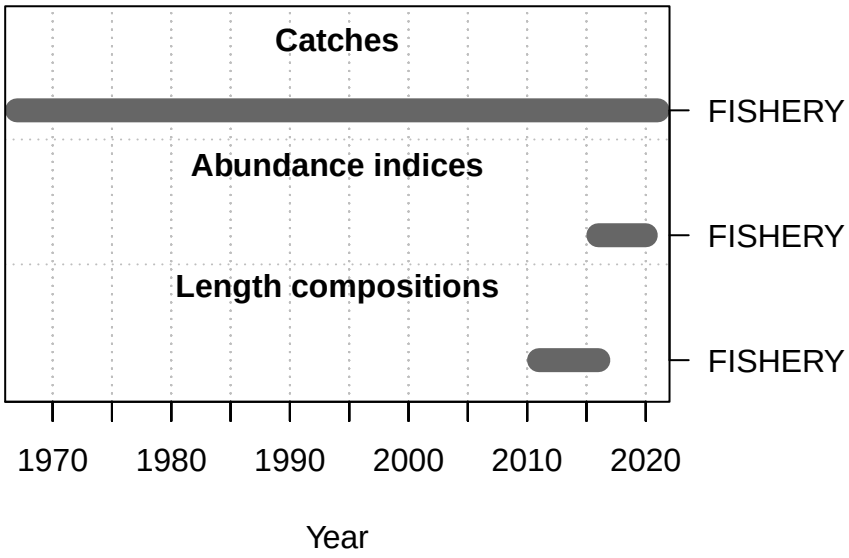
American Samoa Model Checks

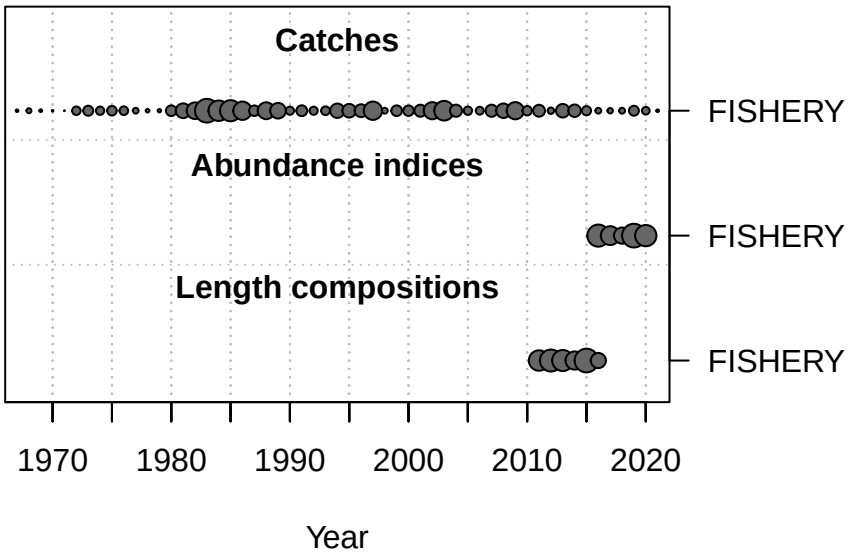
2022-12-08

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

Model Output

Input Data





Convergence Check

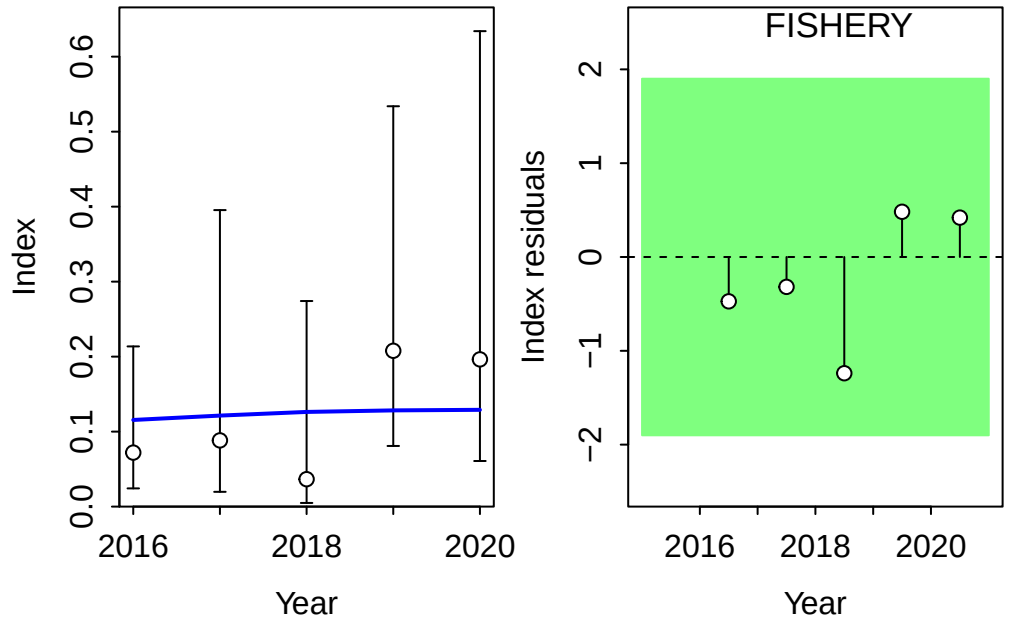
```
  Converged     MaxGrad
1      TRUE 9.34554e-05
```

```
[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

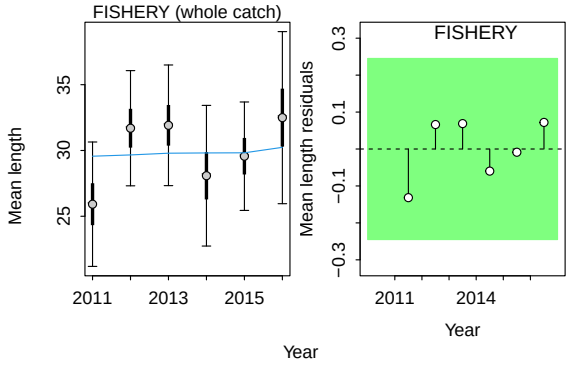
Fleet	RMSE.perc	Nobs
FISHERY	67.4	5
Combined	67.4	5

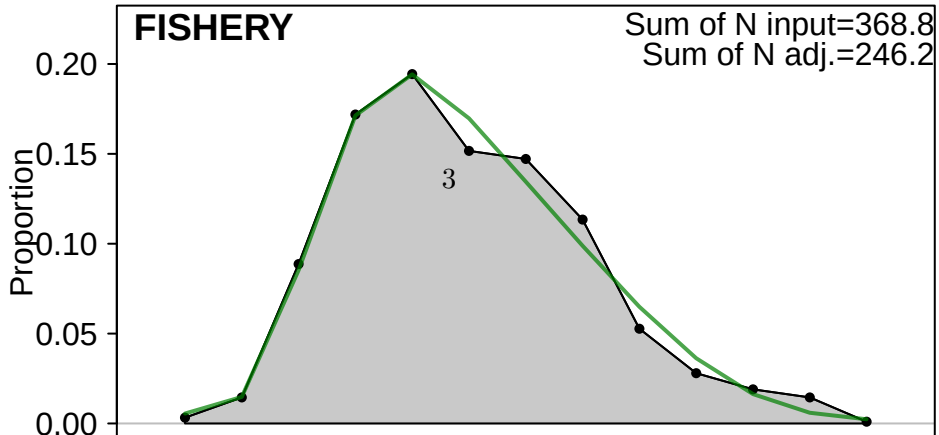


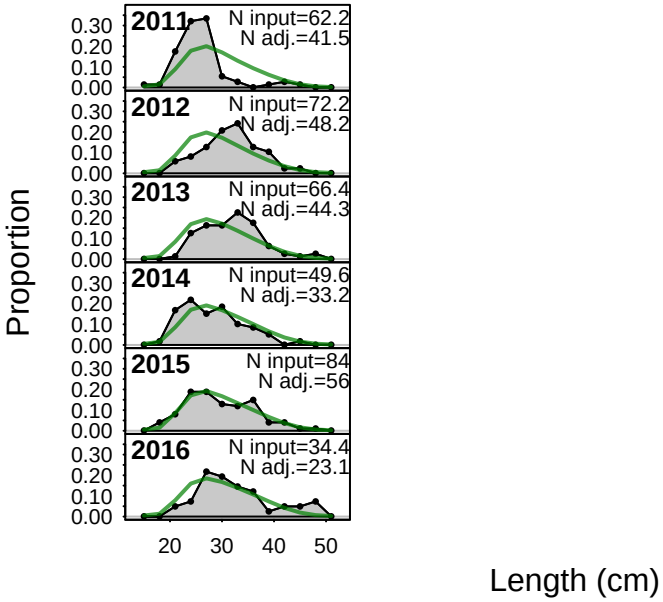
Length Comp

Fleet	RMSE.perc	Nobs
FISHERY	7.7	6
Combined	7.7	6

```
          w          lo          hi          Index runs.p   test  sigma3.lo sigma3.hi type
0.11353348 0.07469091 0.75396447      1 FISHERY    0.5 Passed -0.2451403 0.2451403  len
```







Retrospective

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

Hindcasting

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

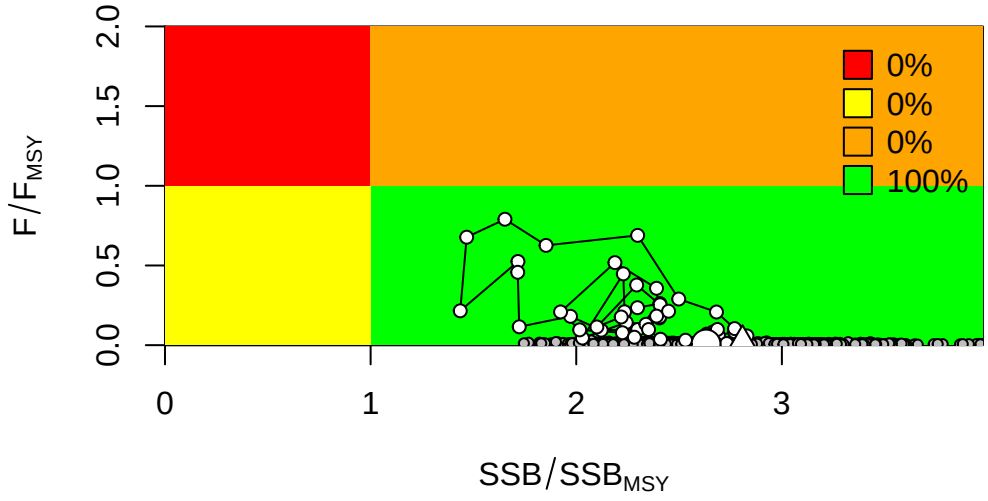
Recruitment Deviations

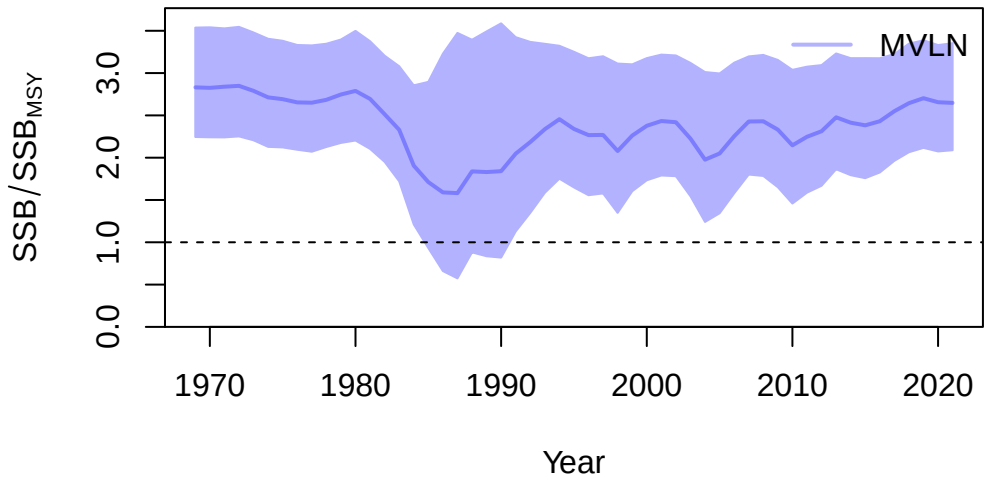
Likelihood Profile

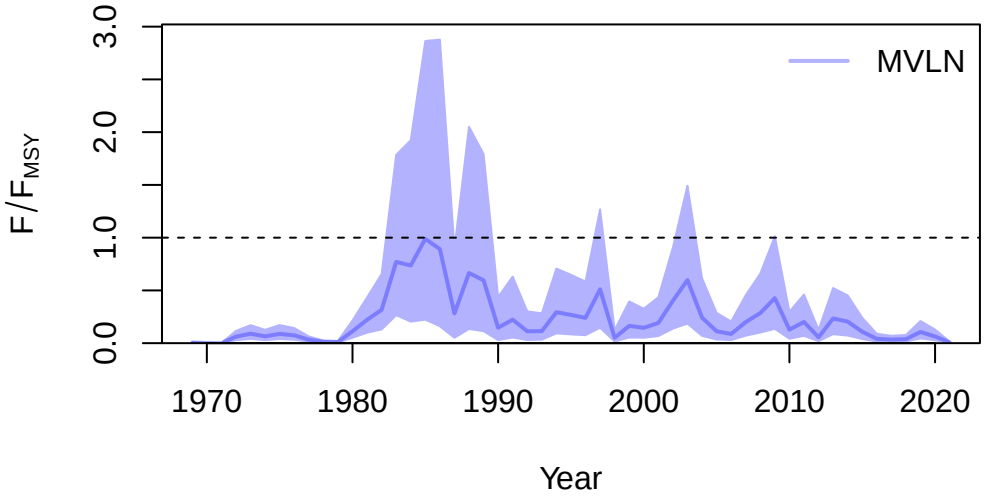
```
[1] "No likelihood runs were found"
```

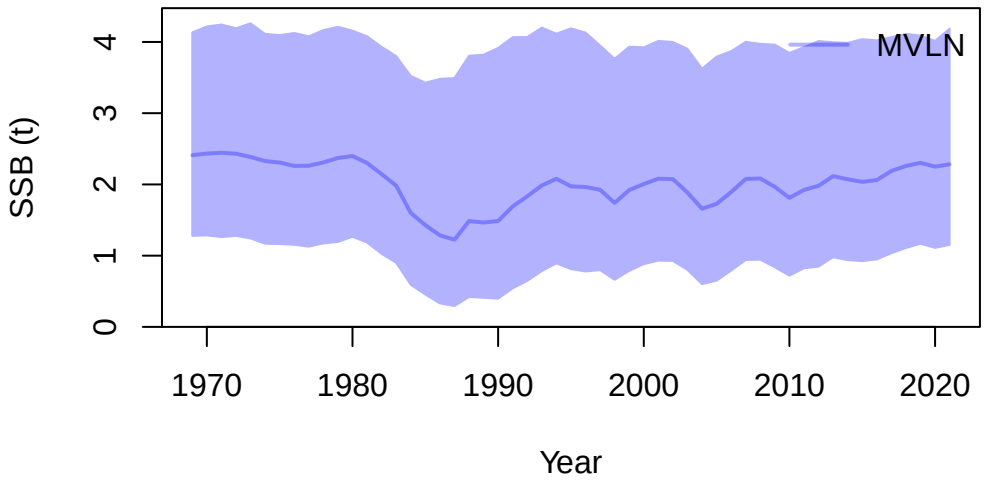
Management Quantities

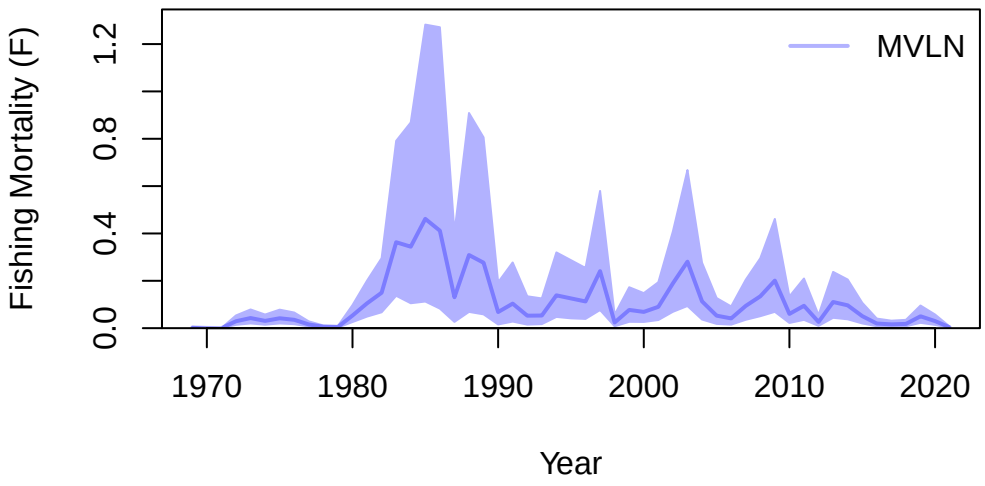
```
 starter.sso with Bratio: SSB/SSBMSY and F: _abs_F
```


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


MVLN
SSB/SSB_MSY
Year
0.0
1.0
2.0
3.0
1970
1980
1990
2000
2010
2020

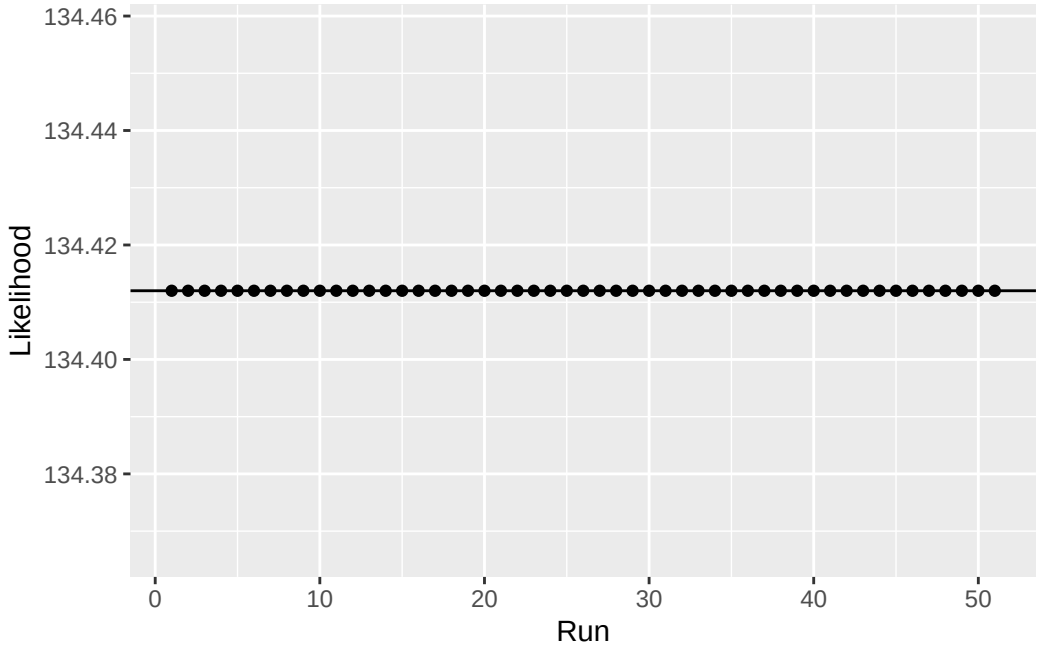

MVLN
F/F_MSY
0.0
1.0
2.0
3.0
1970
1980
1990
2000
2010
2020
Year

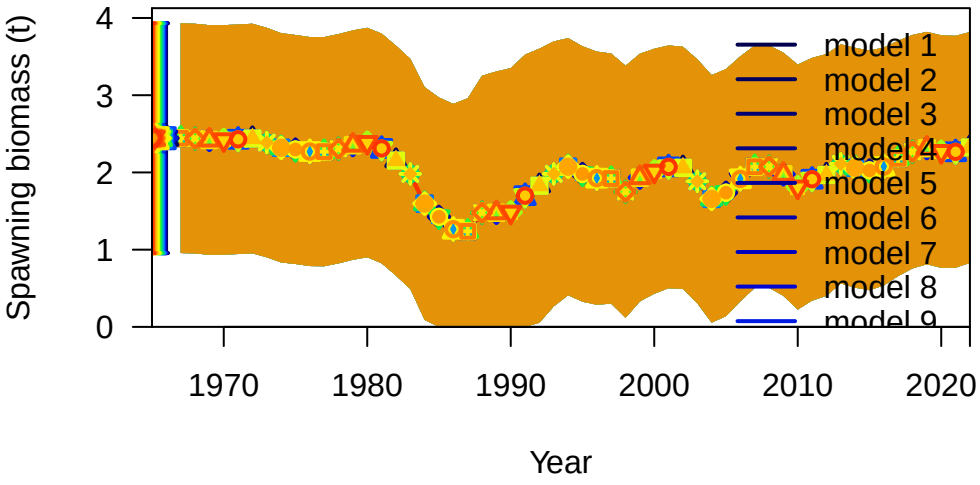

MVLN
SSB (t)
0
1
2
3
4
1970
1980
1990
2000
2010
2020
Year

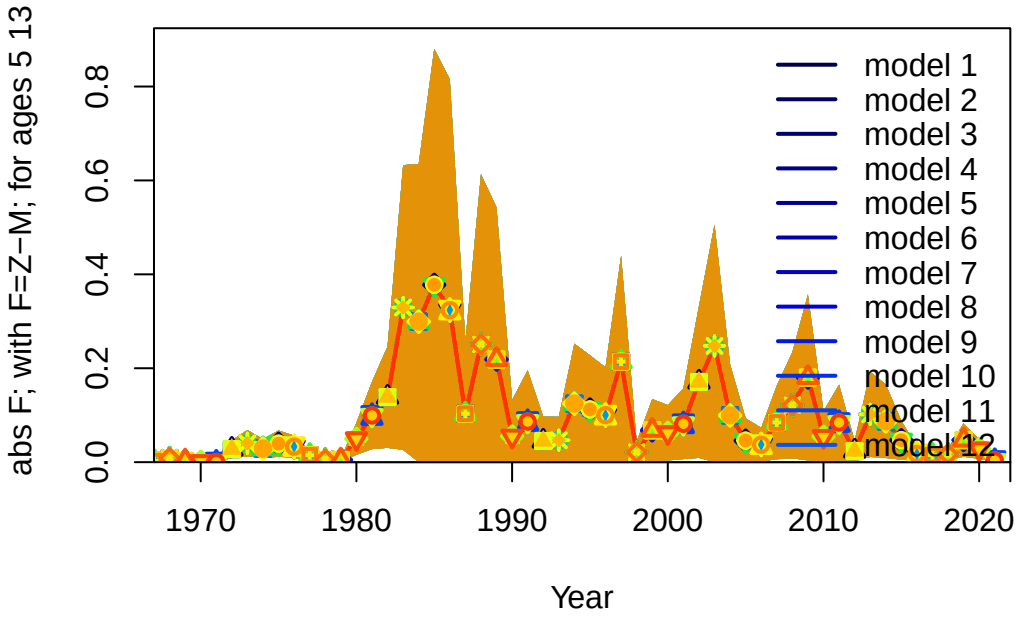


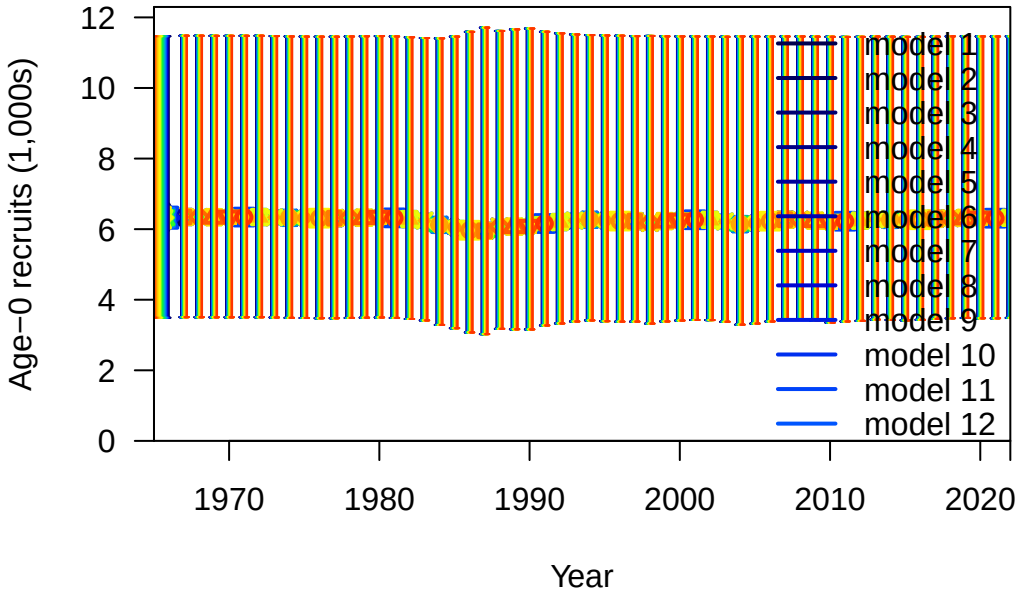

```
null device
          1
```

Jitter

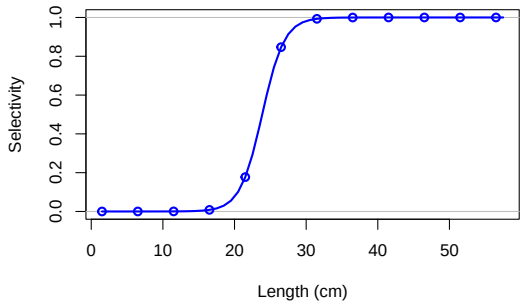

134.46
134.44
134.42
134.40
134.38
Likelihood
0
10
20
30
40
50
Run

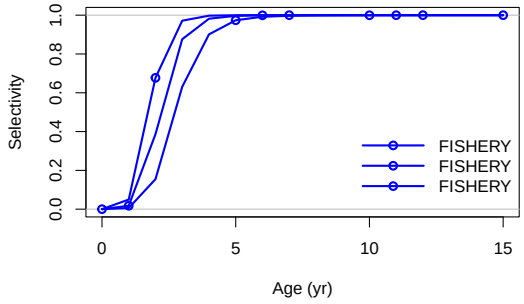

4
3
2
1
0
Spawning biomass (t)
1970
1980
1990
2000
2010
2020
Year
model 1
model 2
model 3
model 4
model 5
model 6
model 7
model 8
model 9

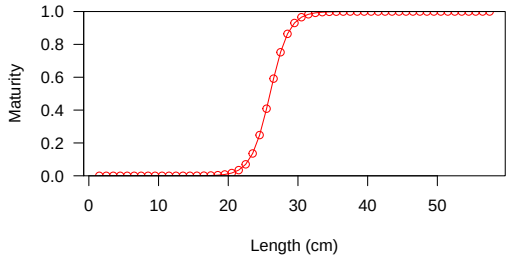


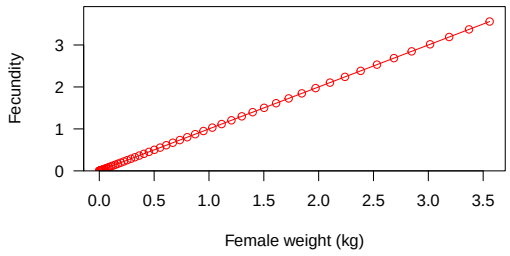


Selectivity and Maturity


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)