

# US Alaska Stocks

## v4.44 (Dec-21-2018)

Not present Present Preferred

Stock	B/Bmsy	Time Series Types			
		U/Umsy	B/Bmgt	U/Umgt	
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. ARFLOUNDGA [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 turbot Bering Sea and Aleutian Islands]	TB SSB	ER F	TB SSB	ER F	
14. GPOCTOBSAI [Giant Pacific octopus Bering Sea and Aleutian Islands]	TB SSB	ER F	TB SSB	ER F	
15. GPOCTOGA [Giant Pacific octopus Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F	
16. HERRPWS [Pacific herring Prince William Sound]	TB SSB	ER F	TB SSB	ER F	
17. HERRSITKA [Pacific herring Sitka]	TB SSB	ER F	TB SSB	ER F	
18. HERRTOG [Herring Togiak District]	TB SSB	ER F	TB SSB	ER F	
19. KMFLOUNBSAI [Kamchatka flounder Bering Sea and Aleutian Islands]	TB SSB	ER F	TB SSB	ER F	
20. NROCKBSAI [Northern rockfish Bering Sea and Aleutian Islands]	TB SSB	ER F	TB SSB	ER F	
21. NROCKGA [Northern rockfish Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F	
22. NRSOLEEBSAI [Northern rock sole Eastern Bering Sea and Aleutian Islands]	TB SSB	ER F	TB SSB	ER F	
23. NRSOLEGA [Northern rock sole Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F	
24. PCODAI [Pacific cod Aleutian Islands]	TB SSB	ER F	TB SSB	ER F	
25. PCODBS [Pacific cod Bering Sea]	TB SSB	ER F	TB SSB	ER F	
26. PCODGA [Pacific cod Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F	
27. PERCHEBSAI [Pacific Ocean perch Eastern Bering Sea and Aleutian Islands]	TB SSB	ER F	TB SSB	ER F	
28. PHALNPAC [Pacific halibut North Pacific]	TB SSB	ER F	TB SSB	ER F	
29. POPERCHGA [Pacific ocean perch Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F	
30. REXSOLEGA [Rex sole Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F	
31. REYEROCKBSAI [Rougheye rockfish Bering Sea and Aleutian Islands]	TB SSB	ER F	TB SSB	ER F	
32. REYEROCKGA [Rougheye rockfish Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F	
33. RKCRABBB [Red king crab Bristol Bay]	TB SSB	ER F	TB SSB	ER F	
34. RKCRABNS [Red king crab Norton Sound]	TB SSB	ER F	TB SSB	ER F	

35. RKCRAPI [Red king crab Pribilof Islands]	TB SSB	ER F	TB SSB	ER F
36. RSOLEGA [Rock sole Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F
37. SABLEFEBSAIGA [Sablefish Eastern Bering Sea / Aleutian Islands / Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F
38. SNOWCRABBS [Snow crab Bering Sea]	TB SSB	ER F	TB SSB	ER F
39. SRAKEROCKBSAI [Shortraker rockfish Bering Sea and Aleutian Islands]	TB SSB	ER F	TB SSB	ER F
40. SRAKEROCKGA [Shortraker rockfish Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F
41. SSTHORNHGA [Shortspine thornyhead Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F
42. TANNERCRABBSAI [Tanner crab Bering Sea and Aleutian Islands]	TB SSB	ER F	TB SSB	ER F
43. WPOLLAI [Walleye pollock Aleutian Islands]	TB SSB	ER F	TB SSB	ER F
44. WPOLLBOGO [Walleye pollock Bogoslof]	TB SSB	ER F	TB SSB	ER F
45. WPOLLEBS [Walleye pollock Eastern Bering Sea]	TB SSB	ER F	TB SSB	ER F
46. WPOLLGA [Walleye pollock Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F
47. WVSCALLALASKA [Weathervane scallop Alaska]	TB SSB	ER F	TB SSB	ER F
48. YEYEROCKGA [Yelloweye rockfish Gulf of Alaska]	TB SSB	ER F	TB SSB	ER F
49. YSOLEBSAI [Yellowfin sole Bering Sea and Aleutian Islands]	TB SSB	ER F	TB SSB	ER F

## Alaska plaice Bering Sea and Aleutian Islands [ALPLAICBSAI]

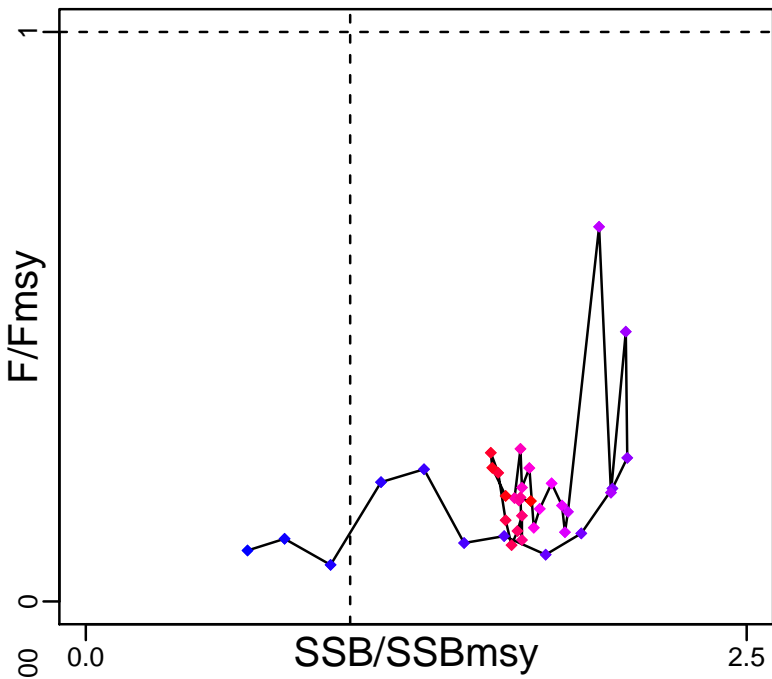
Metadata	
<b>Scientific Name</b>	Pleuronectes quadrituberculatus
<b>Current Assess ID</b>	AFSC-ALPLAICBSAI-1975-2015-SISIMP2016
<b>Area</b>	Bering Sea and Aleutian Islands
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2010, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2015	115,087
<b>Fmsy</b>	Fmsy-pr-1/yr	2010	0.19
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2010	0.25
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

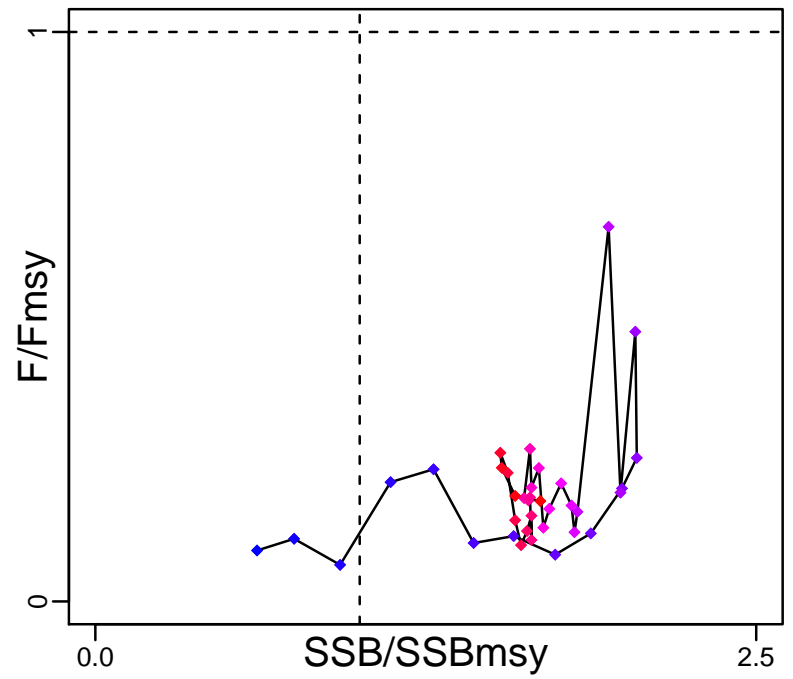
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	485,000	Both	1+
<b>SSB</b>	SSB-MT	2015	215,000	Females	9+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$3.05 \times 10^{11}$	-	1
<b>F</b>	F-1/yr	2015	0.057	-	-
<b>ER</b>	ER-calc-ratio	2015	0.04	-	-
<b>TC</b>	TC-MT	2015	19,400		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	1.871		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2010	0.176		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Alaska plaice Bering Sea and Aleutian Islands [ALPLAICBSAI]

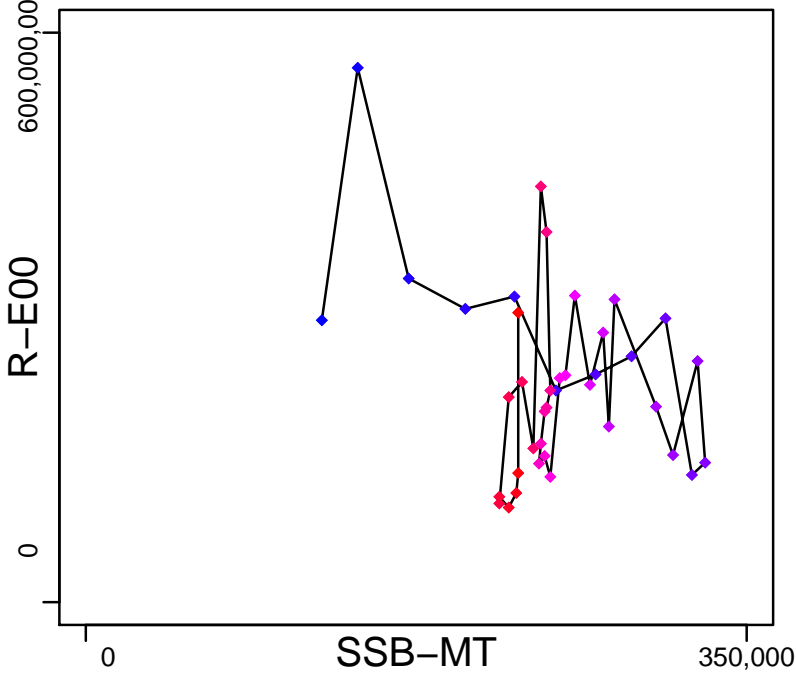
Kobe MSYpref (1972–2010–STACHURA)



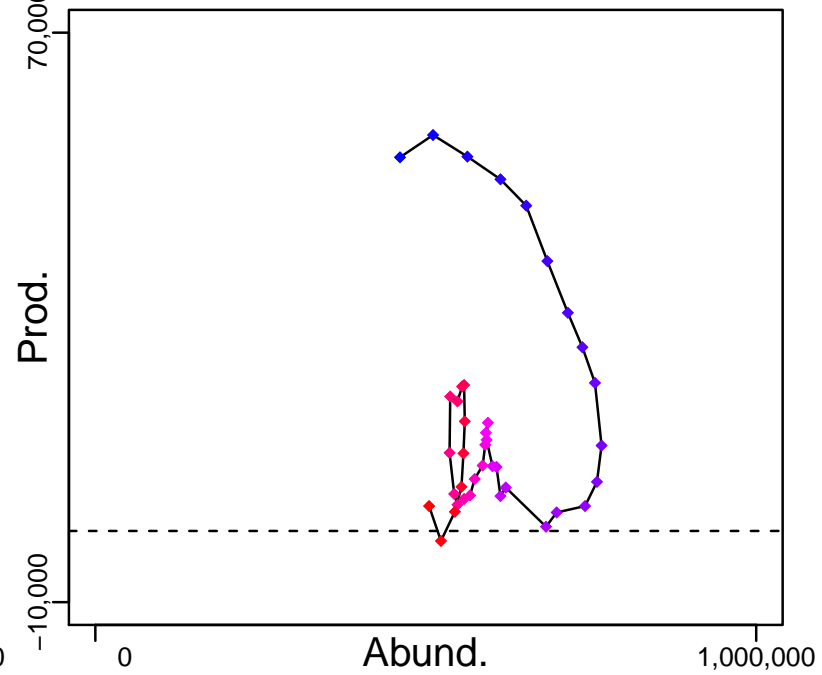
Kobe MGTpref (1972–2010–STACHURA)



Spawner Recruit (1975–2015–SISIMP2016)



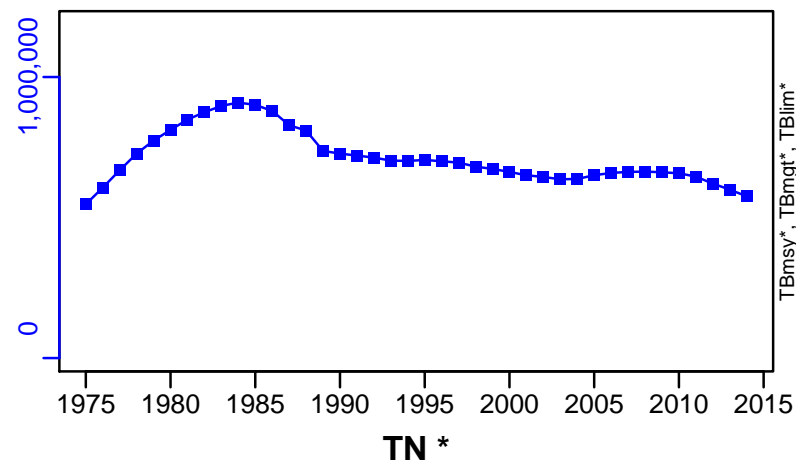
Production (1975–2015–SISIMP2016)



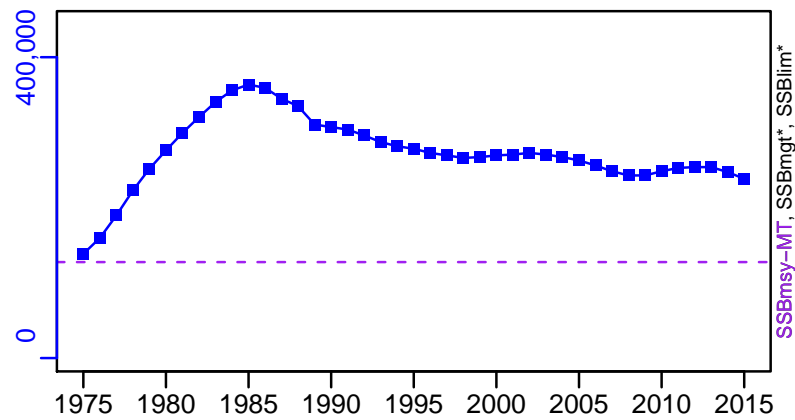
◆ Start Year ◆ End Year \* No Data

# Alaska plaice Bering Sea and Aleutian Islands [ALPLAICBSAI]

TB-MT (1975–2015–SISIMP2016)



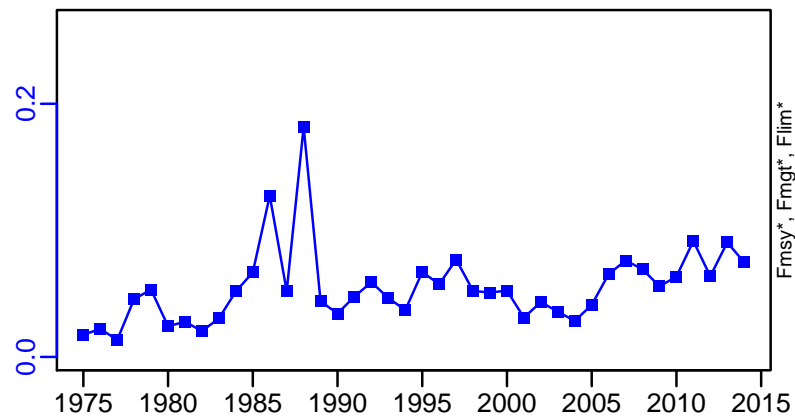
SSB-MT (1975–2015–SISIMP2016)



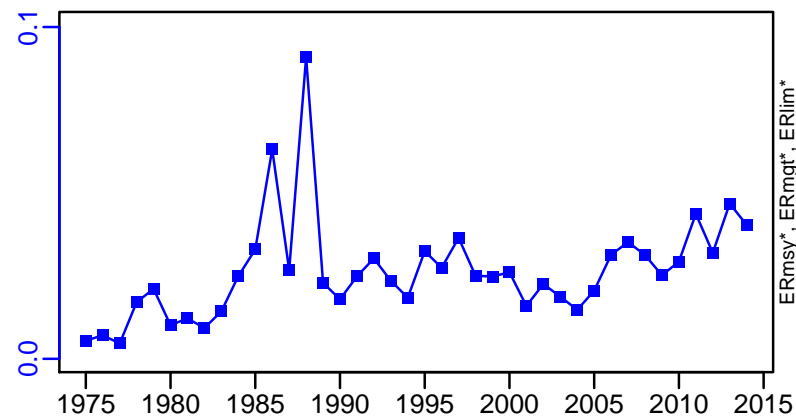
TN \*



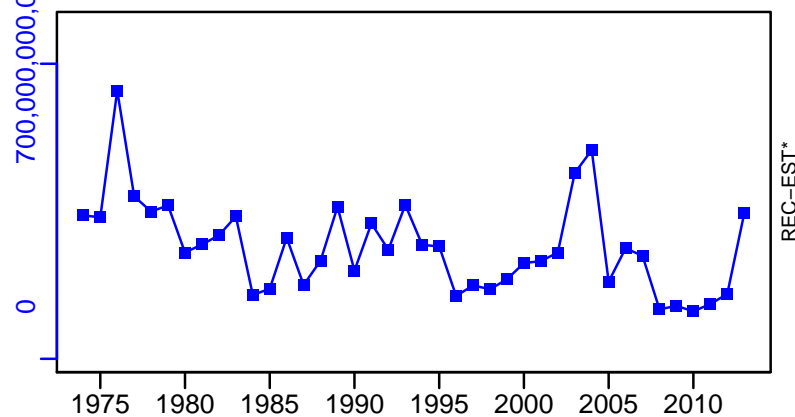
F-1/yr (1975–2015–SISIMP2016)



ER-calc-ratio (1975–2015–SISIMP2016)

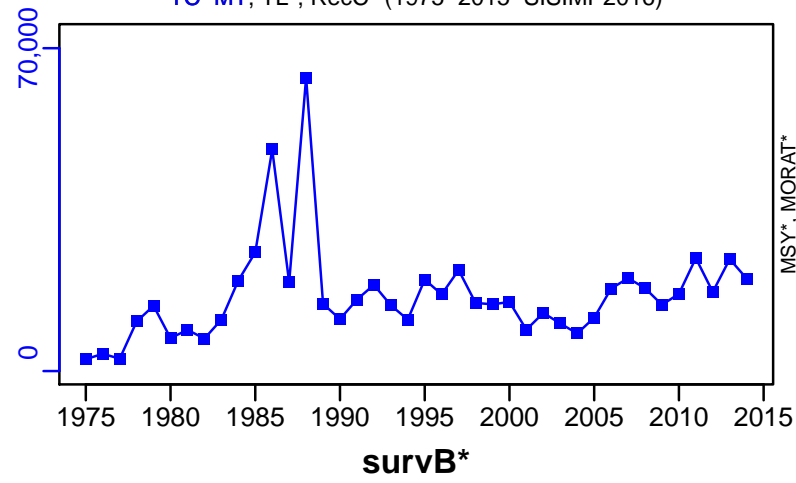


R-E00 (1975–2015–SISIMP2016)

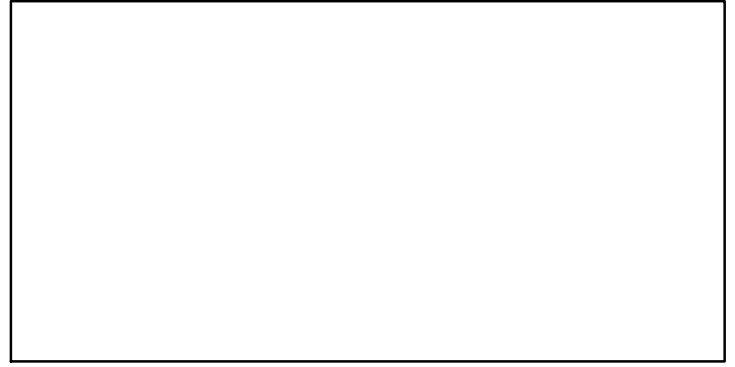


# Alaska plaice Bering Sea and Aleutian Islands [ALPLAICBSAI]

TC-MT, TL\*, RecC\* (1975-2015-SISIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



CdivMSY\*



■ 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	
<b>Scientific Name</b>	Bathyraja parmifera
<b>Current Assess ID</b>	AFSC-ALSKABSAI-1950-2015-SISIMP2016
<b>Area</b>	Bering Sea and Aleutian Islands
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2015	65,423
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	519,000	Both	0+
<b>SSB</b>	SSB-MT	2015	115,000	Females	10+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	26,600,000	-	0
<b>F</b>	F-1/yr	2015	0.056	-	-
<b>ER</b>	ER-calc-ratio	2015	0.048	-	-
<b>TC</b>	TC-MT	2015	24,800		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	1.764		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Alaska skate Bering Sea and Aleutian Islands [ALSKABSAI]

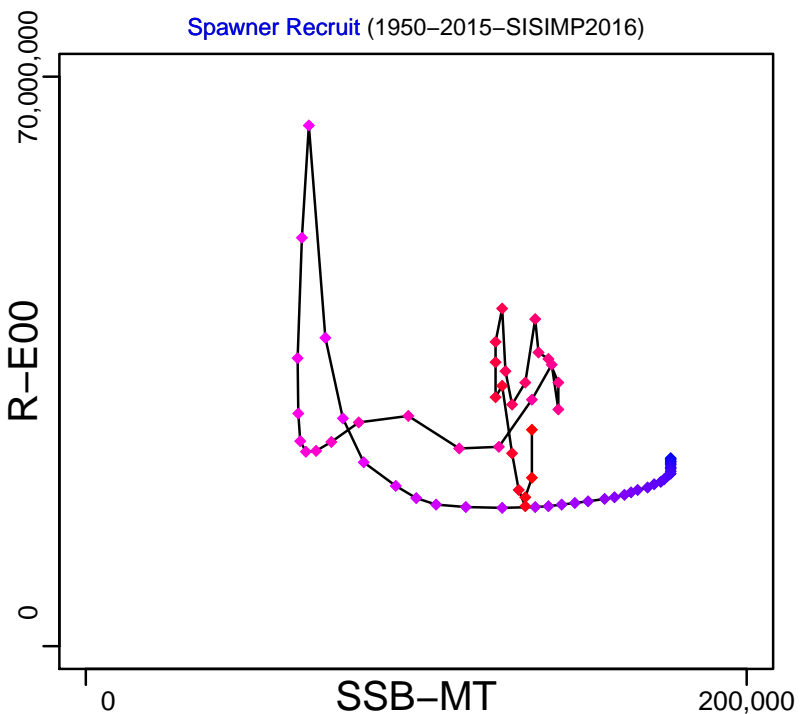
Kobe MSY\*



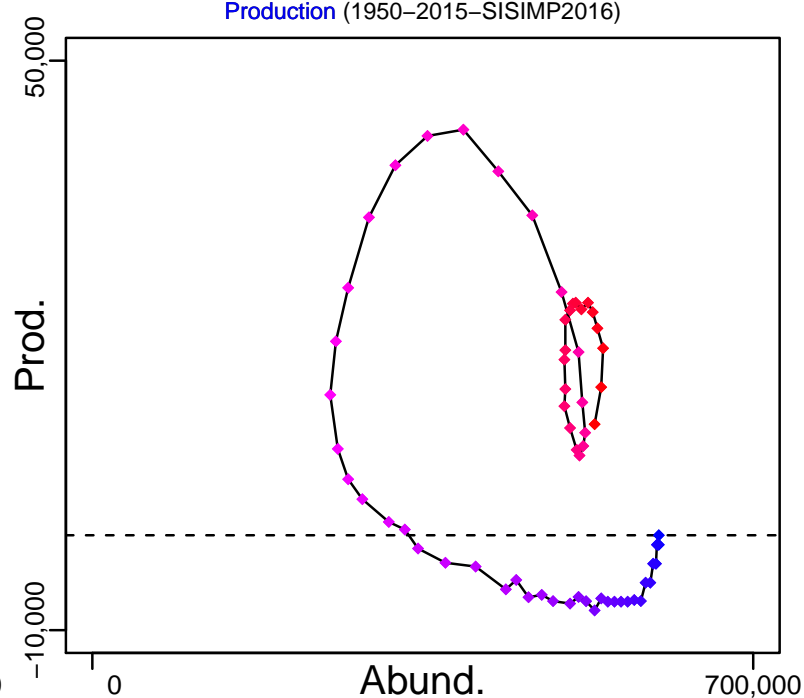
Kobe MGT\*



Spawner Recruit (1950–2015–SISIMP2016)



Production (1950–2015–SISIMP2016)

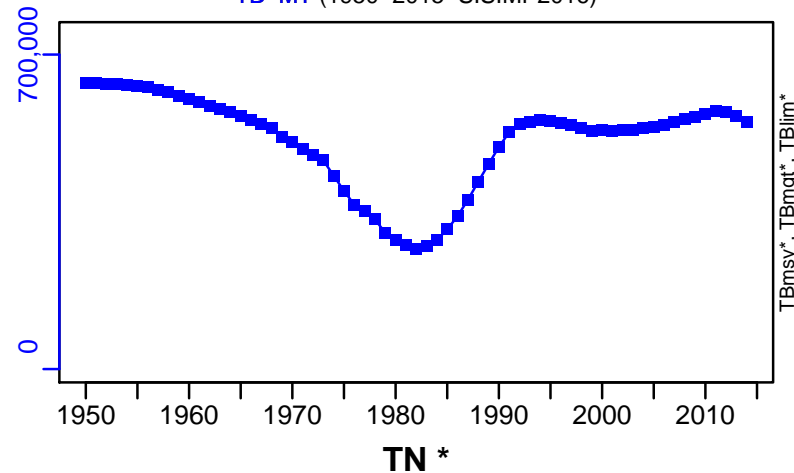


◆ Start Year ◆ End Year \* No Data

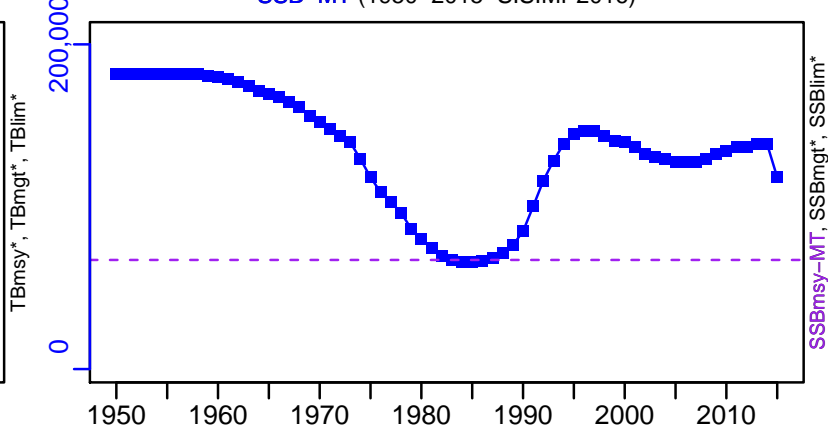


# Alaska skate Bering Sea and Aleutian Islands [ALSKABSAI]

TB-MT (1950–2015–SISIMP2016)



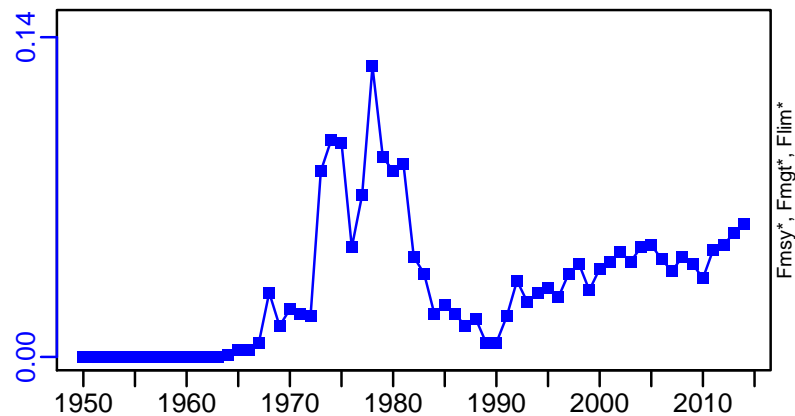
SSB-MT (1950–2015–SISIMP2016)



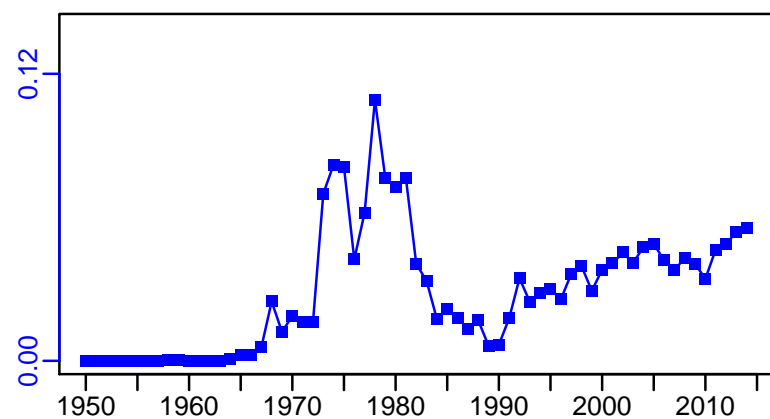
TN \*



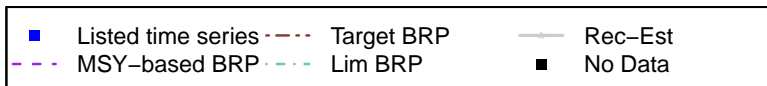
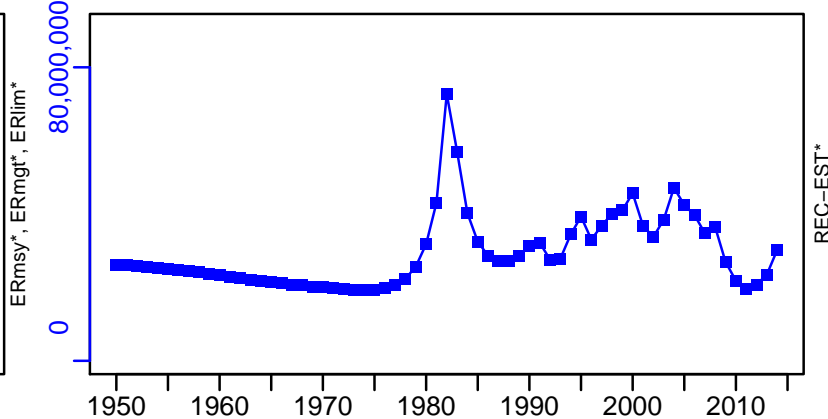
F-1/yr (1950–2015–SISIMP2016)



ER-calc-ratio (1950–2015–SISIMP2016)



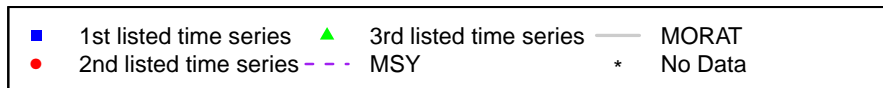
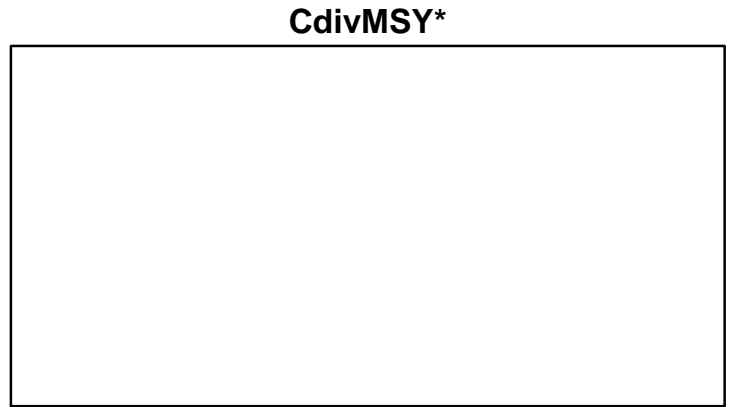
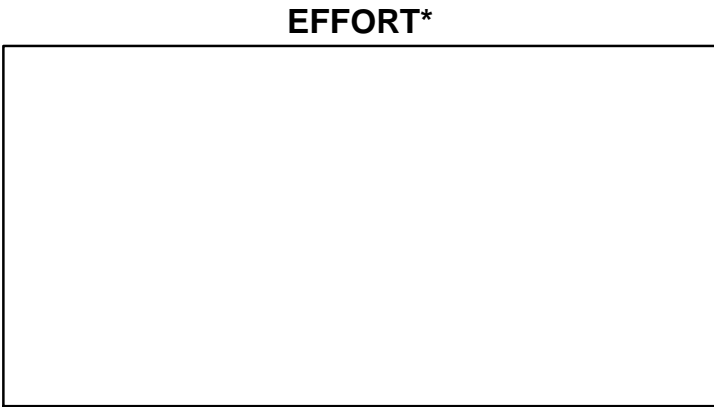
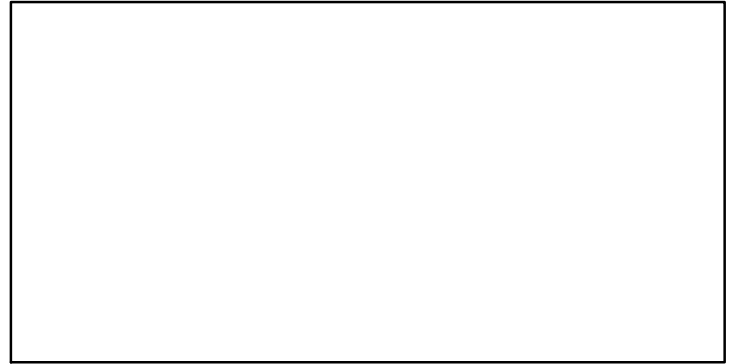
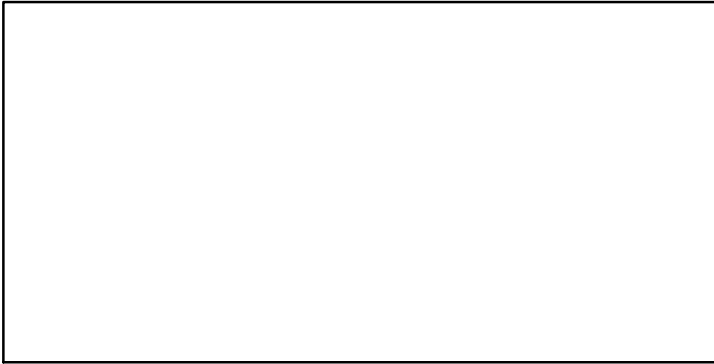
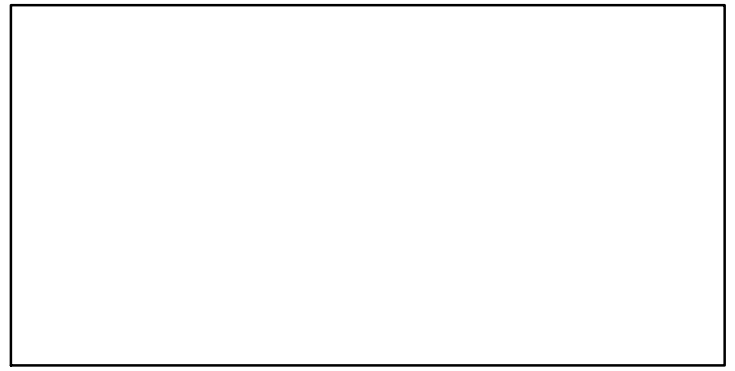
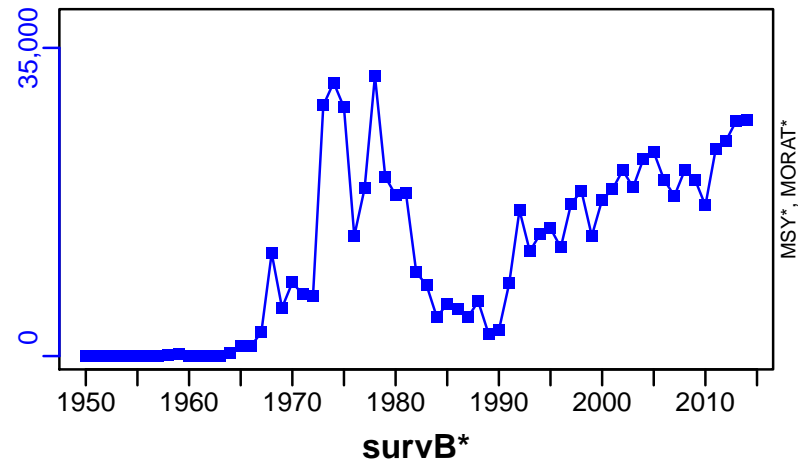
R-E00 (1950–2015–SISIMP2016)



# Alaska skate Bering Sea and Aleutian Islands [ALSKABSAI]

TC-MT, TL\*, RecC\* (1950-2015-SISIMP2016)

TAC\*, Cpair\*, Cadv\*



## Arrowtooth flounder Bering Sea and Aleutian Islands [ARFLOUNDBSAI]

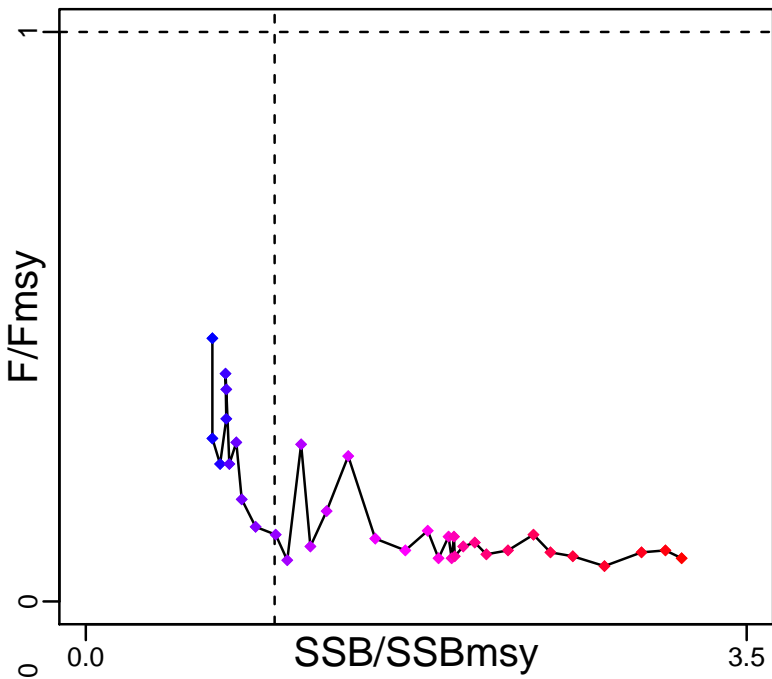
Metadata	
<b>Scientific Name</b>	Atheresthes stomias
<b>Current Assess ID</b>	AFSC-ARFLOUNDBSAI-1976-2015-SISIMP2016
<b>Area</b>	Bering Sea and Aleutian Islands
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2010, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2015	194,266
<b>Fmsy</b>	Fmsy-pr-1/yr	2010	0.29
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	Flim-1/yr	2010	0.29
<b>ERlim</b>	-	-	-

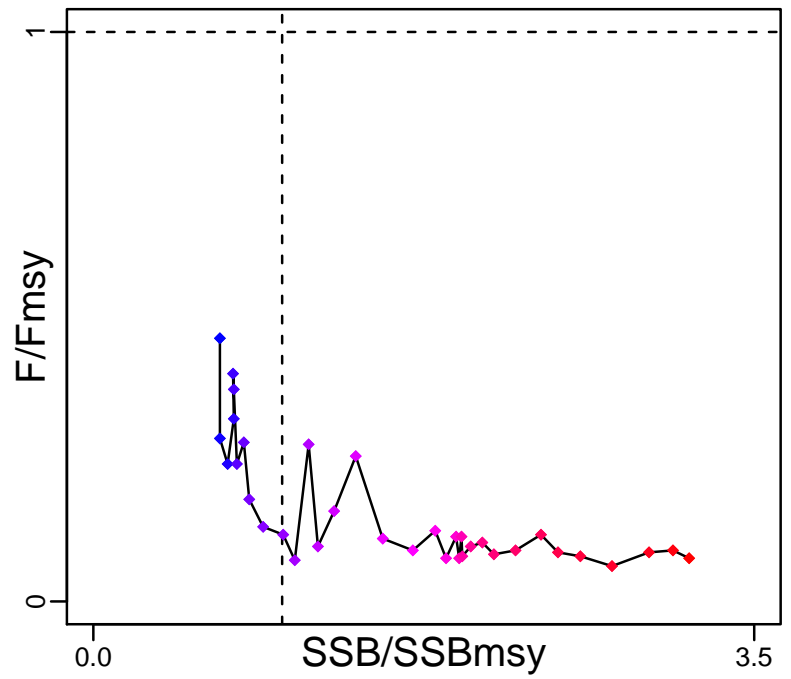
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	908,000	Both	1+
<b>SSB</b>	SSB-MT	2015	534,000	Females	7+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$8.18 \times 10^8$	-	1
<b>F</b>	F-1/yr	2015	0.026	-	-
<b>ER</b>	ER-calc-ratio	2015	0.022	-	-
<b>TC</b>	TC-MT	2015	19,100		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	2.747		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2010	0.076		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Arrowtooth flounder Bering Sea and Aleutian Islands [ARFLOUNDBSAI]

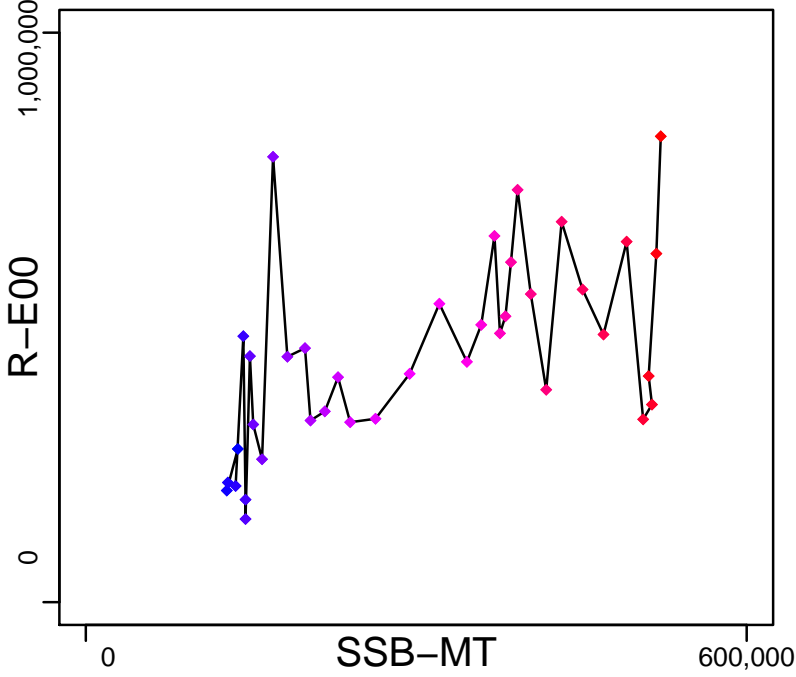
Kobe MSYpref (1970–2010–STACHURA)



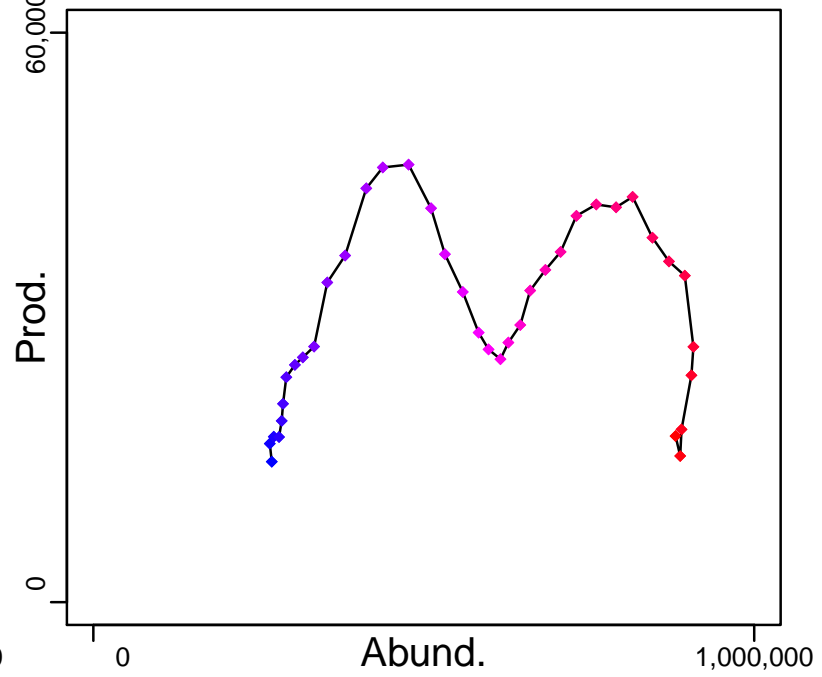
Kobe MGTpref (1970–2010–STACHURA)



Spawner Recruit (1976–2015–SISIMP2016)



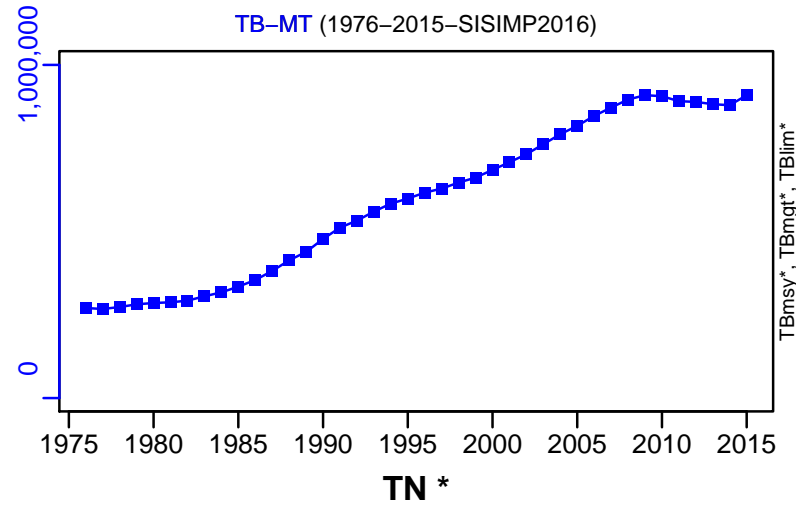
Production (1976–2015–SISIMP2016)



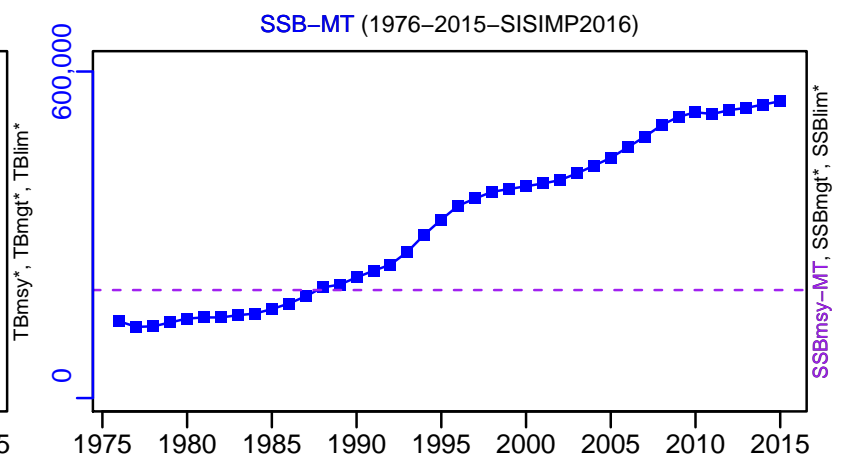
◆ Start Year ◆ End Year \* No Data

# Arrowtooth flounder Bering Sea and Aleutian Islands [ARFLOUNDBSAI]

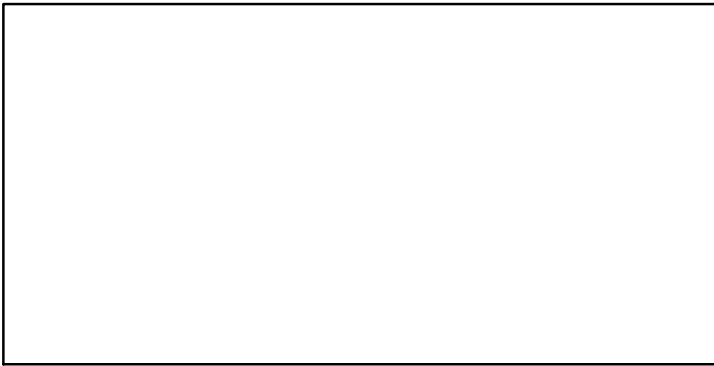
TB-MT (1976–2015–SISIMP2016)



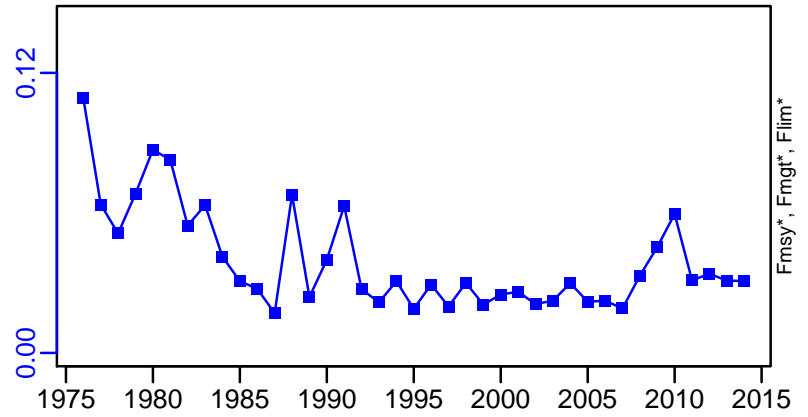
SSB-MT (1976–2015–SISIMP2016)



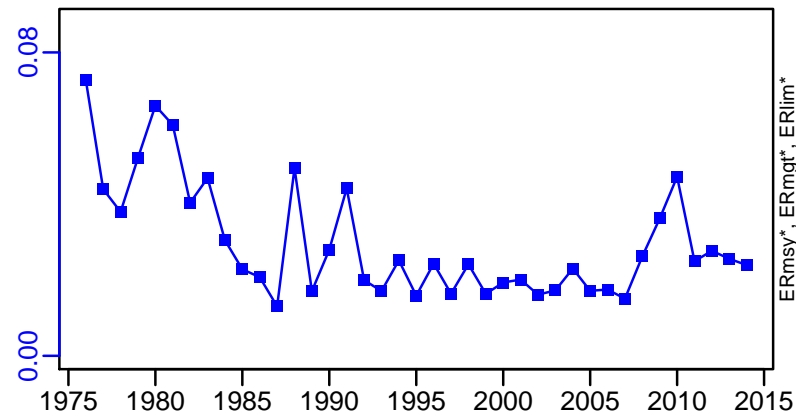
TN \*



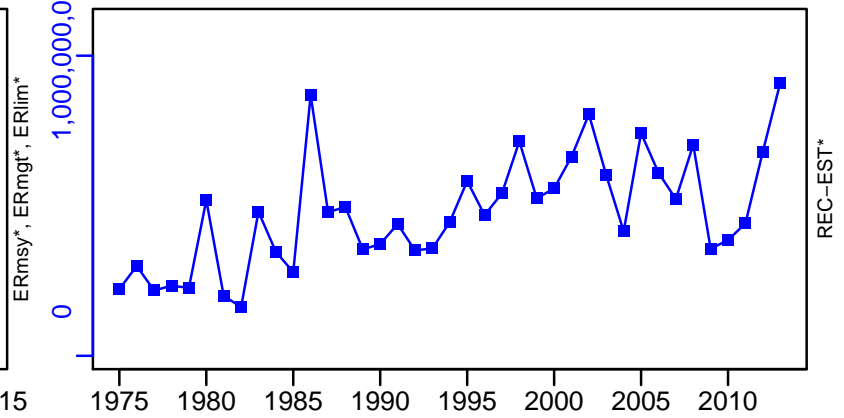
F-1/yr (1976–2015–SISIMP2016)



ER-calc-ratio (1976–2015–SISIMP2016)



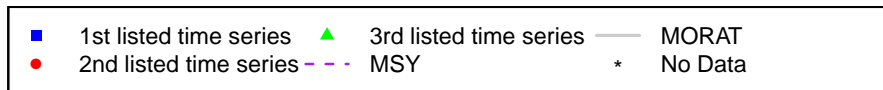
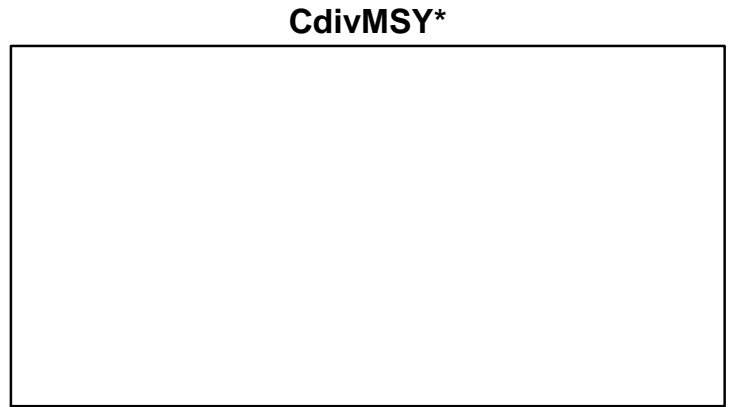
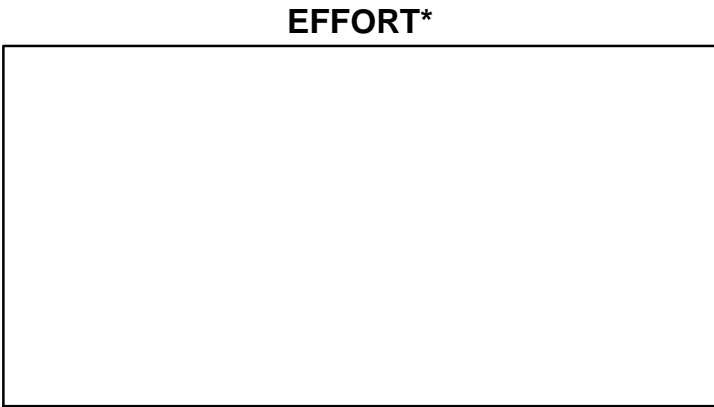
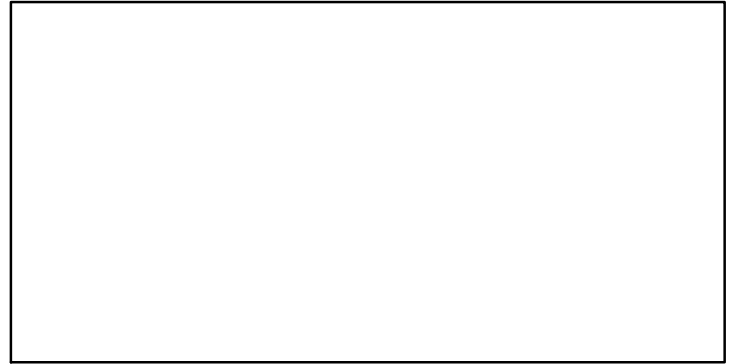
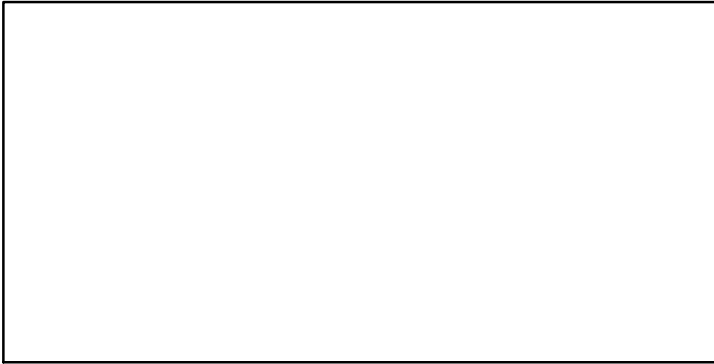
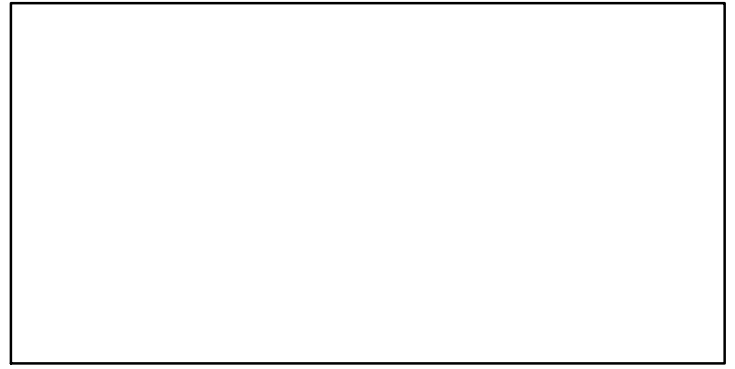
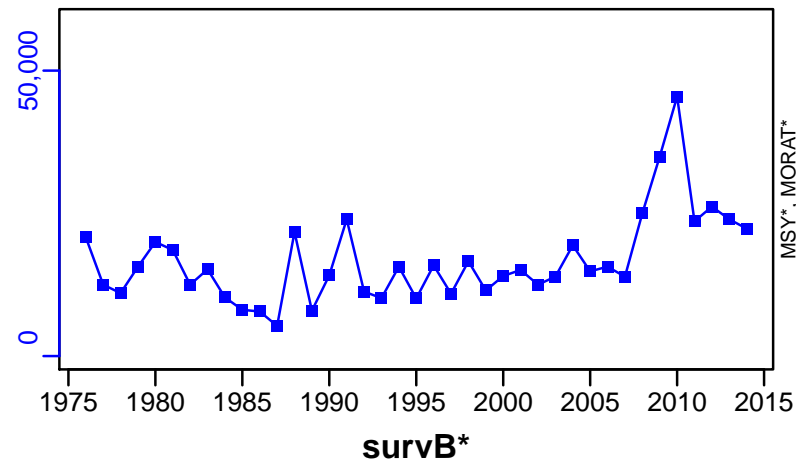
R-E00 (1976–2015–SISIMP2016)



# Arrowtooth flounder Bering Sea and Aleutian Islands [ARFLOUNDBSAI]

TC-MT, TL\*, RecC\* (1976-2015-SISIMP2016)

TAC\*, Cpair\*, Cadv\*



## Arrowtooth flounder Gulf of Alaska [ARFLOUNDGA]

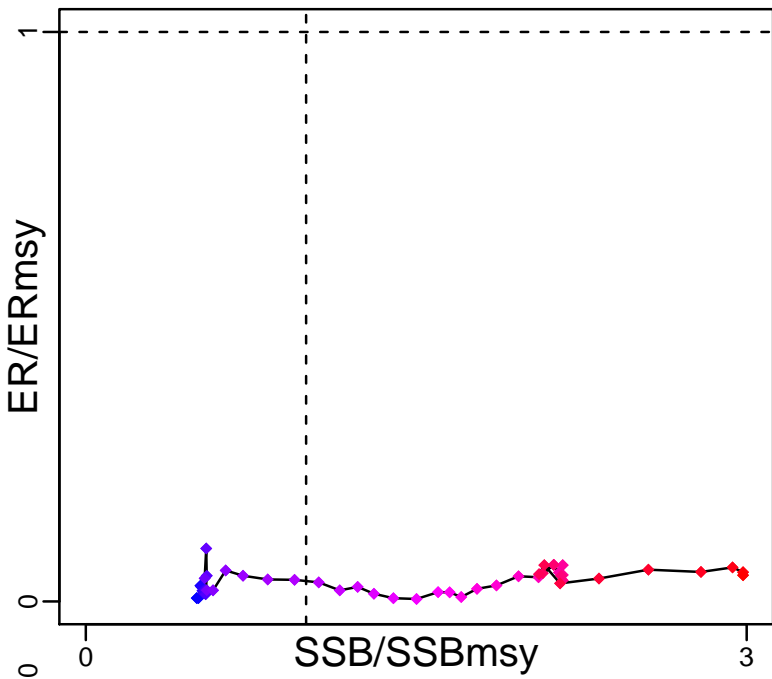
Metadata	
<b>Scientific Name</b>	Atheresthes stomias
<b>Current Assess ID</b>	AFSC-ARFLOUNDGA-1961-2015-SISIMP2016
<b>Area</b>	Gulf of Alaska
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2010, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2010	1,125,923
<b>SSBmsy</b>	SSBmsy-MT	2015	347,295
<b>Fmsy</b>	Fmsy-pr-1/yr	2010	0.219
<b>ERmsy</b>	ERmsy-ratio	2010	0.226
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2010	254,271
<b>M</b>	M-1/yr	2010	0.2
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

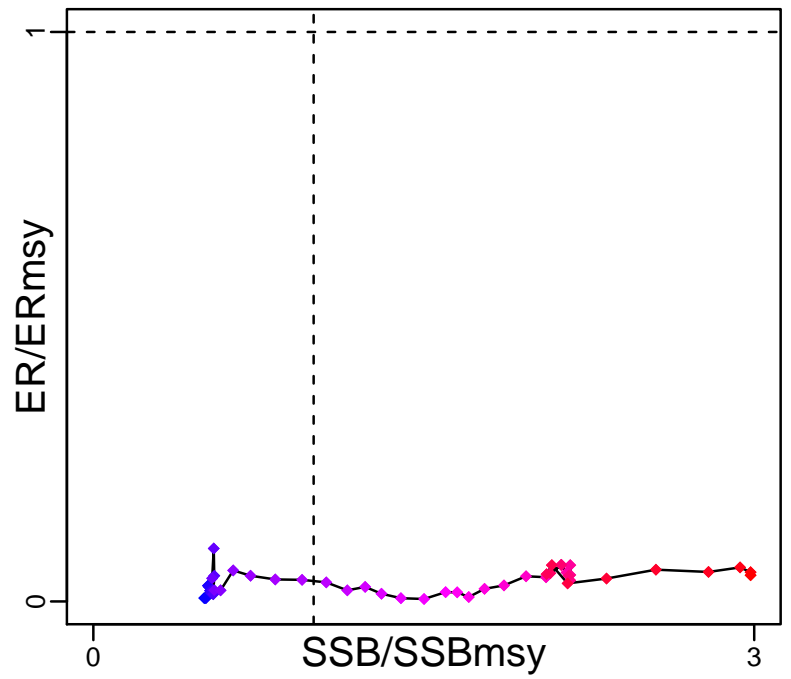
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	2,090,000	-	1+
<b>SSB</b>	SSB-MT	2015	1,130,000	Females	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$4.36 \times 10^8$	-	1
<b>F</b>	F-1/yr	2015	0.011	-	-
<b>ER</b>	ER-calc-ratio	2015	0.018	-	-
<b>TC</b>	TC-MT	2015	36,300		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	TB-MT/TBmsy-calc-MT	2010	1.901		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	3.262		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2010	0.079		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2010	0.046		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Arrowtooth flounder Gulf of Alaska [ARFLOUNDGA]

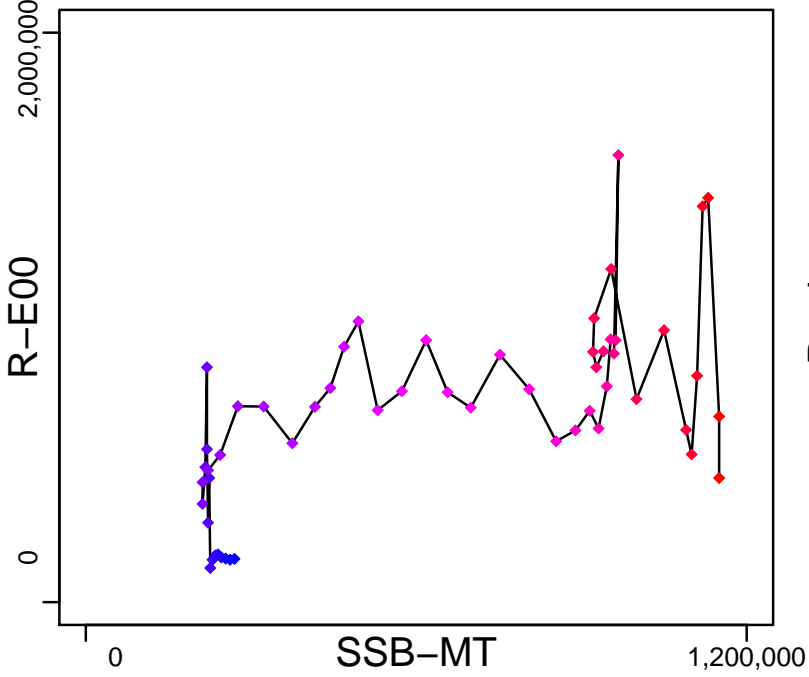
Kobe MSYpref (1958–2010–STACHURA)



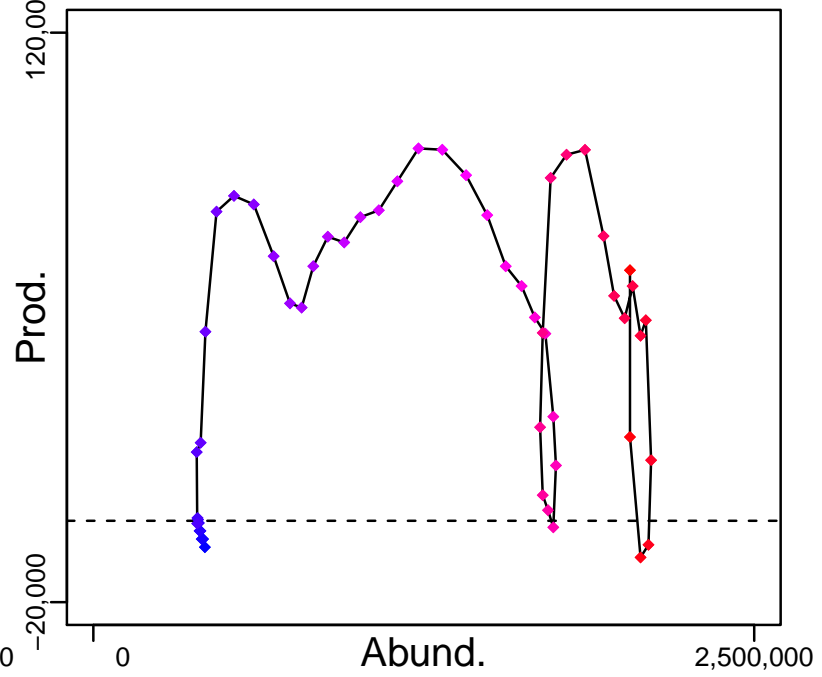
Kobe MGTpref (1958–2010–STACHURA)



Spawner Recruit (1961–2015–SISIMP2016)



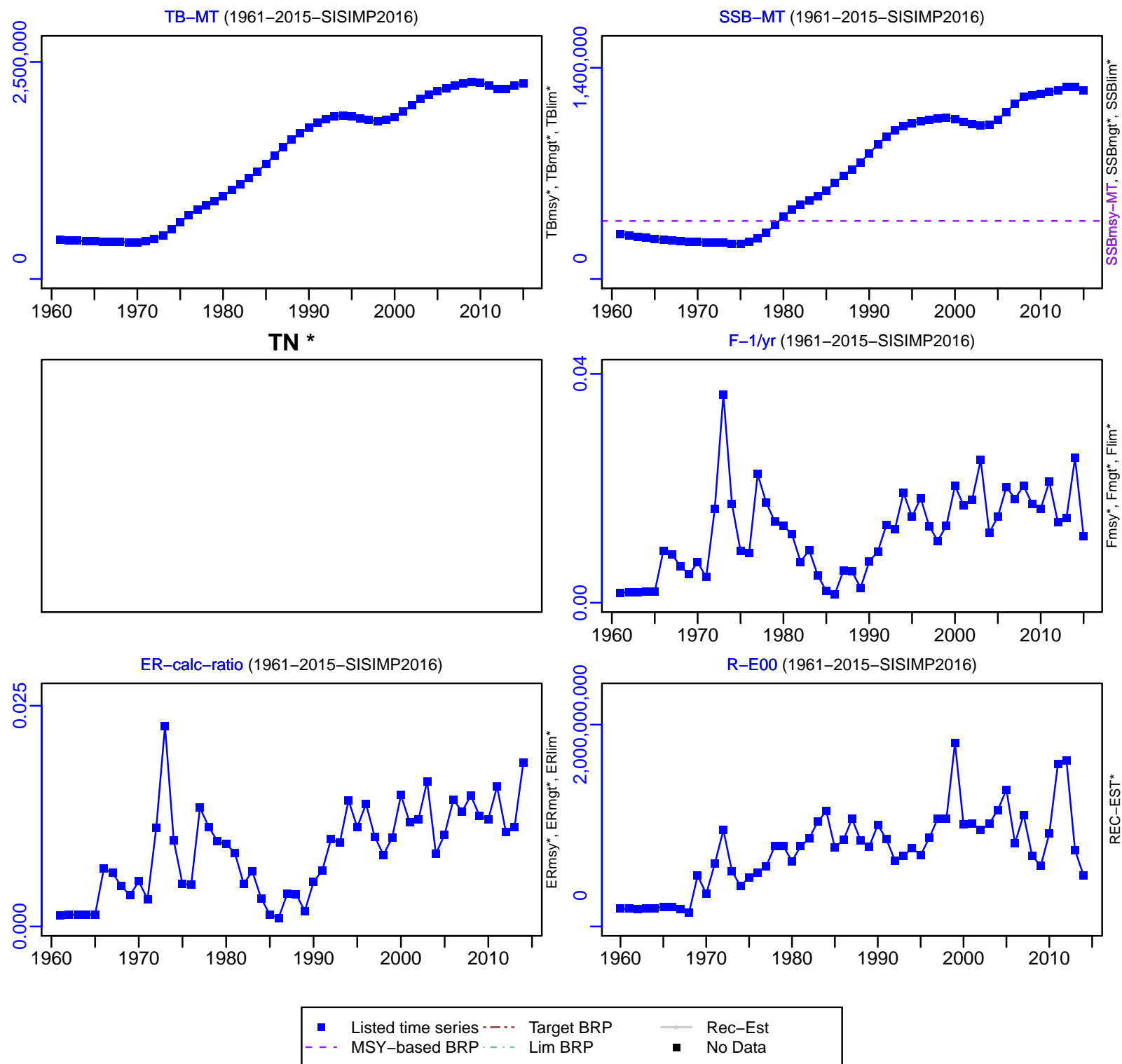
Production (1961–2015–SISIMP2016)



◆ Start Year ◆ End Year \* No Data

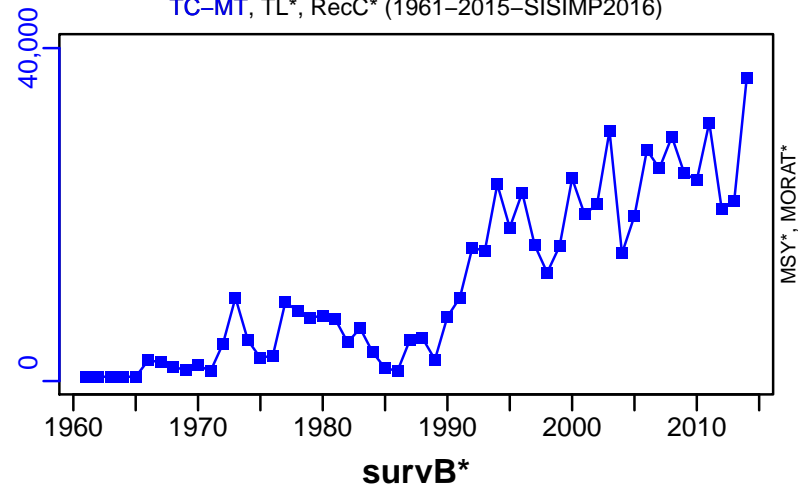


# Arrowtooth flounder Gulf of Alaska [ARFLOUNDGA]

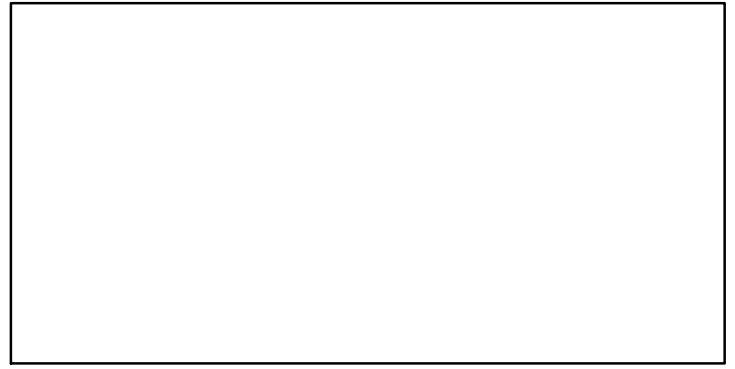


# Arrowtooth flounder Gulf of Alaska [ARFLOUNDGA]

TC-MT, TL\*, RecC\* (1961-2015-SISIMP2016)



TAC\*, Cpair\*, Cadv\*



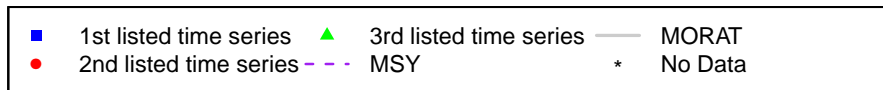
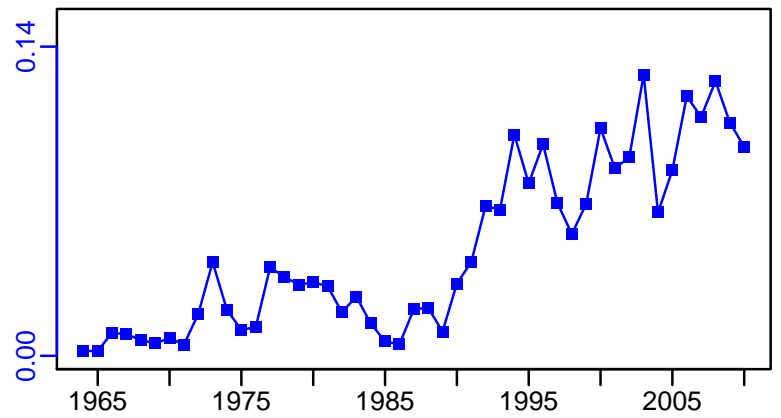
CPUE\*



EFFORT\*



CdivMSY-ratio (1958-2010-STACHURA)



## Atka mackerel Bering Sea and Aleutian Islands [ATKABSAI]

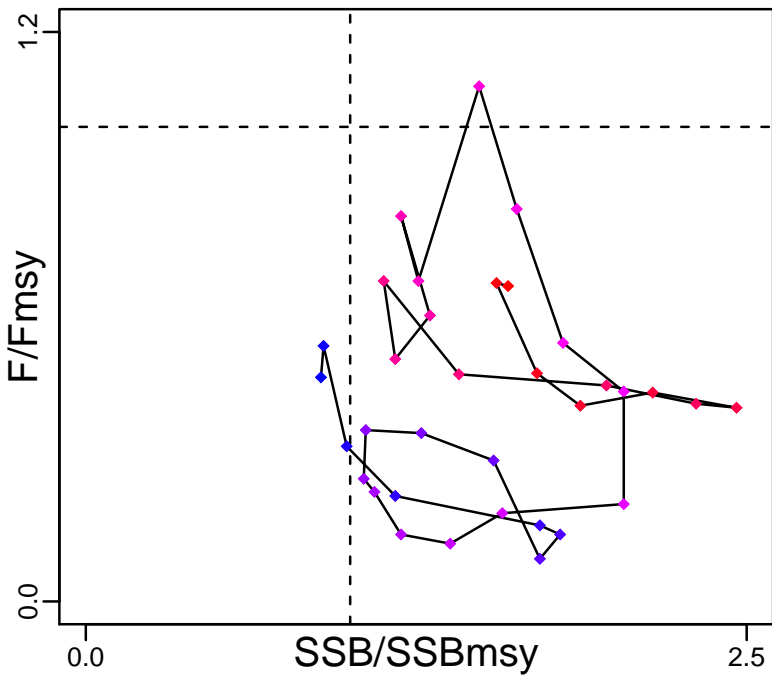
Metadata	
<b>Scientific Name</b>	Pleurogrammus monopterygius
<b>Current Assess ID</b>	AFSC-ATKABSAI-1977-2015-SISIMP2016
<b>Area</b>	Bering Sea and Aleutian Islands
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2011, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2015	118,697
<b>Fmsy</b>	Fmsy-pr-1/yr	2011	0.468
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2011	0.3
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

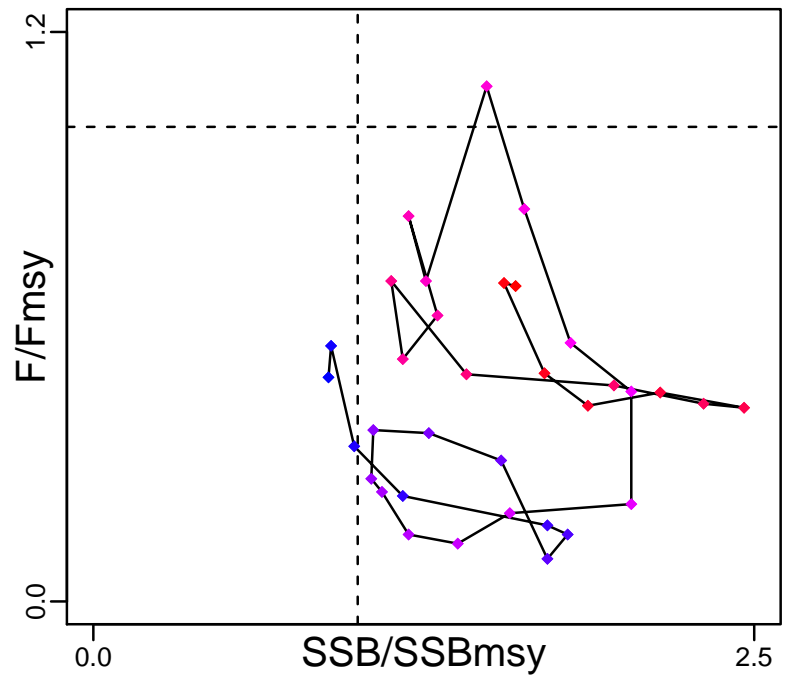
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	589,000	-	1+
<b>SSB</b>	SSB-MT	2015	177,000	Females	3.6+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	507,000	-	1
<b>F</b>	F-1/yr	2015	0.163	-	-
<b>ER</b>	ER-calc-ratio	2015	0.053	-	-
<b>TC</b>	TC-MT	2015	30,900		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	1.494		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2011	0.665		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Atka mackerel Bering Sea and Aleutian Islands [ATKABSAI]

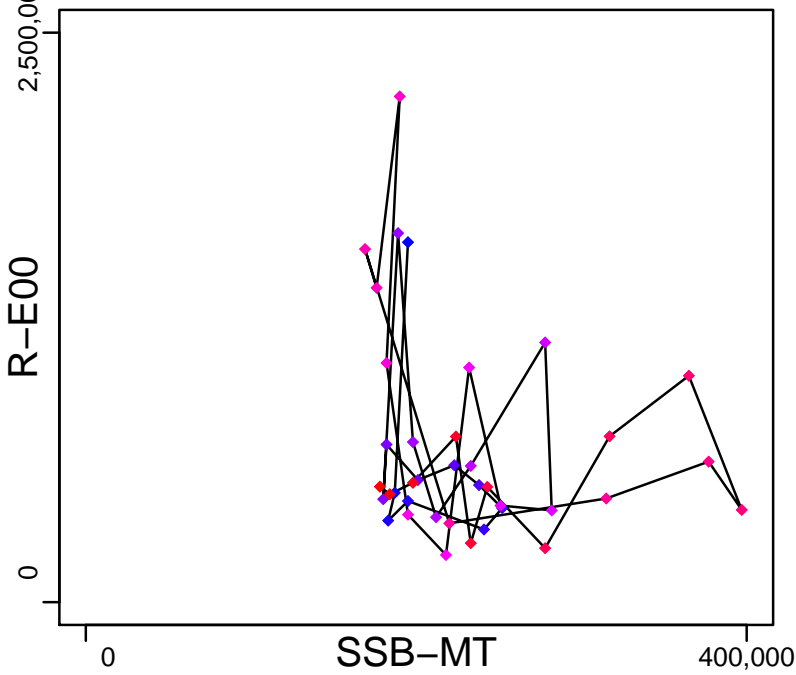
Kobe MSYpref (1976–2011–STACHURA)



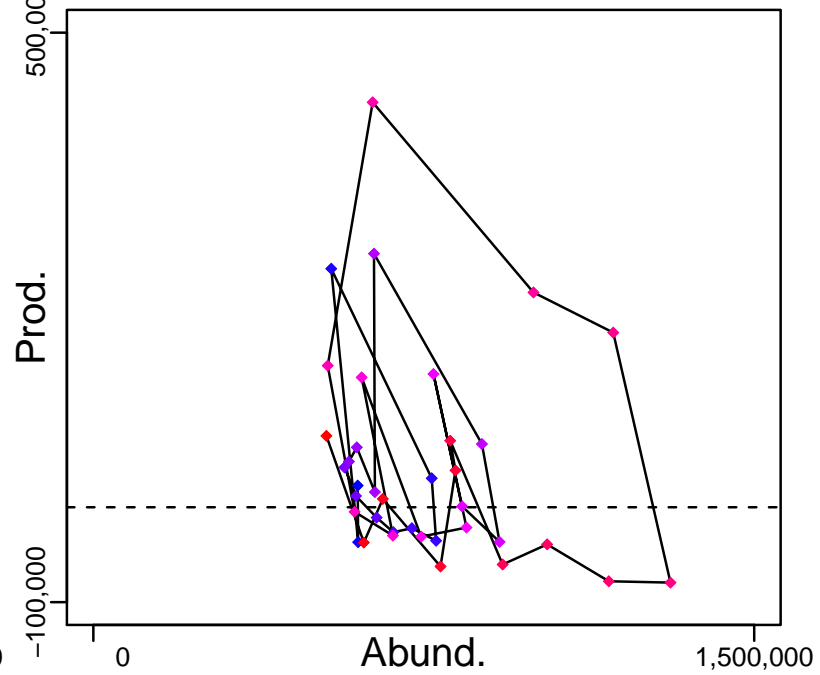
Kobe MGTpref (1976–2011–STACHURA)



Spawner Recruit (1977–2015–SISIMP2016)

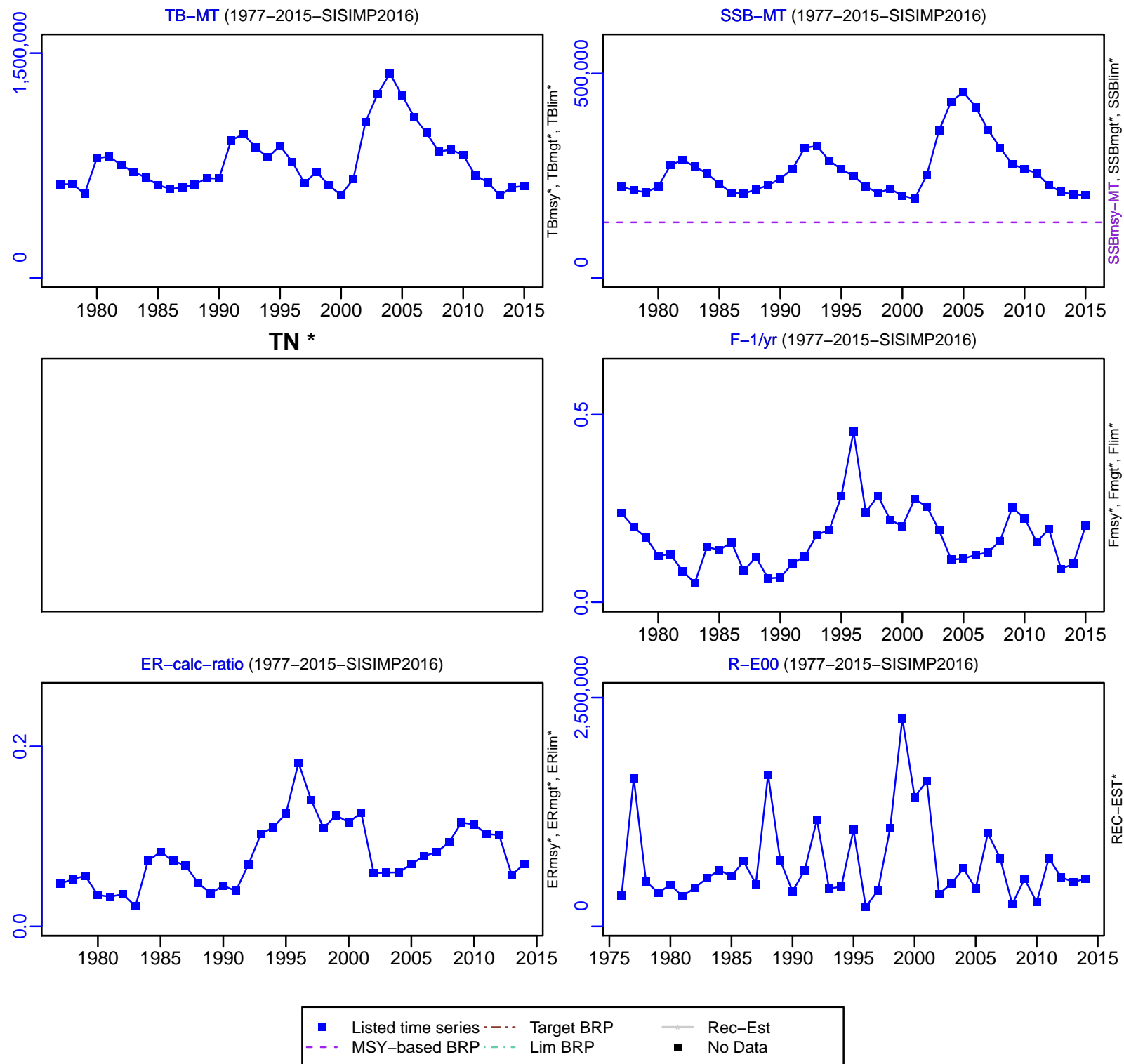


Production (1977–2015–SISIMP2016)



◆ Start Year ◆ End Year \* No Data

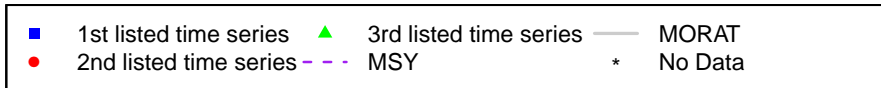
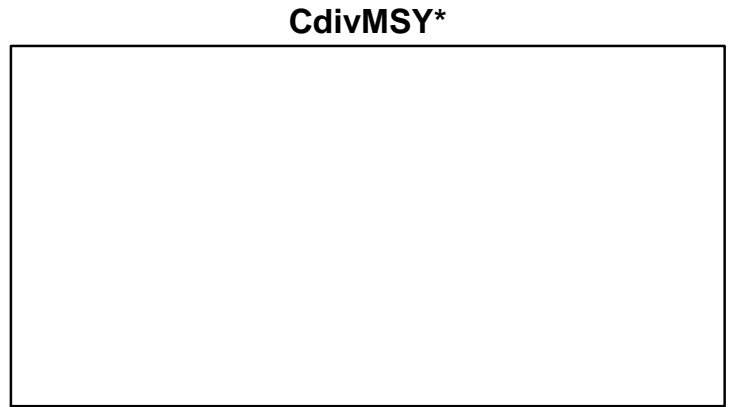
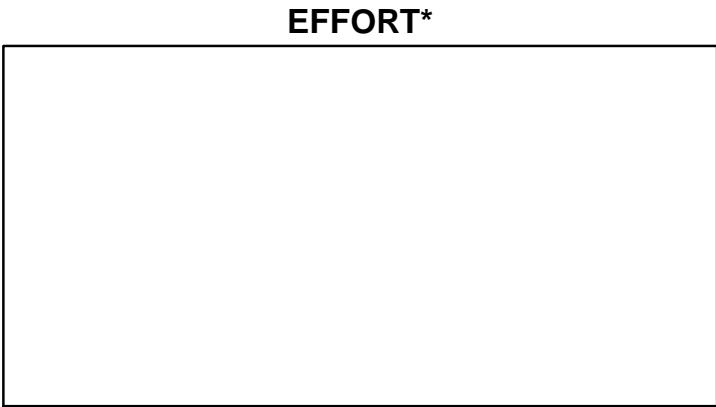
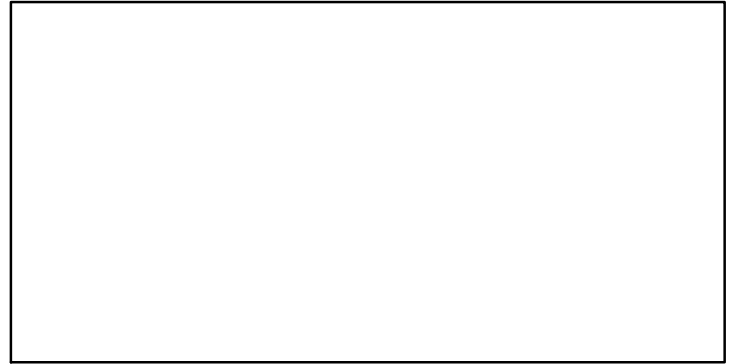
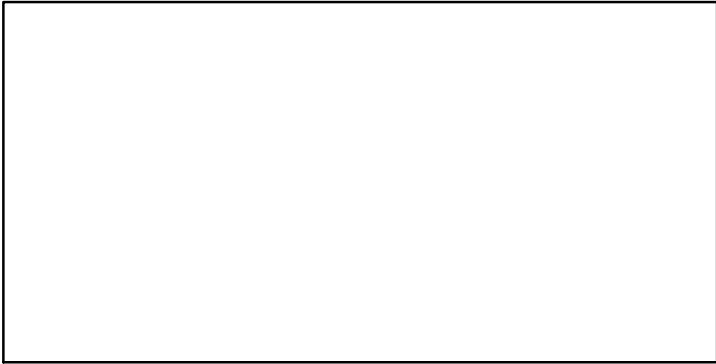
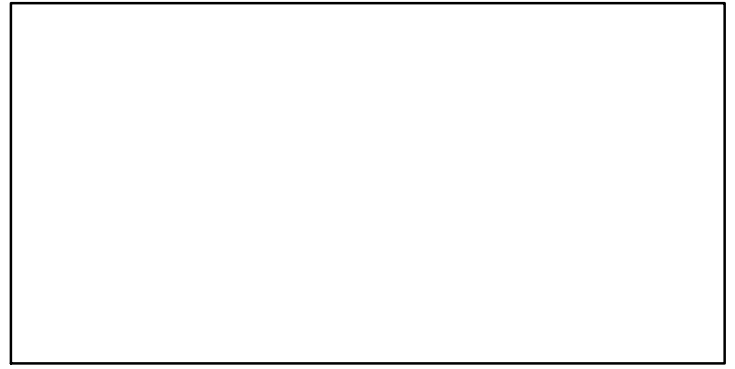
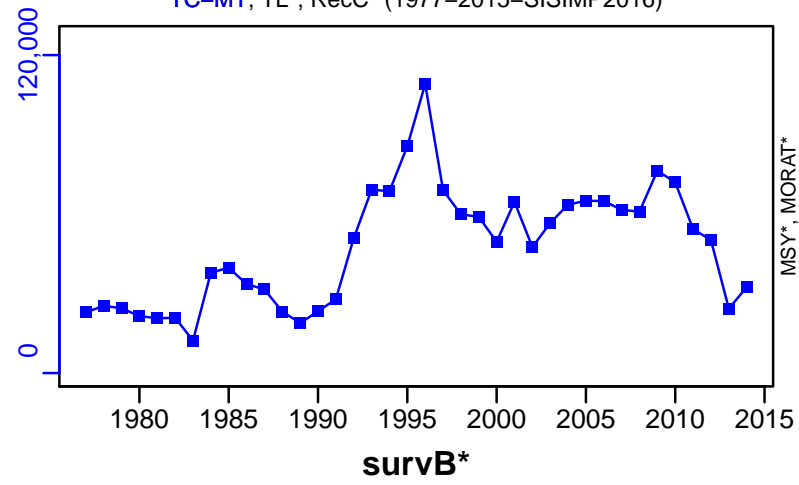
# Atka mackerel Bering Sea and Aleutian Islands [ATKABSAI]



# Atka mackerel Bering Sea and Aleutian Islands [ATKABSAI]

TC-MT, TL\*, RecC\* (1977-2015-SISIMP2016)

TAC\*, Cpair\*, Cadv\*

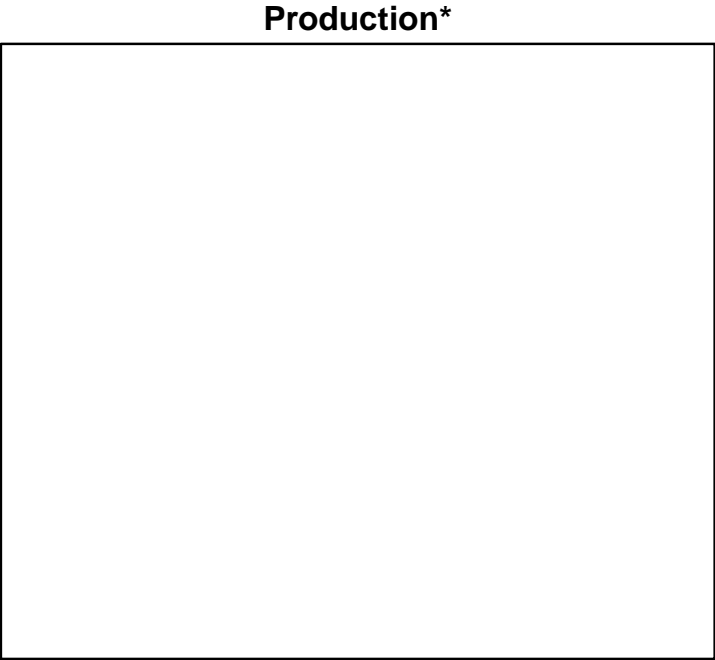
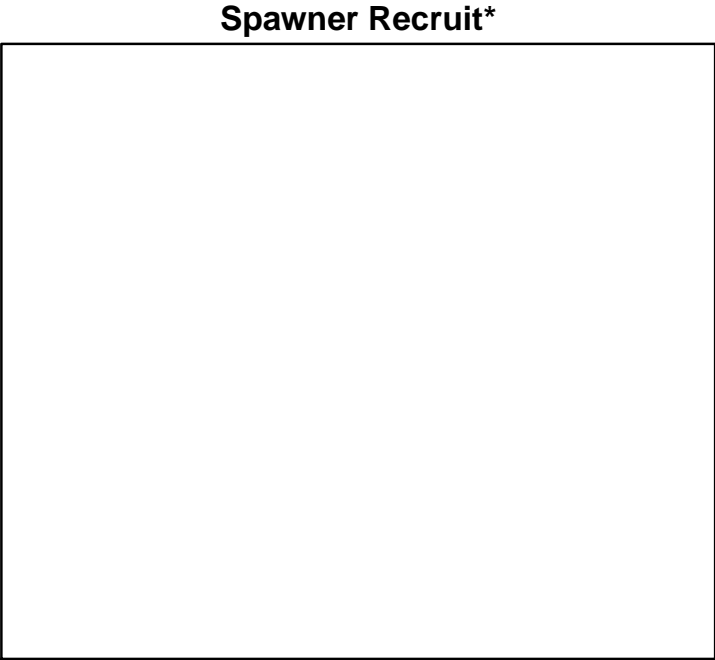
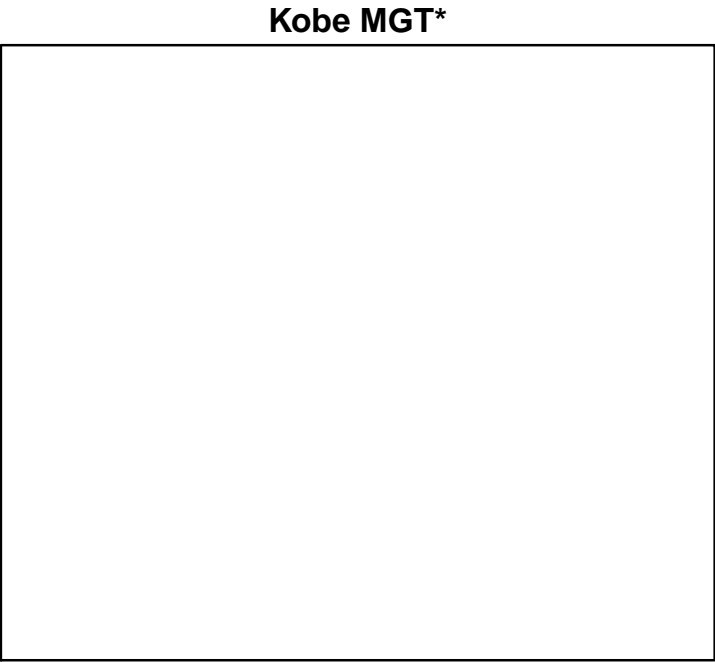
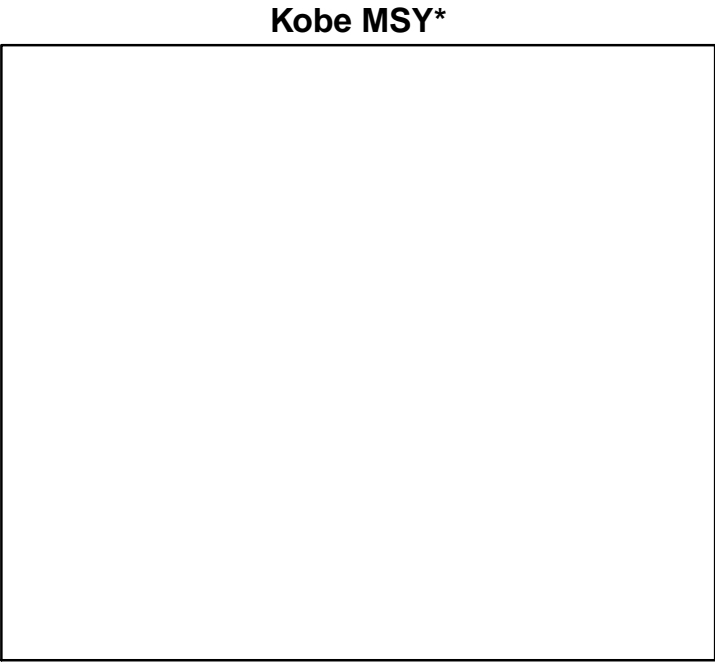


## Atka mackerel Gulf of Alaska [ATKAGA]

Metadata	
<b>Scientific Name</b>	Pleurogrammus monopterygius
<b>Current Assess ID</b>	AFSC-ATKAGA-1977-2014-SISIMP2016
<b>Area</b>	Gulf of Alaska
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2014

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	2014	1040		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

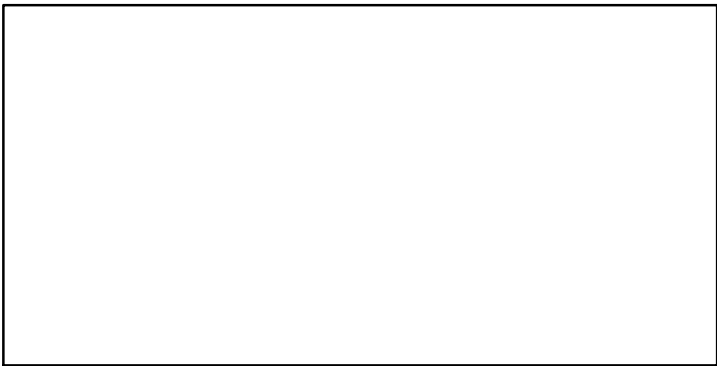


◆ Start Year   ♦ End Year   \* No Data

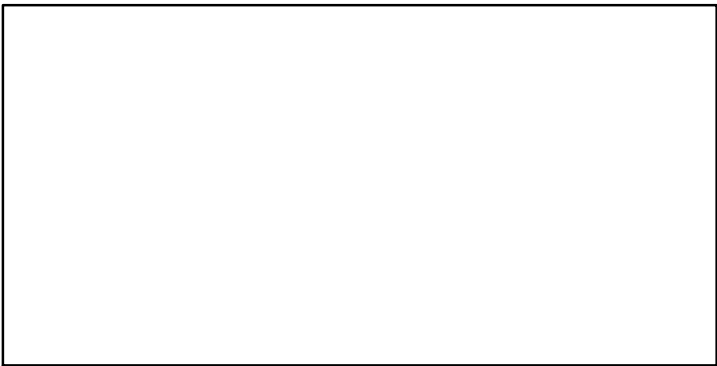


Atka mackerel Gulf of Alaska [ATKAGA]

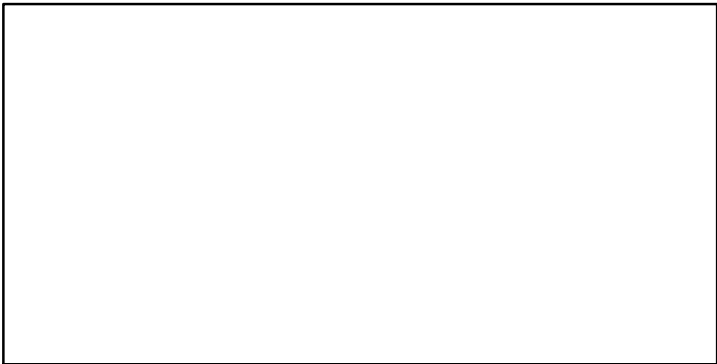
TB\*



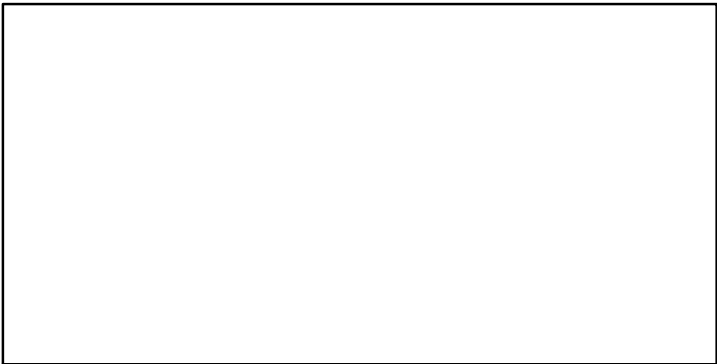
SSB\*



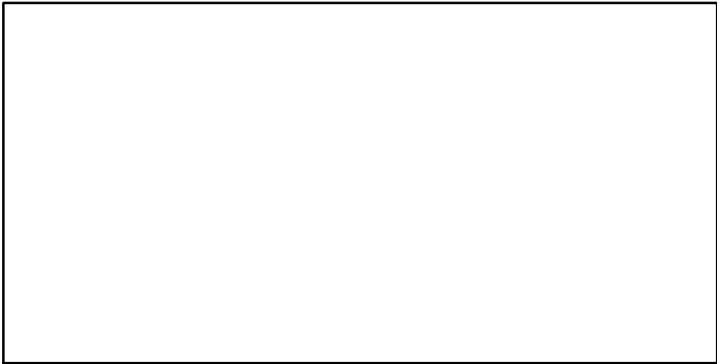
TN \*



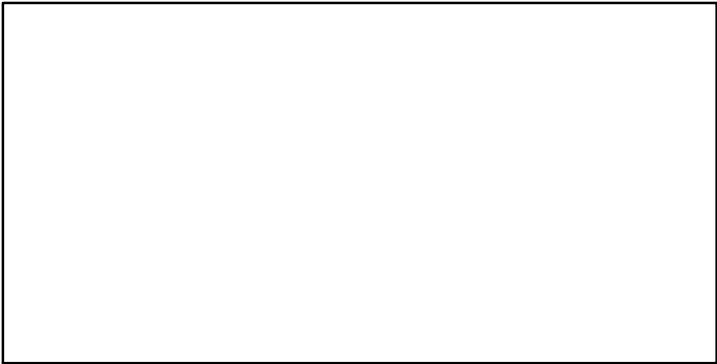
F\*



ER\*



Recruits\*



■ Listed time series

- - - MSY-based BRP

- - - Target BRP

- · - Lim BRP

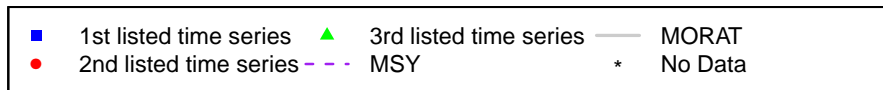
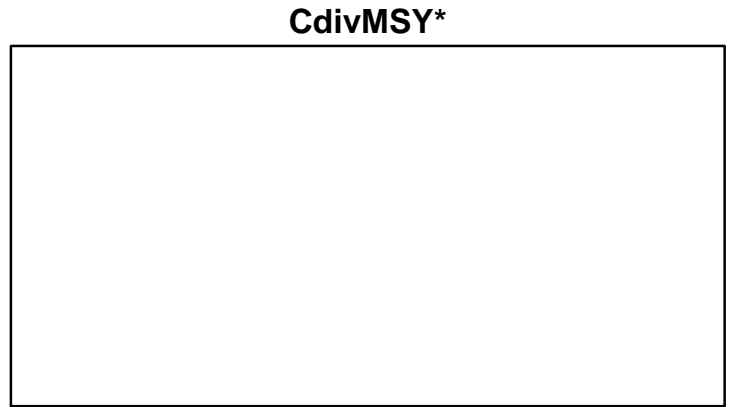
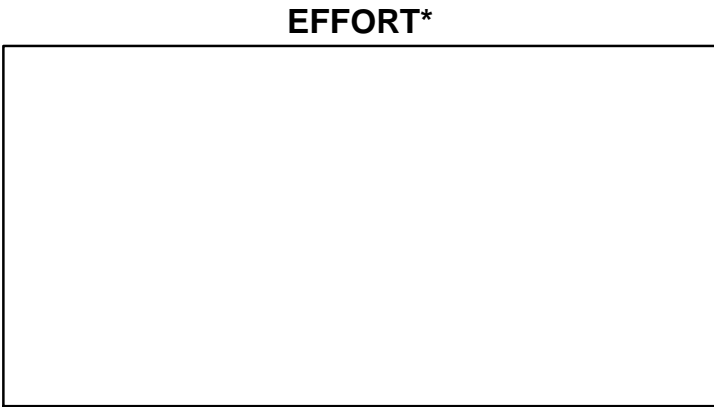
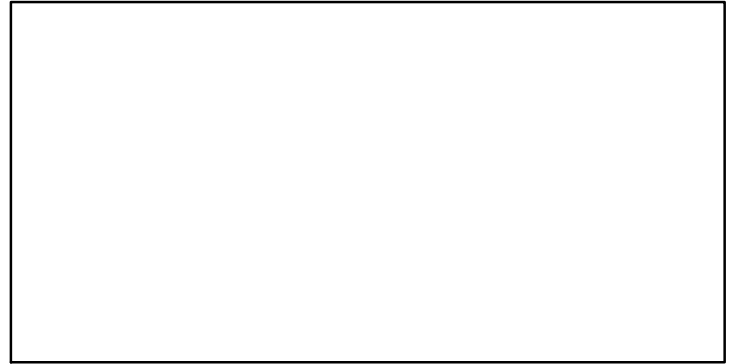
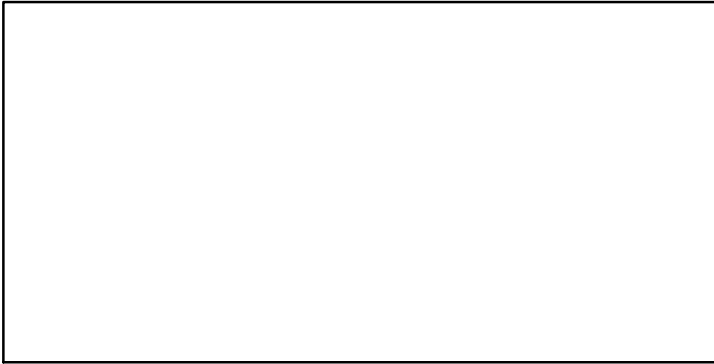
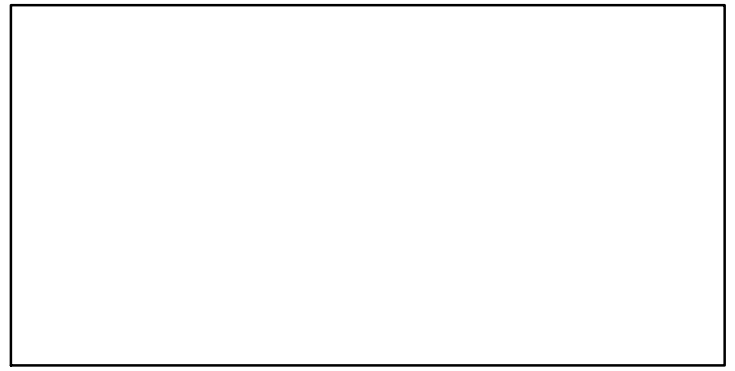
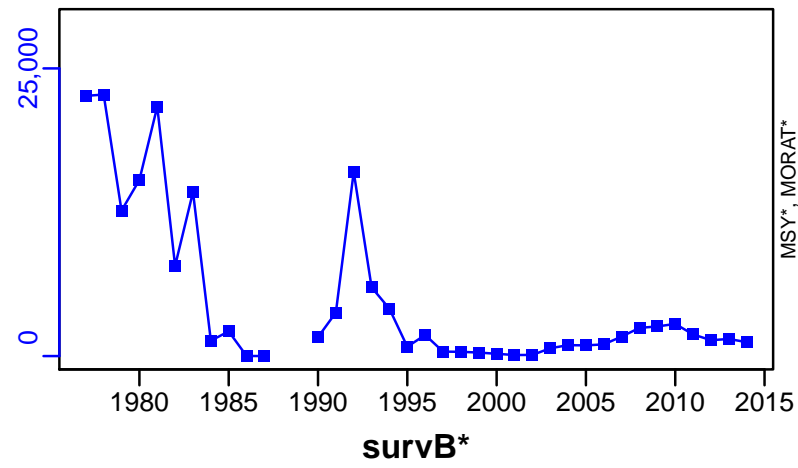
— Rec-Est

■ No Data

# Atka mackerel Gulf of Alaska [ATKAGA]

TC-MT, TL\*, RecC\* (1977-2014-SISIMP2016)

TAC\*, Cpair\*, Cadv\*

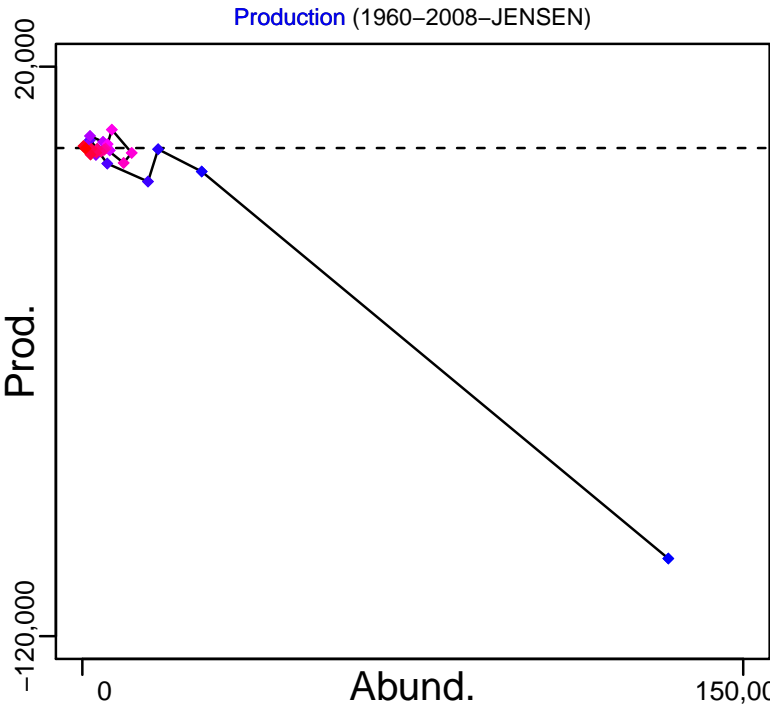
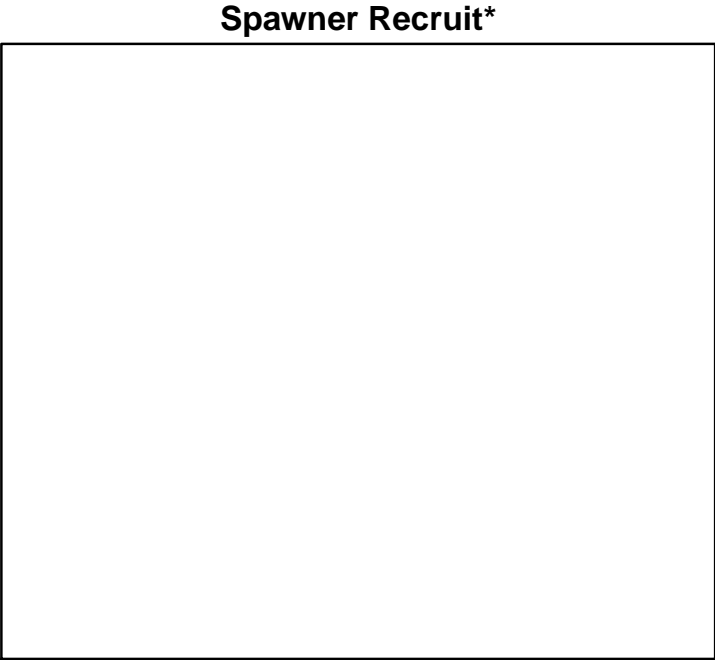
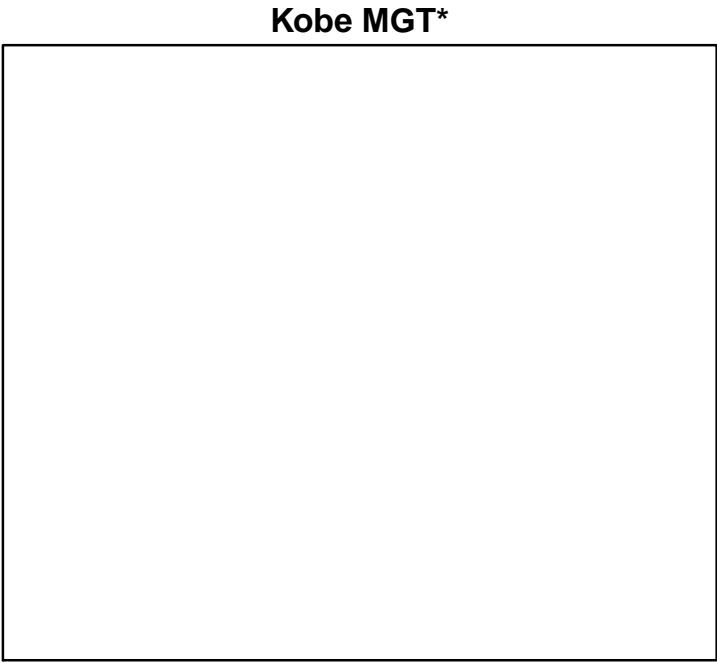
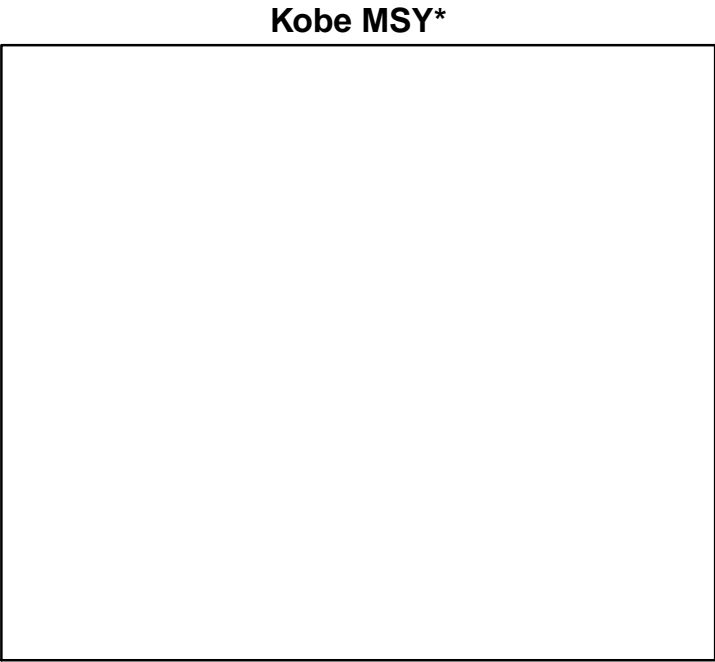


## Blue king crab Pribilof Islands [BKINGCRABPI]

Metadata	
<b>Scientific Name</b>	Paralithodes platypus
<b>Current Assess ID</b>	AFSC-BKINGCRABPI-1960-2008-JENSEN
<b>Area</b>	Pribilof Islands
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2008

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

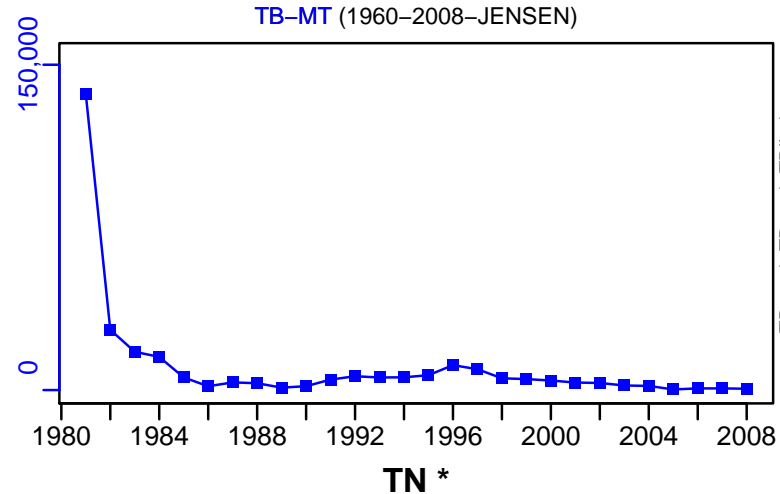
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2008	594	-	-
<b>SSB</b>	SSB-MT	2008	345	Males	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2008	0	-	-
<b>TC</b>	TC-MT	2008	0		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT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



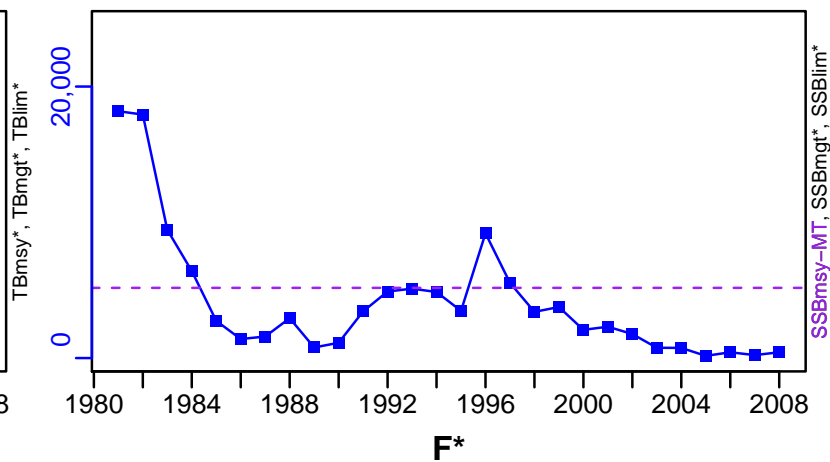
◆ Start Year ◆ End Year \* No Data

# Blue king crab Pribilof Islands [BKINGCRABPI]

TB-MT (1960-2008-JENSEN)



SSB-MT (1960-2008-JENSEN)



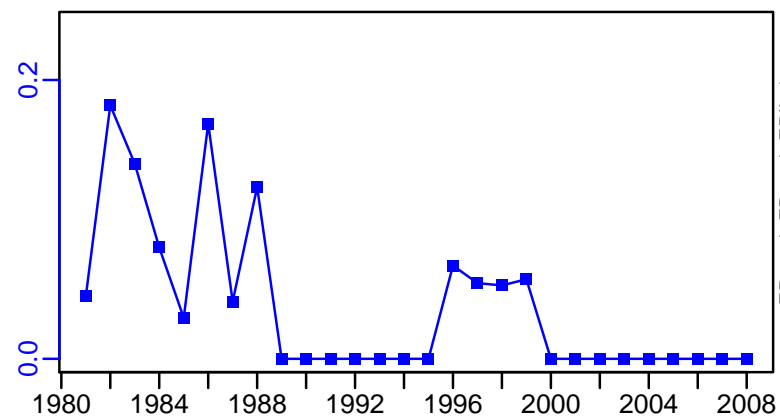
TN \*



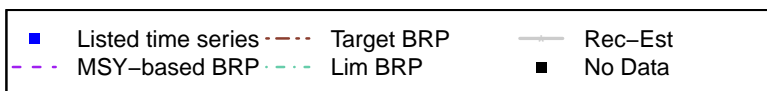
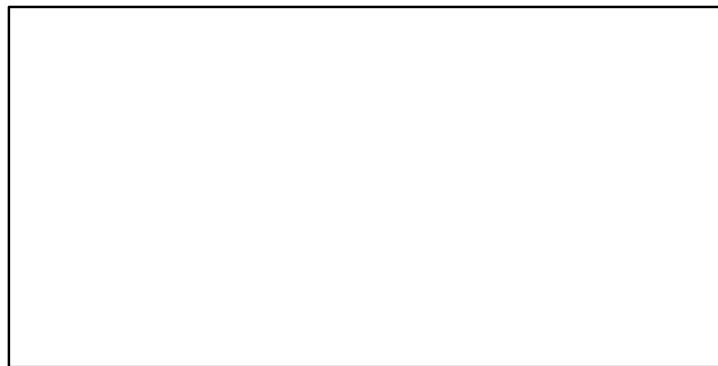
F\*



ER-ratio (1960-2008-JENSEN)

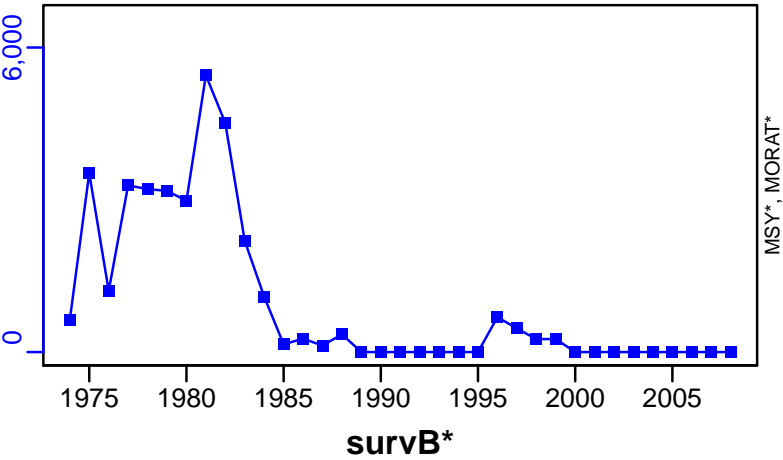


Recruits\*



Blue king crab Pribilof Islands [BKINGCRABPI]

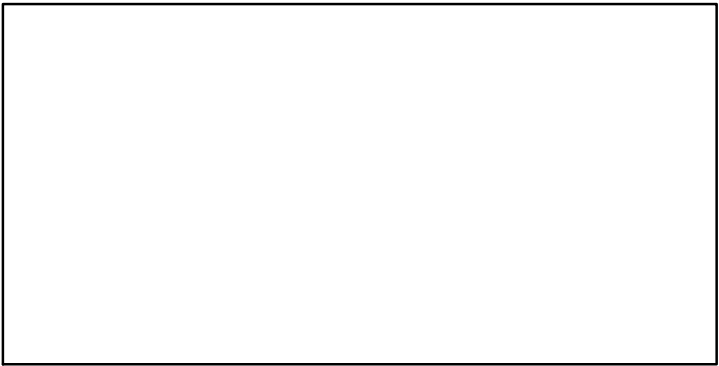
TC-MT, TL\*, RecC\* (1960-2008-JENSEN)



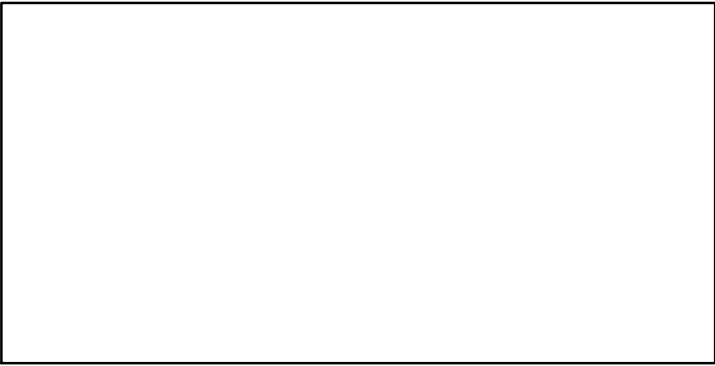
TAC\*, Cpair\*, Cadv\*



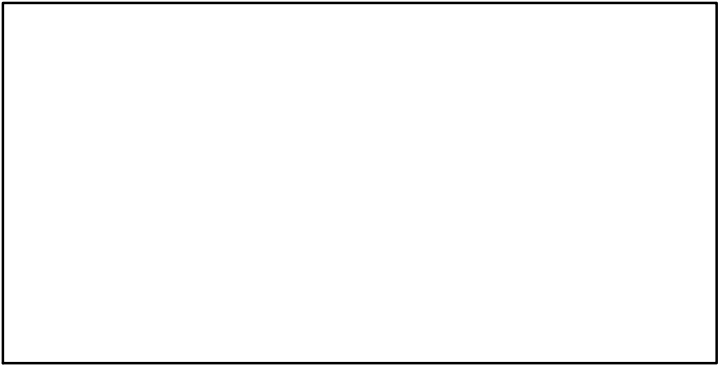
CPUE\*



EFFORT\*



CdivMSY\*



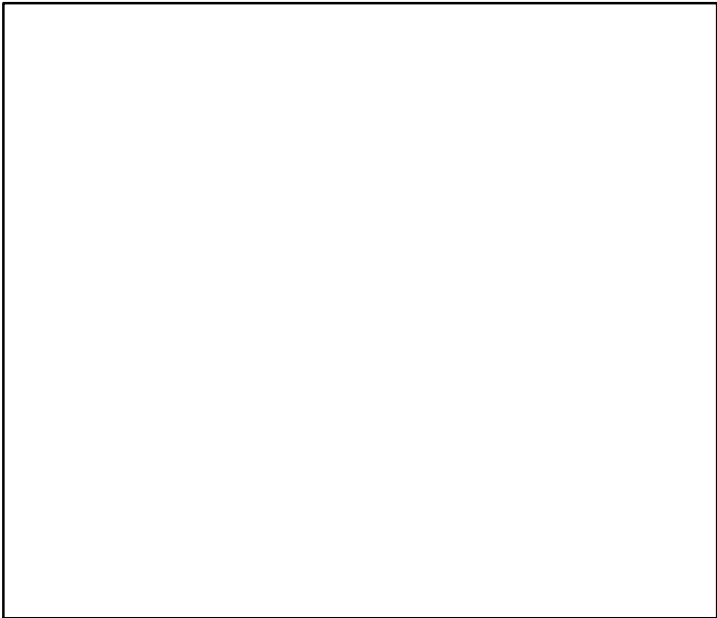
## Blue king crab Saint Matthews Island [BKINGCRABSMI]

Metadata	
<b>Scientific Name</b>	Paralithodes platypus
<b>Current Assess ID</b>	AFSC-BKINGCRABSMI-1960-2008-JENSEN
<b>Area</b>	Saint Matthews Island
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2008

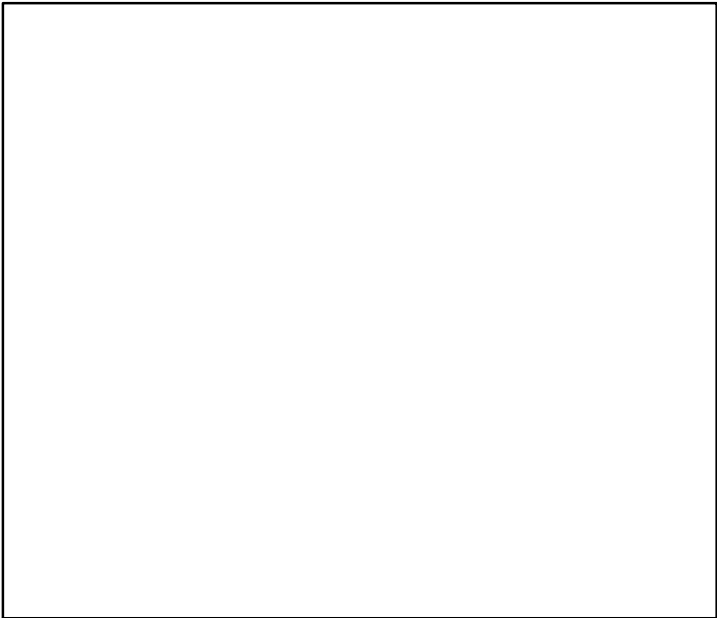
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2008	3351
<b>Fmsy</b>	Fmsy-pr-1/yr	2008	0.18
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2008	4870	Males	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	-	-	-	-	-
<b>TC</b>	TC-MT	2008	0		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2008	1.453		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

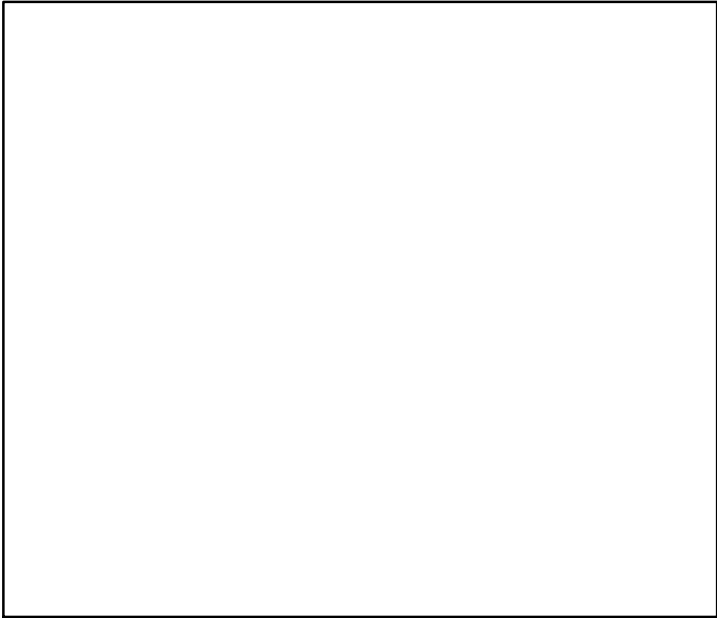
Kobe MSY\*



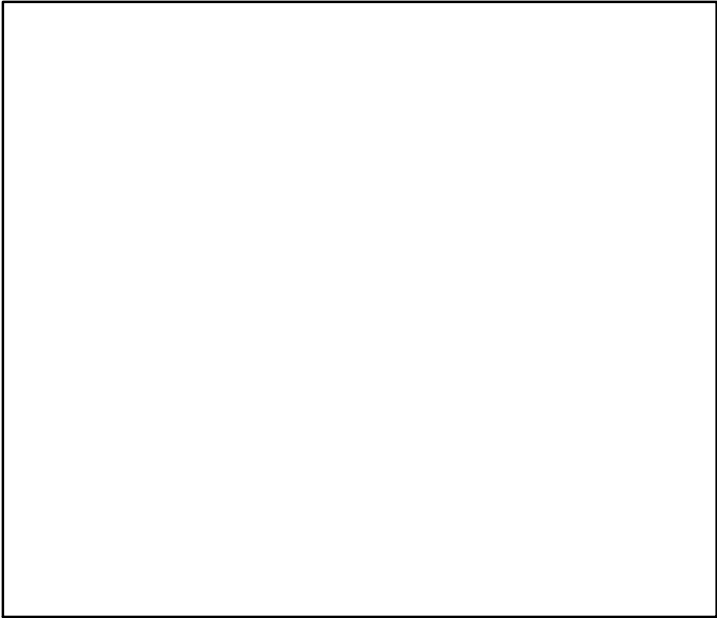
Kobe MGT\*



Spawner Recruit\*



Production\*

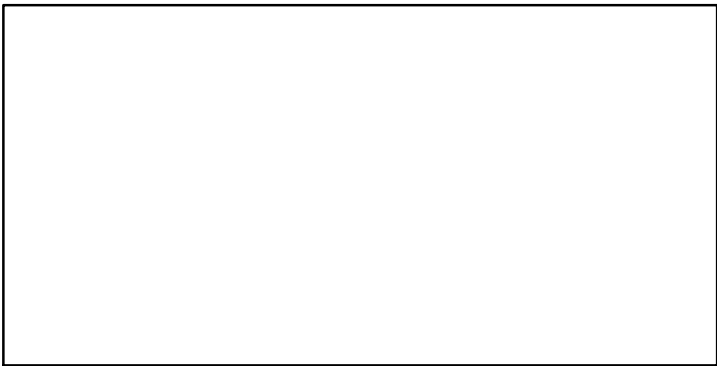


◆ Start Year   ◆ End Year   \* No Data

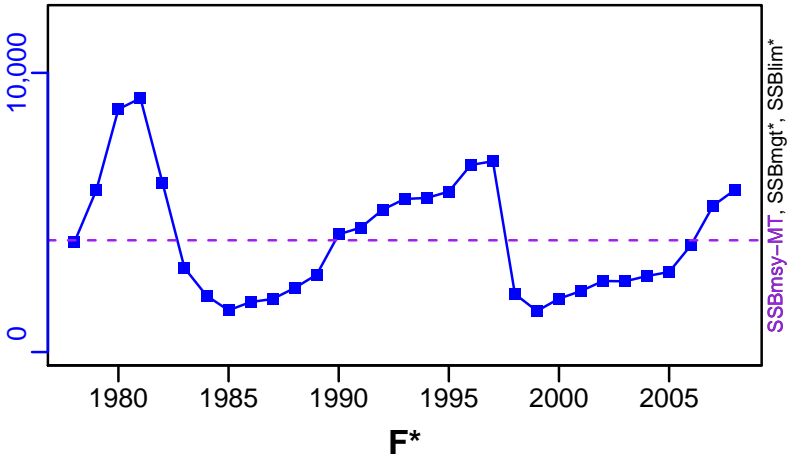


Blue king crab Saint Matthews Island [BKINGCRABSMI]

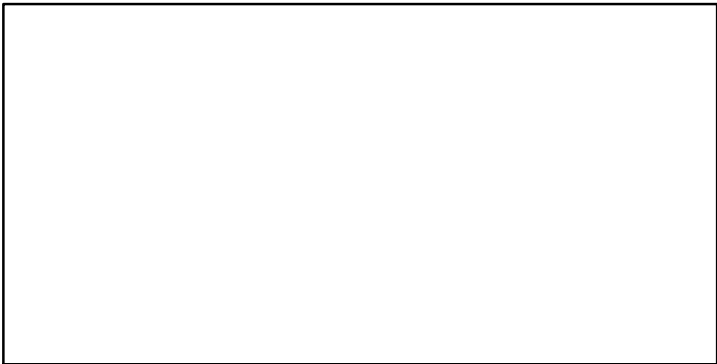
TB\*



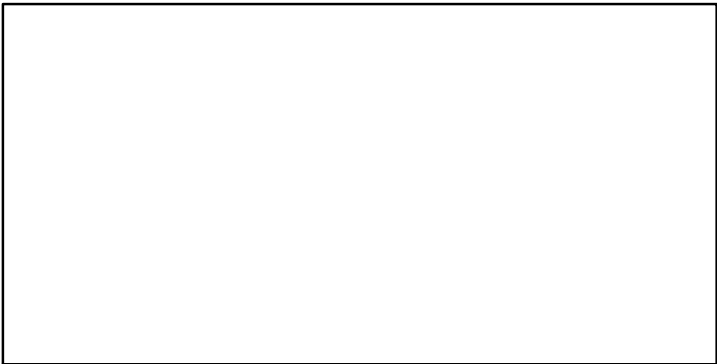
SSB-MT (1960-2008-JENSEN)



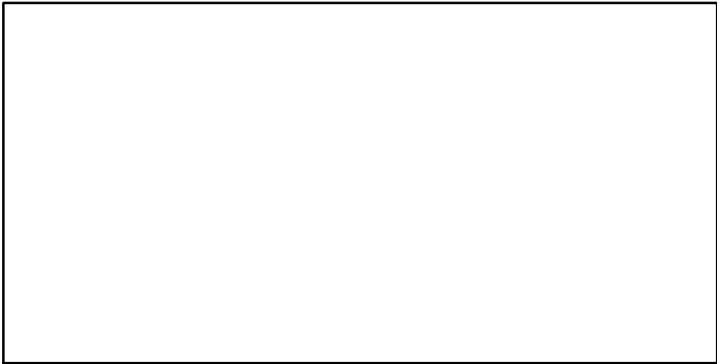
TN \*



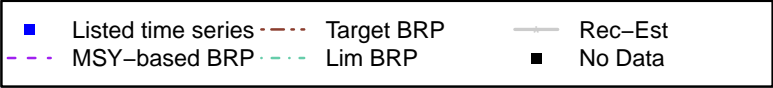
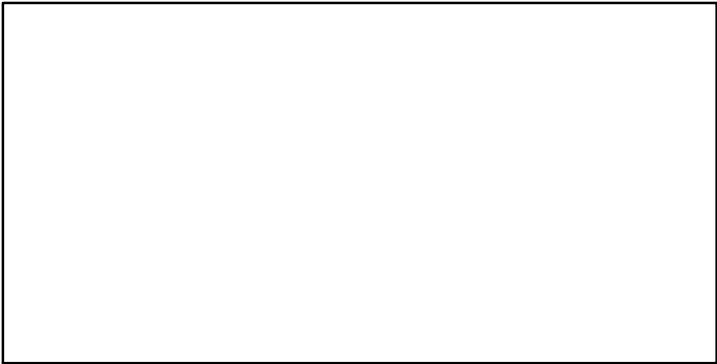
F\*



ER\*



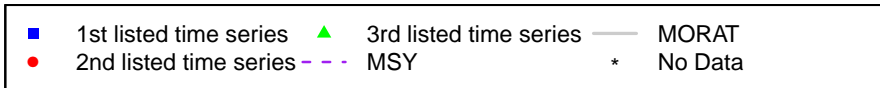
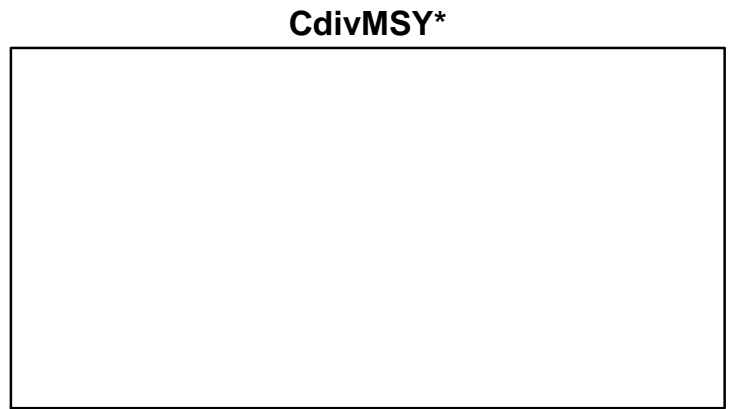
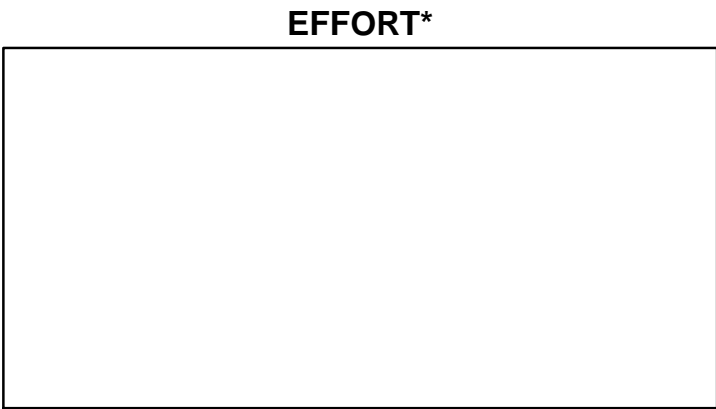
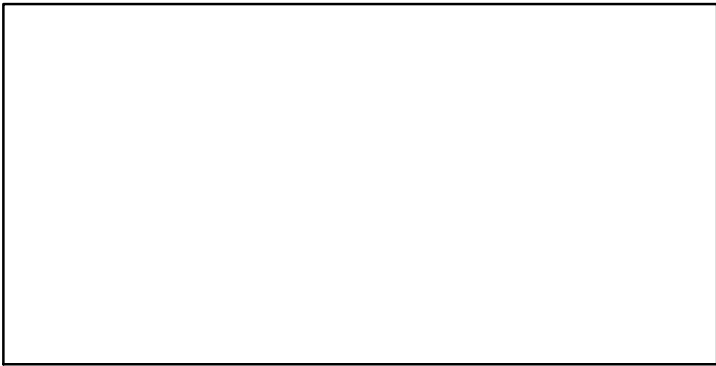
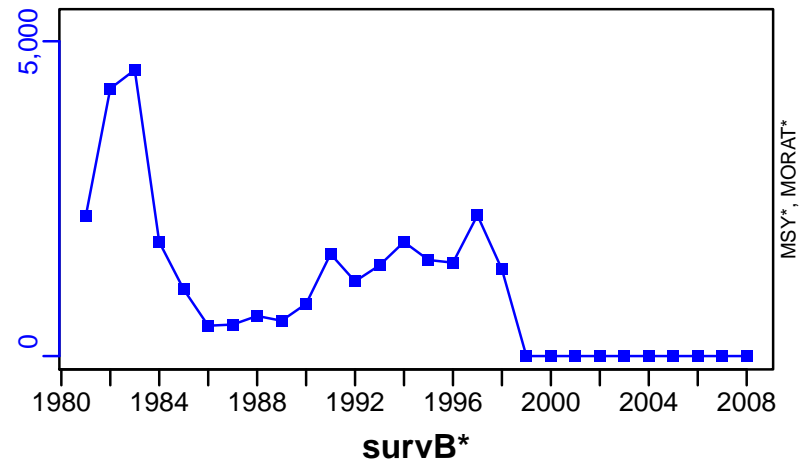
Recruits\*



# Blue king crab Saint Matthews Island [BKINGCRABSMI]

TC-MT, TL\*, RecC\* (1960-2008-JENSEN)

TAC\*, Cpair\*, Cadv\*



## Dover sole Gulf of Alaska [DSOLEGA]

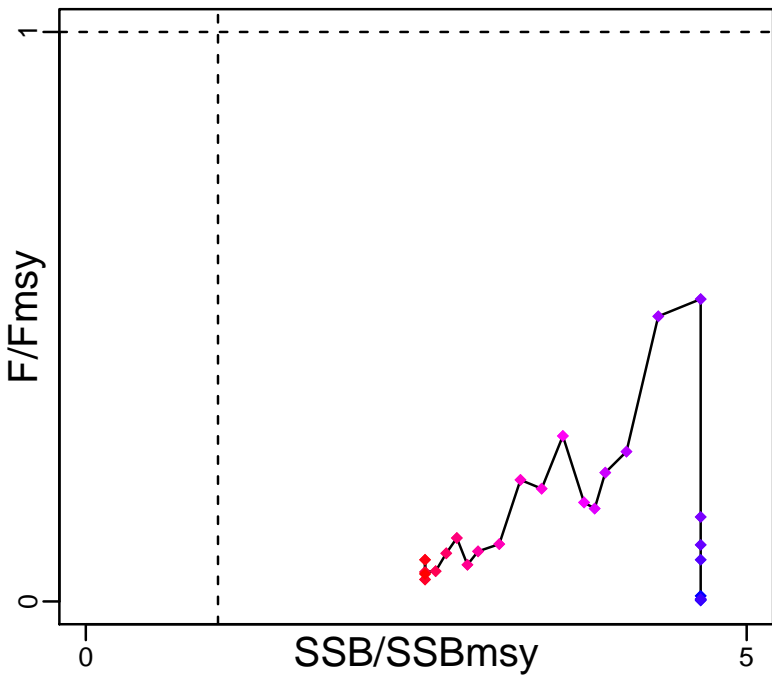
Metadata	
<b>Scientific Name</b>	Microstomus pacificus
<b>Current Assess ID</b>	AFSC-DSOLEGA-1978-2015-SISIMP2016
<b>Area</b>	Gulf of Alaska
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2009, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2015	19,855
<b>Fmsy</b>	Fmsy-pr-1/yr	2009	0.149
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2009	0.085
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

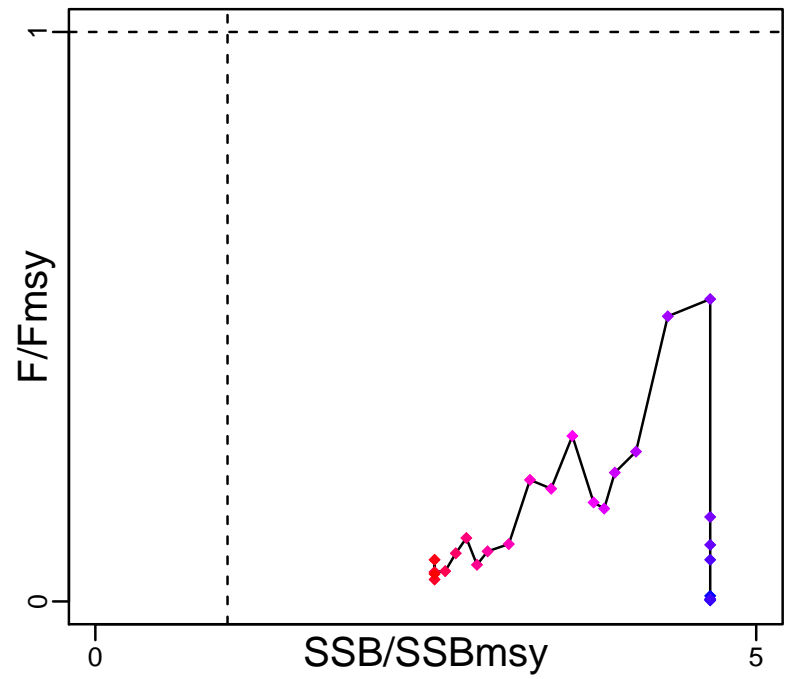
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	141,000	-	0+
<b>SSB</b>	SSB-MT	2015	48,900	Females	12.47+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	19,500,000	-	0
<b>F</b>	F-1/yr	2015	0.003	-	-
<b>ER</b>	ER-calc-ratio	2015	0.003	-	-
<b>TC</b>	TC-MT	2015	324		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	2.464		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2009	0.048		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Dover sole Gulf of Alaska [DSOLEGA]

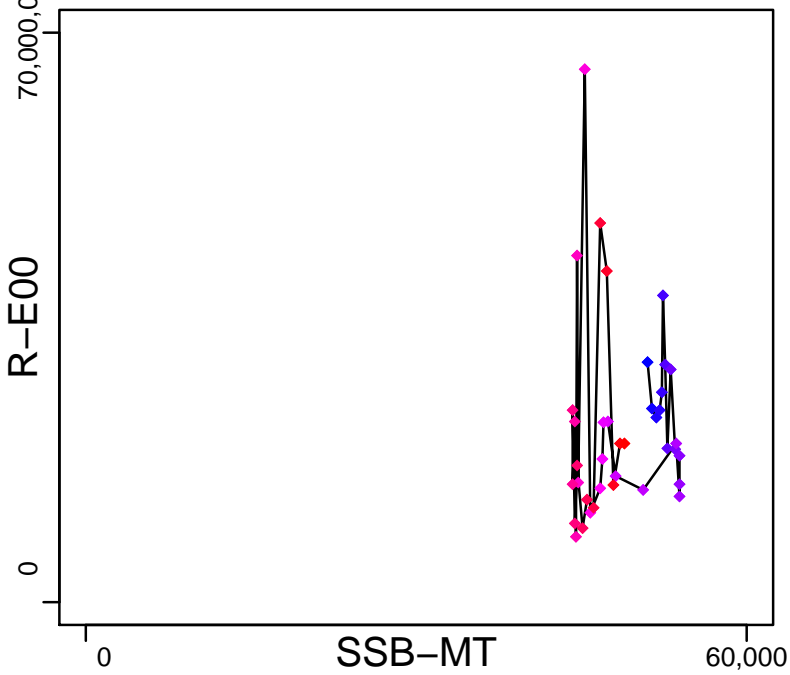
Kobe MSYpref (1978–2009–STACHURA)



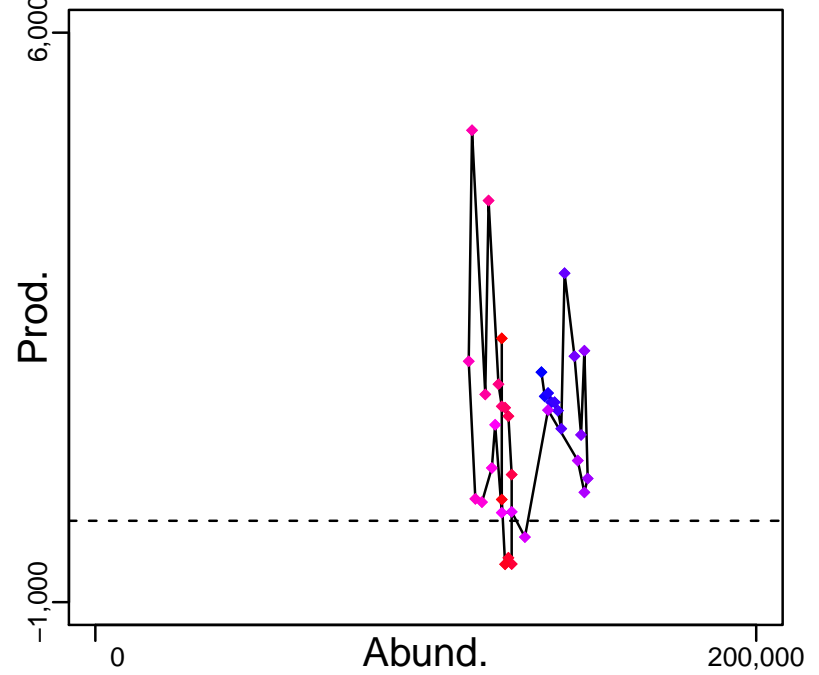
Kobe MGTpref (1978–2009–STACHURA)



Spawner Recruit (1978–2015–SISIMP2016)



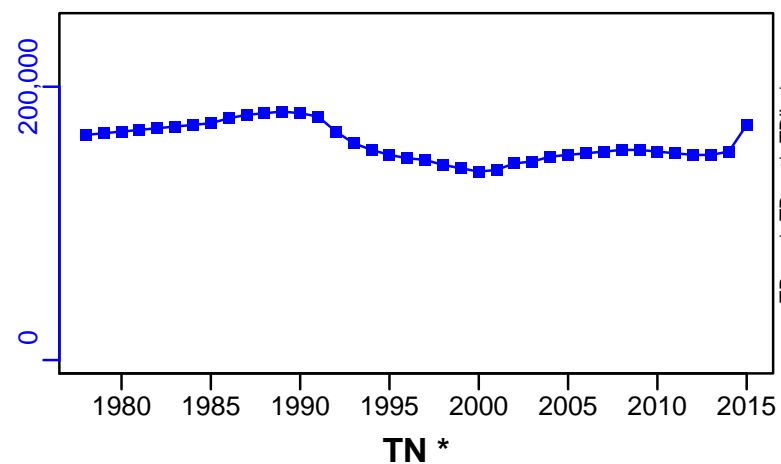
Production (1978–2015–SISIMP2016)



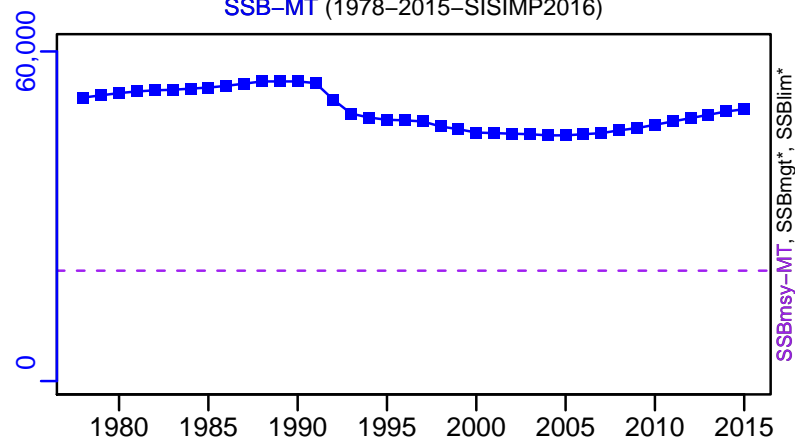
◆ Start Year ◆ End Year \* No Data

# Dover sole Gulf of Alaska [DSOLEGA]

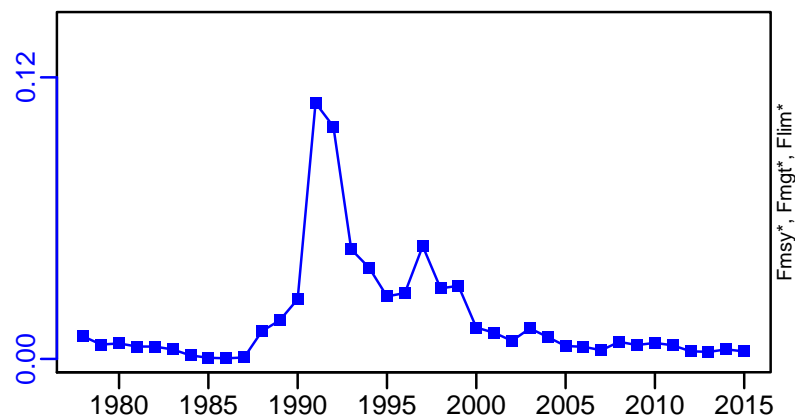
TB-MT (1978–2015–SISIMP2016)



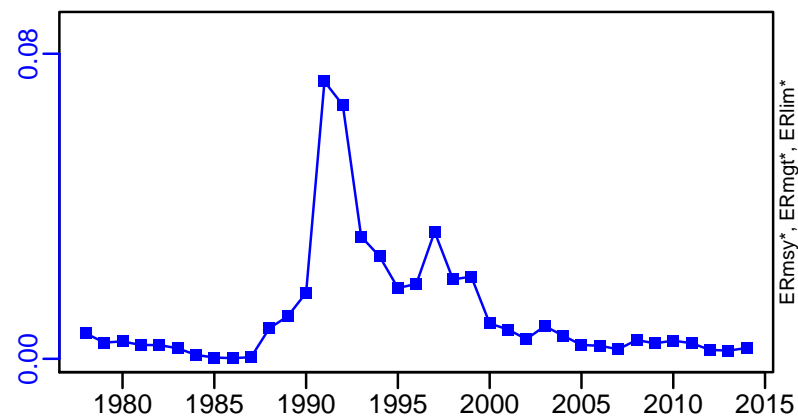
SSB-MT (1978–2015–SISIMP2016)



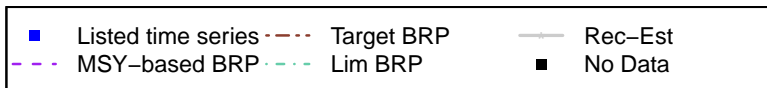
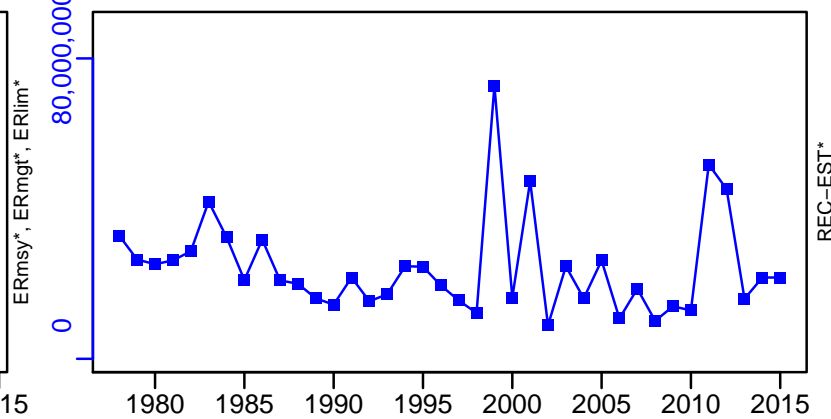
F-1/yr (1978–2015–SISIMP2016)



ER-calc-ratio (1978–2015–SISIMP2016)



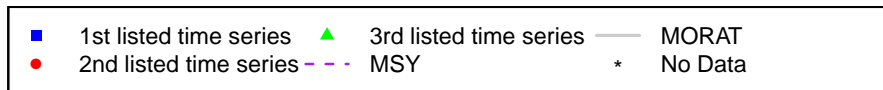
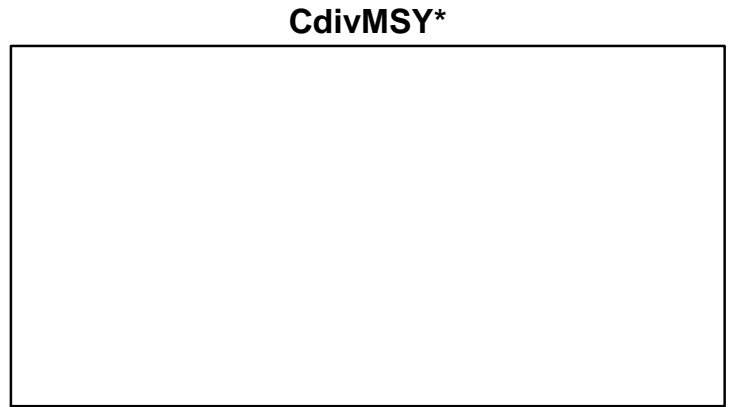
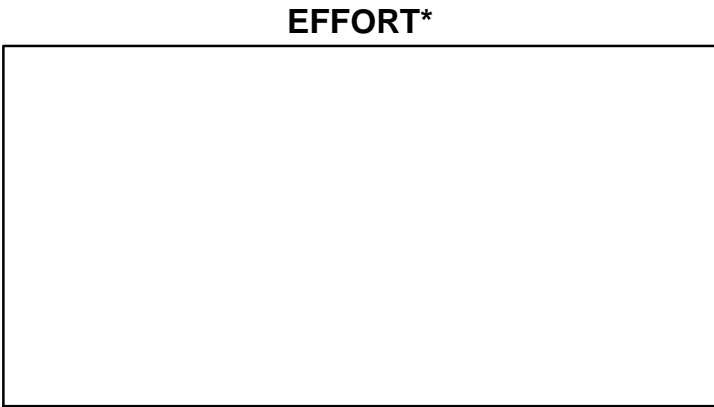
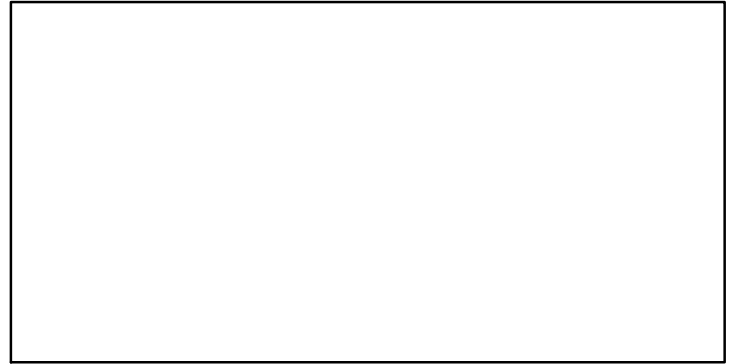
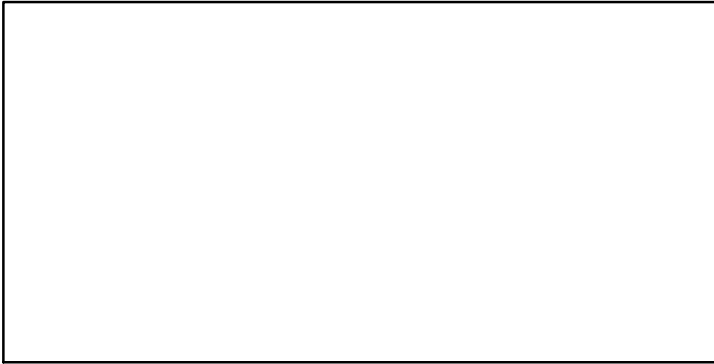
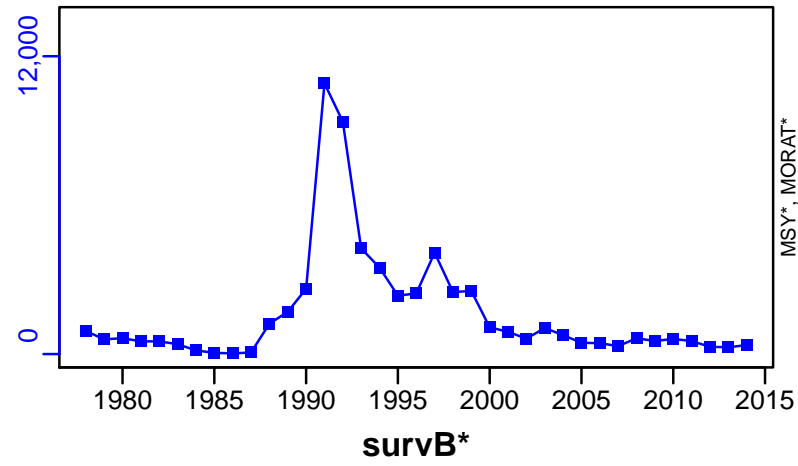
R-E00 (1978–2015–SISIMP2016)



# Dover sole Gulf of Alaska [DSOLEGA]

TC-MT, TL\*, RecC\* (1978-2015-SISIMP2016)

TAC\*, Cpair\*, Cadv\*



## Dusky rockfish Gulf of Alaska [DUSROCKGA]

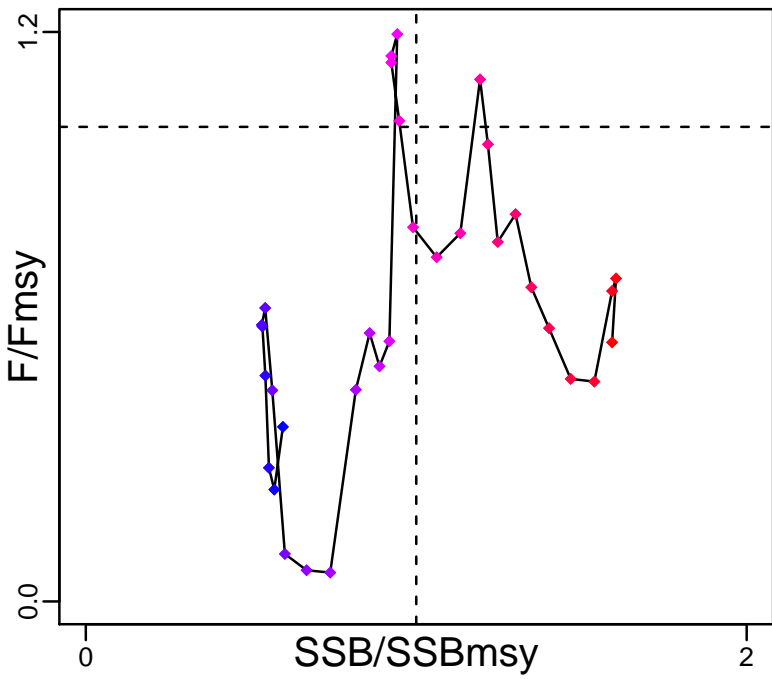
Metadata	
<b>Scientific Name</b>	Sebastes variabilis
<b>Current Assess ID</b>	AFSC-DUSROCKGA-1977-2015-SISIMP2016
<b>Area</b>	Gulf of Alaska
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2010, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2015	17,244
<b>Fmsy</b>	Fmsy-1/yr	2010	0.087
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2010	0.07
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

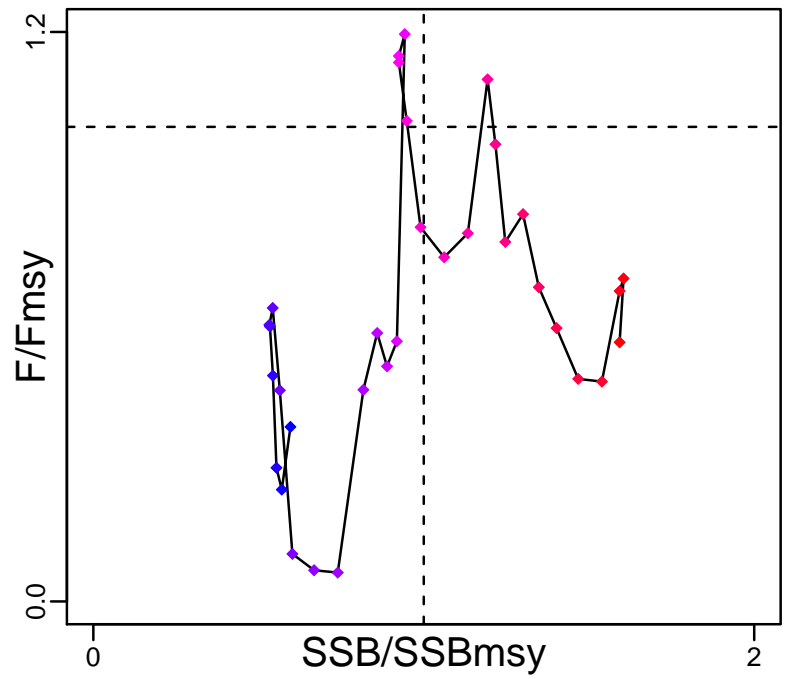
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	63,100	-	4+
<b>SSB</b>	SSB-MT	2015	27,700	Females	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	2,150,000	-	4
<b>F</b>	F-1/yr	2015	0.054	-	-
<b>ER</b>	ER-calc-ratio	2015	0.045	-	-
<b>TC</b>	TC-MT	2015	3030		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	1.605		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2010	0.546		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Dusky rockfish Gulf of Alaska [DUSROCKGA]

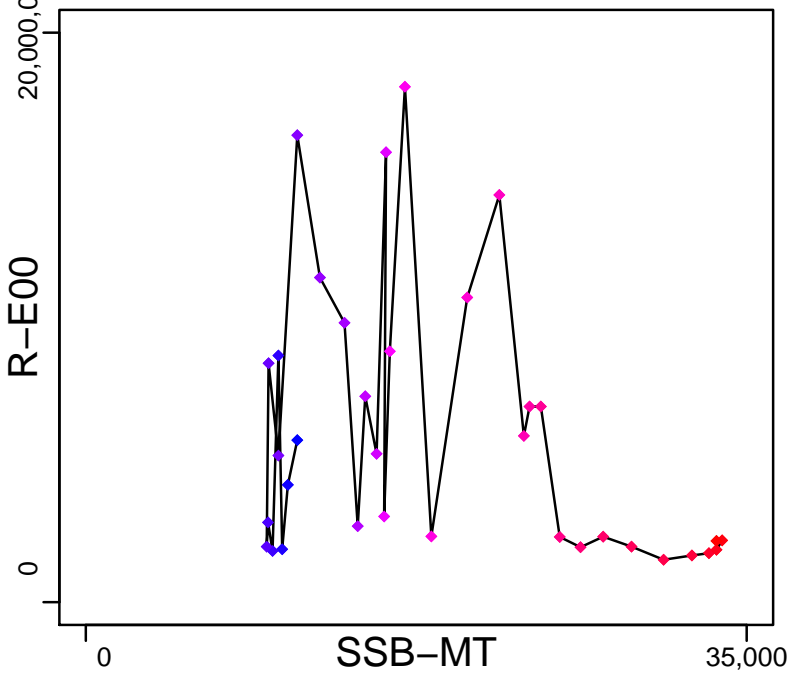
Kobe MSYpref (1973–2010–STACHURA)



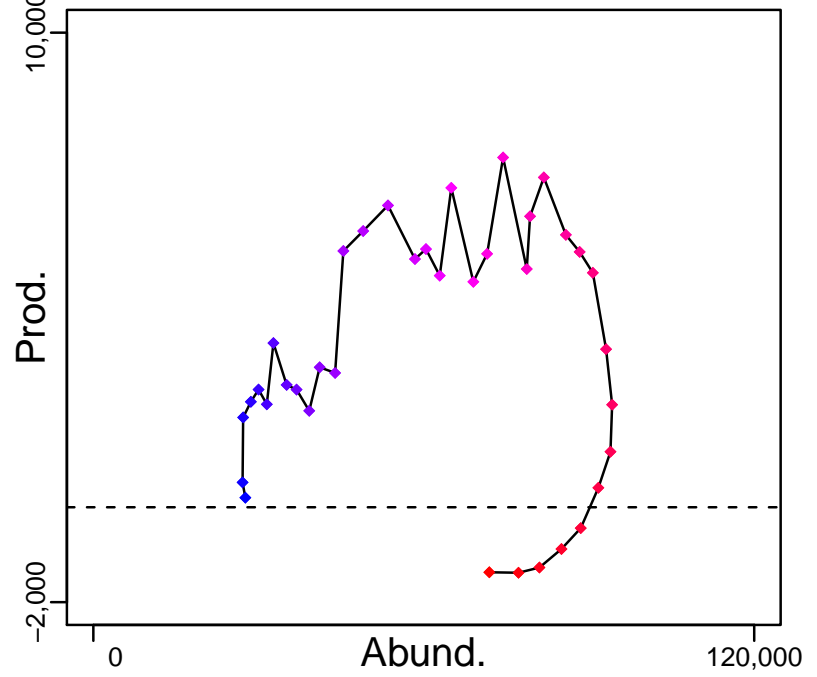
Kobe MGTpref (1973–2010–STACHURA)



Spawner Recruit (1977–2015–SISIMP2016)



Production (1977–2015–SISIMP2016)

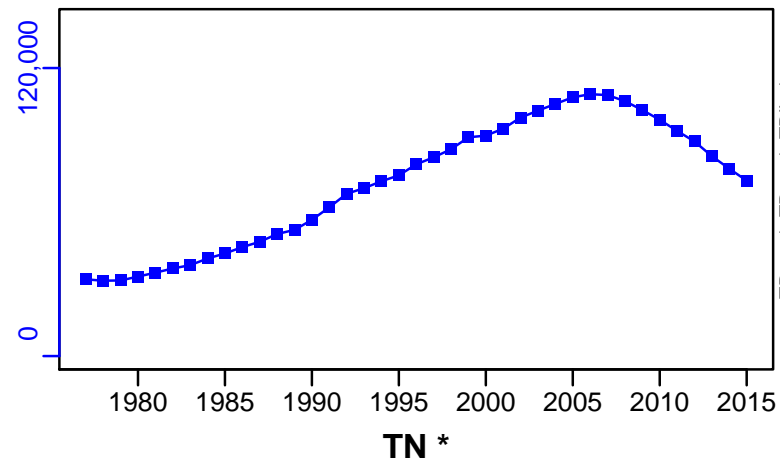


◆ Start Year ◆ End Year \* No Data

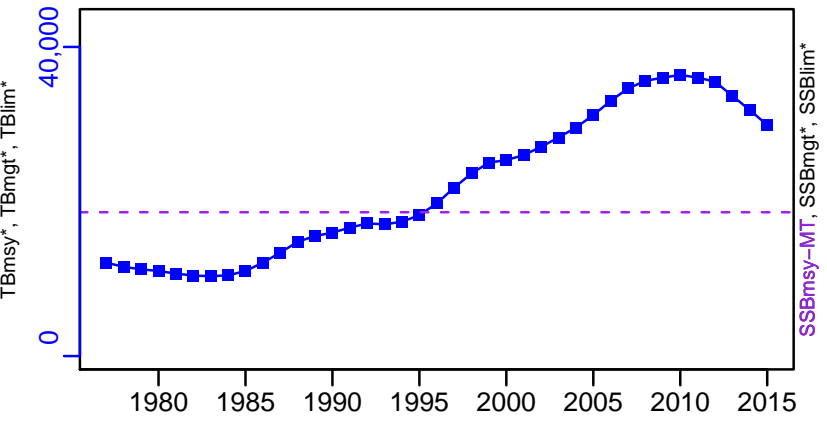


# Dusky rockfish Gulf of Alaska [DUSROCKGA]

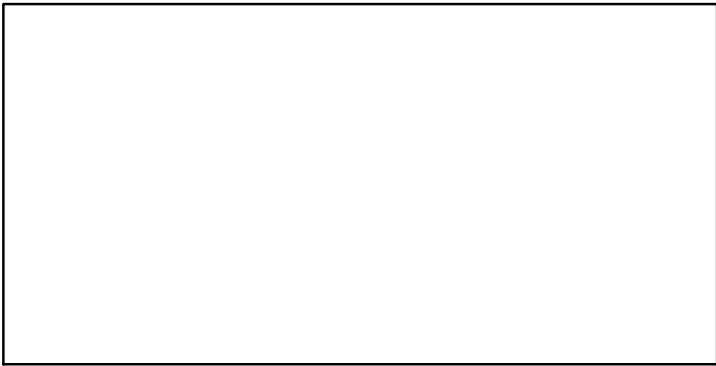
TB-MT (1977-2015-SISIMP2016)



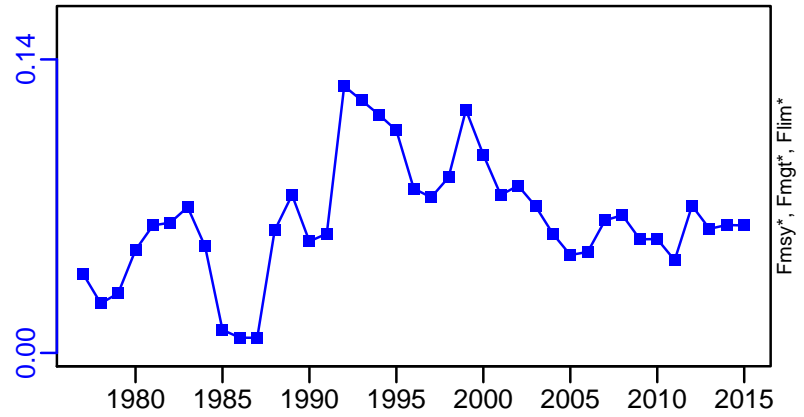
SSB-MT (1977-2015-SISIMP2016)



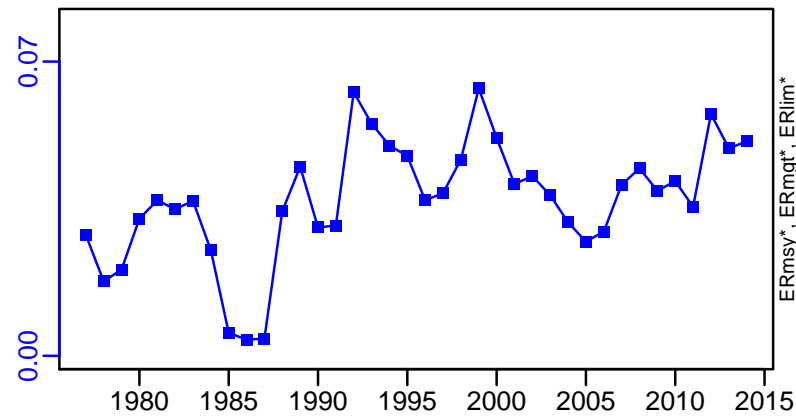
TN \*



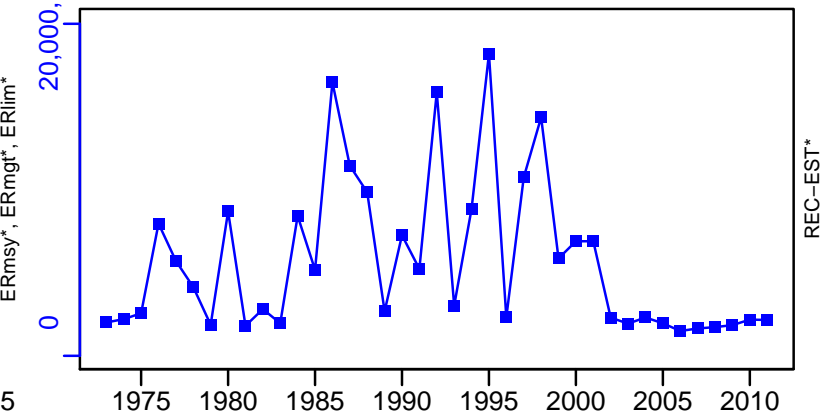
F-1/yr (1977-2015-SISIMP2016)



ER-calc-ratio (1977-2015-SISIMP2016)



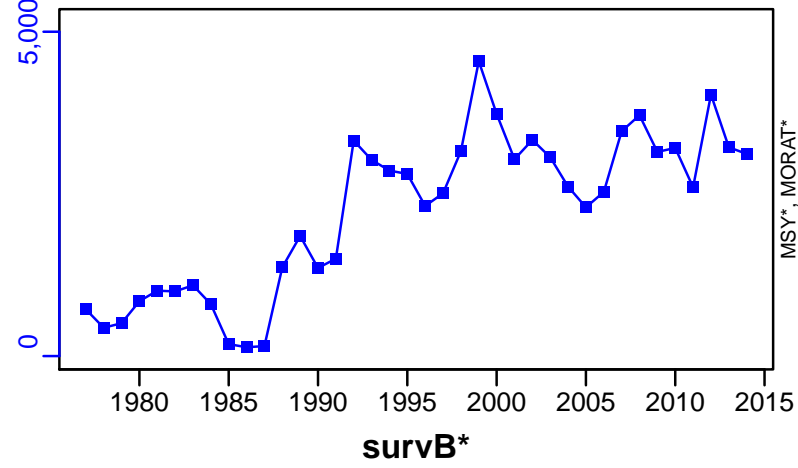
R-E00 (1977-2015-SISIMP2016)



# Dusky rockfish Gulf of Alaska [DUSROCKGA]

TC-MT, TL\*, RecC\* (1977-2015-SISIMP2016)

TAC\*, Cpair\*, Cadv\*



CPUE\*

EFFORT\*

CdivMSY\*

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

## Flathead sole Bering Sea and Aleutian Islands [FLSOLEBSAI]

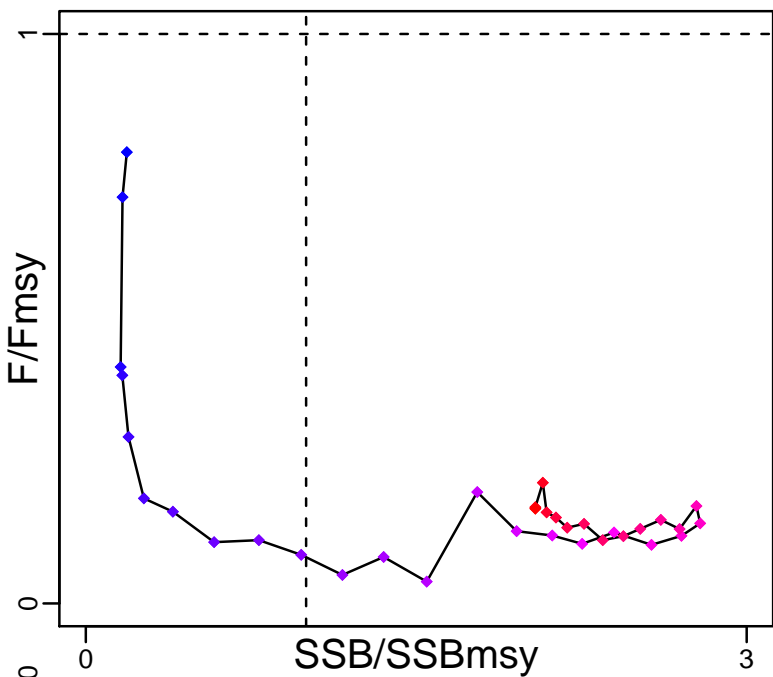
Metadata	
<b>Scientific Name</b>	Hippoglossoides elassodon
<b>Current Assess ID</b>	AFSC-FLSOLEBSAI-1977-2015-SISIMP2016
<b>Area</b>	Bering Sea and Aleutian Islands
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2010, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2015	111,722
<b>Fmsy</b>	Fmsy-pr-1/yr	2010	0.342
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2010	336,027
<b>MSY</b>	MSY-MT	2010	83,321
<b>M</b>	M-1/yr	2010	0.2
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

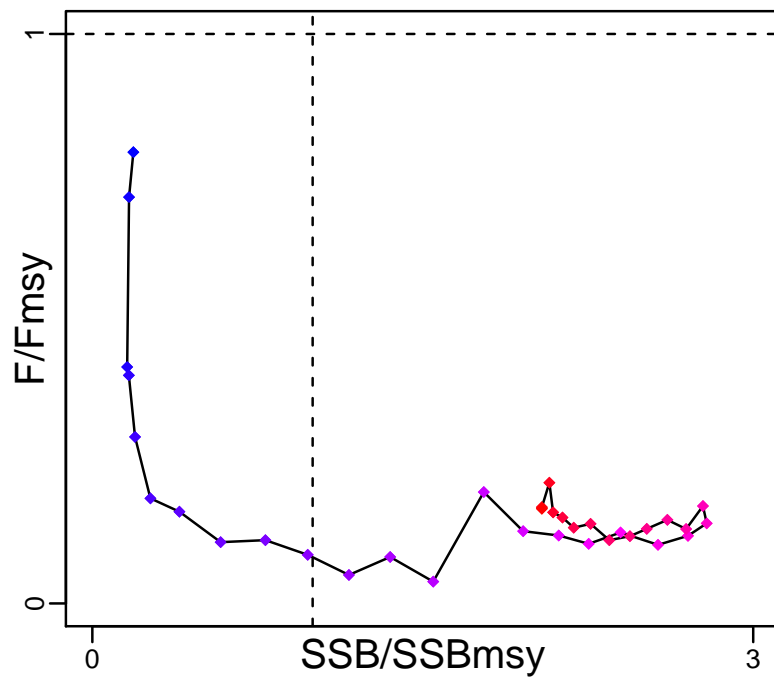
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	738,000	-	3+
<b>SSB</b>	SSB-MT	2015	240,000	Females	9.7+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$1.67 \times 10^9$	-	3
<b>F</b>	F-1/yr	2015	0.045	-	-
<b>ER</b>	ER-calc-ratio	2015	0.021	-	-
<b>TC</b>	TC-MT	2015	15,800		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	2.152		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2010	0.166		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Flathead sole Bering Sea and Aleutian Islands [FLSOLEBSAI]

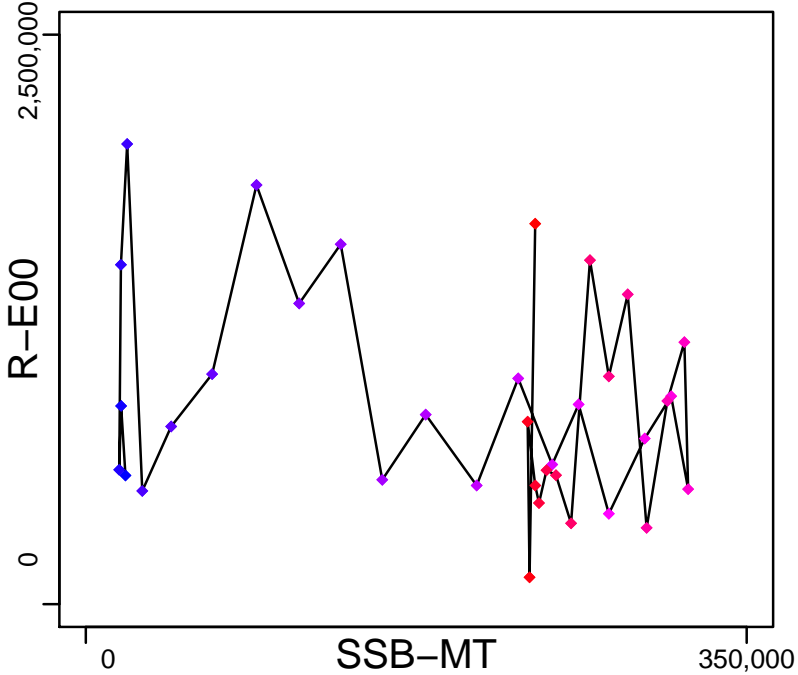
Kobe MSYpref (1974–2010–STACHURA)



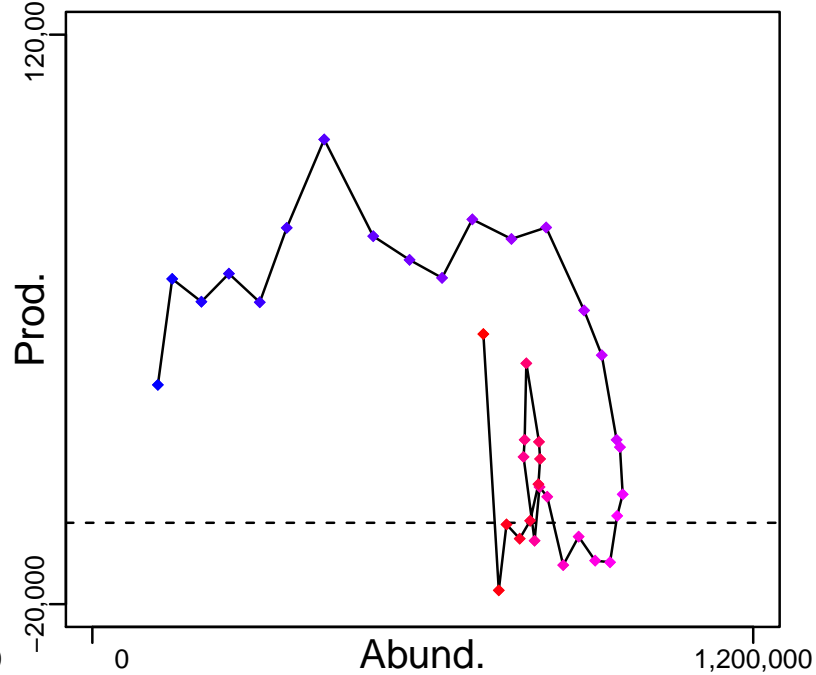
Kobe MGTpref (1974–2010–STACHURA)



Spawner Recruit (1977–2015–SISIMP2016)



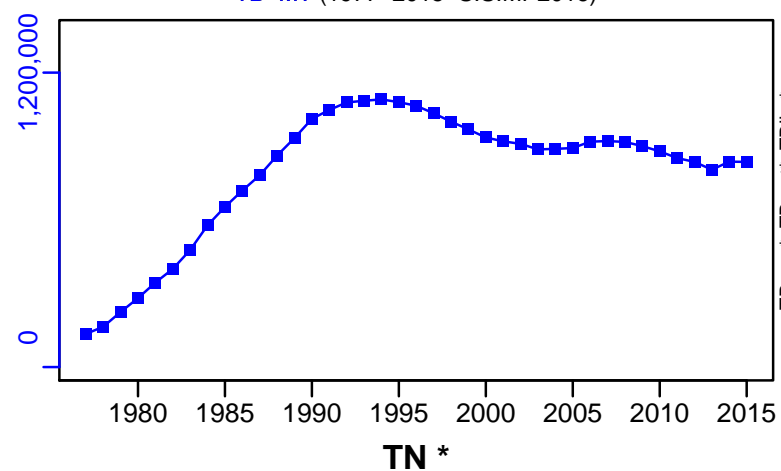
Production (1977–2015–SISIMP2016)



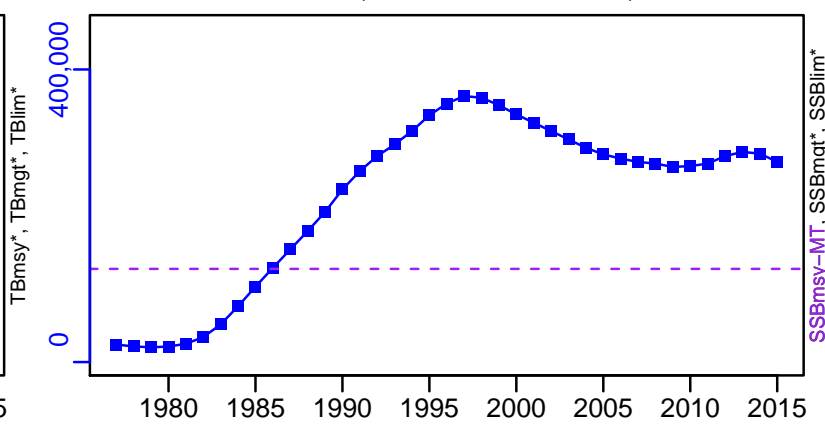
◆ Start Year ◆ End Year \* No Data

# Flathead sole Bering Sea and Aleutian Islands [FLSOLEBSAI]

TB-MT (1977-2015-SISIMP2016)



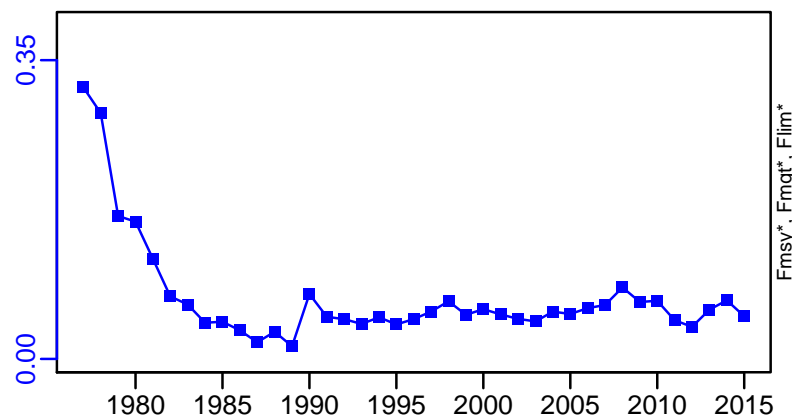
SSB-MT (1977-2015-SISIMP2016)



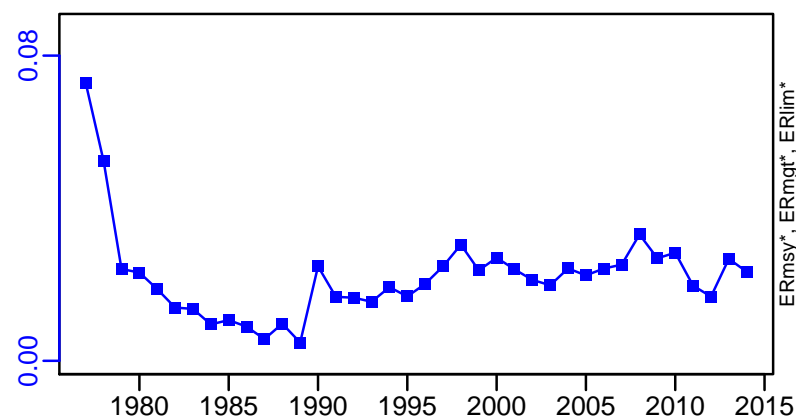
TN \*



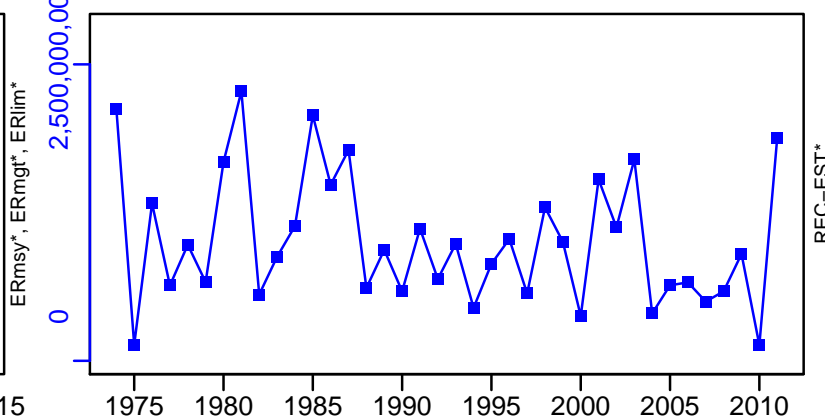
F-1/yr (1977-2015-SISIMP2016)



ER-calc-ratio (1977-2015-SISIMP2016)

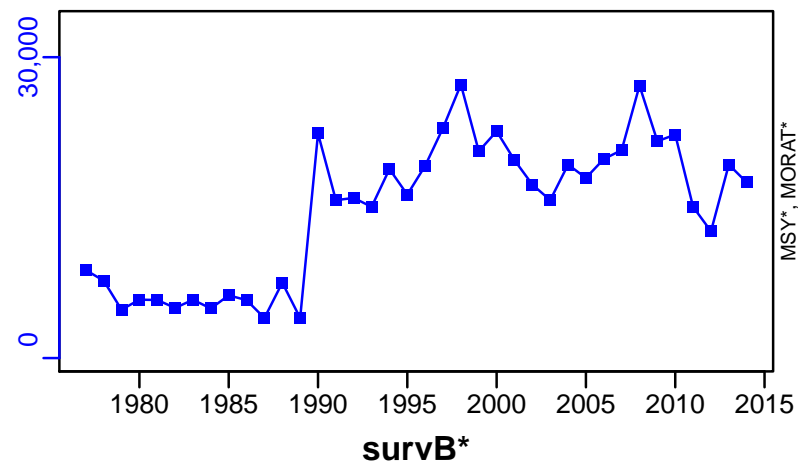


R-E00 (1977-2015-SISIMP2016)

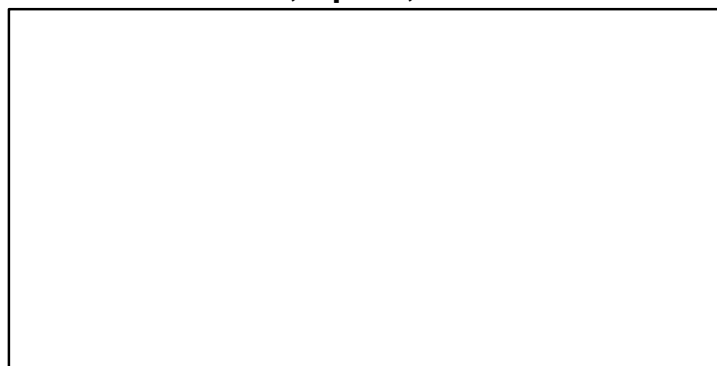


# Flathead sole Bering Sea and Aleutian Islands [FLSOLEBSAI]

TC-MT, TL\*, RecC\* (1977-2015-SISIMP2016)



TAC\*, Cpair\*, Cadv\*



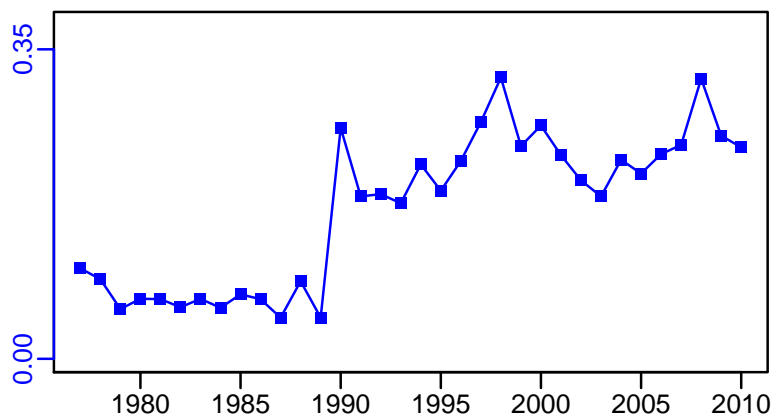
CPUE\*



EFFORT\*



CdivMSY-ratio (1974-2010-STACHURA)



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

## Flathead sole Gulf of Alaska [FLSOLEGA]

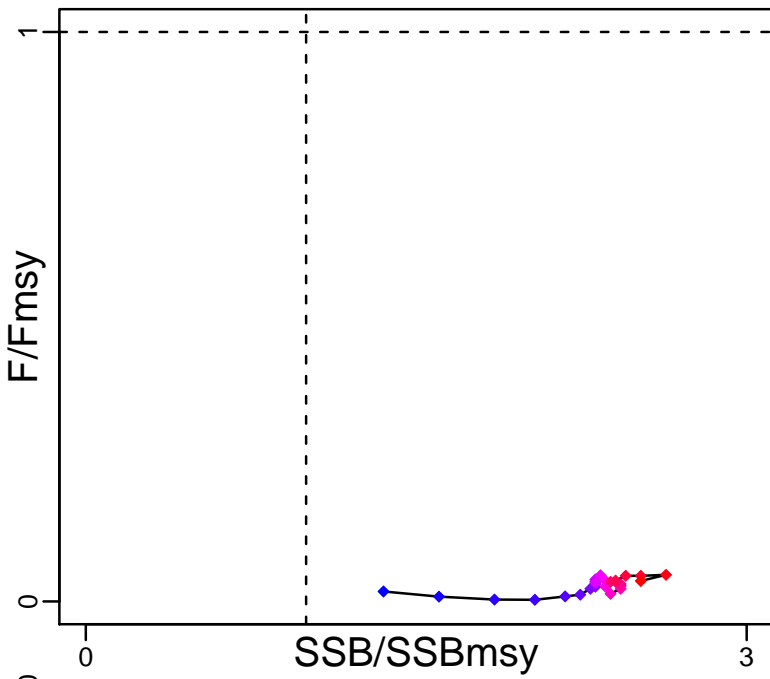
Metadata	
<b>Scientific Name</b>	Hippoglossoides elassodon
<b>Current Assess ID</b>	AFSC-FLSOLEGA-1978-2015-SISIMP2016
<b>Area</b>	Gulf of Alaska
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2010, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2015	32,258
<b>Fmsy</b>	Fmsy-pr-1/yr	2010	0.481
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2010	0.2
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

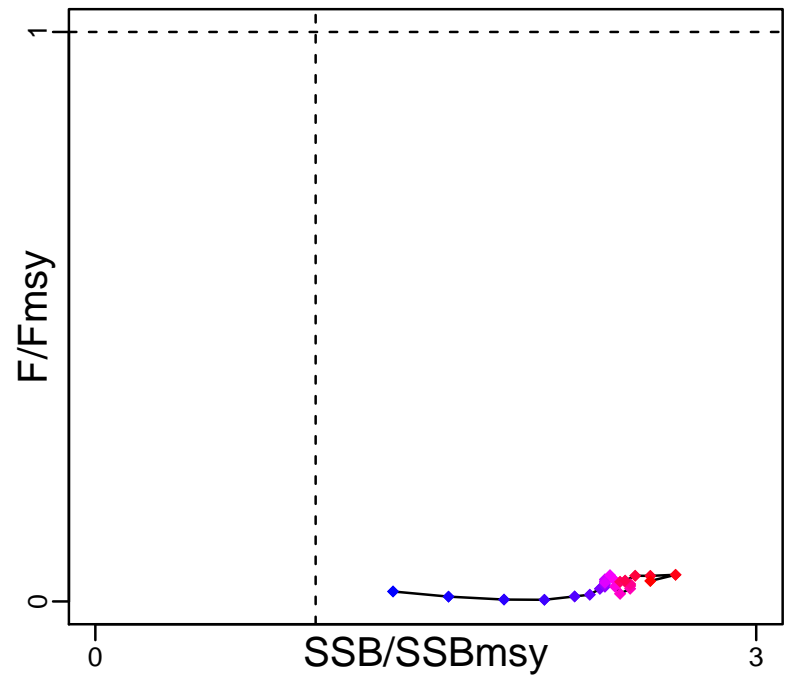
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	258,000	-	3+
<b>SSB</b>	SSB-MT	2015	82,000	Females	8.7+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$3.72 \times 10^8$	-	0
<b>F</b>	F-1/yr	2015	0.016	-	-
<b>ER</b>	ER-calc-ratio	2015	0.011	-	-
<b>TC</b>	TC-MT	2015	2560		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	2.542		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2010	0.036		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Flathead sole Gulf of Alaska [FLSOLEGA]

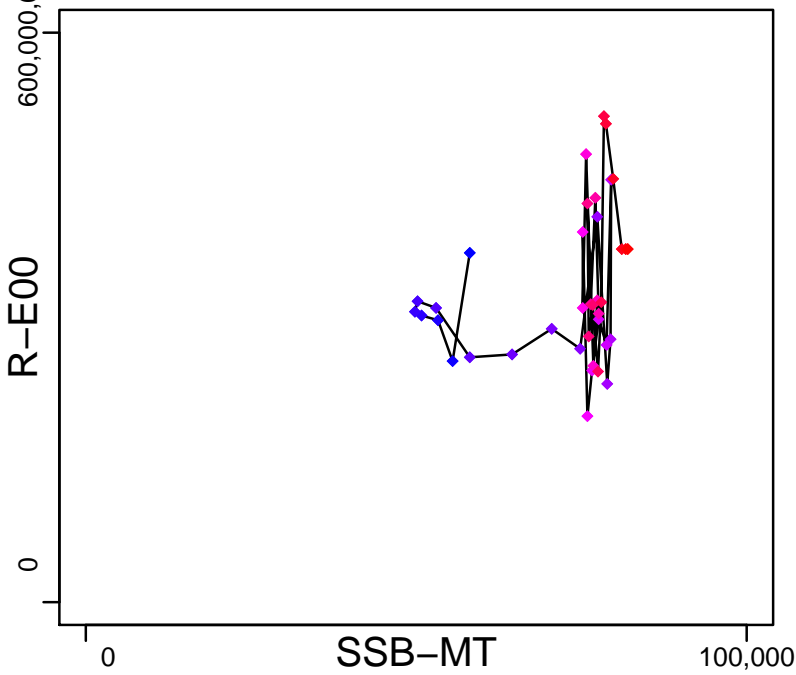
Kobe MSYpref (1978–2010–STACHURA)



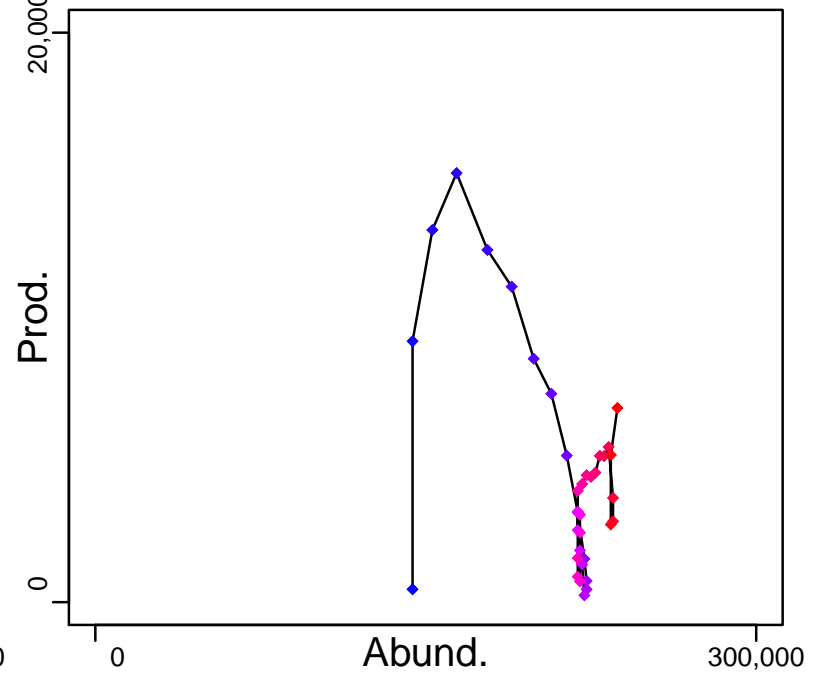
Kobe MGTpref (1978–2010–STACHURA)



Spawner Recruit (1978–2015–SISIMP2016)



Production (1978–2015–SISIMP2016)

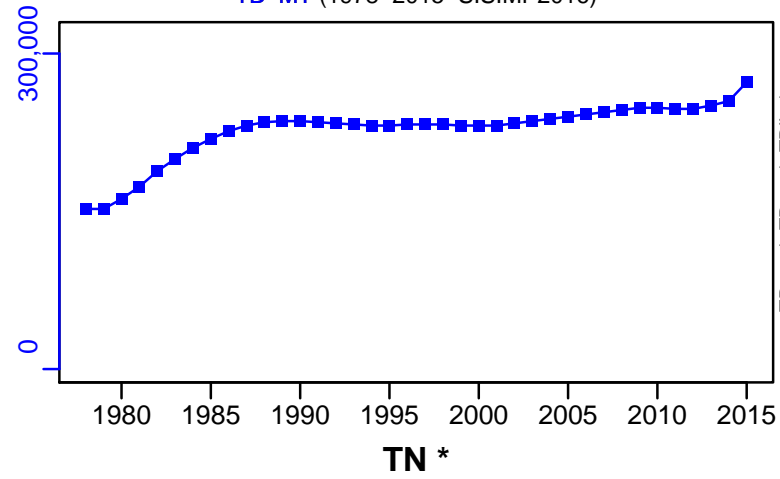


◆ Start Year ◆ End Year \* No Data

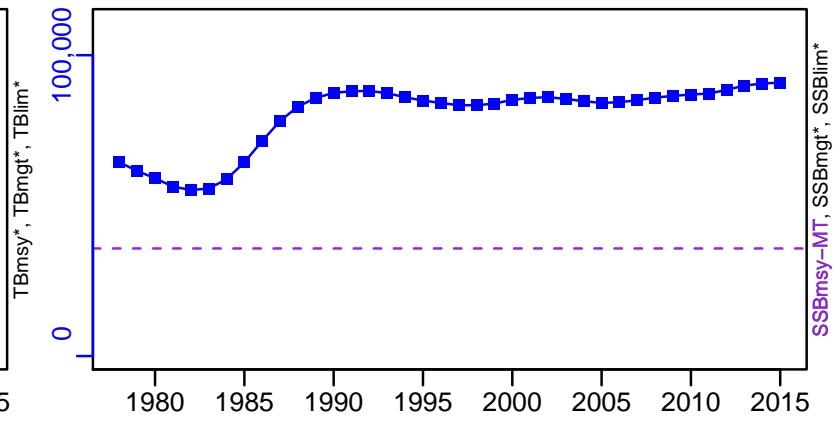


# Flathead sole Gulf of Alaska [FLSOLEGA]

TB-MT (1978–2015–SISIMP2016)

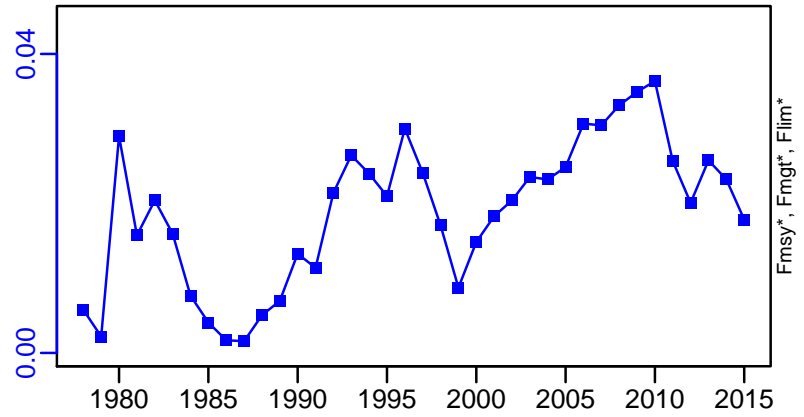
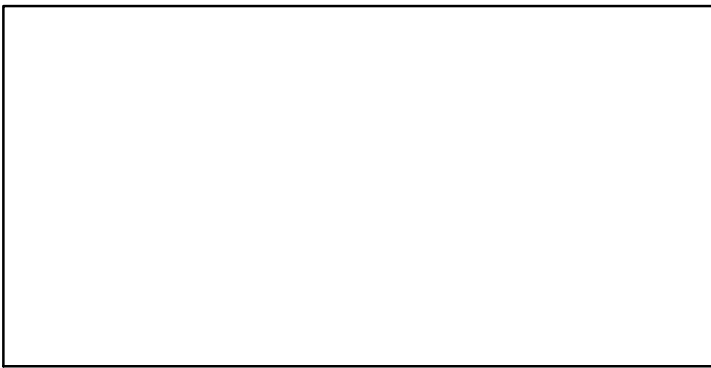


SSB-MT (1978–2015–SISIMP2016)

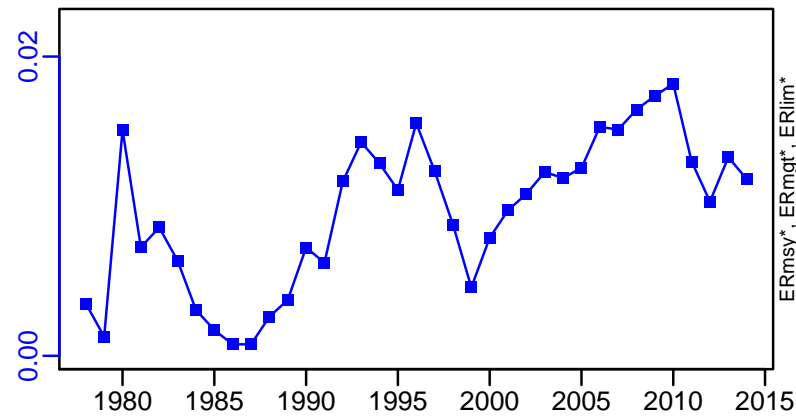


TN \*

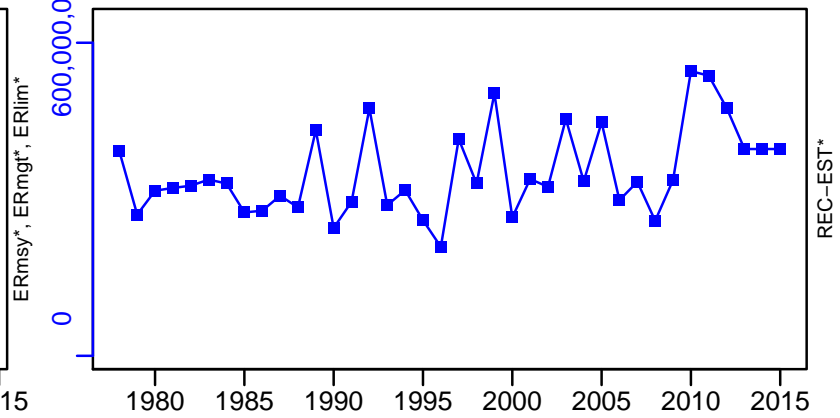
F-1/yr (1978–2015–SISIMP2016)



ER-calc-ratio (1978–2015–SISIMP2016)

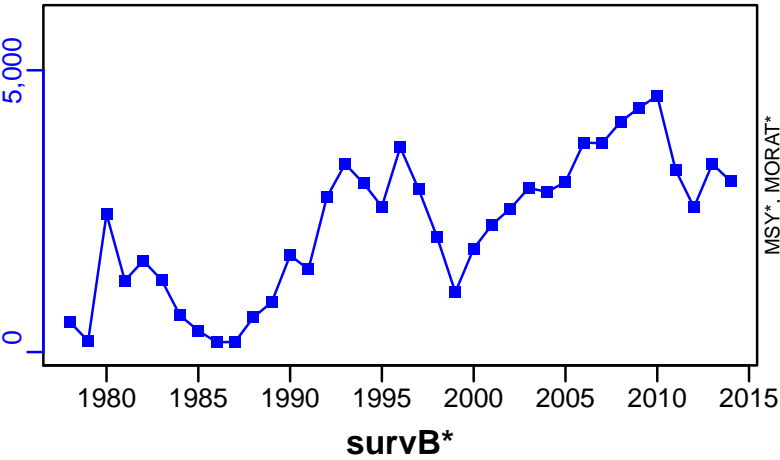


R-E00 (1978–2015–SISIMP2016)

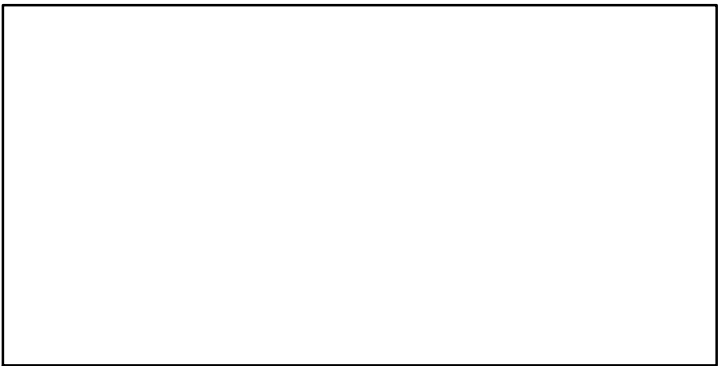


Flathead sole Gulf of Alaska [FLSOLEGA]

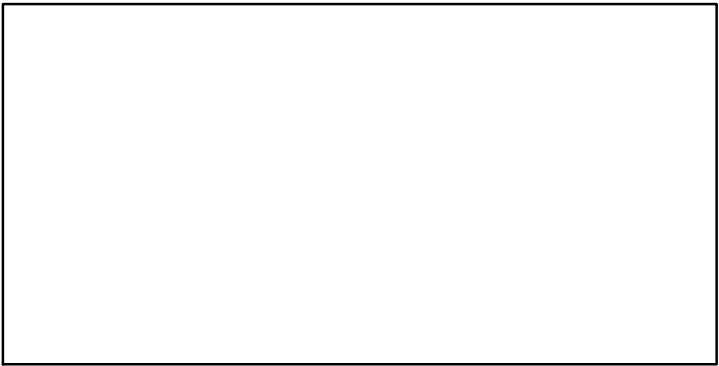
TC-MT, TL\*, RecC\* (1978-2015-SISIMP2016)



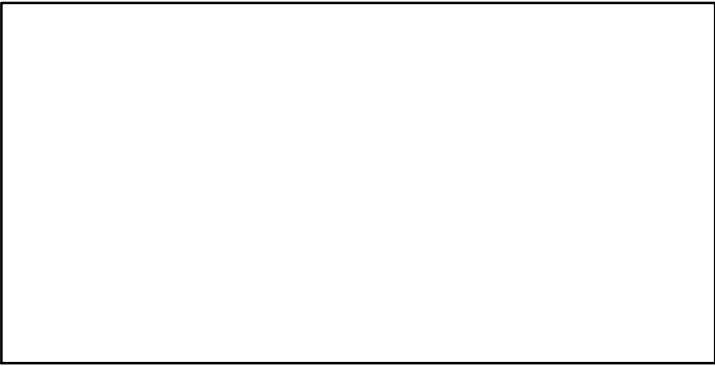
TAC\*, Cpair\*, Cadv\*



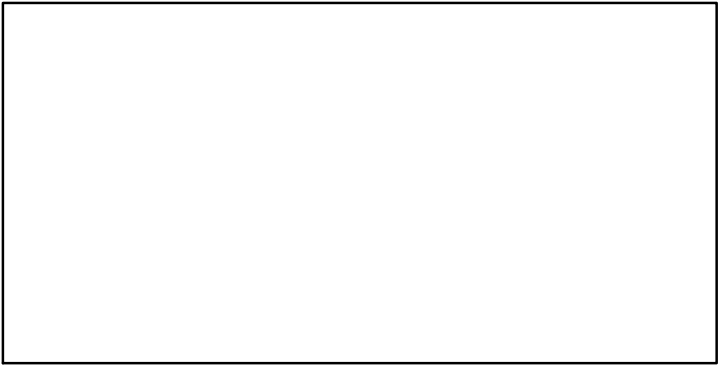
CPUE\*



EFFORT\*



CdivMSY\*



## Greenland turbot Bering Sea and Aleutian Islands [GHALBSAI]

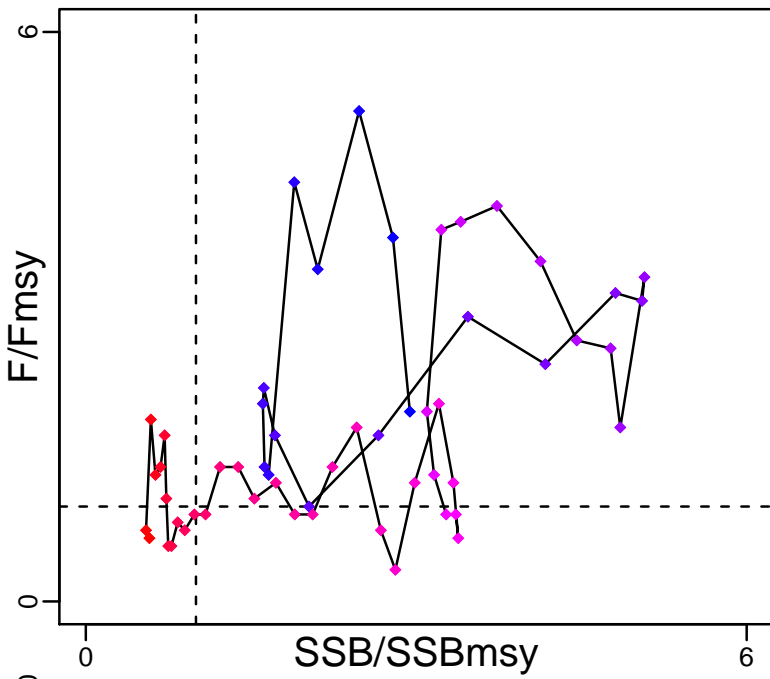
Metadata	
<b>Scientific Name</b>	Reinhardtius hippoglossoides
<b>Current Assess ID</b>	AFSC-GHALBSAI-1960-2015-HIVELY
<b>Area</b>	Bering Sea and Aleutian Islands
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-pr-MT	2015	45,543
<b>Fmsy</b>	Fmsy-pr-1/yr	2015	0.12
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2015	0.11
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

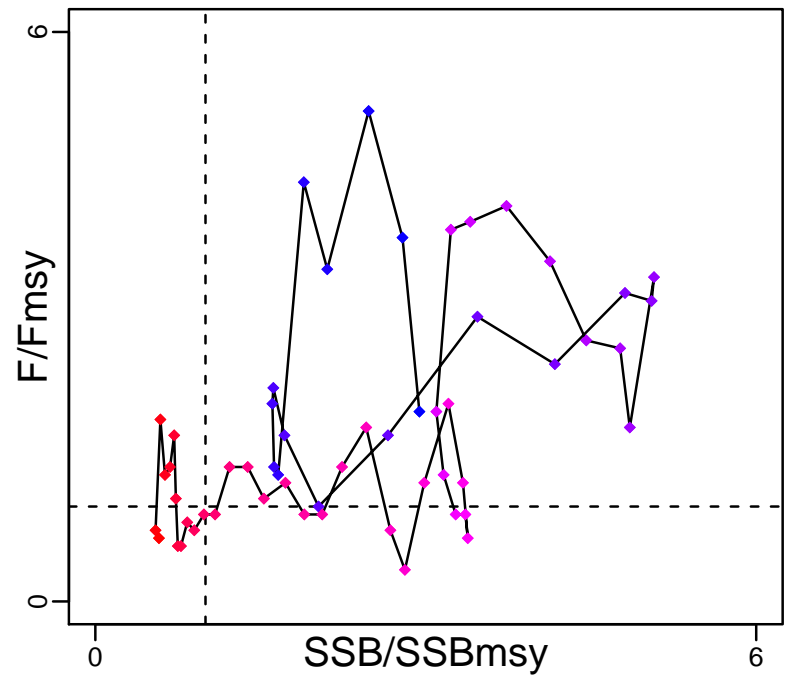
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	122,000	-	1+
<b>SSB</b>	SSB-MT	2015	30,900	Females	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	12,600,000	-	0
<b>F</b>	F-1/yr	2015	0.08	-	-
<b>ER</b>	ER-ratio	2015	0.02	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2015	1650		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-pr-MT	2015	0.678		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2015	0.667		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Greenland turbot Bering Sea and Aleutian Islands [GHALBSAI]

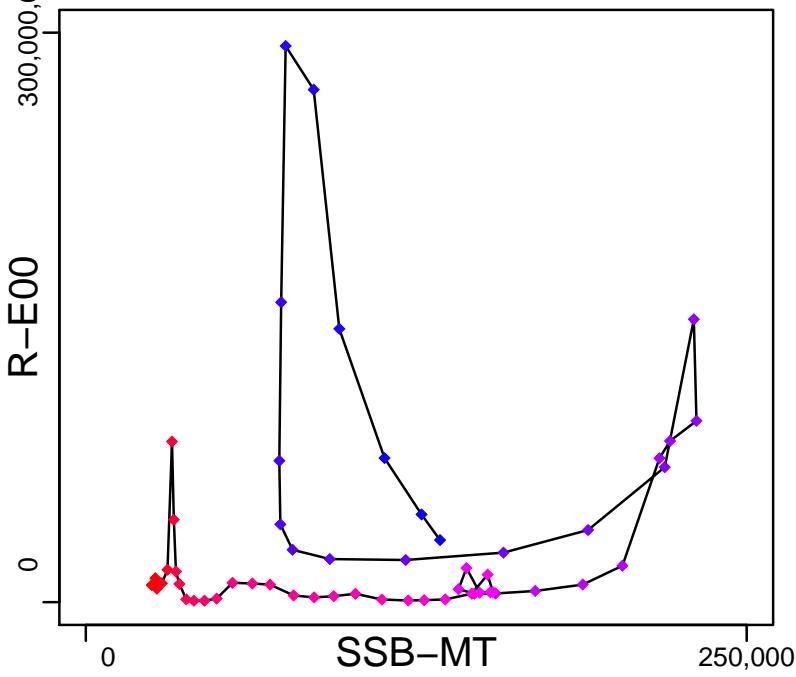
Kobe MSYpref (1960–2015–HIVELY)



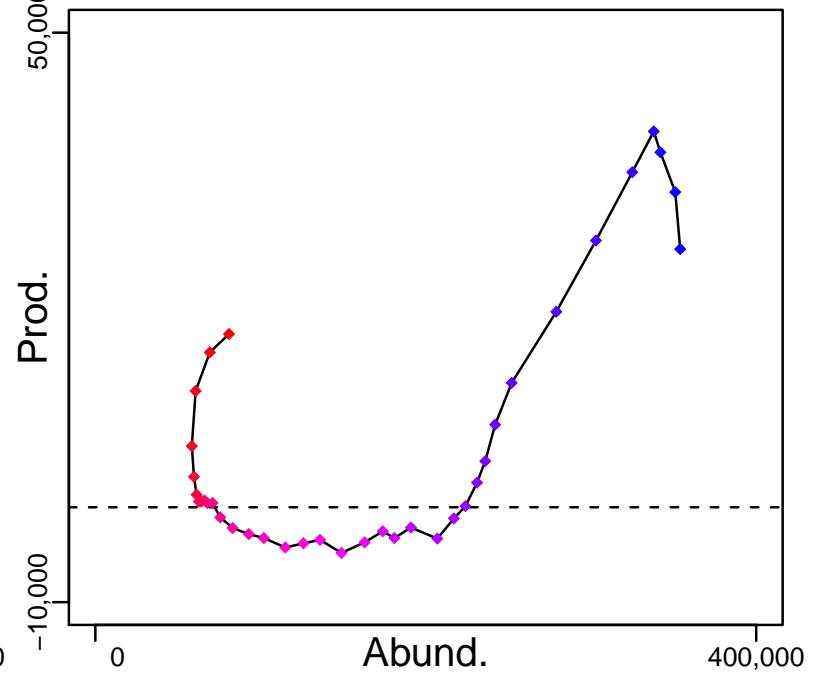
Kobe MGTpref (1960–2015–HIVELY)



Spawner Recruit (1960–2015–HIVELY)



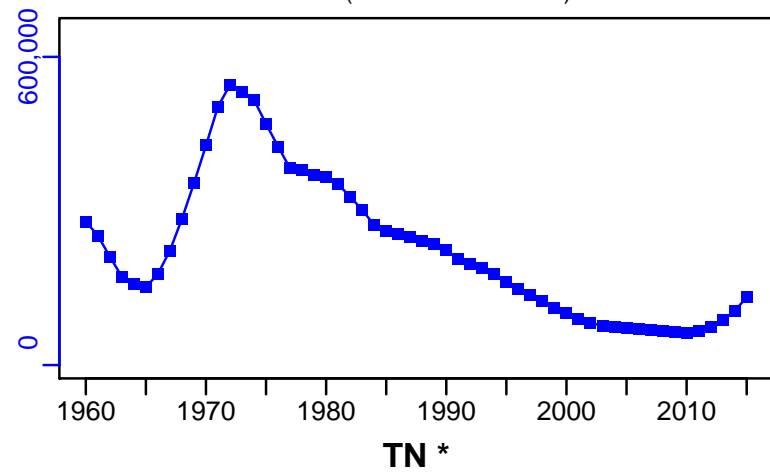
Production (1960–2015–HIVELY)



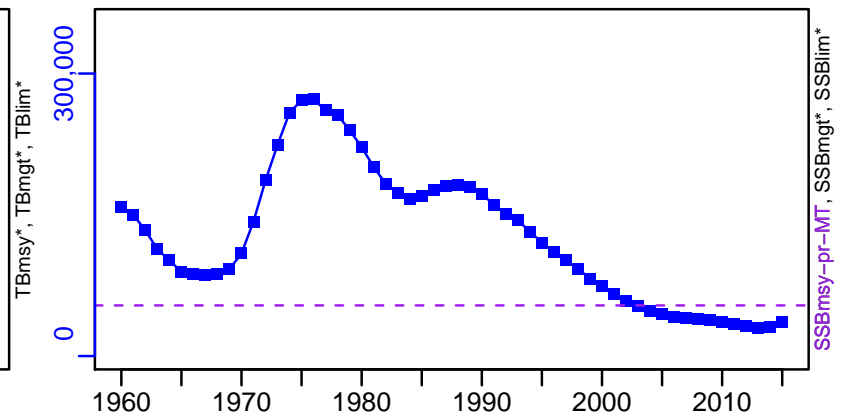
◆ Start Year ◆ End Year \* No Data

# Greenland turbot Bering Sea and Aleutian Islands [GHALBSAI]

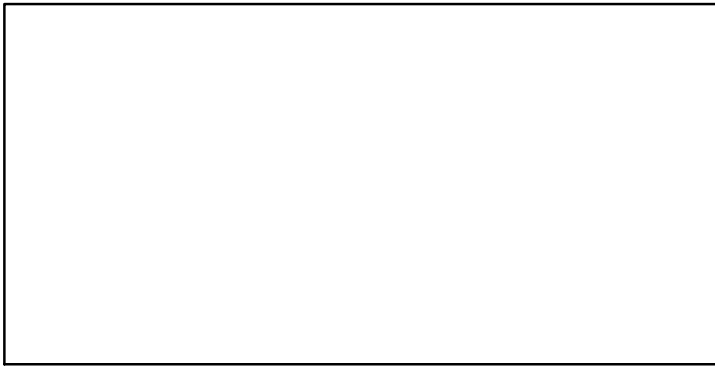
TB-MT (1960–2015–HIVELY)



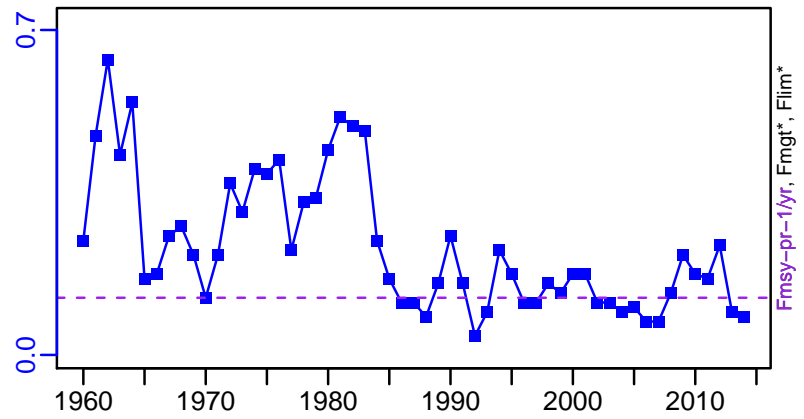
SSB-MT (1960–2015–HIVELY)



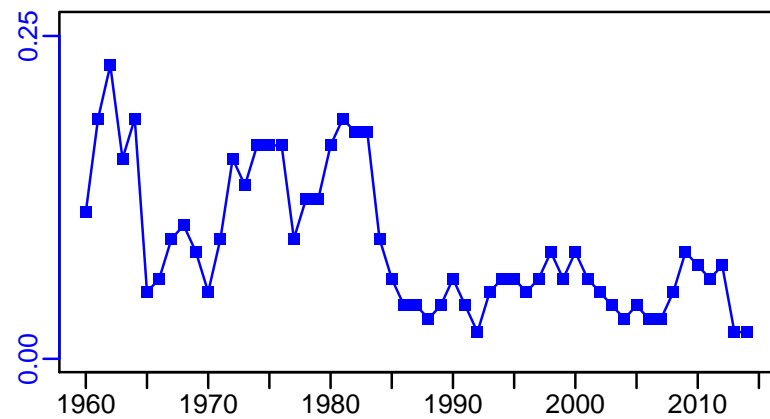
TN \*



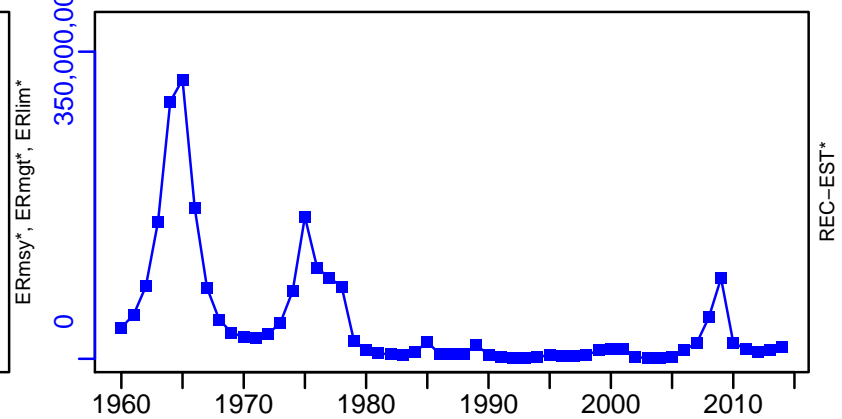
F-1/yr (1960–2015–HIVELY)



ER-ratio (1960–2015–HIVELY)



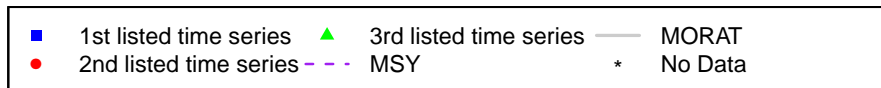
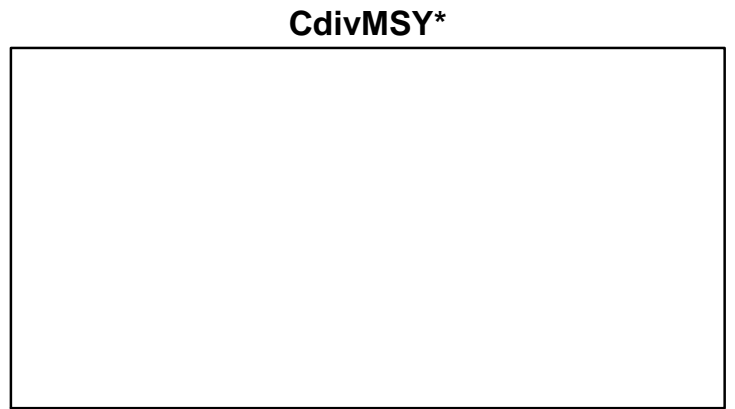
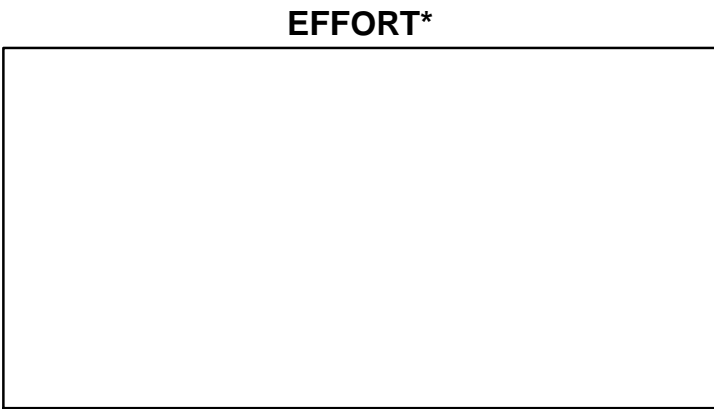
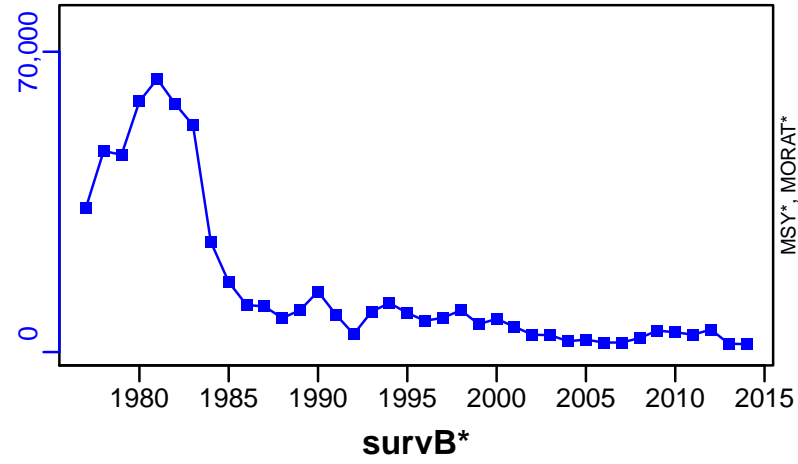
R-E00 (1960–2015–HIVELY)



# Greenland turbot Bering Sea and Aleutian Islands [GHALBSAI]

TL-MT, TC\*, RecC\* (1960–2015–HIVELY)

TAC\*, Cpair\*, Cadv\*



## Giant Pacific octopus Bering Sea and Aleutian Islands [GPOCTOBSAI]

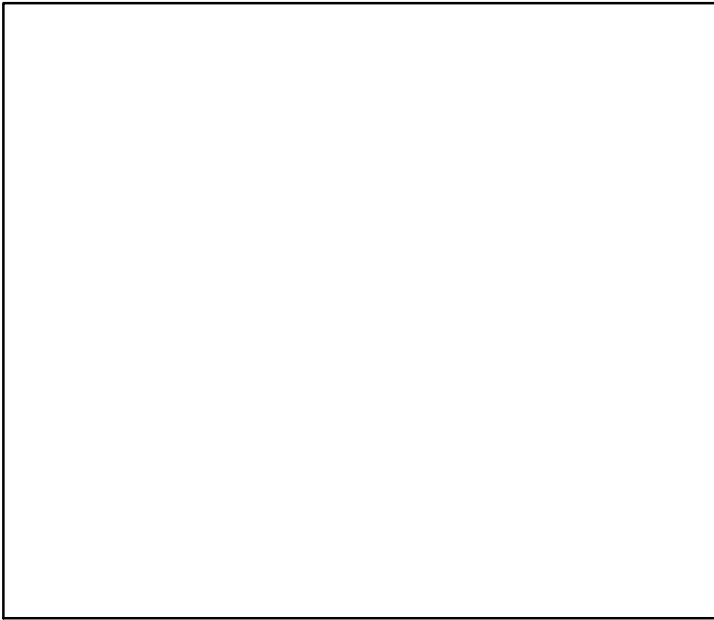
Metadata	
<b>Scientific Name</b>	Enteroctopus dofleini
<b>Current Assess ID</b>	AFSC-GPOCTOBSAI-1997-2014-SISIMP2016
<b>Area</b>	Bering Sea and Aleutian Islands
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2014

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

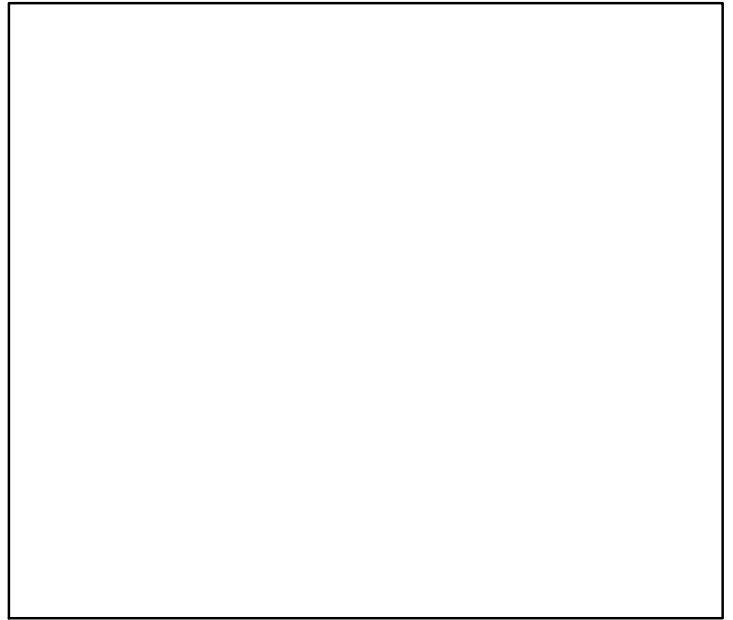
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2014	422		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Giant Pacific octopus Bering Sea and Aleutian Islands [GPOCTOBSAI]

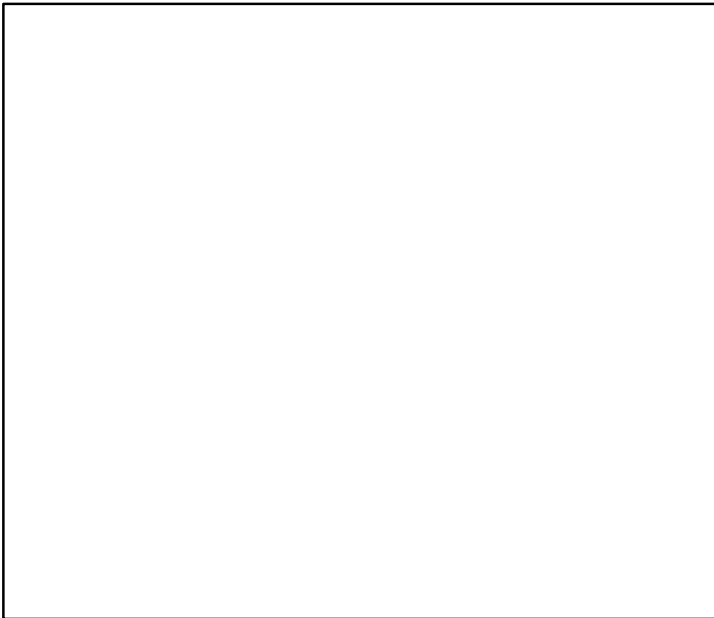
**Kobe MSY\***



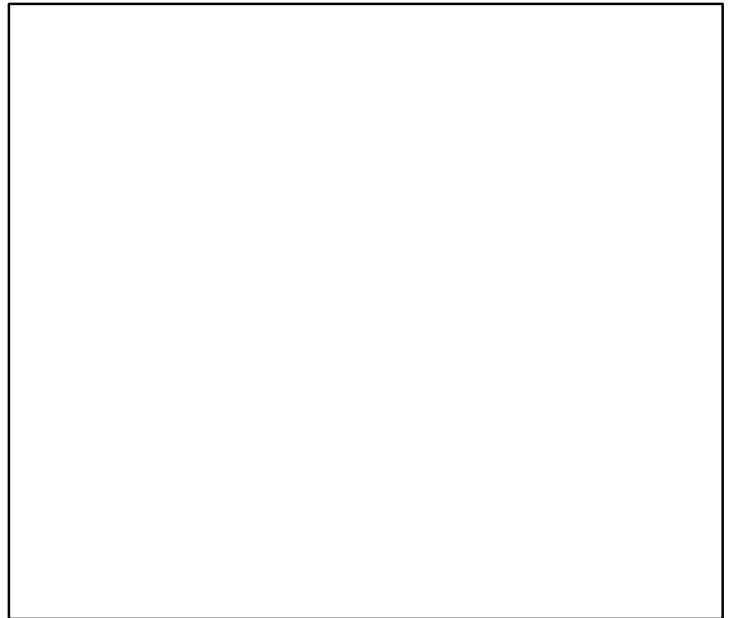
**Kobe MGT\***



**Spawner Recruit\***



**Production\***

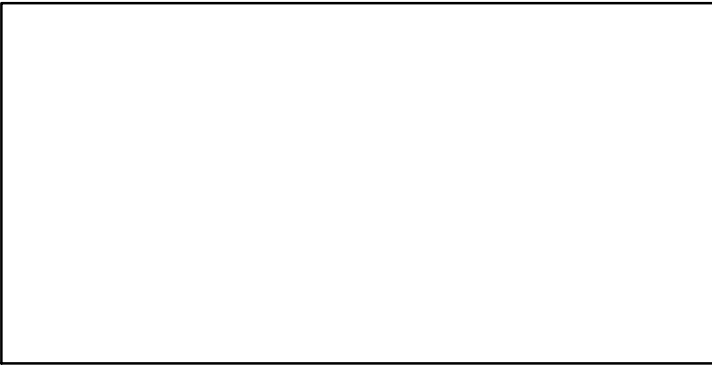


◆ Start Year ◆ End Year \* No Data

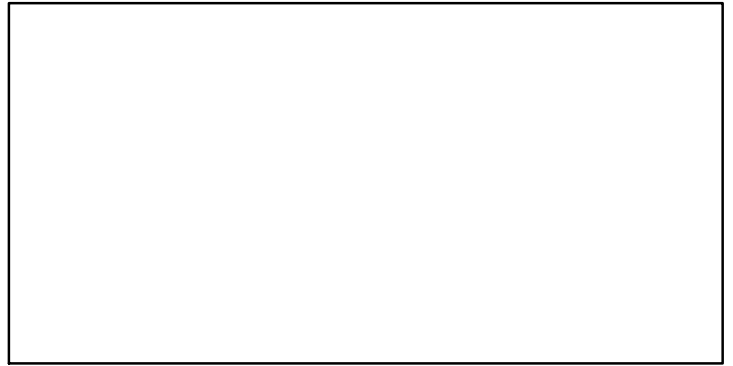


Giant Pacific octopus Bering Sea and Aleutian Islands [GPOCTOBSAI]

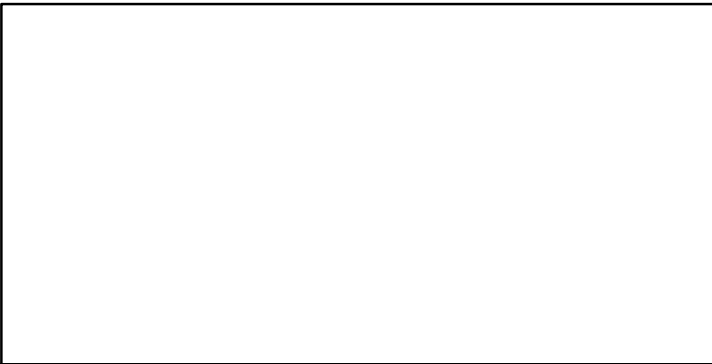
**TB\***



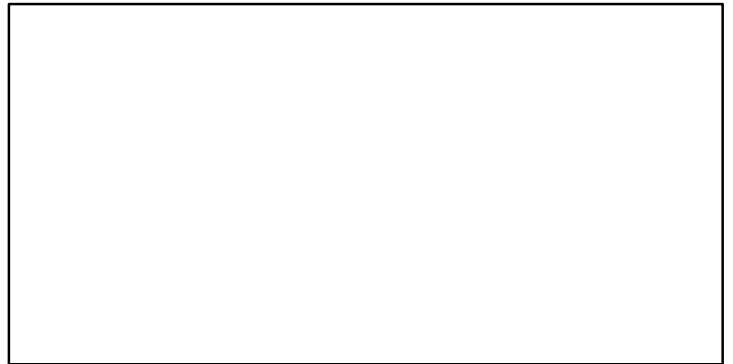
**SSB\***



**TN \***



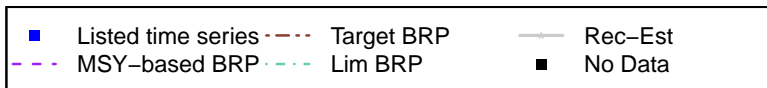
**F\***



**ER\***



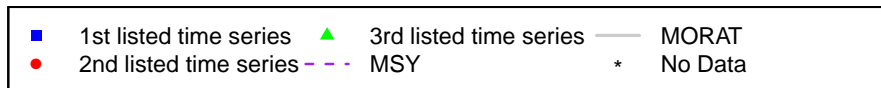
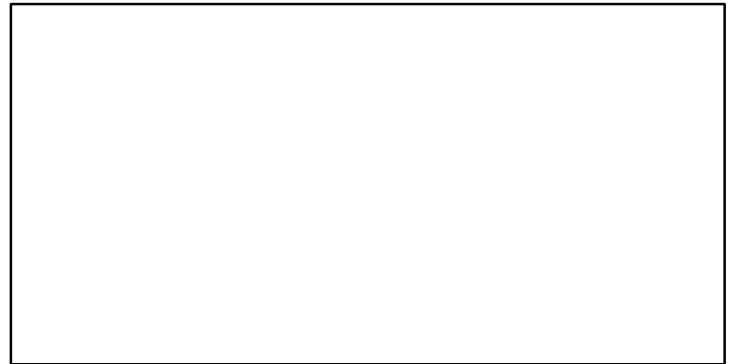
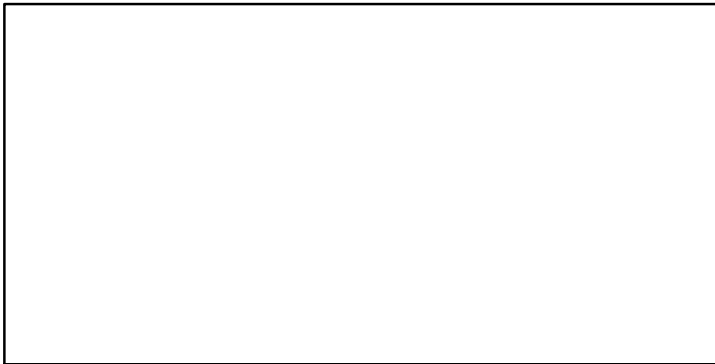
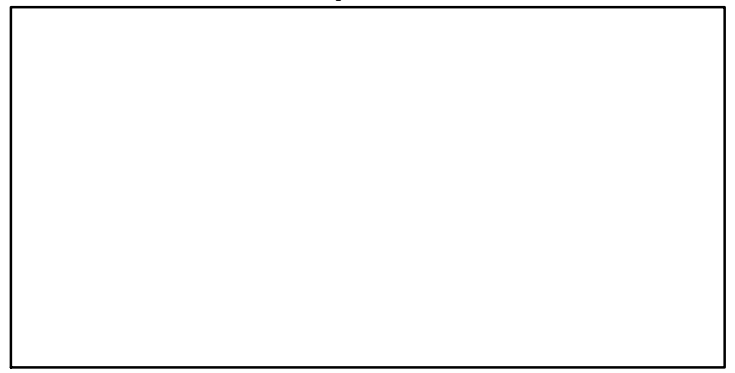
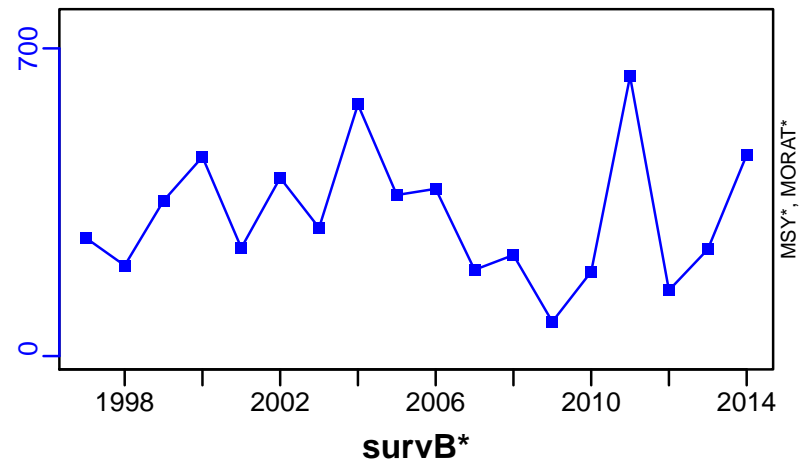
**Recruits\***



# Giant Pacific octopus Bering Sea and Aleutian Islands [GPOCTOBSAI]

TC-MT, TL\*, RecC\* (1997-2014-SISIMP2016)

TAC\*, Cpair\*, Cadv\*

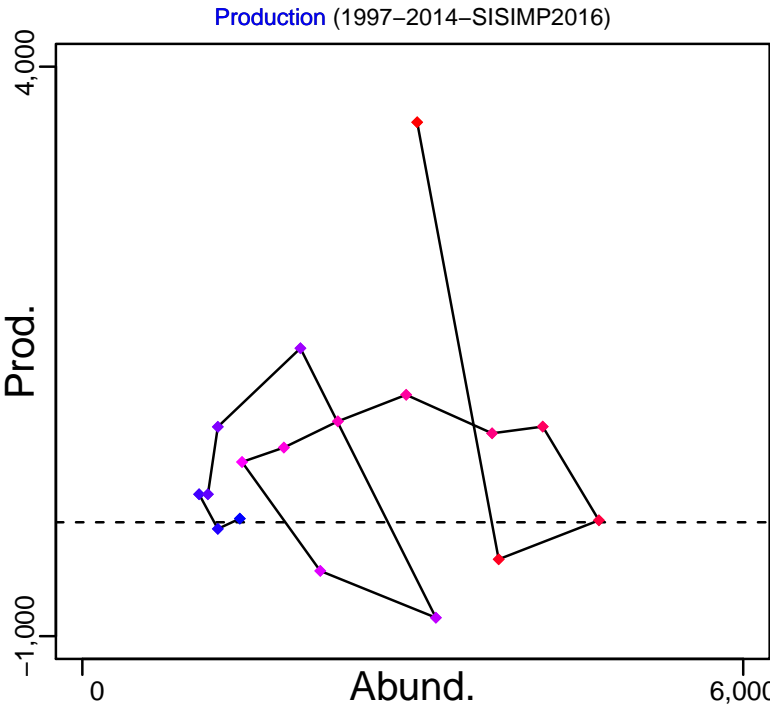
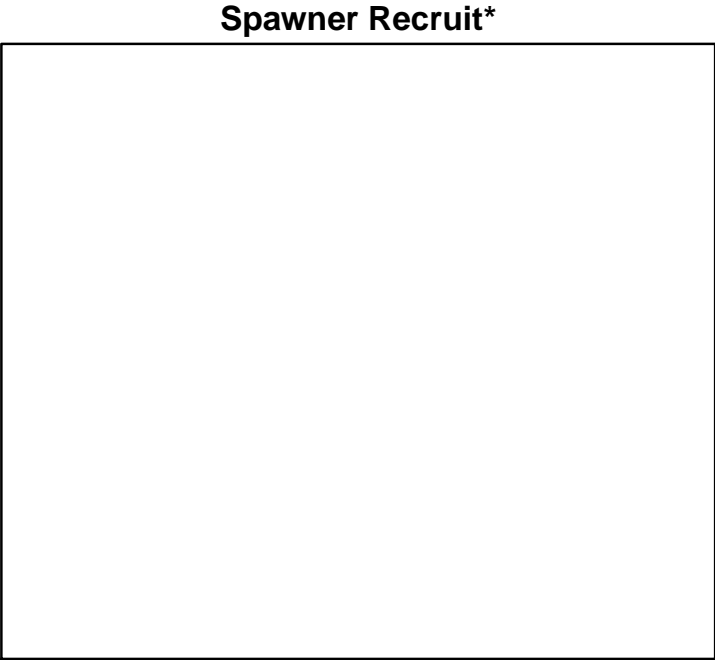
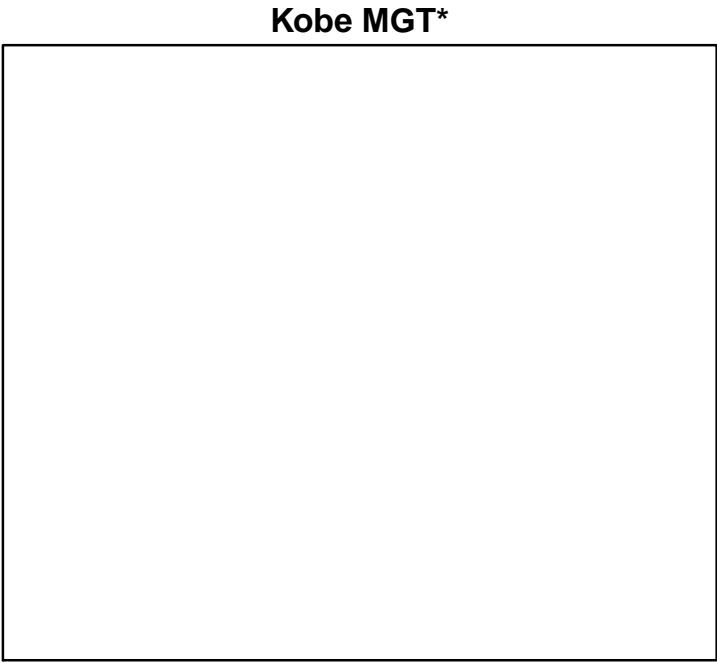
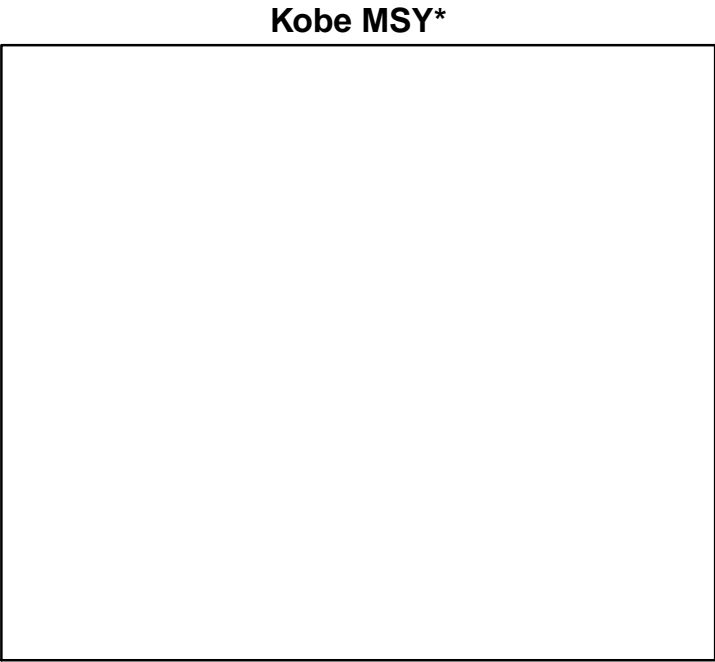


## Giant Pacific octopus Gulf of Alaska [GPOCTOGA]

Metadata	
<b>Scientific Name</b>	Enteroctopus dofleini
<b>Current Assess ID</b>	AFSC-GPOCTOGA-1997-2014-SISIMP2016
<b>Area</b>	Gulf of Alaska
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2014

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	TB-MT	2014	12,300	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2014	0.212	-	-
TC	TC-MT	2014	1300		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

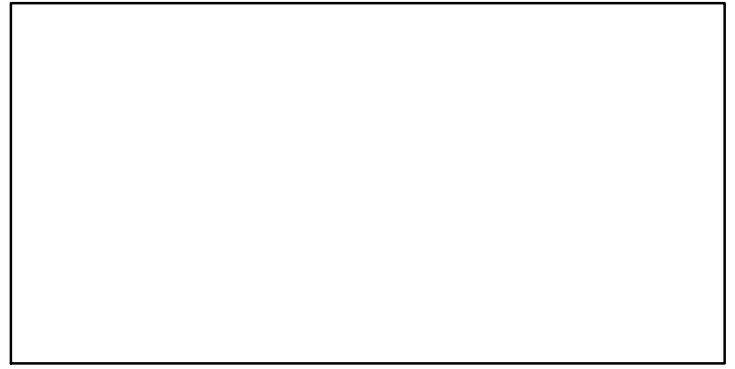
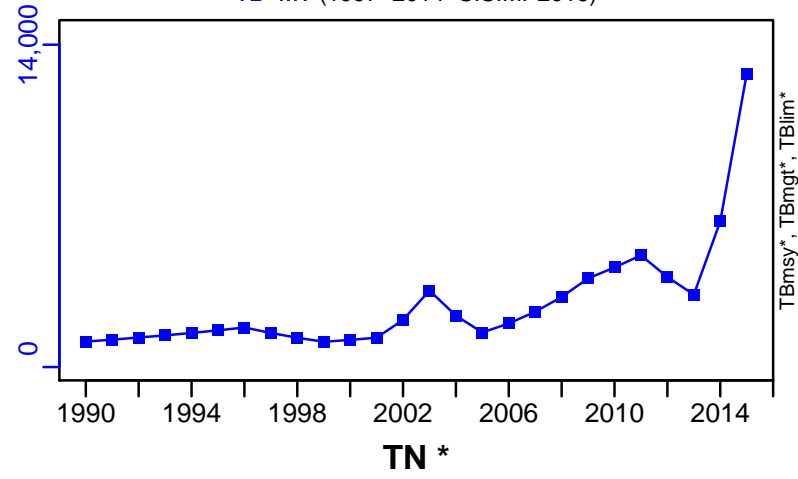


◆ Start Year ◆ End Year \* No Data

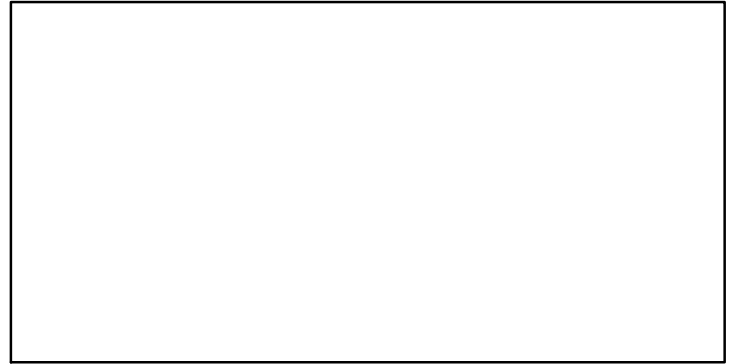
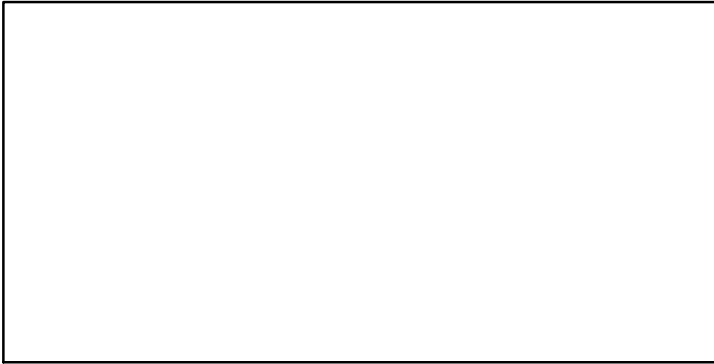
# Giant Pacific octopus Gulf of Alaska [GPOCTOGA]

TB-MT (1997–2014–SISIMP2016)

SSB\*

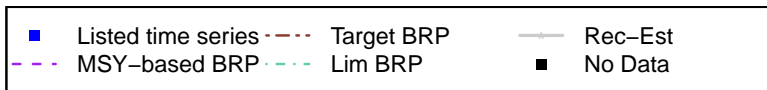
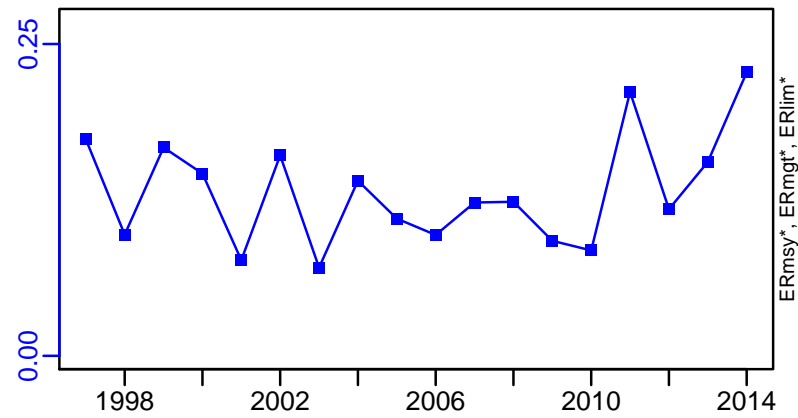


F\*



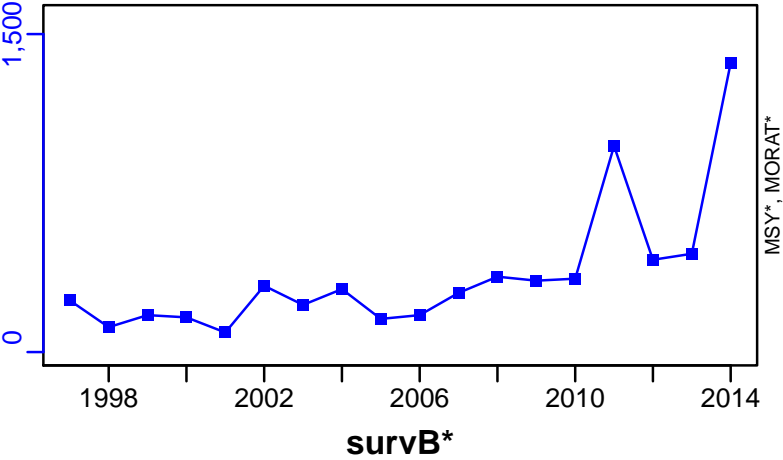
ER-calc-ratio (1997–2014–SISIMP2016)

Recruits\*



Giant Pacific octopus Gulf of Alaska [GPOCTOGA]

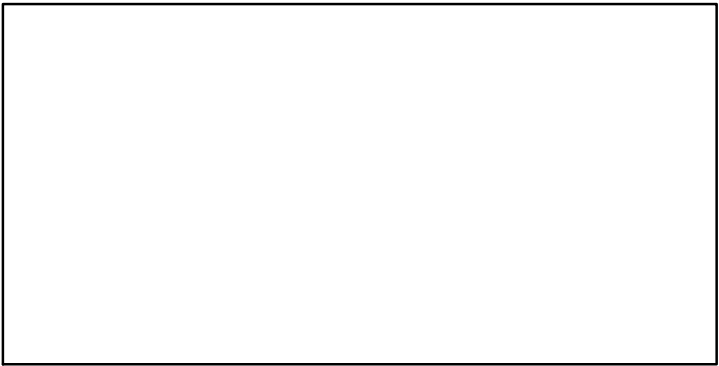
TC-MT, TL\*, RecC\* (1997-2014-SISIMP2016)



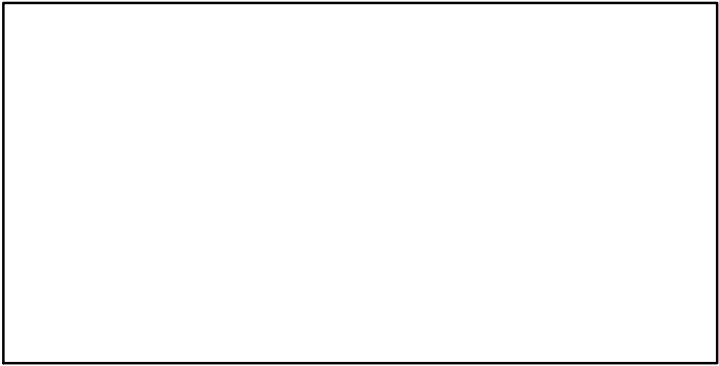
TAC\*, Cpair\*, Cadv\*



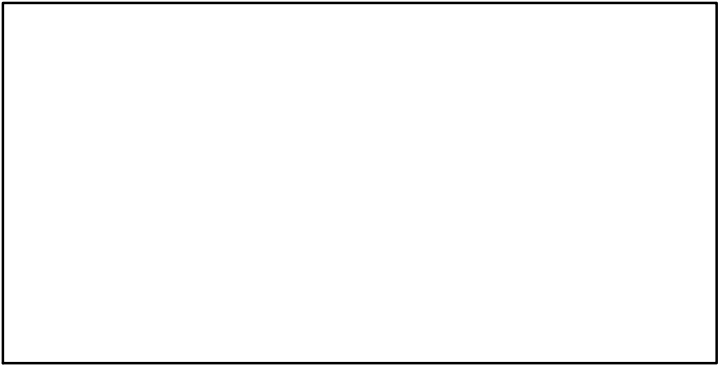
CPUE\*



EFFORT\*



CdivMSY\*



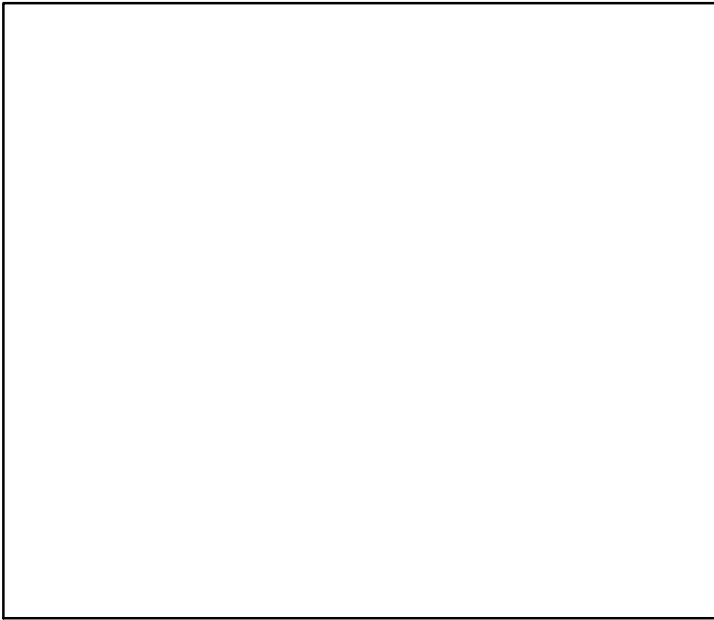
## Pacific herring Prince William Sound [HERRPWS]

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

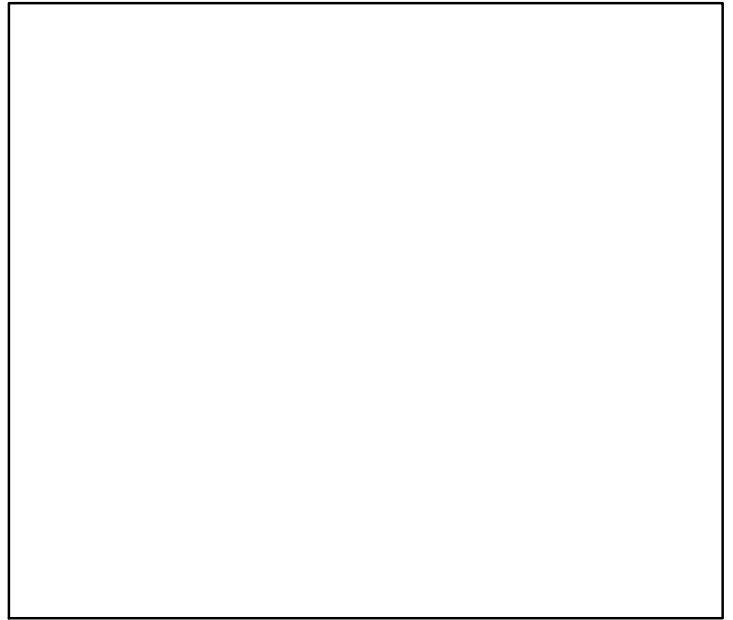
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2006	0.25
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

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	-	-	-	-	-
TC	TC-E00	2006	0		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

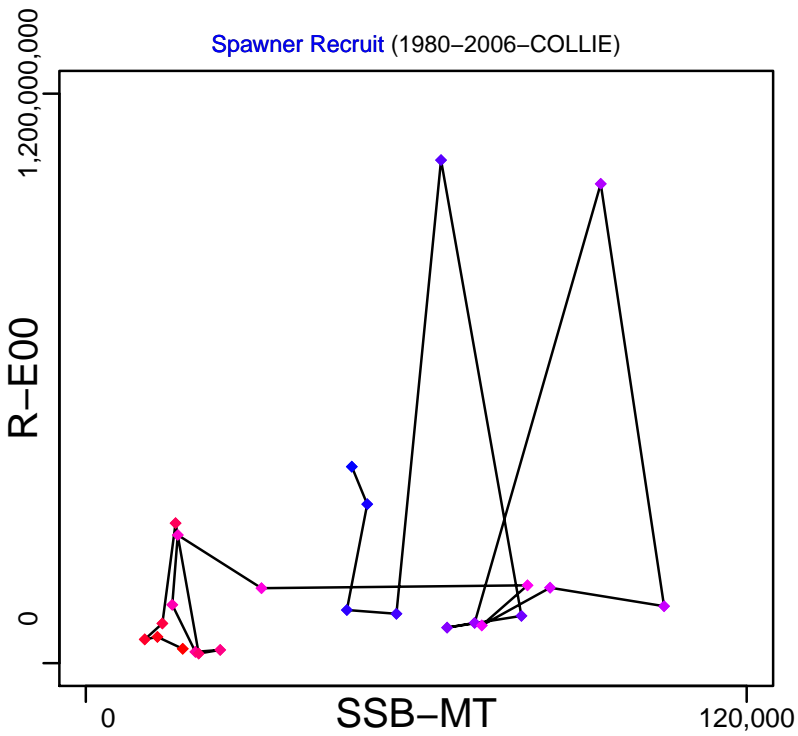
**Kobe MSY\***



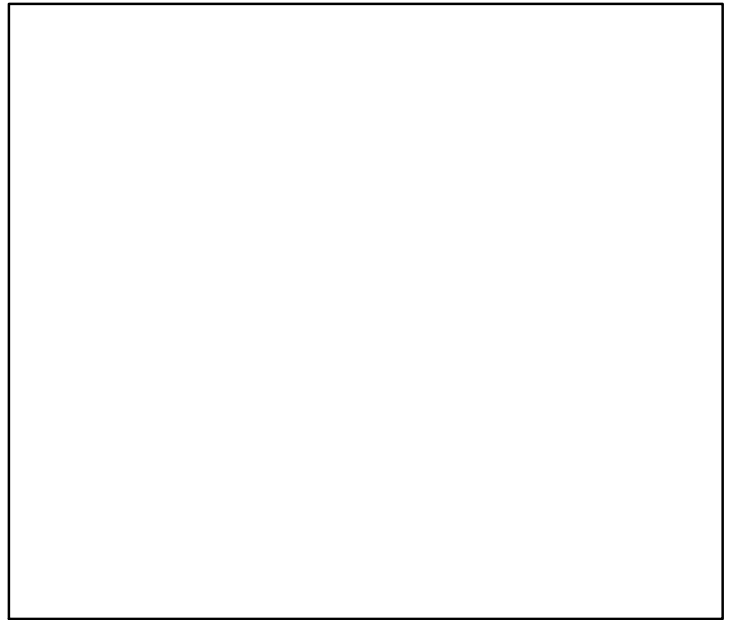
**Kobe MGT\***



Spawner Recruit (1980–2006–COLLIE)



**Production\***

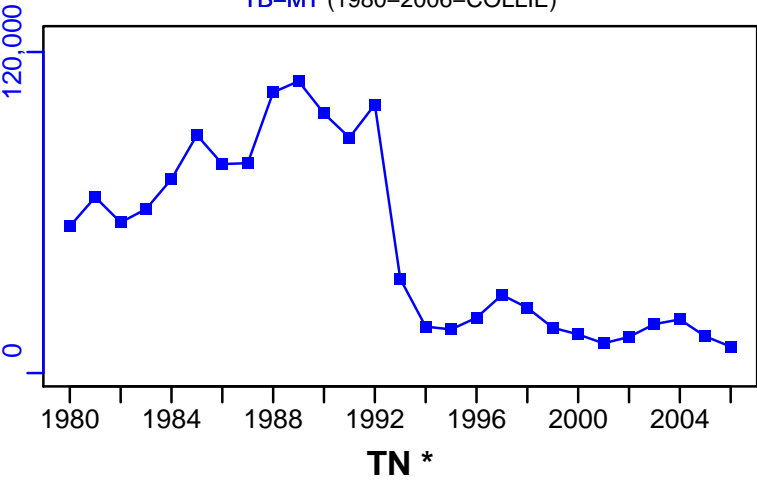


◆ Start Year ◆ End Year \* No Data

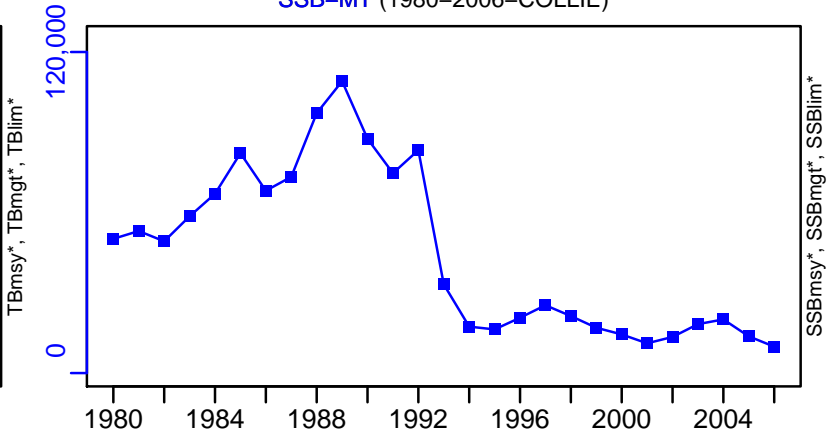


# Pacific herring Prince William Sound [HERRPWS]

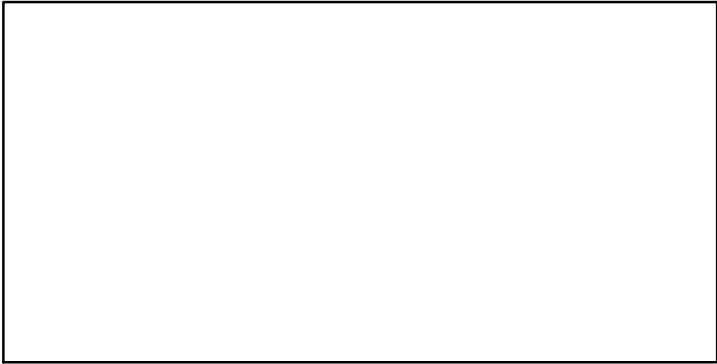
TB-MT (1980-2006-COLLIE)



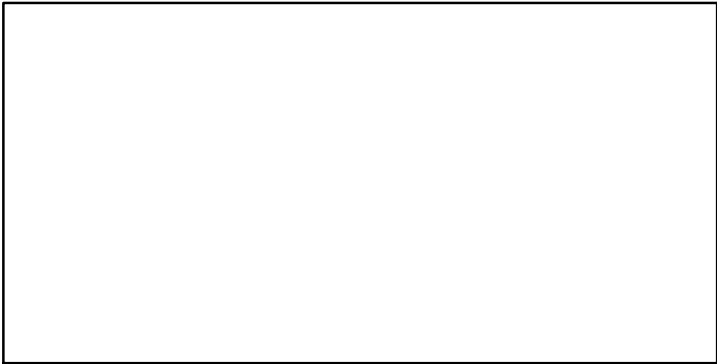
SSB-MT (1980-2006-COLLIE)



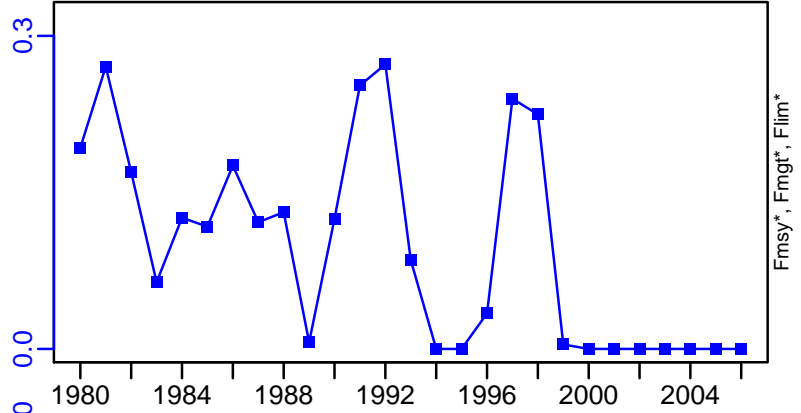
TN \*



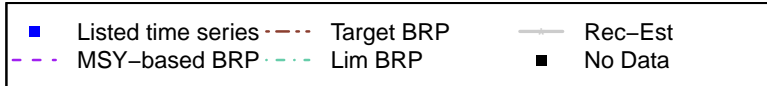
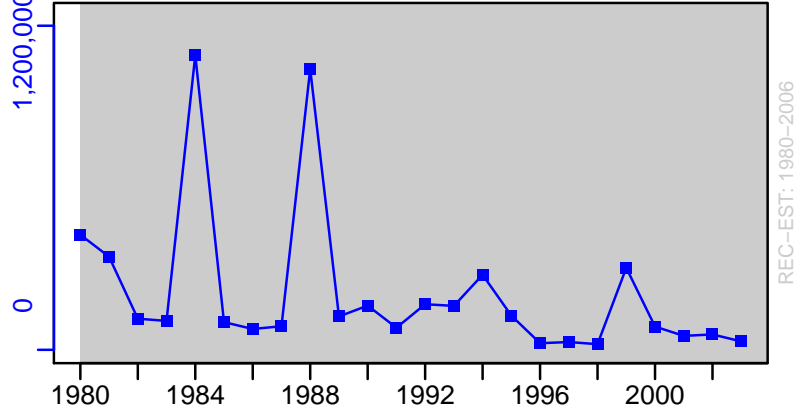
ER\*



F-1/yr (1980-2006-COLLIE)



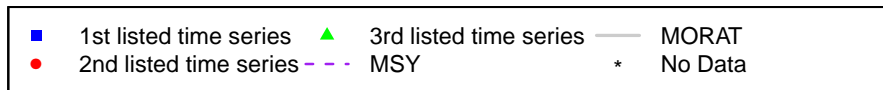
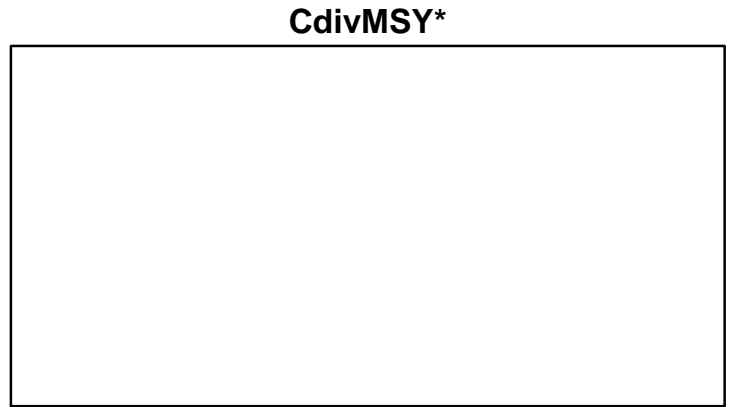
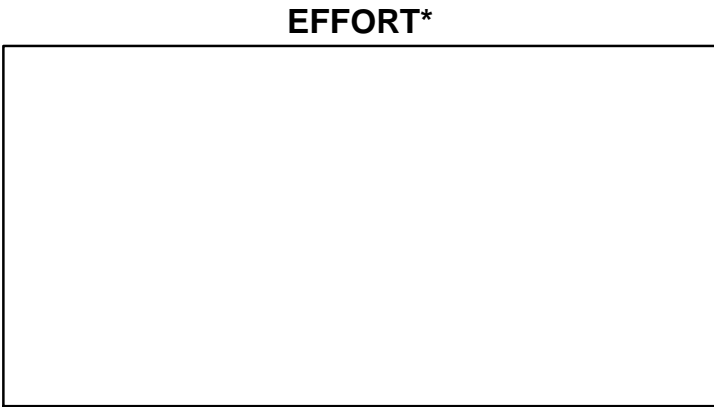
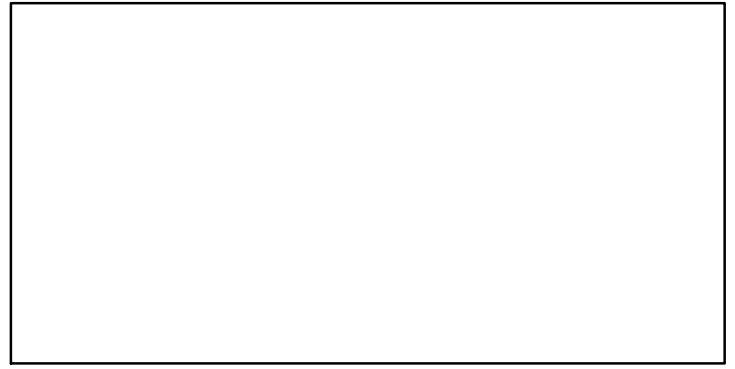
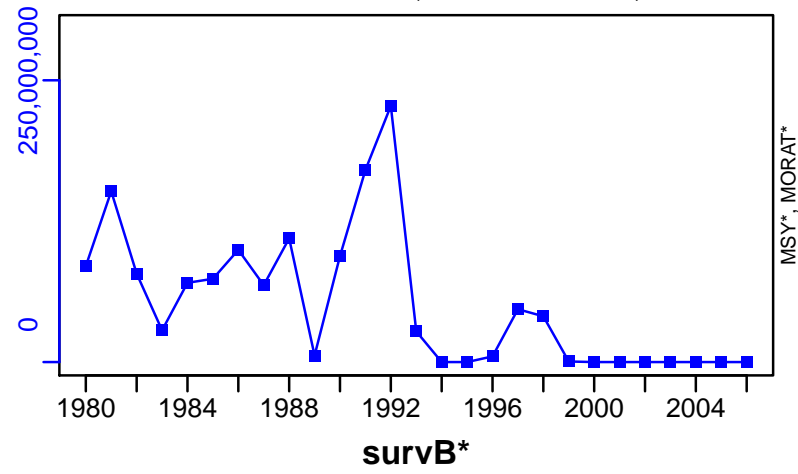
R-E00 (1980-2006-COLLIE)



# Pacific herring Prince William Sound [HERRPWS]

TC-E00, TL\*, RecC\* (1980-2006-COLLIE)

TAC\*, Cpair\*, Cadv\*



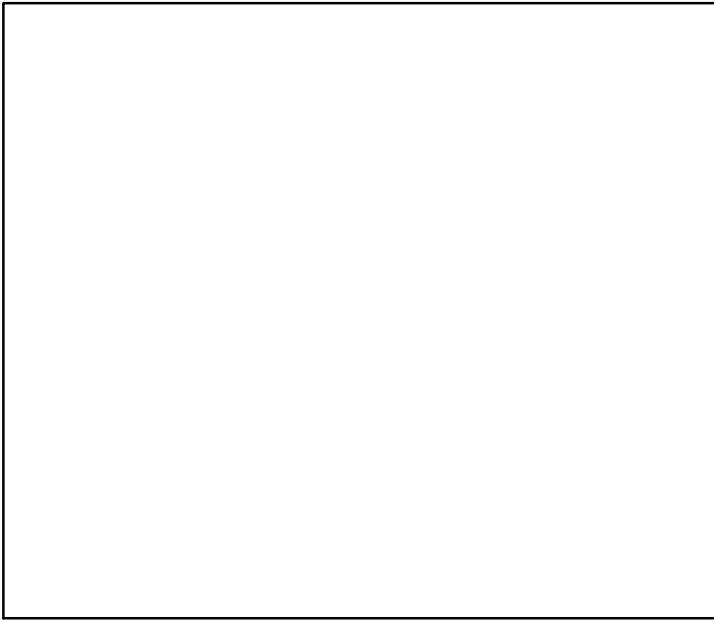
## Pacific herring Sitka [HERRSITKA]

Metadata	
<b>Scientific Name</b>	Clupea pallasii
<b>Current Assess ID</b>	ADFG-HERRSITKA-1978-2007-COLLIE
<b>Area</b>	Sitka
<b>Management Authority</b>	State of Alaska
<b>Assessor</b>	Alaska Department of Fish and Game
<b>Asmts in RAM</b>	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	$1.14 \times 10^8$	-	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	-	-	-		

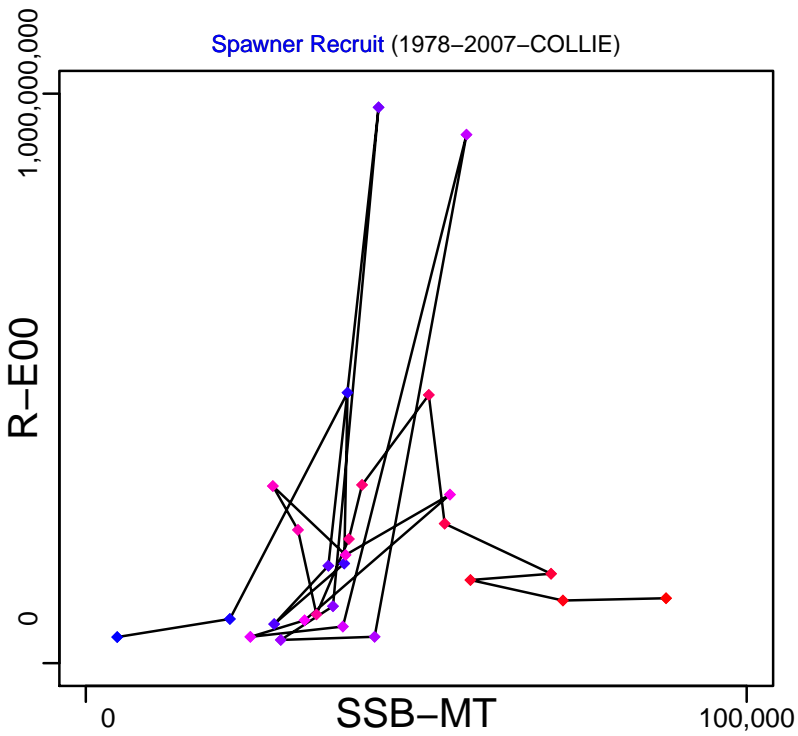
**Kobe MSY\***



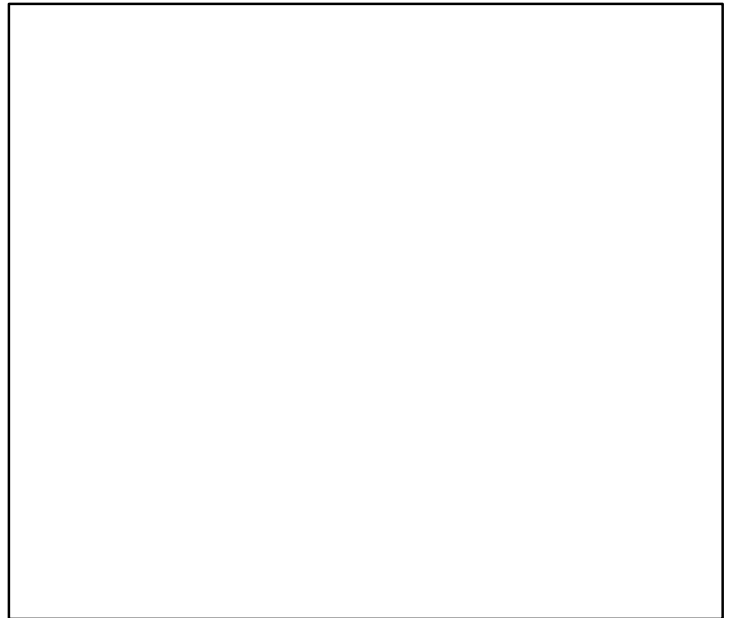
**Kobe MGT\***



Spawner Recruit (1978–2007–COLLIE)



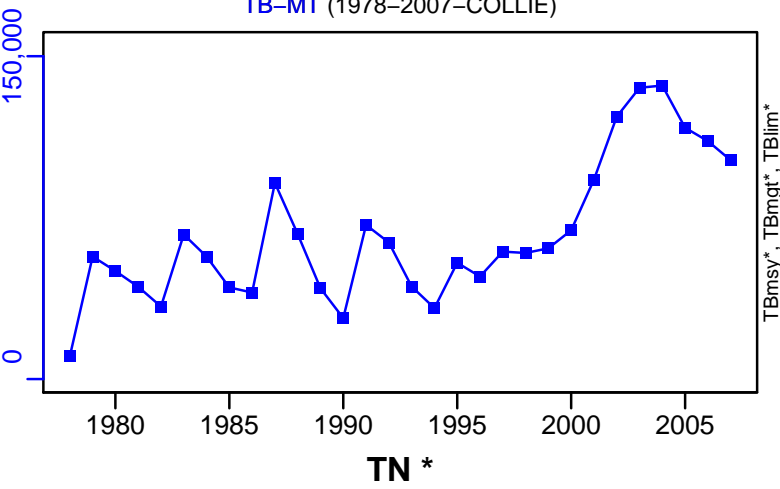
**Production\***



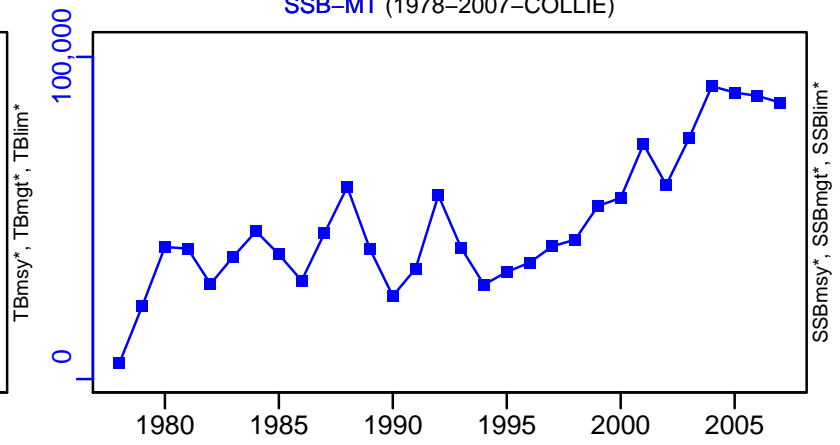
◆ Start Year ◆ End Year \* No Data

# Pacific herring Sitka [HERRSITKA]

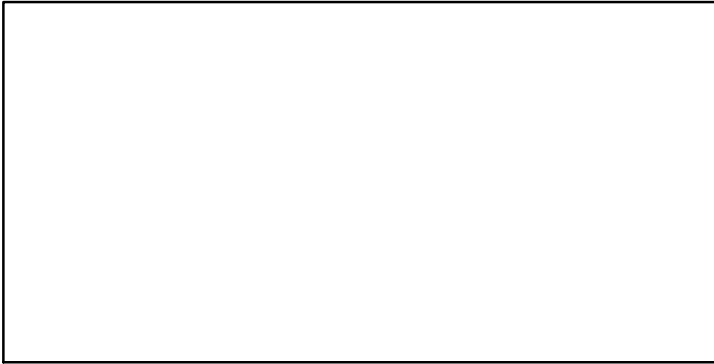
TB-MT (1978-2007-COLLIE)



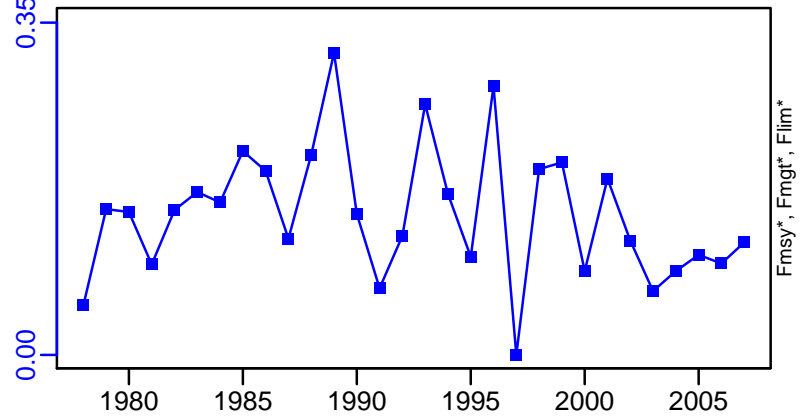
SSB-MT (1978-2007-COLLIE)



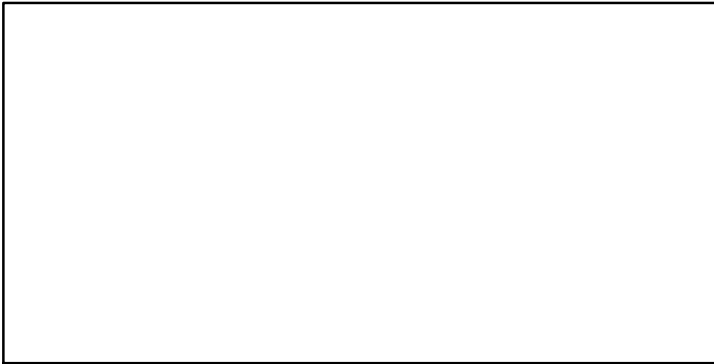
TN \*



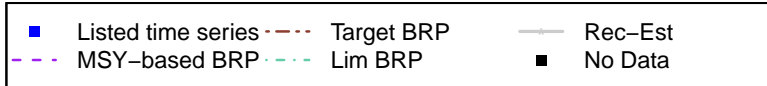
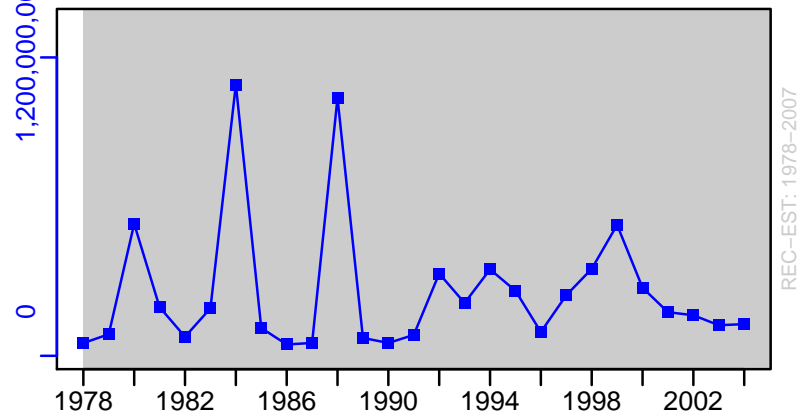
F-1/yr (1978-2007-COLLIE)



ER\*

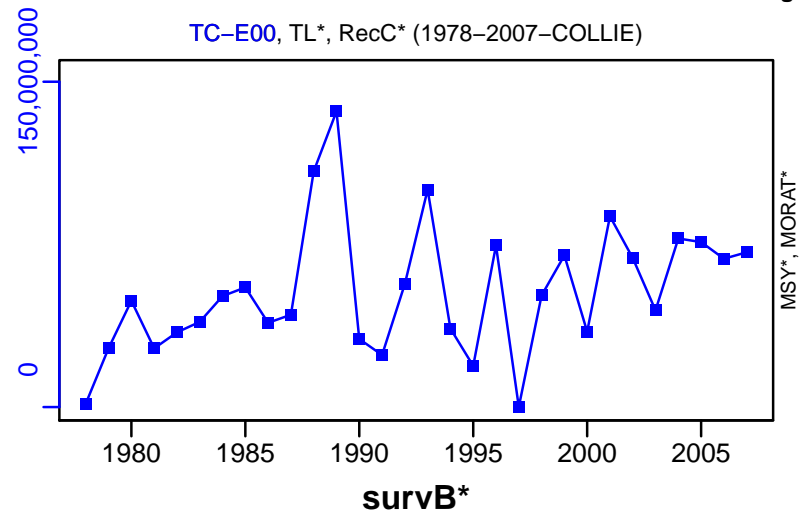


R-E00 (1978-2007-COLLIE)

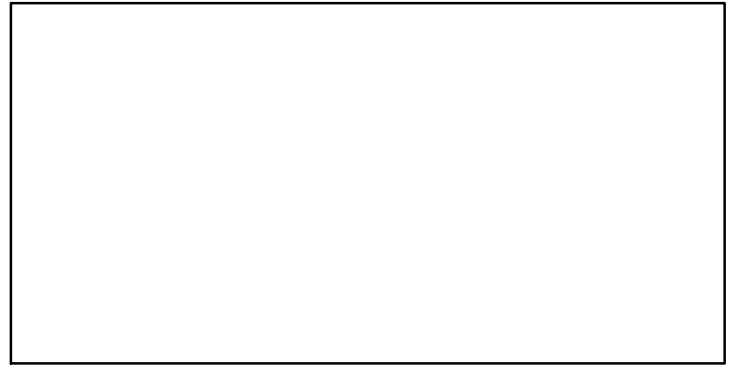


Pacific herring Sitka [HERRSITKA]

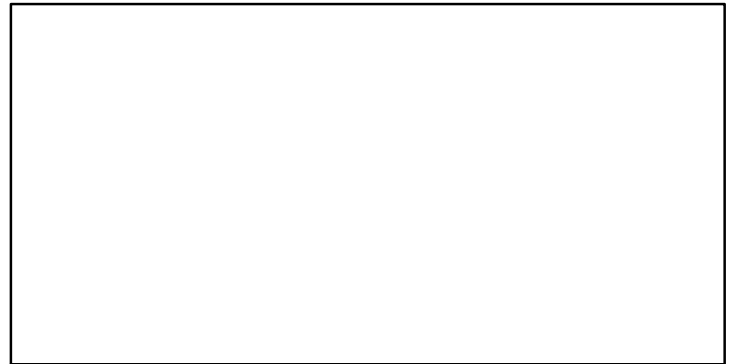
TC-E00, TL\*, RecC\* (1978-2007-COLLIE)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



CdivMSY\*



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

## Herring Togiak District [HERRTOG]

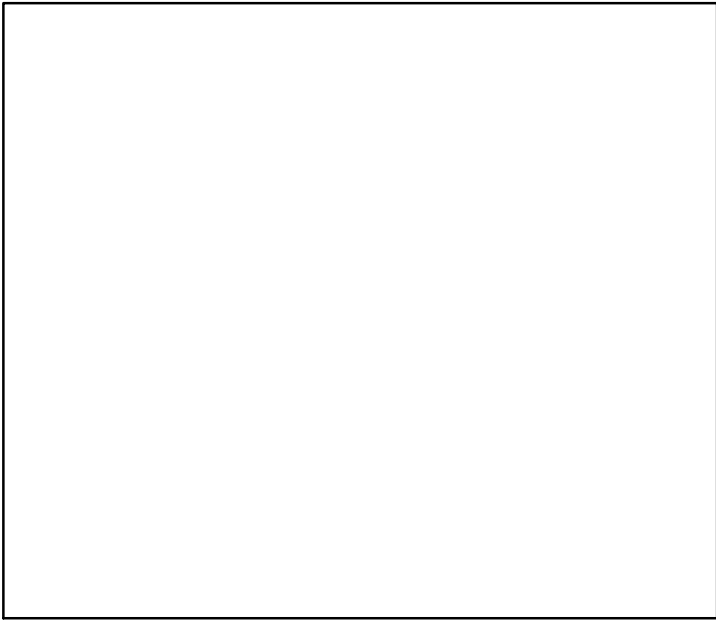
Metadata	
<b>Scientific Name</b>	Clupea pallasii
<b>Current Assess ID</b>	ADFG-HERRTOG-1990-2010-HIVELY
<b>Area</b>	Togiak District
<b>Management Authority</b>	State of Alaska
<b>Assessor</b>	Alaska Department of Fish and Game
<b>Asmts in RAM</b>	2010

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

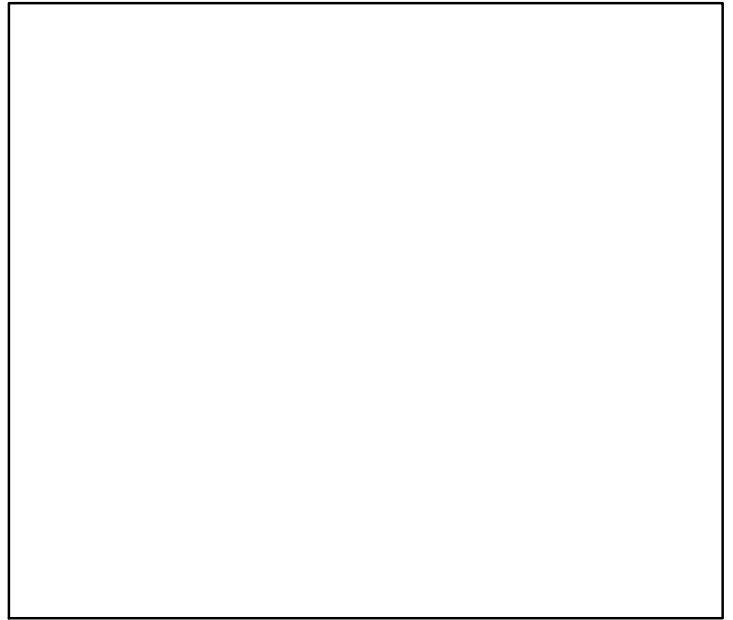
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2010	133,000	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2010	0.18	-	-
TC	TC-MT	2010	23,900		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt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

Herring Togiak District [HERRTOG]

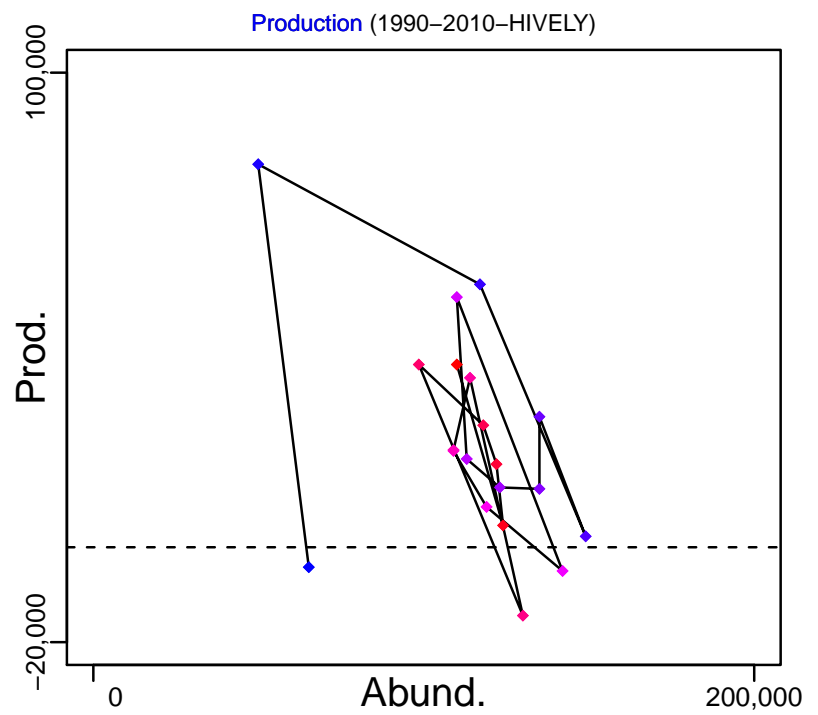
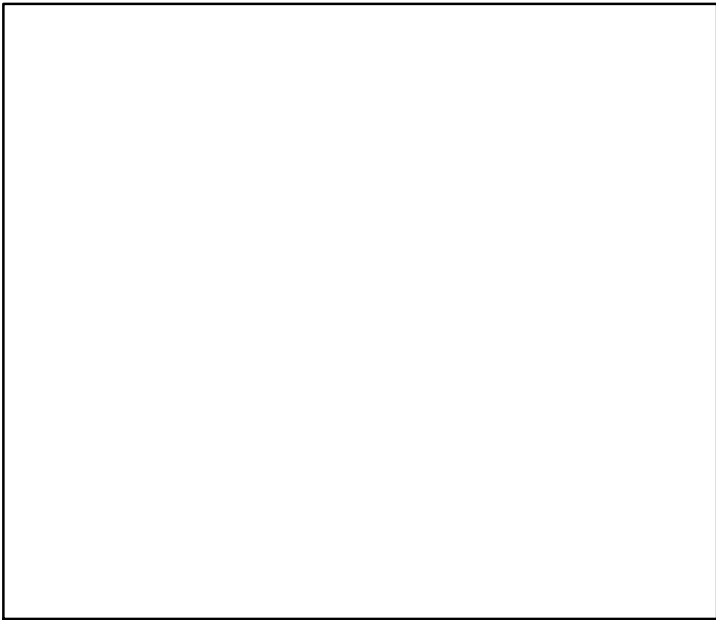
Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



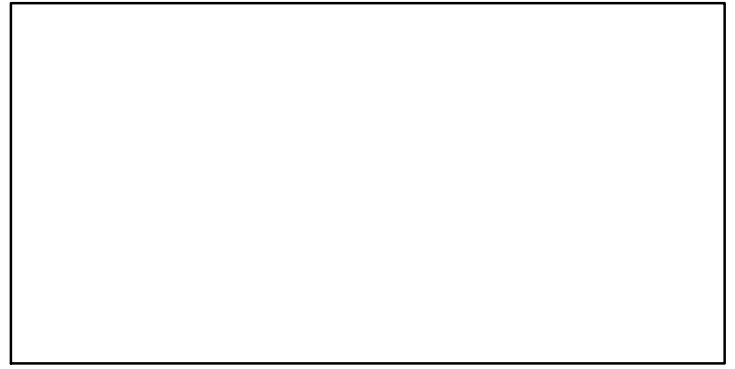
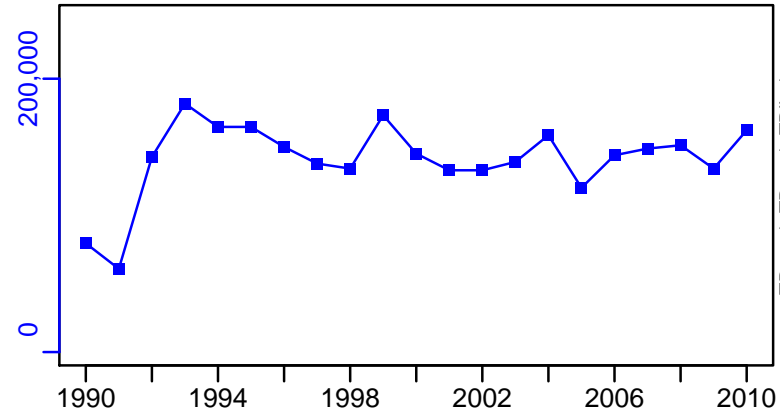
◆ Start Year ◆ End Year \* No Data



# Herring Togiak District [HERRTOG]

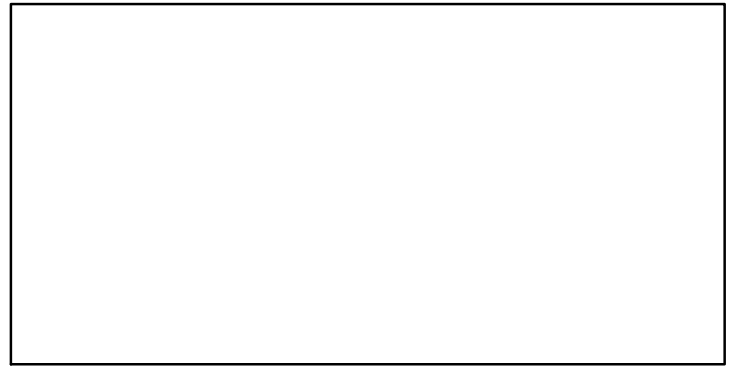
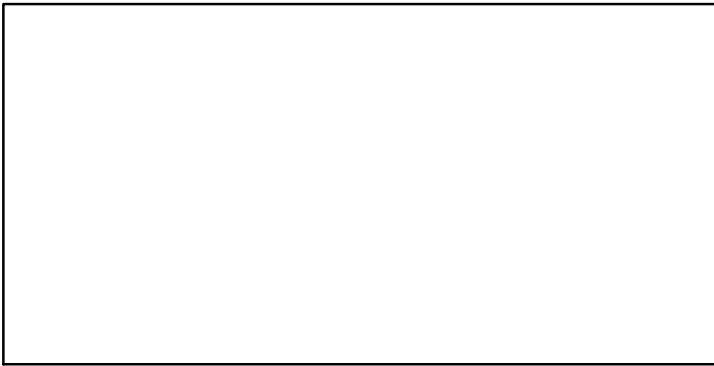
TB-MT (1990-2010-HIVELY)

SSB\*



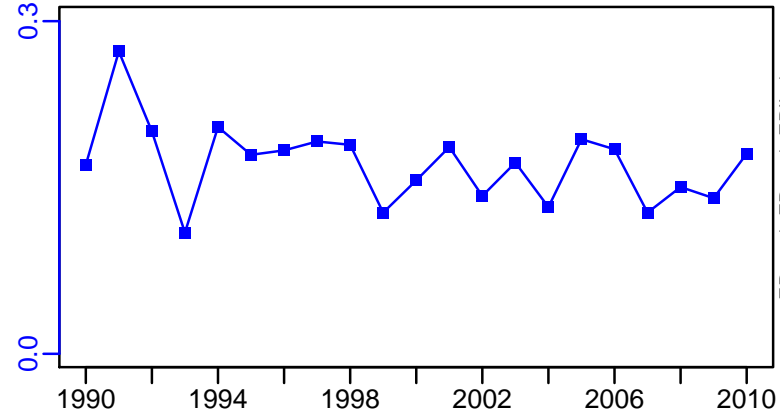
TN \*

F\*



ER-ratio (1990-2010-HIVELY)

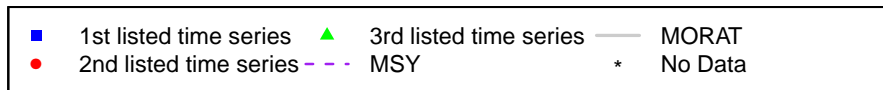
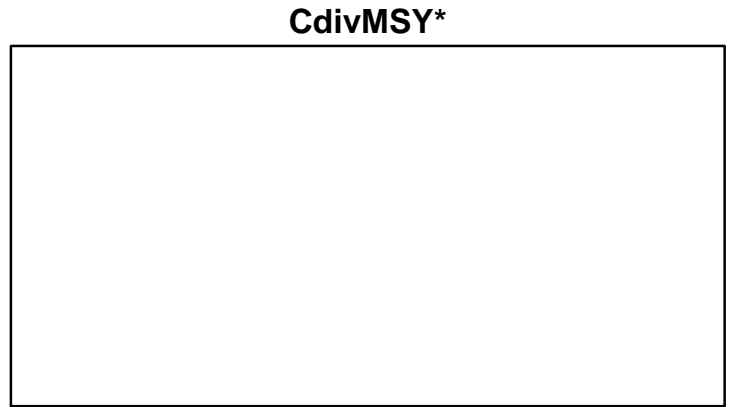
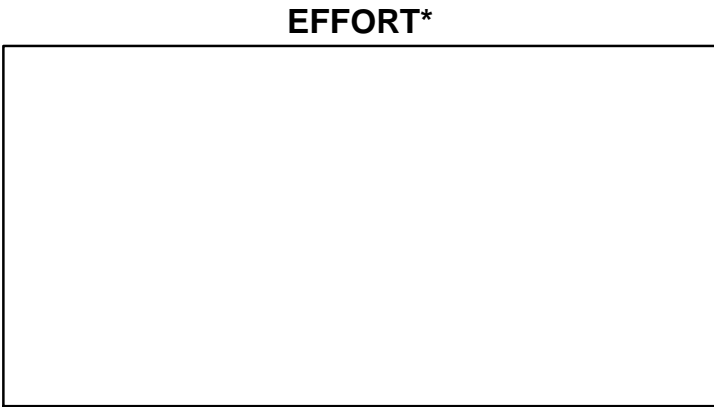
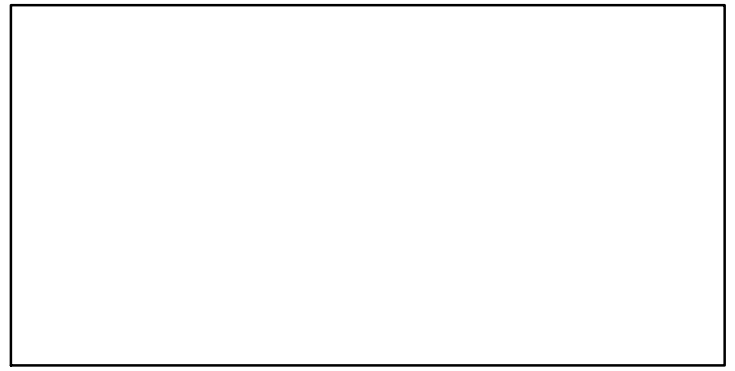
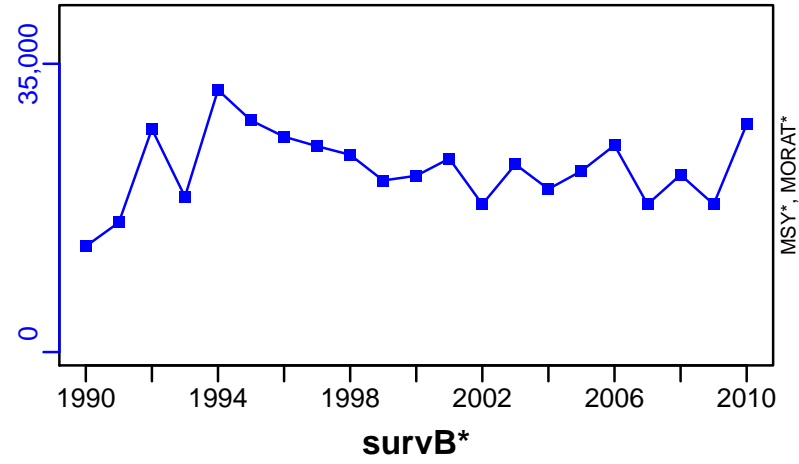
Recruits\*



# Herring Togiak District [HERRTOG]

TC-MT, TL\*, RecC\* (1990-2010-HIVELY)

TAC\*, Cpair\*, Cadv\*



## Kamchatka flounder Bering Sea and Aleutian Islands [KMFLOUNBSAI]

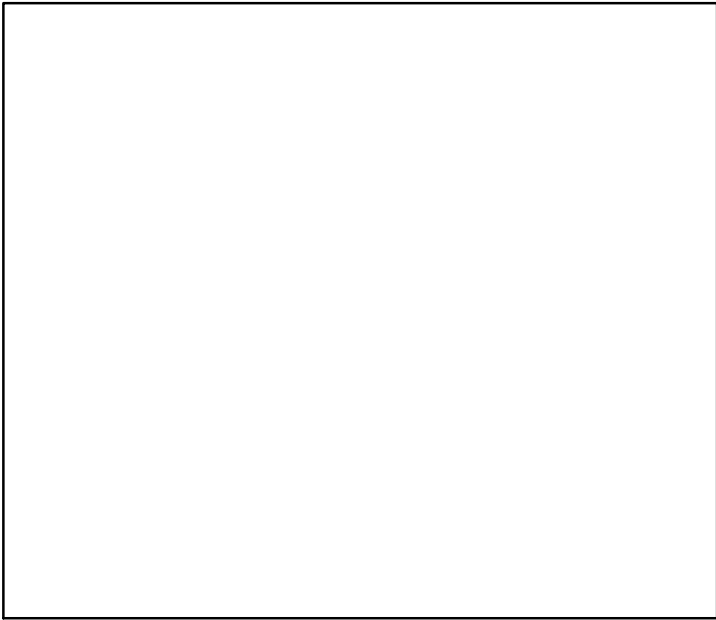
Metadata	
<b>Scientific Name</b>	Atheresthes evermanni
<b>Current Assess ID</b>	AFSC-KMFLOUNBSAI-1991-2015-SISIMP2016
<b>Area</b>	Bering Sea and Aleutian Islands
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2015	46,400
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	168,000	Both	2+
<b>SSB</b>	SSB-MT	2015	61,700	Females	10+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	19,200,000	-	1
<b>F</b>	F-1/yr	2015	0.04	-	-
<b>ER</b>	ER-calc-ratio	2015	0.038	-	-
<b>TC</b>	TC-MT	2015	6460		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	1.33		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Kamchatka flounder Bering Sea and Aleutian Islands [KMFLOUNBSAI]

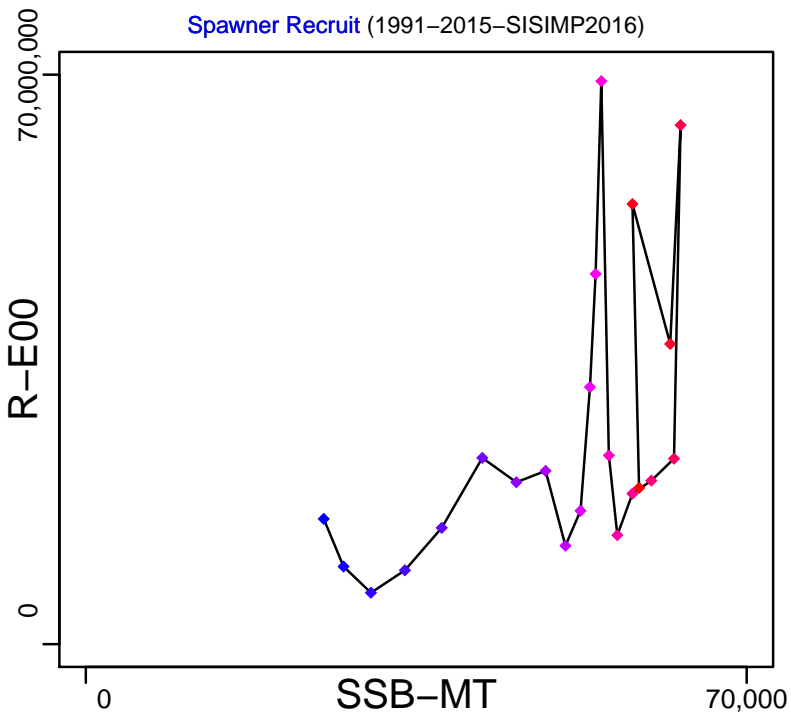
Kobe MSY\*



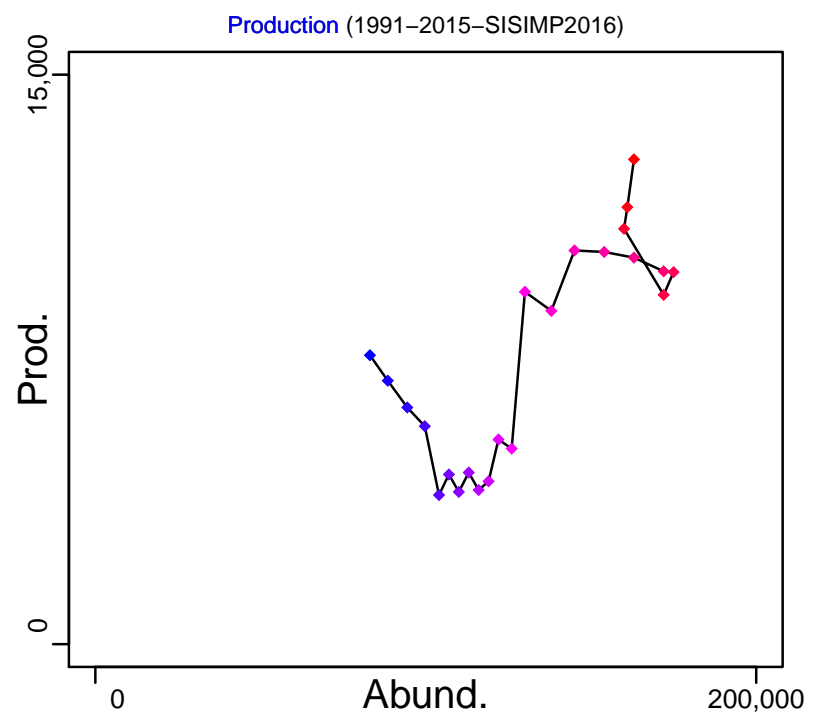
Kobe MGT\*



Spawner Recruit (1991–2015–SISIMP2016)



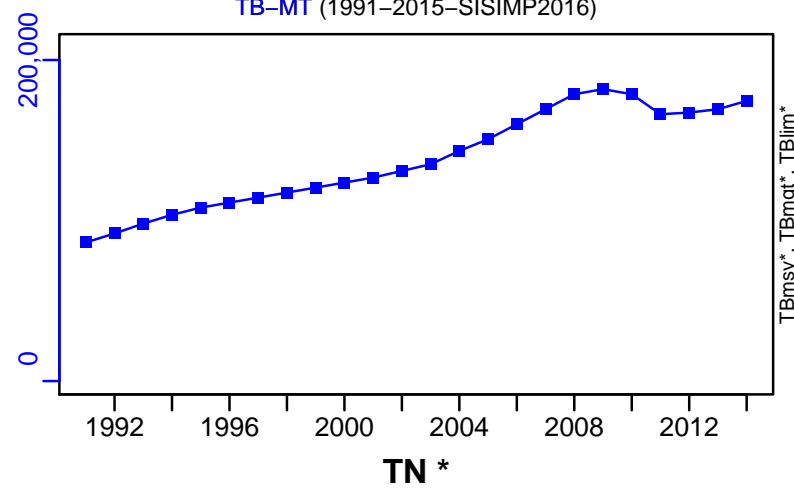
Production (1991–2015–SISIMP2016)



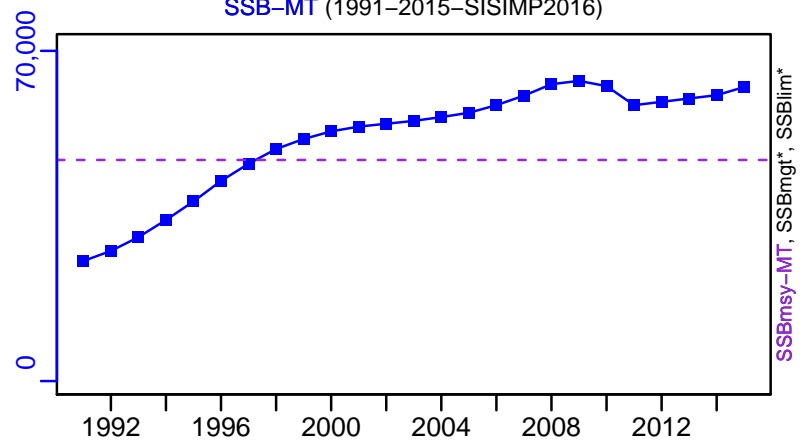
◆ Start Year ◆ End Year \* No Data

# Kamchatka flounder Bering Sea and Aleutian Islands [KMFLOUNBSAI]

TB-MT (1991–2015–SISIMP2016)

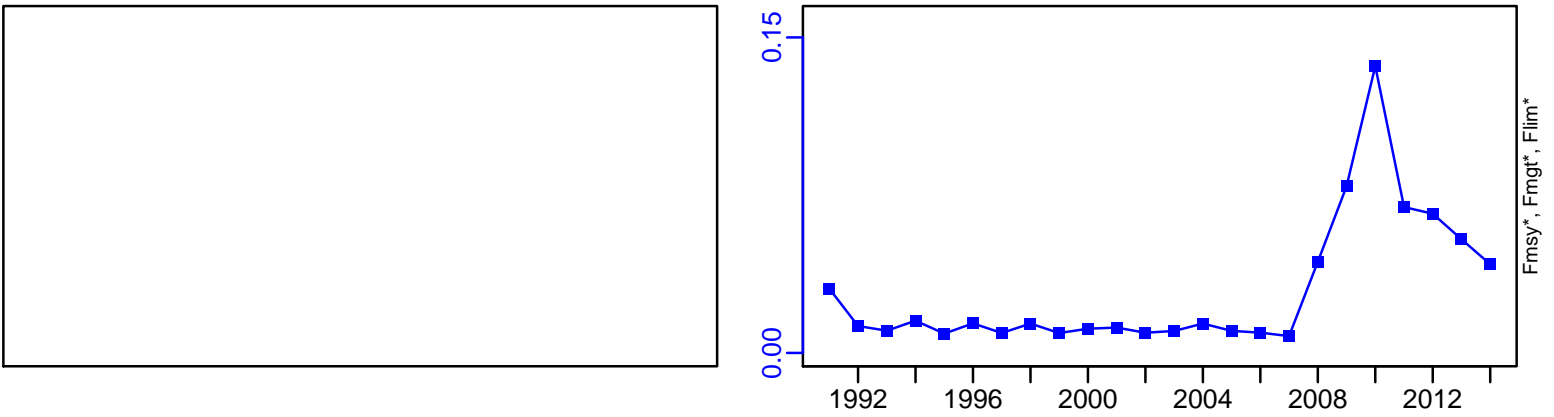


SSB-MT (1991–2015–SISIMP2016)

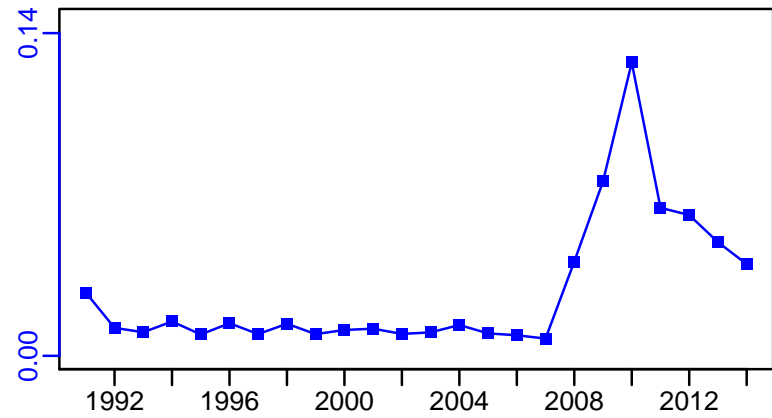


TN \*

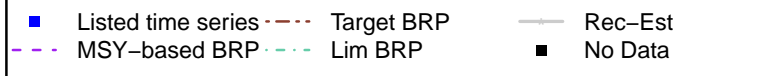
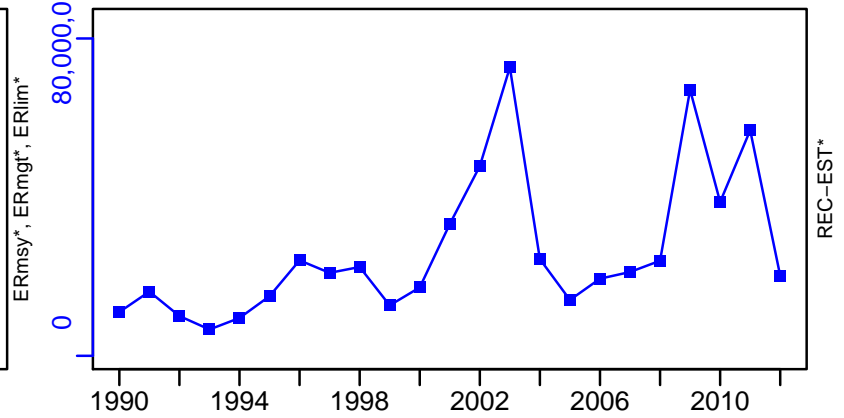
F-1/yr (1991–2015–SISIMP2016)



ER-calc-ratio (1991–2015–SISIMP2016)



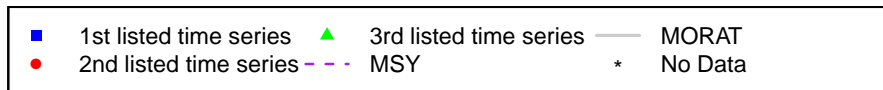
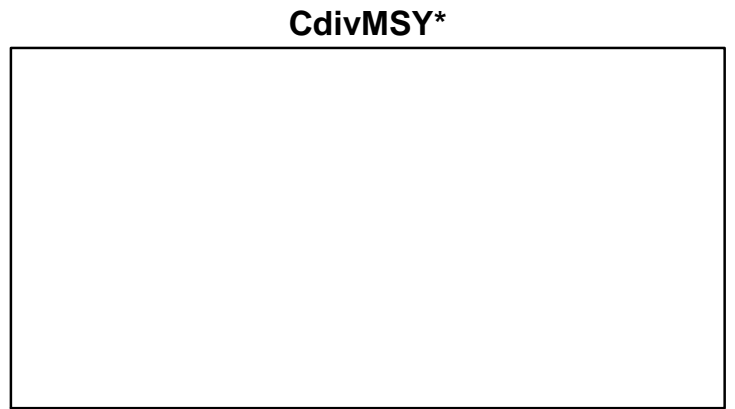
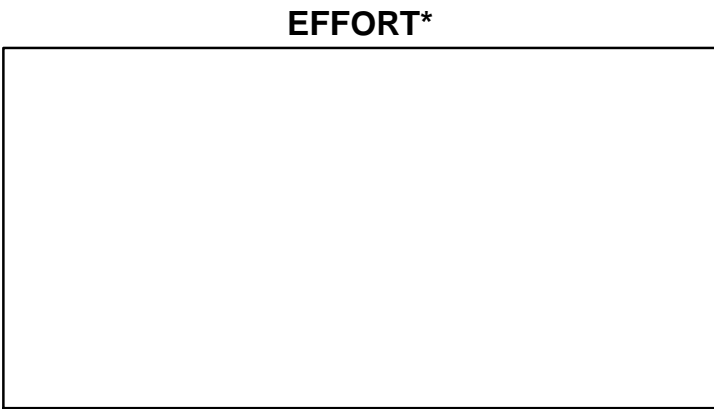
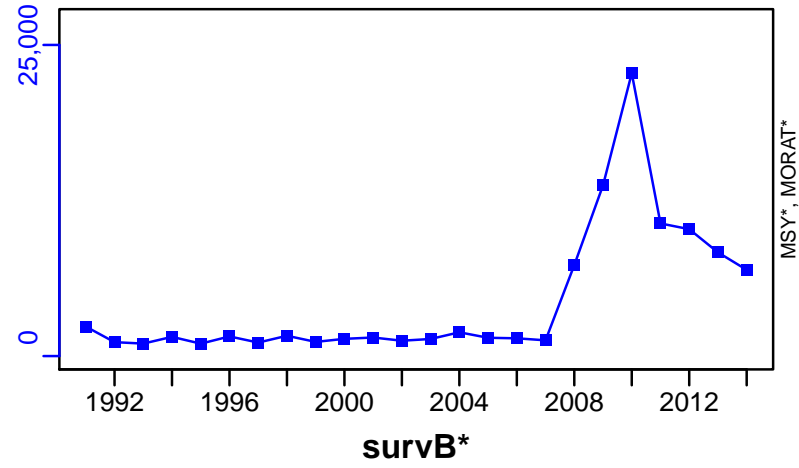
R-E00 (1991–2015–SISIMP2016)



# Kamchatka flounder Bering Sea and Aleutian Islands [KMFLOUNBSAI]

TC-MT, TL\*, RecC\* (1991-2015-SISIMP2016)

TAC\*, Cpair\*, Cadv\*



## Northern rockfish Bering Sea and Aleutian Islands [NROCKBSAI]

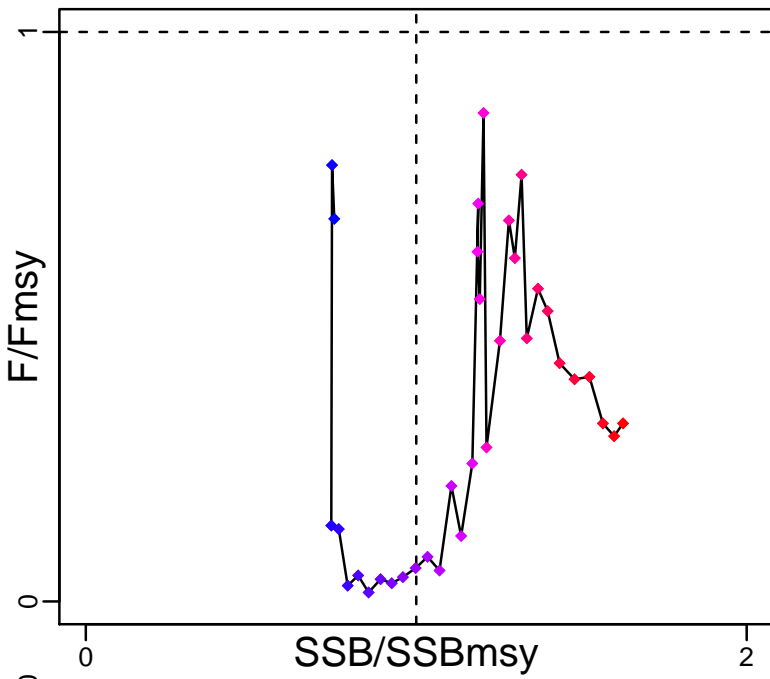
Metadata	
<b>Scientific Name</b>	Sebastes polypsinis
<b>Current Assess ID</b>	AFSC-NROCKBSAI-1977-2015-SISIMP2016
<b>Area</b>	Bering Sea and Aleutian Islands
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2011, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2015	50,547
<b>Fmsy</b>	Fmsy-pr-1/yr	2011	0.071
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2011	0.043
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

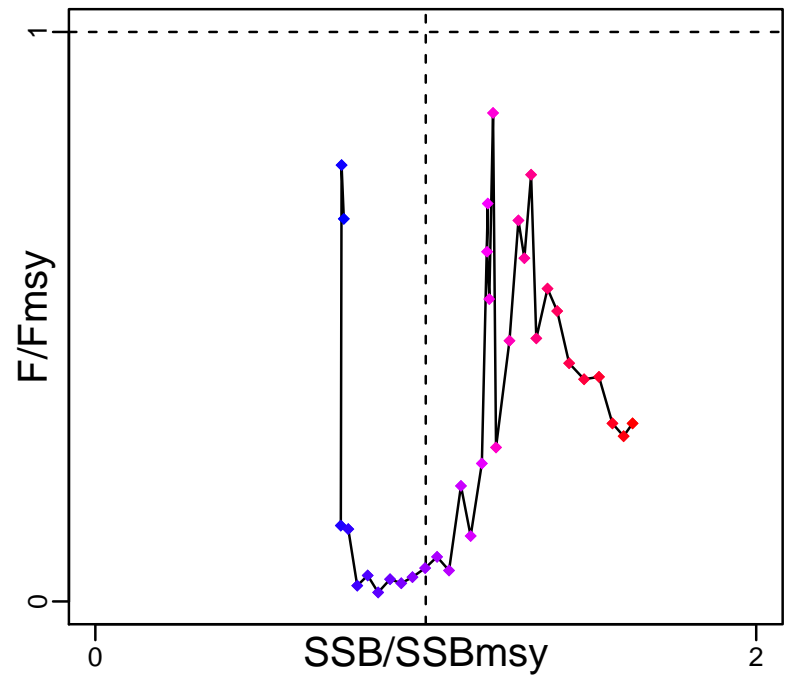
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	220,000	-	3+
<b>SSB</b>	SSB-MT	2015	95,600	Females	8.2+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	40,400,000	-	3
<b>F</b>	F-1/yr	2015	0.013	-	-
<b>ER</b>	ER-calc-ratio	2015	0.011	-	-
<b>TC</b>	TC-MT	2015	2340		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	1.891		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2011	0.313		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Northern rockfish Bering Sea and Aleutian Islands [NROCKBSAI]

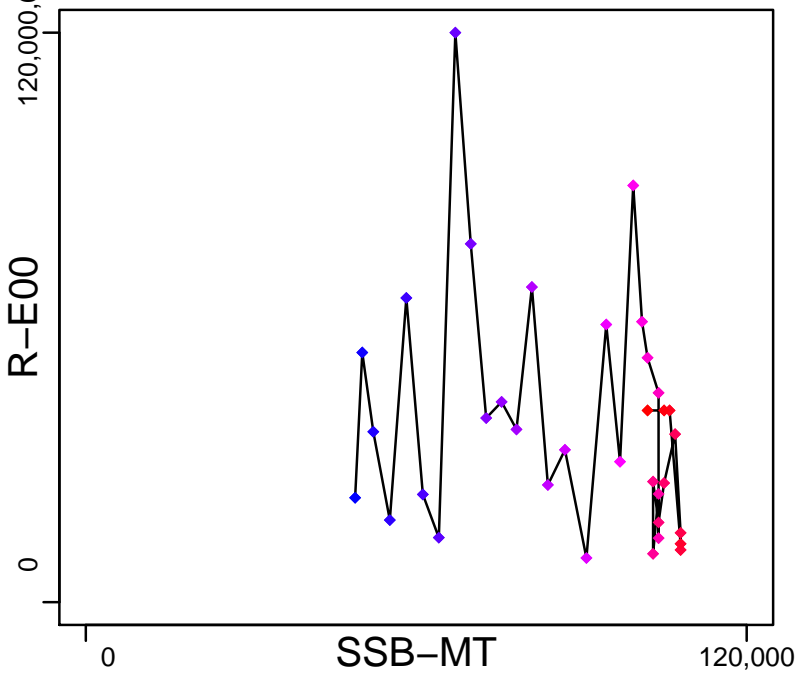
Kobe MSYpref (1974–2011–STACHURA)



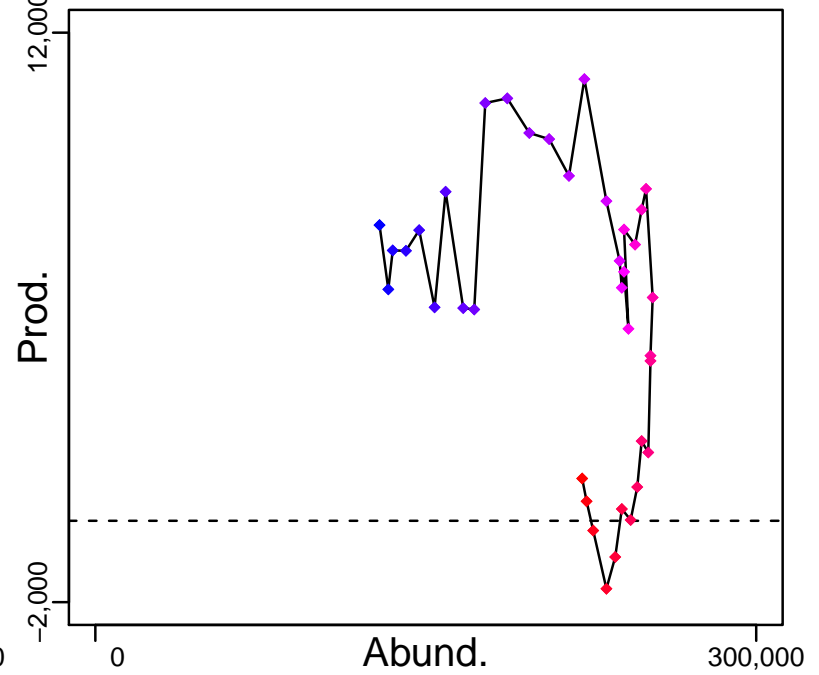
Kobe MGTpref (1974–2011–STACHURA)



Spawner Recruit (1977–2015–SISIMP2016)



Production (1977–2015–SISIMP2016)

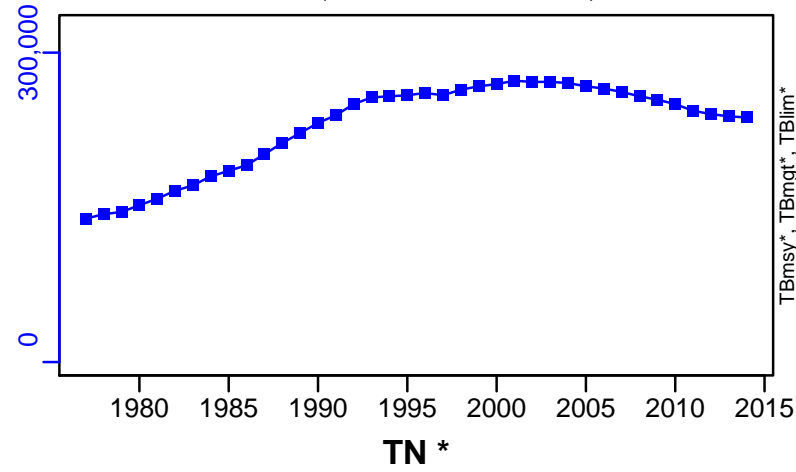


◆ Start Year ◆ End Year \* No Data

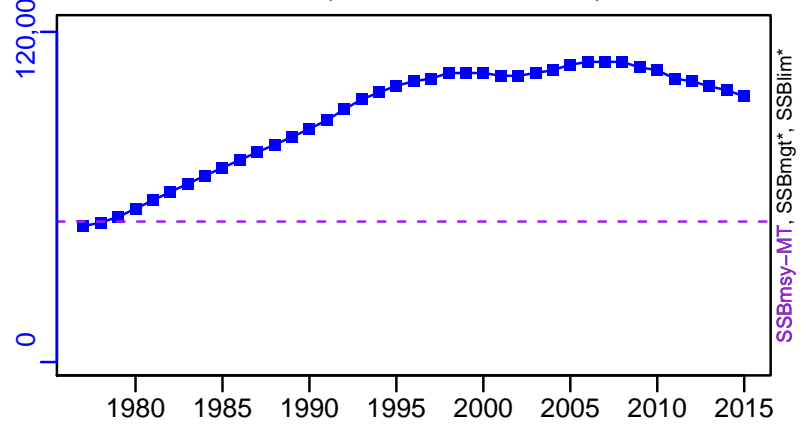


# Northern rockfish Bering Sea and Aleutian Islands [NROCKBSAI]

TB-MT (1977-2015-SISIMP2016)



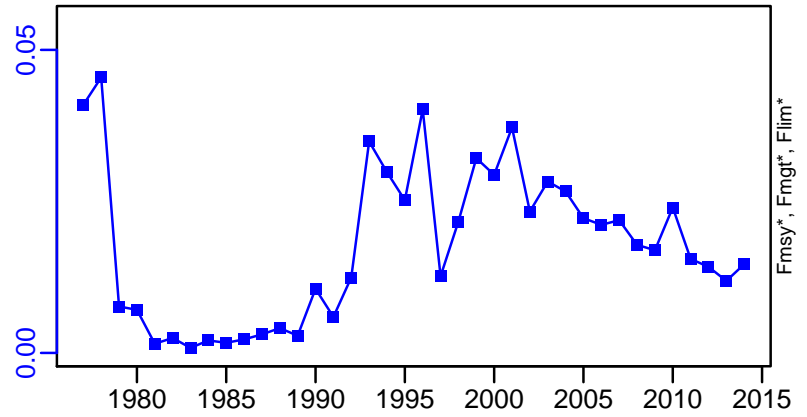
SSB-MT (1977-2015-SISIMP2016)



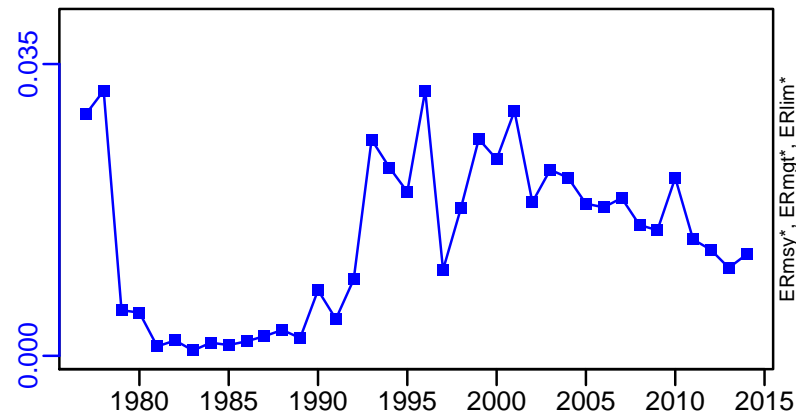
TN \*



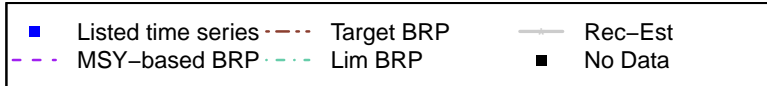
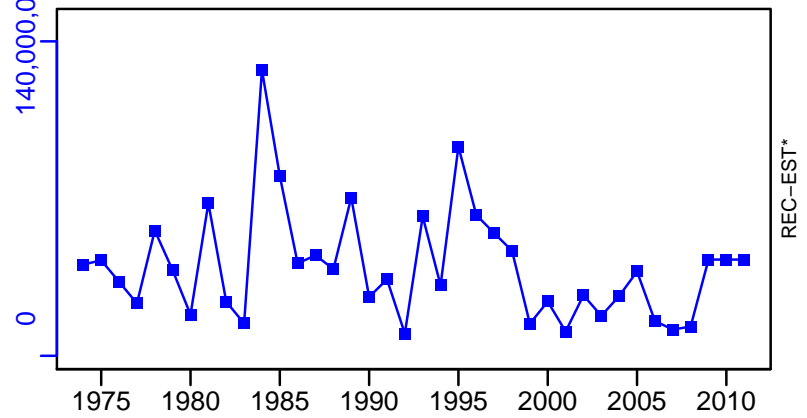
F-1/yr (1977-2015-SISIMP2016)



ER-calc-ratio (1977-2015-SISIMP2016)



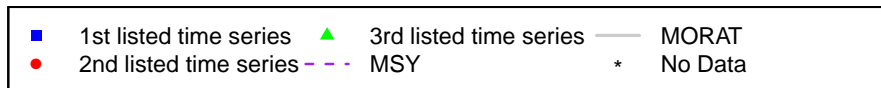
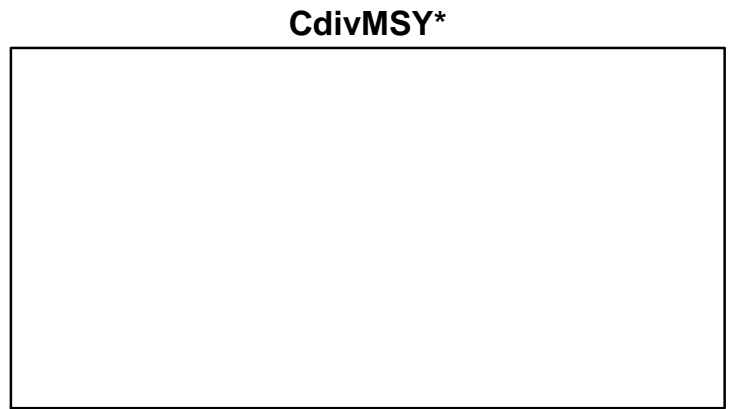
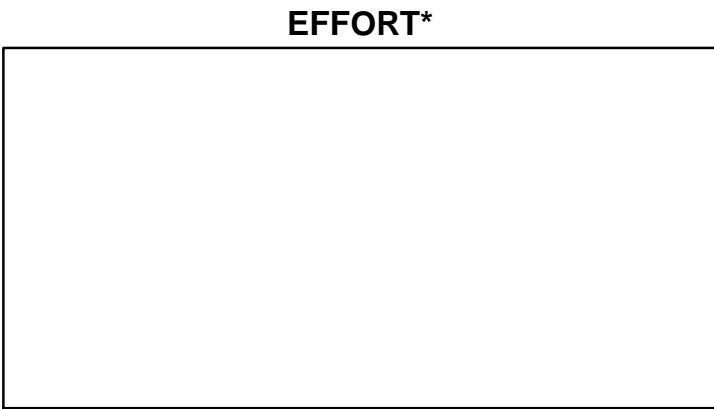
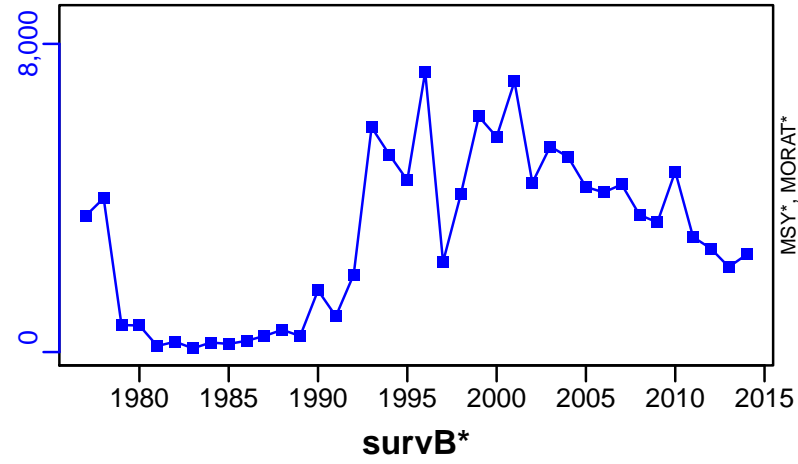
R-E00 (1977-2015-SISIMP2016)



# Northern rockfish Bering Sea and Aleutian Islands [NROCKBSAI]

TC-MT, TL\*, RecC\* (1977-2015-SISIMP2016)

TAC\*, Cpair\*, Cadv\*



## Northern rockfish Gulf of Alaska [NROCKGA]

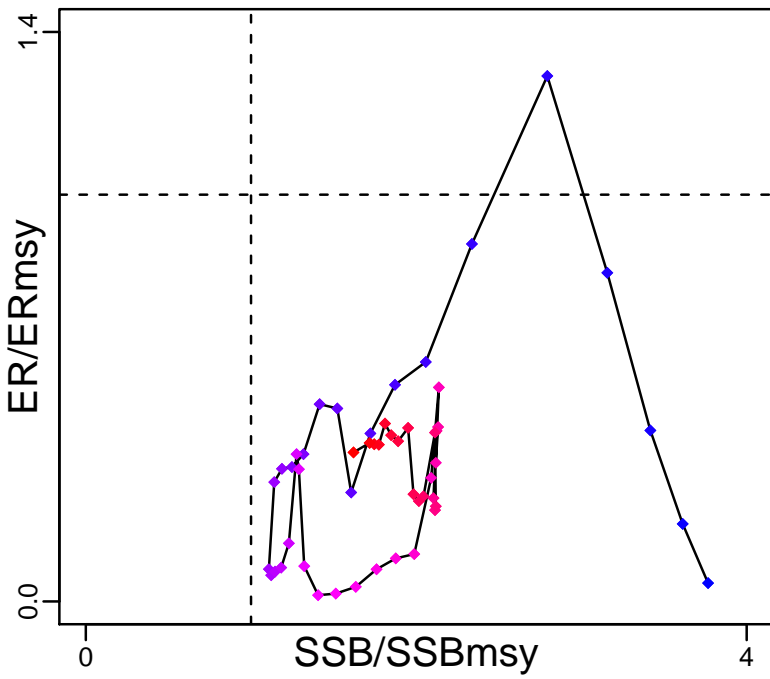
Metadata	
<b>Scientific Name</b>	Sebastes polypsinis
<b>Current Assess ID</b>	AFSC-NROCKGA-1961-2015-SISIMP2016
<b>Area</b>	Gulf of Alaska
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2010, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2010	64,270
<b>SSBmsy</b>	SSBmsy-MT	2015	24,485
<b>Fmsy</b>	Fmsy-pr-1/yr	2010	0.071
<b>ERmsy</b>	ERmsy-ratio	2010	0.094
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2010	6070
<b>M</b>	M-1/yr	2010	0.06
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

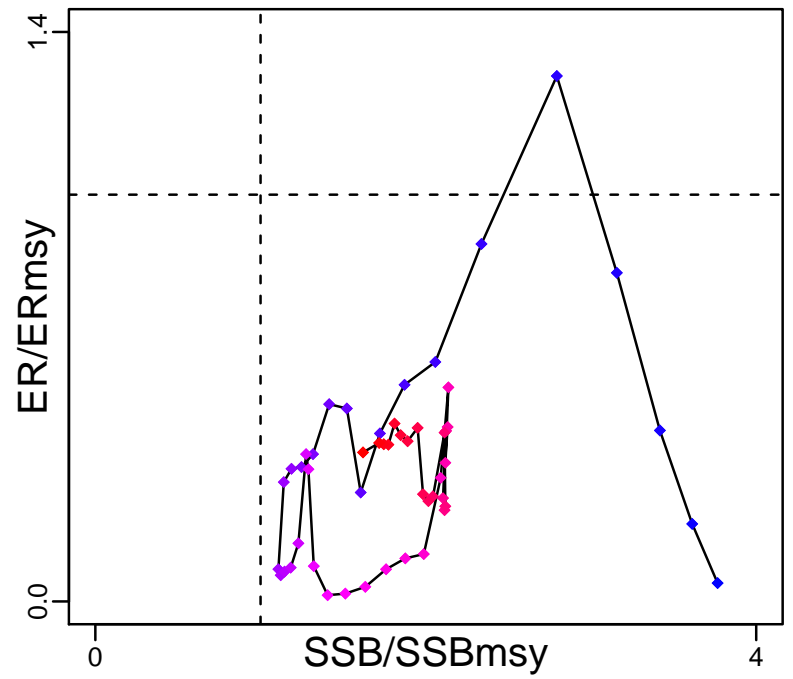
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	81,900	-	2+
<b>SSB</b>	SSB-MT	2015	35,400	Females	11+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	8,590,000	-	2
<b>F</b>	F-1/yr	2015	0.06	-	-
<b>ER</b>	ER-calc-ratio	2015	0.049	-	-
<b>TC</b>	TC-MT	2015	4270		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	TB-MT/TBmsy-calc-MT	2010	1.603		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	1.447		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2010	0.596		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2010	0.366		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Northern rockfish Gulf of Alaska [NROCKGA]

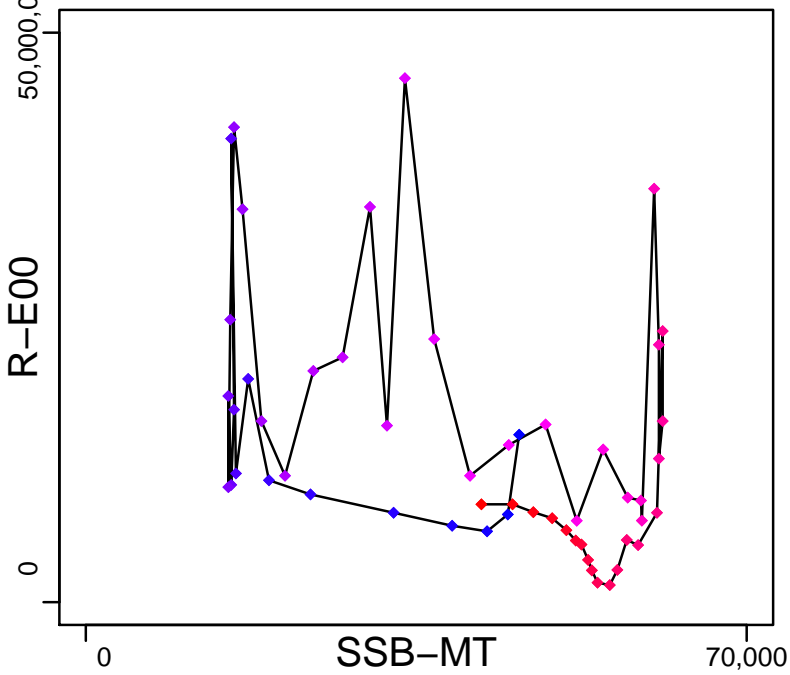
Kobe MSYpref (1959–2010–STACHURA)



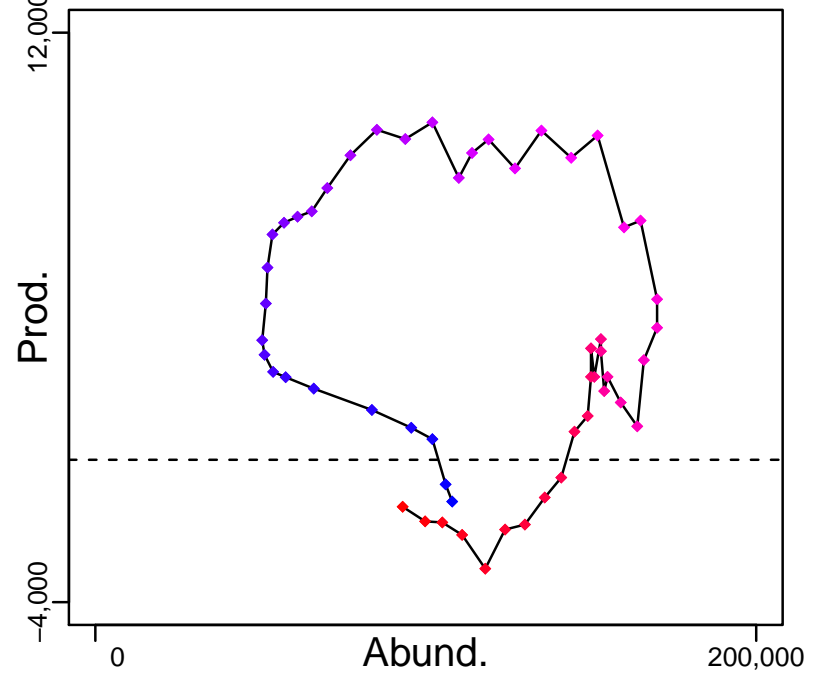
Kobe MGTpref (1959–2010–STACHURA)



Spawner Recruit (1961–2015–SISIMP2016)



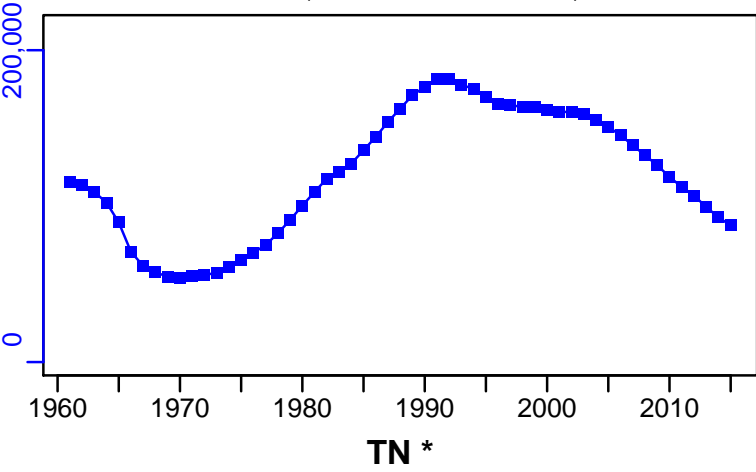
Production (1961–2015–SISIMP2016)



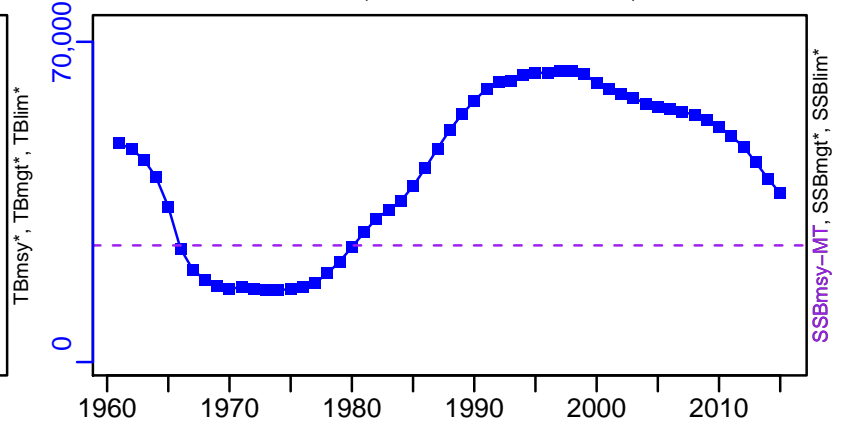
◆ Start Year ◆ End Year \* No Data

# Northern rockfish Gulf of Alaska [NROCKGA]

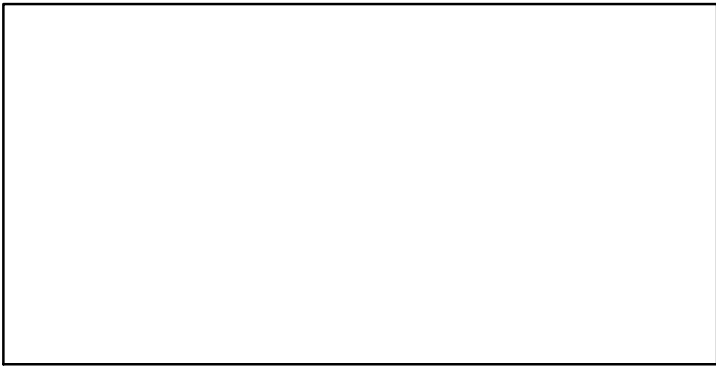
TB-MT (1961–2015–SISIMP2016)



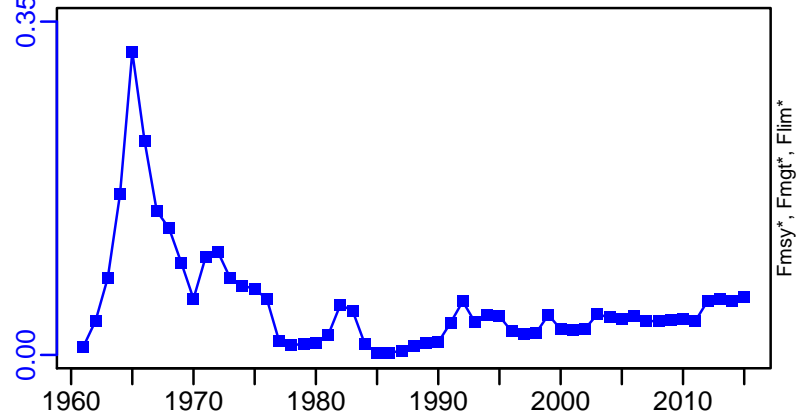
SSB-MT (1961–2015–SISIMP2016)



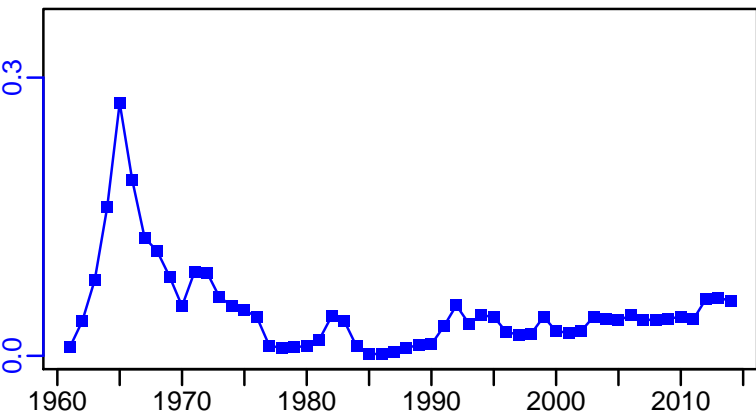
TN \*



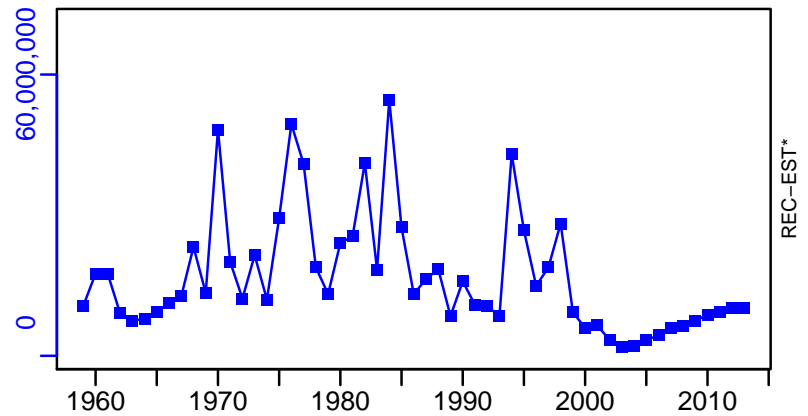
F-1/yr (1961–2015–SISIMP2016)



ER-calc-ratio (1961–2015–SISIMP2016)



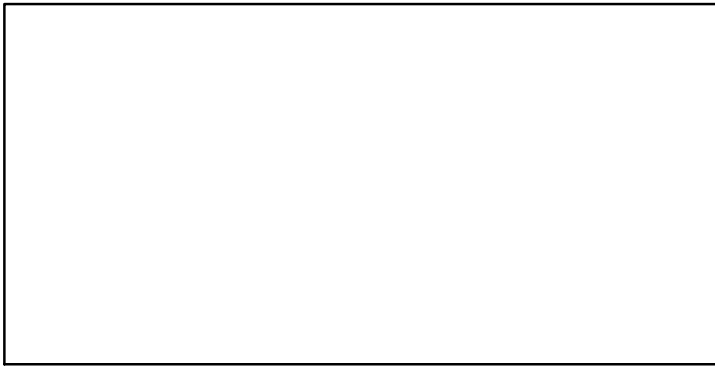
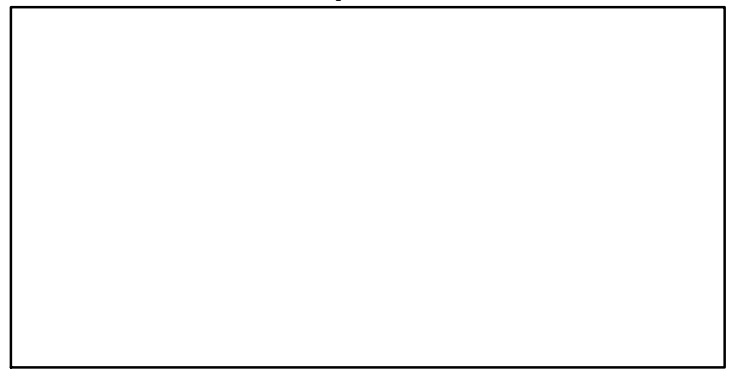
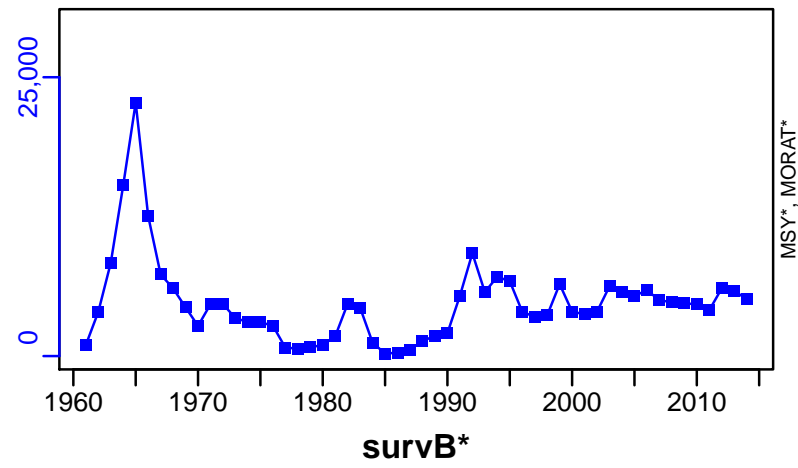
R-E00 (1961–2015–SISIMP2016)



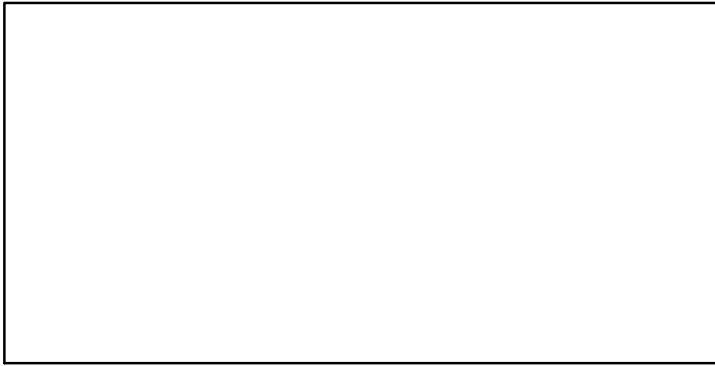
# Northern rockfish Gulf of Alaska [NROCKGA]

TC-MT, TL\*, RecC\* (1961-2015-SISIMP2016)

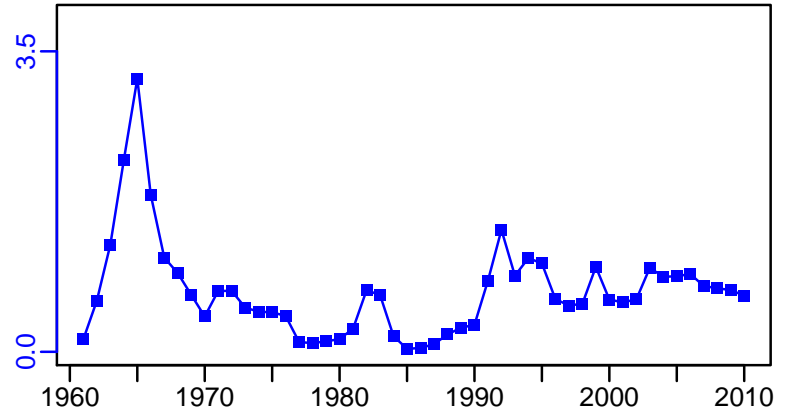
TAC\*, Cpair\*, Cadv\*



EFFORT\*



CdivMSY-ratio (1959-2010-STACHURA)



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

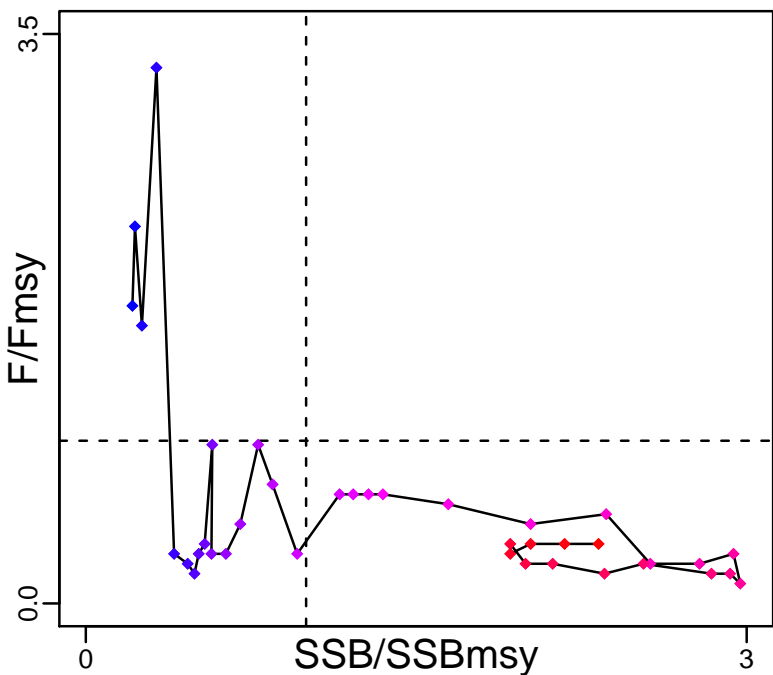
Metadata	
<b>Scientific Name</b>	Lepidopsetta polyxystra
<b>Current Assess ID</b>	AFSC-NRSOLEEBSAI-1975-2015-SISIMP2016
<b>Area</b>	Eastern Bering Sea and Aleutian Islands
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2012, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2015	257,000
<b>Fmsy</b>	Fmsy-pr-1/yr	2012	0.164
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2012	259,310
<b>M</b>	M-1/yr	2012	0.18
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

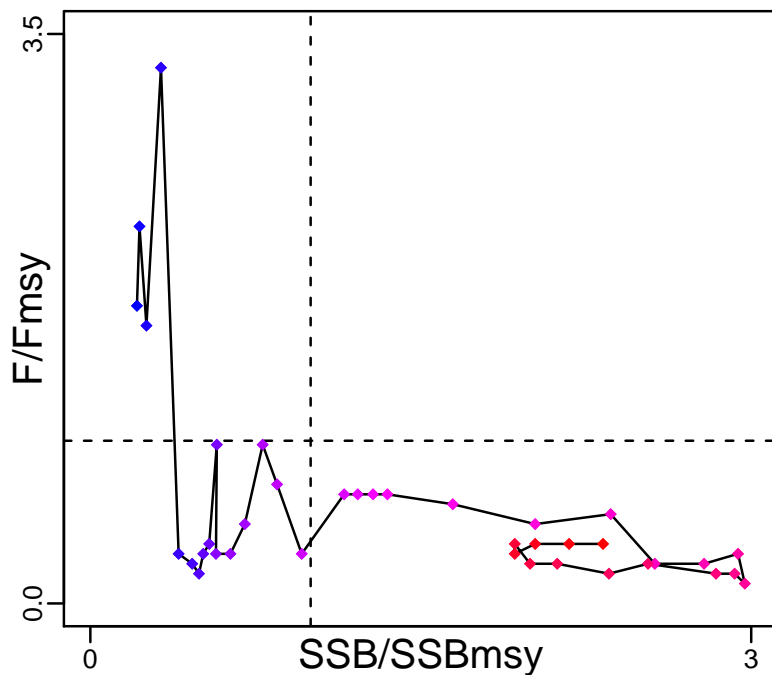
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	1,270,000	-	2+
<b>SSB</b>	SSB-MT	2015	611,000	Females	7.8+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	1,210,000	-	1
<b>F</b>	F-1/yr	2015	0.046	-	-
<b>ER</b>	ER-calc-ratio	2015	0.038	-	-
<b>TC</b>	TC-MT	2015	51,900		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	2.378		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2012	0.366		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

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

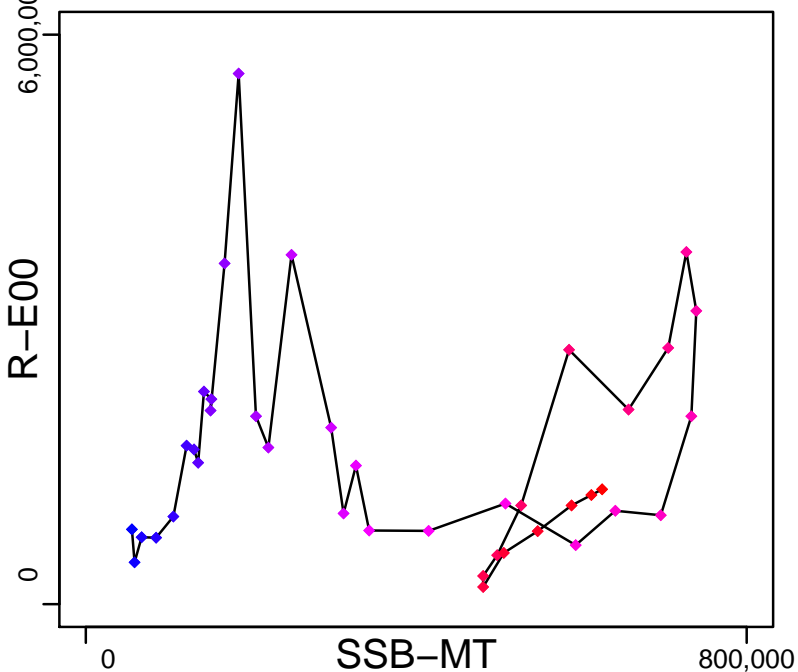
Kobe MSYpref (1975–2012–HIVELY)



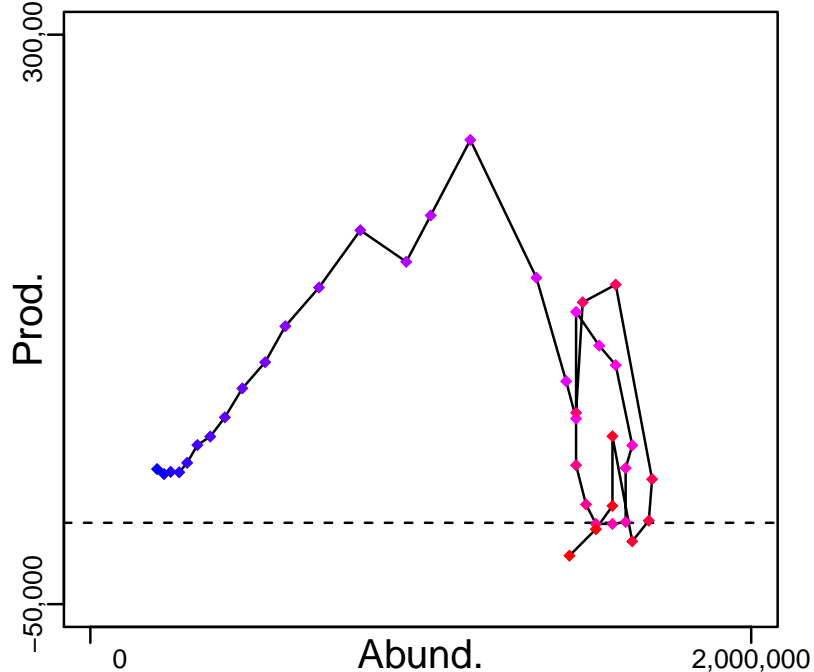
Kobe MGTpref (1975–2012–HIVELY)



Spawner Recruit (1975–2015–SISIMP2016)



Production (1975–2015–SISIMP2016)

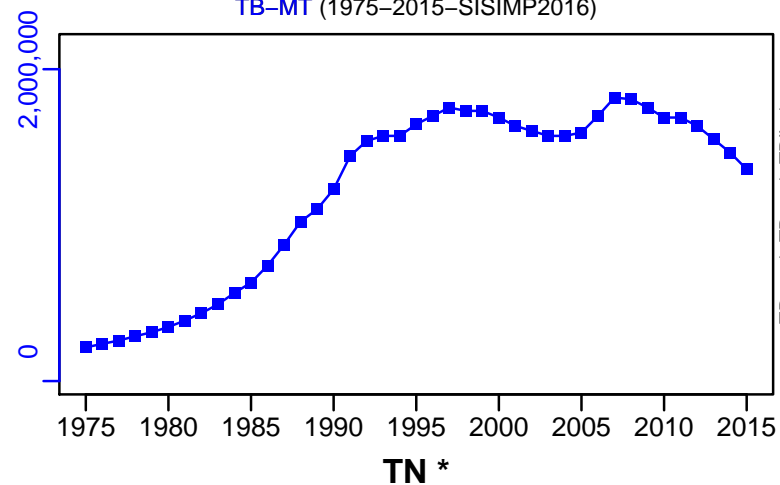


◆ Start Year ◆ End Year \* No Data

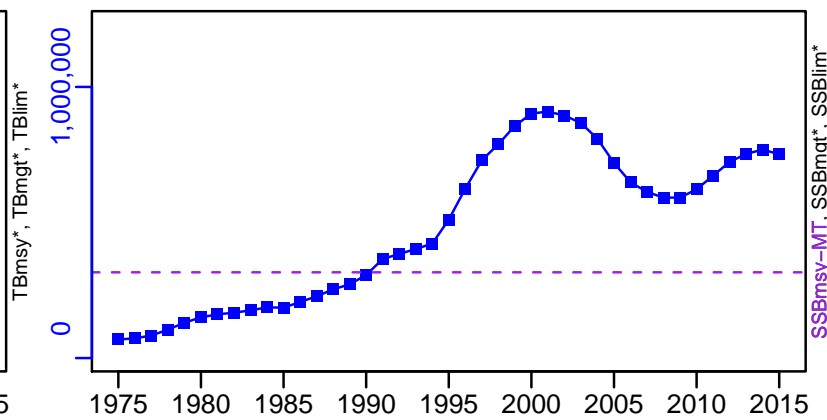


# Northern rock sole Eastern Bering Sea and Aleutian Islands [NRSOLEEBSAI]

TB-MT (1975-2015-SISIMP2016)



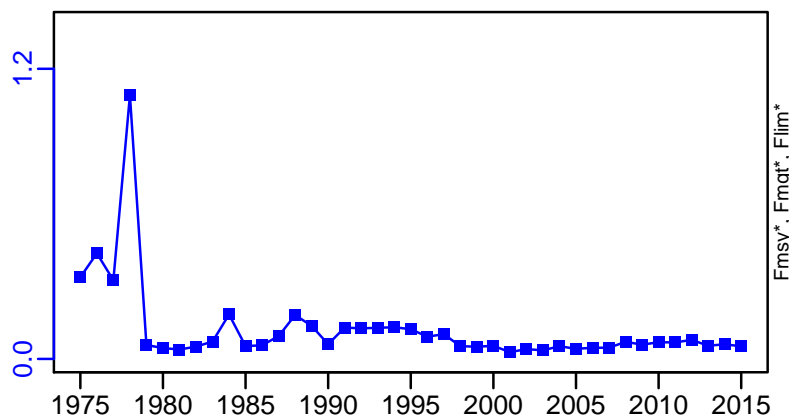
SSB-MT (1975-2015-SISIMP2016)



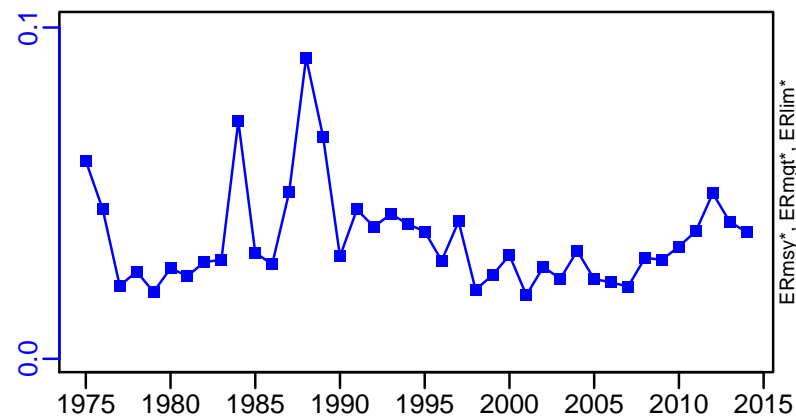
TN \*



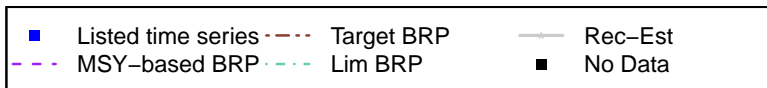
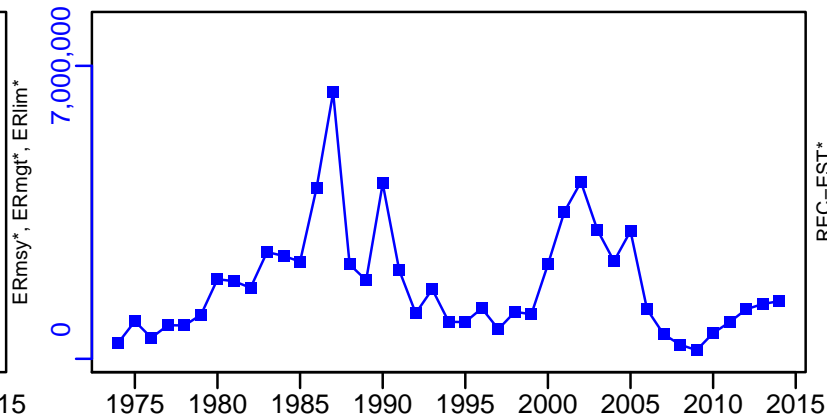
F-1/yr (1975-2015-SISIMP2016)



ER-calc-ratio (1975-2015-SISIMP2016)



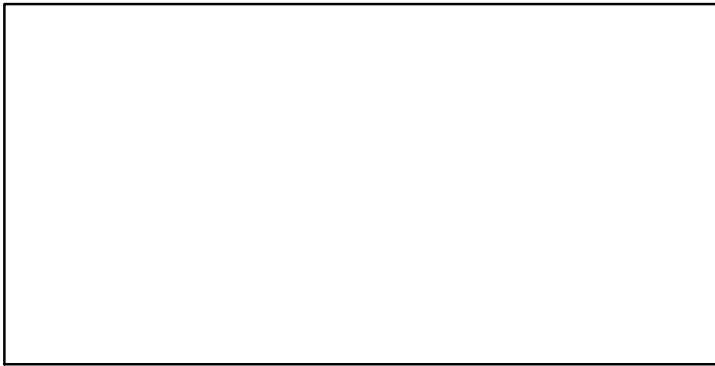
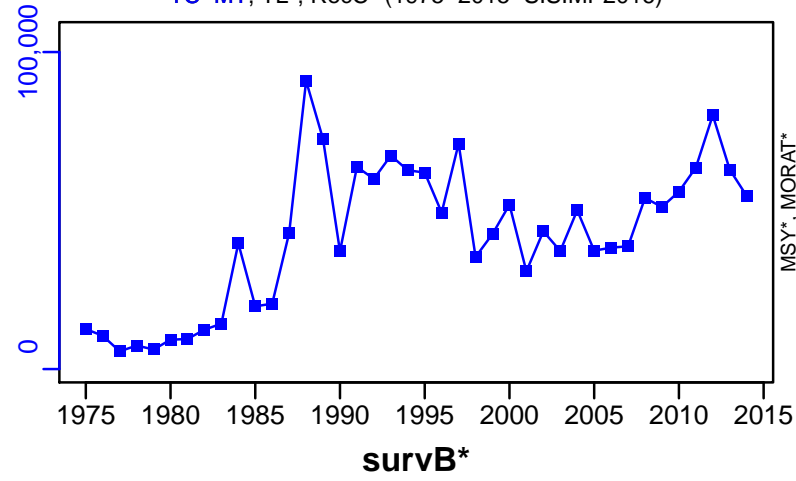
R-E00 (1975-2015-SISIMP2016)



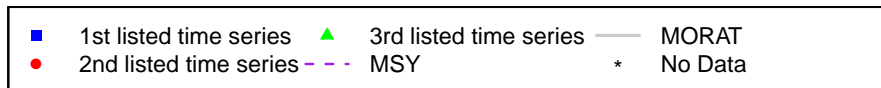
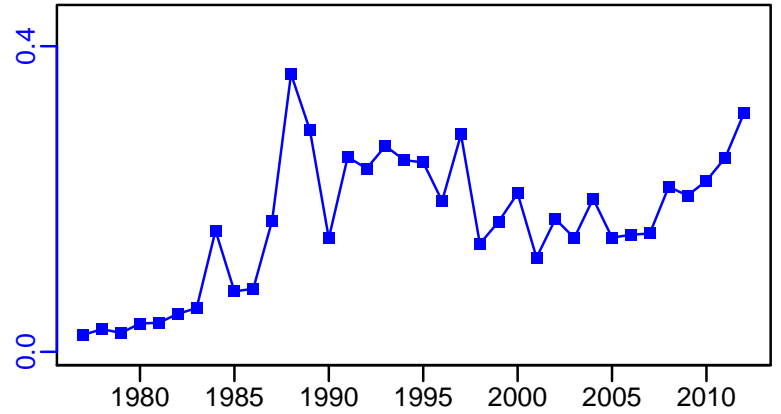
# Northern rock sole Eastern Bering Sea and Aleutian Islands [NRSOLEEBSAI]

TC-MT, TL\*, RecC\* (1975-2015-SISIMP2016)

TAC\*, Cpair\*, Cadv\*



CdivMSY-ratio (1975-2012-HIVELY)

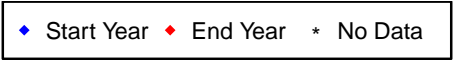
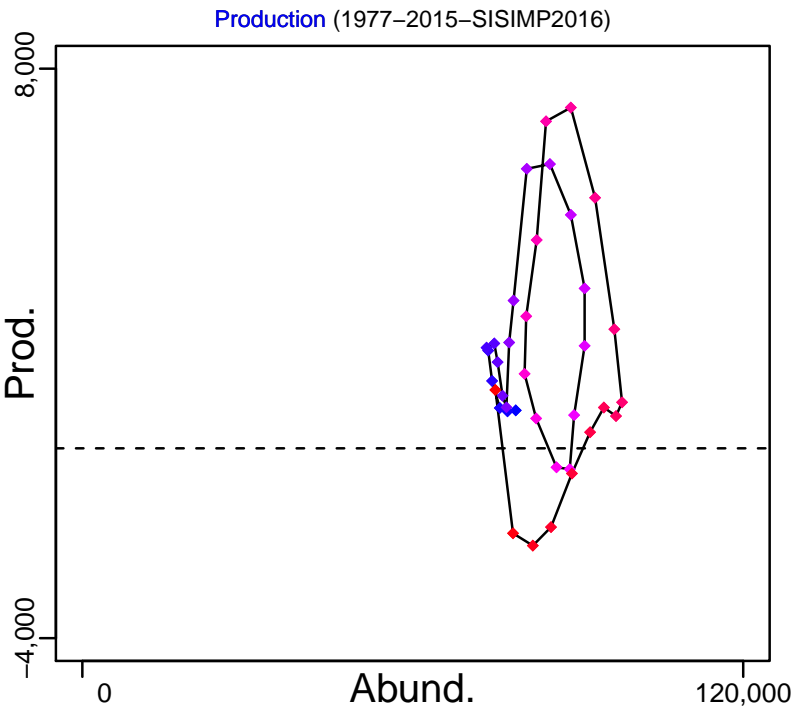
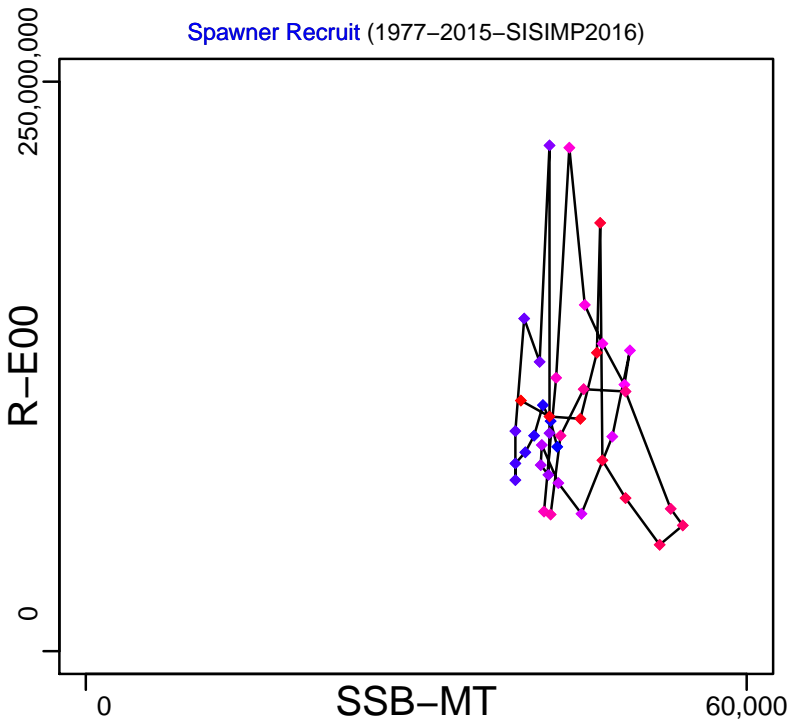
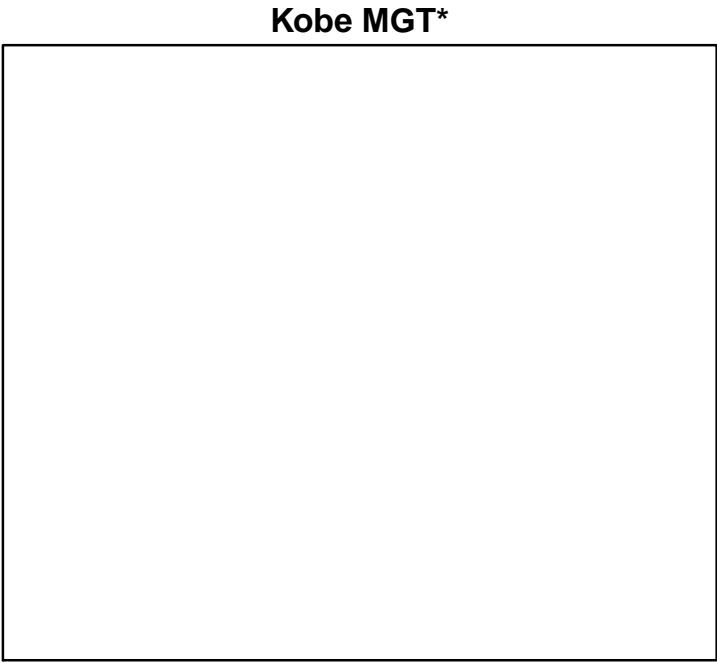
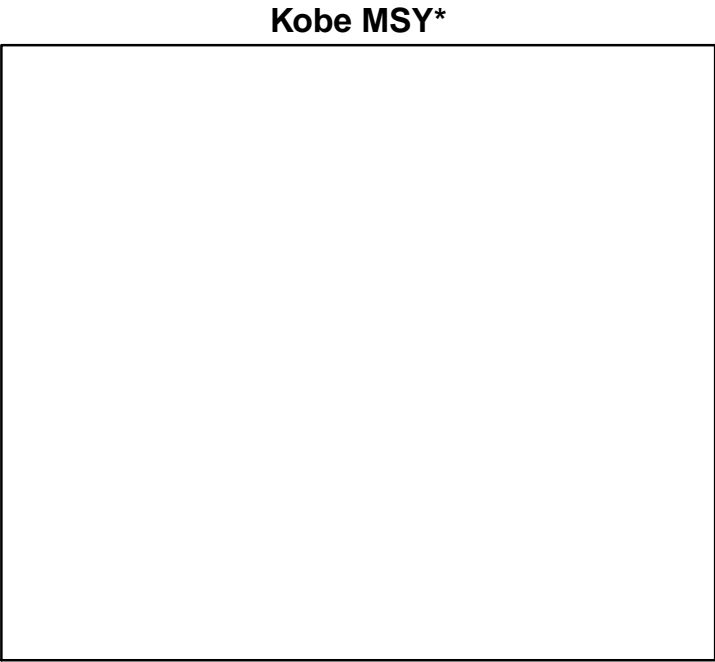


## Northern rock sole Gulf of Alaska [NRSOLEGA]

Metadata	
<b>Scientific Name</b>	Lepidopsetta polyxystra
<b>Current Assess ID</b>	AFSC-NRSOLEGA-1977-2015-SISIMP2016
<b>Area</b>	Gulf of Alaska
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2015

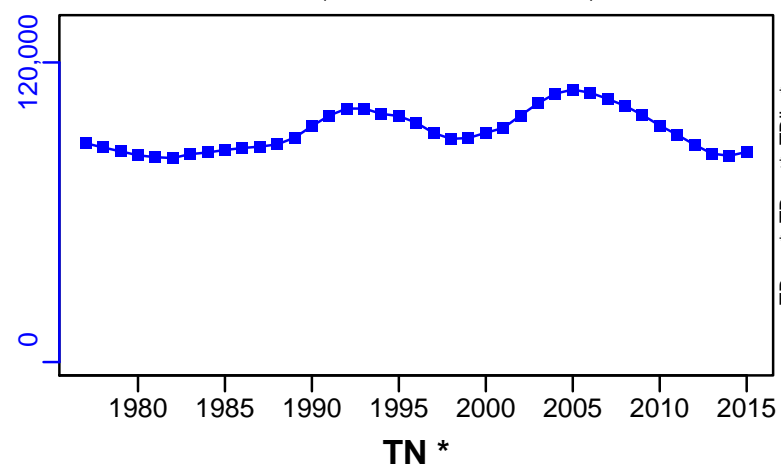
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2015	18,100
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	75,600	-	3+
<b>SSB</b>	SSB-MT	2015	39,500	Females	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$1.1 \times 10^8$	-	0
<b>F</b>	F-1/yr	2015	0.022	-	-
<b>ER</b>	ER-calc-ratio	2015	0.023	-	-
<b>TC</b>	TC-MT	2015	1720		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	2.181		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

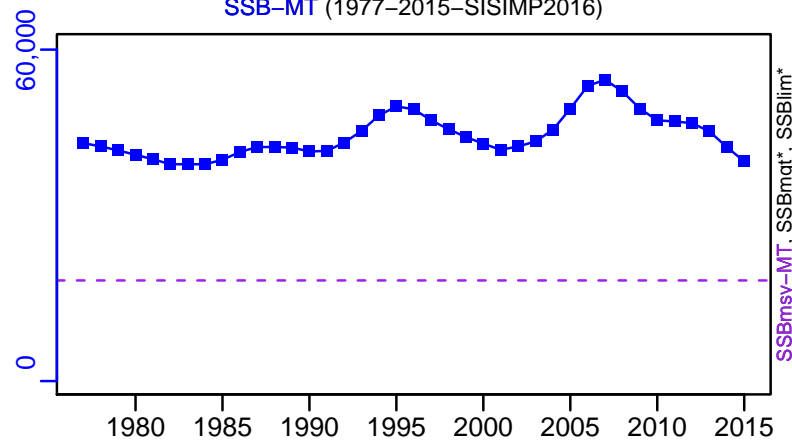


# Northern rock sole Gulf of Alaska [NRSOLEGA]

TB-MT (1977-2015-SISIMP2016)



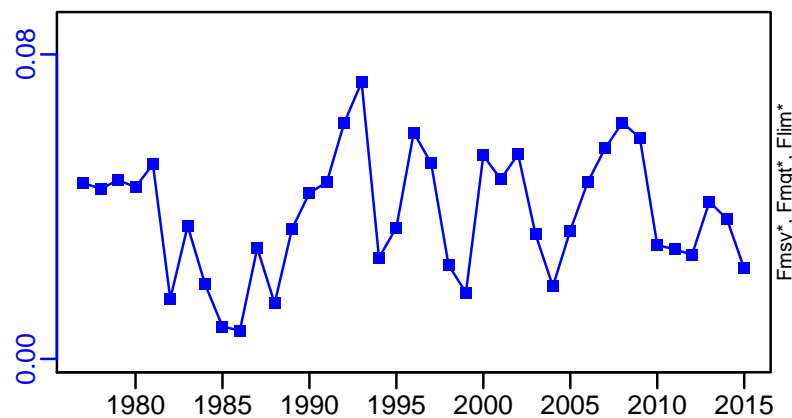
SSB-MT (1977-2015-SISIMP2016)



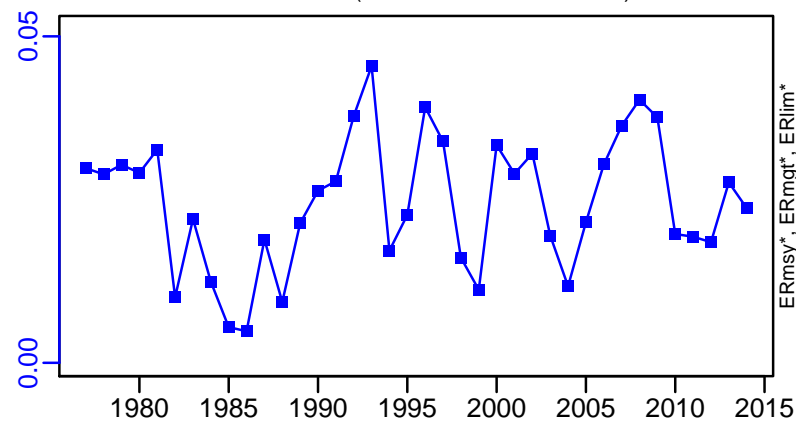
TN \*



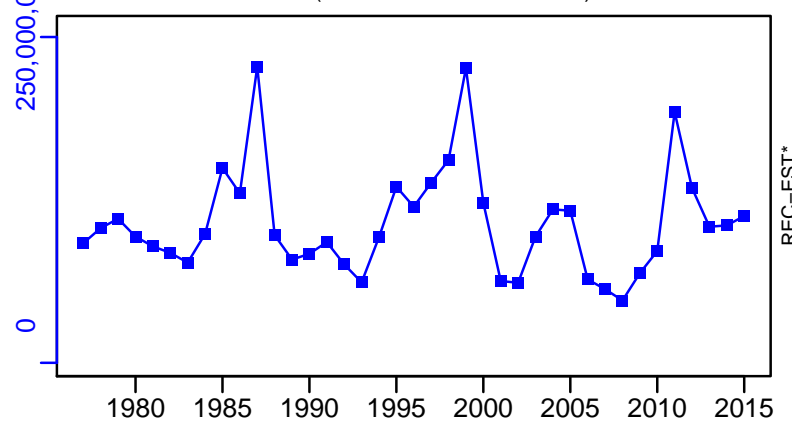
F-1/yr (1977-2015-SISIMP2016)



ER-calc-ratio (1977-2015-SISIMP2016)

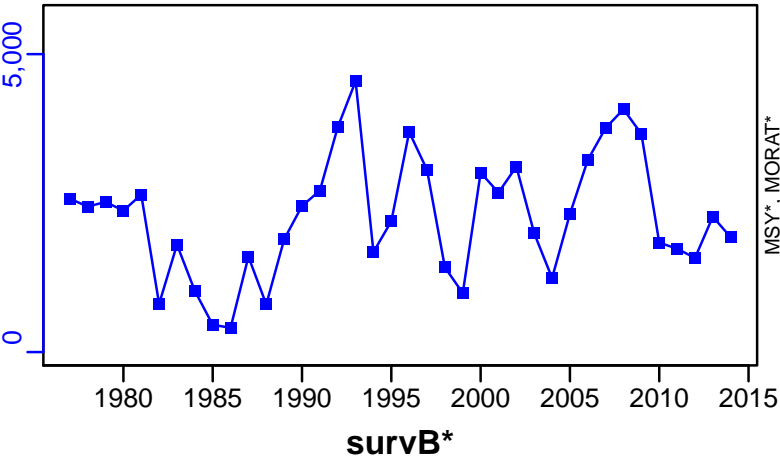


R-E00 (1977-2015-SISIMP2016)



Northern rock sole Gulf of Alaska [NRSOLEGA]

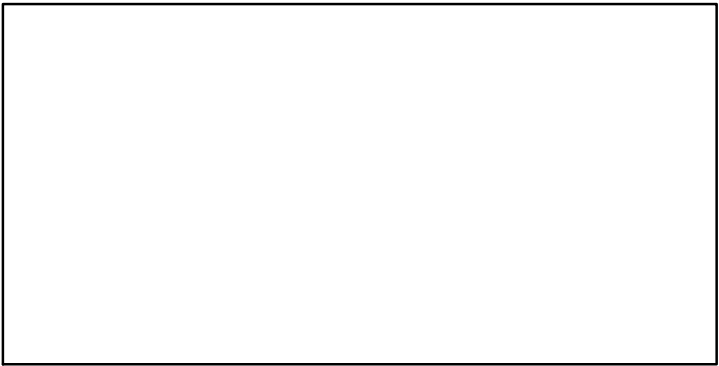
TC-MT, TL\*, RecC\* (1977-2015-SISIMP2016)



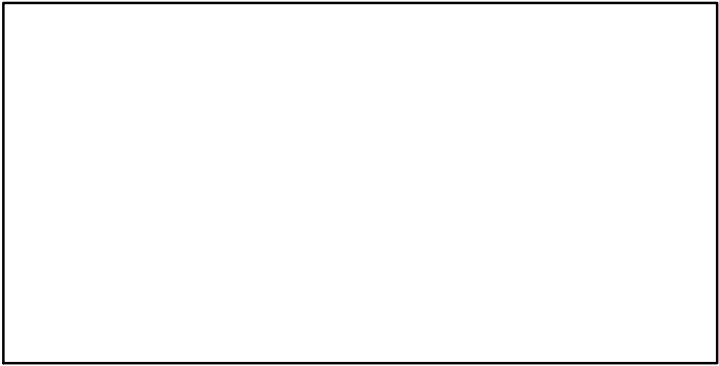
TAC\*, Cpair\*, Cadv\*



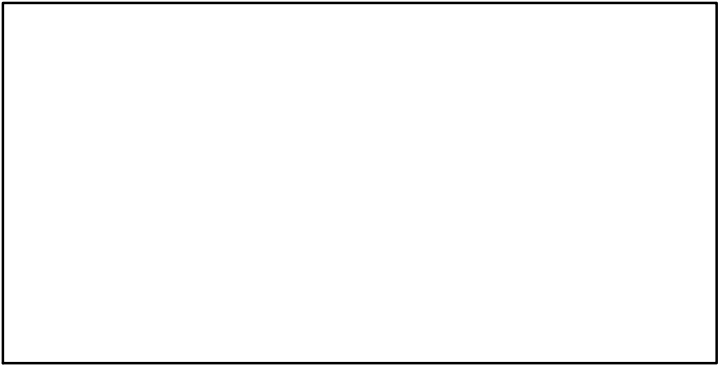
CPUE\*



EFFORT\*



CdivMSY\*

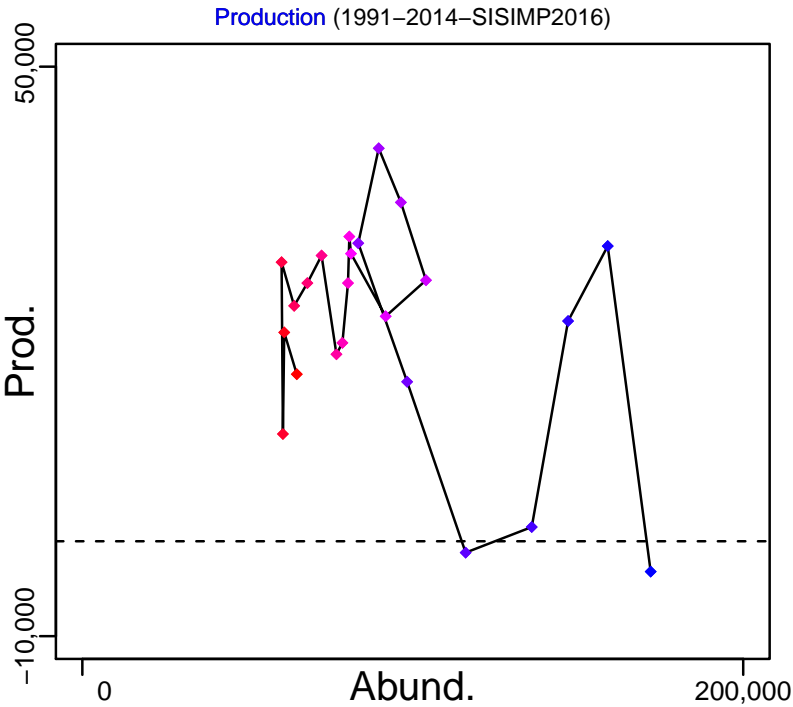
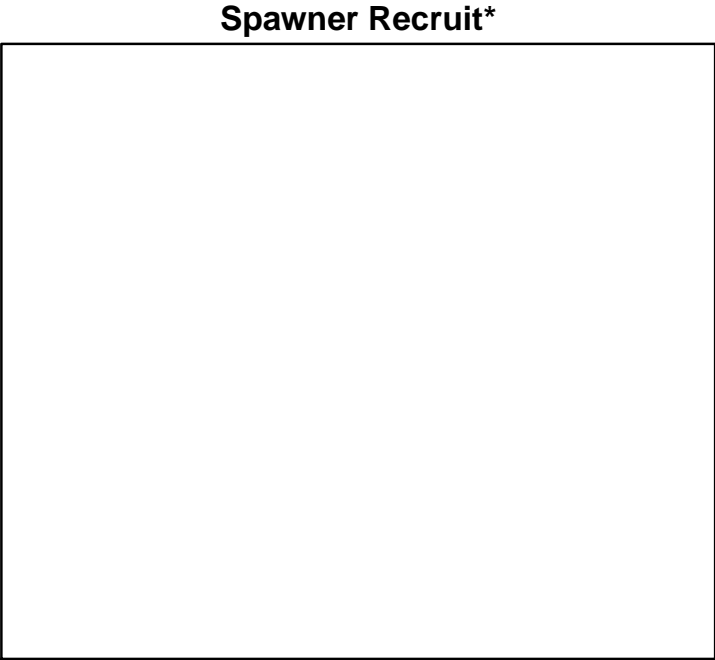
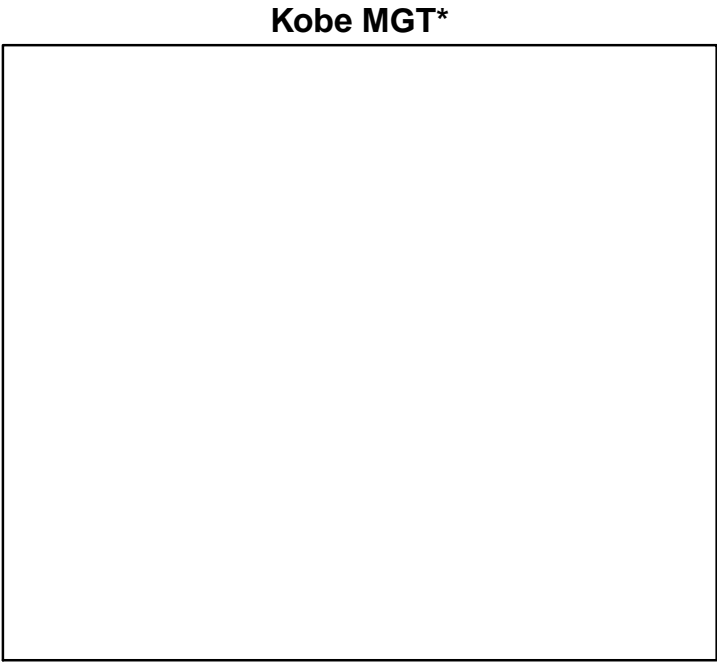
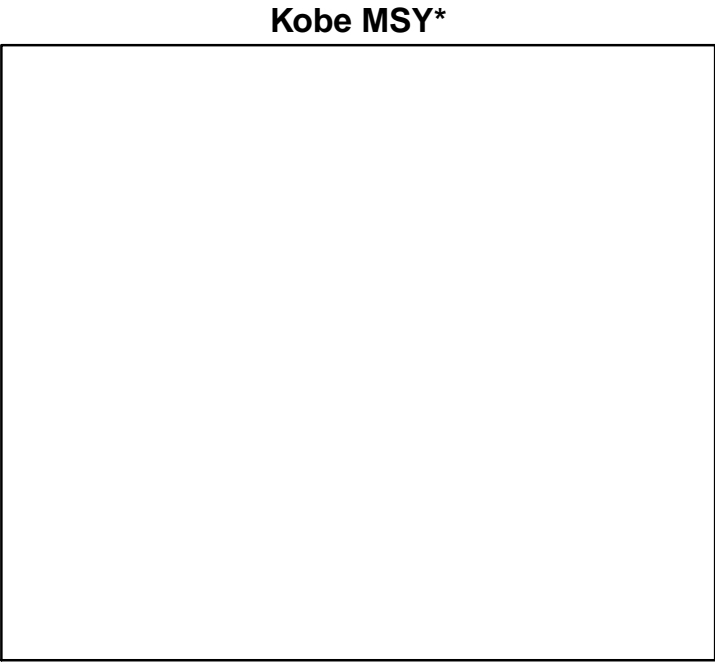


## Pacific cod Aleutian Islands [PCODAI]

Metadata	
<b>Scientific Name</b>	Gadus macrocephalus
<b>Current Assess ID</b>	AFSC-PCODAI-1991-2014-SISIMP2016
<b>Area</b>	Aleutian Islands
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2014

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	TB-MT	2014	68,900	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2014	0.154	-	-
TC	TC-MT	2014	10,600		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



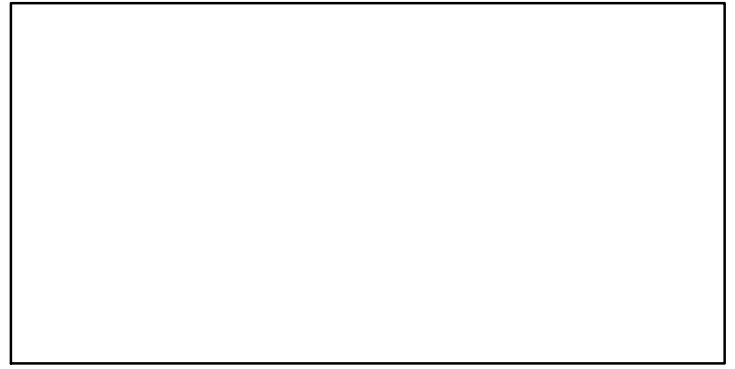
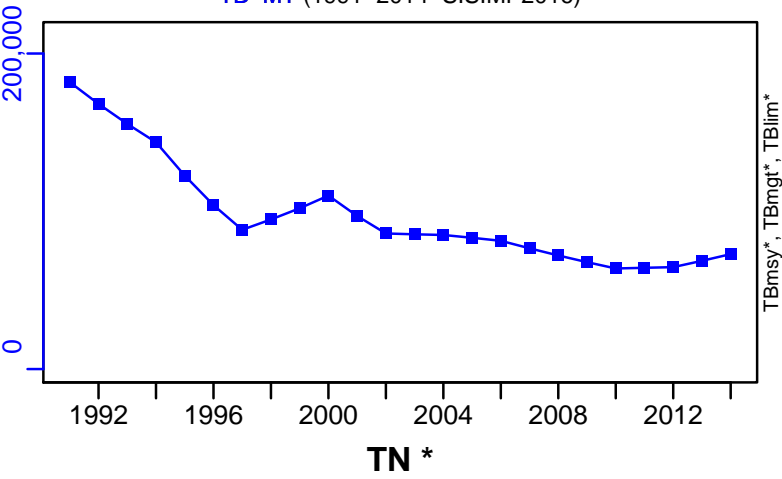
◆ Start Year ◆ End Year \* No Data



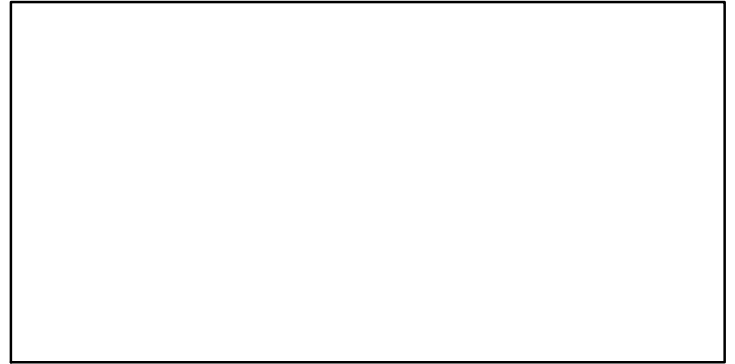
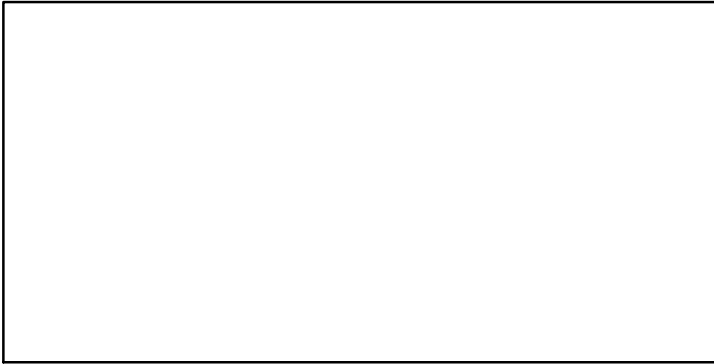
# Pacific cod Aleutian Islands [PCODAI]

TB-MT (1991-2014-SISIMP2016)

SSB\*

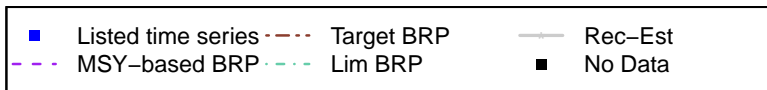
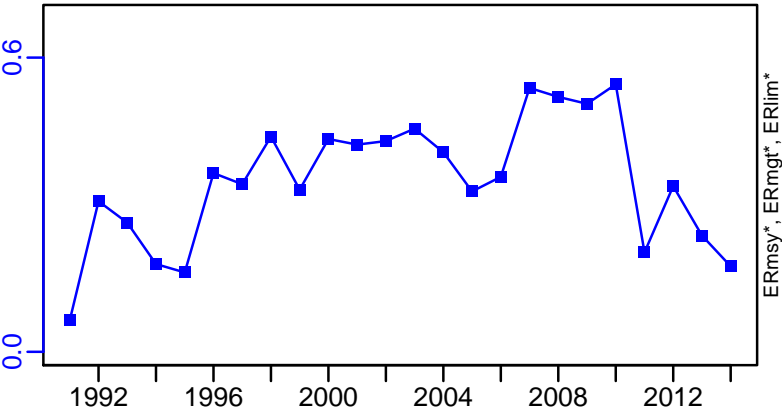


F\*



ER-calc-ratio (1991-2014-SISIMP2016)

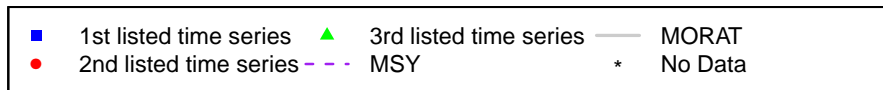
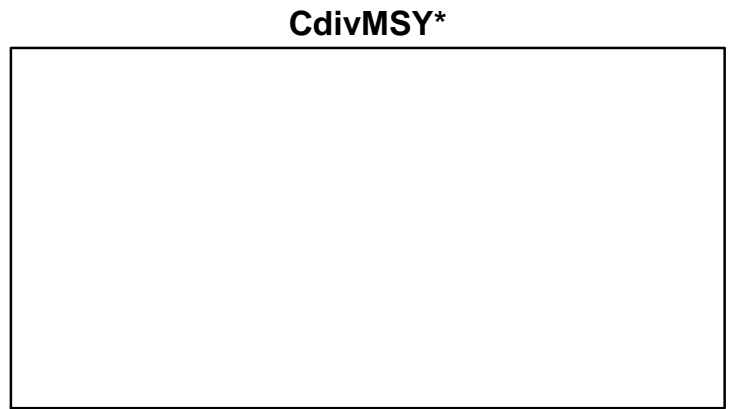
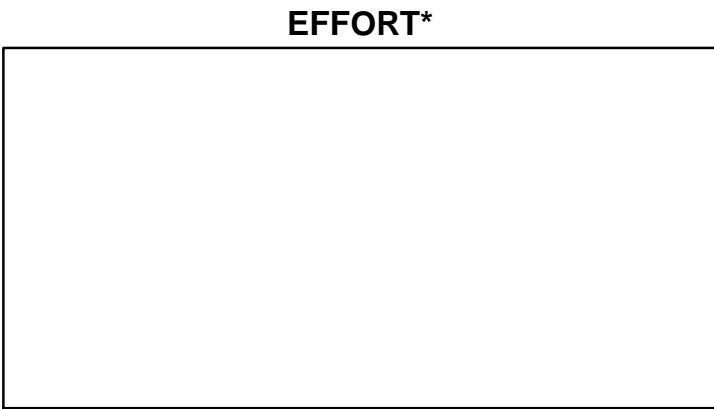
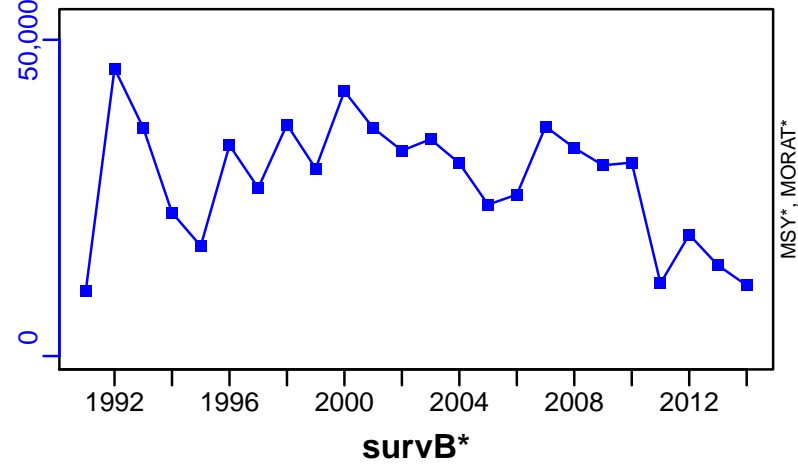
Recruits\*



# Pacific cod Aleutian Islands [PCODAI]

TC-MT, TL\*, RecC\* (1991-2014-SISIMP2016)

TAC\*, Cpair\*, Cadv\*



## Pacific cod Bering Sea [PCODBS]

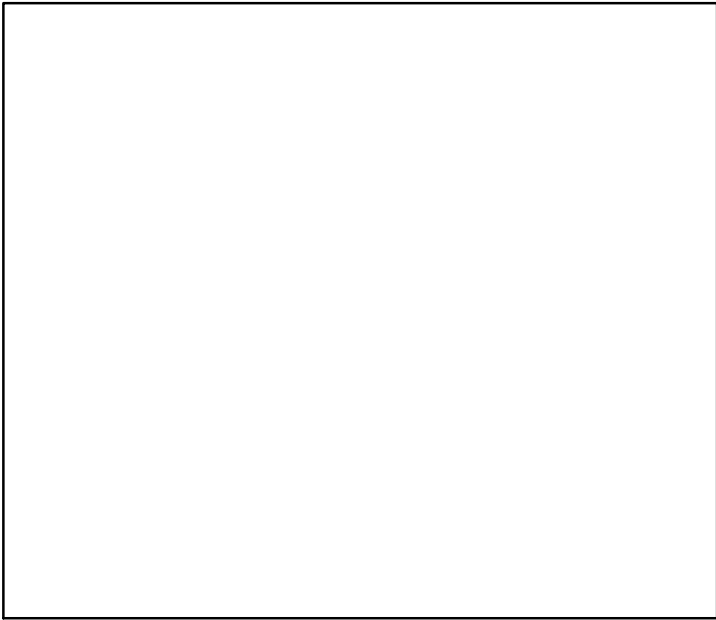
Metadata	
<b>Scientific Name</b>	Gadus macrocephalus
<b>Current Assess ID</b>	AFSC-PCODBS-1977-2015-SISIMP2016
<b>Area</b>	Bering Sea
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2015	282,000
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	1,670,000	-	0+
<b>SSB</b>	SSB-MT	2015	402,000	Females	4.9+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$5.38 \times 10^8$	-	0
<b>F</b>	F-1/yr	2015	0.247	-	-
<b>ER</b>	ER-calc-ratio	2015	0.16	-	-
<b>TC</b>	TC-MT	2015	239,000		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	1.424		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Pacific cod Bering Sea [PCODBS]

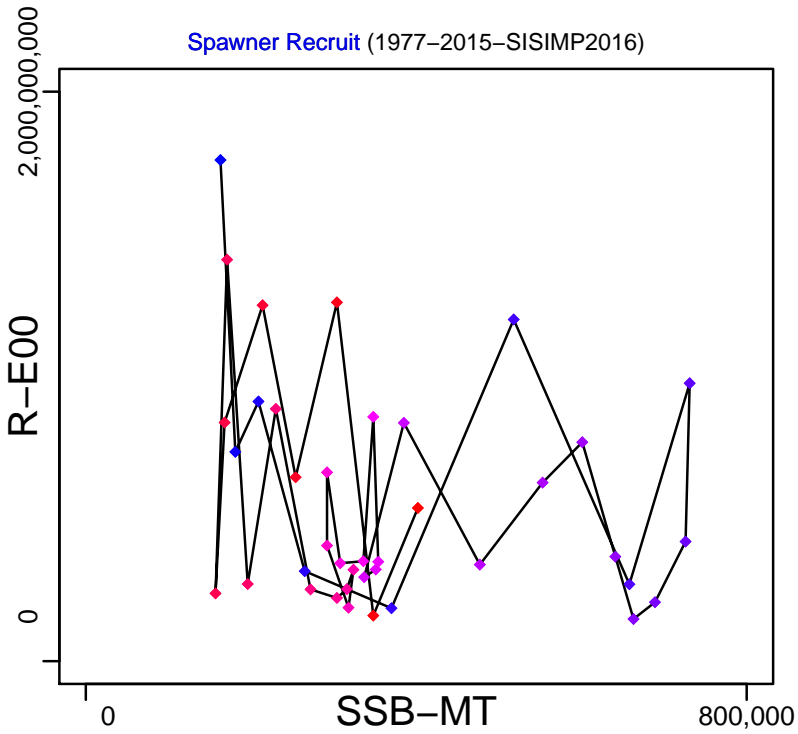
Kobe MSY\*



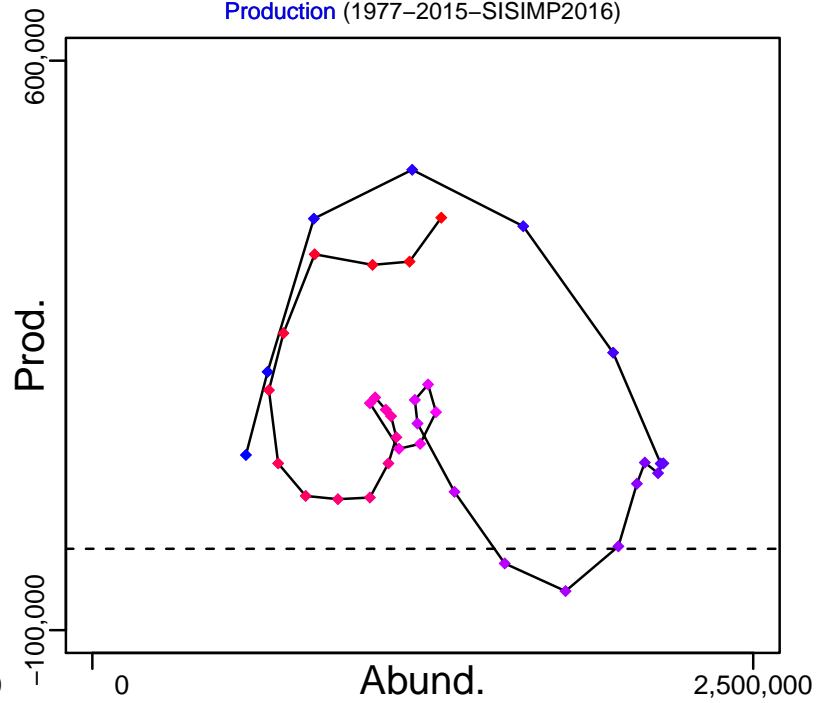
Kobe MGT\*



Spawner Recruit (1977–2015–SISIMP2016)

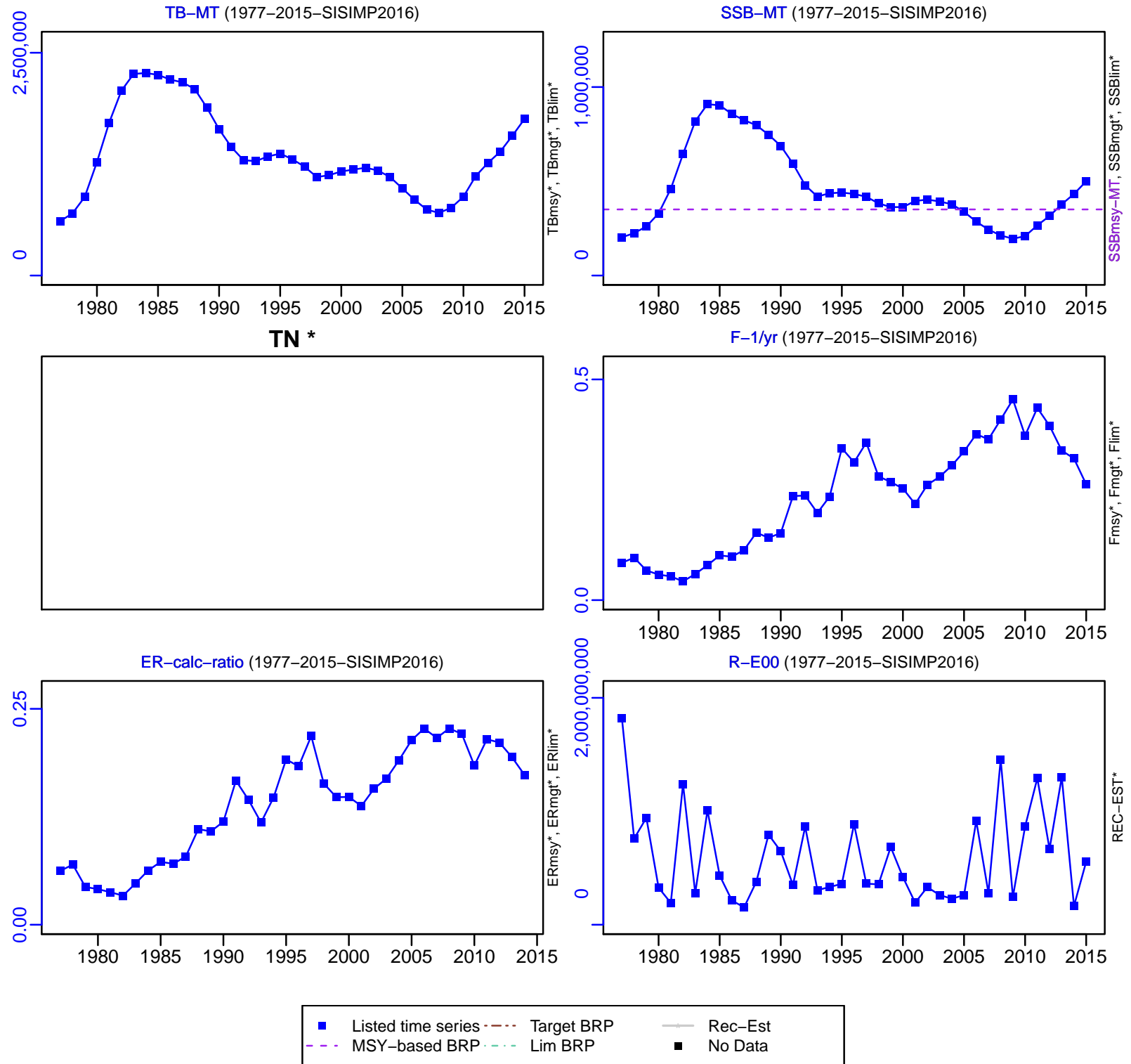


Production (1977–2015–SISIMP2016)



◆ Start Year ◆ End Year \* No Data

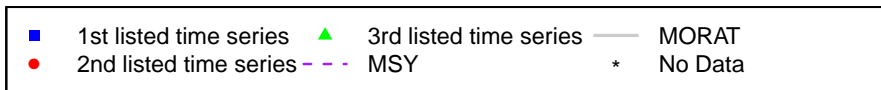
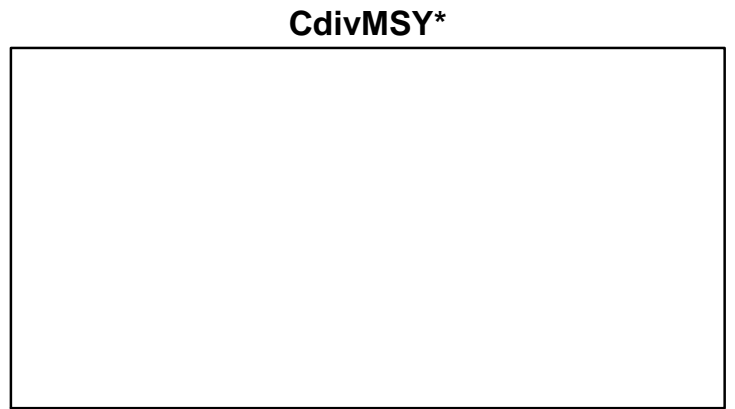
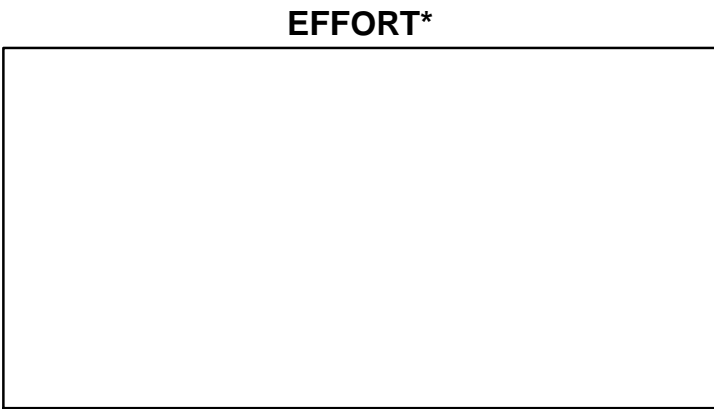
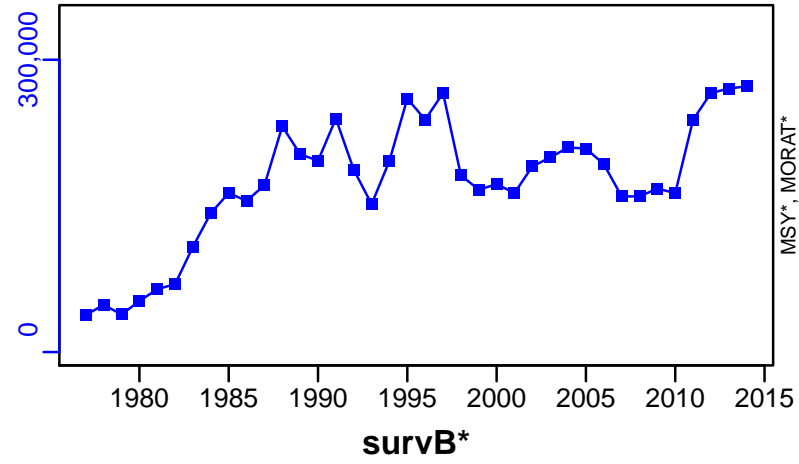
# Pacific cod Bering Sea [PCODBS]



# Pacific cod Bering Sea [PCODBS]

TC-MT, TL\*, RecC\* (1977-2015-SISIMP2016)

TAC\*, Cpair\*, Cadv\*



## Pacific cod Gulf of Alaska [PCODGA]

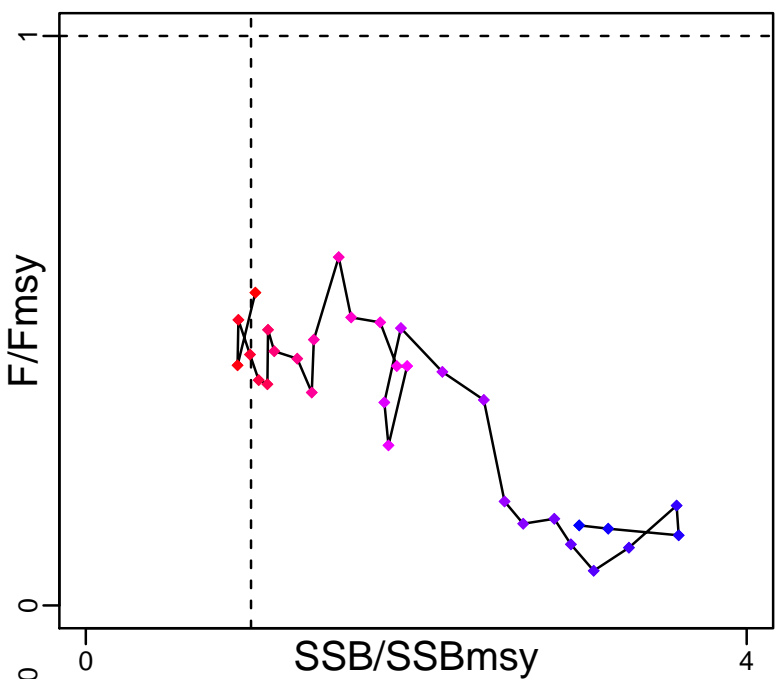
Metadata	
<b>Scientific Name</b>	Gadus macrocephalus
<b>Current Assess ID</b>	AFSC-PCODGA-1977-2015-SISIMP2016
<b>Area</b>	Gulf of Alaska
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2014, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2015	113,800
<b>Fmsy</b>	Fmsy-pr-1/yr	2014	0.69
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2014	91,100
<b>Fmgt</b>	Fmgt-1/yr	2014	0.54
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2014	0.38
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

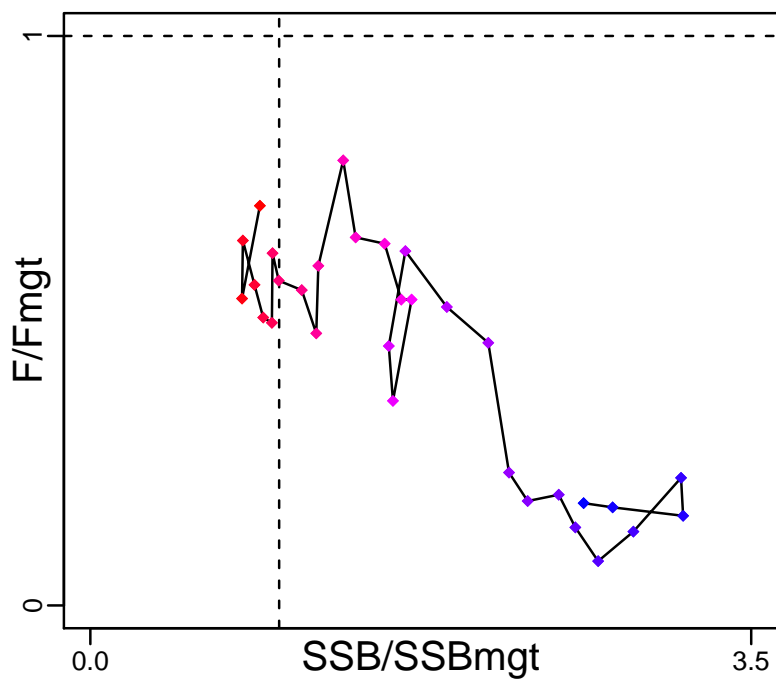
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	640,000	-	3+
<b>SSB</b>	SSB-MT	2015	203,000	Females	4.3+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$3.57 \times 10^8$	-	0
<b>F</b>	F-1/yr	2015	0.108	-	-
<b>ER</b>	ER-calc-ratio	2015	0.125	-	-
<b>TC</b>	TC-MT	2015	84,900		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	1.781		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2014	0.549		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2014	1.614		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	0.702		
<b>ER/ERmgt</b>	-	-	-		

# Pacific cod Gulf of Alaska [PCODGA]

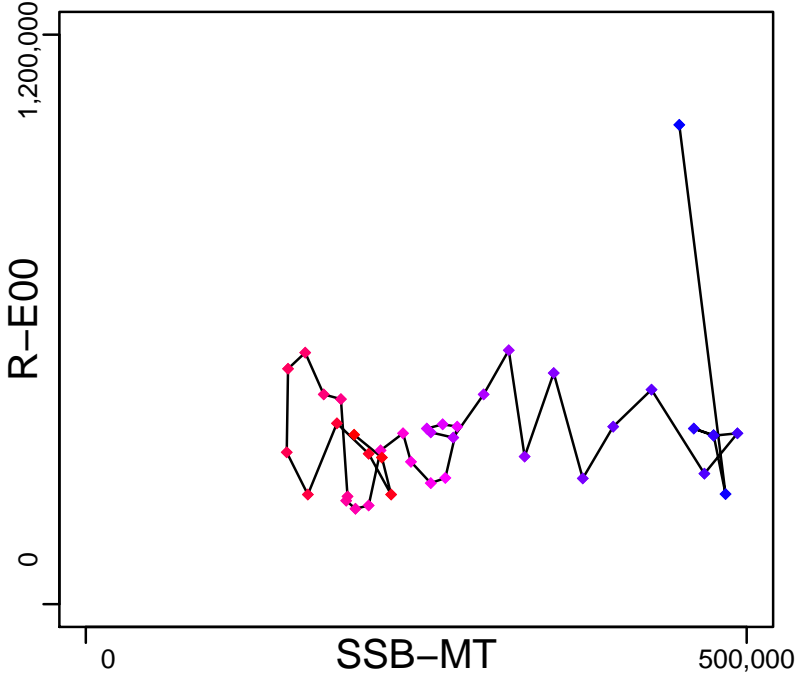
Kobe MSYpref (1977–2014–HIVELY)



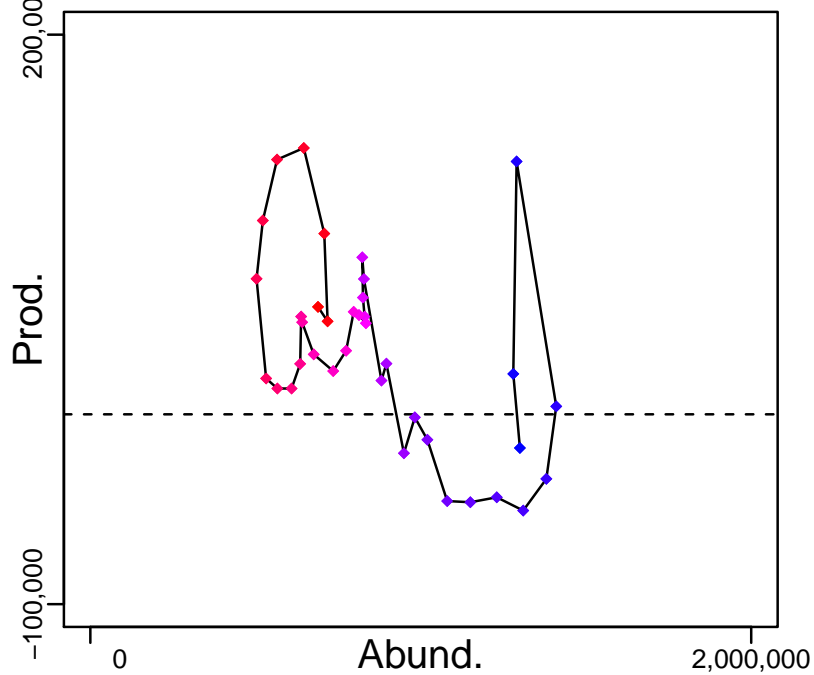
Kobe MGTpref (1977–2014–HIVELY)



Spawner Recruit (1977–2015–SISIMP2016)



Production (1977–2015–SISIMP2016)

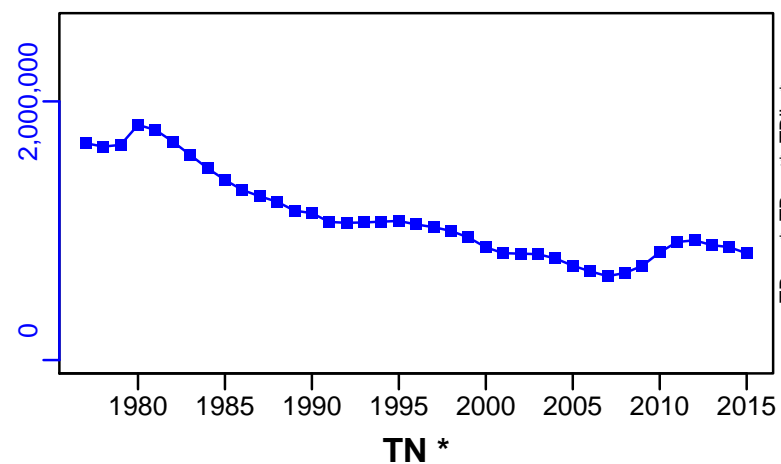


◆ Start Year ◆ End Year \* No Data

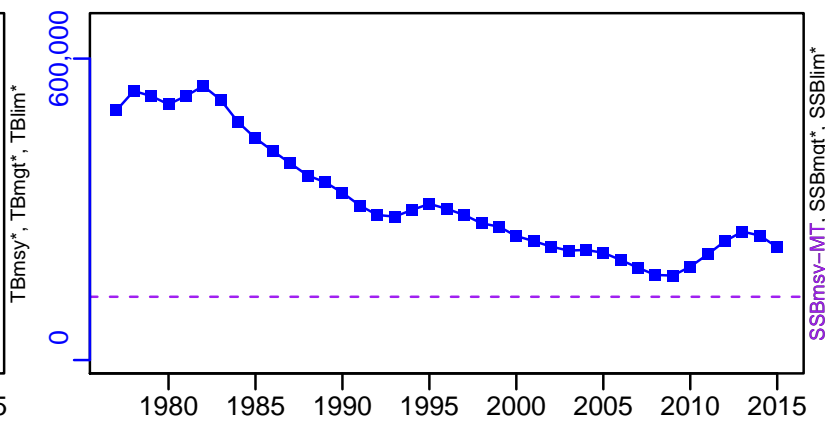


# Pacific cod Gulf of Alaska [PCODGA]

TB-MT (1977–2015–SISIMP2016)



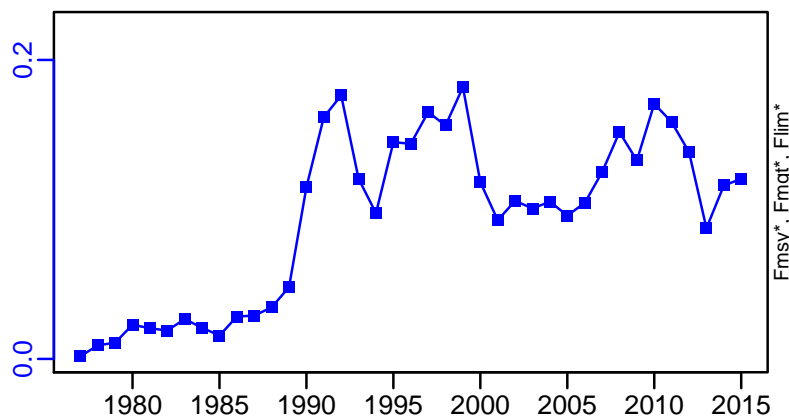
SSB-MT (1977–2015–SISIMP2016)



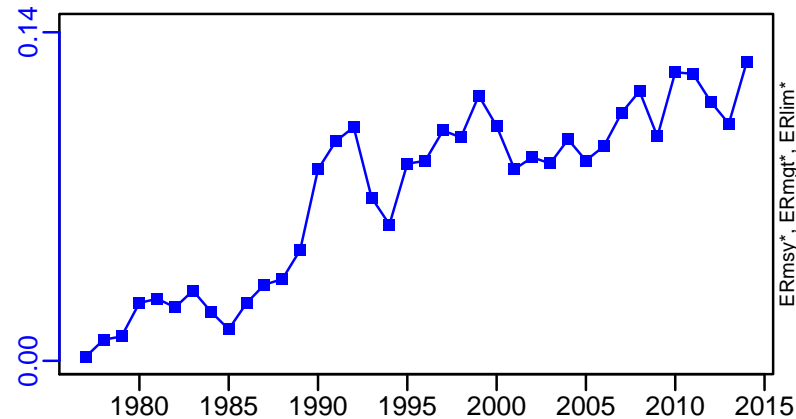
TN \*



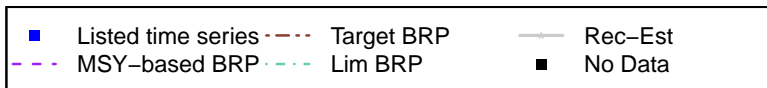
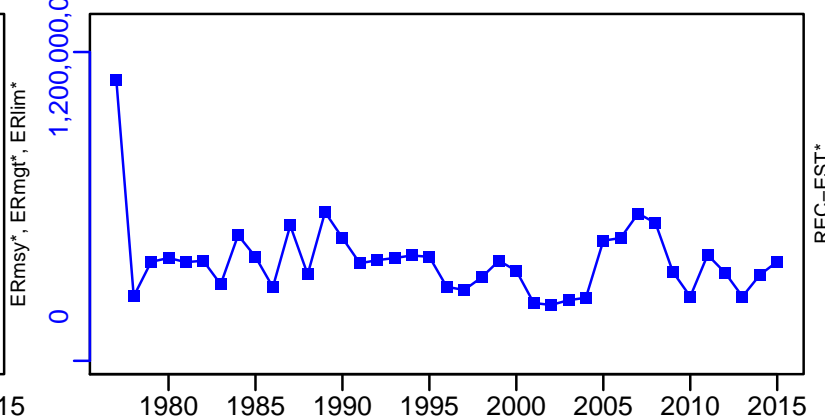
F-1/yr (1977–2015–SISIMP2016)



ER-calc-ratio (1977–2015–SISIMP2016)



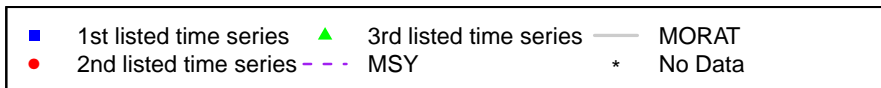
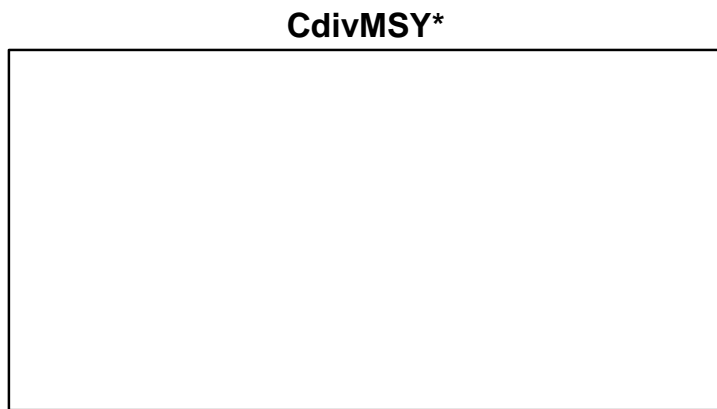
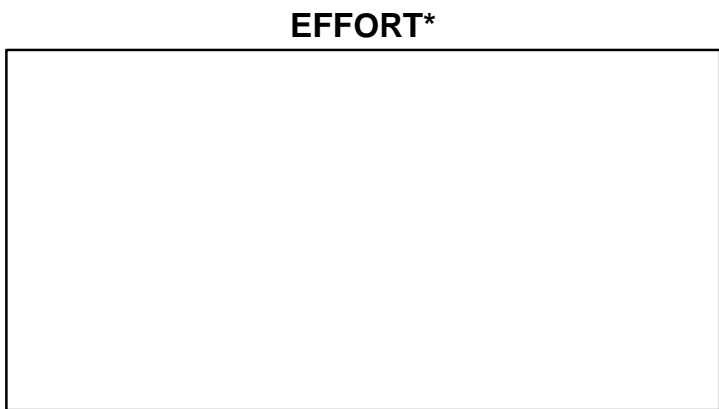
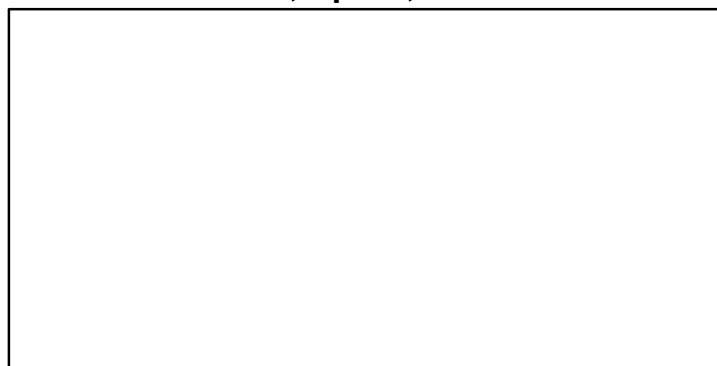
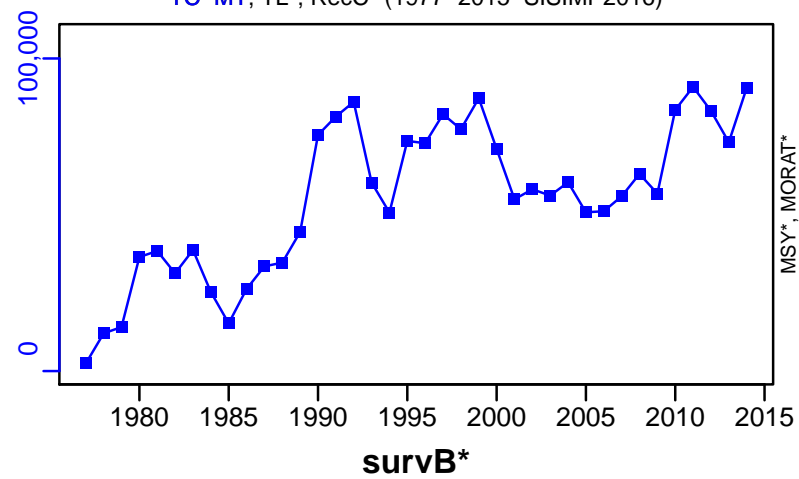
R-E00 (1977–2015–SISIMP2016)



# Pacific cod Gulf of Alaska [PCODGA]

TC-MT, TL\*, RecC\* (1977-2015-SISIMP2016)

TAC\*, Cpair\*, Cadv\*



## Pacific Ocean perch Eastern Bering Sea and Aleutian Islands [PERCHEBSAI]

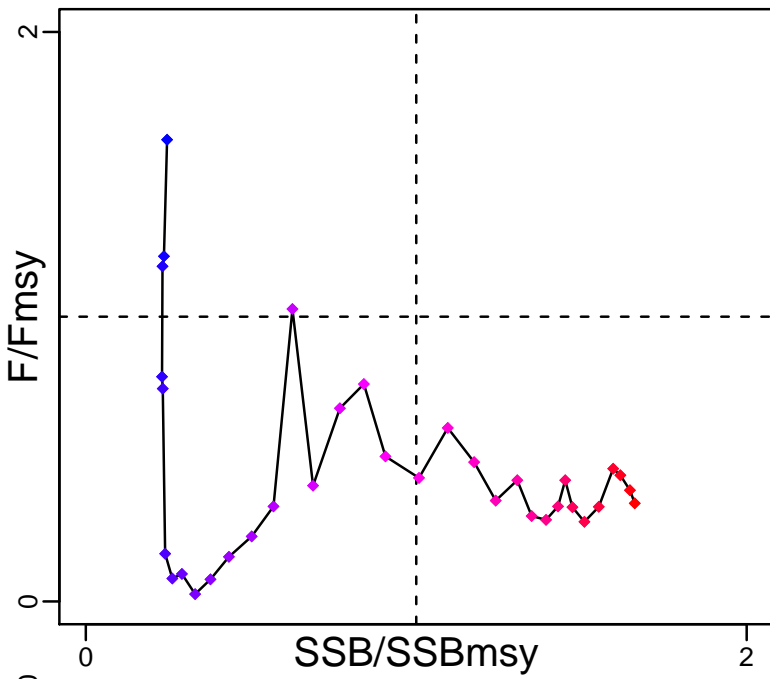
Metadata	
<b>Scientific Name</b>	Sebastes alutus
<b>Current Assess ID</b>	AFSC-PERCHEBSAI-1960-2015-SISIMP2016
<b>Area</b>	Eastern Bering Sea and Aleutian Islands
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2011, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2015	148,053
<b>Fmsy</b>	Fmsy-pr-1/yr	2011	0.074
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2011	0.062
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

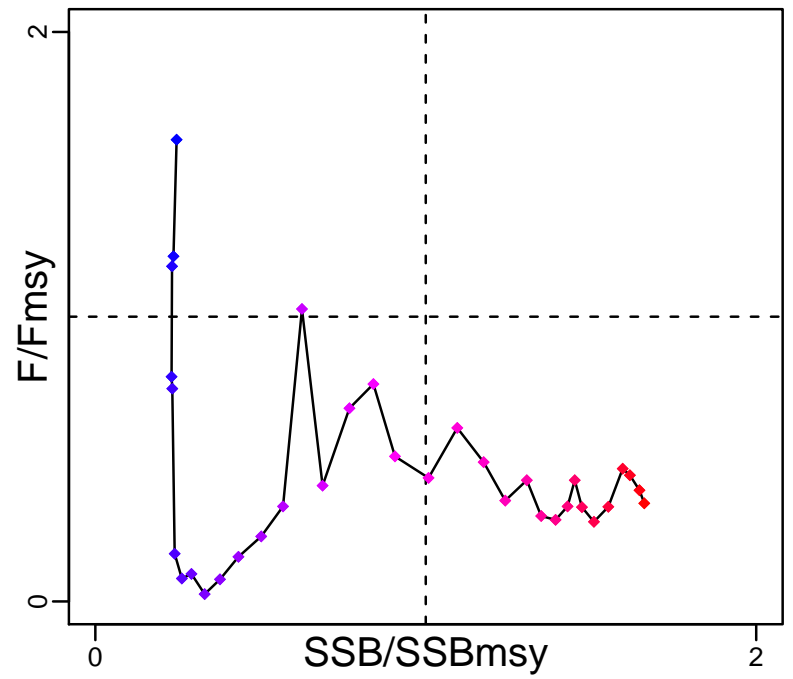
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	598,000	Both	3+
<b>SSB</b>	SSB-MT	2015	234,000	Females	9.1+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	82,100,000	-	3
<b>F</b>	F-1/yr	2015	0.083	-	-
<b>ER</b>	ER-calc-ratio	2015	0.054	-	-
<b>TC</b>	TC-MT	2015	32,400		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	1.582		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2011	0.345		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

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

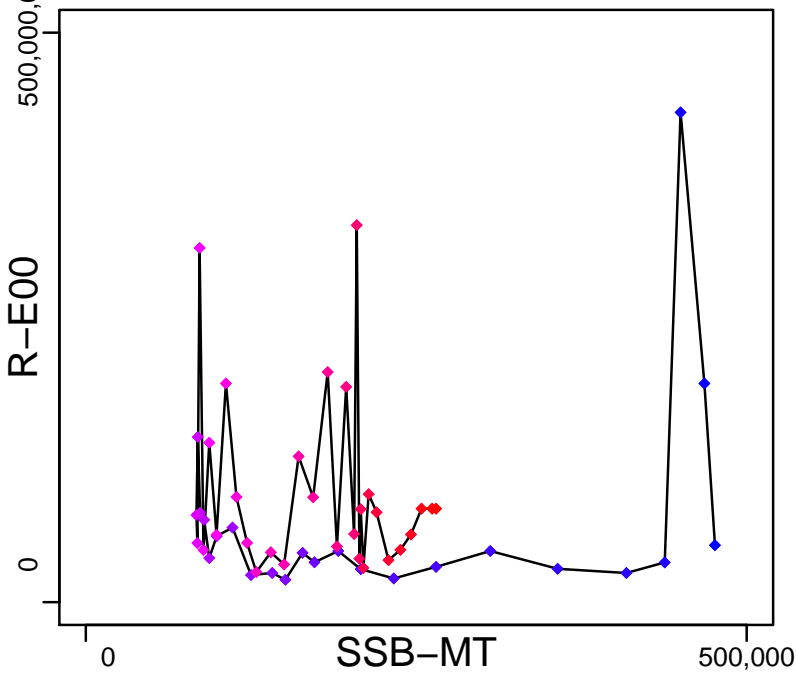
Kobe MSYpref (1960–2011–STACHURA)



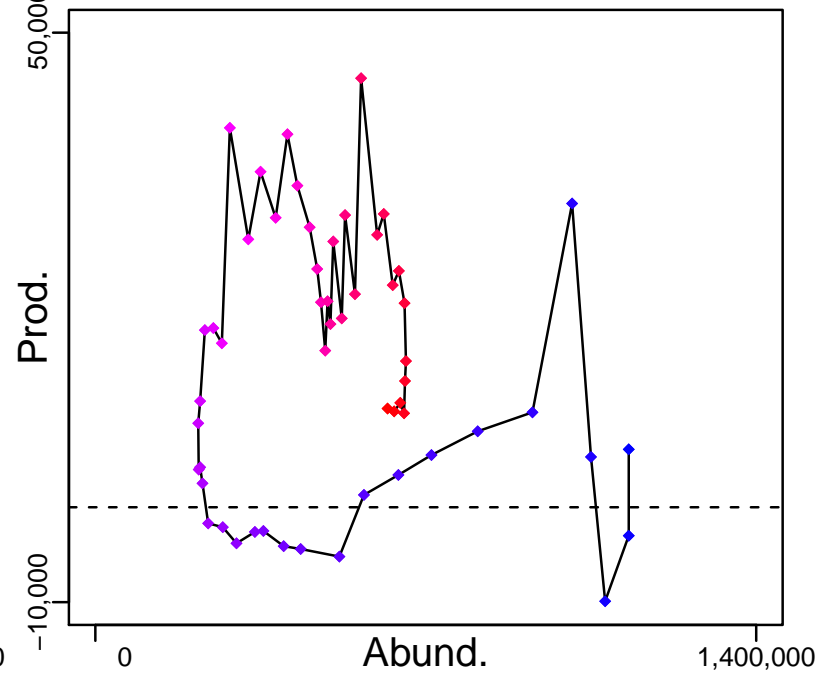
Kobe MGTpref (1960–2011–STACHURA)



Spawner Recruit (1960–2015–SISIMP2016)



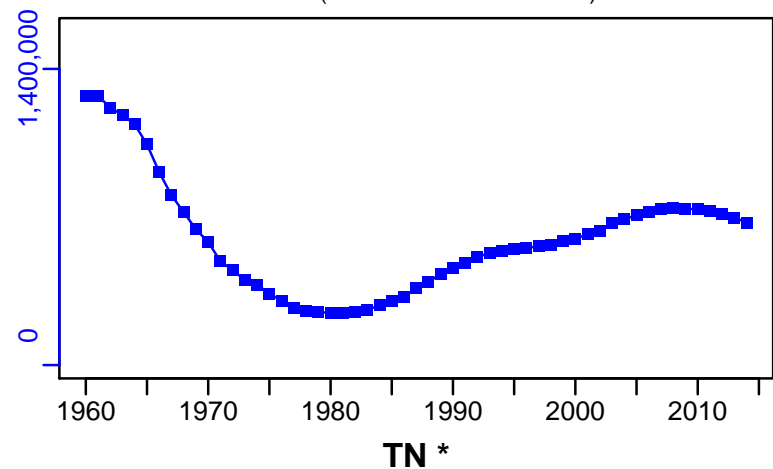
Production (1960–2015–SISIMP2016)



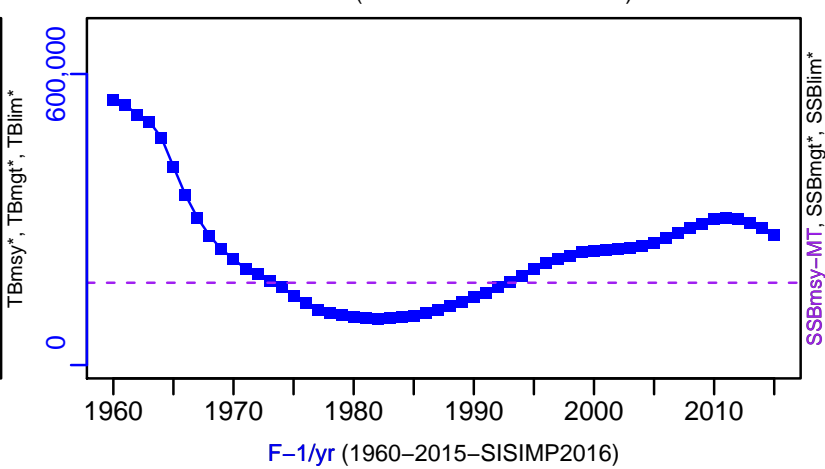
◆ Start Year ◆ End Year \* No Data

# Pacific Ocean perch Eastern Bering Sea and Aleutian Islands [PERCHEBSAI]

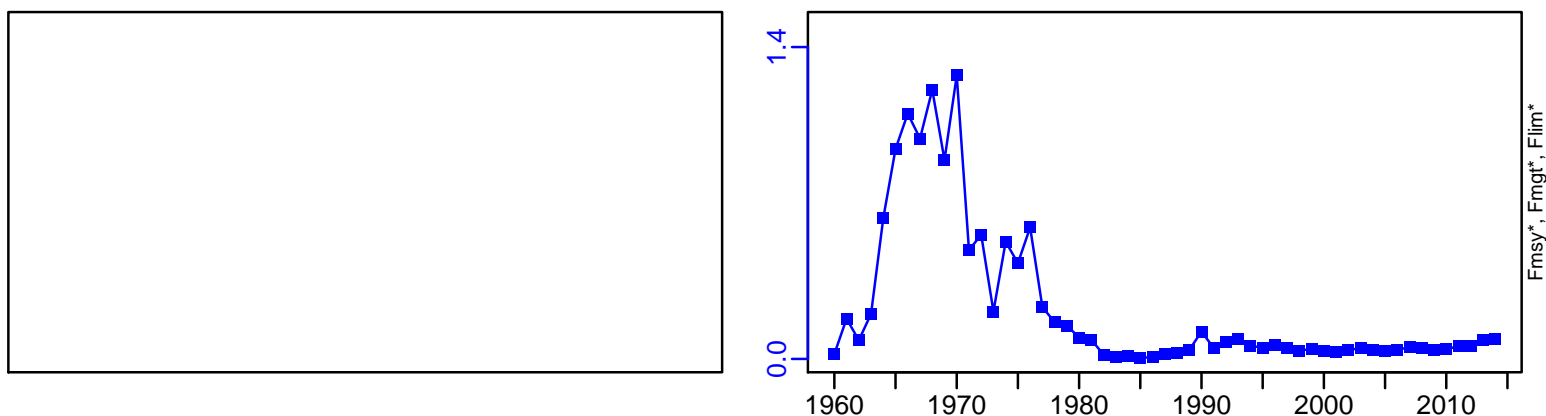
TB-MT (1960–2015–SISIMP2016)



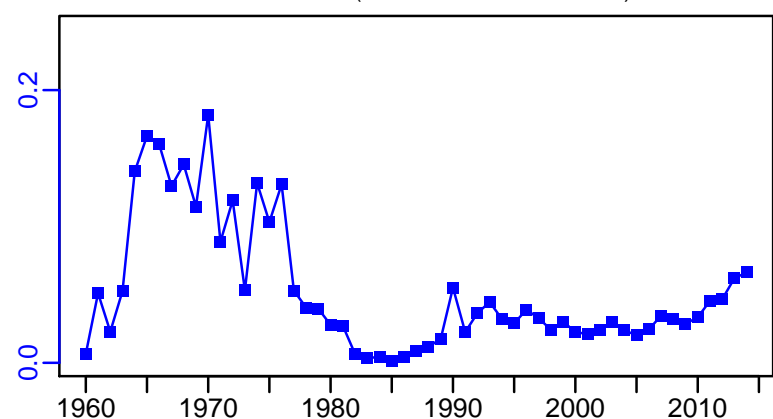
SSB-MT (1960–2015–SISIMP2016)



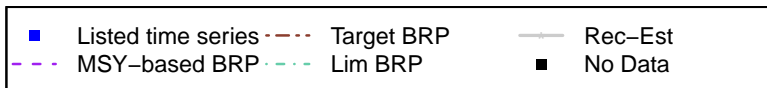
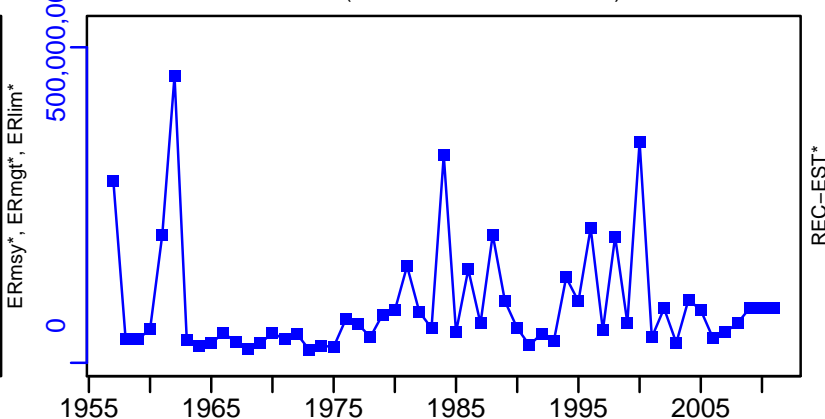
F-1/yr (1960–2015–SISIMP2016)



ER-calc-ratio (1960–2015–SISIMP2016)

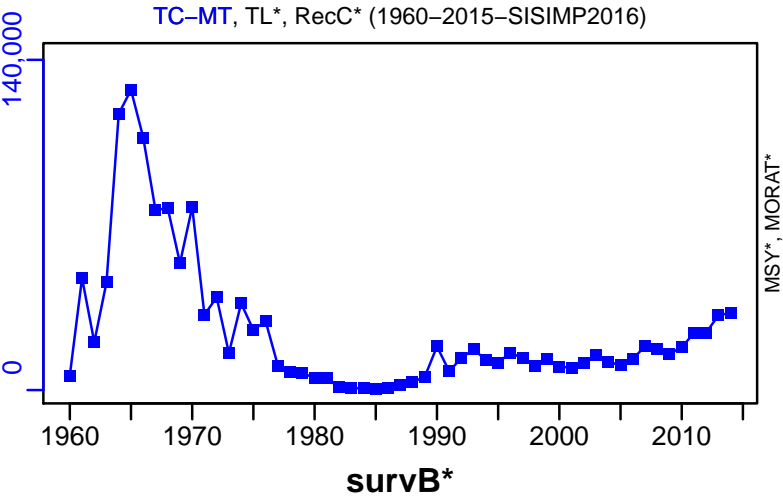


R-E00 (1960–2015–SISIMP2016)



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

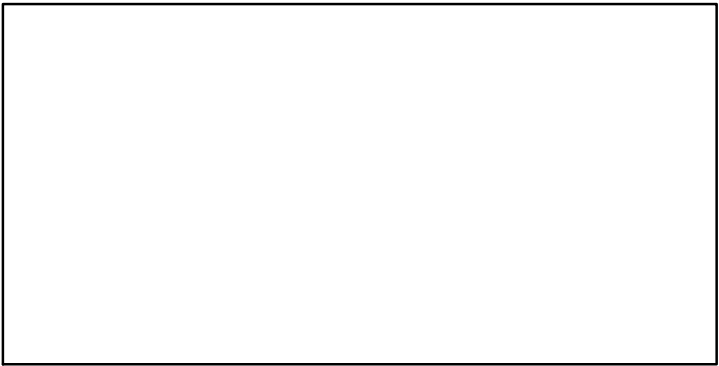
TC-MT, TL\*, RecC\* (1960-2015-SISIMP2016)



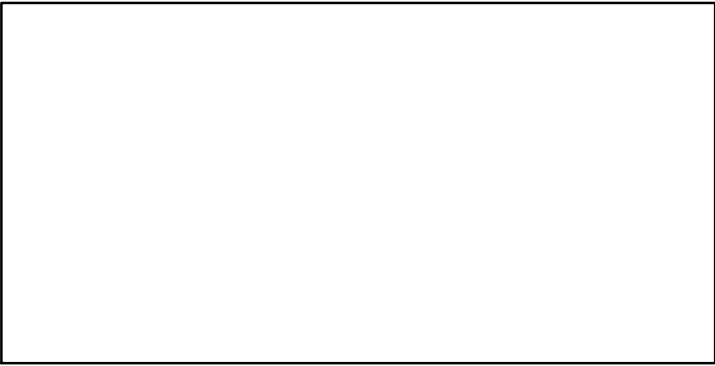
TAC\*, Cpair\*, Cadv\*



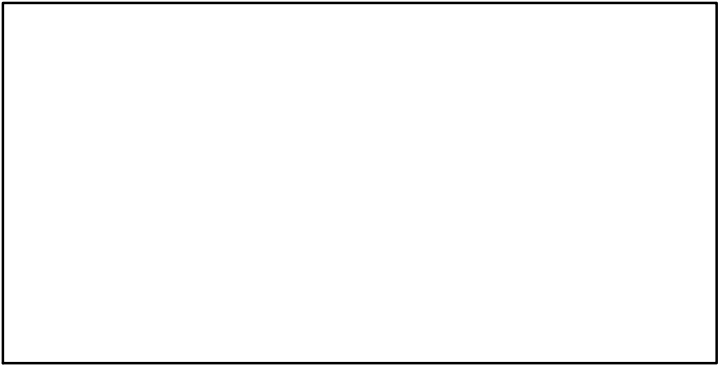
CPUE\*



EFFORT\*



CdivMSY\*



## Pacific halibut North Pacific [PHALNPAC]

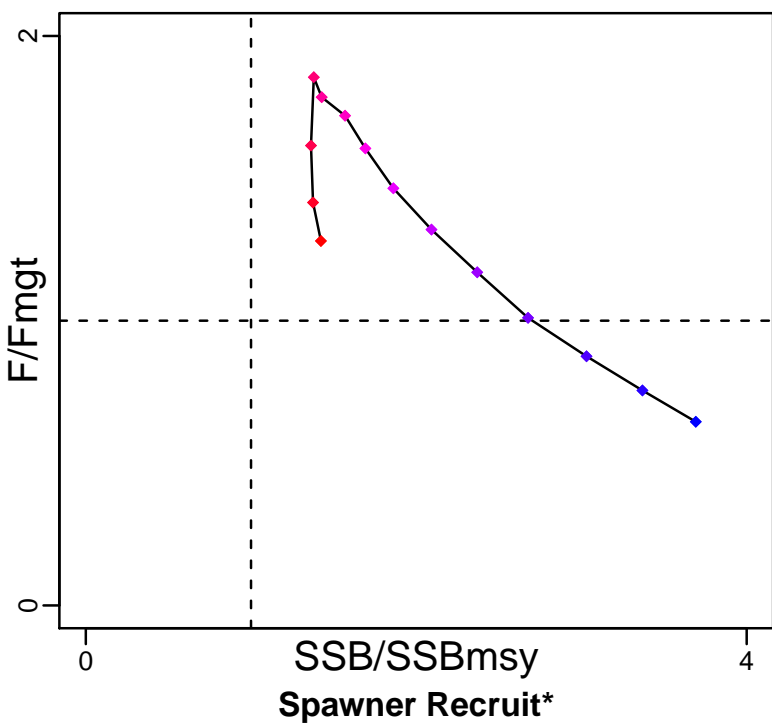
Metadata	
<b>Scientific Name</b>	Hippoglossus stenolepis
<b>Current Assess ID</b>	IPHC-PHALNPAC-1888-2014-HIVELY
<b>Area</b>	North Pacific
<b>Management Authority</b>	International Pacific Halibut Commission
<b>Assessor</b>	International Pacific Halibut Commission
<b>Asmts in RAM</b>	2014

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

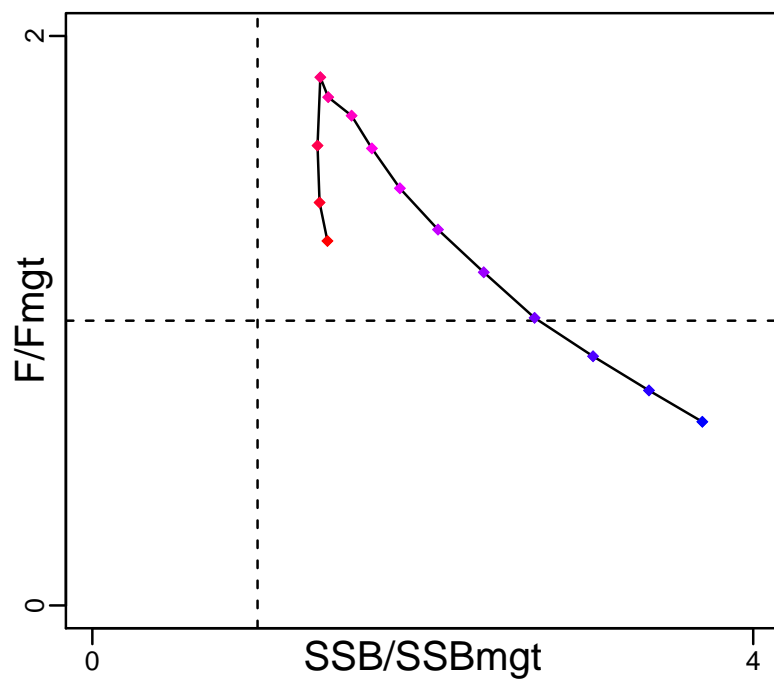
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2014	77,000	-	-
<b>SSB</b>	SSB-MT	2014	94,600	Females	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	F-1/yr	2014	0.256	-	-
<b>ER</b>	ER-calc-ratio	2014	0.139	-	-
<b>TC</b>	TC-MT	2014	10,700		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-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

# Pacific halibut North Pacific [PHALNPAC]

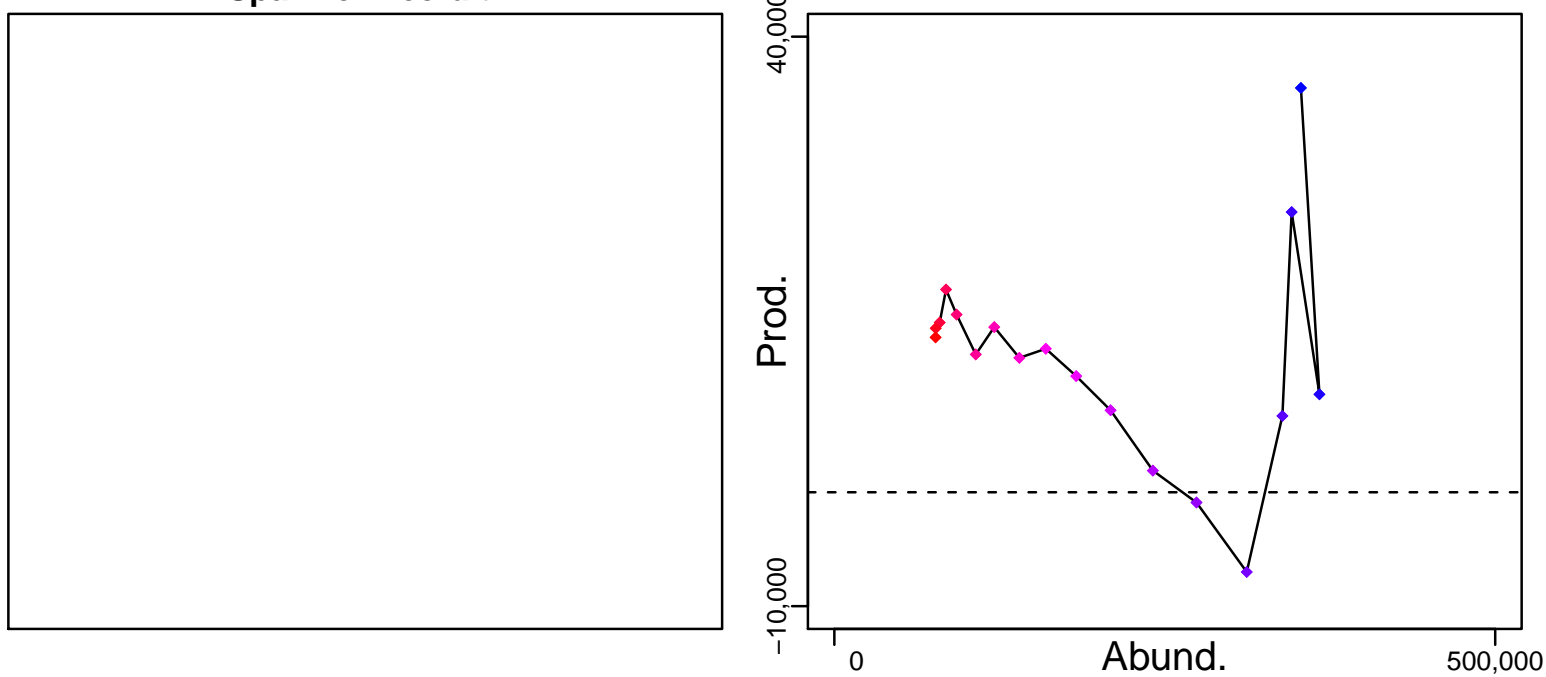
Kobe MSYpref (1888–2014–HIVELY)



Kobe MGTpref (1888–2014–HIVELY)



Production (1888–2014–HIVELY)

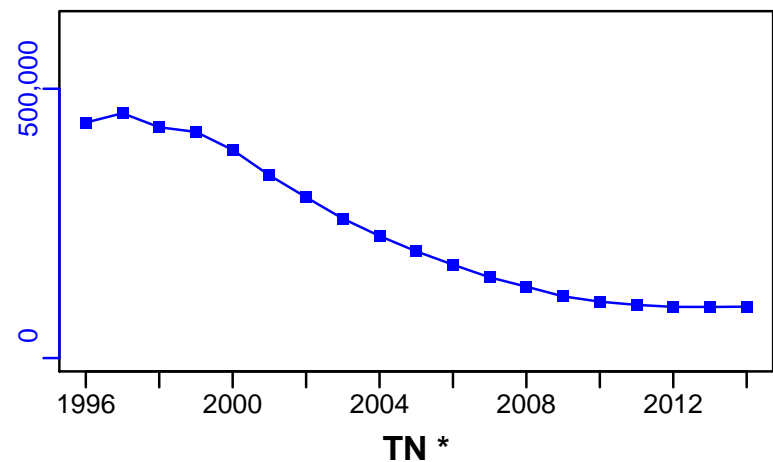


◆ Start Year ◆ End Year \* No Data

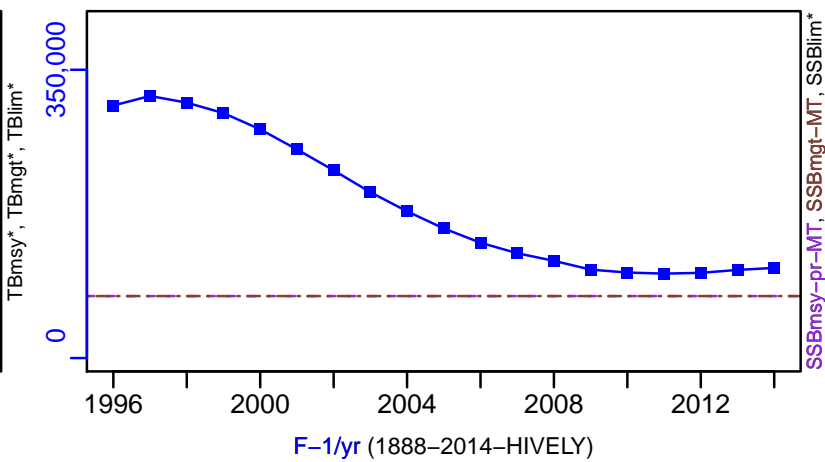


# Pacific halibut North Pacific [PHALNPAC]

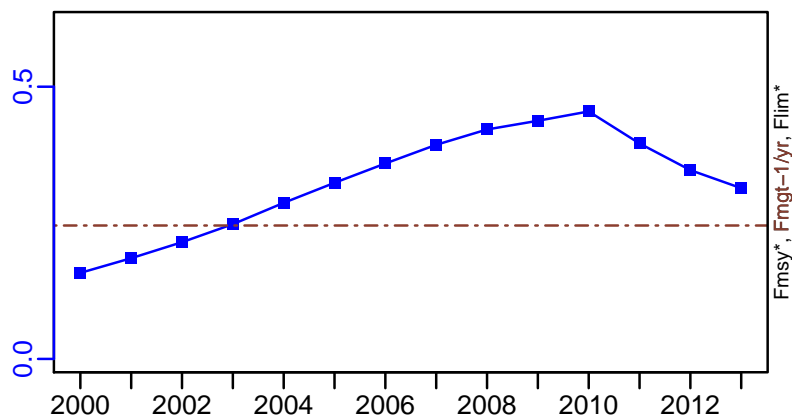
TB-MT (1888-2014-HIVELY)



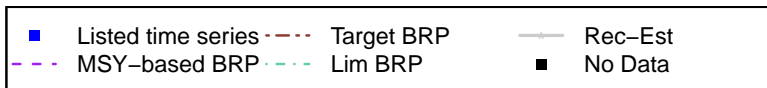
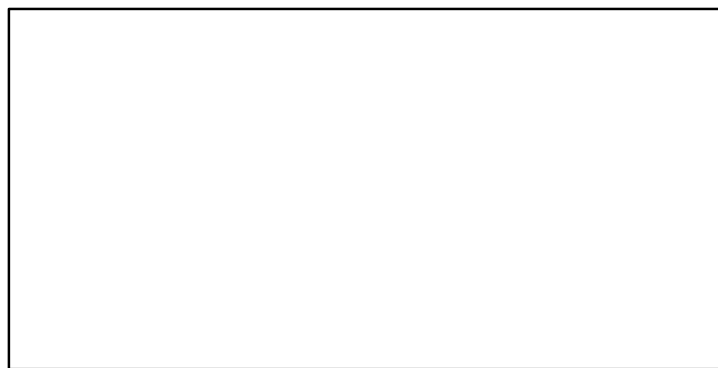
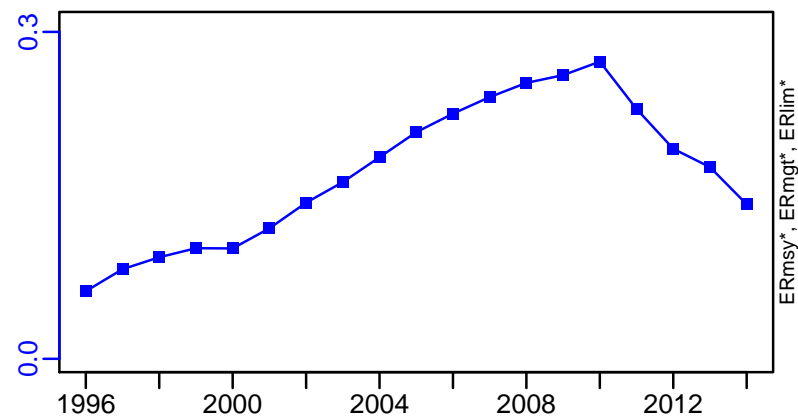
SSB-MT (1888-2014-HIVELY)



F-1/yr (1888-2014-HIVELY)



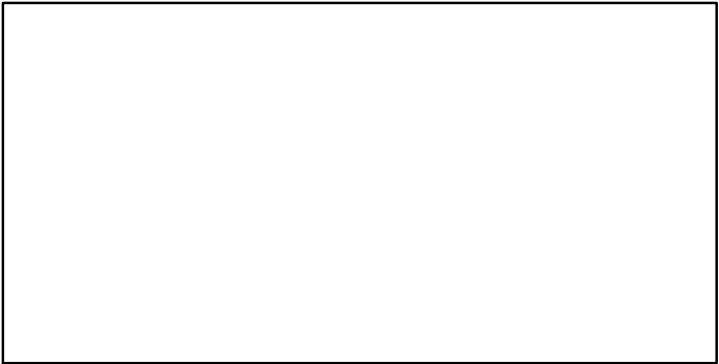
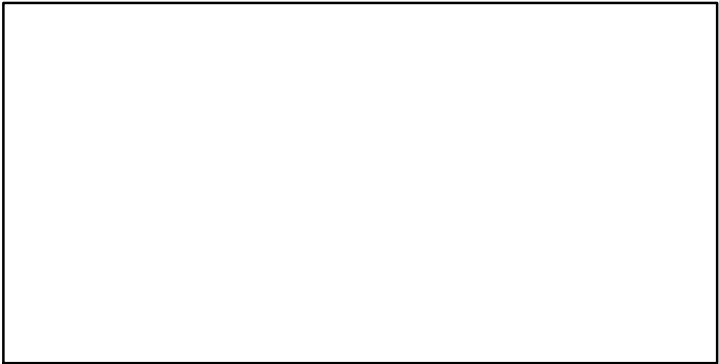
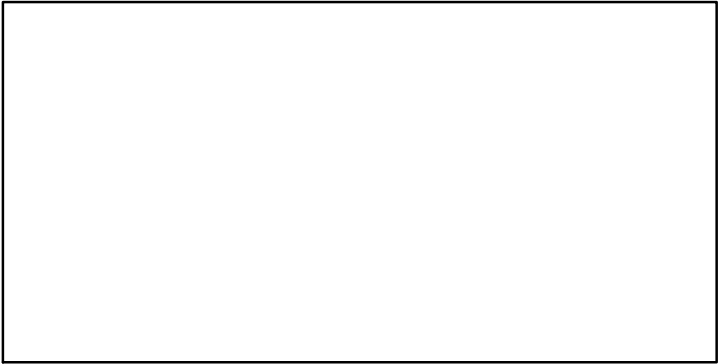
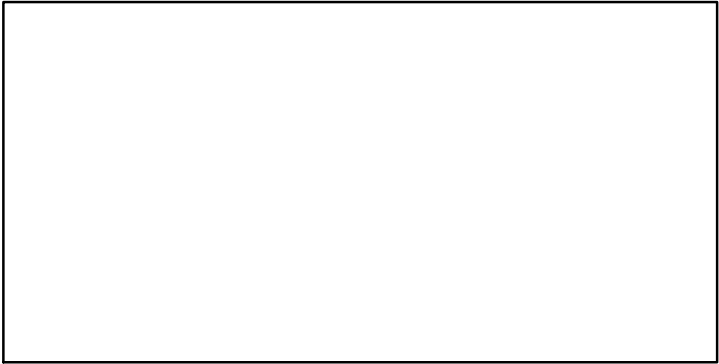
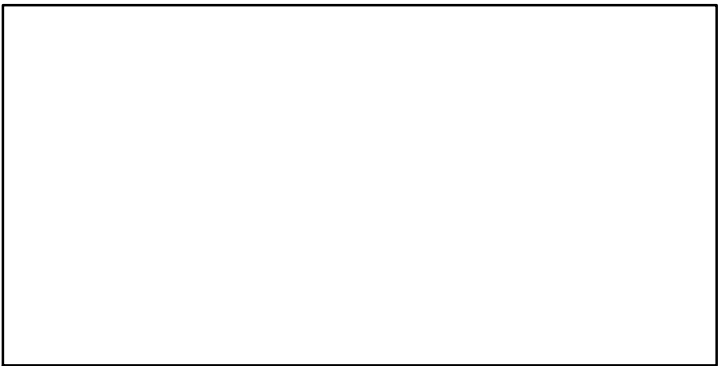
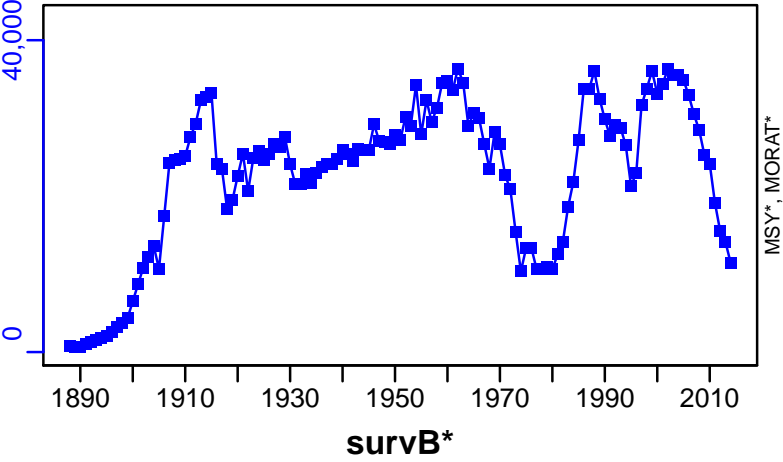
ER-calc-ratio (1888-2014-HIVELY)



Pacific halibut North Pacific [PHALNPAC]

TC-MT, TL\*, RecC\* (1888-2014-HIVELY)

TAC\*, Cpair\*, Cadv\*



## Pacific ocean perch Gulf of Alaska [POPERCHGA]

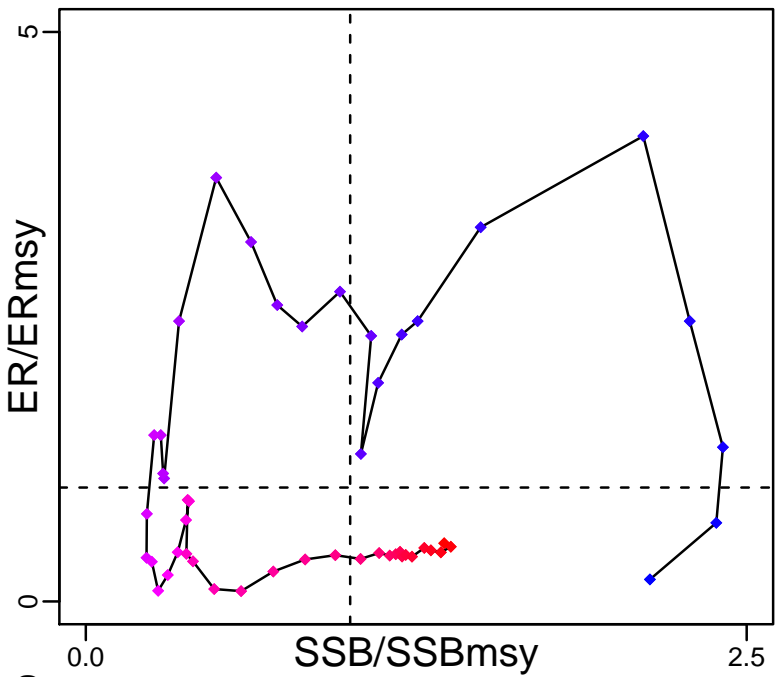
Metadata	
<b>Scientific Name</b>	Sebastes alutus
<b>Current Assess ID</b>	AFSC-POPERCHGA-1961-2015-SISIMP2016
<b>Area</b>	Gulf of Alaska
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2010, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2010	238,362
<b>SSBmsy</b>	SSBmsy-MT	2015	99,865
<b>Fmsy</b>	Fmsy-pr-1/yr	2010	0.142
<b>ERmsy</b>	ERmsy-ratio	2010	0.085
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2010	20,243
<b>M</b>	M-1/yr	2010	0.06
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

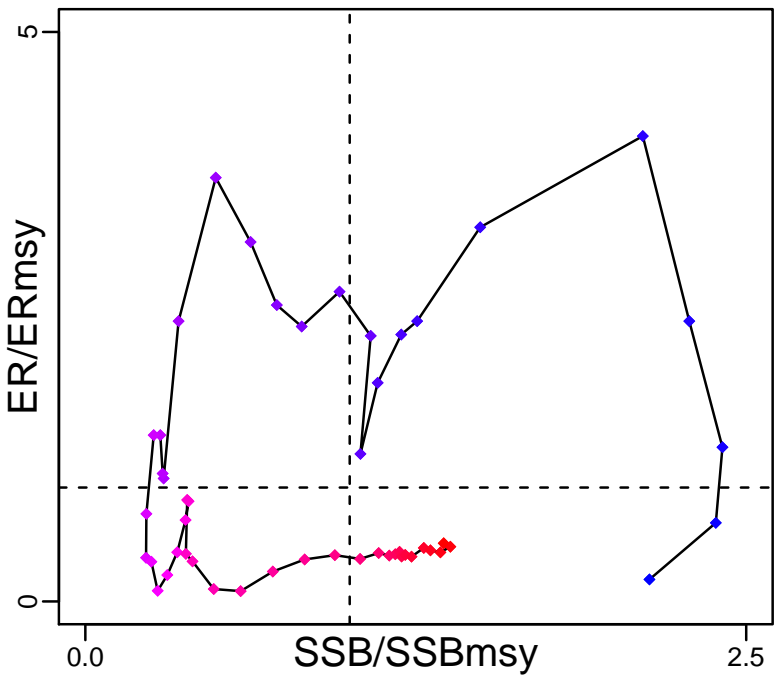
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	462,000	Both	2+
<b>SSB</b>	SSB-MT	2015	155,000	Females	10+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	52,900,000	-	2
<b>F</b>	F-1/yr	2015	0.076	-	-
<b>ER</b>	ER-calc-ratio	2015	0.038	-	-
<b>TC</b>	TC-MT	2015	17,600		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	TB-MT/TBmsy-calc-MT	2010	1.405		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	1.552		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2010	0.615		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2010	0.511		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Pacific ocean perch Gulf of Alaska [POPERCHGA]

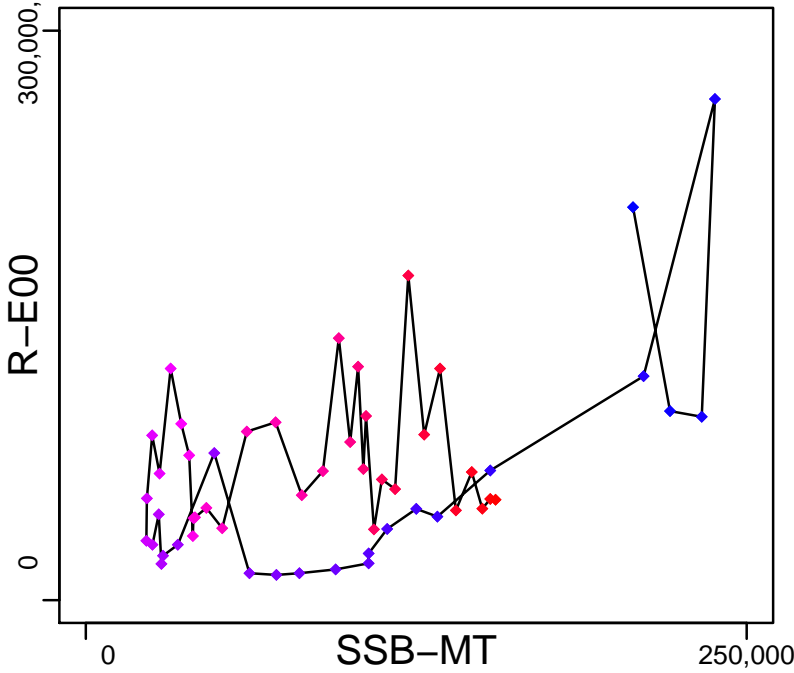
Kobe MSYpref (1959–2010–STACHURA)



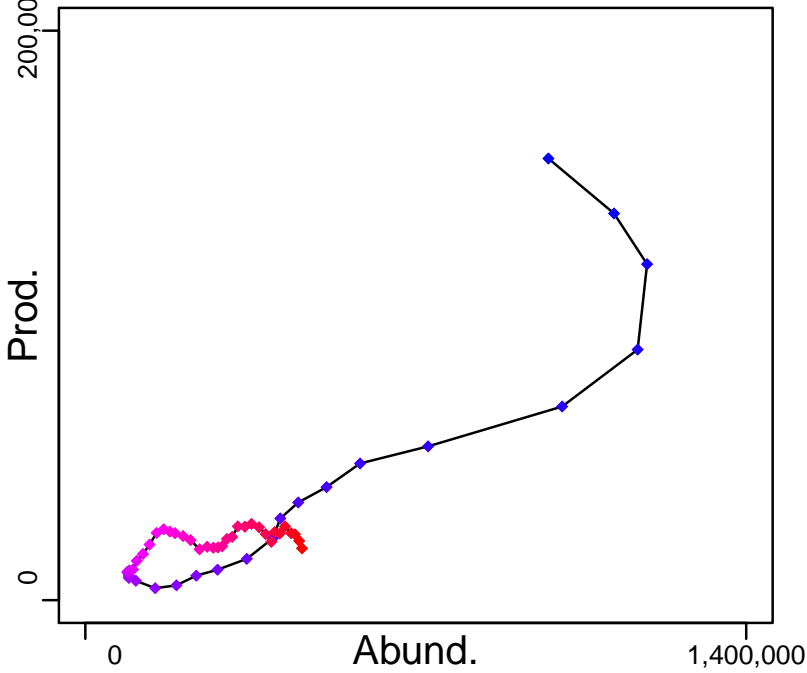
Kobe MGTpref (1959–2010–STACHURA)



Spawner Recruit (1961–2015–SISIMP2016)



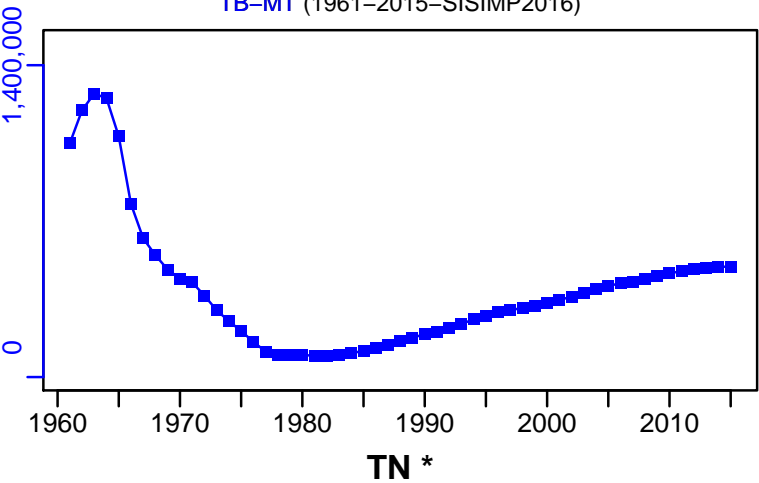
Production (1961–2015–SISIMP2016)



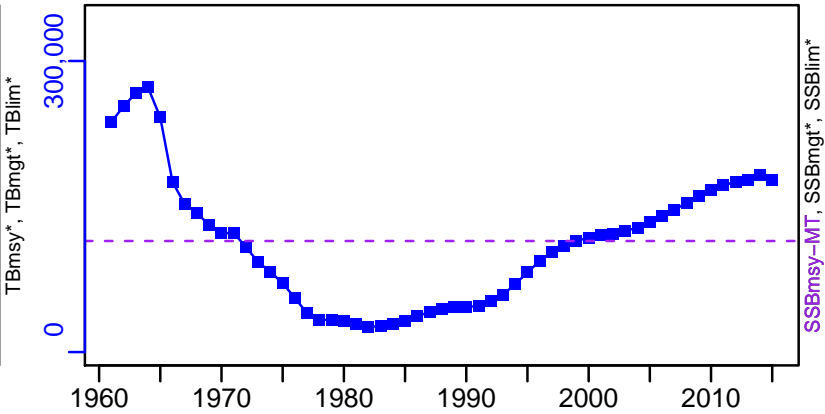
◆ Start Year ◆ End Year \* No Data

Pacific ocean perch Gulf of Alaska [POPERCHGA]

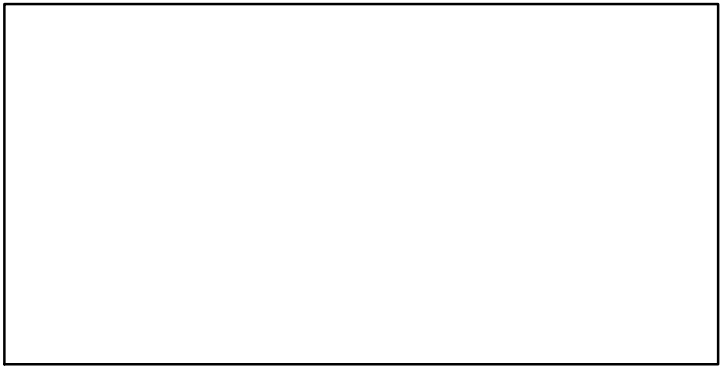
TB-MT (1961-2015-SISIMP2016)



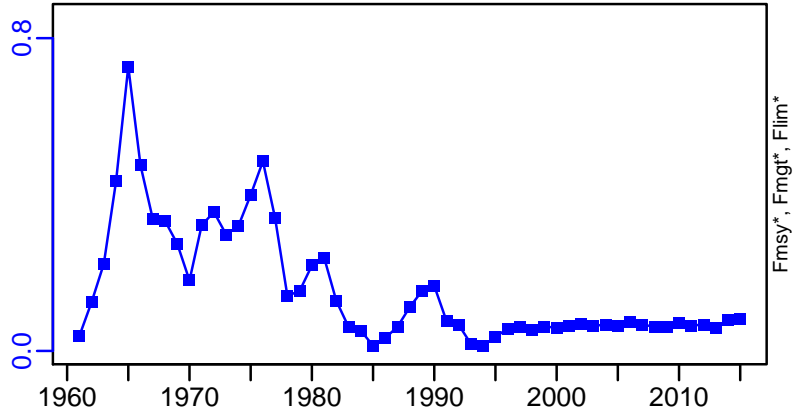
SSB-MT (1961-2015-SISIMP2016)



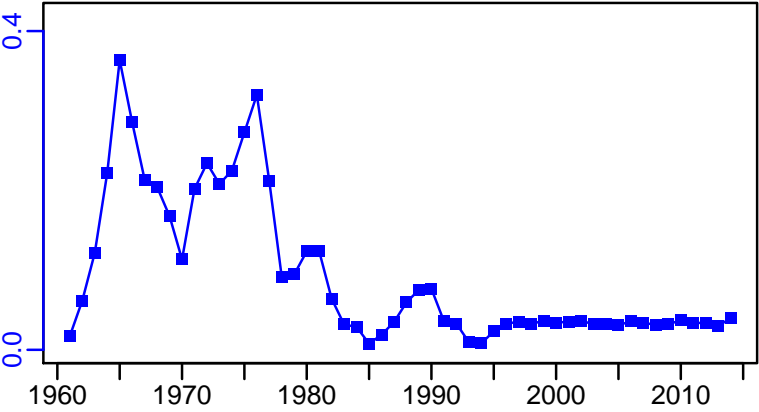
TN \*



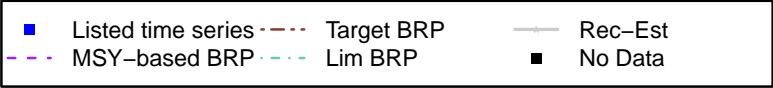
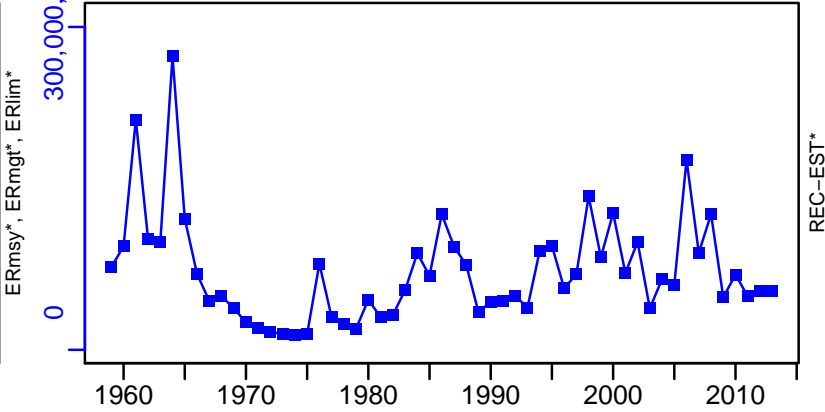
F-1/yr (1961-2015-SISIMP2016)



ER-calc-ratio (1961-2015-SISIMP2016)

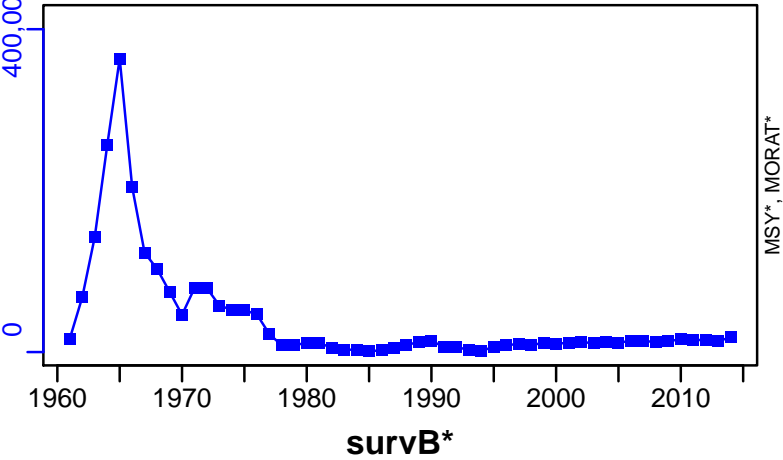


R-E00 (1961-2015-SISIMP2016)



Pacific ocean perch Gulf of Alaska [POPERCHGA]

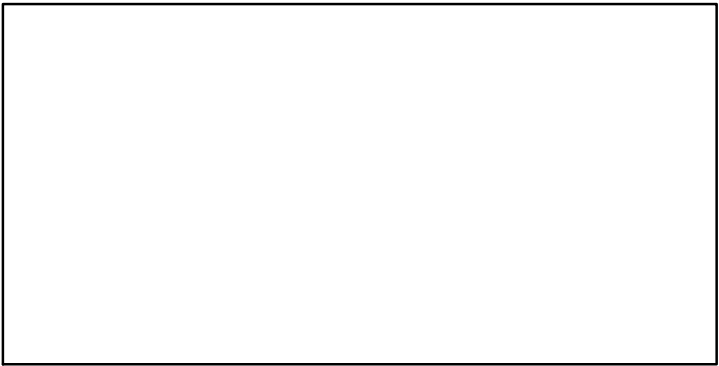
TC-MT, TL\*, RecC\* (1961-2015-SISIMP2016)



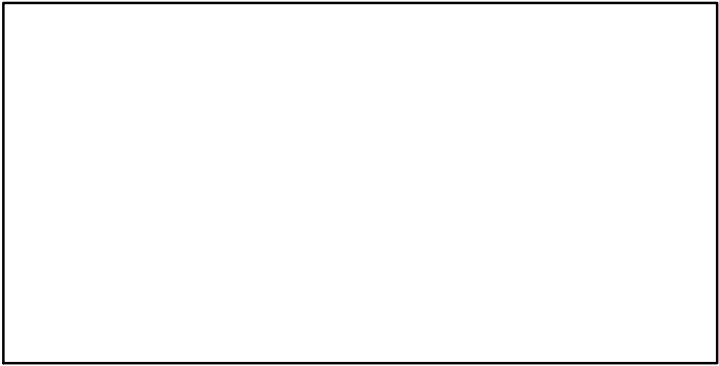
TAC\*, Cpair\*, Cadv\*



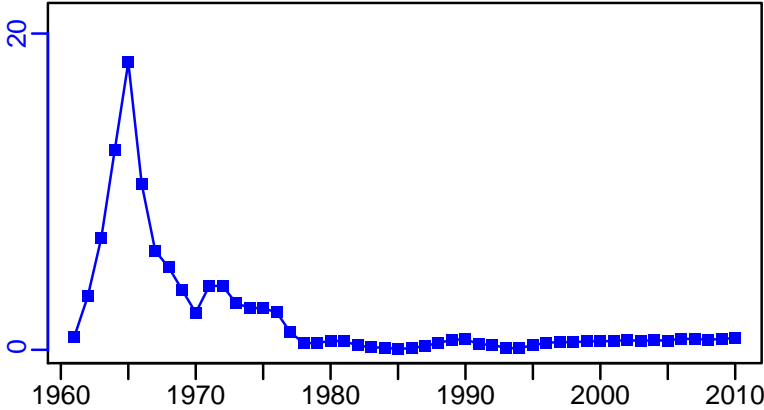
CPUE\*



EFFORT\*



CdivMSY-ratio (1959-2010-STACHURA)

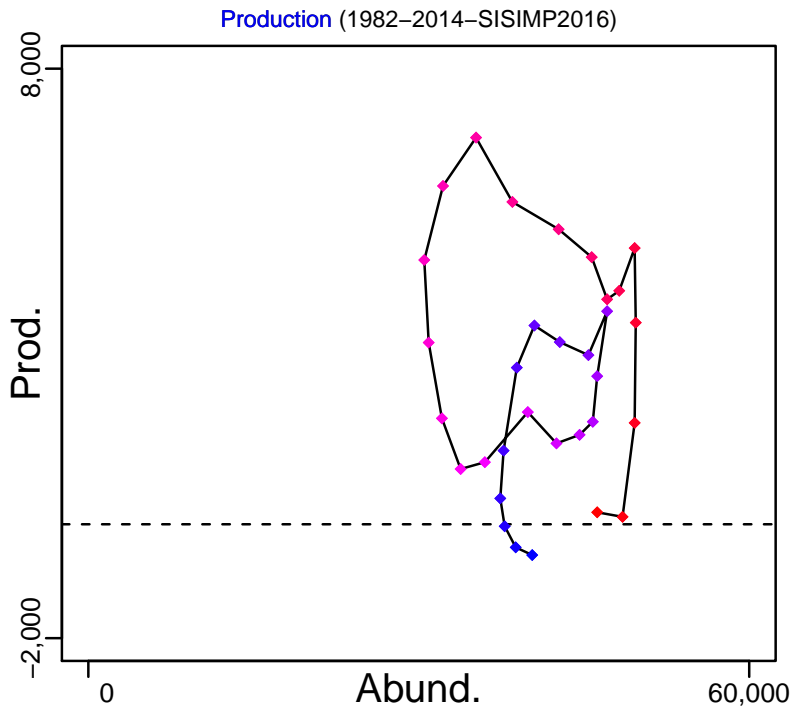
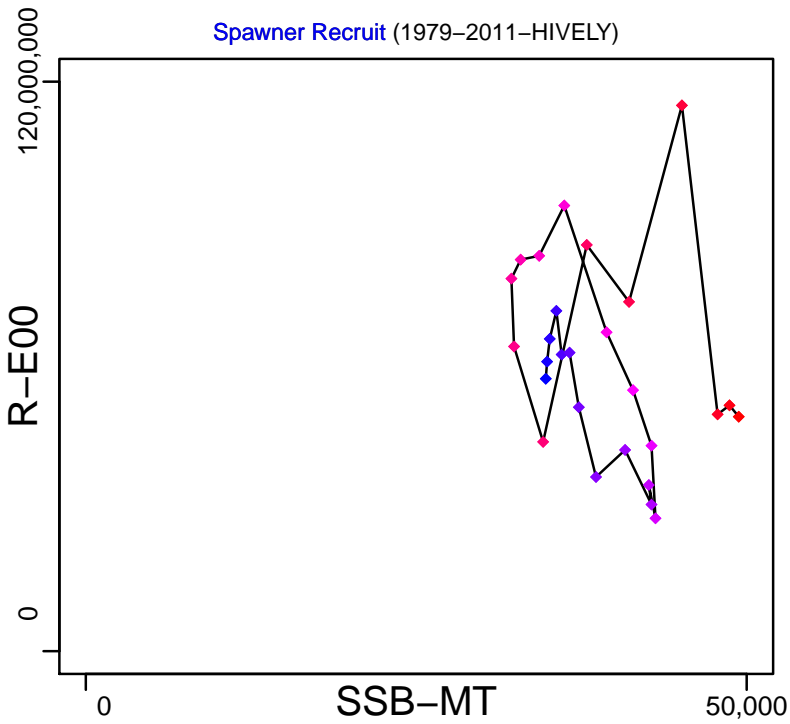
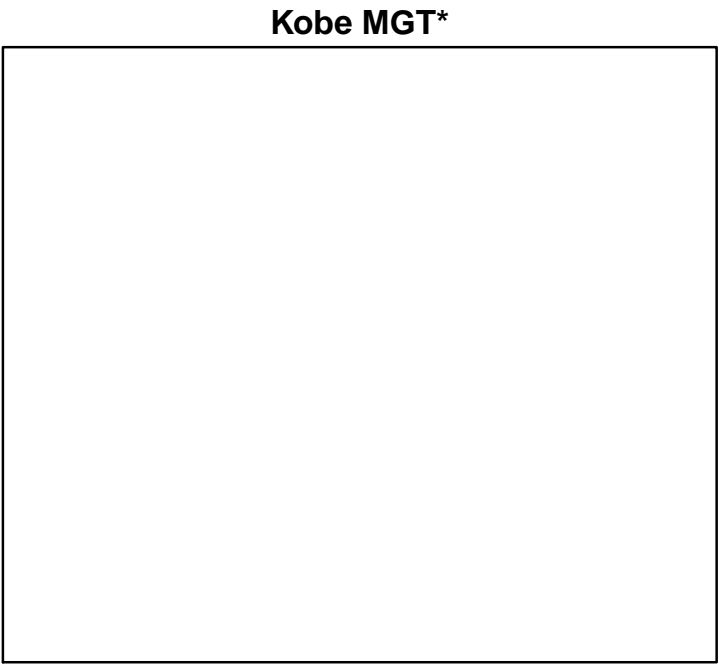
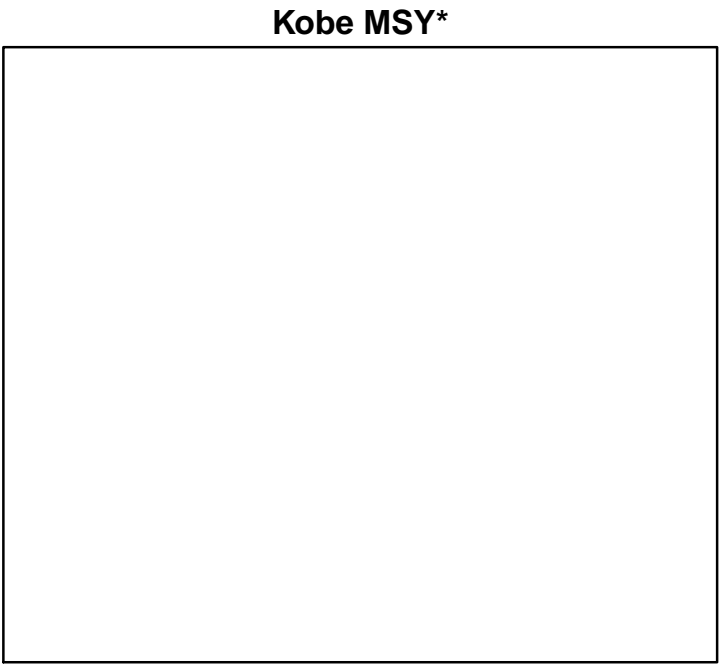


## Rex sole Gulf of Alaska [REXSOLEGA]

Metadata	
<b>Scientific Name</b>	Glyptocephalus zachirus
<b>Current Assess ID</b>	AFSC-REXSOLEGA-1982-2014-SISIMP2016
<b>Area</b>	Gulf of Alaska
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2011, 2014

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-pr-1/yr	2011	0.17
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	Fmgt-1/yr	2011	0.128
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2011	0.17
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2014	41,400	-	0+
SSB	SSB-MT	2011	52,600	Females	-
TN	-	-	-	-	-
R	R-E00	2011	49,400,000	-	3
F	F-1/yr	2011	0.098	-	-
ER	ER-calc-ratio	2014	0.084	-	-
TC	TC-MT	2014	3580		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2011	0.578		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	F-1/yr/Fmgt-1/yr	2011	0.767		
ER/ERmgt	-	-	-		

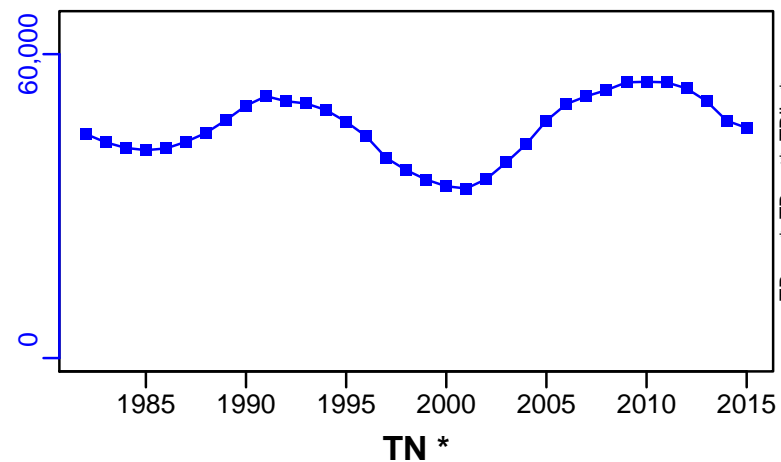


◆ Start Year ◆ End Year \* No Data

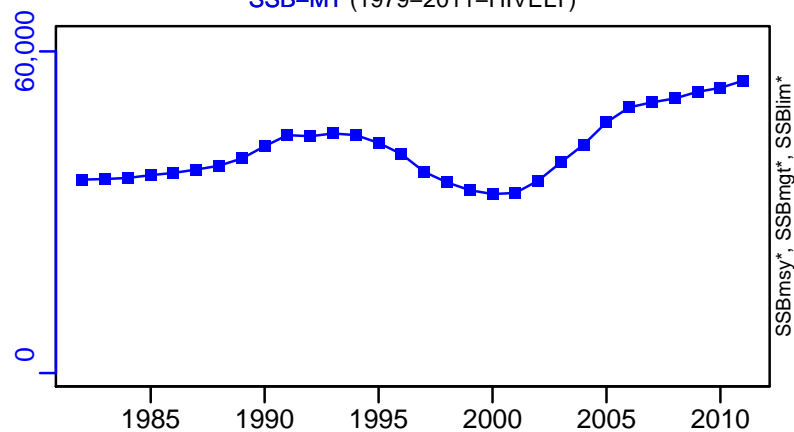


# Rex sole Gulf of Alaska [REXSOLEGA]

TB-MT (1982–2014–SISIMP2016)



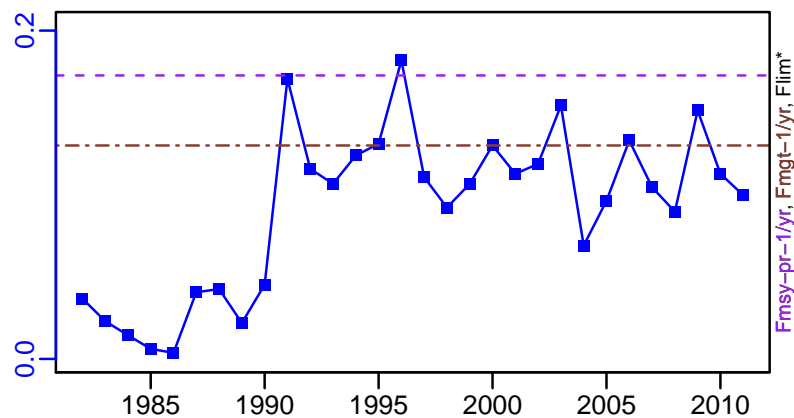
SSB-MT (1979–2011–HIVELY)



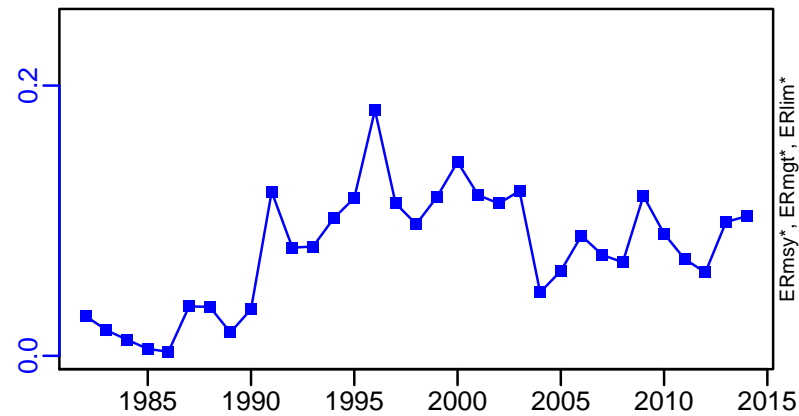
TN \*



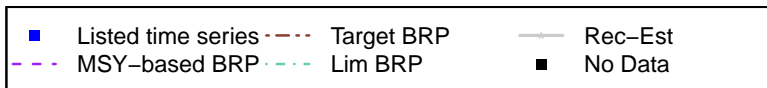
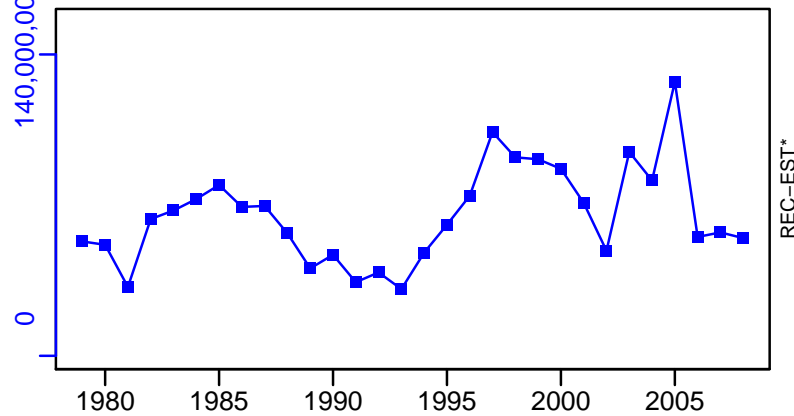
F-1/yr (1979–2011–HIVELY)



ER-calc-ratio (1982–2014–SISIMP2016)

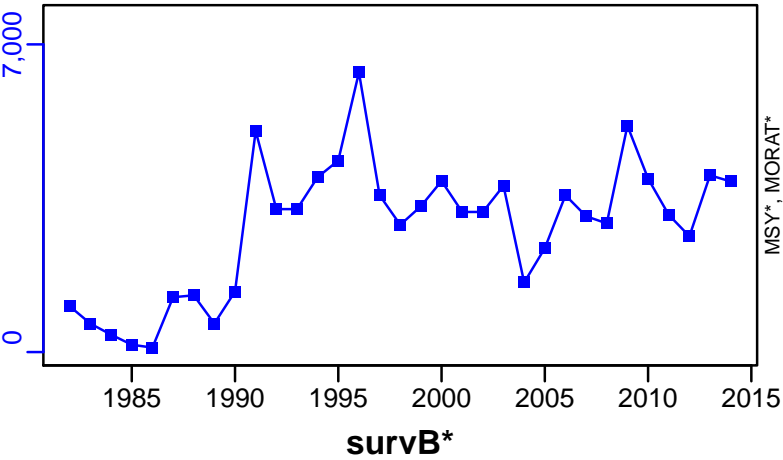


R-E00 (1979–2011–HIVELY)

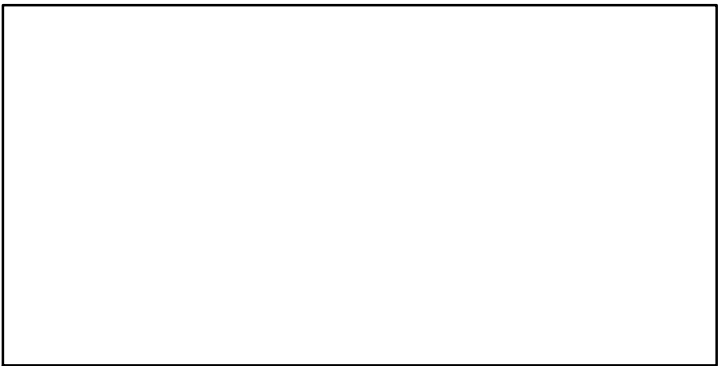


Rex sole Gulf of Alaska [REXSOLEGA]

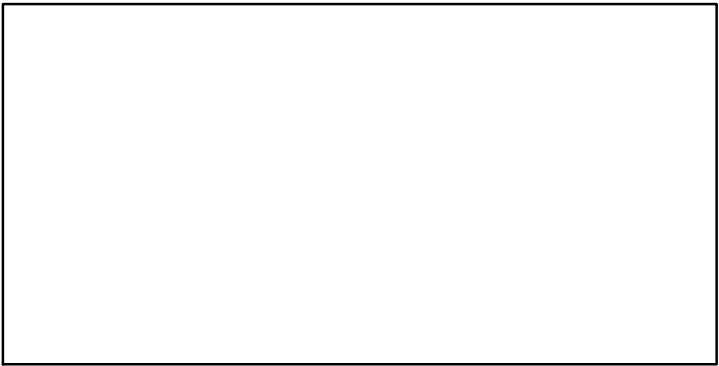
TC-MT, TL\*, RecC\* (1982-2014-SISIMP2016)



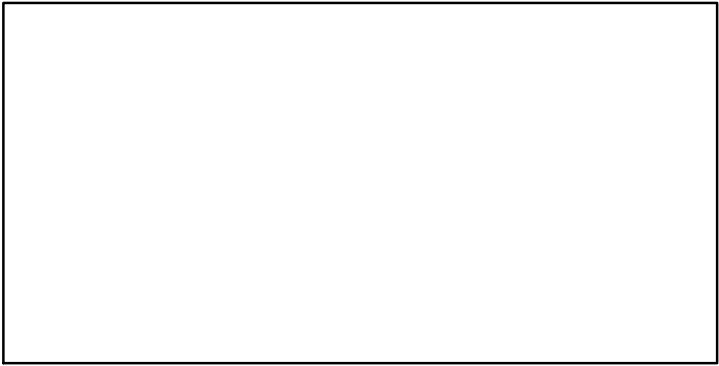
TAC\*, Cpair\*, Cadv\*



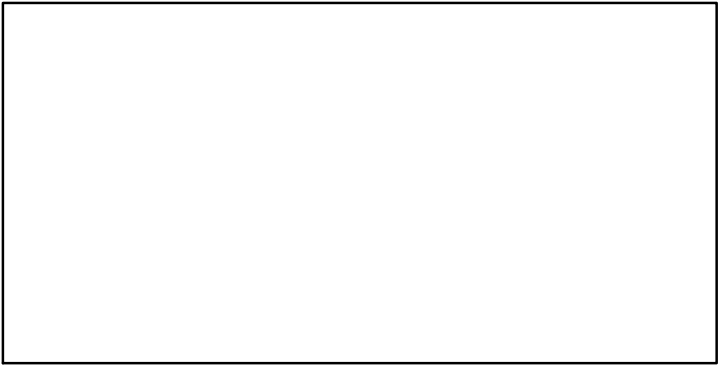
CPUE\*



EFFORT\*



CdivMSY\*



## Rougheye rockfish Bering Sea and Aleutian Islands [REYEROCKBSAI]

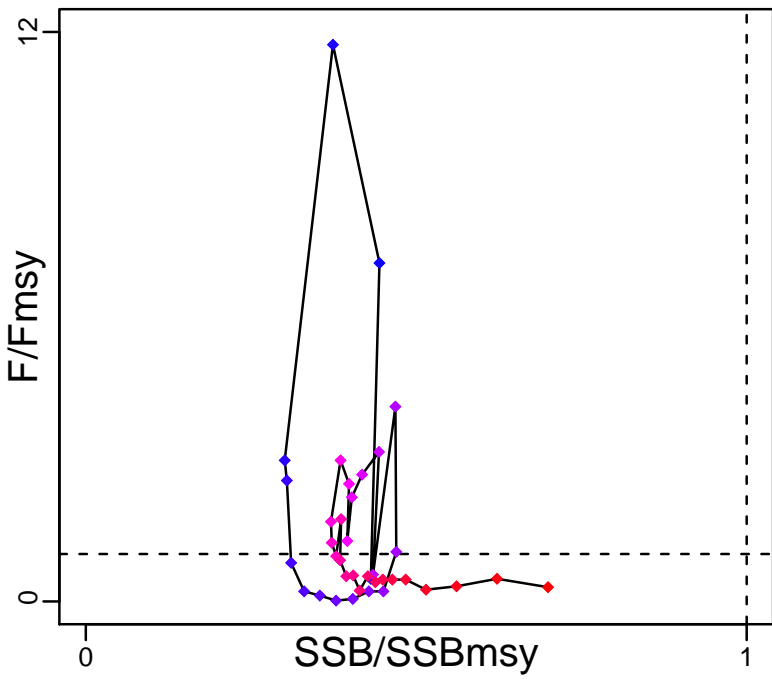
Metadata	
<b>Scientific Name</b>	Sebastes aleutianus
<b>Current Assess ID</b>	AFSC-REYEROCKBSAI-1974-2015-HIVELY
<b>Area</b>	Bering Sea and Aleutian Islands
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in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

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

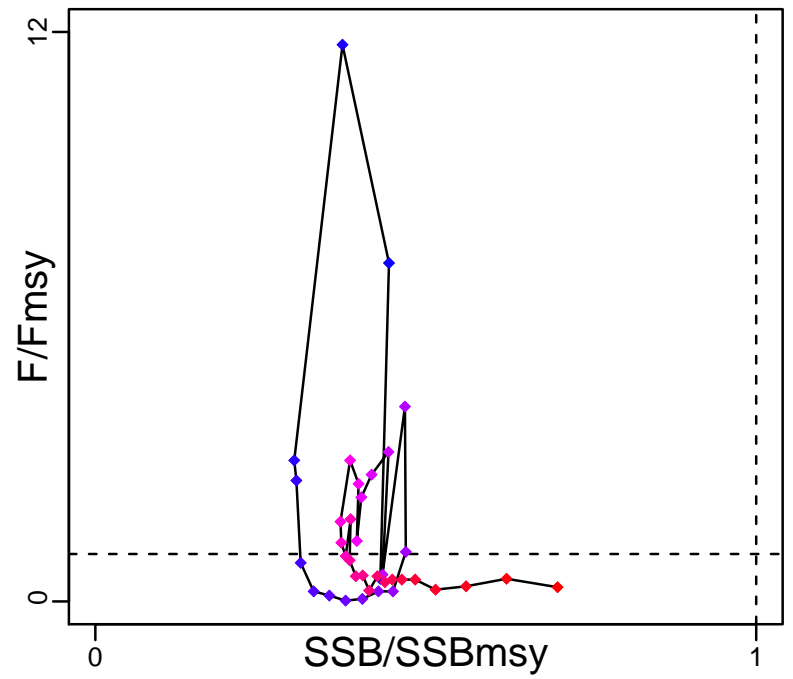
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	40,400	Both	3+
<b>SSB</b>	SSB-MT	2015	6980	Females	3+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	1,560,000	-	3
<b>F</b>	F-1/yr	2015	0.017	-	-
<b>ER</b>	ER-calc-ratio	2015	0.005	-	-
<b>TC</b>	TC-MT	2015	194		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-pr-MT	2015	0.699		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2015	0.3		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Rougheye rockfish Bering Sea and Aleutian Islands [REYEROCKBSAI]

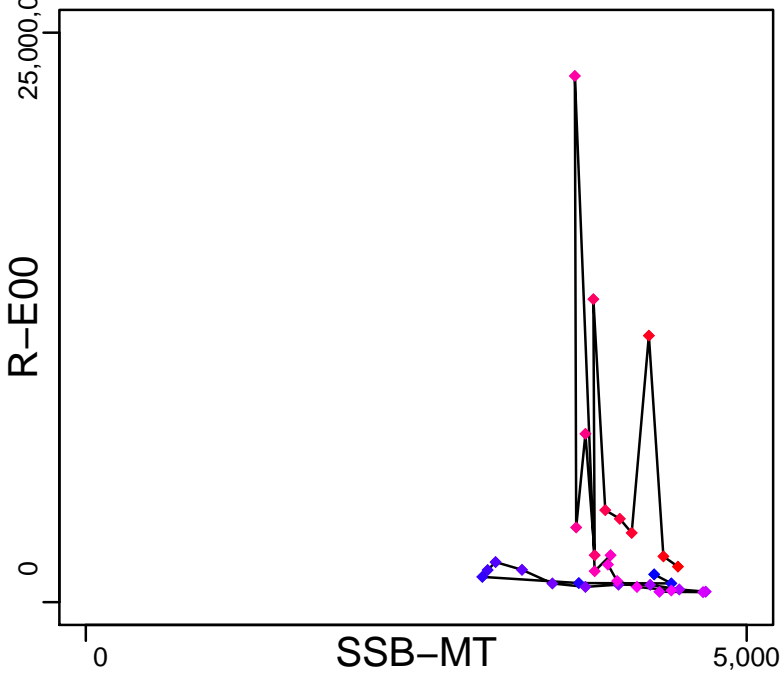
Kobe MSYpref (1974–2015–HIVELY)



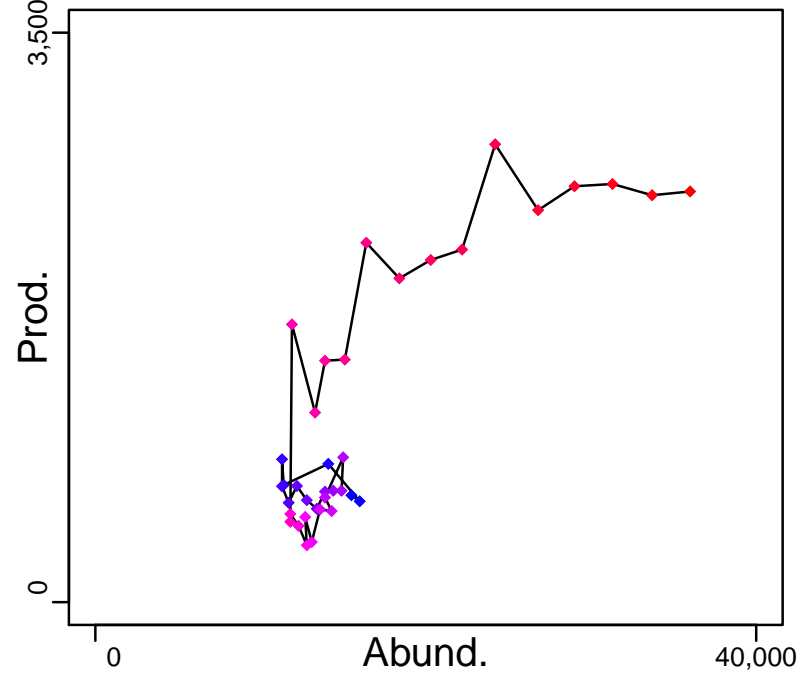
Kobe MGTpref (1974–2015–HIVELY)



Spawner Recruit (1974–2015–HIVELY)



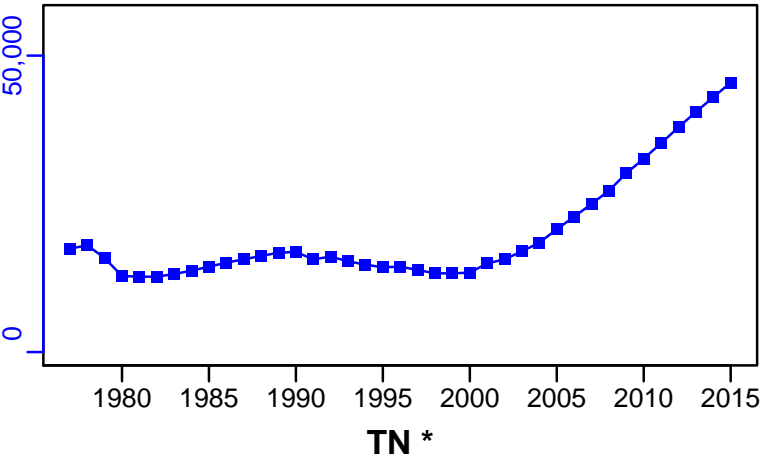
Production (1974–2015–HIVELY)



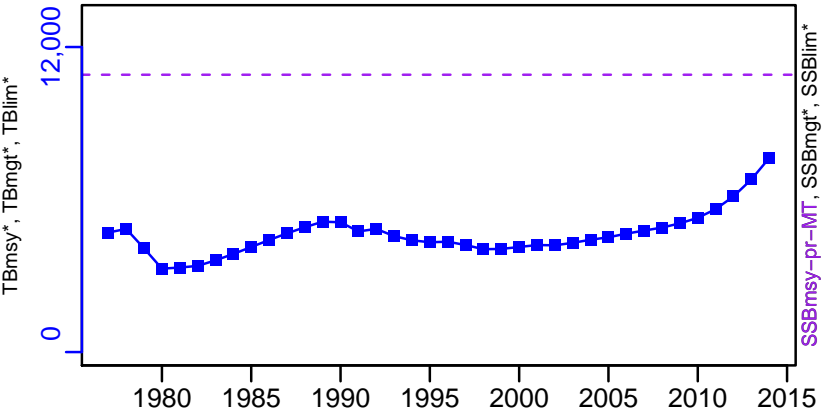
◆ Start Year ◆ End Year \* No Data

# Roughye rockfish Bering Sea and Aleutian Islands [REYEROCKBSAI]

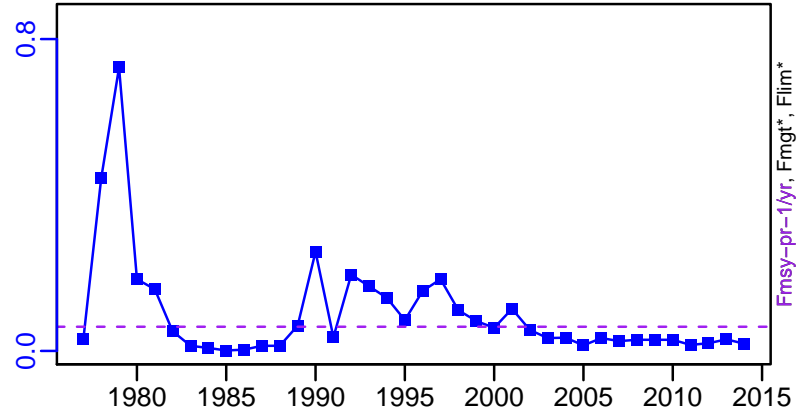
TB-MT (1974-2015-HIVELY)



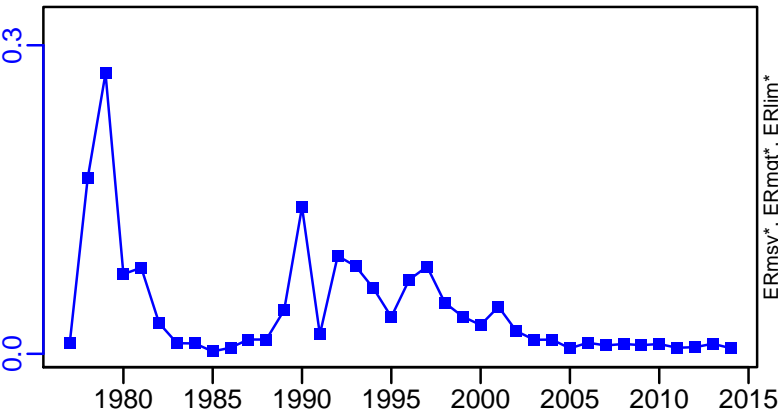
SSB-MT (1974-2015-HIVELY)



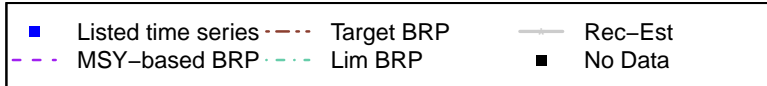
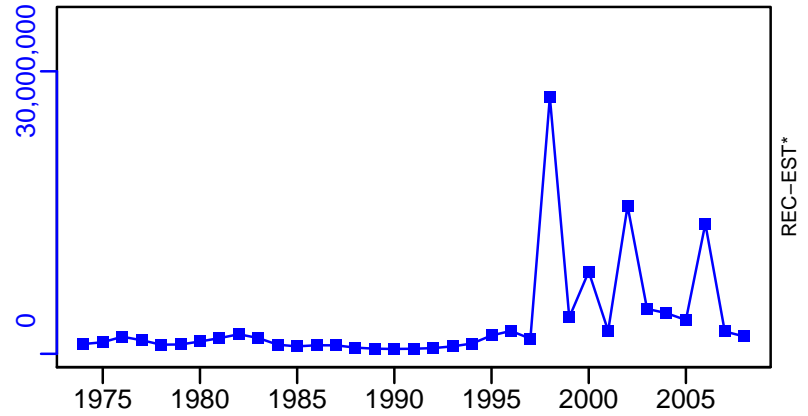
F-1/yr (1974-2015-HIVELY)



ER-calc-ratio (1974-2015-HIVELY)



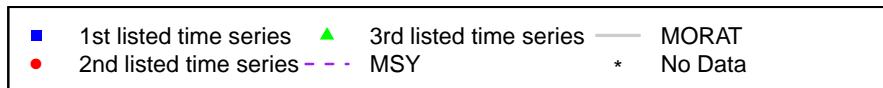
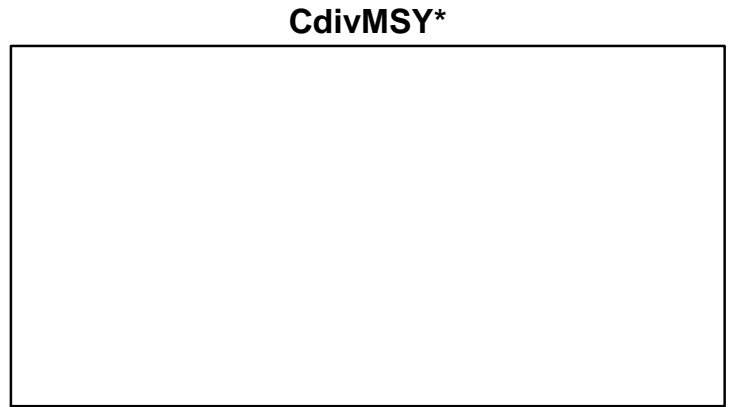
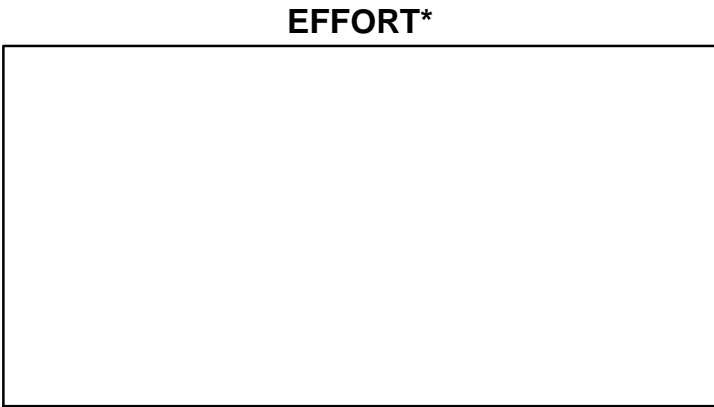
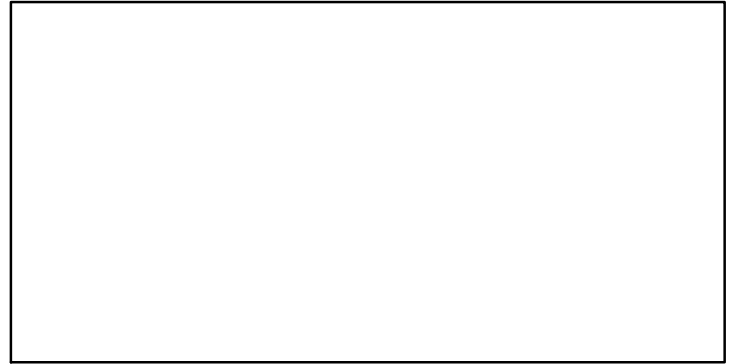
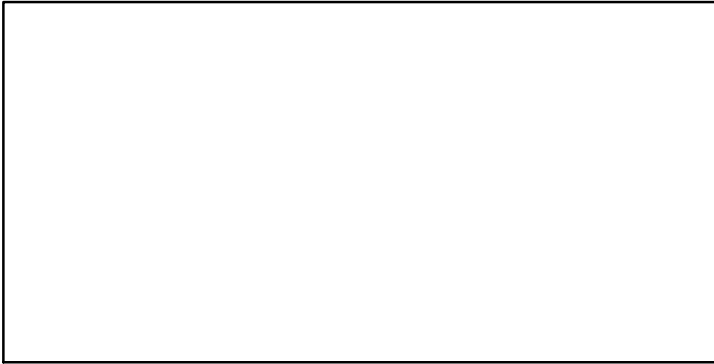
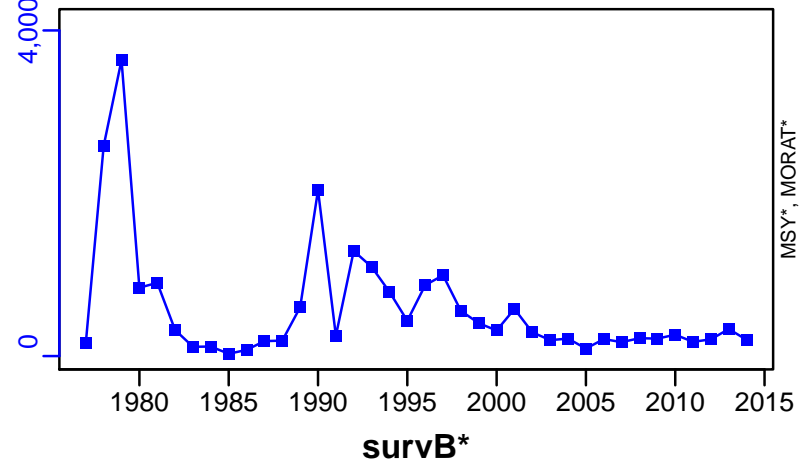
R-E00 (1974-2015-HIVELY)



# Rougheye rockfish Bering Sea and Aleutian Islands [REYEROCKBSAI]

TC-MT, TL\*, RecC\* (1974-2015-HIVELY)

TAC\*, Cpair\*, Cadv\*



## Rougheye rockfish Gulf of Alaska [REYEROCKGA]

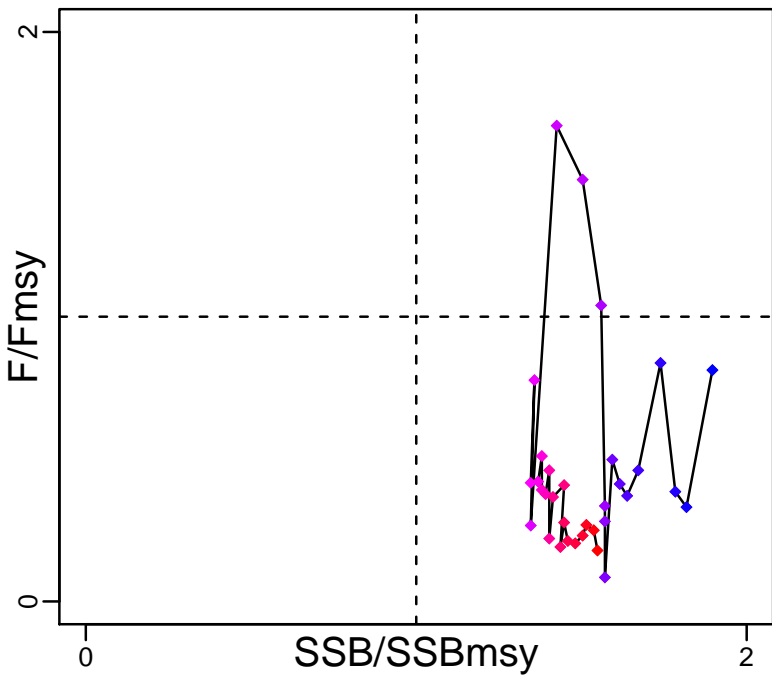
Metadata	
<b>Scientific Name</b>	Sebastes aleutianus
<b>Current Assess ID</b>	AFSC-REYEROCKGA-1974-2010-STACHURA
<b>Area</b>	Gulf of Alaska
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2010

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

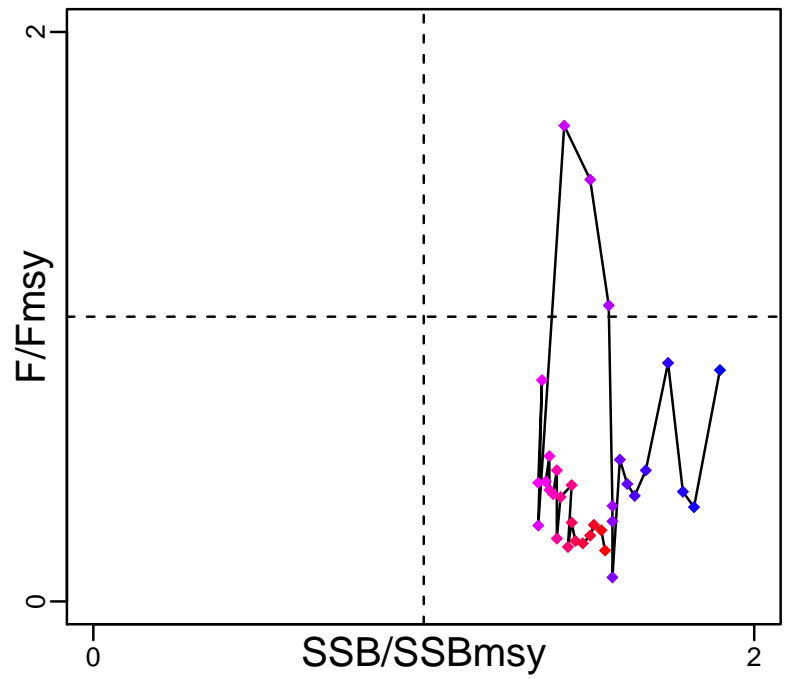
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2010	45,400	-	-
<b>SSB</b>	SSB-MT	2010	13,800	Females	19+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2010	1,160,000	-	-
<b>F</b>	F-1/yr	2010	0.009	-	-
<b>ER</b>	ER-ratio	2010	0.006	-	-
<b>TC</b>	TC-MT	2010	445		
<b>TL</b>	-	-	-		
<b>TB/TBmsy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

# Rougeye rockfish Gulf of Alaska [REYEROCKGA]

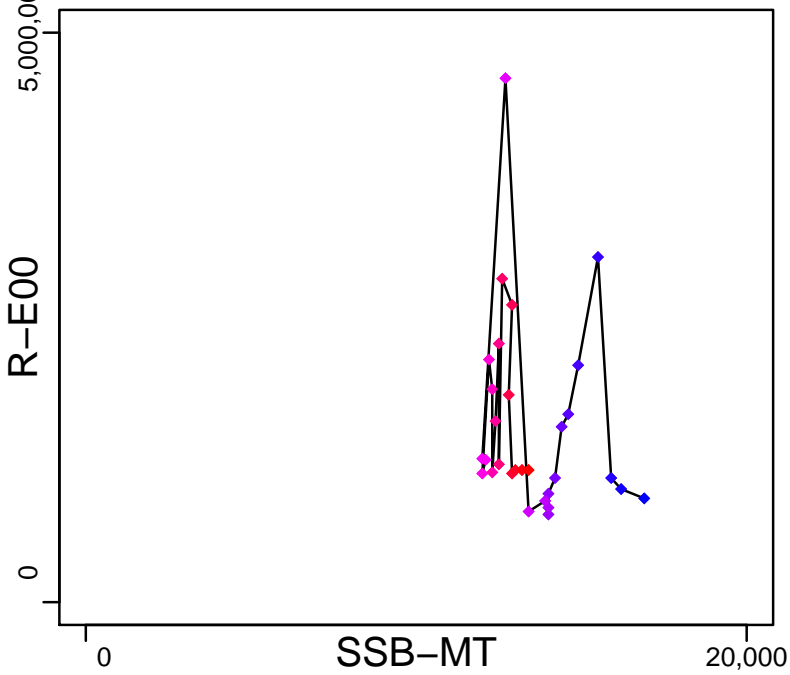
Kobe MSYpref (1974–2010–STACHURA)



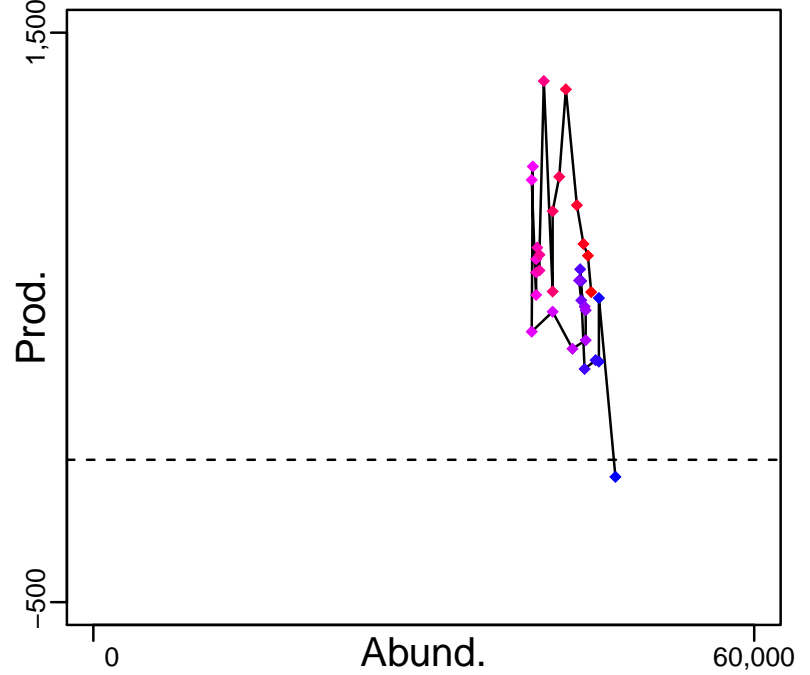
Kobe MGTpref (1974–2010–STACHURA)



Spawner Recruit (1974–2010–STACHURA)



Production (1974–2010–STACHURA)

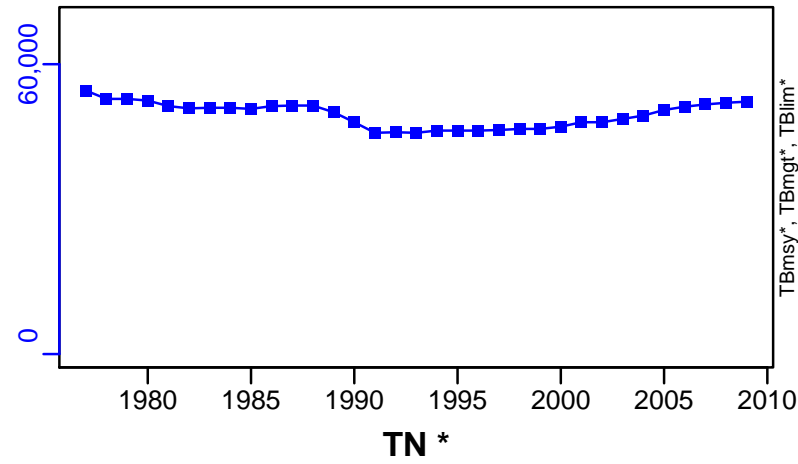


◆ Start Year ◆ End Year \* No Data

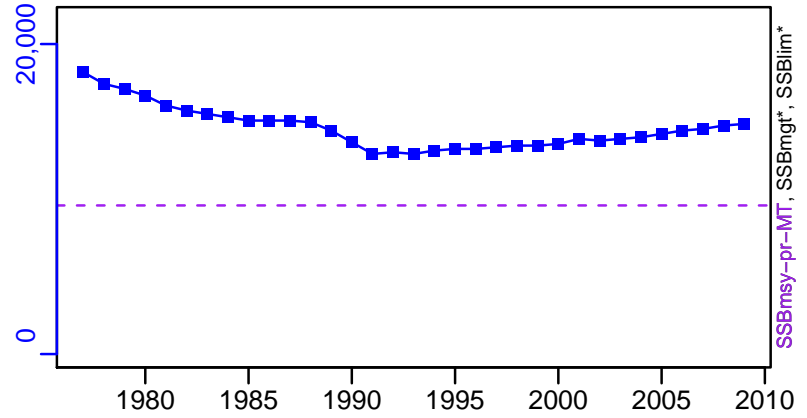


# Rougheye rockfish Gulf of Alaska [REYEROCKGA]

TB-MT (1974-2010-STACHURA)



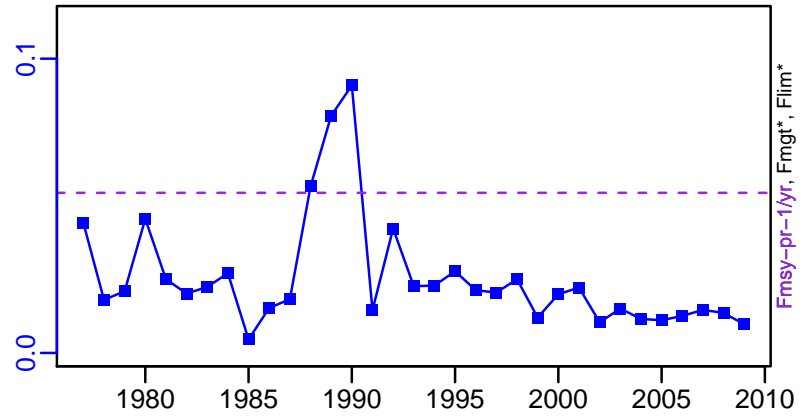
SSB-MT (1974-2010-STACHURA)



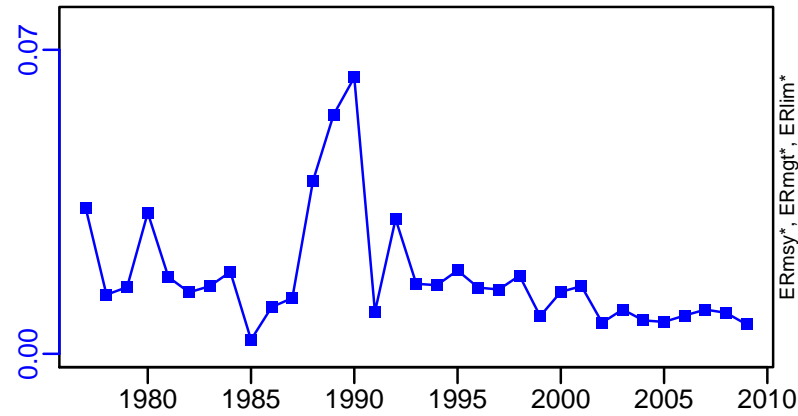
TN \*



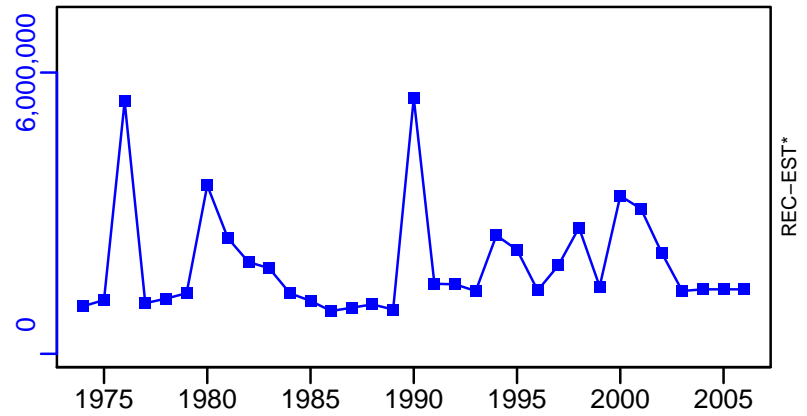
F-1/yr (1974-2010-STACHURA)



ER-ratio (1974-2010-STACHURA)

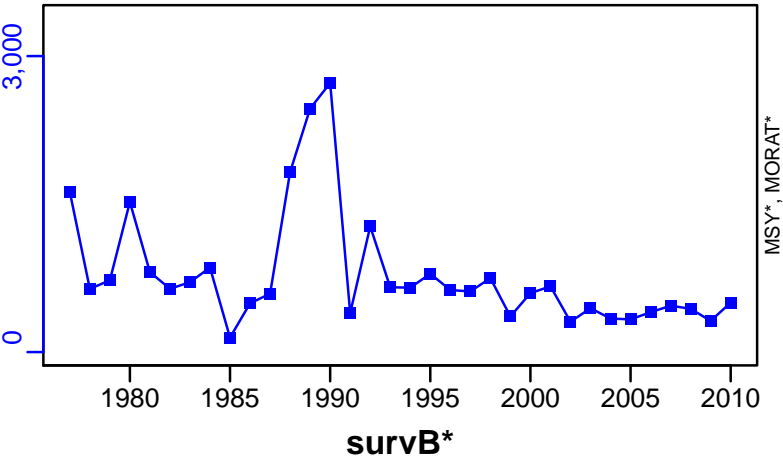


R-E00 (1974-2010-STACHURA)

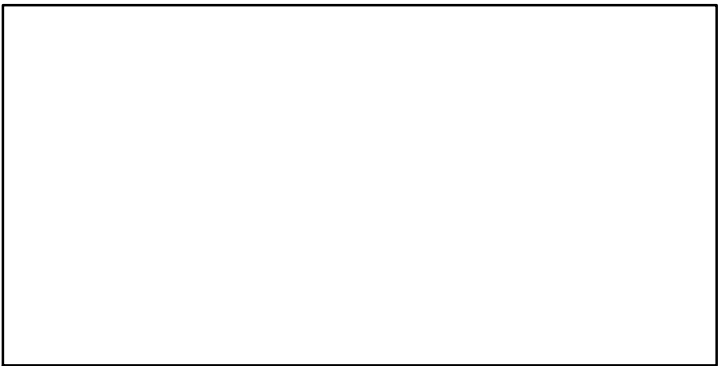


Rougheye rockfish Gulf of Alaska [REYEROCKGA]

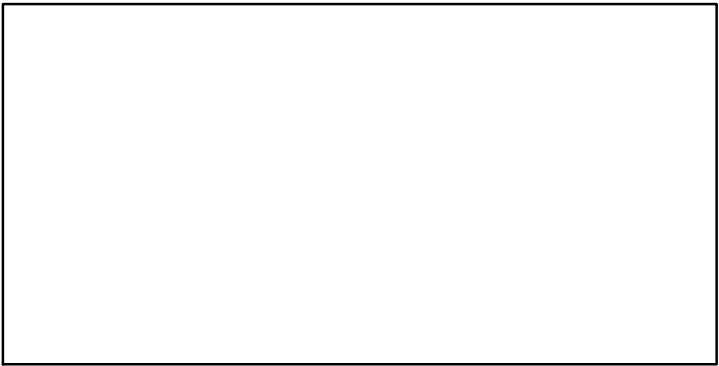
TC-MT, TL\*, RecC\* (1974-2010-STACHURA)



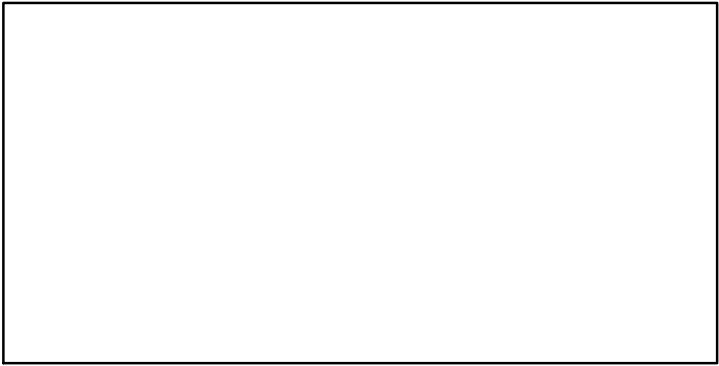
TAC\*, Cpair\*, Cadv\*



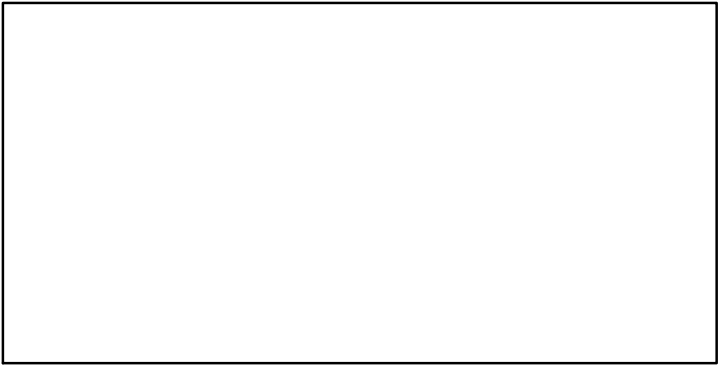
CPUE\*



EFFORT\*



CdivMSY\*



## Red king crab Bristol Bay [RKCRA BBB]

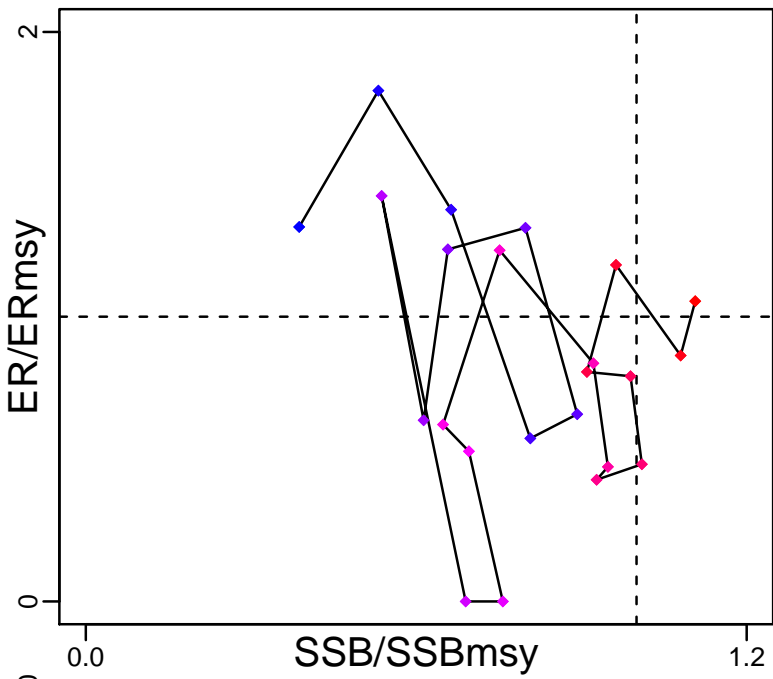
Metadata	
<b>Scientific Name</b>	Paralithodes camtschaticus
<b>Current Assess ID</b>	AFSC-RKCRA BBB-1975-2015-SISIMP2016
<b>Area</b>	Bristol Bay
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2008, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2015	26,100
<b>SSBmsy</b>	SSBmsy-MT	2008	34,070
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-pr-ratio	2008	0.33
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2008	23,646
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

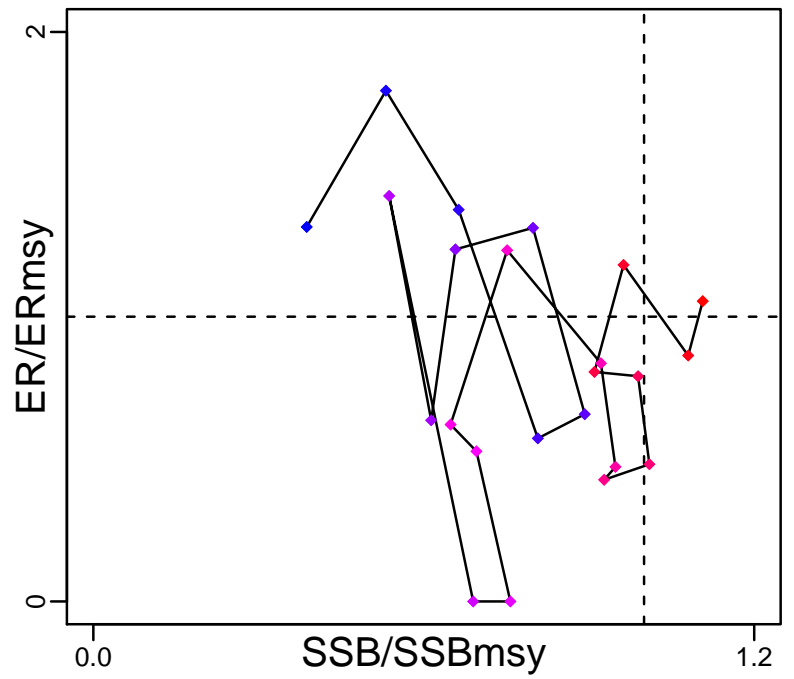
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	86,100	-	-
<b>SSB</b>	SSB-MT	2015	24,700	Females	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	14,700,000	-	-
<b>F</b>	F-1/yr	2015	0.2	-	-
<b>ER</b>	ER-calc-ratio	2015	0.06	-	-
<b>TC</b>	TC-MT	2015	5430		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	TB-MT/TBmsy-MT	2015	3.3		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2008	1.274		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-pr-ratio	2008	1.055		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Red king crab Bristol Bay [RKCRA BBB]

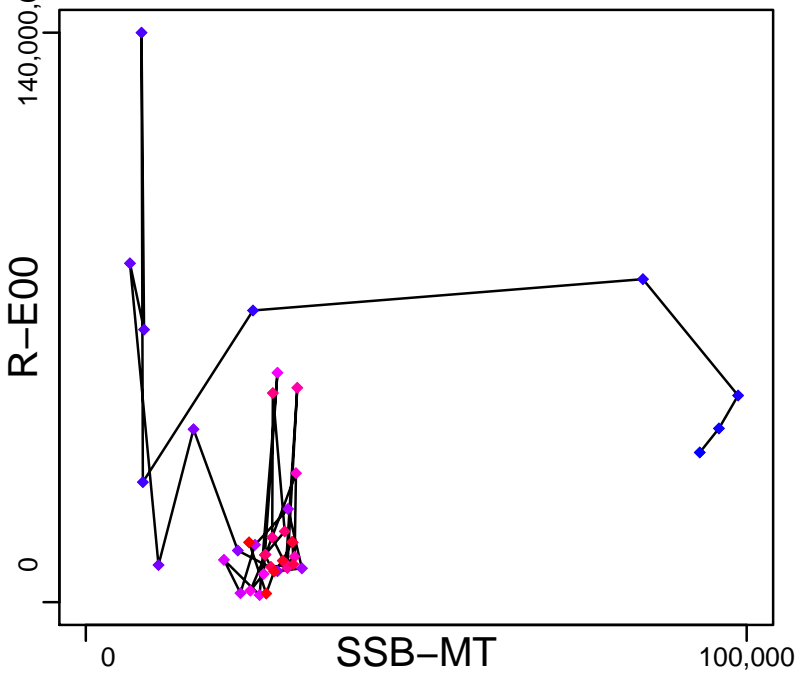
Kobe MSYpref (1960–2008–JENSEN)



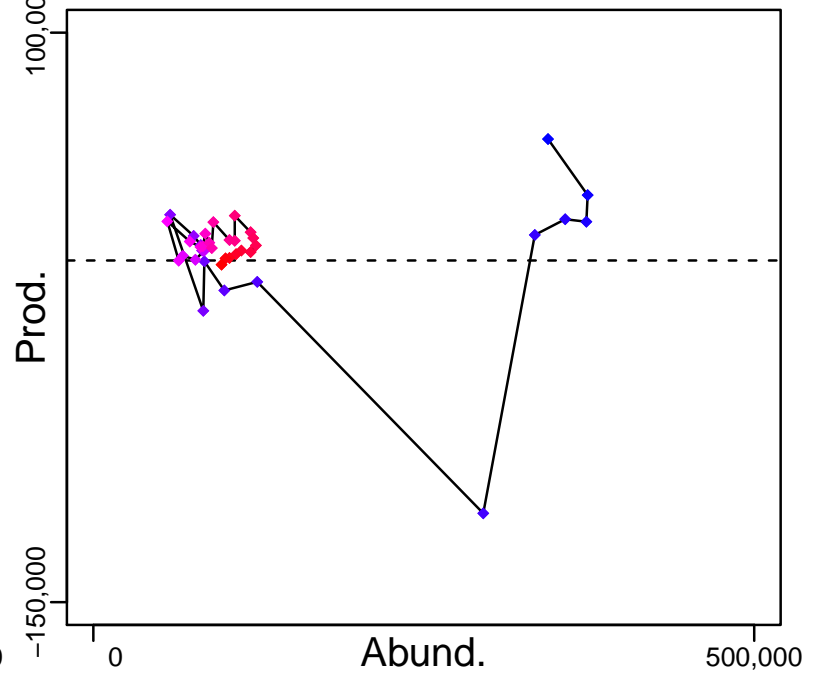
Kobe MGTpref (1960–2008–JENSEN)



Spawner Recruit (1975–2015–SISIMP2016)



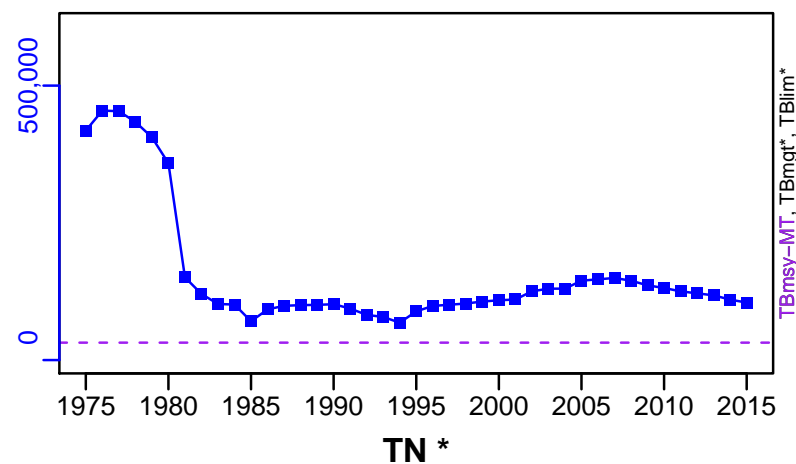
Production (1975–2015–SISIMP2016)



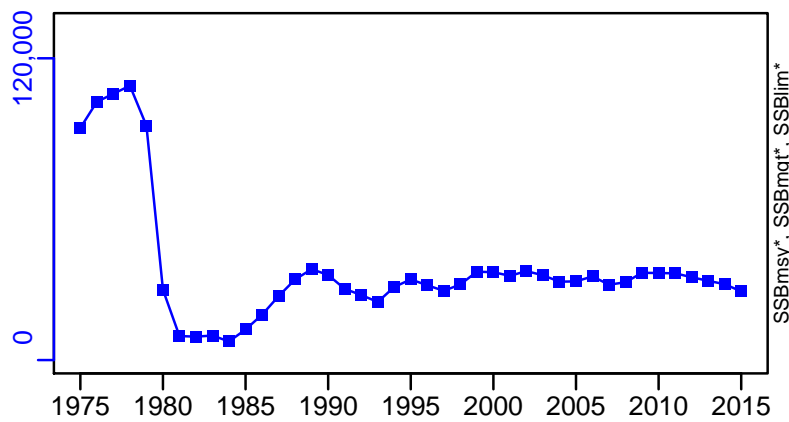
◆ Start Year ◆ End Year \* No Data

# Red king crab Bristol Bay [RKCRABBB]

TB-MT (1975–2015–SISIMP2016)



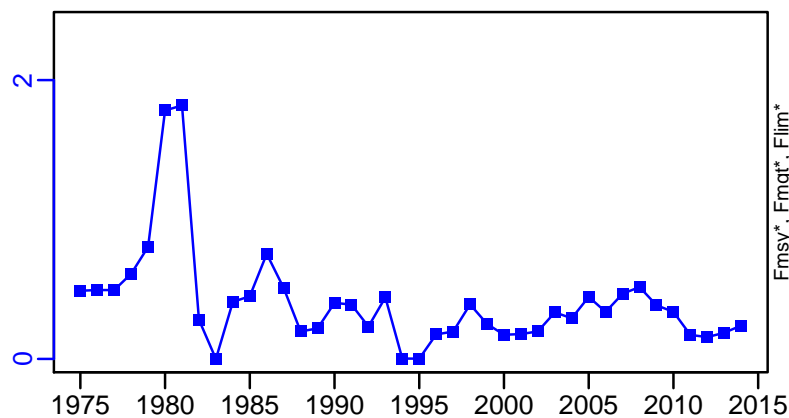
SSB-MT (1975–2015–SISIMP2016)



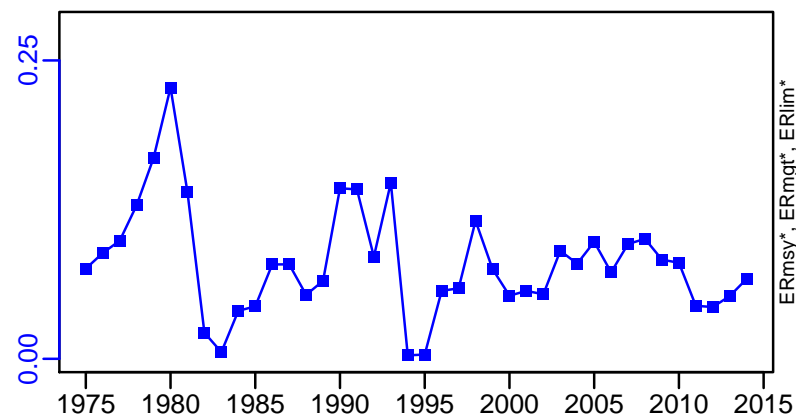
TN \*



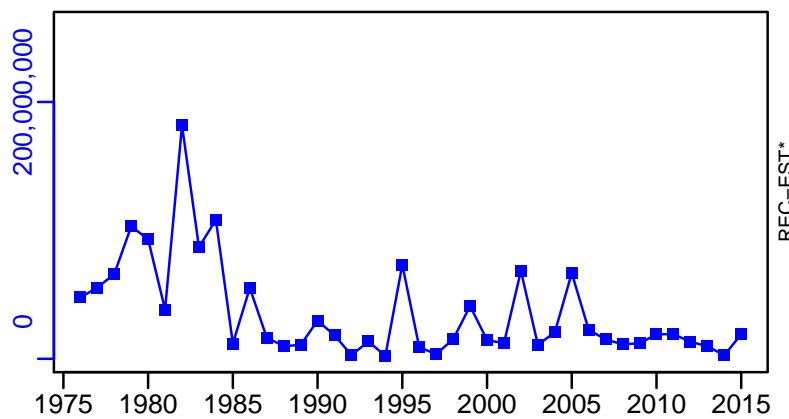
F-1/yr (1975–2015–SISIMP2016)



ER-calc-ratio (1975–2015–SISIMP2016)

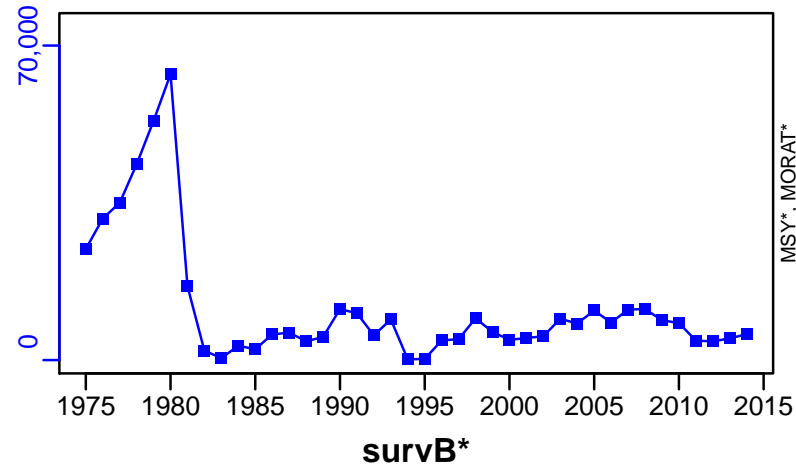


R-E00 (1975–2015–SISIMP2016)

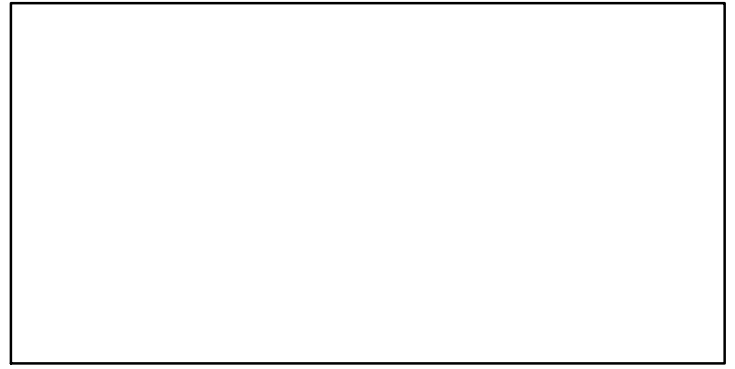


# Red king crab Bristol Bay [RKCRA BBB]

TC-MT, TL\*, RecC\* (1975-2015-SISIMP2016)



TAC\*, Cpair\*, Cadv\*



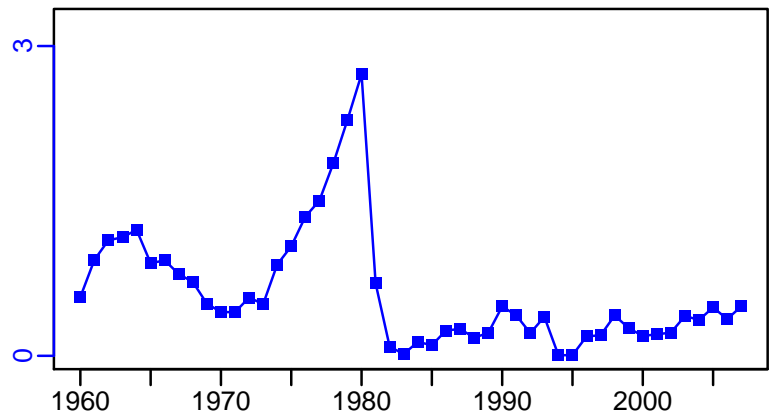
CPUE\*



EFFORT\*



CdivMSY-ratio (1960-2008-JENSEN)



## Red king crab Norton Sound [RKCRA BNS]

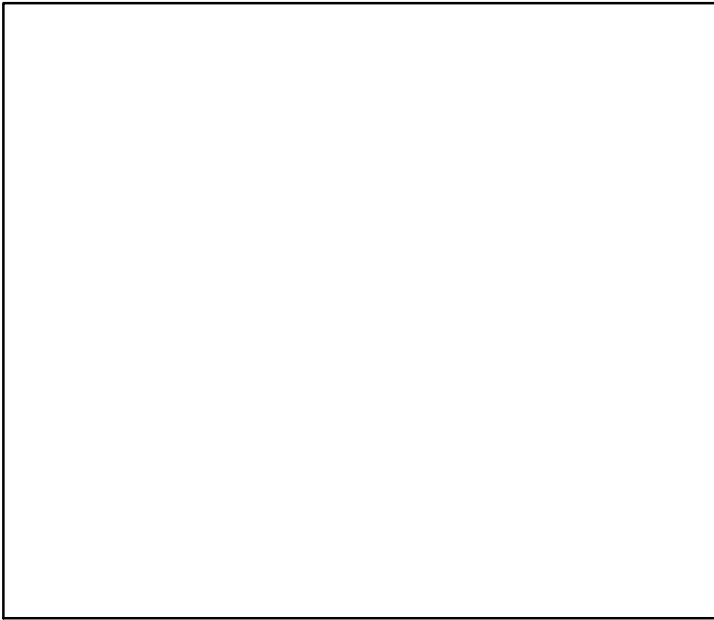
Metadata	
<b>Scientific Name</b>	Paralithodes camtschaticus
<b>Current Assess ID</b>	AFSC-RKCRA BNS-1976-2008-JENSEN
<b>Area</b>	Norton Sound
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2008

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2008	1618
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

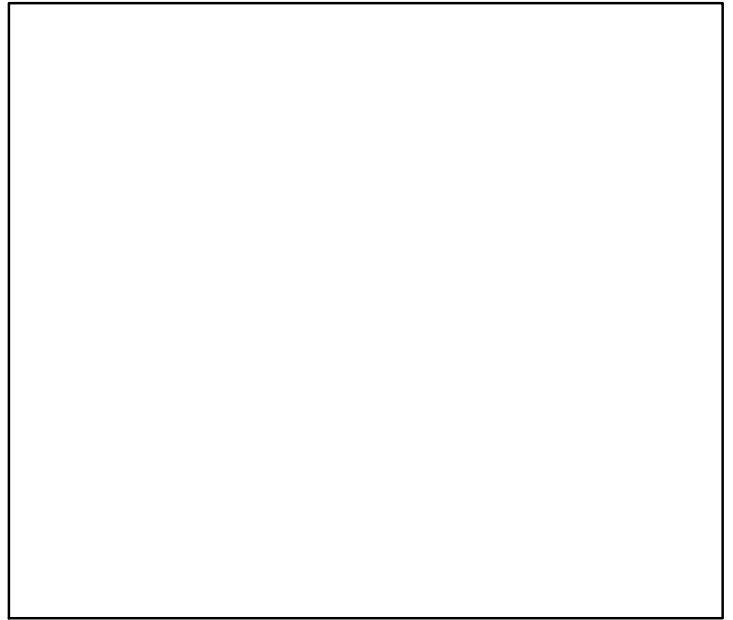
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2008	2380	Males	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	-	-	-	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2008	1.471		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Red king crab Norton Sound [RKCRA BNS]

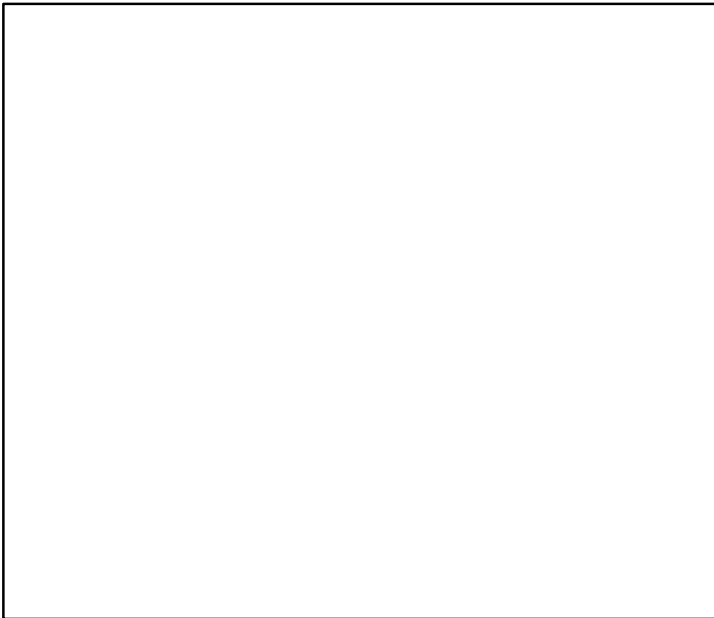
Kobe MSY\*



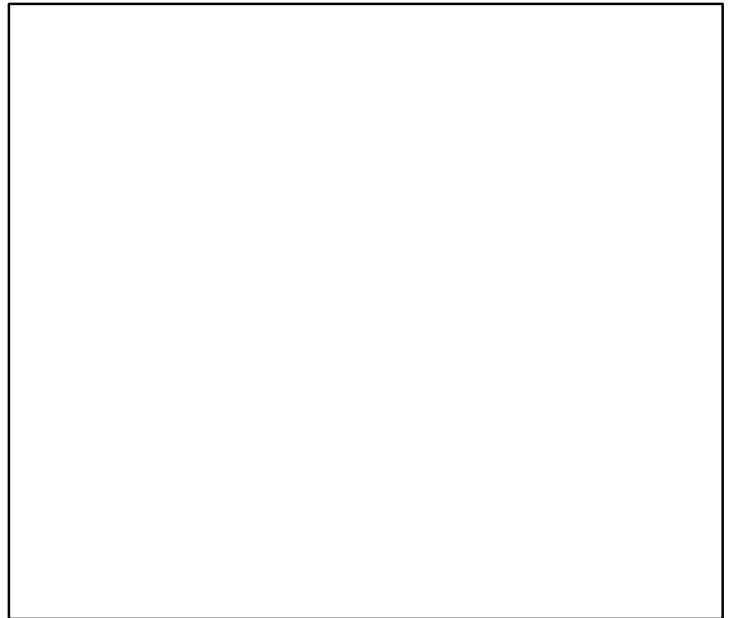
Kobe MGT\*



Spawner Recruit\*



Production\*

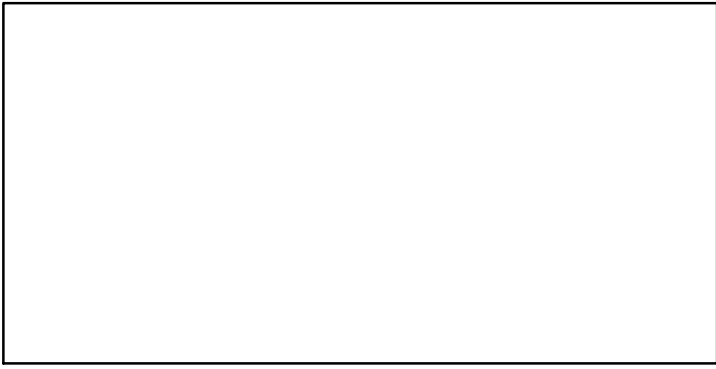


◆ Start Year ◆ End Year \* No Data

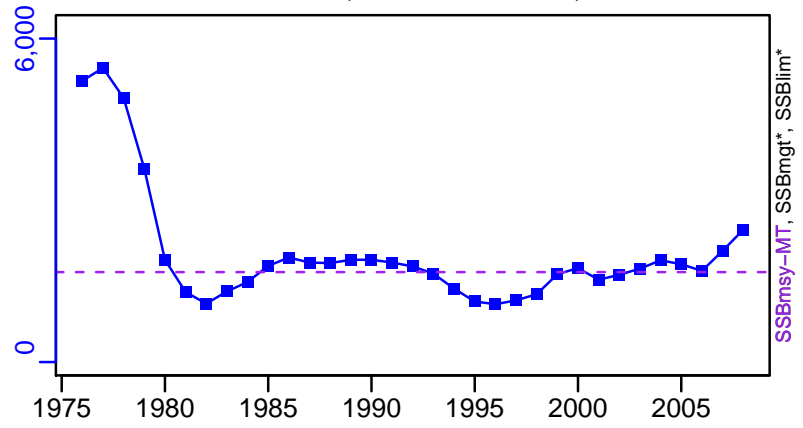


# Red king crab Norton Sound [RKCRABNS]

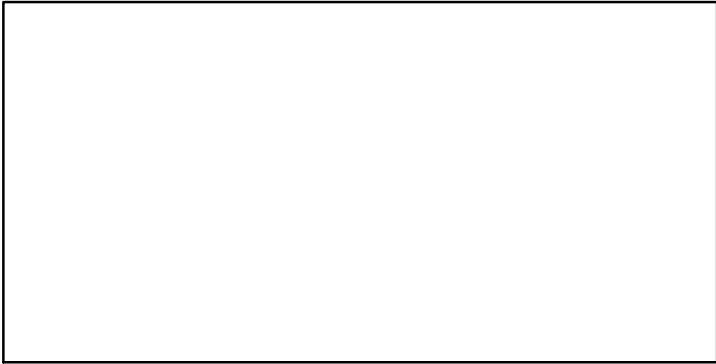
TB\*



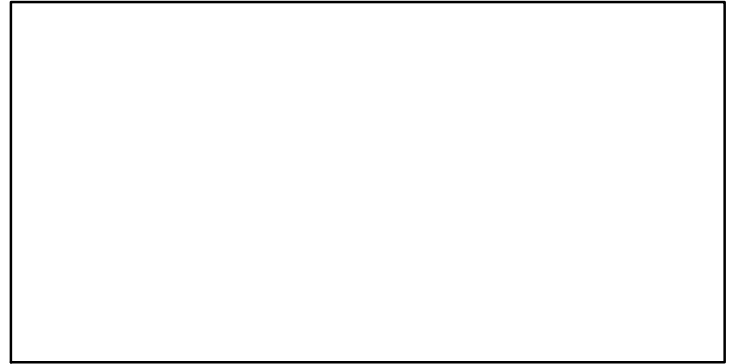
SSB-MT (1976-2008-JENSEN)



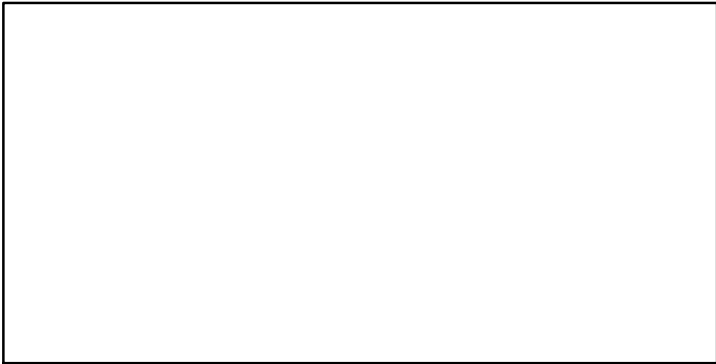
TN \*



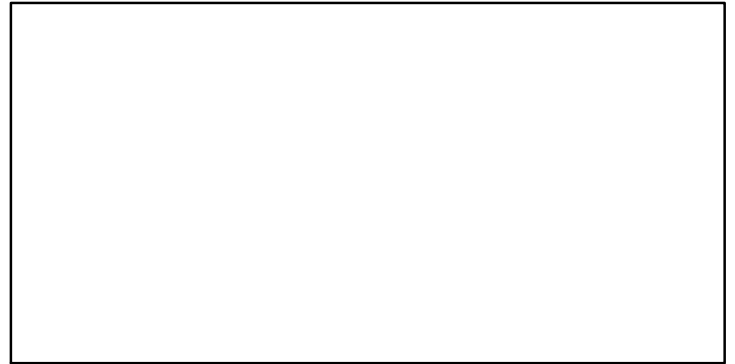
F\*



ER\*

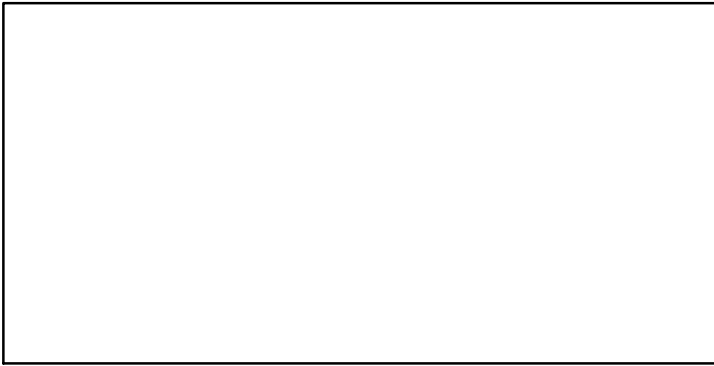


Recruits\*

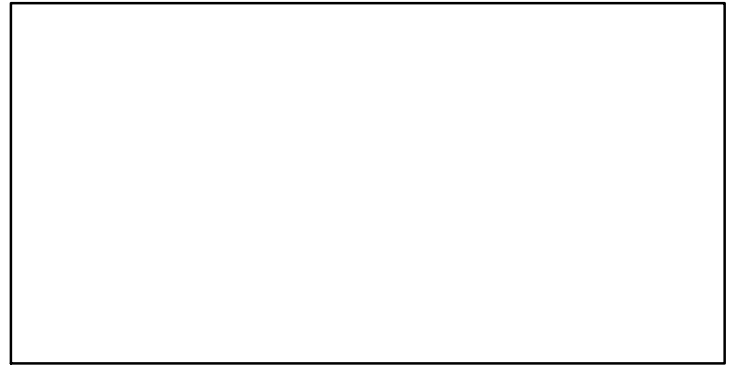


Red king crab Norton Sound [RKCRA BNS]

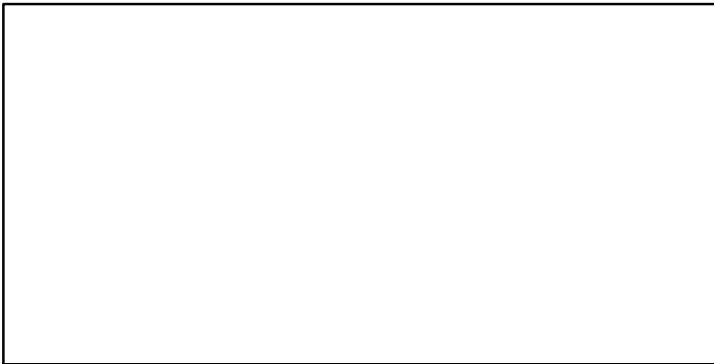
TC\*, TL\*, RecC\*



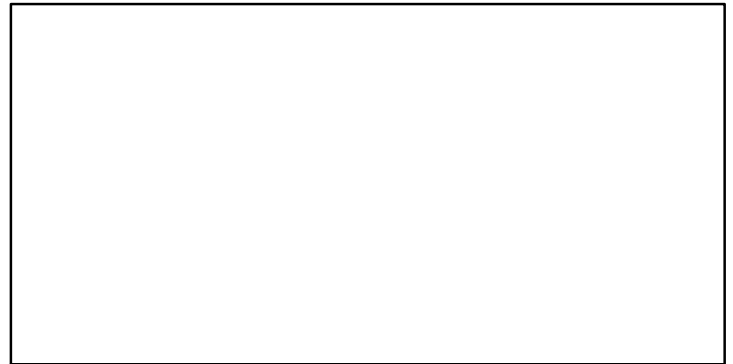
TAC\*, Cpair\*, Cadv\*



survB\*



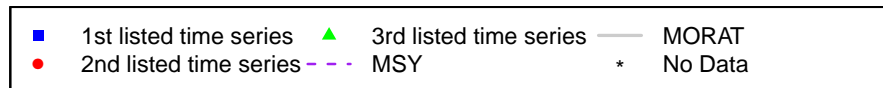
CPUE\*



EFFORT\*



CdivMSY\*



## Red king crab Pribilof Islands [RKCRAPI]

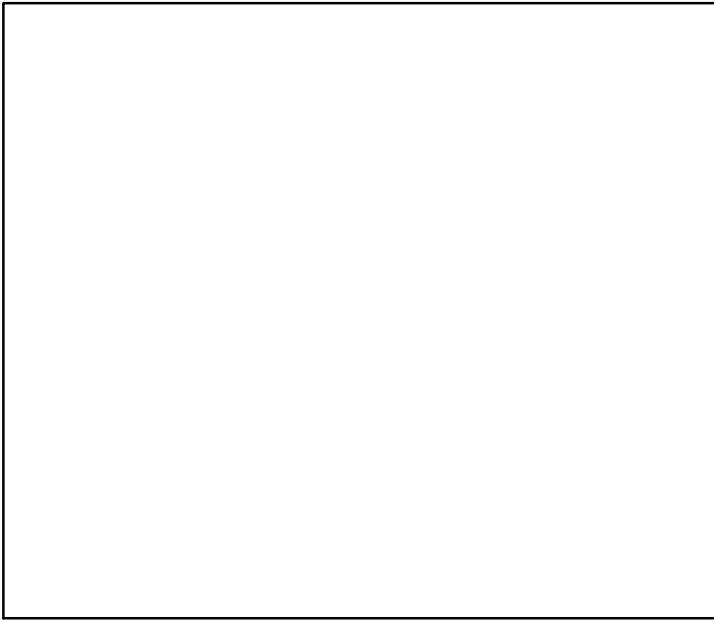
Metadata	
<b>Scientific Name</b>	Paralithodes camtschaticus
<b>Current Assess ID</b>	AFSC-RKCRAPI-1981-2009-JENSEN
<b>Area</b>	Pribilof Islands
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2009

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2009	7790	-	-
<b>SSB</b>	SSB-MT	2009	5670	Males	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-calc-ratio	2009	0	-	-
<b>TC</b>	TC-MT	2009	0		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2009	1.442		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Red king crab Pribilof Islands [RKCRABPI]

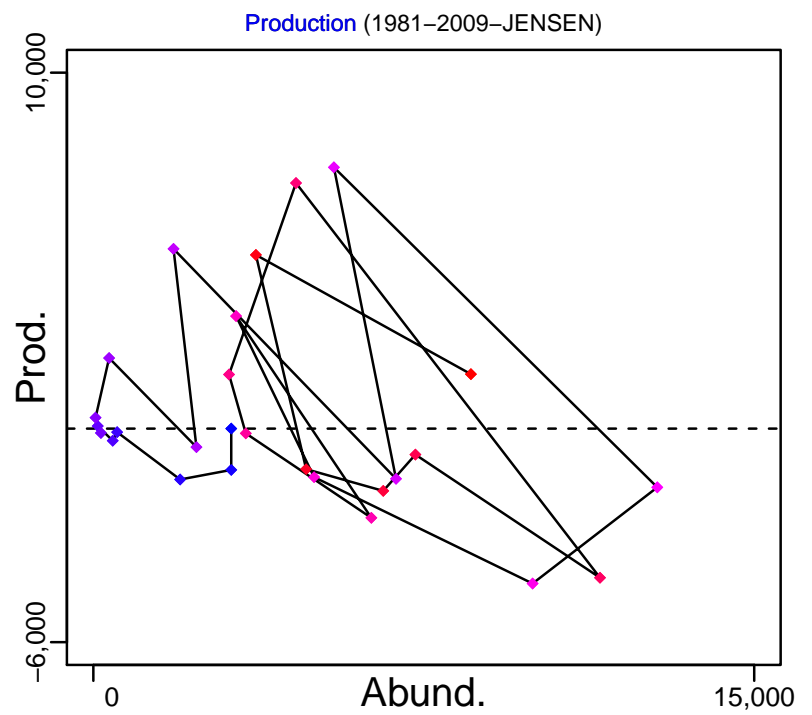
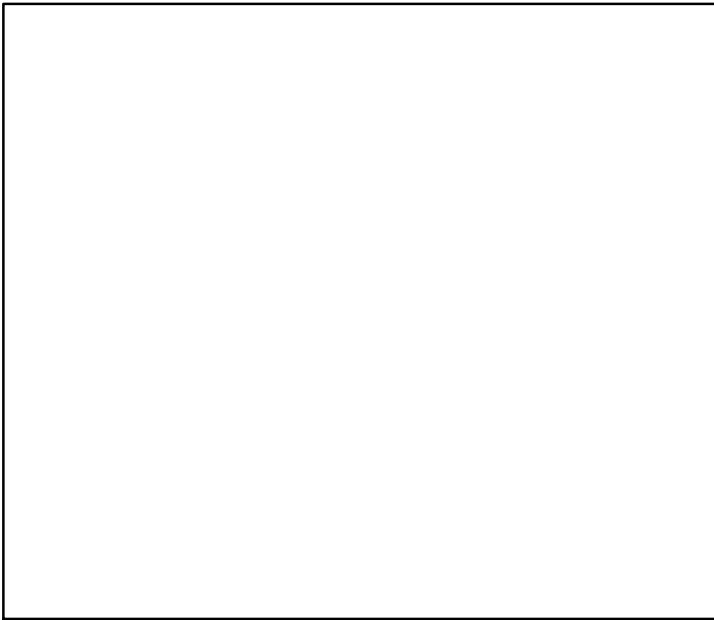
Kobe MSY\*



Kobe MGT\*



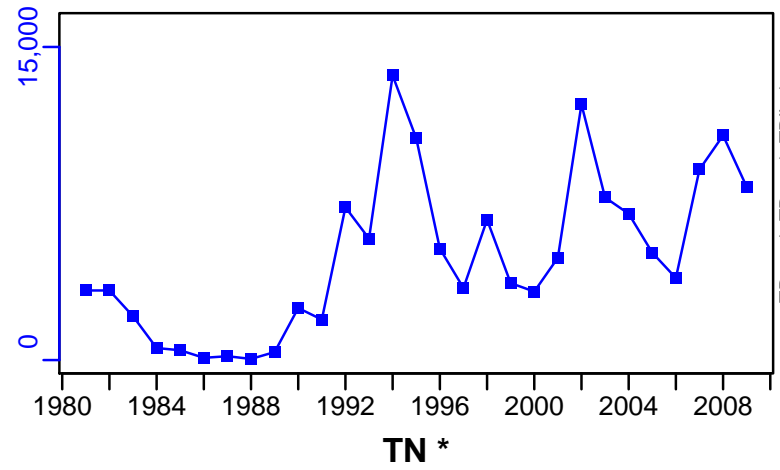
Spawner Recruit\*



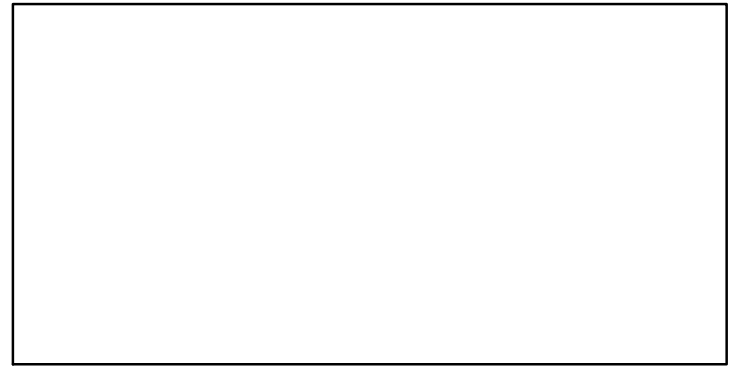
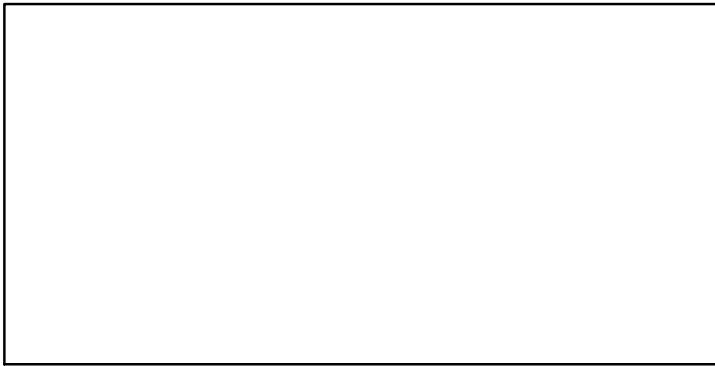
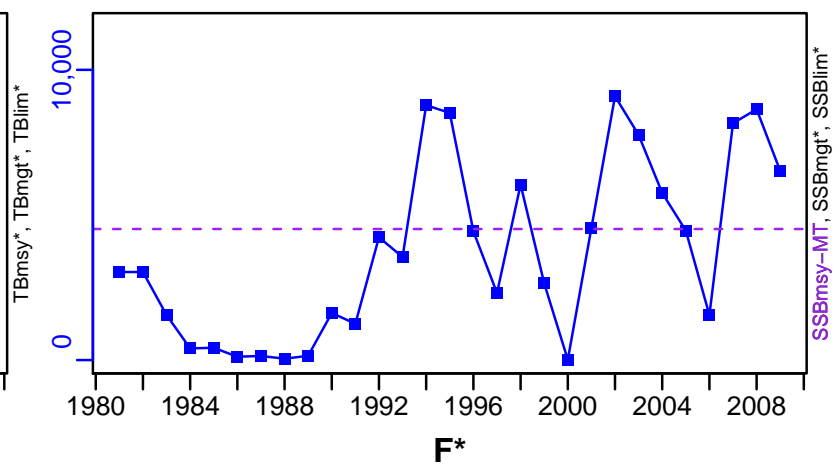
◆ Start Year ◆ End Year \* No Data

# Red king crab Pribilof Islands [RKCRABPI]

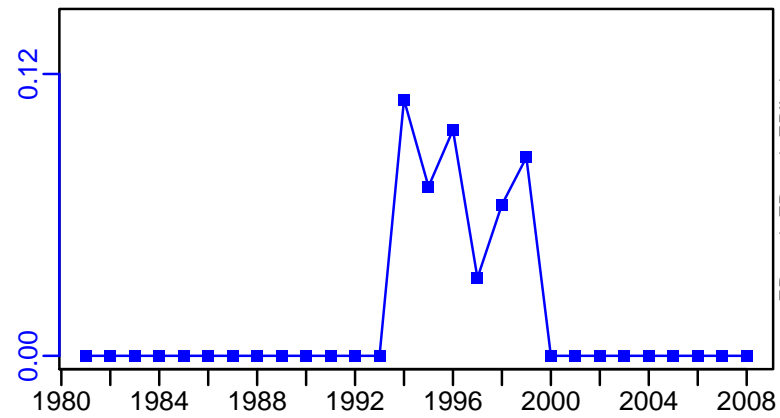
TB-MT (1981-2009-JENSEN)



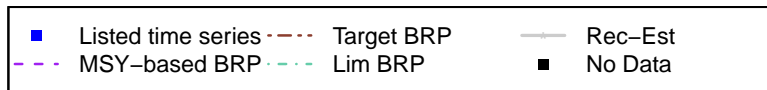
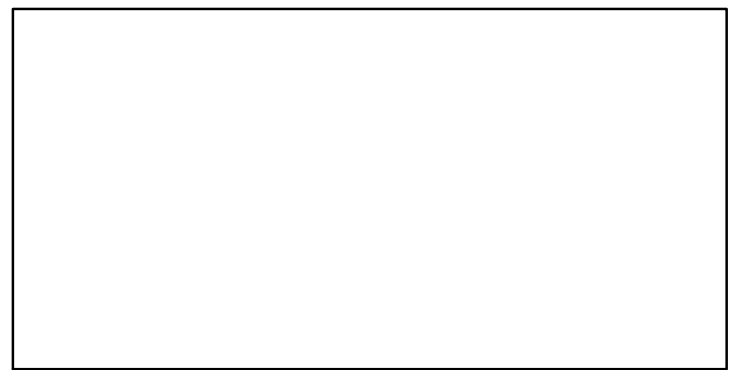
SSB-MT (1981-2009-JENSEN)



ER-calc-ratio (1981-2009-JENSEN)



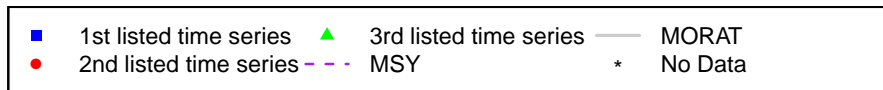
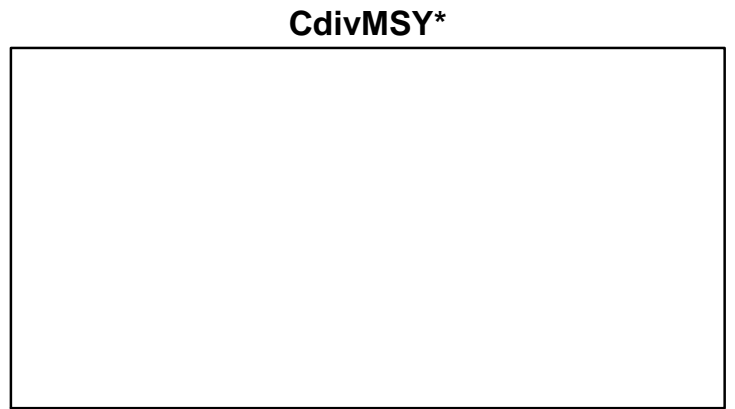
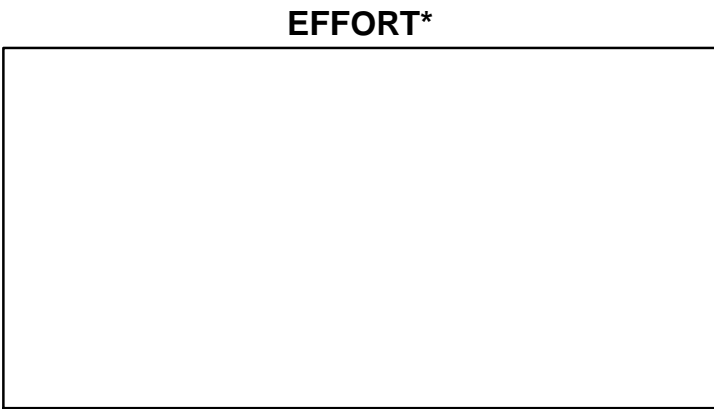
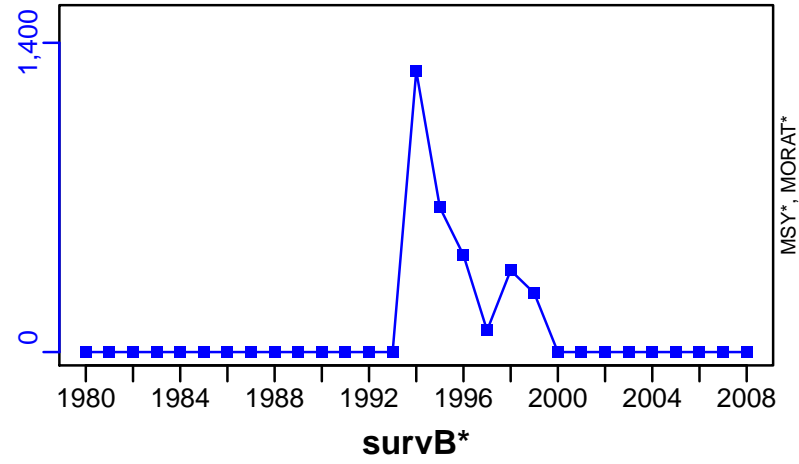
Recruits\*



# Red king crab Pribilof Islands [RKCRA BPI]

TC-MT, TL\*, RecC\* (1981-2009-JENSEN)

TAC\*, Cpair\*, Cadv\*



## Rock sole Gulf of Alaska [RSOLEGA]

Metadata	
<b>Scientific Name</b>	Lepidopsetta bilineata
<b>Current Assess ID</b>	AFSC-RSOLEGA-1977-2015-SISIMP2016
<b>Area</b>	Gulf of Alaska
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2015	32,700
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	156,000	-	3+
<b>SSB</b>	SSB-MT	2015	84,000	Females	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$2.22 \times 10^8$	-	0
<b>F</b>	F-1/yr	2015	0.01	-	-
<b>ER</b>	ER-calc-ratio	2015	0.011	-	-
<b>TC</b>	TC-MT	2015	1720		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	2.568		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Rock sole Gulf of Alaska [RSOLEGA]

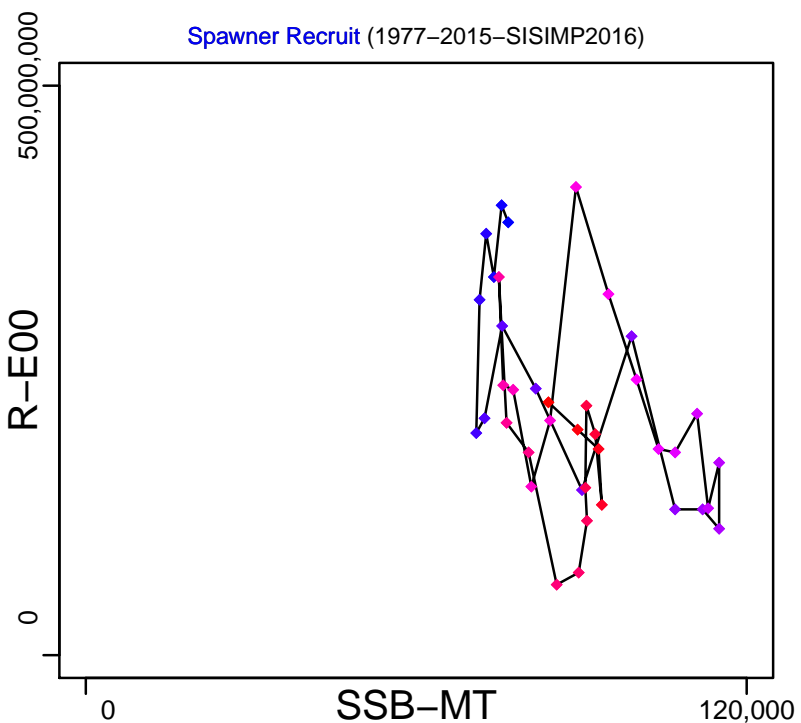
Kobe MSY\*



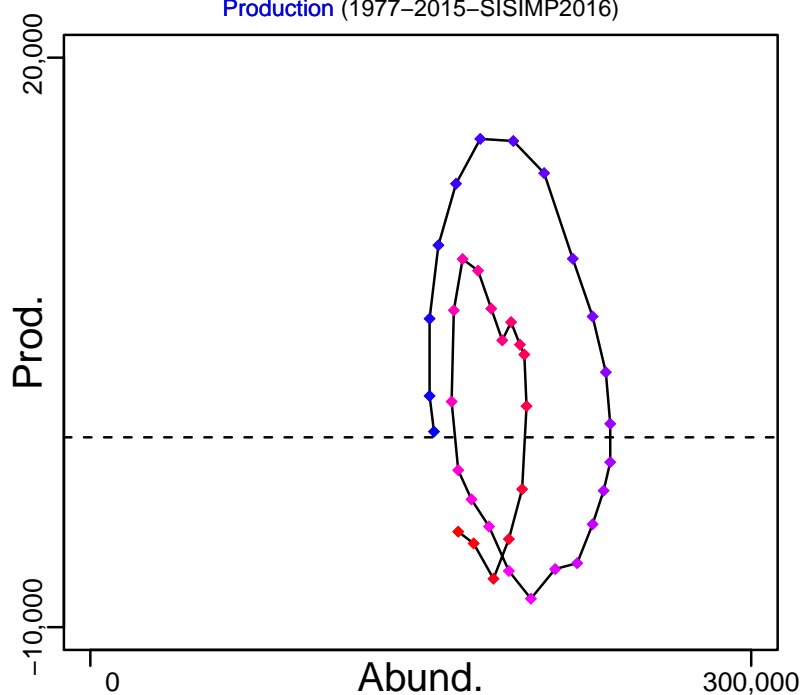
Kobe MGT\*



Spawner Recruit (1977–2015–SISIMP2016)



Production (1977–2015–SISIMP2016)

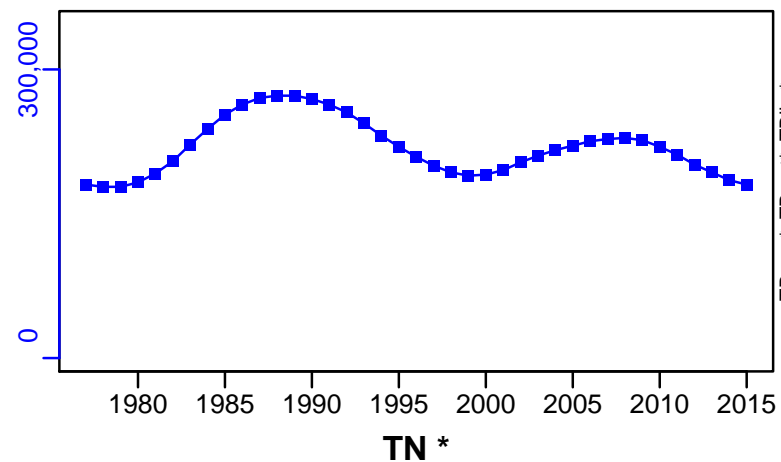


◆ Start Year ◆ End Year \* No Data

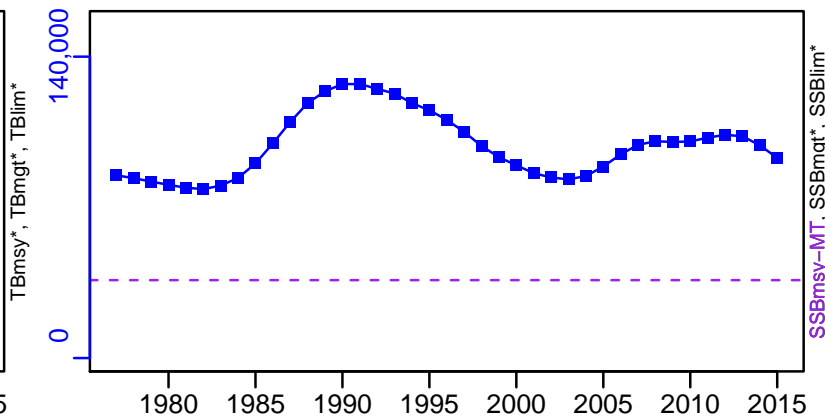


# Rock sole Gulf of Alaska [RSOLEGA]

TB-MT (1977-2015-SISIMP2016)



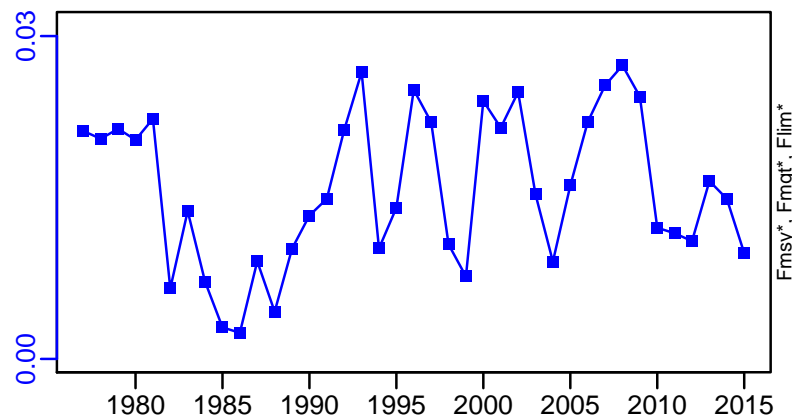
SSB-MT (1977-2015-SISIMP2016)



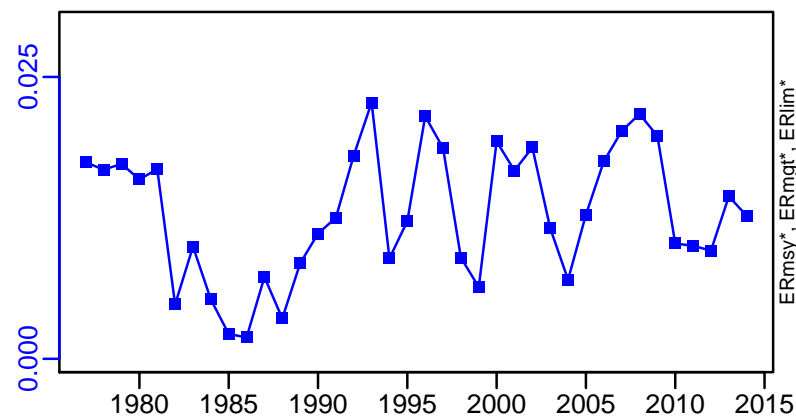
TN \*



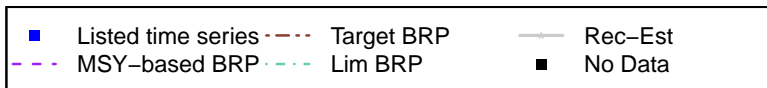
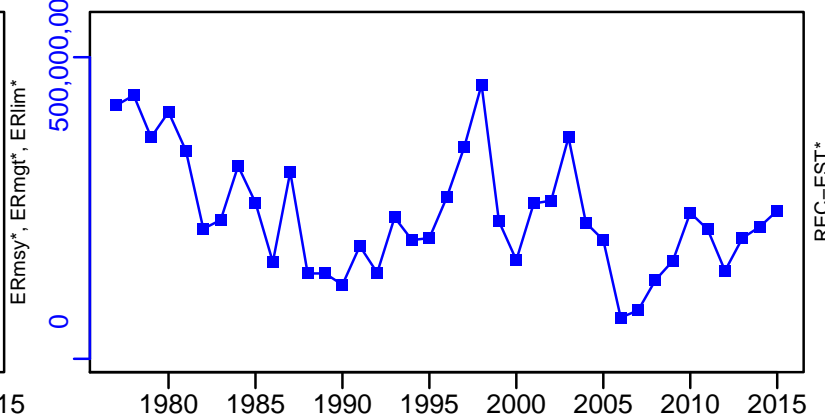
F-1/yr (1977-2015-SISIMP2016)



ER-calc-ratio (1977-2015-SISIMP2016)



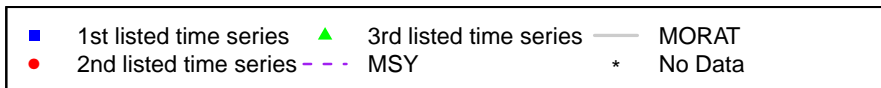
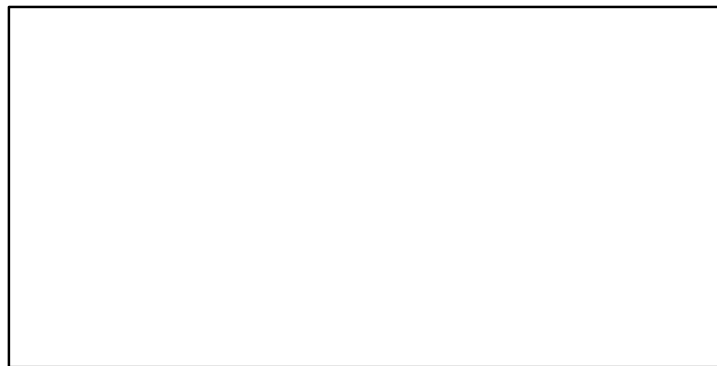
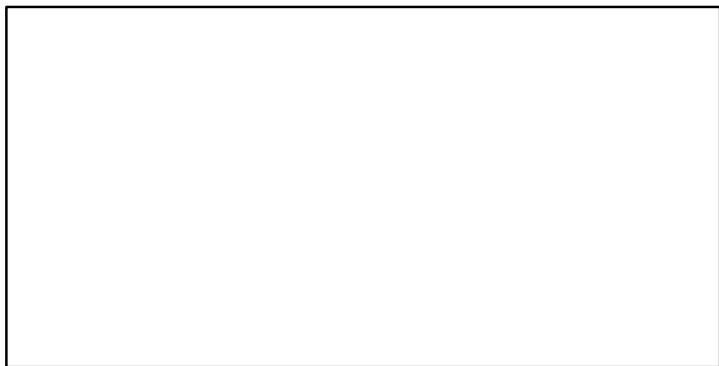
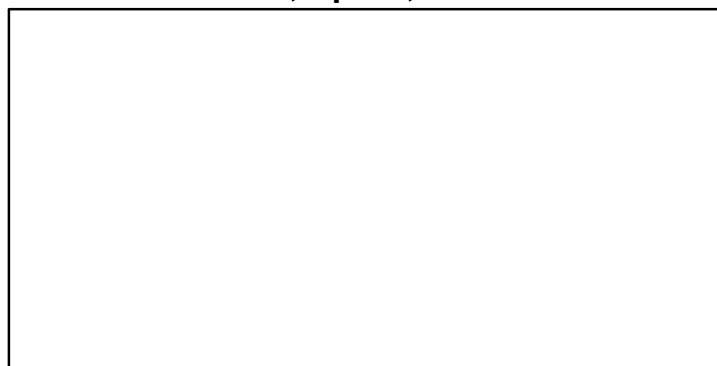
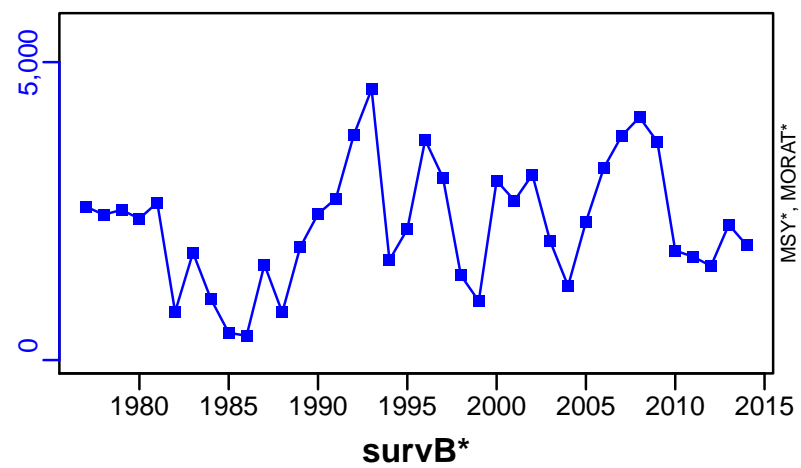
R-E00 (1977-2015-SISIMP2016)



# Rock sole Gulf of Alaska [RSOLEGA]

TC-MT, TL\*, RecC\* (1977-2015-SISIMP2016)

TAC\*, Cpair\*, Cadv\*



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

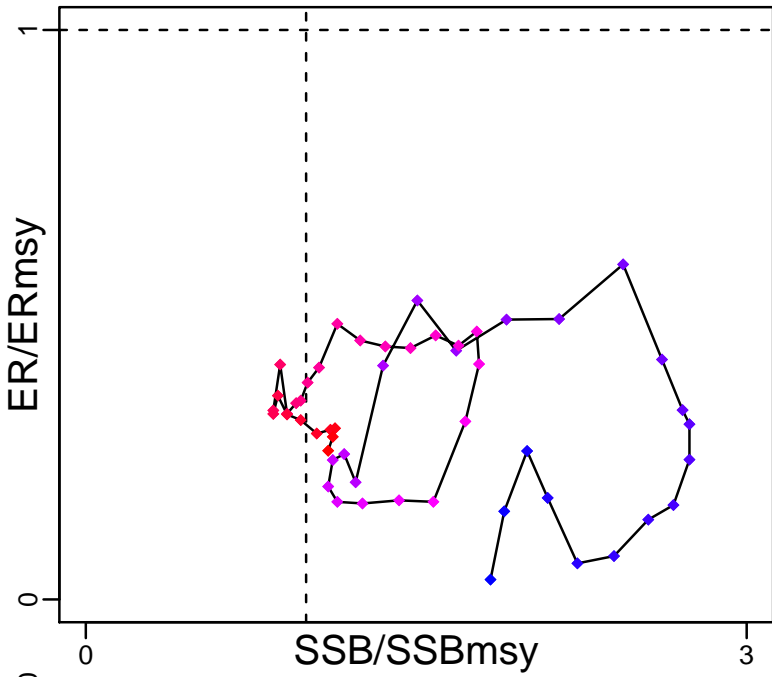
Metadata	
<b>Scientific Name</b>	Anoplopoma fimbria
<b>Current Assess ID</b>	AFSC-SABLEFEBSAIGA-1960-2015-SISIMP2016
<b>Area</b>	Eastern Bering Sea / Aleutian Islands / Gulf of Alaska
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2010, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2010	96,345
<b>SSBmsy</b>	SSBmsy-MT	2015	89,956
<b>Fmsy</b>	Fmsy-pr-1/yr	2010	0.106
<b>ERmsy</b>	ERmsy-ratio	2010	0.197
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2010	275,270
<b>MSY</b>	MSY-MT	2010	18,950
<b>M</b>	M-1/yr	2010	0.1
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	Flim-1/yr	2010	0.115
<b>ERlim</b>	-	-	-

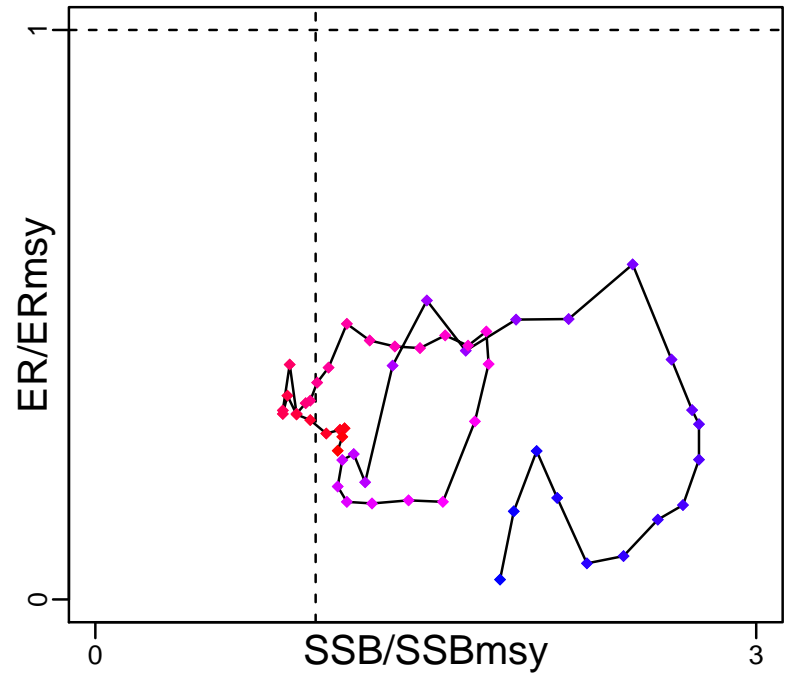
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	202,000	Both	2+
<b>SSB</b>	SSB-MT	2015	90,000	Females	6.6
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	13,300,000	-	2
<b>F</b>	F-1/yr	2015	0.064	-	-
<b>ER</b>	ER-calc-ratio	2015	0.058	-	-
<b>TC</b>	TC-MT	2015	12,000		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	TB-MT/TBmsy-calc-MT	2010	2.283		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	1		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2010	0.585		
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-ratio	2010	0.261		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

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

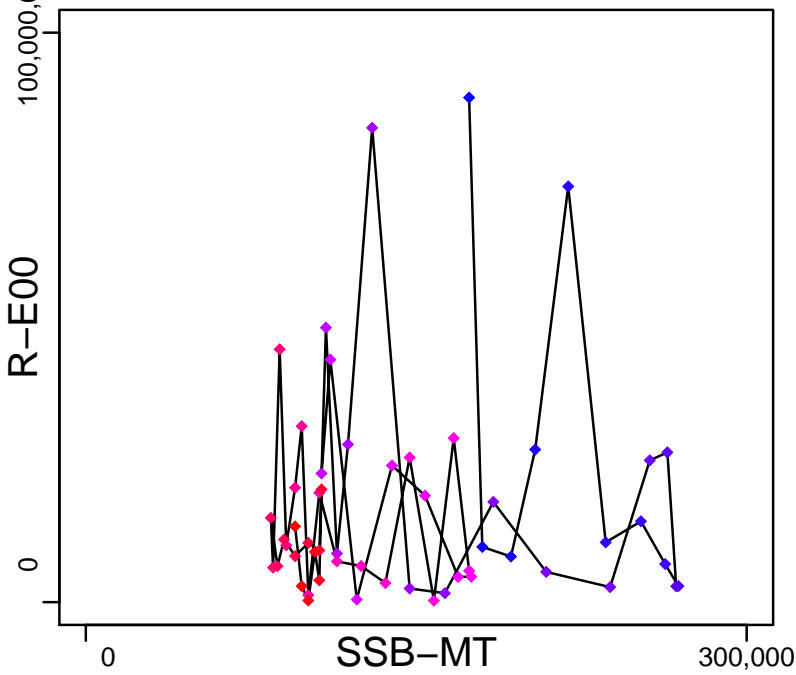
Kobe MSY<sub>pref</sub> (1958–2010–STACHURA)



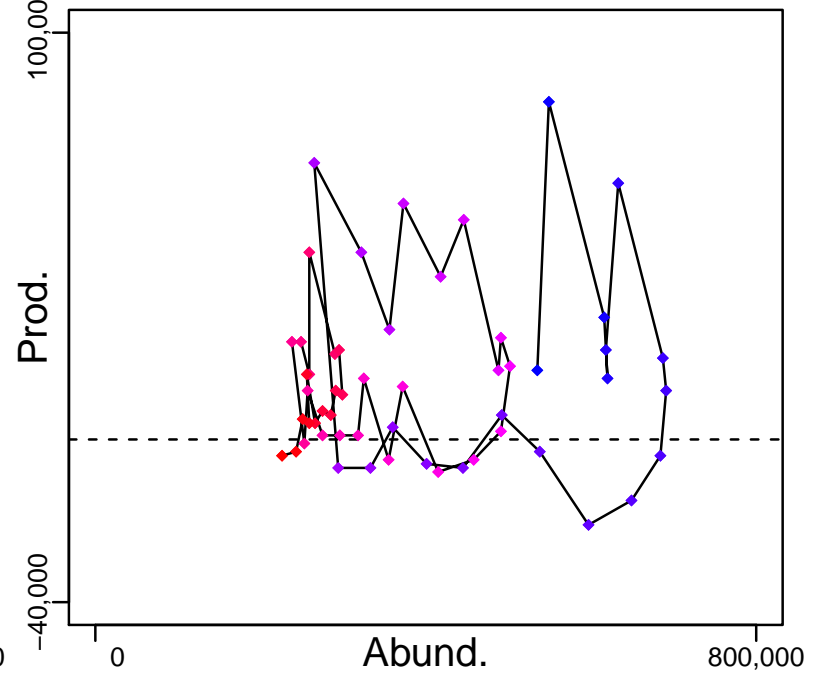
Kobe MGT<sub>pref</sub> (1958–2010–STACHURA)



Spawner Recruit (1960–2015–SISIMP2016)



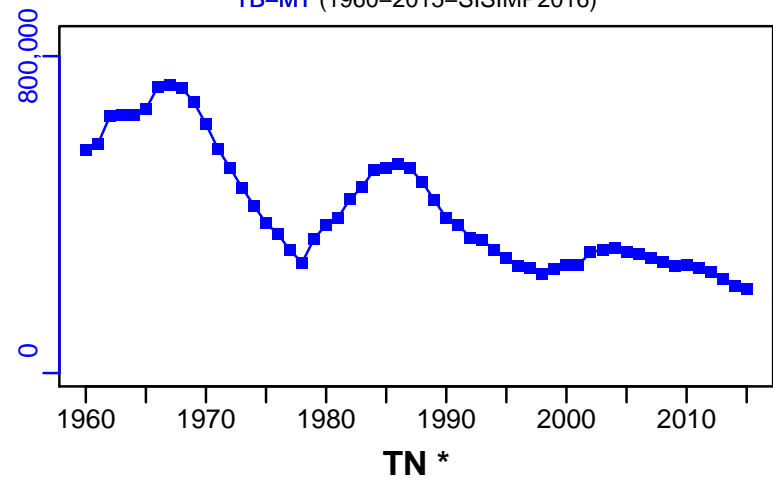
Production (1960–2015–SISIMP2016)



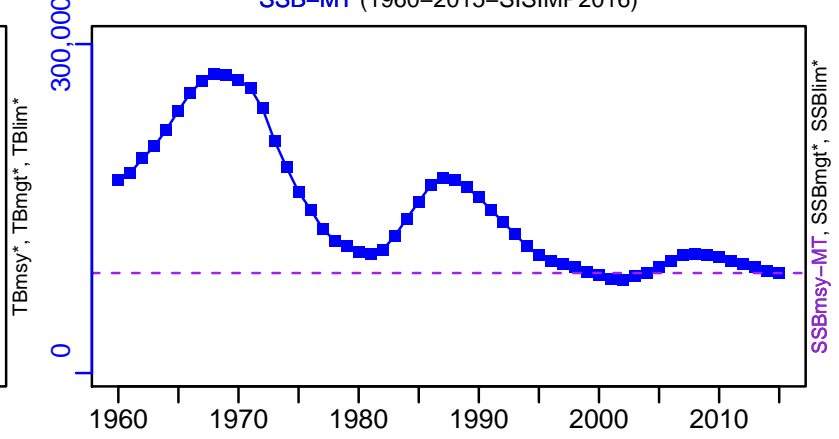
◆ Start Year ◆ End Year \* No Data

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

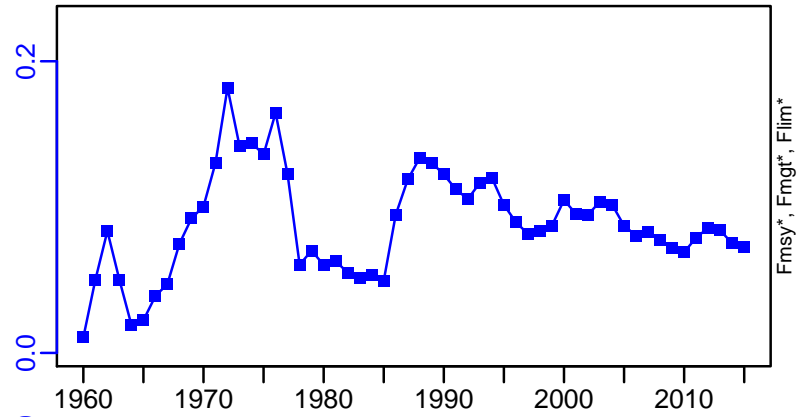
TB-MT (1960–2015–SISIMP2016)



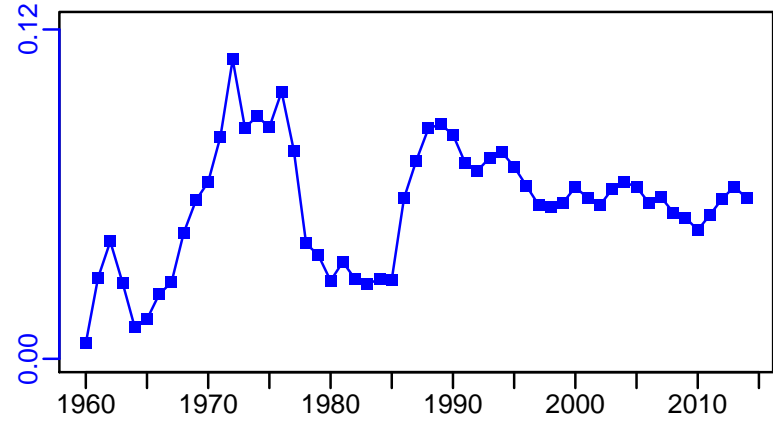
SSB-MT (1960–2015–SISIMP2016)



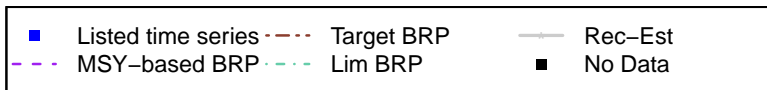
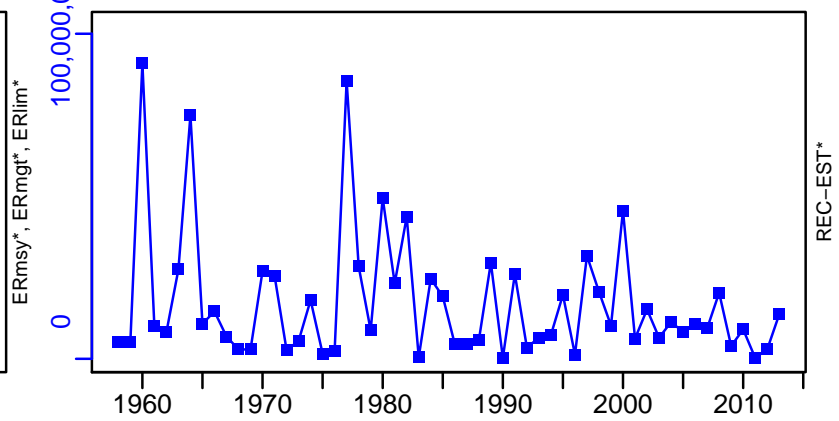
F-1/yr (1960–2015–SISIMP2016)



ER-calc-ratio (1960–2015–SISIMP2016)



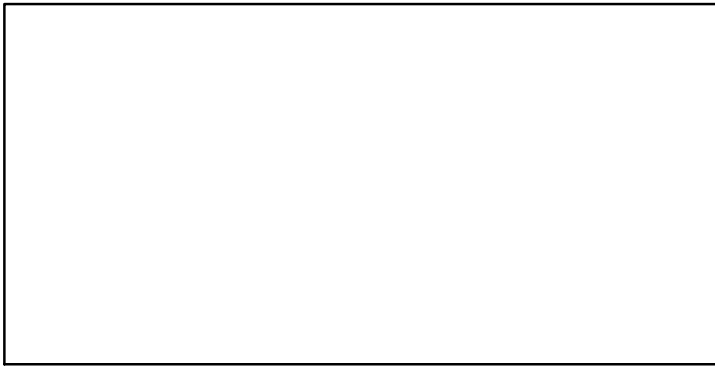
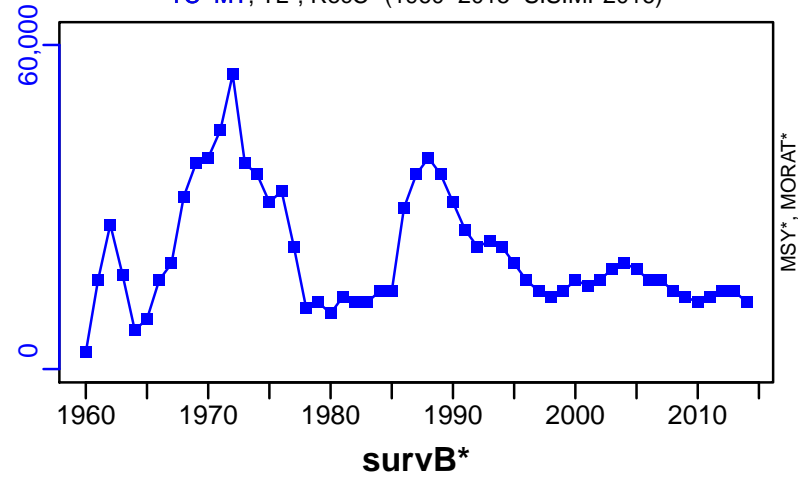
R-E00 (1960–2015–SISIMP2016)



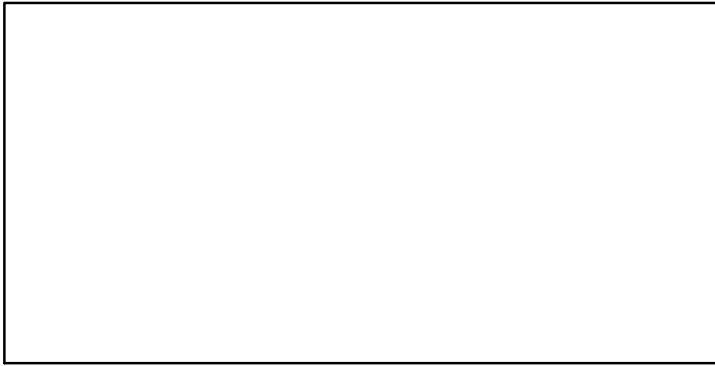
# Sablefish Eastern Bering Sea / Aleutian Islands / Gulf of Alaska [SABLEFEBSAIGA]

TC-MT, TL\*, RecC\* (1960-2015-SISIMP2016)

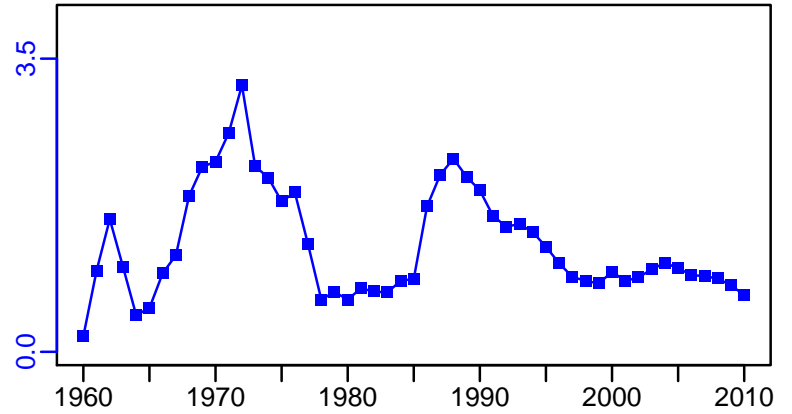
TAC\*, Cpair\*, Cadv\*



EFFORT\*



CdivMSY-ratio (1958-2010-STACHURA)



## Snow crab Bering Sea [SNOWCRABBS]

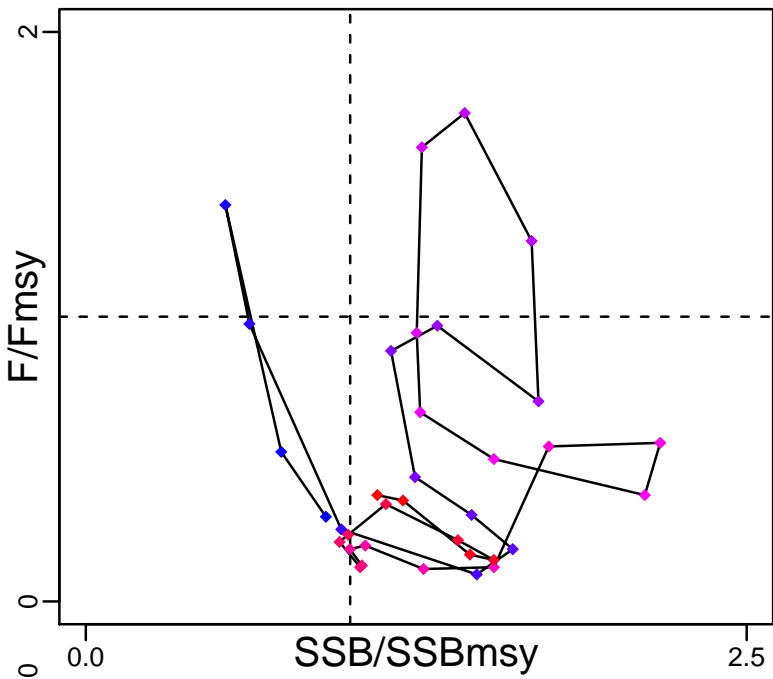
Metadata	
<b>Scientific Name</b>	Chionoecetes opilio
<b>Current Assess ID</b>	AFSC-SNOWCRABBS-1979-2015-SISIMP2016
<b>Area</b>	Bering Sea
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2013, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2015	146,357
<b>SSBmsy</b>	SSBmsy-pr-MT	2013	154,170
<b>Fmsy</b>	Fmsy-pr-1/yr	2013	1.58
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2013	0.18
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

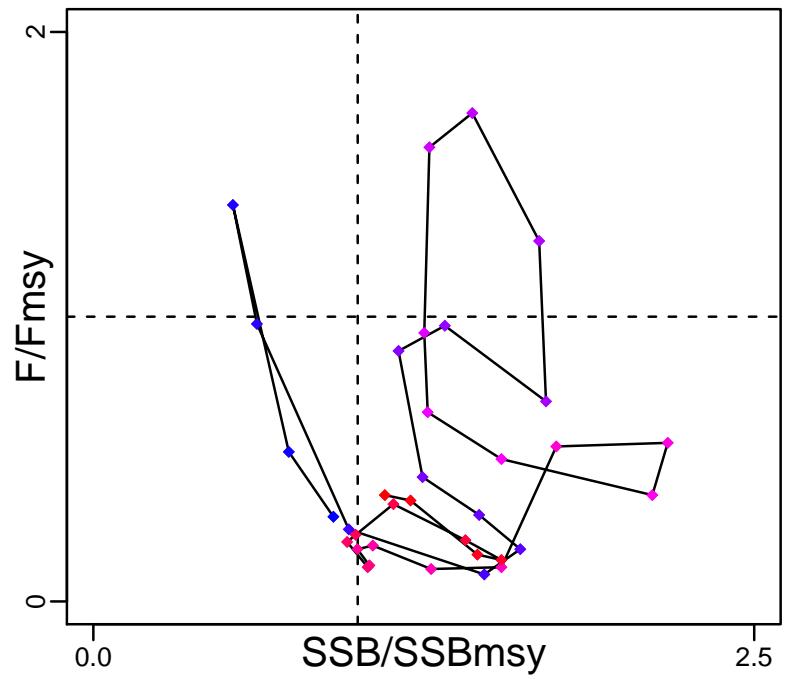
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	777,000	-	-
<b>SSB</b>	SSB-MT	2015	168,000	Females	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$1.39 \times 10^9$	-	-
<b>F</b>	F-1/yr	2015	0.54	-	-
<b>ER</b>	ER-calc-ratio	2015	0.038	-	-
<b>TC</b>	TC-MT	2015	27,800		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	TB-MT/TBmsy-MT	2015	5.311		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-pr-MT	2013	1.103		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2013	0.373		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Snow crab Bering Sea [SNOWCRABBS]

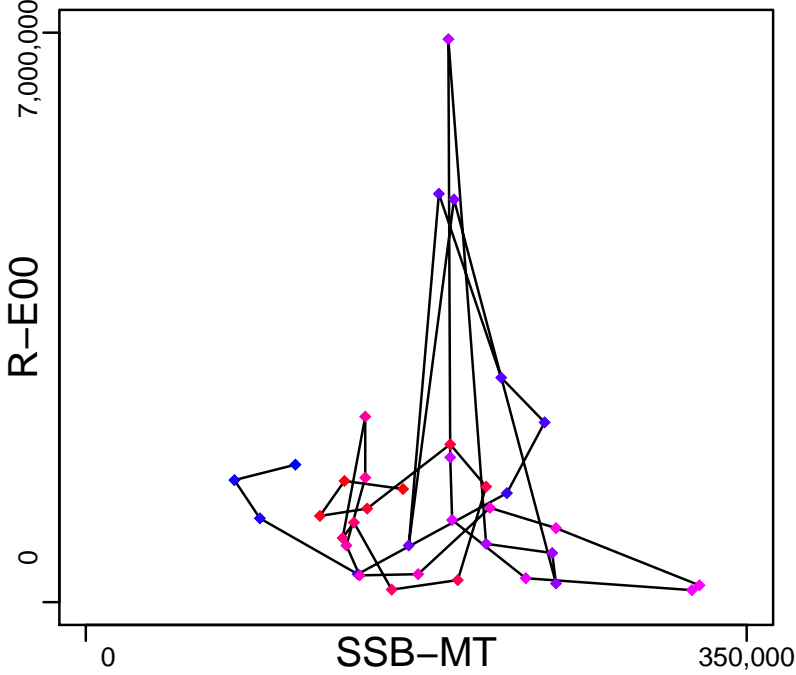
Kobe MSYpref (1978–2013–HIVELY)



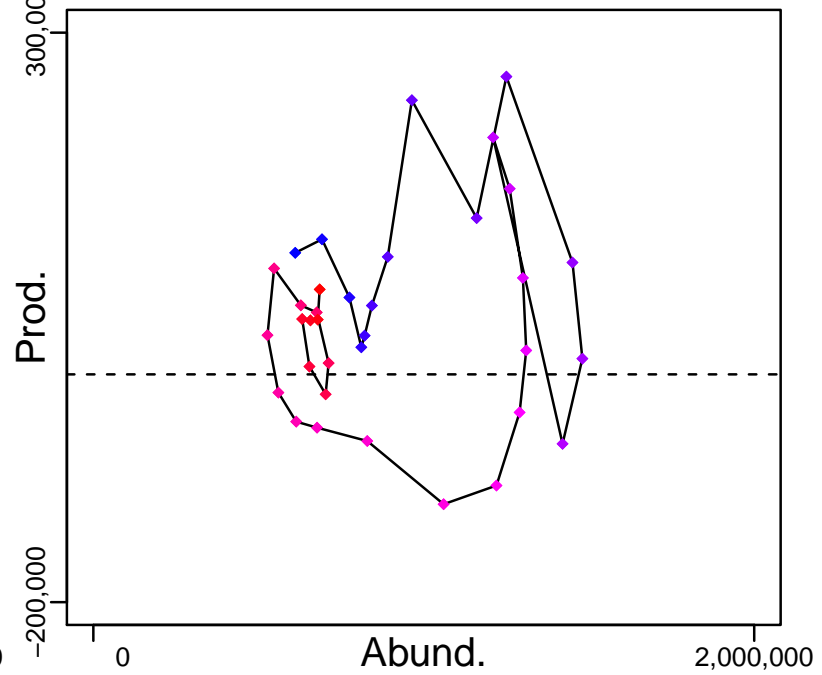
Kobe MGTpref (1978–2013–HIVELY)



Spawner Recruit (1979–2015–SISIMP2016)



Production (1979–2015–SISIMP2016)

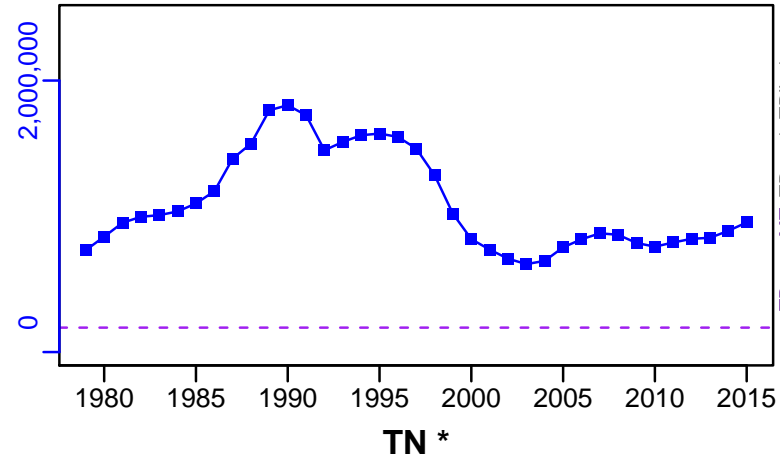


◆ Start Year ◆ End Year \* No Data

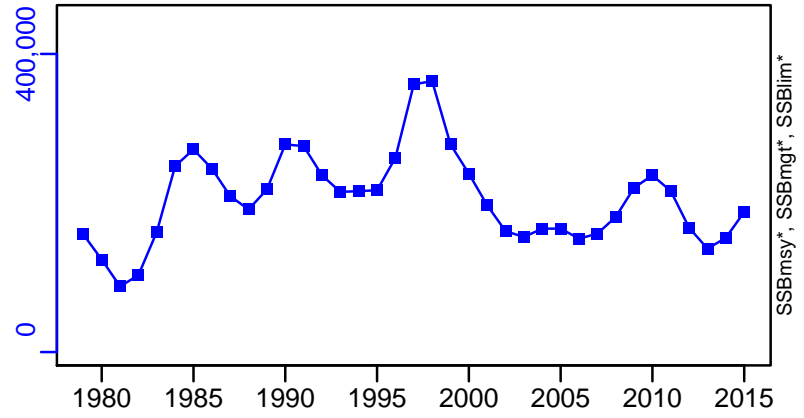


# Snow crab Bering Sea [SNOWCRABBS]

TB-MT (1979–2015–SISIMP2016)



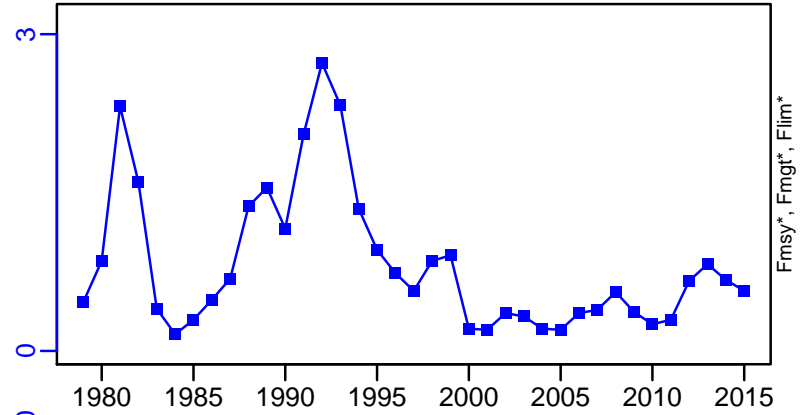
SSB-MT (1979–2015–SISIMP2016)



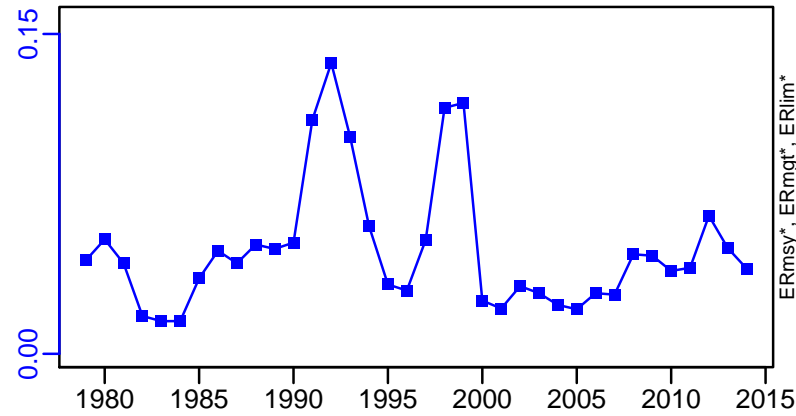
TN \*



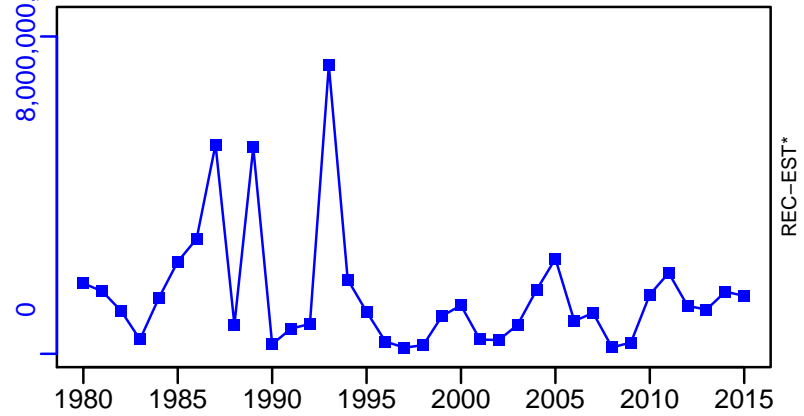
F-1/yr (1979–2015–SISIMP2016)



ER-calc-ratio (1979–2015–SISIMP2016)



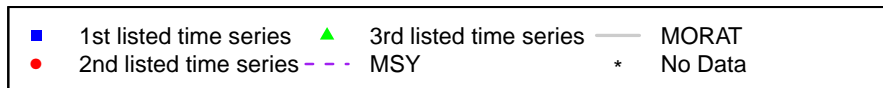
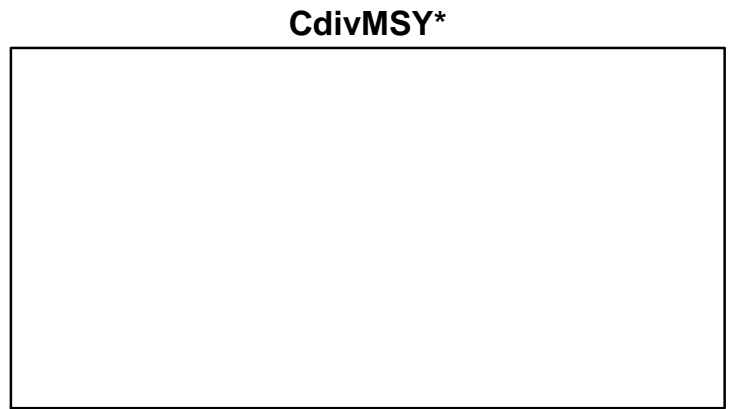
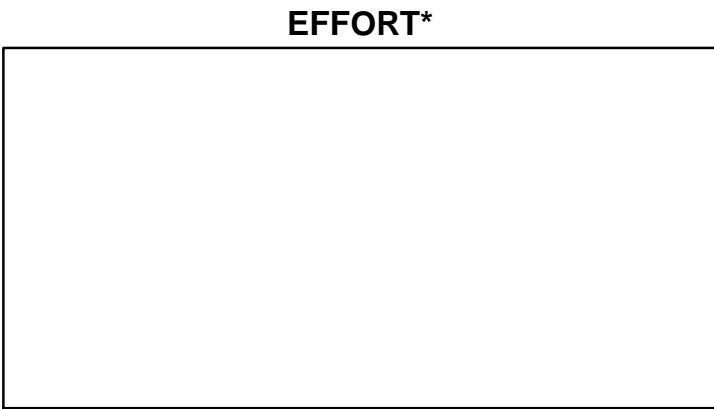
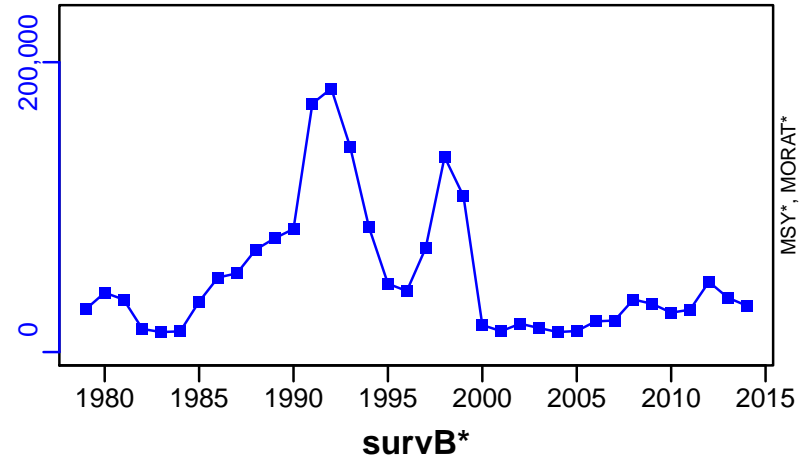
R-E00 (1979–2015–SISIMP2016)



# Snow crab Bering Sea [SNOWCRABBS]

TC-MT, TL\*, RecC\* (1979-2015-SISIMP2016)

TAC\*, Cpair\*, Cadv\*



## Shortraker rockfish Bering Sea and Aleutian Islands [SRAKEROCKBSAI]

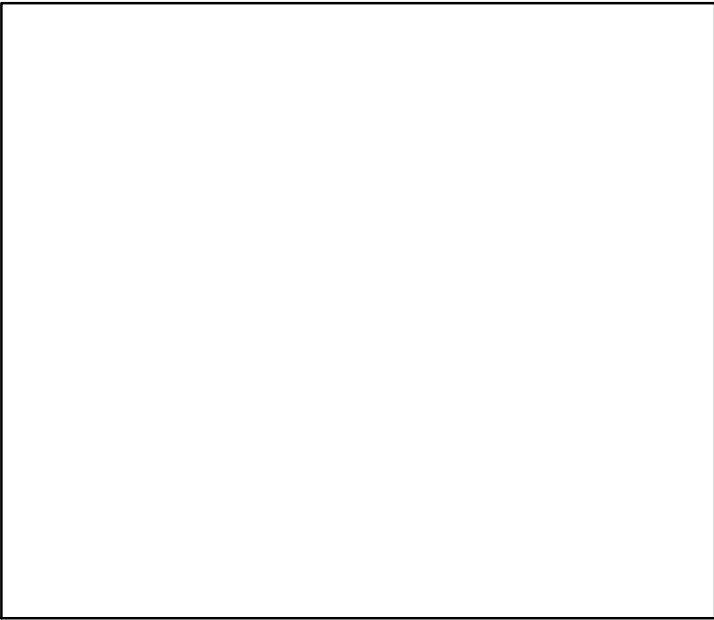
Metadata	
<b>Scientific Name</b>	Sebastes borealis
<b>Current Assess ID</b>	AFSC-SRAKEROCKBSAI-2004-2014-SISIMP2016
<b>Area</b>	Bering Sea and Aleutian Islands
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2010, 2014

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2010	0.03
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2010	0.03
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2014	23,000	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-1/yr	2010	0.012	Both	-
ER	ER-calc-ratio	2014	0.009	-	-
TC	TC-MT	2014	197		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Shortraker rockfish Bering Sea and Aleutian Islands [SRAKEROCKBSAI]

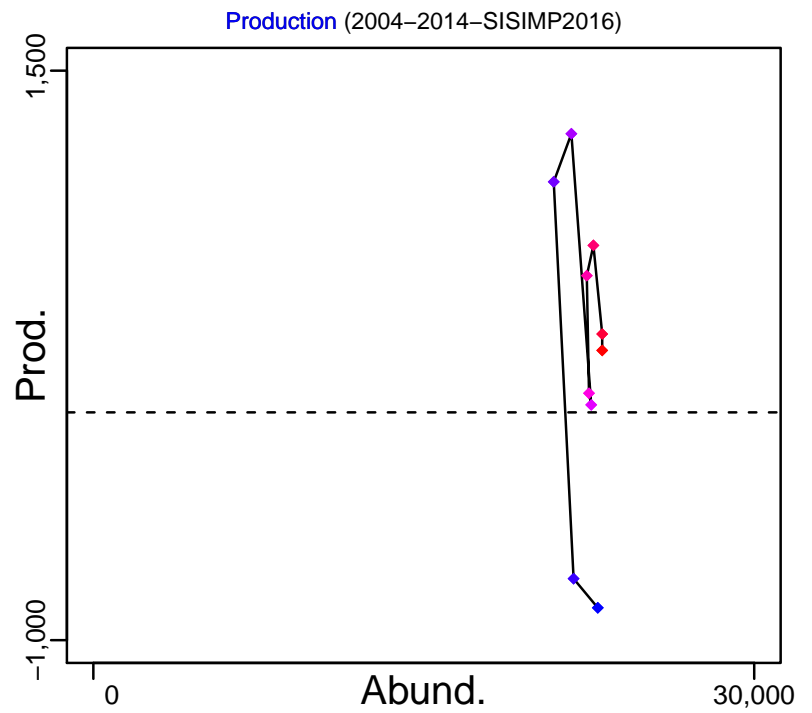
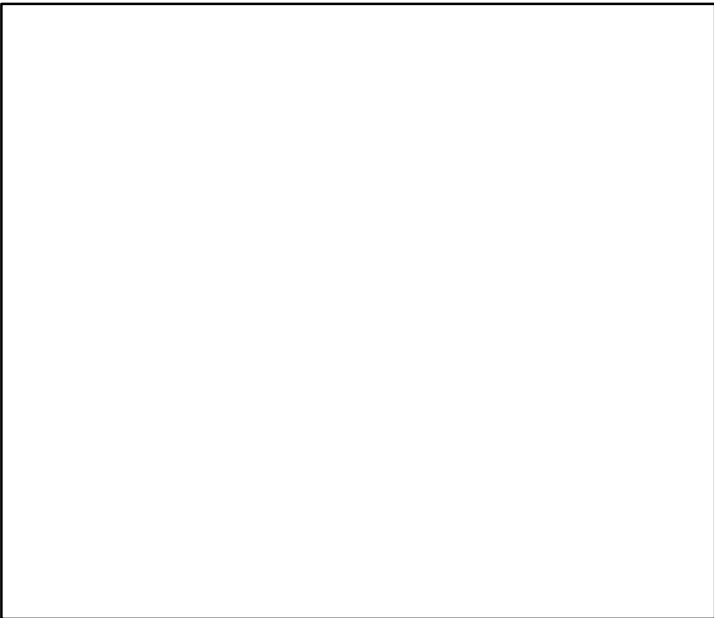
Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*

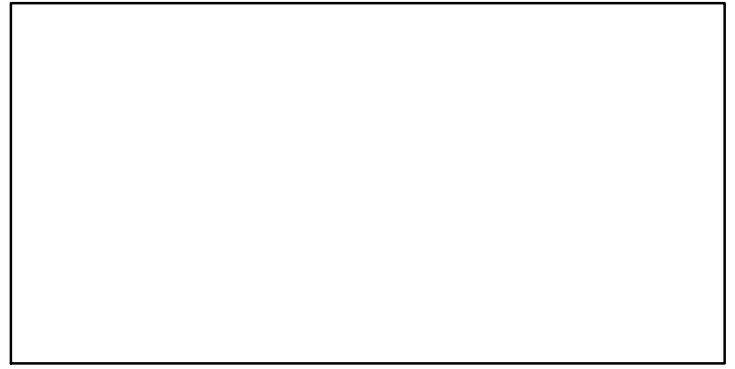
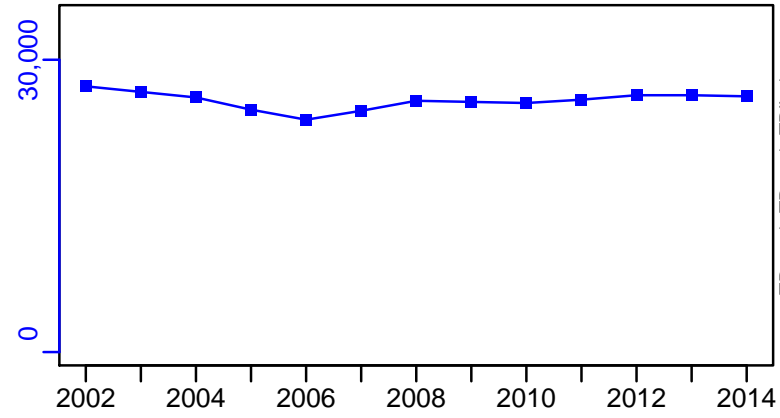


◆ Start Year ◆ End Year \* No Data

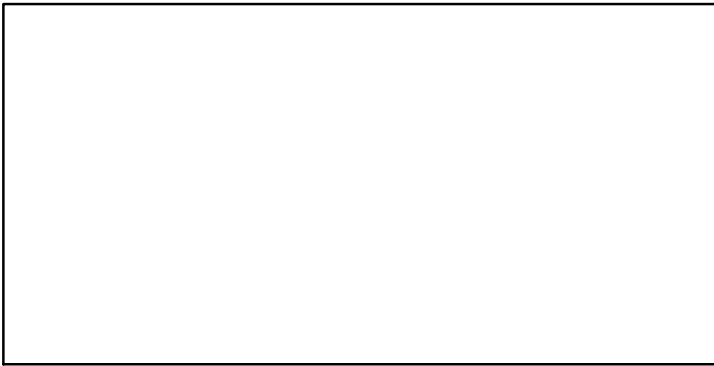
# Shortraker rockfish Bering Sea and Aleutian Islands [SRAKEROCKBSAI]

TB-MT (2004–2014–SISIMP2016)

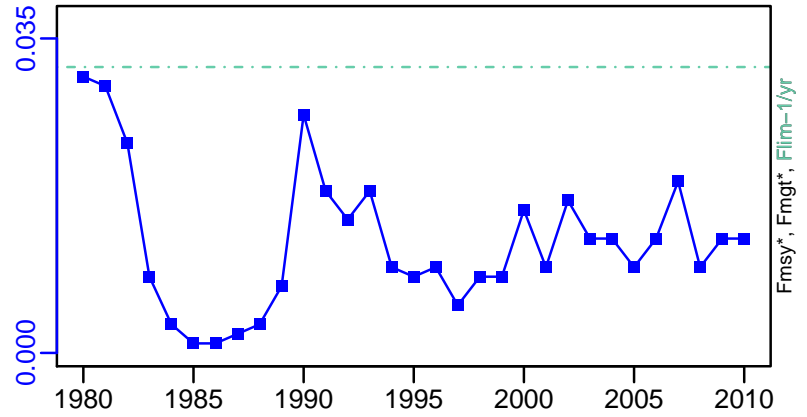
SSB\*



TN \*

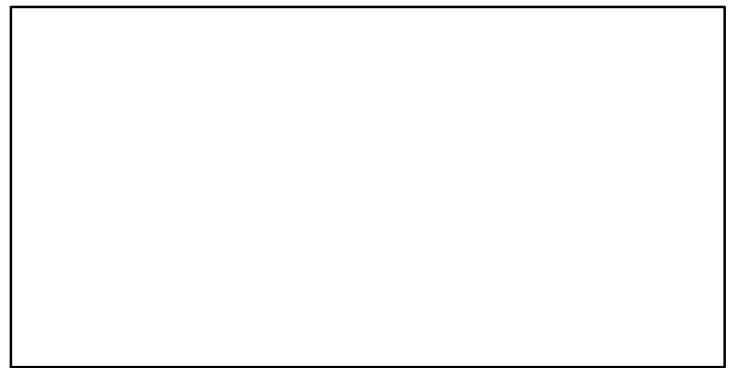
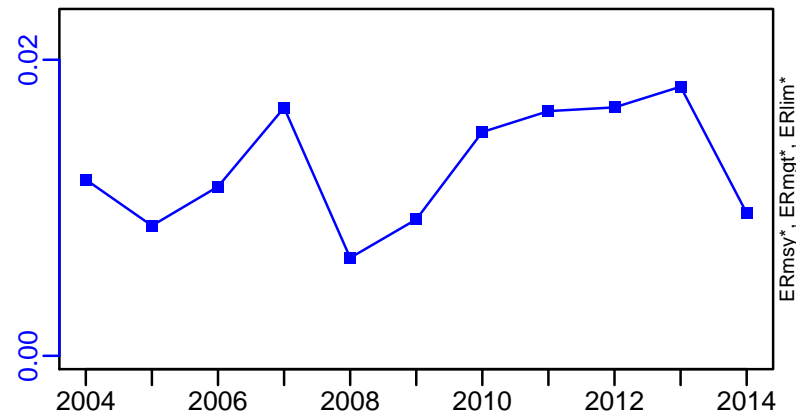


F-1/yr (1977–2010–STACHURA)



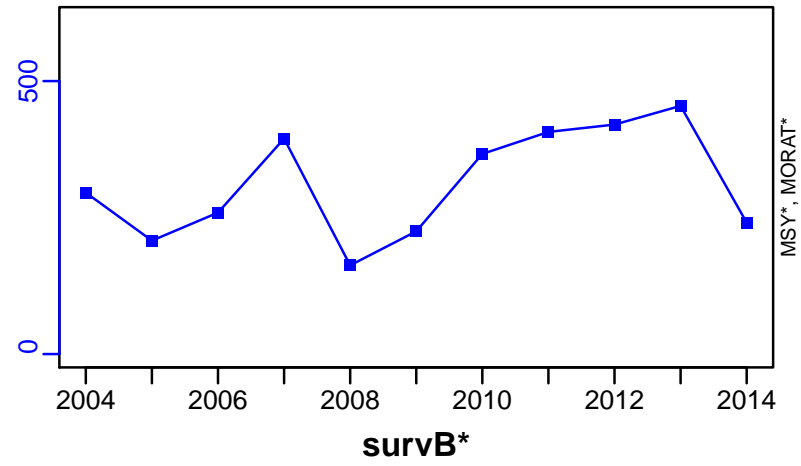
ER-calc-ratio (2004–2014–SISIMP2016)

Recruits\*

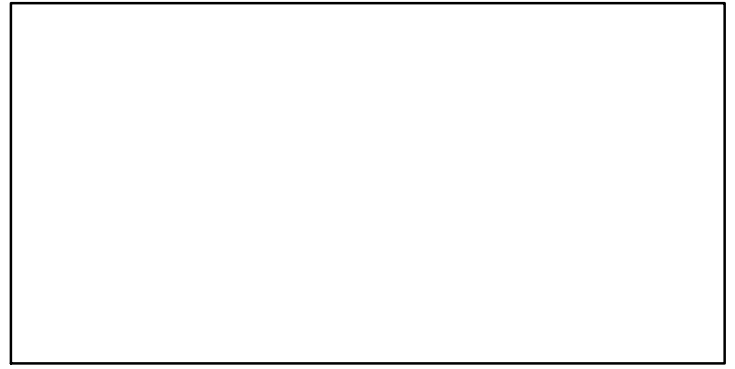


# Shortraker rockfish Bering Sea and Aleutian Islands [SRAKEROCKBSAI]

TC-MT, TL\*, RecC\* (2004–2014–SISIMP2016)



TAC\*, Cpair\*, Cadv\*



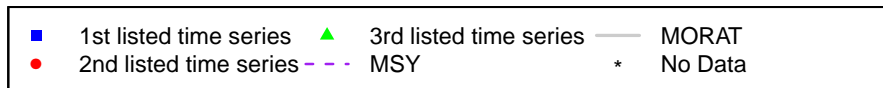
CPUE\*



EFFORT\*



CdivMSY\*

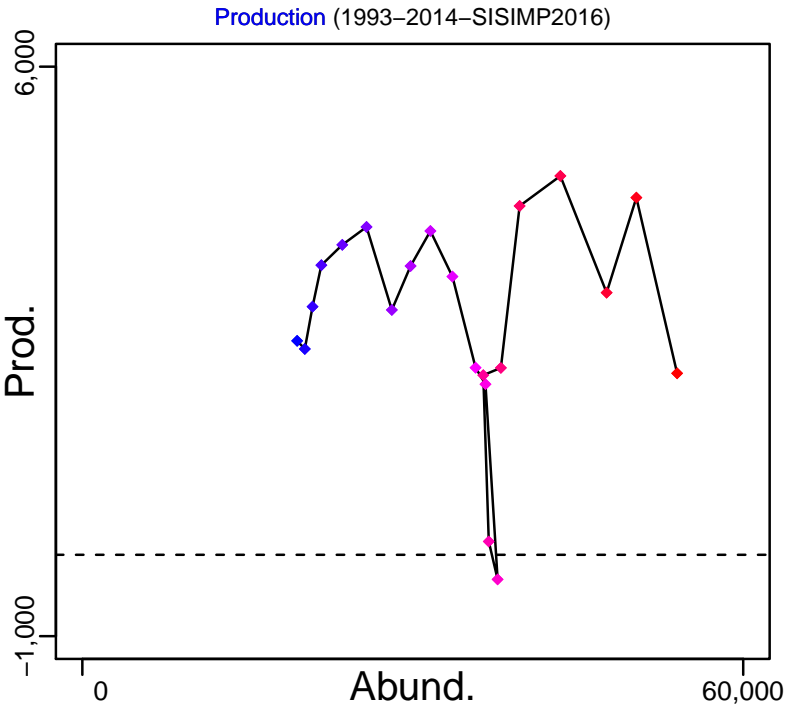
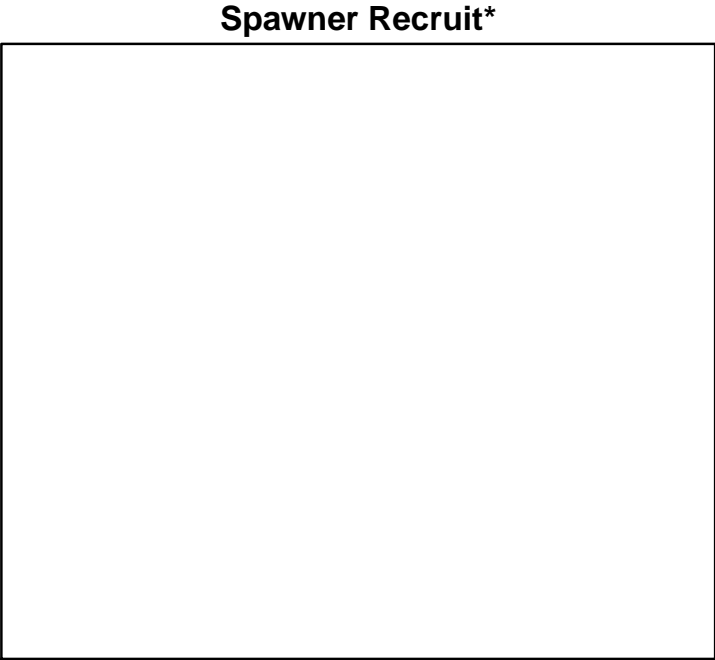
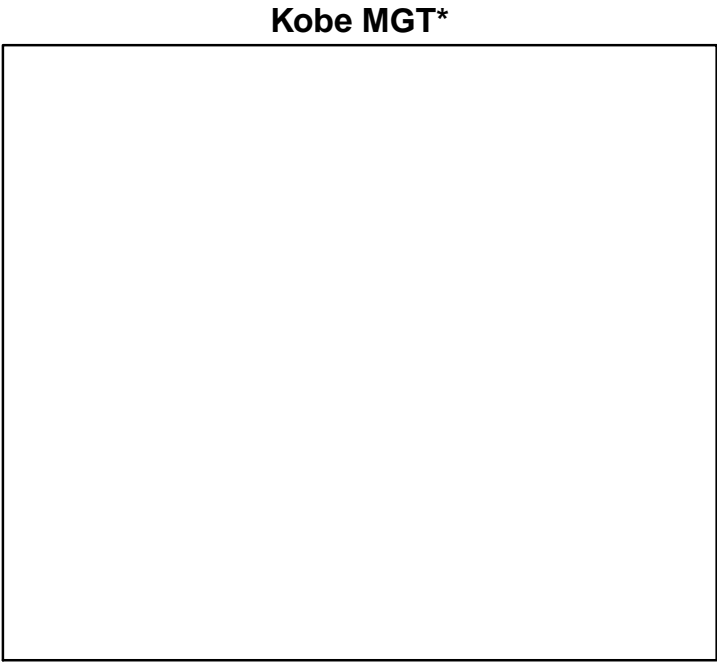
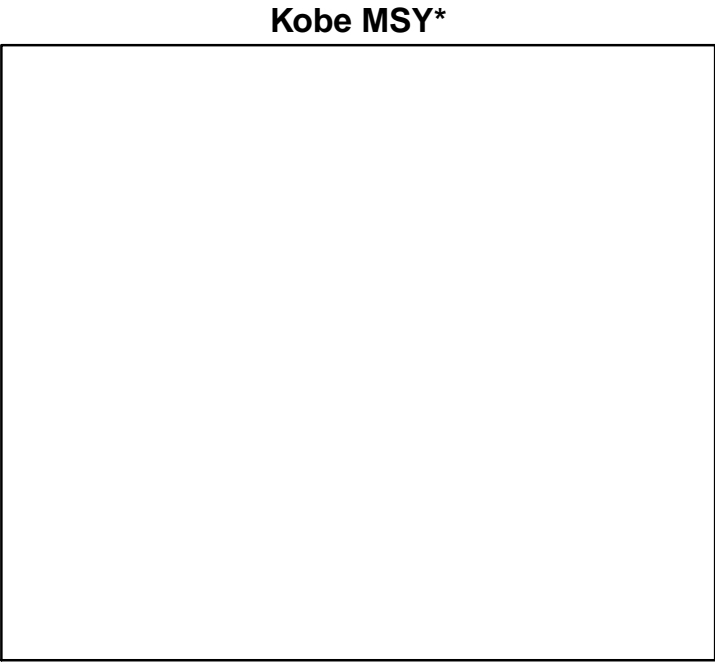


## Shortraker rockfish Gulf of Alaska [SRAKEROCKGA]

Metadata	
<b>Scientific Name</b>	Sebastes borealis
<b>Current Assess ID</b>	AFSC-SRAKEROCKGA-1993-2014-SISIMP2016
<b>Area</b>	Gulf of Alaska
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2014

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	TB-MT	2014	57,200	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2014	0.012	-	-
TC	TC-MT	2014	685		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



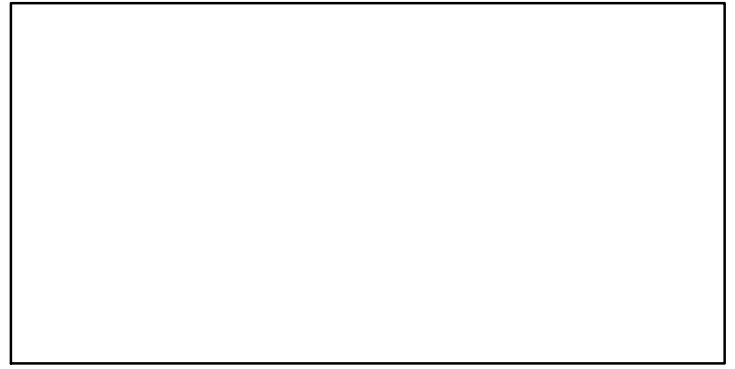
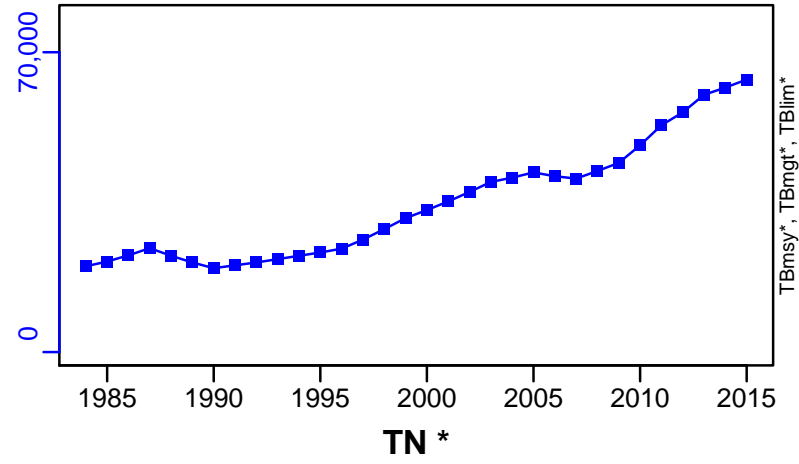
◆ Start Year ◆ End Year \* No Data



# Shortraker rockfish Gulf of Alaska [SRAKEROCKGA]

TB-MT (1993–2014–SISIMP2016)

SSB\*

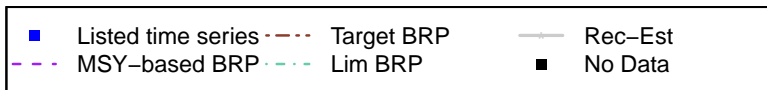
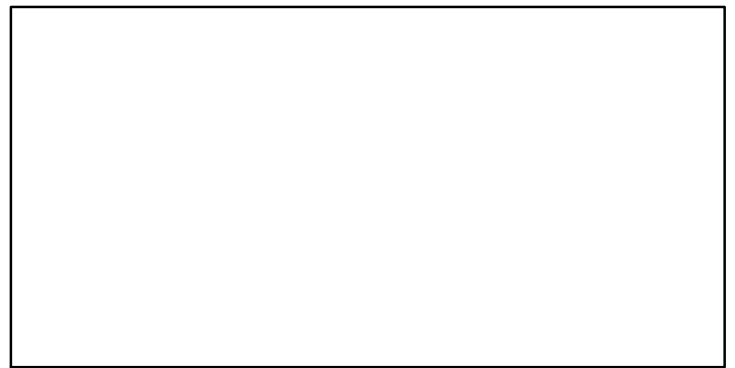
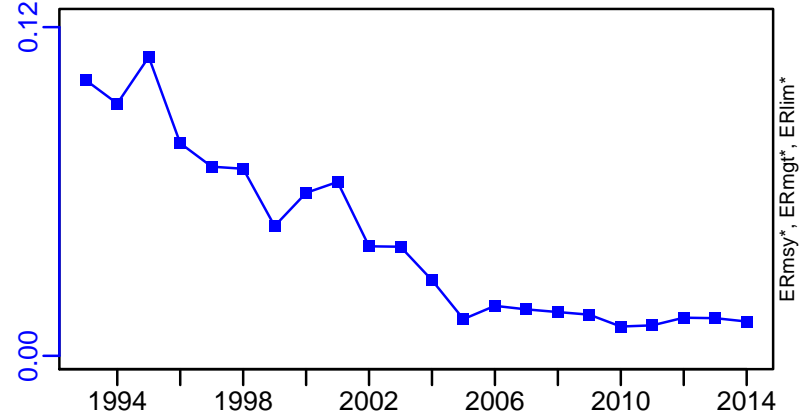


F\*



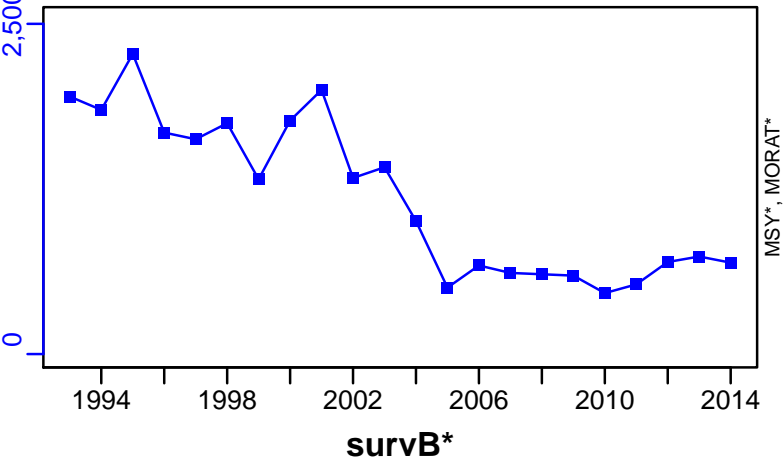
ER-calc-ratio (1993–2014–SISIMP2016)

Recruits\*

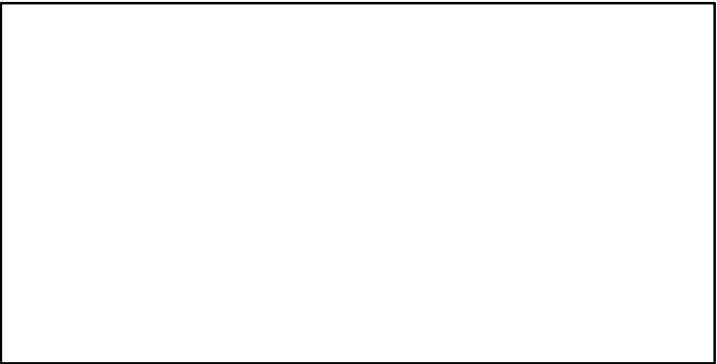


Shortraker rockfish Gulf of Alaska [SRAKEROCKGA]

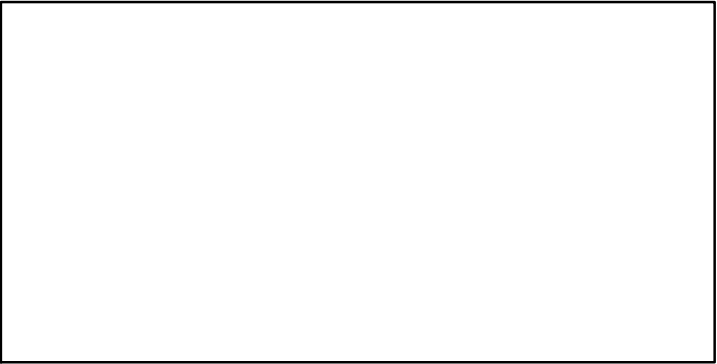
TC-MT, TL\*, RecC\* (1993-2014-SISIMP2016)



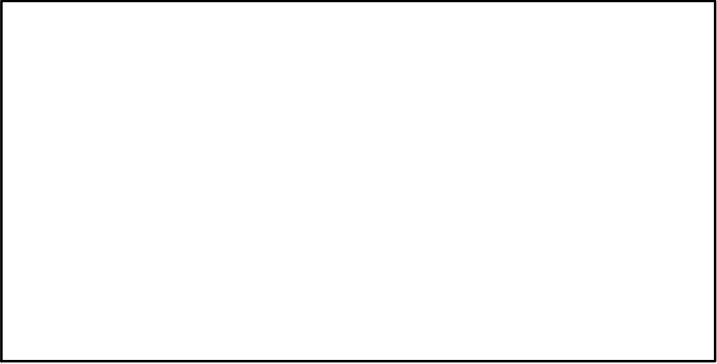
TAC\*, Cpair\*, Cadv\*



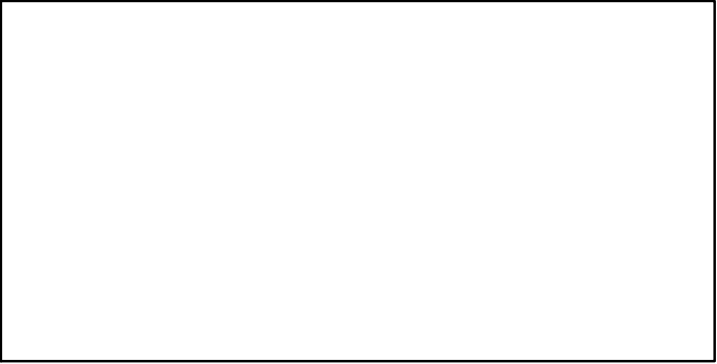
CPUE\*



EFFORT\*



CdivMSY\*



## Shortspine thornyhead Gulf of Alaska [SSTHORNHGA]

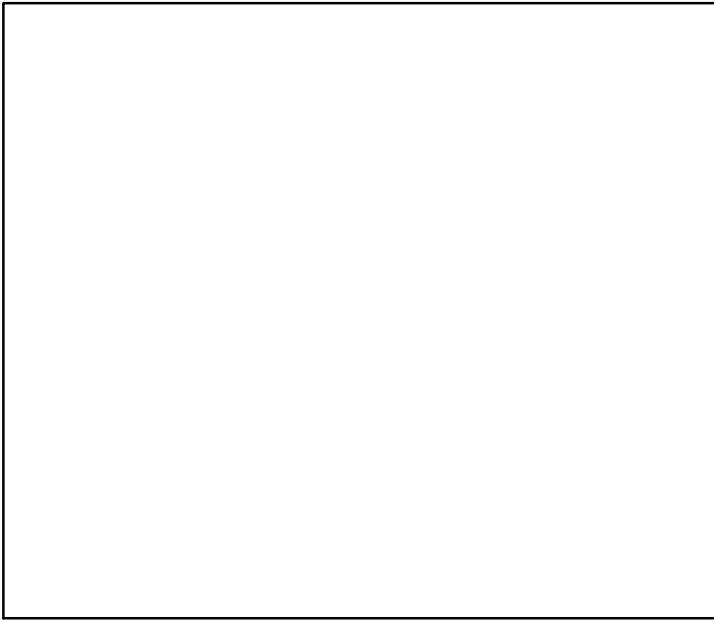
Metadata	
<b>Scientific Name</b>	Sebastes alascanus
<b>Current Assess ID</b>	AFSC-SSTHORNHGA-1980-2014-SISIMP2016
<b>Area</b>	Gulf of Alaska
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2014

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	TB-MT	2014	87,200	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2014	0.014	-	-
TC	TC-MT	2014	1130		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Shortspine thornyhead Gulf of Alaska [SSTHORNHGA]

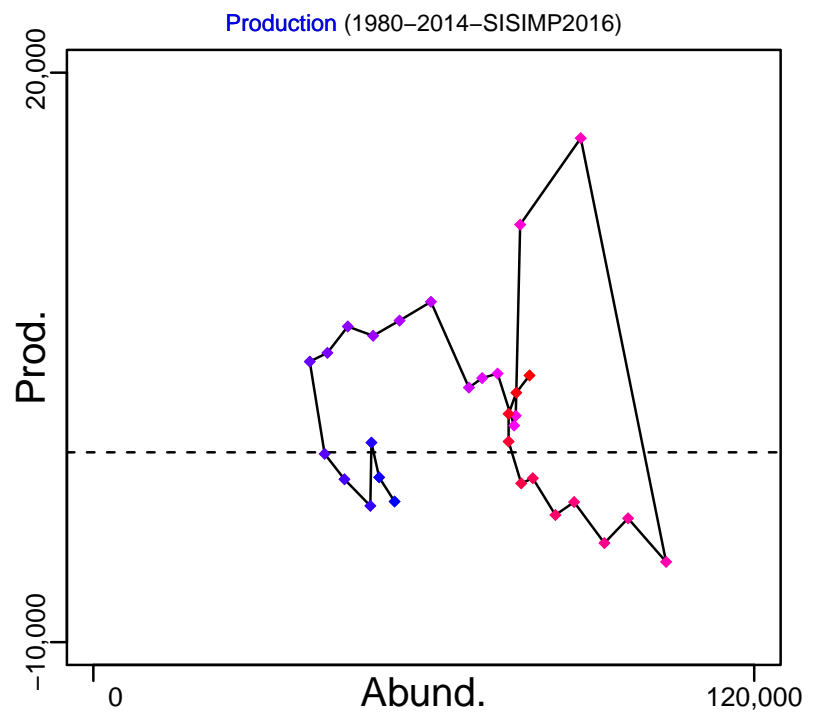
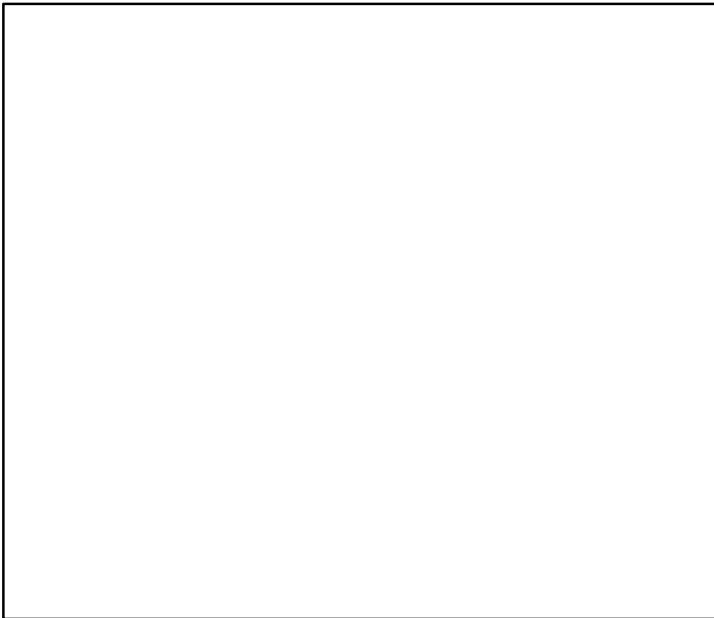
Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*

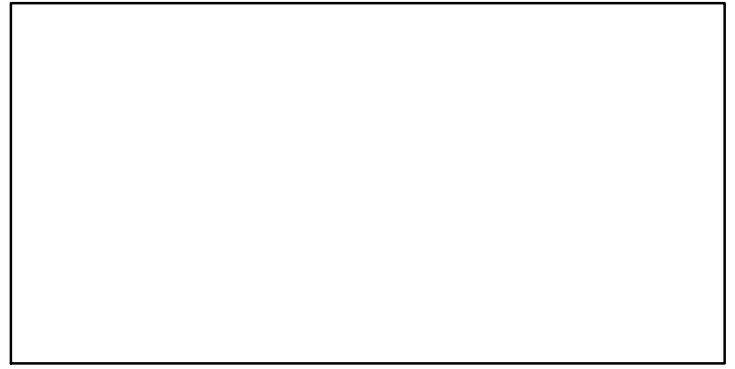
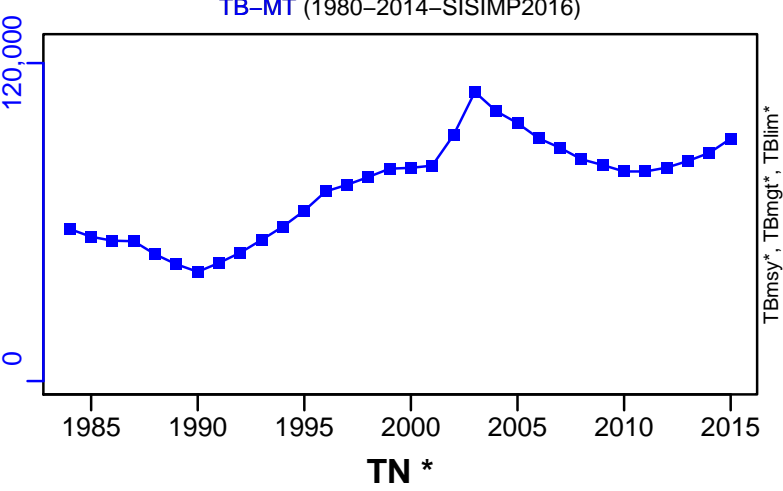


◆ Start Year ◆ End Year \* No Data

# Shortspine thornyhead Gulf of Alaska [SSTHORNHGA]

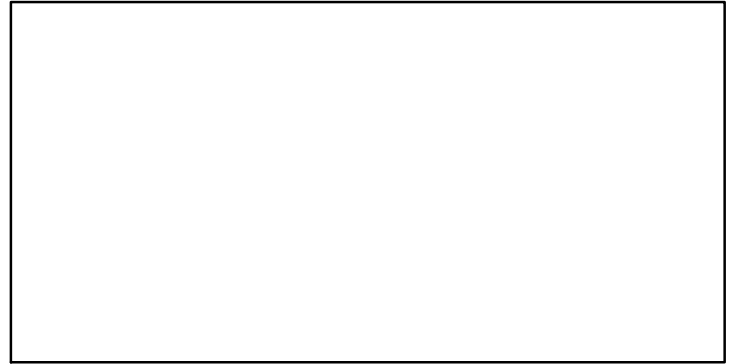
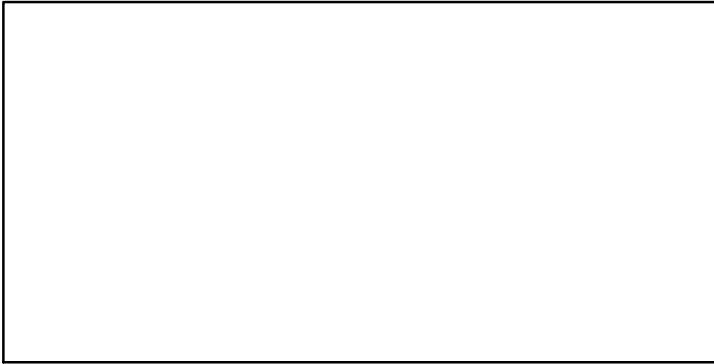
TB-MT (1980-2014-SISIMP2016)

SSB\*



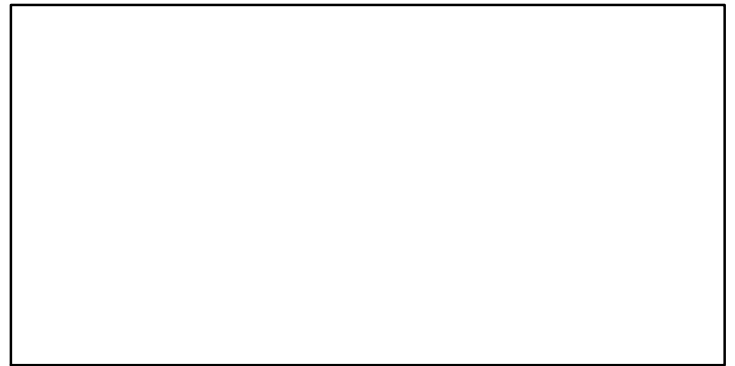
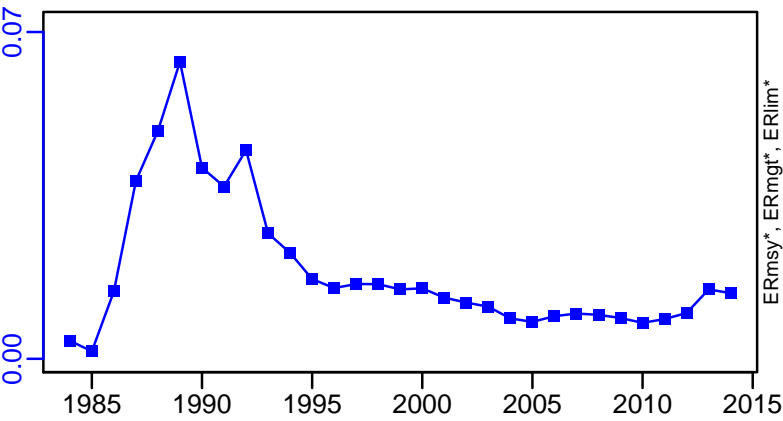
TN \*

F\*



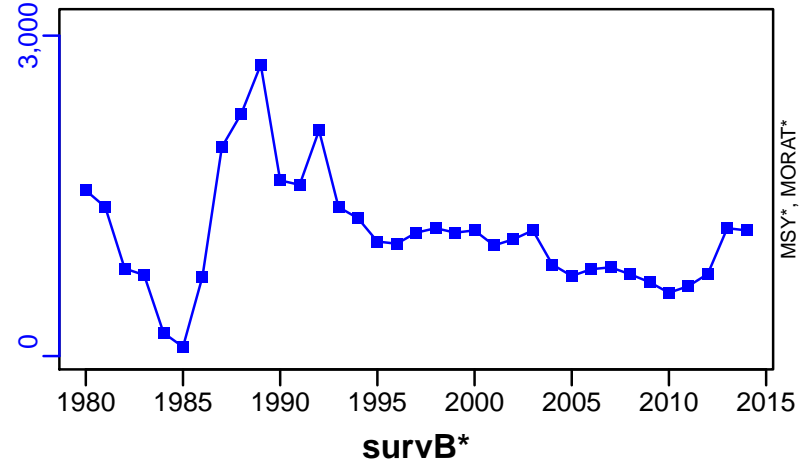
ER-calc-ratio (1980-2014-SISIMP2016)

Recruits\*

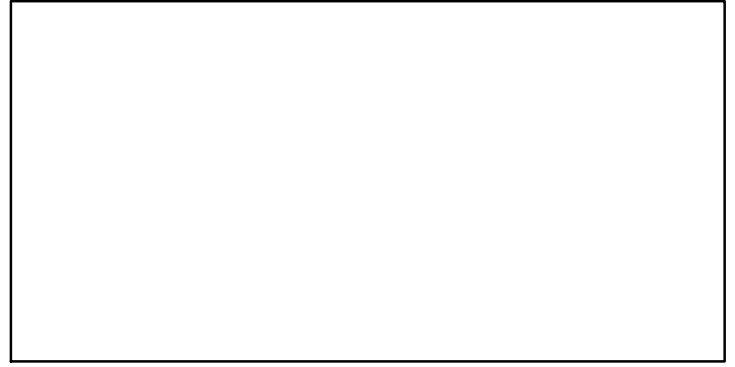


# Shortspine thornyhead Gulf of Alaska [SSTHORNHGA]

TC-MT, TL\*, RecC\* (1980-2014-SISIMP2016)



TAC\*, Cpair\*, Cadv\*



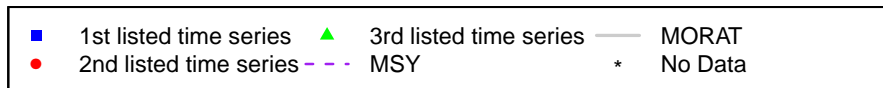
CPUE\*



EFFORT\*



CdivMSY\*



## Tanner crab Bering Sea and Aleutian Islands [TANNERCRABBSAI]

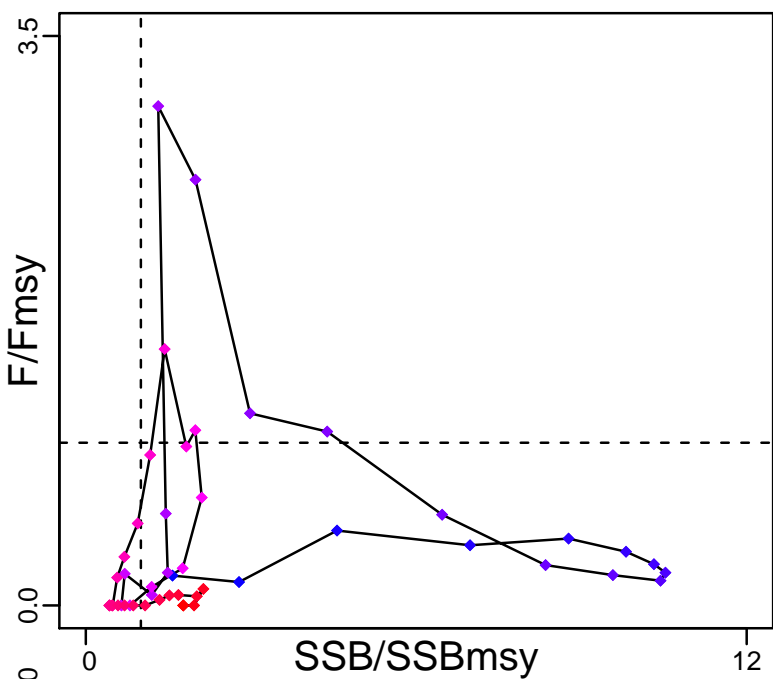
Metadata	
<b>Scientific Name</b>	Chionoecetes bairdi
<b>Current Assess ID</b>	AFSC-TANNERCRABBSAI-1965-2015-SISIMP2016
<b>Area</b>	Bering Sea and Aleutian Islands
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2013, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2015	26,791
<b>SSBmsy</b>	SSBmsy-pr-MT	2013	33,540
<b>Fmsy</b>	Fmsy-pr-1/yr	2013	0.73
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2013	33,540
<b>Fmgt</b>	Fmgt-1/yr	2013	0.73
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

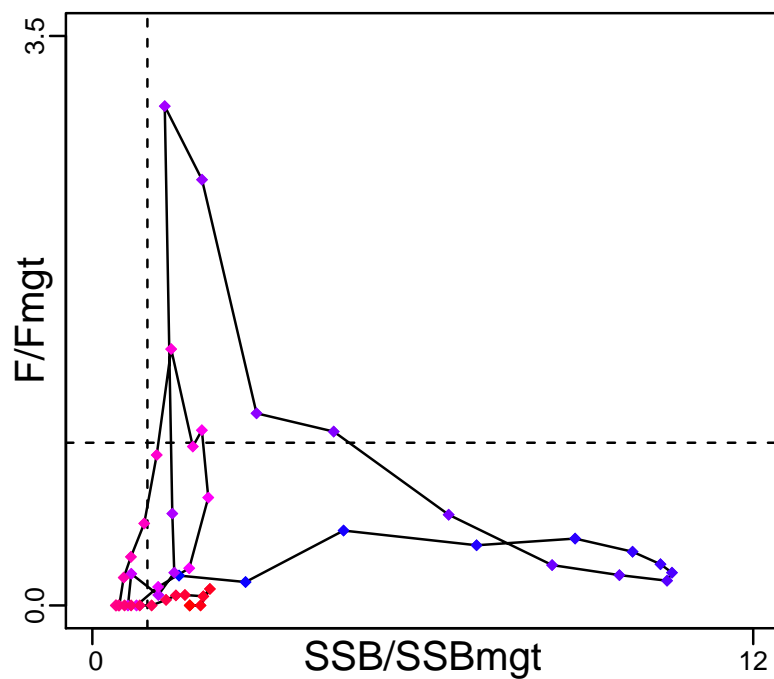
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	137,000	-	-
<b>SSB</b>	SSB-MT	2015	53,700	Females	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	80,700,000	-	-
<b>F</b>	F-1/yr	2015	0.144	-	-
<b>ER</b>	ER-calc-ratio	2015	0.043	-	-
<b>TC</b>	TC-MT	2015	6430		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	TB-MT/TBmsy-MT	2015	5.12		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-pr-MT	2013	1.771		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2013	0		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2013	1.771		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2013	0		
<b>ER/ERmgt</b>	-	-	-		

# Tanner crab Bering Sea and Aleutian Islands [TANNERCRABBSAI]

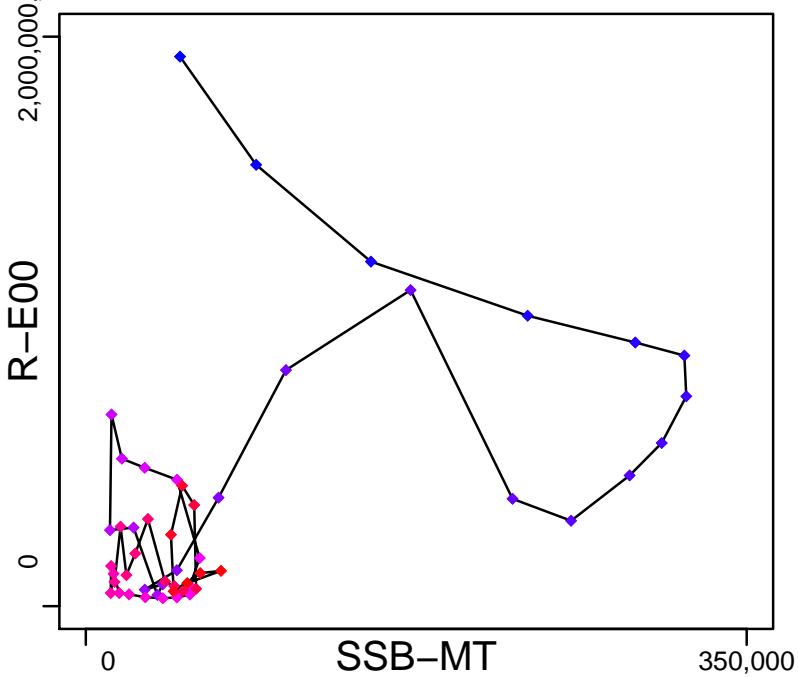
Kobe MSYpref (1949–2013–HIVELY)



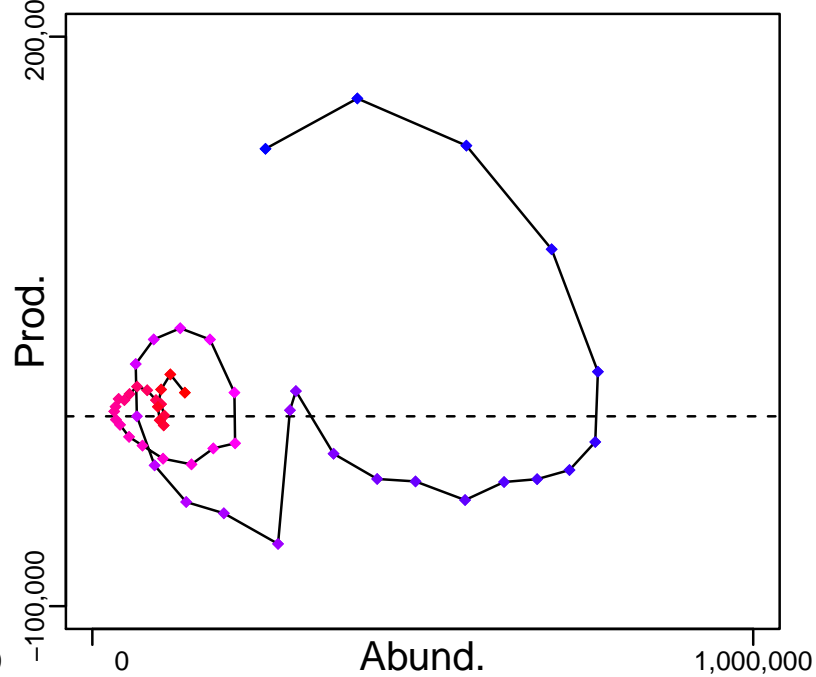
Kobe MGTpref (1949–2013–HIVELY)



Spawner Recruit (1965–2015–SISIMP2016)



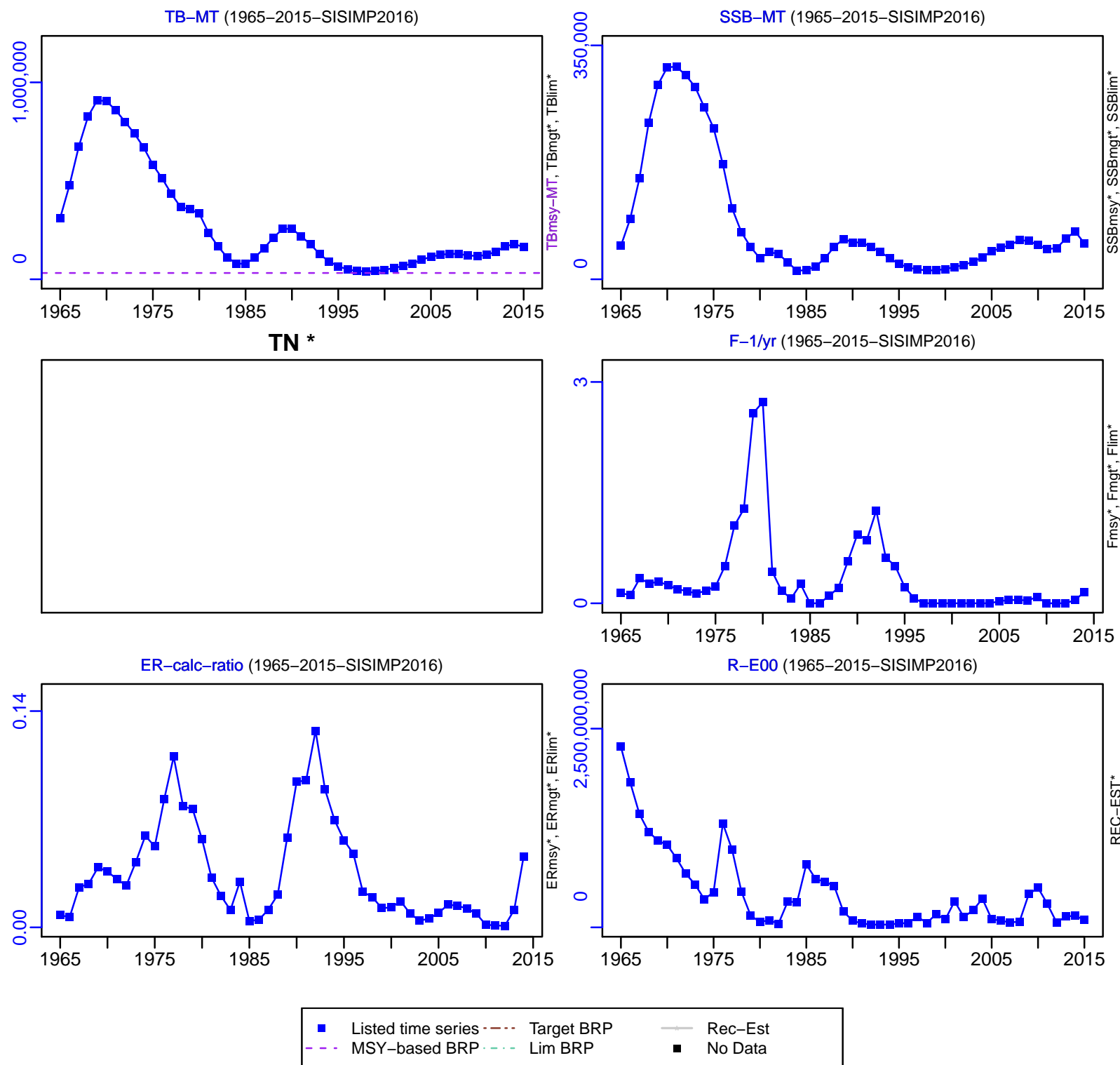
Production (1965–2015–SISIMP2016)



◆ Start Year ◆ End Year \* No Data

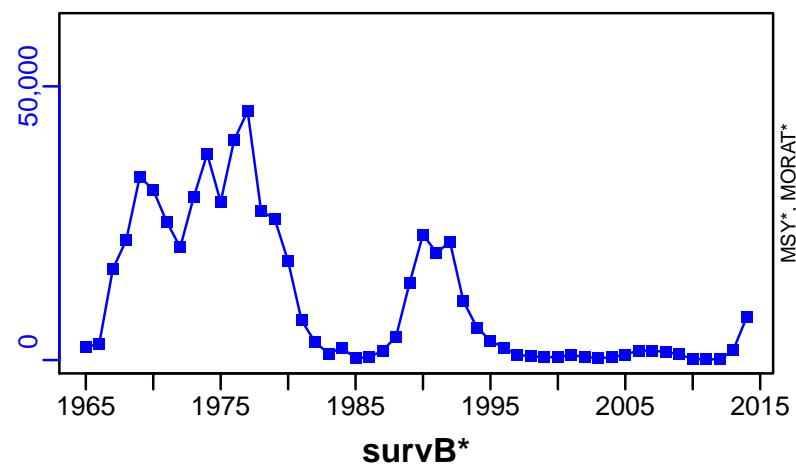


# Tanner crab Bering Sea and Aleutian Islands [TANNERCRABBSAI]

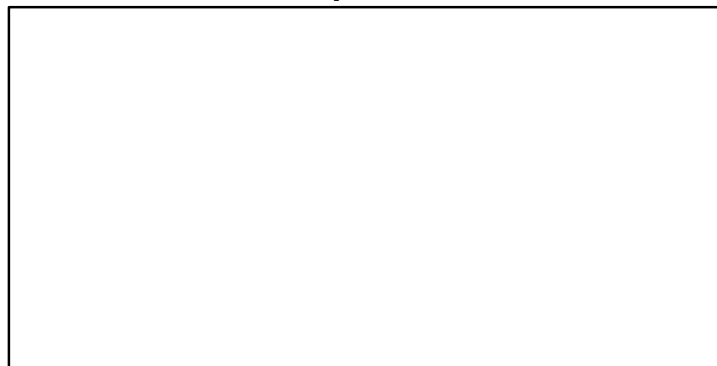


# Tanner crab Bering Sea and Aleutian Islands [TANNERCRABBSAI]

TC-MT, TL\*, RecC\* (1965–2015–SISIMP2016)



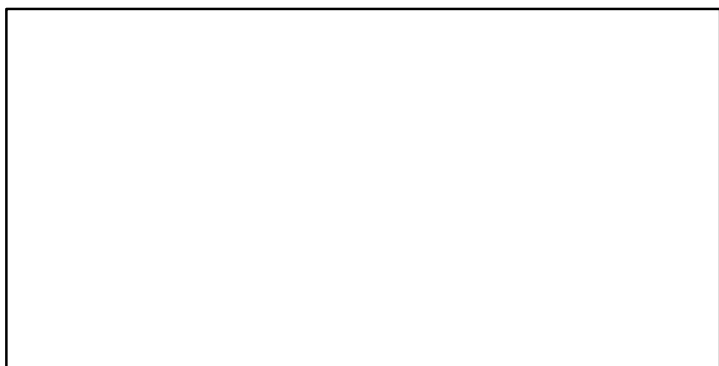
TAC\*, Cpair\*, Cadv\*



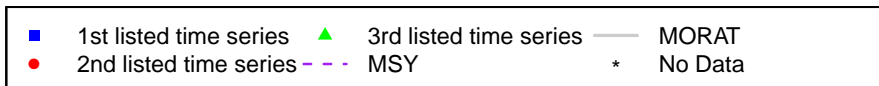
CPUE\*



EFFORT\*



CdivMSY\*



## Walleye pollock Aleutian Islands [WPOLLAI]

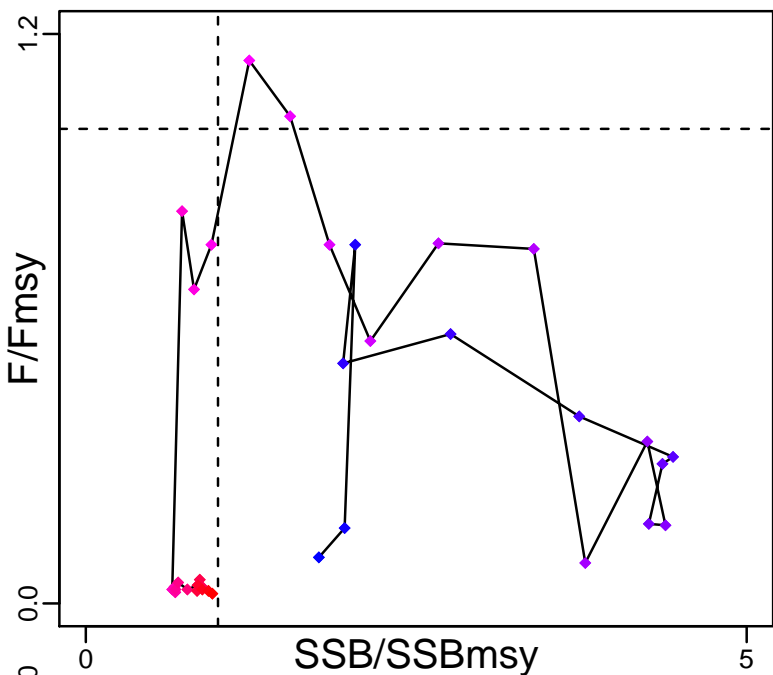
Metadata	
<b>Scientific Name</b>	Theragra chalcogramma
<b>Current Assess ID</b>	AFSC-WPOLLAI-1978-2015-SISIMP2016
<b>Area</b>	Aleutian Islands
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2013, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2015	72,437
<b>Fmsy</b>	Fmsy-pr-1/yr	2013	0.34
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

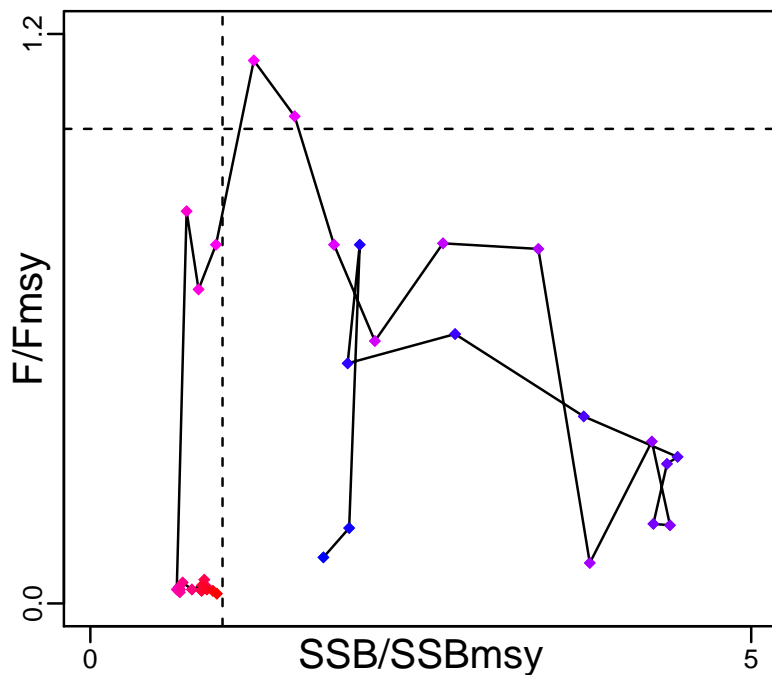
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	216,000	-	1+
<b>SSB</b>	SSB-MT	2015	70,200	Females	4+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	68,200,000	-	0
<b>F</b>	F-1/yr	2015	0.012	-	-
<b>ER</b>	ER-calc-ratio	2015	0.012	-	-
<b>TC</b>	TC-MT	2015	2380		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	0.969		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2013	0.021		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Walleye pollock Aleutian Islands [WPOLLAI]

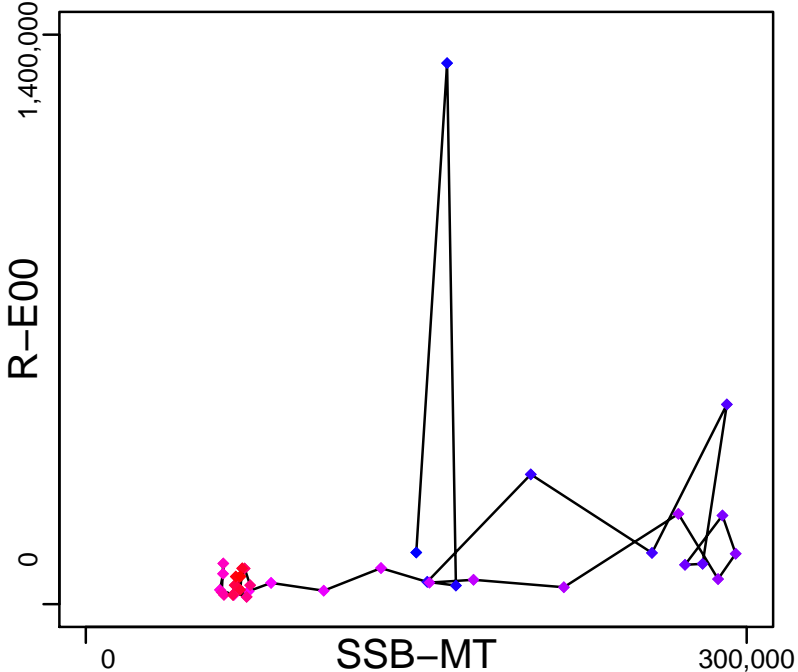
Kobe MSYpref (1976–2013–CHING)



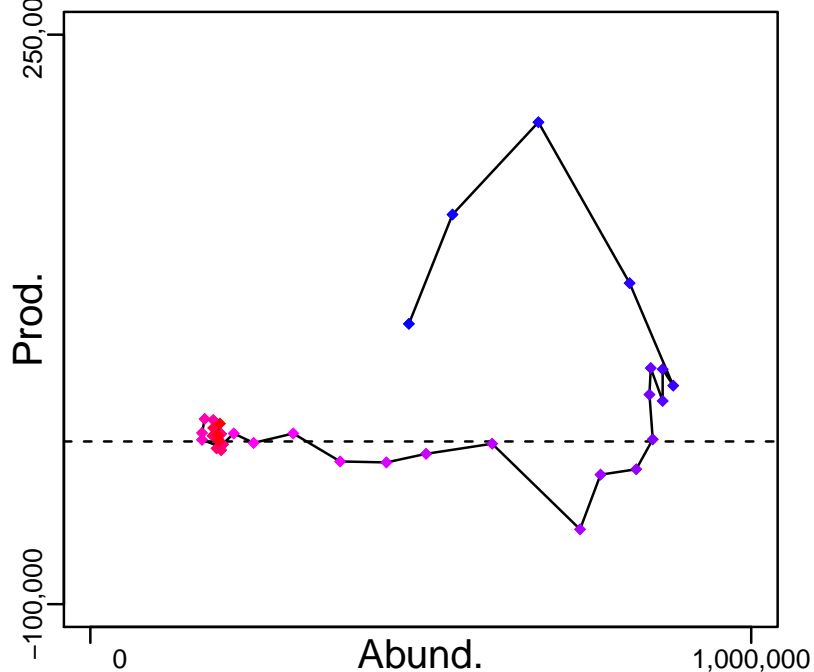
Kobe MGTpref (1976–2013–CHING)



Spawner Recruit (1978–2015–SISIMP2016)



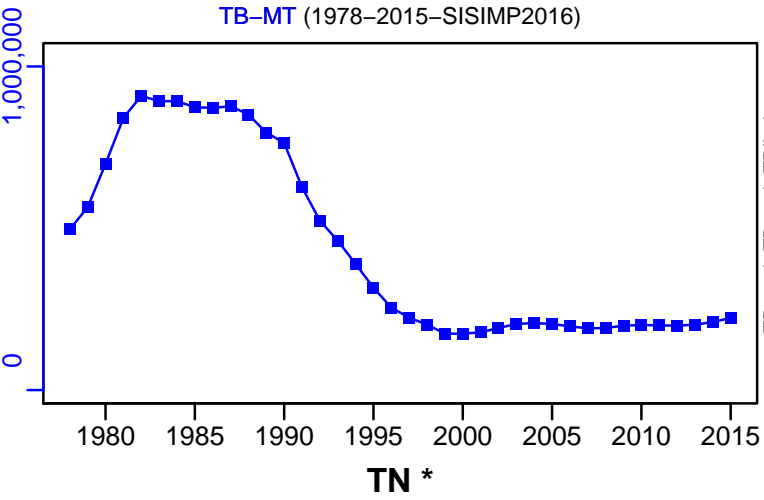
Production (1978–2015–SISIMP2016)



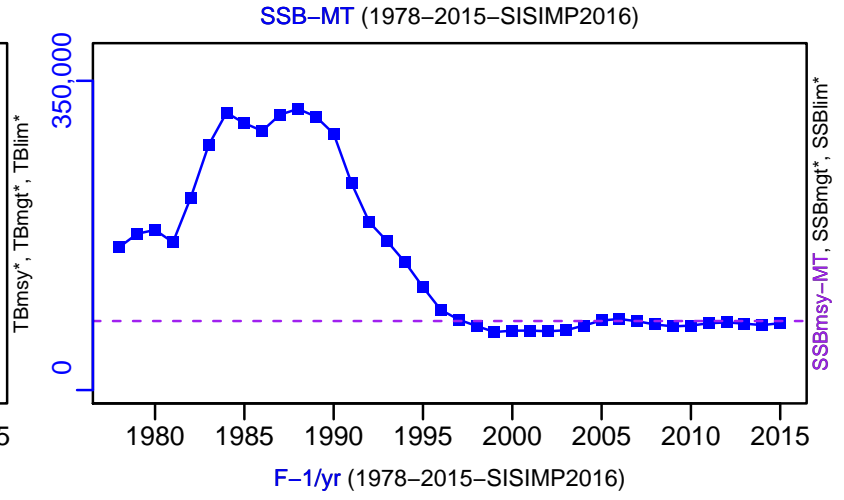
◆ Start Year ◆ End Year \* No Data

# Walleye pollock Aleutian Islands [WPOLLAI]

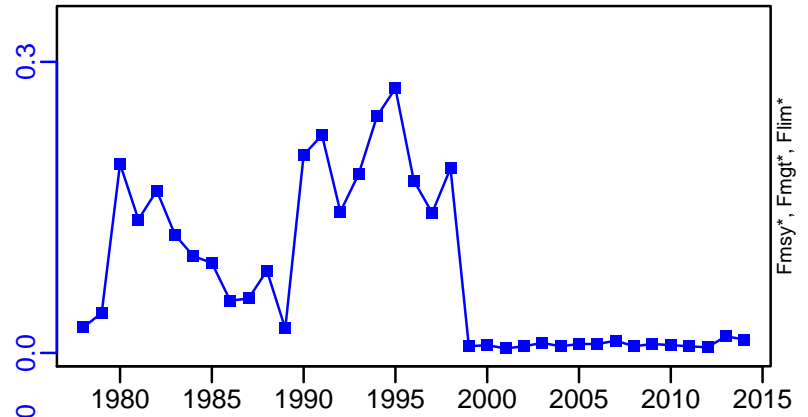
TB-MT (1978-2015-SISIMP2016)



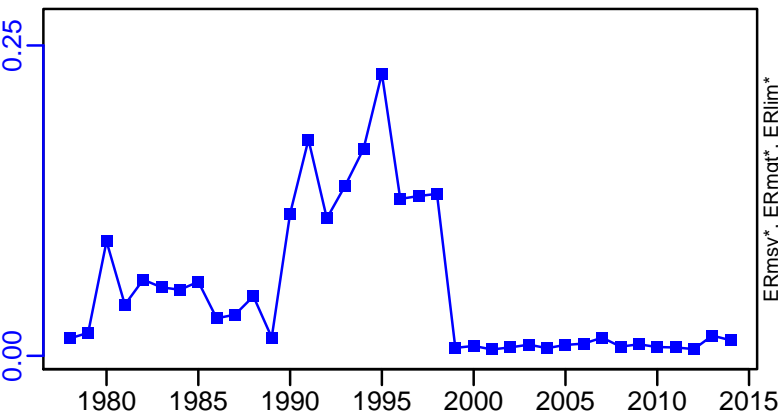
SSB-MT (1978-2015-SISIMP2016)



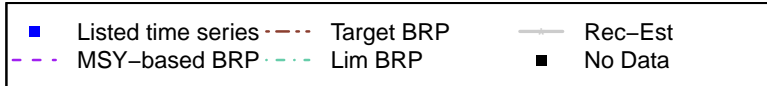
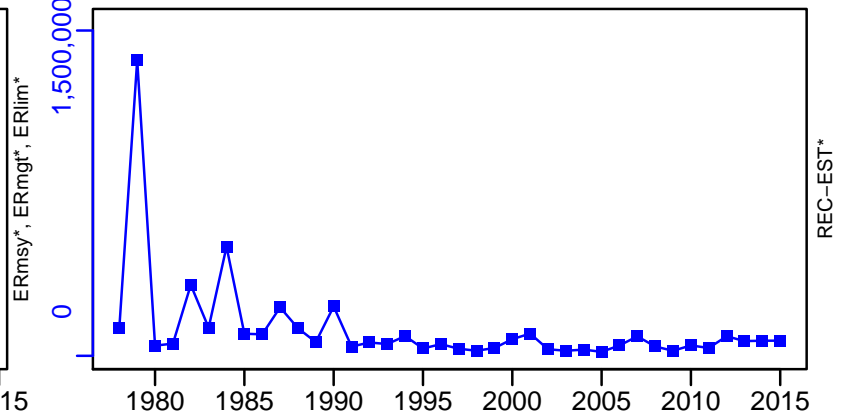
F-1/yr (1978-2015-SISIMP2016)



ER-calc-ratio (1978-2015-SISIMP2016)

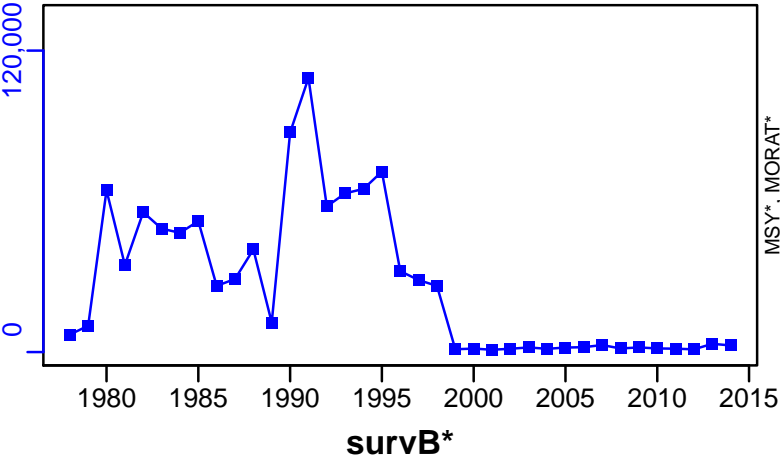


R-E00 (1978-2015-SISIMP2016)



Walleye pollock Aleutian Islands [WPOLLAI]

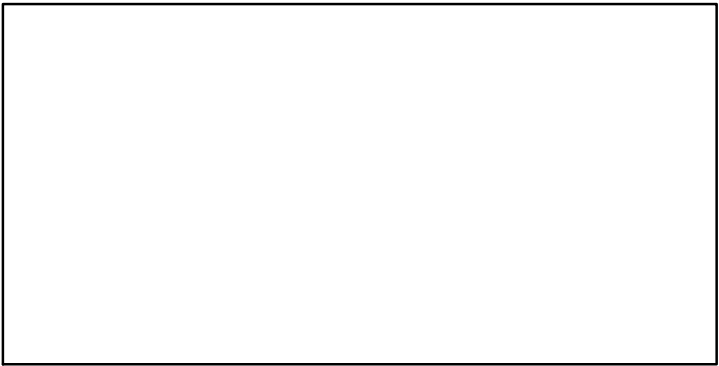
TC-MT, TL\*, RecC\* (1978-2015-SISIMP2016)



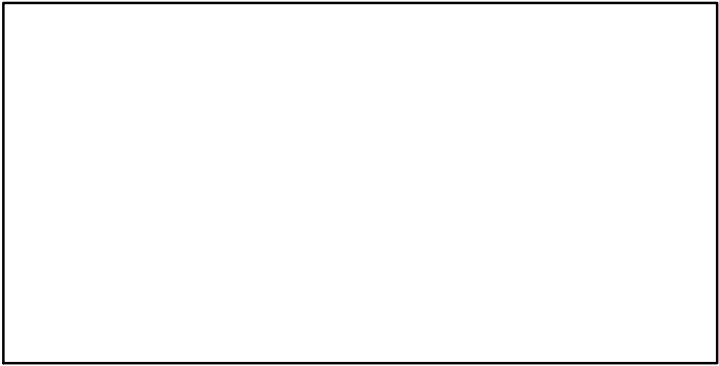
TAC\*, Cpair\*, Cadv\*



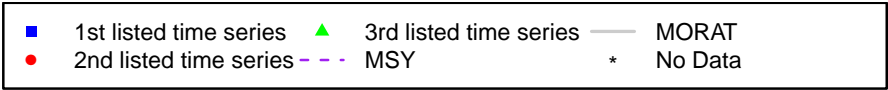
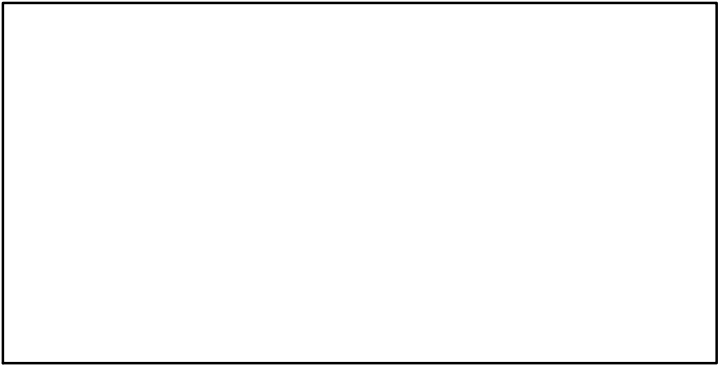
CPUE\*



EFFORT\*



CdivMSY\*



## Walleye pollock Bogoslof [WPOLLBOGO]

Metadata	
<b>Scientific Name</b>	Theragra chalcogramma
<b>Current Assess ID</b>	AFSC-WPOLLBOGO-1977-2014-SISIMP2016
<b>Area</b>	Bogoslof
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2014

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

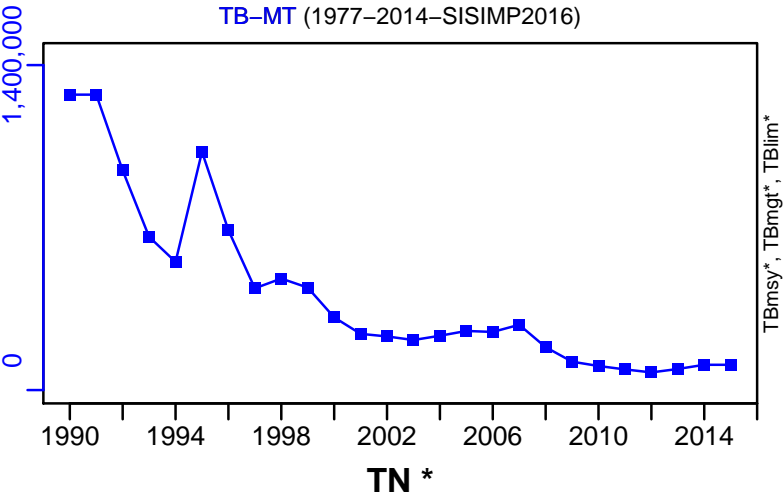
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2014	106,000	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2014	0.004	-	-
TC	TC-MT	2014	428		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		





Walleye pollock Bogoslof [WPOLLBOGO]

TB-MT (1977-2014-SISIMP2016)



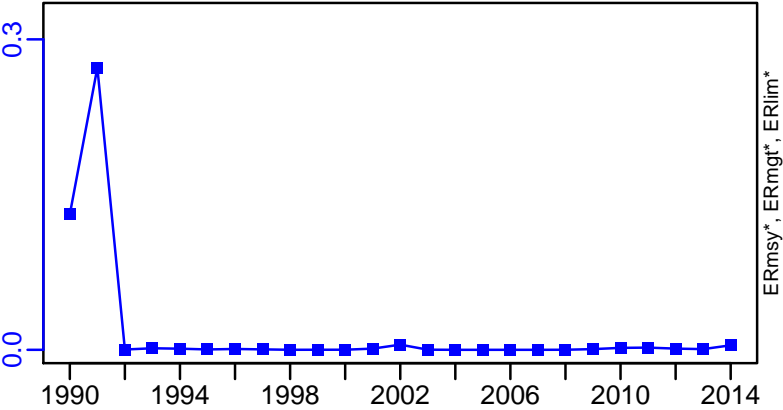
SSB\*



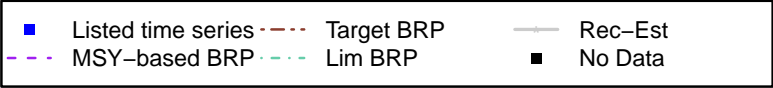
F\*



ER-calc-ratio (1977-2014-SISIMP2016)

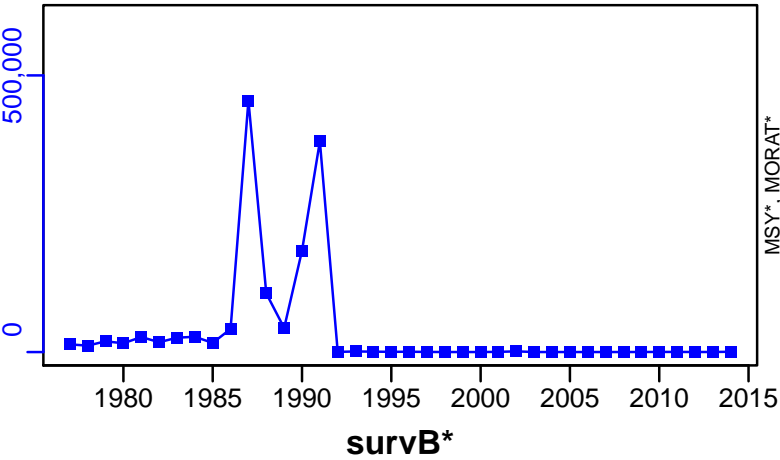


Recruits\*

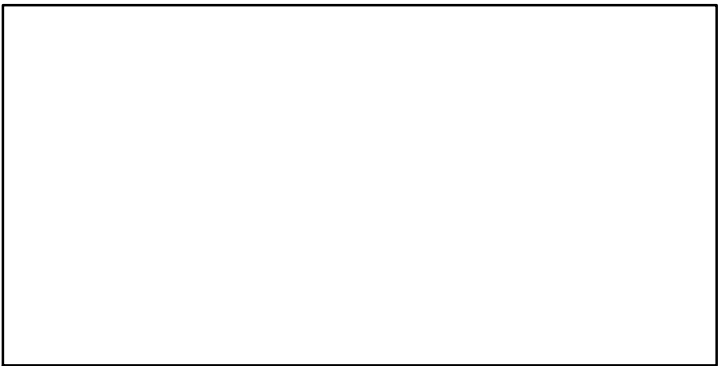


Walleye pollock Bogoslof [WPOLLBOGO]

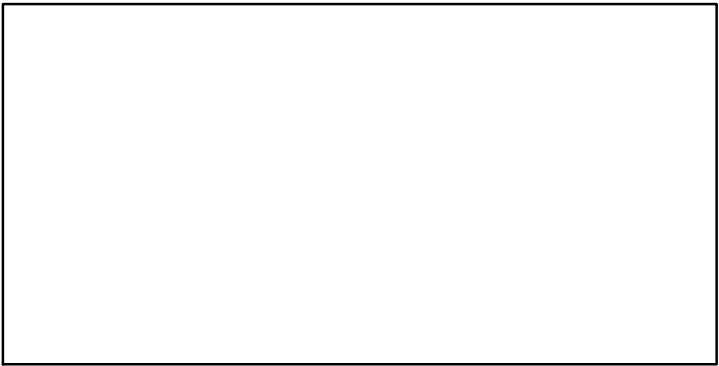
TC-MT, TL\*, RecC\* (1977-2014-SISIMP2016)



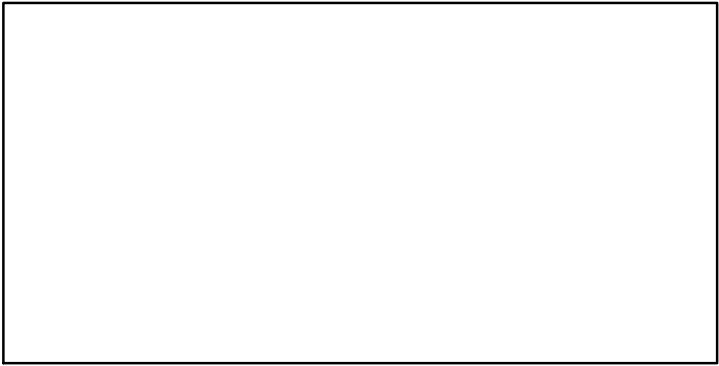
TAC\*, Cpair\*, Cadv\*



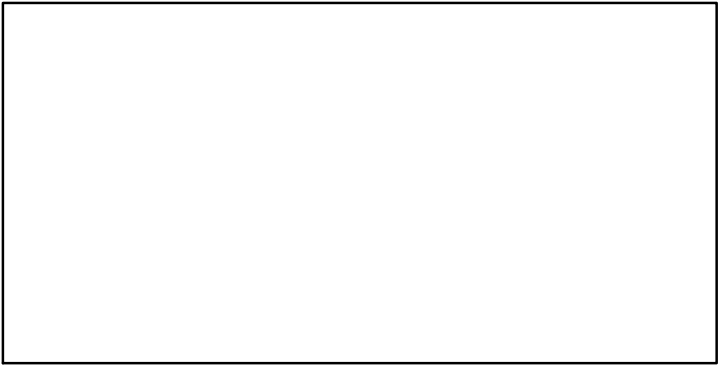
CPUE\*



EFFORT\*



CdivMSY\*



## Walleye pollock Eastern Bering Sea [WPOLLEBS]

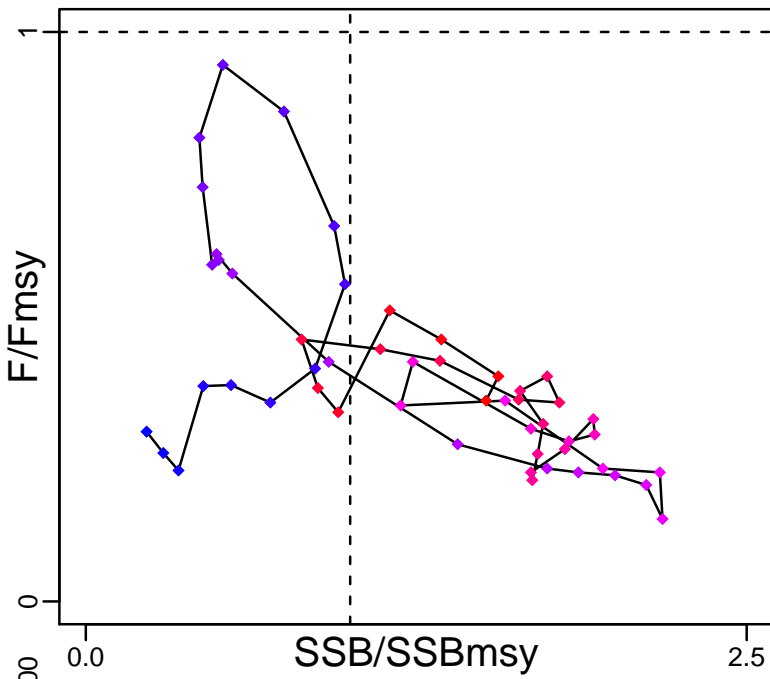
Metadata	
<b>Scientific Name</b>	Theragra chalcogramma
<b>Current Assess ID</b>	AFSC-WPOLLEBS-1963-2015-HIVELY
<b>Area</b>	Eastern Bering Sea
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2015	1,948,000
<b>Fmsy</b>	Fmsy-1/yr	2015	0.587
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2015	5,162,000
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2015	0.3
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

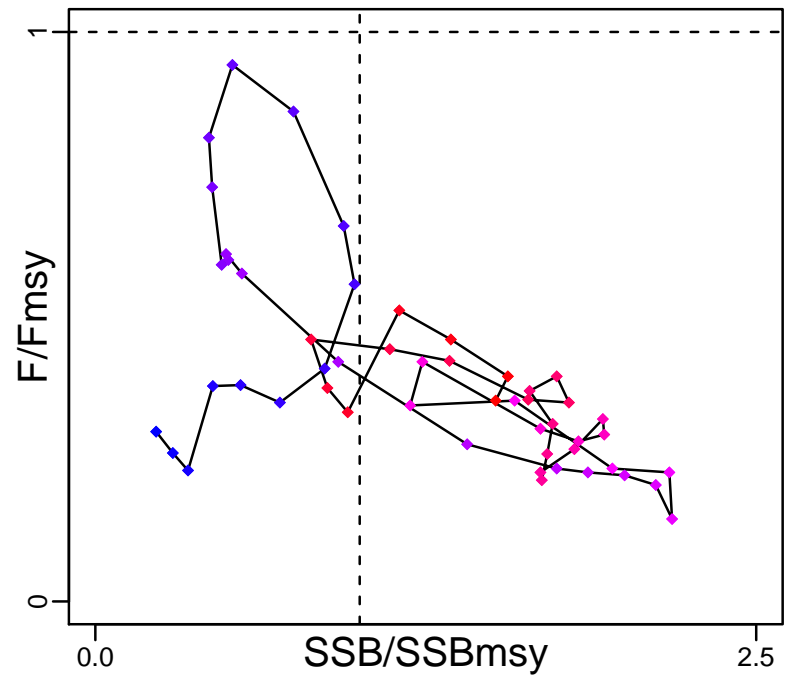
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	7,780,000	-	3+
<b>SSB</b>	SSB-MT	2015	2,950,000	Females	4+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$2.37 \times 10^{10}$	-	1
<b>F</b>	F-1/yr	2015	0.207	-	3 to 8
<b>ER</b>	ER-calc-ratio	2015	0.16	-	-
<b>TC</b>	TC-MT	2015	1,290,000		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	1.514		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2015	0.353		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Walleye pollock Eastern Bering Sea [WPOLLEBS]

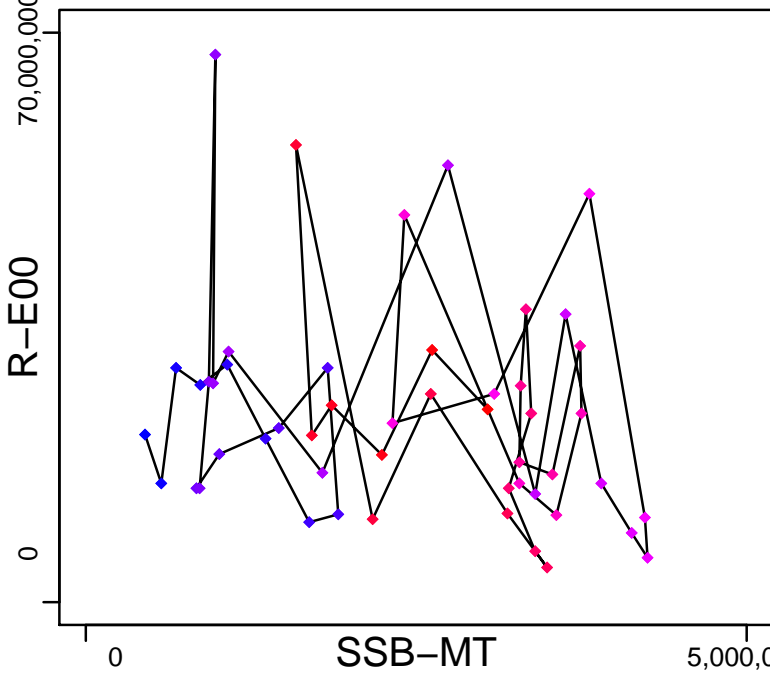
Kobe MSYpref (1963–2015–HIVELY)



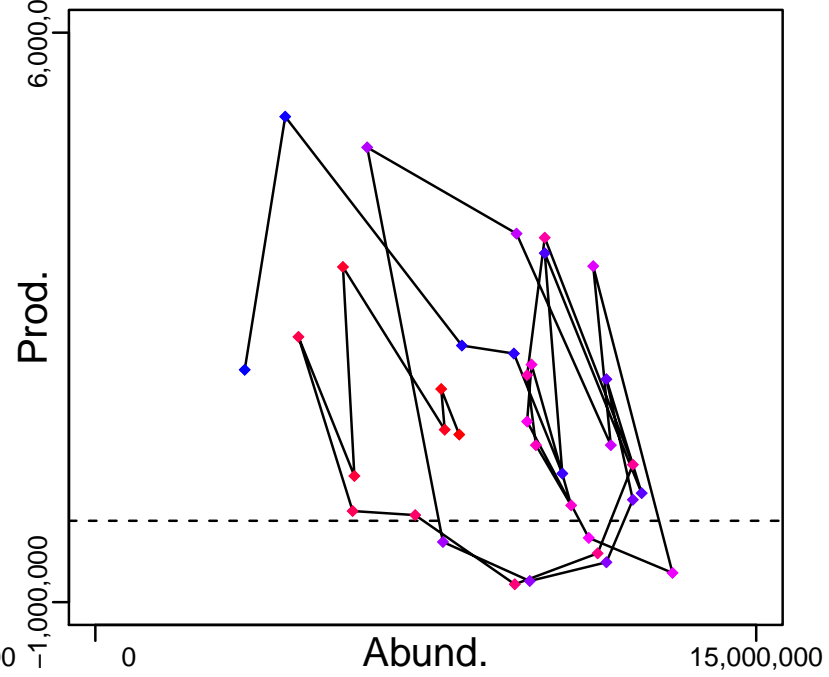
Kobe MGTpref (1963–2015–HIVELY)



Spawner Recruit (1963–2015–HIVELY)

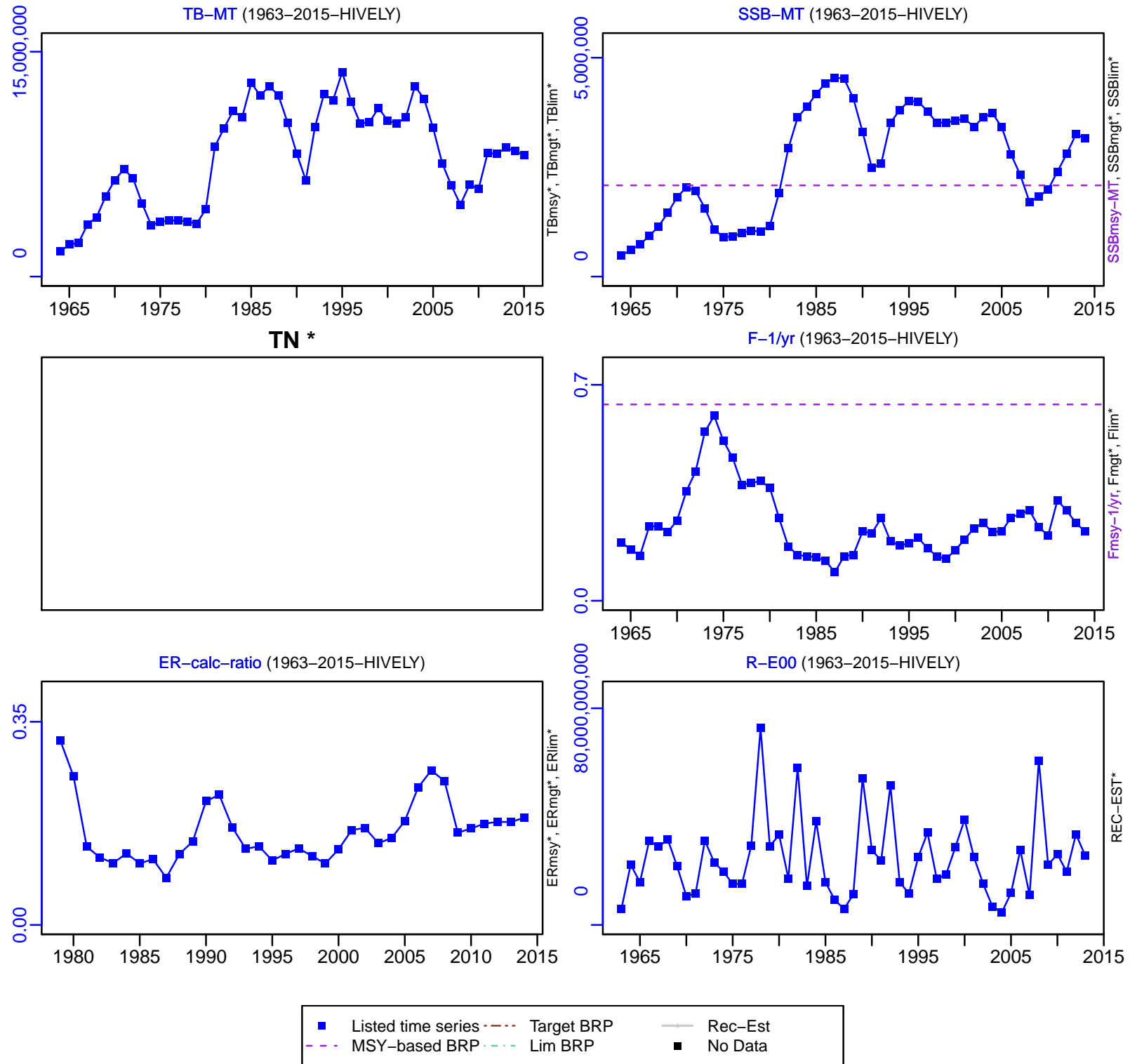


Production (1963–2015–HIVELY)



◆ Start Year ◆ End Year \* No Data

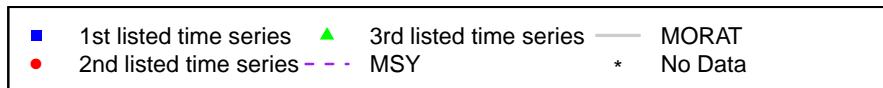
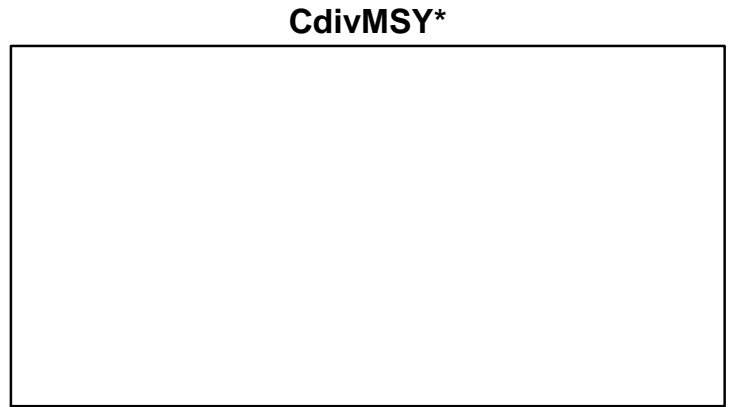
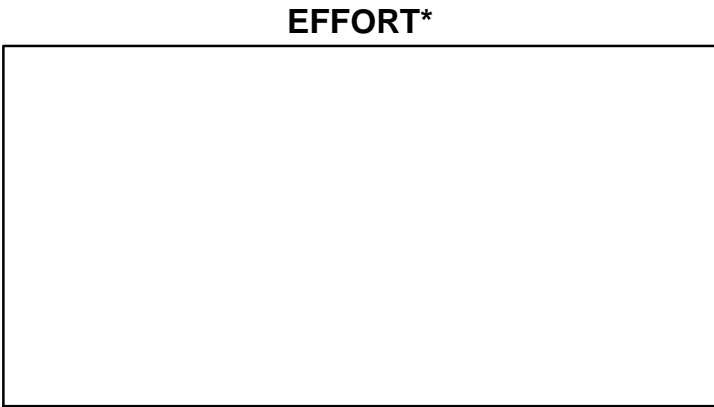
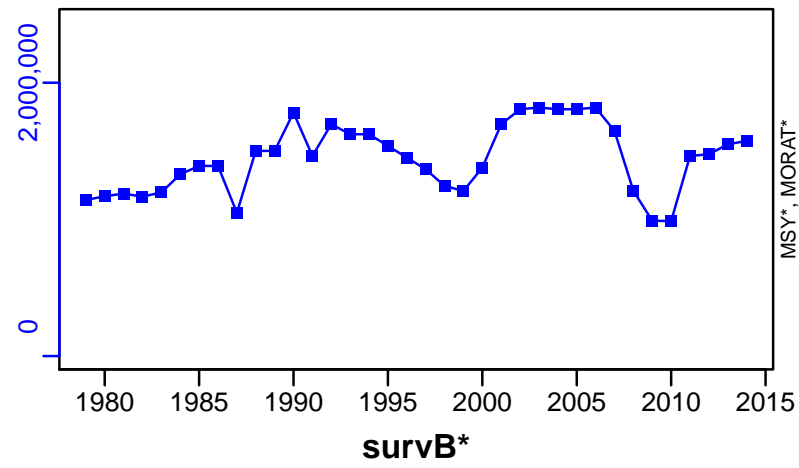
# Walleye pollock Eastern Bering Sea [WPOLLEBS]



Walleye pollock Eastern Bering Sea [WPOLLEBS]

TC-MT, TL\*, RecC\* (1963-2015-HIVELY)

TAC\*, Cpair\*, Cadv\*



## Walleye pollock Gulf of Alaska [WPOLLGA]

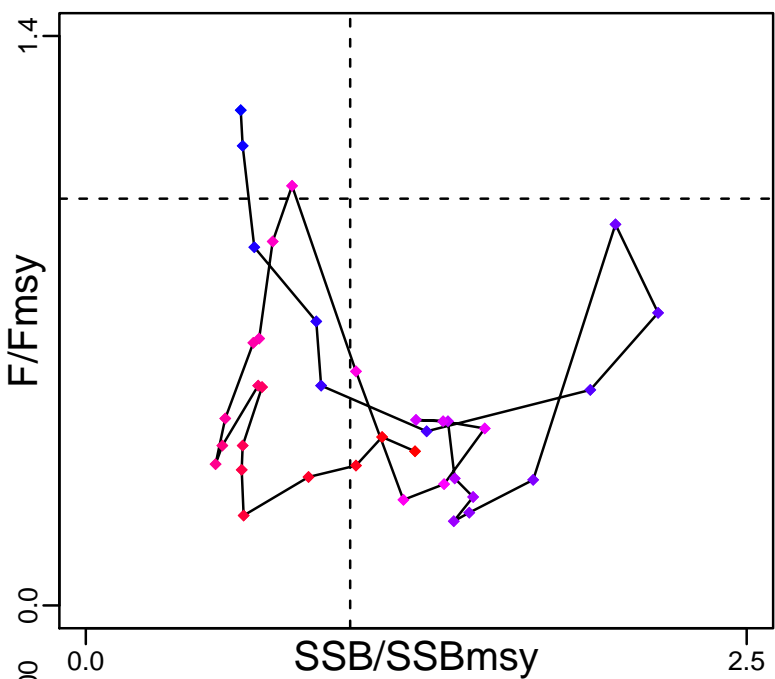
Metadata	
<b>Scientific Name</b>	Theragra chalcogramma
<b>Current Assess ID</b>	AFSC-WPOLLGA-1970-2015-SISIMP2016
<b>Area</b>	Gulf of Alaska
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2014, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2015	262,344
<b>Fmsy</b>	Fmsy-pr-1/yr	2014	0.285
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2014	312,000
<b>Fmgt</b>	Fmgt-1/yr	2014	0.243
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2014	0.3
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

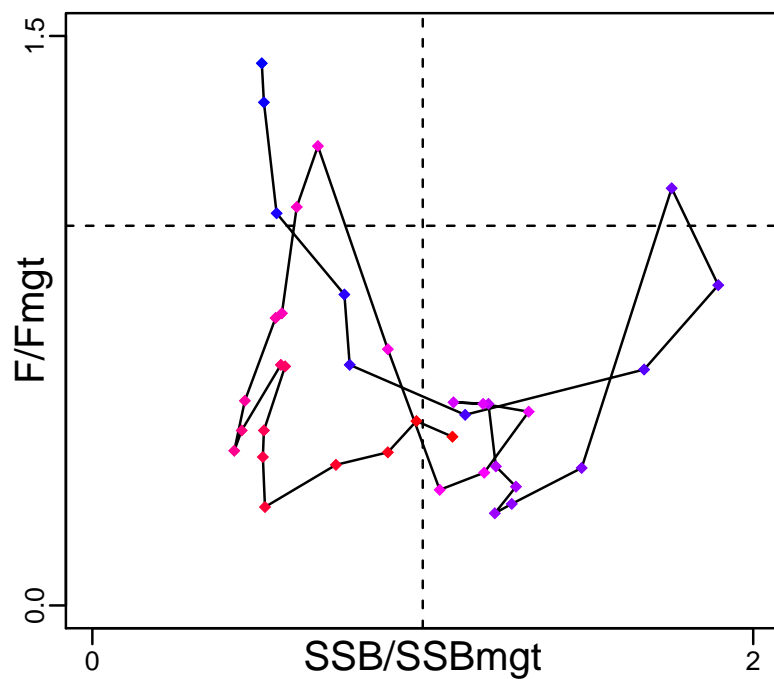
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	1,730,000	-	3+
<b>SSB</b>	SSB-MT	2015	251,000	Females	5+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$8.93 \times 10^8$	-	1
<b>F</b>	F-1/yr	2015	0.243	-	-
<b>ER</b>	ER-calc-ratio	2015	0.126	-	-
<b>TC</b>	TC-MT	2015	143,000		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	0.957		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2014	0.621		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2014	1.09		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	0.728		
<b>ER/ERmgt</b>	-	-	-		

# Walleye pollock Gulf of Alaska [WPOLLGA]

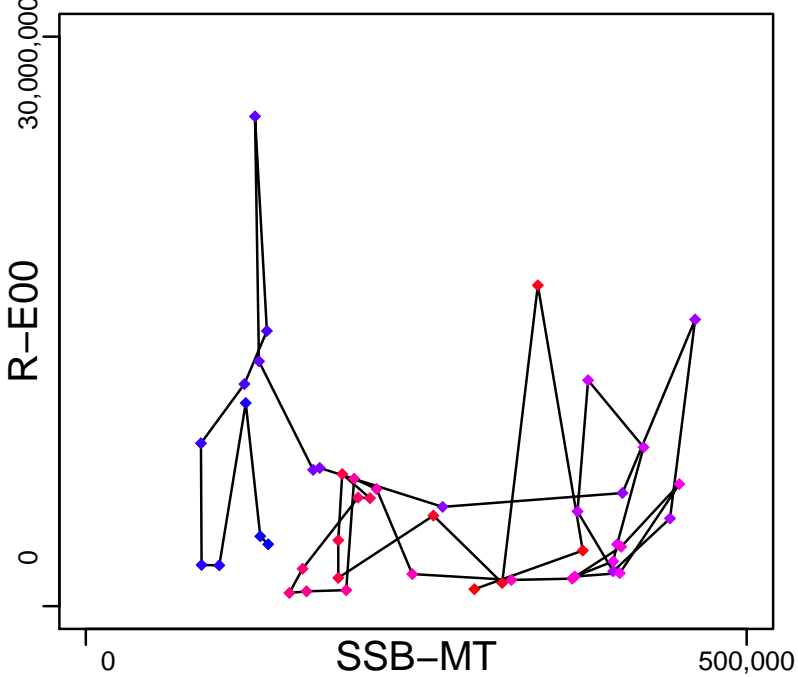
Kobe MSYpref (1970–2014–HIVELY)



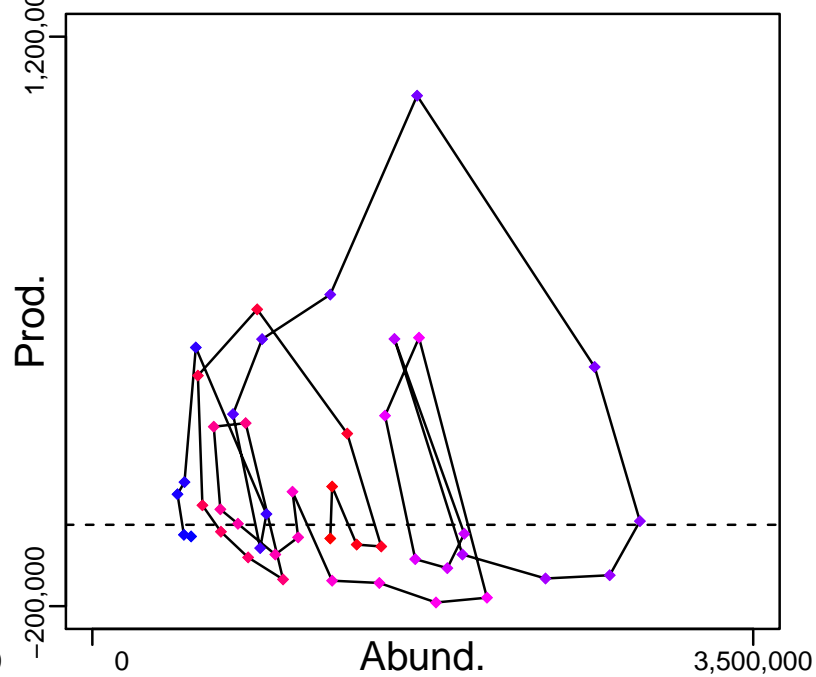
Kobe MGTpref (1970–2014–HIVELY)



Spawner Recruit (1970–2015–SISIMP2016)



Production (1970–2015–SISIMP2016)

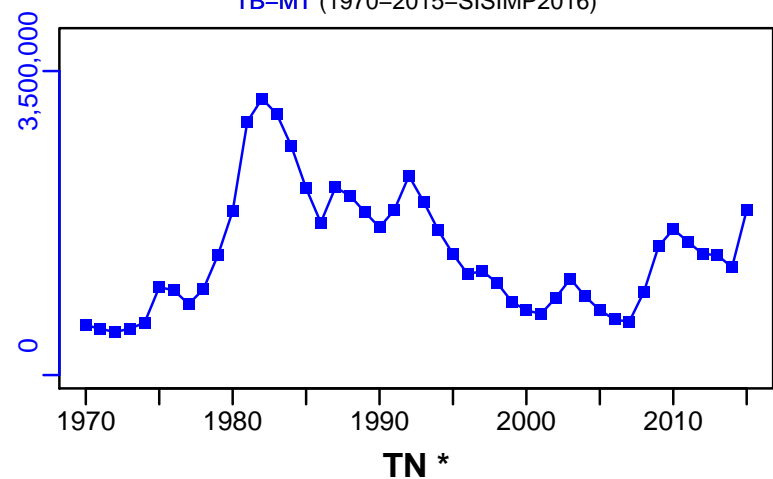


◆ Start Year ◆ End Year \* No Data

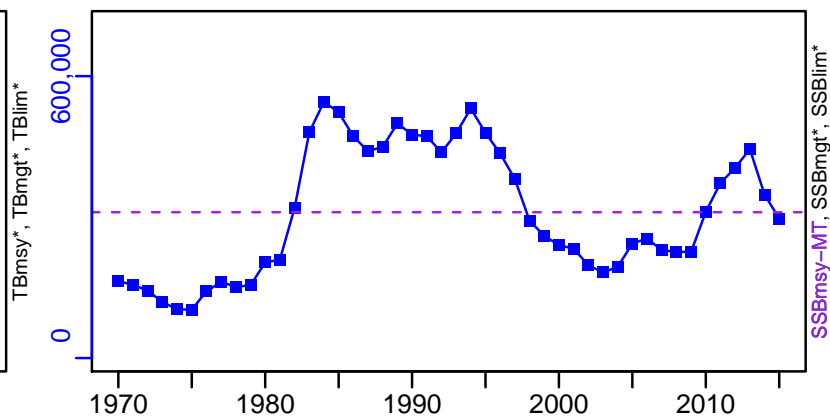


# Walleye pollock Gulf of Alaska [WPOLLGA]

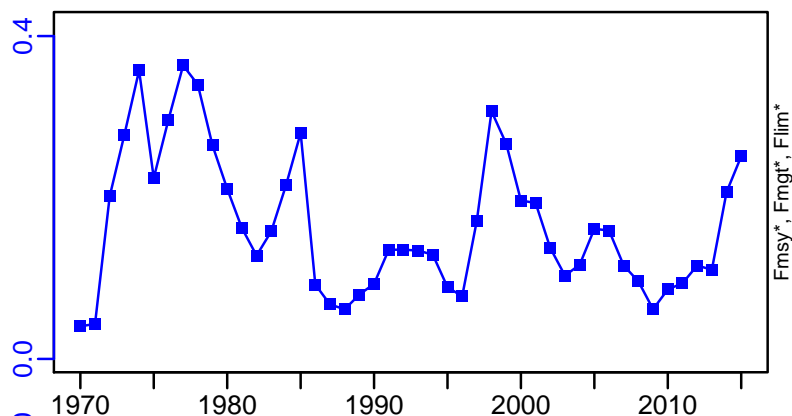
TB-MT (1970-2015-SISIMP2016)



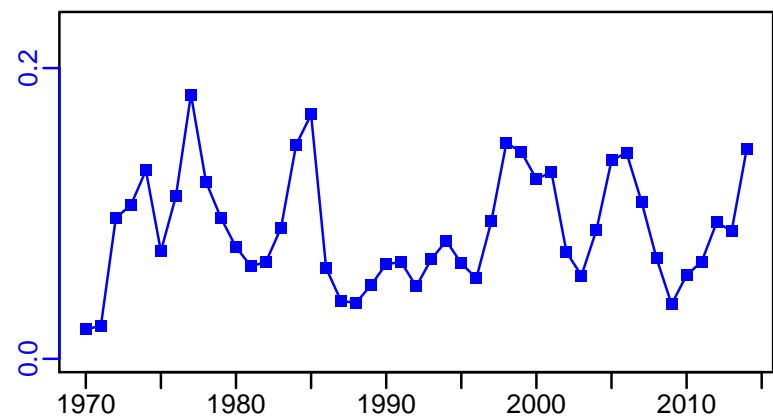
SSB-MT (1970-2015-SISIMP2016)



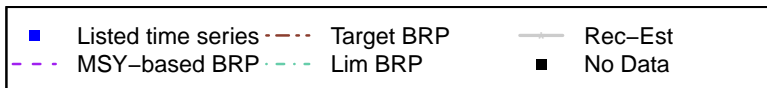
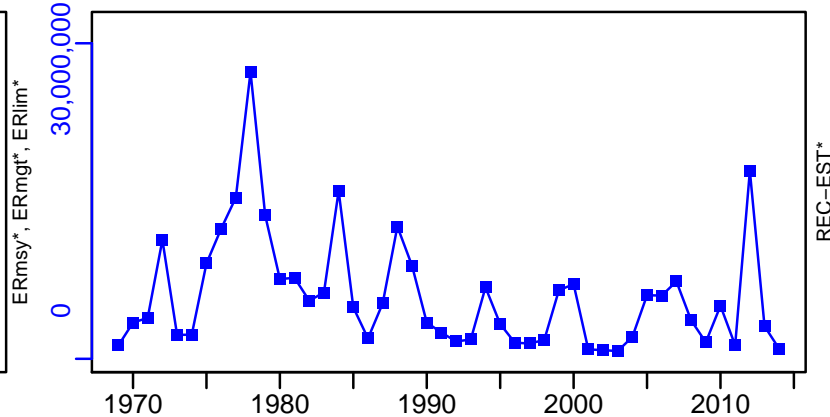
F-1/yr (1970-2015-SISIMP2016)



ER-calc-ratio (1970-2015-SISIMP2016)

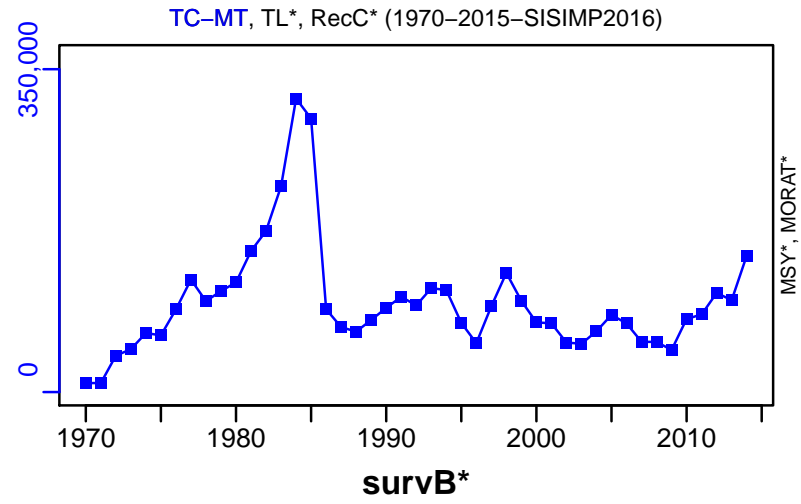


R-E00 (1970-2015-SISIMP2016)

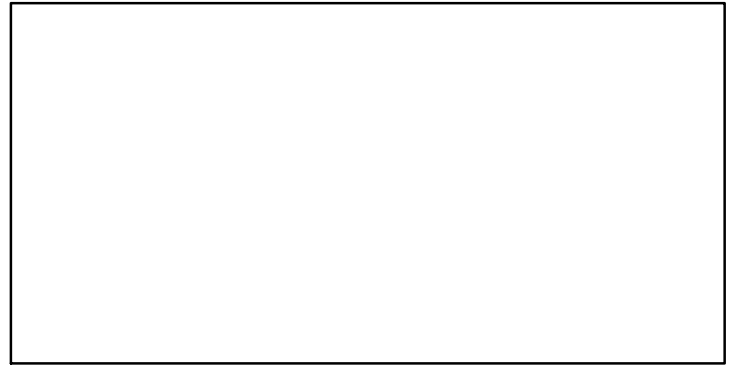


Walleye pollock Gulf of Alaska [WPOLLGA]

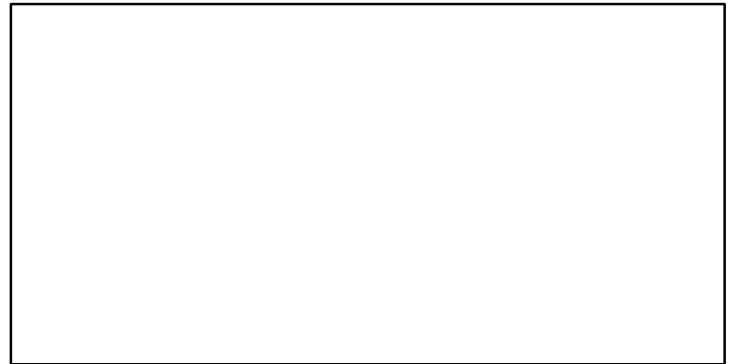
TC-MT, TL\*, RecC\* (1970-2015-SISIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



CdivMSY\*



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

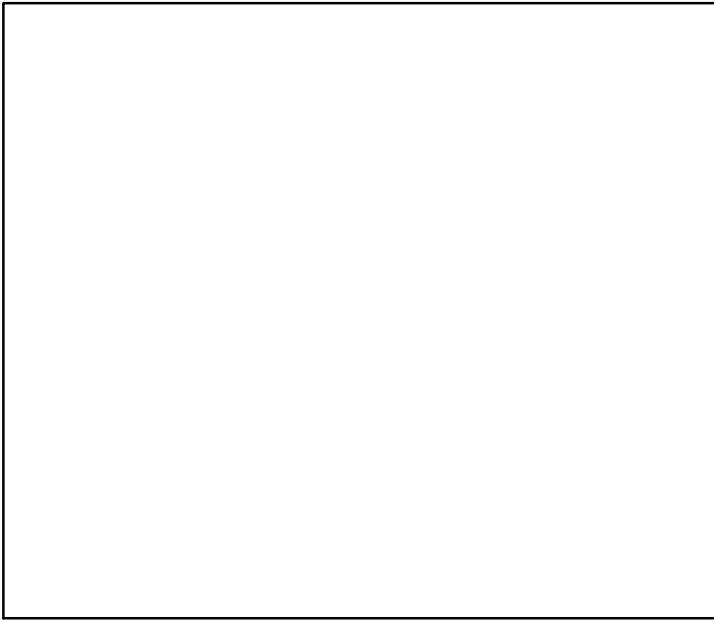
## Weathervane scallop Alaska [WVSCALLALASKA]

Metadata	
<b>Scientific Name</b>	Patinopecten caurinus
<b>Current Assess ID</b>	AFSC-WVSCALLALASKA-1994-2015-SISIMP2016
<b>Area</b>	Alaska
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2015	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	2015	140		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

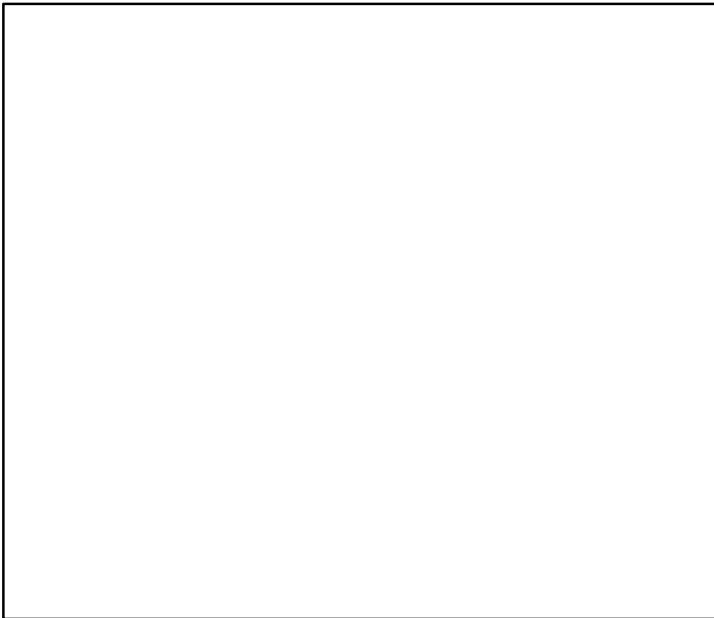
**Kobe MSY\***



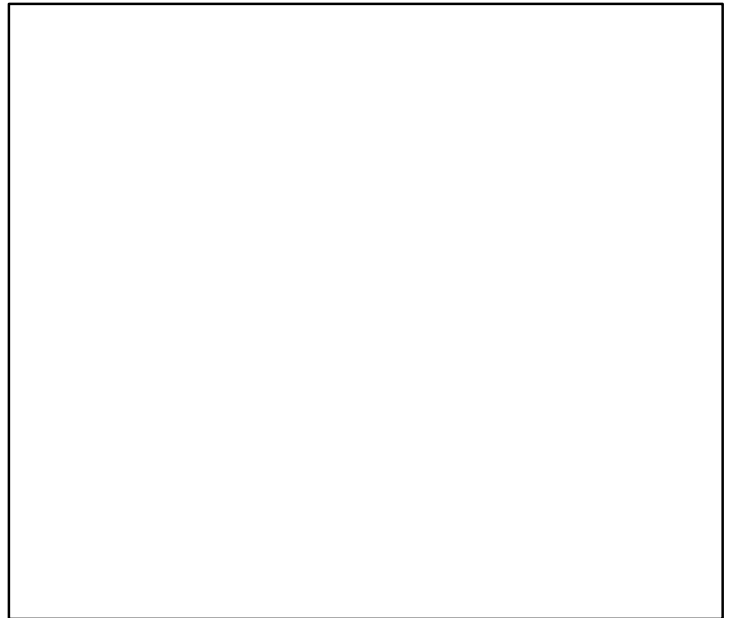
**Kobe MGT\***



**Spawner Recruit\***



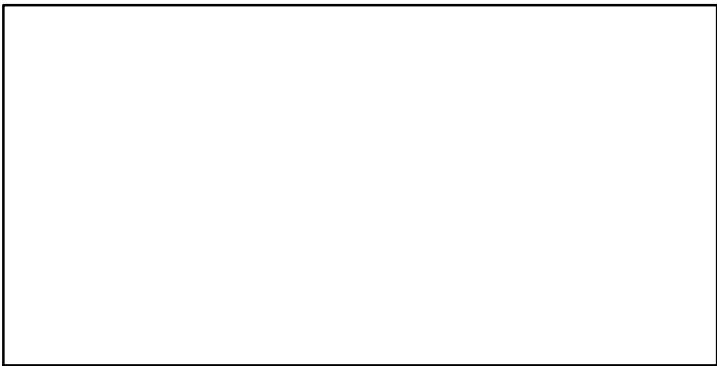
**Production\***



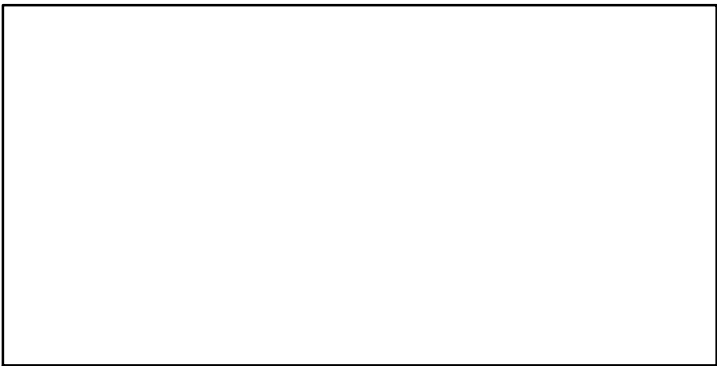
◆ Start Year   ◆ End Year   \* No Data

Weathervane scallop Alaska [WVSCALLALASKA]

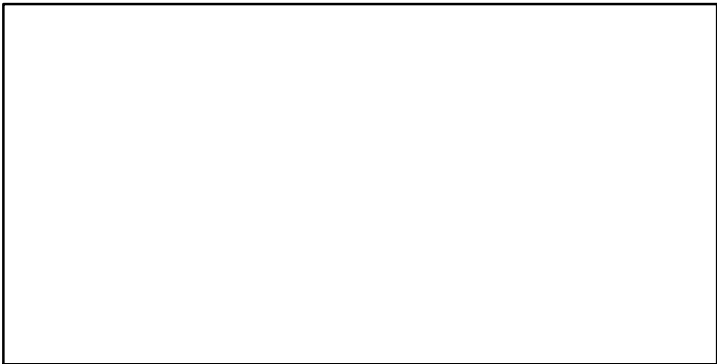
TB\*



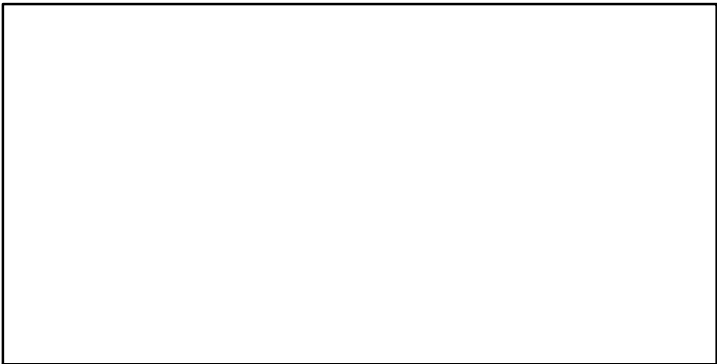
SSB\*



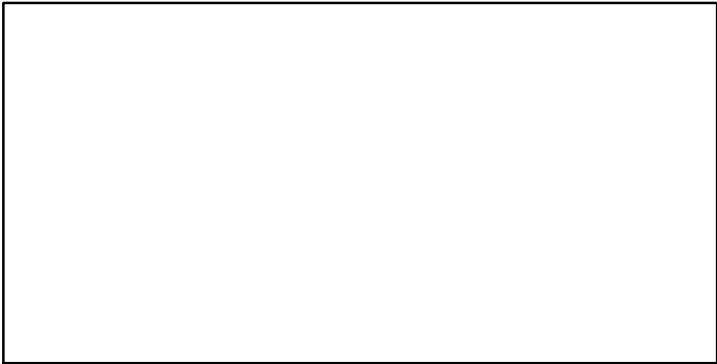
TN \*



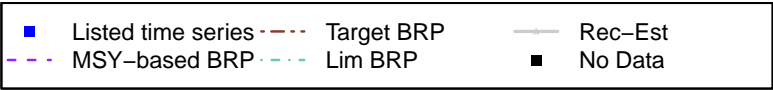
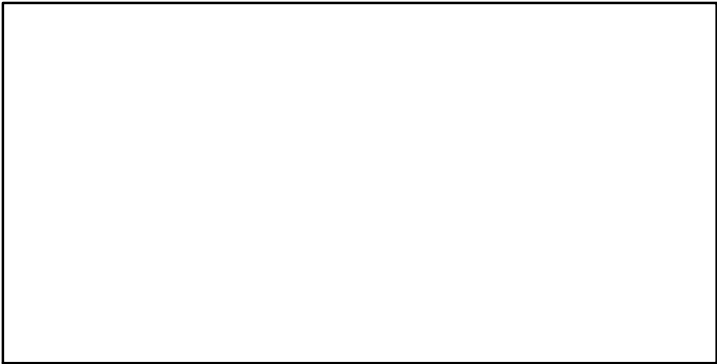
F\*



ER\*



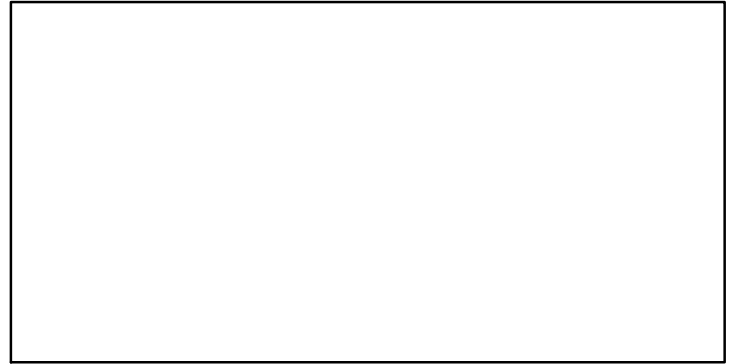
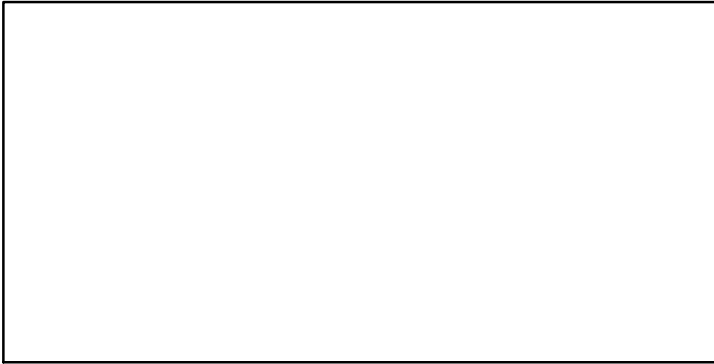
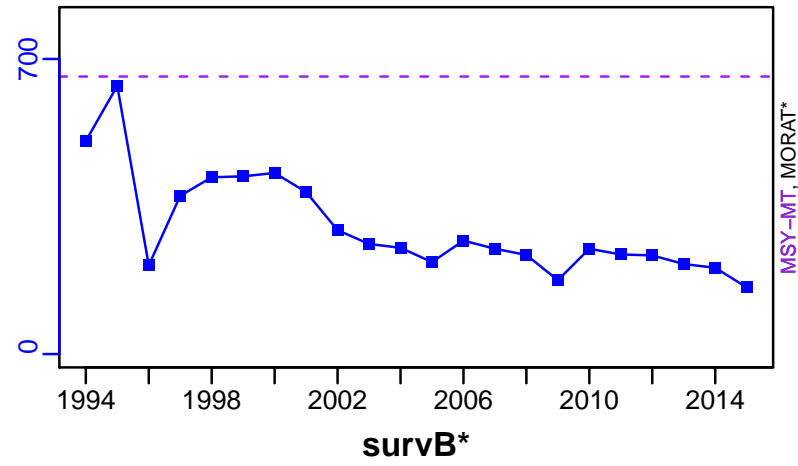
Recruits\*



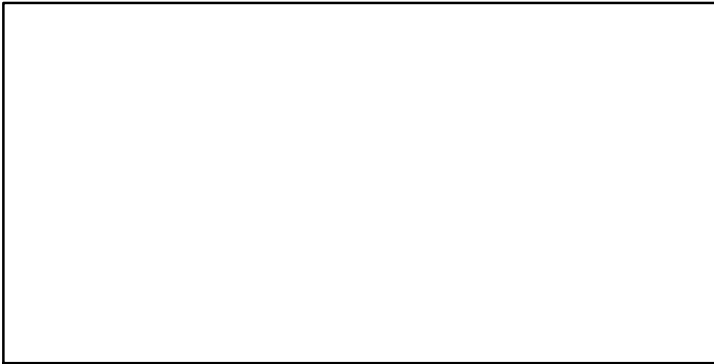
# Weatherwane scallop Alaska [WVSCALLALASKA]

TC-MT, TL\*, RecC\* (1994-2015-SISIMP2016)

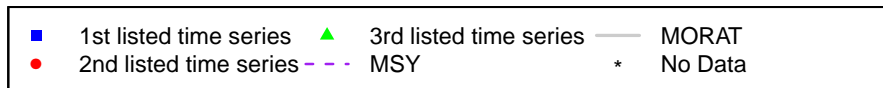
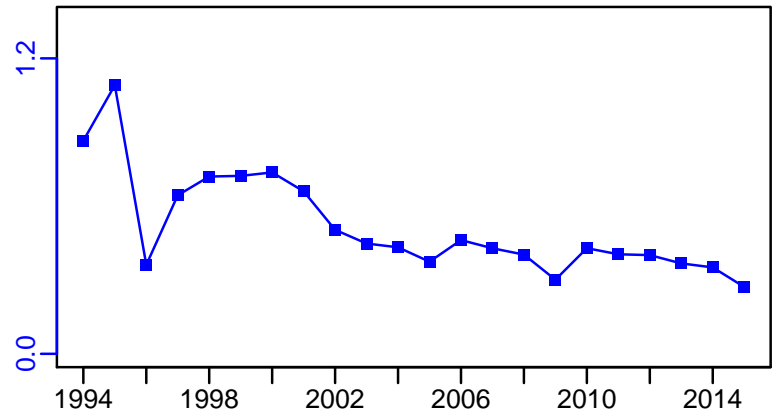
TAC\*, Cpair\*, Cadv\*



EFFORT\*



CdivMSY-ratio (1994-2015-SISIMP2016)



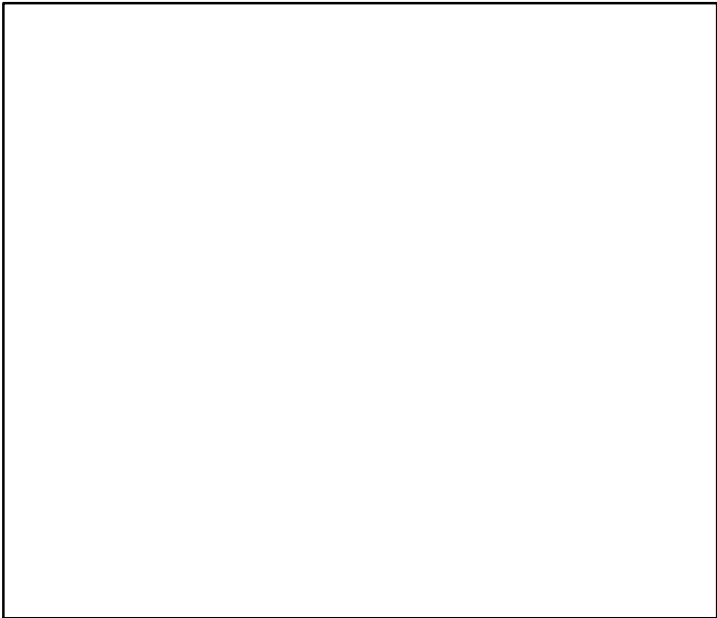
## Yelloweye rockfish Gulf of Alaska [YEYEROCKGA]

Metadata	
<b>Scientific Name</b>	Sebastes ruberrimus
<b>Current Assess ID</b>	AFSC-YEYEROCKGA-1990-2014-SISIMP2016
<b>Area</b>	Gulf of Alaska
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2014

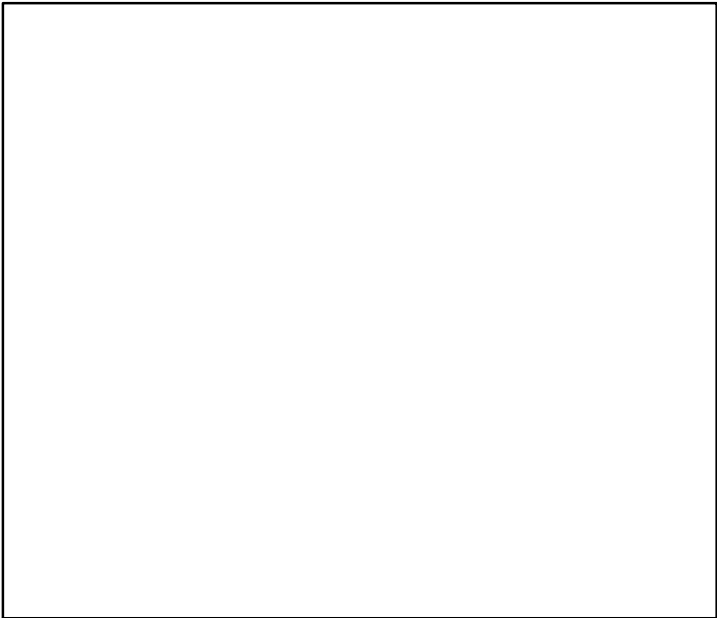
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2014	98		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

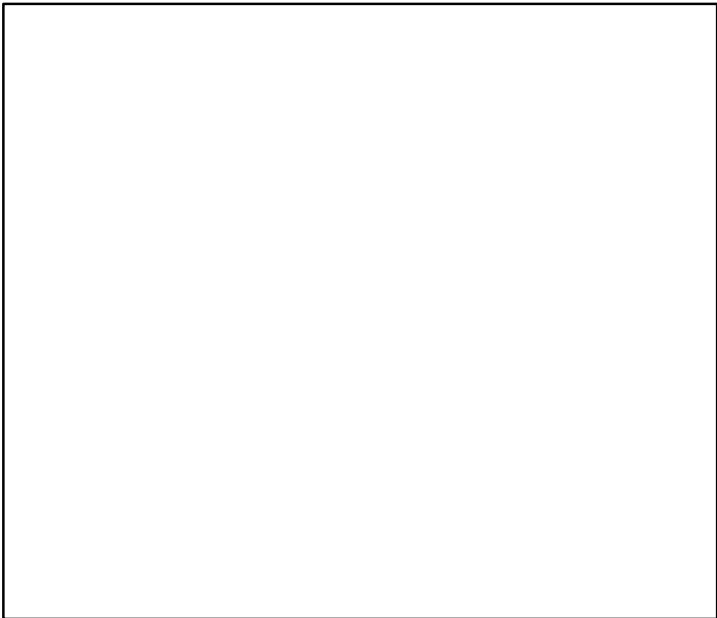
Kobe MSY\*



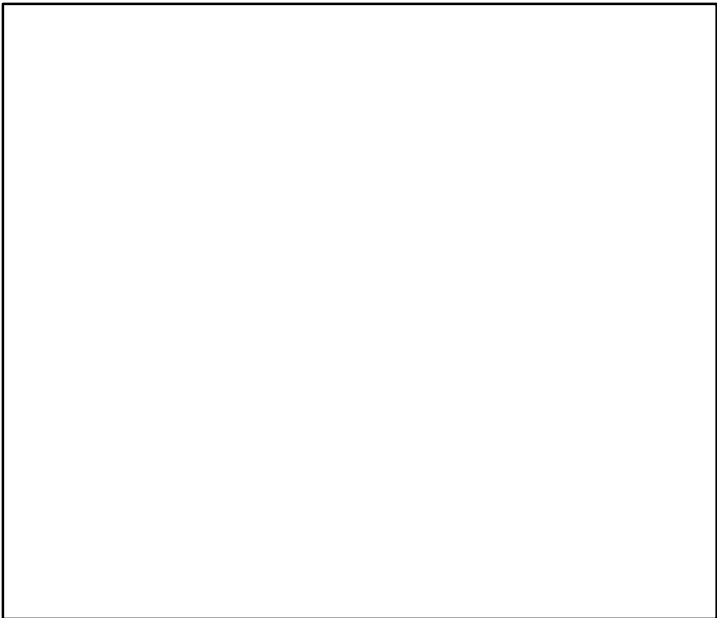
Kobe MGT\*



Spawner Recruit\*



Production\*

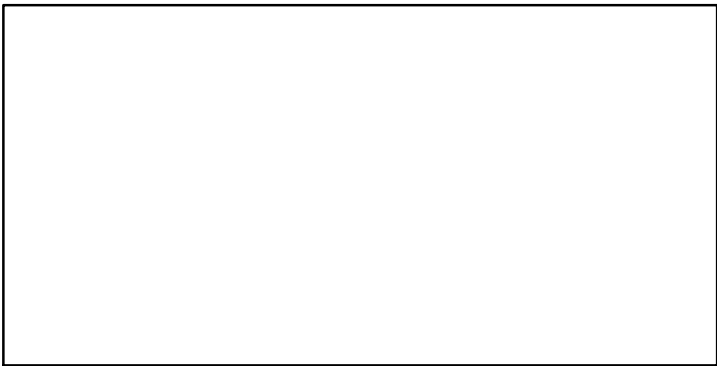


◆ Start Year   ◆ End Year   \* No Data

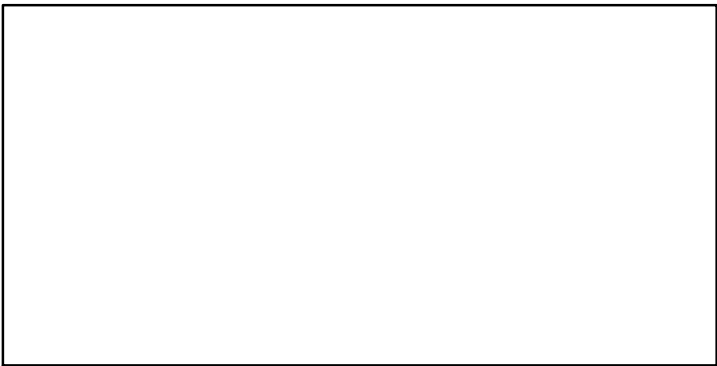


Yelloweye rockfish Gulf of Alaska [YEYEROCKGA]

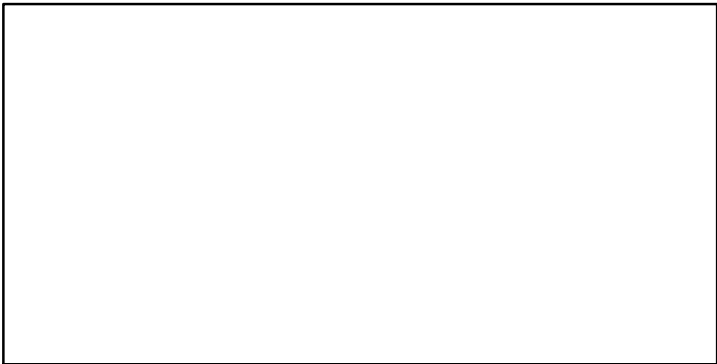
TB\*



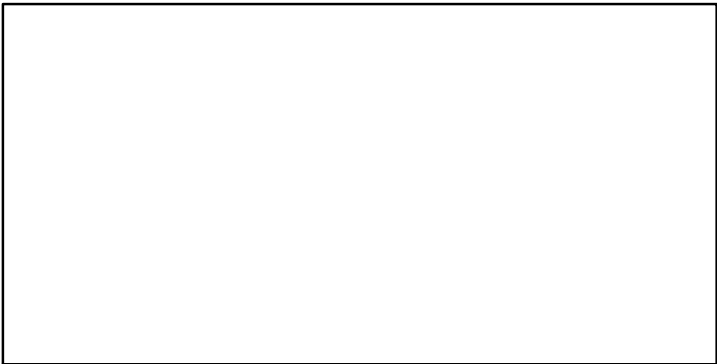
SSB\*



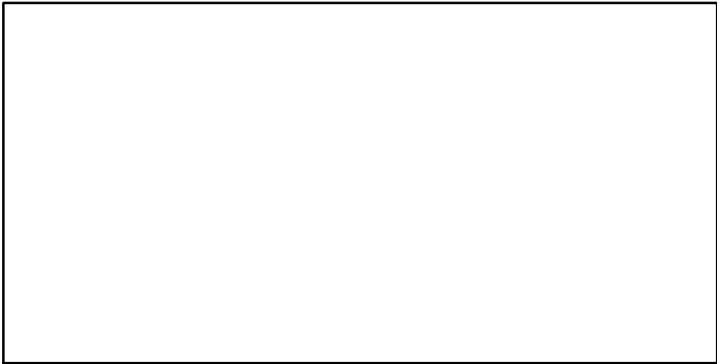
TN \*



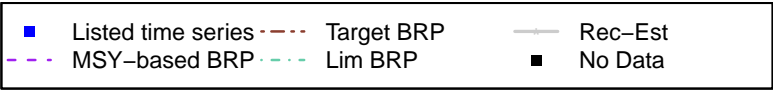
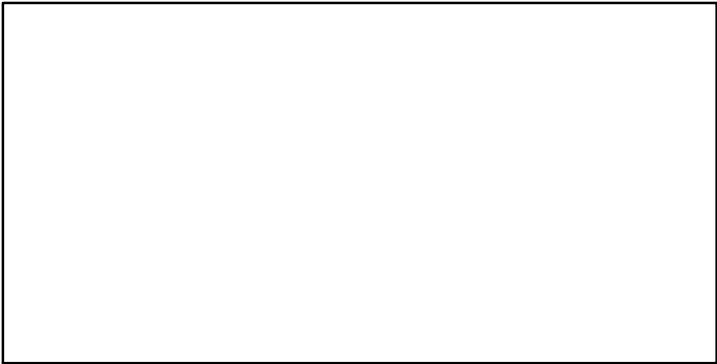
F\*



ER\*

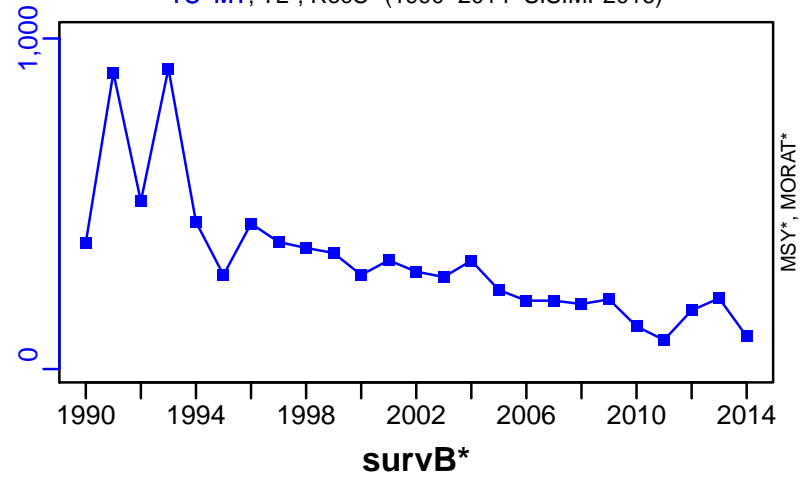


Recruits\*

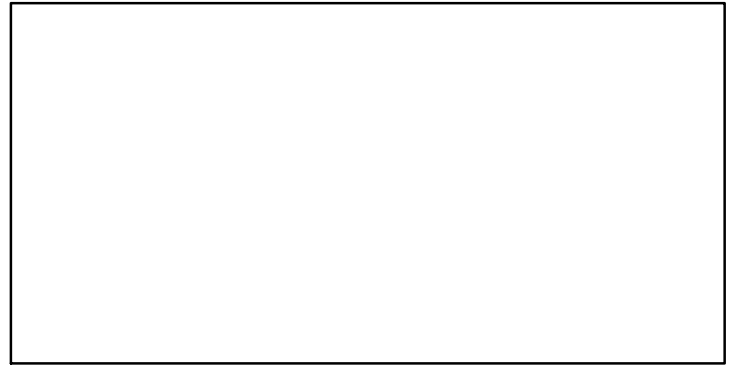


# Yelloweye rockfish Gulf of Alaska [YEYEROCKGA]

TC-MT, TL\*, RecC\* (1990-2014-SISIMP2016)



TAC\*, Cpair\*, Cadv\*



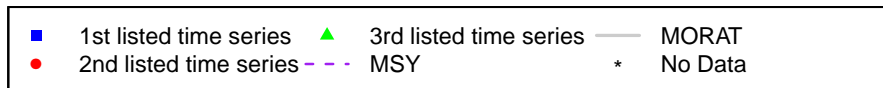
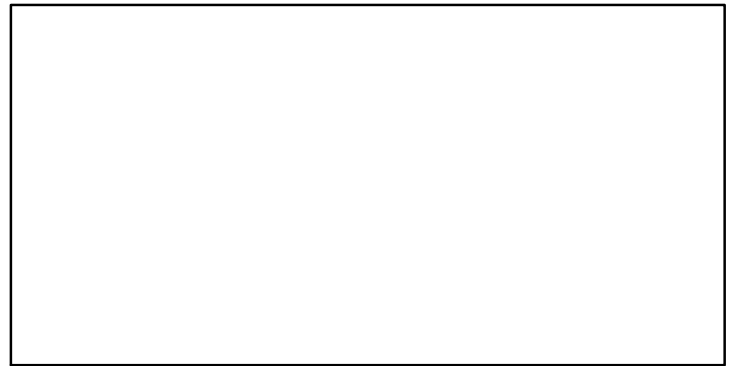
CPUE\*



EFFORT\*



CdivMSY\*



## Yellowfin sole Bering Sea and Aleutian Islands [YSOLEBSAI]

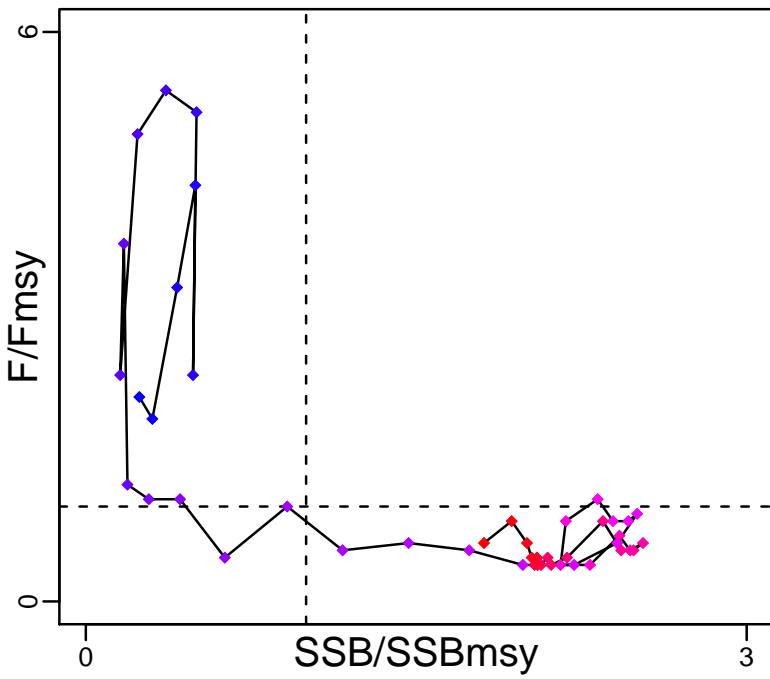
Metadata	
<b>Scientific Name</b>	Limanda aspera
<b>Current Assess ID</b>	AFSC-YSOLEBSAI-1954-2015-SISIMP2016
<b>Area</b>	Bering Sea and Aleutian Islands
<b>Management Authority</b>	National Marine Fisheries Service, US national management
<b>Assessor</b>	Alaska Fisheries Science Center
<b>Asmts in RAM</b>	2010, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2015	435,000
<b>Fmsy</b>	Fmsy-pr-1/yr	2010	0.13
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2010	0.12
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

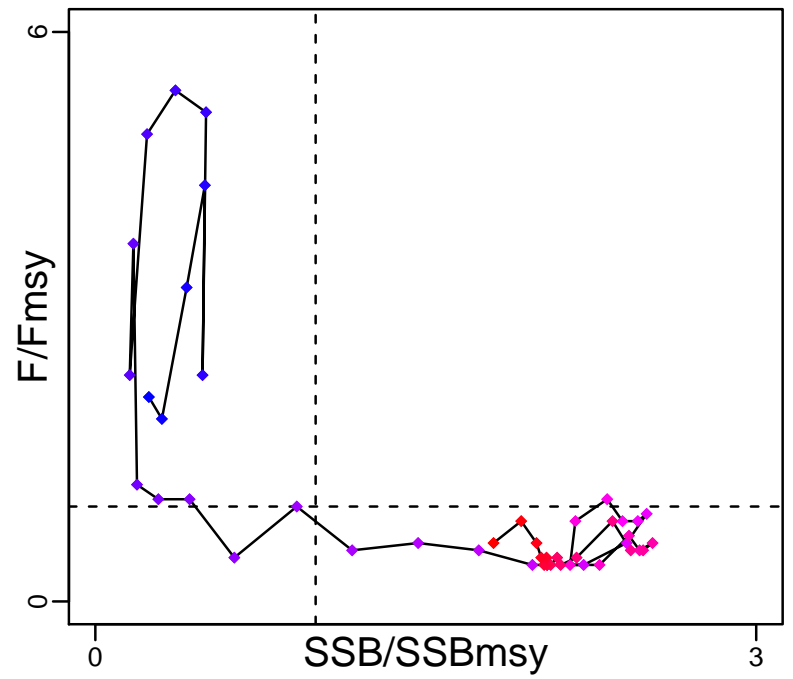
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	2,310,000	-	1+
<b>SSB</b>	SSB-MT	2015	697,000	Females	10.5+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	2,220,000	-	1
<b>F</b>	F-1/yr	2015	0.088	-	-
<b>ER</b>	ER-calc-ratio	2015	0.067	-	-
<b>TC</b>	TC-MT	2015	157,000		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	1.603		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2010	0.615		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Yellowfin sole Bering Sea and Aleutian Islands [YSOLEBSAI]

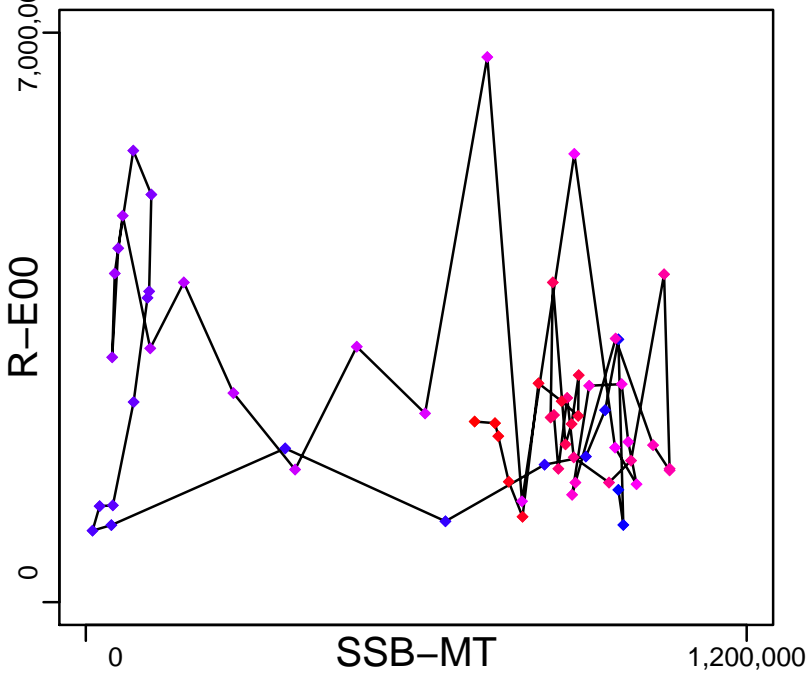
Kobe MSYpref (1949–2010–STACHURA)



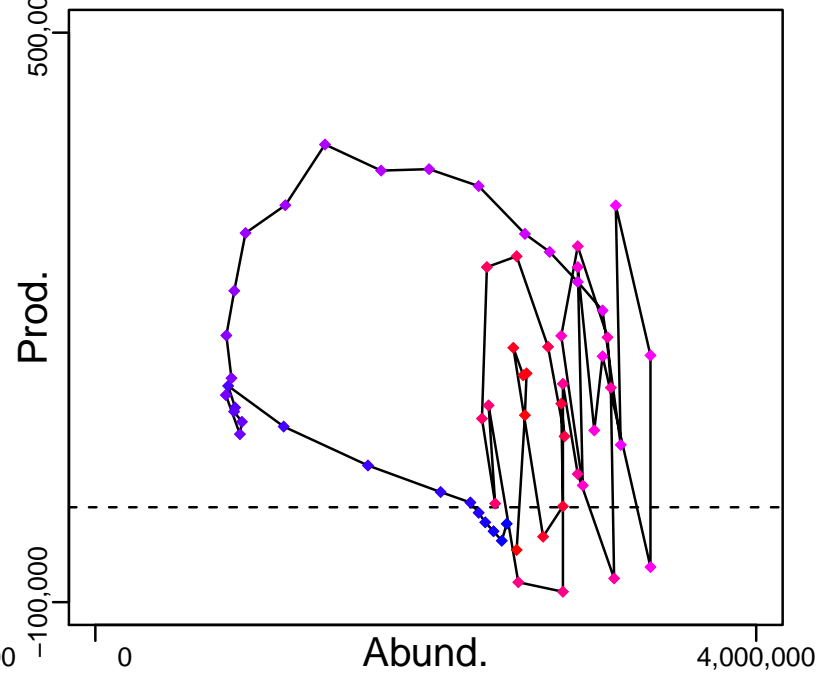
Kobe MGTpref (1949–2010–STACHURA)



Spawner Recruit (1954–2015–SISIMP2016)



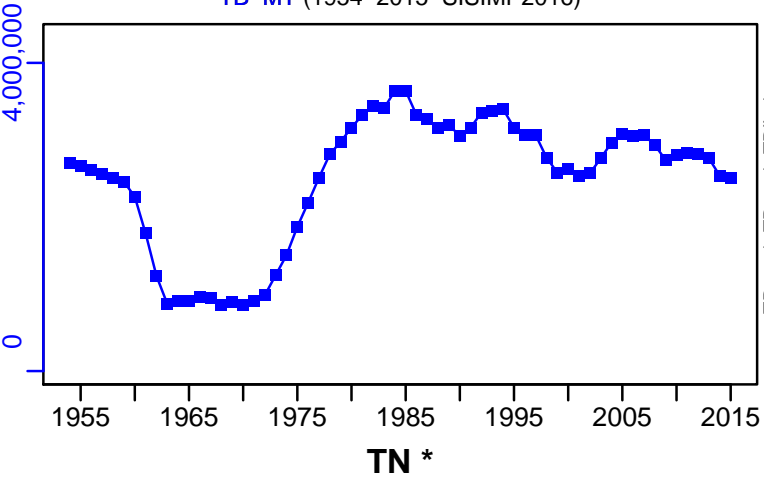
Production (1954–2015–SISIMP2016)



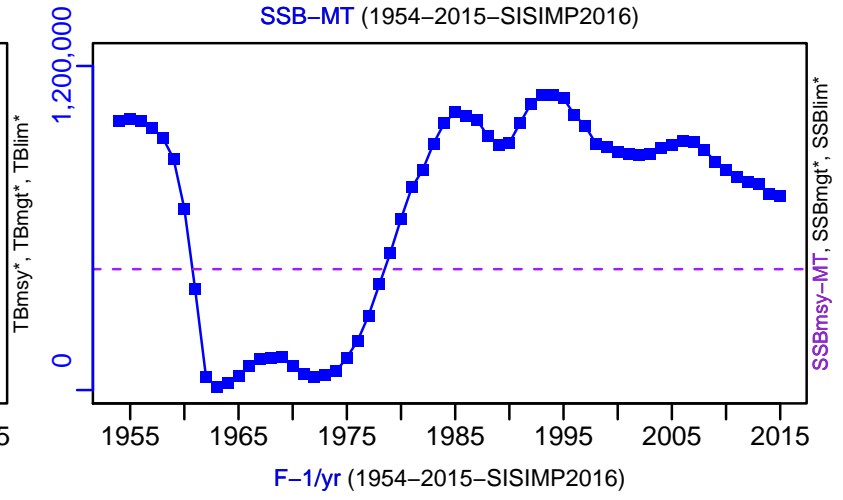
◆ Start Year ◆ End Year \* No Data

# Yellowfin sole Bering Sea and Aleutian Islands [YSOLEBSAI]

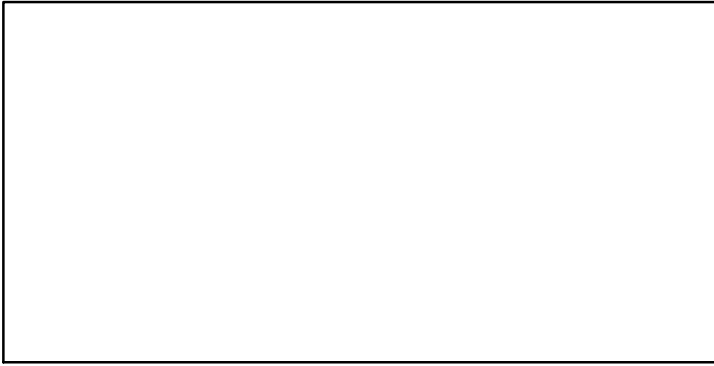
TB-MT (1954–2015–SISIMP2016)



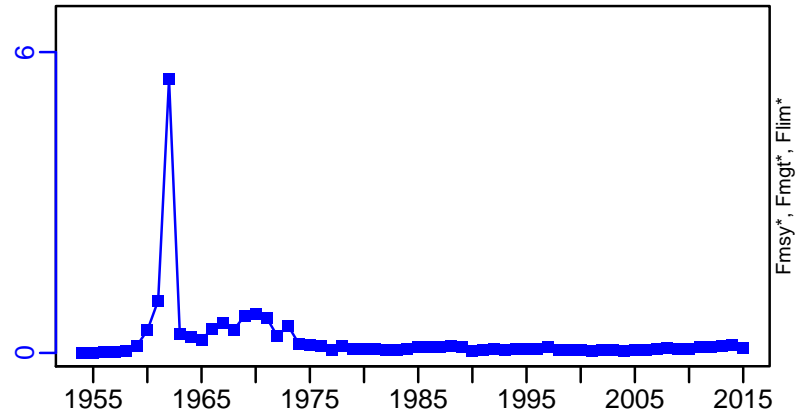
SSB-MT (1954–2015–SISIMP2016)



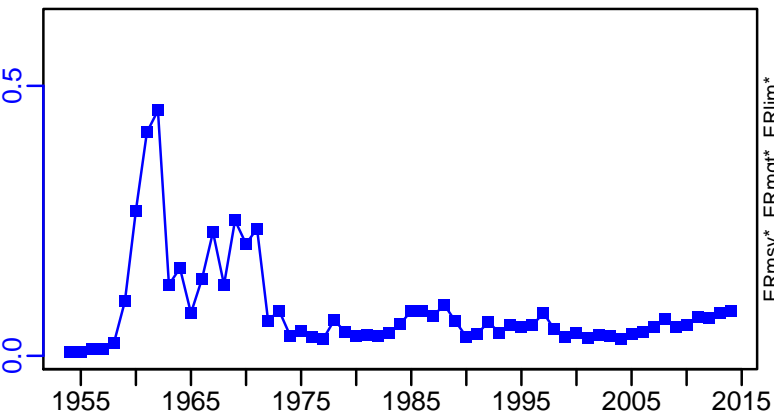
TN \*



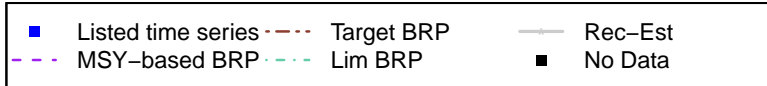
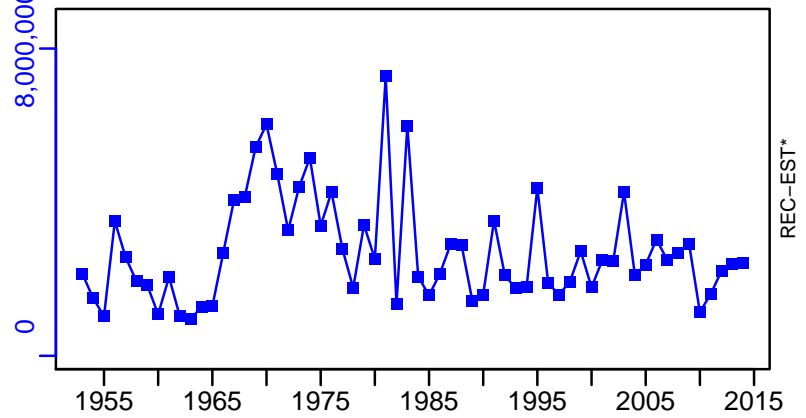
F-1/yr (1954–2015–SISIMP2016)



ER-calc-ratio (1954–2015–SISIMP2016)



R-E00 (1954–2015–SISIMP2016)



# Yellowfin sole Bering Sea and Aleutian Islands [YSOLEBSAI]

TC-MT, TL\*, RecC\* (1954-2015-SISIMP2016)

TAC\*, Cpair\*, Cadv\*

