

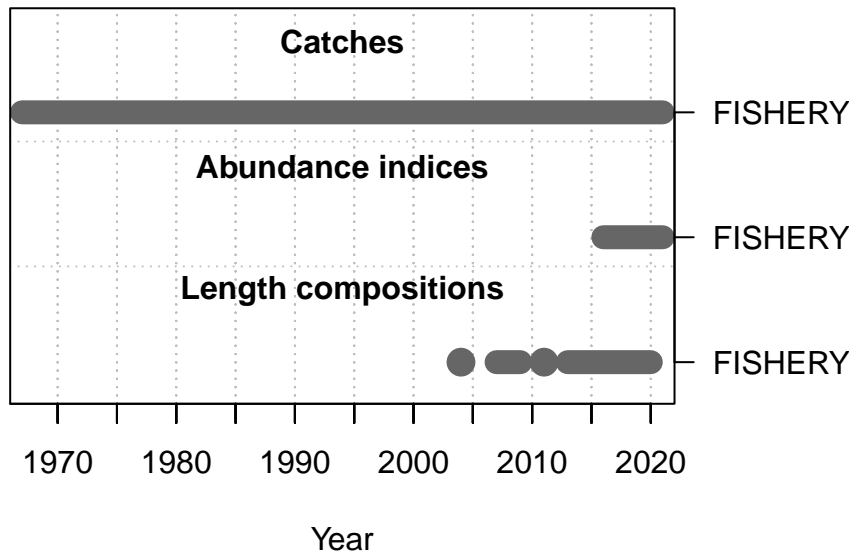
American Samoa Model Checks

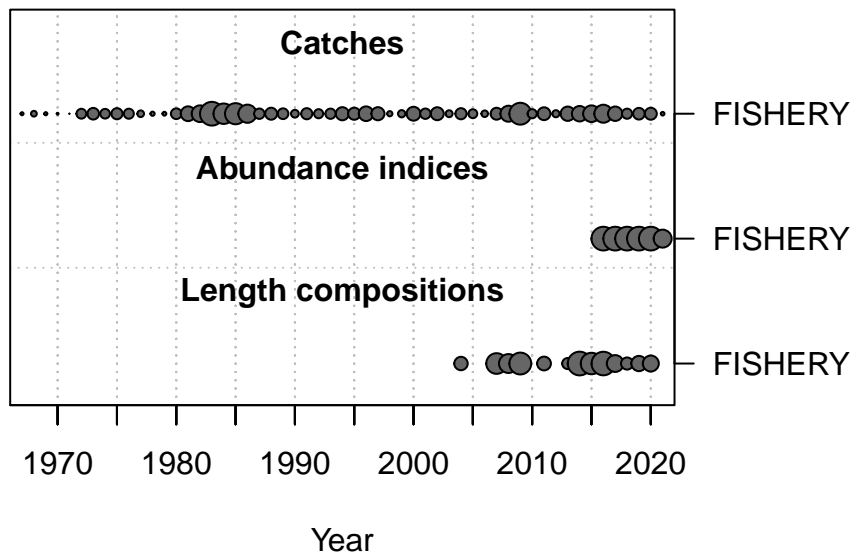
2022-08-23

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

Model Output

Input Data





Convergence Check

```

Converged      MaxGrad
1      TRUE 2.19783e-06

```

```

[1] "1 NOTE: Max data length bin: 85 < max pop len bins: 94; so will accumulate larger pop
[2] "N warnings: 1"

```

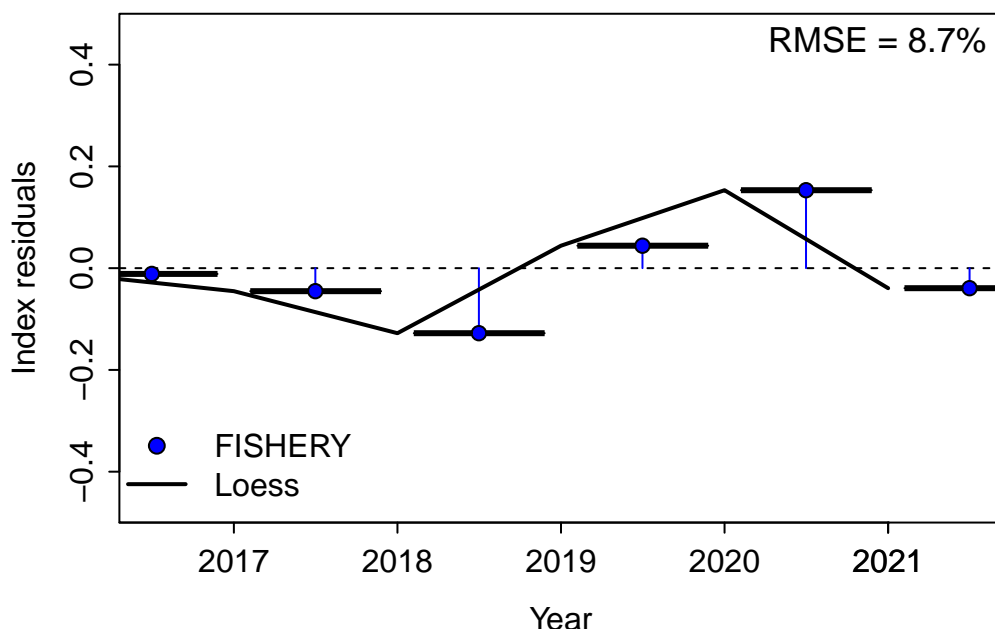
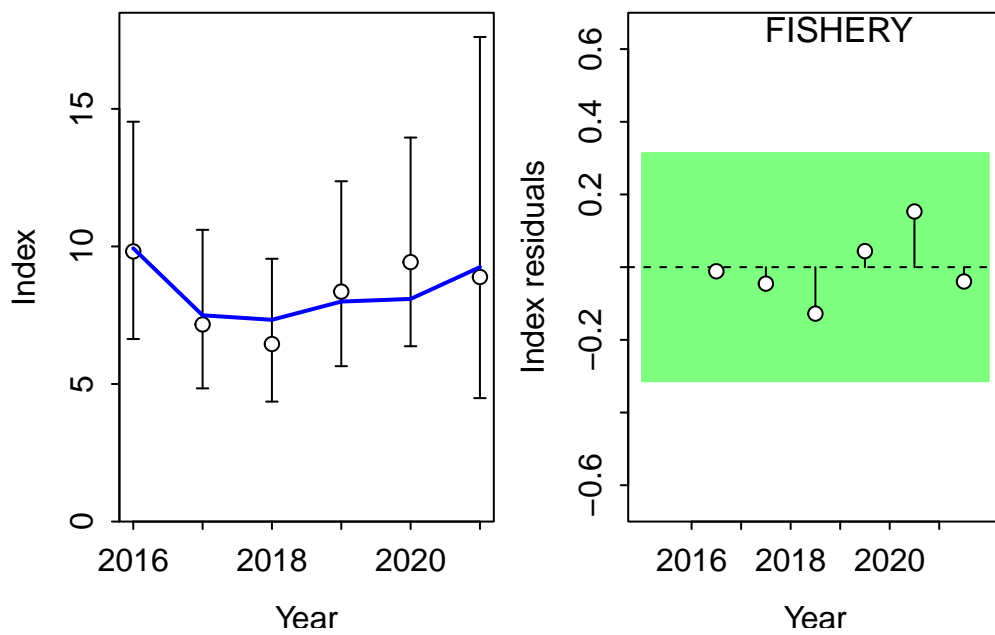
Fit to Model

CPUE

Residual Runs Test (/w plot) stats by Index:

RMSE stats by Index:

Length Comp



#Factor	Fleet	New_Var_adj	Type	Name
4	1	0.10815	len	FISHERY

Residual Runs Test (/w plot) stats by Mean length:

```

      Index runs.p  test  sigma3.lo sigma3.hi type
1 FISHERY  0.001 Failed -0.1254509 0.1254509  len

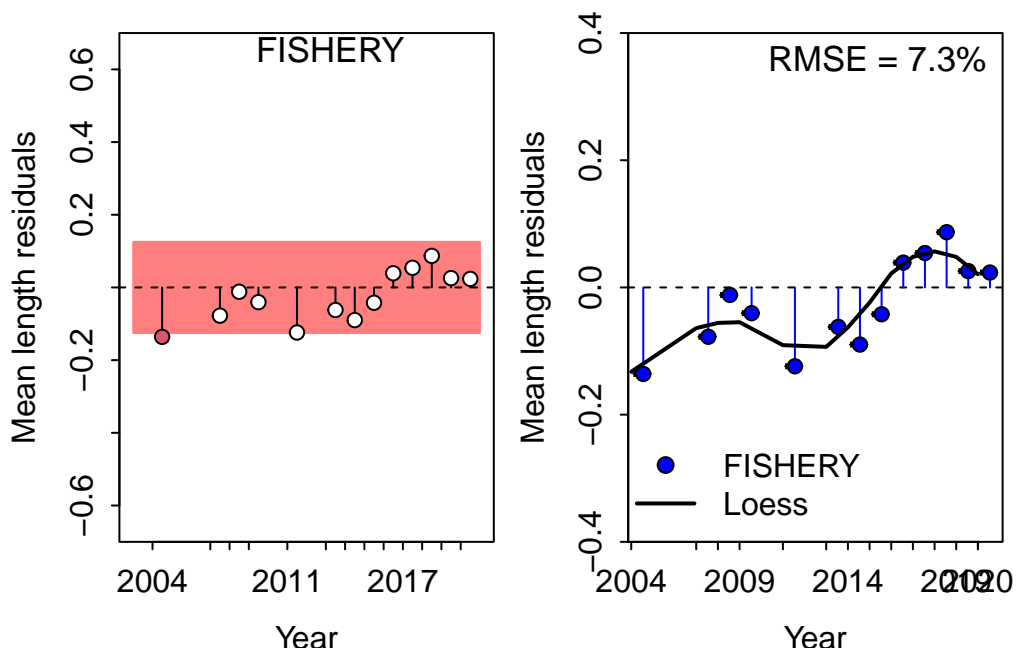
```

RMSE stats by Index:

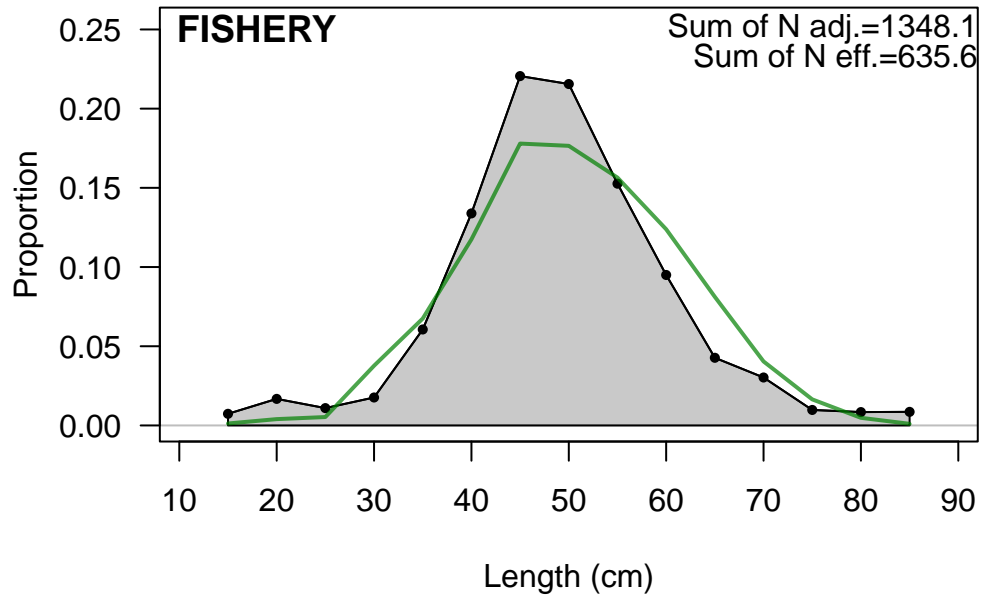
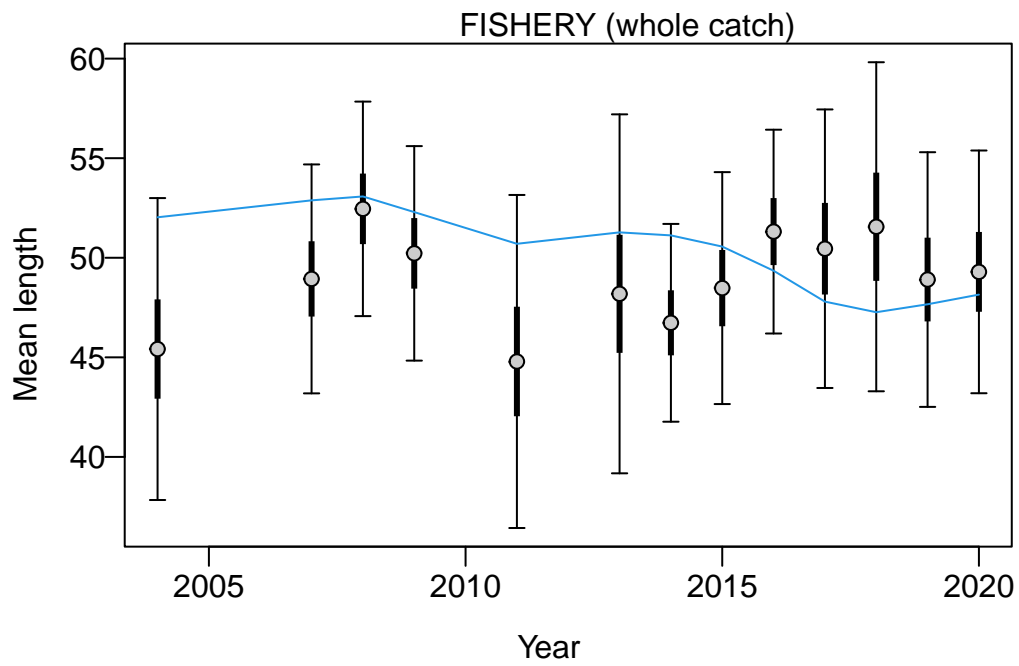
```

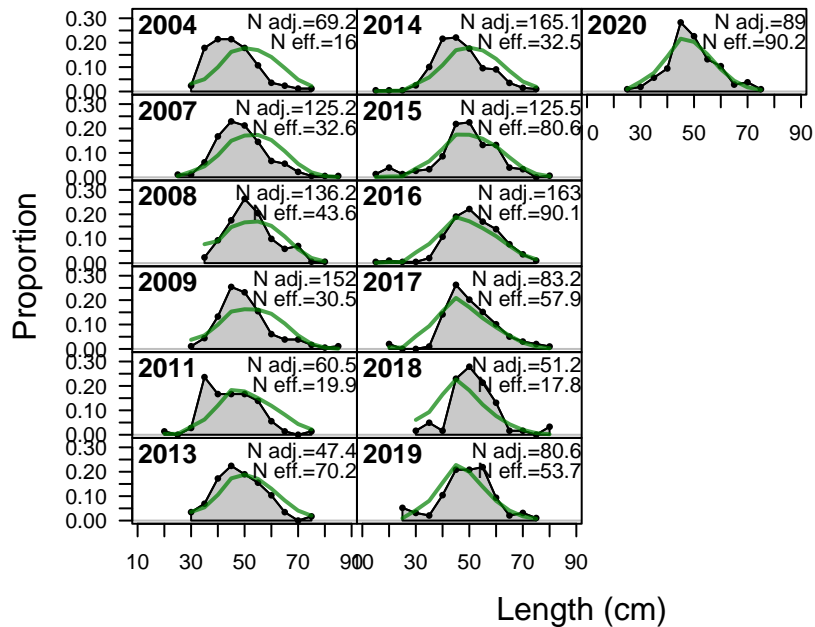
# A tibble: 2 x 3
  Fleet    RMSE.perc Nobs
  <chr>      <dbl> <int>
1 FISHERY      7.3     13
2 Combined      7.3     13

```



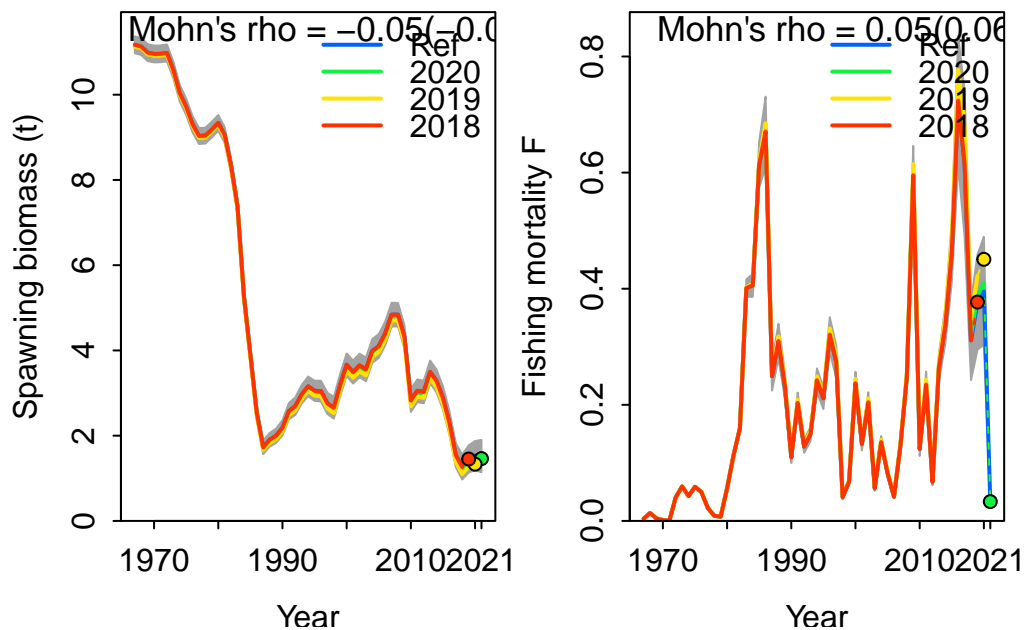
Retrospective and Hindcasting





Retrospective

Mohn's Rho stats, including one step ahead forecasts:



Mohn's Rho stats, including one step ahead forecasts:

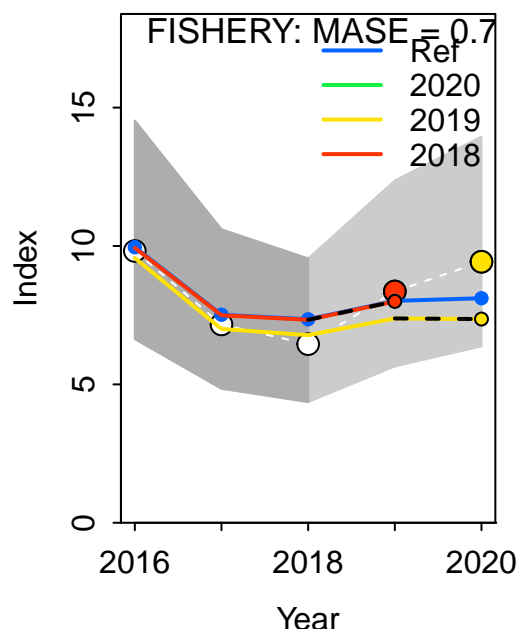
	type	peel	Rho	ForecastRho
1	F	2020	0.0338803025	0.0336394288
2	F	2019	0.1201103829	0.1368381748
3	F	2018	0.0004083536	0.0004059755
4	F Combined		0.0514663463	0.0569611931

Hindcasting

Plotting Hindcast Cross-Validation (one-step-ahead)

Computing MASE with only 2 of 3 prediction residuals for Index FISHERY

Warning: Unequal spacing of naive predictions residuals may influence the interpretation of



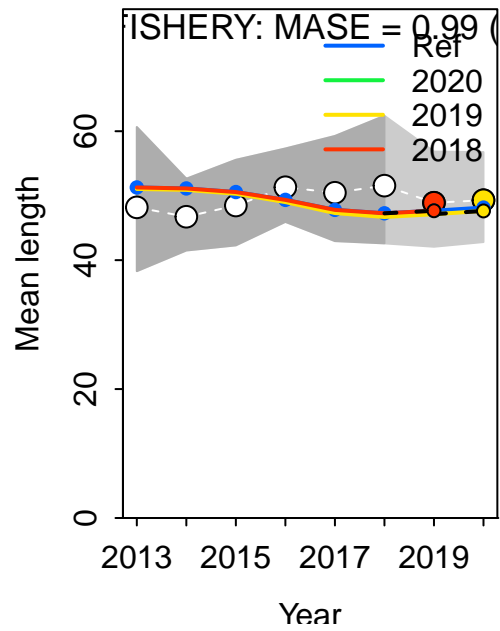
MASE stats by Index:

Plotting Hindcast Cross-Validation (one-step-ahead)

Computing MASE with only 2 of 3 prediction residuals for Index FISHERY

Warning: Unequal spacing of naive predictions residuals may influence the interpretation of

MASE stats by Index:



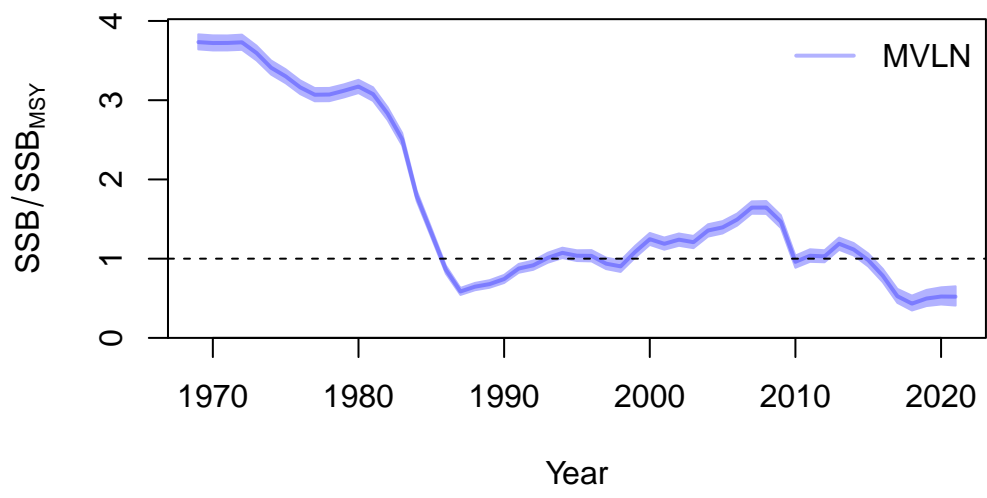
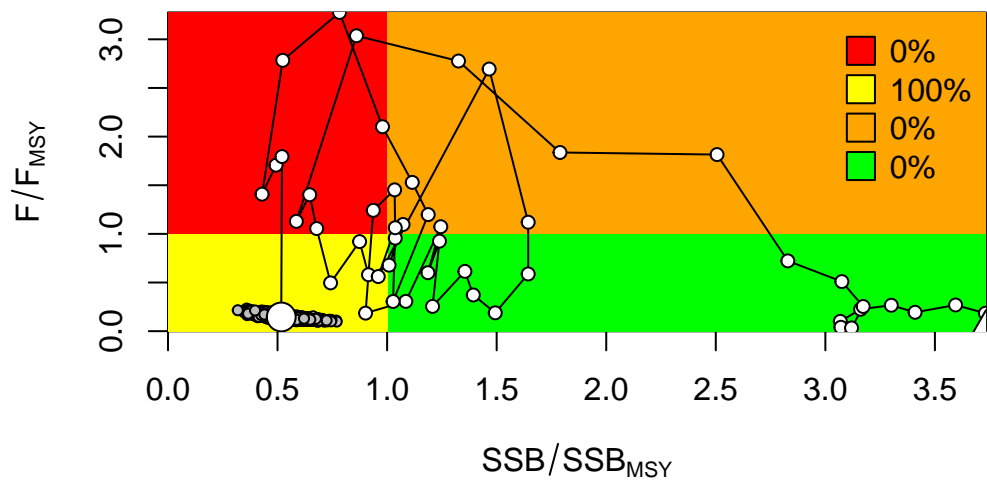
Recruitment Deviations

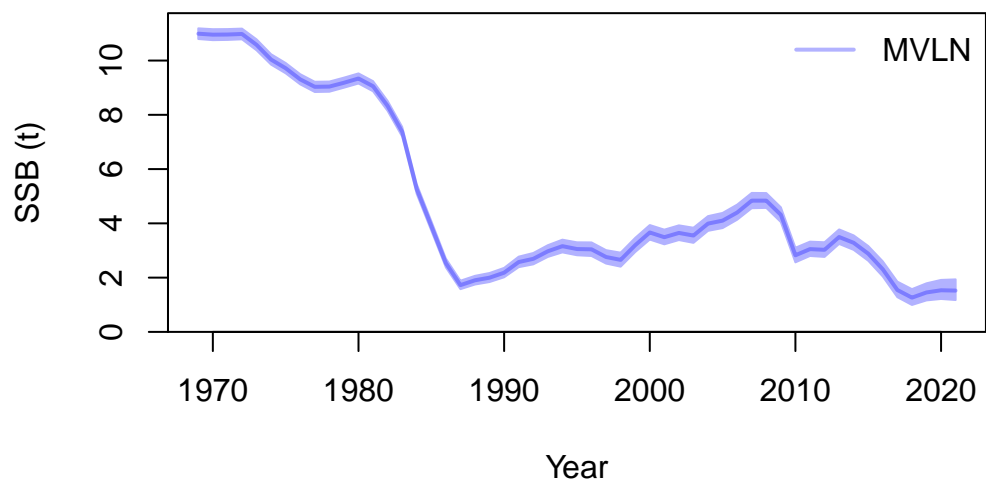
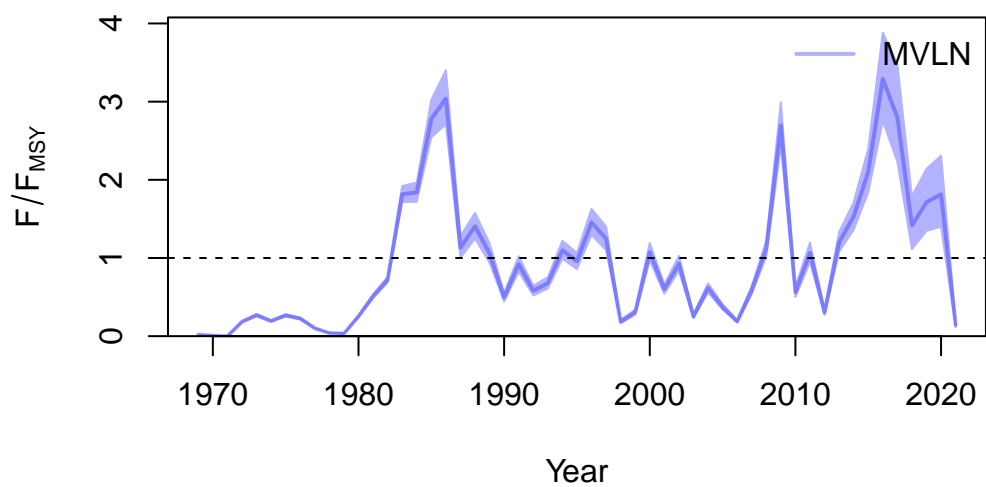
Likelihood Profile

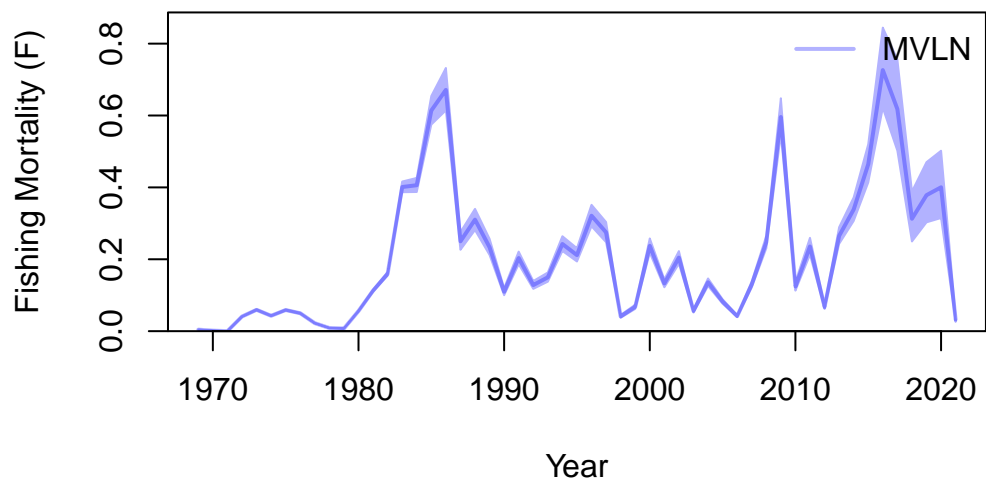
[1] "No likelihood runs were found"

Management Quantities

starter.sso with Bratio: SSB/SSB_{MSY} and $F: _abs_F$







```
null device
      1
```

Jitter

```
[1] "No jitter runs were found."
```