American Samoa Model Checks

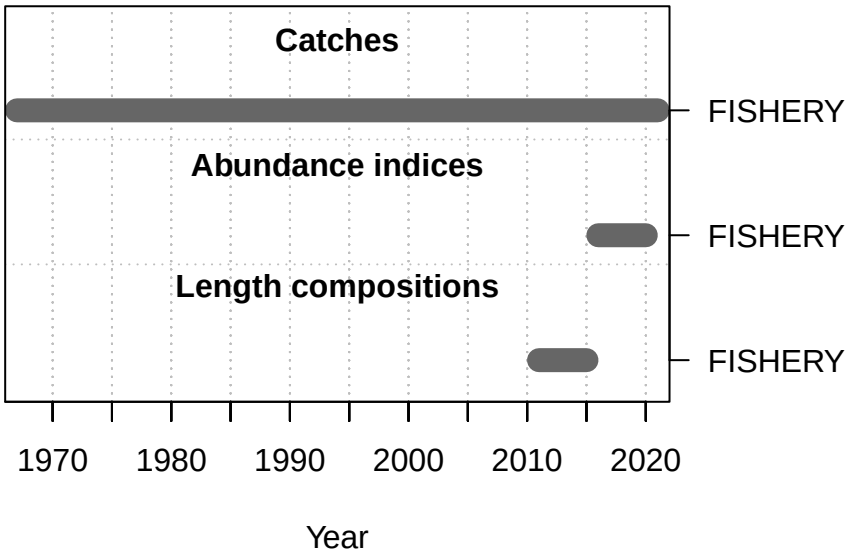
Marc Nadon and Meg Oshima

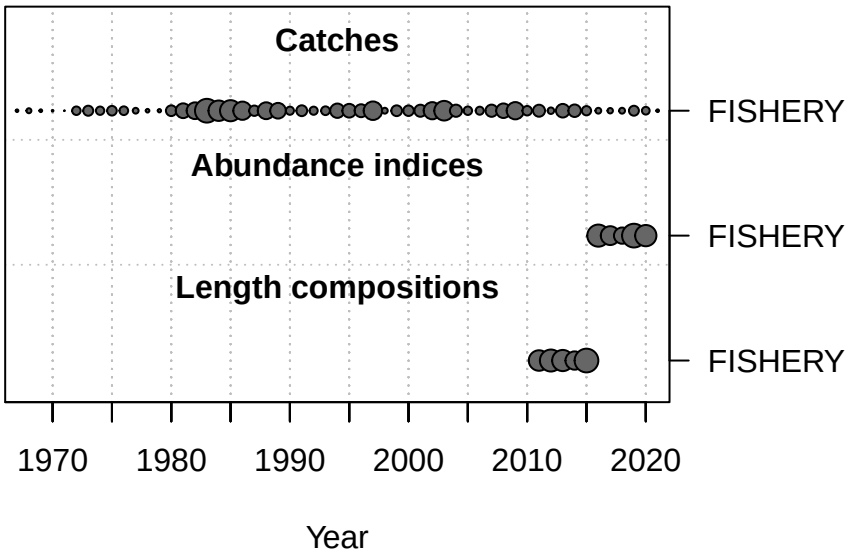
2023-01-13

This is a summary report for the VALO base model run.

Model Output

Input Data





Convergence Check

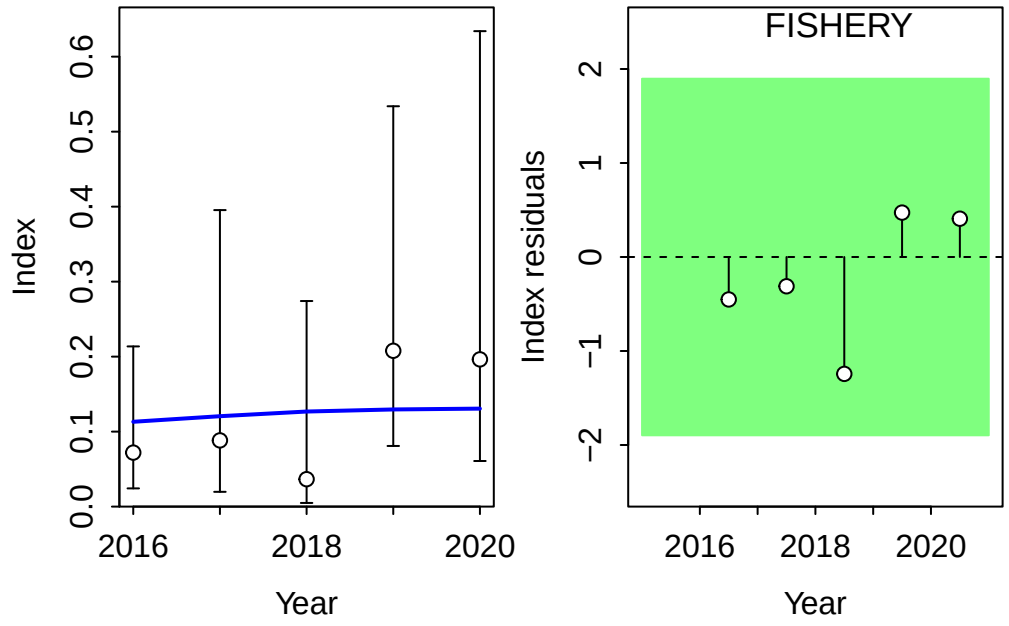
```
  Converged     MaxGrad
1      TRUE 5.45616e-06
```

```
[1] "1 NOTE:  Max data length bin: 51  < max pop len bins: 57; so will accumulate larger pop
[2] "N warnings: 1"
```

Fit to Model

CPUE

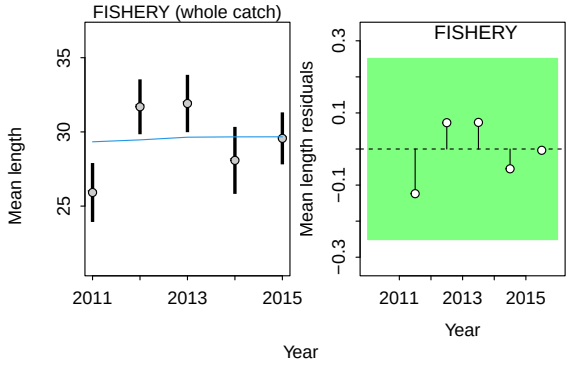
Fleet	RMSE.perc	Nobs
FISHERY	66.9	5
Combined	66.9	5

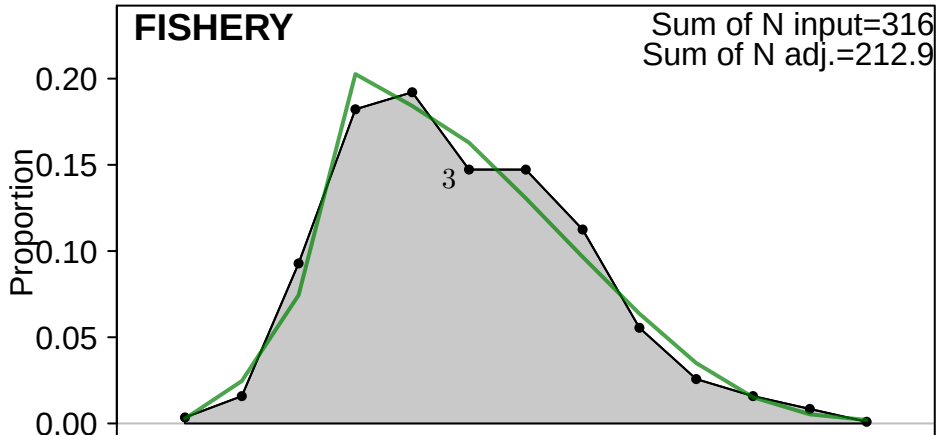


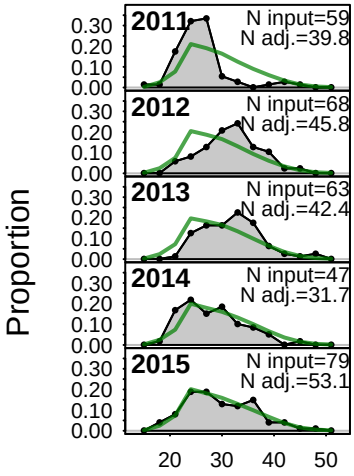
Length Comp

Fleet	RMSE.perc	Nobs
FISHERY	7.6	5
Combined	7.6	5

```
         w          lo          hi          Index runs.p   test  sigma3.lo sigma3.hi type
0.15896274 0.09865562 1.20402999      1 FISHERY  0.331 Passed -0.2510863 0.2510863  len
```







Retrospective

```
[1] "No retrospective runs were found"
```

Hindcasting

```
[1] "No information for hindcast was found"
```

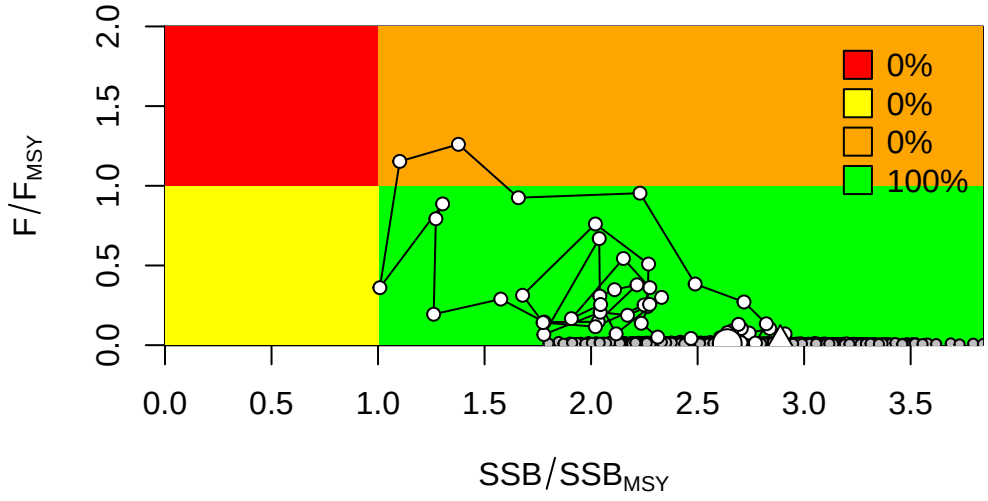
Recruitment Deviations

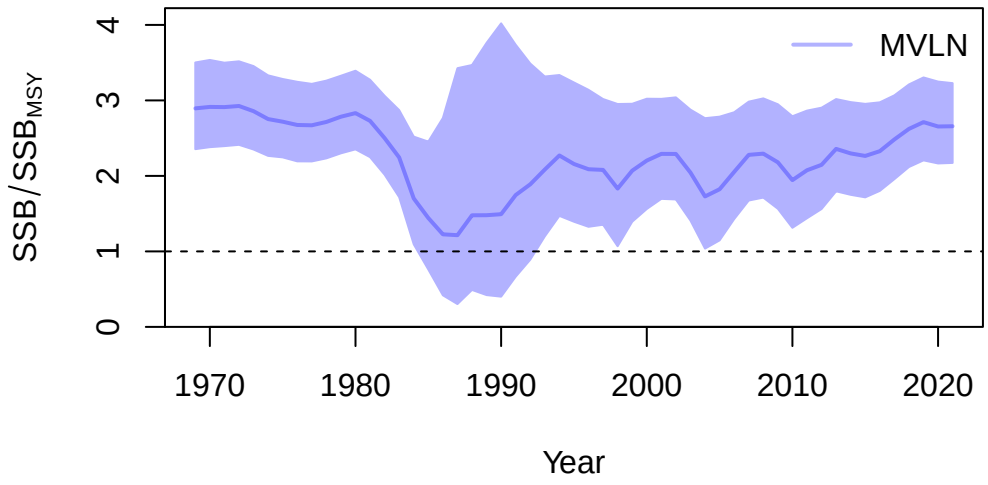
Likelihood Profile

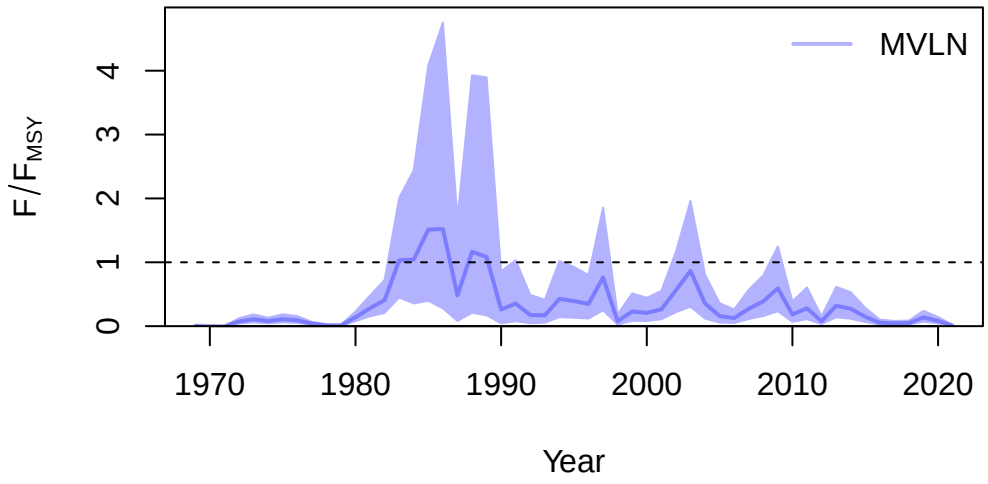
```
[1] "No likelihood runs were found"
```

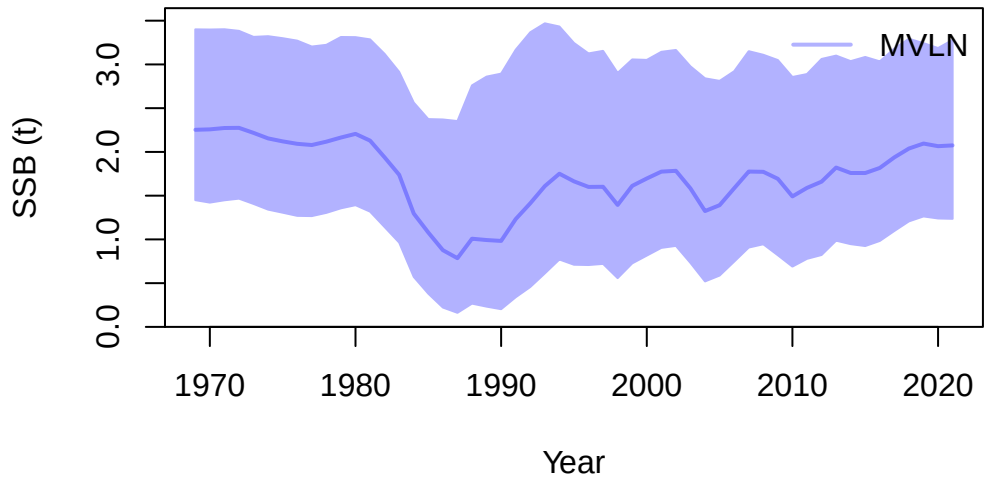
Management Quantities

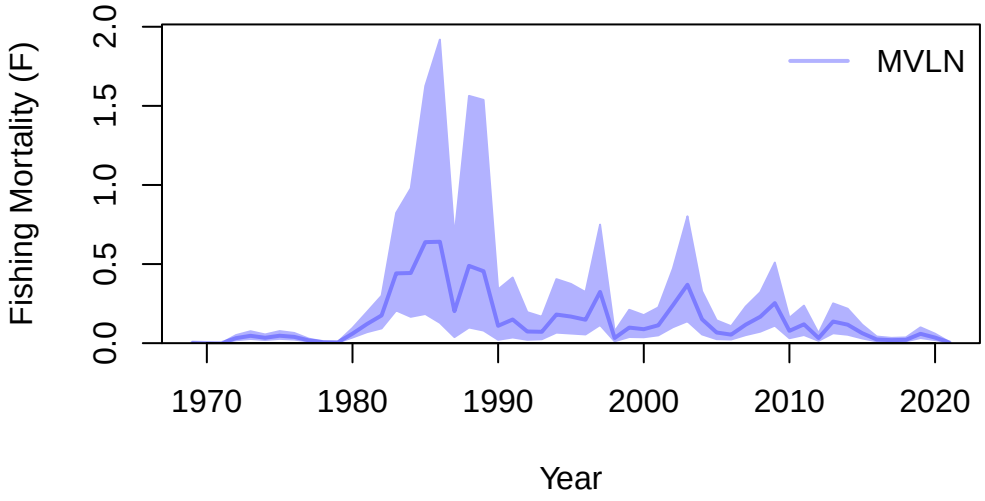
```
 starter.sso with Bratio: SSB/SSBMSY and F: _abs_F
```


0%
0%
0%
100%
F/F_MSY
SSB/SSB_MSY
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5


MVLN
SSB/SSB_MSY
Year
0
1
2
3
4
1970
1980
1990
2000
2010
2020

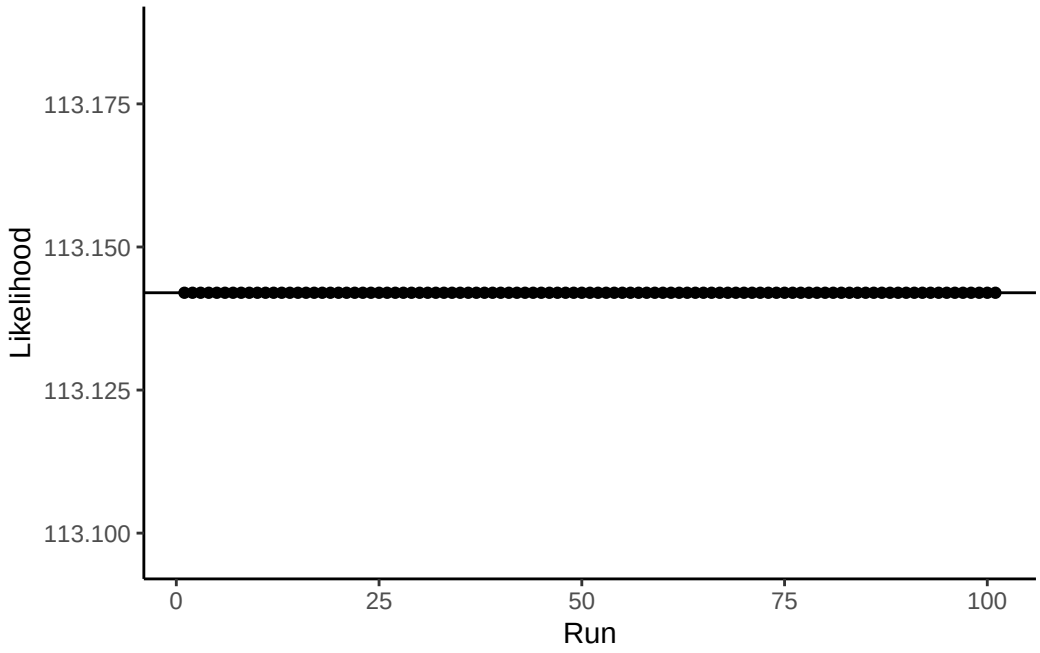

MVLN
F/F_MSY
0
1
2
3
4
1970
1980
1990
2000
2010
2020
Year

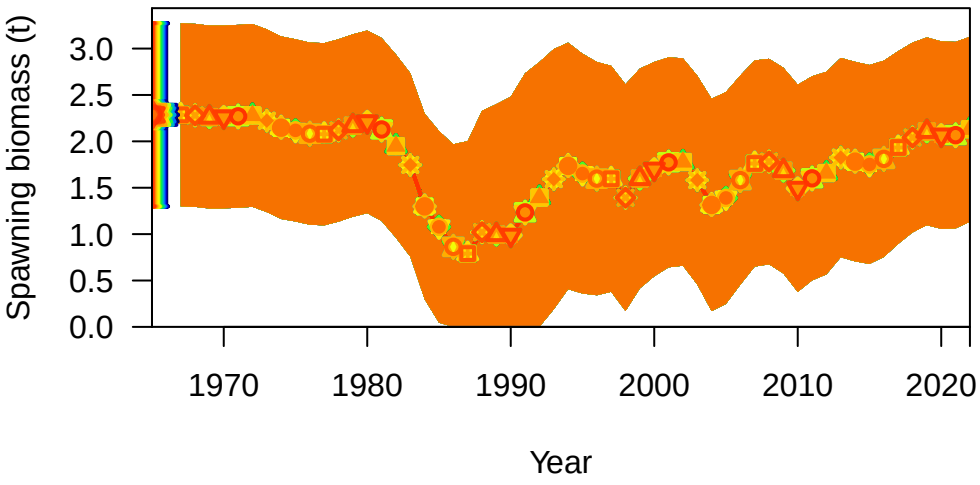

MVLN
SSB (t)
0.0
1.0
2.0
3.0
1970
1980
1990
2000
2010
2020
Year

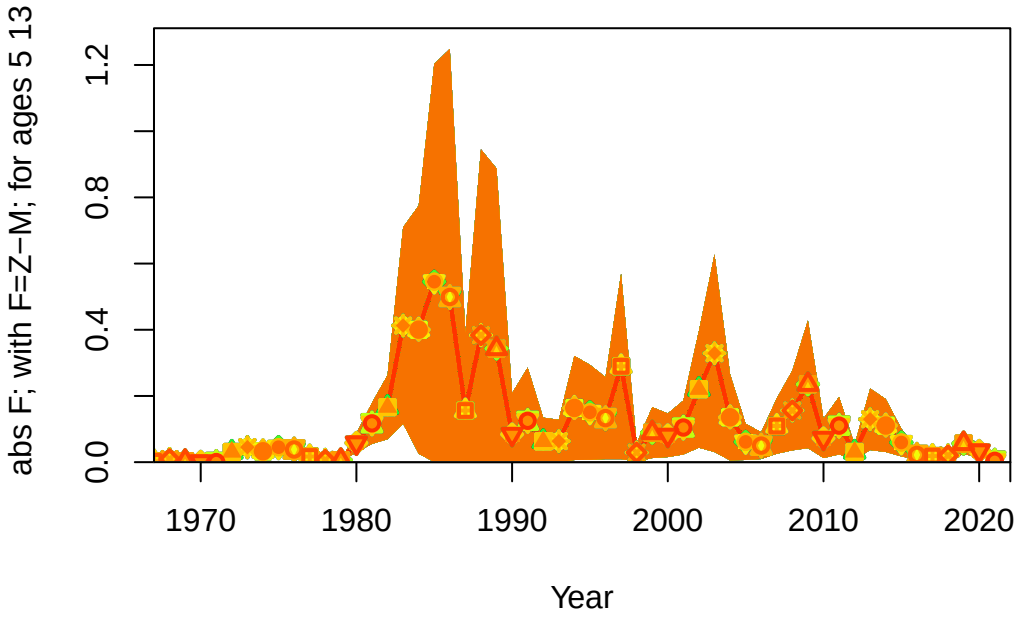


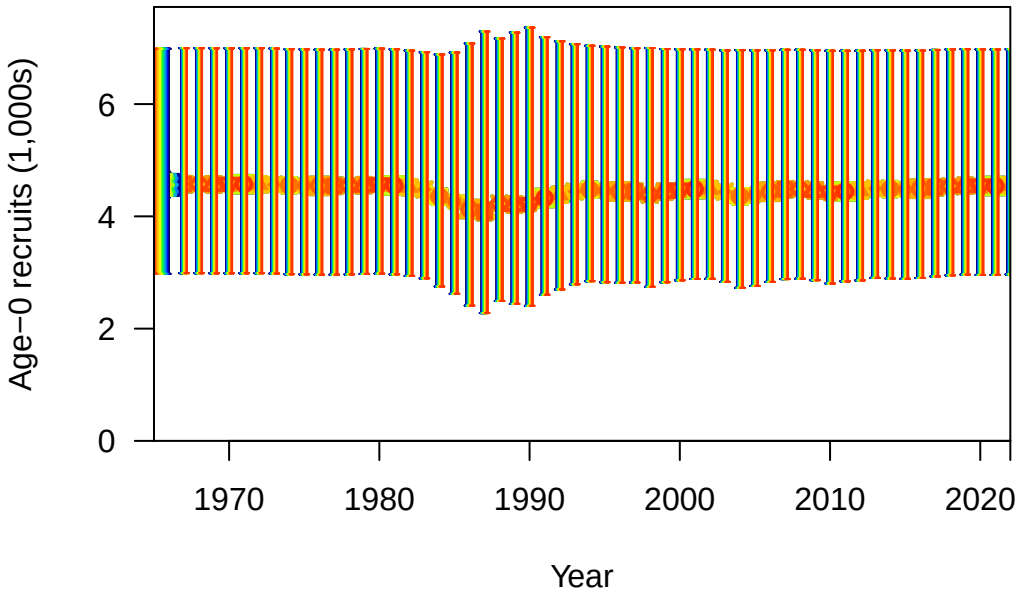

```
null device
          1
```

Jitter

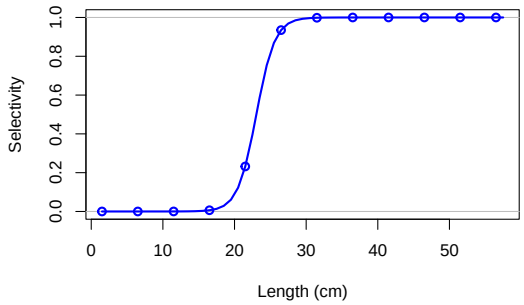

Likelihood
113.175
113.150
113.125
113.100
0
25
50
75
100
Run

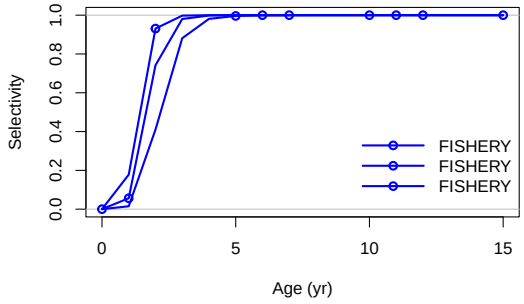

Spawning biomass (t)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1970
1980
1990
2000
2010
2020
Year

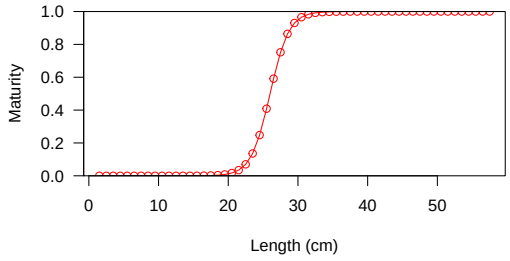


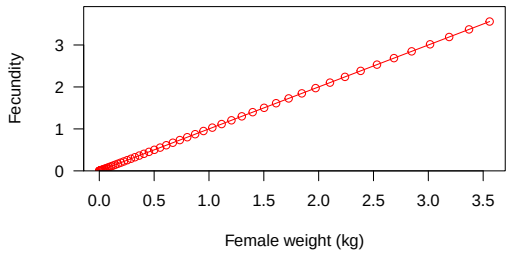


Selectivity and Maturity


Selectivity
0.0
0.2
0.4
0.6
0.8
1.0
0
10
20
30
40
50
Length (cm)


Selectivity
0.0
0.2
0.4
0.6
0.8
1.0
0
5
10
15
Age (yr)
FISHERY
FISHERY
FISHERY


Maturity
0.0
0.2
0.4
0.6
0.8
1.0
0
10
20
30
40
50
Length (cm)


Fecundity
0
1
2
3
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
Female weight (kg)