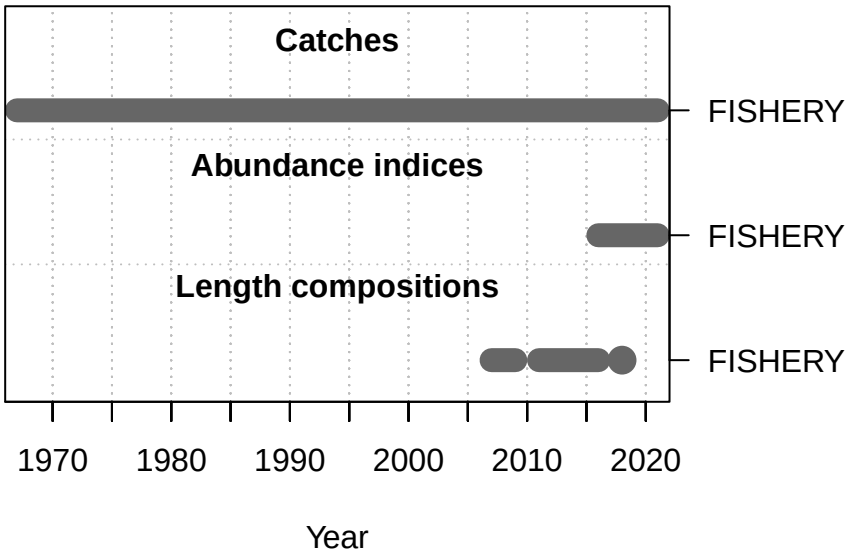
American Samoa Model Checks

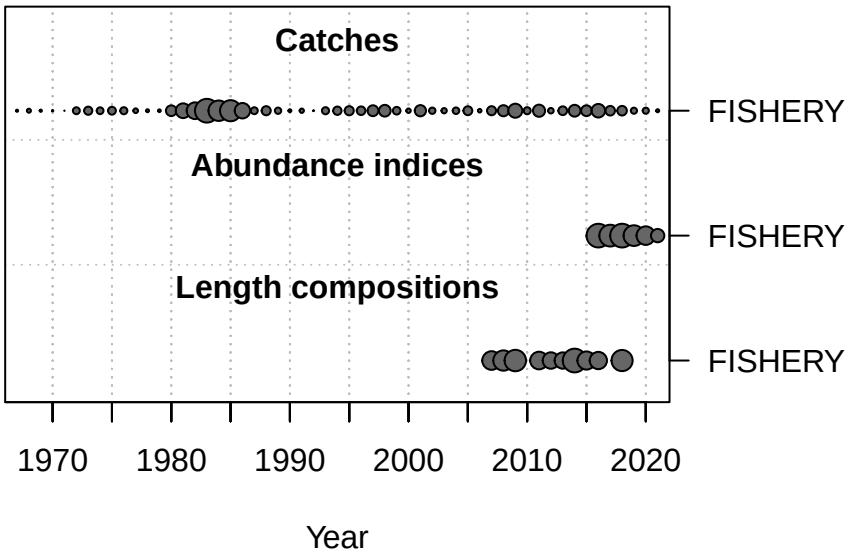
2022-12-08

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

Model Output

Input Data





Convergence Check

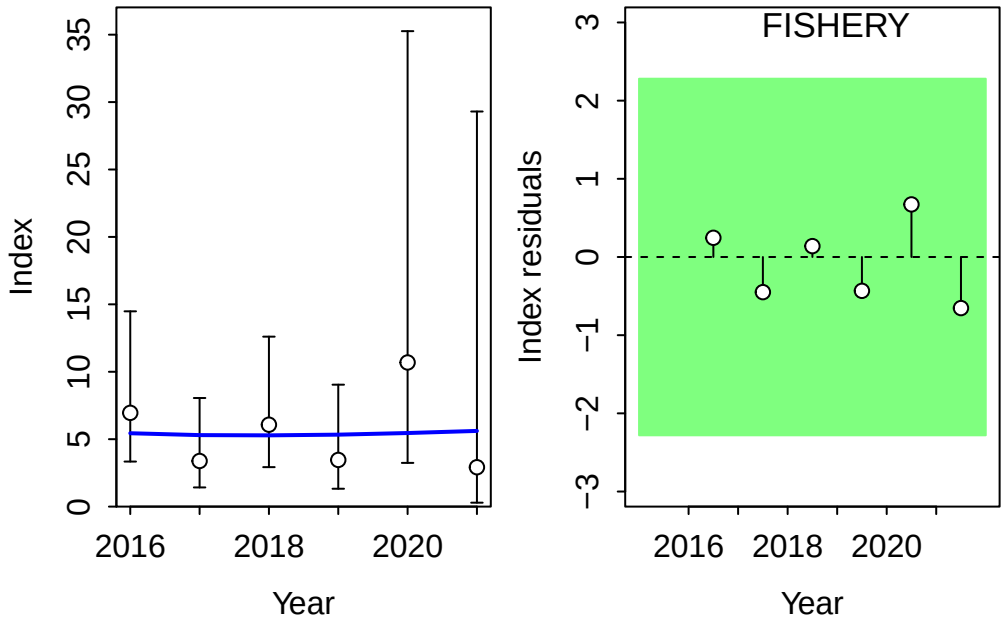
```
  Converged     MaxGrad
1      TRUE 3.56781e-05
```

```
[1] "1 NOTE:  Max data length bin: 90  < max pop len bins: 100; so will accumulate larger po
[2] "N warnings: 1"
```

Fit to Model

CPUE

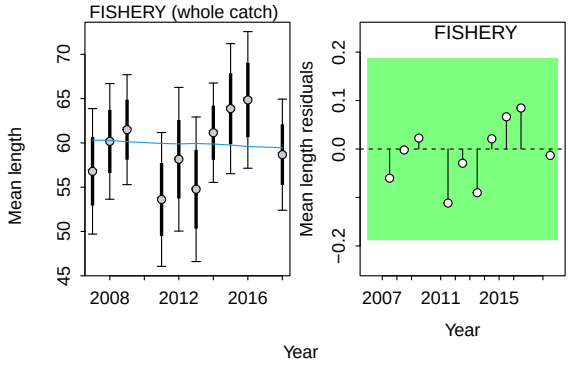
Fleet	RMSE.perc	Nobs
FISHERY	47.4	6
Combined	47.4	6

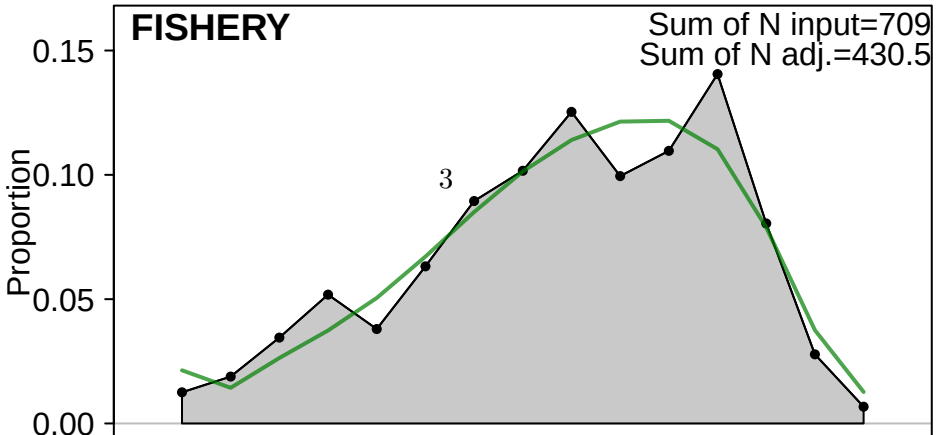


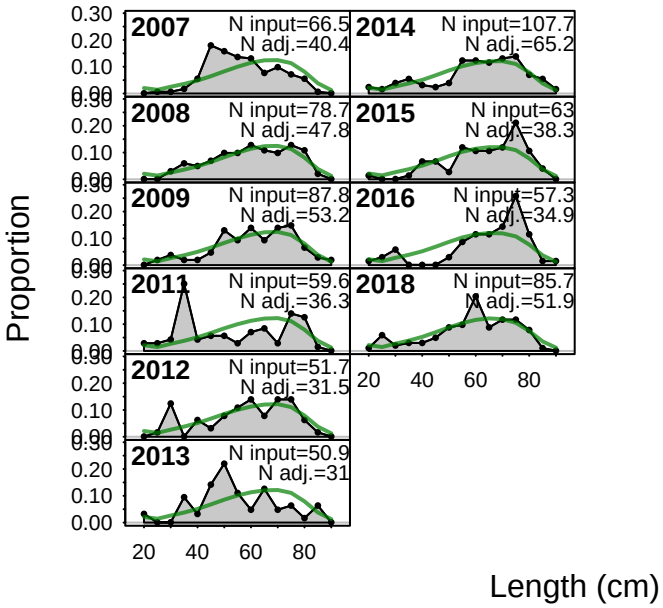
Length Comp

Fleet	RMSE.perc	Nobs
FISHERY	6.1	10
Combined	6.1	10

```
          w         lo         hi              Index runs.p   test  sigma3.lo sigma3.hi type
0.2974831 0.1975416 0.8126795         1 FISHERY  0.287 Passed -0.1868954 0.1868954  len
```







Retrospective

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

Hindcasting

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

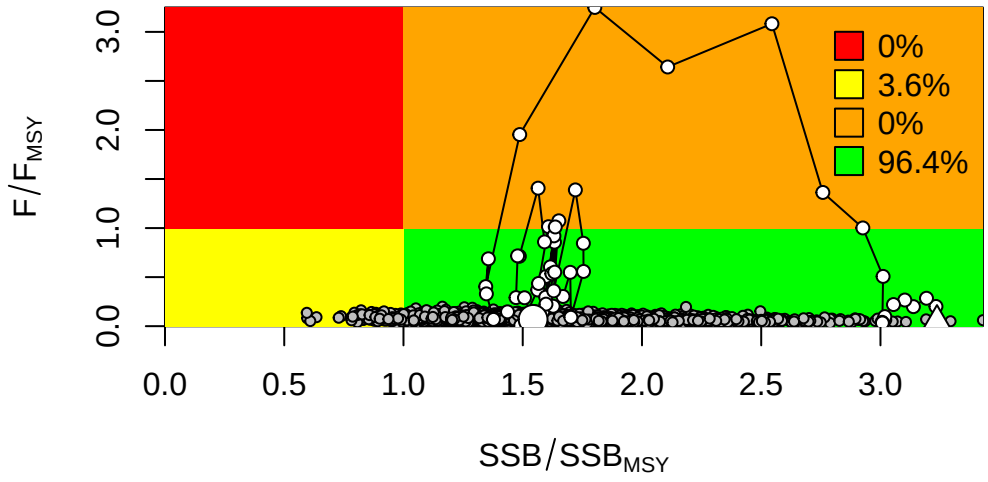
Recruitment Deviations

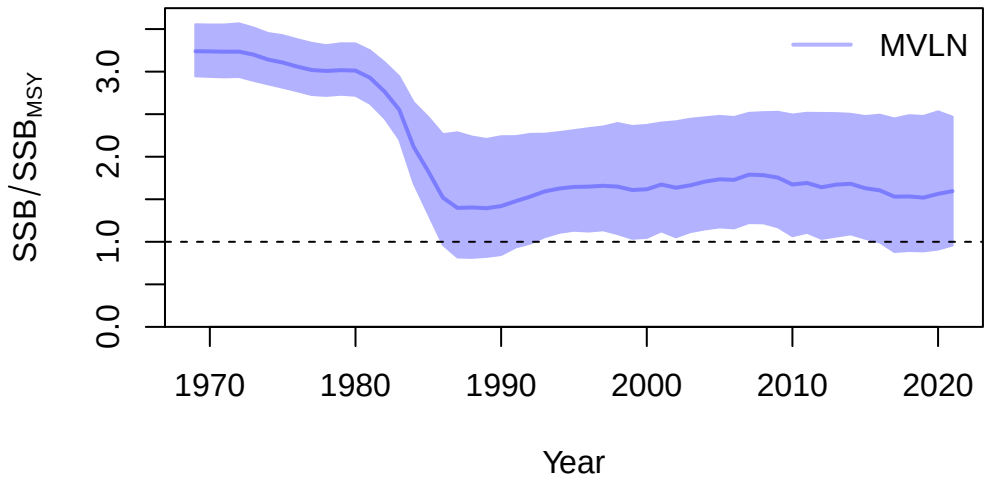
Likelihood Profile

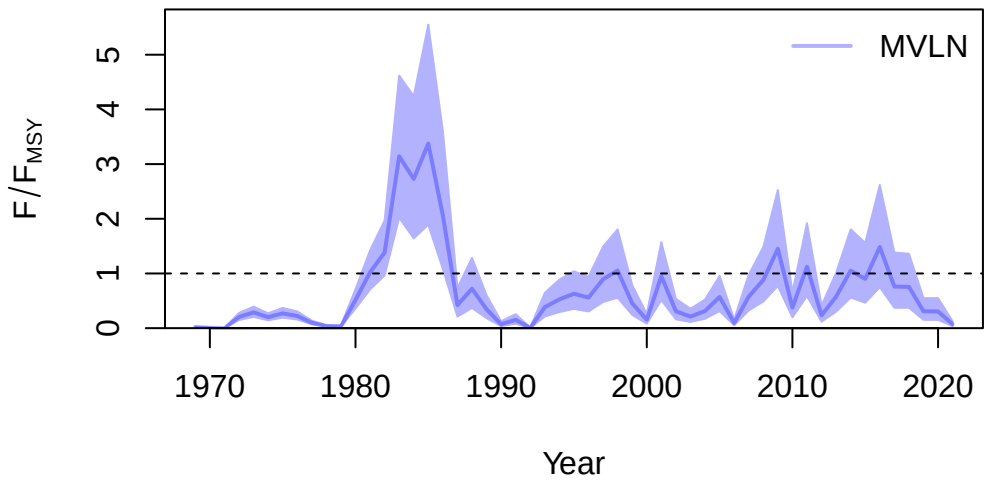
```
[1] "No likelihood runs were found"
```

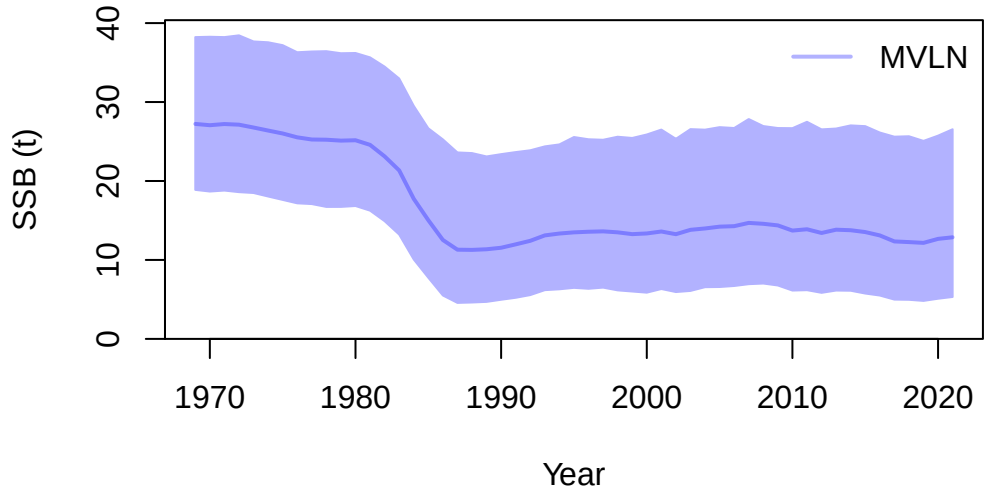
Management Quantities

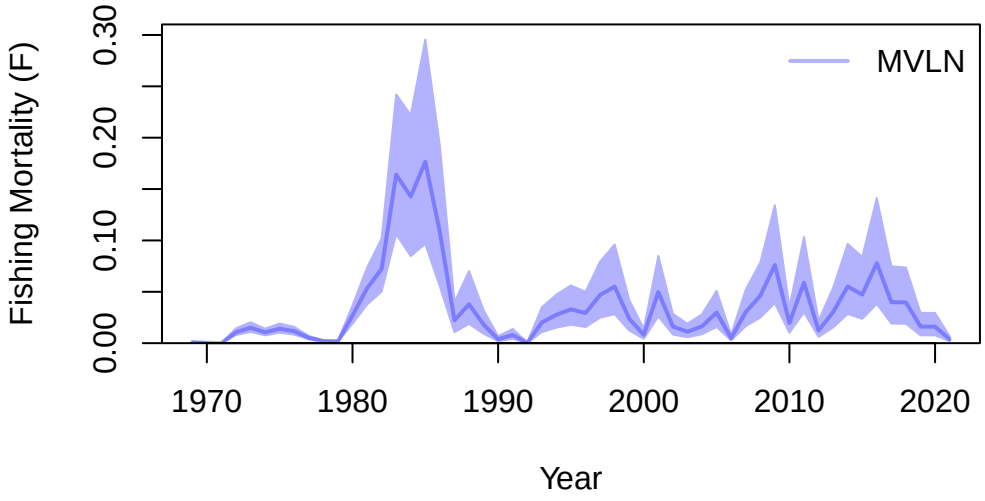
```
 starter.sso with Bratio: SSB/SSBMSY and F: _abs_F
```


0%
3.6%
0%
96.4%
F/F_MSY
SSB/SSB_MSY
0.0
1.0
2.0
3.0
0.5
1.5
2.5


MVLN
SSB/SSB_MSY
Year
1970
1980
1990
2000
2010
2020

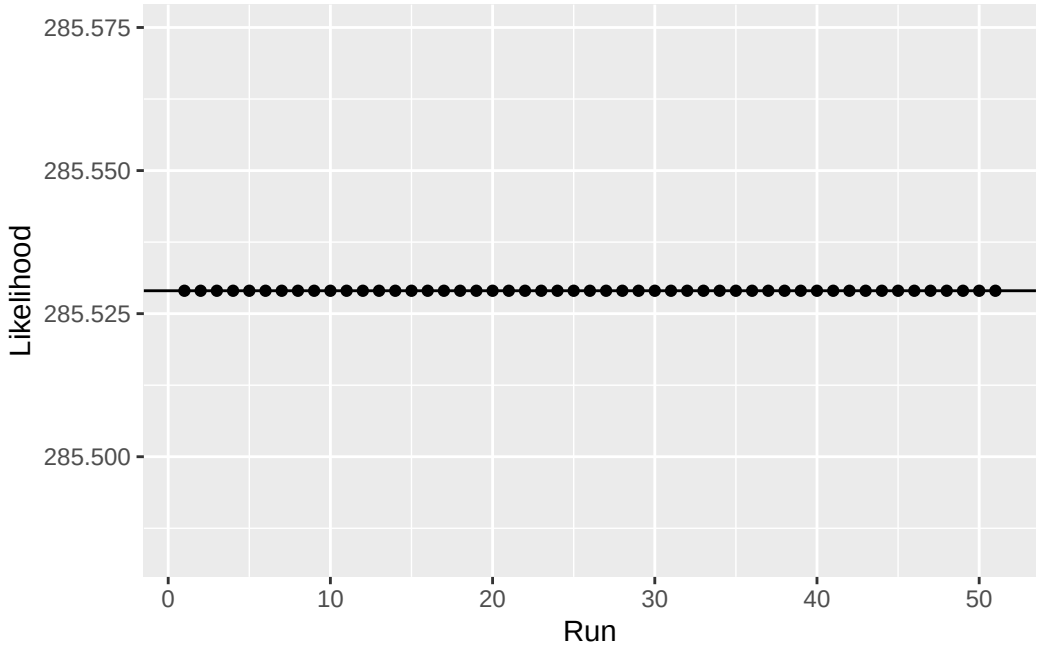

MVLN
F/F_MSY
0
1
2
3
4
5
1970
1980
1990
2000
2010
2020
Year

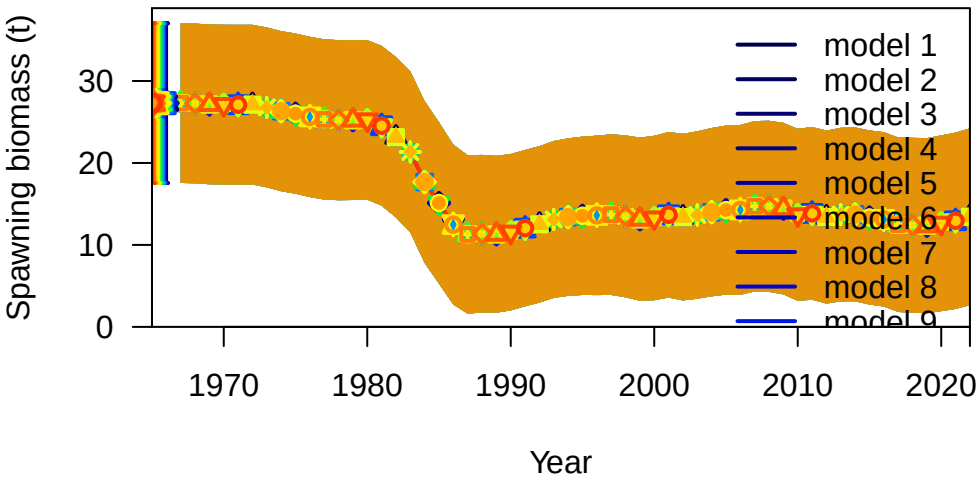

MVLN
SSB (t)
0
10
20
30
40
1970
1980
1990
2000
2010
2020
Year

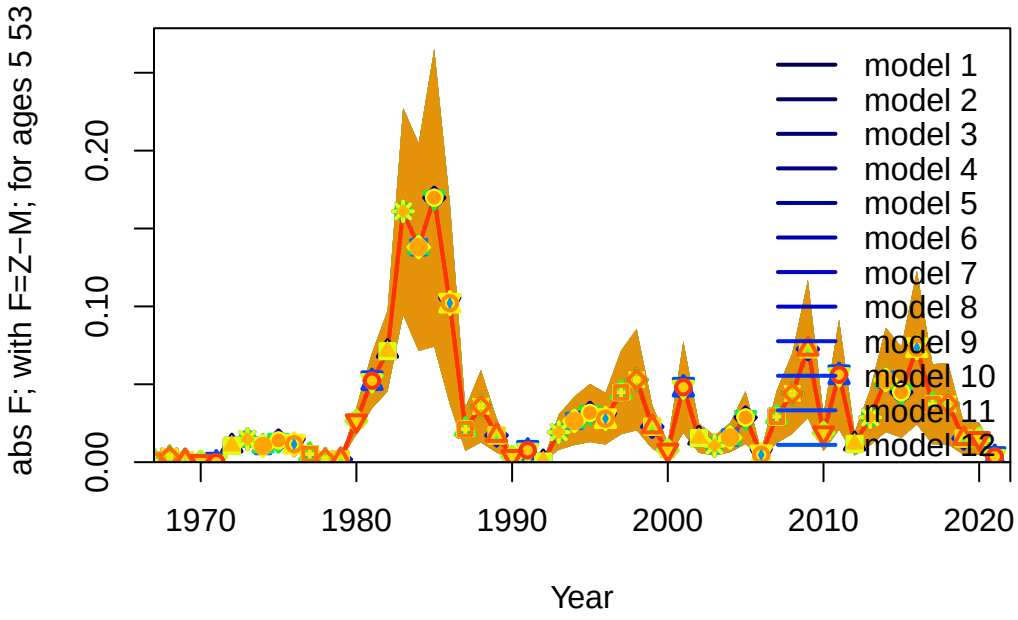


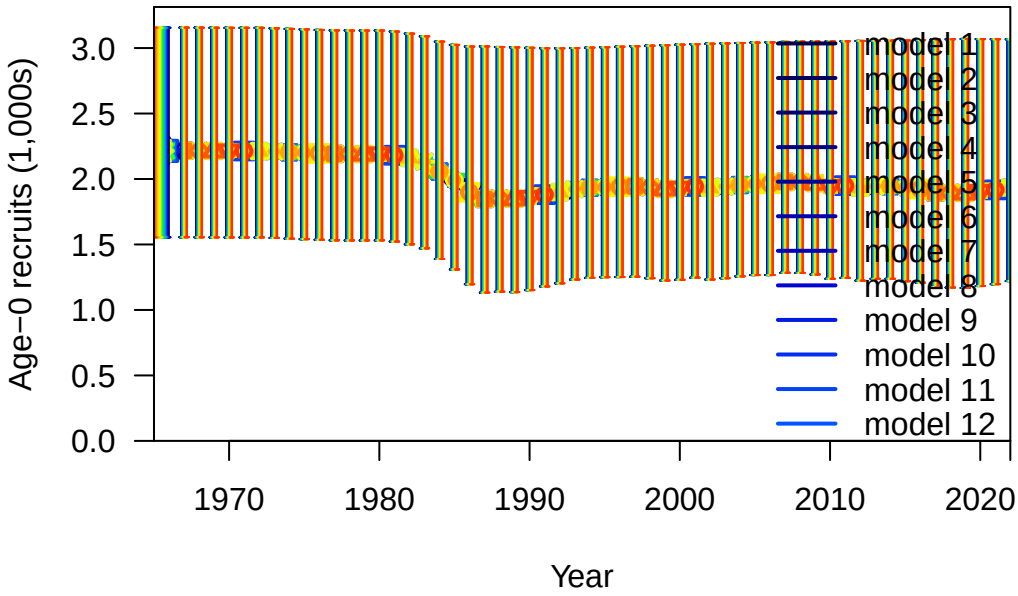

```
null device
          1
```

Jitter

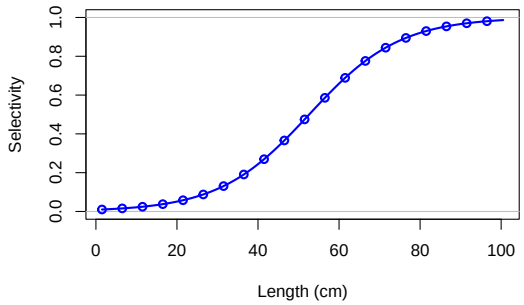

285.575
285.550
285.525
285.500
Likelihood
0
10
20
30
40
50
Run

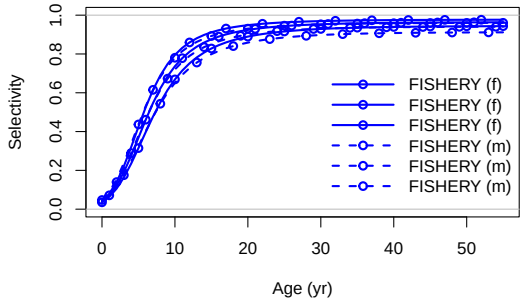

Spawning biomass (t)
30
20
10
0
1970
1980
1990
2000
2010
2020
Year
model 1
model 2
model 3
model 4
model 5
model 6
model 7
model 8
model 9

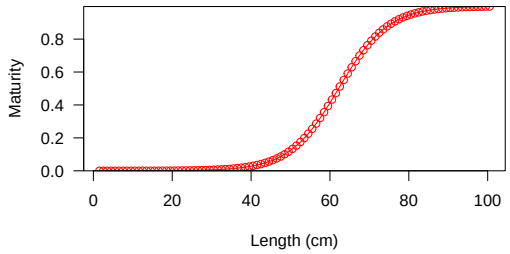


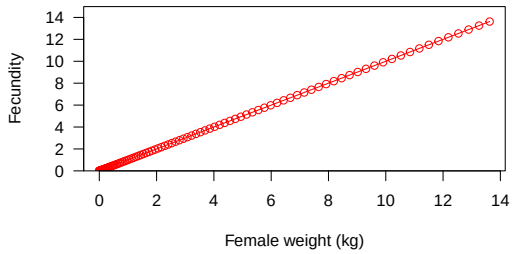


Selectivity and Maturity


Selectivity
0.0
0.2
0.4
0.6
0.8
1.0
0
20
40
60
80
100
Length (cm)


Selectivity
0.0
0.2
0.4
0.6
0.8
1.0
0
10
20
30
40
50
Age (yr)
FISHERY (f)
FISHERY (f)
FISHERY (f)
FISHERY (m)
FISHERY (m)
FISHERY (m)


Maturity
0.0
0.2
0.4
0.6
0.8
0
20
40
60
80
100
Length (cm)


Fecundity
0
2
4
6
8
10
12
14
0
2
4
6
8
10
12
14
Female weight (kg)