

## LBI\_EWG1715

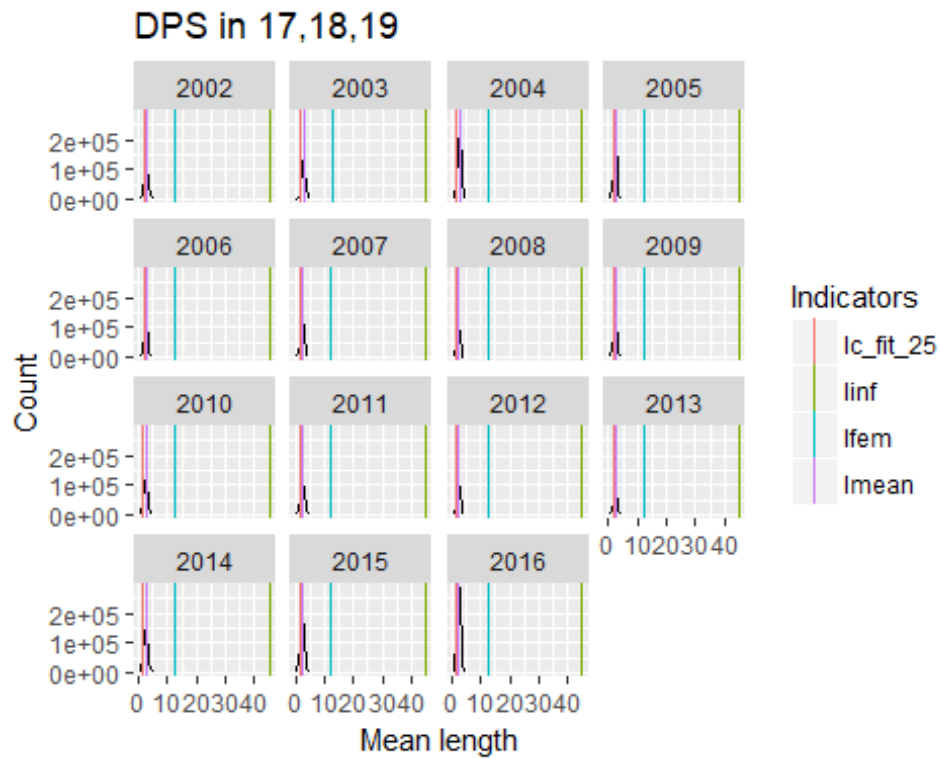
Length based Indicators was conducted with the code constructed by Finley Scott in STECF EWG 16-13.

### Biological parameters

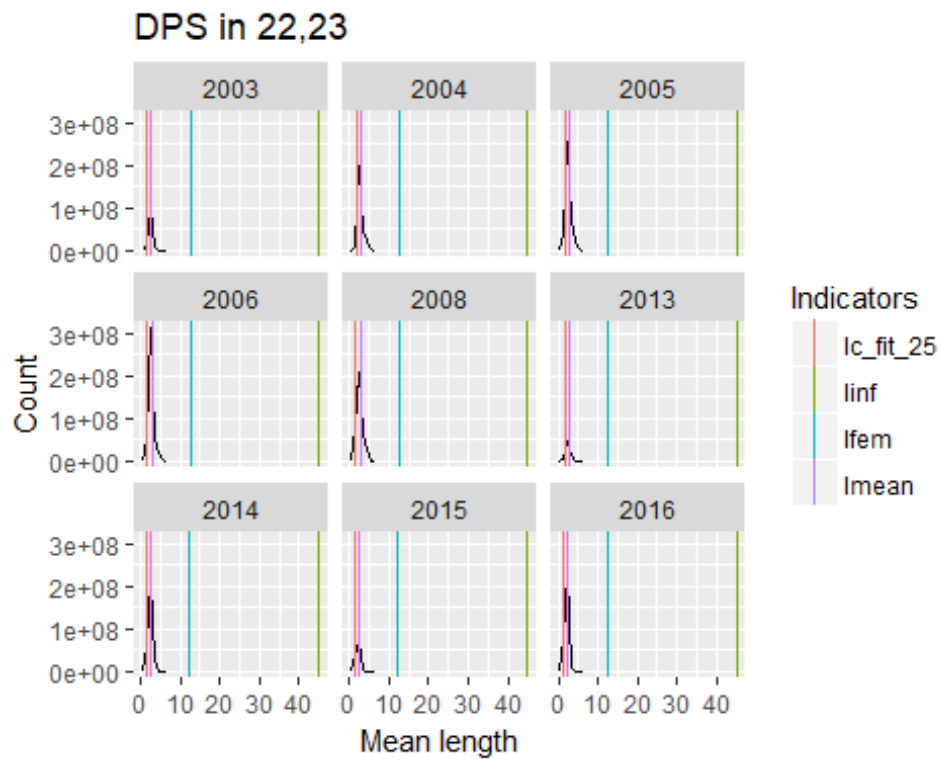
*Growth parameters for the stocks in respect. Asymptotic length in cm.*

	Linf	K	t0	sex
DPS_17_18_19	4.5	0.6	-0.2	C
DPS_22_23	4.6	0.575	-0.2	C
NEP_17_18	8	0.17	-0.5	C
MUT_17_18	30	0.244	-0.61	C
MUT_19	30	0.4	-0.03	C
MUT_20	30	0.4	-0.03	C
MUT_22_23	30	0.4	-0.03	C
HKE_17_18	106	NA	NA	C
HKE_19	104	0.12	-0.01	C
HKE_20	104	0.12	-0.01	C
HKE_22_23	92.1	0.19	-0.39	C
RJC_17_18	121	NA	NA	C
CTC_17_18	29	0.75	-0.07	C
SOL_17	39.6	0.4	-0.46	C
MTS_17_18	4.15	0.49	-0.015	C
PAC_17_18	54.3	0.118	-1.12	C

## Distribution Plots

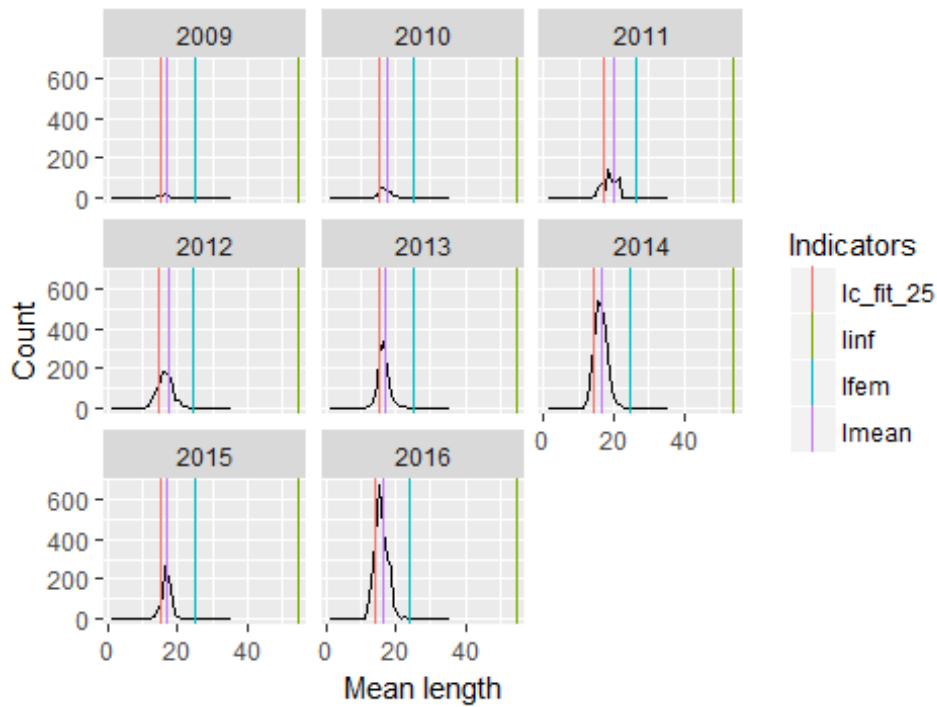


*Exploratory catch distribution and indicators for Deep-water rose shrimp in GSAs 17, 18 and 19.*



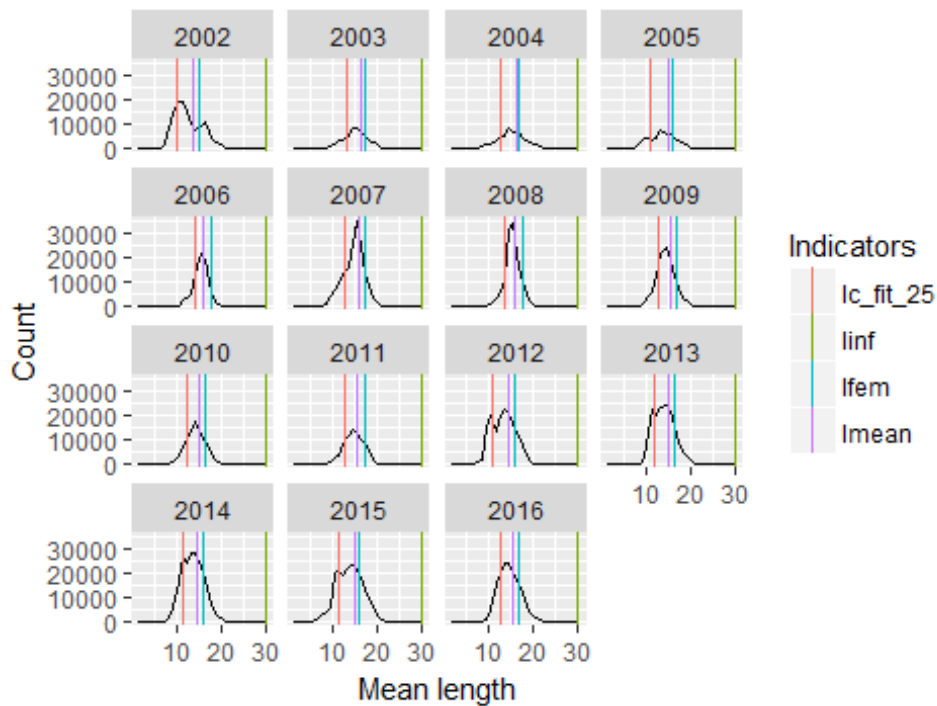
*Exploratory catch distribution and indicators for Deep-water rose shrimp in GSAs 22 and 23.*

### PAC in 17,18

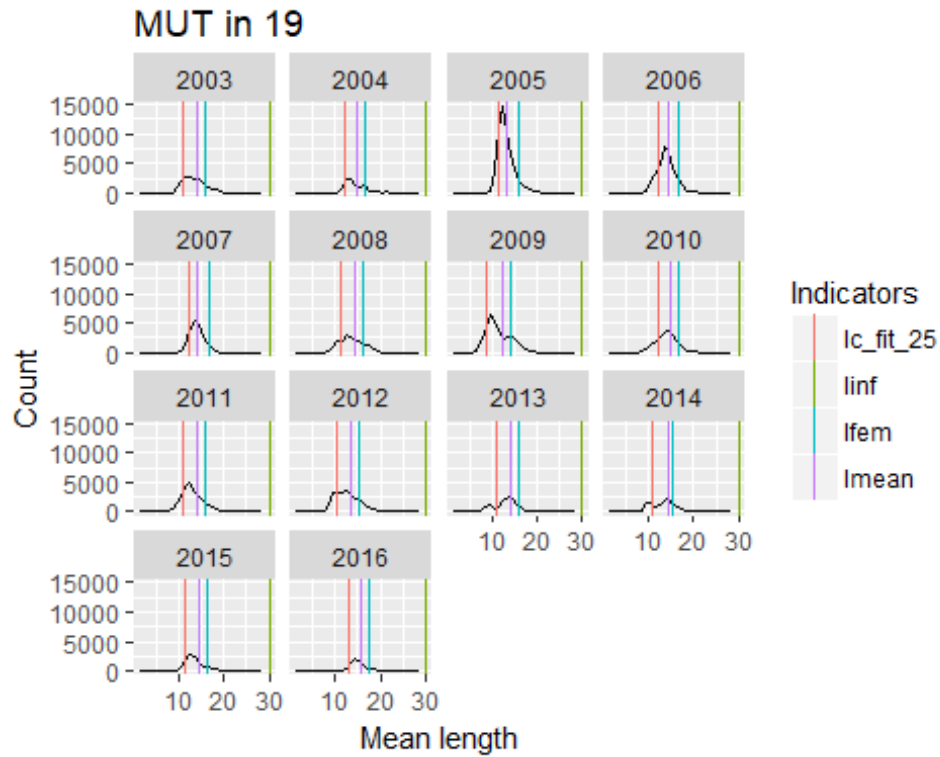


Exploratory catch distribution and indicators for Common pandora in GSAs 17 and 18.

### MUT in 17,18



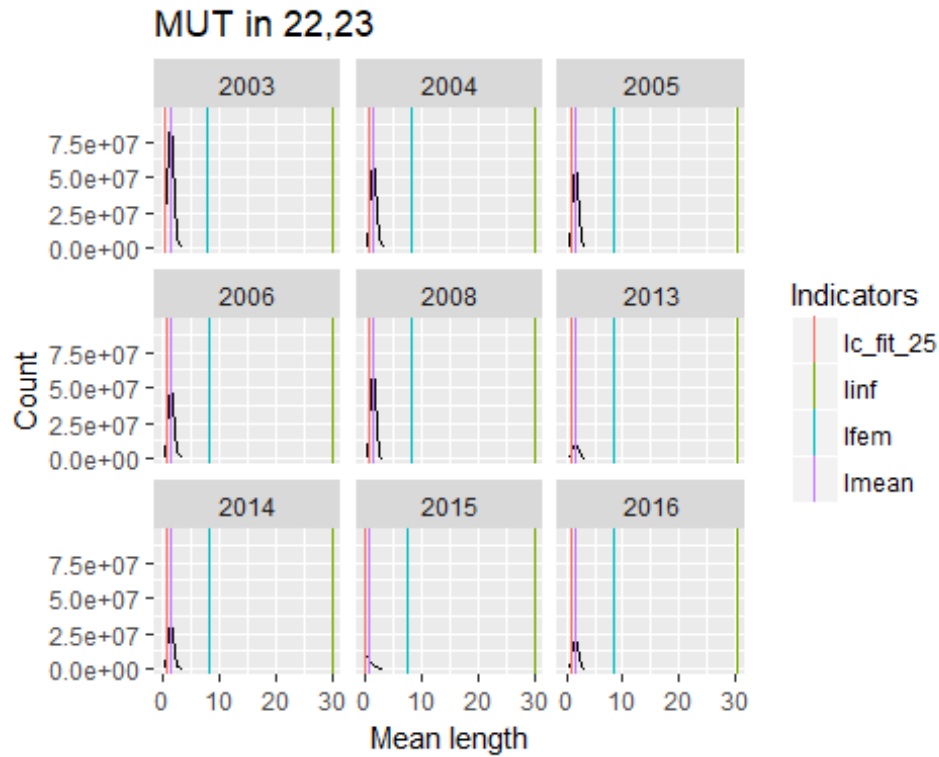
Exploratory catch distribution and indicators for Red mullet in GSAs 17 and 18.



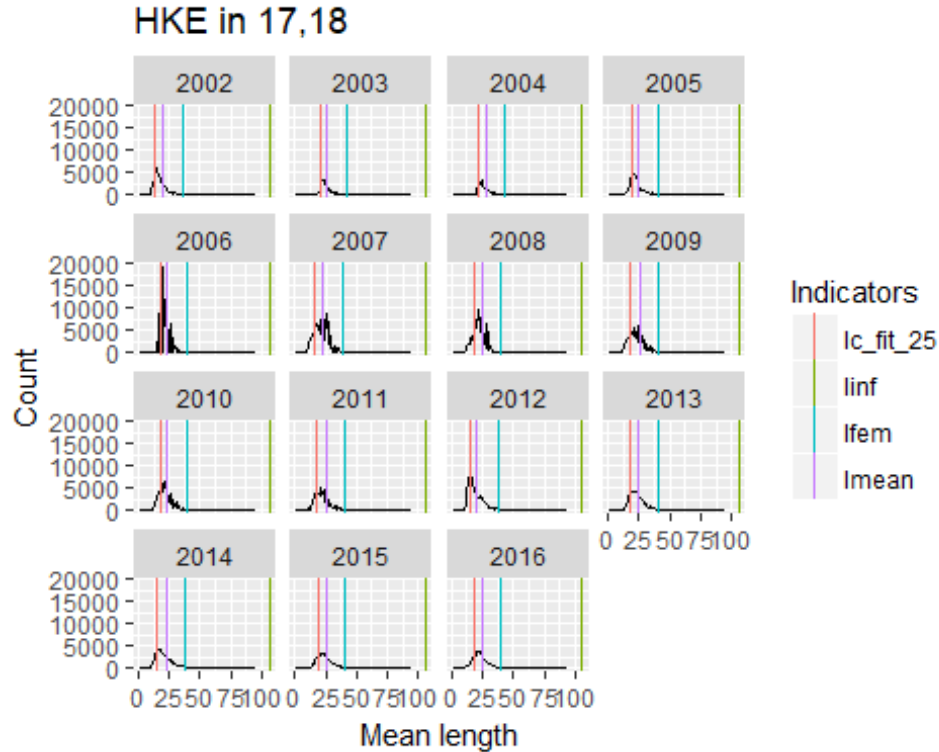
*Exploratory catch distribution and indicators for Red mullet in GSA 19.*



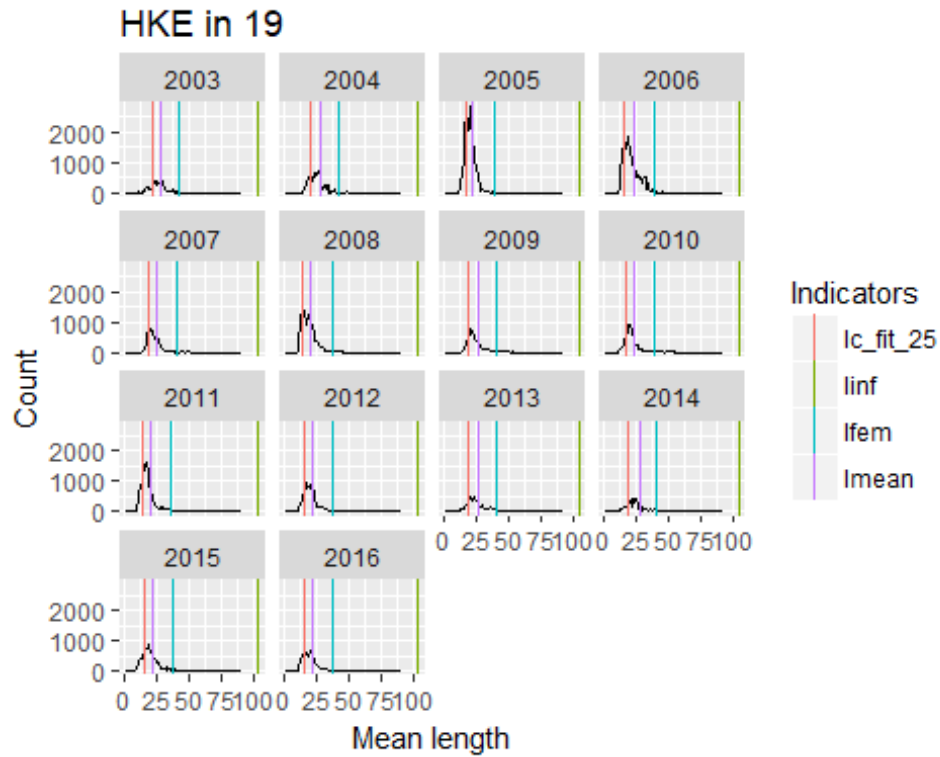
*Exploratory catch distribution and indicators for Red mullet in GSA 20.*



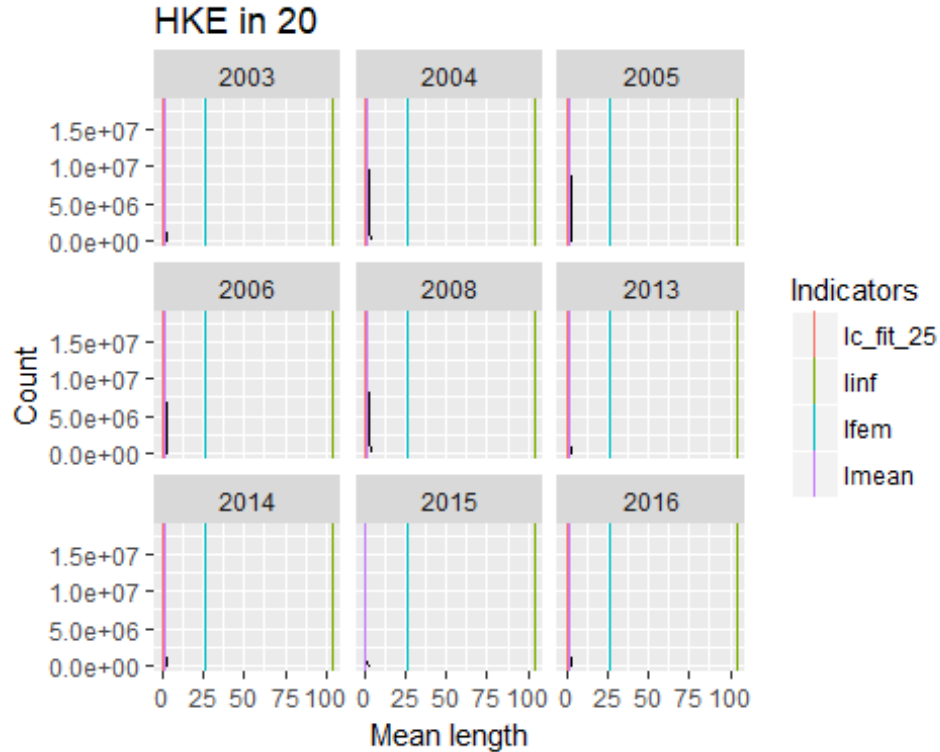
*Exploratory catch distribution and indicators for Red mullet in GSAs 22 and 23.*



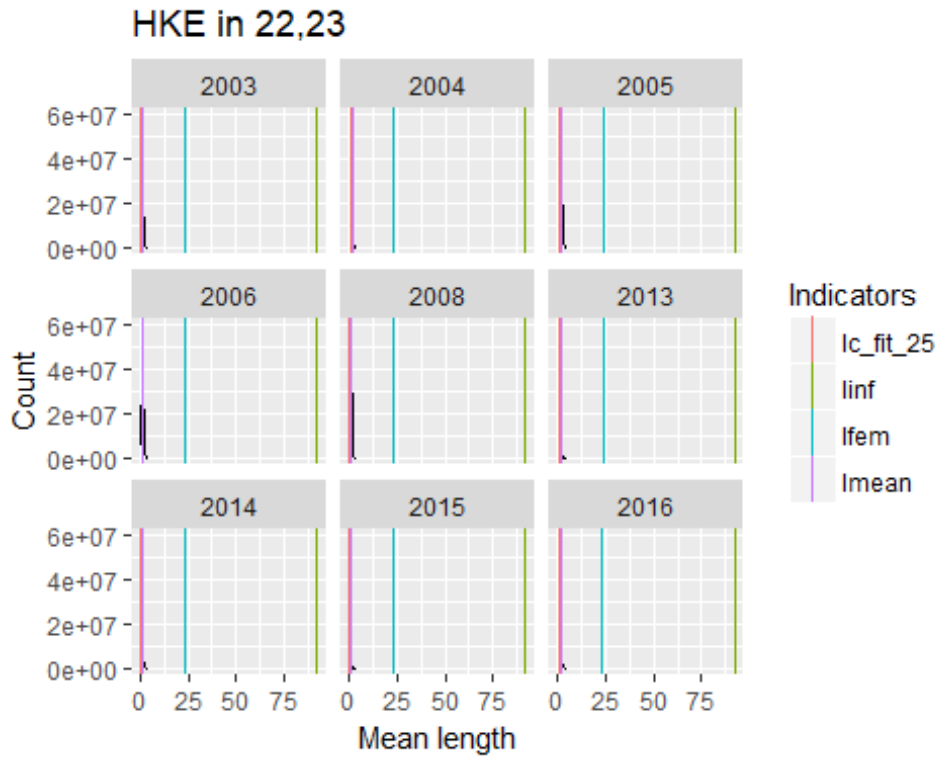
*Exploratory catch distribution and indicators for Hake in GSAs 17 and 18.*



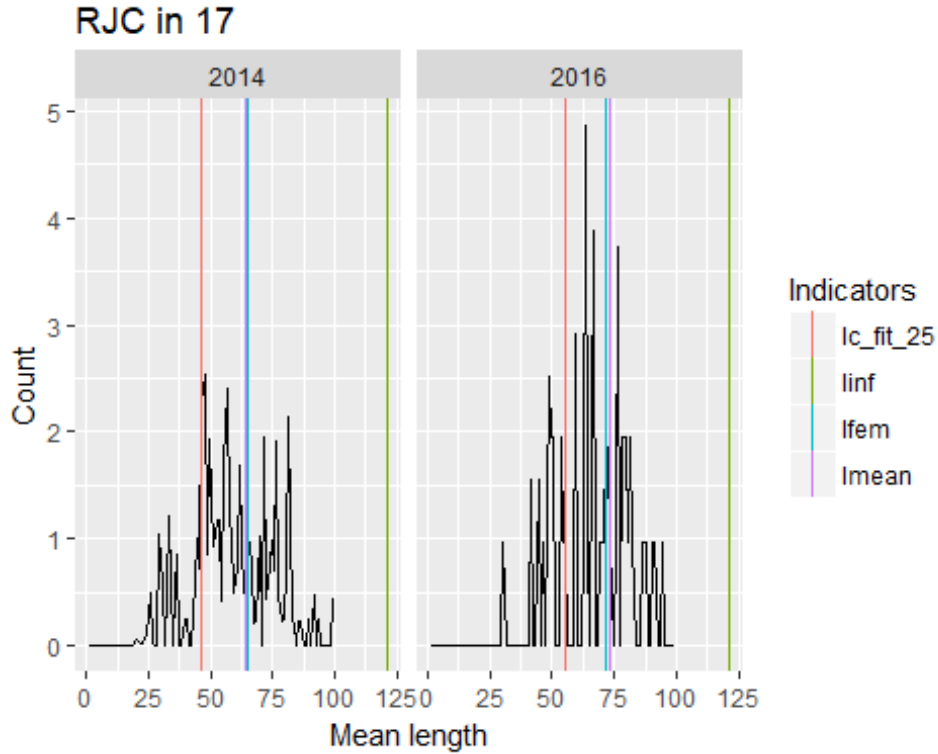
*Exploratory catch distribution and indicators for Hake in GSA 19.*



*Exploratory catch distribution and indicators for Hake in GSA 20.*

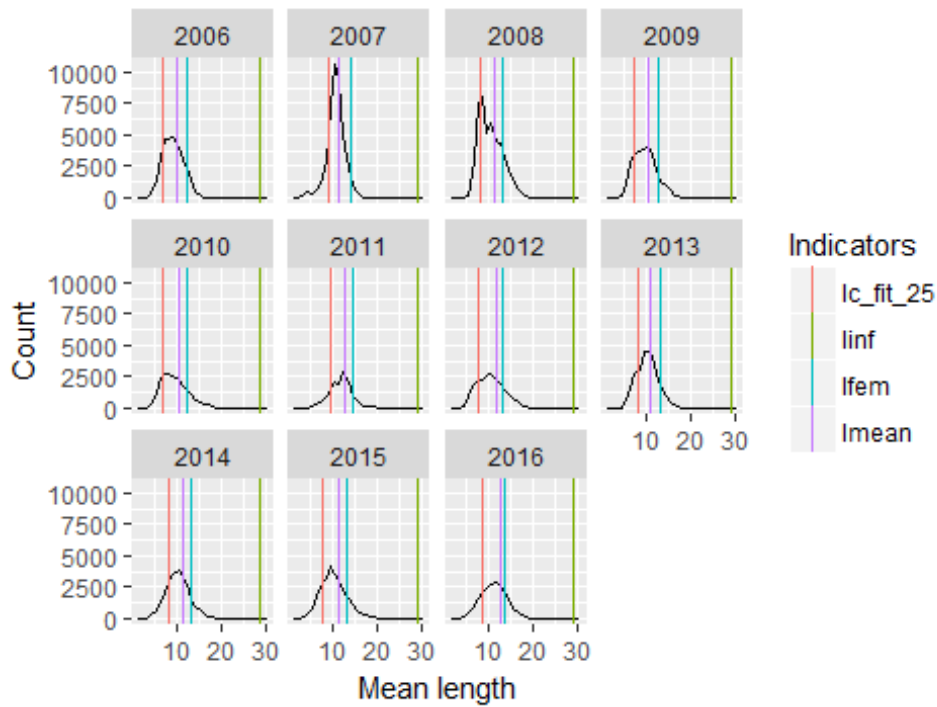


*Exploratory catch distribution and indicators for Hake in GSAs 22 and 23.*



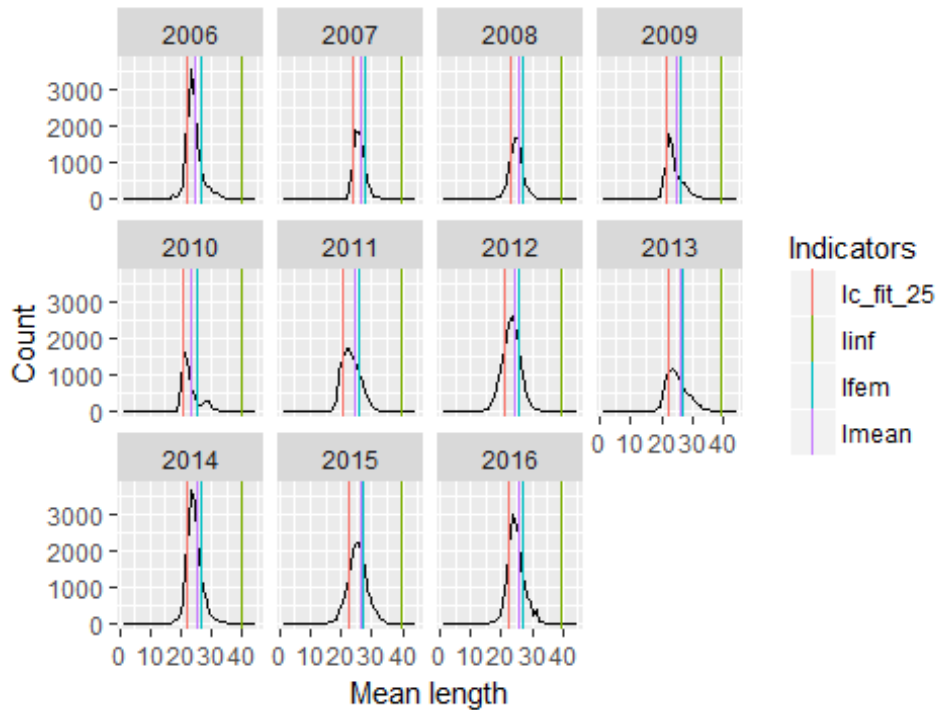
*Exploratory catch distribution and indicators for Thornback ray in GSA 17.*

### CTC in 17,18



Exploratory catch distribution and indicators for Common cuttlefish in GSAs 17 and 18.

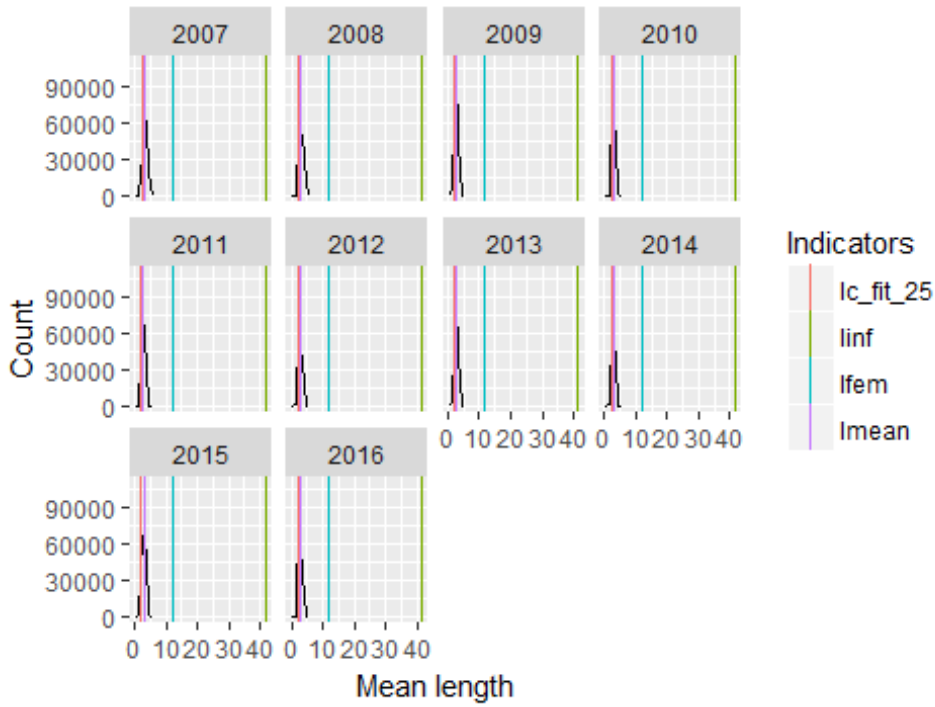
### SOL in 17



Exploratory catch distribution and indicators for Sole in GSA 17.

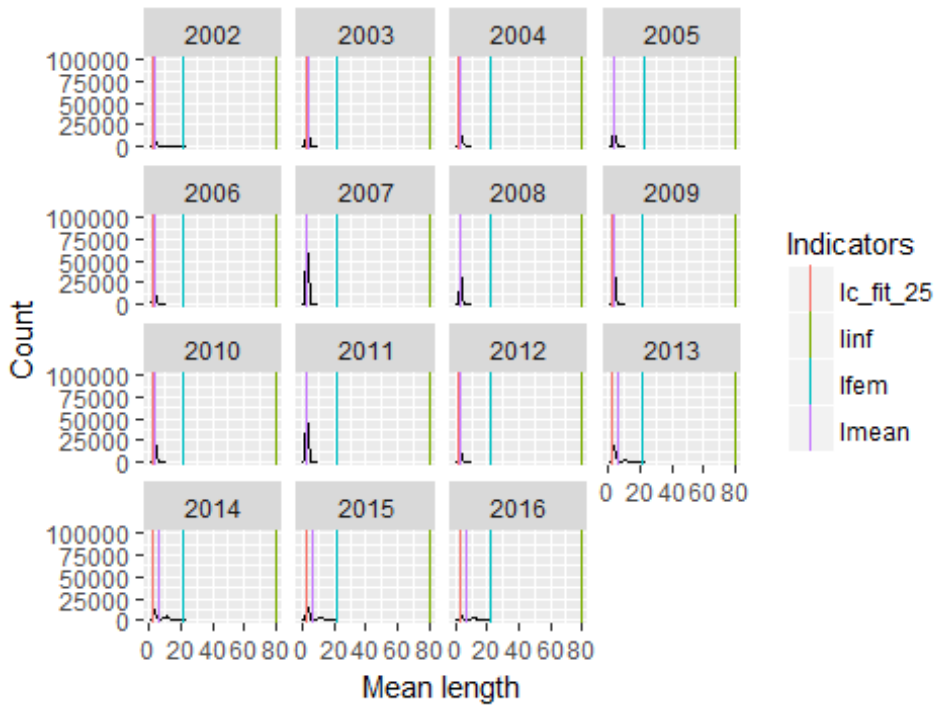


### MTS in 17,18

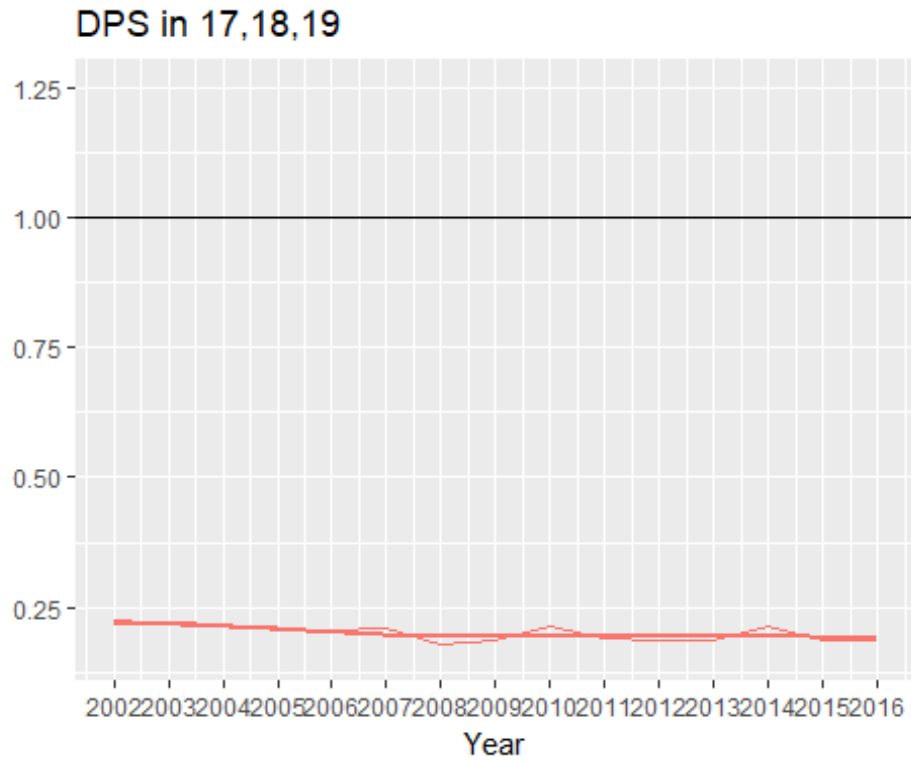


*Exploratory catch distribution and indicators for Spottail mantis shrimp in GSAs 17 and 18.*

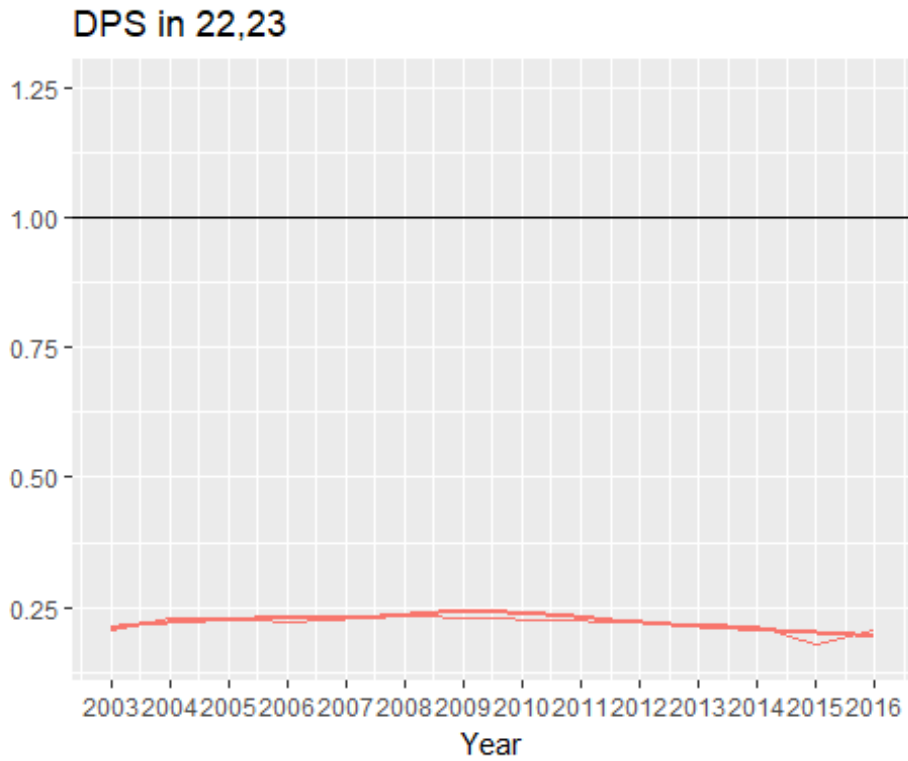
### NEP in 17,18



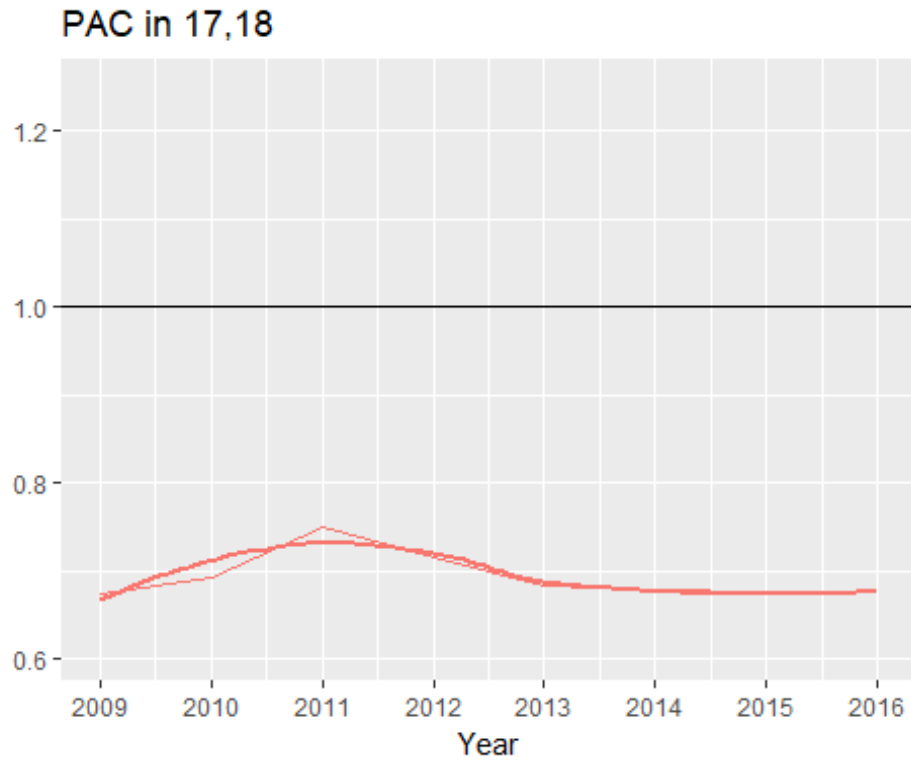
#Indicators



*Indicators with the provided Linf for Deep-water rose shrimp in GSAs 17, 18 and 19. The spiked line for the respective colors represents the results, whereas a smoother was applied on the results in the case of the smoothed line.*

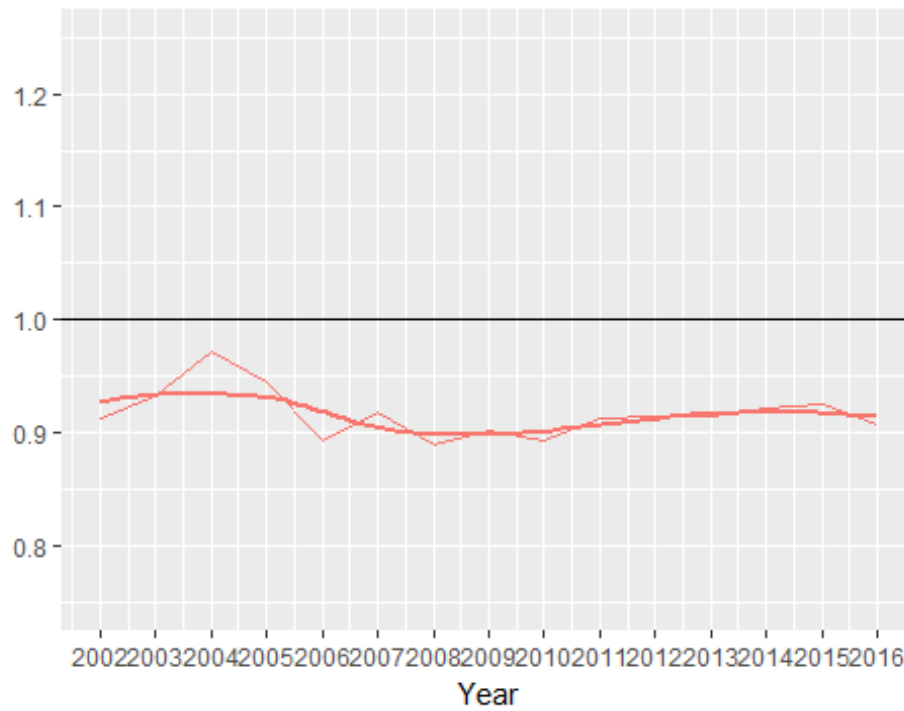


*Indicators with the provided Linf for Deep-water rose shrimp in GSAs 22 and 23. The spiked line for the respective colors represents the results, whereas a smoother was applied on the results in the case of the smoothed line.*

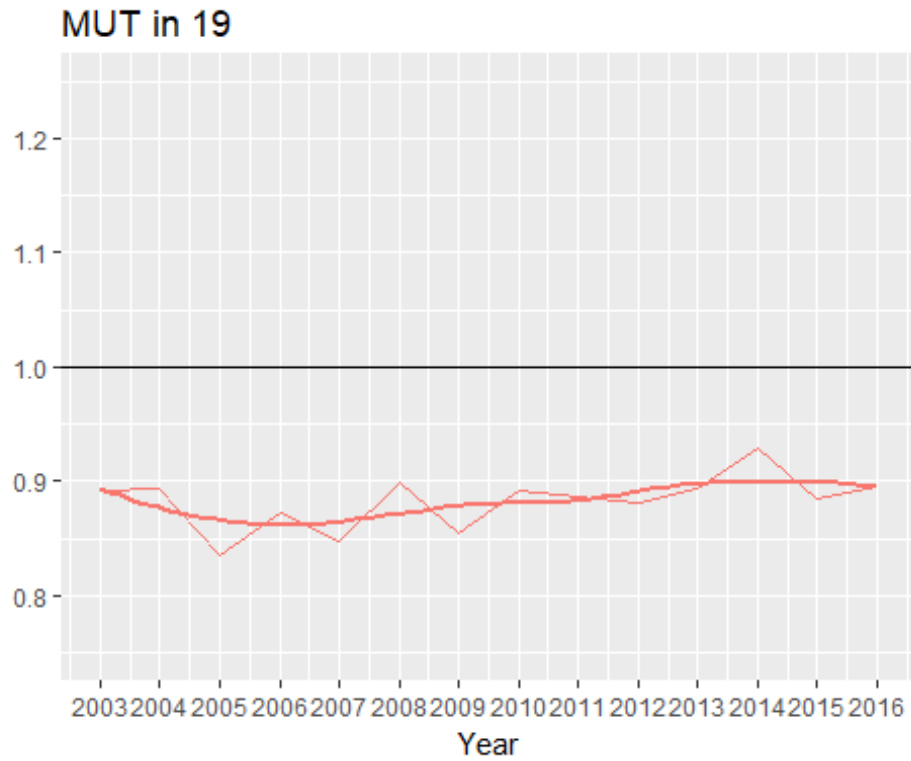


*Indicators with the provided Linf for Common pandora in GSAs 17 and 18. The spiked line for the respective colors represents the results, whereas a smoother was applied on the results in the case of the smoothed line.*

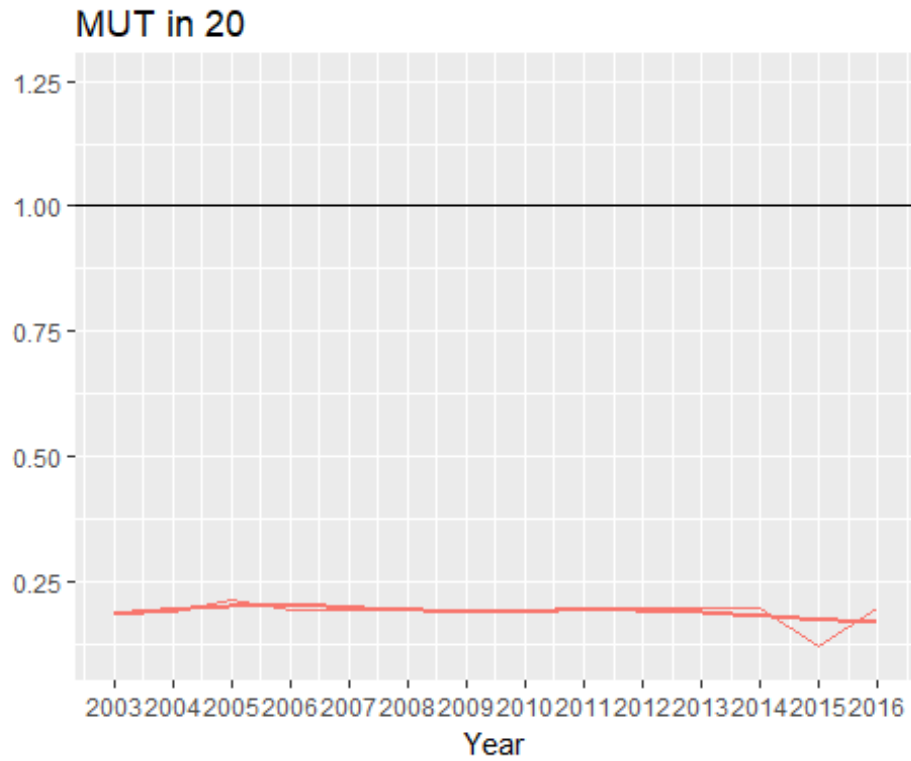
### MUT in 17,18



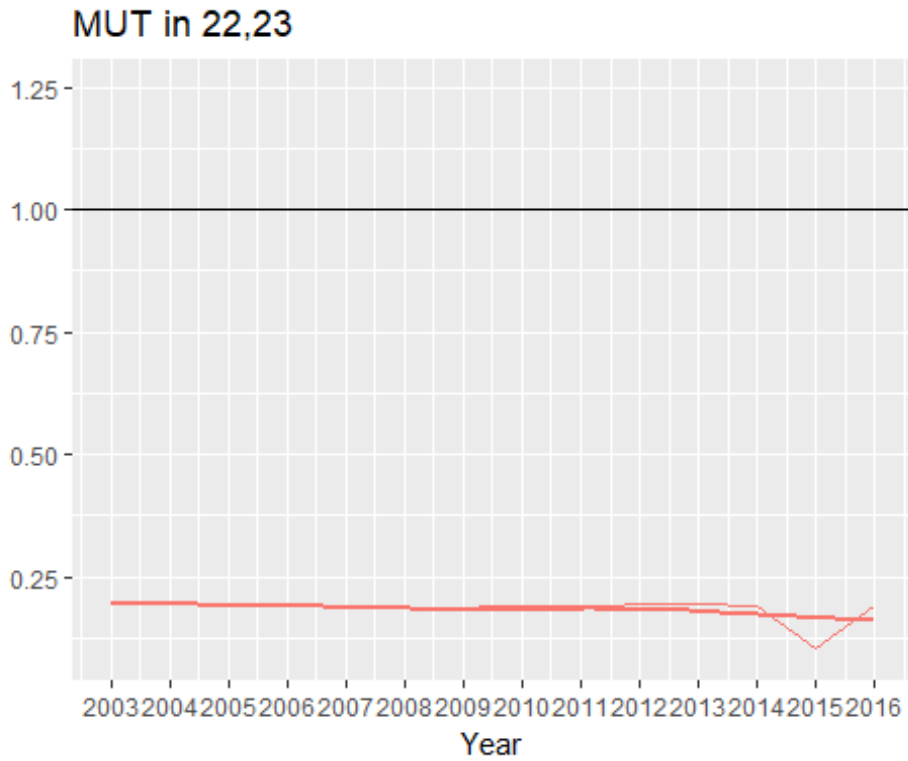
*Indicators with the provided Linf for Red mullet in GSAs 17 and 18. The spiked line for the respective colors represents the results, whereas a smoother was applied on the results in the case of the smoothed line.*



*Indicators with the provided Linf for Red mullet in GSA 19. The spiked line for the respective colors represents the results, whereas a smoother was applied on the results in the case of the smoothed line.*



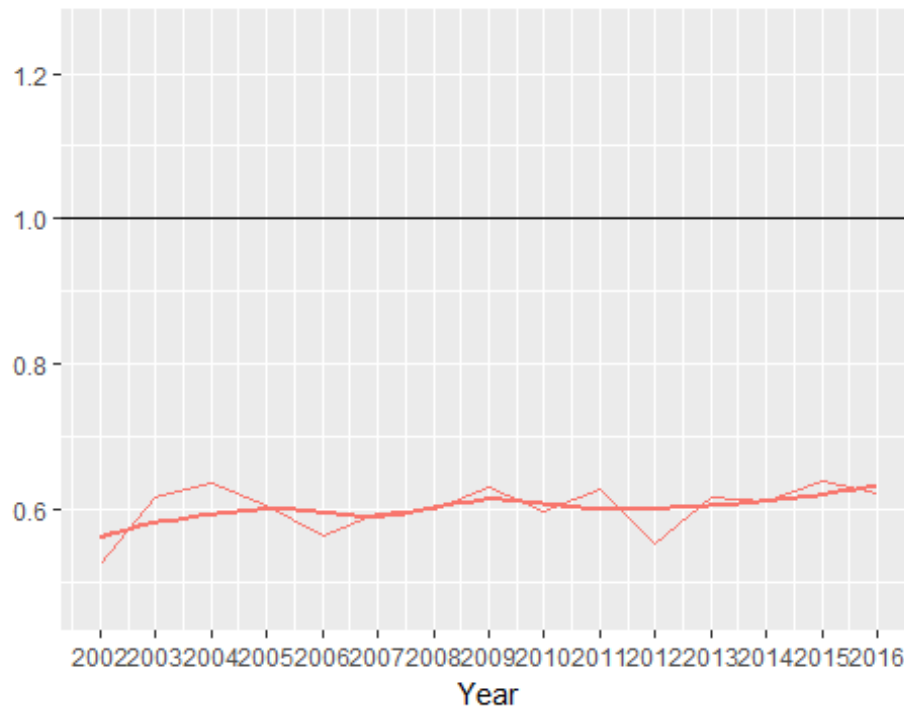
*Indicators with the provided Linf Red mullet in GSA 20. The spiked line for the respective colors represents the results, whereas a smoother was applied on the results in the case of the smoothed line.*



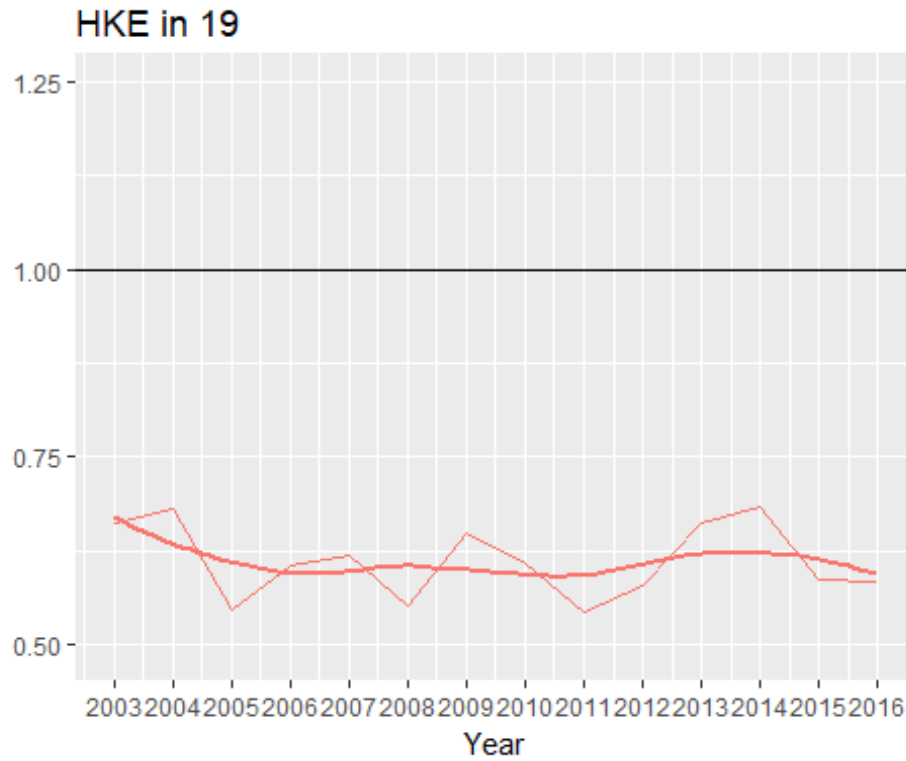
*Indicators with the provided Linf for Red mullet in GSAs 22 and 23. The spiked line for the respective colors represents the results, whereas a smoother was applied on the results in the case of the smoothed line.*



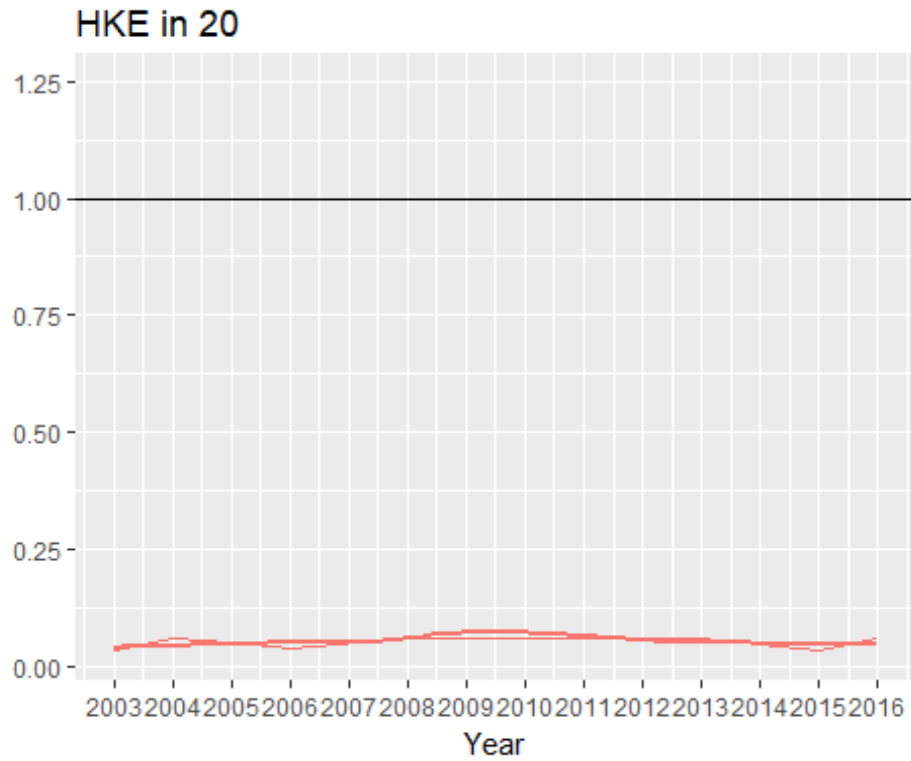
### HKE in 17,18



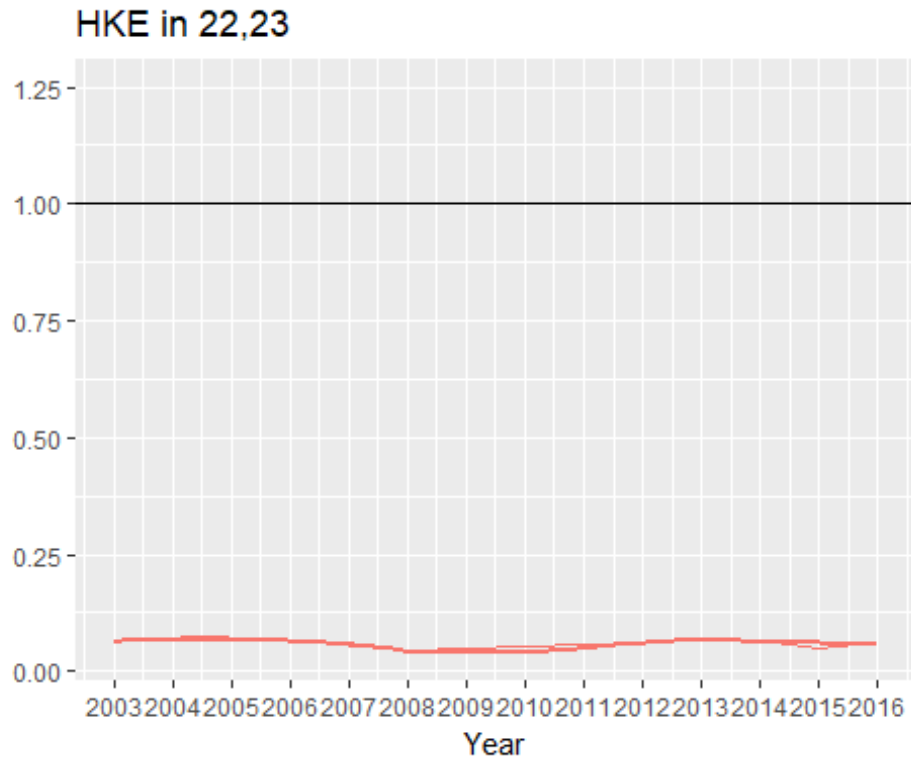
*Indicators with the provided Linf for Hake in GSAs 17 and 18. The spiked line for the respective colors represents the results, whereas a smoother was applied on the results in the case of the smoothed line.*



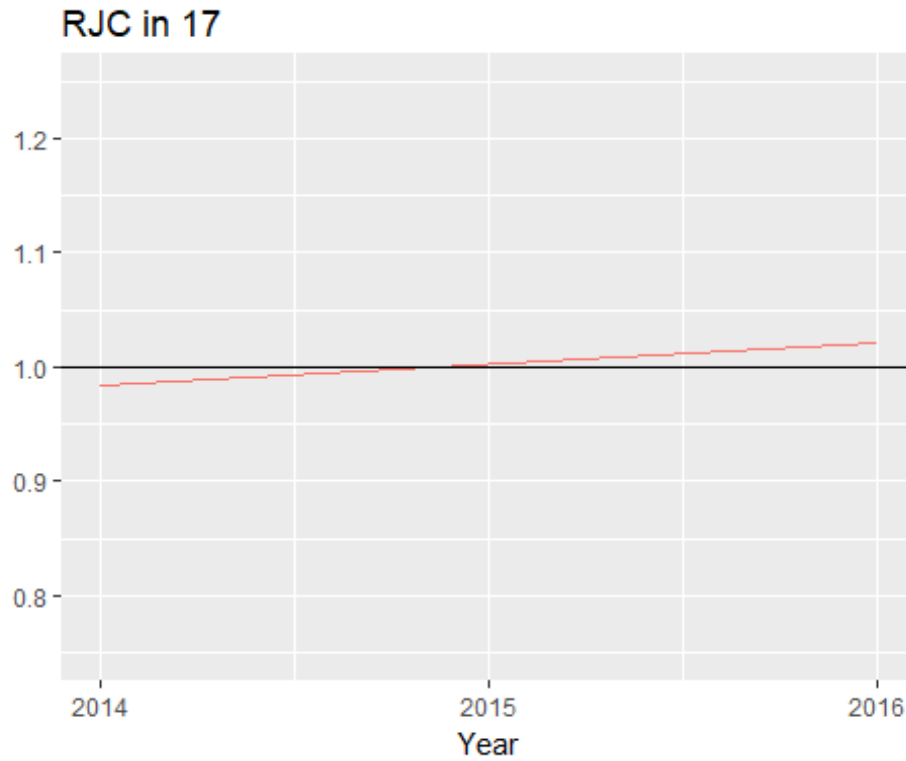
*Indicators with the provided Linf for Hake in GSA 19. The spiked line for the respective colors represents the results, whereas a smoother was applied on the results in the case of the smoothed line.*



*Indicators with the provided Linf for Hake in GSA 20. The spiked line for the respective colors represents the results, whereas a smoother was applied on the results in the case of the smoothed line.*

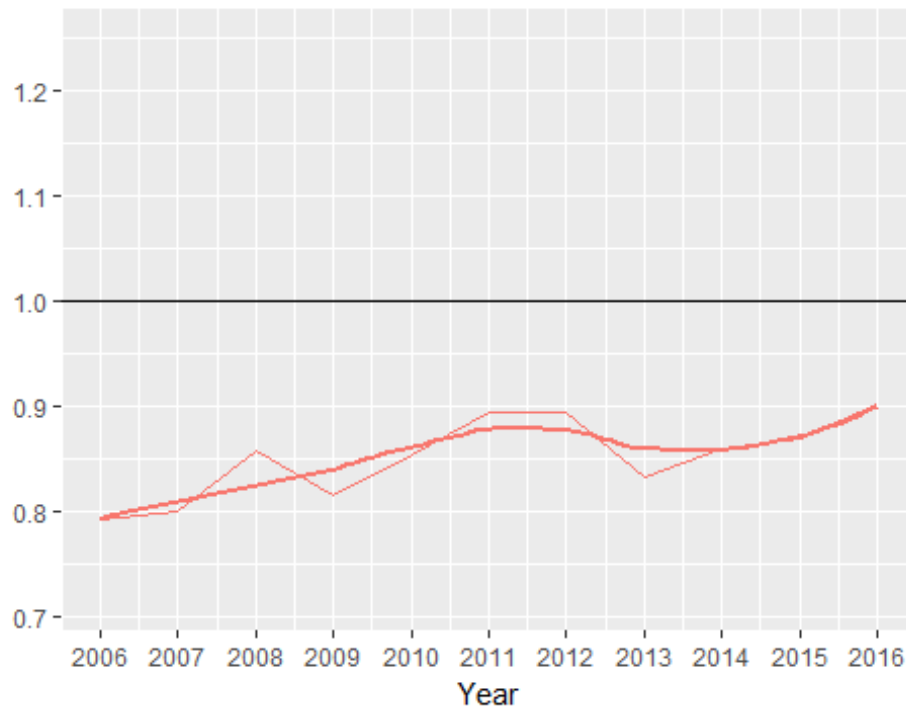


*Indicators with the provided Linf for Hake in GSAs 22 and 23. The spiked line for the respective colors represents the results, whereas a smoother was applied on the results in the case of the smoothed line.*

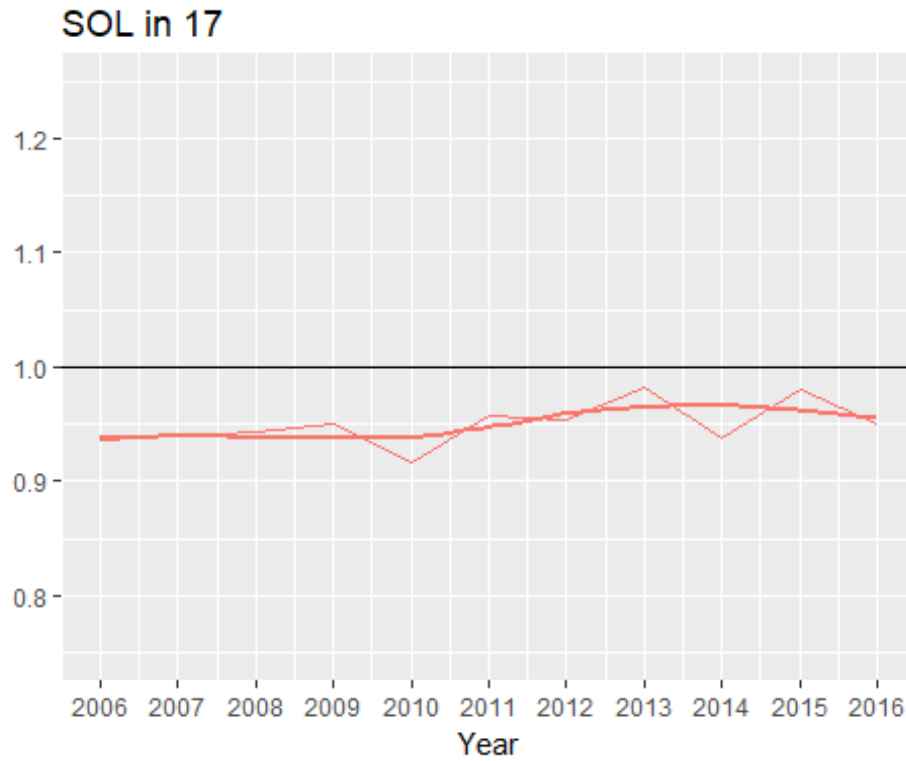


*Indicators with the provided Linf for for Thornback ray in GSA 17. The spiked line for the respective colors represents the results, whereas a smoother was applied on the results in the case of the smoothed line.*

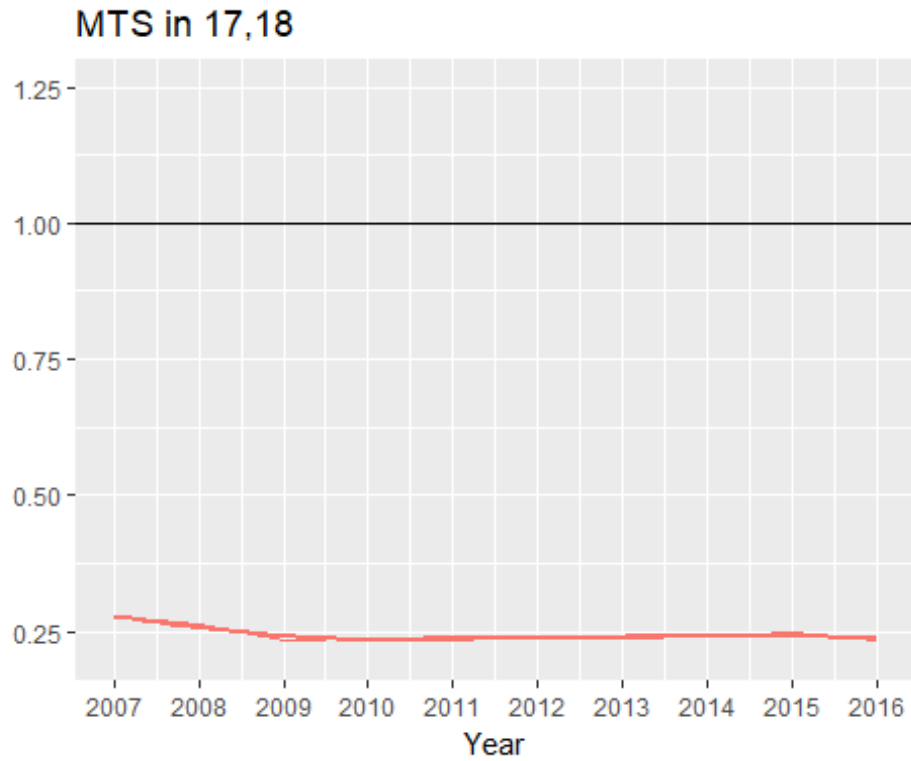
### CTC in 17,18



*Indicators with the provided Linf for Common cuttlefish in GSAs 17 and 18. The spiked line for the respective colors represents the results, whereas a smoother was applied on the results in the case of the smoothed line.*

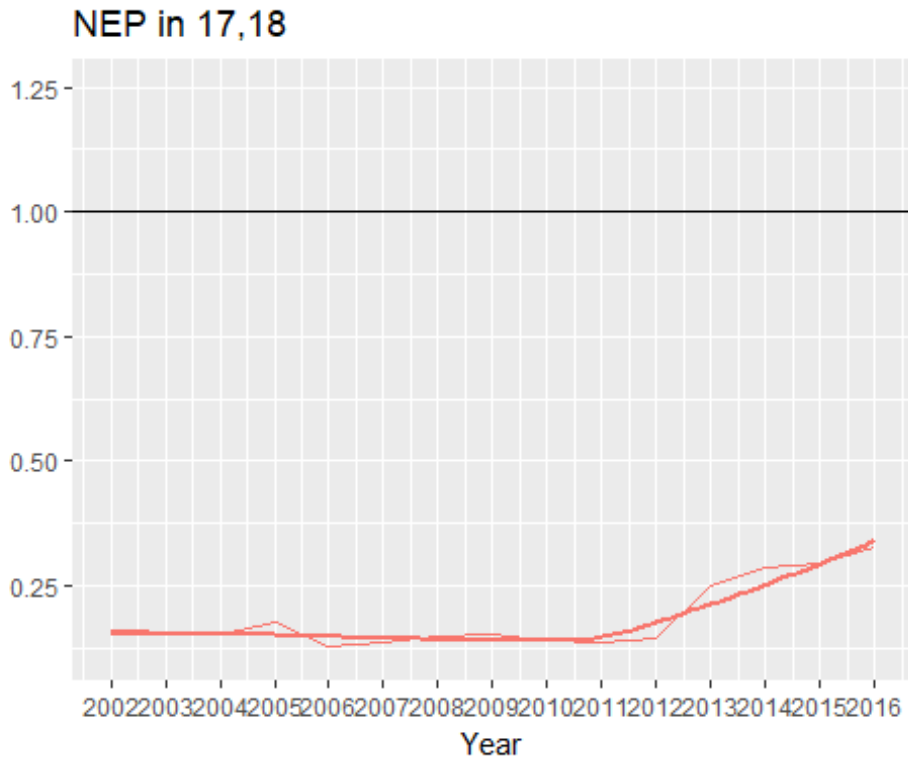


*Indicators with the provided Linf for Sole in GSA 17. The spiked line for the respective colors represents the results, whereas a smoother was applied on the results in the case of the smoothed line.*



*Indicators with the provided Linf for Spottail mantis shrimp in GSAs 17 and 18. The spiked line for the respective colors represents the results, whereas a smoother was applied on the results in the case of the smoothed line.*





*Indicators with the provided Linf for Norway lobster in GSAs 17 and 18. The spiked line for the respective colors represents the results, whereas a smoother was applied on the results in the case of the smoothed line.*