TIM Diagnostics

MODEL STRUCTURE
Match/Mismatch: Matching
Population Structure: Metapopulation
Diagnostic Run: NO. Uses OBS values as data inputs
Residual plots represent RELATIVE difference; ((TRUE−ESTIMATED)/TRUE)*100

Run Time of Estimation: 0.056 minutes

OM Error Parameters

	Parameter	1	2
1	Sigma_Rec	0.4	0.4
2	Sigma_Rec_Apport	0.2	0.2
3	Sigma_F	0.2	0.2
4	Rec_Index_sigma	0.5	0.5
5	Survey_Sigma	0.2	0.2
6	Catch_Sigma	0.05	0.05
7	SIM_N_Catch	100	100
8	SIM_N_Survey	100	100

Likelihood Components

Model Converged

num gradient component = 5.13050098586939e
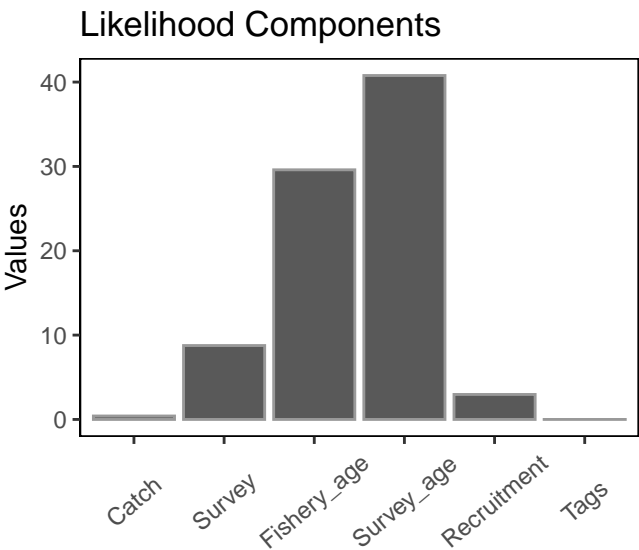
Estimated Parameter Values

	Parameter	1	2
1	q	0.00	0.00
2	R_ave	20258.80	11745.10
3	beta 1 fishery	4.97	4.96
4	beta 2 fishery	1.70	1.96
5	beta 3 fishery	NA	NA
6	beta 4 fishery	NA	NA
7	beta 1 survey	6.36	4.59
8	beta 2 survey	1.41	1.78
9	beta 3 survey	NA	NA
10	beta 4 survey	NA	NA

True Parameter Values

	Parameter	1	2
1	q	0.00	0.00
2	R_ave	21019.00	6596.00
3	beta 1 fishery	1.31	2.45
4	beta 2 fishery	3.76	3.16
5	beta 3 fishery	NA	NA
6	beta 4 fishery	NA	NA
7	beta 1 survey	2.51	1.81
8	beta 2 survey	2.31	2.64
9	beta 3 survey	NA	NA
10	beta 4 survey	NA	NA

Recruitment Total

1

2

Recruitment

Year

Estimated
True

Recruitment Residuals

1

2

Difference (True−Estimated)

Year
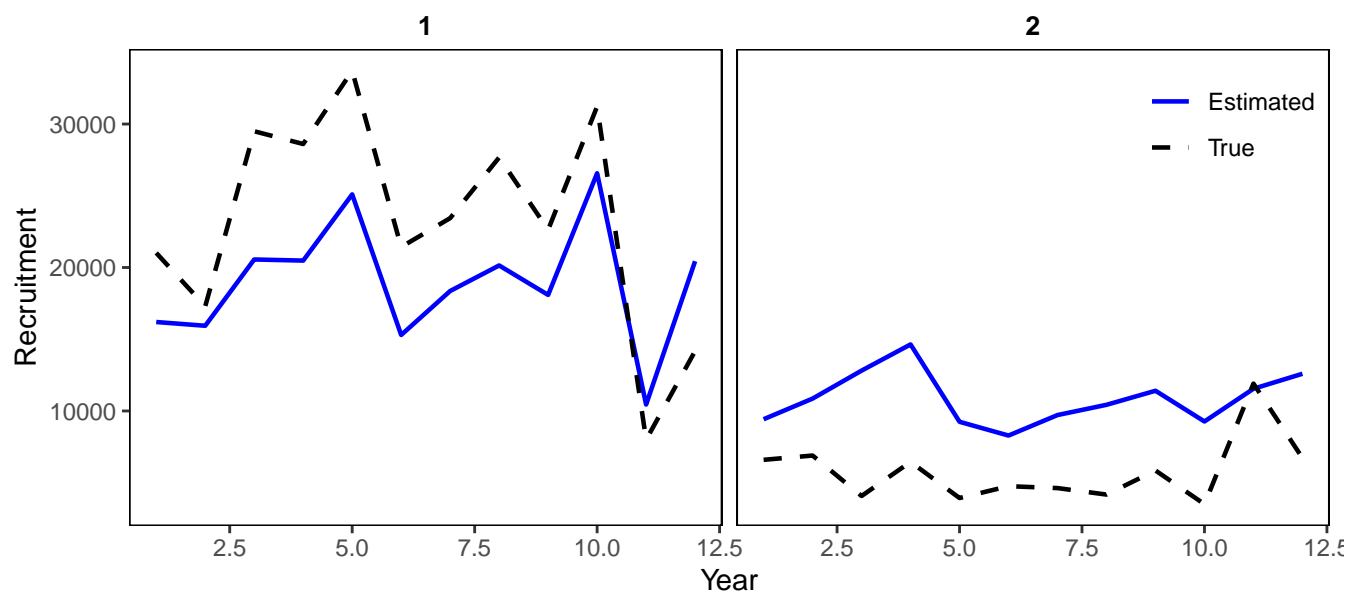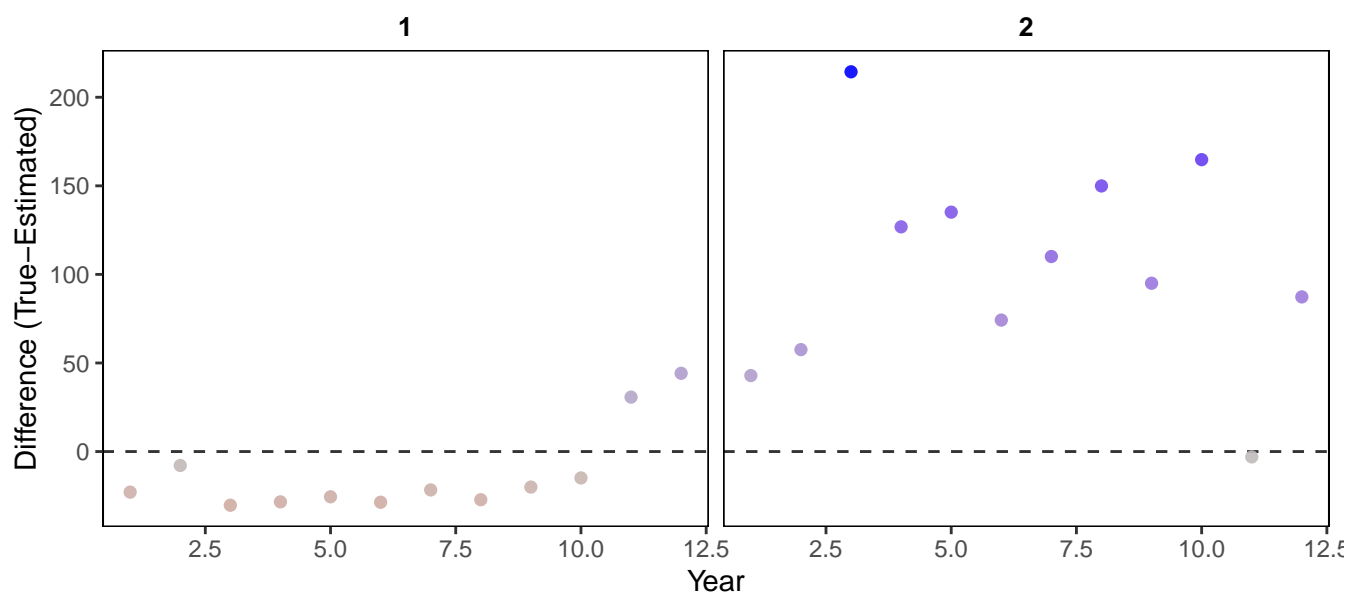
Recruitment Deviations

1

2

Deviations

Year

Estimated
True
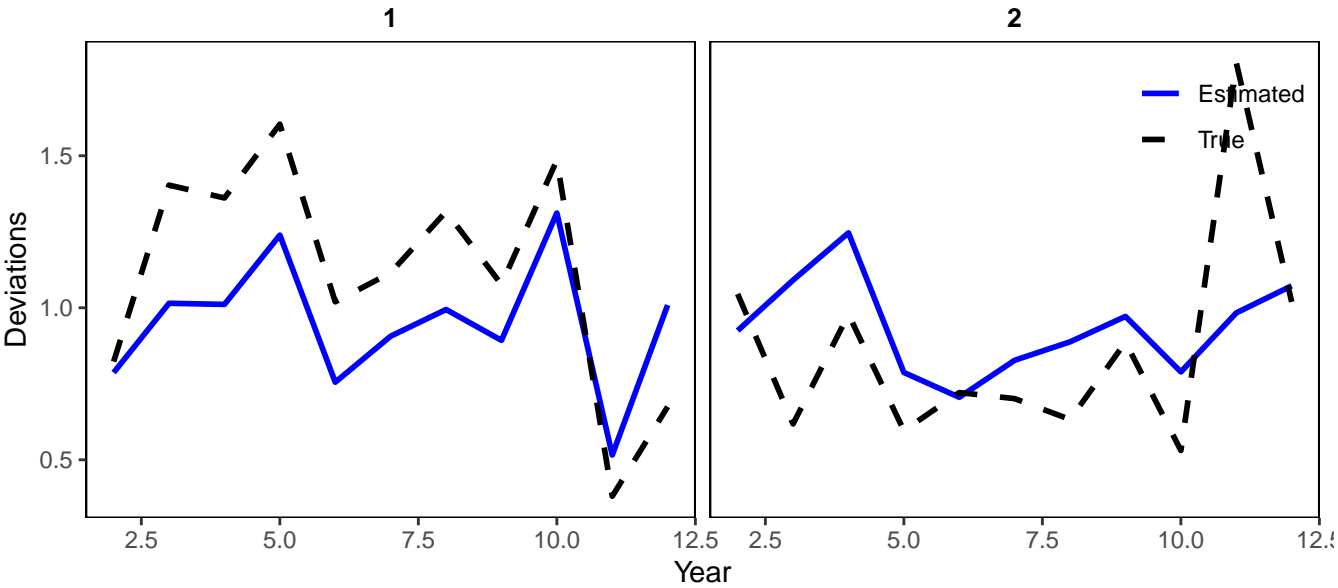
Recruitment Devs Residuals

1

2

Difference (True−Estimated)

Year

Recruitment Apportionment

1	2

Estimated
True

Apportionment Proportion

Year
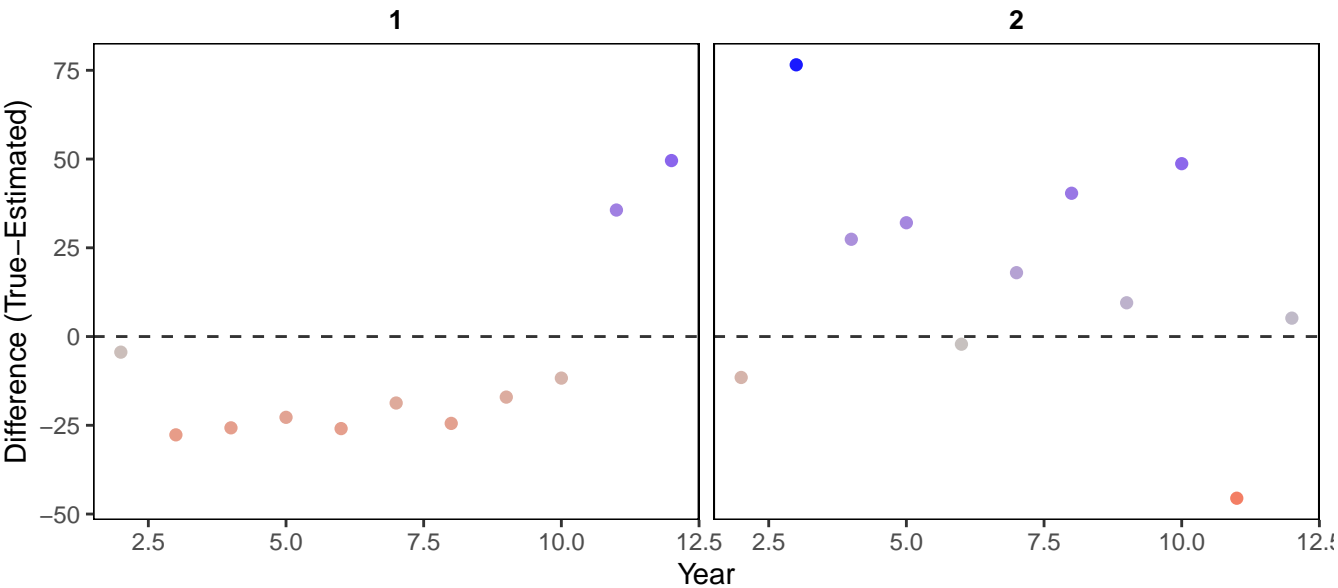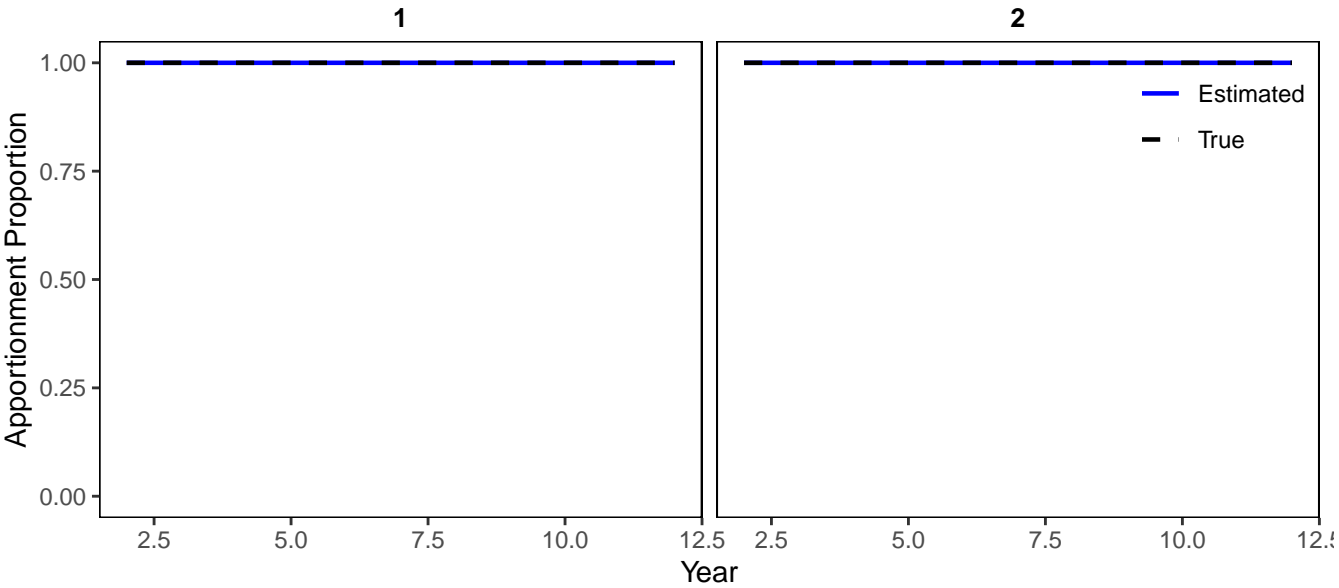
Recruitment Apportionment Residuals

1	2

Difference (True−Estimated)

Year
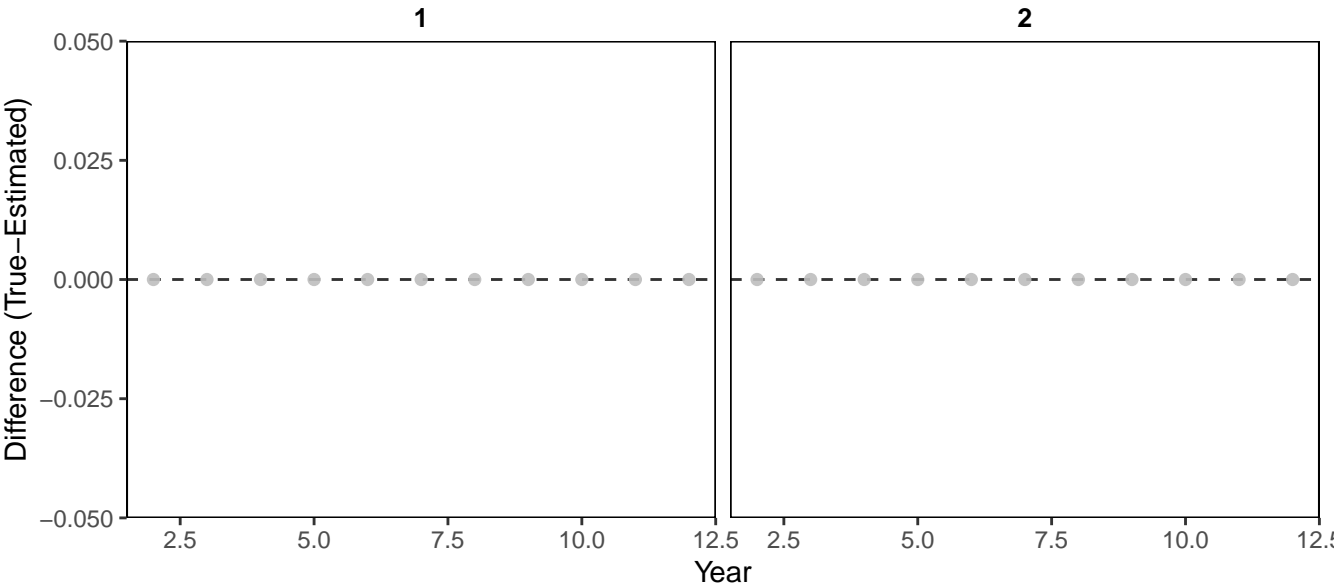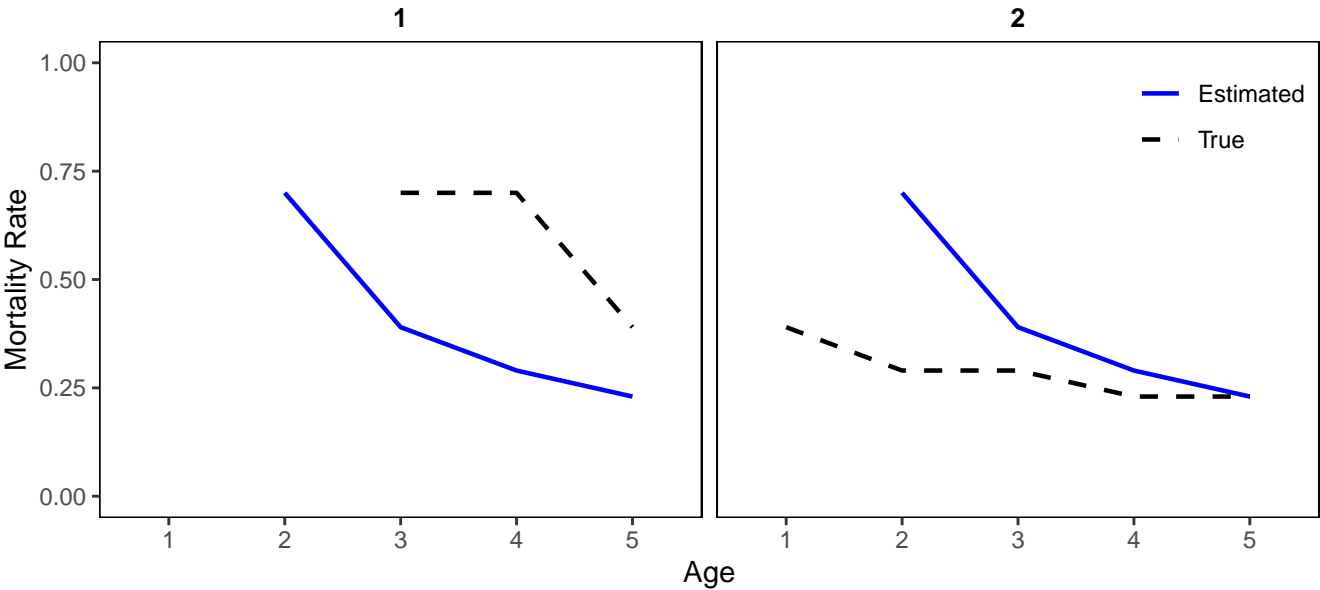
Mortality Rate

Mortality Rate Residuals
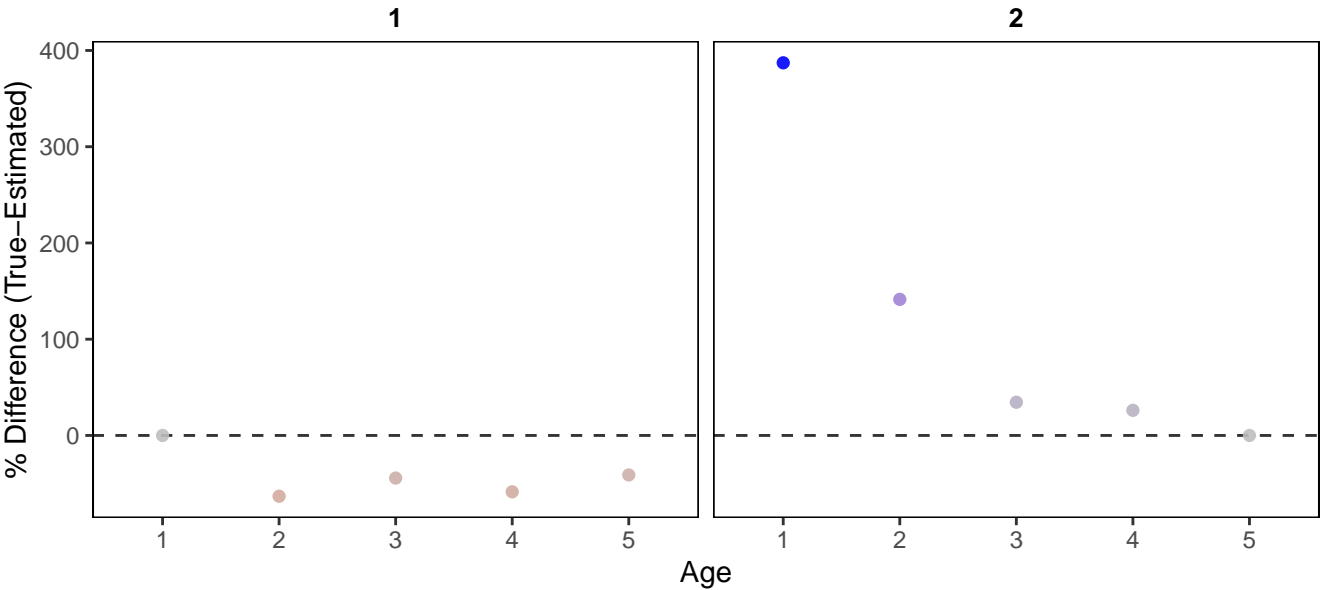
Reporting Rate

Initial Abundance
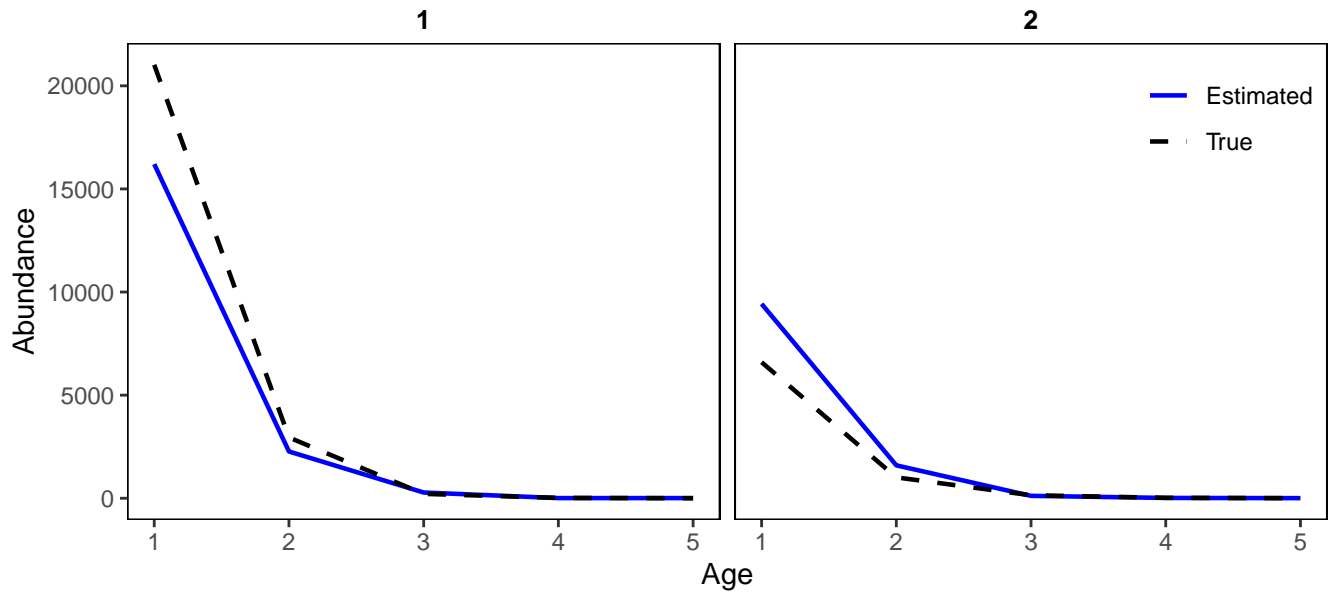
Initial Abundance Residuals
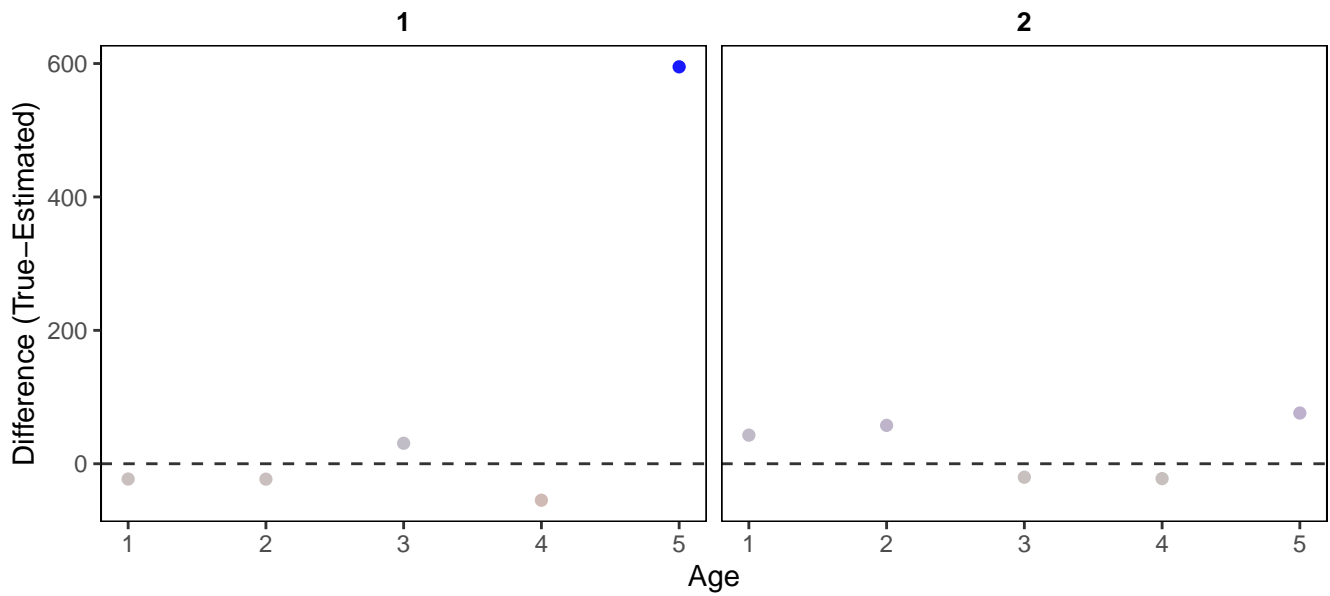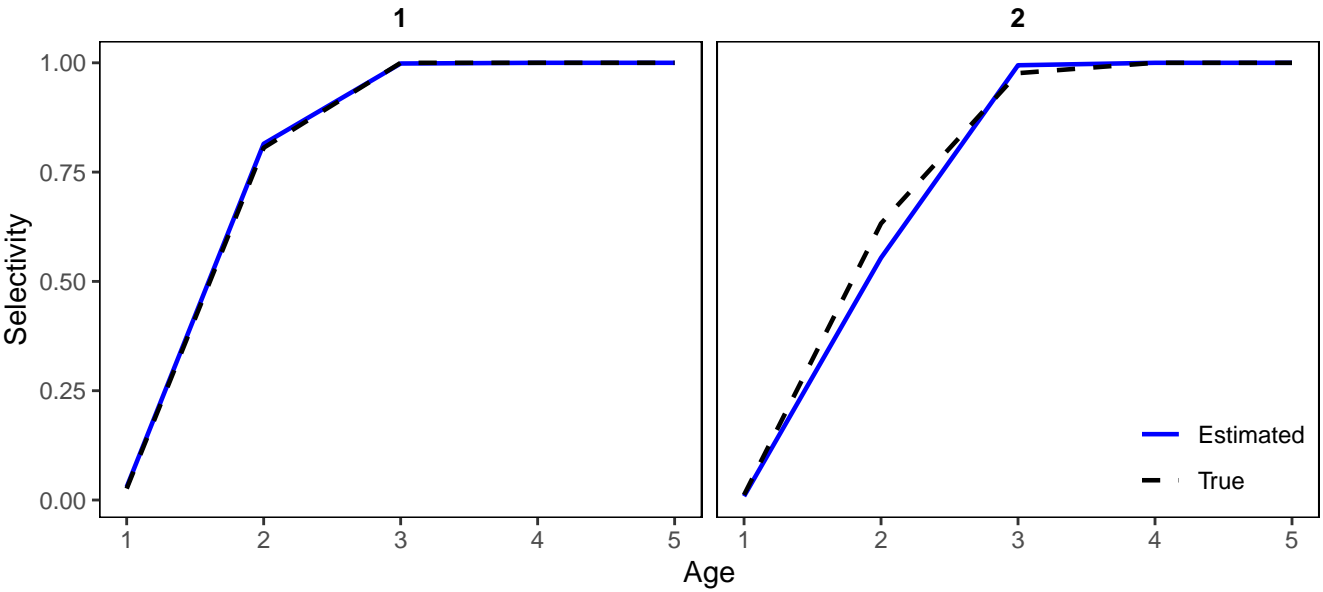
Total Biomass
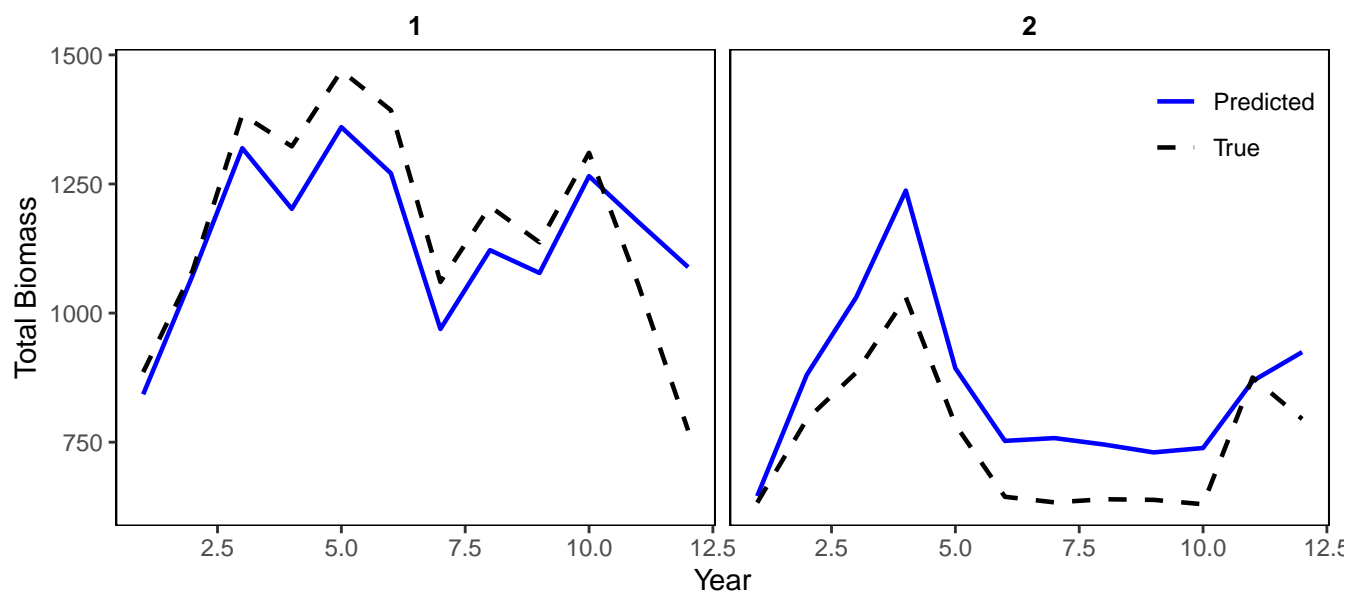
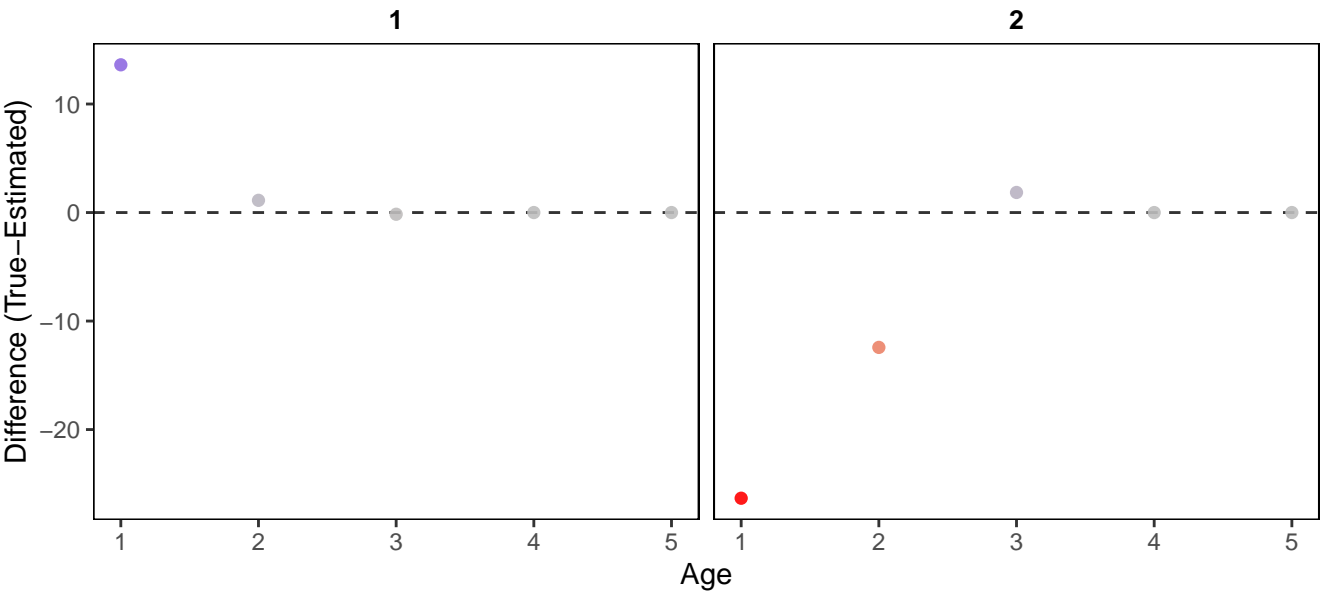# Biomass Residuals
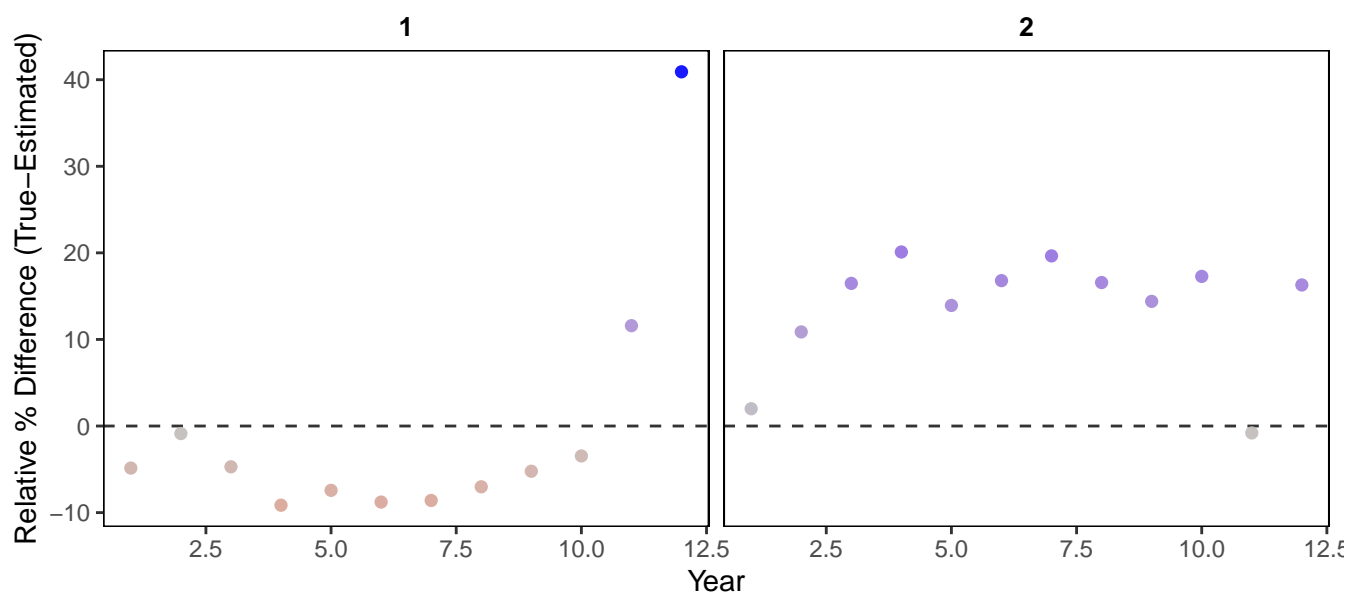
SSB
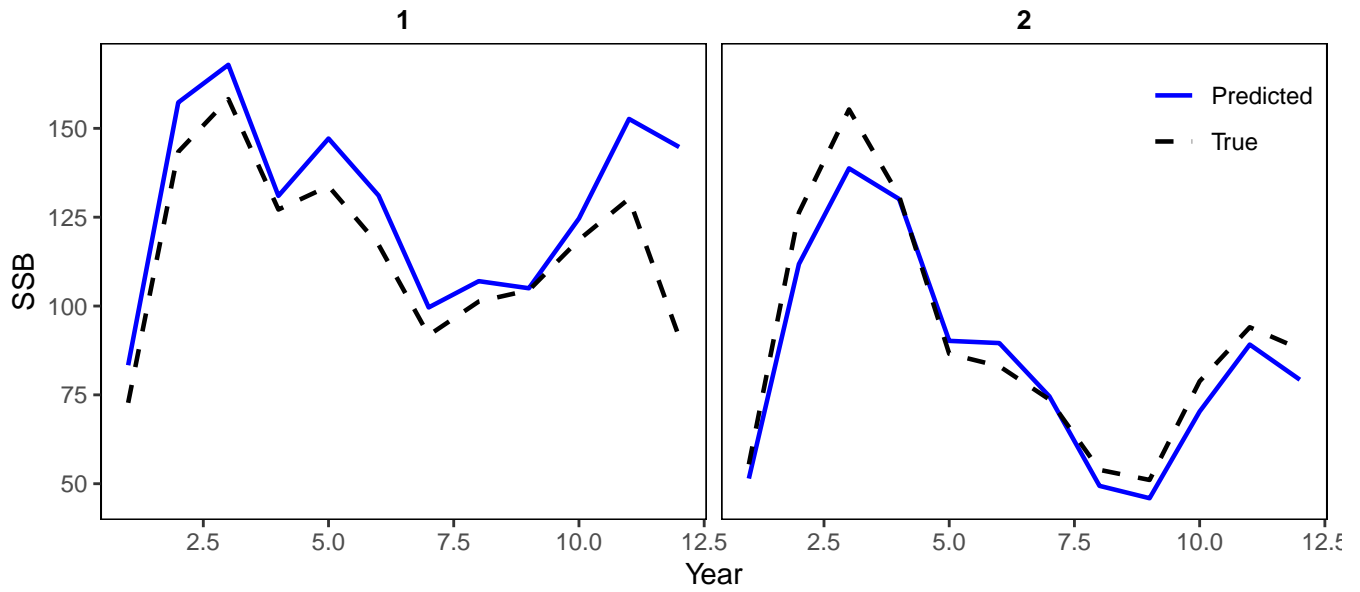
SSB Residuals
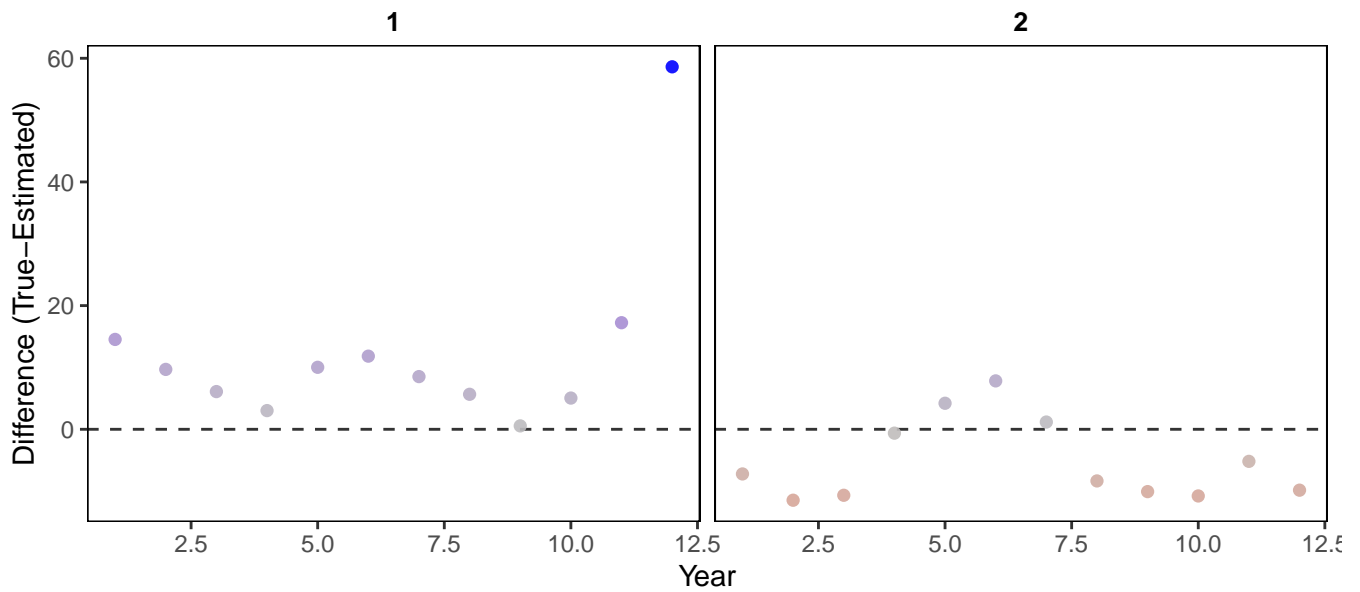
Survey Selectivity
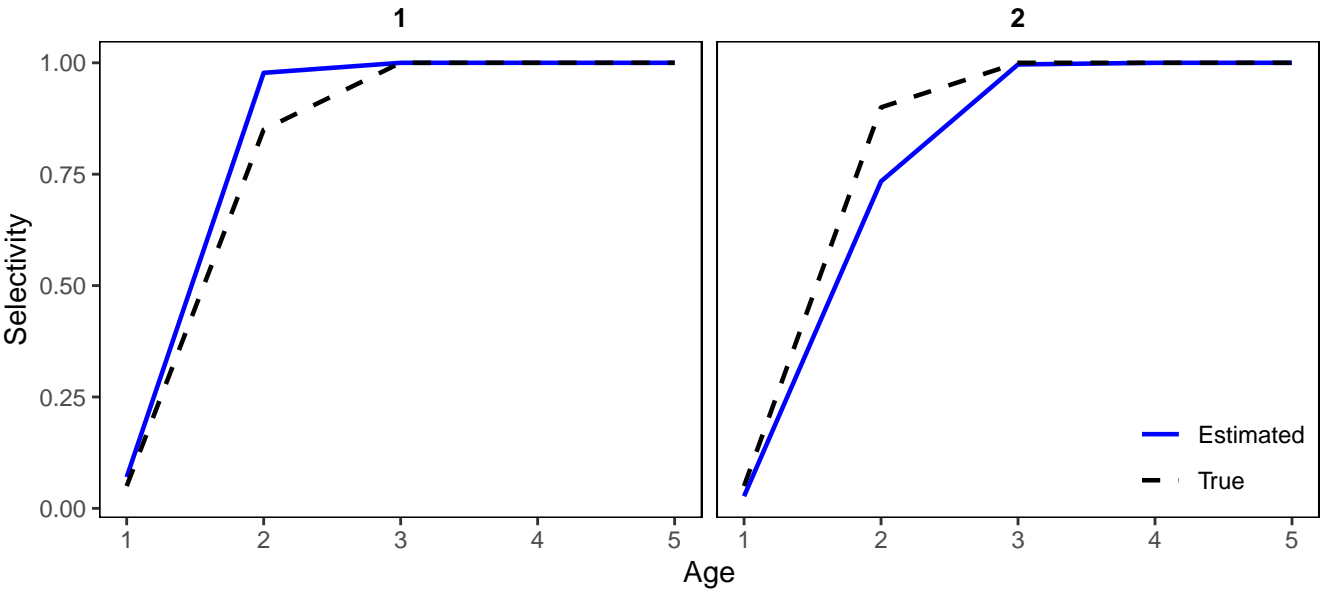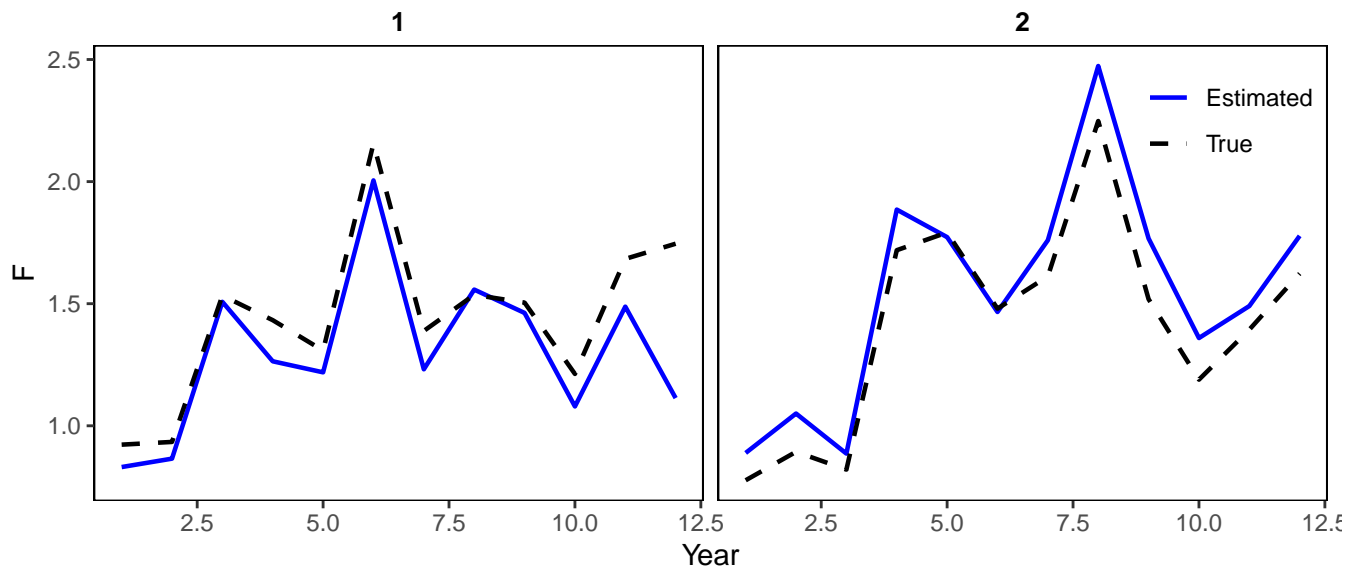
Survey Selectivity Residuals
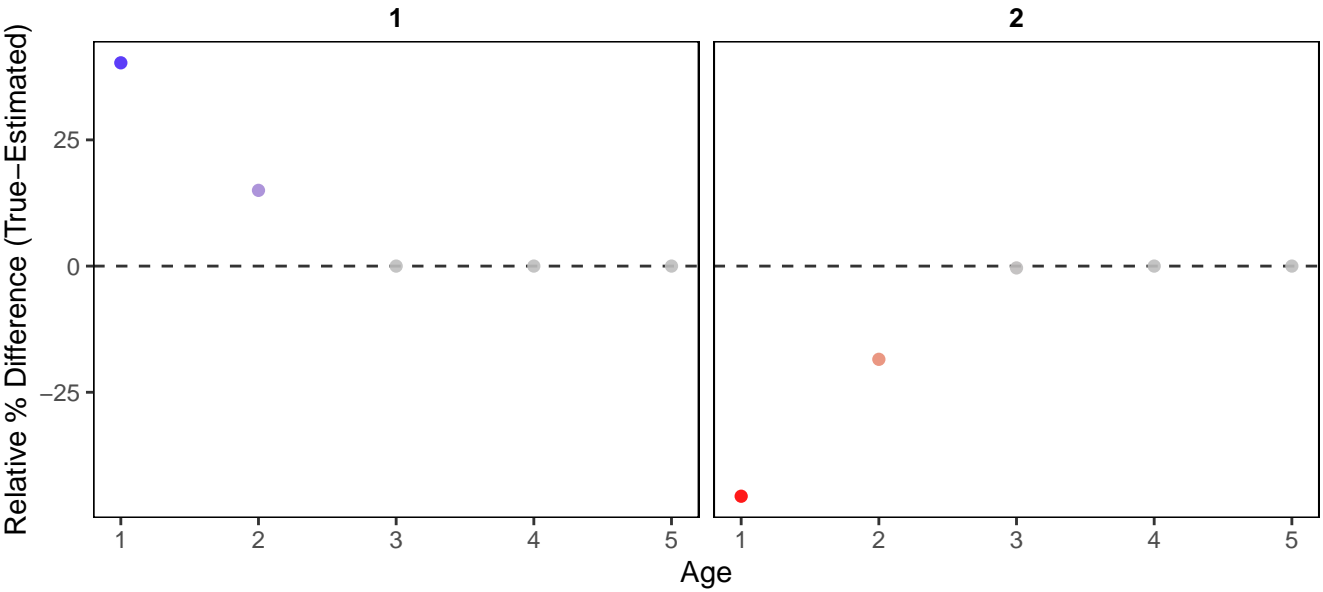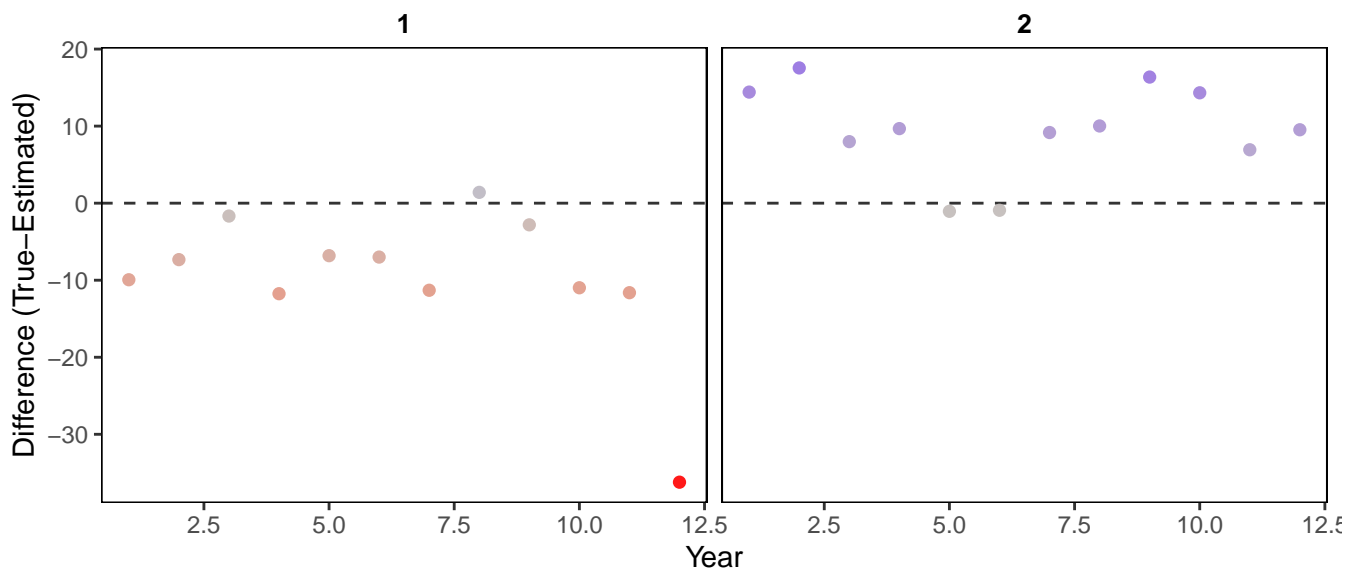
Fishery Selectivity

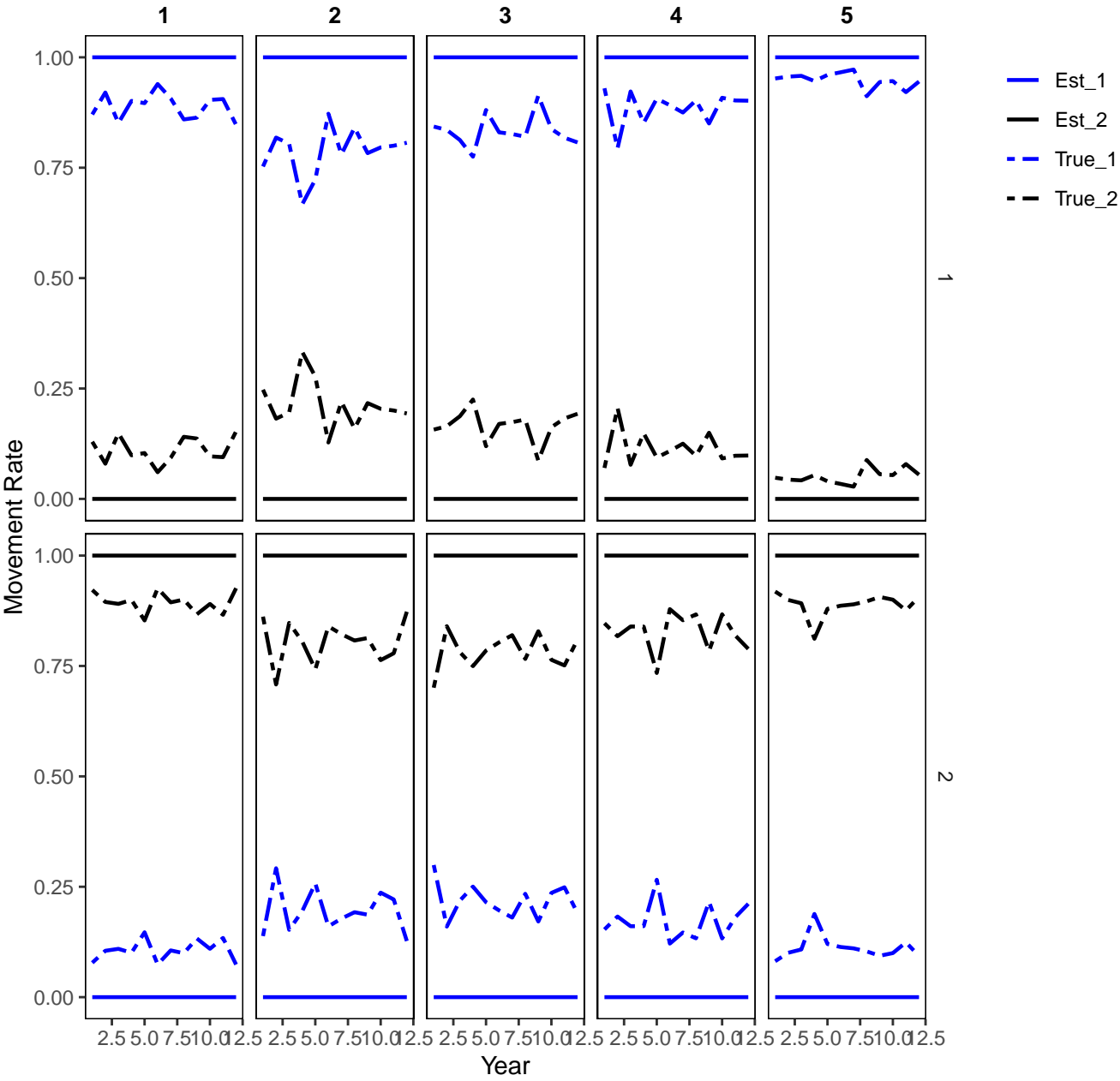Fishery Selectivity Residuals

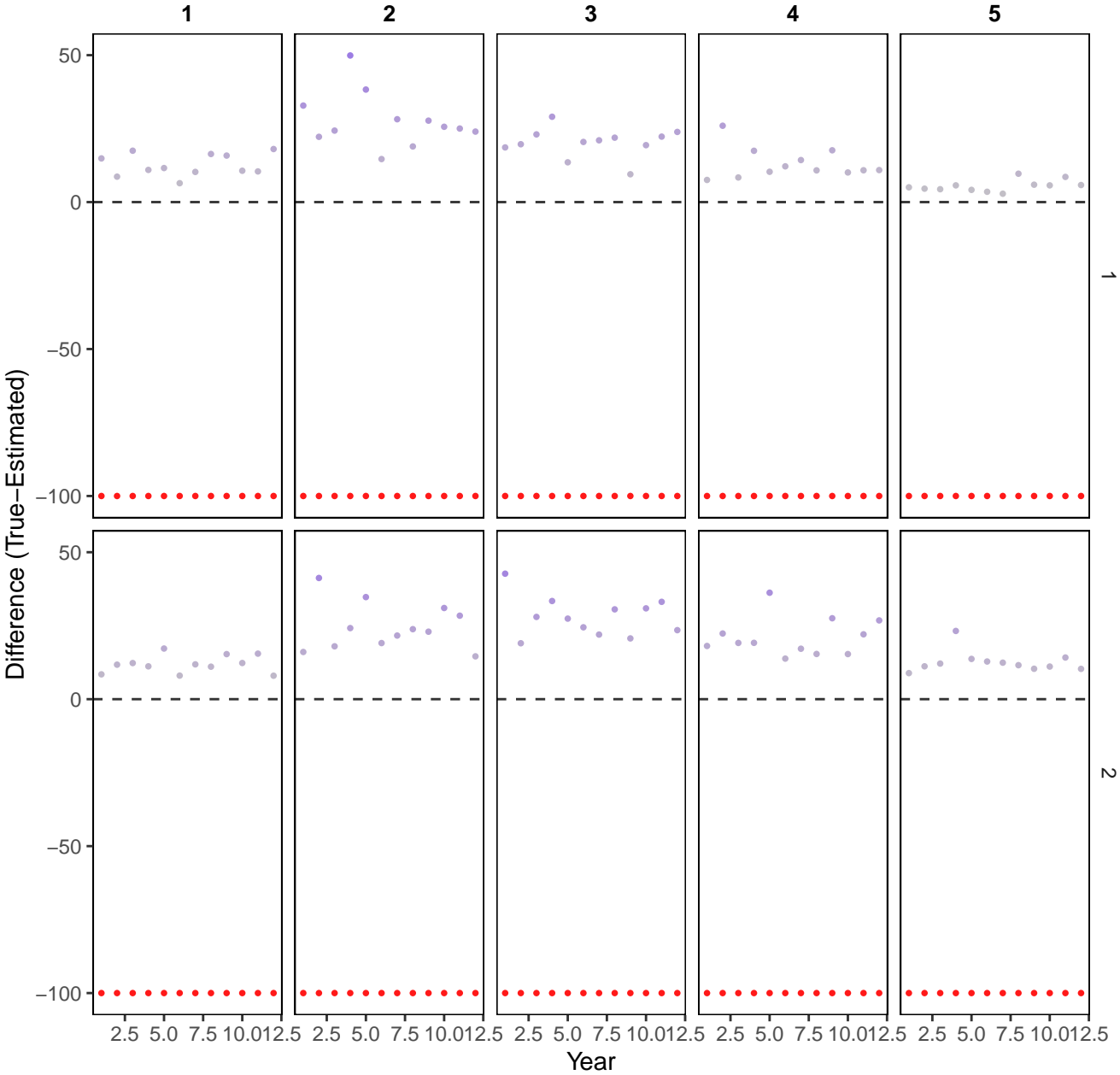# Fishing Mortality

Fully selected F by Year

Fully Selected F Residuals
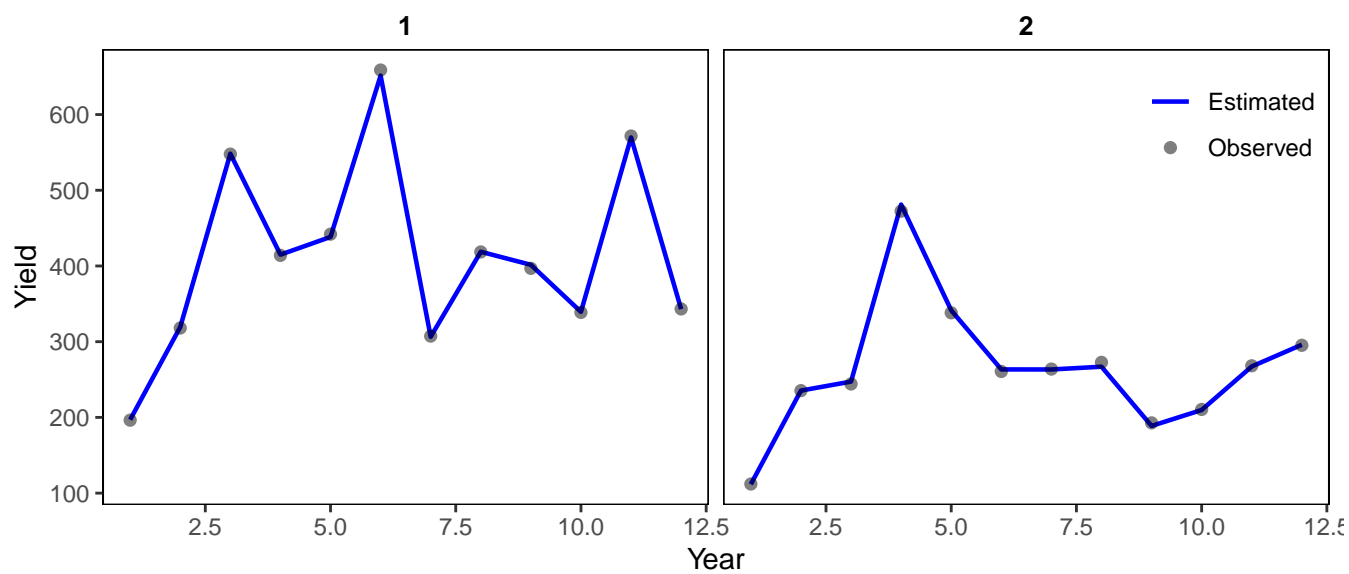
Yearly Movement Rate

Yearly Movement Rate Residuals

Fits to Data

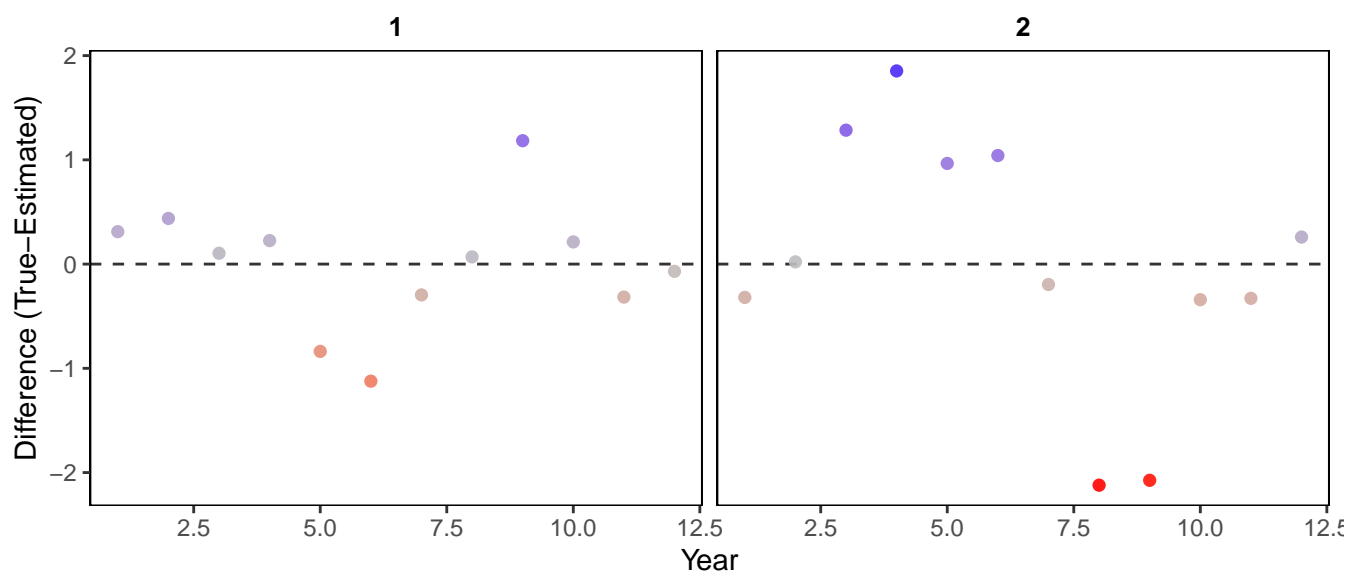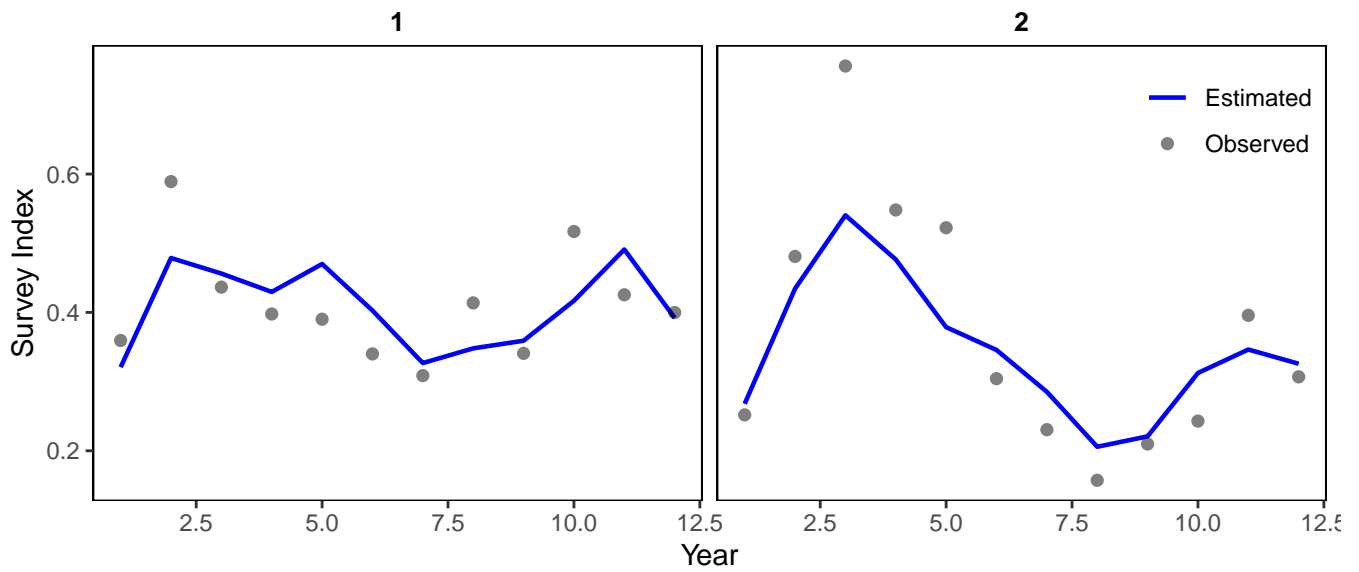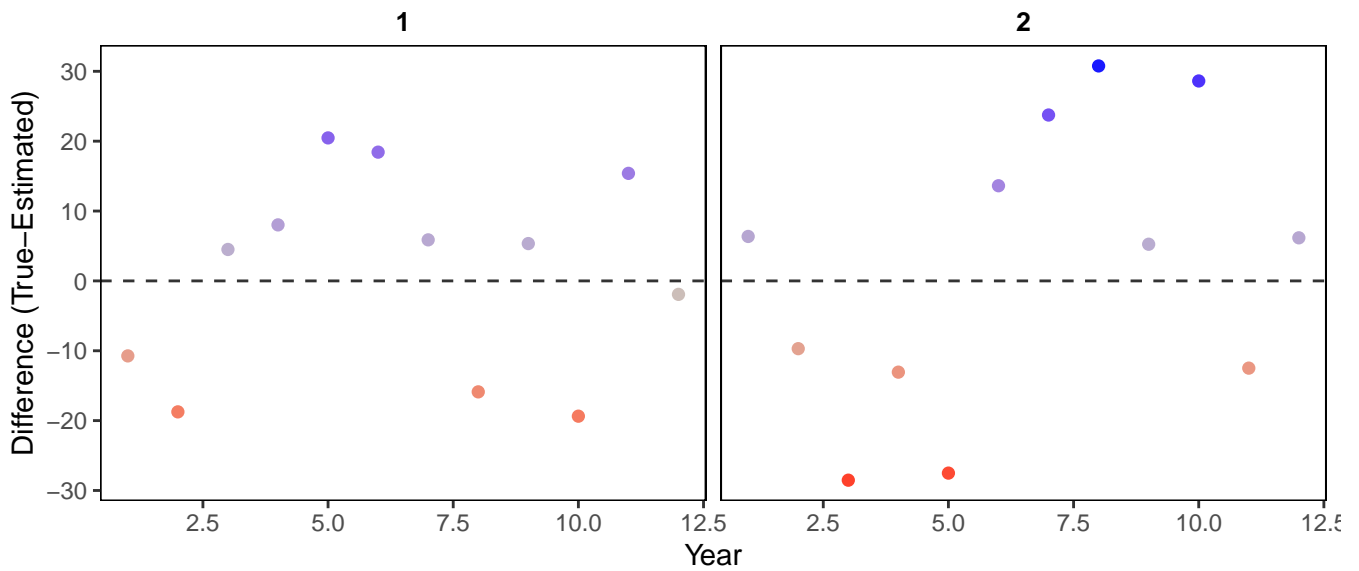## Yield

Yield Residuals

Fits to Data continued

Survey Biomass

Survey Index Residuals

Fits to Data continued