American Samoa Model Checks

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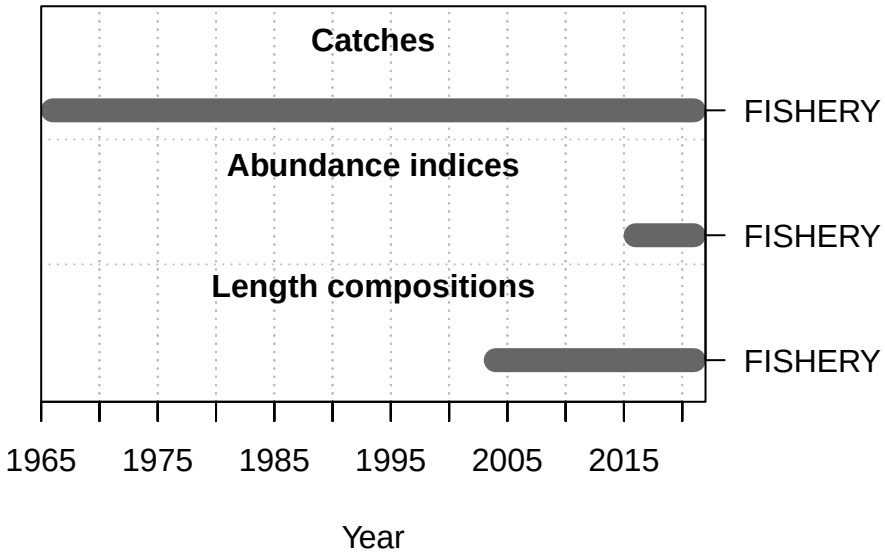
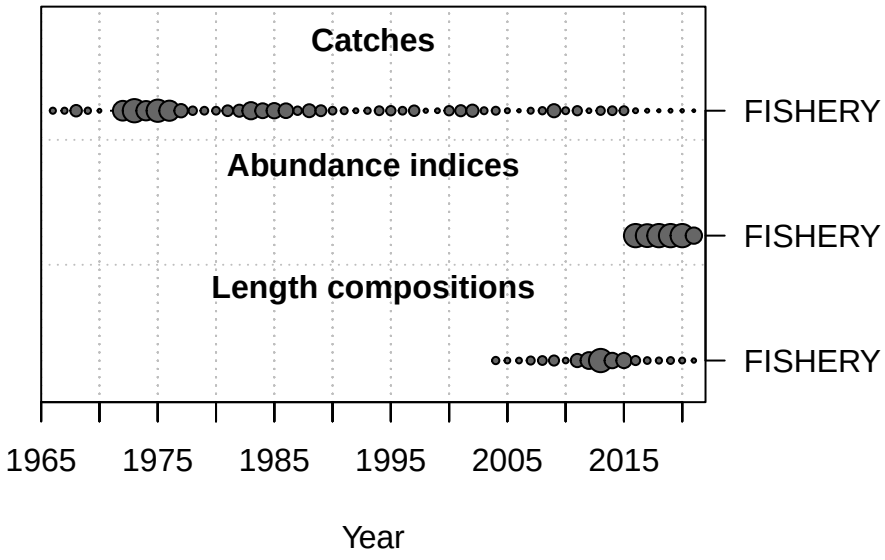
This is a summary report for the LUKA base model run.

Model Output

Input Data





Convergence Check

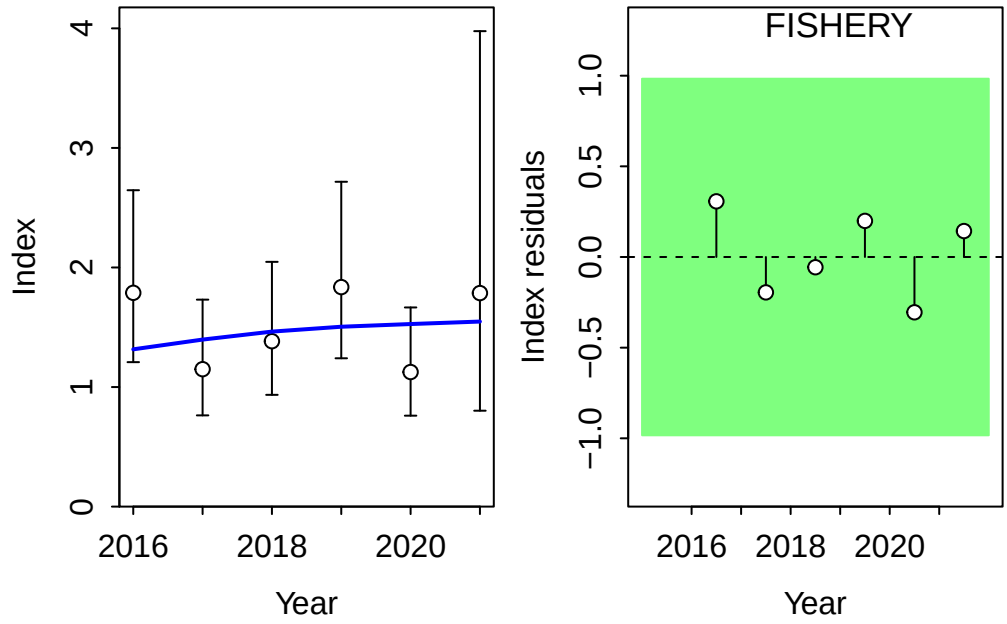
```
  Converged     MaxGrad
1      TRUE 2.53274e-05
```

```
[1] "1 NOTE:  Max data length bin: 28  < max pop len bins: 31; so will accumulate larger pop
[2] "2 Forecast F capped by max possible F from control file: 2.9"
[3] "3 Forecast F capped by max possible F from control file: 2.9"
[4] "N warnings: 3"
```

Fit to Model

CPUE

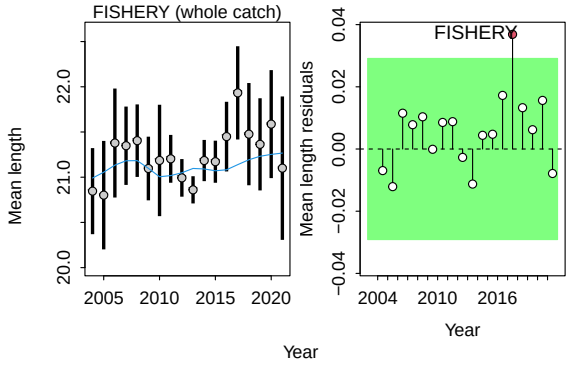
Fleet	RMSE.perc	Nobs
FISHERY	21.9	6
Combined	21.9	6

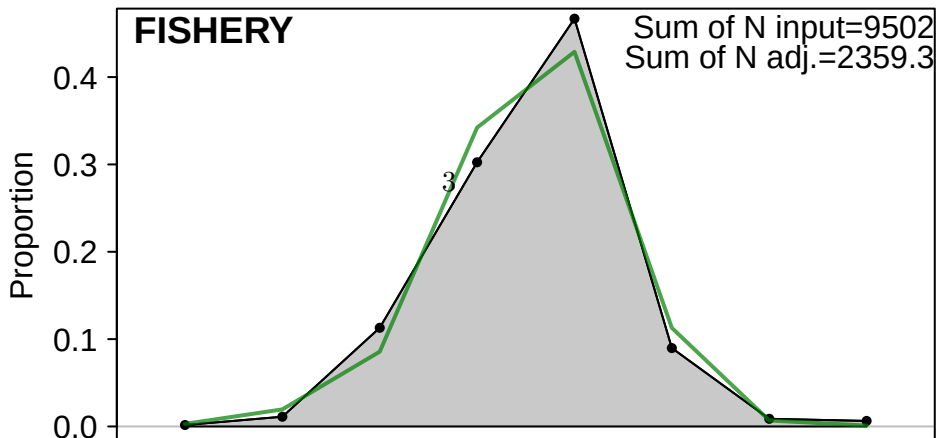


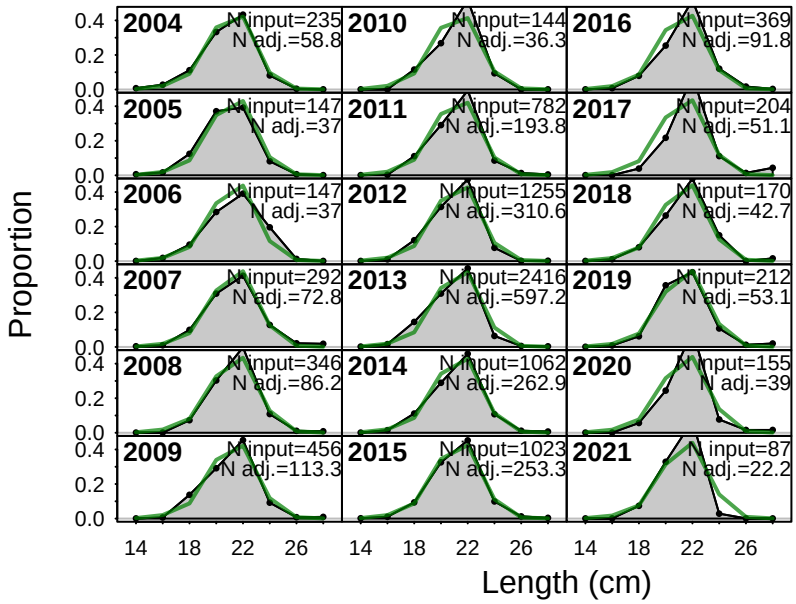
Length Comp

Fleet	RMSE.perc	Nobs
FISHERY	1.3	18
Combined	1.3	18

```
         w         lo         hi              Index runs.p   test   sigma3.lo  sigma3.hi type
0.5792417 0.2988600 2.1611053          1 FISHERY  0.135 Passed -0.02912284 0.02912284  len
```







Retrospective

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

Hindcasting

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

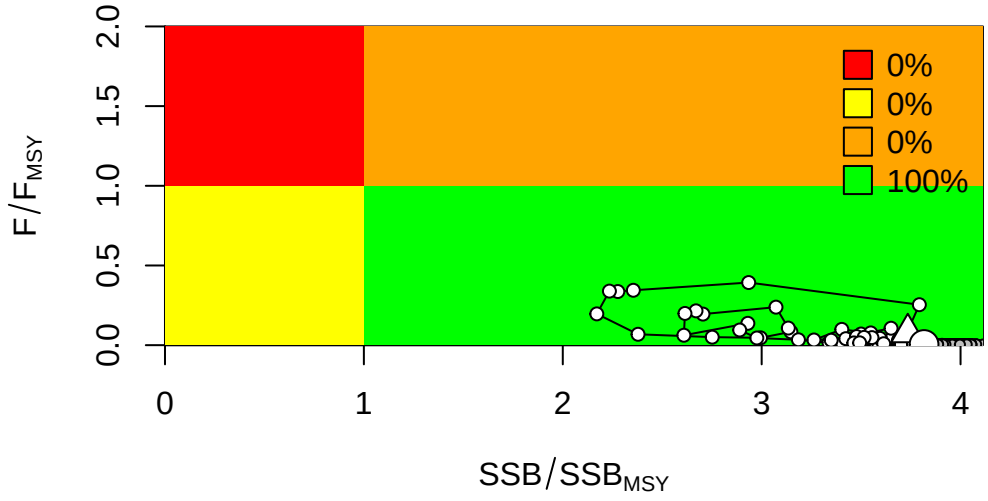
Recruitment Deviations

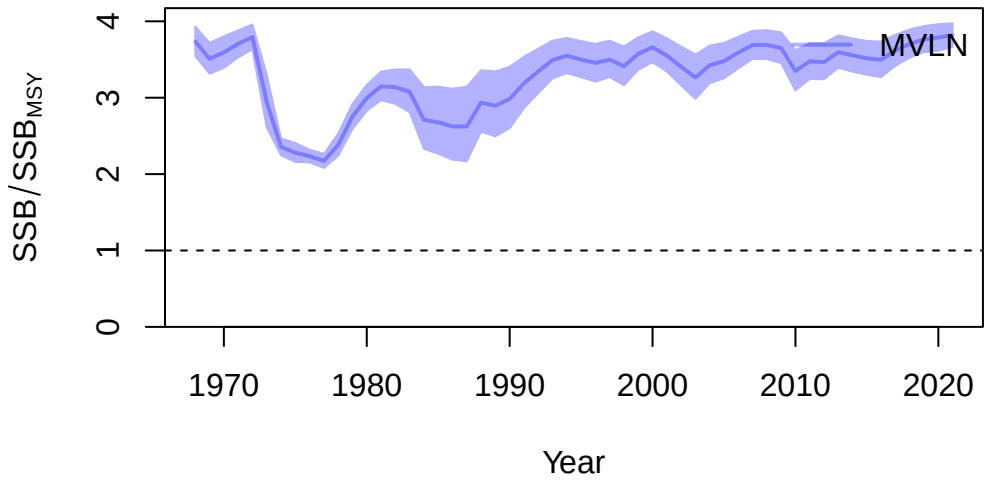
Likelihood Profile

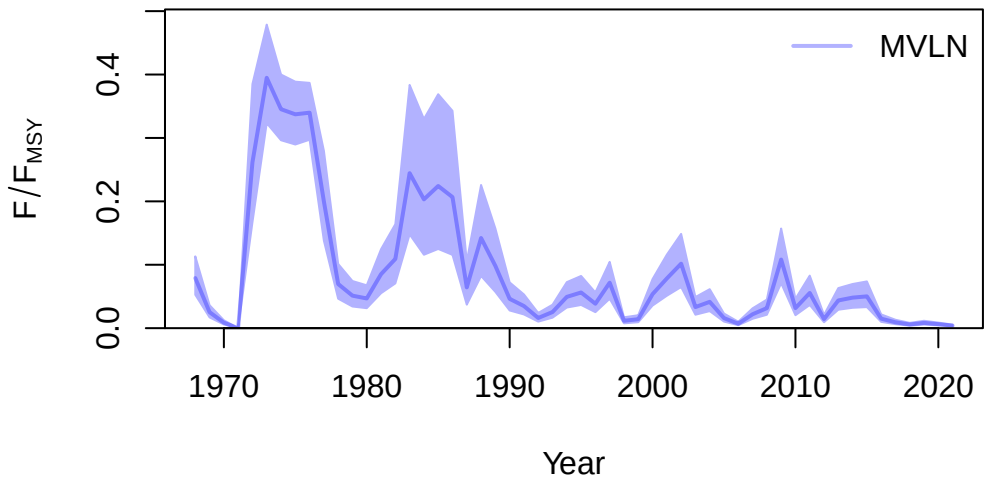
```
[1] "No likelihood runs were found"
```

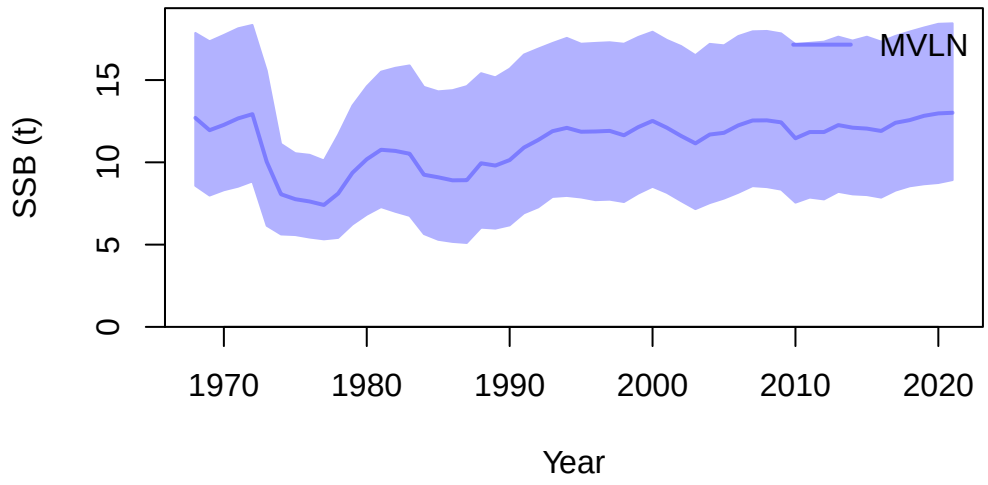
Management Quantities

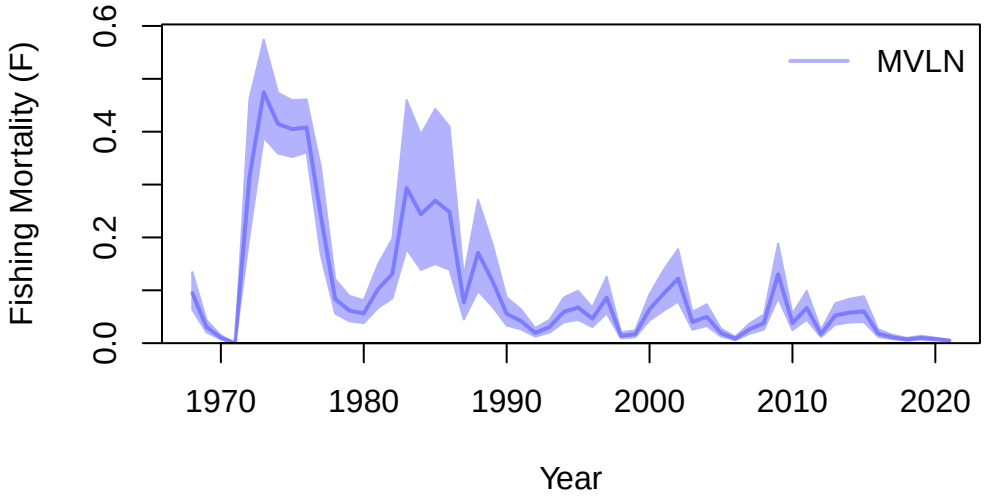
```
 starter.sso with Bratio: SSB/SSBMSY and F: _abs_F
```


0%
0%
0%
100%
F/F_MSY
SSB/SSB_MSY
0.0
0.5
1.0
1.5
2.0
0
1
2
3
4


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

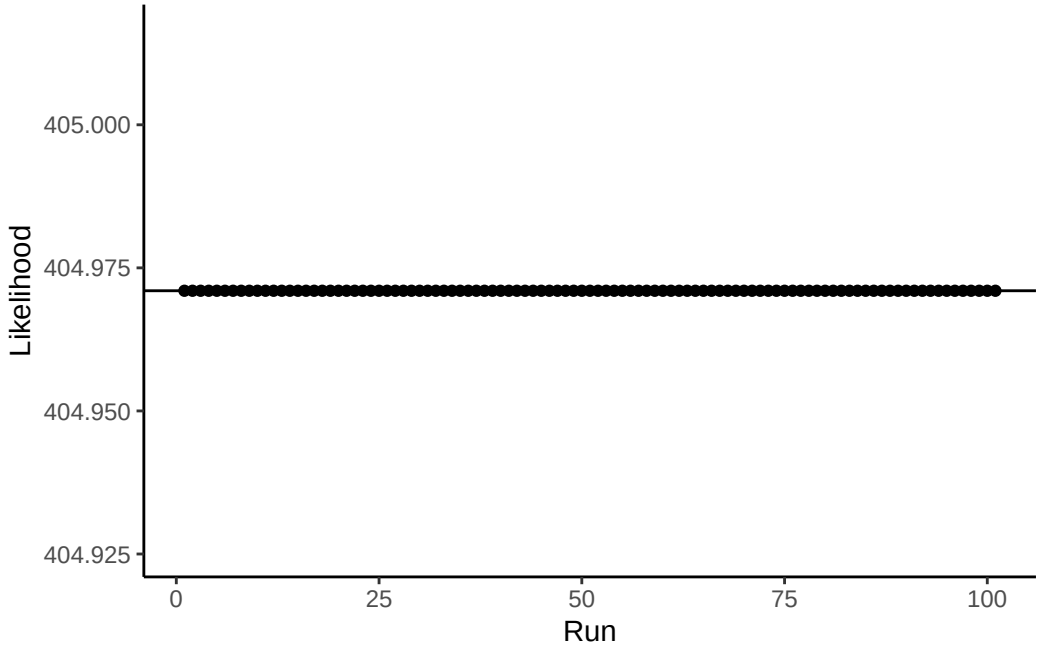

MVLN
F/F_MSY
0.0
0.2
0.4
1970
1980
1990
2000
2010
2020
Year

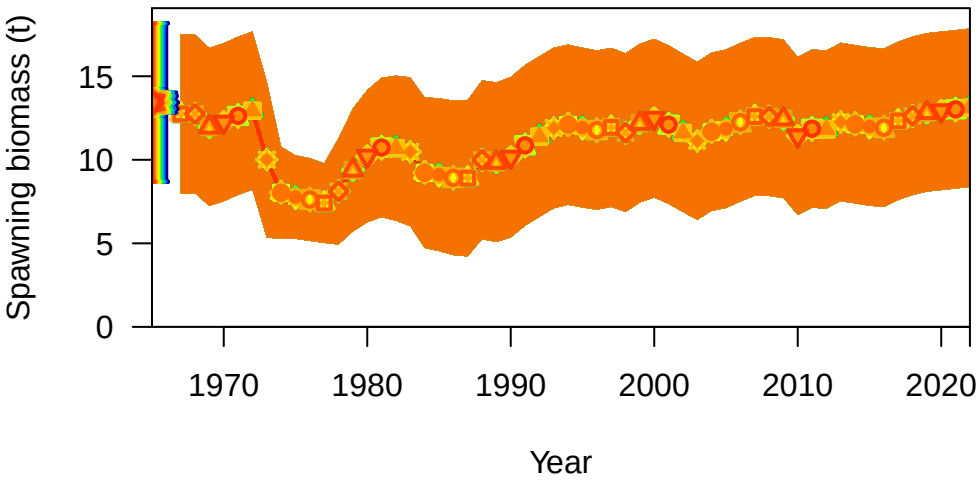

MVLN
SSB (t)
0
5
10
15
1970
1980
1990
2000
2010
2020
Year

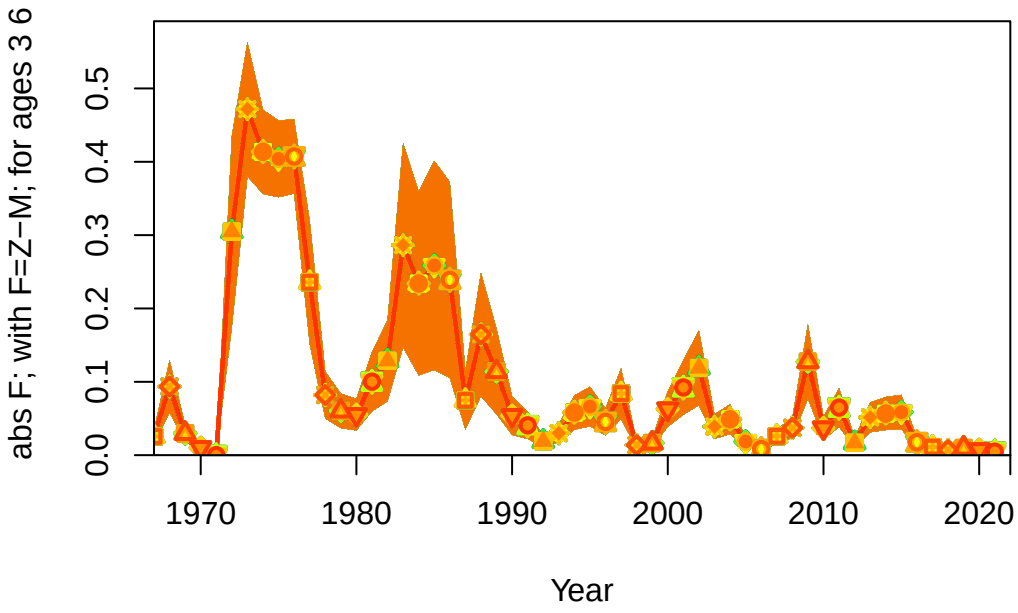


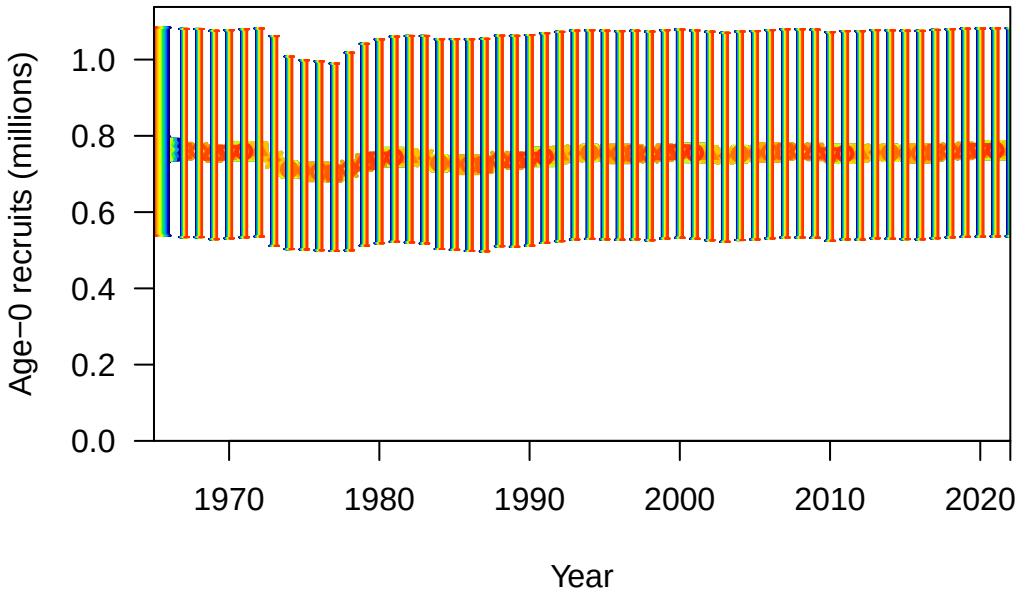

```
null device
          1
```

Jitter

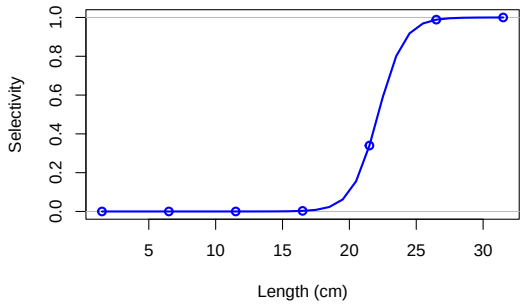

405.000
404.975
404.950
404.925
Likelihood
0
25
50
75
100
Run

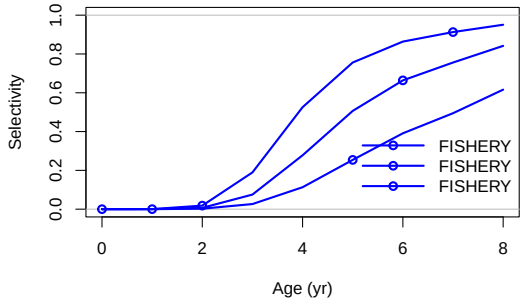

Spawning biomass (t)
15
10
5
0
1970
1980
1990
2000
2010
2020
Year

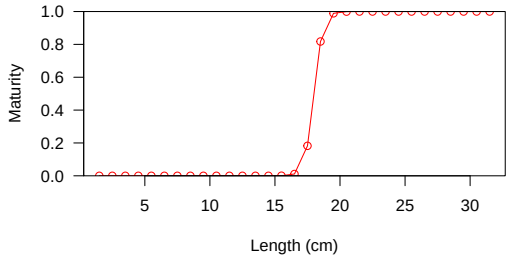


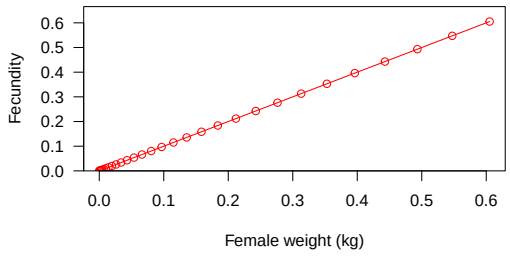


Selectivity and Maturity


Selectivity
0.0
0.2
0.4
0.6
0.8
1.0
5
10
15
20
25
30
Length (cm)


Selectivity
0.0
0.2
0.4
0.6
0.8
1.0
FISHERY
FISHERY
FISHERY
0
2
4
6
8
Age (yr)


Maturity
0.0
0.2
0.4
0.6
0.8
1.0
5
10
15
20
25
30
Length (cm)


Fecundity
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.0
0.1
0.2
0.3
0.4
0.5
0.6
Female weight (kg)