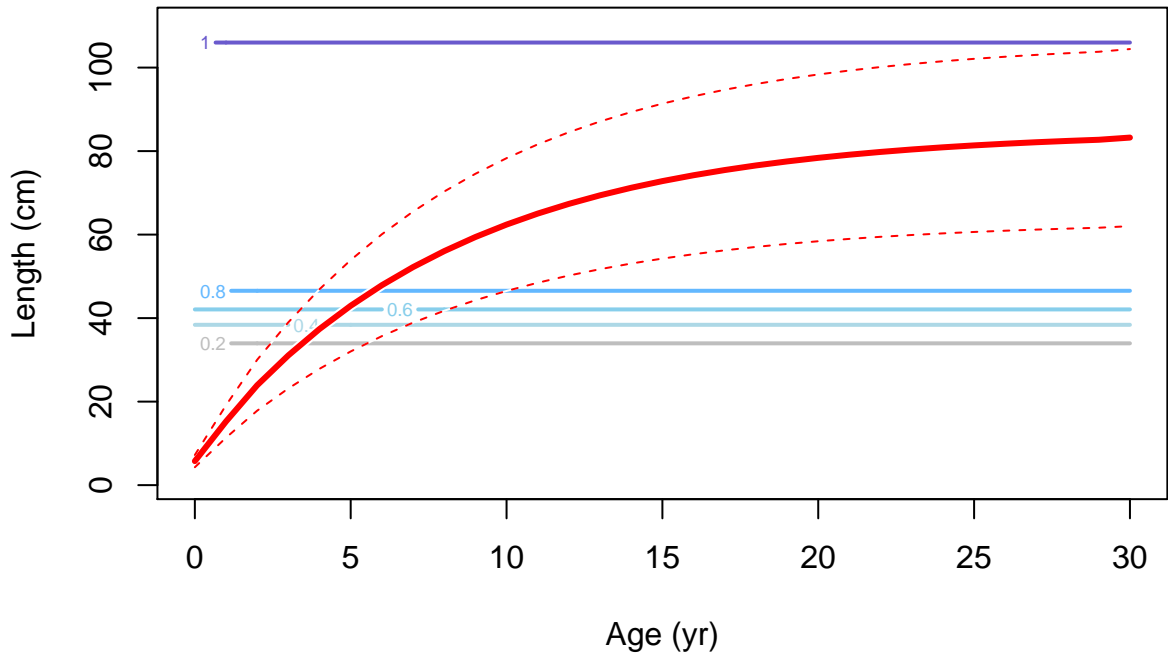
Selectivity

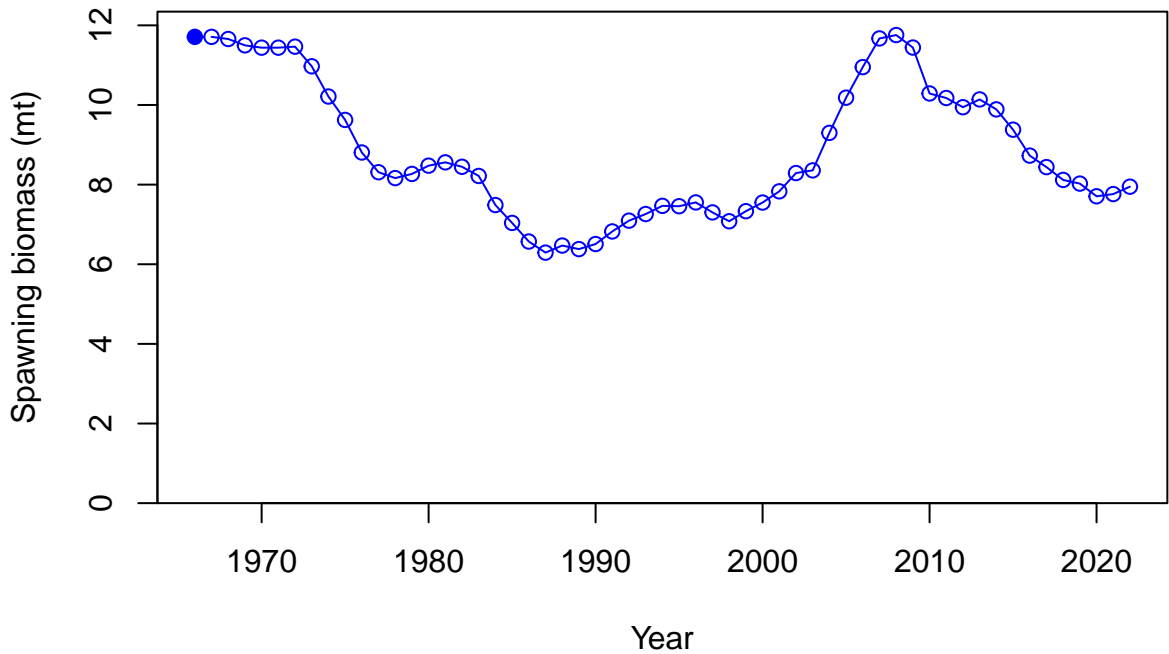


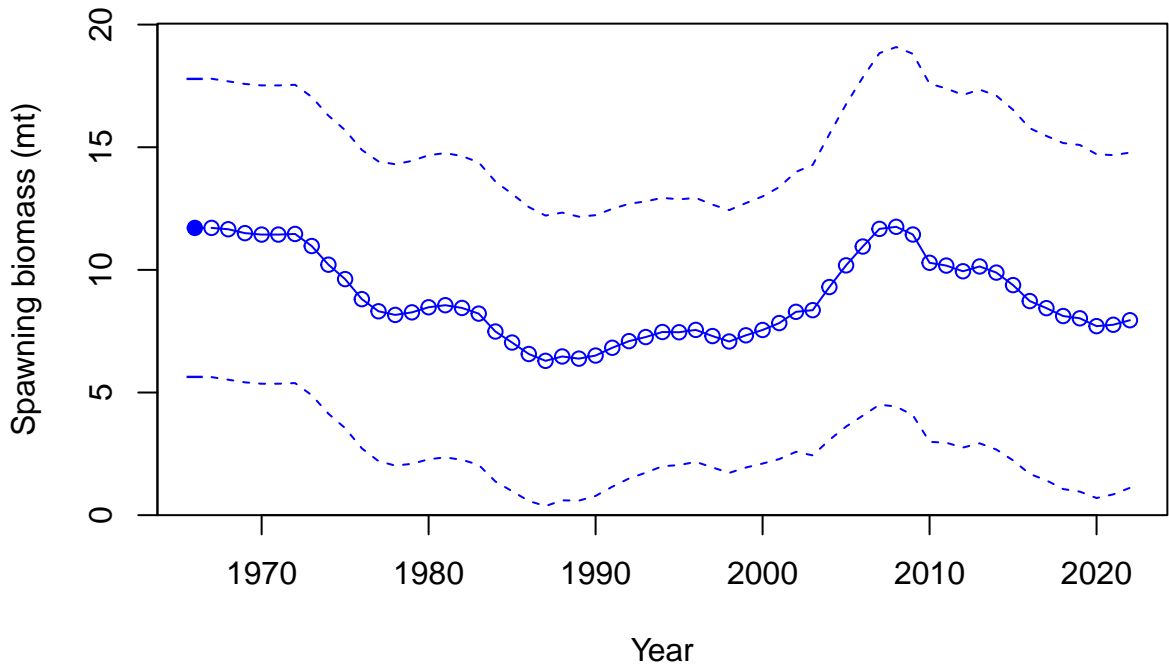
Selectivity



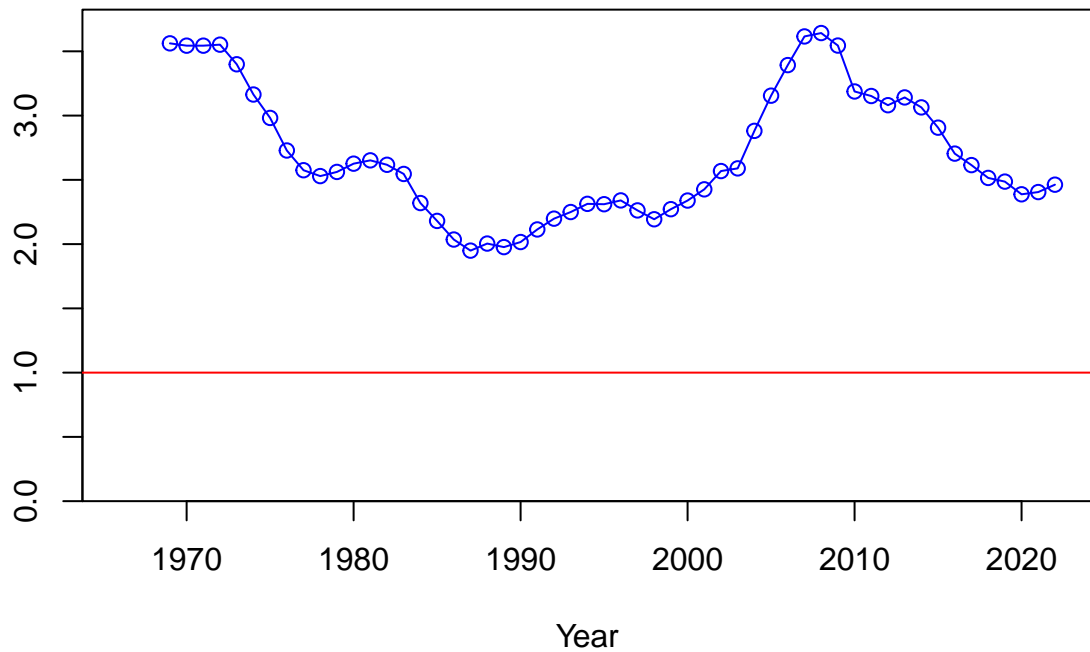




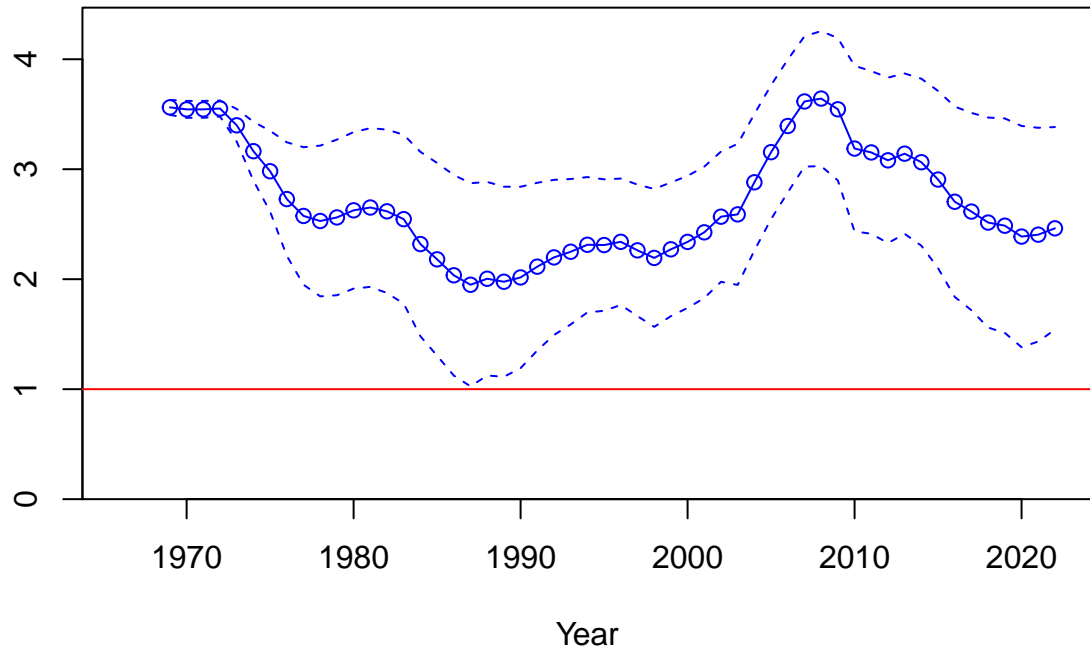


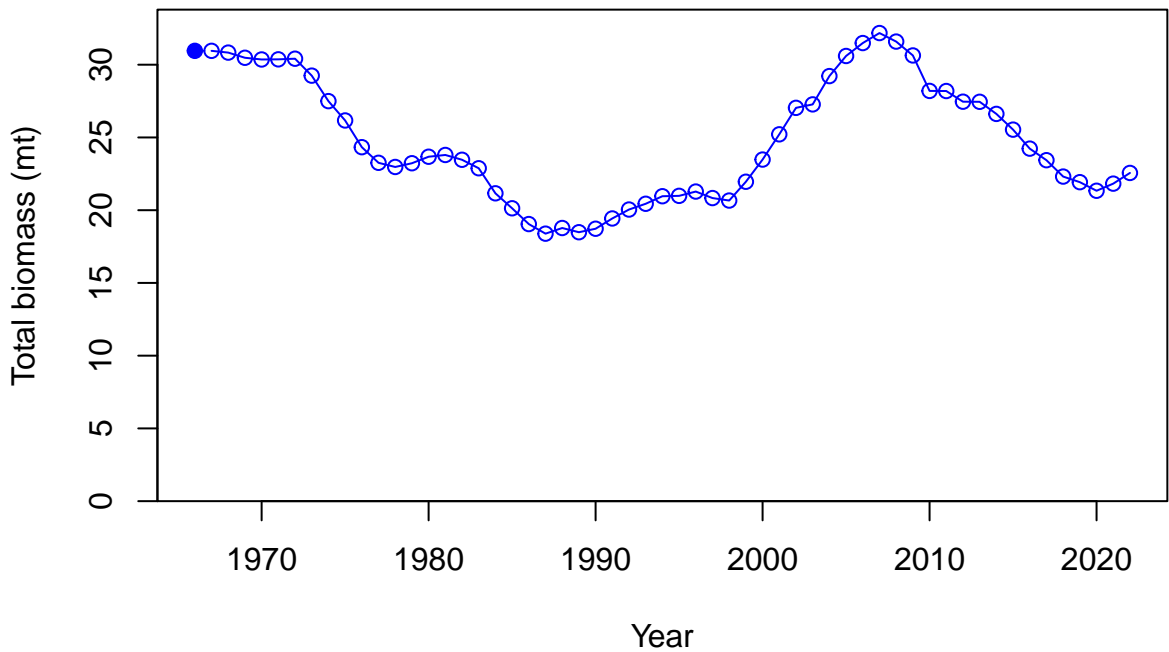


Relative spawning biomass: B/B_{MSY}

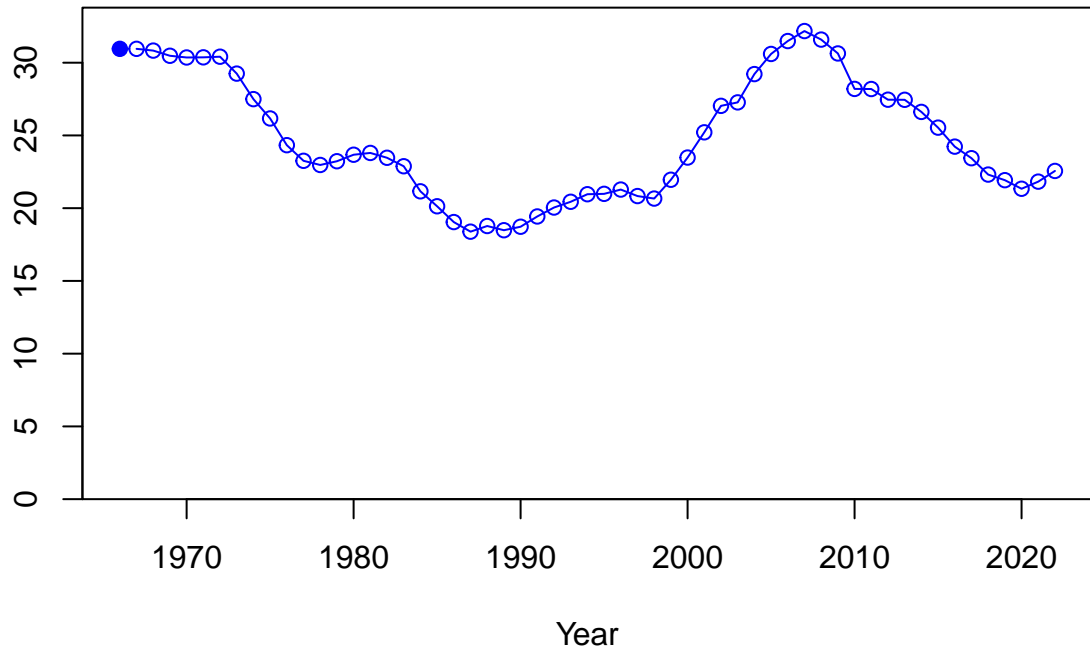


Relative spawning biomass: B/B_{MSY}

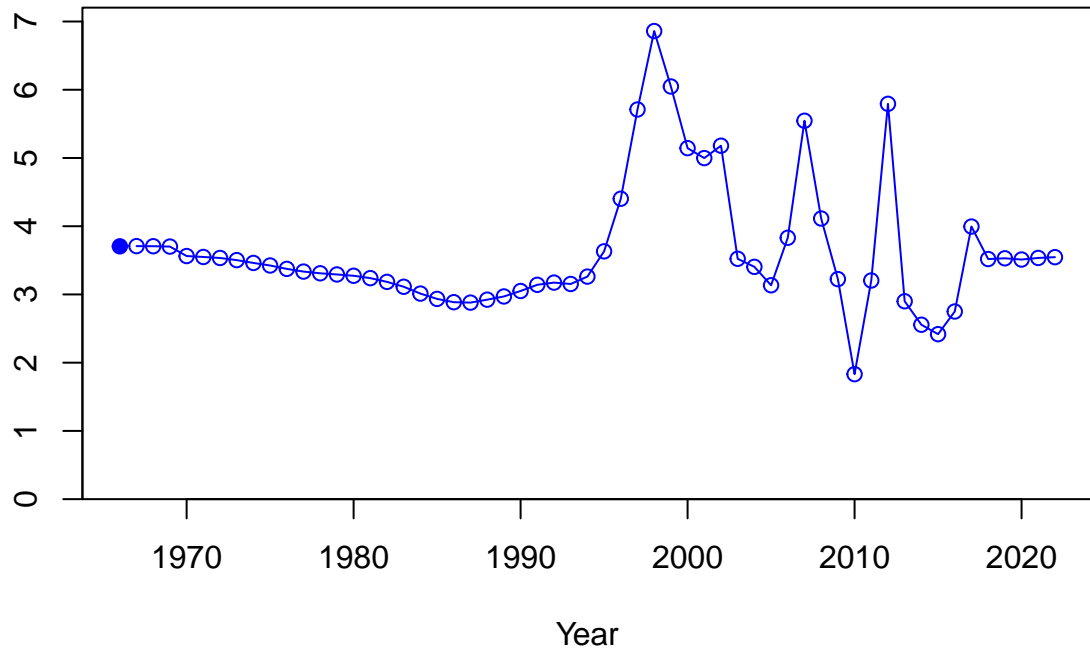




Summary biomass (mt)



Age-0 recruits (1,000s)



Age-0 recruits (1,000s)

20
15
10
5
0

1970

1980

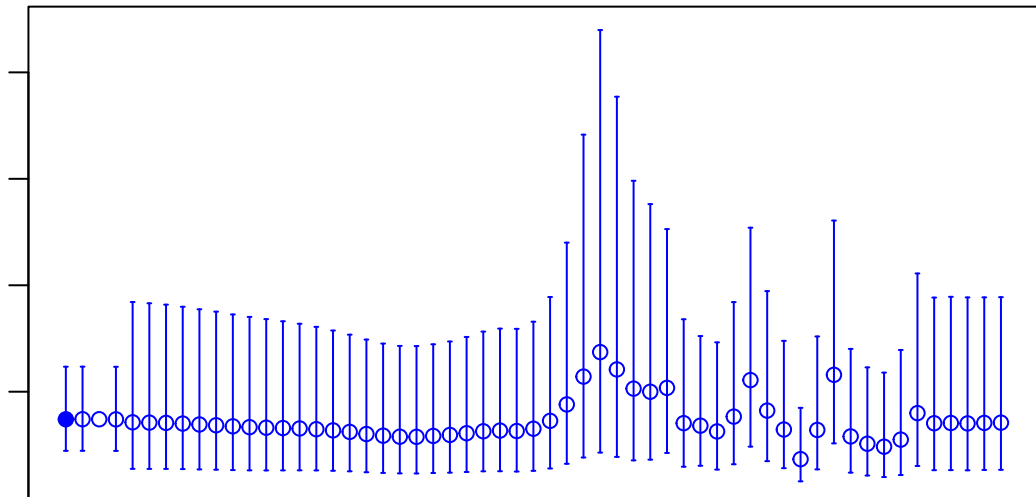
1990

2000

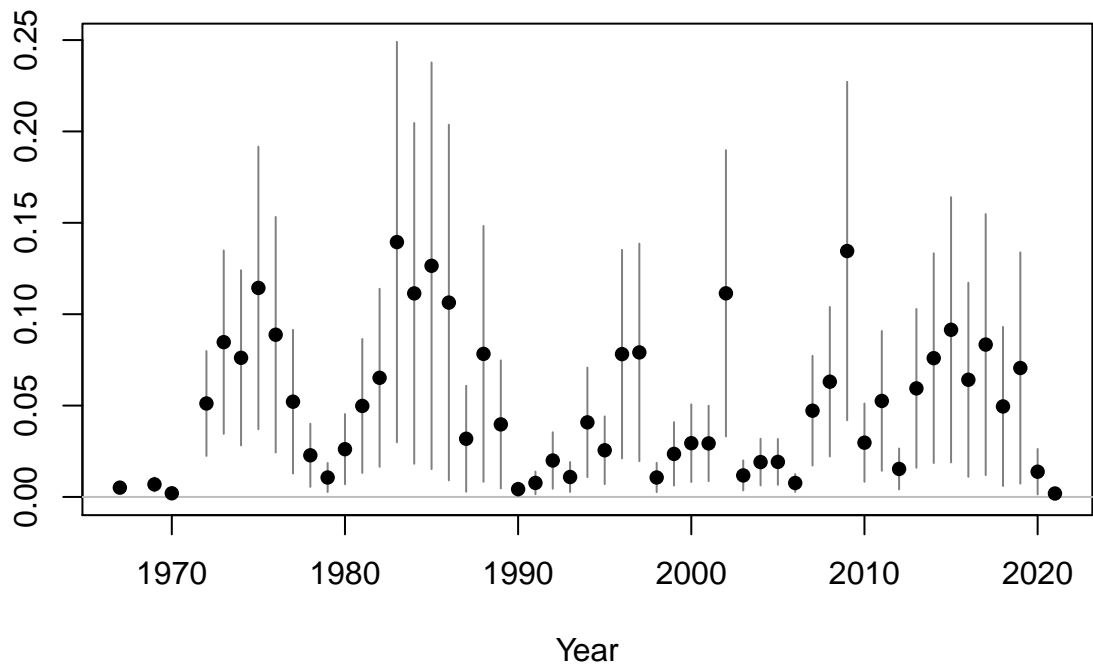
2010

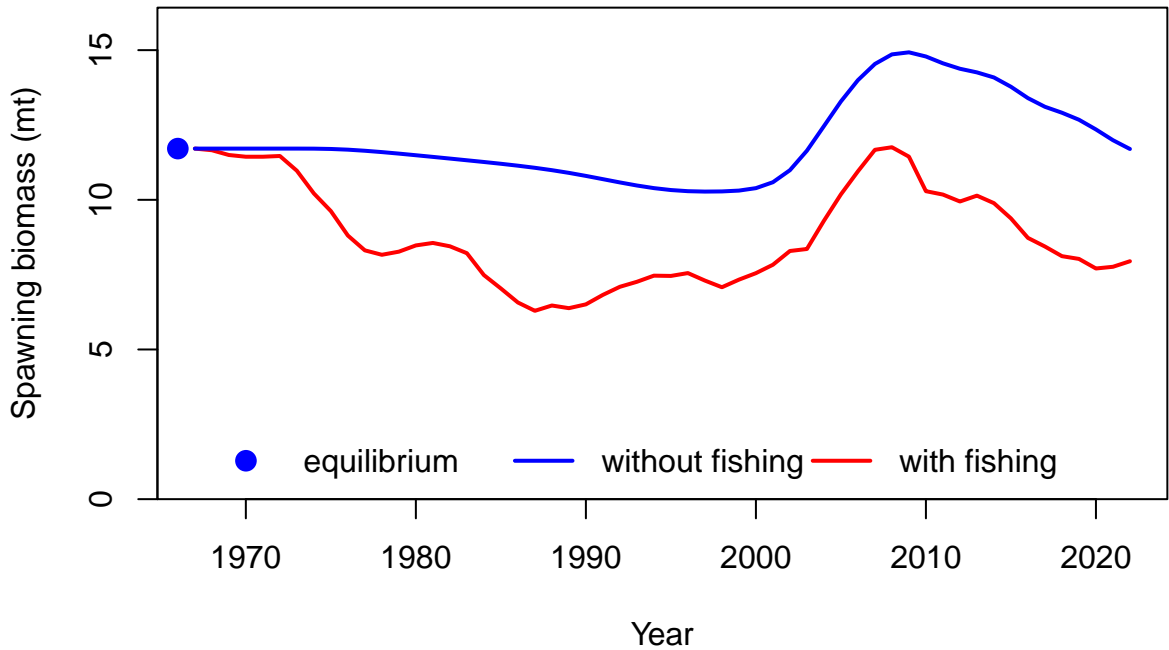
2020

Year

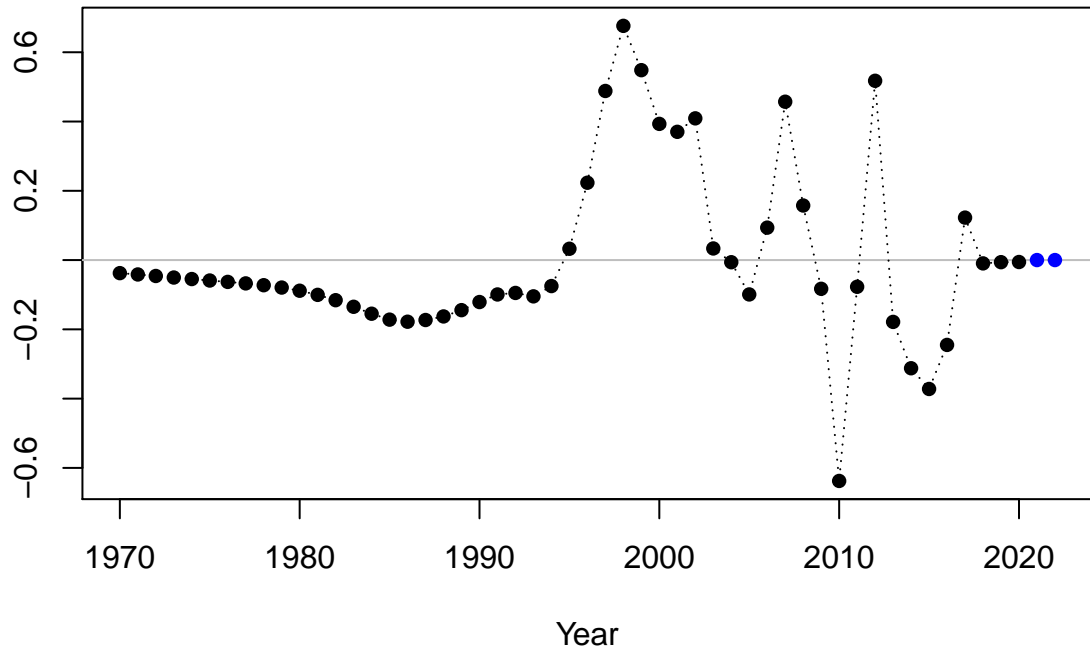


Summary Fishing Mortality

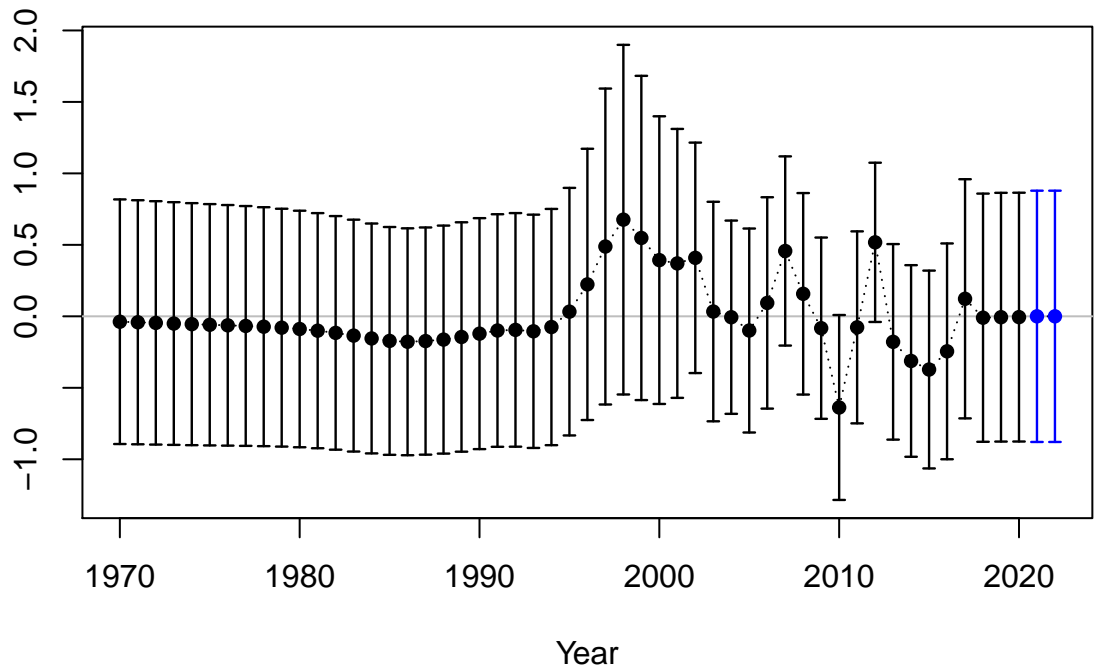




Log recruitment deviation

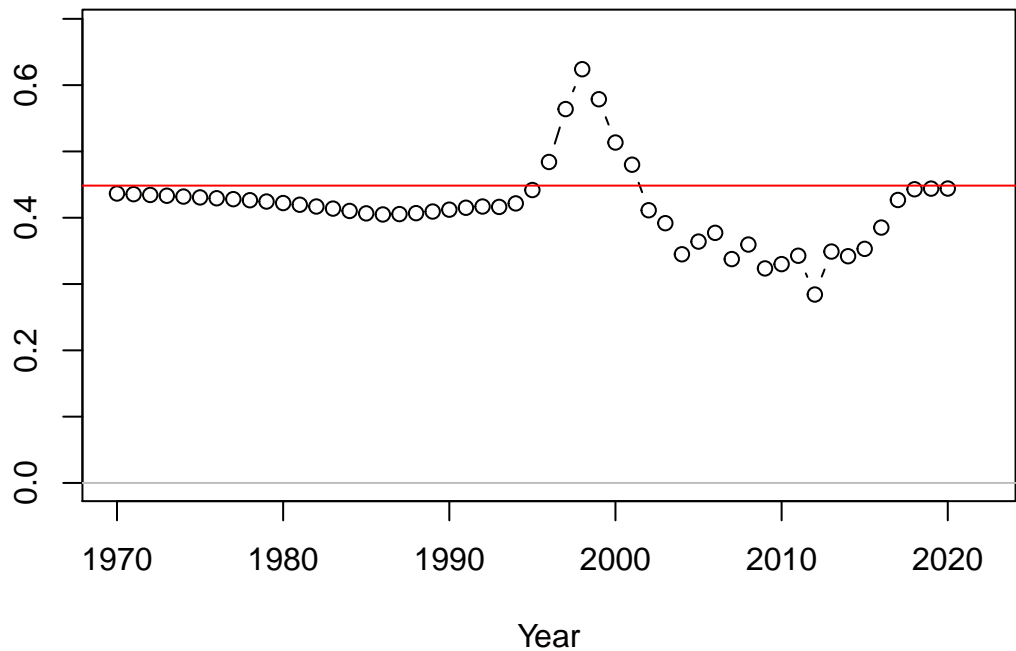


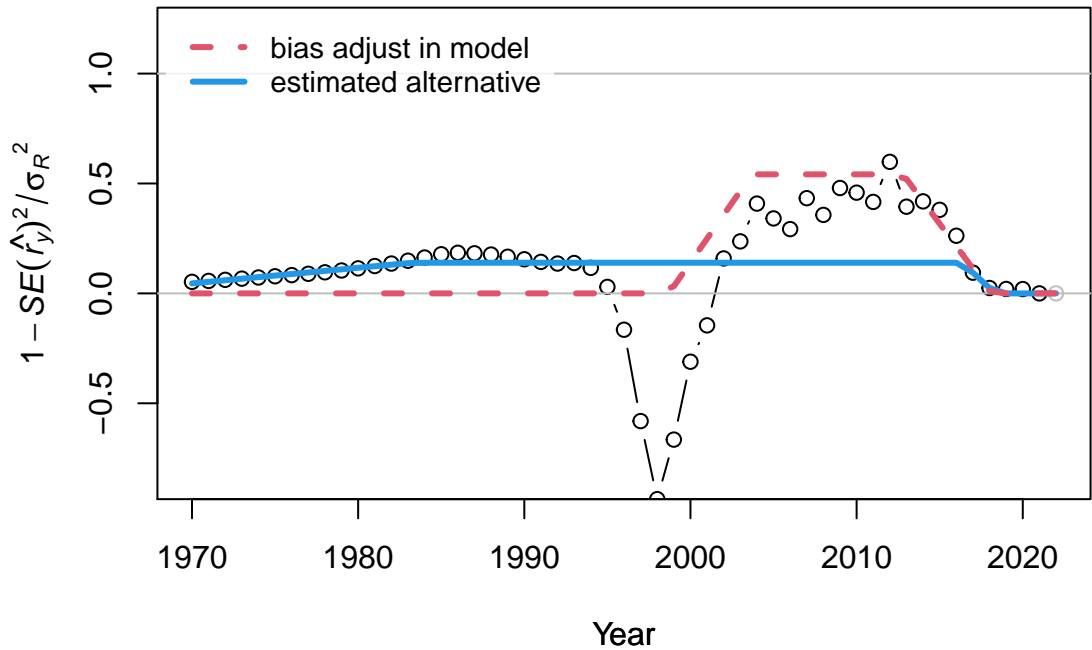
Log recruitment deviation

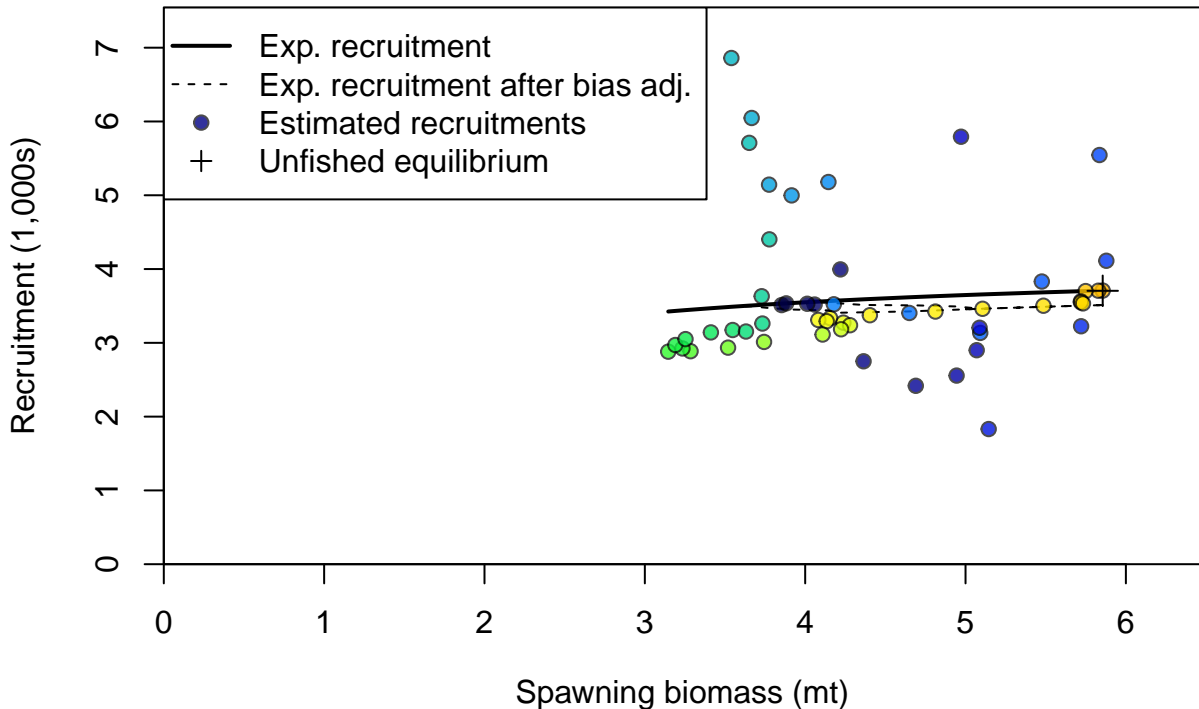


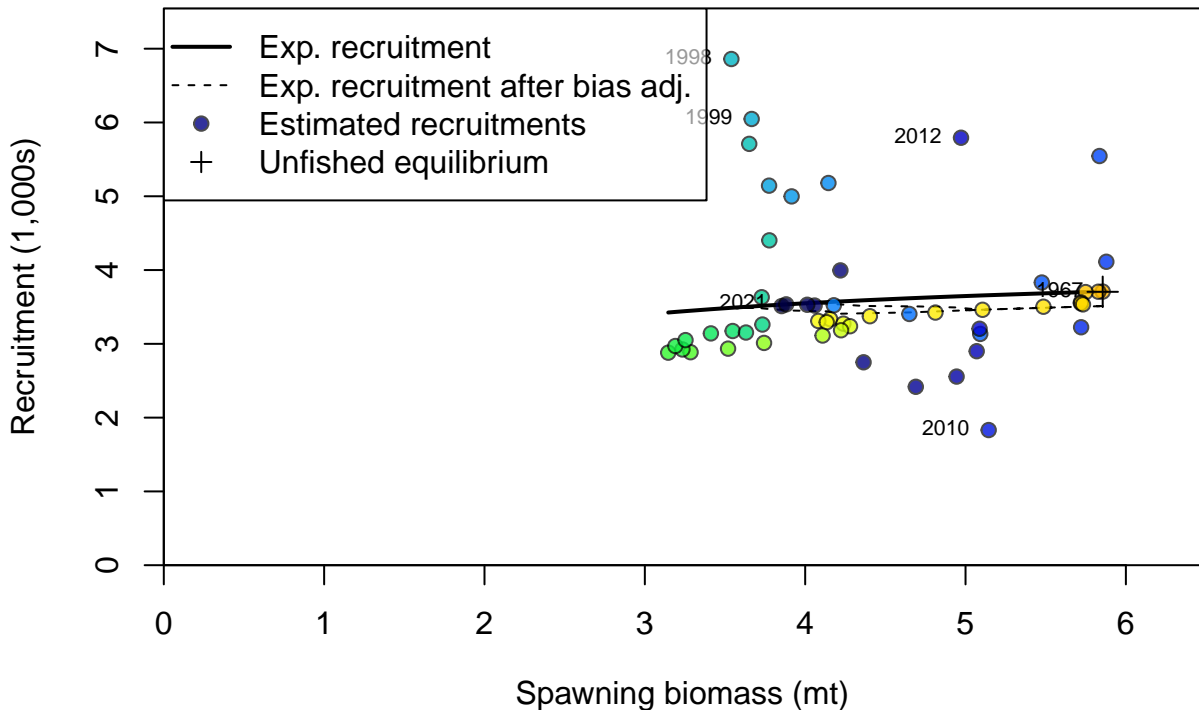
Recruitment deviation variance

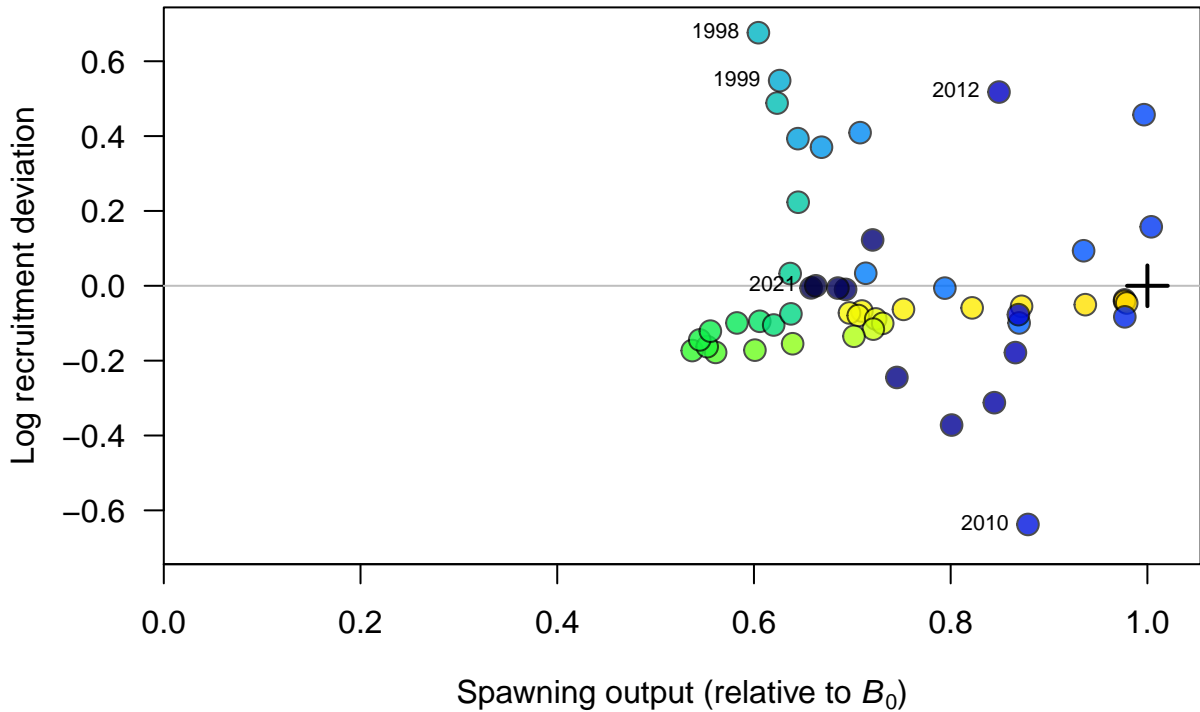
Asymptotic standard error estimate

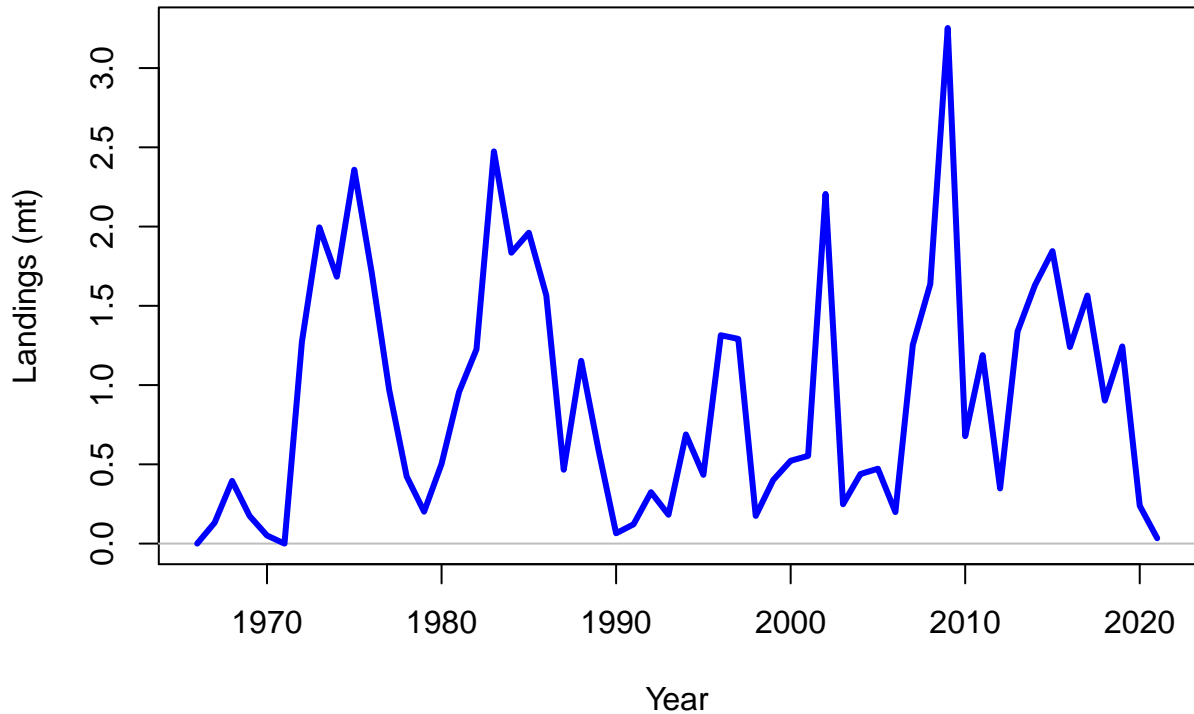


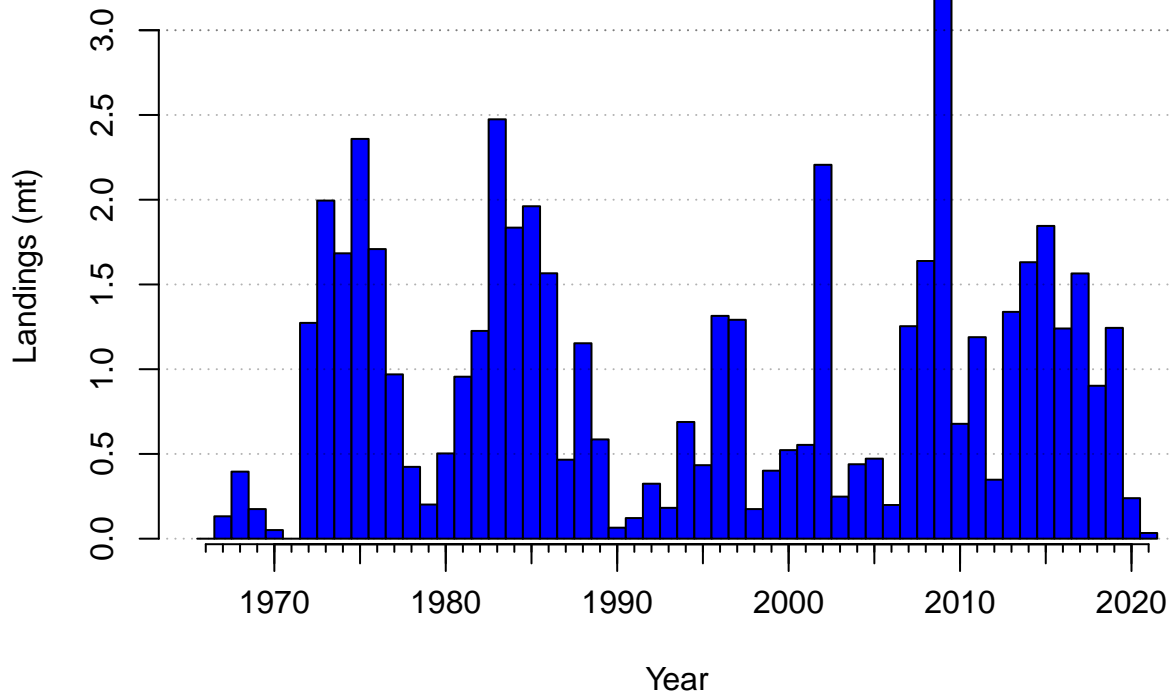


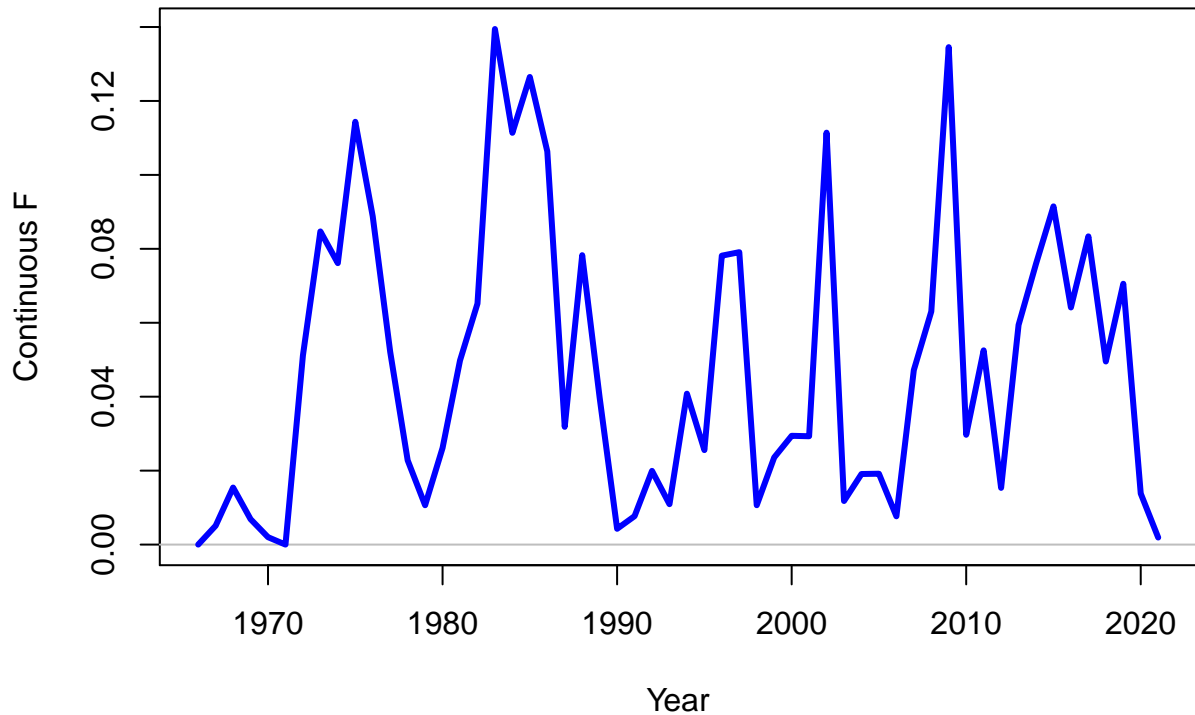




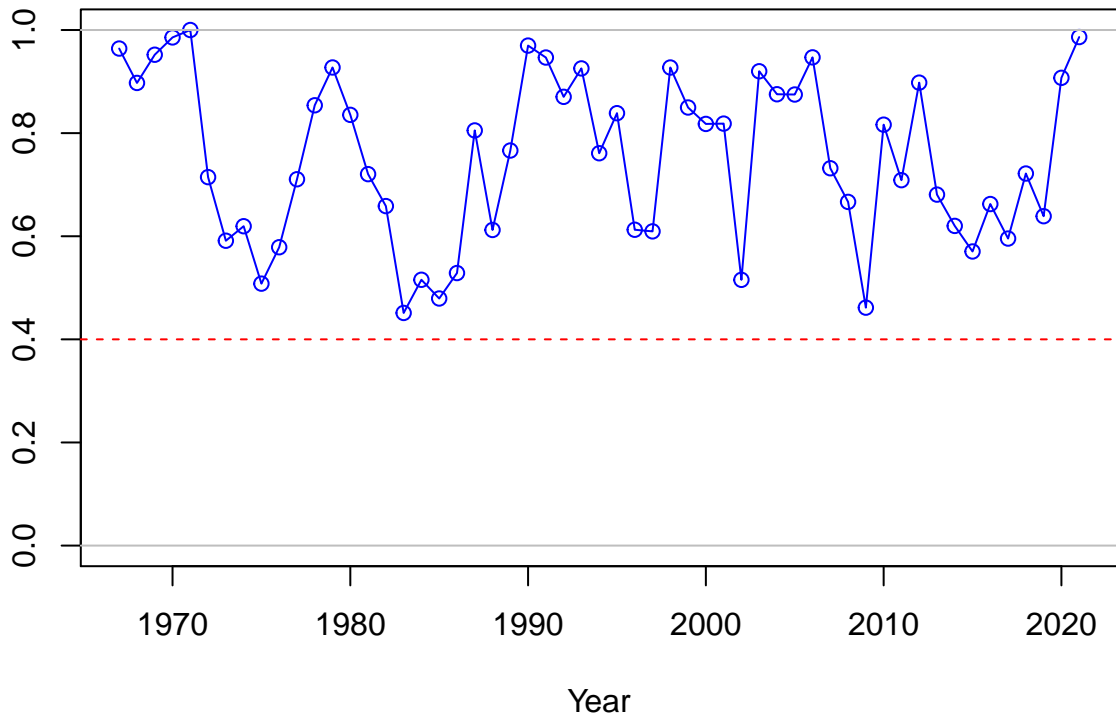




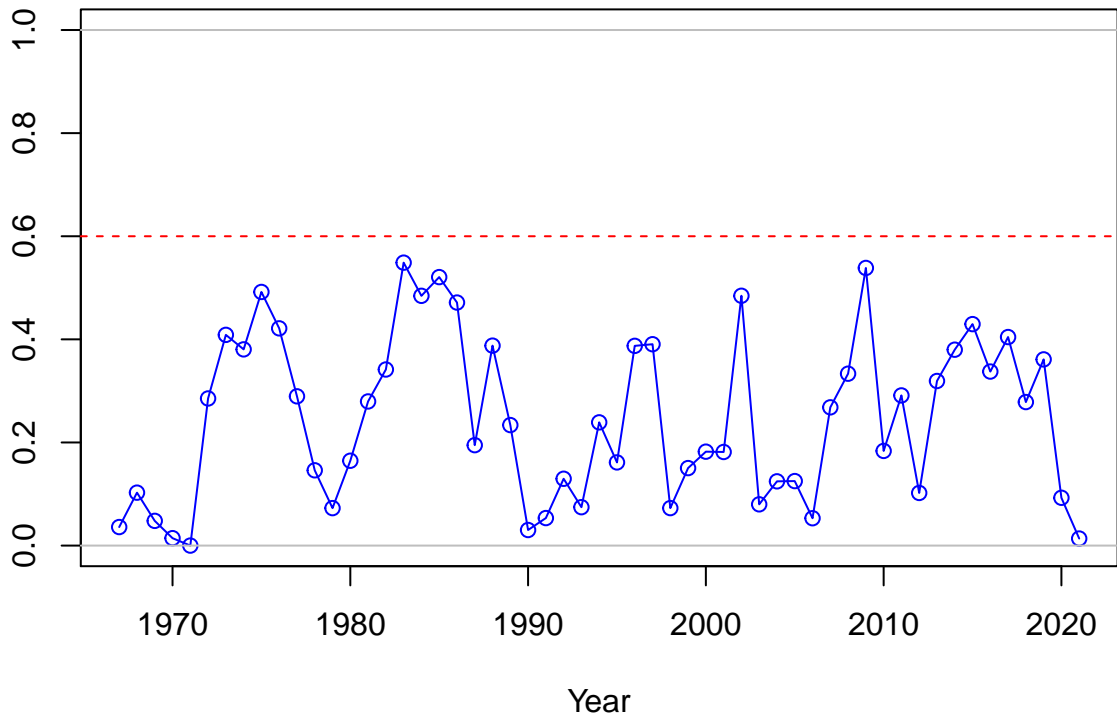




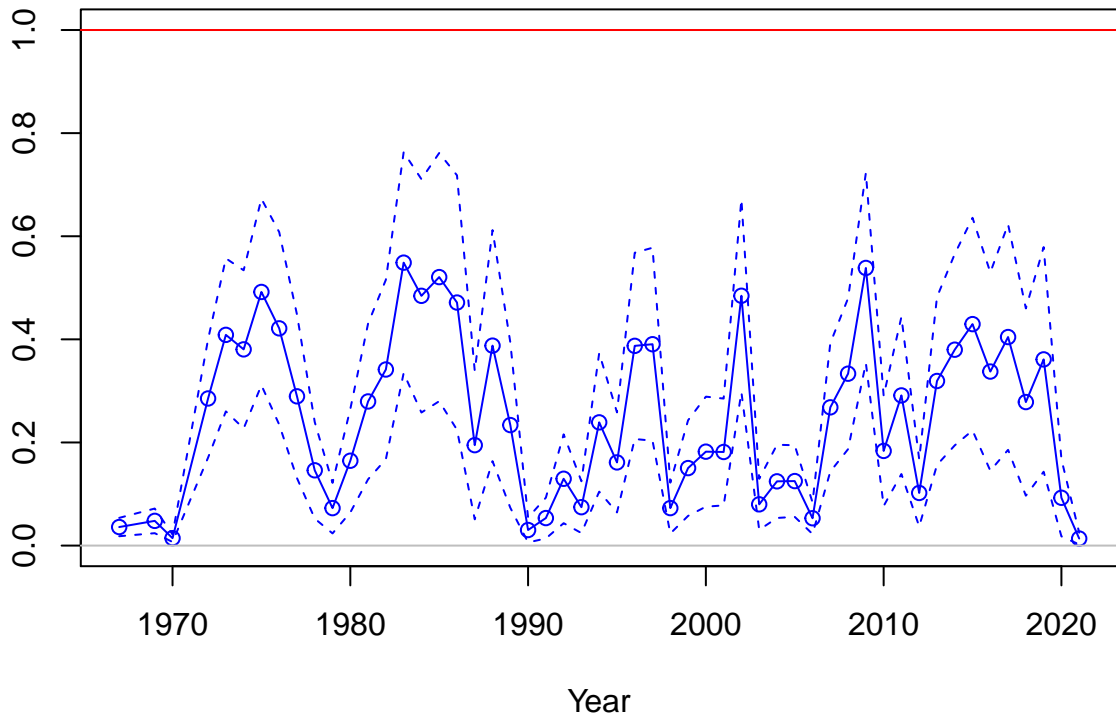
SPR



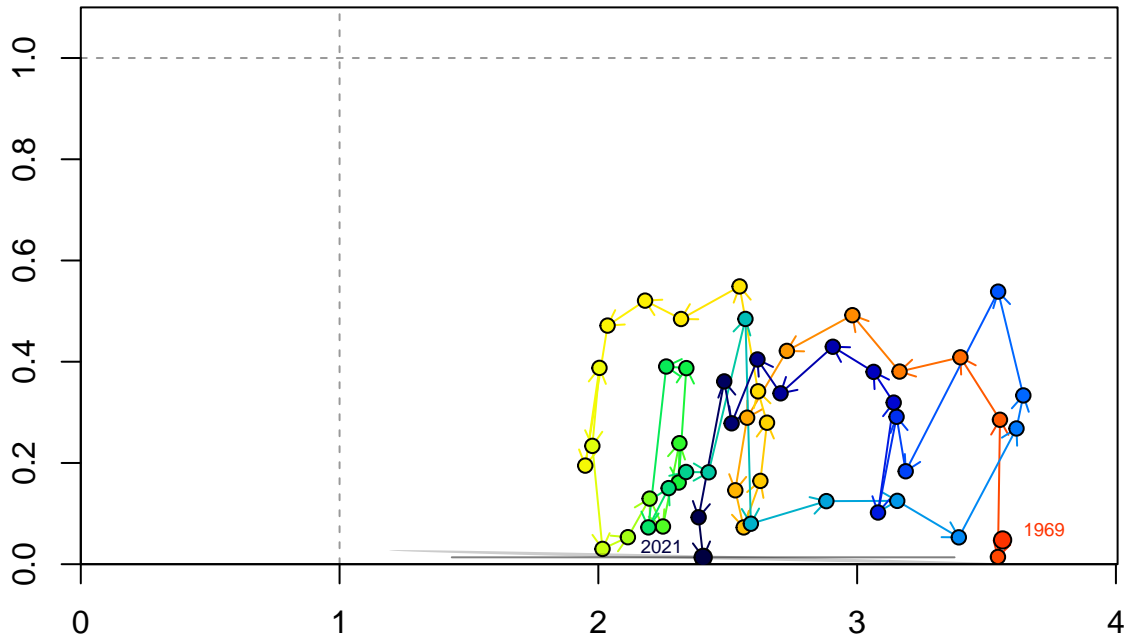
1-SPR



Fishing intensity: 1-SPR

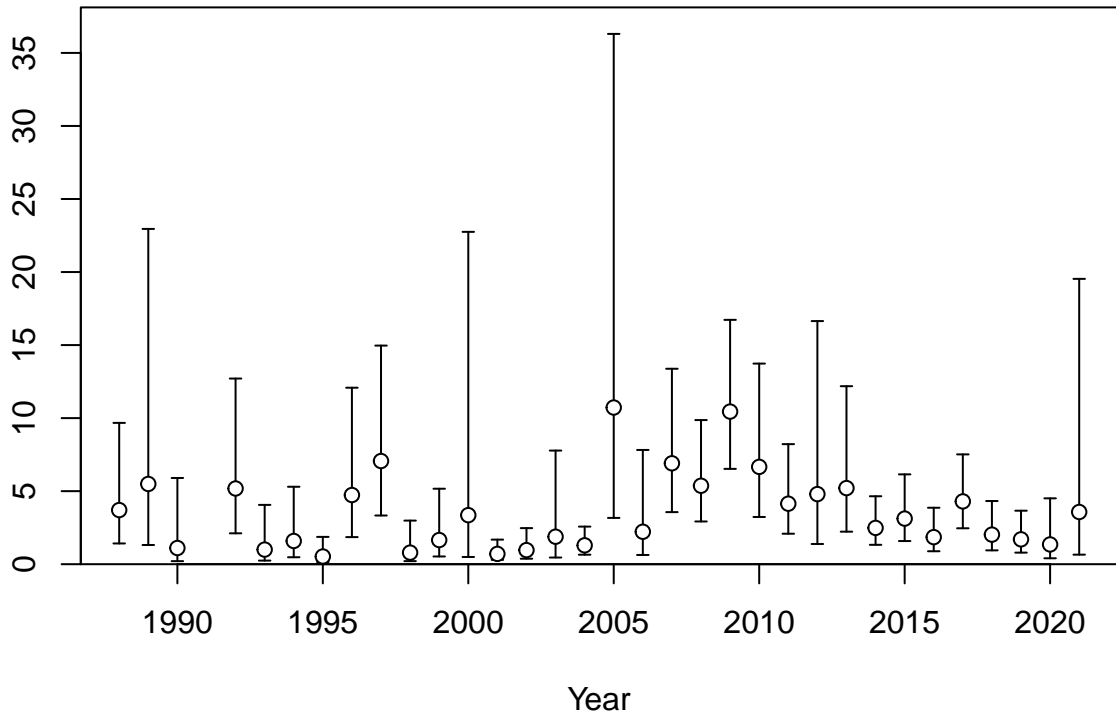


Fishing intensity: 1-SPR

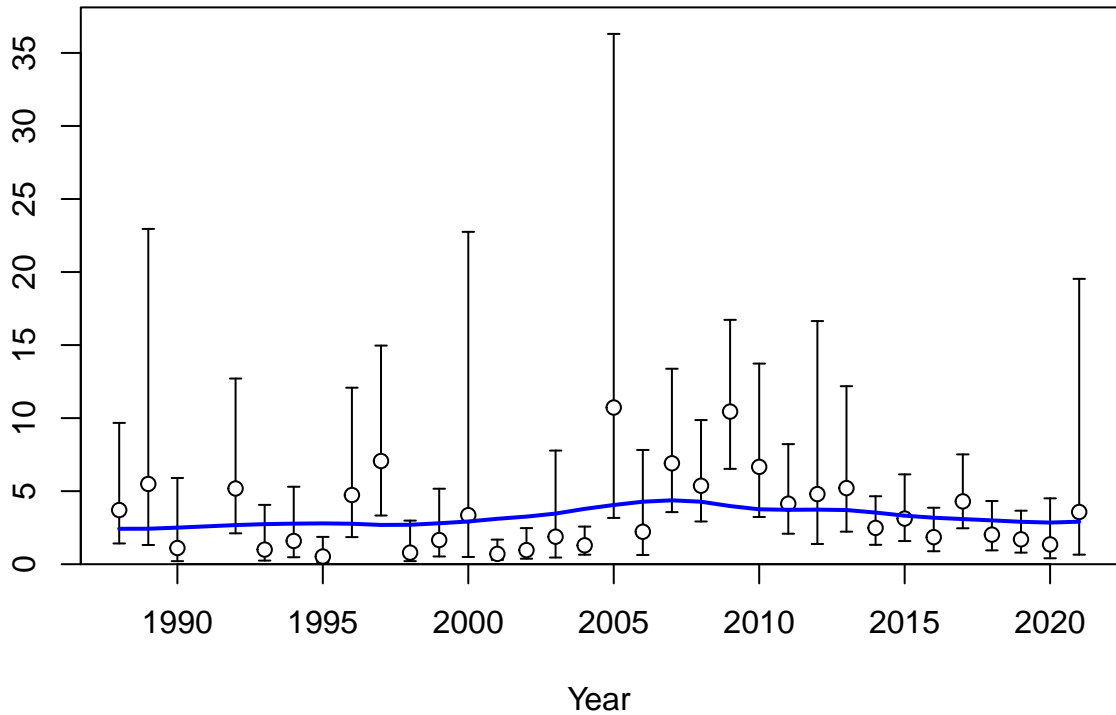


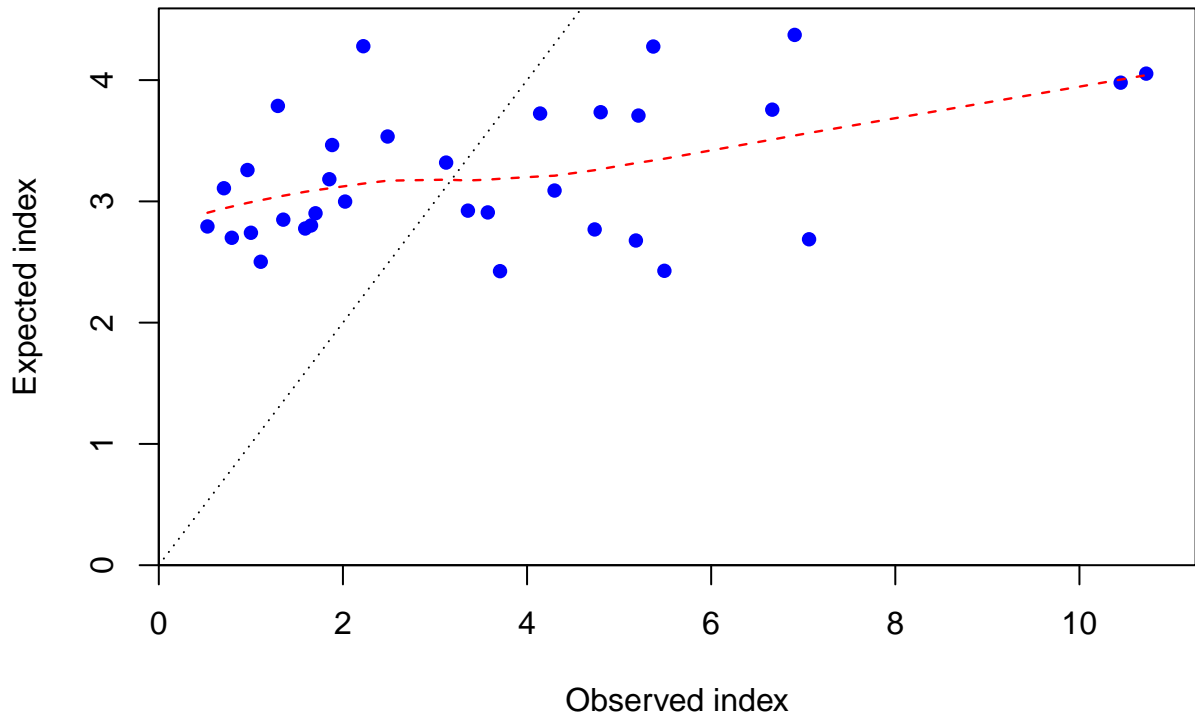
Relative spawning output: B/B_MSY

Index



Index





Log index

3
2
1
0
-1
-2

1990

1995

2000

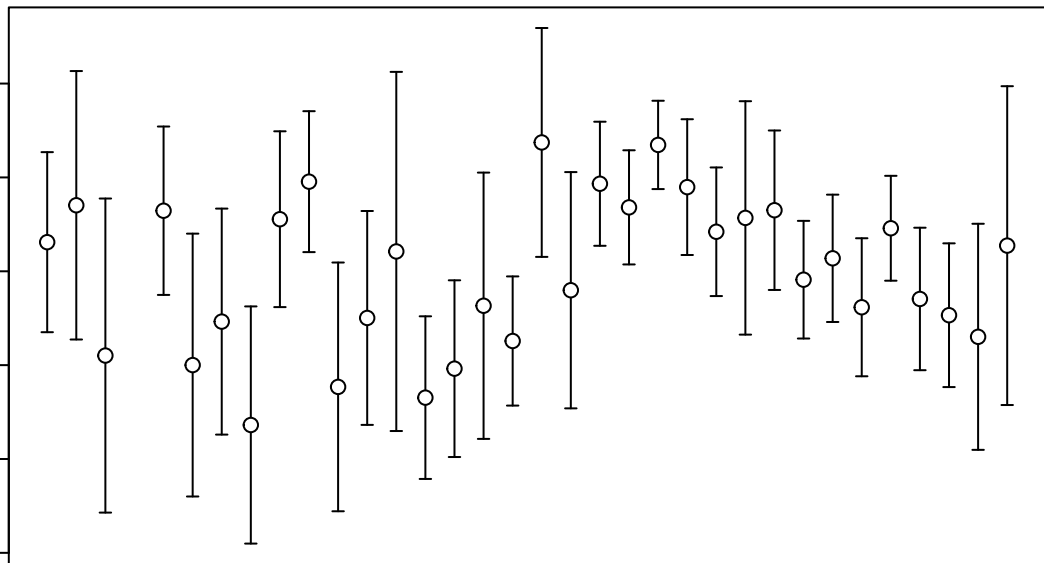
2005

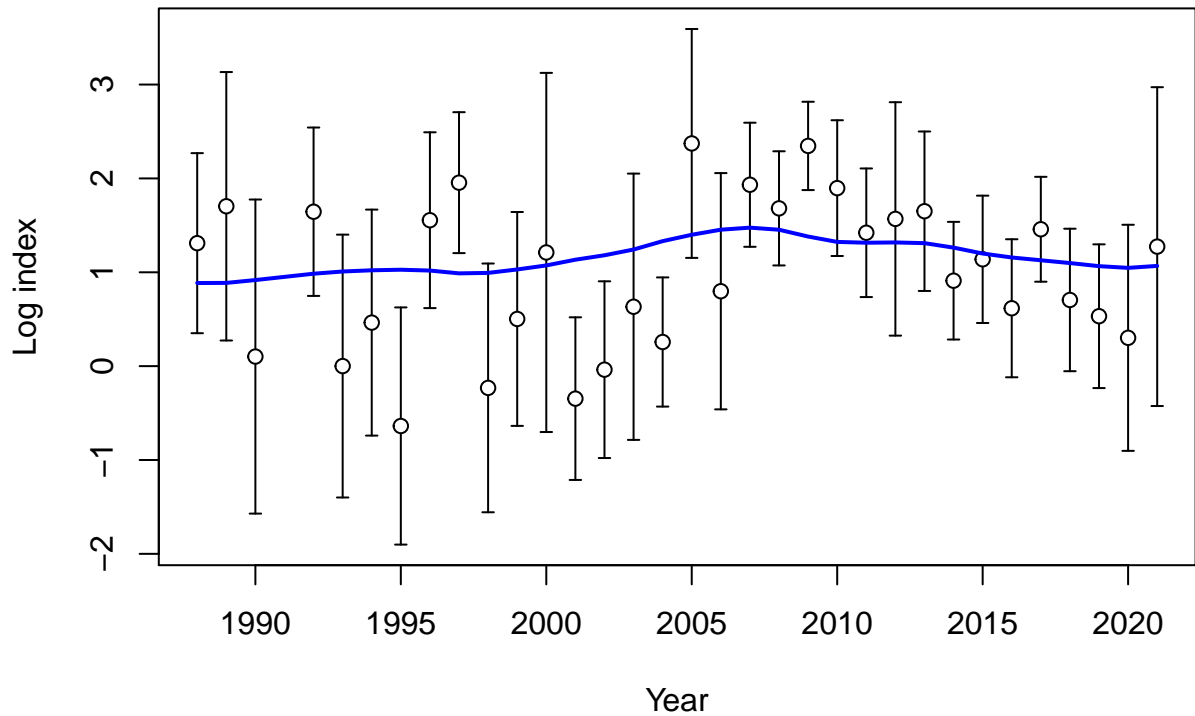
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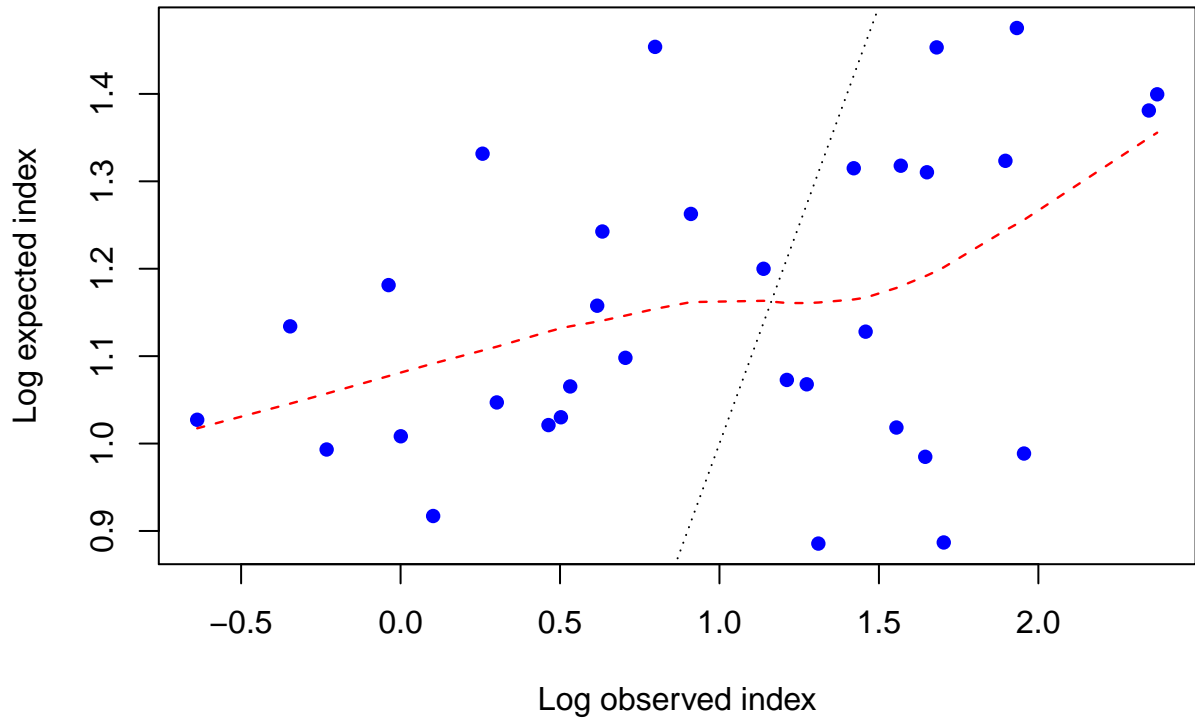
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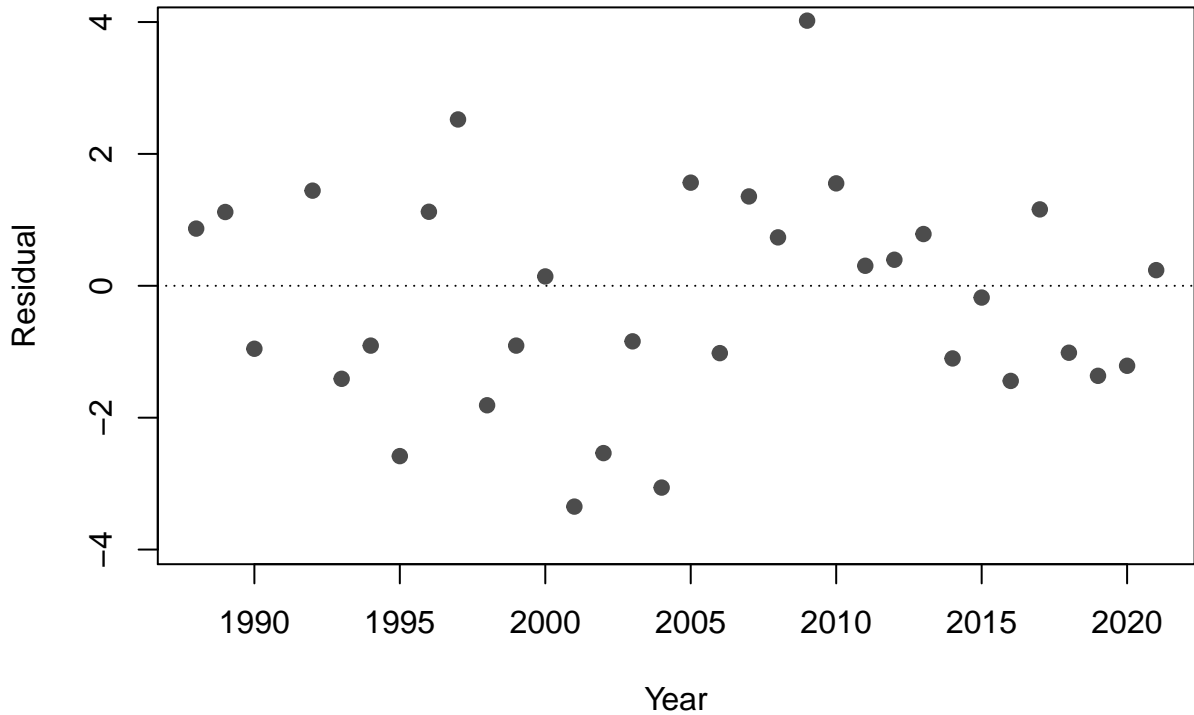
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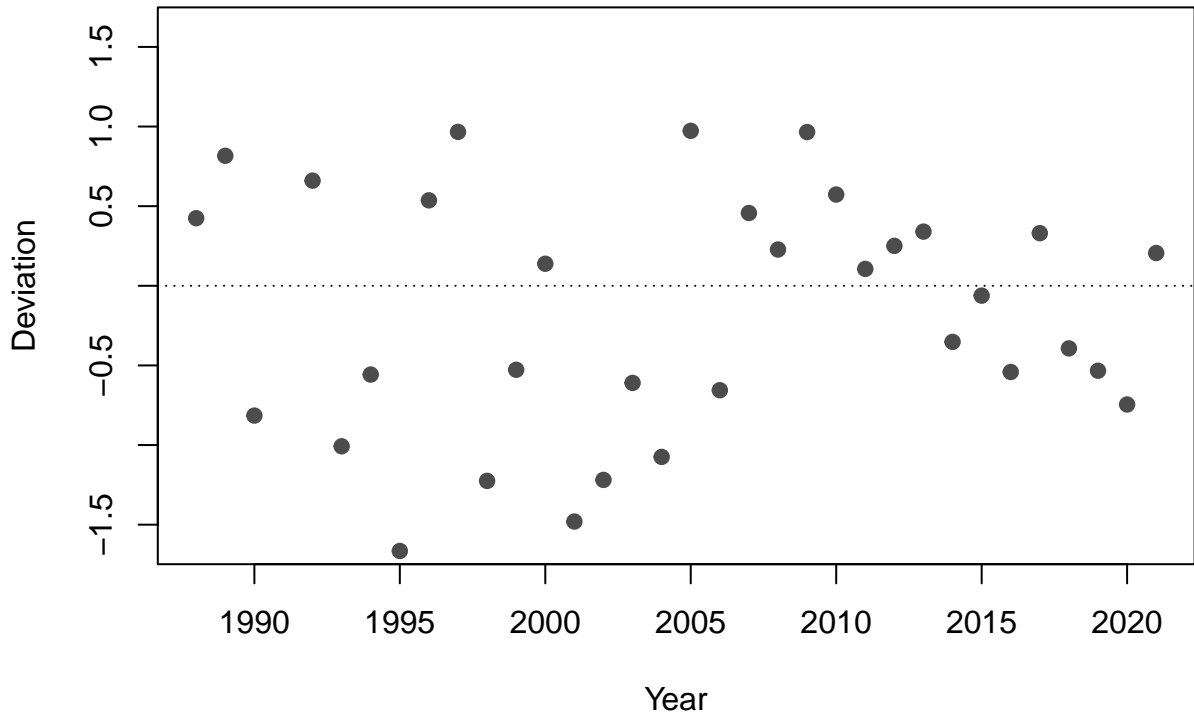
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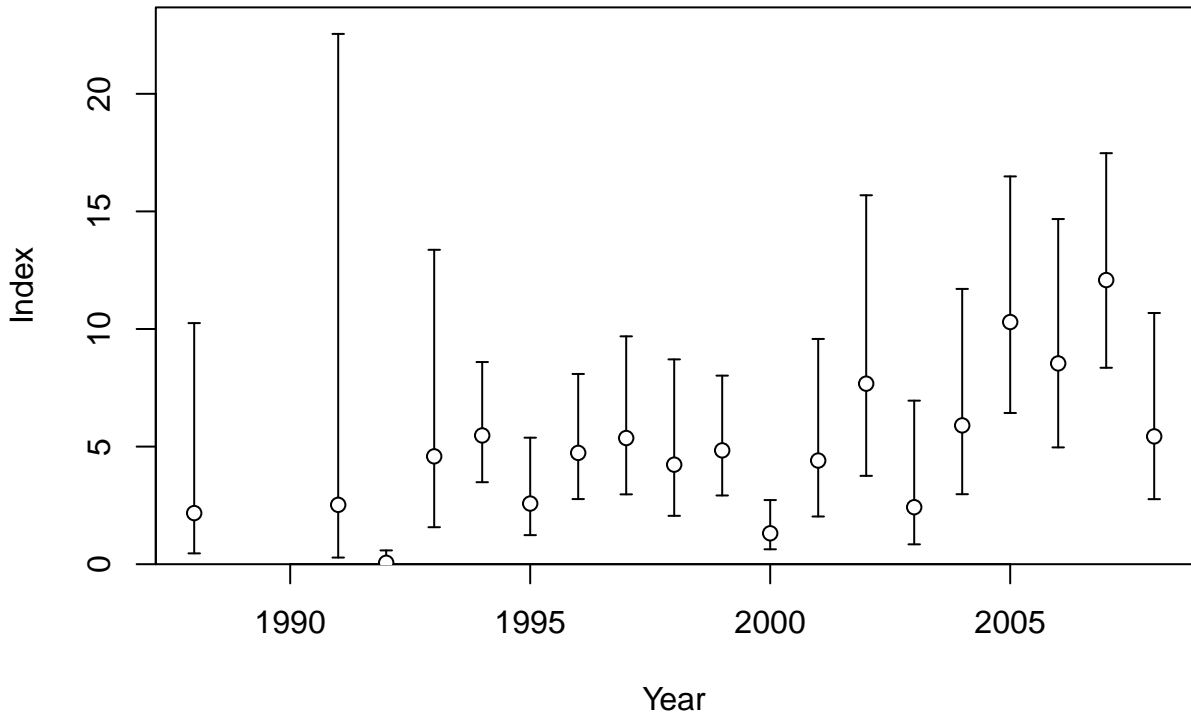


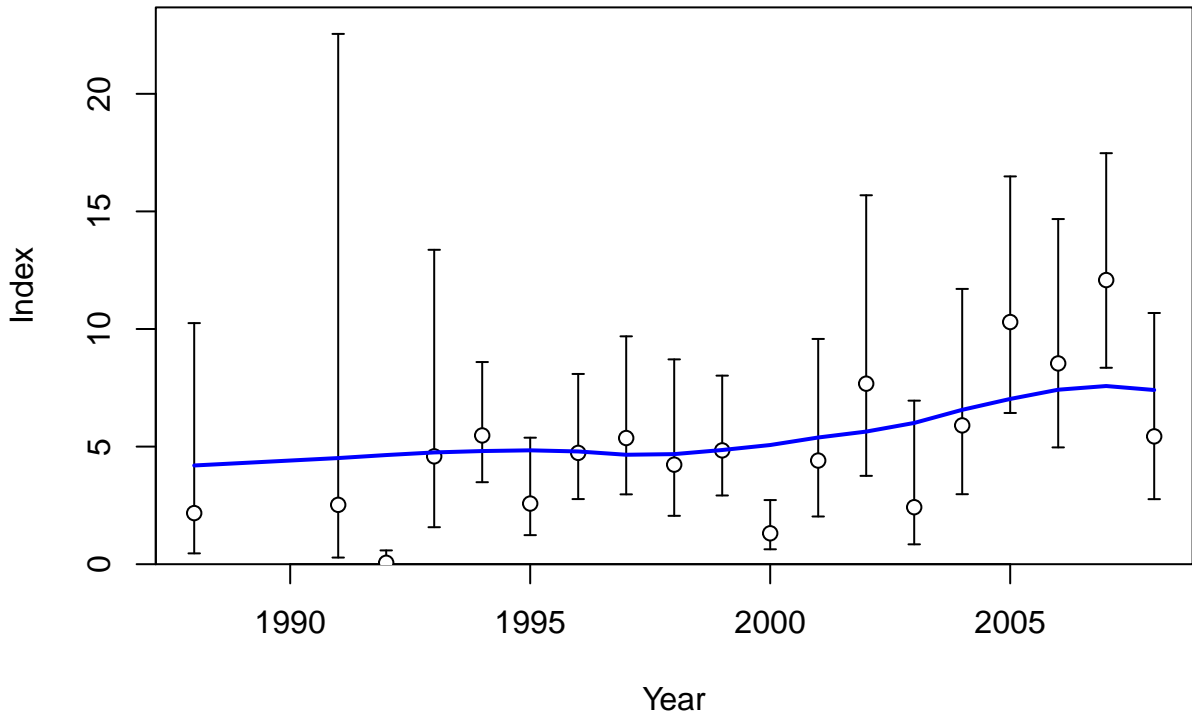


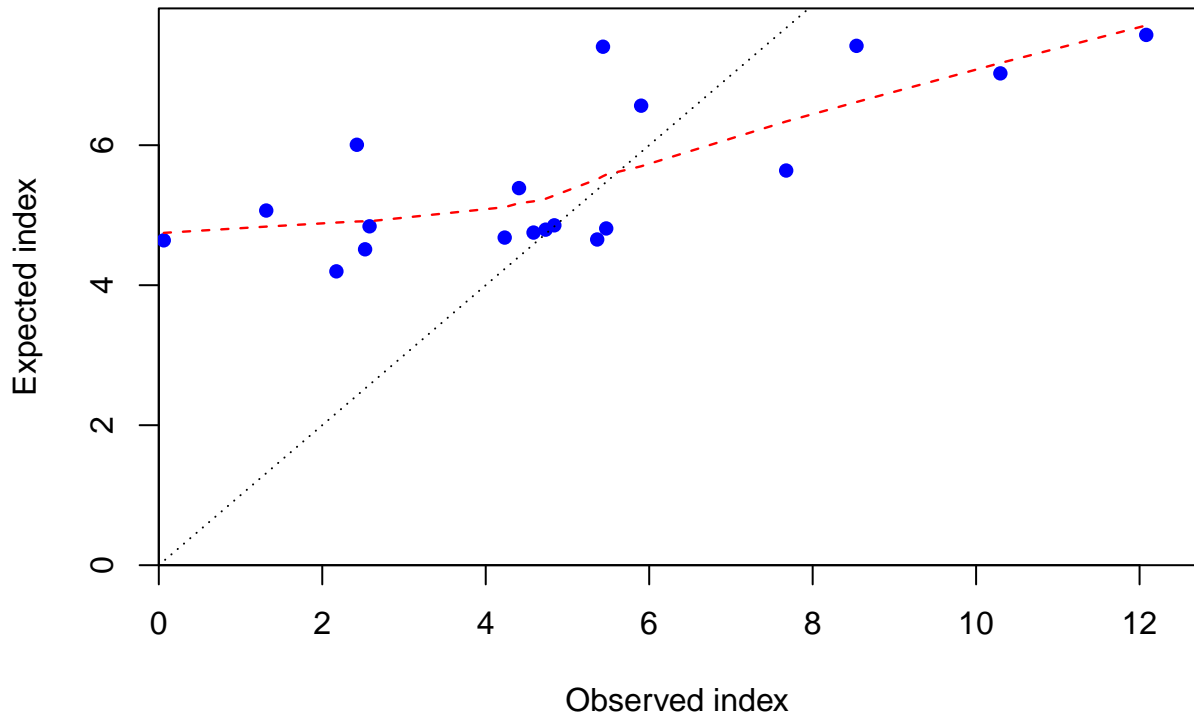


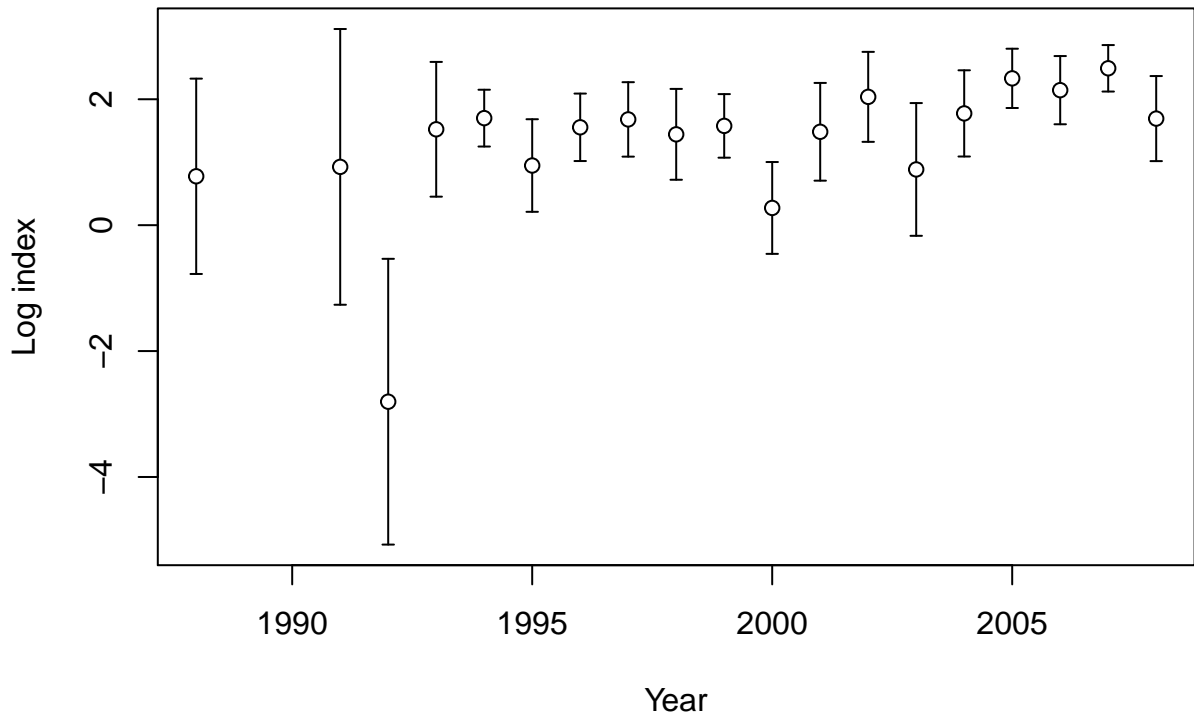


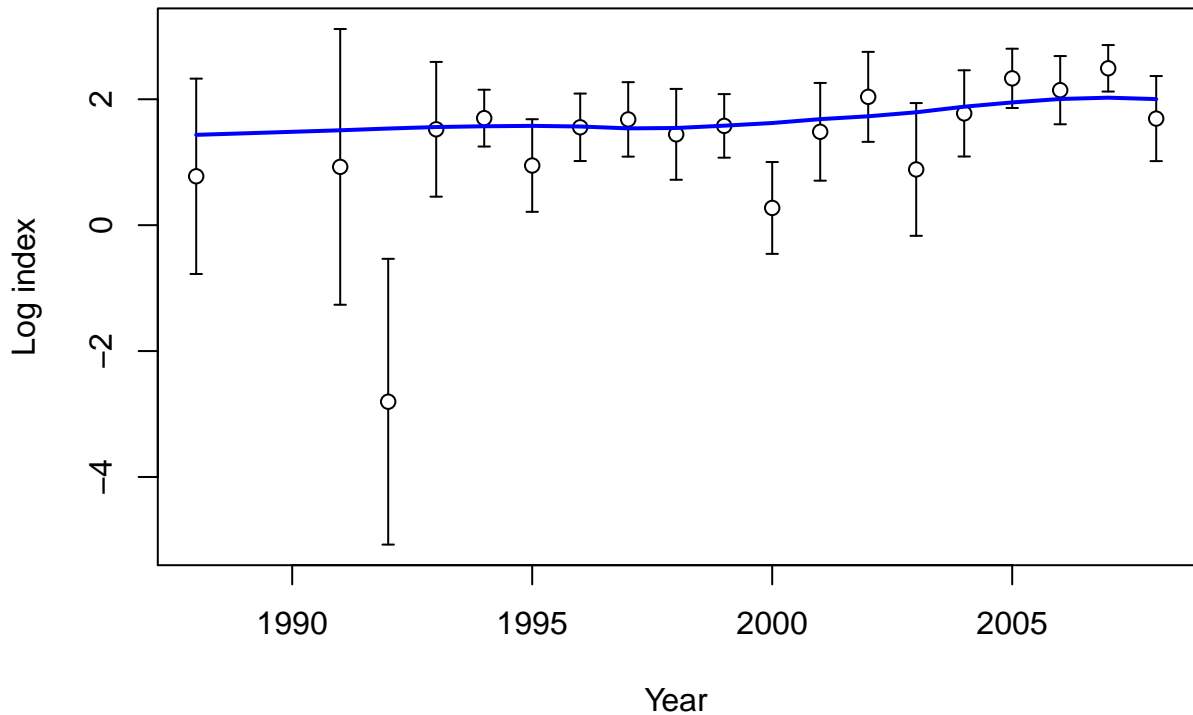


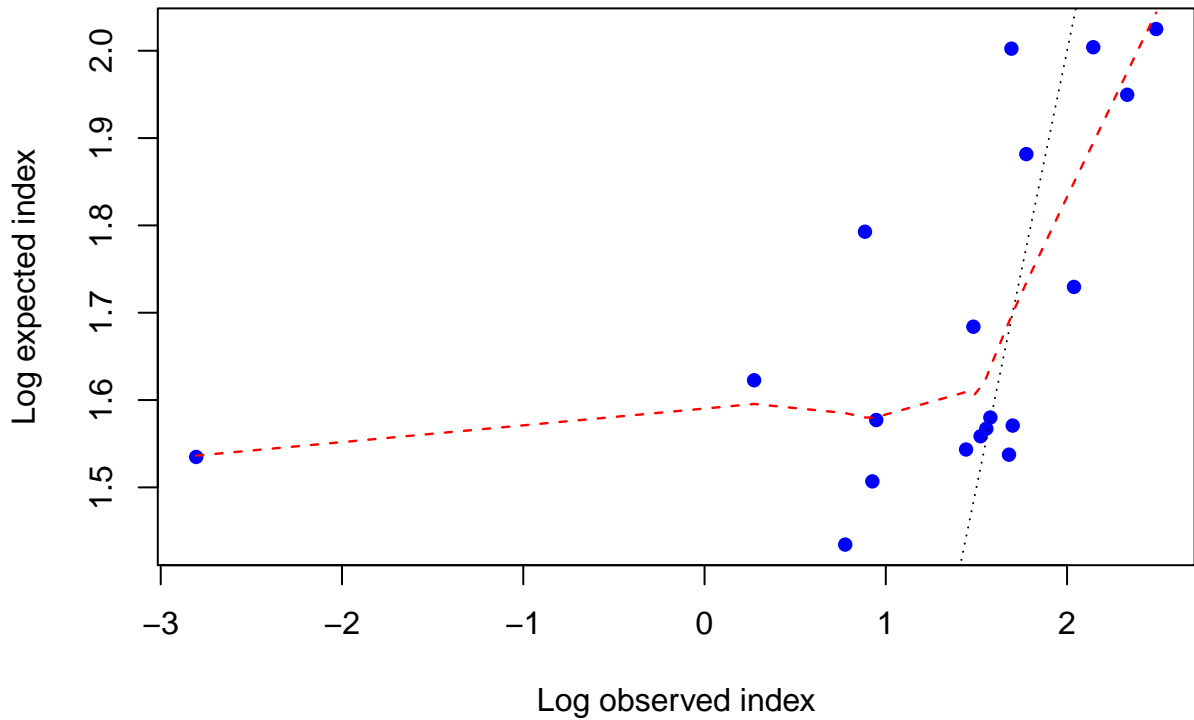


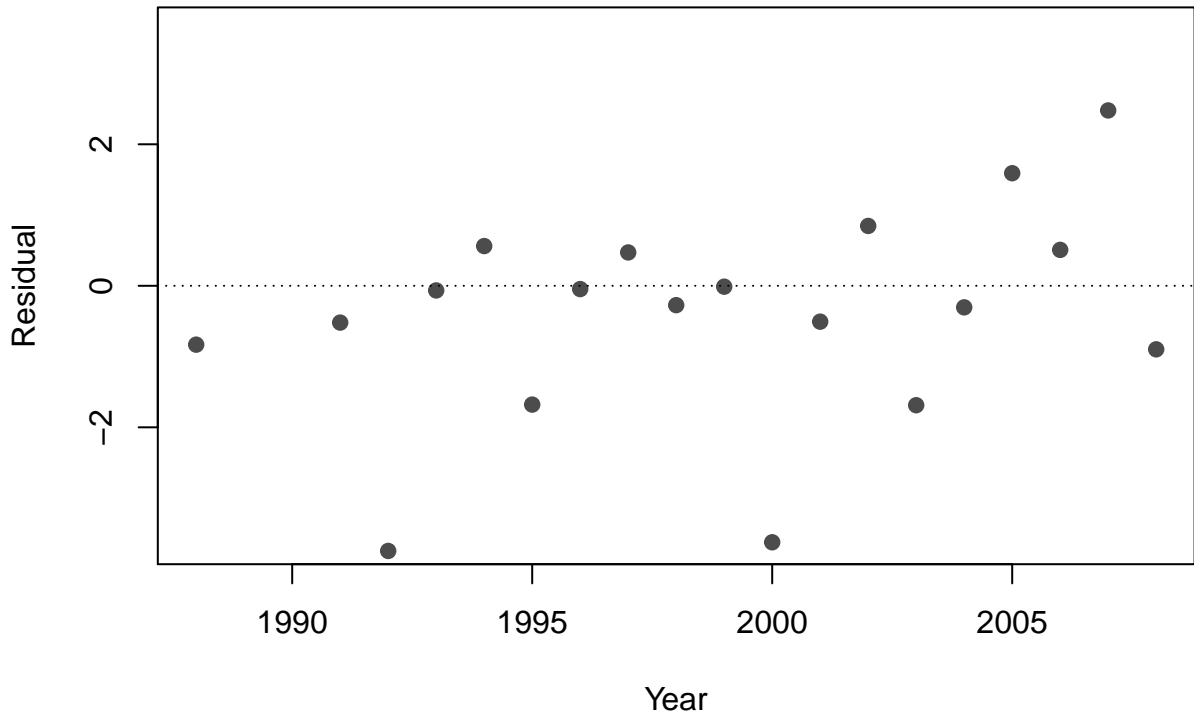


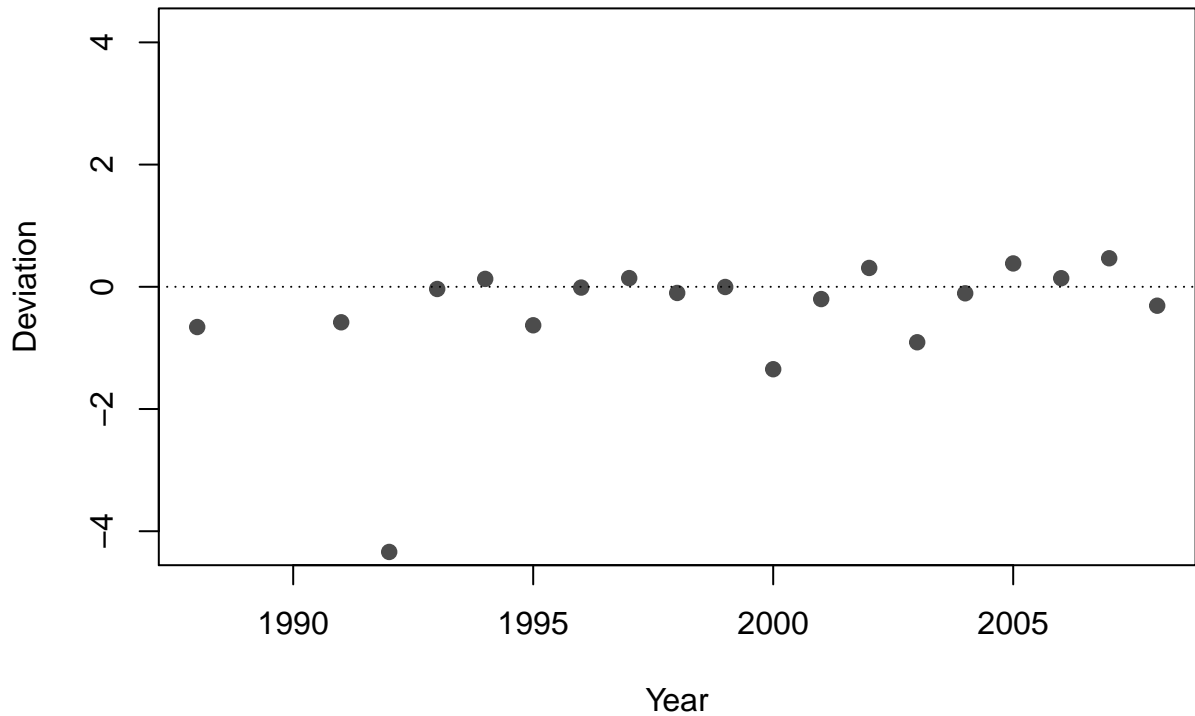




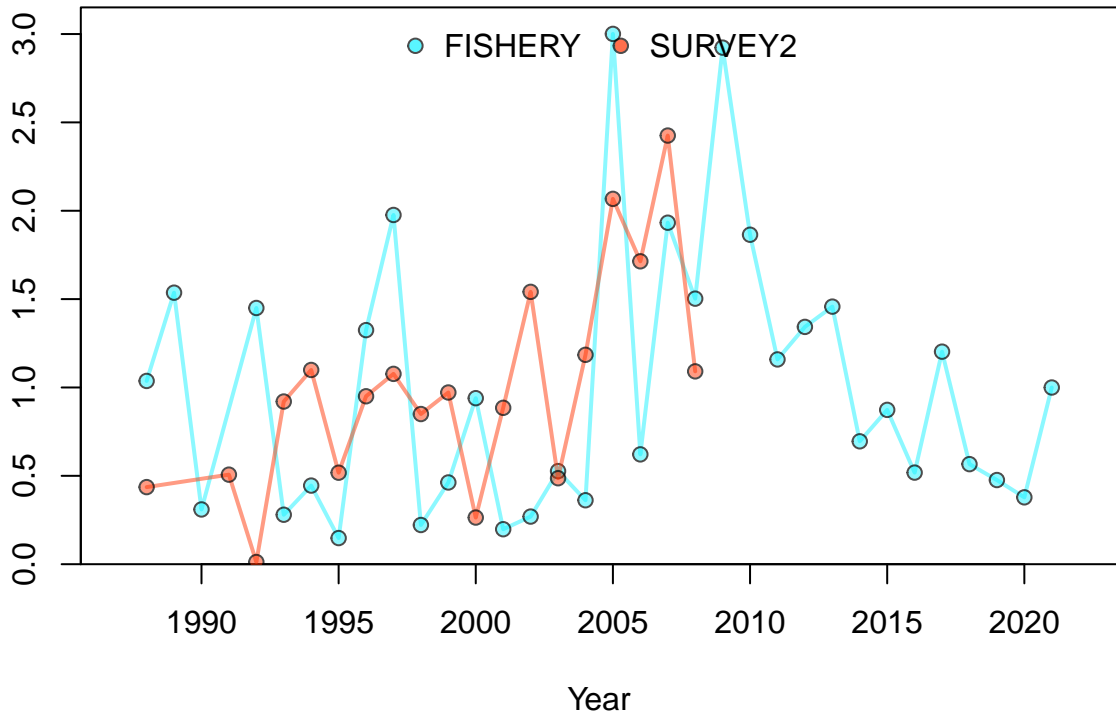


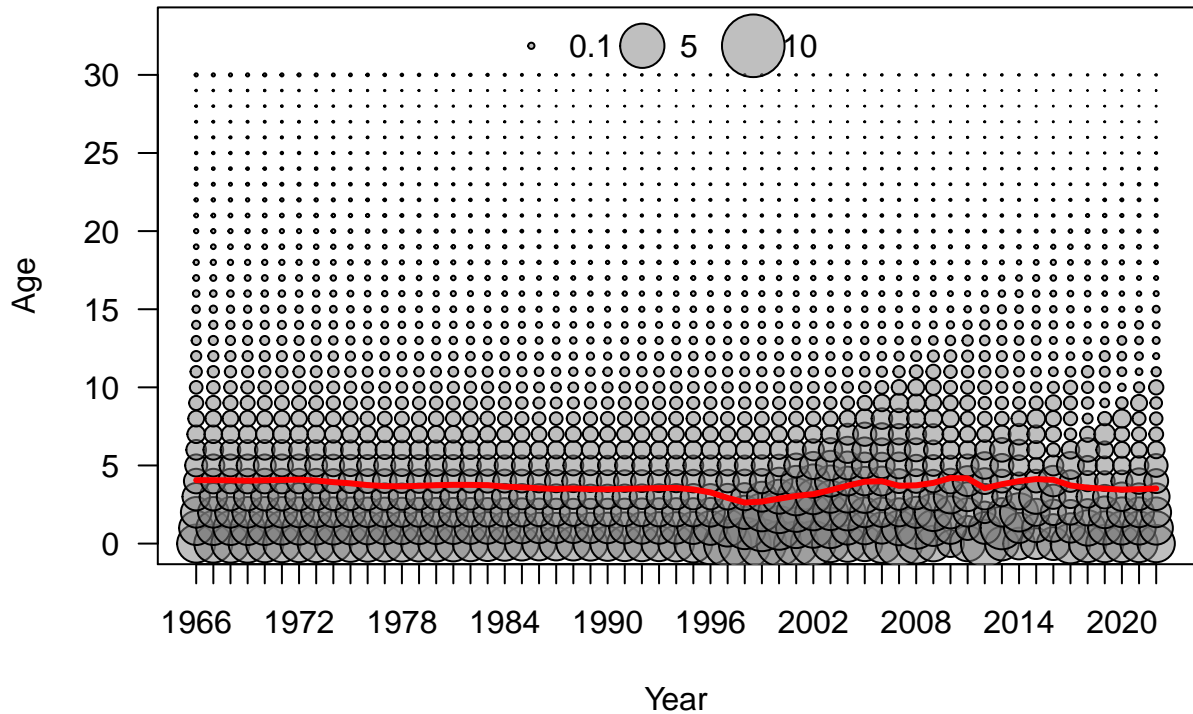


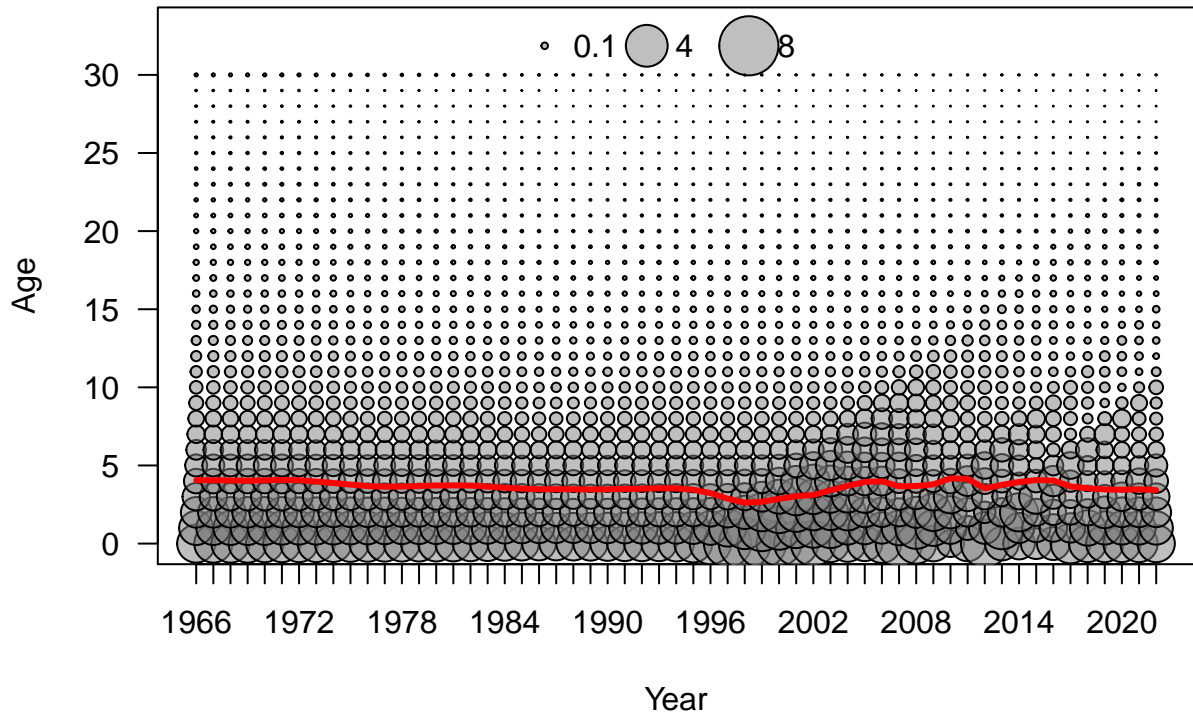


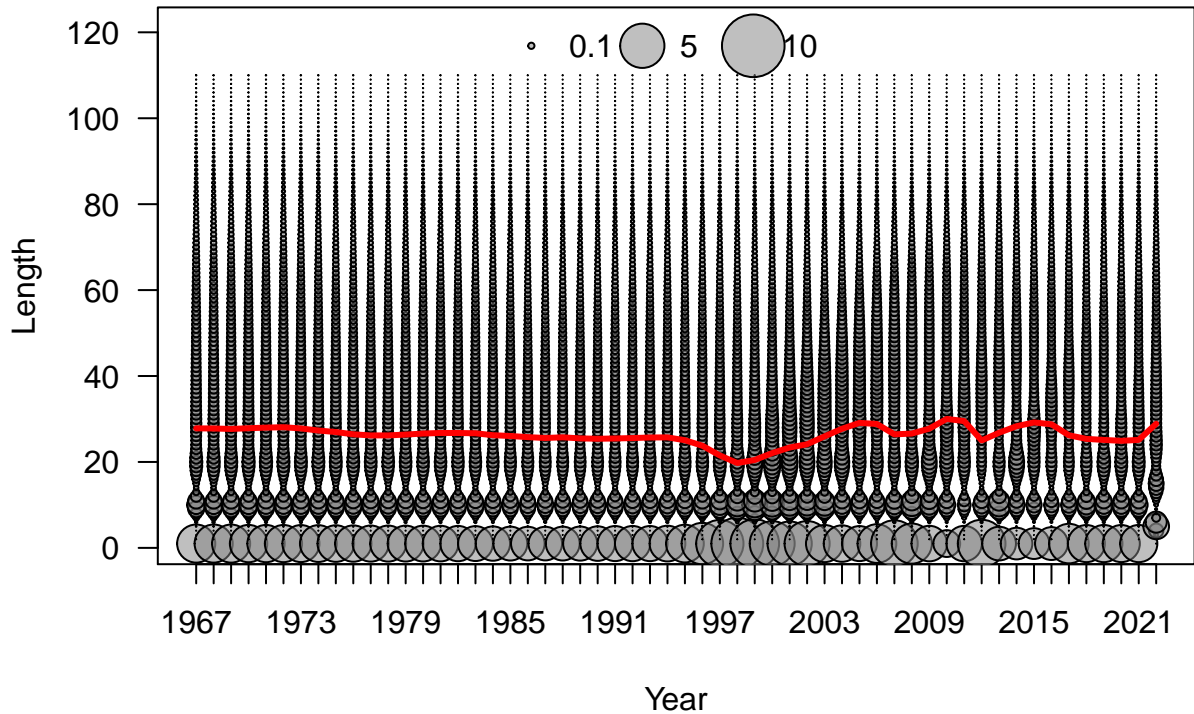


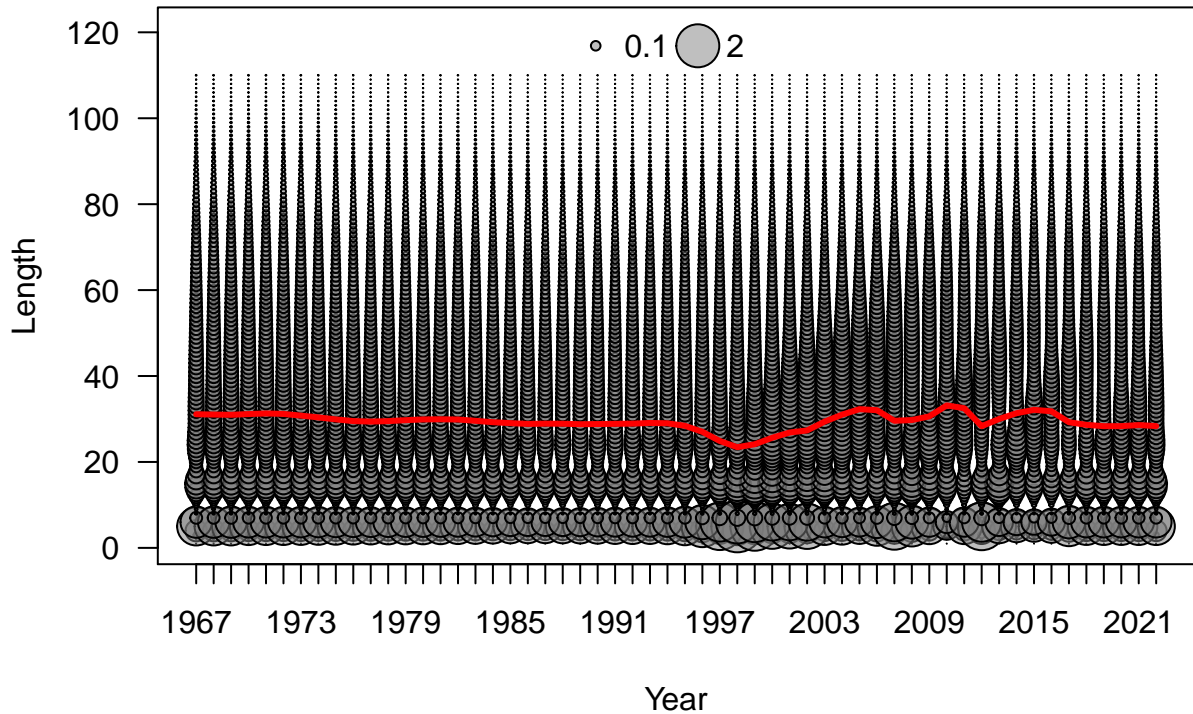
Standardized index

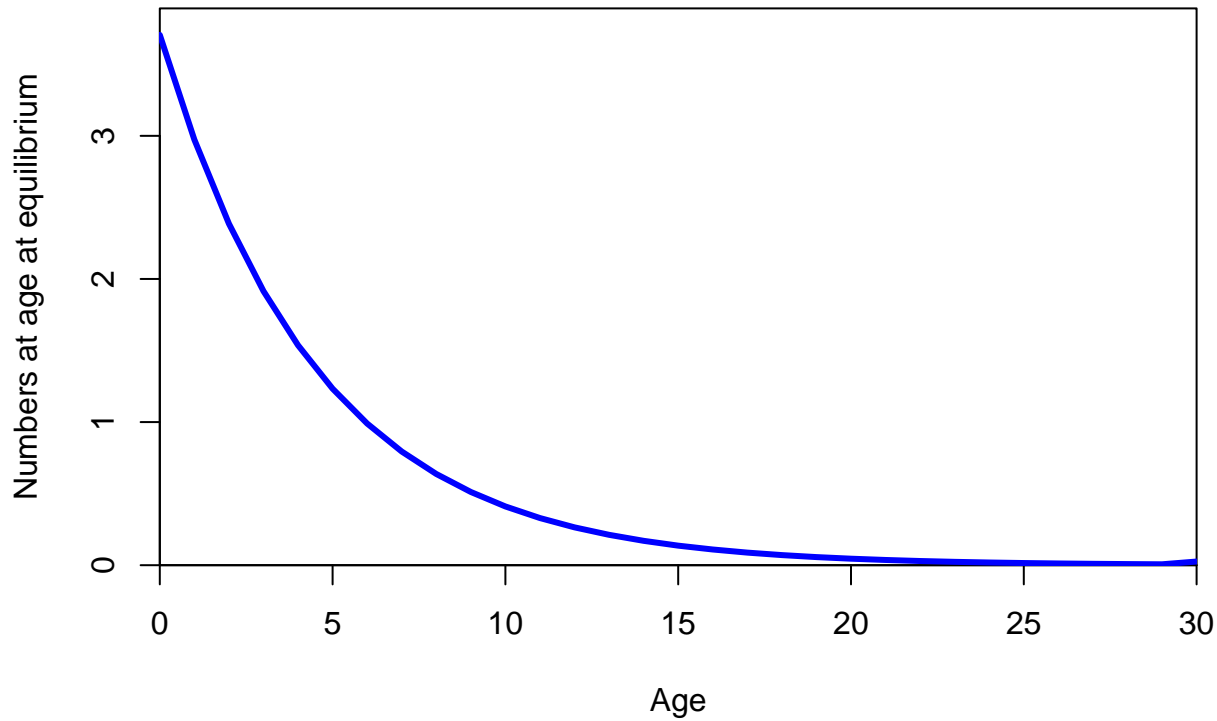






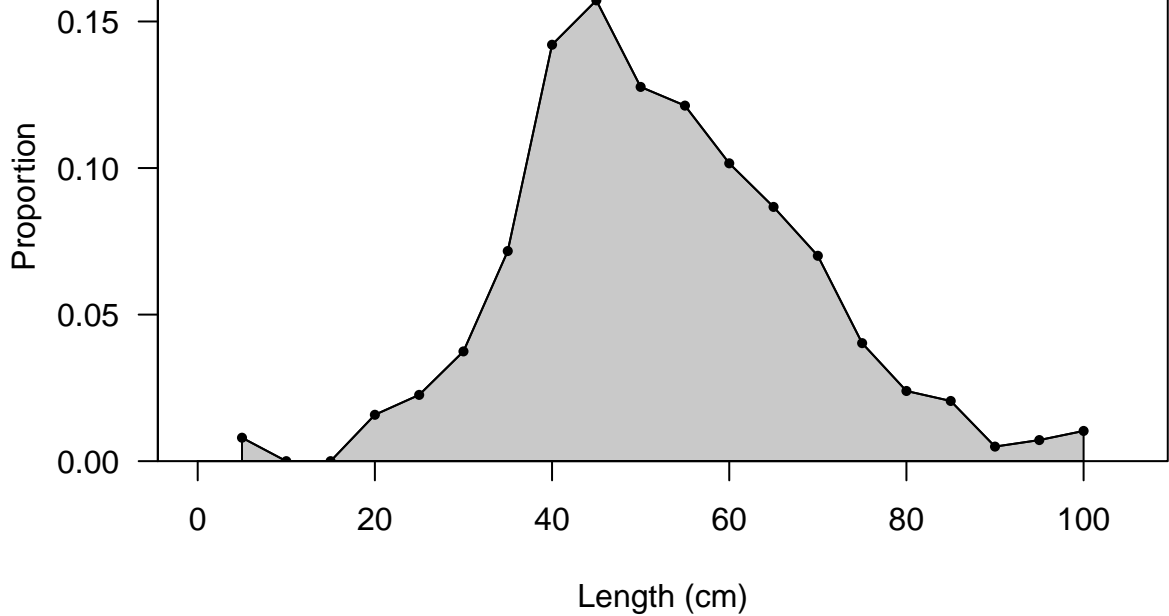


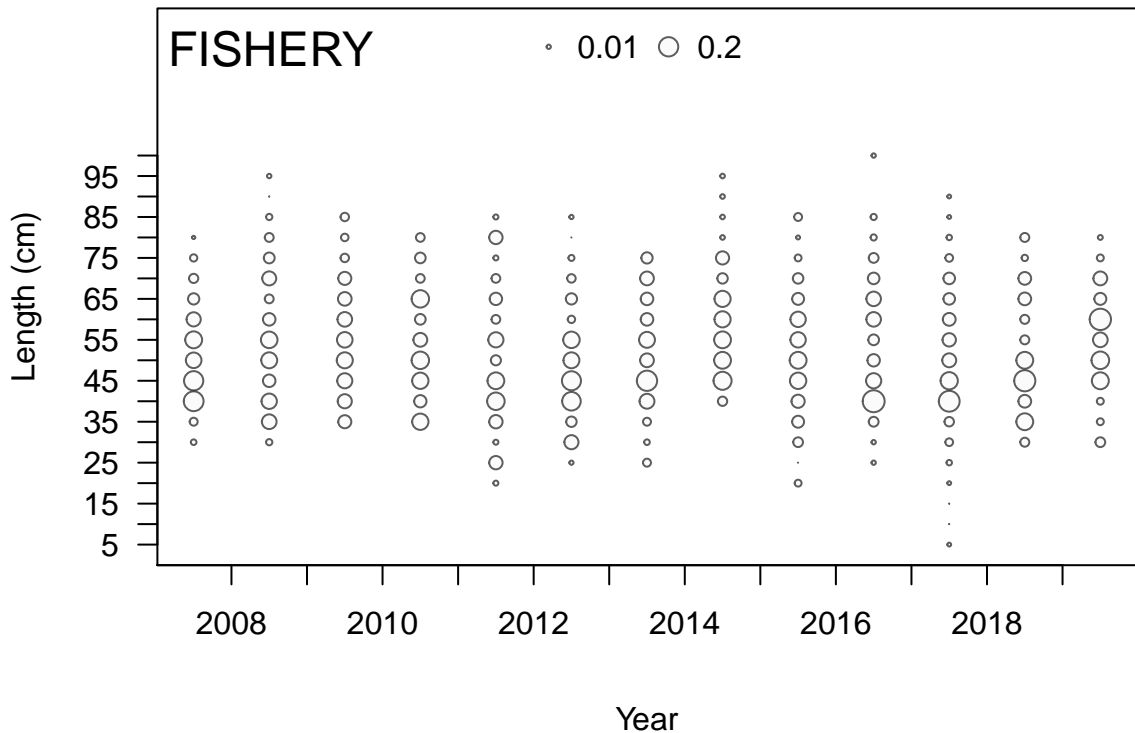




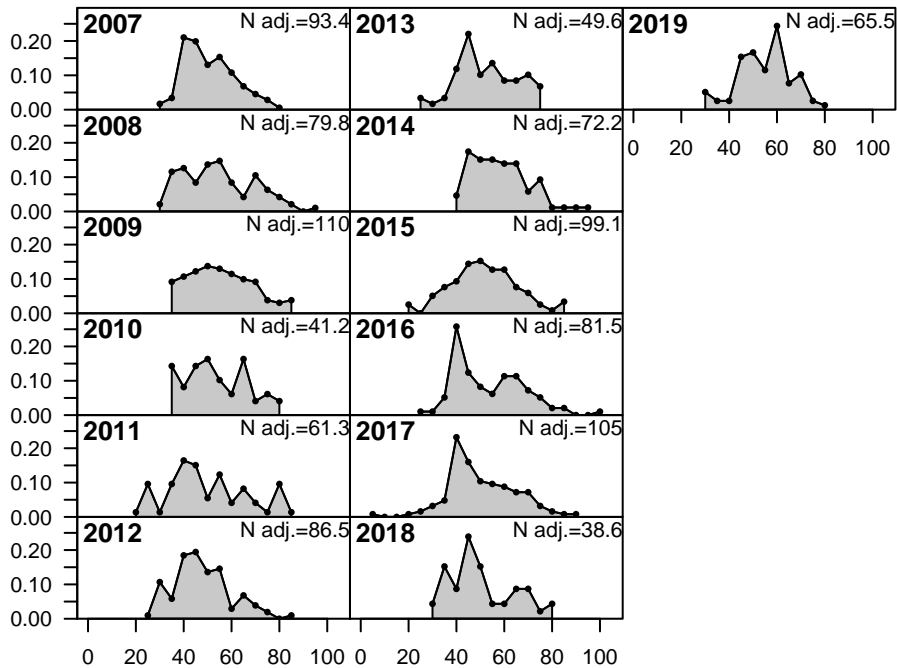
FISHERY

Sum of N adj.=983.8

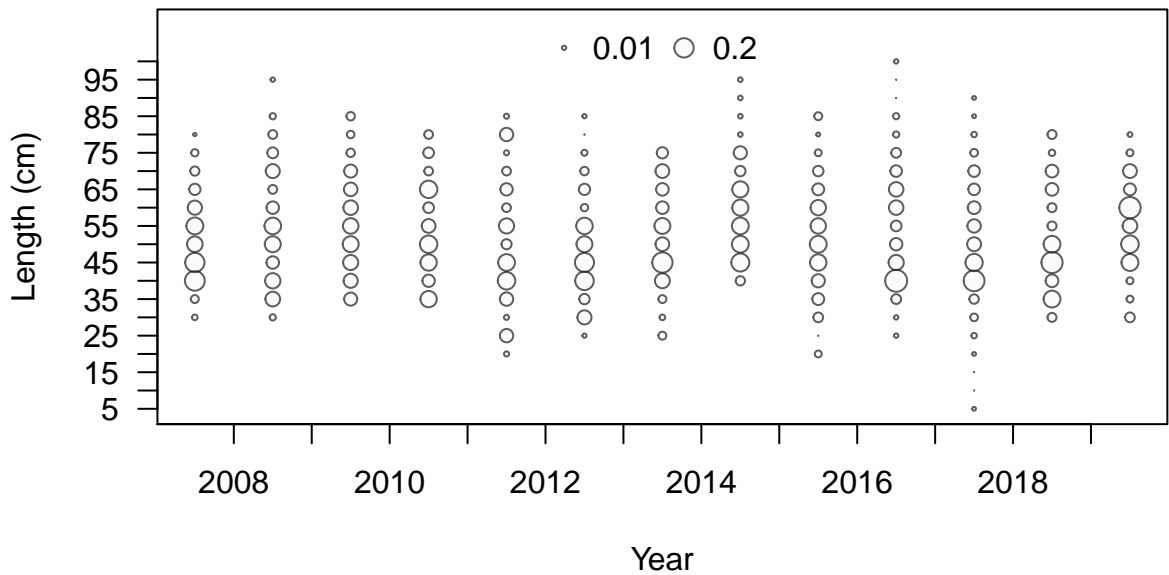




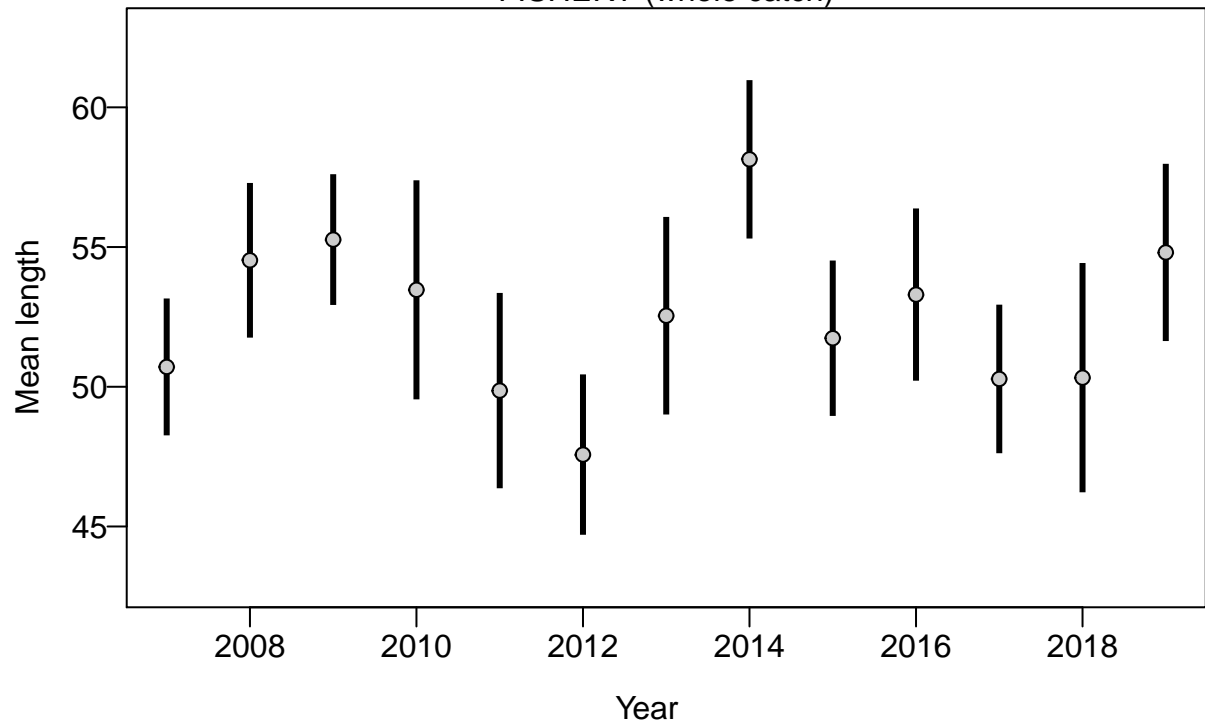
Proportion



Length (cm)

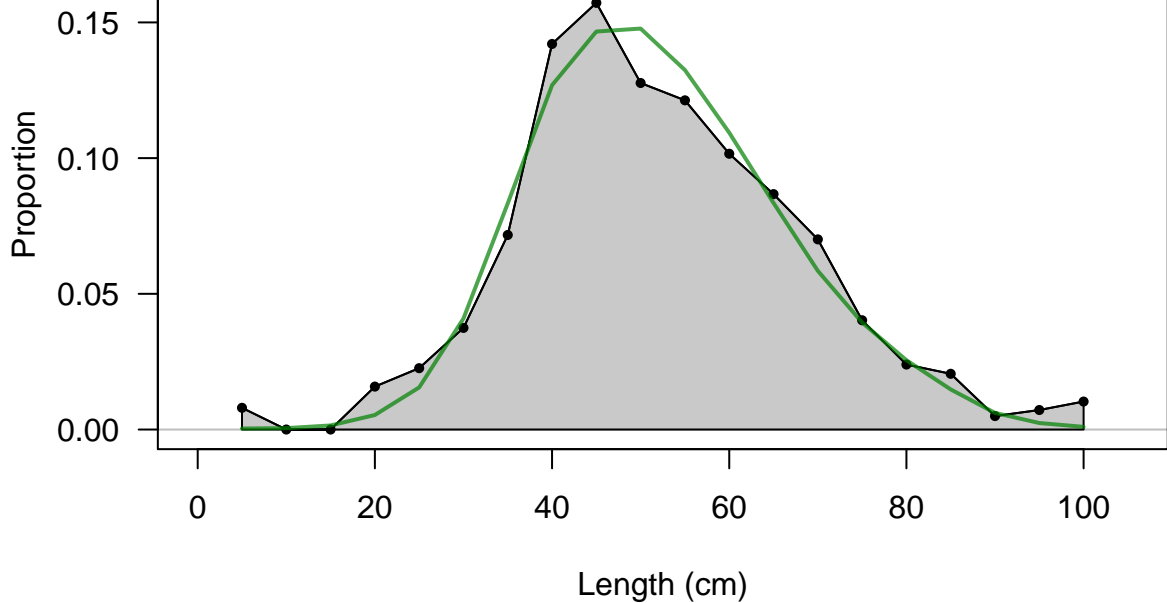


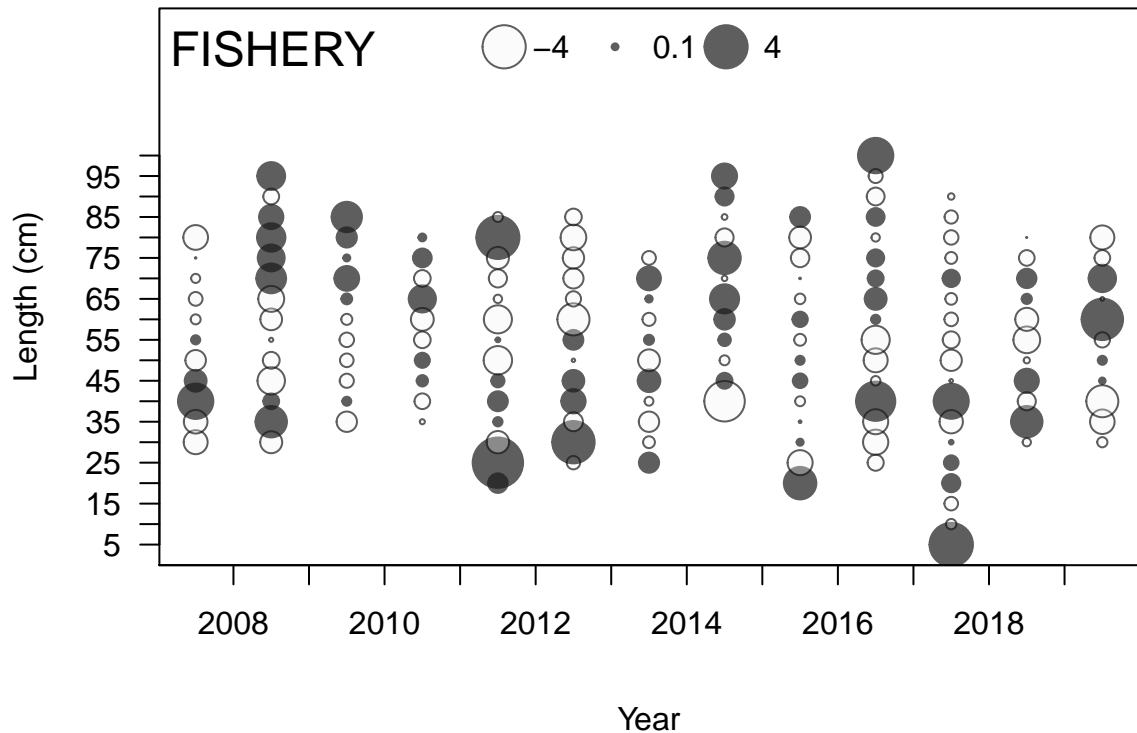
FISHERY (whole catch)



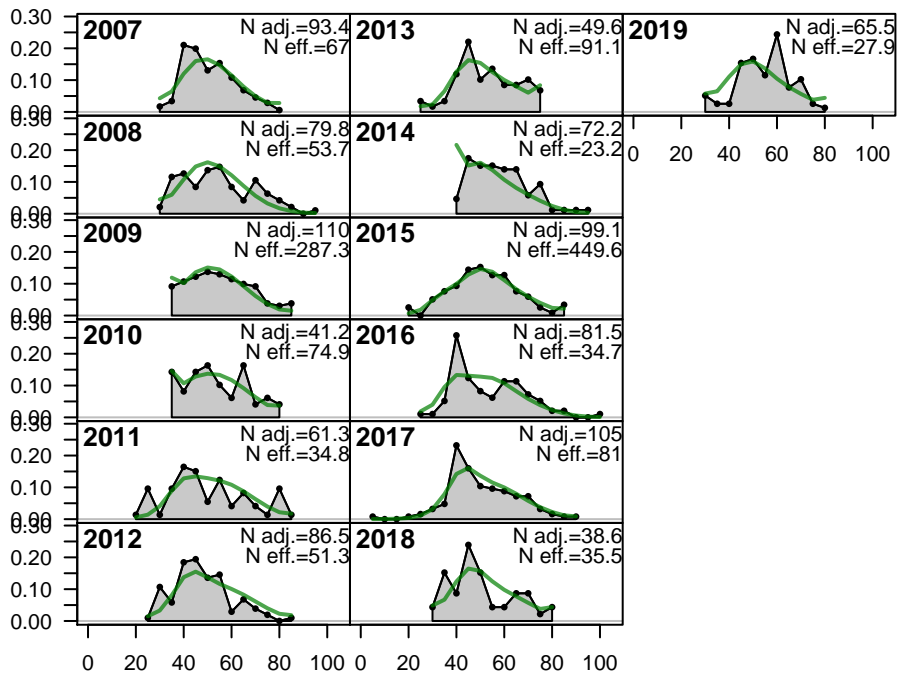
FISHERY

Sum of N adj.=983.8
Sum of N eff.=1311.9

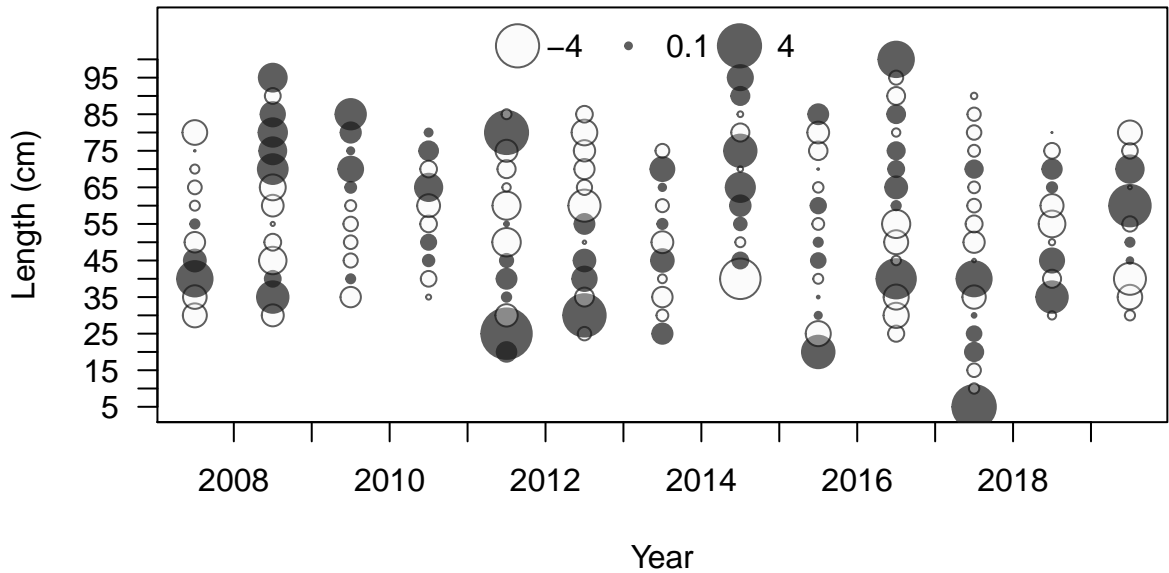


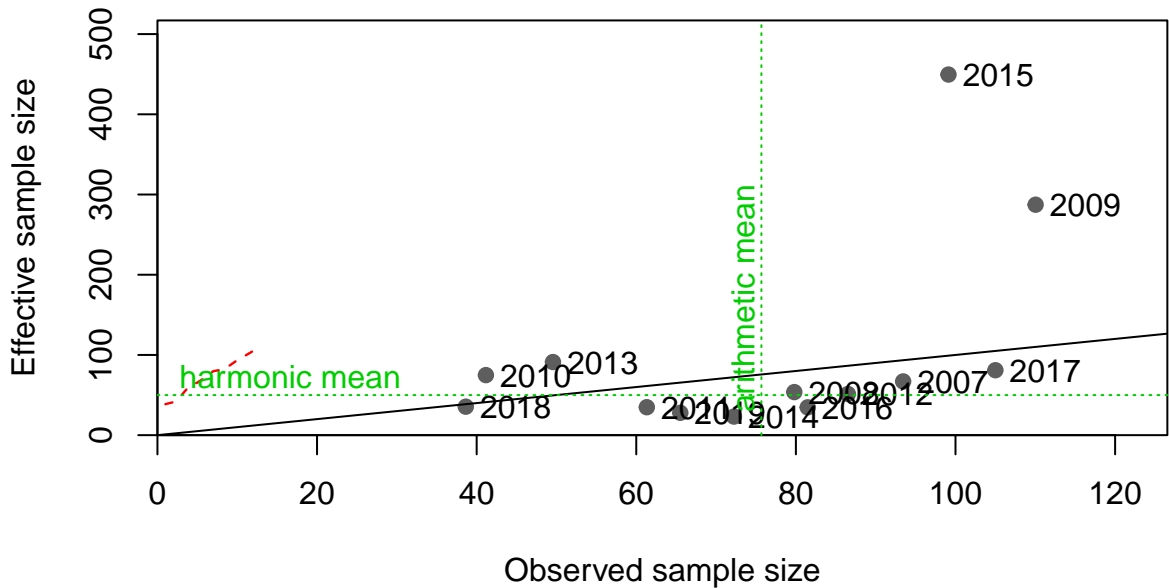


Proportion

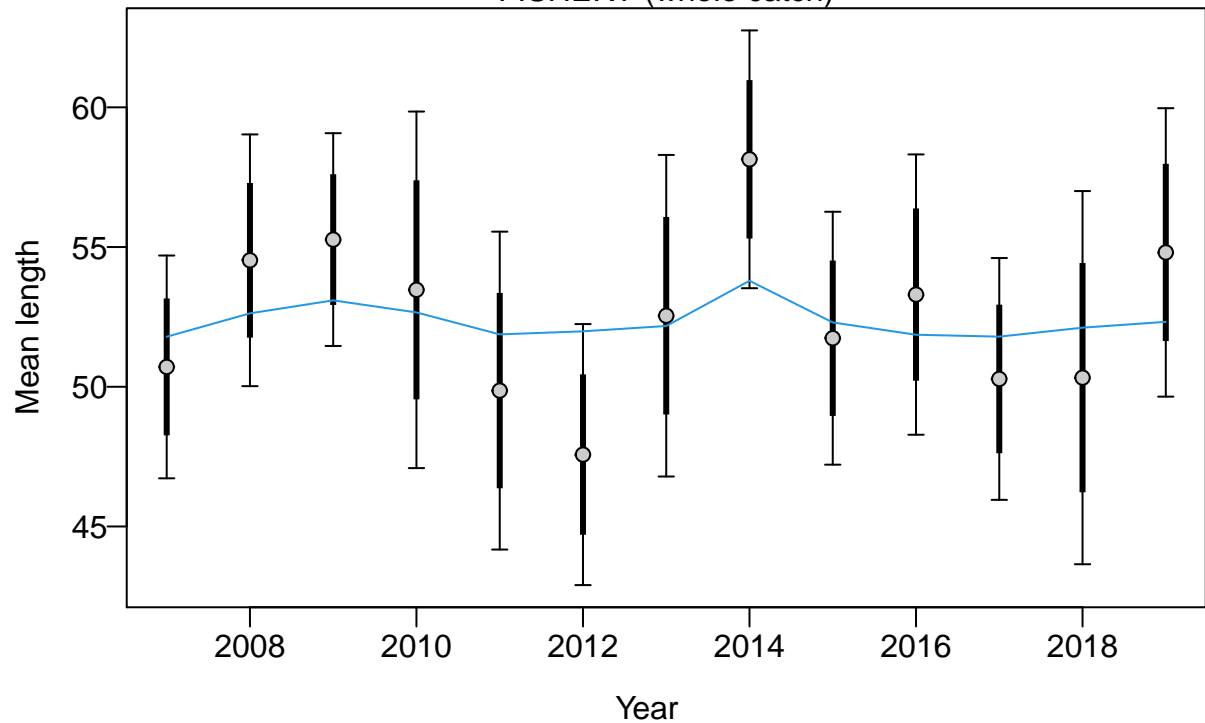


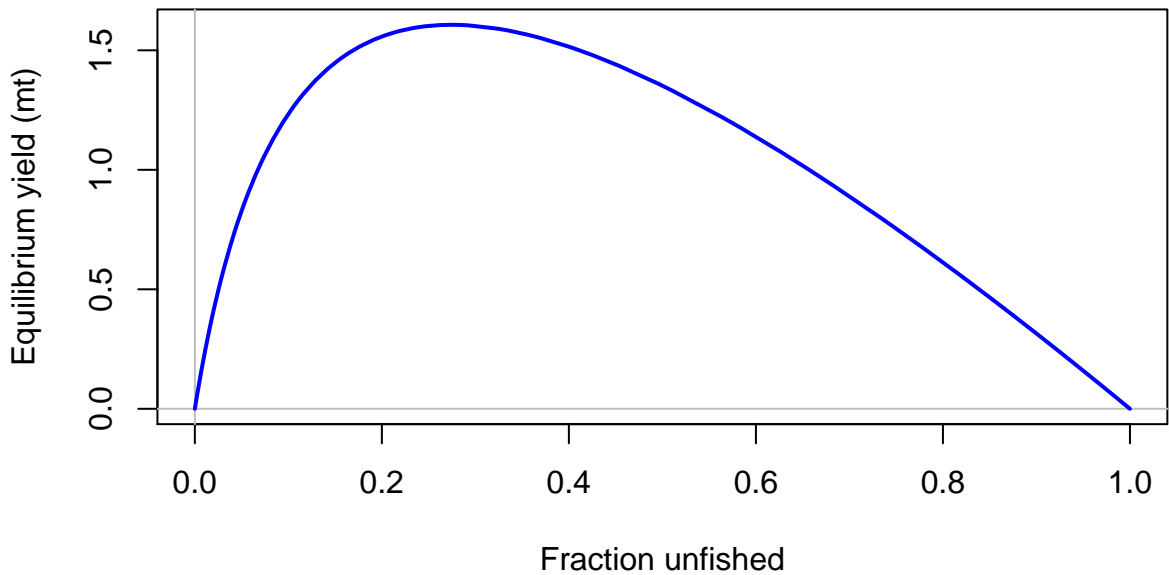
Length (cm)

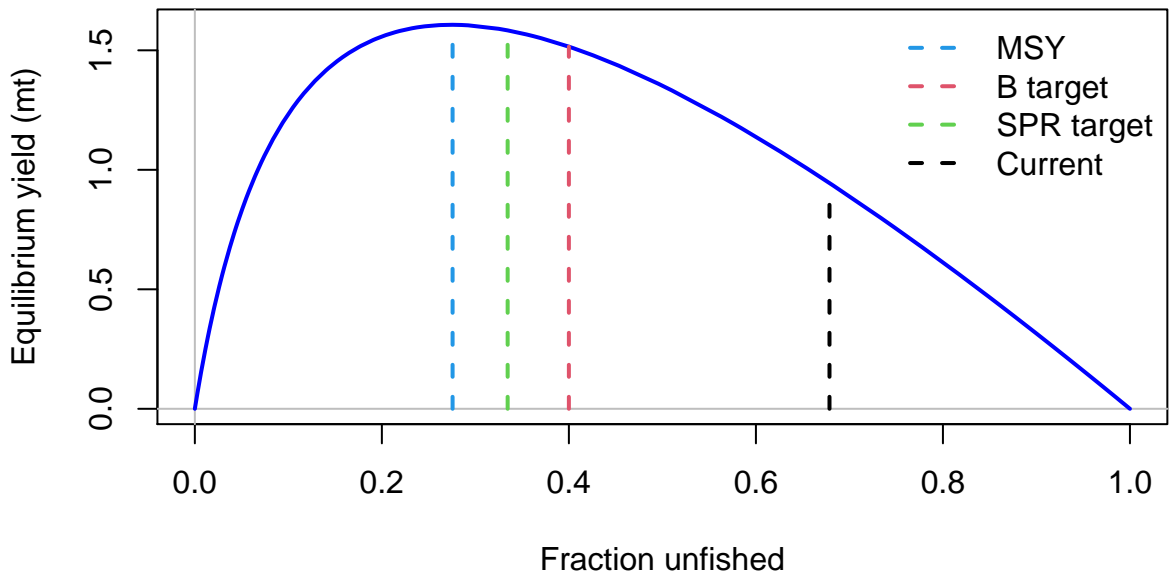


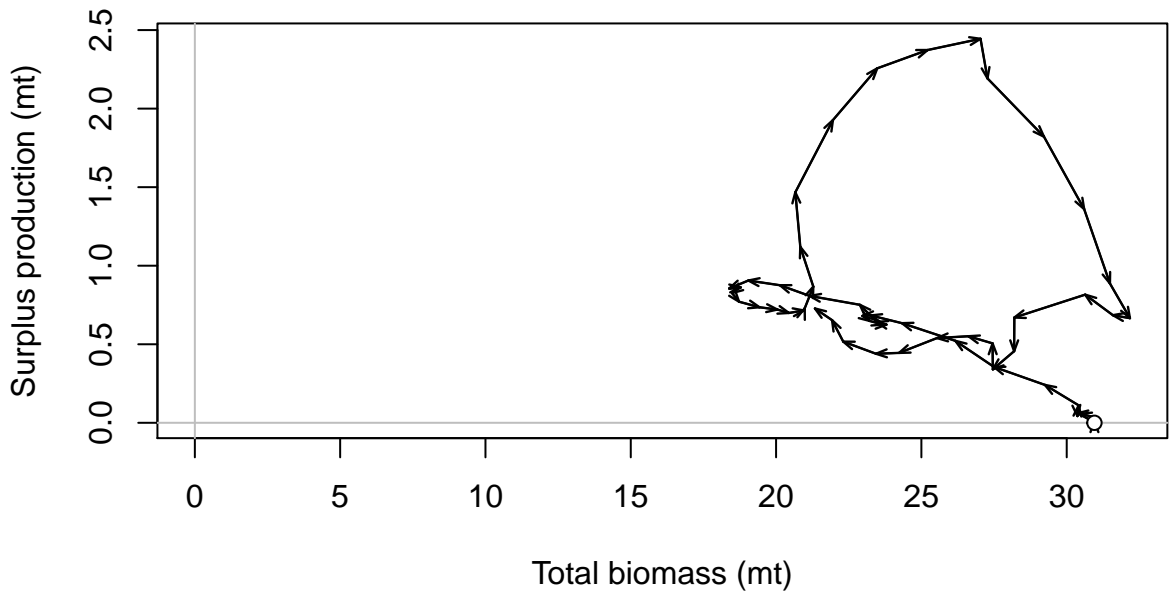


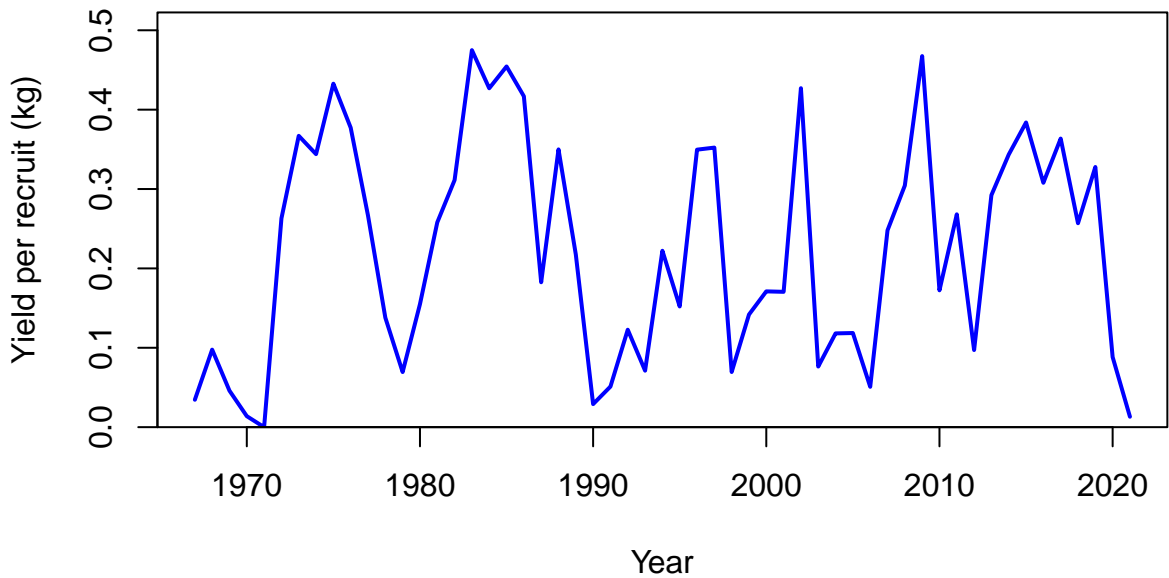
FISHERY (whole catch)

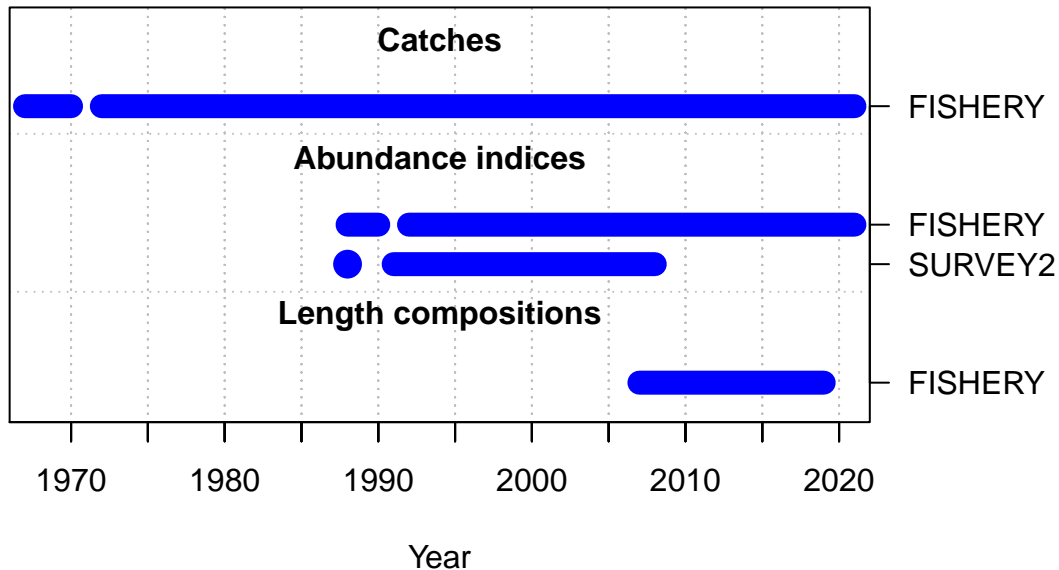


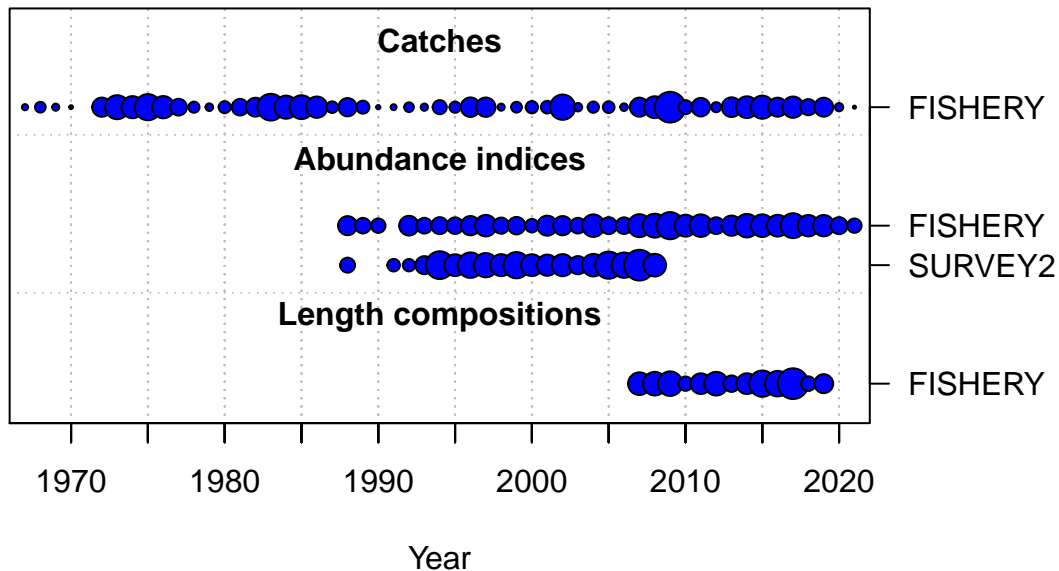




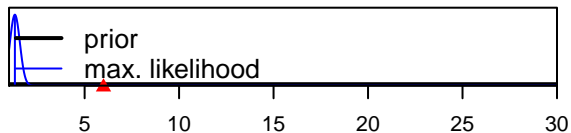




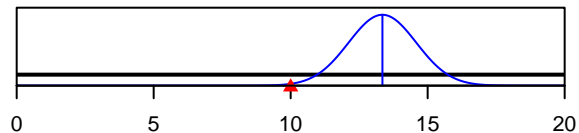




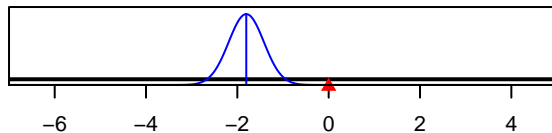
SR_LN(R0)



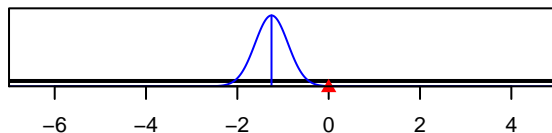
Size_95%width_FISHERY(1)



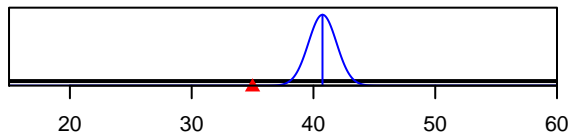
LnQ_base_FISHERY(1)



LnQ_base_SURVEY2(2)



Size_inflection_FISHERY(1)



Parameter value