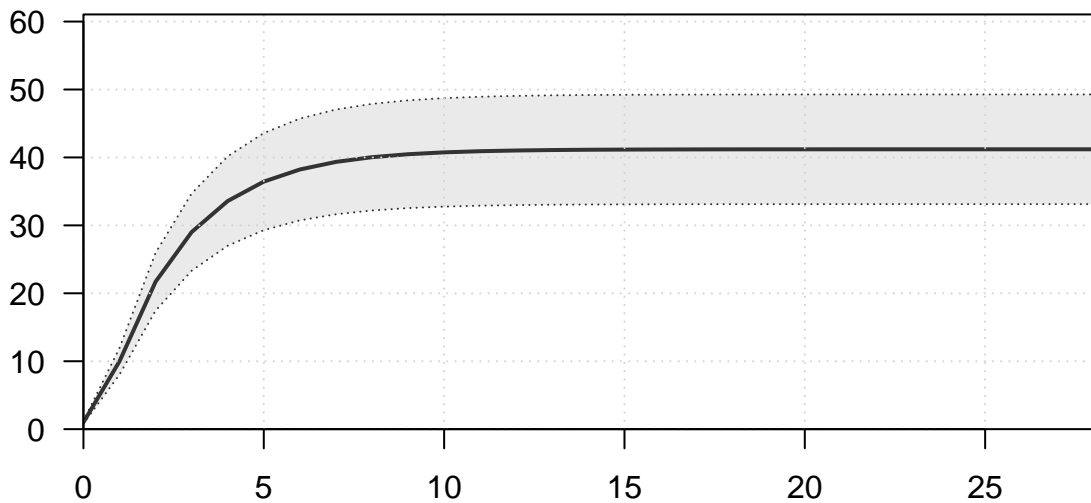
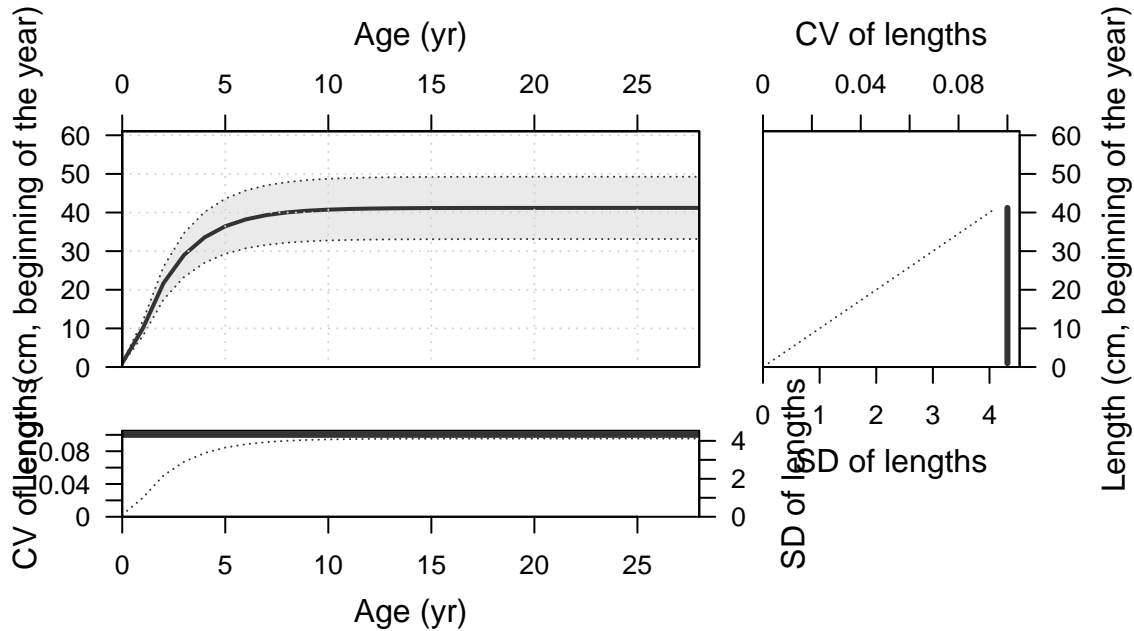


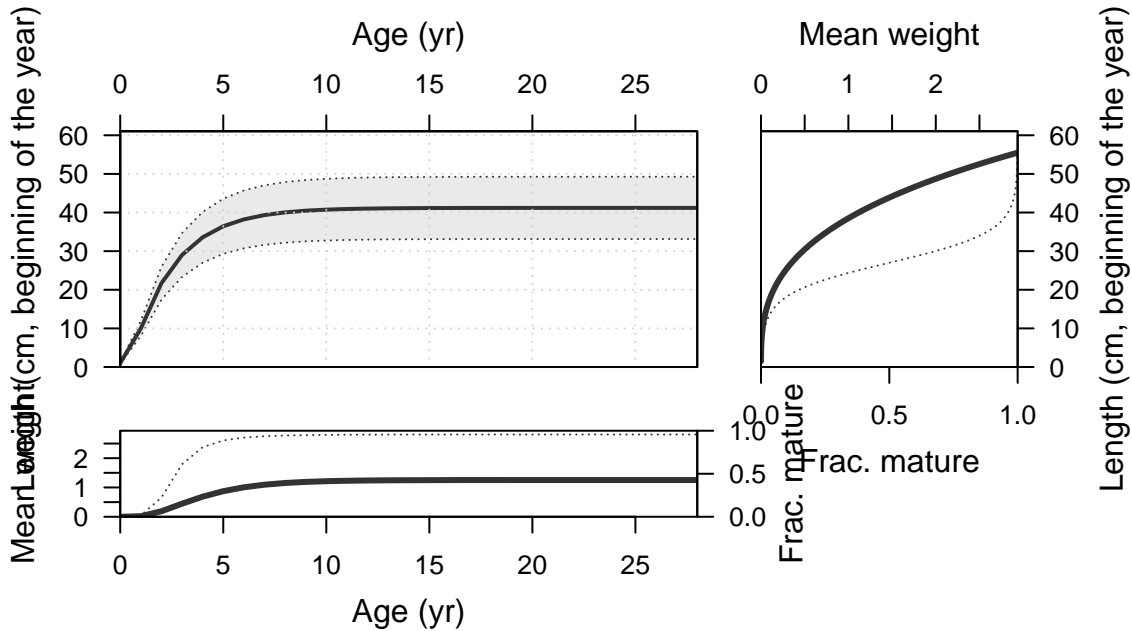
Plots created using the 'r4ss' package in R
Stock Synthesis version: 3.30.19.0
StartTime: Wed Jul 13 15:21:57 2022
Data_File: data.ss
Control_File: control.ss

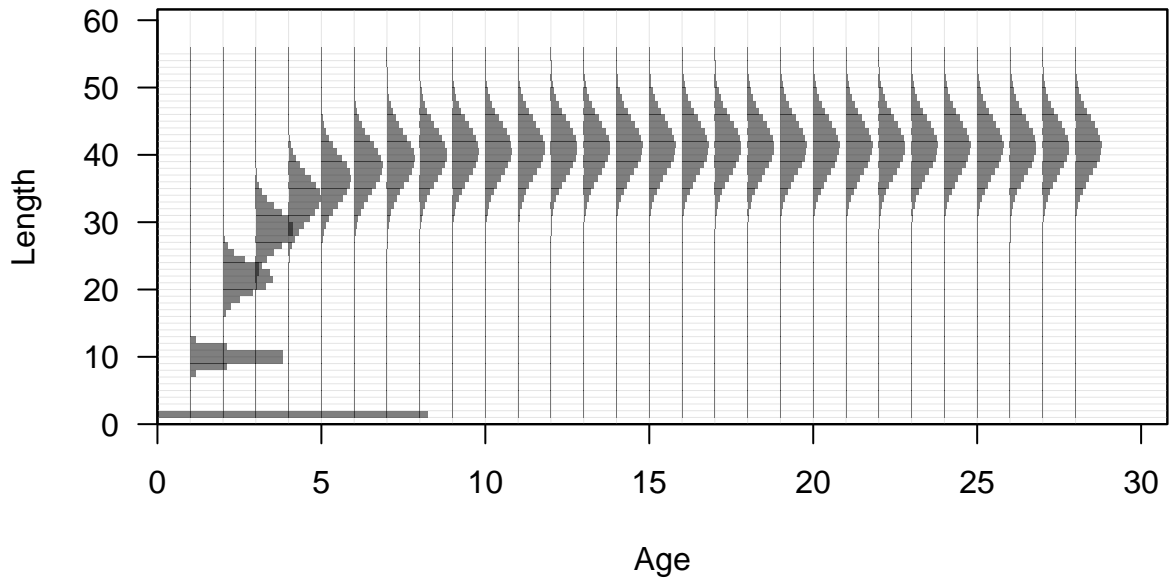
Length (cm, beginning of the year)

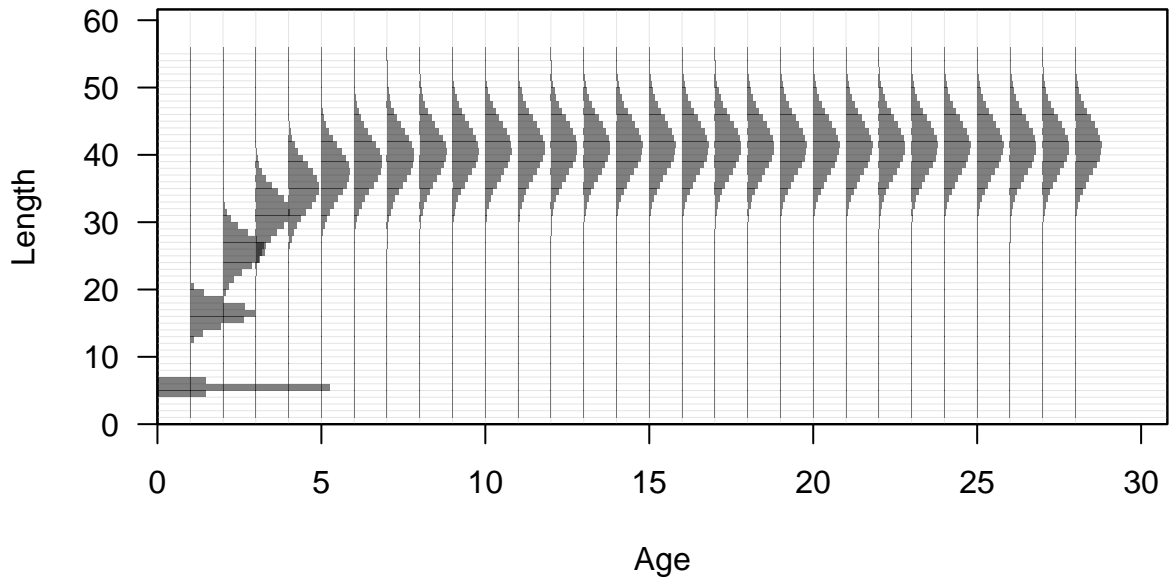


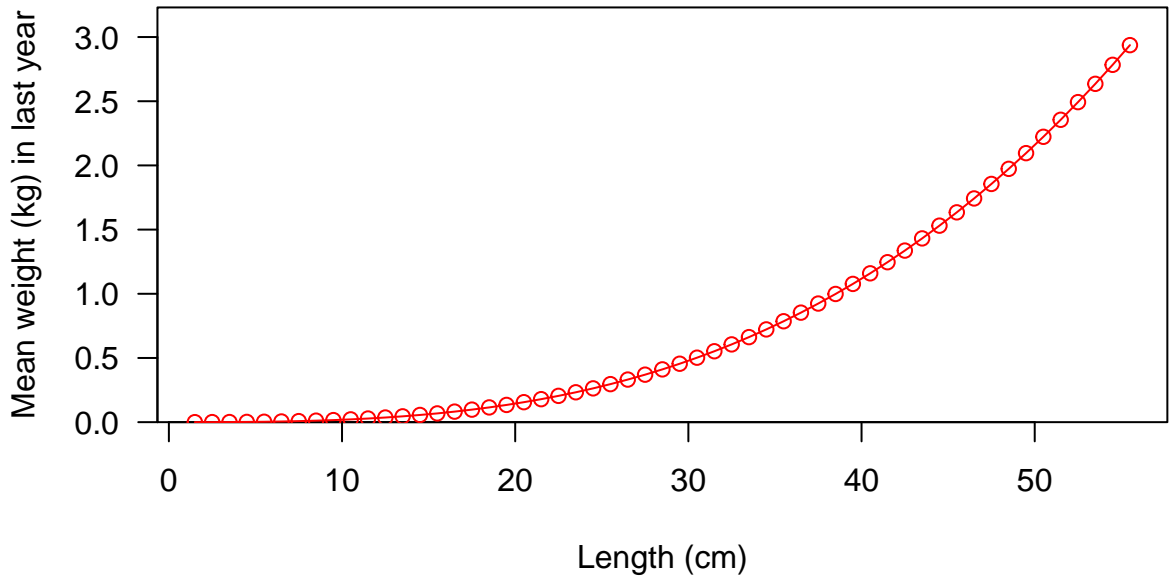
Age (yr)

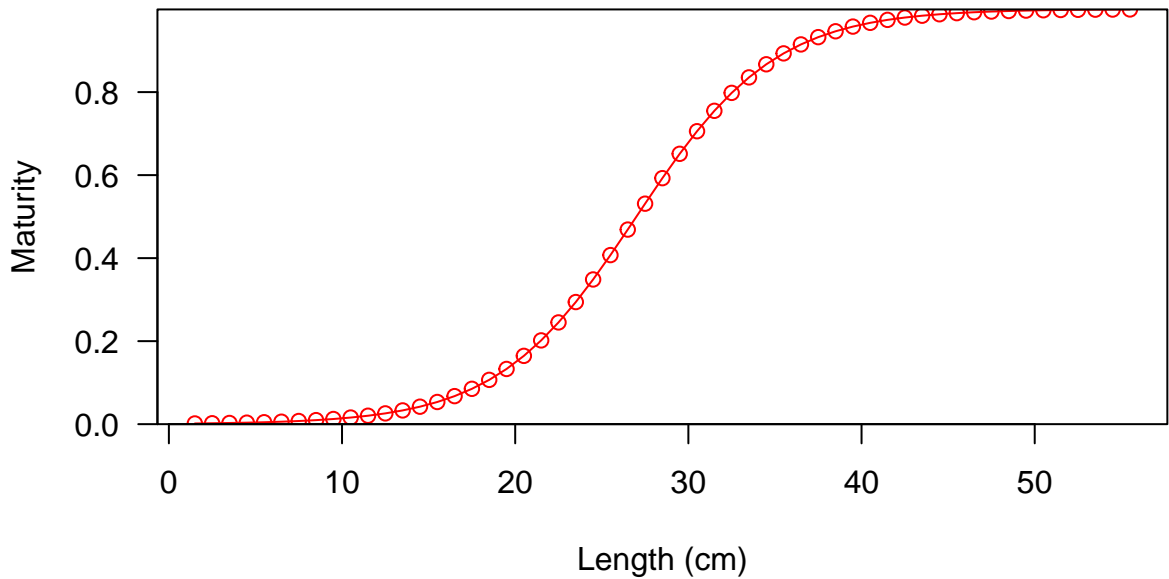


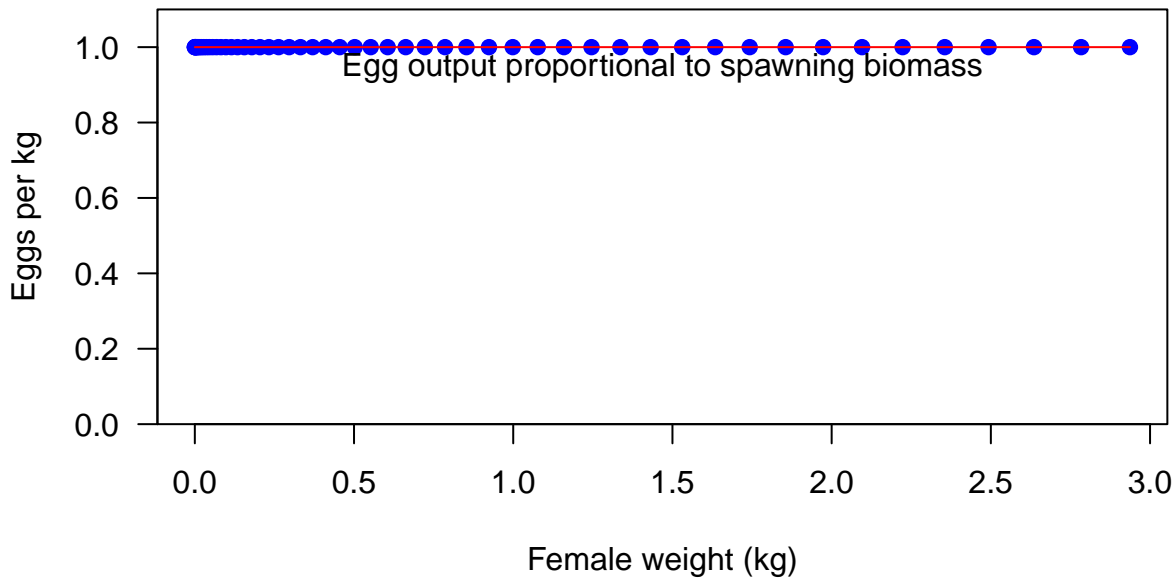


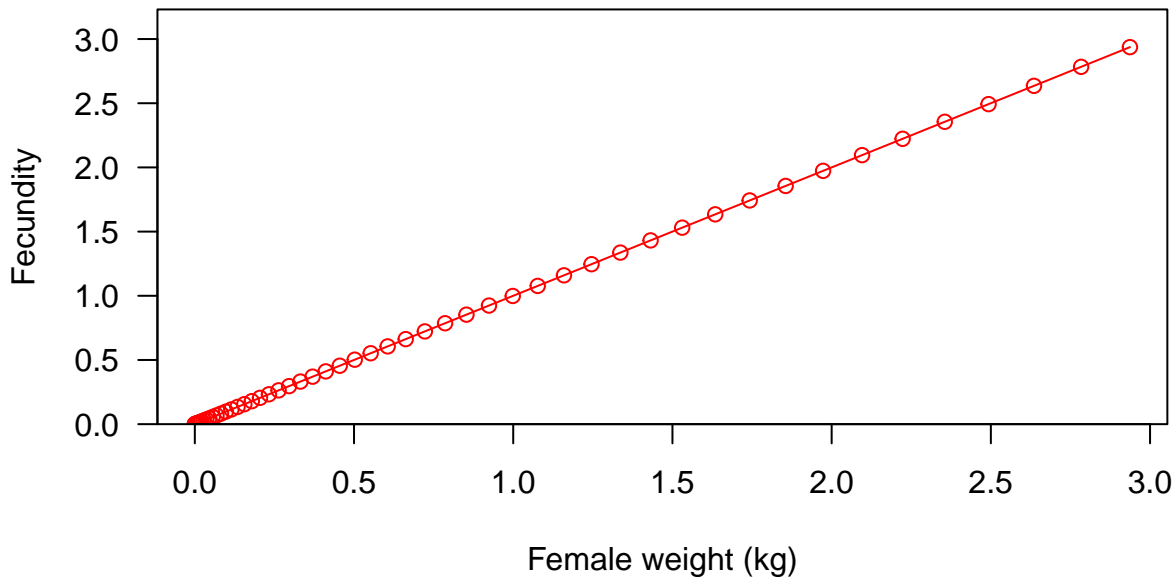


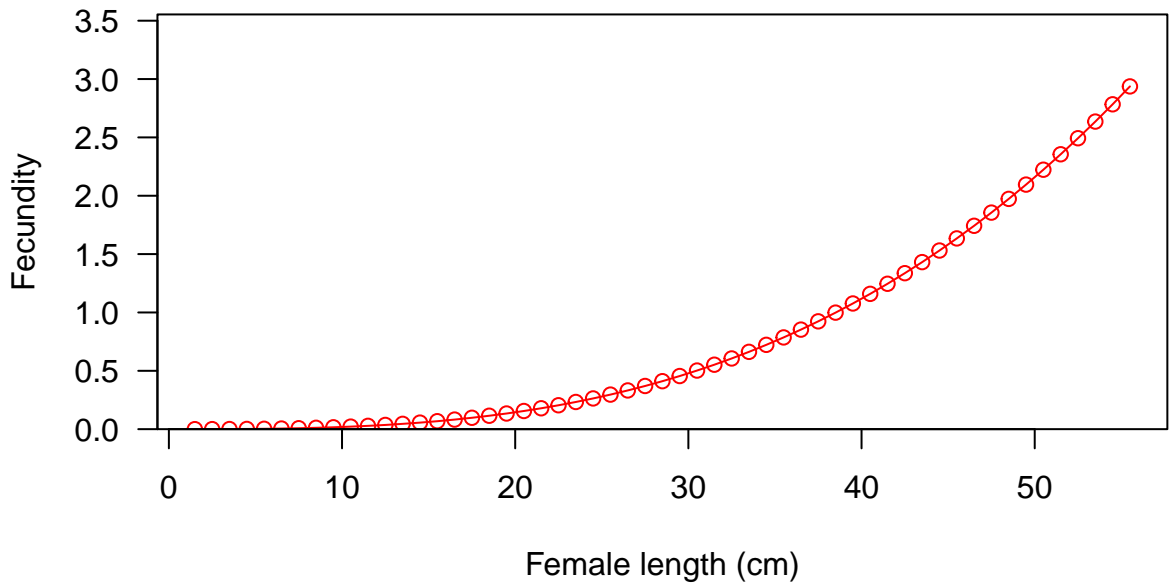


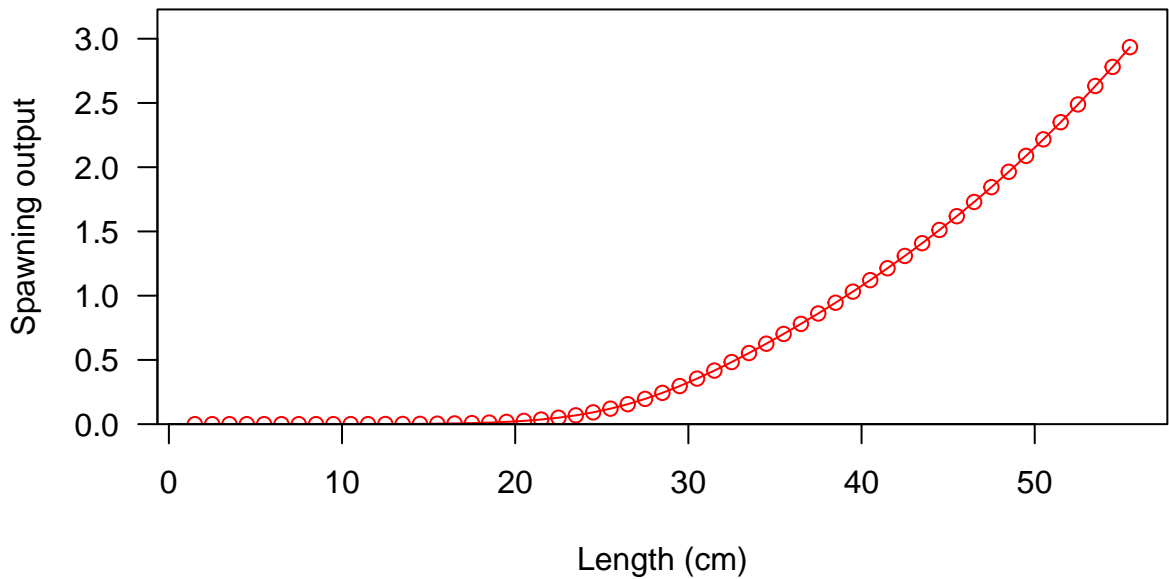


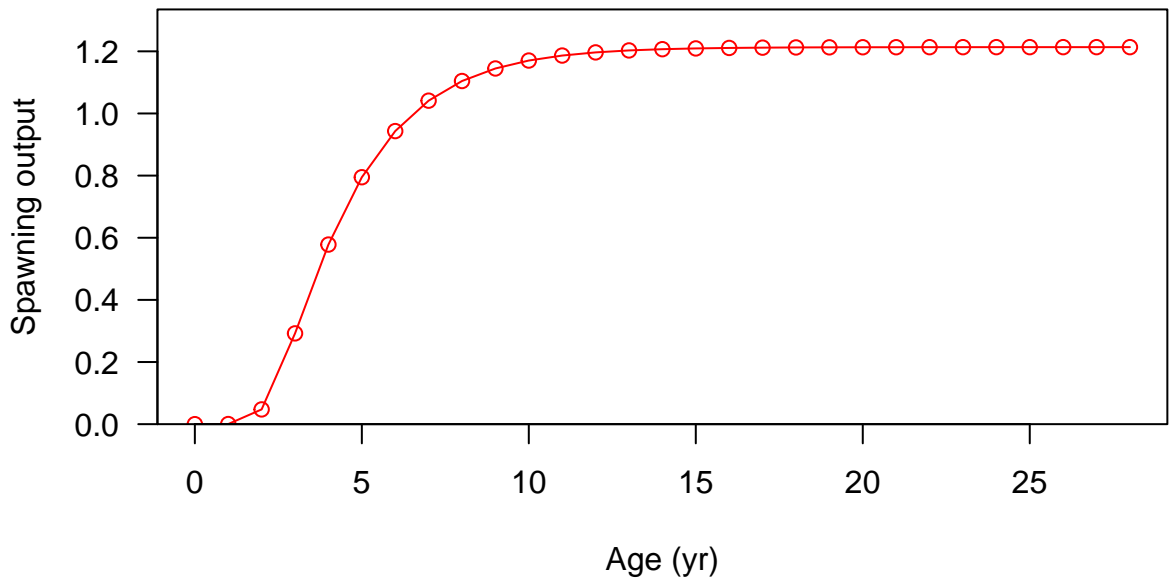




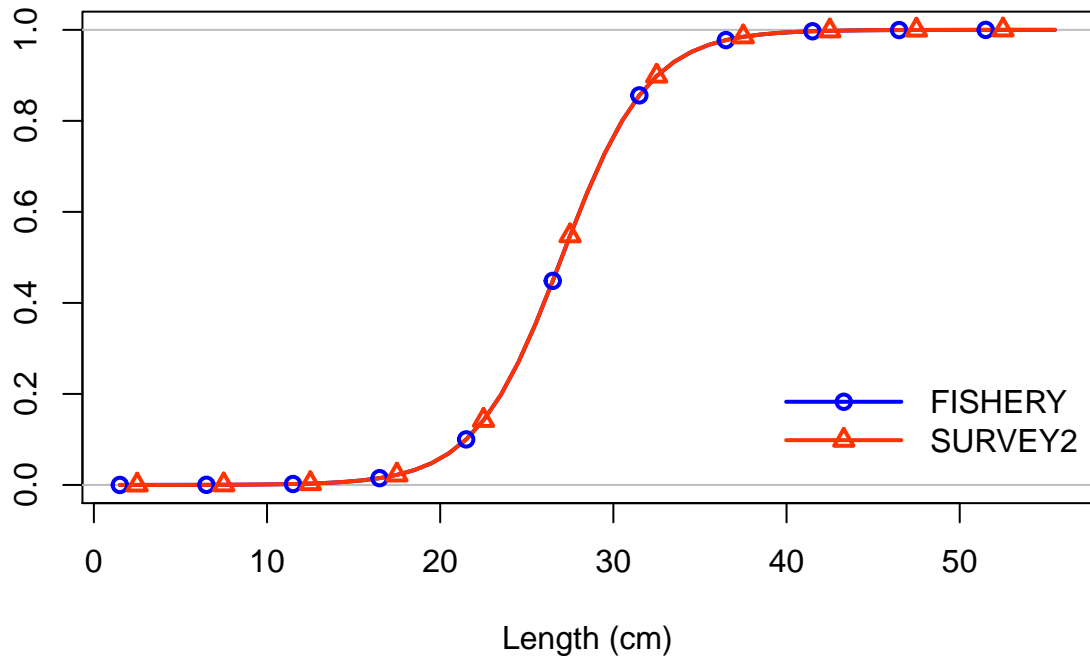




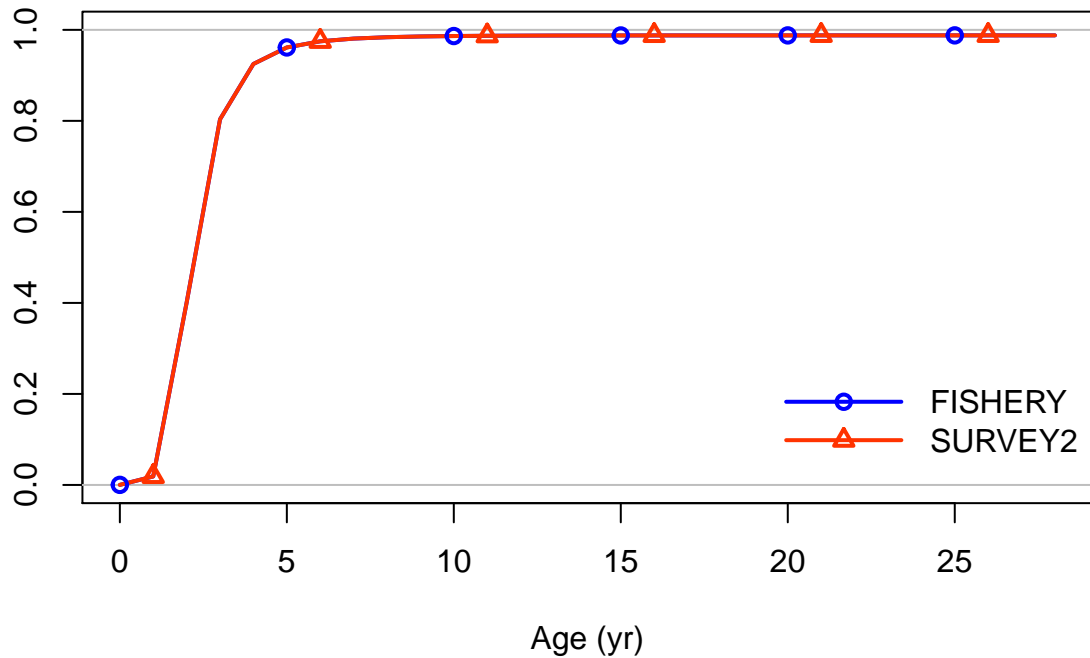




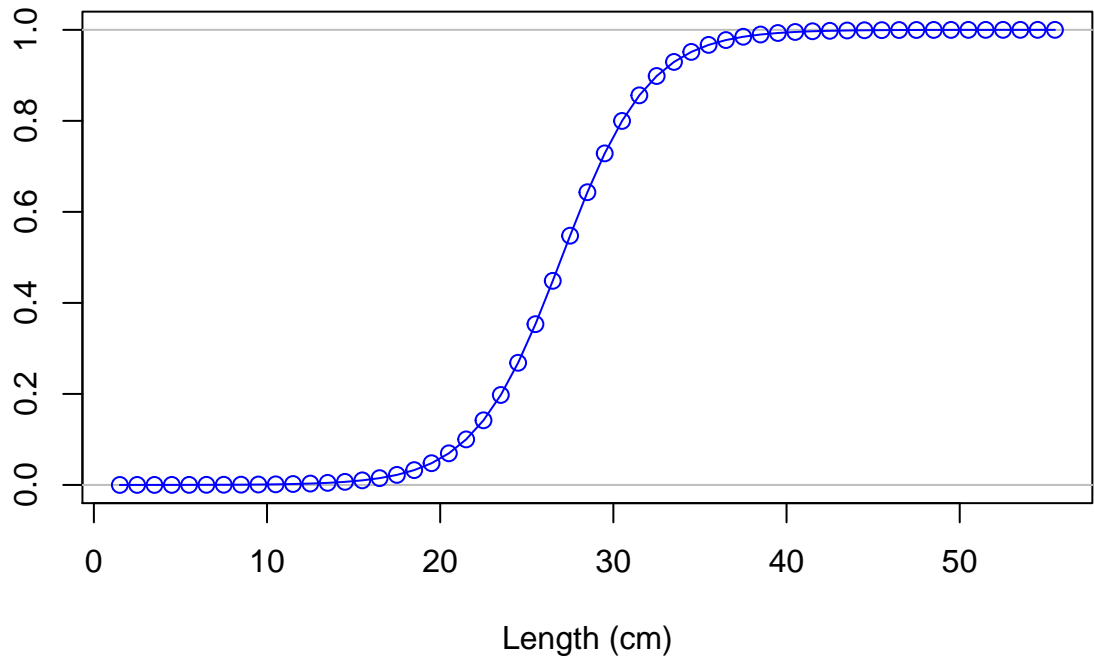
Selectivity



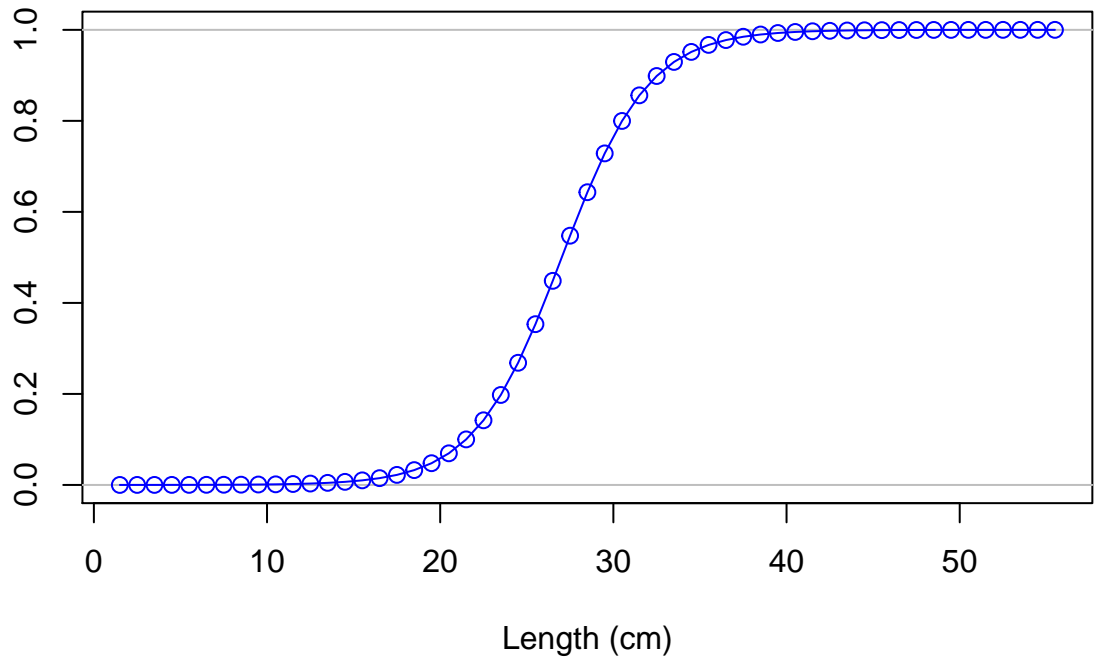
Selectivity

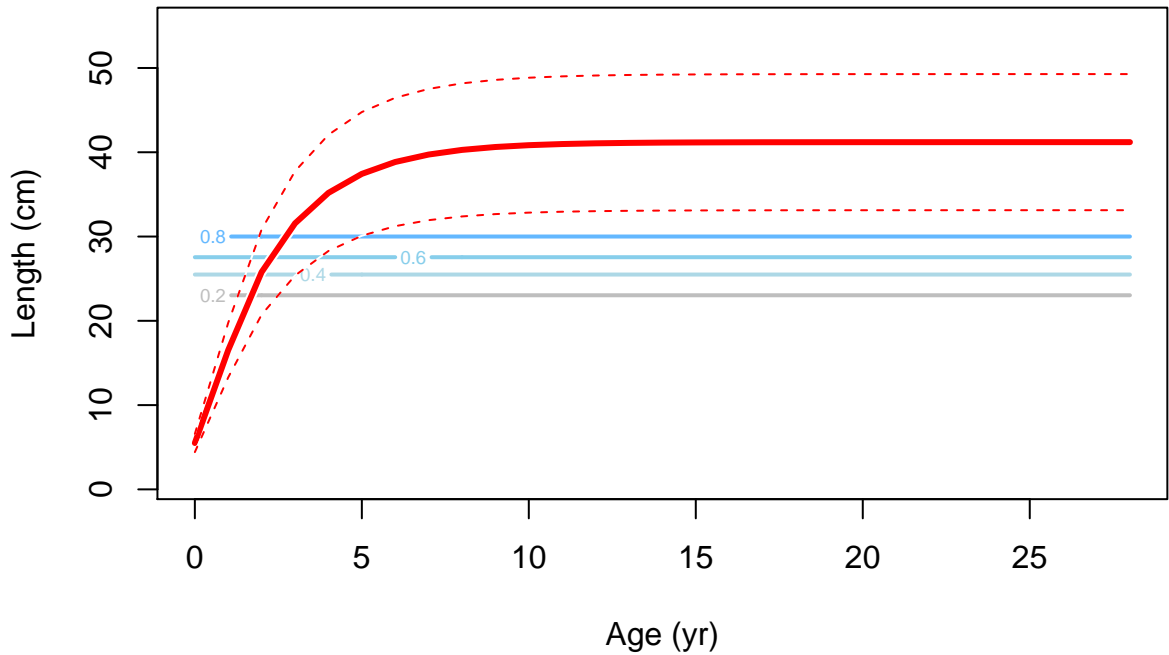


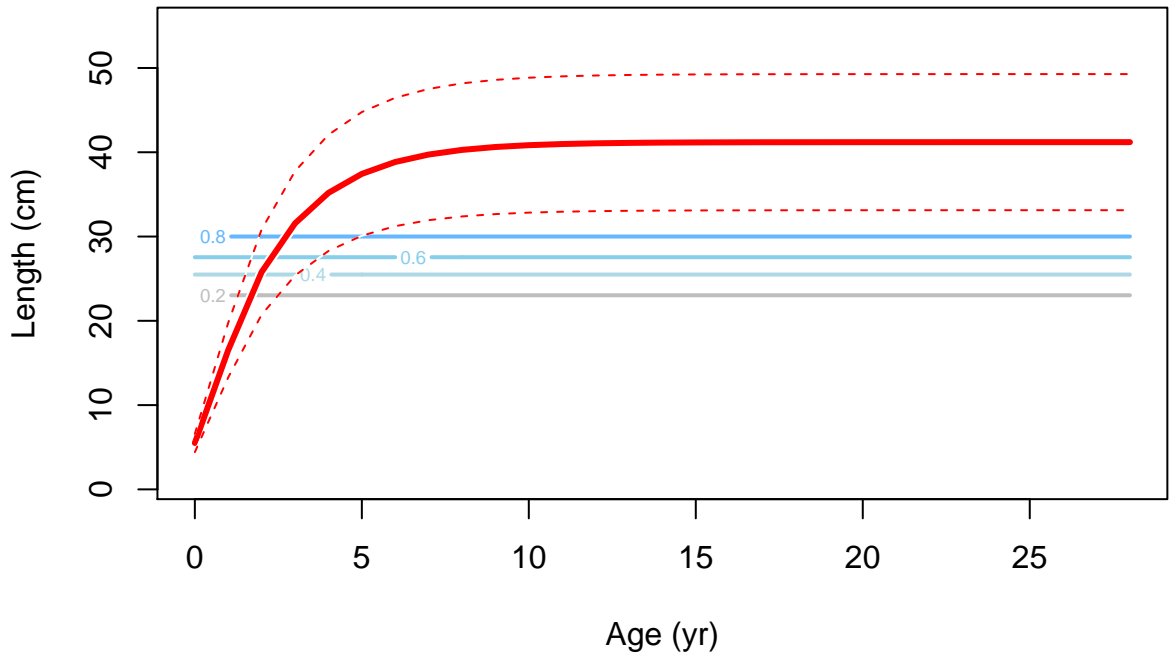
Selectivity



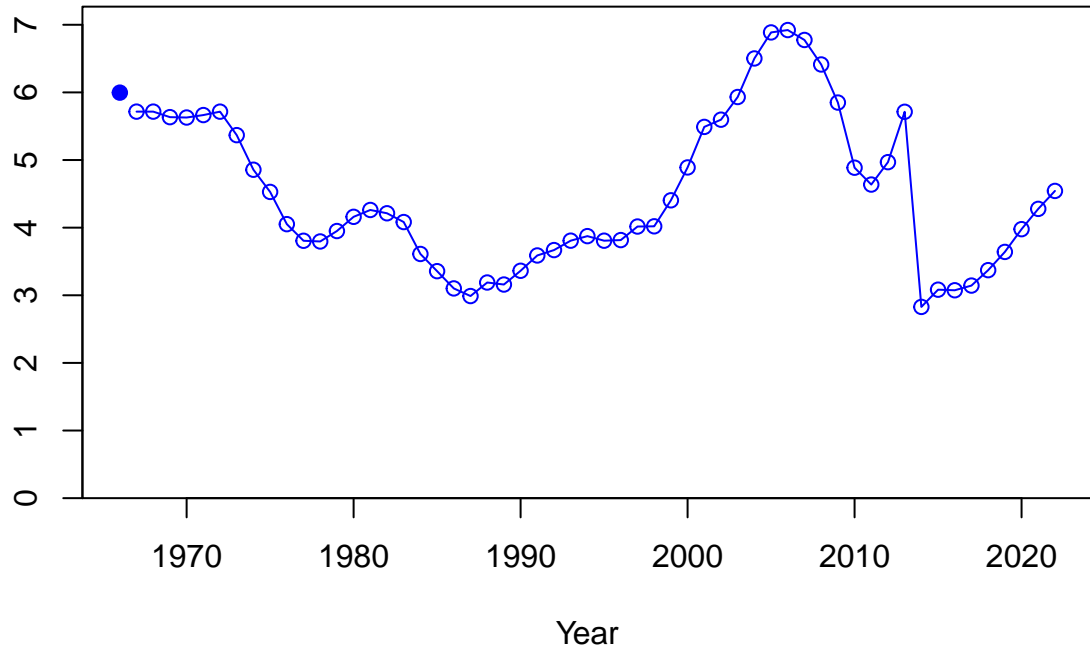
Selectivity



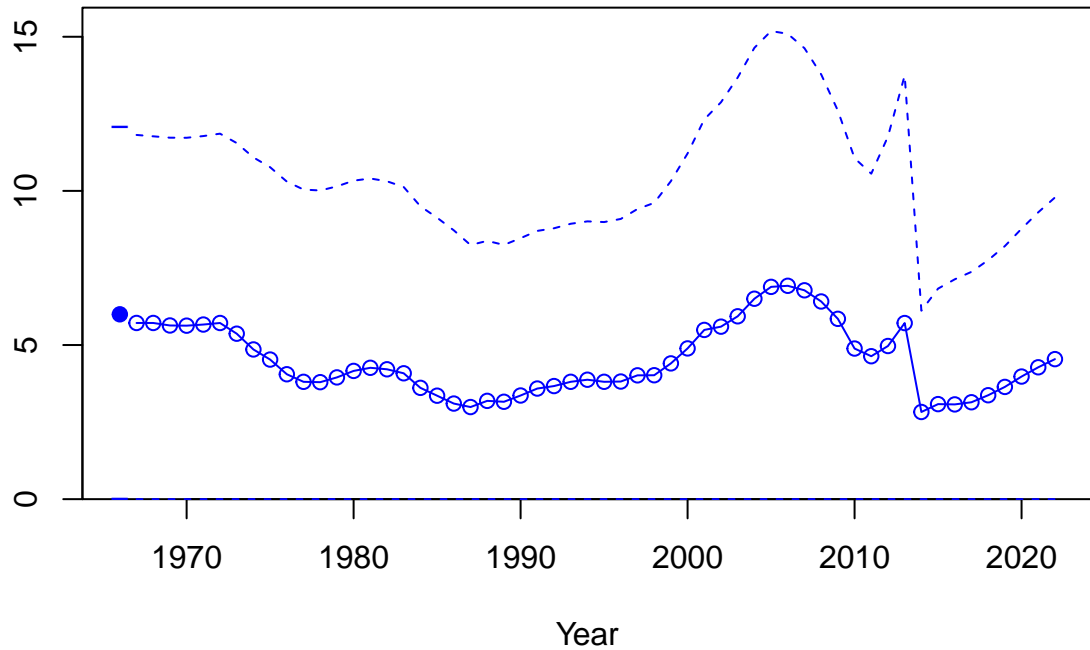




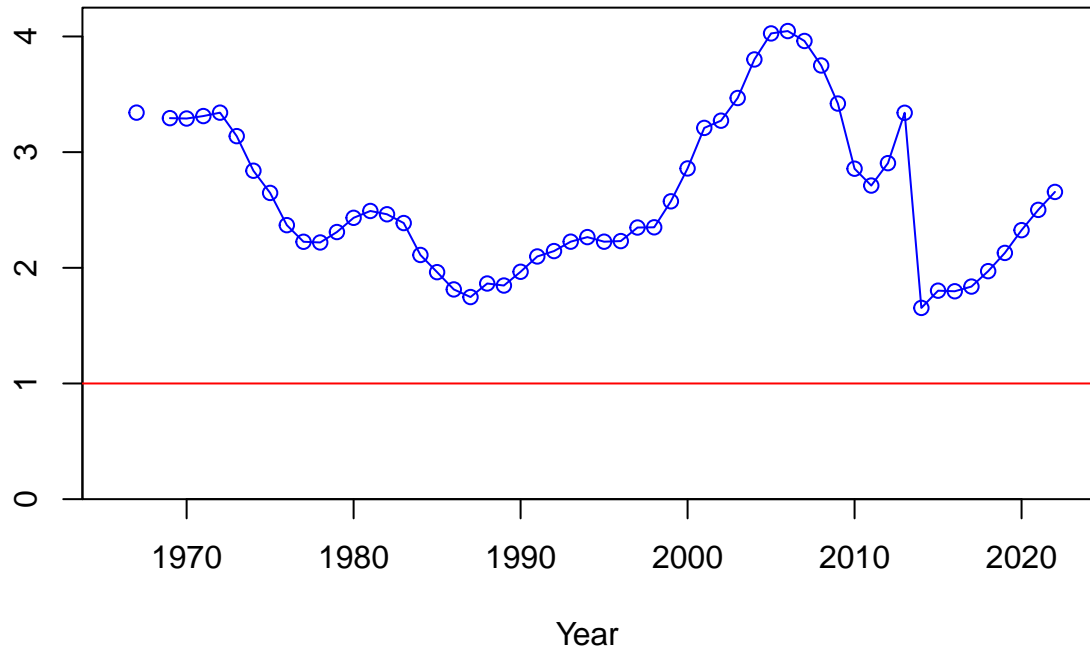
Spawning biomass (mt)



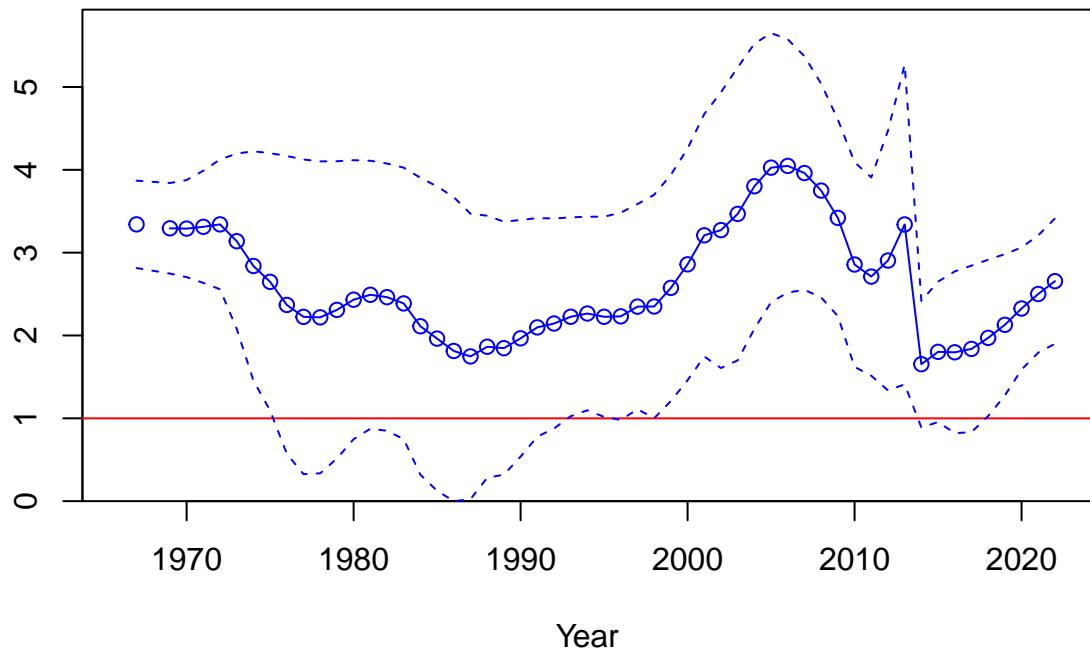
Spawning biomass (mt)

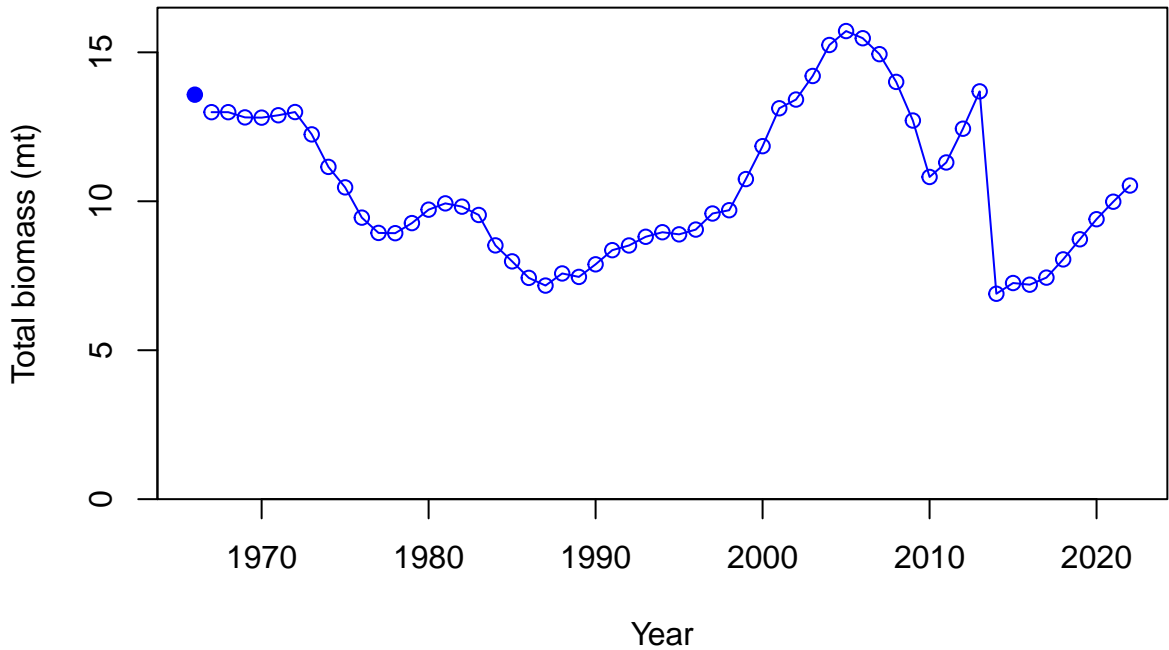


Relative spawning biomass: B/B_{MSY}

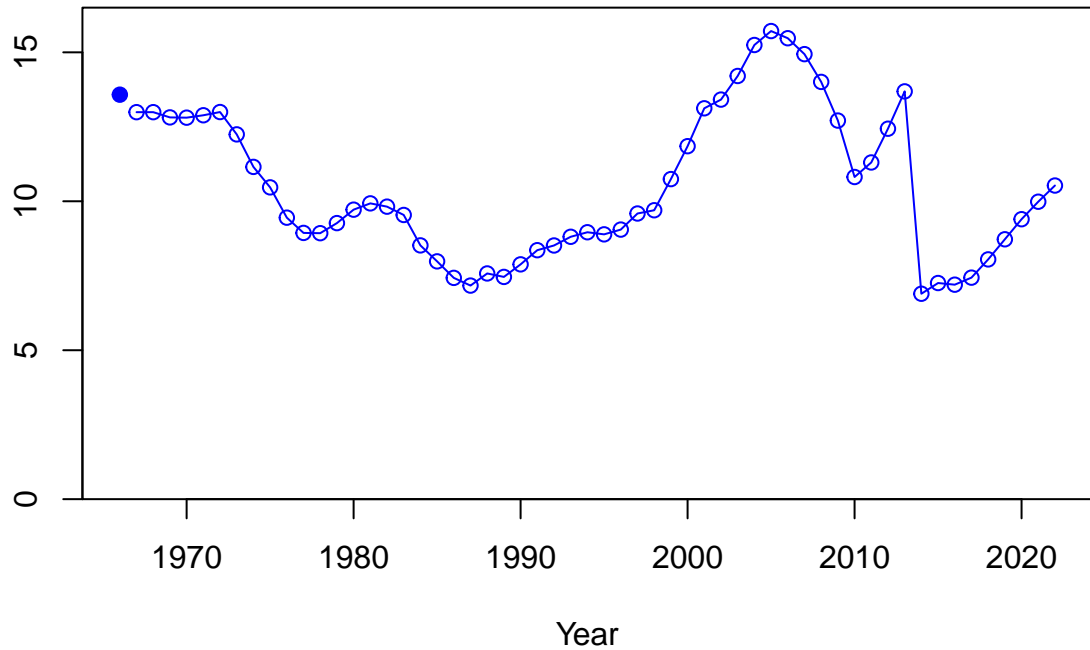


Relative spawning biomass: B/B_{MSY}

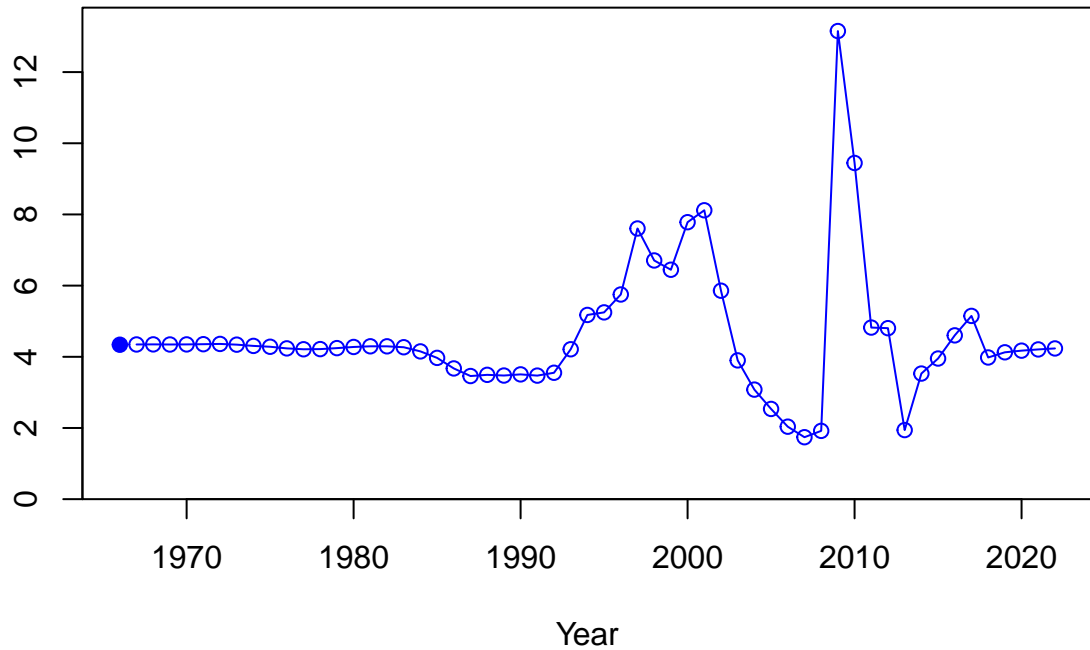




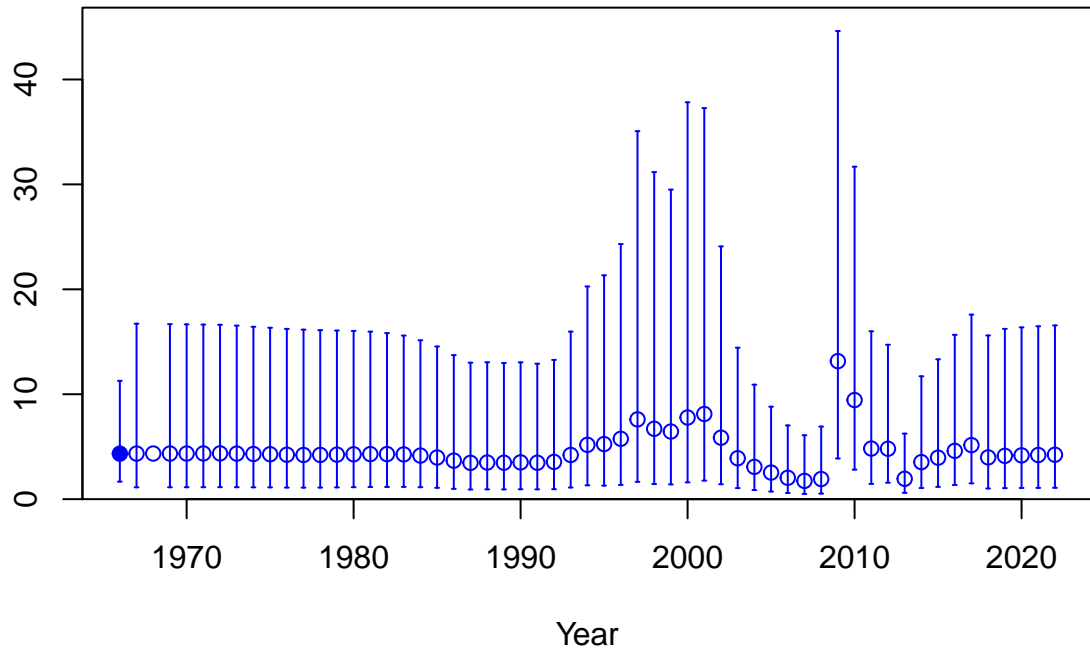
Summary biomass (mt)



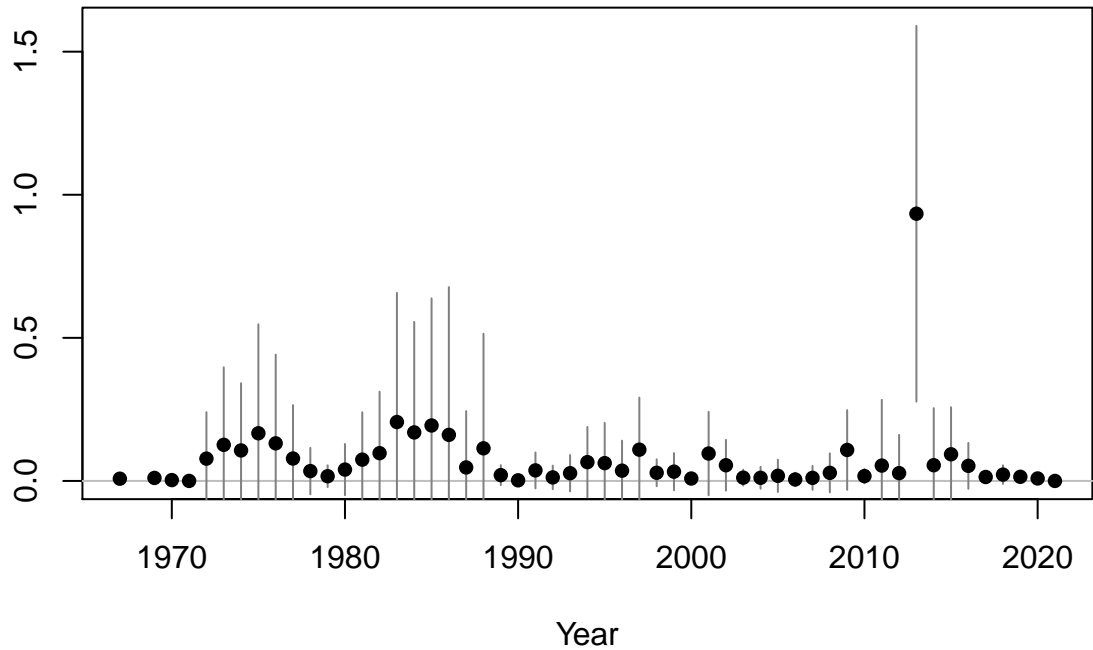
Age-0 recruits (1,000s)

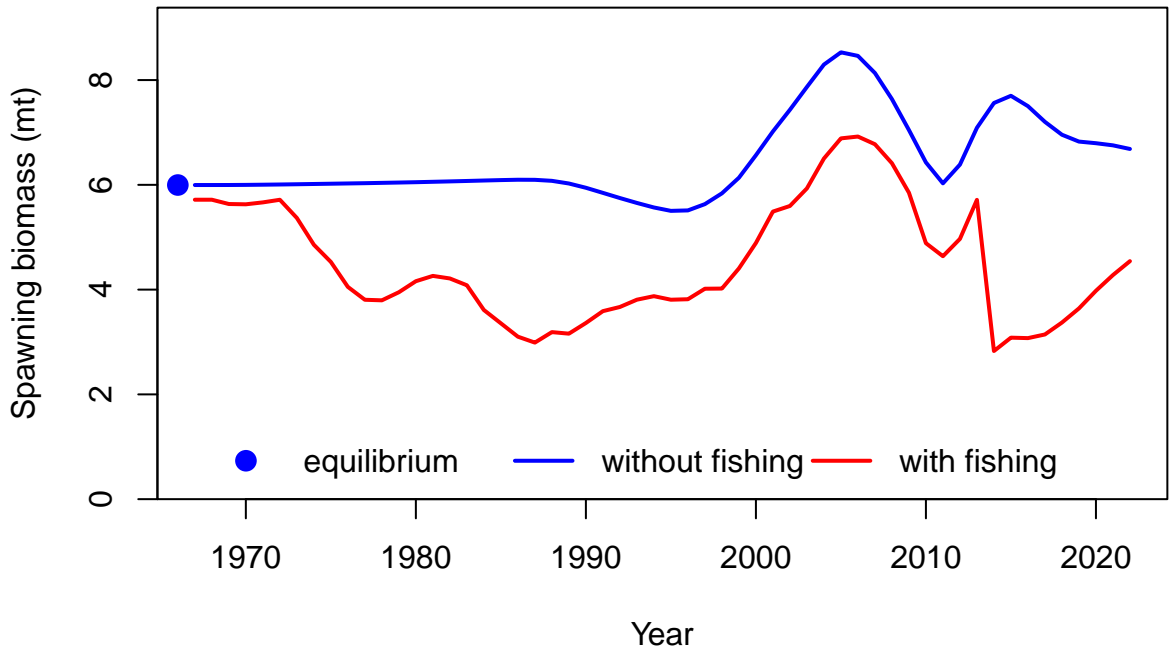


Age-0 recruits (1,000s)



Summary Fishing Mortality





Log recruitment deviation

1.0
0.5
0.0
-0.5

1970

1980

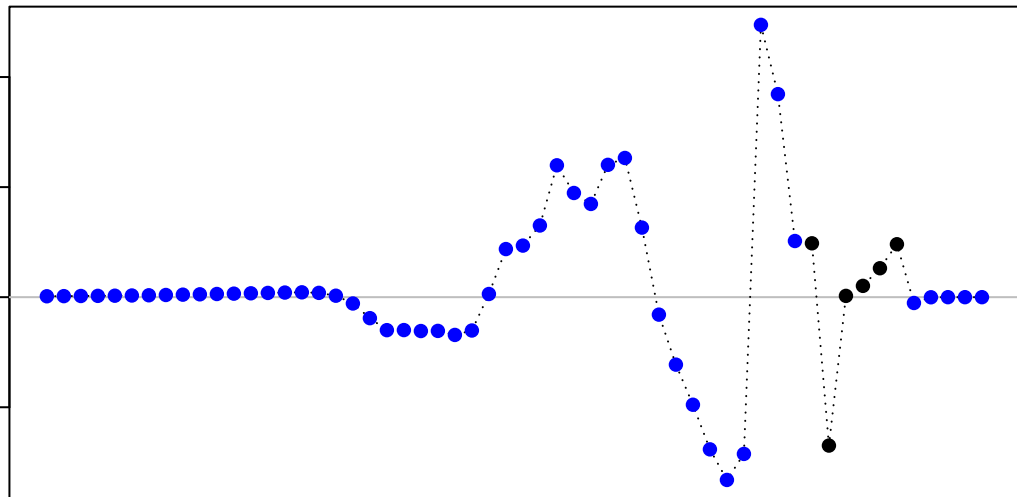
1990

2000

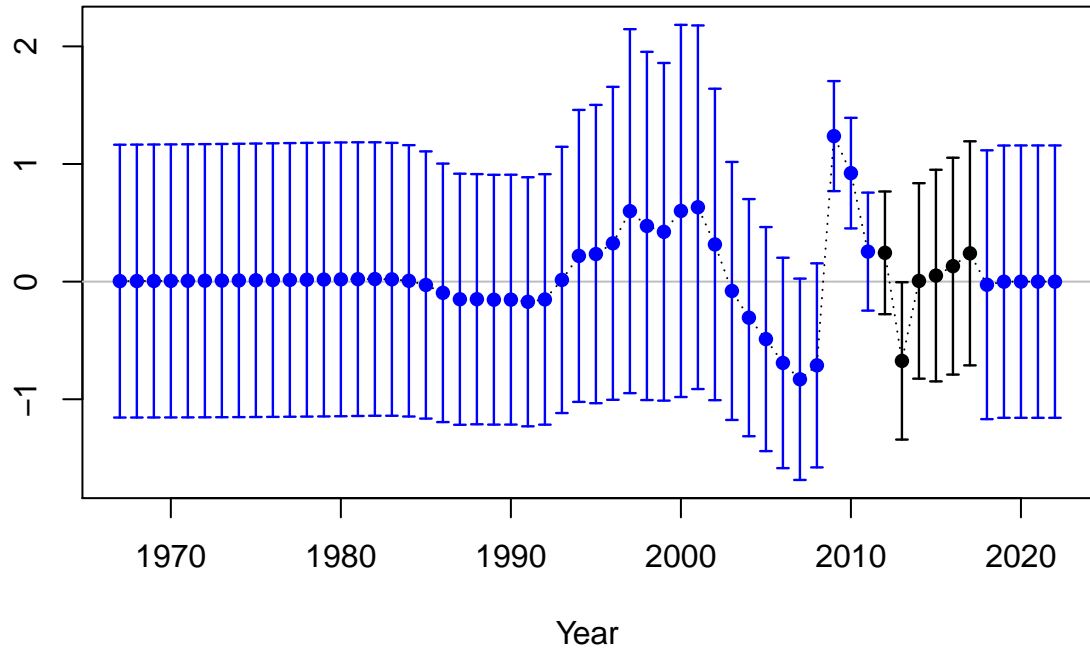
2010

2020

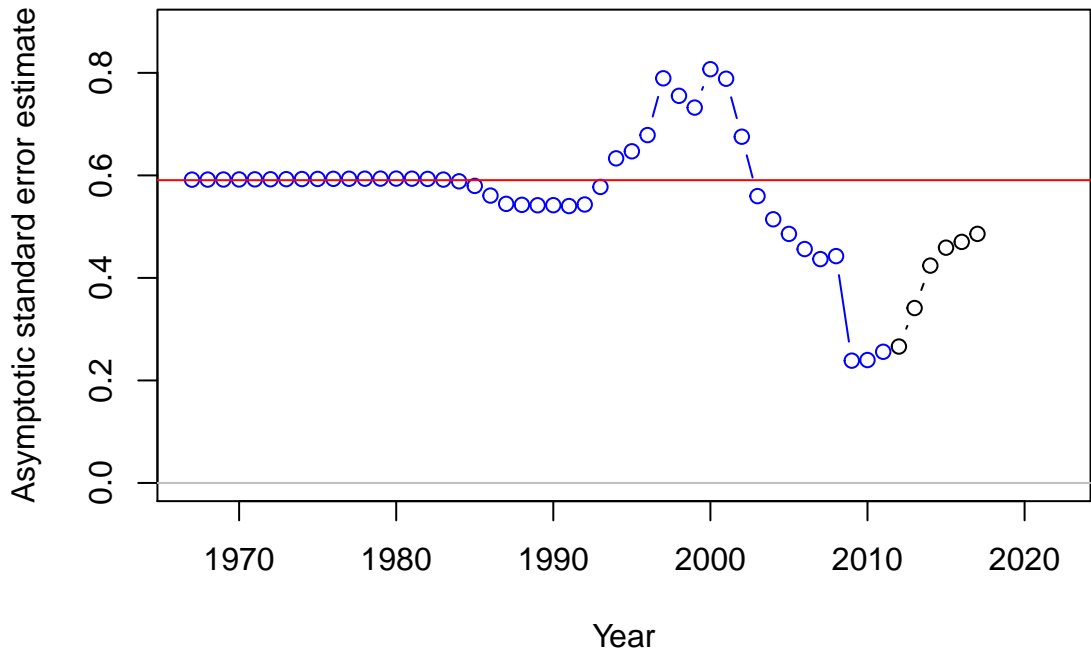
Year

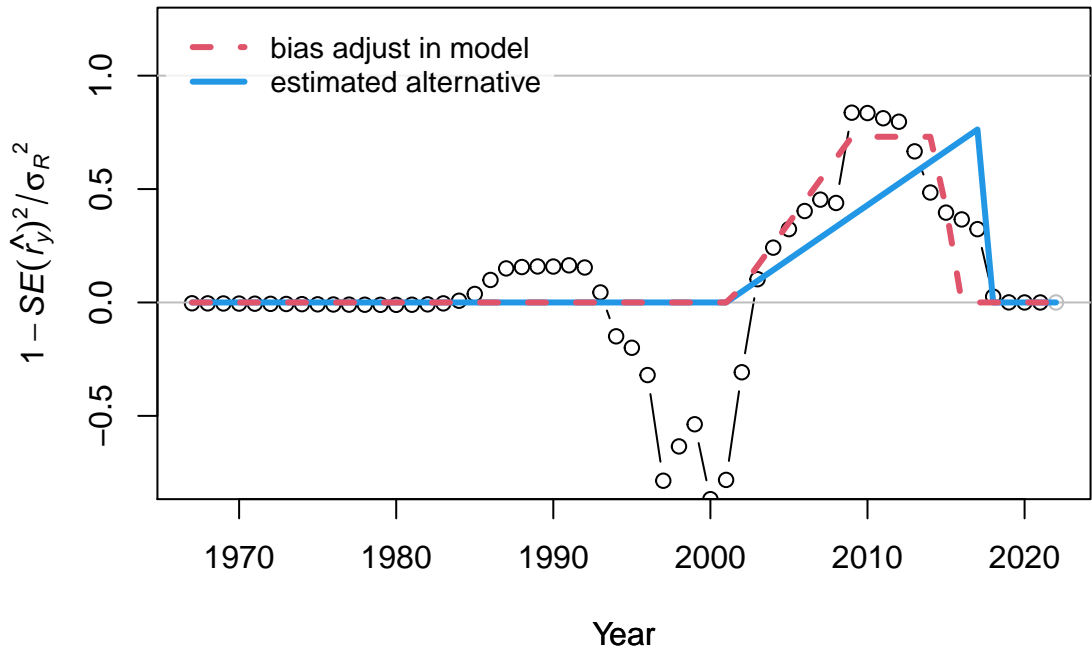


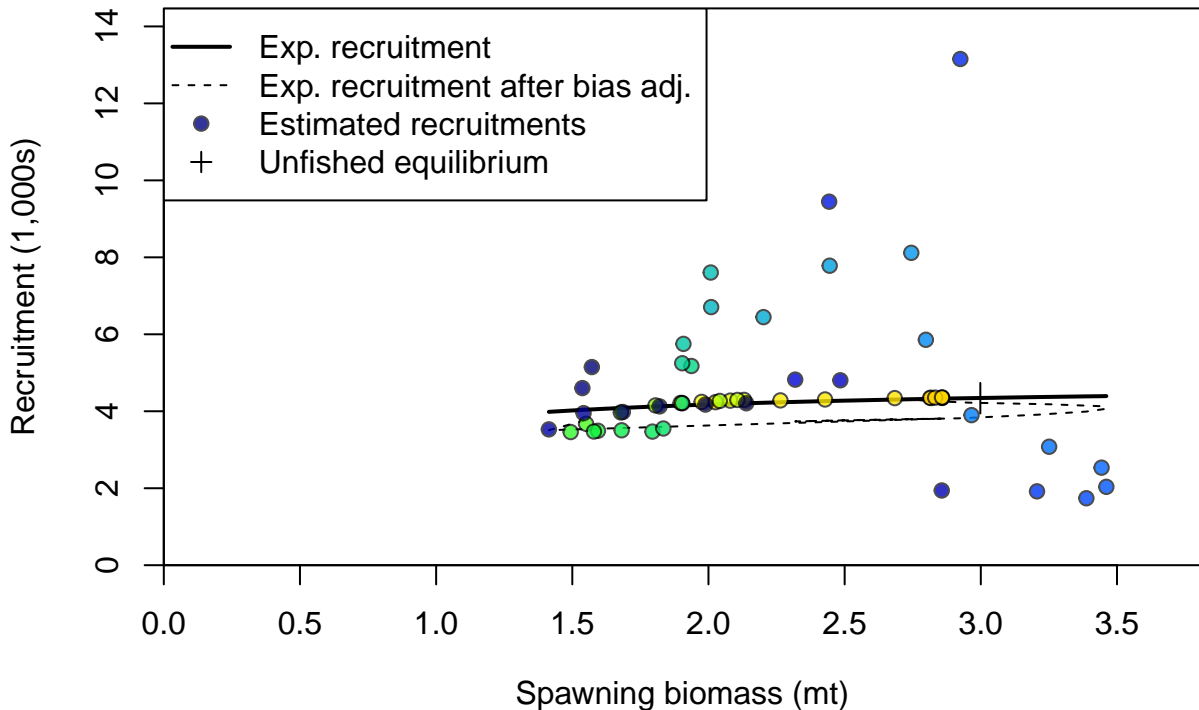
Log recruitment deviation

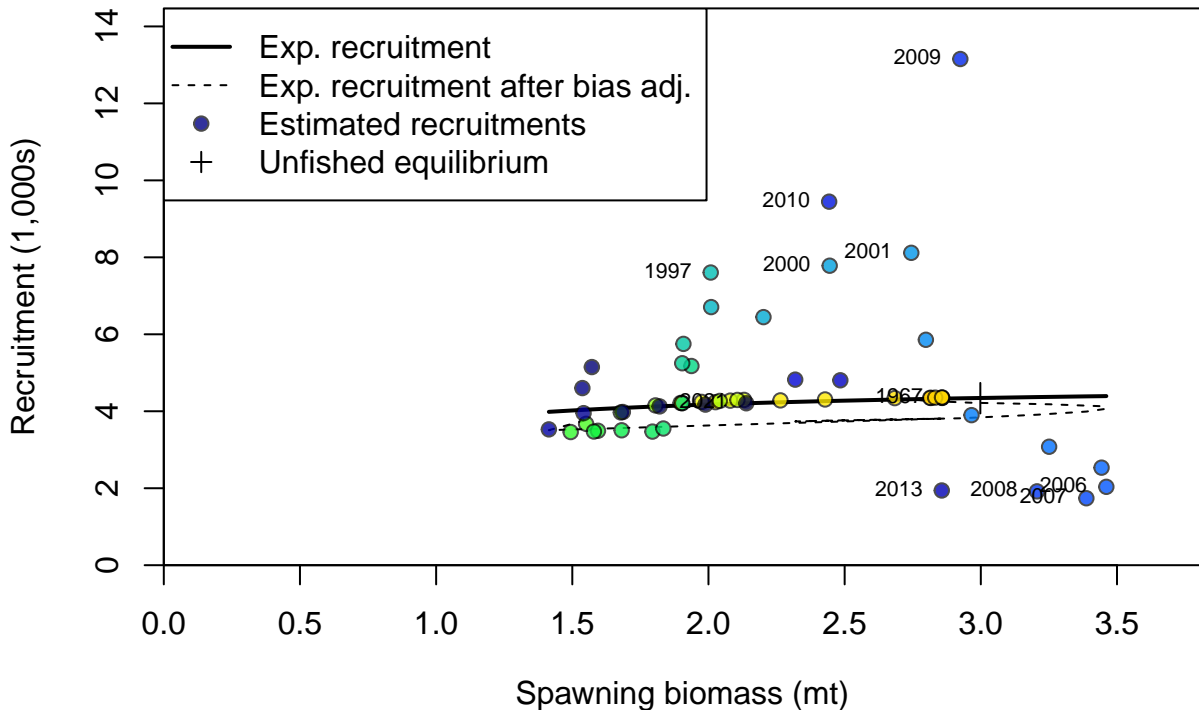


Recruitment deviation variance

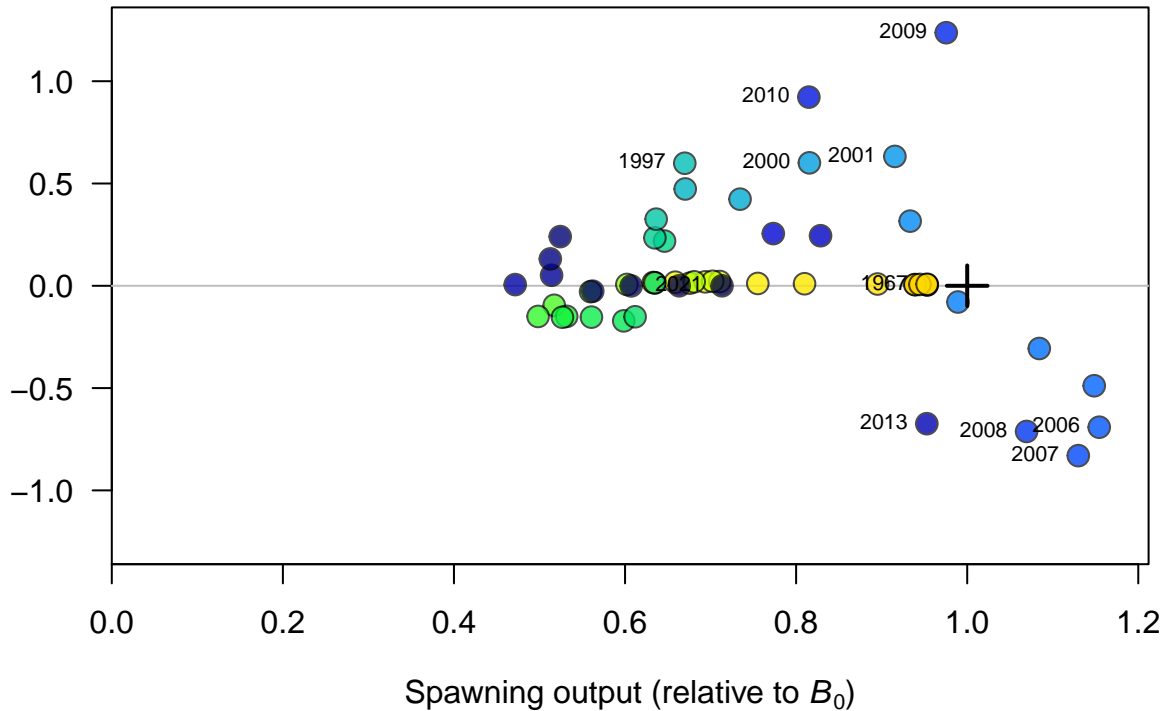


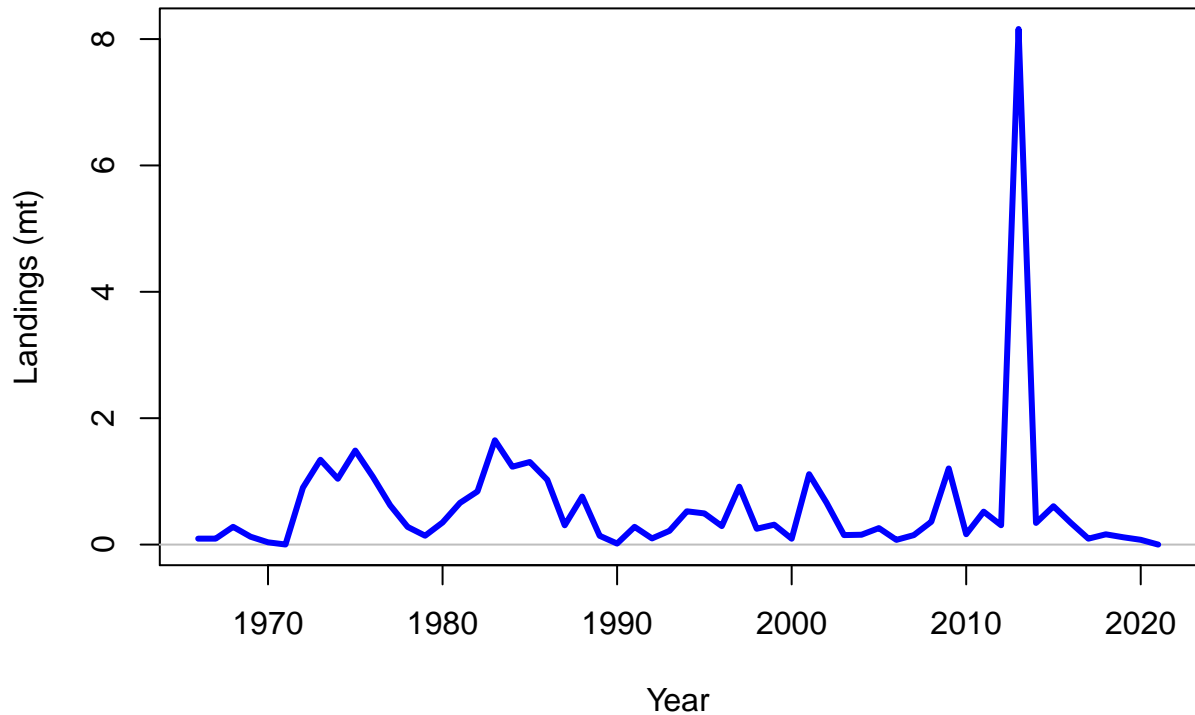


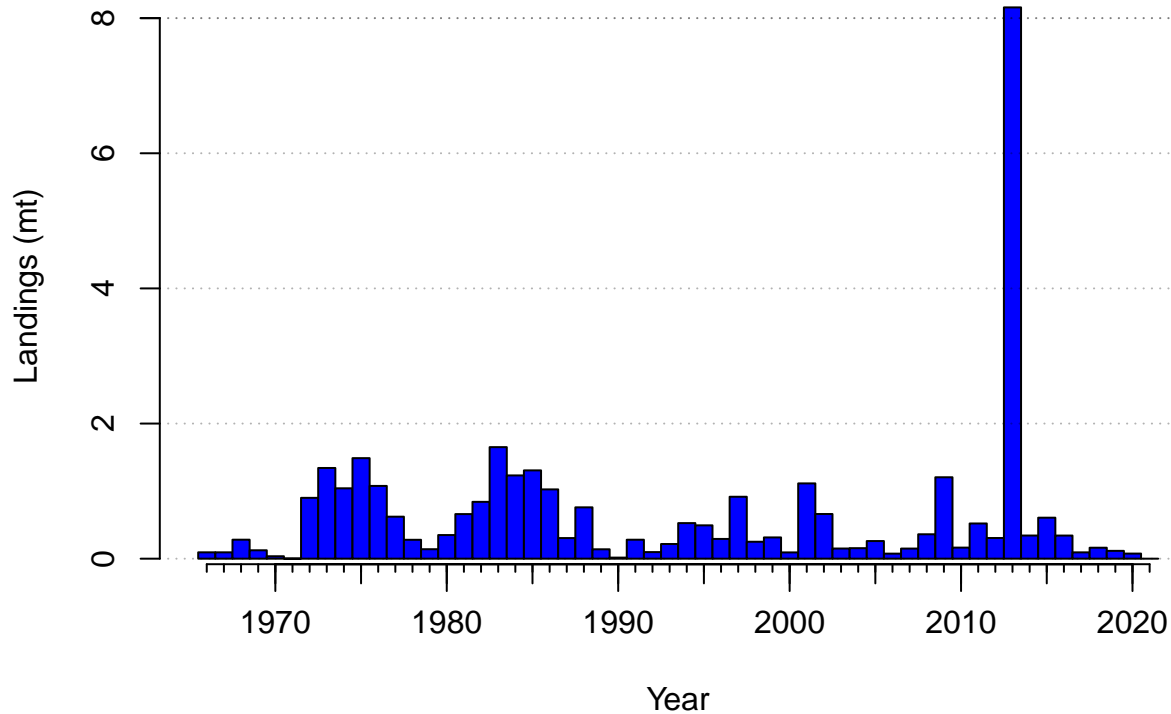


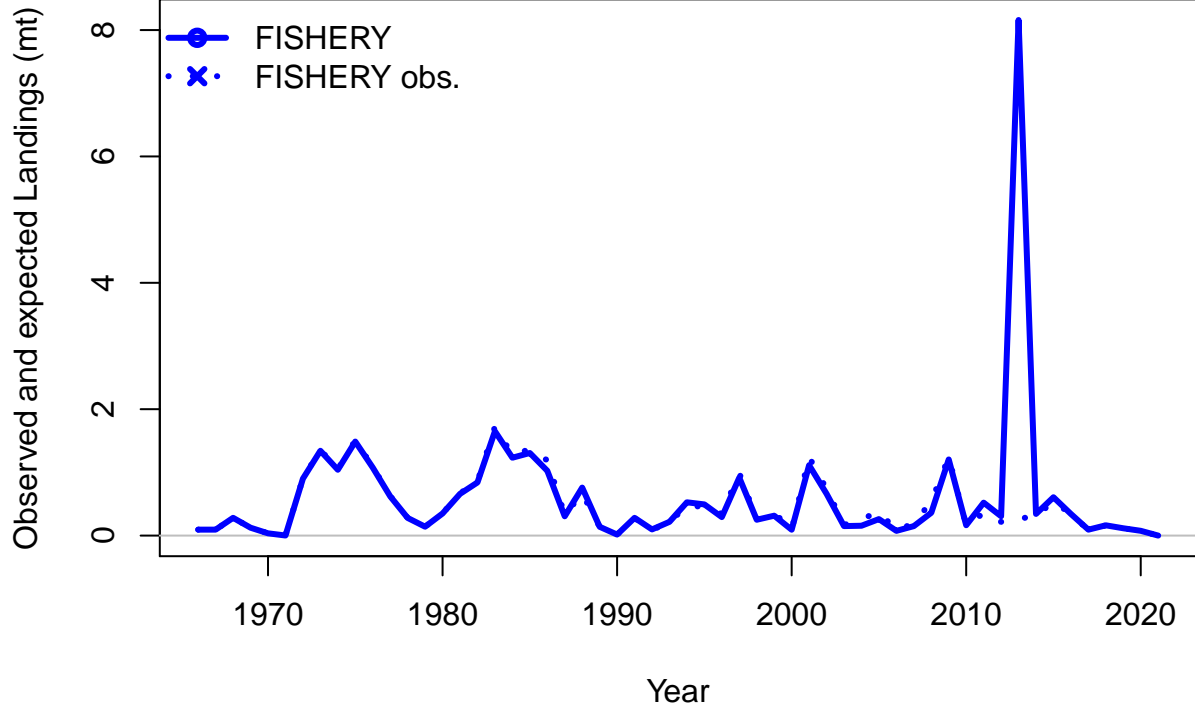


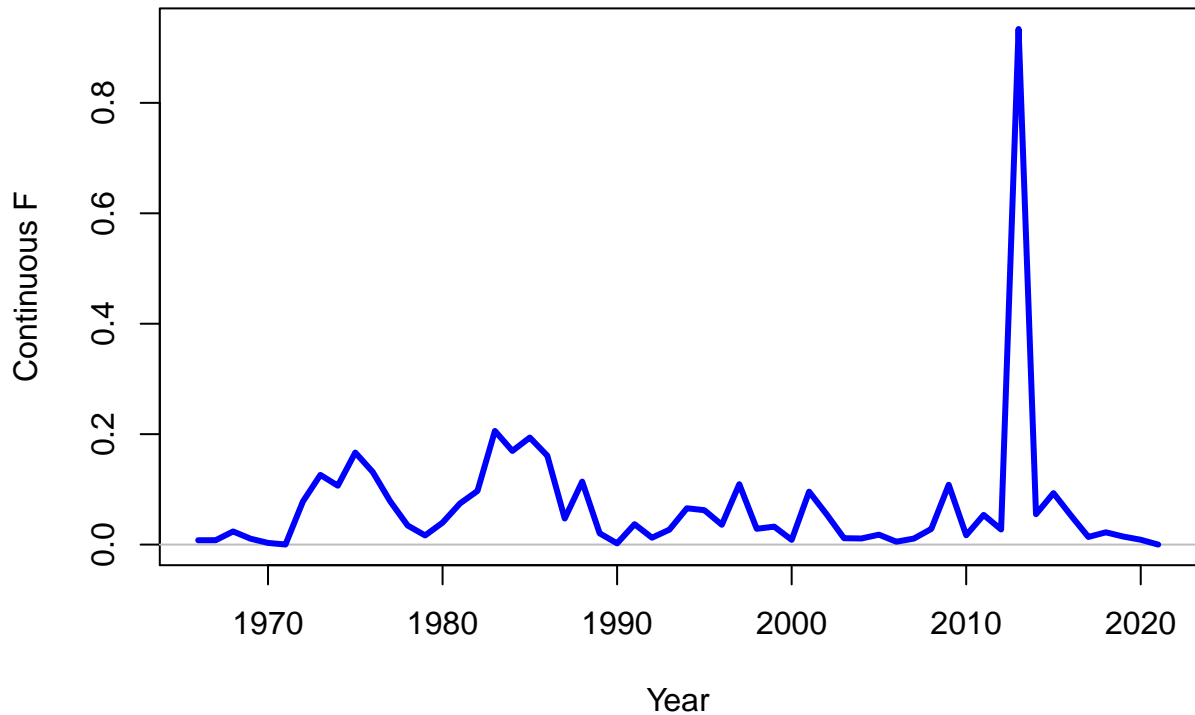
Log recruitment deviation



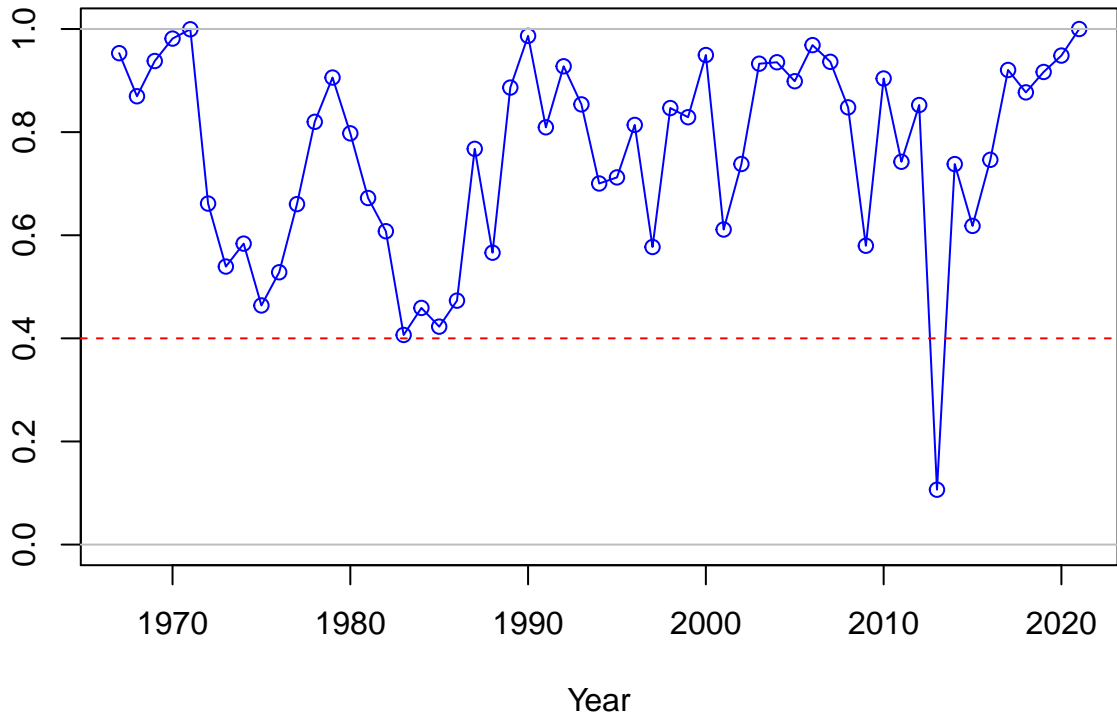




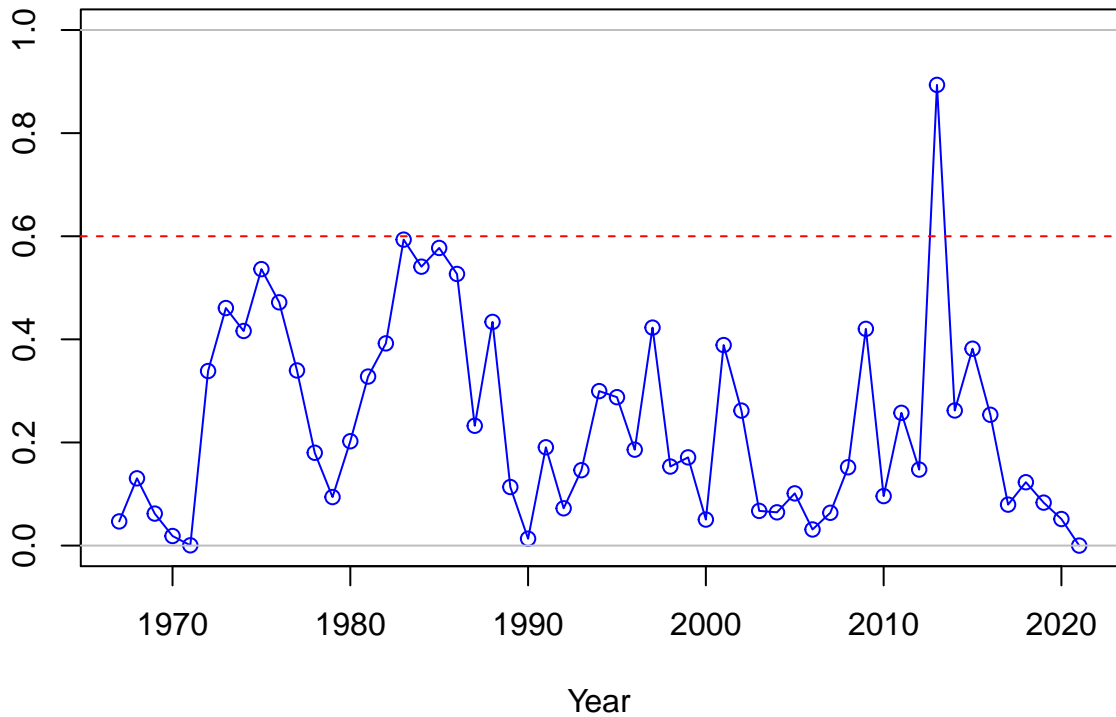




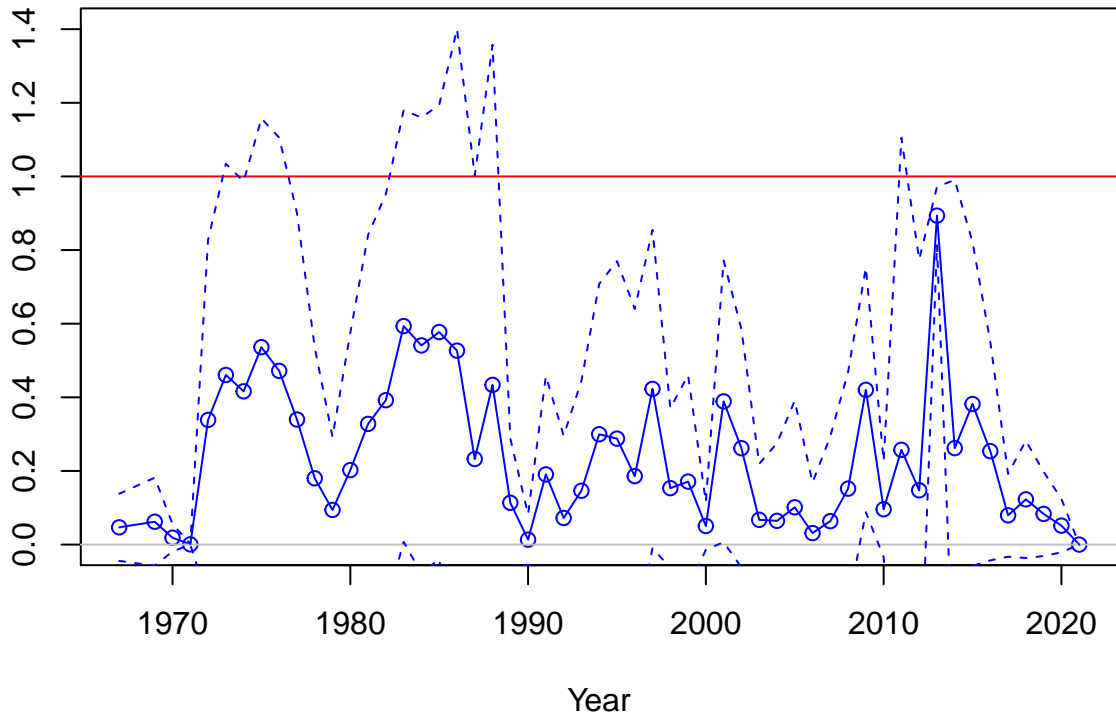
SPR



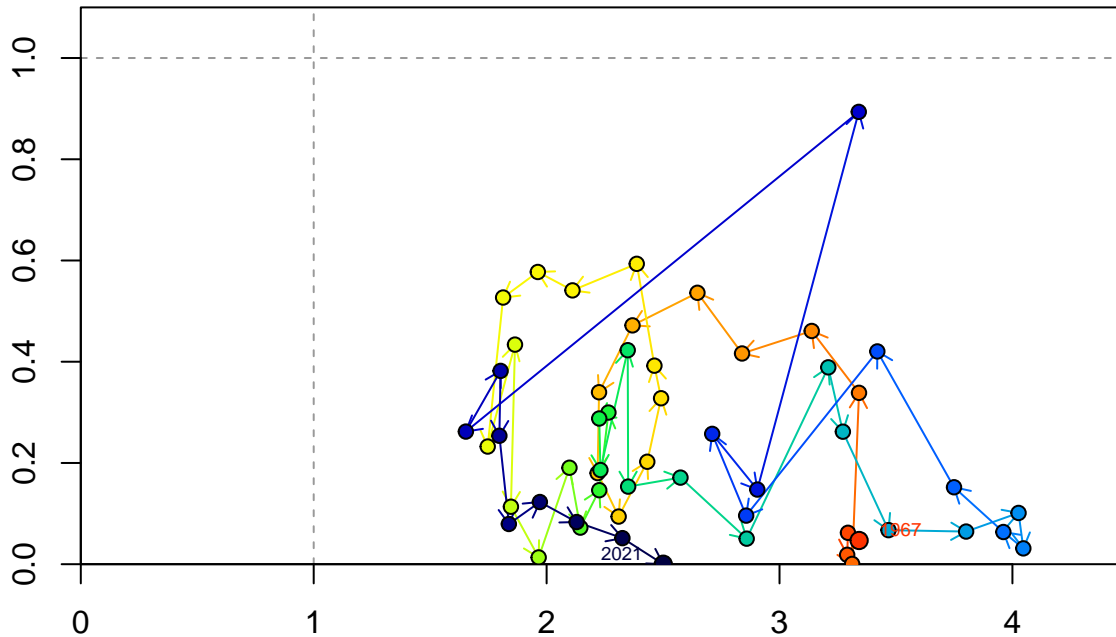
1-SPR



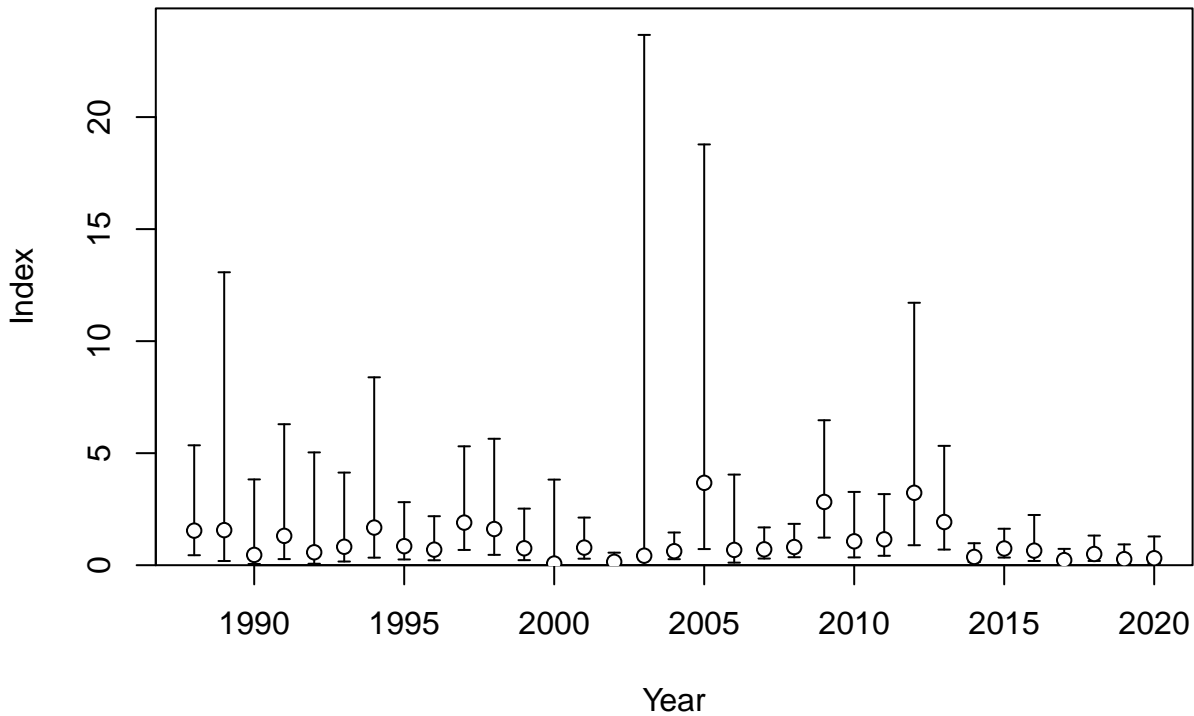
Fishing intensity: 1-SPR

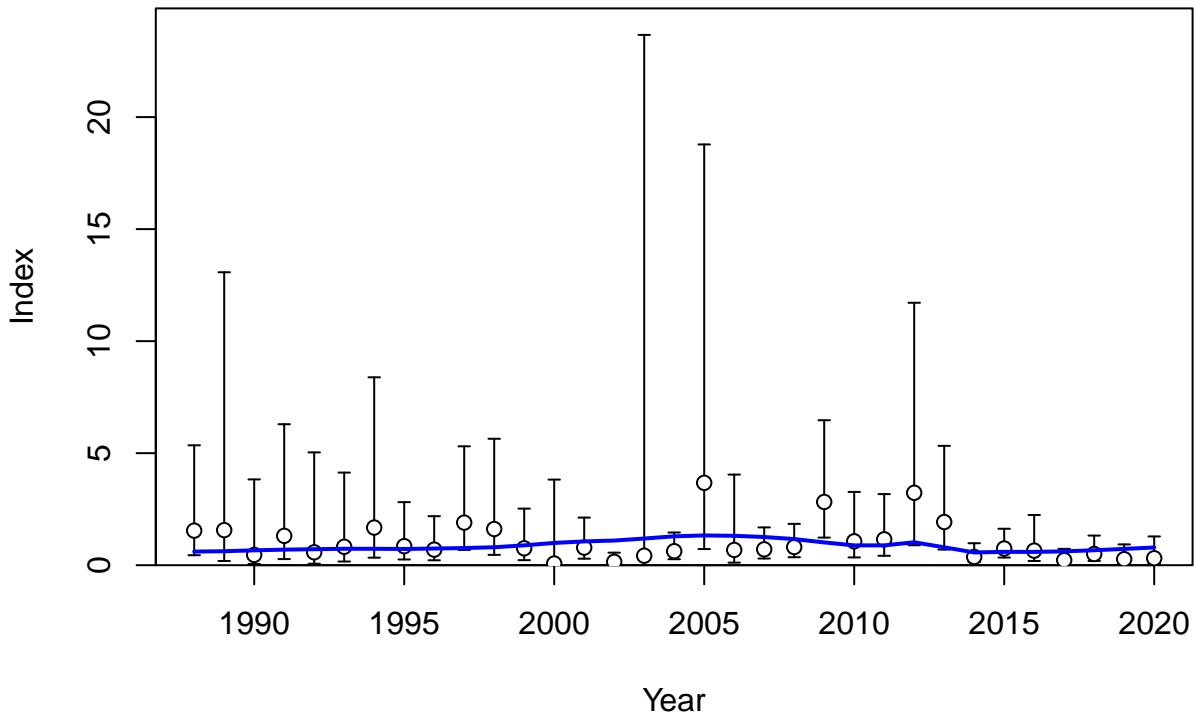


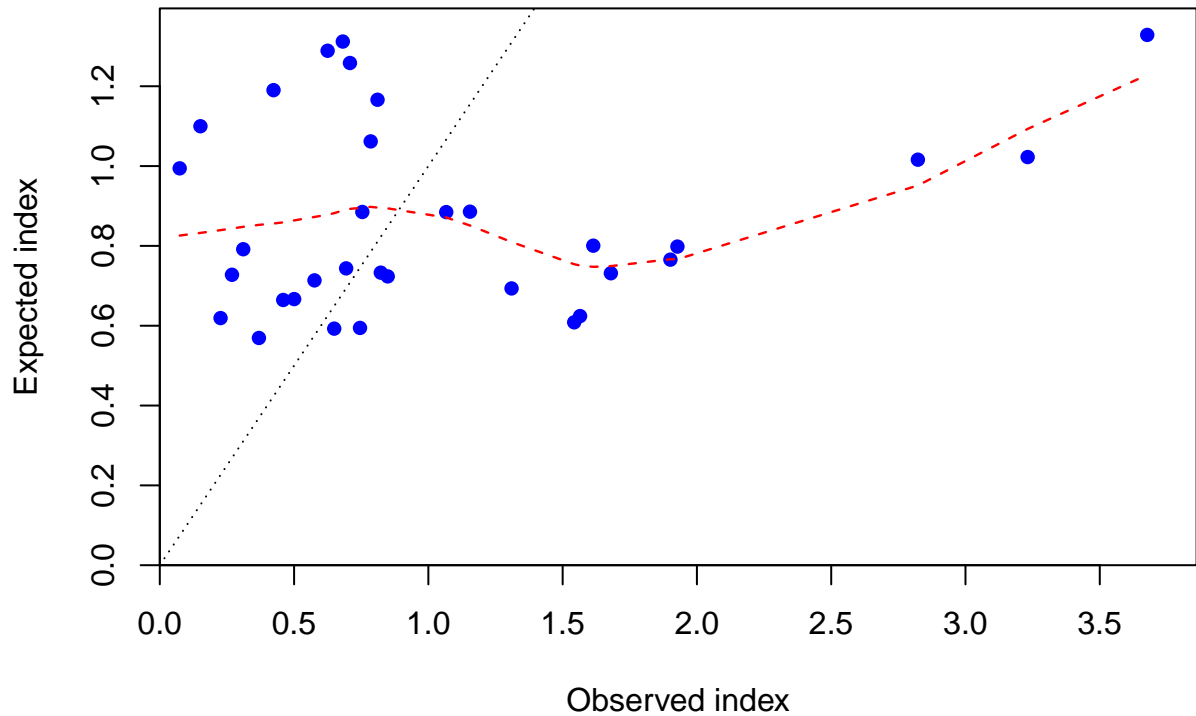
Fishing intensity: 1-SPR

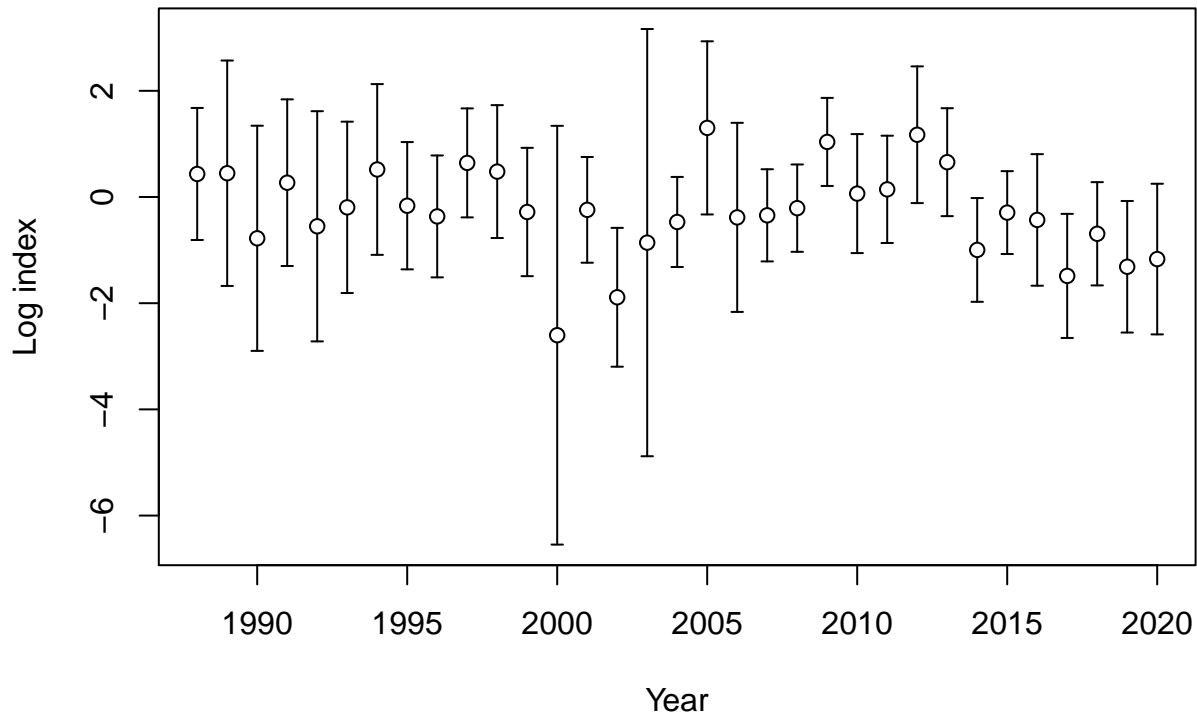


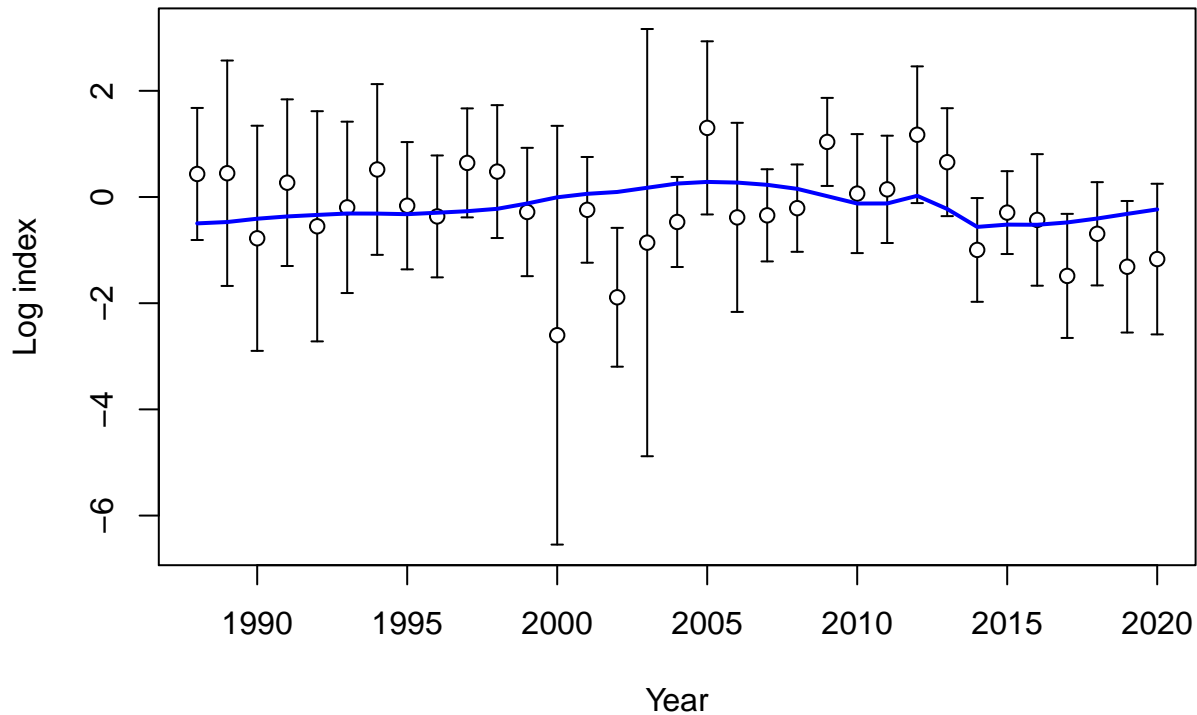
Relative spawning output: B/B_{MSY}

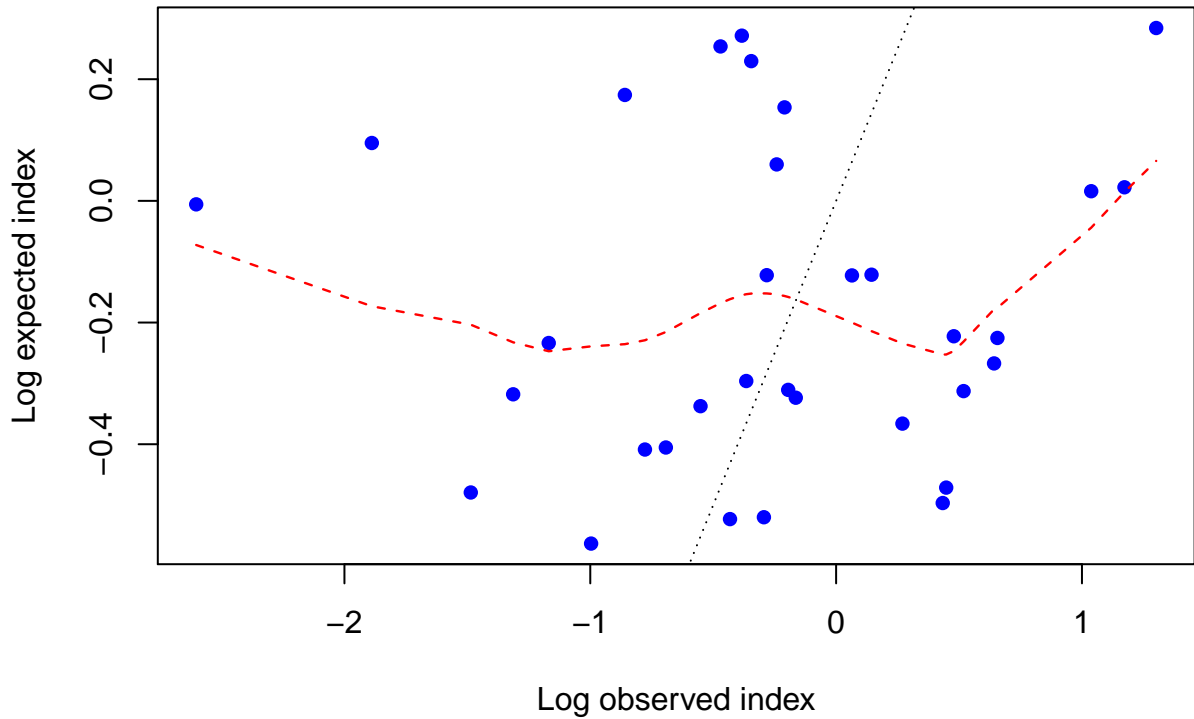




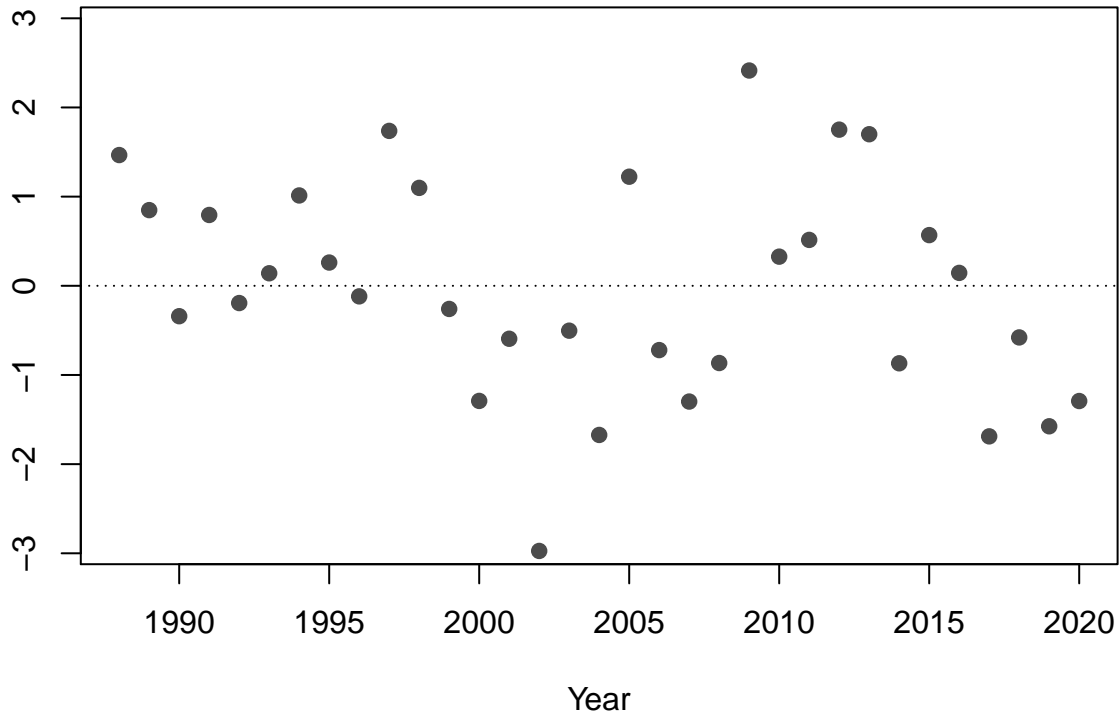


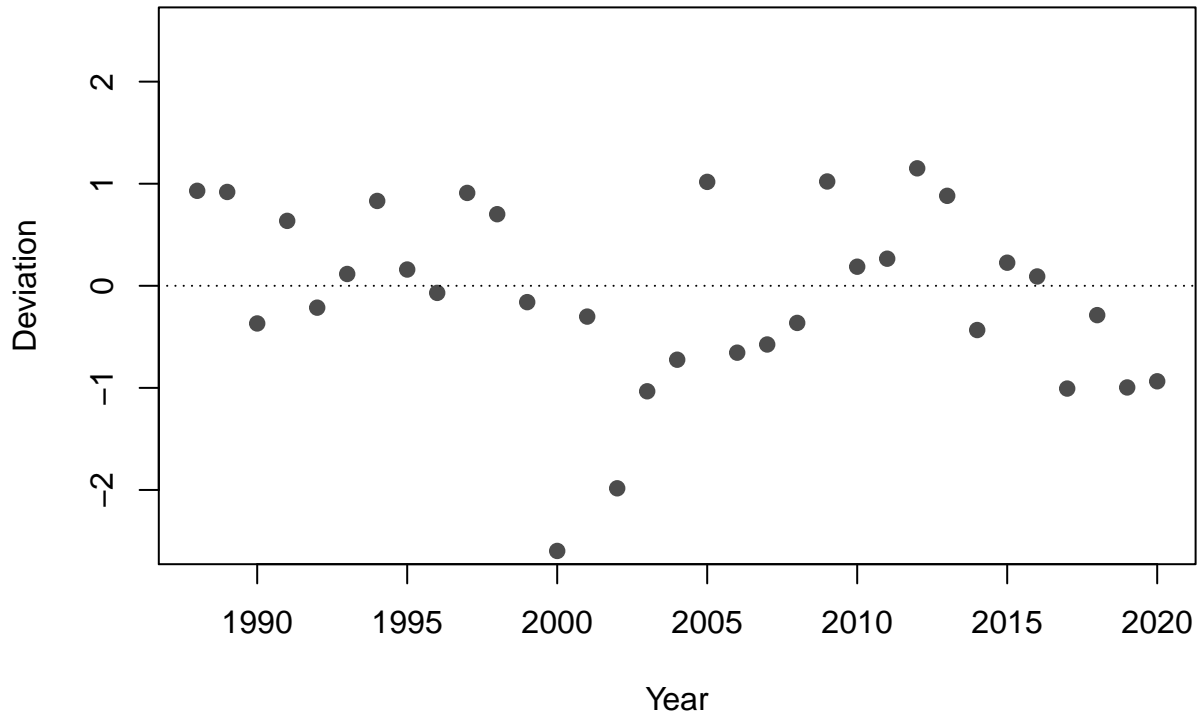


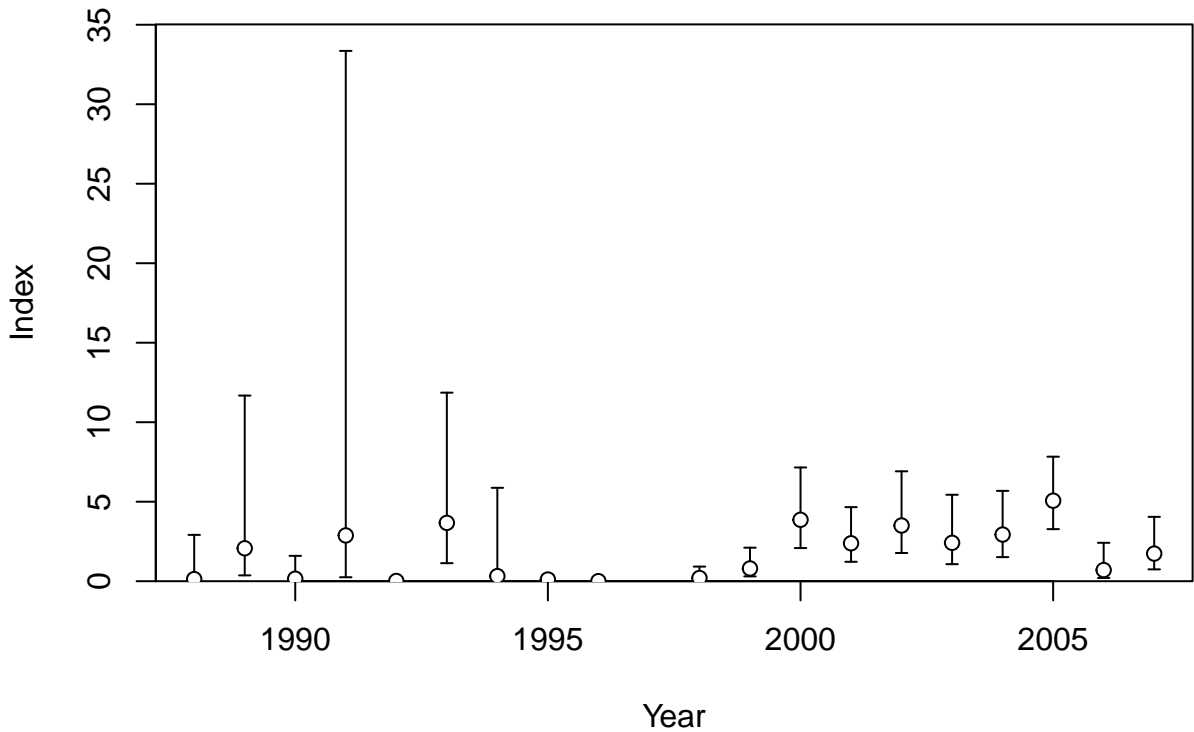


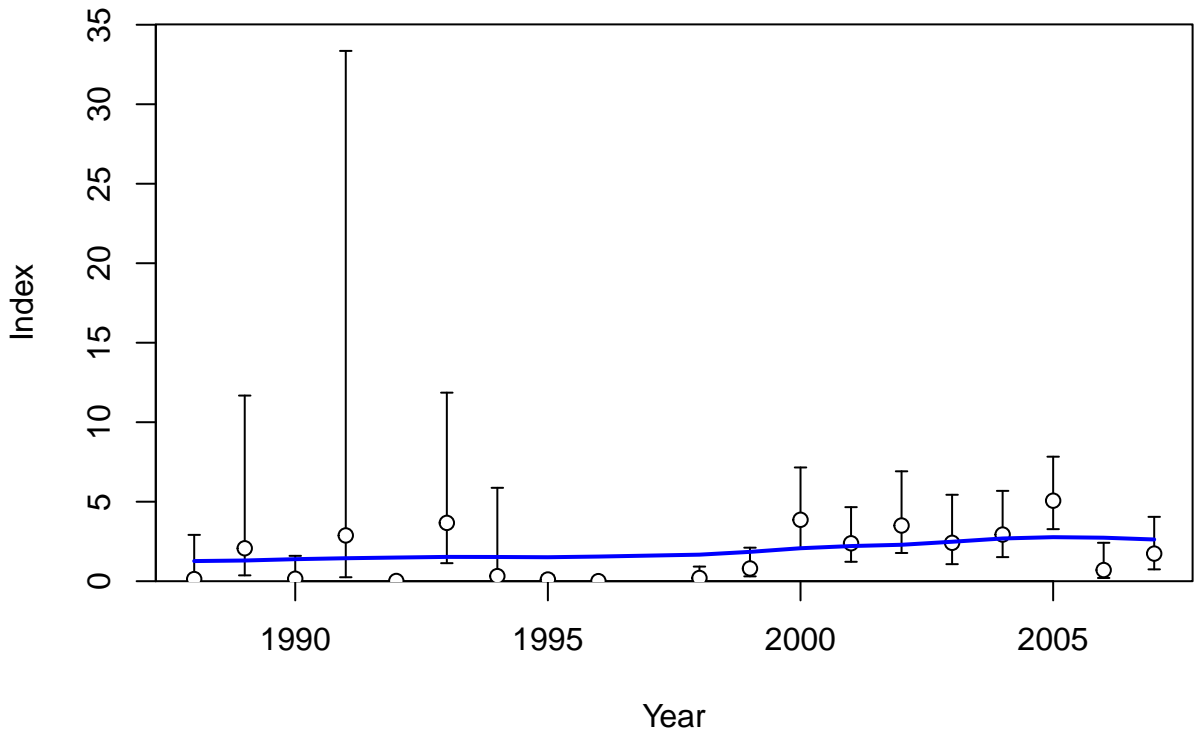


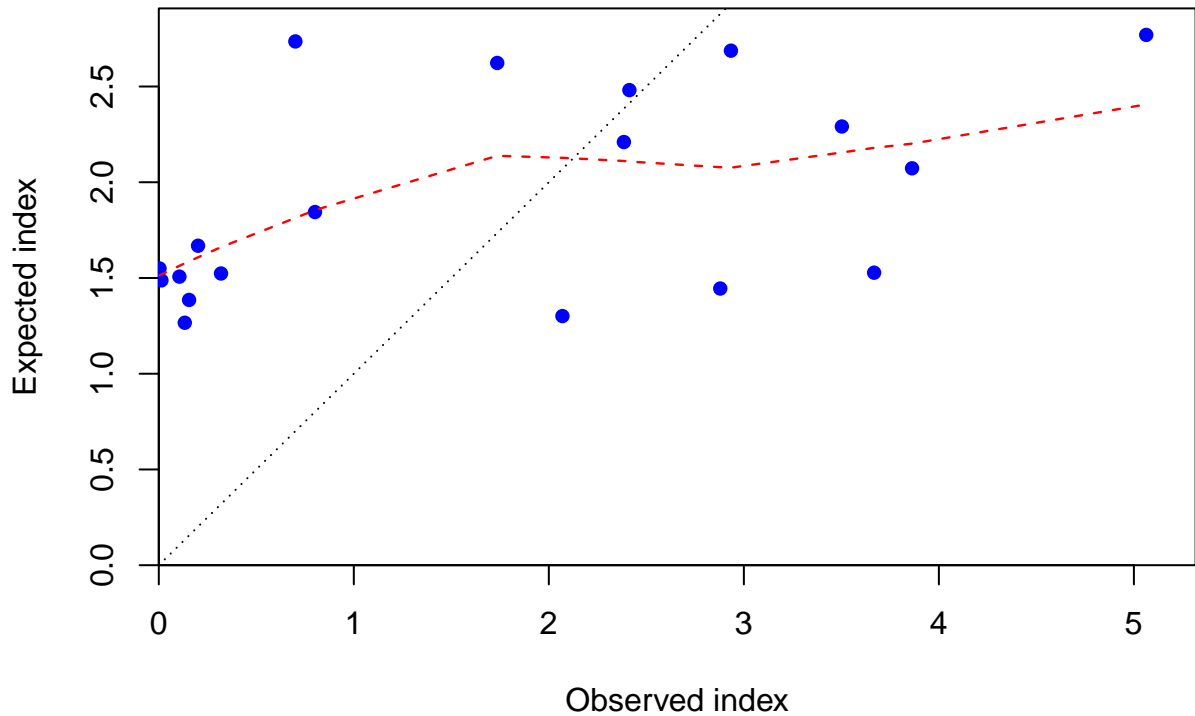
Residual

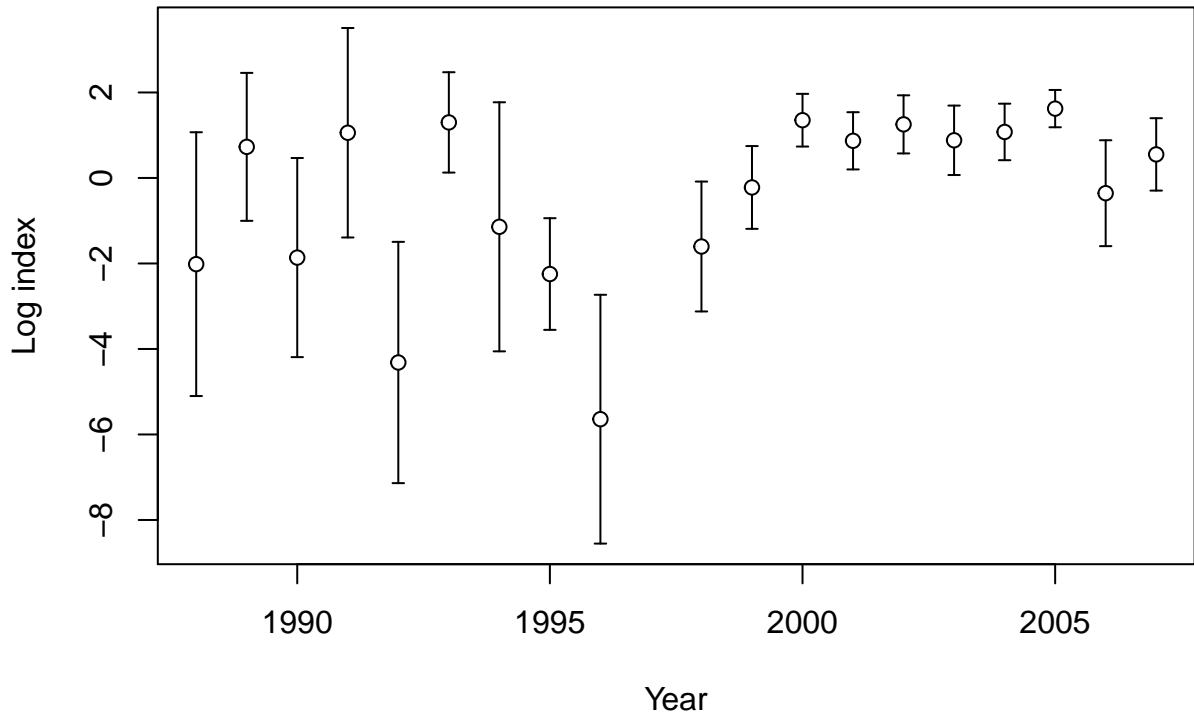


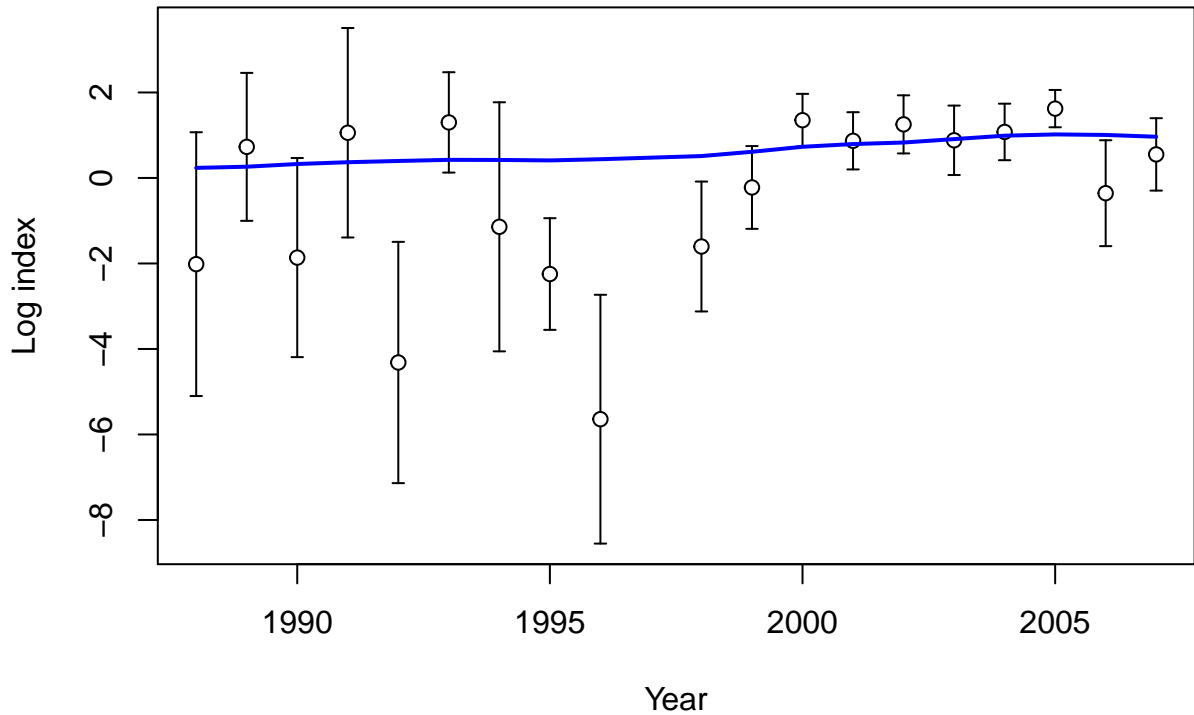


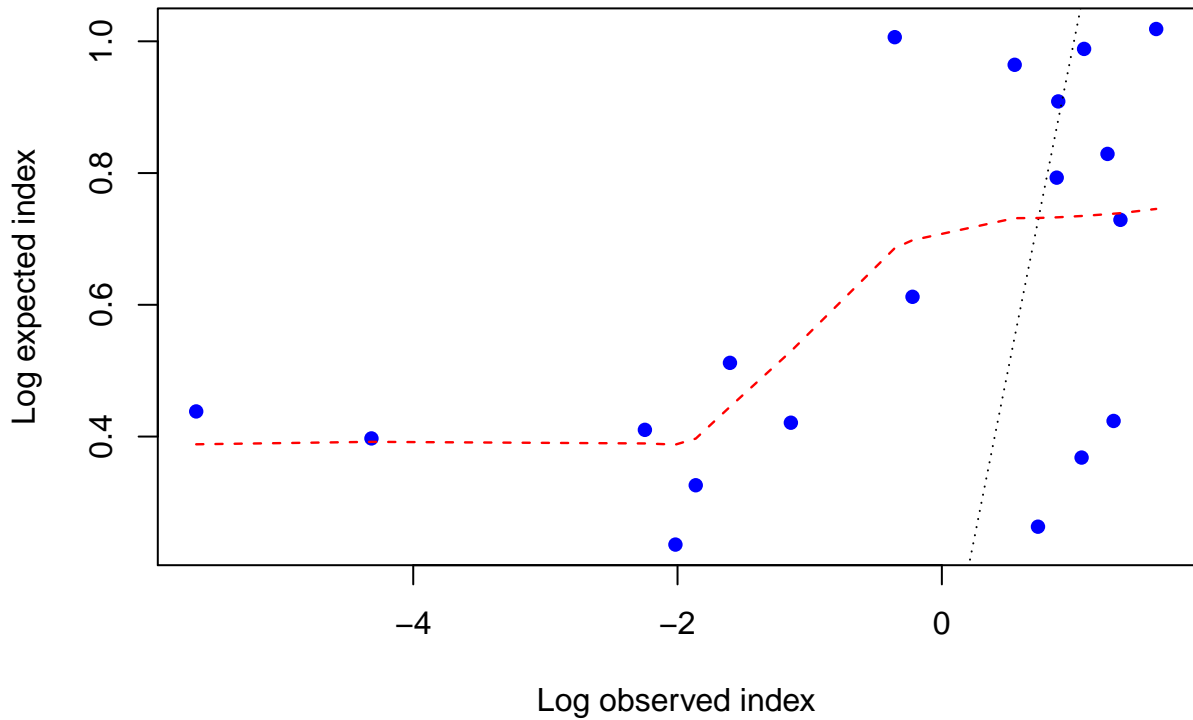


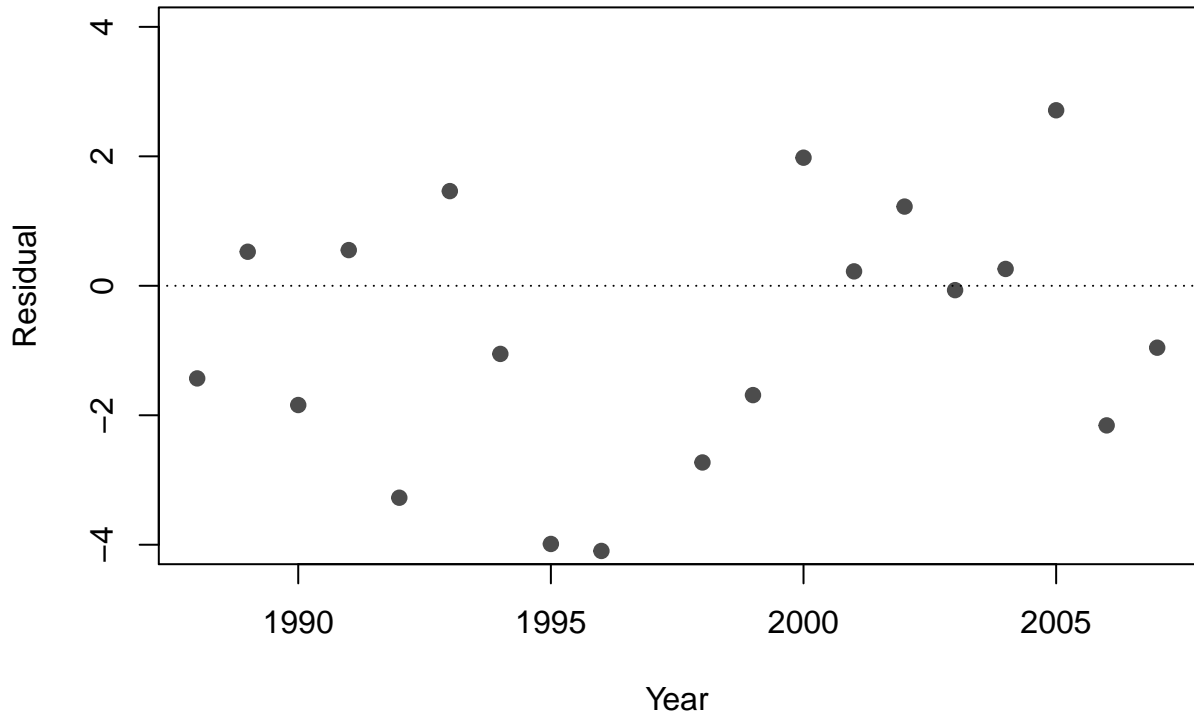


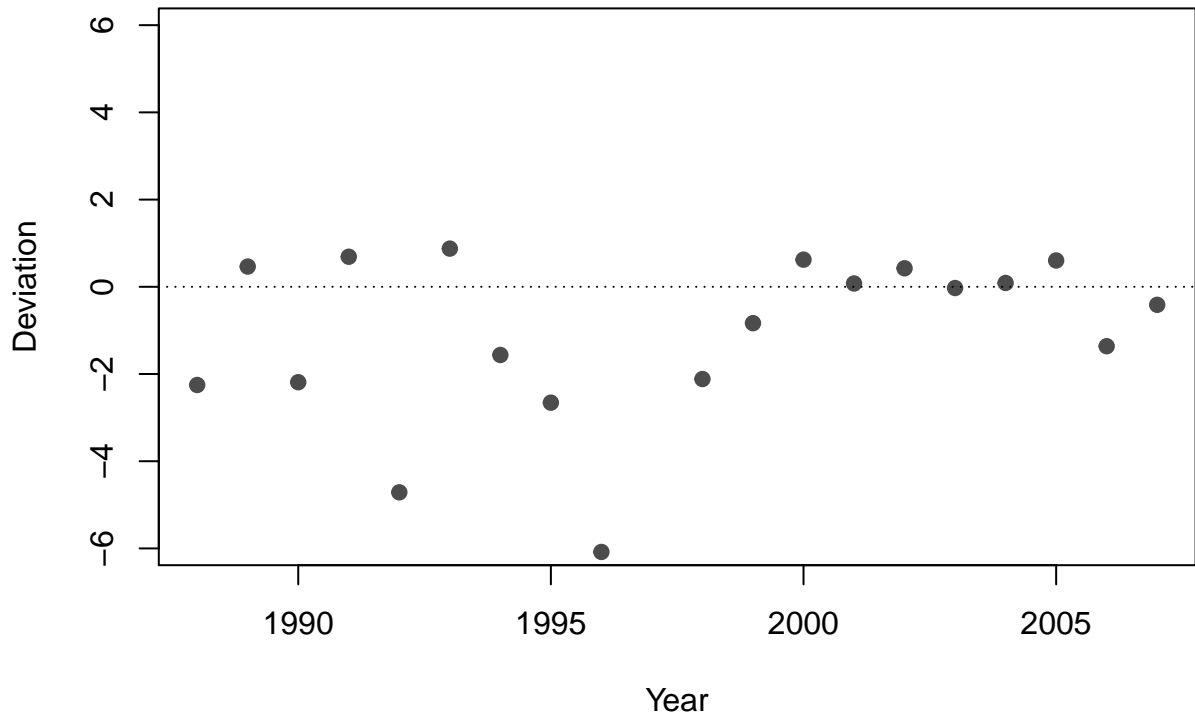




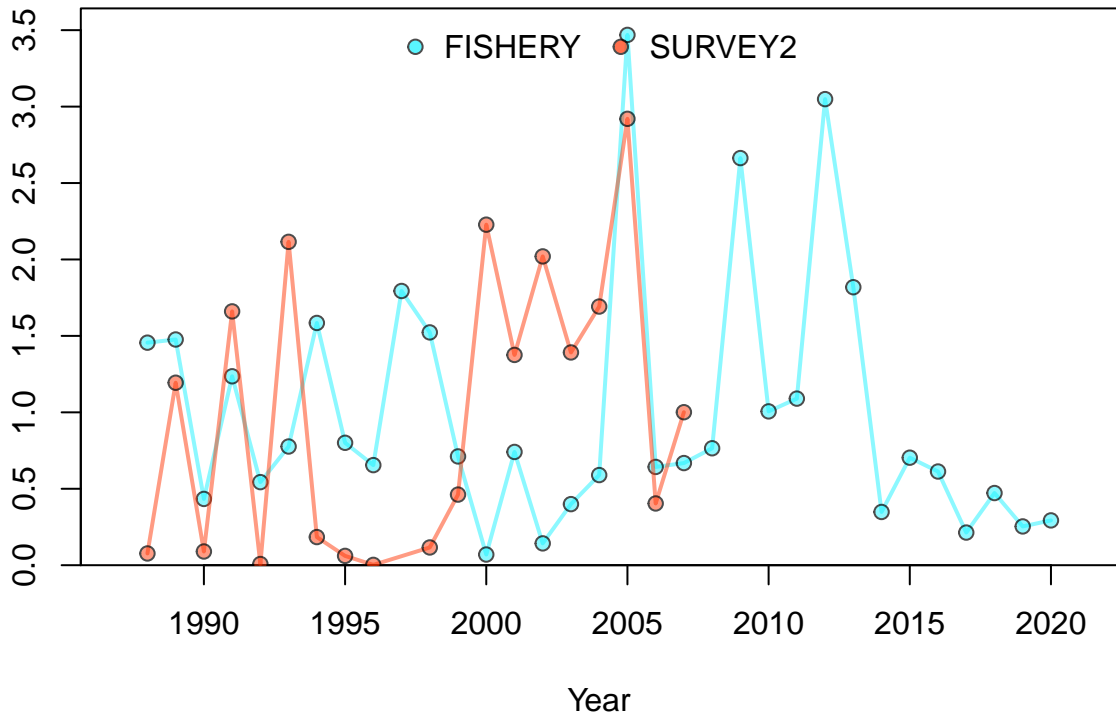


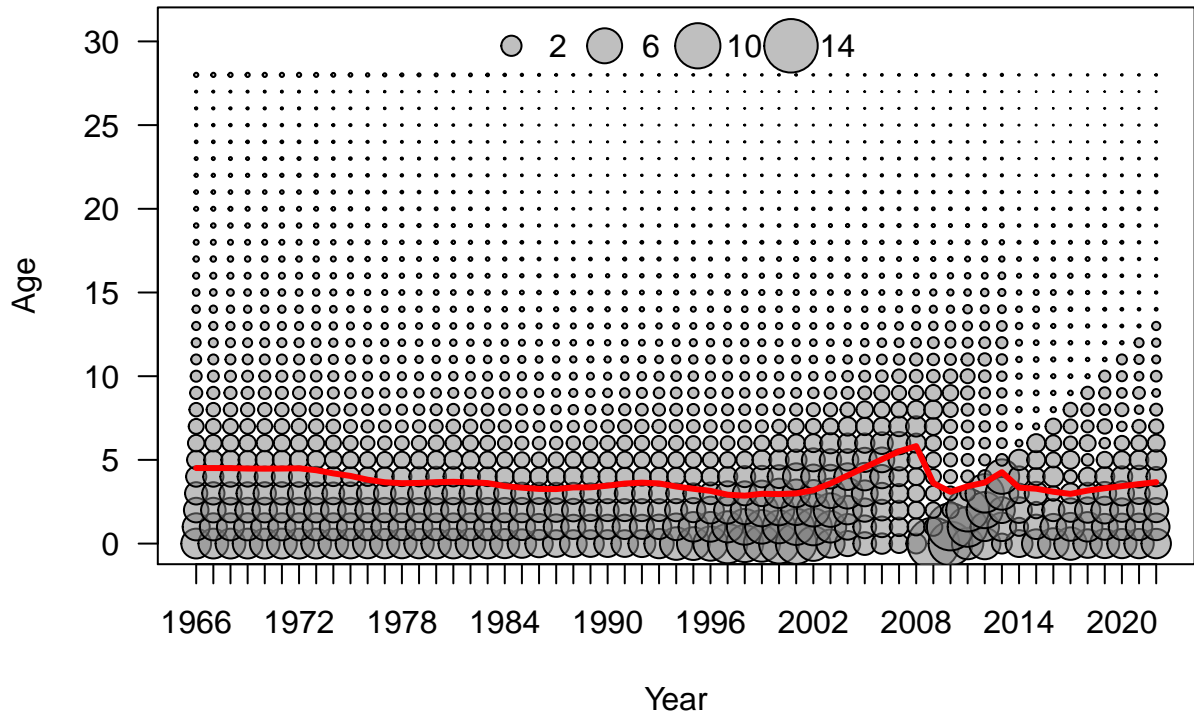


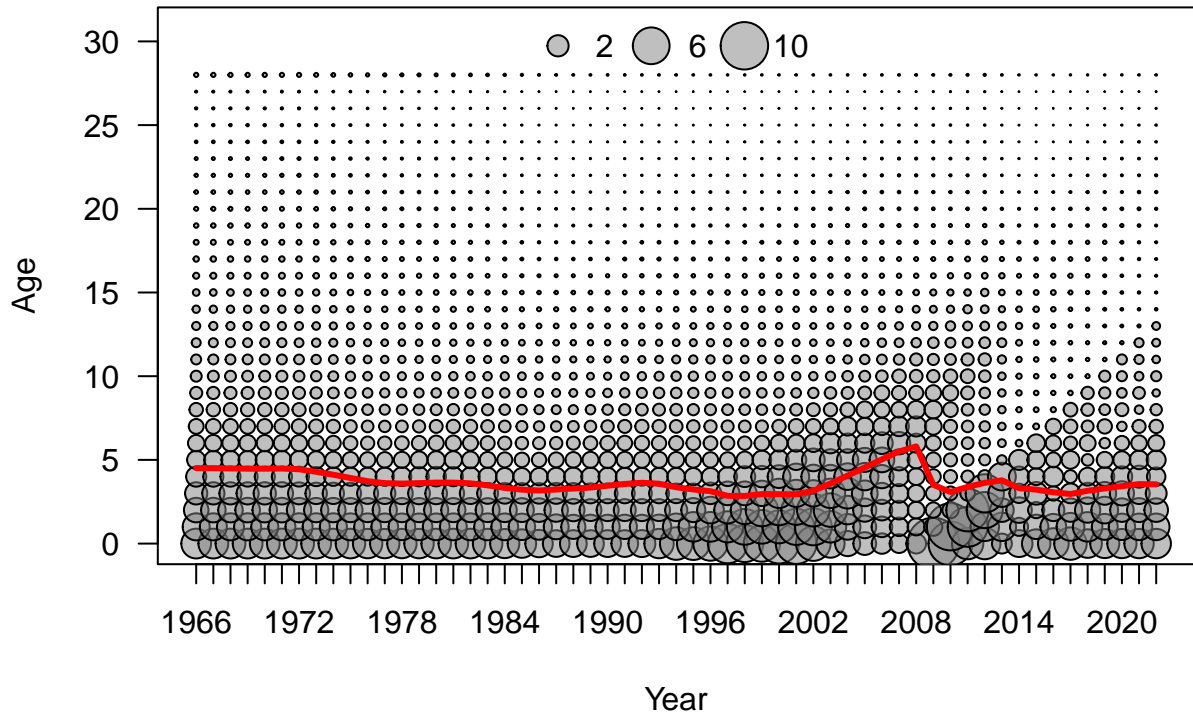




Standardized index







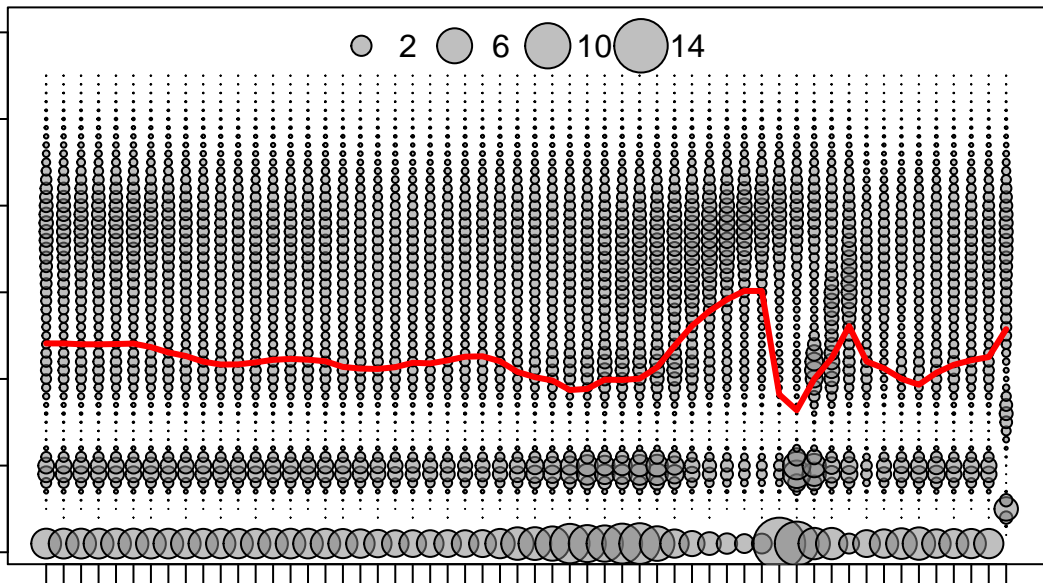
Length

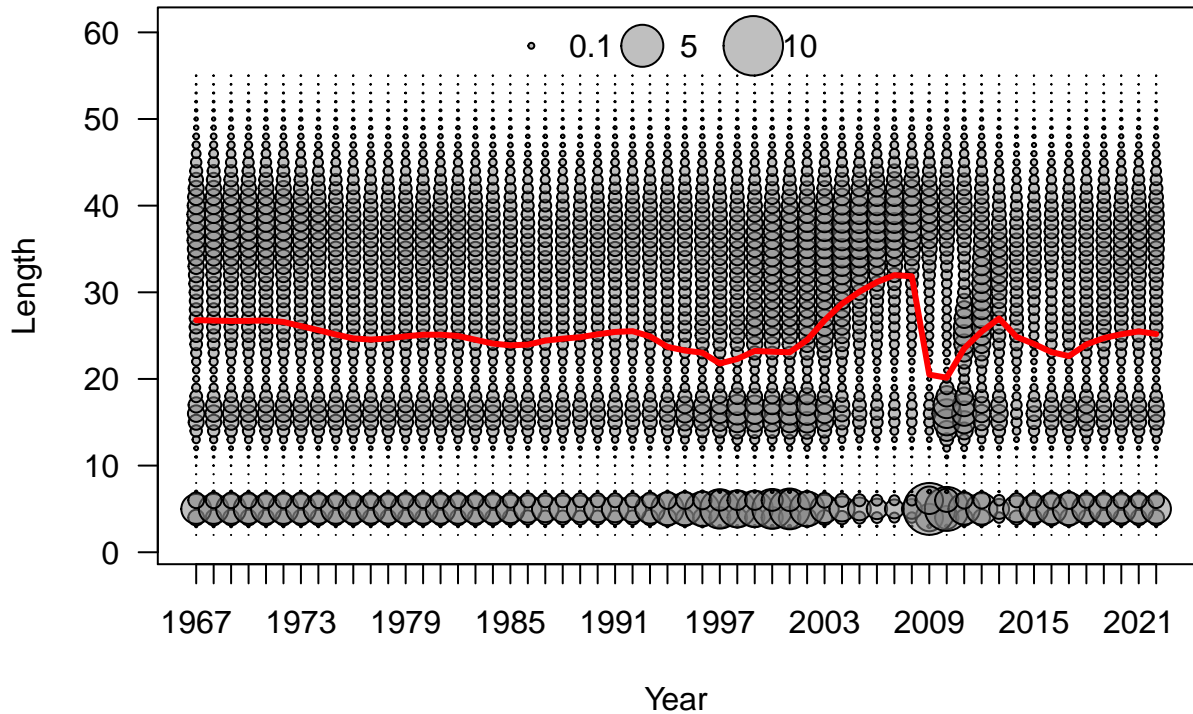
60
50
40
30
20
10
0

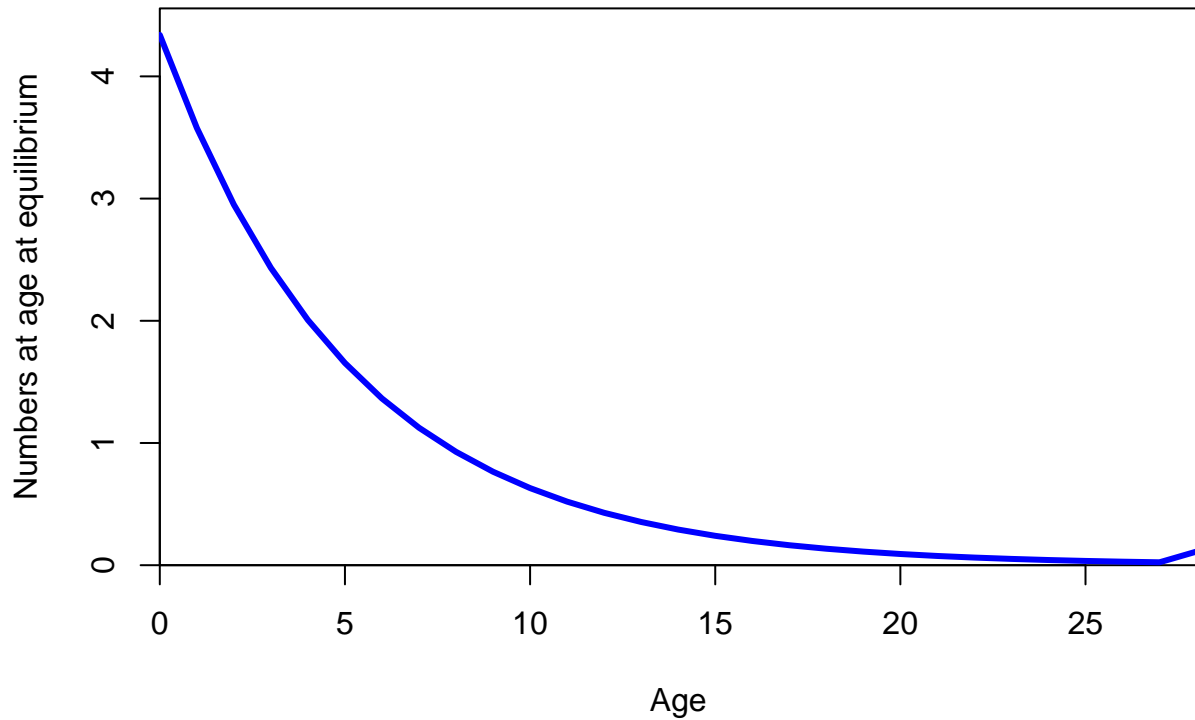
● 2 ● 6 ● 10 ● 14

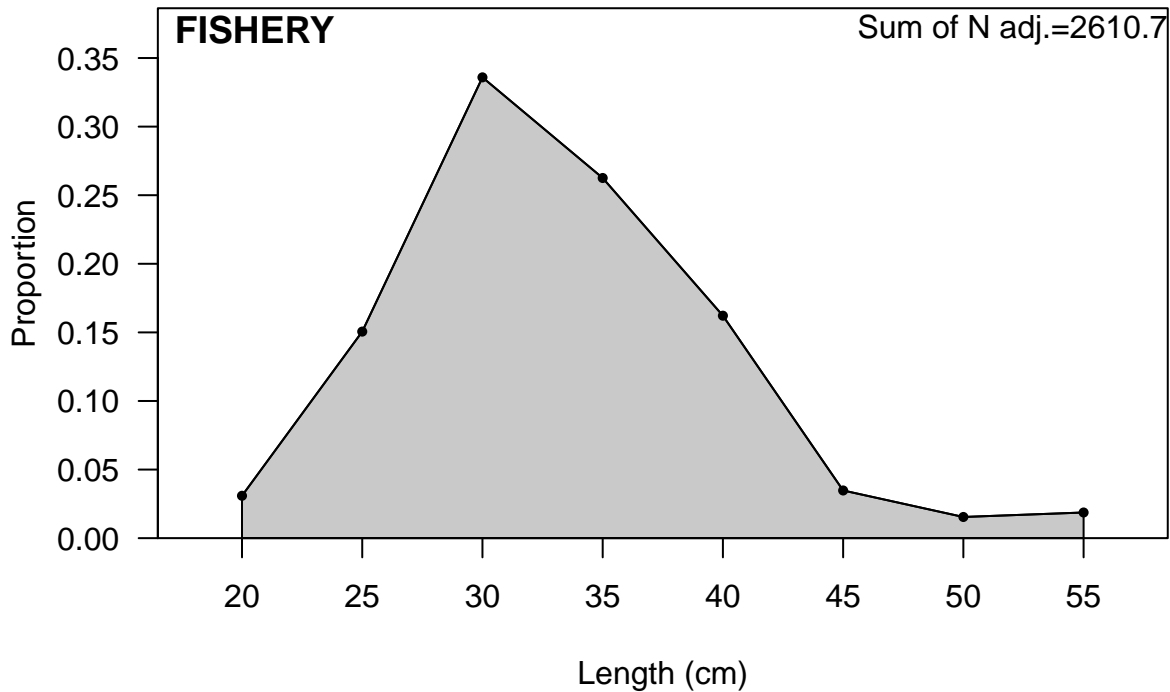
1967 1973 1979 1985 1991 1997 2003 2009 2015 2021

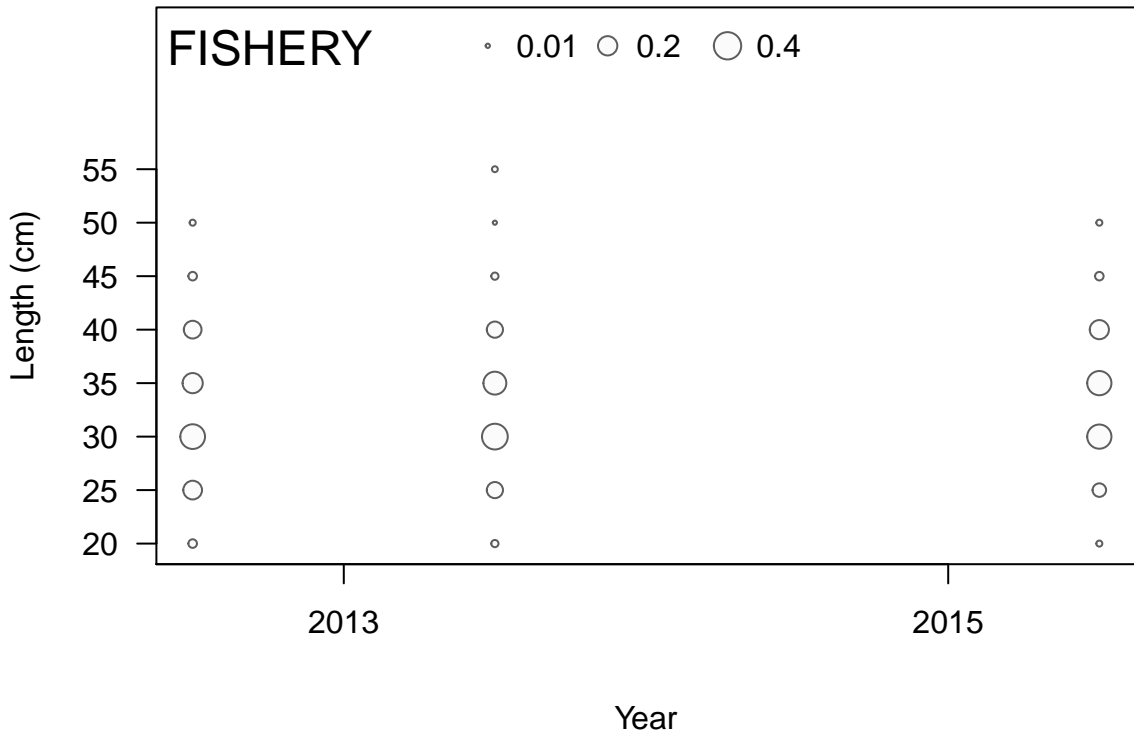
Year

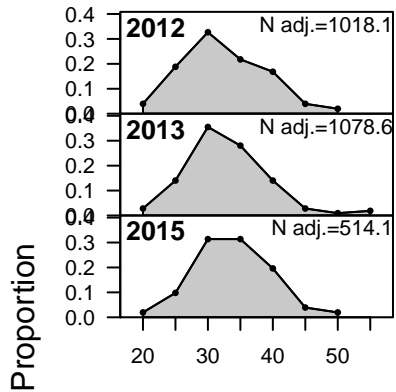




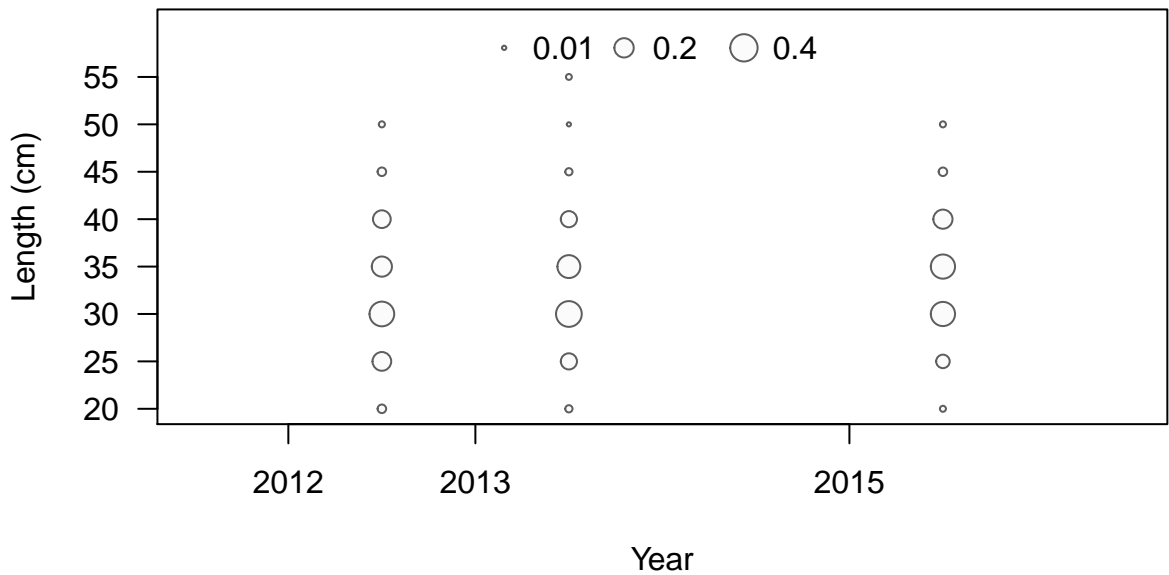




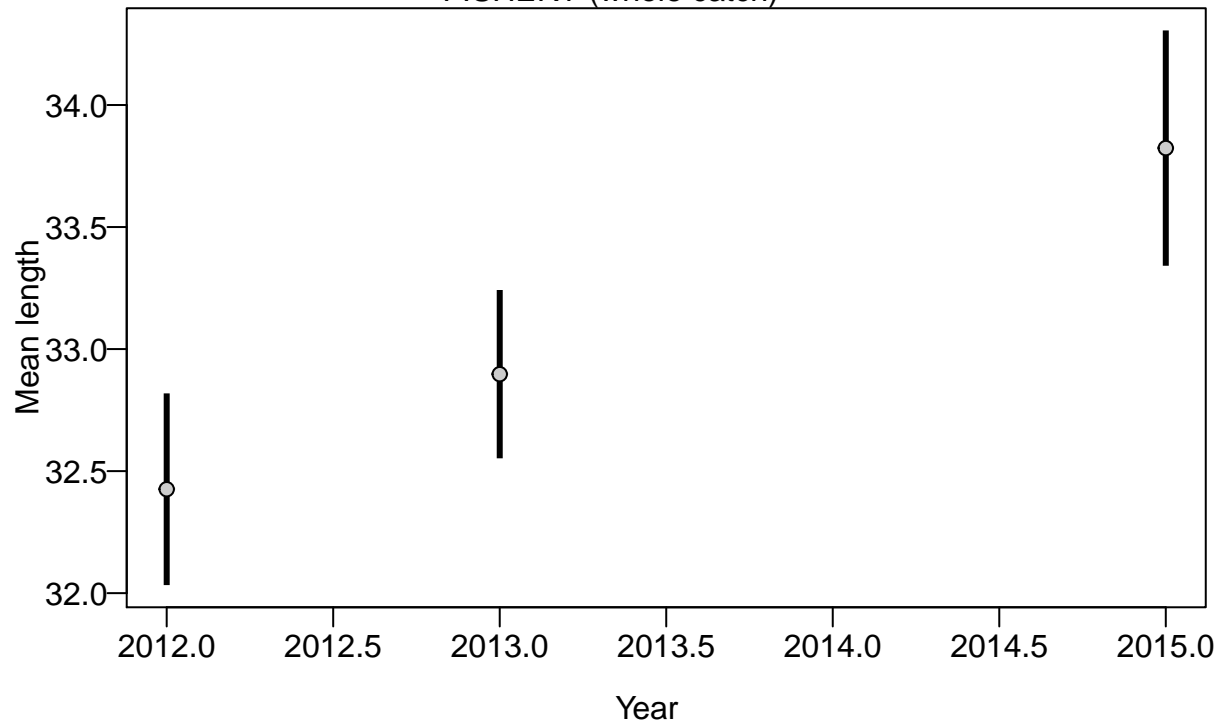


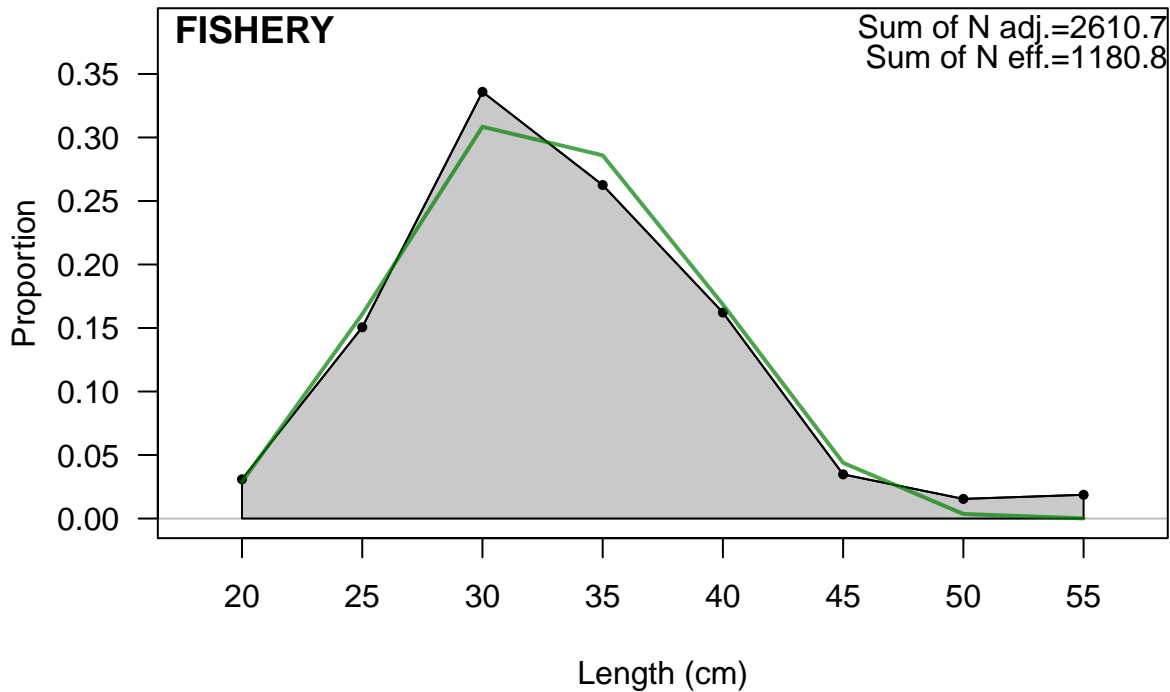


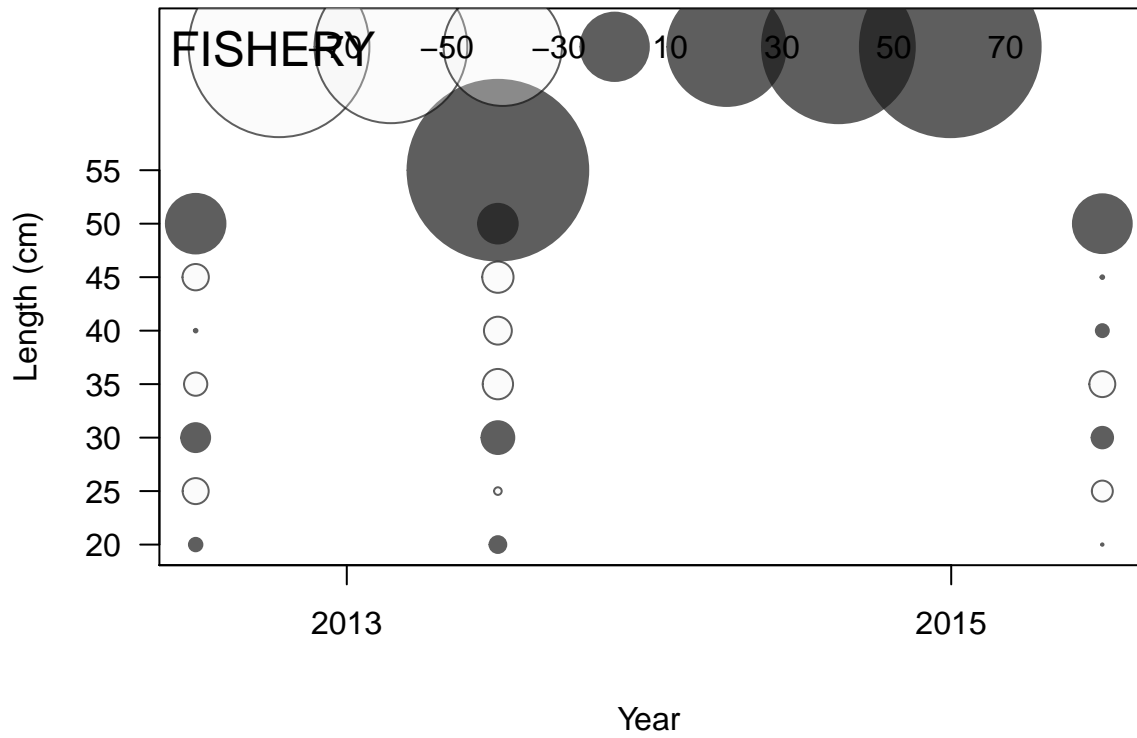
Length (cm)



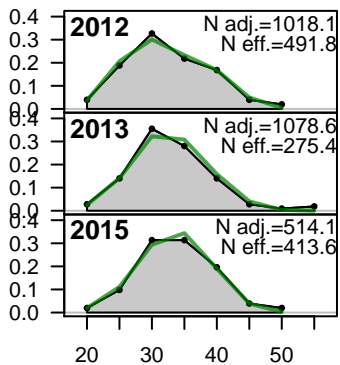
FISHERY (whole catch)



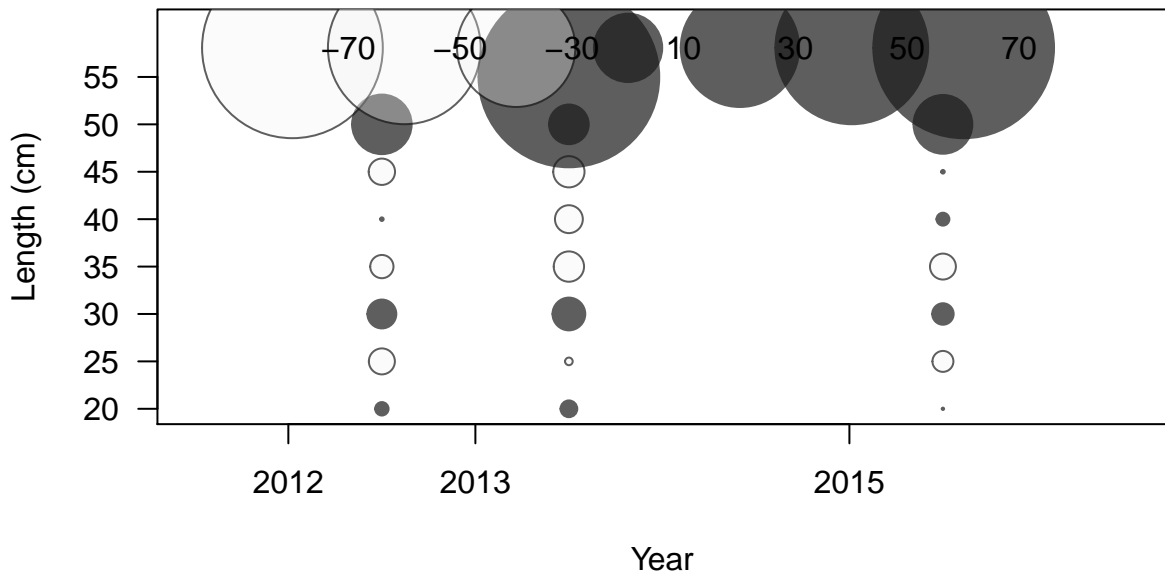




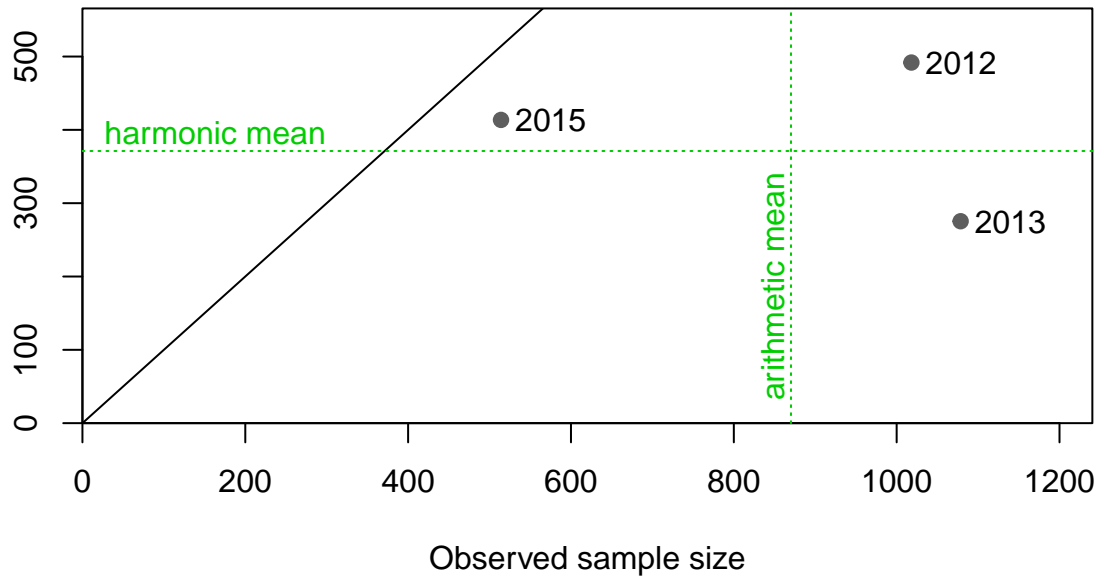
Proportion



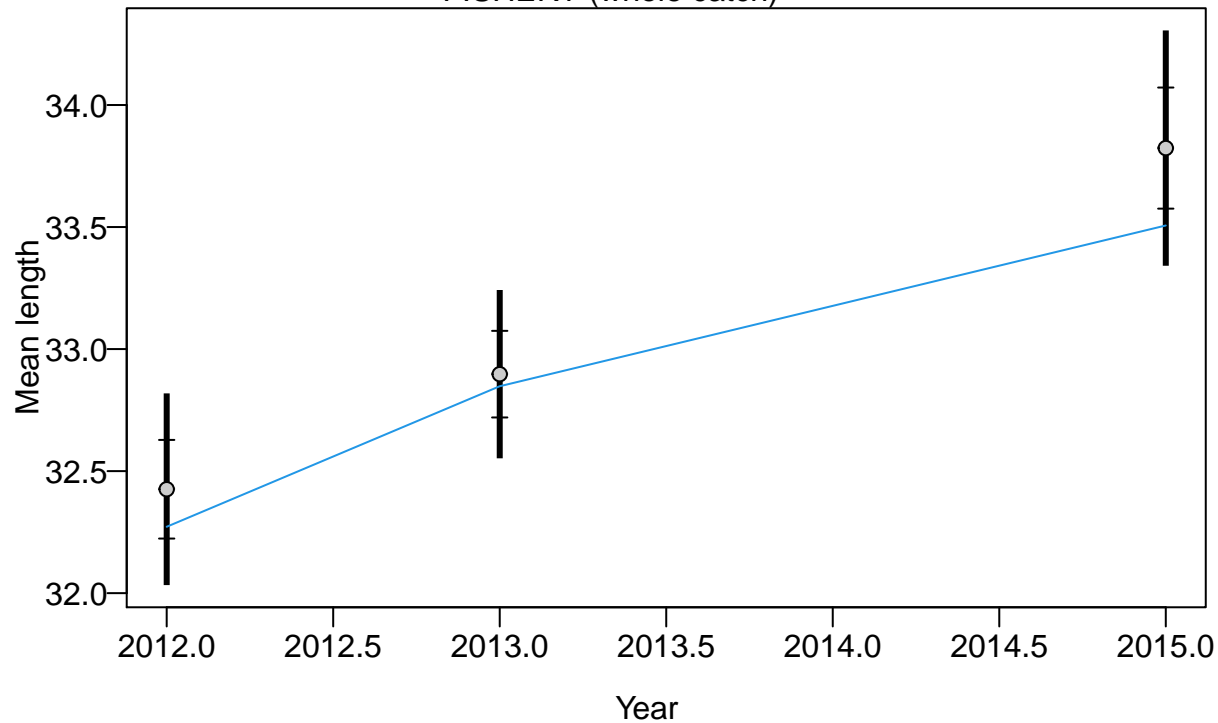
Length (cm)

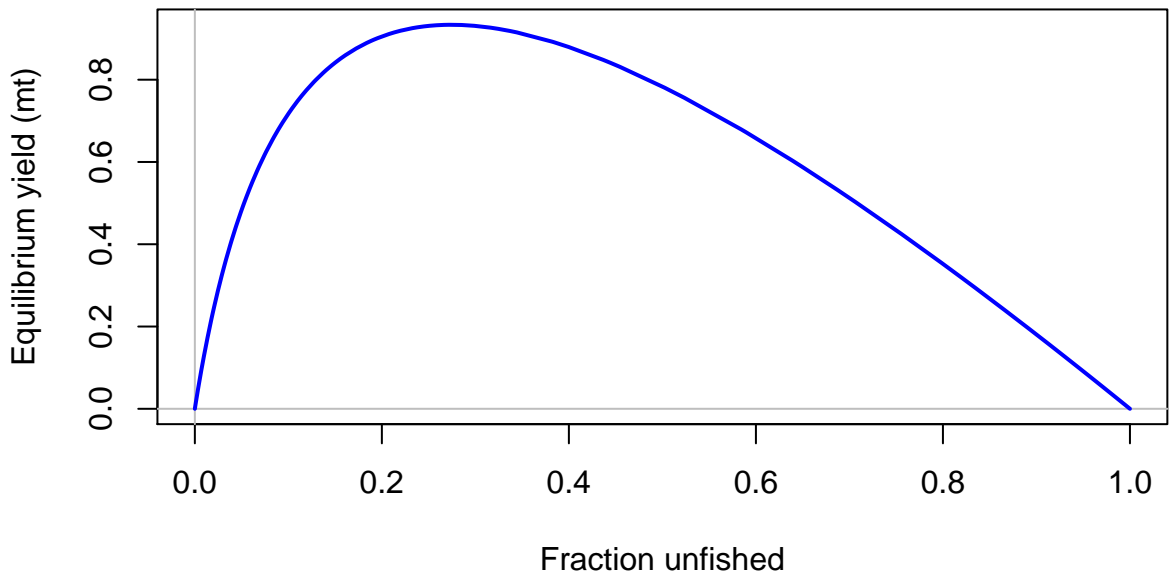


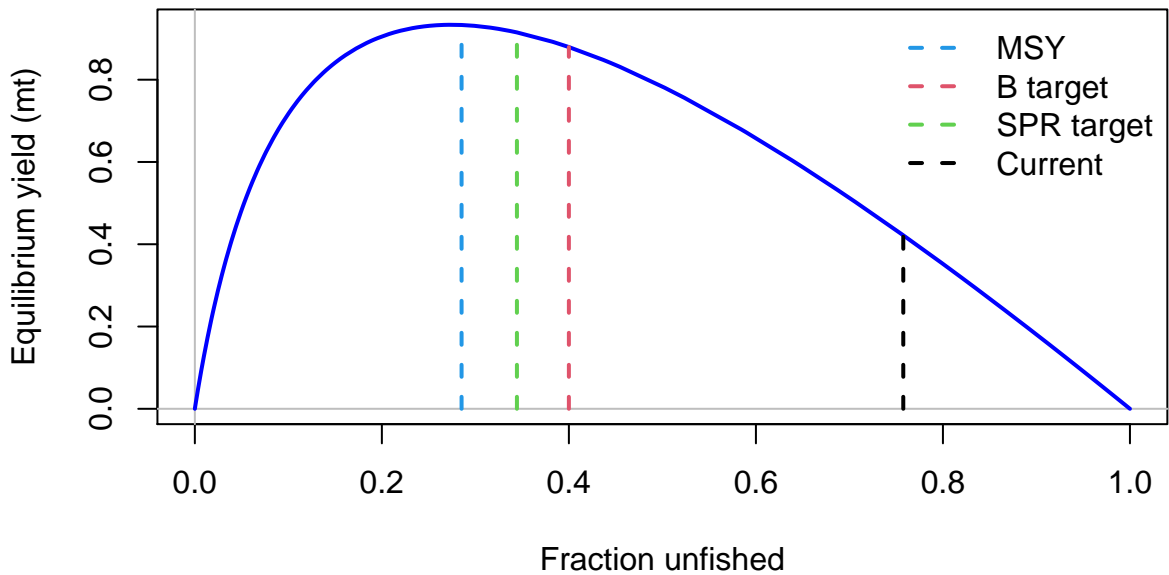
Effective sample size

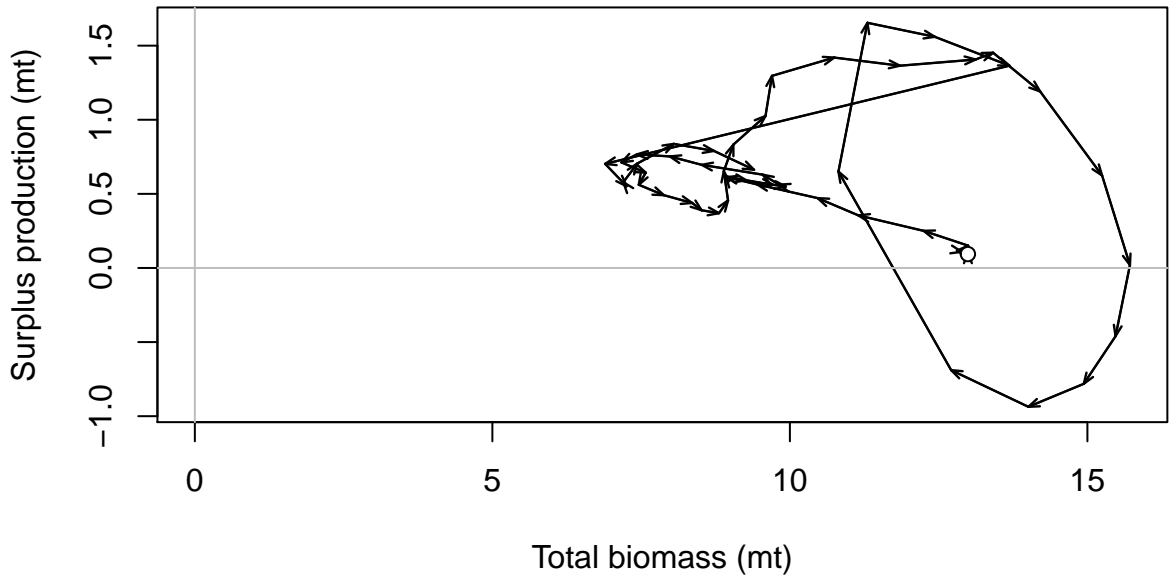


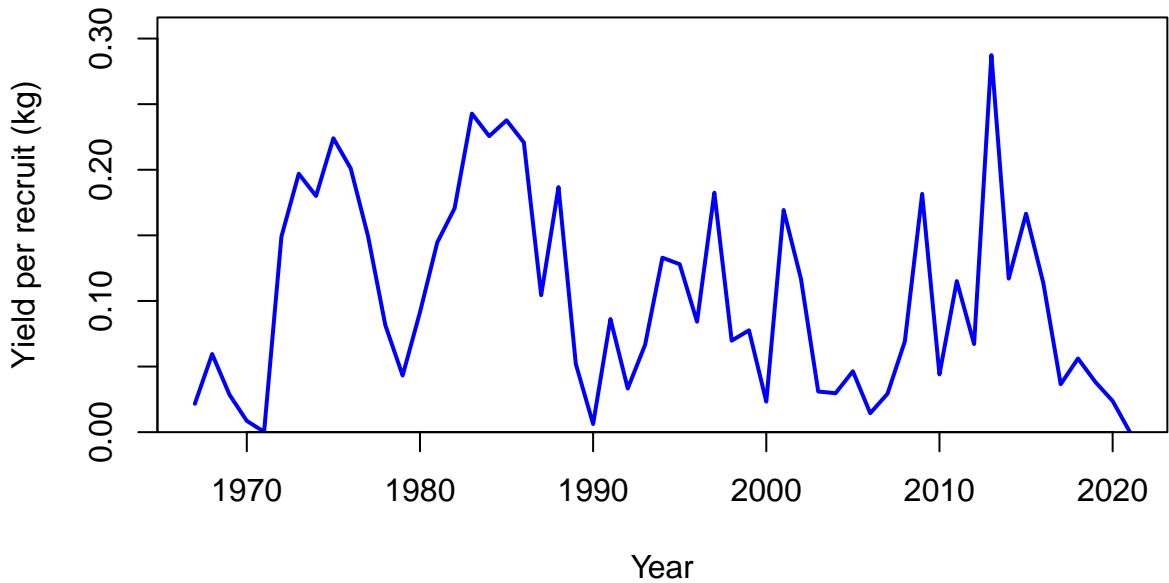
FISHERY (whole catch)

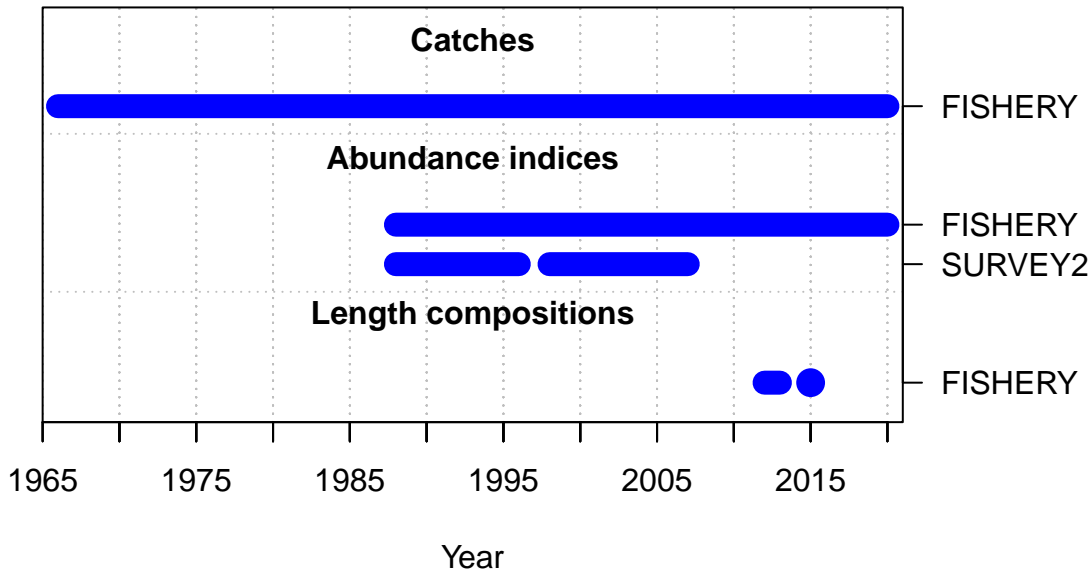


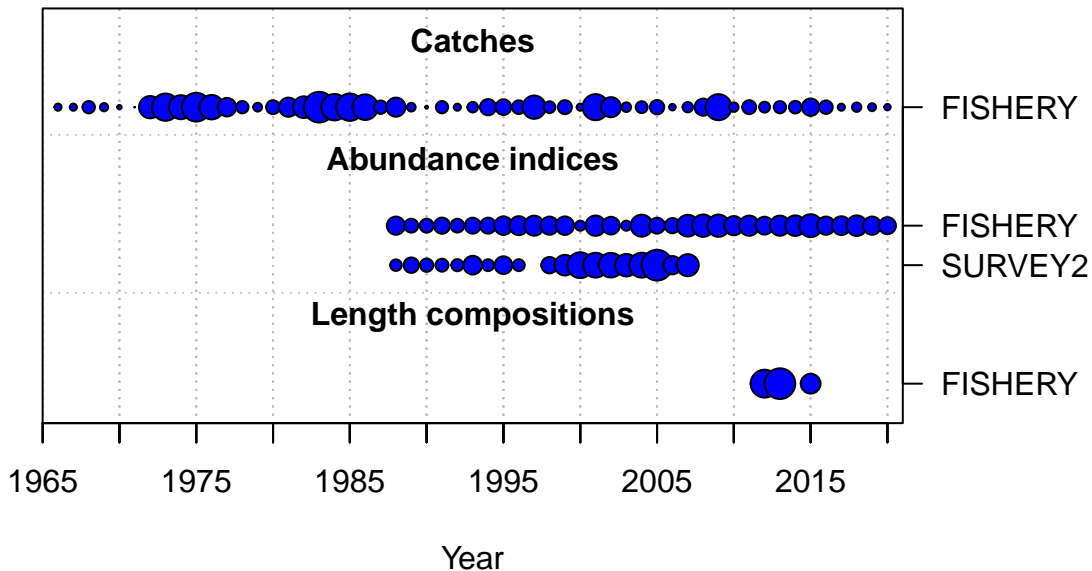




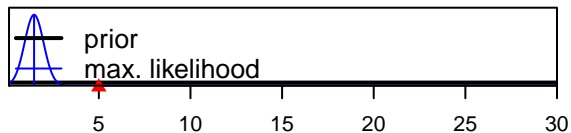




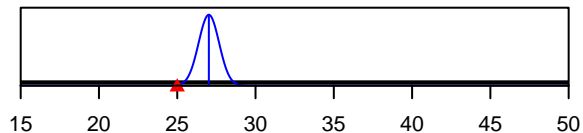




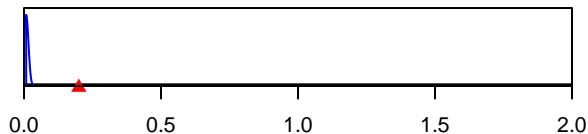
SR_LN(R0)



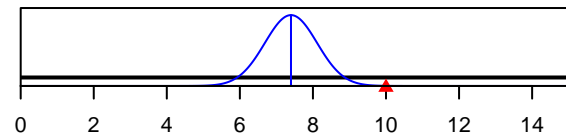
Size_inflection_FISHERY(1)



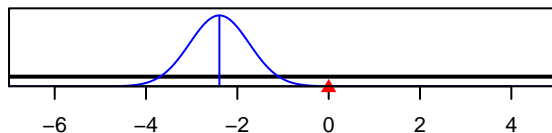
InitF_seas_1_flt_1FISHERY



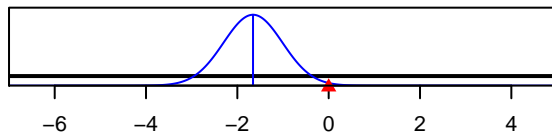
Size_95%width_FISHERY(1)



LnQ_base_FISHERY(1)



LnQ_base_SURVEY2(2)



Density

Parameter value