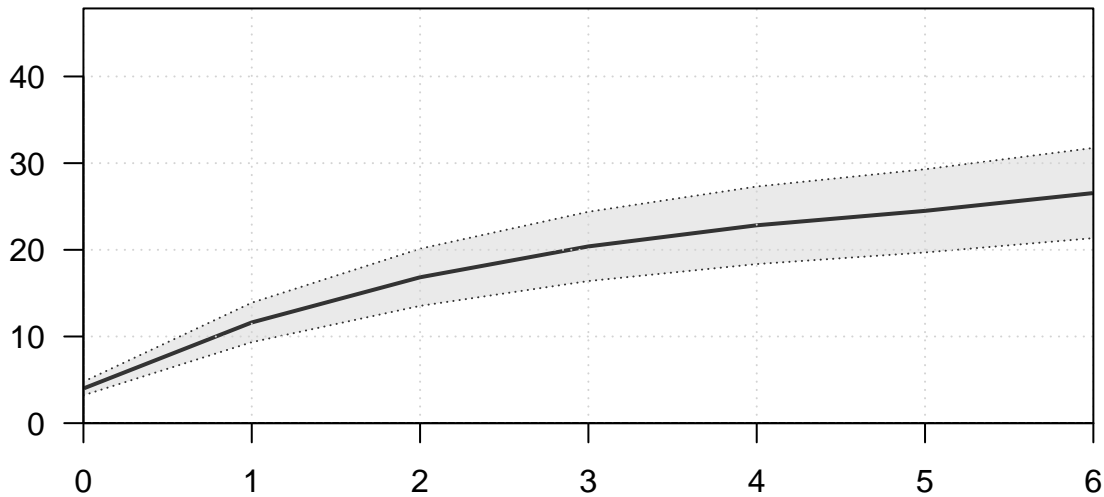
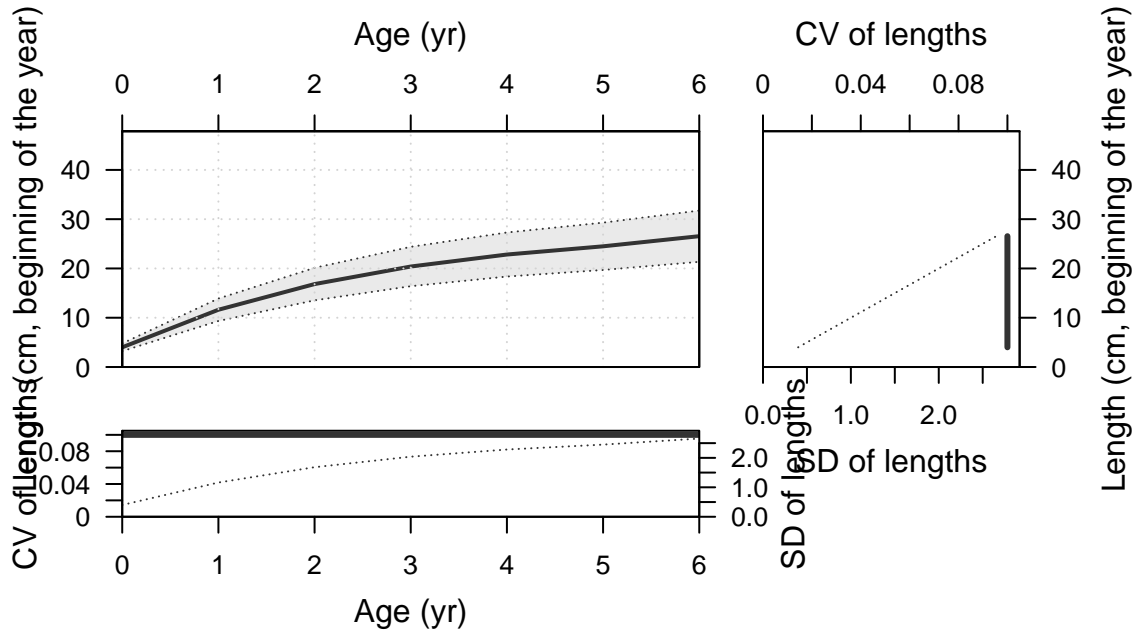


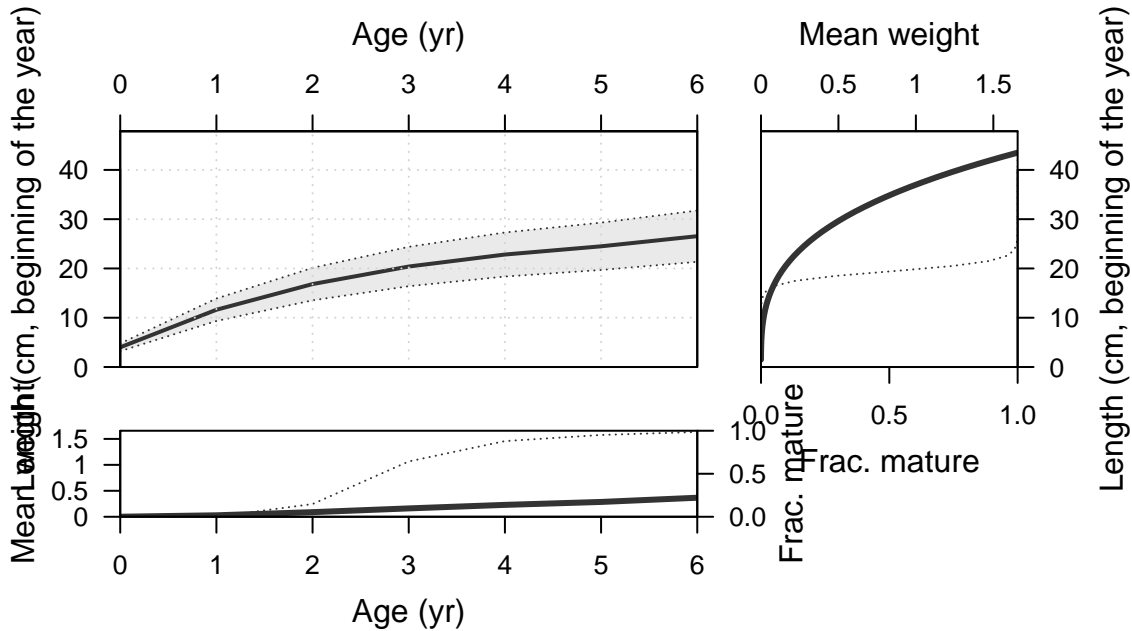
Plots created using the 'r4ss' package in R
Stock Synthesis version: 3.30.19.0
StartTime: Fri Jul 22 12:20:47 2022
Data_File: data.ss
Control_File: control.ss

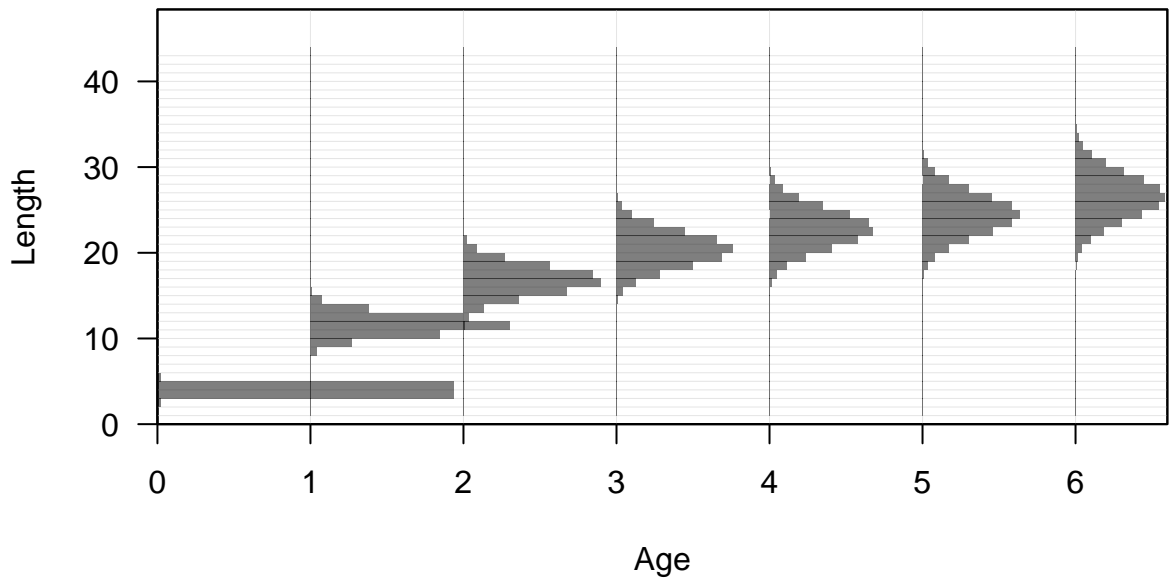
Length (cm, beginning of the year)

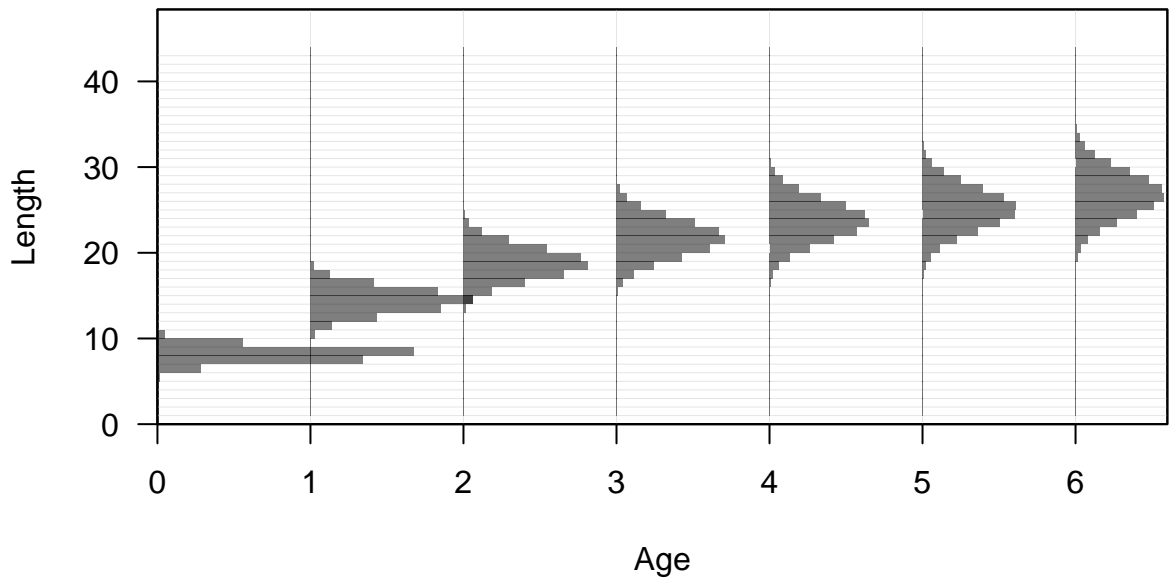


Age (yr)

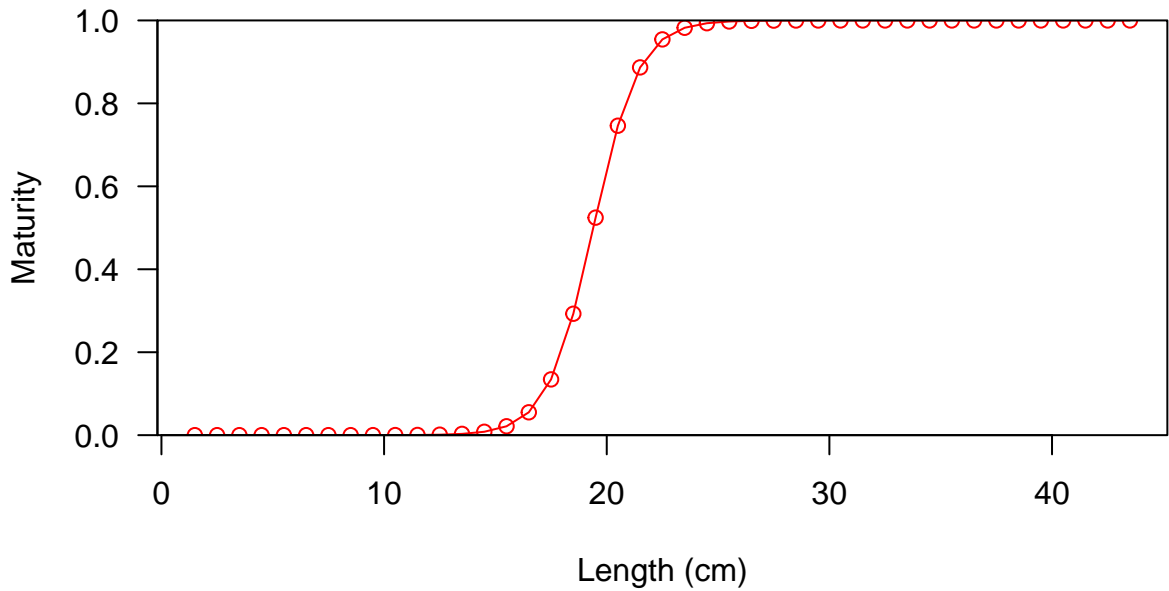








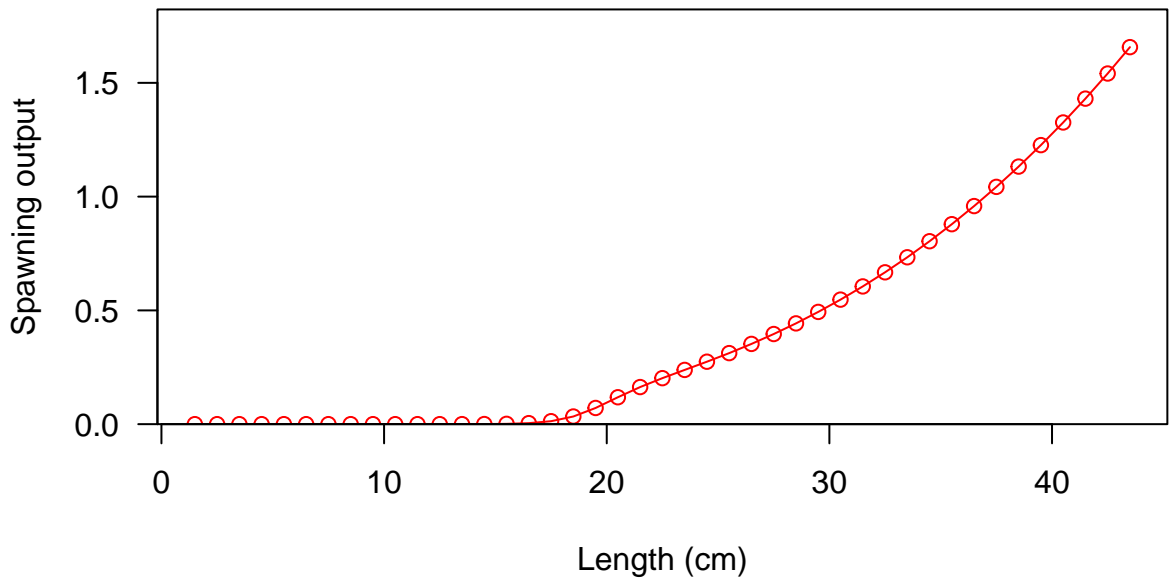


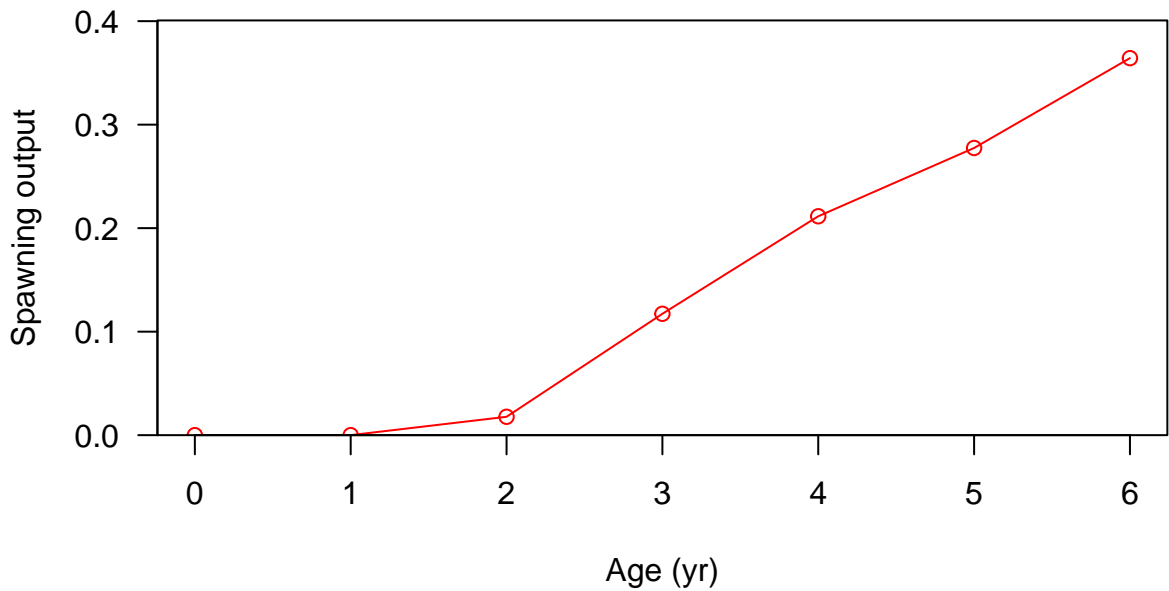




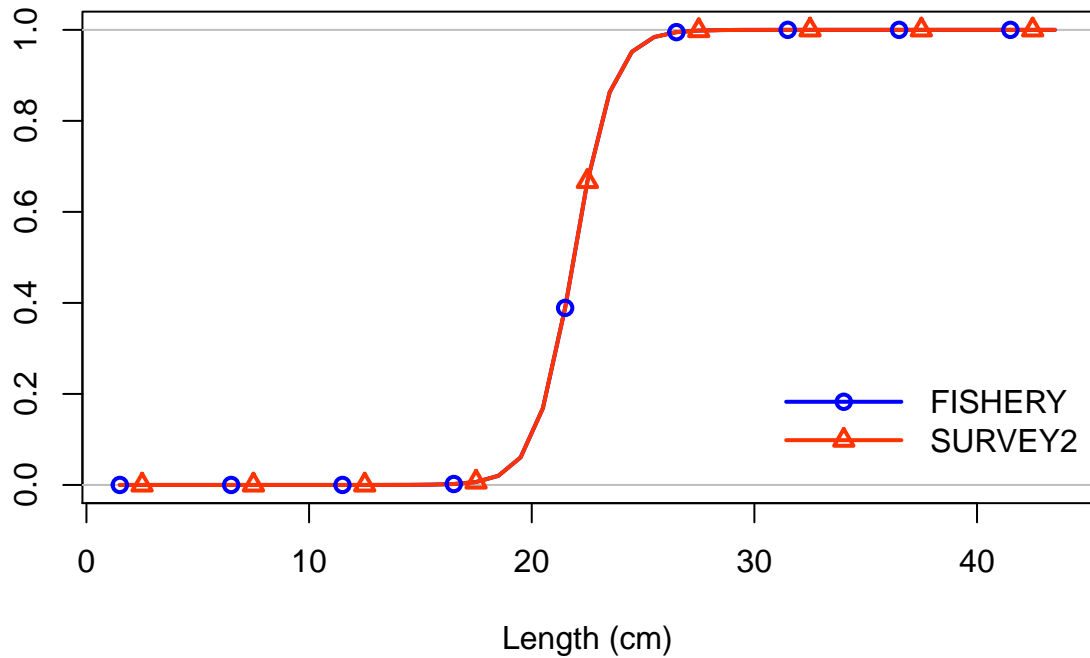




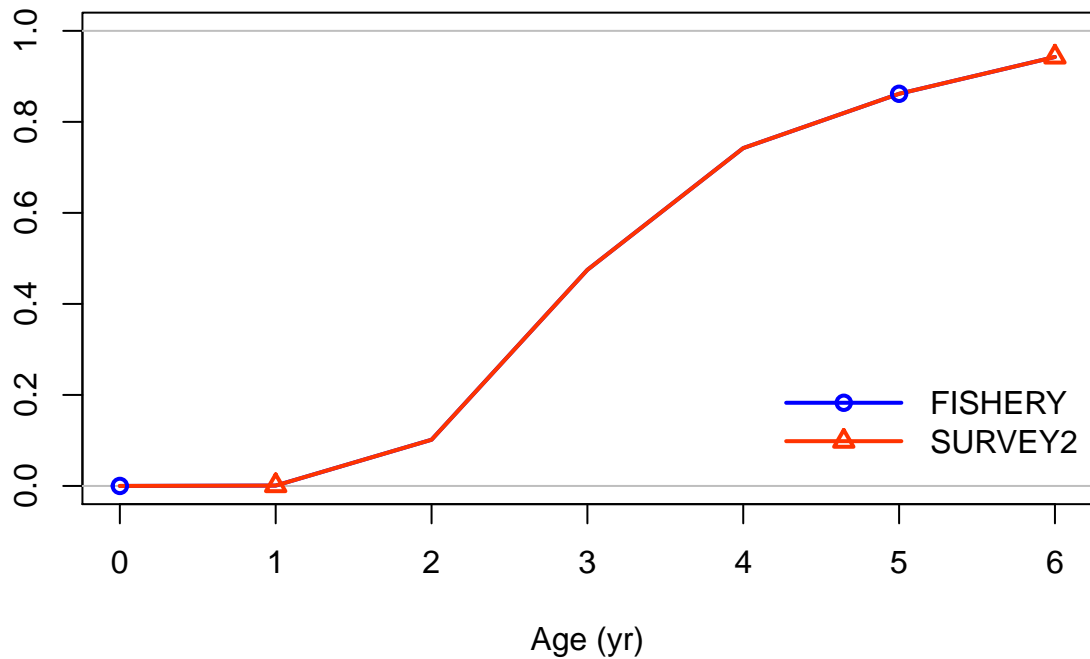




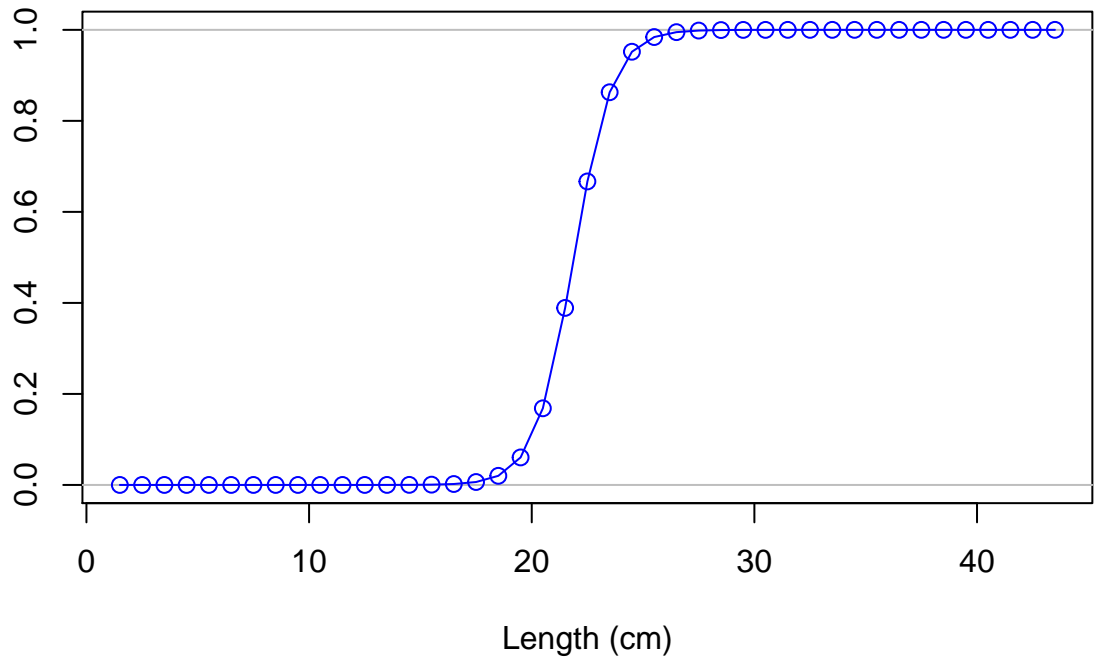
Selectivity



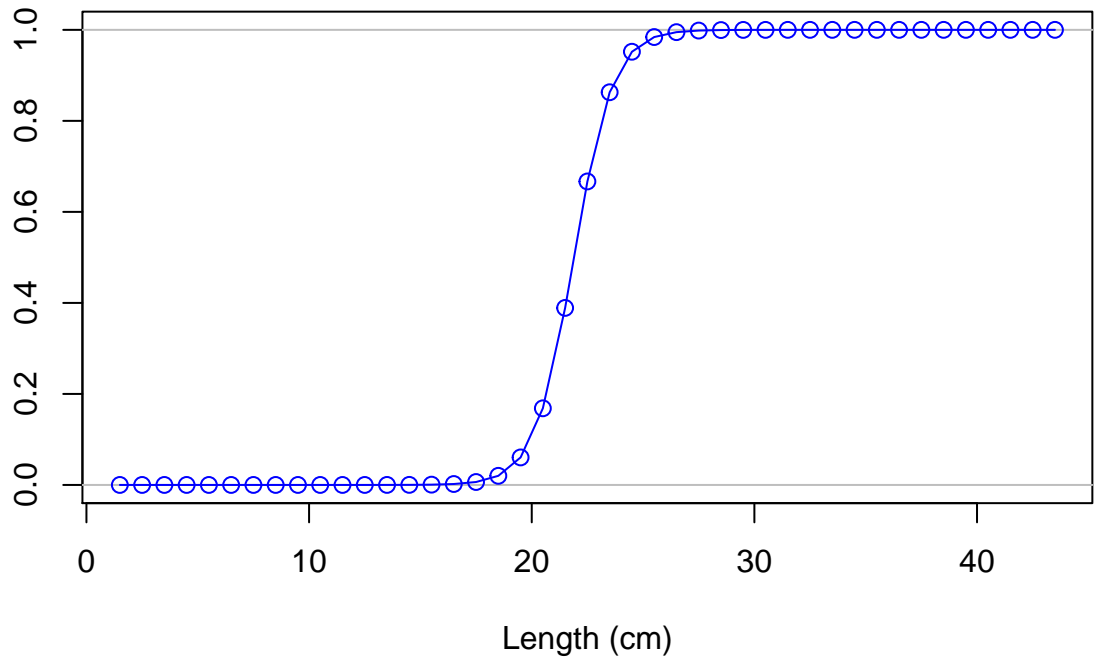
Selectivity

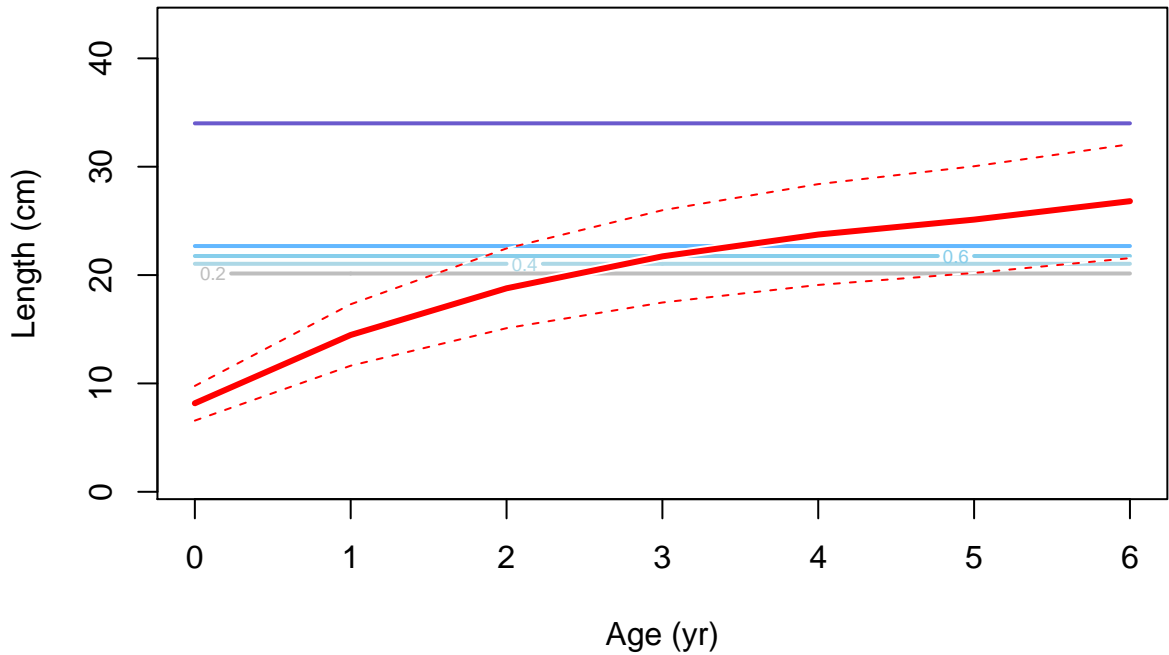


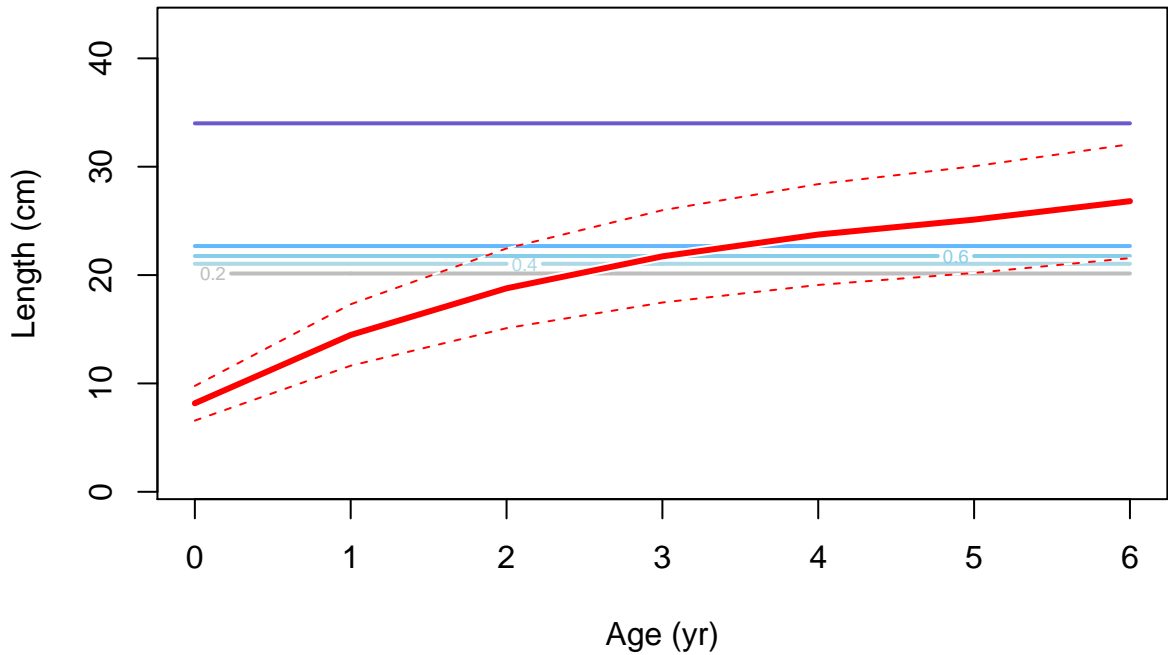
Selectivity



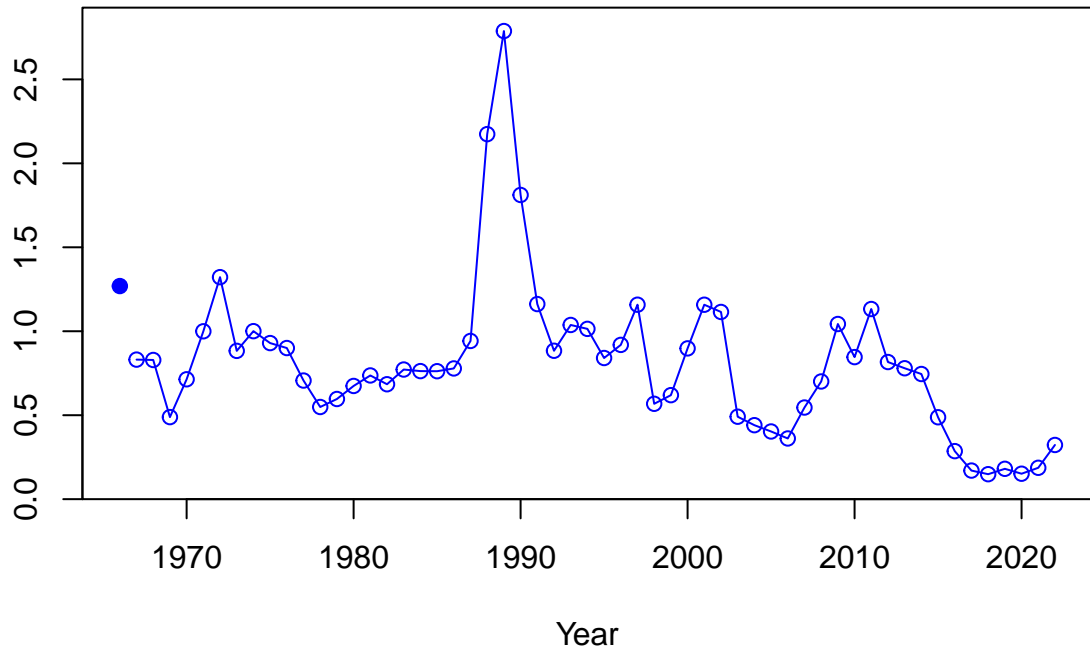
Selectivity



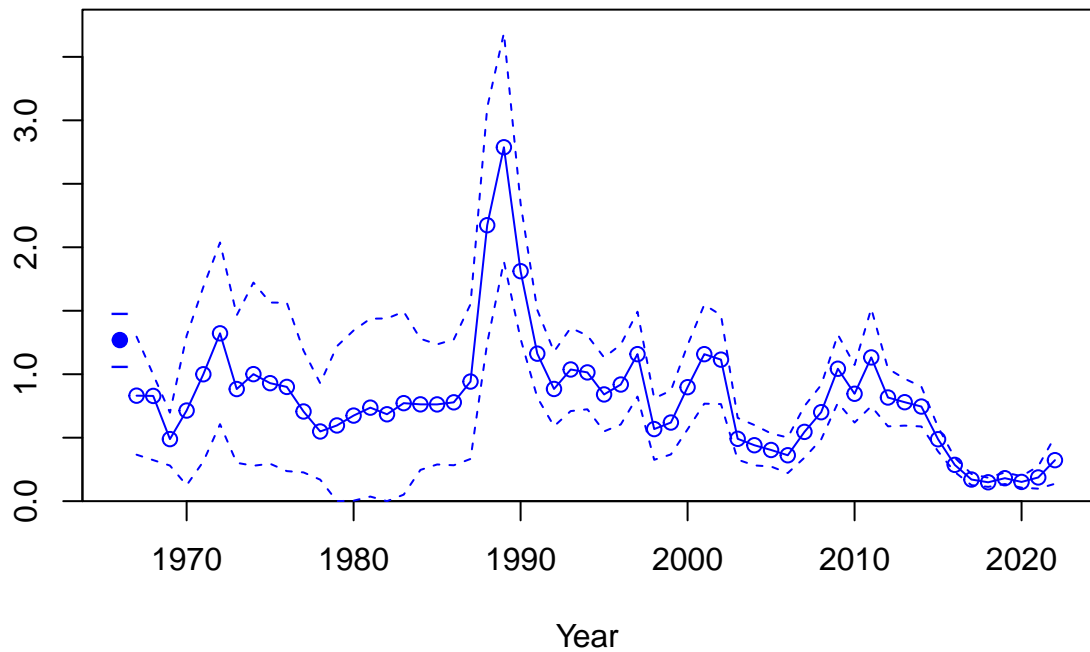




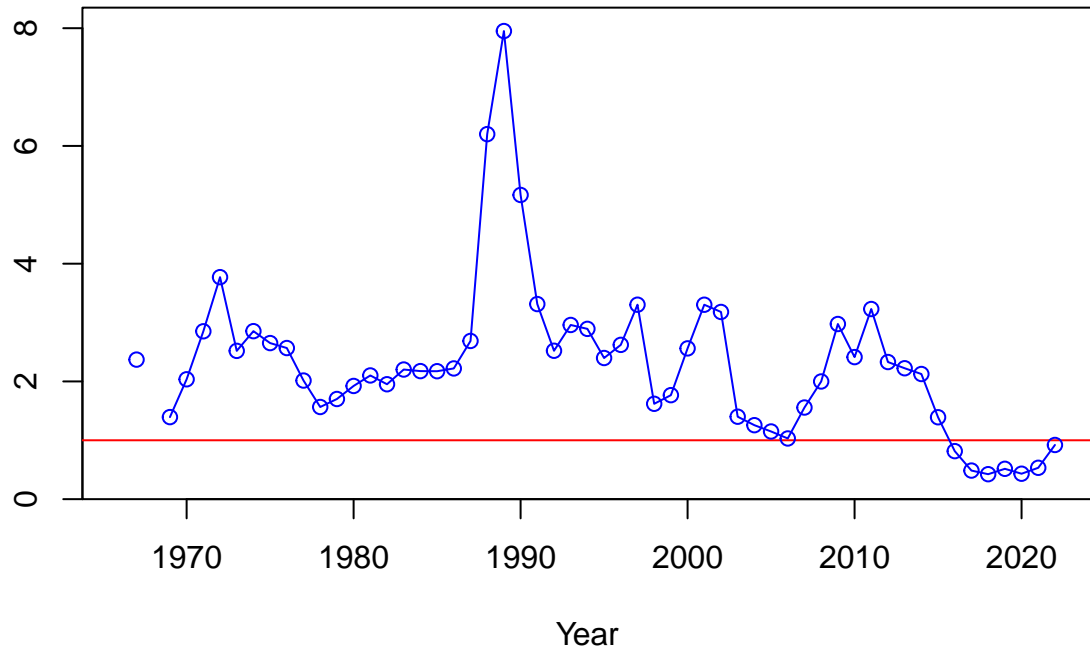
Spawning biomass (mt)



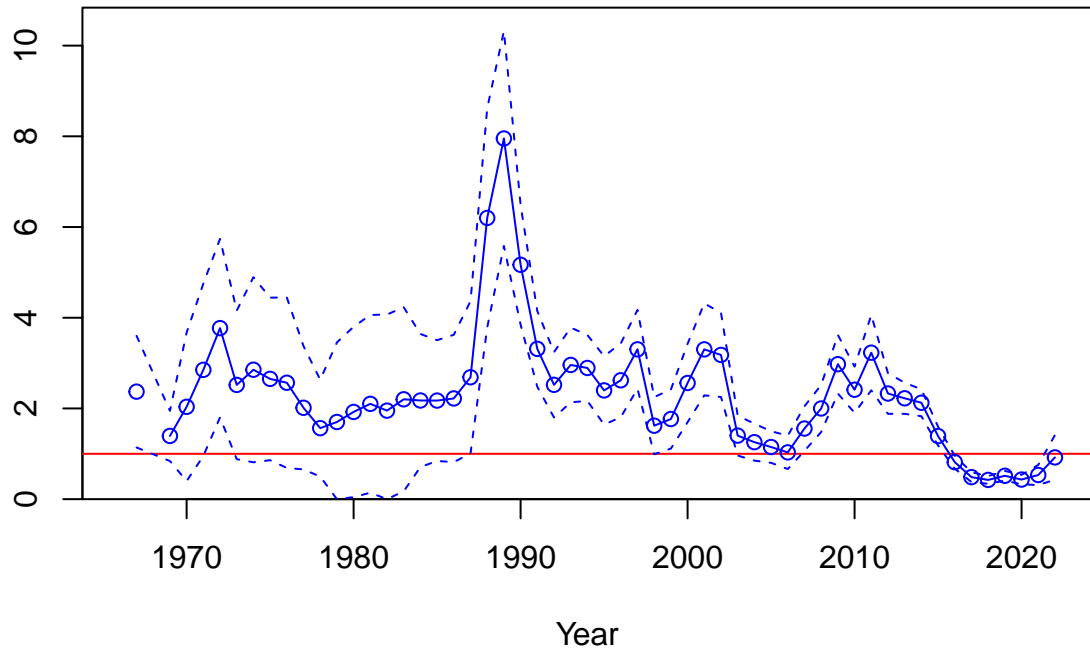
Spawning biomass (mt)

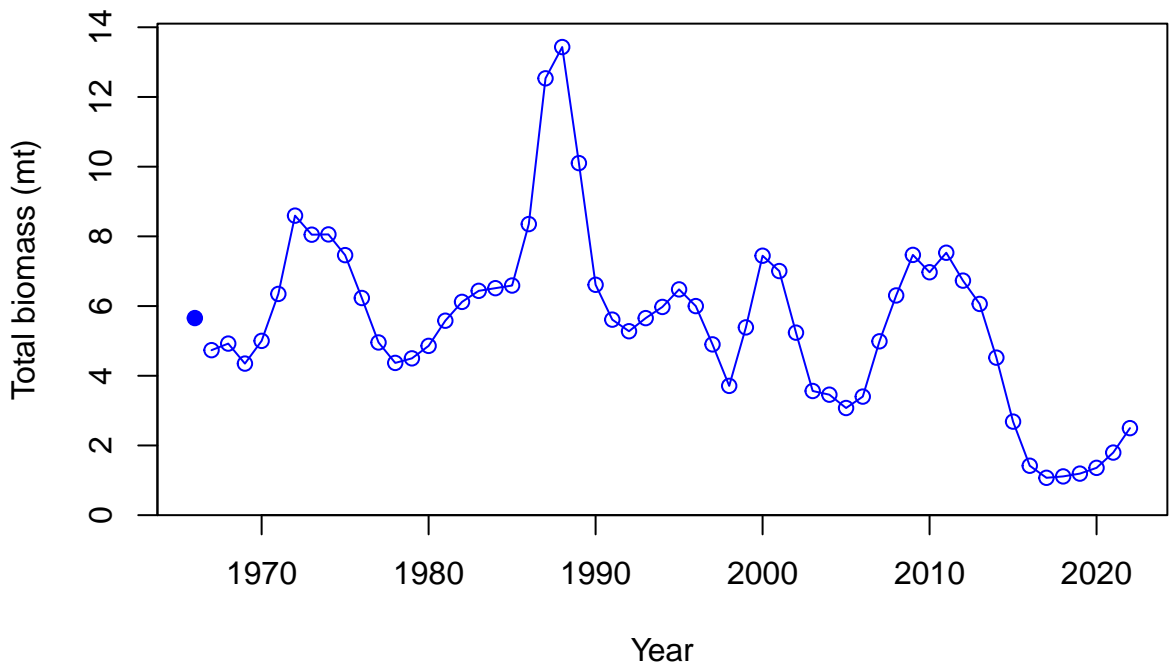


Relative spawning biomass: B/B_{MSY}

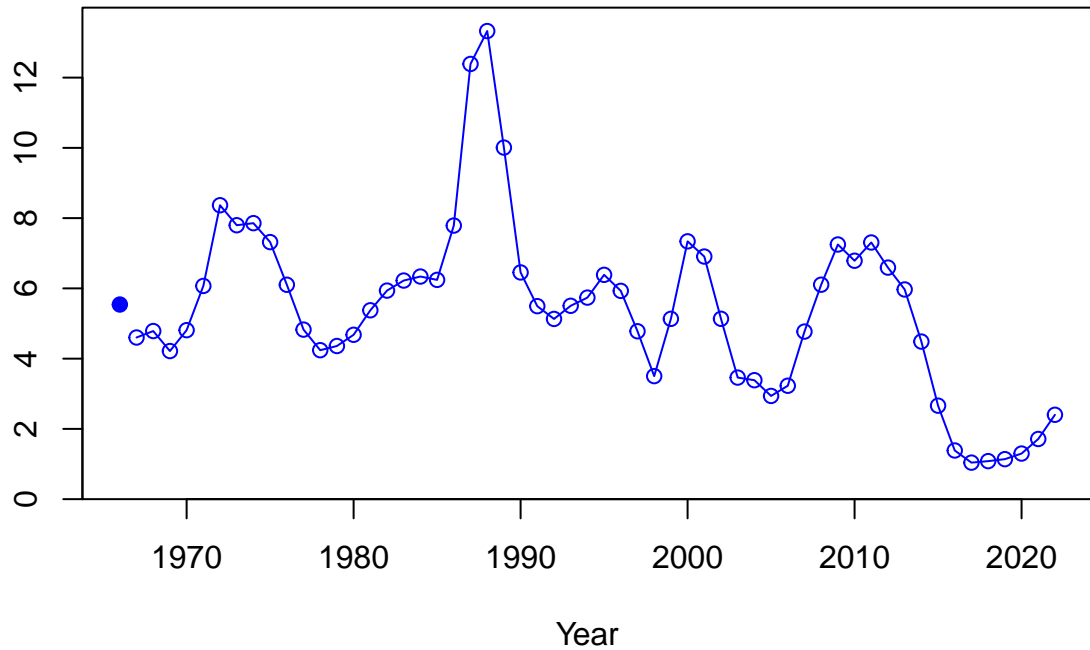


Relative spawning biomass: B/B_{MSY}

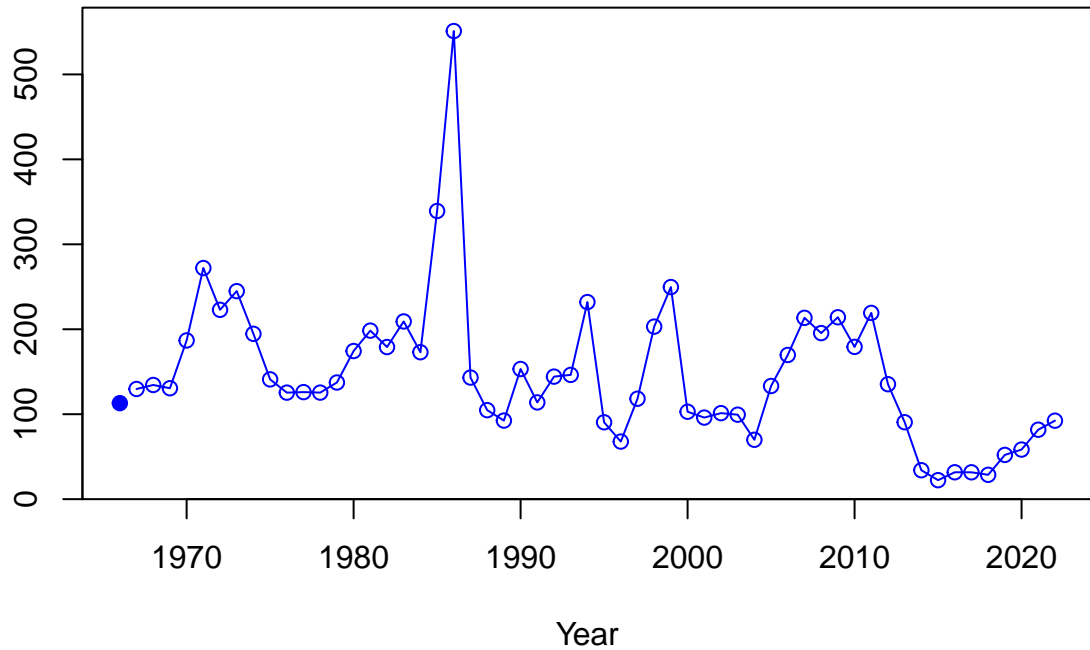




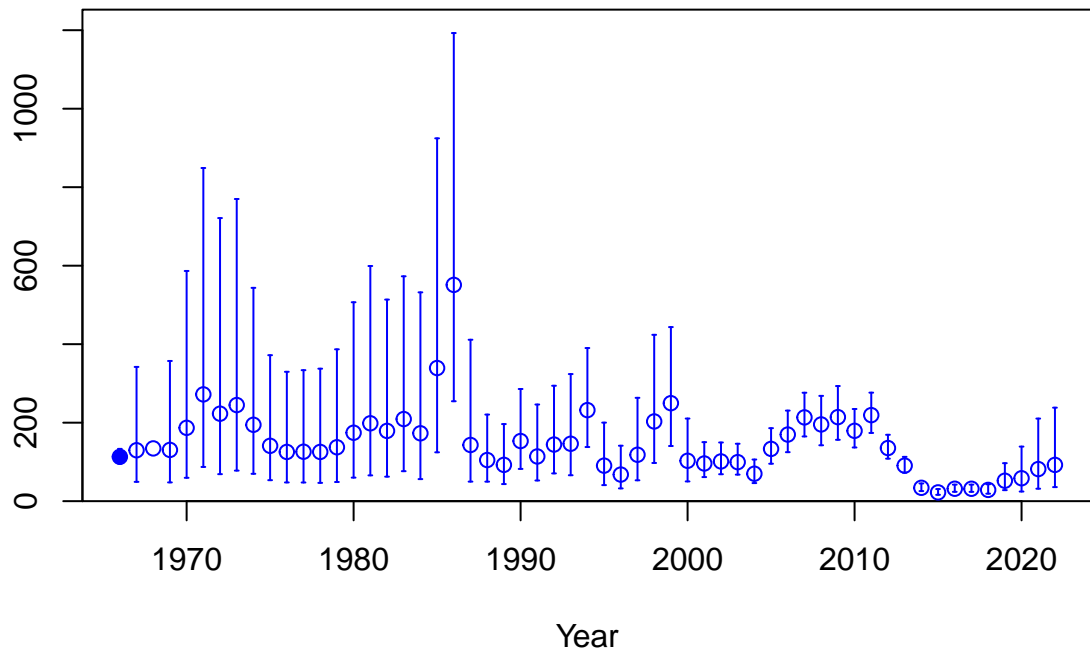
Summary biomass (mt)



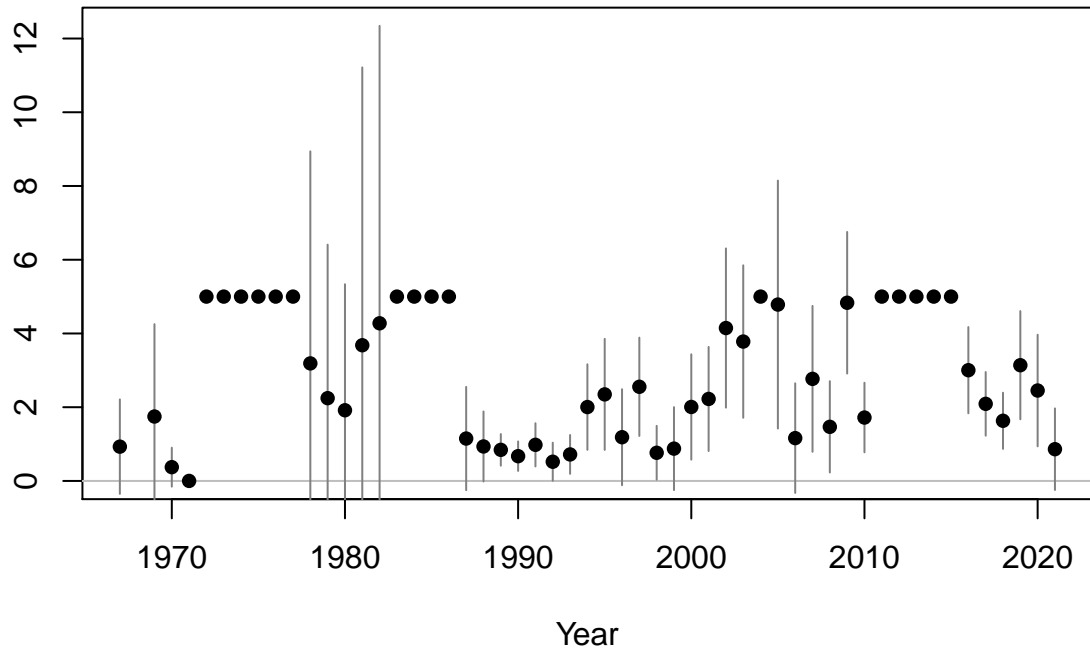
Age-0 recruits (1,000s)



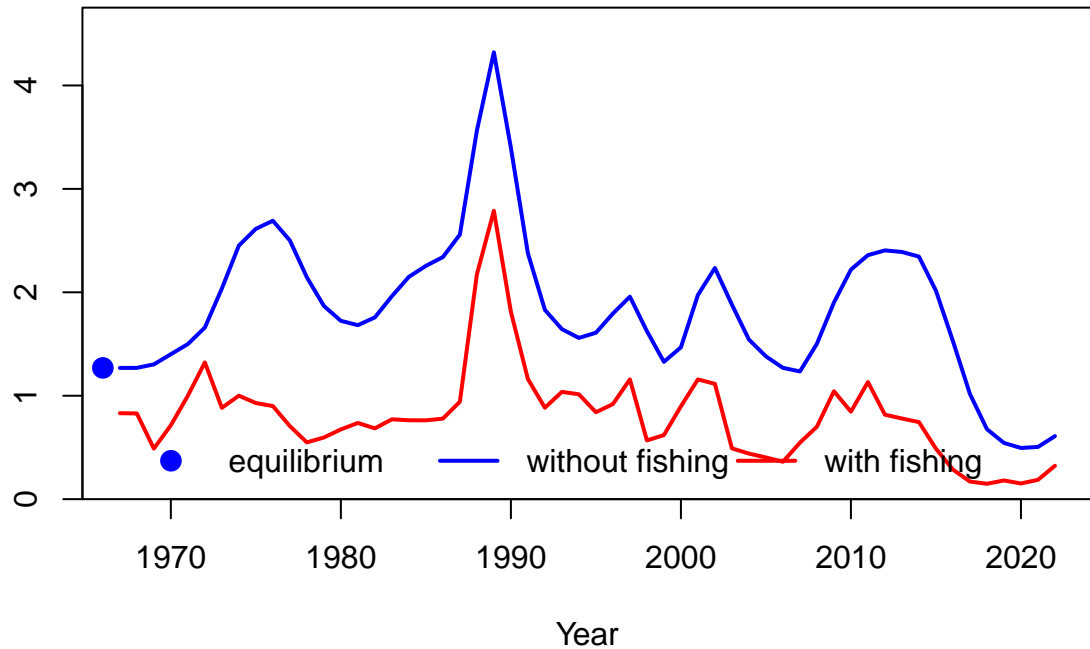
Age-0 recruits (1,000s)



Summary Fishing Mortality



Spawning biomass (mt)



Log recruitment deviation

1.5
1.0
0.5
0.0
-0.5
-1.0

1970

1980

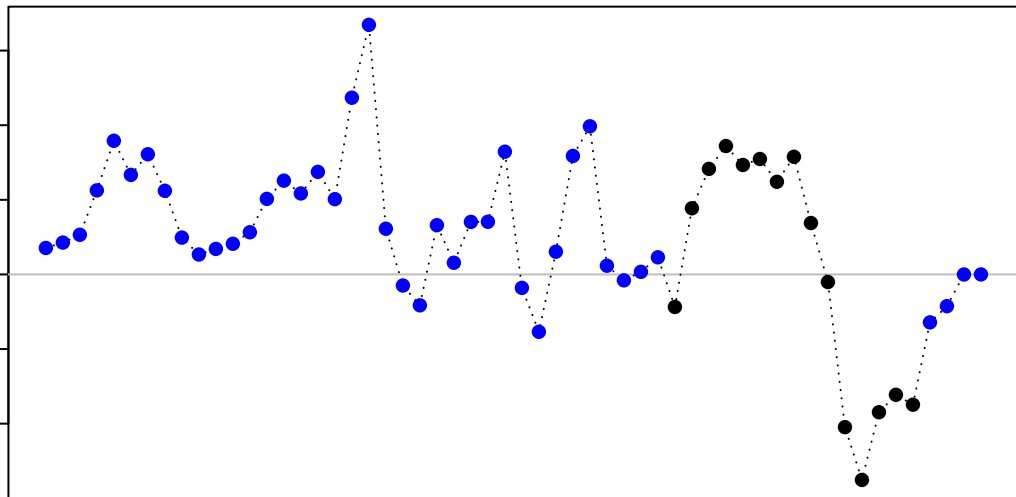
1990

2000

2010

2020

Year



Log recruitment deviation

2
1
0
-1

1970

1980

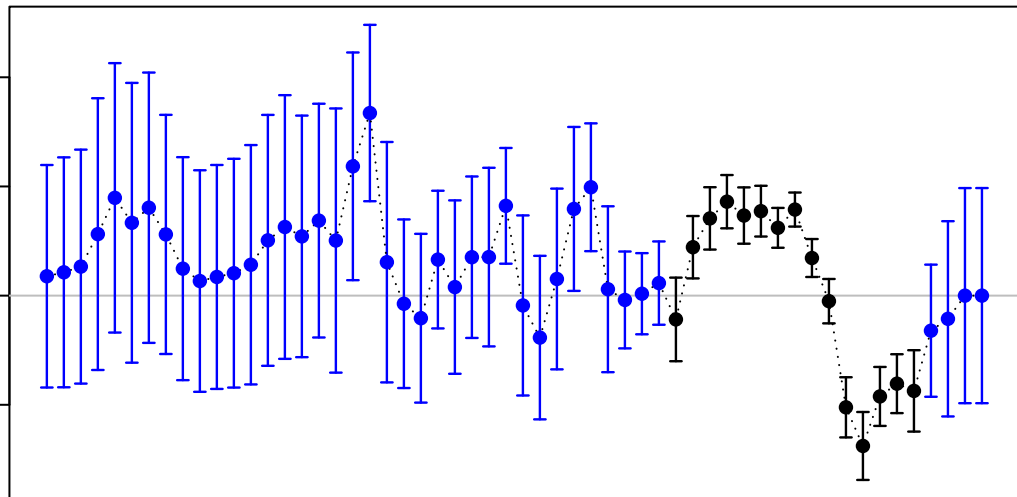
1990

2000

2010

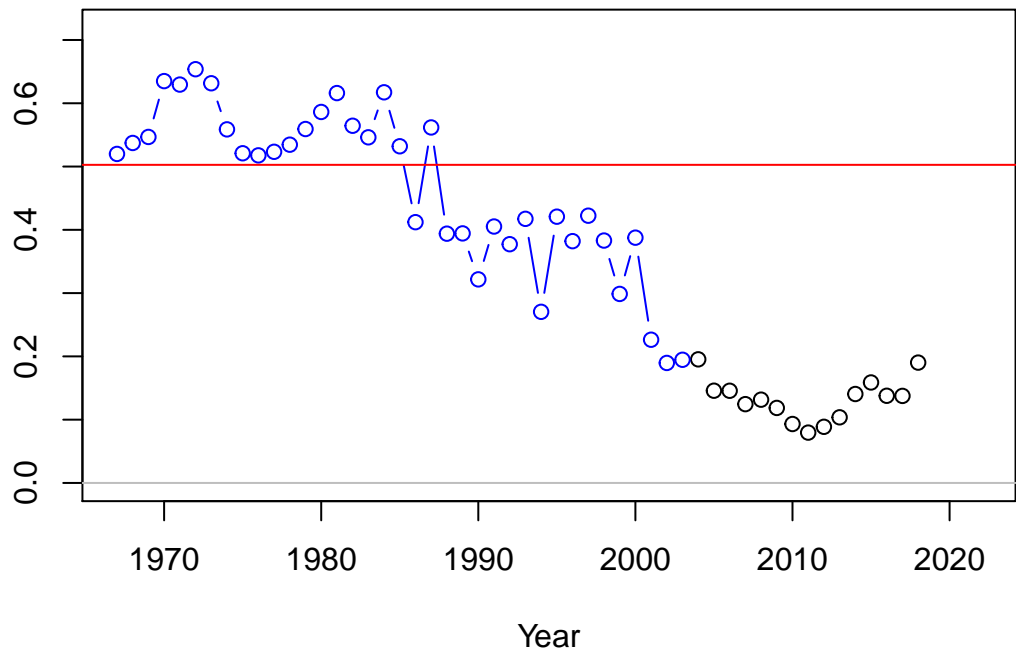
2020

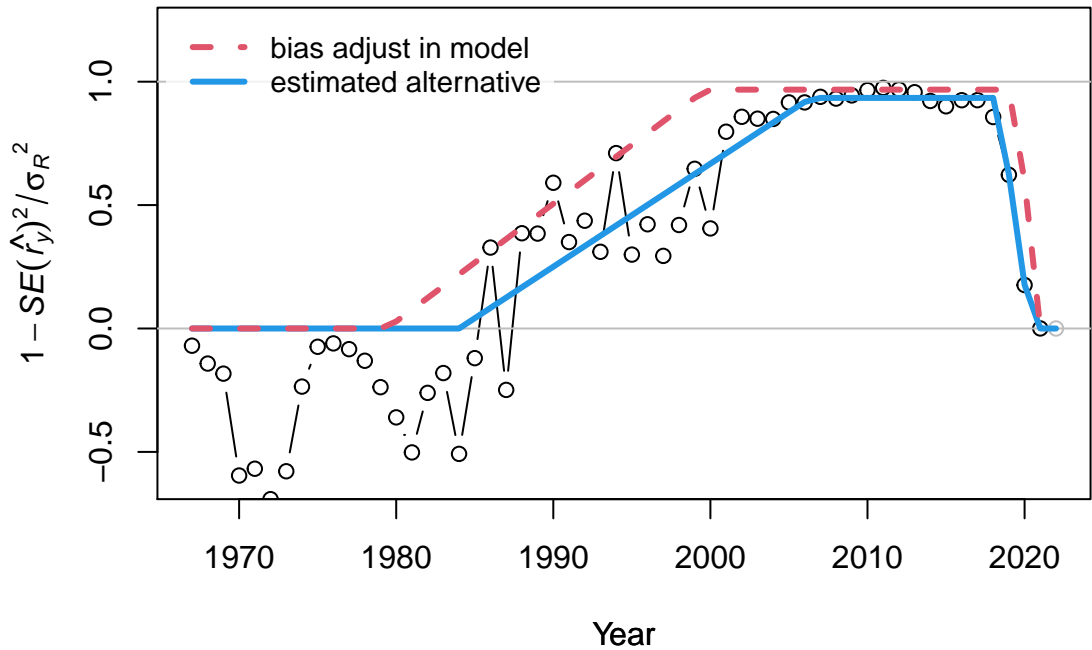
Year

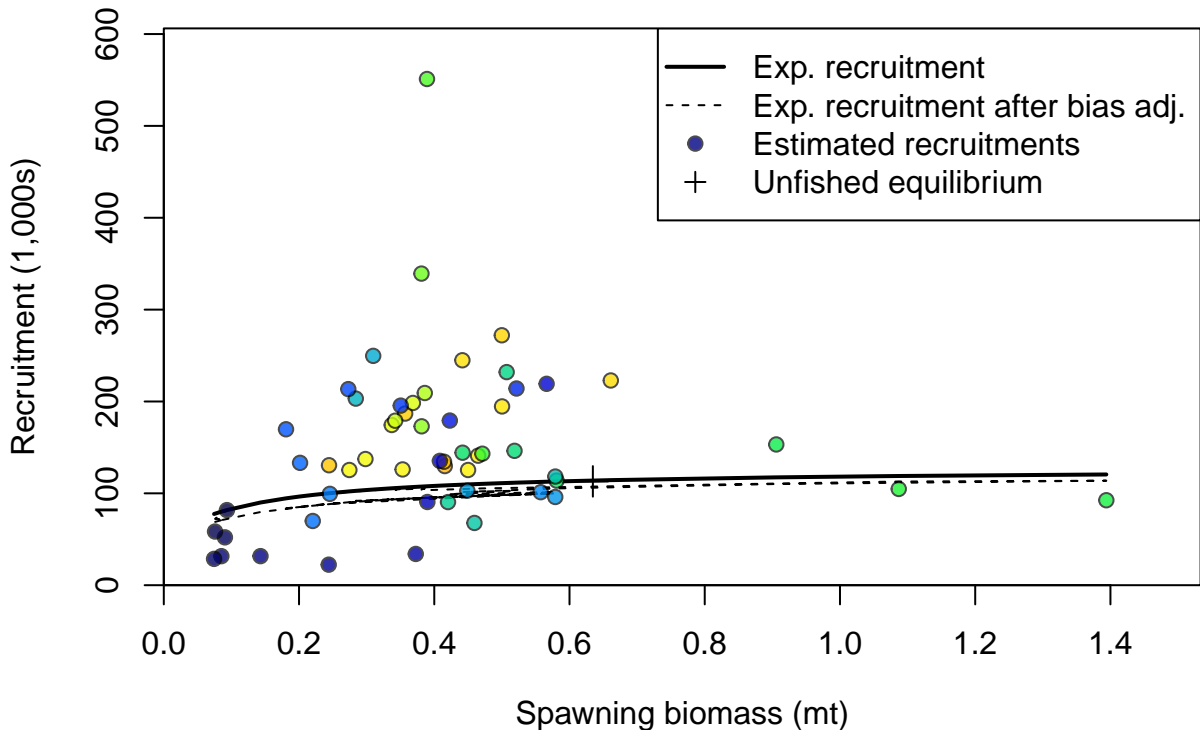


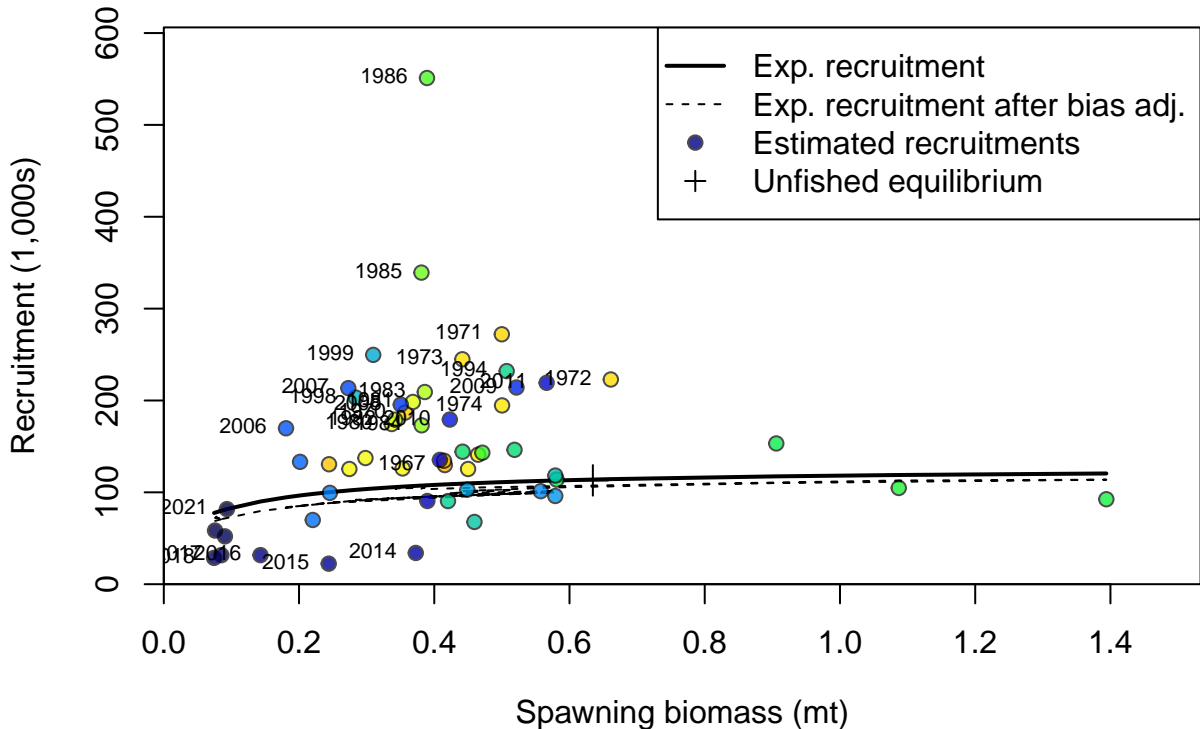
Recruitment deviation variance

Asymptotic standard error estimate

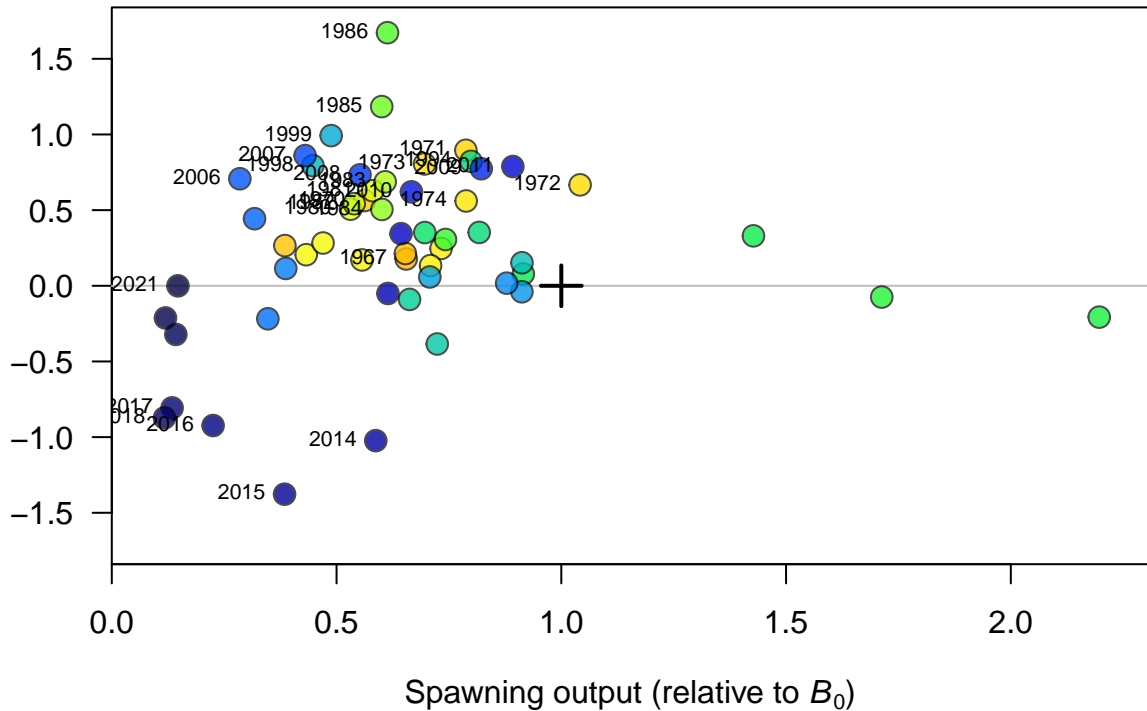


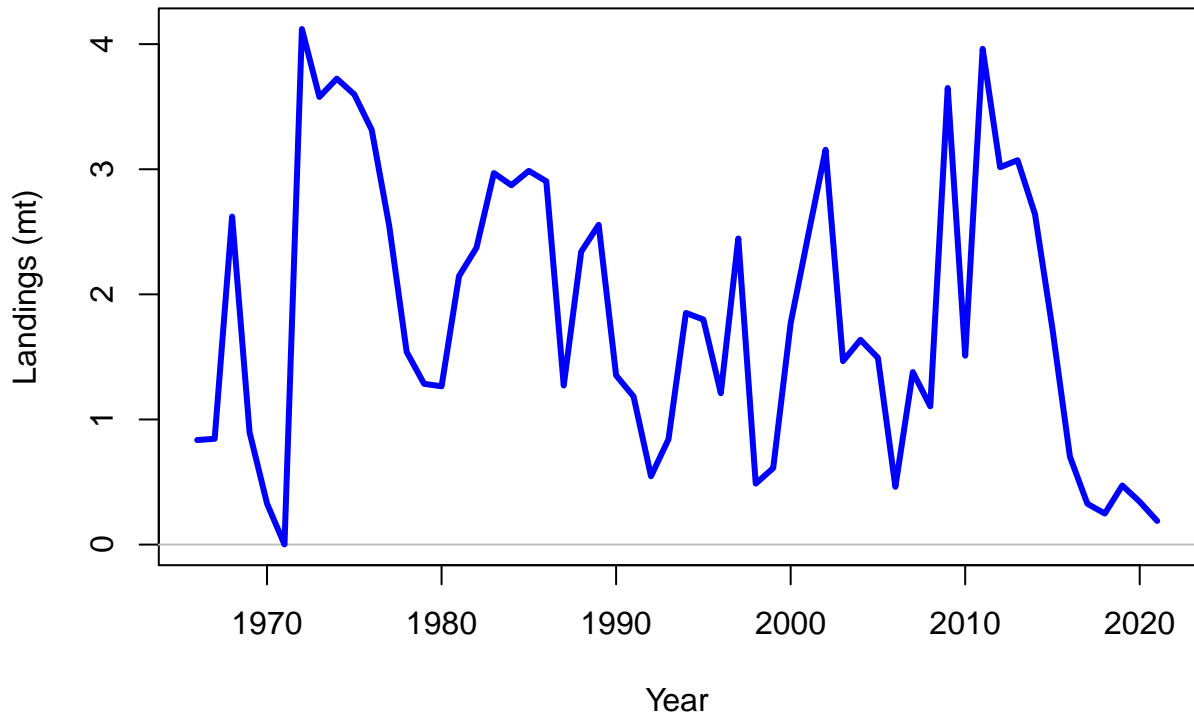


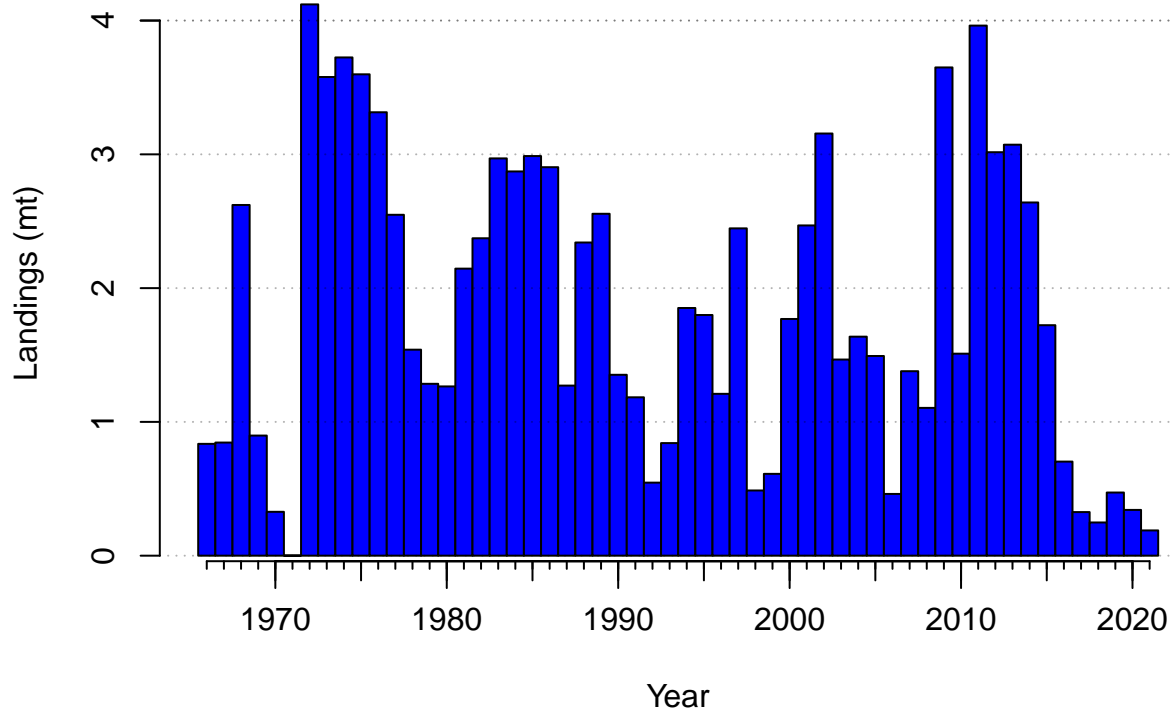




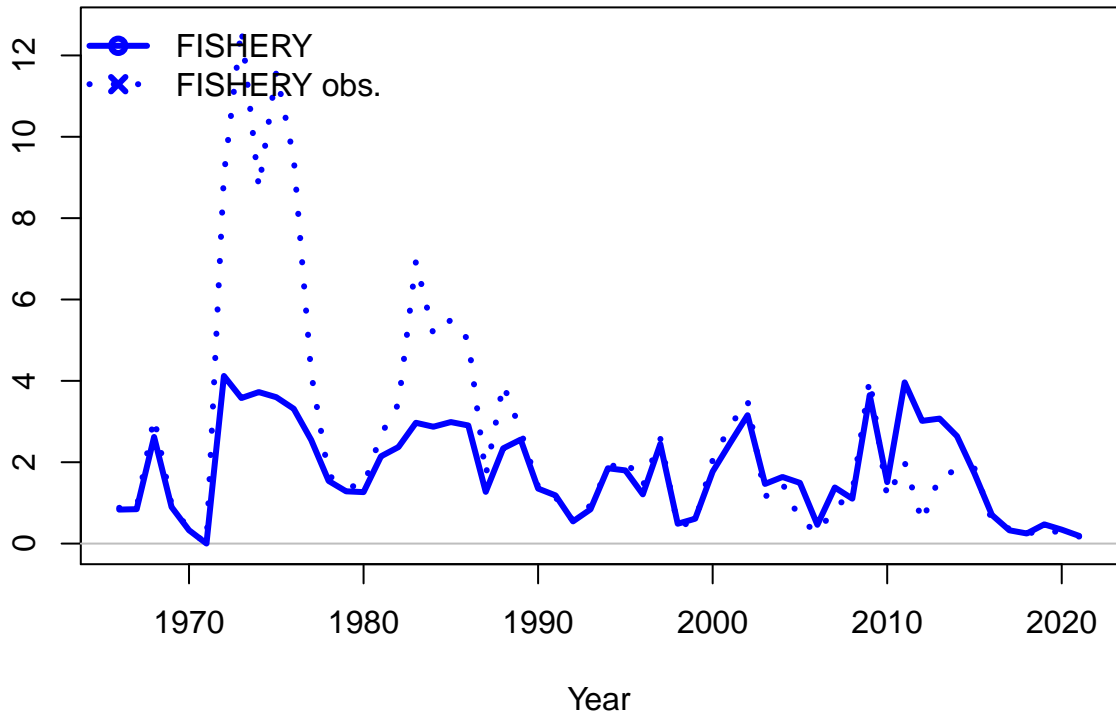
Log recruitment deviation

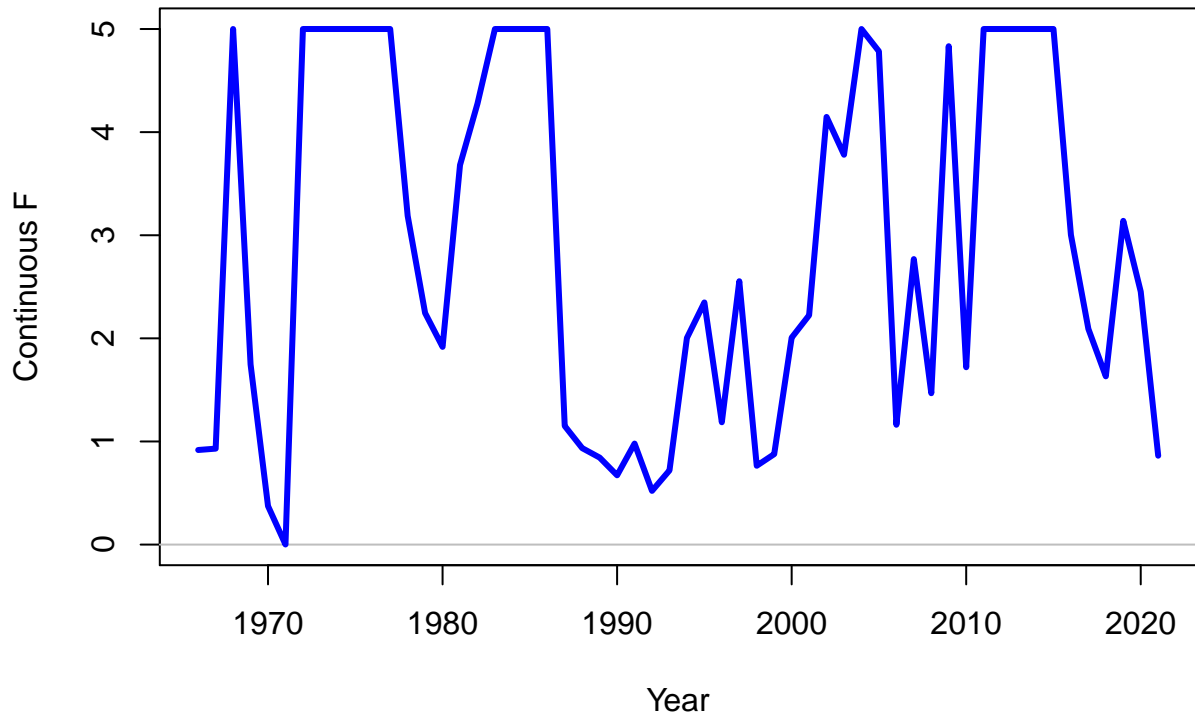




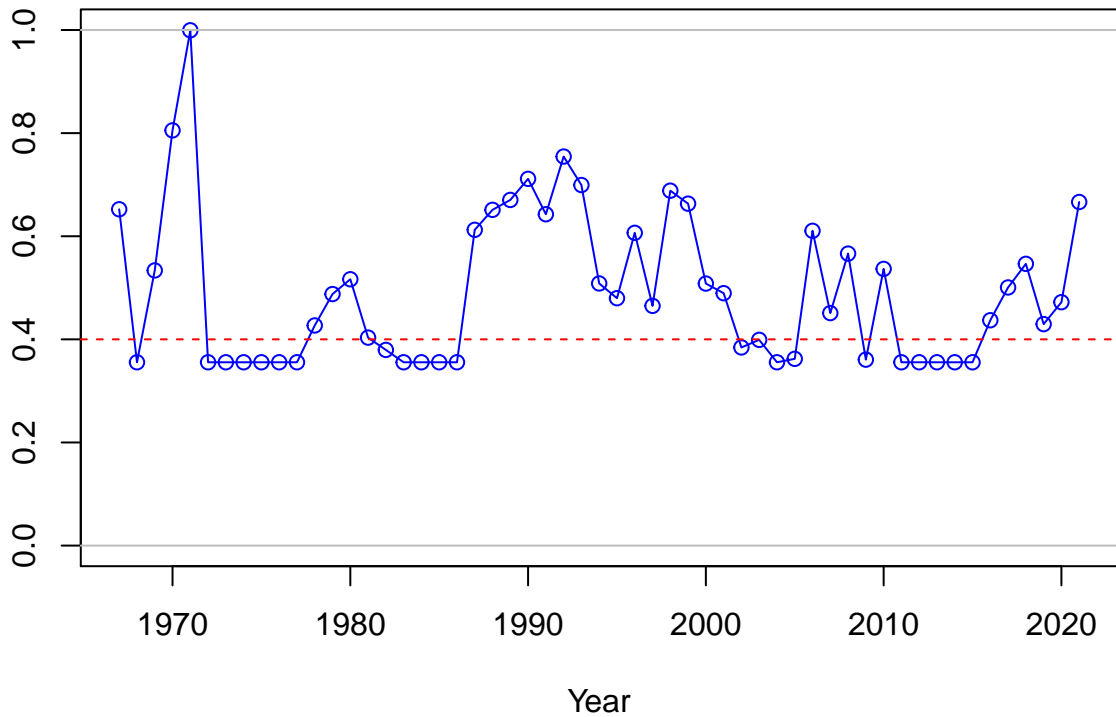


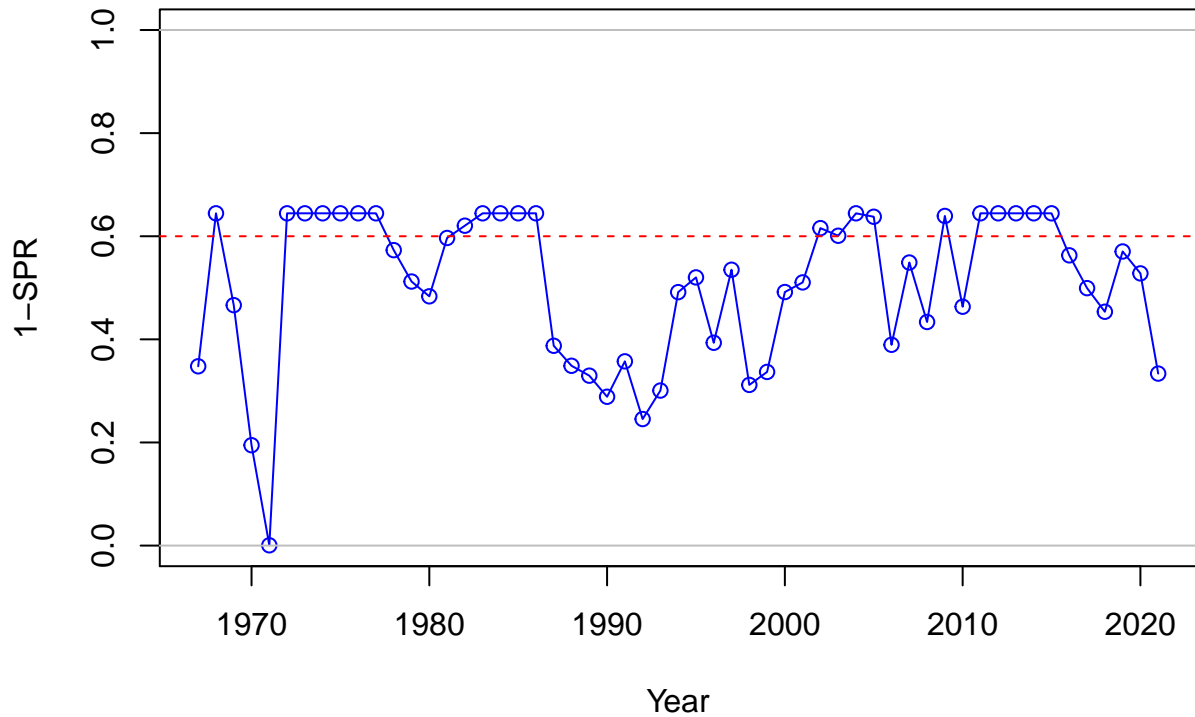
Observed and expected Landings (mt)



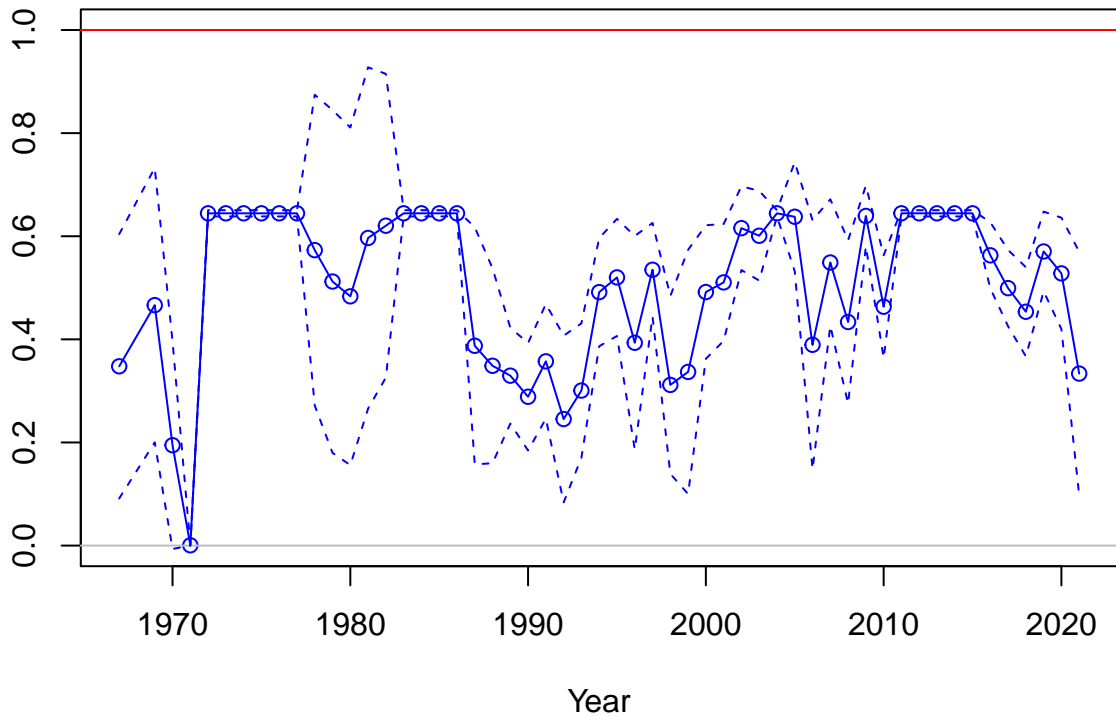


SPR

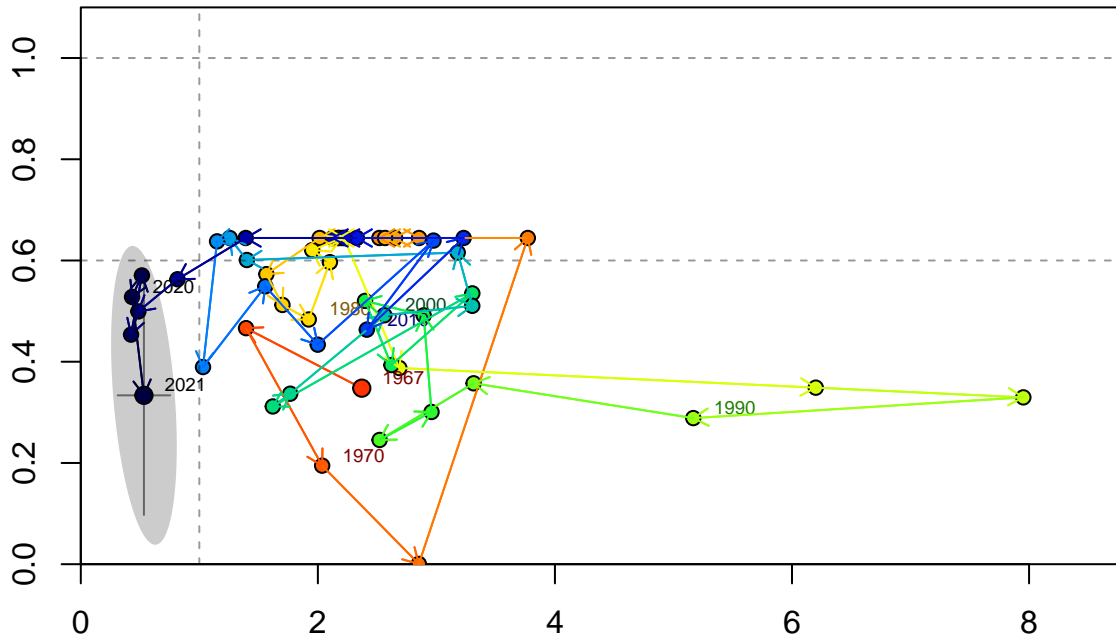




Fishing intensity: 1-SPR



Fishing intensity: 1-SPR

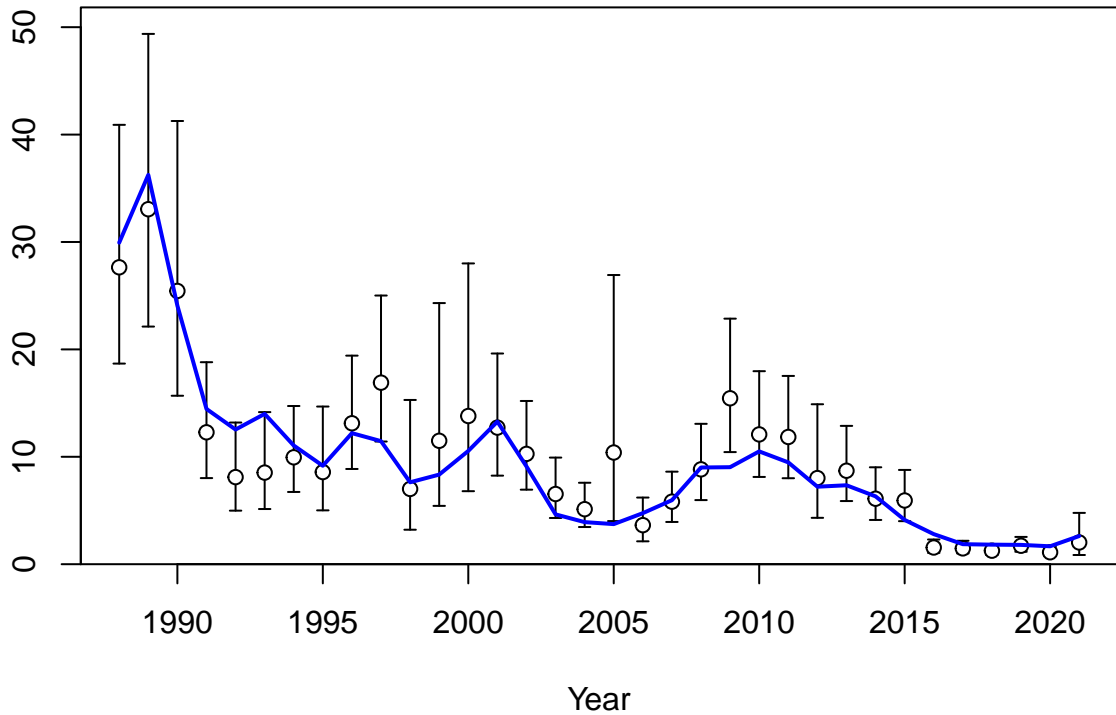


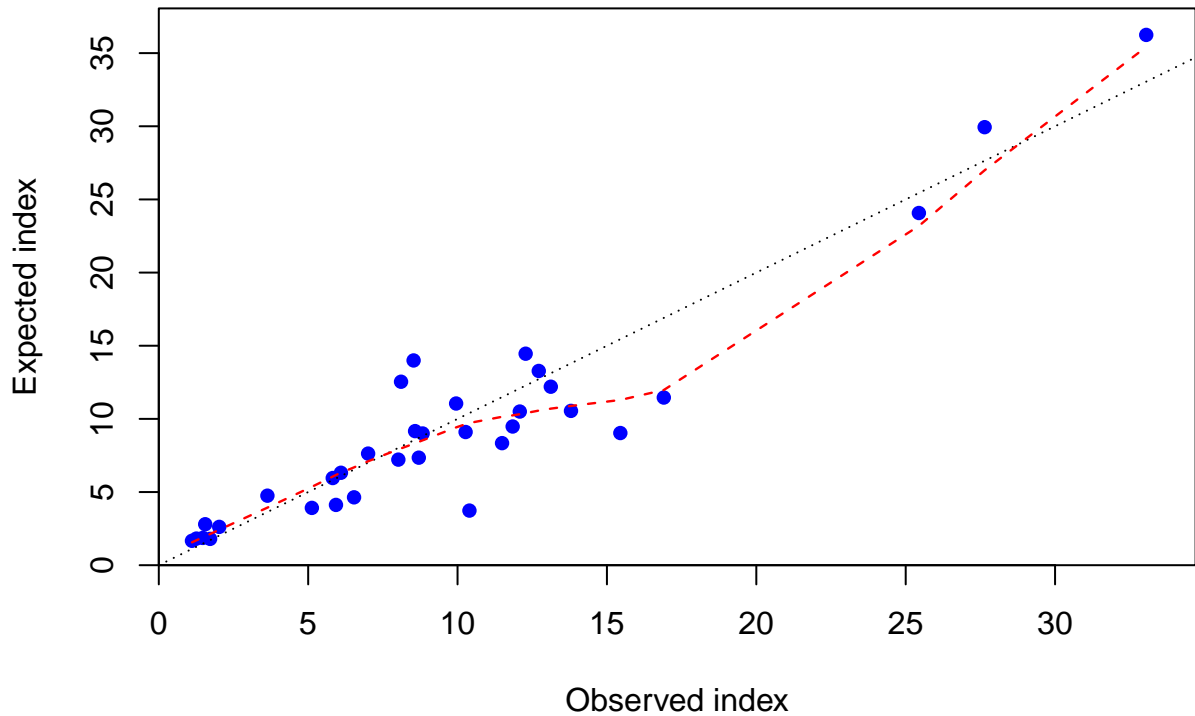
Relative spawning output: B/B_{MSY}

Index

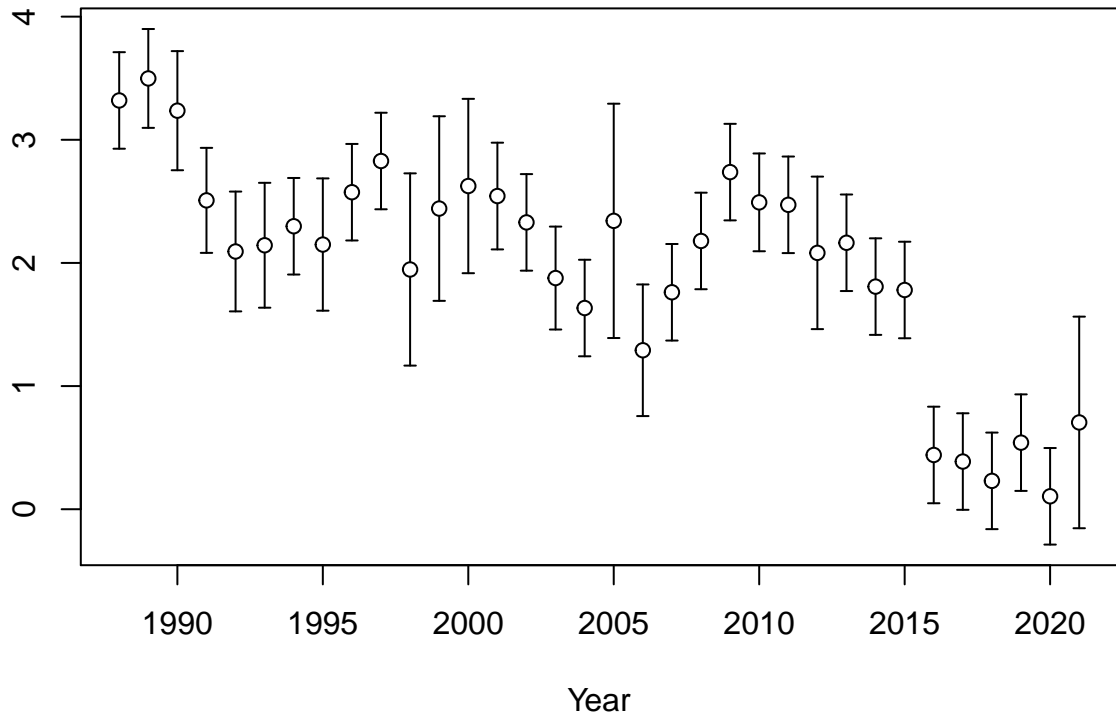


Index

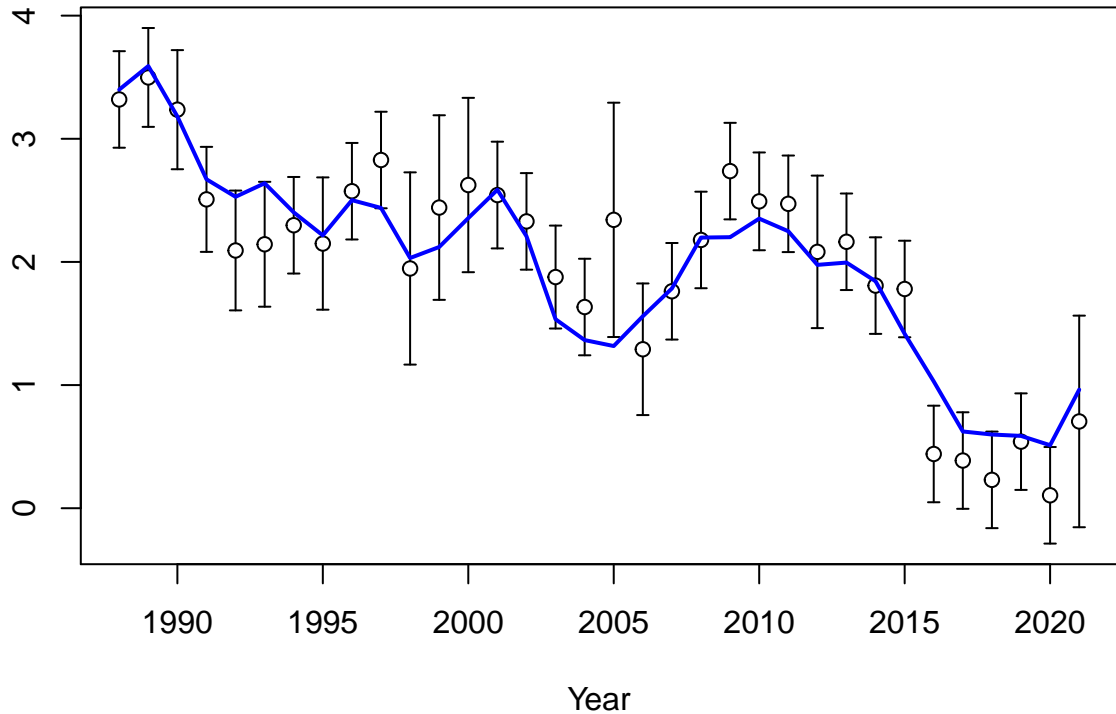


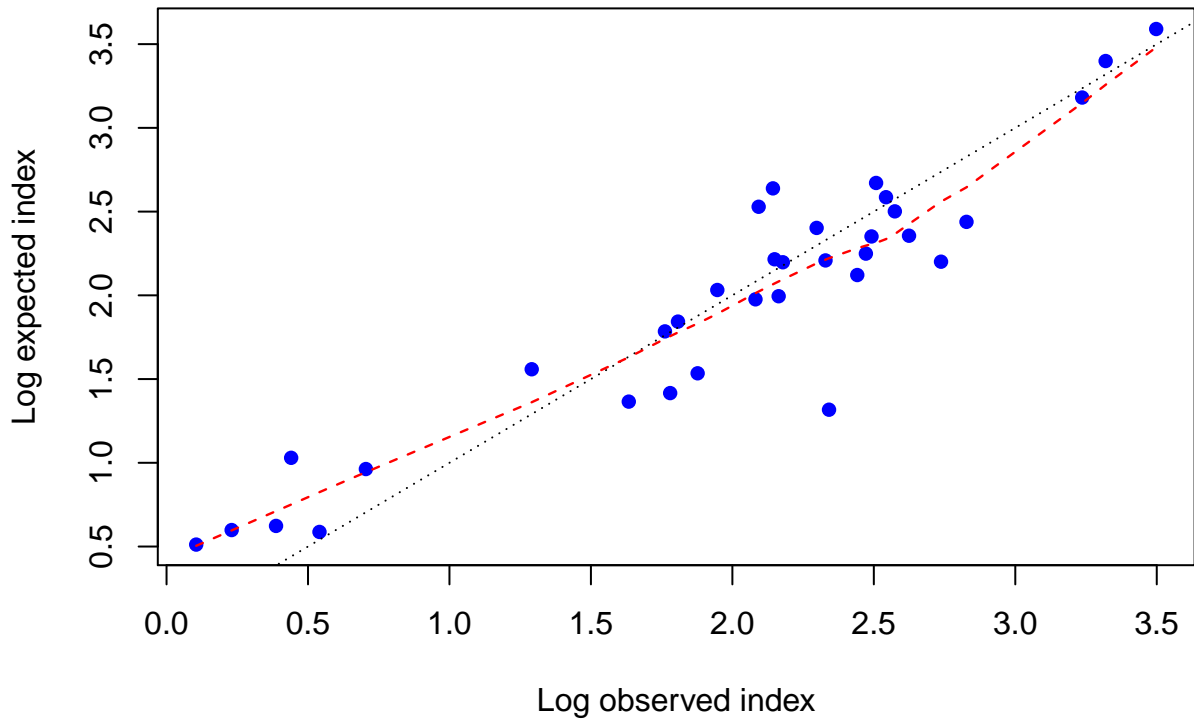


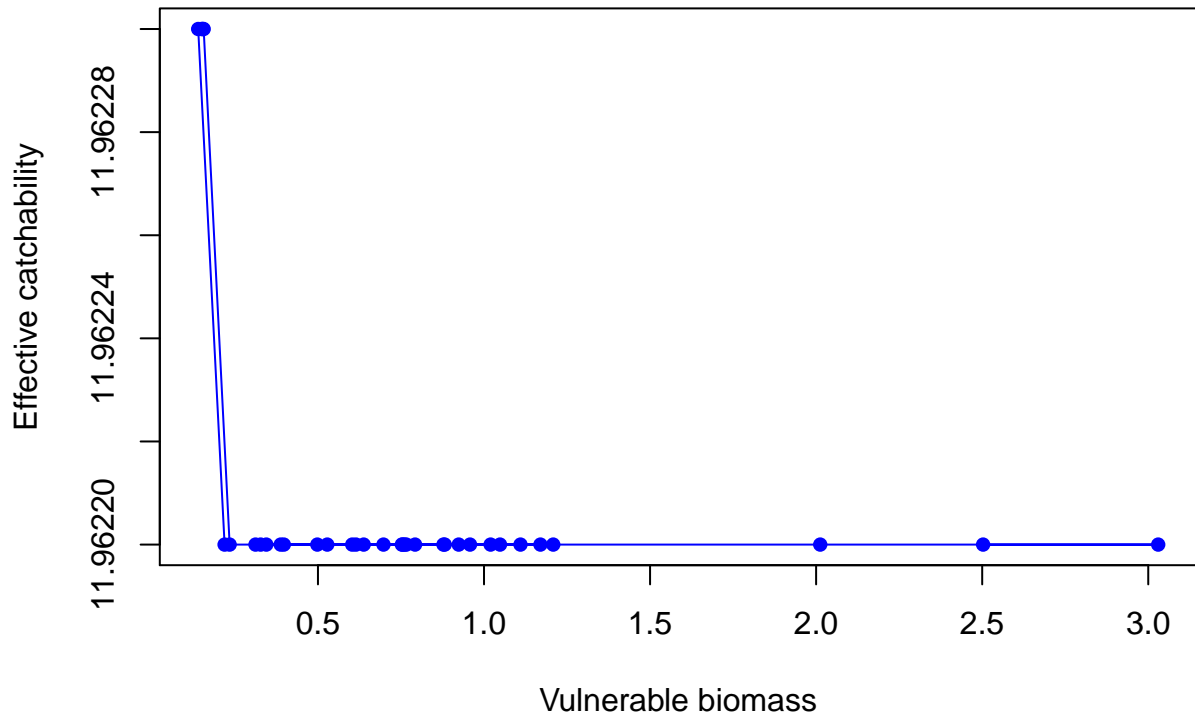
Log index



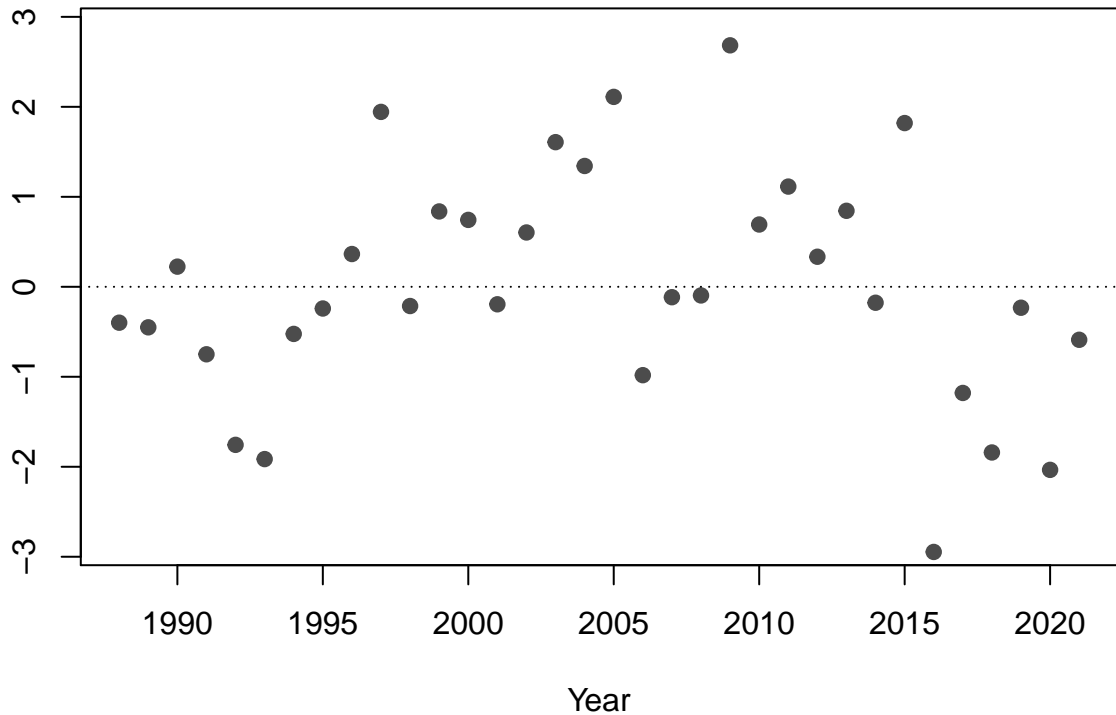
Log index



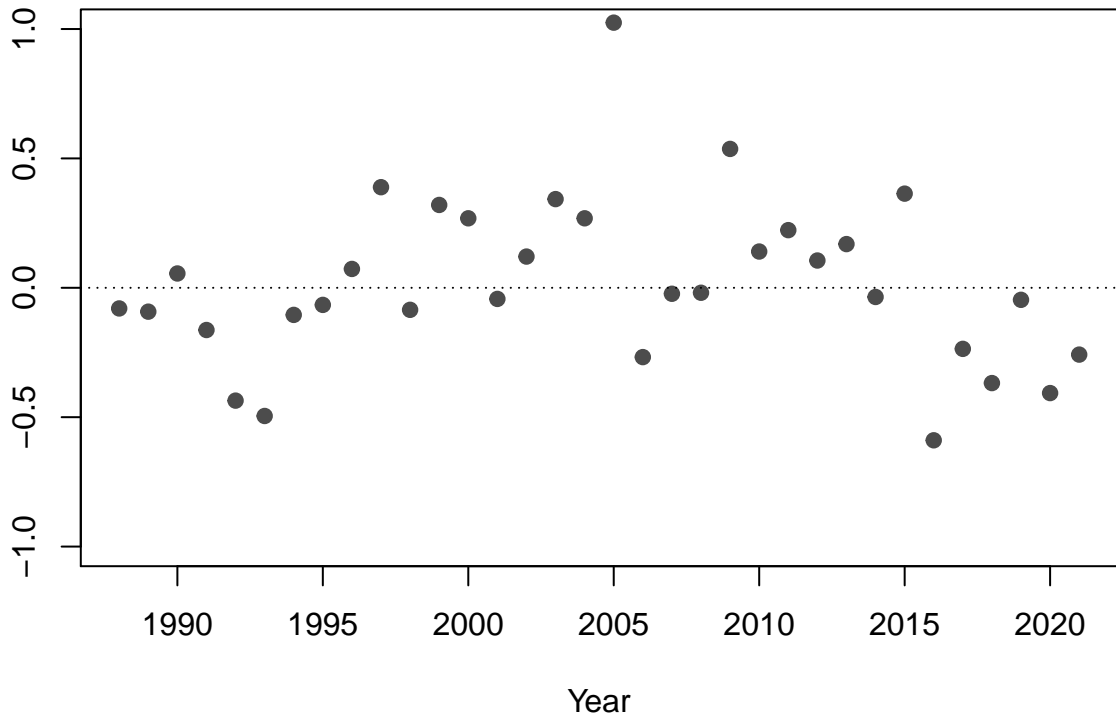


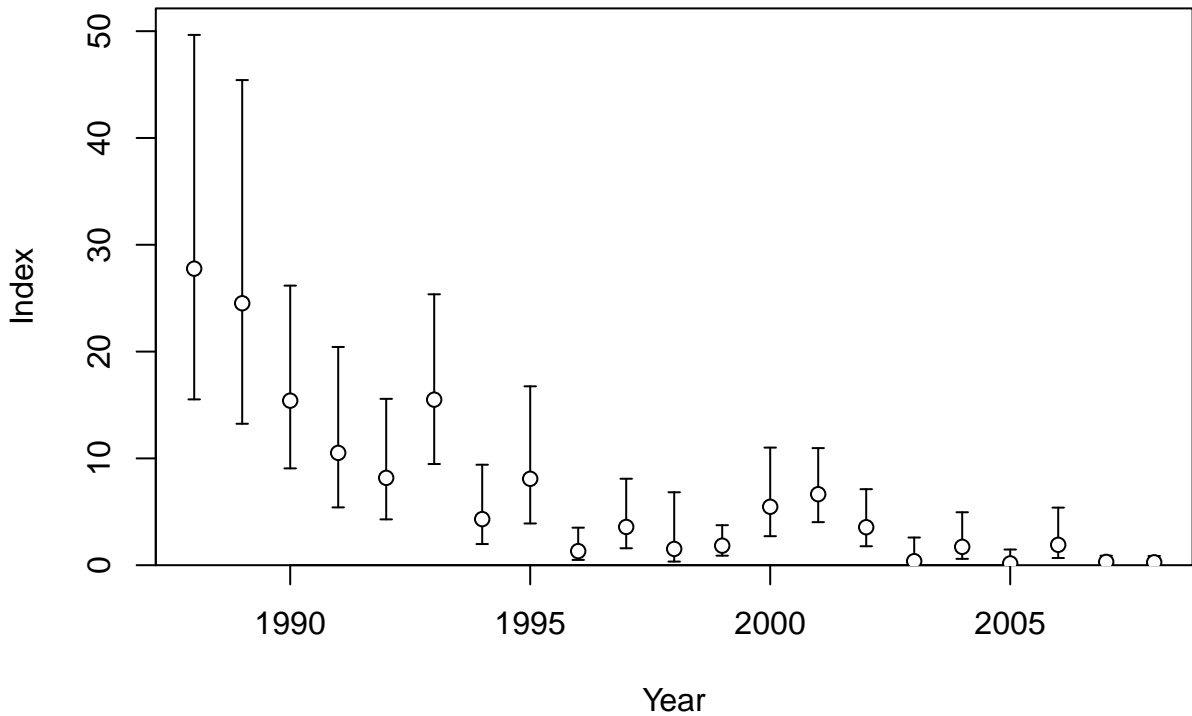


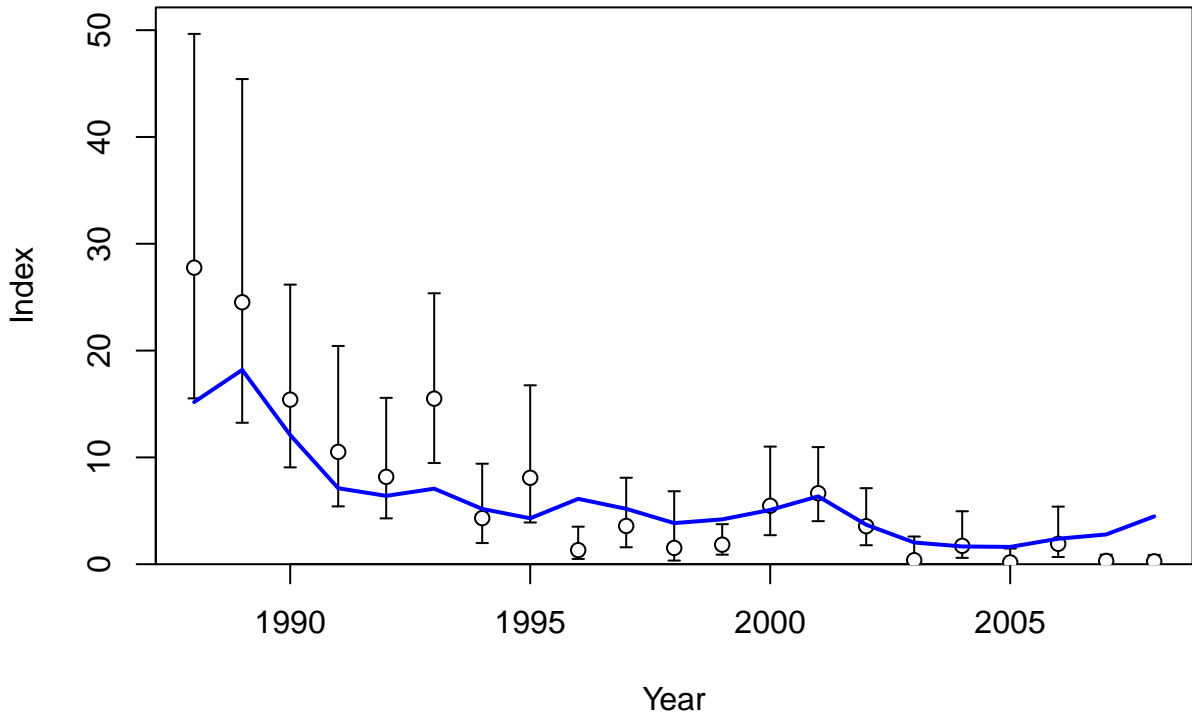
Residual

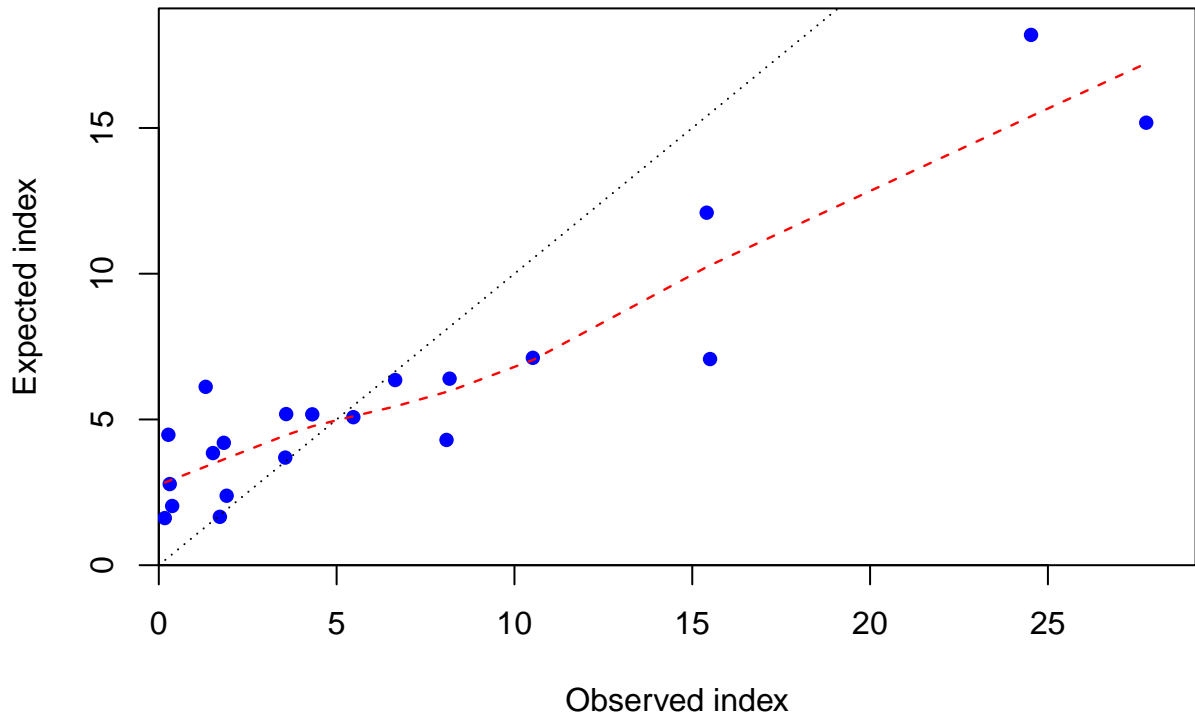


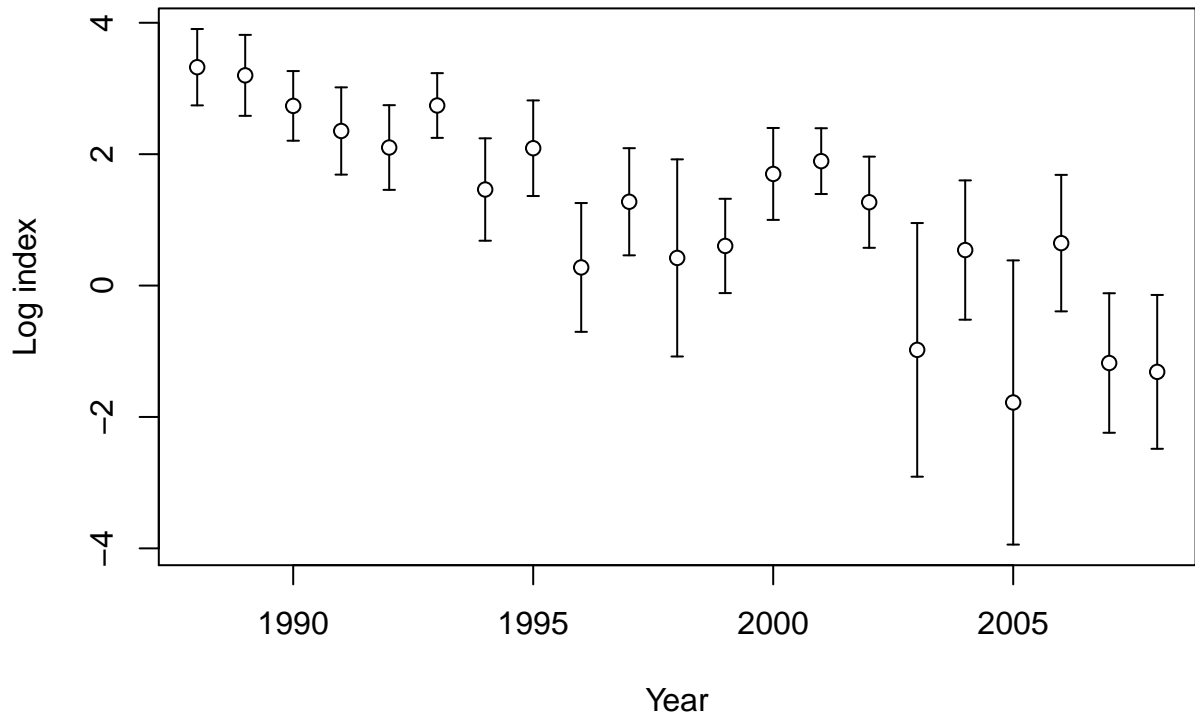
Deviation

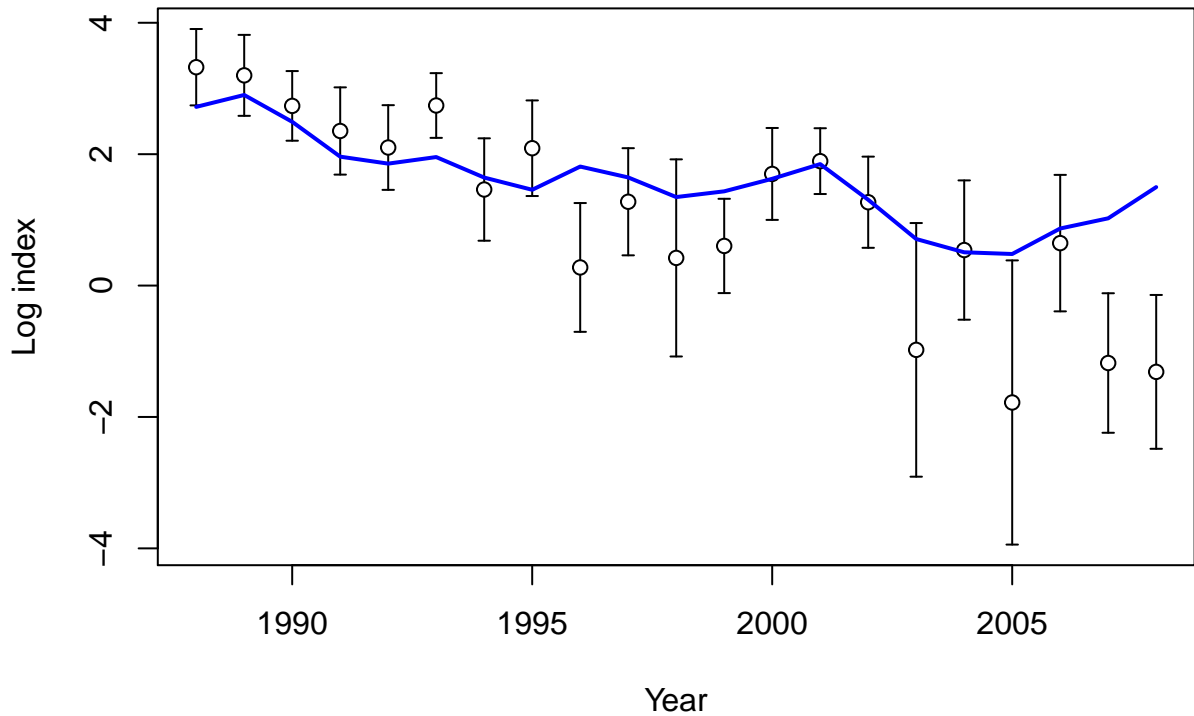


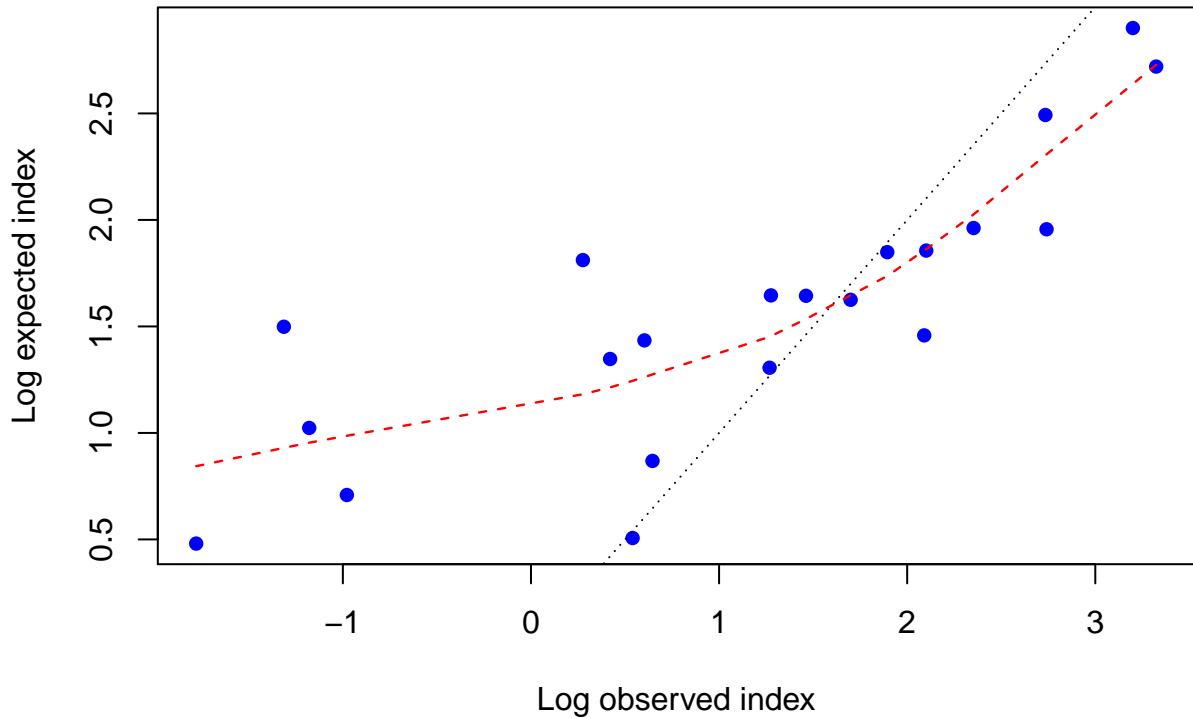




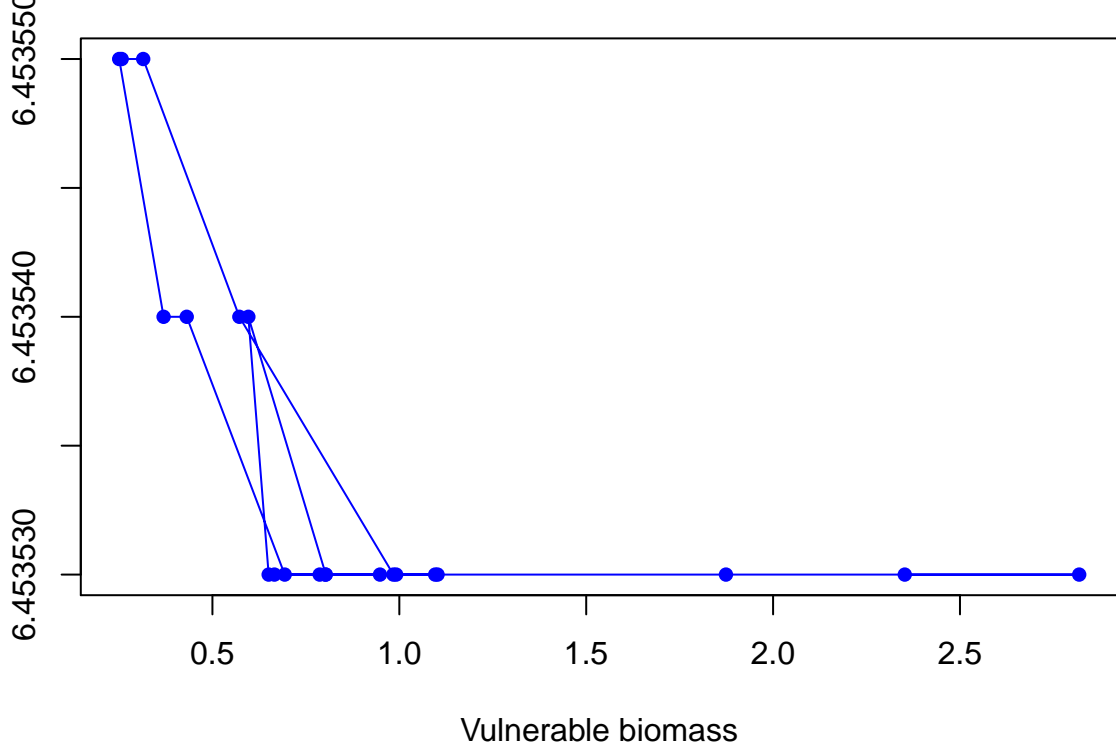


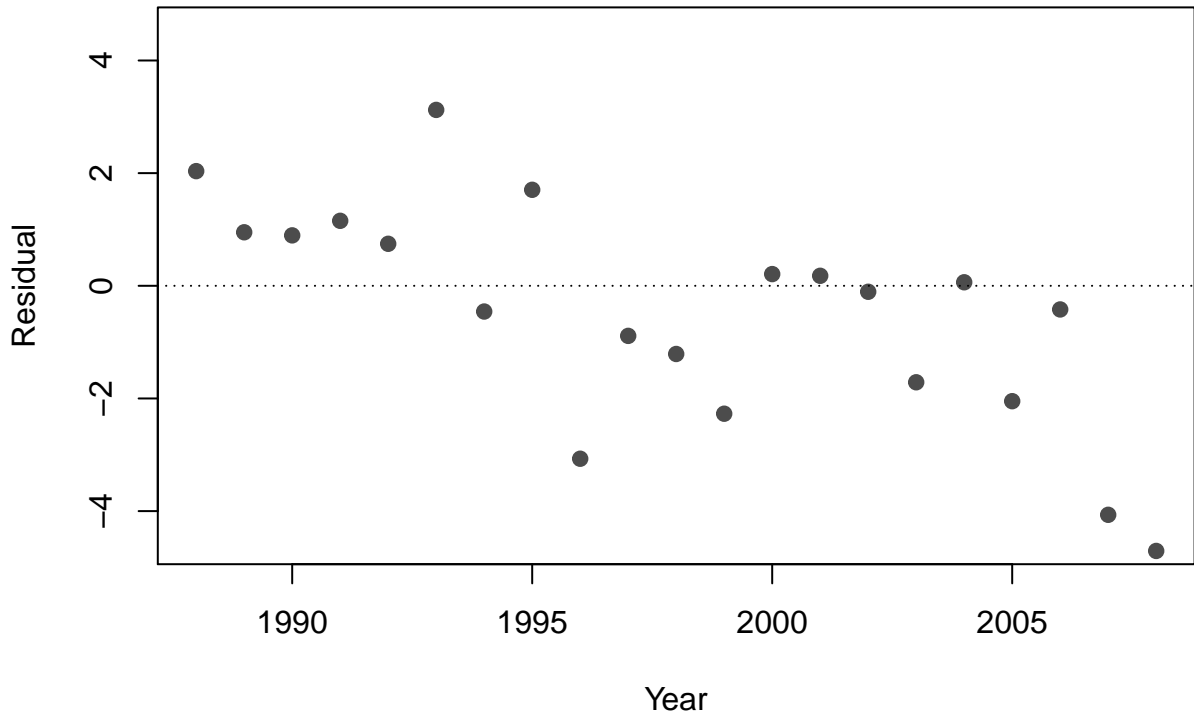


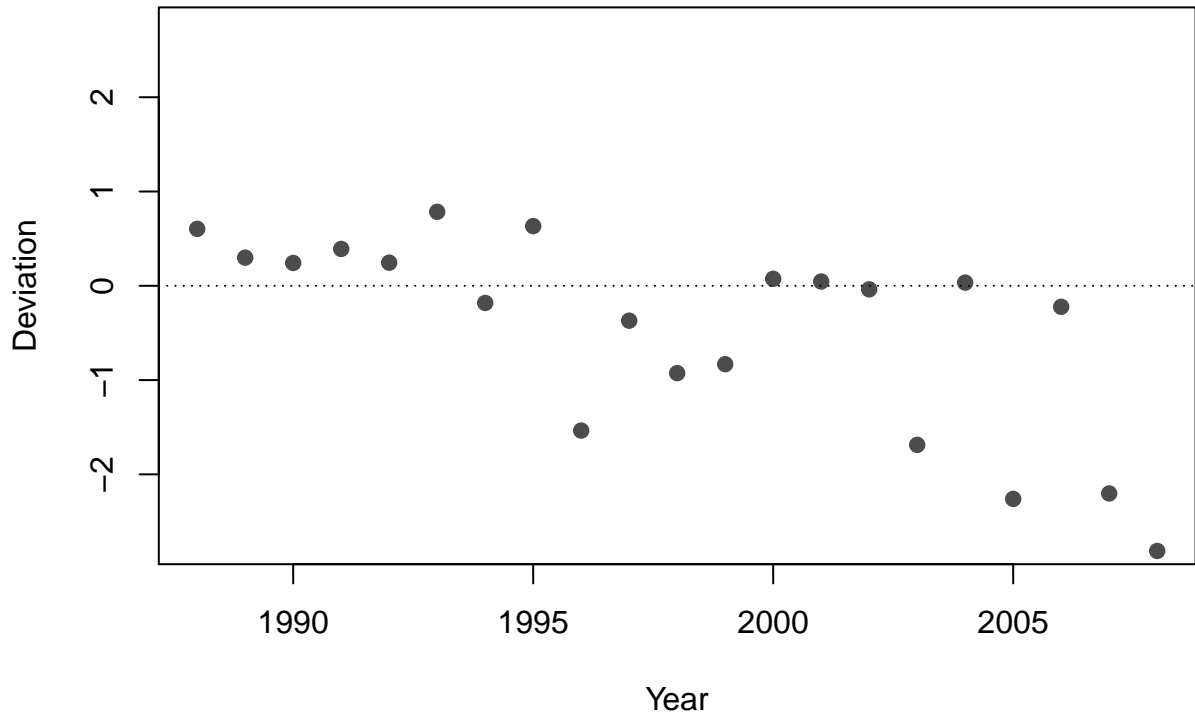




Effective catchability

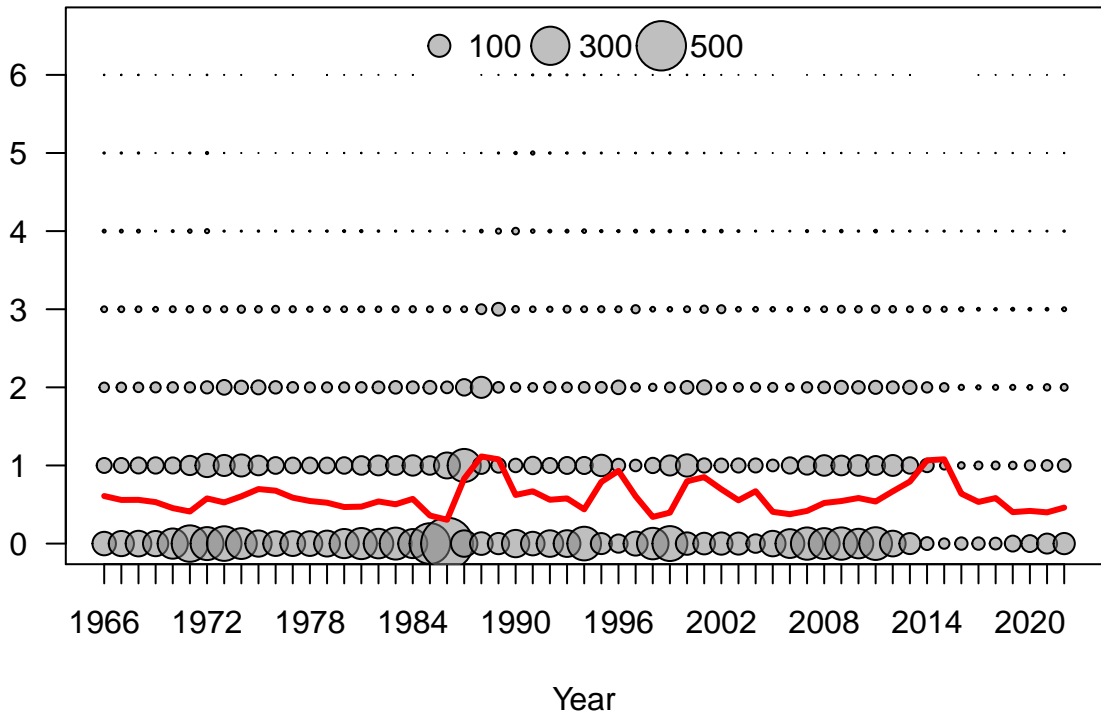




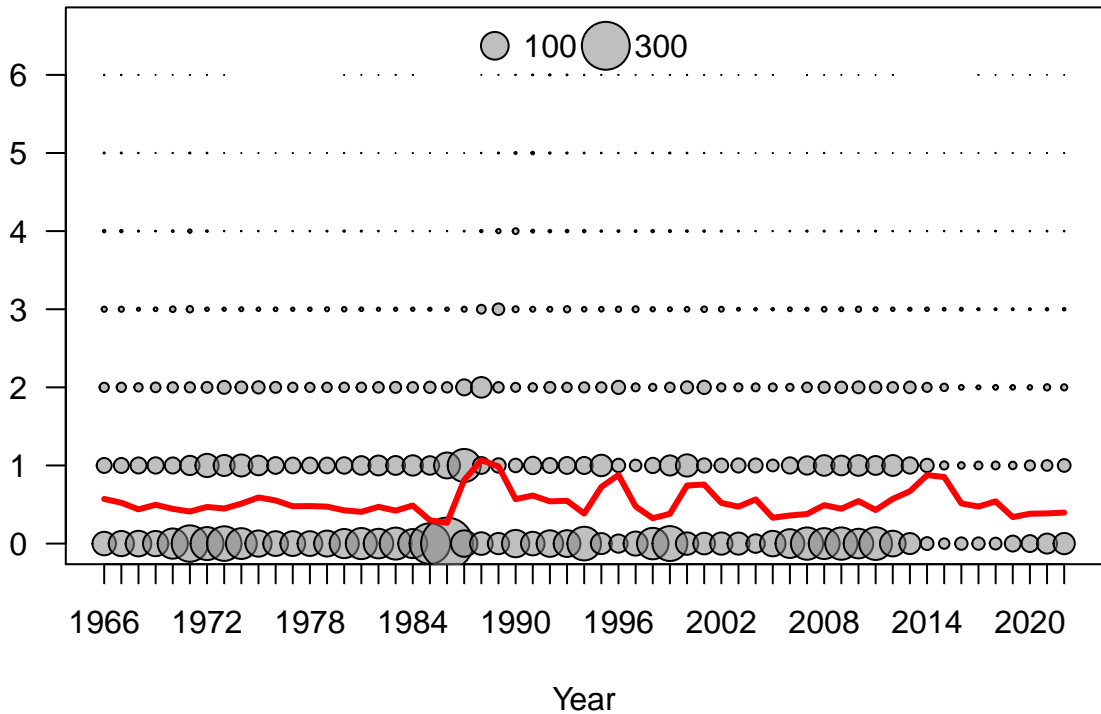


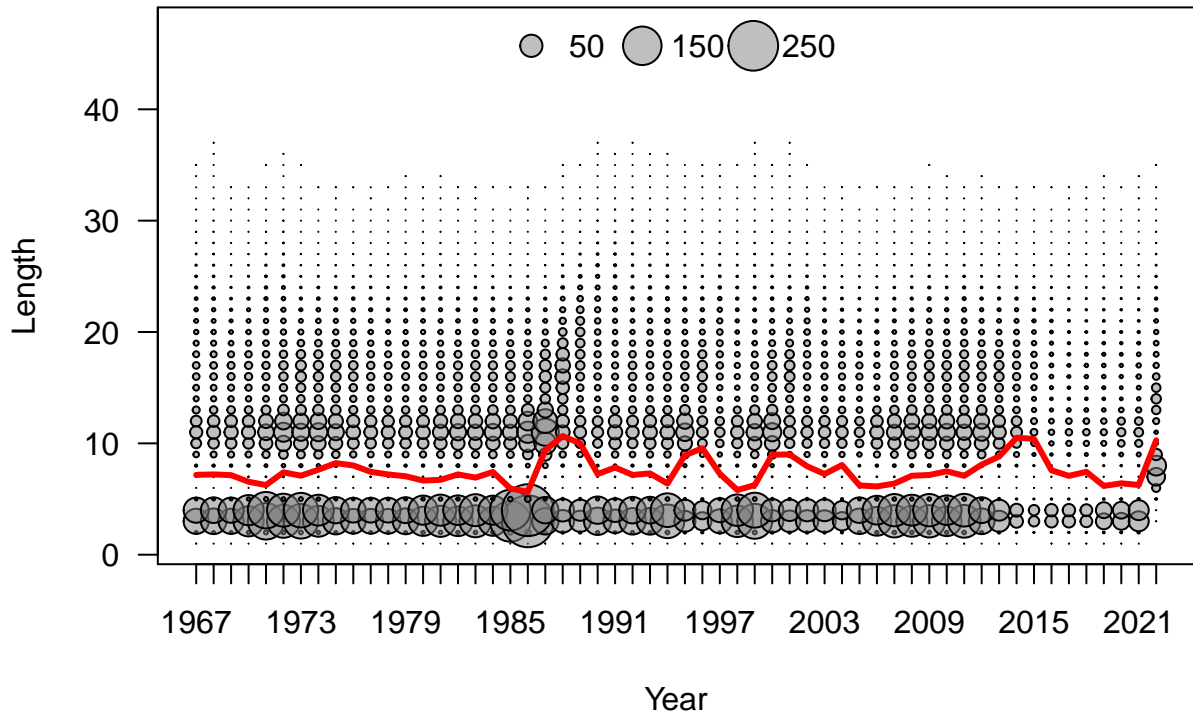


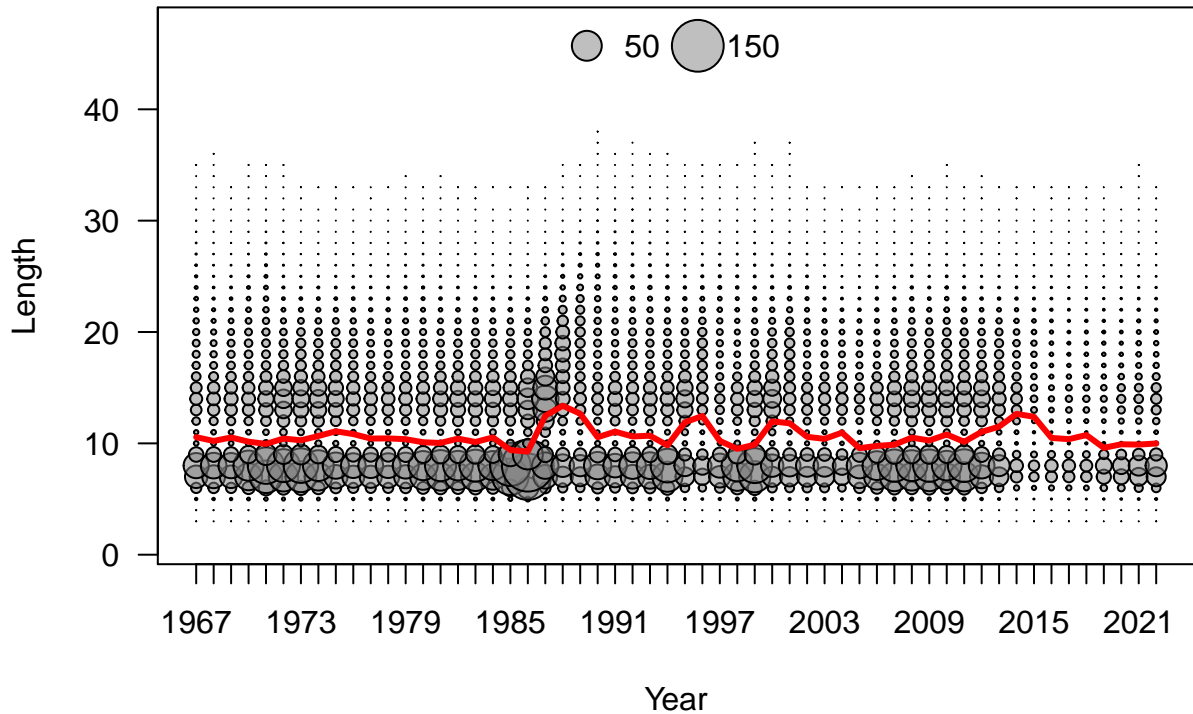
Age

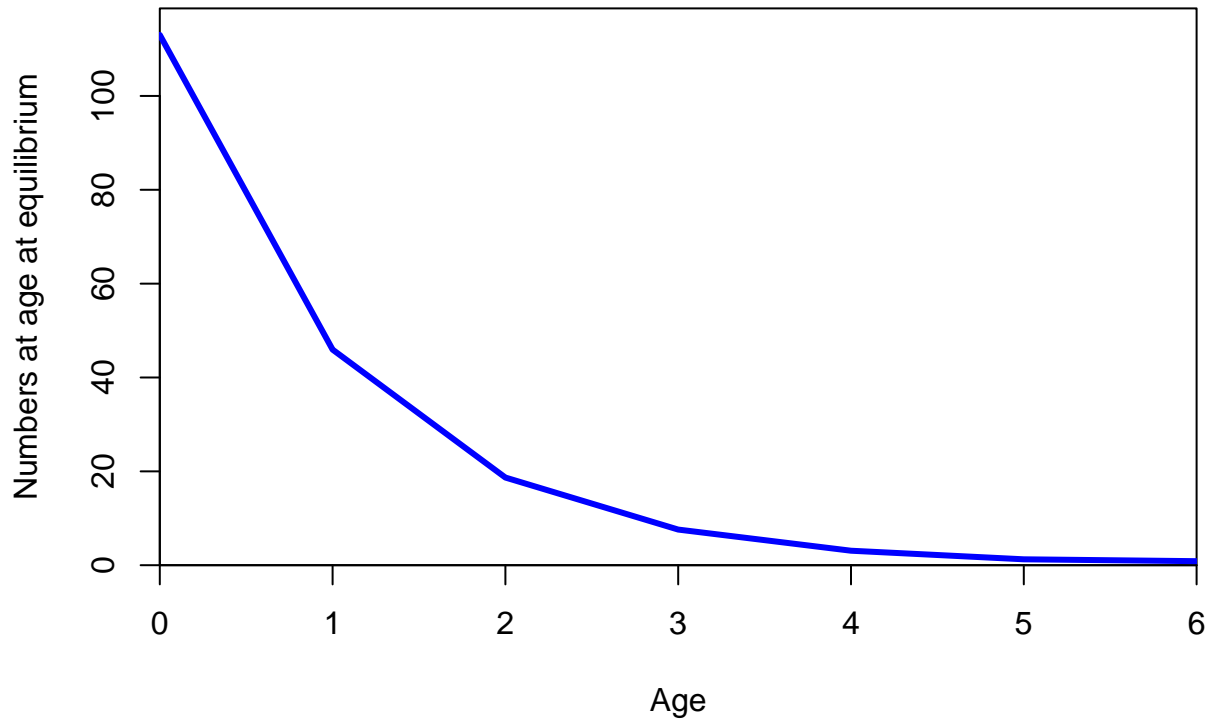


Age



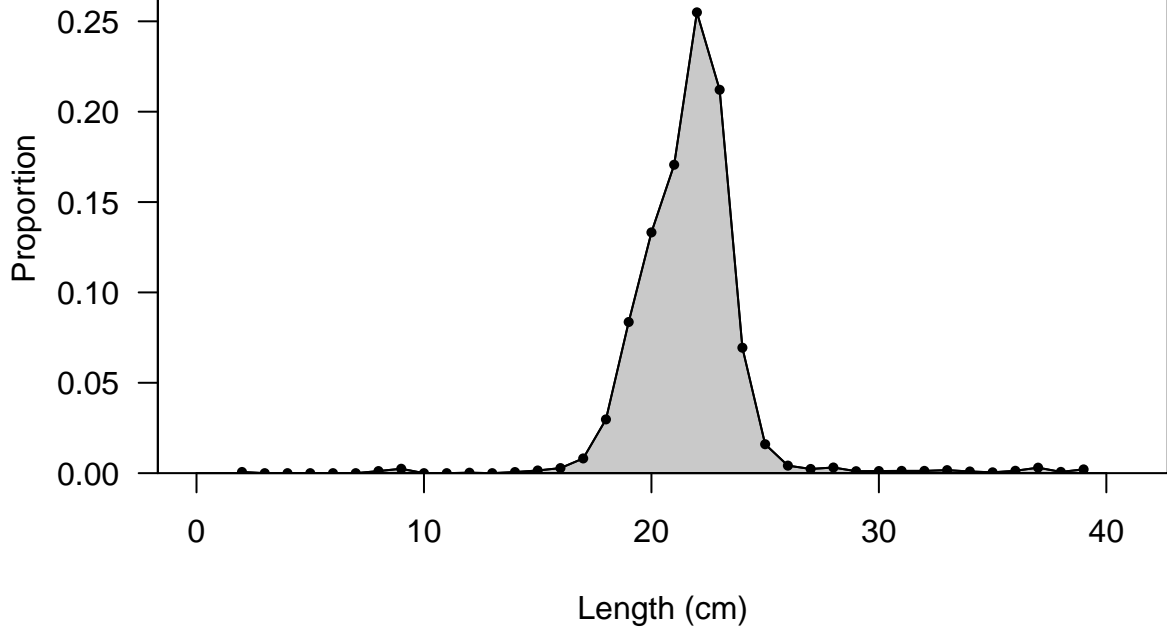


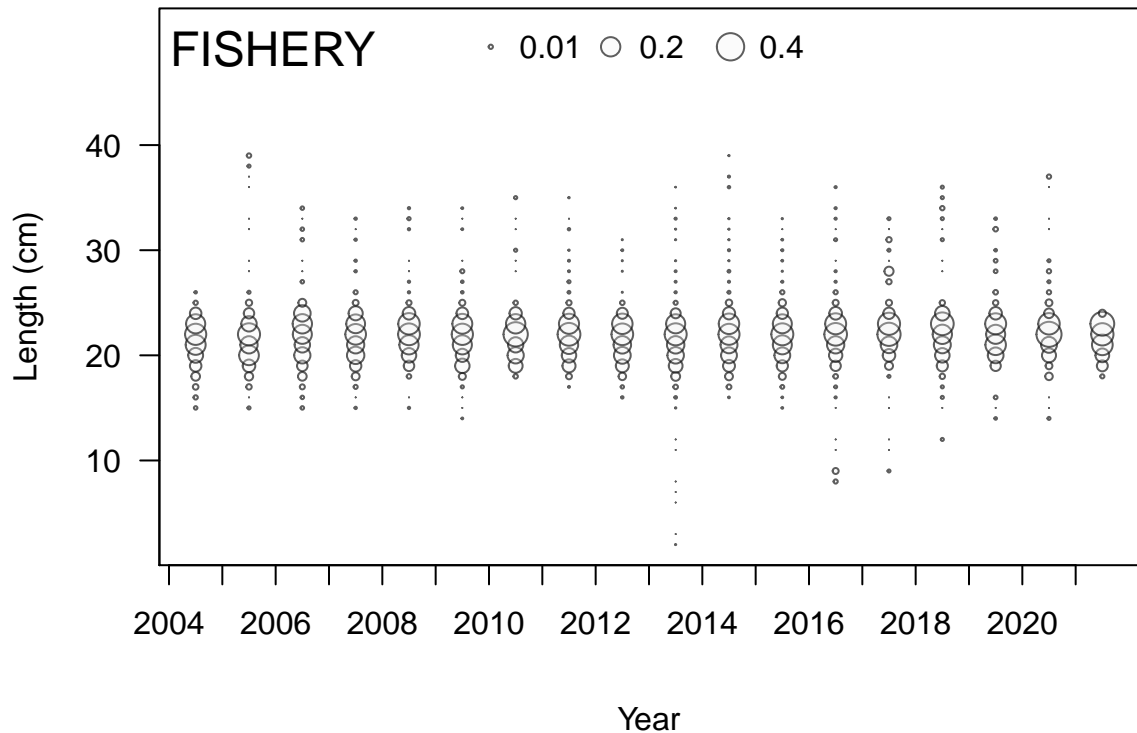




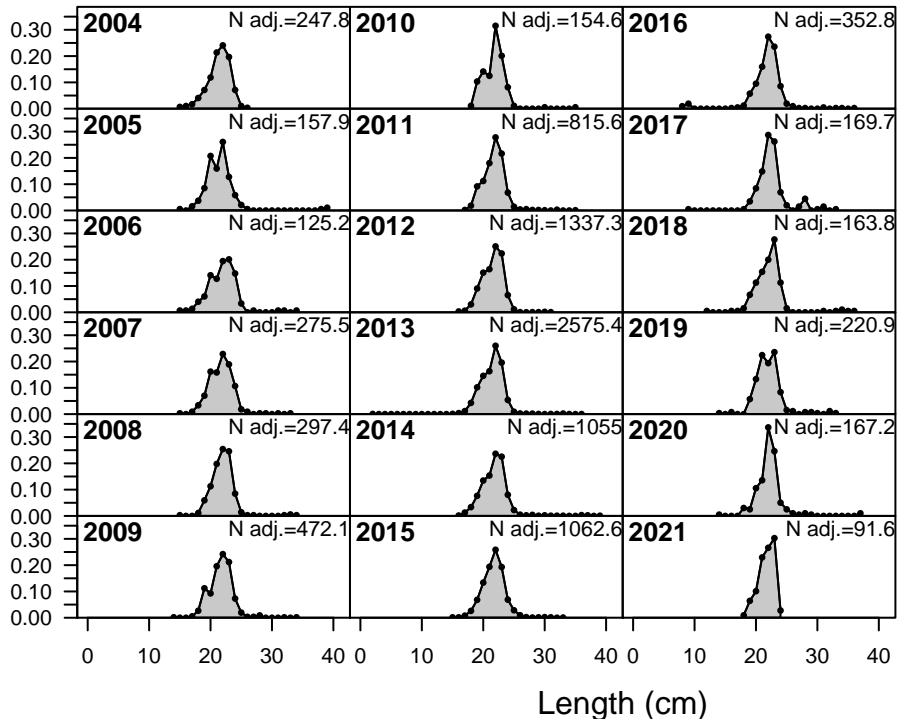
FISHERY

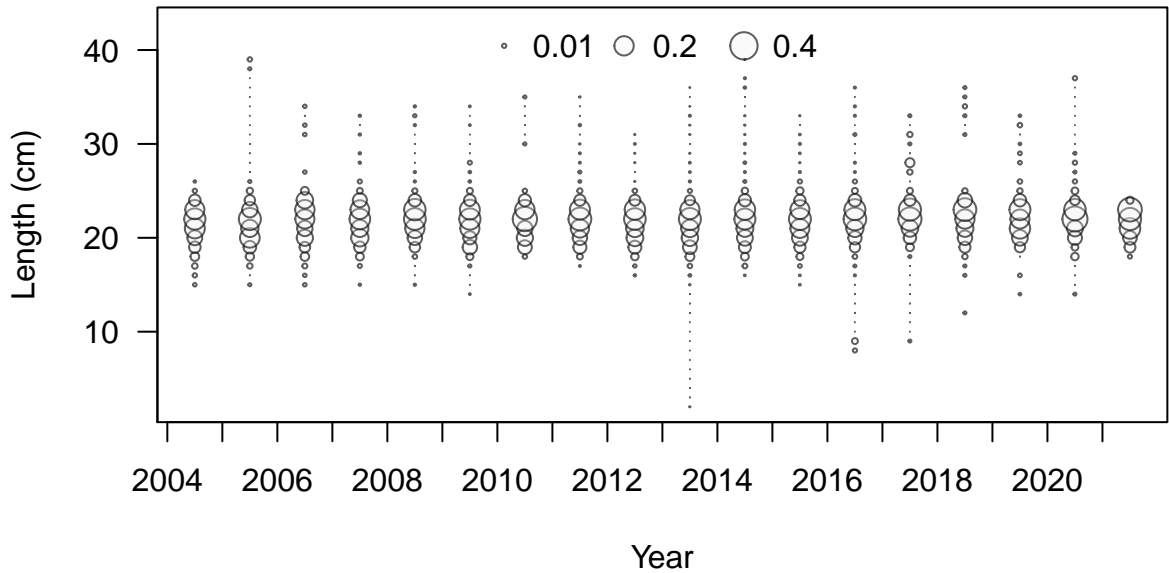
Sum of N adj.=9742.3



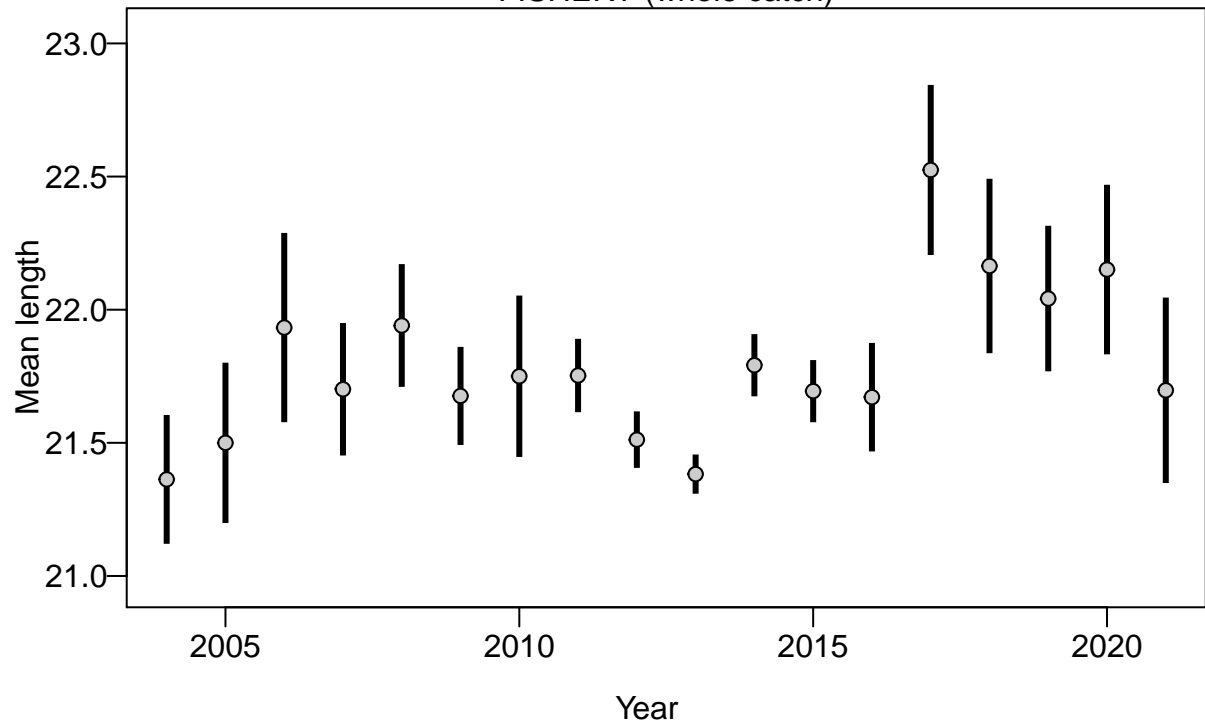


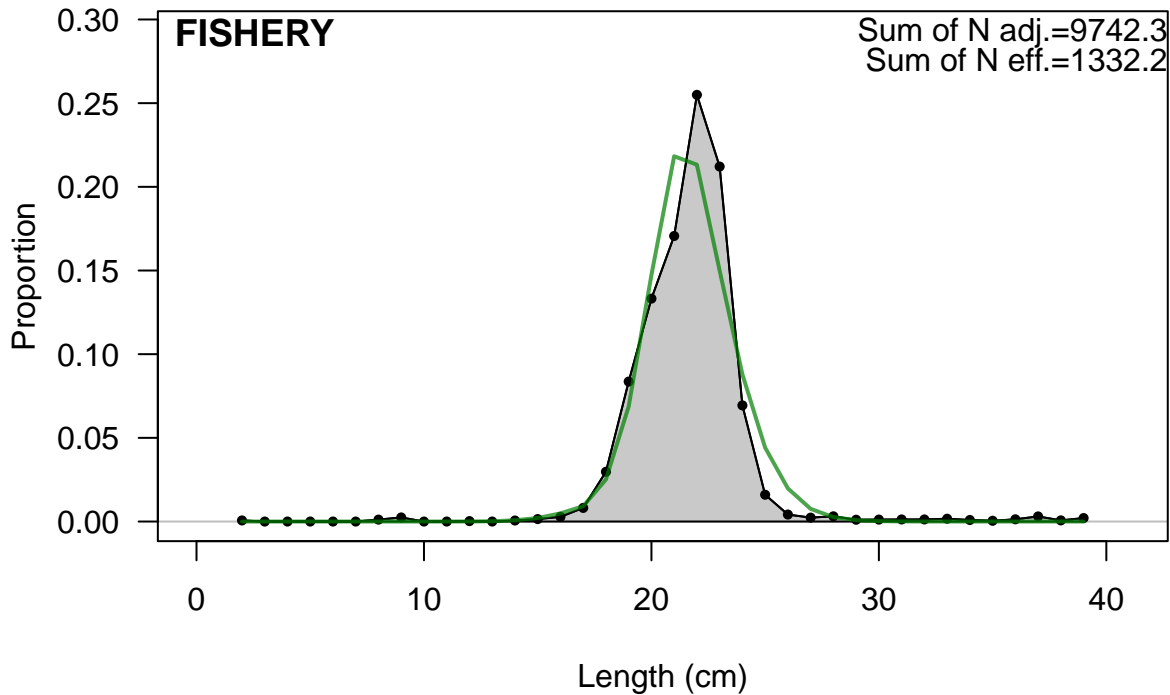
Proportion

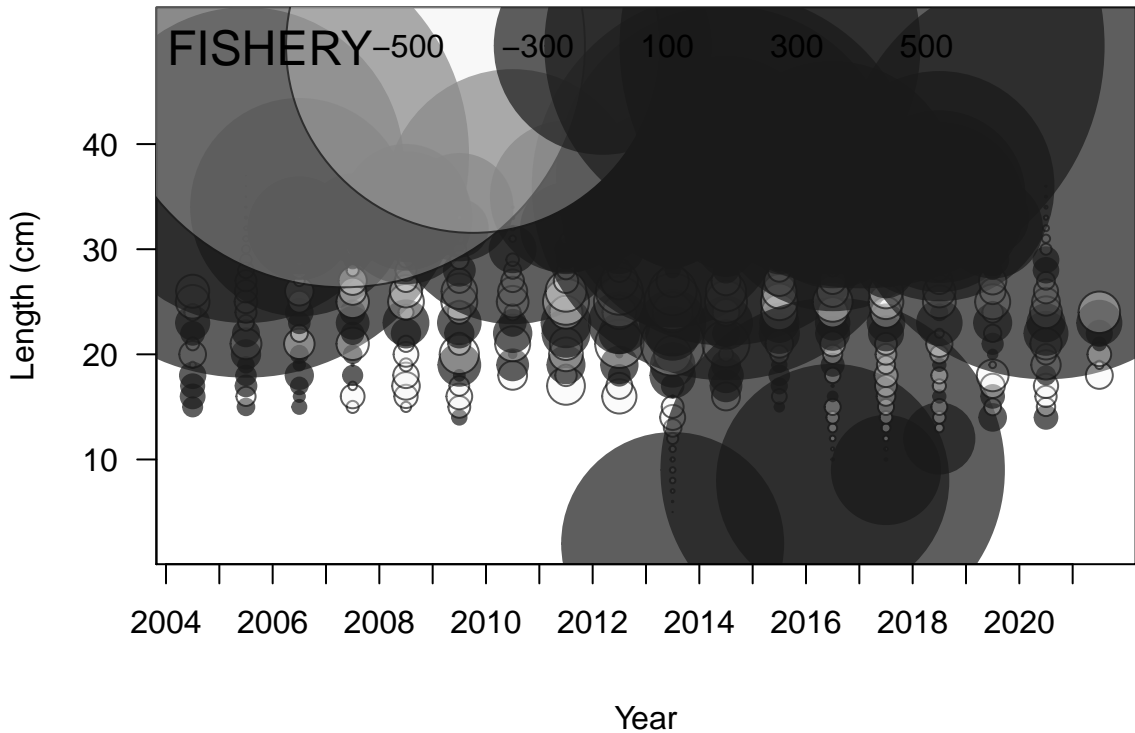


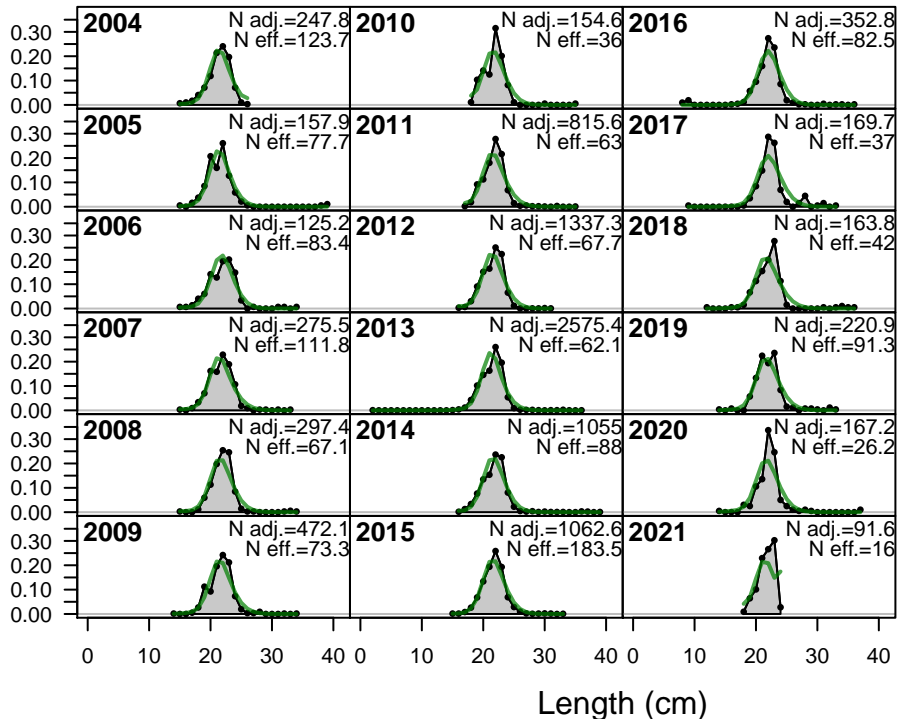


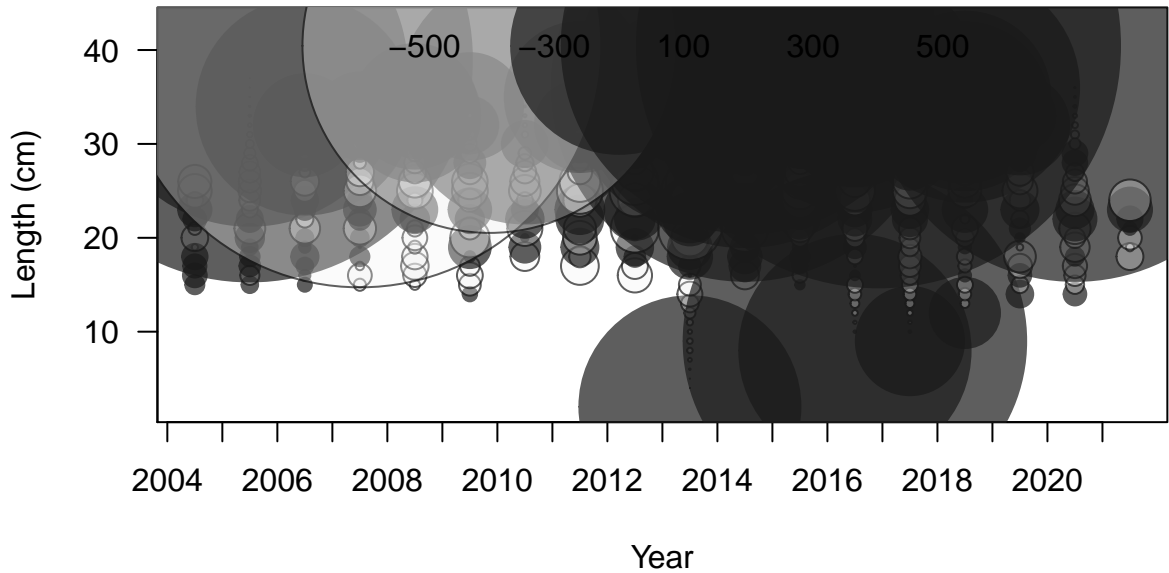
FISHERY (whole catch)



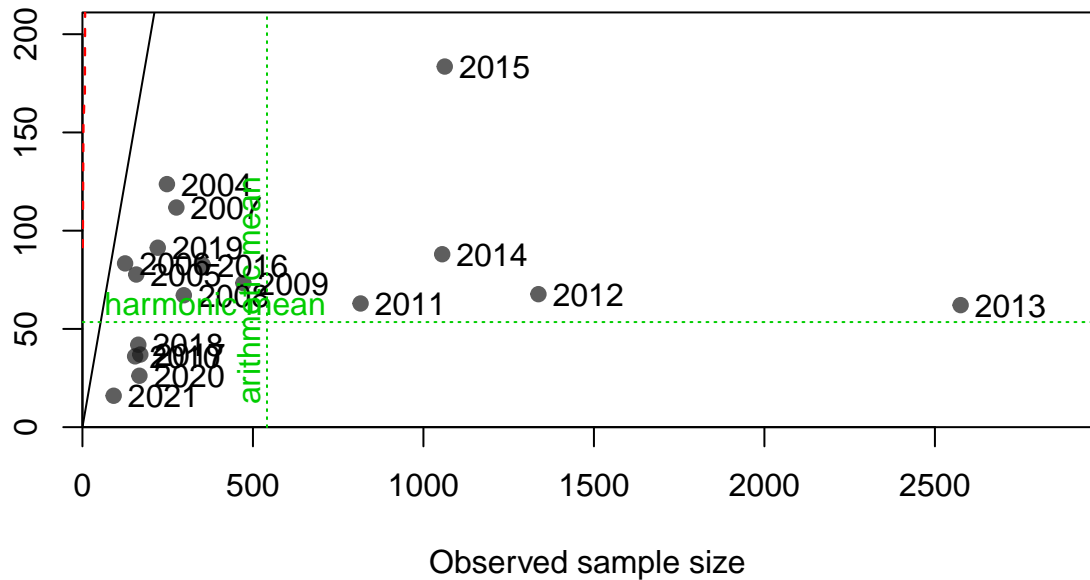




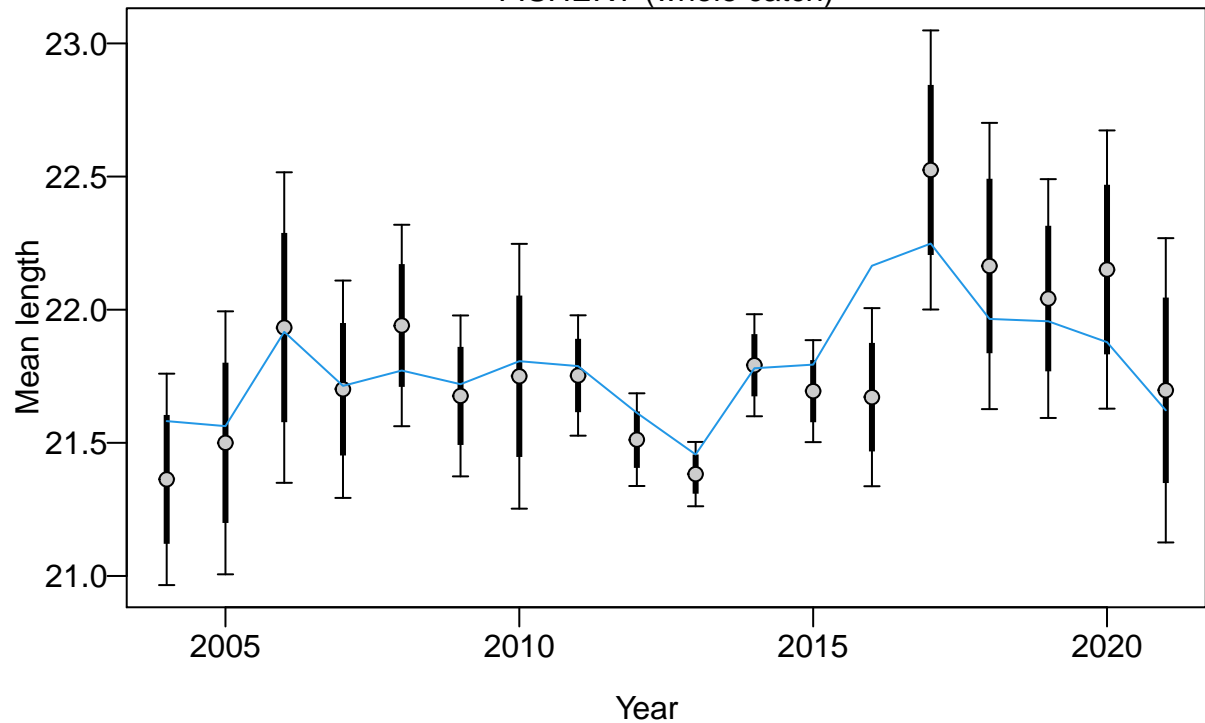


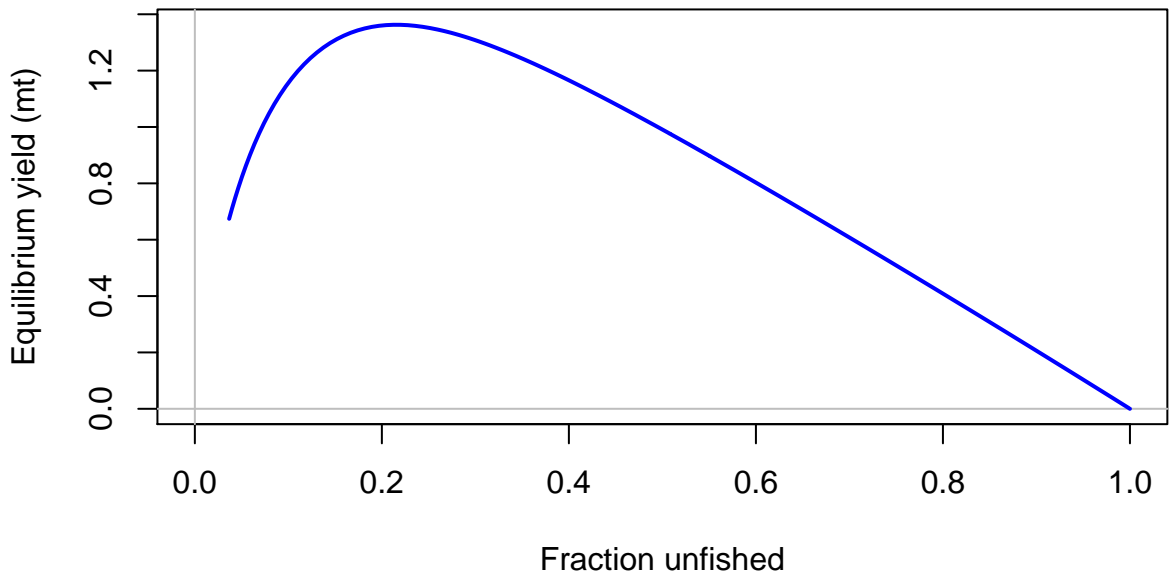


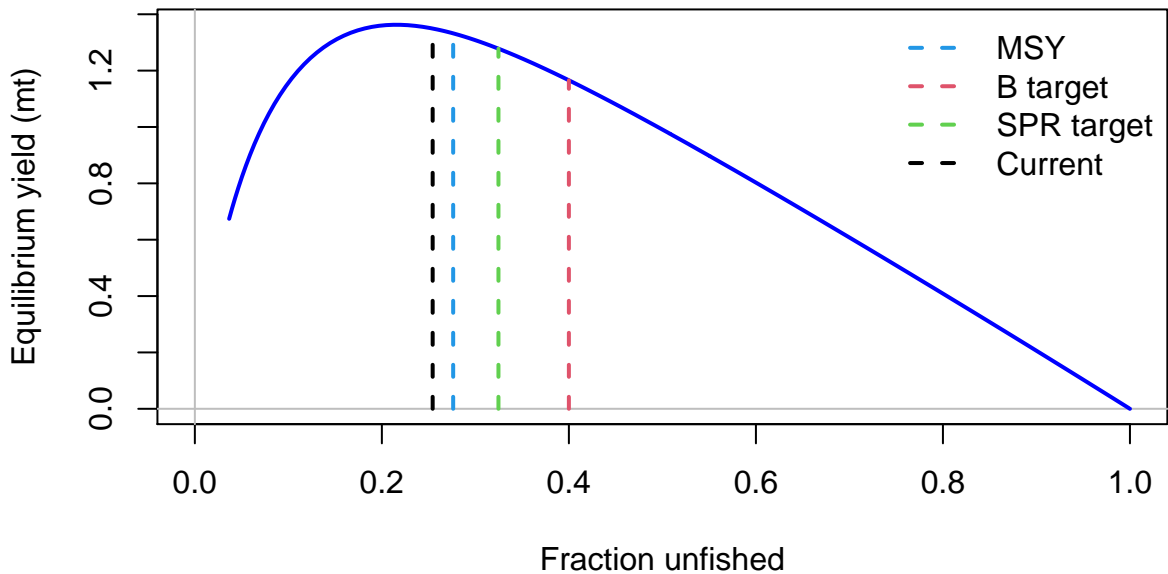
Effective sample size

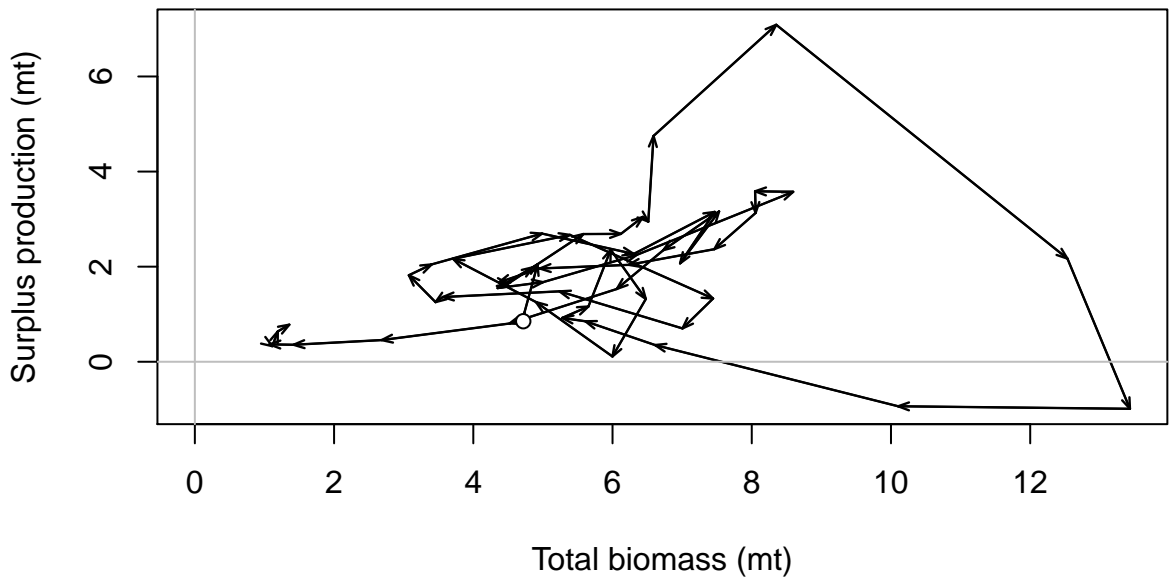


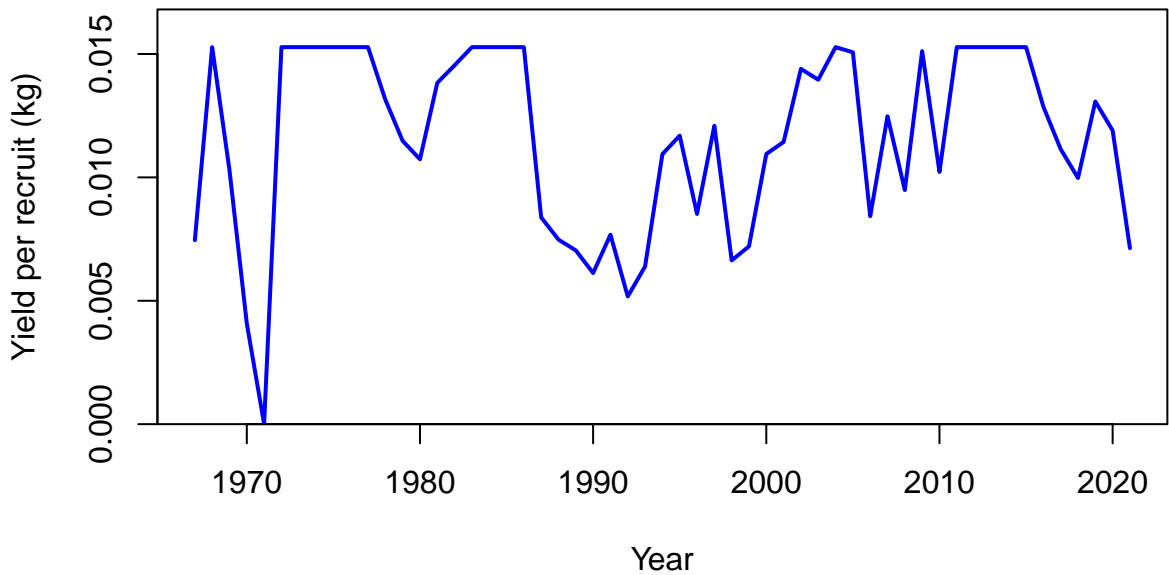
FISHERY (whole catch)

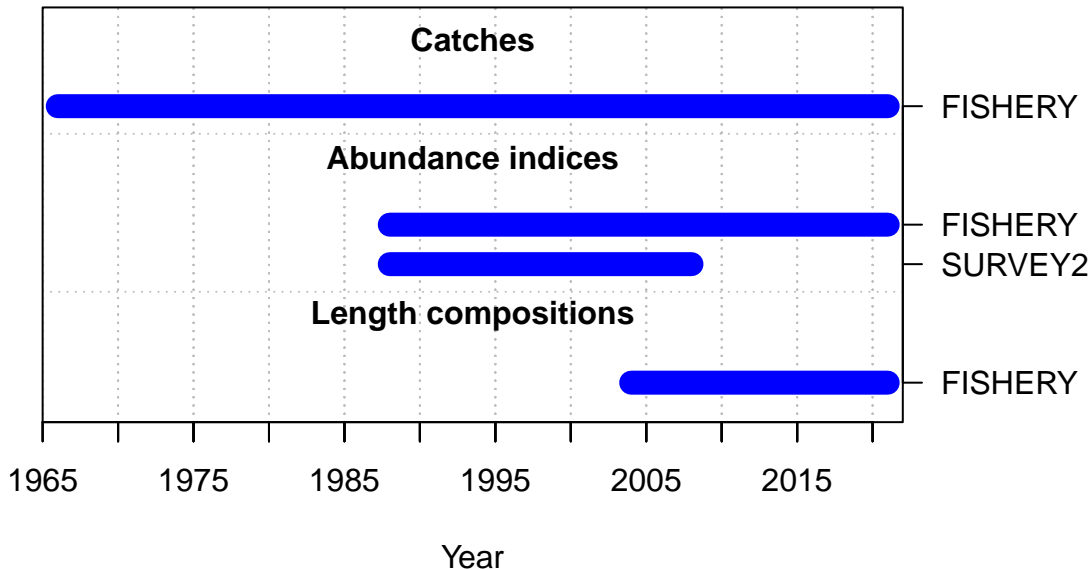


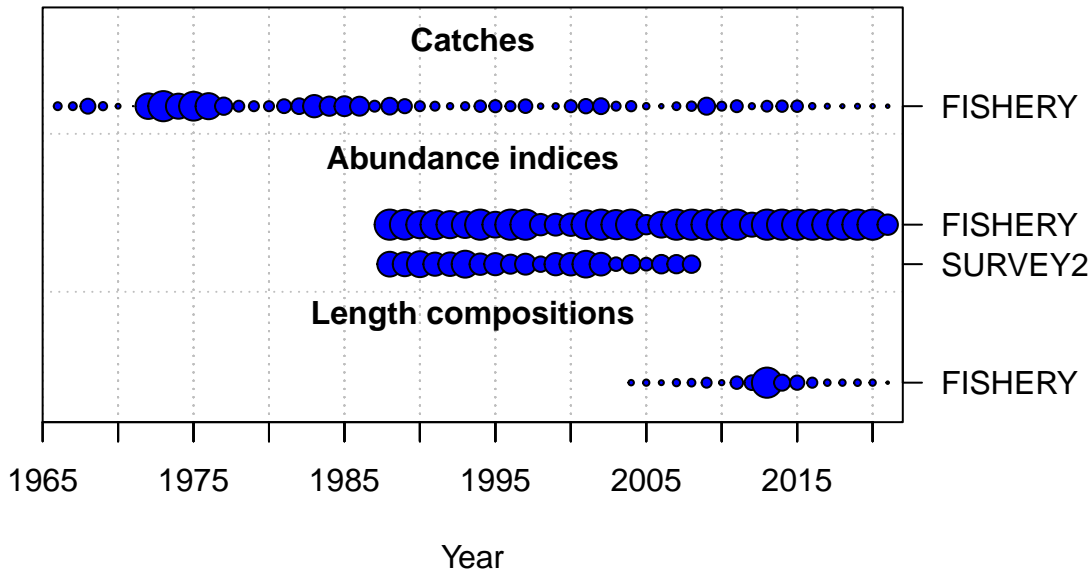






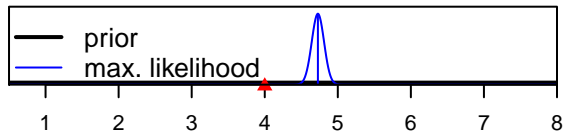




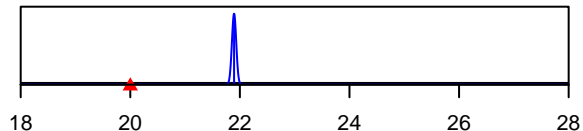


Density

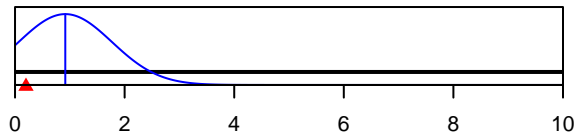
SR_LN(R0)



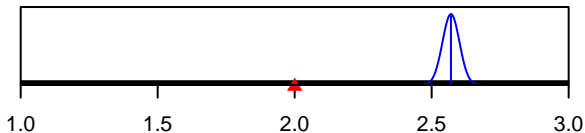
Size_inflection_FISHERY(1)



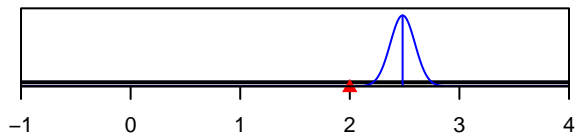
InitF_seas_1flt_1FISHERY



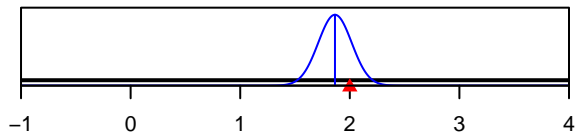
Size_95%width_FISHERY(1)



LnQ_base_FISHERY(1)



LnQ_base_SURVEY2(2)



Parameter value