



NOAA
FISHERIES

SEDAR 89 Correction

South Atlantic Golden Tilefish

October 22nd 2025

Outline

- Background
- Data
- Assessment Model
- Assessment Results
- Uncertainty
- Projections

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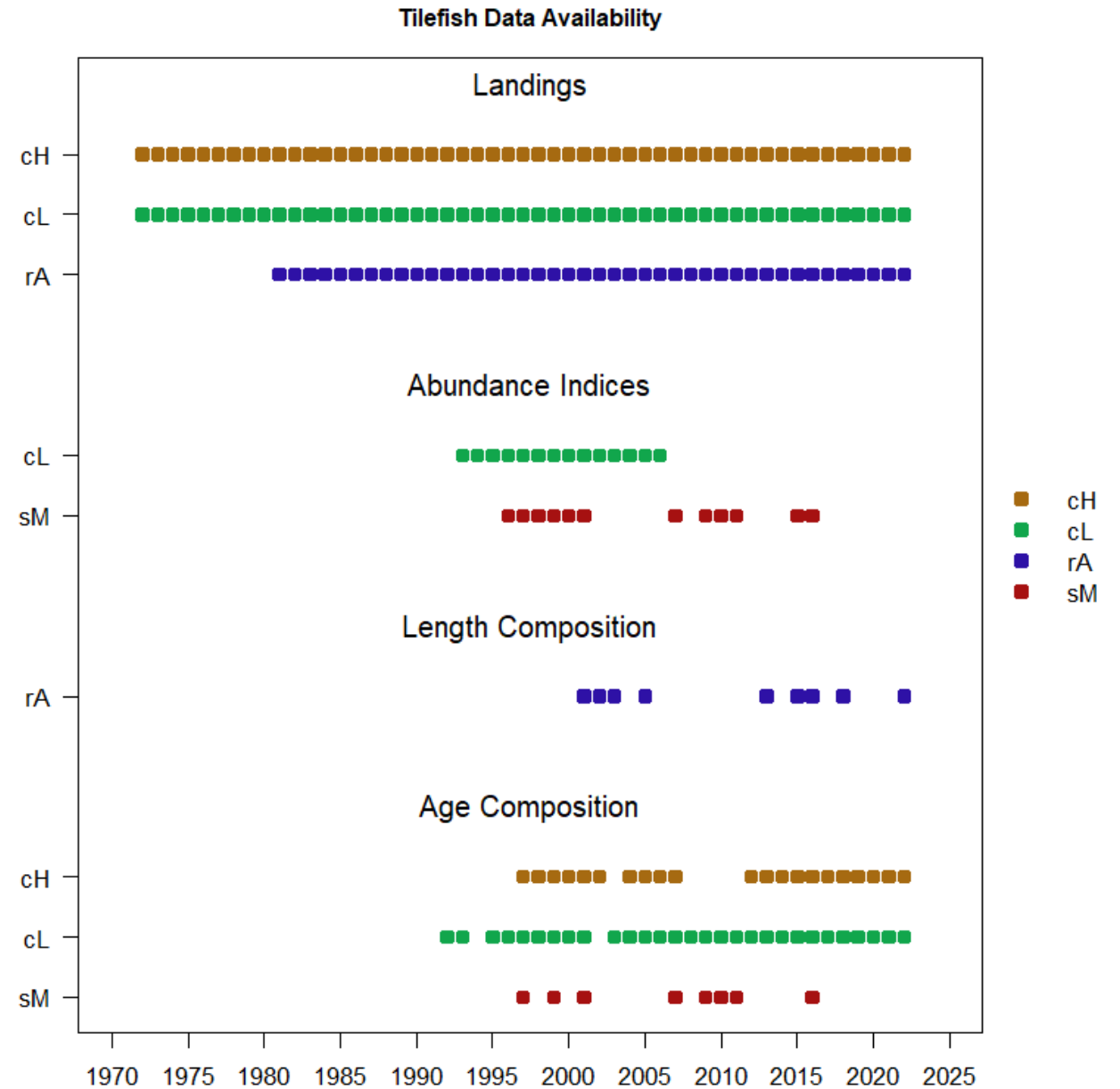
Background

- SEDAR 89 Completed and Reviewed by SSC in October 2024
- Council staff noticed discrepancy between commercial landings provided by ACCSP and quota monitoring estimates in April 2025
- ACCSP provided corrected landings estimates on September 4
- Conducted an assessment with corrected data
- Made one change to BAM (Finit)

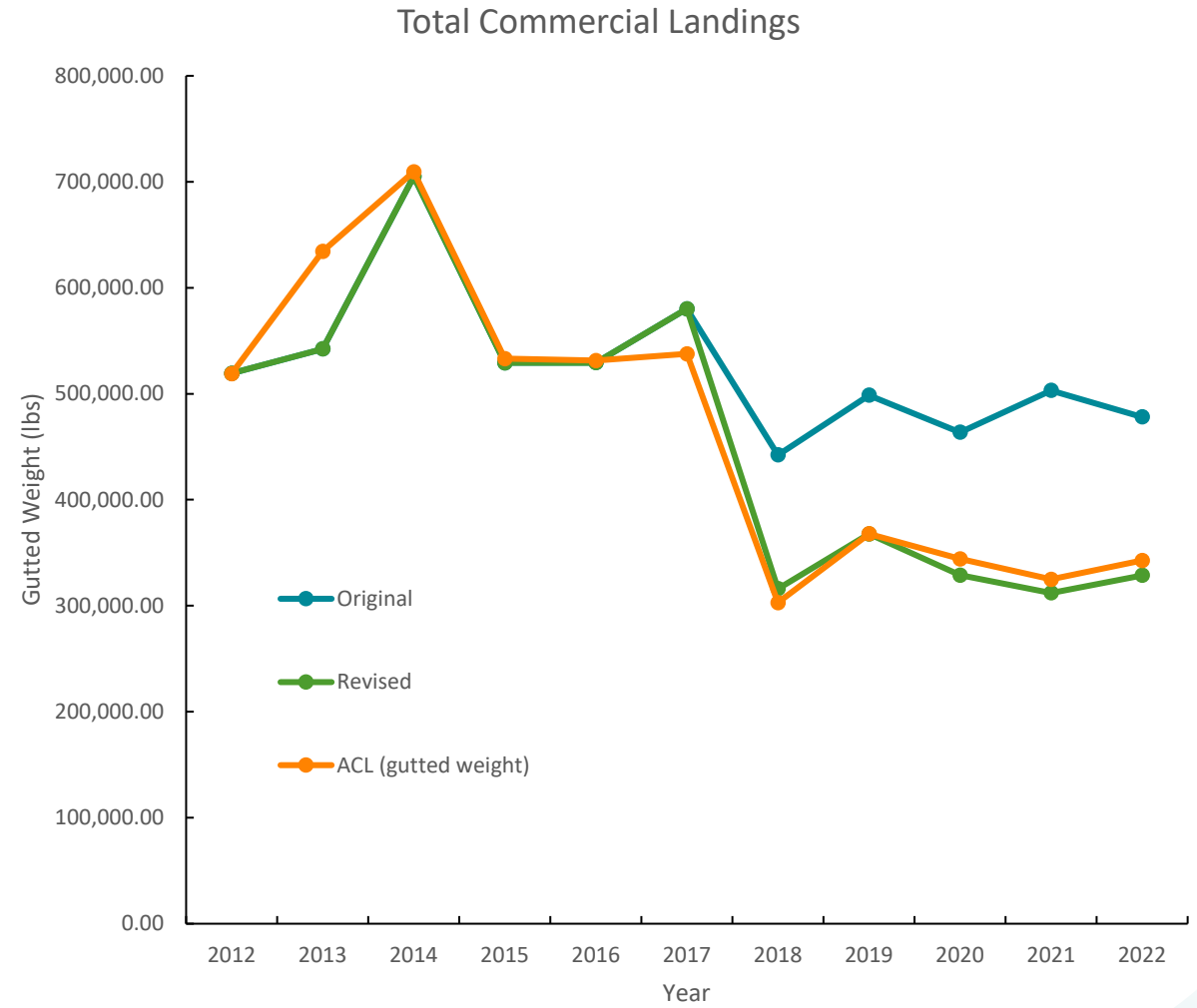
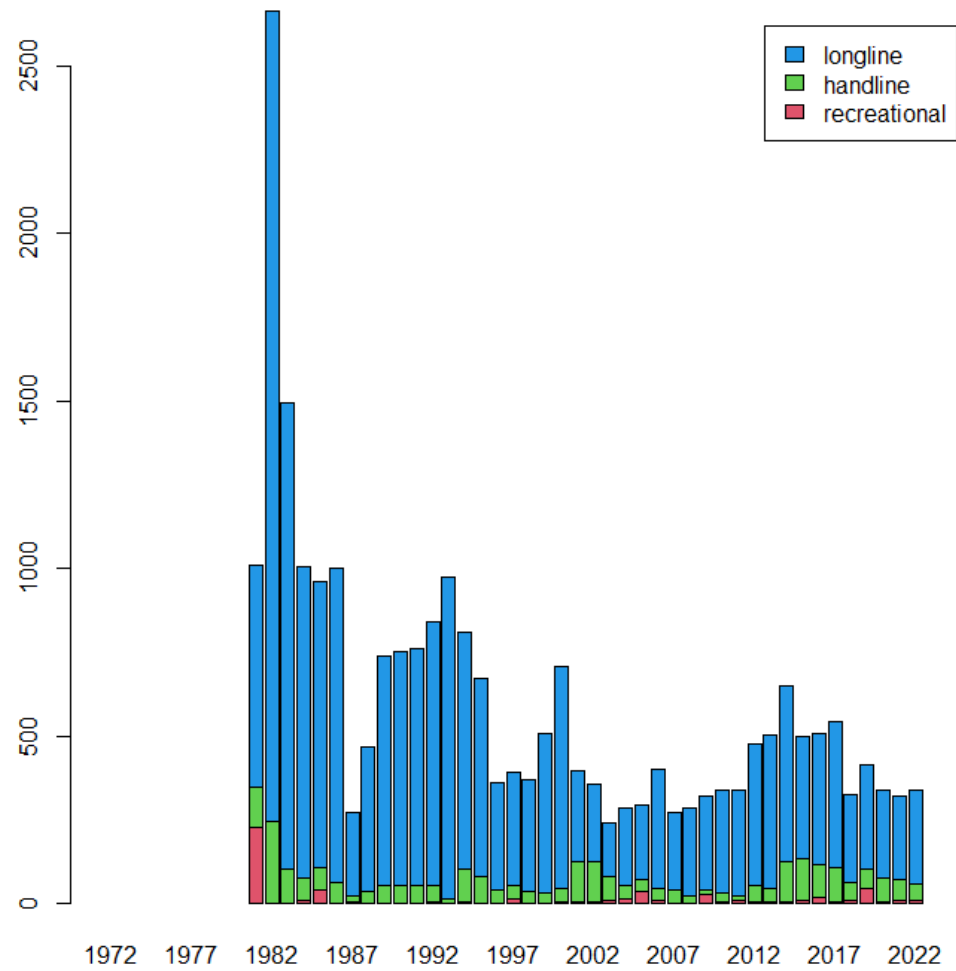
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Data Availability



Landings

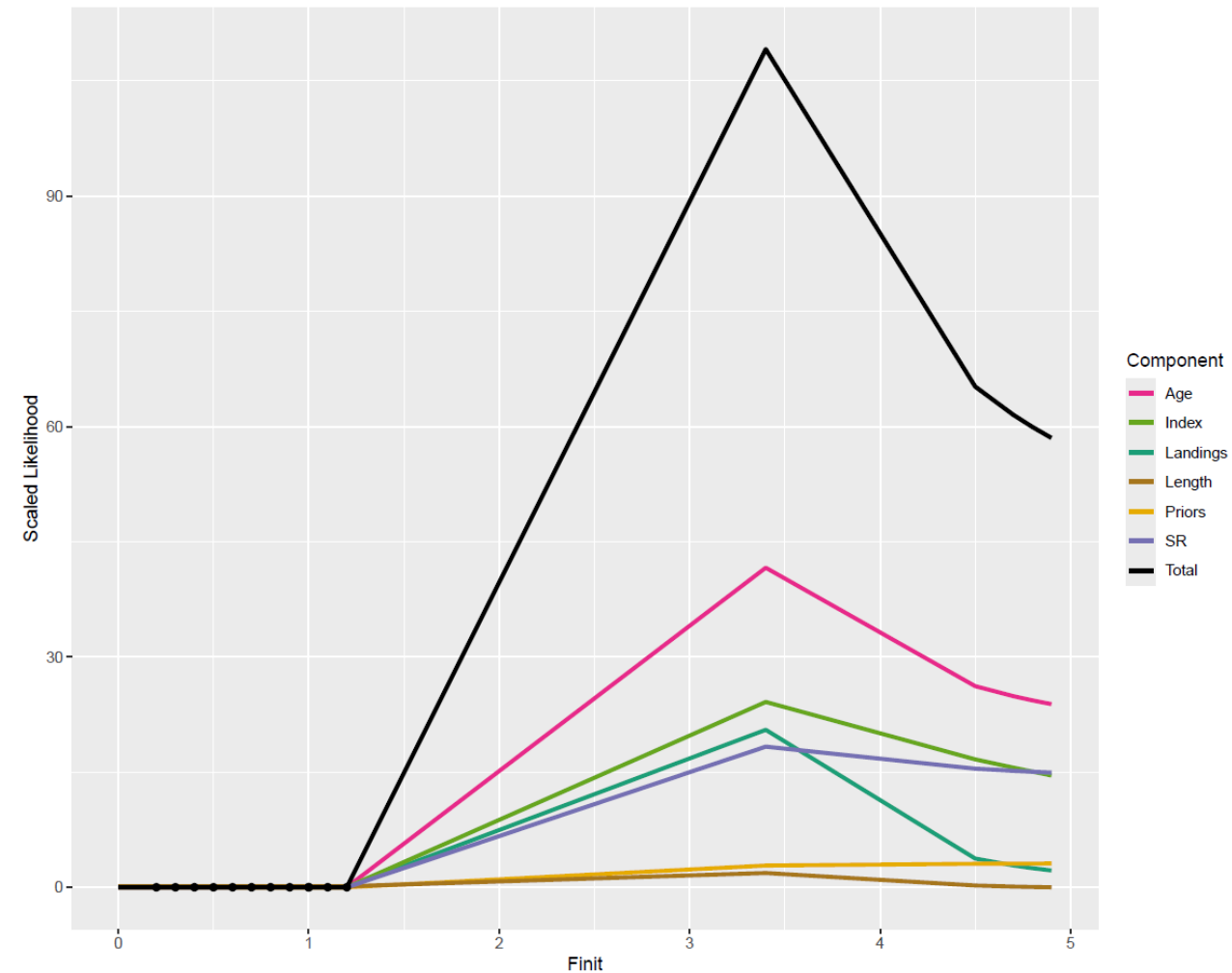


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Modifications to BAM

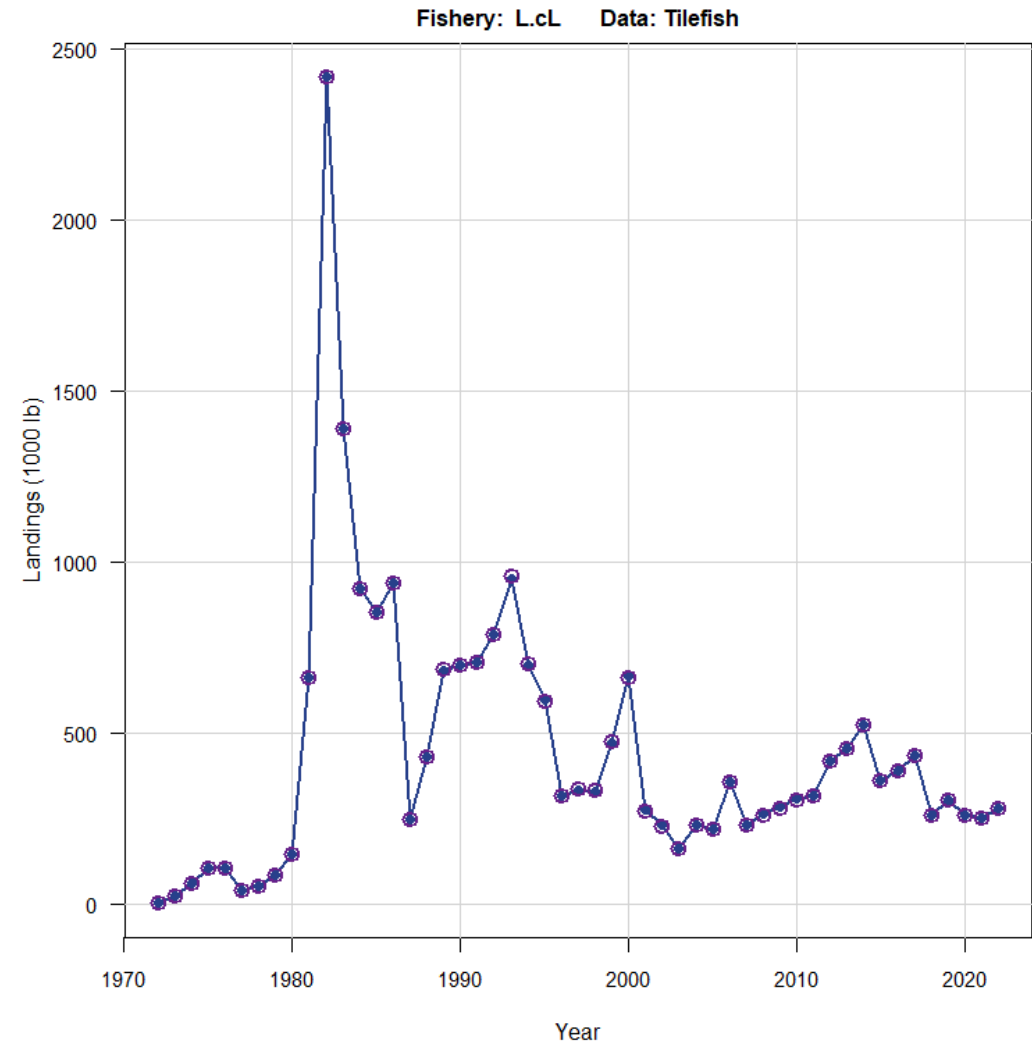
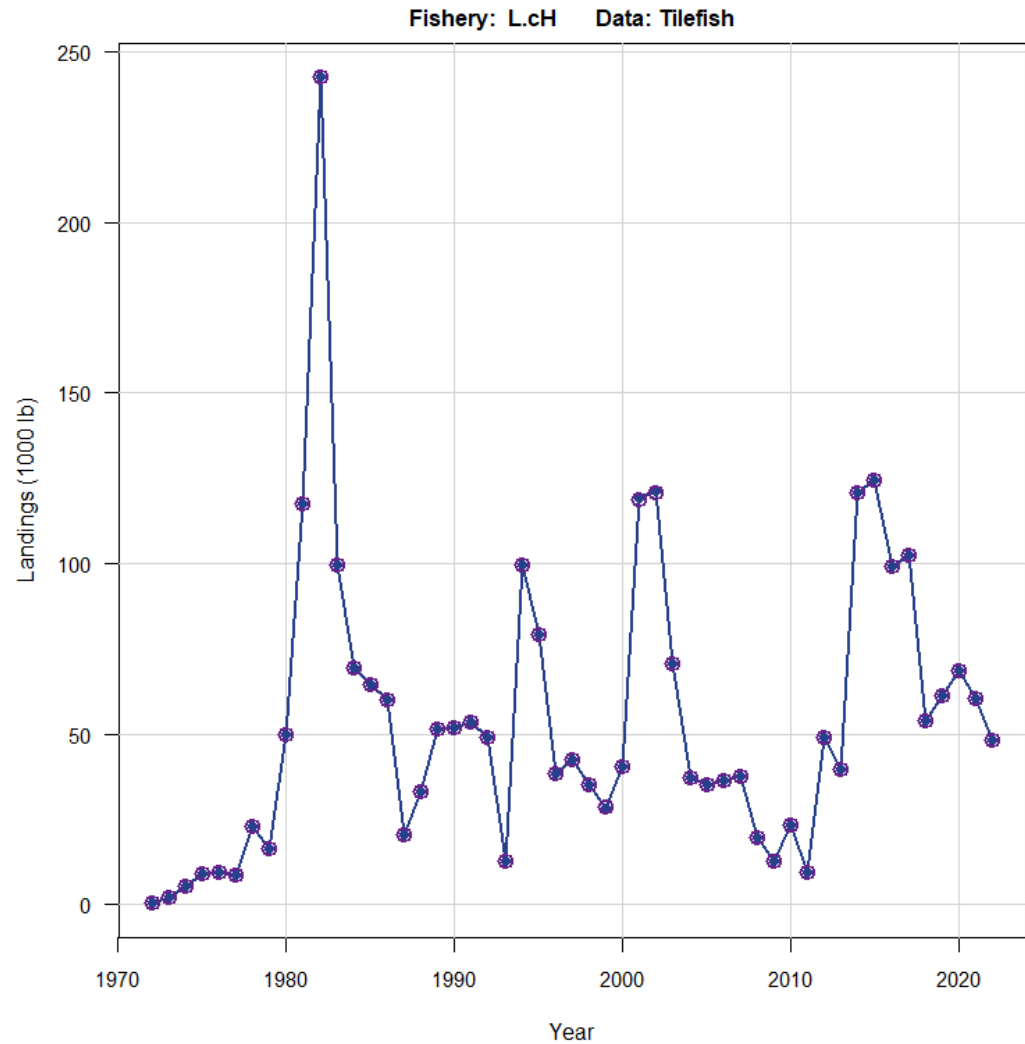
- Finit parameterized as multiplier of average of first 3 years F
 - Previous assessment used a fixed value of 0.01
- Likelihood profiling showed inability to estimate so fixed at 1



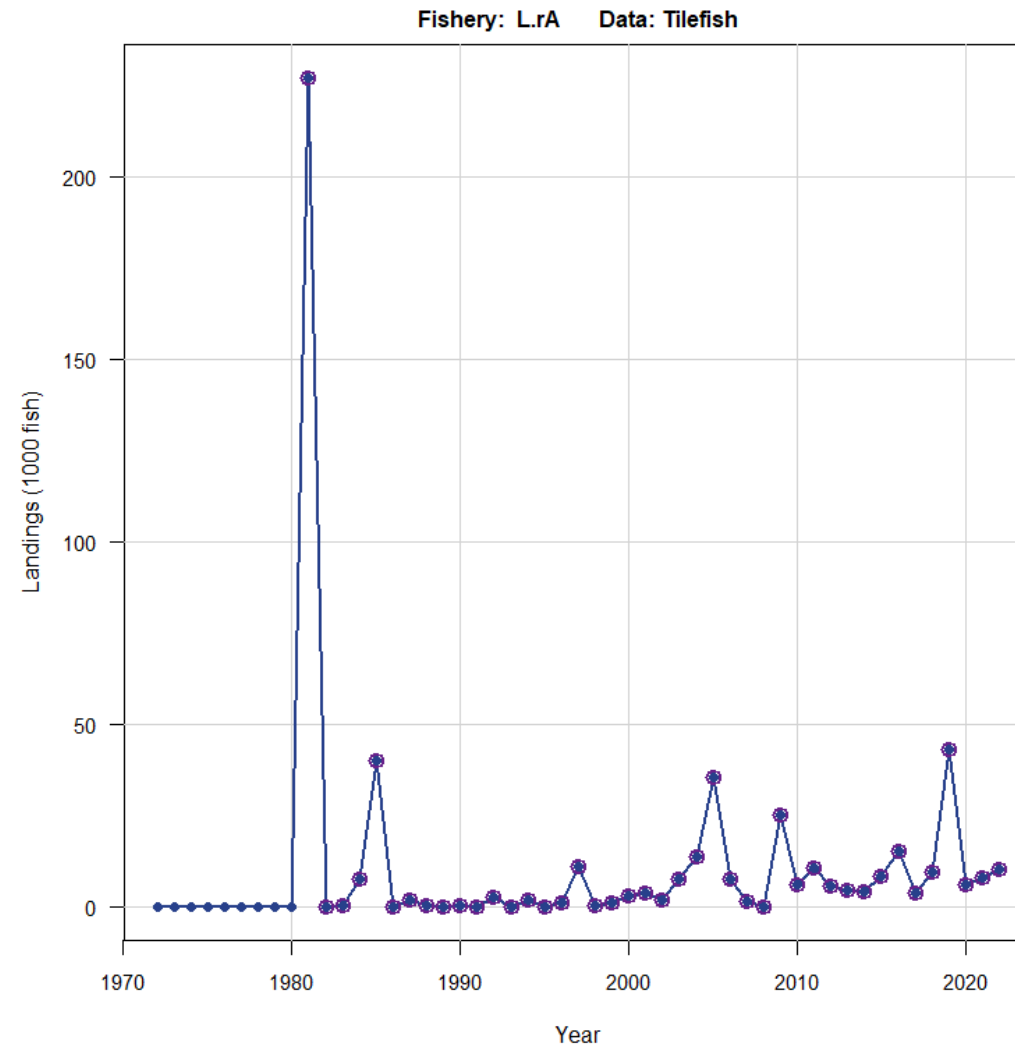
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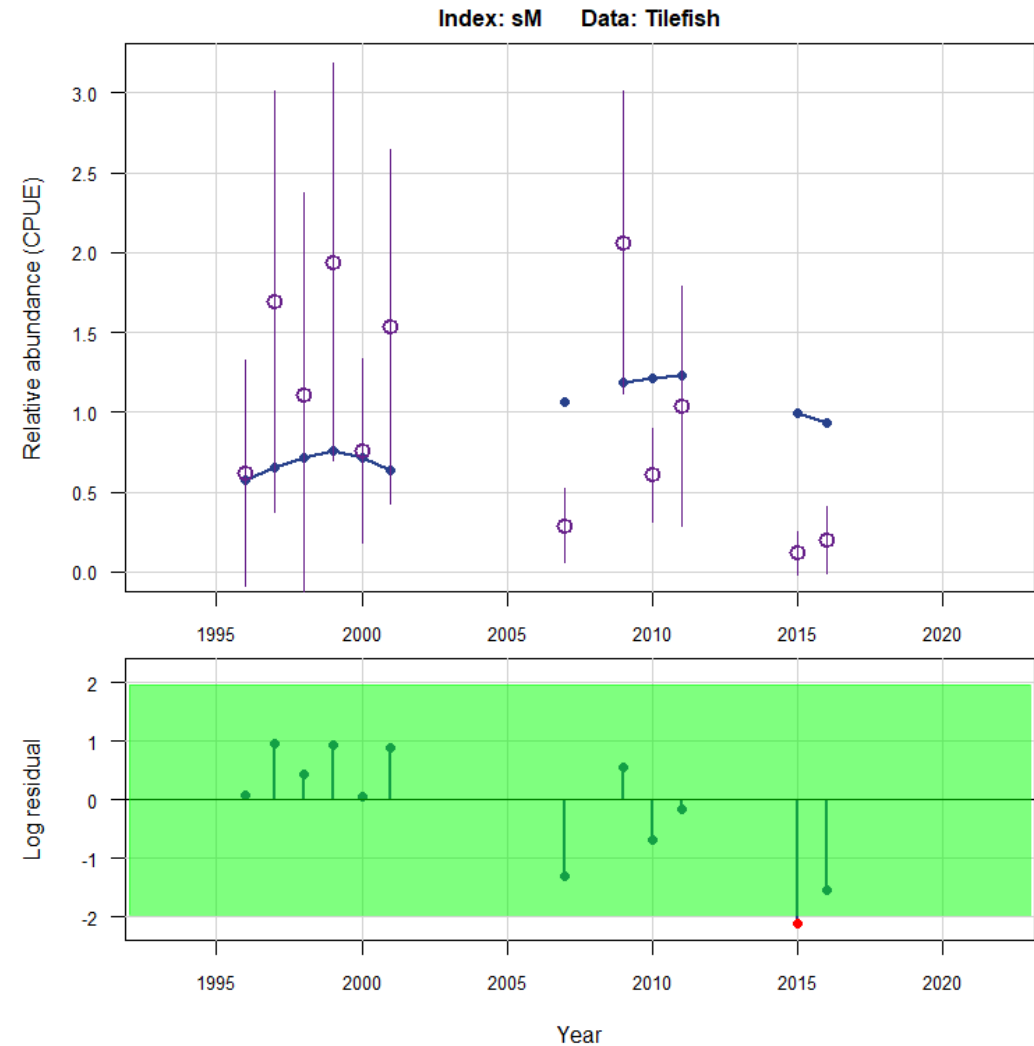
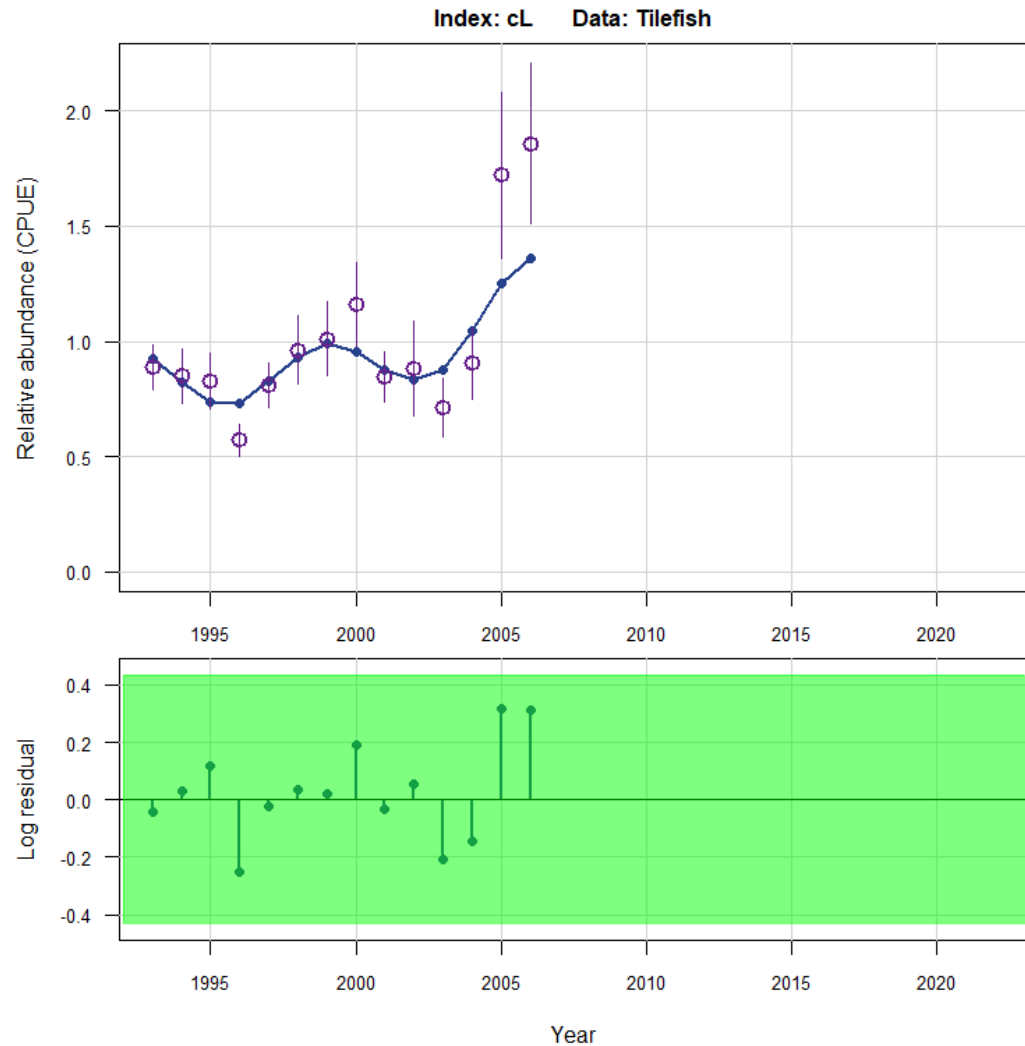
BAM base model – fit to comm landings



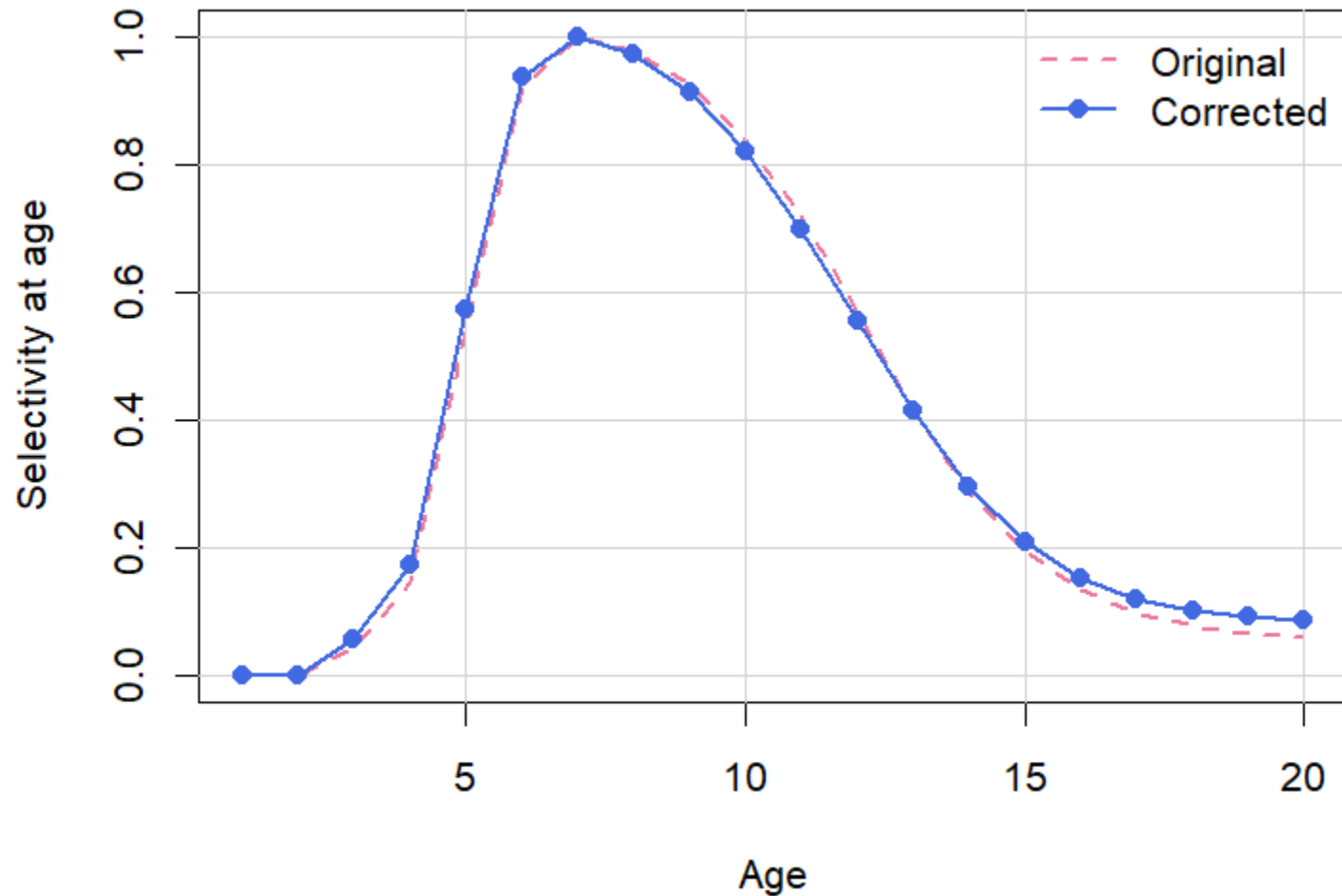
BAM base model – fit to rec landings



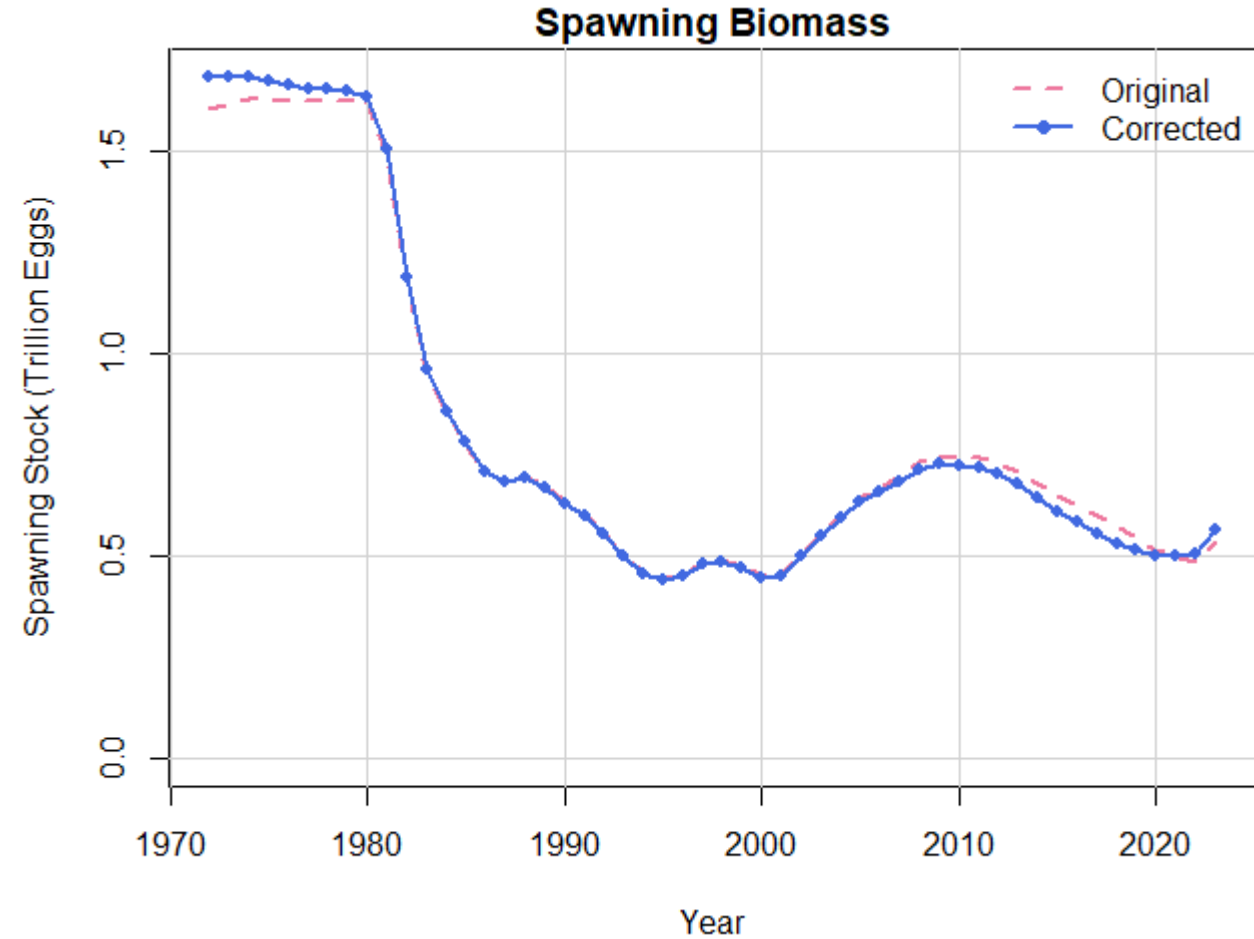
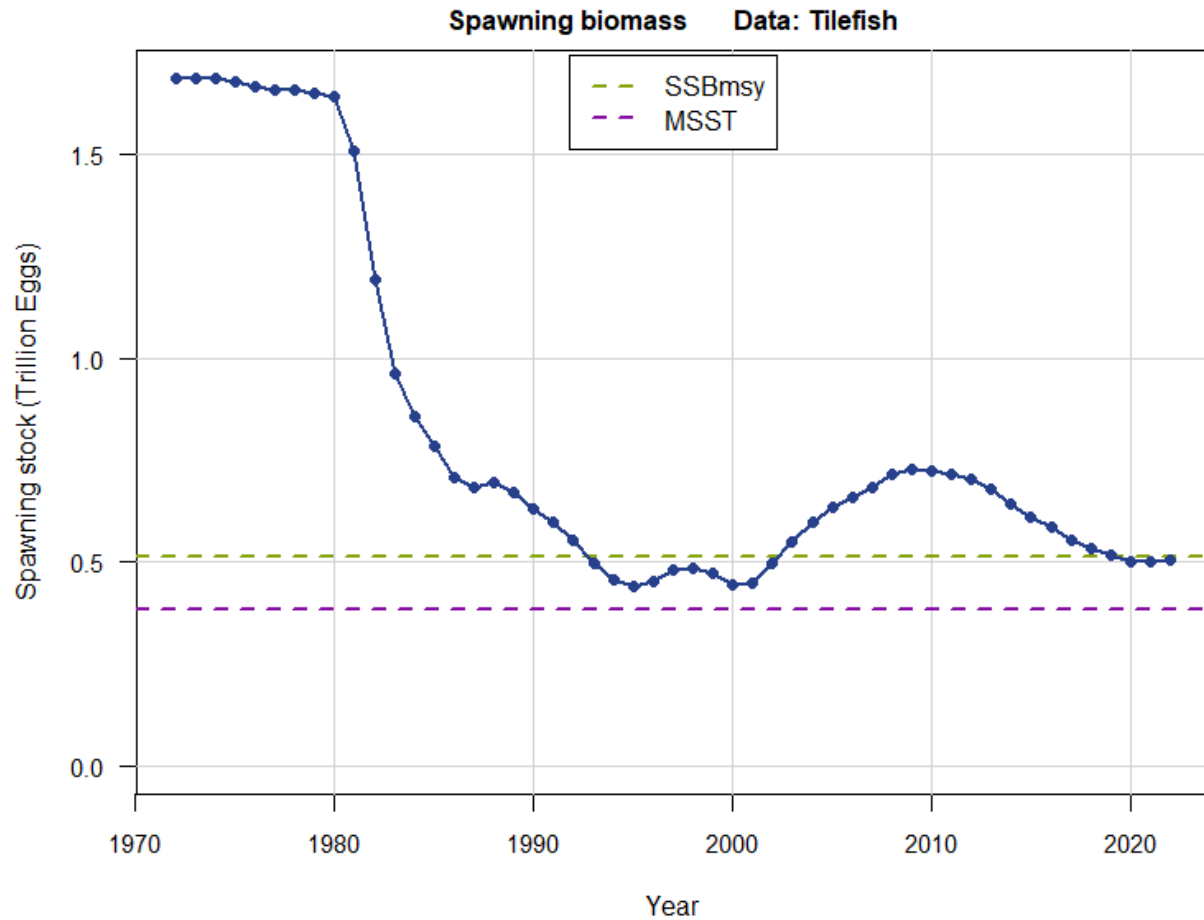
BAM base model – fit to fishery index



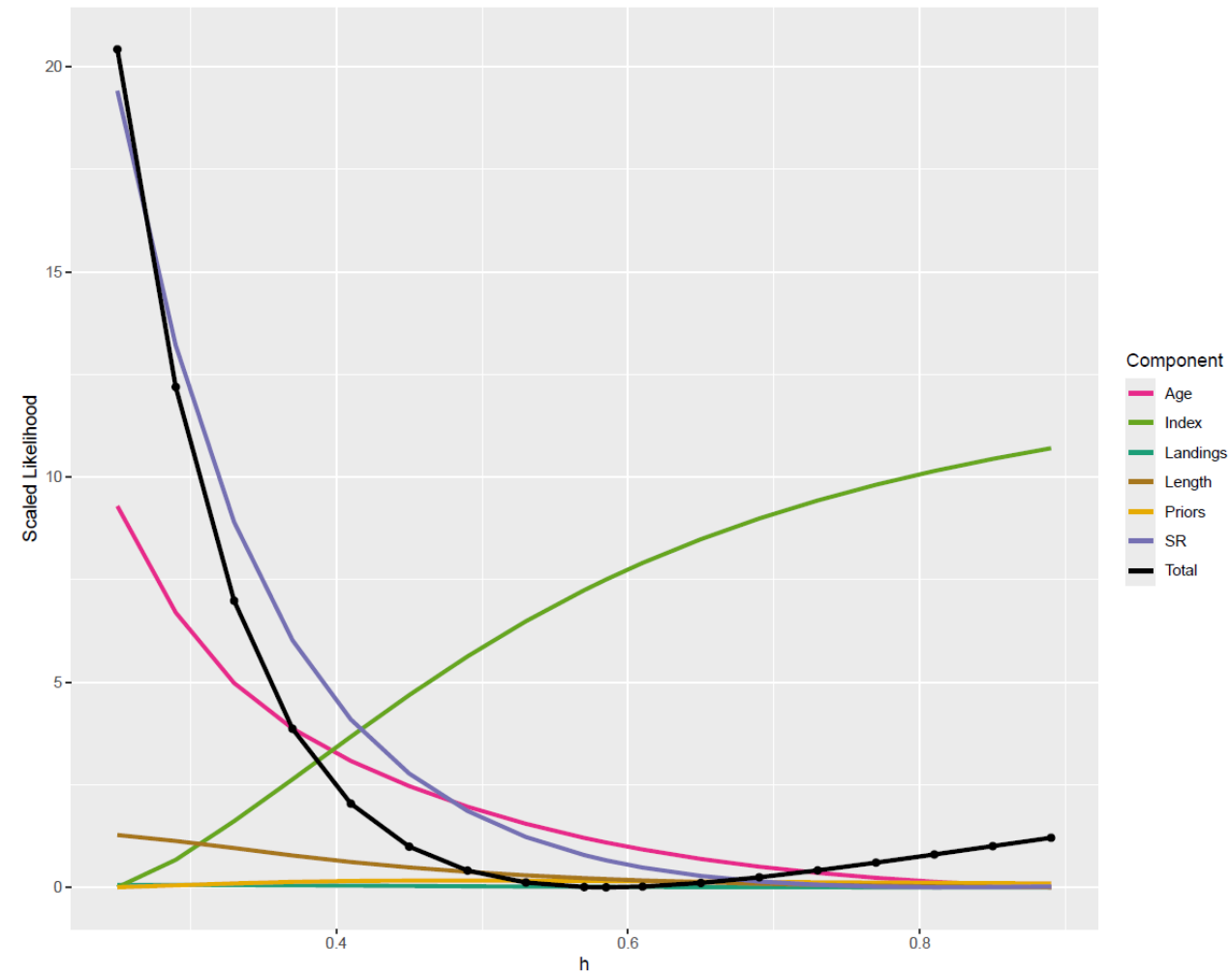
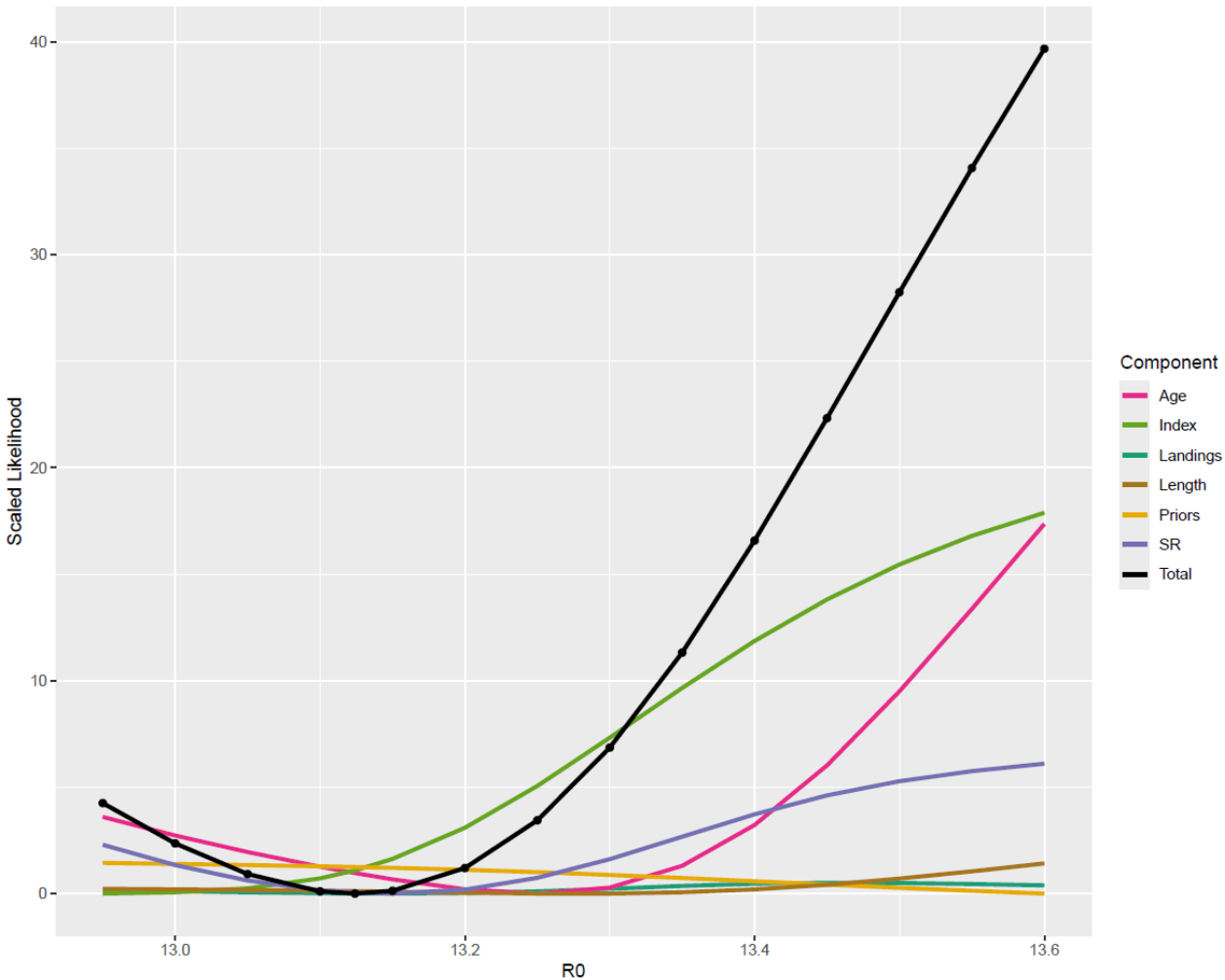
BAM base model – Weighted Selectivity



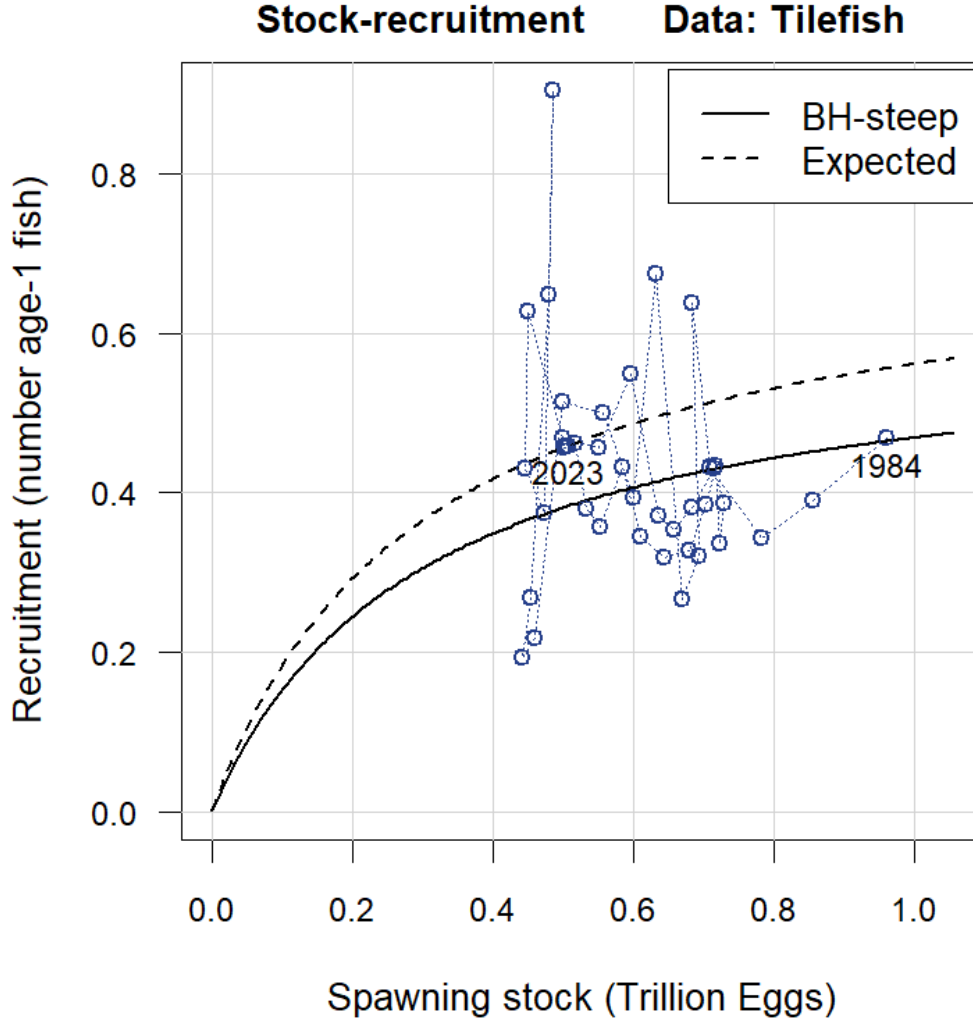
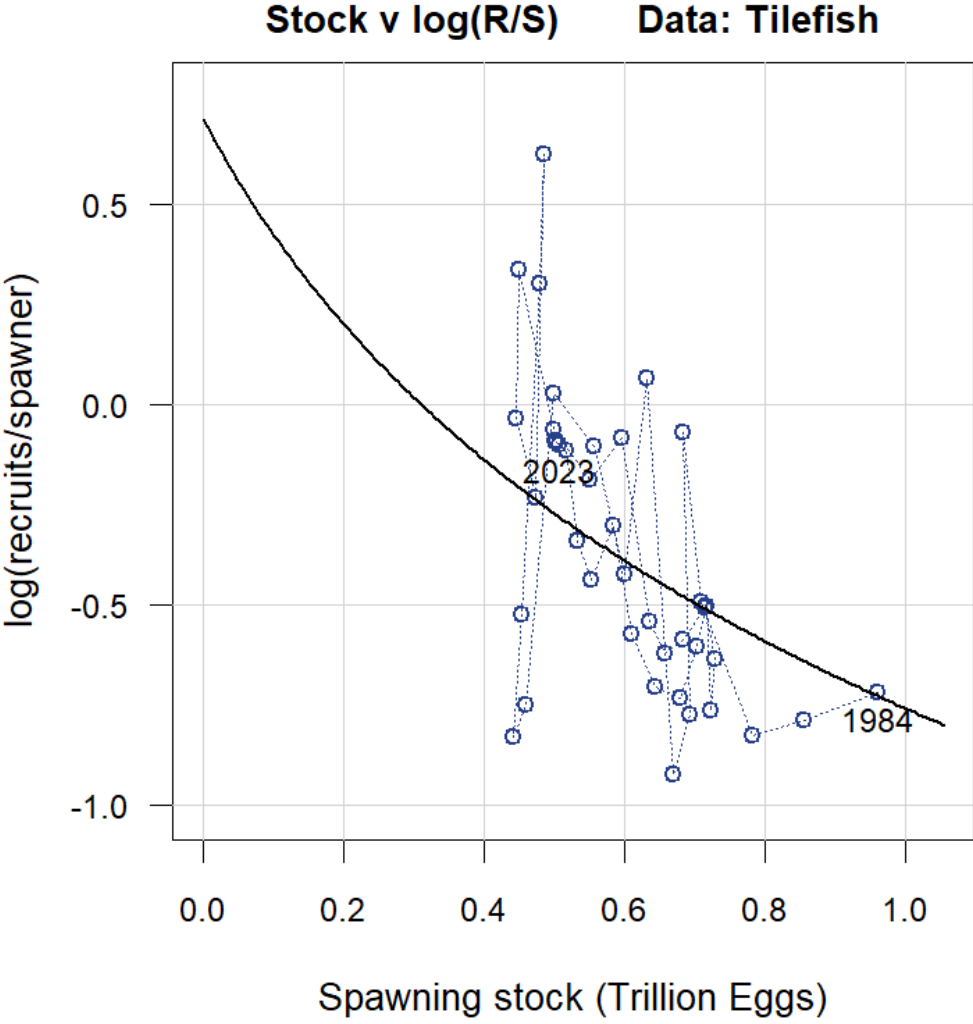
BAM base model – Spawning stock biomass



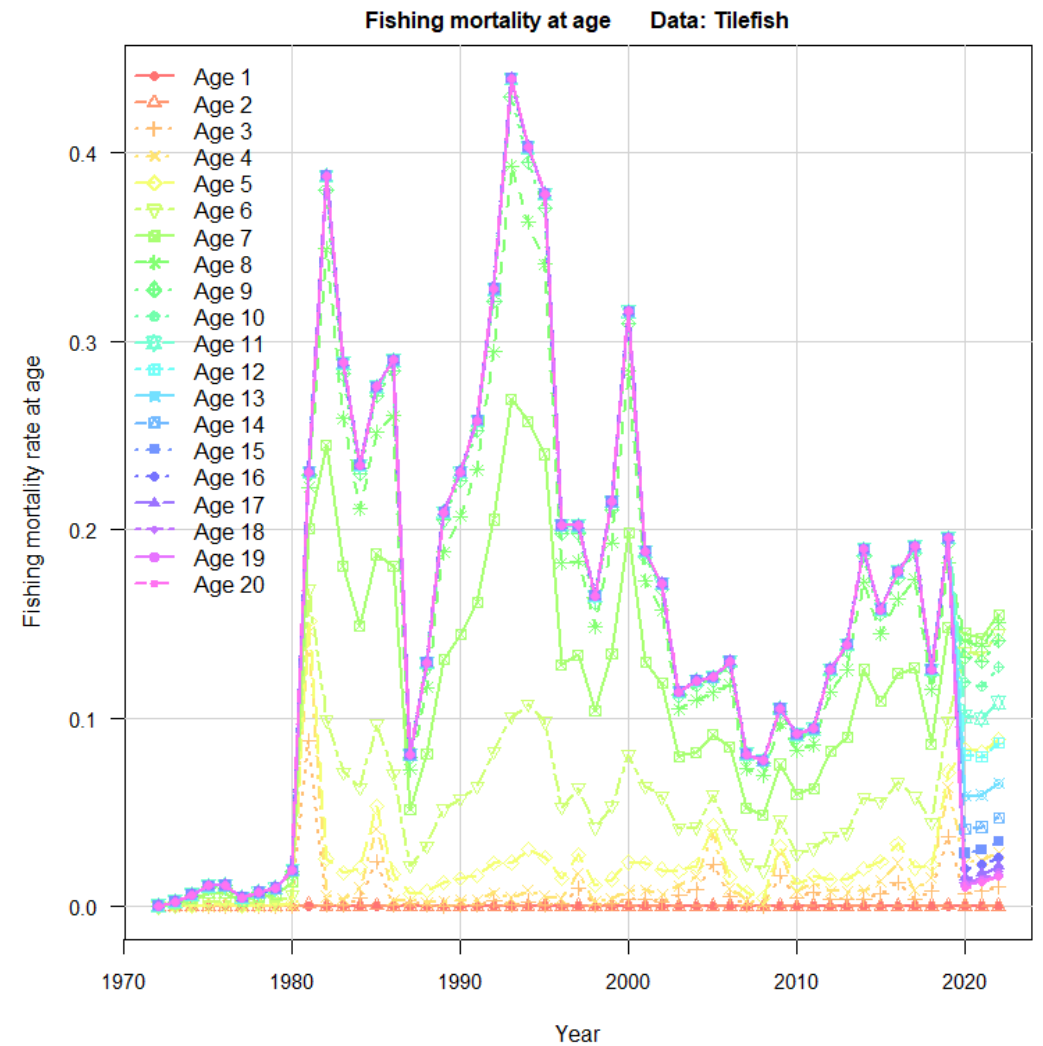
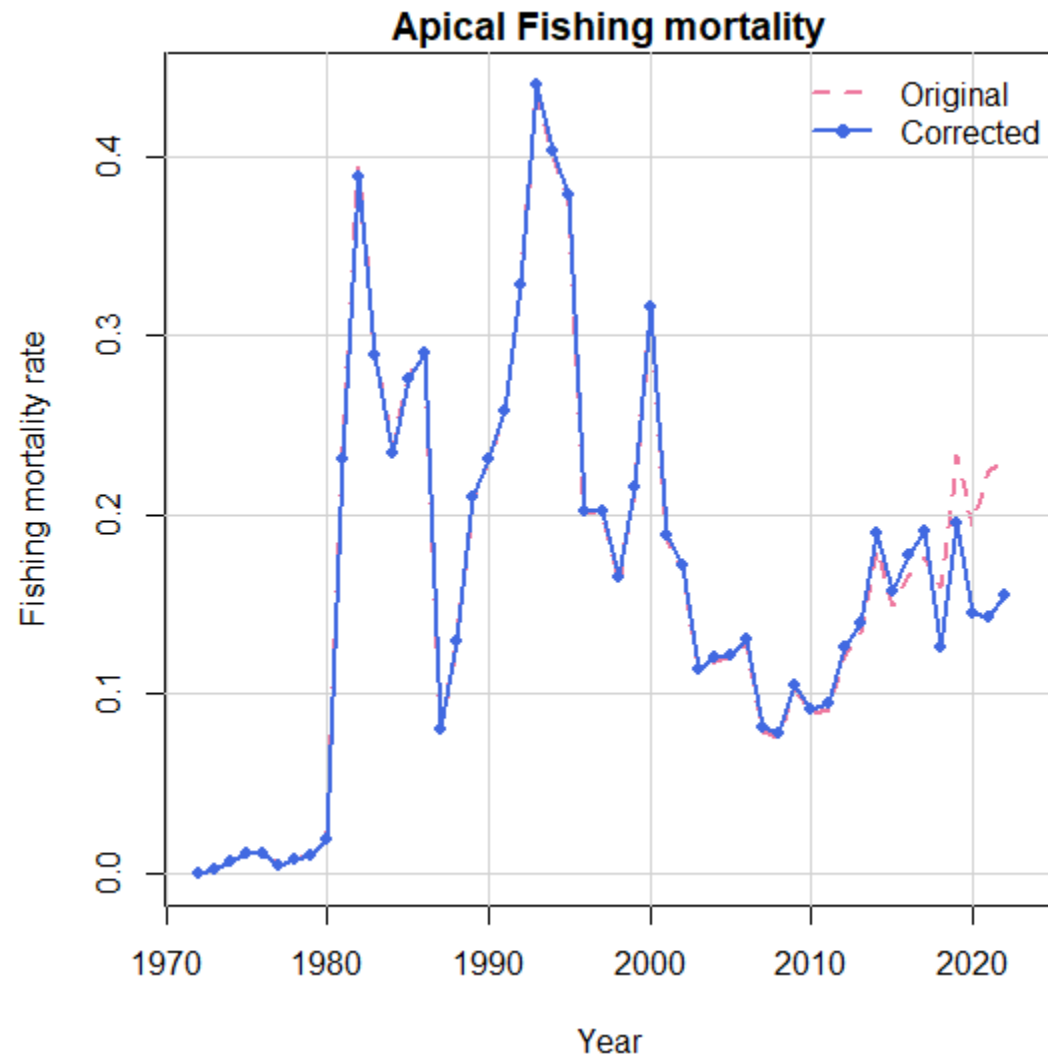
BAM base model – LogR0 & steepness profile



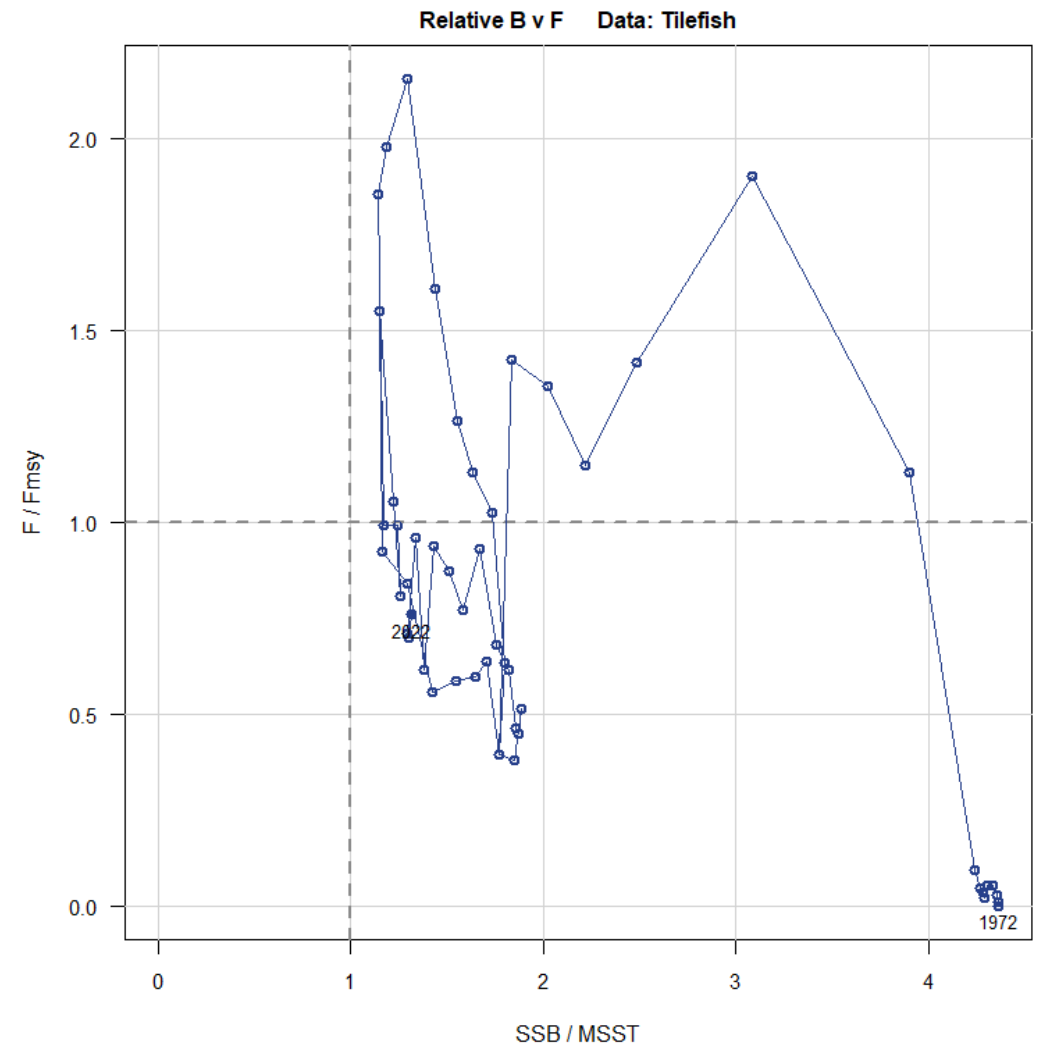
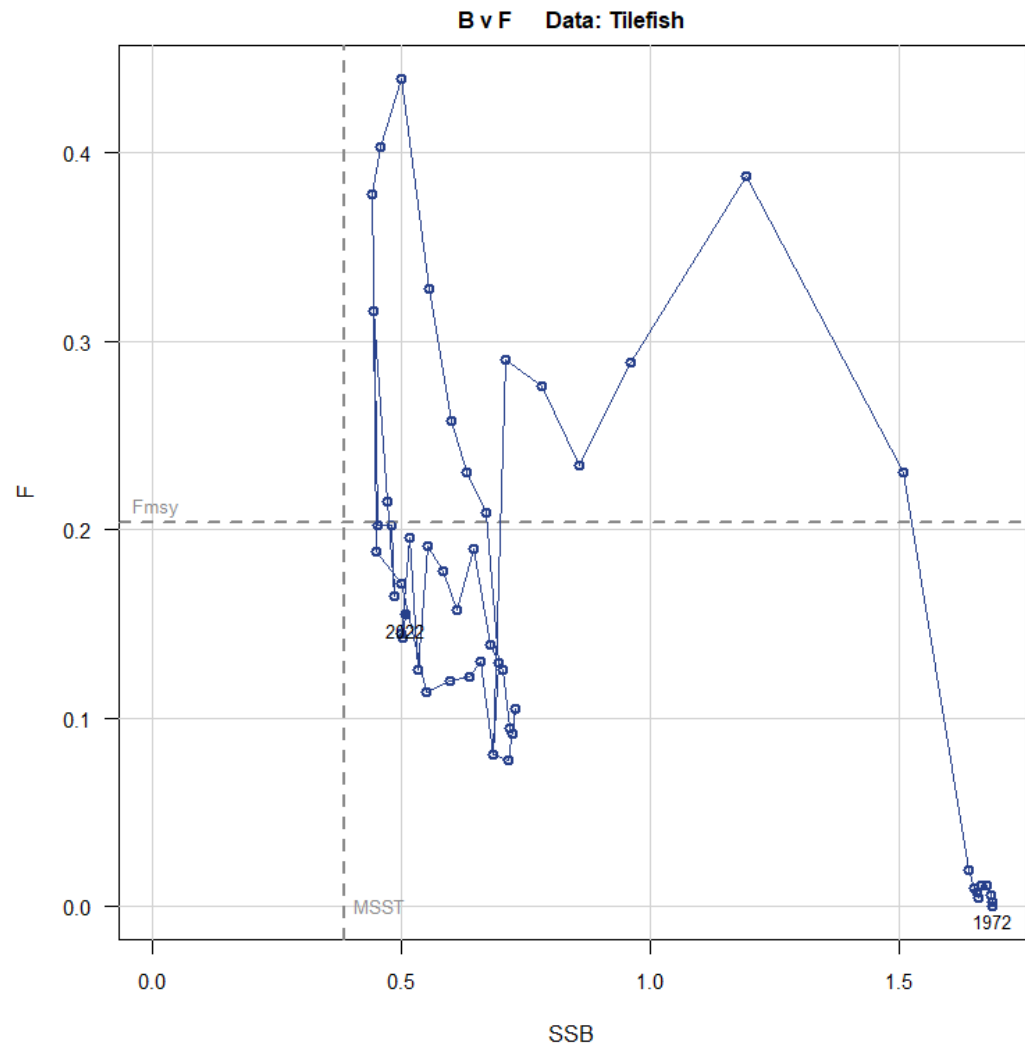
BAM base model – Spawners-recruits



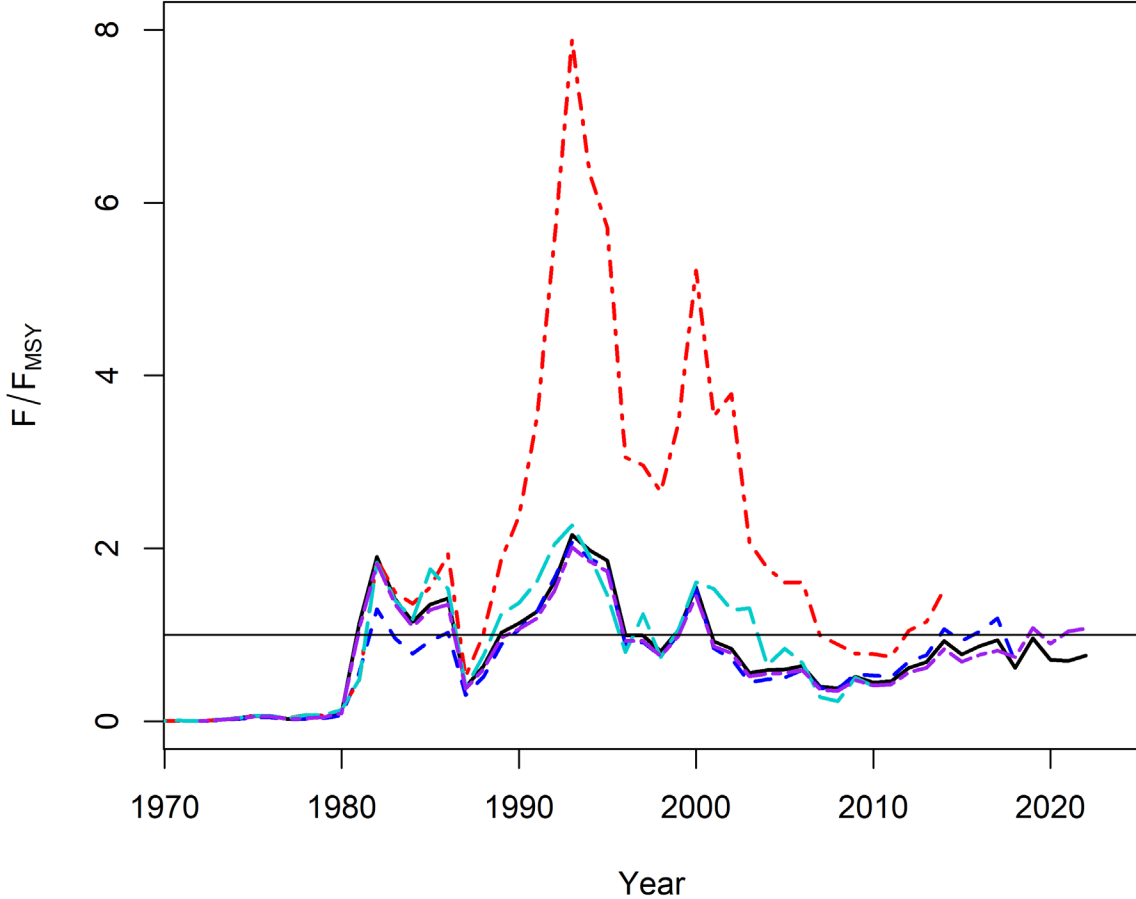
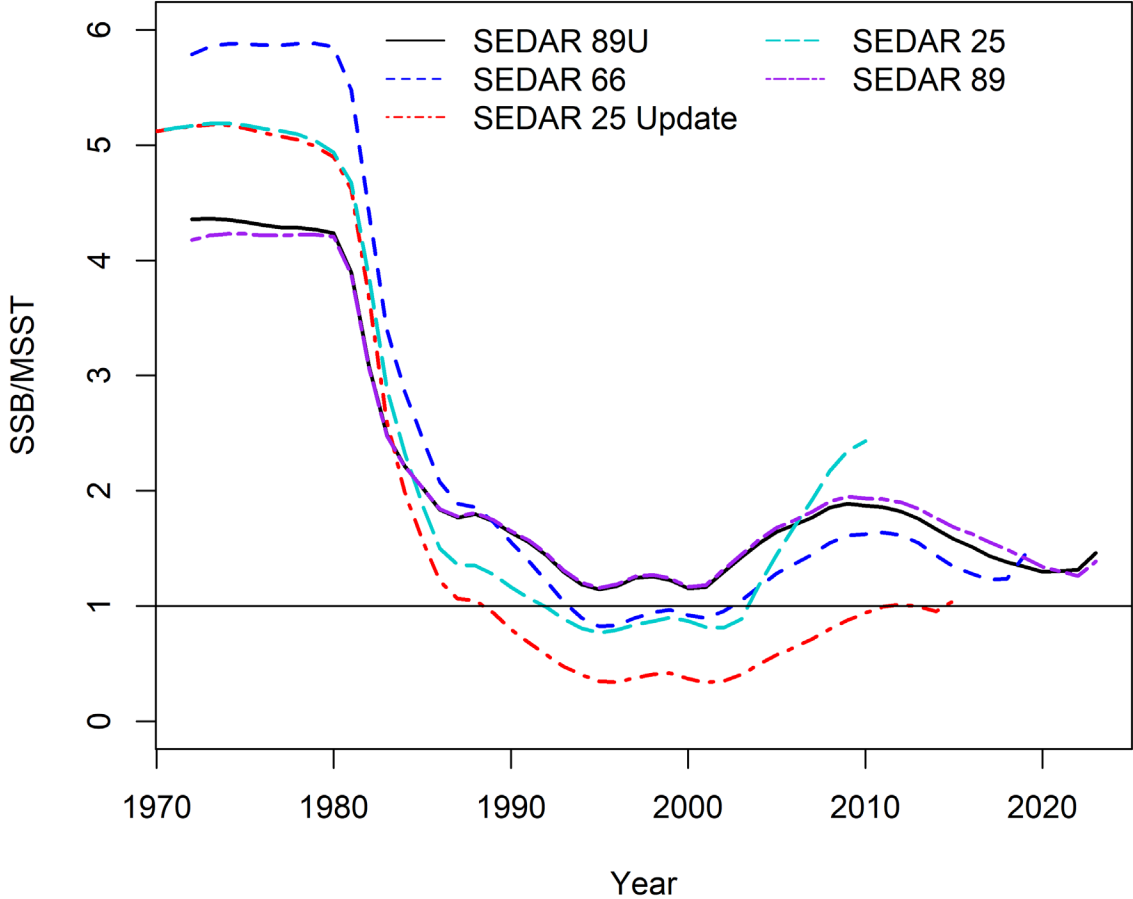
BAM base model – Fishing mortality



BAM base model – Phase Plot



BAM base model – Previous Assessments



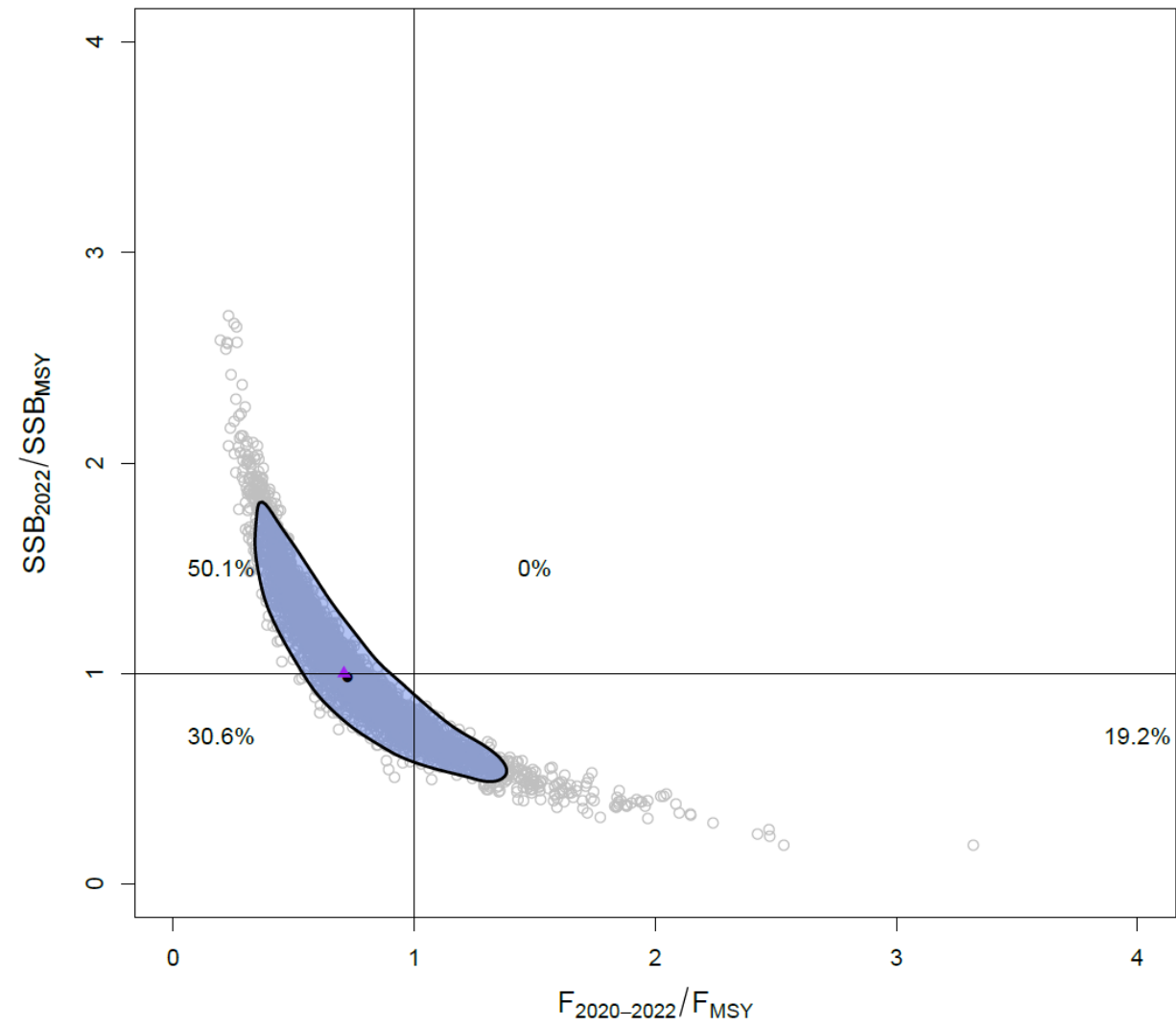
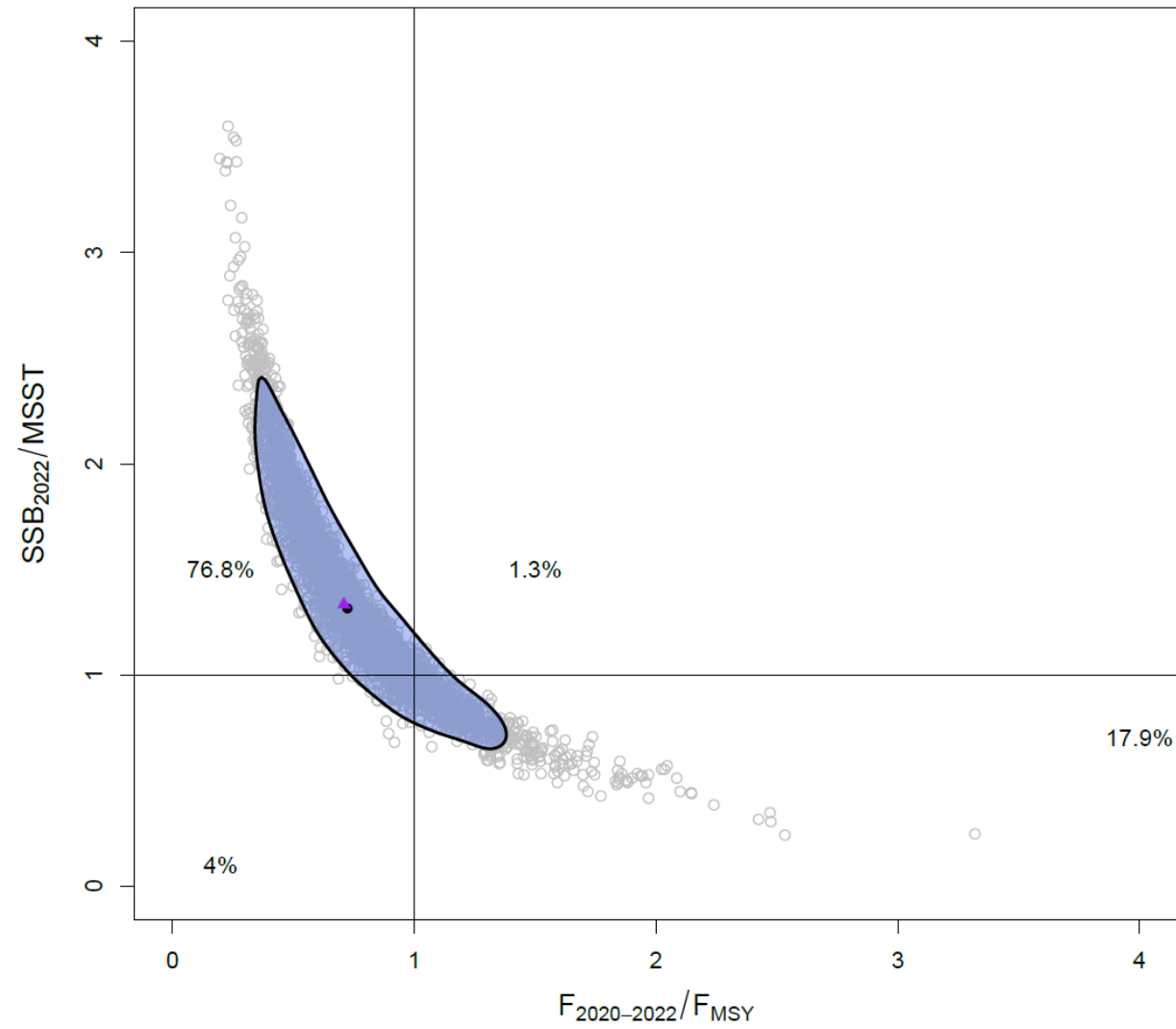
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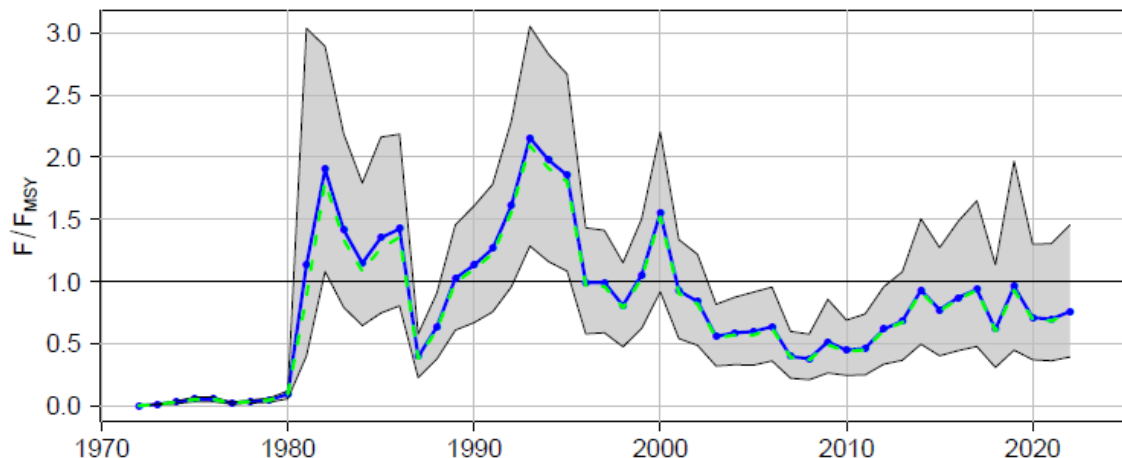
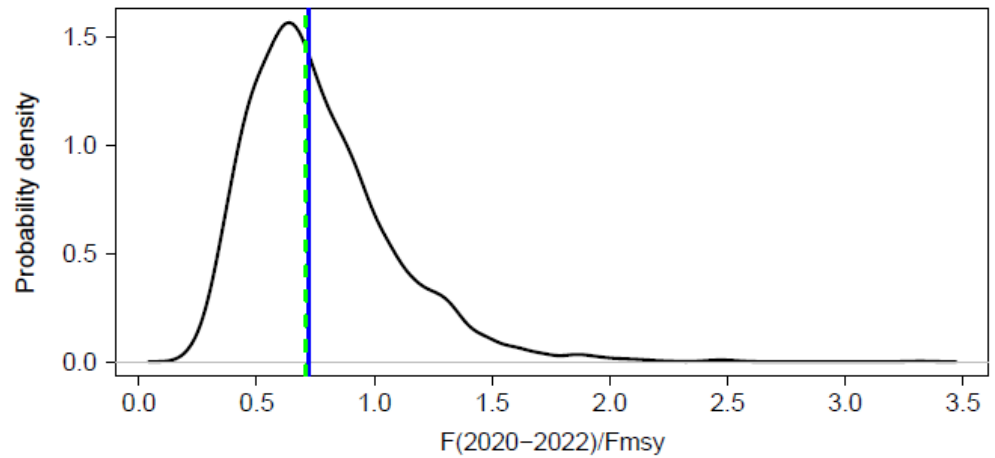
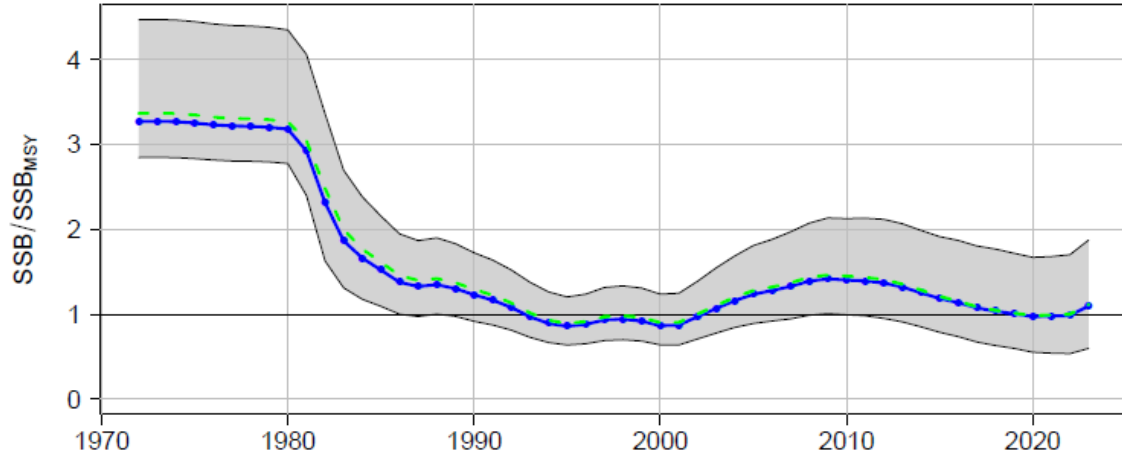
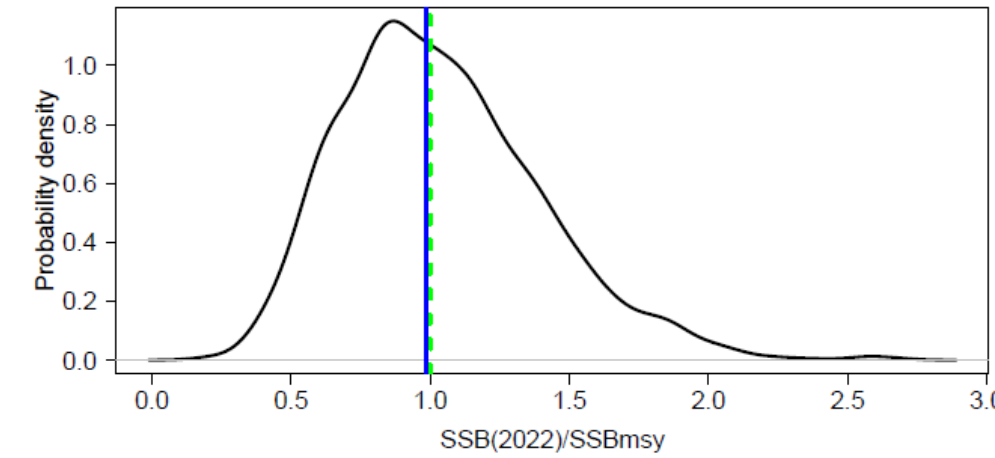
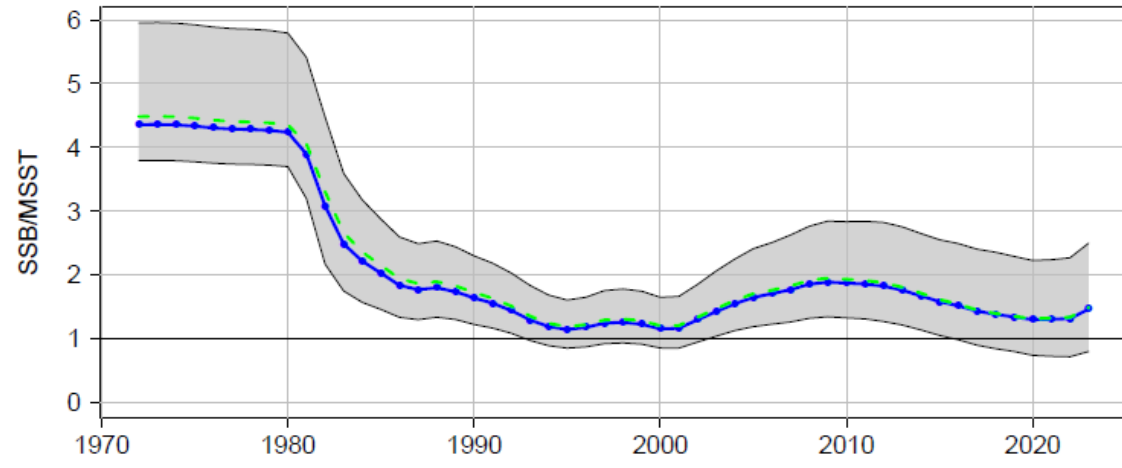
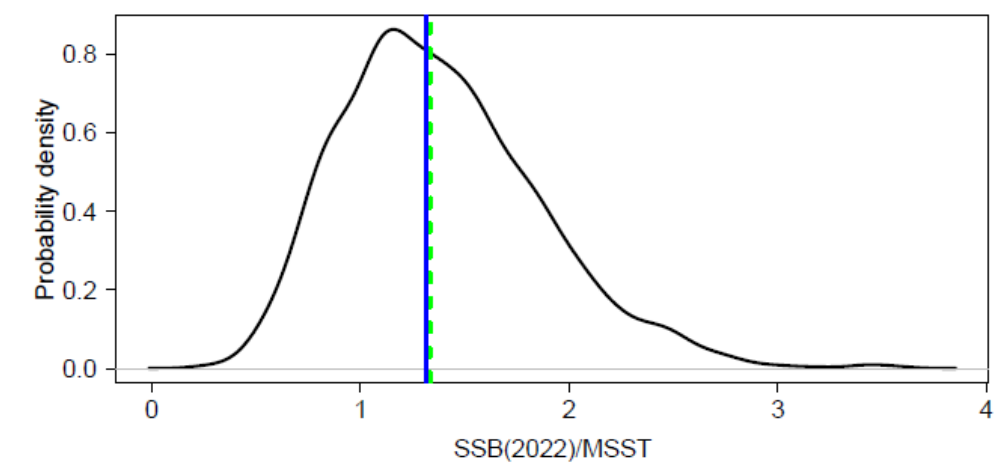
Characterizing uncertainty: Monte Carlo/Bootstrap Ensemble (MCBE)

- Bootstrap the data
 - Multinomial resampling of age and length compositions
 - Multiplicative lognormal error on indices and removes
 - Natural mortality database for Hamel and Cope (2022) regression
- Monte Carlo draws
 - Natural mortality max age: Drawn from $U()$
 - Natural mortality min age: Drawn from $U()$
 - Growth model: refit to data with t_0 drawn from $U(-1,0)$
 - Batch Fecundity
 - Number of batches
 - Peak spawning time
 - Rec Sigma
 - Maturity at age
 - Length-Weight relationships – Whole weight and gutted weight
- 4000 model fits
 - Retained 3043

MCBE – Phase Plots



MCBE — Status



Status Indicator Table

Quantity	Units	Estimate	Median	SE
F_{MSY}	y^{-1}	0.20	0.21	0.06
$75\%F_{MSY}$	y^{-1}	0.15	0.16	0.05
B_{MSY}	1000 lb whole	6158.52	5856.66	997.99
SSB_{MSY}	Trillions of Eggs	515.42	485.07	1165.03
MSST	Trillions of Eggs	386.57	363.80	873.77
MSY	1000 lb gutted	523.31	521.82	66.82
$L_{75\%MSY}$	1000 lb gutted	502.45	501.52	67.16
$L_{current}$	1000 lb gutted	373.42	371.24	16.91
R_{MSY}	millions fish	0.05	0.04	0.01
$F_{2020-2022}/F_{MSY}$	—	0.72	0.71	0.31
$SSB_{2022}/MSST$	—	1.31	1.33	0.48
SSB_{2022}/SSB_{MSY}	—	0.98	1.00	0.36

Summary of assessment results

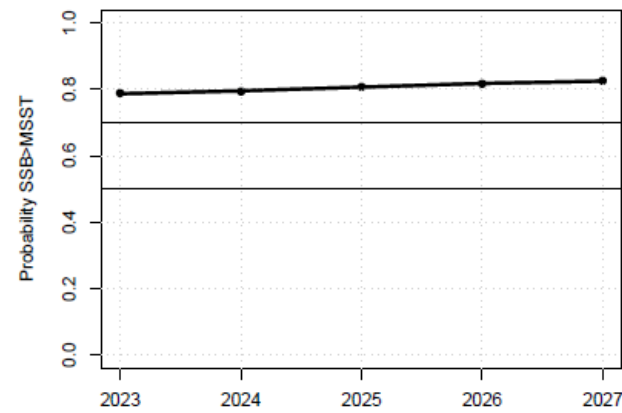
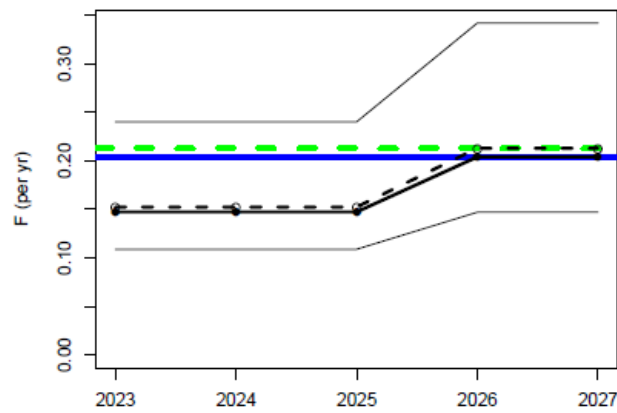
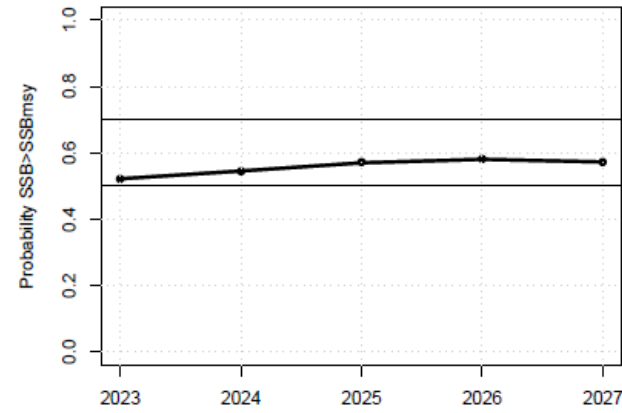
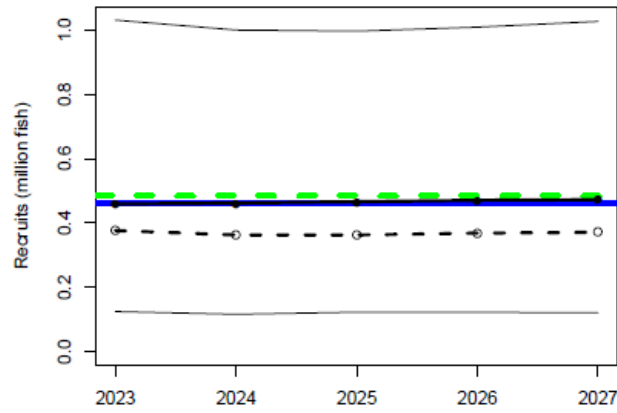
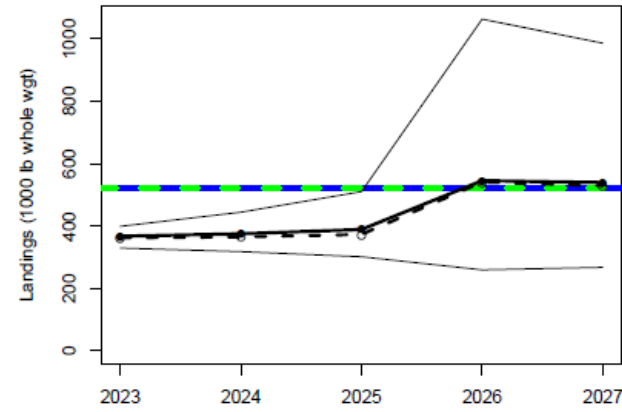
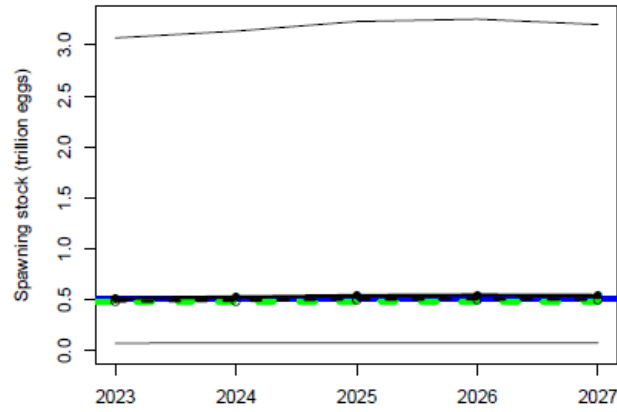
- Half of MCBE and base model say biomass is below the target reference point (SSB_{MSY})
- Majority of MCBE (78.1%) suggest stock is not overfished
- Base model, Median and 80.8% of MCBE suggests not overfishing
- Compared to previous assessment less exploited in terminal years (i.e., higher biomass) and lower F
 - Slightly higher estimate of MSY

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$$F = F_{MSY}$$

OFL



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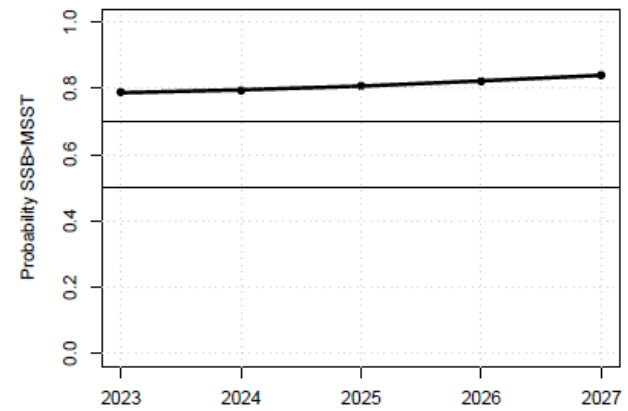
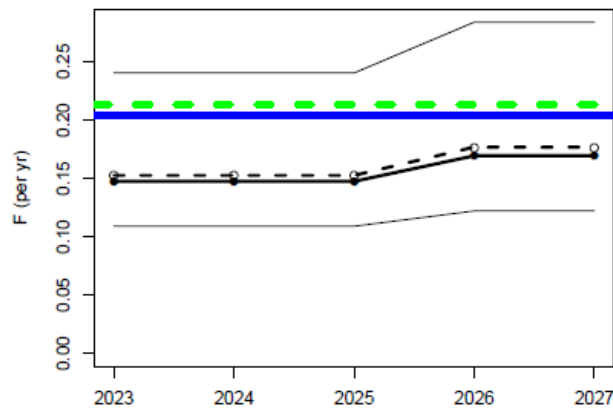
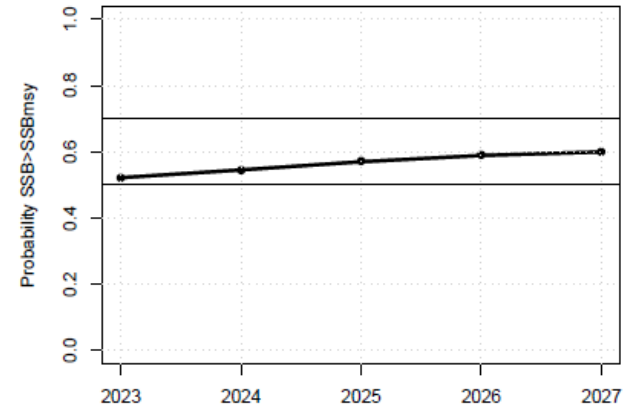
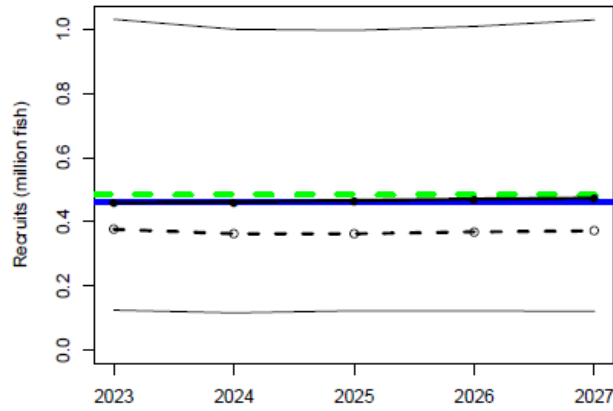
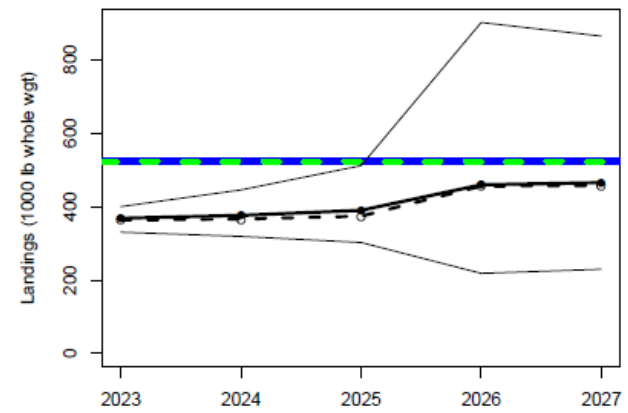
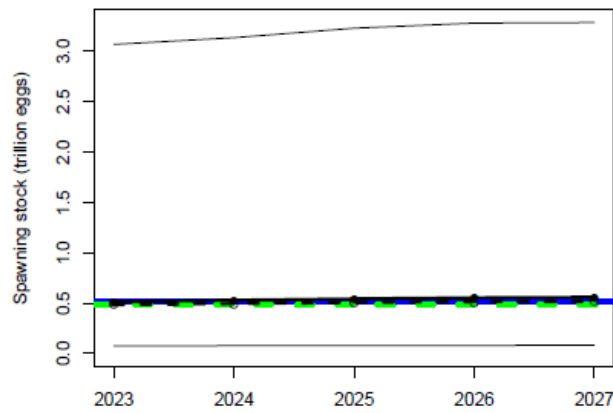
OFL

Table 19. Projection results with fishing mortality rate fixed at $F = F_{\text{MSY}}$ starting in 2026. R = number of age-1 recruits (million), F = fishing mortality rate (per year), S = spawning stock (trillion eggs), L = landings expressed in numbers (n , in 1000s) or gutted weight (w , in 1000 lb), $pr.ssb$ = percent of stochastic projection replicates with $SSB \leq SSB_{\text{MSY}}$, $pr.msst$ = percent of stochastic projection replicates with $SSB \leq MSST$. The extension b indicates expected values (deterministic) from the base run; the extension med indicates median values from the stochastic projections.

Year	R.b	R.med	F.b	F.med	S.b	S.med	L.b(n)	L.med(n)	L.b(w)	L.med(w)	pr.ssb	pr.msst
2023	0.459	0.377	0.147	0.152	0.515	0.487	53	52	368	363	47.8	21.3
2024	0.462	0.363	0.147	0.152	0.529	0.497	55	53	376	366	45.5	20.4
2025	0.466	0.363	0.147	0.152	0.543	0.508	58	55	389	374	43.0	19.3
2026	0.471	0.369	0.204	0.213	0.549	0.511	81	79	546	542	42.0	18.2
2027	0.473	0.371	0.204	0.213	0.544	0.504	80	78	540	530	42.8	17.5

$$F = P^*_{30\%}$$

ABC



$$F = P^*_{30\%}$$

ABC

Table 20. Projection results with fishing mortality rate fixed at F that provides $P^ = 0.30$ starting in 2026. R = number of age-1 recruits (million), F = fishing mortality rate (per year), S = spawning stock (trillion eggs), L = landings expressed in numbers (n , in 1000s) or gutted weight (w , in 1000 lb), $pr.ssb$ = percent of stochastic projection replicates with $SSB \leq SSB_{MSY}$, $pr.msst$ = percent of stochastic projection replicates with $SSB \leq MSST$. The extension b indicates expected values (deterministic) from the base run; the extension med indicates median values from the stochastic projections.*

Year	R.b	R.med	F.b	F.med	S.b	S.med	L.b(n)	L.med(n)	L.b(w)	L.med(w)	pr.ssb	pr.msst
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2025	0.466	0.363	0.147	0.152	0.543	0.508	58	55	389	374	43.0	19.3
2026	0.471	0.369	0.169	0.177	0.554	0.515	68	67	459	455	41.1	17.7
2027	0.474	0.372	0.169	0.177	0.559	0.518	69	67	465	457	40.0	16.0

Questions