

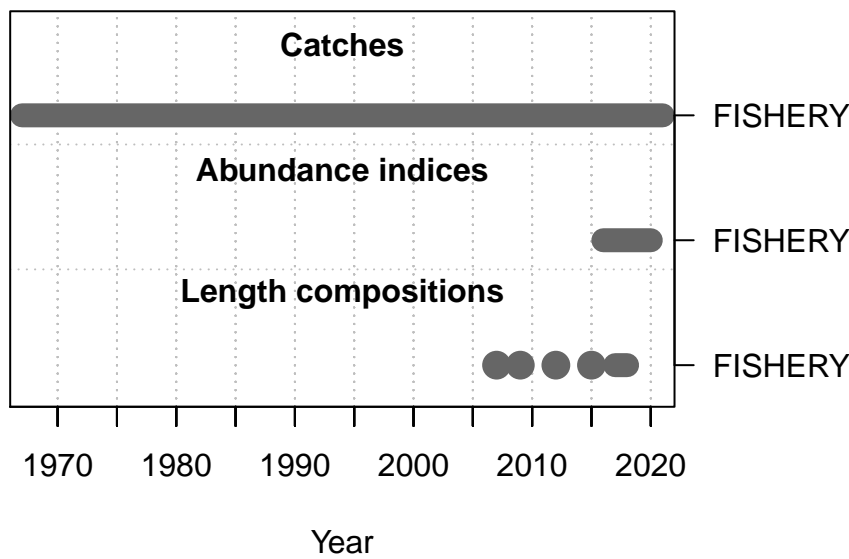
American Samoa Model Checks

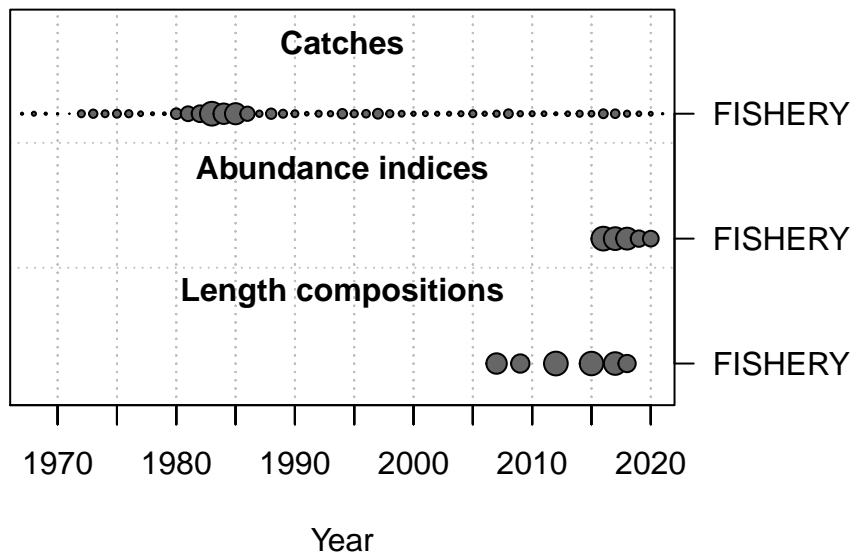
2022-10-19

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

Model Output

Input Data





Convergence Check

```

Converged    MaxGrad
1      TRUE 6.9658e-06

```

```

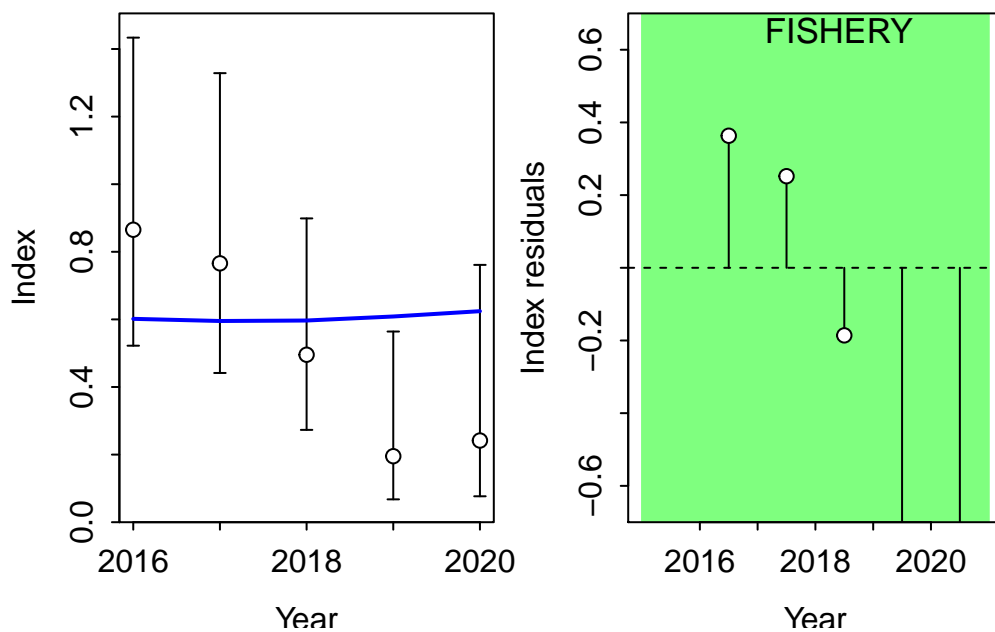
[1] "1 NOTE: Max data length bin: 40 < max pop len bins: 44; so will accumulate larger pop
[2] "N warnings: 1"

```

Fit to Model

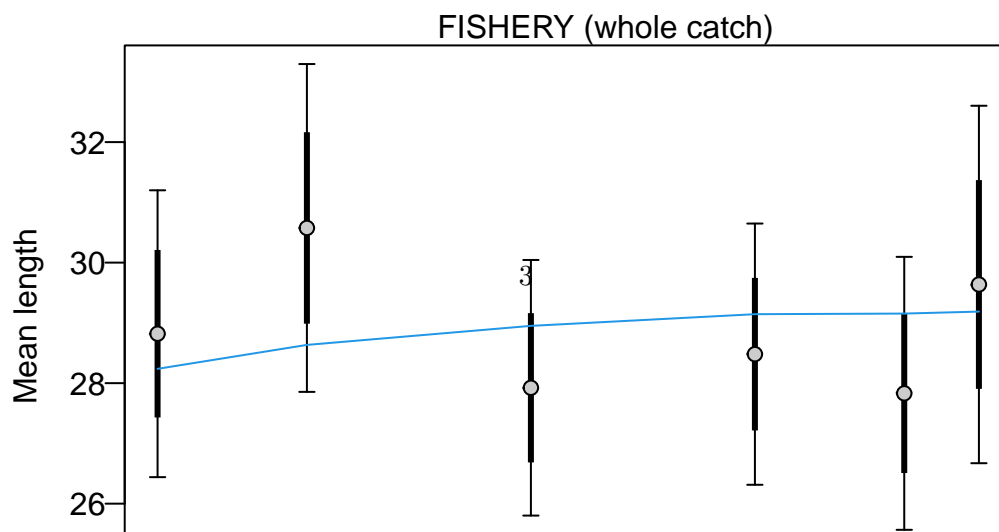
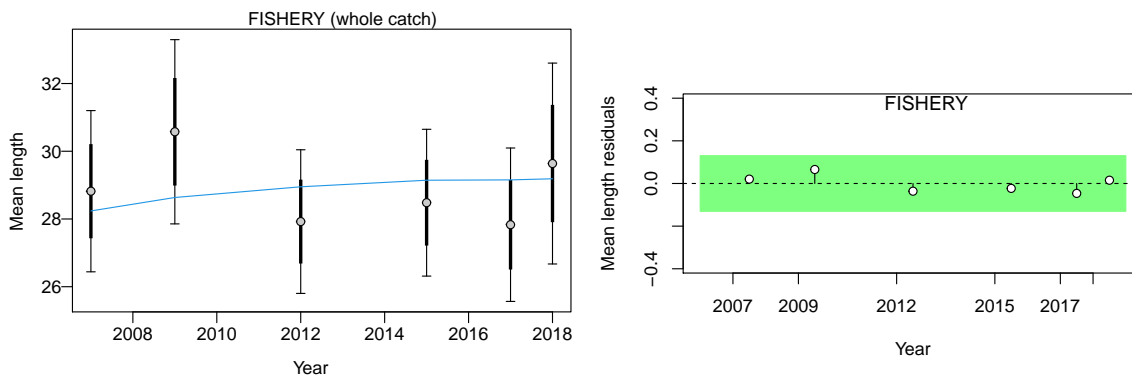
CPUE

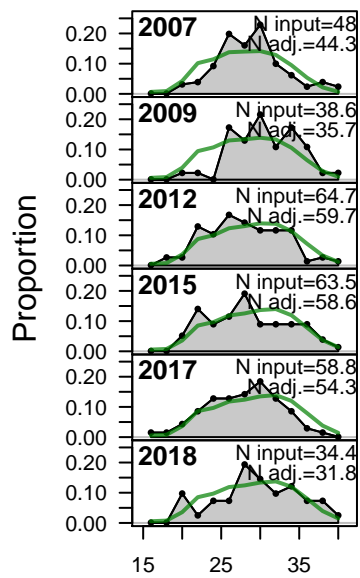
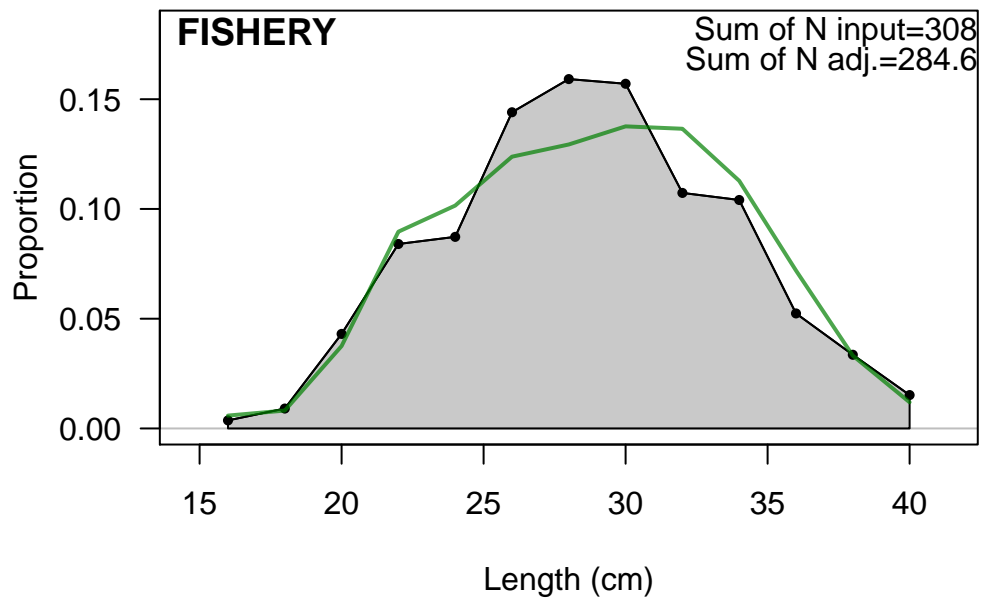
Fleet	RMSE.perc	Nobs
FISHERY	69.6	5
Combined	69.6	5



Length Comp

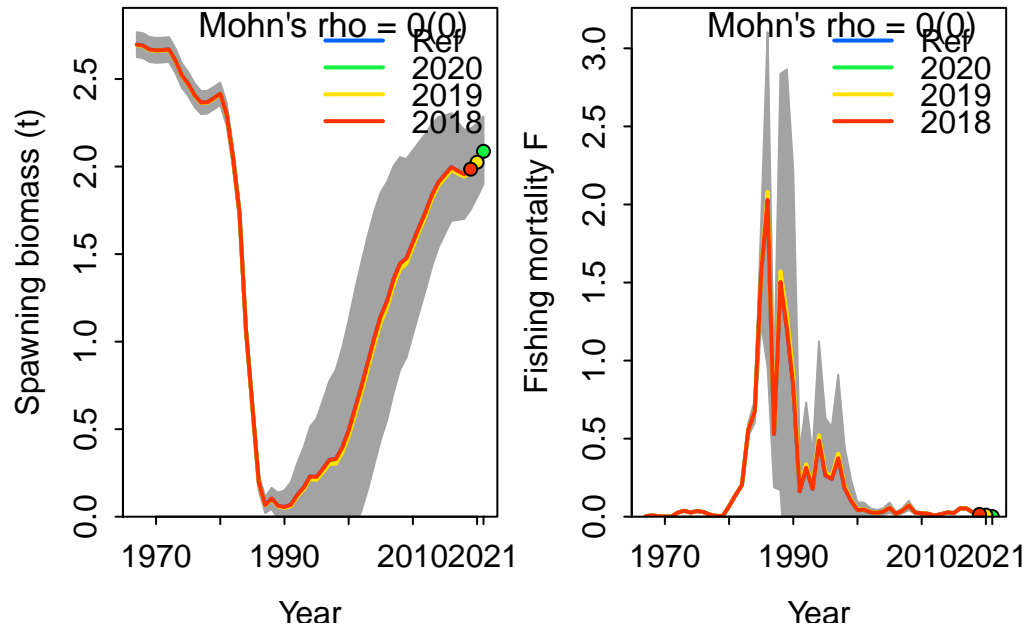
Fleet	RMSE.perc	Nobs
FISHERY	3.9	6
Combined	3.9	6





Retrospective

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



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

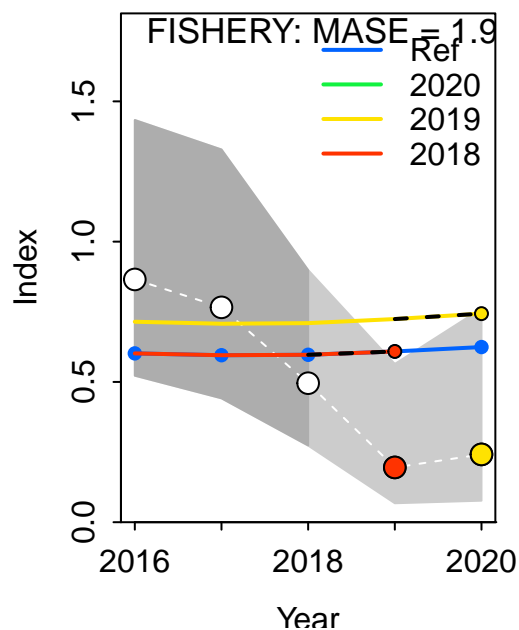
	type	peel	Rho	Forecast	Rho
1	F	2020	0.002792609	0.002501998	
2	F	2019	0.006430587	0.005791715	
3	F	2018	0.000000000	0.000000000	
4	F Combined		0.003074399	0.002764571	

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)

No observations in evaluation years to compute prediction residuals for Index FISHERY

MASE stats by Index:

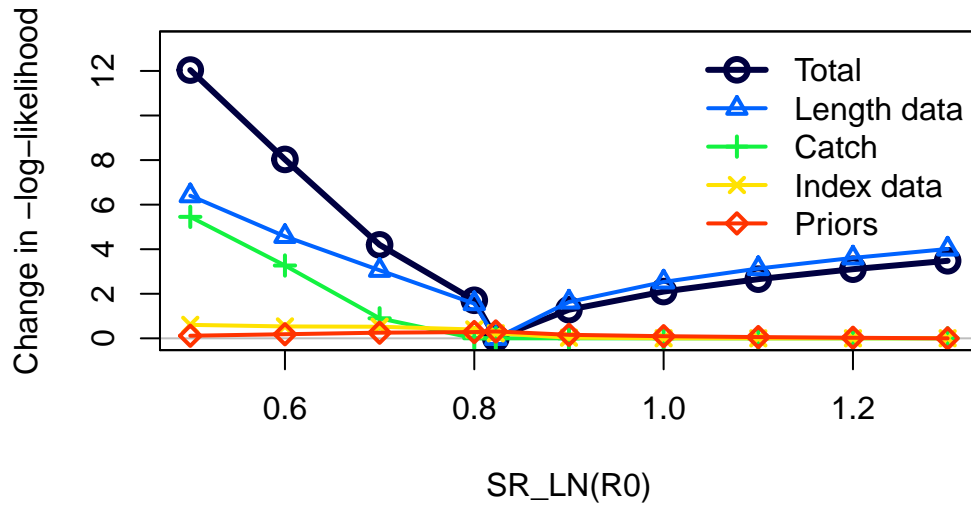
Recruitment Deviations

Likelihood Profile

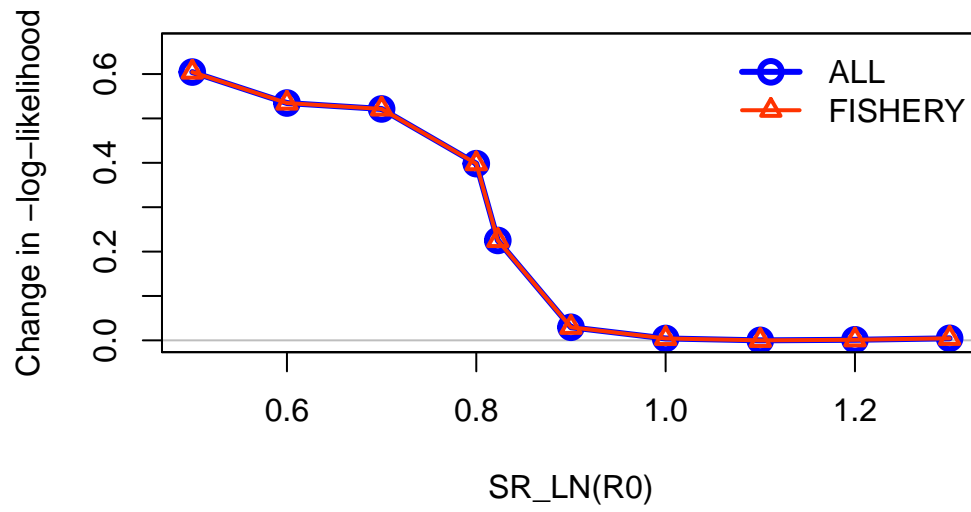
[1] "SR_LN"

	frac_change	include	label
TOTAL	1.0000	TRUE	Total
Catch	0.4528	TRUE	Catch
Equil_catch	0.0000	FALSE	Equilibrium catch
Survey	0.0502	TRUE	Index data
Length_comp	0.5317	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	0.0257	TRUE	Priors
Parm_softbounds	0.0000	FALSE	Soft bounds
Parm_devs	0.0000	FALSE	Parameter deviations
Crash_Pen	0.0000	FALSE	Crash penalty

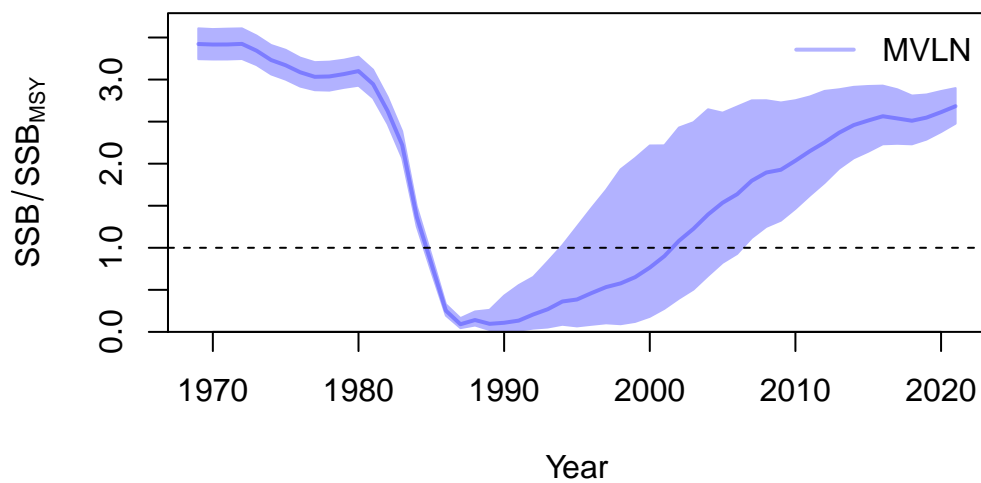
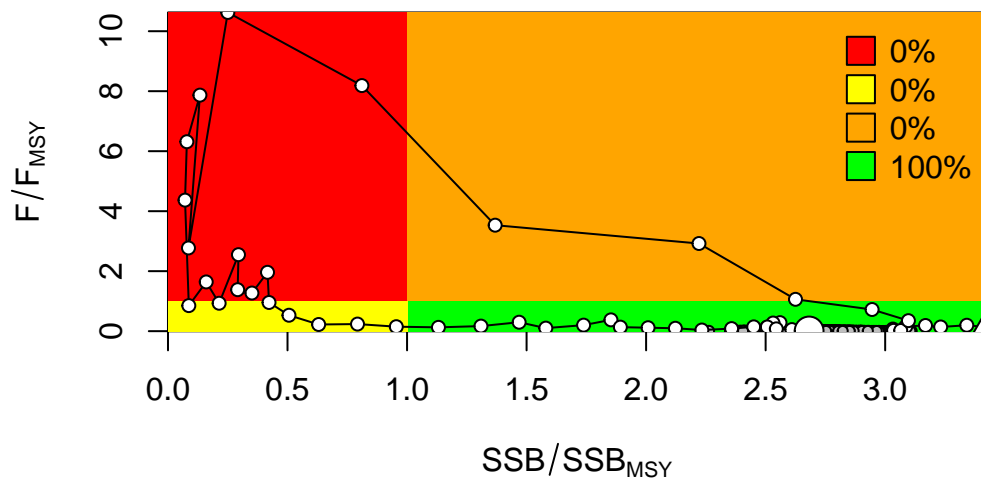


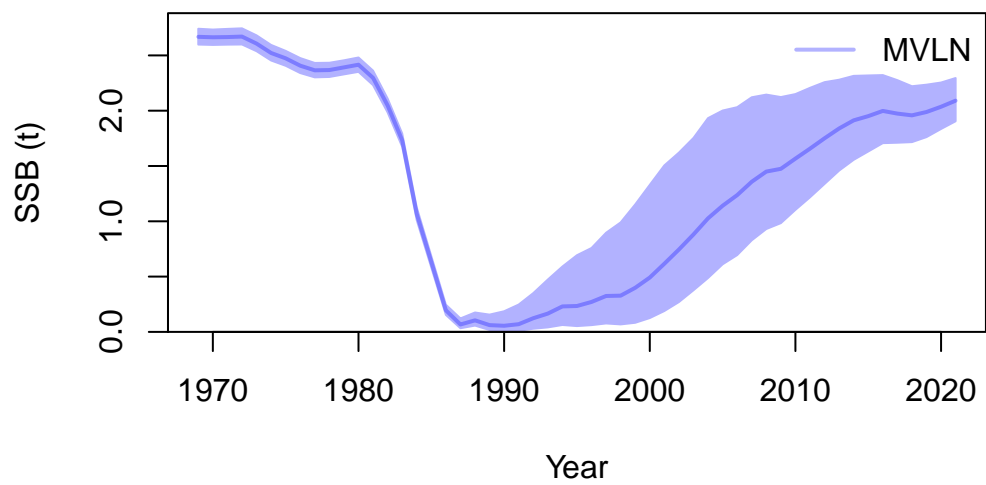
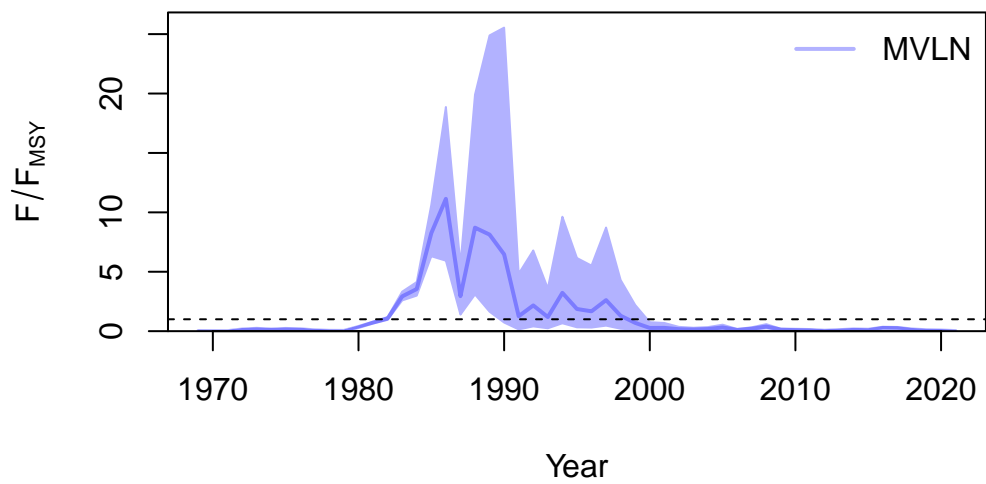
Changes in survey likelihood by fleet

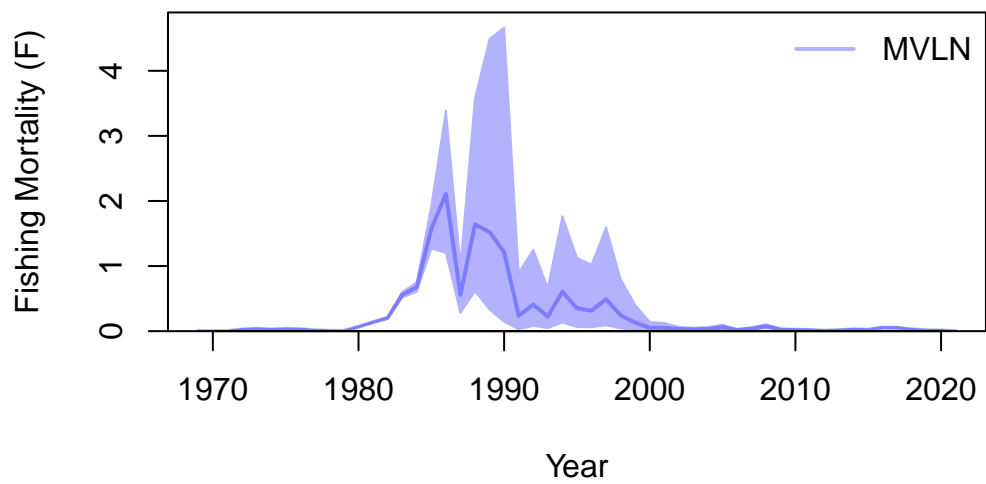


Management Quantities

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







null device
1

Jitter

