

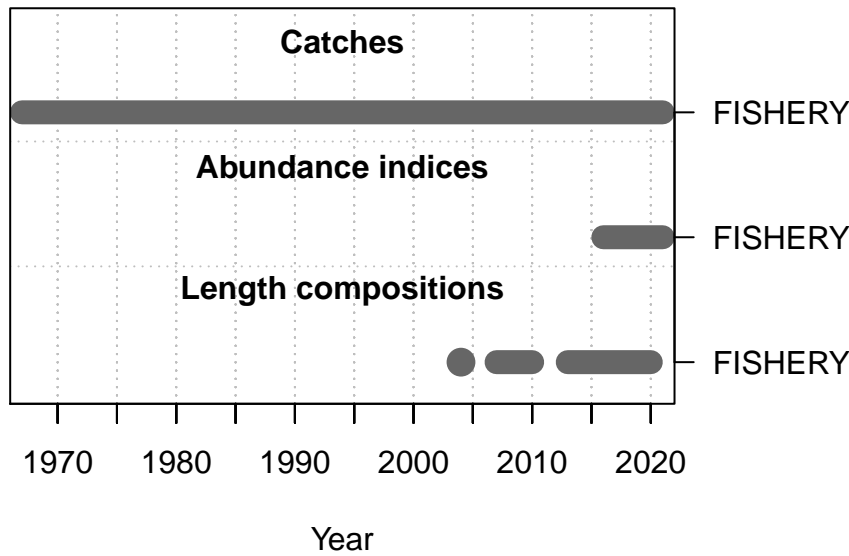
American Samoa Model Checks

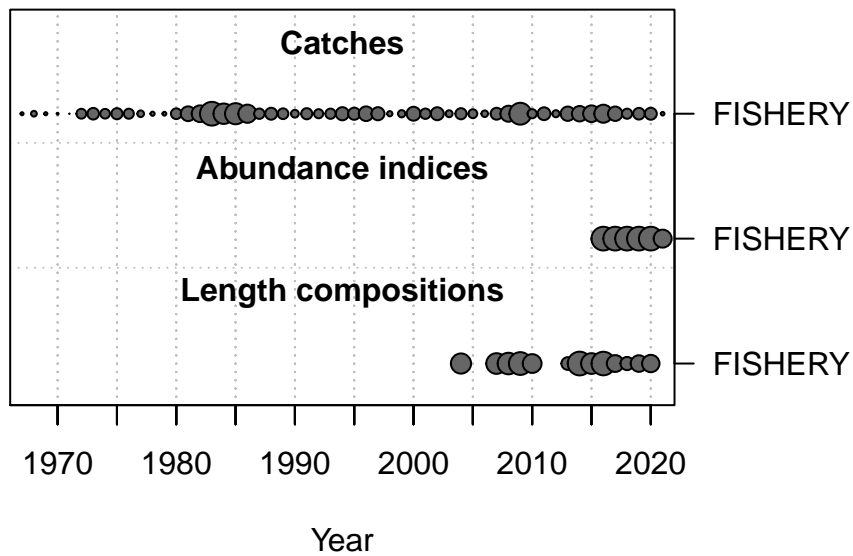
2022-10-16

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

Model Output

Input Data





Convergence Check

```

Converged      MaxGrad
1      TRUE 6.21749e-06

```

```

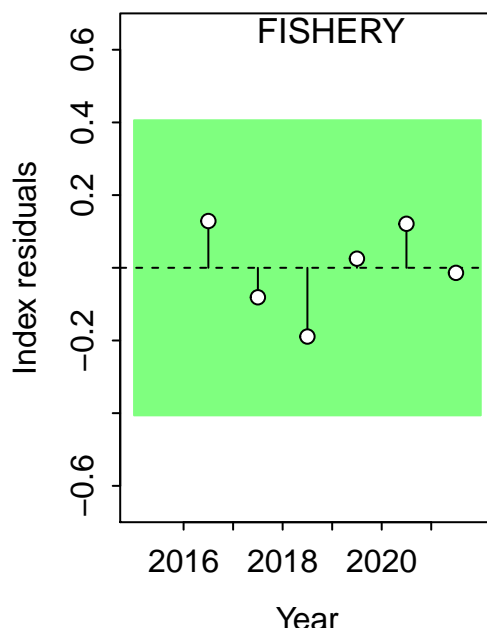
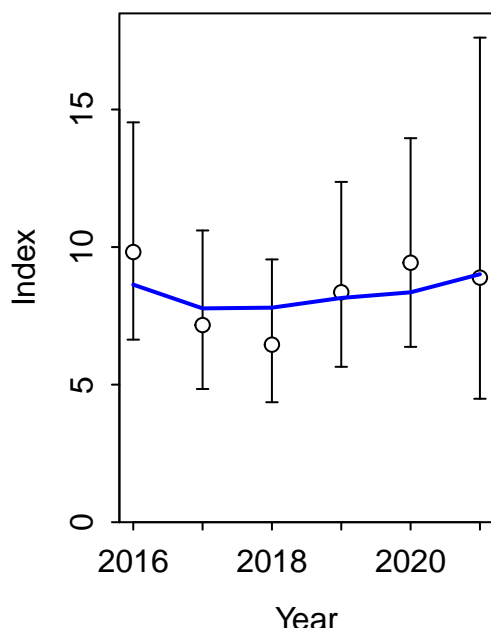
[1] "1 NOTE:  Max data length bin: 85  < max pop len bins: 94; so will accumulate larger pop
[2] "N warnings: 1"

```

Fit to Model

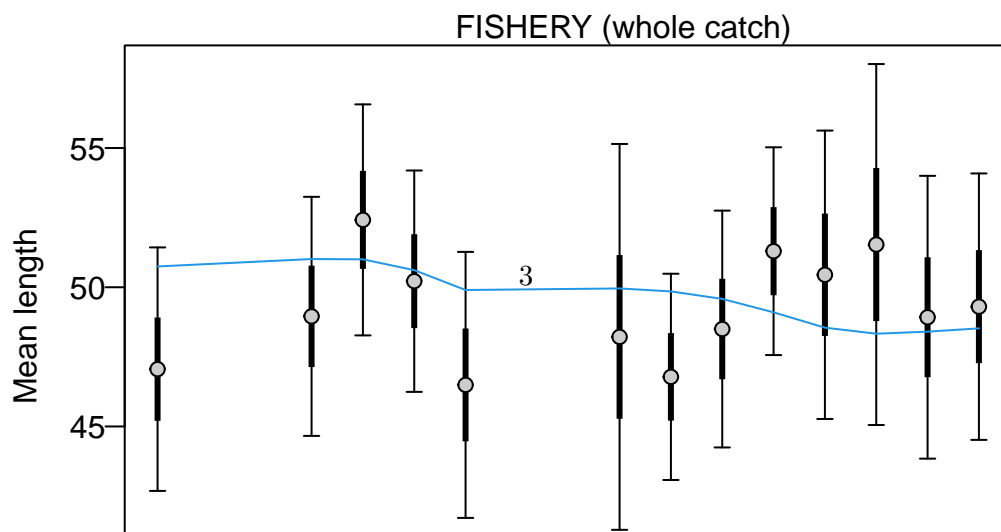
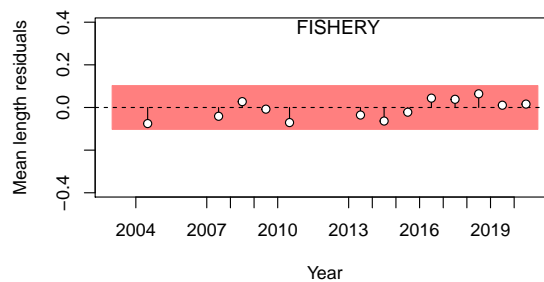
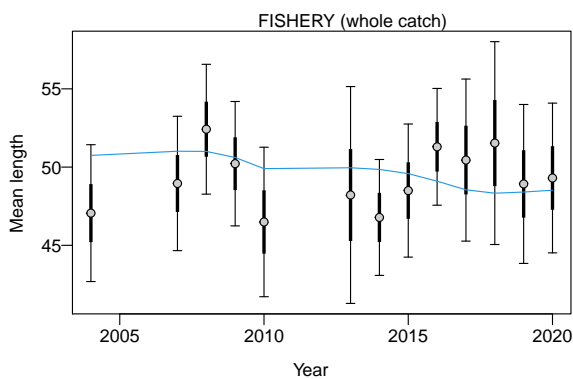
CPUE

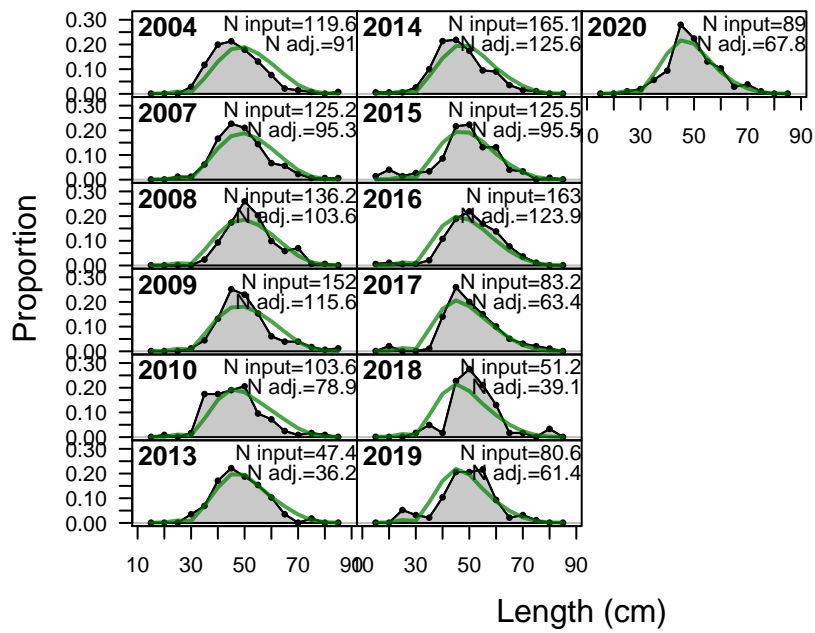
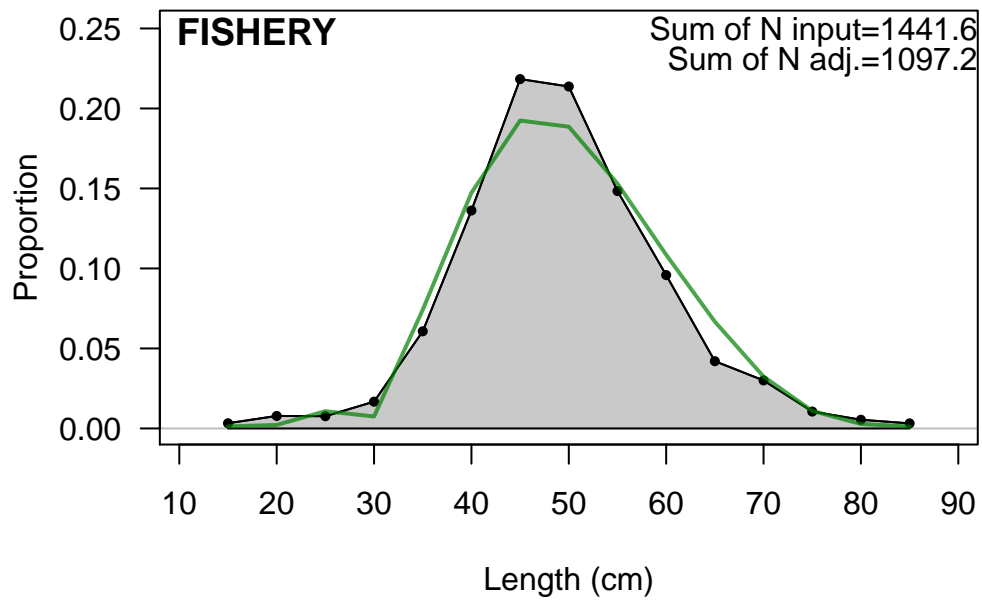
Fleet	RMSE.perc	Nobs
FISHERY	11.1	6
Combined	11.1	6



Length Comp

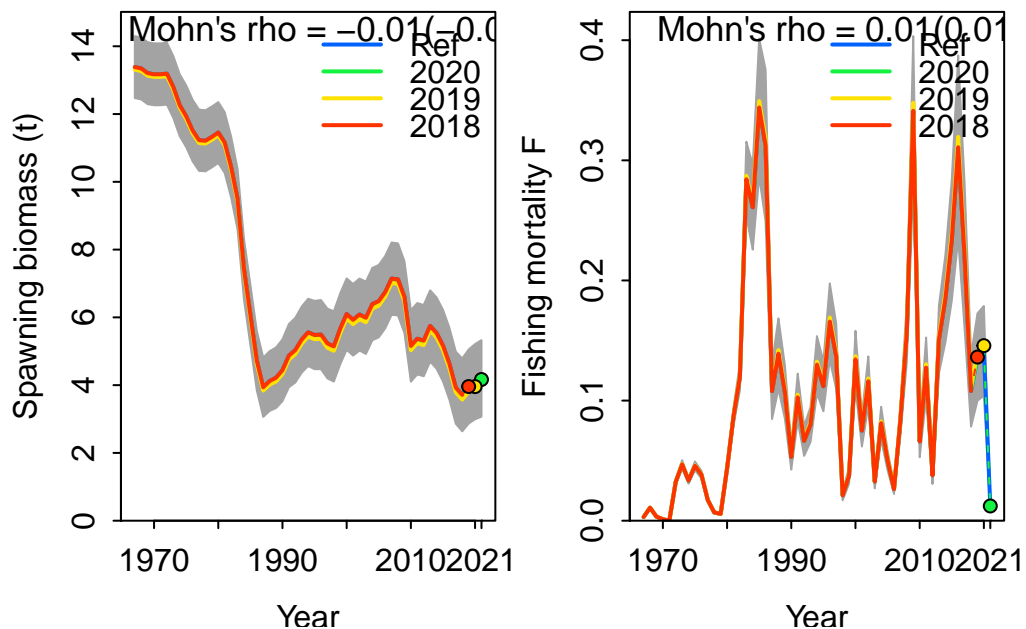
Fleet	RMSE.perc	Nobs
FISHERY	4.5	13
Combined	4.5	13





Retrospective

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



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

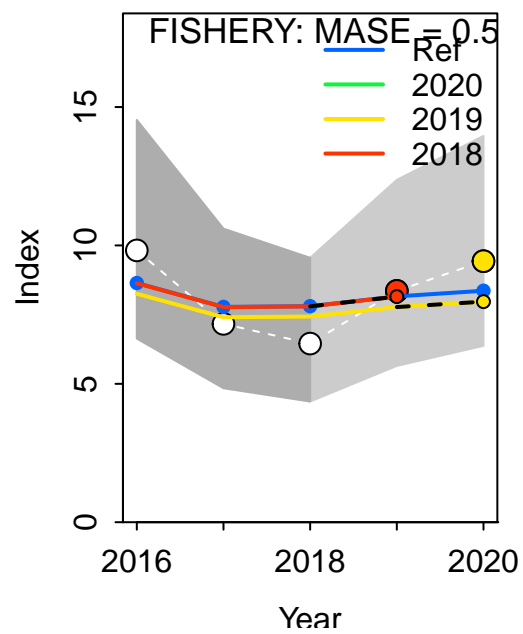
	type	peel	Rho	ForecastRho
1	F	2020	0.0058440226	0.0056097641
2	F	2019	0.0308802372	0.0309393594
3	F	2018	-0.0001203648	-0.0001101031
4	F Combined		0.0122012983	0.0121463402

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



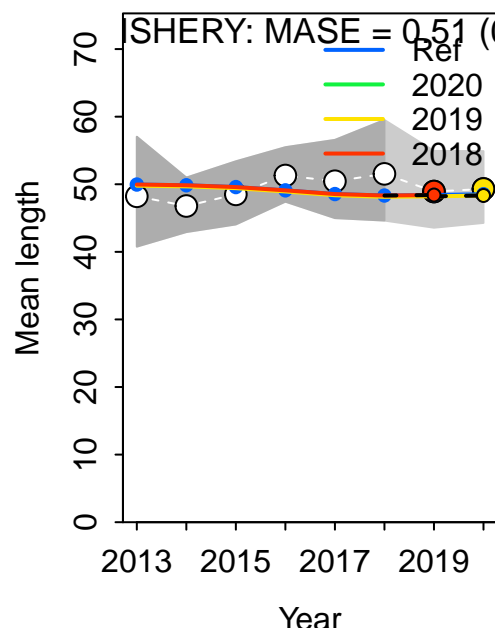
MASE stats by Index:

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

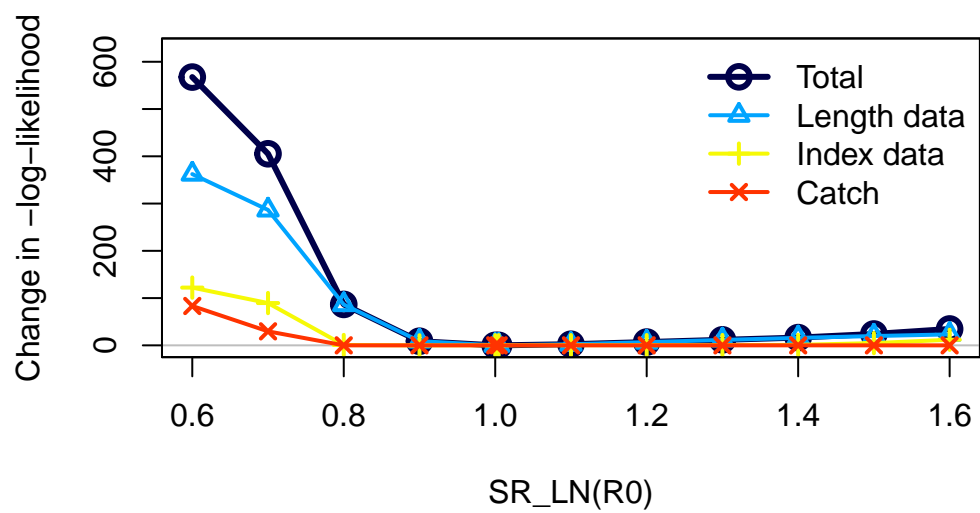
MASE stats by Index:



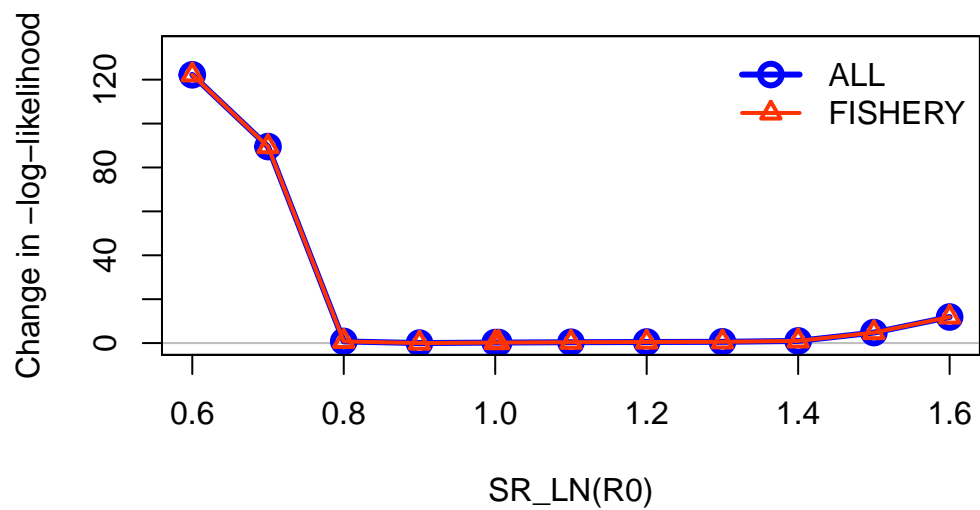
Recruitment Deviations

Likelihood Profile

[1] "SR_LN"			
	frac_change	include	label
TOTAL	1.0000	TRUE	Total
Catch	0.1468	TRUE	Catch
Equil_catch	0.0000	FALSE	Equilibrium catch
Survey	0.2153	TRUE	Index data
Length_comp	0.6384	TRUE	Length data
Recruitment	0.0000	FALSE	Recruitment
InitEQ_Regime	0.0000	FALSE	Initital equilibrium recruitment
Forecast_Recruitment	0.0000	FALSE	Forecast recruitment
Parm_priors	0.0003	FALSE	Priors
Parm_softbounds	0.0000	FALSE	Soft bounds
Parm_devs	0.0000	FALSE	Parameter deviations
Crash_Pen	0.0000	FALSE	Crash penalty

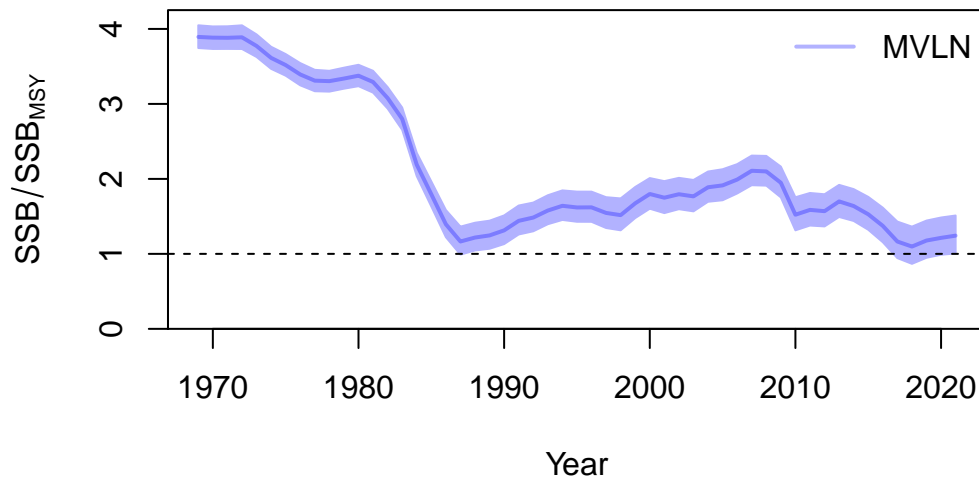
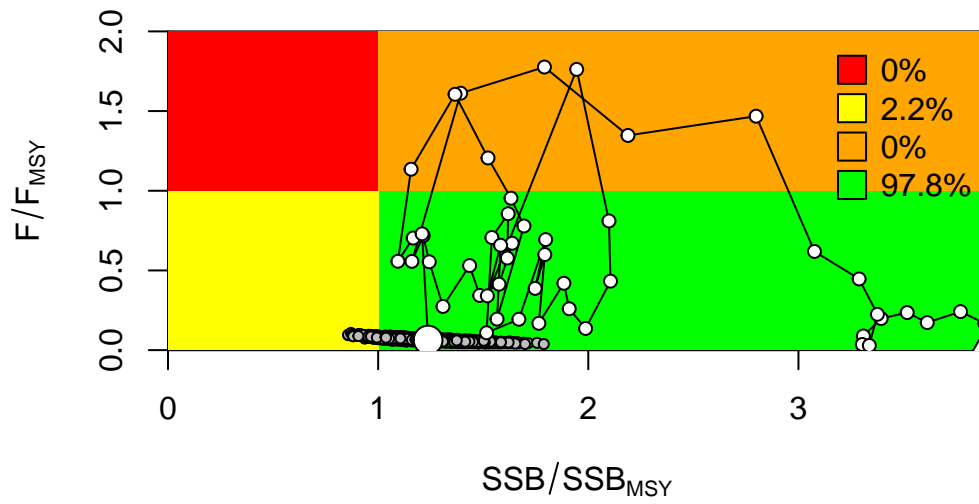


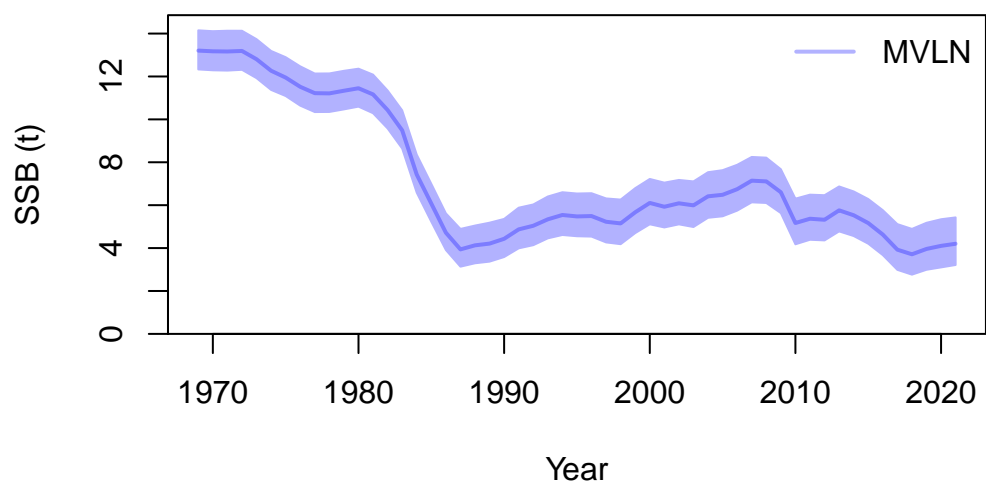
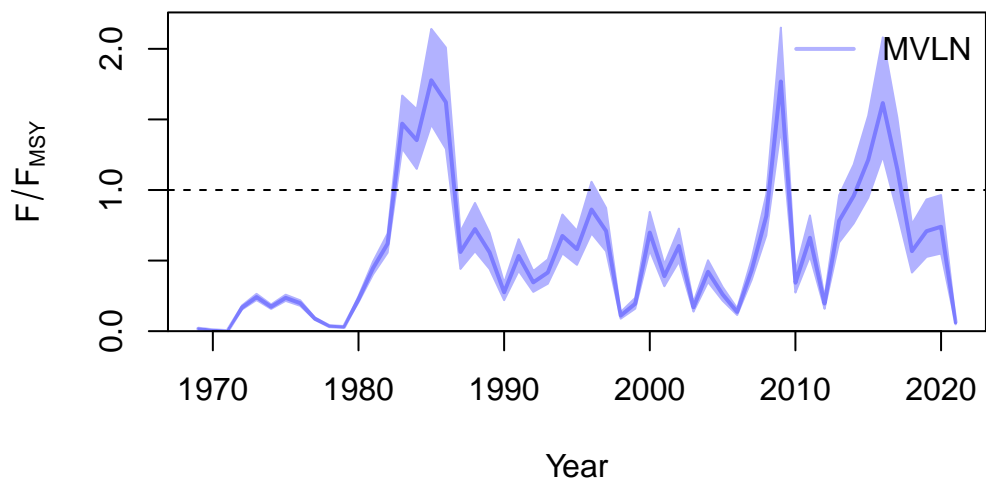
Changes in survey likelihood by fleet

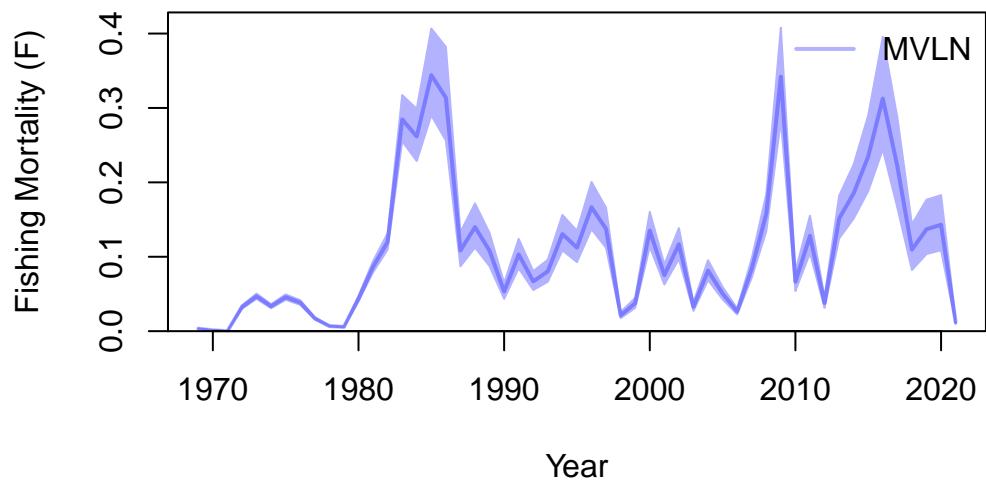


Management Quantities

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







null device
1

Jitter

