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: 0.06167 minutes
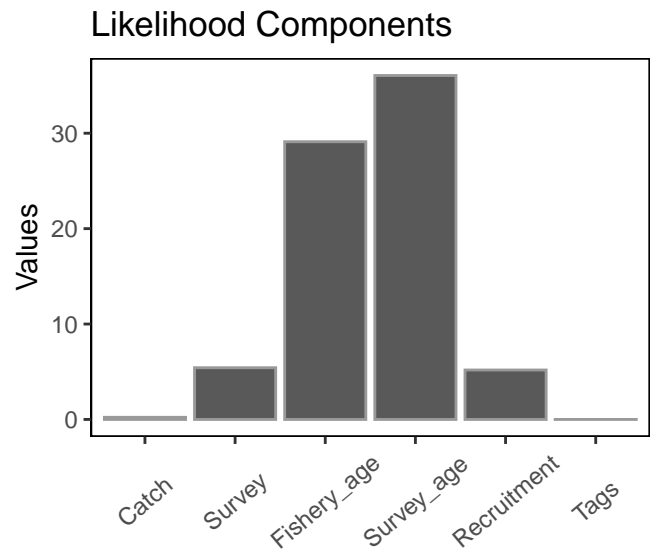
OM Error Parameters

	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 = 3.623062865284566

Estimated Parameter Values

	Parameter	1	2
1	q	0.00	0.00
2	R_ave	21195.60	10235.00
3	beta 1 fishery	4.42	5.44
4	beta 2 fishery	1.81	1.86
5	beta 3 fishery	NA	NA
6	beta 4 fishery	NA	NA
7	beta 1 survey	4.10	5.77
8	beta 2 survey	1.66	1.61
9	beta 3 survey	NA	NA
10	beta 4 survey	NA	NA

True Parameter Values

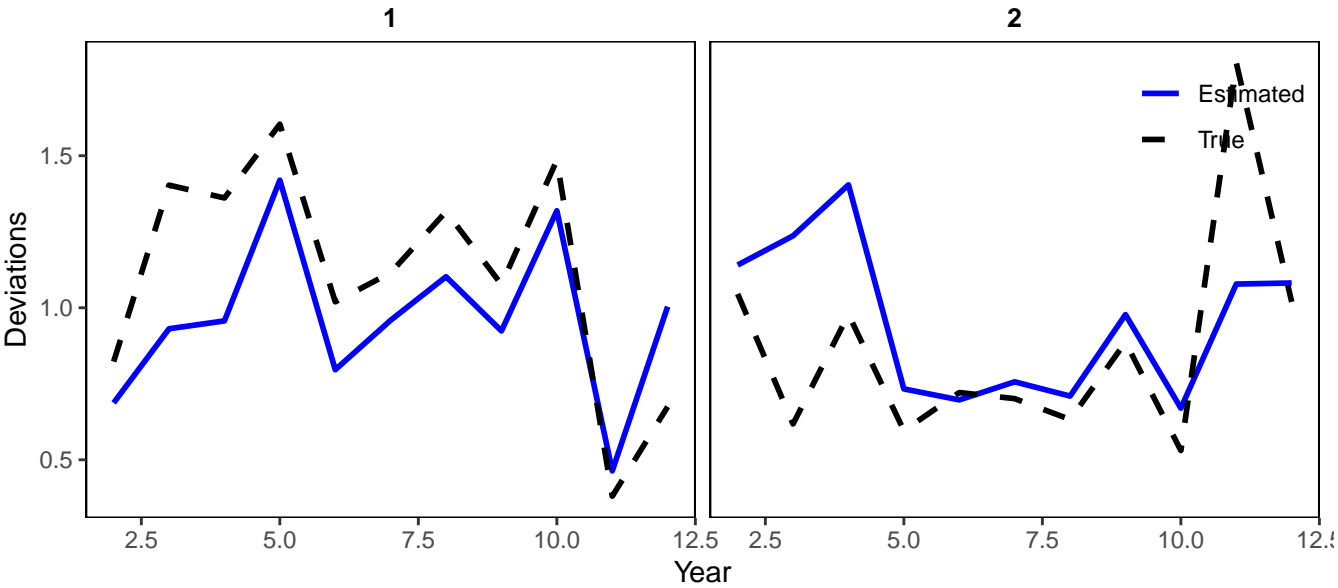|	Parameter	1	2
1	q	0.00	0.00
2	R_ave	21019.00	6596.00
3	beta 1 fishery	1.31	2.45
4	beta 2 fishery	3.76	3.16
5	beta 3 fishery	NA	NA
6	beta 4 fishery	NA	NA
7	beta 1 survey	2.51	1.81
8	beta 2 survey	2.31	2.64
9	beta 3 survey	NA	NA
10	beta 4 survey	NA	NA

Recruitment Total
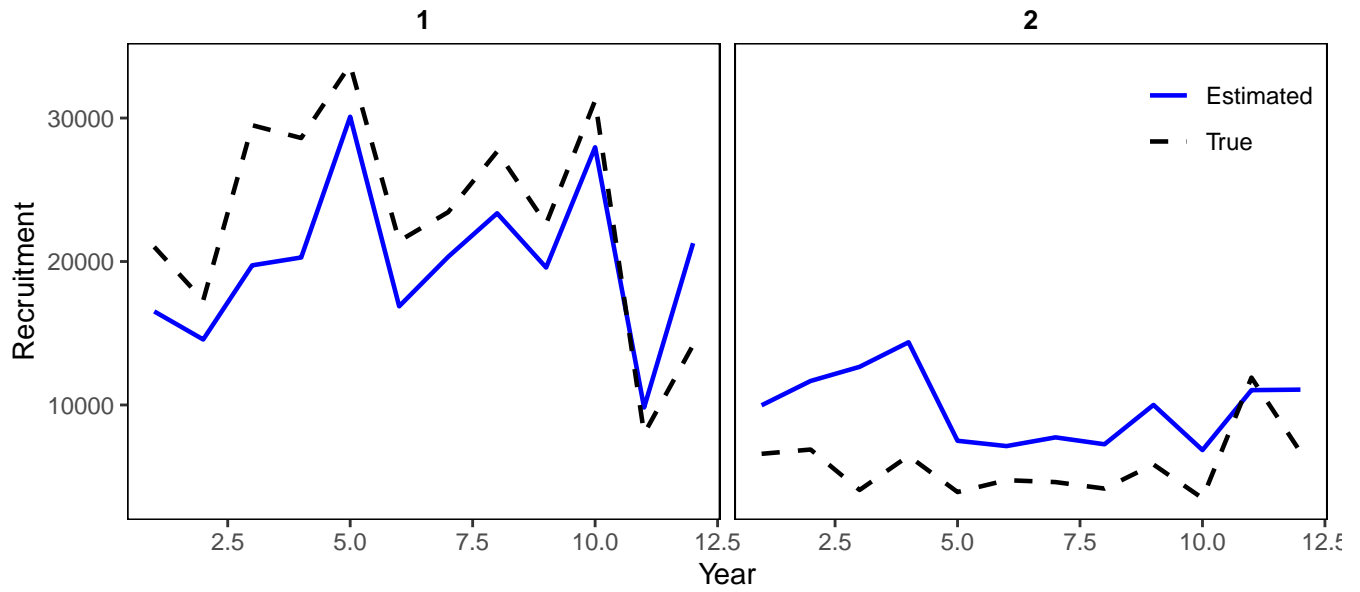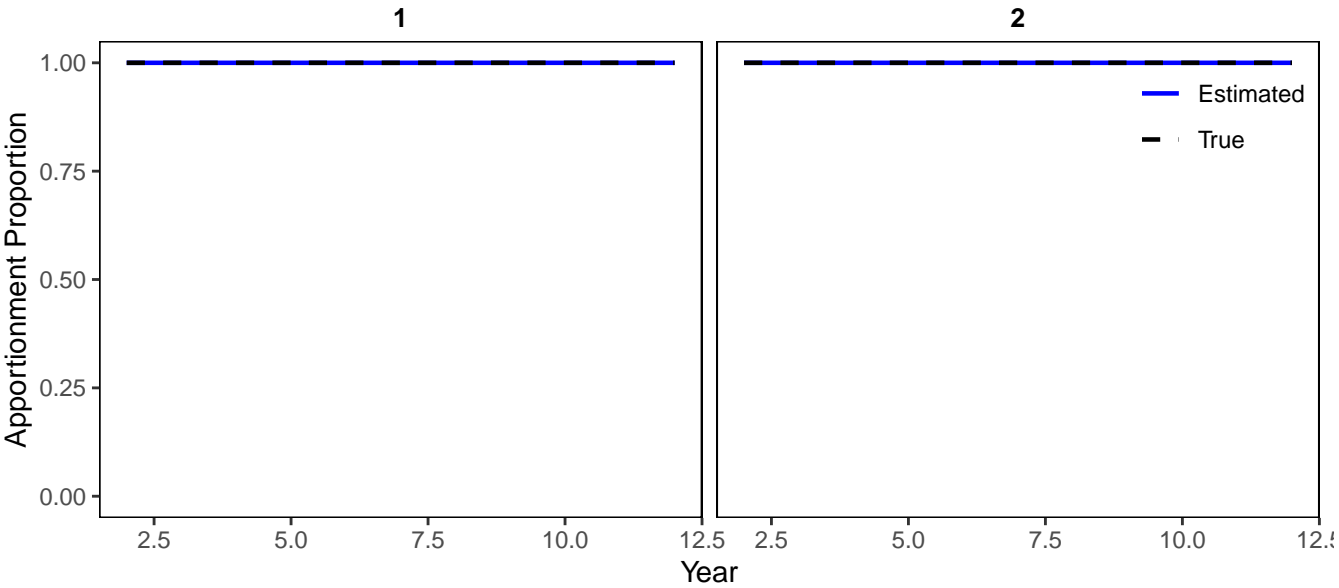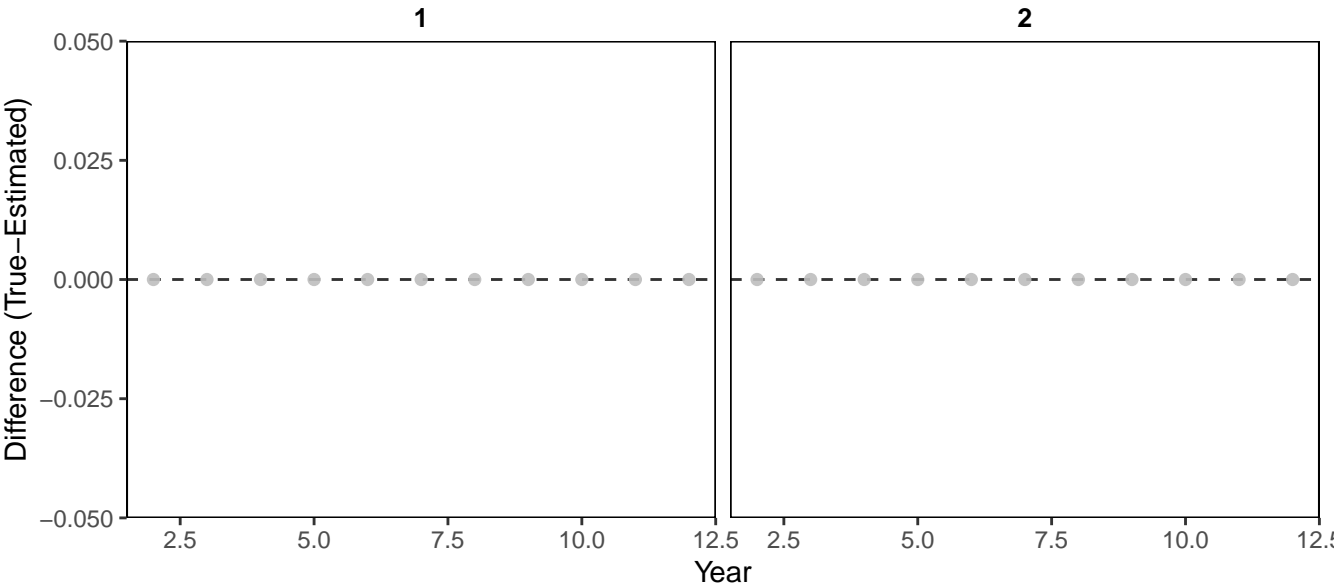

Recruitment Residuals
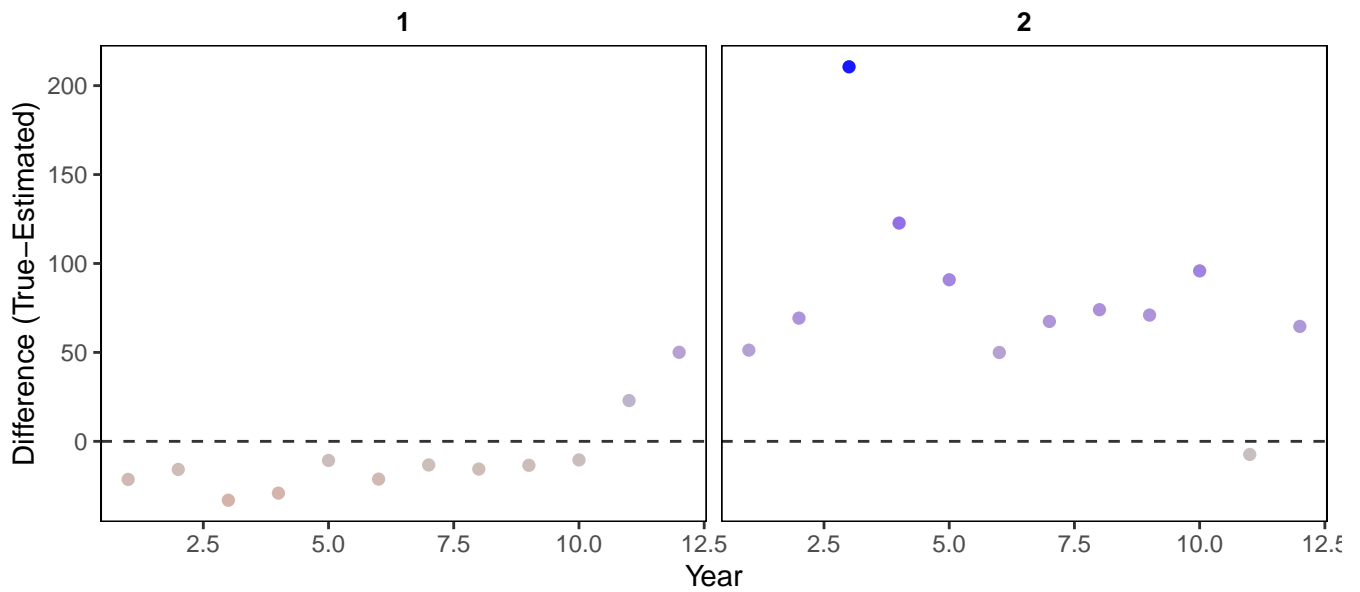
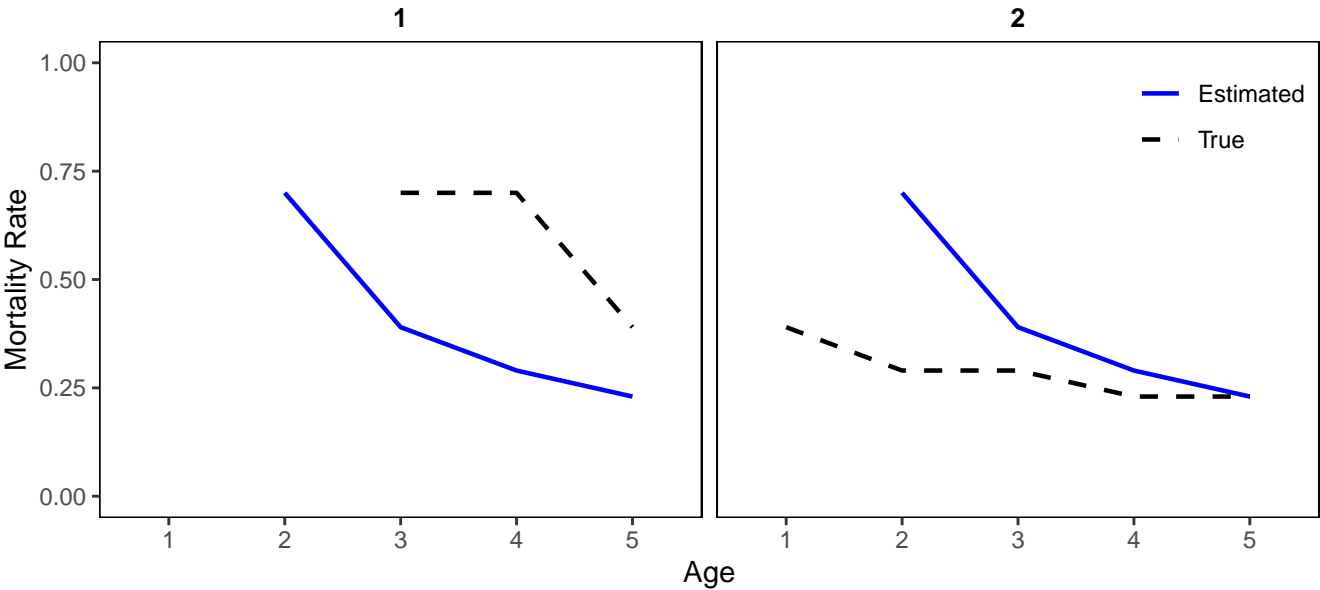# Recruitment Deviations

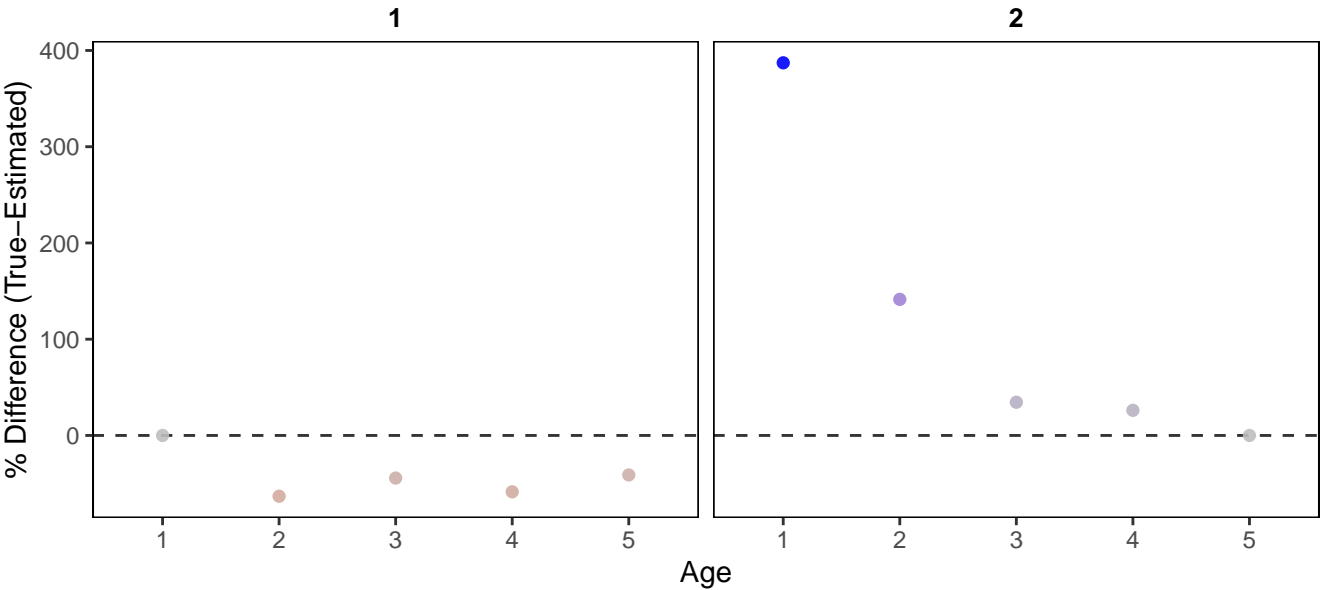# Recruitment Devs Residuals

Recruitment Apportionment

1	2

Apportionment Proportion

Year

Estimated
True
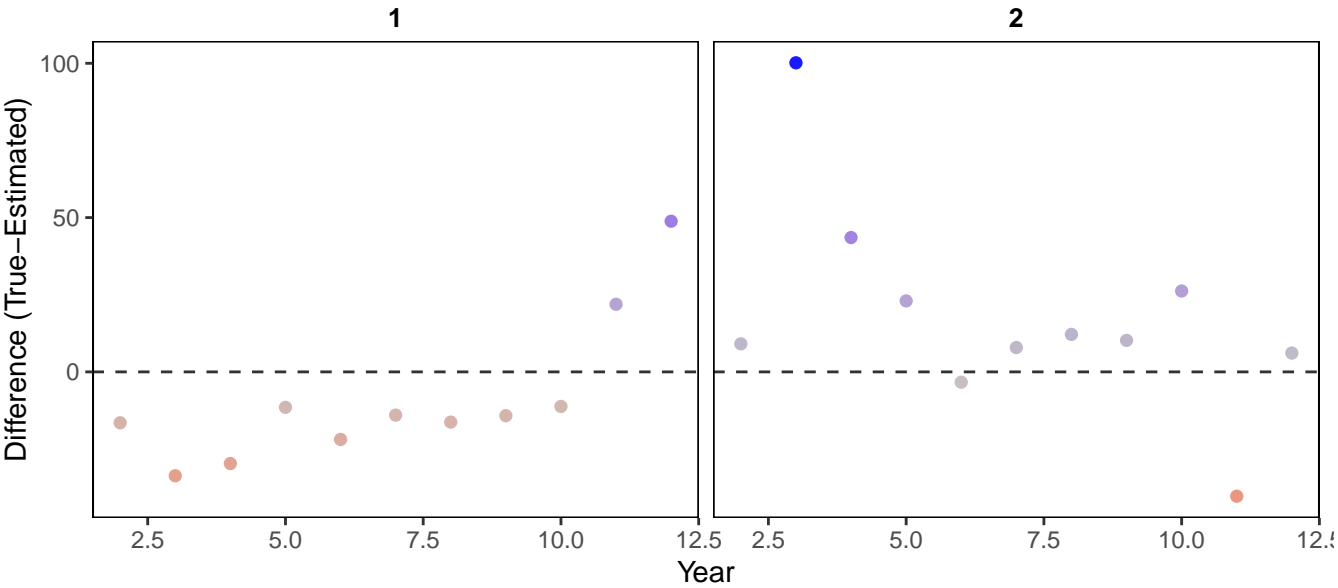
Recruitment Apportionment Residuals

1	2

Difference (True−Estimated)
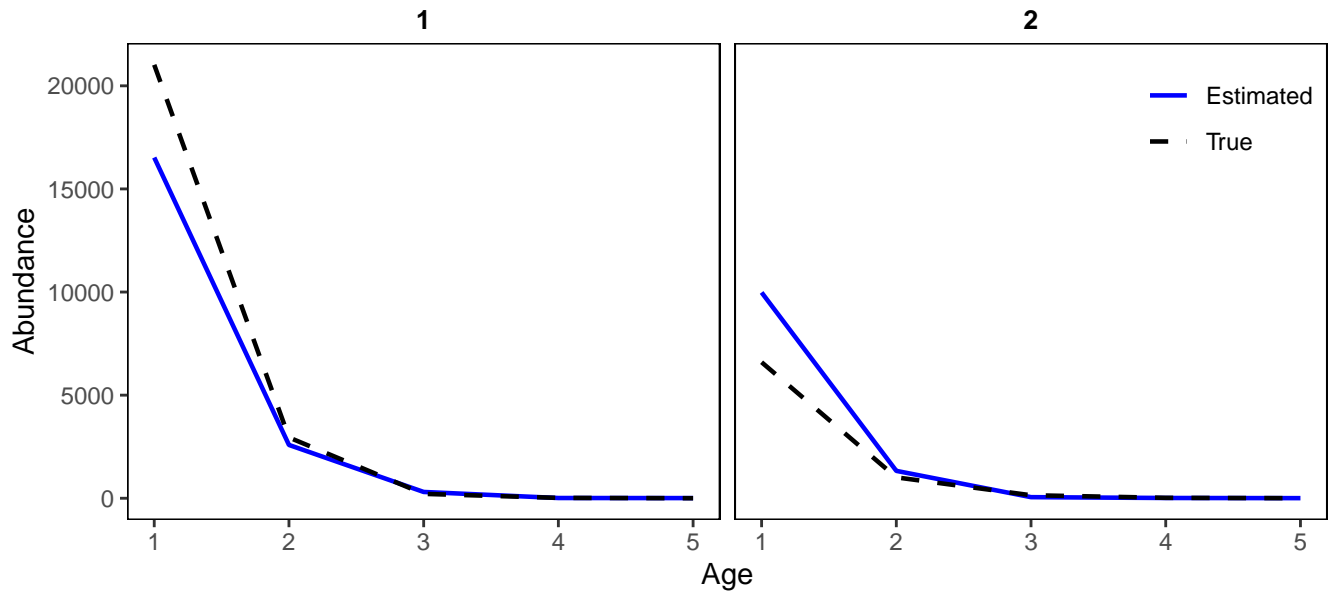
Year

Mortality Rate
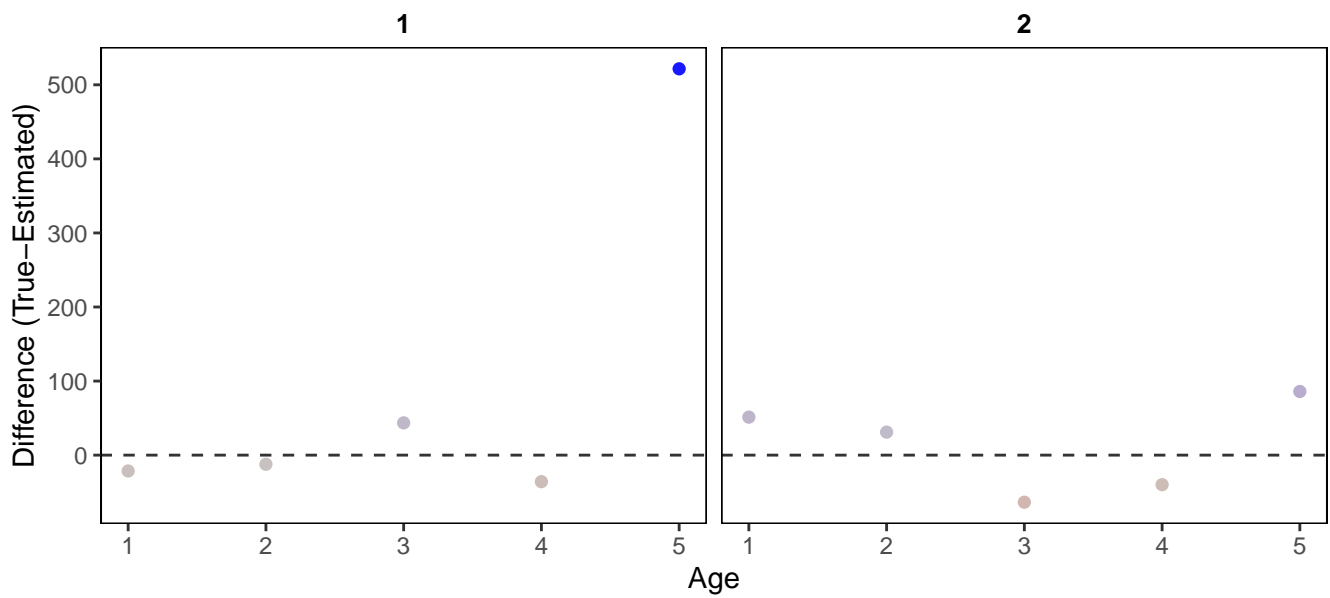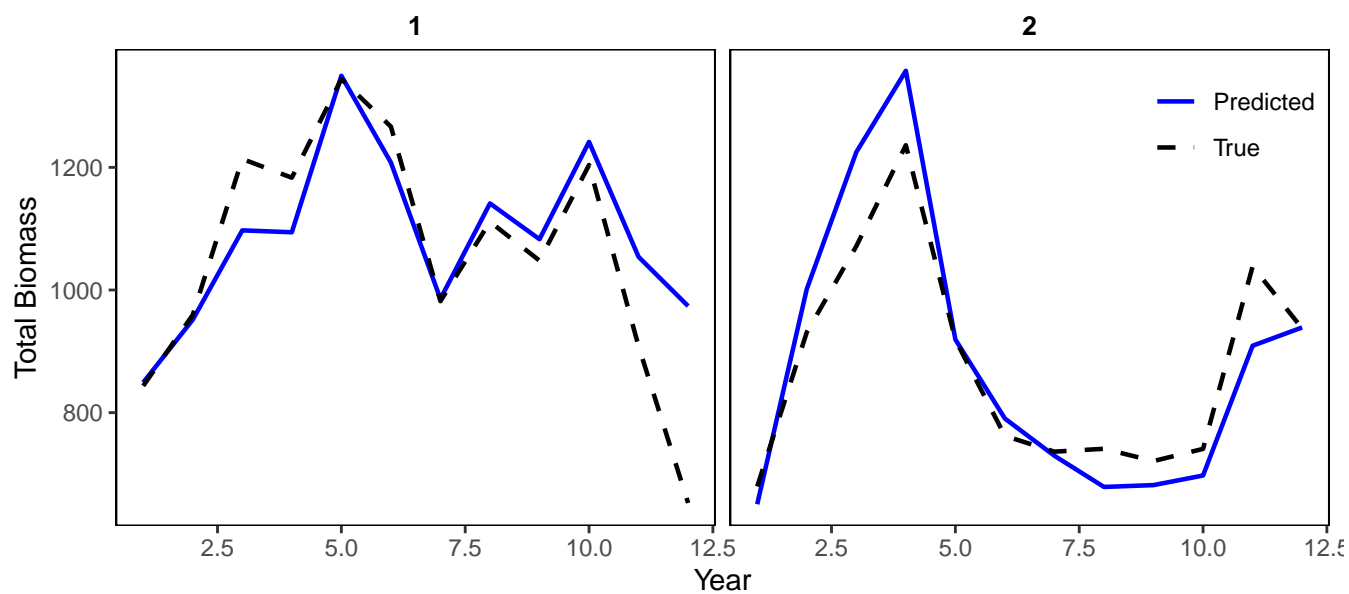

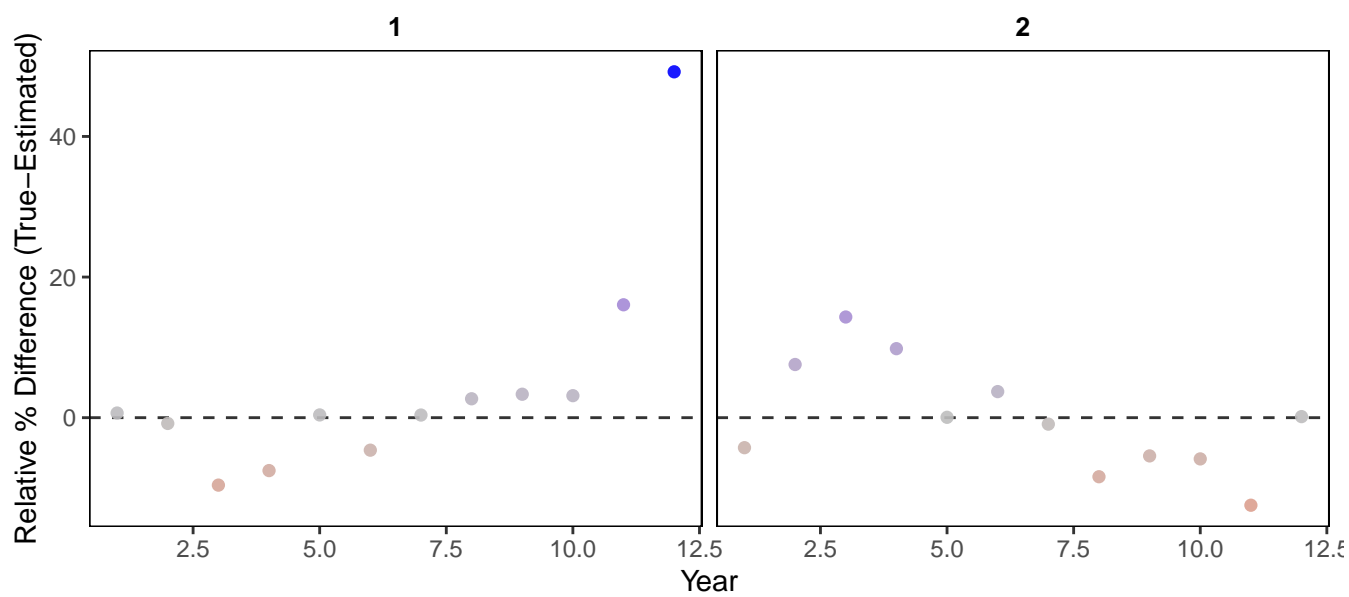# Mortality Rate Residuals
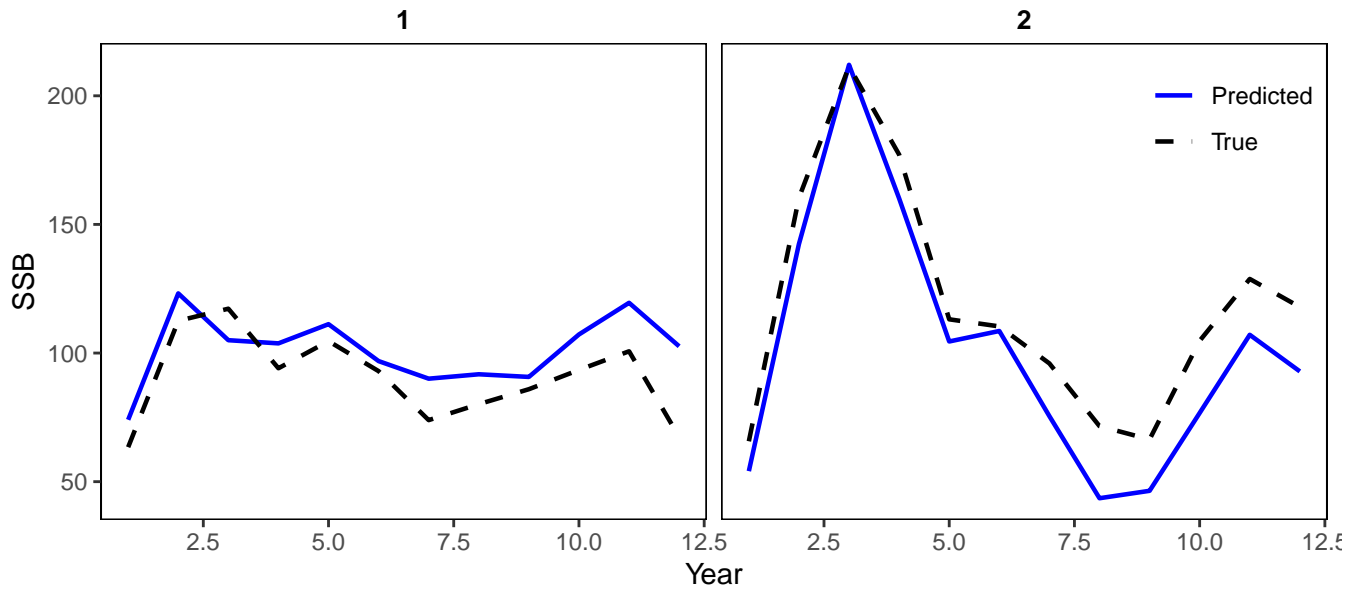
Reporting Rate

Initial Abundance
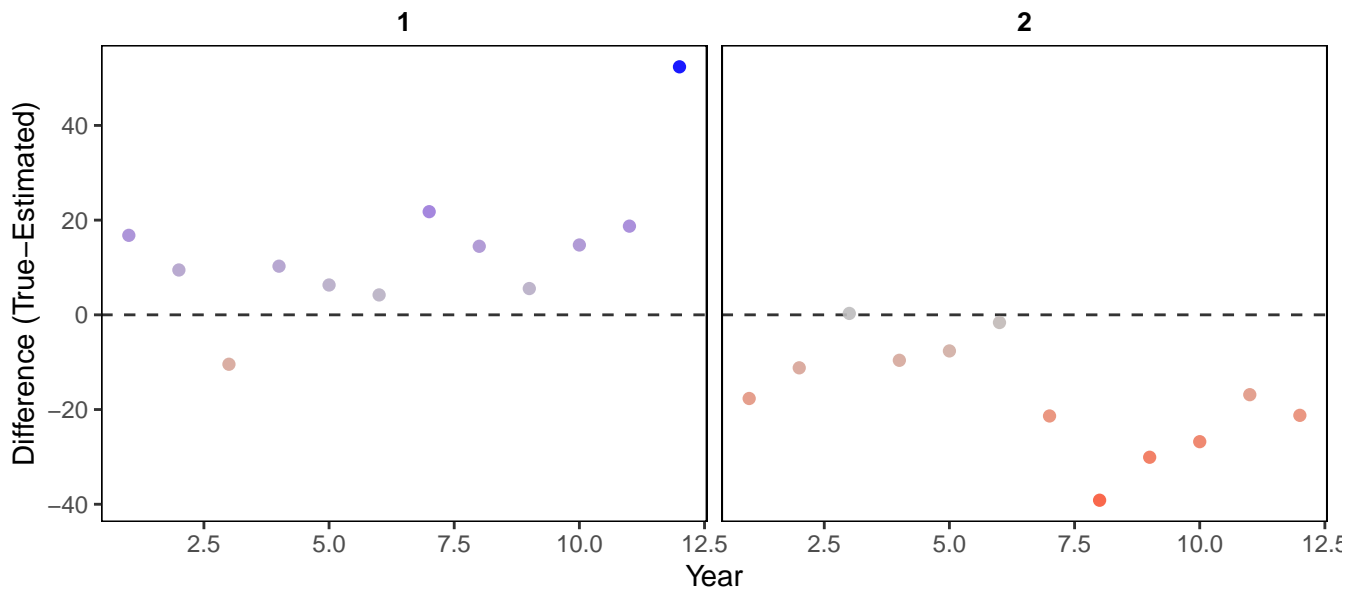

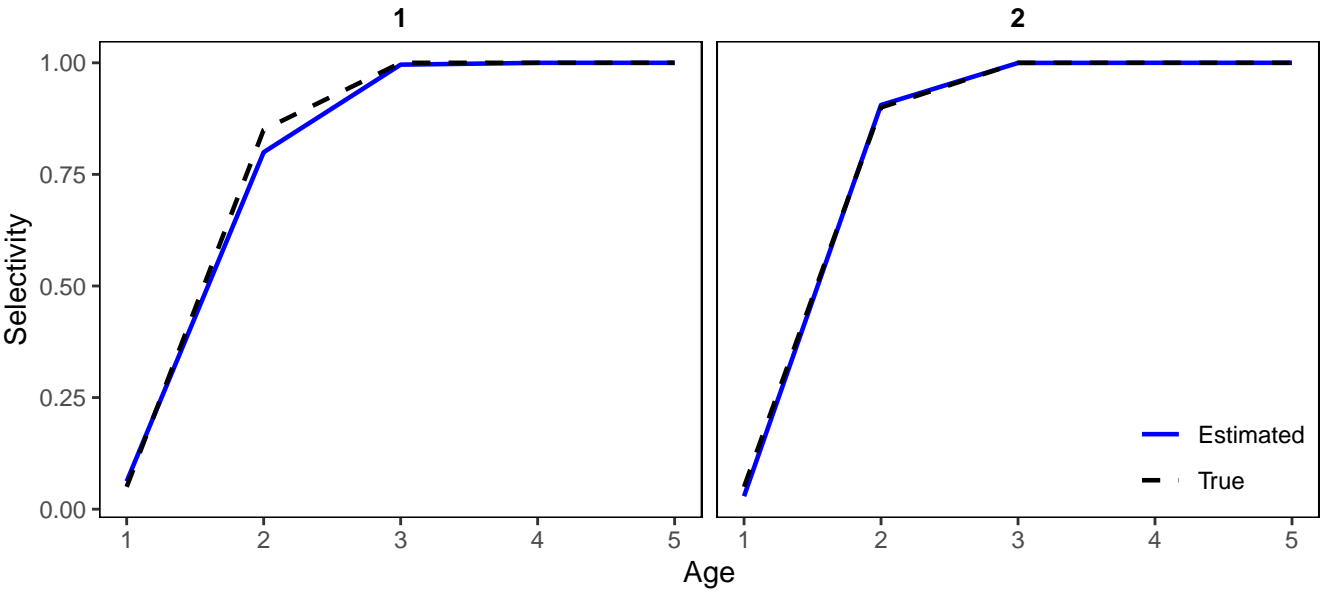## Initial Abundance Residuals
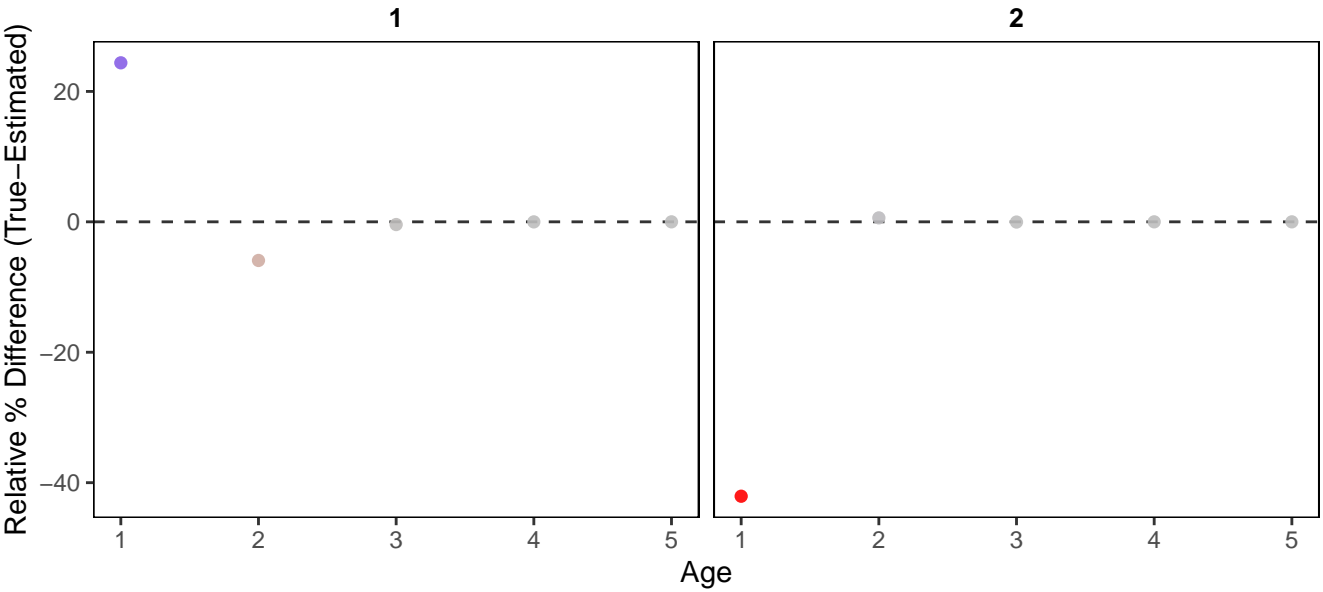
Total Biomass

Biomass Residuals
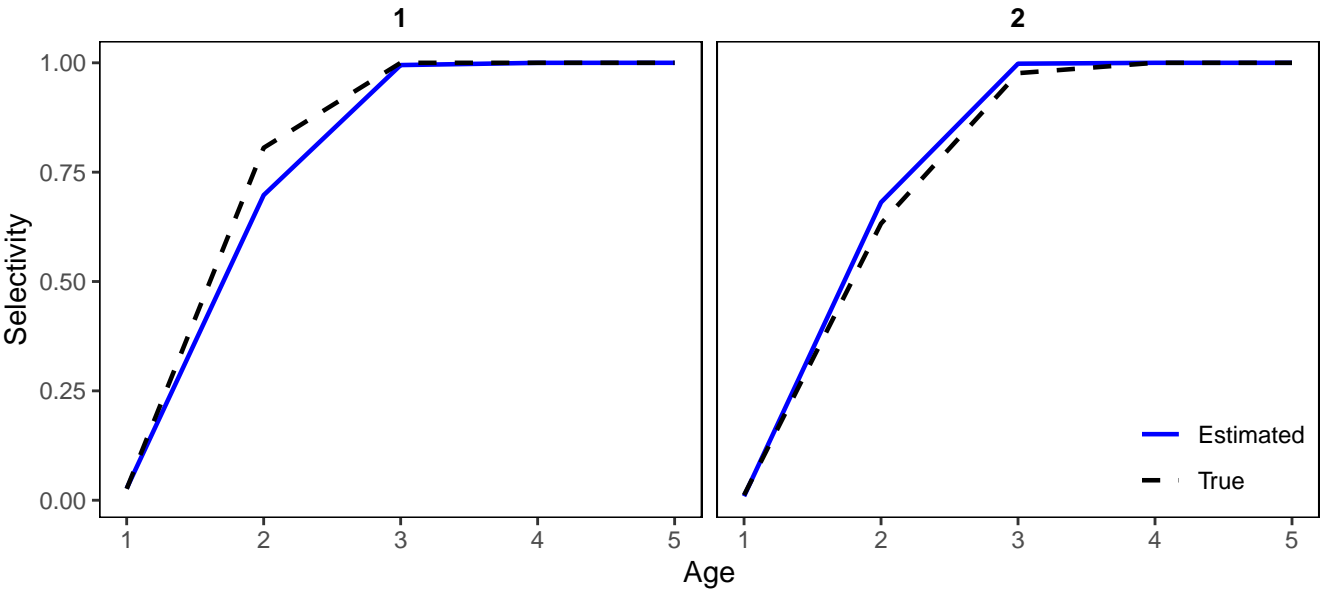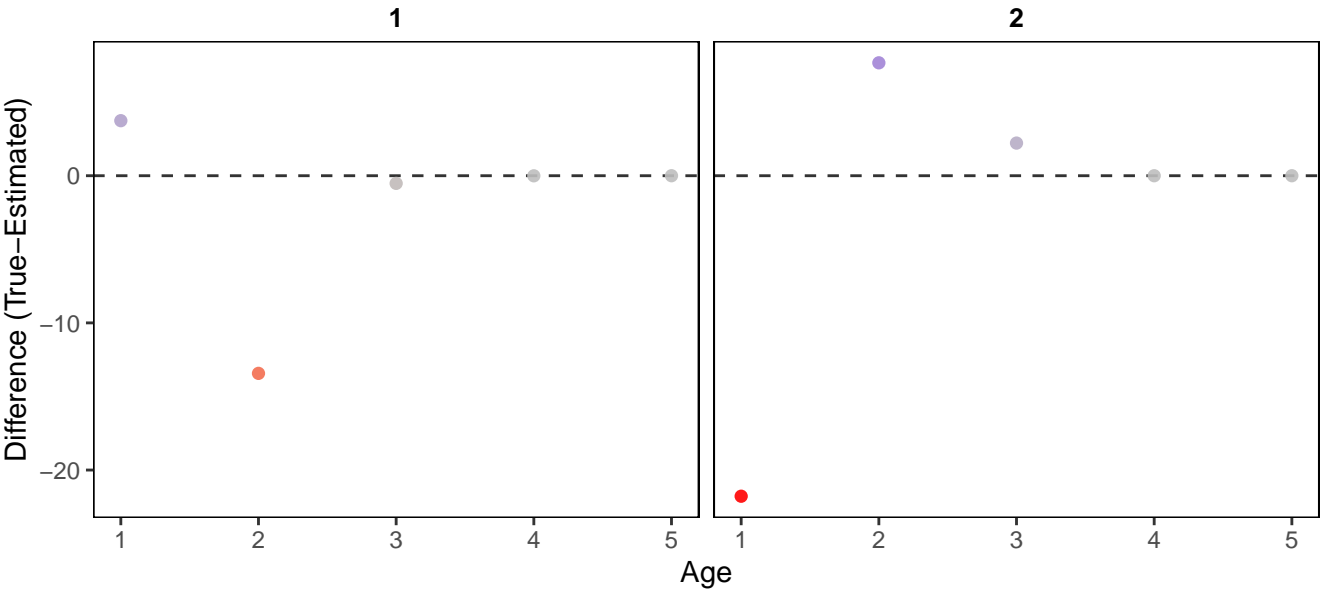
SSB

SSB Residuals

Survey Selectivity
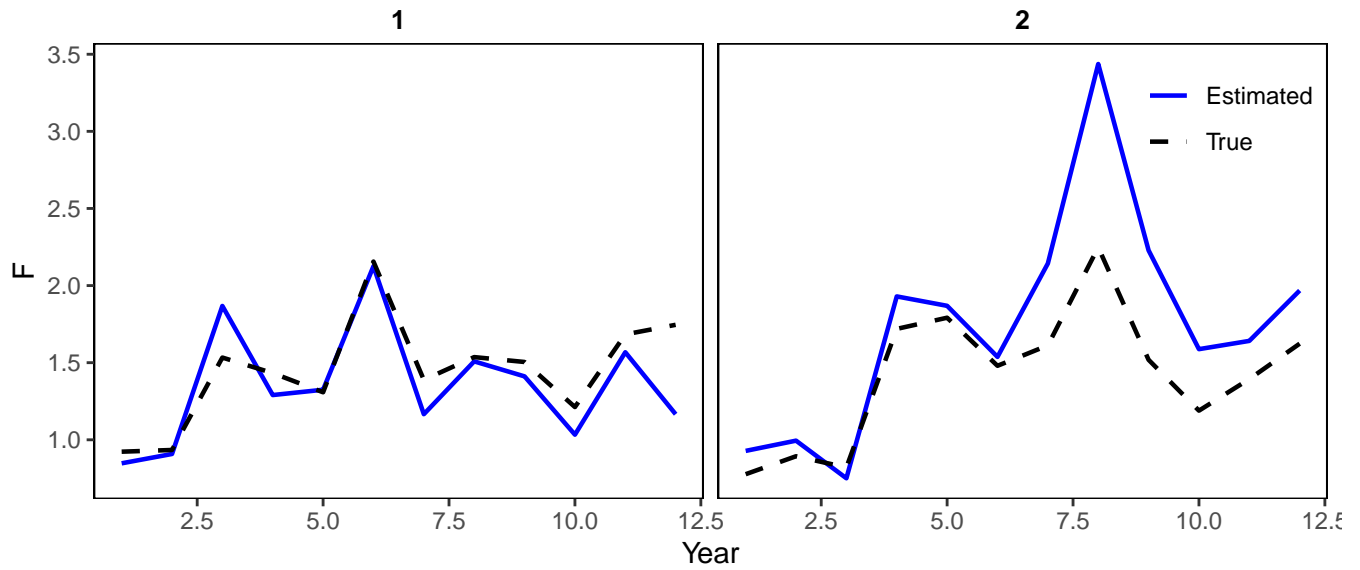
Survey Selectivity Residuals

Fishery Selectivity

Fishery Selectivity Residuals

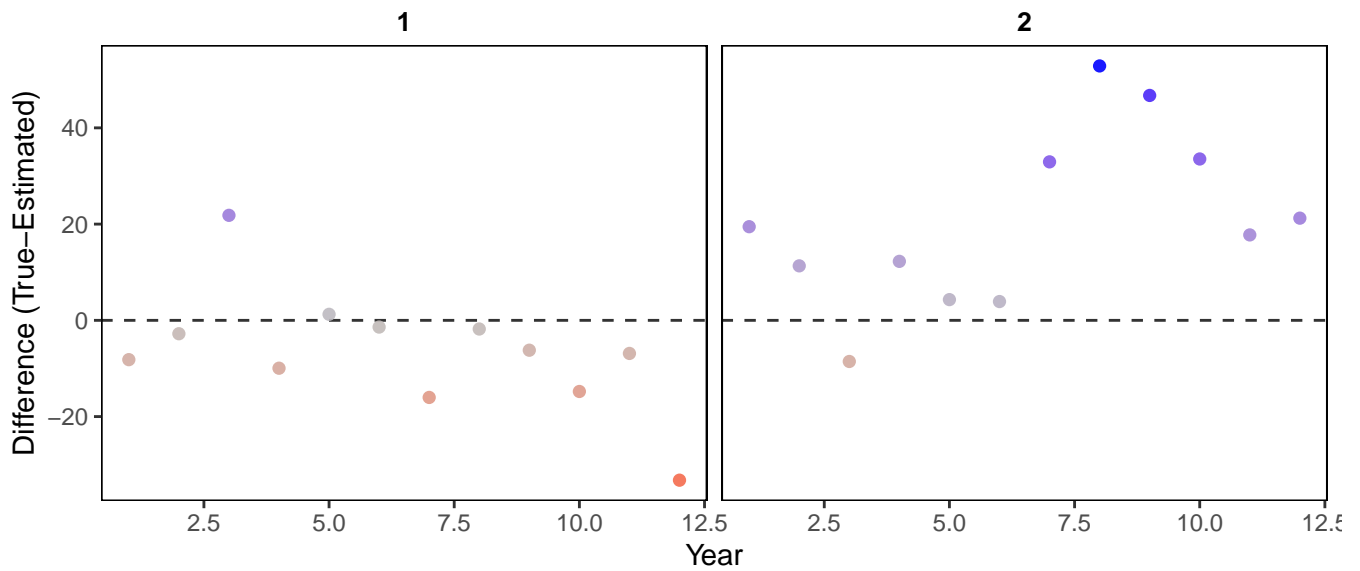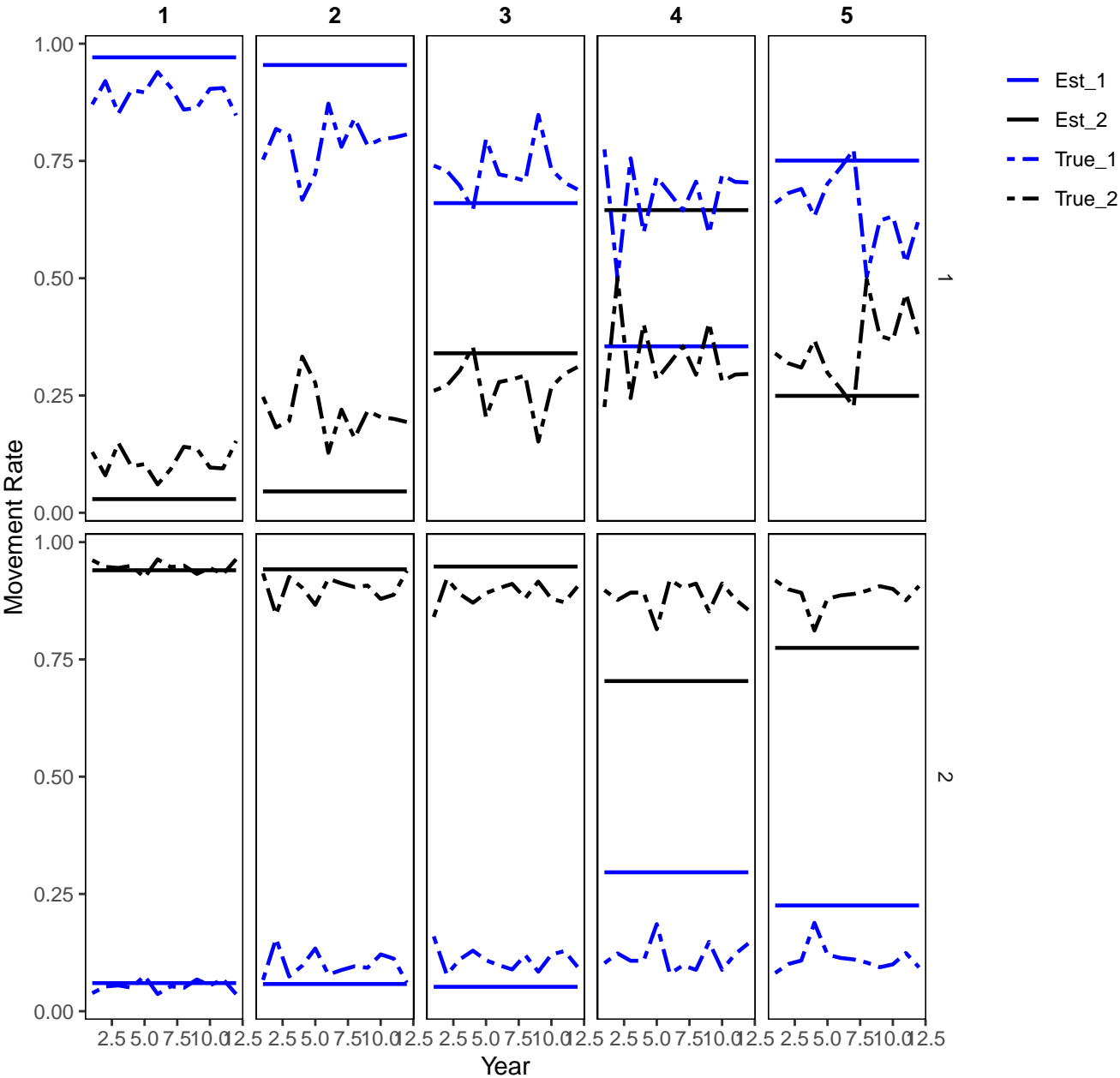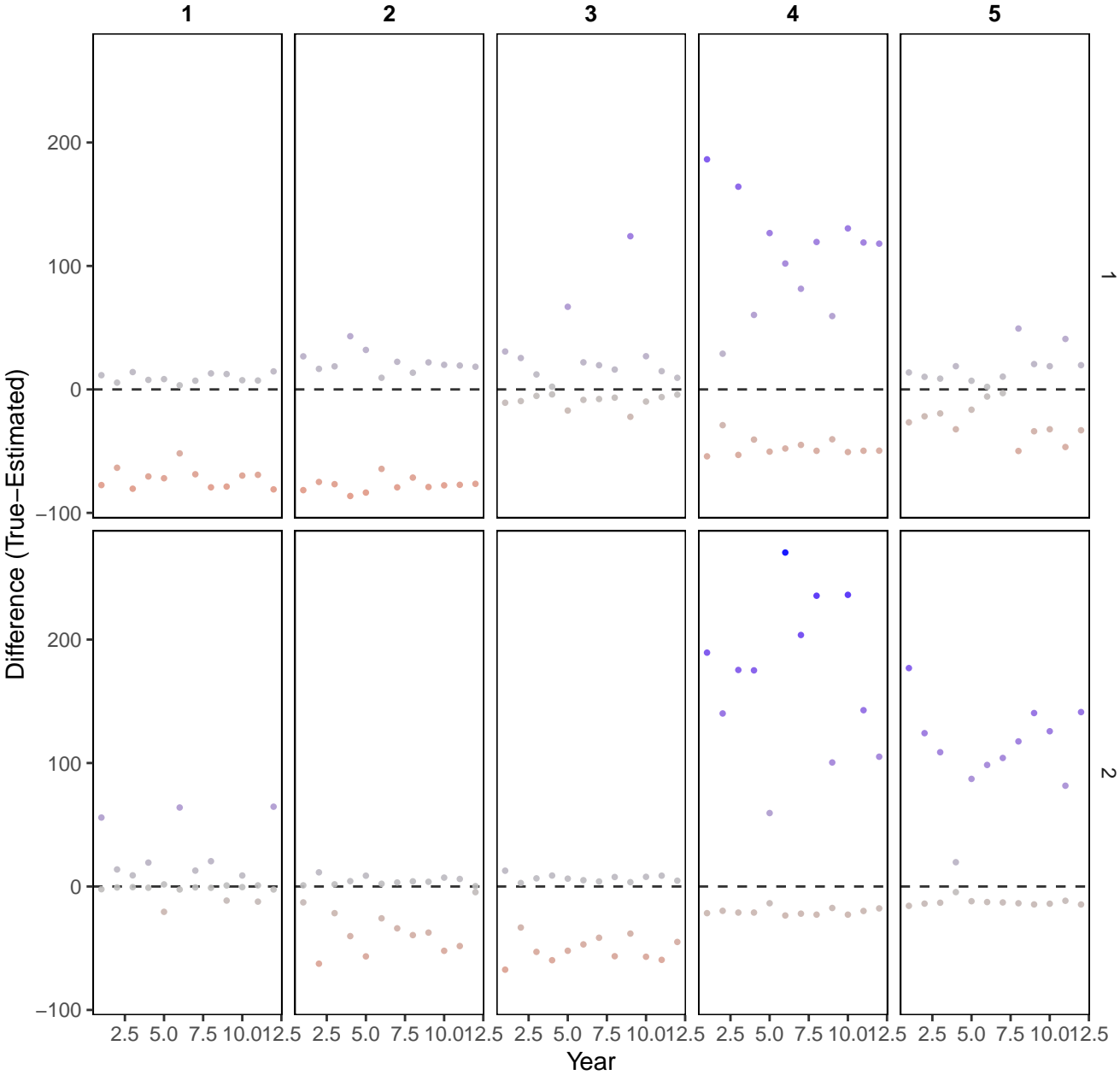# Fishing Mortality

Fully selected F by Year

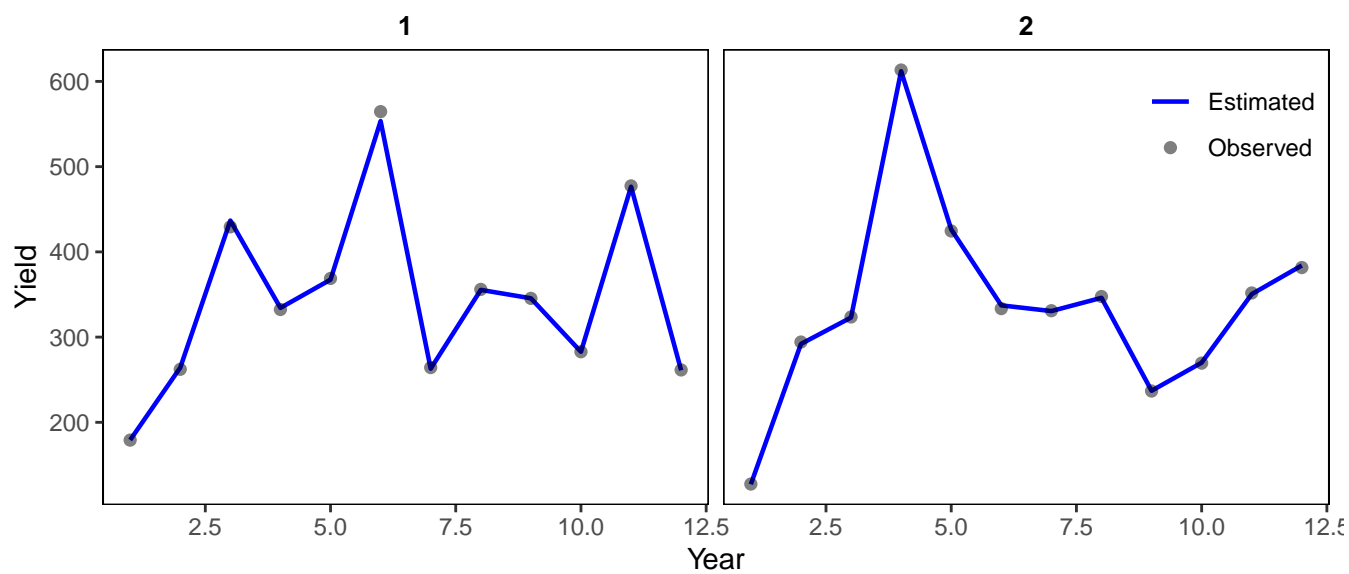
Fully Selected F Residuals

Yearly Movement Rate

Yearly Movement Rate Residuals
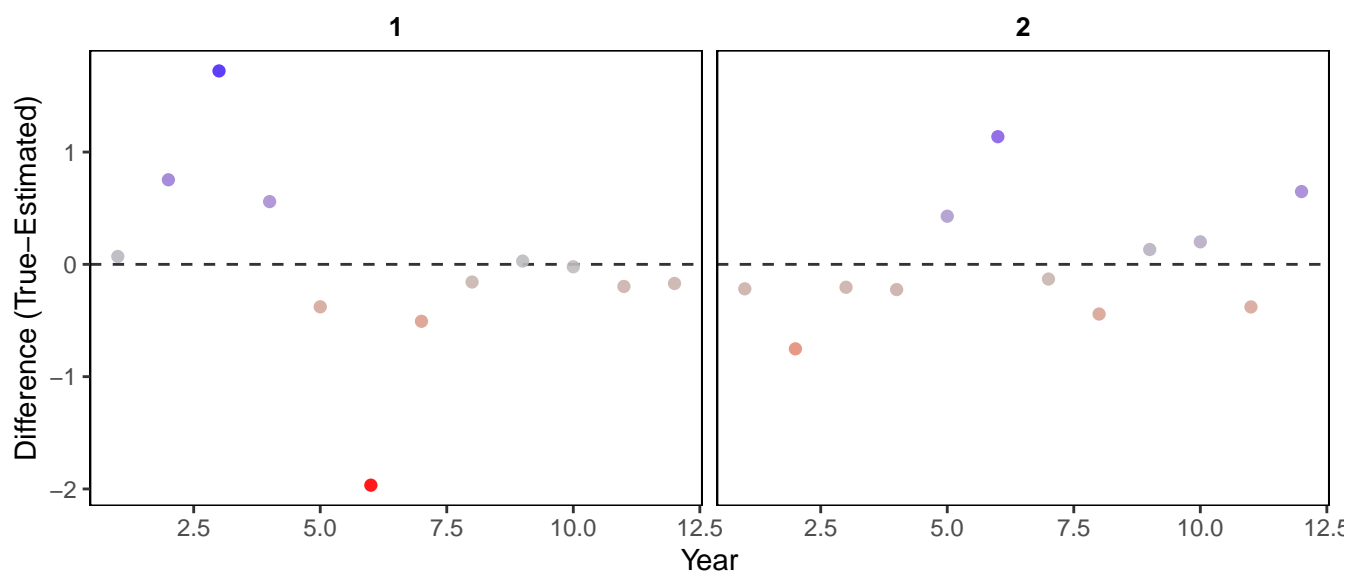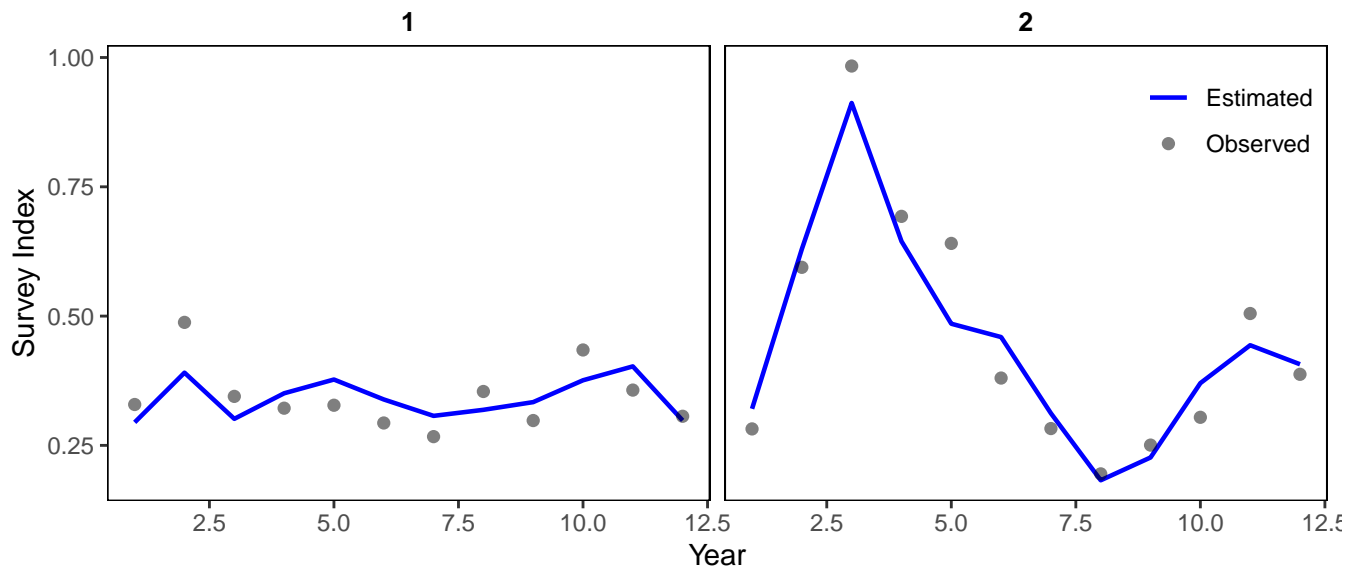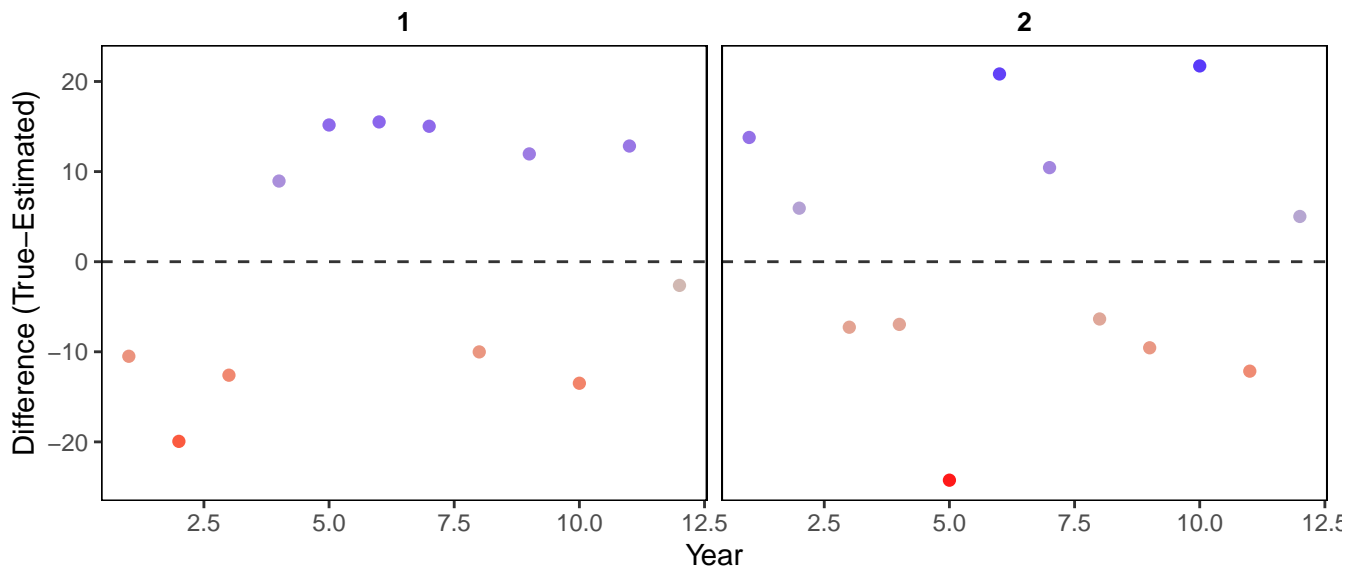
Fits to Data

Yield

Yield Residuals

Fits to Data continued

Survey Biomass

Survey Index Residuals

Fits to Data continued

Survey Age Comp Residuals

Fishery Age Comp Residuals