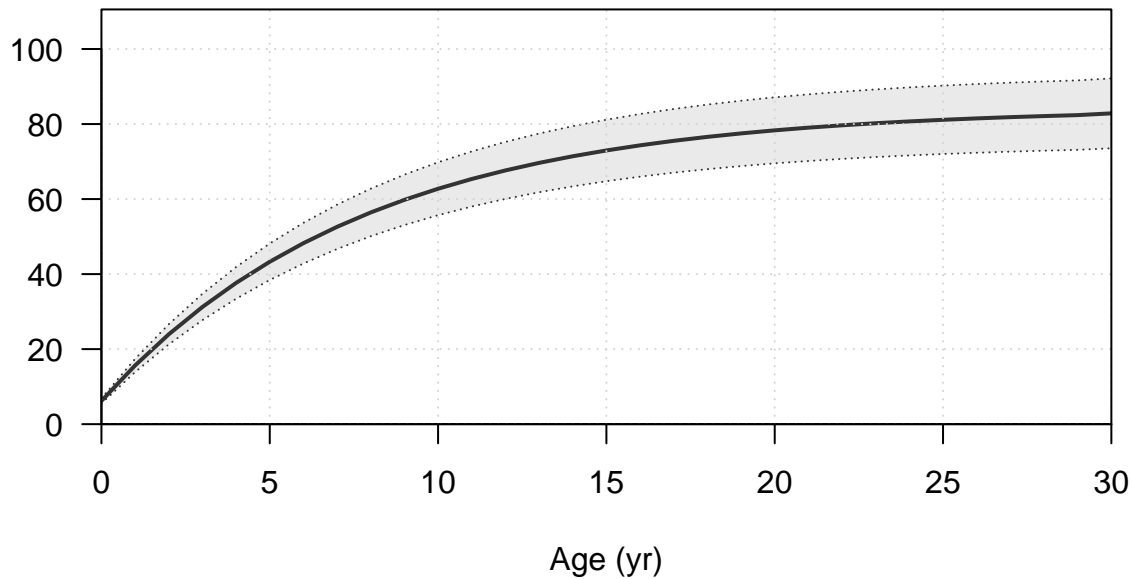
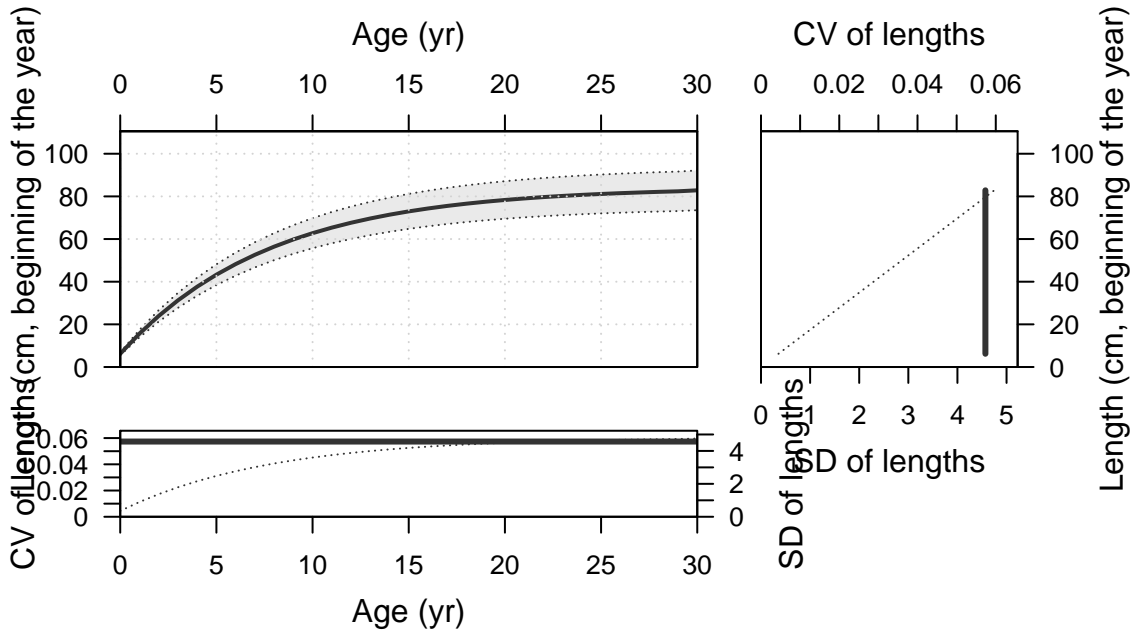
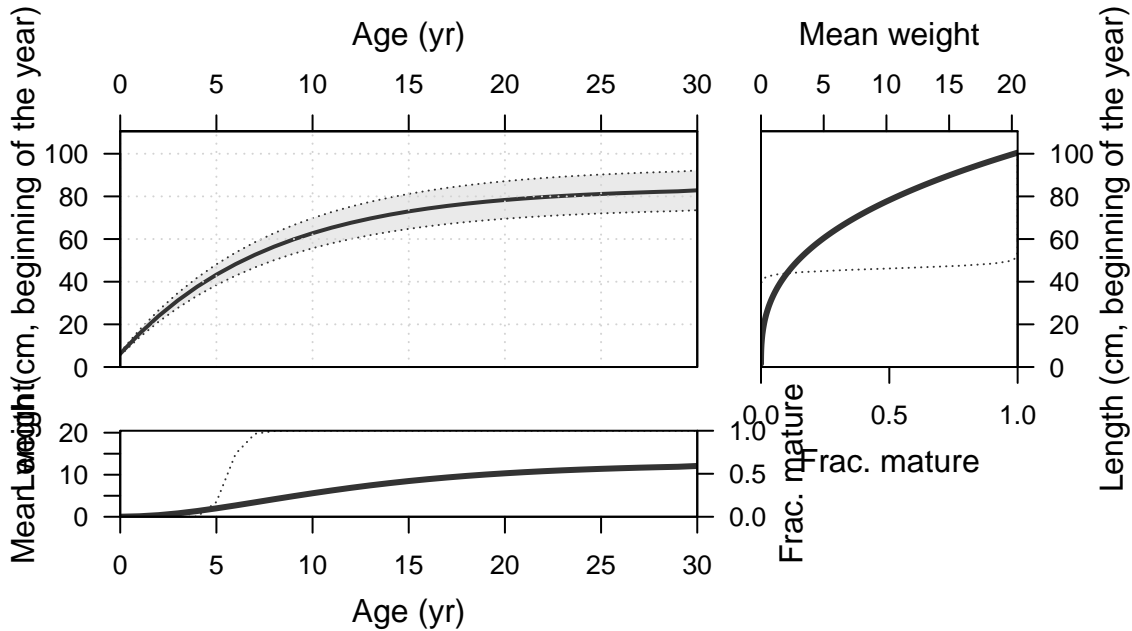


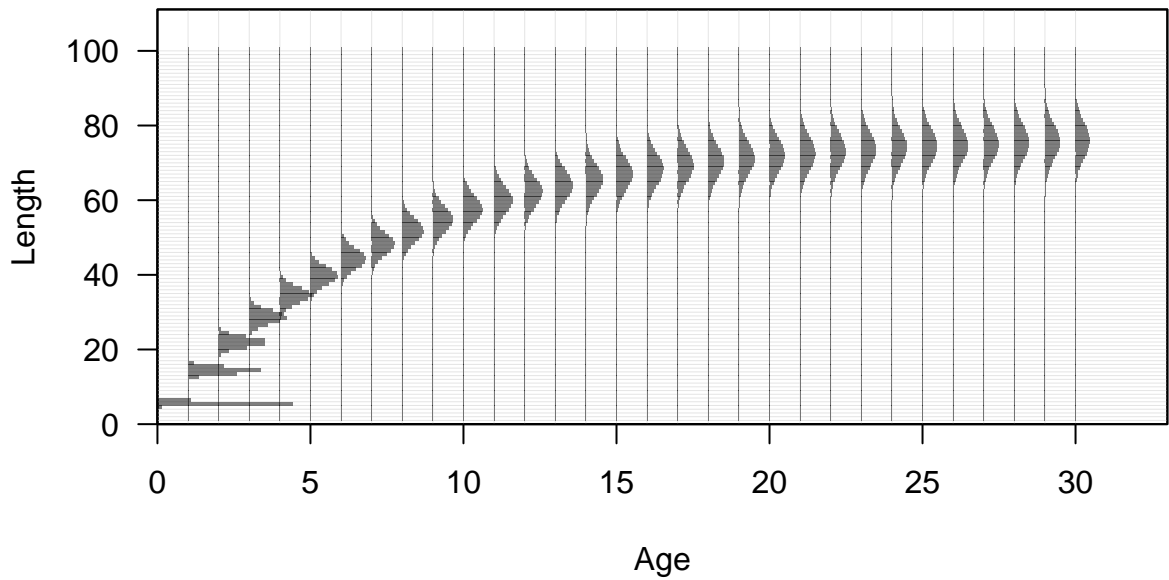
Plots created using the 'r4ss' package in R  
Stock Synthesis version: 3.30.19.0  
StartTime: Sun Feb 19 15:49:03 2023  
Data\_File: data.ss  
Control\_File: control.ss

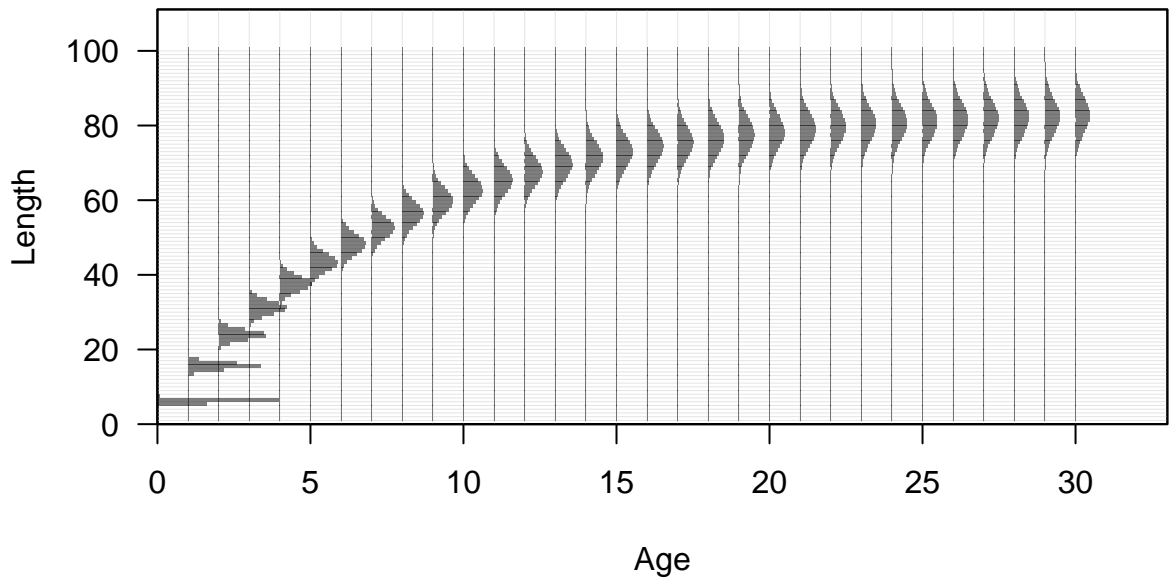
Length (cm, beginning of the year)

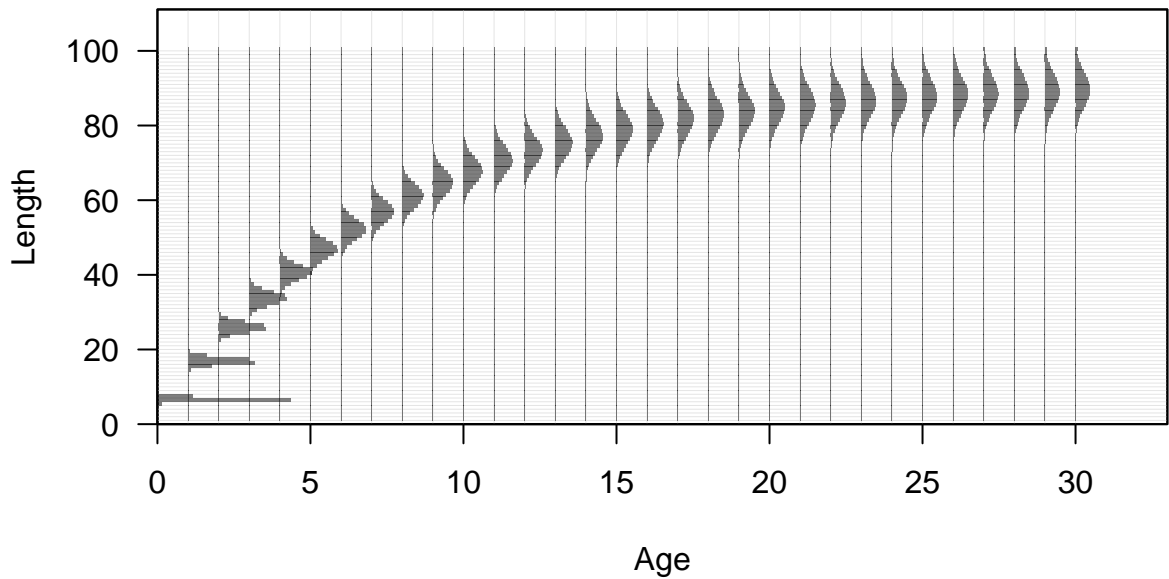


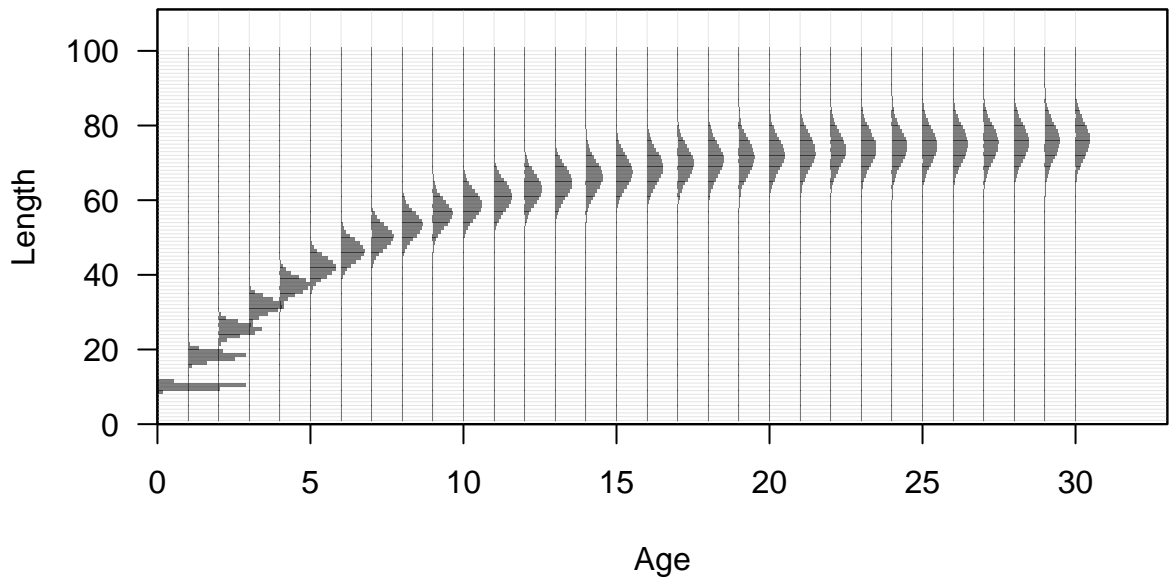




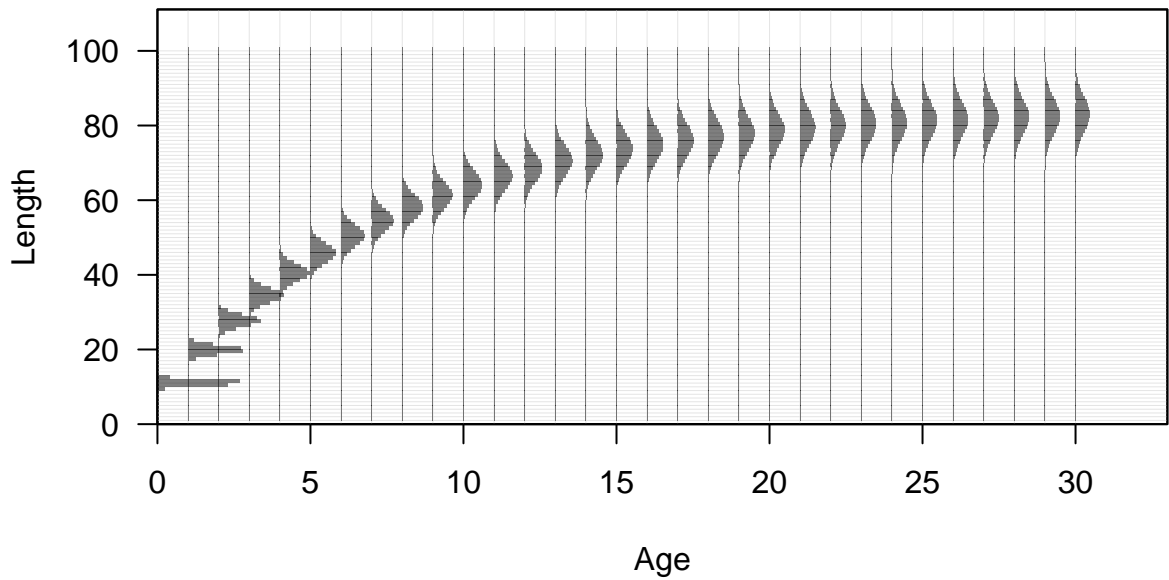


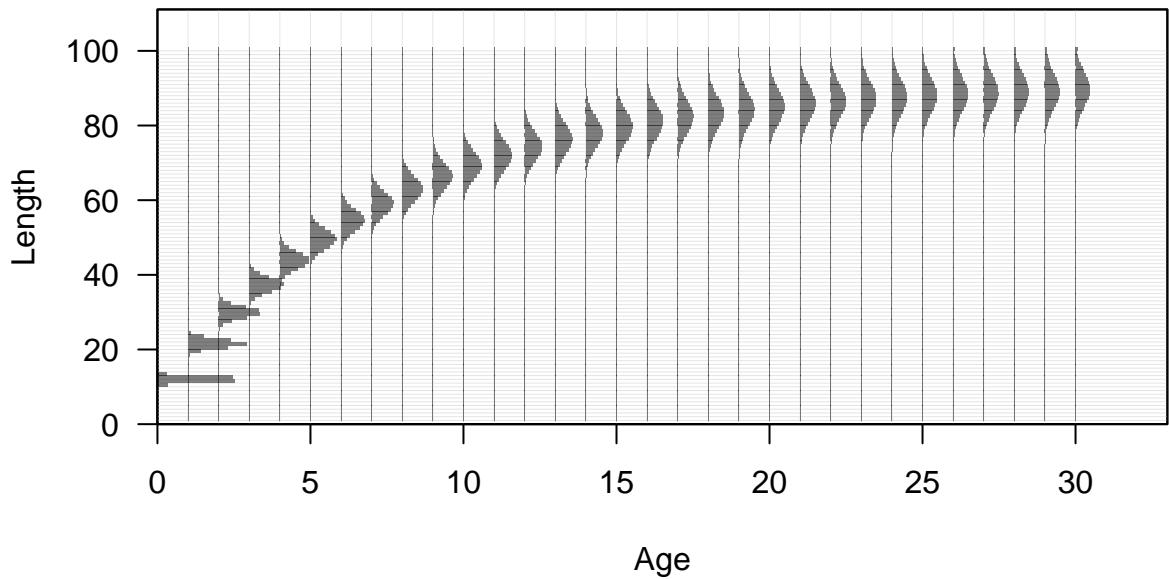




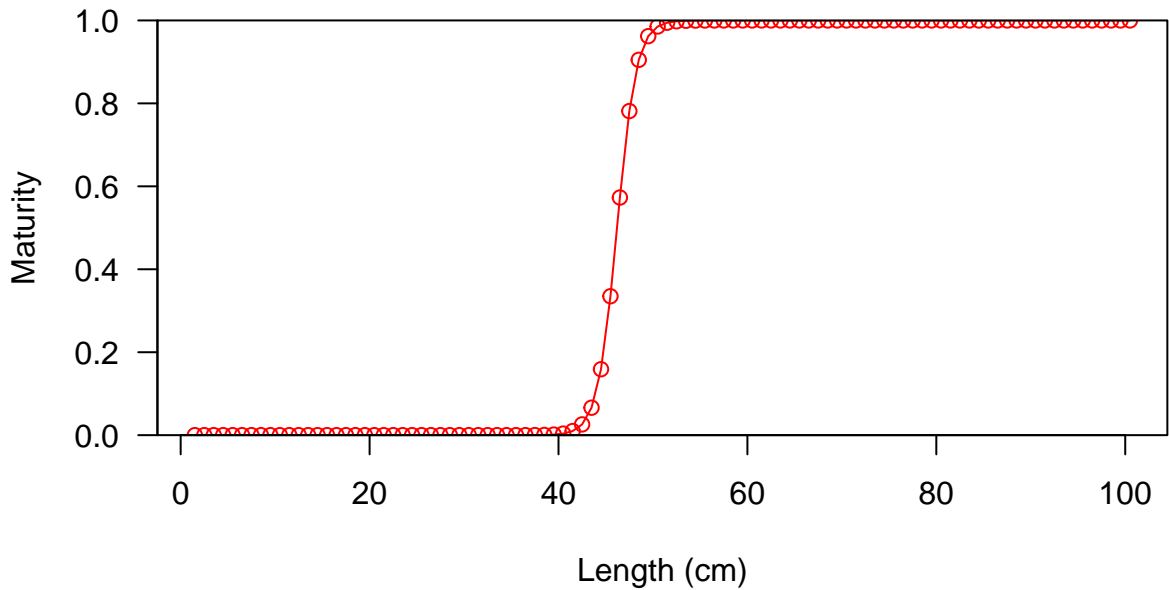


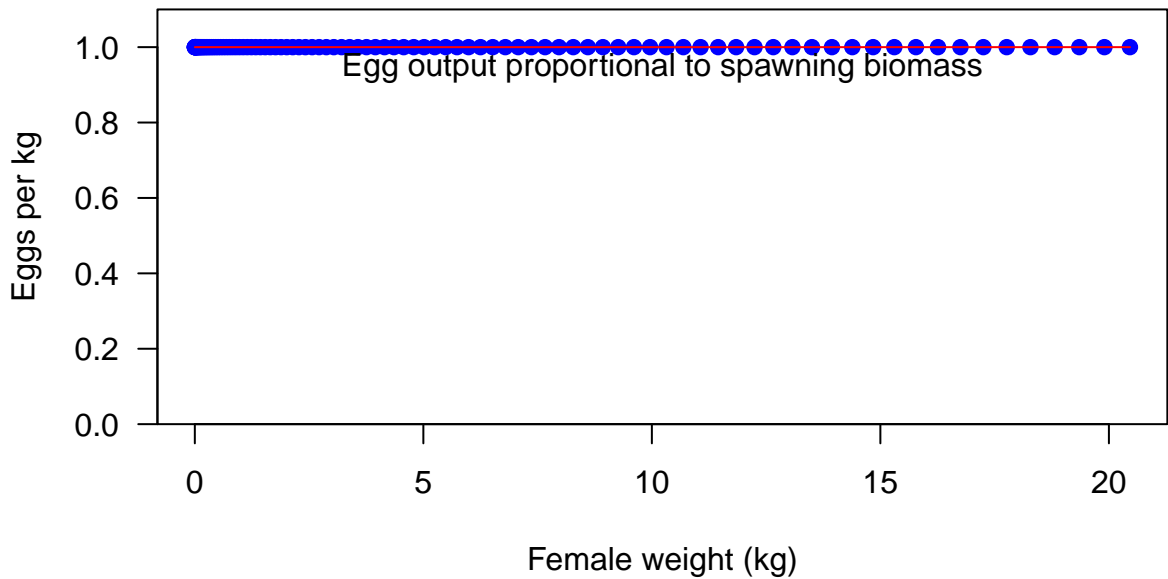




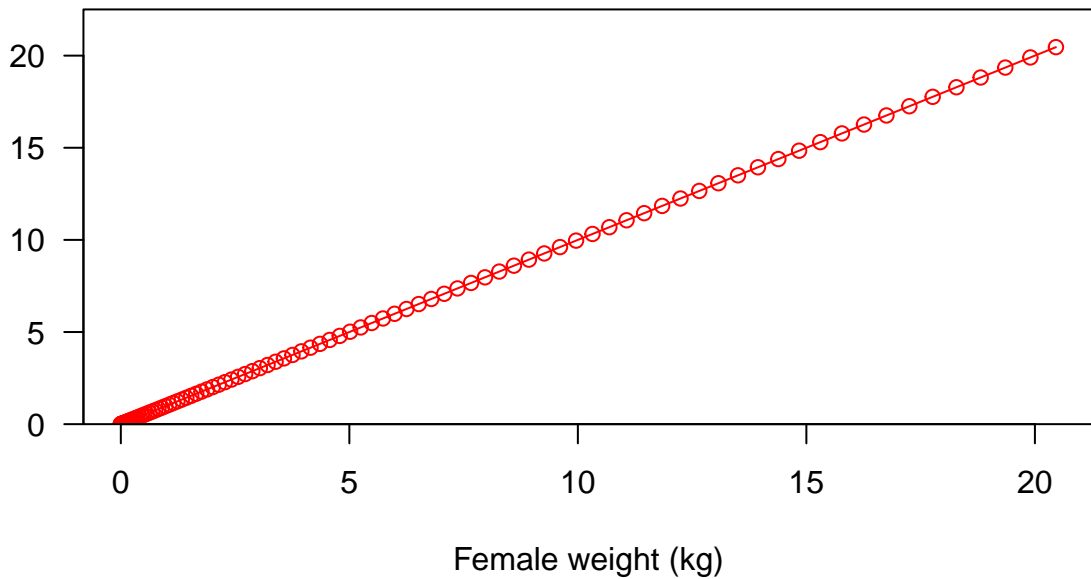








Fecundity



Fecundity

20

15

10

5

0

0

20

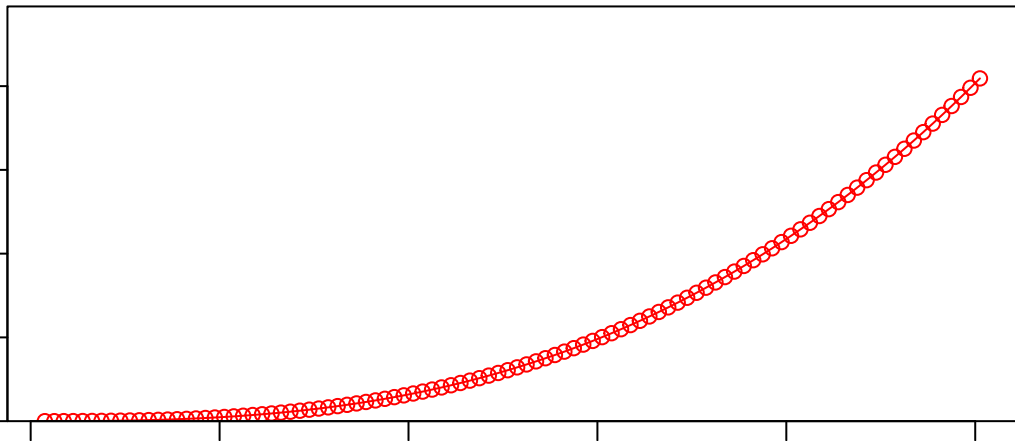
40

60

80

100

Female length (cm)



Spawning output

20  
15  
10  
5  
0

0

20

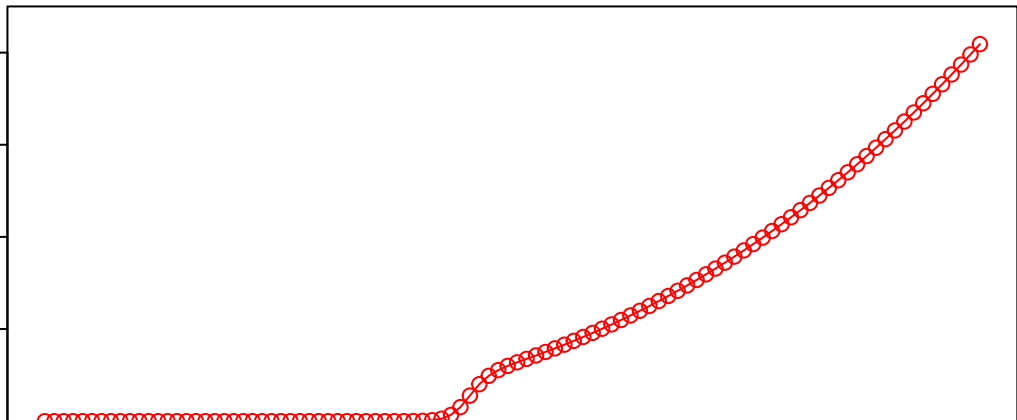
40

60

80

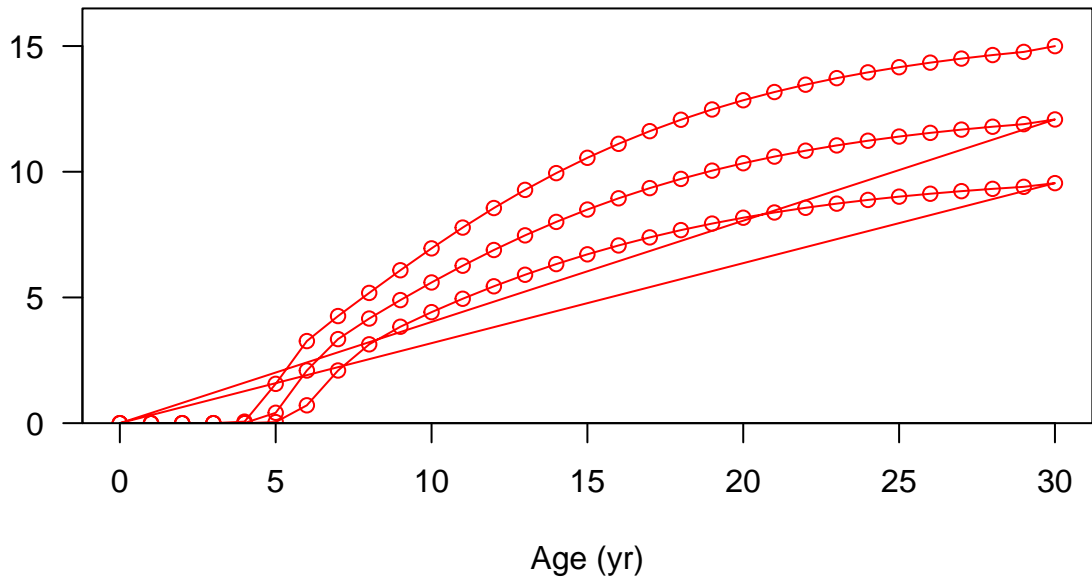
100

Length (cm)

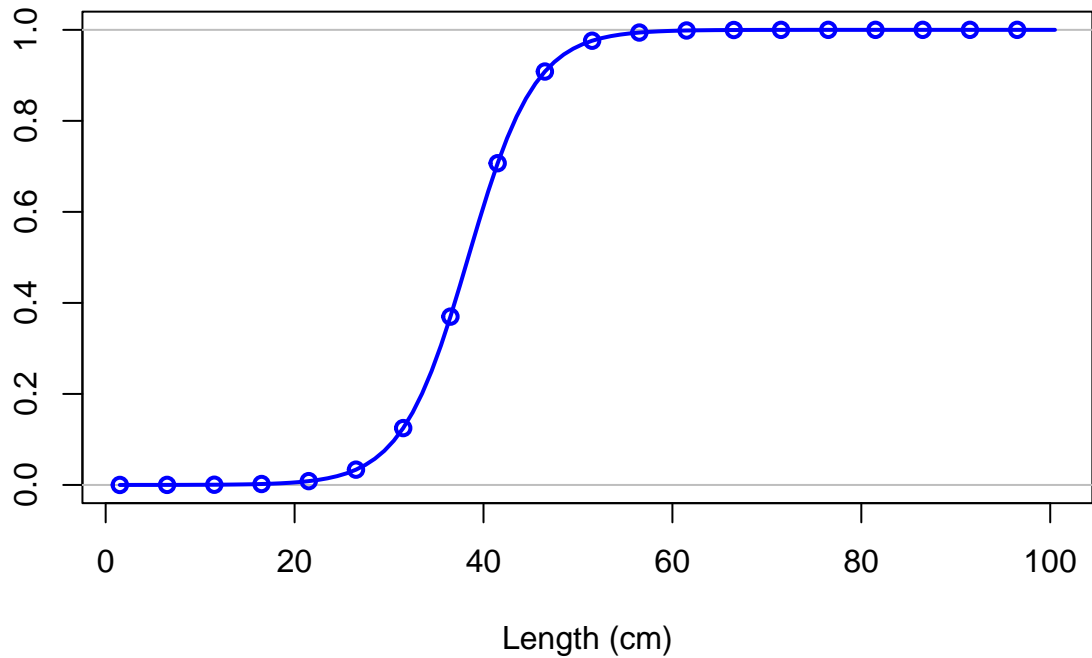




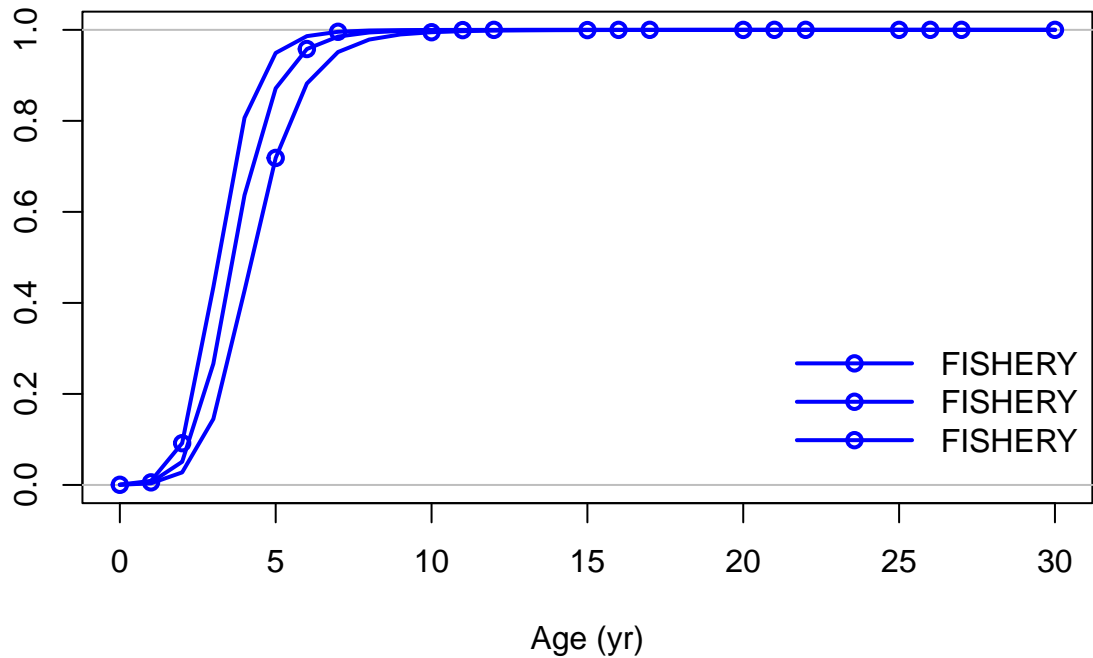
Spawning output



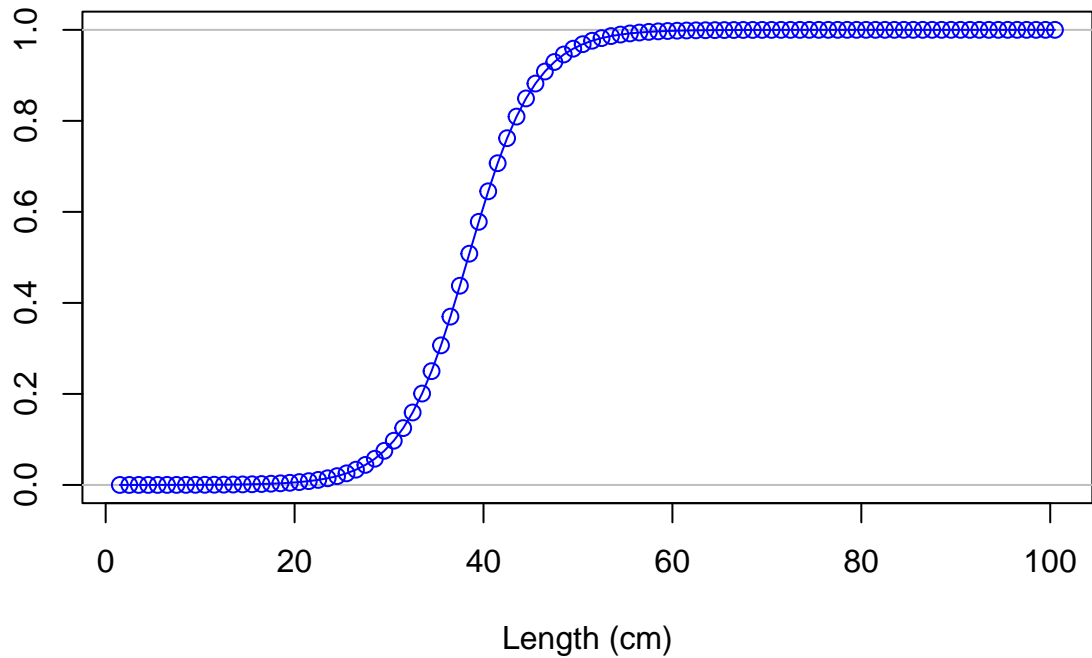
Selectivity

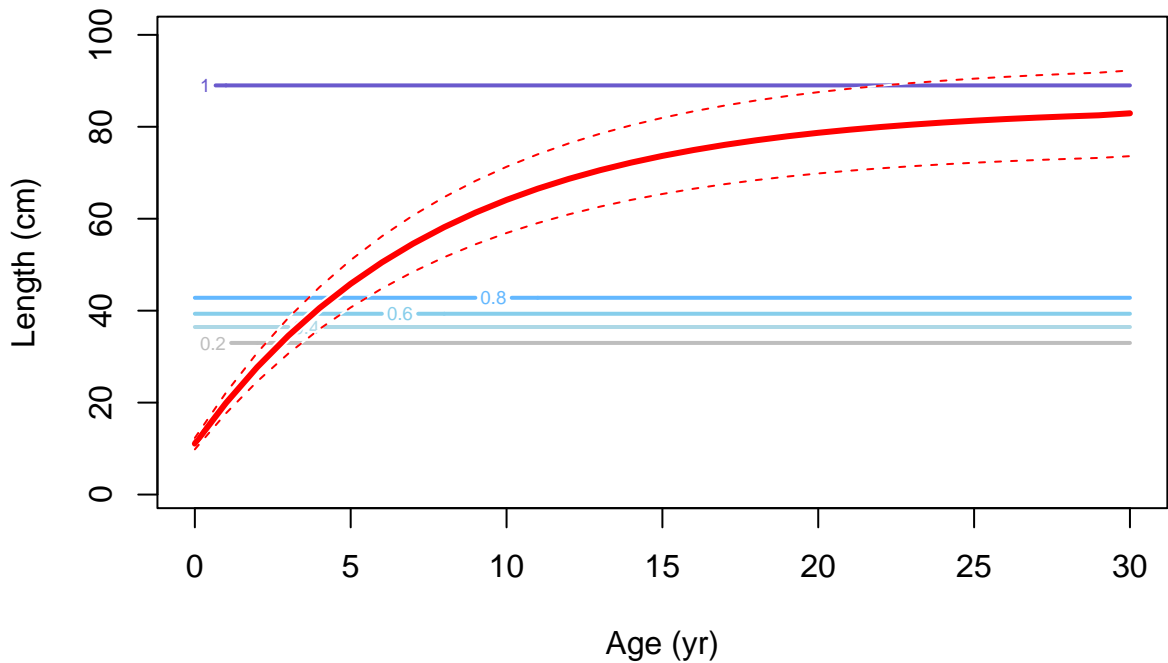


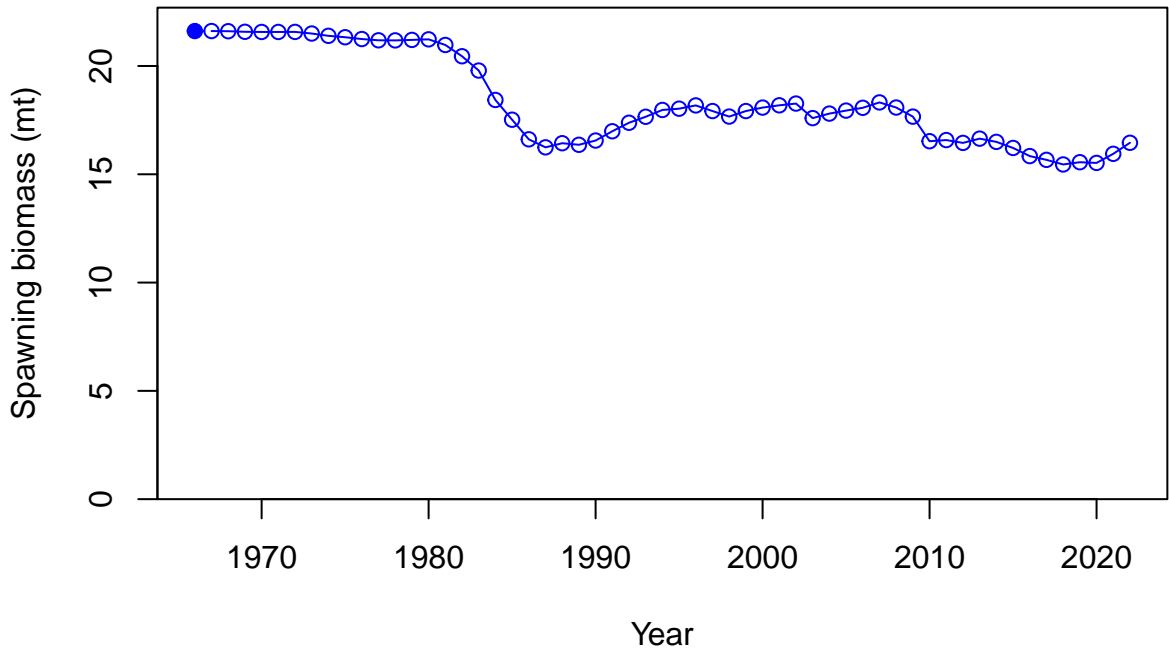
Selectivity

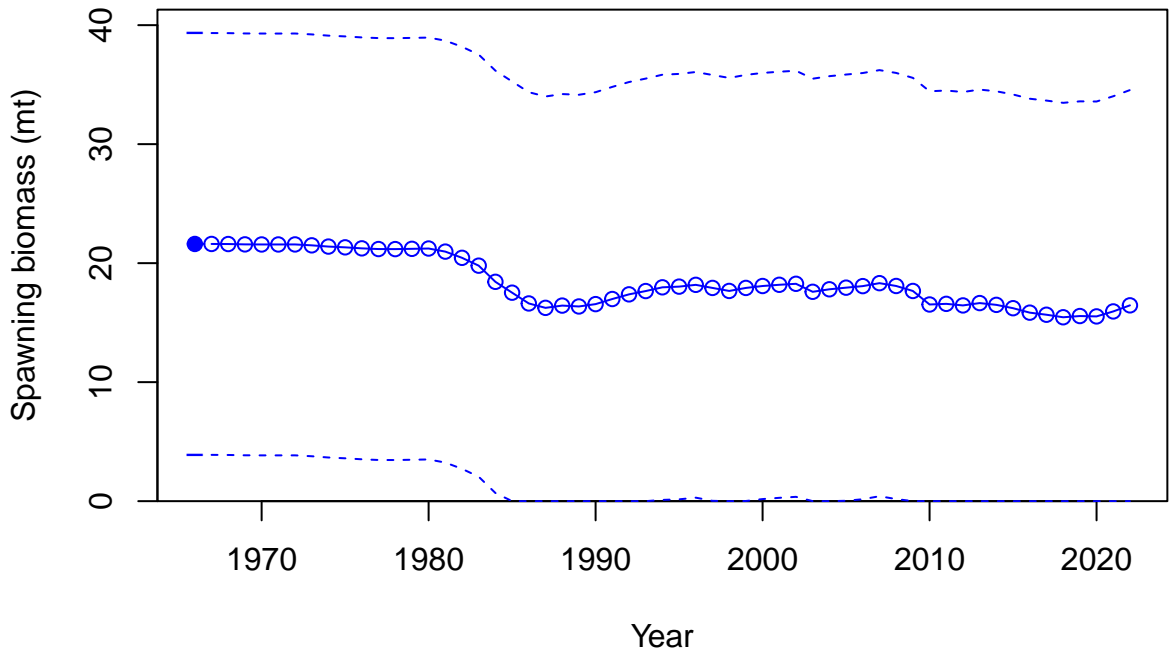


Selectivity

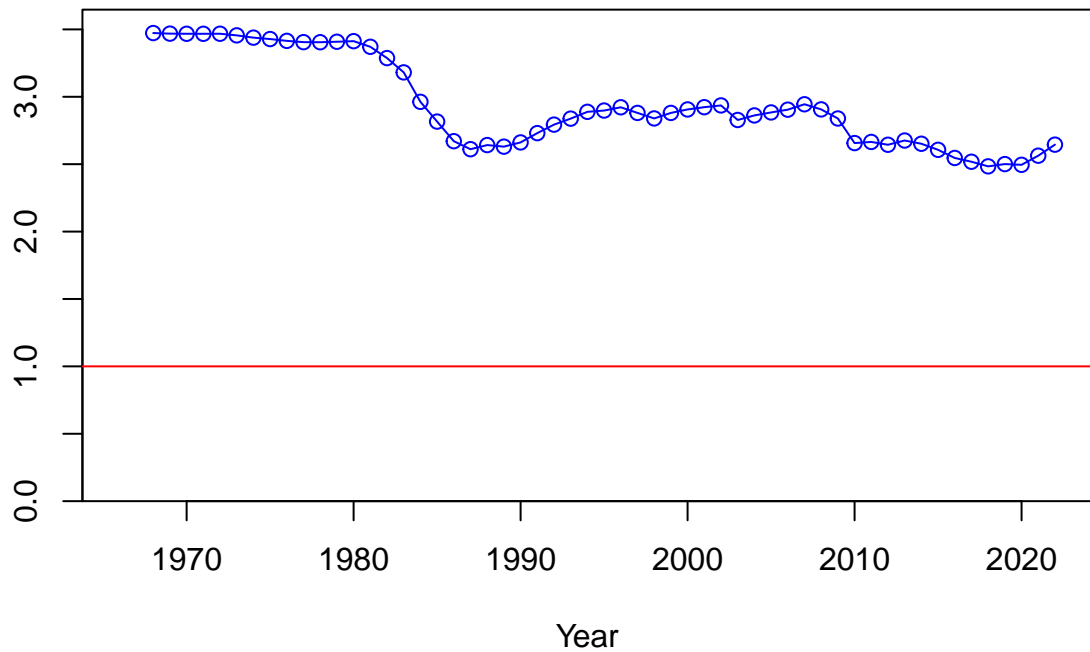






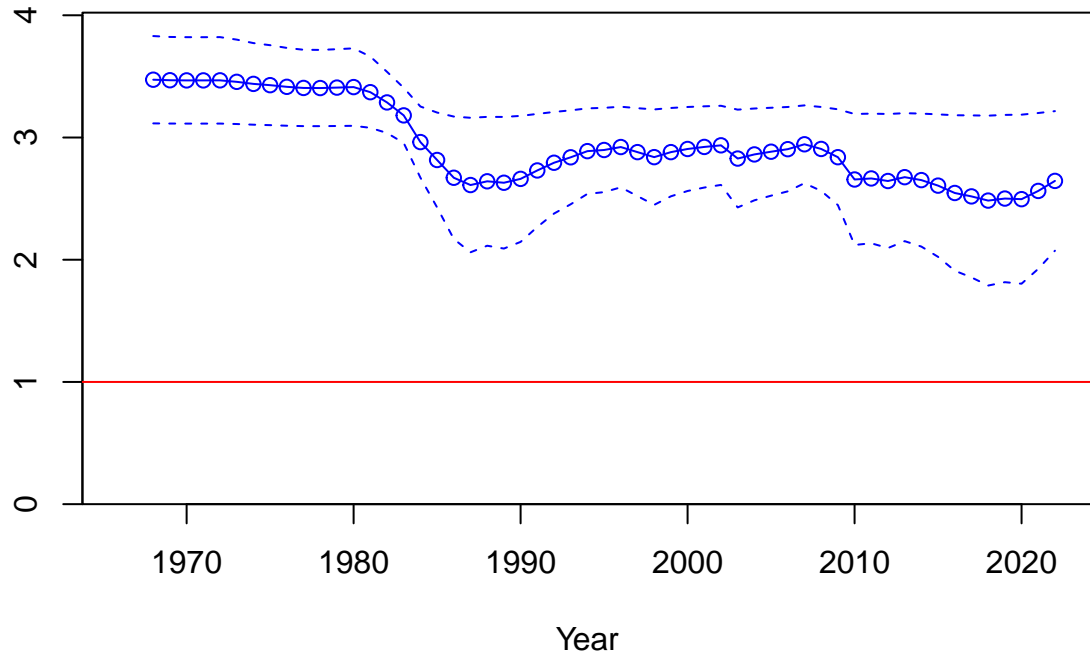


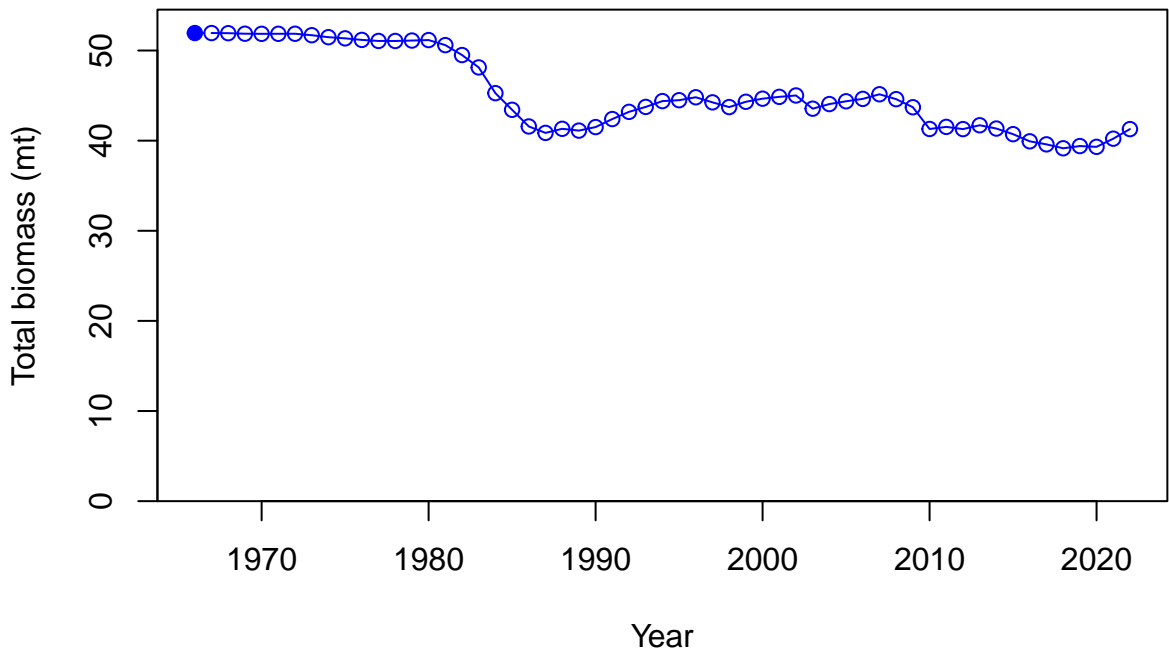
Relative spawning biomass:  $B/B_{MSY}$

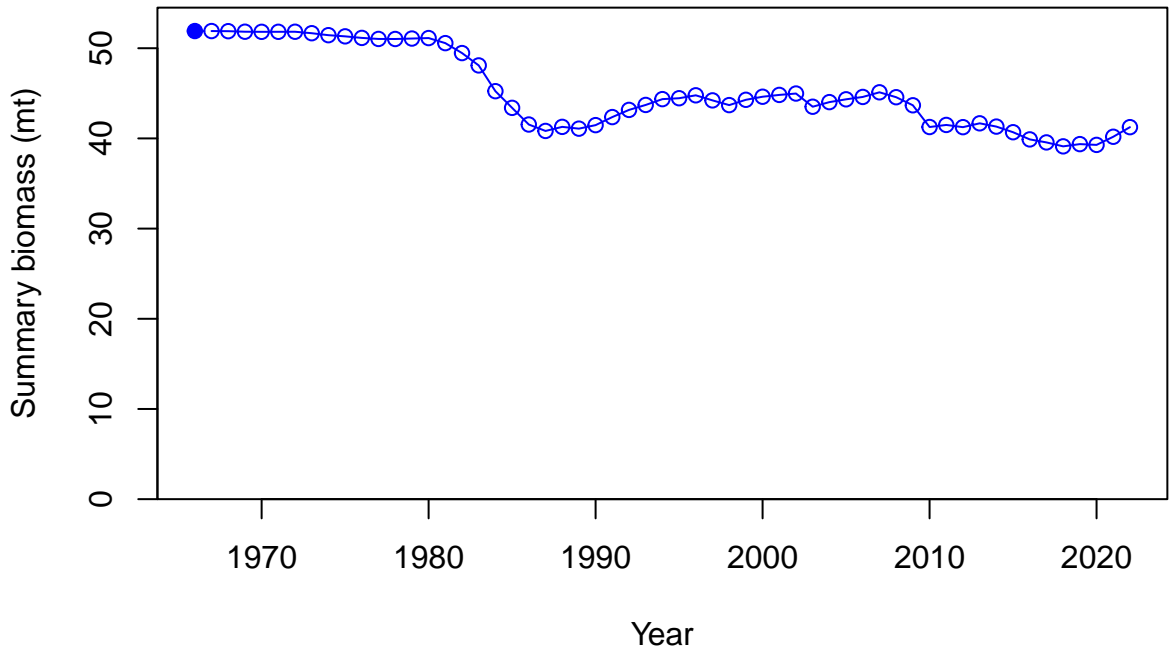




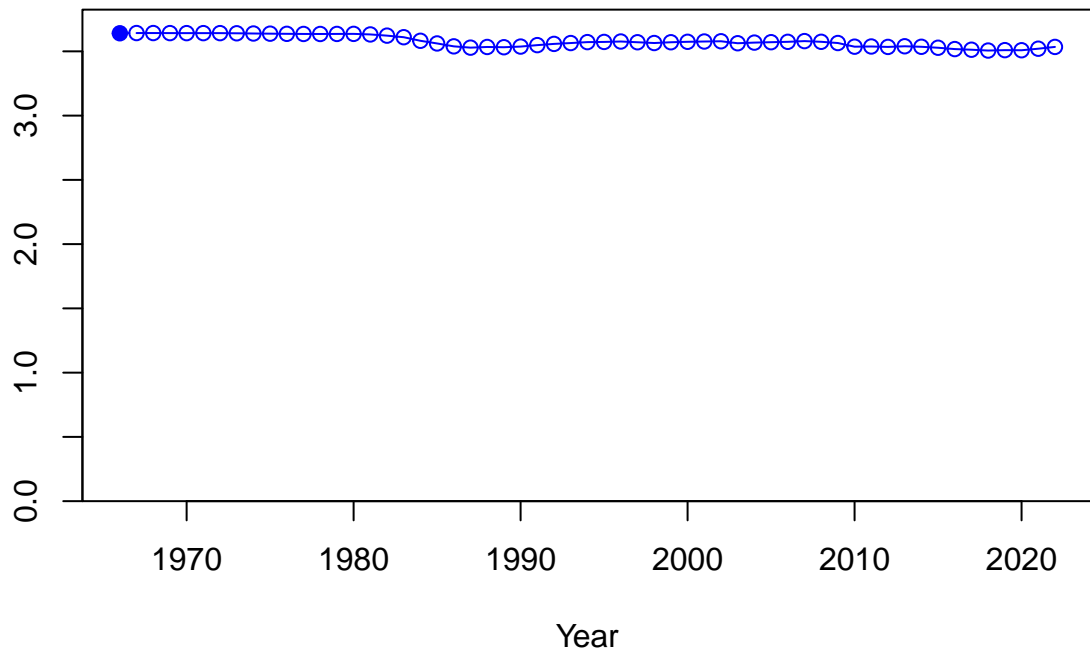
Relative spawning biomass:  $B/B_{MSY}$



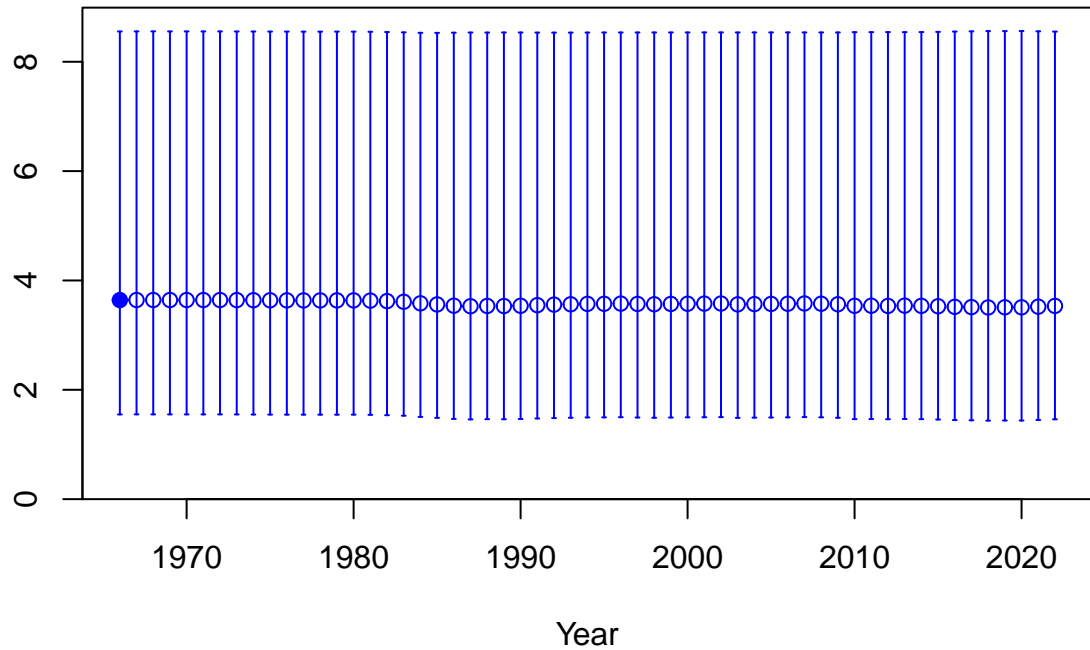




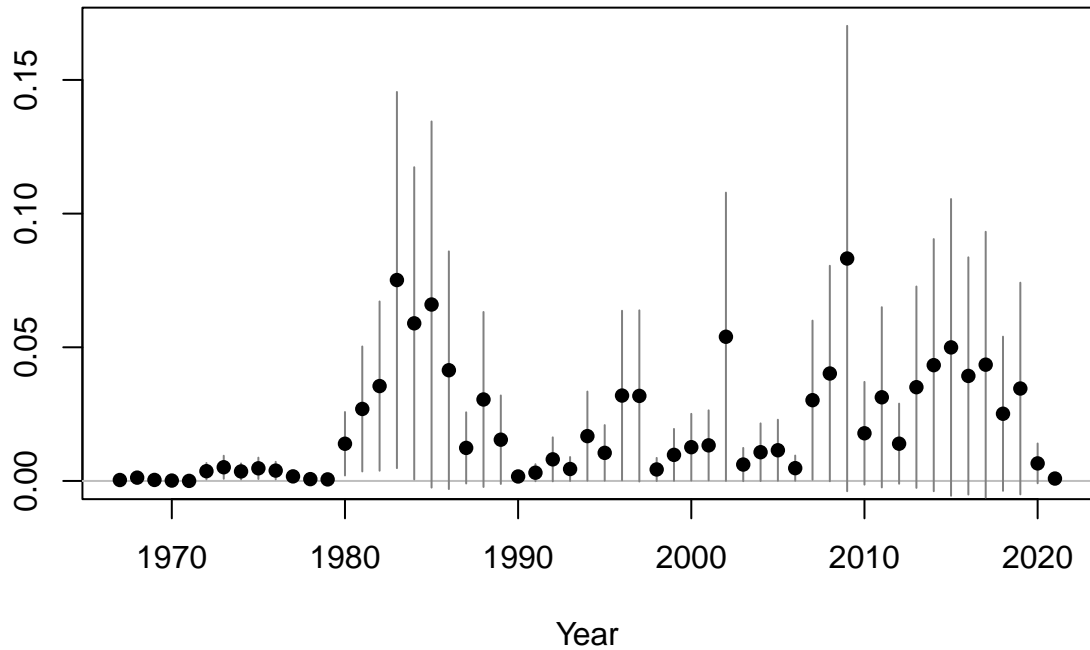
Age-0 recruits (1,000s)

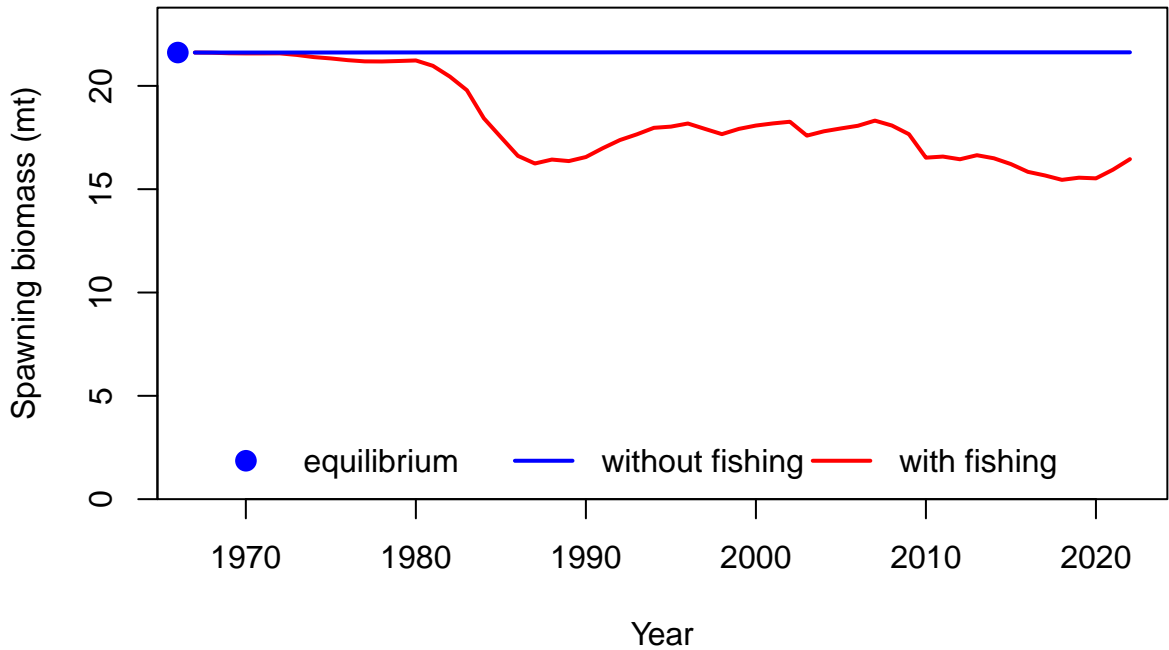


Age-0 recruits (1,000s)

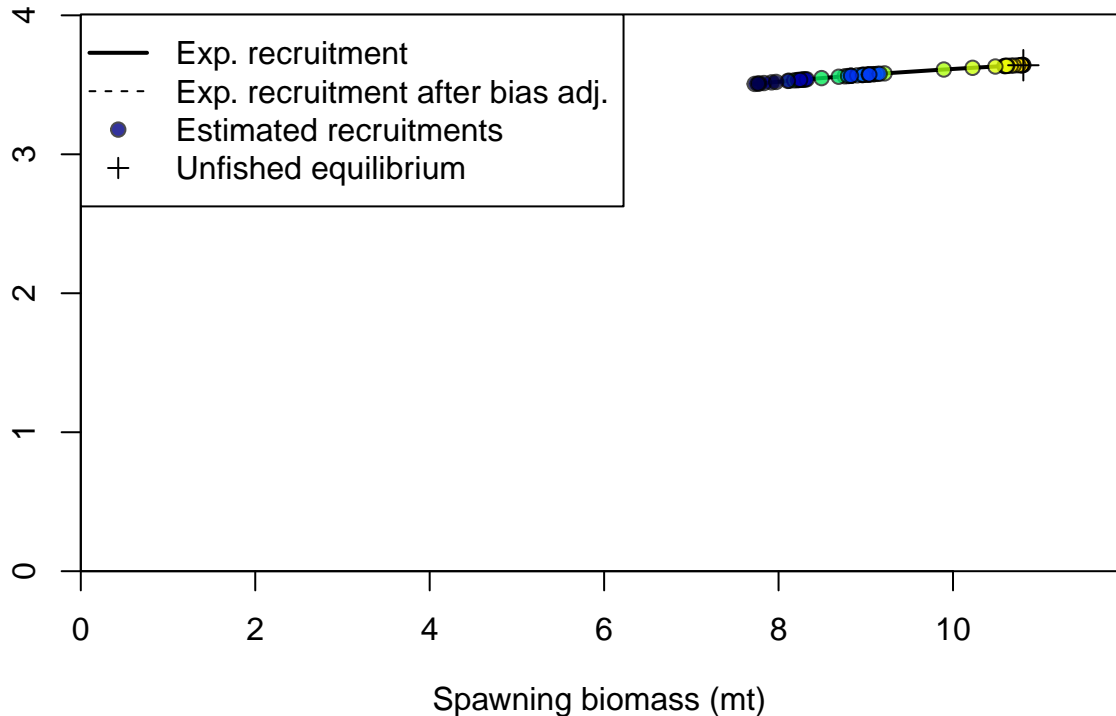


Summary Fishing Mortality



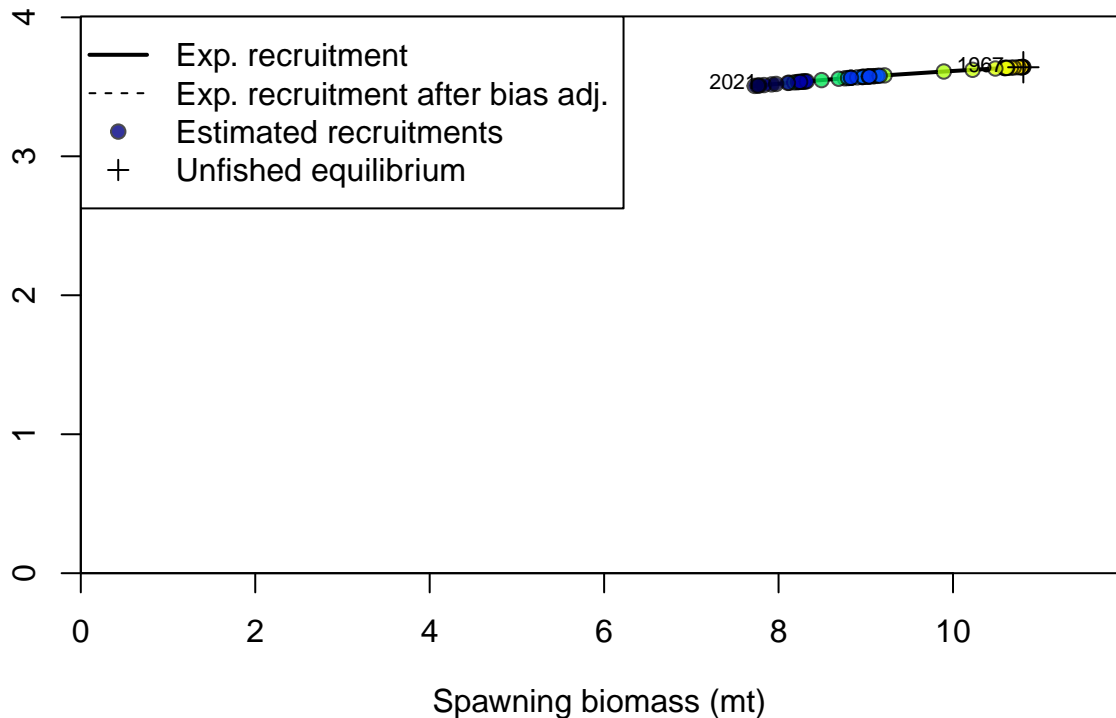


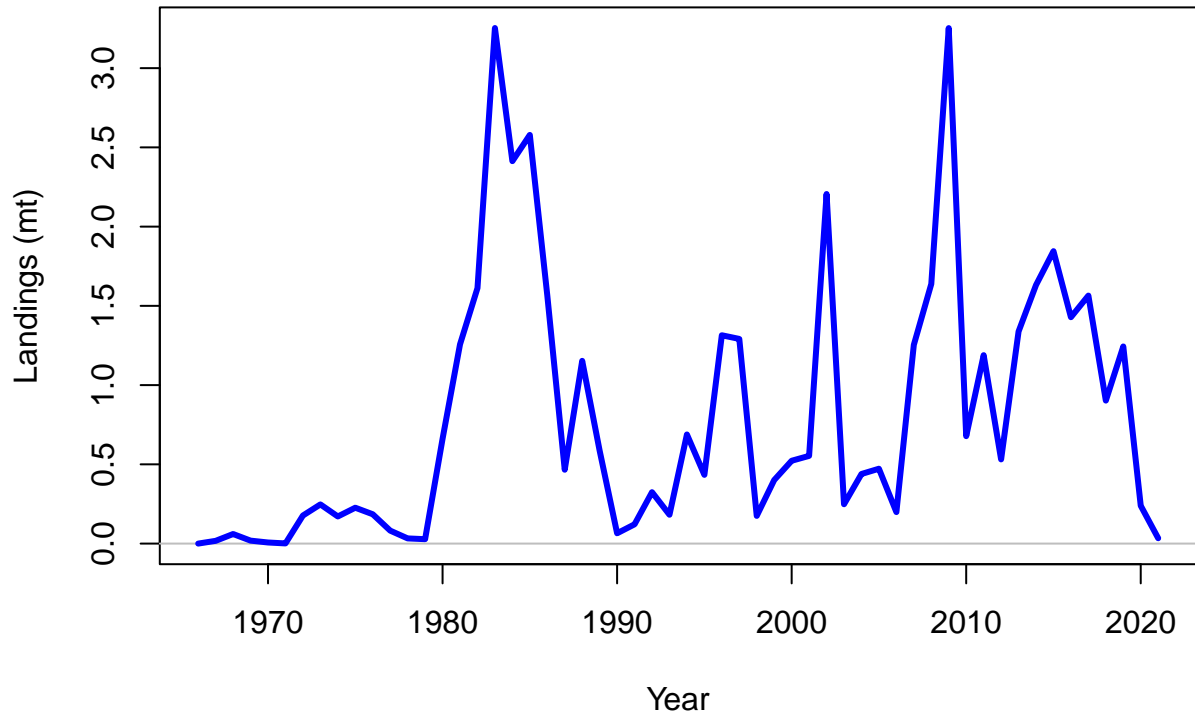
Recruitment (1,000s)

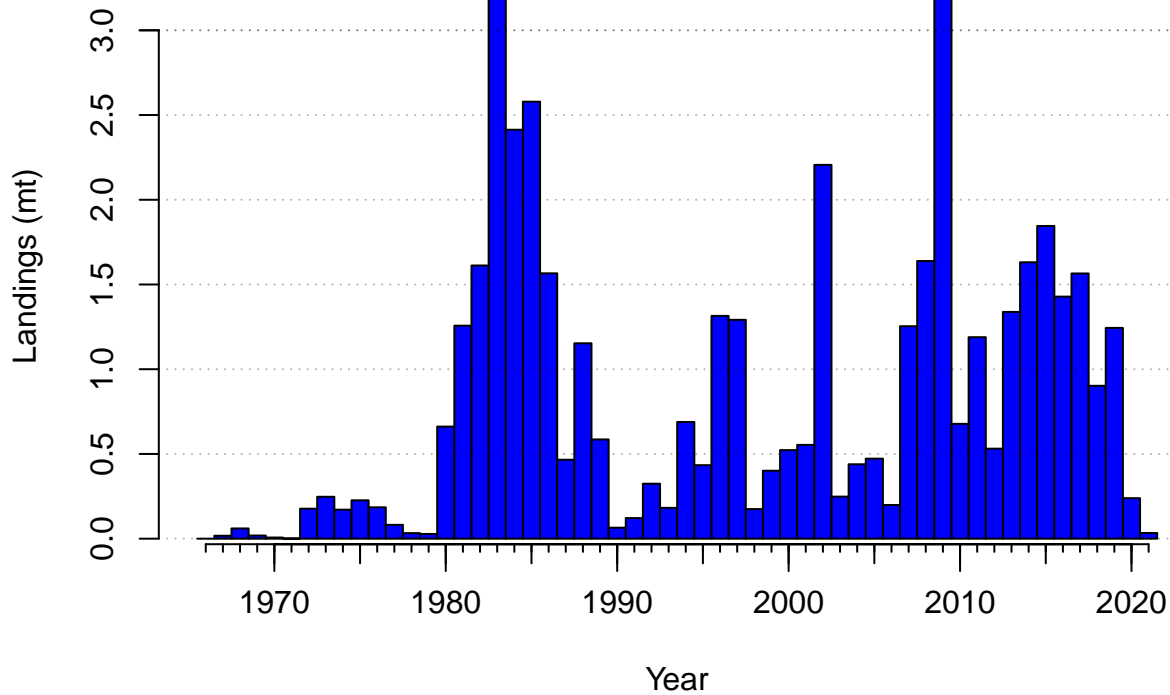


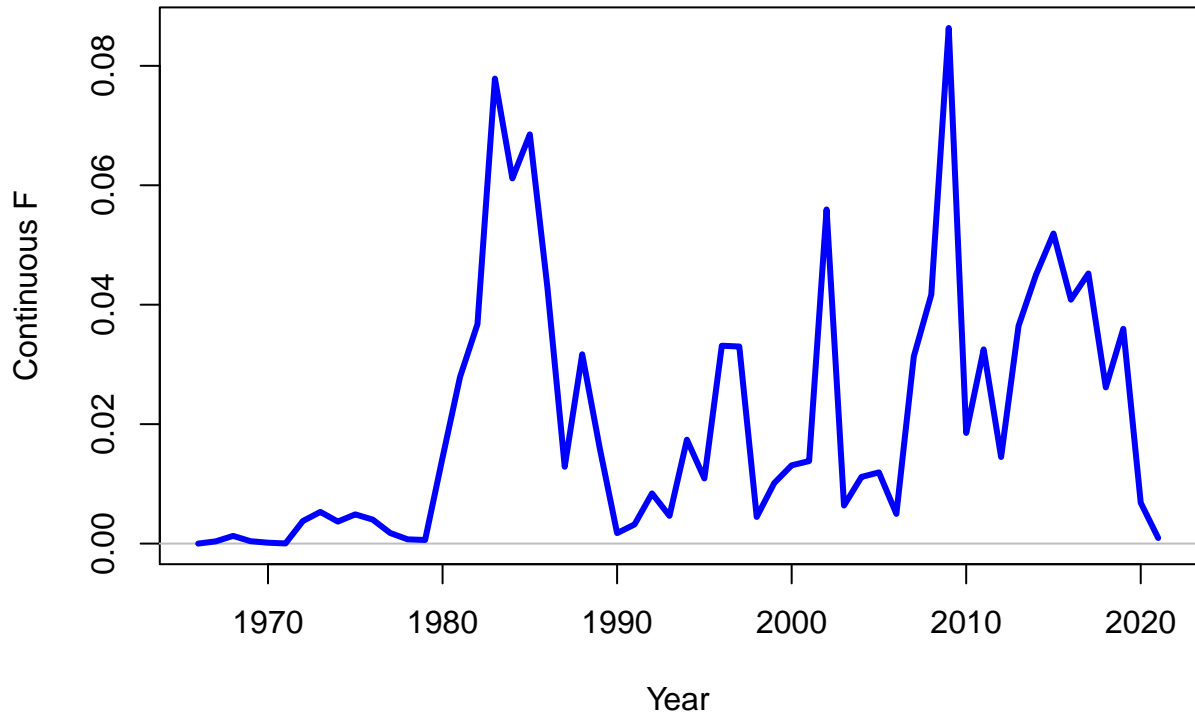


Recruitment (1,000s)

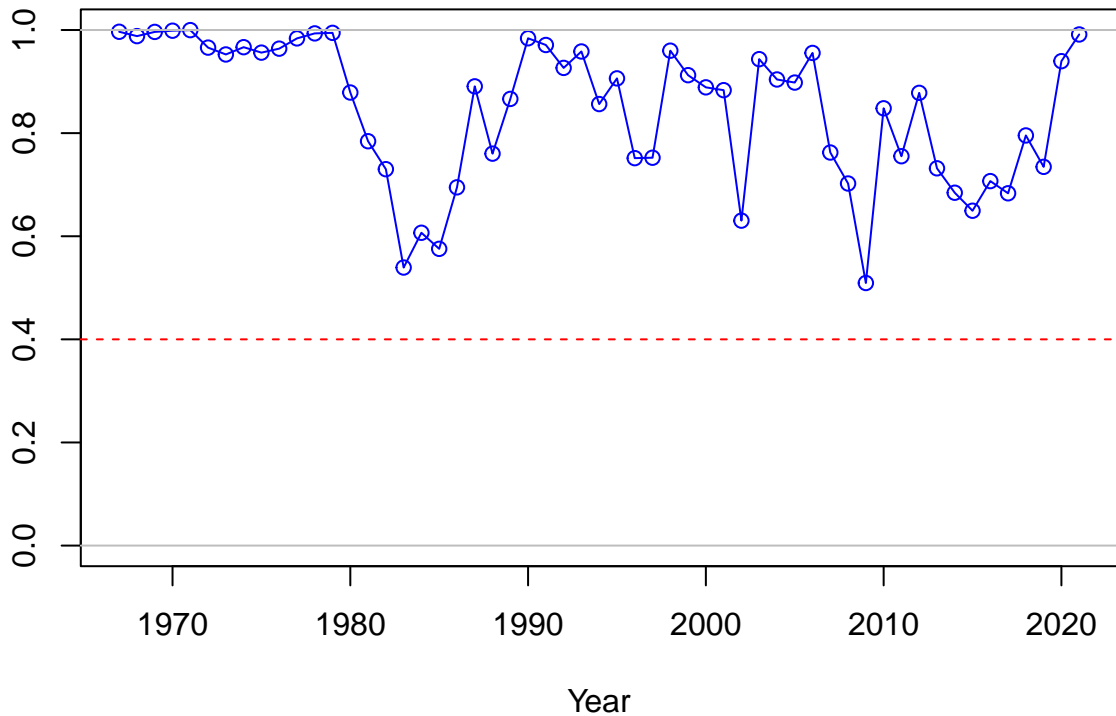




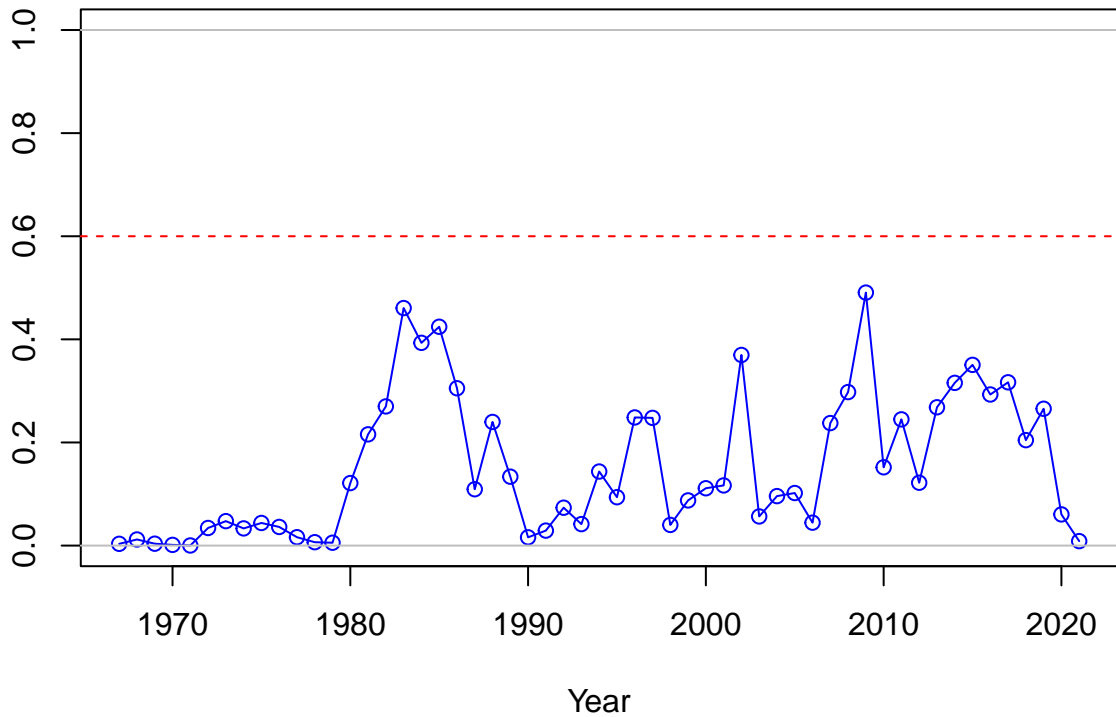




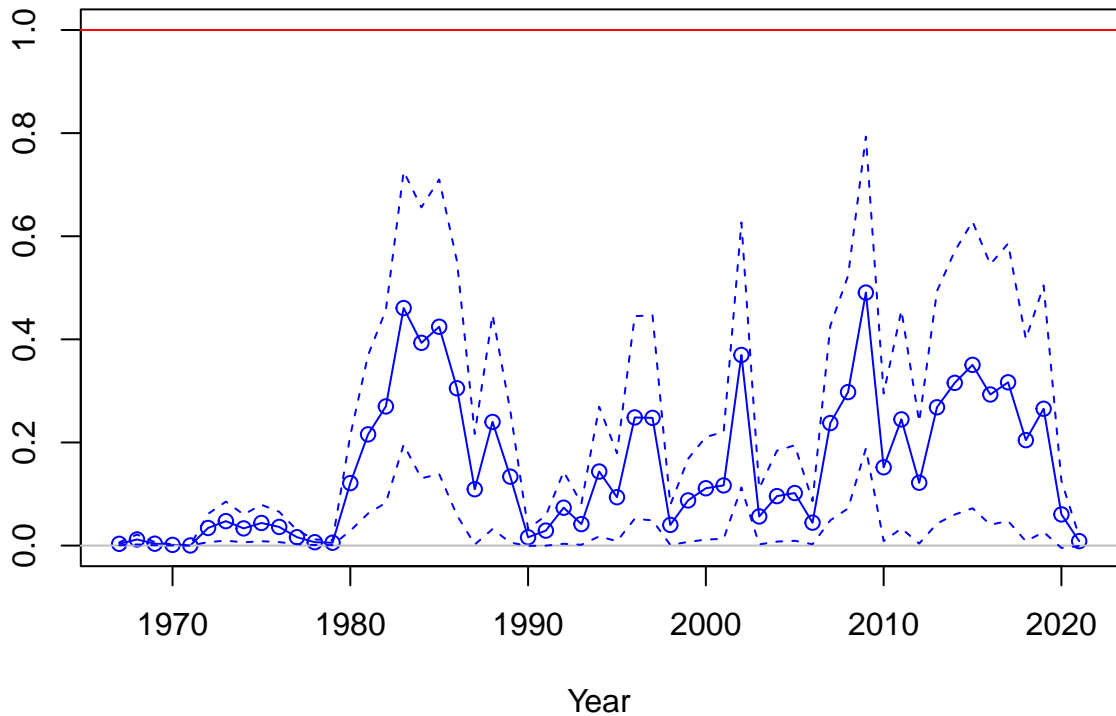
SPR



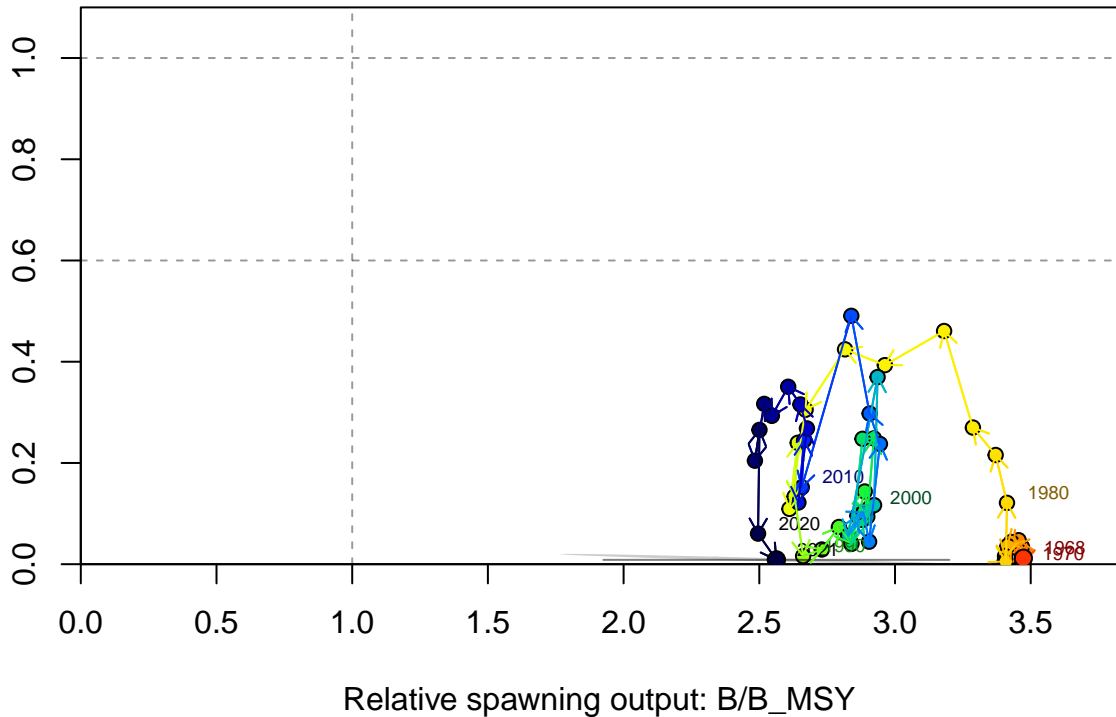
1-SPR



Fishing intensity: 1-SPR

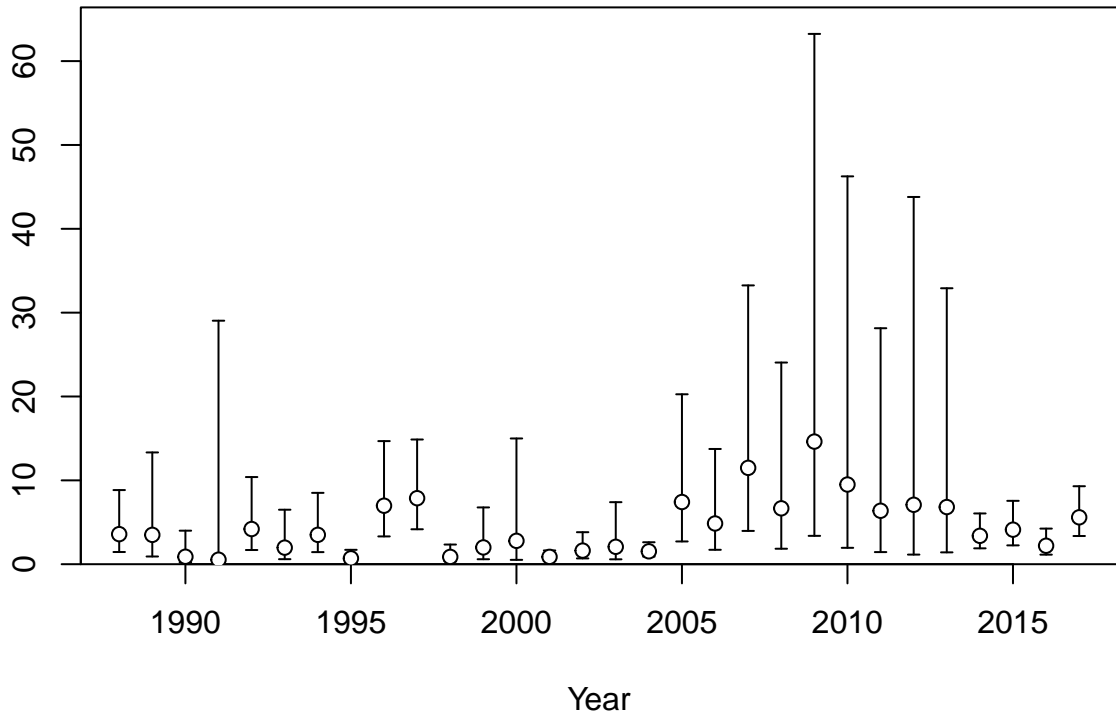


Fishing intensity: 1-SPR

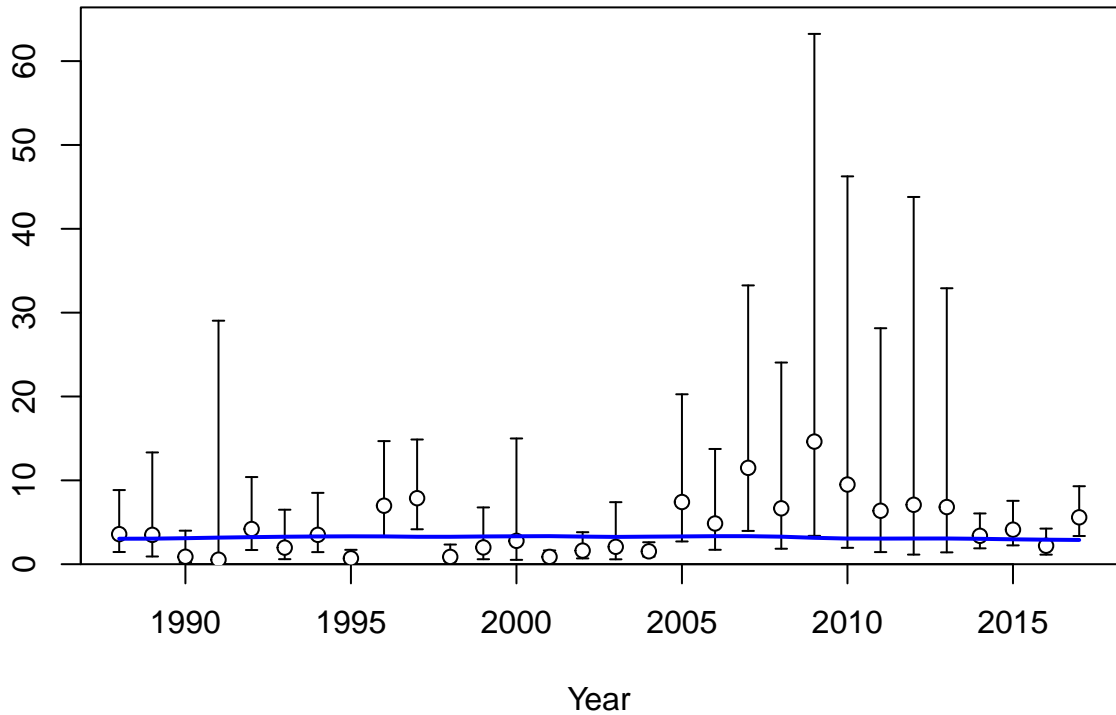


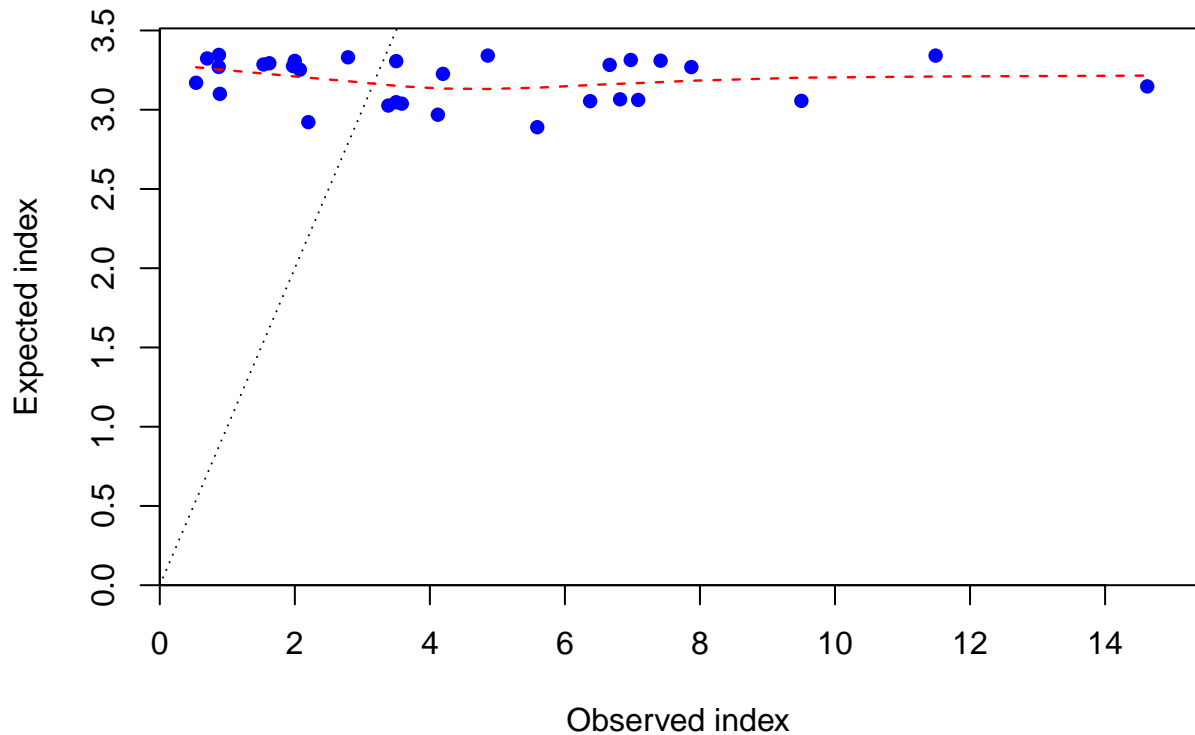


Index



Index





Log index

4  
2  
0  
-2  
-4

1990

1995

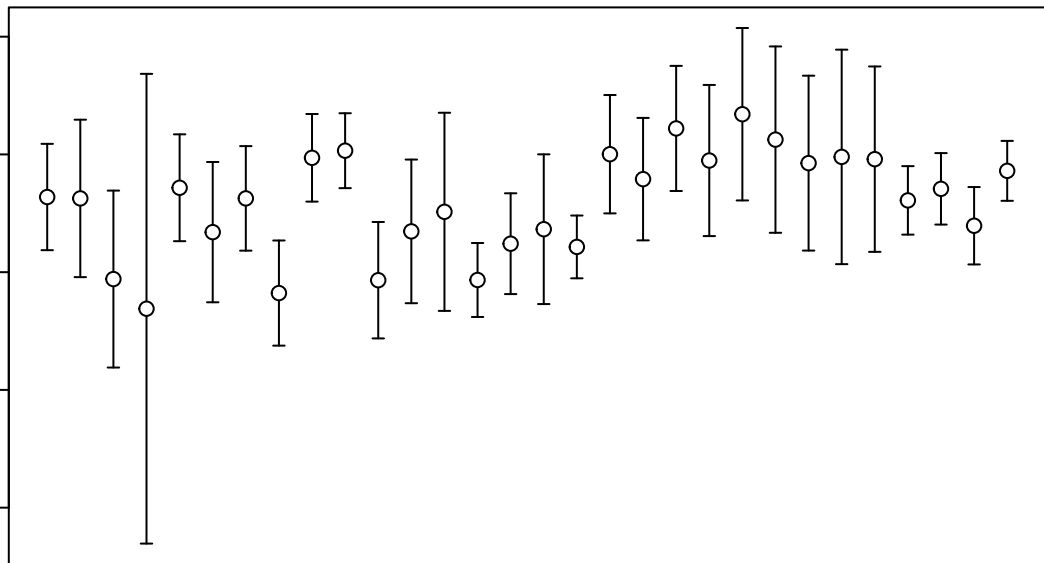
2000

2005

2010

2015

Year



Log index

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2  
0  
-2  
-4

1990

1995

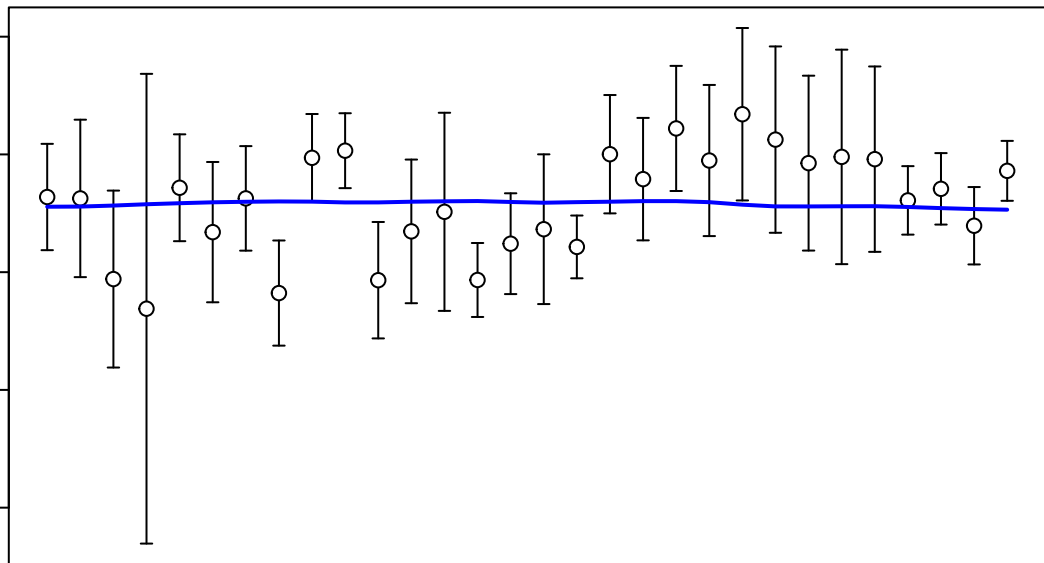
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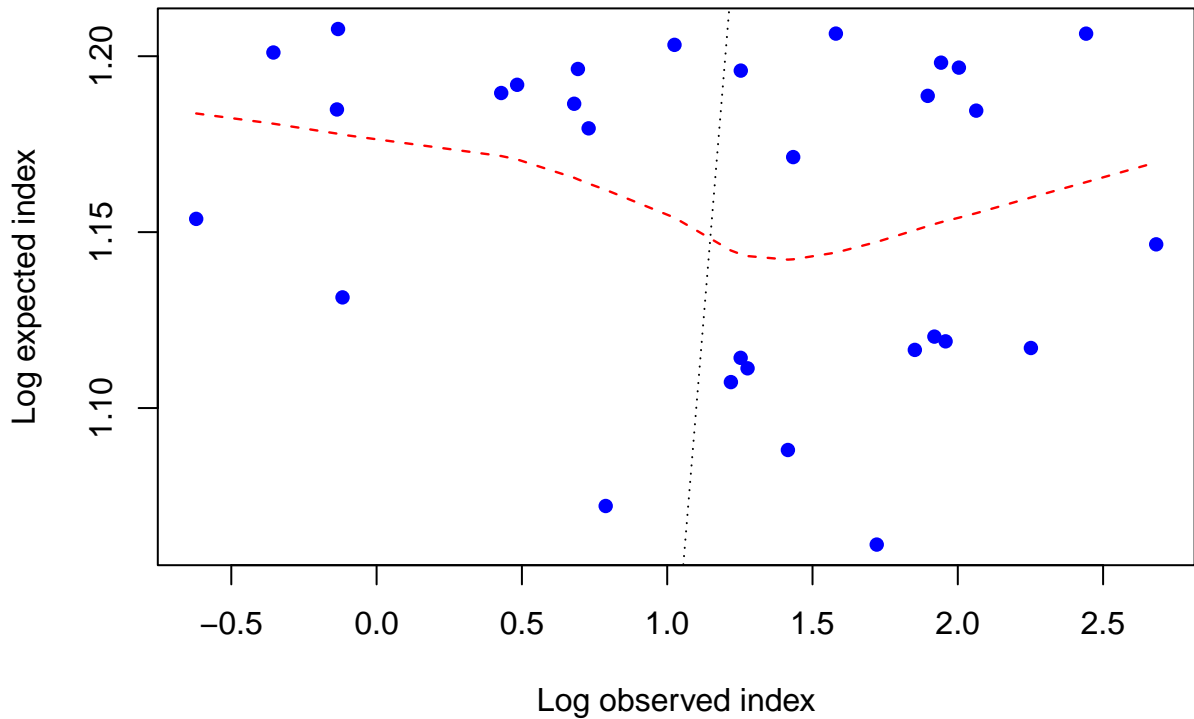
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2010

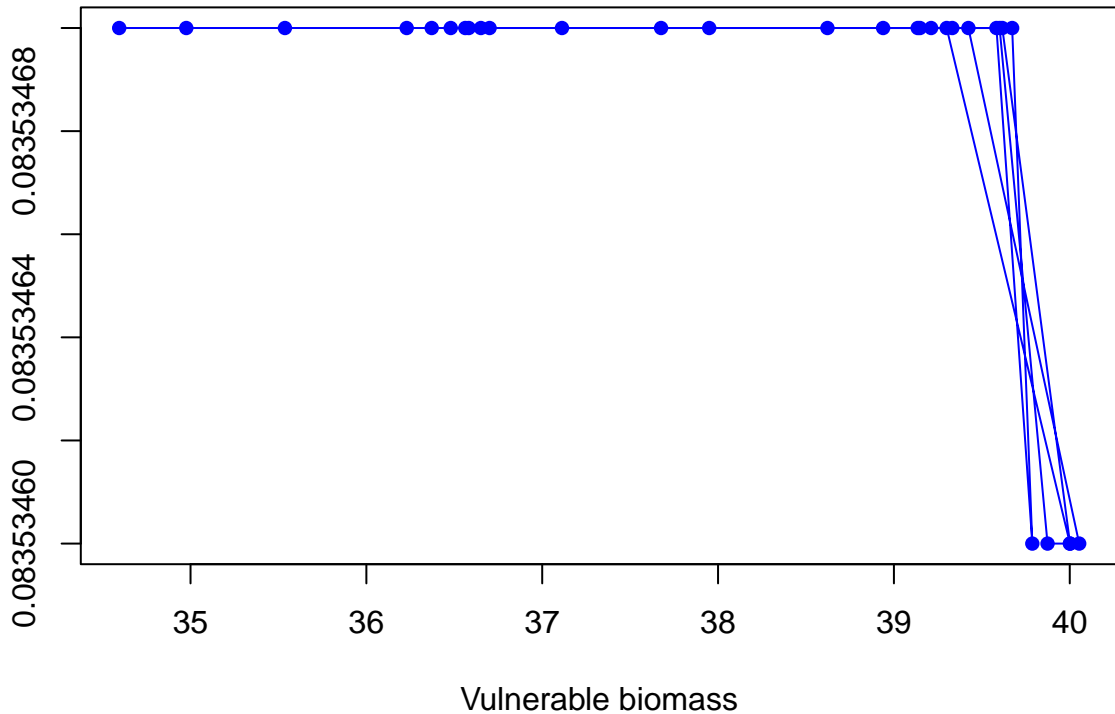
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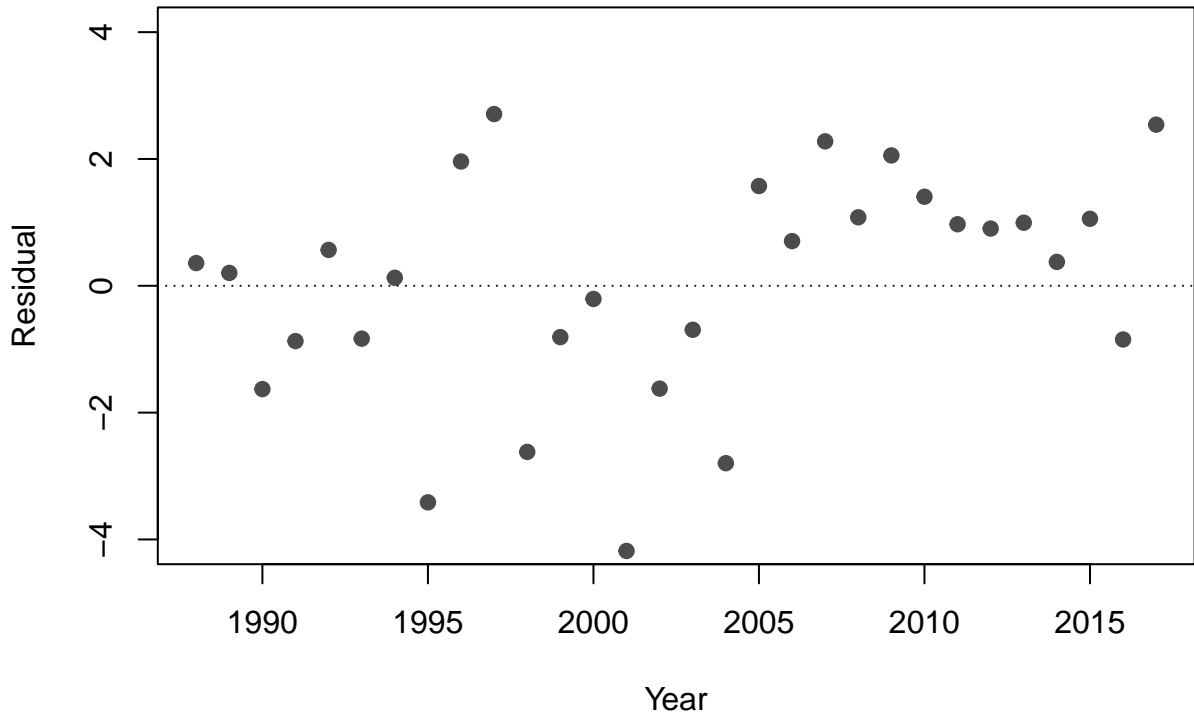
Year



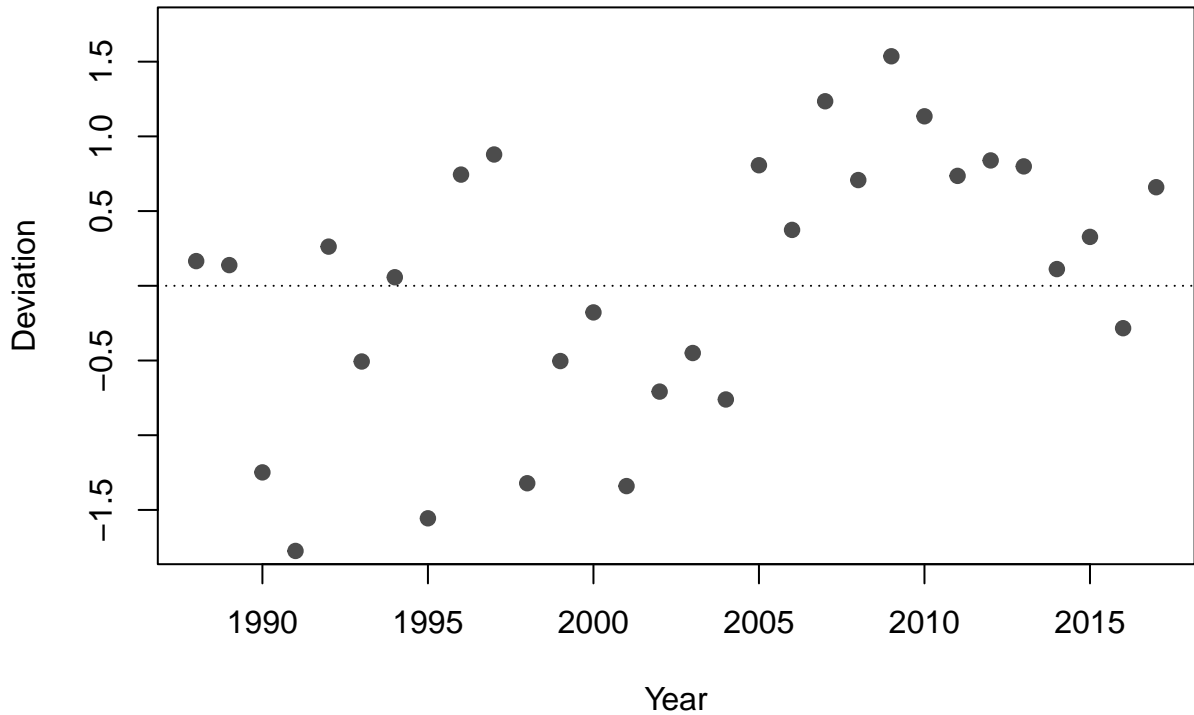


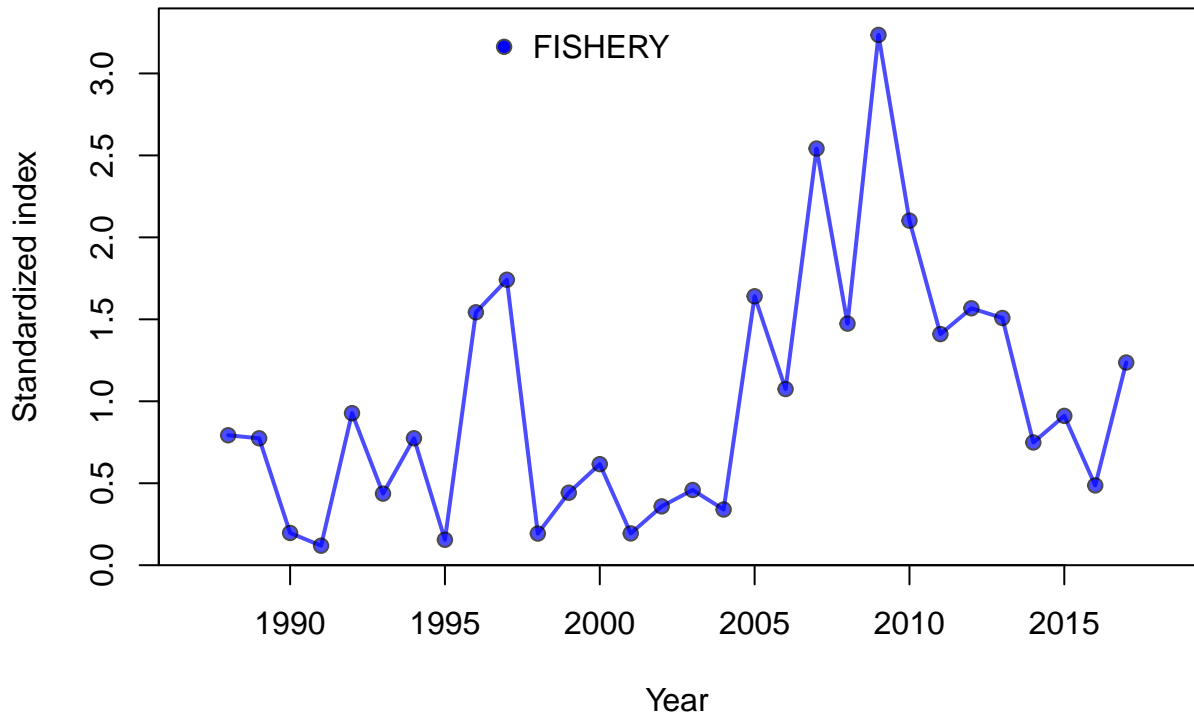
Effective catchability

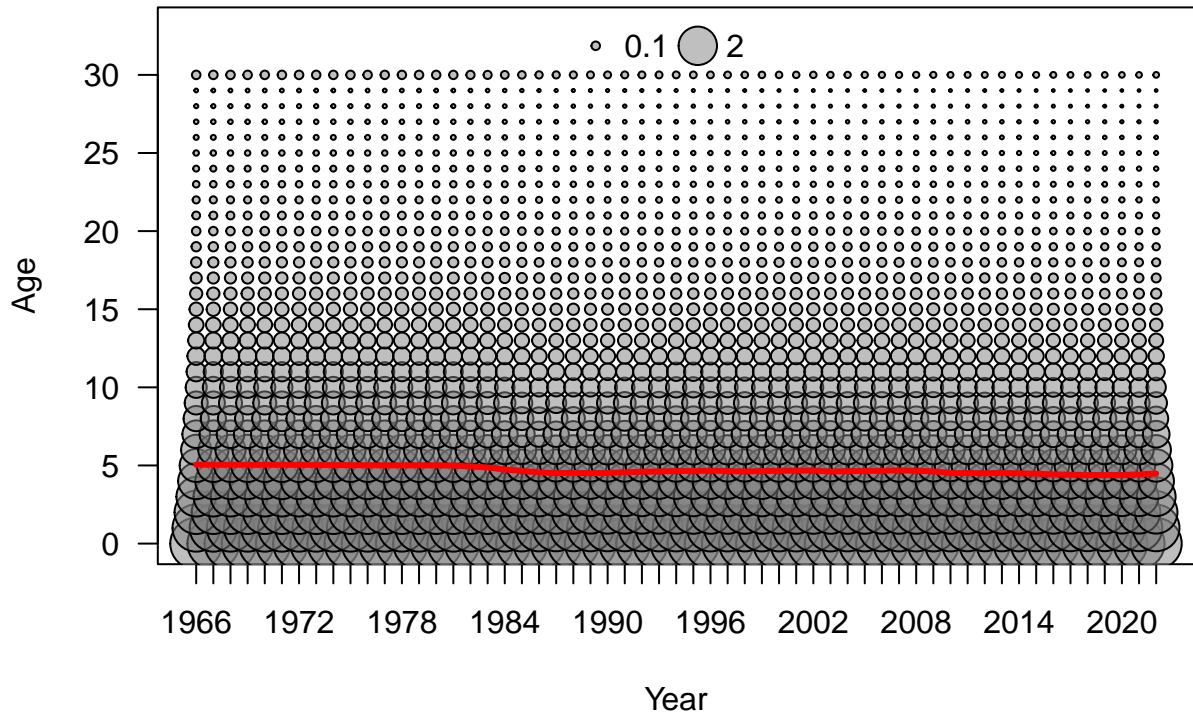


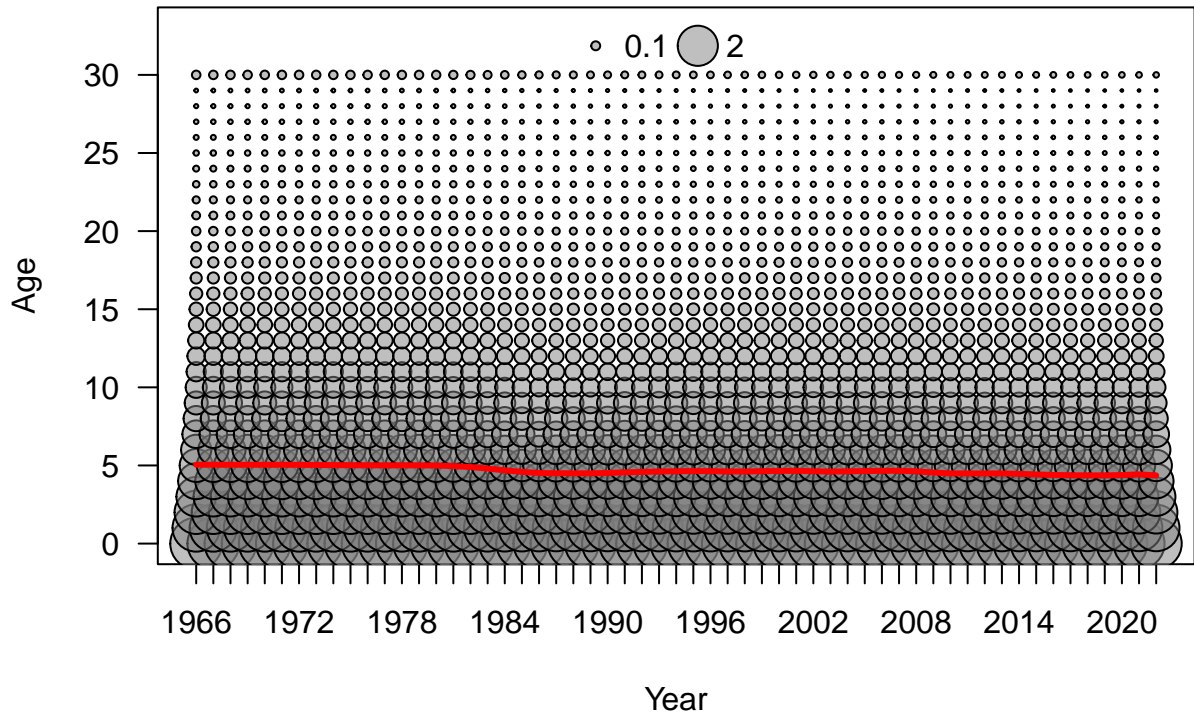


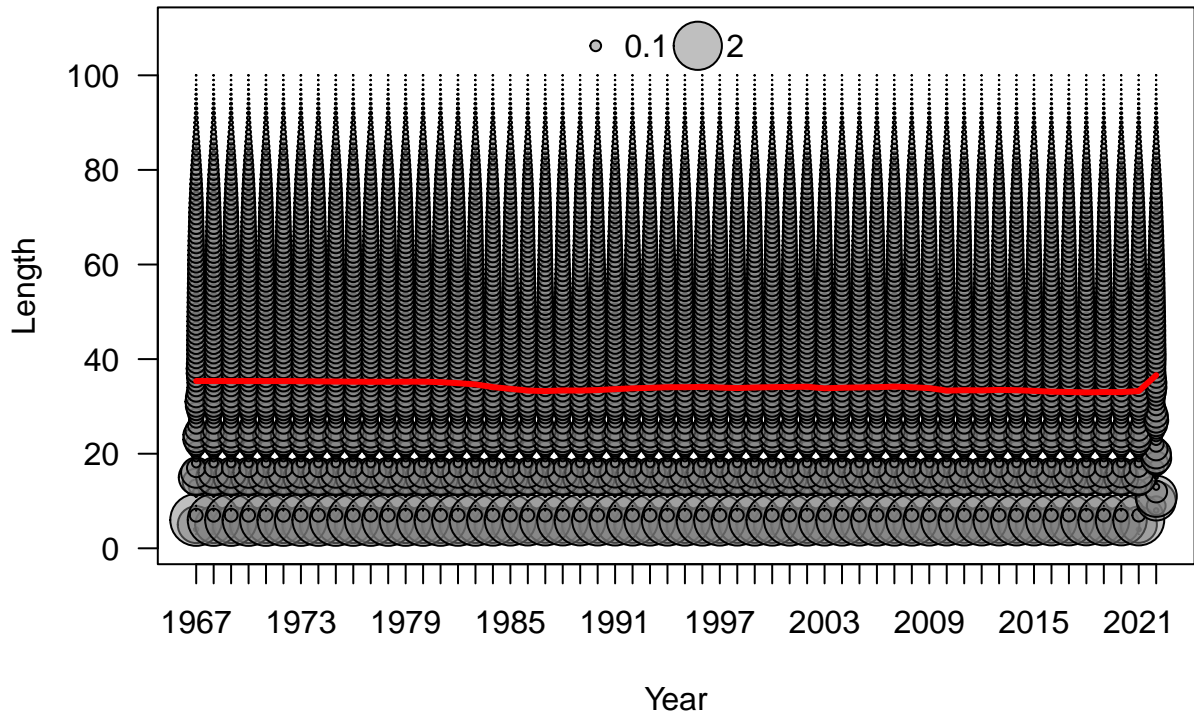


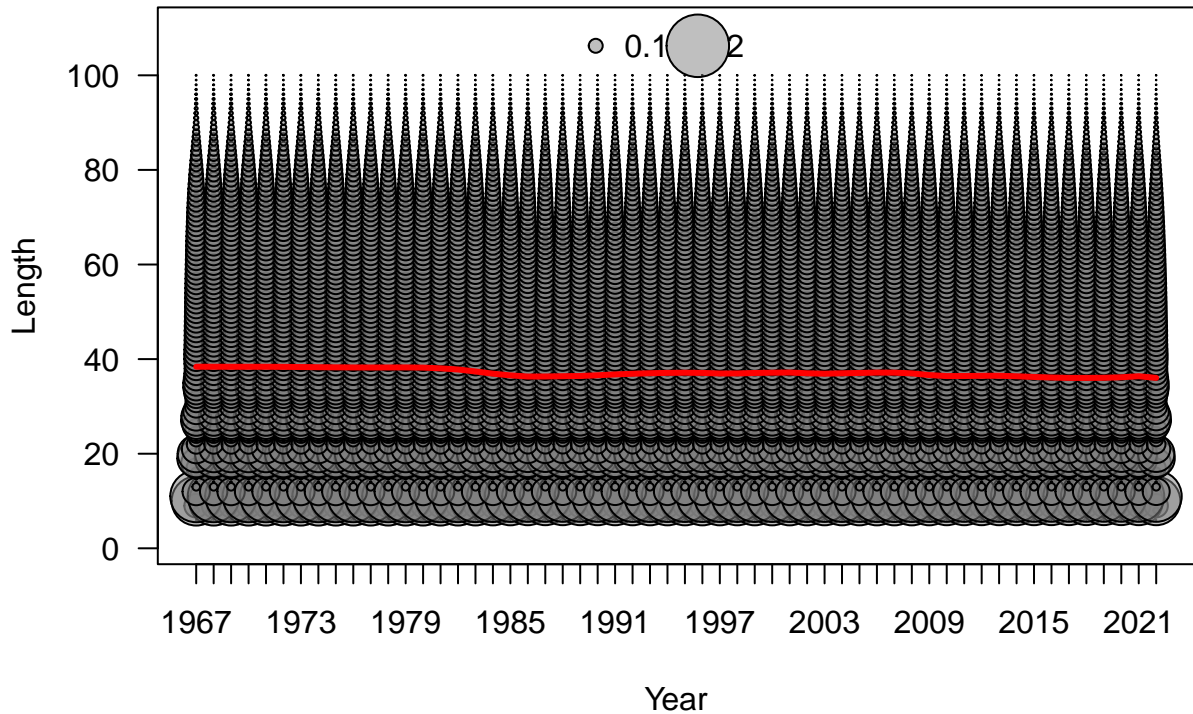


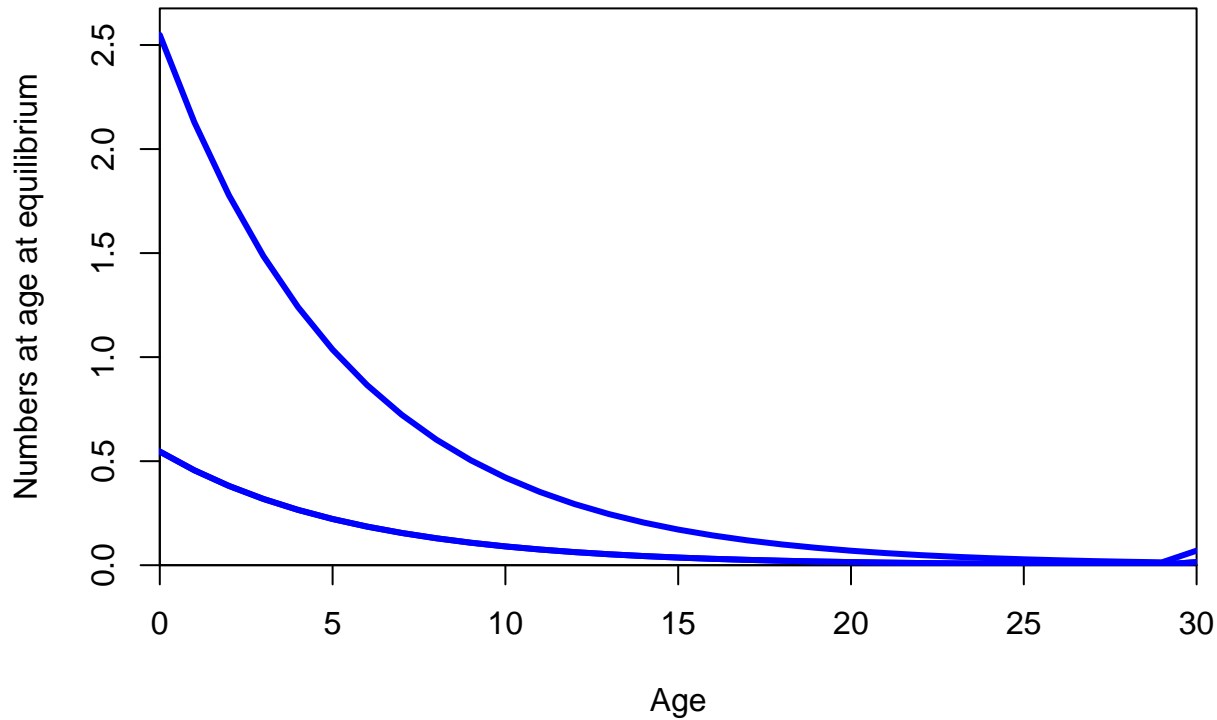






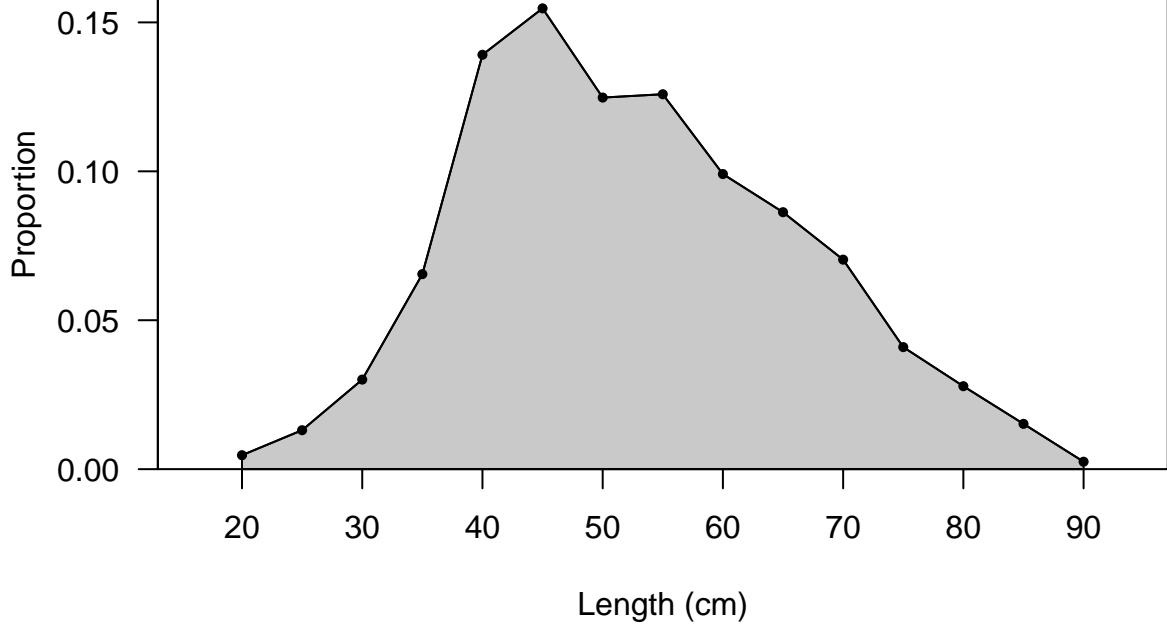






**FISHERY**

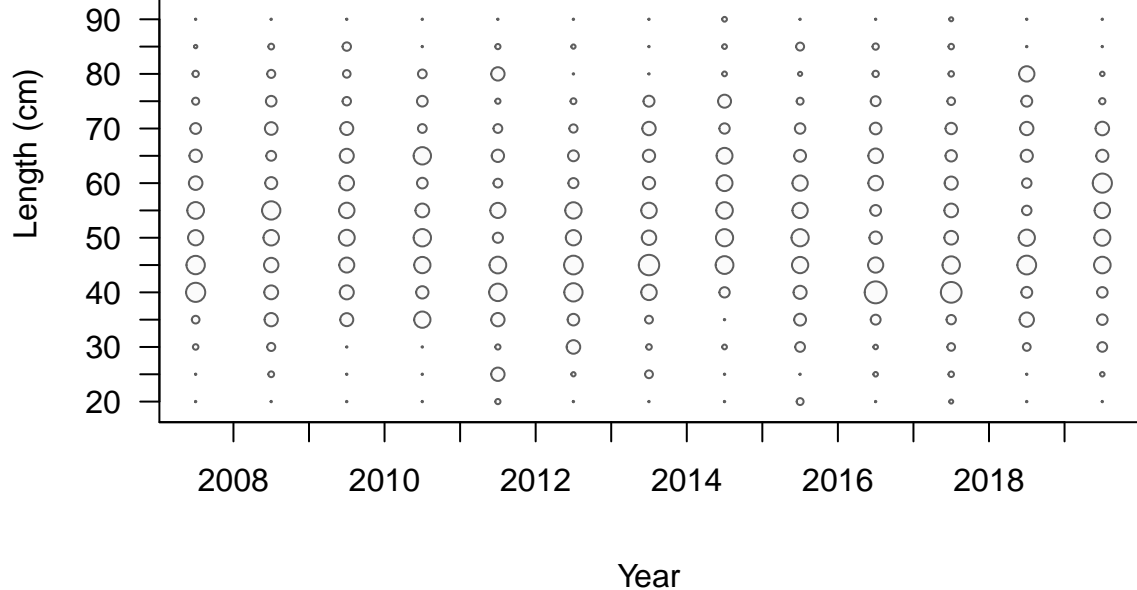
Sum of N input=1078



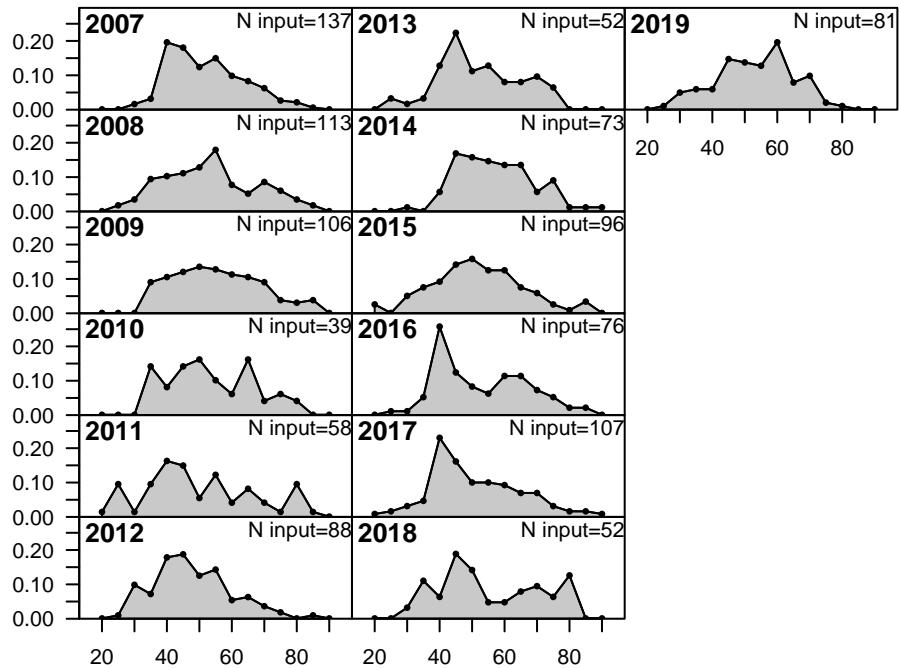


# FISHERY

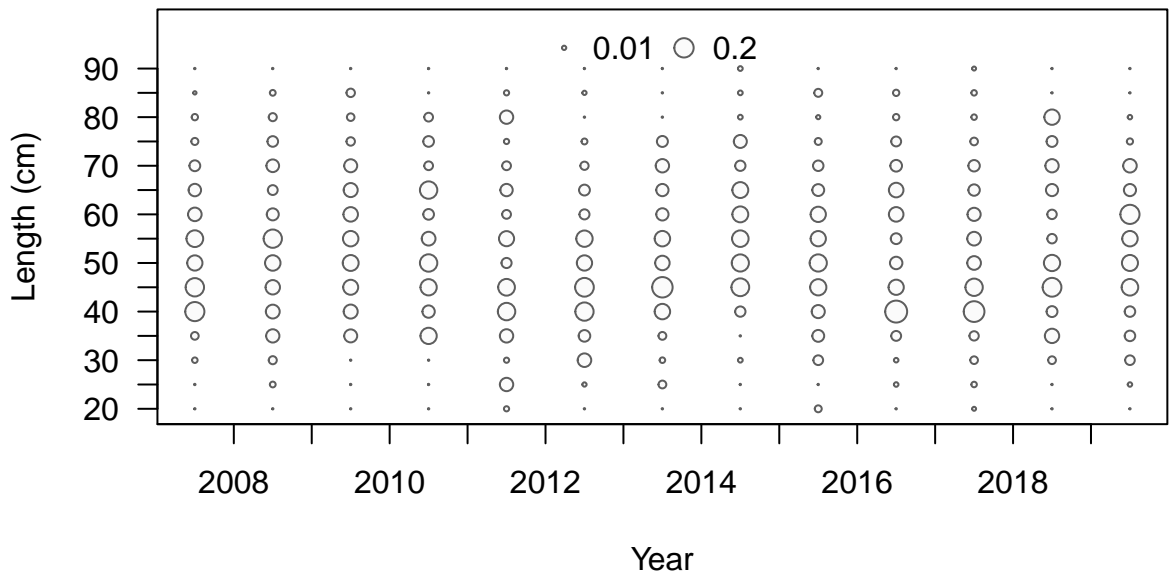
◦ 0.01 ○ 0.2



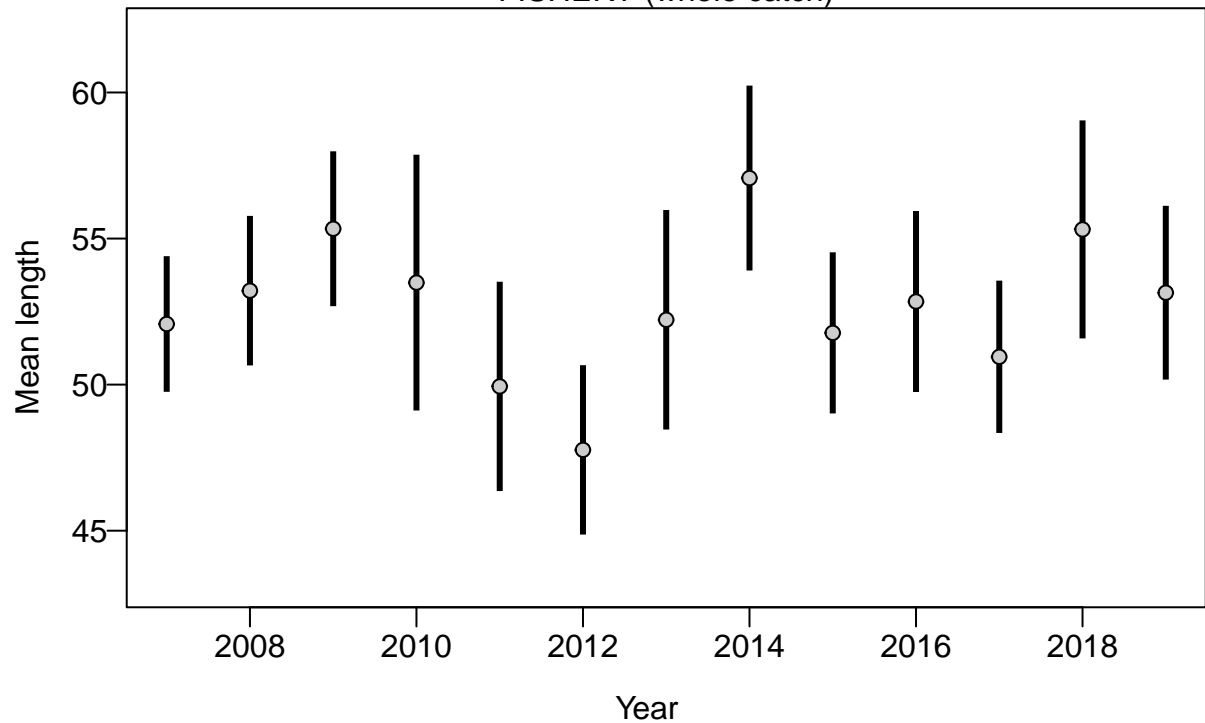
Proportion



Length (cm)

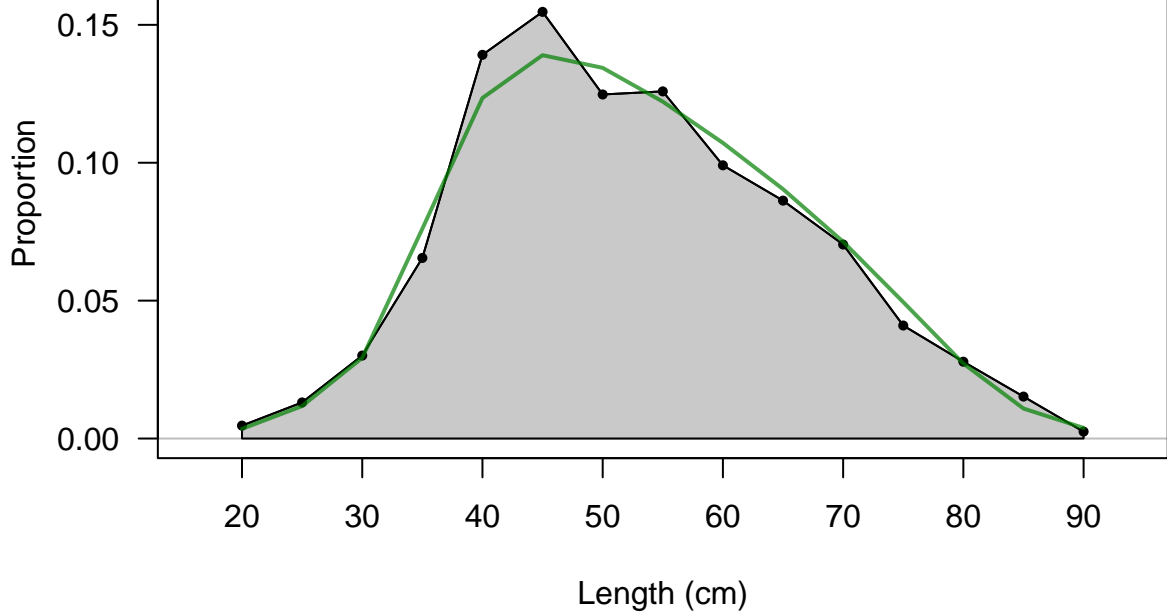


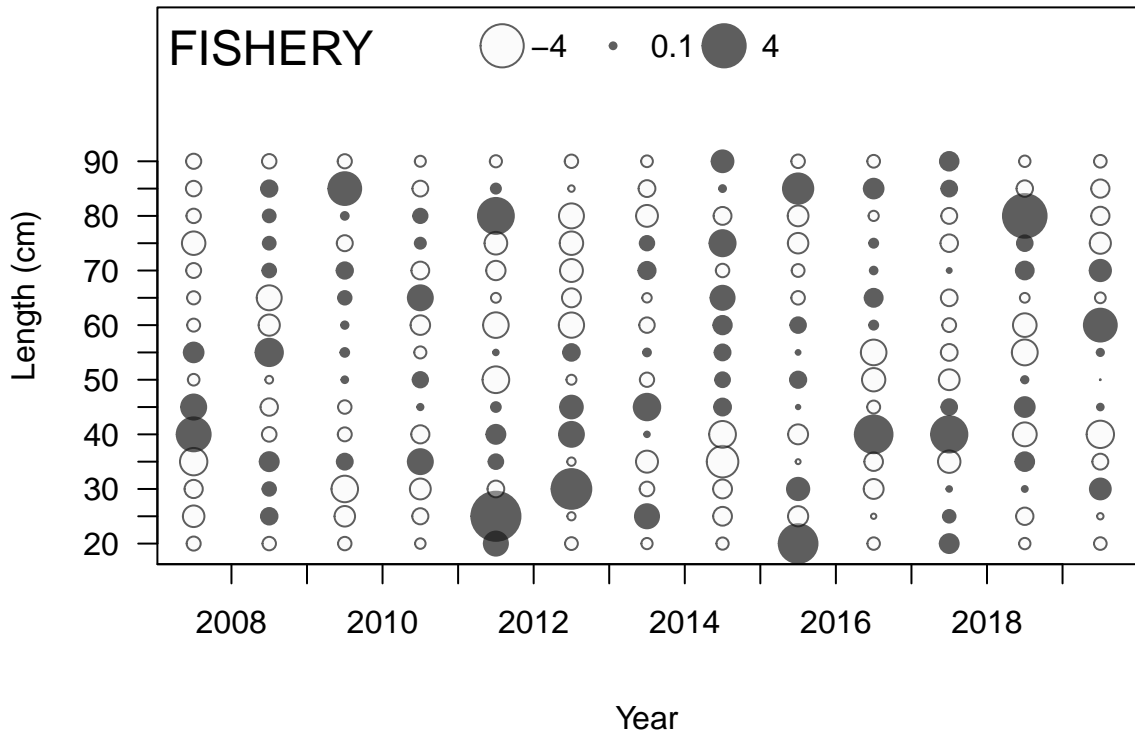
FISHERY (whole catch)



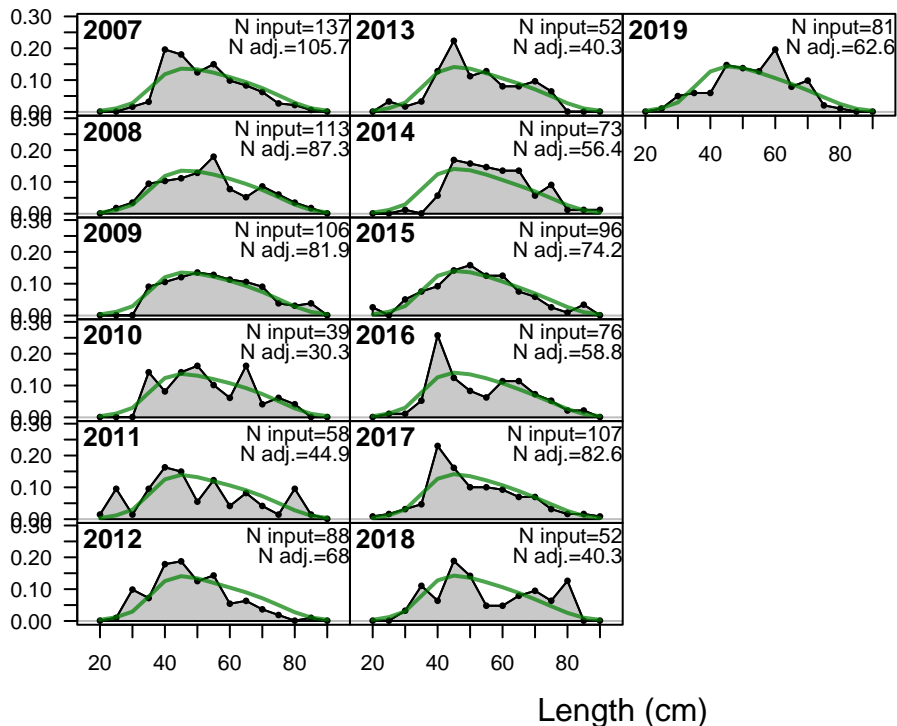
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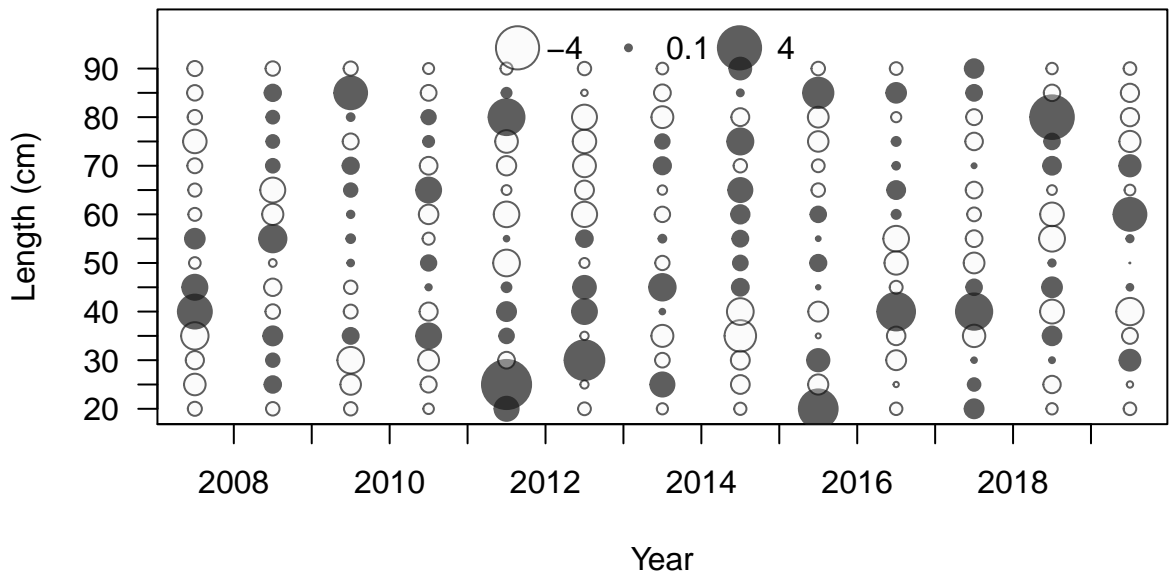
Sum of N input=1078  
Sum of N adj.=833.2





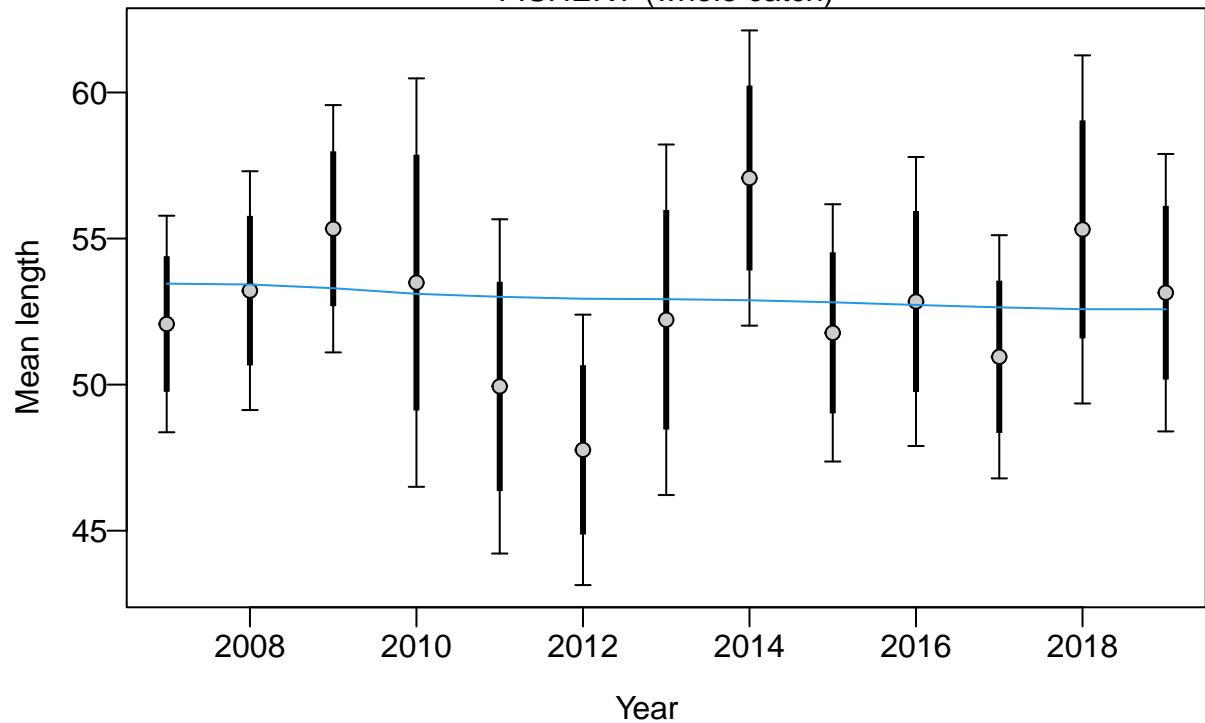
Proportion

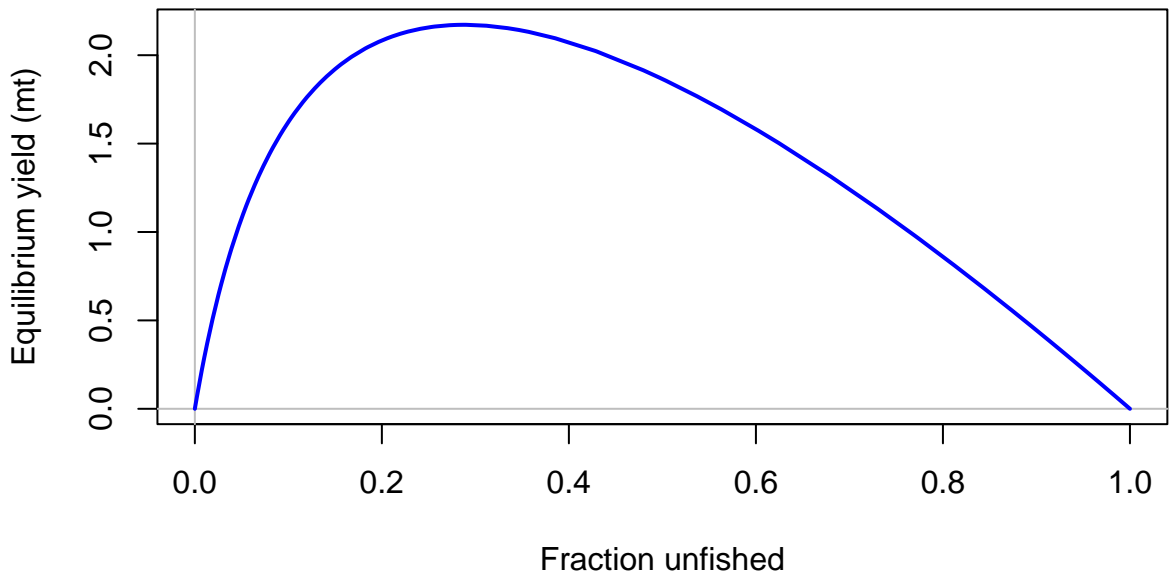


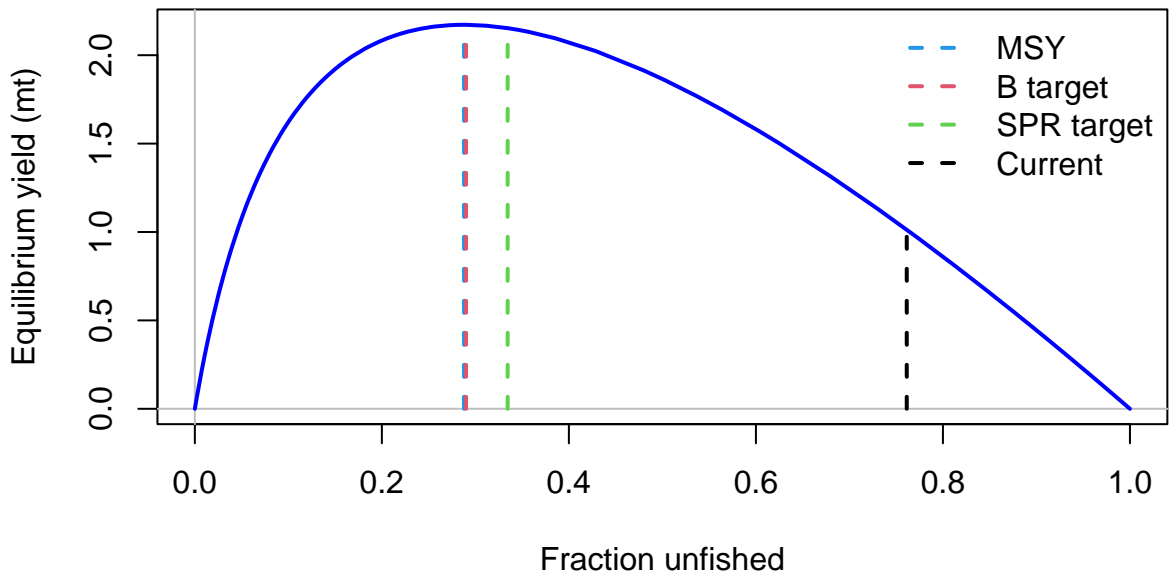


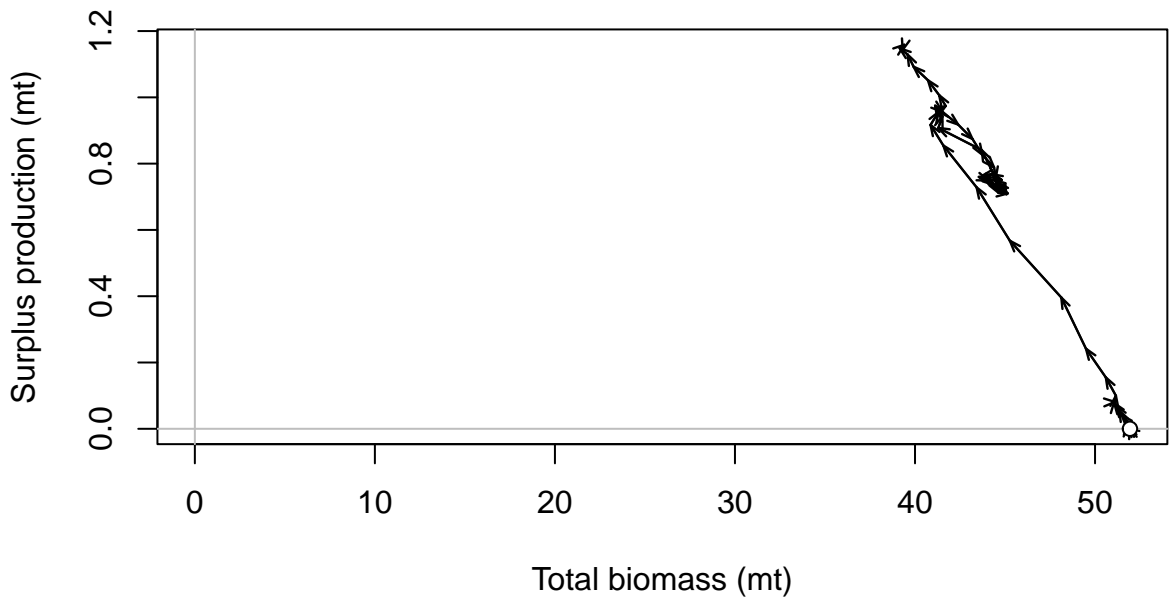


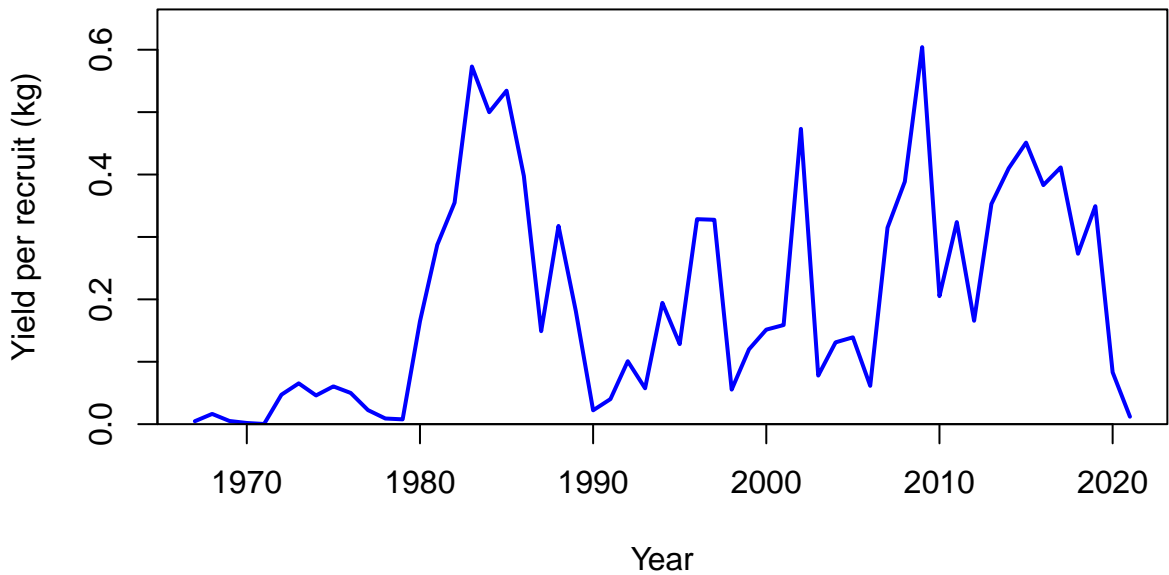
FISHERY (whole catch)

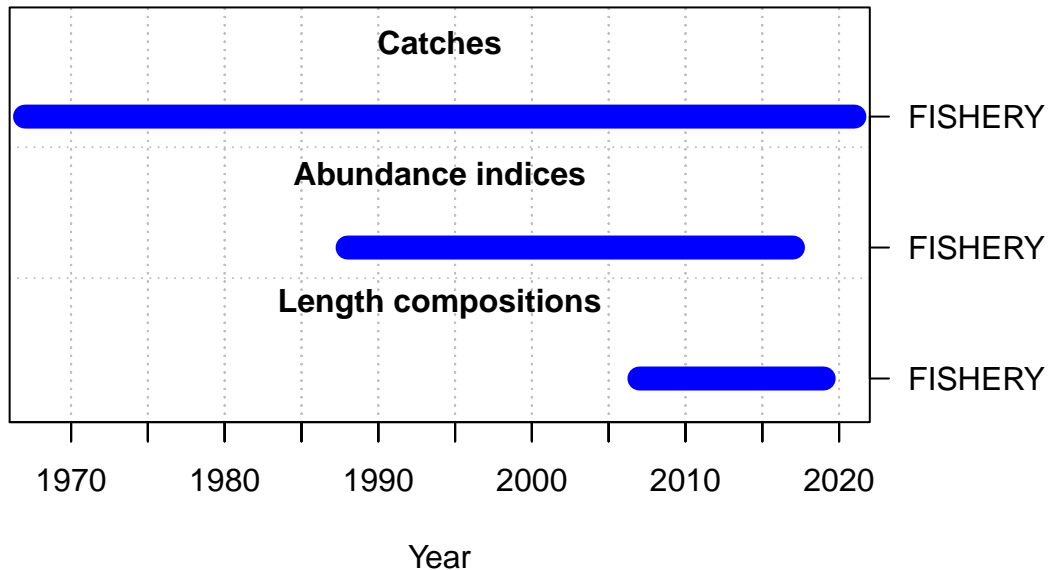


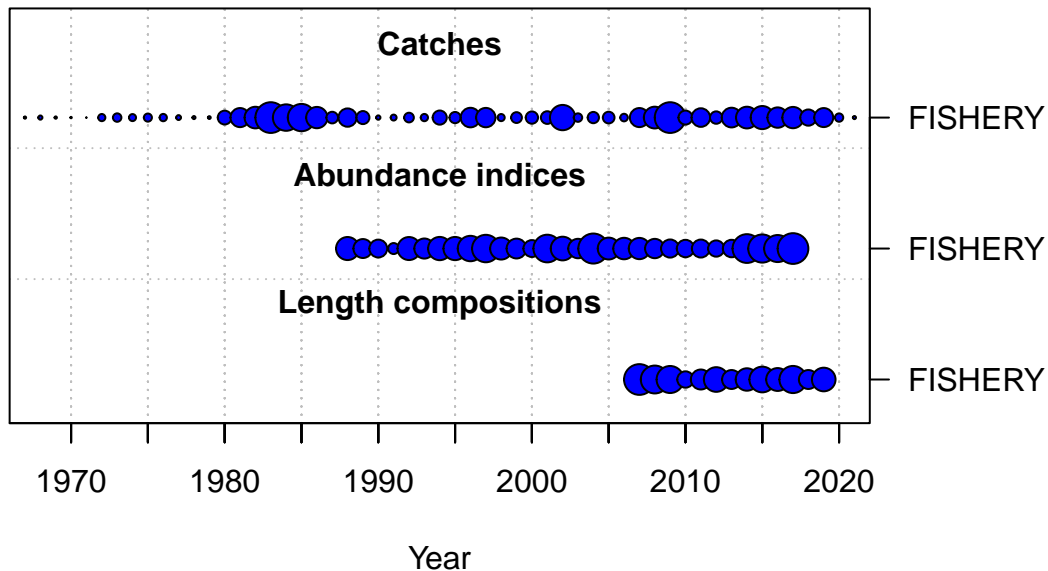


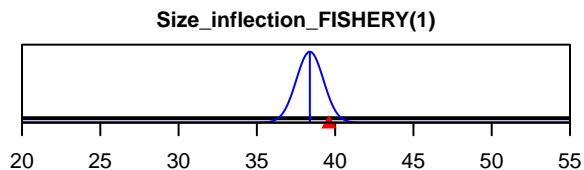
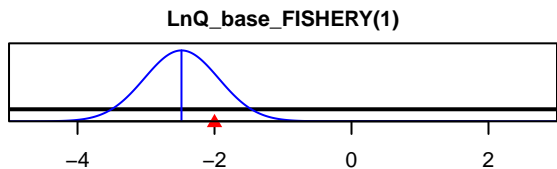
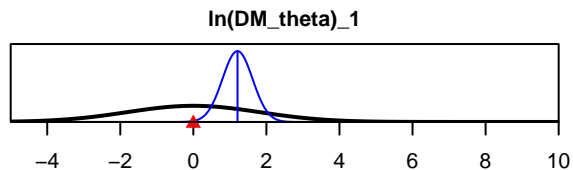
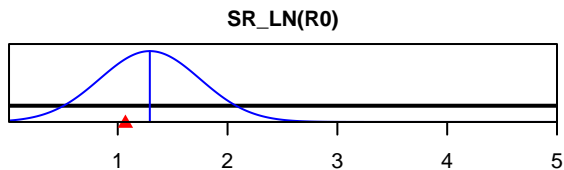
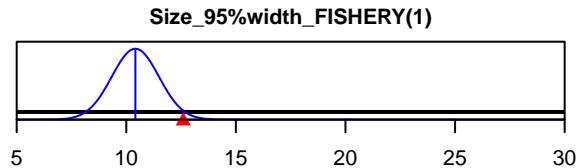
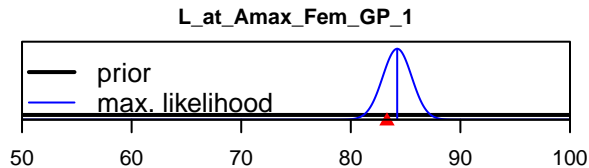












Parameter value