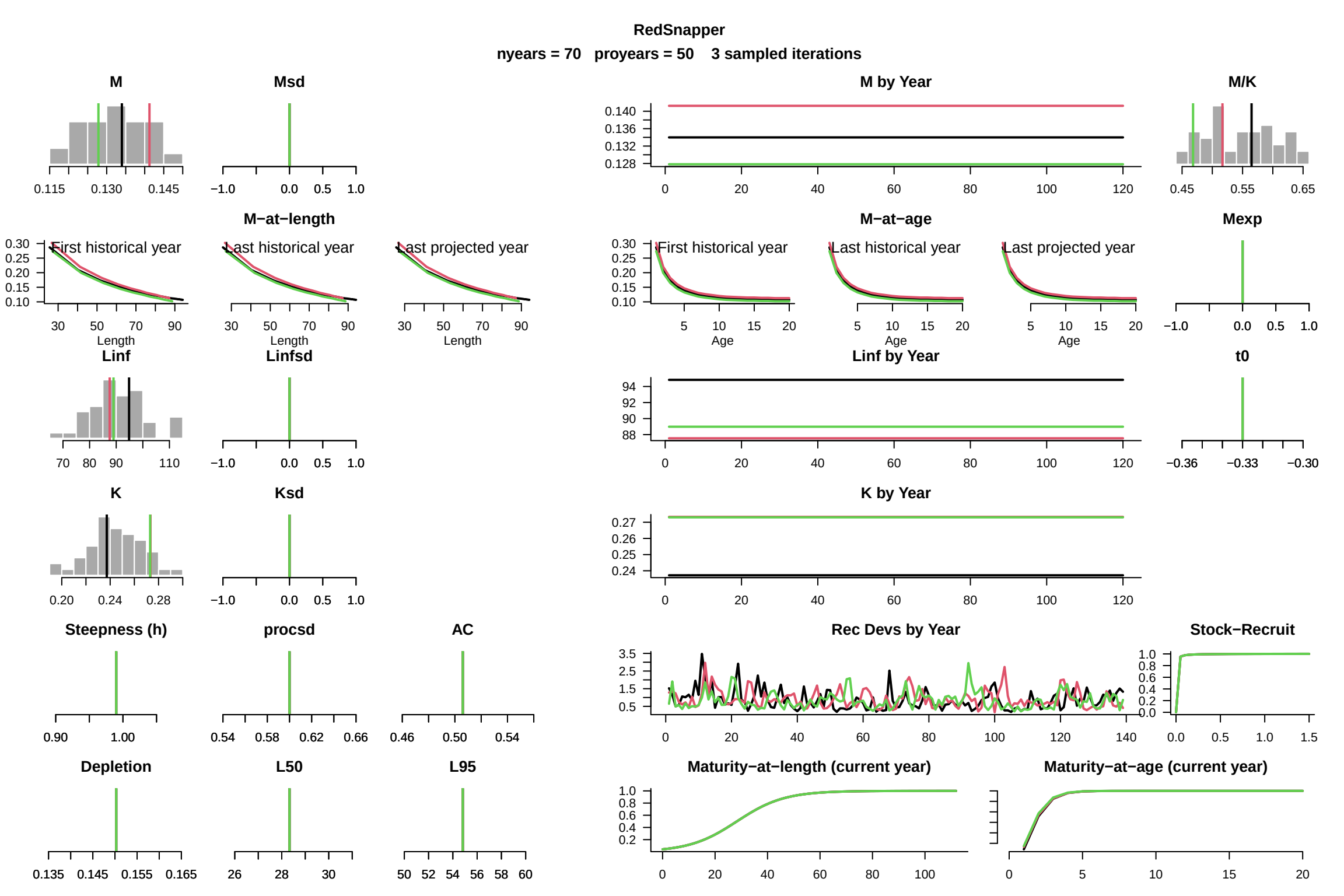
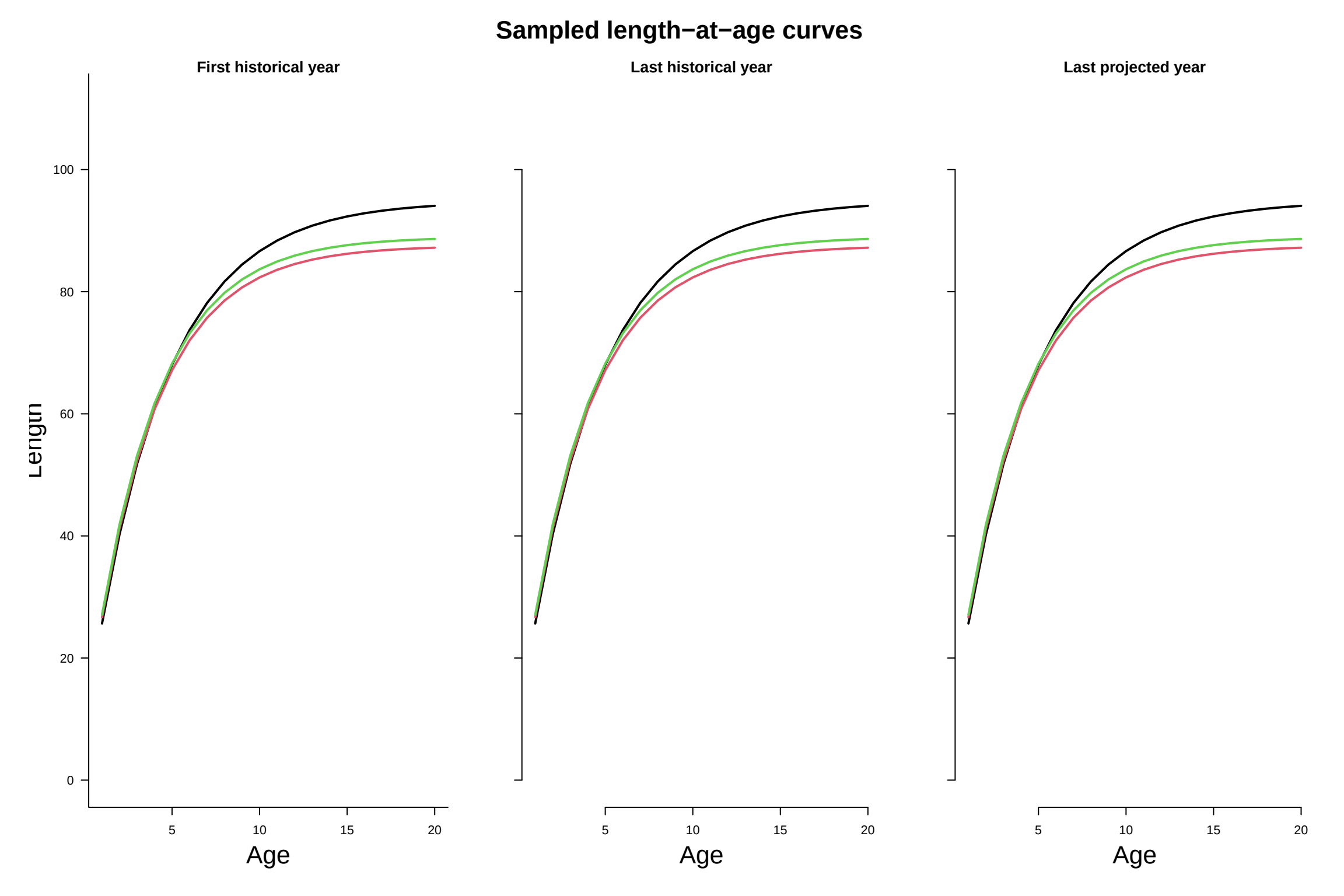
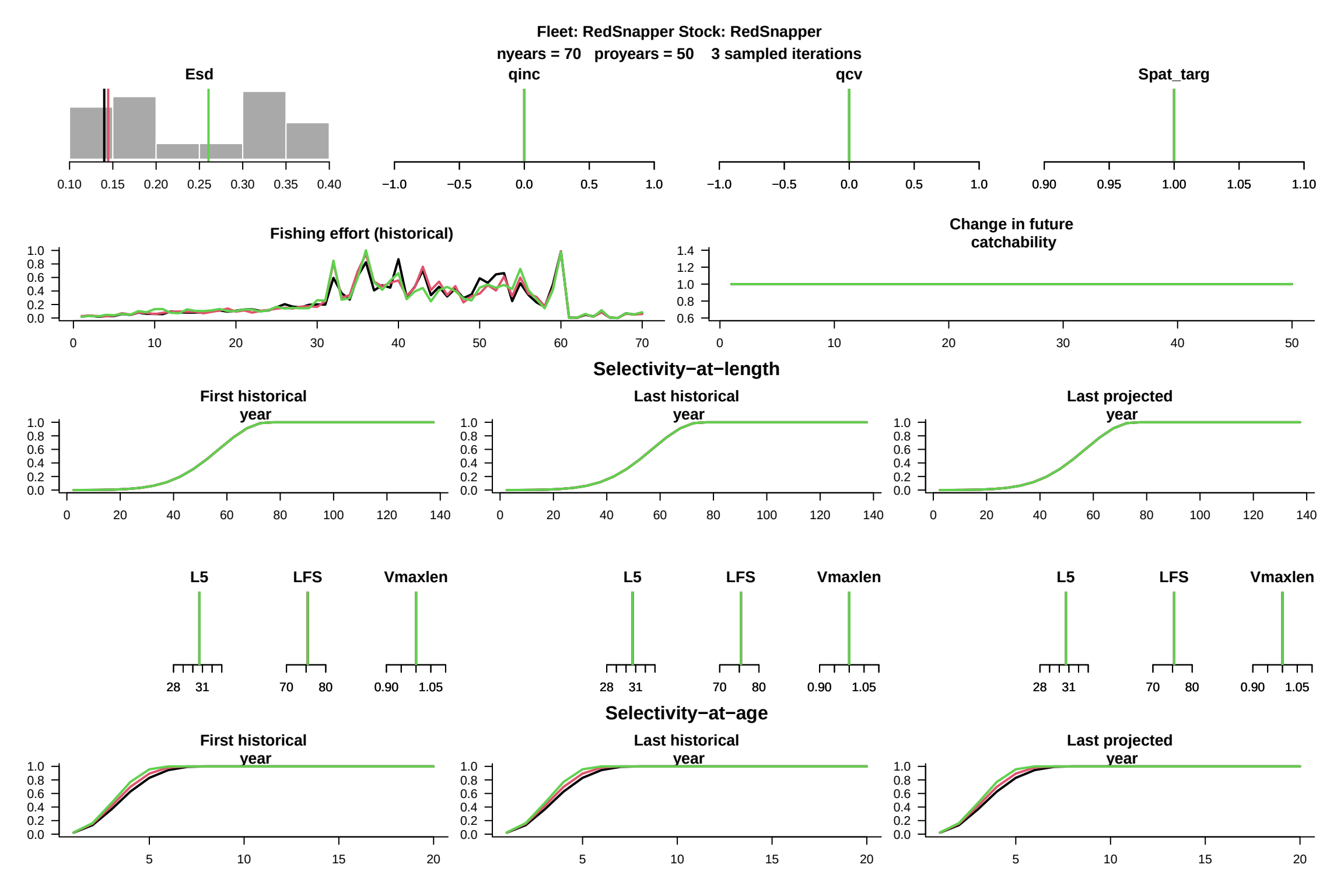
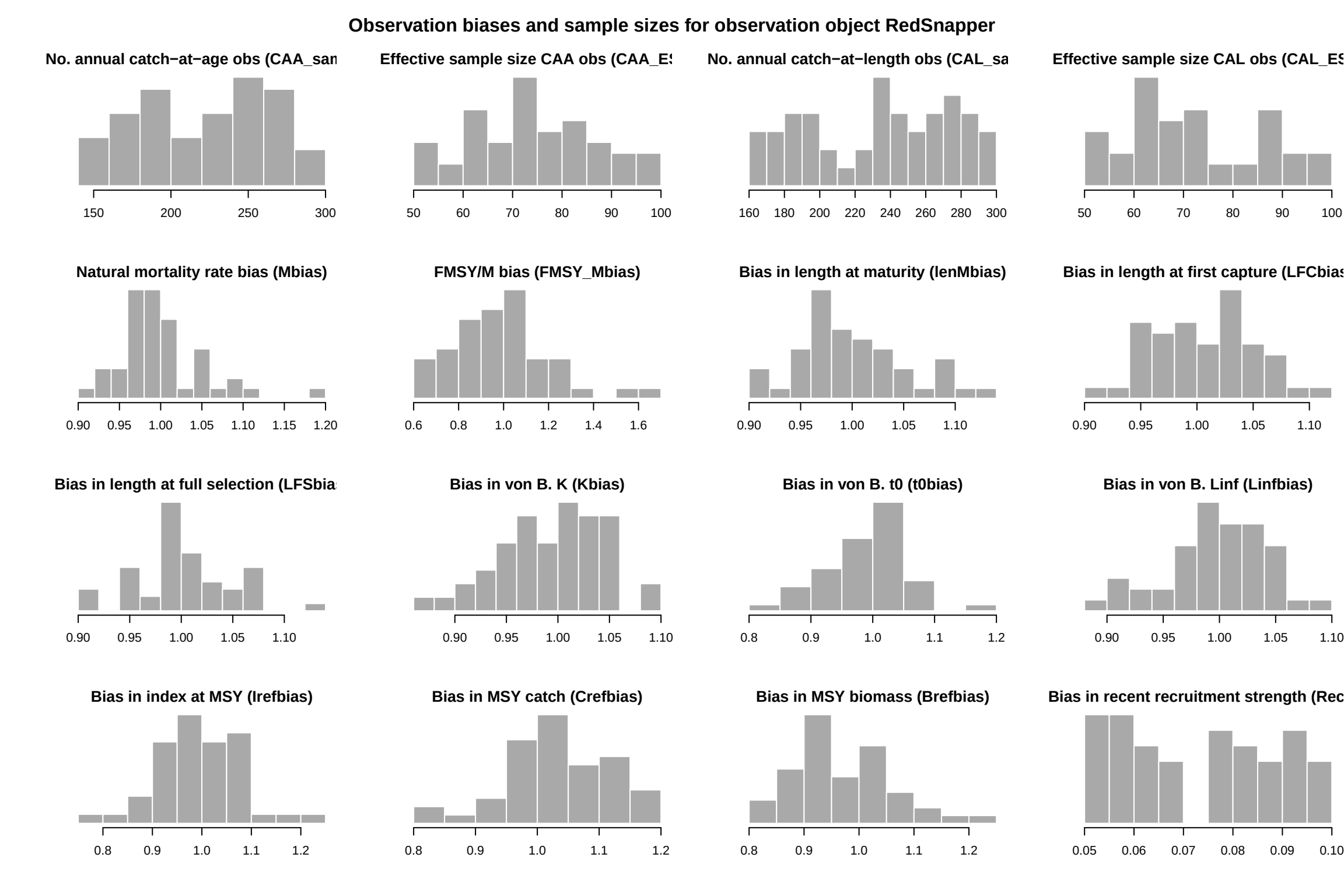
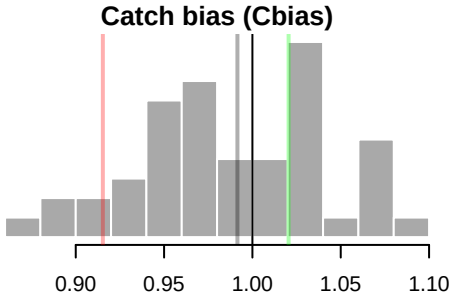

RedSnapper
nyears = 70 proyears = 50 3 sampled iterations
M
Msd
M by Year
M/K
M−at−length
First historical year
Last historical year
Last projected year
Length
M−at−age
Age
Mexp
Linf
Linfsd
Linf by Year
t0
K
Ksd
K by Year
Steepness (h)
procsd
AC
Rec Devs by Year
Stock−Recruit
Depletion
L50
L95
Maturity−at−length (current year)
Maturity−at−age (current year)

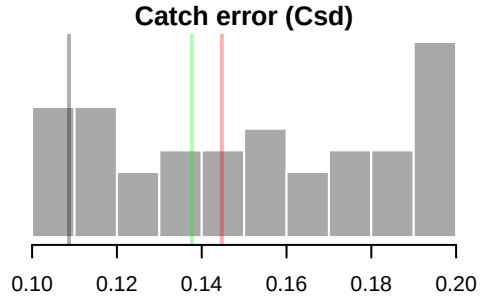

Sampled length−at−age curves
First historical year
Last historical year
Last projected year
Length
100
80
60
40
20
0
5
10
15
20
Age

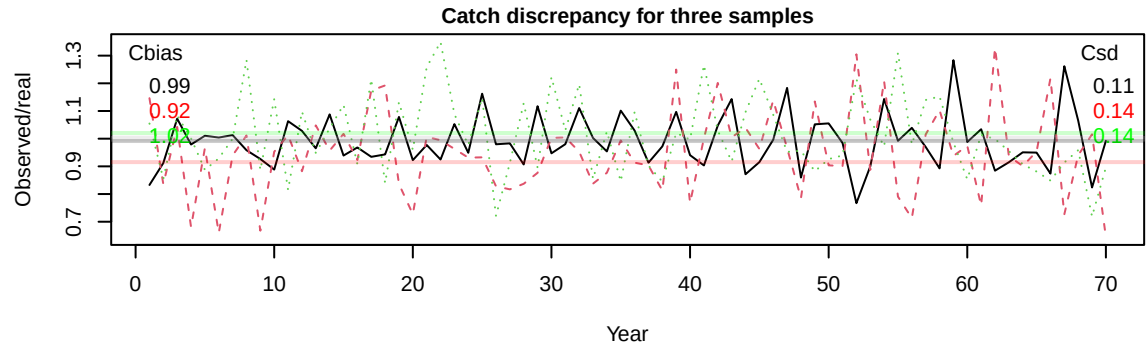

Fleet: RedSnapper Stock: RedSnapper
nyears = 70 proyears = 50 3 sampled iterations
Esd
qinc
qcv
Spat_targ
Fishing effort (historical)
Change in future catchability
Selectivity−at−length
First historical year
Last historical year
Last projected year
L5
LFS
Vmaxlen
Selectivity−at−age
First historical year
Last historical year
Last projected year

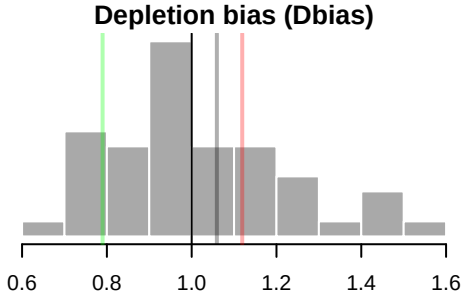

Observation biases and sample sizes for observation object RedSnapper
No. annual catch−at−age obs (CAA_san
150 200 250 300
Effective sample size CAA obs (CAA_ES
50 60 70 80 90 100
No. annual catch−at−length obs (CAL_sa
160 180 200 220 240 260 280 300
Effective sample size CAL obs (CAL_ES
50 60 70 80 90 100
Natural mortality rate bias (Mbias)
0.90 0.95 1.00 1.05 1.10 1.15 1.20
FMSY/M bias (FMSY_Mbias)
0.6 0.8 1.0 1.2 1.4 1.6
Bias in length at maturity (lenMbias)
0.90 0.95 1.00 1.05 1.10
Bias in length at first capture (LFCbias
0.90 0.95 1.00 1.05 1.10
Bias in length at full selection (LFSbia
0.90 0.95 1.00 1.05 1.10
Bias in von B. K (Kbias)
0.90 0.95 1.00 1.05 1.10
Bias in von B. t0 (t0bias)
0.8 0.9 1.0 1.1 1.2
Bias in von B. Linf (Linfbias)
0.90 0.95 1.00 1.05 1.10
Bias in index at MSY (Irefbias)
0.8 0.9 1.0 1.1 1.2
Bias in MSY catch (Crefbias)
0.8 0.9 1.0 1.1 1.2
Bias in MSY biomass (Brefbias)
0.8 0.9 1.0 1.1 1.2
Bias in recent recruitment strength (Rec
0.05 0.06 0.07 0.08 0.09 0.10

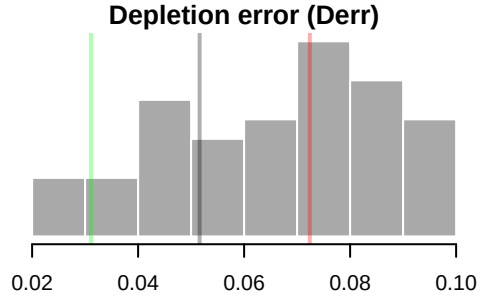
Observation time series plots for observation object RedSnapper

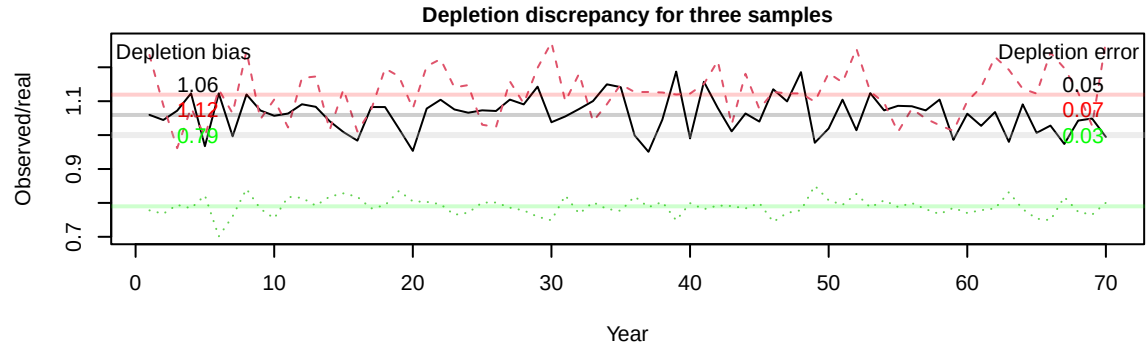


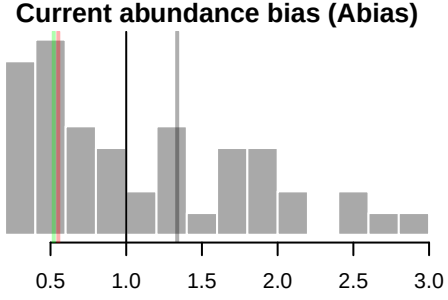


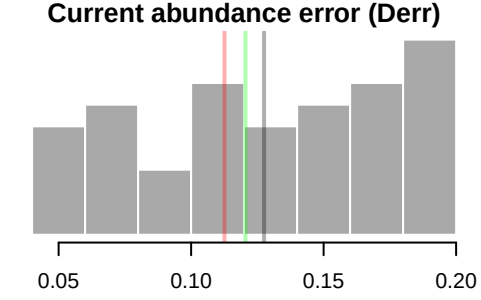


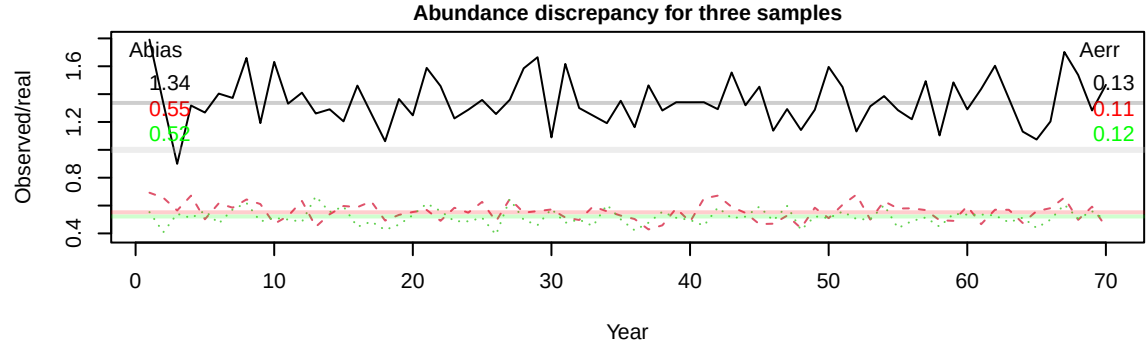


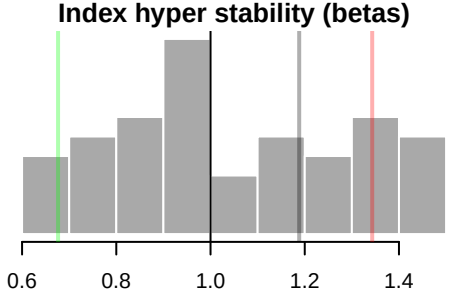


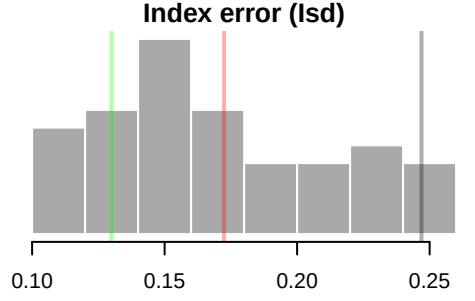


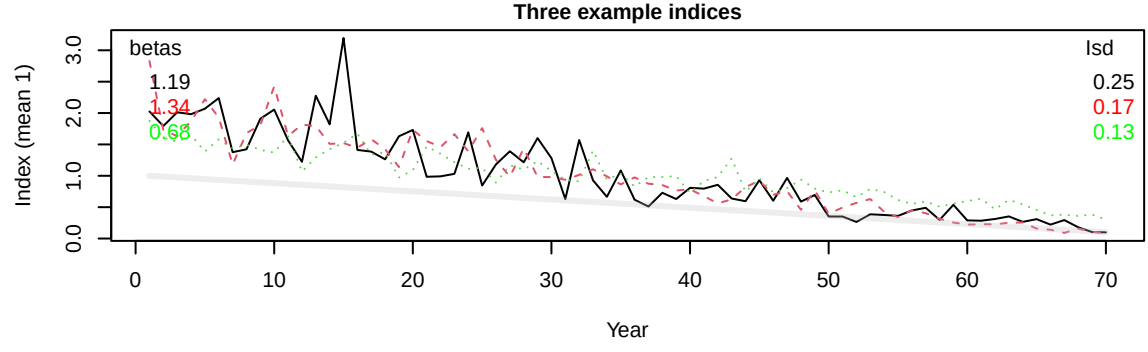




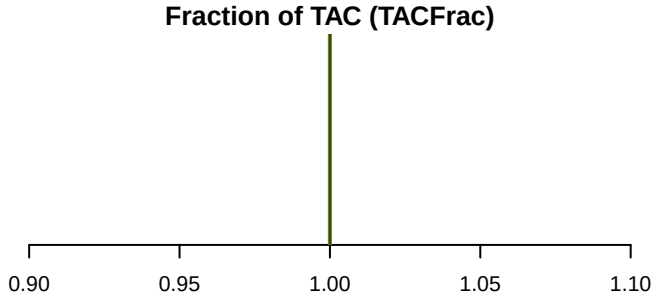


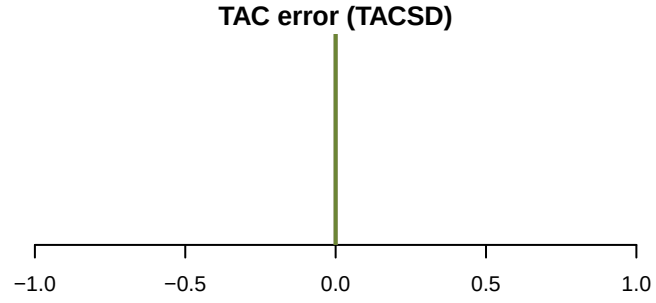


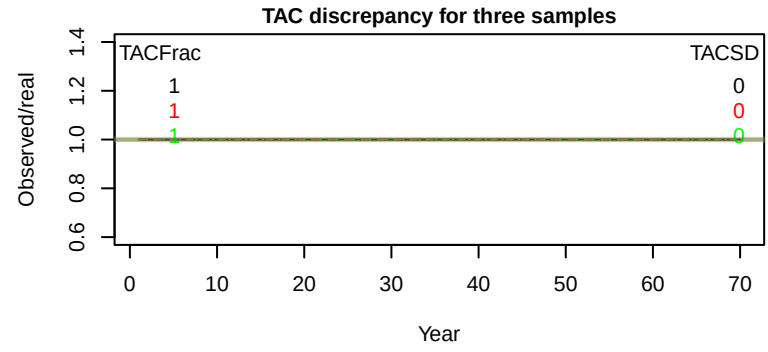


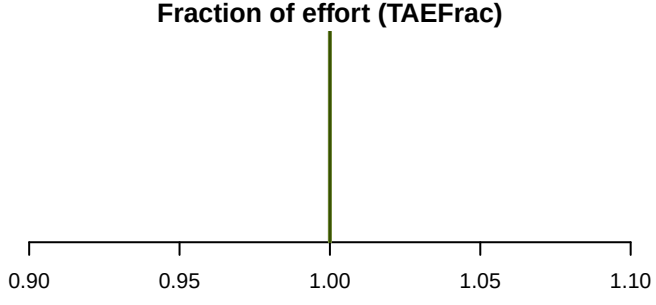


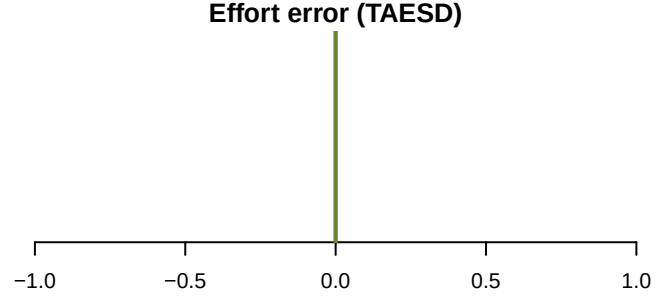
Implementation error time series plots for implementation object Perfect_Imp

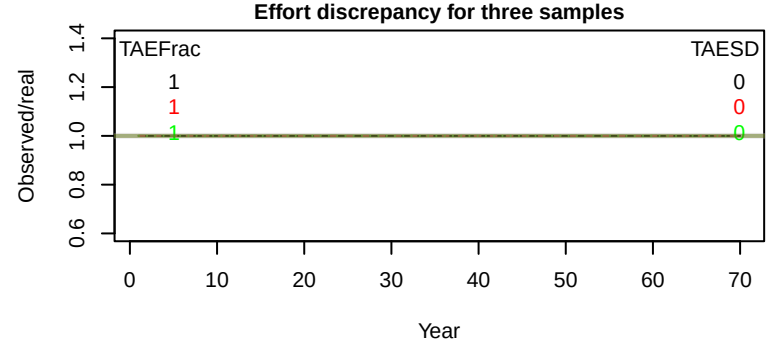


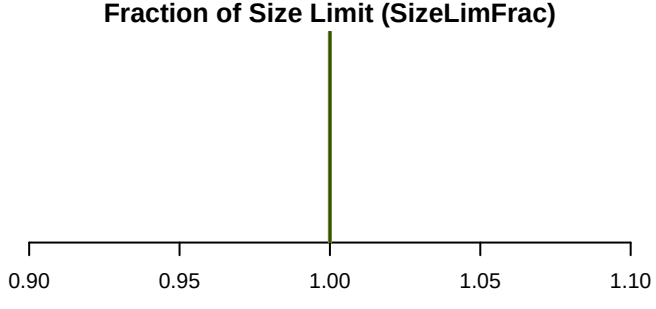


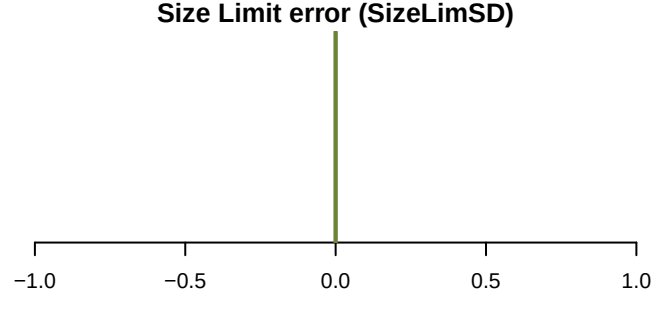


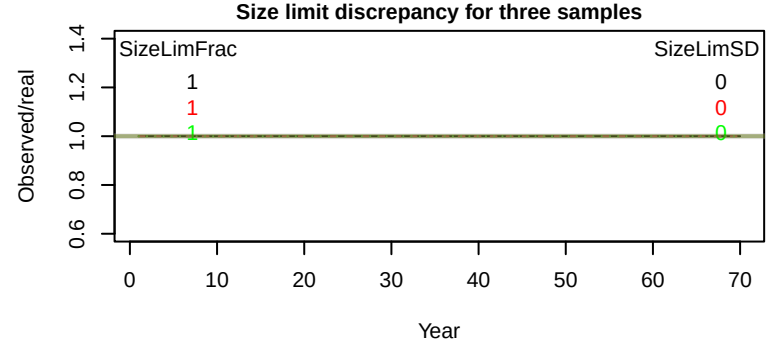


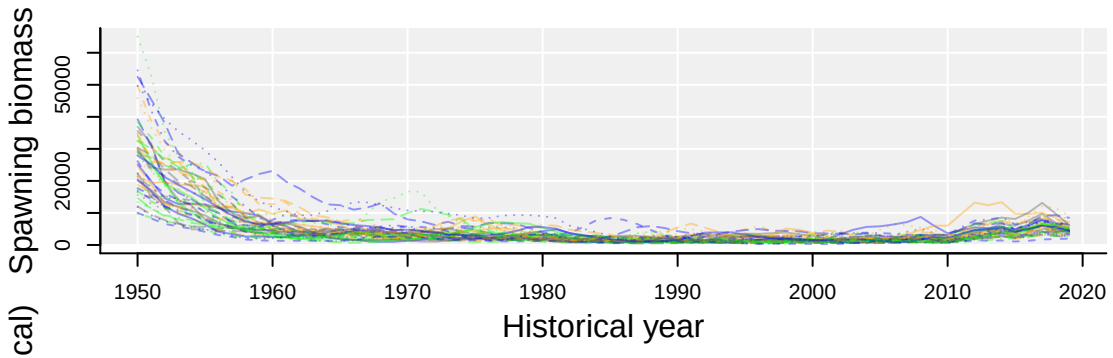


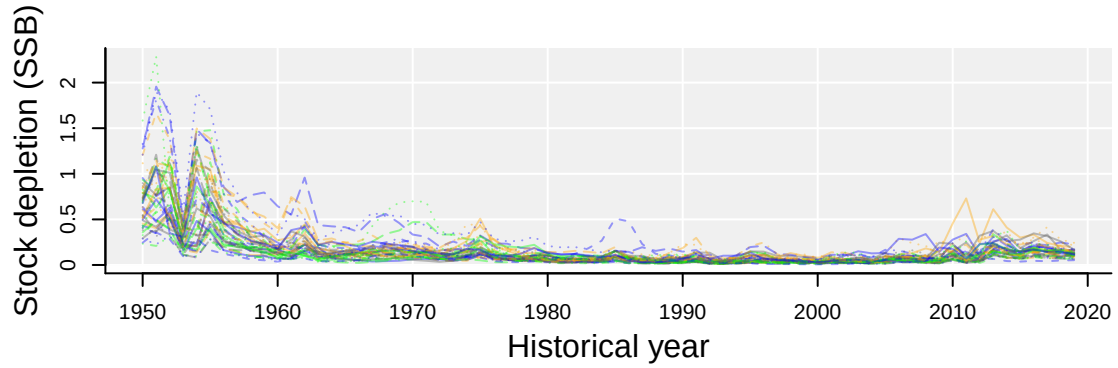


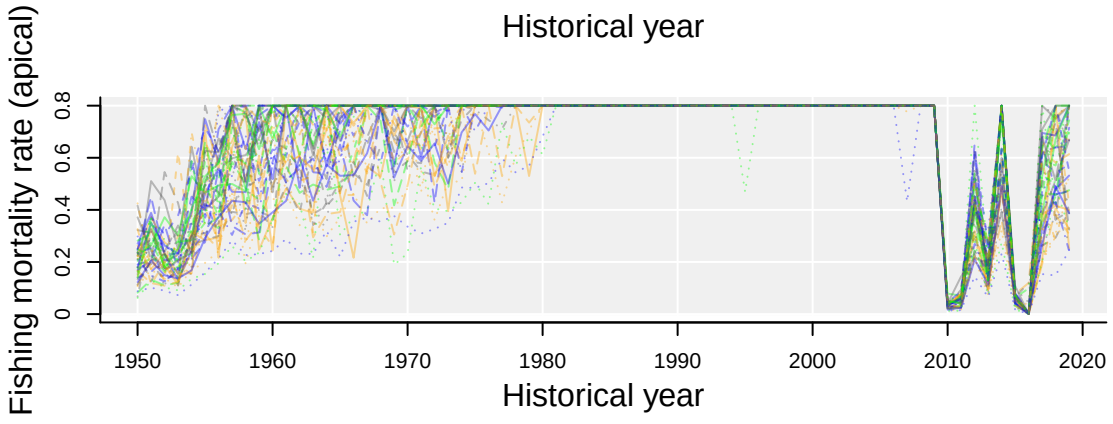


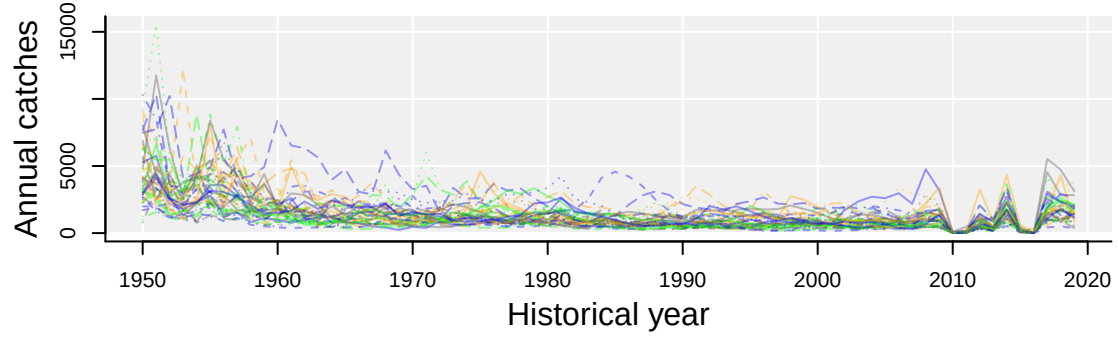


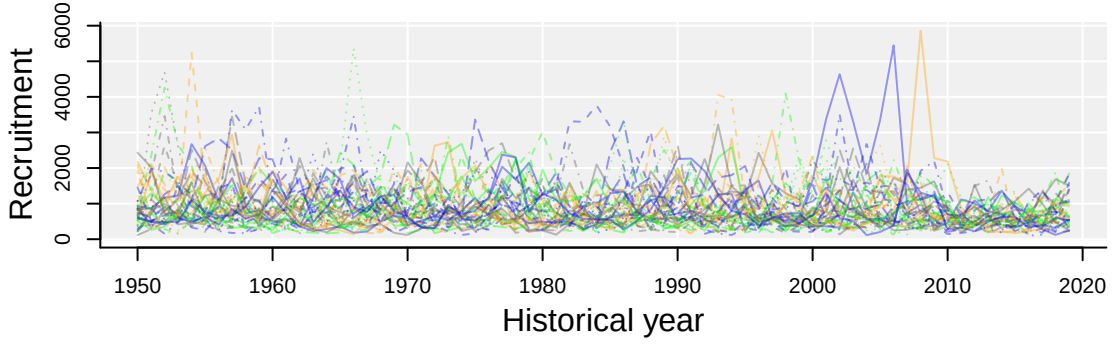


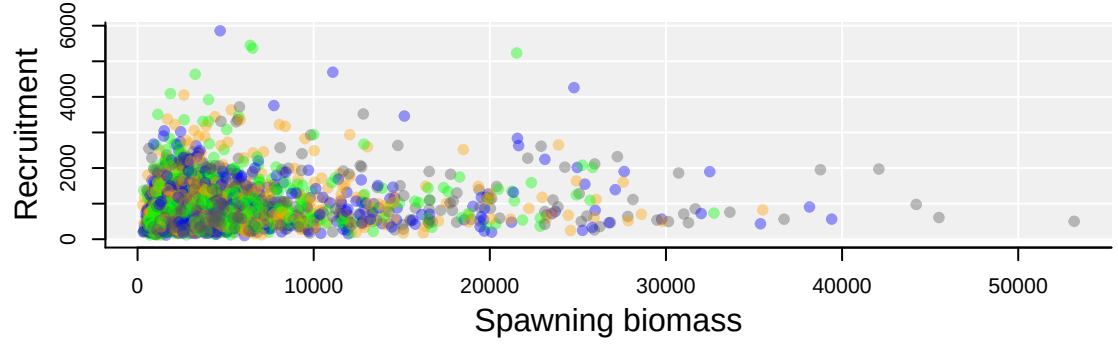

Spawning biomass
0
20000
50000
1950
1960
1970
1980
1990
2000
2010
2020
Historical year

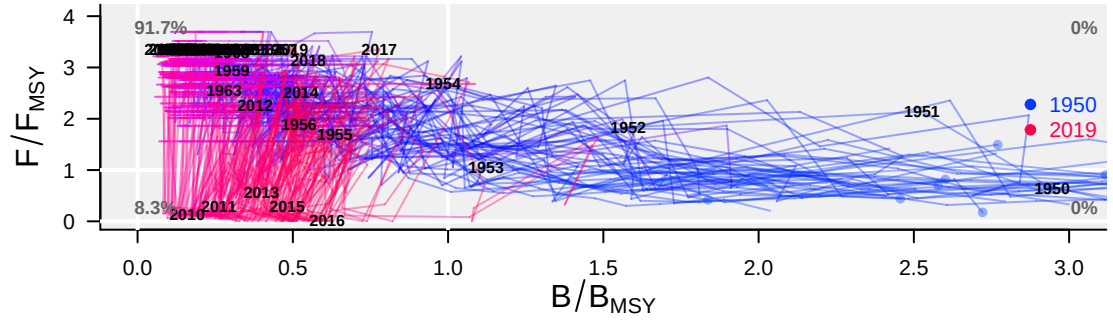

Stock depletion (SSB)
0
0.5
1
1.5
2
1950
1960
1970
1980
1990
2000
2010
2020
Historical year

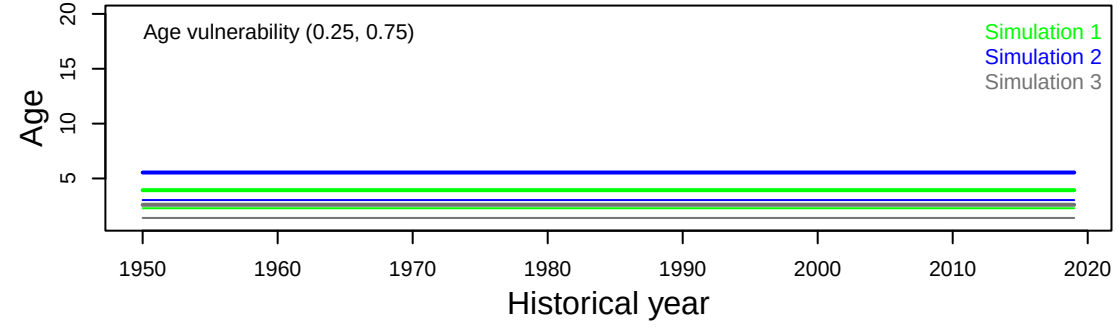

Fishing mortality rate (apical)
0
0.2
0.4
0.6
0.8
1950
1960
1970
1980
1990
2000
2010
2020
Historical year


Annual catches
0
5000
15000
1950
1960
1970
1980
1990
2000
2010
2020
Historical year


Recruitment
0
2000
4000
6000
1950
1960
1970
1980
1990
2000
2010
2020
Historical year


Recruitment
0
2000
4000
6000
0
10000
20000
30000
40000
50000
Spawning biomass


F/F_MSY
0
1
2
3
4
0.0
0.5
1.0
1.5
2.0
2.5
3.0
B/B_MSY
91.7%
8.3%
0%
0%
1950
2019
2017
2018
1959
1963
2012
2014
1954
1956
1955
1952
1951
1953
1950
2010
2011
2013
2015
2016


Age
5
10
15
20
Age vulnerability (0.25, 0.75)
Simulation 1
Simulation 2
Simulation 3
1950
1960
1970
1980
1990
2000
2010
2020
Historical year