

US Alaska Stocks

v4.495 (Apr-17-2021)

Not present Present Preferred

Stock	Time Series Types			
	B/Bmsy	U/Umsy	B/Bmgt	U/Umgmt
1. ALPLAICBSAI [Alaska plaice Bering Sea and Aleutian Islands]	TB SSB	ER F	TB SSB	ER F
2. ALSKABSAI [Alaska skate Bering Sea and Aleutian Islands]	TB SSB	ER F	TB SSB	ER F
3. ARFLOUNDBSAI [Arrowtooth flounder Bering Sea and Aleutian Islands]	TB SSB	ER F	TB SSB	ER F
4. ARFLOUDGA [Arrowtooth flounder Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F
5. ATKABSAI [Atka mackerel Bering Sea and Aleutian Islands]	TB SSB	ER F	TB SSB	ER F
6. ATKAGA [Atka mackerel Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F
7. BKINGCRABPI [Blue king crab Pribilof Islands]	TB SSB	ER F	TB SSB	ER F
8. BKINGCRABSMI [Blue king crab Saint Matthews Island]	TB SSB	ER F	TB SSB	ER F
9. DSOLEGA [Dover sole Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F
10. DUSROCKGA [Dusky rockfish Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F
11. FLSOLEBSAI [Flathead sole Bering Sea and Aleutian Islands]	TB SSB	ER F	TB SSB	ER F
12. FLSOLEGA [Flathead sole Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F
13. GHALBSAI [Greenland halibut Bering Sea and Aleutian Islands]	TB SSB	ER F	TB SSB	ER F
14. GKCRABAIES [Golden king crab Aleutian Islands Eastern segment]	TB SSB	ER F	TB SSB	ER F
15. GKCRABAISW [Golden king crab Aleutian Islands Western segment]	TB SSB	ER F	TB SSB	ER F
16. GKCRABPI [Golden king crab Pribilof Islands]	TB SSB	ER F	TB SSB	ER F
17. GPOCTOBSAI [Giant Pacific octopus Bering Sea and Aleutian Islands]	TB SSB	ER F	TB SSB	ER F
18. GPOCTOGA [Giant Pacific octopus Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F
19. HERRPWS [Pacific herring Prince William Sound]	TB SSB	ER F	TB SSB	ER F
20. HERRSITKA [Pacific herring Sitka]	TB SSB	ER F	TB SSB	ER F
21. HERRTOG [Pacific herring Togiak District]	TB SSB	ER F	TB SSB	ER F
22. KMFLOUNBSAI [Kamchatka flounder Bering Sea and Aleutian Islands]	TB SSB	ER F	TB SSB	ER F
23. NROCKBSAI [Northern rockfish Bering Sea and Aleutian Islands]	TB SSB	ER F	TB SSB	ER F
24. NROCKGA [Northern rockfish Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F
25. NRSOLEEBSAI [Northern rock sole Eastern Bering Sea and Aleutian Islands]	TB SSB	ER F	TB SSB	ER F
26. NRSOLEGA [Northern rock sole Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F
27. PCODAI [Pacific cod Aleutian Islands]	TB SSB	ER F	TB SSB	ER F
28. PCODBS [Pacific cod Bering Sea]	TB SSB	ER F	TB SSB	ER F
29. PCODGA [Pacific cod Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F
30. PERCHEBSAI [Pacific ocean perch Eastern Bering Sea and Aleutian Islands]	TB SSB	ER F	TB SSB	ER F
31. PHALNPAC [Pacific halibut North Pacific]	TB SSB	ER F	TB SSB	ER F
32. POPERCHGA [Pacific ocean perch Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F
33. REXSOLEGA [Rex sole Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F
34. REYEROCKBSAI [Rougheye rockfish Bering Sea and Aleutian Islands]	TB SSB	ER F	TB SSB	ER F

35. REYEROCKGA [Rougheye rockfish Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F
36. RKCRABAIS [Red king crab Aleutian Islands Western segment]	TB SSB	ER F	TB SSB	ER F
37. RKCRABBB [Red king crab Bristol Bay]	TB SSB	ER F	TB SSB	ER F
38. RKCRABNS [Red king crab Norton Sound]	TB SSB	ER F	TB SSB	ER F
39. RKCRABPI [Red king crab Pribilof Islands]	TB SSB	ER F	TB SSB	ER F
40. RSOLEGA [Rock sole Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F
41. SABLEFEBSAIGA [Sablefish Eastern Bering Sea / Aleutian Islands / Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F
42. SNOWCRABBSS [Snow crab Bering Sea]	TB SSB	ER F	TB SSB	ER F
43. SRAKEROCKBSAI [Shorthraker rockfish Bering Sea and Aleutian Islands]	TB SSB	ER F	TB SSB	ER F
44. SRAKEROCKGA [Shorthraker rockfish Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F
45. SSTHORNHGA [Shortspine thornyhead Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F
46. TANNERCRABBSAI [Tanner crab Bering Sea and Aleutian Islands]	TB SSB	ER F	TB SSB	ER F
47. WPOLLAI [Walleye pollock Aleutian Islands]	TB SSB	ER F	TB SSB	ER F
48. WPOLLBAGO [Walleye pollock Bogoslof]	TB SSB	ER F	TB SSB	ER F
49. WPOLLEBS [Walleye pollock Eastern Bering Sea]	TB SSB	ER F	TB SSB	ER F
50. WPOLLGA [Walleye pollock Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F
51. WVSCALLALASKA [Weathervane scallop Alaska]	TB SSB	ER F	TB SSB	ER F
52. YEYEROCKGA [Yelloweye rockfish Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F
53. YSOLEBSAI [Yellowfin sole Bering Sea and Aleutian Islands]	TB SSB	ER F	TB SSB	ER F

Alaska plaice Bering Sea and Aleutian Islands [ALPLAICBSAI]

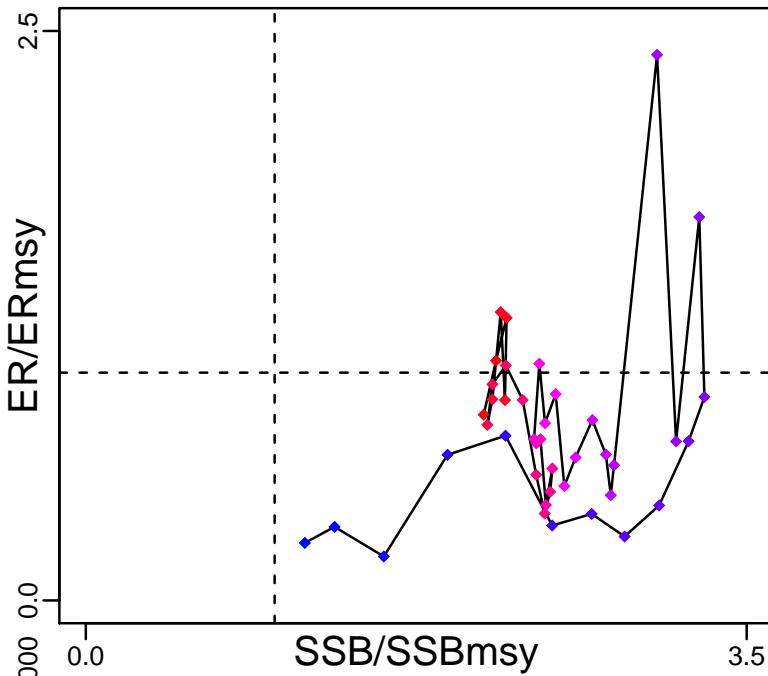
Metadata	
Scientific Name	Pleuronectes quadrituberculatus
Current Assess ID	AFSC-ALPLAICBSAI-1974-2016-SISIMP2021
Area	Bering Sea and Aleutian Islands
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2010, 2016, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2016	96,700
Fmsy	Fmsy-pr-1/yr	2010	0.19
ERmsy	ERmsy-est-ratio	2016	0.037
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2016	8506
M	M-1/yr	2010	0.25
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2016	0.18
ERlim	-	-	-

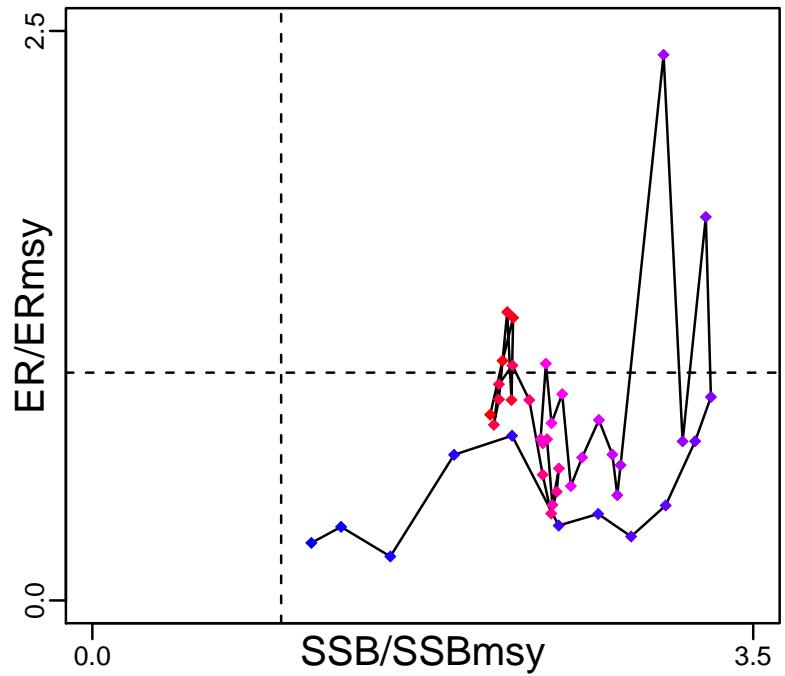
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	485,000	Both	1+	
SSB	SSB-MT	2016	196,345	-	-	
TN	-	-	-	-	-	
R	R-E00	2016	6.18×10^{11}	-	1	
F	F-1/yr	2016	0.044	-	-	
ER	ER-calc-ratio	2016	0.03	-	-	
TC	TC-MT	2016	14,614			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2016	2.03			
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2010	0.176			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2016	0.815			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Alaska plaice Bering Sea and Aleutian Islands [ALPLAICBSAI]

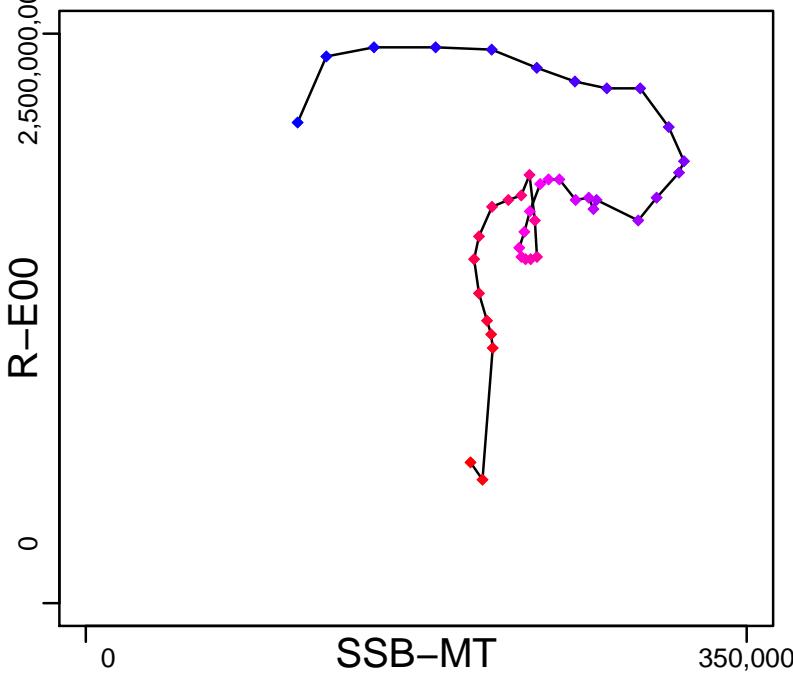
Kobe MSYpref (1974–2016–SISIMP2021)



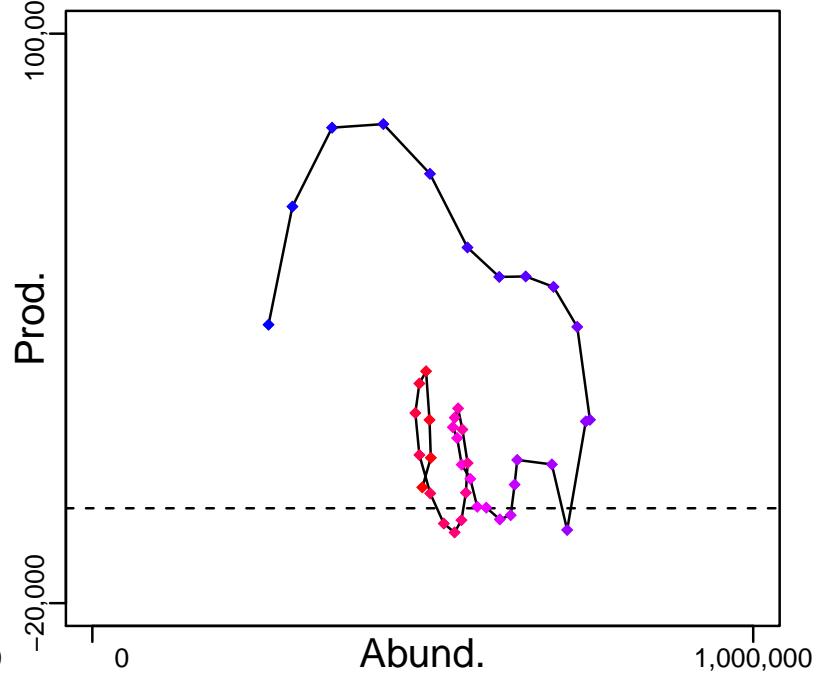
Kobe MGTpref (1974–2016–SISIMP2021)



Spawner Recruit (1974–2016–SISIMP2021)



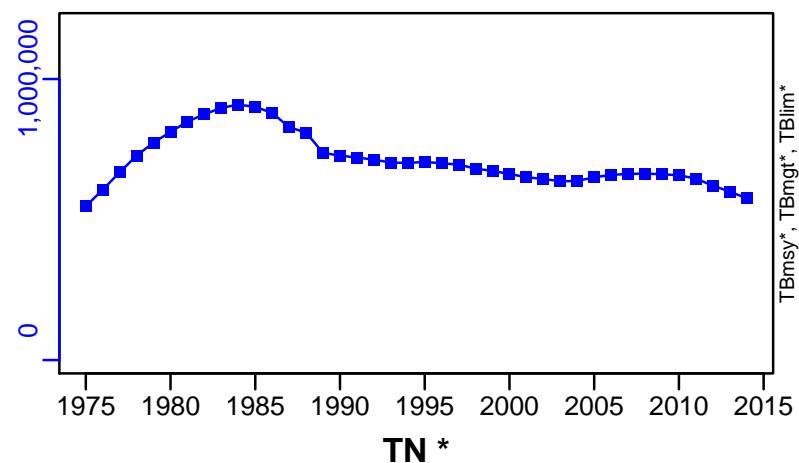
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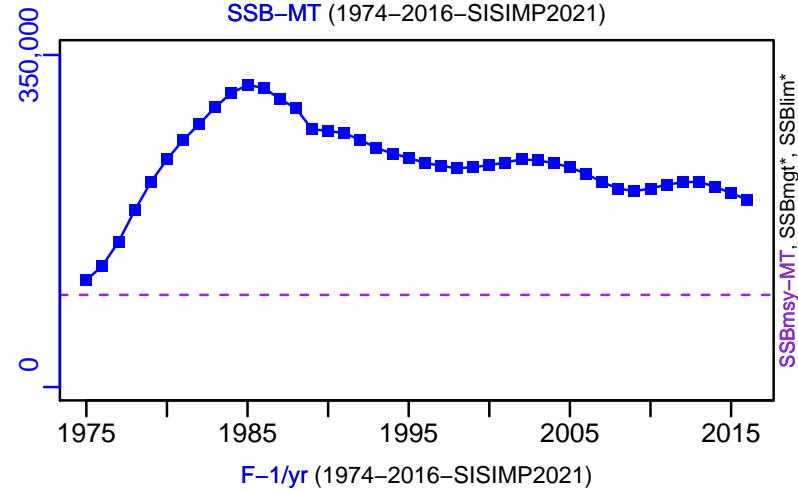
◆ Start Year ◆ End Year * No Data

Alaska plaice Bering Sea and Aleutian Islands [ALPLAICBSAI]

TB-MT (1975–2015–SISIMP2016)

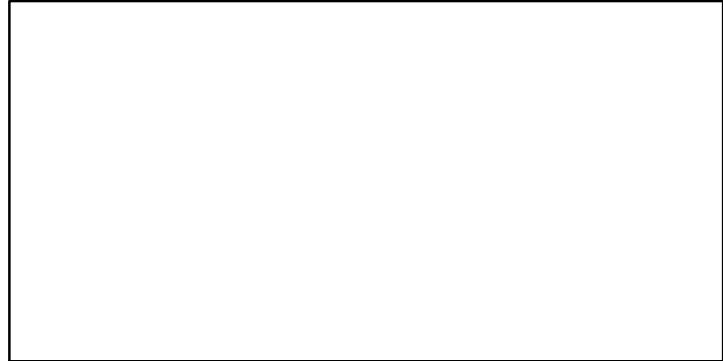


SSB-MT (1974–2016–SISIMP2021)

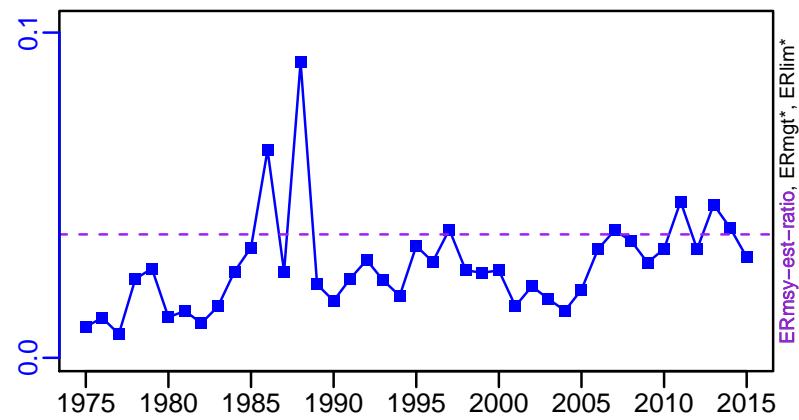


TN *

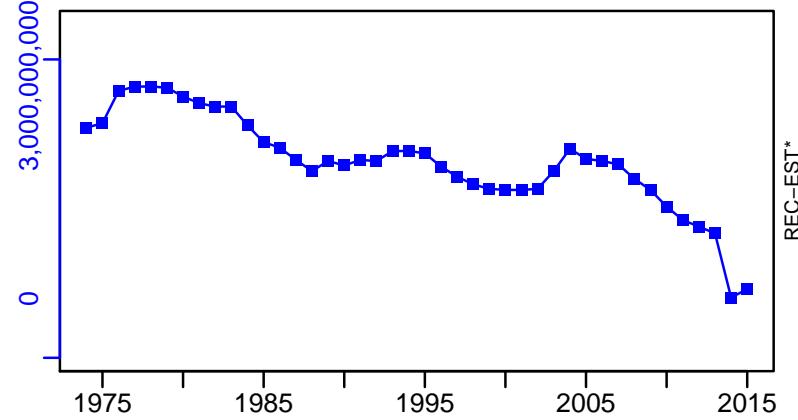
F-1/yr (1974–2016–SISIMP2021)



ER-calc-ratio (1974–2016–SISIMP2021)



R-E00 (1974–2016–SISIMP2021)



SSB_{mgt*}–MT, SSB_{lim*}

F_{mgt*}, F_{lim}–1/yr

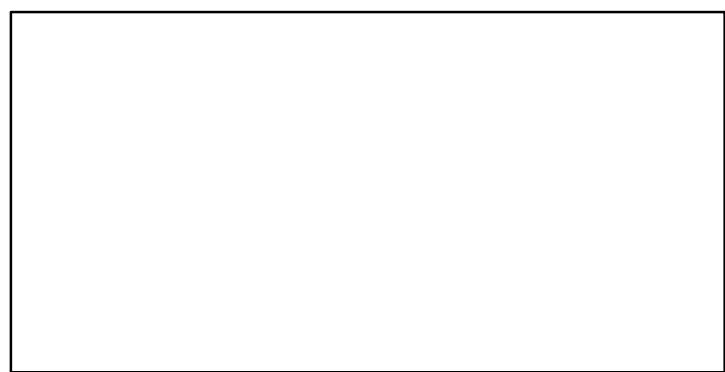
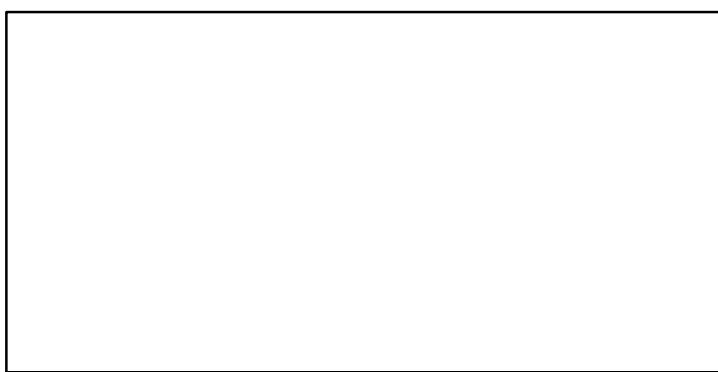
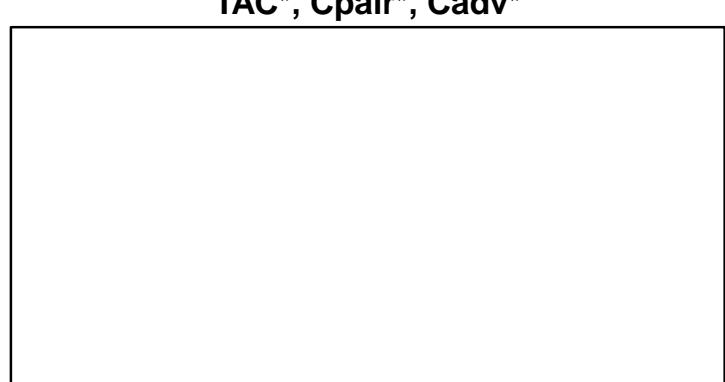
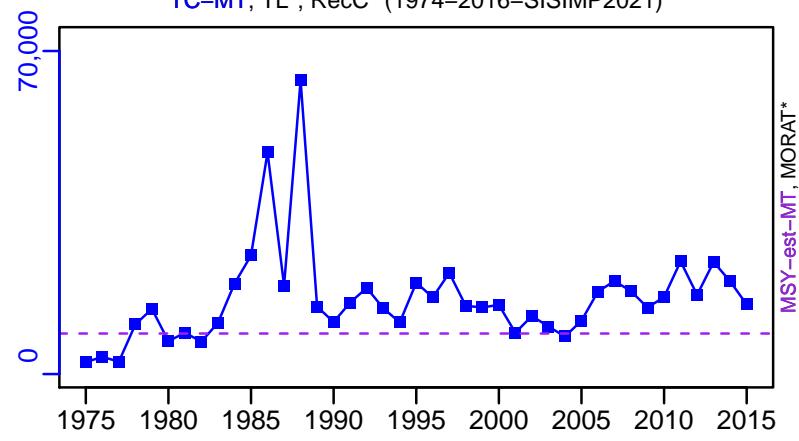
REC-E00*

- | | | |
|----------------------|---------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

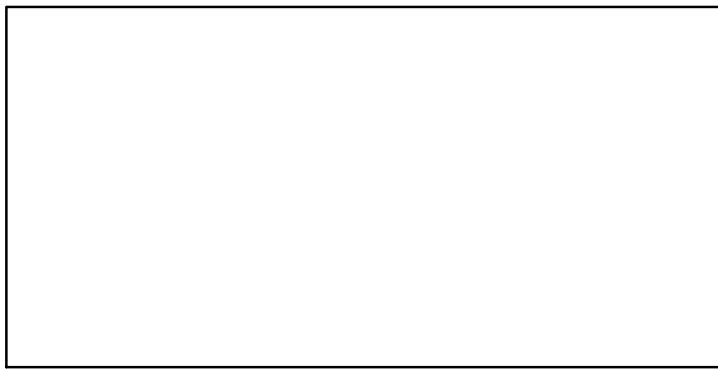
Alaska plaice Bering Sea and Aleutian Islands [ALPLAICBSAI]

TC-MT, TL*, RecC* (1974–2016–SISIMP2021)

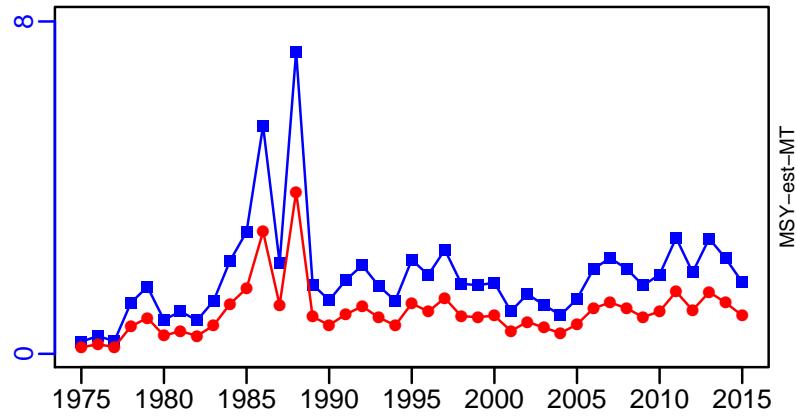
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1974–2016–SISIMP2021)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - MSY	* No Data

Alaska skate Bering Sea and Aleutian Islands [ALSKABSAI]

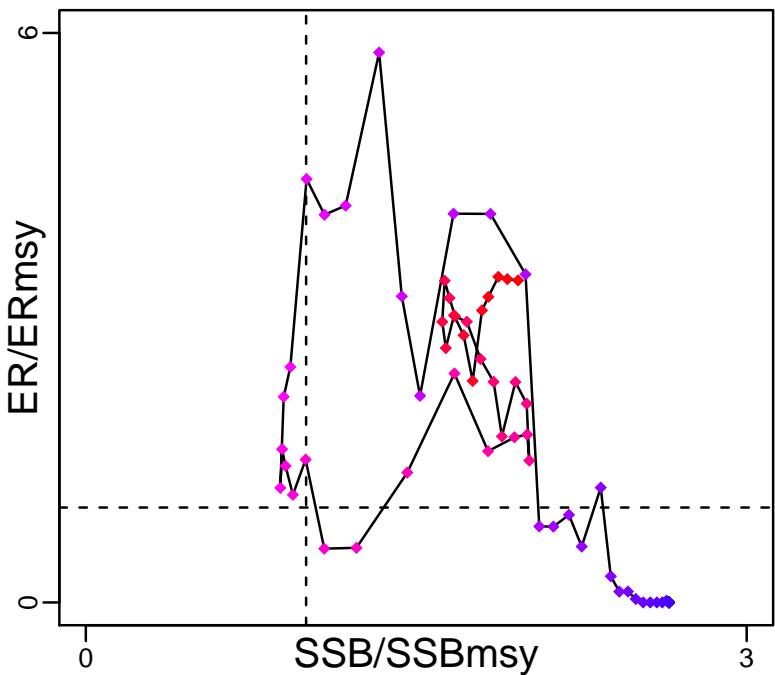
Metadata	
Scientific Name	Bathyraja parmifera
Current Assess ID	AFSC-ALSKABSAI-1950-2018-SISIMP2021
Area	Bering Sea and Aleutian Islands
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2015, 2016, 2018, 2010

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2016	126,388
Fmsy	-	-	-
ERmsy	ERmsy-est-ratio	2016	0.012
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2016	3815
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2016	0.084
ERlim	-	-	-

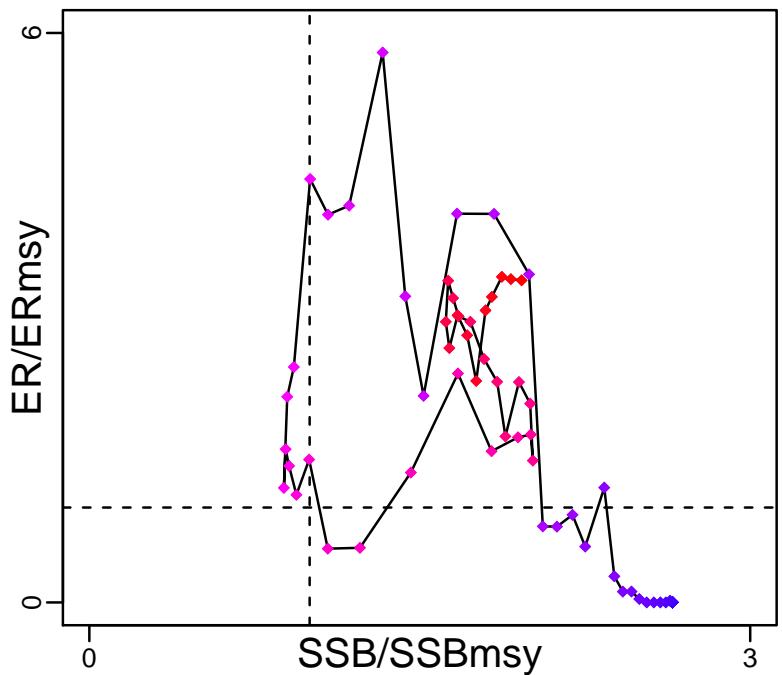
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	519,000	Both	0+	
SSB	SSB-MT	2018	268,836	-	-	
TN	-	-	-	-	-	
R	R-E00	2018	22,516,000	-	0	
F	F-1/yr	2016	0.056	-	-	
ER	ER-ratio	2018	0.052	-	-	
TC	TC-MT	2018	24,668			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2016	1.986			
F/Fmsy	-	-	-			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2016	3.394			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Alaska skate Bering Sea and Aleutian Islands [ALSKABSAI]

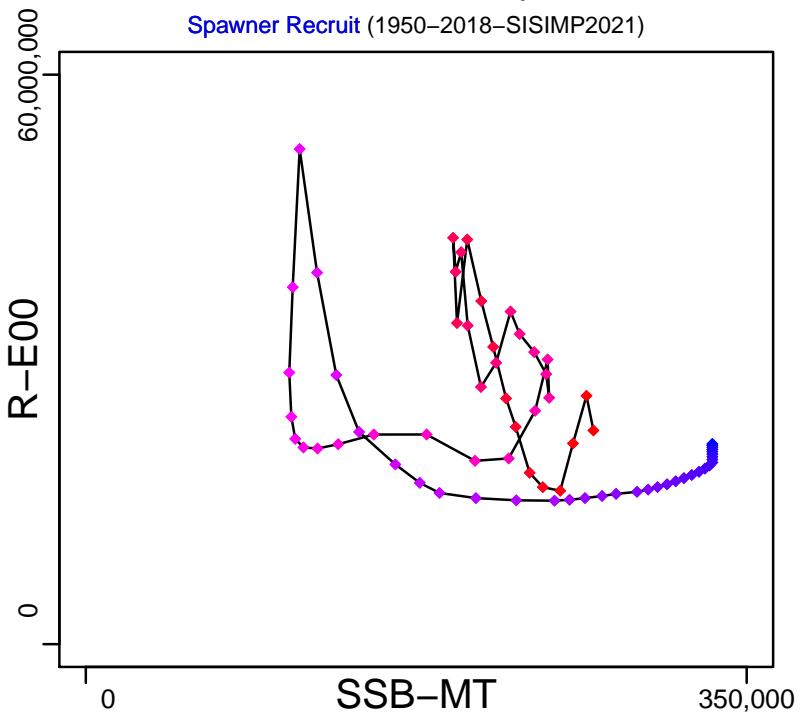
Kobe MSYpref (1950–2016–SISIMP2021)



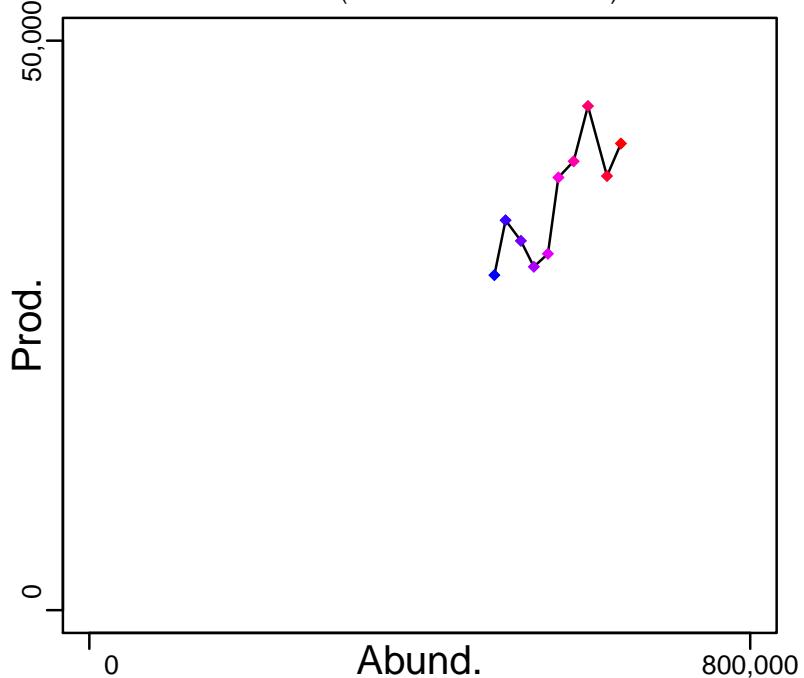
Kobe MGTpref (1950–2016–SISIMP2021)



Spawner Recruit (1950–2018–SISIMP2021)



Production (1950–2018–SISIMP2021)

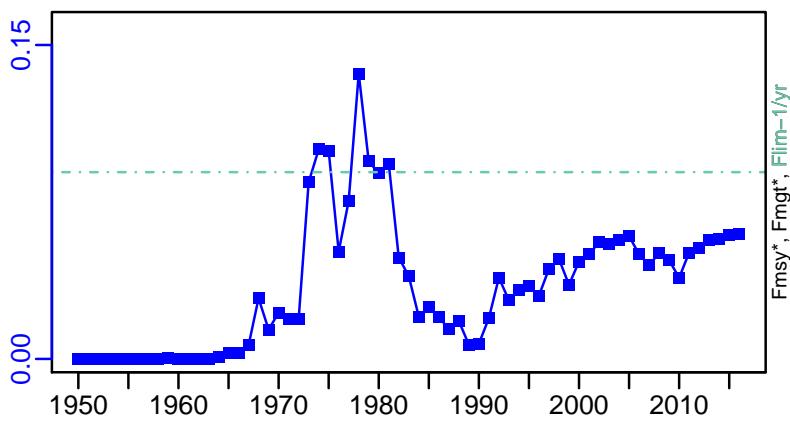
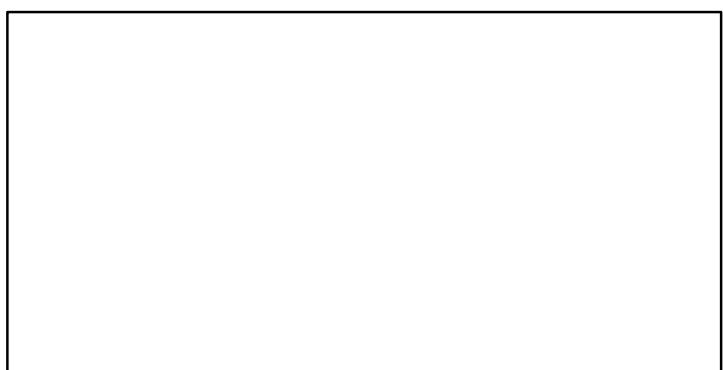
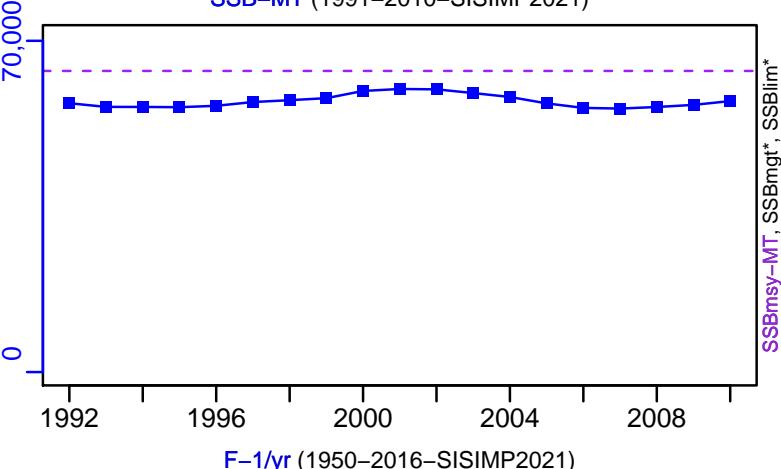
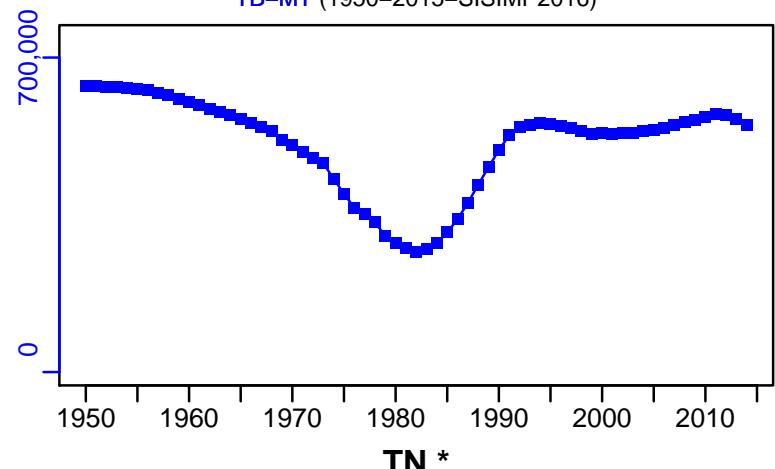


◆ Start Year ◆ End Year * No Data

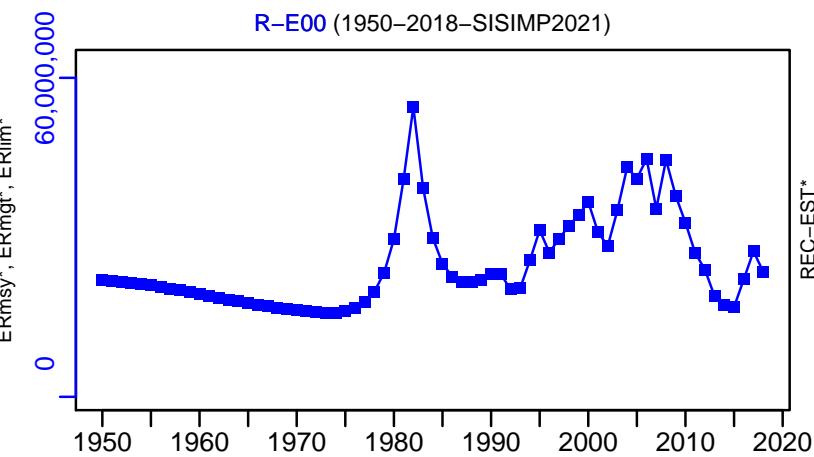
Alaska skate Bering Sea and Aleutian Islands [ALSKABSAI]

TB-MT (1950–2015–SISIMP2016)

SSB-MT (1991–2010–SISIMP2021)



ER-ratio (1950–2018–SISIMP2021)

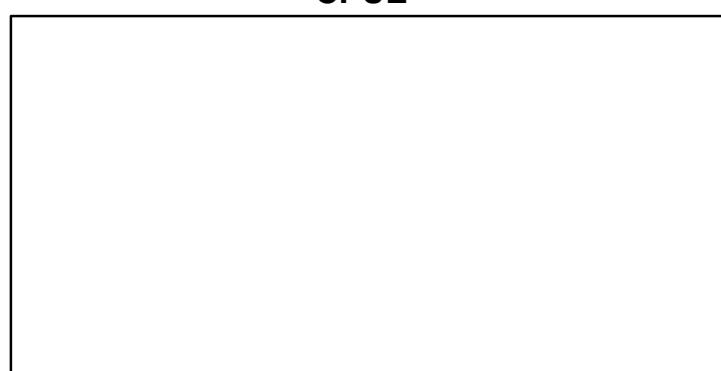
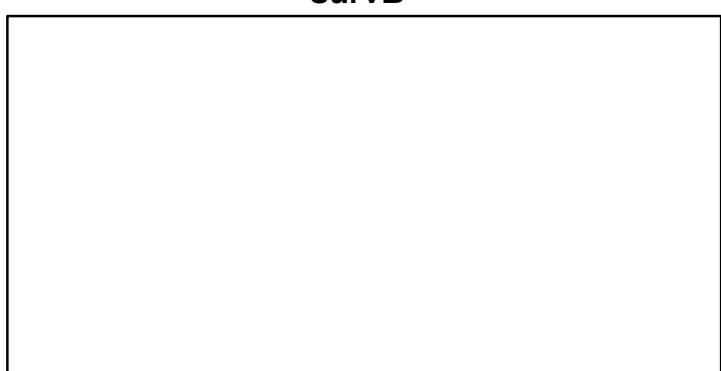
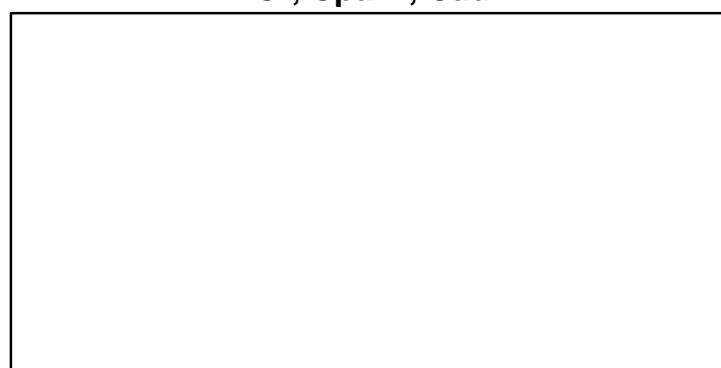
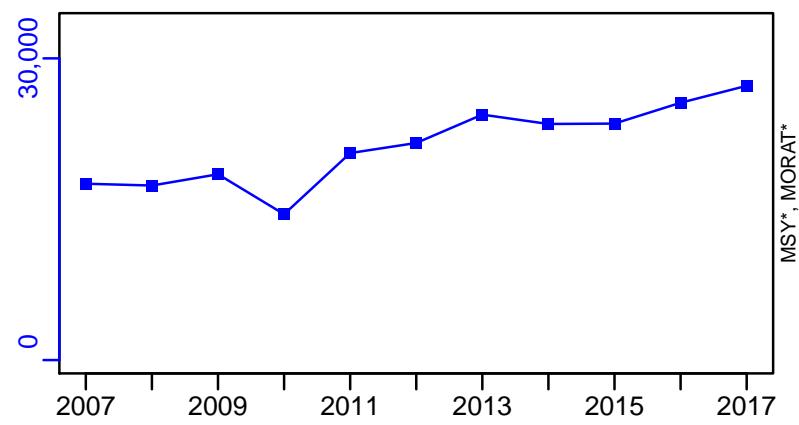


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

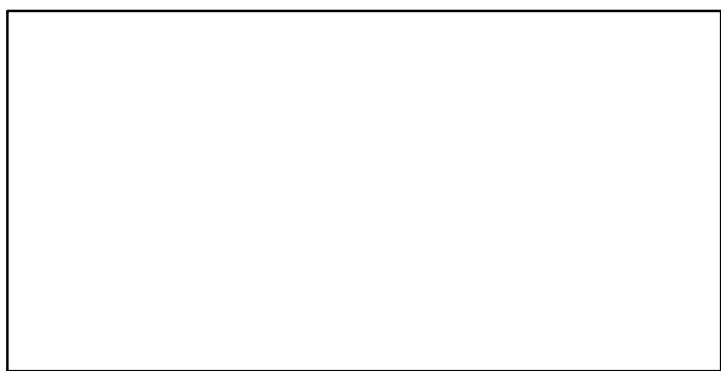
Alaska skate Bering Sea and Aleutian Islands [ALSKABSAI]

TC-MT, TL*, RecC* (1950–2018–SISIMP2021)

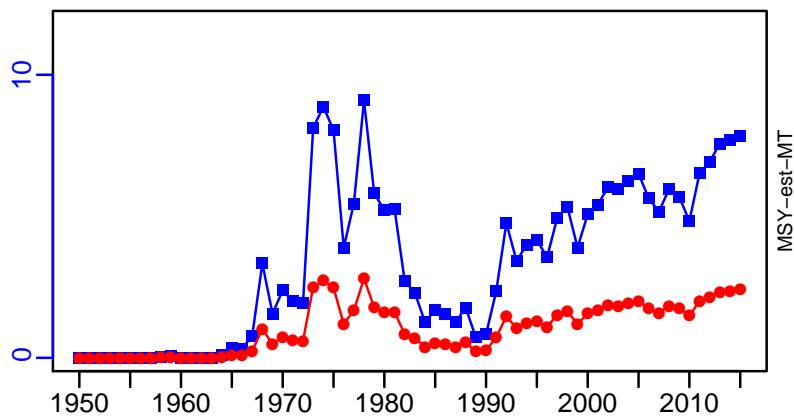
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1950–2016–SISIMP2021)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Arrowtooth flounder Bering Sea and Aleutian Islands [ARFLOUNDBSAI]

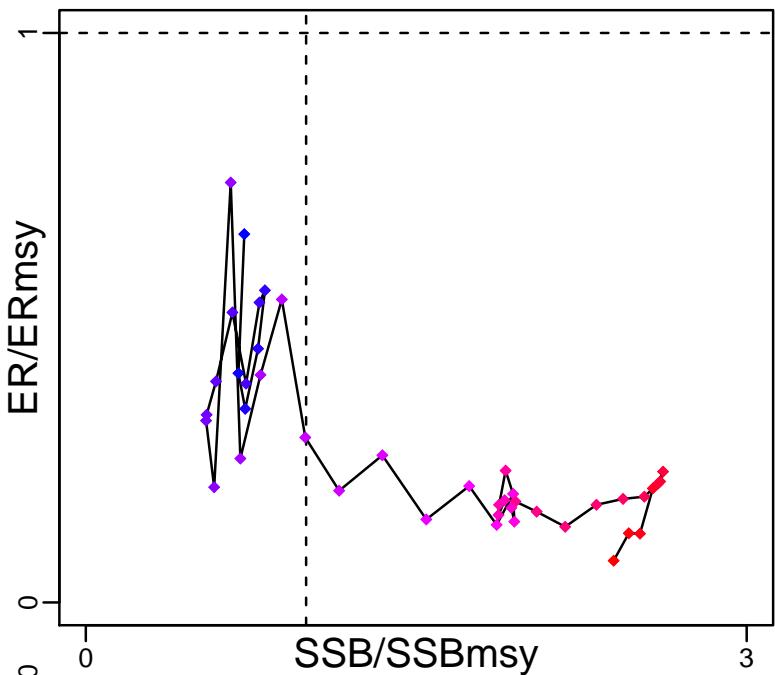
Metadata	
Scientific Name	Atheresthes stomias
Current Assess ID	AFSC-ARFLOUNDBSAI-1975-2018-SISIMP2021
Area	Bering Sea and Aleutian Islands
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2010, 2016, 2017, 2018, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2018	212,183
Fmsy	Fmsy-pr-1/yr	2010	0.29
ERmsy	ERmsy-est-ratio	2018	0.092
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2018	37,091
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2018	0.148
ERlim	-	-	-

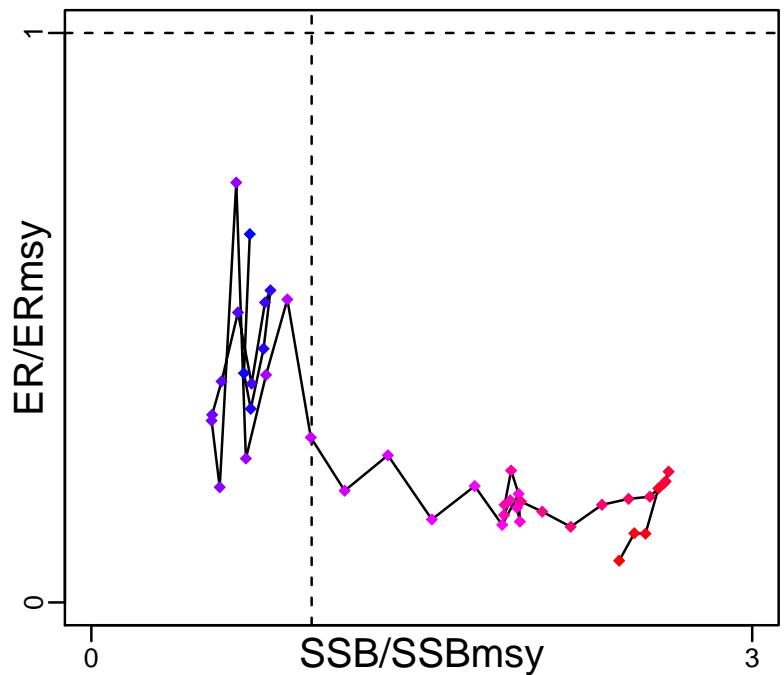
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	908,000	Both	1+	
SSB	SSB-MT	2018	497,583	-	-	
TN	-	-	-	-	-	
R	R-E00	2018	670,048,000	-	1	
F	F-1/yr	2018	0.012	-	-	
ER	ER-calc-ratio	2018	0.007	-	-	
TC	TC-MT	2018	6518			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2018	2.345			
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2010	0.076			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.073			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Arrowtooth flounder Bering Sea and Aleutian Islands [ARFLOUNDBSAI]

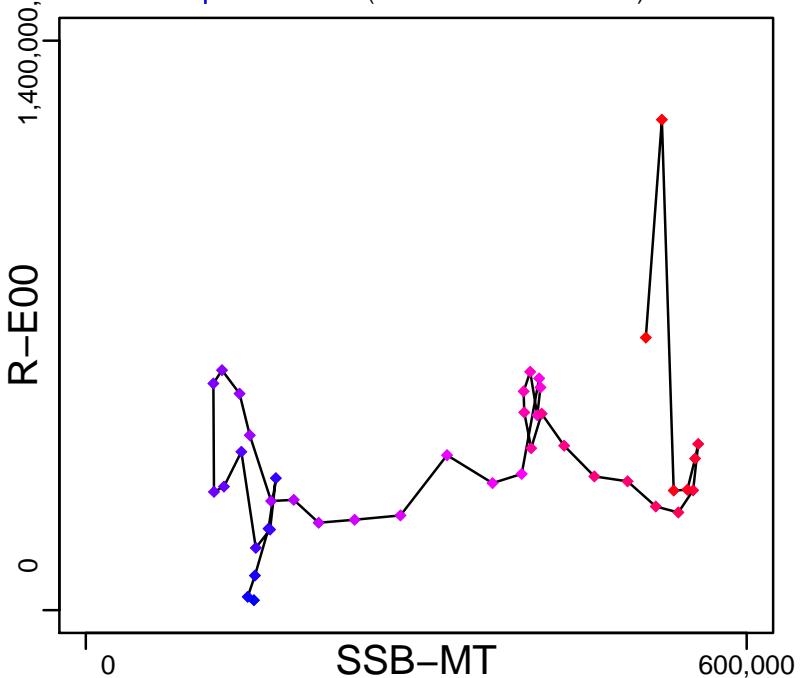
Kobe MSYpref (1975–2018–SISIMP2021)



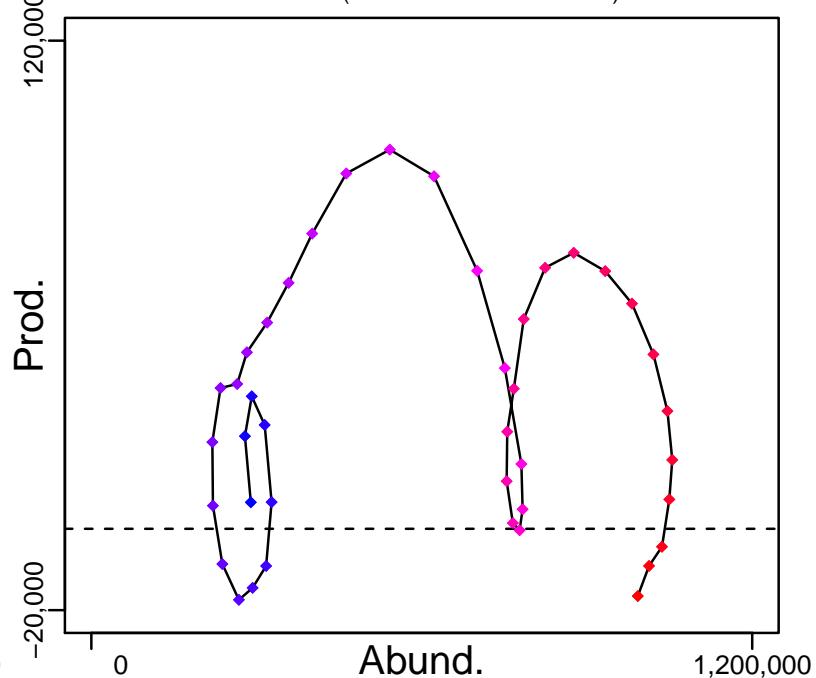
Kobe MGTpref (1975–2018–SISIMP2021)



Spawner Recruit (1975–2018–SISIMP2021)



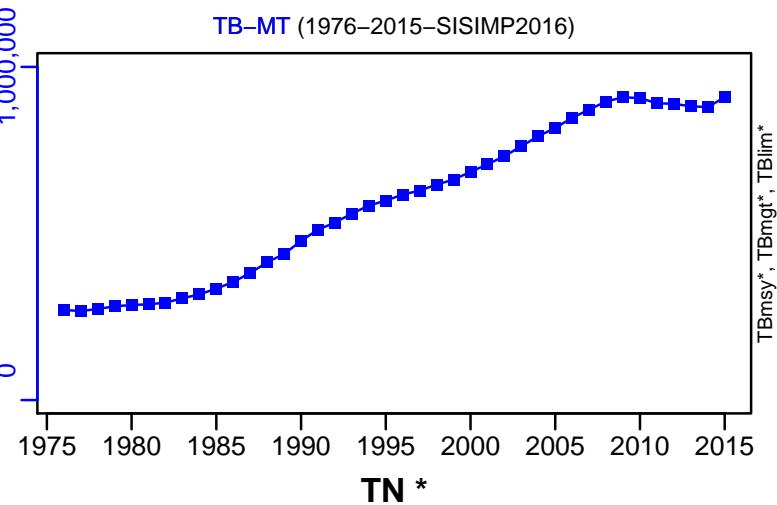
Production (1975–2018–SISIMP2021)



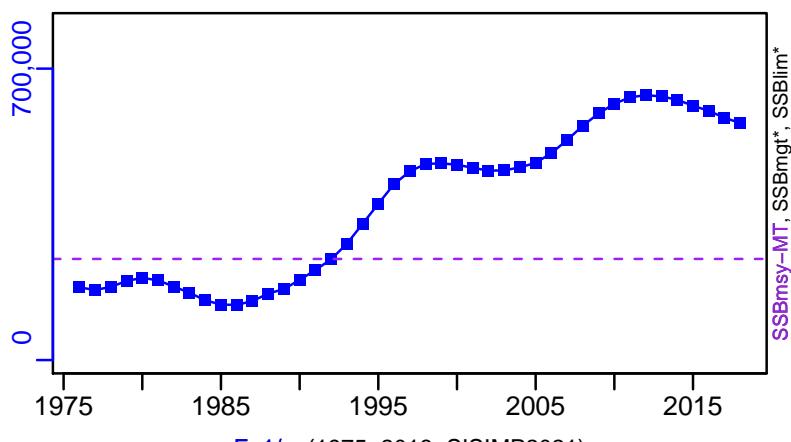
◆ Start Year	◆ End Year	*	No Data
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Arrowtooth flounder Bering Sea and Aleutian Islands [ARFLOUNDBSAI]

TB-MT (1976–2015–SISIMP2016)

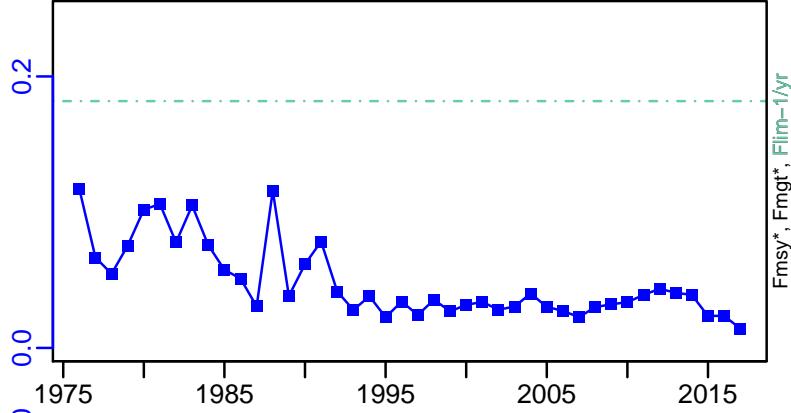
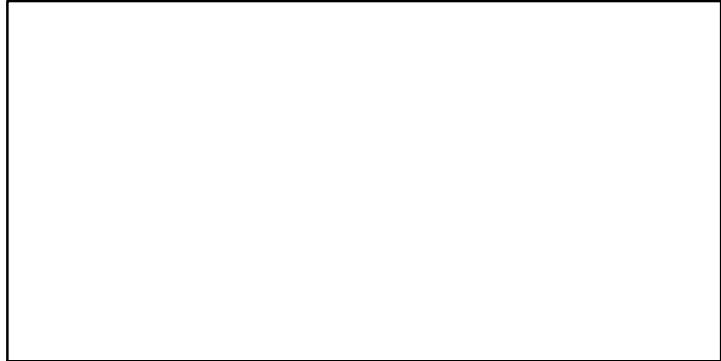


SSB-MT (1975–2018–SISIMP2021)



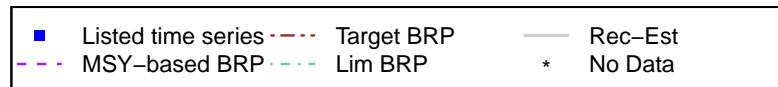
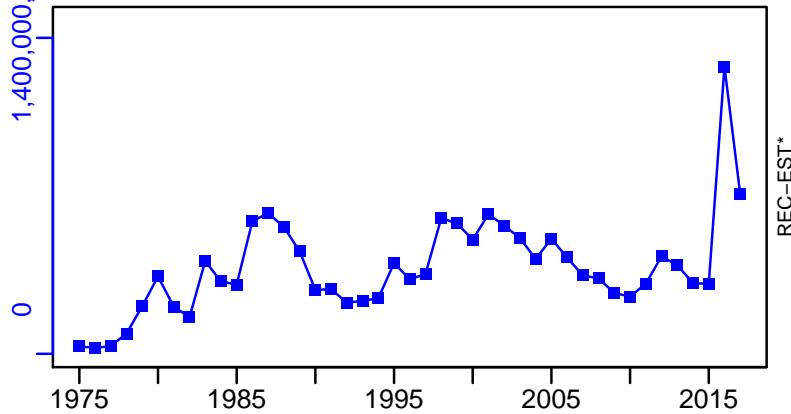
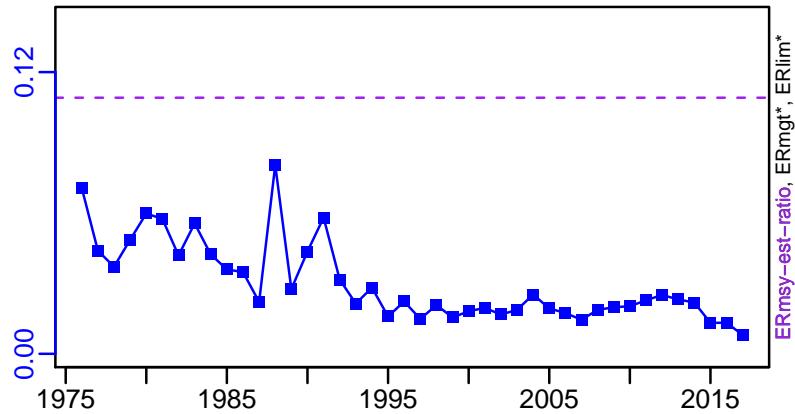
TN *

F-1/yr (1975–2018–SISIMP2021)



ER-calc-ratio (1975–2018–SISIMP2021)

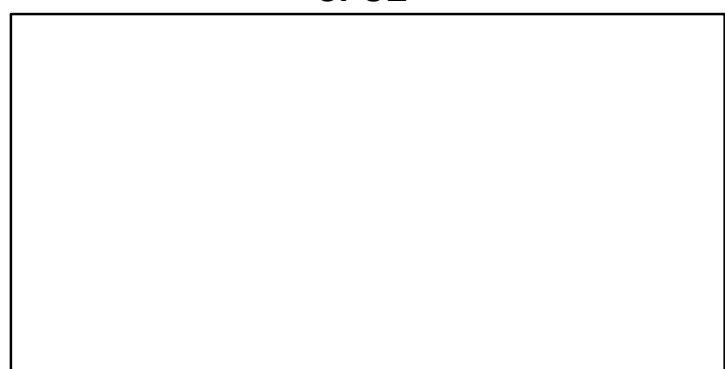
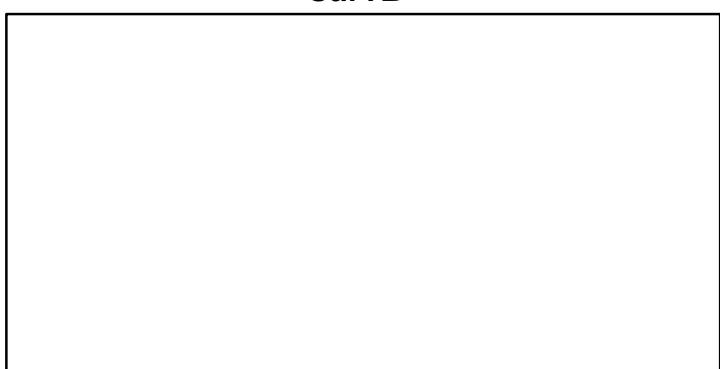
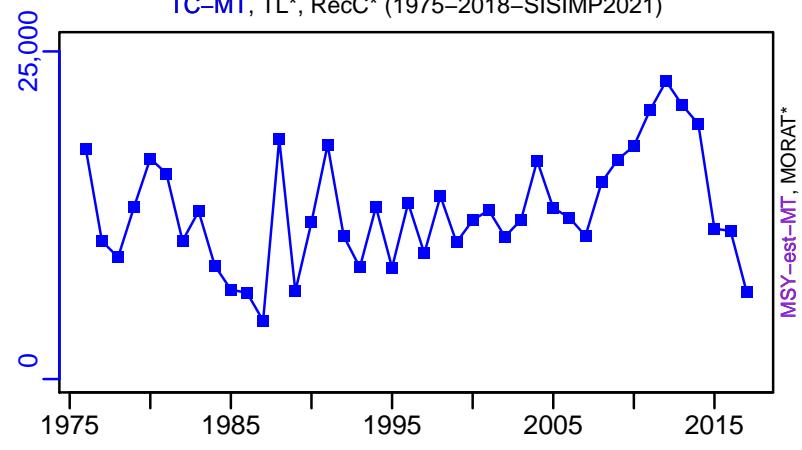
R-E00 (1975–2018–SISIMP2021)



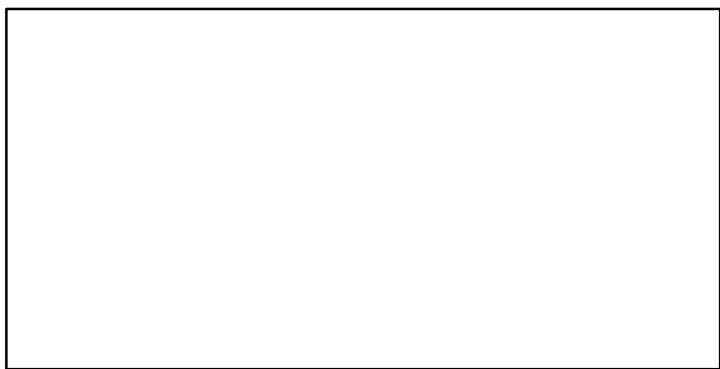
Arrowtooth flounder Bering Sea and Aleutian Islands [ARFLOUNDBSAI]

TC-MT, TL*, RecC* (1975–2018–SISIMP2021)

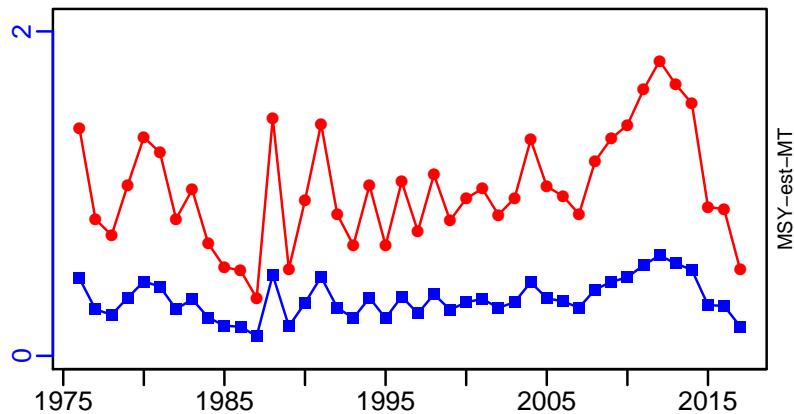
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1975–2018–SISIMP2021)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

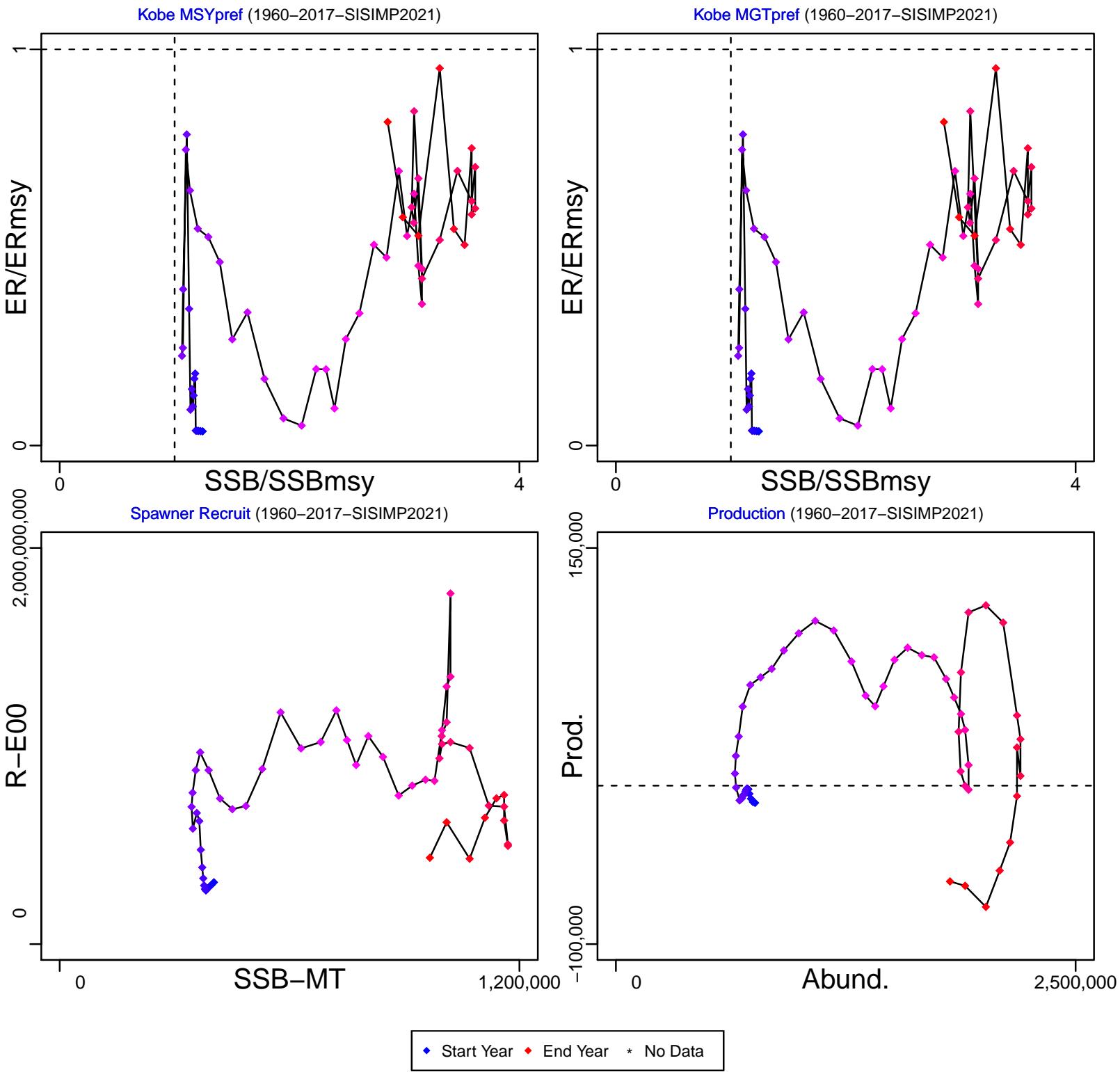
Arrowtooth flounder Gulf of Alaska [ARFLOUDGA]

Metadata	
Scientific Name	Atheresthes stomias
Current Assess ID	AFSC-ARFLOUDGA-1960-2017-SISIMP2021
Area	Gulf of Alaska
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2010, 2016, 2017, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2010	1,125,923
SSBmsy	SSBmsy-MT	2017	323,625
Fmsy	Fmsy-pr-1/yr	2010	0.219
ERmsy	ERmsy-ratio	2010	0.226
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2010	254,271
M	M-1/yr	2010	0.2
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2016	0.204
ERlim	-	-	-

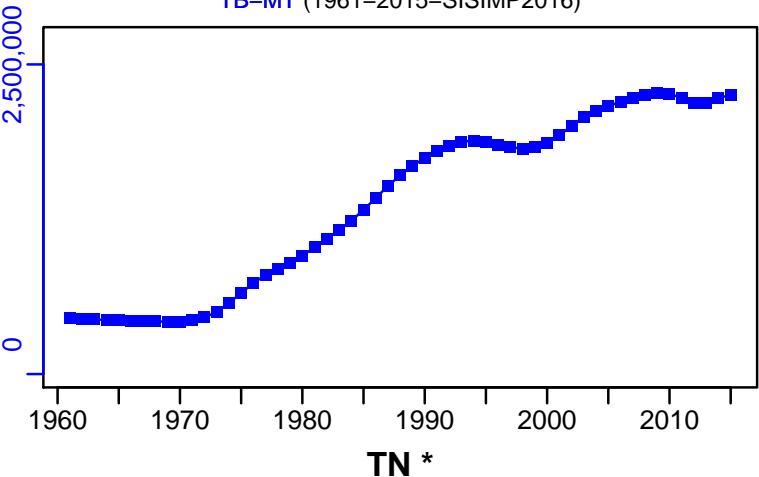
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	2,090,000	-	1+	
SSB	SSB-MT	2017	923,548	-	-	
TN	-	-	-	-	-	
R	R-E00	2017	4.36×10^8	-	1	
F	F-1/yr	2017	0.021	-	-	
ER	ER-calc-ratio	2017	0.015	-	-	
TC	TC-MT	2017	26,865			
TL	-	-	-			
TB/TBmsy	TB-MT/TBmsy-calc-MT	2010	1.901			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2017	2.854			
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2010	0.079			
ER/ERmsy	ER-ratio/ERmsy-ratio	2010	0.046			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Arrowtooth flounder Gulf of Alaska [ARFLOUDGA]

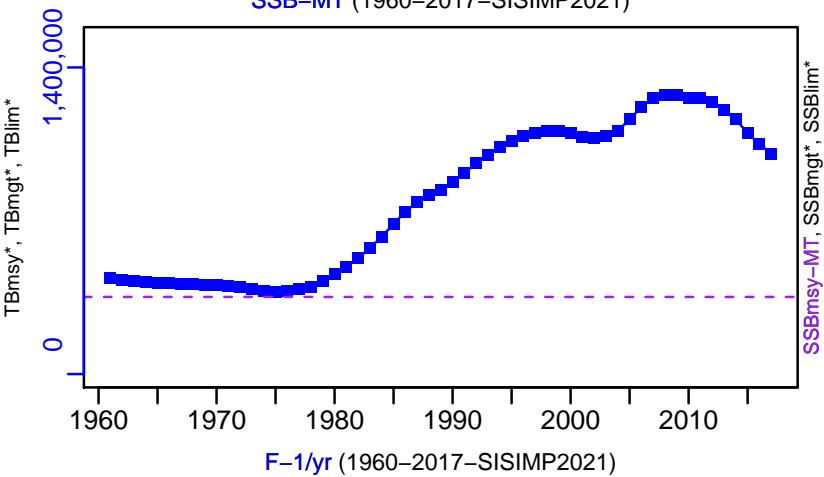


Arrowtooth flounder Gulf of Alaska [ARFLOUDGA]

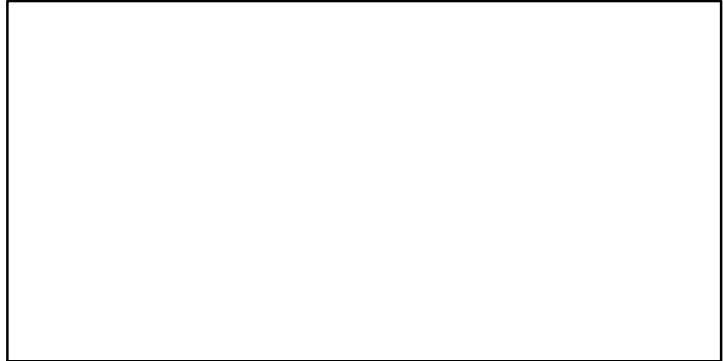
TB-MT (1961–2015–SISIMP2016)



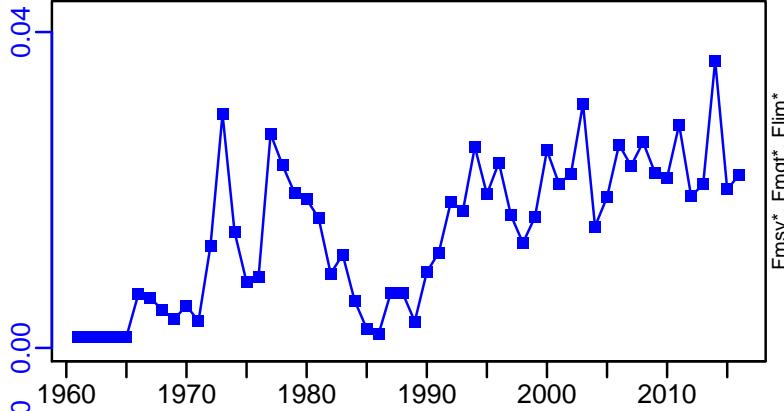
SSB-MT (1960–2017–SISIMP2021)



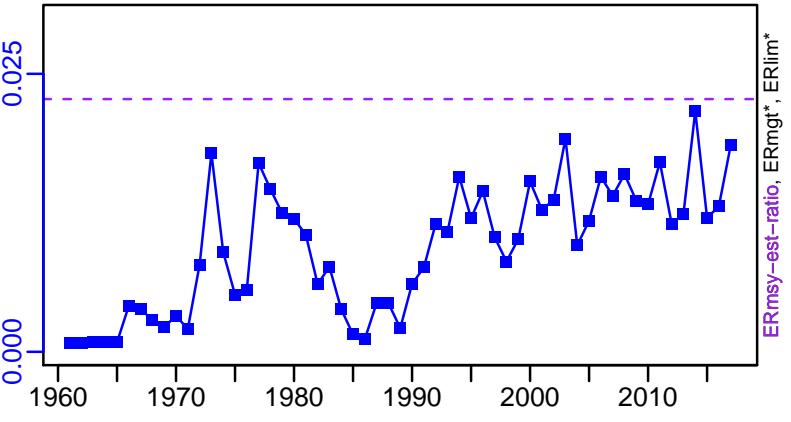
TN *



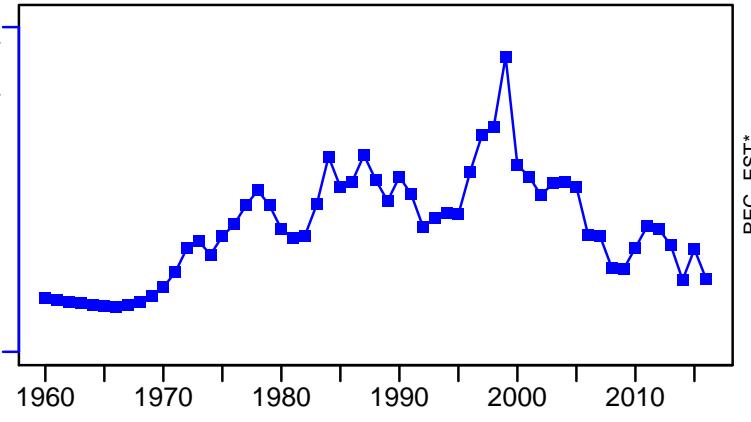
F-1/yr (1960–2017–SISIMP2021)



ER-calc-ratio (1960–2017–SISIMP2021)



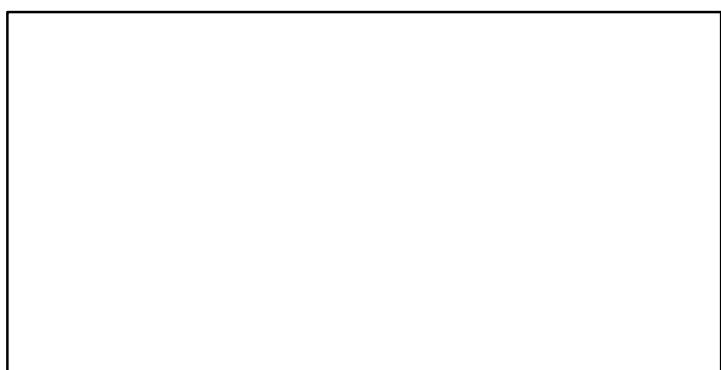
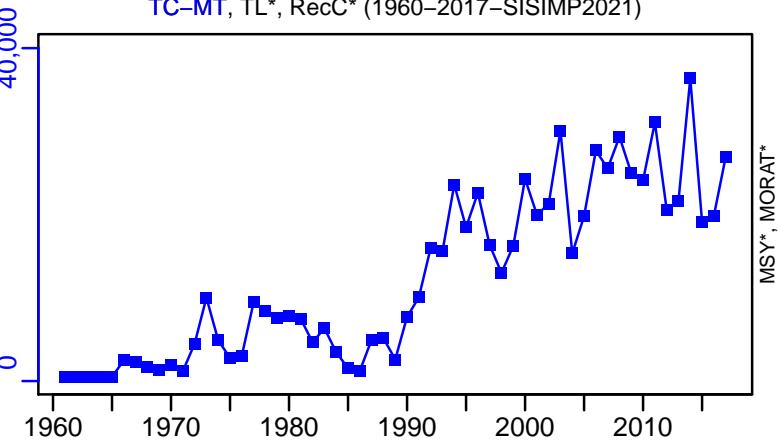
R-E00 (1960–2017–SISIMP2021)



Arrowtooth flounder Gulf of Alaska [ARFLOUNDGA]

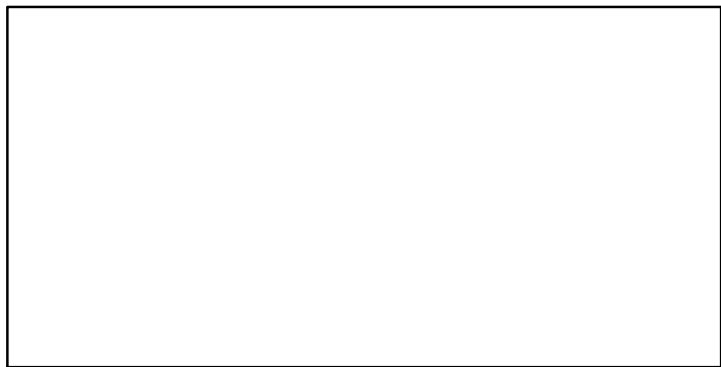
TC-MT, TL*, RecC* (1960–2017–SISIMP2021)

TAC*, Cpair*, Cadv*

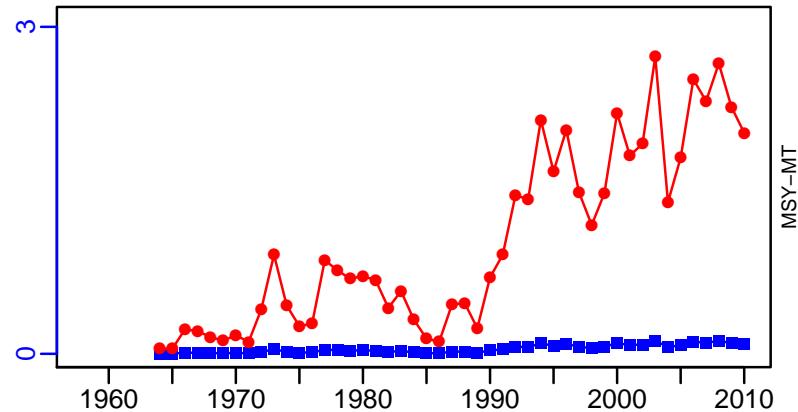


CPUE*

EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1958–2010–STACHURA)



- | | | |
|--------------------------|--------------------------|-----------|
| ■ 1st listed time series | ▲ 3rd listed time series | — MORAT |
| ● 2nd listed time series | - - - MSY | * No Data |

Atka mackerel Bering Sea and Aleutian Islands [ATKABSAI]

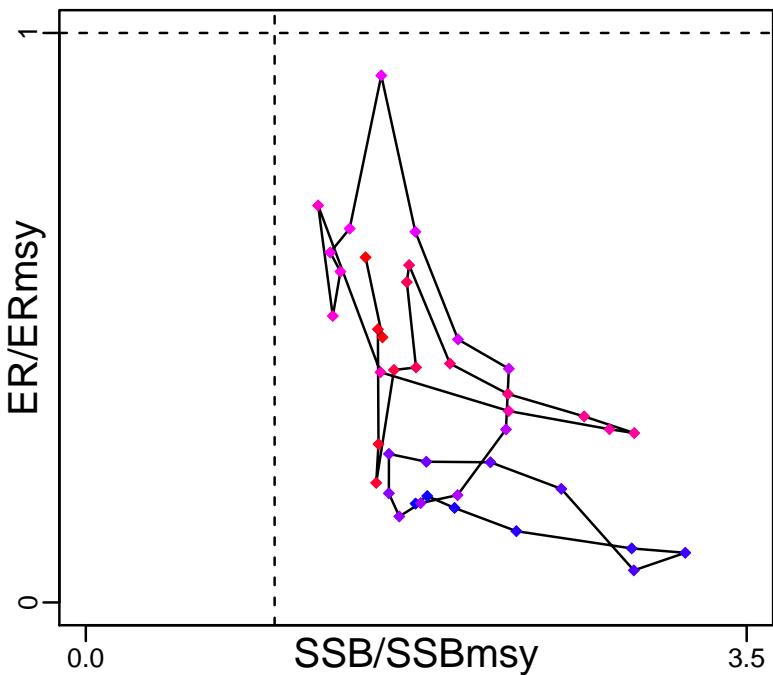
Metadata	
Scientific Name	Pleurogrammus monopterygius
Current Assess ID	AFSC-ATKABSAI-1976-2018-SISIMP2021
Area	Bering Sea and Aleutian Islands
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2011, 2016, 2017, 2018, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2018	99,320
Fmsy	Fmsy-pr-1/yr	2011	0.468
ERmsy	ERmsy-est-ratio	2018	0.227
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2018	71,785
M	M-1/yr	2011	0.3
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2017	0.4
ERlim	-	-	-

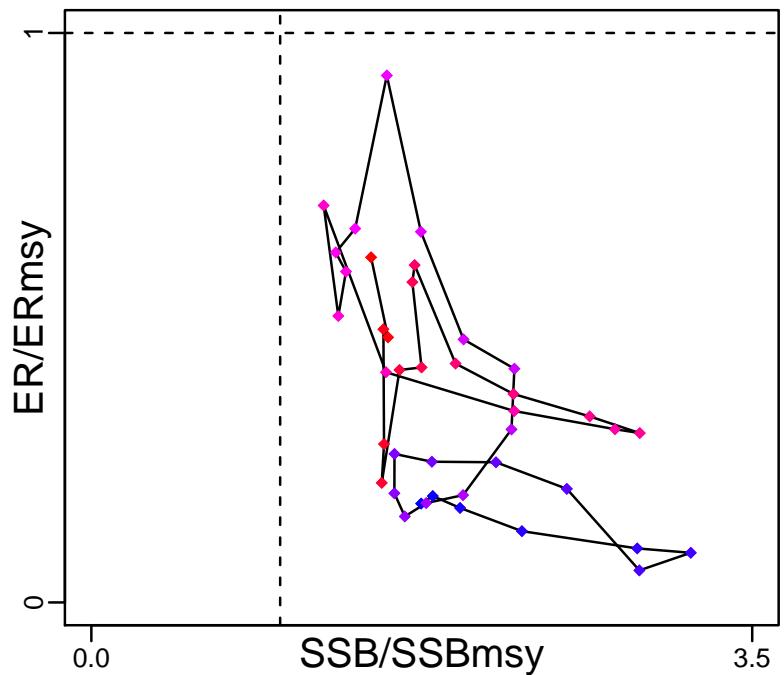
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	589,000	-	1+	
SSB	SSB-MT	2018	123,188	-	-	
TN	-	-	-	-	-	
R	R-E00	2018	470,657	-	1	
F	F-1/yr	2018	0.292	-	-	
ER	ER-calc-ratio	2018	0.137	-	-	
TC	TC-MT	2018	64,451			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2018	1.24			
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2011	0.665			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.606			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Atka mackerel Bering Sea and Aleutian Islands [ATKABSAI]

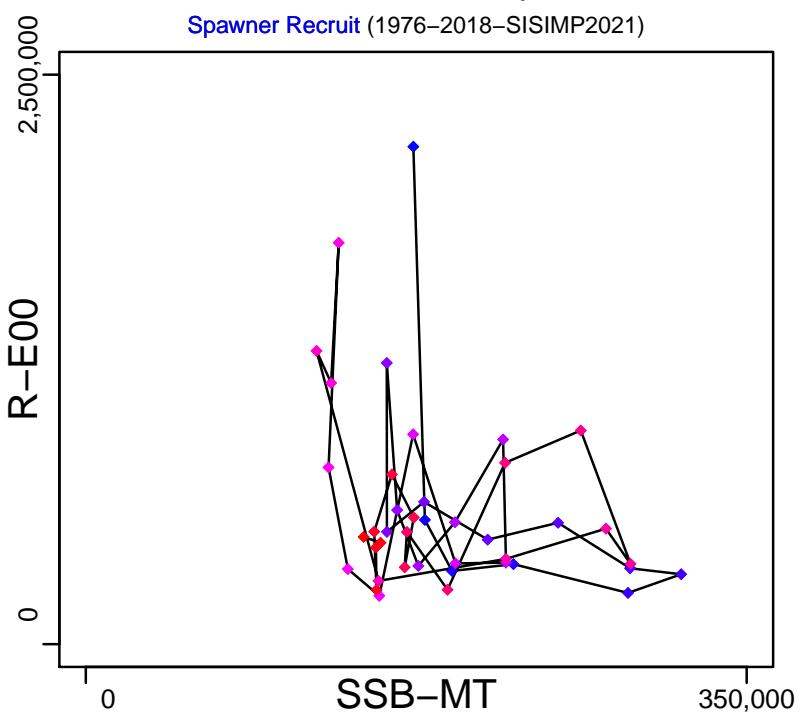
Kobe MSYpref (1976–2018–SISIMP2021)



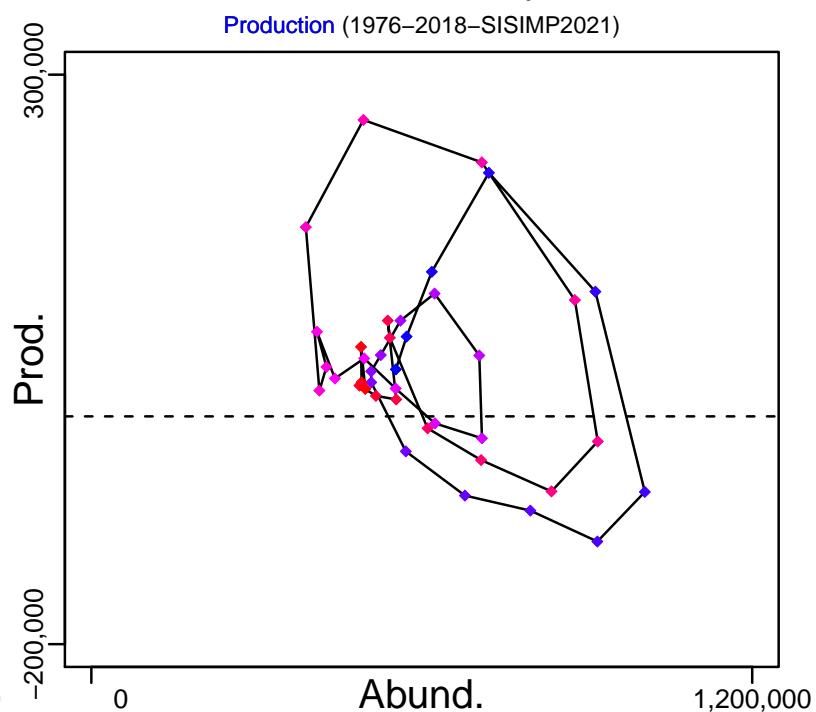
Kobe MGTpref (1976–2018–SISIMP2021)



Spawner Recruit (1976–2018–SISIMP2021)



Production (1976–2018–SISIMP2021)

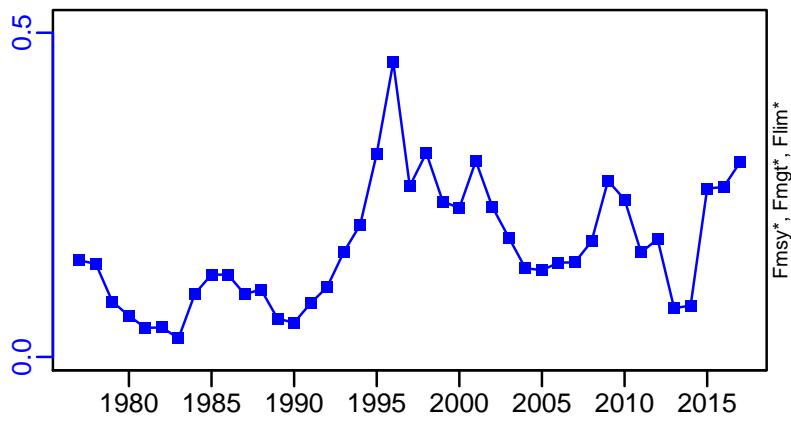
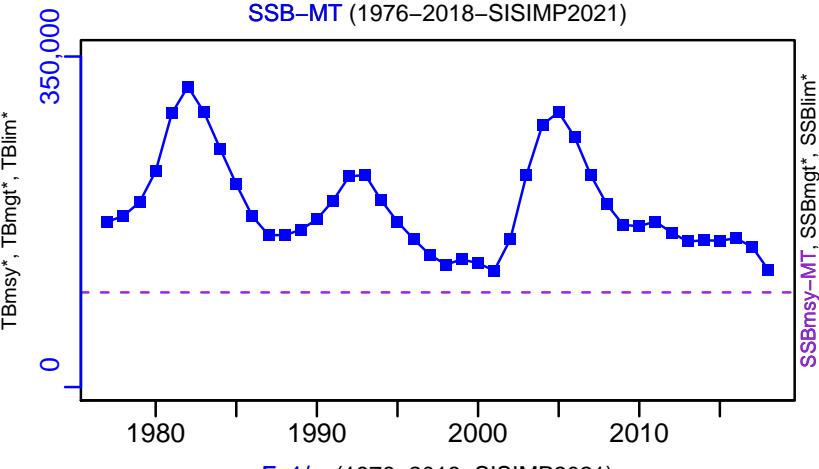
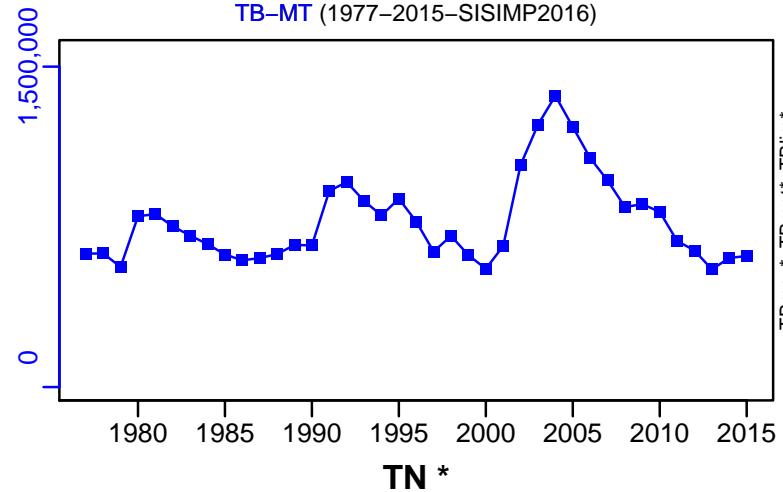


◆ Start Year	◆ End Year	*	No Data
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Atka mackerel Bering Sea and Aleutian Islands [ATKABSAI]

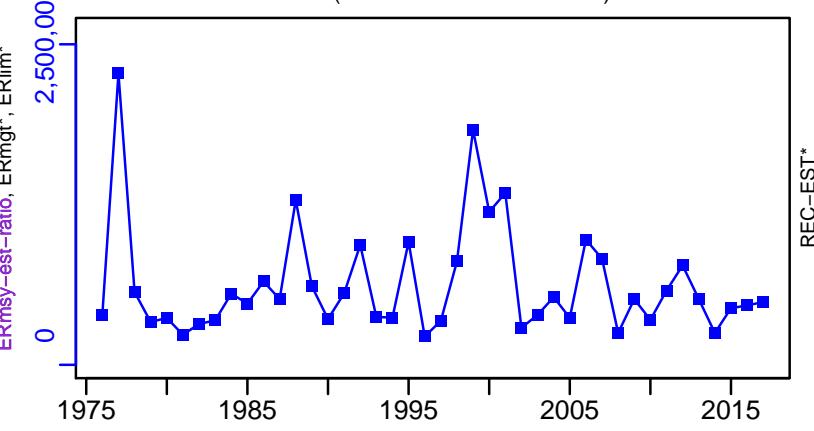
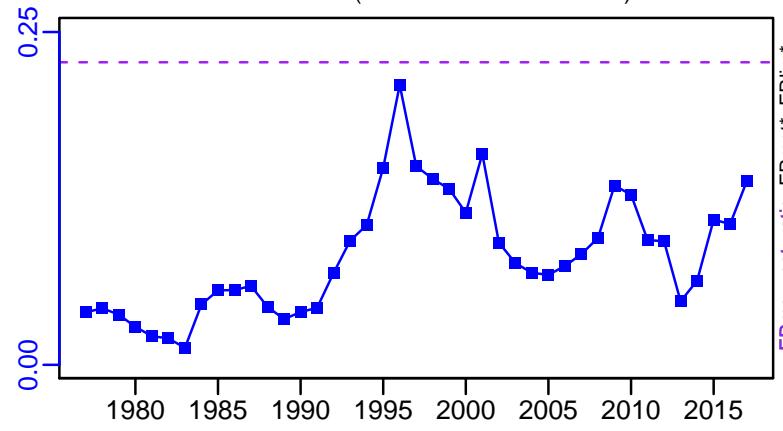
TB-MT (1977–2015–SISIMP2016)

SSB-MT (1976–2018–SISIMP2021)



ER-calc-ratio (1976–2018–SISIMP2021)

R-E00 (1976–2018–SISIMP2021)

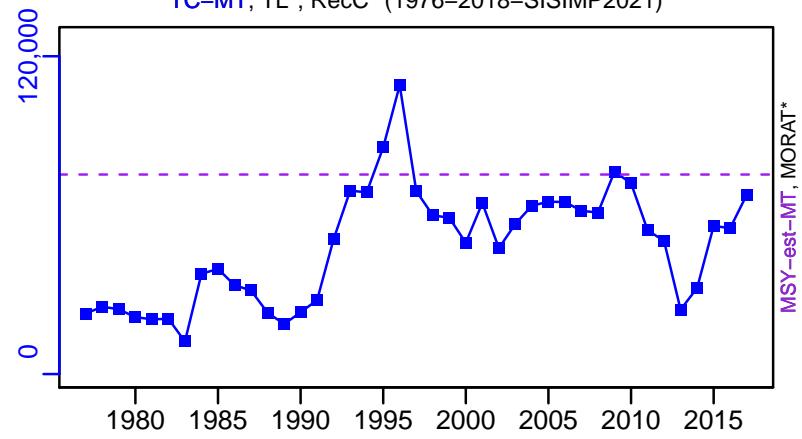


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

Atka mackerel Bering Sea and Aleutian Islands [ATKABSAI]

TC-MT, TL*, RecC* (1976–2018–SISIMP2021)

TAC*, Cpair*, Cadv*



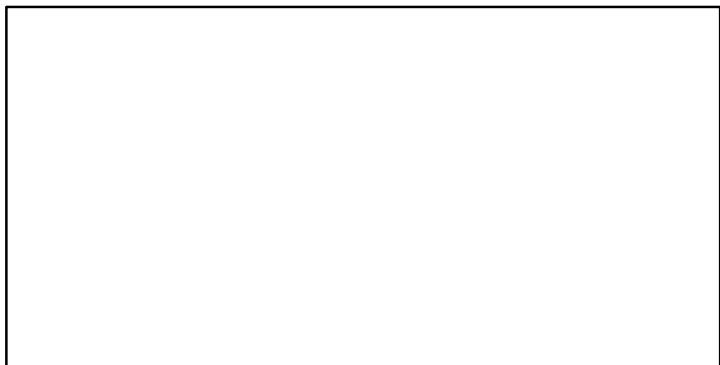
survB*



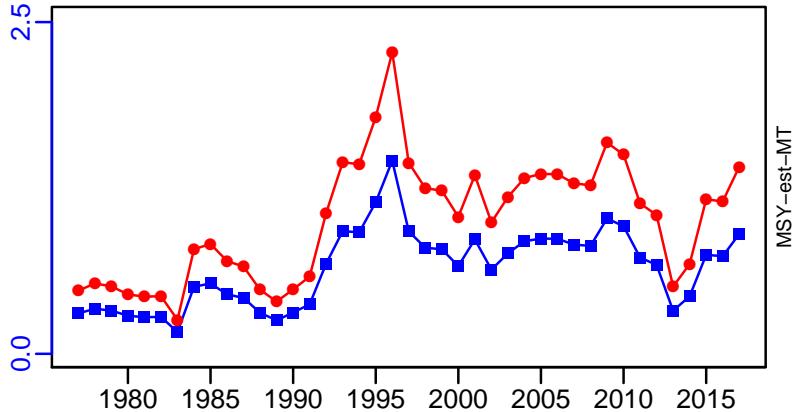
CPUE*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1976–2018–SISIMP2021)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Atka mackerel Gulf of Alaska [ATKAGA]

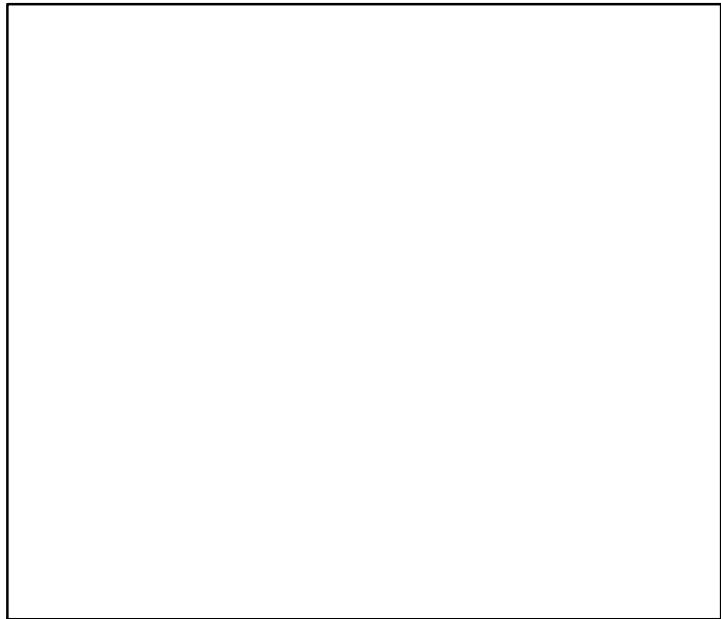
Metadata	
Scientific Name	Pleurogrammus monopterygius
Current Assess ID	AFSC-ATKAGA-1977-2015-SISIMP2021
Area	Gulf of Alaska
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2014, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

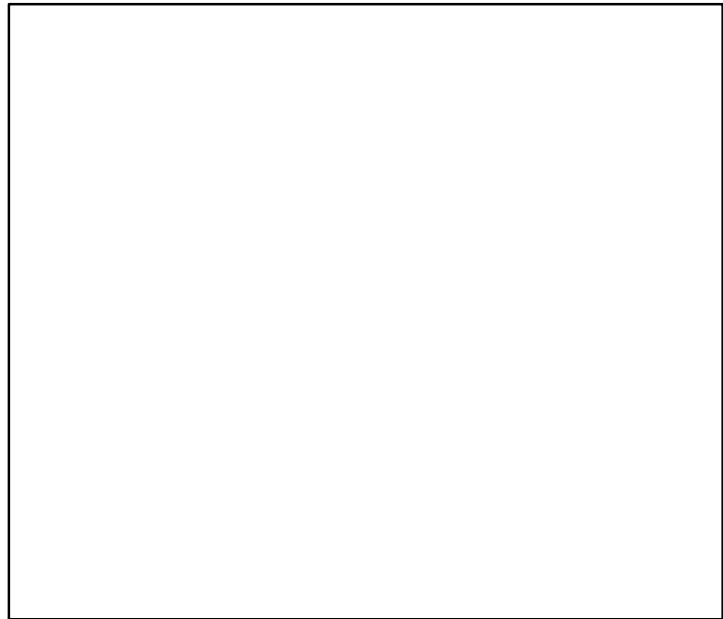
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2015	1228		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Atka mackerel Gulf of Alaska [ATKAGA]

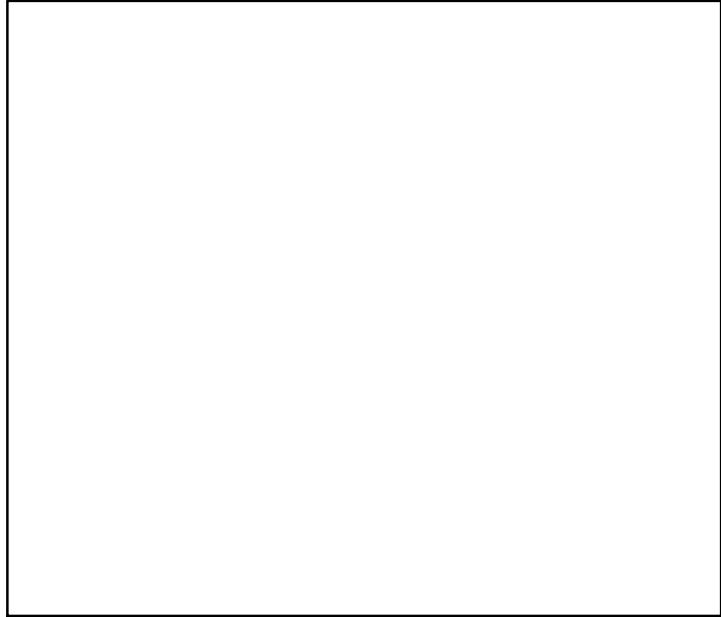
Kobe MSY*



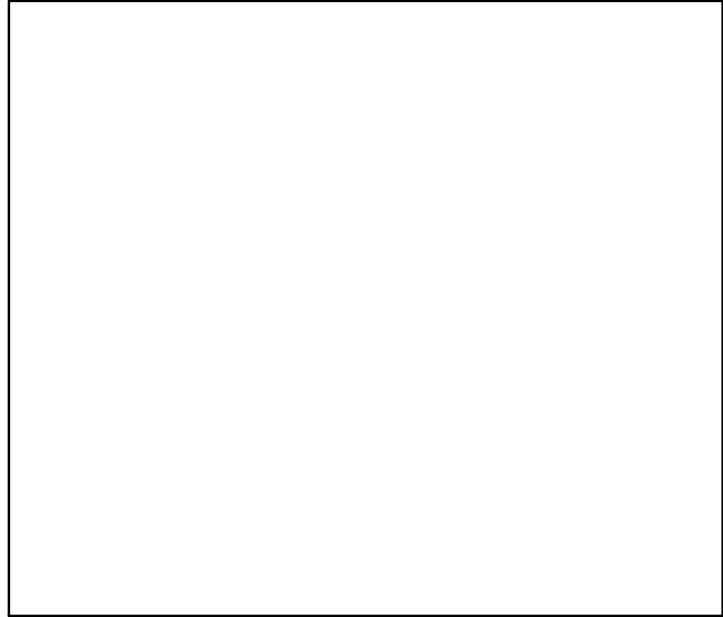
Kobe MGT*



Spawner Recruit*



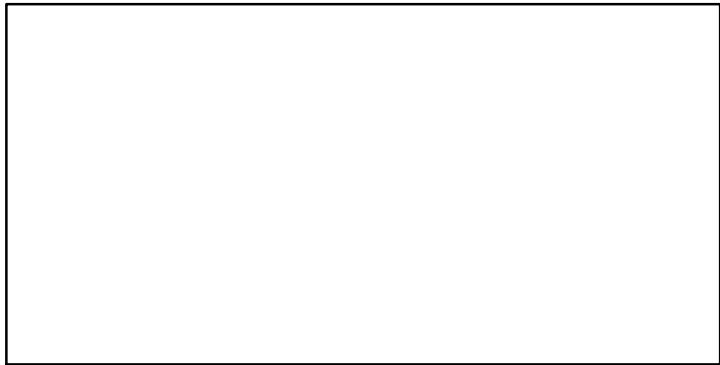
Production*



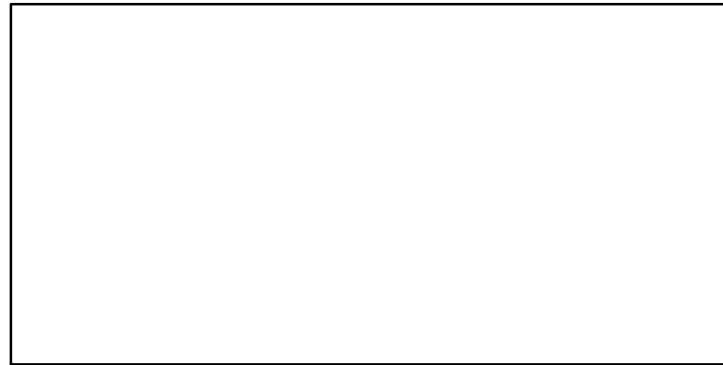
◆ Start Year ◆ End Year * No Data

Atka mackerel Gulf of Alaska [ATKAGA]

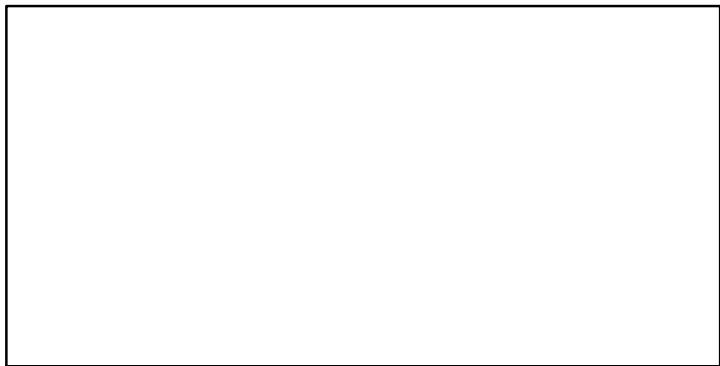
TB*



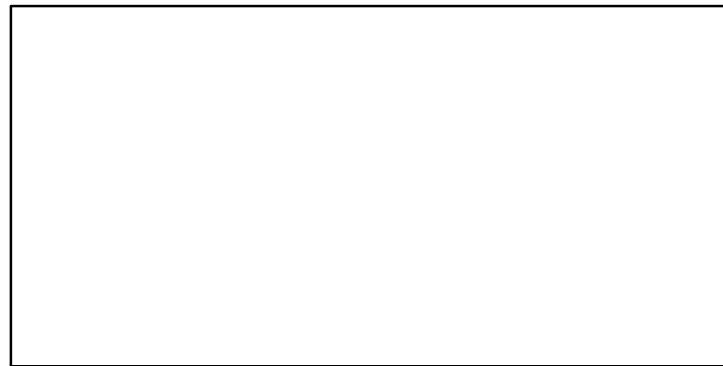
SSB*



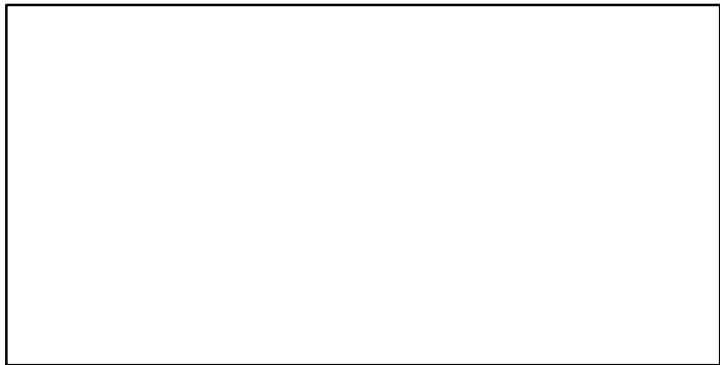
TN *



F*



ER*



Recruits*

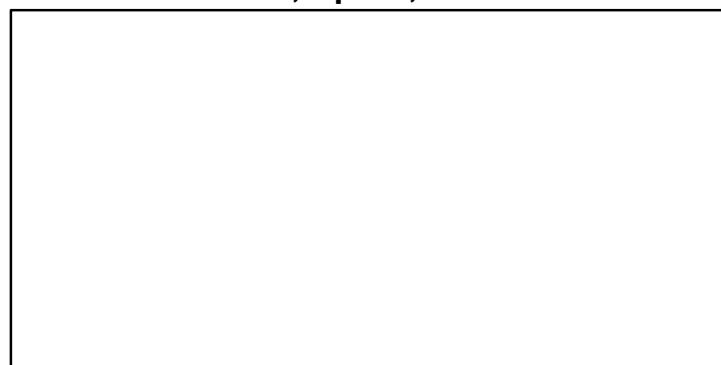
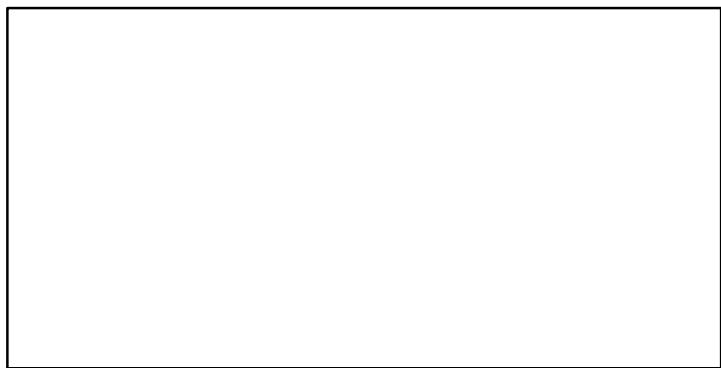
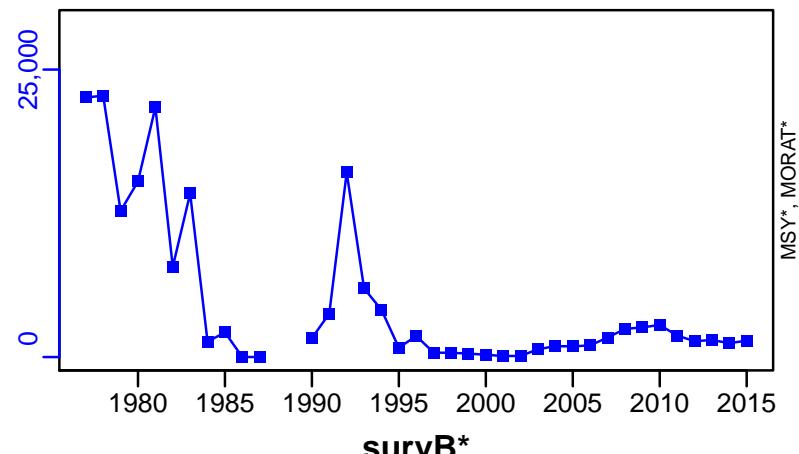


- | | | | | | |
|-------|--------------------|-------|------------|---|---------|
| ■ | Listed time series | - - - | Target BRP | — | Rec-Est |
| - - - | MSY-based BRP | - - - | Lim BRP | * | No Data |

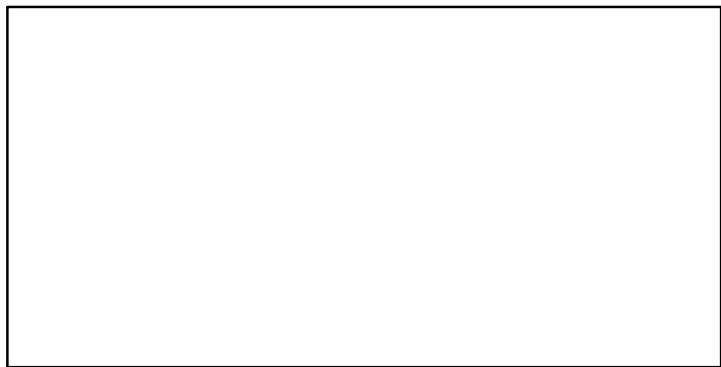
Atka mackerel Gulf of Alaska [ATKAGA]

TC-MT, TL*, RecC* (1977–2015–SISIMP2021)

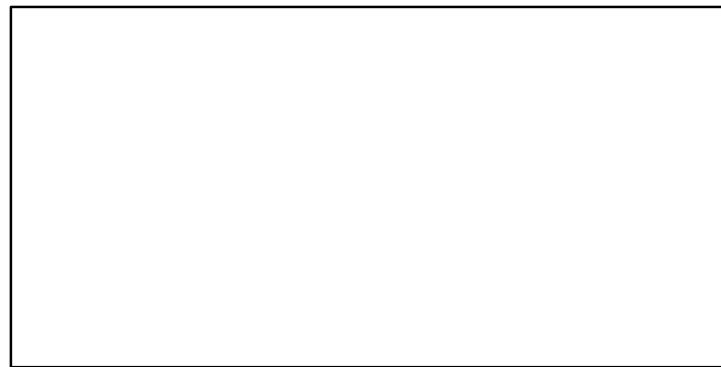
TAC*, Cpair*, Cadv*



EFFORT*



CdivMSY*



- | | | |
|--------------------------|--------------------------|-----------|
| ■ 1st listed time series | ▲ 3rd listed time series | — MORAT |
| ● 2nd listed time series | - - - MSY | * No Data |

Blue king crab Pribilof Islands [BKINGCRABPI]

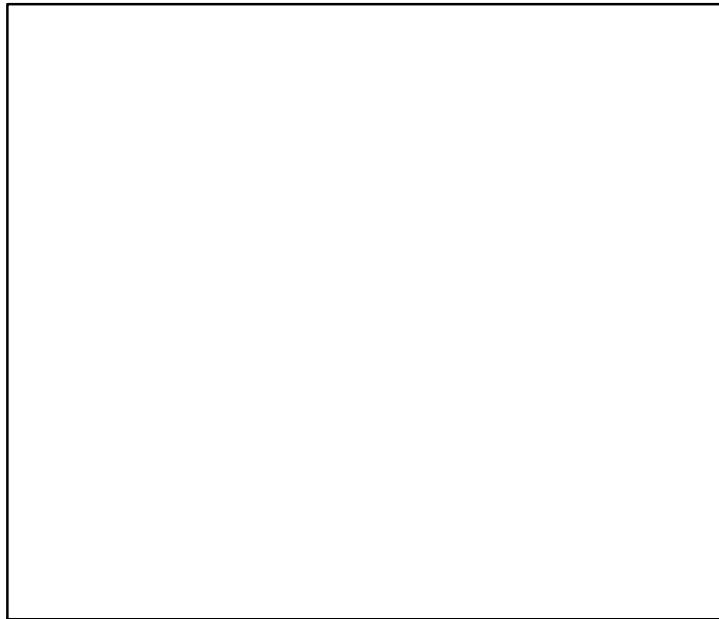
Metadata	
Scientific Name	Paralithodes platypus
Current Assess ID	AFSC-BKINGCRABPI-1975-2017-SISIMP2021
Area	Pribilof Islands
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2008, 2017, 2016

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2008	4209
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

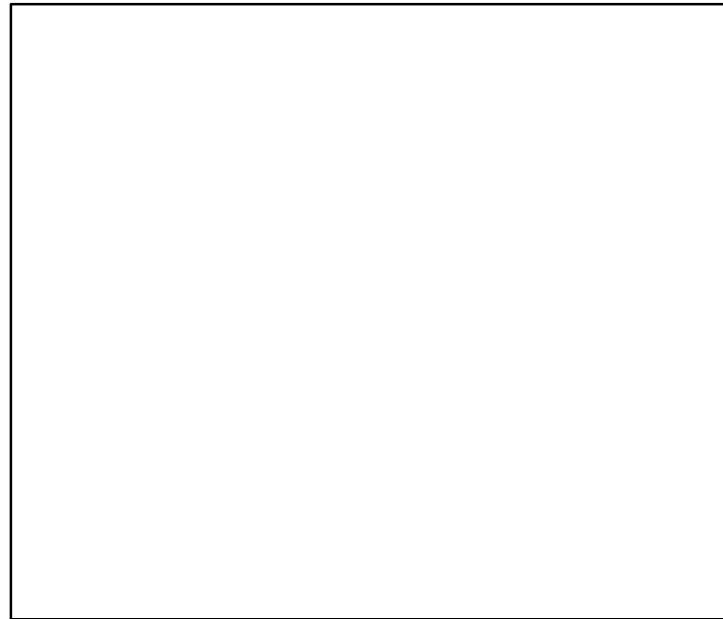
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2008	594	-	-	
SSB	SSB-MT	2008	345	Males	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	-	-	-	-	-	
ER	ER-ratio	2008	0	-	-	
TC	TC-MT	2017	0.38			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2008	0.082			
F/Fmsy	-	-	-			
ER/ERmsy	-	-	-			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Blue king crab Pribilof Islands [BKINGCRABPI]

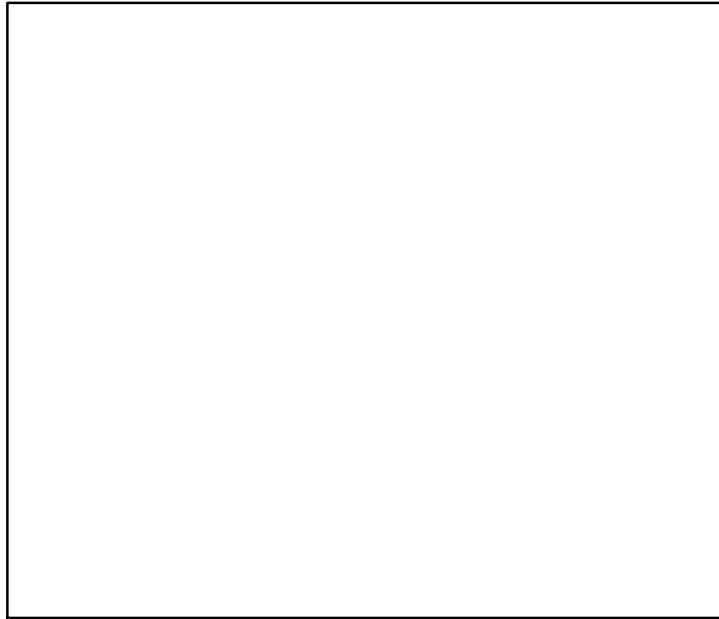
Kobe MSY*



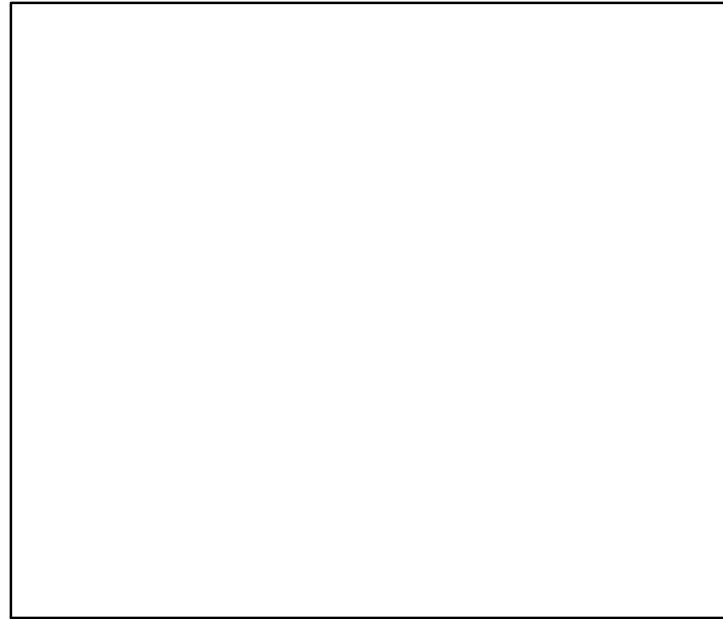
Kobe MGT*



Spawner Recruit*



Production*

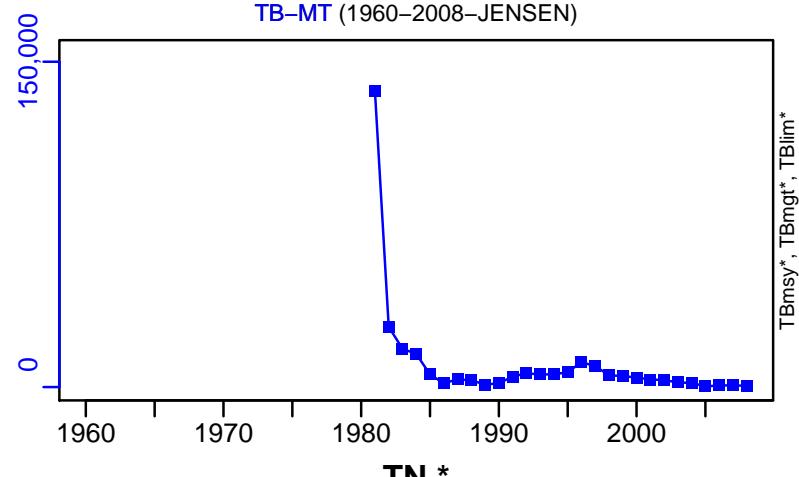


◆ Start Year ♦ End Year * No Data

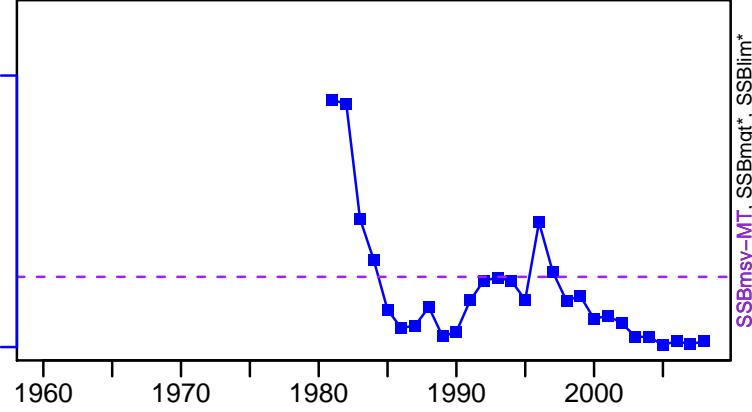
Blue king crab Pribilof Islands [BKINGCRABPI]

TB-MT (1960–2008–JENSEN)

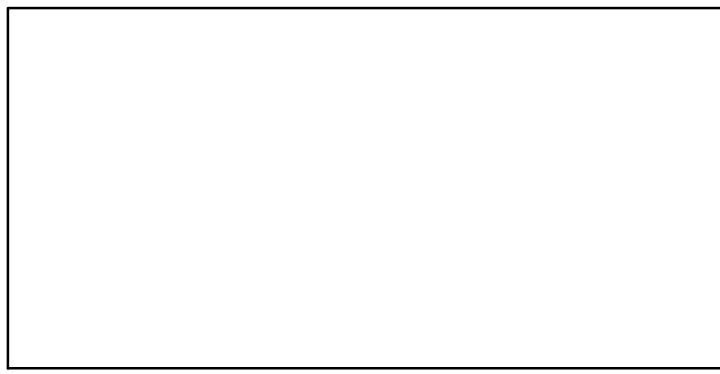
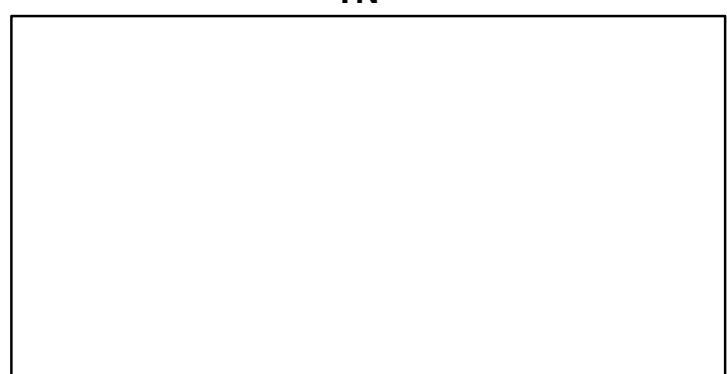
SSB-MT (1960–2008–JENSEN)



TB_{msy}* , TB_{mgt*} , TB_{lim*}

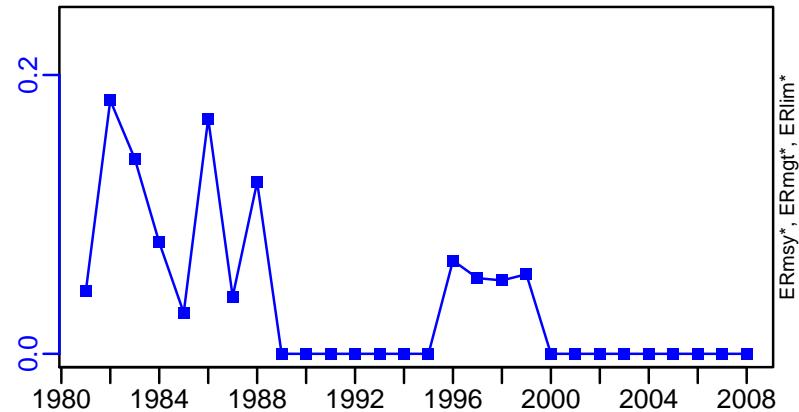


SSB_{msy}-MT , SSB_{mgt*} , SSB_{lim*}

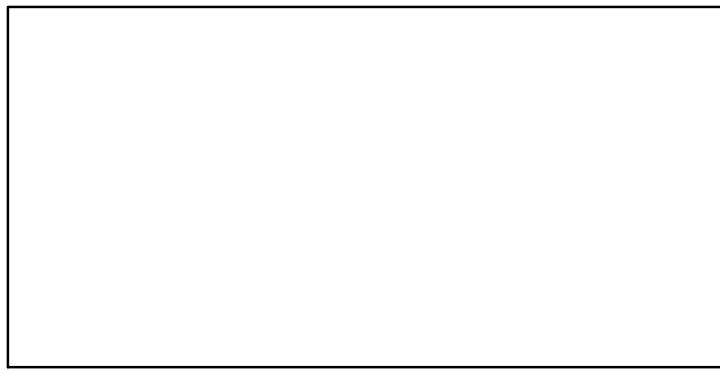


ER-ratio (1960–2008–JENSEN)

Recruits*



ER_{msy}* , ER_{mgt*} , ER_{lim*}

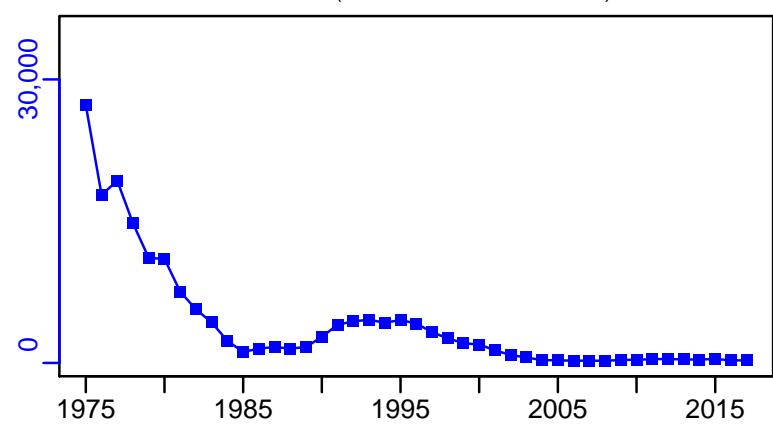
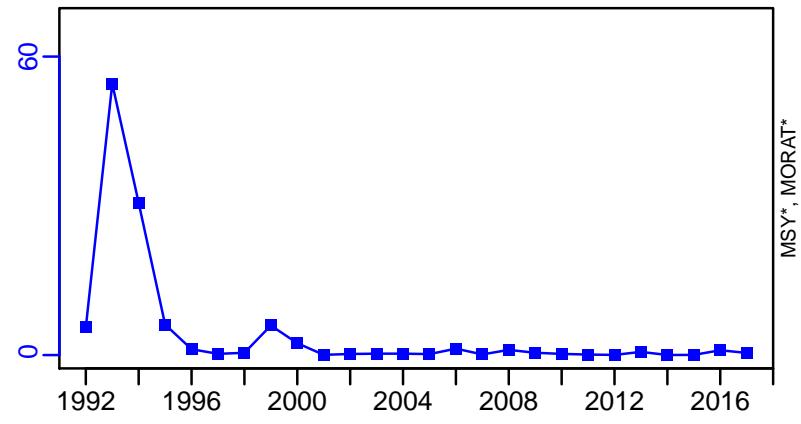


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | ··· Lim BRP | * No Data |

Blue king crab Pribilof Islands [BKINGCRABPI]

TC-MT, TL*, RecC* (1975–2017–SISIMP2021)

TAC*, Cpair*, Cadv*



CPUE*

CdivMSY*

- | | | |
|--------------------------|--------------------------|-----------|
| ■ 1st listed time series | ▲ 3rd listed time series | — MORAT |
| ● 2nd listed time series | - - - MSY | * No Data |

Blue king crab Saint Matthews Island [BKINGCRABSMI]

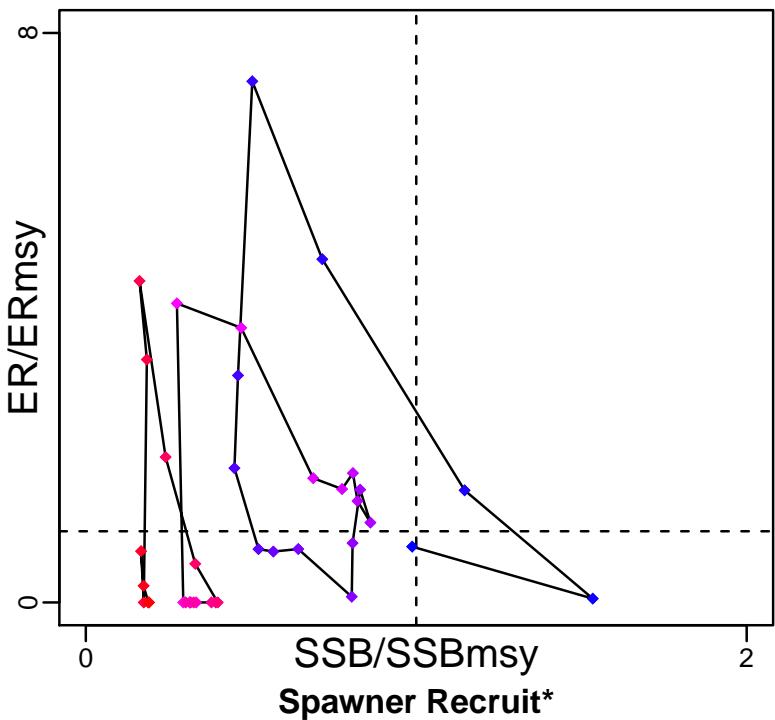
Metadata	
Scientific Name	Paralithodes platypus
Current Assess ID	AFSC-BKINGCRABSMI-1978-2018-SISIMP2021
Area	Saint Matthews Island
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2008, 2016, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2008	3351
Fmsy	Fmsy-pr-1/yr	2008	0.18
ERmsy	ERmsy-est-ratio	2018	0.157
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2018	1163
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

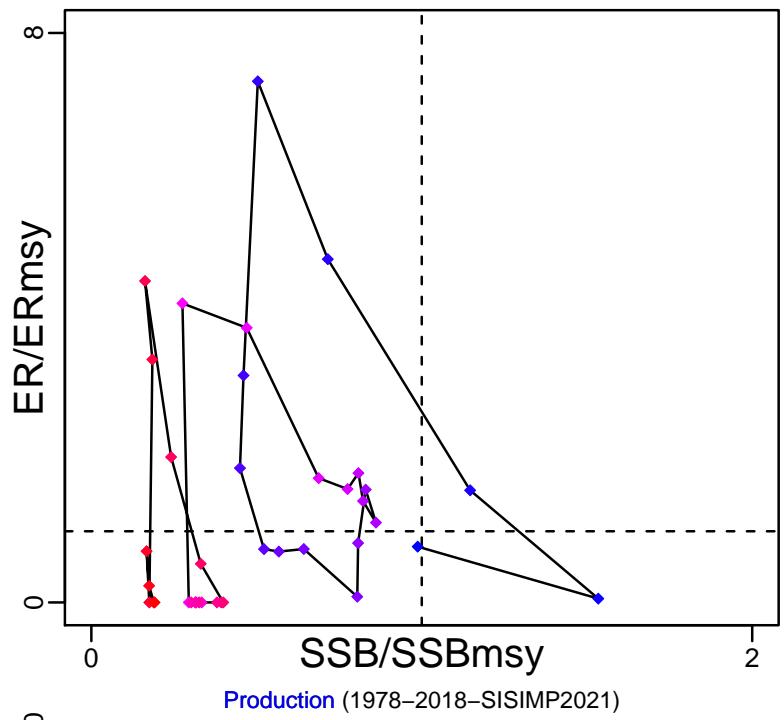
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	-	-	-	-	-	-
SSB	SSB-MT	2018	1309	-	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	-	-	-	-	-	
ER	ER-calc-ratio	2018	0	-	-	
TC	TC-MT	2018	0			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2008	1.453			
F/Fmsy	-	-	-			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Blue king crab Saint Matthews Island [BKINGCRABSMI]

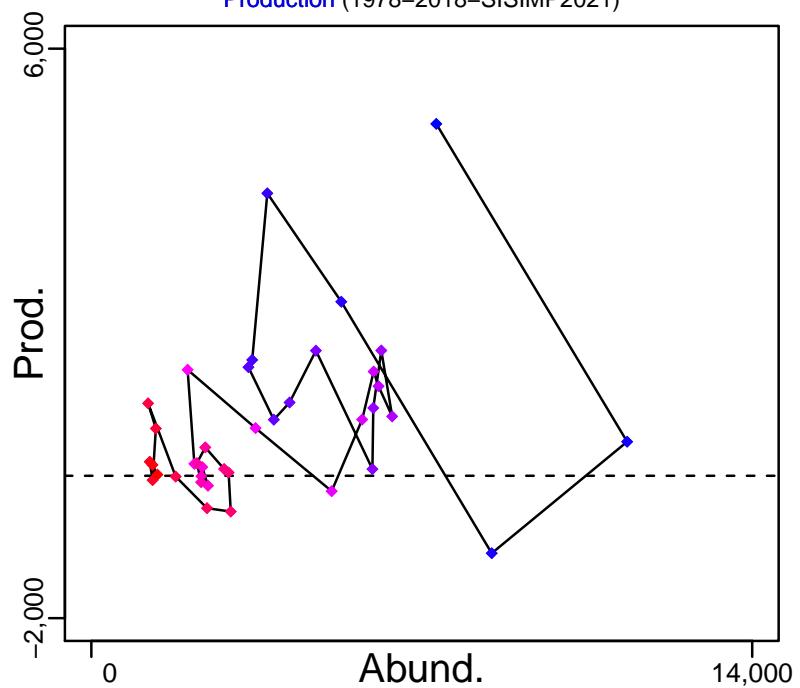
Kobe MSYpref (1978–2018–SISIMP2021)



Kobe MGTpref (1978–2018–SISIMP2021)



Production (1978–2018–SISIMP2021)



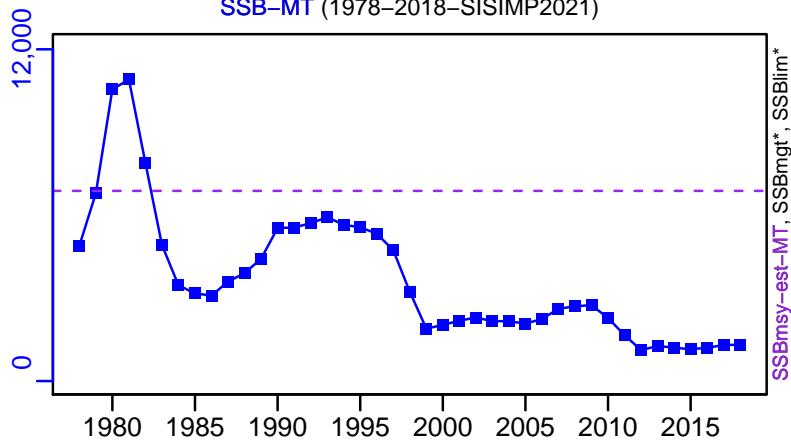
◆ Start Year	◆ End Year	*	No Data
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Blue king crab Saint Matthews Island [BKINGCRABSMI]

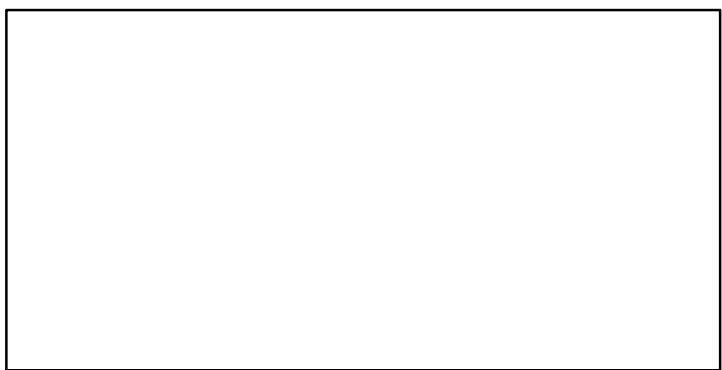
TB*



SSB-MT (1978–2018–SISIMP2021)



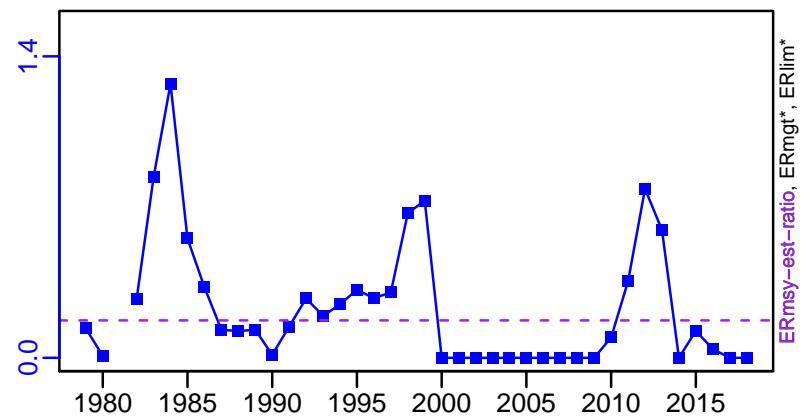
TN *



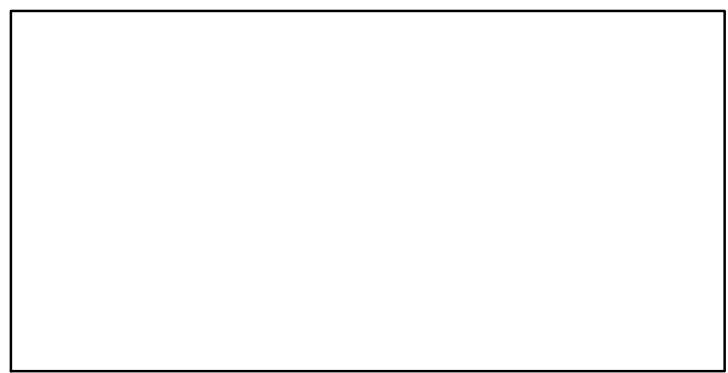
F*



ER-calc-ratio (1978–2018–SISIMP2021)



Recruits*

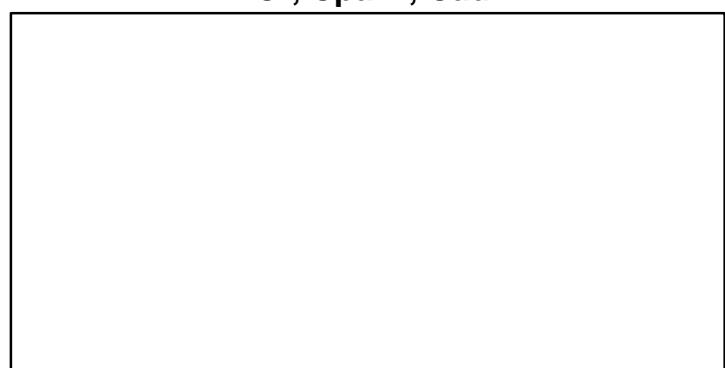
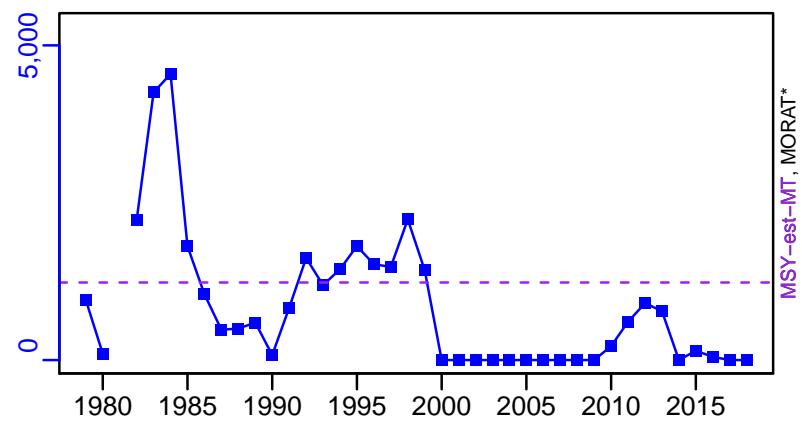


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| - - MSY-based BRP | --- Lim BRP | * No Data |

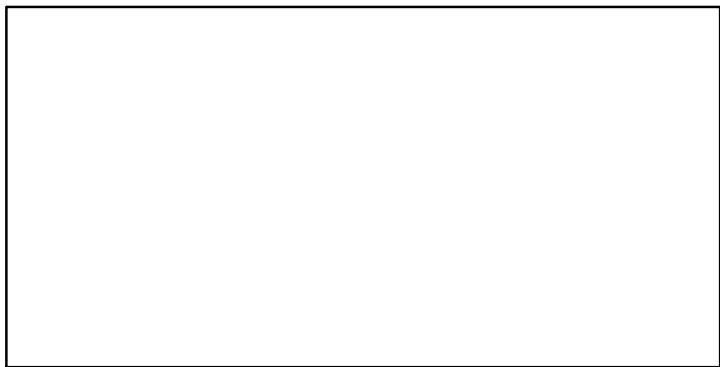
Blue king crab Saint Matthews Island [BKINGCRABSMI]

TC-MT, TL*, RecC* (1978–2018–SISIMP2021)

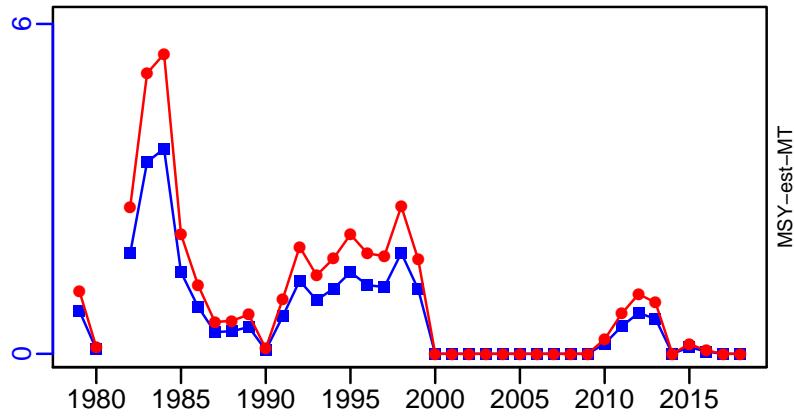
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1978–2018–SISIMP2021)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Dover sole Gulf of Alaska [DSOLEGA]

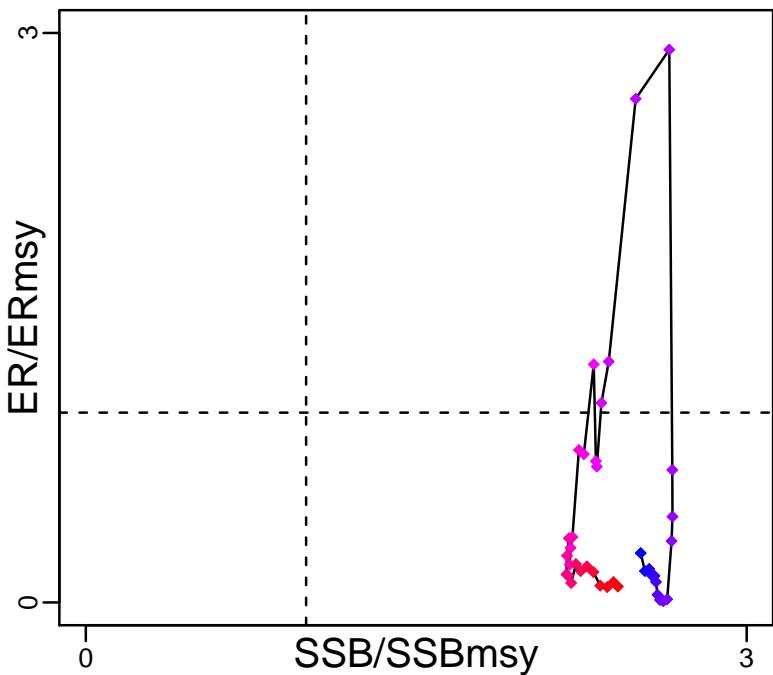
Metadata	
Scientific Name	Microstomus pacificus
Current Assess ID	AFSC-DSOLEGA-1978-2017-SISIMP2021
Area	Gulf of Alaska
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2009, 2015, 2016, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2016	20,255
Fmsy	Fmsy-pr-1/yr	2009	0.149
ERmsy	ERmsy-est-ratio	2016	0.023
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2016	1263
M	M-1/yr	2009	0.085
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2016	0.12
ERlim	-	-	-

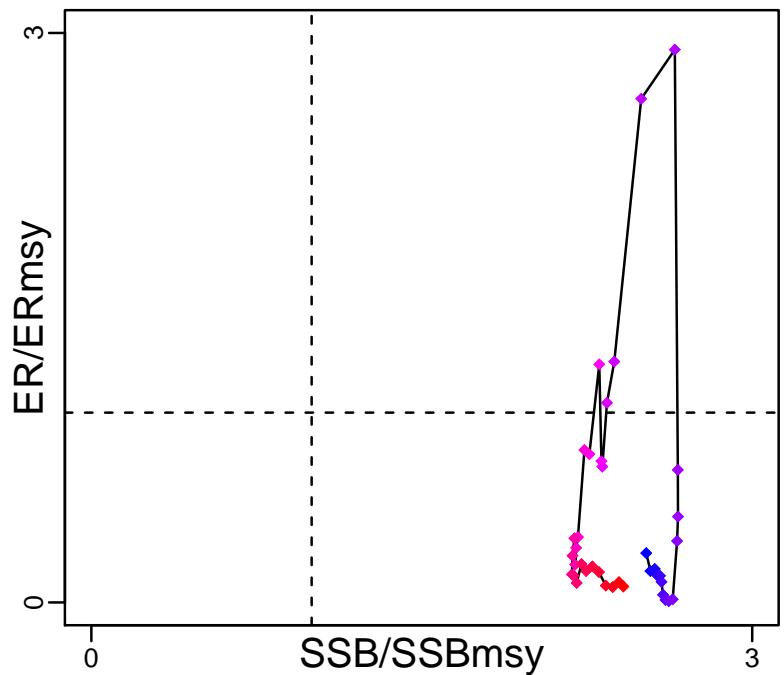
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	141,000	-	0+	
SSB	SSB-MT	2016	49,180	-	-	
TN	-	-	-	-	-	
R	R-E00	2016	19,451,520	-	0	
F	F-1/yr	2016	0.002	-	-	
ER	ER-calc-ratio	2016	0.002	-	-	
TC	TC-MT	2017	253			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2016	2.428			
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2009	0.048			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2016	0.084			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Dover sole Gulf of Alaska [DSOLEGA]

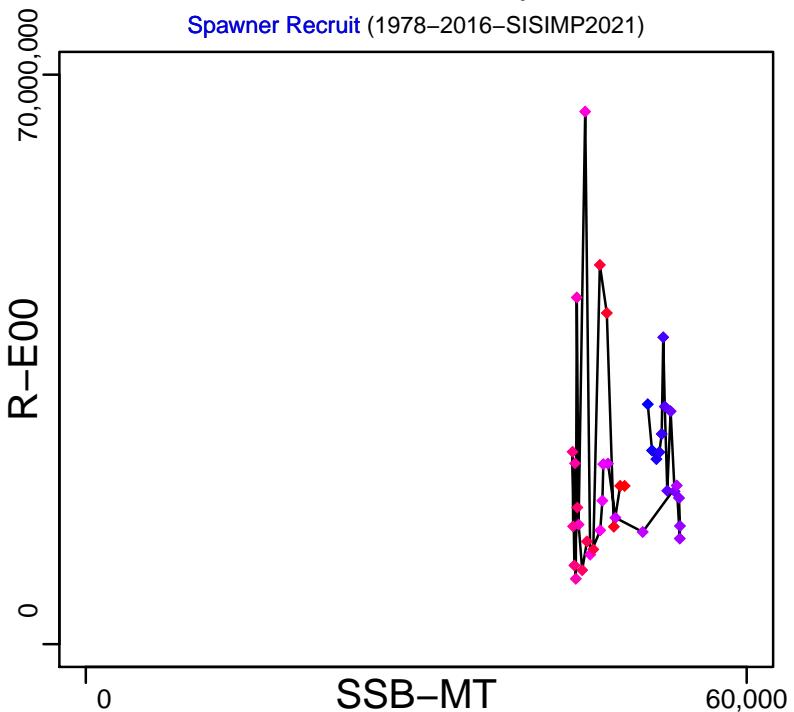
Kobe MSYpref (1978–2016–SISIMP2021)



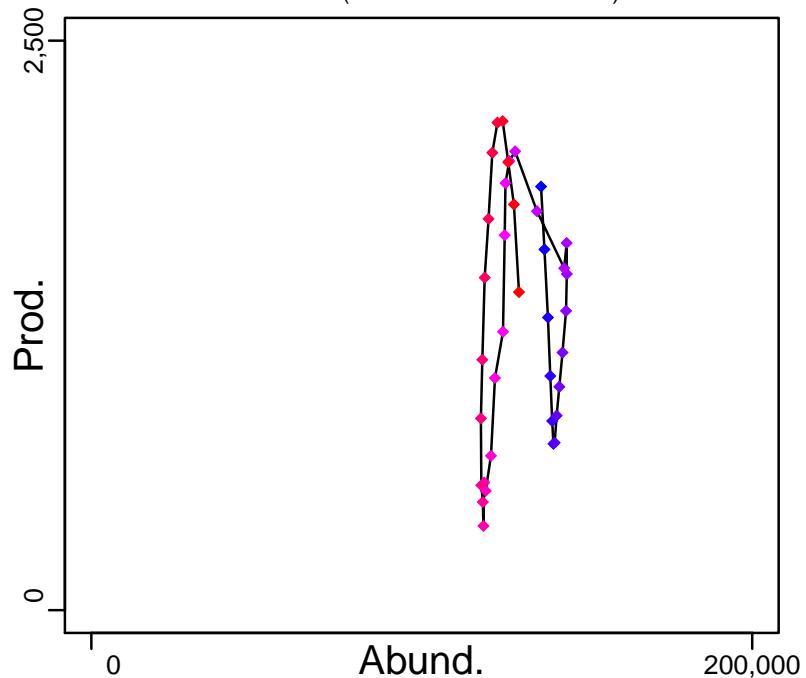
Kobe MGTpref (1978–2016–SISIMP2021)



Spawner Recruit (1978–2016–SISIMP2021)



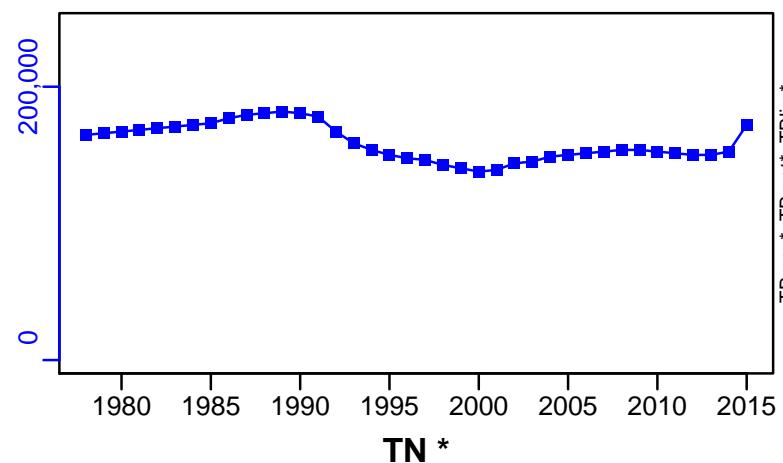
Production (1978–2016–SISIMP2021)



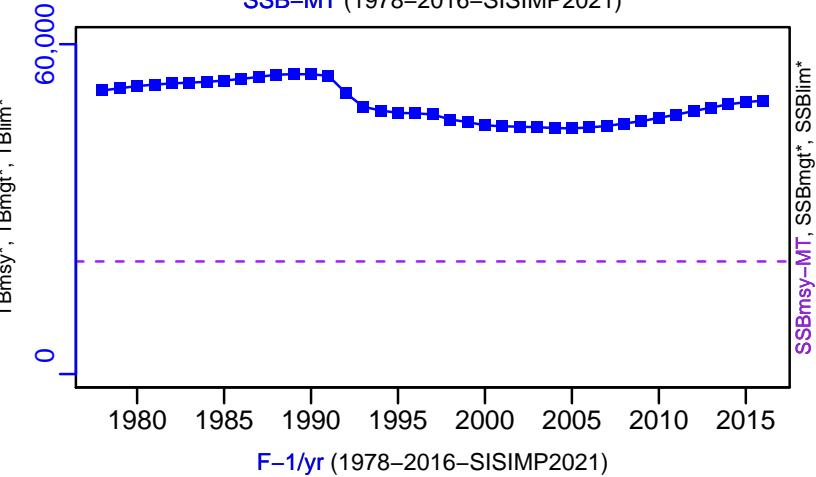
- ◆ Start Year
- ◆ End Year
- * No Data

Dover sole Gulf of Alaska [DSOLEGA]

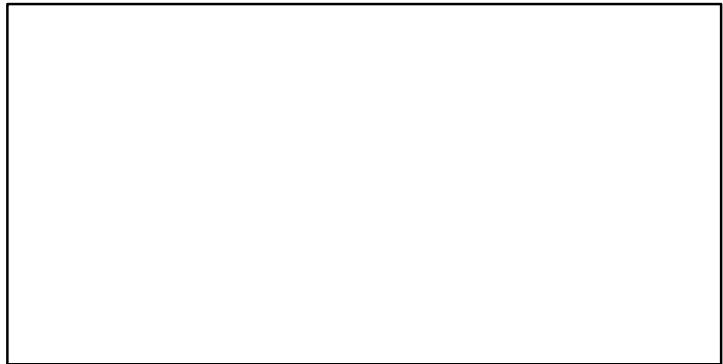
TB-MT (1978–2015–SISIMP2016)



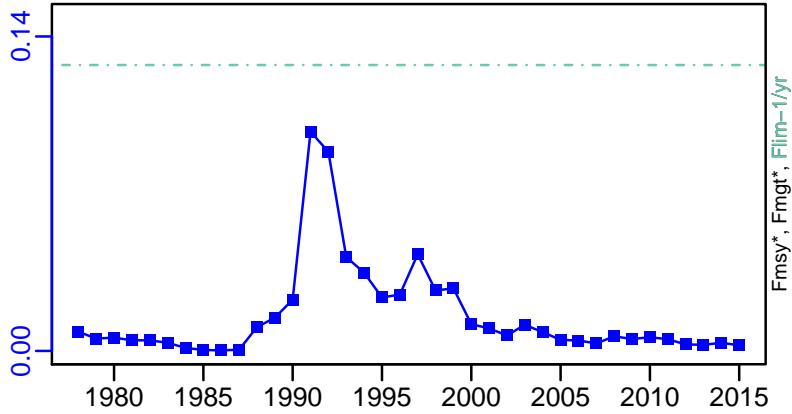
SSB-MT (1978–2016–SISIMP2021)



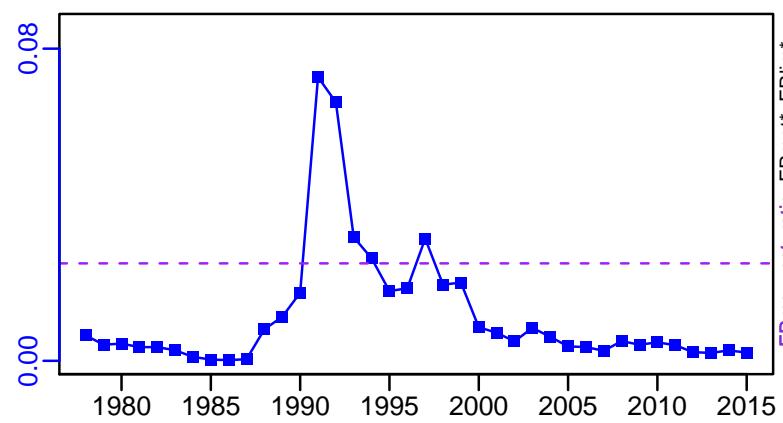
TN *



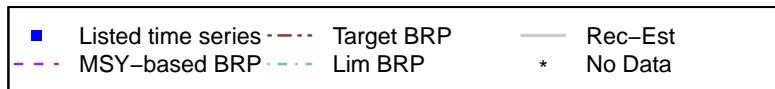
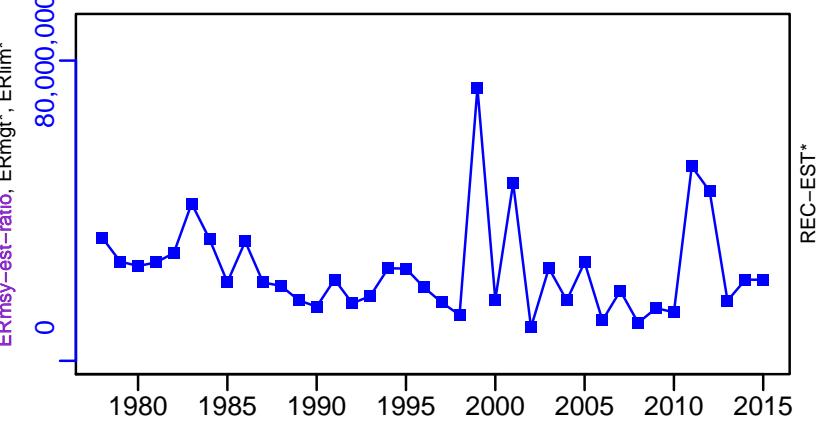
F-1/yr (1978–2016–SISIMP2021)



ER-calc-ratio (1978–2016–SISIMP2021)



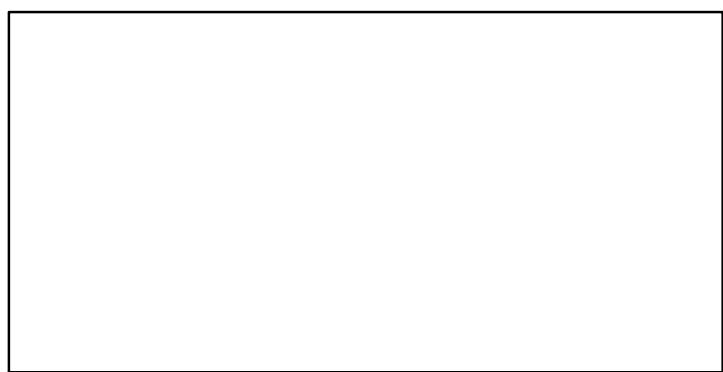
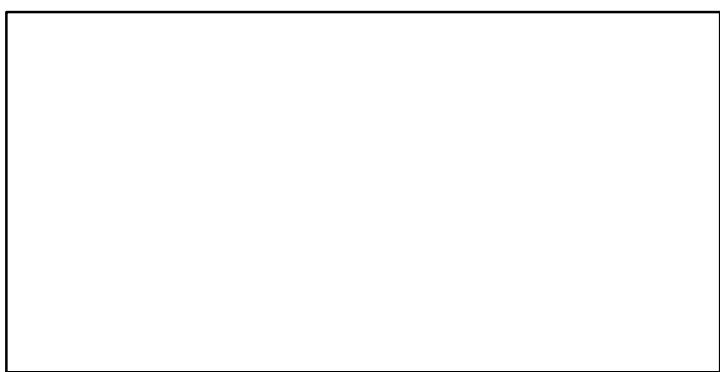
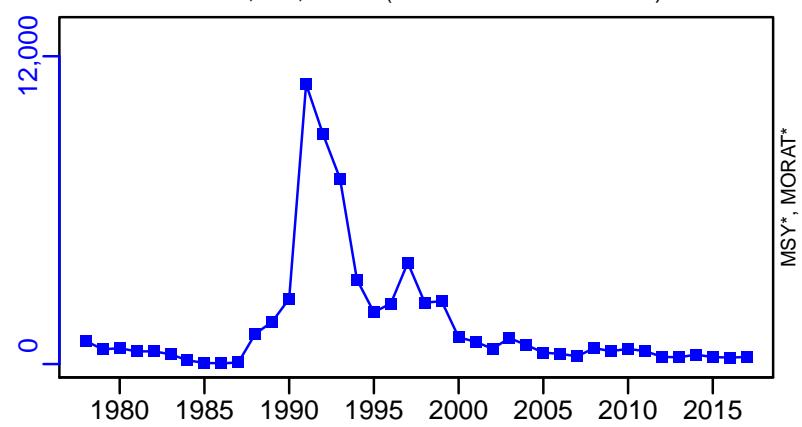
R-E00 (1978–2016–SISIMP2021)



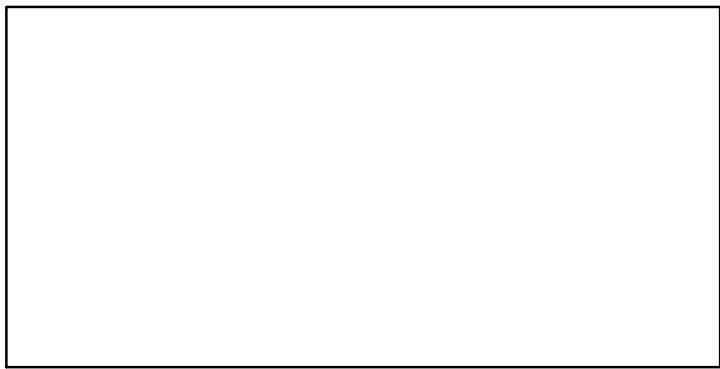
Dover sole Gulf of Alaska [DSOLEGA]

TC-MT, TL*, RecC* (1978–2017–SISIMP2021)

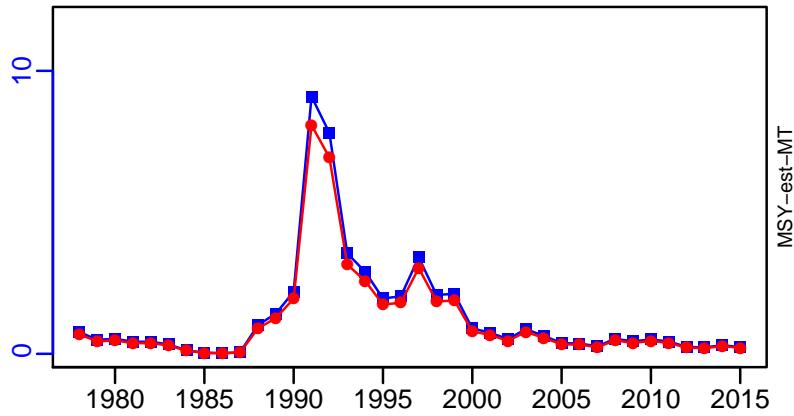
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1978–2016–SISIMP2021)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Dusky rockfish Gulf of Alaska [DUSROCKGA]

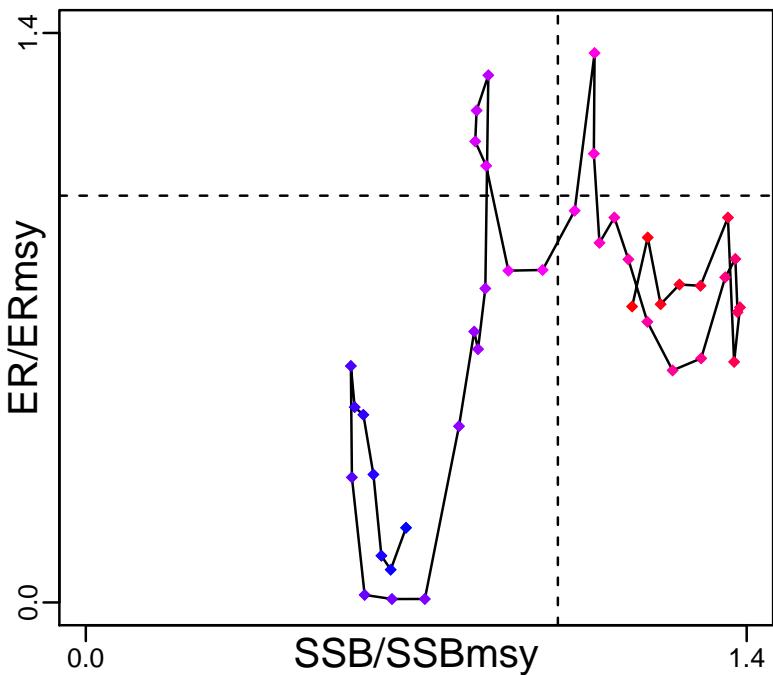
Metadata	
Scientific Name	Sebastodes variabilis
Current Assess ID	AFSC-DUSROCKGA-1973-2018-SISIMP2021
Area	Gulf of Alaska
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2010, 2016, 2018, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2018	18,535
Fmsy	Fmsy-1/yr	2010	0.087
ERmsy	ERmsy-est-ratio	2018	0.053
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2018	3116
M	M-1/yr	2010	0.07
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2016	0.122
ERlim	-	-	-

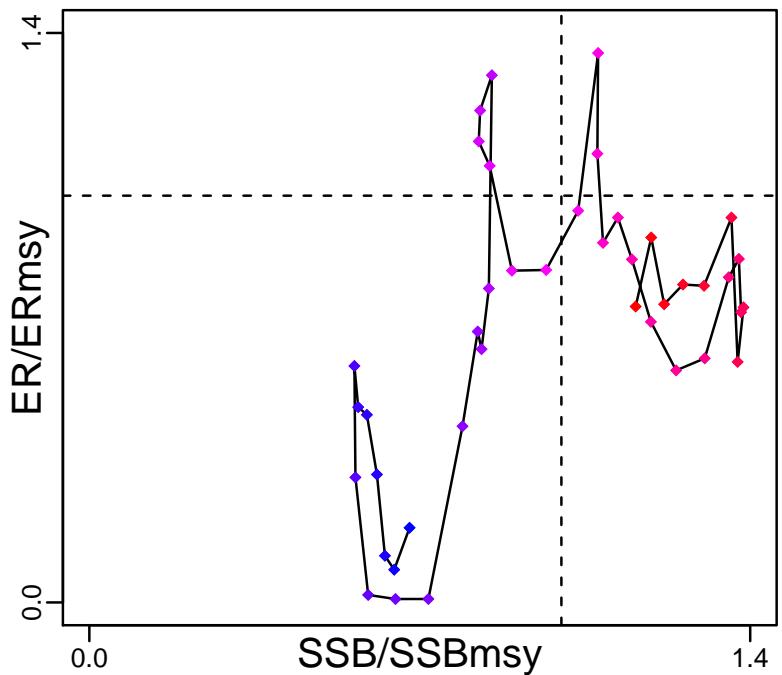
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	63,100	-	4+	
SSB	SSB-MT	2018	21,203	-	-	
TN	-	-	-	-	-	
R	R-E00	2018	2,435,860	-	4	
F	F-1/yr	2018	0.065	-	-	
ER	ER-calc-ratio	2018	0.039	-	-	
TC	TC-MT	2018	2623			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2018	1.144			
F/Fmsy	F-1/yr/Fmsy-1/yr	2010	0.546			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.727			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Dusky rockfish Gulf of Alaska [DUSROCKGA]

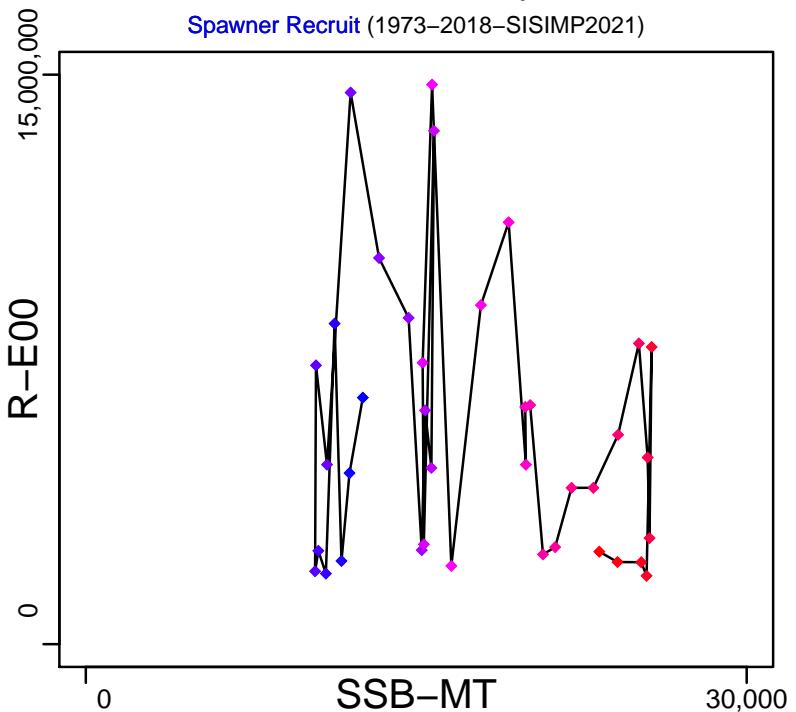
Kobe MSYpref (1973–2018–SISIMP2021)



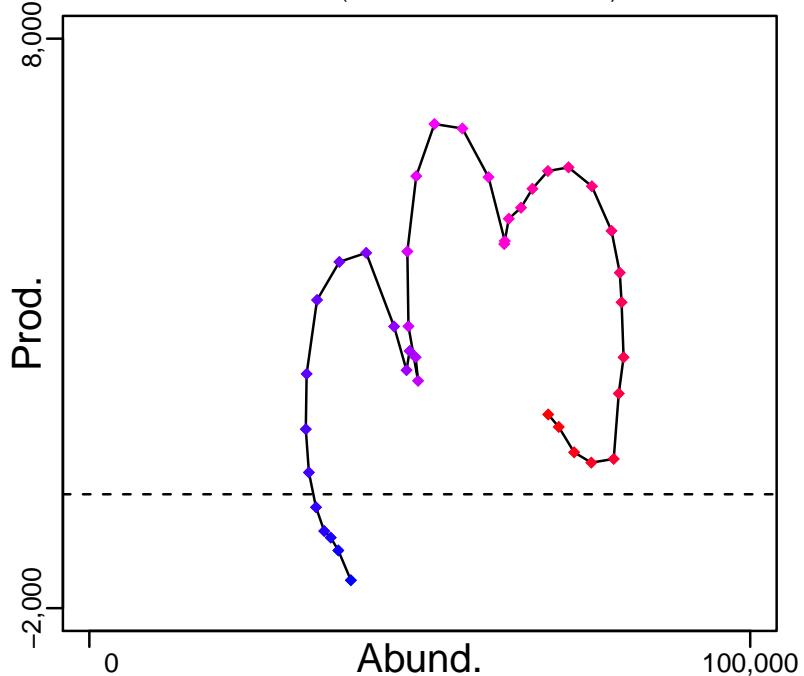
Kobe MGTpref (1973–2018–SISIMP2021)



Spawner Recruit (1973–2018–SISIMP2021)



Production (1973–2018–SISIMP2021)

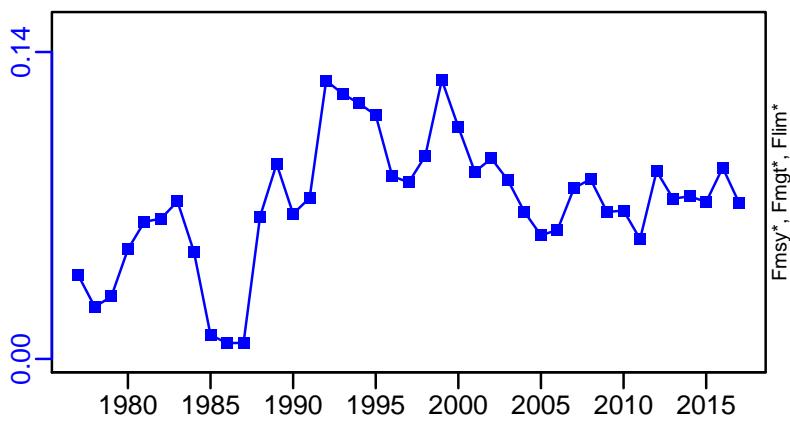
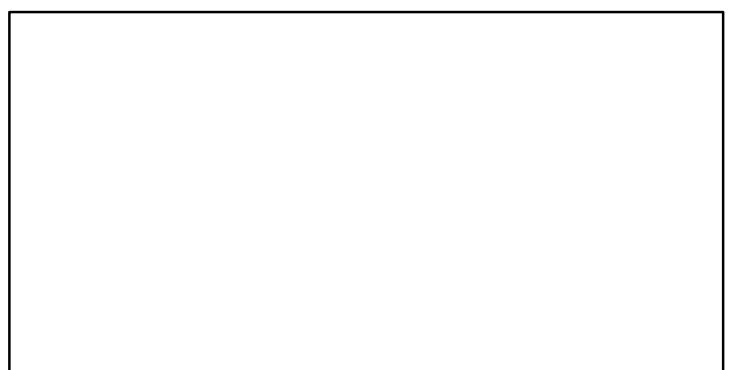
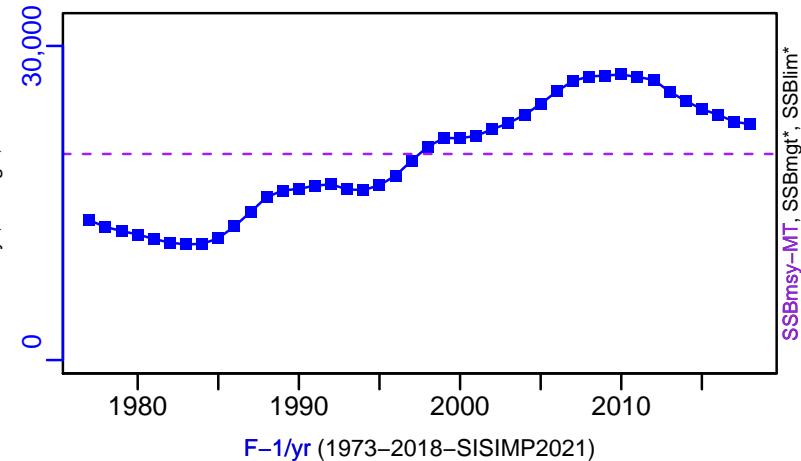
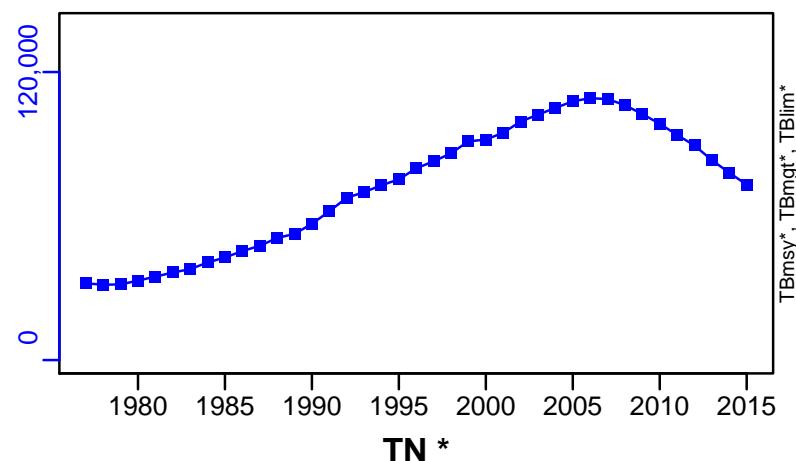


◆ Start Year ◆ End Year * No Data

Dusky rockfish Gulf of Alaska [DUSROCKGA]

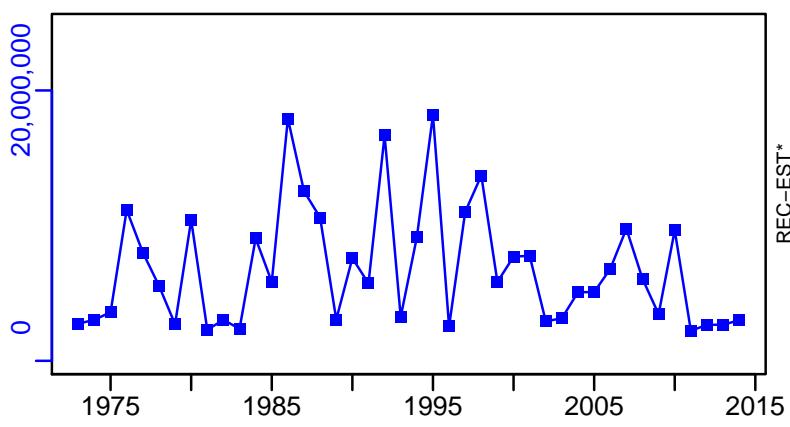
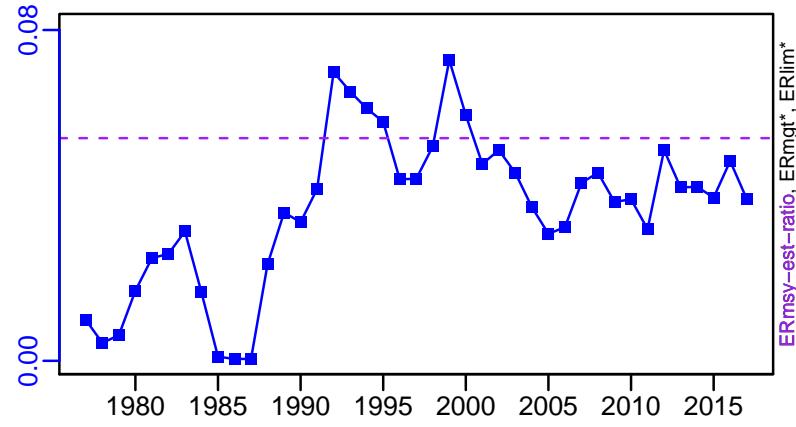
TB-MT (1977–2015–SISIMP2016)

SSB-MT (1973–2018–SISIMP2021)



ER-calc-ratio (1973–2018–SISIMP2021)

R-E00 (1973–2018–SISIMP2021)

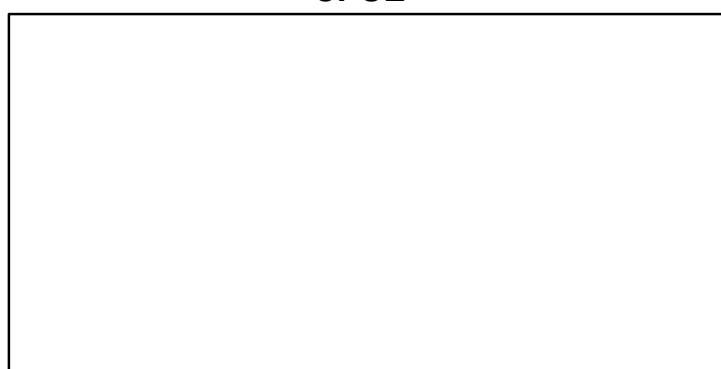
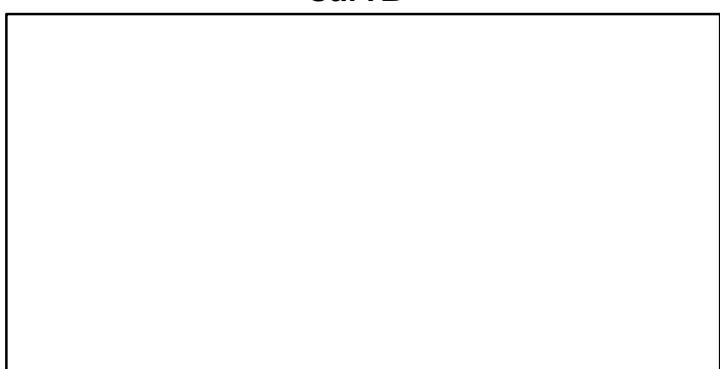
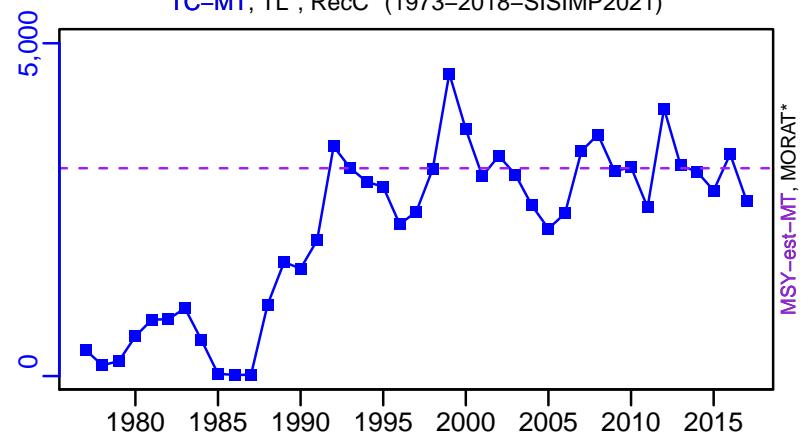


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	--- Lim BRP	* No Data

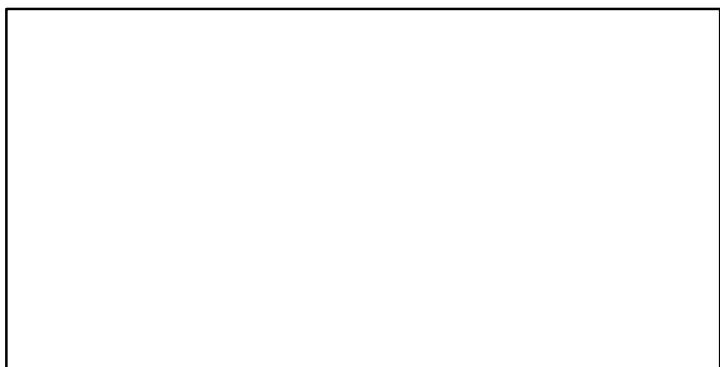
Dusky rockfish Gulf of Alaska [DUSROCKGA]

TC-MT, TL*, RecC* (1973–2018–SISIMP2021)

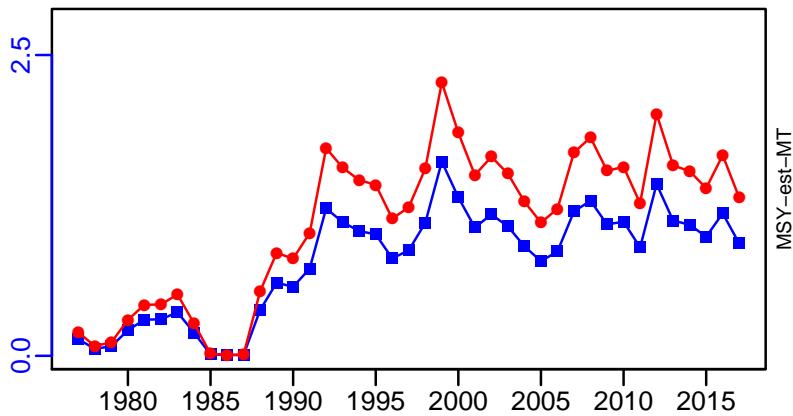
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdiveMEANC-ratio, (1973–2018–SISIMP2021)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Flathead sole Bering Sea and Aleutian Islands [FLSOLEBSAI]

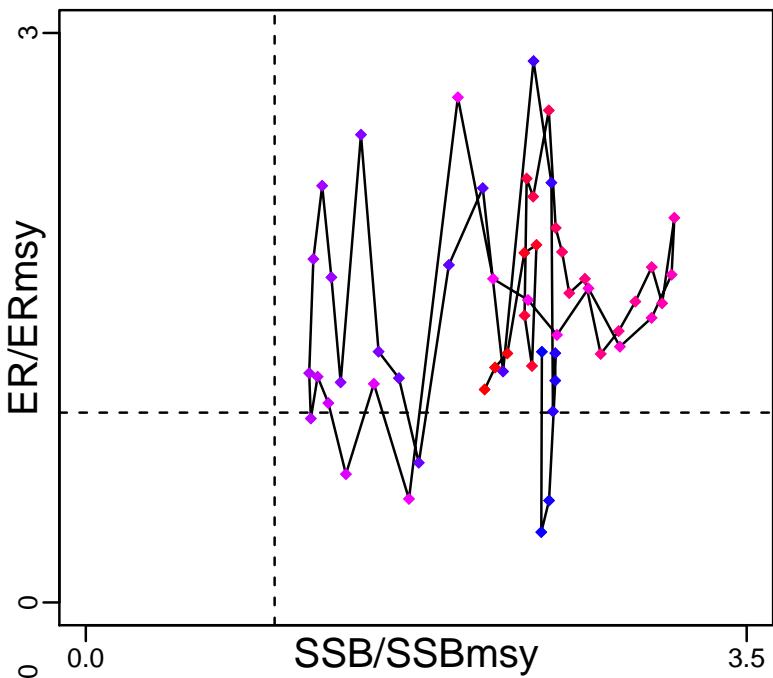
Metadata	
Scientific Name	Hippoglossoides elassodon
Current Assess ID	AFSC-FLSOLEBSAI-1961-2018-SISIMP2021
Area	Bering Sea and Aleutian Islands
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2018, 2010, 2016, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2018	74,221
Fmsy	Fmsy-pr-1/yr	2010	0.342
ERmsy	ERmsy-est-ratio	2018	0.014
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	SSB0-MT	2010	336,027
MSY	MSY-MT	2010	83,321
M	M-1/yr	2010	0.2
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2016	0.432
ERlim	-	-	-

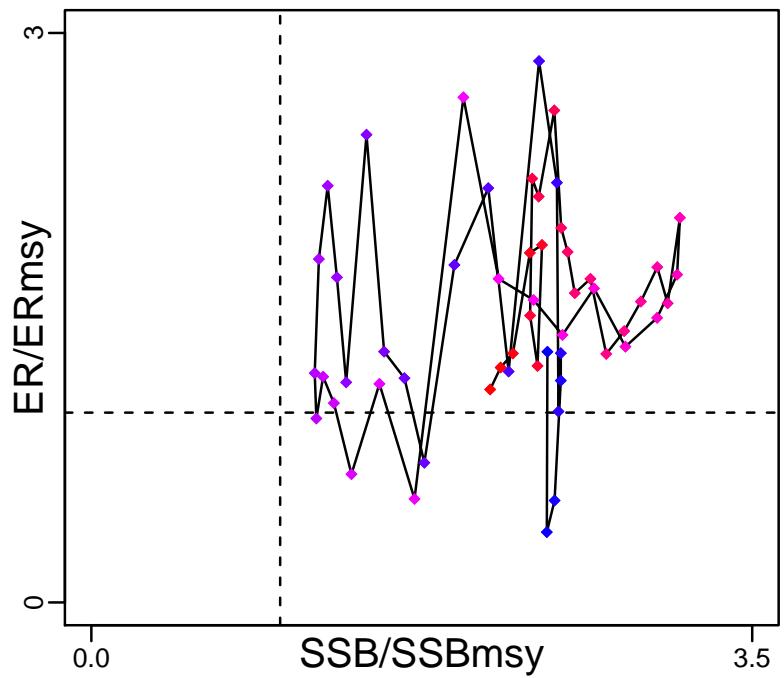
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	738,000	-	3+	
SSB	SSB-MT	2018	154,356	-	-	
TN	-	-	-	-	-	
R	R-E00	2018	970,941,000	-	3	
F	F-1/yr	2018	0.049	-	-	
ER	ER-calc-ratio	2018	0.016	-	-	
TC	TC-MT	2018	9149			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2018	2.08			
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2010	0.166			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	1.122			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Flathead sole Bering Sea and Aleutian Islands [FLSOLEBSAI]

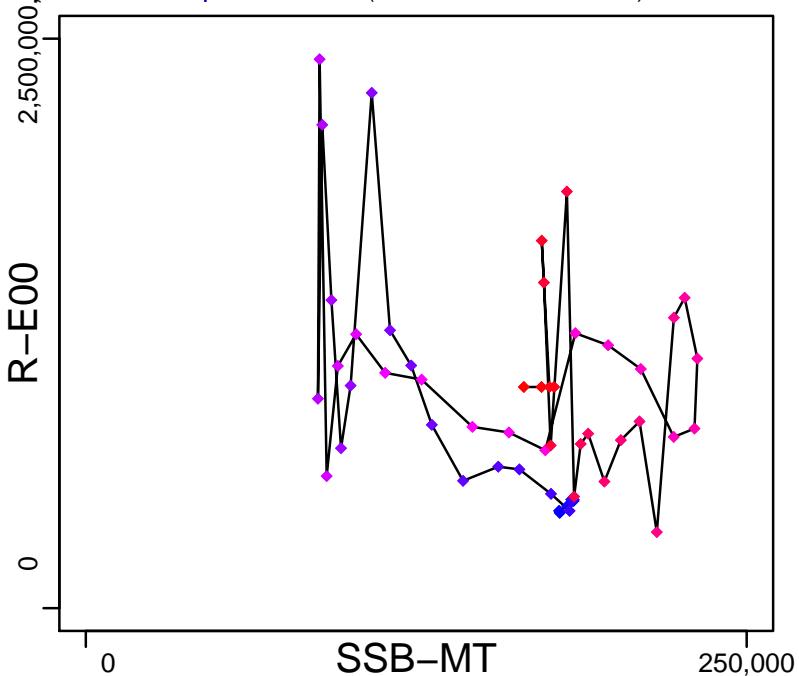
Kobe MSYpref (1961–2018–SISIMP2021)



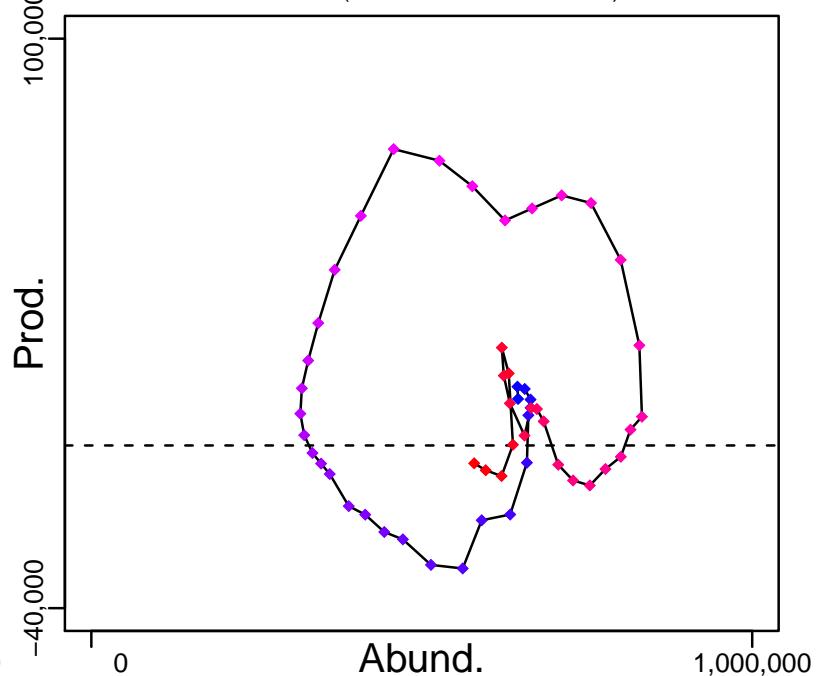
Kobe MGTpref (1961–2018–SISIMP2021)



Spawner Recruit (1961–2018–SISIMP2021)



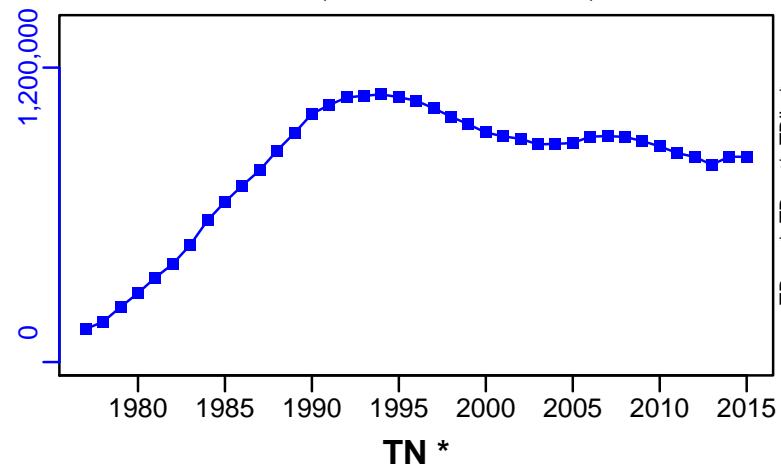
Production (1961–2018–SISIMP2021)



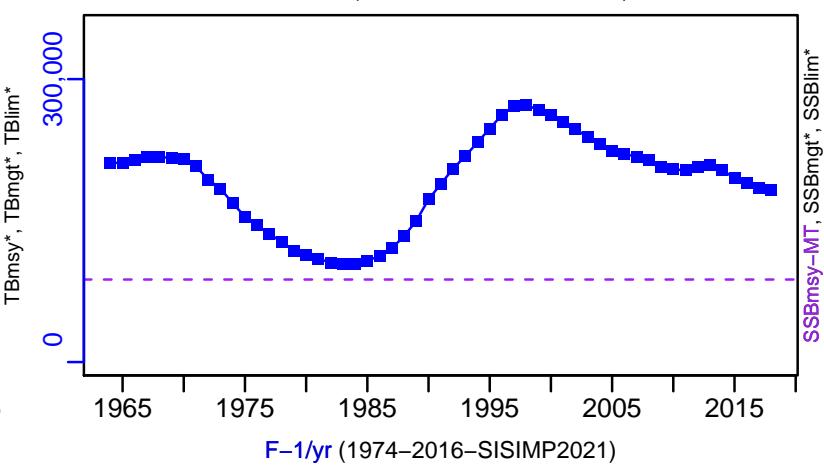
◆ Start Year ◆ End Year * No Data

Flathead sole Bering Sea and Aleutian Islands [FLSOLEBSAI]

TB-MT (1977–2015–SISIMP2016)



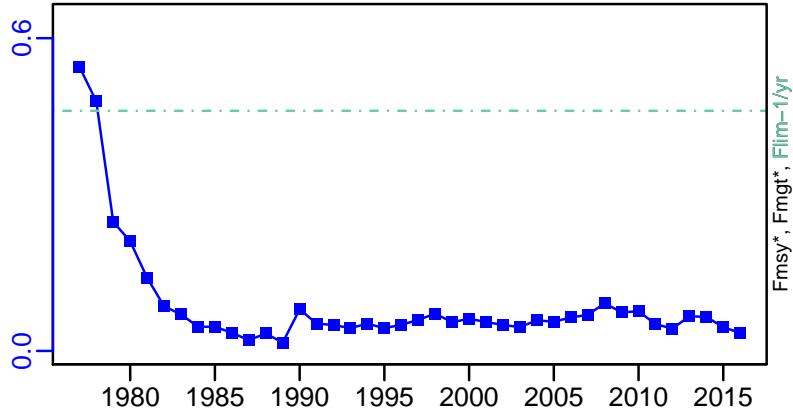
SSB-MT (1961–2018–SISIMP2021)



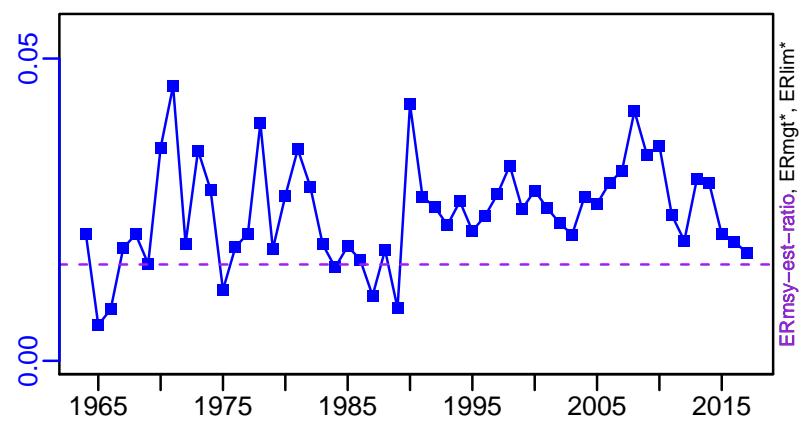
TN *



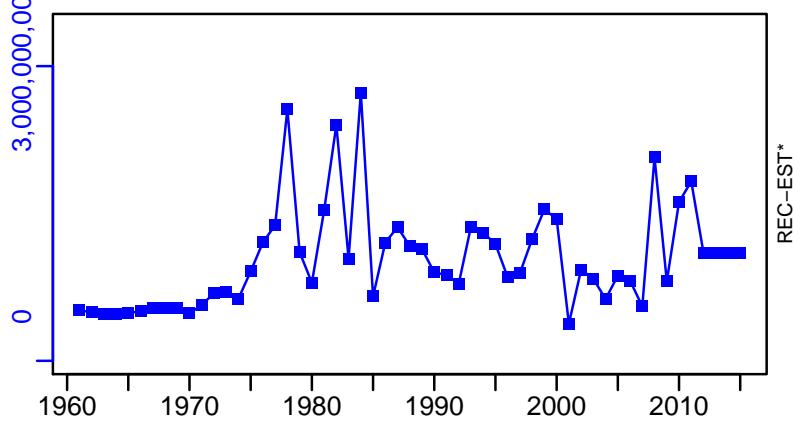
F-1/yr (1974–2016–SISIMP2021)



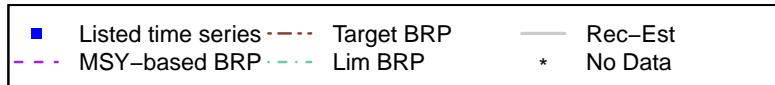
ER-calc-ratio (1961–2018–SISIMP2021)



R-E00 (1961–2018–SISIMP2021)



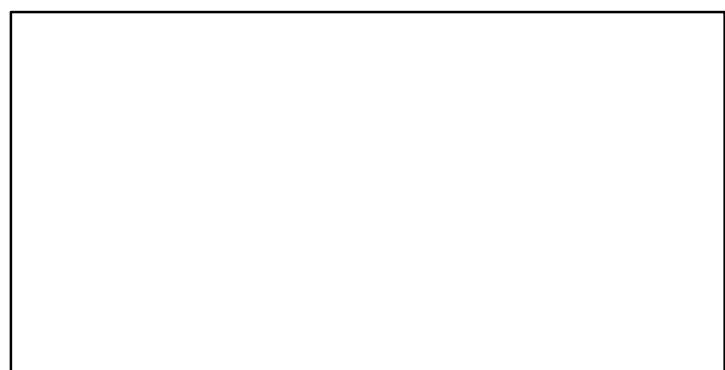
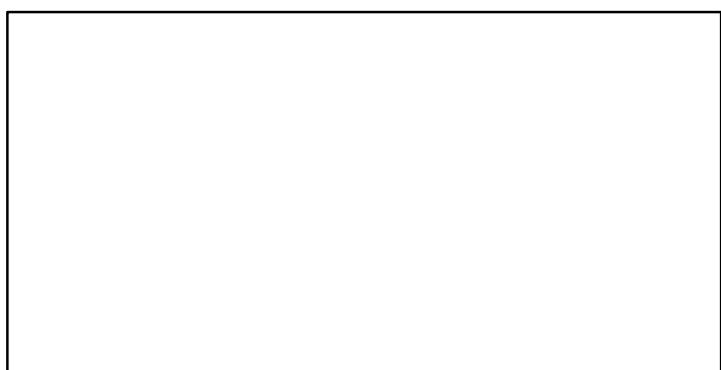
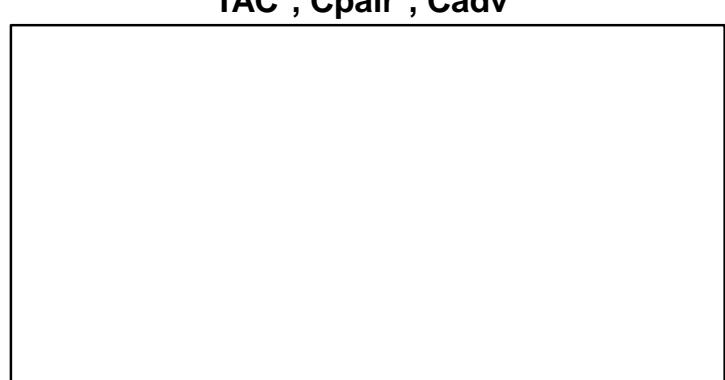
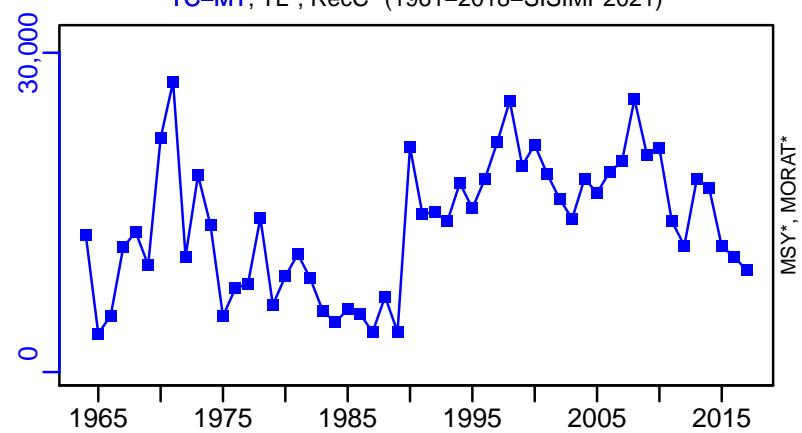
REC-EST*



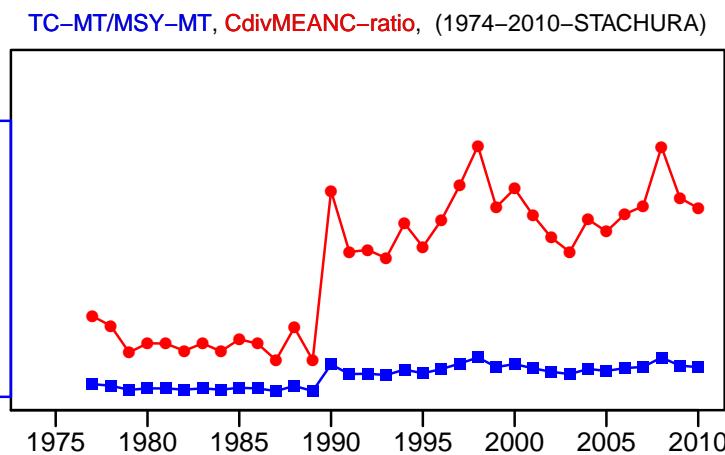
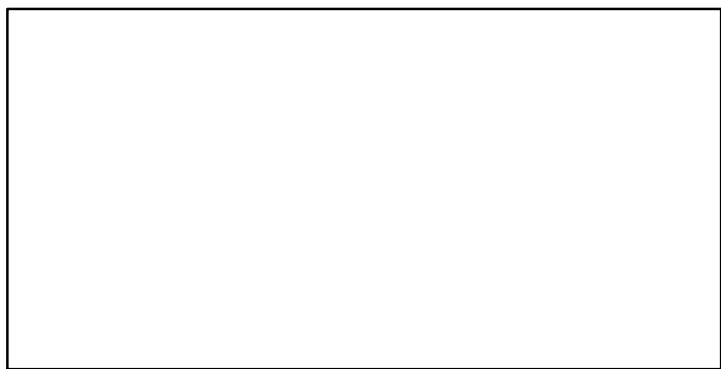
Flathead sole Bering Sea and Aleutian Islands [FLSOLEBSAI]

TC-MT, TL*, RecC* (1961–2018–SISIMP2021)

TAC*, Cpair*, Cadv*



EFFORT*



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Flathead sole Gulf of Alaska [FLSOLEGA]

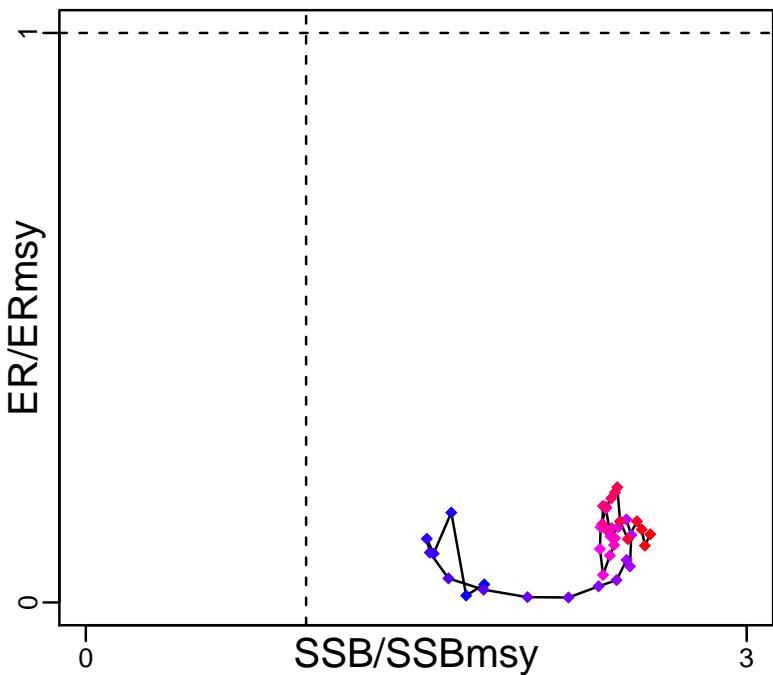
Metadata	
Scientific Name	Hippoglossoides elassodon
Current Assess ID	AFSC-FLSOLEGA-1978-2017-SISIMP2021
Area	Gulf of Alaska
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2010, 2015, 2016, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2017	32,043
Fmsy	Fmsy-pr-1/yr	2010	0.481
ERrmsy	ERrmsy-est-ratio	2017	0.073
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2017	7902
M	M-1/yr	2010	0.2
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2017	0.4
ERlim	-	-	-

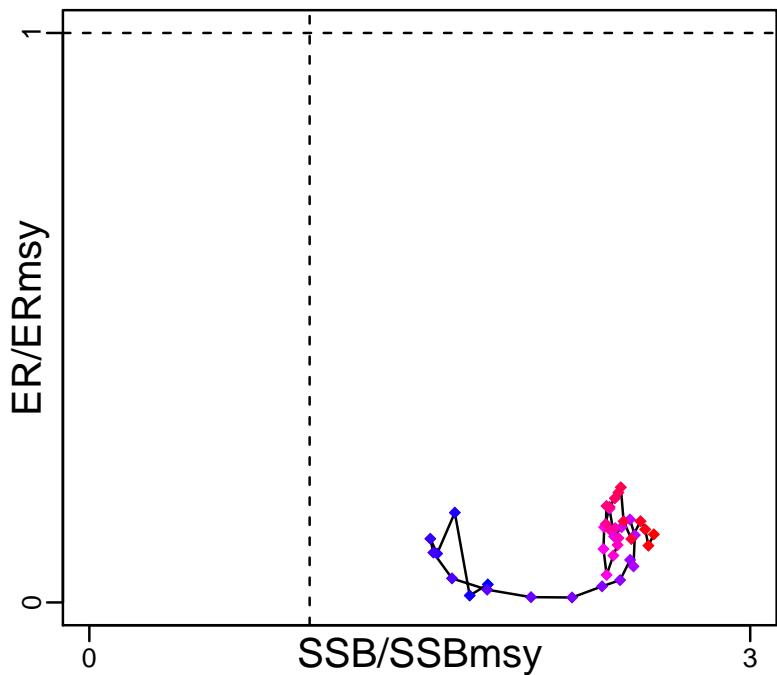
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	258,000	-	3+	
SSB	SSB-MT	2017	83,296	-	-	
TN	-	-	-	-	-	
R	R-E00	2017	370,248,000	-	0	
F	F-1/yr	2017	0.011	-	-	
ER	ER-calc-ratio	2017	0.009	-	-	
TC	TC-MT	2017	2421			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2017	2.6			
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2010	0.036			
ER/ERrmsy	ER-calc-ratio/ERrmsy-est-ratio	2017	0.12			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Flathead sole Gulf of Alaska [FLSOLEGA]

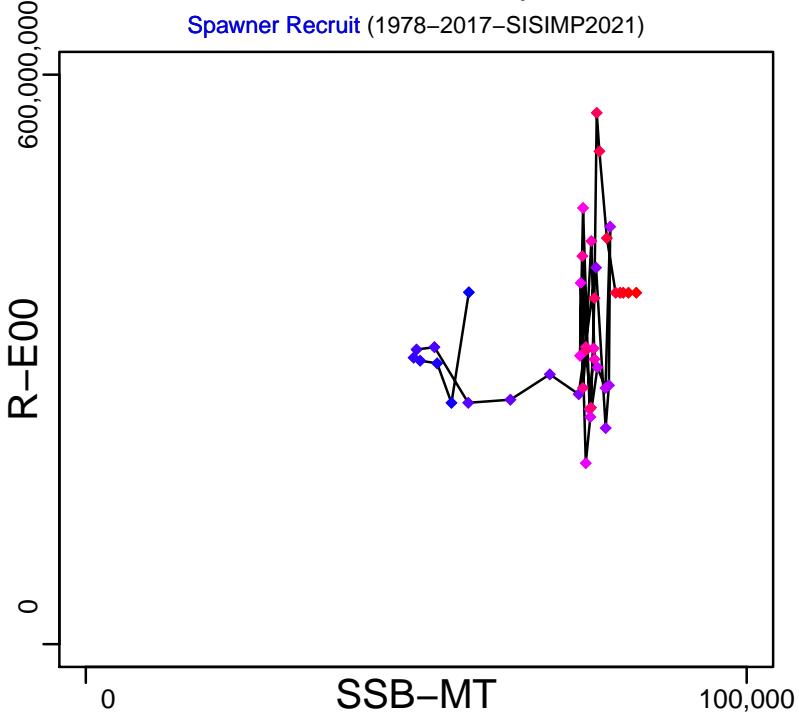
Kobe MSYpref (1978–2017–SISIMP2021)



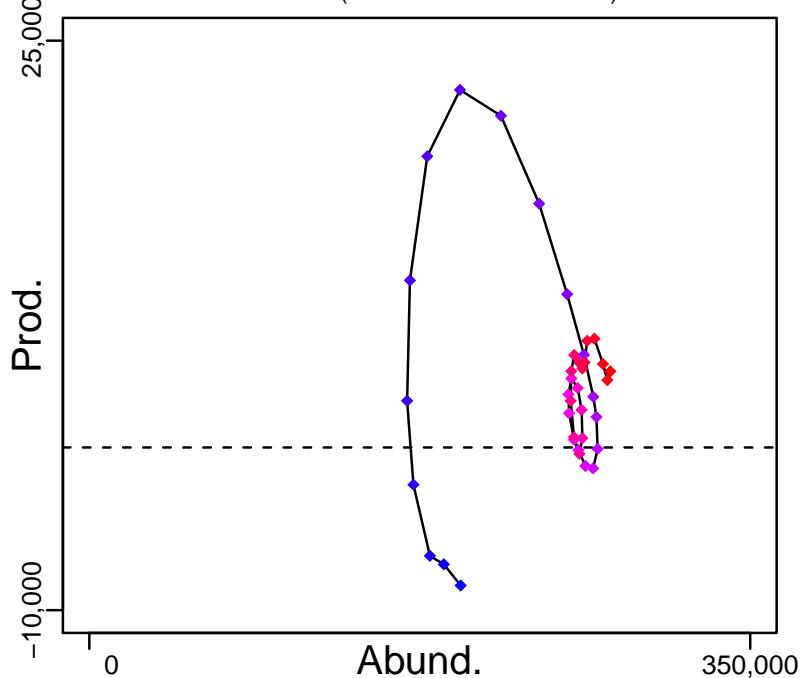
Kobe MGTpref (1978–2017–SISIMP2021)



Spawner Recruit (1978–2017–SISIMP2021)



Production (1978–2017–SISIMP2021)

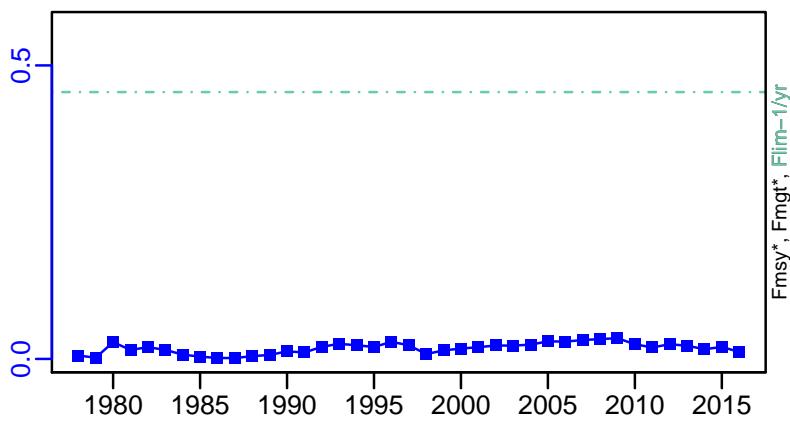
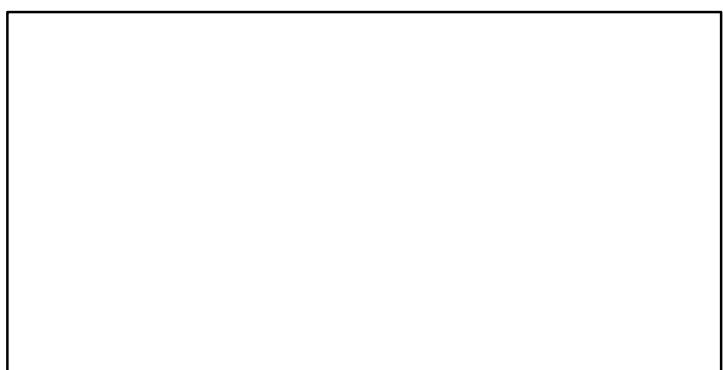
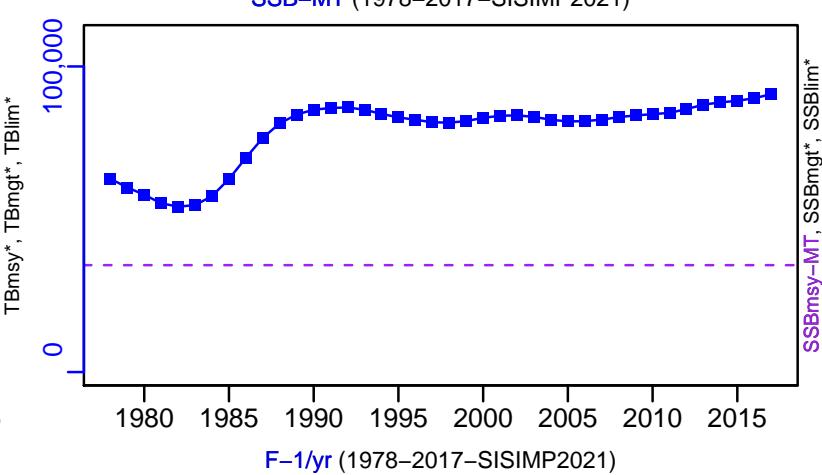
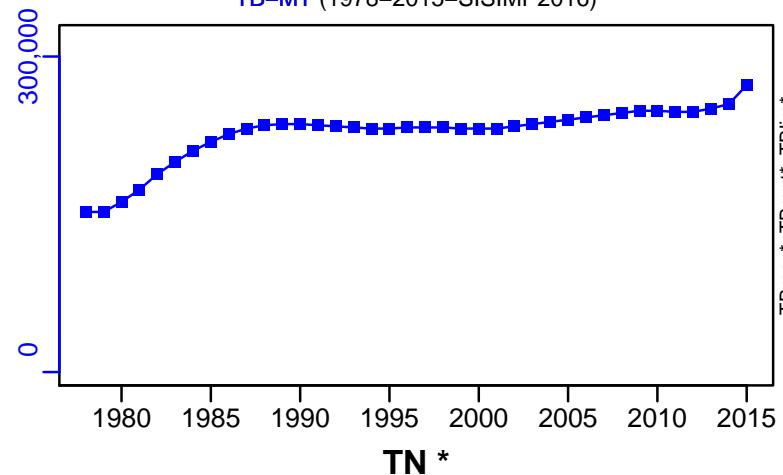


- ◆ Start Year
- ◆ End Year
- * No Data

Flathead sole Gulf of Alaska [FLSOLEGA]

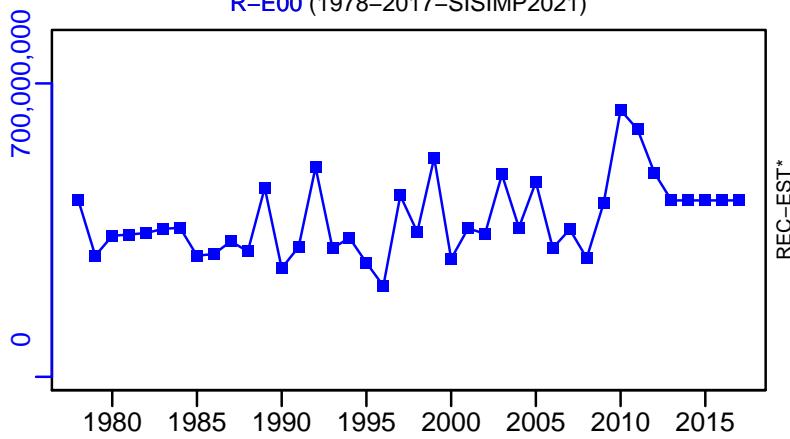
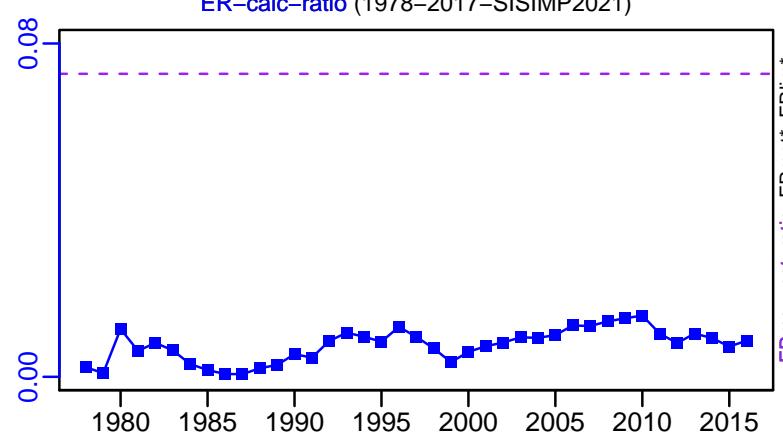
TB-MT (1978–2015–SISIMP2016)

SSB-MT (1978–2017–SISIMP2021)



ER-calc-ratio (1978–2017–SISIMP2021)

R-E00 (1978–2017–SISIMP2021)

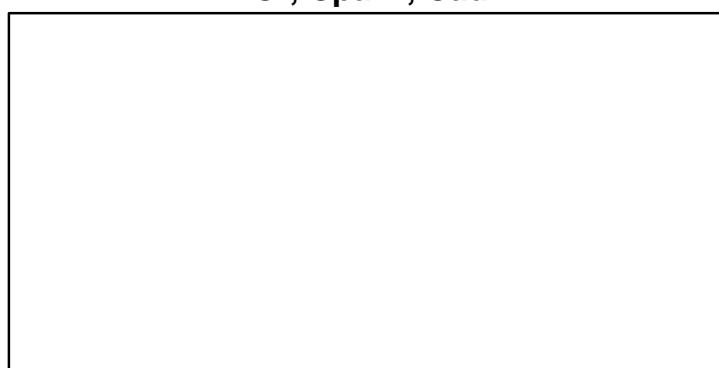
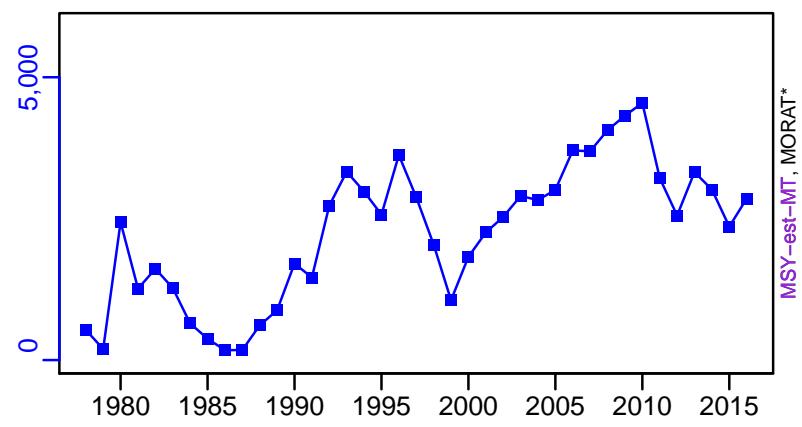


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

Flathead sole Gulf of Alaska [FLSOLEGA]

TC-MT, TL*, RecC* (1978–2017–SISIMP2021)

TAC*, Cpair*, Cadv*



survB*

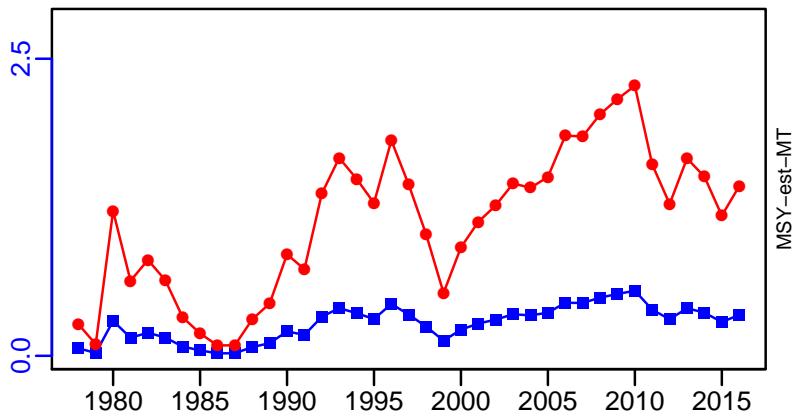
CPUE*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1978–2017–SISIMP2021)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Greenland halibut Bering Sea and Aleutian Islands [GHALBSAI]

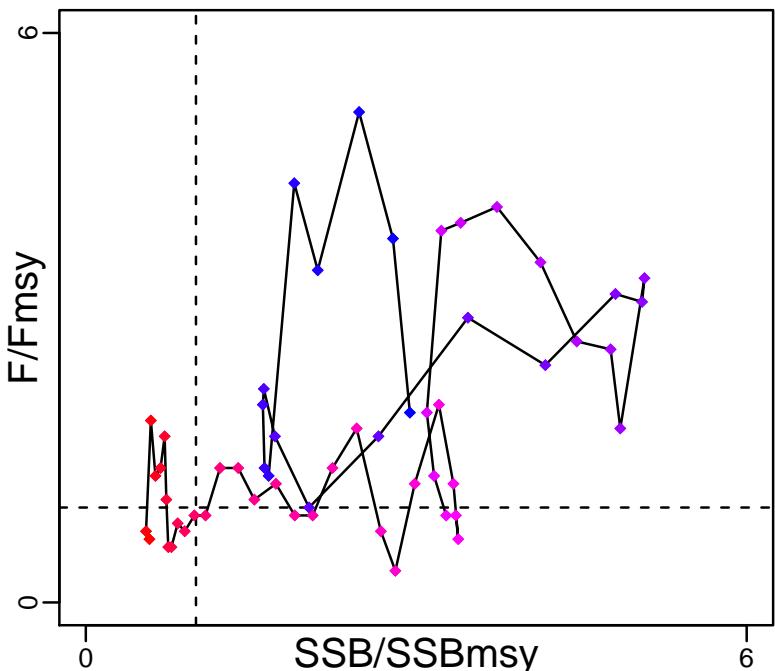
Metadata	
Scientific Name	Reinhardtius hippoglossoides
Current Assess ID	AFSC-GHALBSAI-1945-2018-SISIMP2021
Area	Bering Sea and Aleutian Islands
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2016, 2017, 2018, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2018	31,687
Fmsy	Fmsy-pr-1/yr	2015	0.12
ERmsy	ERmsy-est-ratio	2015	0.022
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2015	2666
M	M-1/yr	2015	0.11
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2017	0.29
ERlim	-	-	-

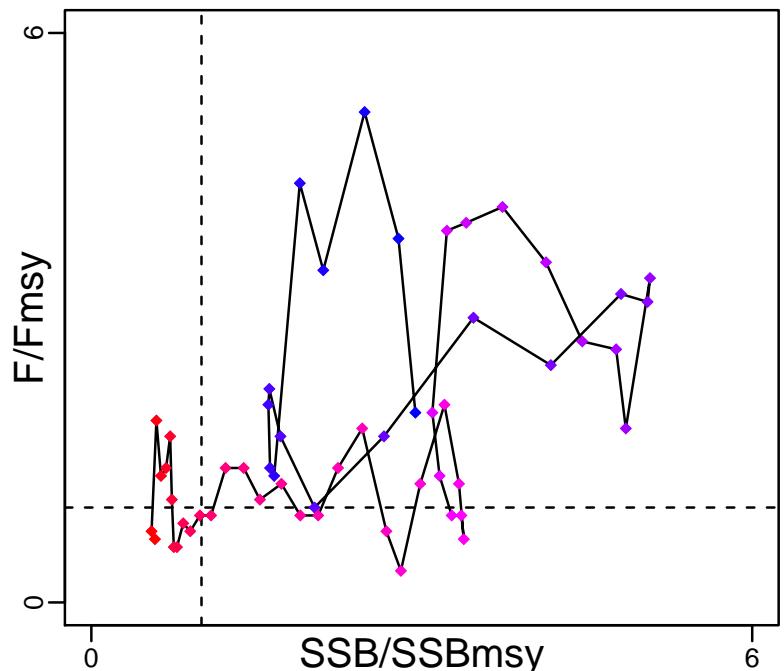
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	122,000	-	1+	
SSB	SSB-MT	2018	50,465	-	-	
TN	-	-	-	-	-	
R	R-E00	2018	6,040,920	-	0	
F	F-1/yr	2018	0.058	-	-	
ER	ER-calc-ratio	2018	0.024	-	-	
TC	TC-MT	2018	2834			
TL	TL-MT	2015	1650			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2018	1.593			
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2015	0.667			
ER/ERmsy	ER-ratio/ERmsy-est-ratio	2015	0.924			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Greenland halibut Bering Sea and Aleutian Islands [GHALBSAI]

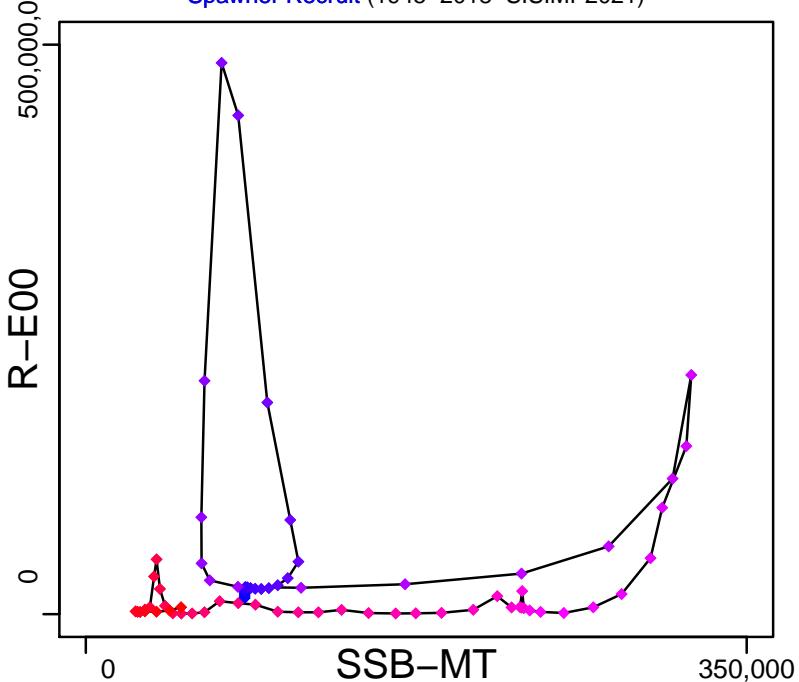
Kobe MSYref (1960–2015–HIVELY)



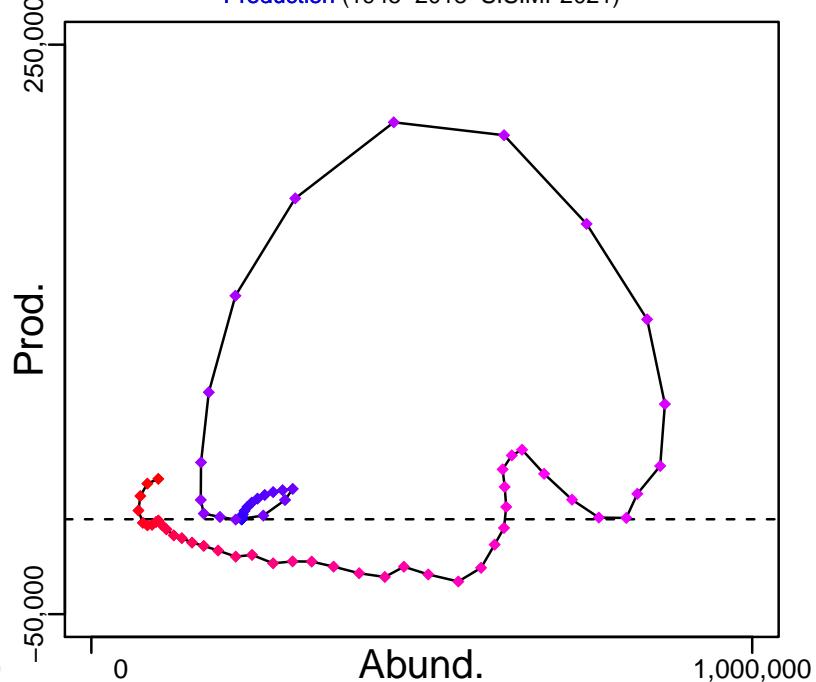
Kobe MGTPref (1960–2015–HIVELY)



Spawner Recruit (1945–2018–SISIMP2021)



Production (1945–2018–SISIMP2021)

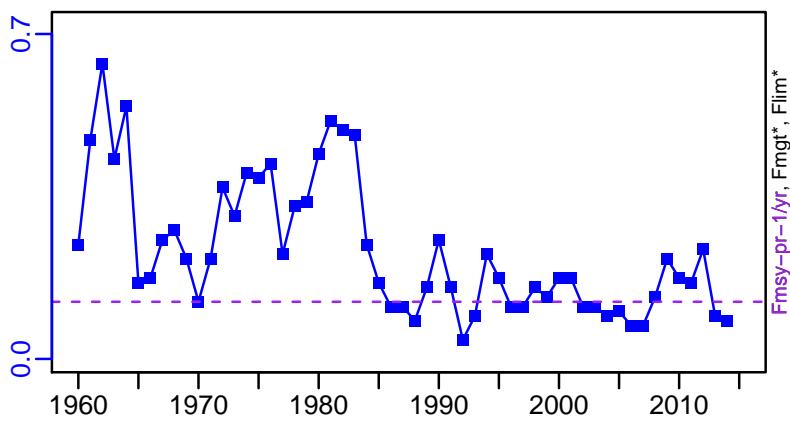
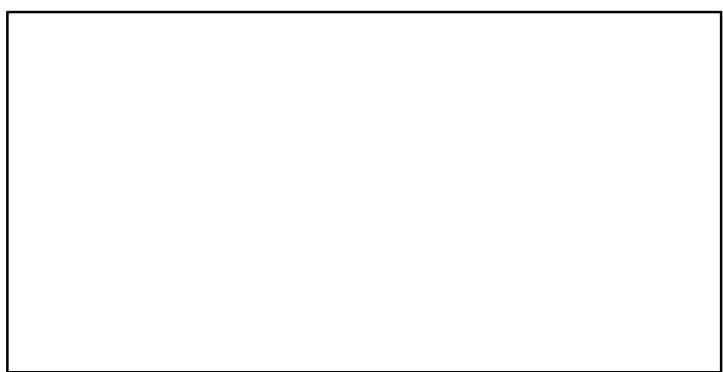
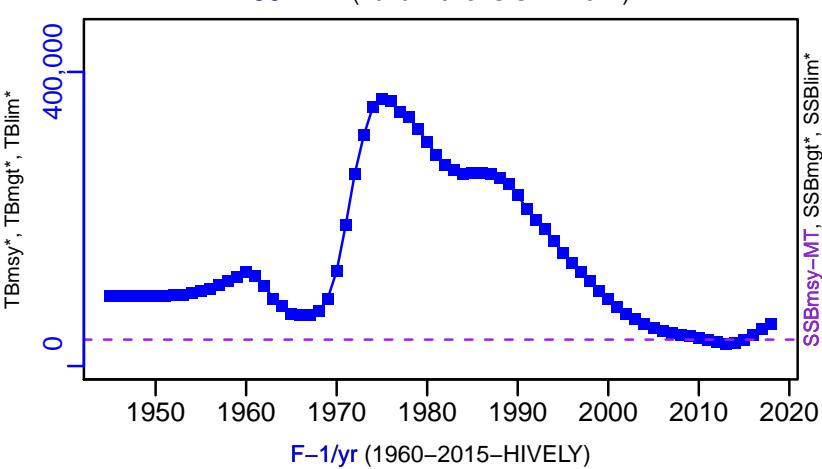
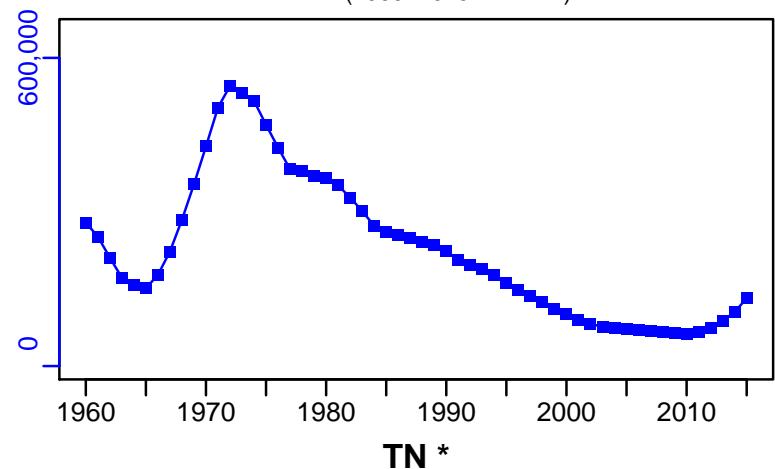


◆ Start Year ◆ End Year * No Data

Greenland halibut Bering Sea and Aleutian Islands [GHALBSAI]

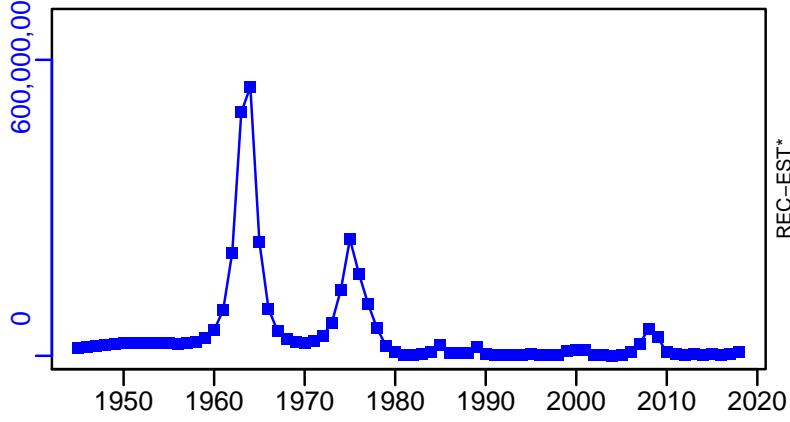
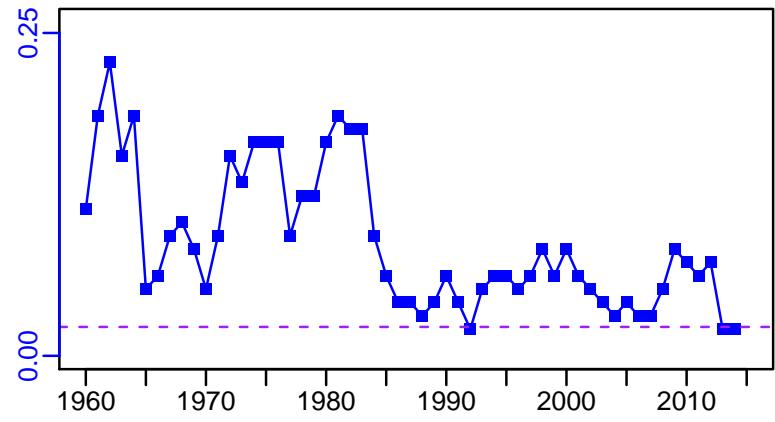
TB-MT (1960–2015–HIVELY)

SSB-MT (1945–2018–SISIMP2021)



ER-ratio (1960–2015–HIVELY)

R-E00 (1945–2018–SISIMP2021)

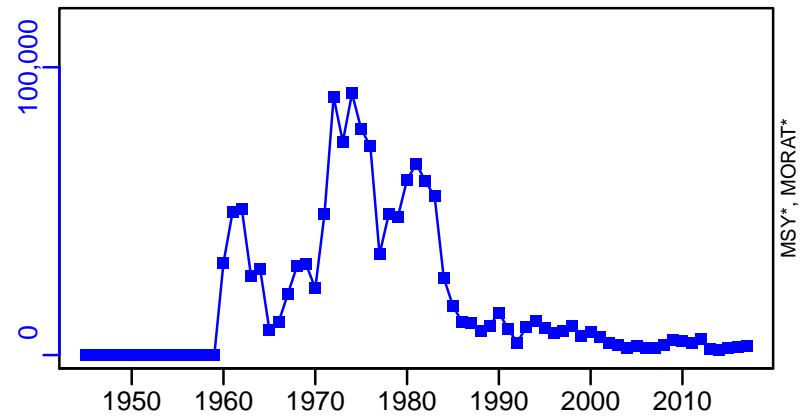


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	--- Lim BRP	* No Data

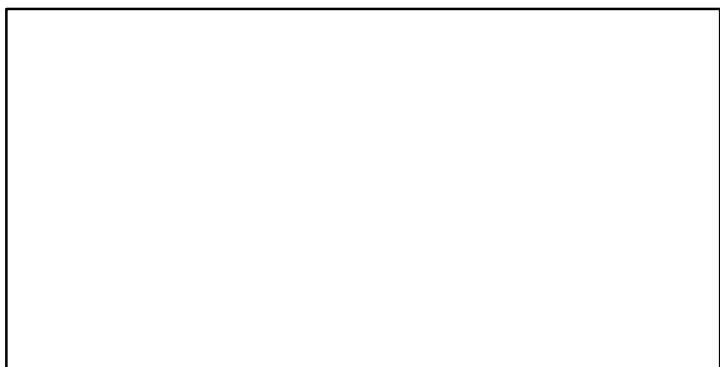
Greenland halibut Bering Sea and Aleutian Islands [GHALBSAI]

TC-MT, TL*, RecC* (1945–2018–SISIMP2021)

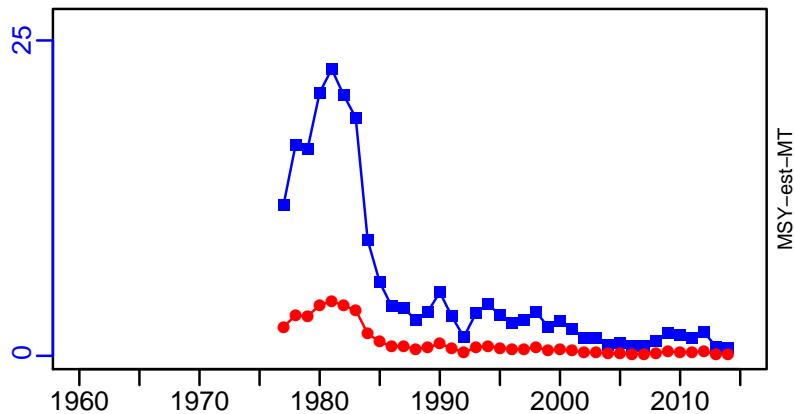
TAC*, Cpair*, Cadv*



EFFORT*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1960–2015–HIVELY)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Golden king crab Aleutian Islands Eastern segment [GKCRABAIES]

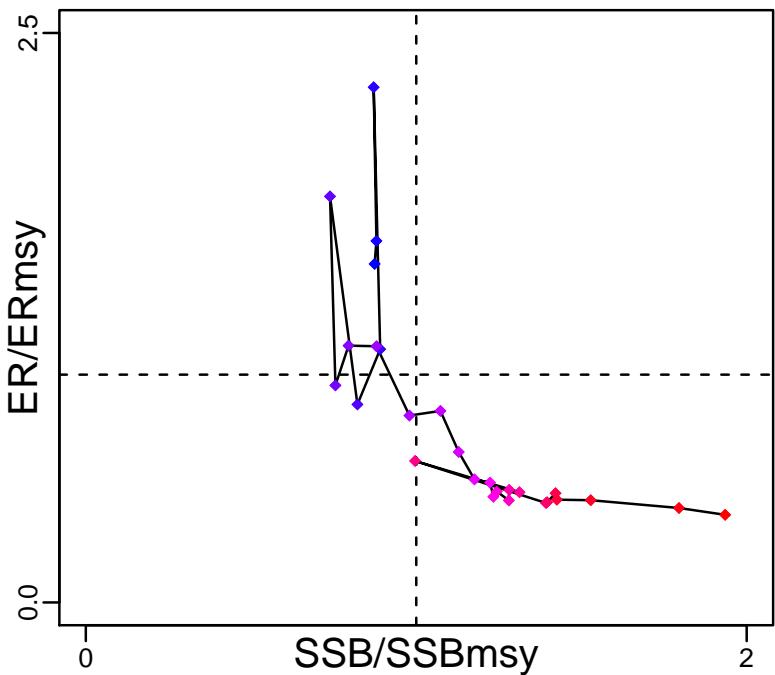
Metadata	
Scientific Name	Lithodes aequispinus
Current Assess ID	AFSC-GKCRABAIES-1985-2017-SISIMP2021
Area	Aleutian Islands Eastern segment
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2016, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2017	6954
Fmsy	-	-	-
ERmsy	ERmsy-est-ratio	2017	0.336
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2017	2827
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

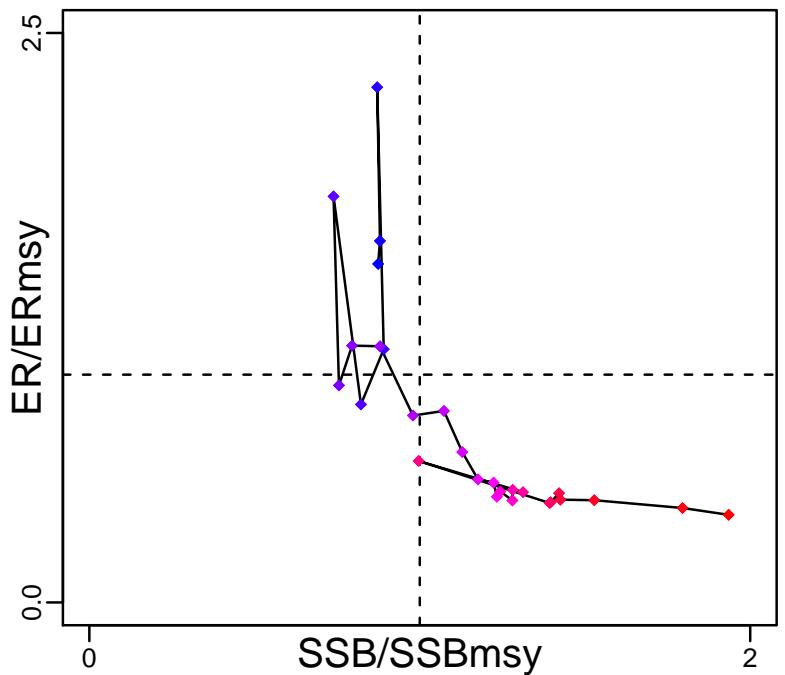
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	-	-	-	-	-	
SSB	SSB-MT	2017	13,455	-	-	
TN	-	-	-	-	-	
R	R-E00	2017	4,700,000	-	-	
F	-	-	-	-	-	
ER	ER-calc-ratio	2017	0.129	-	-	
TC	TC-MT	2017	2104			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2017	1.935			
F/Fmsy	-	-	-			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2017	0.385			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Golden king crab Aleutian Islands Eastern segment [GKCRABAIES]

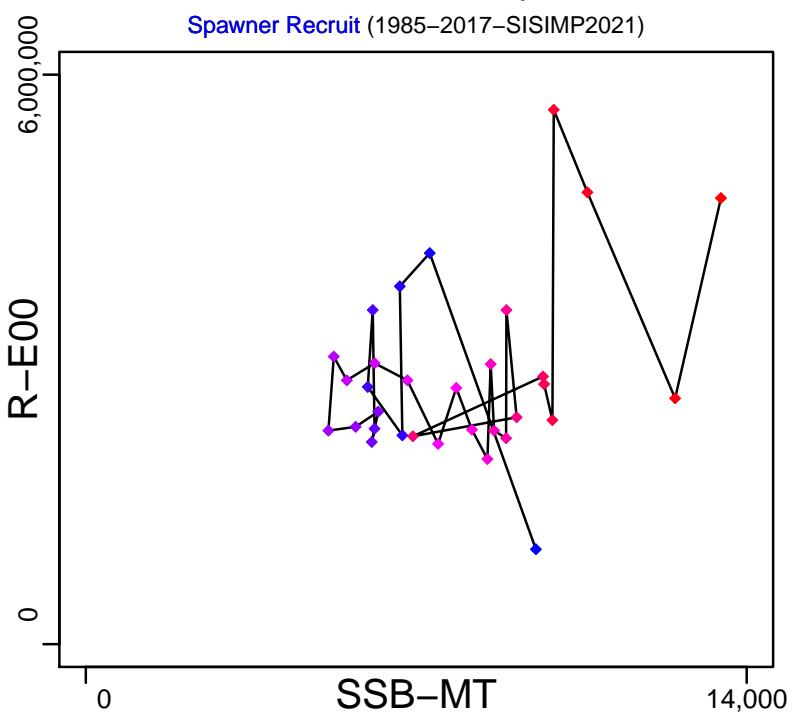
Kobe MSYpref (1985–2017–SISIMP2021)



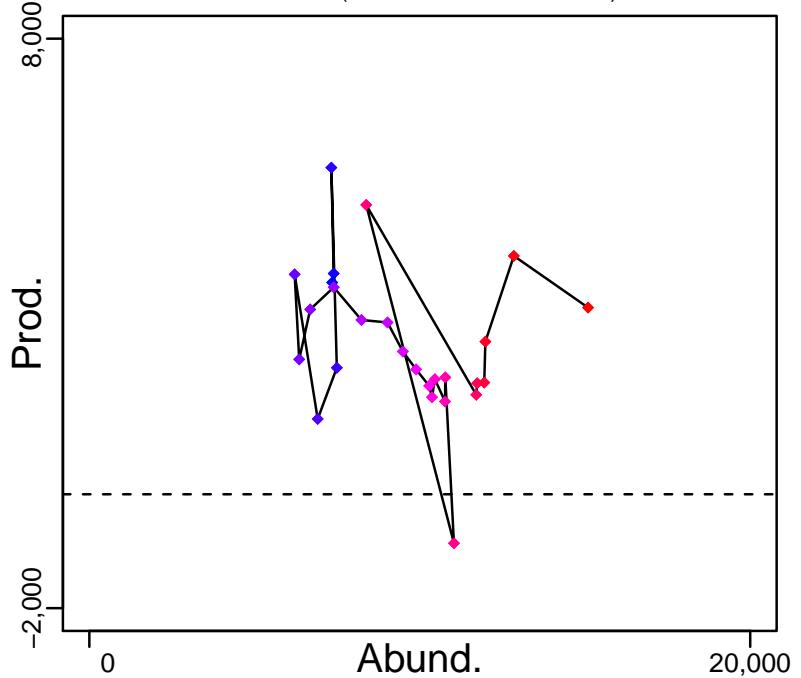
Kobe MGTpref (1985–2017–SISIMP2021)



Spawner Recruit (1985–2017–SISIMP2021)



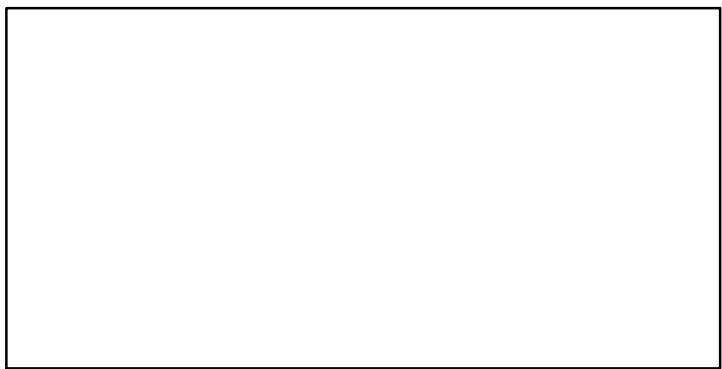
Production (1985–2017–SISIMP2021)



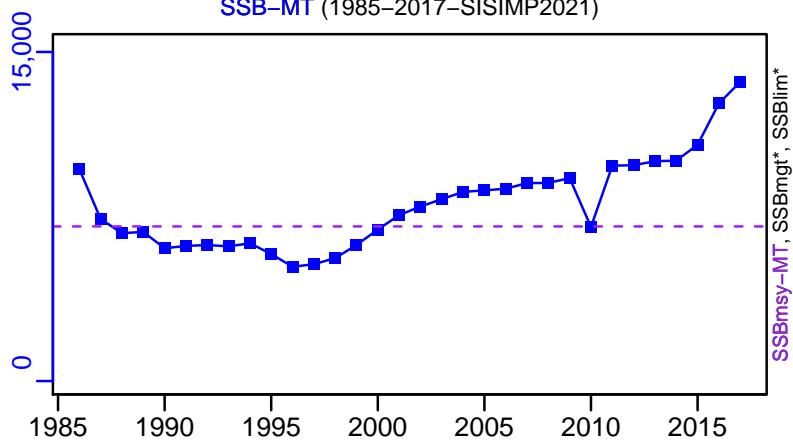
◆ Start Year ◆ End Year * No Data

Golden king crab Aleutian Islands Eastern segment [GKCRABAIES]

TB*



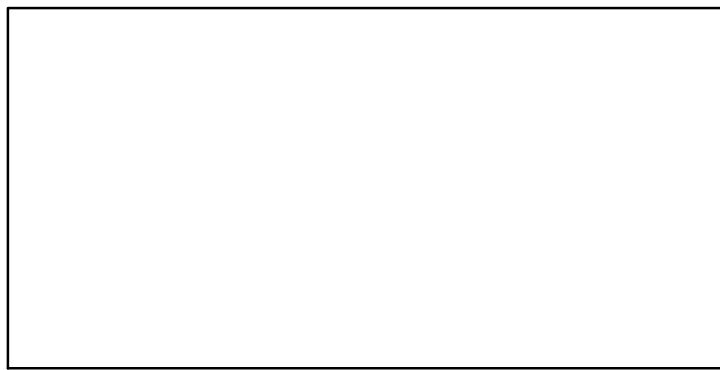
SSB-MT (1985–2017–SISIMP2021)



TN *

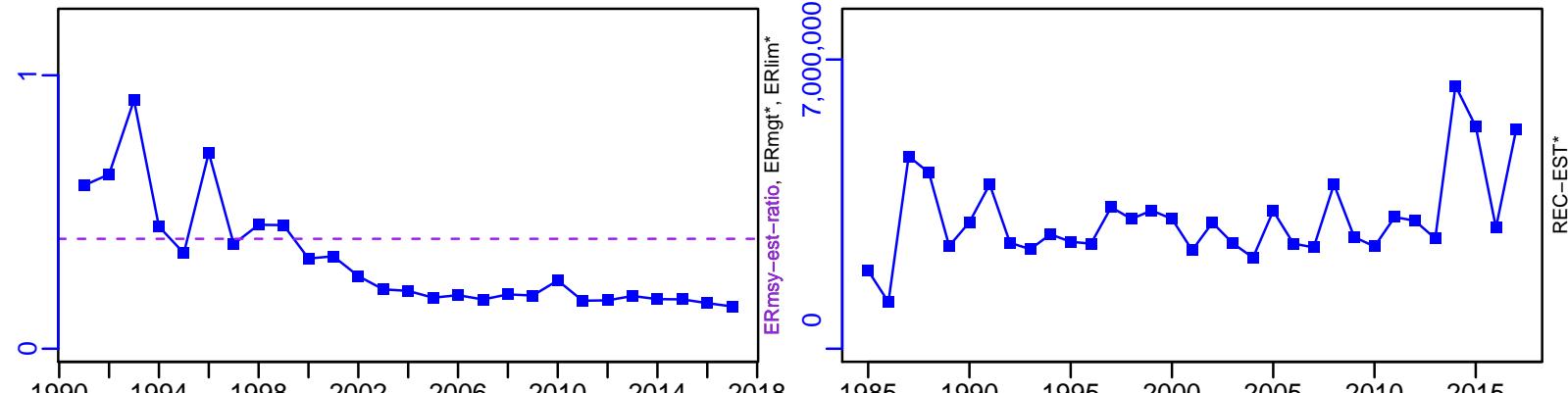


F*



ER-calc-ratio (1985–2017–SISIMP2021)

R-E00 (1985–2017–SISIMP2021)

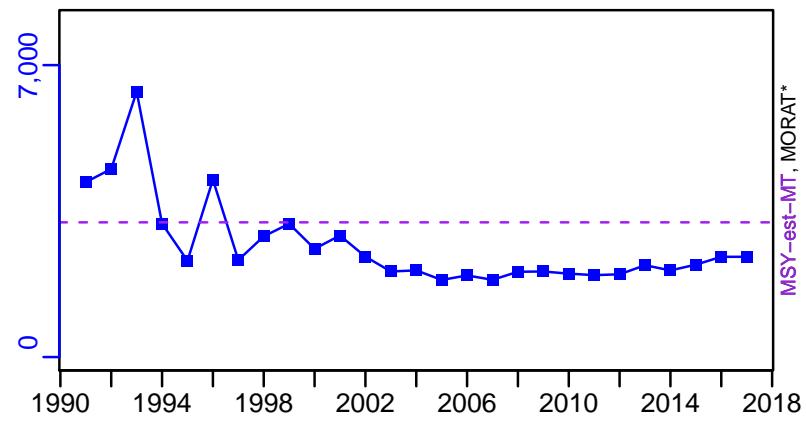


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| - - - MSY-based BRP | --- Lim BRP | * No Data |

Golden king crab Aleutian Islands Eastern segment [GKCRABAIES]

TC-MT, TL*, RecC* (1985–2017–SISIMP2021)

TAC*, Cpair*, Cadv*



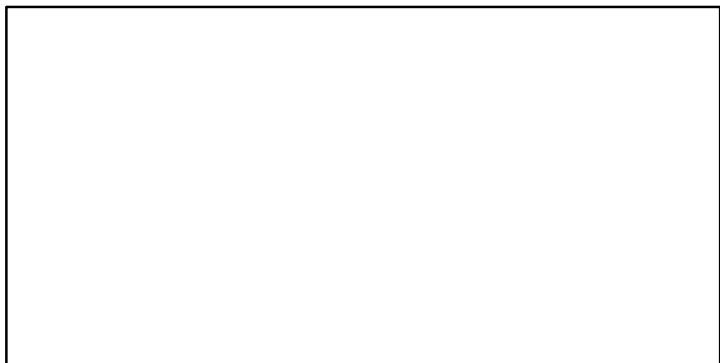
survB*



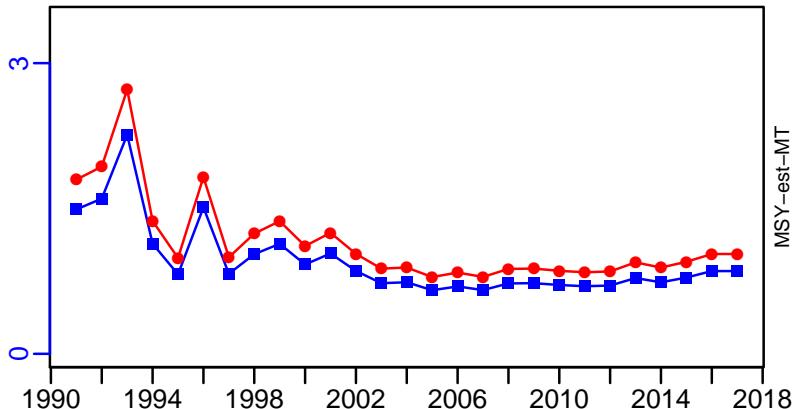
CPUE*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1985–2017–SISIMP2021)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Golden king crab Aleutian Islands Western segment [GKCRABA|WS]

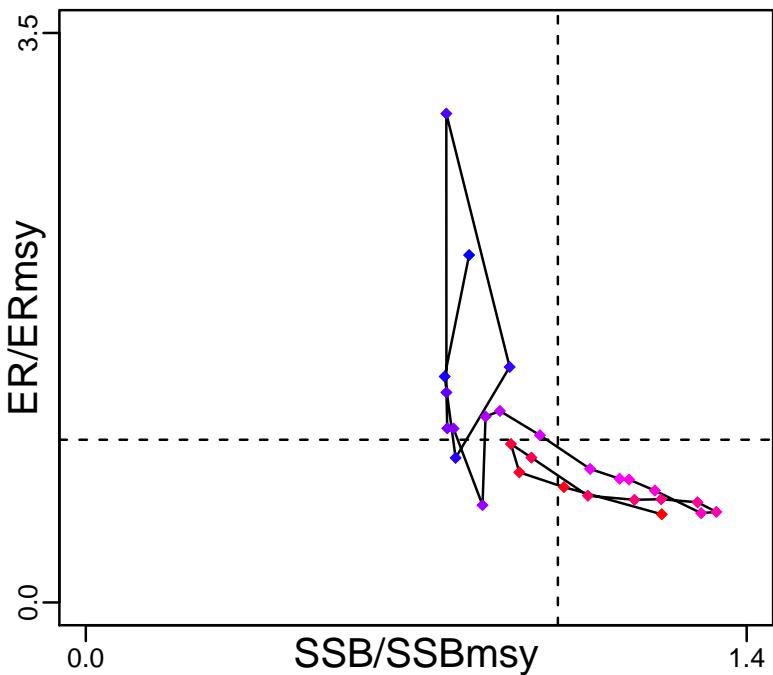
Metadata	
Scientific Name	Lithodes aequispinus
Current Assess ID	AFSC-GKCRABA WS-1985-2017-SISIMP2021
Area	Aleutian Islands Western segment
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2016, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2017	5138
Fmsy	-	-	-
ERmsy	ERmsy-est-ratio	2017	0.347
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2017	2155
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

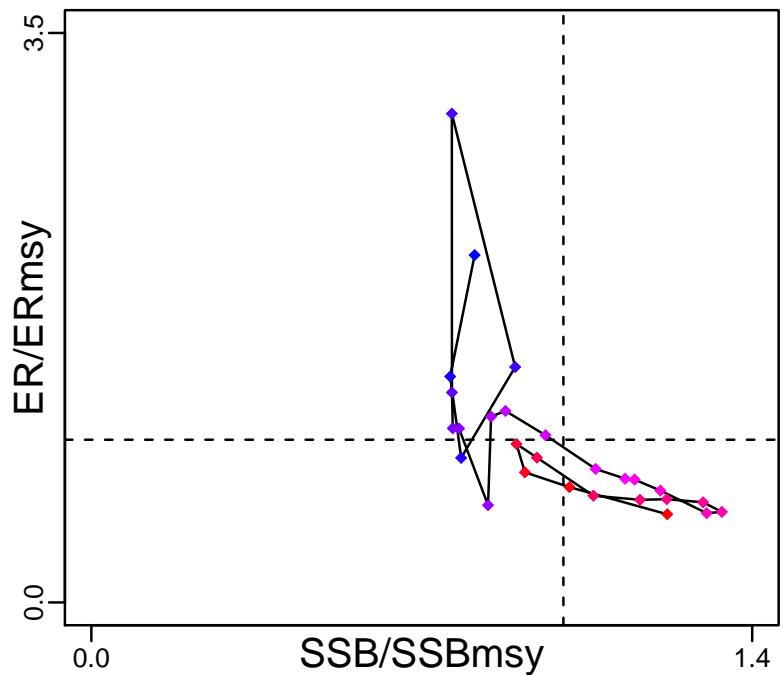
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	-	-	-	-	-	
SSB	SSB-MT	2017	6269	-	-	
TN	-	-	-	-	-	
R	R-E00	2017	2,060,000	-	-	
F	-	-	-	-	-	
ER	ER-calc-ratio	2017	0.188	-	-	
TC	TC-MT	2017	1425			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2017	1.22			
F/Fmsy	-	-	-			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2017	0.542			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Golden king crab Aleutian Islands Western segment [GKCRABA1WS]

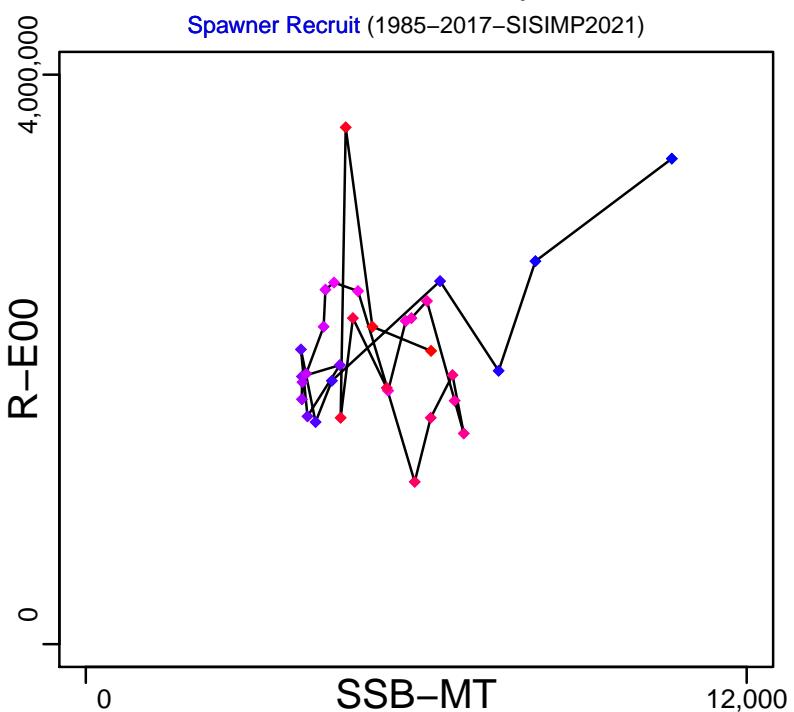
Kobe MSYpref (1985–2017–SISIMP2021)



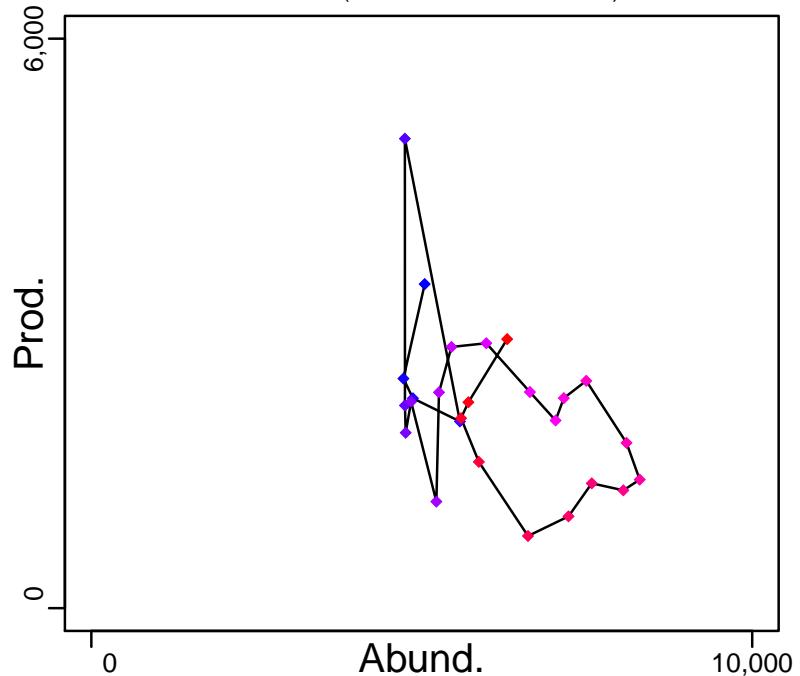
Kobe MGTpref (1985–2017–SISIMP2021)



Spawner Recruit (1985–2017–SISIMP2021)



Production (1985–2017–SISIMP2021)



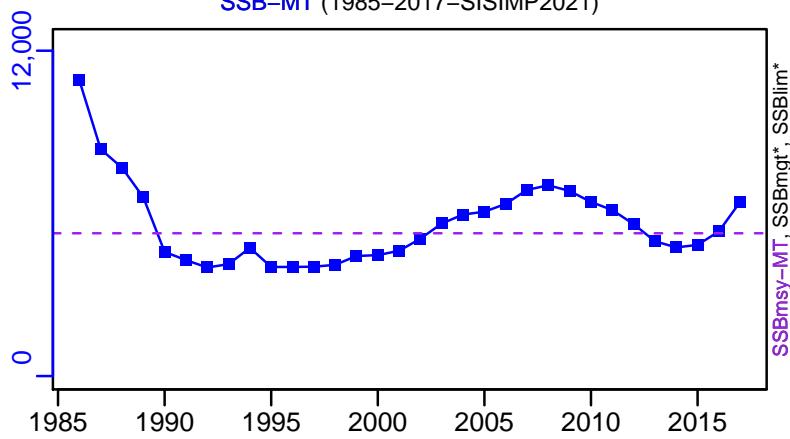
◆ Start Year ◆ End Year * No Data

Golden king crab Aleutian Islands Western segment [GKCRABA1WS]

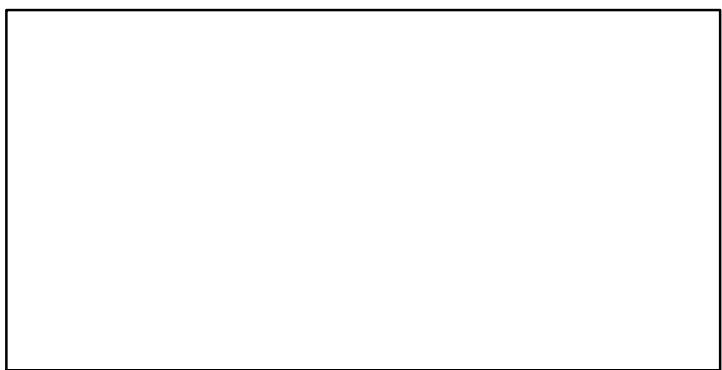
TB*



SSB-MT (1985–2017–SISIMP2021)



TN *

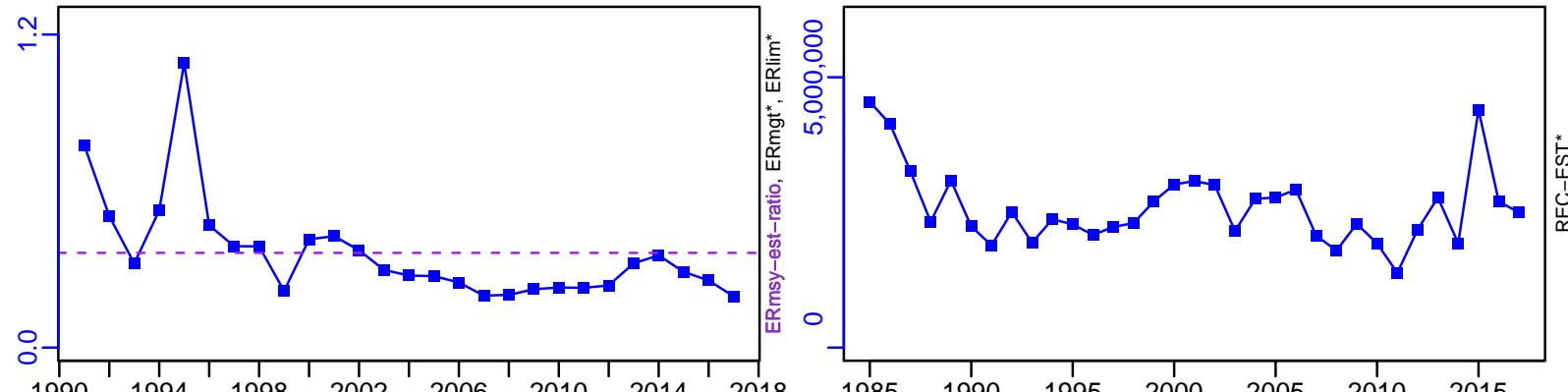


F*



ER-calc-ratio (1985–2017–SISIMP2021)

R-E00 (1985–2017–SISIMP2021)

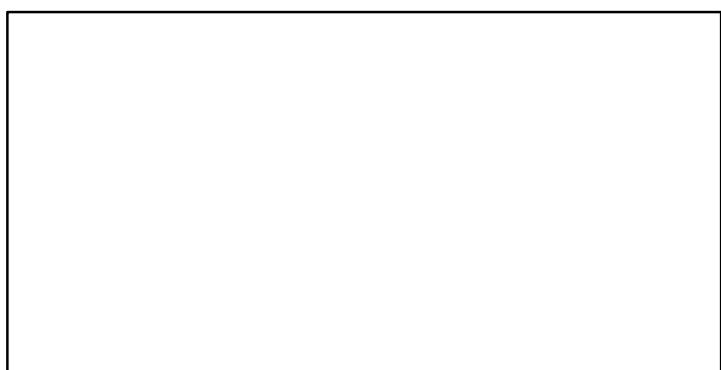
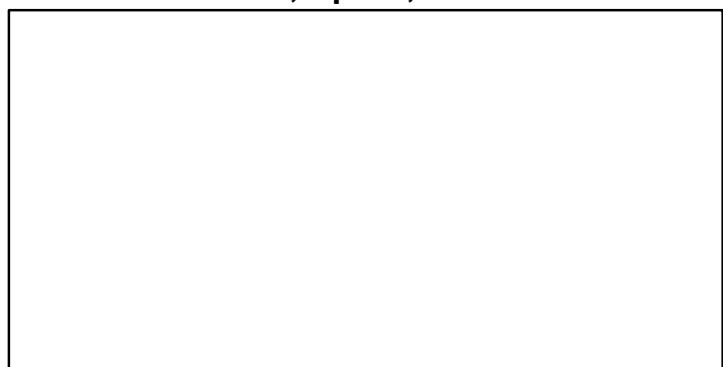
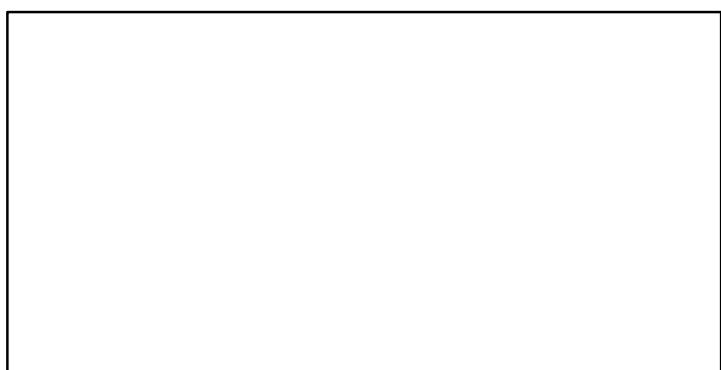
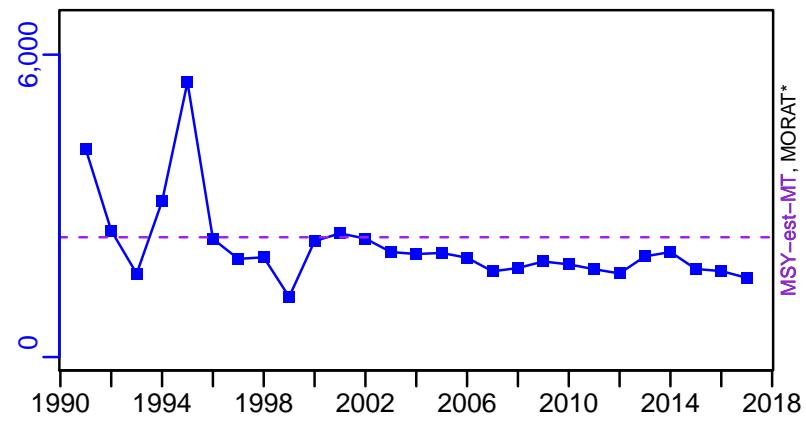


- | | | |
|----------------------|---------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

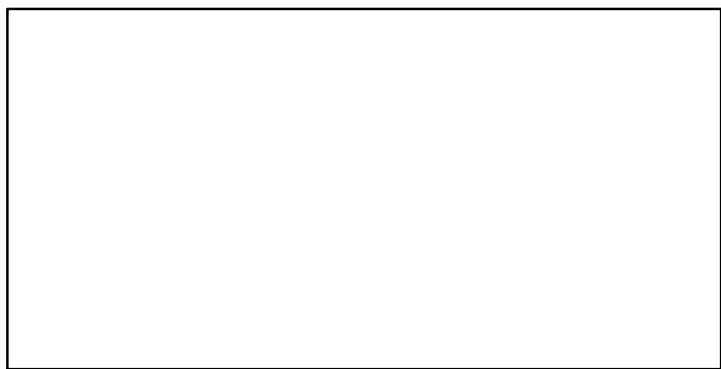
Golden king crab Aleutian Islands Western segment [GKCRABA1WS]

TC-MT, TL*, RecC* (1985–2017–SISIMP2021)

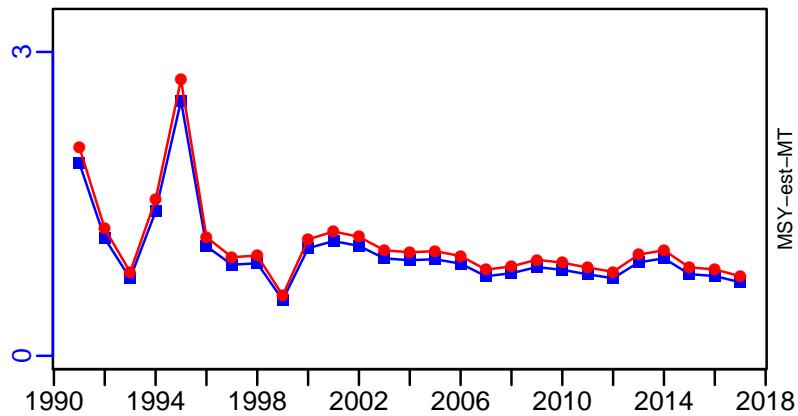
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1985–2017–SISIMP2021)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

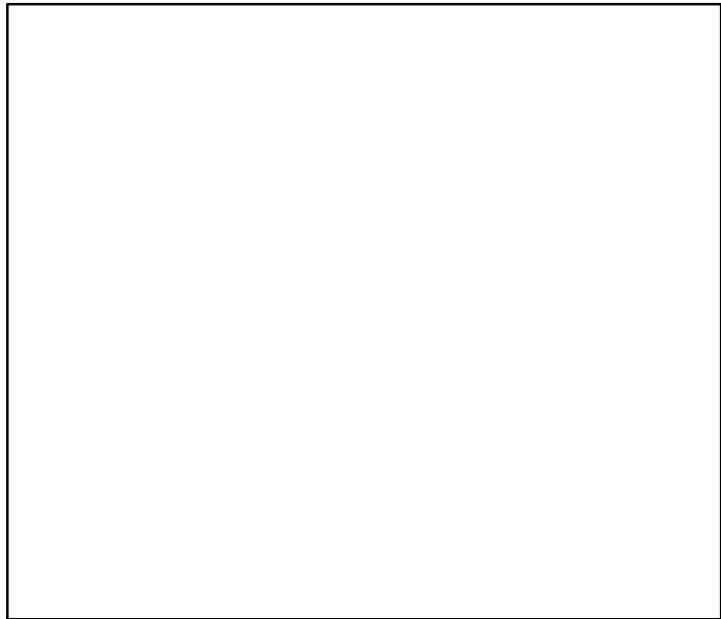
Golden king crab Pribilof Islands [GKCRABPI]

Metadata	
Scientific Name	Lithodes aequispinus
Current Assess ID	AFSC-GKCRABPI-1982-2016-SISIMP2021
Area	Pribilof Islands
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2016, 2009

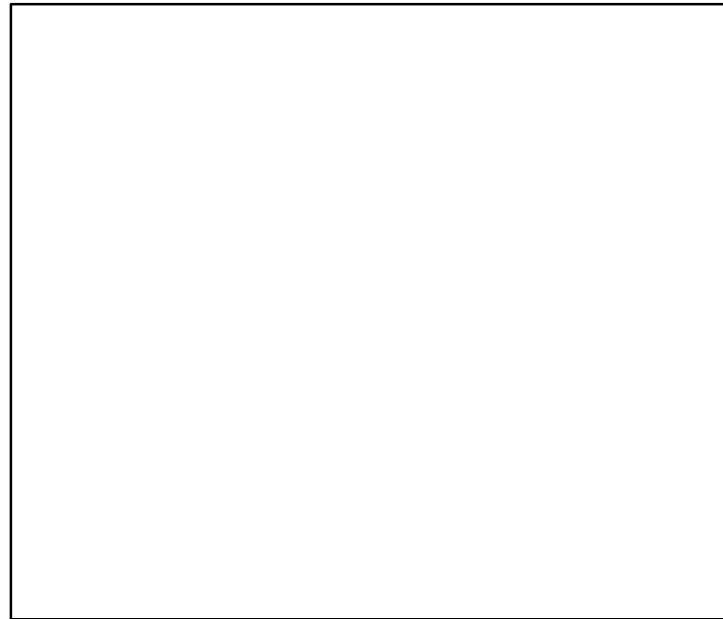
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	0		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

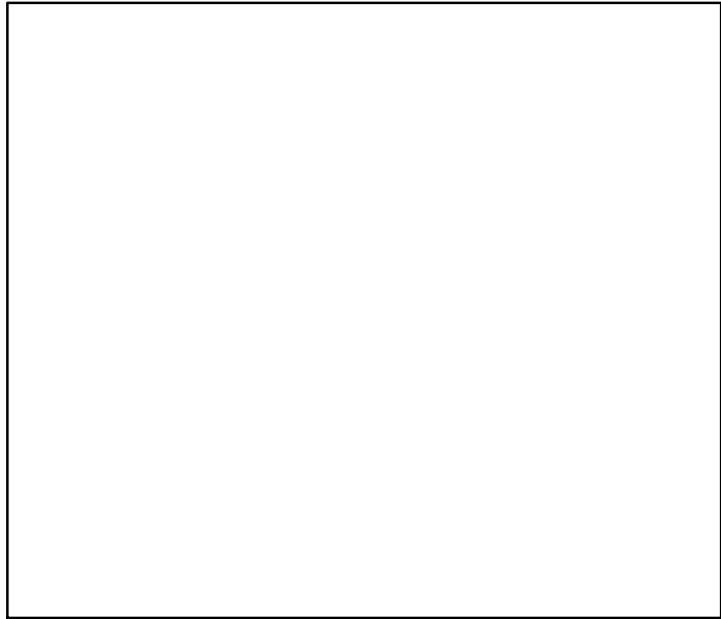
Kobe MSY*



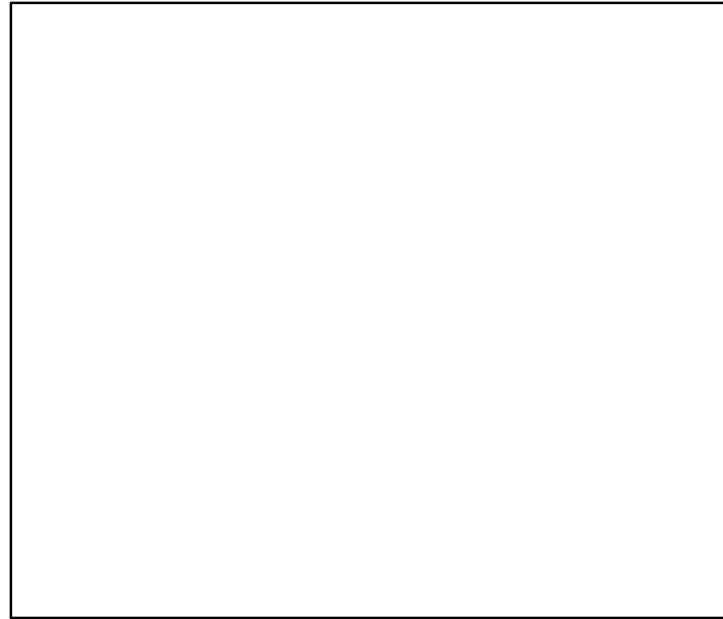
Kobe MGT*



Spawner Recruit*



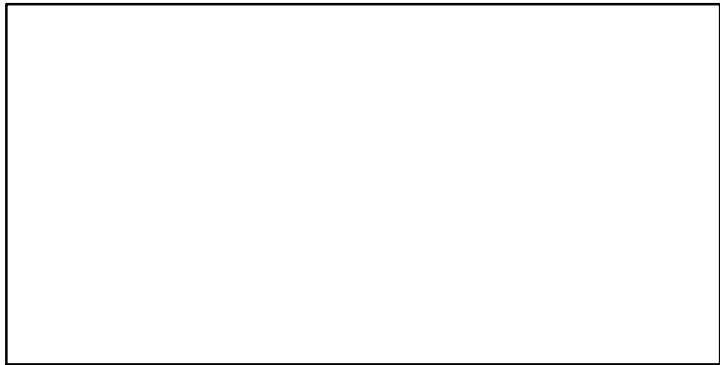
Production*



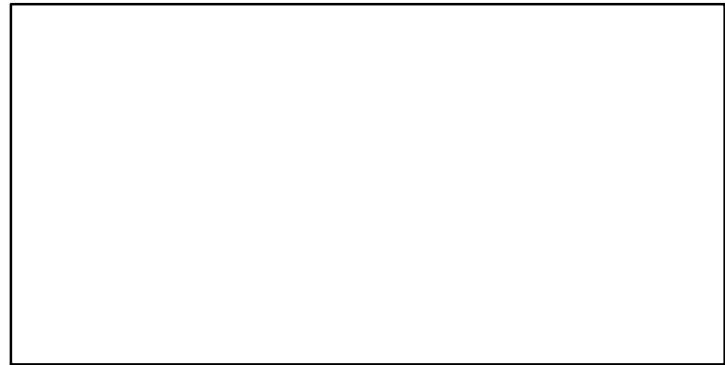
◆ Start Year ♦ End Year * No Data

Golden king crab Pribilof Islands [GKCRABPI]

TB*



SSB*



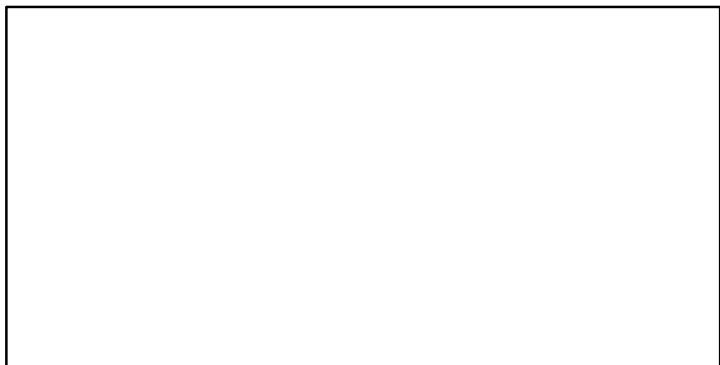
TN *



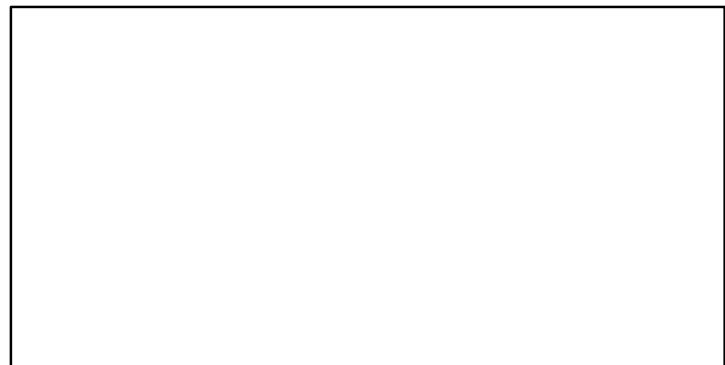
F*



ER*



Recruits*

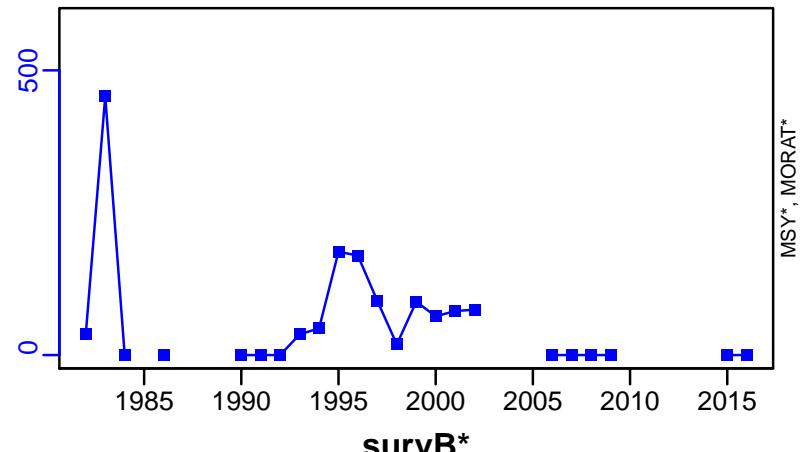


- | | | | | | |
|-------|--------------------|-------|------------|---|---------|
| ■ | Listed time series | - - - | Target BRP | — | Rec-Est |
| - - - | MSY-based BRP | - - - | Lim BRP | * | No Data |

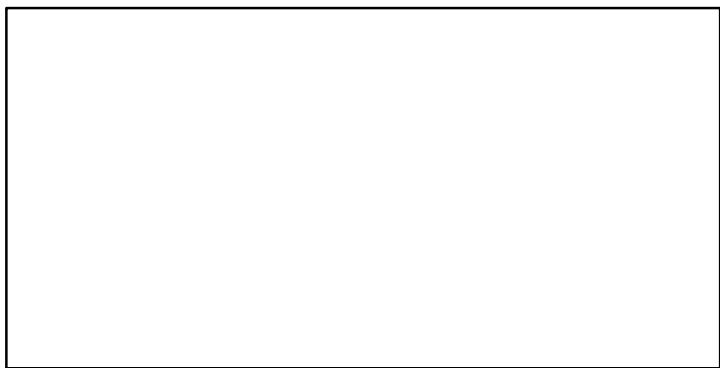
Golden king crab Pribilof Islands [GKCRABPI]

TC-MT, TL*, RecC* (1982–2016–SISIMP2021)

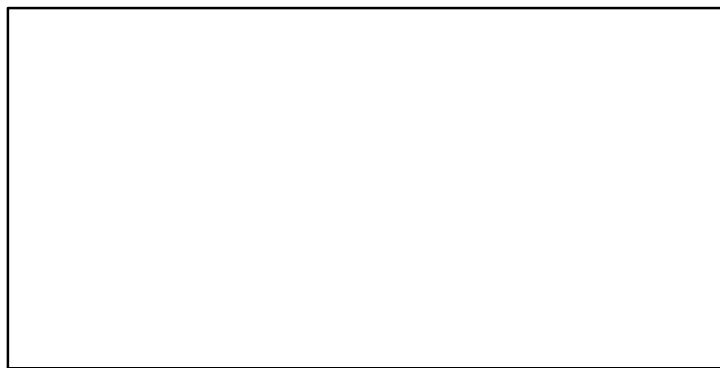
TAC*, Cpair*, Cadv*



MSY*, MORAT*



CPUE*



EFFORT*



CdivMSY*



- | | | |
|--------------------------|--------------------------|-----------|
| ■ 1st listed time series | ▲ 3rd listed time series | — MORAT |
| ● 2nd listed time series | - - MSY | * No Data |

Giant Pacific octopus Bering Sea and Aleutian Islands [GPOCTOBSAI]

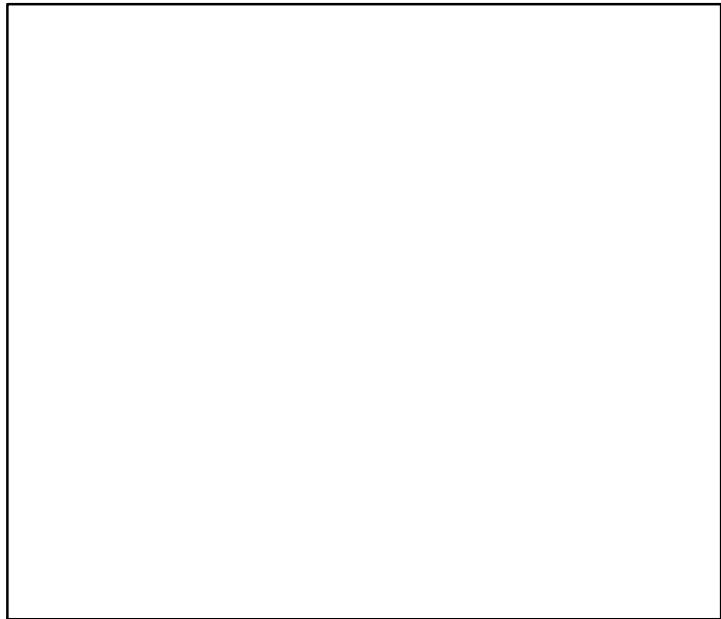
Metadata	
Scientific Name	Enteroctopus dofleini
Current Assess ID	AFSC-GPOCTOBSAI-1997-2017-SISIMP2021
Area	Bering Sea and Aleutian Islands
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2014, 2015, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

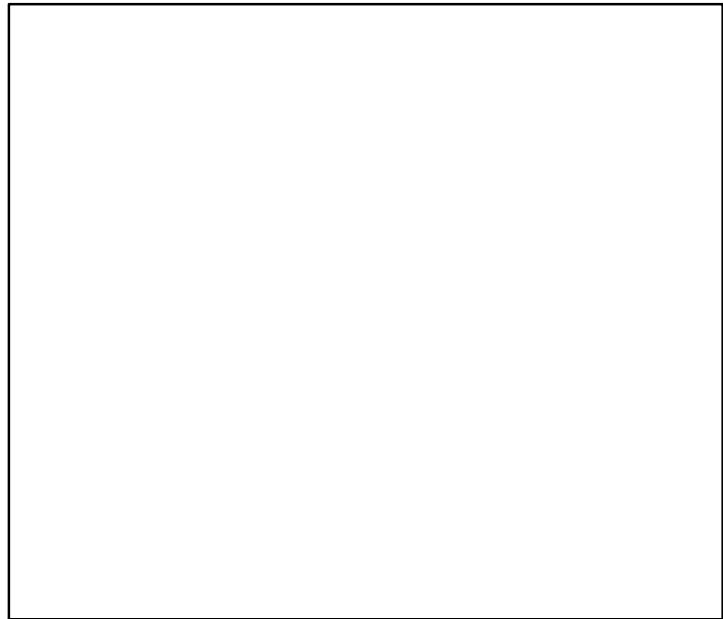
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2017	281		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Giant Pacific octopus Bering Sea and Aleutian Islands [GPOCTOBSAI]

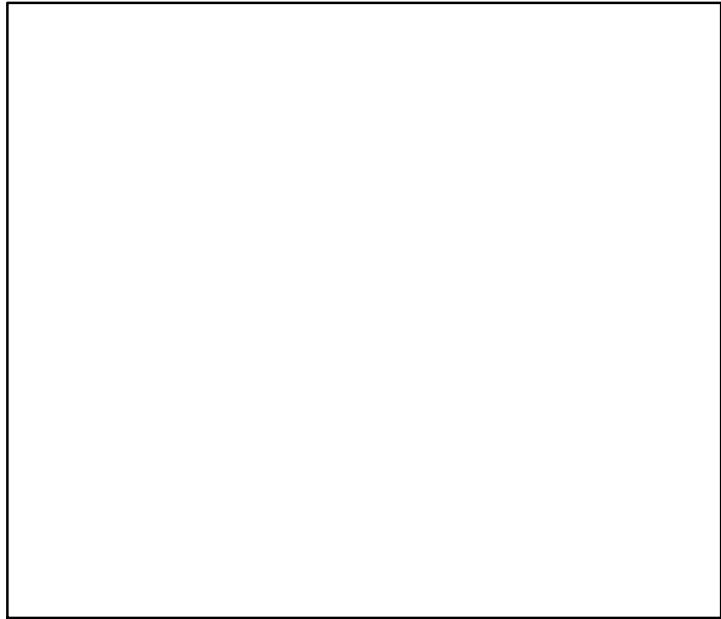
Kobe MSY*



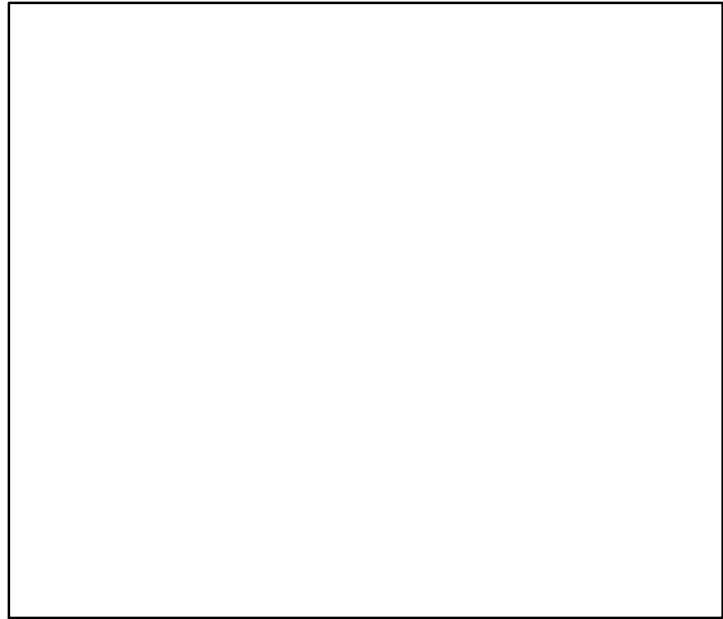
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ♦ End Year * No Data

Giant Pacific octopus Bering Sea and Aleutian Islands [GPOCTOBSAI]

TB*



SSB*



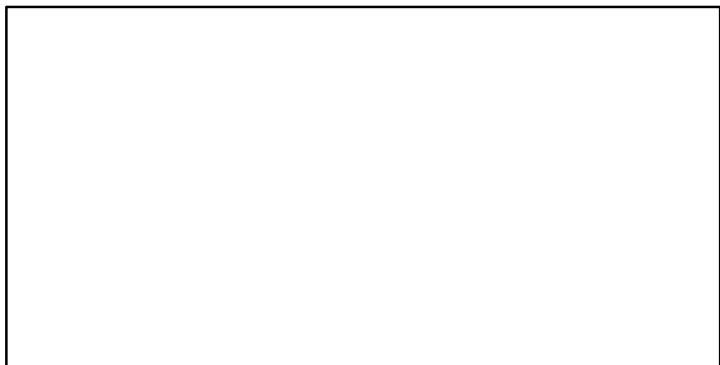
TN *



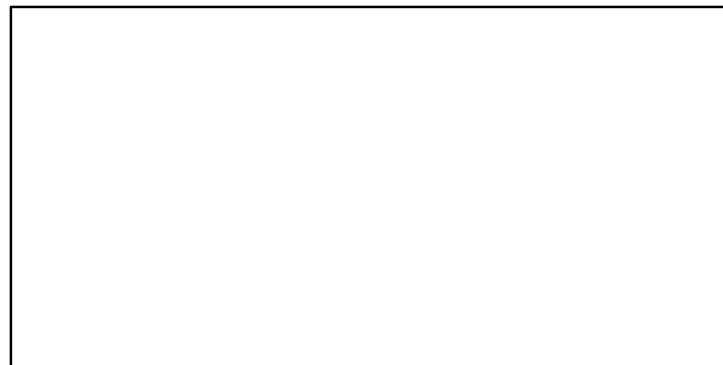
F*



ER*



Recruits*

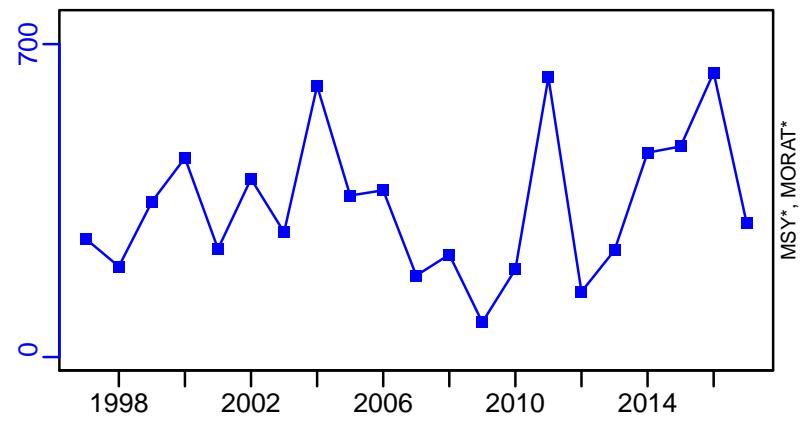


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Giant Pacific octopus Bering Sea and Aleutian Islands [GPOCTOBSAI]

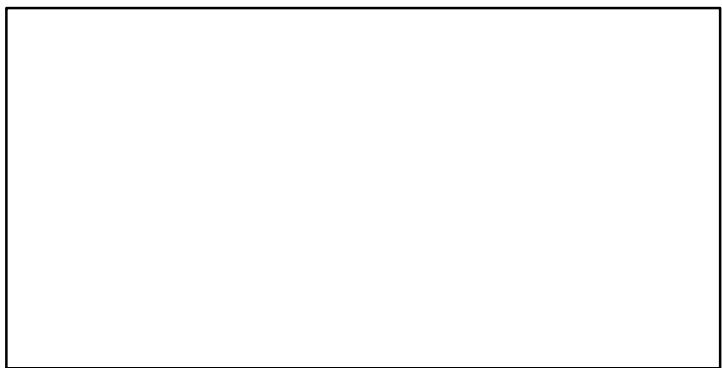
TC-MT, TL*, RecC* (1997–2017-SISIMP2021)

TAC*, Cpair*, Cadv*

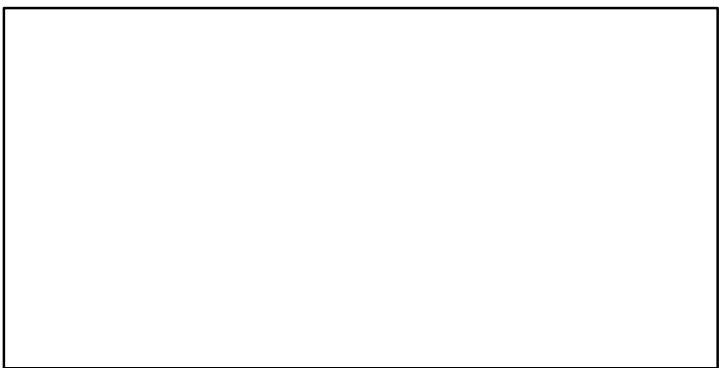


survB*

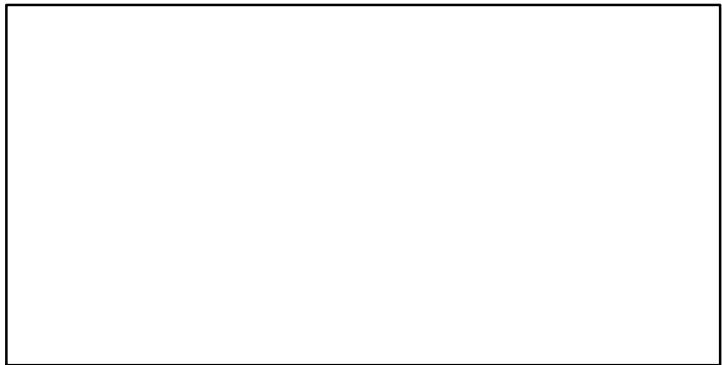
MSY*, MORAT*



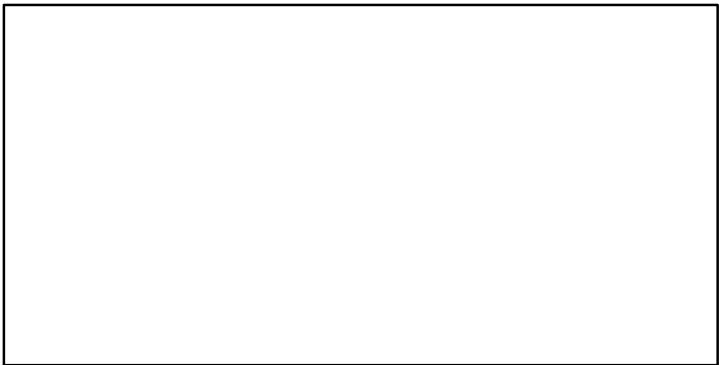
CPUE*



EFFORT*



CdivMSY*



- | | | |
|--------------------------|--------------------------|-----------|
| ■ 1st listed time series | ▲ 3rd listed time series | — MORAT |
| ● 2nd listed time series | - - MSY | * No Data |

Giant Pacific octopus Gulf of Alaska [GPOCTOGA]

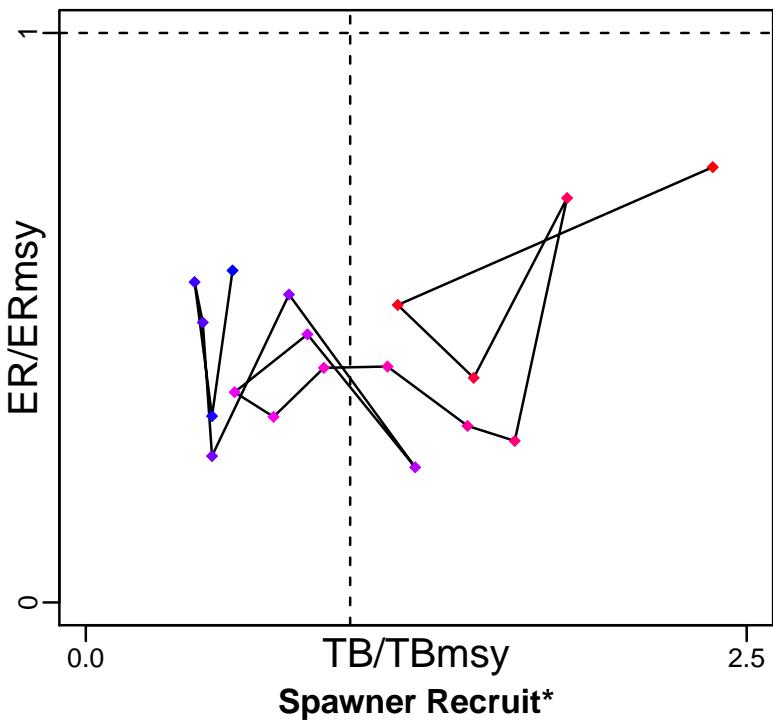
Metadata	
Scientific Name	Enteroctopus dofleini
Current Assess ID	AFSC-GPOCTOGA-1997-2016-SISIMP2021
Area	Gulf of Alaska
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2014, 2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2014	2576
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-est-ratio	2014	0.278
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2014	717
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

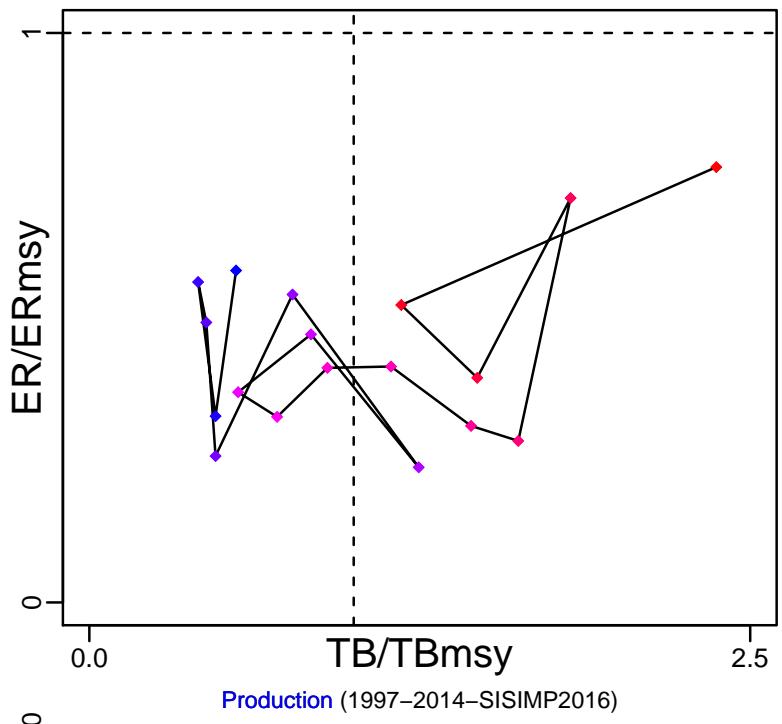
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2014	12,300	-	-	
SSB	-	-	-	-	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	-	-	-	-	-	
ER	ER-calc-ratio	2014	0.213	-	-	
TC	TC-MT	2016	382			
TL	-	-	-			
TB/TBmsy	TB-MT/TBmsy-est-MT	2014	4.775			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2014	0.764			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Giant Pacific octopus Gulf of Alaska [GPOCTOGA]

Kobe MSYpref (1997–2014–SISIMP2016)

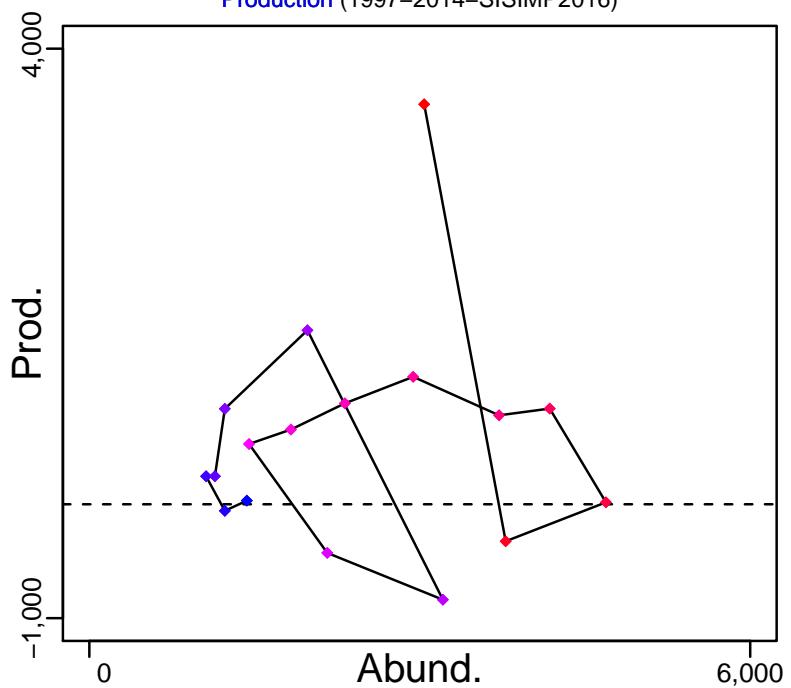


Kobe MGTpref (1997–2014–SISIMP2016)



Spawner Recruit*

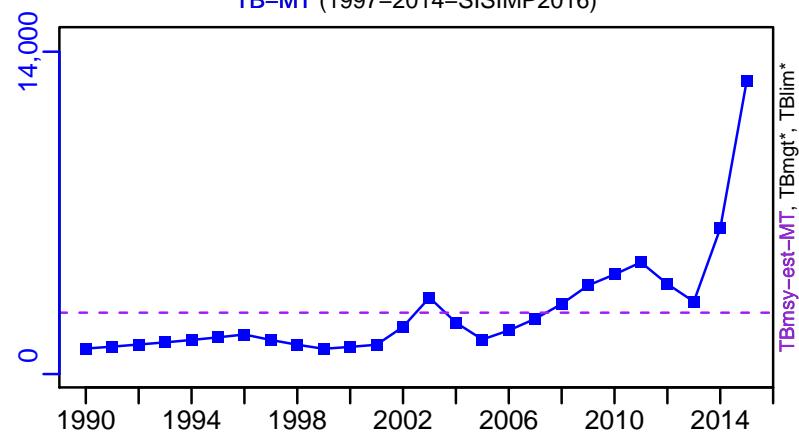
Production (1997–2014–SISIMP2016)



◆ Start Year ◆ End Year * No Data

Giant Pacific octopus Gulf of Alaska [GPOCTOGA]

TB-MT (1997–2014–SISIMP2016)



SSB*



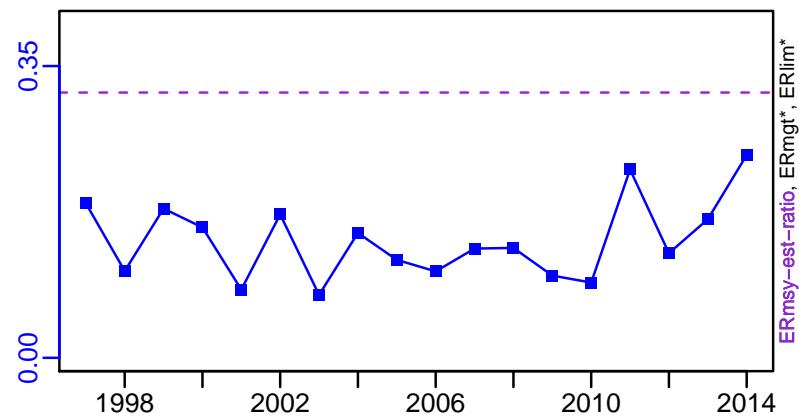
TN *



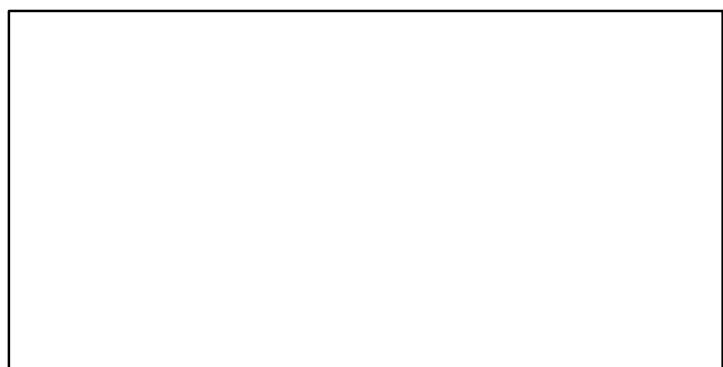
F*



ER-calc-ratio (1997–2014–SISIMP2016)



Recruits*

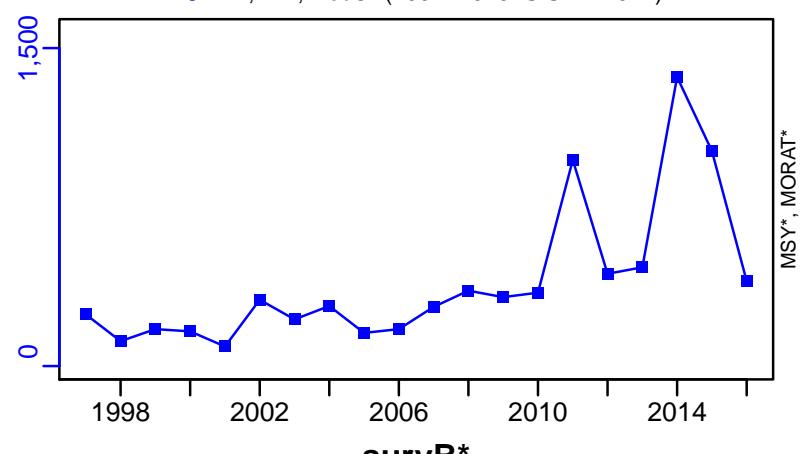


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	— Lim BRP	* No Data

Giant Pacific octopus Gulf of Alaska [GPOCTOGA]

TC-MT, TL*, RecC* (1997–2016–SISIMP2021)

TAC*, Cpair*, Cadv*



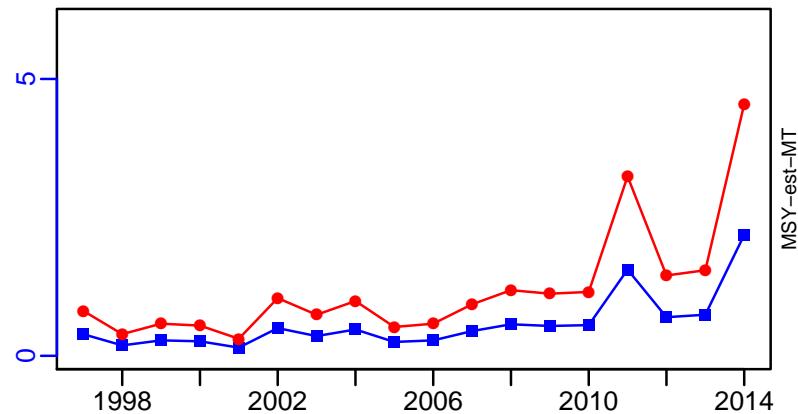
CPUE*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1997–2014–SISIMP2016)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Pacific herring Prince William Sound [HERRPWS]

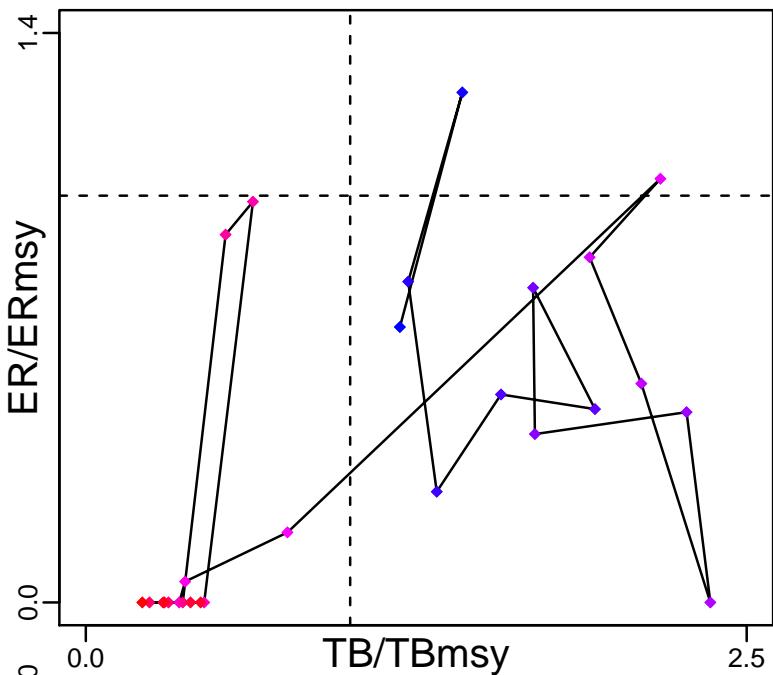
Metadata	
Scientific Name	Clupea pallasii
Current Assess ID	ADFG-HERRPWS-1980-2006-COLLIE
Area	Prince William Sound
Management Authority	State of Alaska
Assessor	Alaska Department of Fish and Game
Asmts in RAM	2006

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2006	44,442
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-est-ratio	2006	0.16
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2006	7111
M	M-1/yr	2006	0.25
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

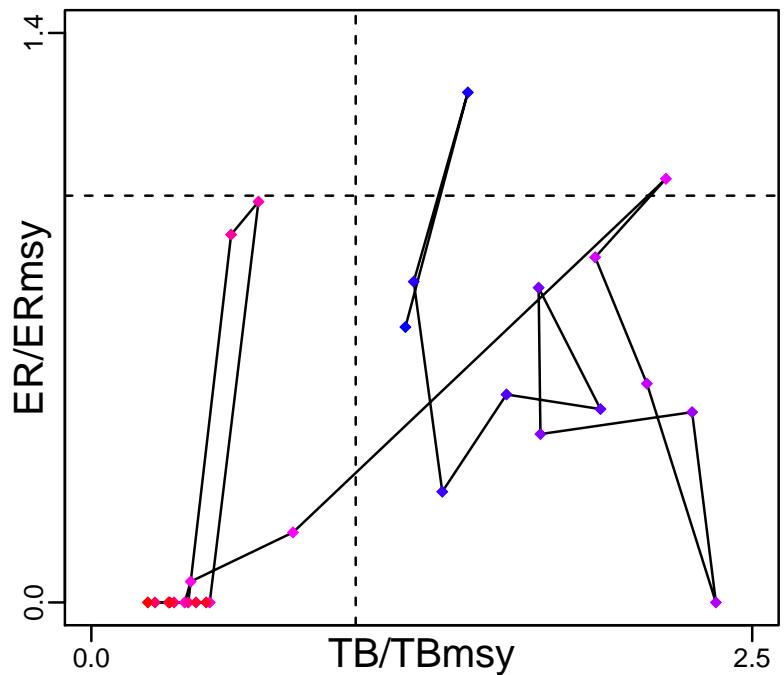
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2006	9500	-	3+	
SSB	SSB-MT	2006	9500	Both	3+	
TN	-	-	-	-	-	
R	R-E00	2006	30,300,000	-	3	
F	F-1/yr	2006	0	Both	3+	
ER	ER-calc-ratio	2006	0	-	-	
TC	TC-E00	2006	0			
TL	TL-MT	2006	0			
TB/TBmsy	TB-MT/TBmsy-est-MT	2006	0.214			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2006	0			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Pacific herring Prince William Sound [HERRPWS]

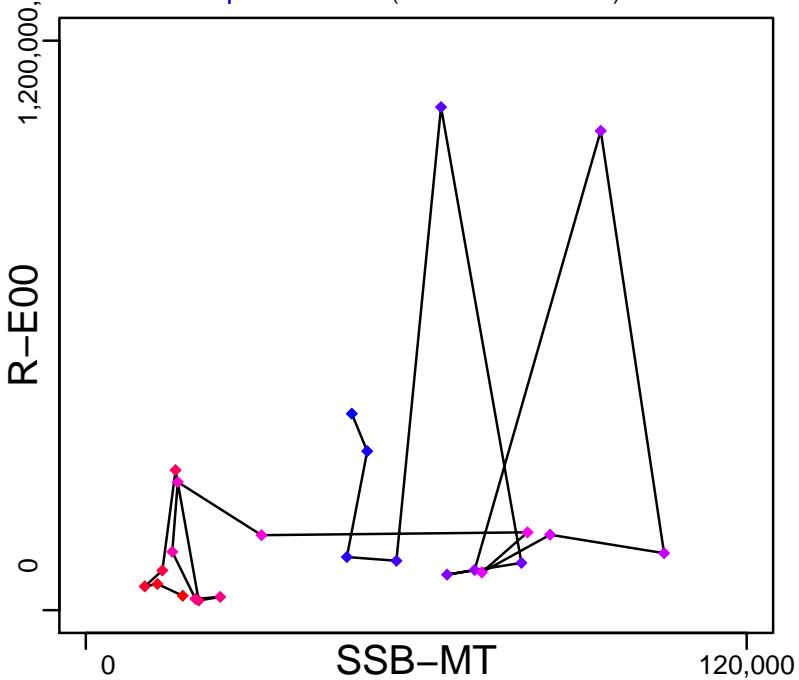
Kobe MSYpref (1980–2006–COLLIE)



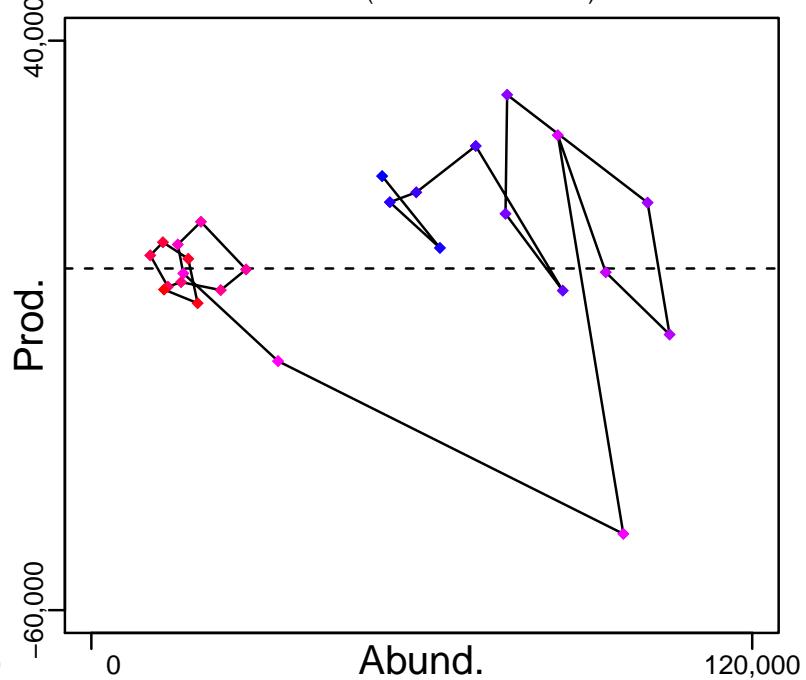
Kobe MGTPref (1980–2006–COLLIE)



Spawner Recruit (1980–2006–COLLIE)



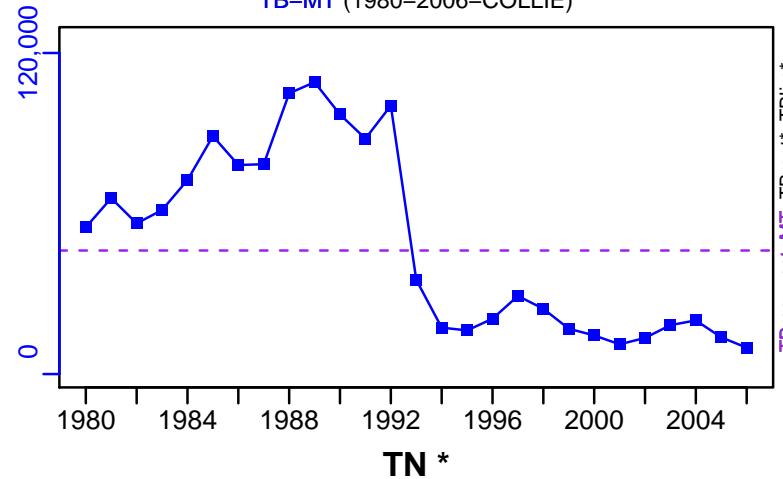
Production (1980–2006–COLLIE)



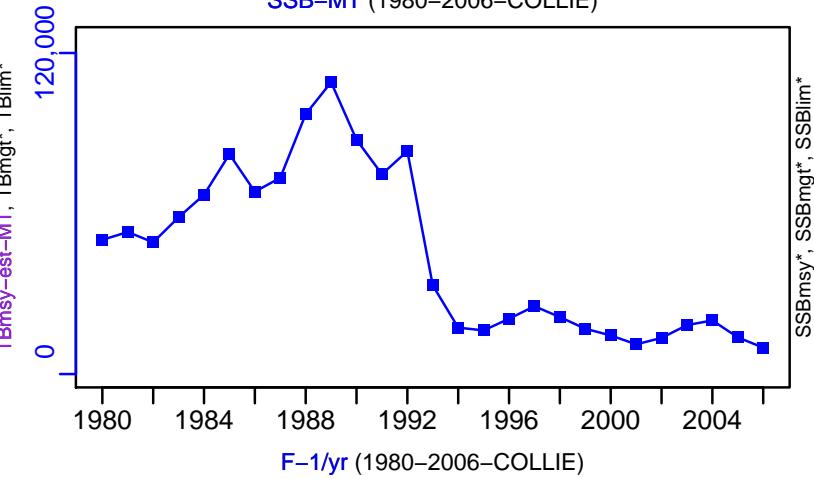
◆ Start Year ♦ End Year * No Data

Pacific herring Prince William Sound [HERRPWS]

TB-MT (1980–2006–COLLIE)



SSB-MT (1980–2006–COLLIE)



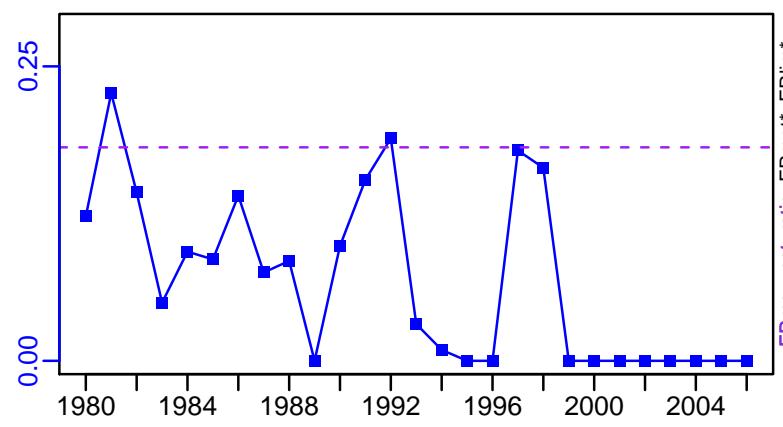
TN *

SSBmsy*, SSBmg*, SSBlim*

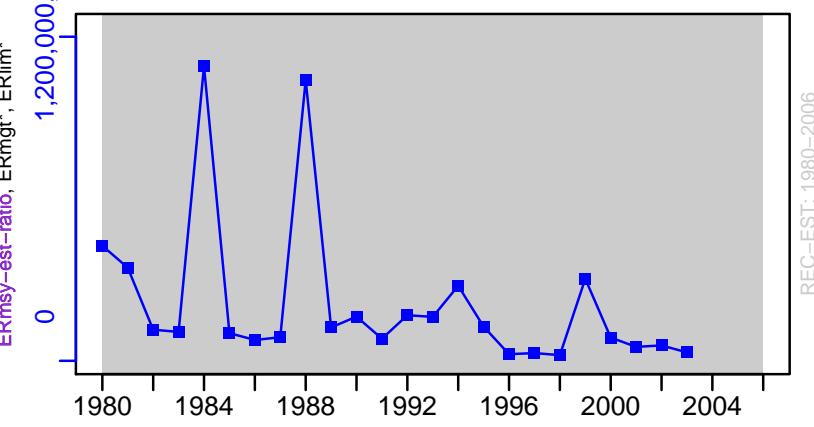
Fmsy*, Fmg*, Film*

REC-EST: 1980–2006

ER-calc-ratio (1980–2006–COLLIE)



R-E00 (1980–2006–COLLIE)

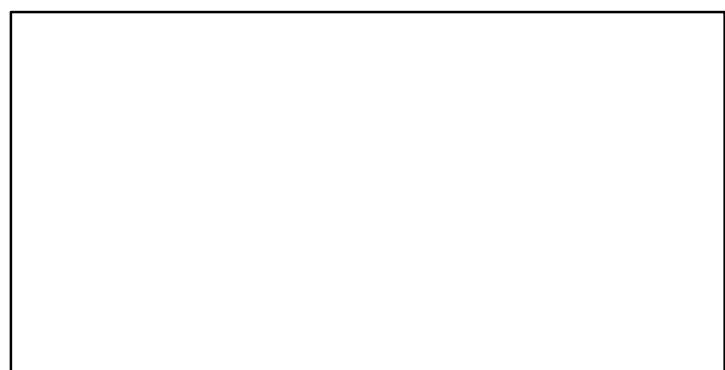
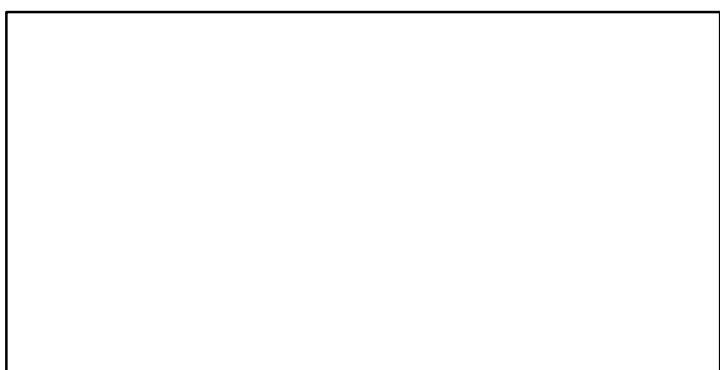
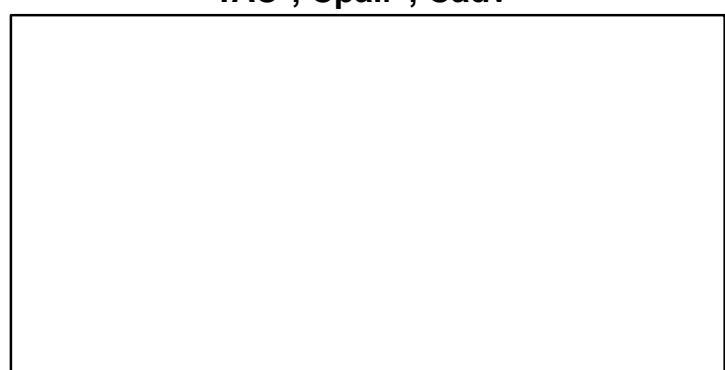
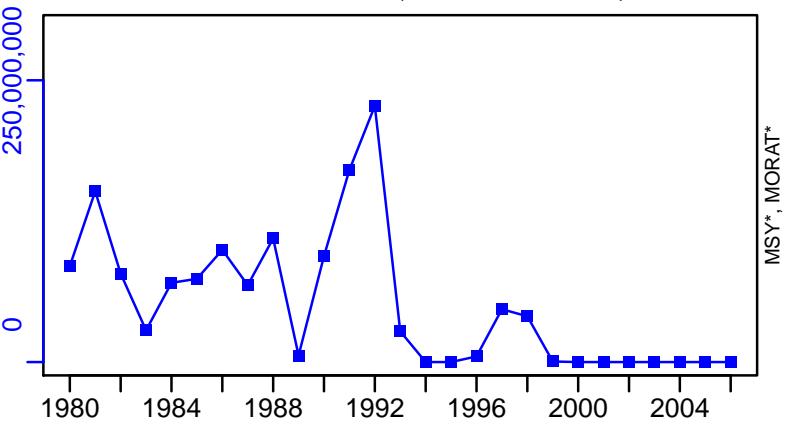


- | | | |
|----------------------|---------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

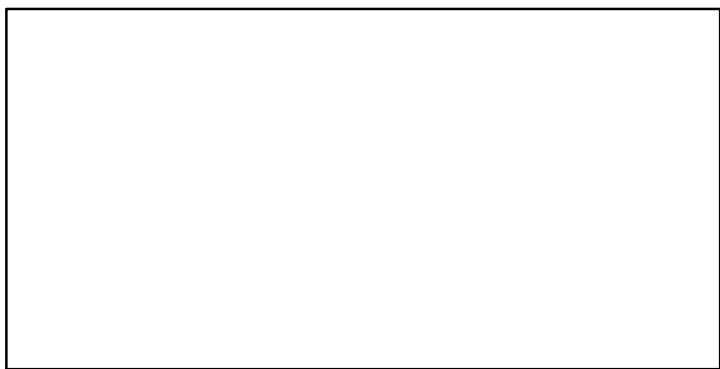
Pacific herring Prince William Sound [HERRPWS]

TC-E00, TL*, RecC* (1980–2006–COLLIE)

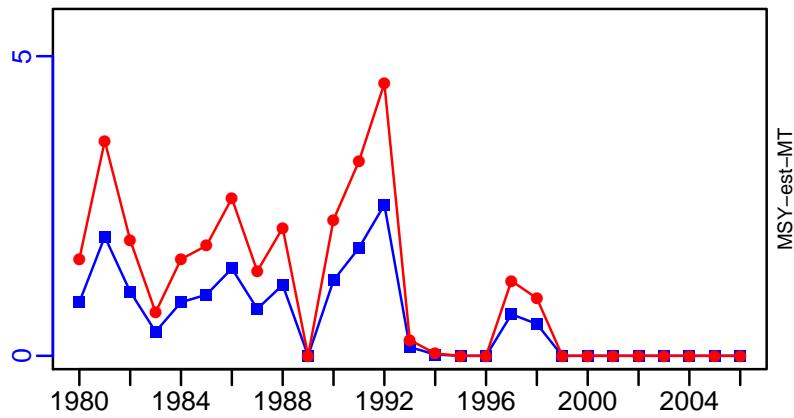
TAC*, Cpair*, Cadv*



EFFORT*



TL-MT/MSY-est-MT, CdivMEANC-ratio, (1980–2006–COLLIE)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Pacific herring Sitka [HERRSITKA]

Metadata	
Scientific Name	Clupea pallasi
Current Assess ID	ADFG-HERRSITKA-1978-2007-COLLIE
Area	Sitka
Management Authority	State of Alaska
Assessor	Alaska Department of Fish and Game
Asmts in RAM	2007

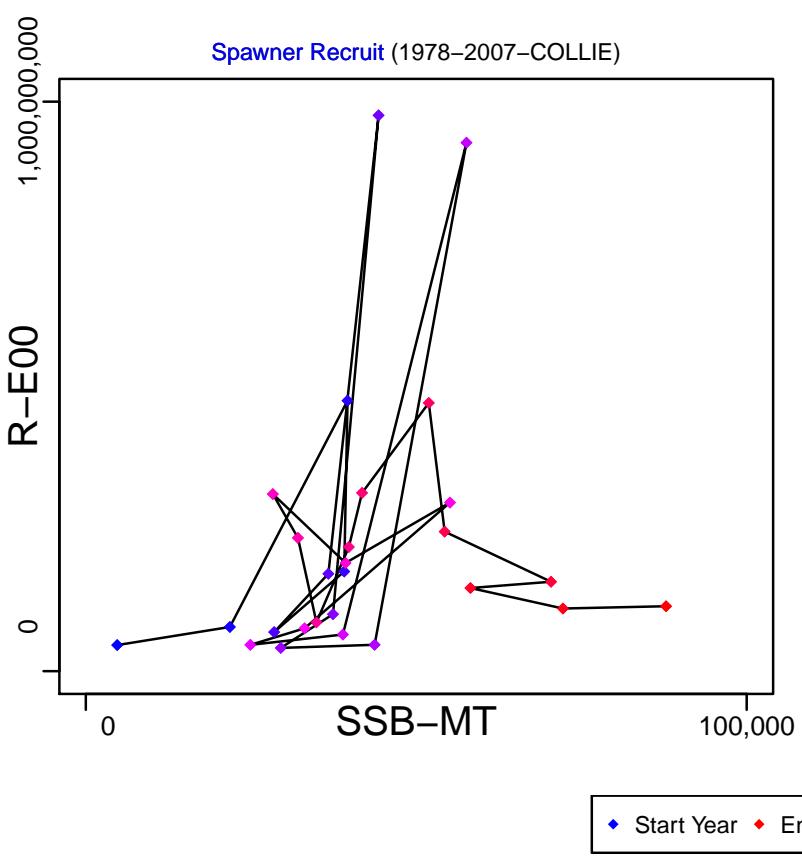
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2007	0.2
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2007	98,400	-	3+	
SSB	SSB-MT	2007	82,900	Both	3+	
TN	-	-	-	-	-	
R	R-E00	2007	1.14×10^8	-	3	
F	F-1/yr	2007	0.118	Both	3+	
ER	-	-	-	-	-	
TC	TC-E00	2007	69,600,000			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	-	-	-			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Pacific herring Sitka [HERRSITKA]

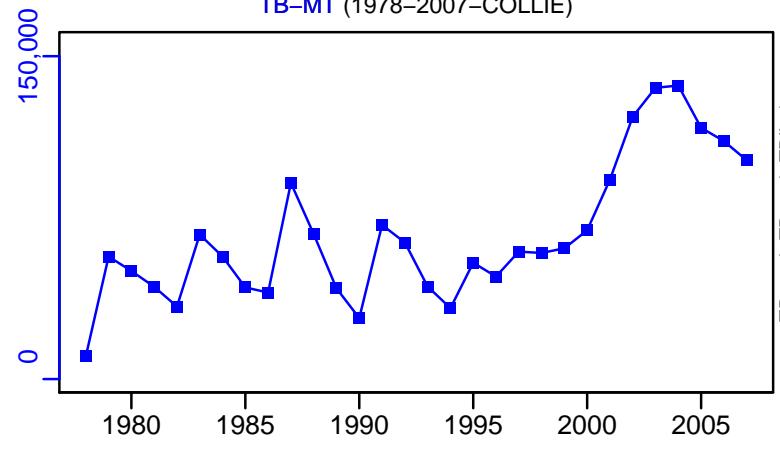
Kobe MSY*

Kobe MGT*

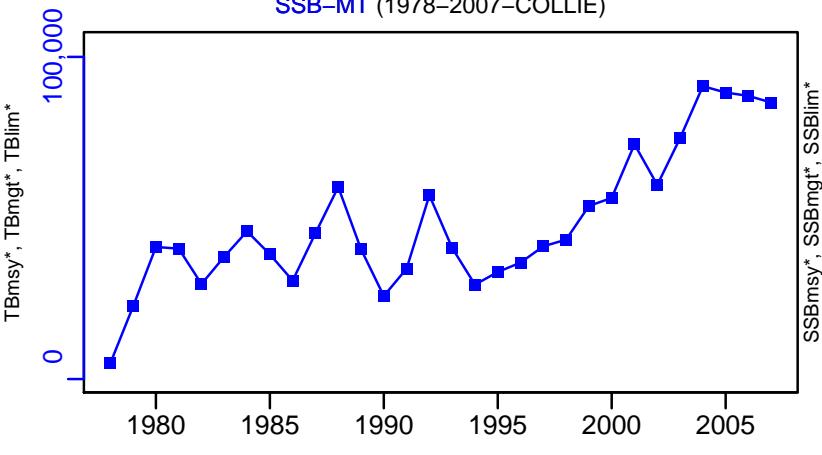


Pacific herring Sitka [HERRSITKA]

TB-MT (1978–2007–COLLIE)



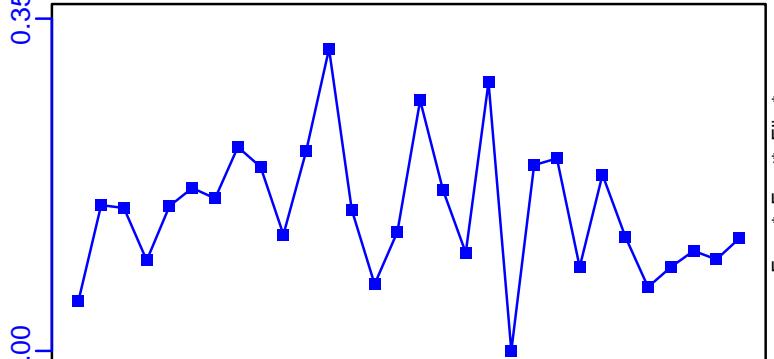
SSB-MT (1978–2007–COLLIE)



TN *



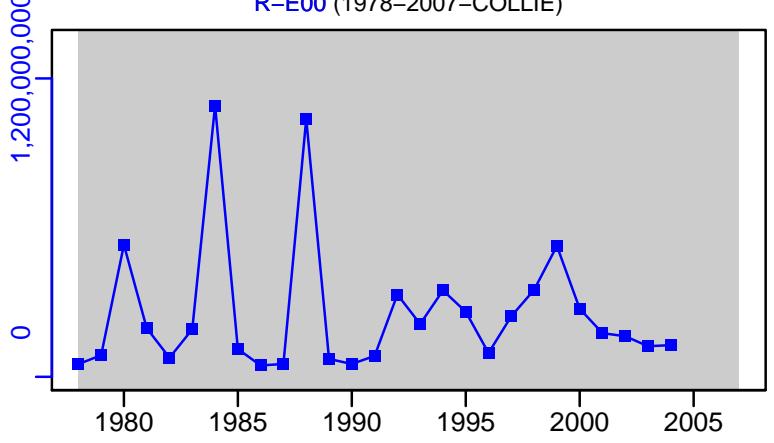
F-1/yr (1978–2007–COLLIE)



ER*



R-E00 (1978–2007–COLLIE)



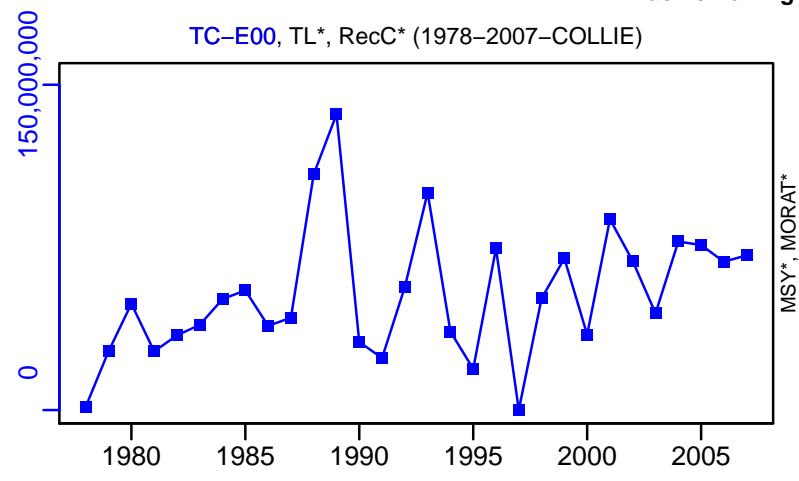
REC-EST: 1978–2007

- Listed time series
- Target BRP
- MSY-based BRP
- Lim BRP
- Rec-Est
- * No Data

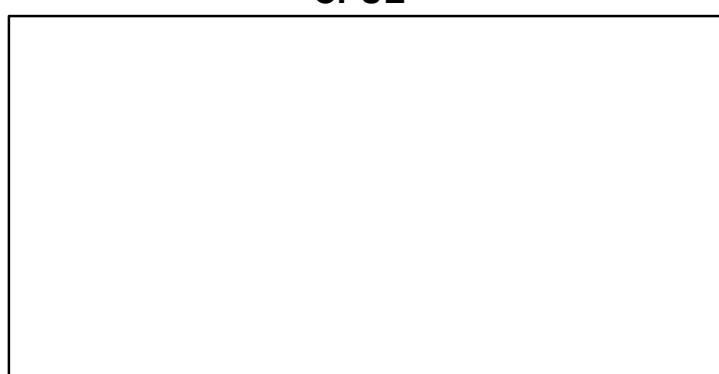
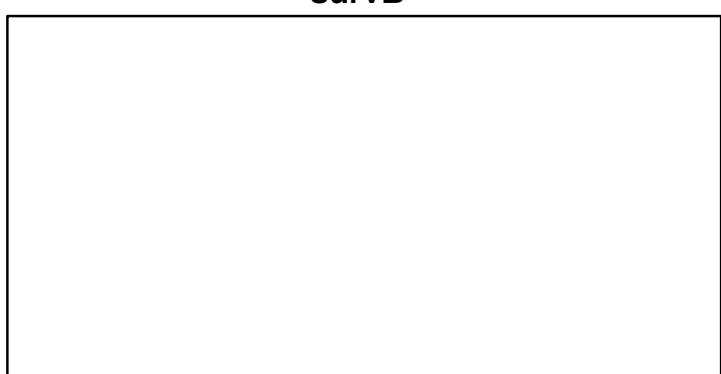
Pacific herring Sitka [HERRSITKA]

TC-E00, TL*, RecC* (1978–2007–COLLIE)

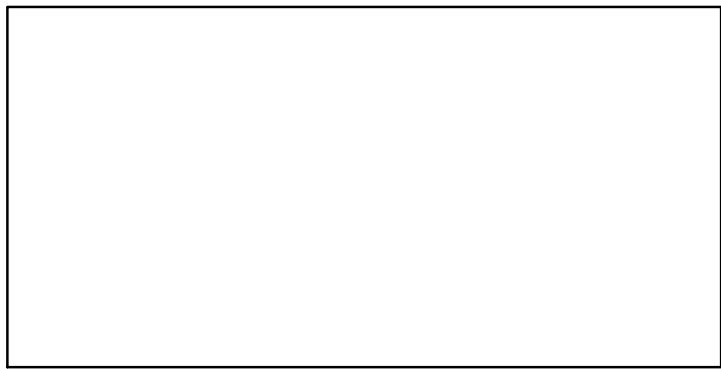
TAC*, Cpair*, Cadv*



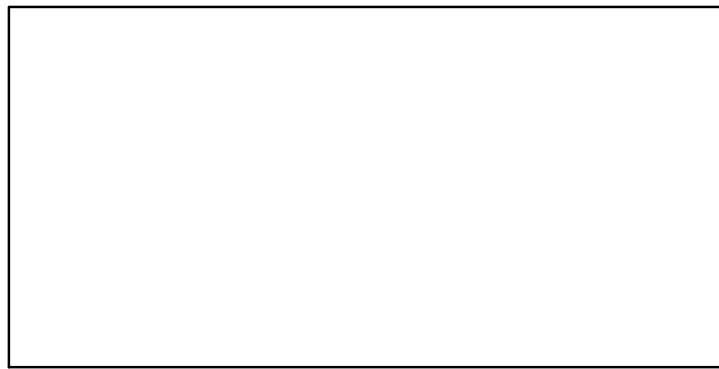
MSY*, MORAT*



EFFORT*



CdivMSY*



- | | | |
|--------------------------|--------------------------|-----------|
| ■ 1st listed time series | ▲ 3rd listed time series | — MORAT |
| ● 2nd listed time series | - - MSY | * No Data |

Pacific herring Togiak District [HERRTOG]

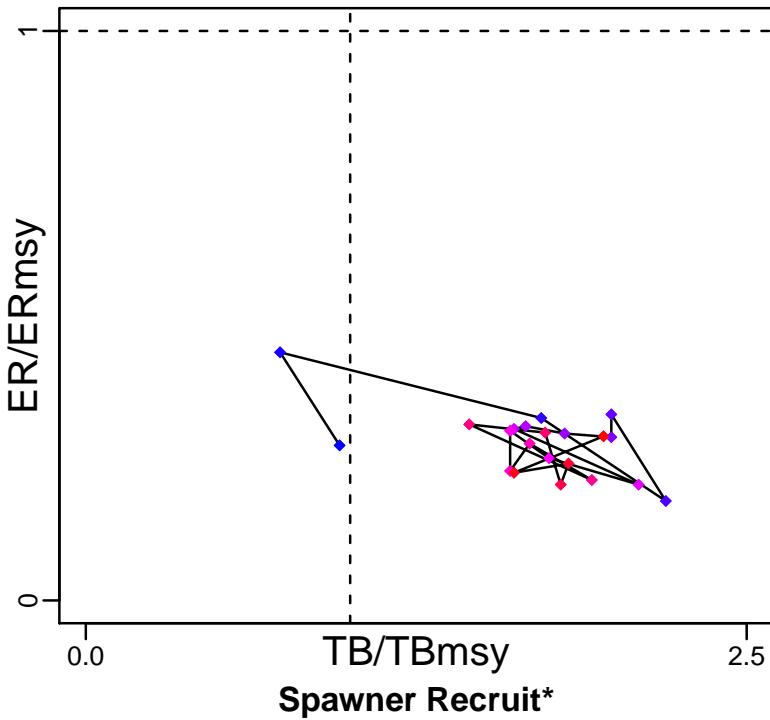
Metadata	
Scientific Name	Clupea pallasii
Current Assess ID	ADFG-HERRTOG-1990-2010-HIVELY
Area	Togiak District
Management Authority	State of Alaska
Assessor	Alaska Department of Fish and Game
Asmts in RAM	2010

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2010	67,908
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-est-ratio	2010	0.624
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2010	42,397
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

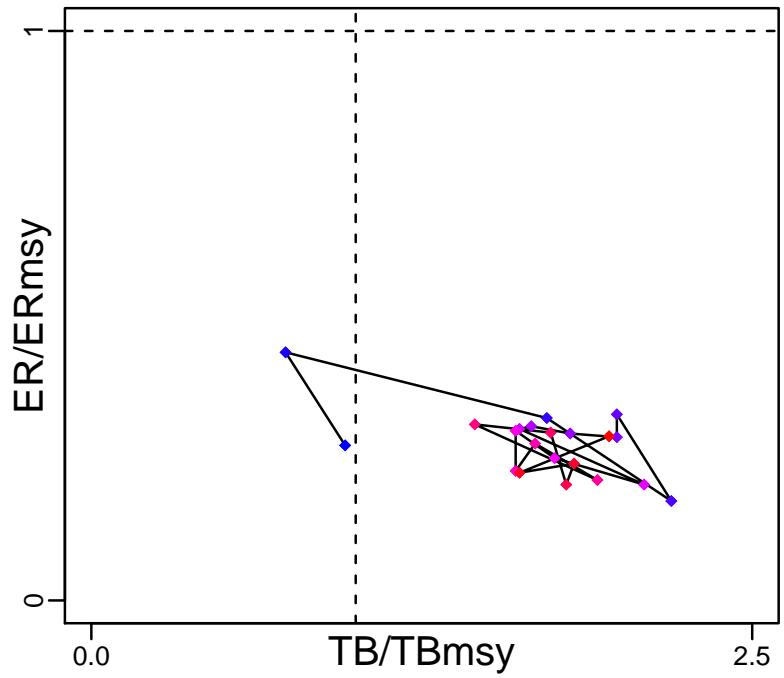
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2010	133,000	-	-	
SSB	-	-	-	-	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	-	-	-	-	-	
ER	ER-ratio	2010	0.18	-	-	
TC	TC-MT	2010	23,900			
TL	-	-	-			
TB/TBmsy	TB-MT/TBmsy-est-MT	2010	1.959			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	ER-ratio/ERmsy-est-ratio	2010	0.288			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Pacific herring Togiak District [HERRTOG]

Kobe MSYpref (1990–2010–HIVELY)

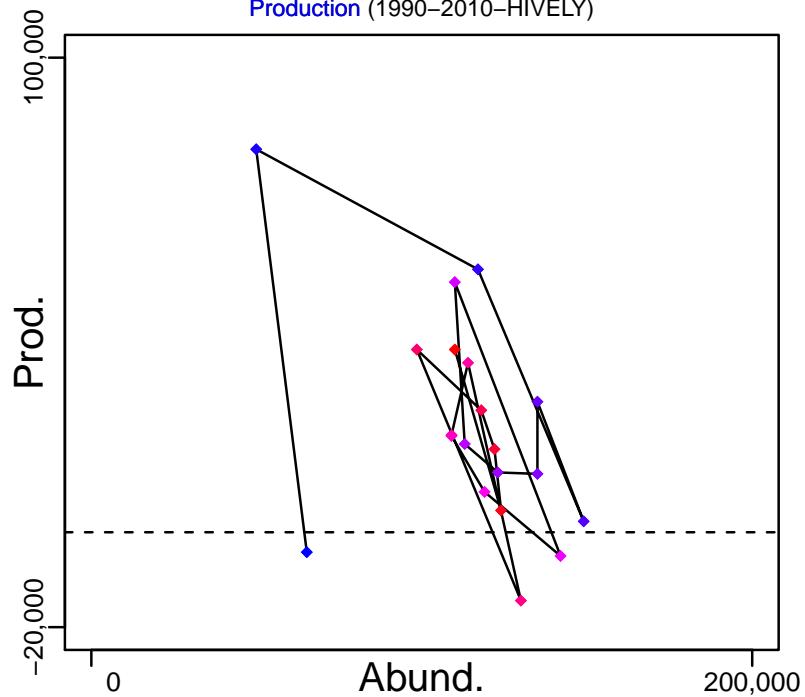
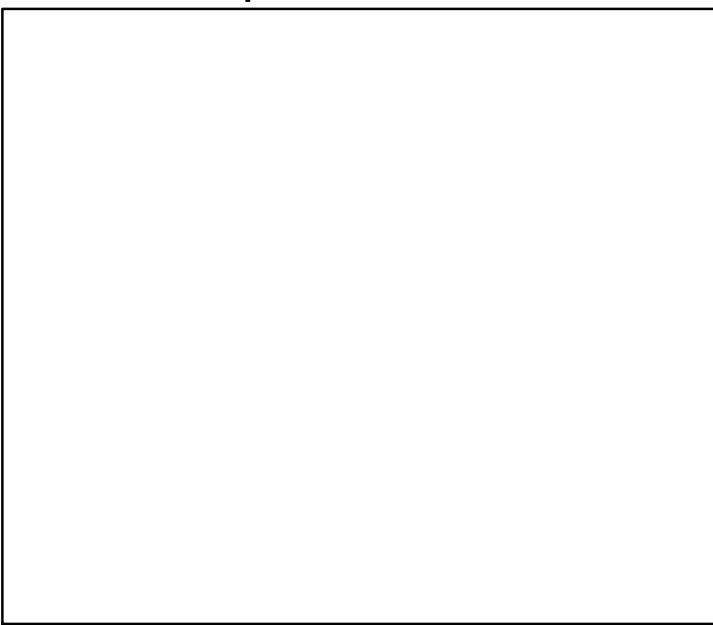


Kobe MGTPref (1990–2010–HIVELY)



Spawner Recruit*

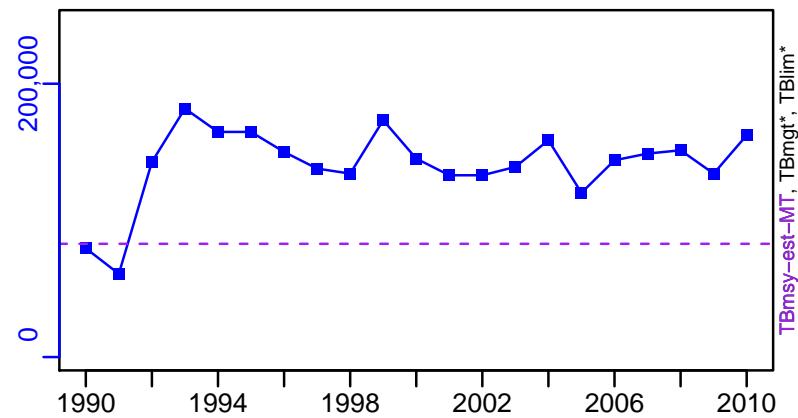
Production (1990–2010–HIVELY)



◆ Start Year ♦ End Year * No Data

Pacific herring Togiak District [HERRTOG]

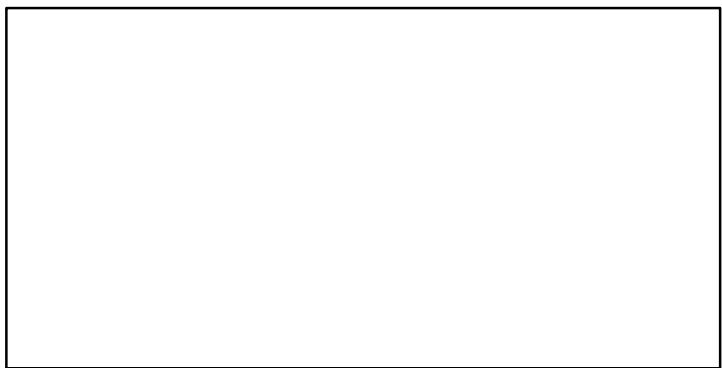
TB-MT (1990–2010-HIVELY)



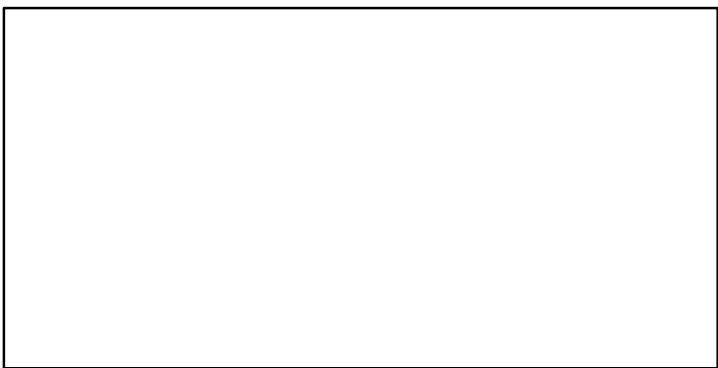
SSB*



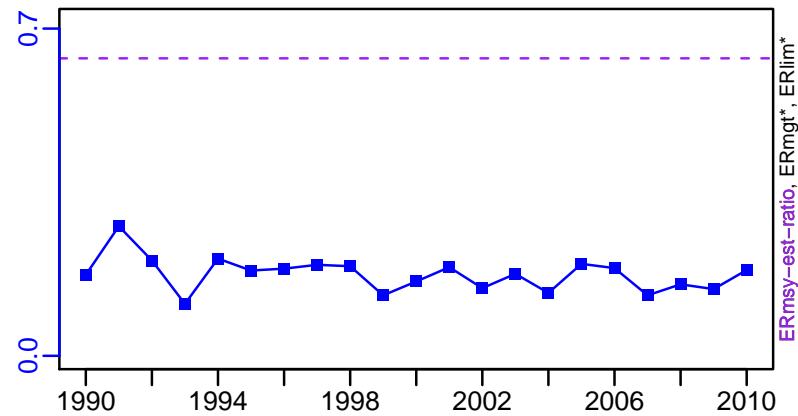
TN *



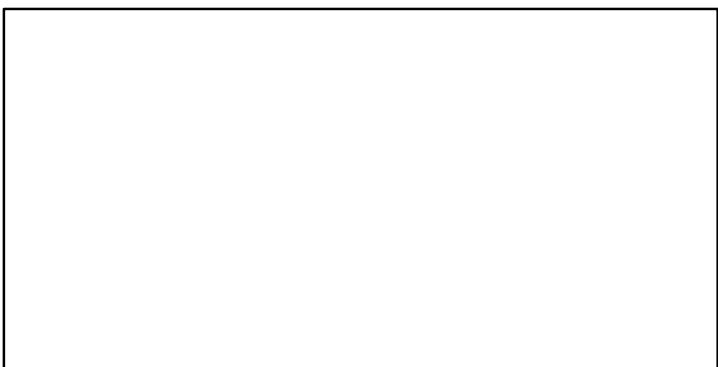
F*



ER-ratio (1990–2010-HIVELY)



Recruits*

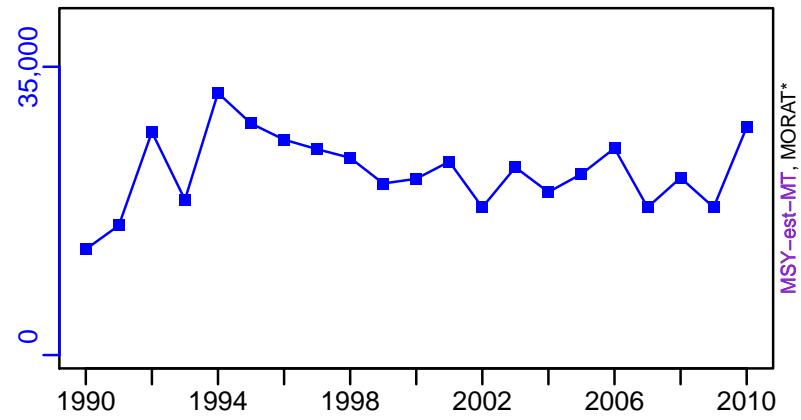


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	--- Lim BRP	* No Data

Pacific herring Togiak District [HERRTOG]

TC-MT, TL*, RecC* (1990–2010–HIVELY)

TAC*, Cpair*, Cadv*



survB*

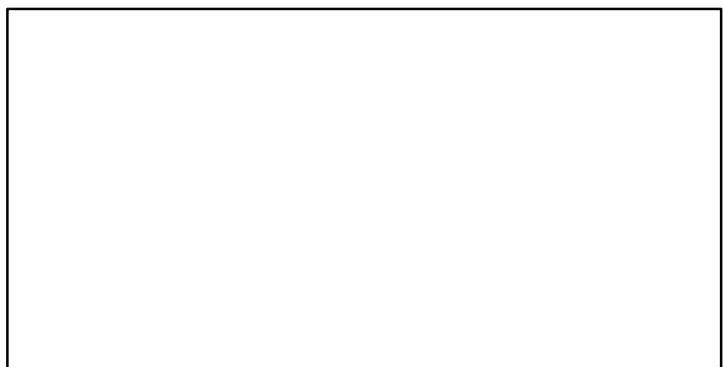
MSY-est-MT, MORAT*



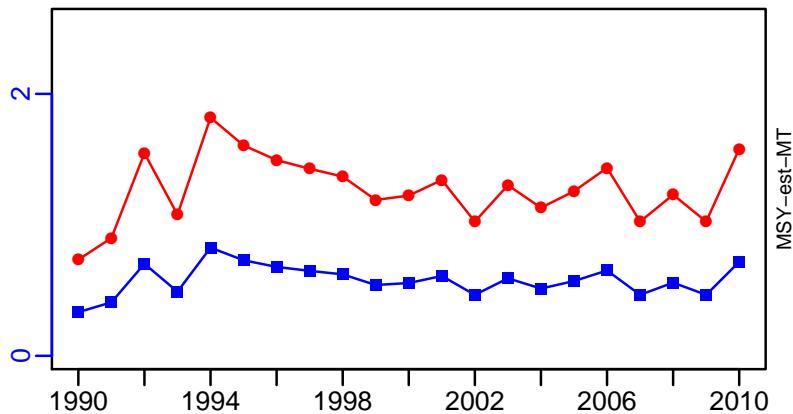
CPUE*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1990–2010–HIVELY)



■ 1st listed time series ▲ 3rd listed time series — MORAT
 ● 2nd listed time series - - - MSY * No Data

Kamchatka flounder Bering Sea and Aleutian Islands [KMFLOUNBSAI]

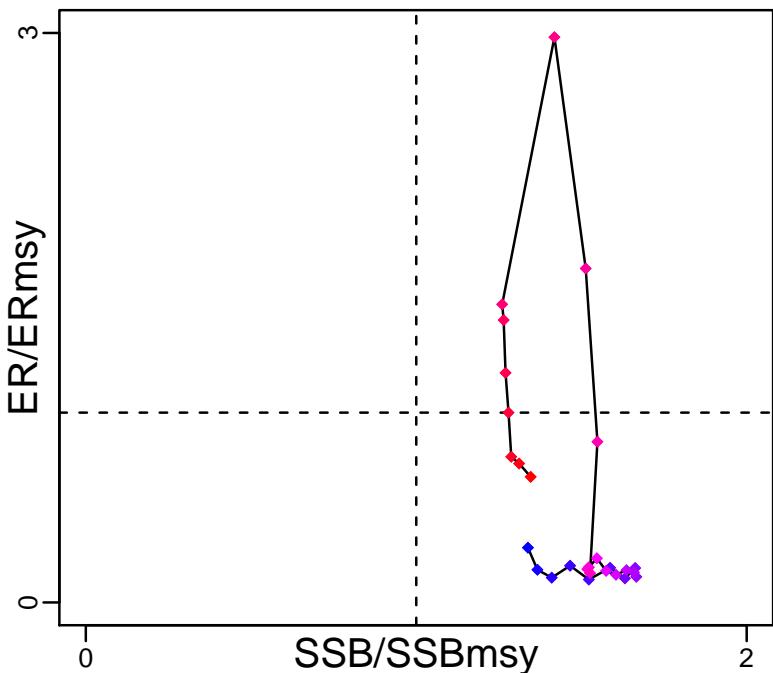
Metadata	
Scientific Name	Atheresthes evermanni
Current Assess ID	AFSC-KMFLOUNBSAI-1990-2018-SISIMP2021
Area	Bering Sea and Aleutian Islands
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2016, 2017, 2018, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2018	37,685
Fmsy	-	-	-
ERmsy	ERmsy-est-ratio	2018	0.053
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2018	5055
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2018	0.232
ERlim	-	-	-

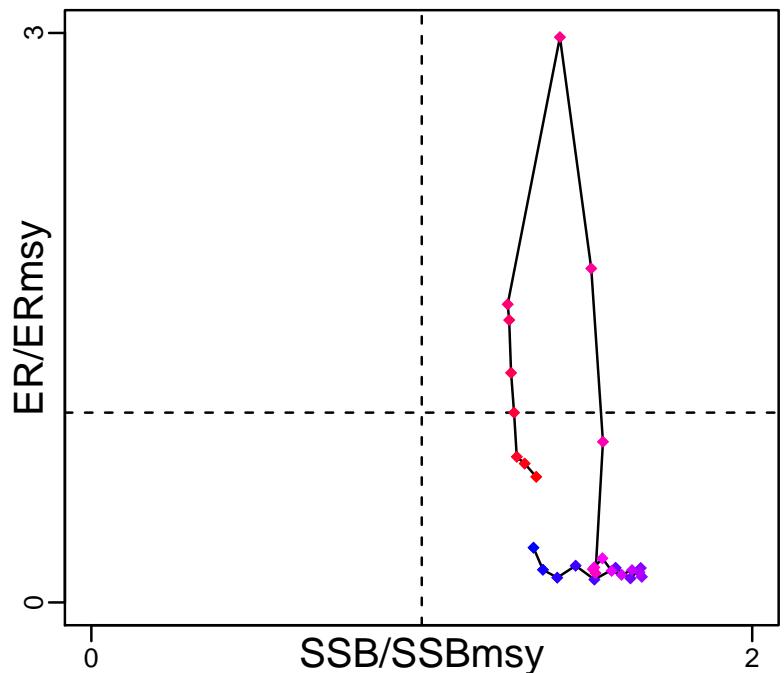
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	168,000	Both	2+	
SSB	SSB-MT	2018	52,843	-	-	
TN	-	-	-	-	-	
R	R-E00	2018	33,700,300	-	1	
F	F-1/yr	2018	0.048	-	-	
ER	ER-calc-ratio	2018	0.035	-	-	
TC	TC-MT	2018	4503			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2018	1.402			
F/Fmsy	-	-	-			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.662			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Kamchatka flounder Bering Sea and Aleutian Islands [KMFLOUNBSAI]

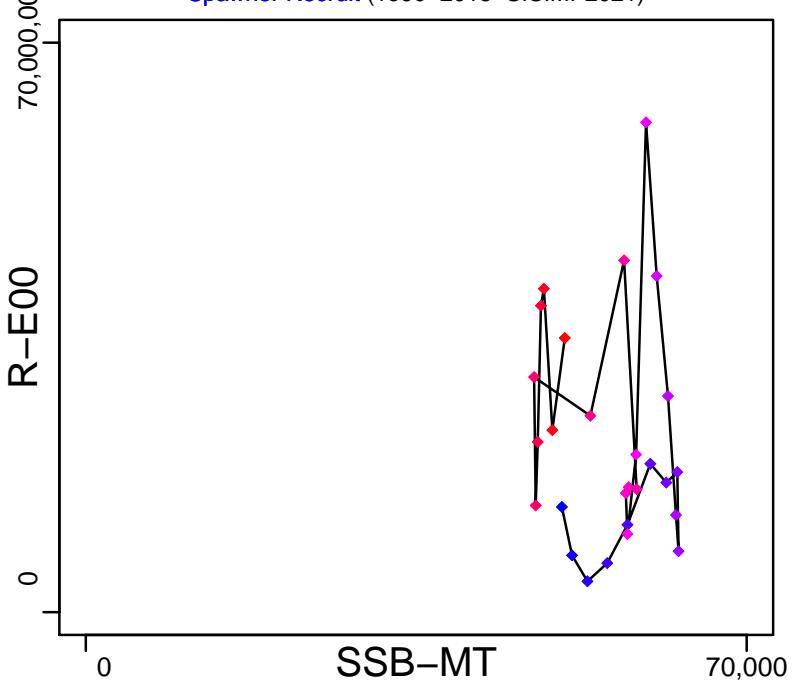
Kobe MSYpref (1990–2018–SISIMP2021)



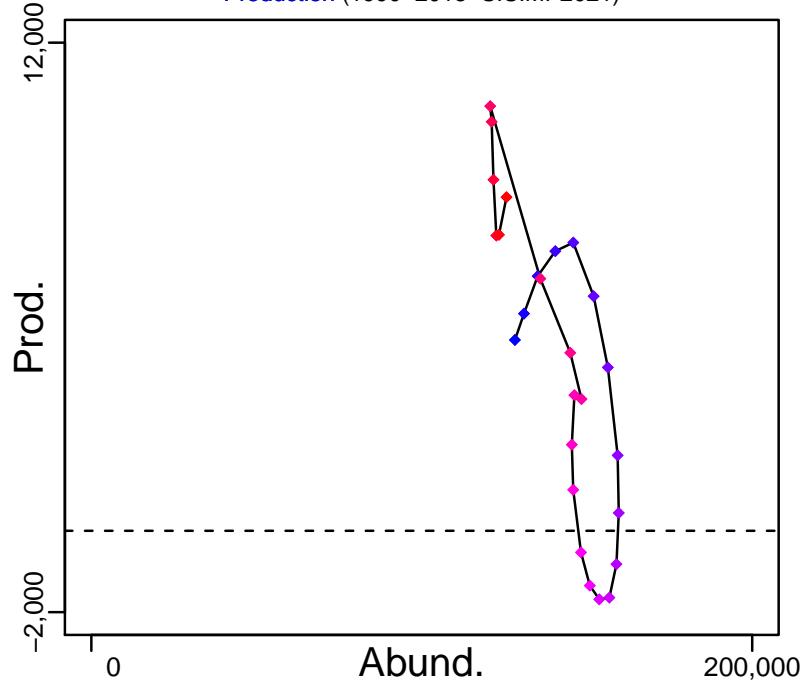
Kobe MGTpref (1990–2018–SISIMP2021)



Spawner Recruit (1990–2018–SISIMP2021)



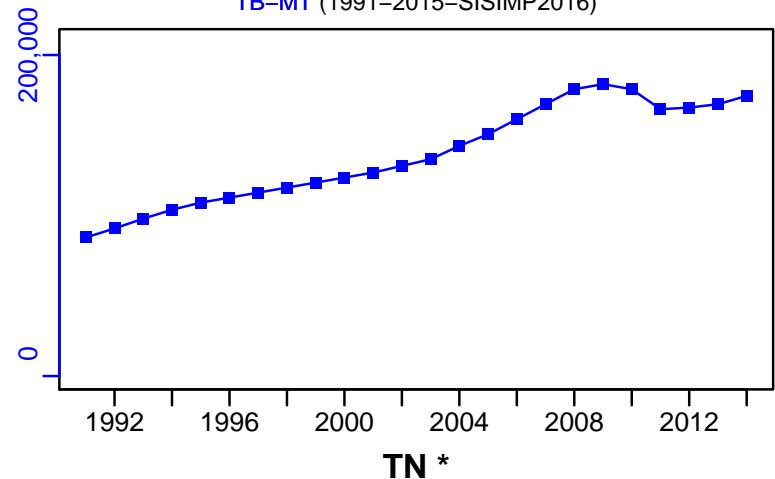
Production (1990–2018–SISIMP2021)



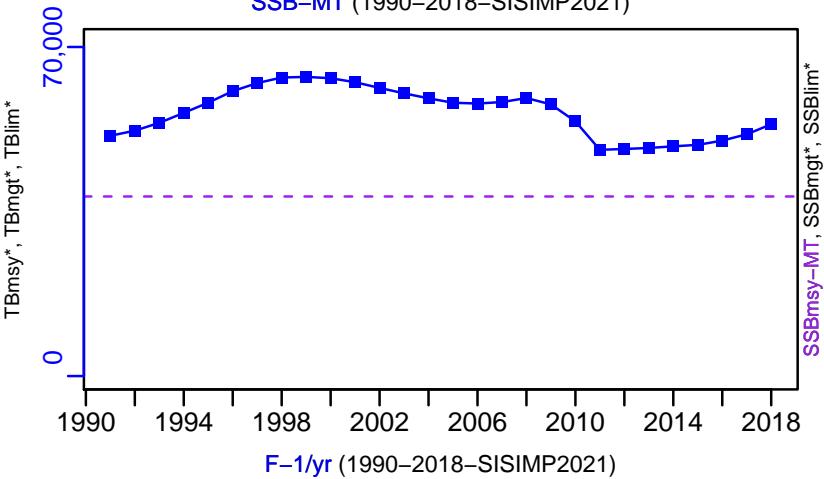
◆ Start Year ◆ End Year * No Data

Kamchatka flounder Bering Sea and Aleutian Islands [KMFLOUNBSAI]

TB-MT (1991–2015–SISIMP2016)



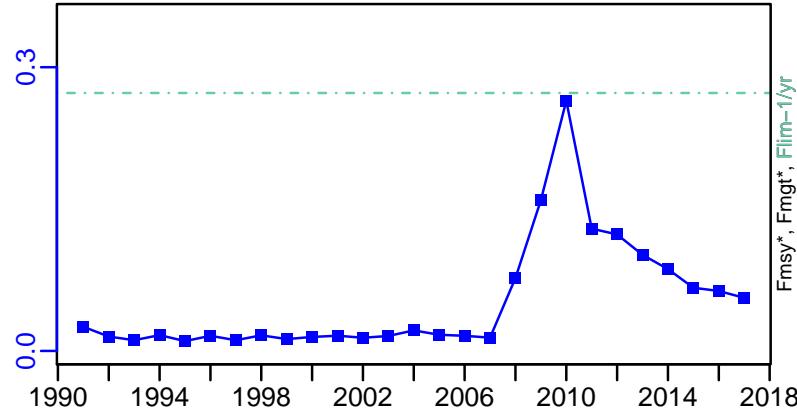
SSB-MT (1990–2018–SISIMP2021)



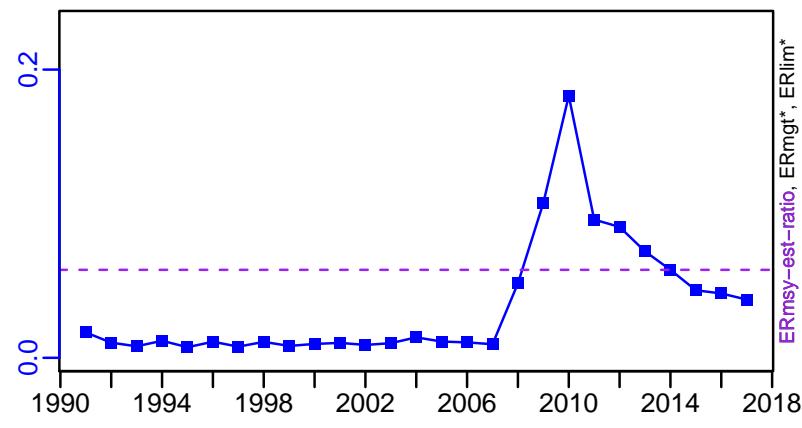
TN *



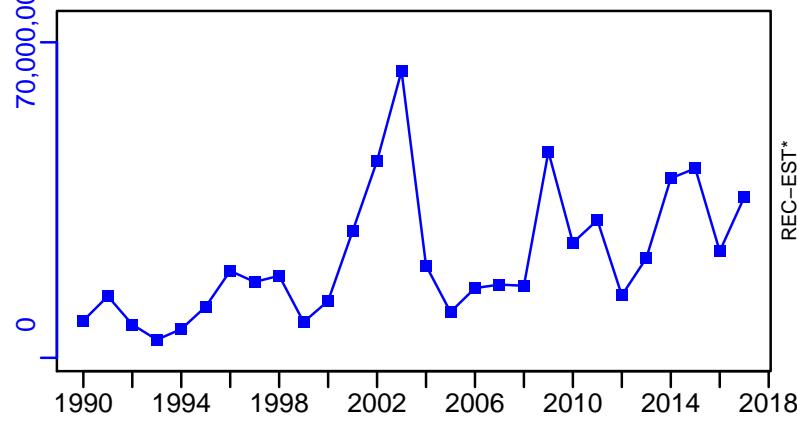
F-1/yr (1990–2018–SISIMP2021)



ER-calc-ratio (1990–2018–SISIMP2021)



R-E00 (1990–2018–SISIMP2021)

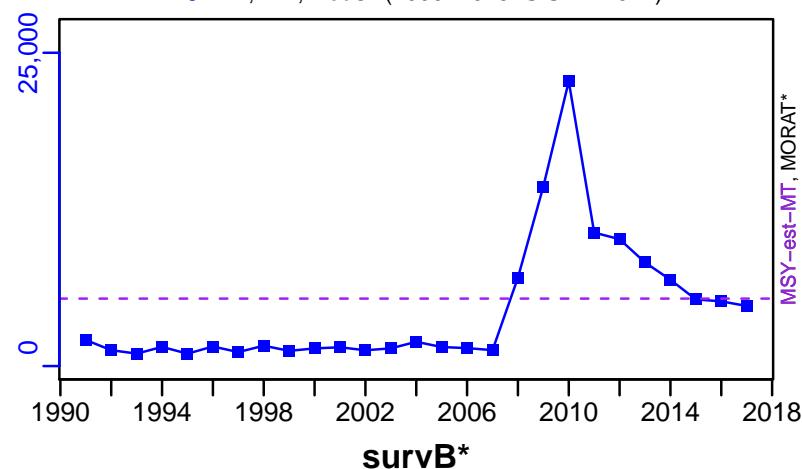


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

Kamchatka flounder Bering Sea and Aleutian Islands [KMFLOUNBSAI]

TC-MT, TL*, RecC* (1990–2018–SISIMP2021)

TAC*, Cpair*, Cadv*



survB*

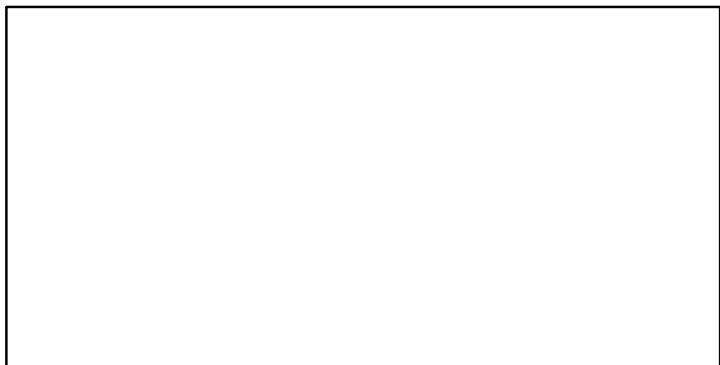
MSY-est-MT, MORAT*



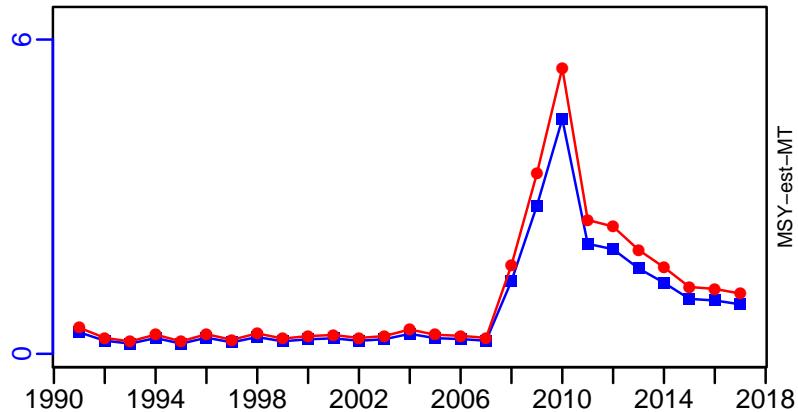
CPUE*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1990–2018–SISIMP2021)



MSY-est-MT

■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - MSY	* No Data

Northern rockfish Bering Sea and Aleutian Islands [NROCKBSAI]

Metadata	
Scientific Name	Sebastodes polypinnis
Current Assess ID	AFSC-NROCKBSAI-1974-2018-SISIMP2021
Area	Bering Sea and Aleutian Islands
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2011, 2016, 2017, 2018, 2015

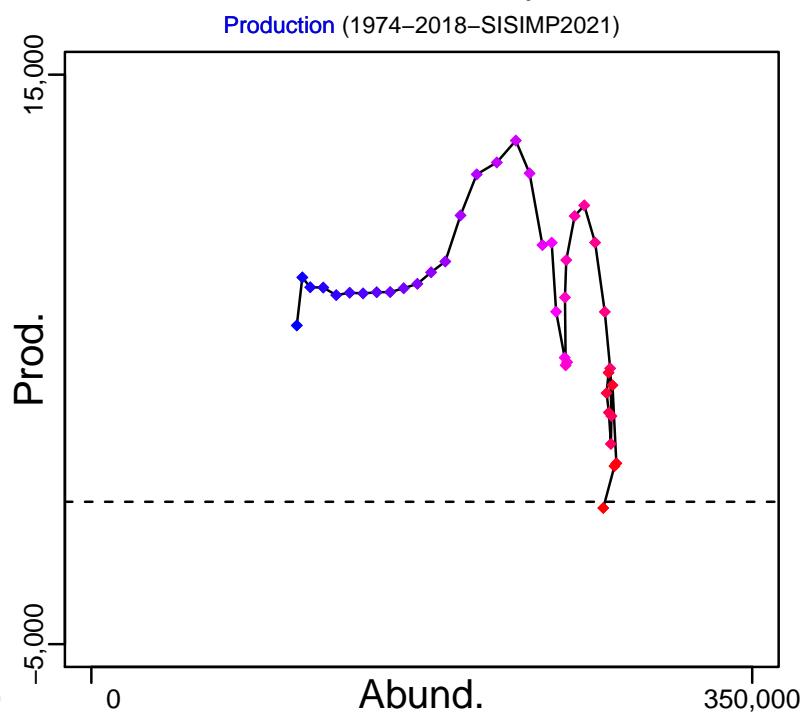
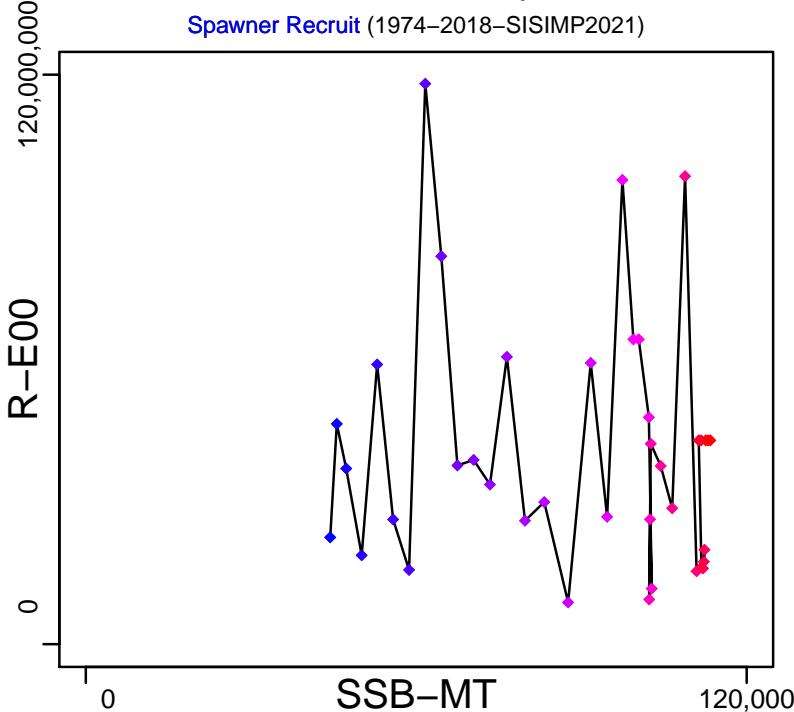
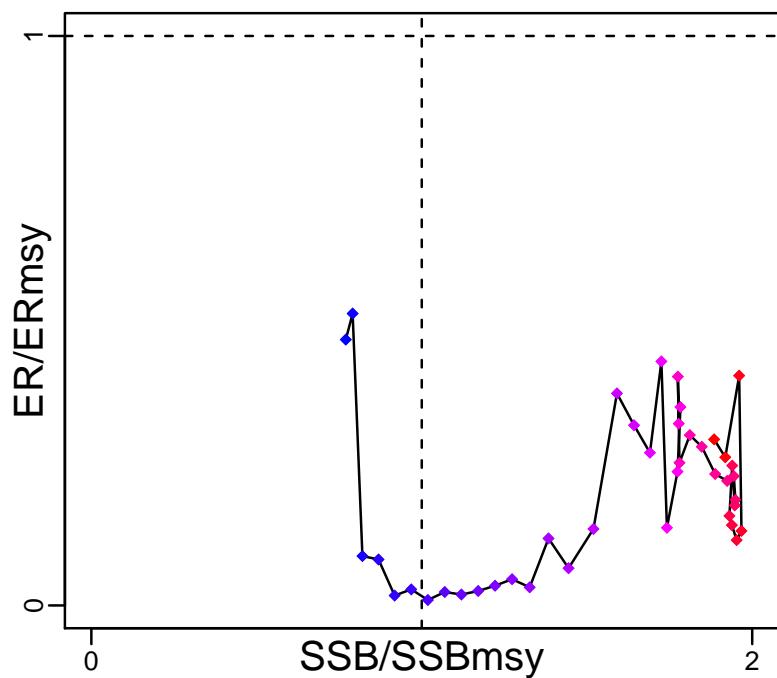
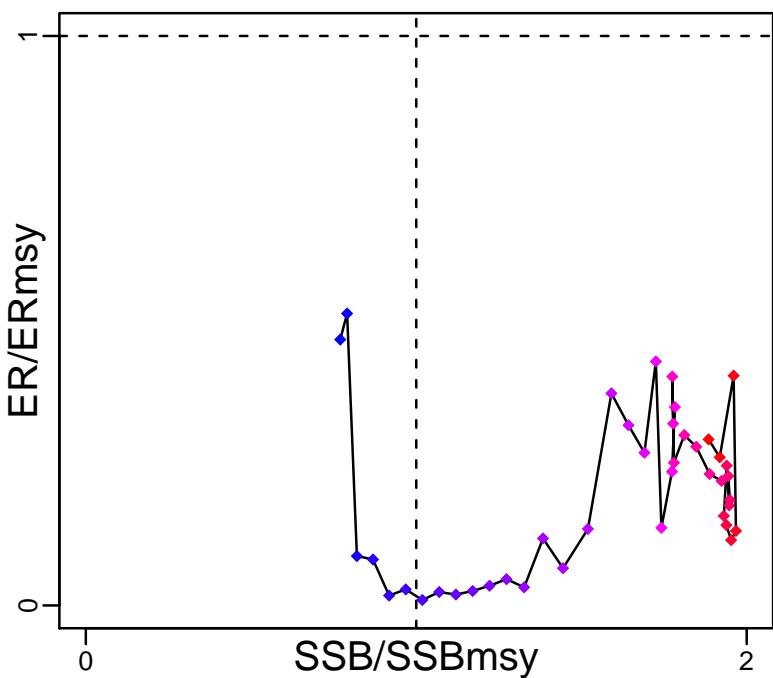
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2018	57,636
Fmsy	Fmsy-pr-1/yr	2011	0.071
ERmsy	ERmsy-est-ratio	2018	0.064
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	Fmgt-1/yr	2016	0.07
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2018	9097
M	M-1/yr	2011	0.043
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2018	0.08
ERlim	-	-	-

Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	220,000	-	3+	
SSB	SSB-MT	2018	108,630	-	-	
TN	-	-	-	-	-	
R	R-E00	2018	42,940,900	-	3	
F	F-1/yr	2018	0.021	-	-	
ER	ER-calc-ratio	2018	0.019	-	-	
TC	TC-MT	2018	5000			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2018	1.885			
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2011	0.313			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.292			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	F-1/yr/Fmgt-1/yr	2016	0.295			
ER/ERmgt	-	-	-			

Northern rockfish Bering Sea and Aleutian Islands [NROCKBSAI]

Kobe MSYpref (1974–2018–SISIMP2021)

Kobe MGTpref (1974–2018–SISIMP2021)

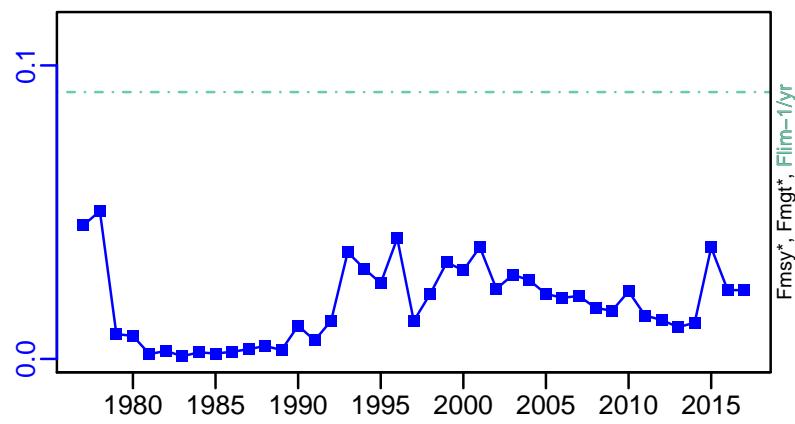
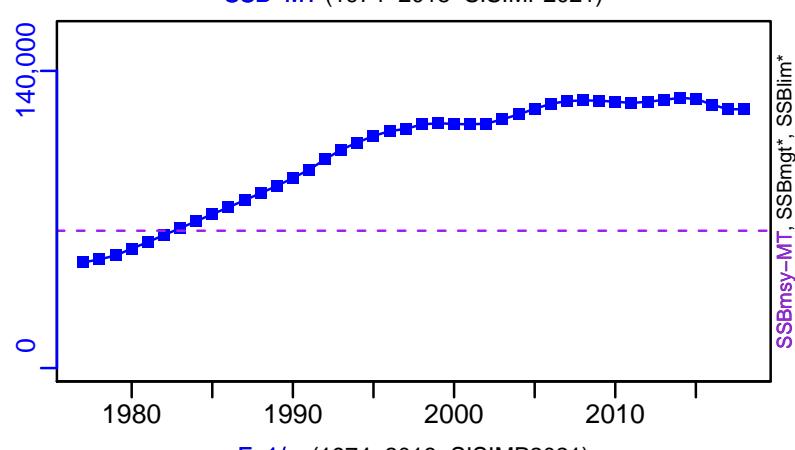
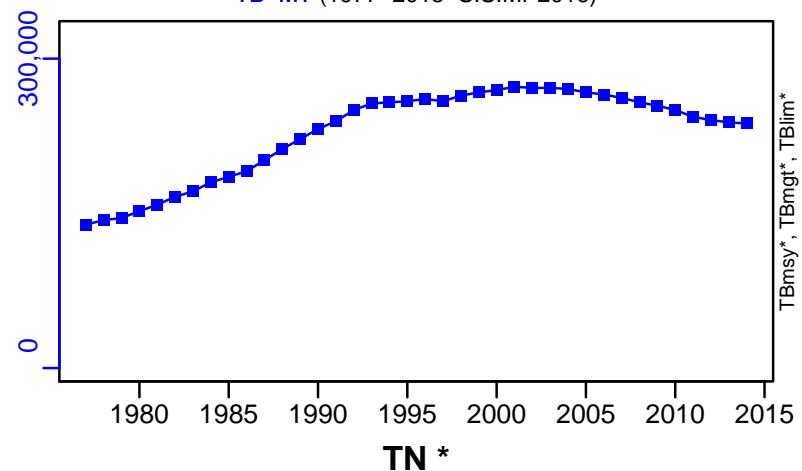


◆ Start Year ◆ End Year * No Data

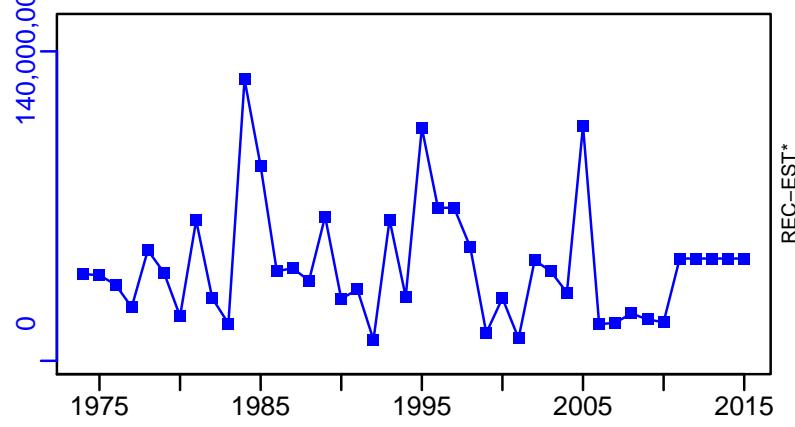
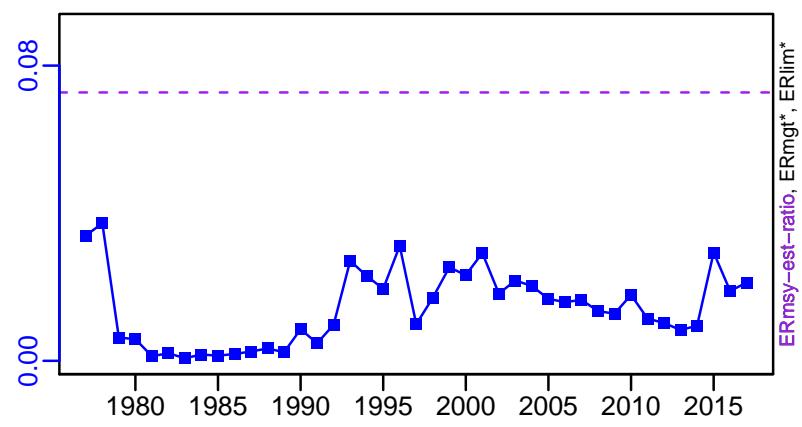
Northern rockfish Bering Sea and Aleutian Islands [NROCKBSAI]

TB-MT (1977–2015–SISIMP2016)

SSB-MT (1974–2018–SISIMP2021)



ER-calc-ratio (1974–2018–SISIMP2021)

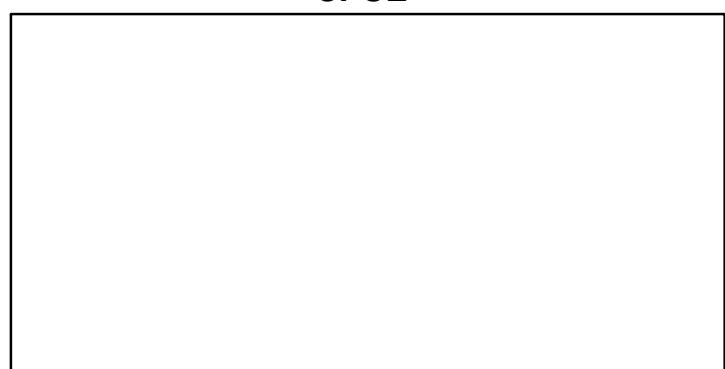
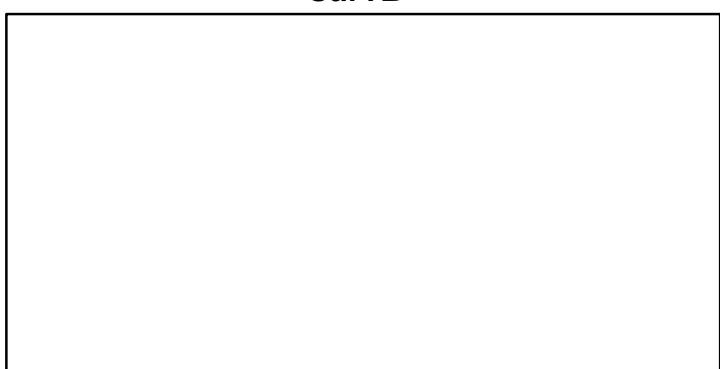
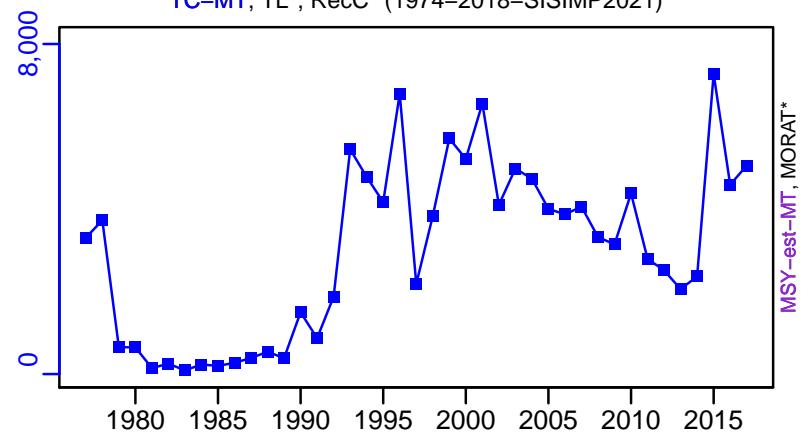


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

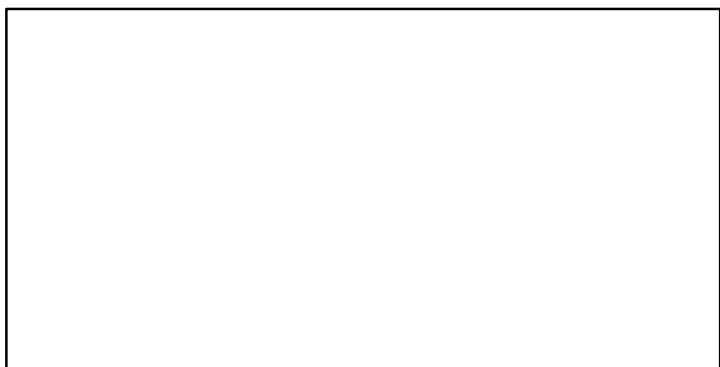
Northern rockfish Bering Sea and Aleutian Islands [NROCKBSAI]

TC-MT, TL*, RecC* (1974–2018–SISIMP2021)

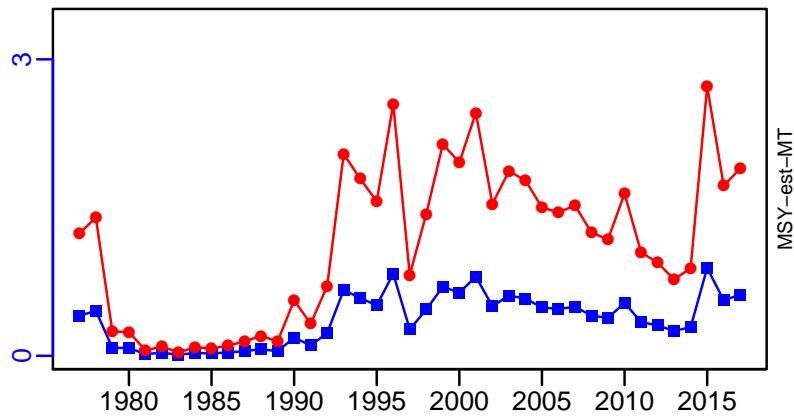
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1974–2018–SISIMP2021)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Northern rockfish Gulf of Alaska [NROCKGA]

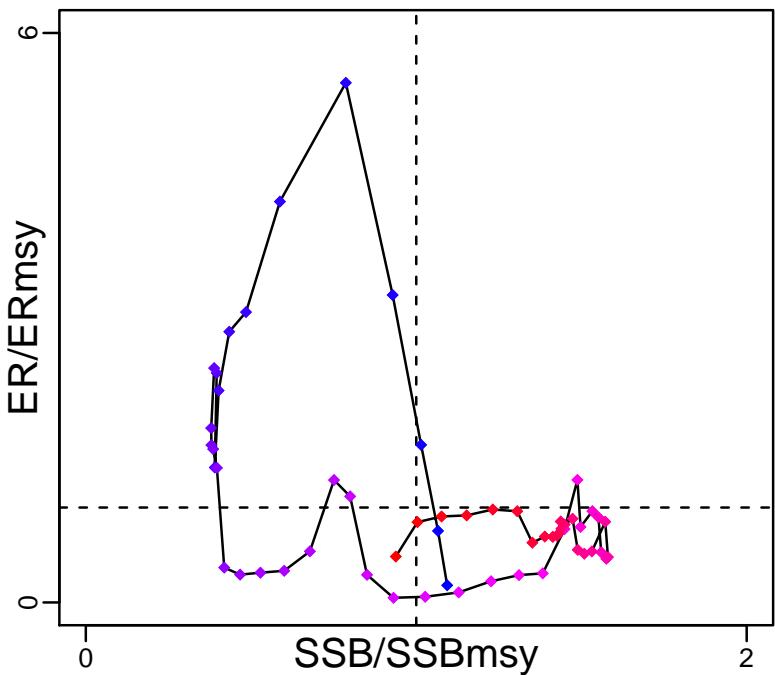
Metadata	
Scientific Name	Sebastodes polypinnis
Current Assess ID	AFSC-NROCKGA-1959-2018-SISIMP2021
Area	Gulf of Alaska
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2010, 2016, 2017, 2018, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2010	64,270
SSBmsy	SSBmsy-MT	2017	24,485
Fmsy	Fmsy-pr-1/yr	2010	0.071
ERmsy	ERmsy-ratio	2010	0.094
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2010	6070
M	M-1/yr	2010	0.06
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2016	0.073
ERlim	-	-	-

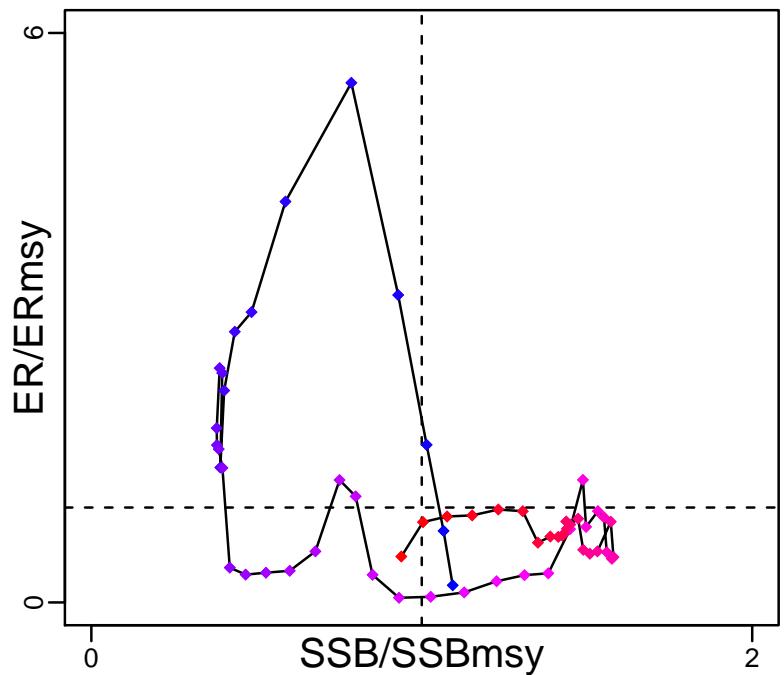
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	81,900	-	2+	
SSB	SSB-MT	2018	39,819	-	-	
TN	-	-	-	-	-	
R	R-E00	2018	9,922,190	-	2	
F	F-1/yr	2018	0.022	-	-	
ER	ER-calc-ratio	2018	0.015	-	-	
TC	TC-MT	2018	1836			
TL	-	-	-			
TB/TBmsy	TB-MT/TBmsy-calc-MT	2010	1.603			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2017	1.204			
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2010	0.596			
ER/ERmsy	ER-ratio/ERmsy-ratio	2010	0.366			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Northern rockfish Gulf of Alaska [NROCKGA]

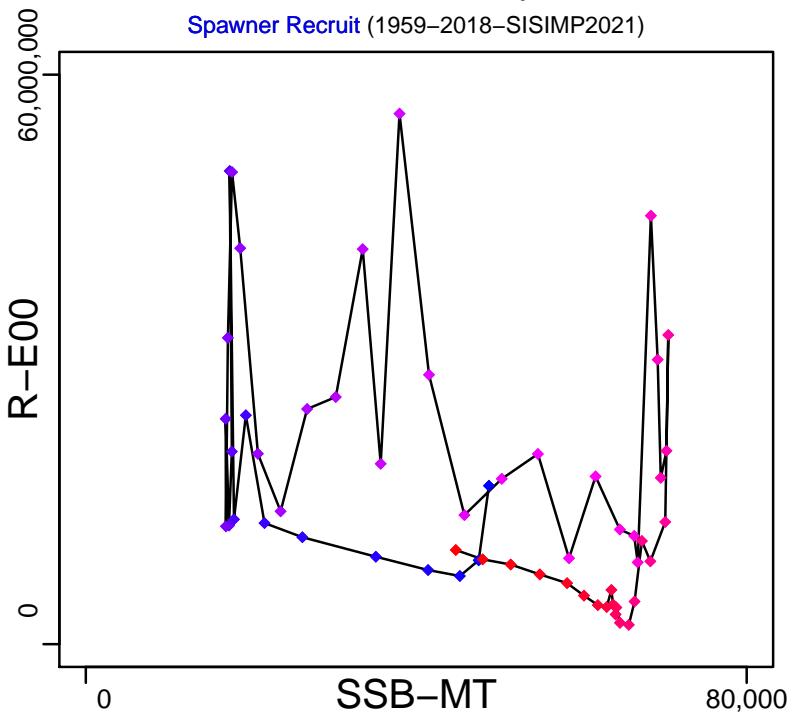
Kobe MSYpref (1959–2018–SISIMP2021)



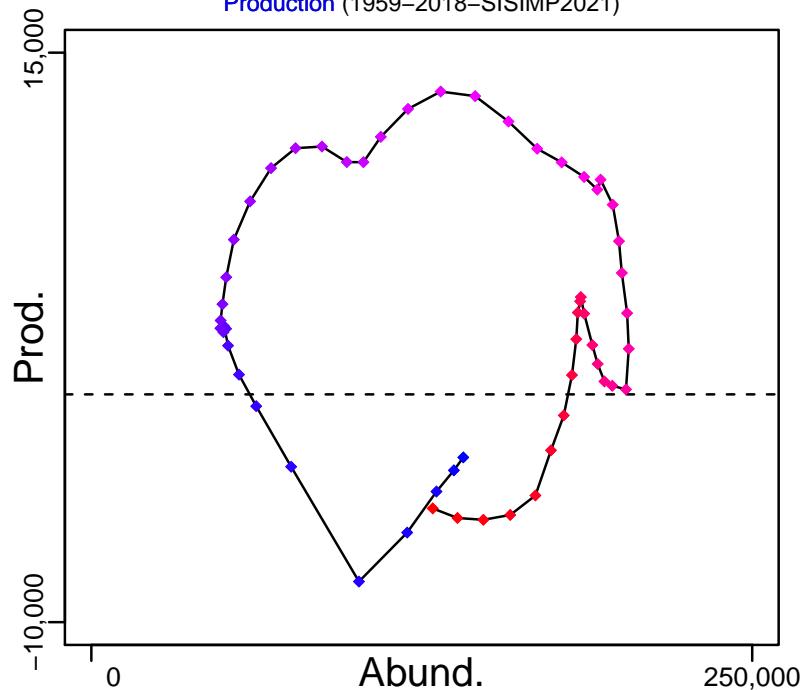
Kobe MGTpref (1959–2018–SISIMP2021)



Spawner Recruit (1959–2018–SISIMP2021)



Production (1959–2018–SISIMP2021)

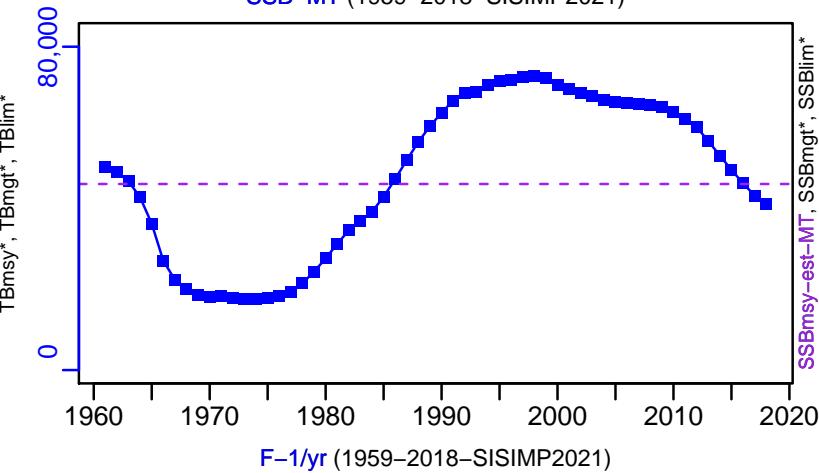
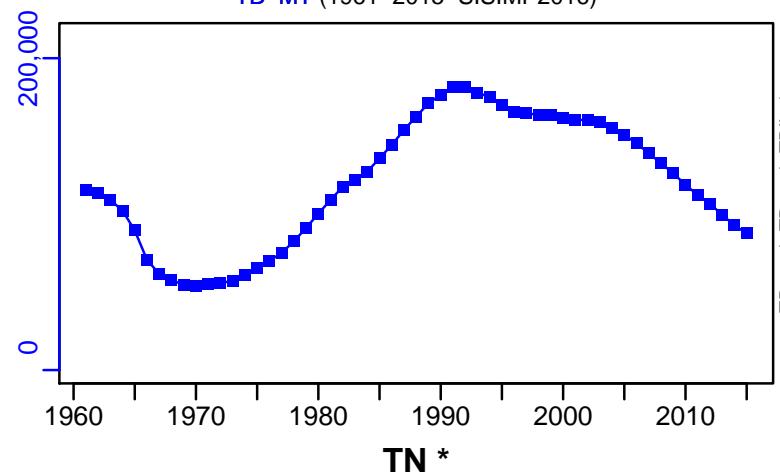


◆ Start Year ◆ End Year * No Data

Northern rockfish Gulf of Alaska [NROCKGA]

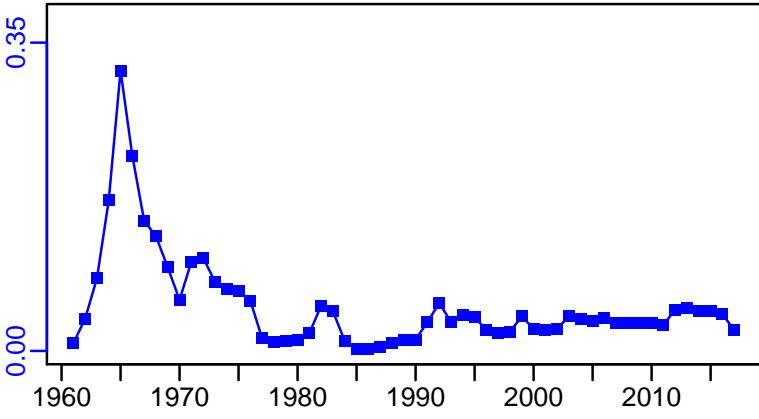
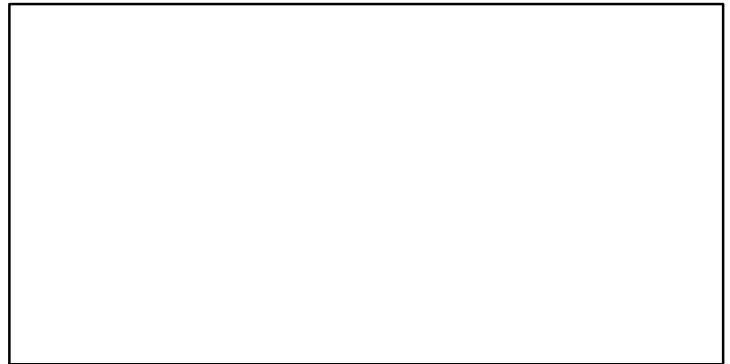
TB-MT (1961–2015–SISIMP2016)

SSB-MT (1959–2018–SISIMP2021)



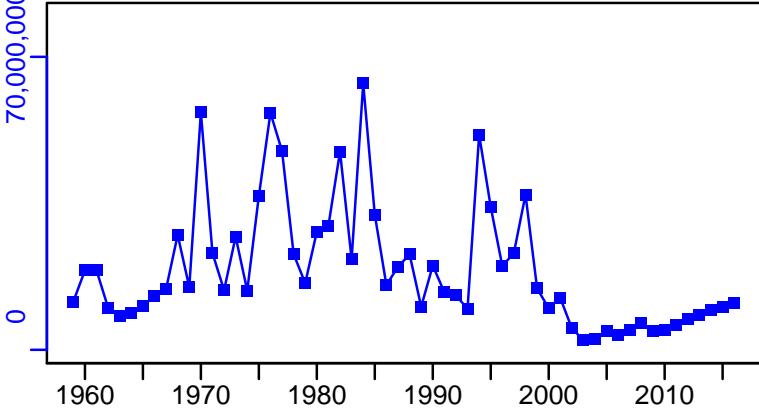
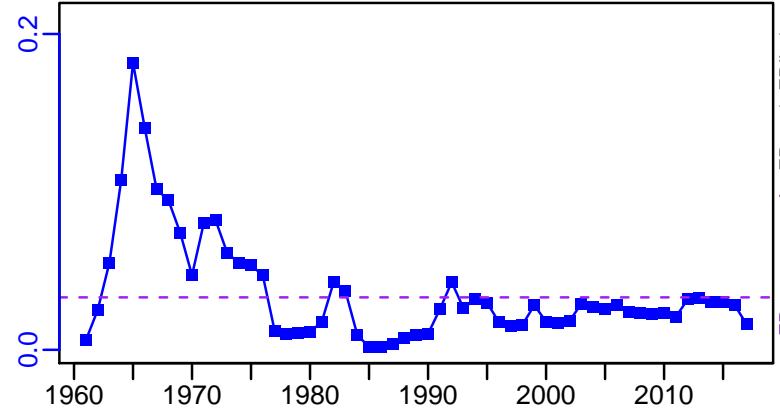
TN *

F-1/yr (1959–2018–SISIMP2021)



ER-calc-ratio (1959–2018–SISIMP2021)

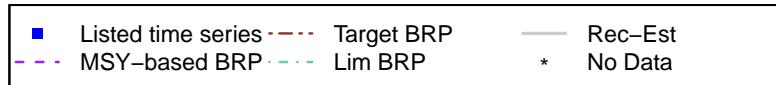
R-E00 (1959–2018–SISIMP2021)



Fmsy*, Fmgt*, Filmt*, Film*

TBmsy*, TBmgt*, TBlim*

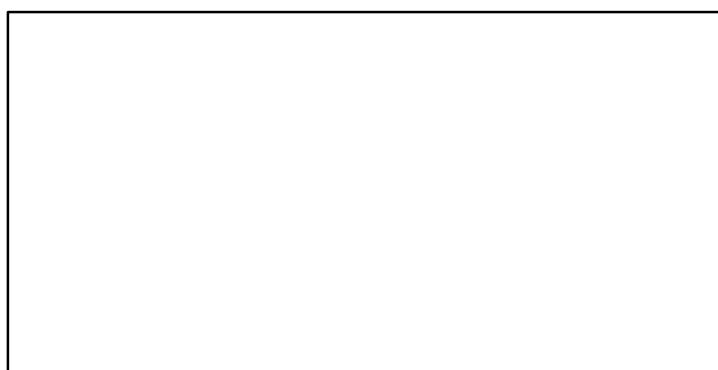
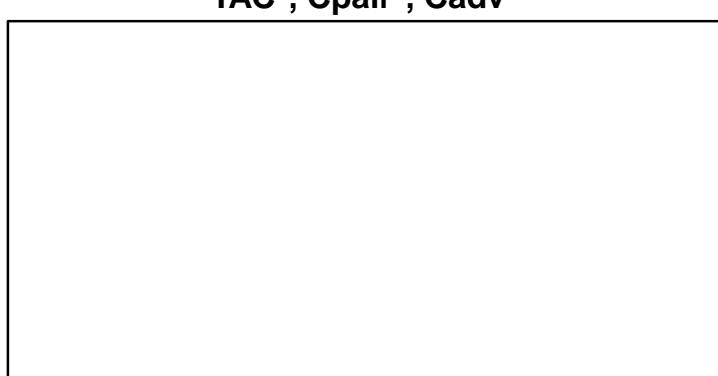
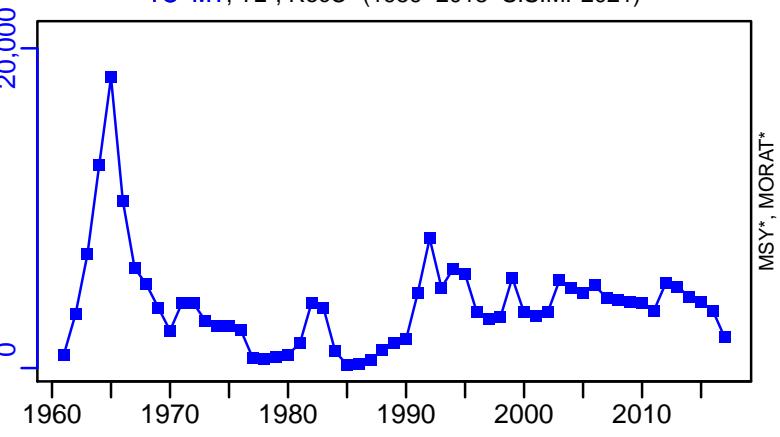
REC-EST*



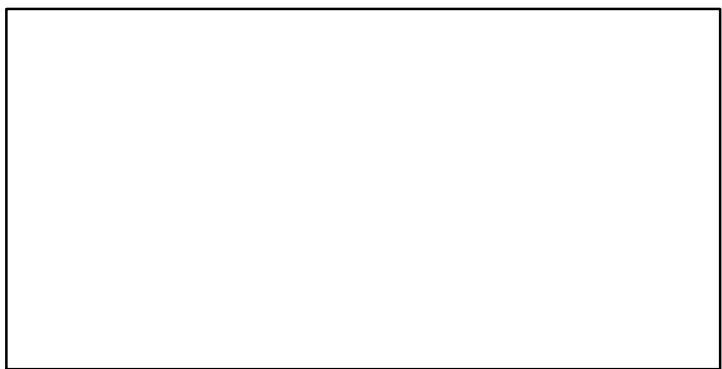
Northern rockfish Gulf of Alaska [NROCKGA]

TC-MT, TL*, RecC* (1959–2018–SISIMP2021)

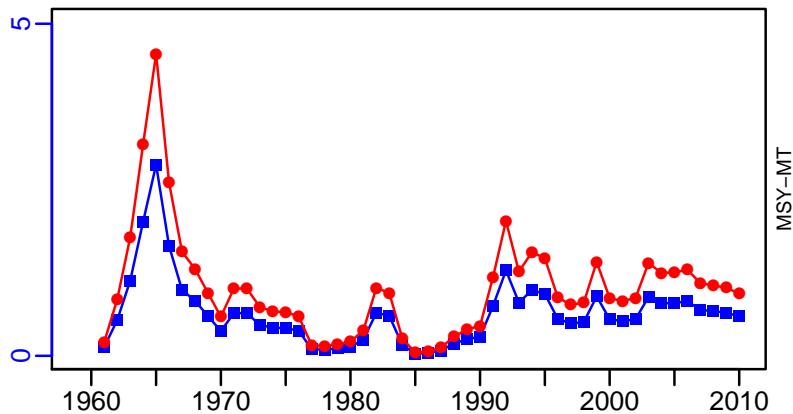
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1959–2010–STACHURA)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Northern rock sole Eastern Bering Sea and Aleutian Islands [NRSOLEEBSAI]

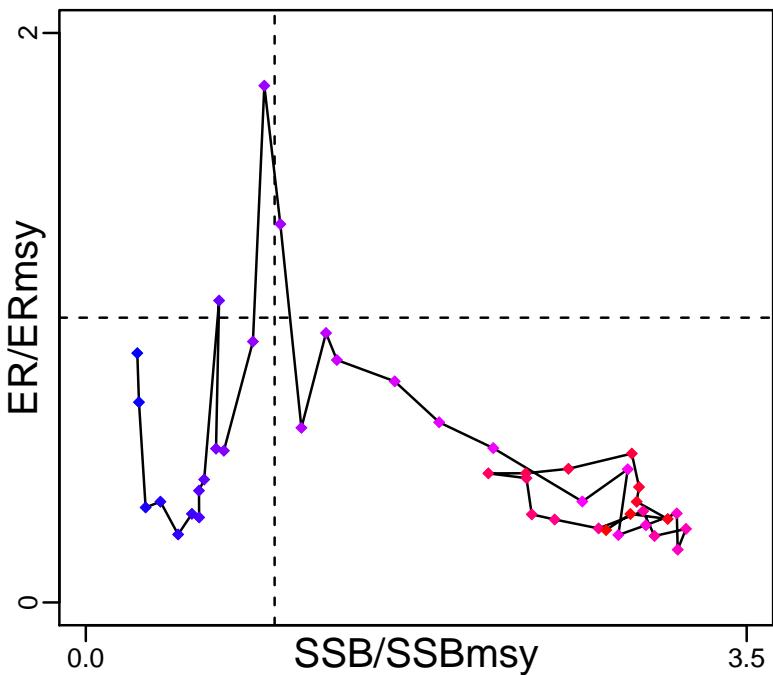
Metadata	
Scientific Name	Lepidopsetta polyxystra
Current Assess ID	AFSC-NRSOLEEBSAI-1974-2018-SISIMP2021
Area	Eastern Bering Sea and Aleutian Islands
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2016, 2018, 2012, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2018	186,000
Fmsy	Fmsy-pr-1/yr	2012	0.164
ERmsy	ERmsy-est-ratio	2018	0.104
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2012	259,310
M	M-1/yr	2012	0.18
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2016	0.194
ERlim	-	-	-

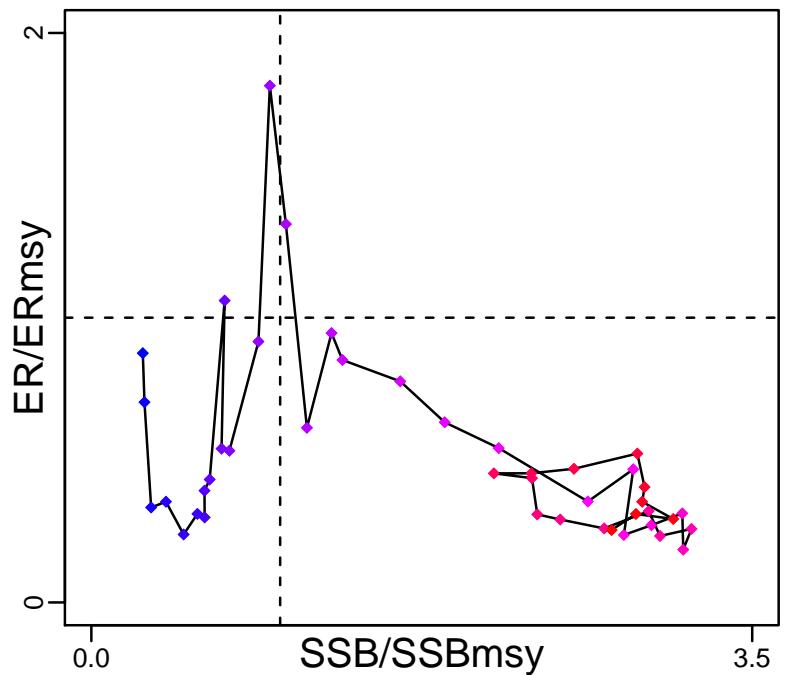
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	1,270,000	-	2+	
SSB	SSB-MT	2018	458,572	-	-	
TN	-	-	-	-	-	
R	R-E00	2018	1,034,960	-	1	
F	F-1/yr	2018	0.051	-	-	
ER	ER-calc-ratio	2018	0.027	-	-	
TC	TC-MT	2018	35,272			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2018	2.465			
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2012	0.366			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.254			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Northern rock sole Eastern Bering Sea and Aleutian Islands [NRSOLEEBSAI]

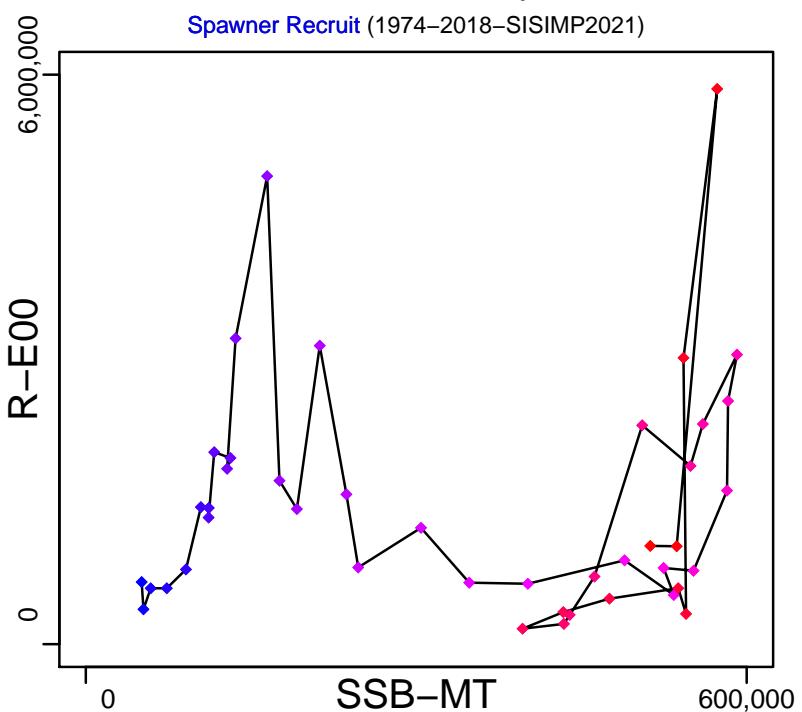
Kobe MSYpref (1974–2018–SISIMP2021)



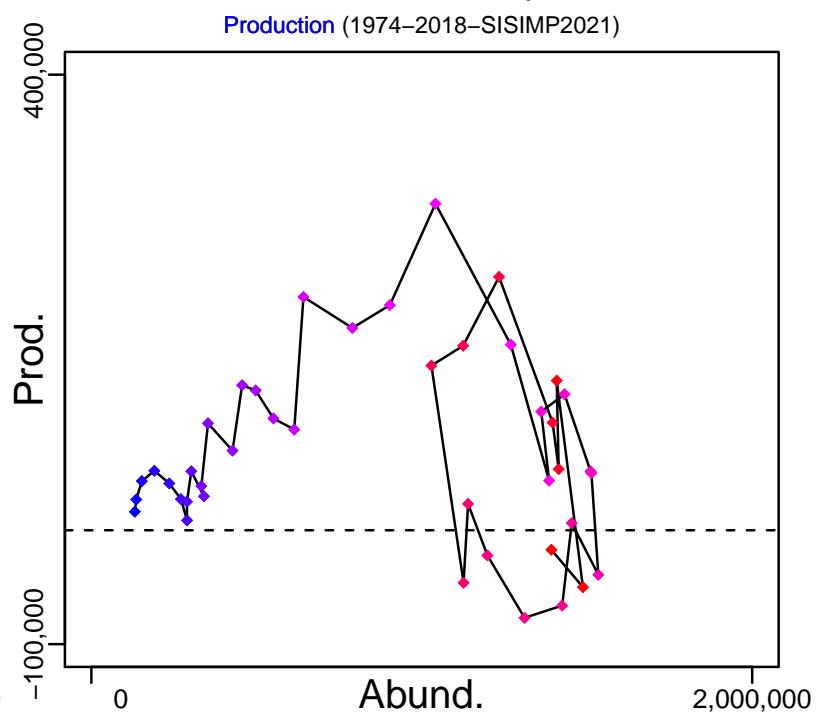
Kobe MGTpref (1974–2018–SISIMP2021)



Spawner Recruit (1974–2018–SISIMP2021)



Production (1974–2018–SISIMP2021)

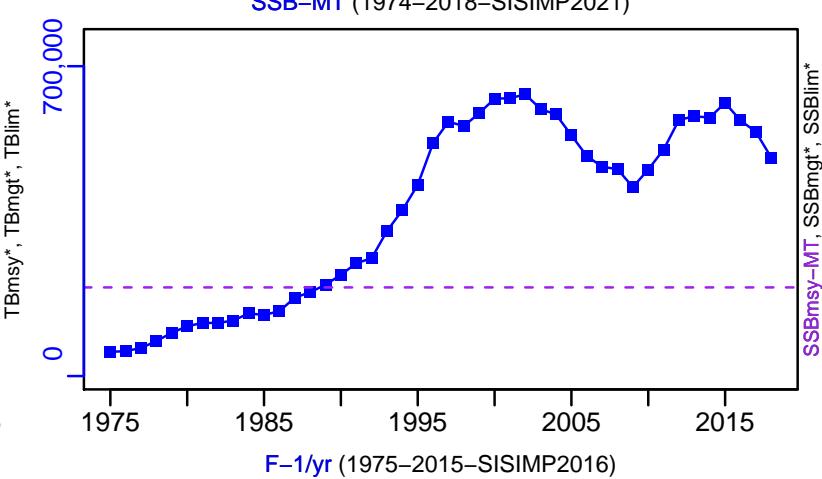
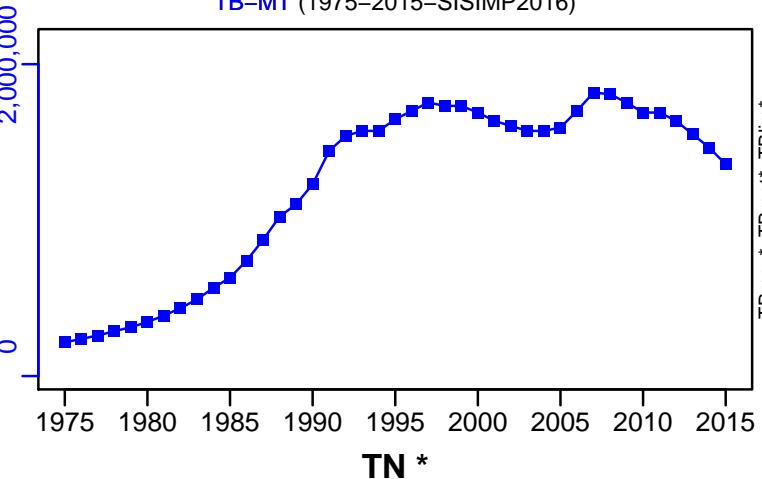


◆ Start Year ◆ End Year * No Data

Northern rock sole Eastern Bering Sea and Aleutian Islands [NRSOLEEBSAI]

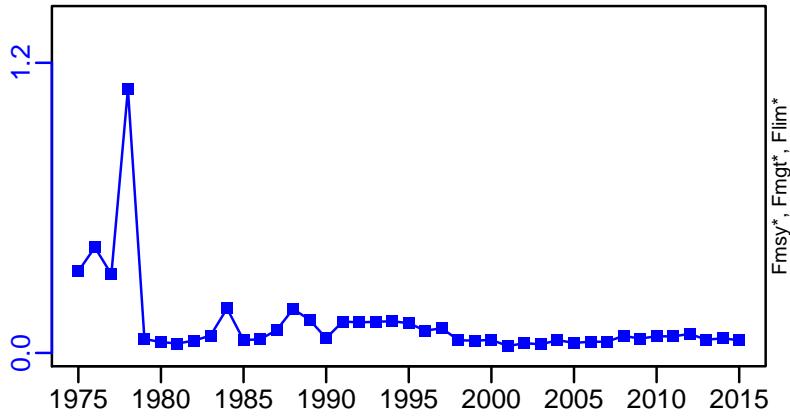
TB-MT (1975–2015–SISIMP2016)

SSB-MT (1974–2018–SISIMP2021)



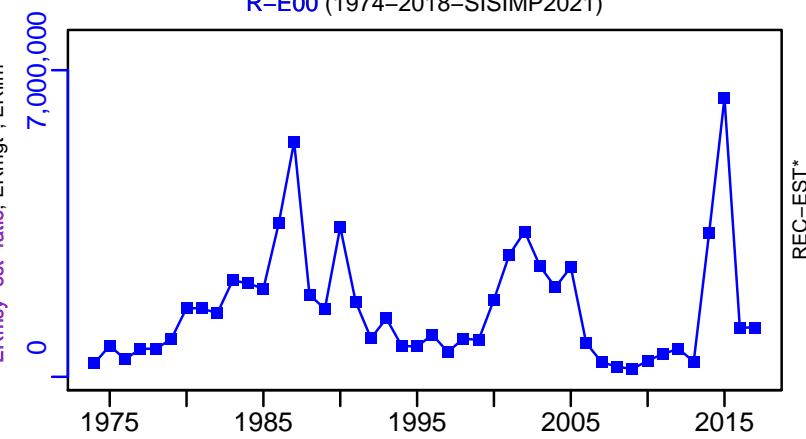
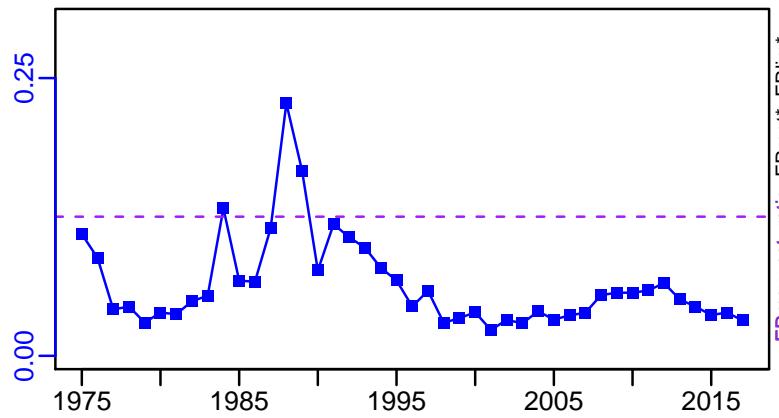
TN *

F-1/yr (1975–2015–SISIMP2016)



ER-calc-ratio (1974–2018–SISIMP2021)

R-E00 (1974–2018–SISIMP2021)

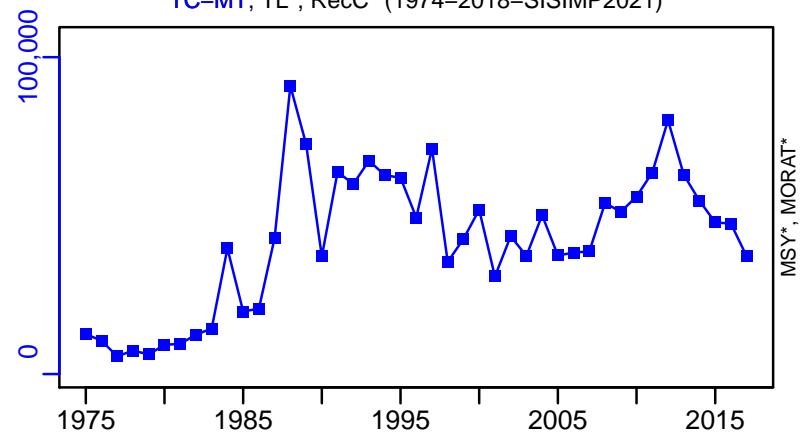


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - Lim BRP	* No Data

Northern rock sole Eastern Bering Sea and Aleutian Islands [NRSOLEEBSAI]

TC-MT, TL*, RecC* (1974–2018–SISIMP2021)

TAC*, Cpair*, Cadv*



MSY*, MORAT*

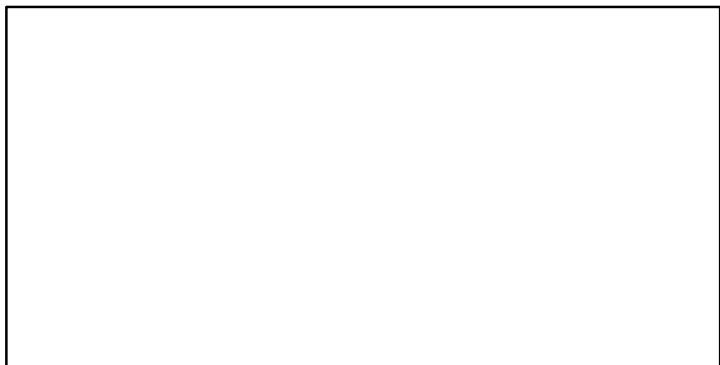
survB*



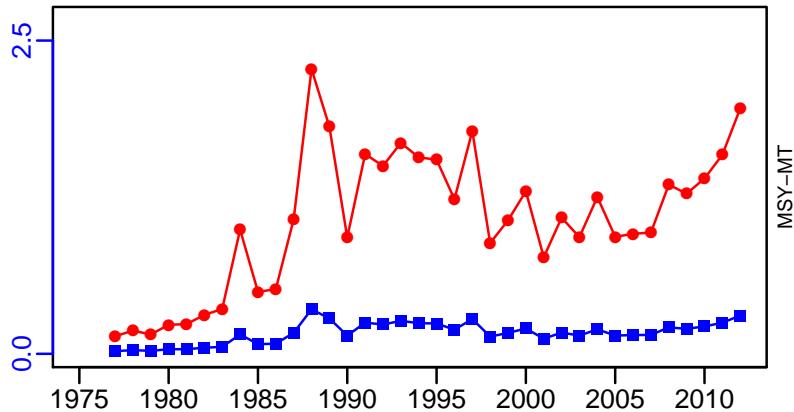
CPUE*



EFFORT*



TC-MT/MSY-MT, CdiveMEANC-ratio, (1975–2012–HIVELY)



MSY-MT

■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Northern rock sole Gulf of Alaska [NRSOLEGA]

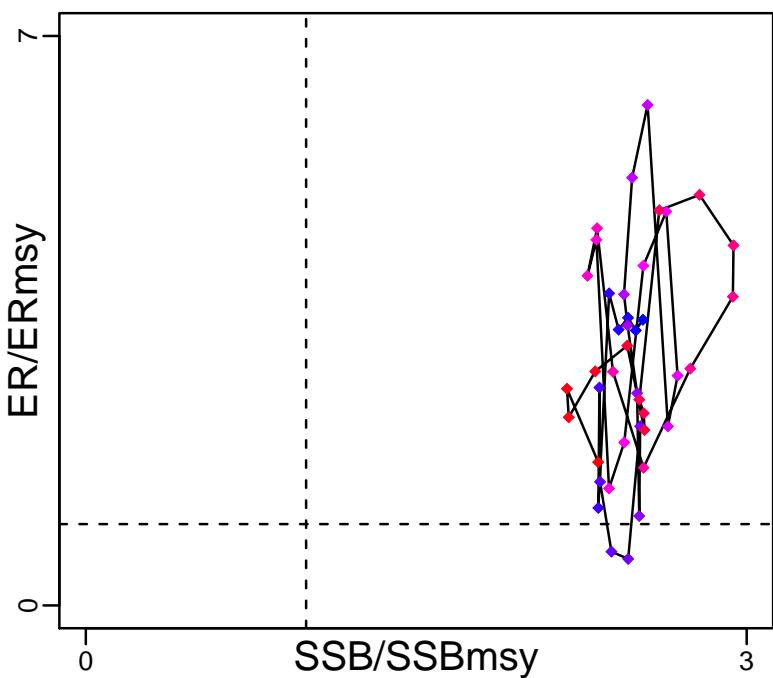
Metadata	
Scientific Name	Lepidopsetta polyxystra
Current Assess ID	AFSC-NRSOLEGA-1977-2018-SISIMP2021
Area	Gulf of Alaska
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2015, 2016, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2018	17,985
Fmsy	-	-	-
ERrmsy	ERrmsy-est-ratio	2018	0.006
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2018	259
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2018	0.462
ERlim	-	-	-

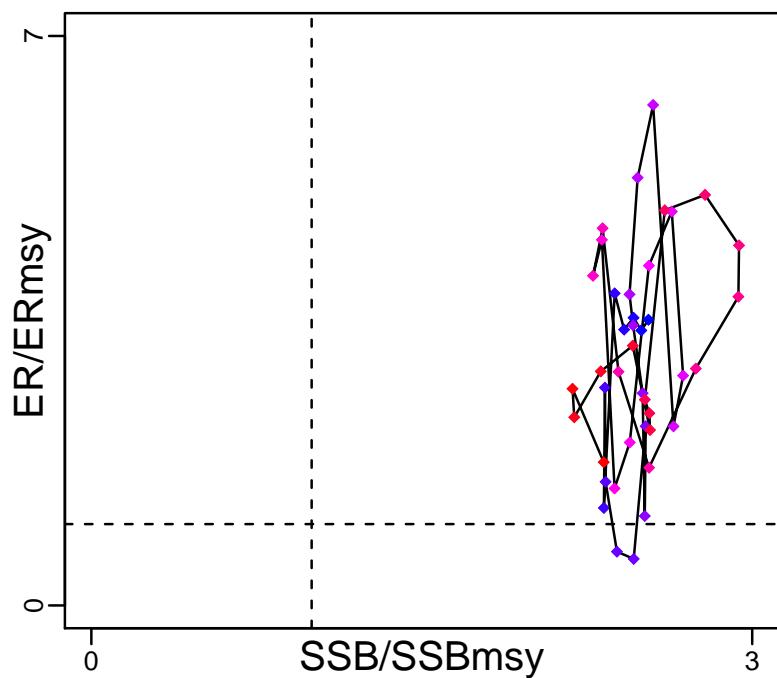
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	75,600	-	3+	
SSB	SSB-MT	2018	44,662	-	-	
TN	-	-	-	-	-	
R	R-E00	2018	127,100,400	-	0	
F	F-1/yr	2018	0.023	-	-	
ER	ER-calc-ratio	2018	0.011	-	-	
TC	TC-MT	2018	1059			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2018	2.483			
F/Fmsy	-	-	-			
ER/ERrmsy	ER-calc-ratio/ERrmsy-est-ratio	2018	1.761			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Northern rock sole Gulf of Alaska [NRSOLEGA]

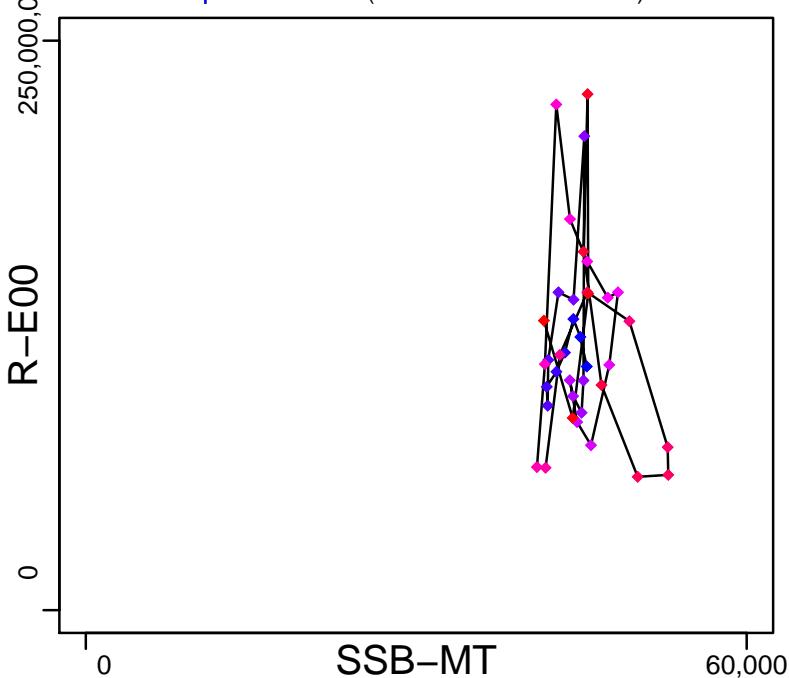
Kobe MSYpref (1977–2018–SISIMP2021)



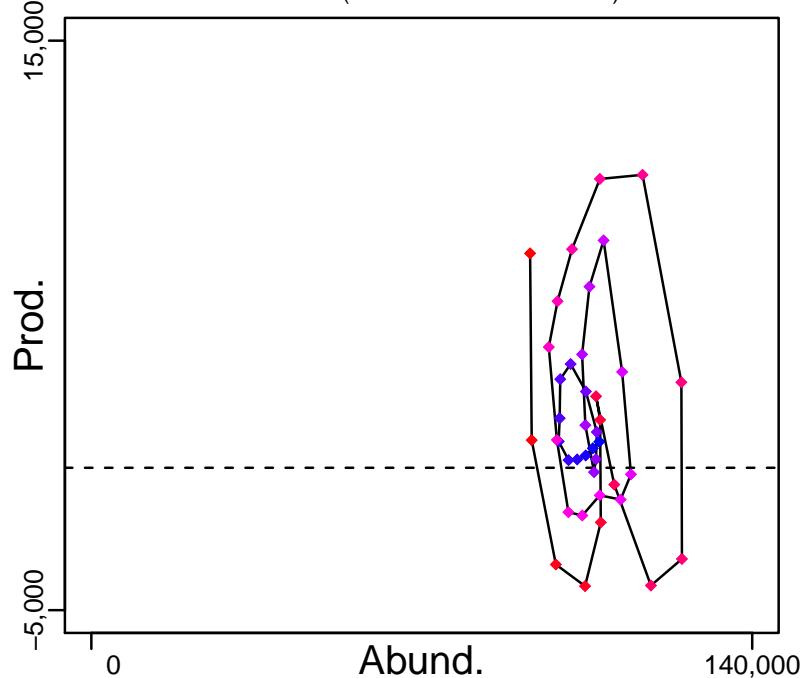
Kobe MGTpref (1977–2018–SISIMP2021)



Spawner Recruit (1977–2018–SISIMP2021)



Production (1977–2018–SISIMP2021)

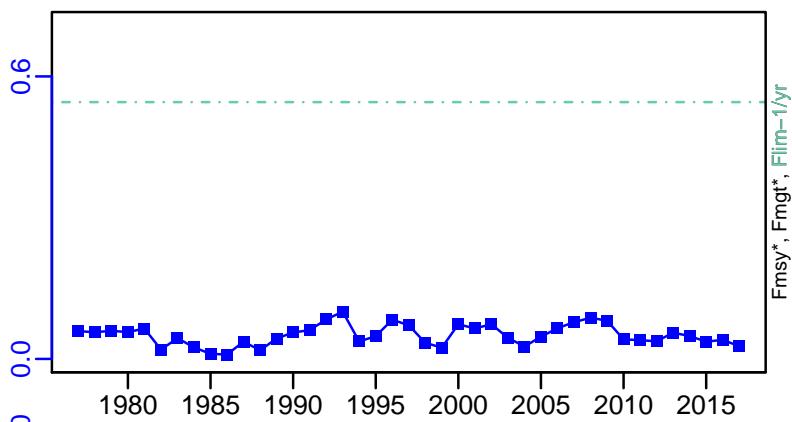
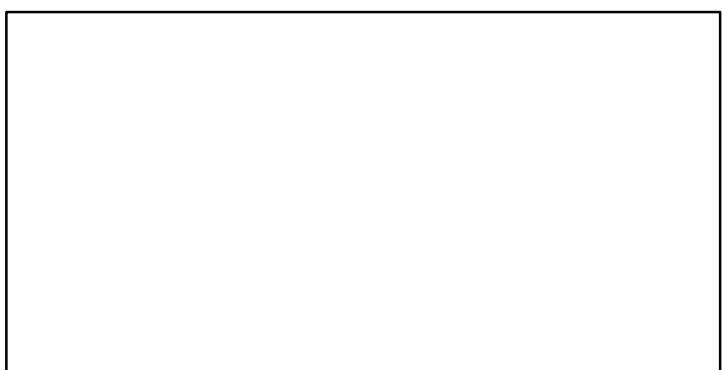
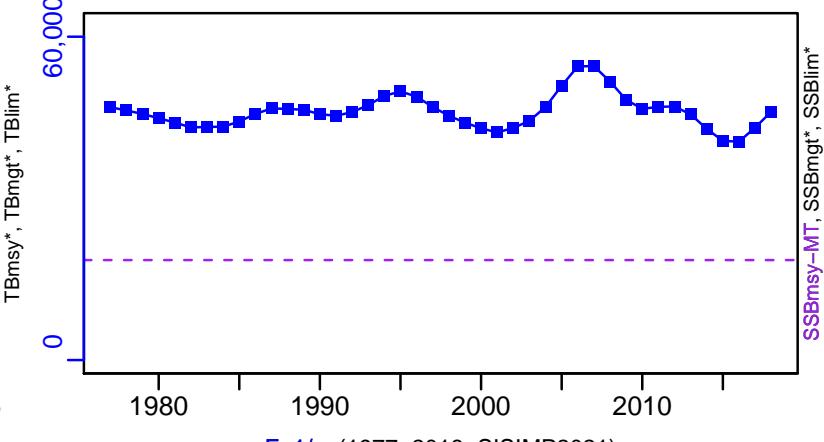
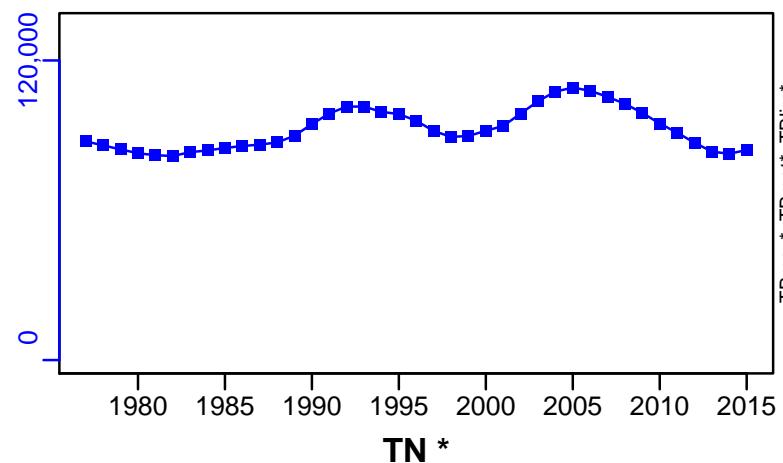


- ◆ Start Year
- ◆ End Year
- * No Data

Northern rock sole Gulf of Alaska [NRSOLEGA]

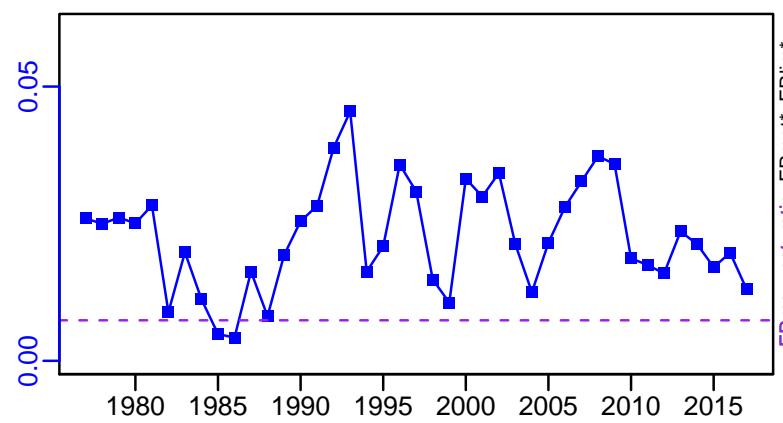
TB-MT (1977–2015–SISIMP2016)

SSB-MT (1977–2018–SISIMP2021)

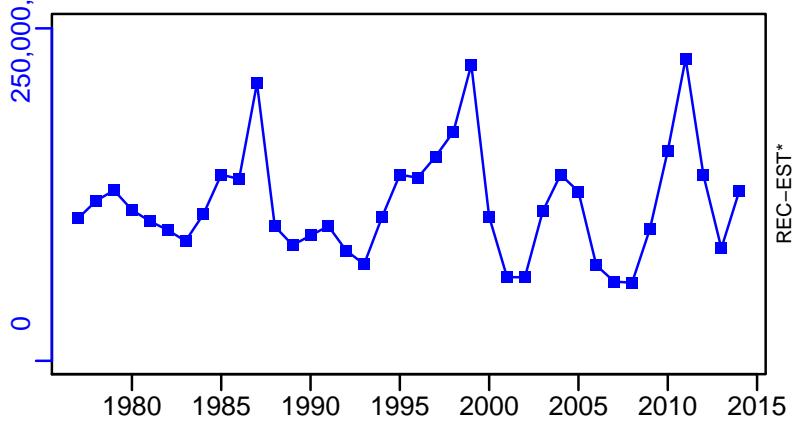


ER-calc-ratio (1977–2018–SISIMP2021)

ERmsy-est-ratio, ERmgt*, ERlim*



R-E00 (1977–2018–SISIMP2021)

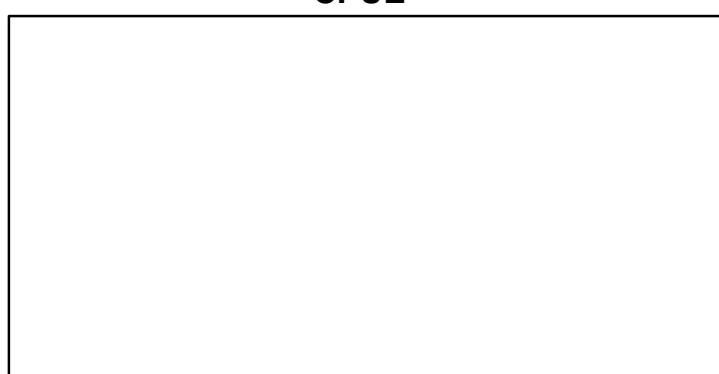
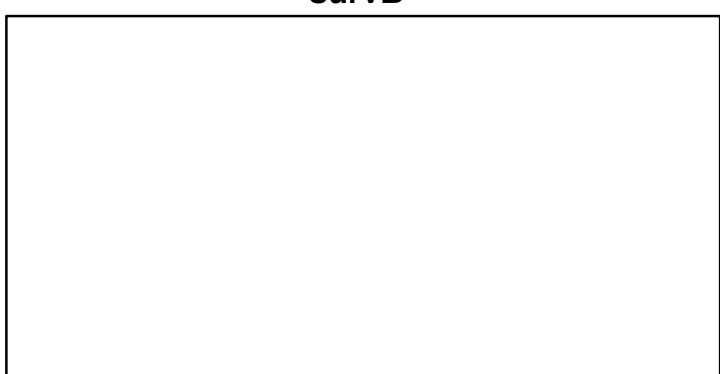
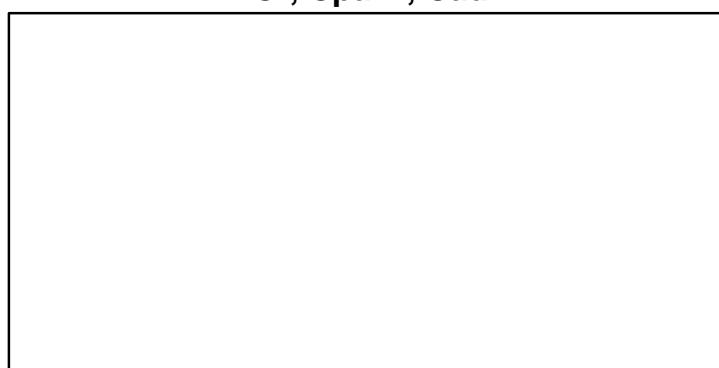
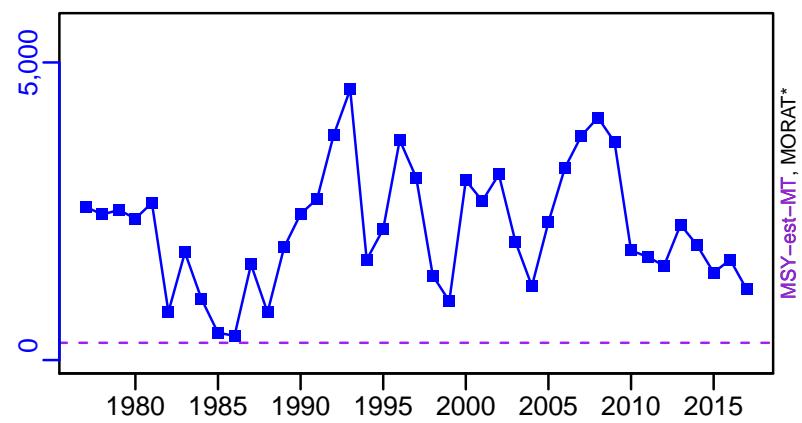


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

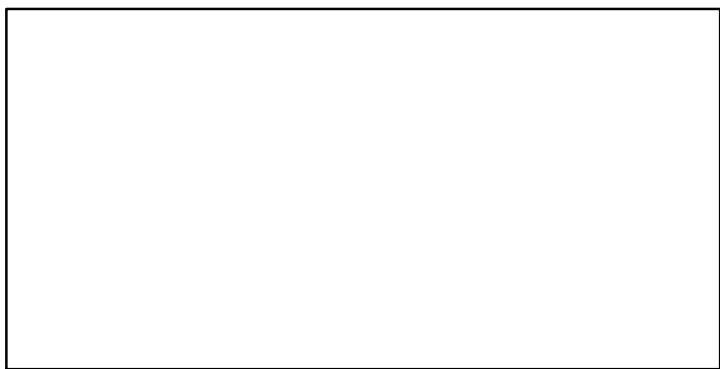
Northern rock sole Gulf of Alaska [NRSOLEGA]

TC-MT, TL*, RecC* (1977–2018–SISIMP2021)

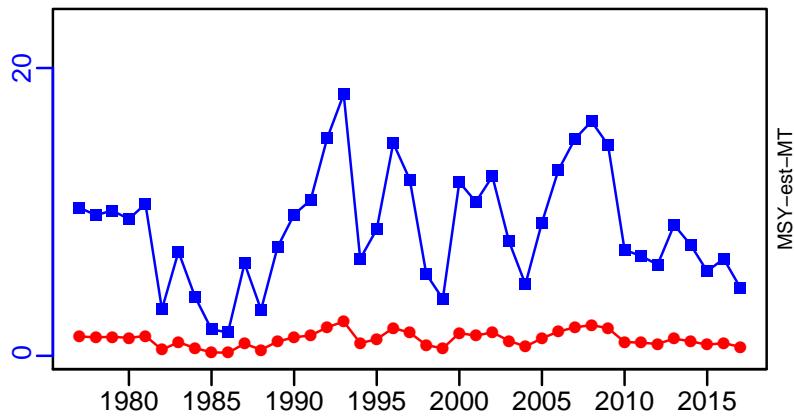
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1977–2018–SISIMP2021)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Pacific cod Aleutian Islands [PCODAI]

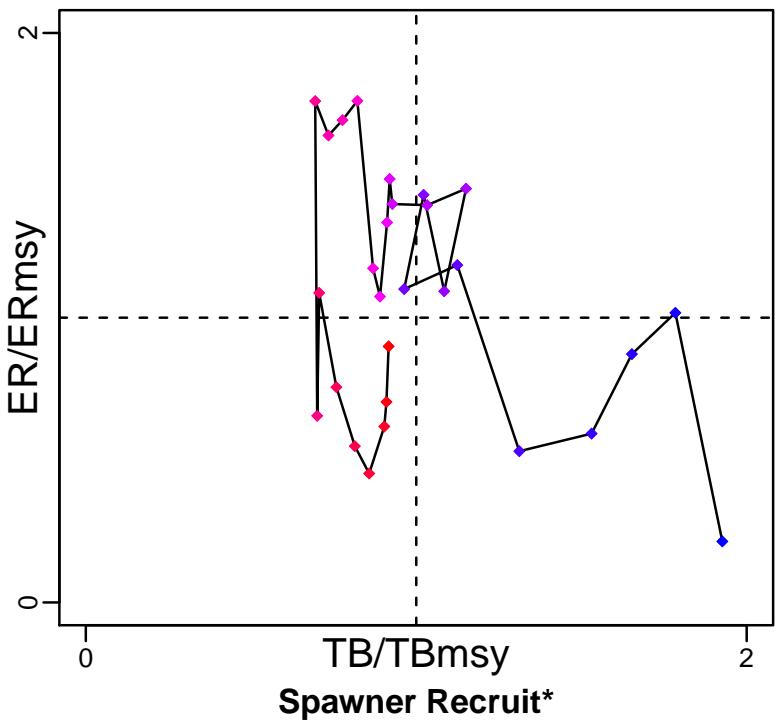
Metadata	
Scientific Name	Gadus macrocephalus
Current Assess ID	AFSC-PCODAI-1991-2018-SISIMP2021
Area	Aleutian Islands
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2014, 2016, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2018	88,063
SSBmsy	-	-	-
Fmsy	-	-	-
ERrmsy	ERrmsy-est-ratio	2018	0.269
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2018	23,732
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

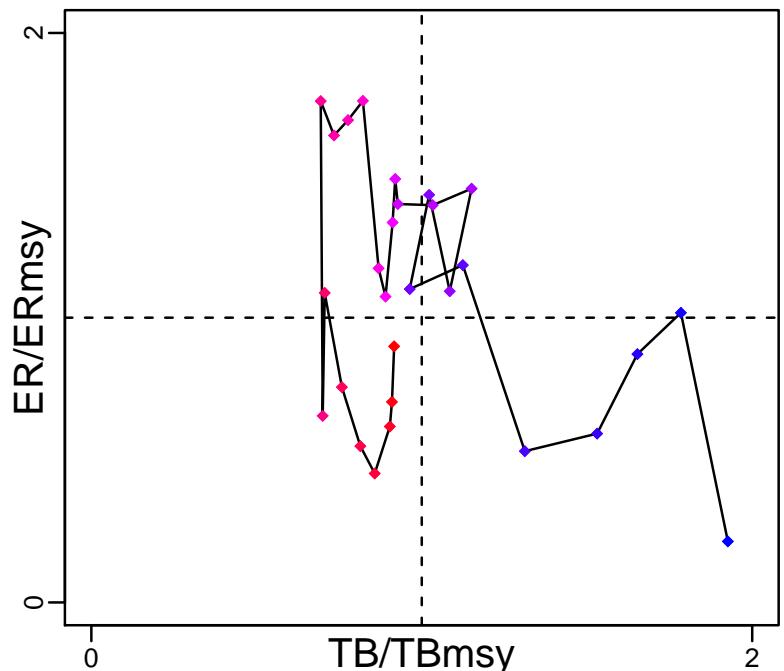
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2018	80,696	-	-	
SSB	-	-	-	-	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	-	-	-	-	-	
ER	ER-calc-ratio	2018	0.242	-	-	
TC	TC-MT	2018	19,558			
TL	-	-	-			
TB/TBmsy	TB-MT/TBmsy-est-MT	2018	0.916			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERrmsy	ER-calc-ratio/ERrmsy-est-ratio	2018	0.899			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Pacific cod Aleutian Islands [PCODAI]

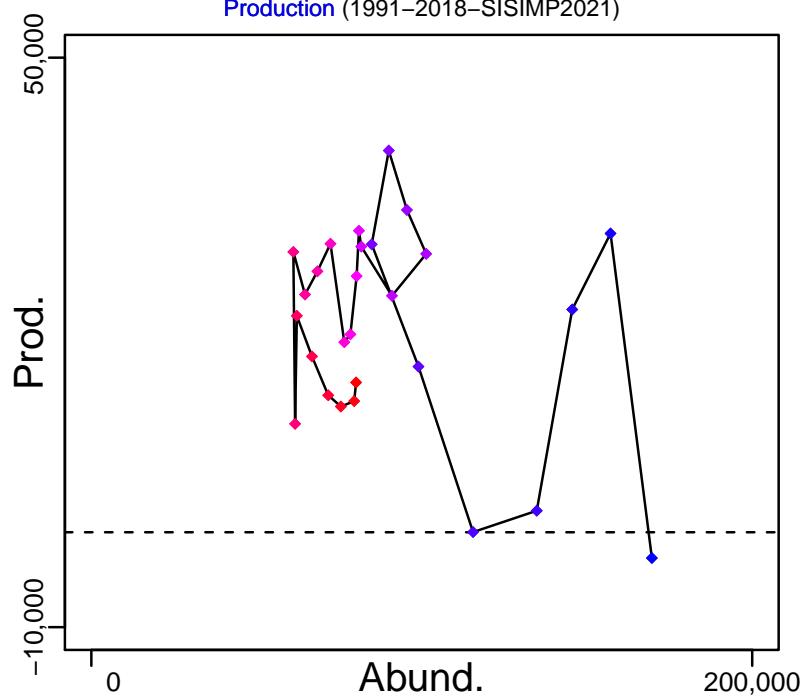
Kobe MSYpref (1991–2018–SISIMP2021)



Kobe MGTpref (1991–2018–SISIMP2021)



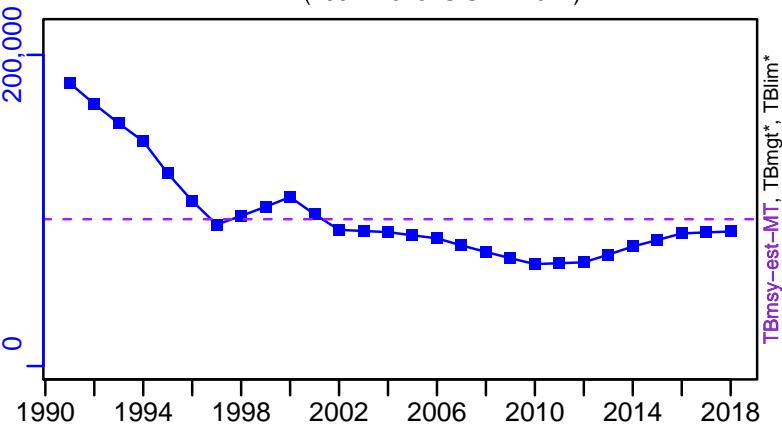
Production (1991–2018–SISIMP2021)



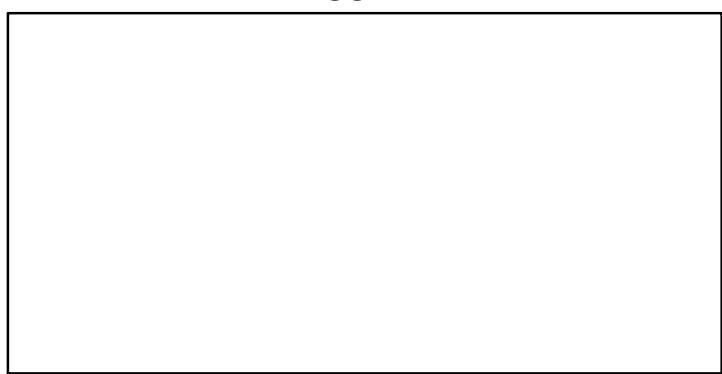
◆ Start Year ◆ End Year * No Data

Pacific cod Aleutian Islands [PCODAI]

TB-MT (1991–2018–SISIMP2021)



SSB*



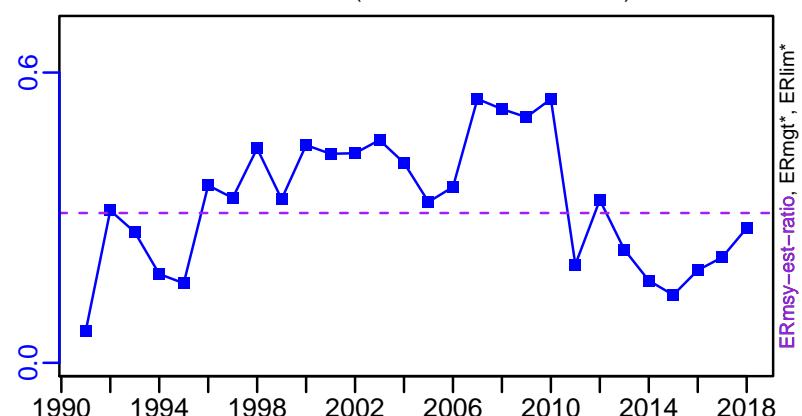
TN *



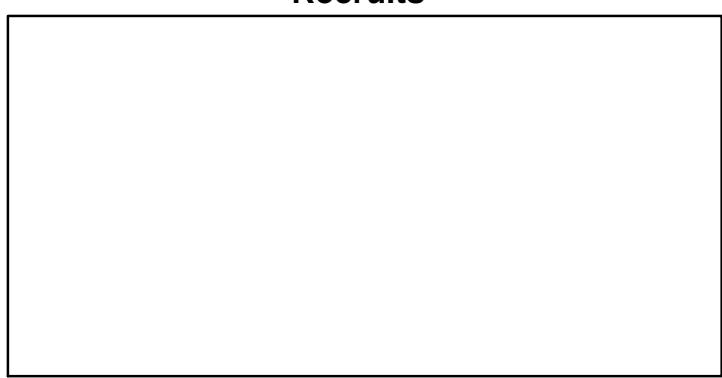
F*



ER-calc-ratio (1991–2018–SISIMP2021)



Recruits*

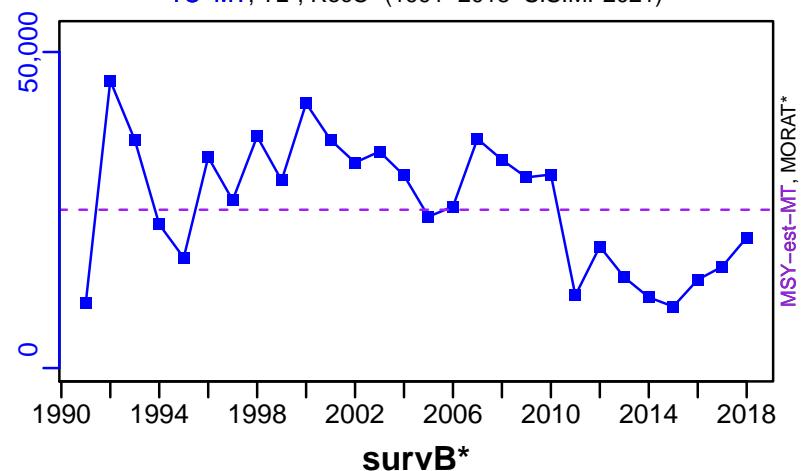


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | — Lim BRP | * No Data |

Pacific cod Aleutian Islands [PCODAI]

TC-MT, TL*, RecC* (1991–2018–SISIMP2021)

TAC*, Cpair*, Cadv*



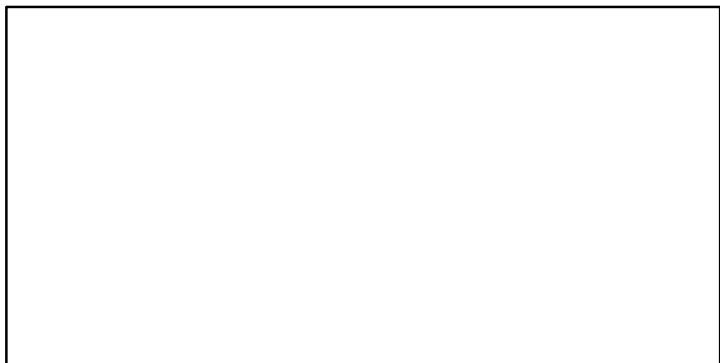
survB*



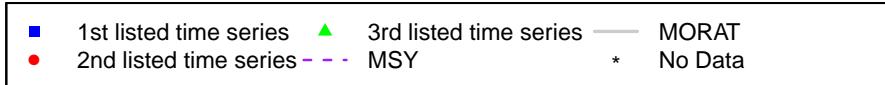
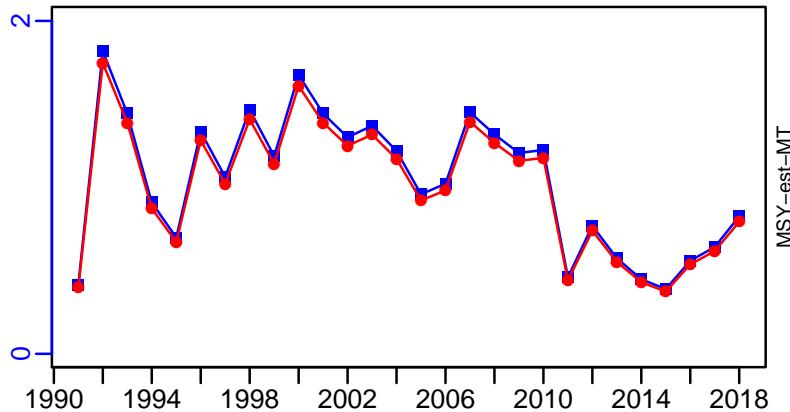
CPUE*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1991–2018–SISIMP2021)



Pacific cod Bering Sea [PCODBS]

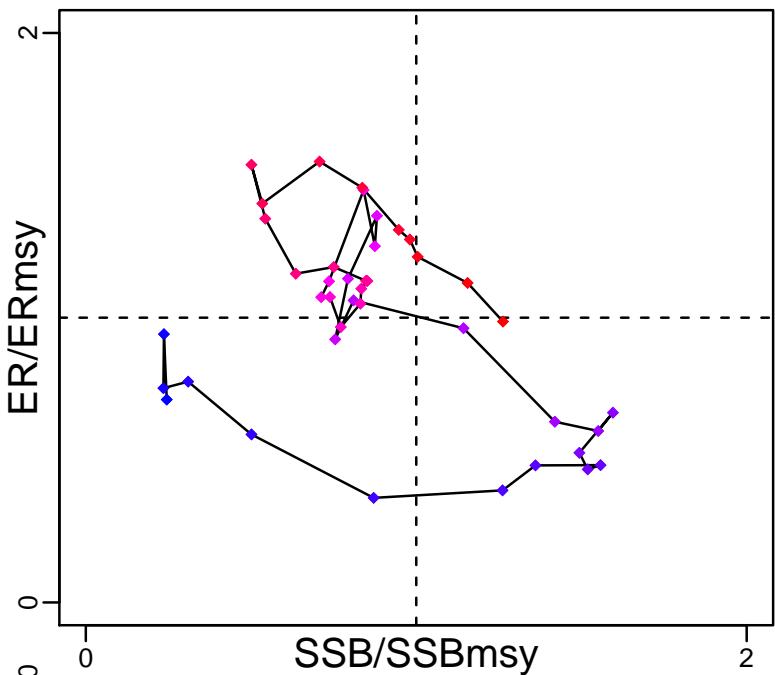
Metadata	
Scientific Name	Gadus macrocephalus
Current Assess ID	AFSC-PCODBS-1977-2018-SISIMP2021
Area	Bering Sea
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2015, 2016, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2018	230,000
Fmsy	-	-	-
ERmsy	ERmsy-est-ratio	2018	0.229
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2018	190,996
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2018	0.474
ERlim	-	-	-

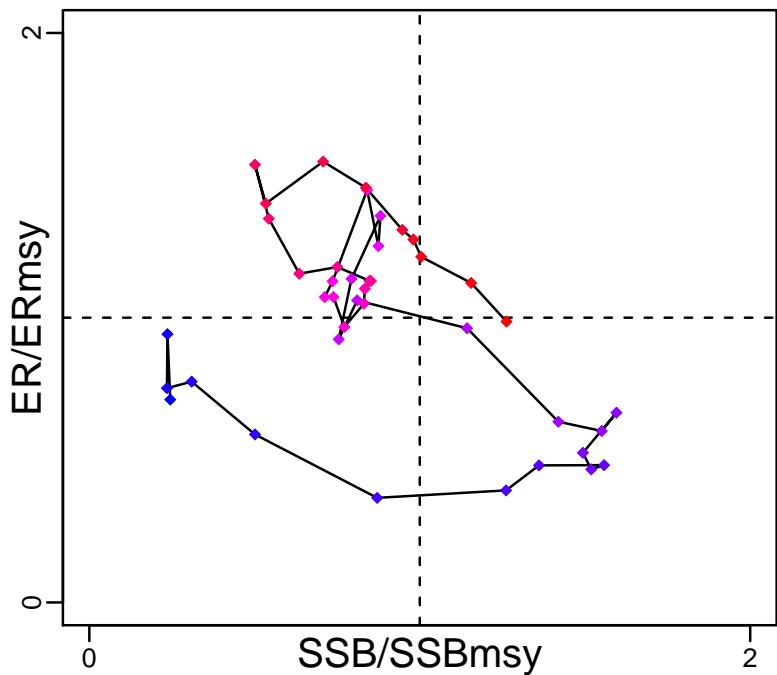
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	1,670,000	-	0+	
SSB	SSB-MT	2018	303,676	-	-	
TN	-	-	-	-	-	
R	R-E00	2018	435,409,000	-	0	
F	F-1/yr	2018	0.384	-	-	
ER	ER-calc-ratio	2018	0.226	-	-	
TC	TC-MT	2018	237,858			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2018	1.32			
F/Fmsy	-	-	-			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.986			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Pacific cod Bering Sea [PCODBS]

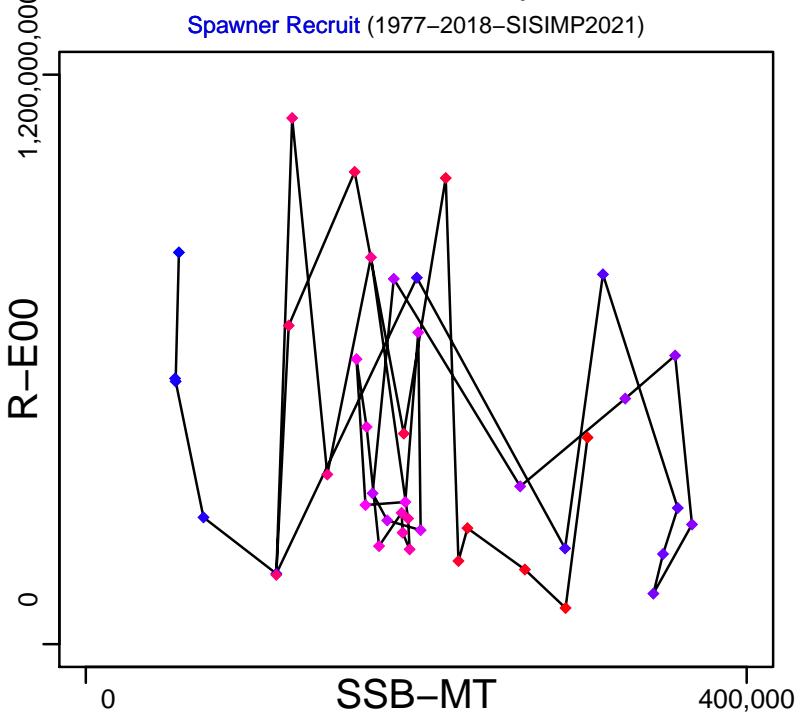
Kobe MSYpref (1977–2018–SISIMP2021)



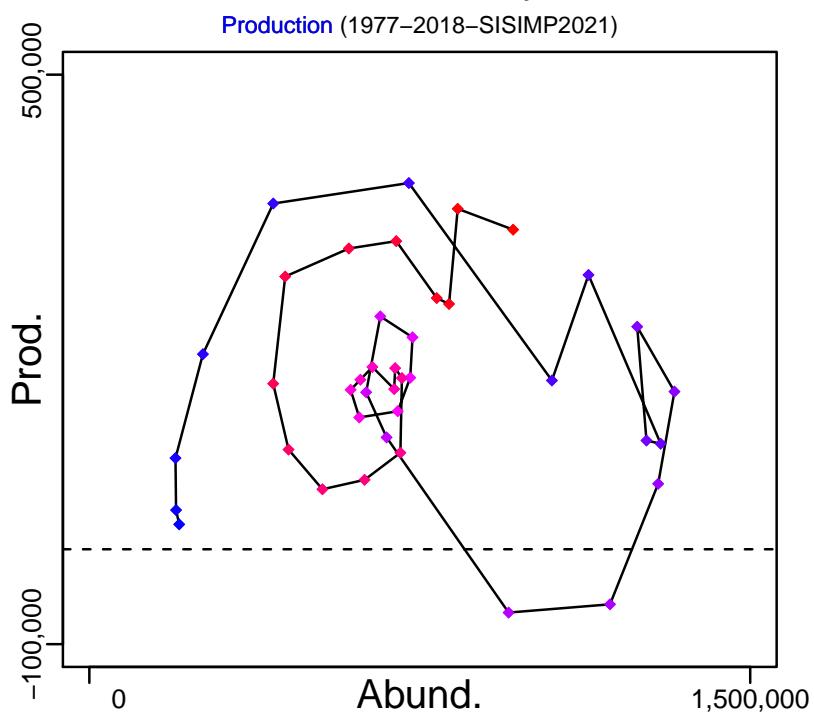
Kobe MGTpref (1977–2018–SISIMP2021)



Spawner Recruit (1977–2018–SISIMP2021)



Production (1977–2018–SISIMP2021)

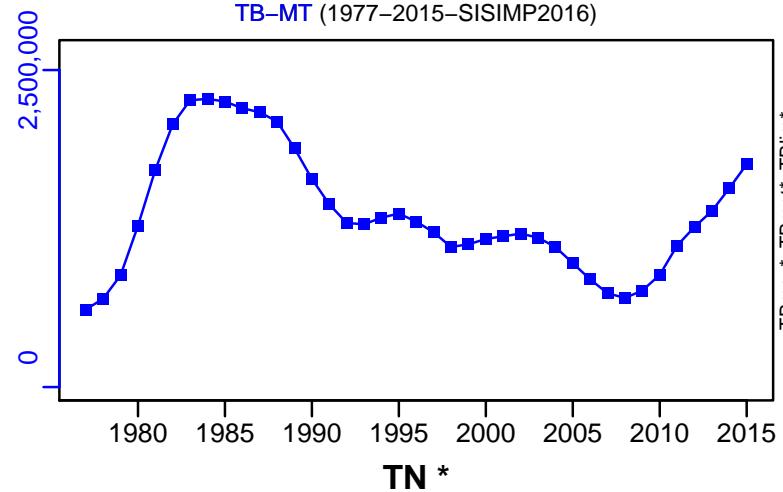


◆ Start Year	◆ End Year	*	No Data
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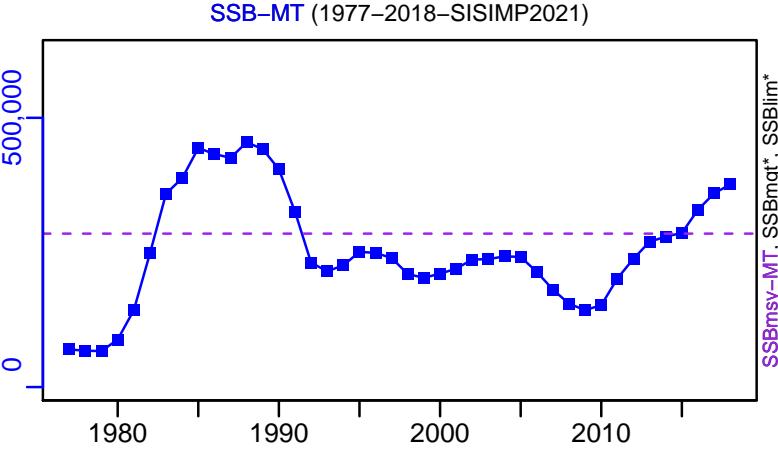
Pacific cod Bering Sea [PCODBS]

TB-MT (1977–2015–SISIMP2016)

SSB-MT (1977–2018–SISIMP2021)



TB_msy*, TB_{mgt}, TB_{lim}*

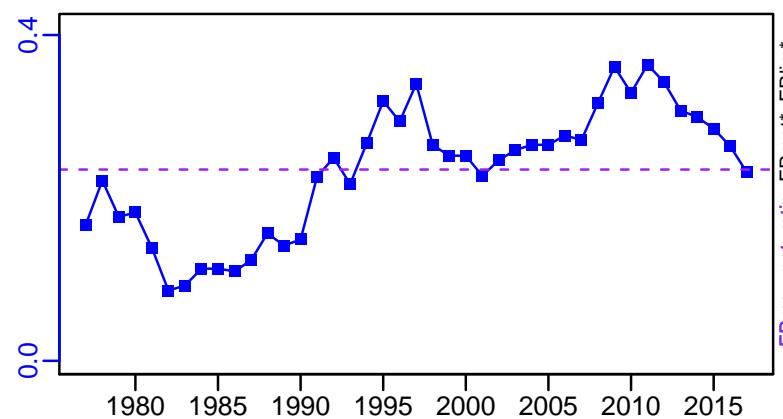


F_msy*, F_{mgt}, F_{lim}-1/yr

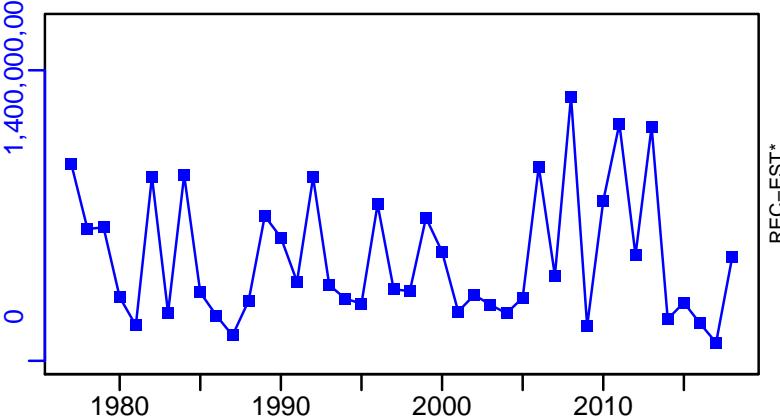


ER-calc-ratio (1977–2018–SISIMP2021)

R-E00 (1977–2018–SISIMP2021)



ER_msy-est-ratio, ER_{mgt}, ER_{lim}*

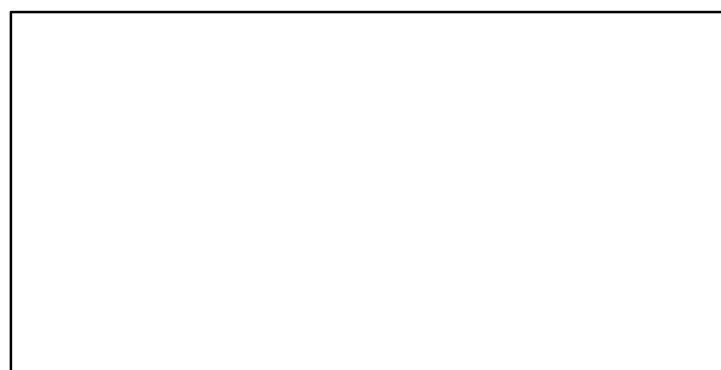
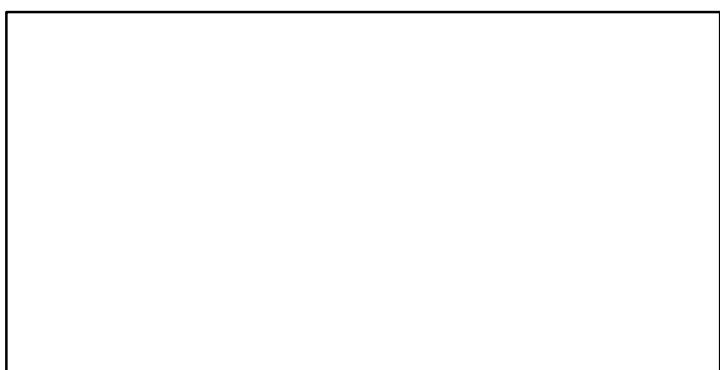
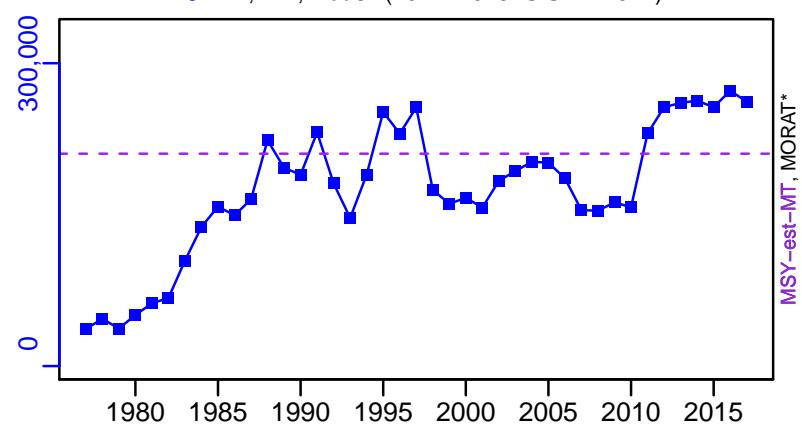


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	--- Lim BRP	* No Data

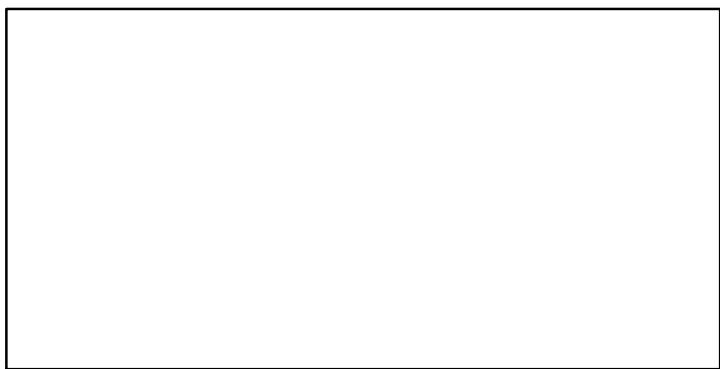
Pacific cod Bering Sea [PCODBS]

TC-MT, TL*, RecC* (1977–2018–SISIMP2021)

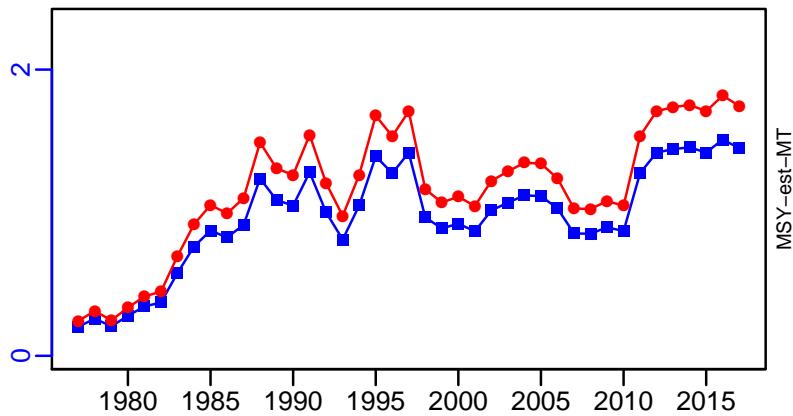
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1977–2018–SISIMP2021)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Pacific cod Gulf of Alaska [PCODGA]

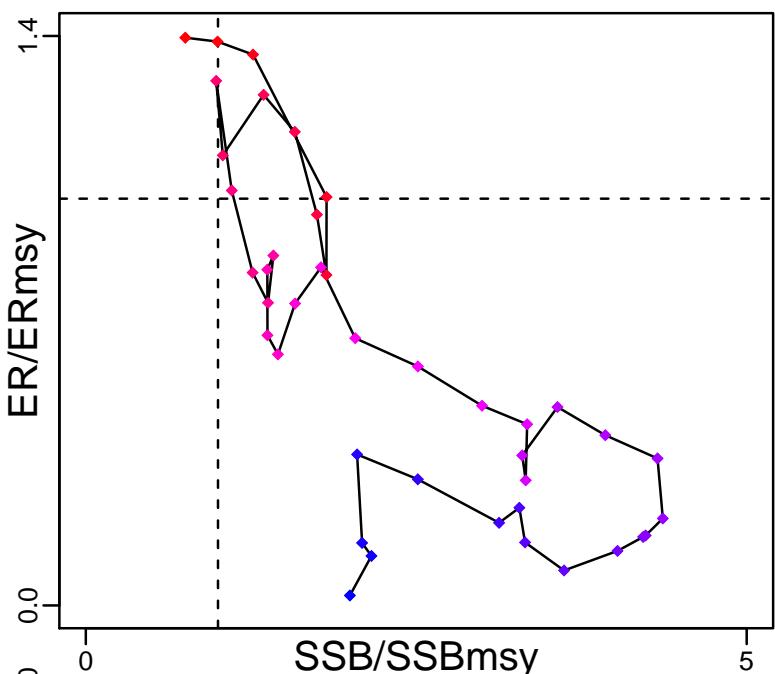
Metadata	
Scientific Name	Gadus macrocephalus
Current Assess ID	AFSC-PCODGA-1977-2018-SISIMP2021
Area	Gulf of Alaska
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2014, 2015, 2016, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2018	60,284
Fmsy	Fmsy-pr-1/yr	2014	0.69
ERmsy	ERmsy-est-ratio	2018	0.256
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2014	91,100
Fmgt	Fmgt-1/yr	2015	0.495
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2018	46,390
M	M-1/yr	2014	0.38
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2018	0.593
ERlim	-	-	-

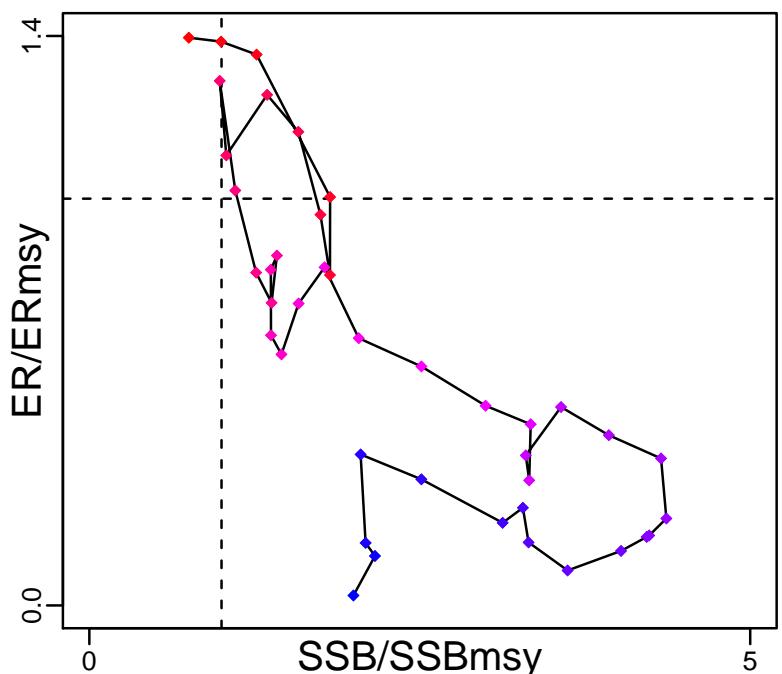
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	640,000	-	3+	
SSB	SSB-MT	2018	39,723	-	-	
TN	-	-	-	-	-	
R	R-E00	2018	702,851,000	-	0	
F	F-1/yr	2018	0.732	-	-	
ER	ER-calc-ratio	2018	0.357	-	-	
TC	TC-MT	2018	48,734			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2018	0.659			
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2014	0.549			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	1.396			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2014	1.614			
F/Fmgt	F-1/yr/Fmgt-1/yr	2015	0.218			
ER/ERmgt	-	-	-			

Pacific cod Gulf of Alaska [PCODGA]

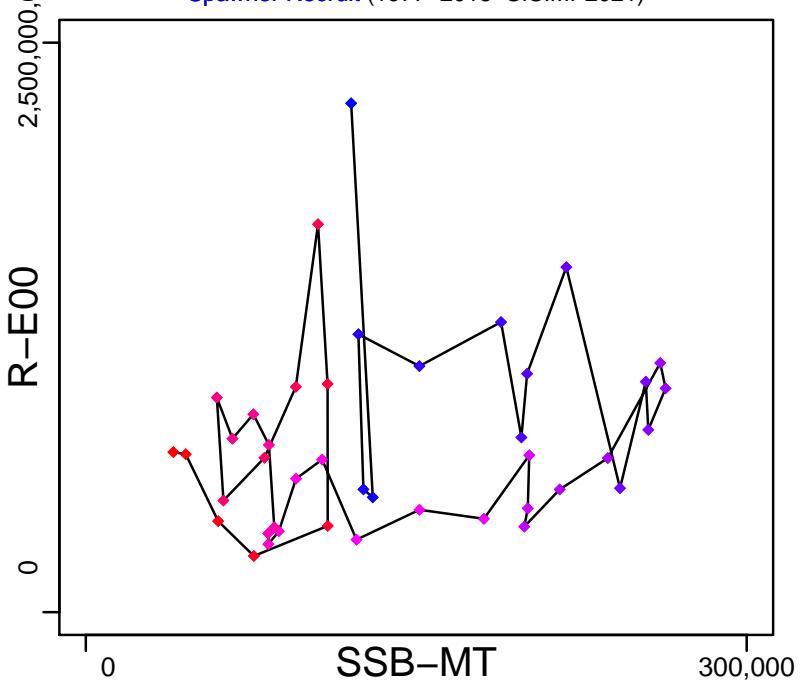
Kobe MSYpref (1977–2018–SISIMP2021)



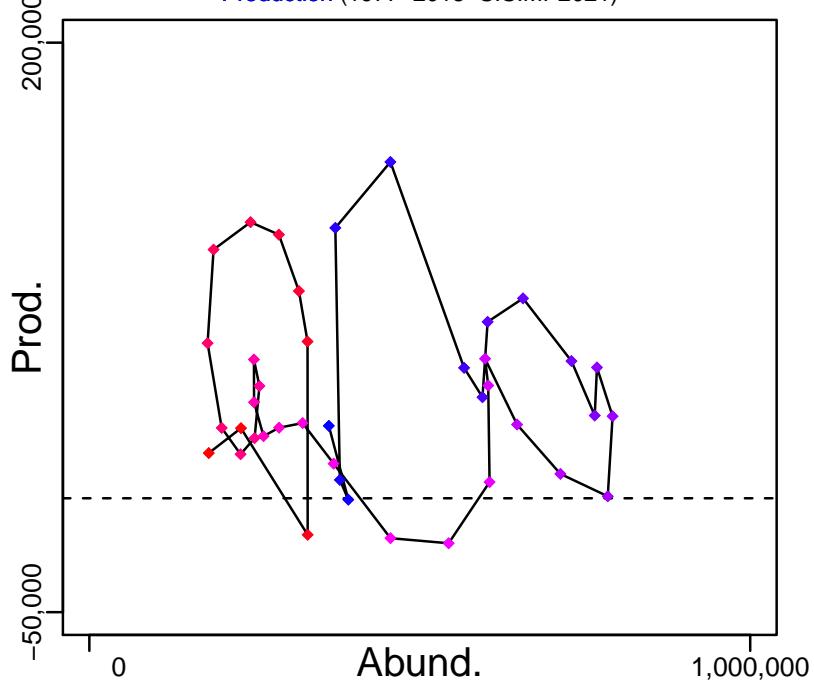
Kobe MGTpref (1977–2018–SISIMP2021)



Spawner Recruit (1977–2018–SISIMP2021)



Production (1977–2018–SISIMP2021)

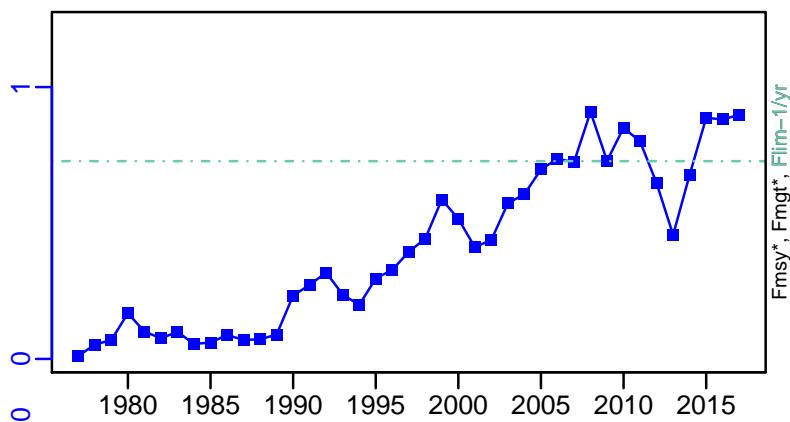
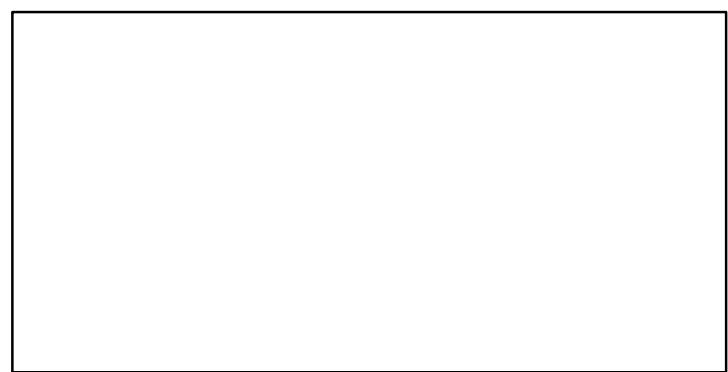
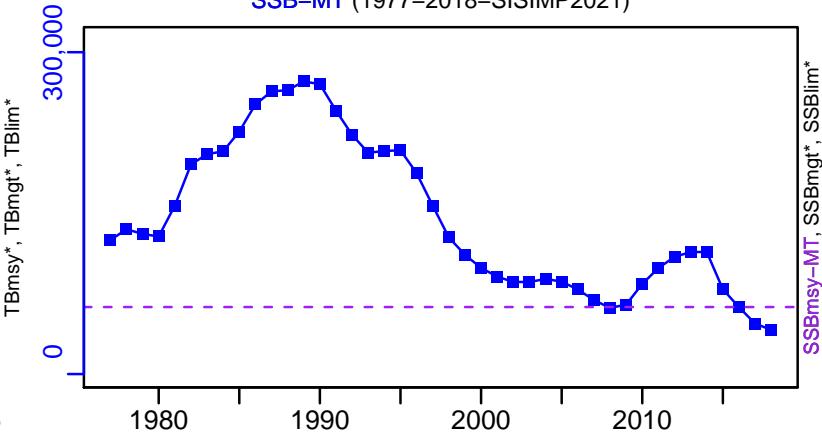
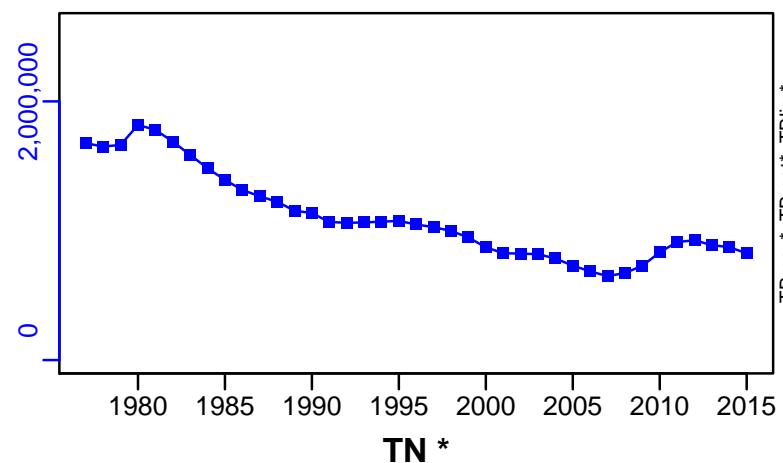


◆ Start Year ♦ End Year * No Data

Pacific cod Gulf of Alaska [PCODGA]

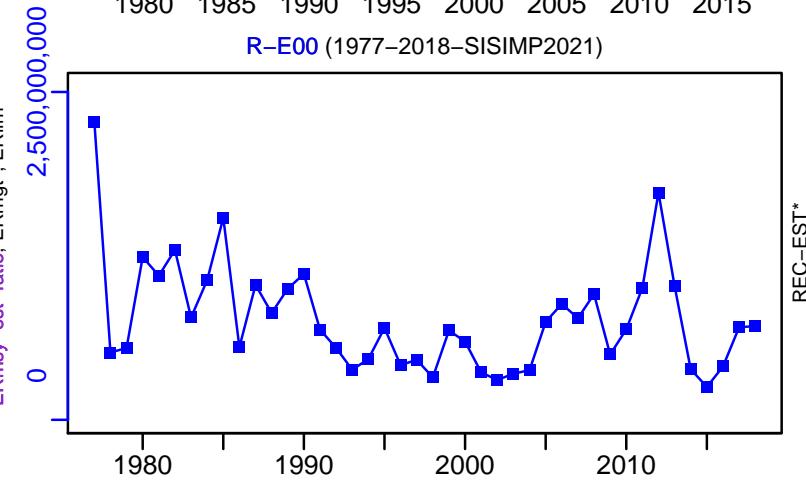
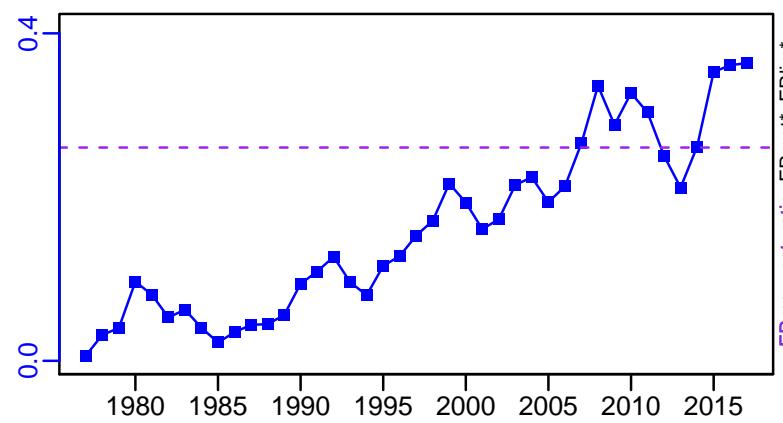
TB-MT (1977–2015–SISIMP2016)

SSB-MT (1977–2018–SISIMP2021)



ER-calc-ratio (1977–2018–SISIMP2021)

R-E00 (1977–2018–SISIMP2021)

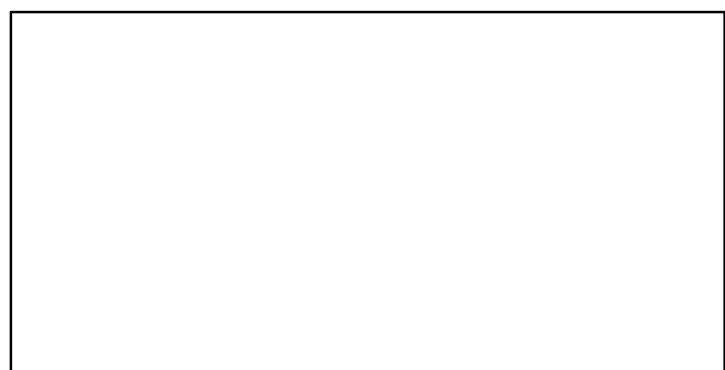
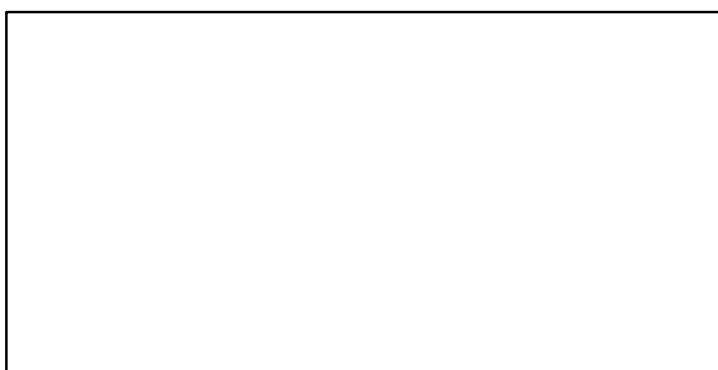
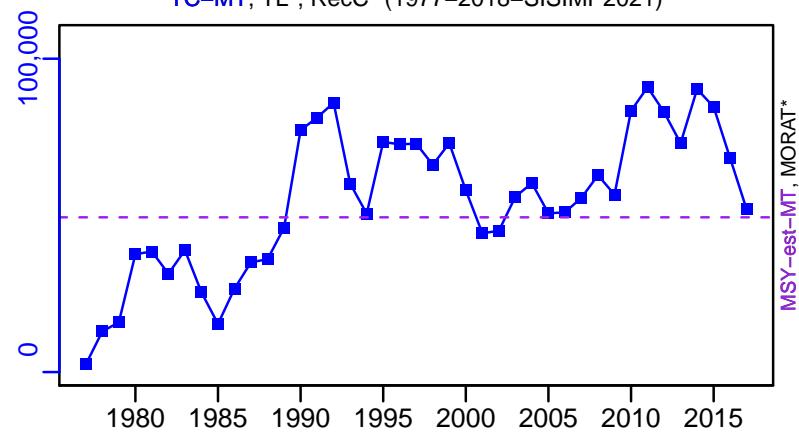


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

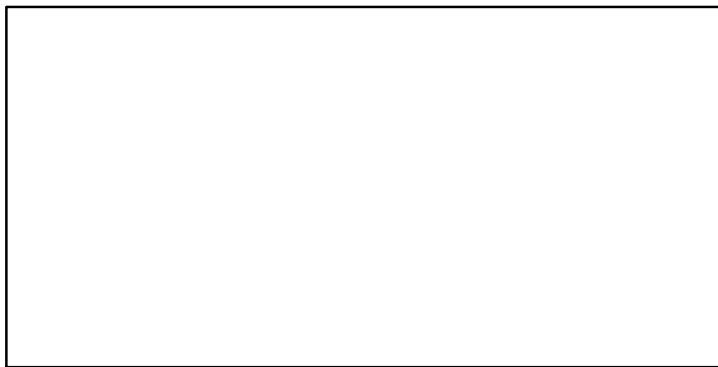
Pacific cod Gulf of Alaska [PCODGA]

TC-MT, TL*, RecC* (1977–2018–SISIMP2021)

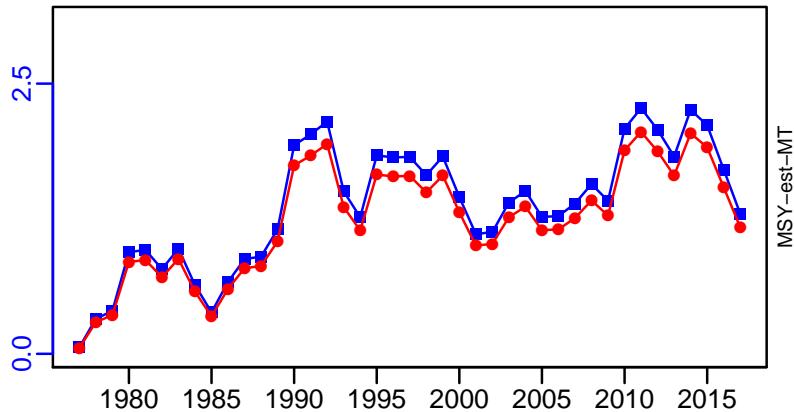
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1977–2018–SISIMP2021)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - MSY	* No Data

Pacific ocean perch Eastern Bering Sea and Aleutian Islands [PERCHEBSAI]

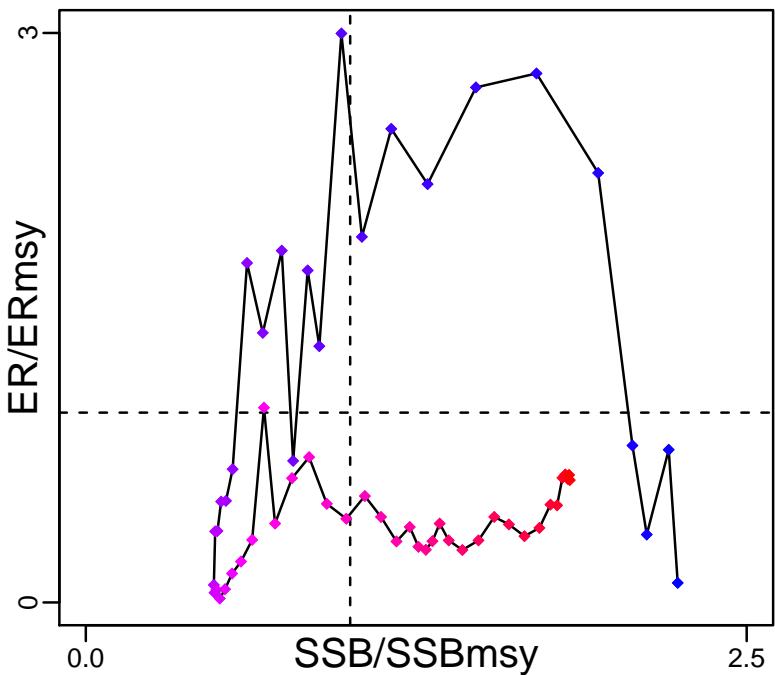
Metadata	
Scientific Name	Sebastodes alutus
Current Assess ID	AFSC-PERCHEBSAI-1957-2018-SISIMP2021
Area	Eastern Bering Sea and Aleutian Islands
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2016, 2017, 2018, 2011, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2018	226,008
Fmsy	Fmsy-pr-1/yr	2011	0.074
ERmsy	ERmsy-est-ratio	2018	0.049
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2018	26,500
M	M-1/yr	2011	0.062
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2018	0.082
ERlim	-	-	-

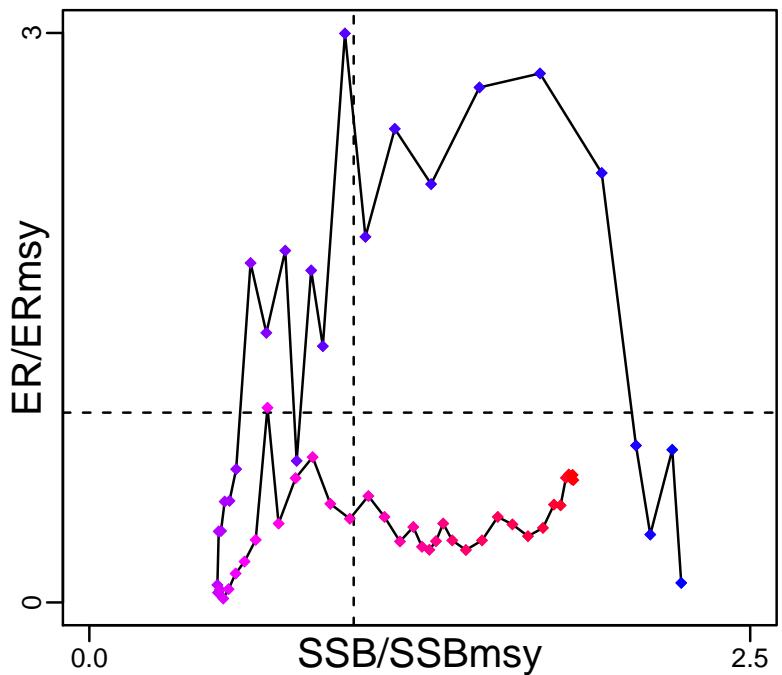
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	598,000	Both	3+	
SSB	SSB-MT	2018	408,484	-	-	
TN	-	-	-	-	-	
R	R-E00	2018	101,724,000	-	3	
F	F-1/yr	2018	0.05	-	-	
ER	ER-calc-ratio	2018	0.033	-	-	
TC	TC-MT	2018	32,543			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2018	1.807			
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2011	0.345			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.672			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Pacific ocean perch Eastern Bering Sea and Aleutian Islands [PERCHEBSAI]

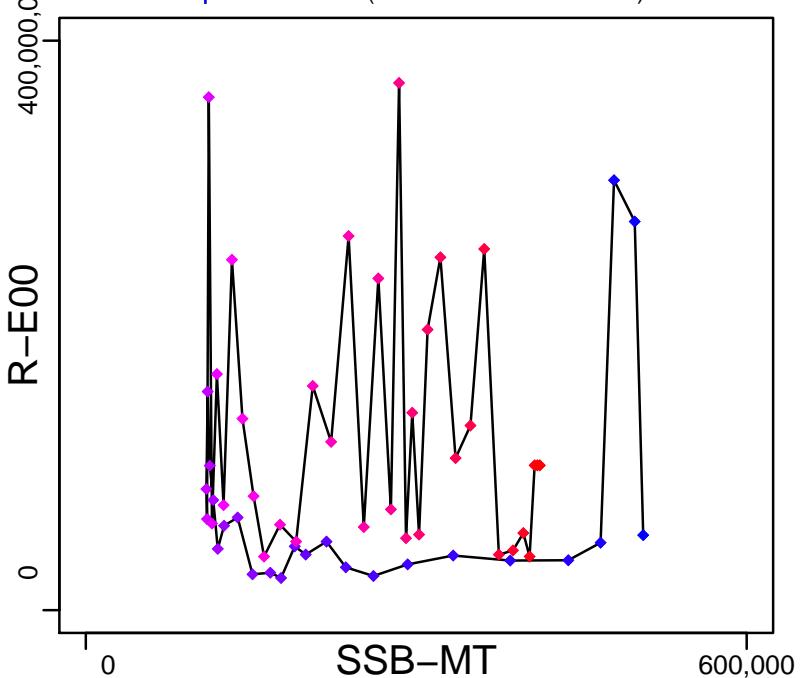
Kobe MSYpref (1957–2018–SISIMP2021)



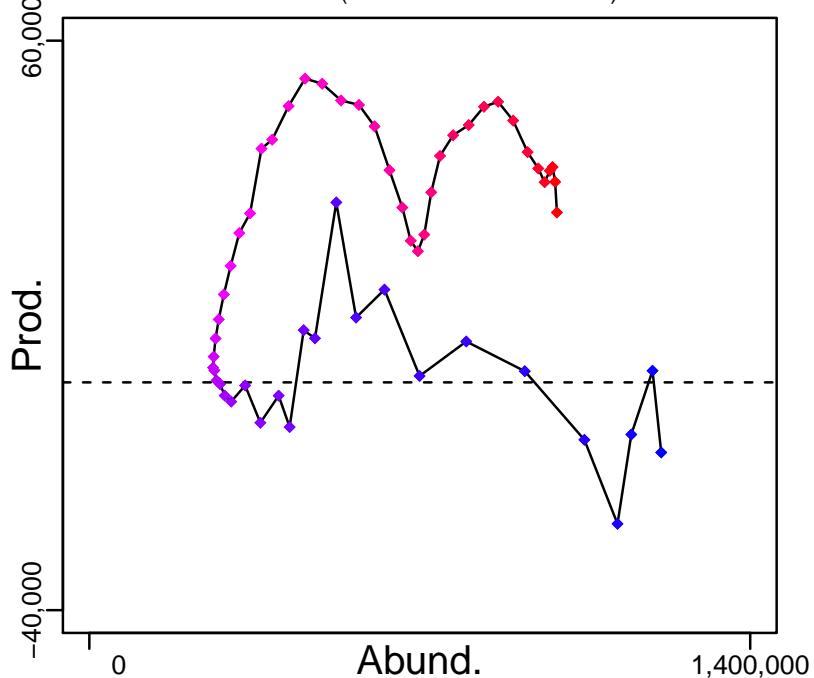
Kobe MGTpref (1957–2018–SISIMP2021)



Spawner Recruit (1957–2018–SISIMP2021)



Production (1957–2018–SISIMP2021)

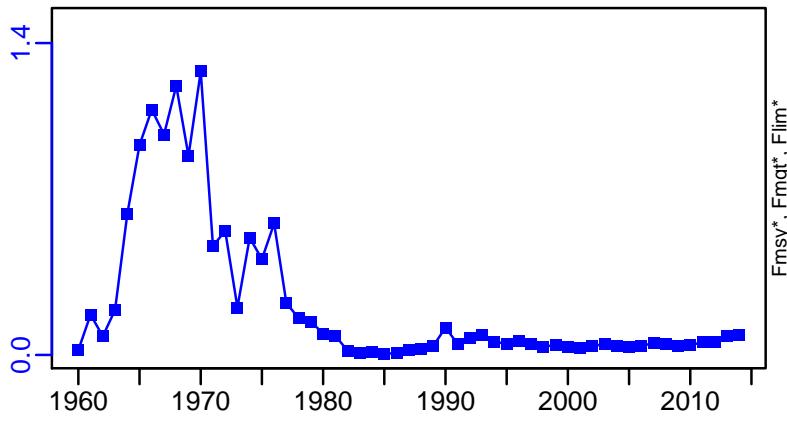
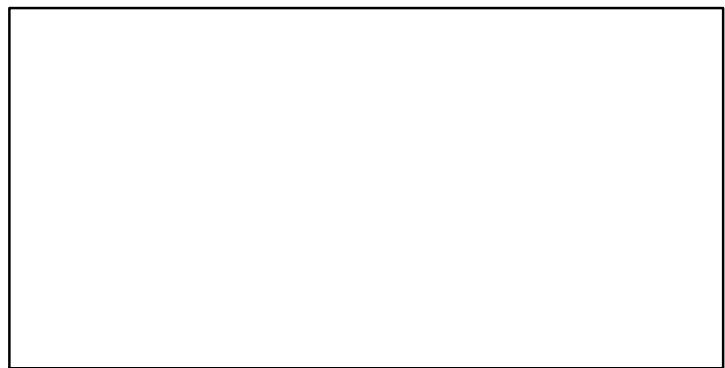
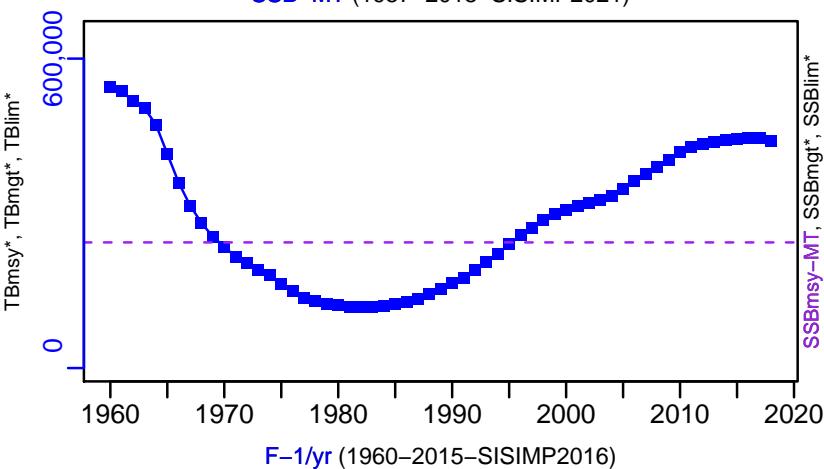
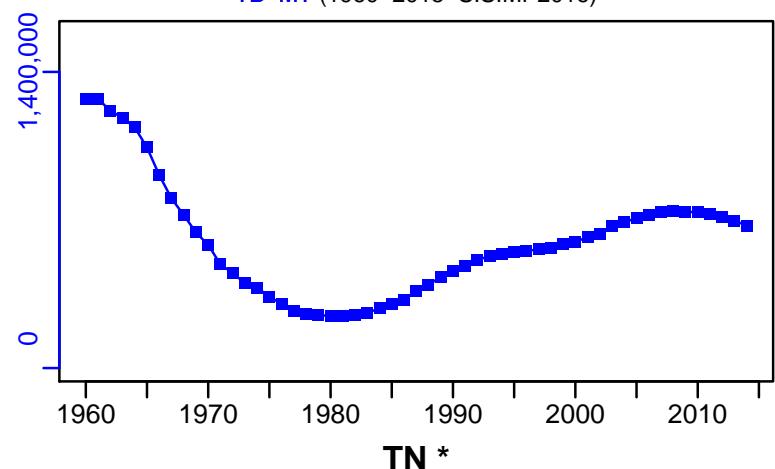


◆ Start Year ◆ End Year * No Data

Pacific ocean perch Eastern Bering Sea and Aleutian Islands [PERCHEBSAI]

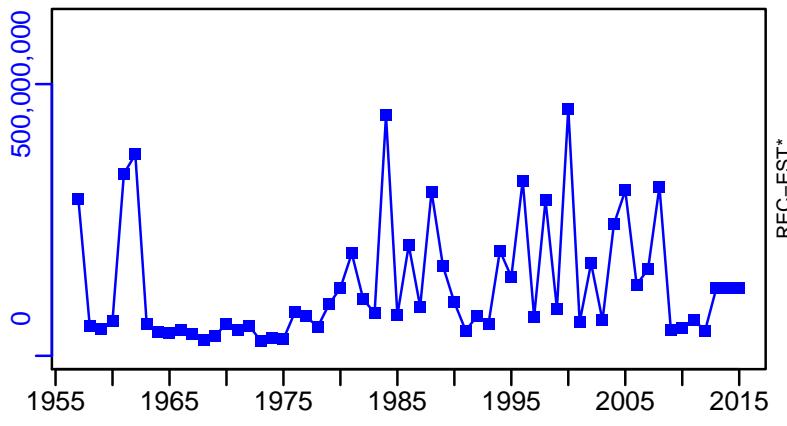
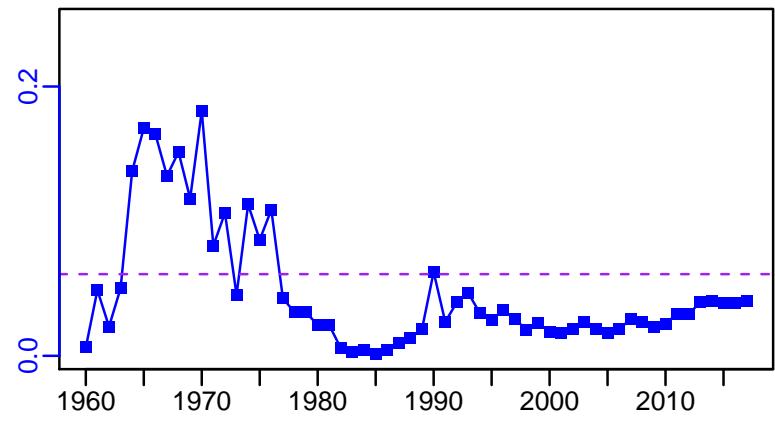
TB-MT (1960–2015–SISIMP2016)

SSB-MT (1957–2018–SISIMP2021)



ER-calc-ratio (1957–2018–SISIMP2021)

R-E00 (1957–2018–SISIMP2021)

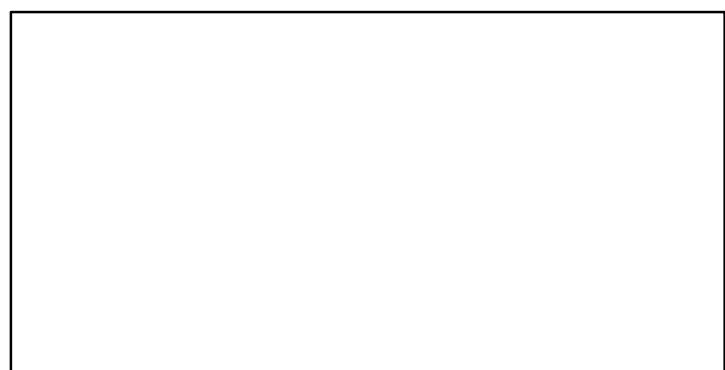
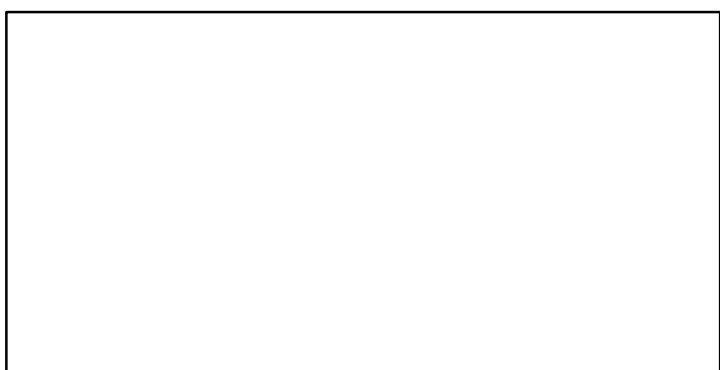
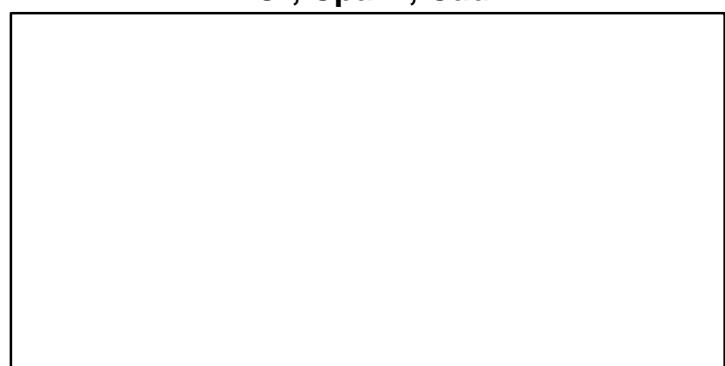
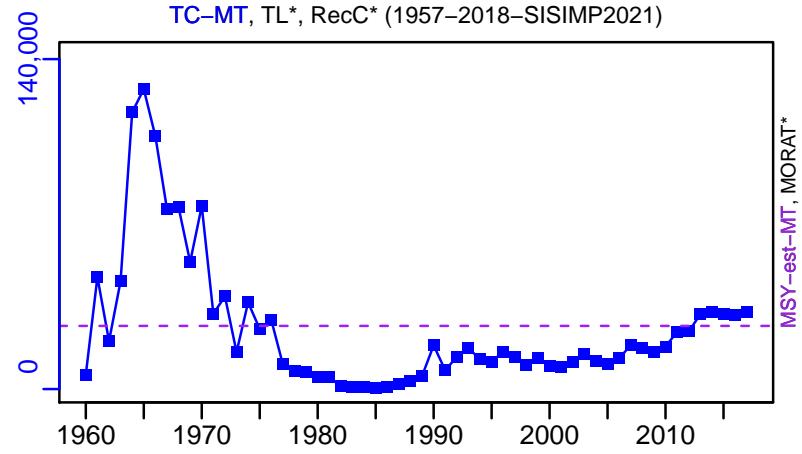


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - Lim BRP	* No Data

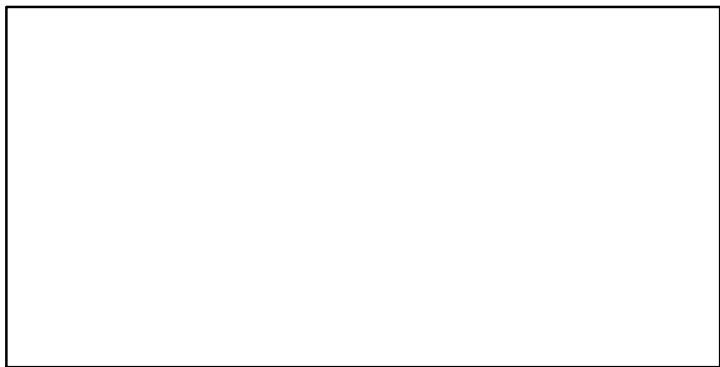
Pacific ocean perch Eastern Bering Sea and Aleutian Islands [PERCHEBSAI]

TC-MT, TL*, RecC* (1957–2018–SISIMP2021)

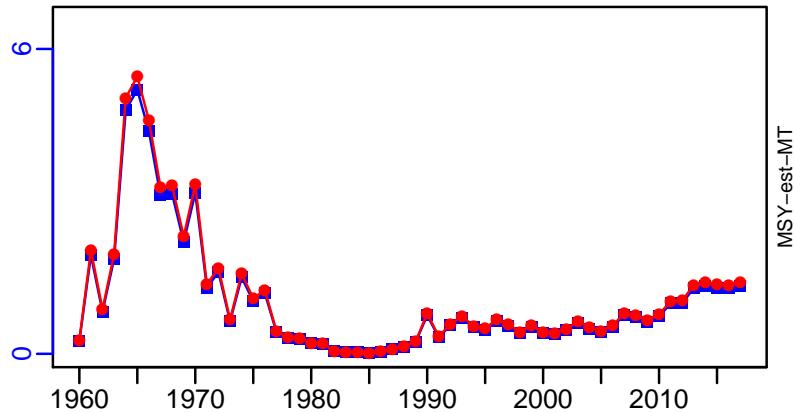
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1957–2018–SISIMP2021)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Pacific halibut North Pacific [PHALNPAC]

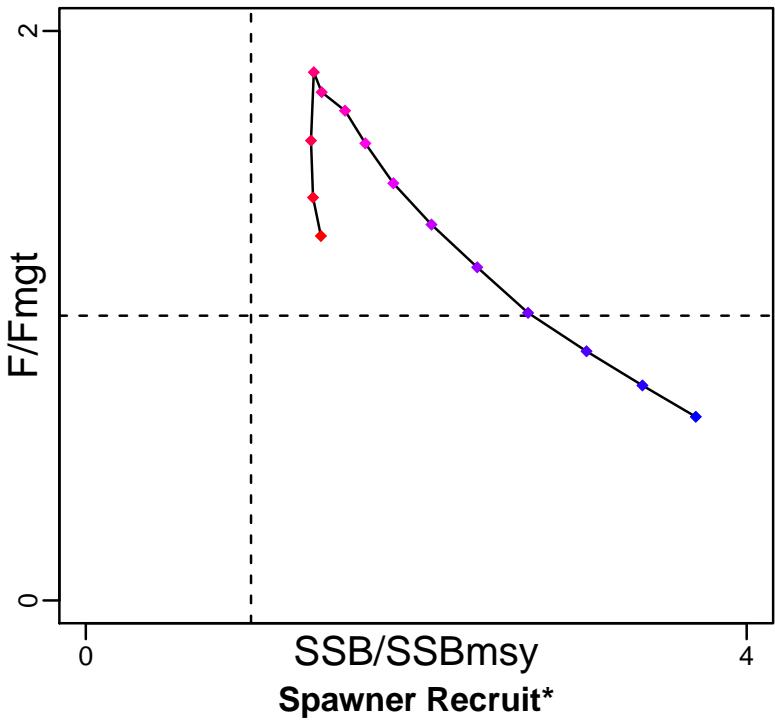
Metadata	
Scientific Name	Hippoglossus stenolepis
Current Assess ID	IPHC-PHALNPAC-1888-2014-HIVELY
Area	North Pacific
Management Authority	International Pacific Halibut Commission
Assessor	International Pacific Halibut Commission
Asmts in RAM	2014

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-pr-MT	2014	65,004
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2014	65,004
Fmgt	Fmgt-1/yr	2014	0.2
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

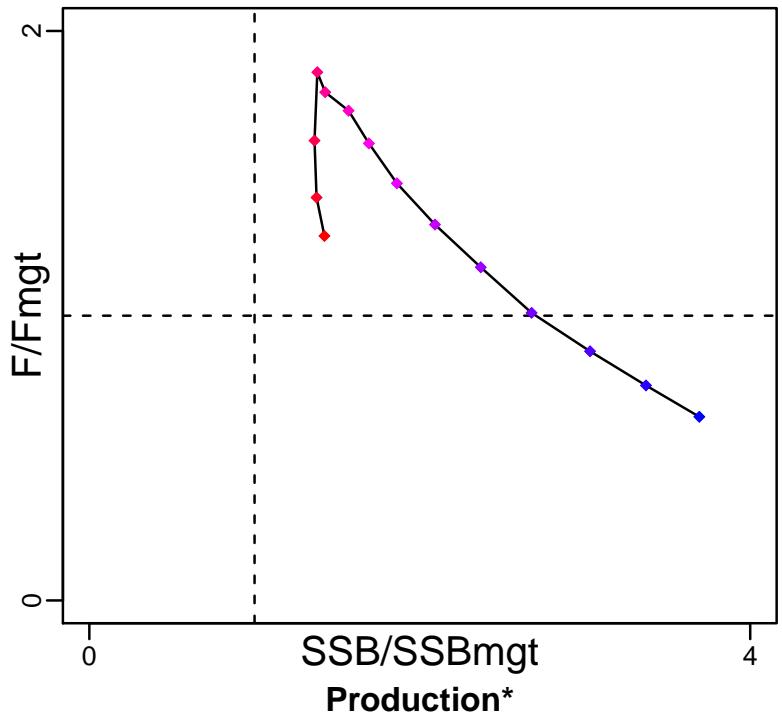
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2014	77,000	-	-	
SSB	SSB-MT	2014	94,600	Females	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	F-1/yr	2014	0.256	-	-	
ER	ER-calc-ratio	2014	0.139	-	-	
TC	TC-MT	2014	10,700			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-pr-MT	2014	1.455			
F/Fmsy	-	-	-			
ER/ERmsy	-	-	-			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2014	1.455			
F/Fmgt	F-1/yr/Fmgt-1/yr	2014	1.28			
ER/ERmgt	-	-	-			

Pacific halibut North Pacific [PHALNPAC]

Kobe MSYpref (1888–2014–HIVELY)



Kobe MGTPref (1888–2014–HIVELY)

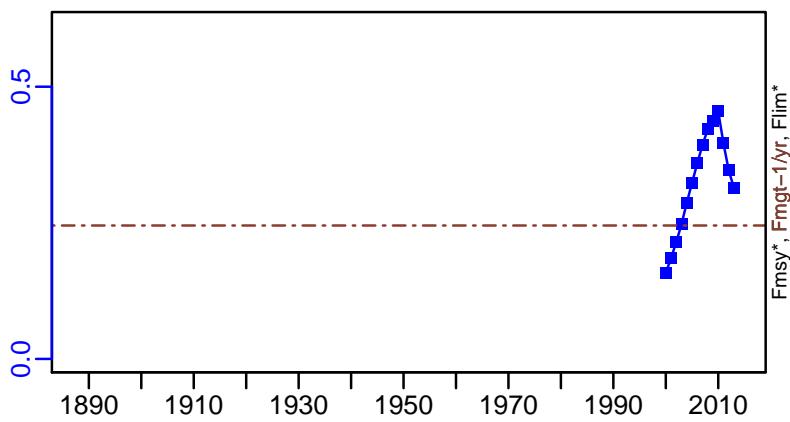
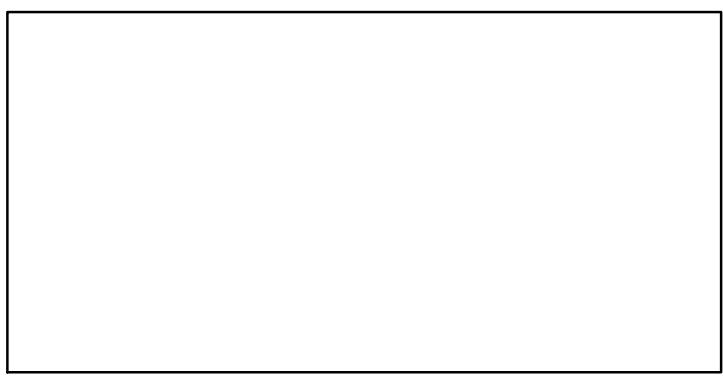
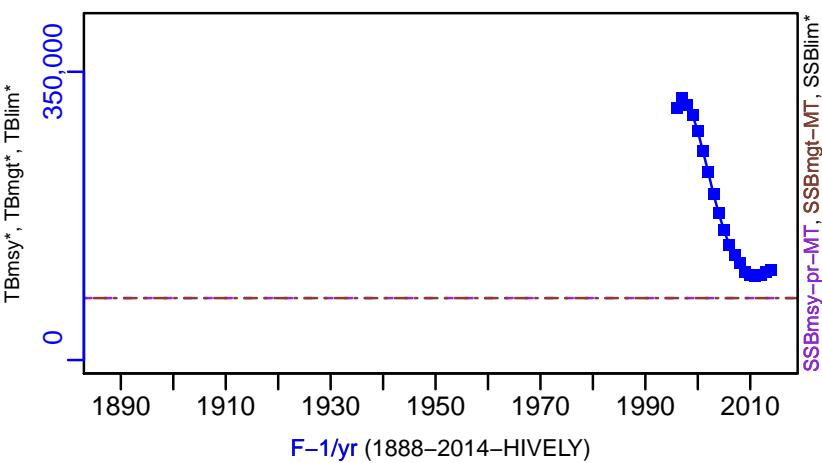
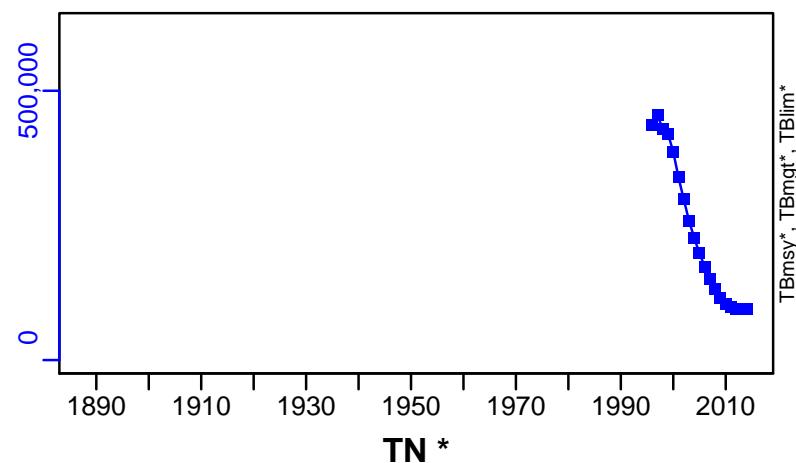


◆ Start Year ◆ End Year * No Data

Pacific halibut North Pacific [PHALNPAC]

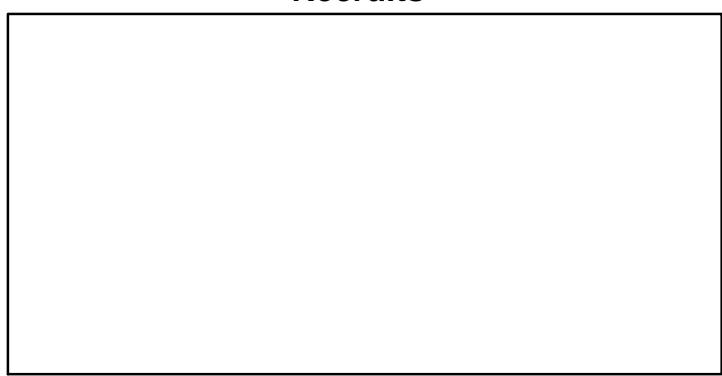
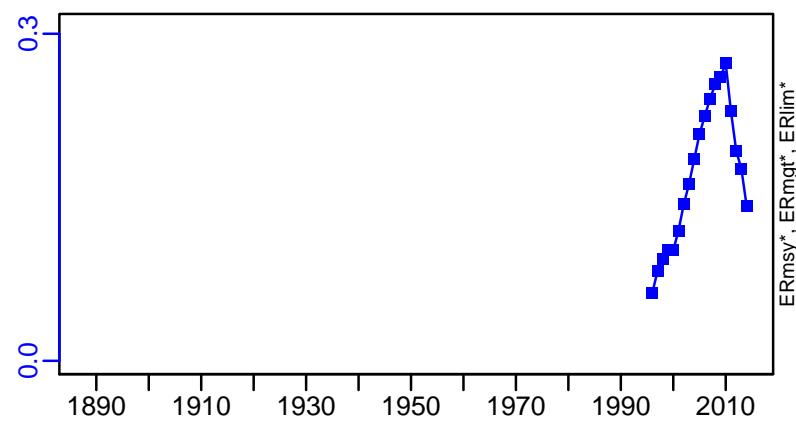
TB-MT (1888–2014–HIVELY)

SSB-MT (1888–2014–HIVELY)



ER-calc-ratio (1888–2014–HIVELY)

Recruits*

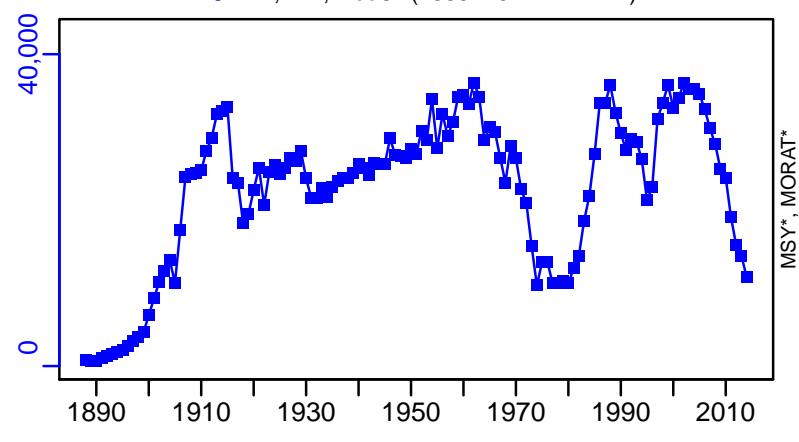


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	--- Lim BRP	* No Data

Pacific halibut North Pacific [PHALNPAC]

TC-MT, TL*, RecC* (1888–2014-HIVELY)

TAC*, Cpair*, Cadv*



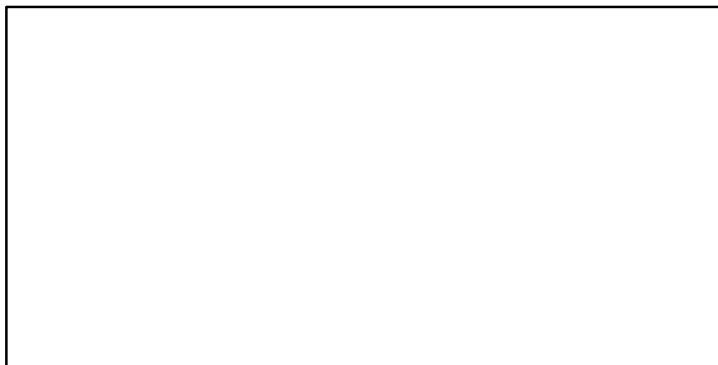
survB*



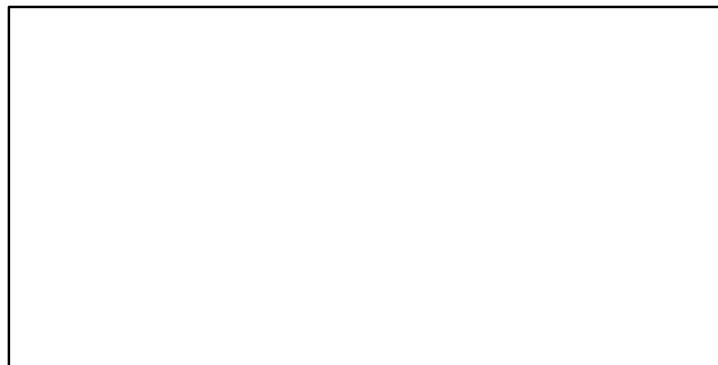
CPUE*



EFFORT*



CdivMSY*



- | | | |
|--------------------------|--------------------------|-----------|
| ■ 1st listed time series | ▲ 3rd listed time series | — MORAT |
| ● 2nd listed time series | - - - MSY | * No Data |

Pacific ocean perch Gulf of Alaska [POPERCHGA]

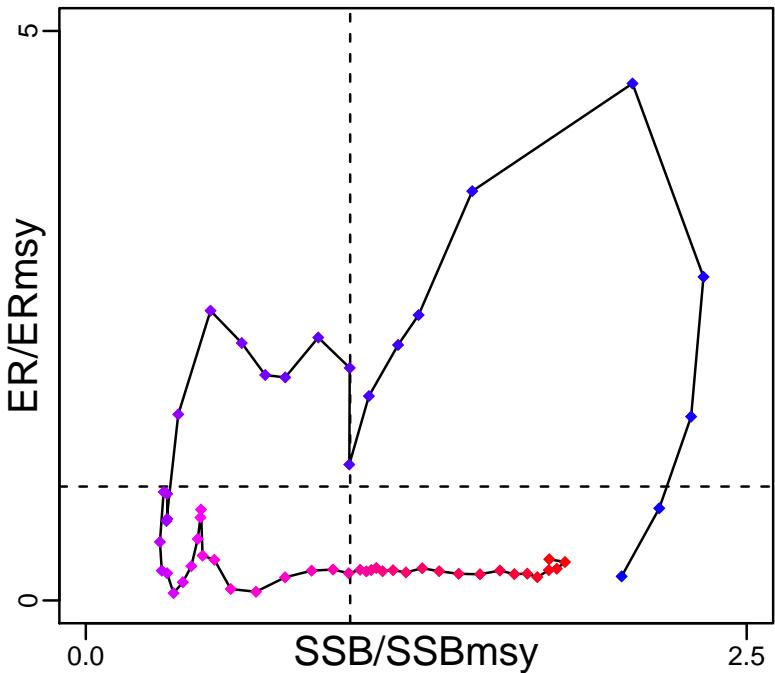
Metadata	
Scientific Name	Sebastes alutus
Current Assess ID	AFSC-POPERCHGA-1959-2018-SISIMP2021
Area	Gulf of Alaska
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2010, 2016, 2017, 2018, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2010	238,362
SSBmsy	SSBmsy-MT	2018	102,767
Fmsy	Fmsy-pr-1/yr	2010	0.142
ERmsy	ERmsy-ratio	2010	0.085
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2010	20,243
M	M-1/yr	2010	0.06
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2018	0.091
ERlim	-	-	-

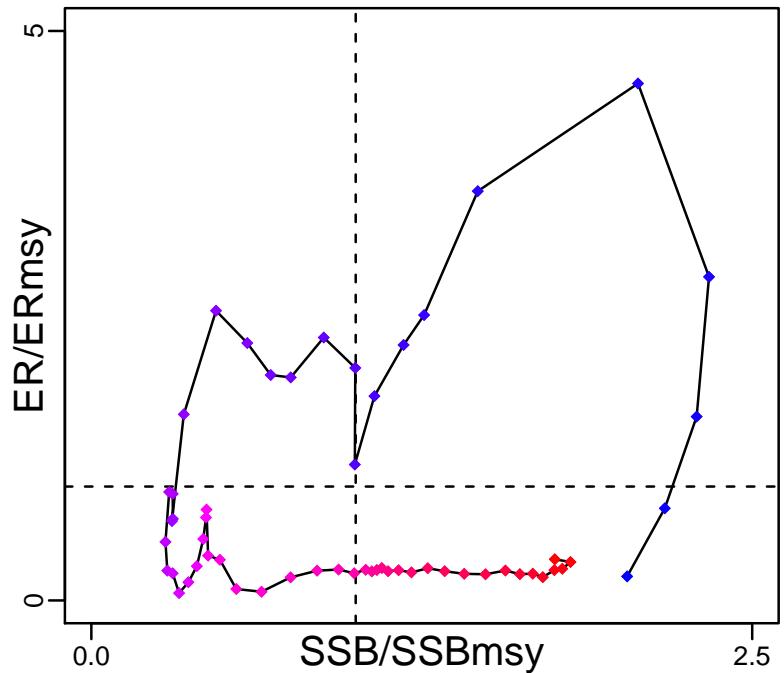
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	462,000	Both	2+	
SSB	SSB-MT	2018	180,010	-	-	
TN	-	-	-	-	-	
R	R-E00	2018	61,032,400	-	2	
F	F-1/yr	2018	0.07	-	-	
ER	ER-calc-ratio	2018	0.055	-	-	
TC	TC-MT	2018	23,880			
TL	-	-	-			
TB/TBmsy	TB-MT/TBmsy-calc-MT	2010	1.405			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2018	1.752			
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2010	0.615			
ER/ERmsy	ER-ratio/ERmsy-ratio	2010	0.511			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Pacific ocean perch Gulf of Alaska [POPERCHGA]

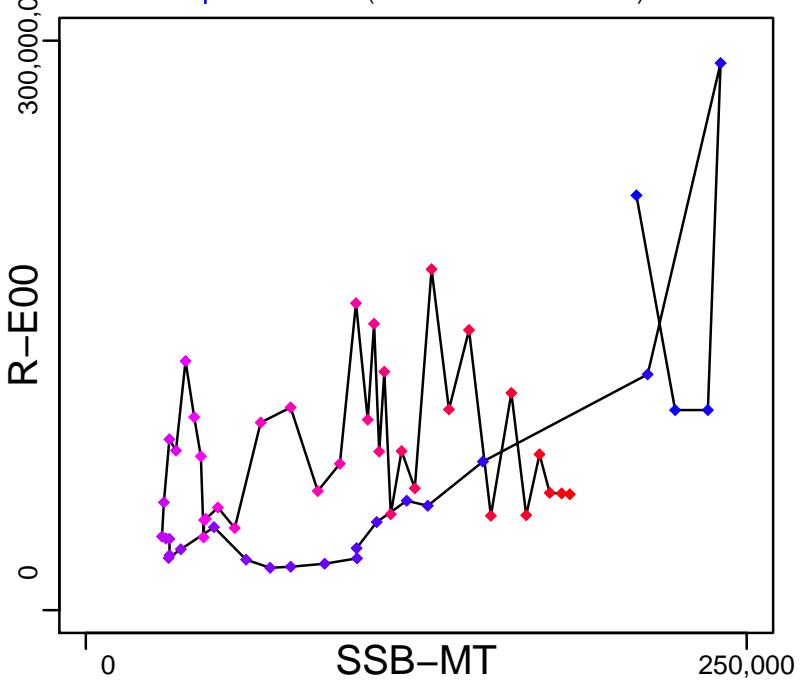
Kobe MSYpref (1959–2018–SISIMP2021)



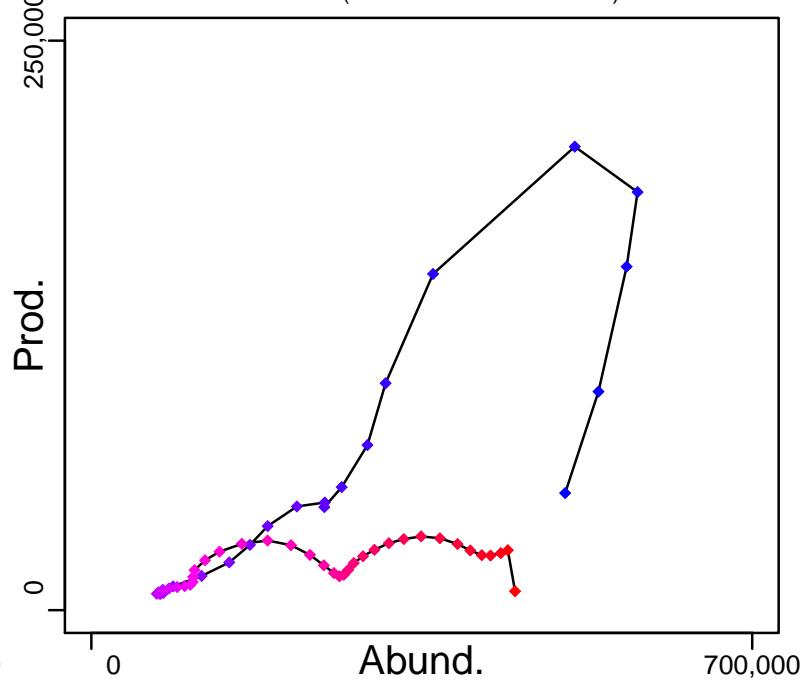
Kobe MGTpref (1959–2018–SISIMP2021)



Spawner Recruit (1959–2018–SISIMP2021)



Production (1959–2018–SISIMP2021)

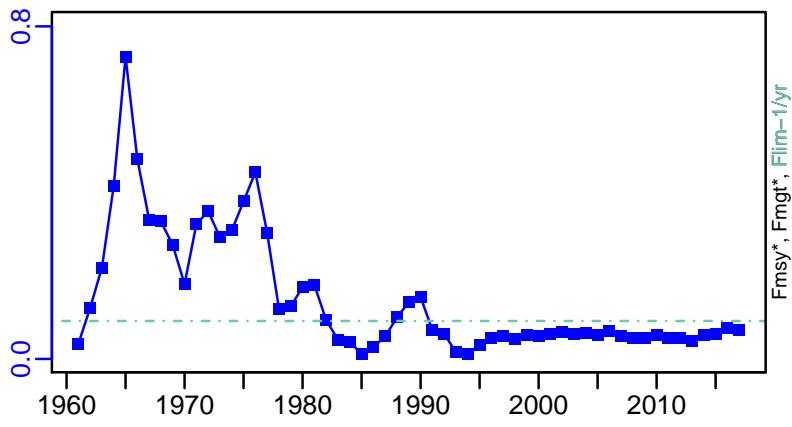
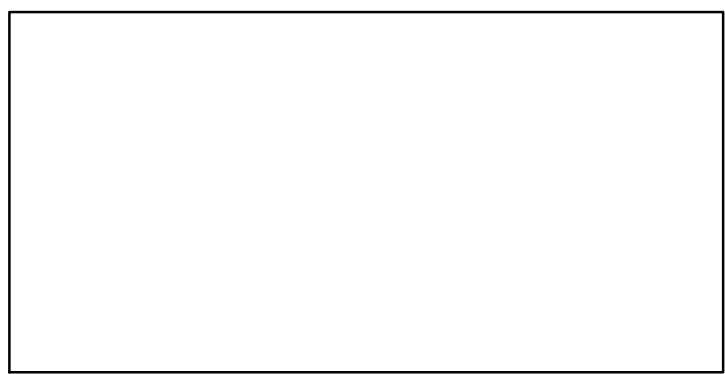
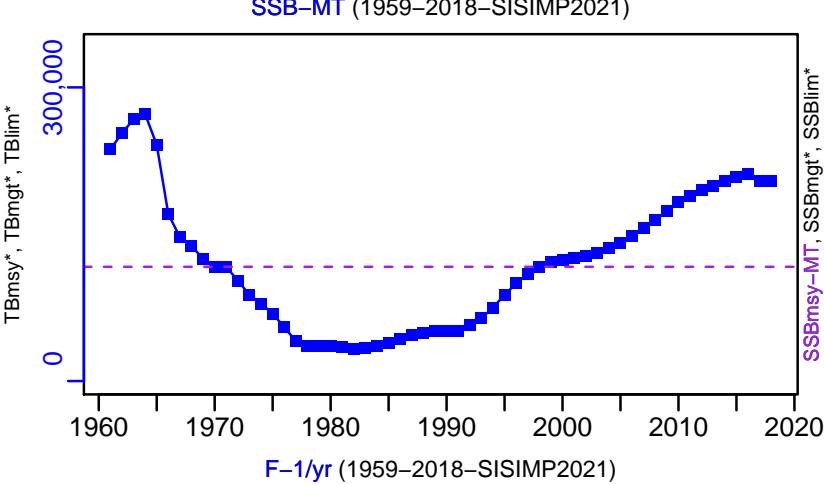
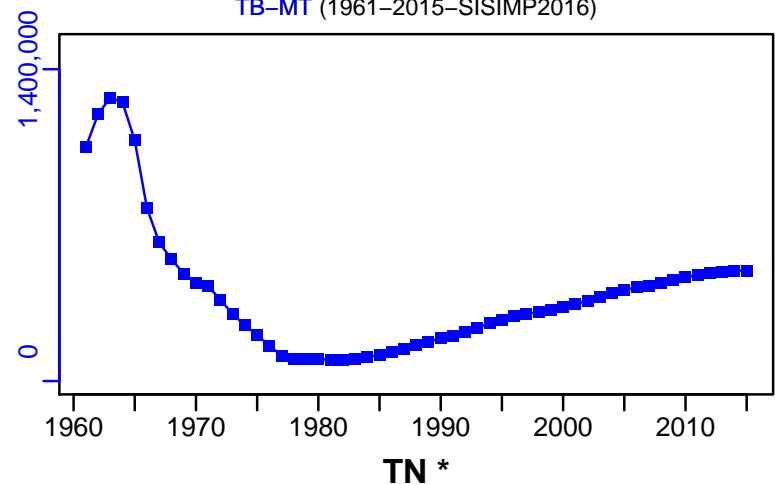


◆ Start Year ◆ End Year * No Data

Pacific ocean perch Gulf of Alaska [POPERCHGA]

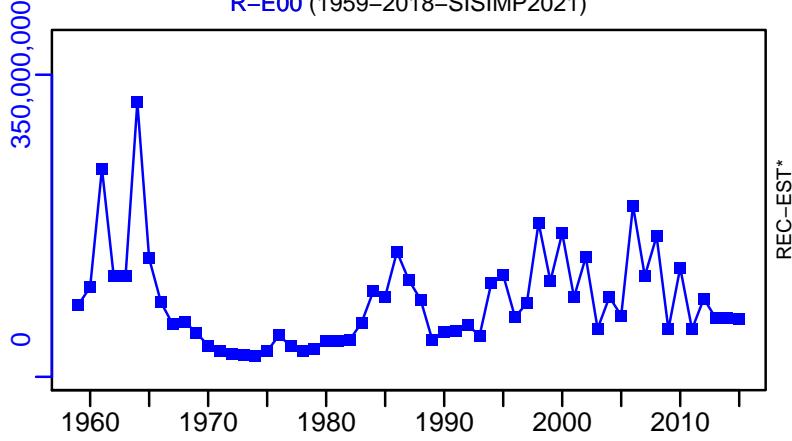
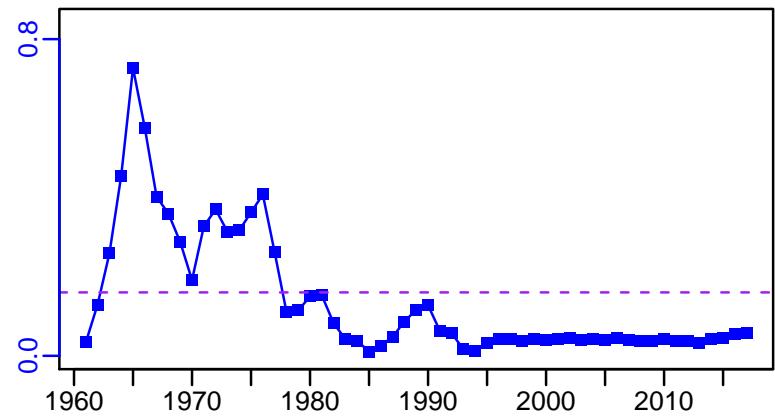
TB-MT (1961–2015–SISIMP2016)

SSB-MT (1959–2018–SISIMP2021)



ER-calc-ratio (1959–2018–SISIMP2021)

R-E00 (1959–2018–SISIMP2021)

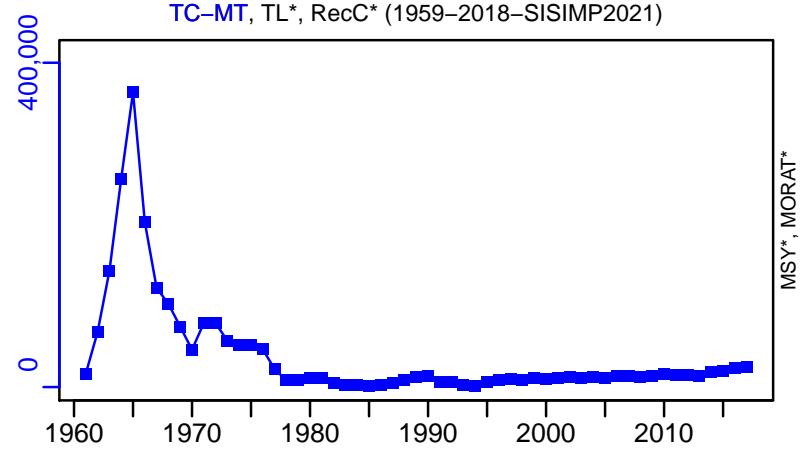


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

Pacific ocean perch Gulf of Alaska [POPERCHGA]

TC-MT, TL*, RecC* (1959–2018–SISIMP2021)

TAC*, Cpair*, Cadv*



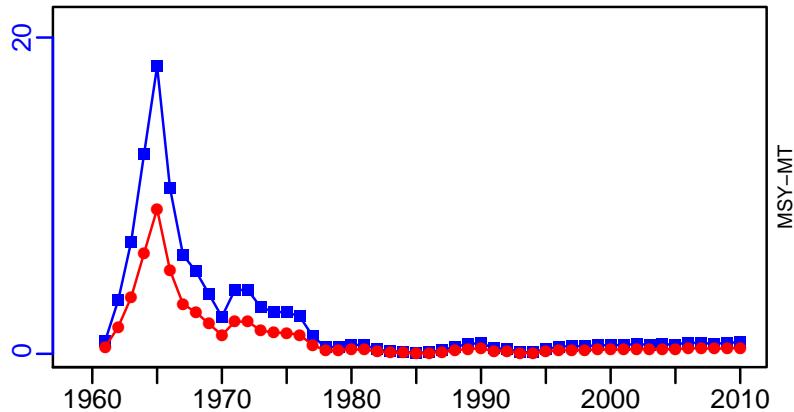
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1959–2010–STACHURA)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Rex sole Gulf of Alaska [REXSOLEGA]

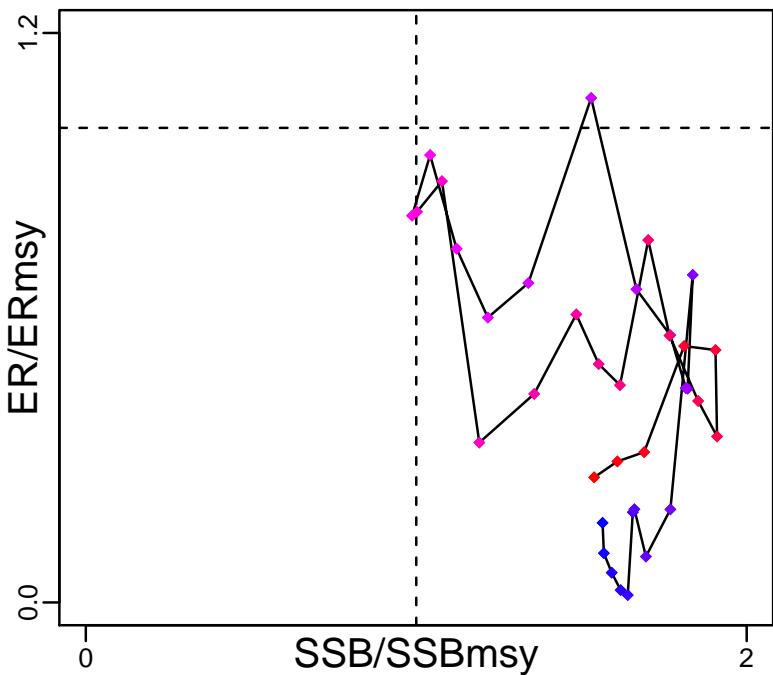
Metadata	
Scientific Name	Glyptocephalus zachirus
Current Assess ID	AFSC-REXSOLEGA-1982-2018-SISIMP2021
Area	Gulf of Alaska
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2011, 2014, 2016, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-MT	2016	19,896
SSBmsy	SSBmsy-MT	2017	19,896
Fmsy	Fmsy-1/yr	2017	0.128
ERmsy	ERmsy-ratio	2016	0.29
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	Fmgt-1/yr	2011	0.128
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-calc-MT	2016	5770
M	M-1/yr	2011	0.17
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2017	0.17
ERlim	ERlim-ratio	2016	0.29

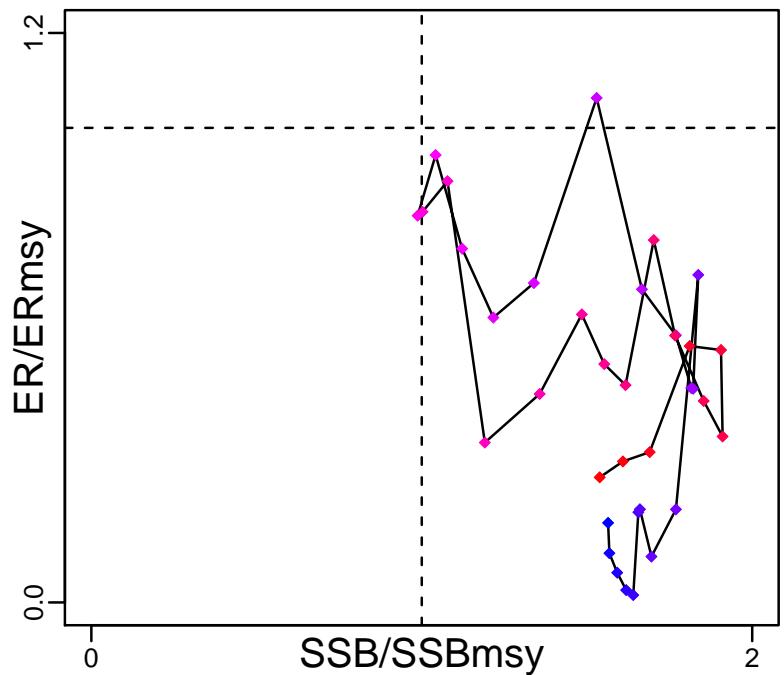
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2016	43,731	-	-
SSB	SSB-MT	2018	36,411	-	-
TN	-	-	-	-	-
R	R-E00	2018	78,656,292	-	0
F	F-1/yr	2018	0.025	-	-
ER	ER-calc-ratio	2018	0.017	-	-
TC	TC-MT	2018	1483		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-MT	2016	2.198		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2017	2.408		
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	0.508		
ER/ERmsy	ER-ratio/ERmsy-ratio	2016	0.162		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	F-1/yr/Fmgt-1/yr	2011	0.767		
ER/ERmgt	-	-	-		

Rex sole Gulf of Alaska [REXSOLEGA]

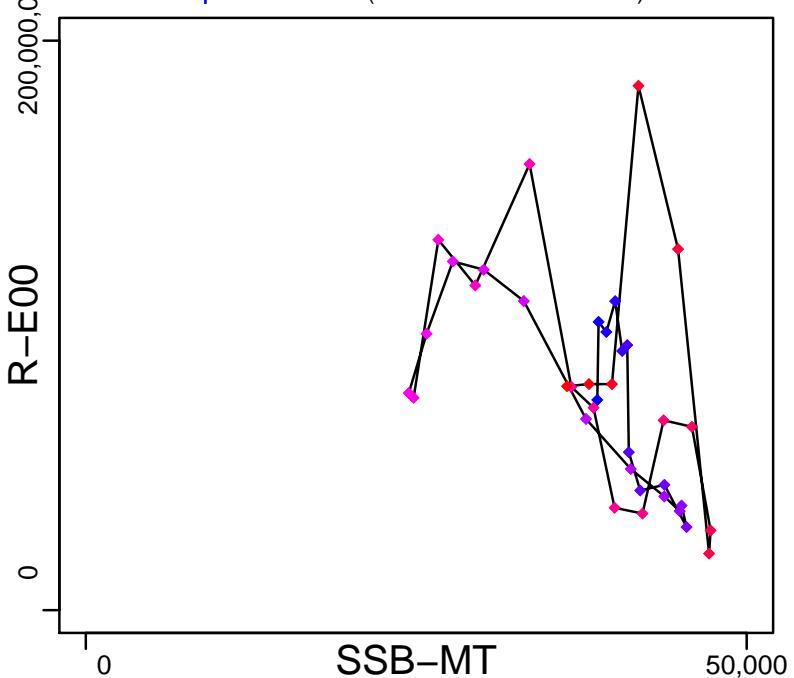
Kobe MSYpref (1982–2018–SISIMP2021)



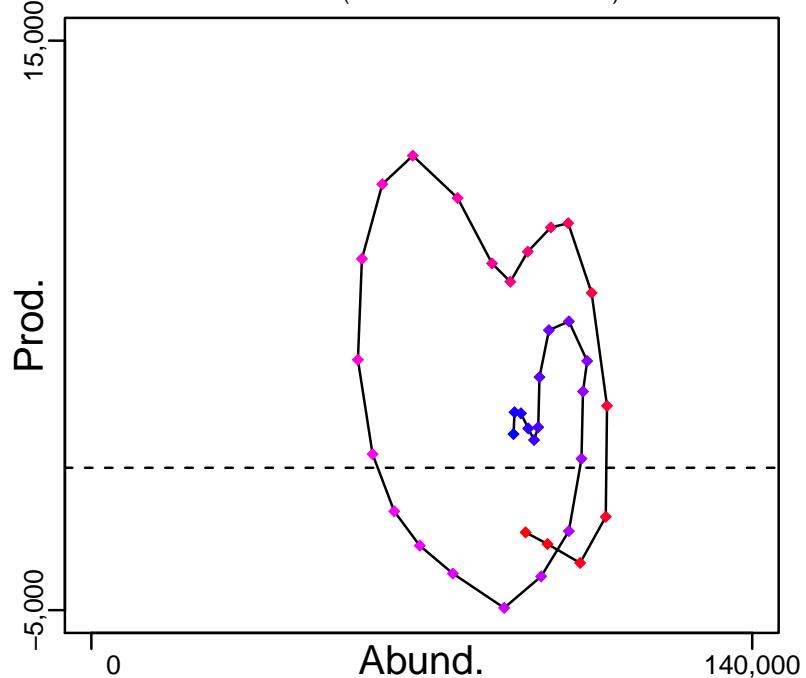
Kobe MGTpref (1982–2018–SISIMP2021)



Spawner Recruit (1982–2018–SISIMP2021)



Production (1982–2018–SISIMP2021)

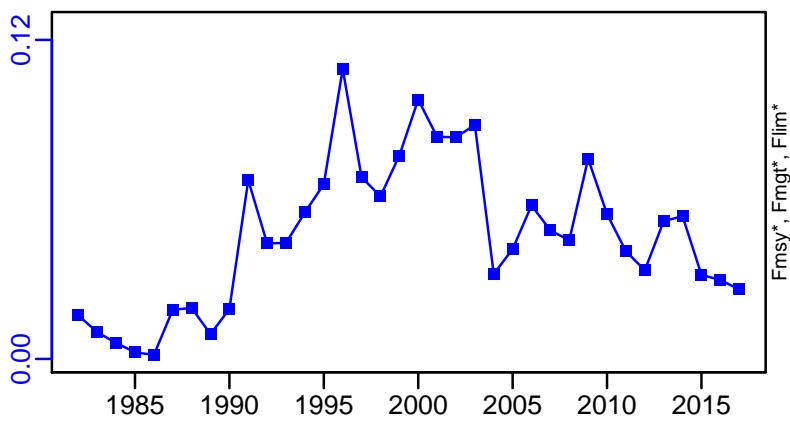
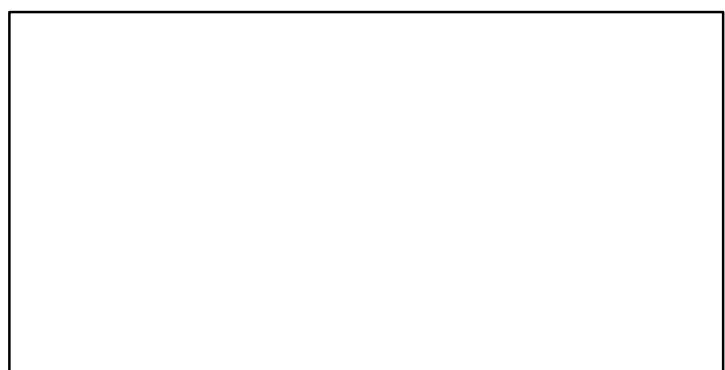
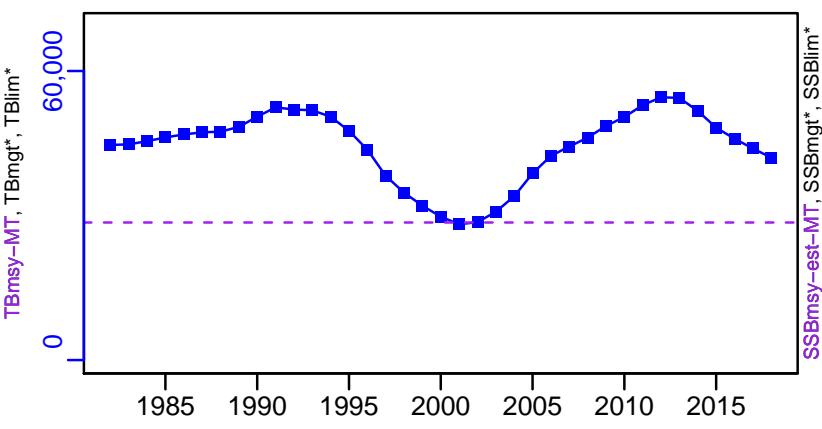
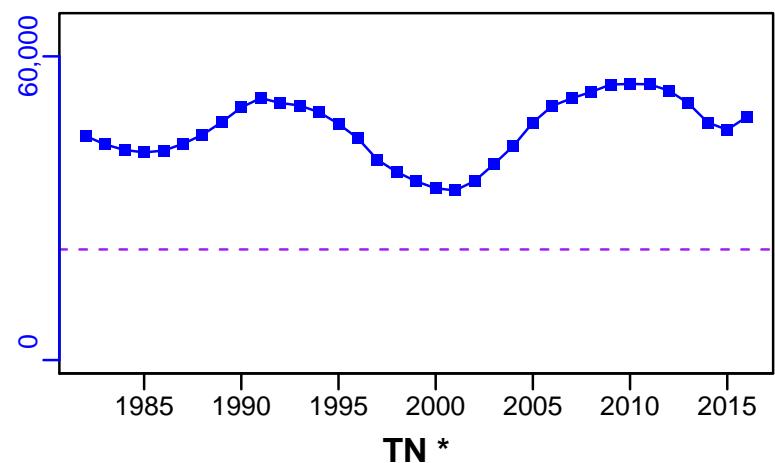


◆ Start Year ◆ End Year * No Data

Rex sole Gulf of Alaska [REXSOLEGA]

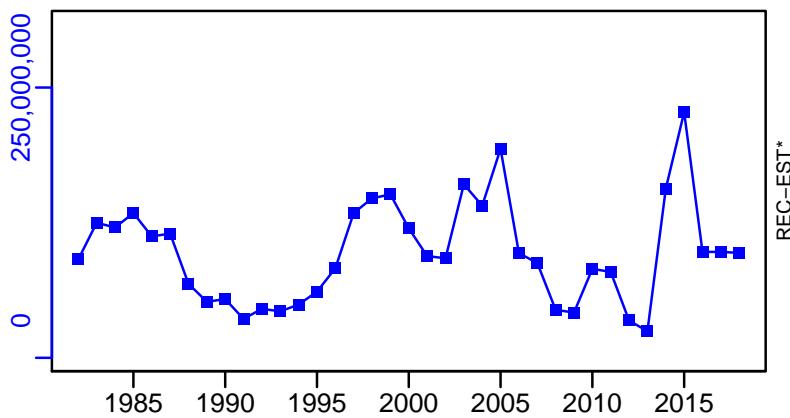
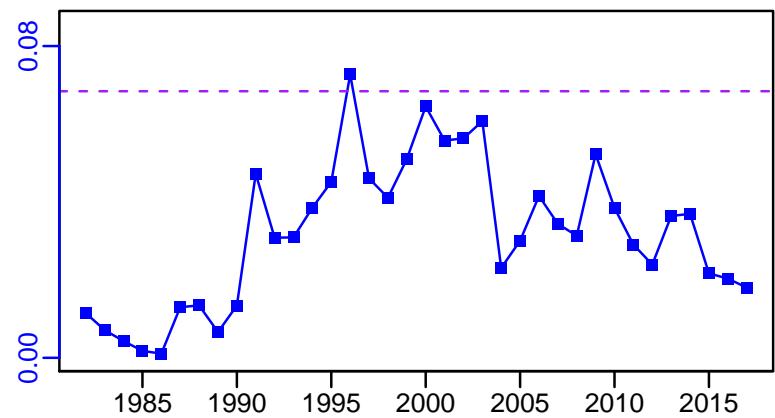
TB-MT (1982–2016–SISIMP2021)

SSB-MT (1982–2018–SISIMP2021)



ER-calc-ratio (1982–2018–SISIMP2021)

R-E00 (1982–2018–SISIMP2021)

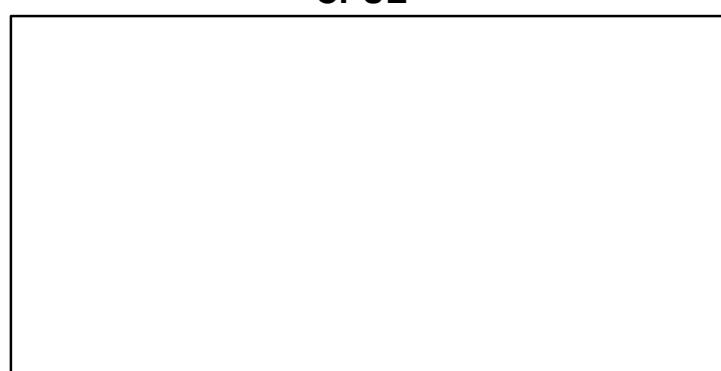
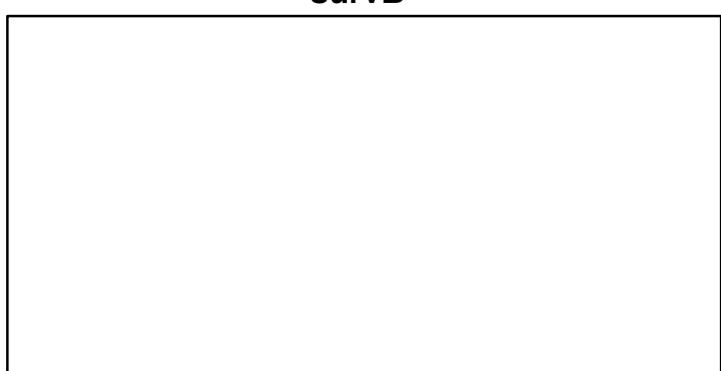
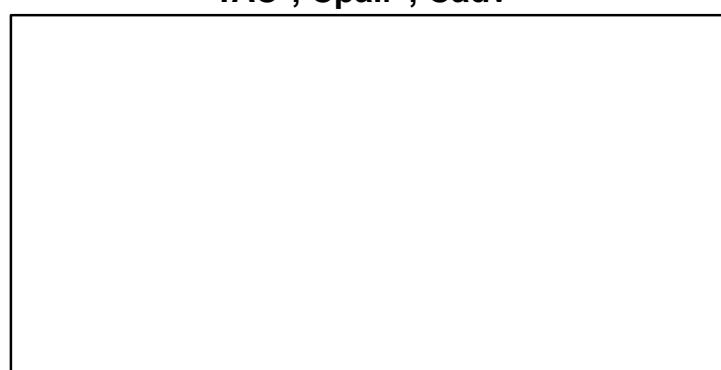
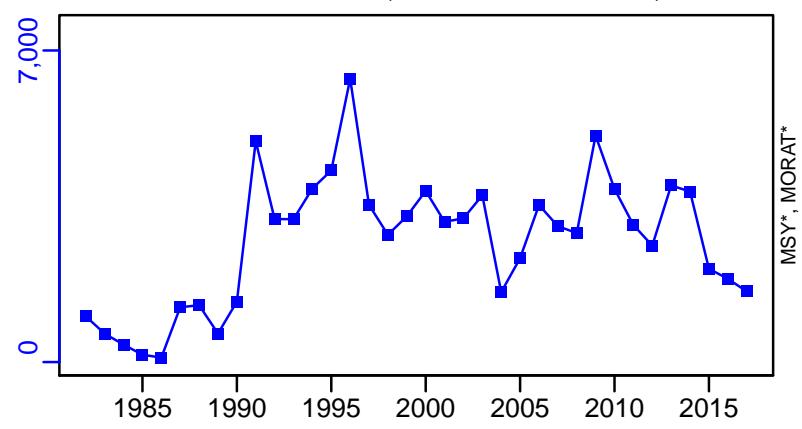


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - Lim BRP	* No Data

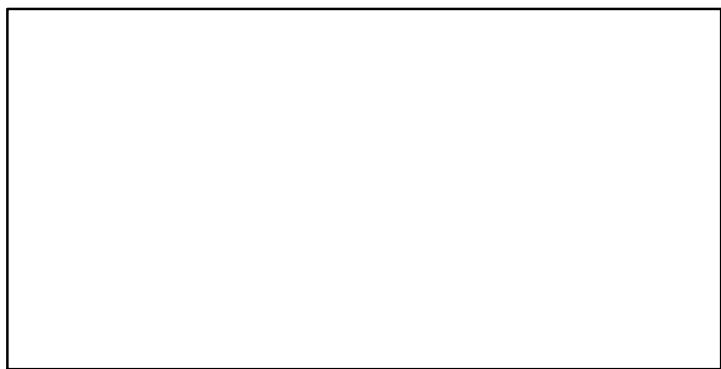
Rex sole Gulf of Alaska [REXSOLEGA]

TC-MT, TL*, RecC* (1982–2018–SISIMP2021)

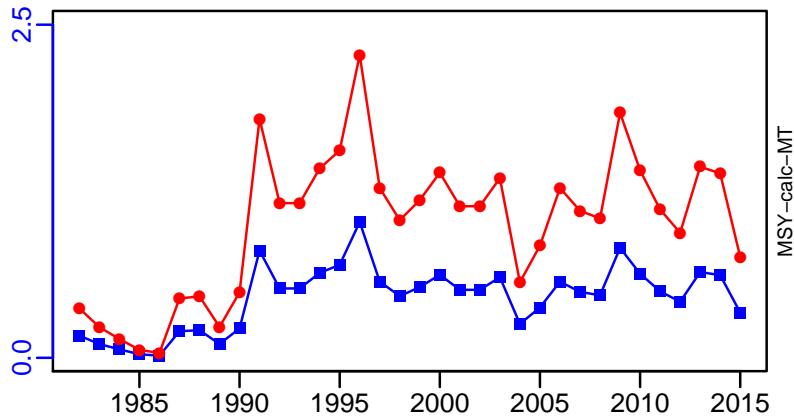
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-calc-MT, CdivMEANC-ratio, (1982–2016–SISIMP2021)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Rougheye rockfish Bering Sea and Aleutian Islands [REYEROCKBSAI]

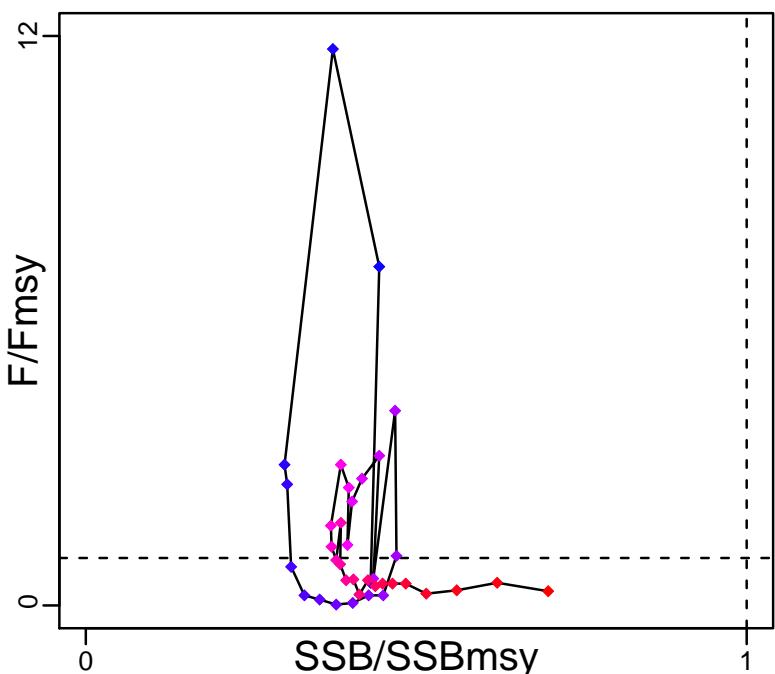
Metadata	
Scientific Name	Sebastodes aleutianus
Current Assess ID	AFSC-REYEROCKBSAI-1974-2015-HIVELY
Area	Bering Sea and Aleutian Islands
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-pr-MT	2015	9977
Fmsy	Fmsy-pr-1/yr	2015	0.058
ERmsy	ERmsy-est-ratio	2015	0.06
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2015	1408
M	M-1/yr	2015	0.03
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

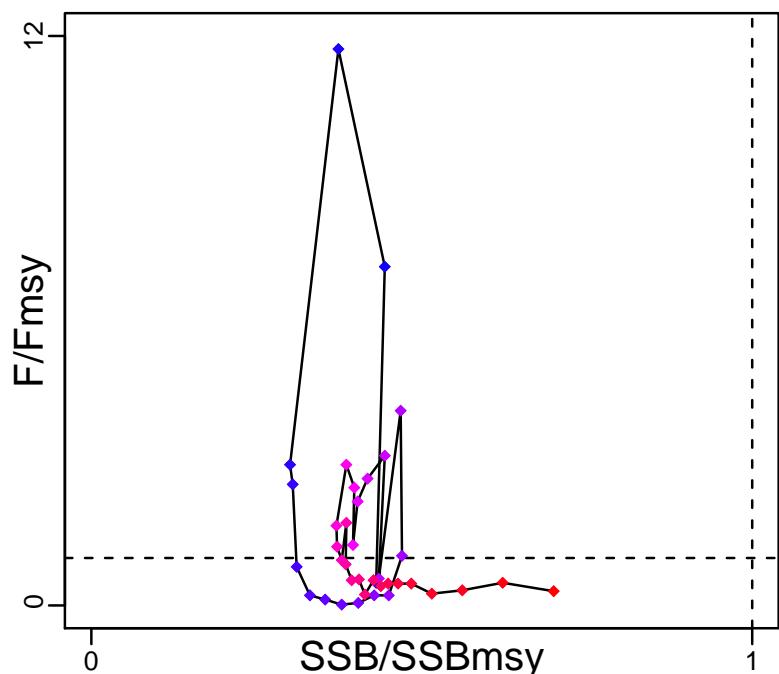
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2015	40,400	Both	3+
SSB	SSB-MT	2015	6980	Females	3+
TN	-	-	-	-	-
R	R-E00	2015	1,560,000	-	3
F	F-1/yr	2015	0.017	-	-
ER	ER-calc-ratio	2015	0.005	-	-
TC	TC-MT	2015	194		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSB-MT/SSBmsy-pr-MT	2015	0.7		
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2015	0.3		
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2015	0.084		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Rougheye rockfish Bering Sea and Aleutian Islands [REYEROCKBSAI]

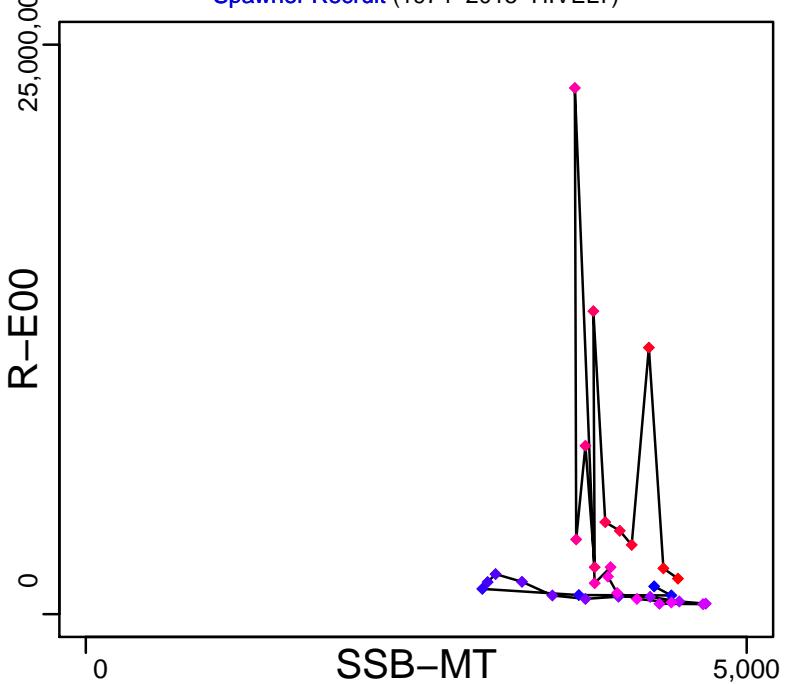
Kobe MSYpref (1974–2015–HIVELY)



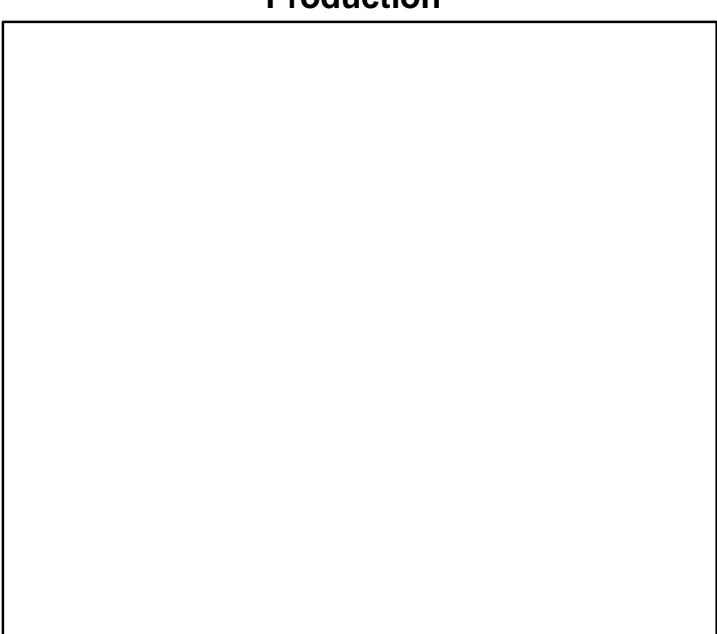
Kobe MGTPref (1974–2015–HIVELY)



Spawner Recruit (1974–2015–HIVELY)



Production*

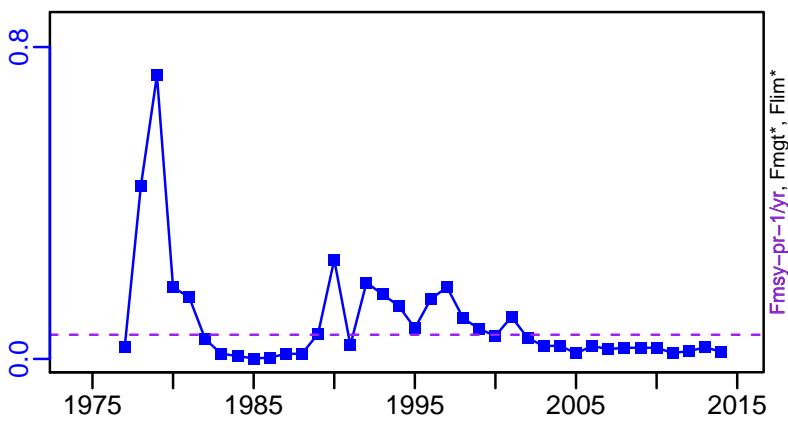
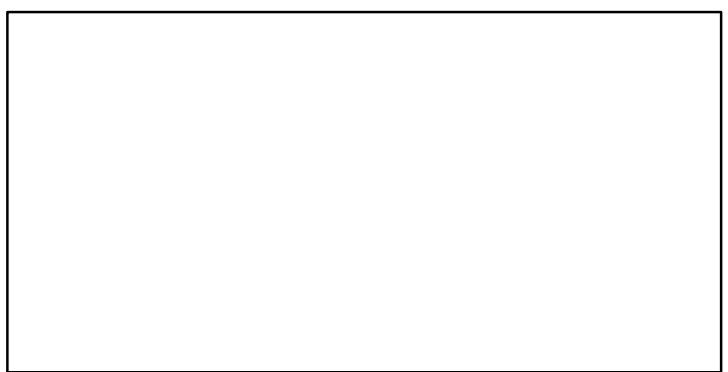
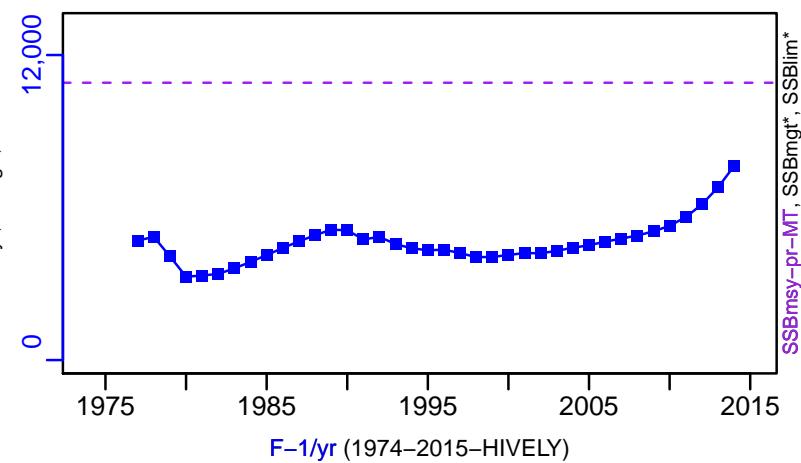
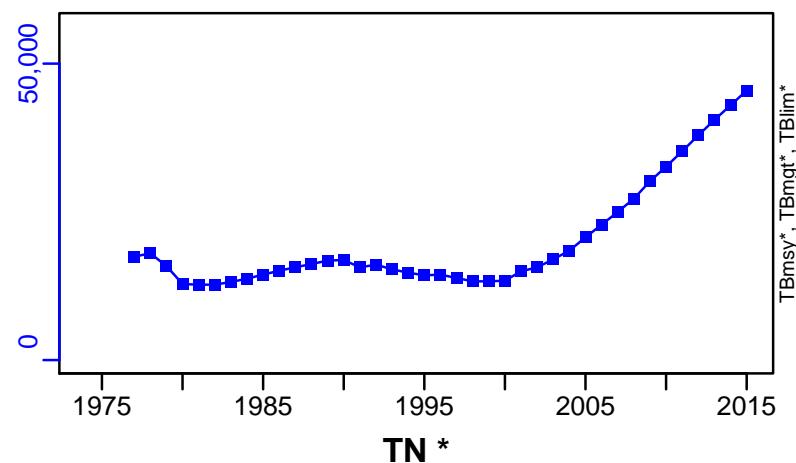


◆ Start Year ◆ End Year * No Data

Rougheye rockfish Bering Sea and Aleutian Islands [REYEROCKBSAI]

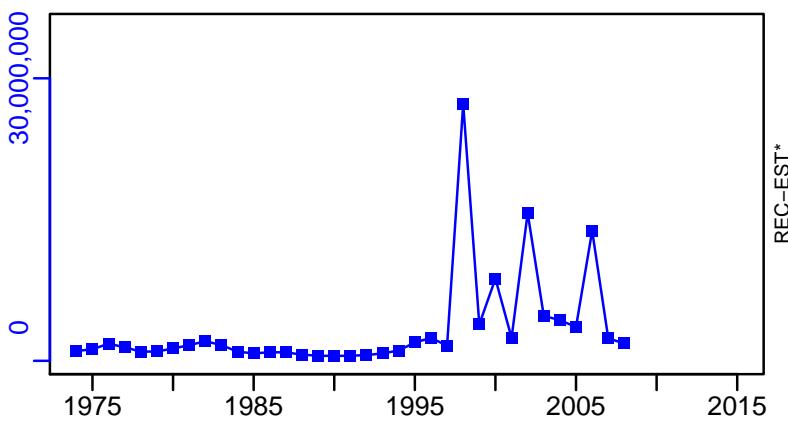
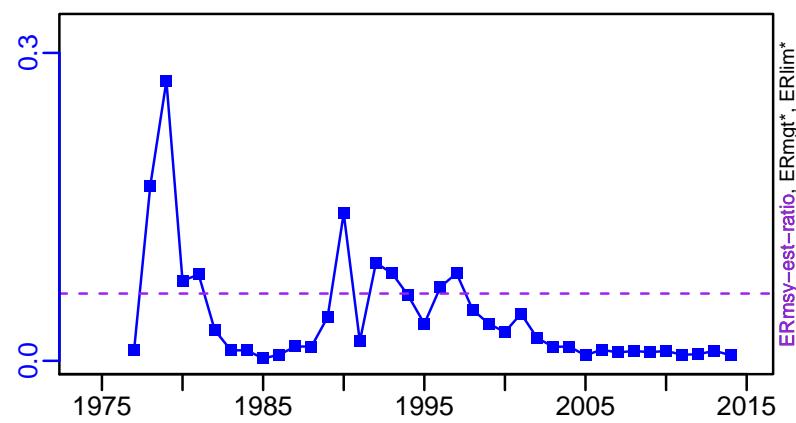
TB-MT (1974–2015–HIVELY)

SSB-MT (1974–2015–HIVELY)



ER-calc-ratio (1974–2015–HIVELY)

R-E00 (1974–2015–HIVELY)

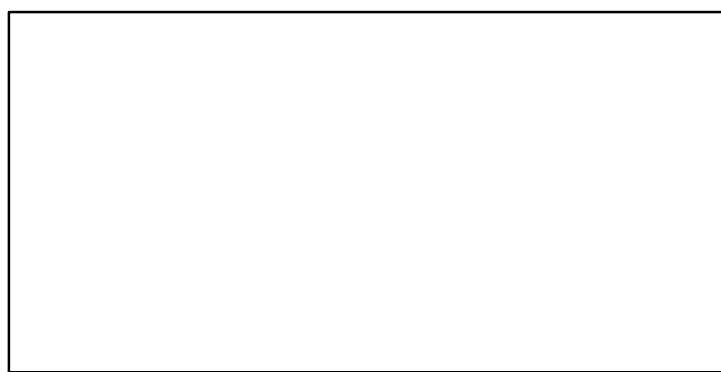
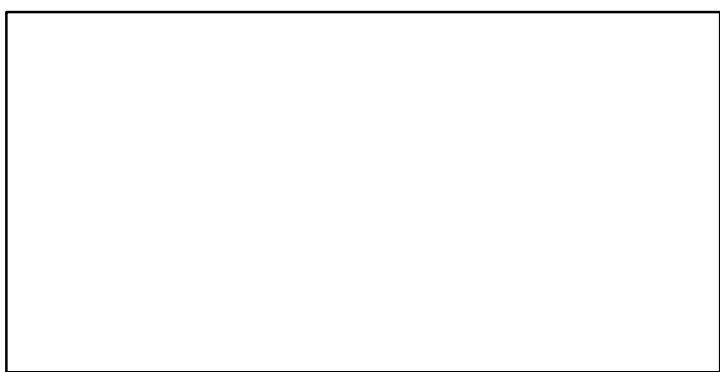
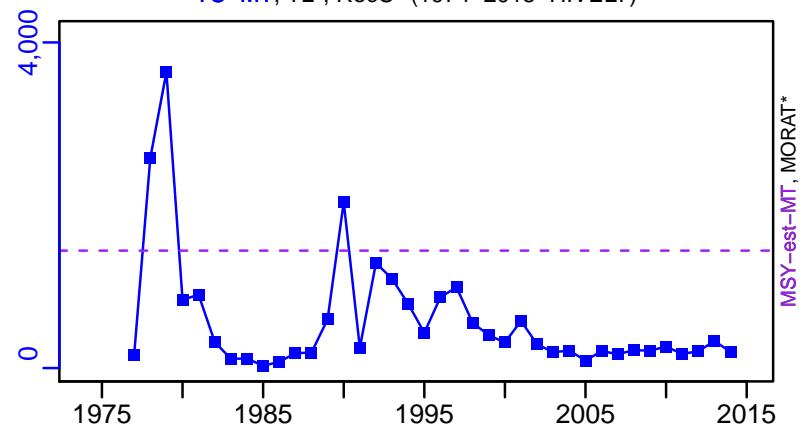


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	--- Lim BRP	* No Data

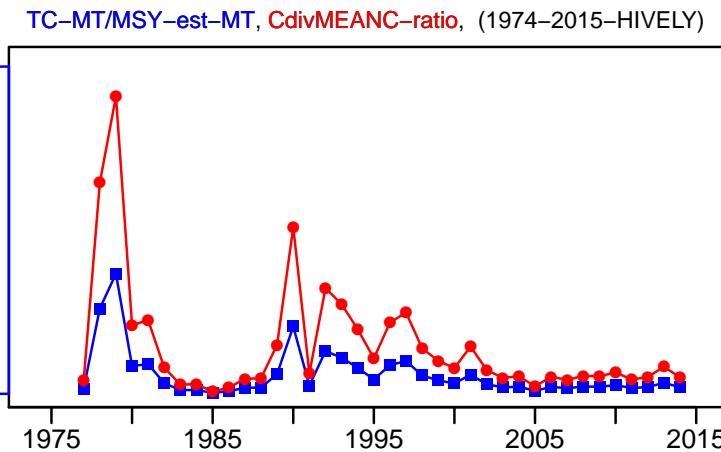
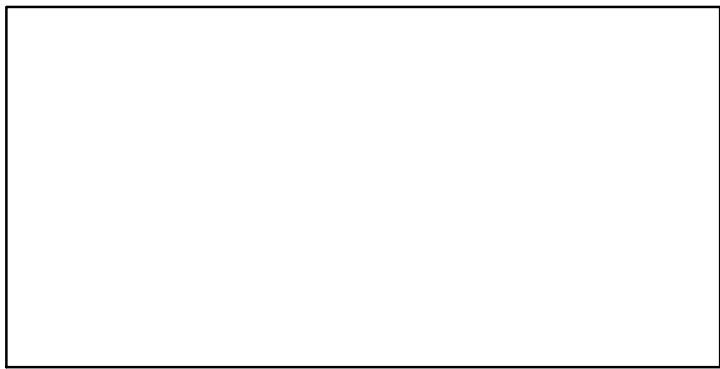
Rougheye rockfish Bering Sea and Aleutian Islands [REYEROCKBSAI]

TC-MT, TL*, RecC* (1974–2015-HIVELY)

TAC*, Cpair*, Cadv*



EFFORT*



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - MSY	* No Data

Rougheye rockfish Gulf of Alaska [REYEROCKGA]

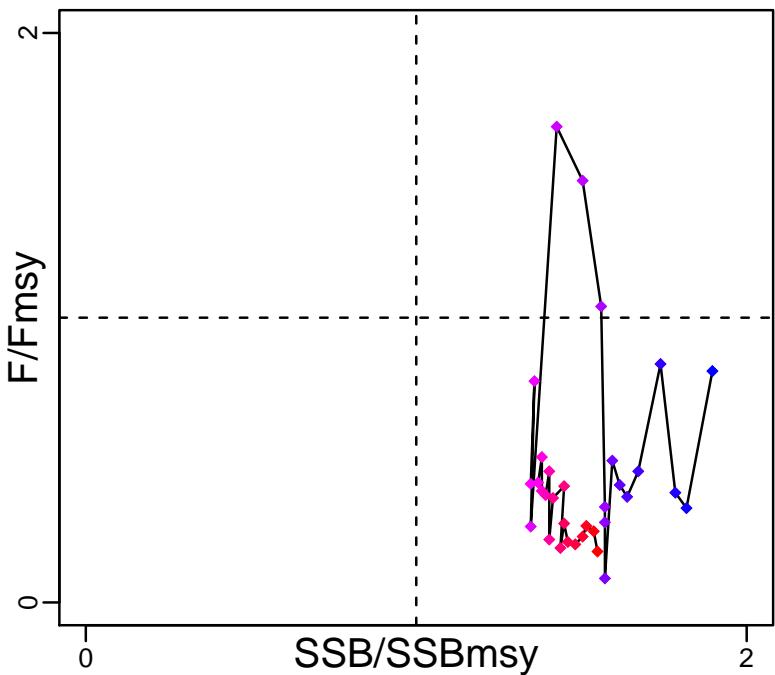
Metadata	
Scientific Name	Sebastodes aleutianus
Current Assess ID	AFSC-REYEROCKGA-1974-2010-STACHURA
Area	Gulf of Alaska
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2010

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-pr-MT	2010	8912
Fmsy	Fmsy-pr-1/yr	2010	0.048
ERmsy	ERmsy-est-ratio	2010	0.014
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2010	661
M	M-1/yr	2010	0.034
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

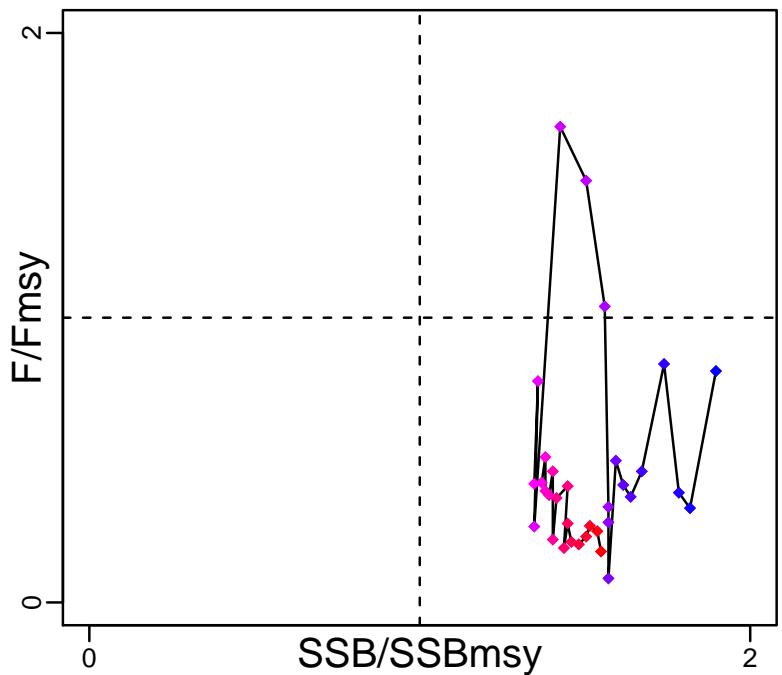
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2010	45,400	-	-
SSB	SSB-MT	2010	13,800	Females	19+
TN	-	-	-	-	-
R	R-E00	2010	1,160,000	-	-
F	F-1/yr	2010	0.009	-	-
ER	ER-ratio	2010	0.006	-	-
TC	TC-MT	2010	445		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSB-MT/SSBmsy-pr-MT	2010	1.548		
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2010	0.179		
ER/ERmsy	ER-ratio/ERmsy-est-ratio	2010	0.448		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Rougheye rockfish Gulf of Alaska [REYEROCKGA]

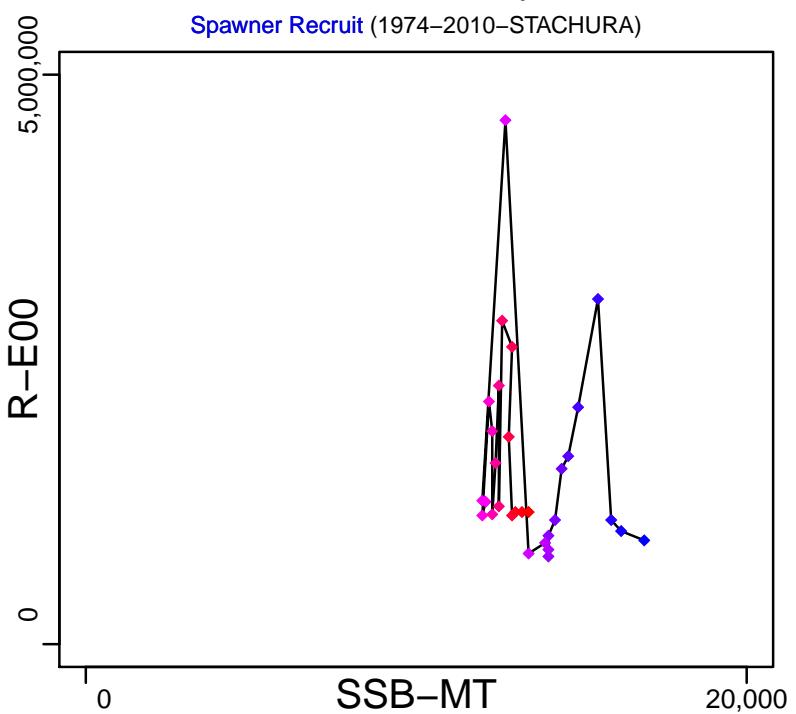
Kobe MSYpref (1974–2010–STACHURA)



Kobe MGTpref (1974–2010–STACHURA)



Spawner Recruit (1974–2010–STACHURA)



Production*

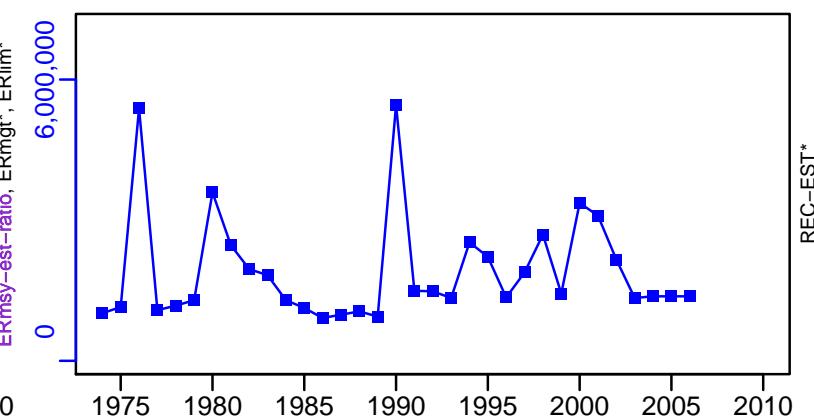
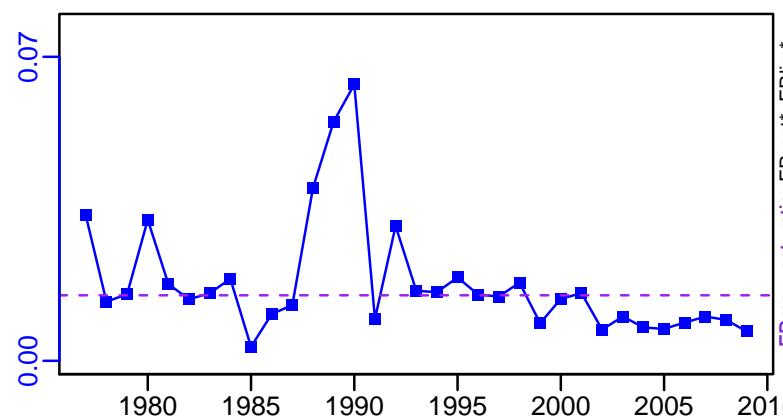
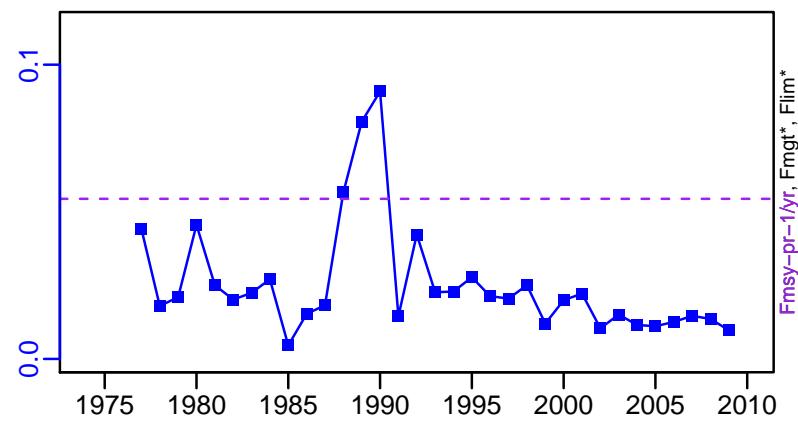
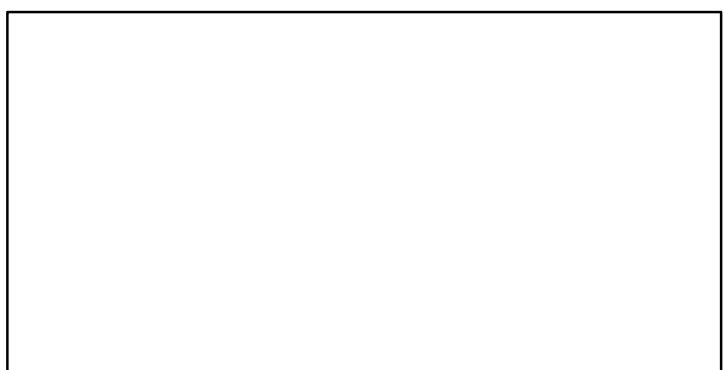
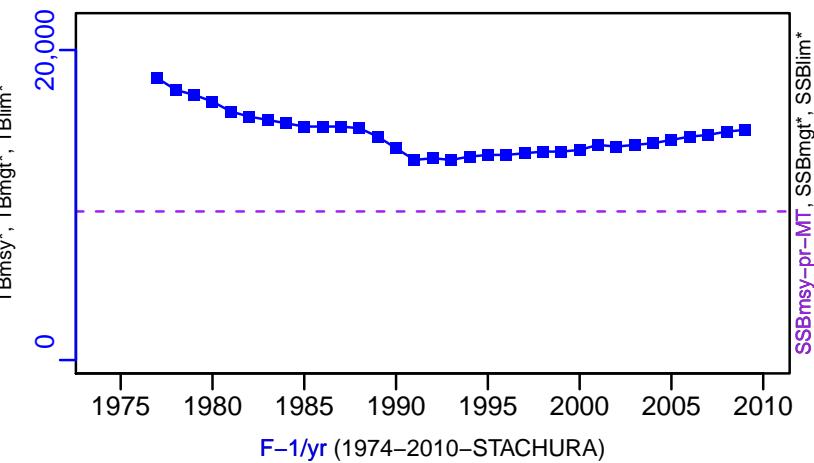
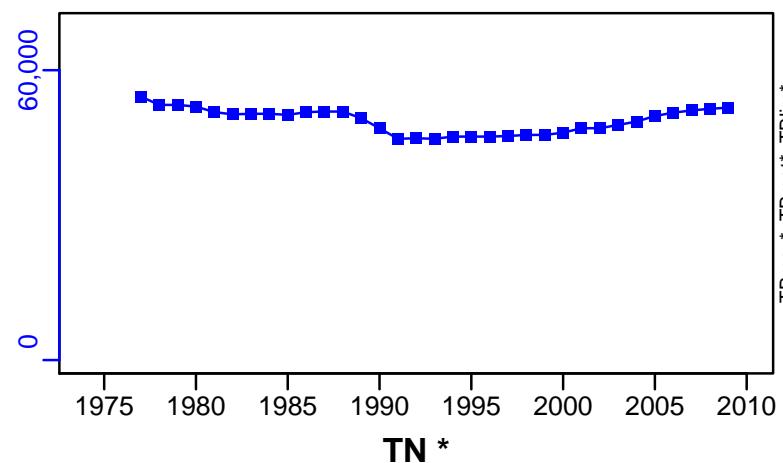


◆ Start Year ◆ End Year * No Data

Rougheye rockfish Gulf of Alaska [REYEROCKGA]

TB-MT (1974–2010–STACHURA)

SSB-MT (1974–2010–STACHURA)

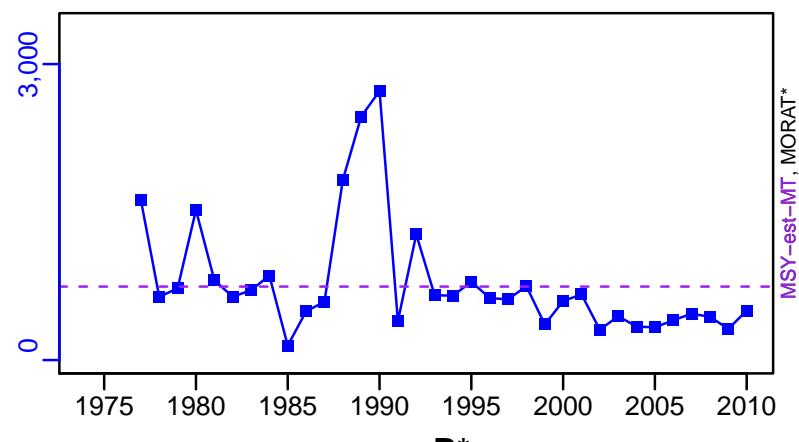


■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	--- Lim BRP	* No Data

Rougheye rockfish Gulf of Alaska [REYEROCKGA]

TC-MT, TL*, RecC* (1974–2010-STACHURA)

TAC*, Cpair*, Cadv*



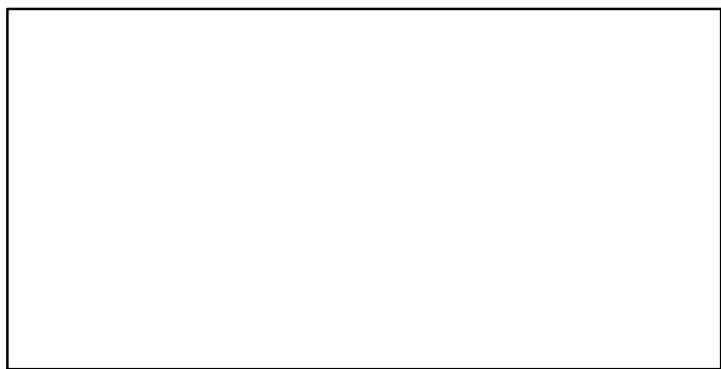
survB*



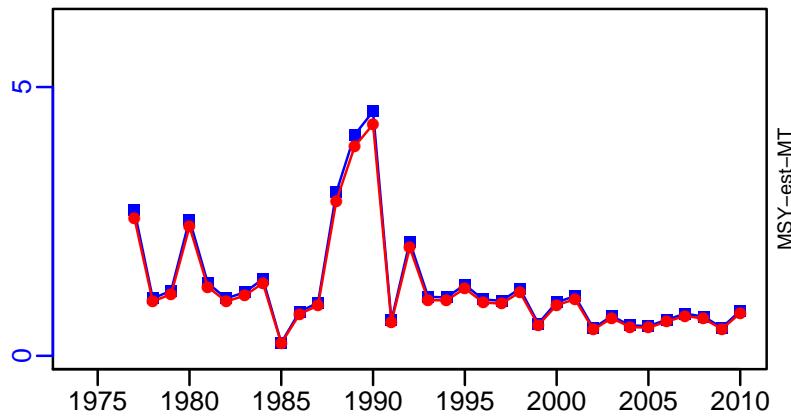
CPUE*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1974–2010-STACHURA)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Red king crab Aleutian Islands Western segment [RKCRAIBAIWS]

Metadata	
Scientific Name	Paralithodes camtschaticus
Current Assess ID	AFSC-RKCRAIBAIWS-1961-2017-SISIMP2021
Area	Aleutian Islands Western segment
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2017, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2017	0		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Red king crab Aleutian Islands Western segment [RKCRABAIWS]

Kobe MSY*

Kobe MGT*

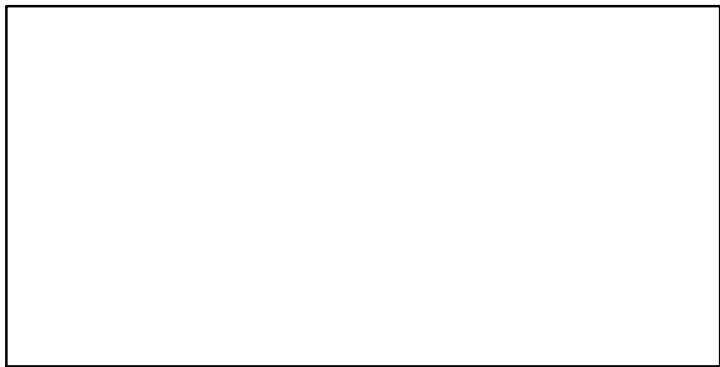
Spawner Recruit*

Production*

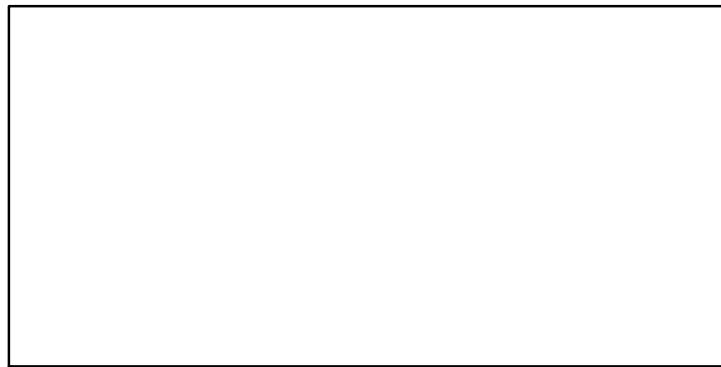
◆ Start Year ♦ End Year * No Data

Red king crab Aleutian Islands Western segment [RKCRABAIWS]

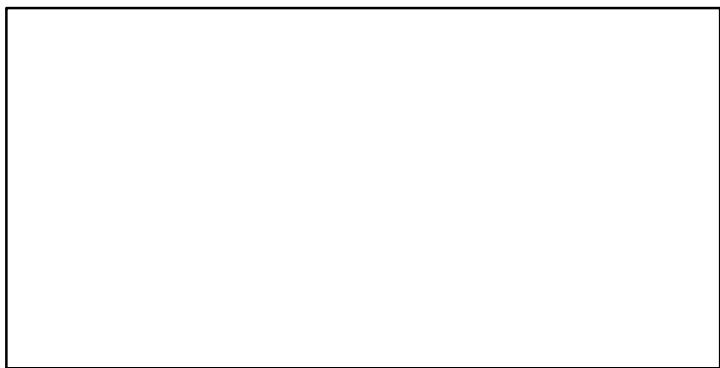
TB*



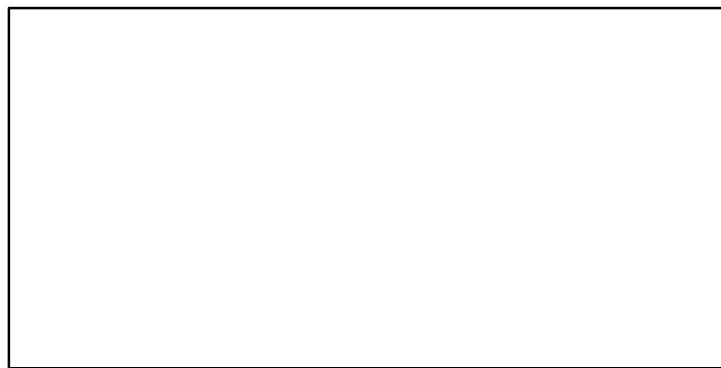
SSB*



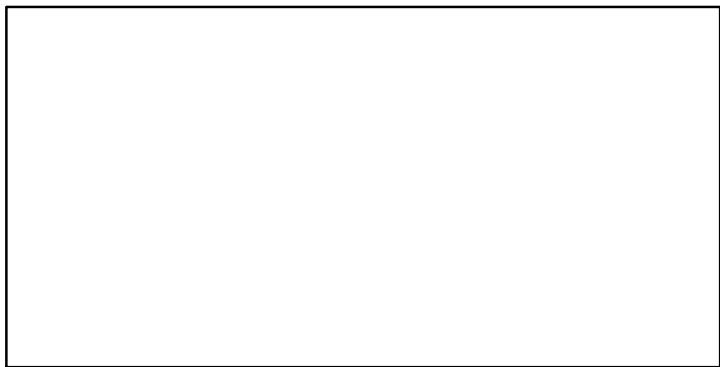
TN *



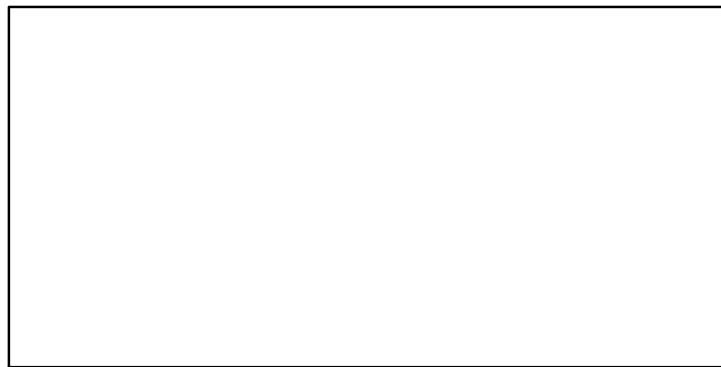
F*



ER*



Recruits*

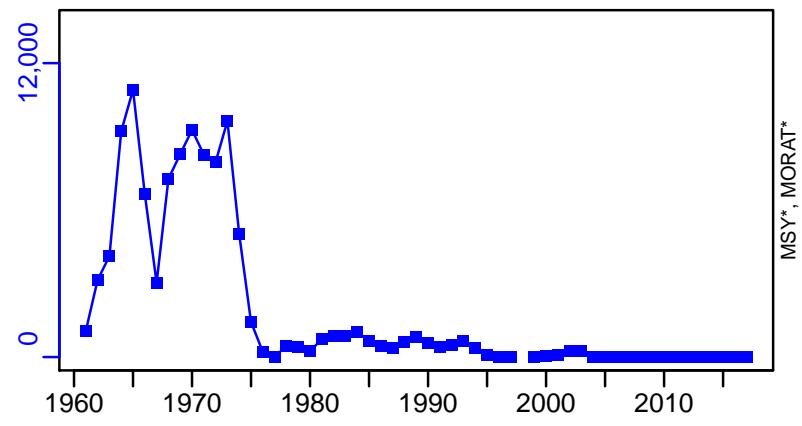


- | | | |
|----------------------|------------------|-----------|
| ■ Listed time series | - - - Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

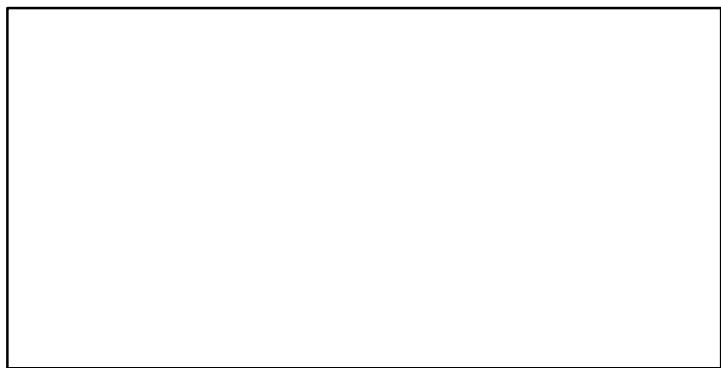
Red king crab Aleutian Islands Western segment [RKCRABAIWS]

TC-MT, TL*, RecC* (1961–2017–SISIMP2021)

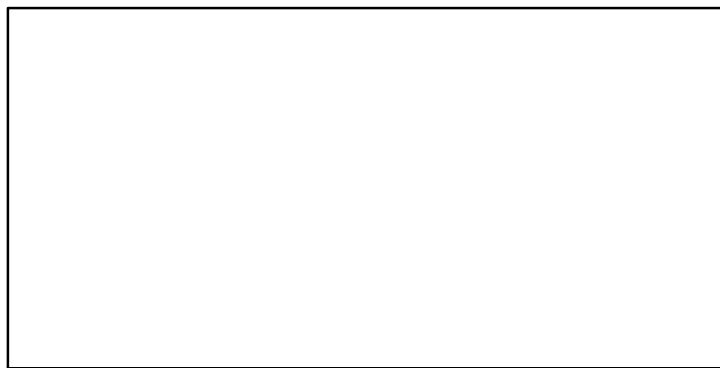
TAC*, Cpair*, Cadv*



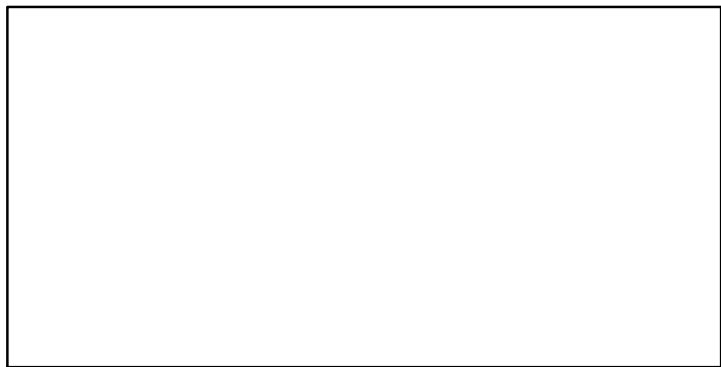
survB*



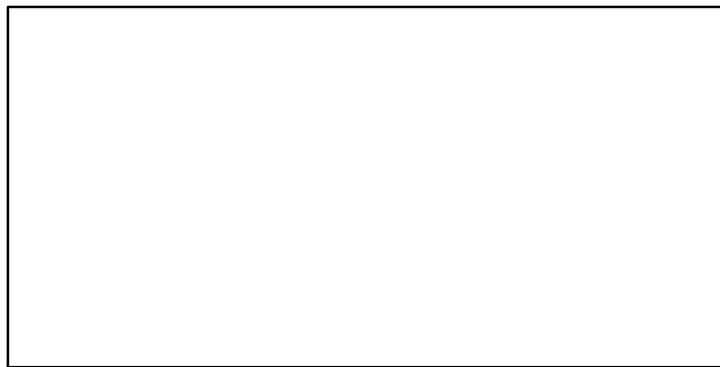
CPUE*



EFFORT*



CdivMSY*



- | | | |
|--------------------------|--------------------------|-----------|
| ■ 1st listed time series | ▲ 3rd listed time series | — MORAT |
| ● 2nd listed time series | - - - MSY | * No Data |

Red king crab Bristol Bay [RKCRABBB]

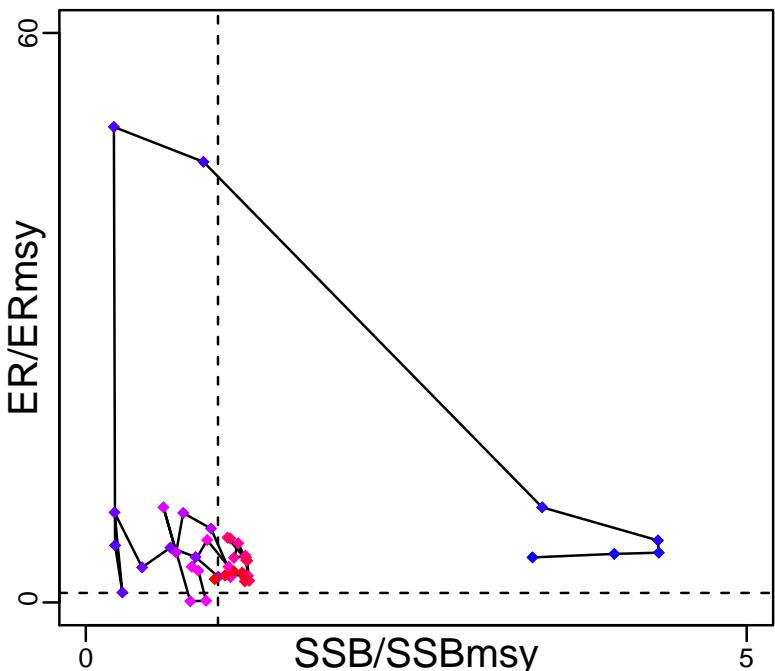
Metadata	
Scientific Name	Paralithodes camtschaticus
Current Assess ID	AFSC-RKCRABBB-1953-2018-SISIMP2021
Area	Bristol Bay
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2016, 2018, 2008, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-MT	2015	26,100
SSBmsy	SSBmsy-MT	2018	25,500
Fmsy	-	-	-
ERmsy	ERmsy-pr-ratio	2008	0.33
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2008	23,646
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	12,740
Flim	-	-	-
ERlim	-	-	-

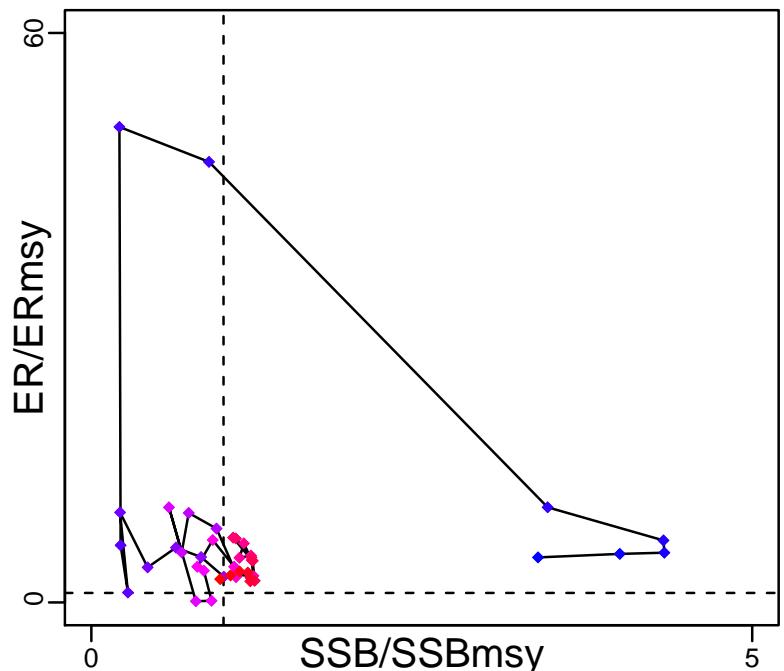
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	86,100	-	-	
SSB	SSB-MT	2018	20,804	-	-	
TN	-	-	-	-	-	
R	R-E00	2018	14,641,000	-	-	
F	F-1/yr	2016	0.167	-	-	
ER	ER-calc-ratio	2018	0.173	-	-	
TC	TC-MT	2018	3481			
TL	-	-	-			
TB/TBmsy	TB-MT/TBmsy-MT	2015	3.299			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2018	0.816			
F/Fmsy	-	-	-			
ER/ERmsy	ER-ratio/ERmsy-pr-ratio	2008	1.055			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Red king crab Bristol Bay [RKCRABBB]

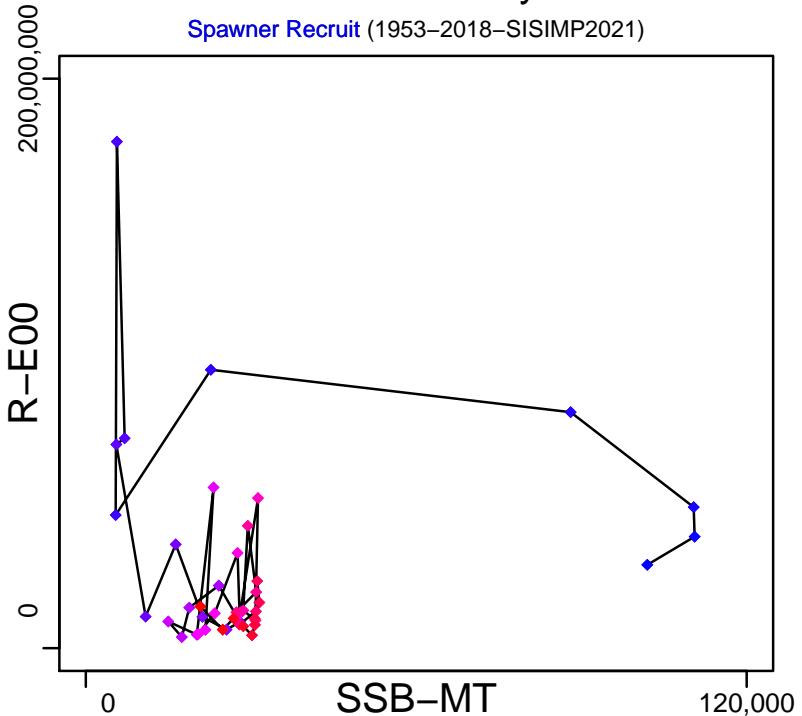
Kobe MSYpref (1953–2018–SISIMP2021)



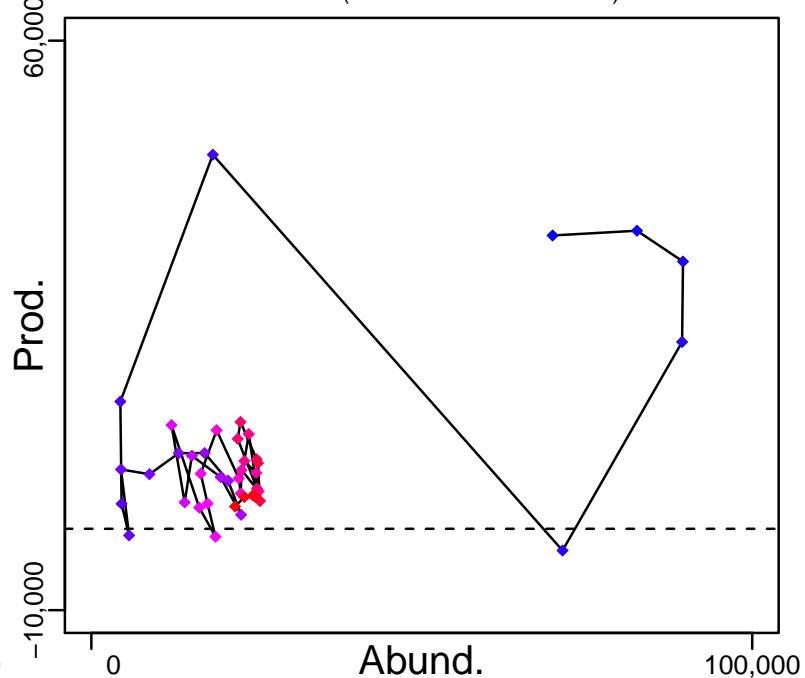
Kobe MGTpref (1953–2018–SISIMP2021)



Spawner Recruit (1953–2018–SISIMP2021)



Production (1953–2018–SISIMP2021)

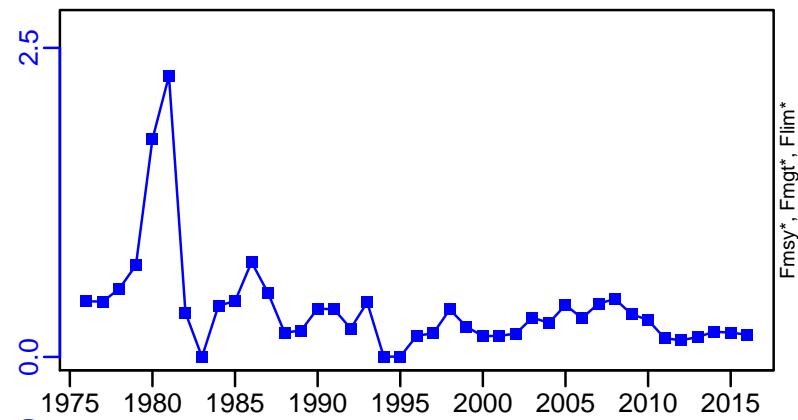
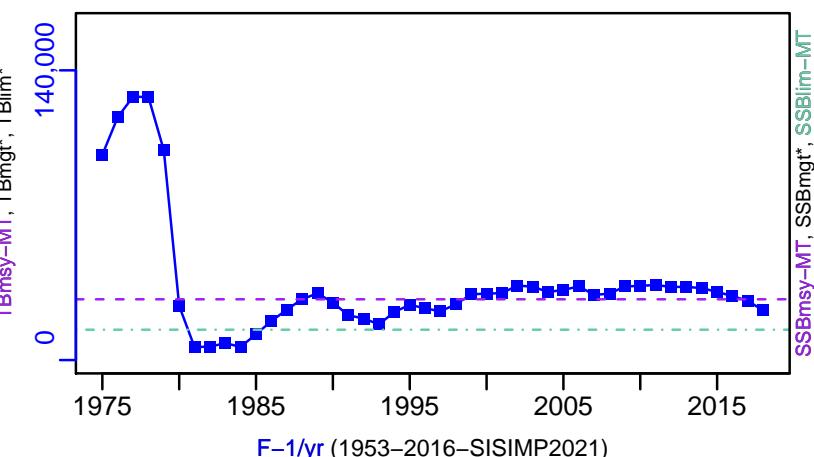
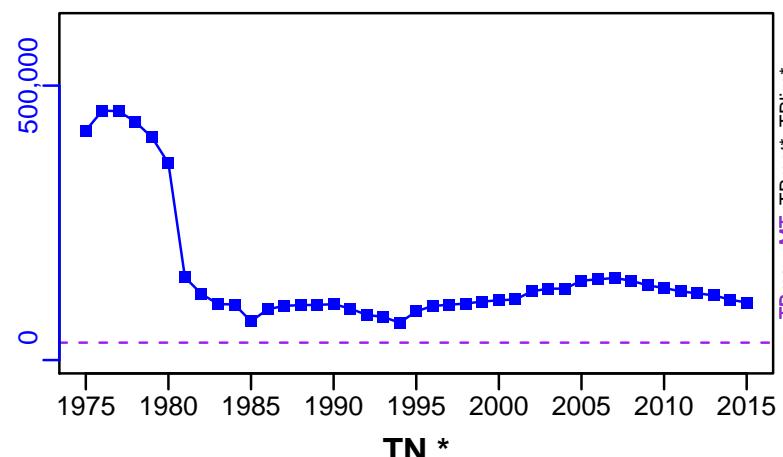


◆ Start Year ◆ End Year * No Data

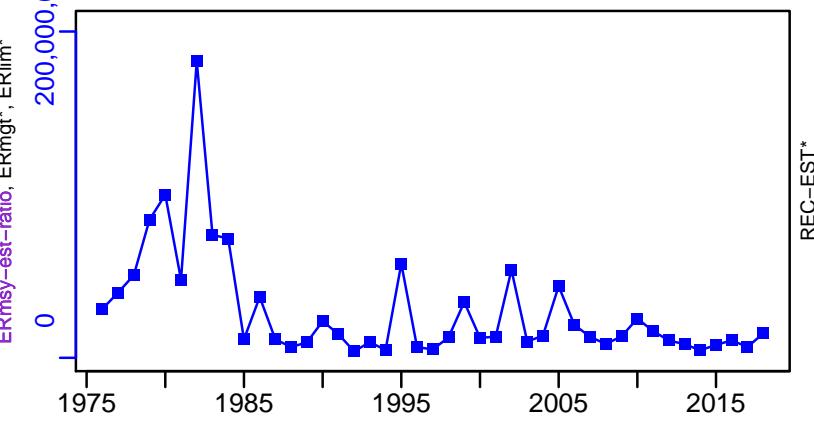
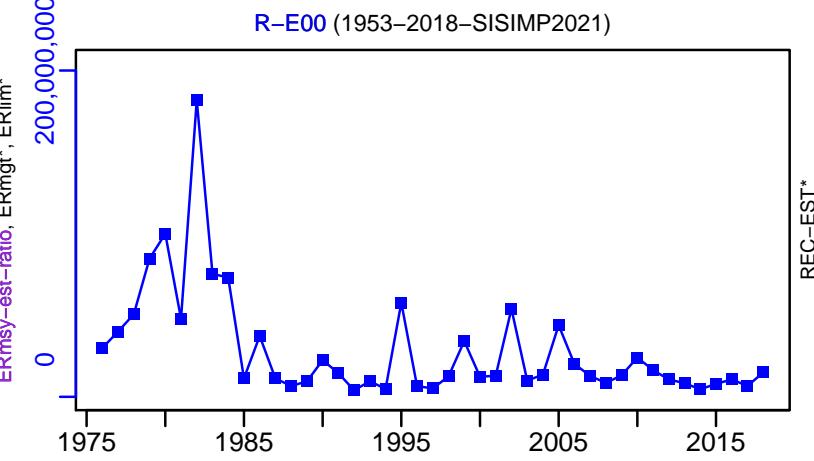
Red king crab Bristol Bay [RKCRABBB]

TB-MT (1975–2015–SISIMP2016)

SSB-MT (1953–2018–SISIMP2021)



ER-calc-ratio (1953–2018–SISIMP2021)

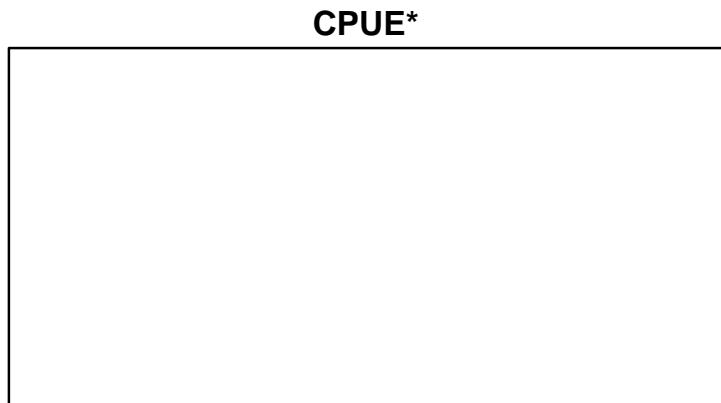
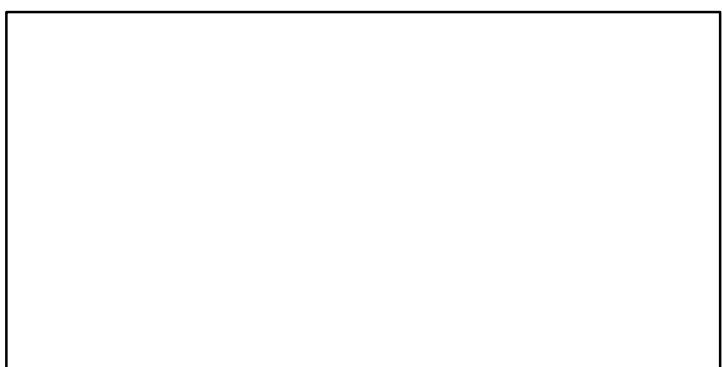
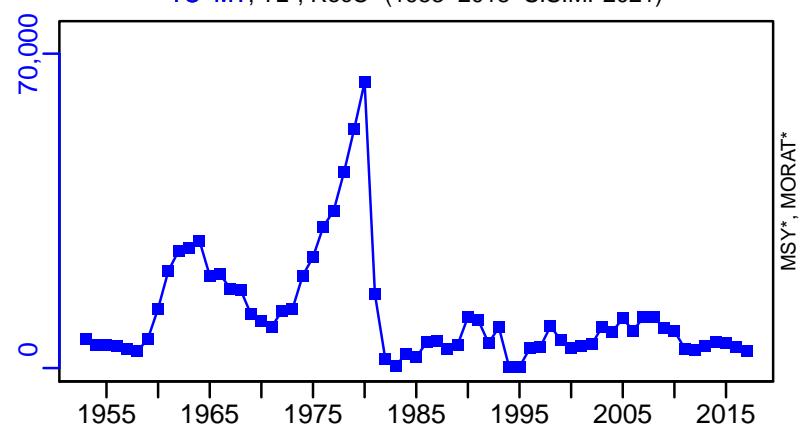


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

Red king crab Bristol Bay [RKCRABBB]

TC-MT, TL*, RecC* (1953–2018–SISIMP2021)

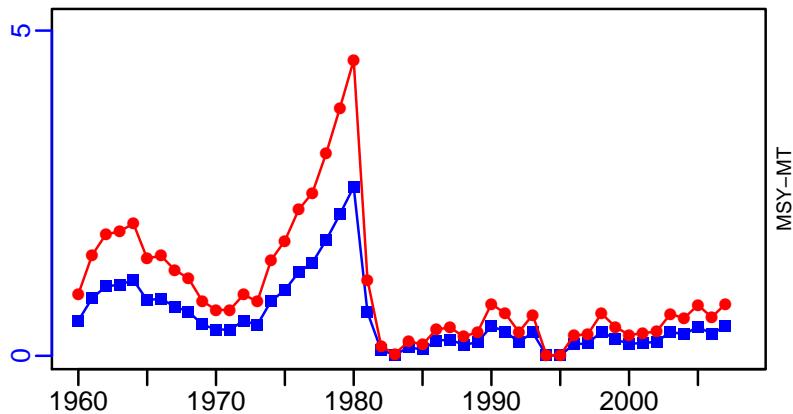
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1960–2008–JENSEN)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Red king crab Norton Sound [RKCRABNS]

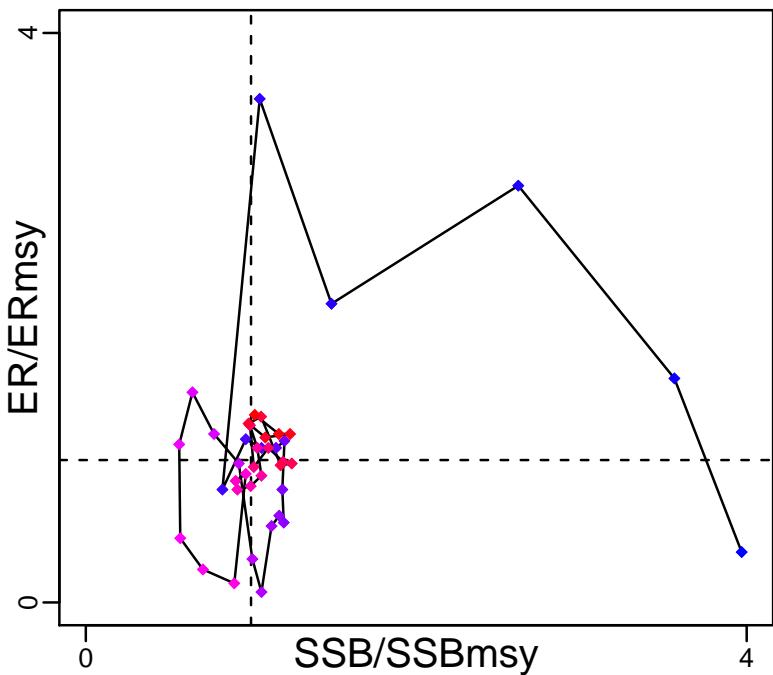
Metadata	
Scientific Name	Paralithodes camtschaticus
Current Assess ID	AFSC-RKCRABNS-1976-2017-SISIMP2021
Area	Norton Sound
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2008, 2016, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2008	1618
Fmsy	-	-	-
ERmsy	ERmsy-est-ratio	2017	0.082
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2017	322,584
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

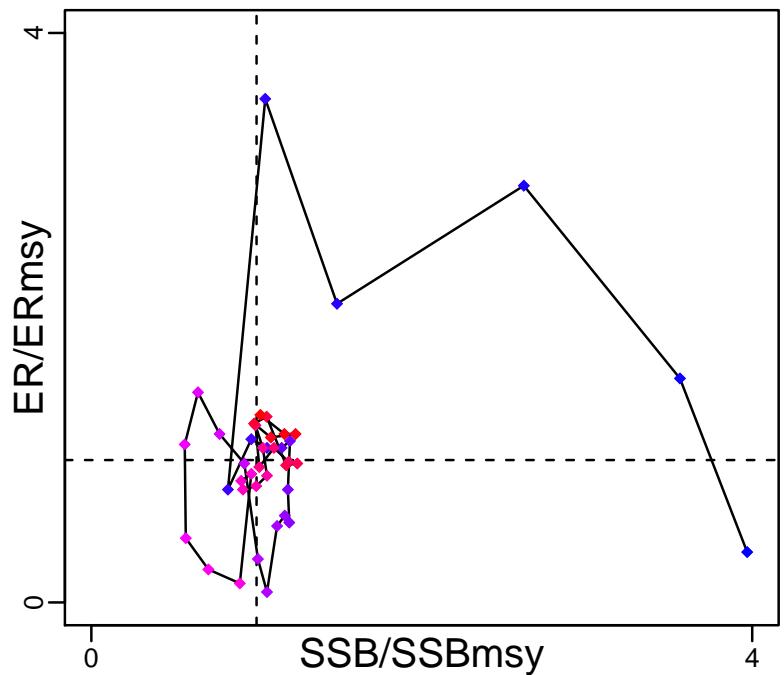
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	-	-	-	-	-	
SSB	SSB-MT	2017	4,850,000	-	-	
TN	-	-	-	-	-	
R	R-E00	2017	720,000	-	-	
F	-	-	-	-	-	
ER	ER-ratio	2017	0.108	-	-	
TC	TC-MT	2017	522,000			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2008	1.471			
F/Fmsy	-	-	-			
ER/ERmsy	ER-ratio/ERmsy-est-ratio	2017	1.317			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Red king crab Norton Sound [RKCRABNS]

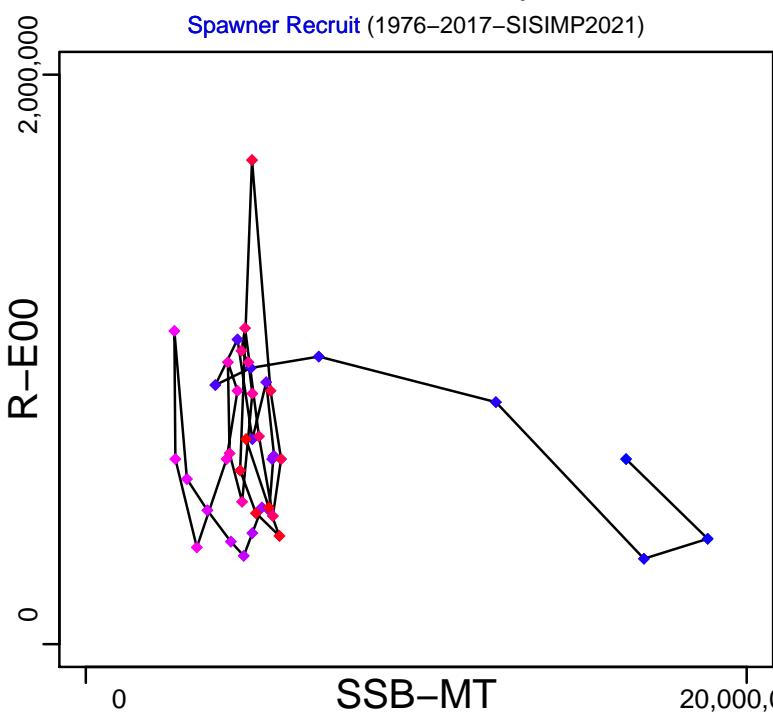
Kobe MSYpref (1976–2017–SISIMP2021)



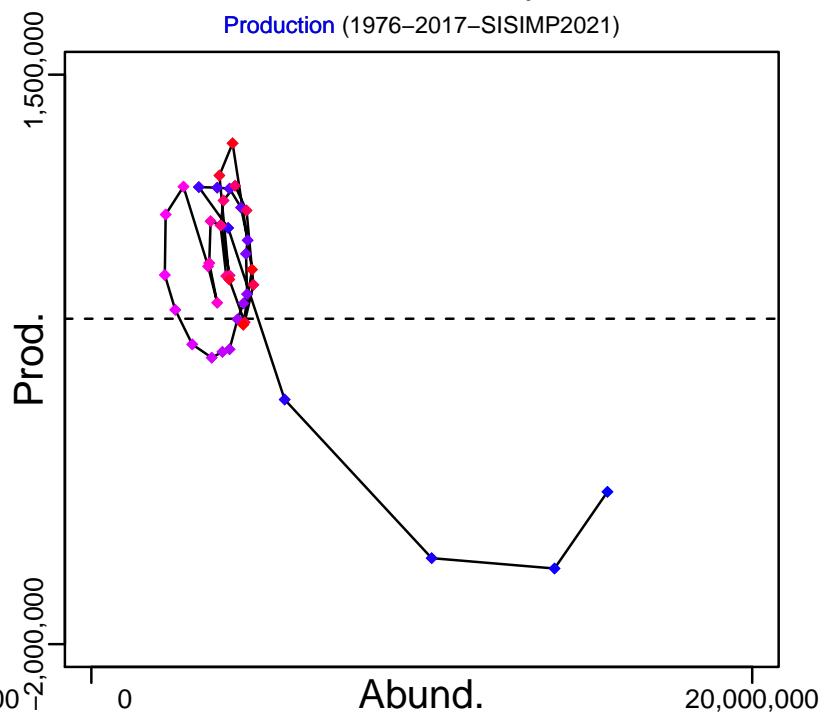
Kobe MGTpref (1976–2017–SISIMP2021)



Spawner Recruit (1976–2017–SISIMP2021)



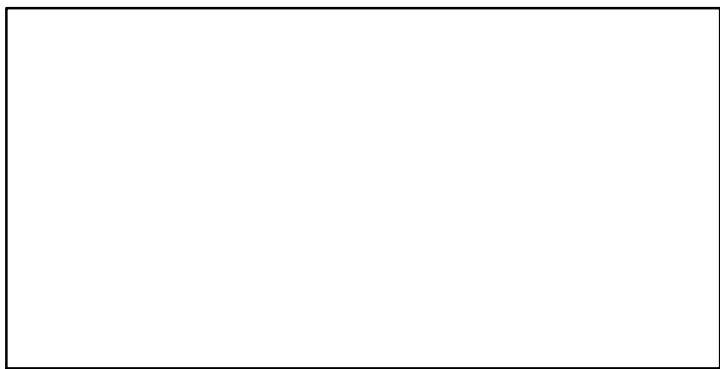
Production (1976–2017–SISIMP2021)



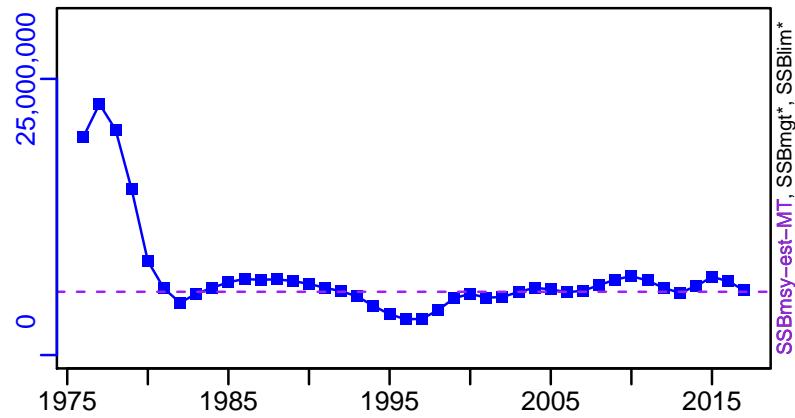
◆ Start Year ◆ End Year * No Data

Red king crab Norton Sound [RKCRABNS]

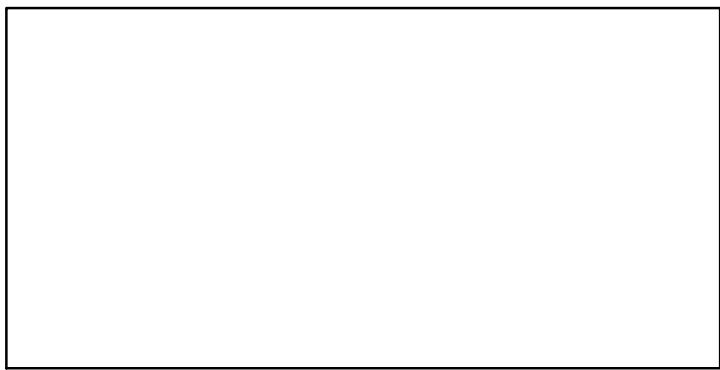
TB*



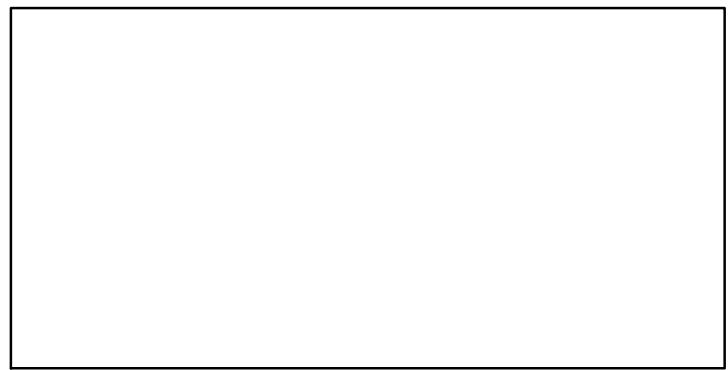
SSB-MT (1976–2017–SISIMP2021)



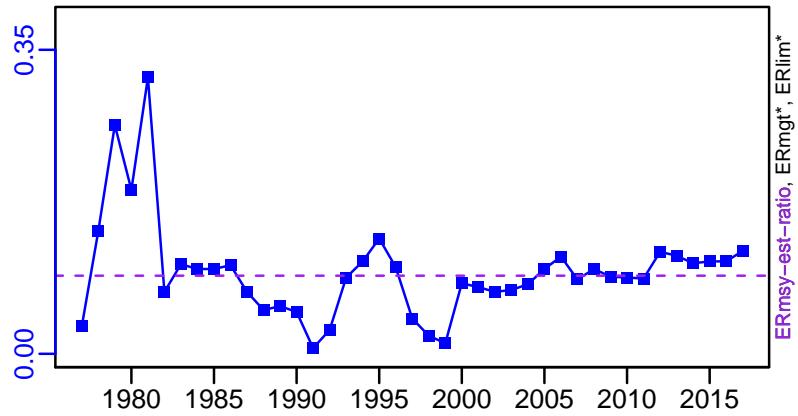
TN *



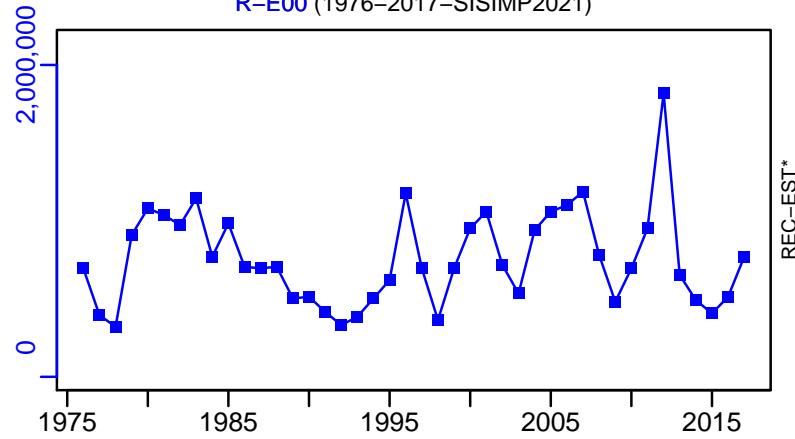
F*



ER-ratio (1976–2017–SISIMP2021)



R-E00 (1976–2017–SISIMP2021)

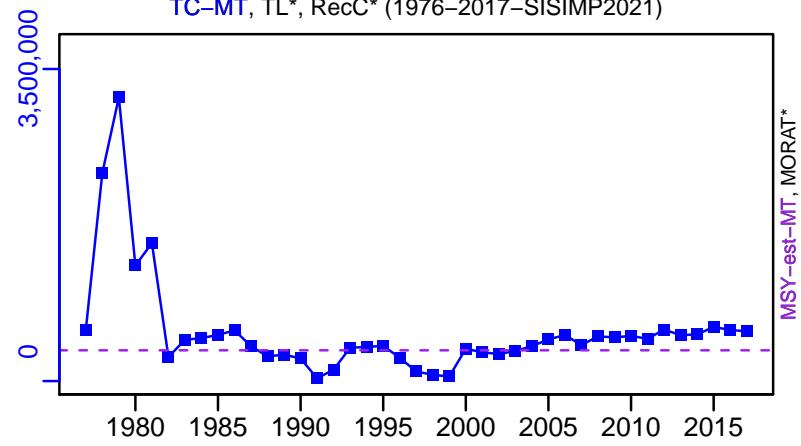


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	--- Lim BRP	* No Data

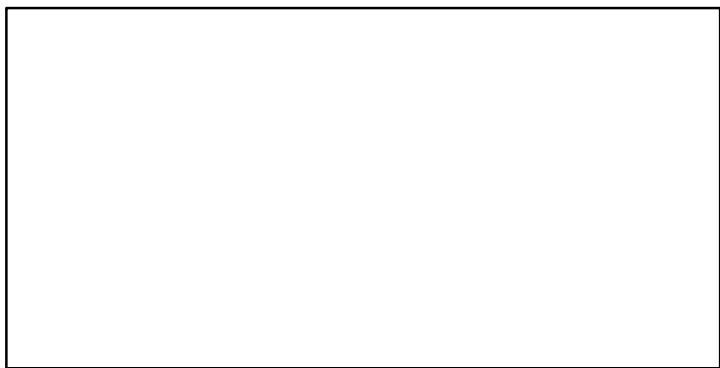
Red king crab Norton Sound [RKCRABNS]

TC-MT, TL*, RecC* (1976–2017–SISIMP2021)

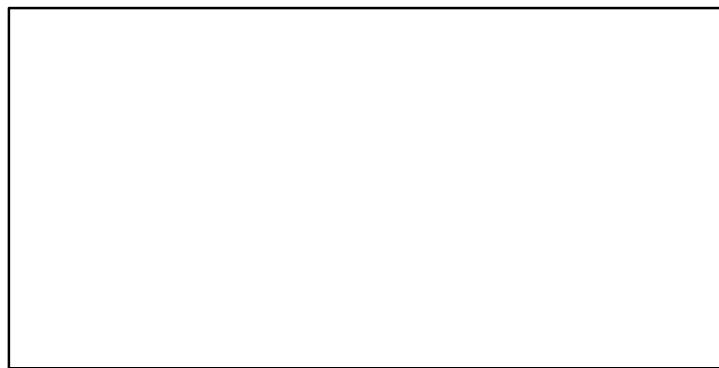
TAC*, Cpair*, Cadv*



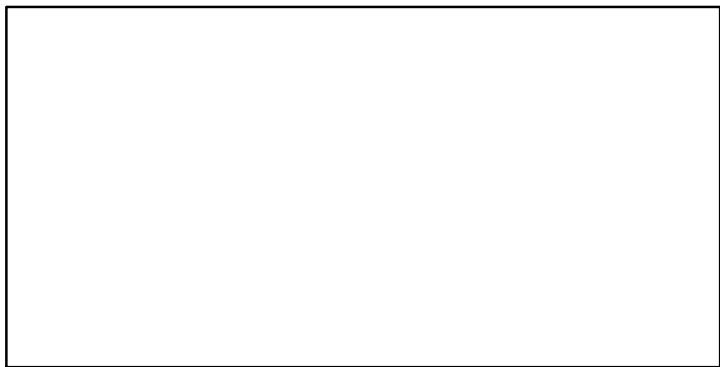
survB*



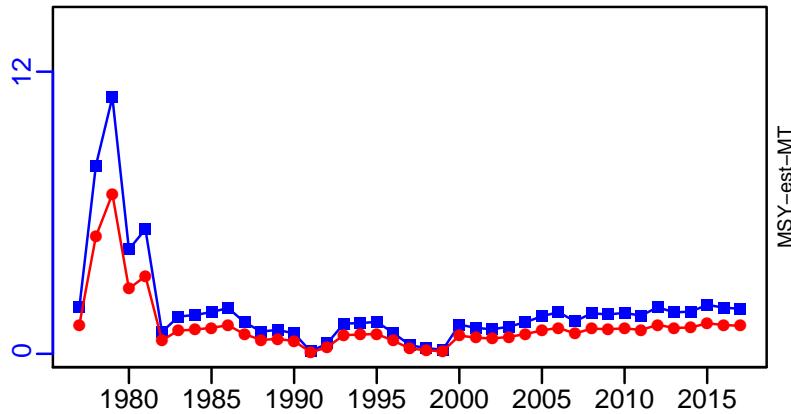
CPUE*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1976–2017–SISIMP2021)



1st listed time series 3rd listed time series MORAT
2nd listed time series MSY * No Data

Red king crab Pribilof Islands [RKCRABPI]

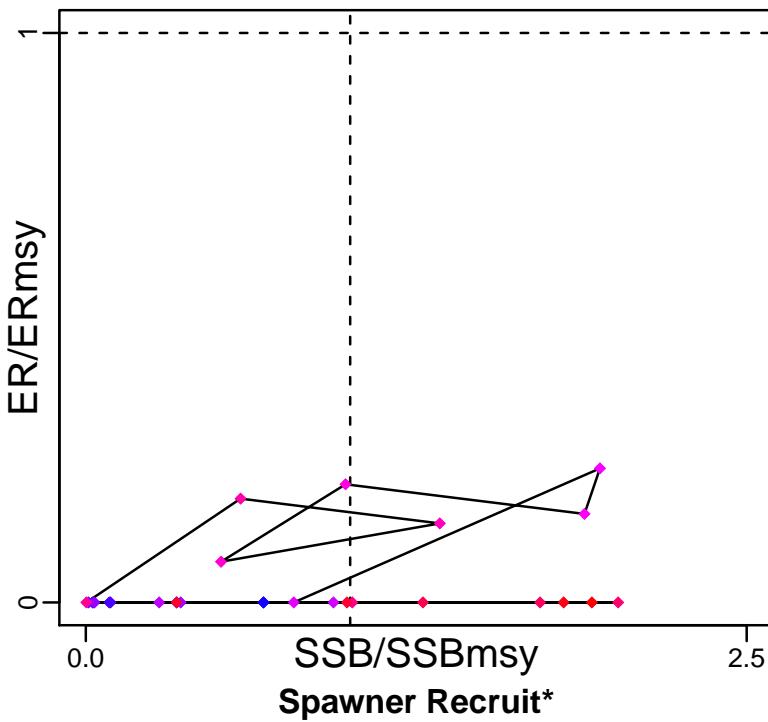
Metadata	
Scientific Name	Paralithodes camtschaticus
Current Assess ID	AFSC-RKCRABPI-1991-2016-SISIMP2021
Area	Pribilof Islands
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2009, 2016, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2009	3928
Fmsy	-	-	-
ERmsy	ERmsy-est-ratio	2009	0.392
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2009	1485
M	M-1/yr	2009	0.18
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

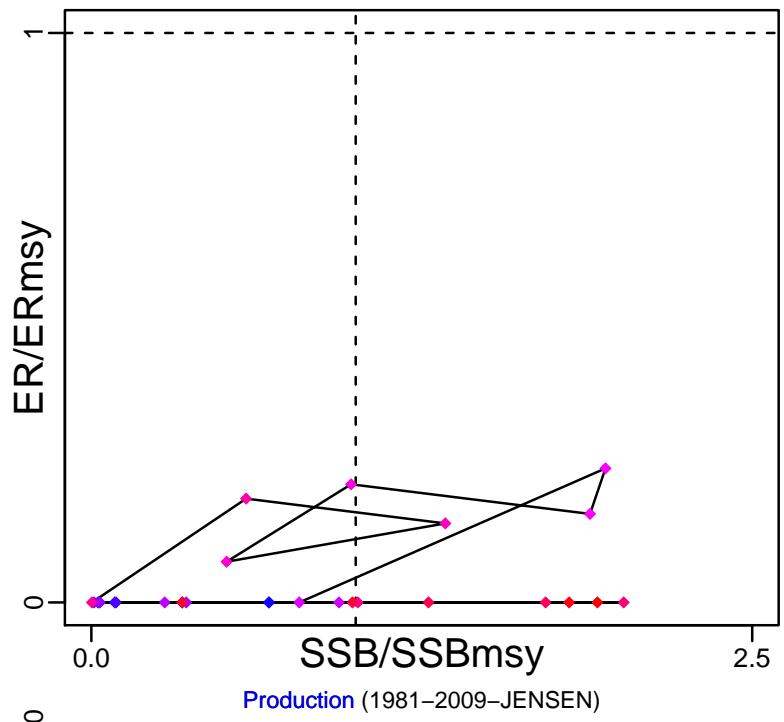
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2009	7790	-	-	
SSB	SSB-MT	2009	5670	Males	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	-	-	-	-	-	
ER	ER-calc-ratio	2009	0	-	-	
TC	TC-MT	2016	0.49			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2009	1.443			
F/Fmsy	-	-	-			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2009	0			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Red king crab Pribilof Islands [RKCRABPI]

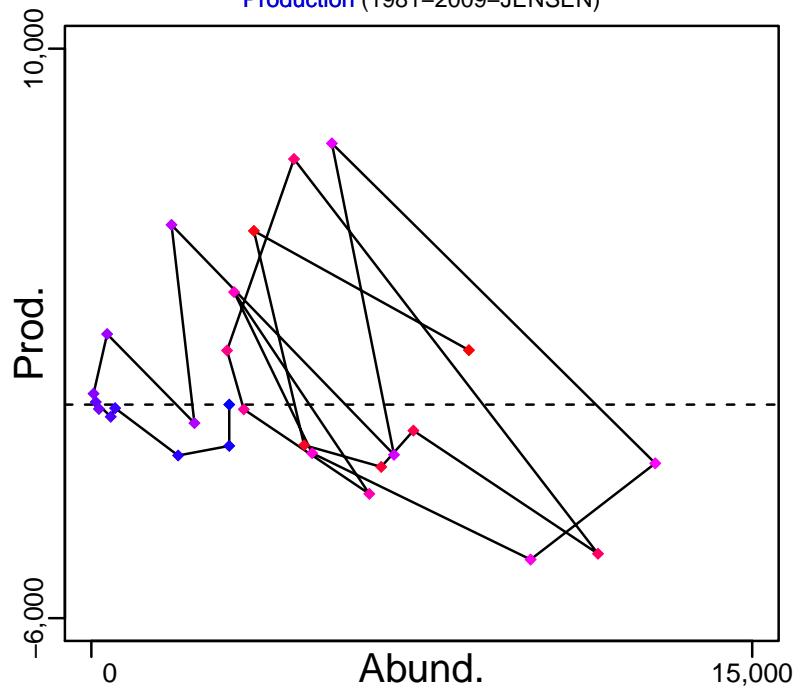
Kobe MSYpref (1981–2009–JENSEN)



Kobe MGTpref (1981–2009–JENSEN)



Production (1981–2009–JENSEN)

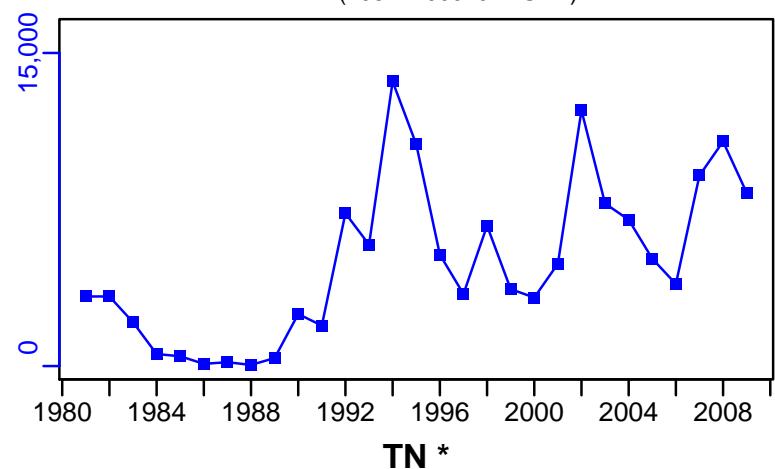


◆ Start Year ◆ End Year * No Data

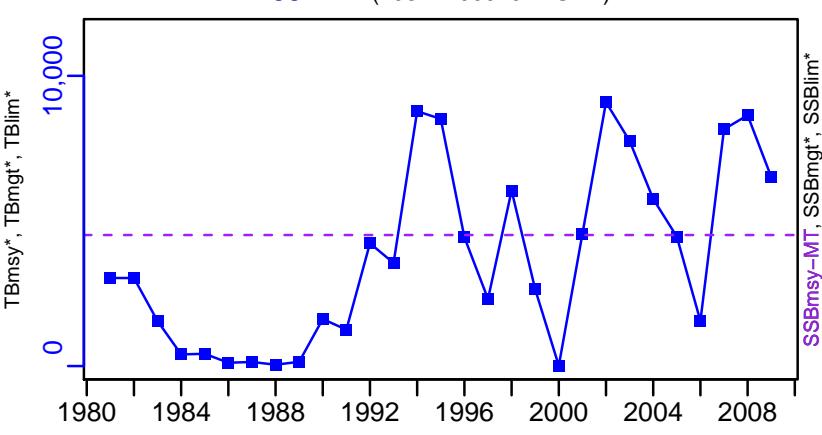
Red king crab Pribilof Islands [RKCRABPI]

TB-MT (1981–2009–JENSEN)

SSB-MT (1981–2009–JENSEN)



TN *

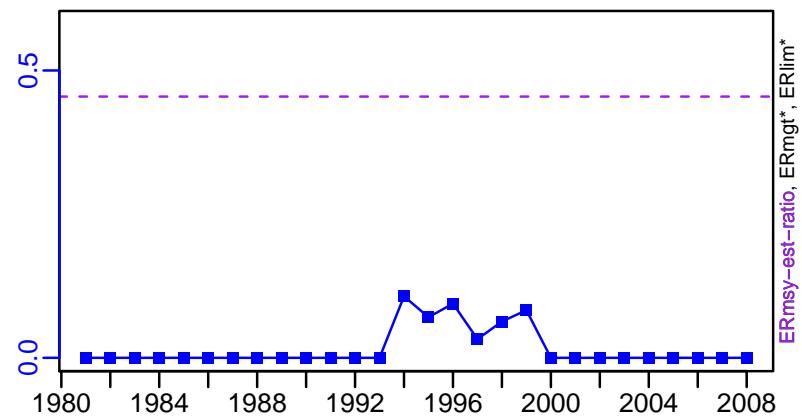


F*



ER-calc-ratio (1981–2009–JENSEN)

Recruits*



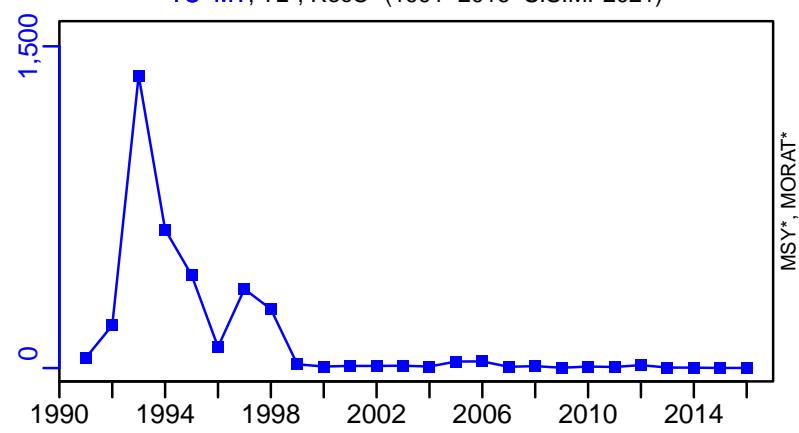
ER_{mgt}-est-ratio, ER_{mgt}* , ER_{lim}*

- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP | --- Lim BRP | * No Data |

Red king crab Pribilof Islands [RKCRABPI]

TC-MT, TL*, RecC* (1991–2016–SISIMP2021)

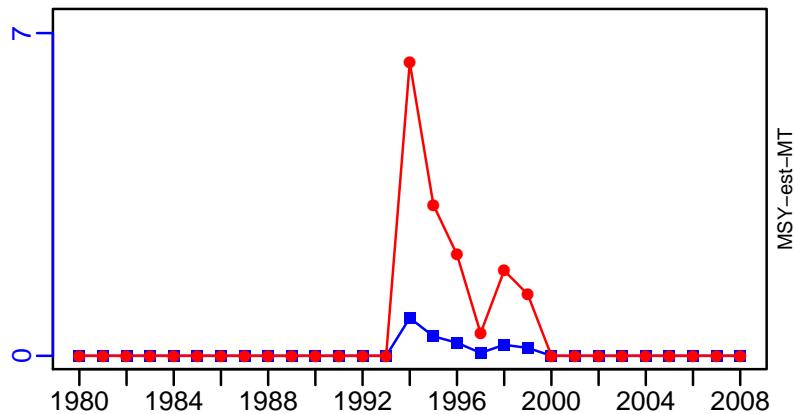
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1981–2009–JENSEN)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Rock sole Gulf of Alaska [RSOLEGA]

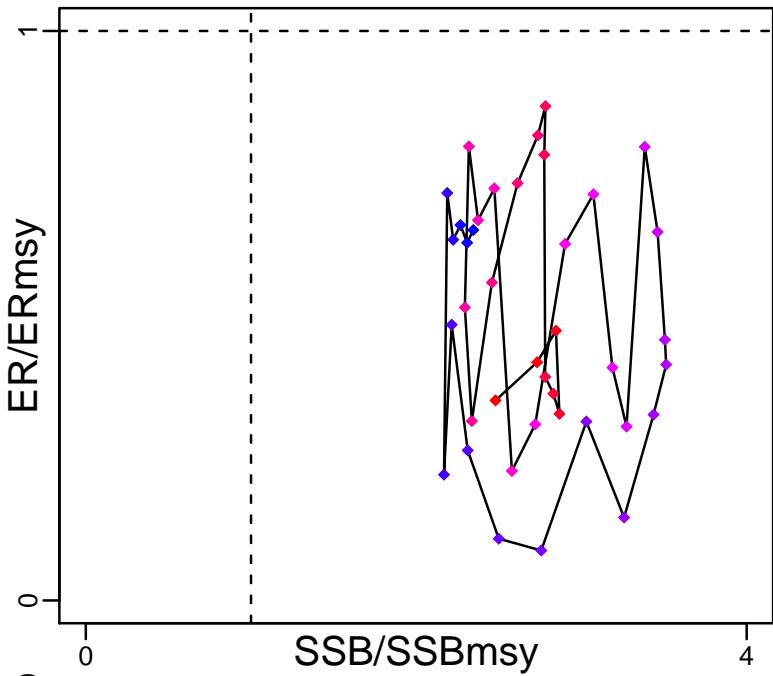
Metadata	
Scientific Name	Lepidopsetta bilineata
Current Assess ID	AFSC-RSOLEGA-1977-2016-SISIMP2021
Area	Gulf of Alaska
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2016	32,700
Fmsy	-	-	-
ERrmsy	ERrmsy-est-ratio	2016	0.029
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2016	1505
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2016	0.243
ERlim	-	-	-

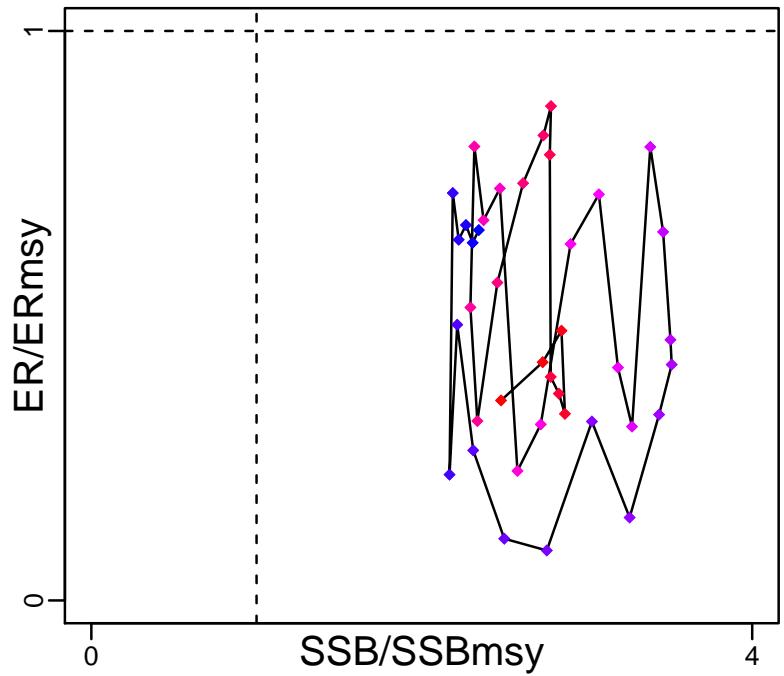
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	156,000	-	3+	
SSB	SSB-MT	2016	75,853	-	-	
TN	-	-	-	-	-	
R	R-E00	2016	221,642,000	-	0	
F	F-1/yr	2016	0.014	-	-	
ER	ER-calc-ratio	2016	0.01	-	-	
TC	TC-MT	2016	1311			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2016	2.32			
F/Fmsy	-	-	-			
ER/ERrmsy	ER-calc-ratio/ERrmsy-est-ratio	2016	0.351			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Rock sole Gulf of Alaska [RSOLEGA]

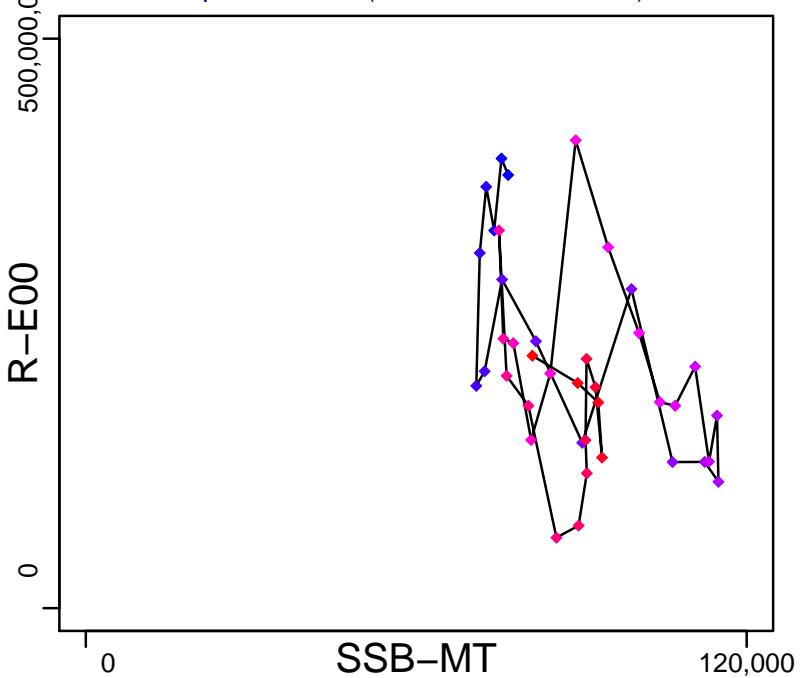
Kobe MSYpref (1977–2016–SISIMP2021)



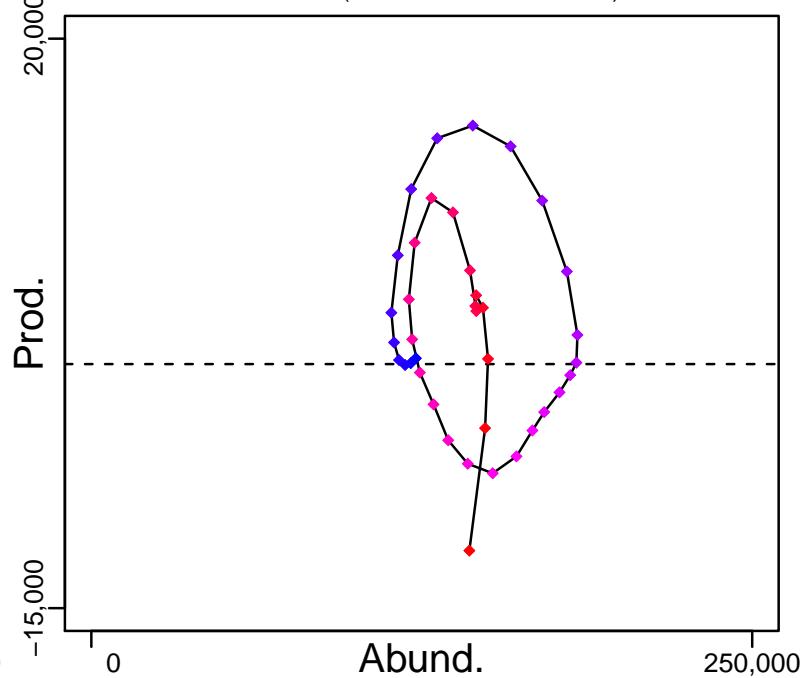
Kobe MGTpref (1977–2016–SISIMP2021)



Spawner Recruit (1977–2016–SISIMP2021)



Production (1977–2016–SISIMP2021)

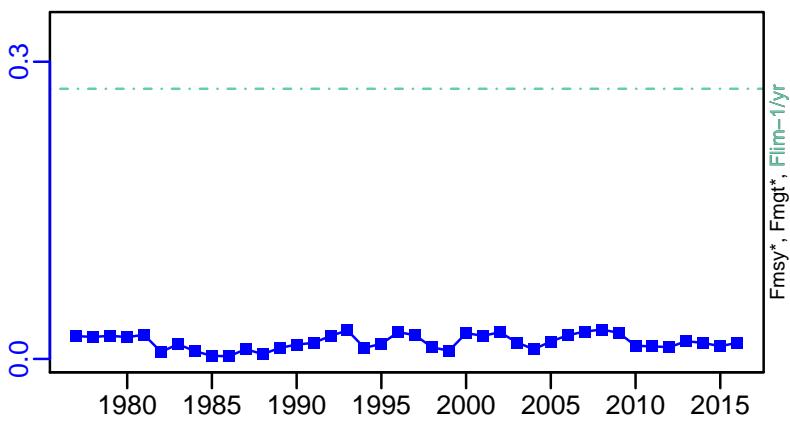
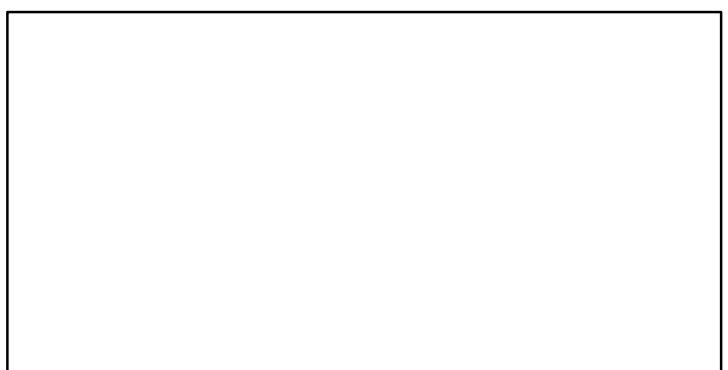
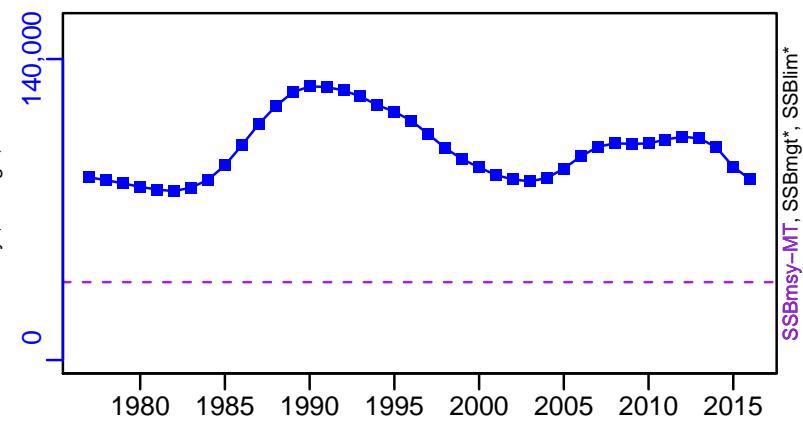
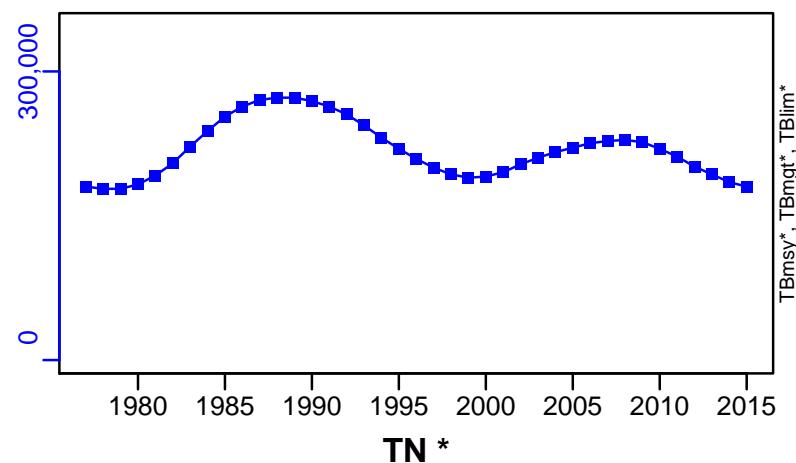


◆ Start Year	◆ End Year	*	No Data
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Rock sole Gulf of Alaska [RSOLEGA]

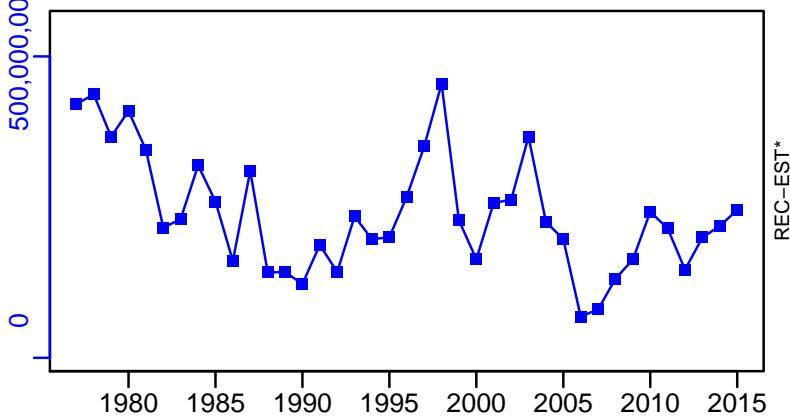
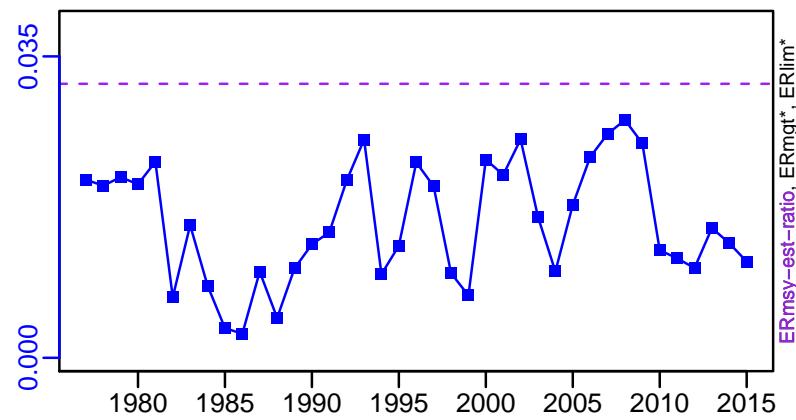
TB-MT (1977–2015–SISIMP2016)

SSB-MT (1977–2016–SISIMP2021)



ER-calc-ratio (1977–2016–SISIMP2021)

R-E00 (1977–2016–SISIMP2021)

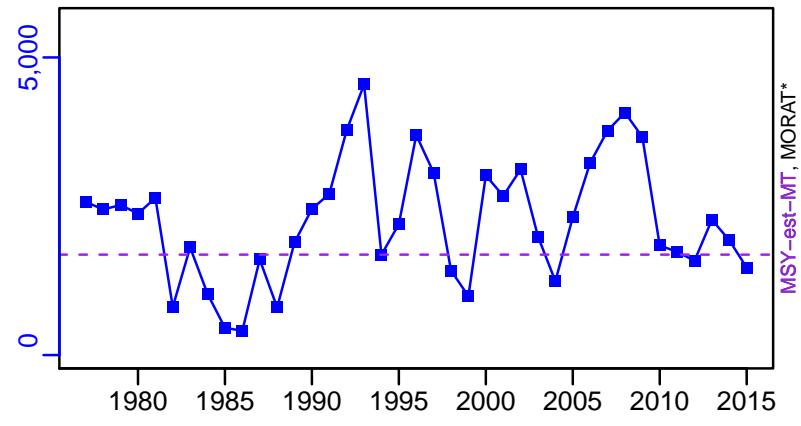


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

Rock sole Gulf of Alaska [RSOLEGA]

TC-MT, TL*, RecC* (1977–2016–SISIMP2021)

TAC*, Cpair*, Cadv*



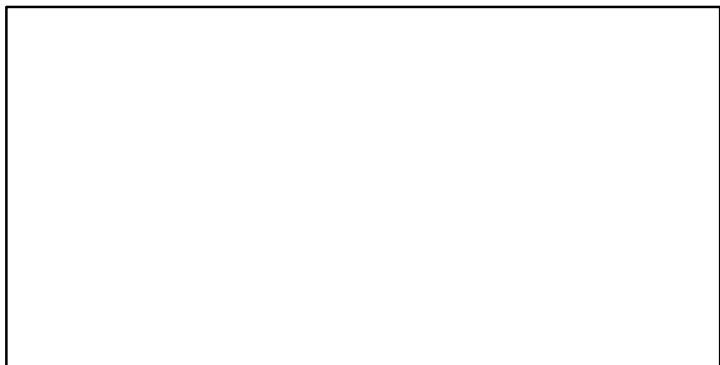
survB*



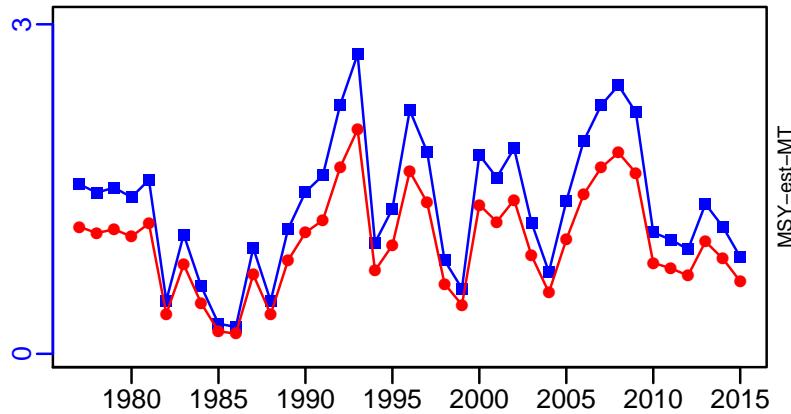
CPUE*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1977–2016–SISIMP2021)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Sablefish Eastern Bering Sea / Aleutian Islands / Gulf of Alaska
[SABLEFEBSAIGA]

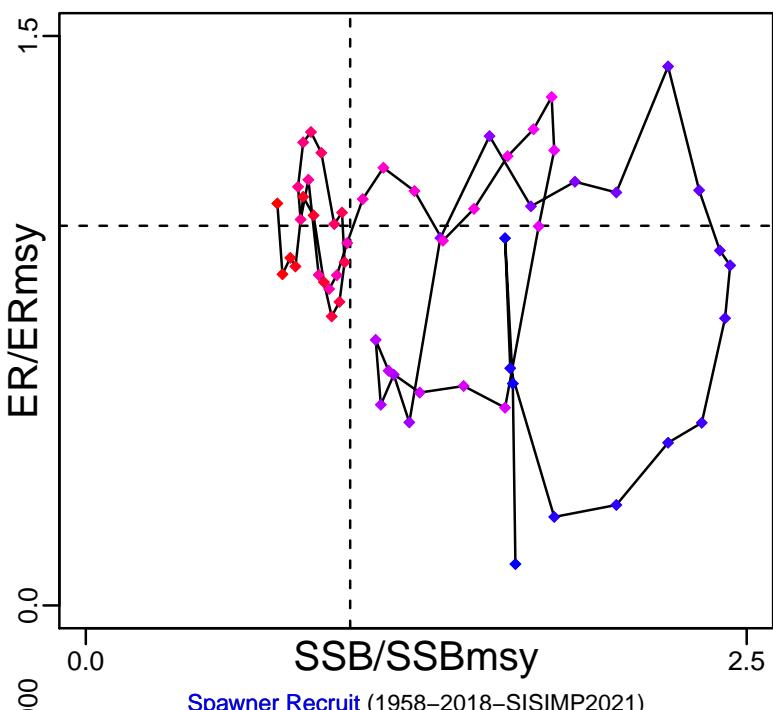
Metadata	
Scientific Name	Anoplopoma fimbria
Current Assess ID	AFSC-SABLEFEBSAIGA-1958-2018-SISIMP2021
Area	Eastern Bering Sea / Aleutian Islands / Gulf of Alaska
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2010, 2016, 2017, 2018, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2010	96,345
SSBmsy	SSBmsy-MT	2018	102,146
Fmsy	Fmsy-pr-1/yr	2010	0.106
ERrmsy	ERrmsy-ratio	2010	0.197
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	SSB0-MT	2010	275,270
MSY	MSY-MT	2010	18,950
M	M-1/yr	2010	0.1
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2018	0.099
ERlim	-	-	-

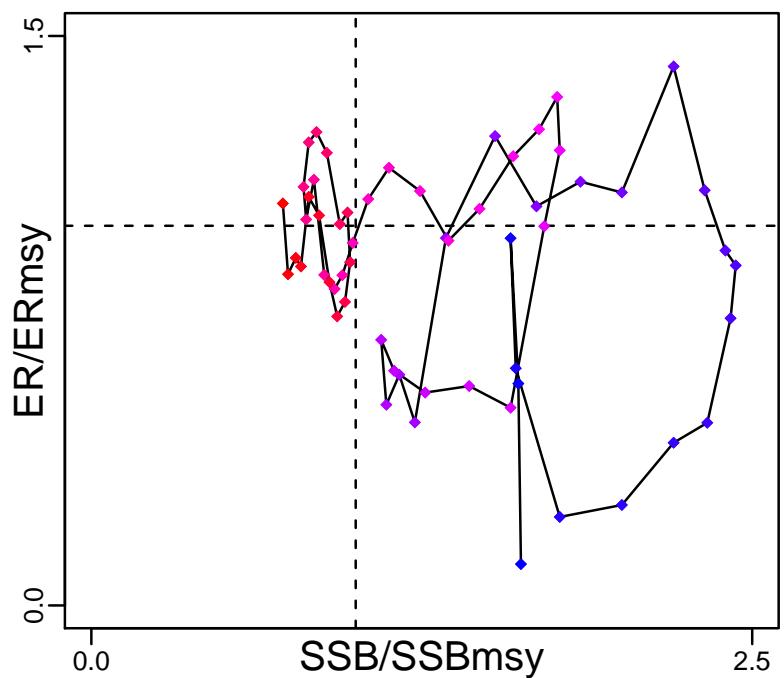
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2015	202,000	Both	2+
SSB	SSB-MT	2018	79,000	-	-
TN	-	-	-	-	-
R	R-E00	2018	12,491,200	-	2
F	F-1/yr	2018	0.081	-	-
ER	ER-calc-ratio	2018	0.081	-	-
TC	TC-MT	2018	13,000		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2010	2.283		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2018	0.773		
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2010	0.585		
ER/ERrmsy	ER-calc-ratio/ERrmsy-ratio	2010	0.261		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Sablefish Eastern Bering Sea / Aleutian Islands / Gulf of Alaska [SABLEFEBSAIGA]

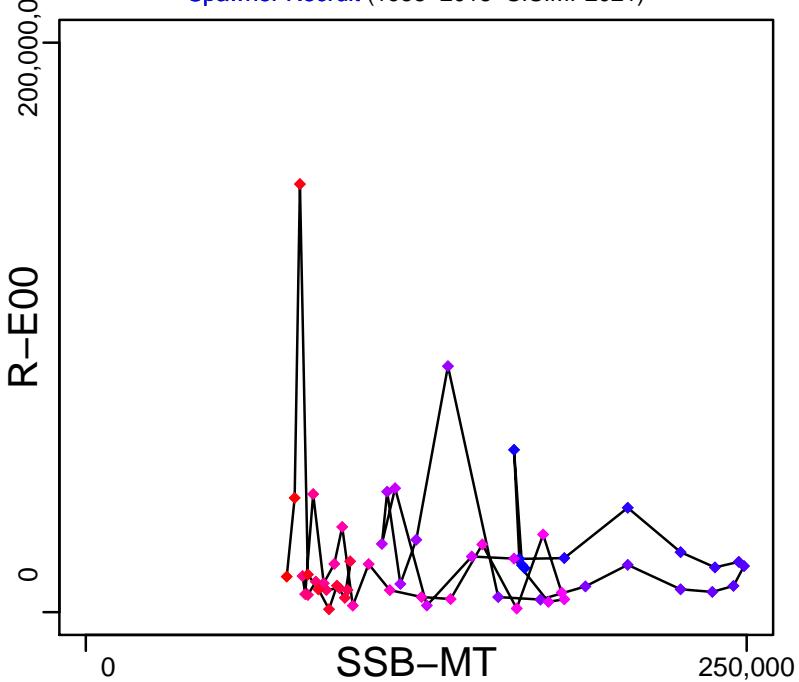
Kobe MSYpref (1958–2018–SISIMP2021)



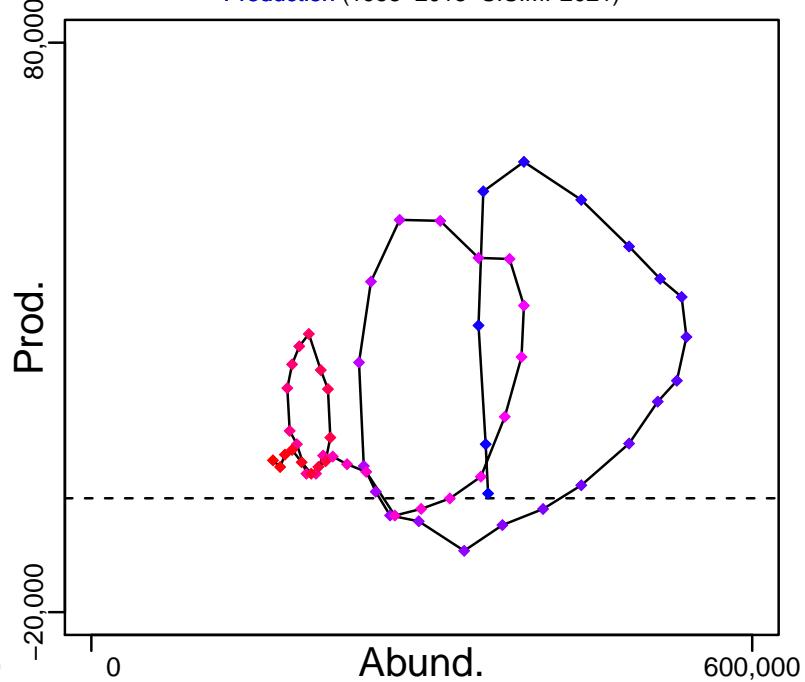
Kobe MGTpref (1958–2018–SISIMP2021)



Spawner Recruit (1958–2018–SISIMP2021)



Production (1958–2018–SISIMP2021)

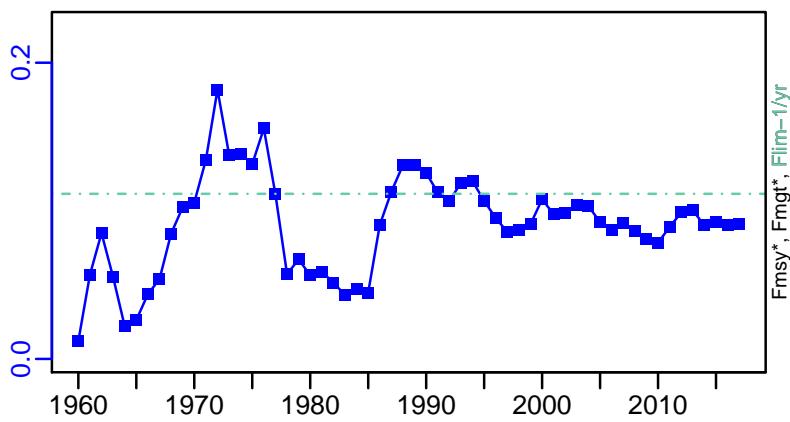
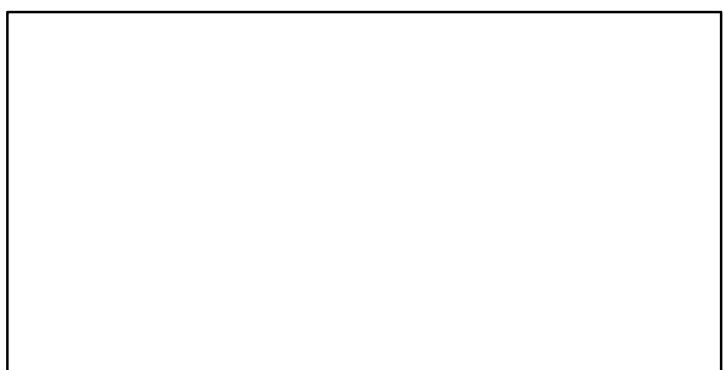
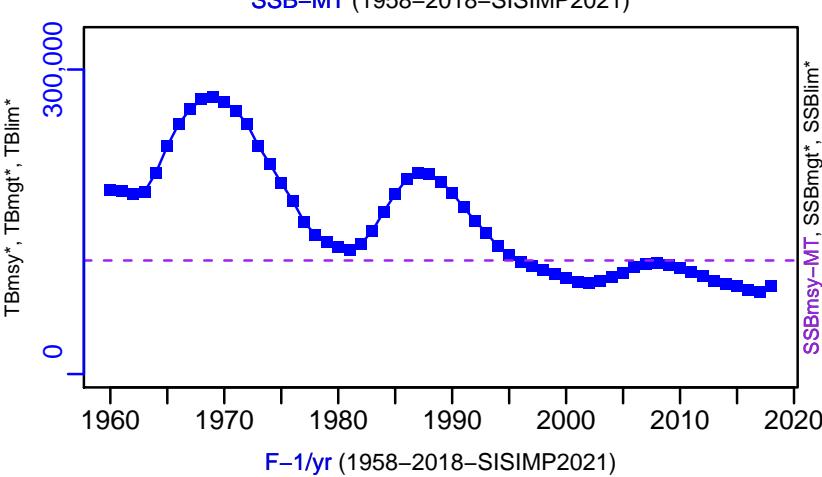
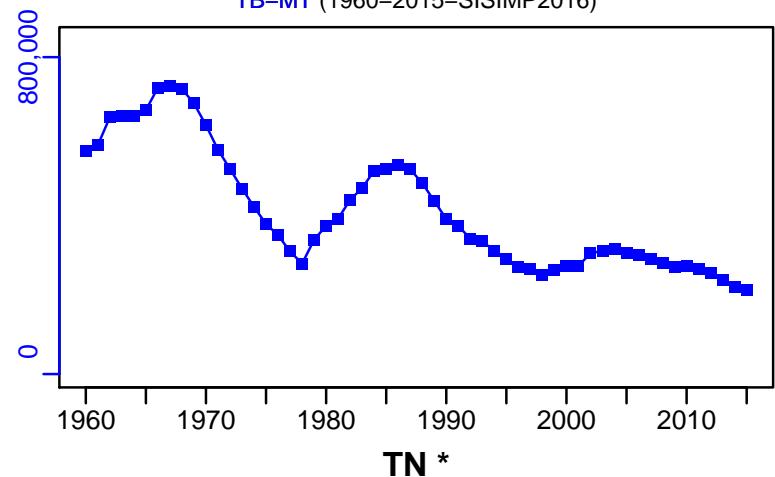


◆ Start Year ◆ End Year * No Data

Sablefish Eastern Bering Sea / Aleutian Islands / Gulf of Alaska [SABLEFEBSAIGA]

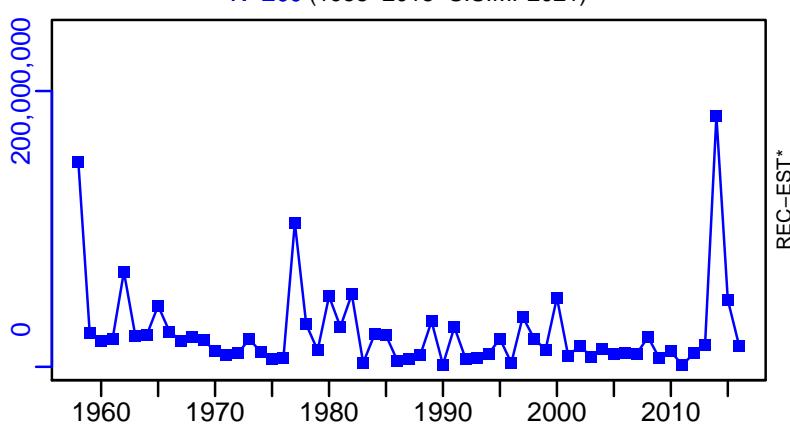
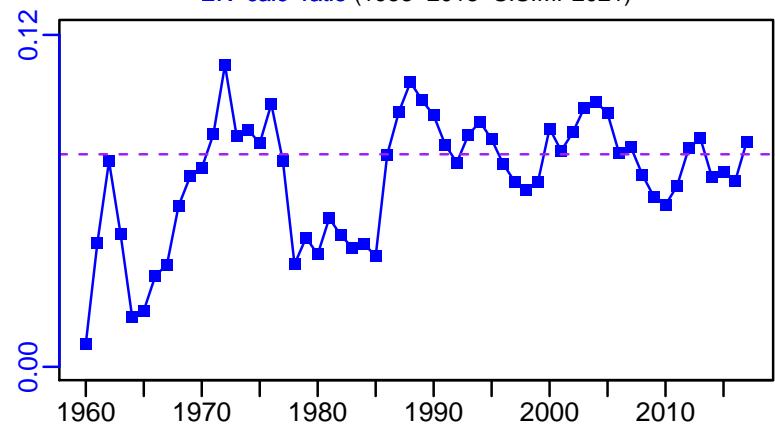
TB-MT (1960–2015–SISIMP2016)

SSB-MT (1958–2018–SISIMP2021)



ER-calc-ratio (1958–2018–SISIMP2021)

R-E00 (1958–2018–SISIMP2021)

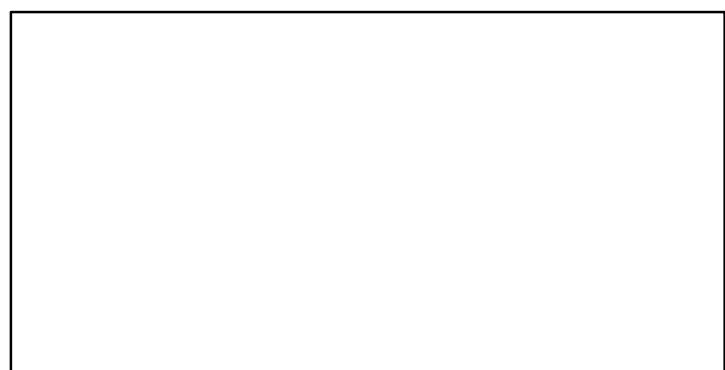
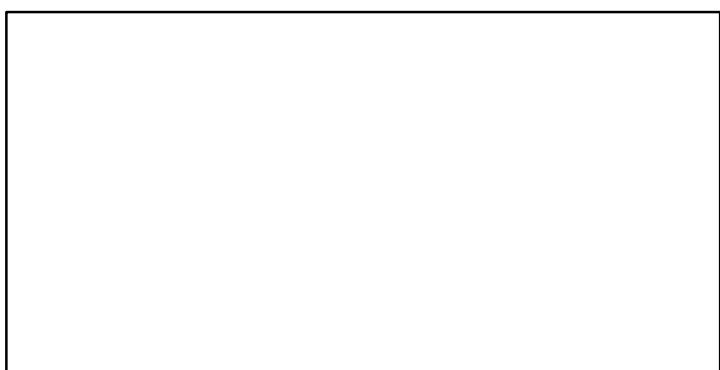
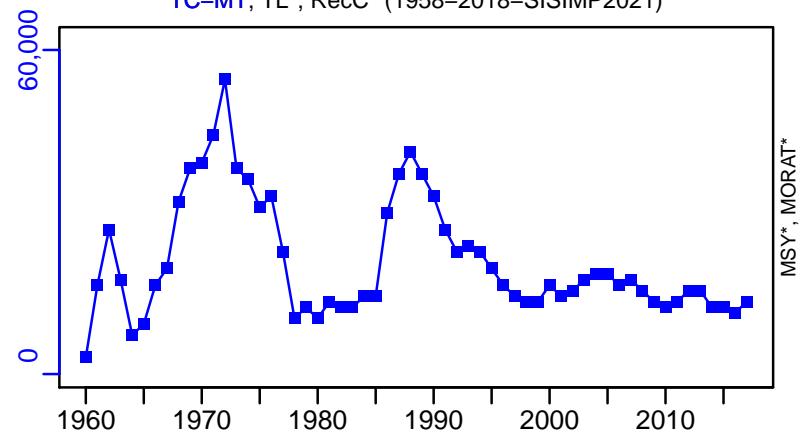


■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - - Lim BRP	* No Data

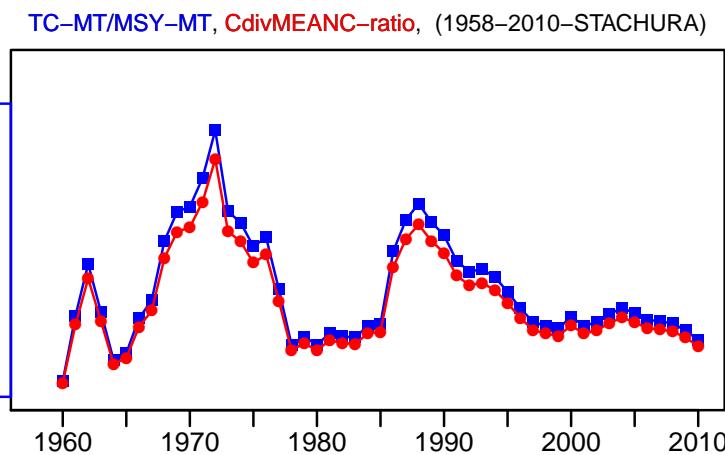
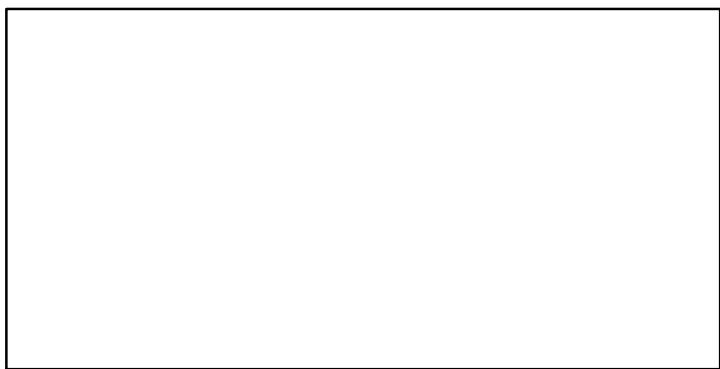
Sablefish Eastern Bering Sea / Aleutian Islands / Gulf of Alaska [SABLEFEBSAIGA]

TC-MT, TL*, RecC* (1958–2018–SISIMP2021)

TAC*, Cpair*, Cadv*



EFFORT*



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - MSY	* No Data

Snow crab Bering Sea [SNOWCRABBS]

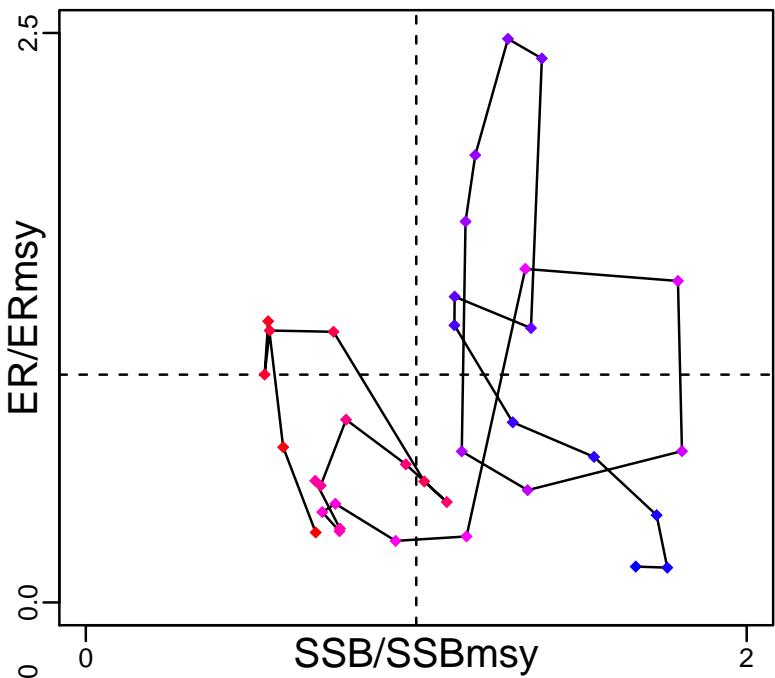
Metadata	
Scientific Name	Chionoecetes opilio
Current Assess ID	AFSC-SNOWCRABBS-1982-2017-SISIMP2021
Area	Bering Sea
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2013, 2016, 2015, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-MT	2015	146,357
SSBmsy	SSBmsy-MT	2016	139,400
Fmsy	Fmsy-pr-1/yr	2013	1.58
ERmsy	ERmsy-est-ratio	2016	0.454
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2016	45,238
M	M-1/yr	2013	0.18
TBlim	-	-	-
SSBlim	SSBlim-MT	2016	69,700
Flim	Flim-1/yr	2017	1.04
ERlim	-	-	-

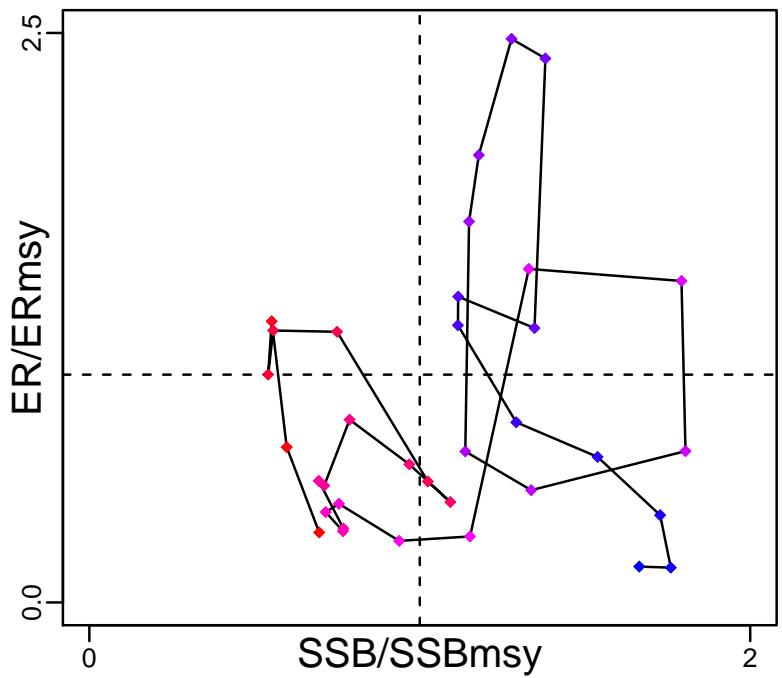
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	777,000	-	-	
SSB	SSB-MT	2016	96,970	-	-	
TN	-	-	-	-	-	
R	R-E00	2017	6×10^8	-	-	
F	F-1/yr	2017	0.44	-	-	
ER	ER-calc-ratio	2016	0.139	-	-	
TC	TC-MT	2017	8600			
TL	-	-	-			
TB/TBmsy	TB-MT/TBmsy-MT	2015	5.309			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2016	0.696			
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2013	0.373			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2016	0.307			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Snow crab Bering Sea [SNOWCRABBS]

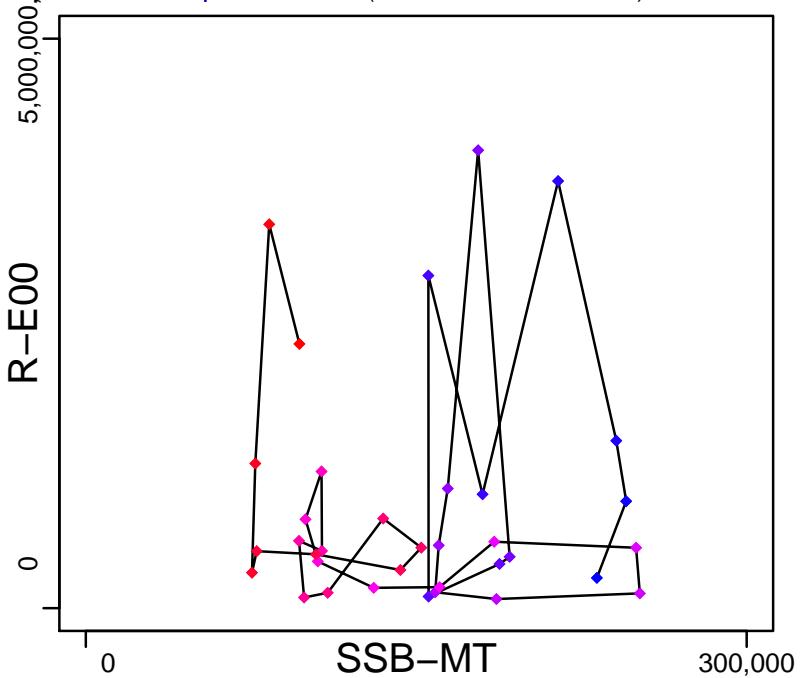
Kobe MSYpref (1978–2016–SISIMP2021)



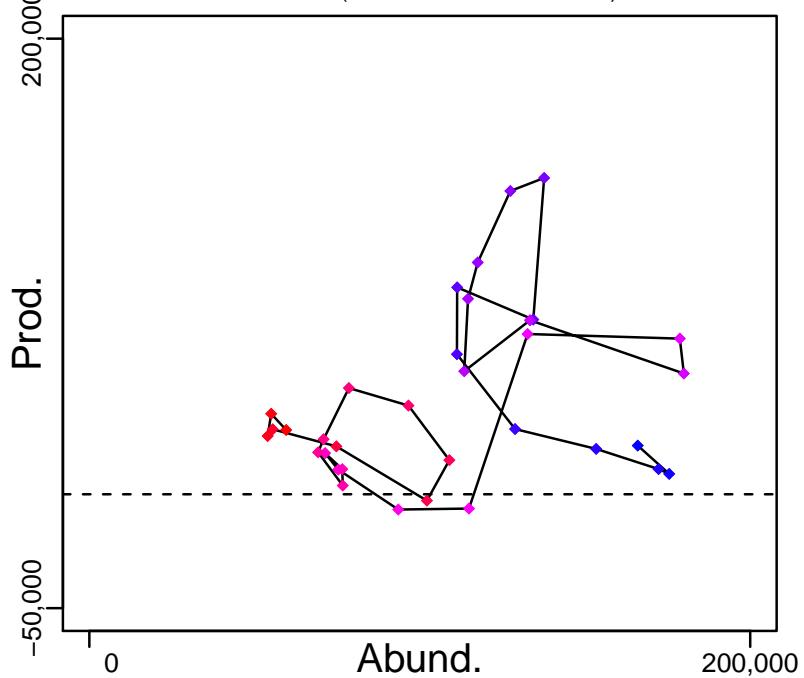
Kobe MGTpref (1978–2016–SISIMP2021)



Spawner Recruit (1978–2016–SISIMP2021)



Production (1978–2016–SISIMP2021)

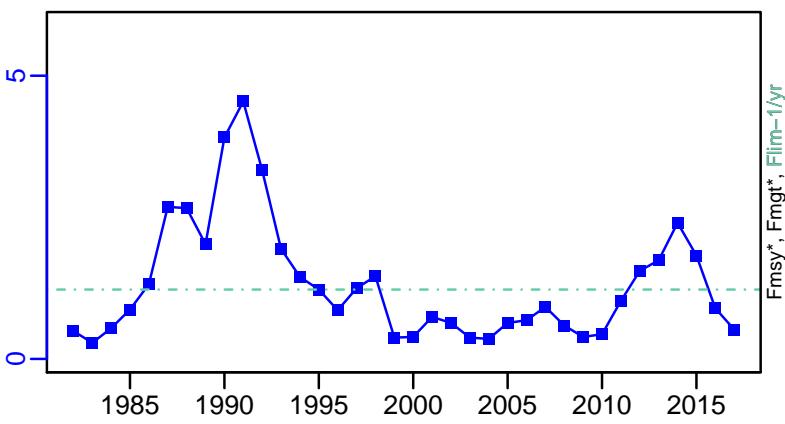
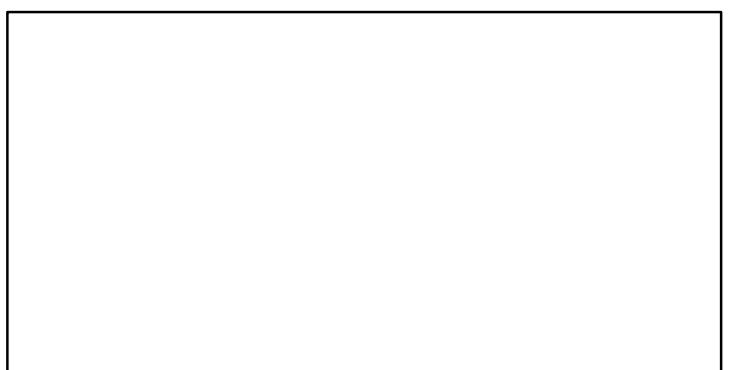
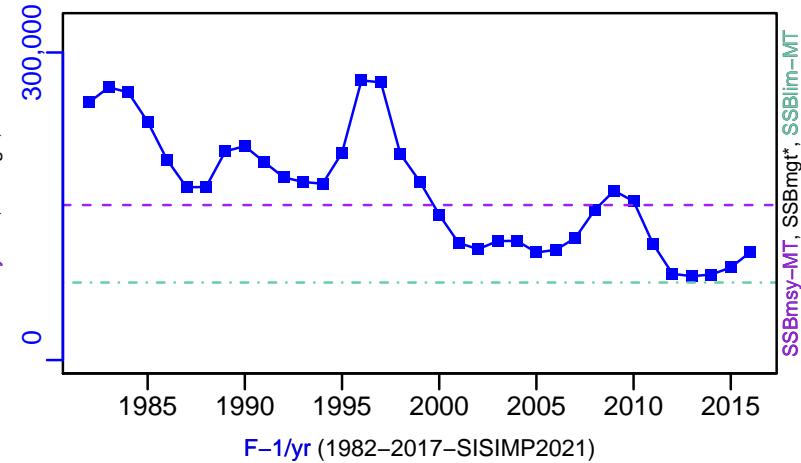
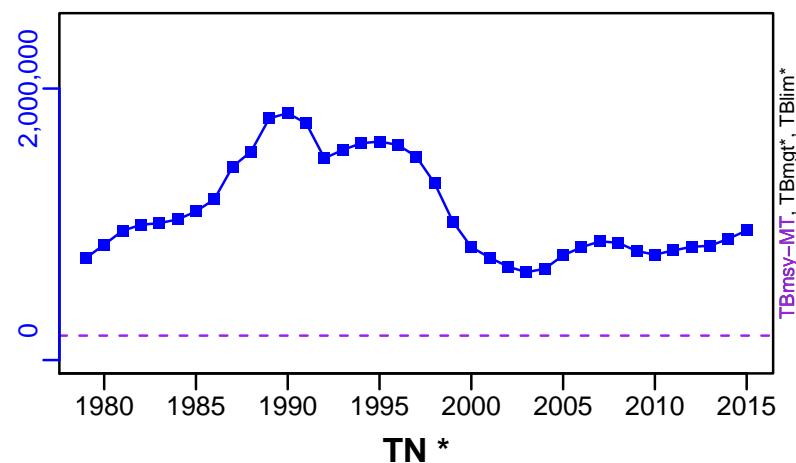


◆ Start Year ◆ End Year * No Data

Snow crab Bering Sea [SNOWCRABBS]

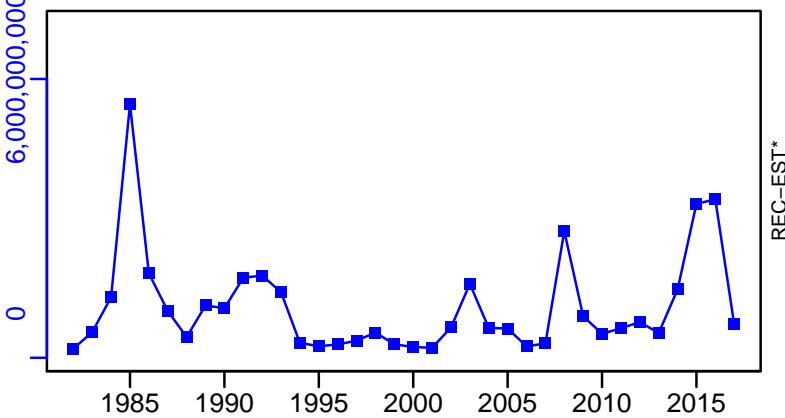
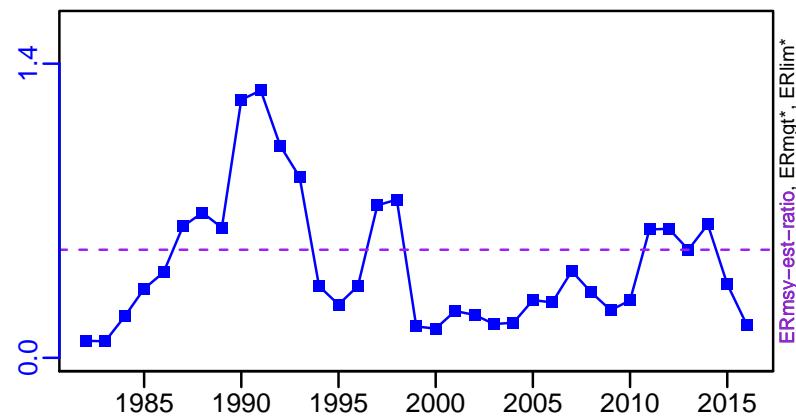
TB-MT (1979–2015–SISIMP2016)

SSB-MT (1978–2016–SISIMP2021)



ER-calc-ratio (1978–2016–SISIMP2021)

R-E00 (1982–2017–SISIMP2021)

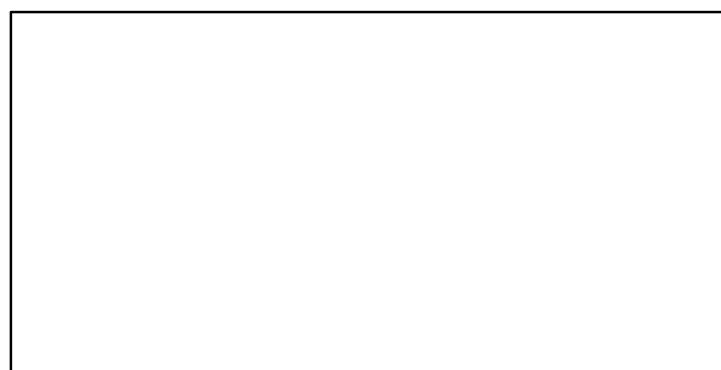
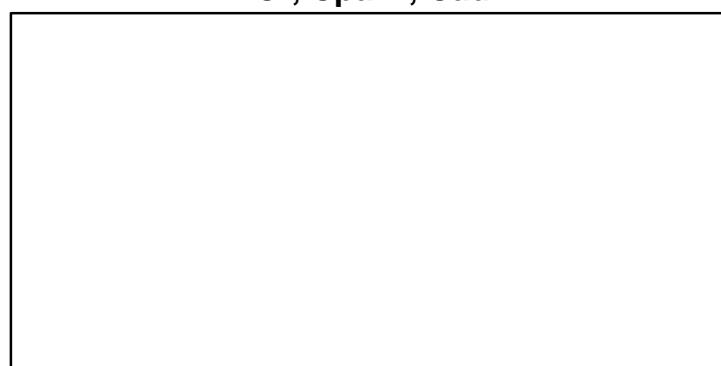
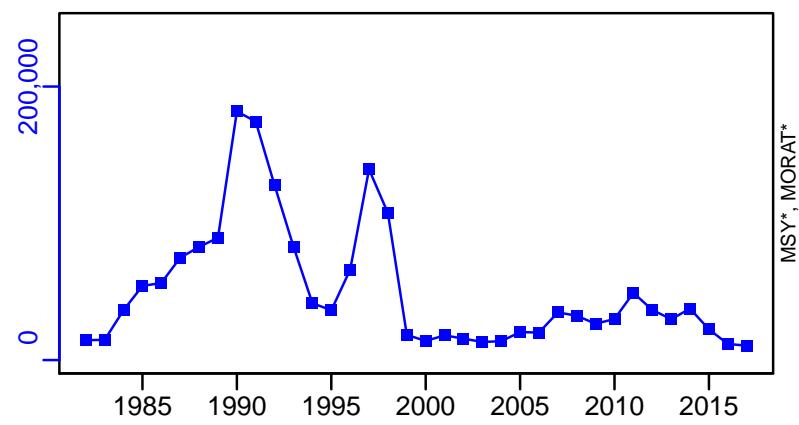


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

Snow crab Bering Sea [SNOWCRABBS]

TC-MT, TL*, RecC* (1982–2017–SISIMP2021)

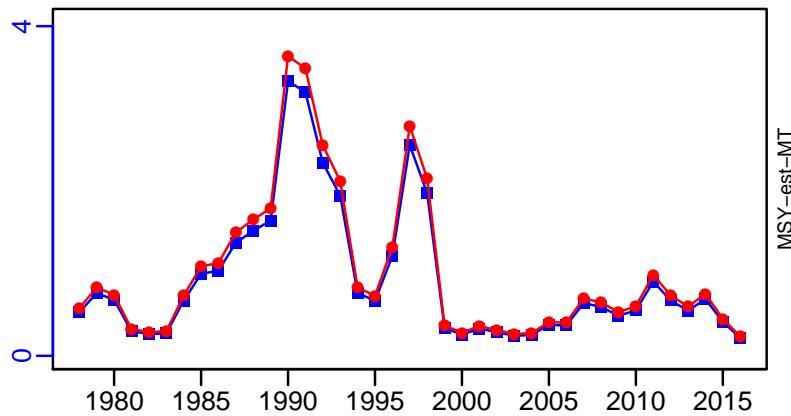
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1978–2016–SISIMP2021)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Shortraker rockfish Bering Sea and Aleutian Islands [SRAKEROCKBSAI]

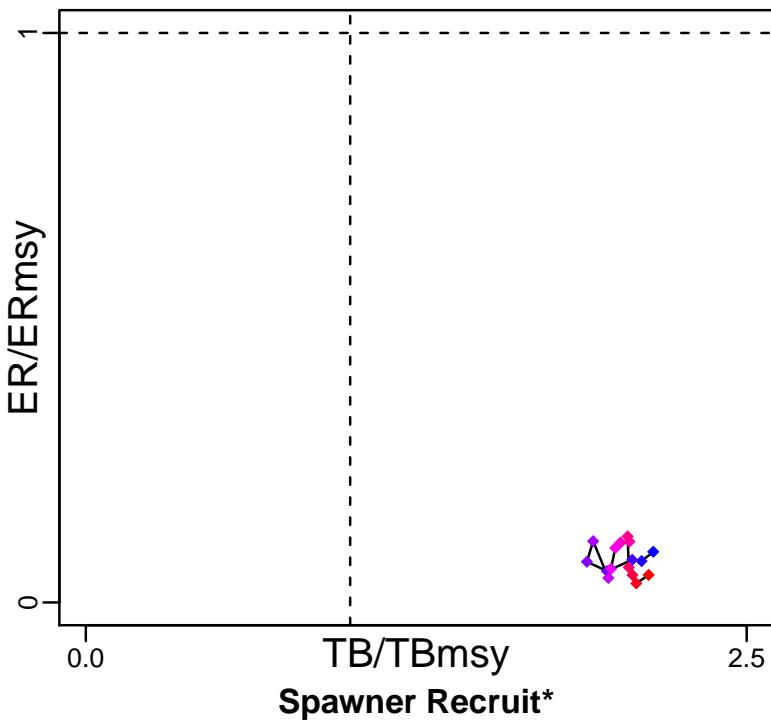
Metadata	
Scientific Name	Sebastodes borealis
Current Assess ID	AFSC-SRAKEROCKBSAI-1977-2018-SISIMP2021
Area	Bering Sea and Aleutian Islands
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2010, 2018, 2016, 2014

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2018	11,043
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2016	0.031
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2018	1565
M	M-1/yr	2010	0.03
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2010	0.03
ERlim	ERlim-ratio	2016	0.031

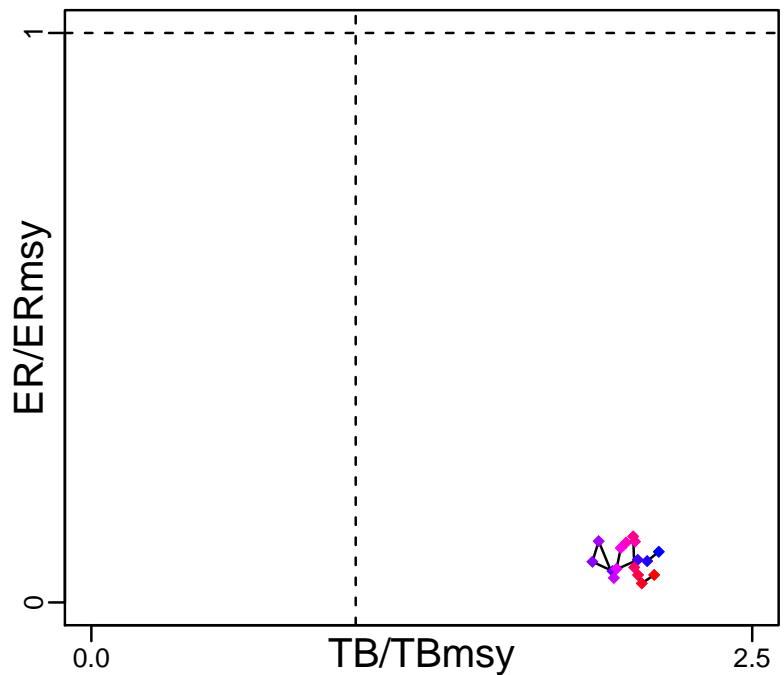
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2018	24,055	-	-	
SSB	-	-	-	-	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	F-1/yr	2010	0.012	Both	-	
ER	ER-calc-ratio	2018	0.007	-	-	
TC	TC-MT	2018	161			
TL	-	-	-			
TB/TBmsy	TB-MT/TBmsy-est-MT	2018	2.178			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	ER-ratio/ERmsy-ratio	2016	0.223			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Shortraker rockfish Bering Sea and Aleutian Islands [SRAKEROCKBSAI]

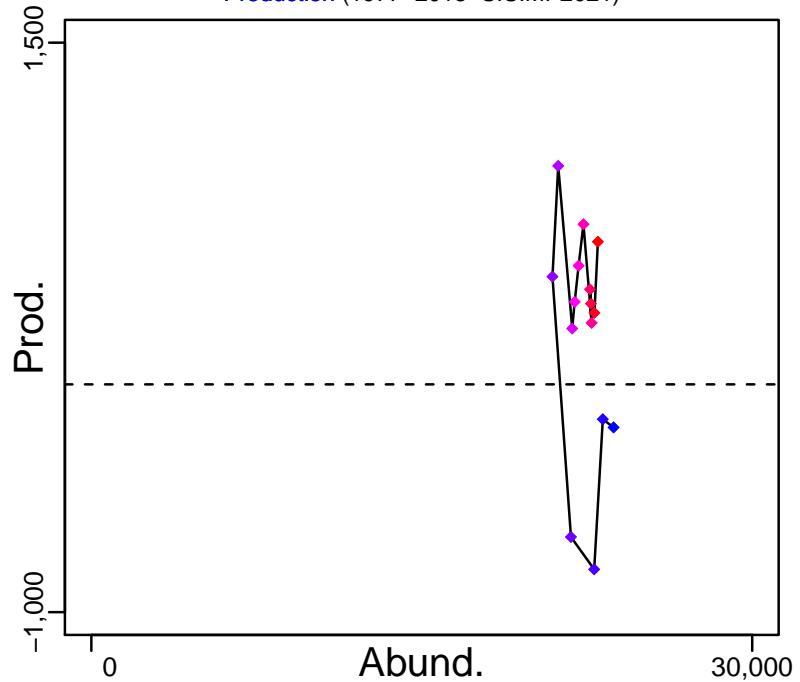
Kobe MSYpref (1977–2018–SISIMP2021)



Kobe MGTpref (1977–2018–SISIMP2021)



Production (1977–2018–SISIMP2021)

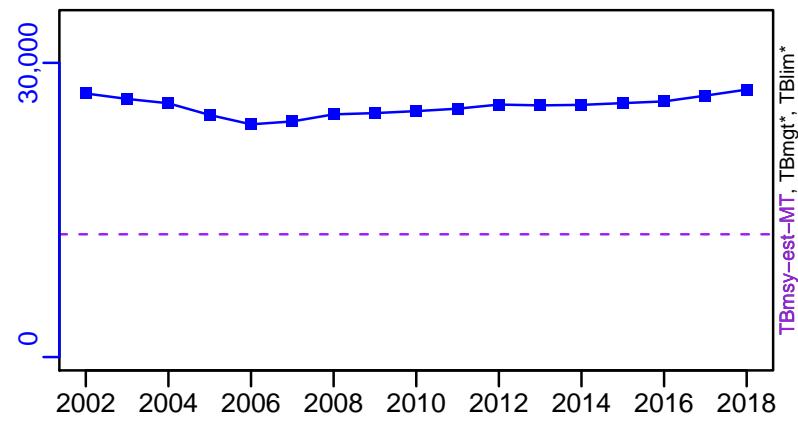


◆ Start Year ◆ End Year * No Data

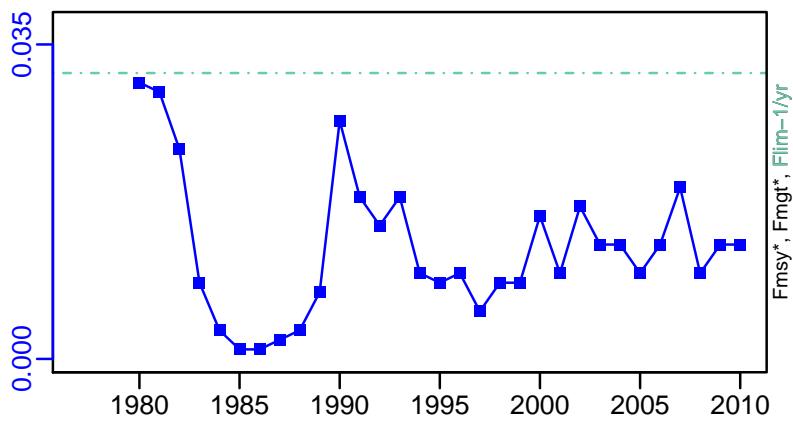
Shortraker rockfish Bering Sea and Aleutian Islands [SRAKEROCKBSAI]

TB-MT (1977–2018–SISIMP2021)

SSB*

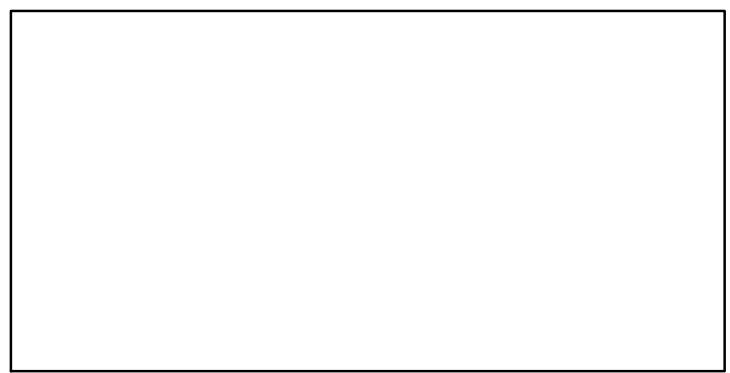
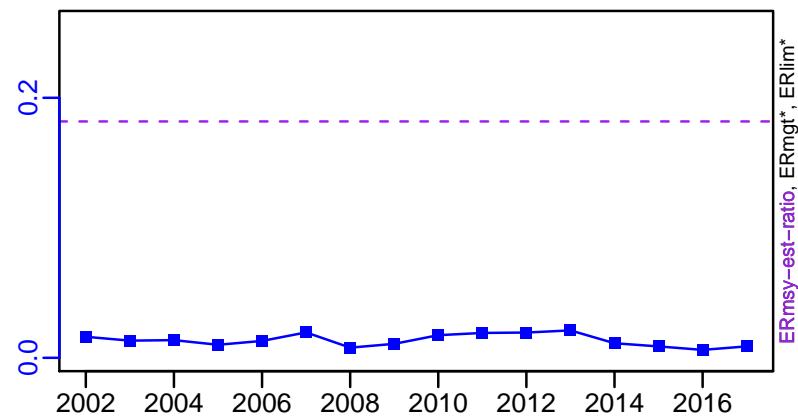


F-1/yr (1977–2010–STACHURA)



ER-calc-ratio (1977–2018–SISIMP2021)

Recruits*

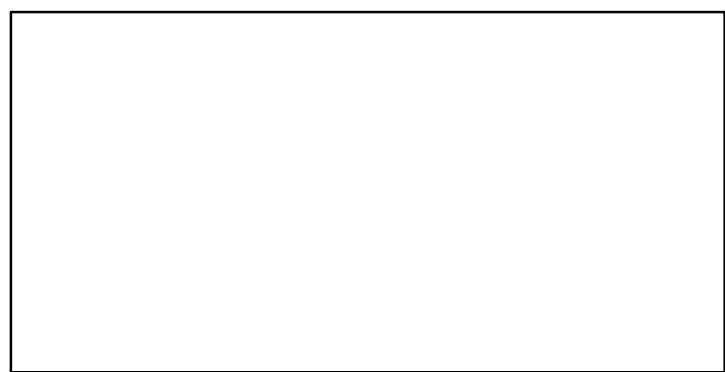
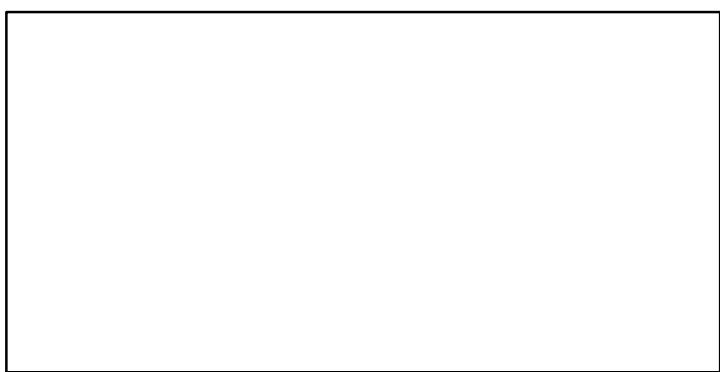
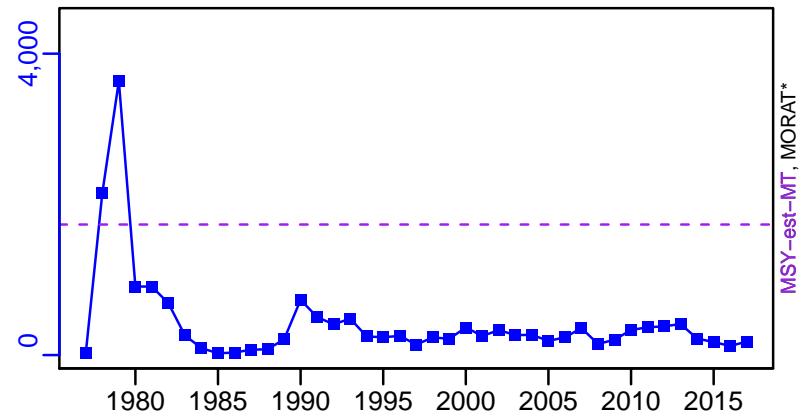


- Listed time series
- Target BRP
- Rec-Est
- MSY-based BRP
- Lim BRP
- * No Data

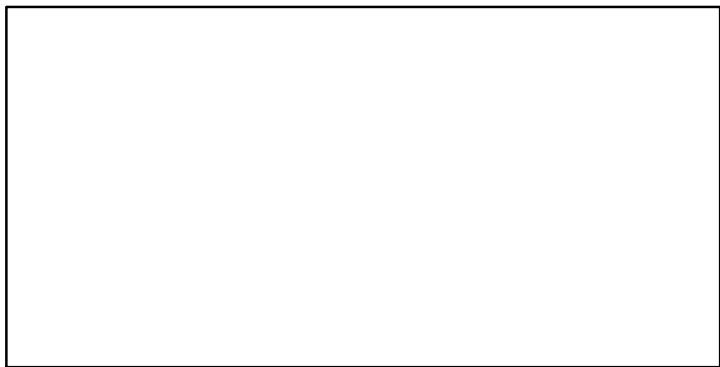
Shortraker rockfish Bering Sea and Aleutian Islands [SRAKEROCKBSAI]

TC-MT, TL*, RecC* (1977–2018–SISIMP2021)

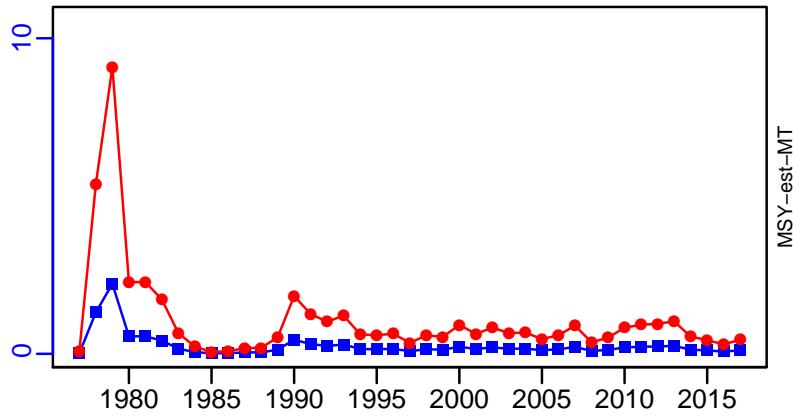
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1977–2018–SISIMP2021)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Shortraker rockfish Gulf of Alaska [SRAKEROCKGA]

Metadata	
Scientific Name	Sebastodes borealis
Current Assess ID	AFSC-SRAKEROCKGA-1984-2017-SISIMP2021
Area	Gulf of Alaska
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2016, 2017, 2014

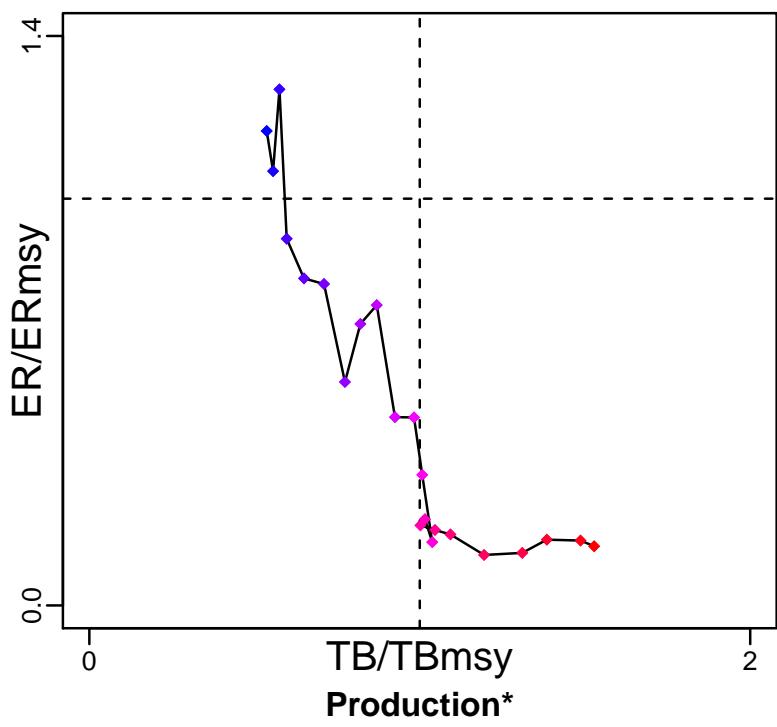
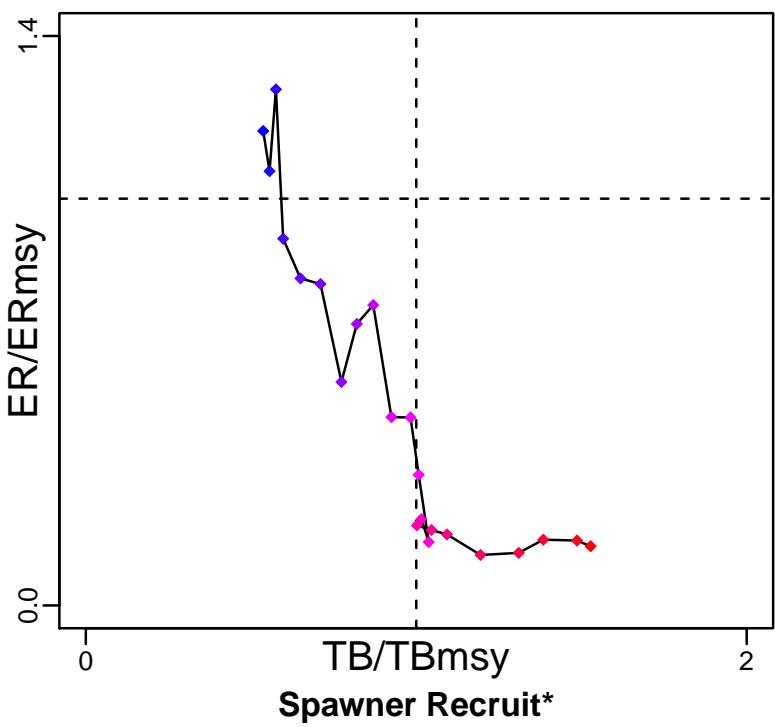
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2014	36,329
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2016	0.031
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2014	3083
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	ERlim-ratio	2016	0.031

Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2017	31,534	-	-	
SSB	-	-	-	-	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	-	-	-	-	-	
ER	ER-calc-ratio	2017	0.009	-	-	
TC	TC-MT	2017	776			
TL	-	-	-			
TB/TBmsy	TB-MT/TBmsy-est-MT	2014	1.575			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	ER-ratio/ERmsy-ratio	2016	0.323			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Shortraker rockfish Gulf of Alaska [SRAKEROCKGA]

Kobe MSYpref (1993–2014–SISIMP2016)

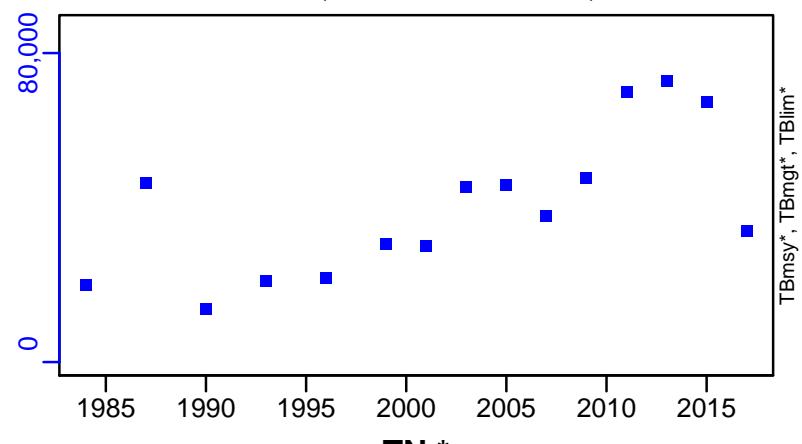
Kobe MGTpref (1993–2014–SISIMP2016)



◆ Start Year ◆ End Year * No Data

Shortraker rockfish Gulf of Alaska [SRAKEROCKGA]

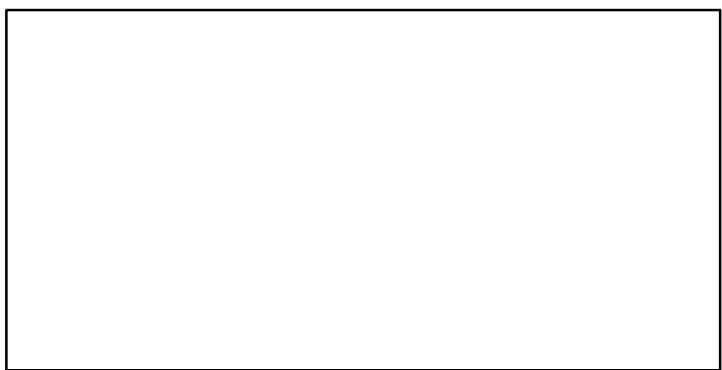
TB-MT (1984–2017–SISIMP2021)



SSB*



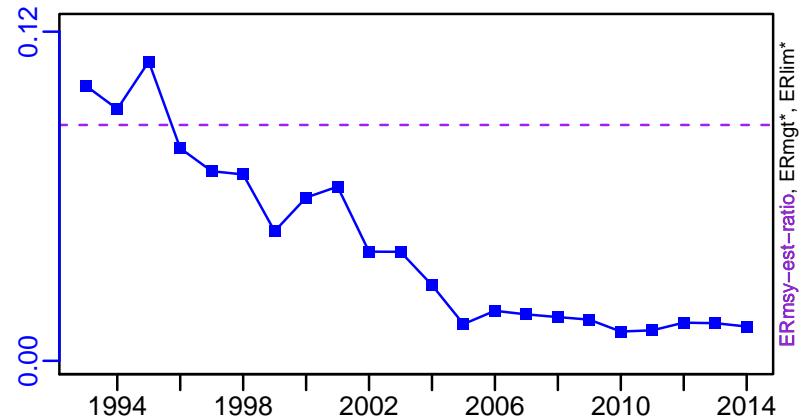
TN *



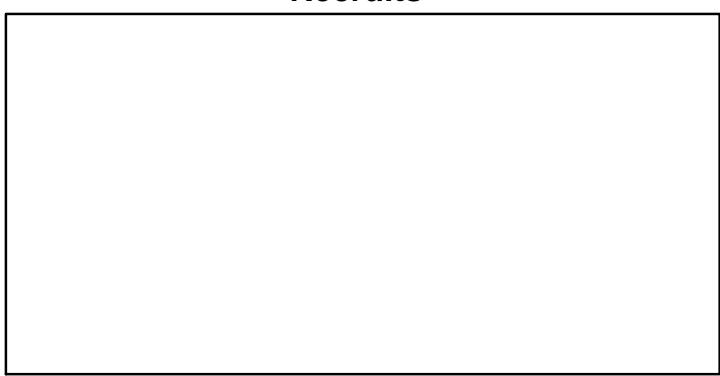
F*



ER-calc-ratio (1993–2014–SISIMP2016)



Recruits*

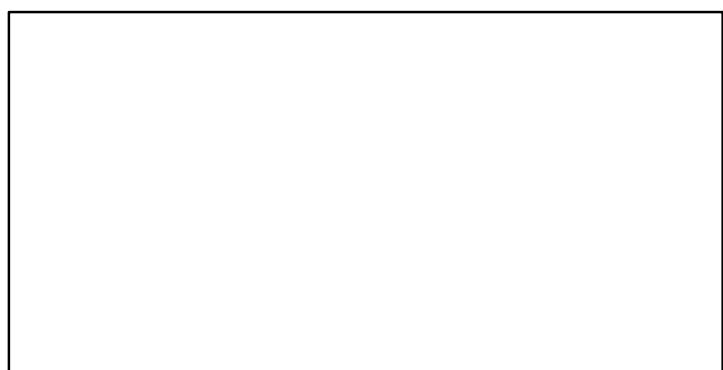
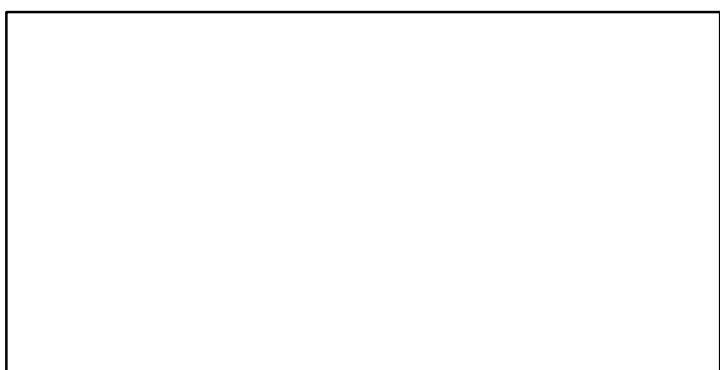
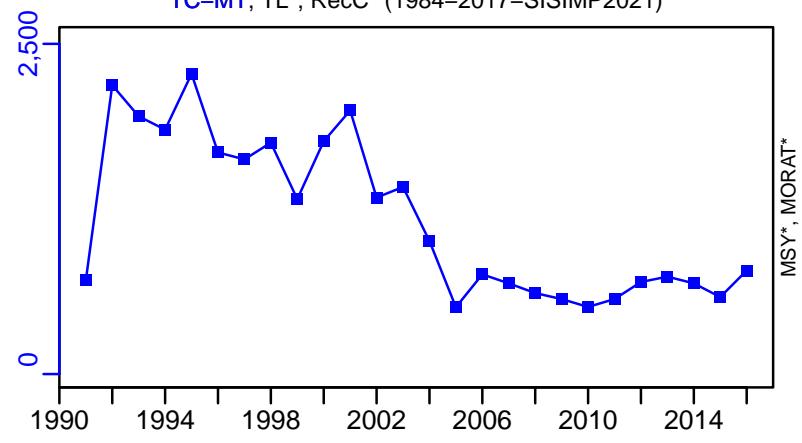


- | | | |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| - - - MSY-based BRP | --- Lim BRP | * No Data |

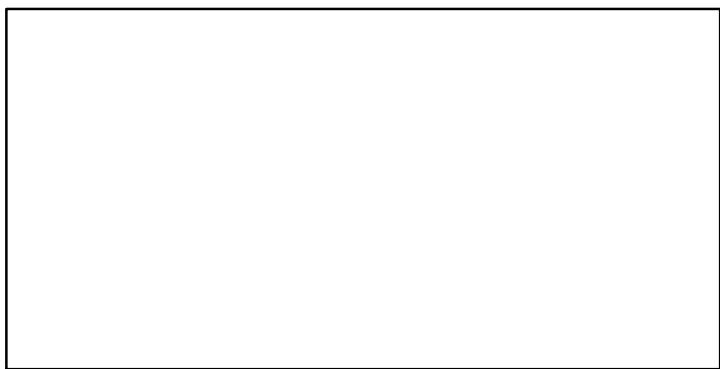
Shortraker rockfish Gulf of Alaska [SRAKEROCKGA]

TC-MT, TL*, RecC* (1984–2017–SISIMP2021)

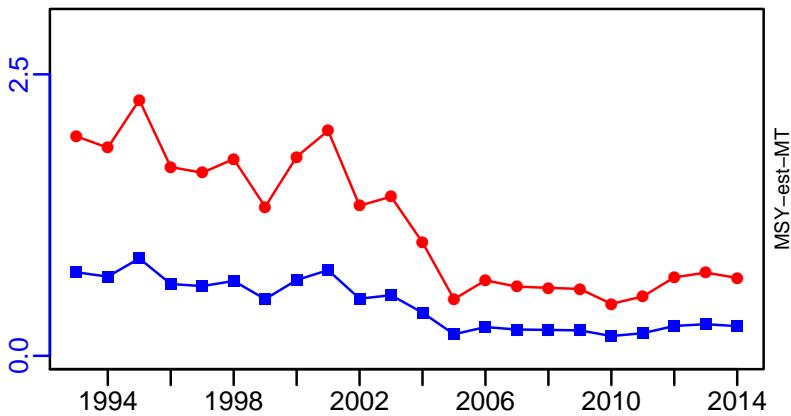
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1993–2014–SISIMP2016)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Shortspine thornyhead Gulf of Alaska [SSTHORNHGA]

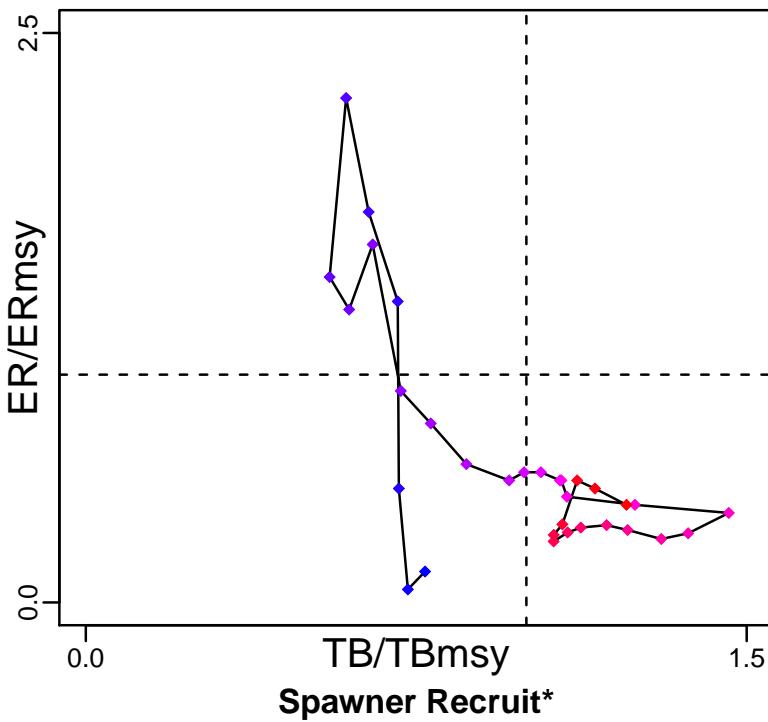
Metadata	
Scientific Name	Sebastolobus alascanus
Current Assess ID	AFSC-SSTHORNHGA-1980-2017-SISIMP2021
Area	Gulf of Alaska
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2014, 2016, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2016	71,015
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2016	0.028
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2016	1988
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	ERlim-ratio	2016	0.028

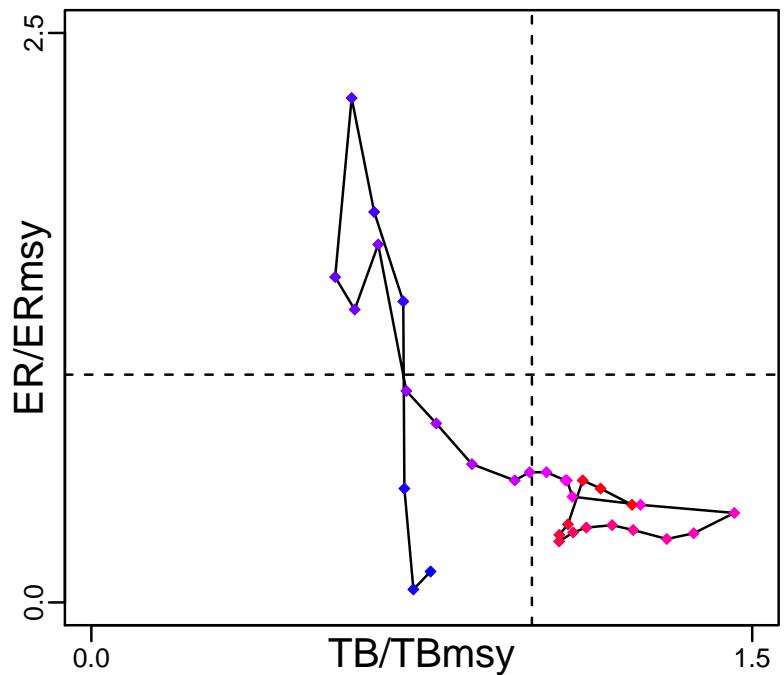
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2016	87,150	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2016	0.012	-	-
TC	TC-MT	2017	1021		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-est-MT	2016	1.227		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2016	0.429		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Shortspine thornyhead Gulf of Alaska [SSTHORNHGA]

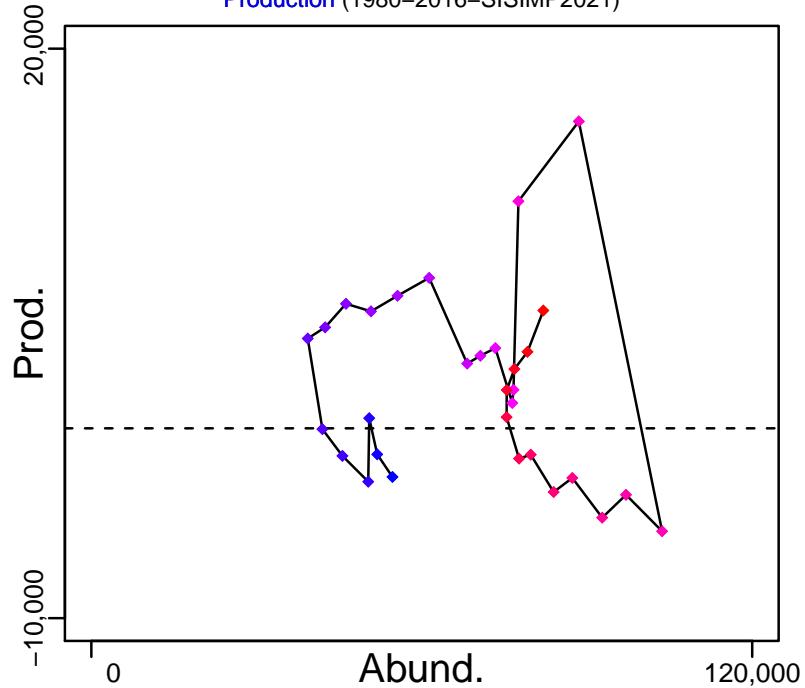
Kobe MSYpref (1980–2016–SISIMP2021)



Kobe MGTpref (1980–2016–SISIMP2021)



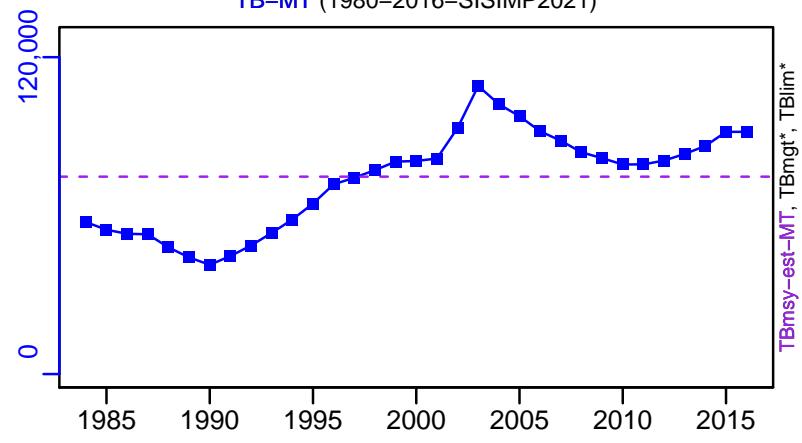
Production (1980–2016–SISIMP2021)



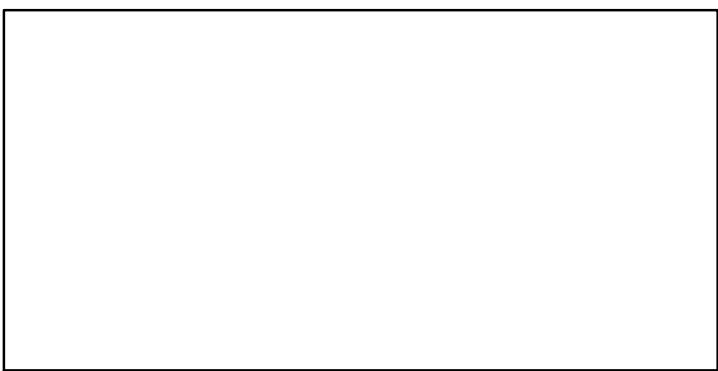
◆ Start Year ◆ End Year * No Data

Shortspine thornyhead Gulf of Alaska [SSTHORNHGA]

TB-MT (1980–2016–SISIMP2021)



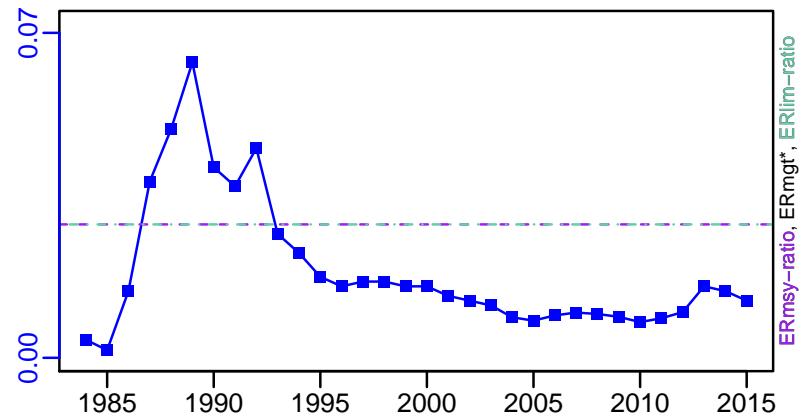
SSB*



TN *

F*

ER-ratio (1980–2016–SISIMP2021)



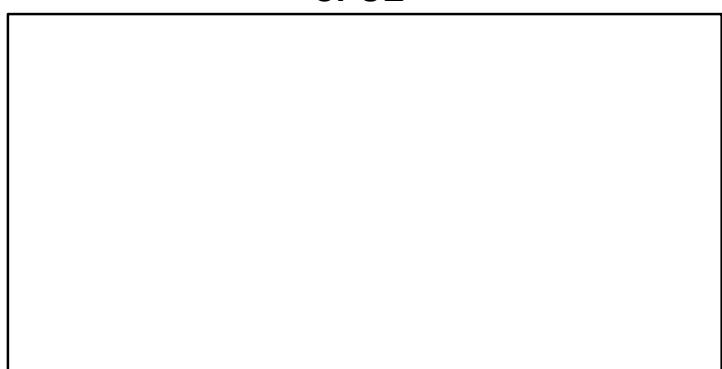
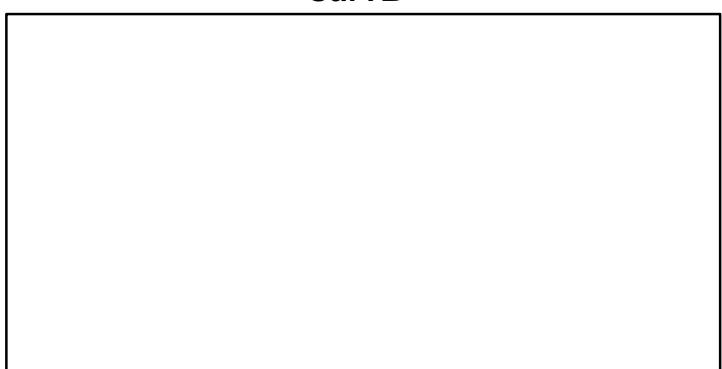
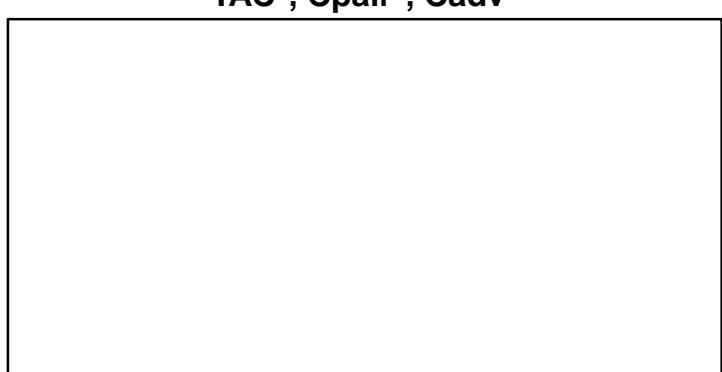
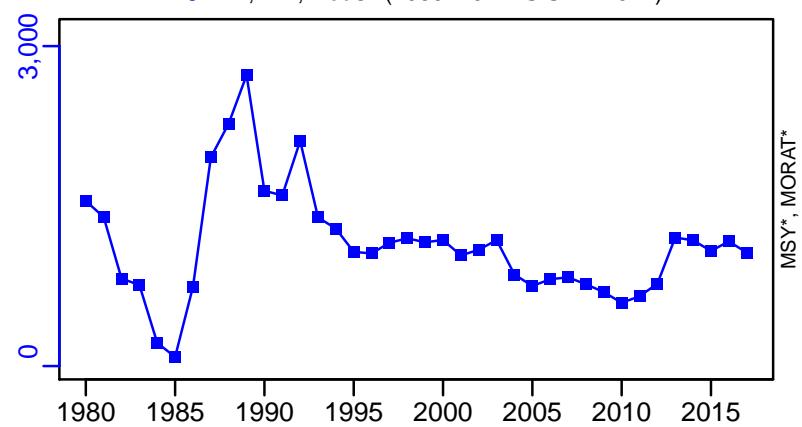
Recruits*

■ Listed time series	— Target BRP	— Rec-Est
— MSY-based BRP	— Lim BRP	* No Data

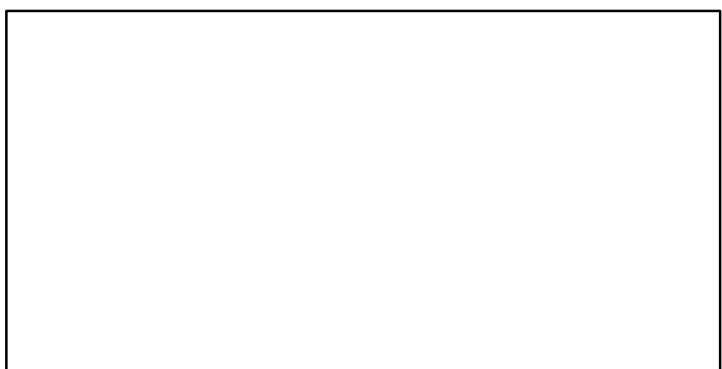
Shortspine thornyhead Gulf of Alaska [SSTHORNHGA]

TC-MT, TL*, RecC* (1980–2017–SISIMP2021)

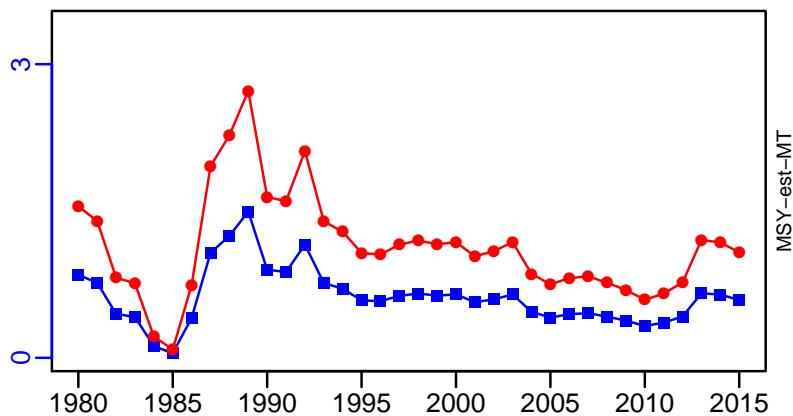
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdiveMEANC-ratio, (1980–2016–SISIMP2021)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Tanner crab Bering Sea and Aleutian Islands [TANNERCRABBSAI]

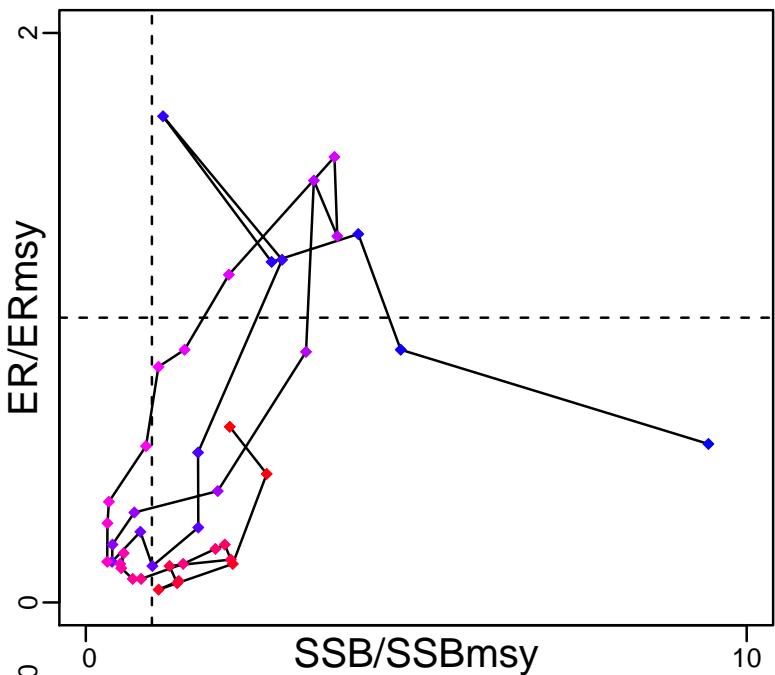
Metadata	
Scientific Name	Chionoecetes bairdi
Current Assess ID	AFSC-TANNERCRABBSAI-1948-2017-SISIMP2021
Area	Bering Sea and Aleutian Islands
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2017, 2013, 2016, 2017, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-MT	2015	26,791
SSBmsy	SSBmsy-MT	2017	29,170
Fmsy	Fmsy-pr-1/yr	2013	0.73
ERmsy	ERmsy-conv-ratio	2017	0.532
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2013	33,540
Fmgt	Fmgt-1/yr	2013	0.73
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2017	12,250
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2017	14,580
Flim	-	-	-
ERlim	-	-	-

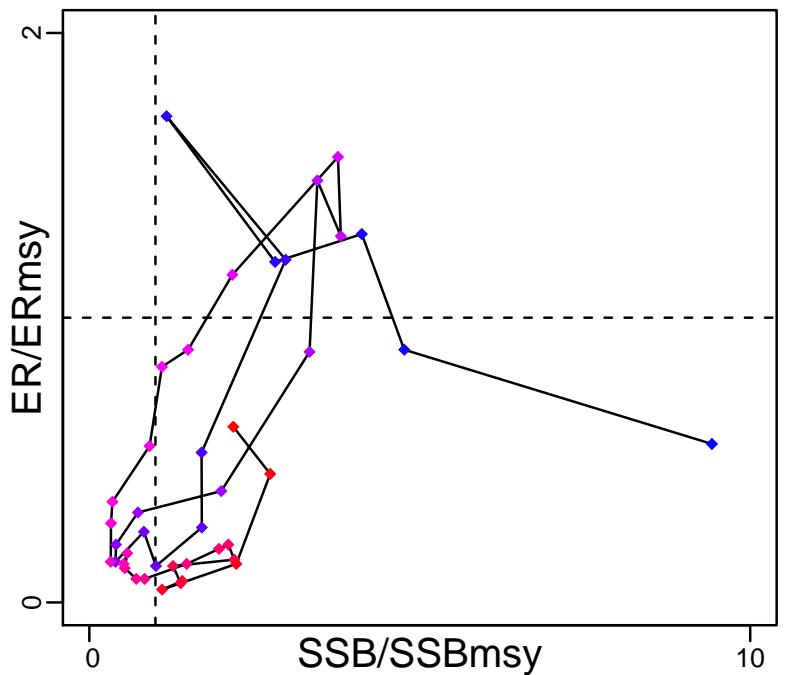
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	137,000	-	-	
SSB	SSB-MT	2016	53,700	-	-	
TN	-	-	-	-	-	
R	R-E00	2017	662,470,000	-	-	
F	F-1/yr	2015	0.144	-	-	
ER	ER-ratio	2016	0.082	-	-	
TC	TC-MT	2017	3620			
TL	-	-	-			
TB/TBmsy	TB-MT/TBmsy-MT	2015	5.114			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2016	2.004			
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2013	0			
ER/ERmsy	ER-ratio/ERmsy-est-ratio	2016	0.617			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2013	1.771			
F/Fmgt	F-1/yr/Fmgt-1/yr	2013	0			
ER/ERmgt	-	-	-			

Tanner crab Bering Sea and Aleutian Islands [TANNERCRABBSAI]

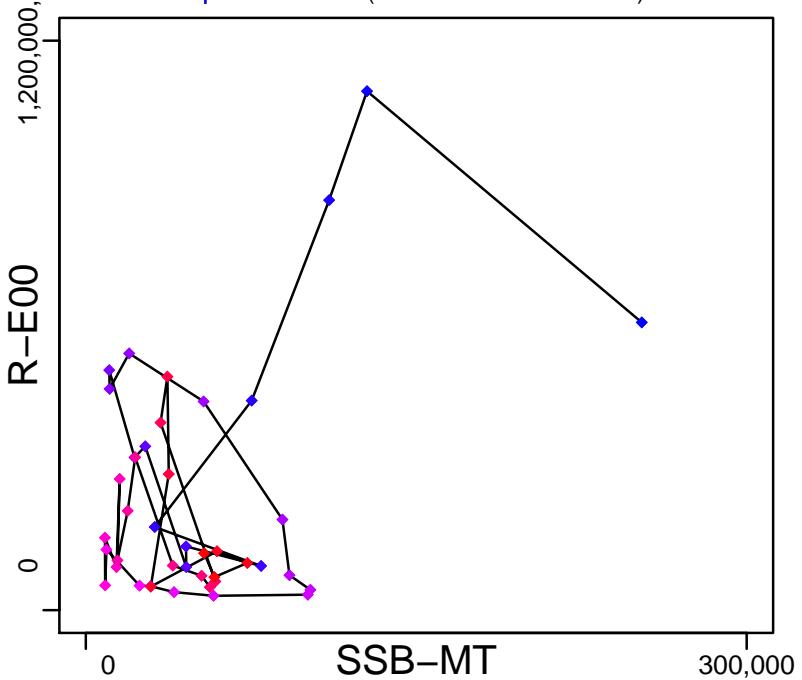
Kobe MSYpref (1949–2016–SISIMP2021)



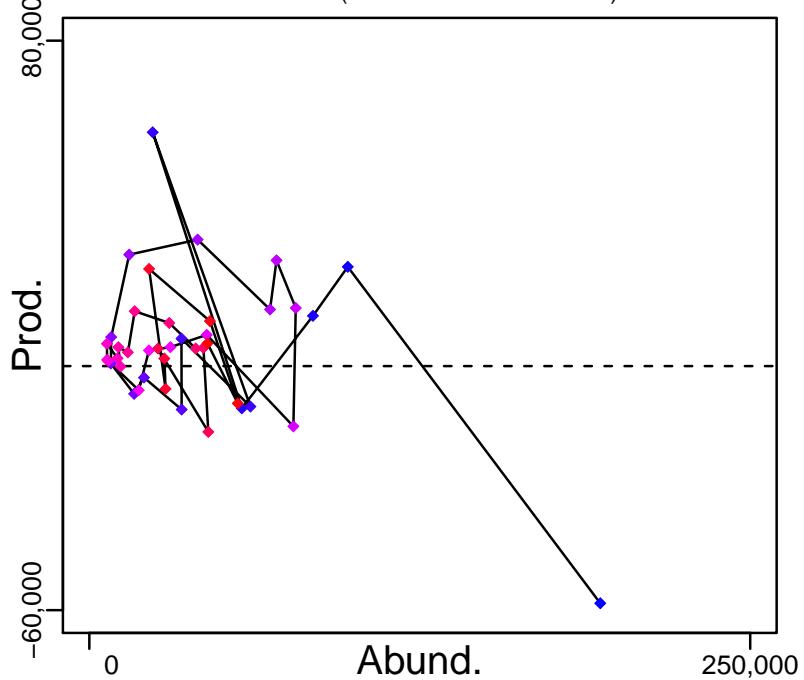
Kobe MGTpref (1949–2016–SISIMP2021)



Spawner Recruit (1949–2016–SISIMP2021)



Production (1949–2016–SISIMP2021)

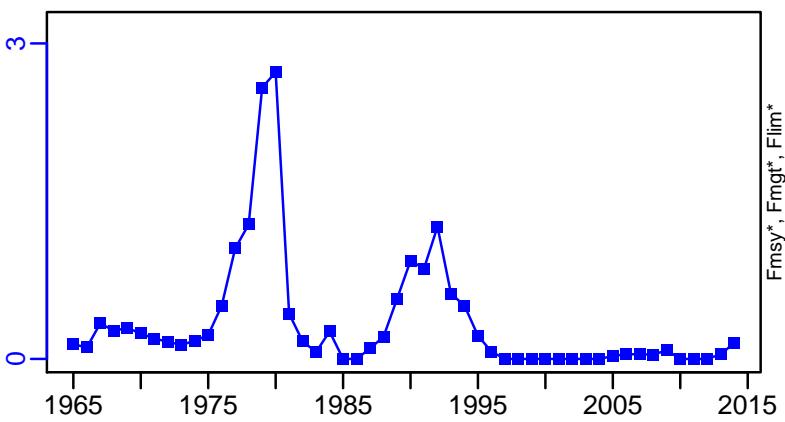
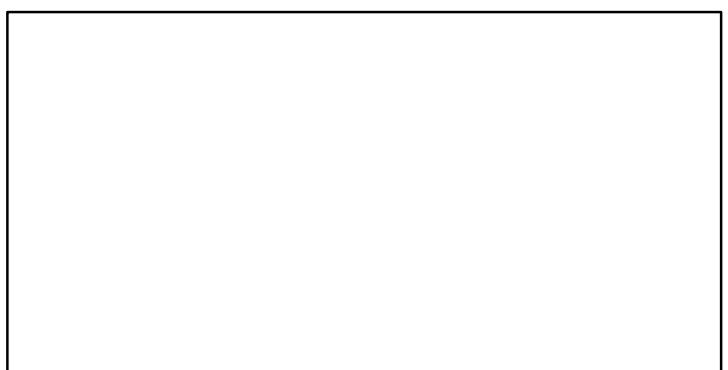
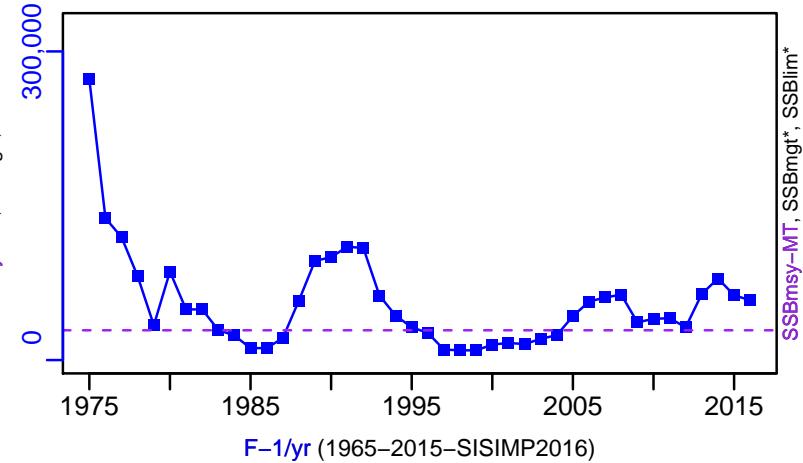
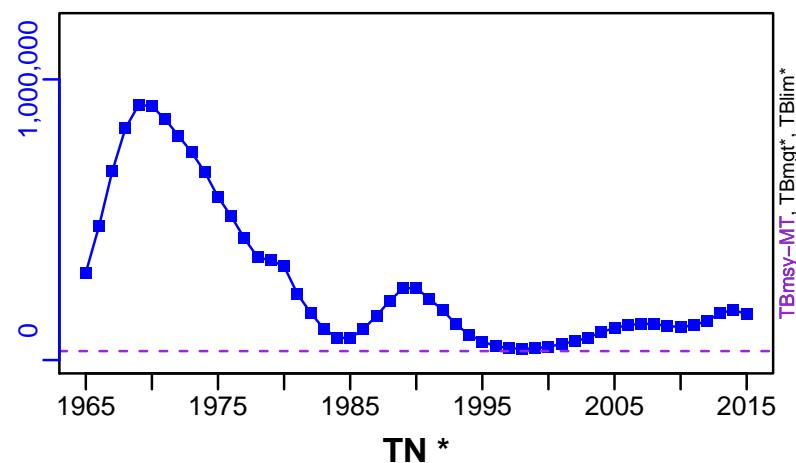


◆ Start Year ◆ End Year * No Data

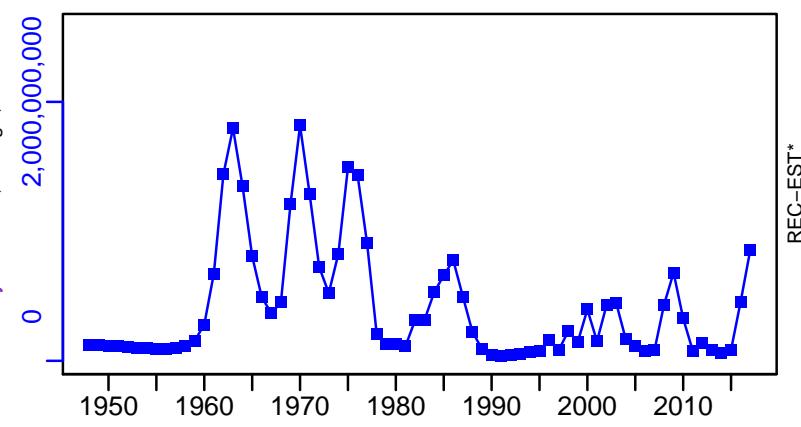
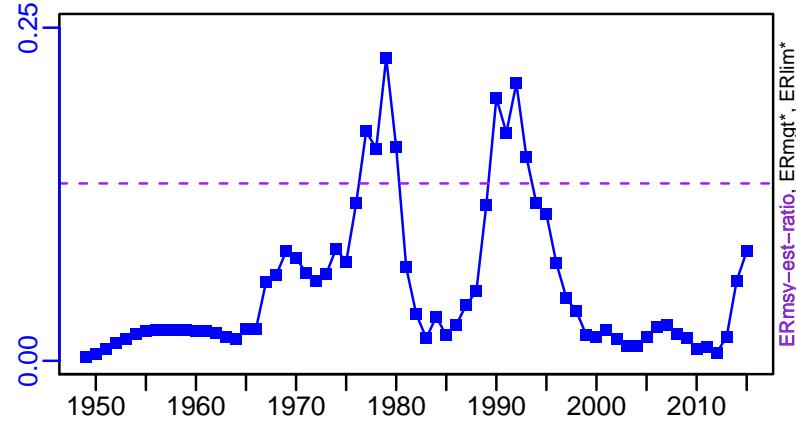
Tanner crab Bering Sea and Aleutian Islands [TANNERCRABBSAI]

TB-MT (1965–2015–SISIMP2016)

SSB-MT (1949–2016–SISIMP2021)



ER-ratio (1949–2016–SISIMP2021)

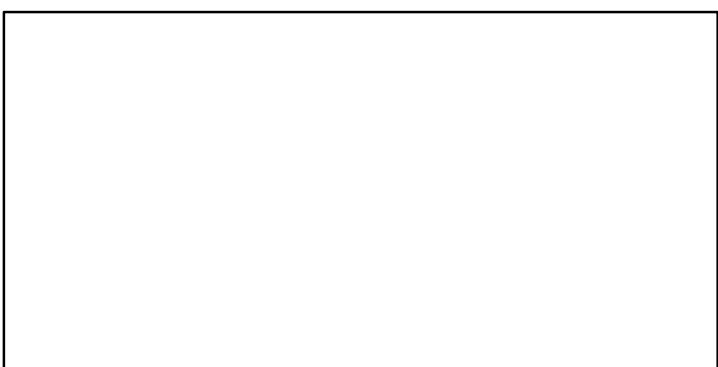
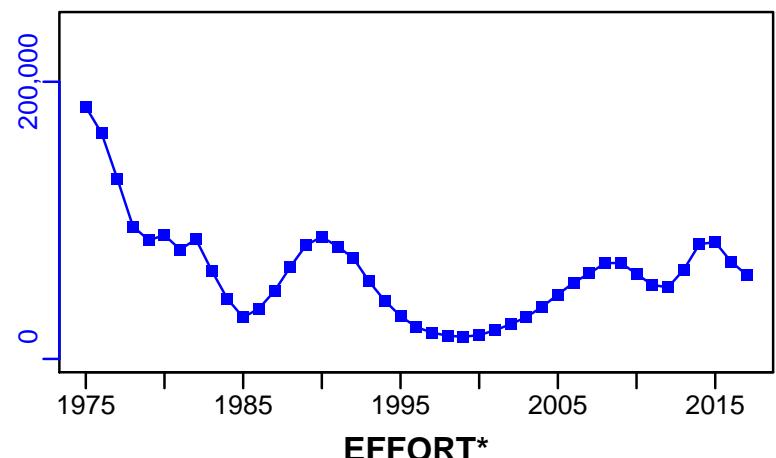
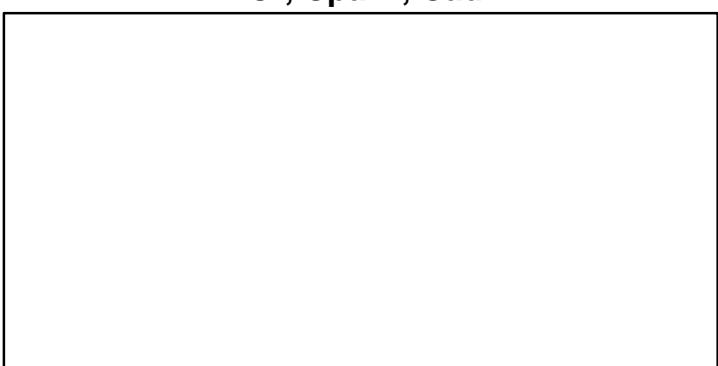
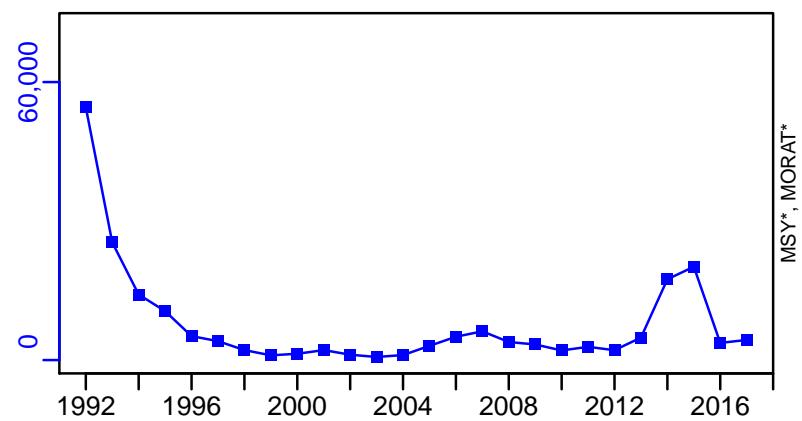


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	··· Lim BRP	* No Data

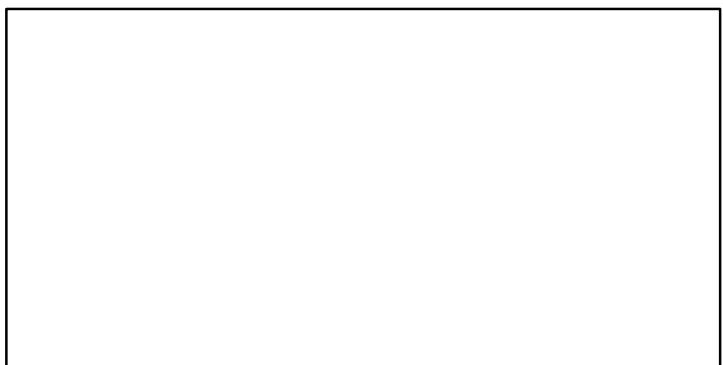
Tanner crab Bering Sea and Aleutian Islands [TANNERCRABBSAI]

TC-MT, TL*, RecC* (1948–2017–SISIMP2021)

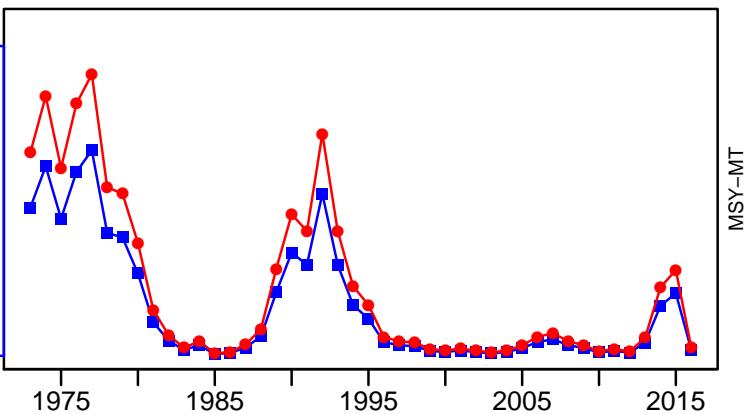
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1949–2017–SISIMP2021)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Walleye pollock Aleutian Islands [WPOLLA]

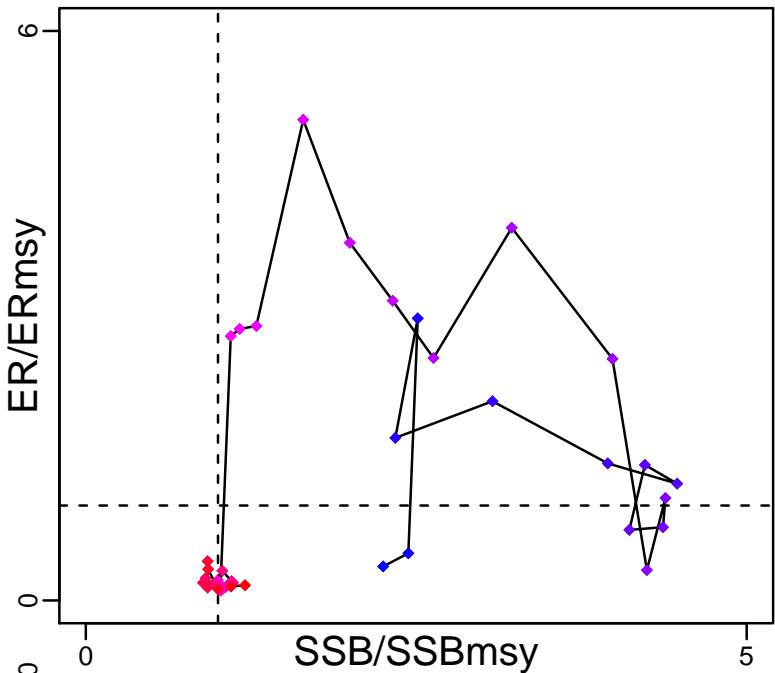
Metadata	
Scientific Name	Theragra chalcogramma
Current Assess ID	AFSC-WPOLLA-1978-2018-SISIMP2021
Area	Aleutian Islands
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2013, 2015, 2016, 2018

Reference Points				
Type	ID	Asmt Year	Value	
TBmsy	-	-	-	
SSBmsy	SSBmsy-MT	2018	71,148	
Fmsy	Fmsy-pr-1/yr	2013	0.34	
ERmsy	ERmsy-est-ratio	2018	0.033	
TBmgt	-	-	-	
SSBmgt	-	-	-	
Fmgt	Fmgt-1/yr	2015	0.34	
ERmgt	-	-	-	
TB0	-	-	-	
SSB0	-	-	-	
MSY	MSY-est-MT	2018	7792	
M	-	-	-	
TBlim	-	-	-	
SSBlim	-	-	-	
Flim	Flim-1/yr	2016	0.232	
ERlim	-	-	-	

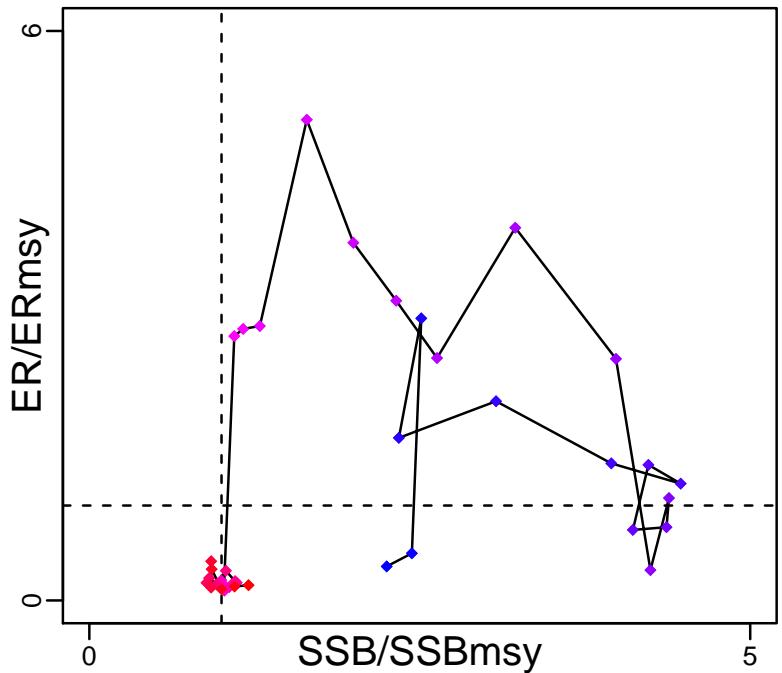
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	216,000	-	1+	
SSB	SSB-MT	2018	89,844	-	-	
TN	-	-	-	-	-	
R	R-E00	2018	81,377,500	-	0	
F	F-1/yr	2018	0.006	-	-	
ER	ER-calc-ratio	2018	0.005	-	-	
TC	TC-MT	2018	1507			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2018	1.263			
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2013	0.021			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.161			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	F-1/yr/Fmgt-1/yr	2015	0.035			
ER/ERmgt	-	-	-			

Walleye pollock Aleutian Islands [WPOLLA]

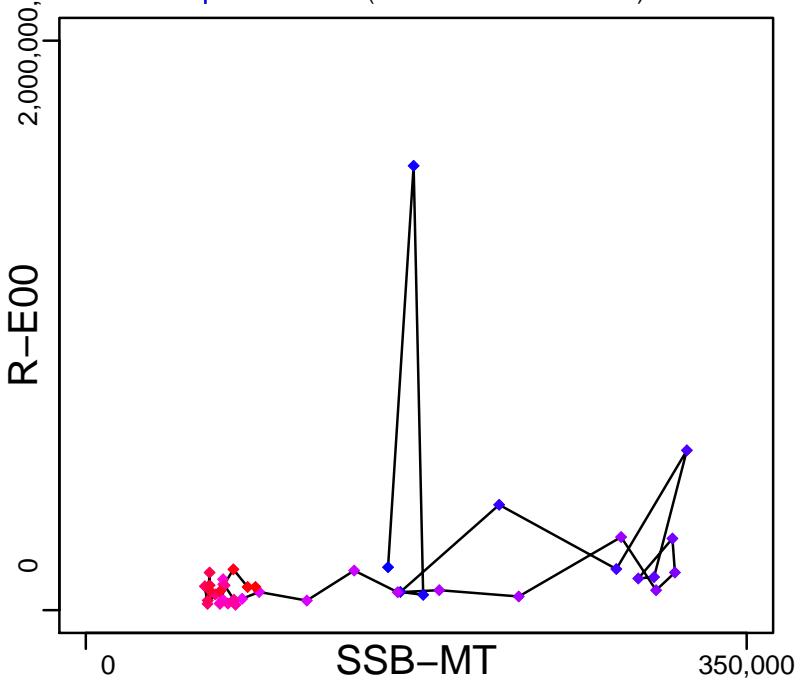
Kobe MSYpref (1978–2018–SISIMP2021)



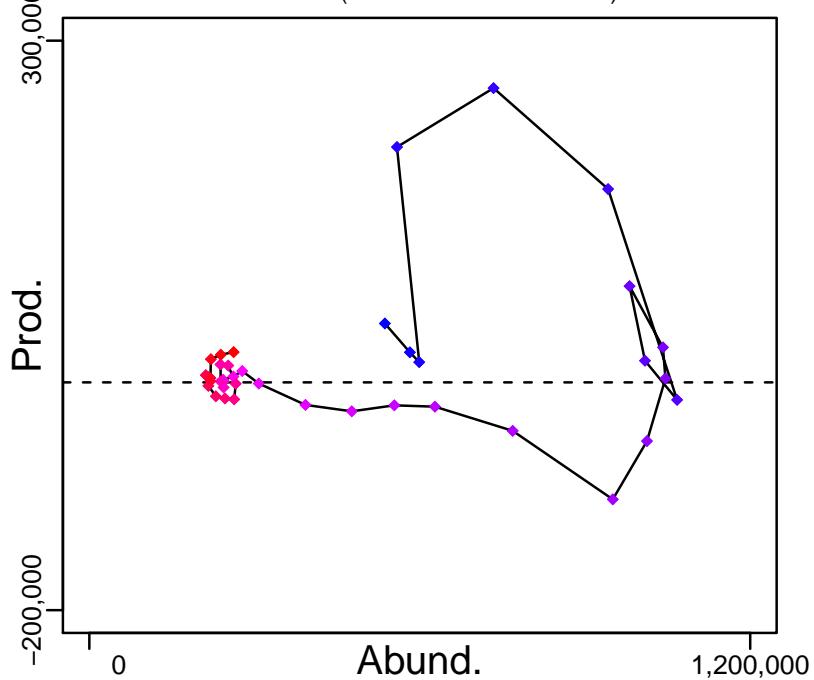
Kobe MGTpref (1978–2018–SISIMP2021)



Spawner Recruit (1978–2018–SISIMP2021)



Production (1978–2018–SISIMP2021)

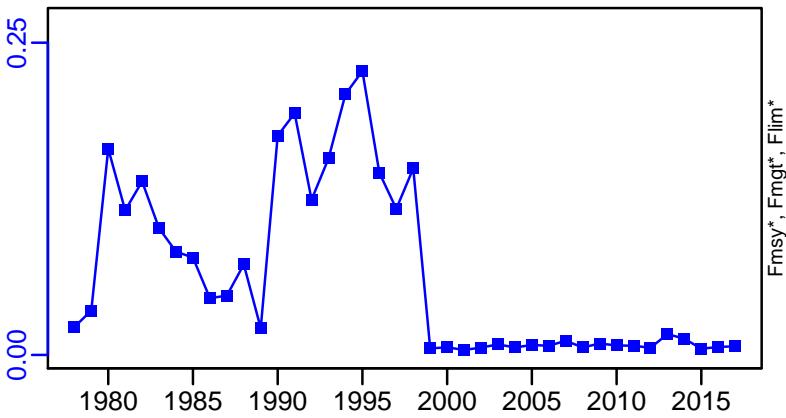
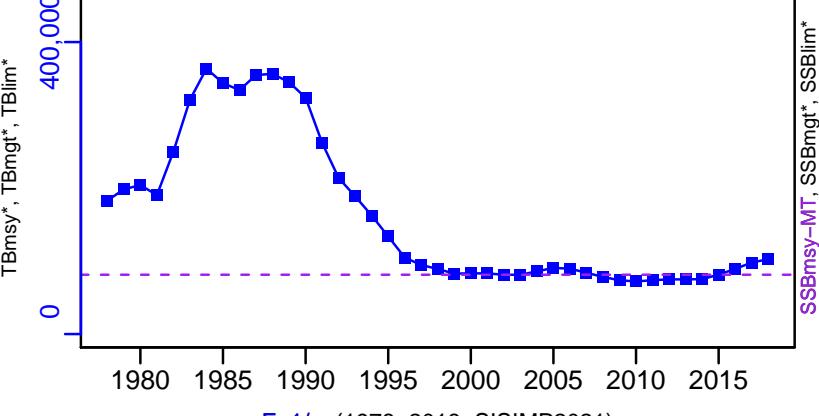
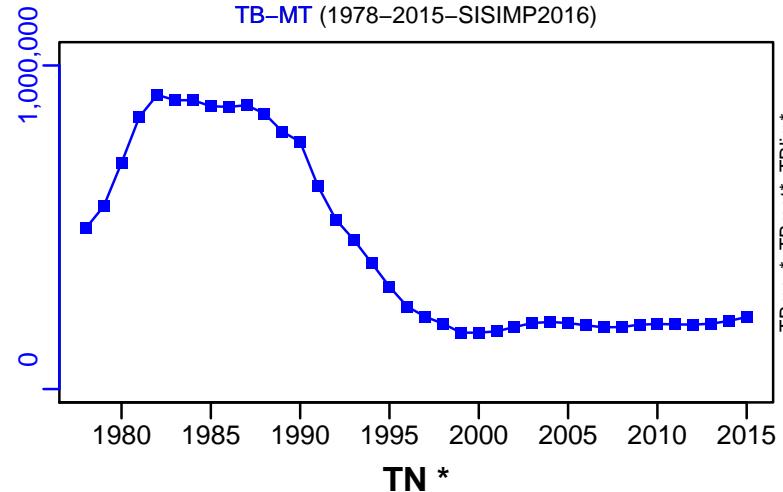


◆ Start Year ◆ End Year * No Data

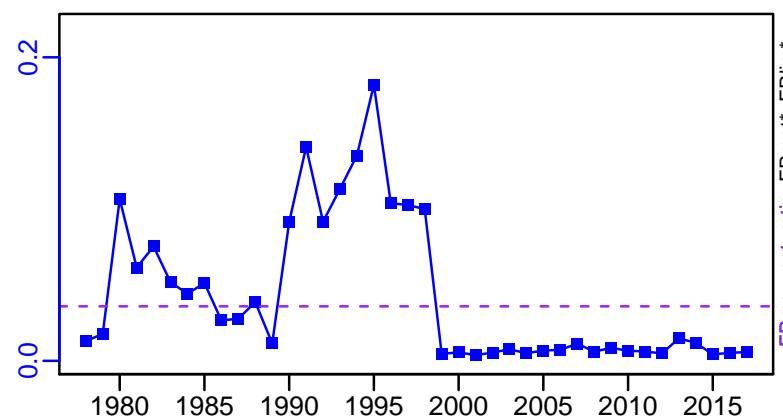
Walleye pollock Aleutian Islands [WPOLLA]

TB-MT (1978–2015–SISIMP2016)

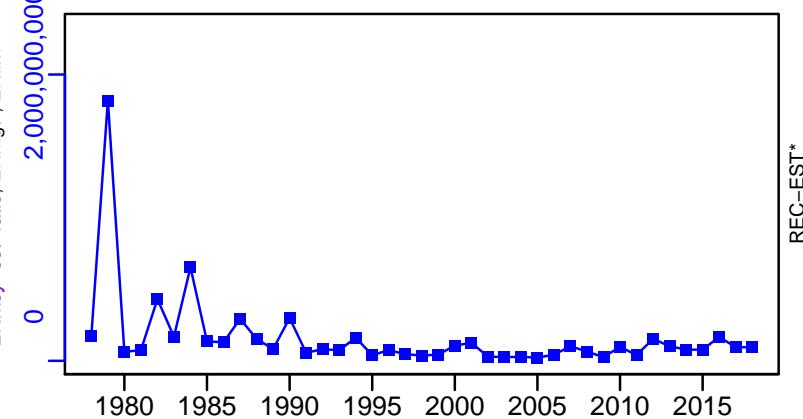
SSB-MT (1978–2018–SISIMP2021)



ER-calc-ratio (1978–2018–SISIMP2021)



R-E00 (1978–2018–SISIMP2021)

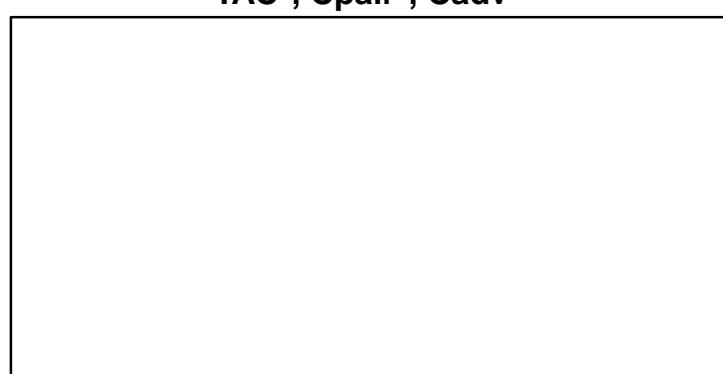
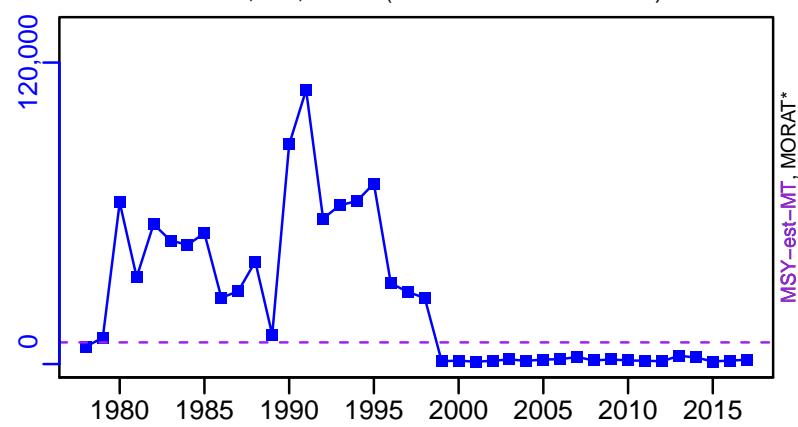


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

Walleye pollock Aleutian Islands [WPOLLA]

TC-MT, TL*, RecC* (1978–2018–SISIMP2021)

TAC*, Cpair*, Cadv*



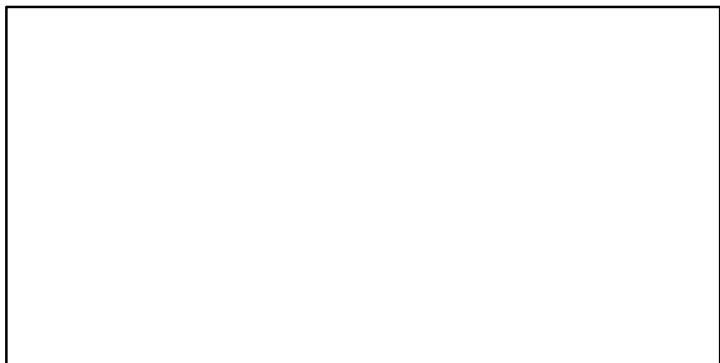
survB*



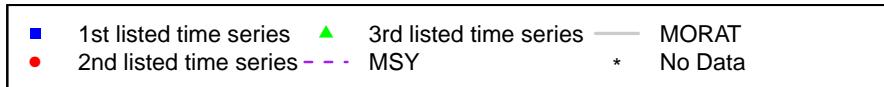
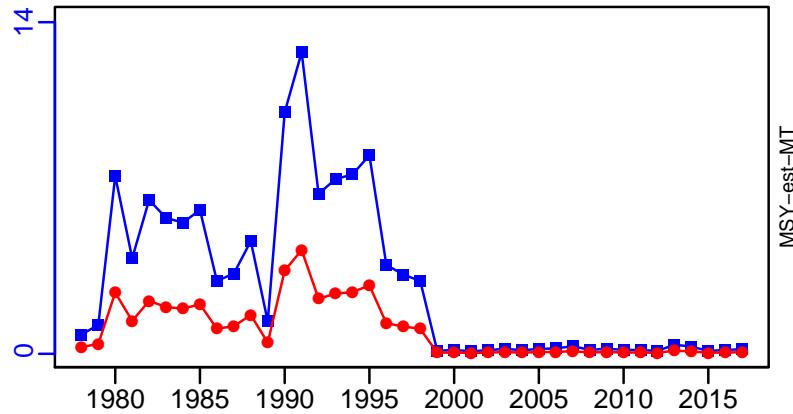
CPUE*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1978–2018–SISIMP2021)



Walleye pollock Bogoslof [WPOLLBOGO]

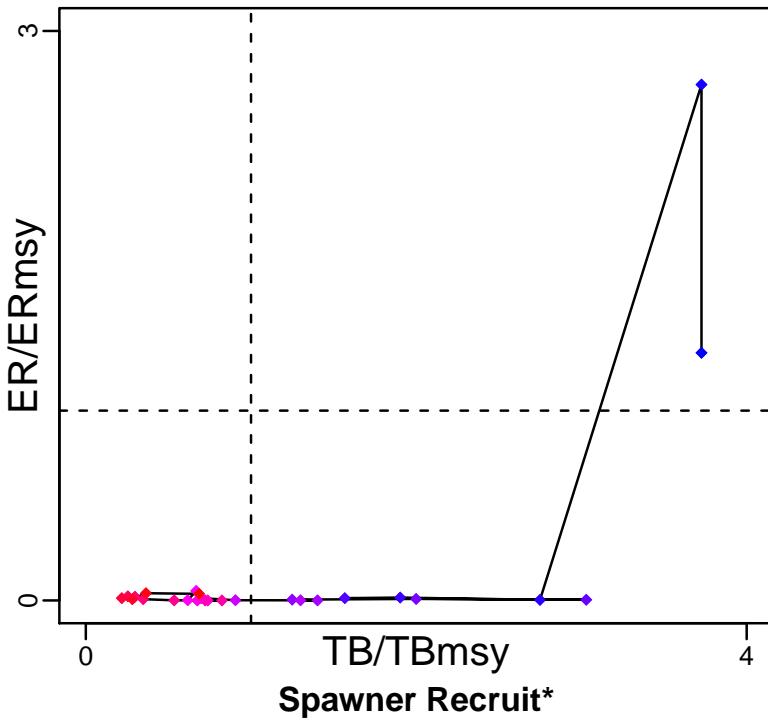
Metadata	
Scientific Name	Theragra chalcogramma
Current Assess ID	AFSC-WPOLLBOGO-1977-2017-SISIMP2021
Area	Bogoslof
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2014, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2017	336,827
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2017	0.092
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2017	30,988
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	ERlim-ratio	2017	0.092

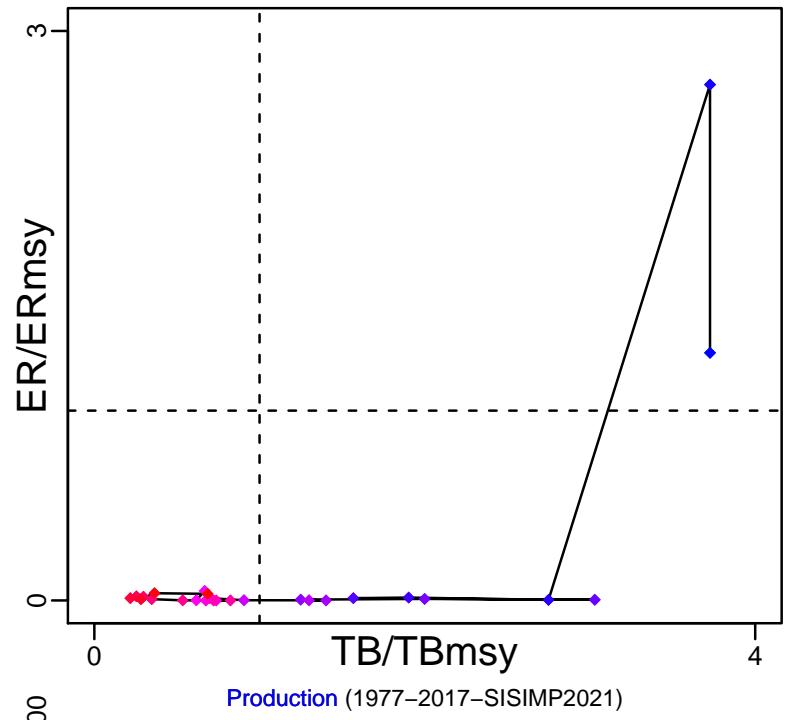
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2017	434,760	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2017	0.003	-	-
TC	TC-MT	2017	733		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-est-MT	2017	1.291		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2017	0.035		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Walleye pollock Bogoslof [WPOLLBOGO]

Kobe MSYpref (1977–2017–SISIMP2021)

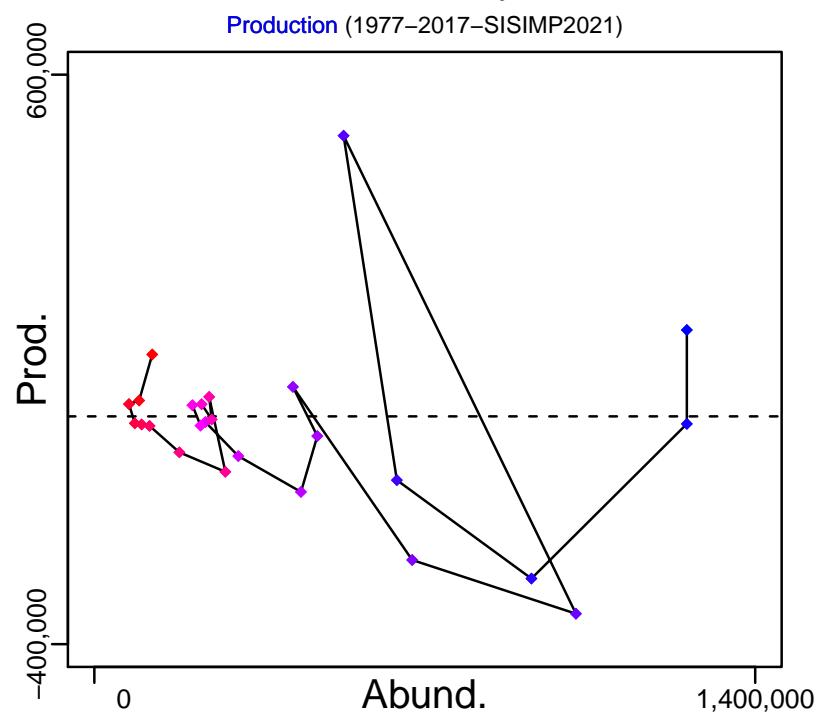
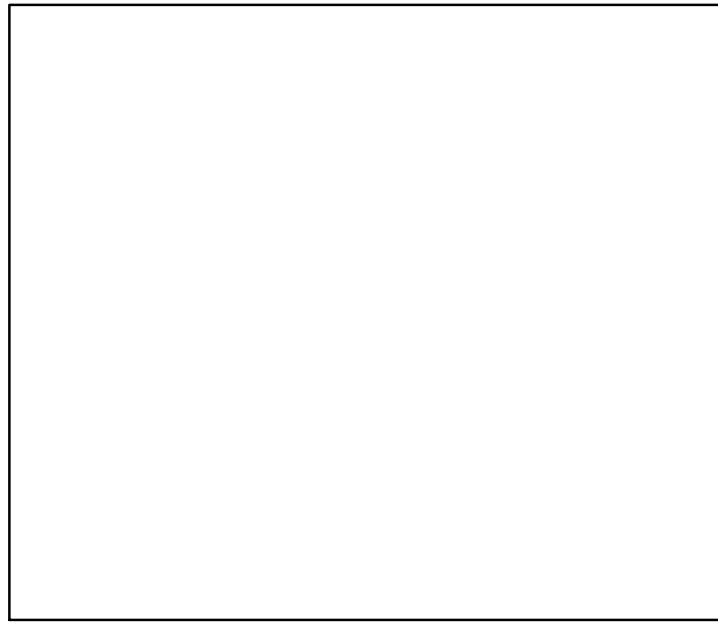


Kobe MGTpref (1977–2017–SISIMP2021)



Spawner Recruit*

Production (1977–2017–SISIMP2021)

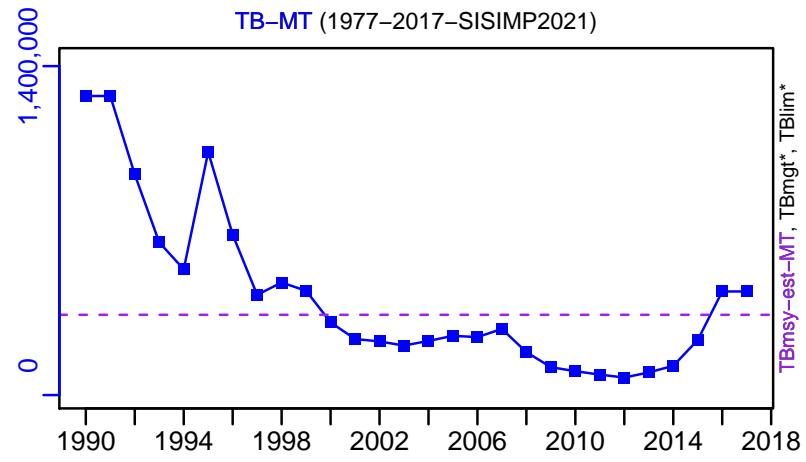


◆ Start Year ◆ End Year * No Data

Walleye pollock Bogoslof [WPOLLBOGO]

TB-MT (1977–2017–SISIMP2021)

SSB*

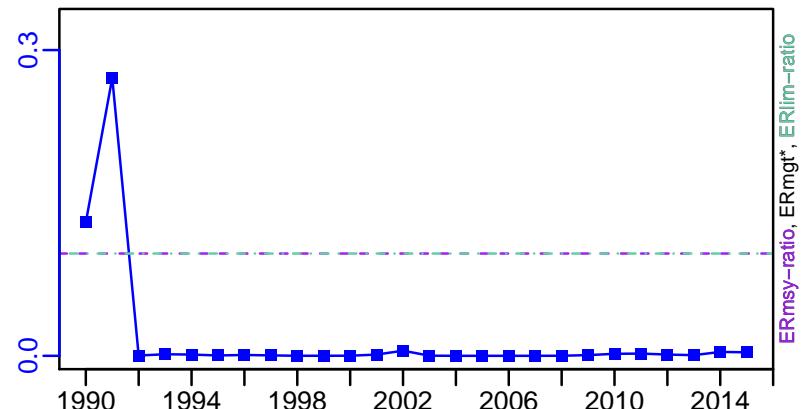


TN *

F*

ER-ratio (1977–2017–SISIMP2021)

Recruits*

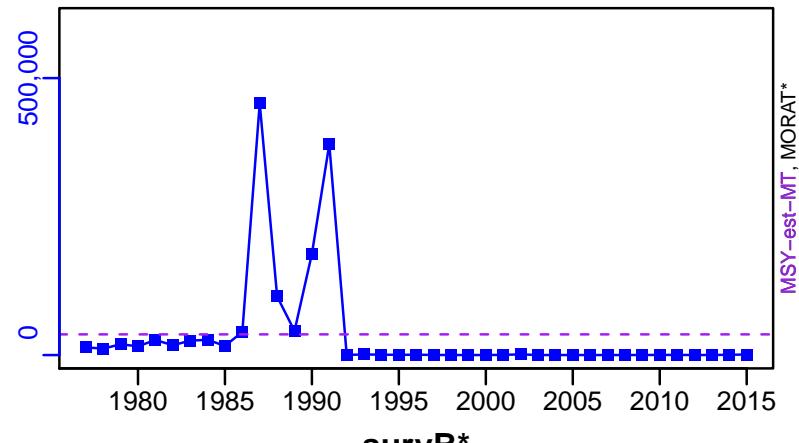


- | | | |
|----------------------|---------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| - - - MSY-based BRP | - - - Lim BRP | * No Data |

Walleye pollock Bogoslof [WPOLLBOGO]

TC-MT, TL*, RecC* (1977–2017–SISIMP2021)

TAC*, Cpair*, Cadv*



MSY-est-MT, MORAT*

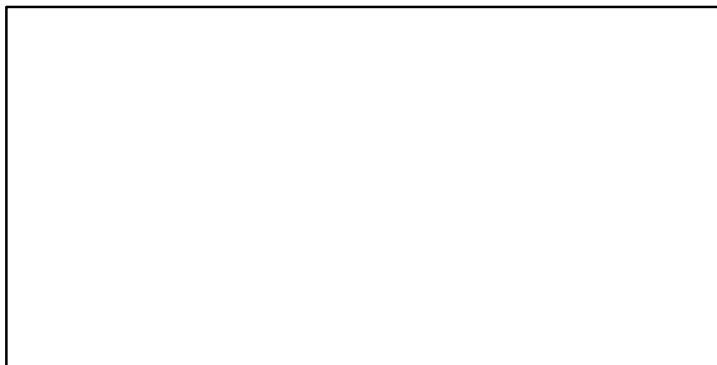
survB*



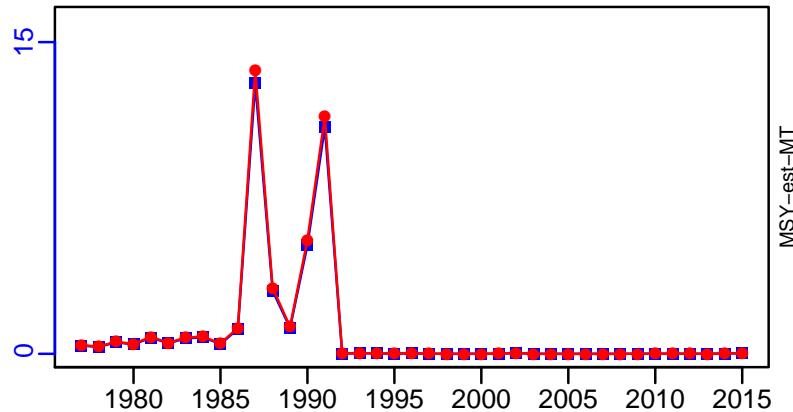
CPUE*



EFFORT*



TC-MT/MSY-est-MT, CdiveMEANC-ratio, (1977–2017–SISIMP2021)



MSY-est-MT

■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Walleye pollock Eastern Bering Sea [WPOLLEBS]

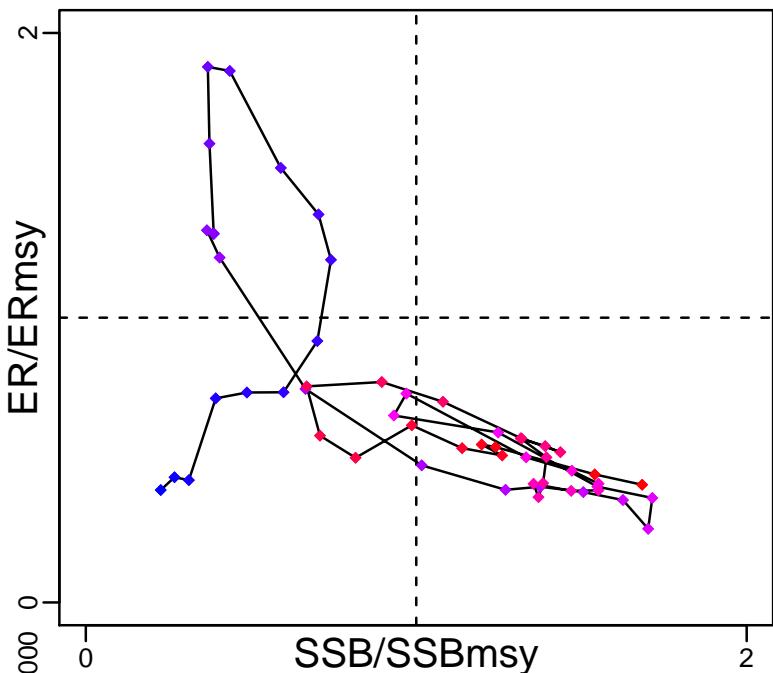
Metadata	
Scientific Name	Theragra chalcogramma
Current Assess ID	AFSC-WPOLLEBS-1963-2018-SISIMP2021
Area	Eastern Bering Sea
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2015, 2016, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2018	2,280,000
Fmsy	Fmsy-1/yr	2015	0.587
ERmsy	ERmsy-conv-ratio	2018	0.292
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	SSB0-MT	2015	5,162,000
MSY	MSY-MT	2018	1,953,300
M	M-1/yr	2015	0.3
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2016	0.636
ERlim	-	-	-

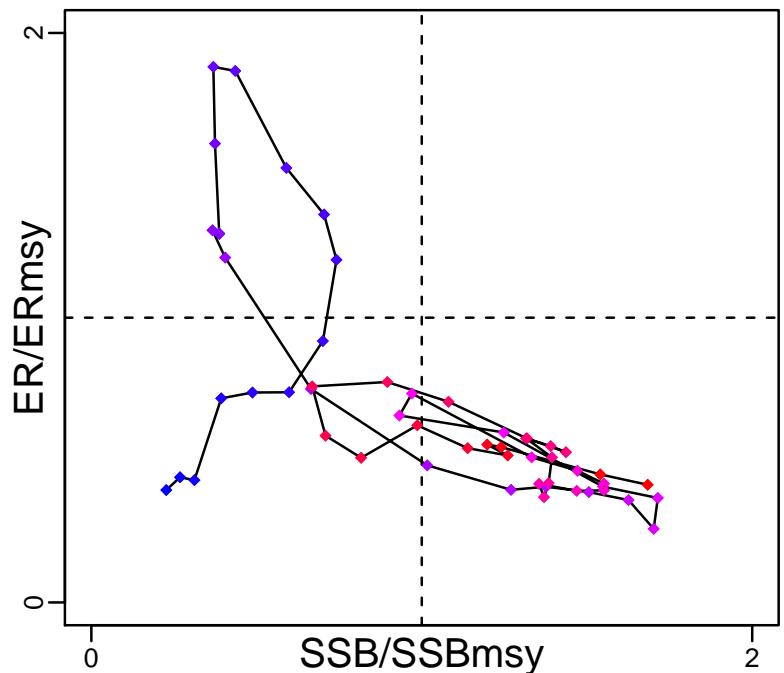
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	7,780,000	-	3+	
SSB	SSB-MT	2018	3,552,790	-	-	
TN	-	-	-	-	-	
R	R-E00	2018	1.74×10^{13}	-	1	
F	F-1/yr	2018	0.318	-	-	
ER	ER-calc-ratio	2018	0.12	-	-	
TC	TC-MT	2018	1,359,270			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2018	1.558			
F/Fmsy	F-1/yr/Fmsy-1/yr	2015	0.353			
ER/ERmsy	ER-calc-ratio/ERmsy-conv-ratio	2018	0.413			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Walleye pollock Eastern Bering Sea [WPOLLEBS]

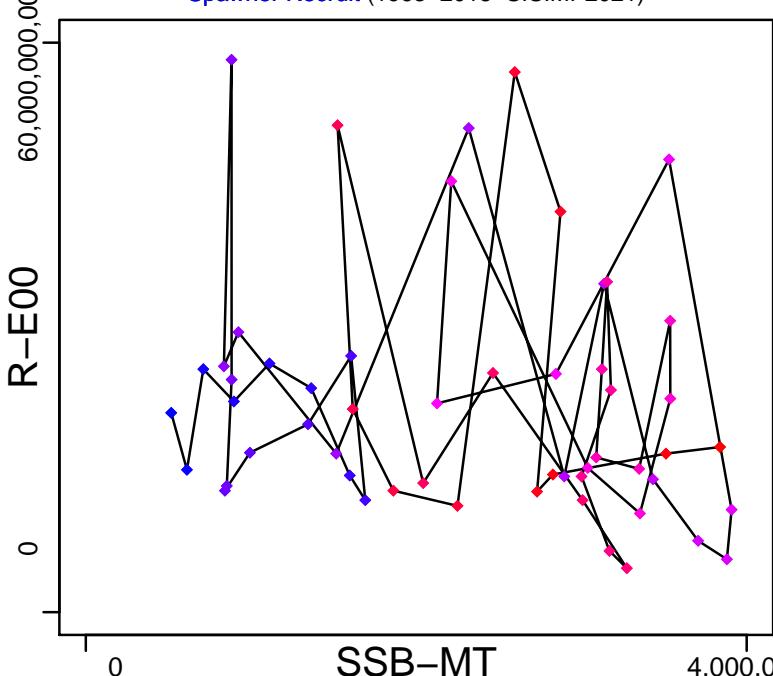
Kobe MSYpref (1963–2018–SISIMP2021)



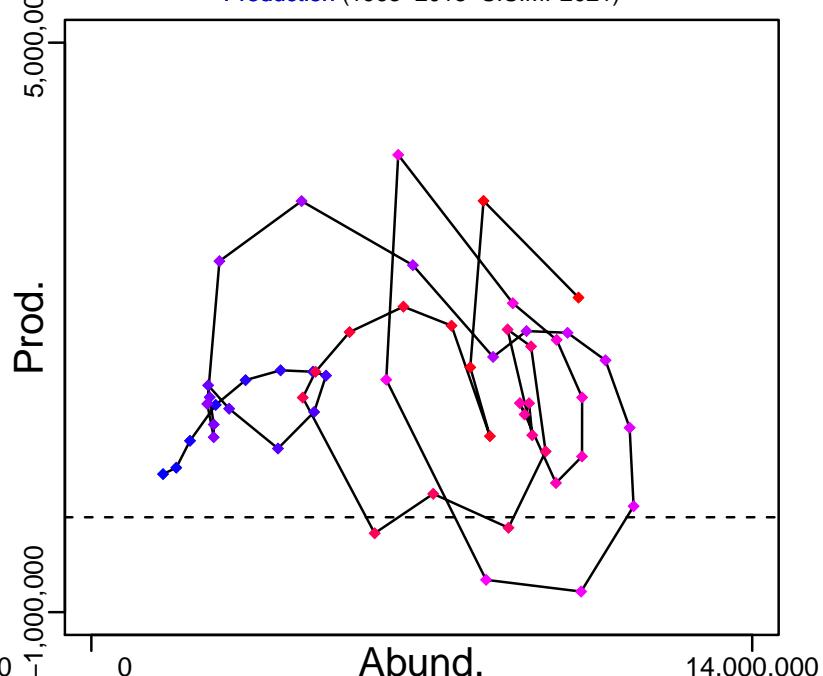
Kobe MGTpref (1963–2018–SISIMP2021)



Spawner Recruit (1963–2018–SISIMP2021)



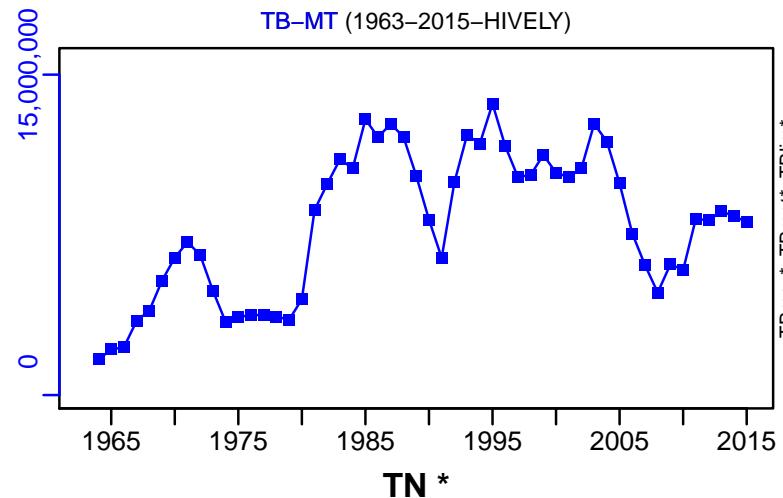
Production (1963–2018–SISIMP2021)



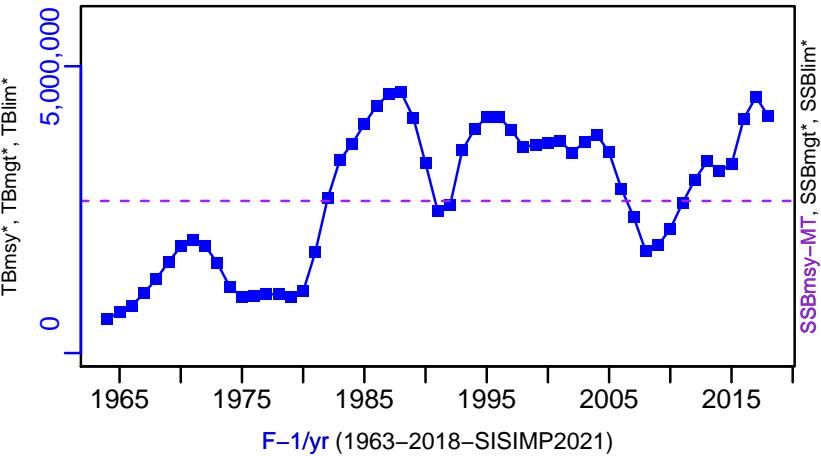
◆ Start Year ◆ End Year * No Data

Walleye pollock Eastern Bering Sea [WPOLLEBS]

TB-MT (1963–2015-HIVELY)



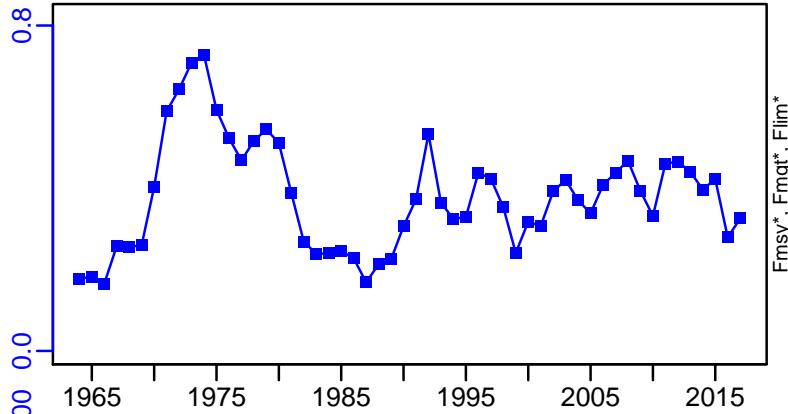
SSB-MT (1963–2018-SISIMP2021)



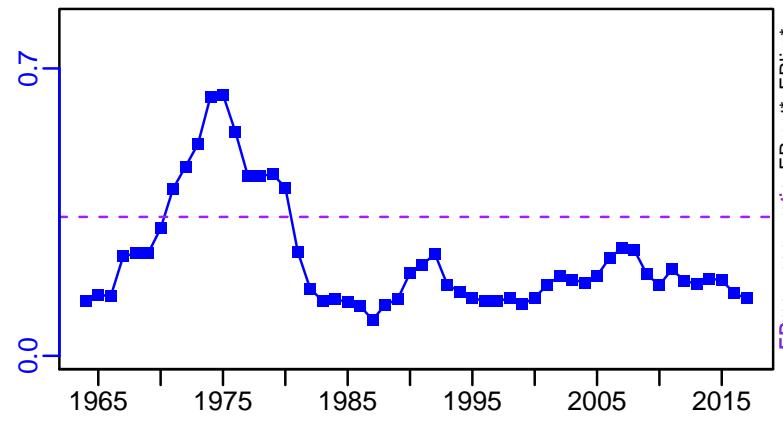
TN *



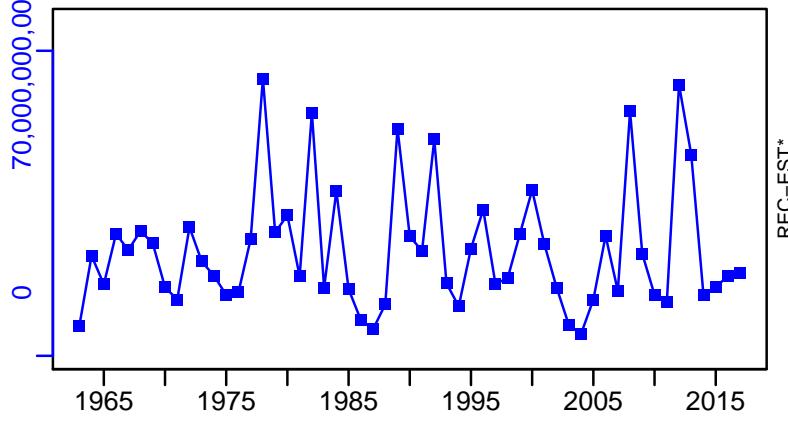
F-1/yr (1963–2018-SISIMP2021)



ER-calc-ratio (1963–2018-SISIMP2021)



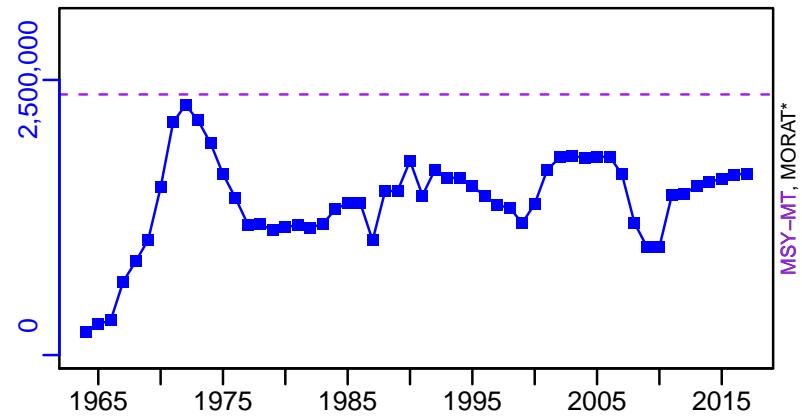
R-E00 (1963–2018-SISIMP2021)



Walleye pollock Eastern Bering Sea [WPOLLEBS]

TC-MT, TL*, RecC* (1963–2018–SISIMP2021)

TAC*, Cpair*, Cadv*

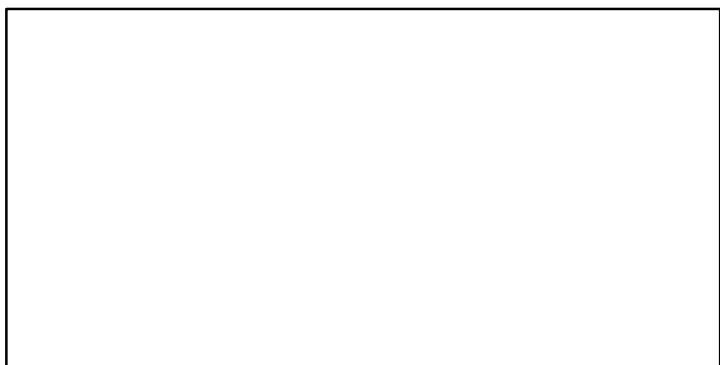


survB*

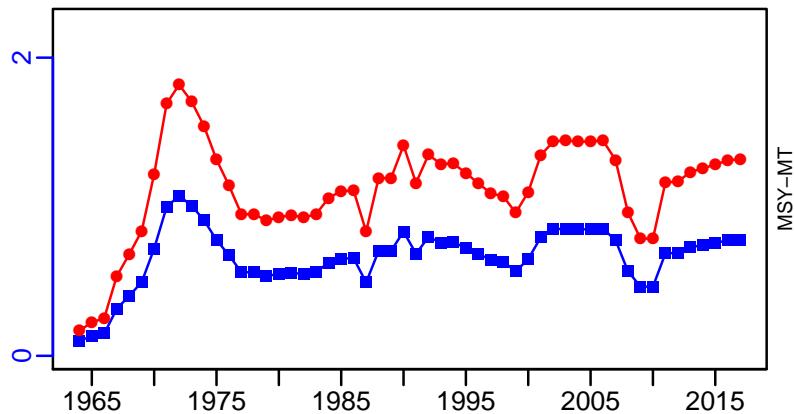
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1963–2018–SISIMP2021)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

Walleye pollock Gulf of Alaska [WPOLLGA]

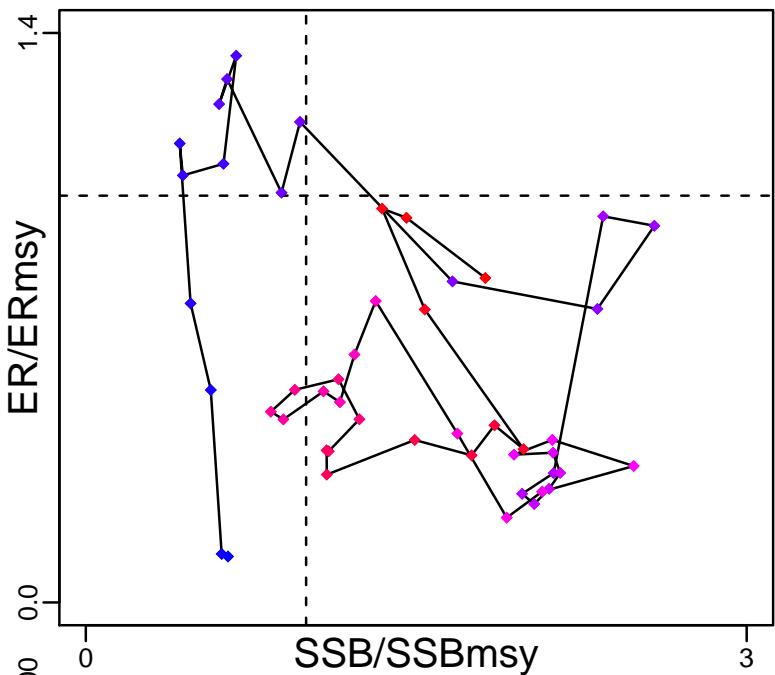
Metadata	
Scientific Name	Theragra chalcogramma
Current Assess ID	AFSC-WPOLLGA-1969-2018-SISIMP2021
Area	Gulf of Alaska
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2016, 2017, 2018, 2014, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2018	194,000
Fmsy	Fmsy-pr-1/yr	2014	0.285
ERmsy	ERmsy-est-ratio	2018	0.211
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2014	312,000
Fmgt	Fmgt-1/yr	2015	0.29
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2018	128,689
M	M-1/yr	2014	0.3
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2018	0.237
ERlim	-	-	-

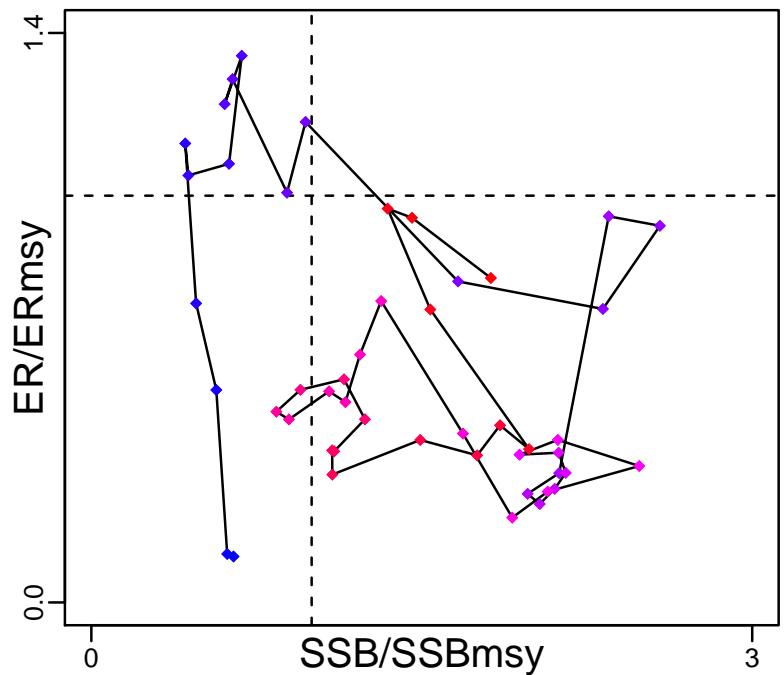
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	1,730,000	-	3+	
SSB	SSB-MT	2018	325,544	-	-	
TN	-	-	-	-	-	
R	R-E00	2018	5,414,880,000	-	1	
F	F-1/yr	2018	0.182	-	-	
ER	ER-calc-ratio	2018	0.168	-	-	
TC	TC-MT	2018	186,157			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2018	1.678			
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2014	0.621			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.798			
TB/TBmgt	-	-	-			
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2014	1.09			
F/Fmgt	F-1/yr/Fmgt-1/yr	2015	0.838			
ER/ERmgt	-	-	-			

Walleye pollock Gulf of Alaska [WPOLLGA]

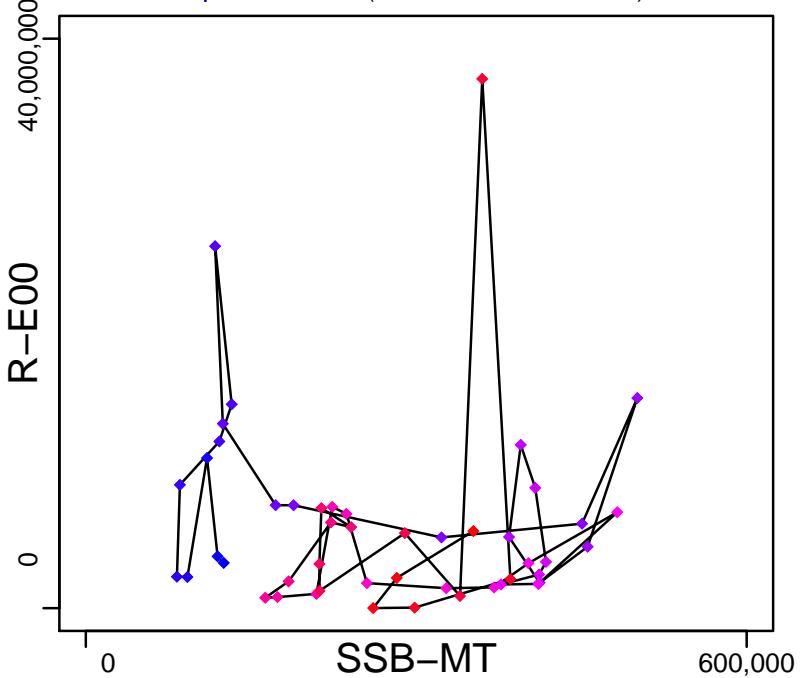
Kobe MSYpref (1969–2018–SISIMP2021)



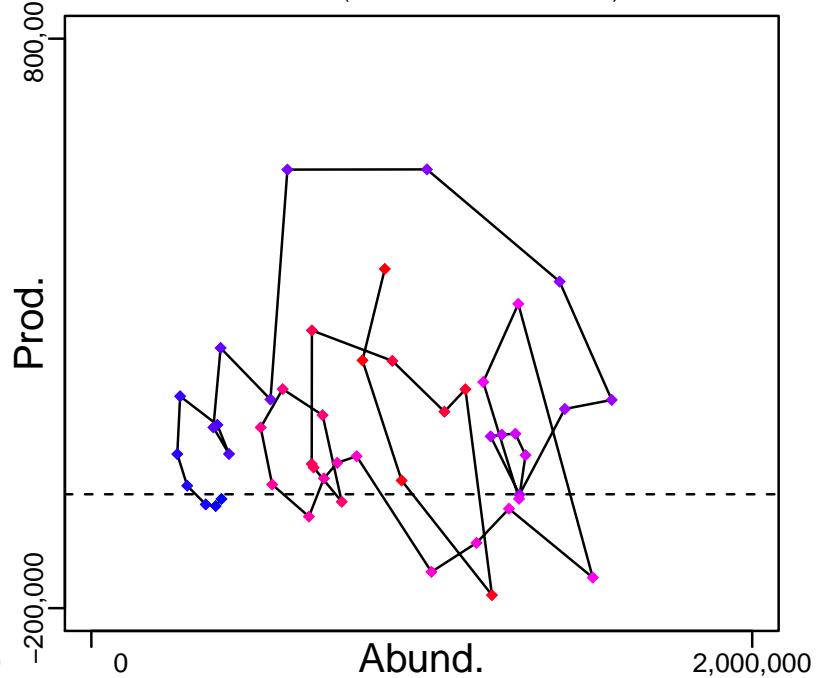
Kobe MGTpref (1969–2018–SISIMP2021)



Spawner Recruit (1969–2018–SISIMP2021)



Production (1969–2018–SISIMP2021)

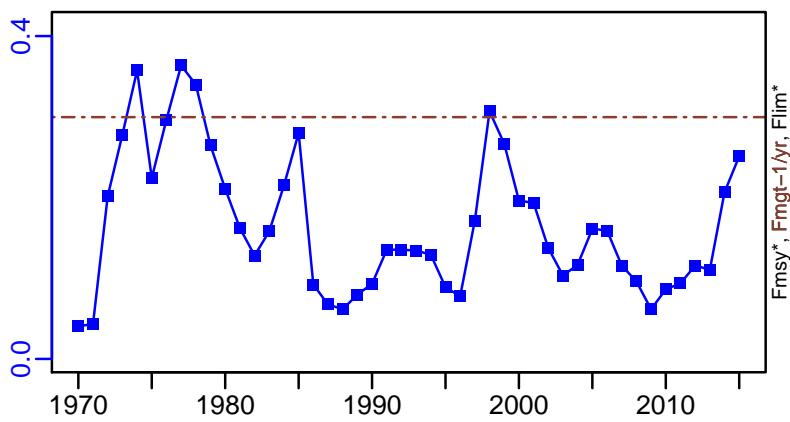
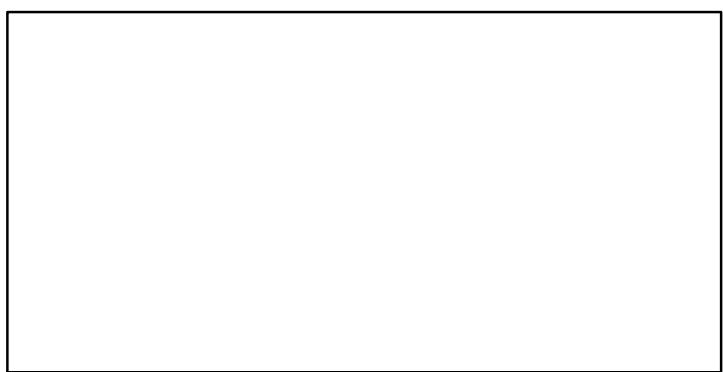
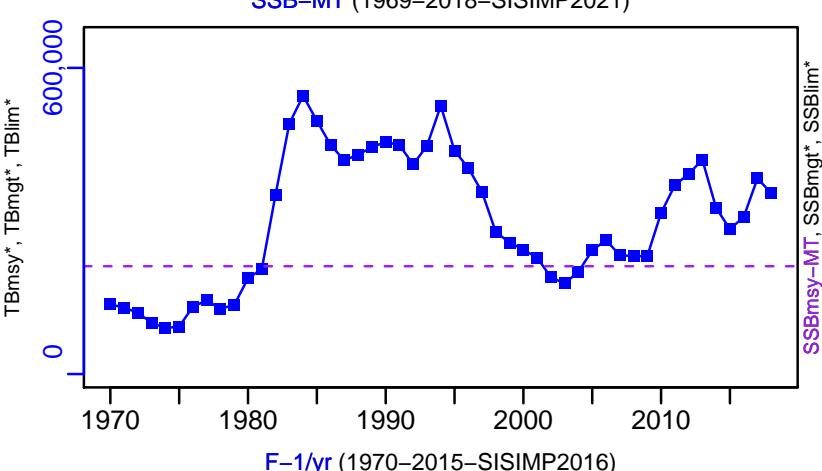
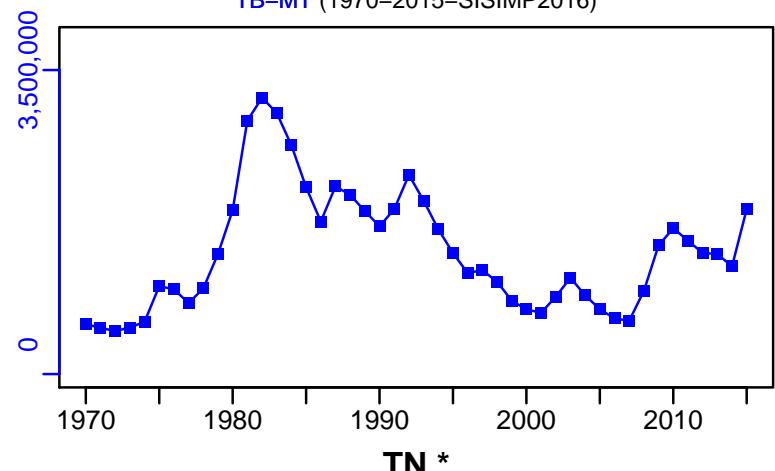


◆ Start Year ◆ End Year * No Data

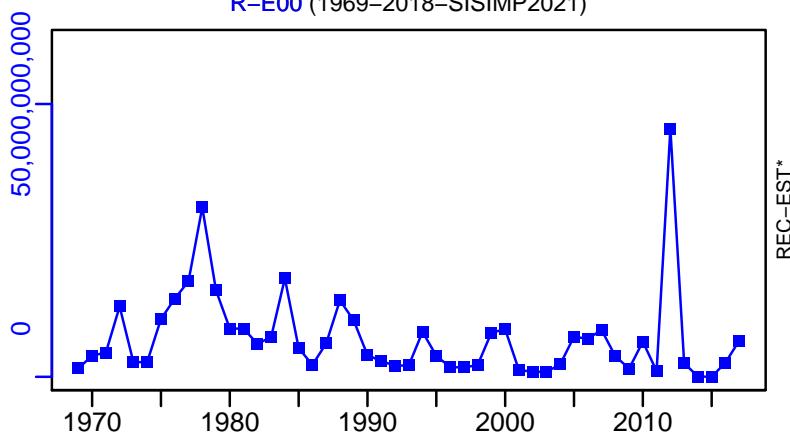
Walleye pollock Gulf of Alaska [WPOLLGA]

TB-MT (1970–2015–SISIMP2016)

SSB-MT (1969–2018–SISIMP2021)



ER-calc-ratio (1969–2018–SISIMP2021)



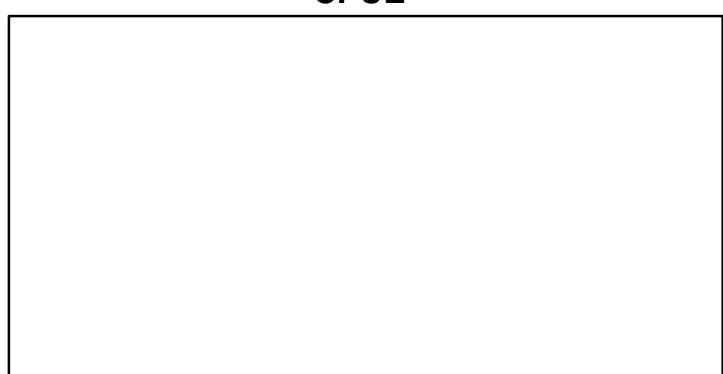
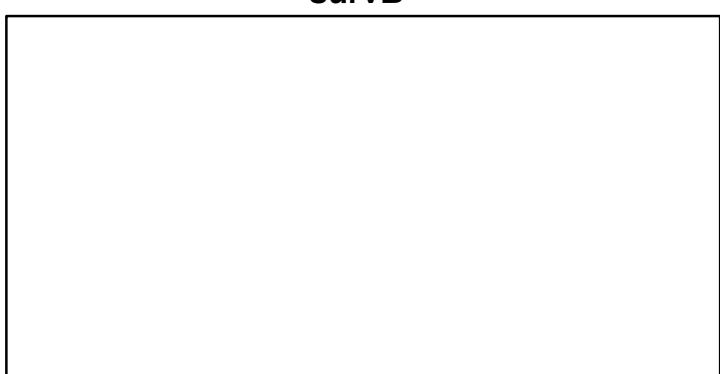
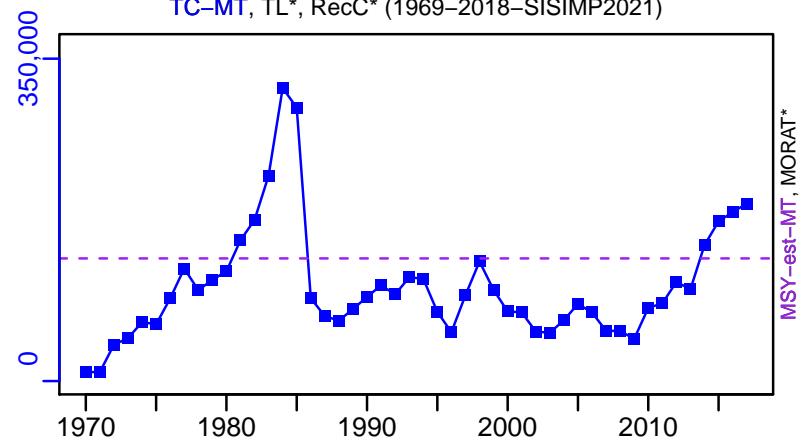
R-E00 (1969–2018–SISIMP2021)

■ Listed time series	— Target BRP	— Rec-Est
- - - MSY-based BRP	- - Lim BRP	* No Data

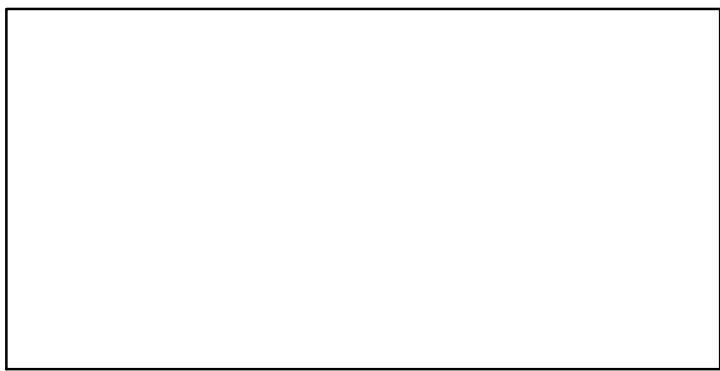
Walleye pollock Gulf of Alaska [WPOLLGA]

TC-MT, TL*, RecC* (1969–2018–SISIMP2021)

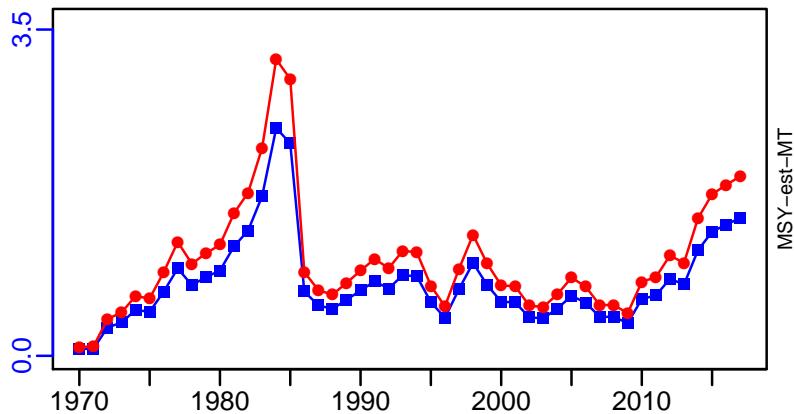
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1969–2018–SISIMP2021)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - - MSY	* No Data

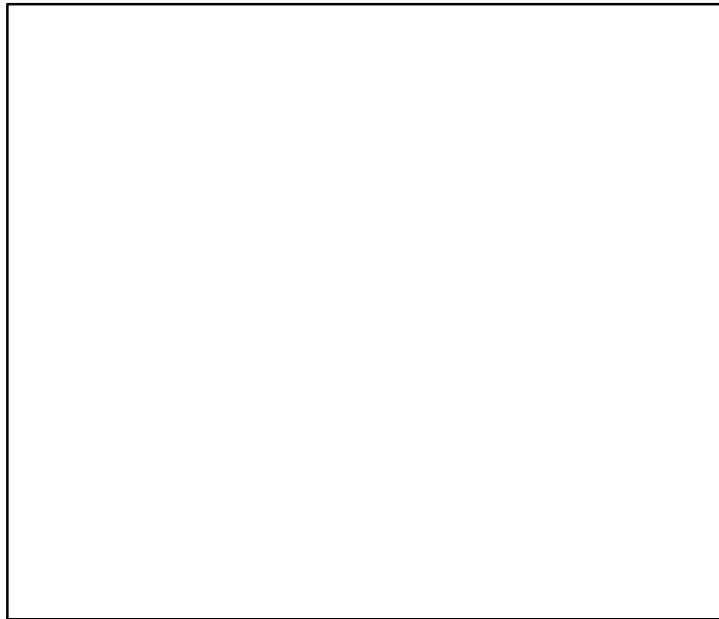
Weathervane scallop Alaska [WVSCALLALASKA]

Metadata	
Scientific Name	Patinopecten caurinus
Current Assess ID	AFSC-WVSCALLALASKA-1994-2017-SISIMP2021
Area	Alaska
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2015, 2016, 2017

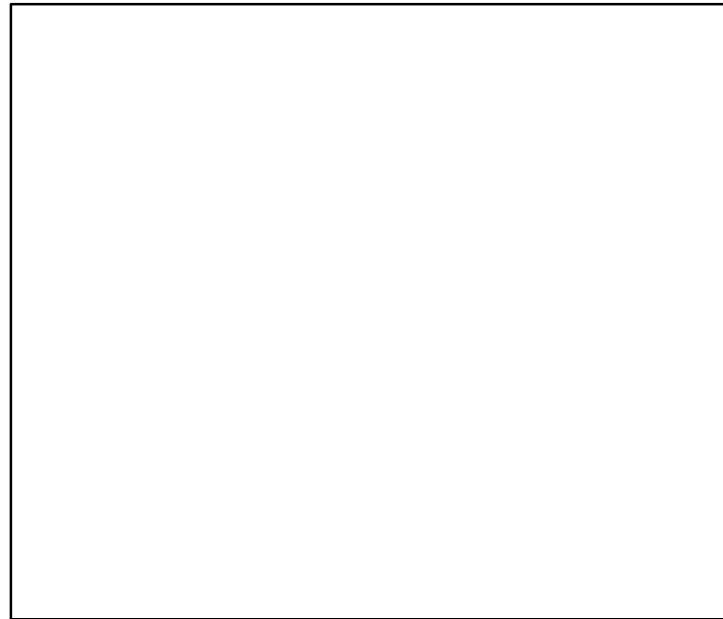
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2017	582
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2017	106		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

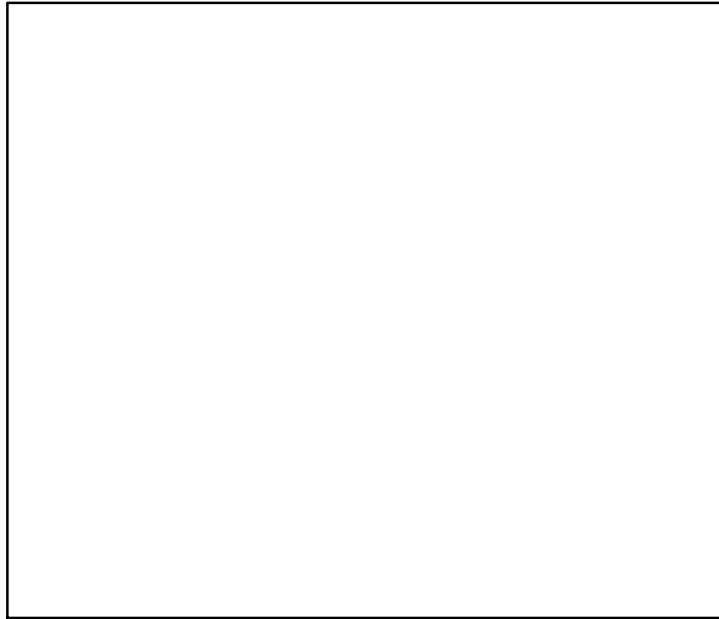
Kobe MSY*



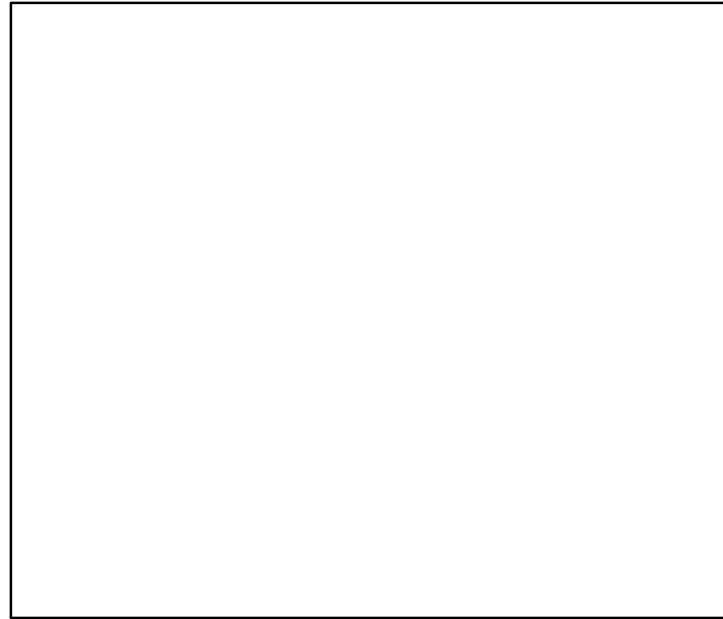
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ♦ End Year * No Data

Weathervane scallop Alaska [WVSCALLALASKA]

TB*



SSB*



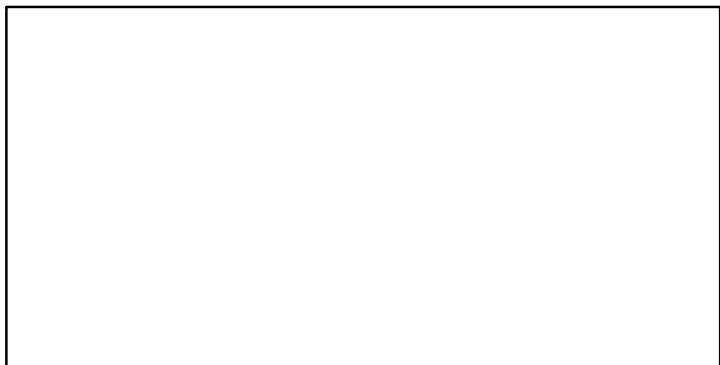
TN *



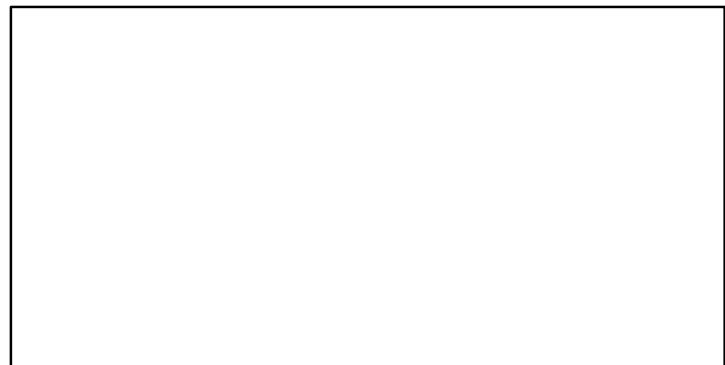
F*



ER*



Recruits*

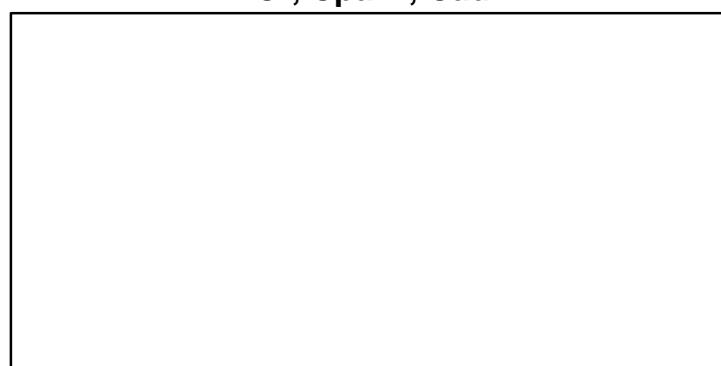
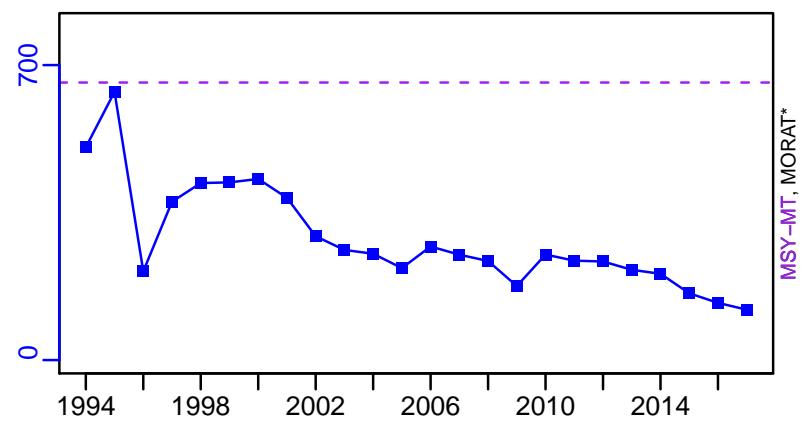


- | | | | | | |
|-------|--------------------|-------|------------|---|---------|
| ■ | Listed time series | - - - | Target BRP | — | Rec-Est |
| - - - | MSY-based BRP | - - - | Lim BRP | * | No Data |

Weathervane scallop Alaska [WVSCALLALASKA]

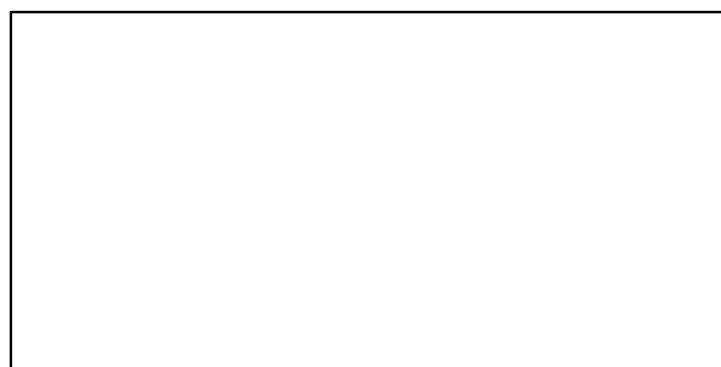
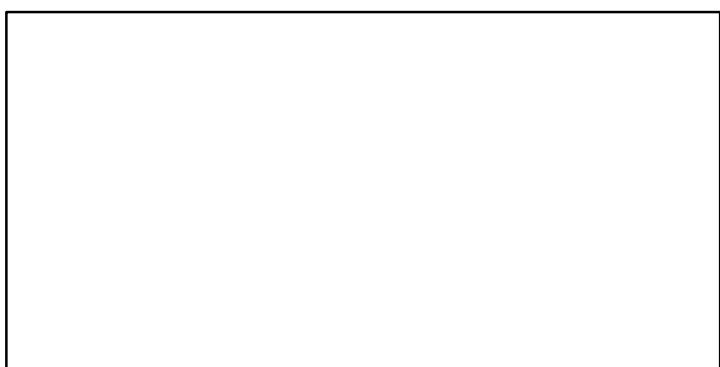
TC-MT, TL*, RecC* (1994–2017–SISIMP2021)

TAC*, Cpair*, Cadv*

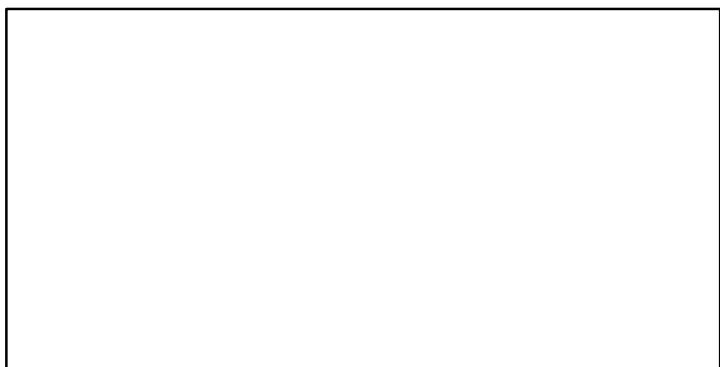


survB*

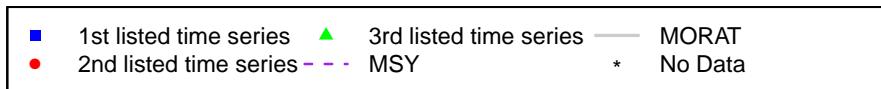
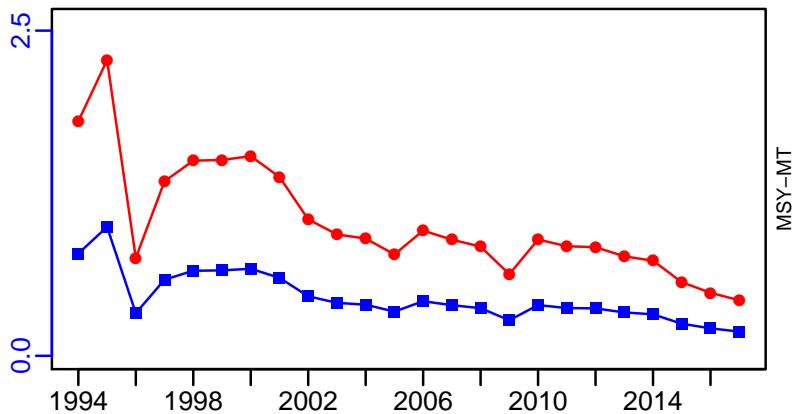
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1994–2017–SISIMP2021)



Yelloweye rockfish Gulf of Alaska [YEYEROCKGA]

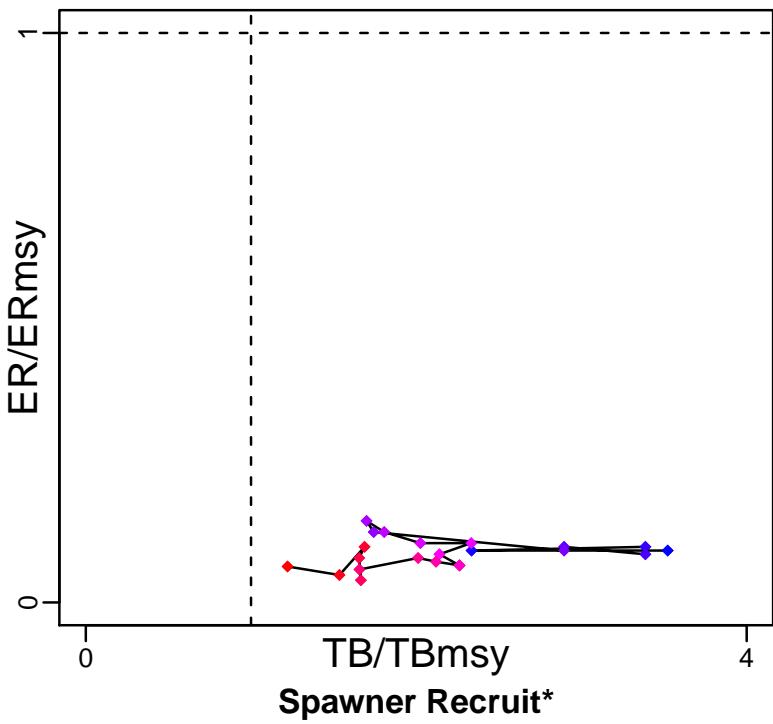
Metadata	
Scientific Name	Sebastodes ruberrimus
Current Assess ID	AFSC-YEYEROCKGA-1992-2017-SISIMP2021
Area	Gulf of Alaska
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2014, 2016, 2016, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2016	8647
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-est-ratio	2016	0.154
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2016	1329
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	ERlim-ratio	2016	0.034

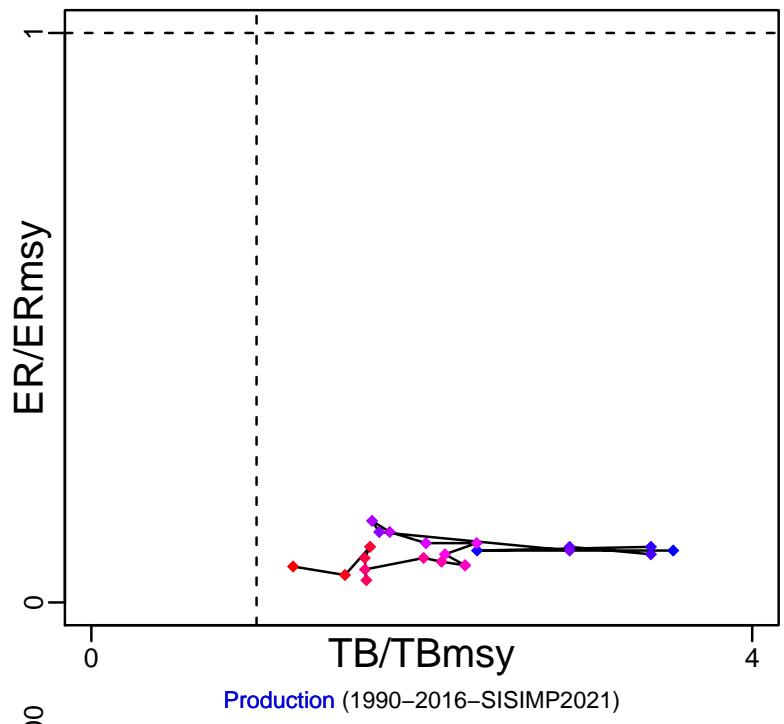
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2016	10,347	-	-	
SSB	-	-	-	-	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	-	-	-	-	-	
ER	ER-ratio	2016	0.01	-	-	
TC	TC-MT	2017	181			
TL	-	-	-			
TB/TBmsy	TB-MT/TBmsy-est-MT	2016	1.197			
SSB/SSBmsy	-	-	-			
F/Fmsy	-	-	-			
ER/ERmsy	ER-ratio/ERmsy-est-ratio	2016	0.063			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Yelloweye rockfish Gulf of Alaska [YEYEROCKGA]

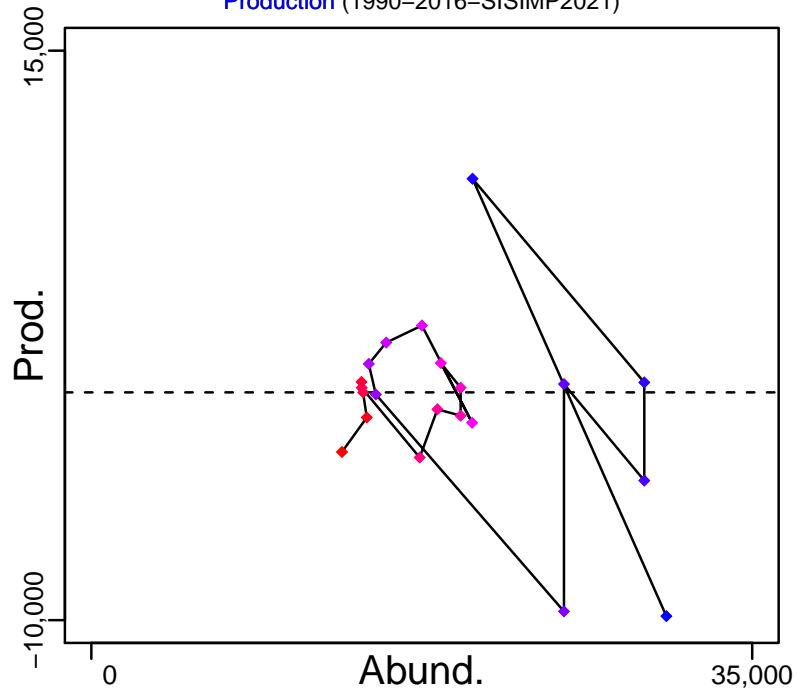
Kobe MSYpref (1990–2016–SISIMP2021)



Kobe MGTpref (1990–2016–SISIMP2021)



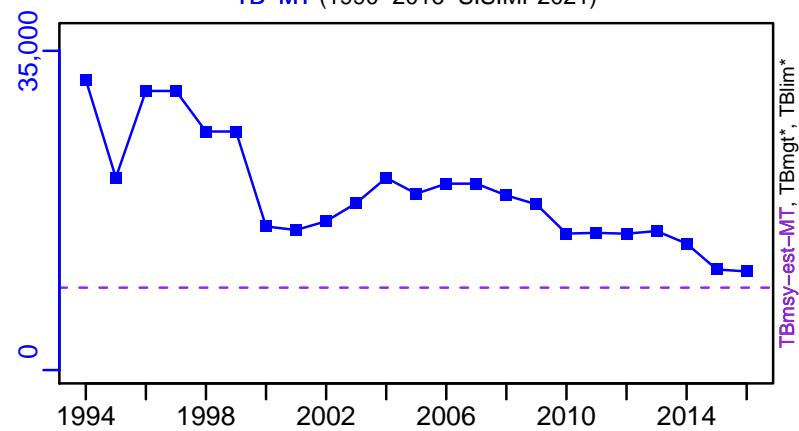
Production (1990–2016–SISIMP2021)



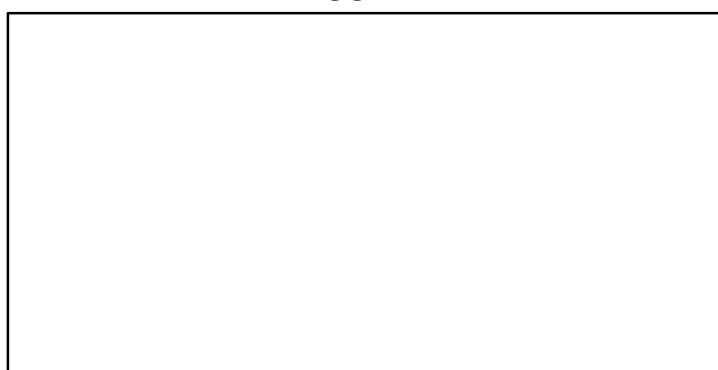
◆ Start Year
 ◆ End Year
 * No Data

Yelloweye rockfish Gulf of Alaska [YEYEROCKGA]

TB-MT (1990–2016–SISIMP2021)



SSB*



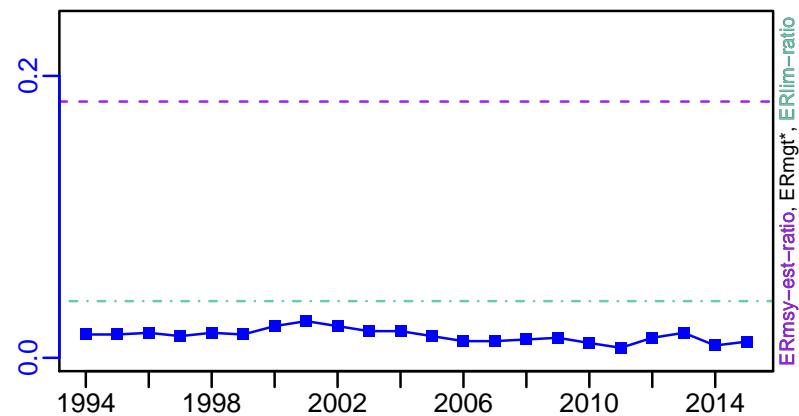
TN *



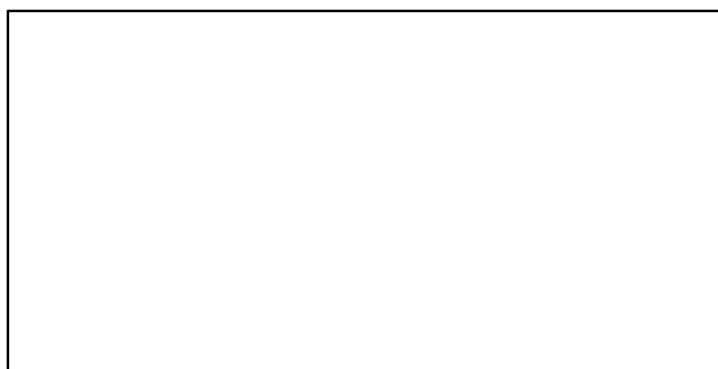
F*



ER-ratio (1990–2016–SISIMP2021)



Recruits*

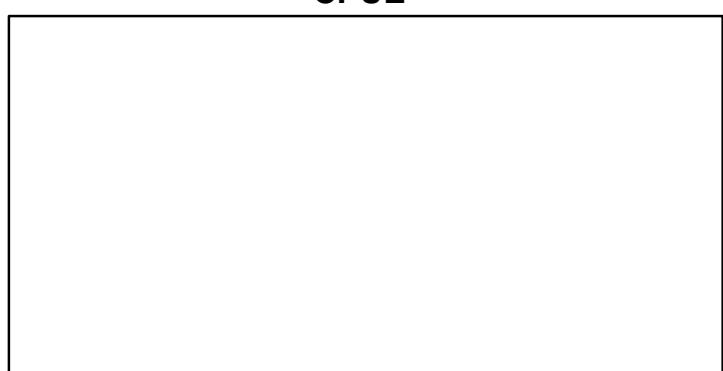
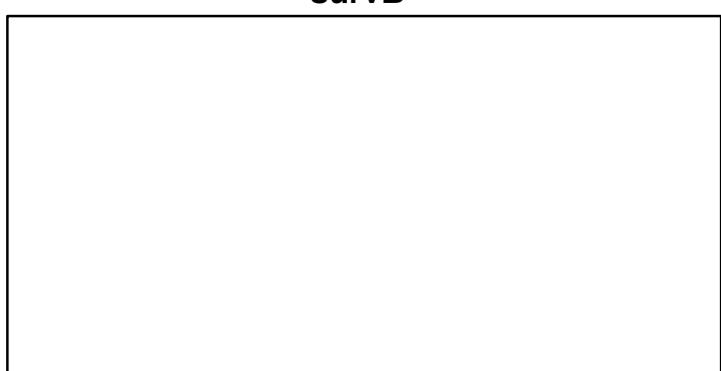
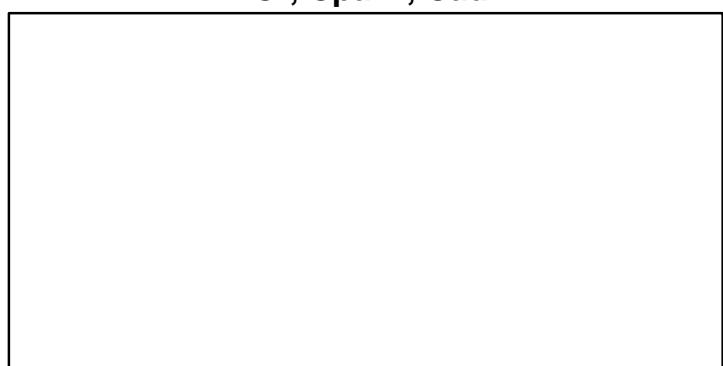
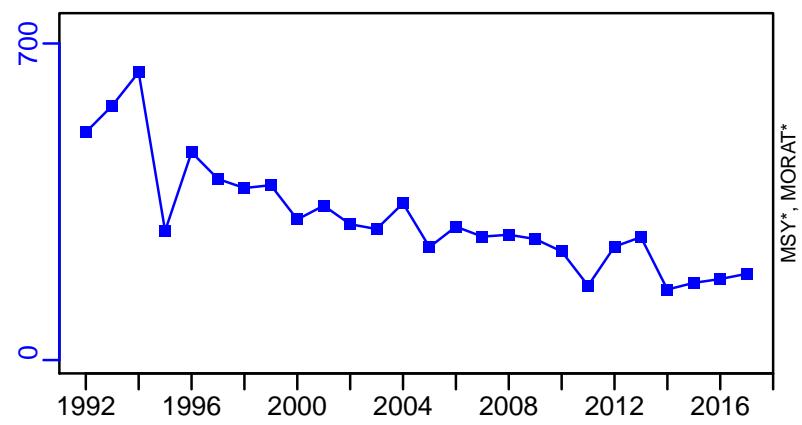


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

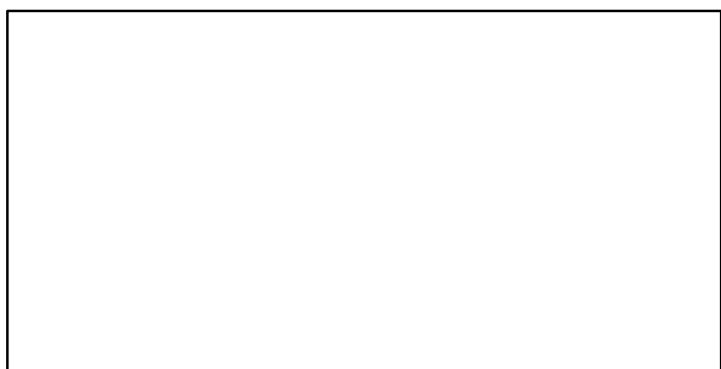
Yelloweye rockfish Gulf of Alaska [YEYEROCKGA]

TC-MT, TL*, RecC* (1992–2017–SISIMP2021)

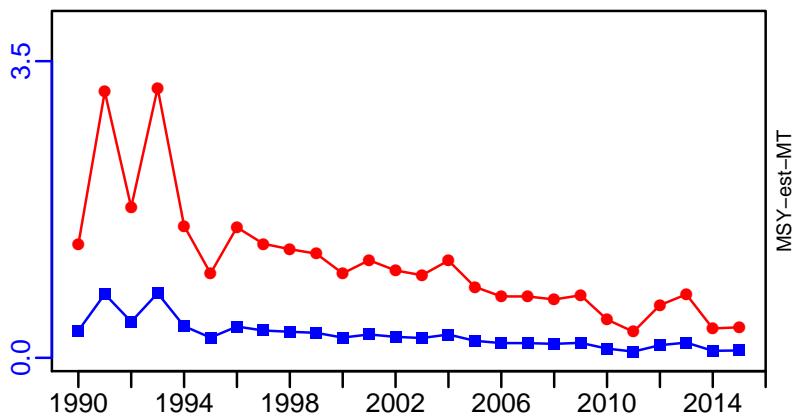
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1990–2016–SISIMP2021)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - MSY	* No Data

Yellowfin sole Bering Sea and Aleutian Islands [YSOLEBSAI]

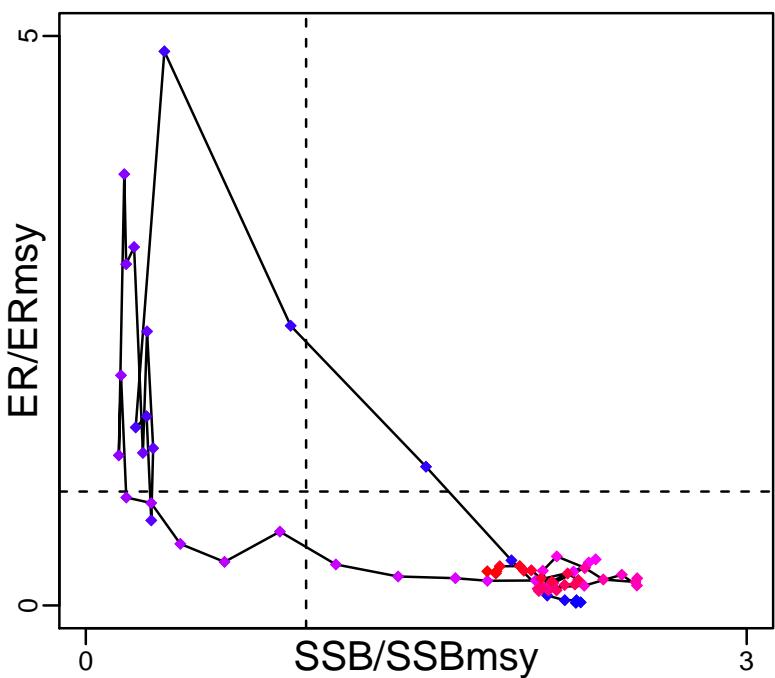
Metadata	
Scientific Name	Limanda aspera
Current Assess ID	AFSC-YSOLEBSAI-1953-2018-SISIMP2021
Area	Bering Sea and Aleutian Islands
Management Authority	National Marine Fisheries Service, US national management
Assessor	Alaska Fisheries Science Center
Asmts in RAM	2010, 2016, 2017, 2018, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2018	460,800
Fmsy	Fmsy-pr-1/yr	2010	0.13
ERmsy	ERmsy-est-ratio	2018	0.106
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2018	242,467
M	M-1/yr	2010	0.12
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2018	0.17
ERlim	-	-	-

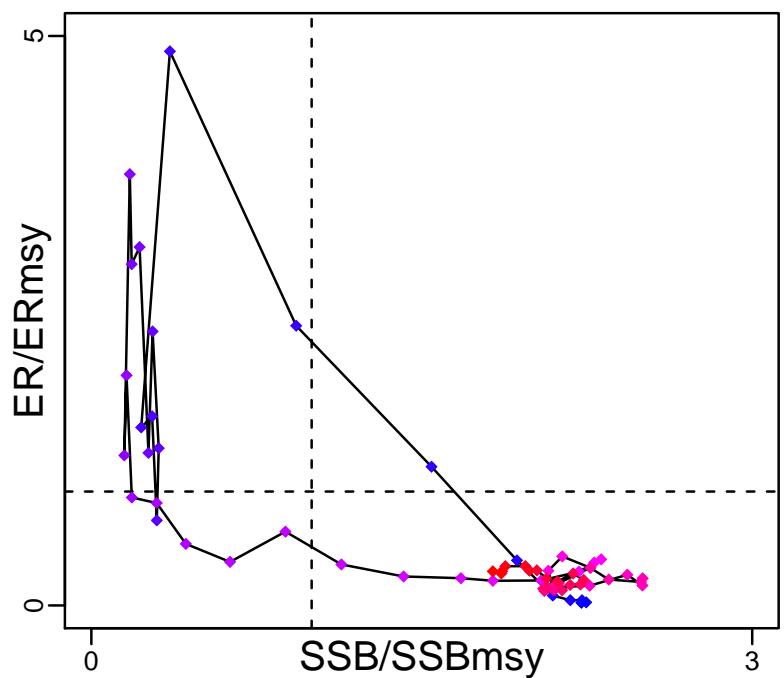
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2015	2,310,000	-	1+	
SSB	SSB-MT	2018	835,050	-	-	
TN	-	-	-	-	-	
R	R-E00	2018	2,303,240	-	1	
F	F-1/yr	2018	0.078	-	-	
ER	ER-calc-ratio	2018	0.032	-	-	
TC	TC-MT	2018	132,297			
TL	-	-	-			
TB/TBmsy	-	-	-			
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2018	1.812			
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2010	0.615			
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2018	0.299			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Yellowfin sole Bering Sea and Aleutian Islands [YSOLEBSAI]

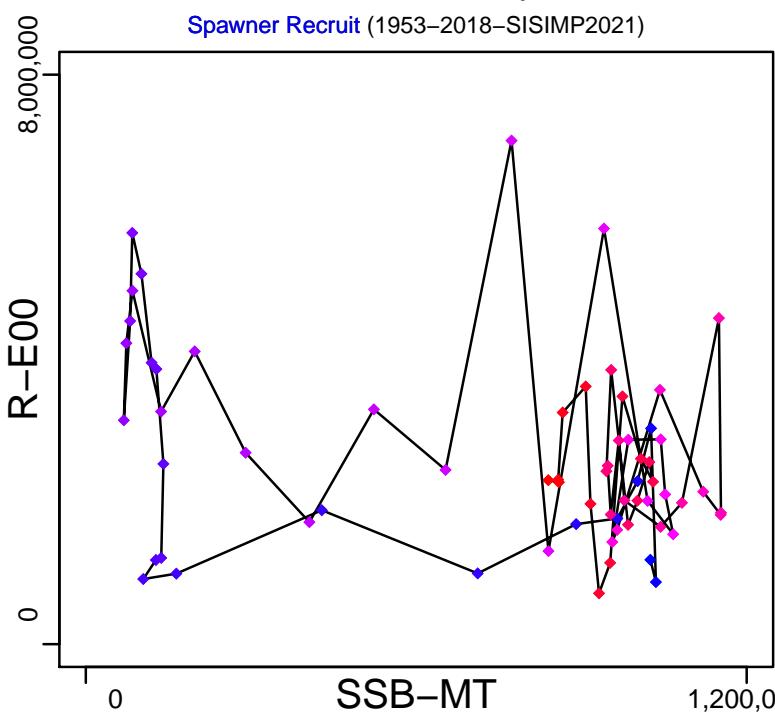
Kobe MSYpref (1953–2018–SISIMP2021)



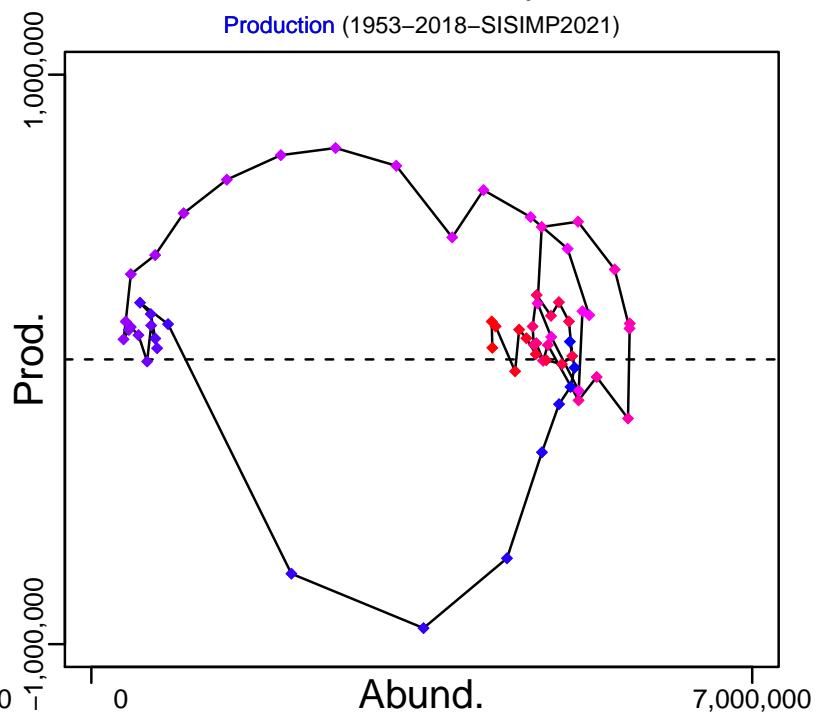
Kobe MGTpref (1953–2018–SISIMP2021)



Spawner Recruit (1953–2018–SISIMP2021)



Production (1953–2018–SISIMP2021)

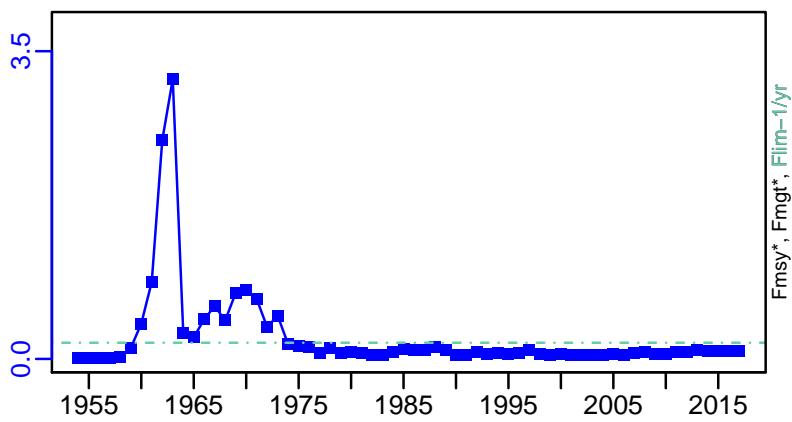
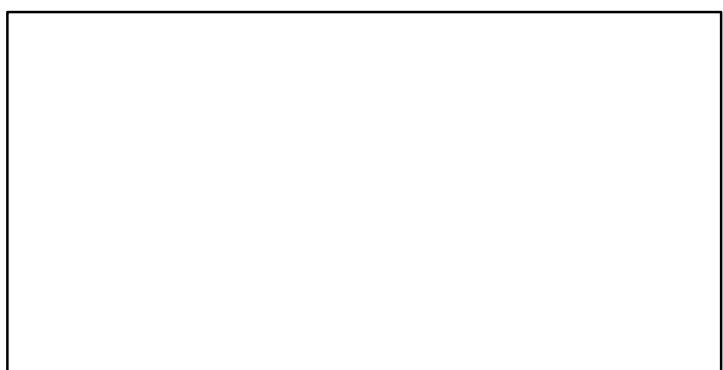
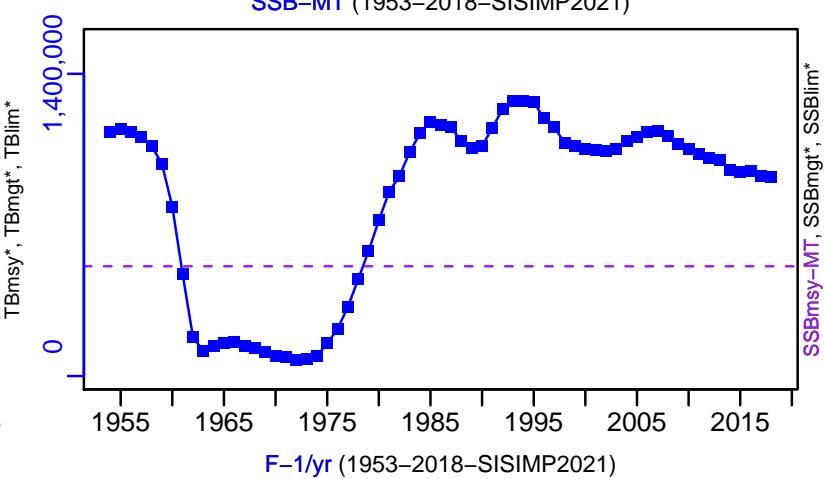
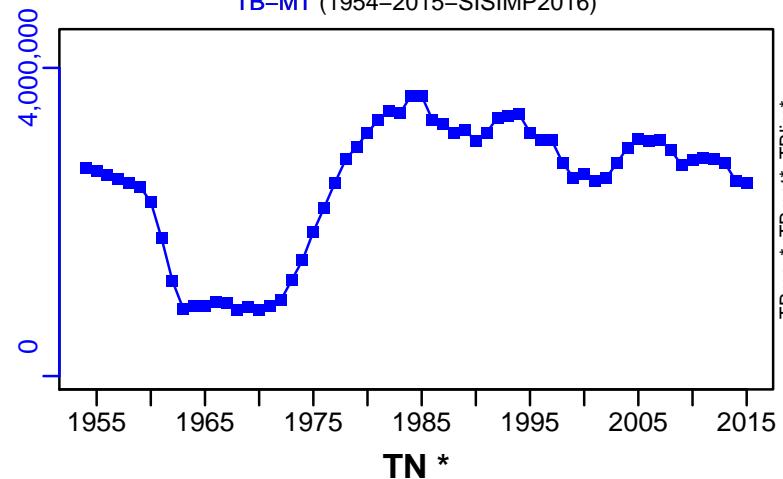


◆ Start Year	◆ End Year	*	No Data
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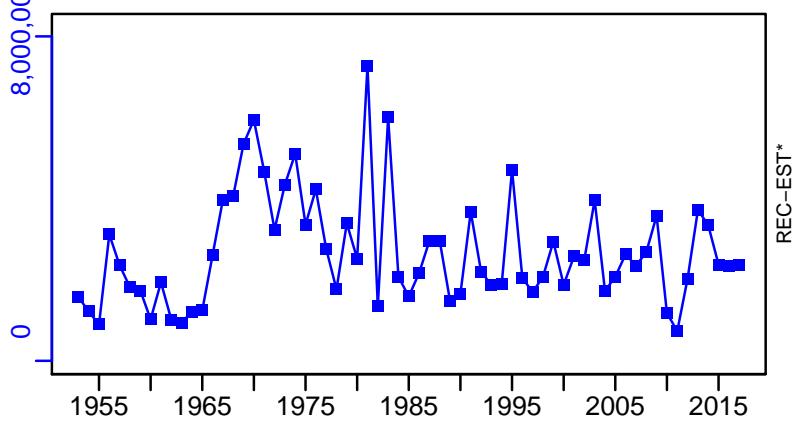
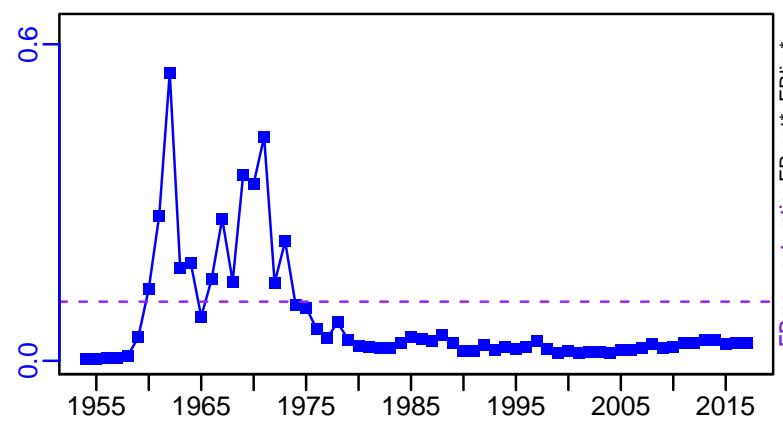
Yellowfin sole Bering Sea and Aleutian Islands [YSOLEBSAI]

TB-MT (1954–2015–SISIMP2016)

SSB-MT (1953–2018–SISIMP2021)



ER-calc-ratio (1953–2018–SISIMP2021)

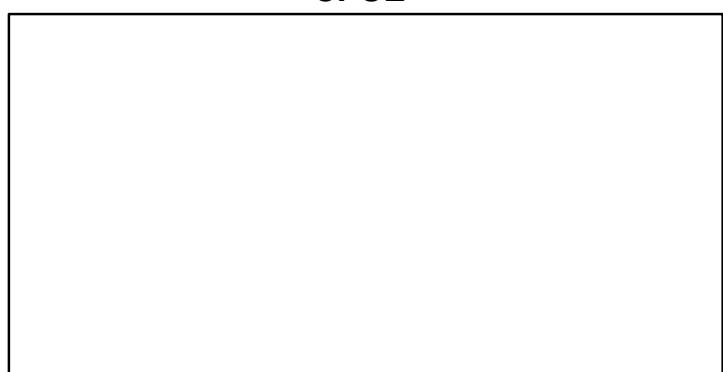
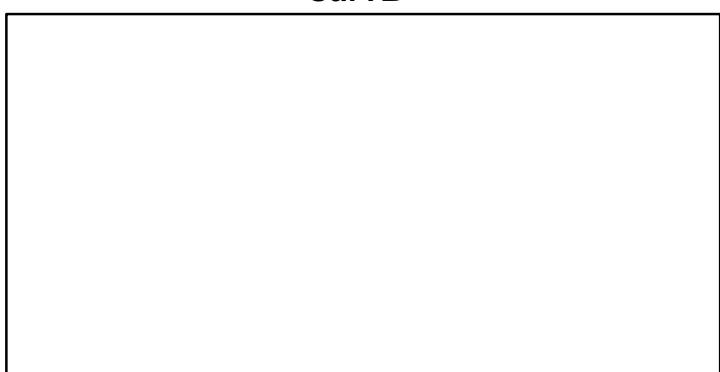
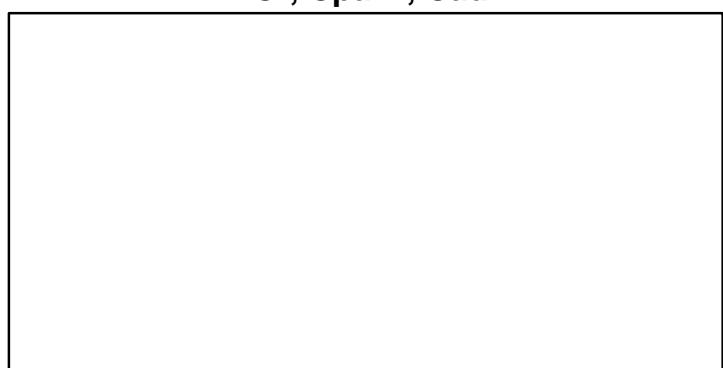
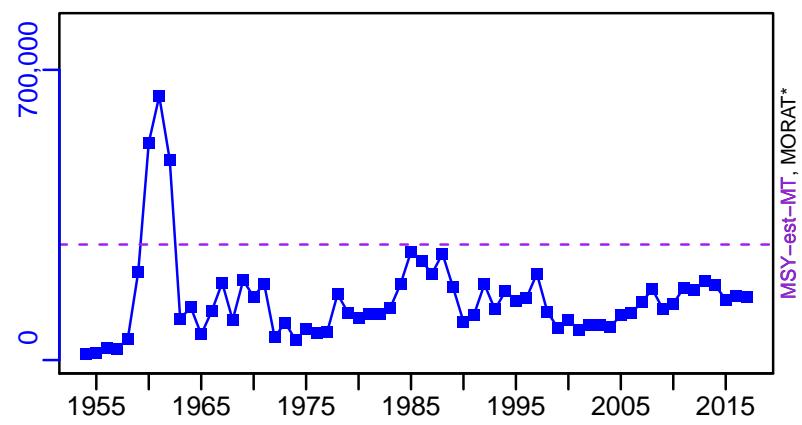


■ Listed time series	— Target BRP	— Rec-Est
- - MSY-based BRP	- - Lim BRP	* No Data

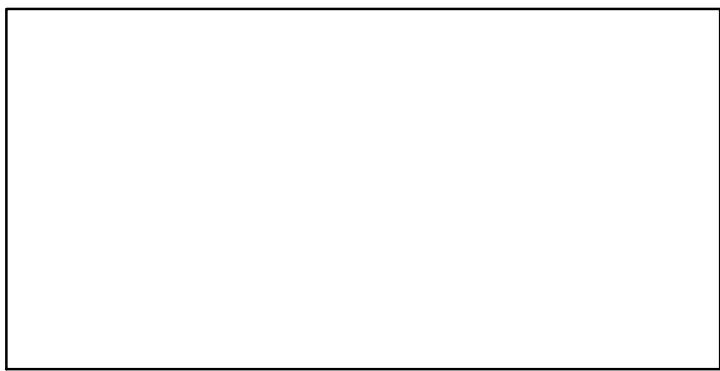
Yellowfin sole Bering Sea and Aleutian Islands [YSOLEBSAI]

TC-MT, TL*, RecC* (1953–2018–SISIMP2021)

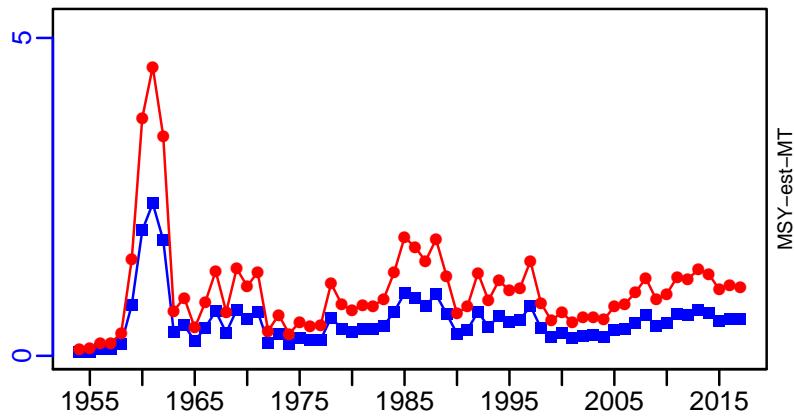
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1953–2018–SISIMP2021)



■ 1st listed time series	▲ 3rd listed time series	— MORAT
● 2nd listed time series	- - MSY	* No Data