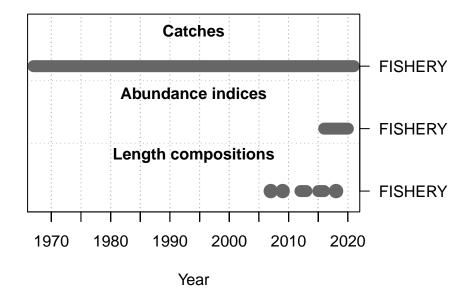
American Samoa Model Checks

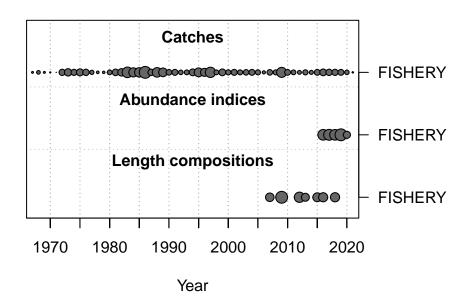
2022-10-07

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

Model Output

Input Data





Convergence Check

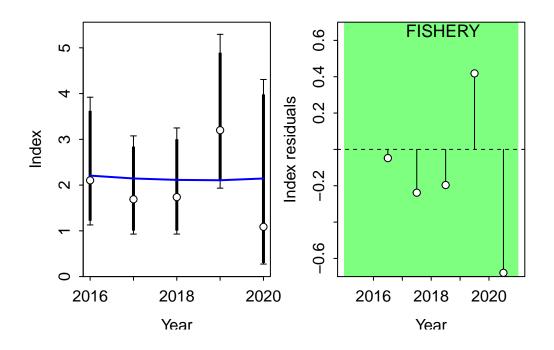
Converged MaxGrad
TRUE 9.11584e-05

[1] "1 NOTE: Max data length bin: 65 < max pop len bins: 72; so will accumulate larger pop [2] "N warnings: 1"

Fit to Model

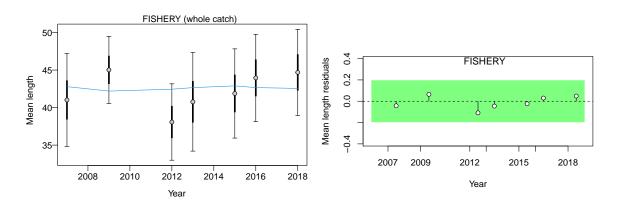
CPUE

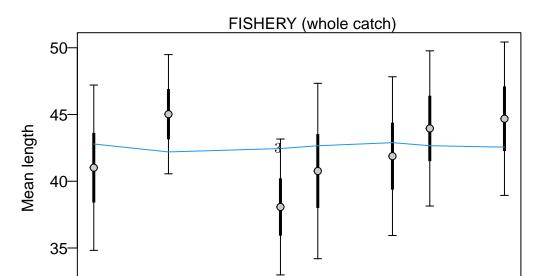
Fleet	RMSE.perc	Nobs
FISHERY	38.3	5
Combined	38.3	5

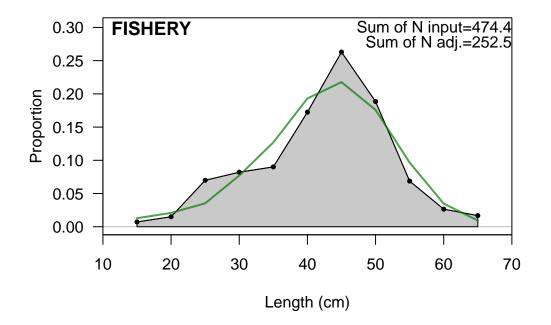


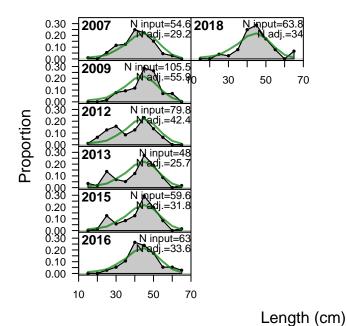
Length Comp

Fleet	${\rm RMSE.perc}$	Nobs
FISHERY	5.8	7
Combined	5.8	7



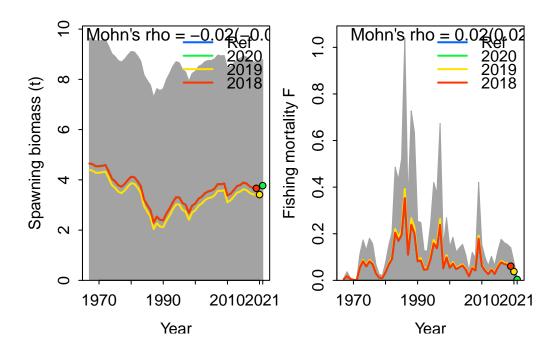






Retrospective

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



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

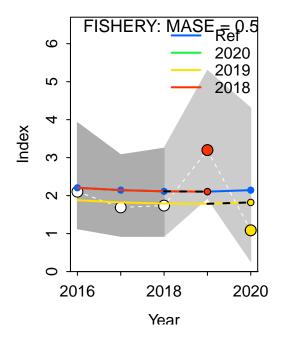
	type	peel	Rho	${\tt ForecastRho}$
1	F	2020	0.001577646	0.00151359
2	F	2019	0.072479974	0.07134151
3	F	2018	0.000000000	0.00000000
4	F	Combined	0.024685874	0.02428503

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)

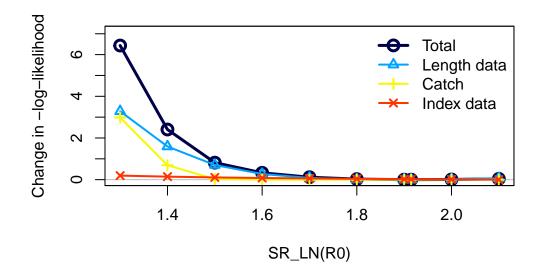
No observations in evaluation years to compute prediction residuals for Index FISHERY MASE stats by Index:

Recruitment Deviations

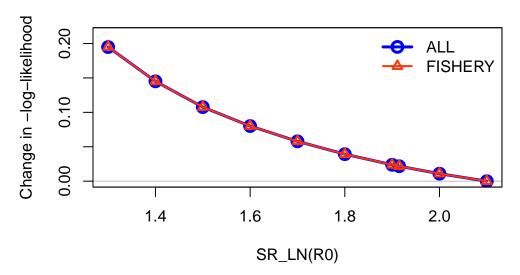
Likelihood Profile

[1] "SR_LN"					
	frac_change	${\tt include}$			label
TOTAL	1.0000	TRUE			Total
Catch	0.4634	TRUE			Catch
Equil_catch	0.0000	FALSE		Equili	ibrium catch
Survey	0.0303	TRUE			Index data
Length_comp	0.5099	TRUE			Length data
Recruitment	0.0000	FALSE			Recruitment
InitEQ_Regime	0.0000	FALSE	${\tt Initital}$	${\tt equilibrium}$	recruitment

Forecast_Recruitment	0.0000	FALSE	Forecast recruitment
Parm_priors	0.0002	FALSE	Priors
Parm_softbounds	0.0000	FALSE	Soft bounds
Parm_devs	0.0000	FALSE	Parameter deviations
Crash_Pen	0.0000	FALSE	Crash penalty

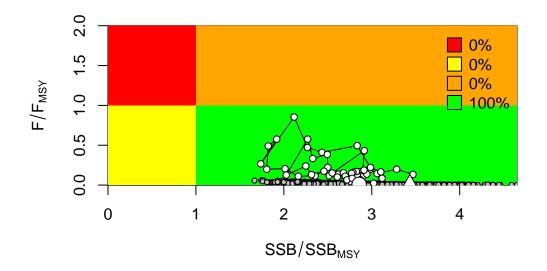


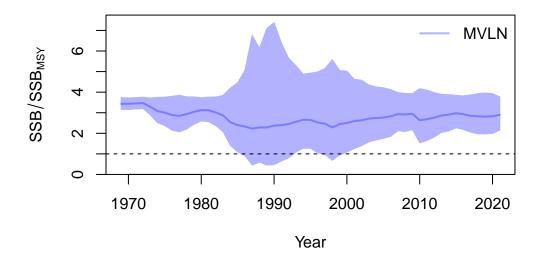
Changes in survey likelihood by fleet

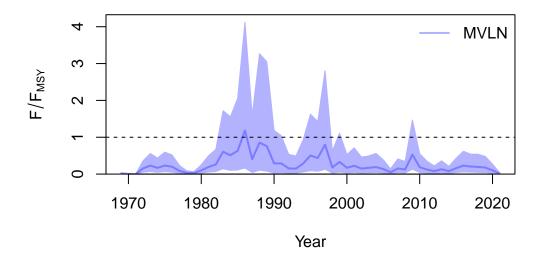


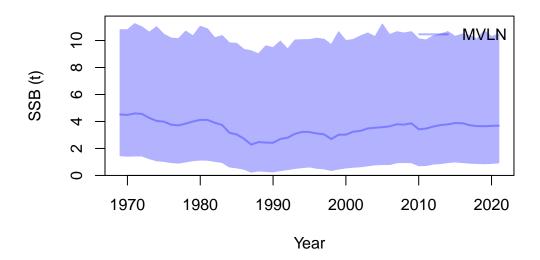
Management Quantities

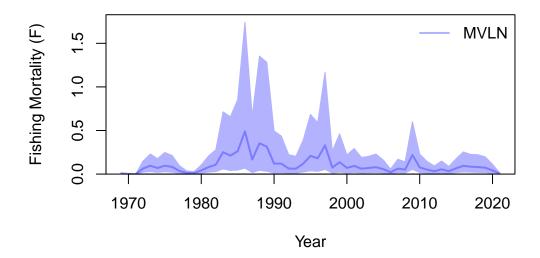
starter.sso with Bratio: SSB/SSBMSY and F: ${\tt _abs_F}$











null device

Jitter

