

US West Coast Stocks

v4.495 (Apr-17-2021)

Not present Present Preferred

Stock	B/Bmsy	Time Series Types			
		U/Umsy	B/Bmgt	U/Umgt	
1. ARFLOUNDPACOAST [Arrowtooth flounder Pacific Coast]	TB SSB	ER F	TB SSB	ER F	
2. AUROCKPCOAST [Aurora rockfish Pacific Coast]	TB SSB	ER F	TB SSB	ER F	
3. BGROCKPCOAST [Blackgill rockfish Pacific Coast]	TB SSB	ER F	TB SSB	ER F	
4. BLACKROCKCAL [Black rockfish California]	TB SSB	ER F	TB SSB	ER F	
5. BLACKROCKORECOAST [Black rockfish Oregon Coast]	TB SSB	ER F	TB SSB	ER F	
6. BLACKROCKWASH [Black rockfish Washington]	TB SSB	ER F	TB SSB	ER F	
7. BLUEROCKCAL [Blue rockfish California]	TB SSB	ER F	TB SSB	ER F	
8. BNKROCKCAL [Bank rockfish California]	TB SSB	ER F	TB SSB	ER F	
9. BOCACCSPACOAST [Bocaccio Southern Pacific Coast]	TB SSB	ER F	TB SSB	ER F	
10. BRNROCKPCOAST [Brown rockfish Pacific Coast]	TB SSB	ER F	TB SSB	ER F	
11. CABEZNCAL [Cabezon Northern California]	TB SSB	ER F	TB SSB	ER F	
12. CABEZORECOAST [Cabezon Oregon Coast]	TB SSB	ER F	TB SSB	ER F	
13. CABEZSCAL [Cabezon Southern California]	TB SSB	ER F	TB SSB	ER F	
14. CABEZWASH [Cabezon Washington]	TB SSB	ER F	TB SSB	ER F	
15. CALSCORPSCAL [California scorpionfish Southern California]	TB SSB	ER F	TB SSB	ER F	
16. CHILISPCOAST [Chilipepper Southern Pacific Coast]	TB SSB	ER F	TB SSB	ER F	
17. CHROCKCPCOAST [China rockfish Central Pacific Coast]	TB SSB	ER F	TB SSB	ER F	
18. CHROCKNPCOAST [China rockfish Northern Pacific Coast]	TB SSB	ER F	TB SSB	ER F	
19. CHROCKSPCOAST [China rockfish Southern Pacific Coast]	TB SSB	ER F	TB SSB	ER F	
20. CMACKPCOAST [Pacific chub mackerel Pacific Coast]	TB SSB	ER F	TB SSB	ER F	
21. COWCODSCAL [Cowcod Southern California]	TB SSB	ER F	TB SSB	ER F	
22. CPRROCKPCOAST [Copper rockfish Pacific Coast]	TB SSB	ER F	TB SSB	ER F	
23. CROCKPCOAST [Canary rockfish Pacific Coast]	TB SSB	ER F	TB SSB	ER F	
24. DKROCKPCOAST [Darkblotched rockfish Pacific Coast]	TB SSB	ER F	TB SSB	ER F	
25. DSOLEPCOAST [Dover sole Pacific Coast]	TB SSB	ER F	TB SSB	ER F	
26. ESOLEPCOAST [English sole Pacific Coast]	TB SSB	ER F	TB SSB	ER F	
27. GOPHERSPCOAST [Gopher rockfish Southern Pacific Coast]	TB SSB	ER F	TB SSB	ER F	
28. GRNSTROCKPCOAST [Greenstriped rockfish Pacific Coast]	TB SSB	ER F	TB SSB	ER F	
29. GRSPROCKNCAL [Greenspotted rockfish Northern Pacific Coast]	TB SSB	ER F	TB SSB	ER F	
30. GRSPROCKSCAL [Greenspotted rockfish Southern Pacific Coast]	TB SSB	ER F	TB SSB	ER F	
31. KELPGREENLINGORECOAST [Kelp greenling Oregon Coast]	TB SSB	ER F	TB SSB	ER F	
32. LINGCODNPCOAST [Lingcod Northern Pacific Coast]	TB SSB	ER F	TB SSB	ER F	
33. LINGCODSPCOAST [Lingcod Southern Pacific Coast]	TB SSB	ER F	TB SSB	ER F	
34. LNOSEKAPCOAST [Longnose skate Pacific Coast]	TB SSB	ER F	TB SSB	ER F	
35. LSTHORNHPCOAST [Longspine thornyhead Pacific Coast]	TB SSB	ER F	TB SSB	ER F	
36. PGEODWA [Pacific geoduck Washington]	TB SSB	ER F	TB SSB	ER F	
37. PHAKEPCOAST [Pacific hake Pacific Coast]	TB SSB	ER F	TB SSB	ER F	
38. POPERCHPCOAST [Pacific ocean perch Pacific Coast]	TB SSB	ER F	TB SSB	ER F	
39. PSOLEPCOAST [Petrale sole Pacific Coast]	TB SSB	ER F	TB SSB	ER F	

40. REXSOLEPCOAST [Rex sole Pacific Coast]	TB SSB	ER F	TB SSB	ER F
41. SABLEFPCOAST [Sablefish Pacific Coast]	TB SSB	ER F	TB SSB	ER F
42. SARDPCOAST [Pacific sardine Pacific Coast]	TB SSB	ER F	TB SSB	ER F
43. SBELLYROCKPCOAST [Shortbelly rockfish Pacific Coast]	TB SSB	ER F	TB SSB	ER F
44. SHCROCKPCOAST [Sharpchin rockfish Pacific Coast]	TB SSB	ER F	TB SSB	ER F
45. SNROCKPCOAST [Splitnose rockfish Pacific Coast]	TB SSB	ER F	TB SSB	ER F
46. SPSDOGPCOAST [Spotted spiny dogfish Pacific Coast]	TB SSB	ER F	TB SSB	ER F
47. SSTHORNHPCOAST [Shortspine thornyhead Pacific Coast]	TB SSB	ER F	TB SSB	ER F
48. STFLOUNNPCOAST [Starry flounder Northern Pacific Coast]	TB SSB	ER F	TB SSB	ER F
49. STFLOUNSPCOAST [Starry flounder Southern Pacific Coast]	TB SSB	ER F	TB SSB	ER F
50. WROCKPCOAST [Widow rockfish Pacific Coast]	TB SSB	ER F	TB SSB	ER F
51. YEYEROCKPCOAST [Yelloweye rockfish Pacific Coast]	TB SSB	ER F	TB SSB	ER F
52. YTROCKNPCOAST [Yellowtail rockfish Northern Pacific Coast]	TB SSB	ER F	TB SSB	ER F

Arrowtooth flounder Pacific Coast [ARFLOUNDPCOAST]

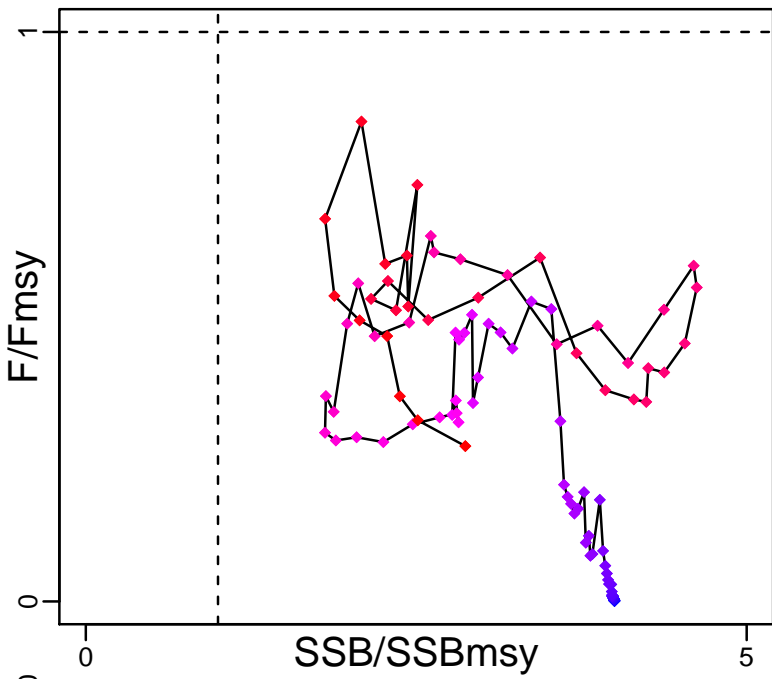
Metadata	
Scientific Name	Atheresthes stomias
Current Assess ID	NWFSC-ARFLOUNDPCOAST-1916-2017-SISIMP2021
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2015, 2007, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2007	44,591
SSBmsy	SSBmsy-MT	2017	16,362
Fmsy	Fmsy-1/yr	2017	0.7
ERmsy	ERmsy-ratio	2007	0.131
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	SSB0-MT	2007	80,313
MSY	MSY-MT	2017	6775
M	M-1/yr	2007	0.166
TBlim	-	-	-
SSBlim	SSBlim-MT	2017	8181
Flim	Flim-1/yr	2017	0.7
ERlim	-	-	-

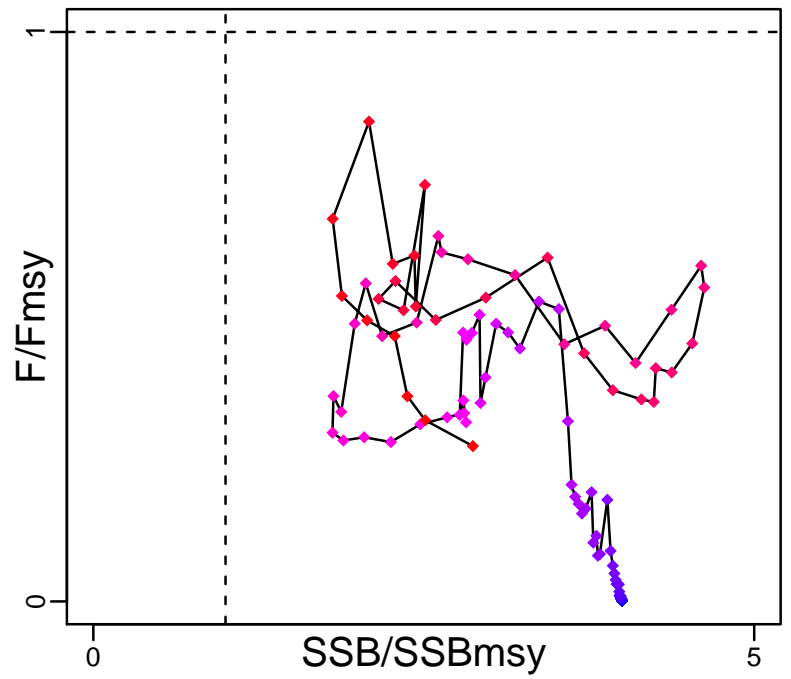
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2017	94,534	-	-
SSB	SSB-MT	2017	56,710	-	-
TN	-	-	-	-	-
R	R-E00	2017	50,277,400	-	0
F	F-1/yr	2017	0.191	-	-
ER	ER-calc-ratio	2017	0.021	-	-
TC	TC-MT	2017	1899		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2007	1.868		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2017	3.466		
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	0.273		
ER/ERmsy	ER-ratio/ERmsy-ratio	2007	0.218		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Arrowtooth flounder Pacific Coast [ARFLOUNDPCOAST]

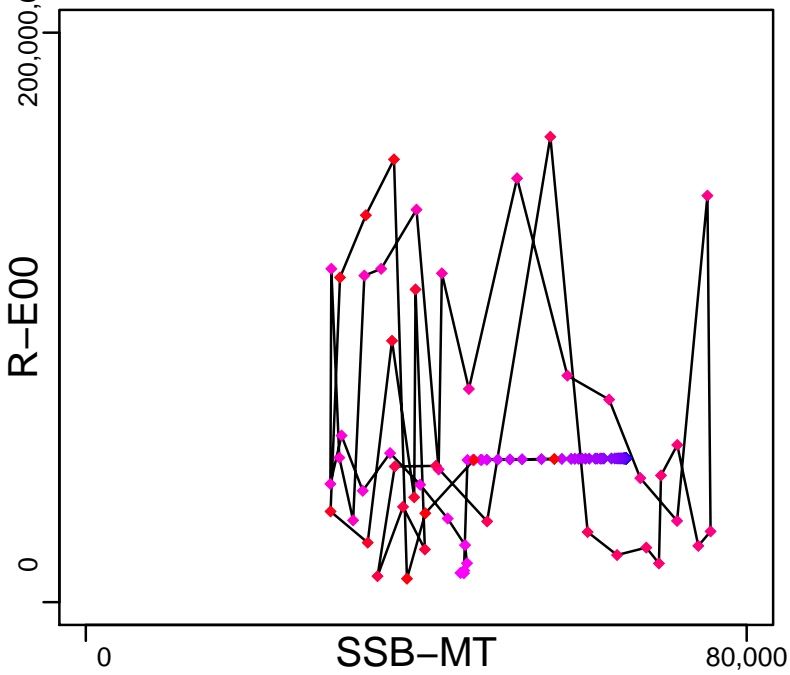
Kobe MSYpref (1916–2017–SISIMP2021)



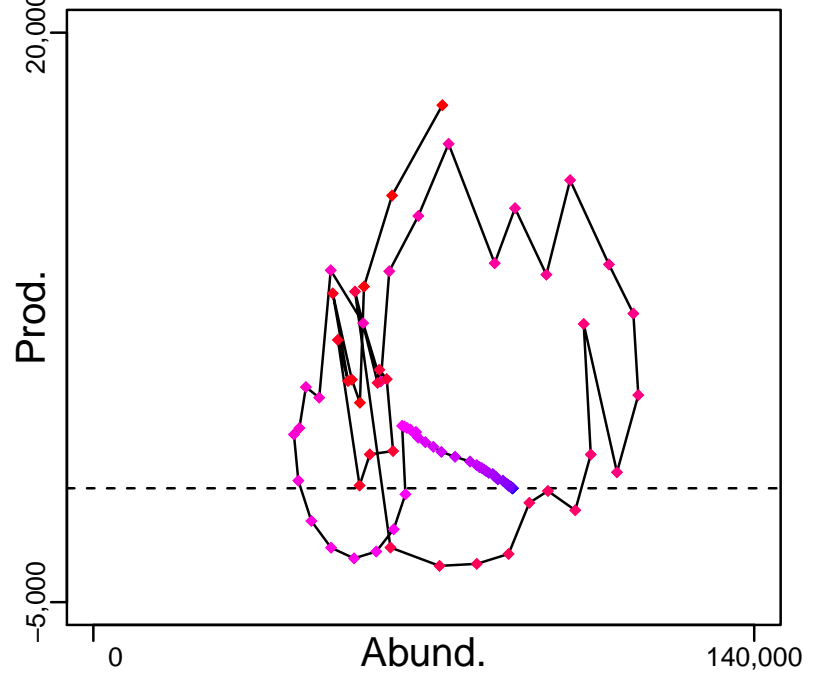
Kobe MGTpref (1916–2017–SISIMP2021)



Spawner Recruit (1916–2017–SISIMP2021)



Production (1916–2017–SISIMP2021)

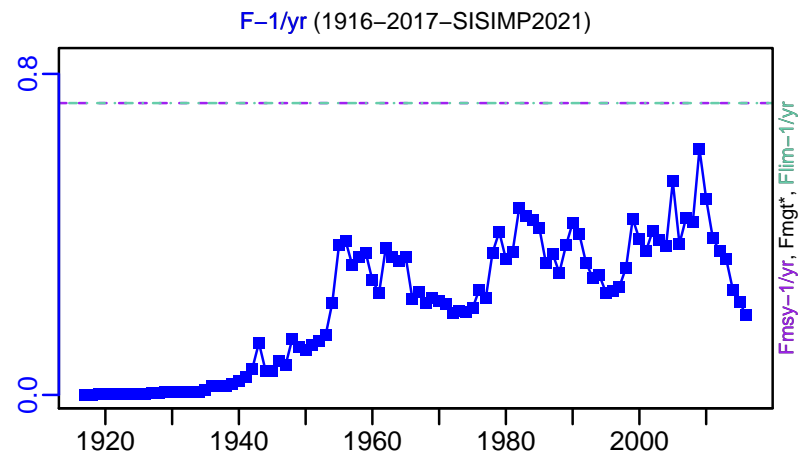
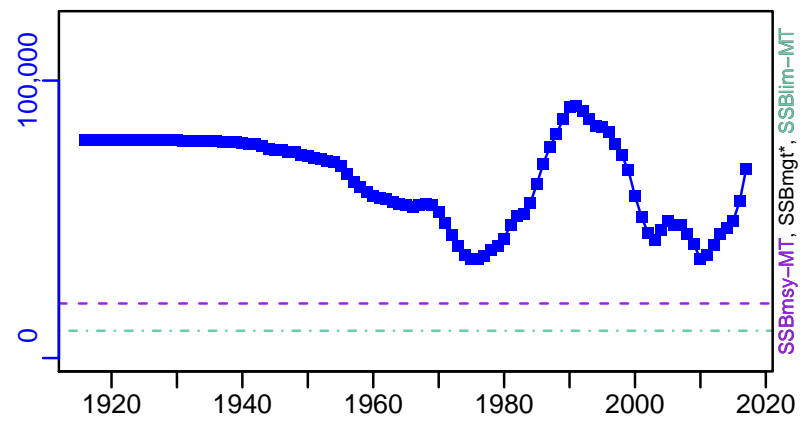
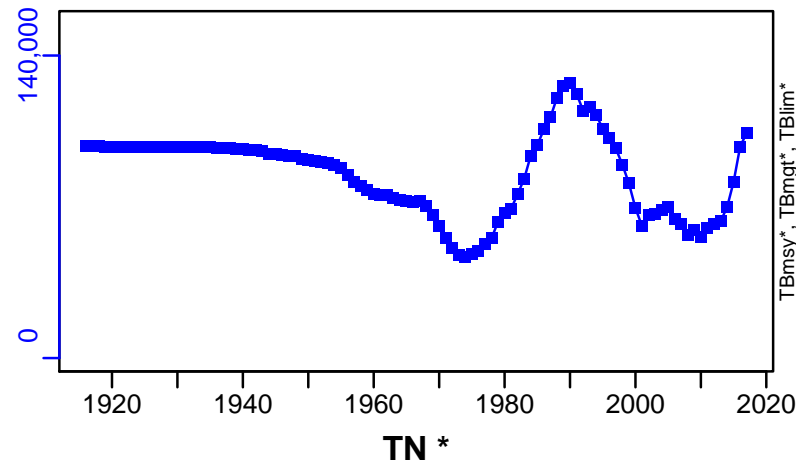


◆ Start Year ◆ End Year * No Data

Arrowtooth flounder Pacific Coast [ARFLOUNDCOAST]

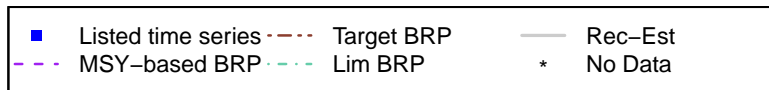
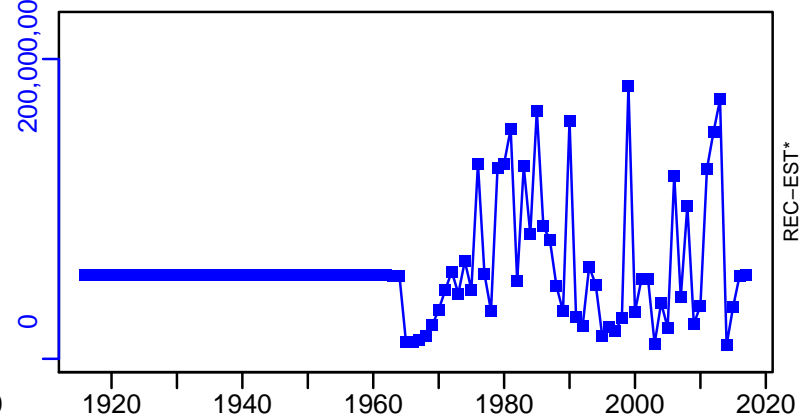
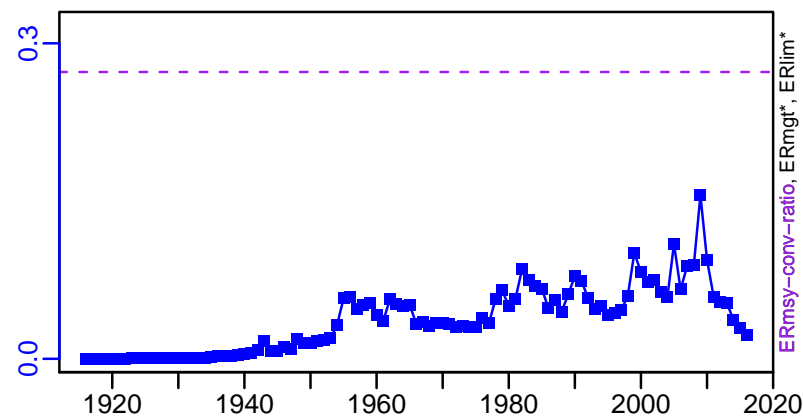
TB-MT (1916-2017-SISIMP2021)

SSB-MT (1916-2017-SISIMP2021)



ER-calc-ratio (1916-2017-SISIMP2021)

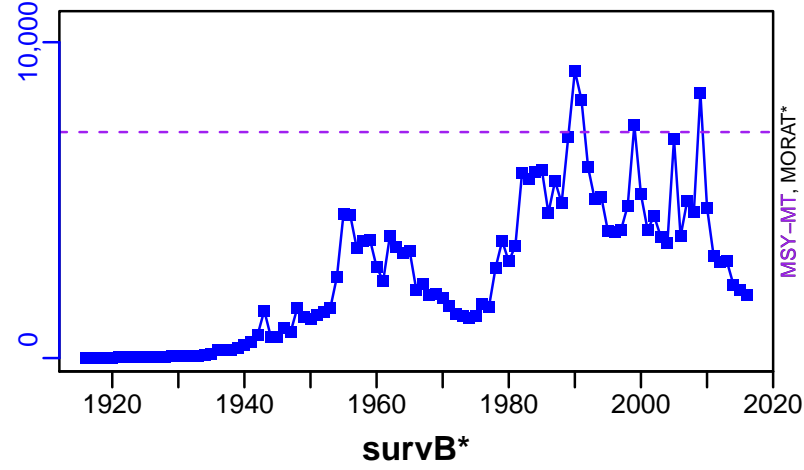
R-E00 (1916-2017-SISIMP2021)



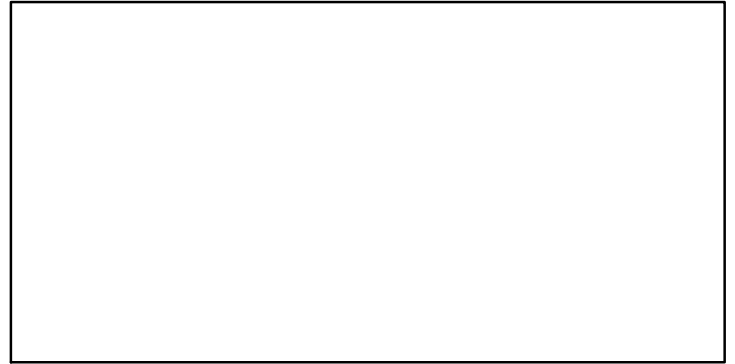
Arrowtooth flounder Pacific Coast [ARFLOUNDPCOAST]

TC-MT, TL*, RecC* (1916-2017-SISIMP2021)

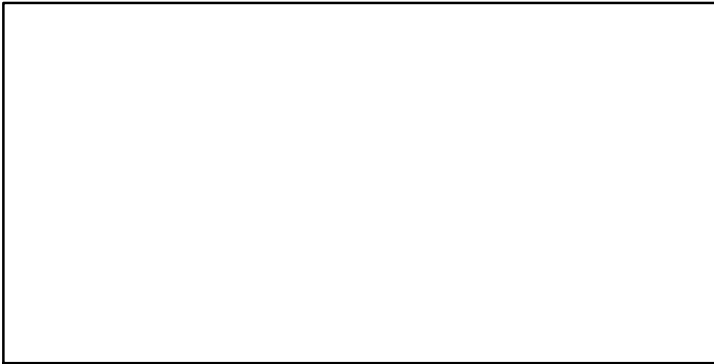
TAC*, Cpair*, Cadv*



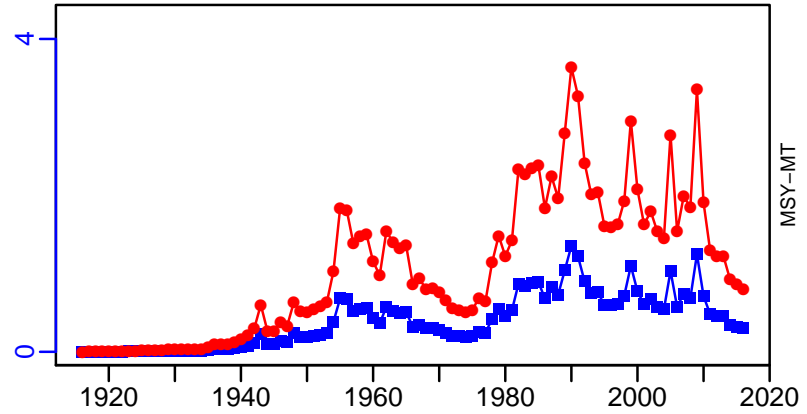
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1916-2017-SISIMP2021)



Aurora rockfish Pacific Coast [AUROCKPCOAST]

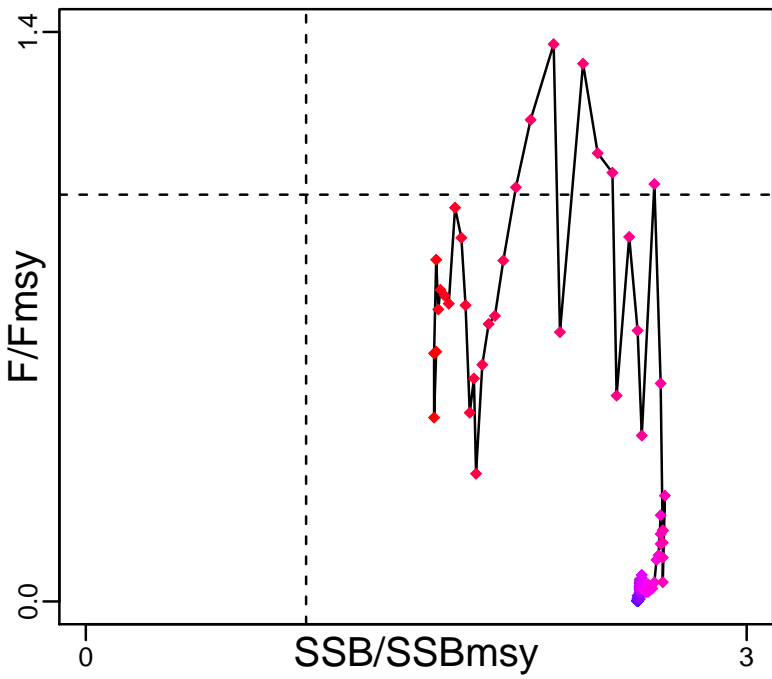
Metadata	
Scientific Name	Sebastes aurora
Current Assess ID	NWFSC-AUROCKPCOAST-1916-2013-SISIMP2016
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2013

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2013	1050
Fmsy	Fmsy-1/yr	2013	0.5
ERmsy	ERmsy-conv-ratio	2013	0.029
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2013	72
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2013	657
Flim	Flim-1/yr	2013	0.5
ERlim	-	-	-

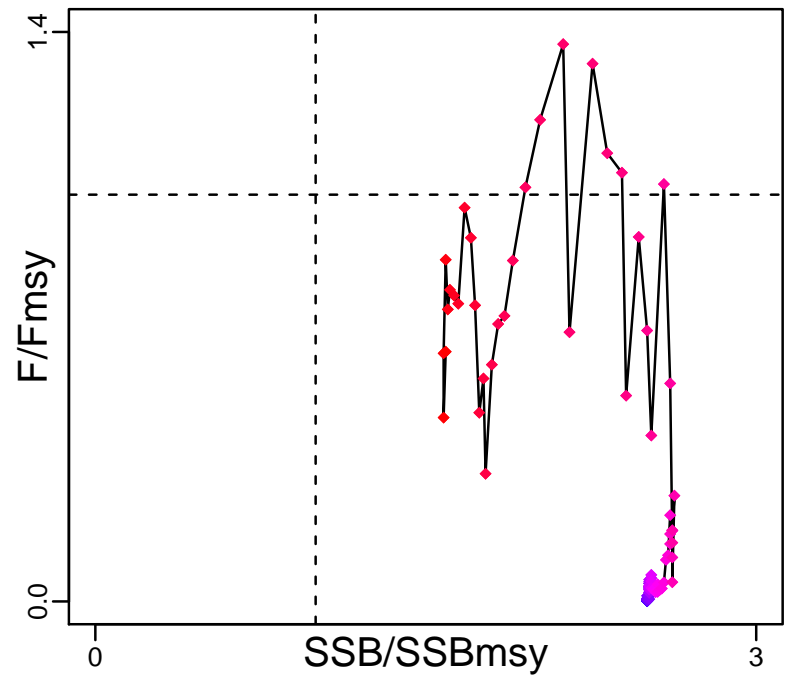
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2013	4370	-	0+
SSB	SSB-MT	2013	1670	Females	12.56
TN	-	-	-	-	-
R	R-E00	2013	736,000	-	0
F	F-1/yr	2013	0.307	-	-
ER	ER-calc-ratio	2013	0.01	-	-
TC	TC-MT	2013	43		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2013	1.59		
F/Fmsy	F-1/yr/Fmsy-1/yr	2013	0.614		
ER/ERmsy	ER-calc-ratio/ERmsy-conv-ratio	2013	0.339		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Aurora rockfish Pacific Coast [AUROCKPCOAST]

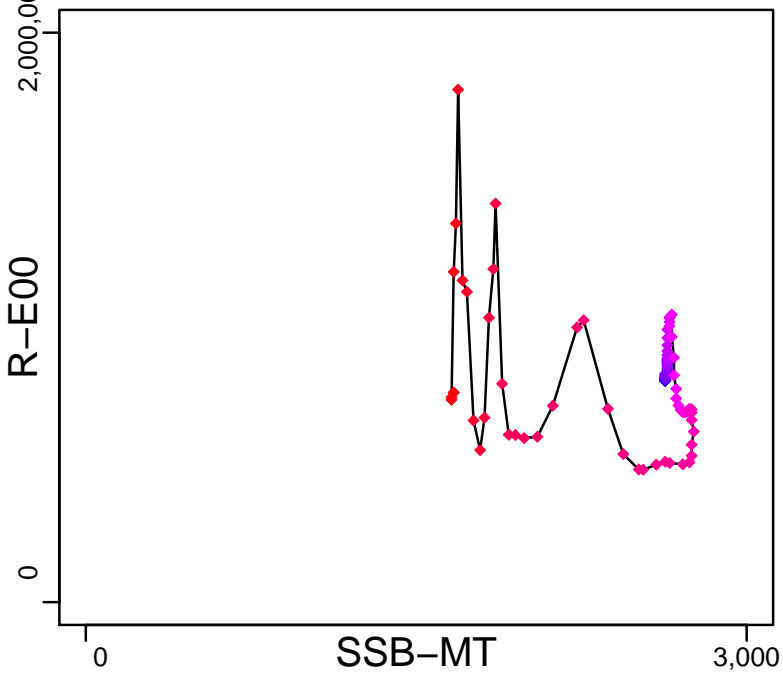
Kobe MSYpref (1916–2013–SISIMP2016)



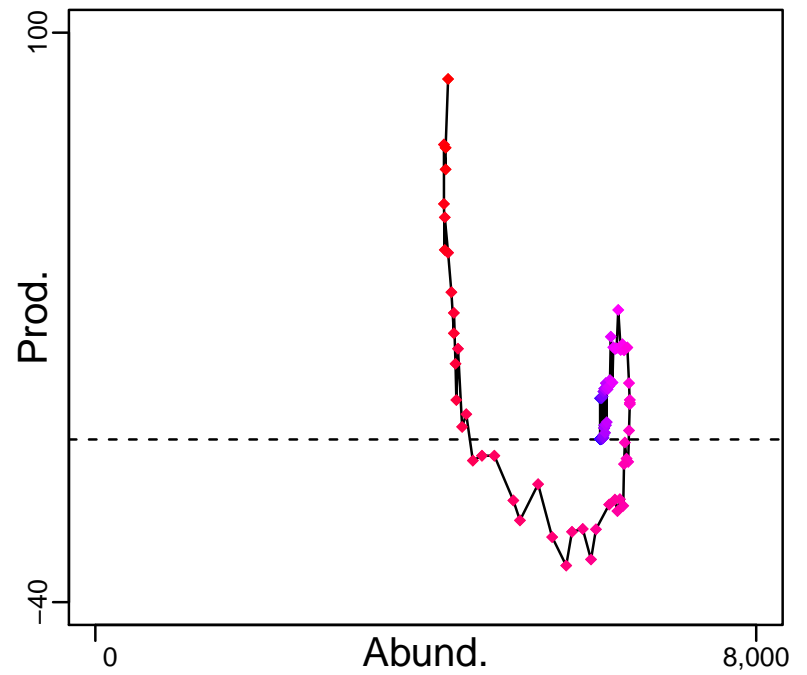
Kobe MGTpref (1916–2013–SISIMP2016)



Spawner Recruit (1916–2013–SISIMP2016)



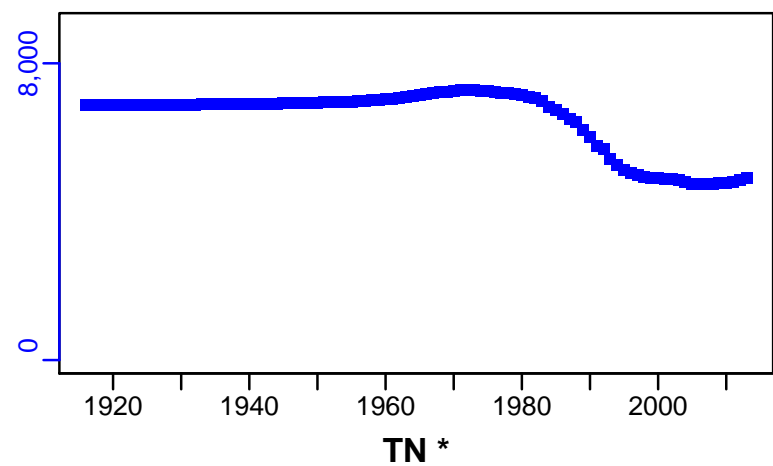
Production (1916–2013–SISIMP2016)



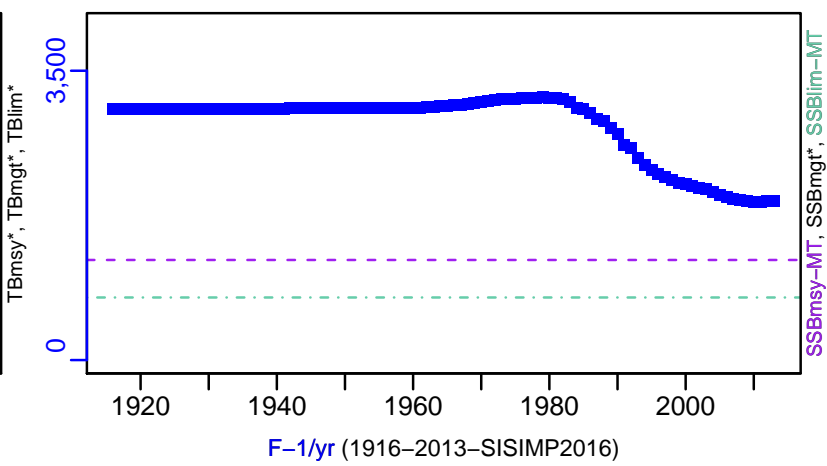
◆ Start Year ◆ End Year * No Data

Aurora rockfish Pacific Coast [AUROCKPCOAST]

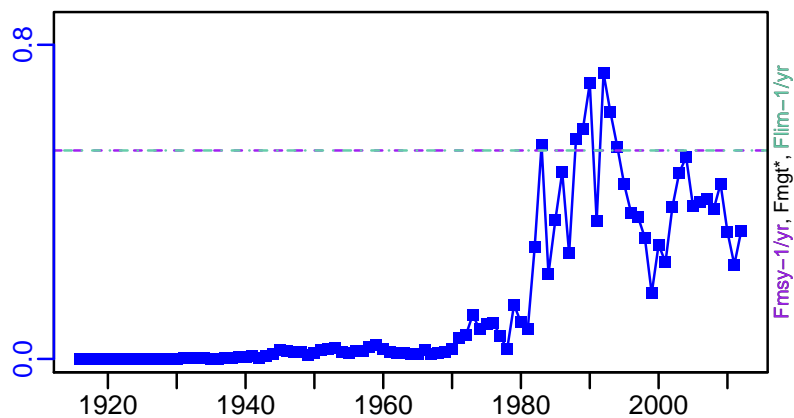
TB-MT (1916–2013–SISIMP2016)



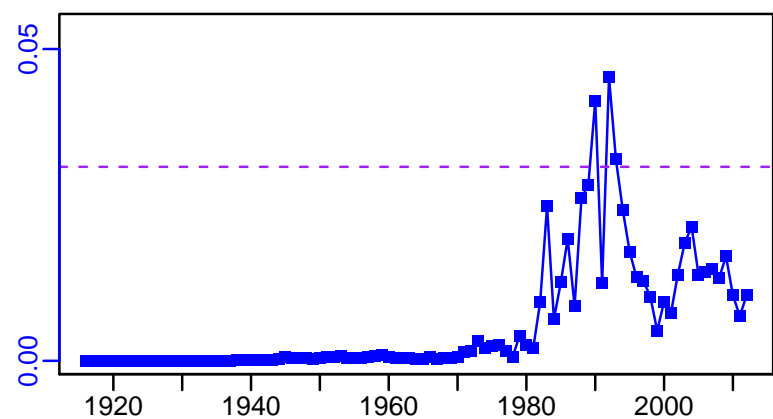
SSB-MT (1916–2013–SISIMP2016)



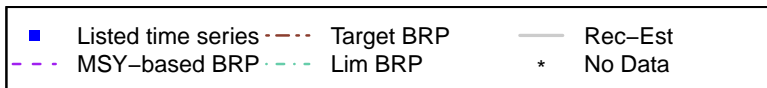
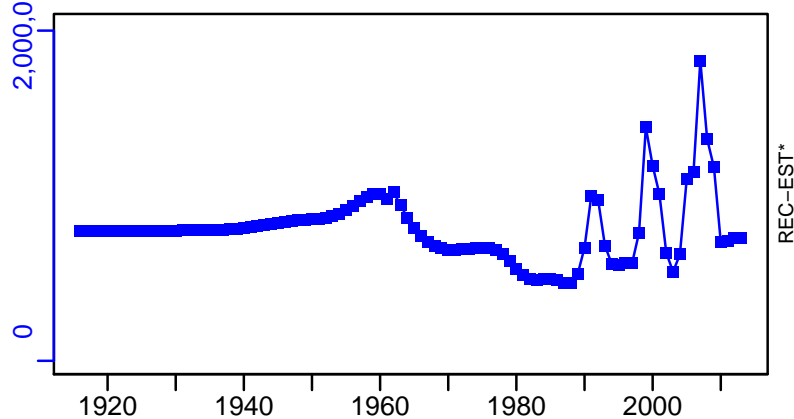
F-1/yr (1916–2013–SISIMP2016)



ER-calc-ratio (1916–2013–SISIMP2016)



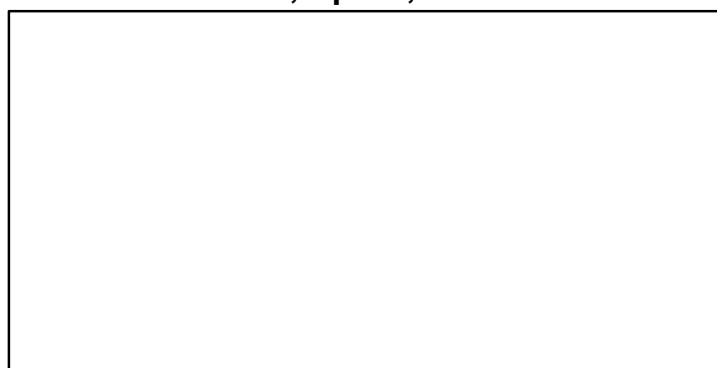
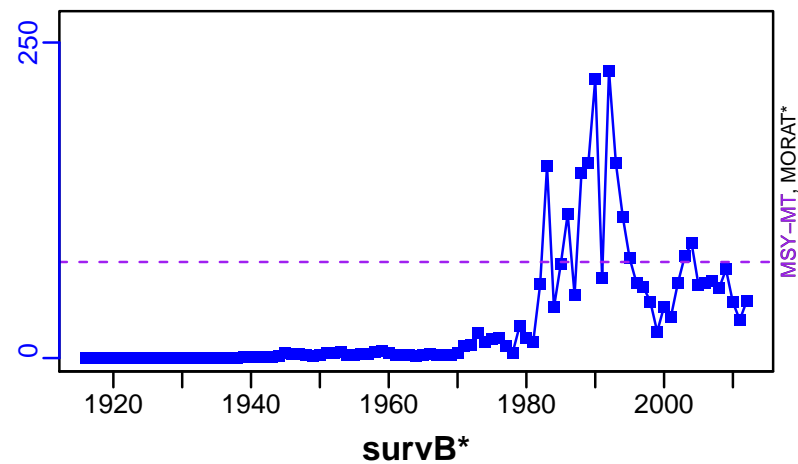
R-E00 (1916–2013–SISIMP2016)



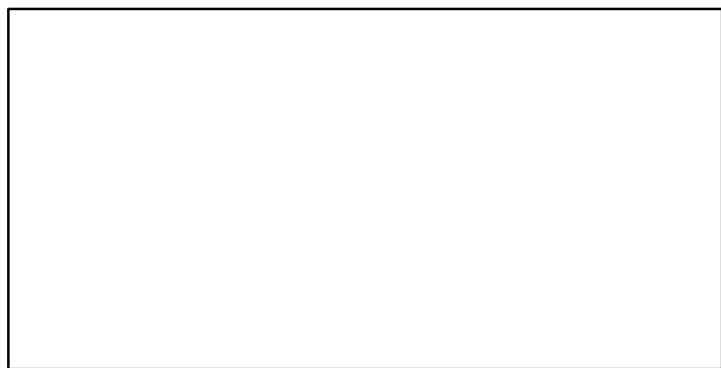
Aurora rockfish Pacific Coast [AUROCKPCOAST]

TC-MT, TL*, RecC* (1916-2013-SISIMP2016)

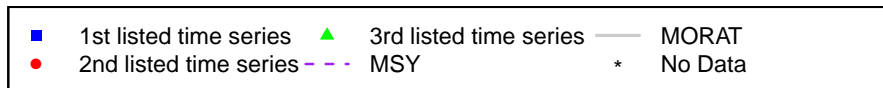
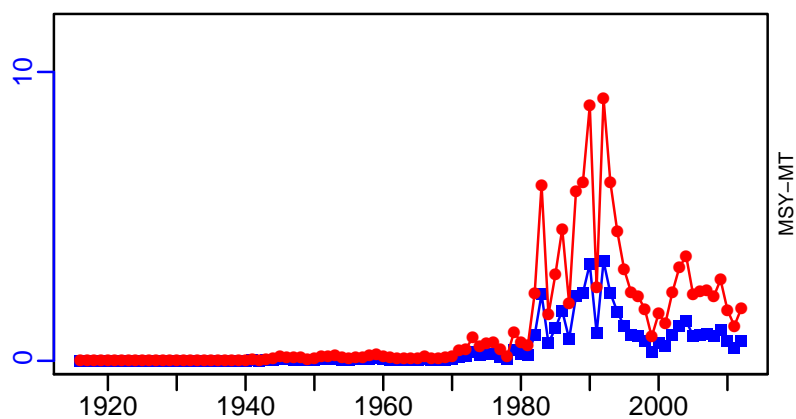
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1916-2013-SISIMP2016)



Blackgill rockfish Pacific Coast [BGROCKPCOAST]

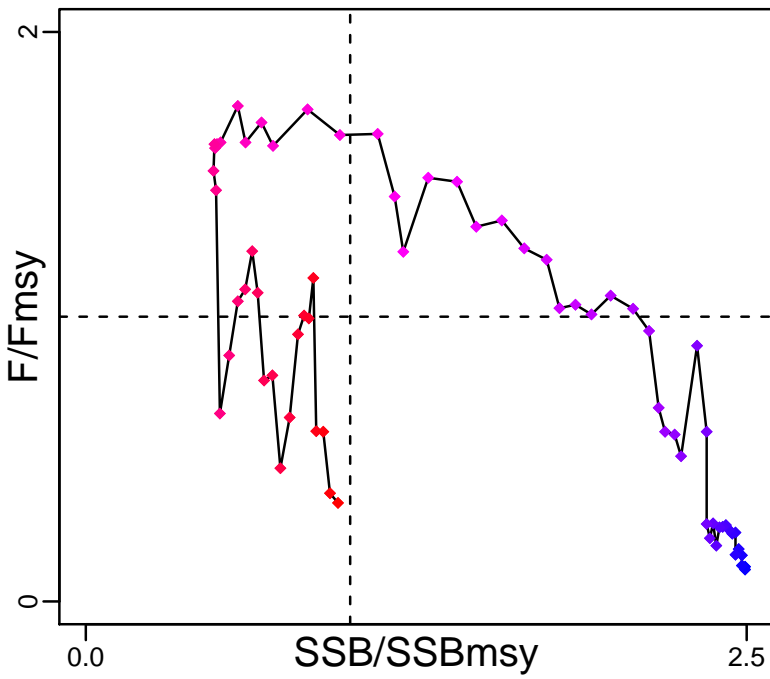
Metadata	
Scientific Name	Sebastes melanostomus
Current Assess ID	NWFSC-BGROCKPCOAST-1950-2017-SISIMP2021
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2011, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-MT	2011	5063
SSBmsy	SSBmsy-E00larvae	2017	8.26×10^{11}
Fmsy	Fmsy-1/yr	2017	0.5
ERmsy	ERmsy-pr-ratio	2011	0.022
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2011	12,927
SSB0	SSB0-E00larvae	2011	1,187,800
MSY	MSY-MT	2017	188
M	M-1/yr	2011	0.07
TBlim	-	-	-
SSBlim	SSBlim-E00larvae	2017	5.16×10^{11}
Flim	Flim-1/yr	2017	0.5
ERlim	-	-	-

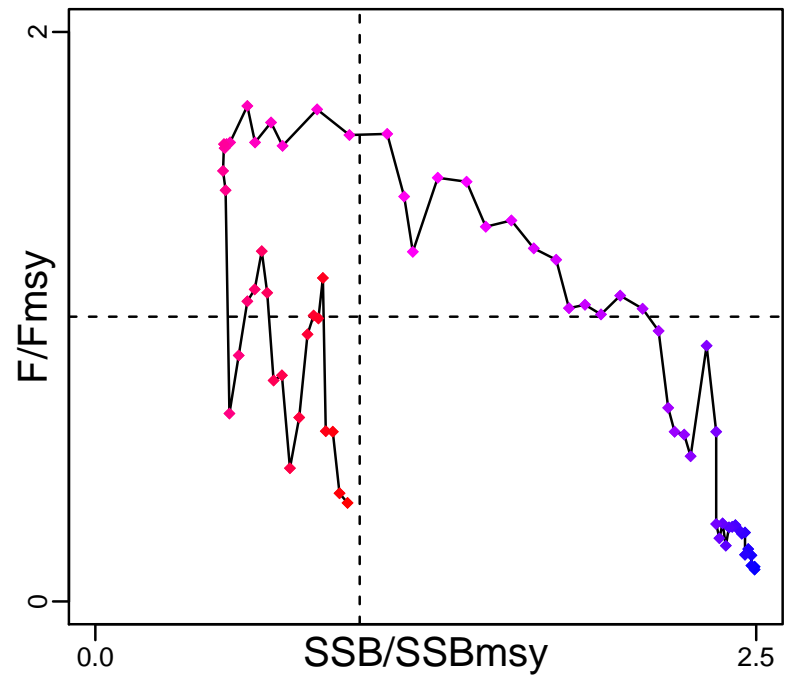
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2017	7910	-	-
SSB	SSB-E00larvae	2017	8.13×10^{11}	-	-
TN	-	-	-	-	-
R	R-E00	2017	2,227,050	-	0
F	F-1/yr	2017	0.173	-	-
ER	ER-calc-ratio	2017	0.005	-	-
TC	TC-MT	2017	39		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-MT	2011	1.302		
SSB/SSBmsy	SSB-E00larvae/SSBmsy-E00larvae	2017	0.984		
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	0.346		
ER/ERmsy	ER-ratio/ERmsy-pr-ratio	2011	1.032		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Blackgill rockfish Pacific Coast [BGROCKPCOAST]

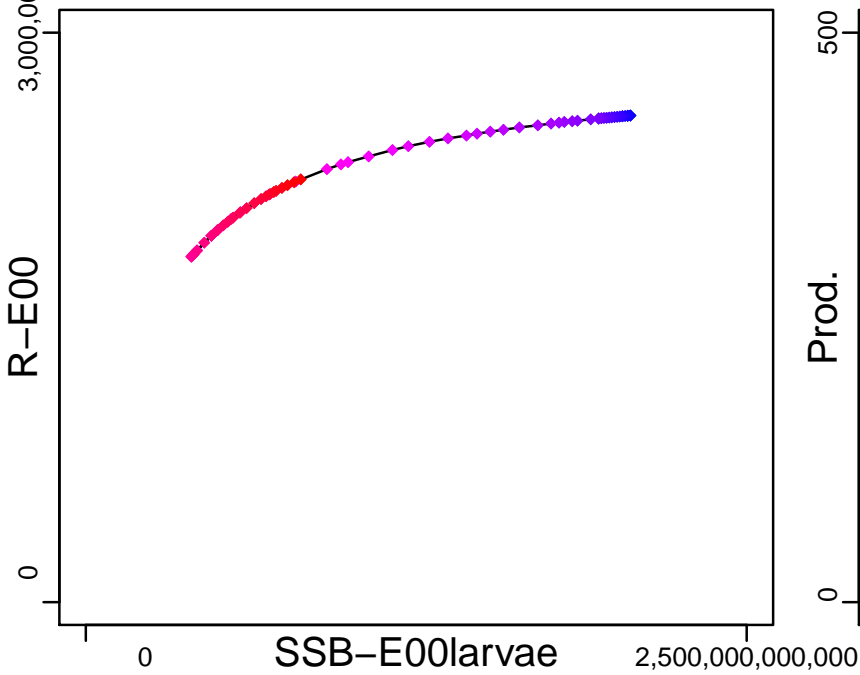
Kobe MSYpref (1950–2017–SISIMP2021)



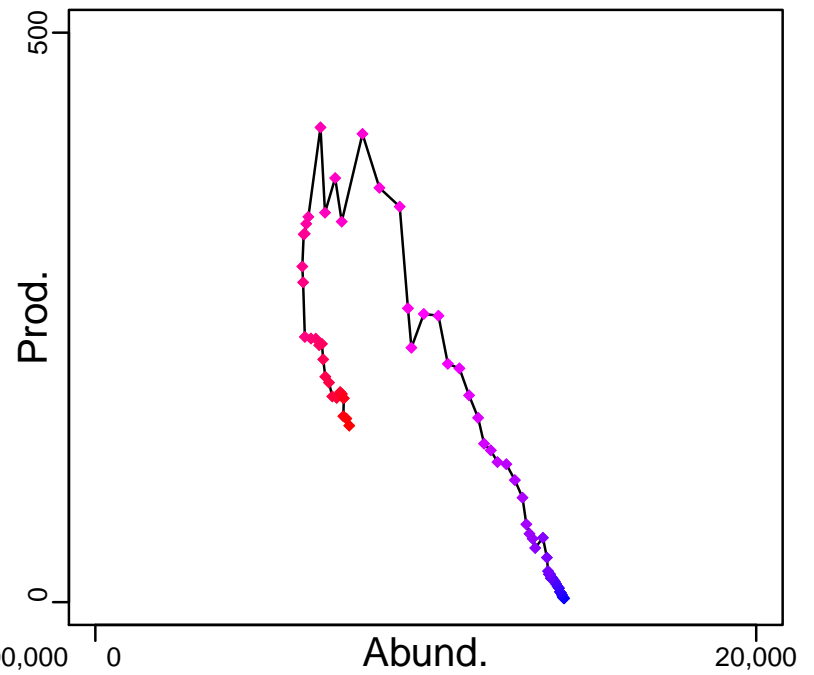
Kobe MGTpref (1950–2017–SISIMP2021)



Spawner Recruit (1950–2017–SISIMP2021)



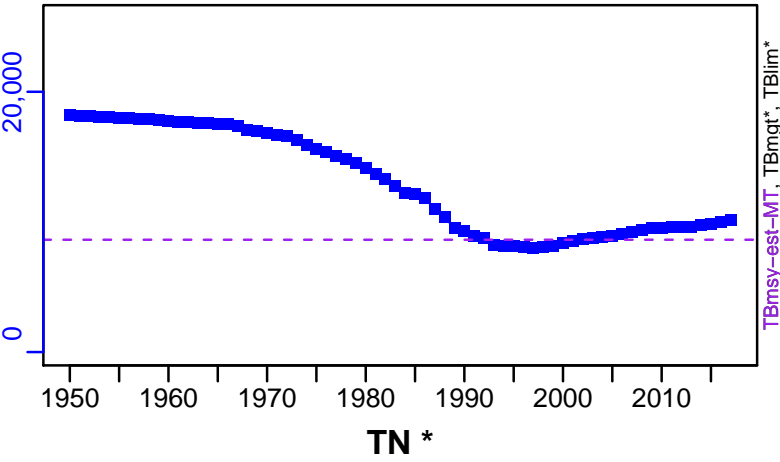
Production (1950–2017–SISIMP2021)



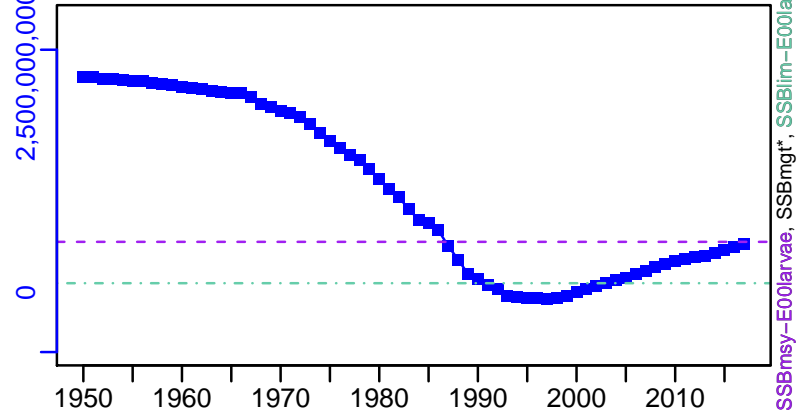
◆ Start Year ◆ End Year * No Data

Blackgill rockfish Pacific Coast [BGROCKPCOAST]

TB-MT (1950–2017–SISIMP2021)



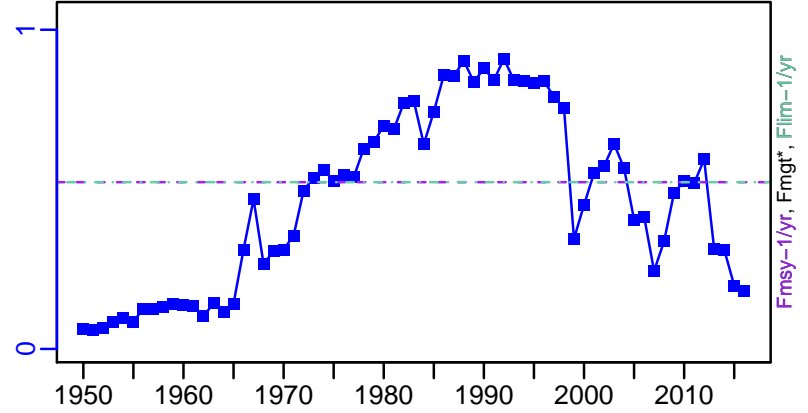
SSB-E00larvae (1950–2017–SISIMP2021)



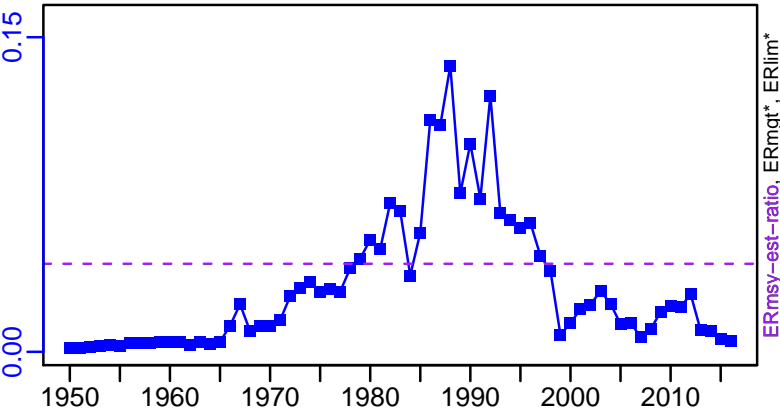
TN *



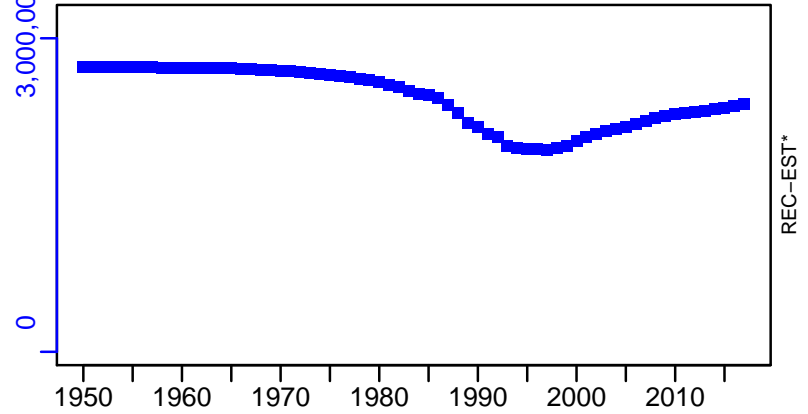
F-1/yr (1950–2017–SISIMP2021)



ER-calc-ratio (1950–2017–SISIMP2021)

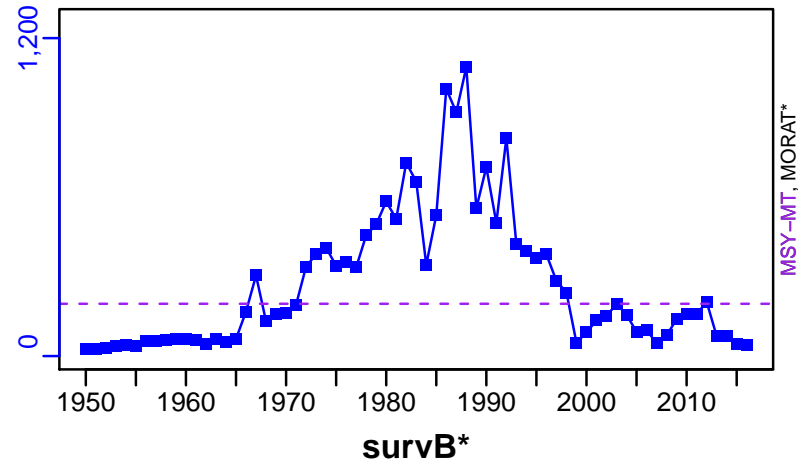


R-E00 (1950–2017–SISIMP2021)



Blackgill rockfish Pacific Coast [BGROCKPCOAST]

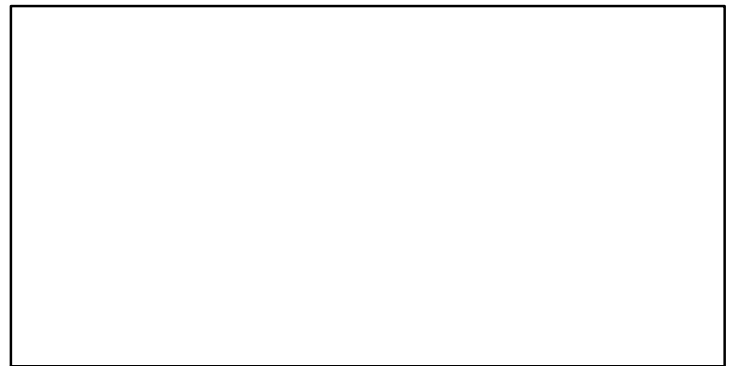
TC-MT, TL*, RecC* (1950–2017–SISIMP2021)



TAC*, Cpair*, Cadv*



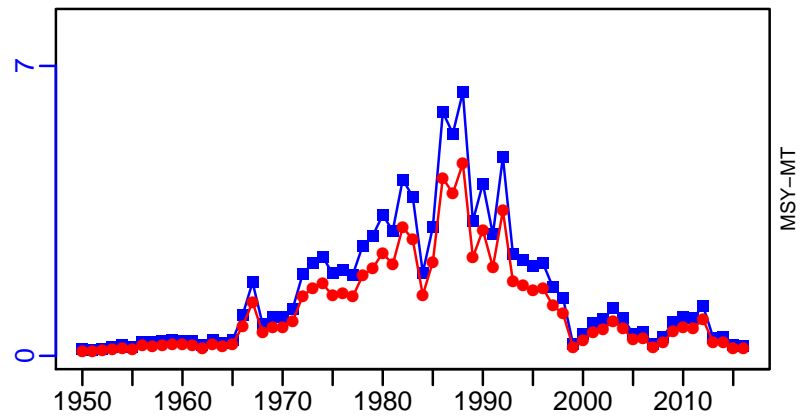
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1950–2017–SISIMP2021)



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

Black rockfish California [BLACKROCKCAL]

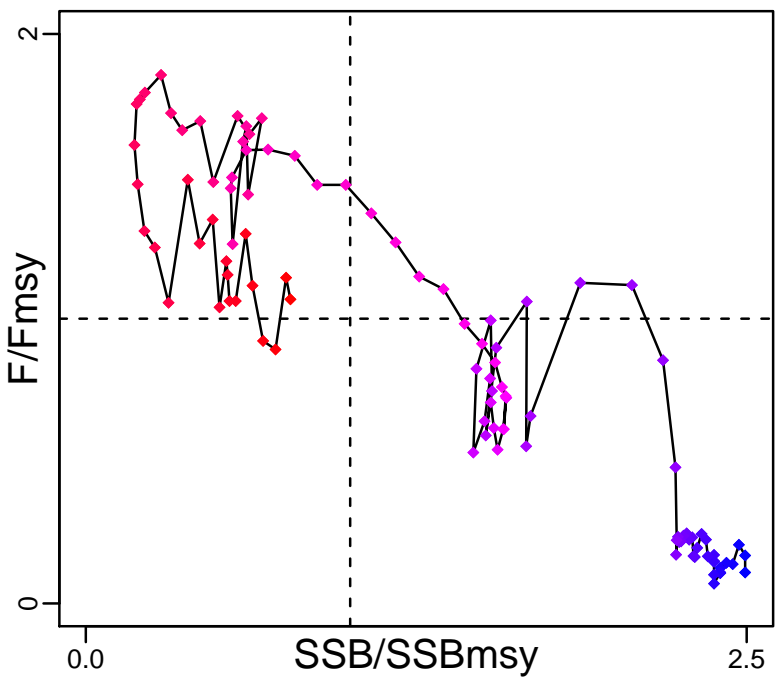
Metadata	
Scientific Name	Sebastes melanops
Current Assess ID	SWFSC-BLACKROCKCAL-1916-2015-SISIMP2016
Area	California
Management Authority	National Marine Fisheries Service, US national management
Assessor	Southwest Fisheries Science Center
Asmts in RAM	2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2015	425
Fmsy	Fmsy-1/yr	2015	0.5
ERmsy	ERmsy-conv-ratio	2015	0.082
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2015	343
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2015	266
Flim	Flim-1/yr	2015	0.5
ERlim	-	-	-

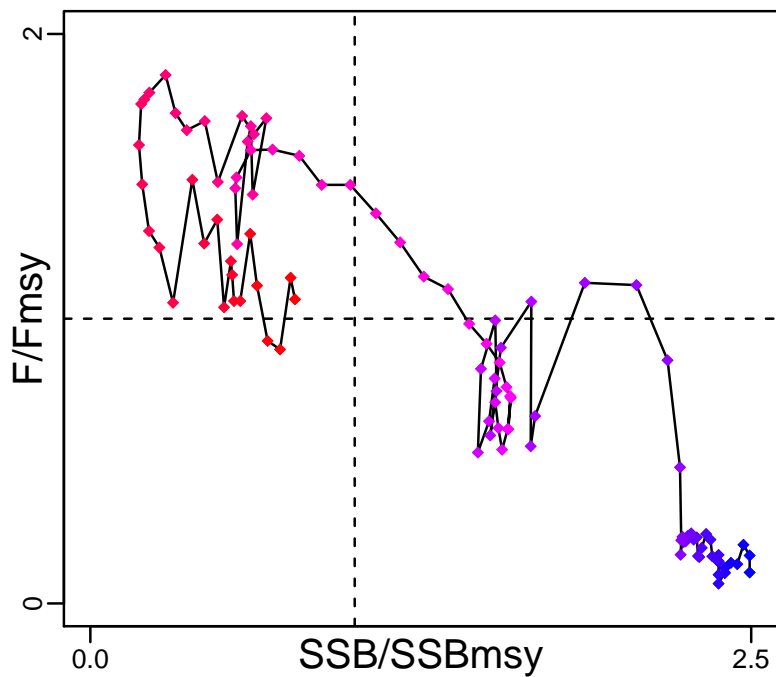
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2015	5770	-	3+
SSB	SSB-MT	2015	353	Females	7+
TN	-	-	-	-	-
R	R-E00	2015	1,750,000	-	0
F	F-1/yr	2015	0.534	-	-
ER	ER-calc-ratio	2015	0.068	-	-
TC	TC-MT	2015	380		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2015	0.831		
F/Fmsy	F-1/yr/Fmsy-1/yr	2015	1.068		
ER/ERmsy	ER-calc-ratio/ERmsy-conv-ratio	2015	0.829		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Black rockfish California [BLACKROCKCAL]

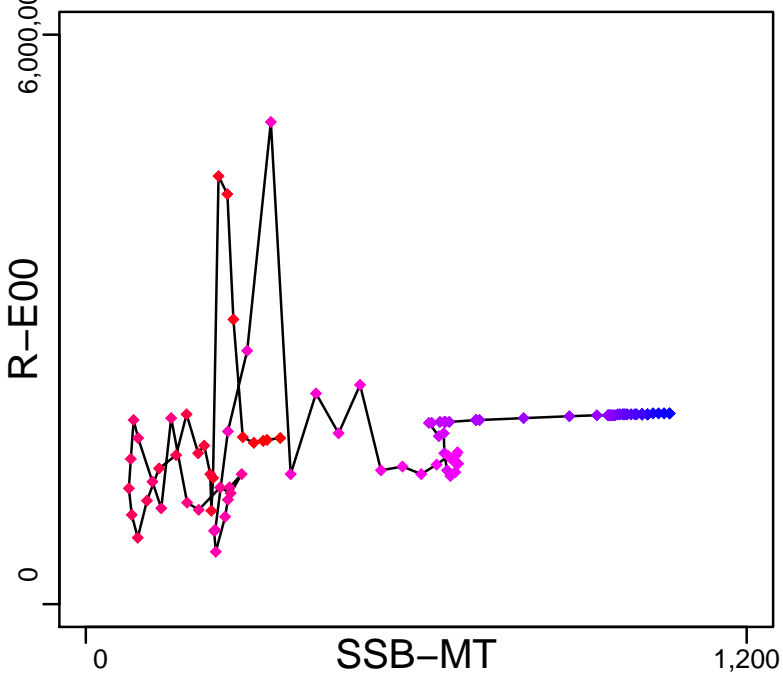
Kobe MSYpref (1916–2015–SISIMP2016)



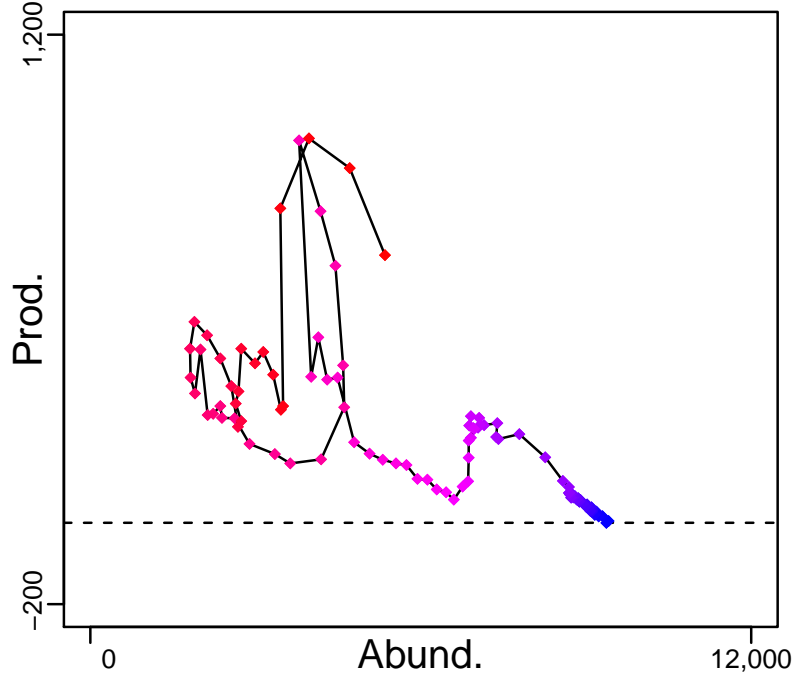
Kobe MGTpref (1916–2015–SISIMP2016)



Spawner Recruit (1916–2015–SISIMP2016)



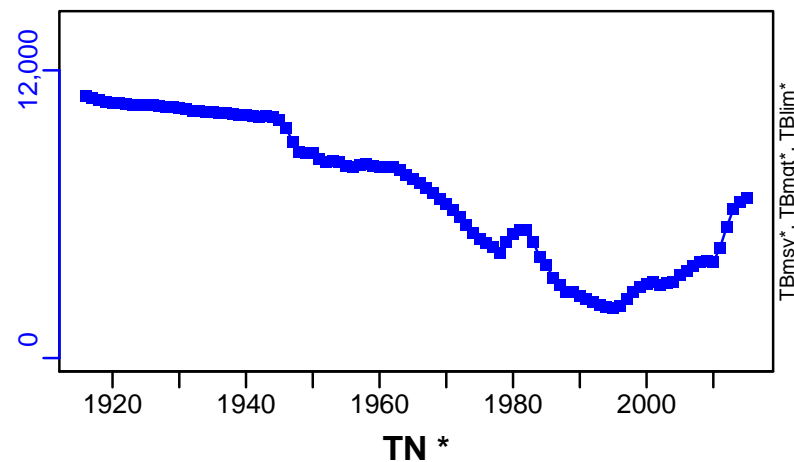
Production (1916–2015–SISIMP2016)



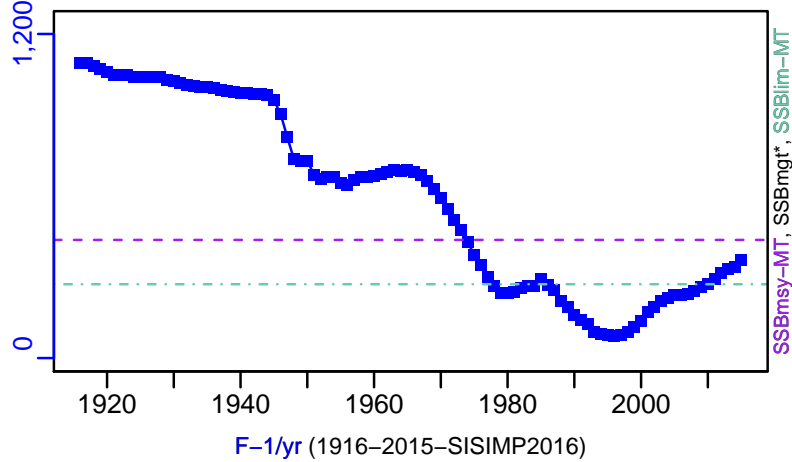
◆ Start Year ◆ End Year * No Data

Black rockfish California [BLACKROCKCAL]

TB-MT (1916-2015-SISIMP2016)



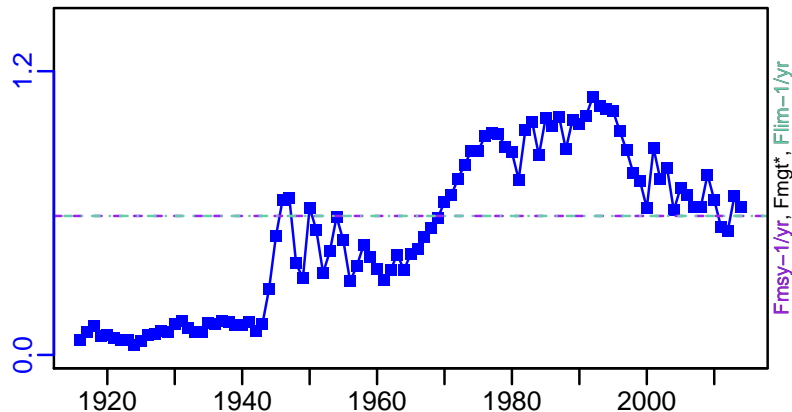
SSB-MT (1916-2015-SISIMP2016)



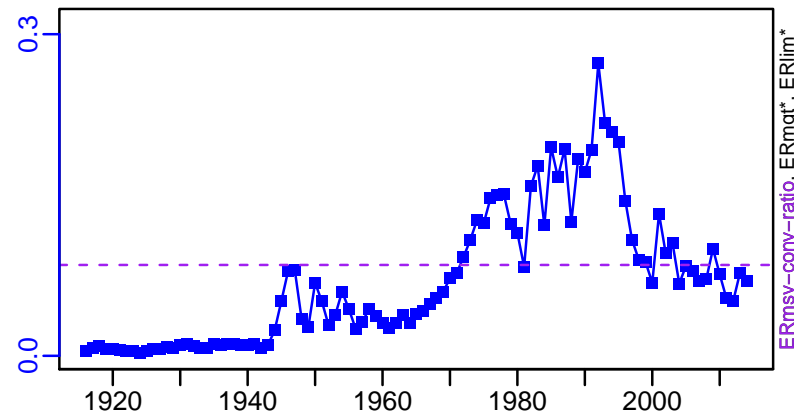
TN *



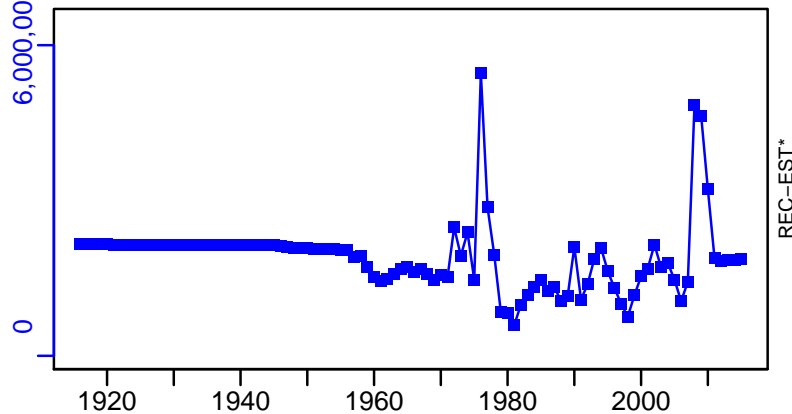
F-1/yr (1916-2015-SISIMP2016)



ER-calc-ratio (1916-2015-SISIMP2016)

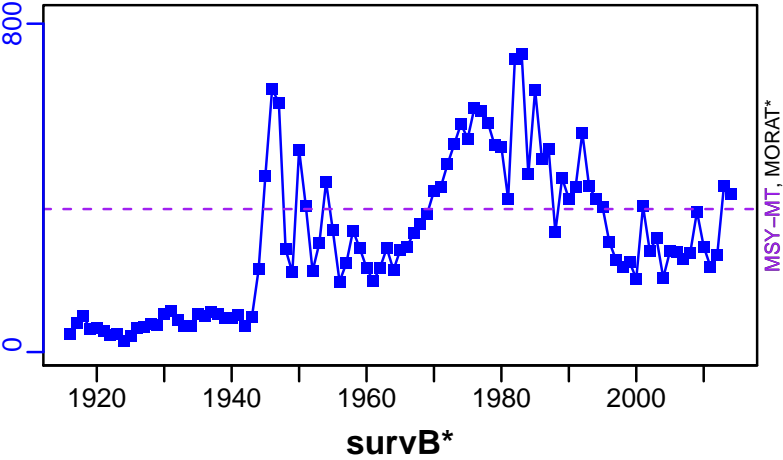


R-E00 (1916-2015-SISIMP2016)



Black rockfish California [BLACKROCKCAL]

TC-MT, TL*, RecC* (1916-2015-SISIMP2016)



TAC*, Cpair*, Cadv*



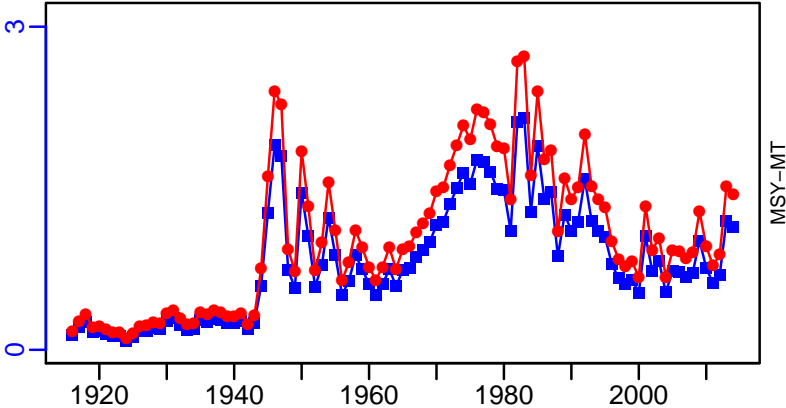
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1916-2015-SISIMP2016)



Black rockfish Oregon Coast [BLACKROCKORECOAST]

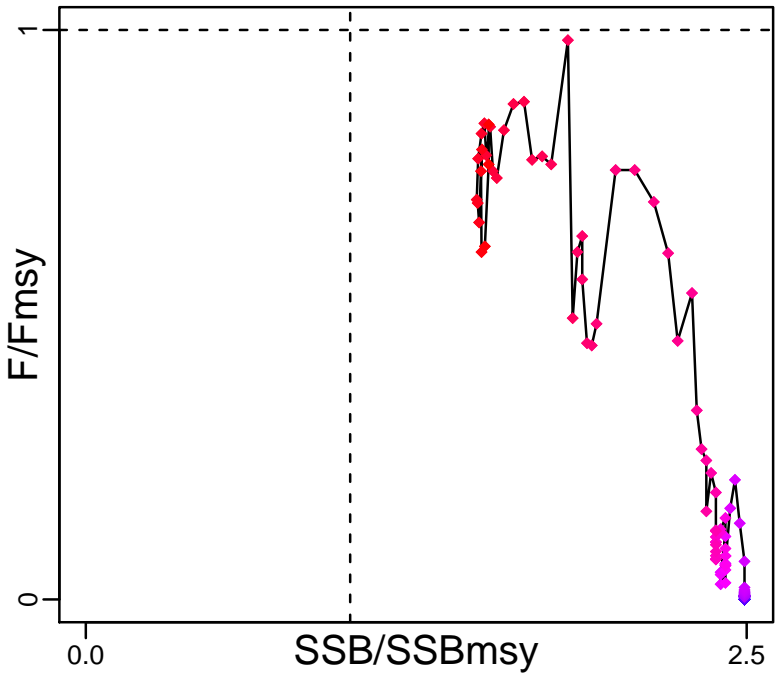
Metadata	
Scientific Name	Sebastes melanops
Current Assess ID	NWFSC-BLACKROCKORECOAST-1892-2015-SISIMP2016
Area	Oregon Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2015	554
Fmsy	Fmsy-1/yr	2015	0.5
ERmsy	ERmsy-conv-ratio	2015	0.095
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2015	518
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2015	346
Flim	Flim-1/yr	2015	0.5
ERlim	-	-	-

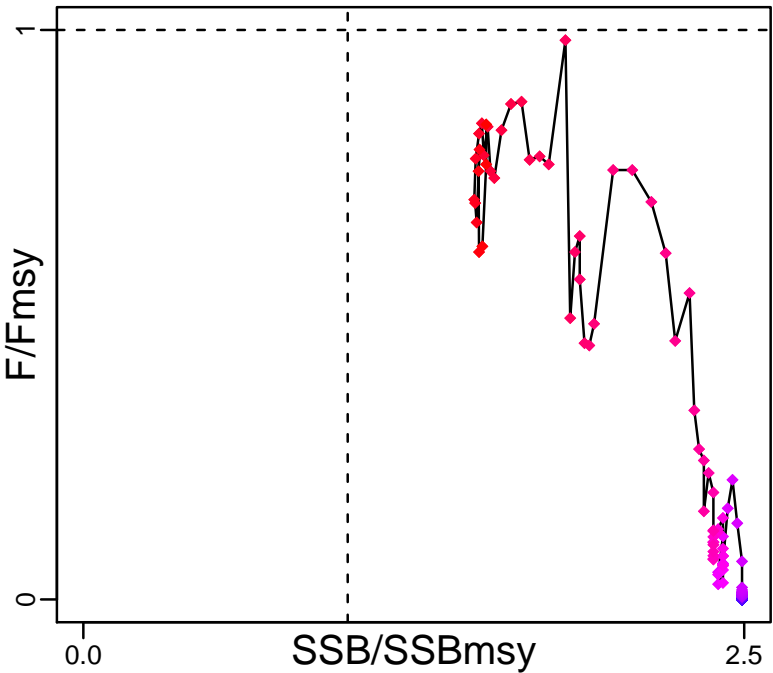
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2015	8060	-	3+
SSB	SSB-MT	2015	838	Females	7+
TN	-	-	-	-	-
R	R-E00	2015	3,510,000	-	0
F	F-1/yr	2015	0.417	-	-
ER	ER-calc-ratio	2015	0.06	-	-
TC	TC-MT	2015	485		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2015	1.513		
F/Fmsy	F-1/yr/Fmsy-1/yr	2015	0.834		
ER/ERmsy	ER-calc-ratio/ERmsy-conv-ratio	2015	0.629		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Black rockfish Oregon Coast [BLACKROCKORECOAST]

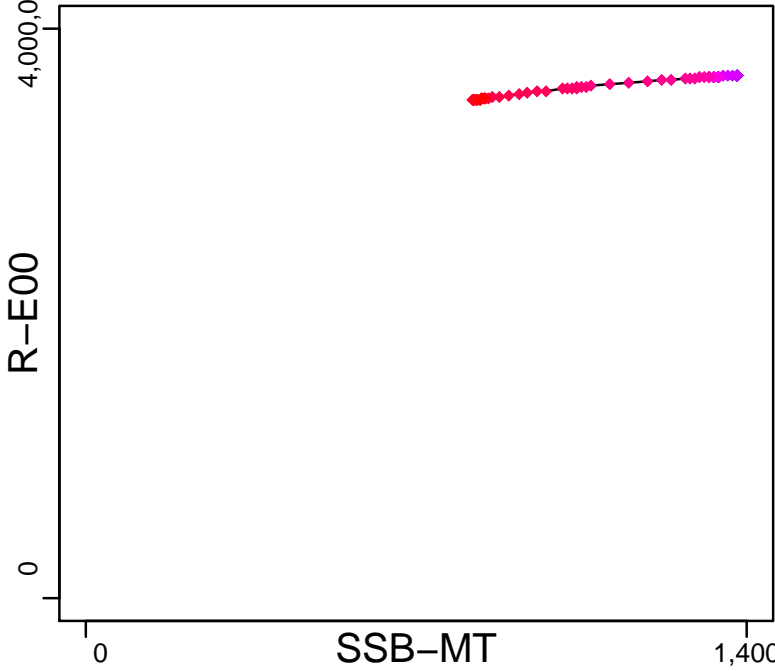
Kobe MSYpref (1892–2015–SISIMP2016)



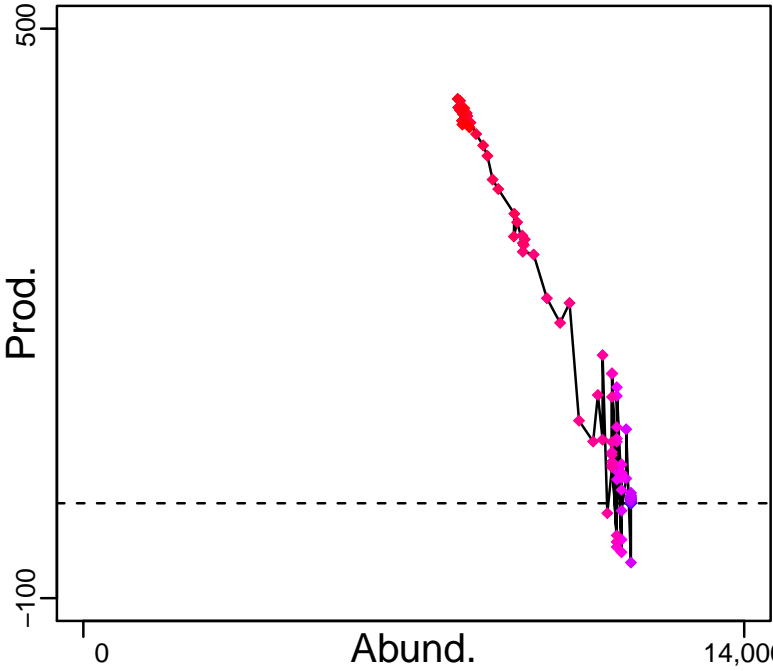
Kobe MGTpref (1892–2015–SISIMP2016)



Spawner Recruit (1892–2015–SISIMP2016)



Production (1892–2015–SISIMP2016)

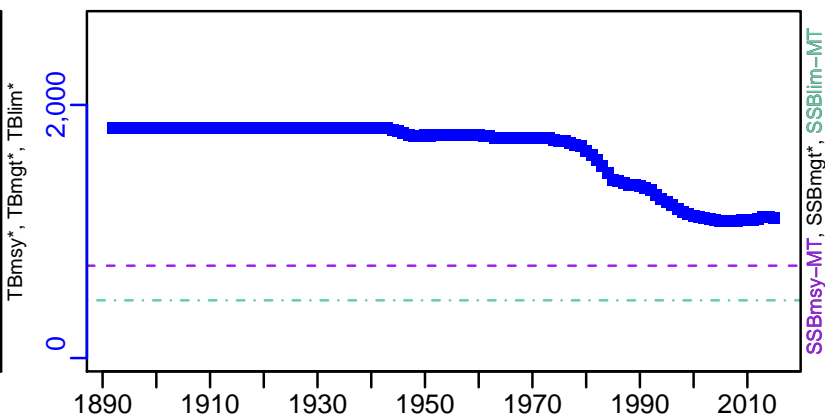
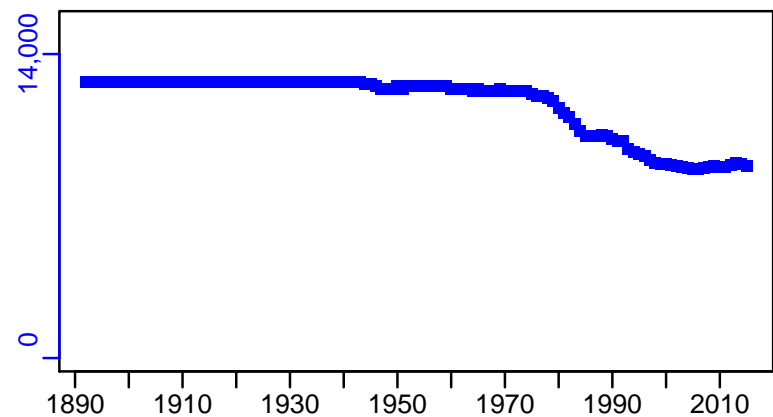


◆ Start Year ◆ End Year * No Data

Black rockfish Oregon Coast [BLACKROCKORECOAST]

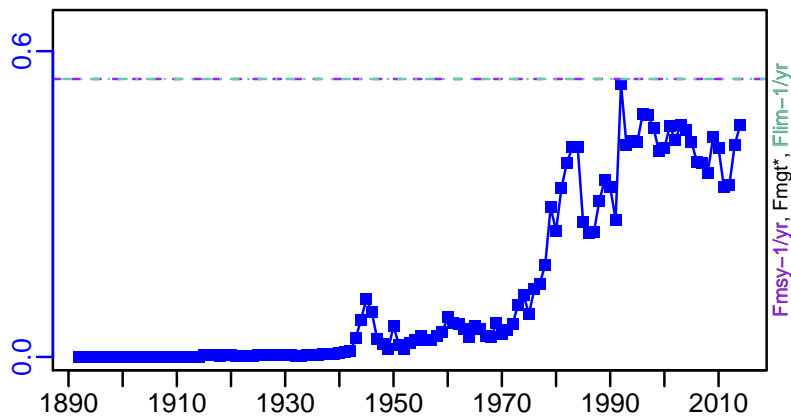
TB-MT (1892-2015-SISIMP2016)

SSB-MT (1892-2015-SISIMP2016)



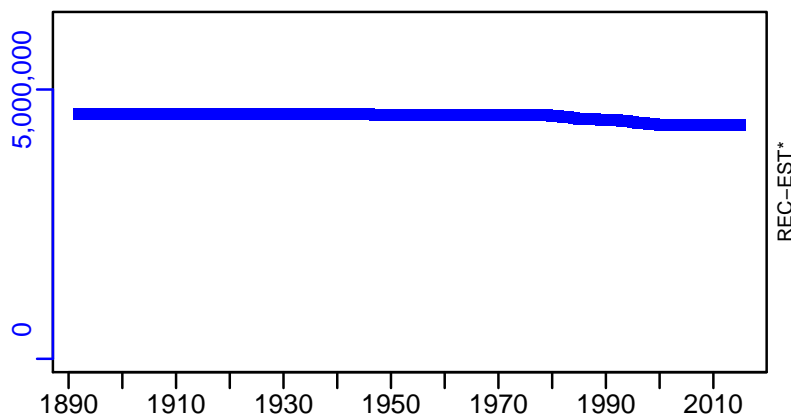
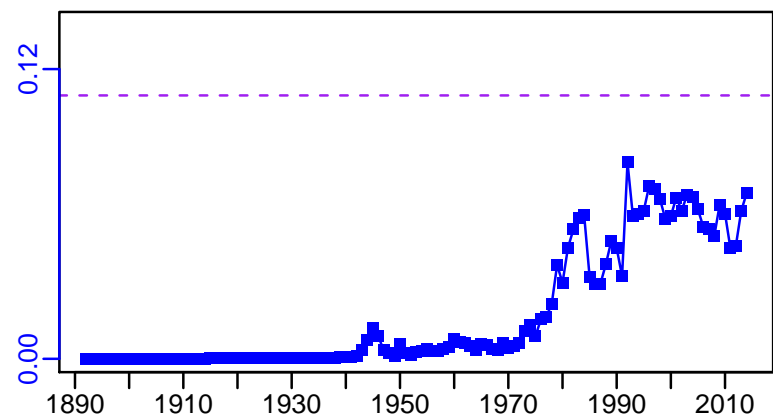
TN *

F-1/yr (1892-2015-SISIMP2016)



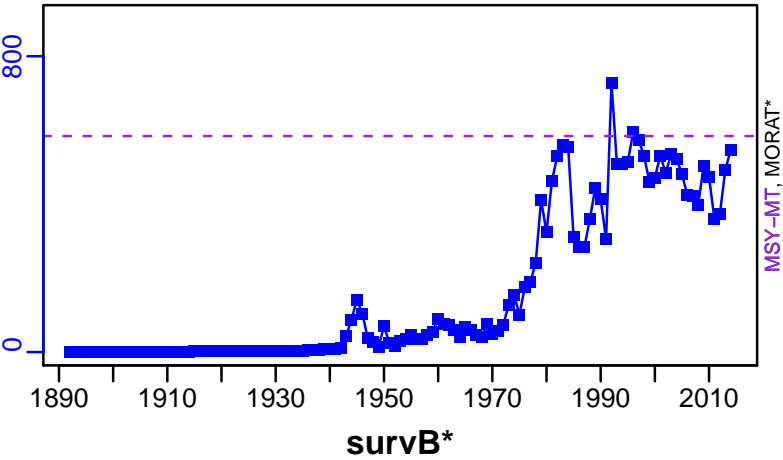
ER-calc-ratio (1892-2015-SISIMP2016)

R-E00 (1892-2015-SISIMP2016)



Black rockfish Oregon Coast [BLACKROCKORECOAST]

TC-MT, TL*, RecC* (1892-2015-SISIMP2016)



TAC*, Cpair*, Cadv*



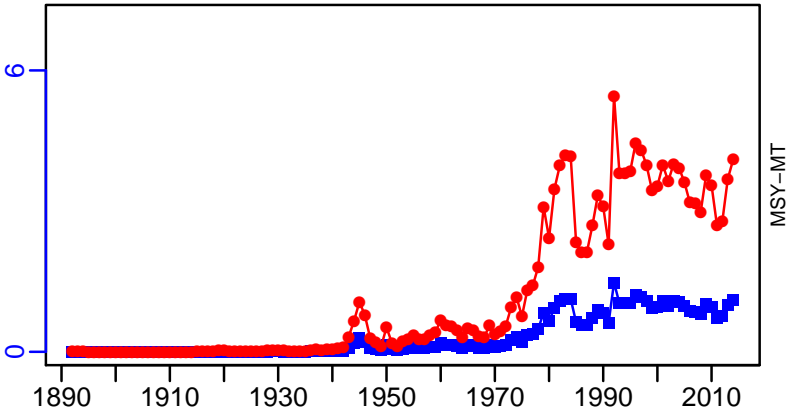
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1892-2015-SISIMP2016)



Black rockfish Washington [BLACKROCKWASH]

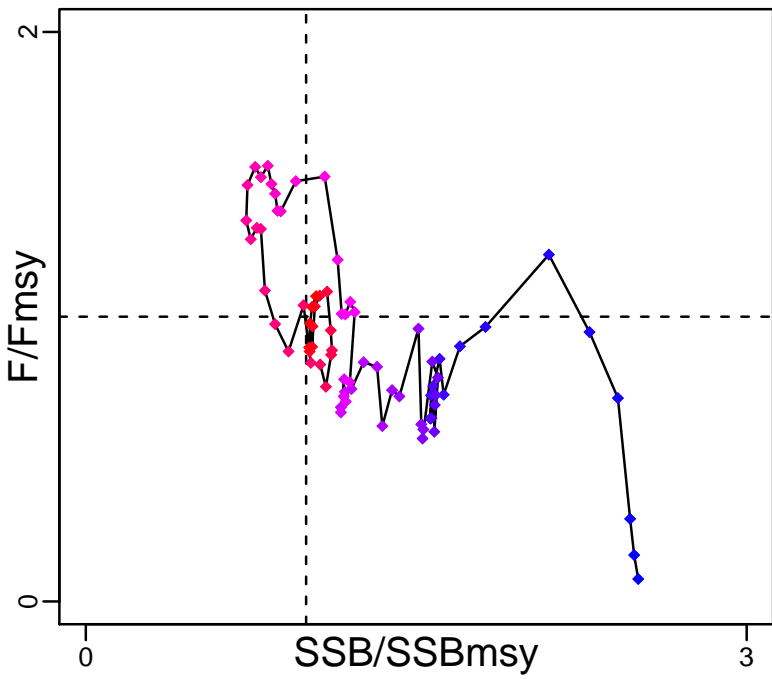
Metadata	
Scientific Name	Sebastes melanops
Current Assess ID	NWFSC-BLACKROCKWASH-1940-2015-SISIMP2016
Area	Washington
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2015	542
Fmsy	Fmsy-1/yr	2015	0.5
ERmsy	ERmsy-est-ratio	2015	0.052
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2015	276
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2015	339
Flim	Flim-1/yr	2015	0.5
ERlim	-	-	-

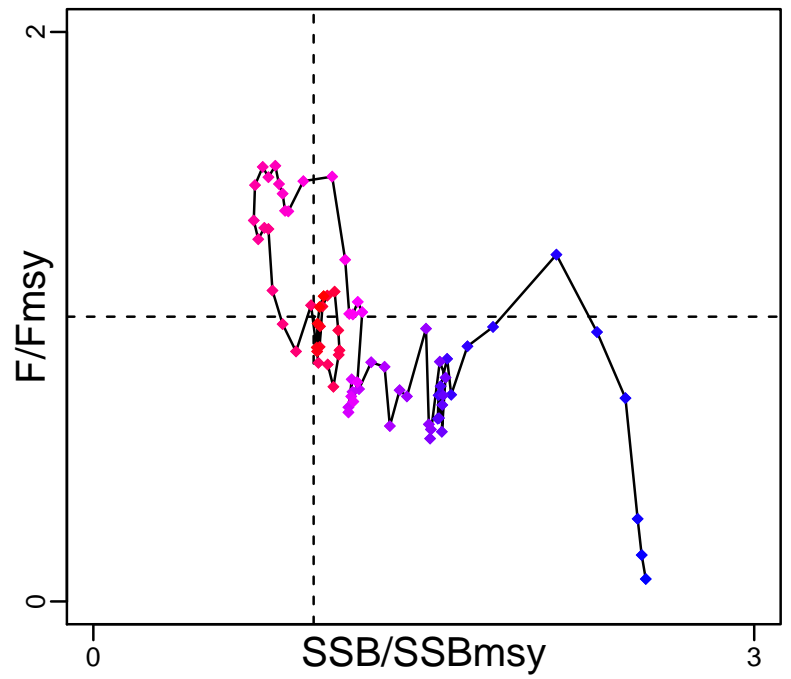
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2015	5640	-	3+
SSB	SSB-MT	2015	582	Females	7+
TN	-	-	-	-	-
R	R-E00	2015	1,910,000	-	0
F	F-1/yr	2015	0.536	-	-
ER	ER-calc-ratio	2015	0.063	-	-
TC	TC-MT	2015	356		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2015	1.073		
F/Fmsy	F-1/yr/Fmsy-1/yr	2015	1.072		
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2015	1.215		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Black rockfish Washington [BLACKROCKWASH]

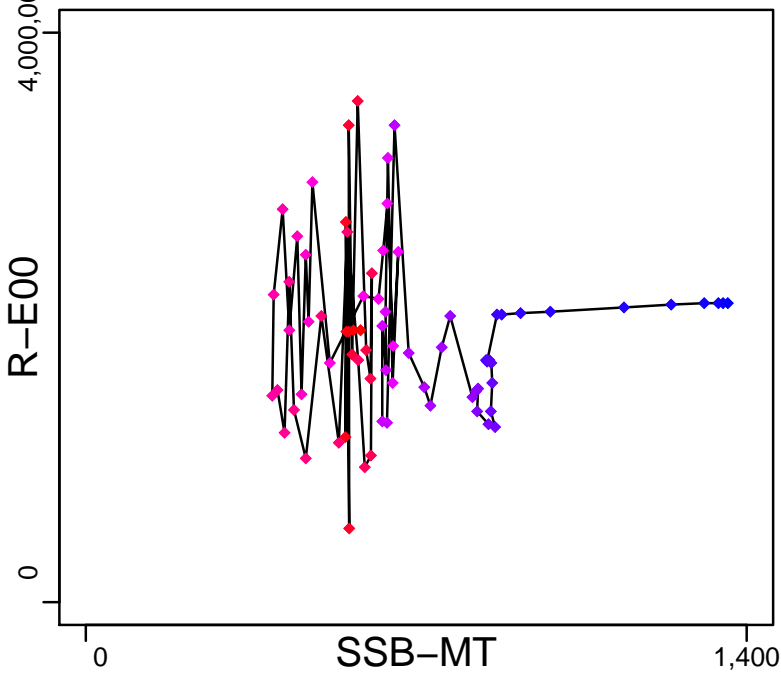
Kobe MSYpref (1940–2015–SISIMP2016)



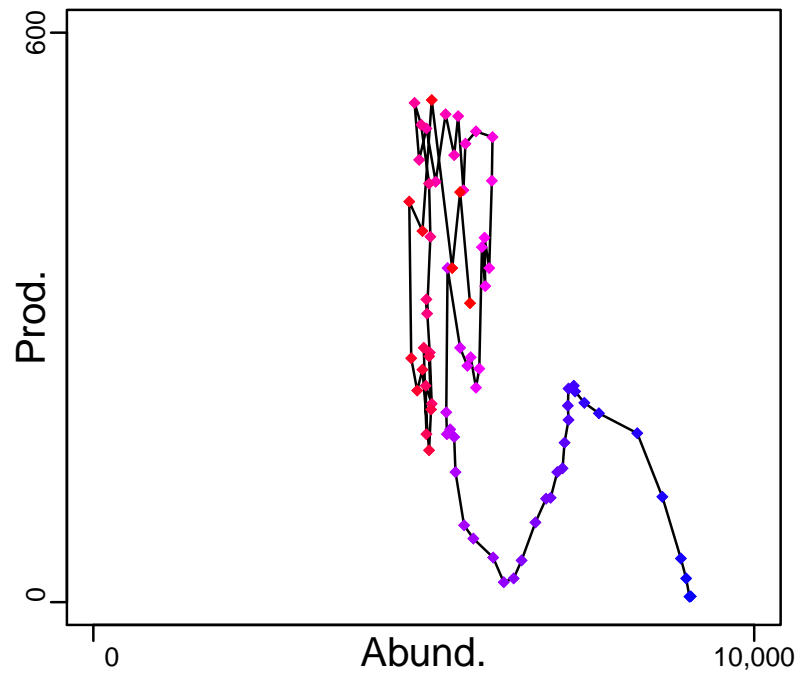
Kobe MGTpref (1940–2015–SISIMP2016)



Spawner Recruit (1940–2015–SISIMP2016)



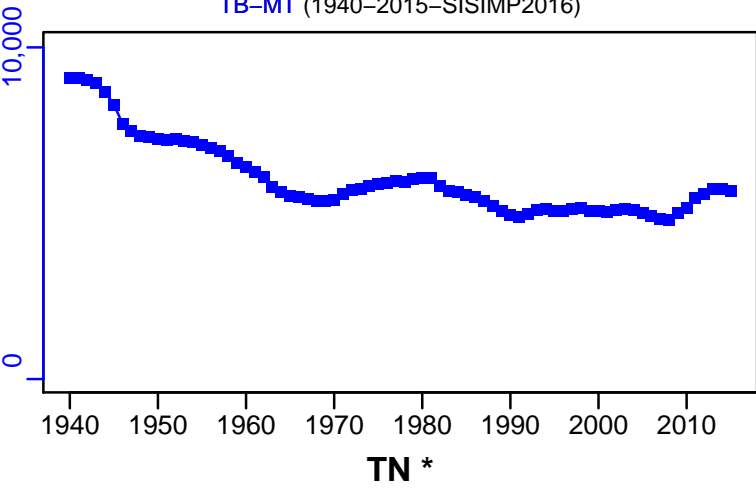
Production (1940–2015–SISIMP2016)



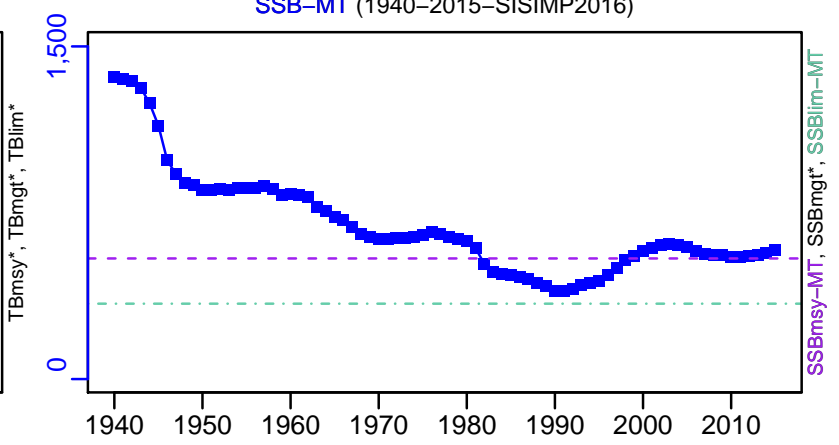
◆ Start Year ◆ End Year * No Data

Black rockfish Washington [BLACKROCKWASH]

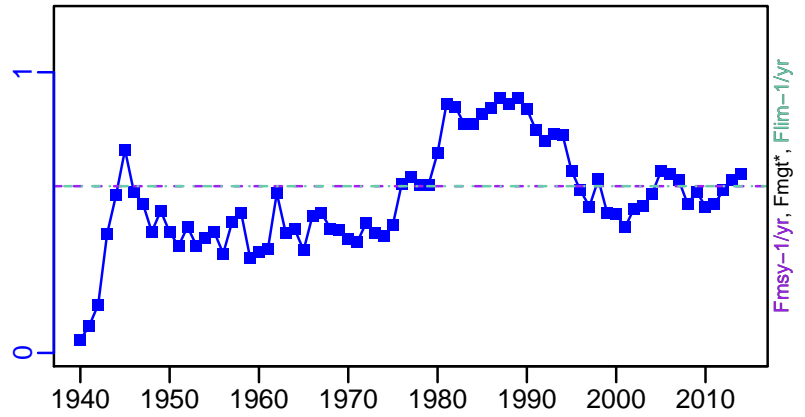
TB-MT (1940–2015–SISIMP2016)



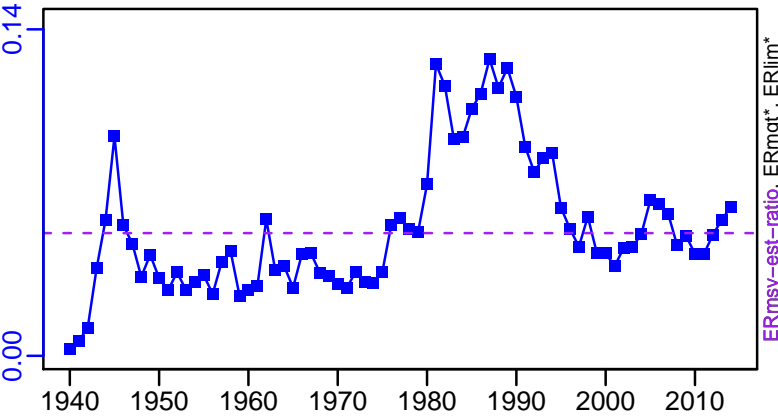
SSB-MT (1940–2015–SISIMP2016)



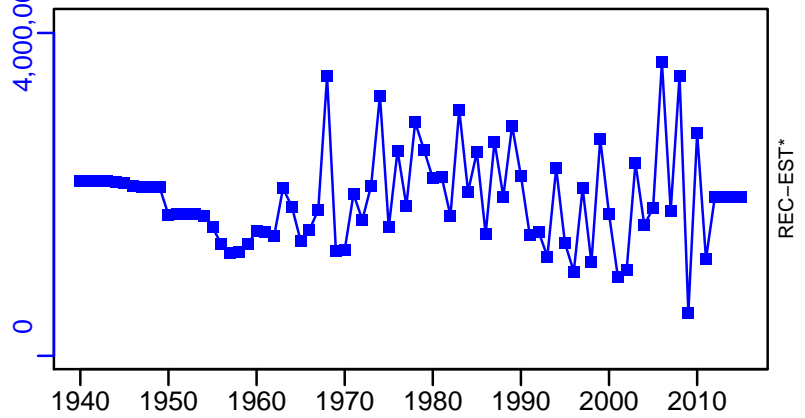
F-1/yr (1940–2015–SISIMP2016)



ER-calc-ratio (1940–2015–SISIMP2016)

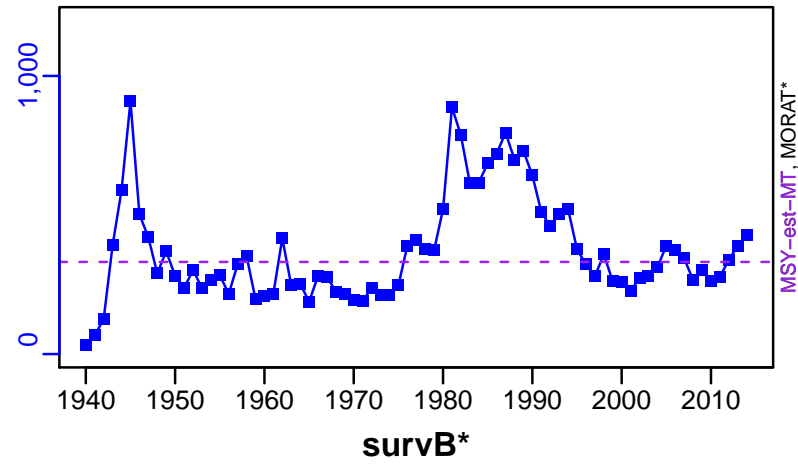


R-E00 (1940–2015–SISIMP2016)



Black rockfish Washington [BLACKROCKWASH]

TC-MT, TL*, RecC* (1940–2015–SISIMP2016)



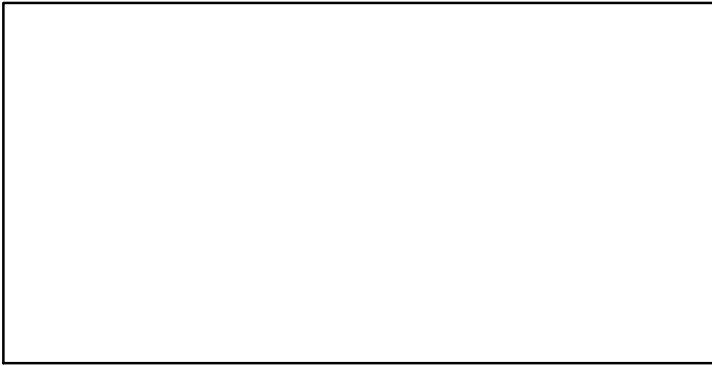
TAC*, Cpair*, Cadv*



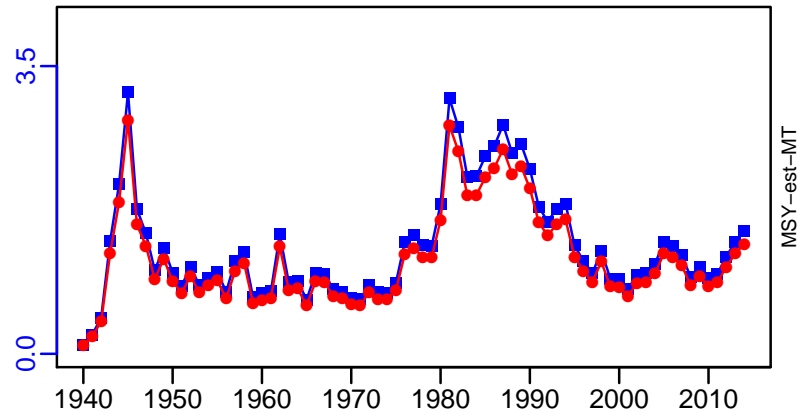
CPUE*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1940–2015–SISIMP2016)



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

Blue rockfish California [BLUEROCKCAL]

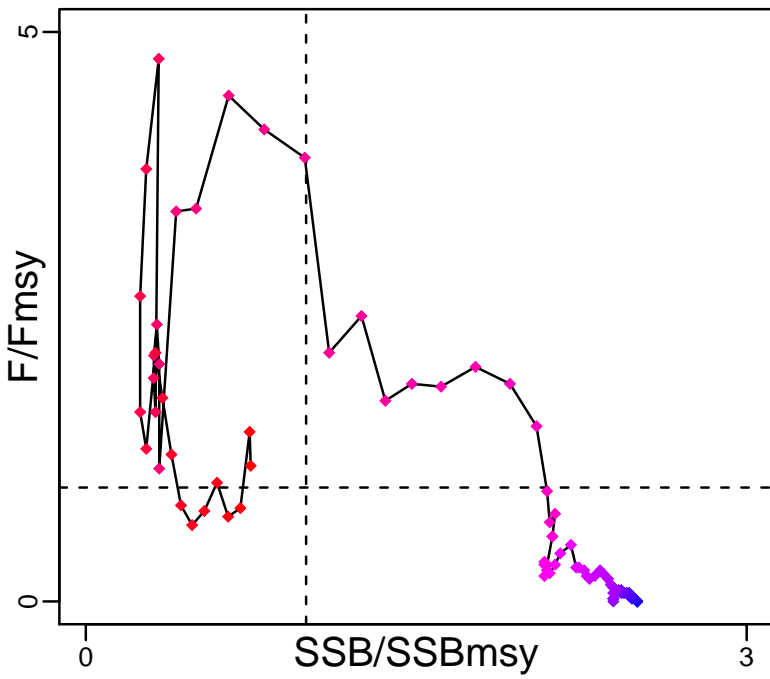
Metadata	
Scientific Name	Sebastes mystinus
Current Assess ID	NWFSC-BLUEROCKCAL-1916-2007-BRANCH
Area	California
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2007

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2007	5037
SSBmsy	SSBmsy-pr-E00larvae	2007	8.31×10^8
Fmsy	Fmsy-pr-1/yr	2007	0.04
ERmsy	ERmsy-conv-ratio	2007	0.057
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2007	13,223
SSB0	SSB0-MT	2007	2077
MSY	MSY-MT	2007	275
M	M-1/yr	2007	0.12
TBlim	TBlim-MT	2007	205
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

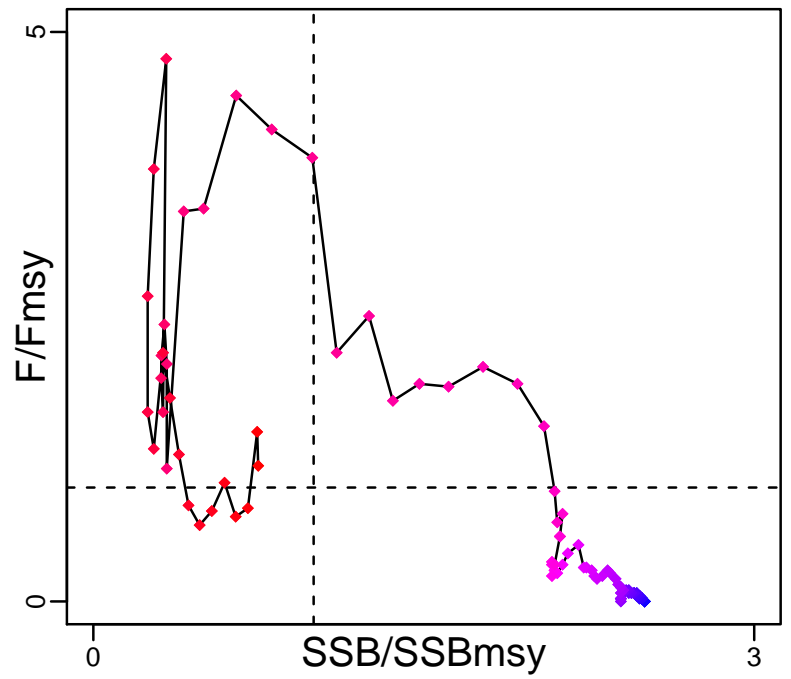
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2007	5450	-	1+
SSB	SSB-E00larvae	2007	6.22×10^8	Females	6+
TN	-	-	-	-	-
R	R-E00	2007	2,260,000	-	0
F	F-1/yr	2007	0.048	Both	1+
ER	ER-ratio	2007	0.048	-	-
TC	TC-MT	2007	263		
TL	-	-	-		
TB/TBmsy	TB-MT/(TB0-MT*0.368)	2007	1.12		
SSB/SSBmsy	SSB-E00larvae/SSBmsy-pr-E00larvae	2007	0.748		
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2007	1.191		
ER/ERmsy	ER-ratio/ERmsy-conv-ratio	2007	0.855		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Blue rockfish California [BLUEROCKCAL]

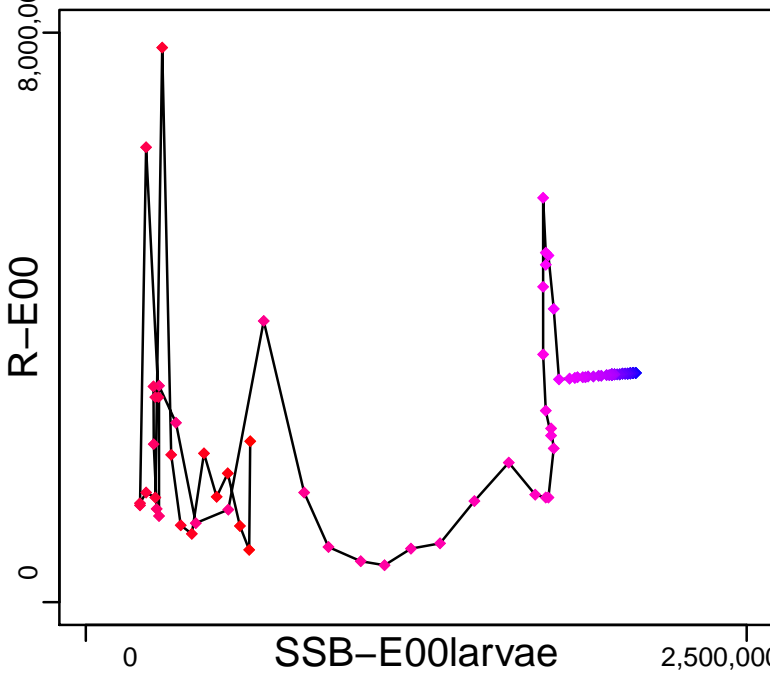
Kobe MSYpref (1916–2007–BRANCH)



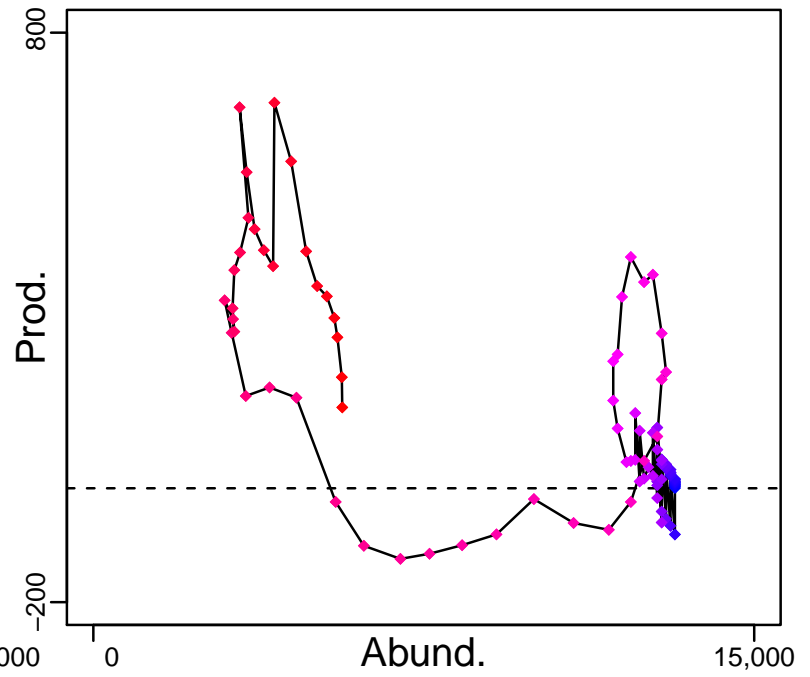
Kobe MGTpref (1916–2007–BRANCH)



Spawner Recruit (1916–2007–BRANCH)



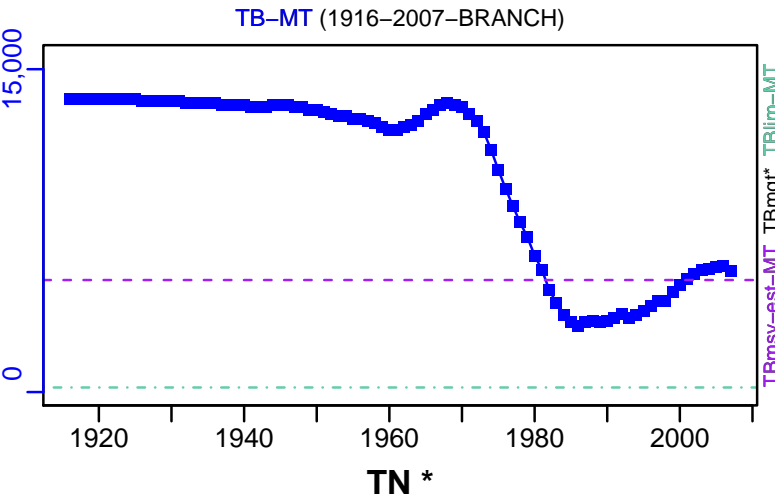
Production (1916–2007–BRANCH)



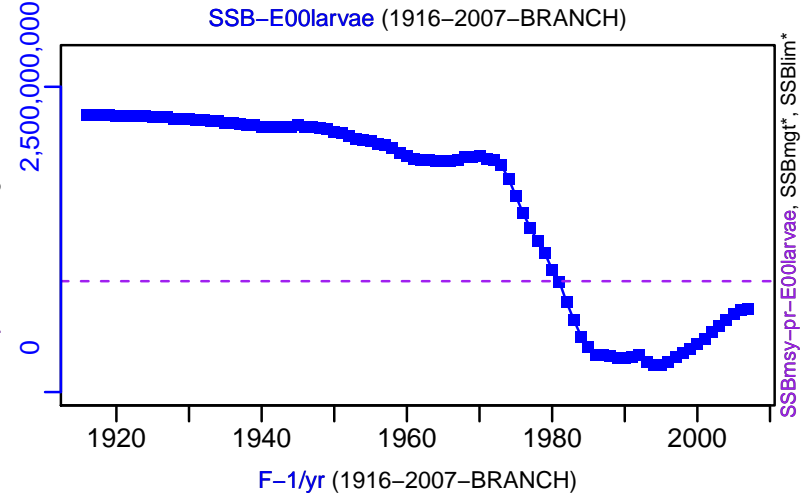
◆ Start Year ◆ End Year * No Data

Blue rockfish California [BLUEROCKCAL]

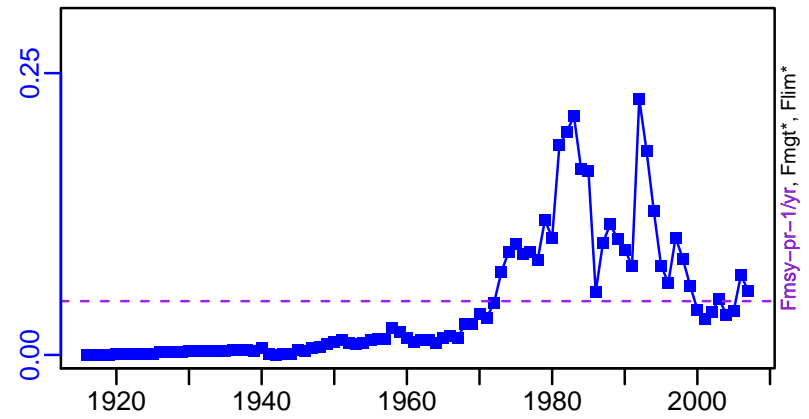
TB-MT (1916-2007-BRANCH)



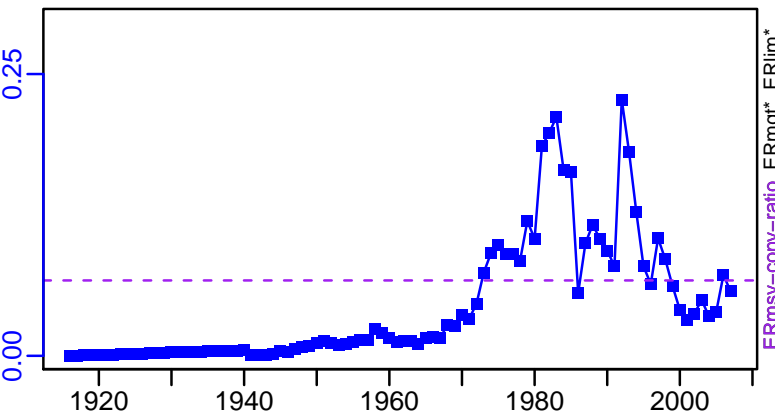
SSB-E00larvae (1916-2007-BRANCH)



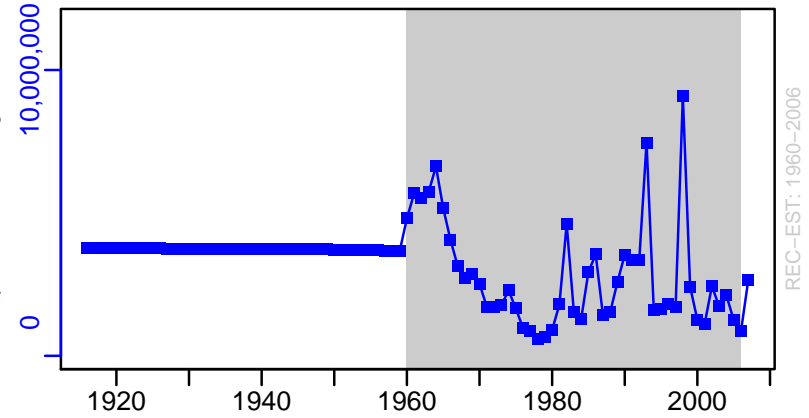
F-1/yr (1916-2007-BRANCH)



ER-ratio (1916-2007-BRANCH)



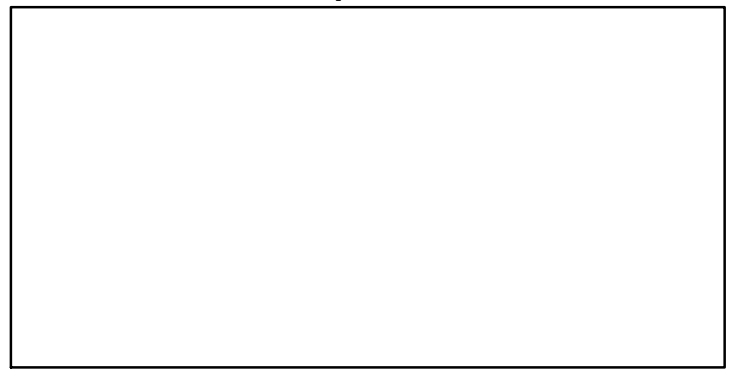
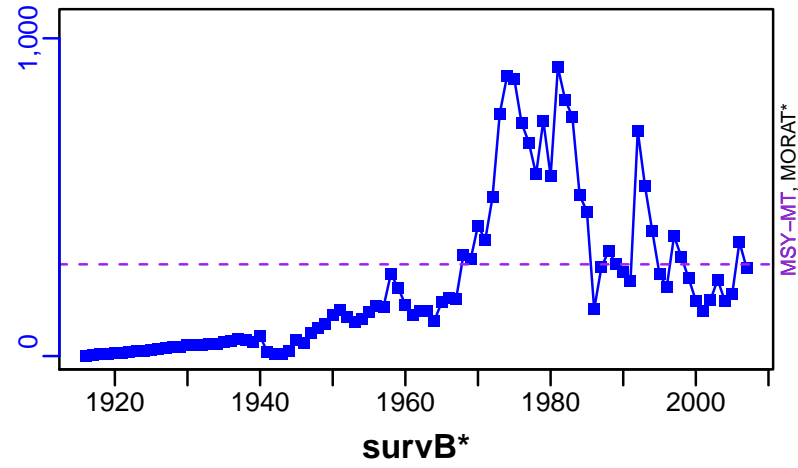
R-E00 (1916-2007-BRANCH)



Blue rockfish California [BLUEROCKCAL]

TC-MT, TL*, RecC* (1916-2007-BRANCH)

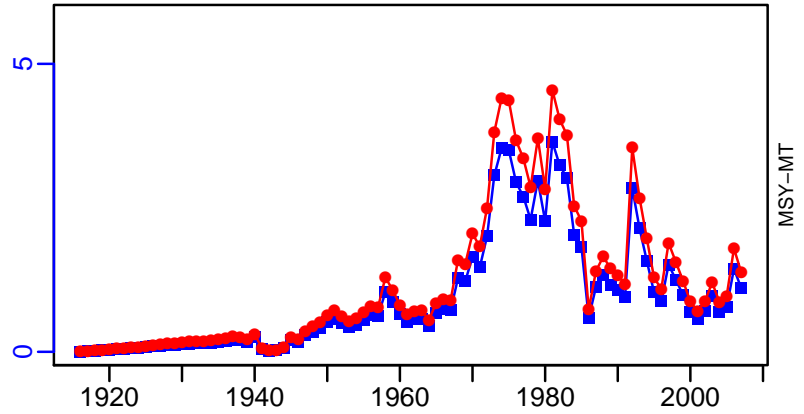
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1916-2007-BRANCH)



Bank rockfish California [BNKROCKCAL]

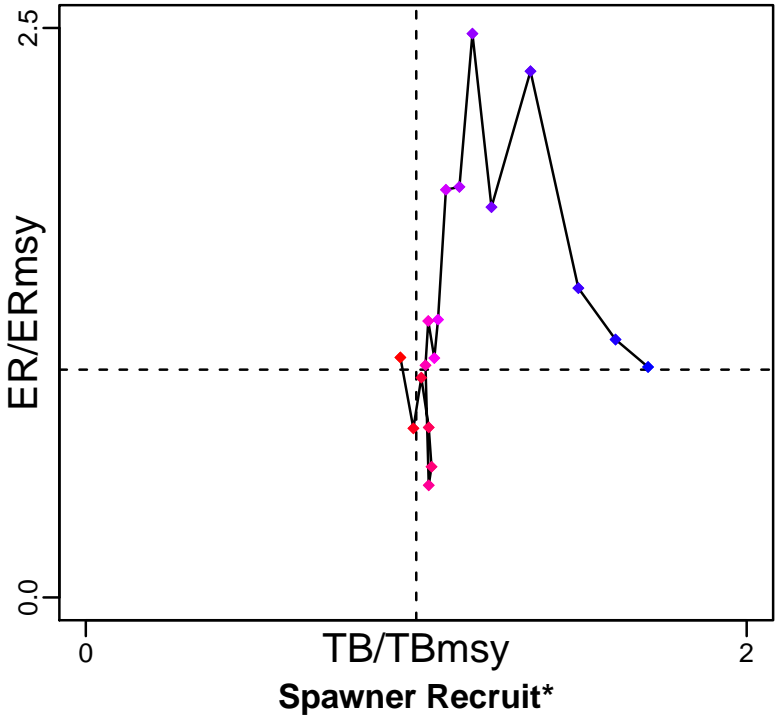
Metadata	
Scientific Name	Sebastes rufus
Current Assess ID	PFMC-BNKROCKCAL-1979-1999-CHING
Area	California
Management Authority	National Marine Fisheries Service, US national management
Assessor	Pacific Fishery Management Council
Asmts in RAM	1999

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	1999	7111
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-est-ratio	1999	0.079
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	1999	560
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

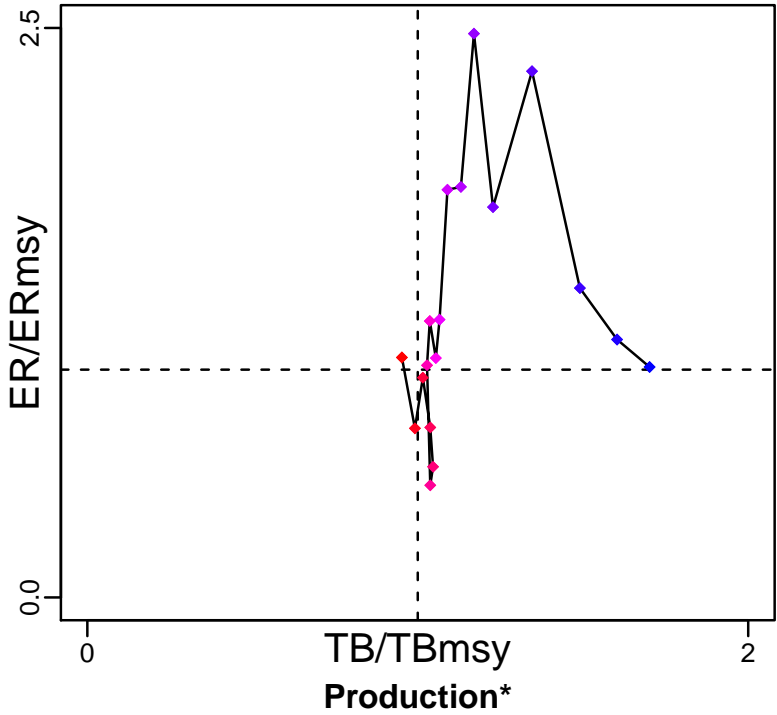
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	1999	6380	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	1999	0.083	-	-
TC	TC-MT	1999	562		
TL	TL-MT	1999	562		
TB/TBmsy	TB-MT/TBmsy-est-MT	1999	0.897		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-est-ratio	1999	1.053		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Bank rockfish California [BNKROCKCAL]

Kobe MSYpref (1979–1999–CHING)



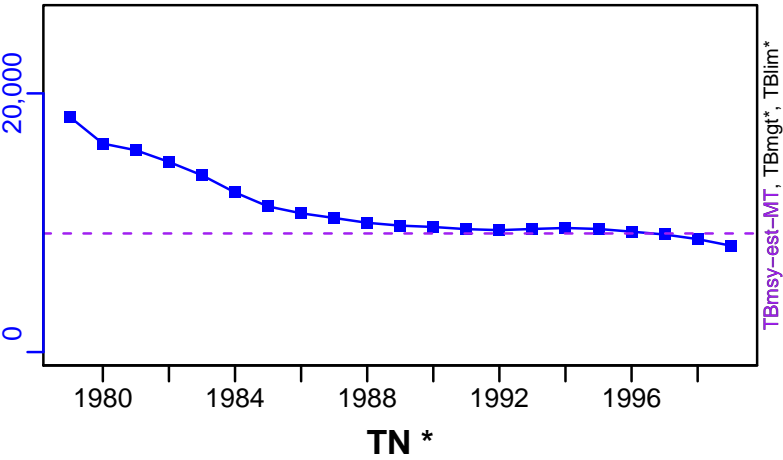
Kobe MGTpref (1979–1999–CHING)



◆ Start Year ◆ End Year * No Data

Bank rockfish California [BNKROCKCAL]

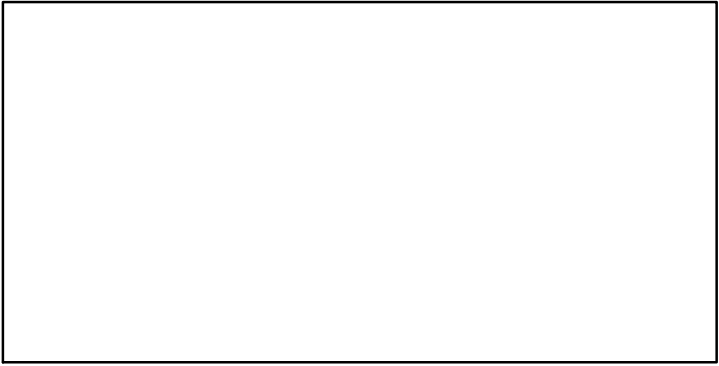
TB-MT (1979-1999-CHING)



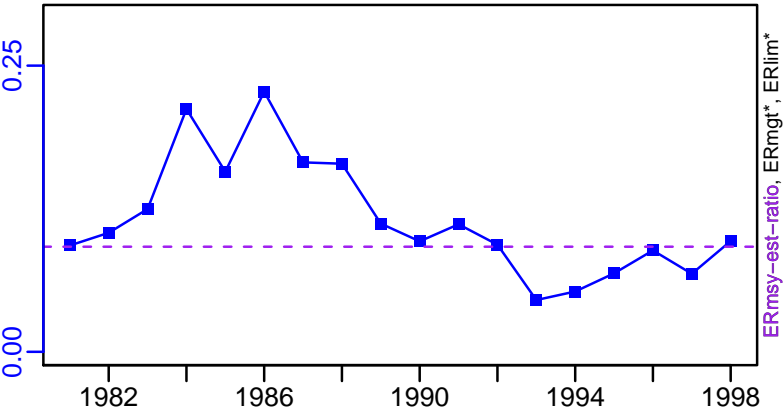
SSB*



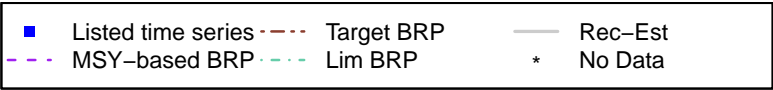
F*



ER-ratio (1979-1999-CHING)

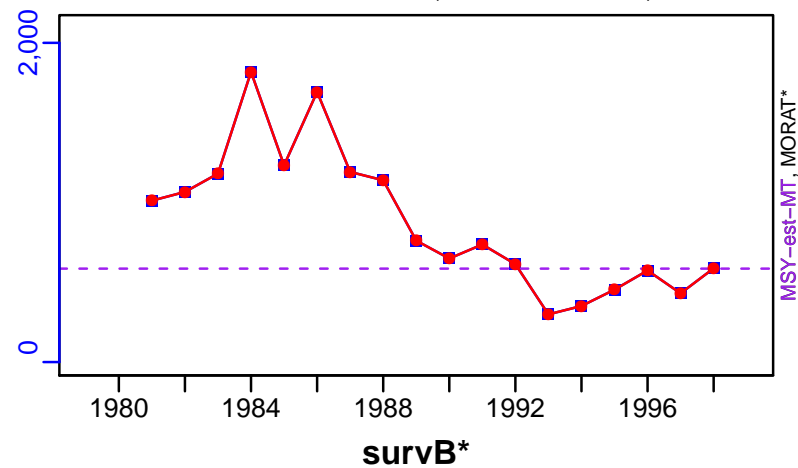


Recruits*



Bank rockfish California [BNKROCKCAL]

TC-MT, TL-MT, RecC* (1979-1999-CHING)



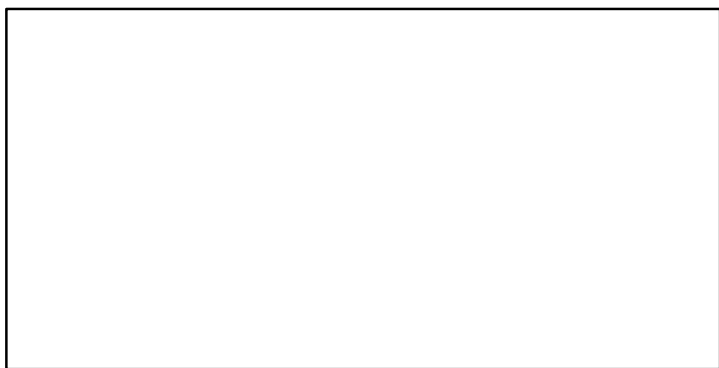
TAC*, Cpair*, Cadv*



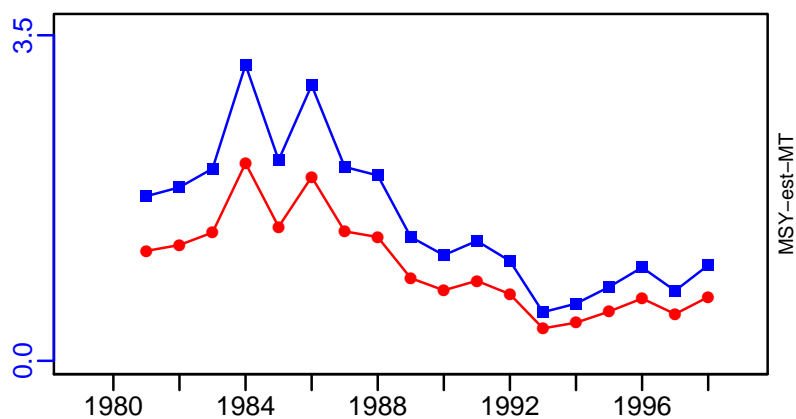
CPUE*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1979-1999-CHING)



- 1st listed time series (blue square)
- 2nd listed time series (red circle)
- 3rd listed time series (green triangle)
- MSY (purple dashed line)
- MORAT (grey line)
- No Data (*)

Bocaccio Southern Pacific Coast [BOCACCSPCOAST]

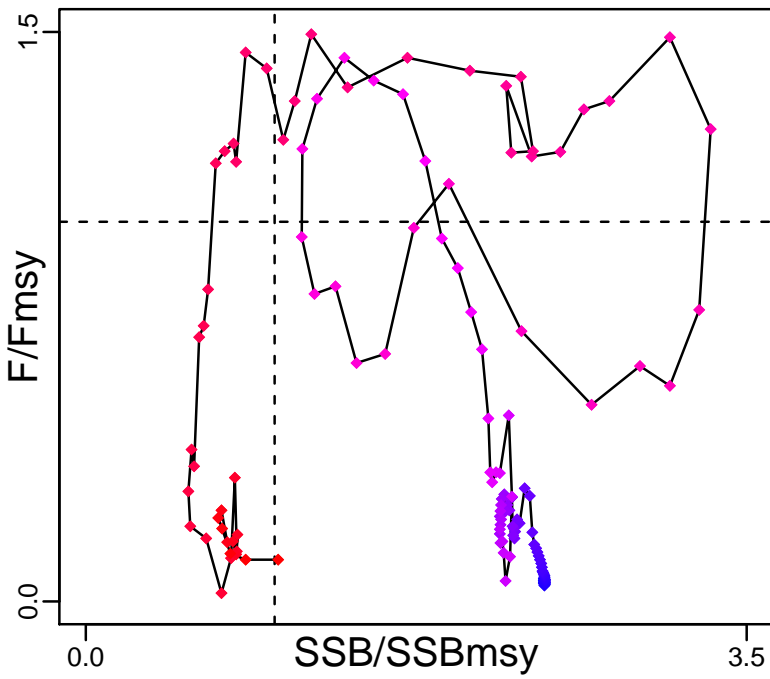
Metadata	
Scientific Name	Sebastes paucispinis
Current Assess ID	SWFSC-BOCACCSPCOAST-1892-2017-SISIMP2021
Area	Southern Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Southwest Fisheries Science Center
Asmts in RAM	2009, 2017, 2013

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2013	41,502
SSBmsy	SSBmsy-E00larvae	2017	2,964,399,902
Fmsy	Fmsy-1/yr	2017	0.5
ERmsy	ERmsy-est-ratio	2013	0.06
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2009	44,070
SSB0	-	-	-
MSY	MSY-MT	2017	1934
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-E00larvae	2017	1,852,750,000
Flim	Flim-1/yr	2017	0.5
ERlim	-	-	-

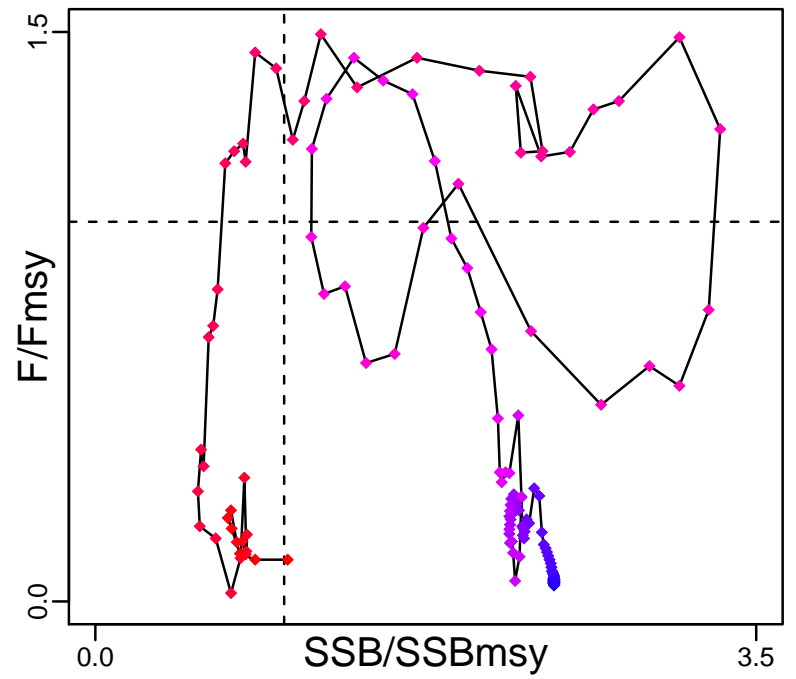
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2017	25,293	-	-
SSB	SSB-E00larvae	2017	3.6×10^9	-	-
TN	-	-	-	-	-
R	R-E00	2017	6,220,000	-	0
F	F-1/yr	2017	0.055	-	-
ER	ER-calc-ratio	2017	0.007	-	-
TC	TC-MT	2017	157		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-est-MT	2013	0.46		
SSB/SSBmsy	SSB-E00larvae/SSBmsy-E00larvae	2017	1.214		
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	0.11		
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2013	0.19		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Bocaccio Southern Pacific Coast [BOCACCSPCOAST]

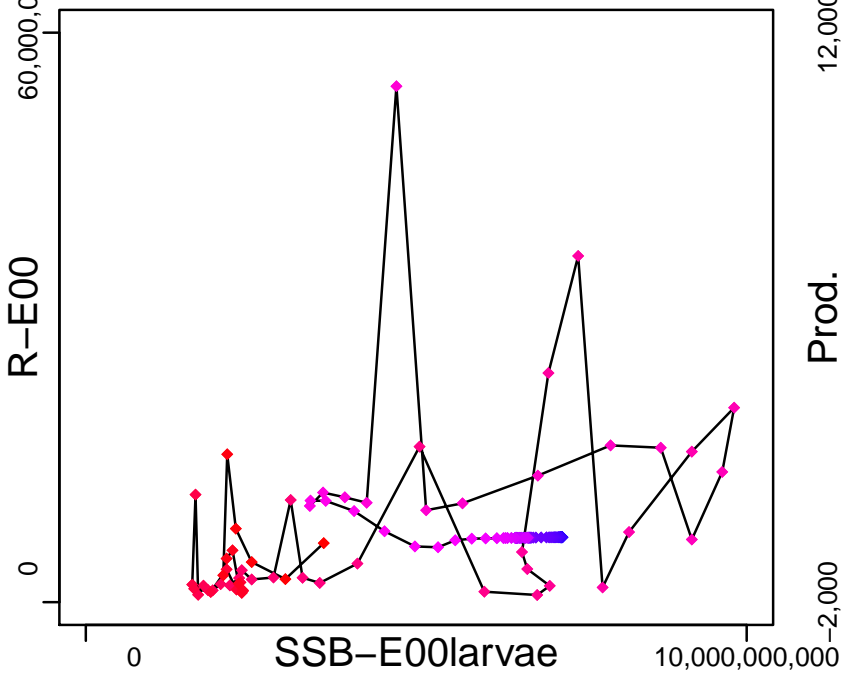
Kobe MSYpref (1892–2017–SISIMP2021)



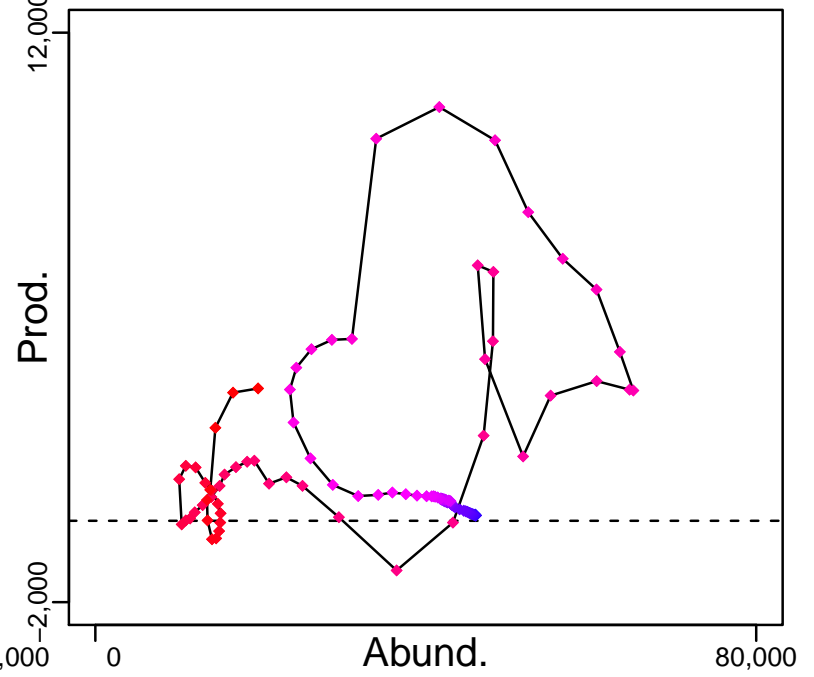
Kobe MGTpref (1892–2017–SISIMP2021)



Spawner Recruit (1892–2017–SISIMP2021)

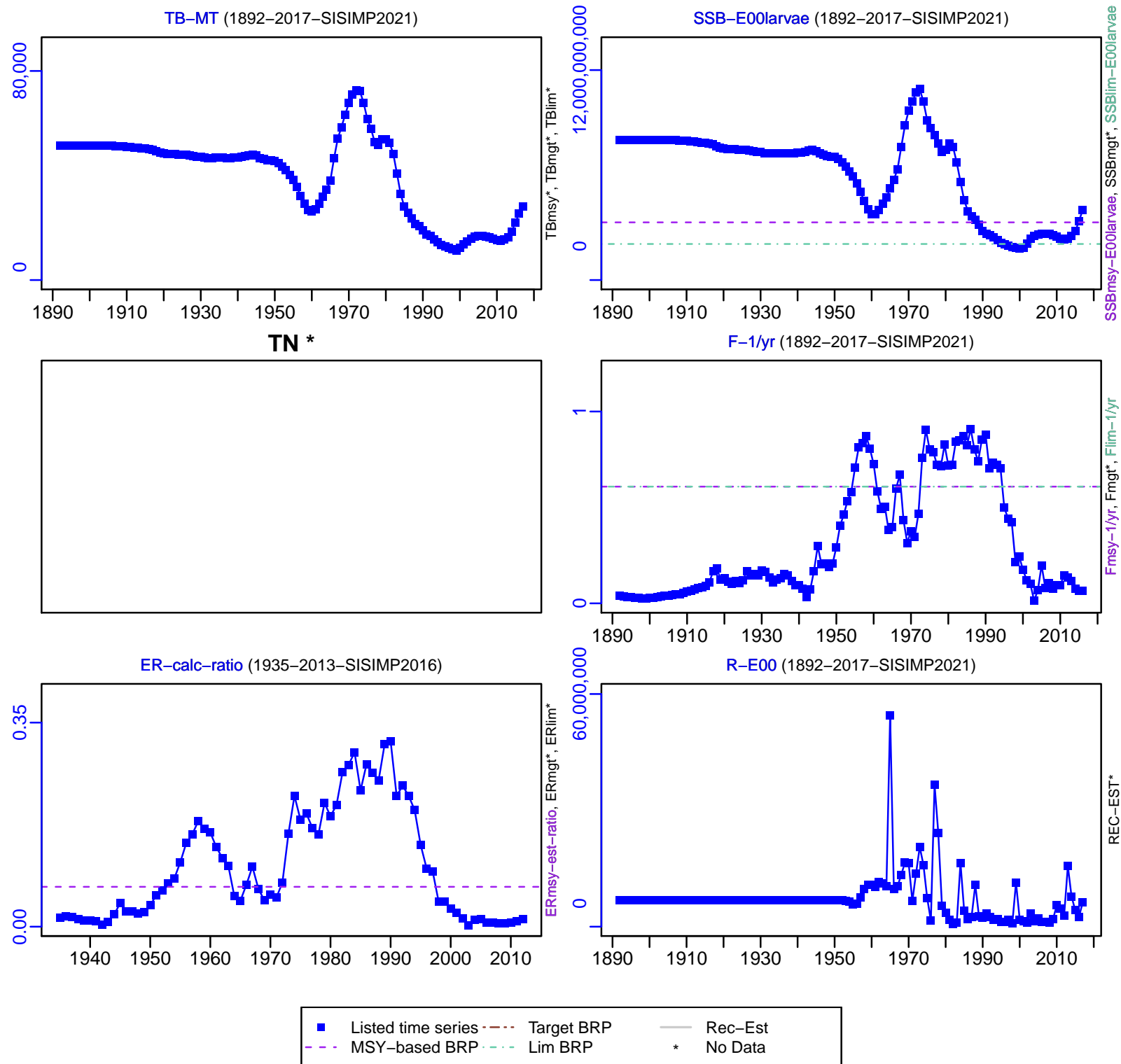


Production (1892–2017–SISIMP2021)



◆ Start Year ◆ End Year * No Data

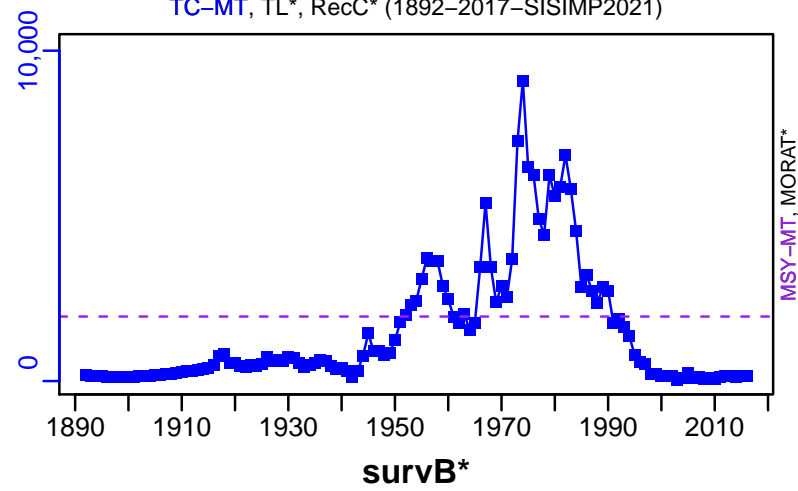
Bocaccio Southern Pacific Coast [BOCACCSPOAST]



Bocaccio Southern Pacific Coast [BOCACCSPCOAST]

TC-MT, TL*, RecC* (1892-2017-SISIMP2021)

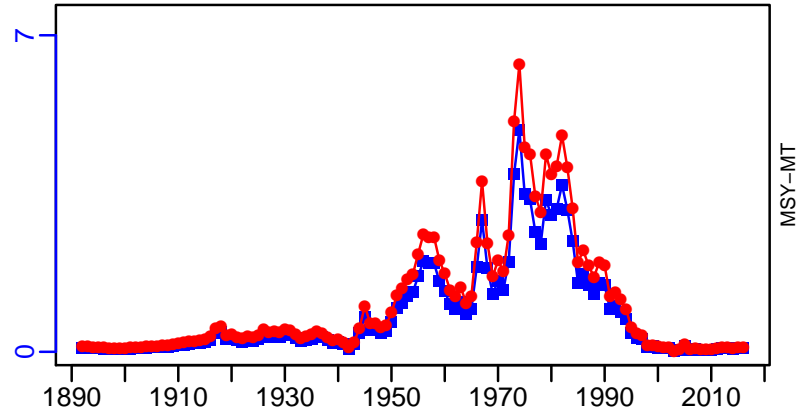
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1892-2017-SISIMP2021)



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

Brown rockfish Pacific Coast [BRNROCKPCOAST]

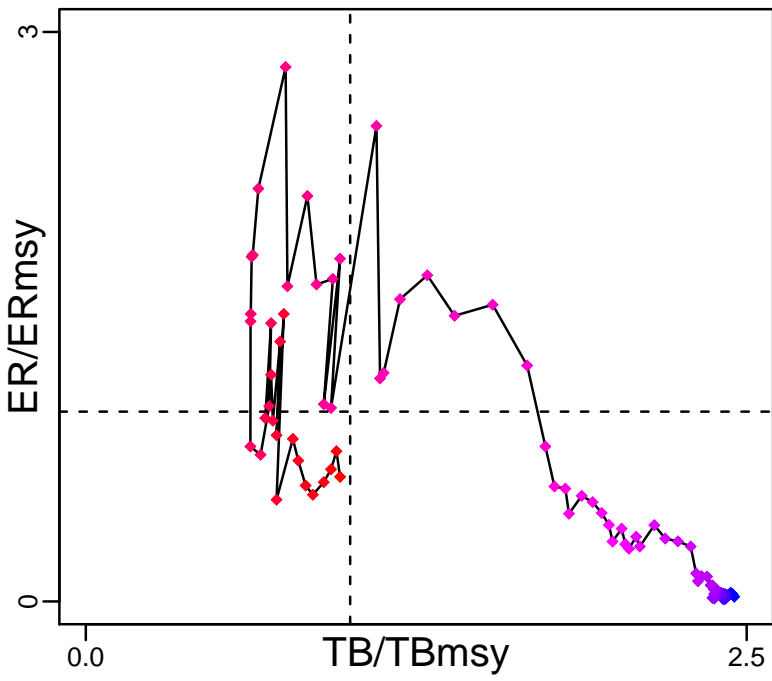
Metadata	
Scientific Name	Sebastes auriculatus
Current Assess ID	SWFSC-BRNROCKPCOAST-1916-2012-SISIMP2016
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Southwest Fisheries Science Center
Asmts in RAM	2012

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2012	1455
SSBmsy	SSBmsy-conv-MT	2012	805
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2012	0.103
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2012	150
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	ERlim-ratio	2012	0.103

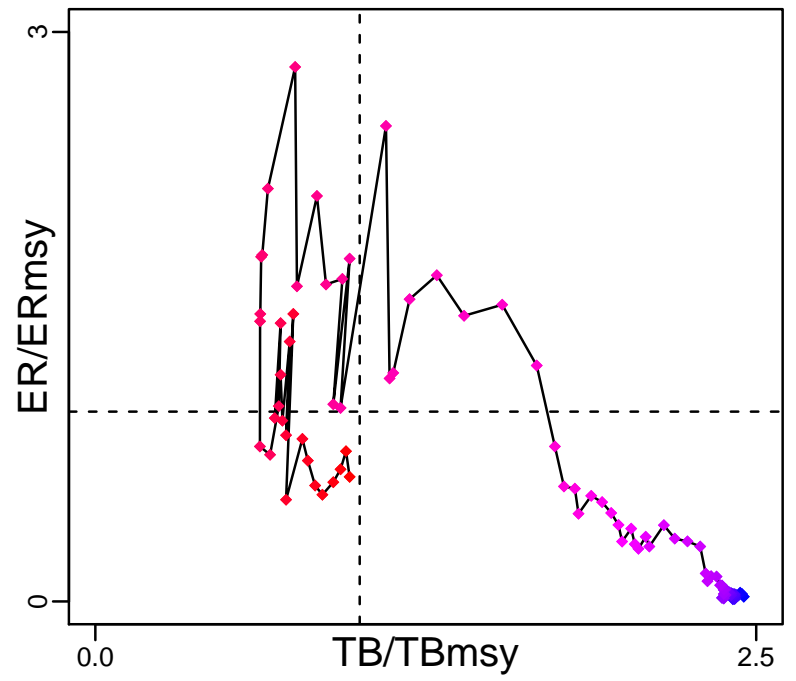
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2012	1450	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2012	0.068	-	-
TC	TC-MT	2012	95		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2012	0.996		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2012	0.656		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Brown rockfish Pacific Coast [BRNROCKPCOAST]

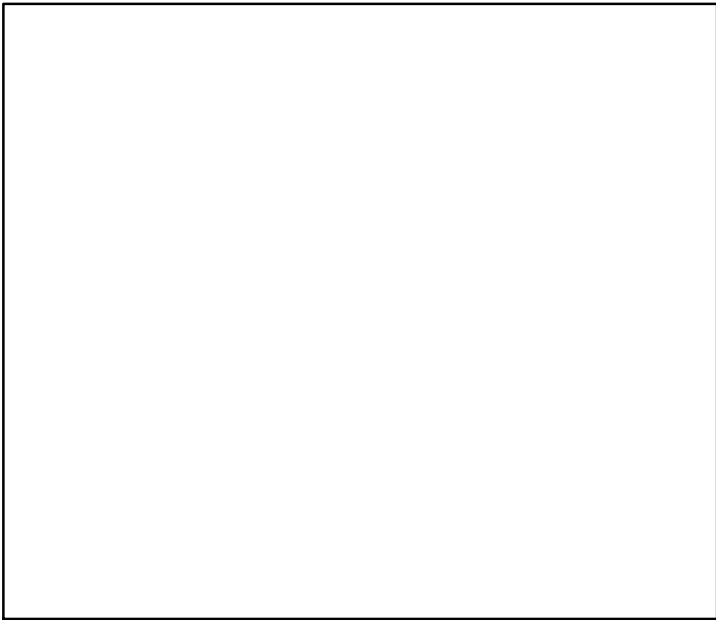
Kobe MSYpref (1916–2012–SISIMP2016)



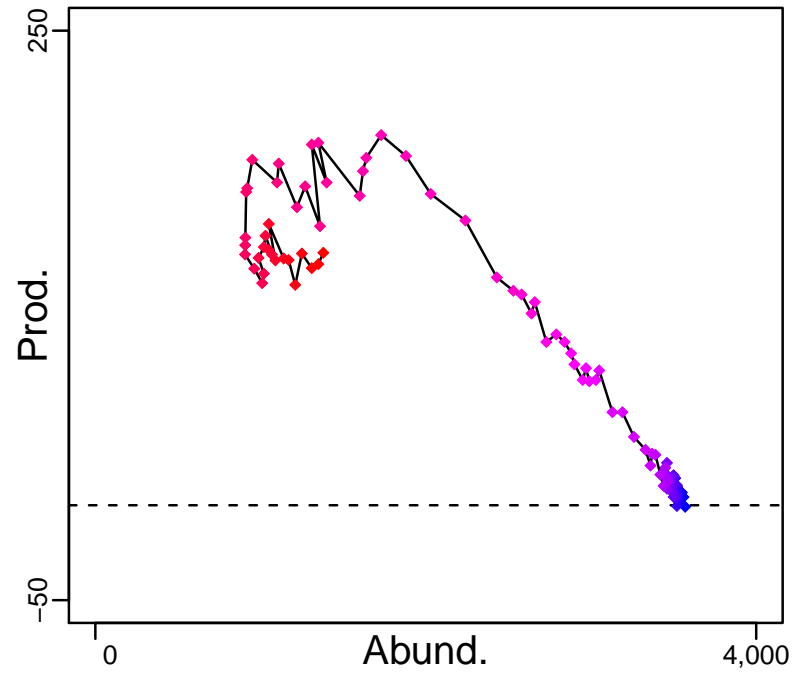
Kobe MGTpref (1916–2012–SISIMP2016)



Spawner Recruit*



Production (1916–2012–SISIMP2016)

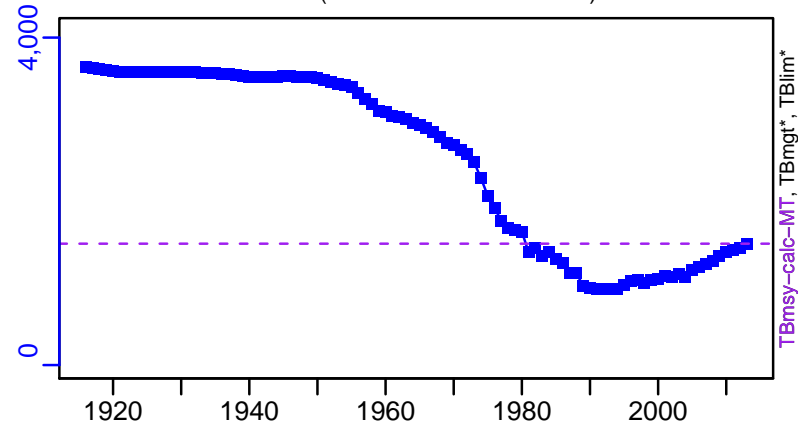


◆ Start Year ◆ End Year * No Data

Brown rockfish Pacific Coast [BRNROCKPCOAST]

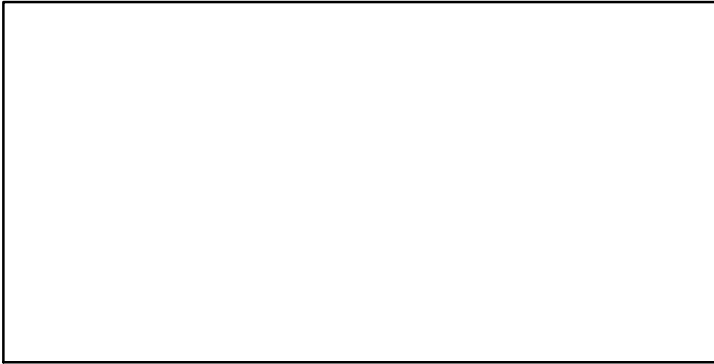
TB-MT (1916-2012-SISIMP2016)

SSB*



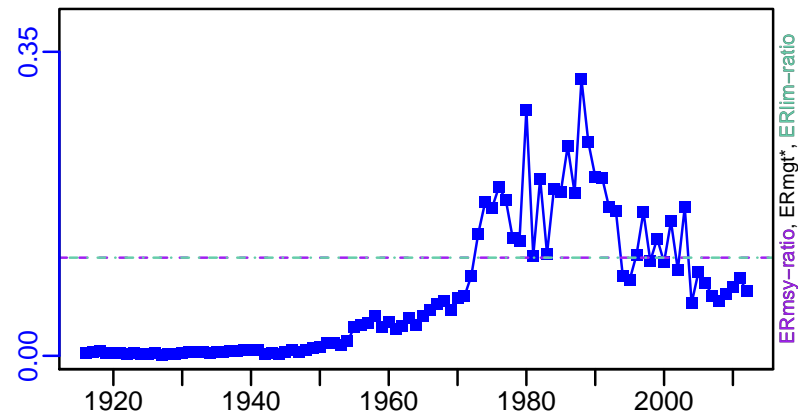
TN *

F*



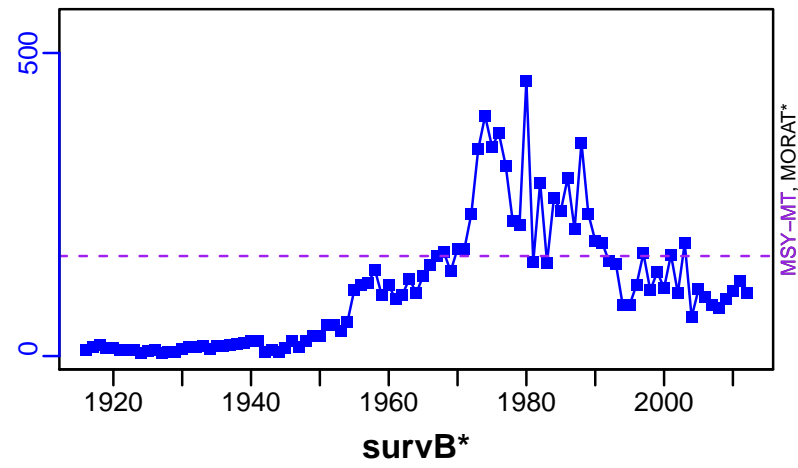
ER-ratio (1916-2012-SISIMP2016)

Recruits*



Brown rockfish Pacific Coast [BRNROCKPCOAST]

TC-MT, TL*, RecC* (1916-2012-SISIMP2016)



TAC*, Cpair*, Cadv*



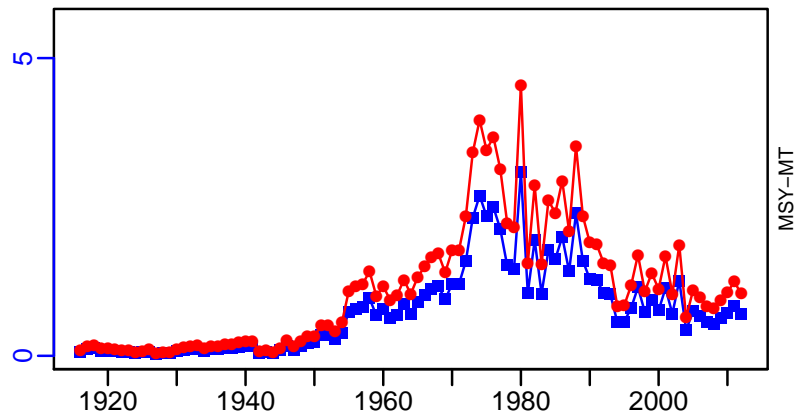
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1916-2012-SISIMP2016)



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

Cabezon Northern California [CABEZNCAL]

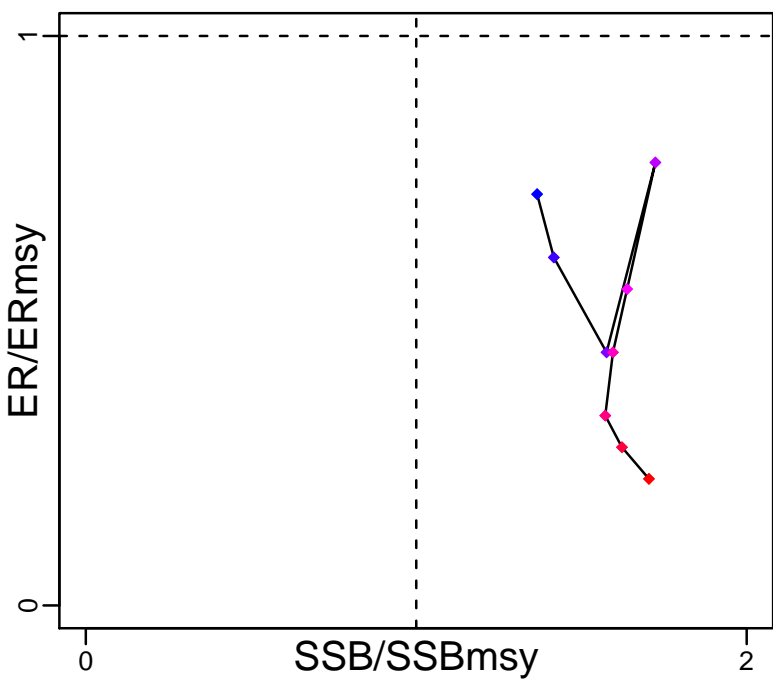
Metadata	
Scientific Name	Scorpaenichthys marmoratus
Current Assess ID	PFMC-CABEZNCAL-1930-2009-CHING
Area	Northern California
Management Authority	National Marine Fisheries Service, US national management
Assessor	Pacific Fishery Management Council
Asmts in RAM	2009

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2009	717
SSBmsy	SSBmsy-MT	2009	257
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2009	0.18
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2009	1835
SSB0	SSB0-MT	2009	1036
MSY	MSY-MT	2009	129
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

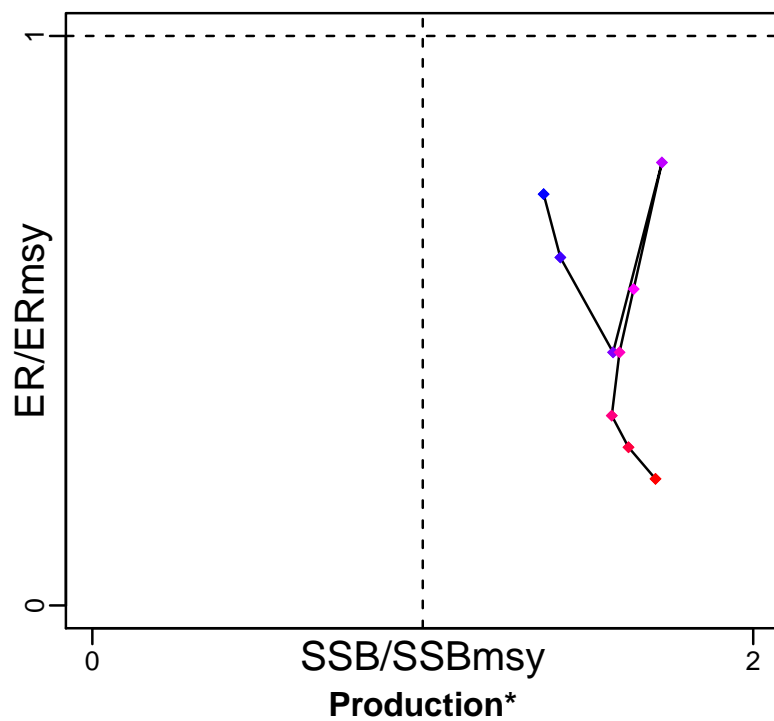
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2009	483	Both	2+
SSB	SSB-MT	2009	469	Females	3+
TN	-	-	-	-	-
R	R-E00	2009	776	-	-
F	-	-	-	-	-
ER	ER-ratio	2009	0.04	-	-
TC	TC-MT	2009	39		
TL	TL-MT	2009	20		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2009	0.674		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2009	1.825		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2009	0.222		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Cabazon Northern California [CABEZNCAL]

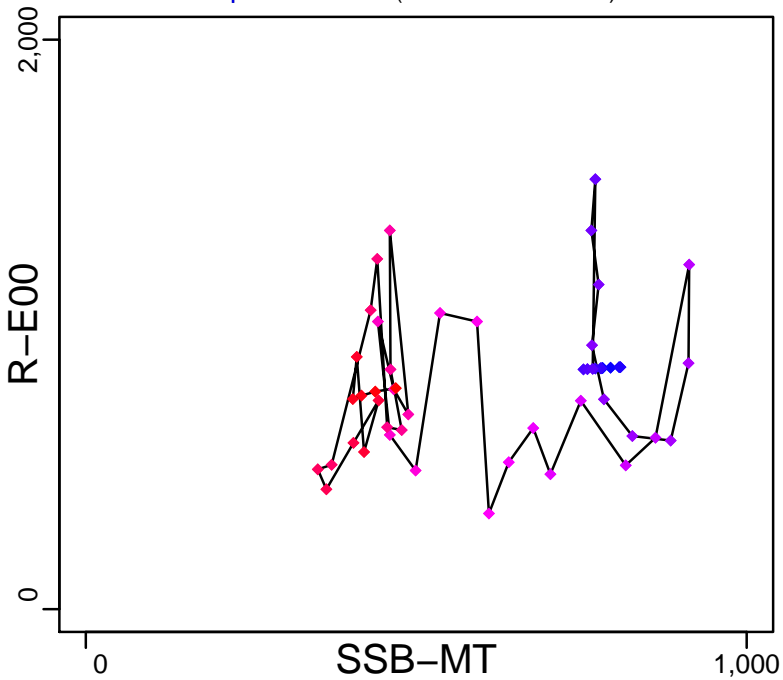
Kobe MSYpref (1930–2009–CHING)



Kobe MGTpref (1930–2009–CHING)



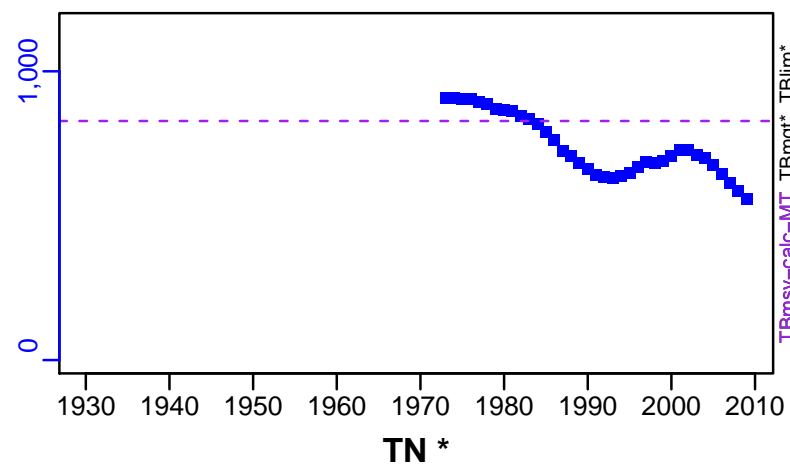
Spawner Recruit (1930–2009–CHING)



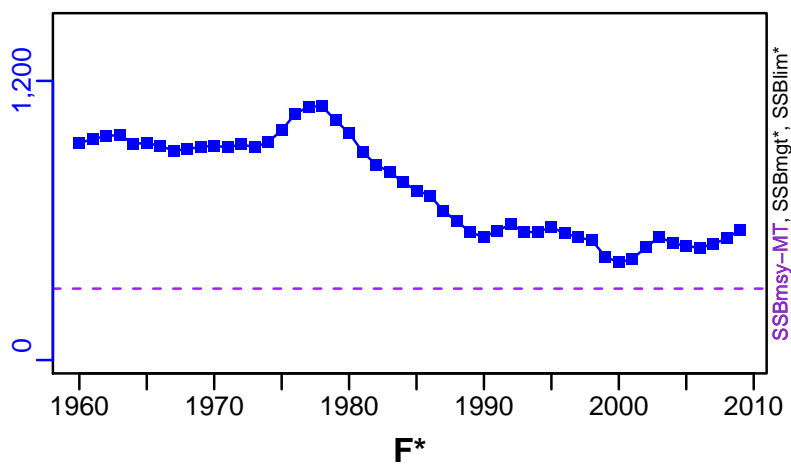
◆ Start Year ◆ End Year * No Data

Cabazon Northern California [CABEZNCAL]

TB-MT (1930-2009-CHING)



SSB-MT (1930-2009-CHING)



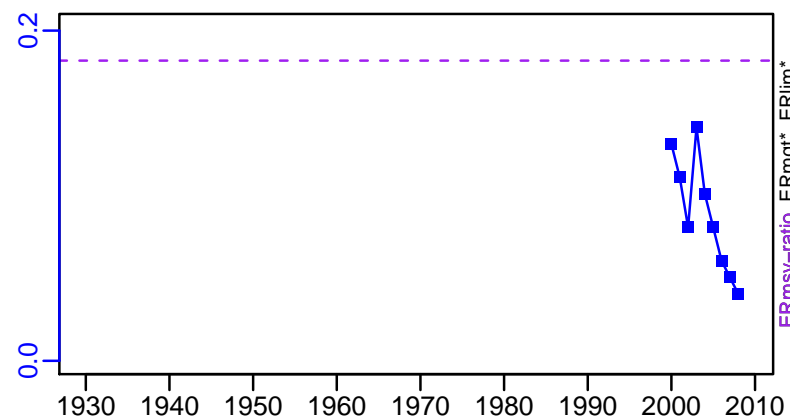
TN *



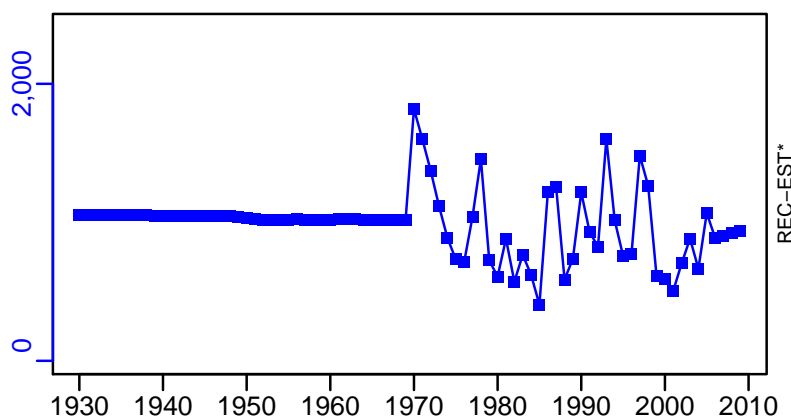
F*



ER-ratio (1930-2009-CHING)

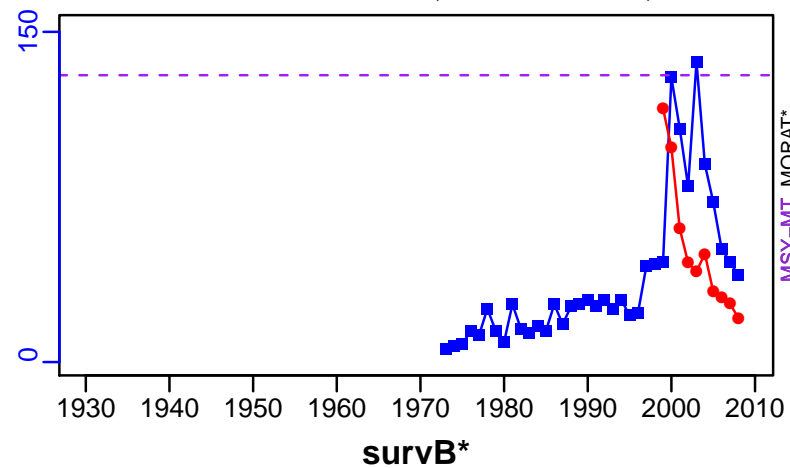


R-E00 (1930-2009-CHING)



Cabazon Northern California [CABEZNCAL]

TC-MT, TL-MT, RecC* (1930-2009-CHING)



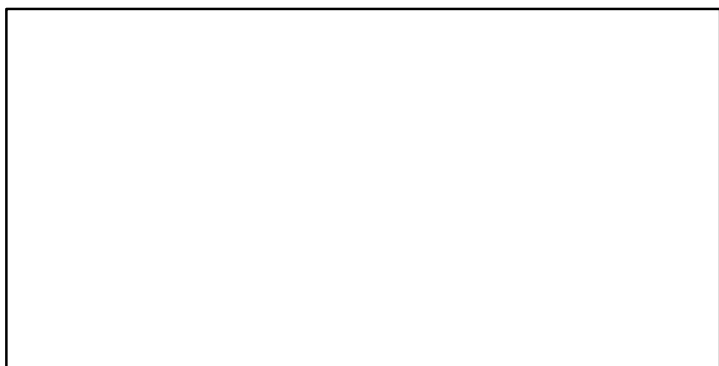
TAC*, Cpair*, Cadv*



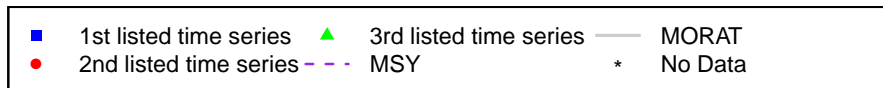
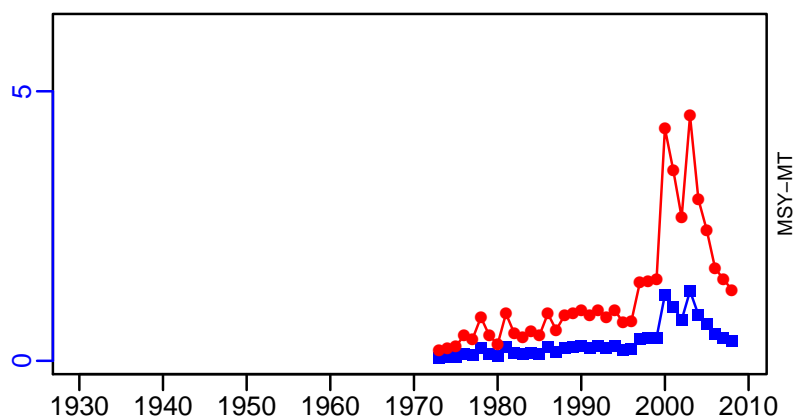
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1930-2009-CHING)



Cabezon Oregon Coast [CABEZORECOAST]

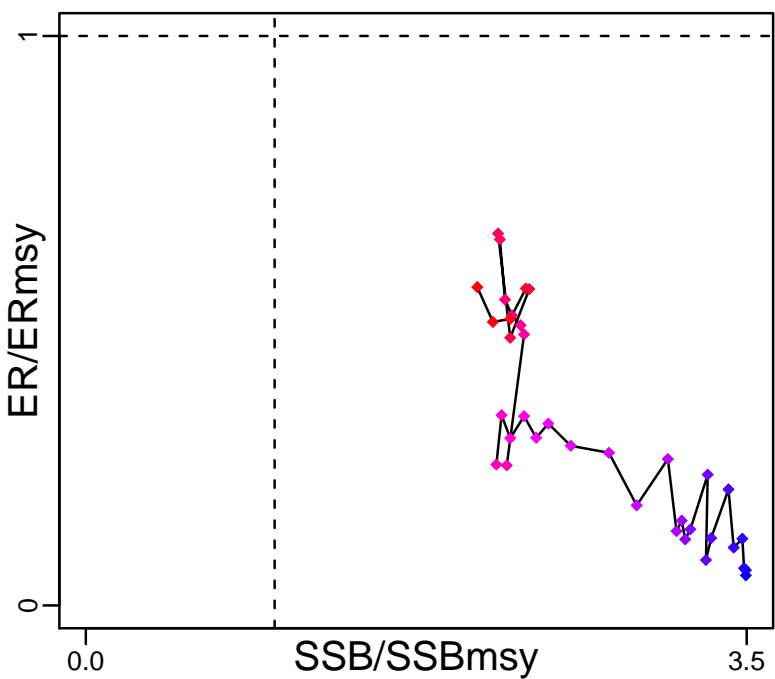
Metadata	
Scientific Name	Scorpaenichthys marmoratus
Current Assess ID	NWFSC-CABEZORECOAST-1973-2009-STACHURA
Area	Oregon Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2009

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2009	300
SSBmsy	SSBmsy-MT	2009	109
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2009	0.16
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	SSB0-MT	2009	409
MSY	MSY-MT	2009	48
M	M-1/yr	2009	0.25
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

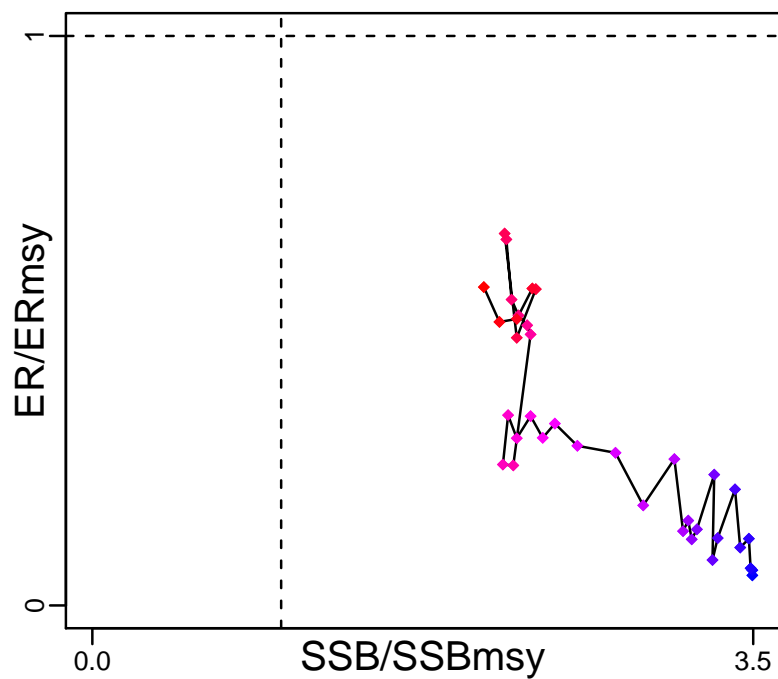
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2009	455	-	2+
SSB	SSB-MT	2009	214	Females	3.86
TN	-	-	-	-	-
R	R-E00	2009	178,000	-	0
F	F-1/yr	2009	0.742	-	-
ER	ER-calc-ratio	2009	0.089	-	-
TC	TC-MT	2009	43		
TL	TL-MT	2009	43		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2009	1.517		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2009	1.963		
F/Fmsy	-	-	-		
ER/ERmsy	ER-calc-ratio/ERmsy-ratio	2009	0.559		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Cabezon Oregon Coast [CABEZORECOAST]

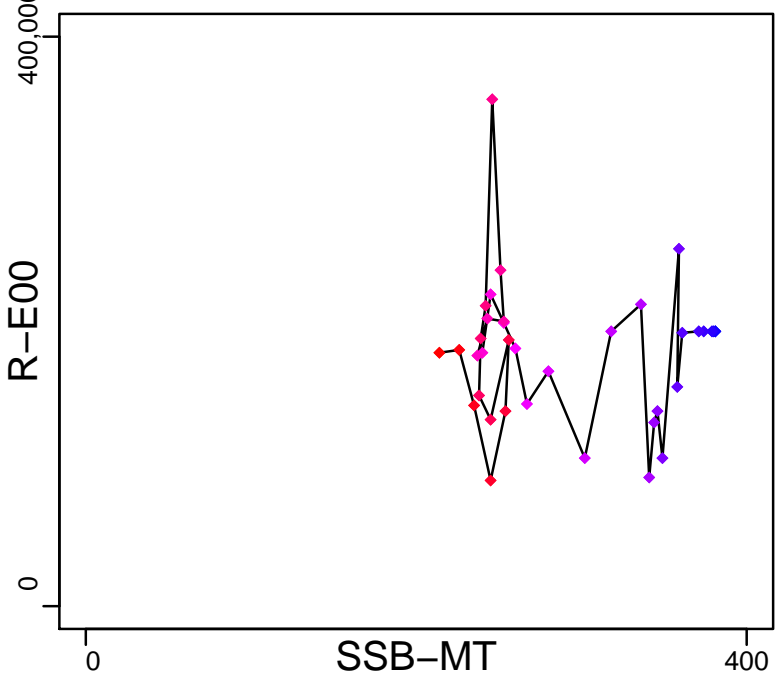
Kobe MSYpref (1973–2009–STACHURA)



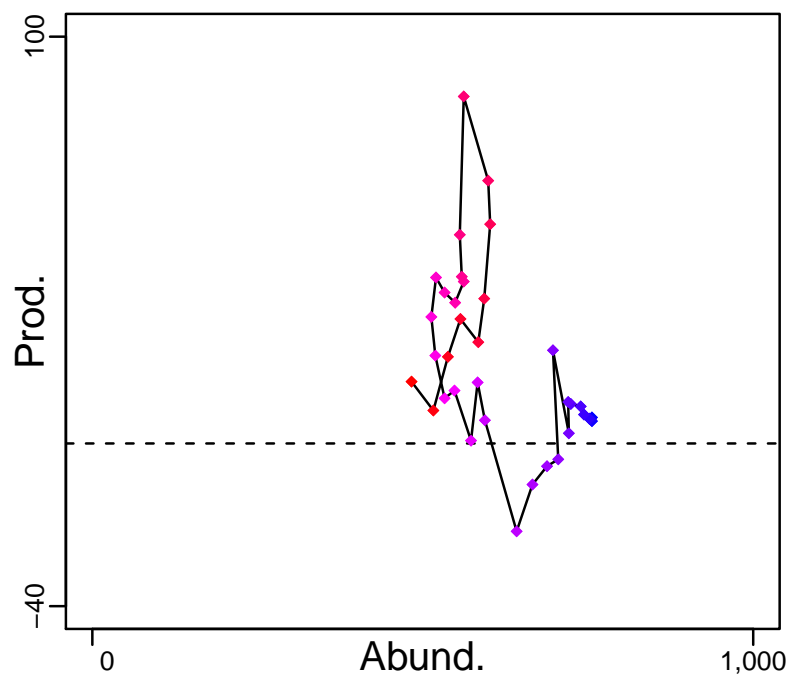
Kobe MGTpref (1973–2009–STACHURA)



Spawner Recruit (1973–2009–STACHURA)



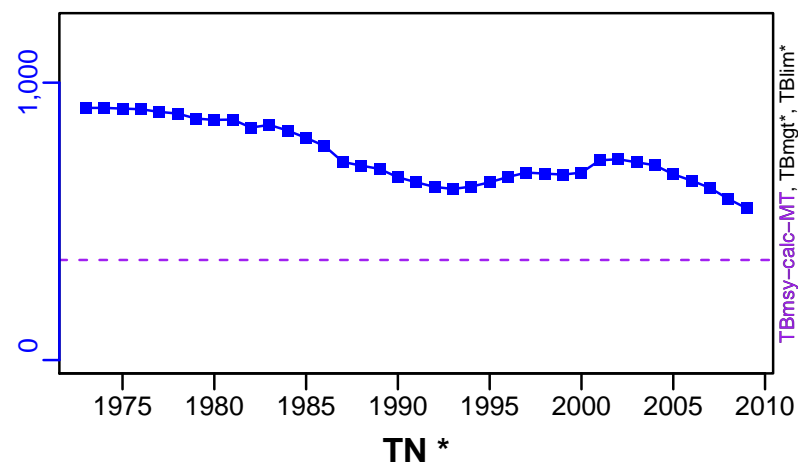
Production (1973–2009–STACHURA)



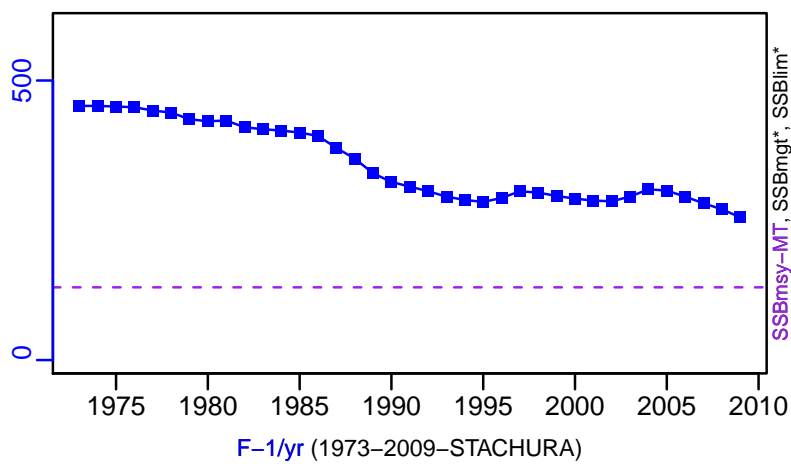
◆ Start Year ◆ End Year * No Data

Cabazon Oregon Coast [CABEZORECOAST]

TB-MT (1973–2009–STACHURA)

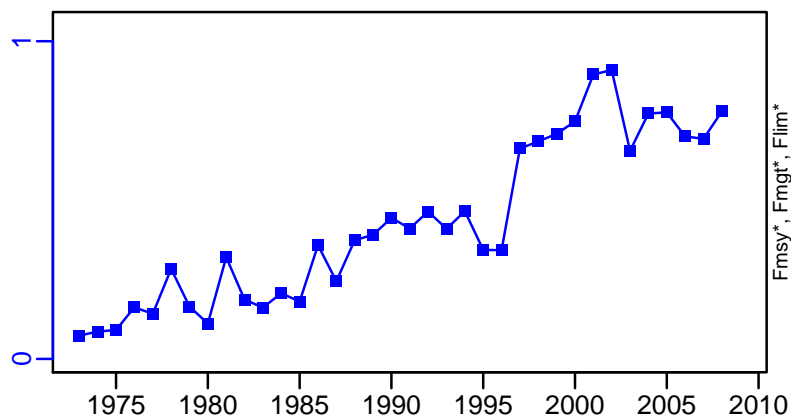


SSB-MT (1973–2009–STACHURA)

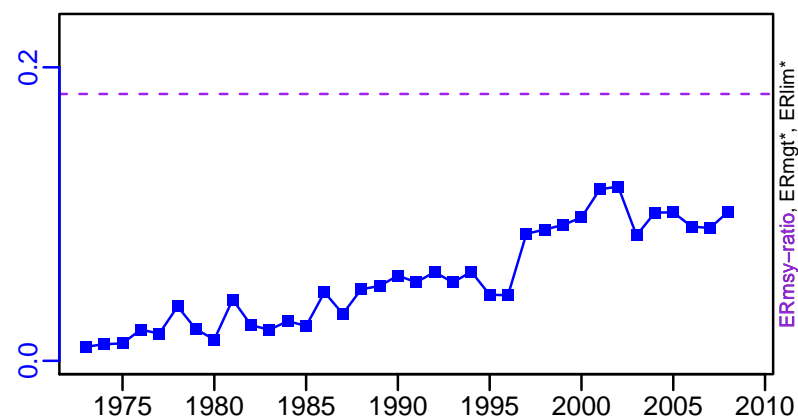


TN *

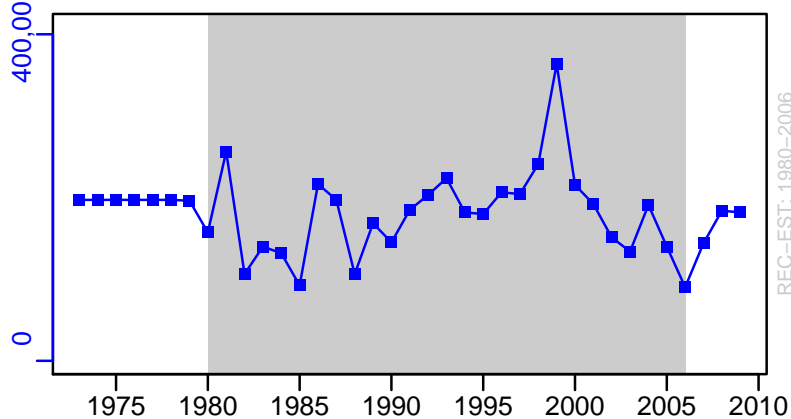
F-1/yr (1973–2009–STACHURA)



ER-calc-ratio (1973–2009–STACHURA)



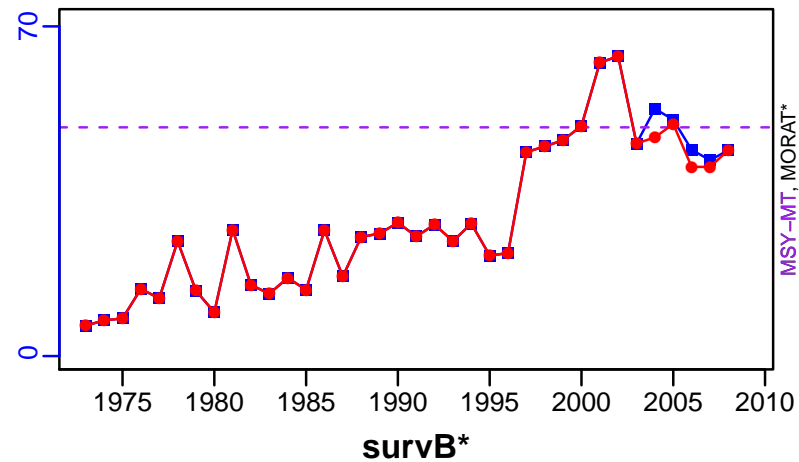
R-E00 (1973–2009–STACHURA)



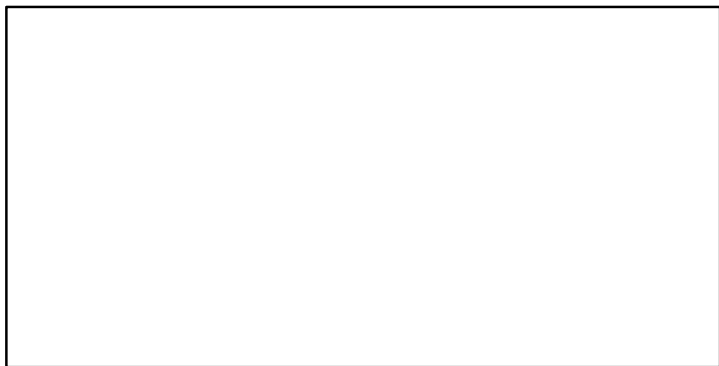
Cabezon Oregon Coast [CABEZORECOAST]

TC-MT, TL-MT, RecC* (1973-2009-STACHURA)

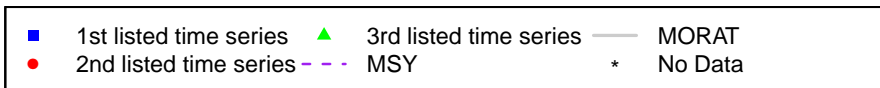
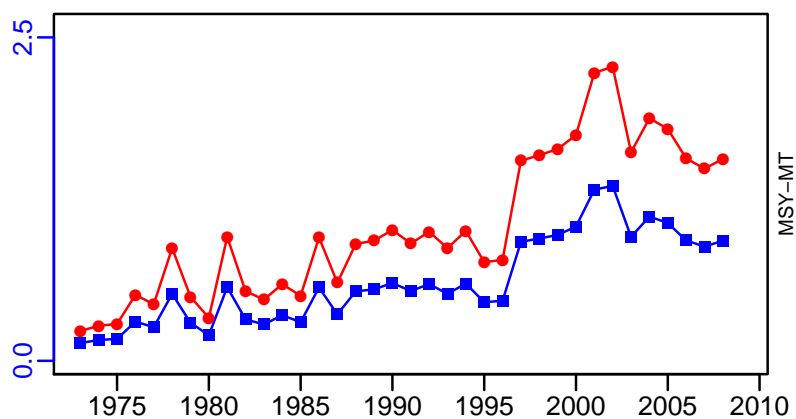
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1973-2009-STACHURA)



Cabezon Southern California [CABEZSCAL]

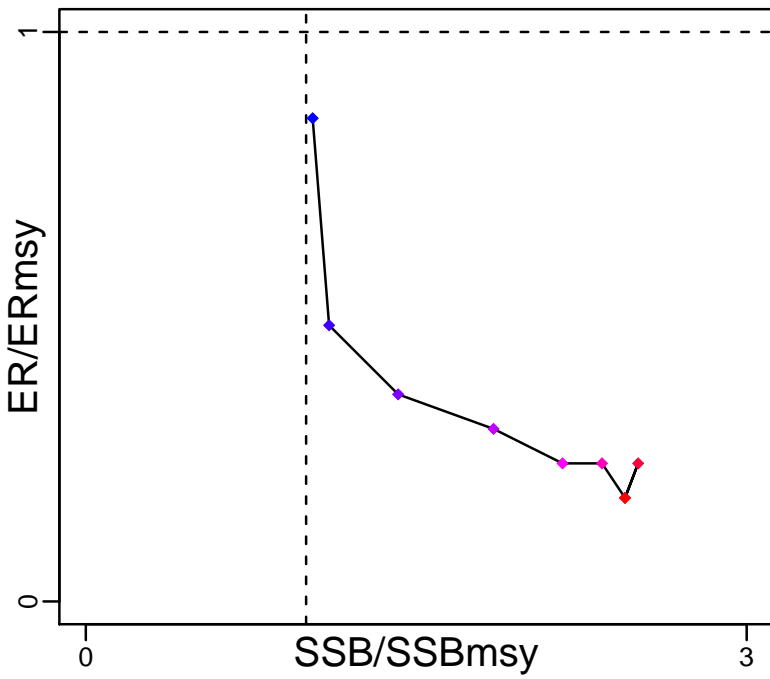
Metadata	
Scientific Name	Scorpaenichthys marmoratus
Current Assess ID	PFMC-CABEZSCAL-1930-2009-CHING
Area	Southern California
Management Authority	National Marine Fisheries Service, US national management
Assessor	Pacific Fishery Management Council
Asmts in RAM	2009

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2009	182
SSBmsy	SSBmsy-MT	2009	67
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2009	0.165
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2009	470
SSB0	SSB0-MT	2009	263
MSY	MSY-MT	2009	30
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

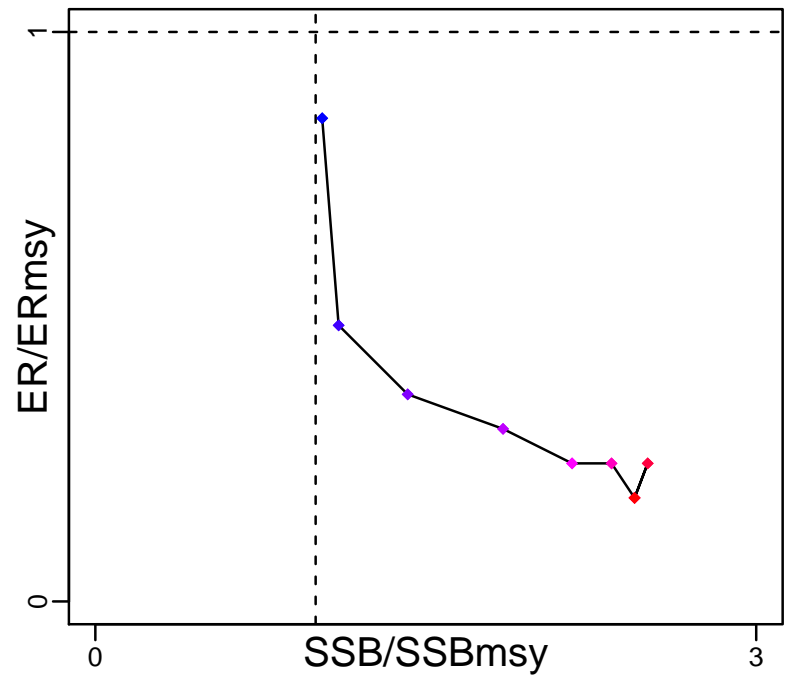
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2009	789	Both	2+
SSB	SSB-MT	2009	158	Females	3+
TN	-	-	-	-	-
R	R-E00	2009	192	-	-
F	-	-	-	-	-
ER	ER-ratio	2009	0.03	-	-
TC	TC-MT	2009	10		
TL	TL-MT	2009	3.9		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2009	4.34		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2009	2.358		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2009	0.182		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Cabazon Southern California [CABEZSCAL]

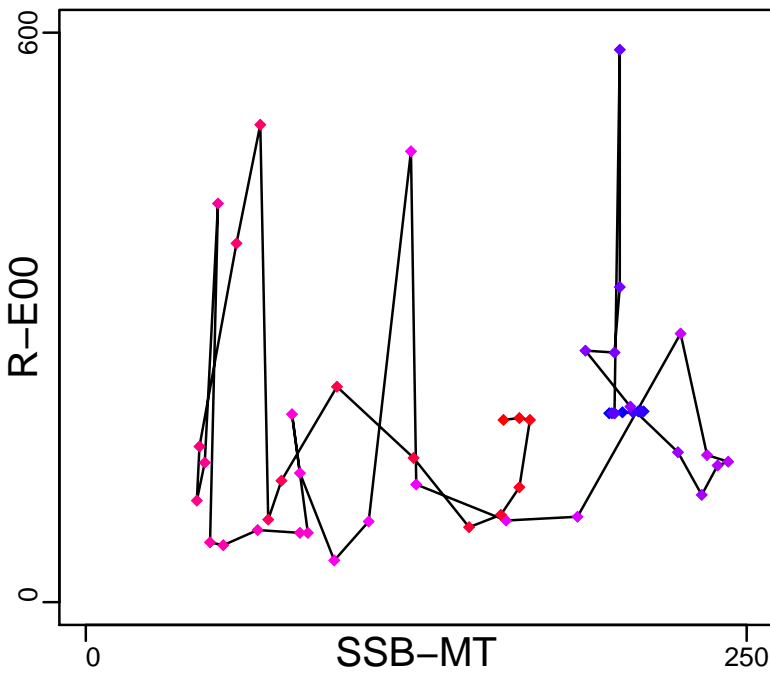
Kobe MSYpref (1930–2009–CHING)



Kobe MGTpref (1930–2009–CHING)



Spawner Recruit (1930–2009–CHING)



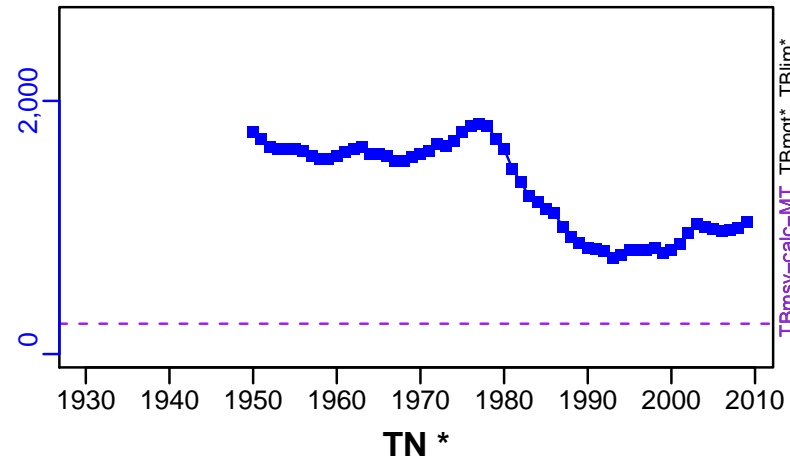
Production*



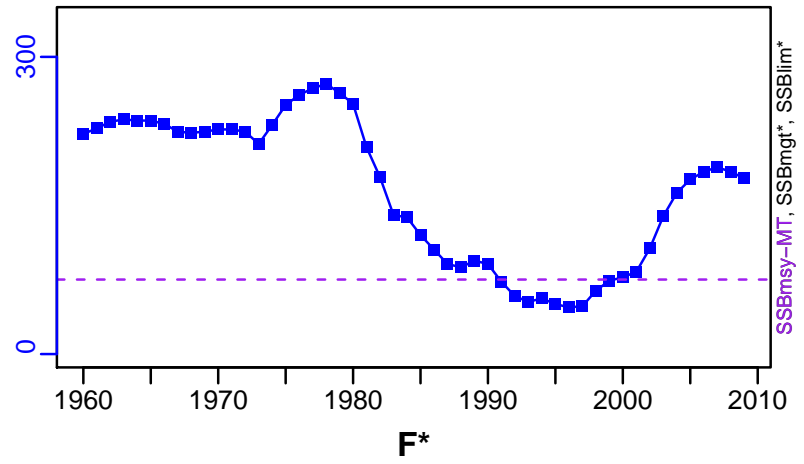
◆ Start Year ◆ End Year * No Data

Cabazon Southern California [CABEZSCAL]

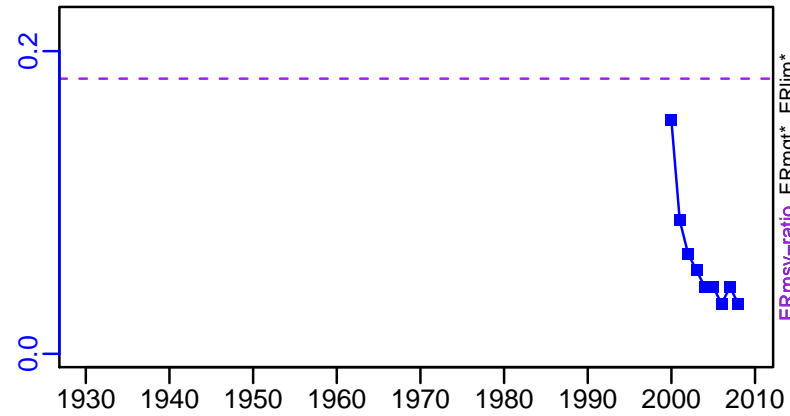
TB-MT (1930–2009–CHING)



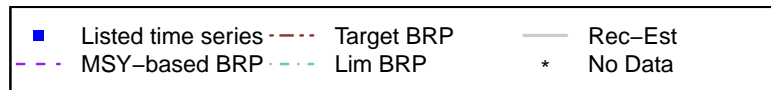
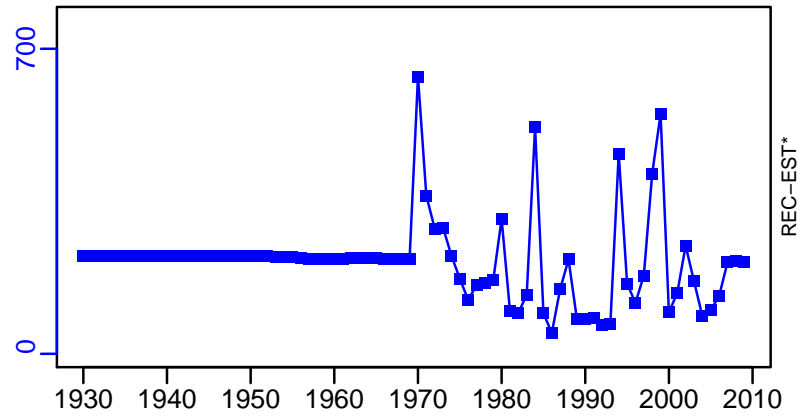
SSB-MT (1930–2009–CHING)



ER-ratio (1930–2009–CHING)

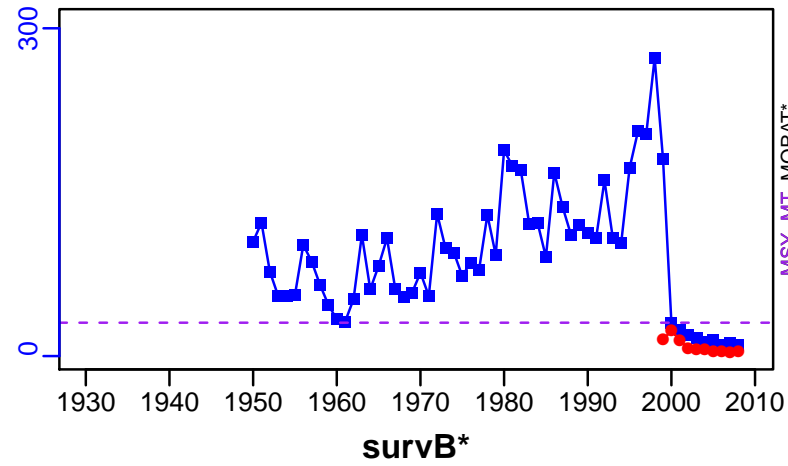


R-E00 (1930–2009–CHING)



Cabazon Southern California [CABEZSCAL]

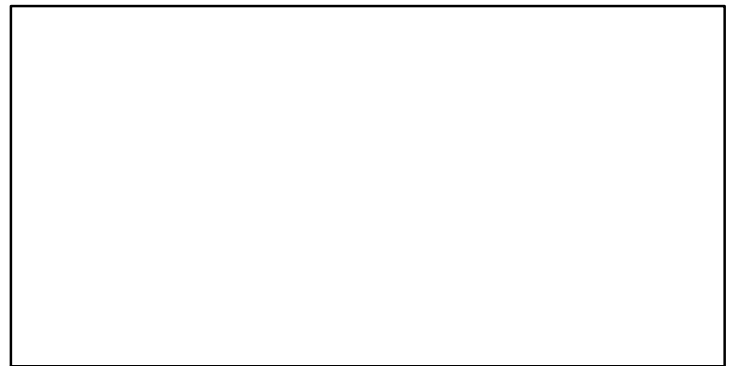
TC-MT, TL-MT, RecC* (1930-2009-CHING)



TAC*, Cpair*, Cadv*



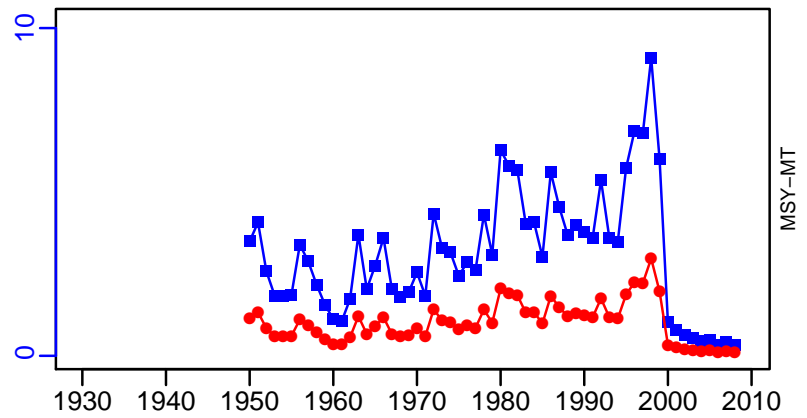
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1930-2009-CHING)



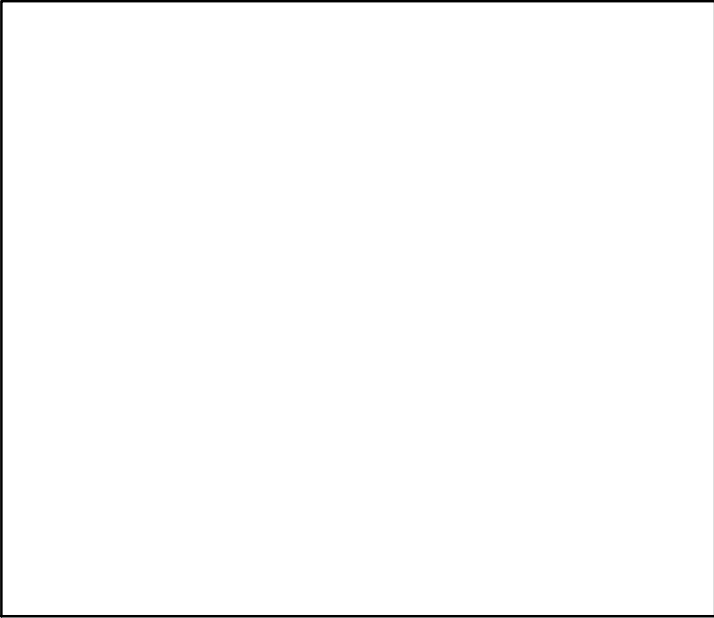
Cabezon Washington [CABEZWASH]

Metadata	
Scientific Name	Scorpaenichthys marmoratus
Current Assess ID	NWFSC-CABEZWASH-1963-2016-SISIMP2021
Area	Washington
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2016

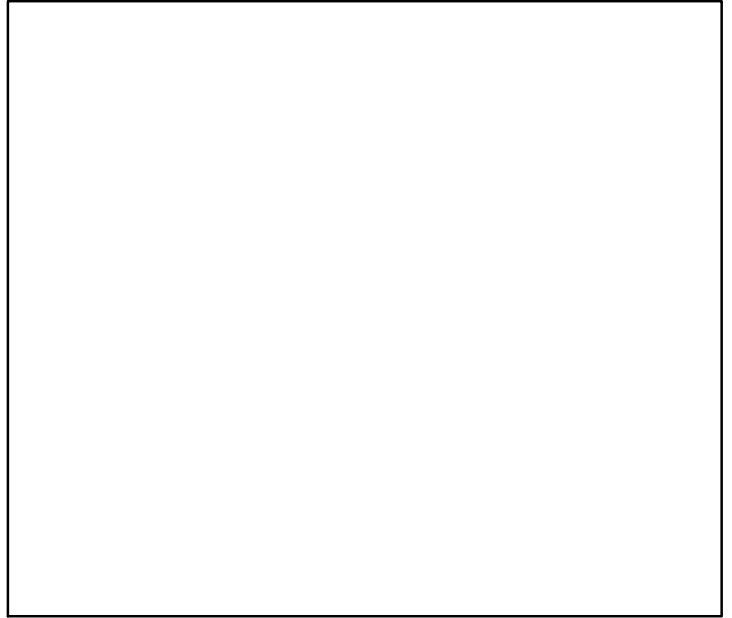
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	4.98		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

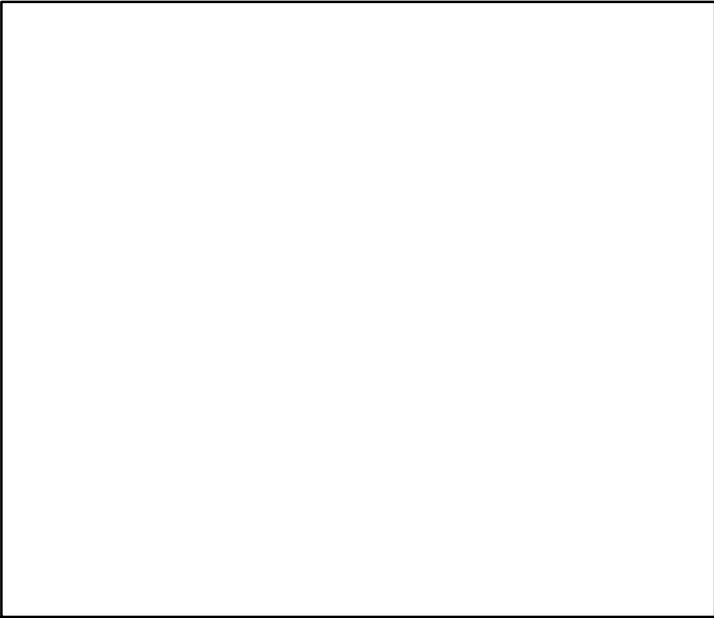
Kobe MSY*



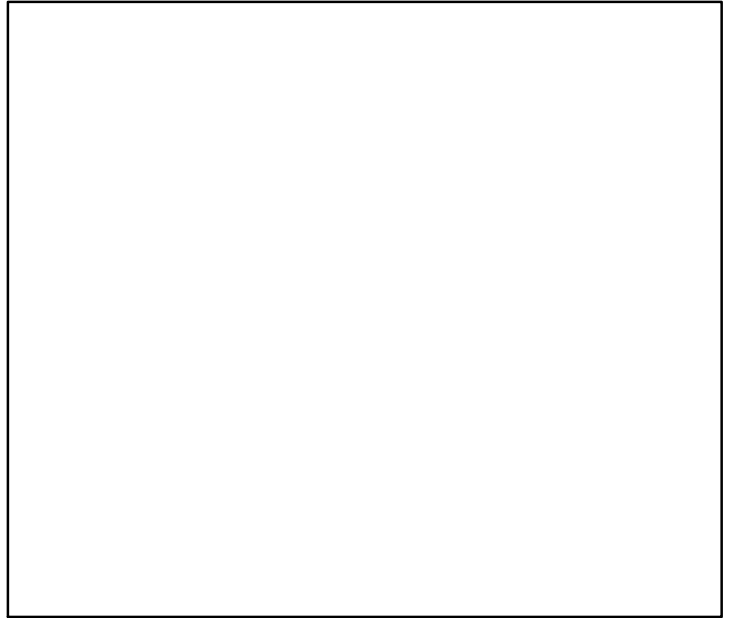
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ◆ End Year * No Data

TB*



SSB*



TN *



F*



ER*



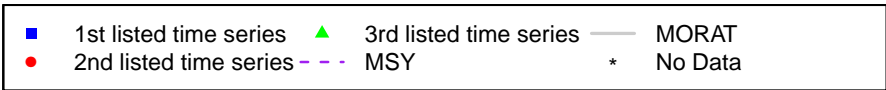
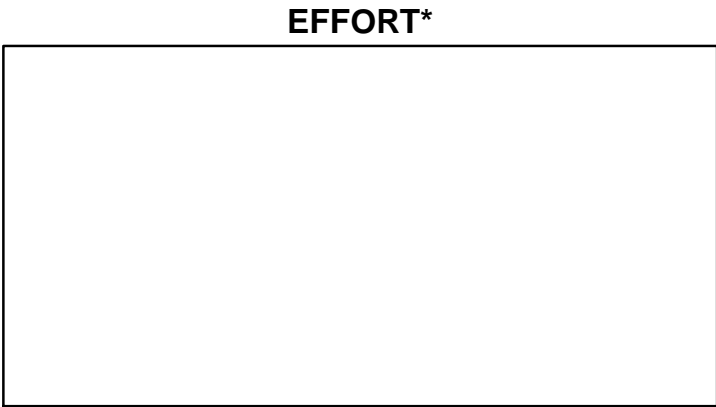
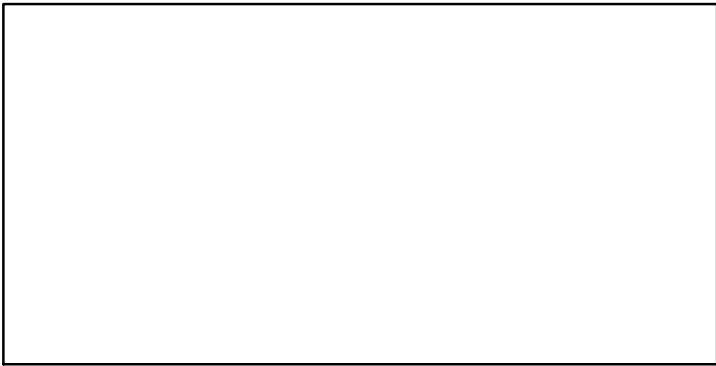
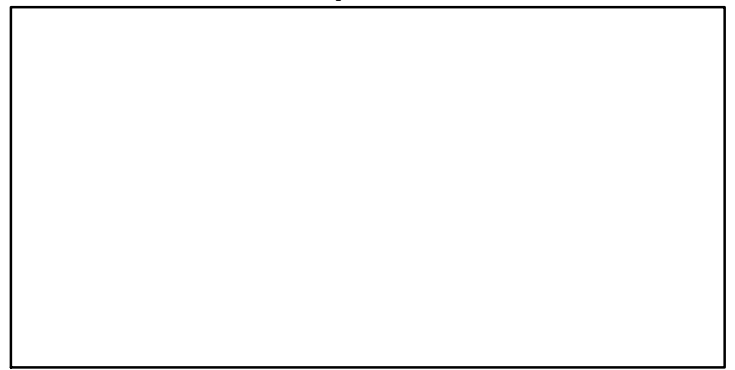
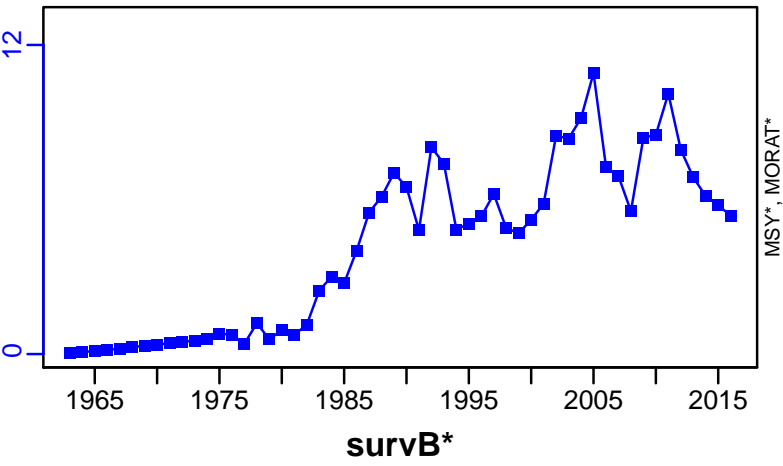
Recruits*



Cabezon Washington [CABEZWASH]

TC-MT, TL*, RecC* (1963–2016–SISIMP2021)

TAC*, Cpair*, Cadv*



California scorpionfish Southern California [CALSCORPSCAL]

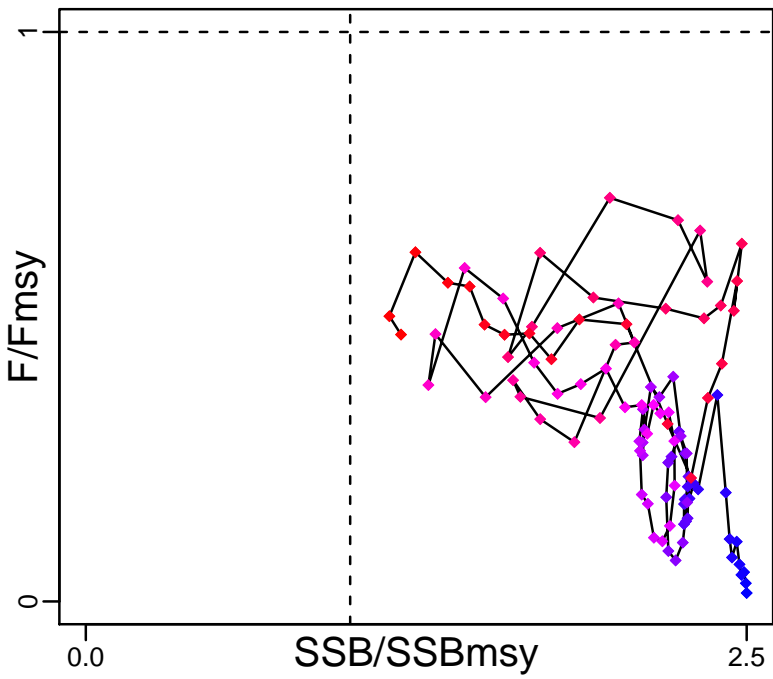
Metadata	
Scientific Name	Scorpaena guttata
Current Assess ID	SWFSC-CALSCORPSCAL-1916-2017-SISIMP2021
Area	Southern California
Management Authority	National Marine Fisheries Service, US national management
Assessor	Southwest Fisheries Science Center
Asmts in RAM	2015, 2017, 2005

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2005	789
SSBmsy	SSBmsy-MT	2017	650
Fmsy	Fmsy-1/yr	2017	0.5
ERmsy	ERmsy-ratio	2005	0.161
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2005	2007
SSB0	SSB0-MT	2005	1024
MSY	MSY-MT	2017	247
M	M-1/yr	2005	0.25
TBlim	-	-	-
SSBlim	SSBlim-MT	2017	406
Flim	Flim-1/yr	2017	0.5
ERlim	-	-	-

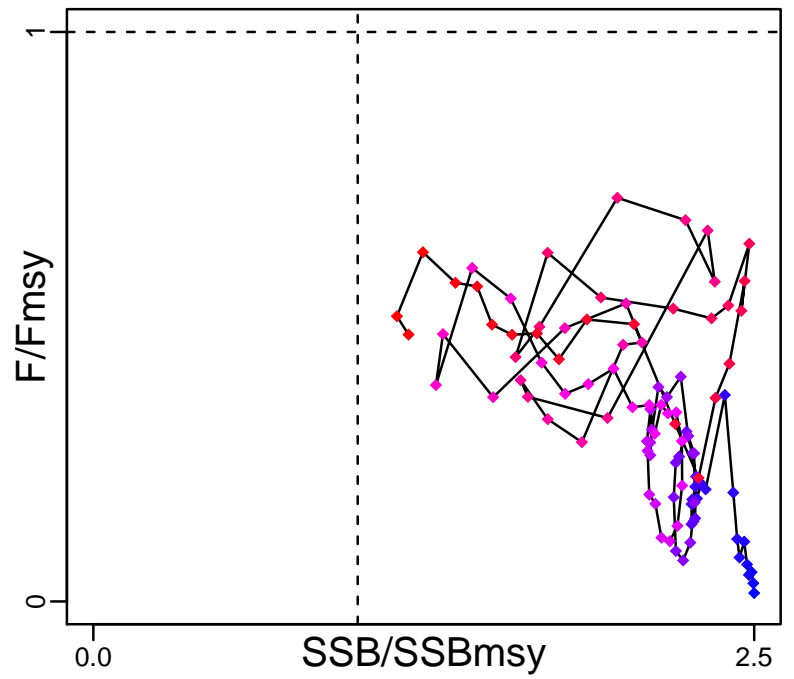
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2017	1915	-	-
SSB	SSB-MT	2017	882	-	-
TN	-	-	-	-	-
R	R-E00	2017	3,343,810	-	0
F	F-1/yr	2017	0.234	-	-
ER	ER-calc-ratio	2017	0.043	-	-
TC	TC-MT	2017	74		
TL	TL-MT	2005	81		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2005	2.371		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2017	1.358		
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	0.469		
ER/ERmsy	ER-ratio/ERmsy-ratio	2005	0.441		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

California scorpionfish Southern California [CALSCORPSCAL]

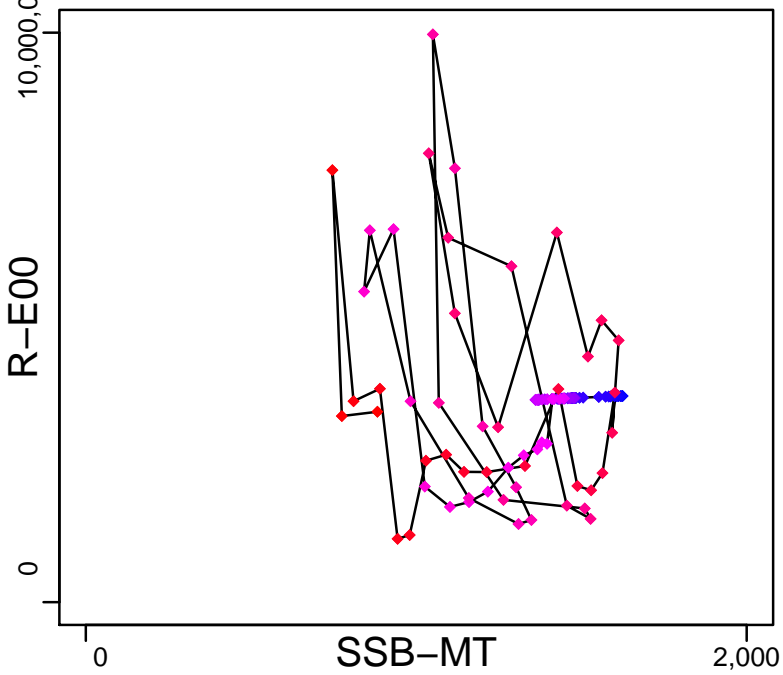
Kobe MSYpref (1916–2017–SISIMP2021)



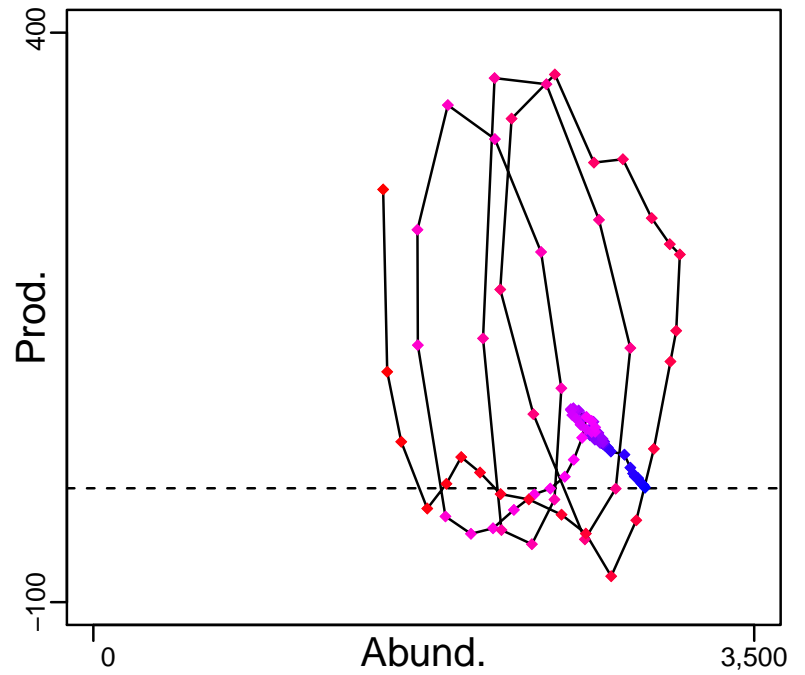
Kobe MGTpref (1916–2017–SISIMP2021)



Spawner Recruit (1916–2017–SISIMP2021)



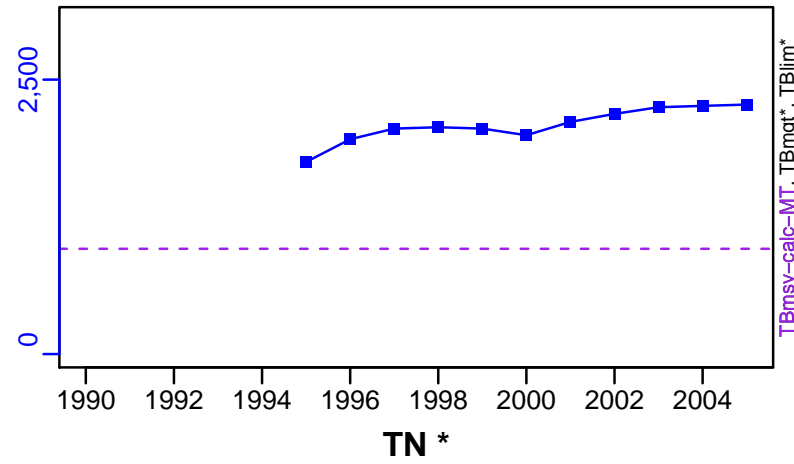
Production (1916–2017–SISIMP2021)



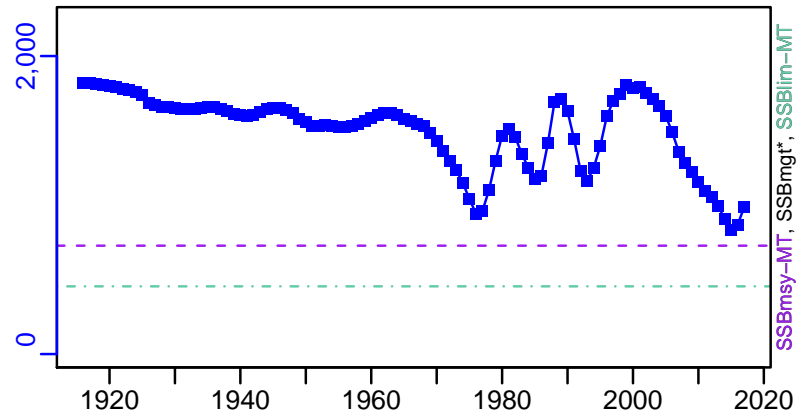
◆ Start Year ◆ End Year * No Data

California scorpionfish Southern California [CALSCORPSCAL]

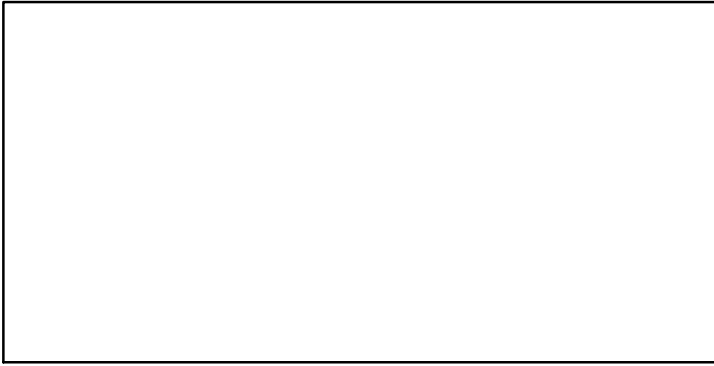
TB-MT (1990–2005–STANTON)



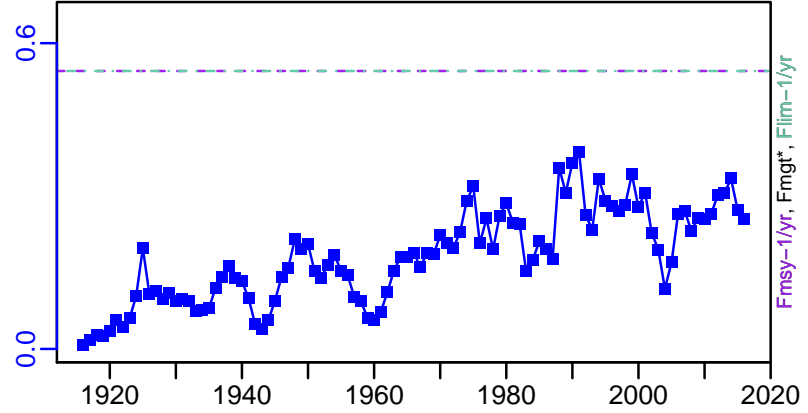
SSB-MT (1916–2017–SISIMP2021)



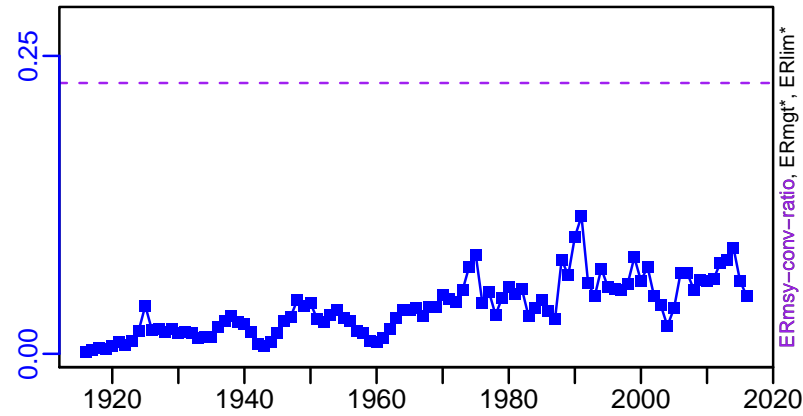
TN *



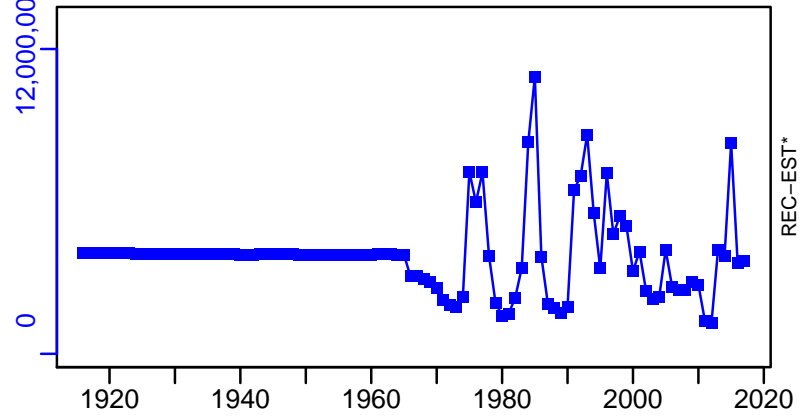
F-1/yr (1916–2017–SISIMP2021)



ER-calc-ratio (1916–2017–SISIMP2021)



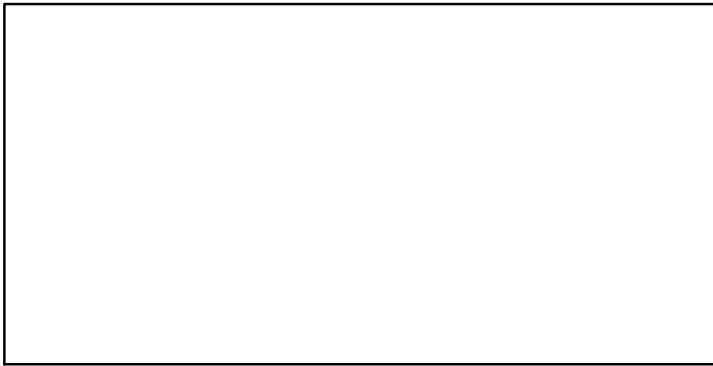
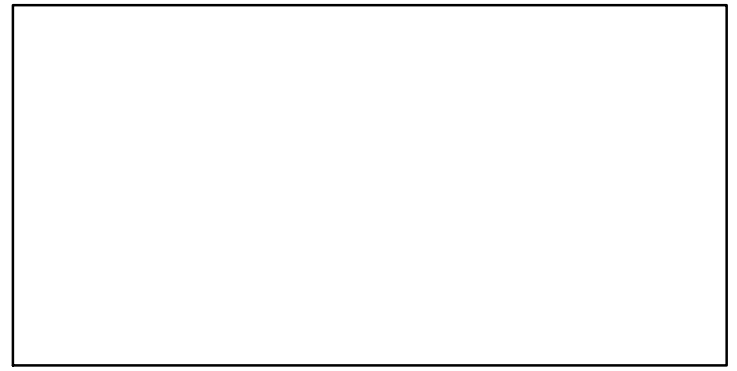
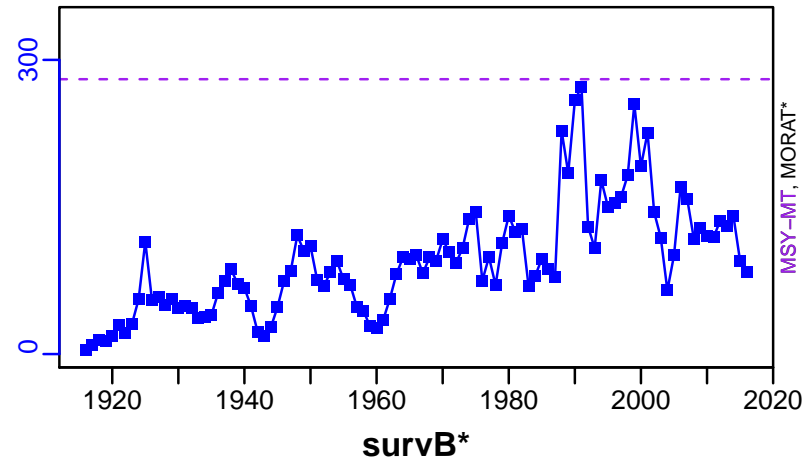
R-E00 (1916–2017–SISIMP2021)



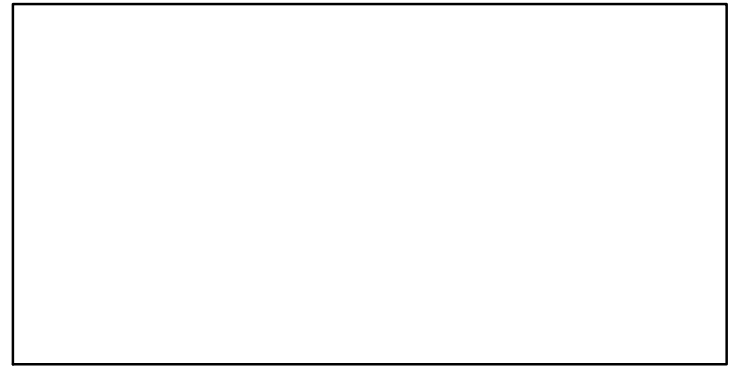
California scorpionfish Southern California [CALSCORPSCAL]

TC-MT, TL*, RecC* (1916-2017-SISIMP2021)

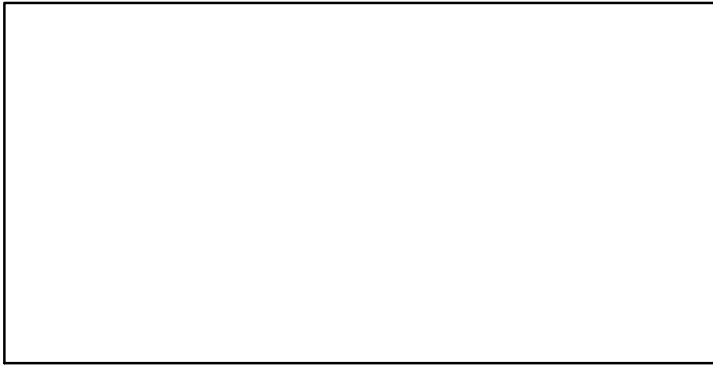
TAC*, Cpair*, Cadv*



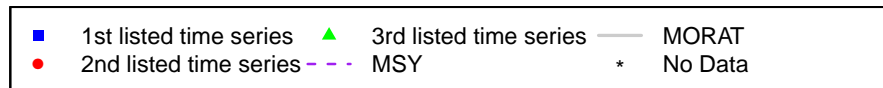
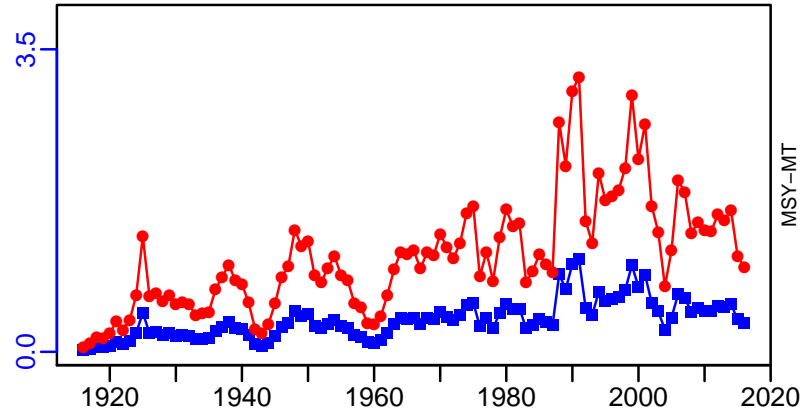
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1916-2017-SISIMP2021)



Chilipepper Southern Pacific Coast [CHILISPCOAST]

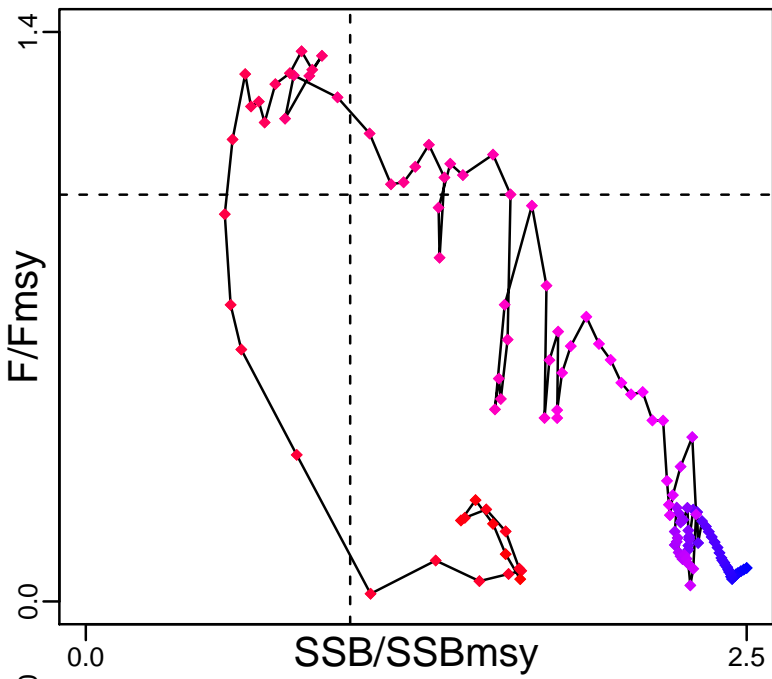
Metadata	
Scientific Name	Sebastes goodei
Current Assess ID	SWFSC-CHILISPCOAST-1892-2017-SISIMP2021
Area	Southern Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Southwest Fisheries Science Center
Asmts in RAM	2007, 2015, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2007	19,321
SSBmsy	SSBmsy-E00larvae	2017	2.72×10^9
Fmsy	Fmsy-1/yr	2017	0.5
ERmsy	ERmsy-ratio	2007	0.112
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2007	45,057
SSB0	SSB0-MT	2007	33,390
MSY	MSY-MT	2017	2064
M	M-1/yr	2007	0.16
TBlim	TBlim-MT	2007	8666
SSBlim	SSBlim-E00larvae	2017	1.7×10^9
Flim	Flim-1/yr	2017	0.5
ERlim	-	-	-

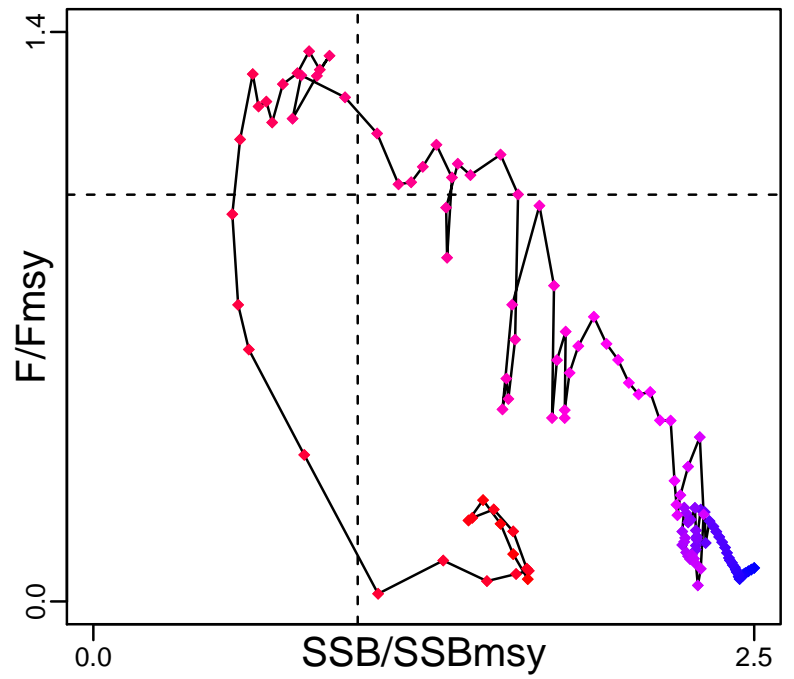
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2017	39,163	-	-
SSB	SSB-E00larvae	2017	4.71×10^9	-	-
TN	-	-	-	-	-
R	R-E00	2017	37,210,400	-	0
F	F-1/yr	2017	0.027	-	-
ER	ER-calc-ratio	2017	0.003	-	-
TC	TC-MT	2017	97		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2007	1.739		
SSB/SSBmsy	SSB-E00larvae/SSBmsy-E00larvae	2017	1.732		
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	0.055		
ER/ERmsy	ER-ratio/ERmsy-ratio	2007	0.035		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Chilipepper Southern Pacific Coast [CHILISPCOAST]

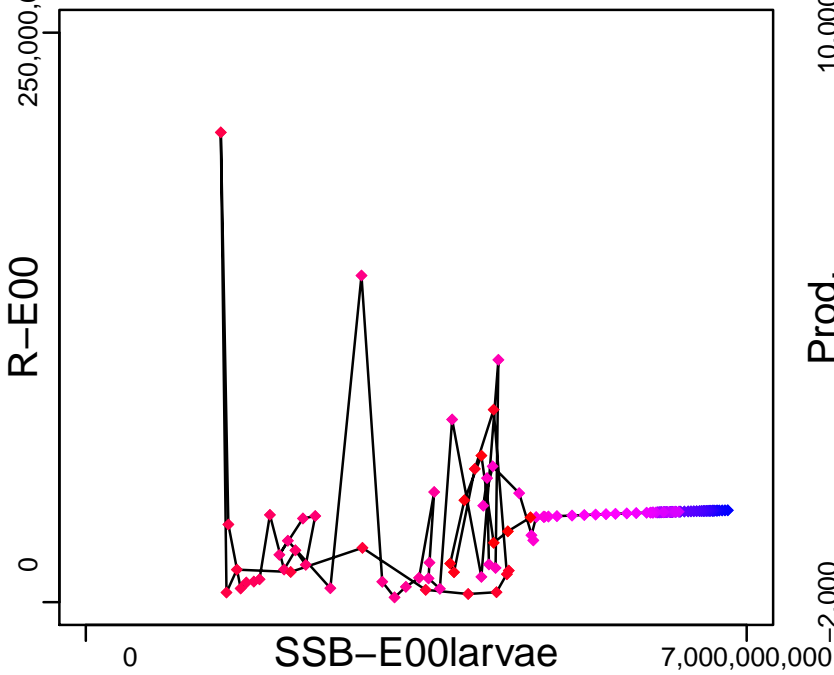
Kobe MSYpref (1892–2017–SISIMP2021)



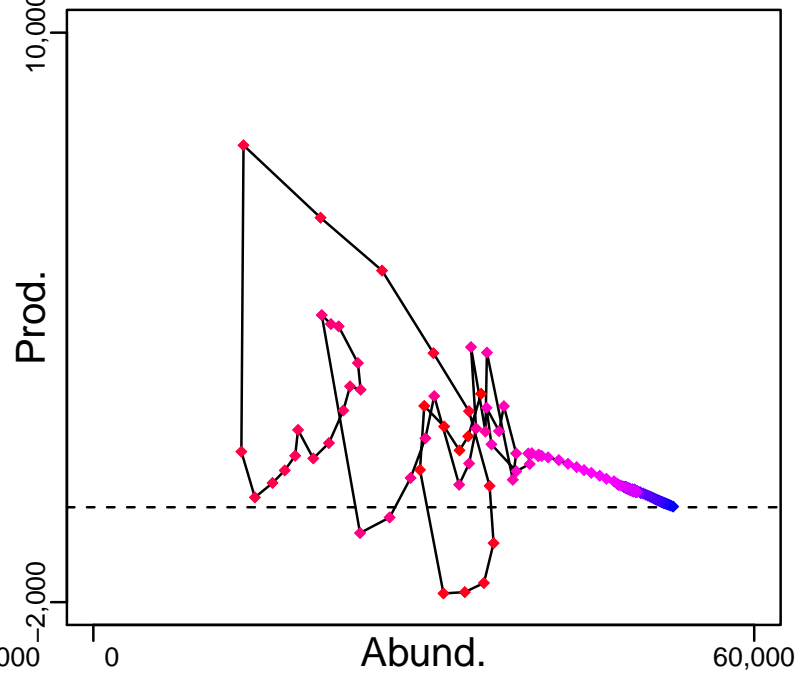
Kobe MGTpref (1892–2017–SISIMP2021)



Spawner Recruit (1892–2017–SISIMP2021)



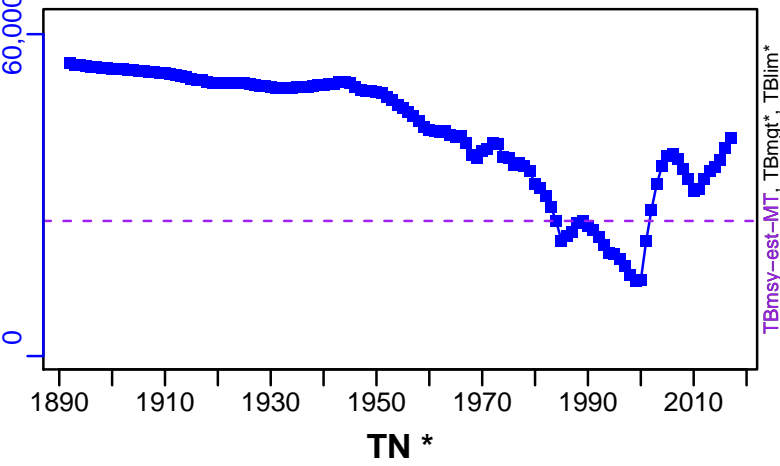
Production (1892–2017–SISIMP2021)



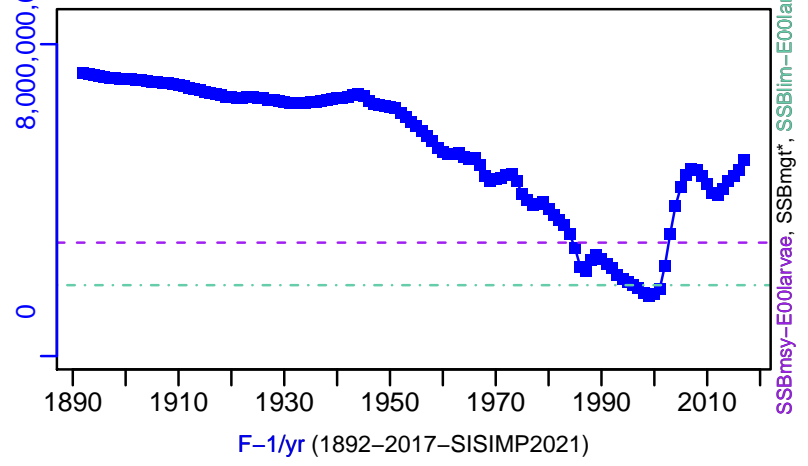
◆ Start Year ◆ End Year * No Data

Chilipepper Southern Pacific Coast [CHILISPCOAST]

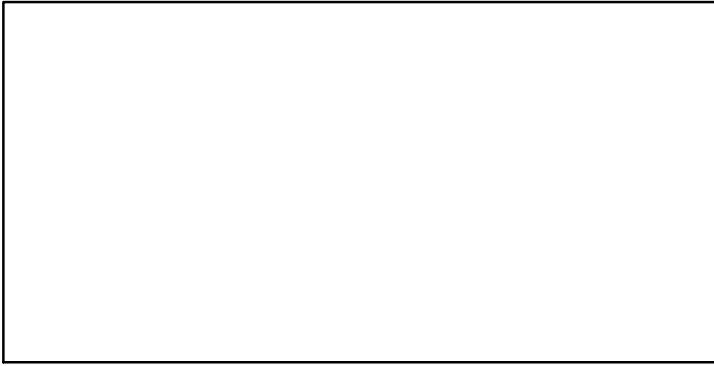
TB-MT (1892-2017-SISIMP2021)



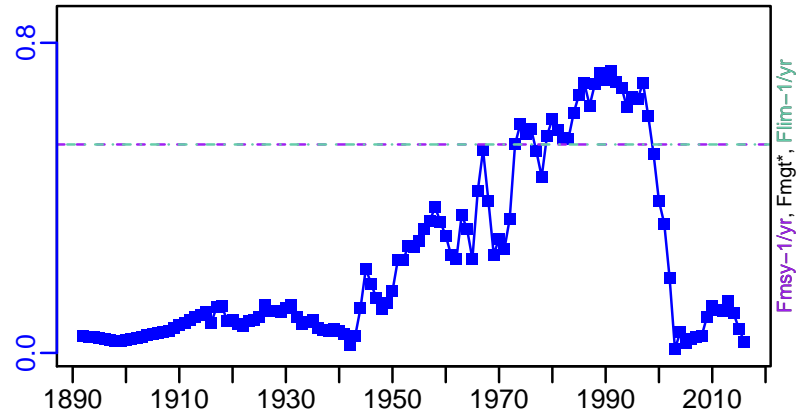
SSB-E00larvae (1892-2017-SISIMP2021)



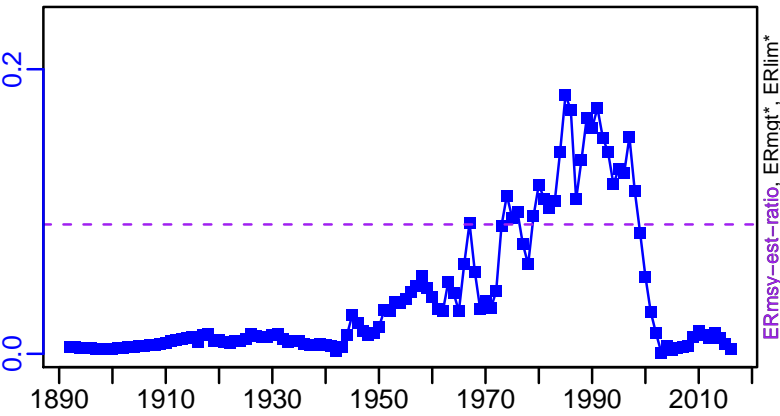
TN *



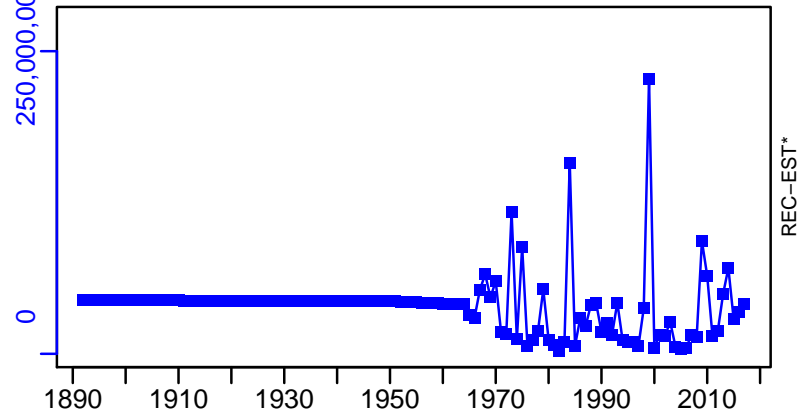
F-1/yr (1892-2017-SISIMP2021)



ER-calc-ratio (1892-2017-SISIMP2021)

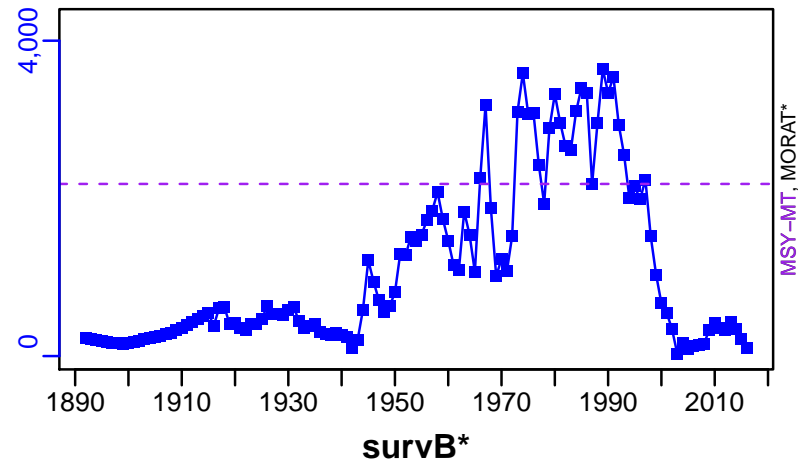


R-E00 (1892-2017-SISIMP2021)



Chilipepper Southern Pacific Coast [CHILISPCOAST]

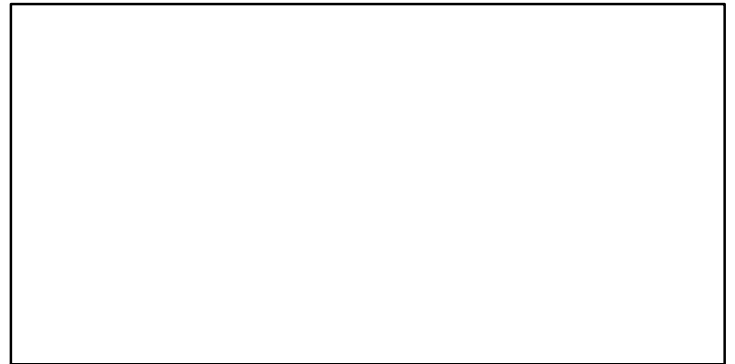
TC-MT, TL*, RecC* (1892-2017-SISIMP2021)



TAC*, Cpair*, Cadv*



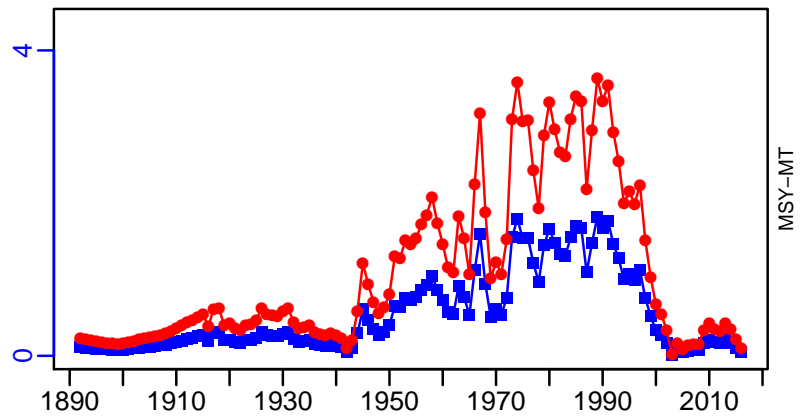
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1892-2017-SISIMP2021)



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

China rockfish Central Pacific Coast [CHROCKCPCOAST]

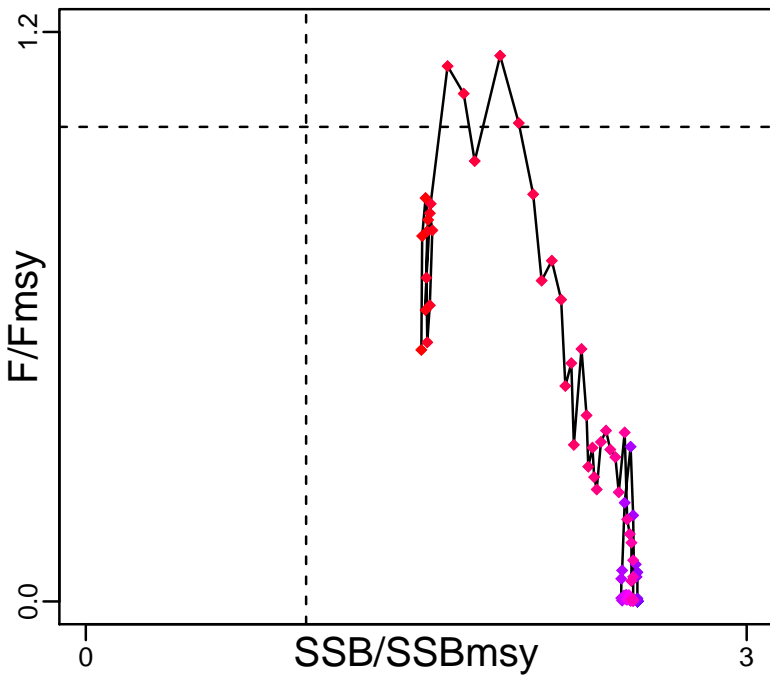
Metadata	
Scientific Name	Sebastes nebulosus
Current Assess ID	NWFSC-CHROCKCPCOAST-1900-2015-SISIMP2016
Area	Central Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2015	272
SSBmsy	SSBmsy-E00eggs	2015	2.6×10^{10}
Fmsy	Fmsy-1/yr	2015	0.5
ERmsy	ERmsy-est-ratio	2015	0.047
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2015	16
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-E00eggs	2015	1.63×10^{10}
Flim	Flim-1/yr	2015	0.5
ERlim	-	-	-

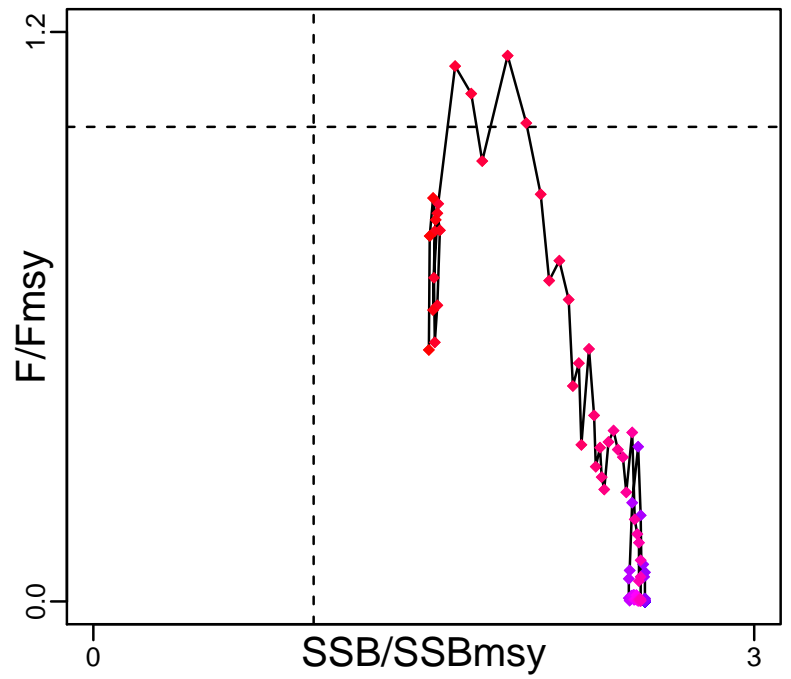
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2015	381	-	5+
SSB	SSB-E00eggs	2015	4×10^{10}	Females	-
TN	-	-	-	-	-
R	R-E00	2015	68,200	-	0
F	F-1/yr	2015	0.265	-	-
ER	ER-calc-ratio	2015	0.019	-	-
TC	TC-MT	2015	7		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-est-MT	2015	1.4		
SSB/SSBmsy	SSB-E00eggs/SSBmsy-E00eggs	2015	1.538		
F/Fmsy	F-1/yr/Fmsy-1/yr	2015	0.53		
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2015	0.397		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

China rockfish Central Pacific Coast [CHROCKCPCOAST]

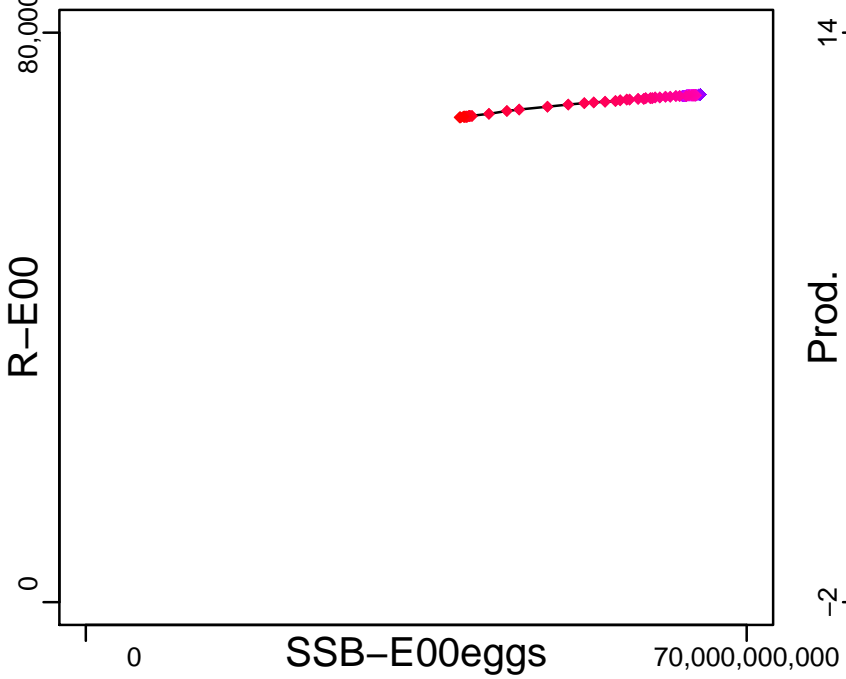
Kobe MSYpref (1900–2015–SISIMP2016)



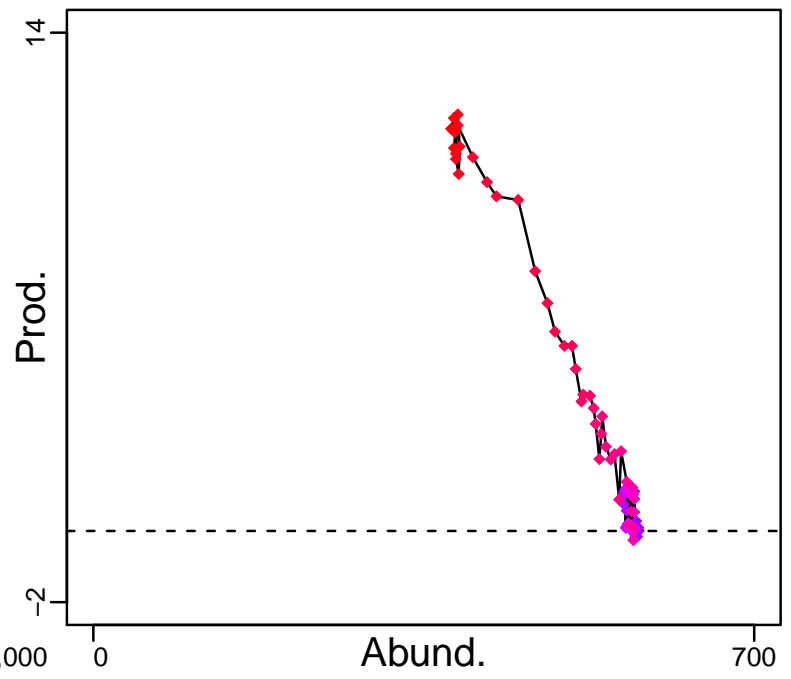
Kobe MGTpref (1900–2015–SISIMP2016)



Spawner Recruit (1900–2015–SISIMP2016)

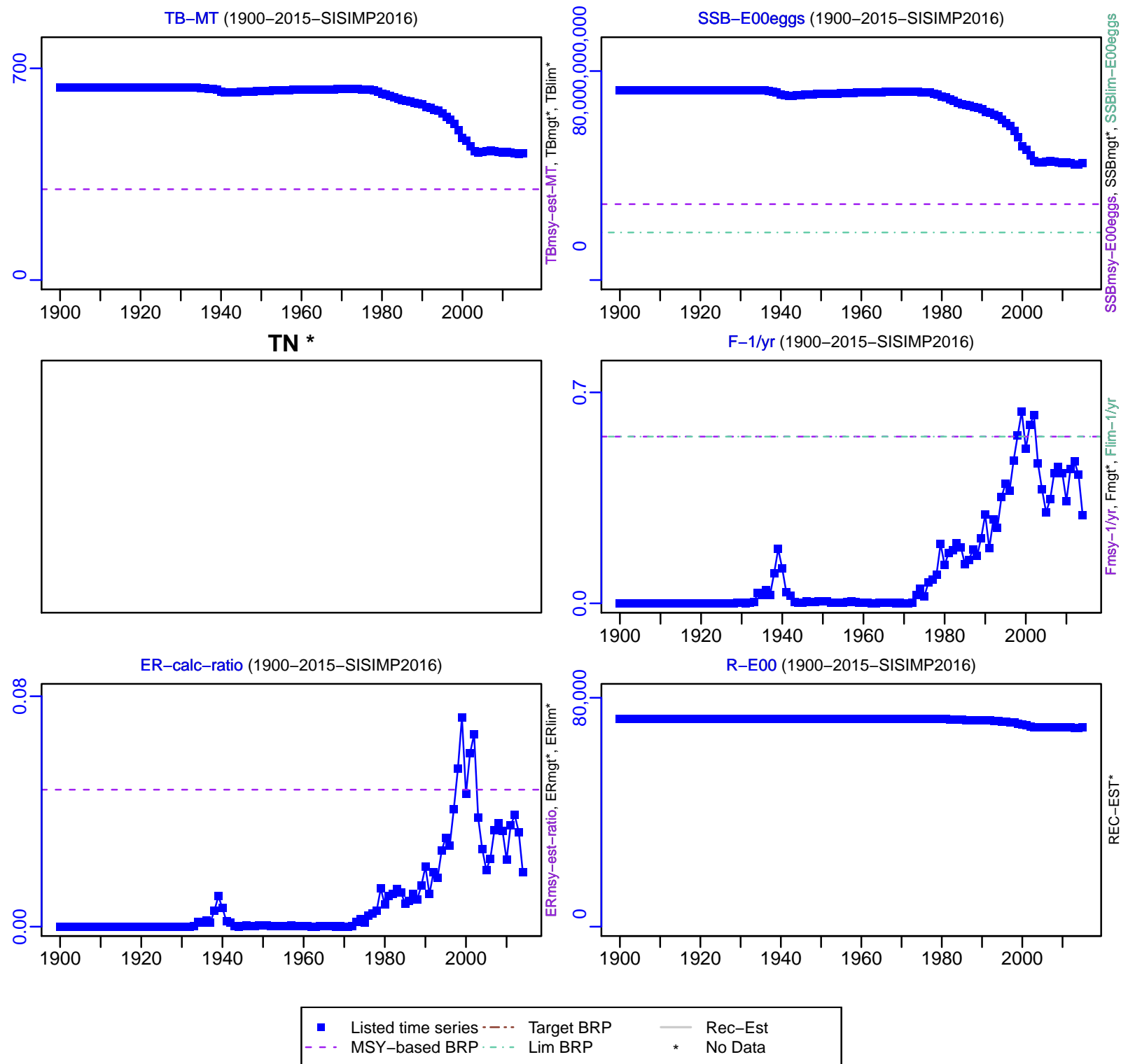


Production (1900–2015–SISIMP2016)



◆ Start Year ◆ End Year * No Data

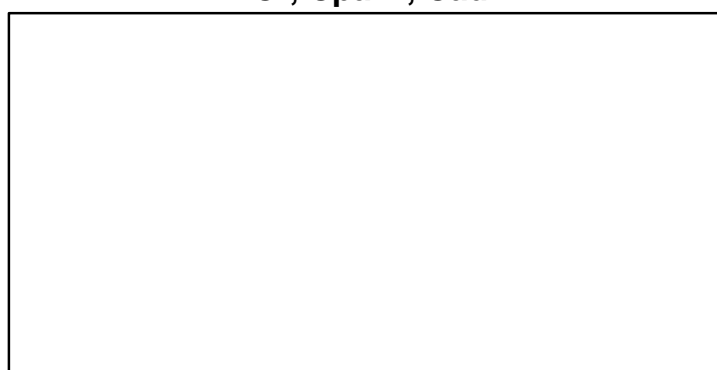
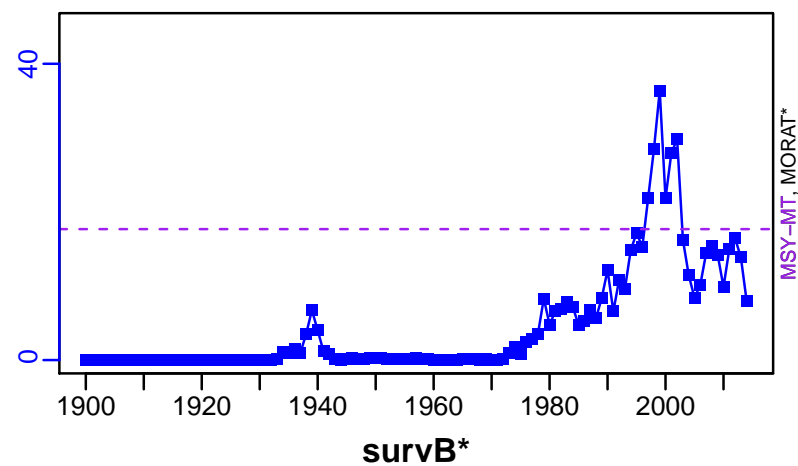
China rockfish Central Pacific Coast [CHROCKPCOAST]



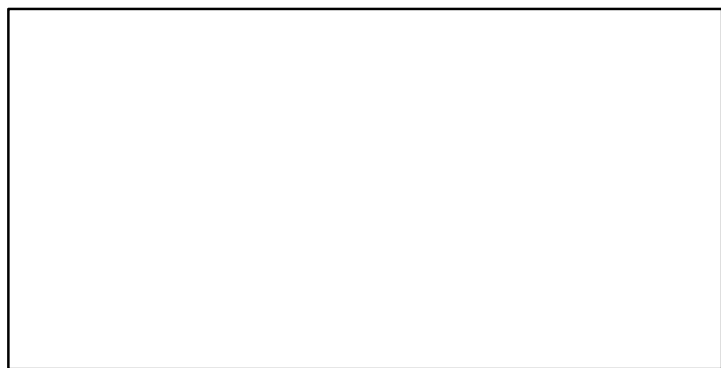
China rockfish Central Pacific Coast [CHROCKPCOAST]

TC-MT, TL*, RecC* (1900–2015–SISIMP2016)

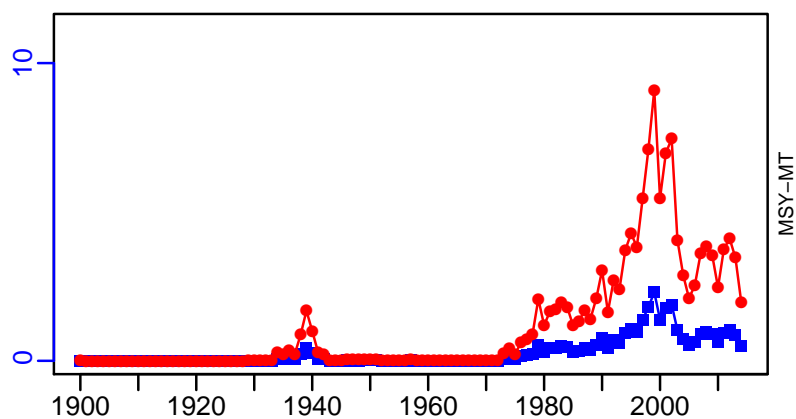
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1900–2015–SISIMP2016)



China rockfish Northern Pacific Coast [CHROCKNPCOAST]

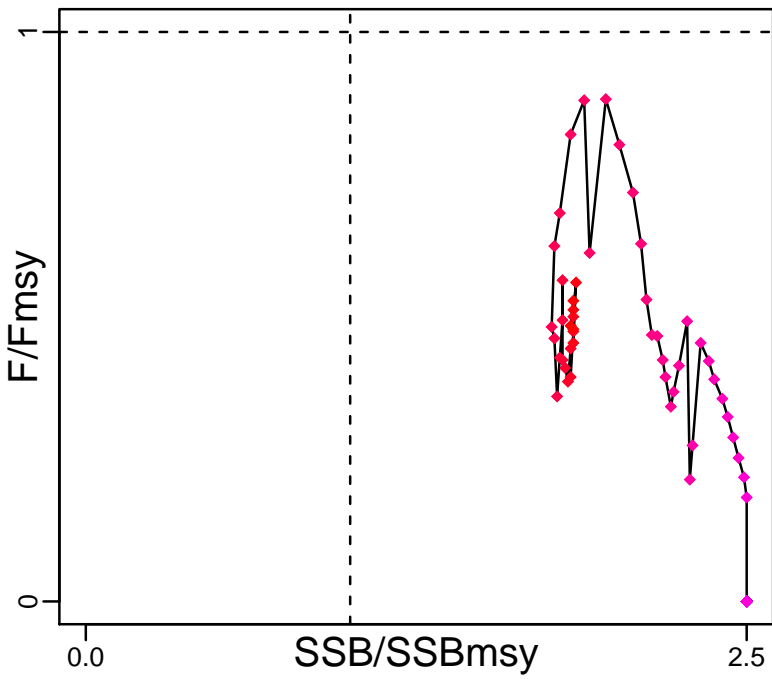
Metadata	
Scientific Name	Sebastes nebulosus
Current Assess ID	SWFSC-CHROCKNPCOAST-1900-2015-SISIMP2016
Area	Northern Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Southwest Fisheries Science Center
Asmts in RAM	2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2015	111
SSBmsy	SSBmsy-E00eggs	2015	9.76×10^9
Fmsy	Fmsy-1/yr	2015	0.5
ERmsy	ERmsy-est-ratio	2015	0.043
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2015	4.804
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-E00eggs	2015	6.13×10^9
Flim	Flim-1/yr	2015	0.5
ERlim	-	-	-

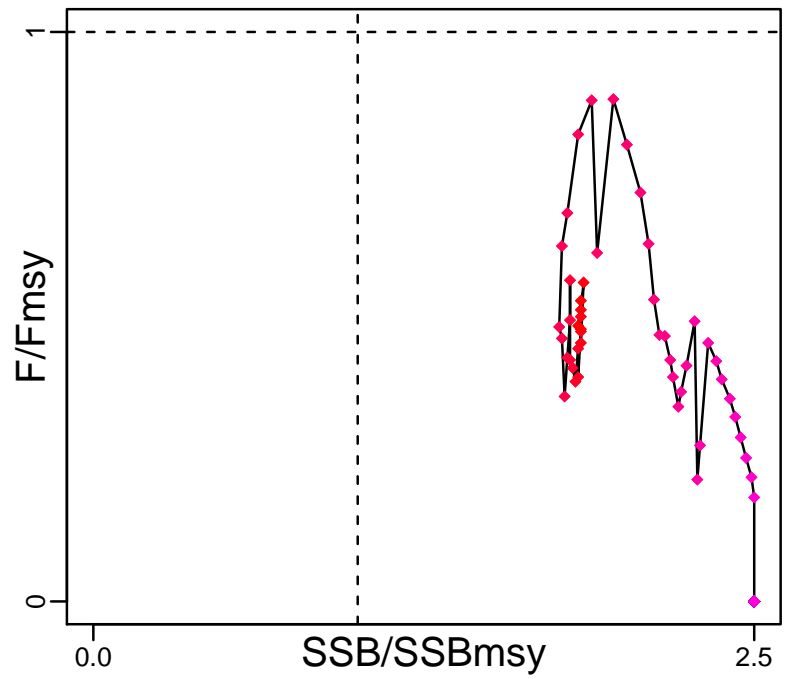
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2015	183	-	5+
SSB	SSB-E00eggs	2015	1.79×10^{10}	Females	-
TN	-	-	-	-	-
R	R-E00	2015	33,300	-	0
F	F-1/yr	2015	0.242	-	-
ER	ER-calc-ratio	2015	0.017	-	-
TC	TC-MT	2015	3.02		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-est-MT	2015	1.646		
SSB/SSBmsy	SSB-E00eggs/SSBmsy-E00eggs	2015	1.834		
F/Fmsy	F-1/yr/Fmsy-1/yr	2015	0.484		
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2015	0.382		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

China rockfish Northern Pacific Coast [CHROCKNPCOAST]

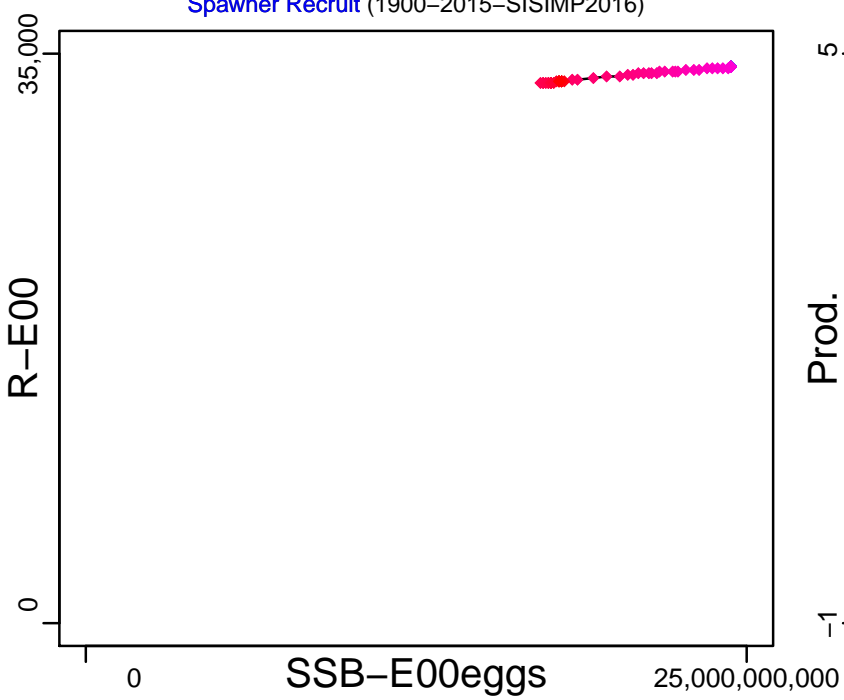
Kobe MSYpref (1900–2015–SISIMP2016)



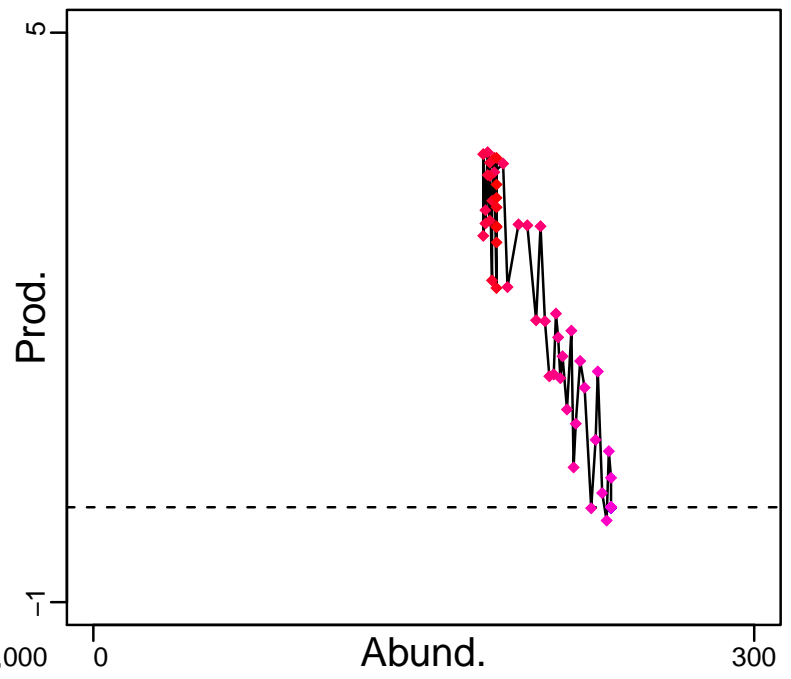
Kobe MGTpref (1900–2015–SISIMP2016)



Spawner Recruit (1900–2015–SISIMP2016)

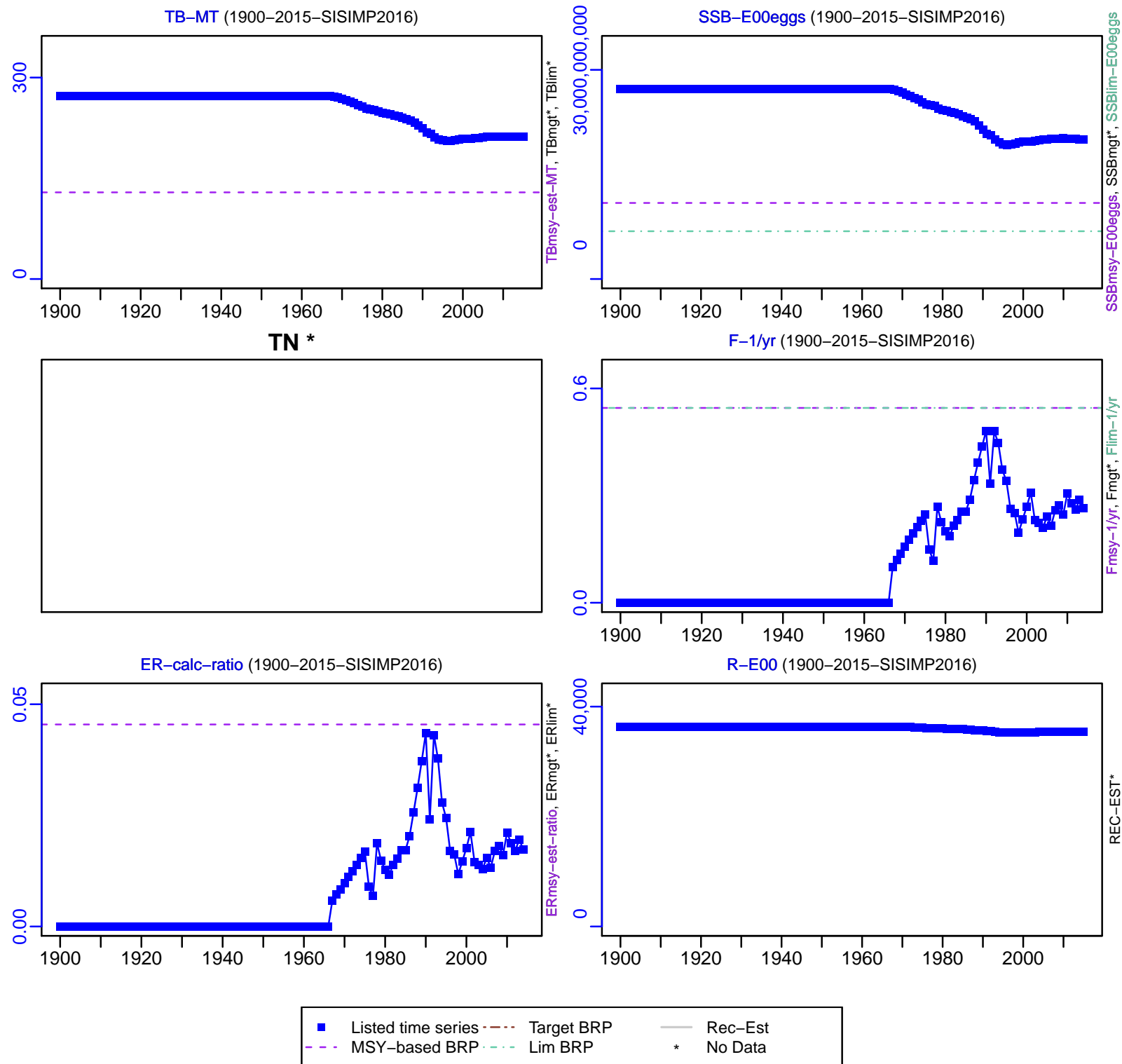


Production (1900–2015–SISIMP2016)



◆ Start Year ◆ End Year * No Data

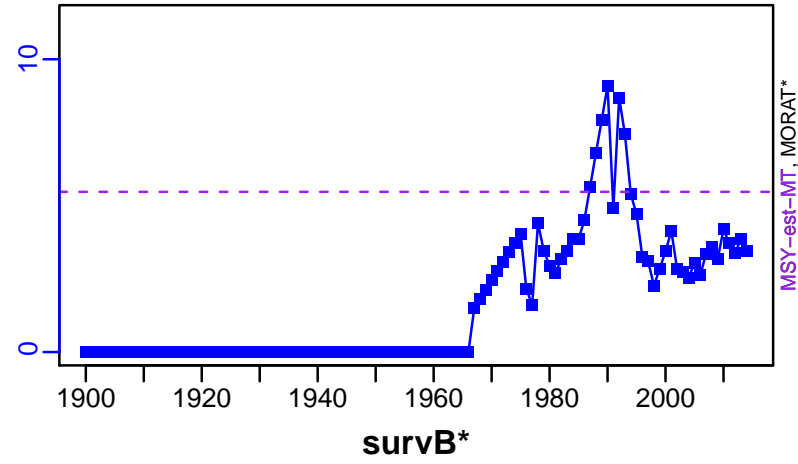
China rockfish Northern Pacific Coast [CHROCKNP coast]



China rockfish Northern Pacific Coast [CHROCKNPCOAST]

TC-MT, TL*, RecC* (1900-2015-SISIMP2016)

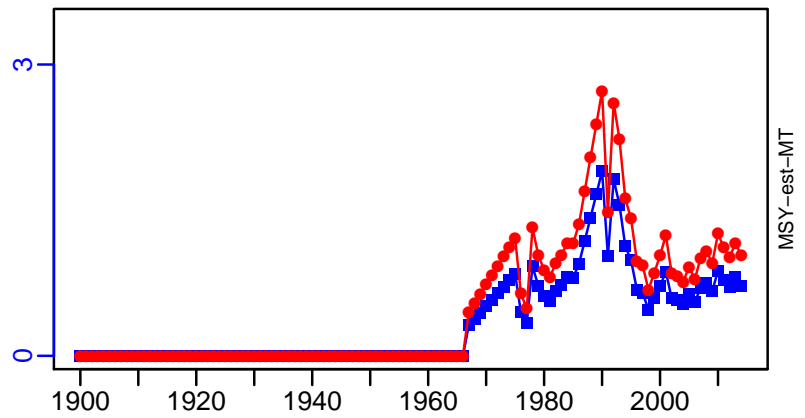
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1900-2015-SISIMP2016)



China rockfish Southern Pacific Coast [CHROCKSPCOAST]

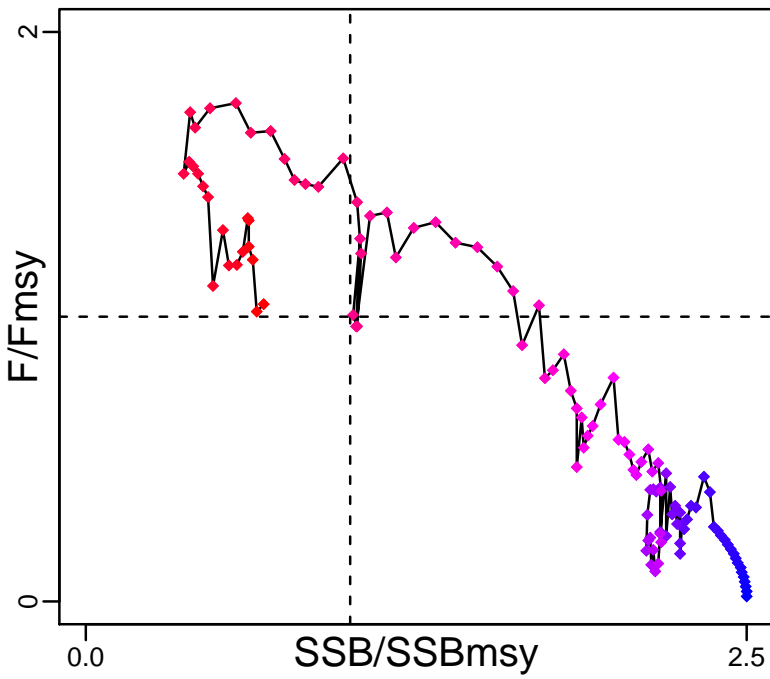
Metadata	
Scientific Name	Sebastes nebulosus
Current Assess ID	NWFSC-CHROCKSPCOAST-1900-2015-SISIMP2016
Area	Southern Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2015	343
SSBmsy	SSBmsy-E00eggs	2015	2.66×10^{10}
Fmsy	Fmsy-1/yr	2015	0.5
ERmsy	ERmsy-est-ratio	2015	0.073
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2015	21
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-E00eggs	2015	1.66×10^{10}
Flim	Flim-1/yr	2015	0.5
ERlim	-	-	-

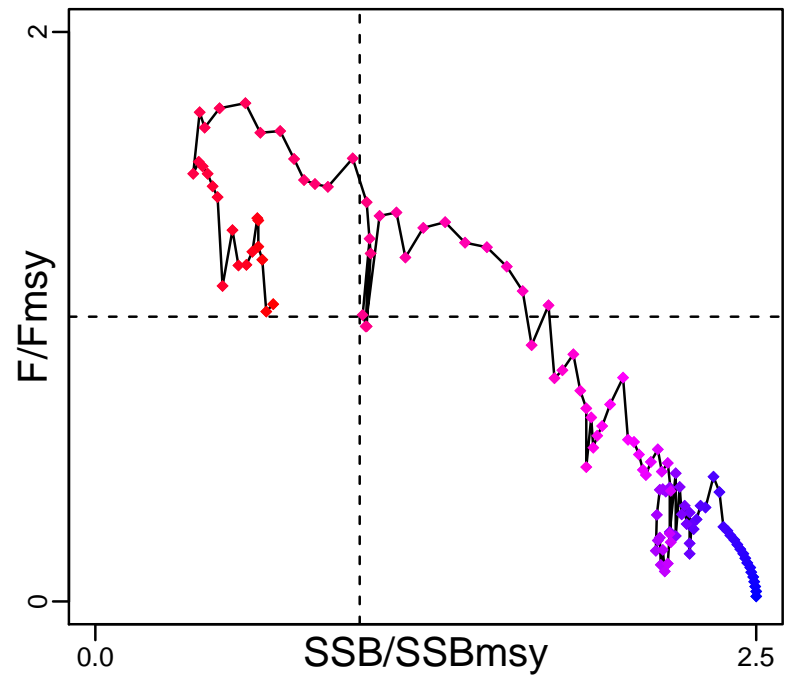
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2015	280	-	5+
SSB	SSB-E00eggs	2015	1.86×10^{10}	-	-
TN	-	-	-	-	-
R	R-E00	2015	130,000	-	0
F	F-1/yr	2015	0.522	-	-
ER	ER-calc-ratio	2015	0.046	-	-
TC	TC-MT	2015	12		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-est-MT	2015	0.817		
SSB/SSBmsy	SSB-E00eggs/SSBmsy-E00eggs	2015	0.699		
F/Fmsy	F-1/yr/Fmsy-1/yr	2015	1.044		
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2015	0.621		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

China rockfish Southern Pacific Coast [CHROCKSPCOAST]

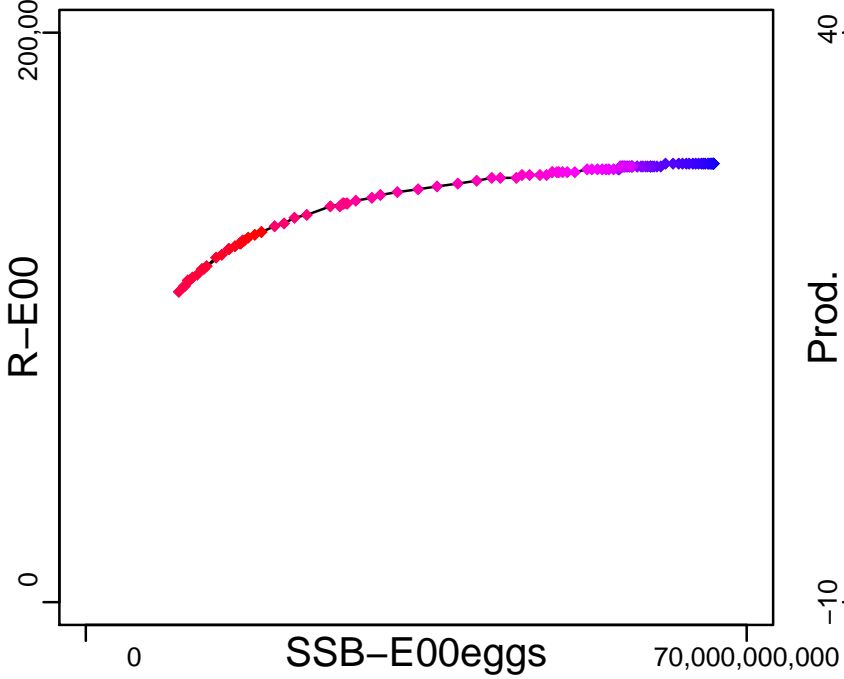
Kobe MSYpref (1900–2015–SISIMP2016)



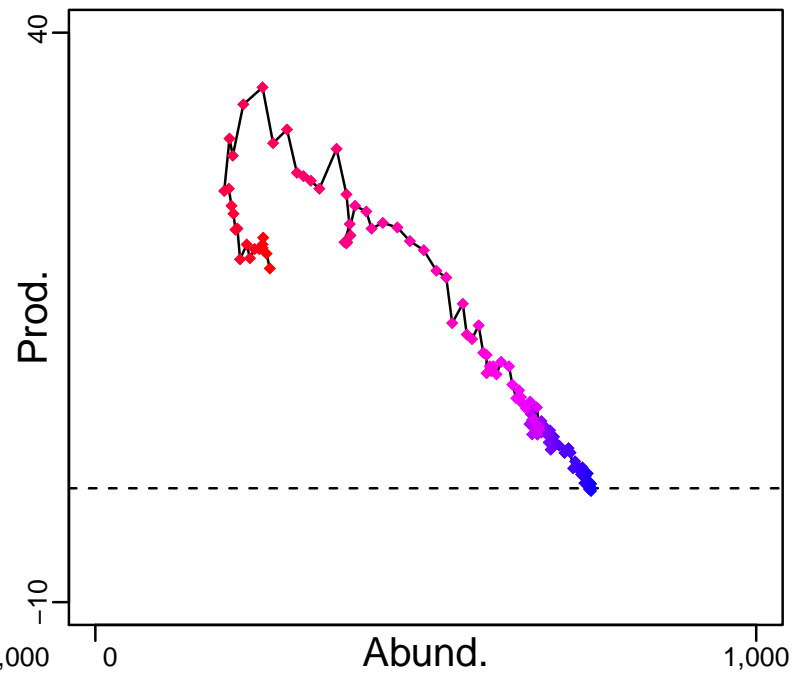
Kobe MGTpref (1900–2015–SISIMP2016)



Spawner Recruit (1900–2015–SISIMP2016)

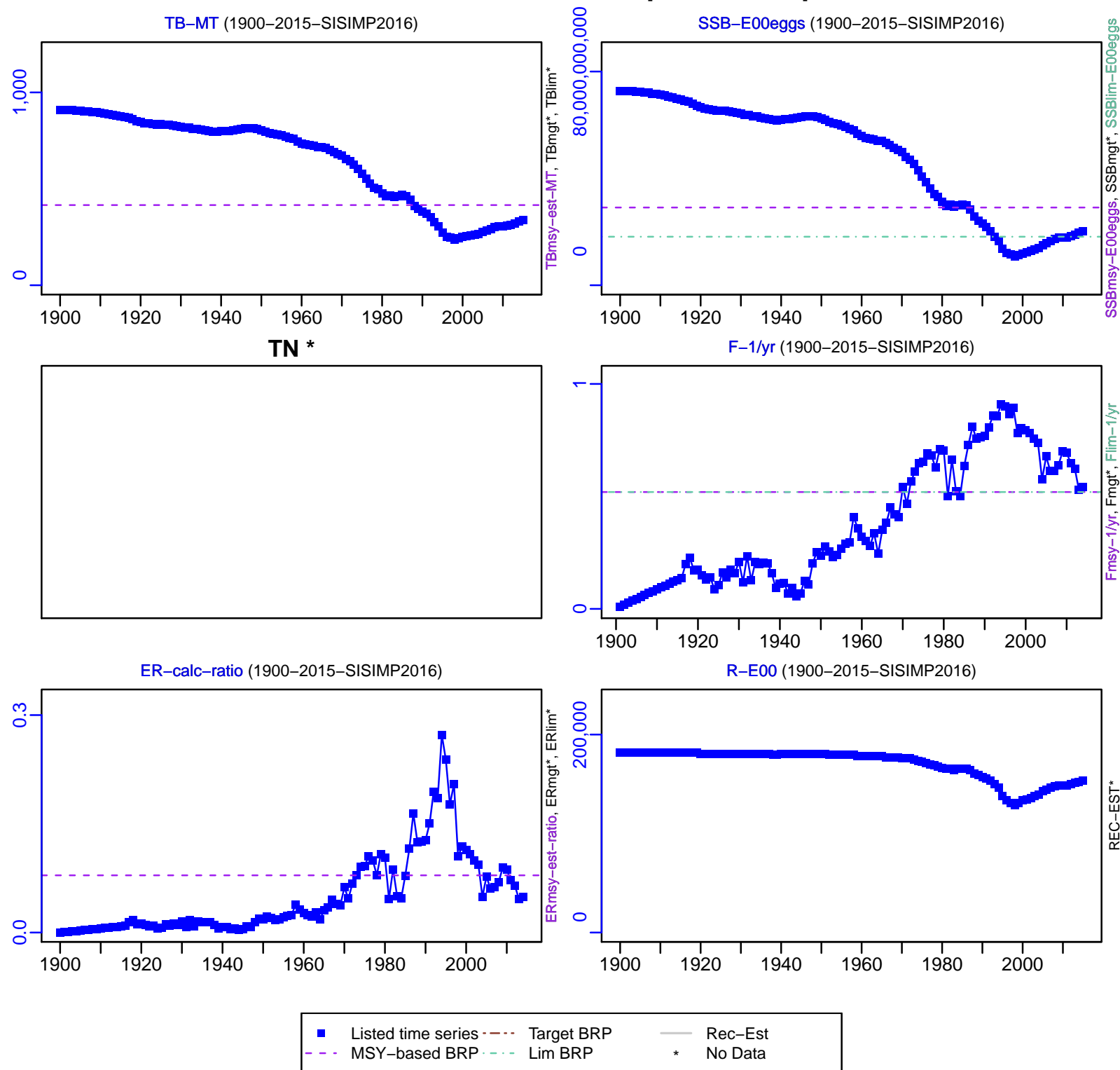


Production (1900–2015–SISIMP2016)



◆ Start Year ◆ End Year * No Data

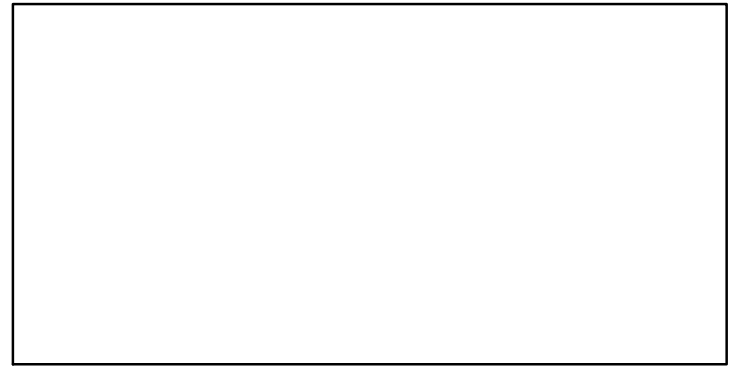
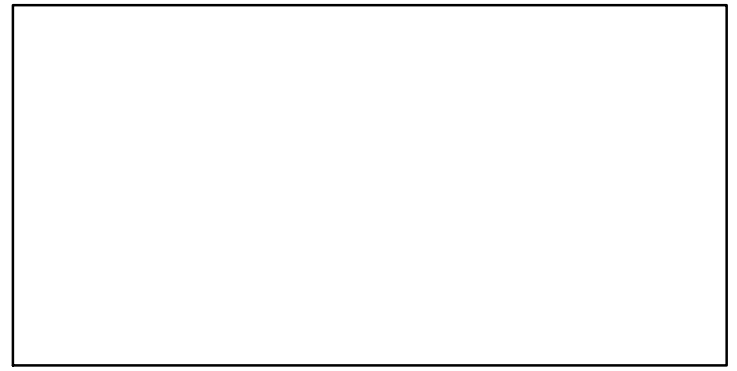
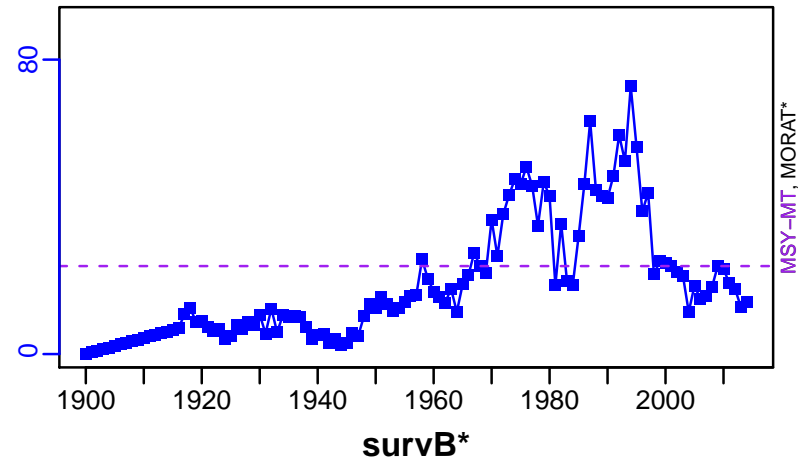
China rockfish Southern Pacific Coast [CHROCKSPCOAST]



China rockfish Southern Pacific Coast [CHROCKSPCOAST]

TC-MT, TL*, RecC* (1900–2015–SISIMP2016)

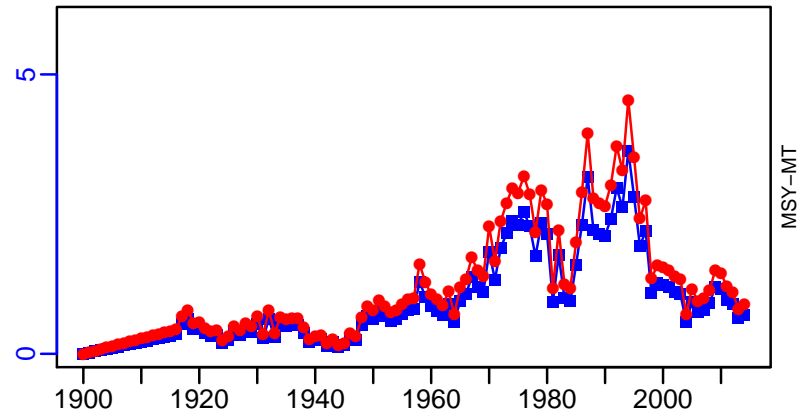
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1900–2015–SISIMP2016)



Pacific chub mackerel Pacific Coast [CMACKPCOAST]

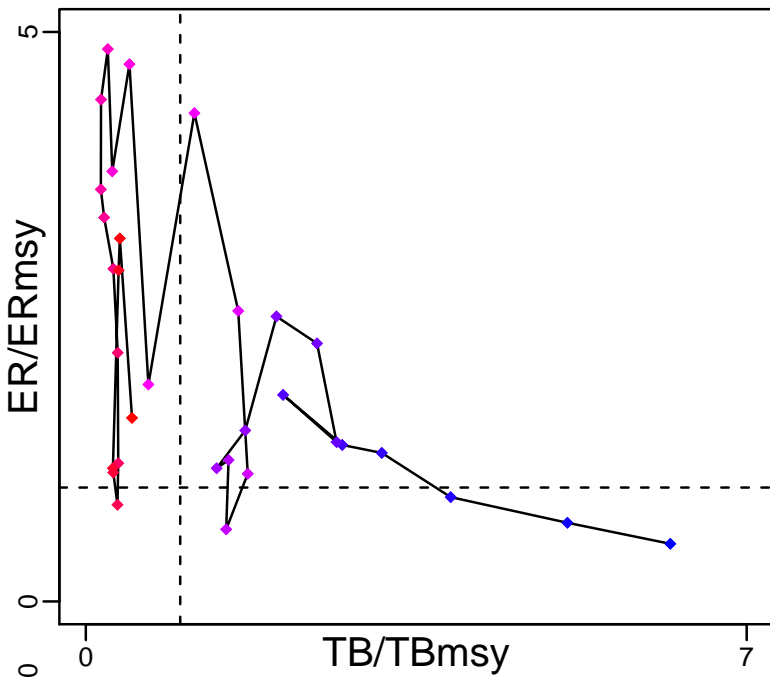
Metadata	
Scientific Name	Scomber japonicus
Current Assess ID	SWFSC-CMACKPCOAST-1983-2016-SISIMP2021
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Southwest Fisheries Science Center
Asmts in RAM	2008, 2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2008	125,285
SSBmsy	SSBmsy-MT	2008	122,357
Fmsy	Fmsy-1/yr	2008	0.138
ERmsy	ERmsy-ratio	2008	0.184
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	SSB0-MT	2008	182,791
MSY	MSY-MT	2008	23,048
M	M-1/yr	2008	0.5
TBlim	TBlim-MT	2016	18,200
SSBlim	SSBlim-MT	2008	29,420
Flim	-	-	-
ERlim	-	-	-

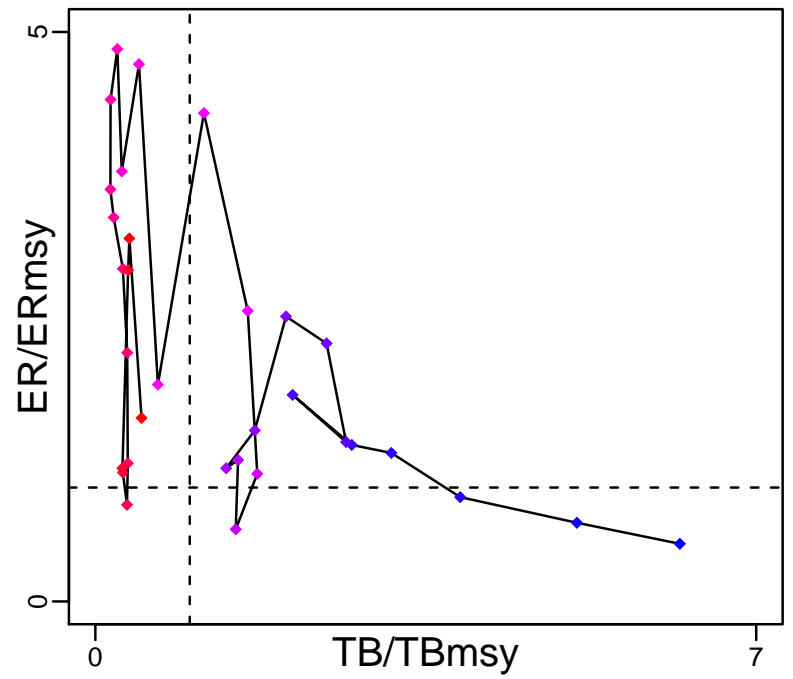
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2016	118,968	-	-
SSB	SSB-MT	2016	47,178	-	-
TN	-	-	-	-	-
R	R-E00	2016	327,350,000	-	0
F	F-1/yr	2008	0.087	-	-
ER	ER-ratio	2016	0.104	-	-
TC	TC-MT	2016	10,124		
TL	TL-MT	2008	13,700		
TB/TBmsy	TB-MT/TBmsy-est-MT	2016	0.598		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2008	0.68		
F/Fmsy	F-1/yr/Fmsy-1/yr	2008	0.633		
ER/ERmsy	ER-ratio/ERmsy-ratio	2008	0.39		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Pacific chub mackerel Pacific Coast [CMACKPCOAST]

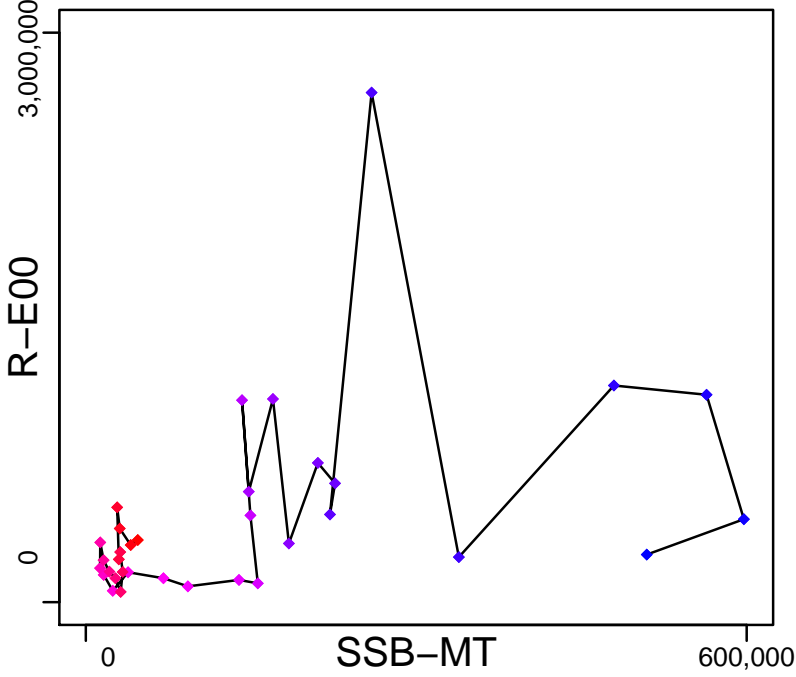
Kobe MSY_{pref} (1983–2016–SISIMP2021)



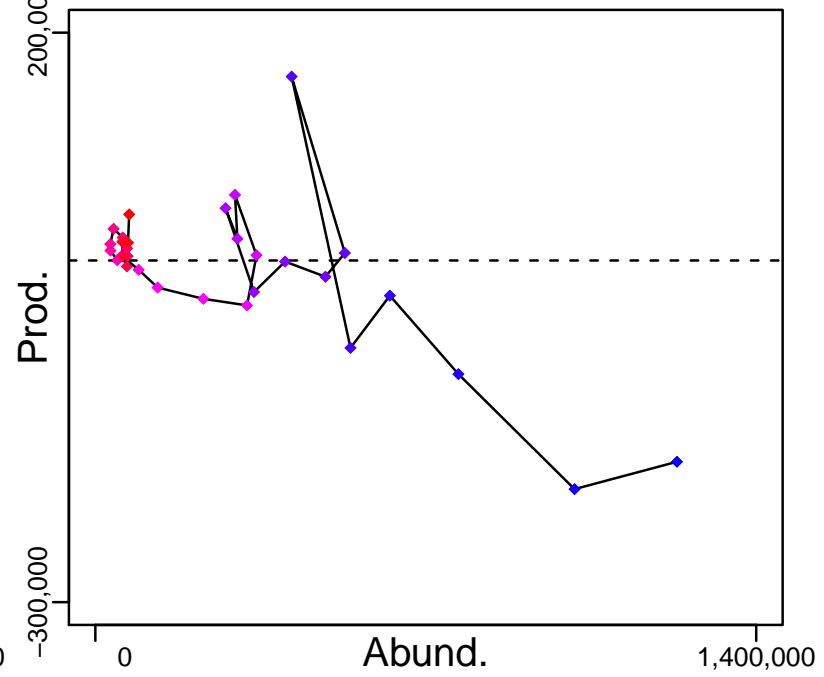
Kobe MGT_{pref} (1983–2016–SISIMP2021)



Spawner Recruit (1983–2016–SISIMP2021)



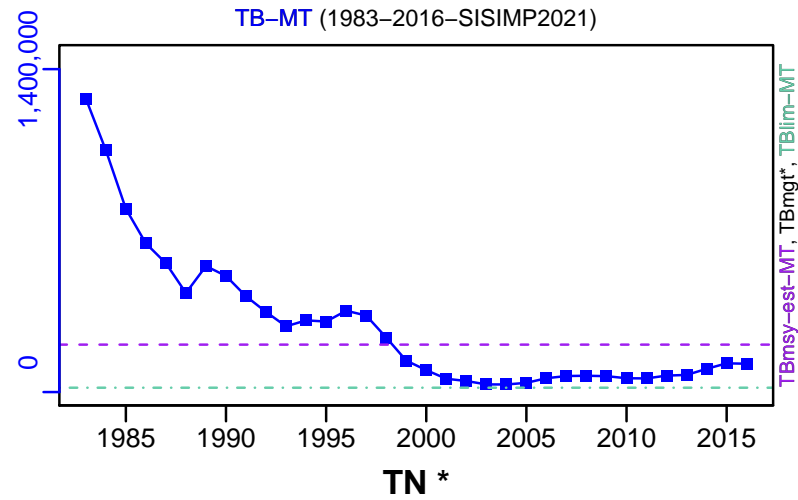
Production (1983–2016–SISIMP2021)



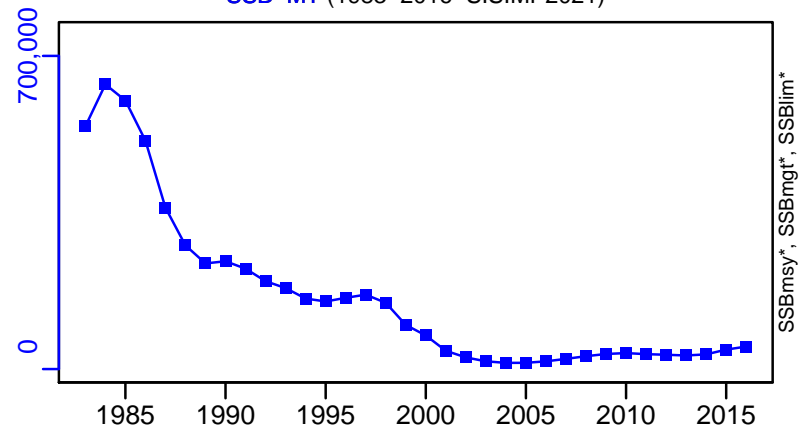
◆ Start Year ◆ End Year * No Data

Pacific chub mackerel Pacific Coast [CMACKPCOAST]

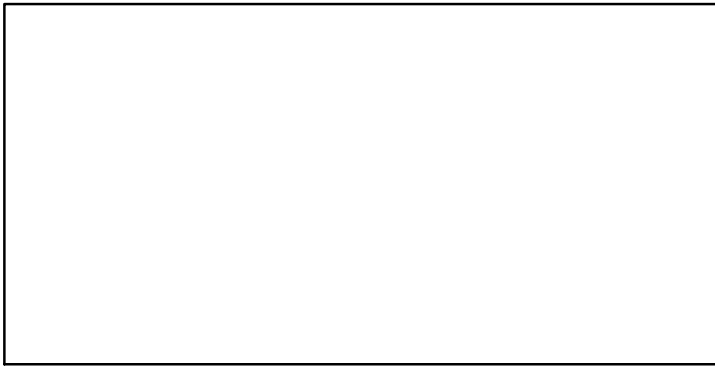
TB-MT (1983–2016–SISIMP2021)



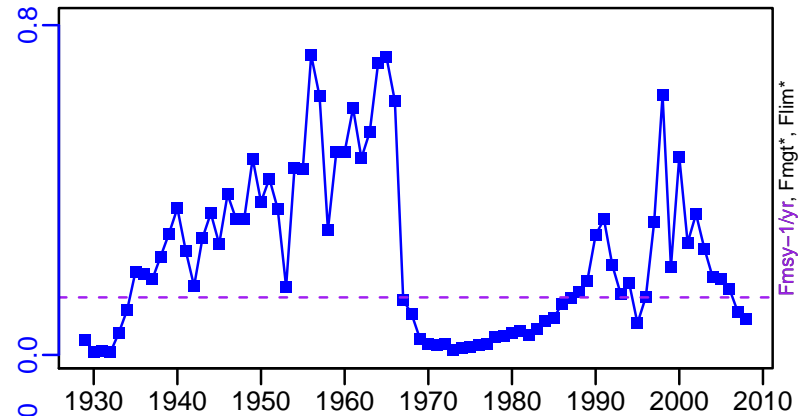
SSB-MT (1983–2016–SISIMP2021)



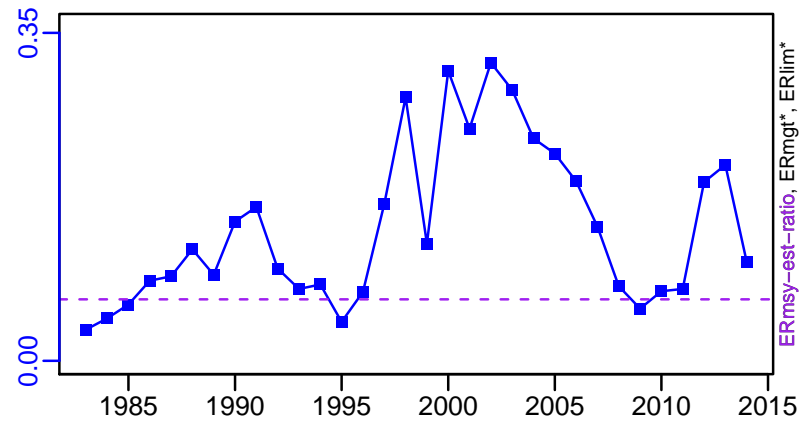
TN *



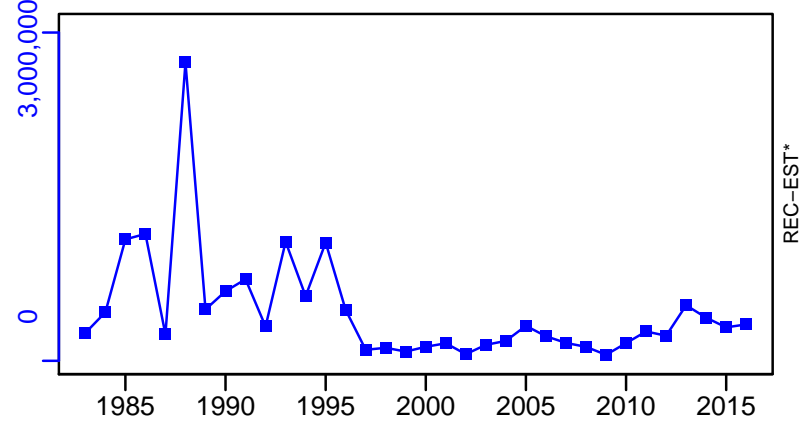
F-1/yr (1929–2008–PINSKY)



ER-ratio (1983–2016–SISIMP2021)



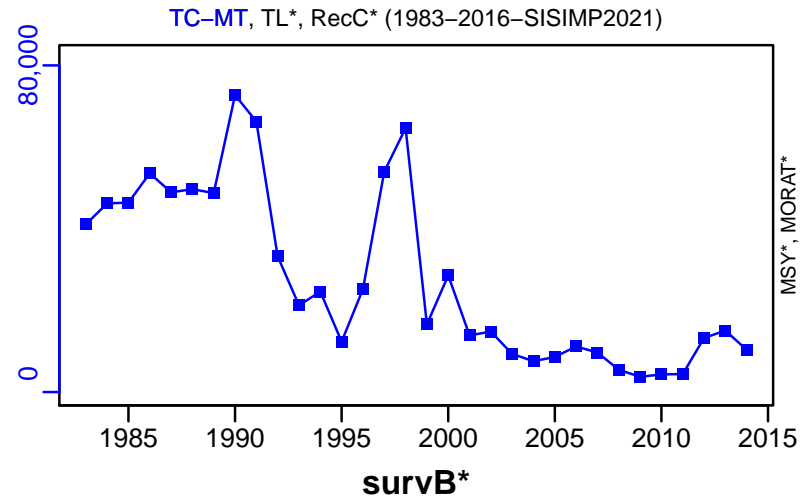
R-E00 (1983–2016–SISIMP2021)



Pacific chub mackerel Pacific Coast [CMACKPCOAST]

TC-MT, TL*, RecC* (1983-2016-SISIMP2021)

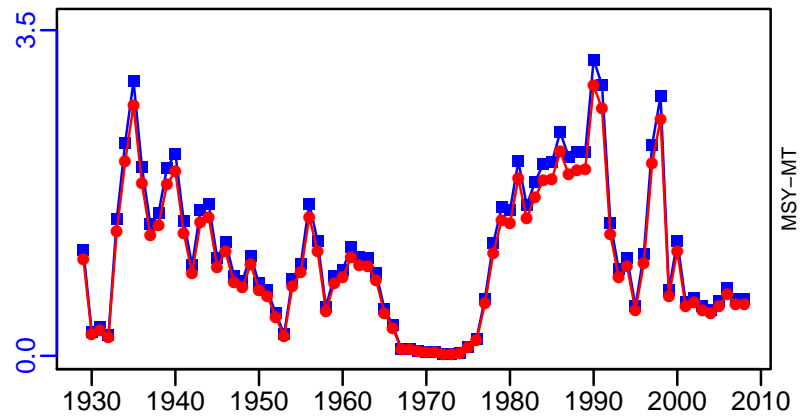
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1929-2008-PINSKY)



Cowcod Southern California [COWCODSCAL]

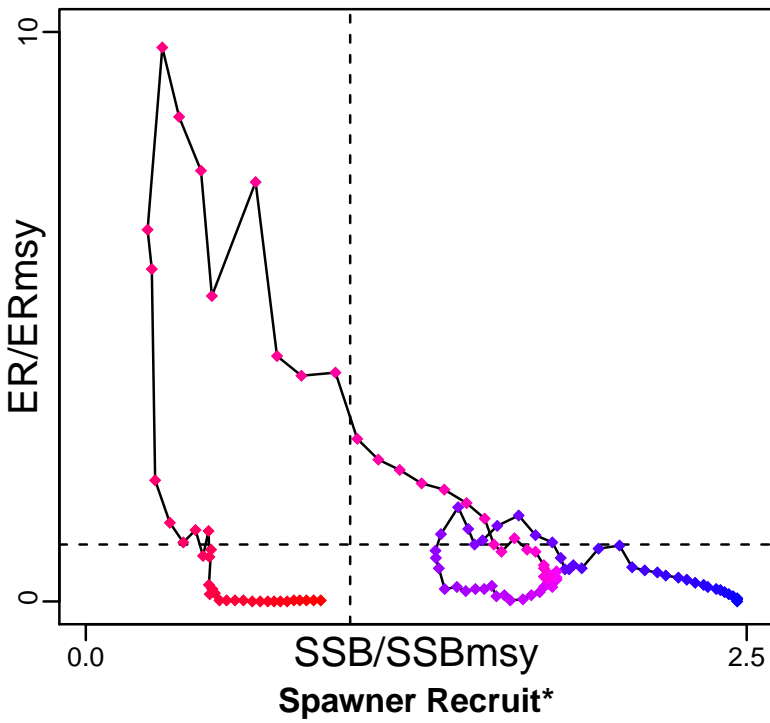
Metadata	
Scientific Name	Sebastes levis
Current Assess ID	PFMC-COWCODSCAL-1900-2015-HIVELY
Area	Southern California
Management Authority	National Marine Fisheries Service, US national management
Assessor	Pacific Fishery Management Council
Asmts in RAM	2015, 2012

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2015	1255
SSBmsy	SSBmsy-MT	2015	629
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2015	0.055
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2015	620
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2015	0.05
TB0	TB0-MT	2015	3099
SSB0	SSB0-MT	2015	1549
MSY	MSY-MT	2015	69
M	M-1/yr	2015	0.06
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	ERlim-ratio	2012	0.05

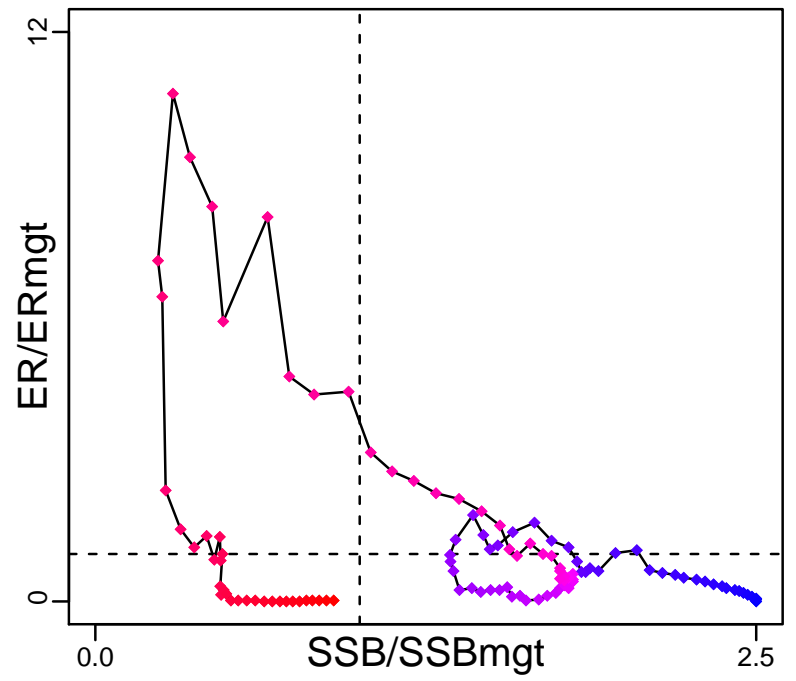
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2015	1120	-	11+
SSB	SSB-MT	2015	559	Females	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2015	0.001	-	-
TC	TC-MT	2015	1.5		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2015	0.893		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2015	0.889		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2015	0.018		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2015	0.902		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Cowcod Southern California [COWCODSCAL]

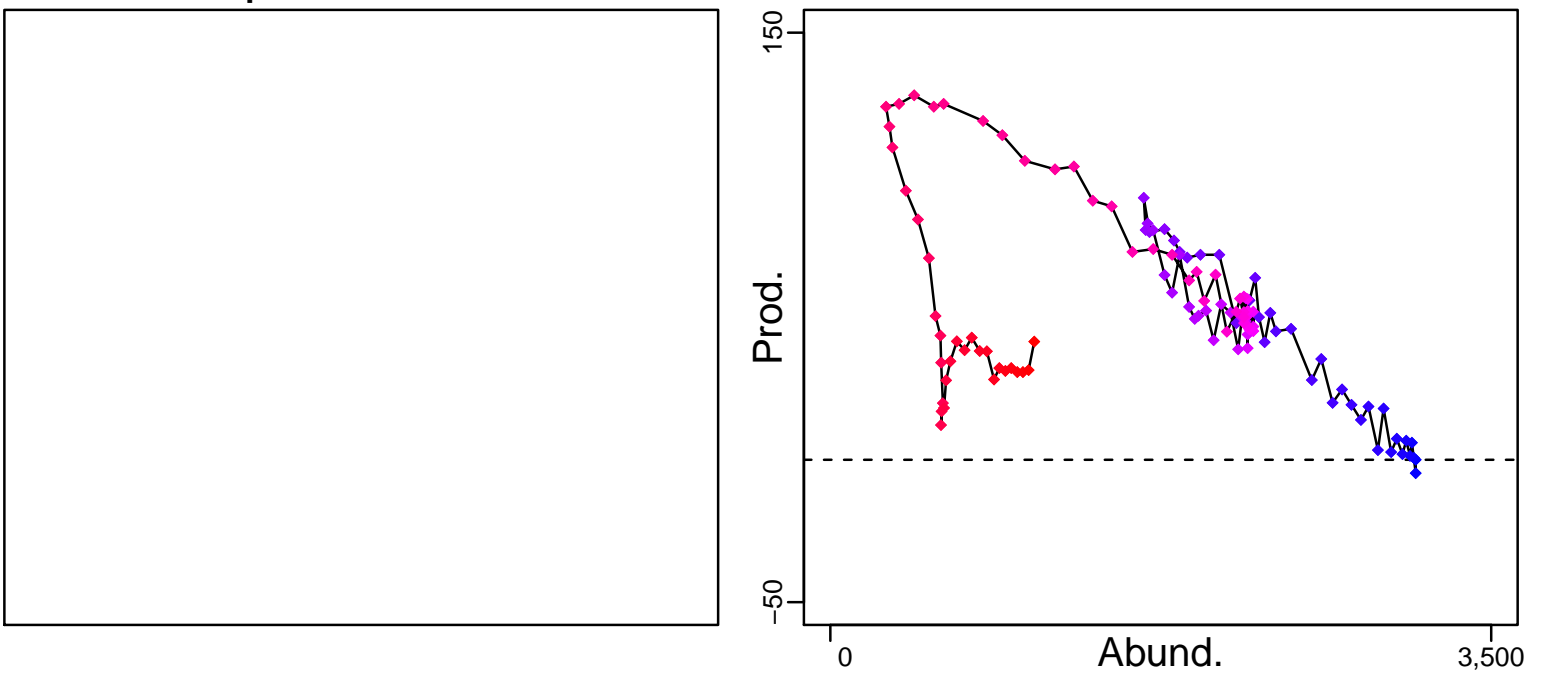
Kobe MSYpref (1900–2015–HIVELY)



Kobe MGTpref (1900–2015–HIVELY)



Production (1900–2015–HIVELY)

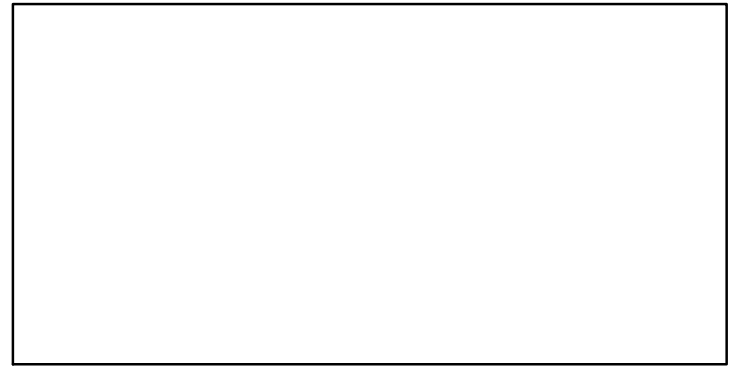
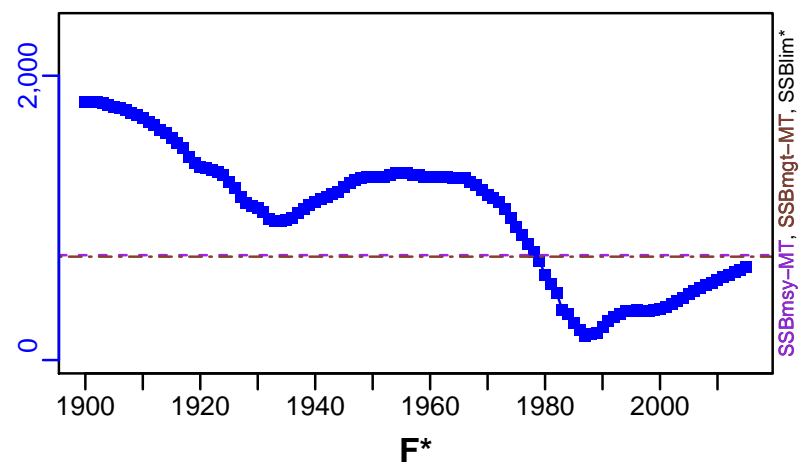
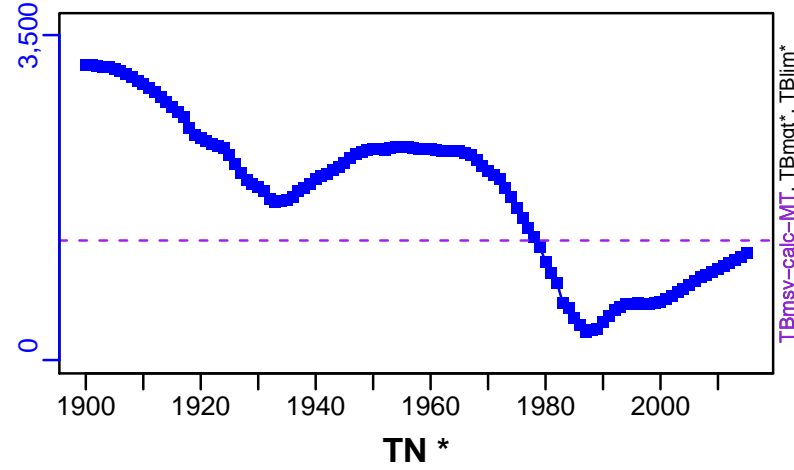


◆ Start Year ◆ End Year * No Data

Cowcod Southern California [COWCODSCAL]

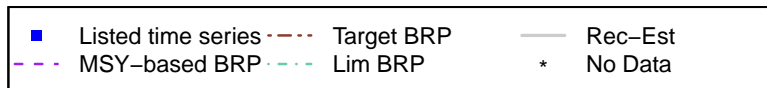
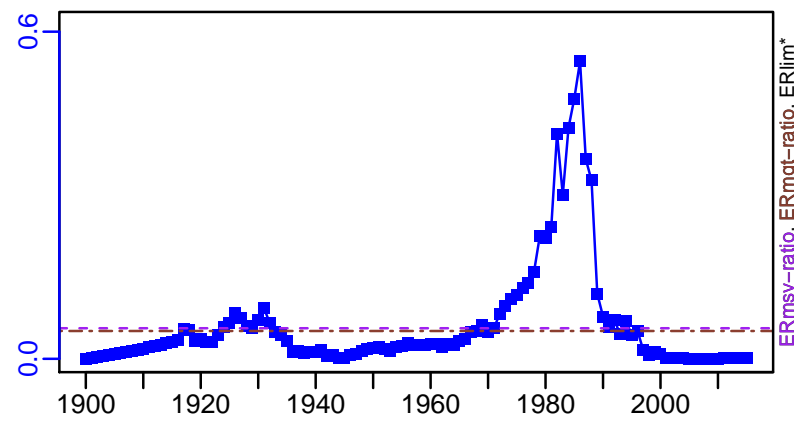
TB-MT (1900–2015–HIVELY)

SSB-MT (1900–2015–HIVELY)



ER-ratio (1900–2015–HIVELY)

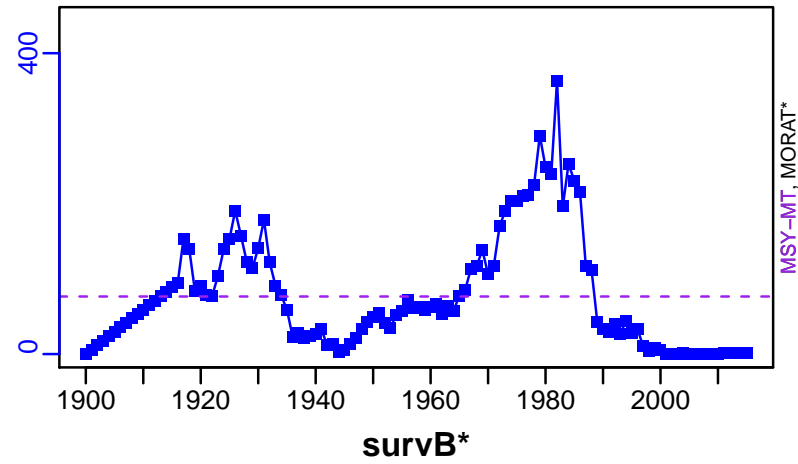
Recruits*



Cowcod Southern California [COWCODSCAL]

TC-MT, TL*, RecC* (1900-2015-HIVELY)

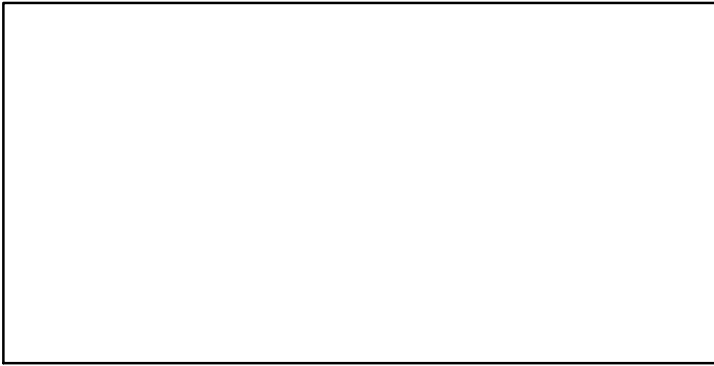
TAC*, Cpair*, Cadv*



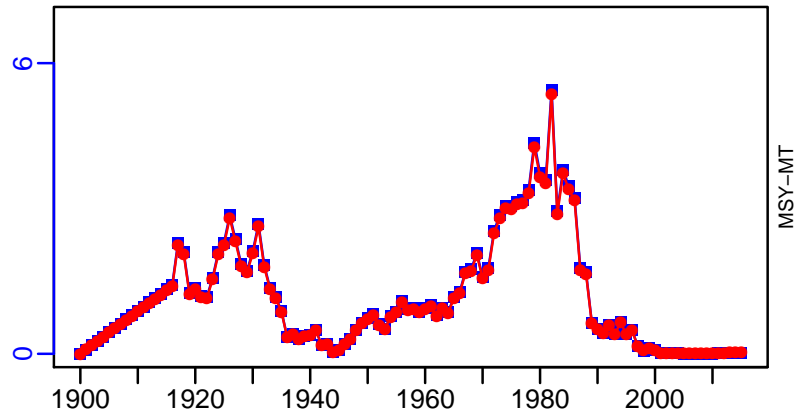
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1900-2015-HIVELY)



Copper rockfish Pacific Coast [CPRROCKPCOAST]

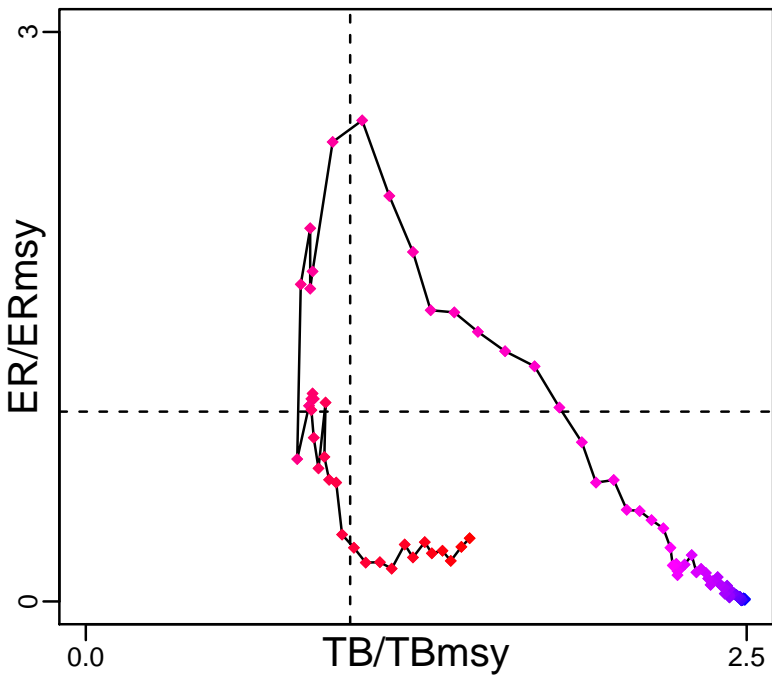
Metadata	
Scientific Name	Sebastes caurinus
Current Assess ID	SWFSC-CPRROCKPCOAST-1916-2012-SISIMP2016
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Southwest Fisheries Science Center
Asmts in RAM	2012

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2012	2238
SSBmsy	SSBmsy-conv-MT	2012	1259
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2012	0.088
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2012	197
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	ERlim-ratio	2012	0.088

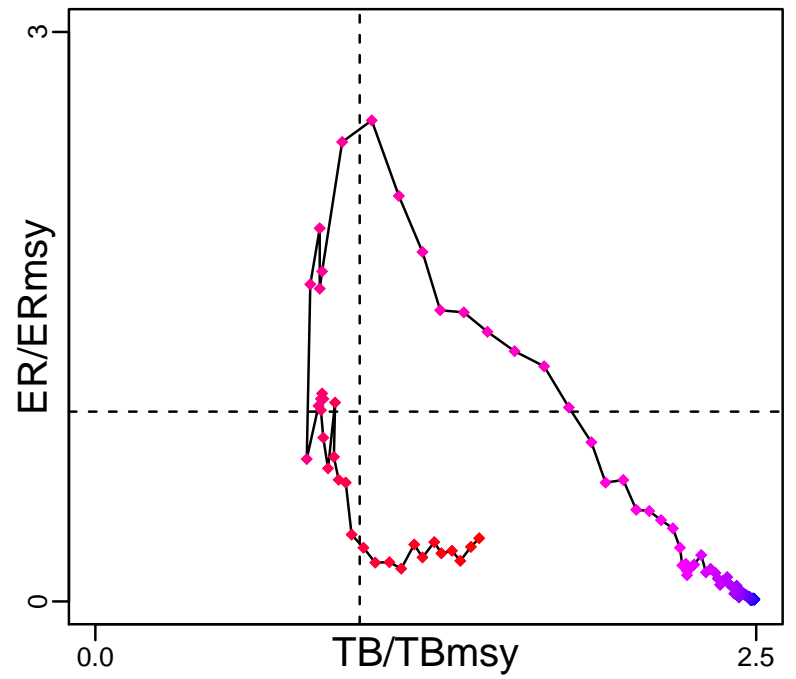
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2012	3290	-	6+
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2012	0.029	-	-
TC	TC-MT	2012	95		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2012	1.47		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2012	0.333		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Copper rockfish Pacific Coast [CPRROCKPCOAST]

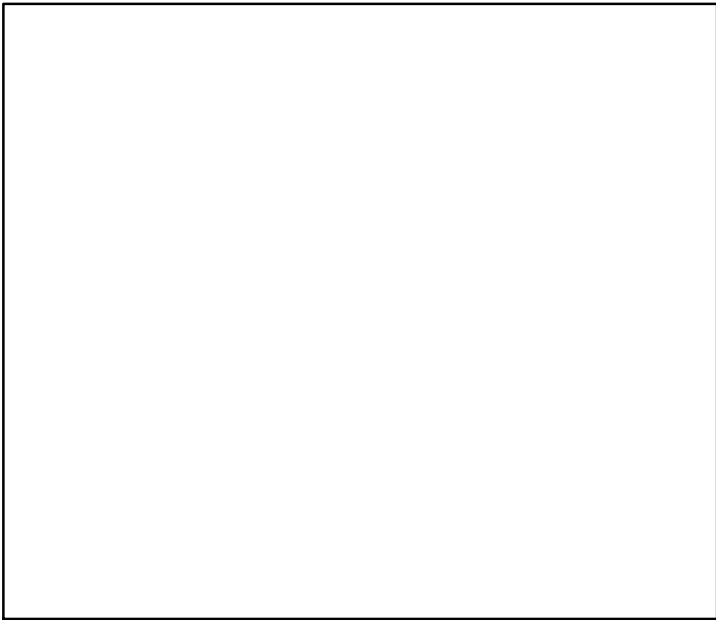
Kobe MSYpref (1916–2012–SISIMP2016)



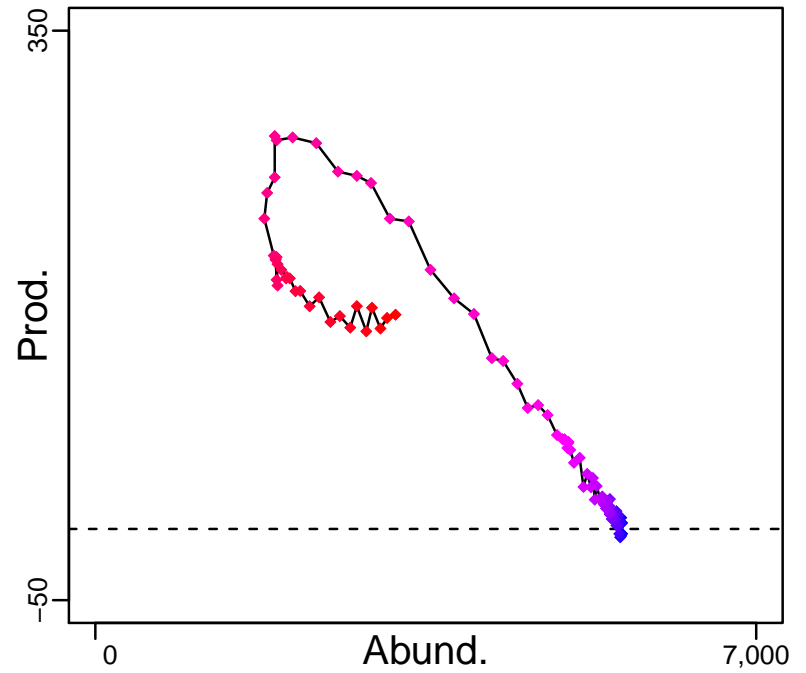
Kobe MGTpref (1916–2012–SISIMP2016)



Spawner Recruit*



Production (1916–2012–SISIMP2016)

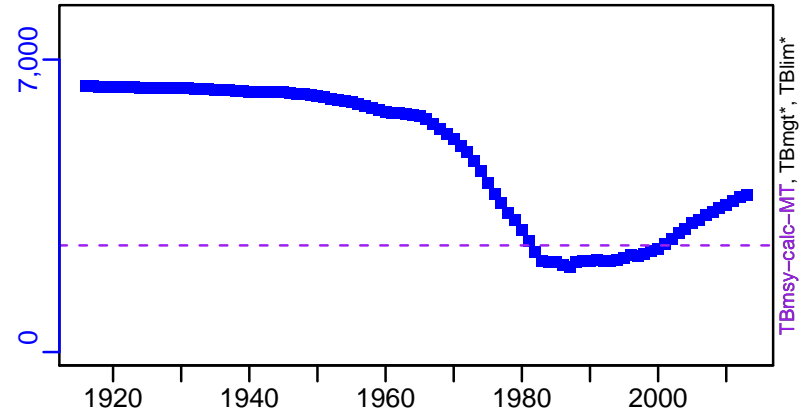


◆ Start Year ◆ End Year * No Data

Copper rockfish Pacific Coast [CPRROCKPCOAST]

TB-MT (1916-2012-SISIMP2016)

SSB*



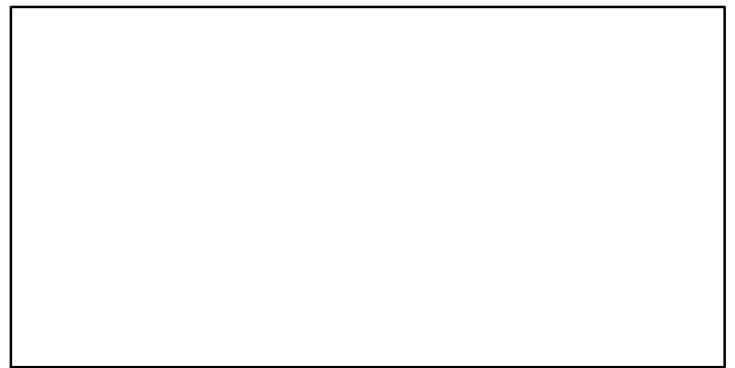
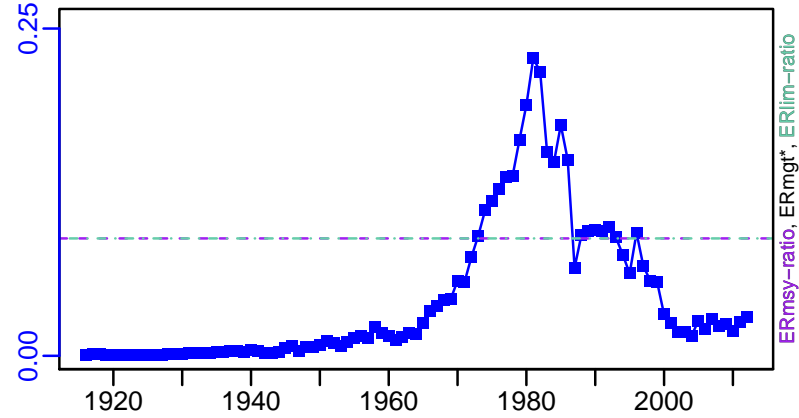
TN *

F*



ER-ratio (1916-2012-SISIMP2016)

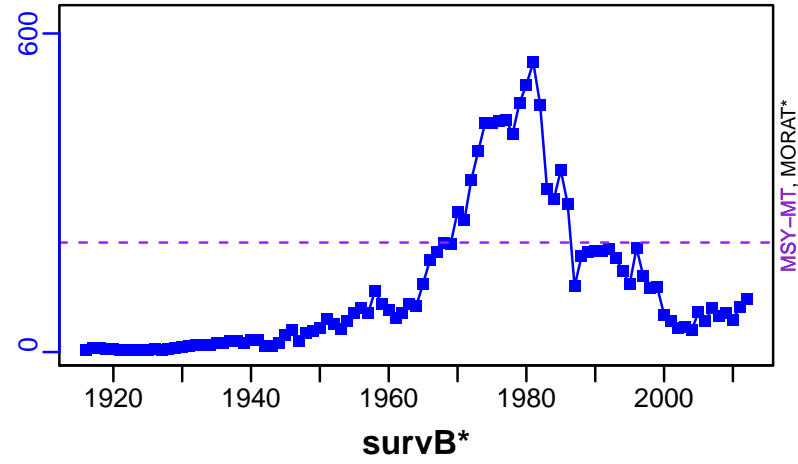
Recruits*



Copper rockfish Pacific Coast [CPRROCKPCOAST]

TC-MT, TL*, RecC* (1916-2012-SISIMP2016)

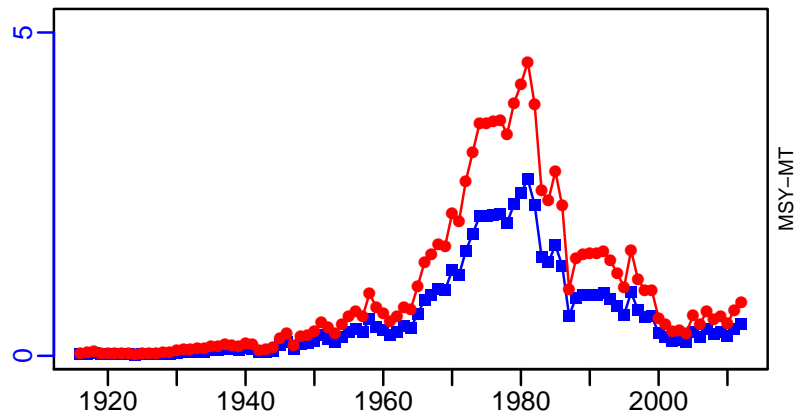
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1916-2012-SISIMP2016)



Canary rockfish Pacific Coast [CROCKPCOAST]

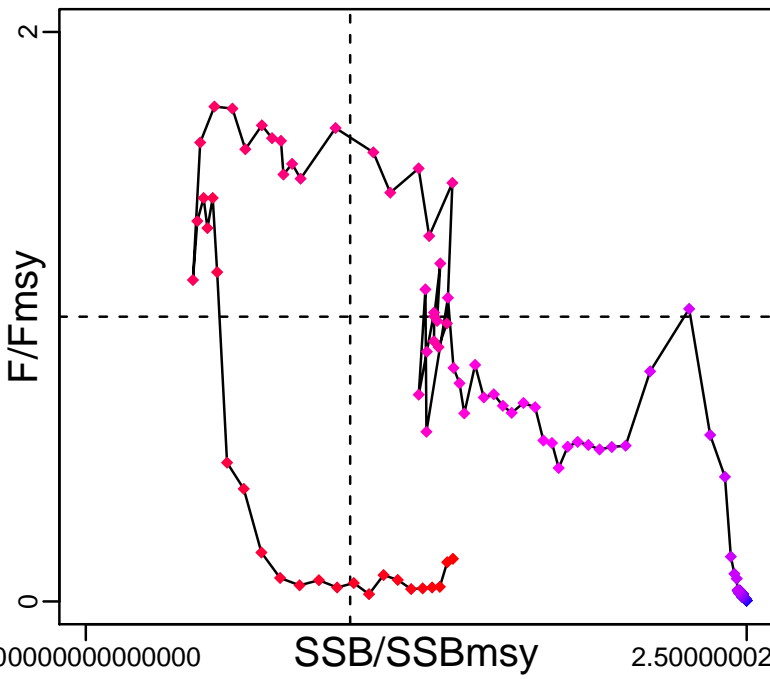
Metadata	
Scientific Name	Sebastes pinniger
Current Assess ID	NWFSC-CROCKPCOAST-1892-2017-SISIMP2021
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2015, 2017, 2011

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2011	26,414
SSBmsy	SSBmsy-E00eggs	2017	2,984,323,975
Fmsy	Fmsy-1/yr	2017	0.5
ERmsy	ERmsy-ratio	2011	0.03
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2011	70,664
SSB0	SSB0-MT	2011	27,846
MSY	MSY-MT	2017	1197
M	M-1/yr	2011	0.06
TBlim	-	-	-
SSBlim	SSBlim-E00eggs	2017	1,865,199,951
Flim	Flim-1/yr	2017	0.5
ERlim	-	-	-

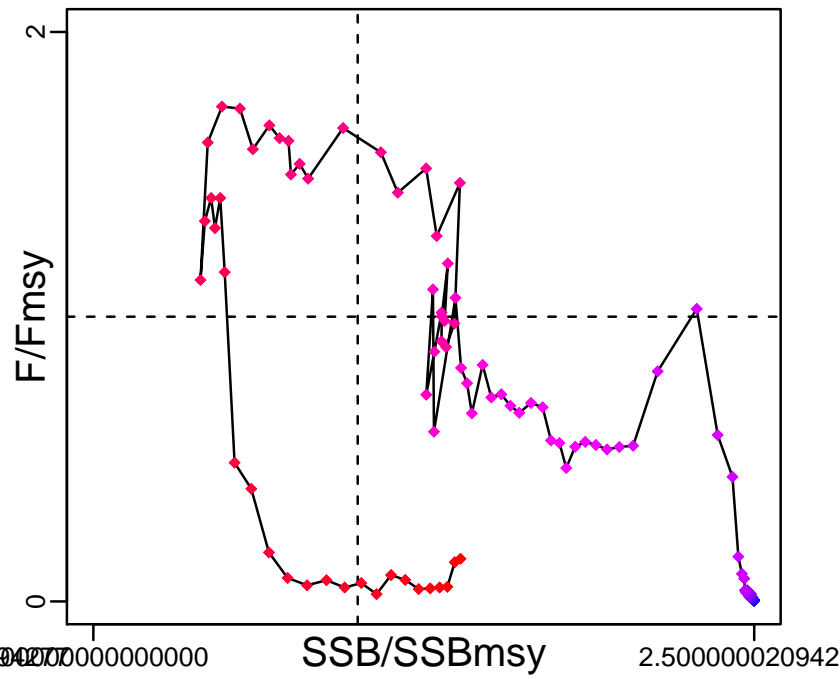
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2017	36,349	-	-
SSB	SSB-E00eggs	2017	4,215,490,000	-	-
TN	-	-	-	-	-
R	R-E00	2017	2,652,800	-	0
F	F-1/yr	2017	0.075	-	-
ER	ER-calc-ratio	2017	0.003	-	-
TC	TC-MT	2017	125		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2011	0.61		
SSB/SSBmsy	SSB-E00eggs/SSBmsy-E00eggs	2017	1.413		
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	0.15		
ER/ERmsy	ER-ratio/ERmsy-ratio	2011	0.171		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Canary rockfish Pacific Coast [CROCKPCOAST]

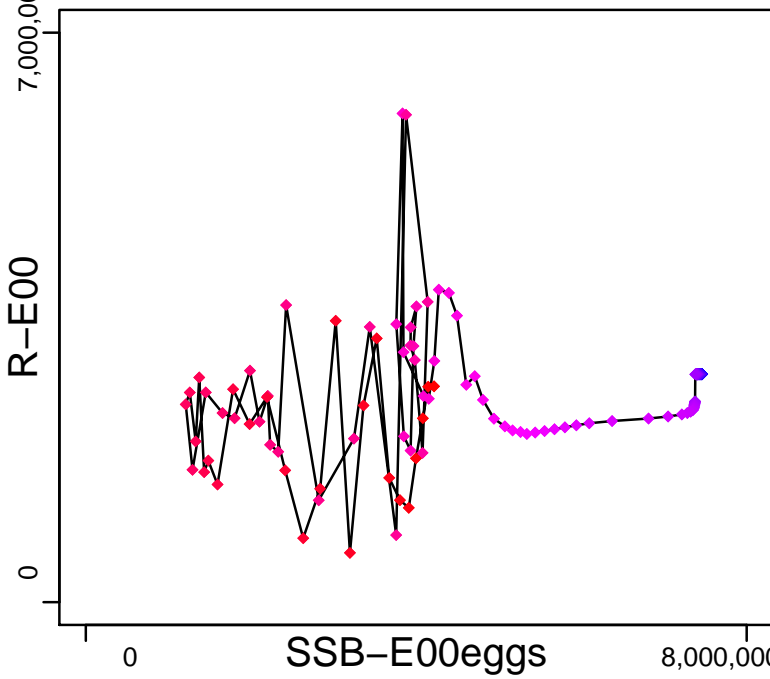
Kobe MSYpref (1892–2017–SISIMP2021)



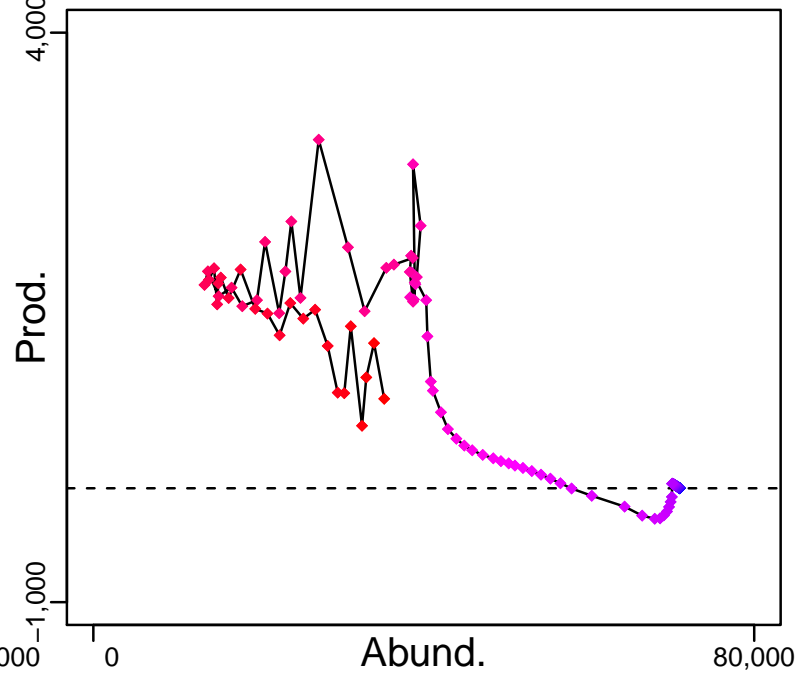
Kobe MGTpref (1892–2017–SISIMP2021)



Spawner Recruit (1892–2017–SISIMP2021)

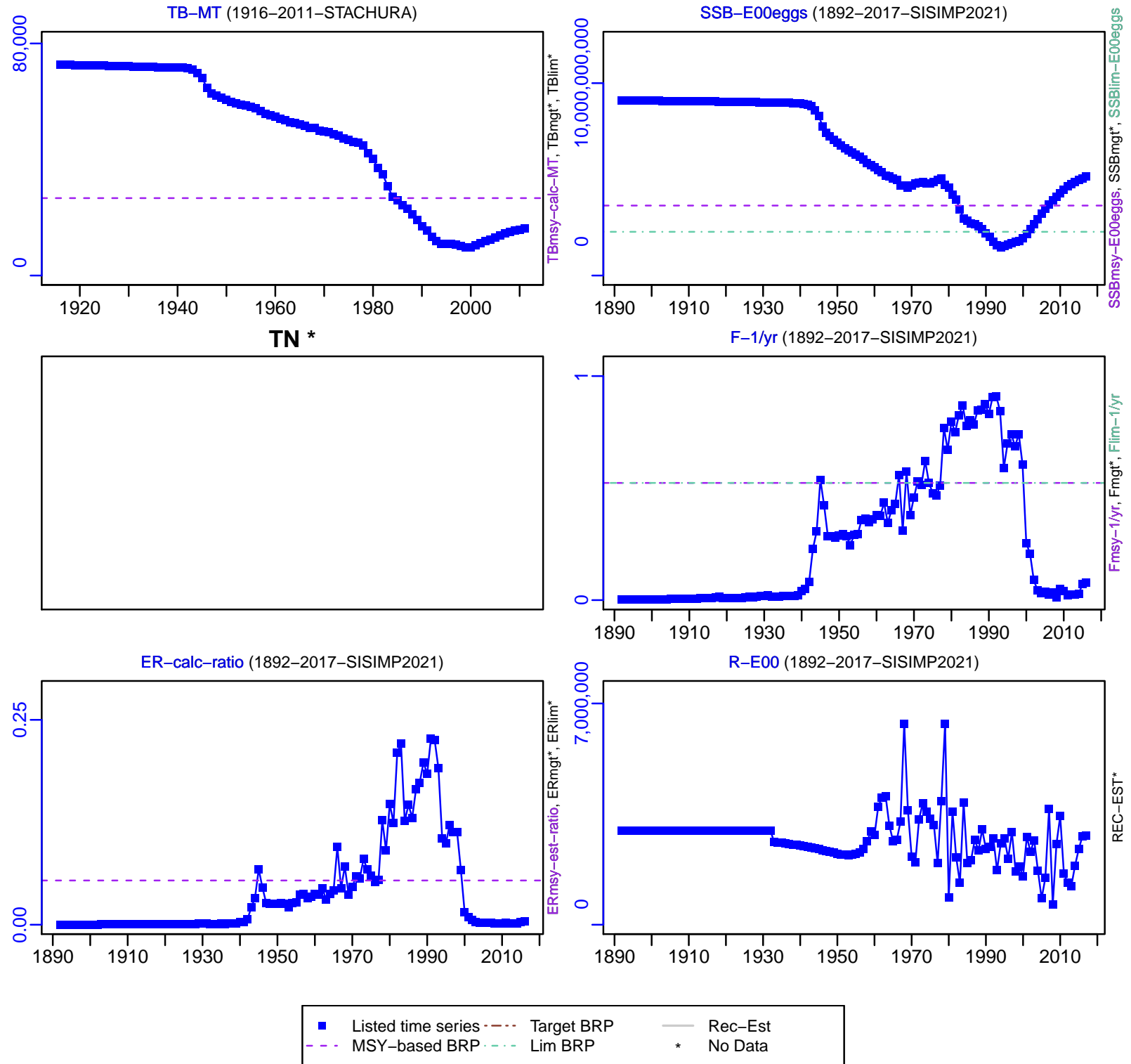


Production (1892–2017–SISIMP2021)



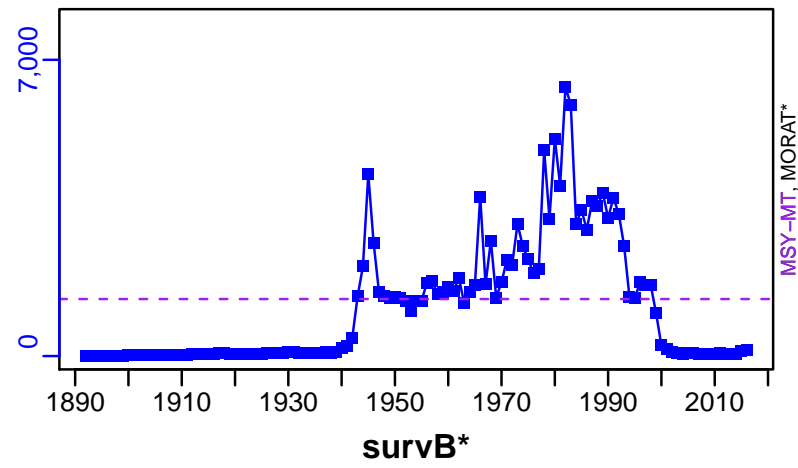
◆ Start Year ◆ End Year * No Data

Canary rockfish Pacific Coast [CROCKPCOAST]



Canary rockfish Pacific Coast [CROCKPCOAST]

TC-MT, TL*, RecC* (1892-2017-SISIMP2021)



TAC*, Cpair*, Cadv*



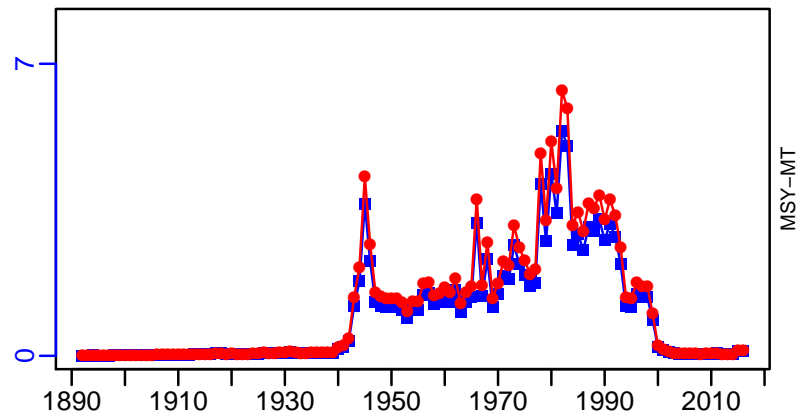
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1892-2017-SISIMP2021)



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

Darkblotched rockfish Pacific Coast [DKROCKPCOAST]

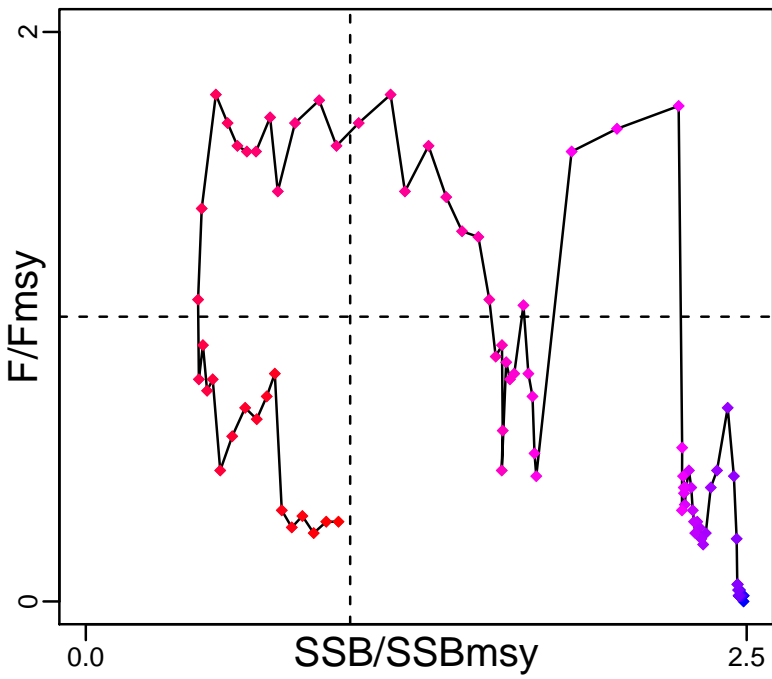
Metadata	
Scientific Name	Sebastes crameri
Current Assess ID	NWFSC-DKROCKPCOAST-1915-2017-SISIMP2021
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2015, 2017, 2011

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2011	11,382
SSBmsy	SSBmsy-E00eggs	2017	1,417,723,999
Fmsy	Fmsy-1/yr	2017	0.5
ERmsy	ERmsy-ratio	2011	0.068
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2011	32,710
SSB0	SSB0-E00eggs	2011	2.92×10^{12}
MSY	MSY-MT	2017	639
M	M-1/yr	2011	0.07
TBlim	-	-	-
SSBlim	SSBlim-E00eggs	2017	886,078,003
Flim	Flim-1/yr	2017	0.5
ERlim	-	-	-

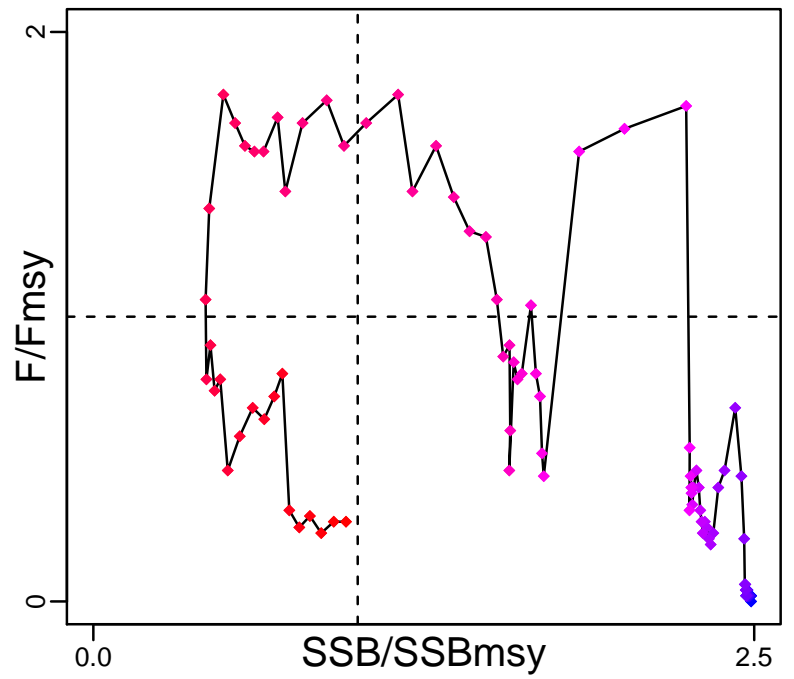
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2017	20,713	-	-
SSB	SSB-E00eggs	2017	1,418,720,000	-	-
TN	-	-	-	-	-
R	R-E00	2017	2,624,160	-	0
F	F-1/yr	2017	0.14	-	-
ER	ER-calc-ratio	2017	0.007	-	-
TC	TC-MT	2017	137		
TL	TL-MT	2011	183		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2011	1.221		
SSB/SSBmsy	SSB-E00eggs/SSBmsy-E00eggs	2017	1.001		
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	0.28		
ER/ERmsy	ER-ratio/ERmsy-ratio	2011	0.201		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Darkblotched rockfish Pacific Coast [DKROCKPCOAST]

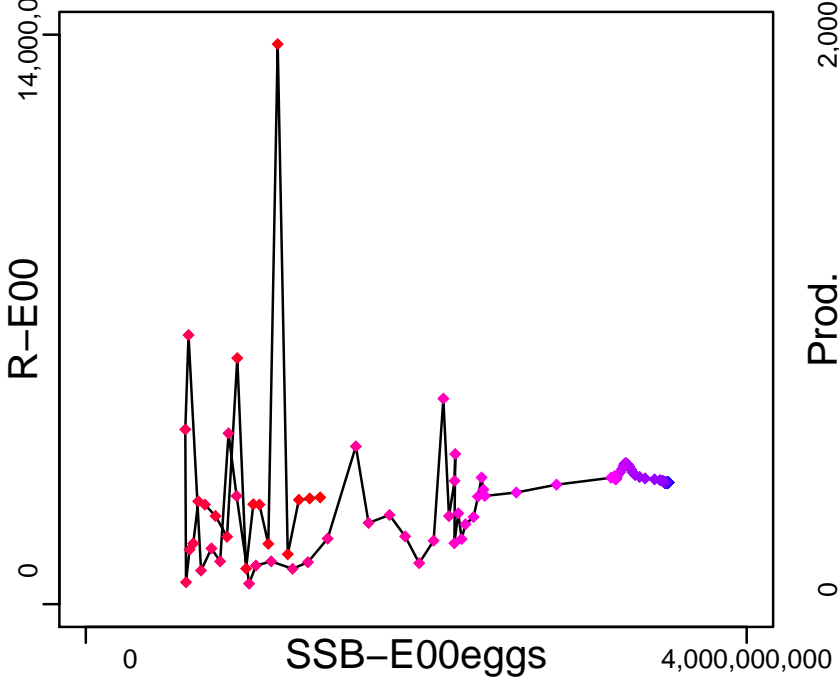
Kobe MSYpref (1915–2017–SISIMP2021)



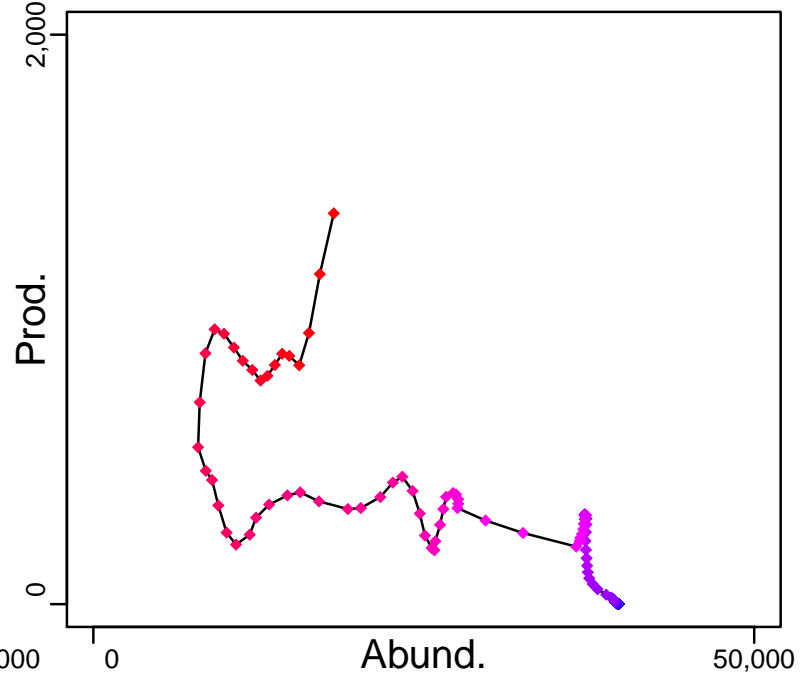
Kobe MGTpref (1915–2017–SISIMP2021)



Spawner Recruit (1915–2017–SISIMP2021)

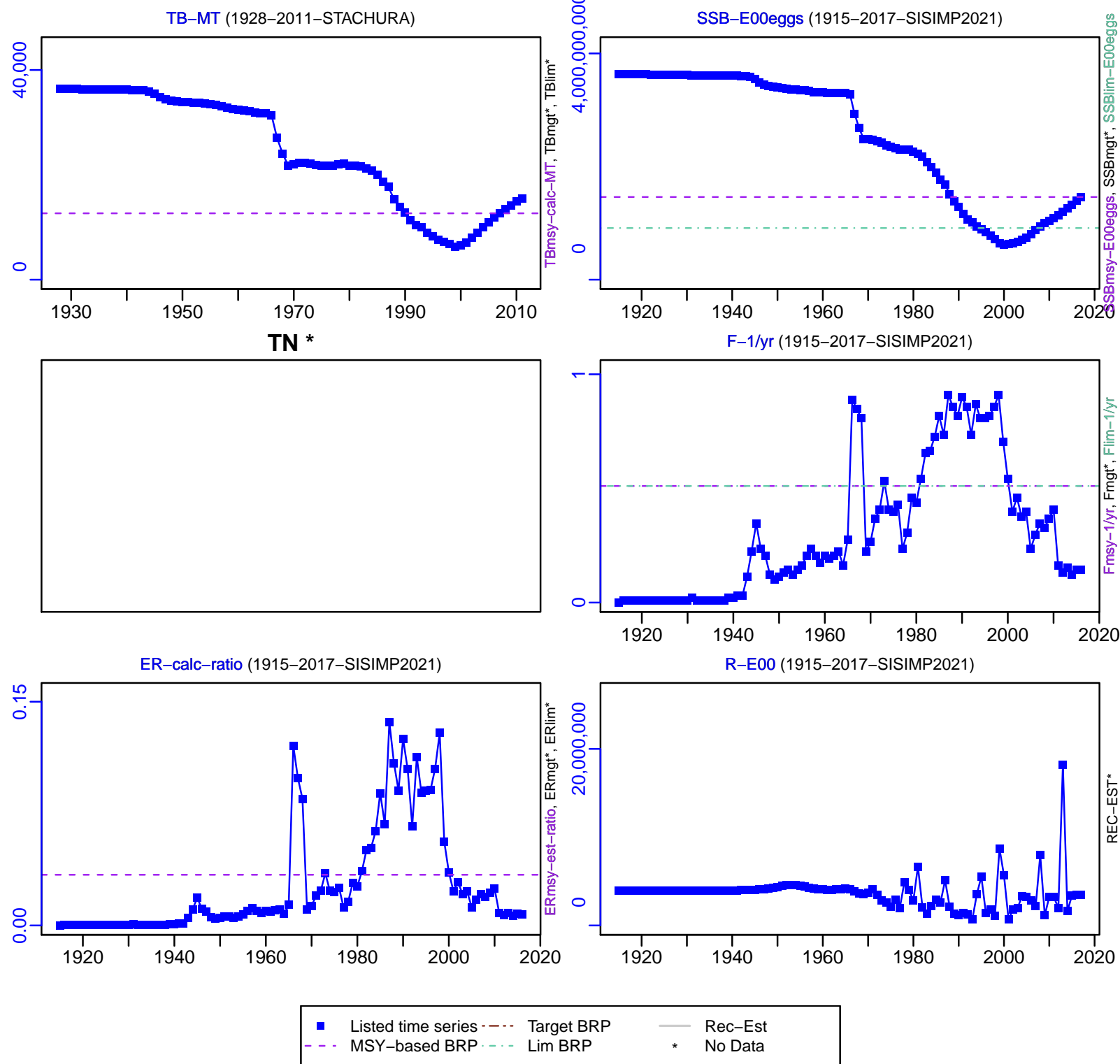


Production (1915–2017–SISIMP2021)



◆ Start Year ◆ End Year * No Data

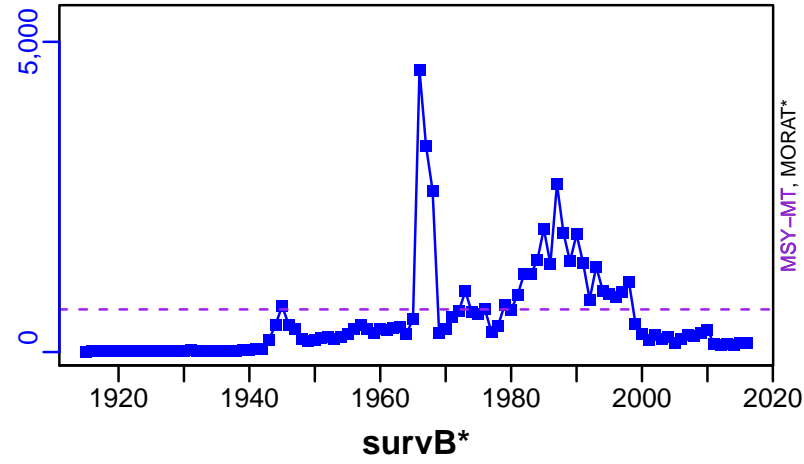
Darkblotched rockfish Pacific Coast [DKROCKPCOAST]



Darkblotched rockfish Pacific Coast [DKROCKPCOAST]

TC-MT, TL*, RecC* (1915-2017-SISIMP2021)

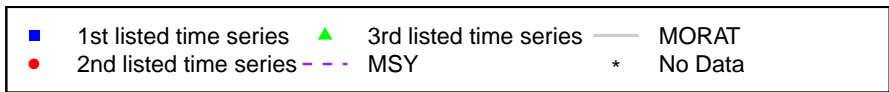
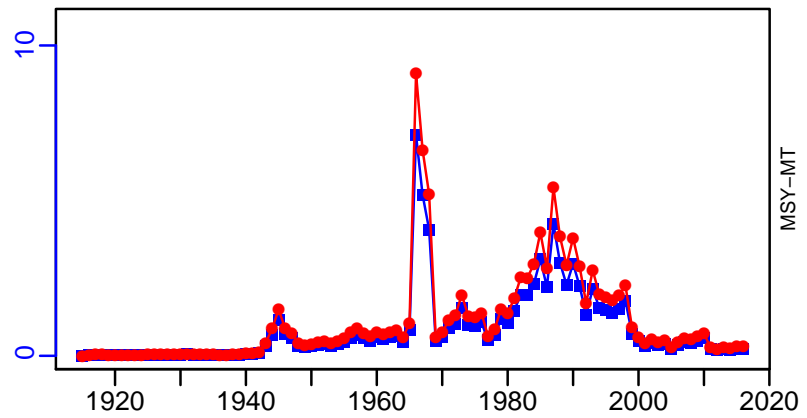
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1915-2017-SISIMP2021)



Dover sole Pacific Coast [DSOLEPCOAST]

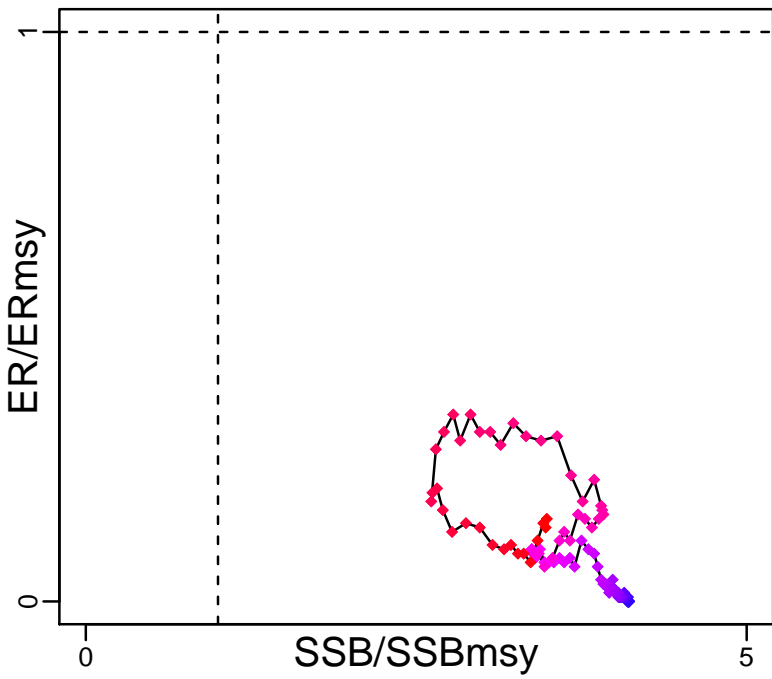
Metadata	
Scientific Name	Microstomus pacificus
Current Assess ID	SWFSC-DSOLEPCOAST-1910-2011-STACHURA
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Southwest Fisheries Science Center
Asmts in RAM	2011

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2011	265,321
SSBmsy	SSBmsy-MT	2011	114,398
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2011	0.131
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2011	821,271
SSB0	SSB0-MT	2011	469,866
MSY	MSY-MT	2011	34,757
M	M-1/yr	2011	0.101
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

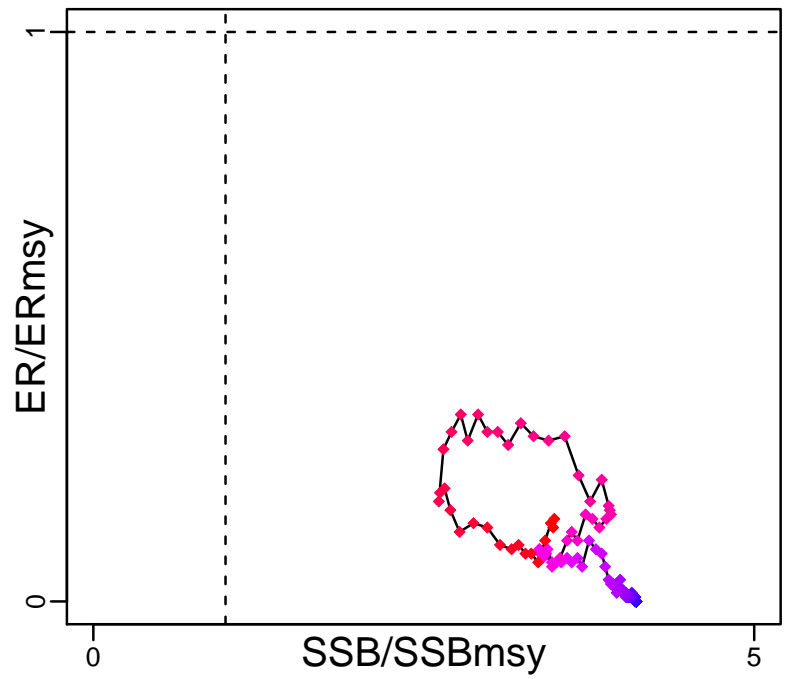
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2011	685,000	-	0+
SSB	SSB-MT	2011	394,000	Females	5+
TN	-	-	-	-	-
R	R-E00	2011	376,000	-	0
F	-	-	-	-	-
ER	ER-ratio	2011	0.017	Both	5+
TC	TC-MT	2011	11,300		
TL	TL-MT	2011	10,400		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2011	2.582		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2011	3.444		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2011	0.13		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Dover sole Pacific Coast [DSOLEPCOAST]

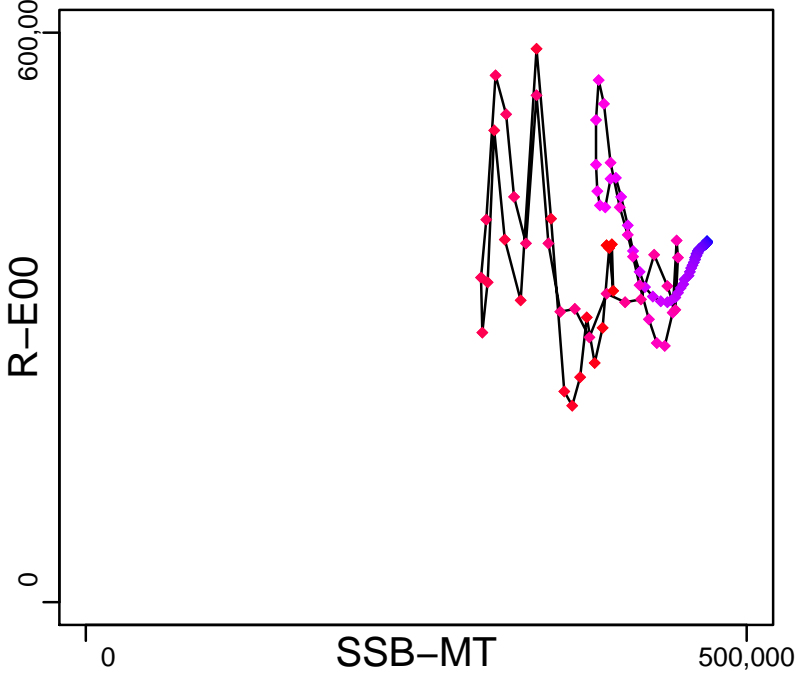
Kobe MSYpref (1910–2011–STACHURA)



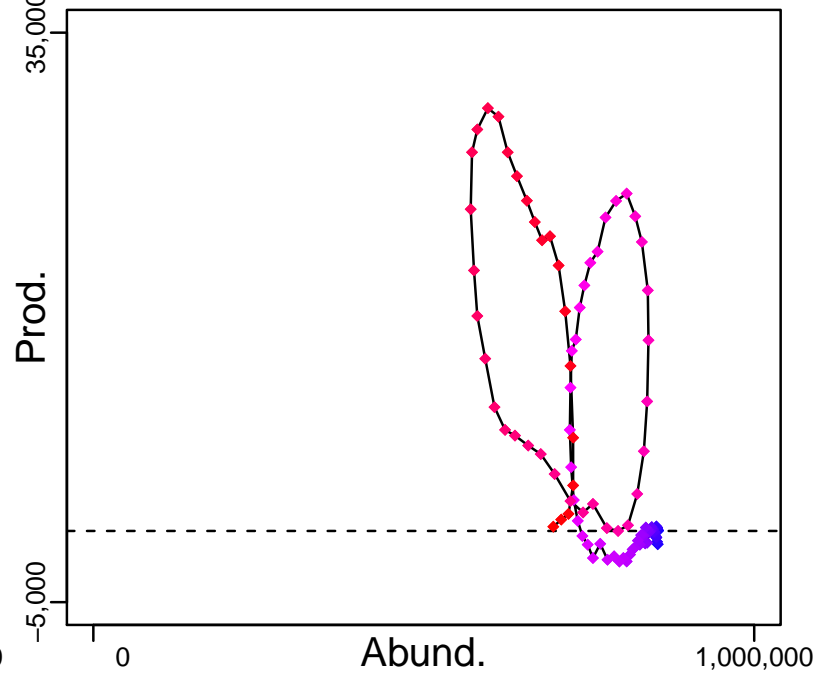
Kobe MGTpref (1910–2011–STACHURA)



Spawner Recruit (1910–2011–STACHURA)



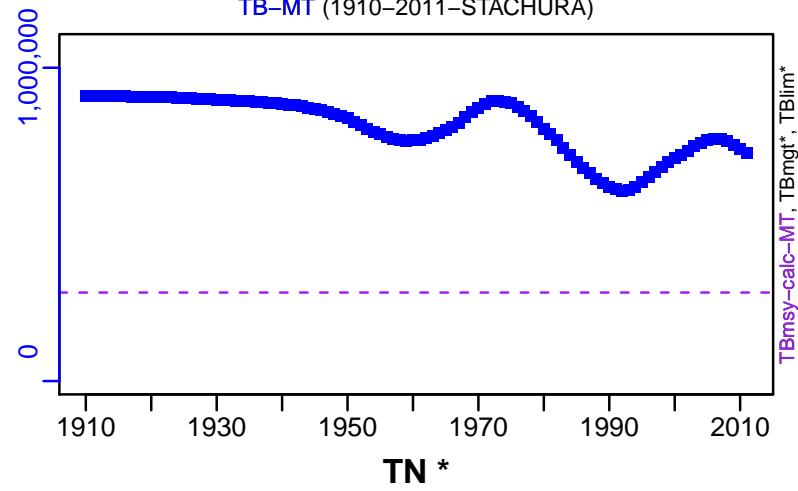
Production (1910–2011–STACHURA)



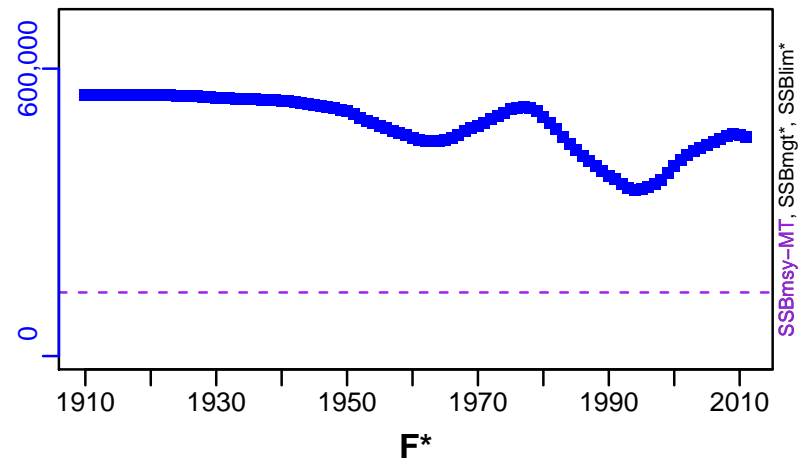
◆ Start Year ◆ End Year * No Data

Dover sole Pacific Coast [DSOLEPCOAST]

TB-MT (1910-2011-STACHURA)



SSB-MT (1910-2011-STACHURA)



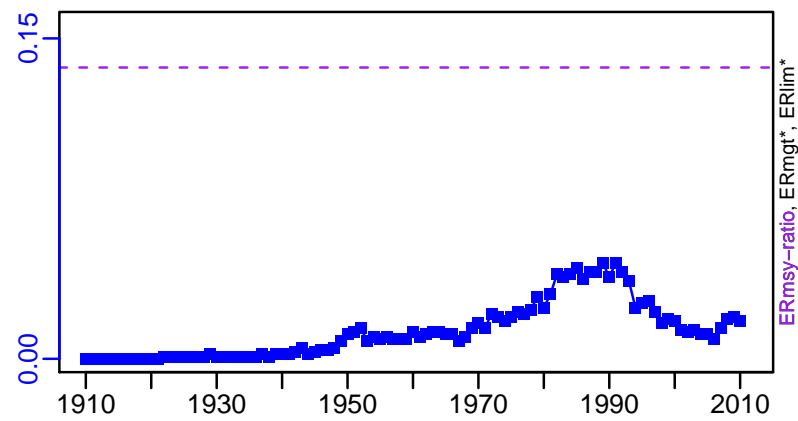
TN *



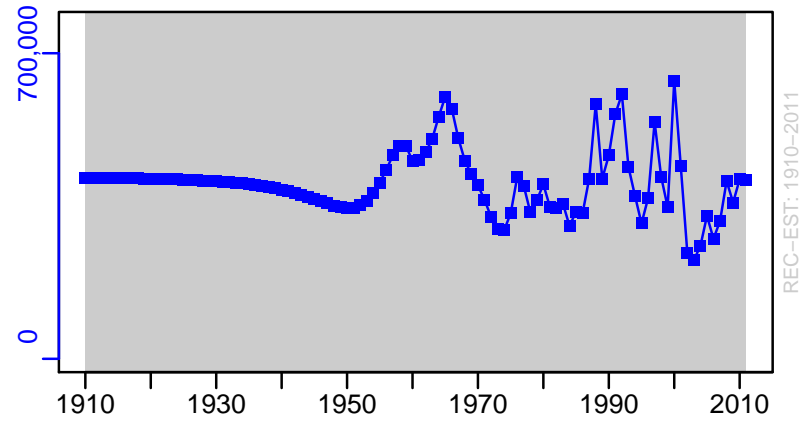
F*



ER-ratio (1910-2011-STACHURA)



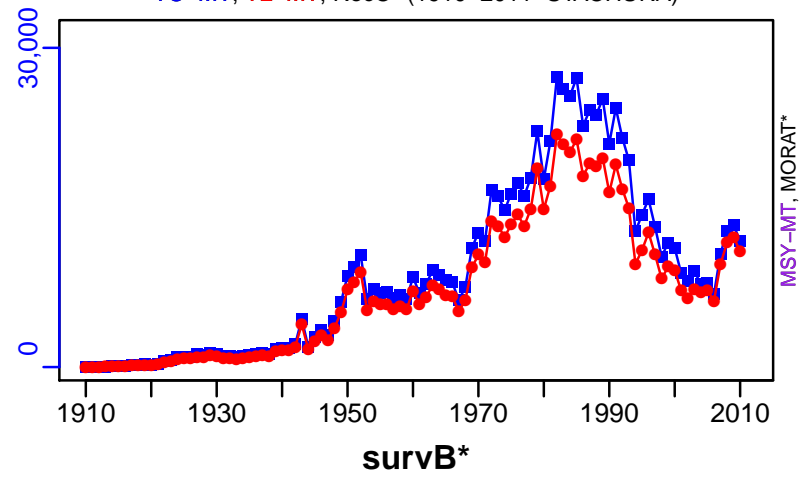
R-E00 (1910-2011-STACHURA)



Dover sole Pacific Coast [DSOLEPCOAST]

TC-MT, TL-MT, RecC* (1910-2011-STACHURA)

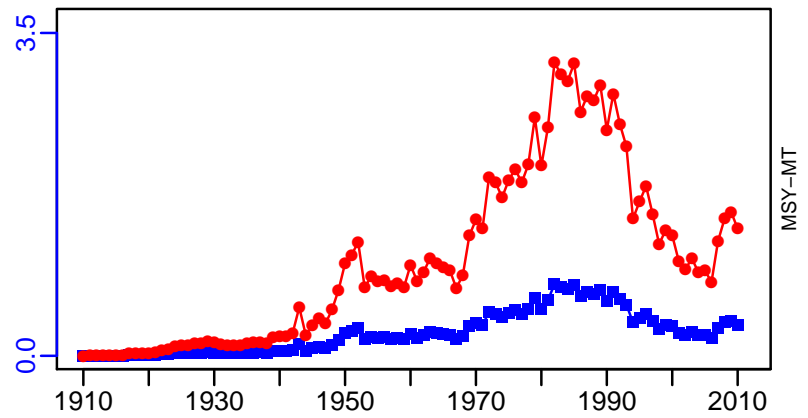
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1910-2011-STACHURA)



English sole Pacific Coast [ESOLEPCOAST]

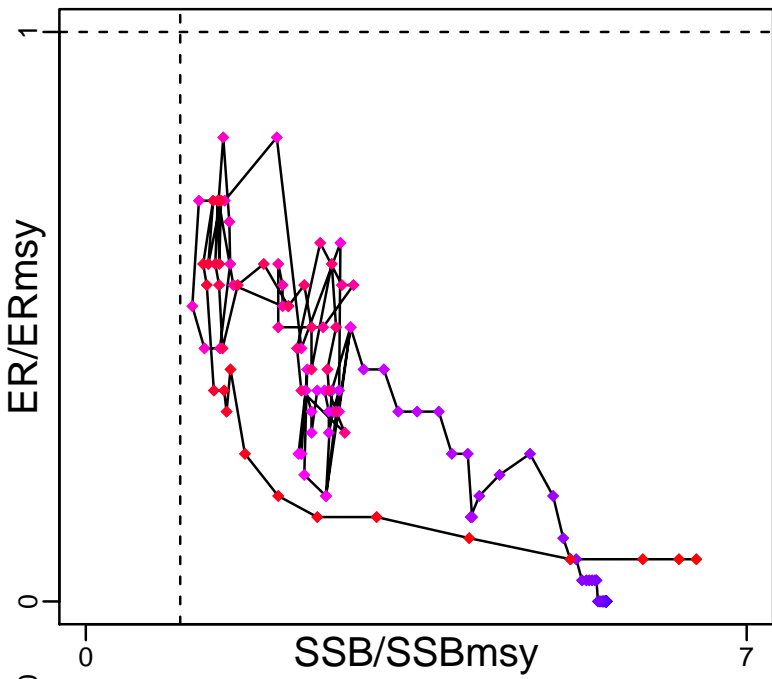
Metadata	
Scientific Name	Parophrys vetulus
Current Assess ID	NWFSC-ESOLEPCOAST-1876-2012-SISIMP2016
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2007, 2012

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2007	15,748
SSBmsy	SSBmsy-MT	2007	6526
Fmsy	Fmsy-1/yr	2012	0.7
ERmsy	ERmsy-ratio	2007	0.27
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	SSB0-MT	2007	36,012
MSY	MSY-MT	2012	3875
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2007	7364
Flim	Flim-1/yr	2012	0.7
ERlim	-	-	-

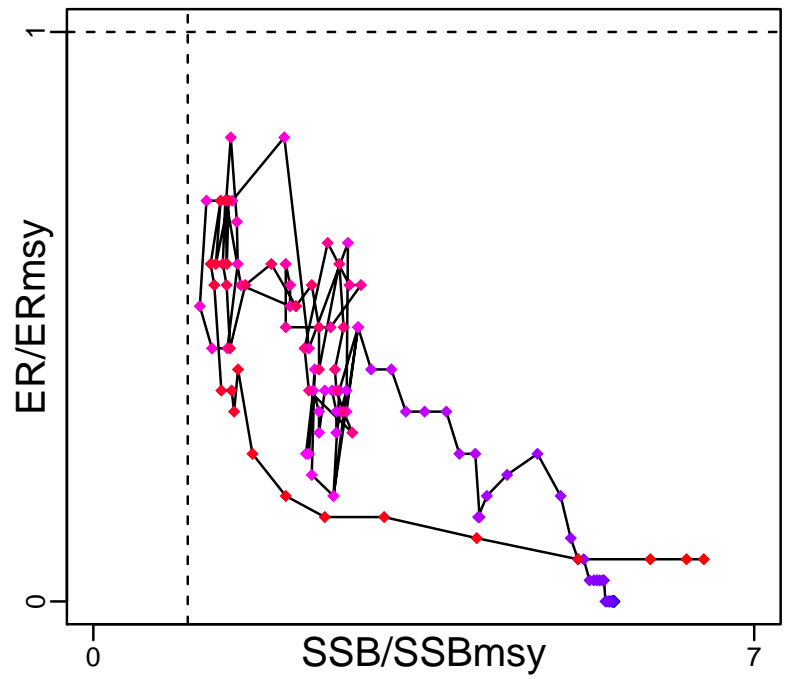
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2007	69,900	-	7.7+
SSB	SSB-MT	2007	41,900	Females	3+
TN	-	-	-	-	-
R	R-E00	2007	1.25×10^8	-	0
F	F-1/yr	2012	0.037	-	-
ER	ER-ratio	2007	0.02	-	-
TC	TC-MT	2007	1080		
TL	TL-MT	2007	886		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2007	4.439		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2007	6.42		
F/Fmsy	F-1/yr/Fmsy-1/yr	2012	0.053		
ER/ERmsy	ER-ratio/ERmsy-ratio	2007	0.074		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

English sole Pacific Coast [ESOLEPCOAST]

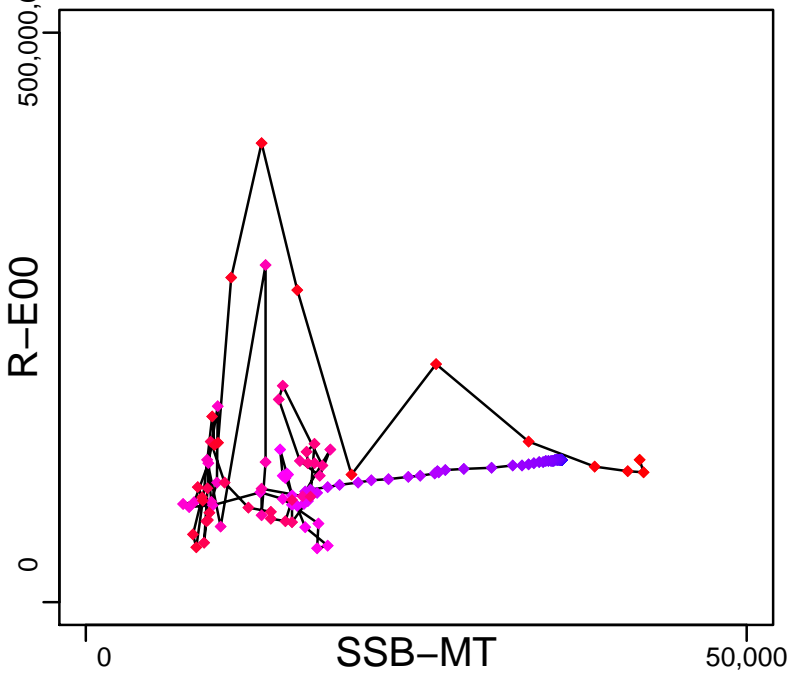
Kobe MSYpref (1876–2007–BRANCH)



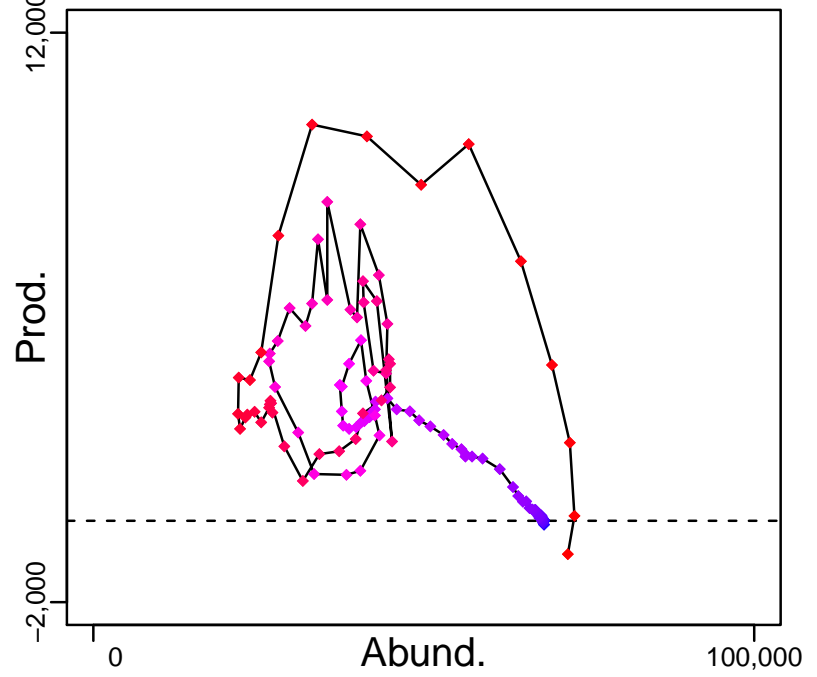
Kobe MGTpref (1876–2007–BRANCH)



Spawner Recruit (1876–2007–BRANCH)



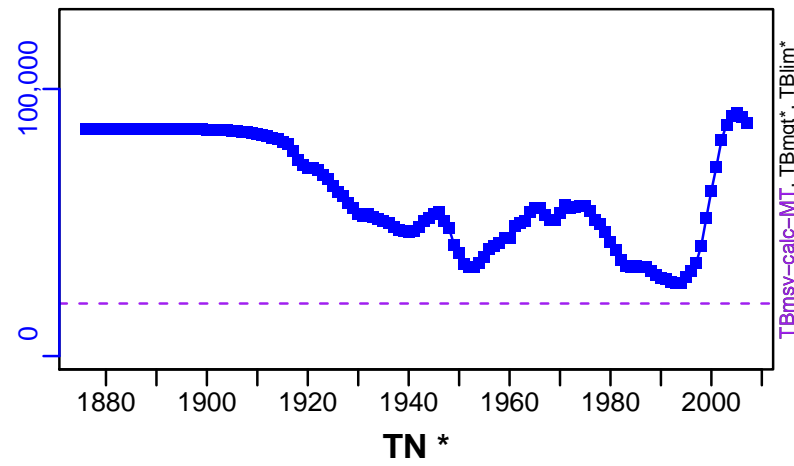
Production (1876–2007–BRANCH)



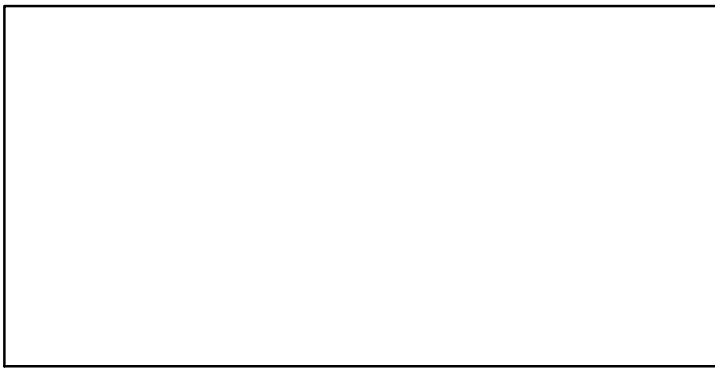
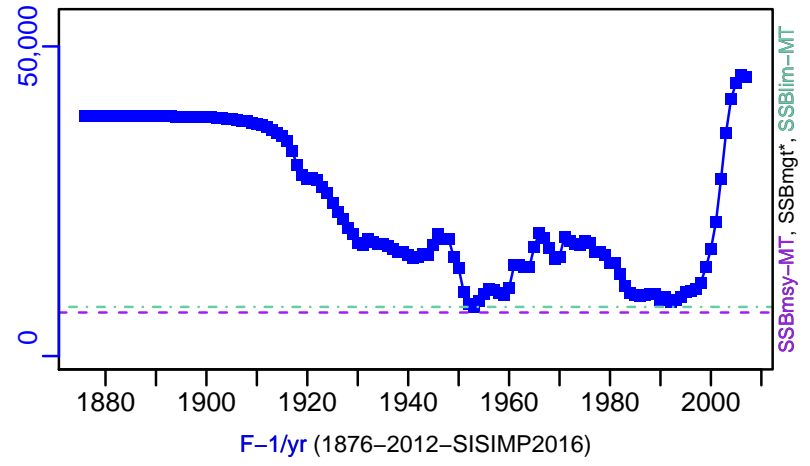
◆ Start Year ◆ End Year * No Data

English sole Pacific Coast [ESOLEPCOAST]

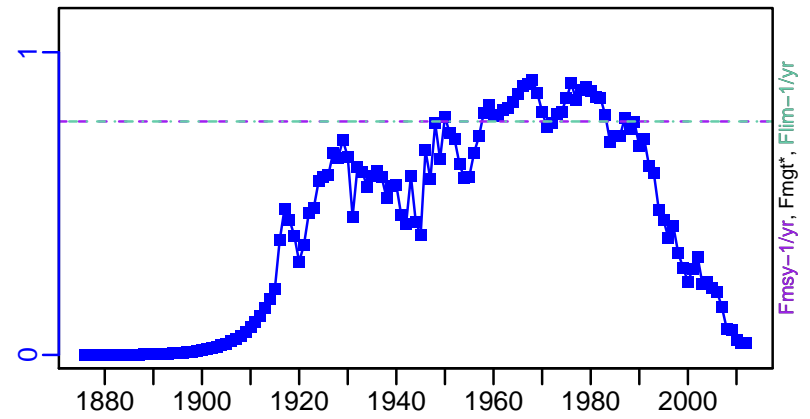
TB-MT (1876-2007-BRANCH)



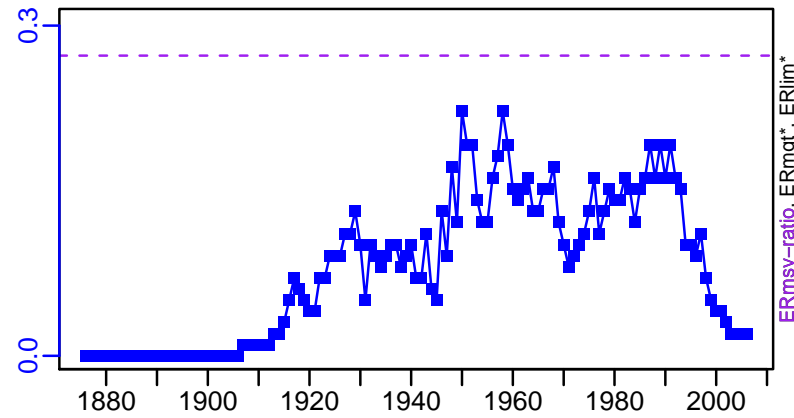
SSB-MT (1876-2007-BRANCH)



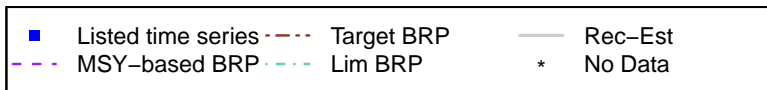
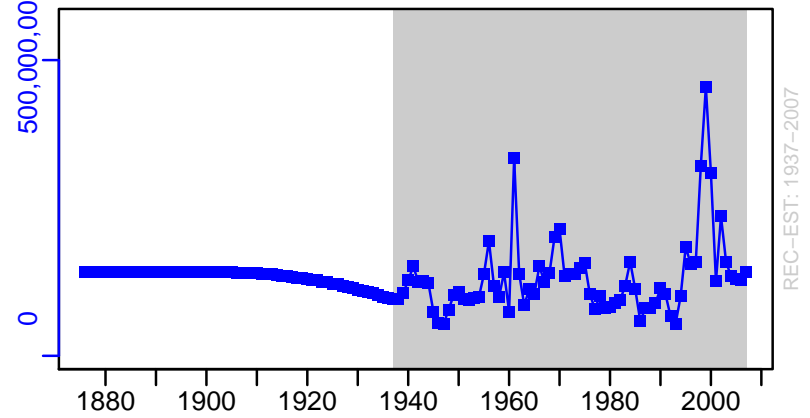
F-1/yr (1876-2012-SISIMP2016)



ER-ratio (1876-2007-BRANCH)



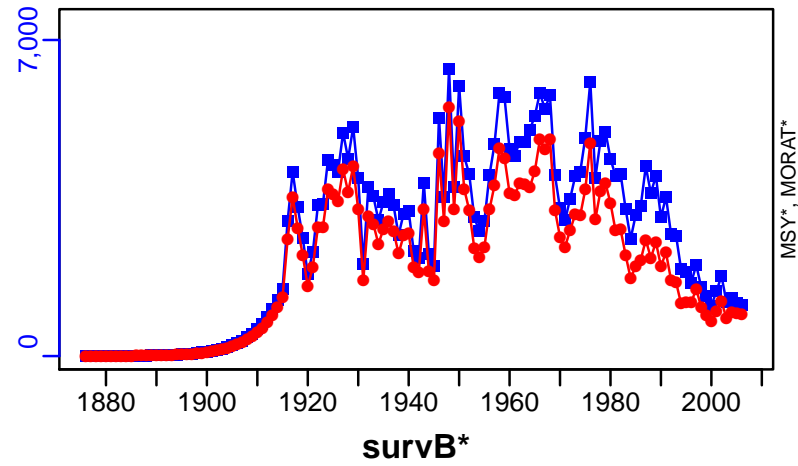
R-E00 (1876-2007-BRANCH)



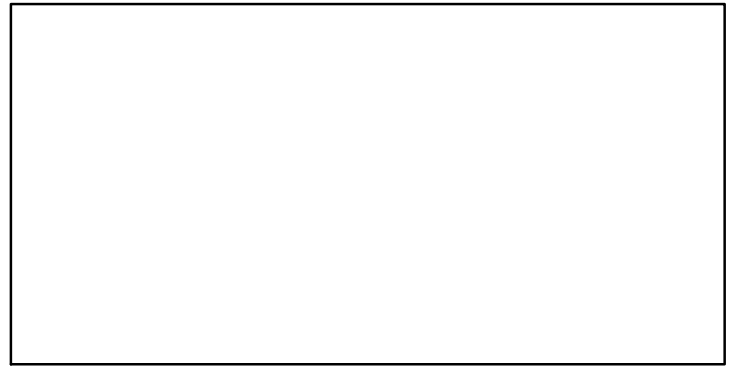
English sole Pacific Coast [ESOLEPCOAST]

TC-MT, TL-MT, RecC* (1876-2007-BRANCH)

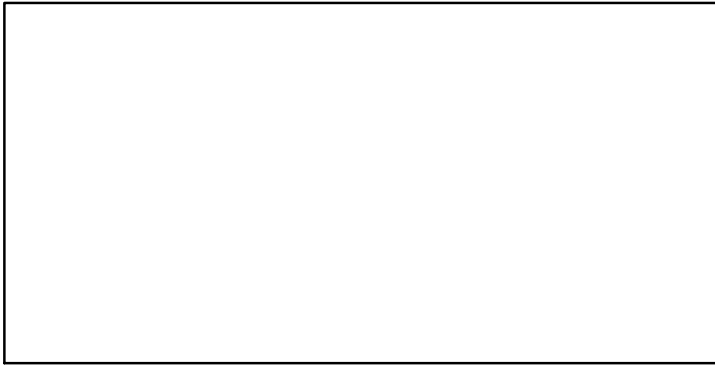
TAC*, Cpair*, Cadv*



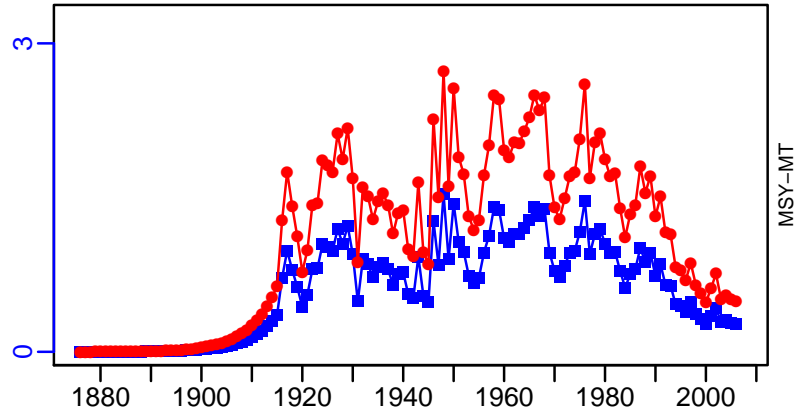
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1876-2007-BRANCH)



Gopher rockfish Southern Pacific Coast [GOPHERSPCOAST]

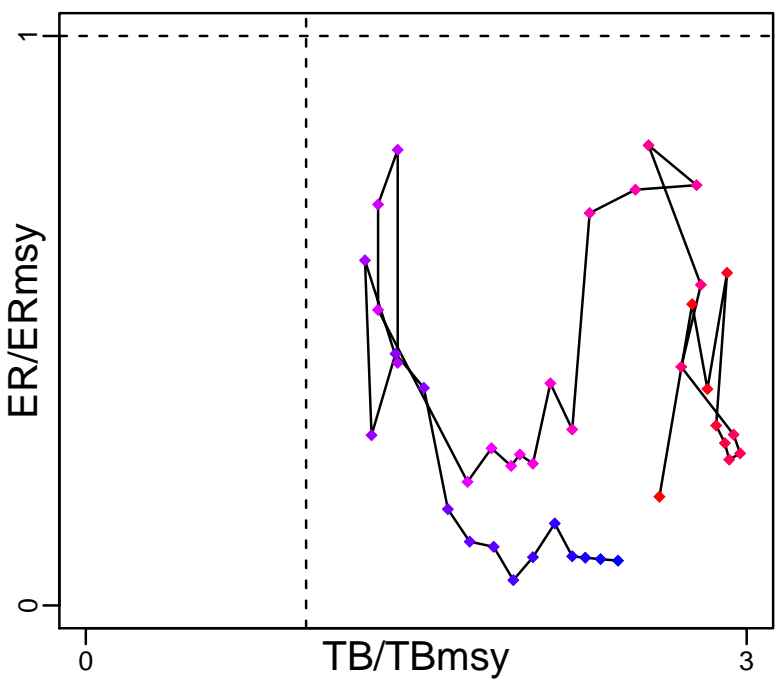
Metadata	
Scientific Name	Sebastes carnatus
Current Assess ID	SWFSC-GOPHERSPCOAST-1965-2005-STANTON
Area	Southern Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Southwest Fisheries Science Center
Asmts in RAM	2005

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-MT	2005	1010
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-calc-ratio	2005	0.1
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2005	2440
SSB0	SSB0-MT	2005	1995
MSY	MSY-MT	2005	101
M	M-1/yr	2005	0.2
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

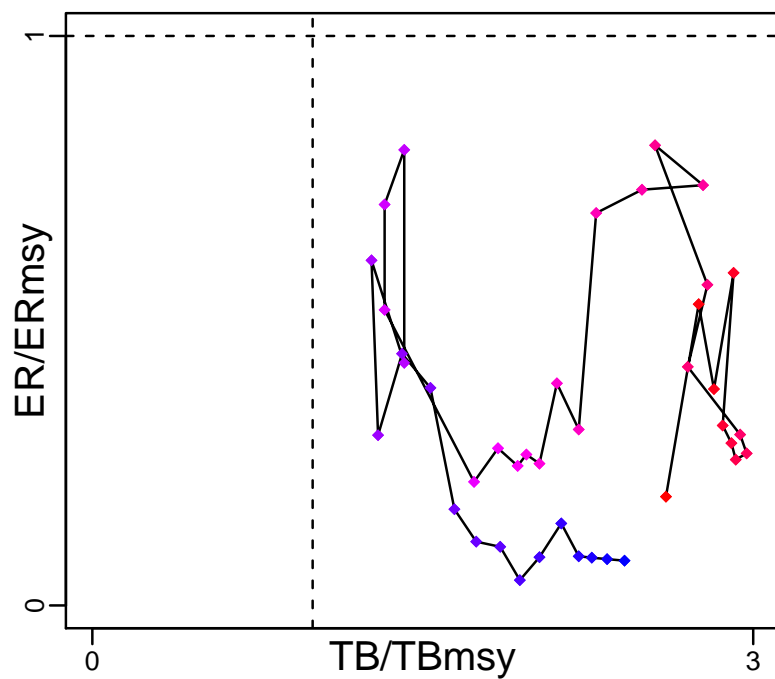
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2005	2570	-	1+
SSB	SSB-MT	2005	1900	Females	3+
TN	-	-	-	-	-
R	R-MT	2005	2730	-	0
F	-	-	-	-	-
ER	ER-ratio	2005	0.019	-	-
TC	TC-MT	2005	50		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-MT	2005	2.545		
SSB/SSBmsy	SSB-MT/(SSB0-MT*0.368)	2005	2.588		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-calc-ratio	2005	0.191		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Gopher rockfish Southern Pacific Coast [GOPHERSPCOAST]

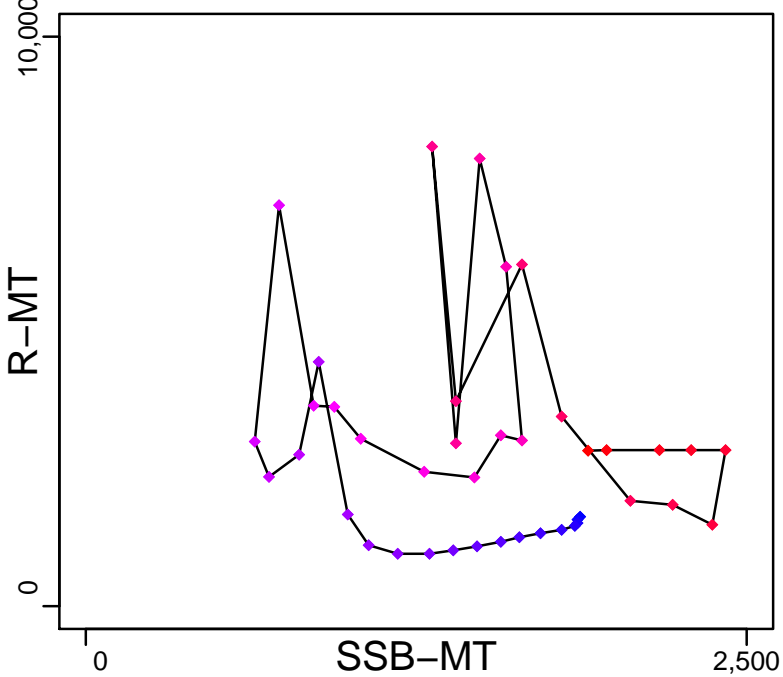
Kobe MSYpref (1965–2005–STANTON)



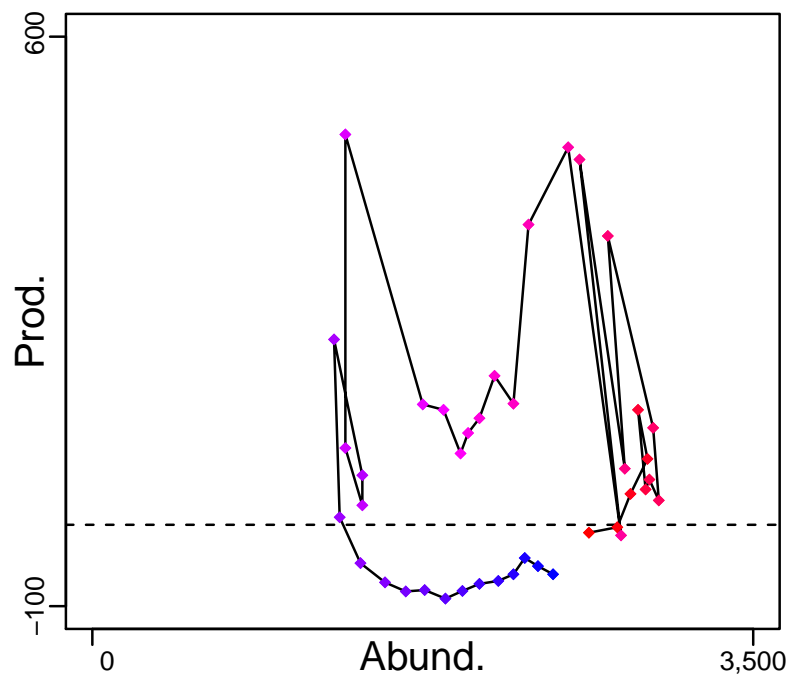
Kobe MGTpref (1965–2005–STANTON)



Spawner Recruit (1965–2005–STANTON)



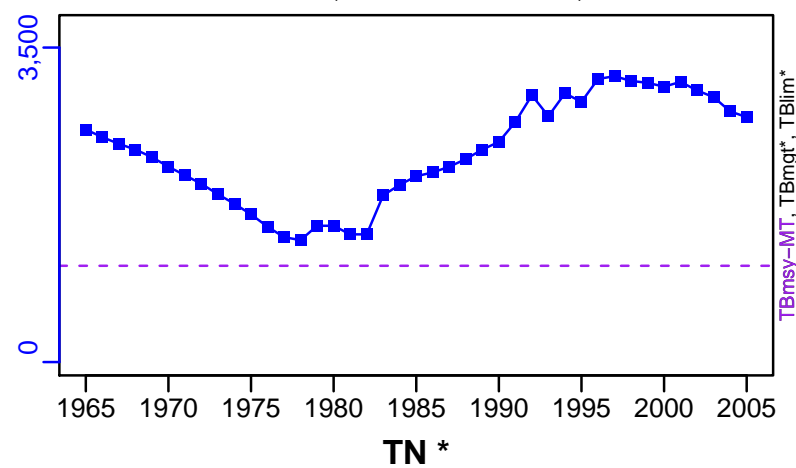
Production (1965–2005–STANTON)



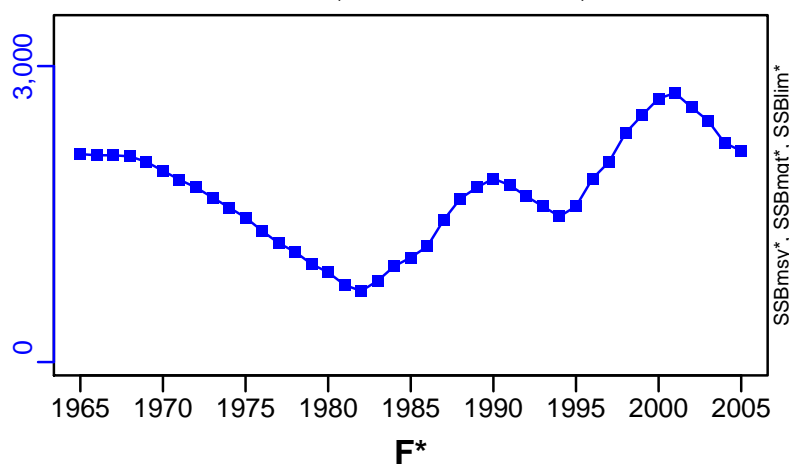
◆ Start Year ◆ End Year * No Data

Gopher rockfish Southern Pacific Coast [GOPHERSPCOAST]

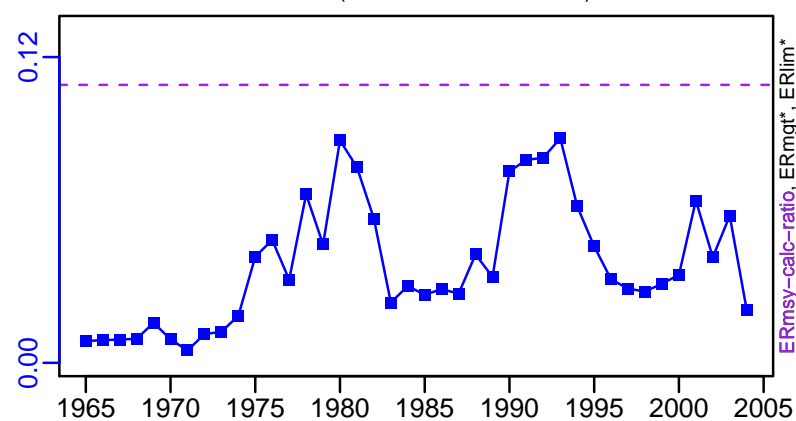
TB-MT (1965–2005–STANTON)



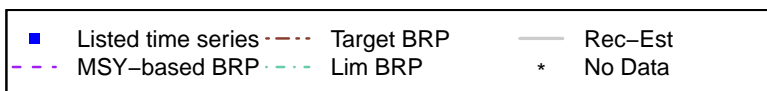
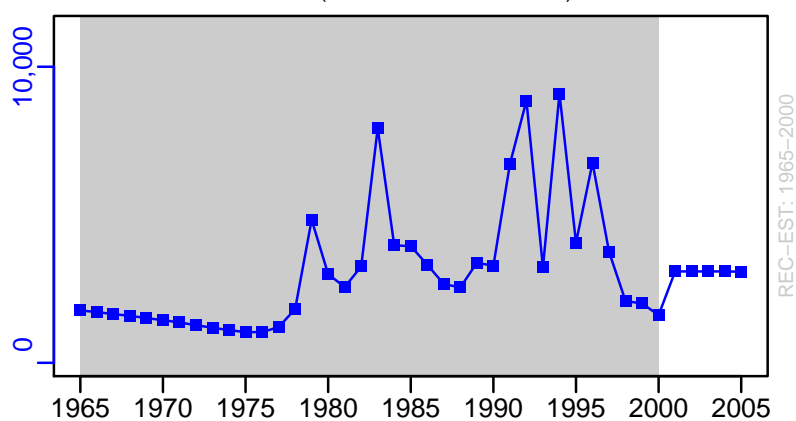
SSB-MT (1965–2005–STANTON)



ER-ratio (1965–2005–STANTON)

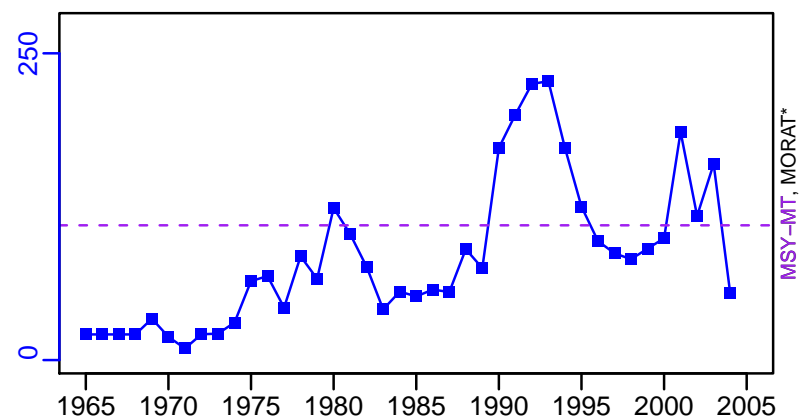


R-MT (1965–2005–STANTON)



Gopher rockfish Southern Pacific Coast [GOPHERSPCOAST]

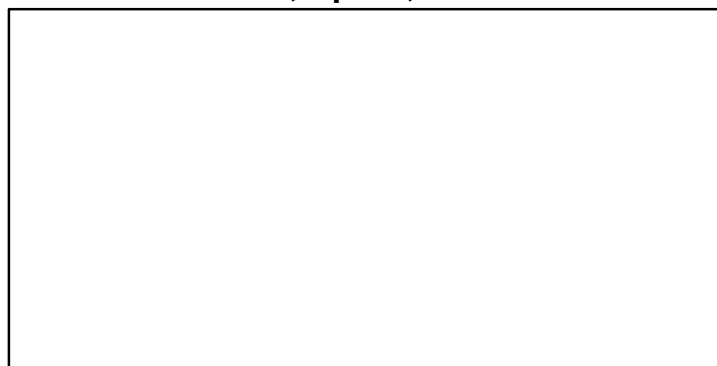
TC-MT, TL*, RecC* (1965-2005-STANTON)



survB*



TAC*, Cpair*, Cadv*



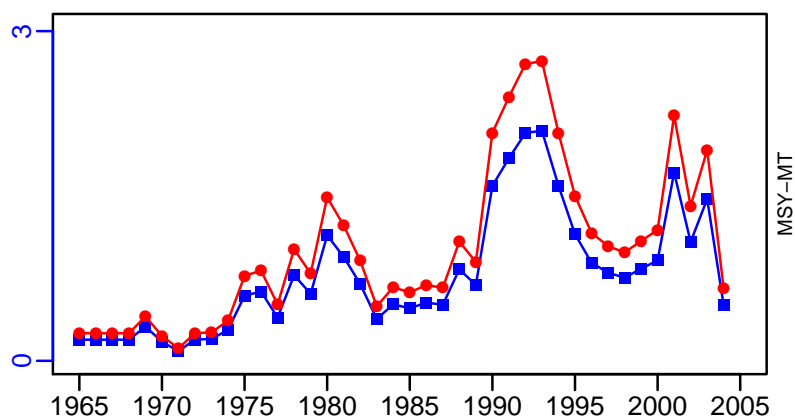
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1965-2005-STANTON)



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

Greenstriped rockfish Pacific Coast [GRNSTROCKPCOAST]

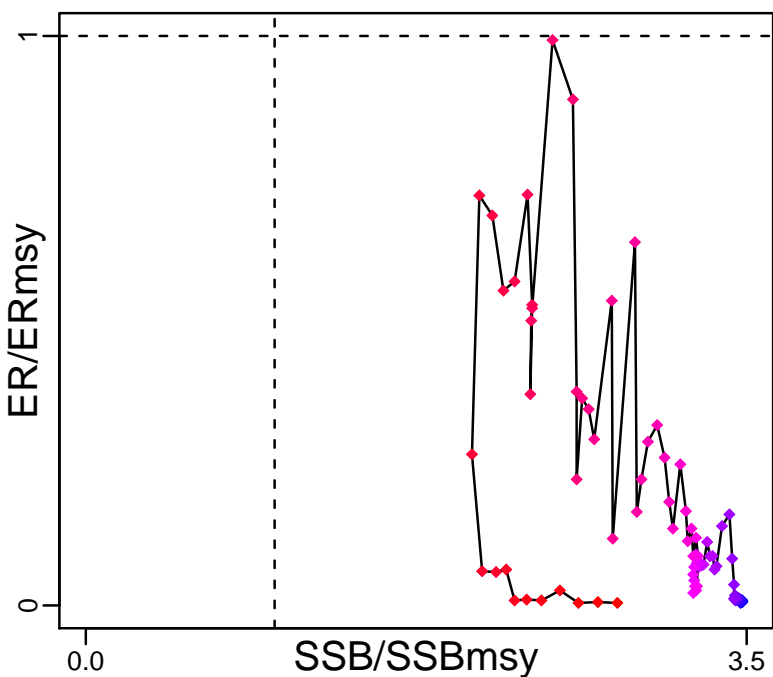
Metadata	
Scientific Name	Sebastes elongatus
Current Assess ID	PFMC-GRNSTROCKPCOAST-1916-2009-STANTON
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Pacific Fishery Management Council
Asmts in RAM	2009

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2009	11,774
SSBmsy	SSBmsy-E00eggs	2009	2.039×10^9
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2009	0.068
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2009	803
M	M-1/yr	2009	0.08
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

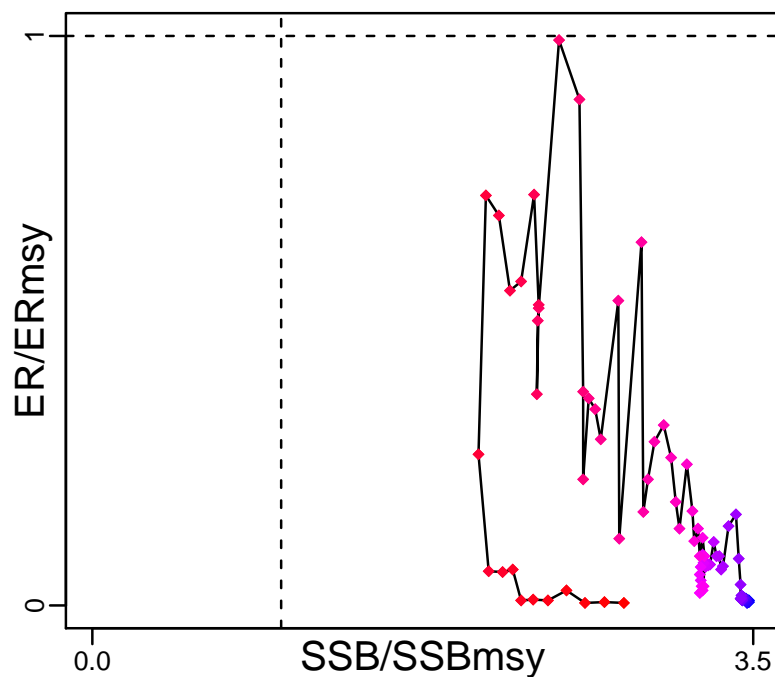
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2009	29,200	-	2+
SSB	SSB-E00eggs	2009	5.74×10^9	Females	-
TN	-	-	-	-	-
R	R-E00	2009	14,700	-	0
F	-	-	-	-	-
ER	ER-ratio	2009	0	-	-
TC	TC-MT	2009	9		
TL	TL-MT	2009	3.39		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2009	2.48		
SSB/SSBmsy	SSB-E00eggs/SSBmsy-E00eggs	2009	2.815		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2009	0.004		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Greenstriped rockfish Pacific Coast [GRNSTROCKPCOAST]

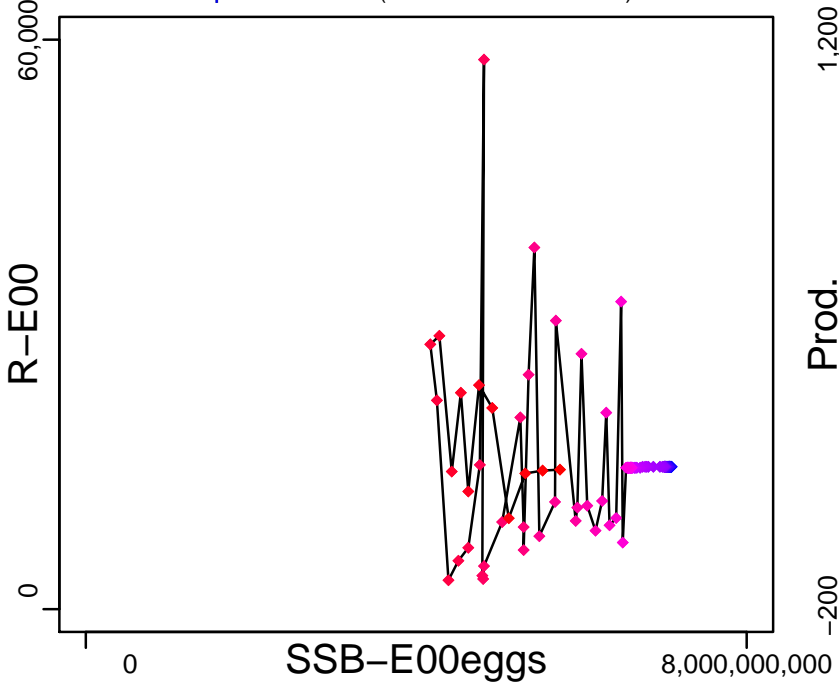
Kobe MSYpref (1916–2009–STANTON)



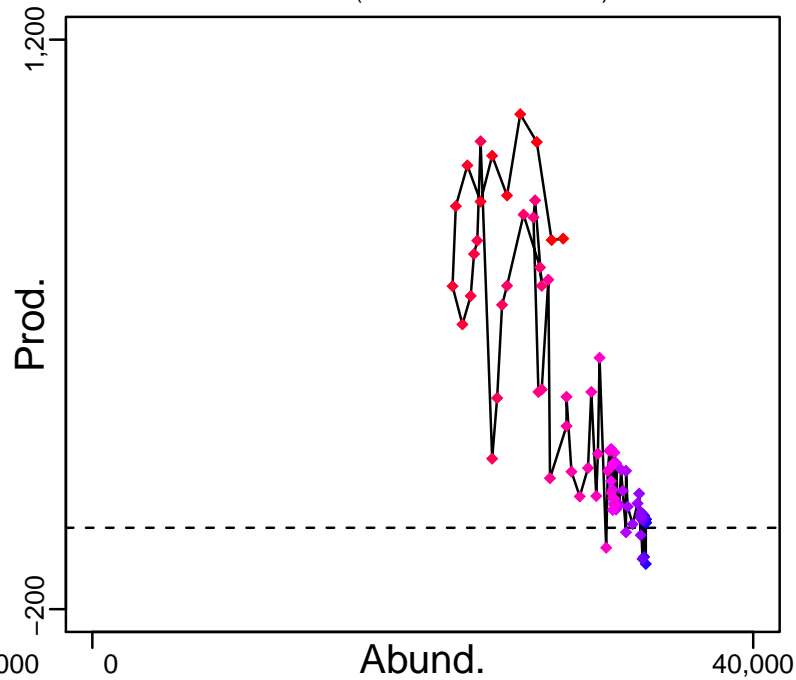
Kobe MGTpref (1916–2009–STANTON)



Spawner Recruit (1916–2009–STANTON)



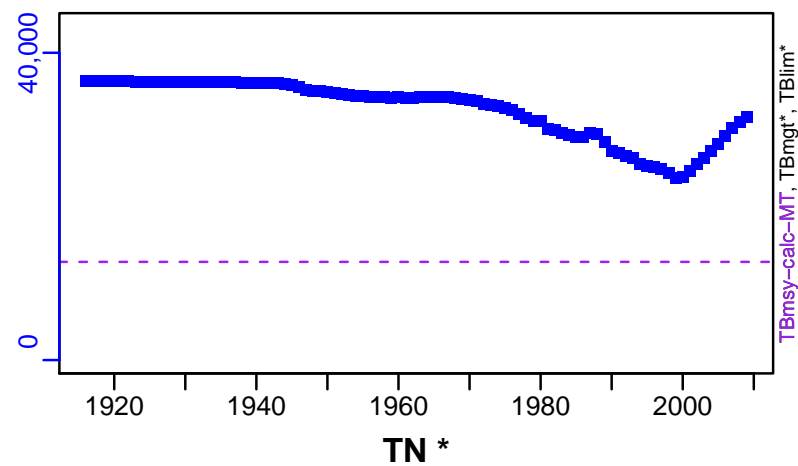
Production (1916–2009–STANTON)



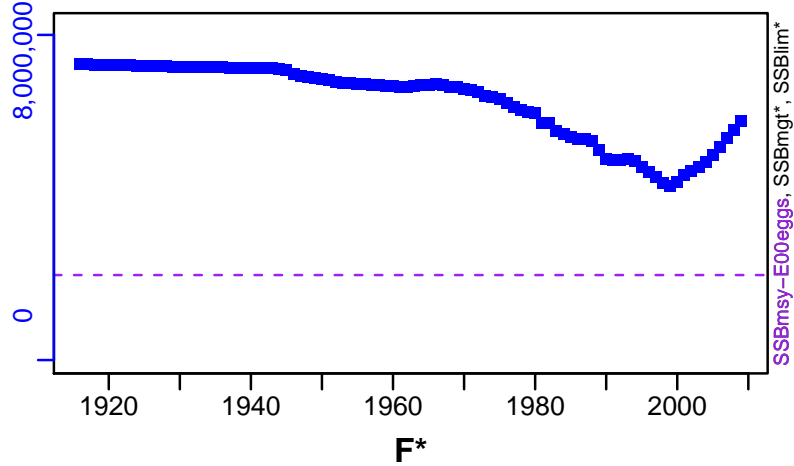
◆ Start Year ◆ End Year * No Data

Greenstriped rockfish Pacific Coast [GRNSTROCKPCOAST]

TB-MT (1916-2009-STANTON)



SSB-E00eggs (1916-2009-STANTON)



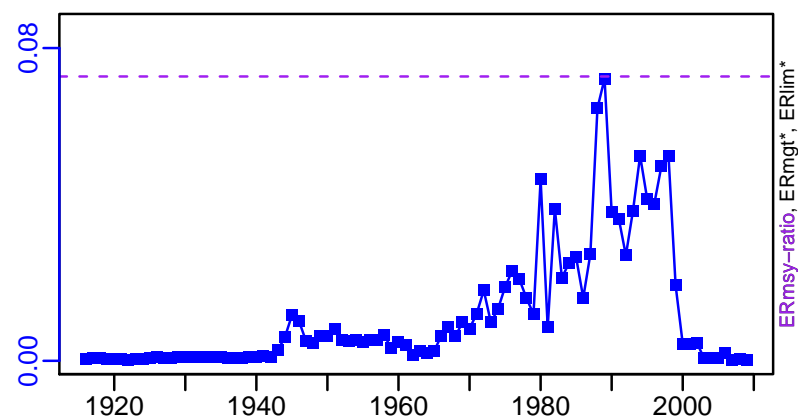
TN *



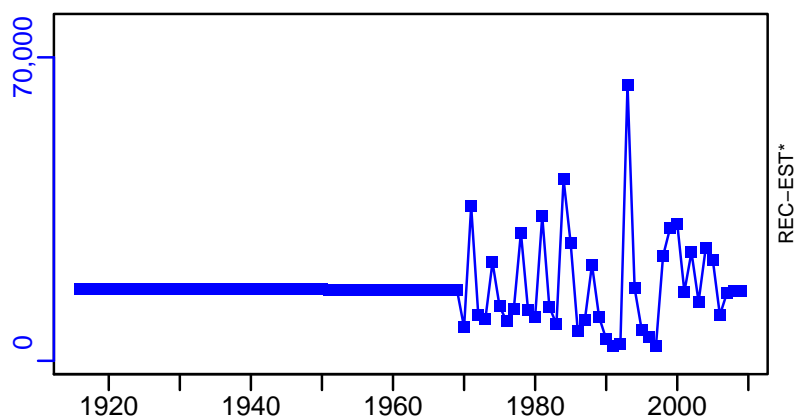
F*



ER-ratio (1916-2009-STANTON)

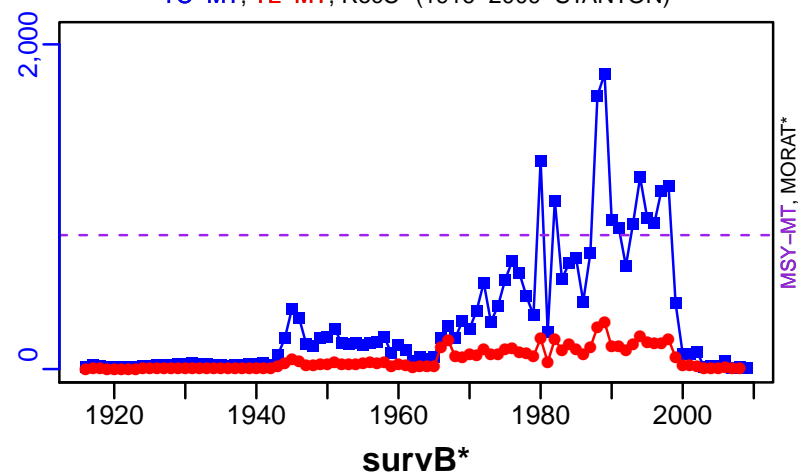


R-E00 (1916-2009-STANTON)



Greenstriped rockfish Pacific Coast [GRNSTROCKPCOAST]

TC-MT, TL-MT, RecC* (1916-2009-STANTON)



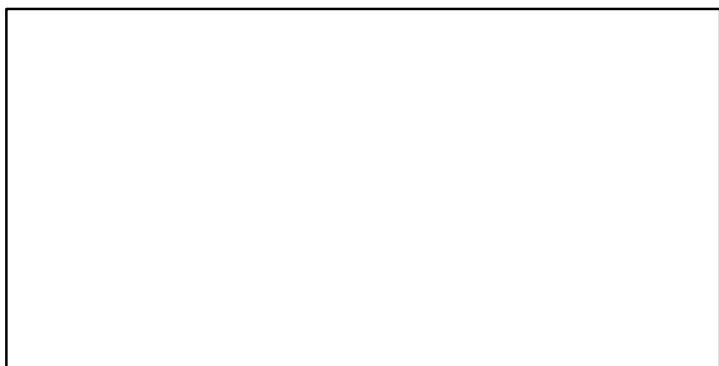
TAC*, Cpair*, Cadv*



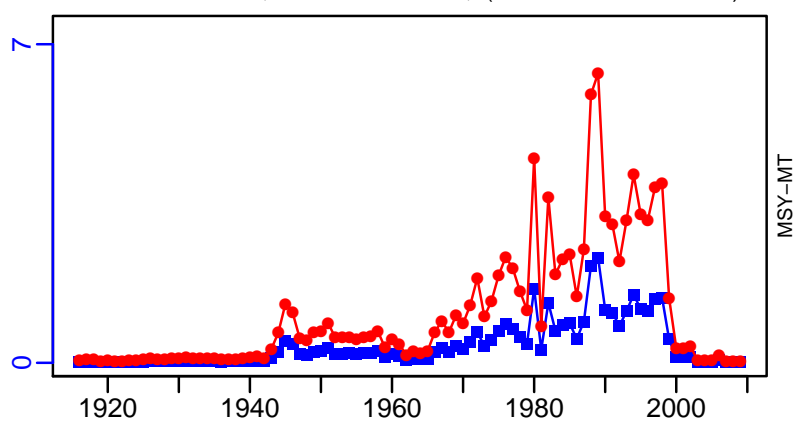
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1916-2009-STANTON)



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

Greenspotted rockfish Northern Pacific Coast [GRSPROCKNCAL]

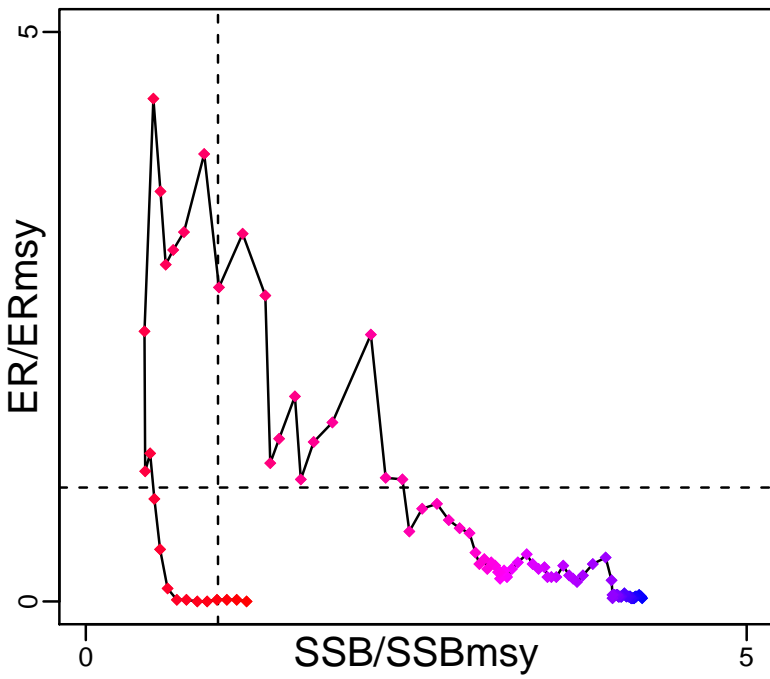
Metadata	
Scientific Name	Sebastes chlorostictus
Current Assess ID	SWFSC-GRSPROCKNCAL-1916-2010-STACHURA
Area	Northern Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Southwest Fisheries Science Center
Asmts in RAM	2010

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2010	840
SSBmsy	SSBmsy-E00eggs	2010	1.34×10^{11}
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2010	0.07
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2010	3160
SSB0	SSB0-E00eggs	2010	5.64×10^9
MSY	MSY-MT	2010	59
M	M-1/yr	2010	0.07
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

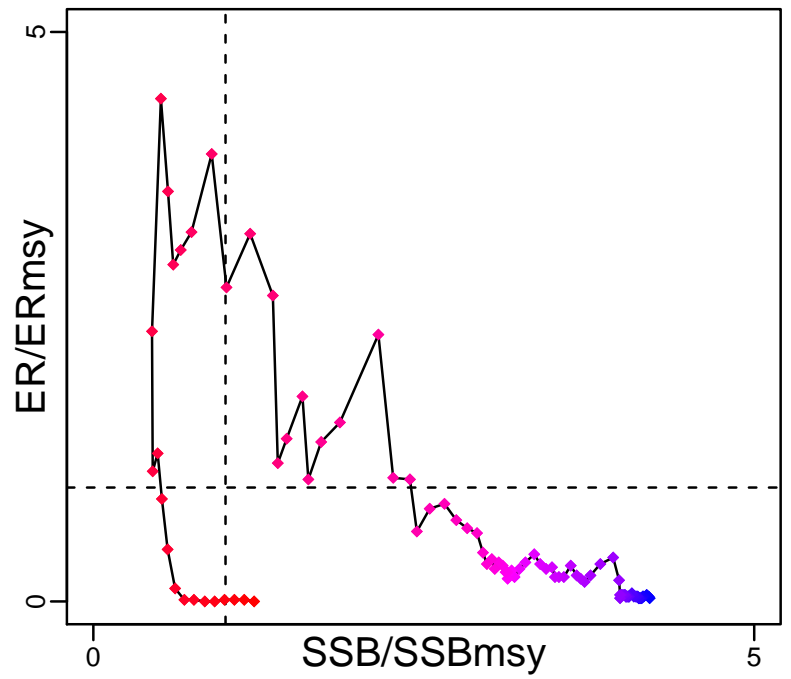
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2010	1190	-	0+
SSB	SSB-E00eggs	2010	1.63×10^{11}	Females	-
TN	-	-	-	-	-
R	R-E00	2010	391,000	-	0
F	-	-	-	-	-
ER	ER-ratio	2010	0	-	-
TC	TC-MT	2010	0.4		
TL	TL-MT	2010	0.37		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2010	1.417		
SSB/SSBmsy	SSB-E00eggs/SSBmsy-E00eggs	2010	1.216		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2010	0		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Greenspotted rockfish Northern Pacific Coast [GRSPROCKNCAL]

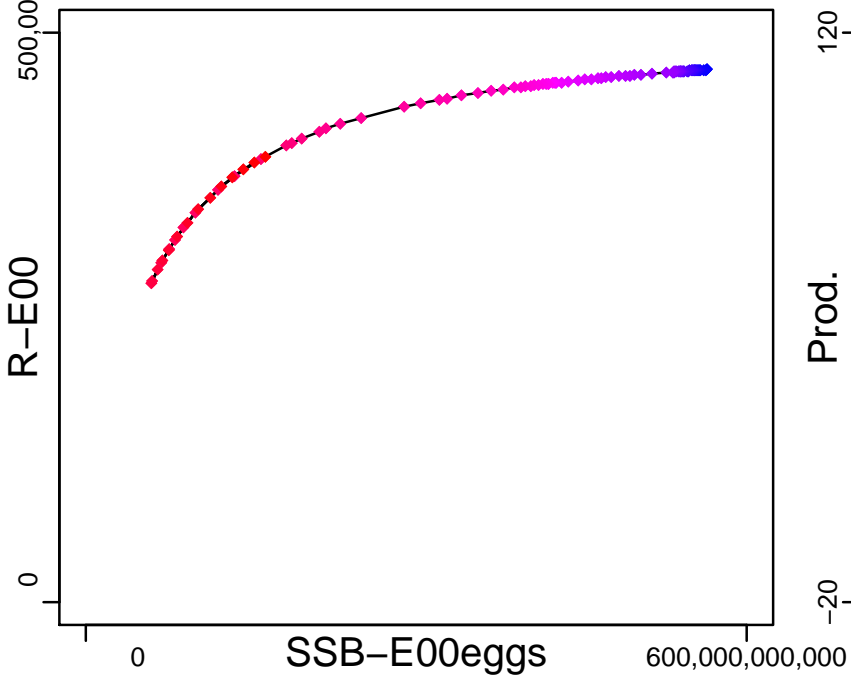
Kobe MSYpref (1916–2010–STACHURA)



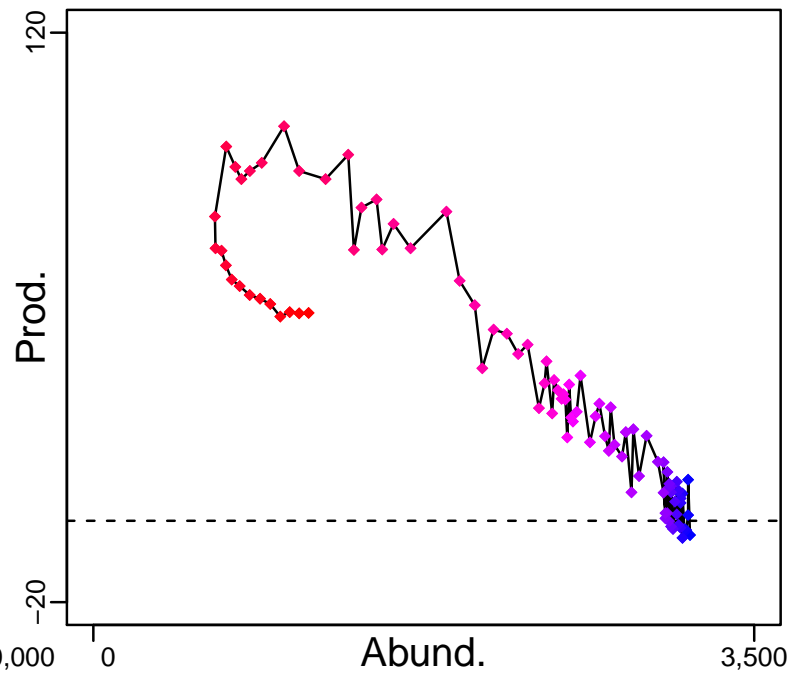
Kobe MGTpref (1916–2010–STACHURA)



Spawner Recruit (1916–2010–STACHURA)



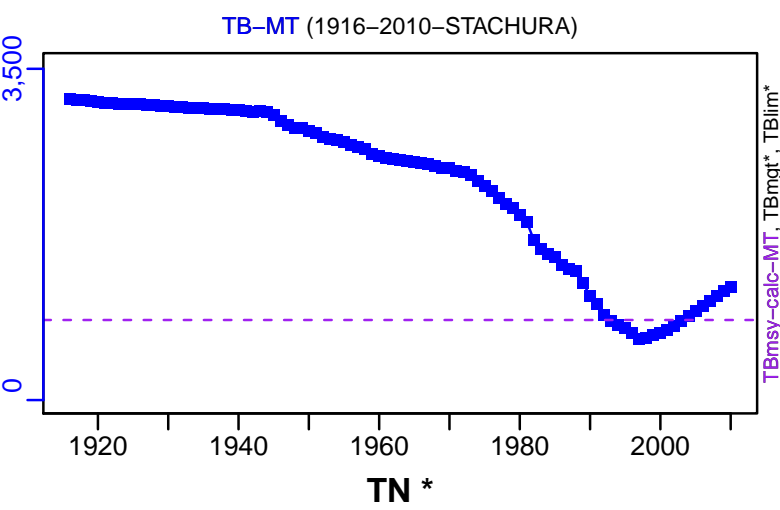
Production (1916–2010–STACHURA)



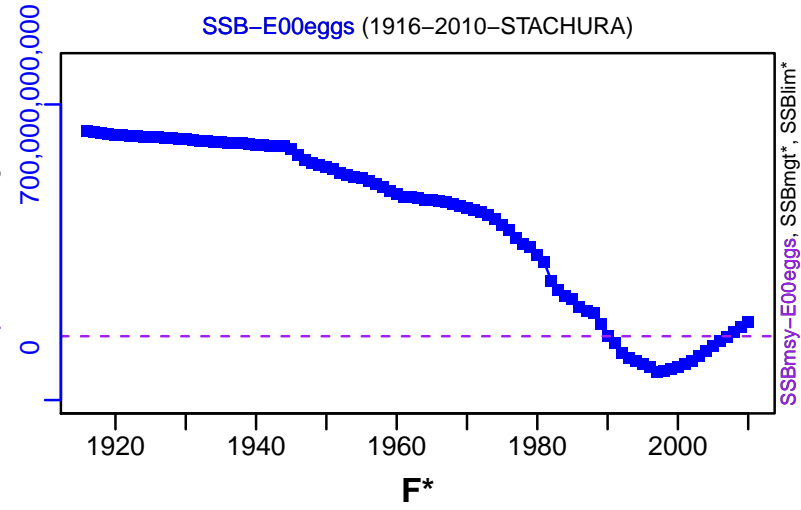
◆ Start Year ◆ End Year * No Data

Greenspotted rockfish Northern Pacific Coast [GRSPROCKNCAL]

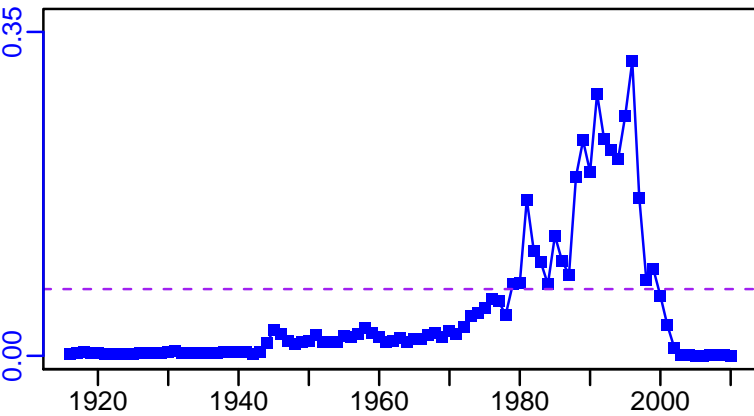
TB-MT (1916-2010-STACHURA)



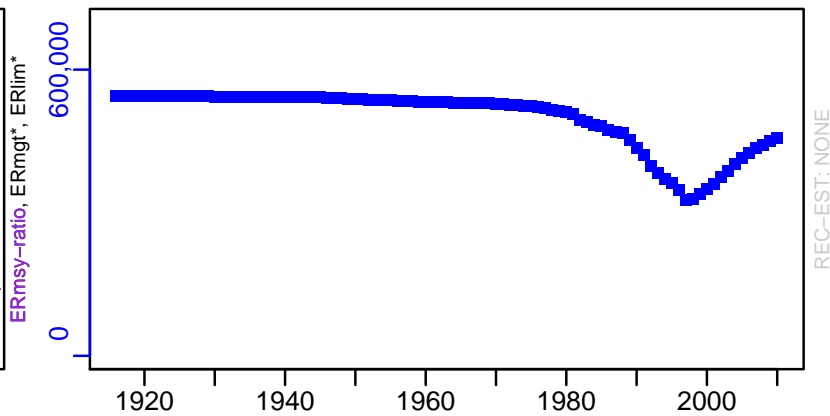
SSB-E00eggs (1916-2010-STACHURA)



ER-ratio (1916-2010-STACHURA)



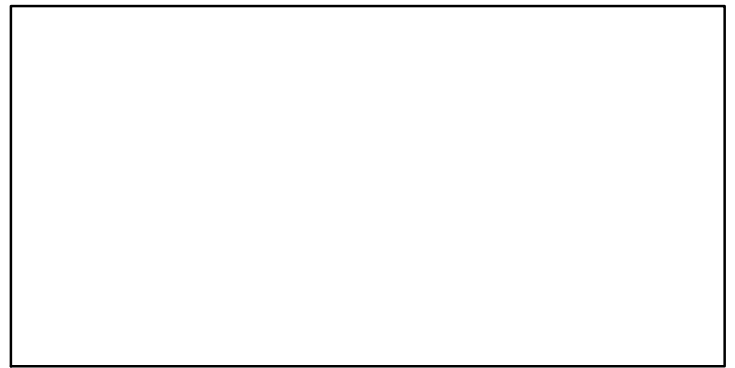
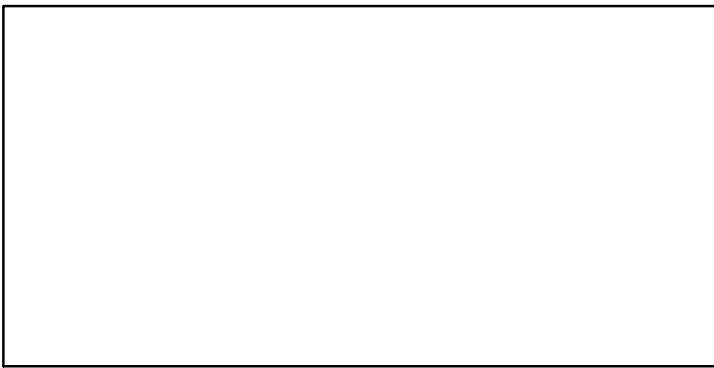
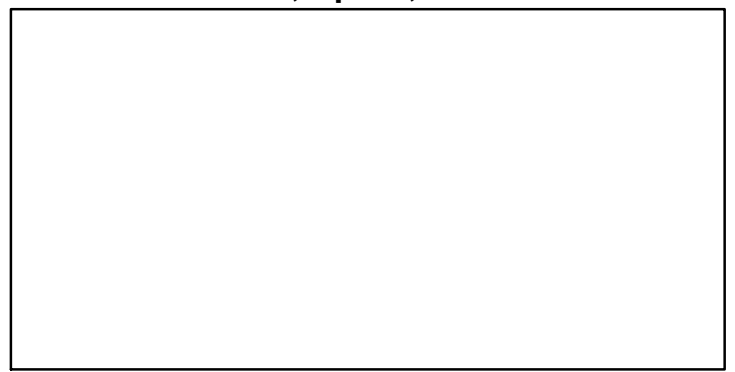
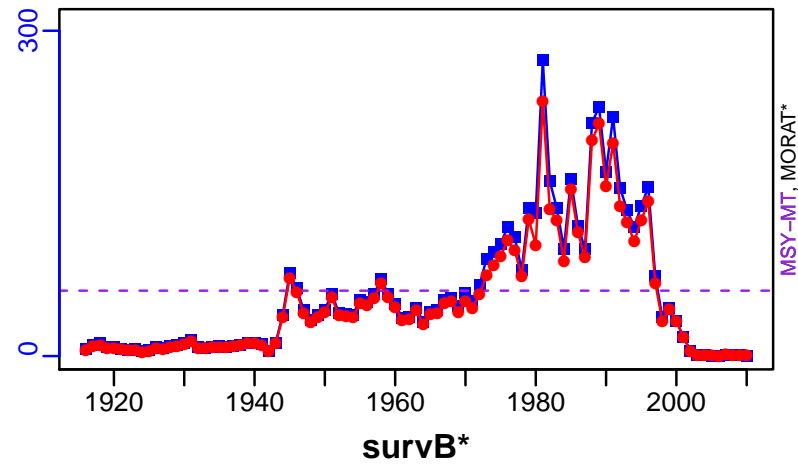
R-E00 (1916-2010-STACHURA)



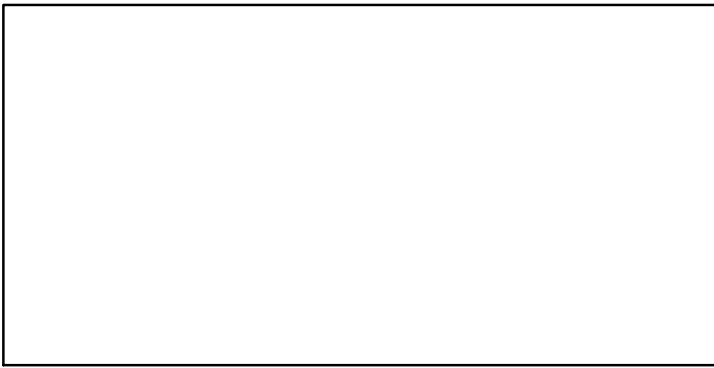
Greenspotted rockfish Northern Pacific Coast [GRSPROCKNCAL]

TC-MT, TL-MT, RecC* (1916-2010-STACHURA)

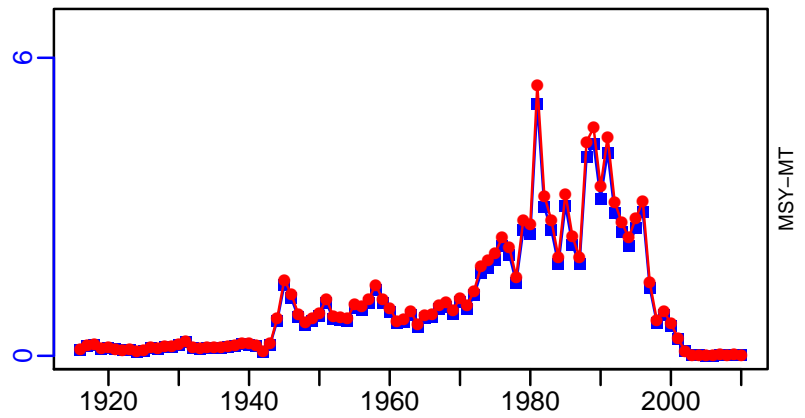
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1916-2010-STACHURA)



Greenspotted rockfish Southern Pacific Coast [GRSPROCKSCAL]

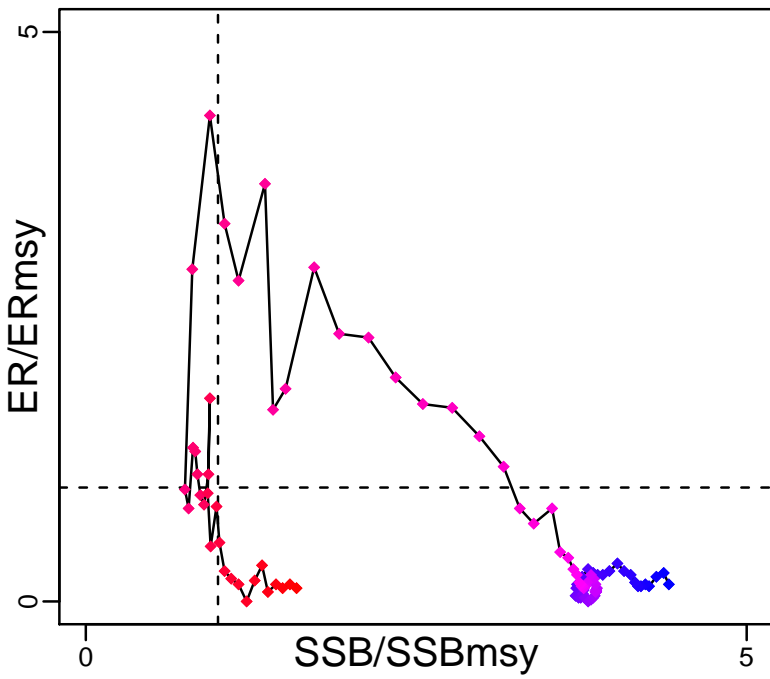
Metadata	
Scientific Name	Sebastes chlorostictus
Current Assess ID	SWFSC-GRSPROCKSCAL-1916-2010-STACHURA
Area	Southern Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Southwest Fisheries Science Center
Asmts in RAM	2010

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2010	932
SSBmsy	SSBmsy-E00eggs	2010	1.8×10^{11}
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2010	0.06
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2010	4331
SSB0	SSB0-E00eggs	2010	7.94×10^9
MSY	MSY-MT	2010	56
M	M-1/yr	2010	0.07
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

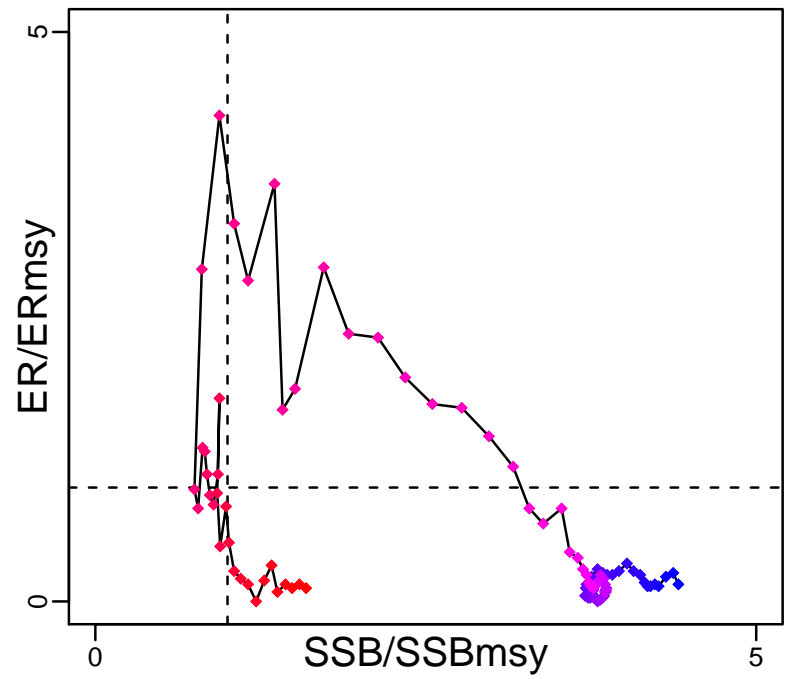
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2010	1920	-	0+
SSB	SSB-E00eggs	2010	2.87×10^{11}	Females	-
TN	-	-	-	-	-
R	R-E00	2010	681,000	-	0
F	-	-	-	-	-
ER	ER-ratio	2010	0.007	-	-
TC	TC-MT	2010	11		
TL	TL-MT	2010	11		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2010	2.061		
SSB/SSBmsy	SSB-E00eggs/SSBmsy-E00eggs	2010	1.594		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2010	0.117		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Greenspotted rockfish Southern Pacific Coast [GRSPROCKSCAL]

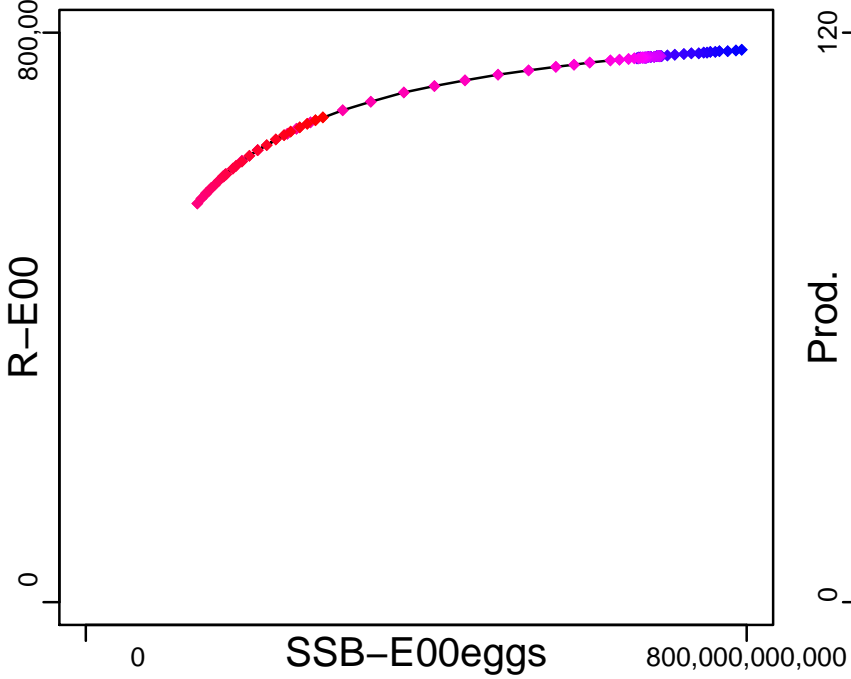
Kobe MSYpref (1916–2010–STACHURA)



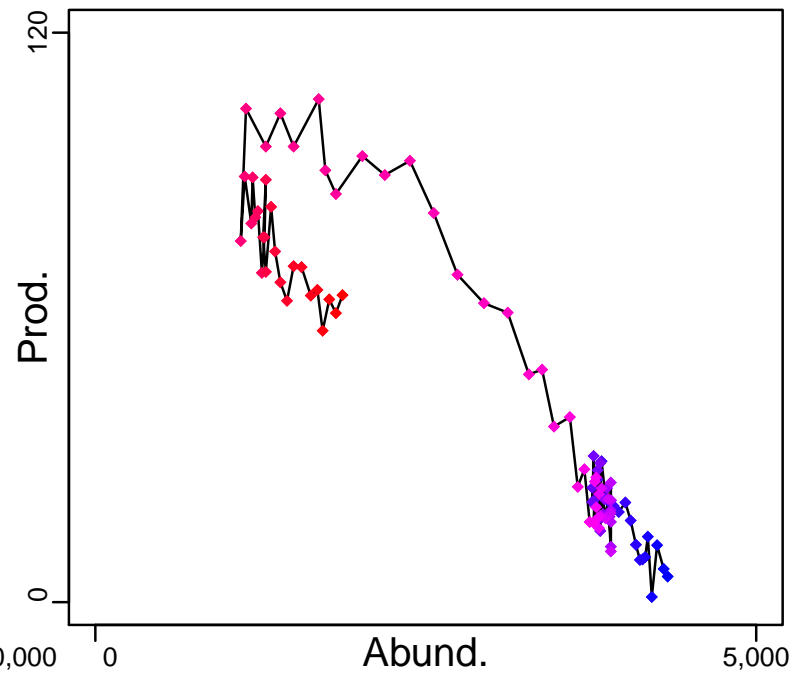
Kobe MGTpref (1916–2010–STACHURA)



Spawner Recruit (1916–2010–STACHURA)



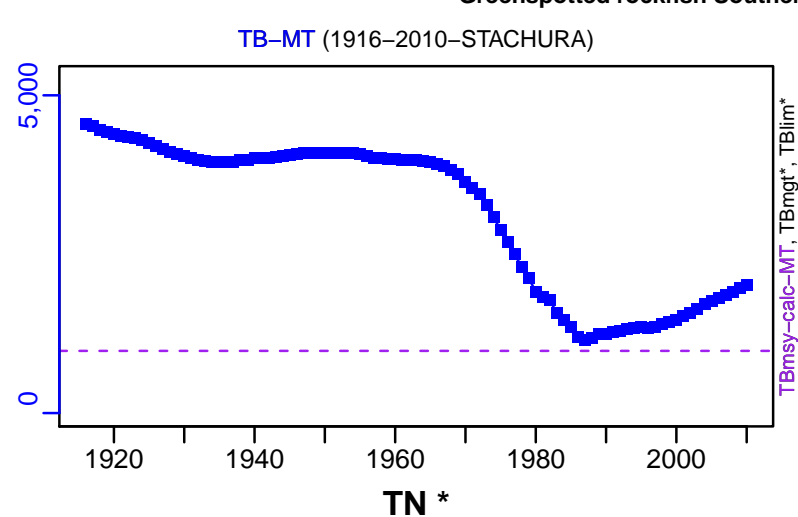
Production (1916–2010–STACHURA)



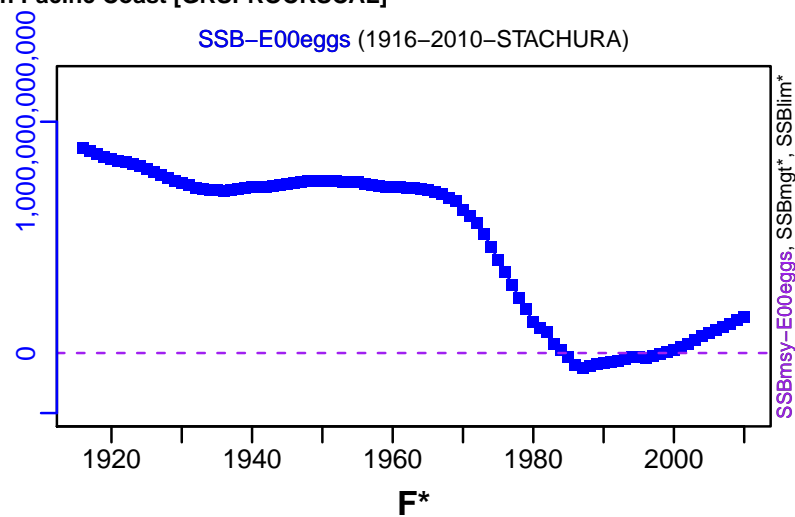
◆ Start Year ◆ End Year * No Data

Greenspotted rockfish Southern Pacific Coast [GRSPROCKSCAL]

TB-MT (1916-2010-STACHURA)



SSB-E00eggs (1916-2010-STACHURA)

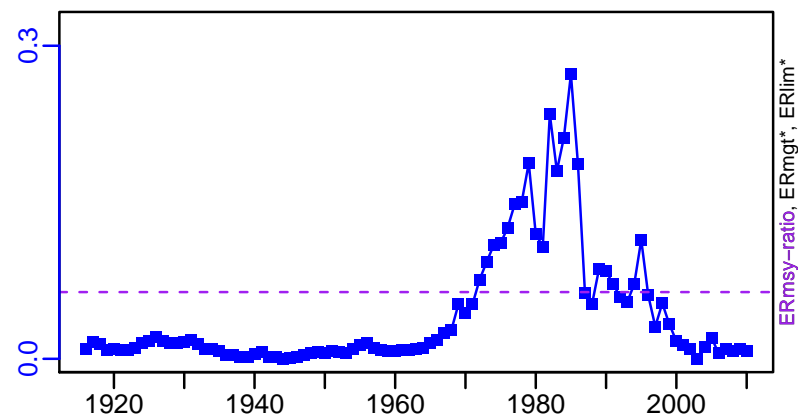


TN *

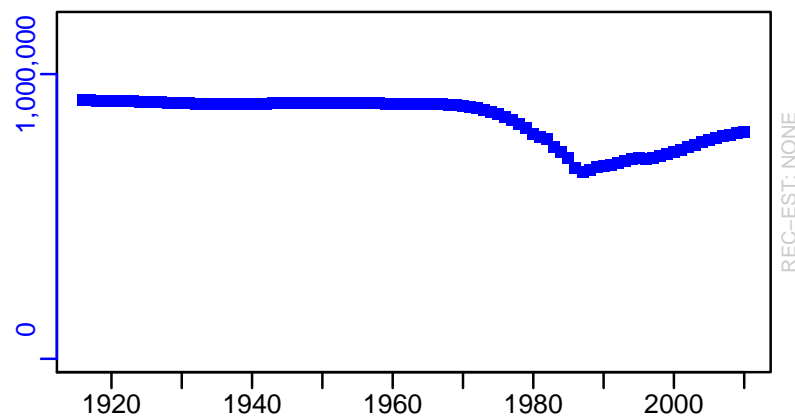
F*



ER-ratio (1916-2010-STACHURA)



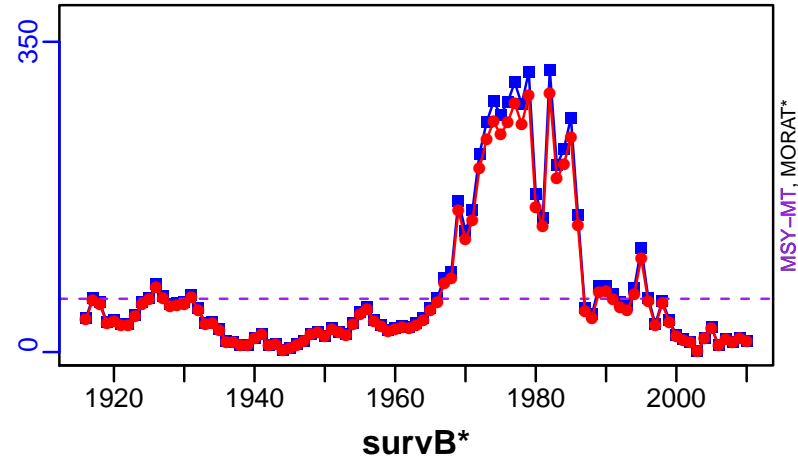
R-E00 (1916-2010-STACHURA)



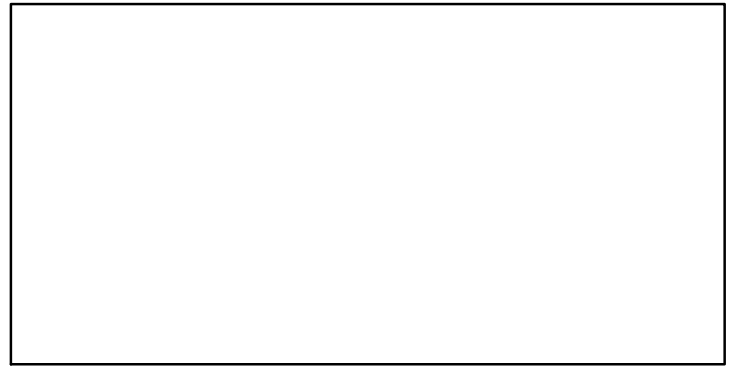
Greenspotted rockfish Southern Pacific Coast [GRSPROCKSCAL]

TC-MT, TL-MT, RecC* (1916-2010-STACHURA)

TAC*, Cpair*, Cadv*



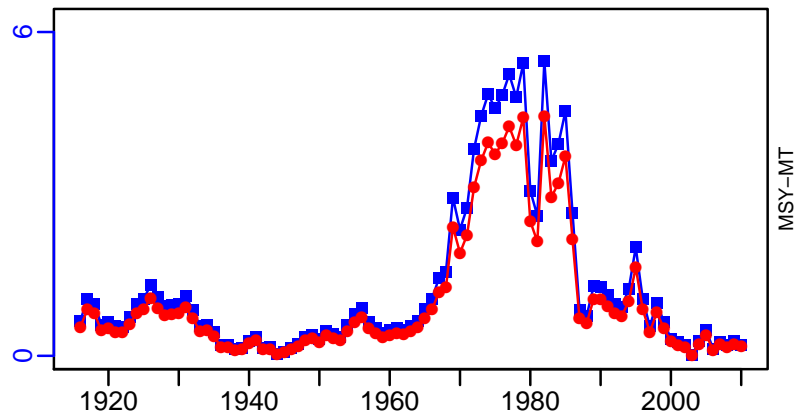
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1916-2010-STACHURA)



Kelp greenling Oregon Coast [KELPGREENLINGORECOAST]

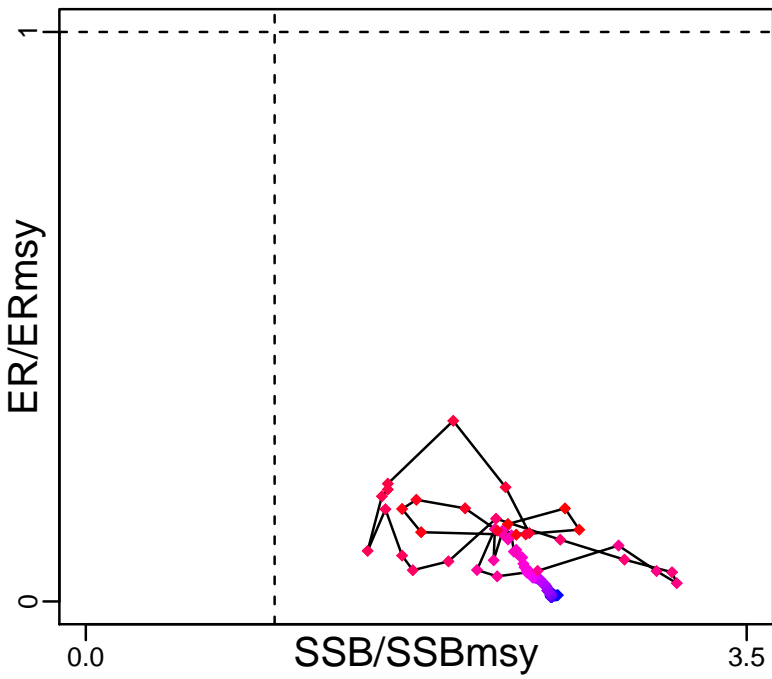
Metadata	
Scientific Name	Hexagrammos decagrammus
Current Assess ID	NWFSC-KELPGREENLINGORECOAST-1915-2015-SISIMP2016
Area	Oregon Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2015, 2005

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2005	656
SSBmsy	SSBmsy-MT	2015	159
Fmsy	-	-	-
ERmsy	ERmsy-pr-ratio	2005	0.125
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2005	1295
SSB0	SSB0-MT	2005	321
MSY	MSY-MT	2015	130
M	M-1/yr	2005	0.26
TBlim	-	-	-
SSBlim	SSBlim-MT	2015	99
Flim	-	-	-
ERlim	-	-	-

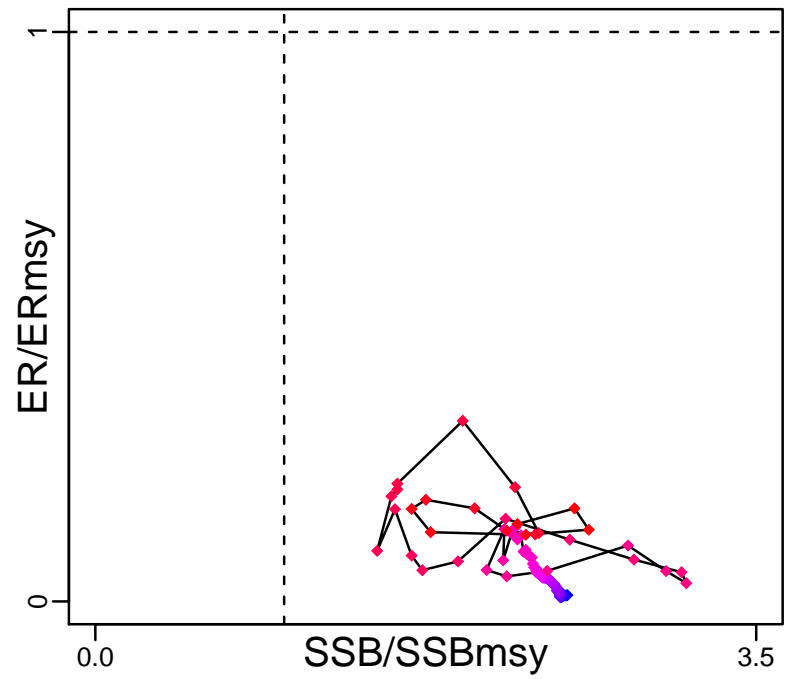
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2015	1130	-	0+
SSB	SSB-MT	2015	316	Females	-
TN	-	-	-	-	-
R	R-E00	2015	1,410,000	-	0
F	-	-	-	-	-
ER	ER-calc-ratio	2015	0.03	-	-
TC	TC-MT	2015	33		
TL	TL-MT	2005	52		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2005	0.951		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2015	1.99		
F/Fmsy	-	-	-		
ER/ERmsy	ER-calc-ratio/ERmsy-pr-ratio	2005	0.594		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kelp greenling Oregon Coast [KELPGREENLINGORECOAST]

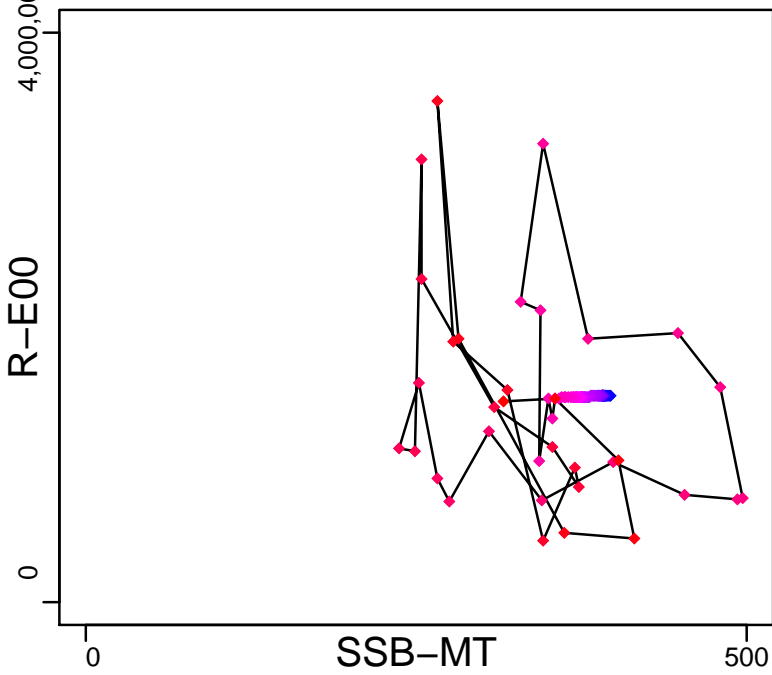
Kobe MSYpref (1915–2015–SISIMP2016)



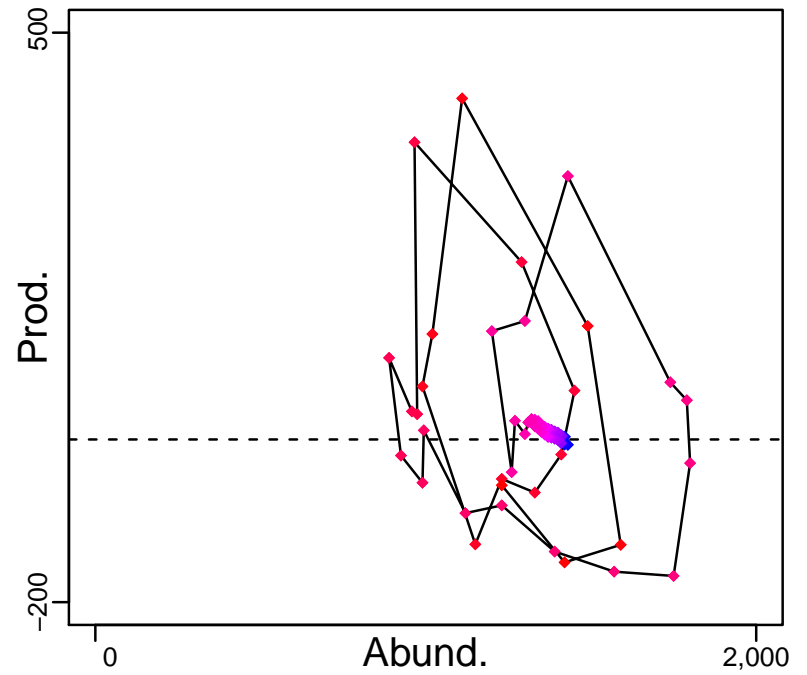
Kobe MGTpref (1915–2015–SISIMP2016)



Spawner Recruit (1915–2015–SISIMP2016)



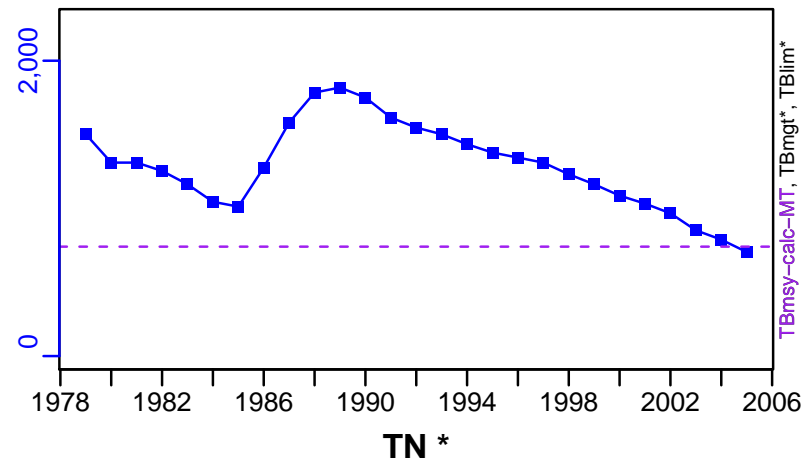
Production (1915–2015–SISIMP2016)



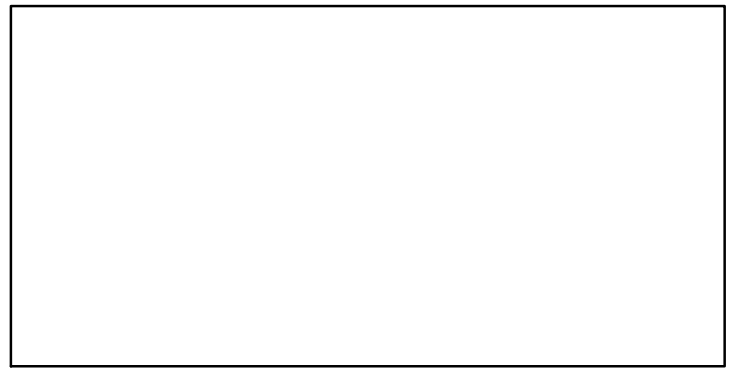
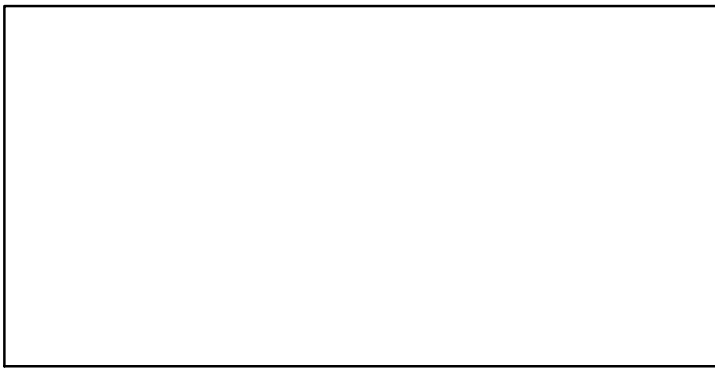
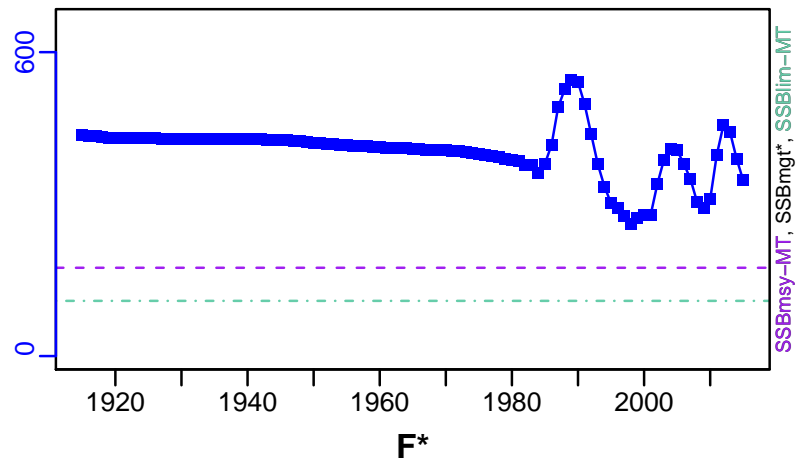
◆ Start Year ◆ End Year * No Data

Kelp greenling Oregon Coast [KELPGREENLINGORECOAST]

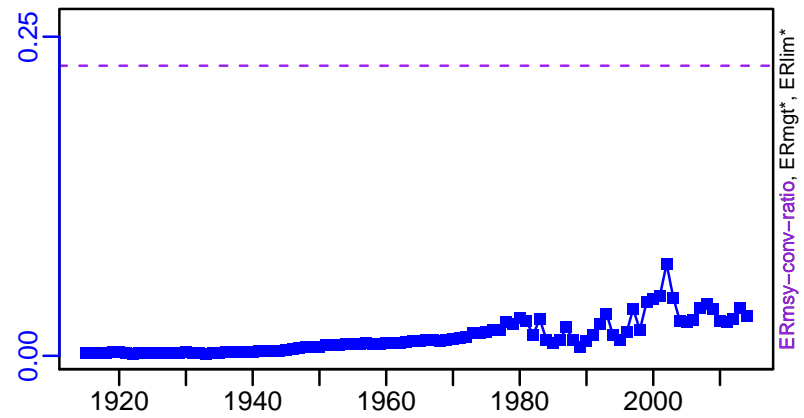
TB-MT (1979-2005-STANTON)



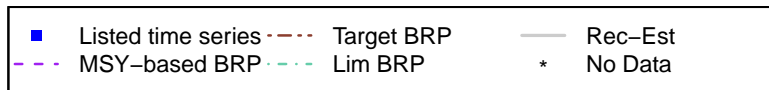
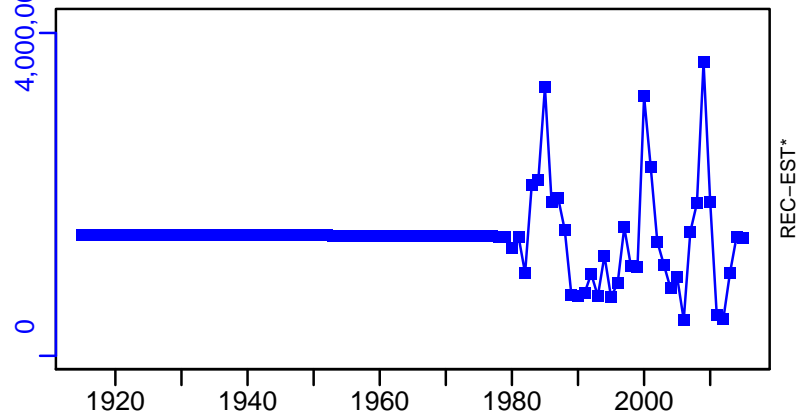
SSB-MT (1915-2015-SISIMP2016)



ER-calc-ratio (1915-2015-SISIMP2016)



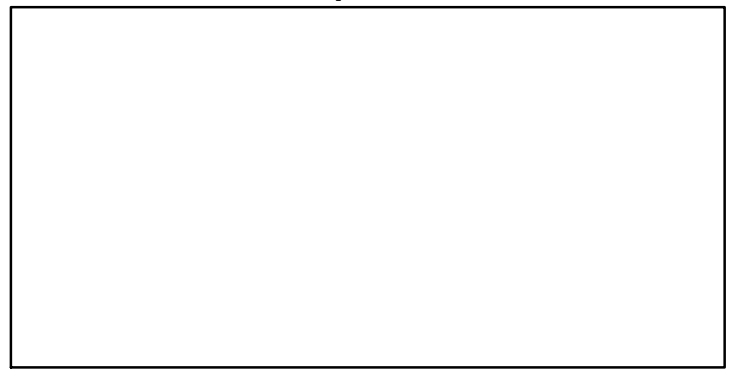
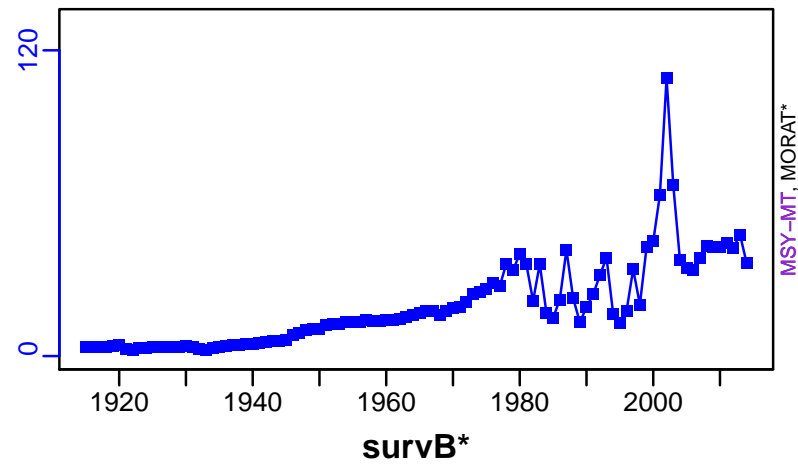
R-E00 (1915-2015-SISIMP2016)



Kelp greenling Oregon Coast [KELPGREENLINGORECOAST]

TC-MT, TL*, RecC* (1915-2015-SISIMP2016)

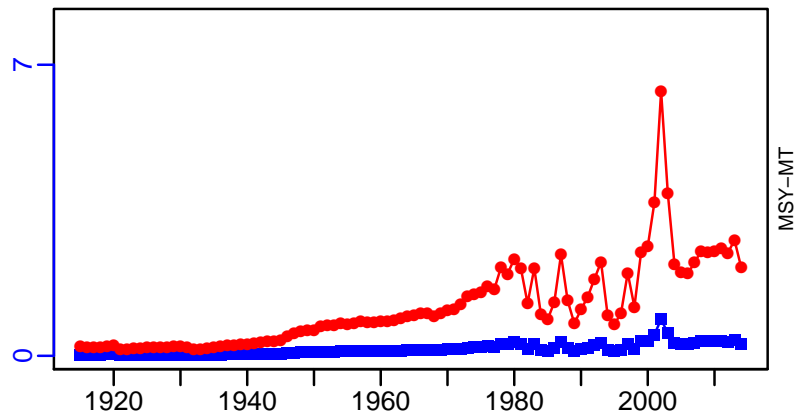
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1915-2015-SISIMP2016)



Lingcod Northern Pacific Coast [LINGCODNPCOAST]

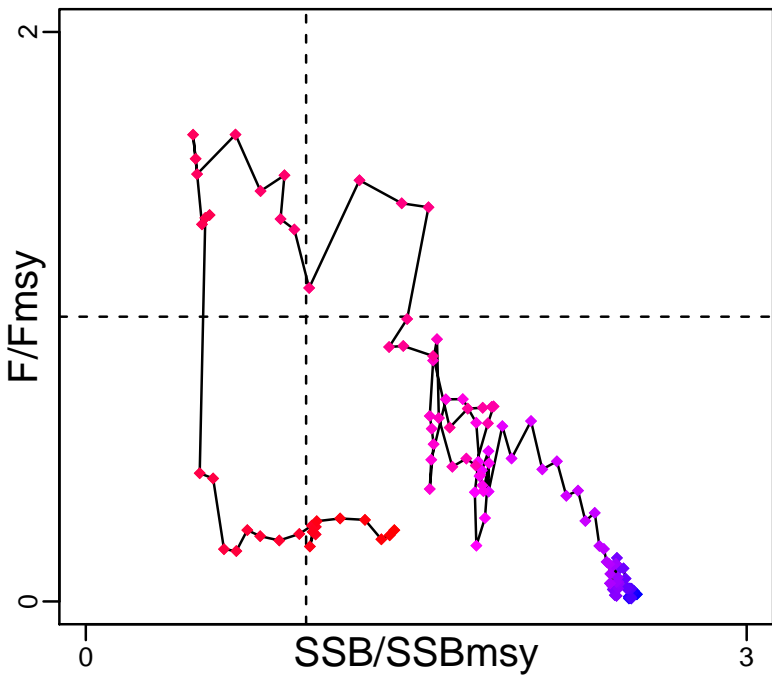
Metadata	
Scientific Name	Ophiodon elongatus
Current Assess ID	NWFSC-LINGCODNPCOAST-1889-2017-SISIMP2021
Area	Northern Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2017, 2009

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-MT	2009	12,386
SSBmsy	SSBmsy-MT	2017	15,179
Fmsy	Fmsy-1/yr	2017	0.55
ERmsy	ERmsy-ratio	2009	0.14
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2009	44,536
SSB0	SSB0-MT	2009	33,075
MSY	MSY-MT	2017	3197
M	M-1/yr	2009	0.18
TBlim	-	-	-
SSBlim	SSBlim-MT	2017	9487
Flim	Flim-1/yr	2017	0.55
ERlim	-	-	-

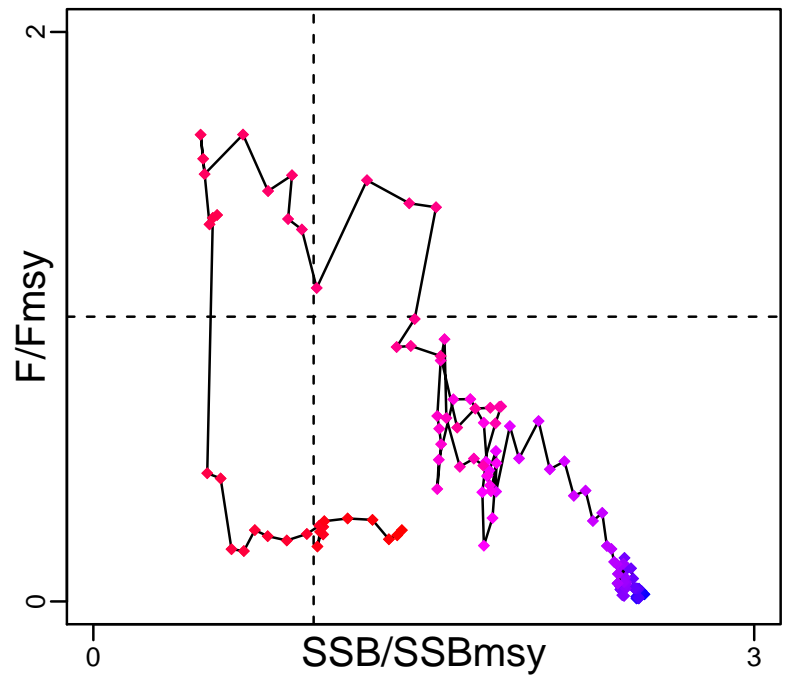
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2017	34,064	-	-
SSB	SSB-MT	2017	21,976	-	-
TN	-	-	-	-	-
R	R-E00	2017	8,036,830	-	0
F	F-1/yr	2017	0.138	-	-
ER	ER-calc-ratio	2017	0.021	-	-
TC	TC-MT	2017	723		
TL	TL-MT	2009	350		
TB/TBmsy	TB-MT/TBmsy-MT	2009	2.567		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2017	1.448		
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	0.25		
ER/ERmsy	ER-ratio/ERmsy-ratio	2009	0.253		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Lingcod Northern Pacific Coast [LINGCODNPCOAST]

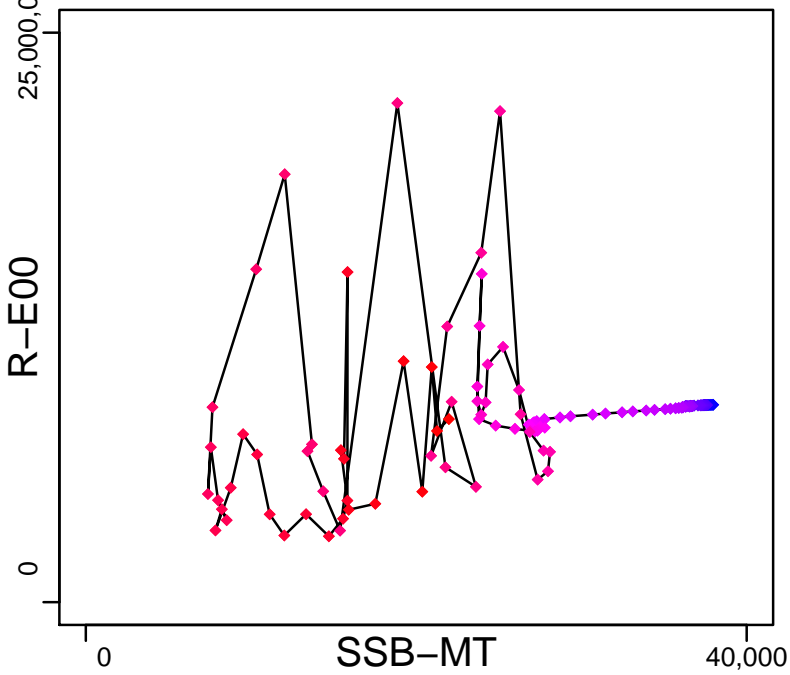
Kobe MSYpref (1889–2017–SISIMP2021)



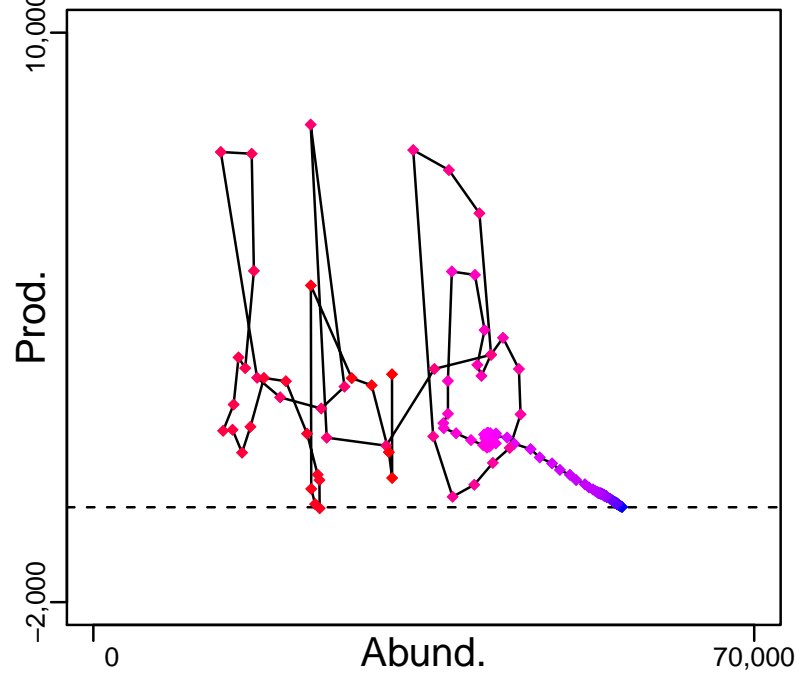
Kobe MGTpref (1889–2017–SISIMP2021)



Spawner Recruit (1889–2017–SISIMP2021)



Production (1889–2017–SISIMP2021)

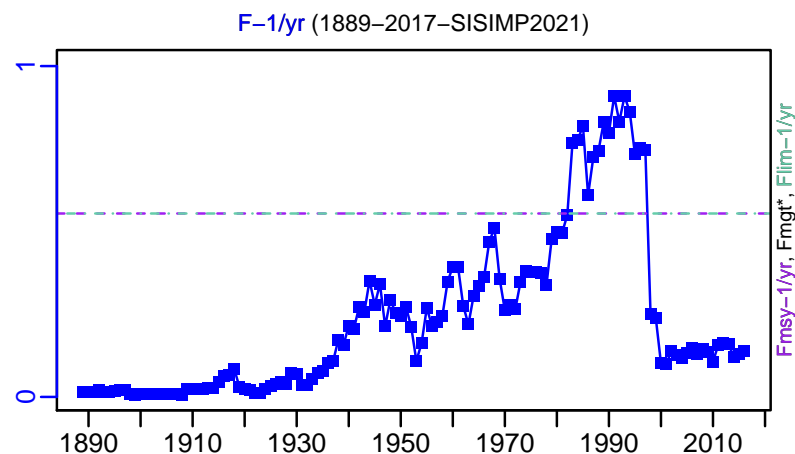
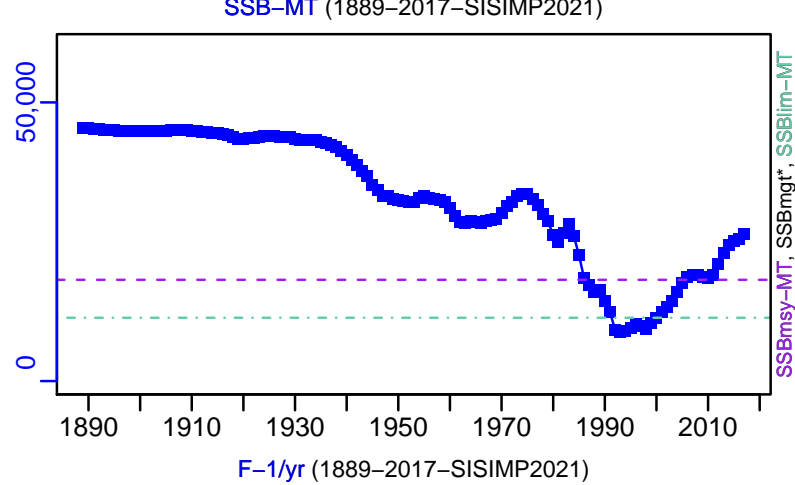
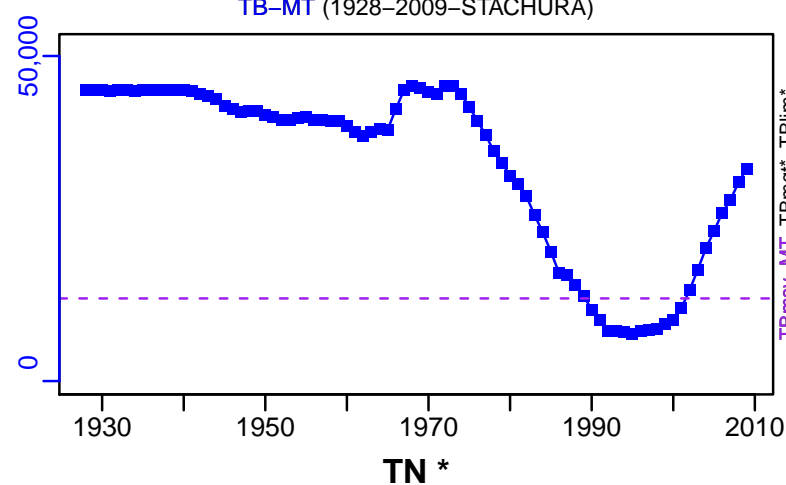


◆ Start Year ◆ End Year * No Data

Lingcod Northern Pacific Coast [LINGCODNPCOAST]

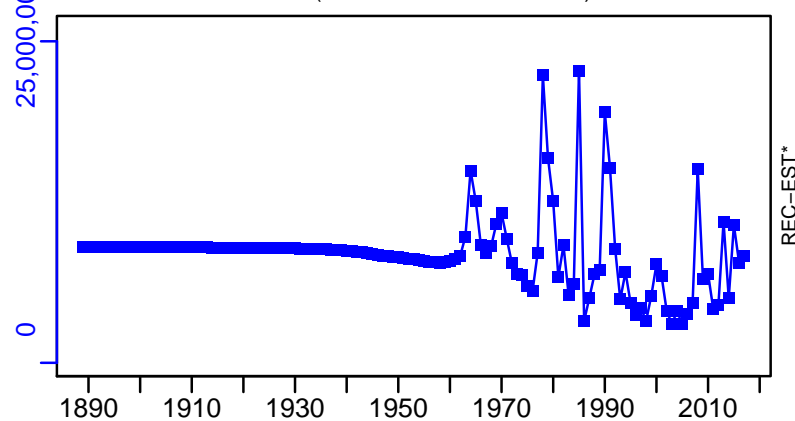
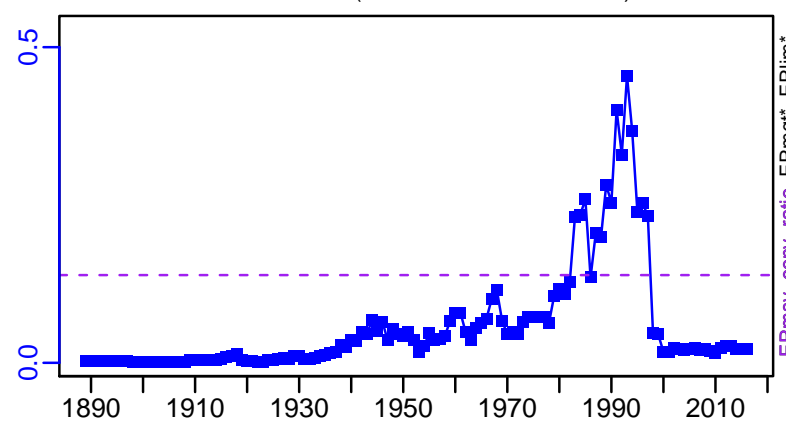
TB-MT (1928-2009-STACHURA)

SSB-MT (1889-2017-SISIMP2021)



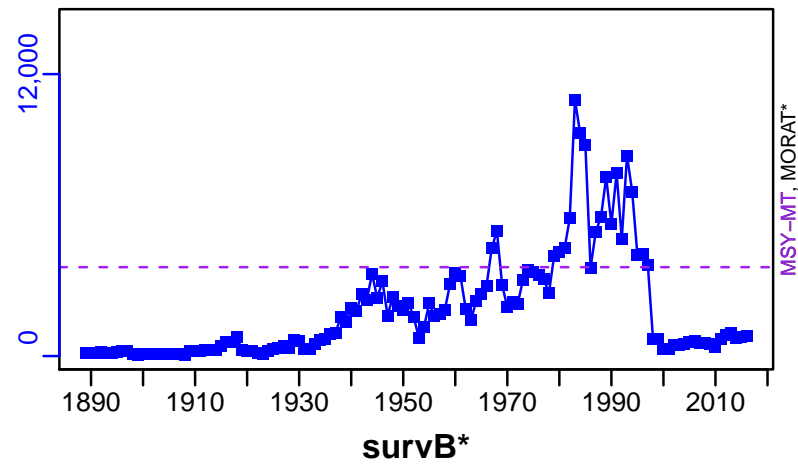
ER-calc-ratio (1889-2017-SISIMP2021)

R-E00 (1889-2017-SISIMP2021)



Lingcod Northern Pacific Coast [LINGCODNPCOAST]

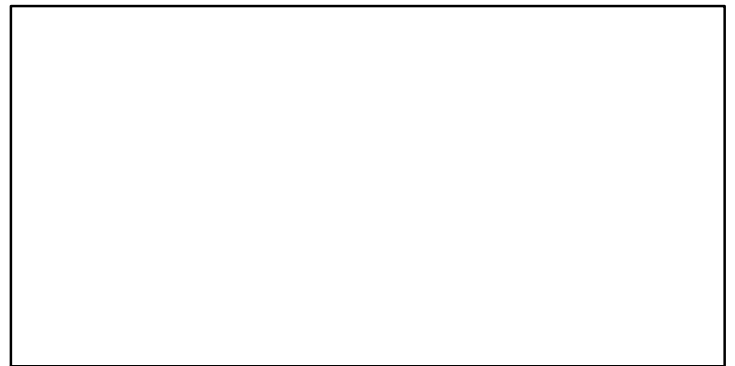
TC-MT, TL*, RecC* (1889–2017–SISIMP2021)



TAC*, Cpair*, Cadv*



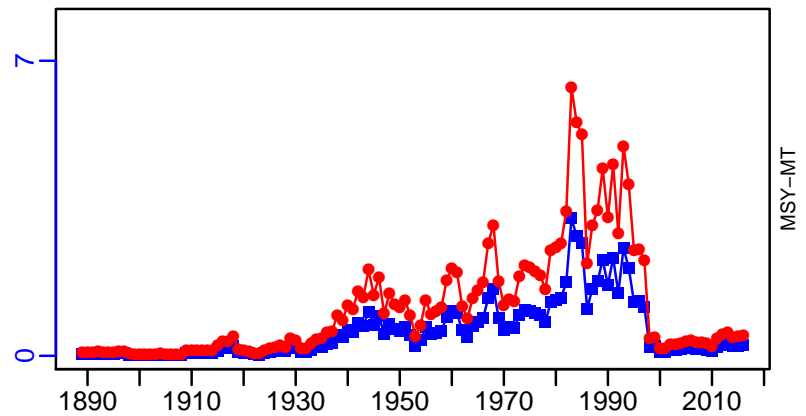
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1889–2017–SISIMP2021)



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

Lingcod Southern Pacific Coast [LINGCODSPCOAST]

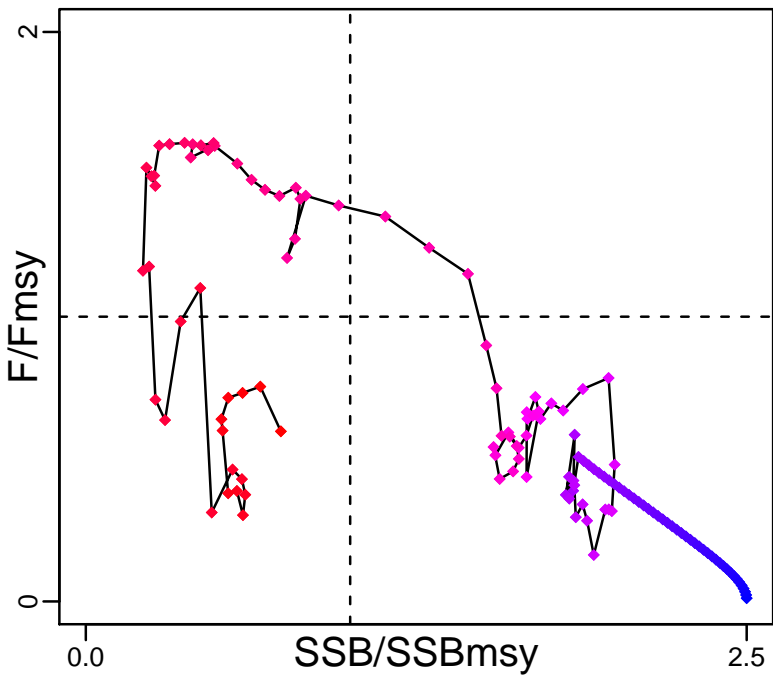
Metadata	
Scientific Name	Ophiodon elongatus
Current Assess ID	NWFSC-LINGCODSPCOAST-1889-2017-SISIMP2021
Area	Southern Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2017, 2009

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2009	16,291
SSBmsy	SSBmsy-MT	2017	8185
Fmsy	Fmsy-1/yr	2017	0.55
ERmsy	ERmsy-ratio	2009	0.103
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	SSB0-MT	2009	25,311
MSY	MSY-MT	2017	1732
M	M-1/yr	2009	0.18
TBlim	-	-	-
SSBlim	SSBlim-MT	2017	5116
Flim	Flim-1/yr	2017	0.55
ERlim	-	-	-

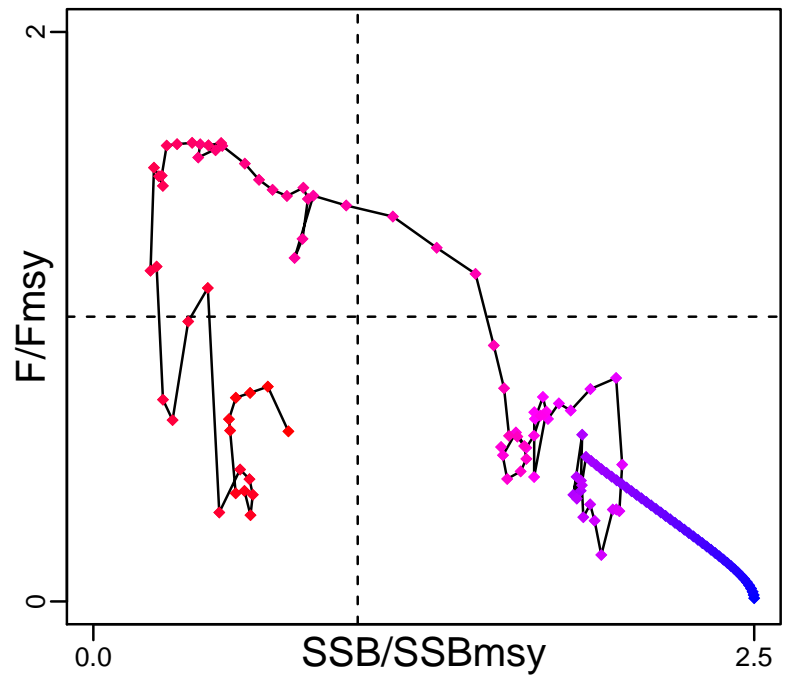
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2017	11,610	-	-
SSB	SSB-MT	2017	6742	-	-
TN	-	-	-	-	-
R	R-E00	2017	4,007,240	-	0
F	F-1/yr	2017	0.329	-	-
ER	ER-calc-ratio	2017	0.07	-	-
TC	TC-MT	2017	774		
TL	TL-MT	2009	171		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2009	1.897		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2017	0.824		
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	0.597		
ER/ERmsy	ER-ratio/ERmsy-ratio	2009	0.093		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Lingcod Southern Pacific Coast [LINGCODSPCOAST]

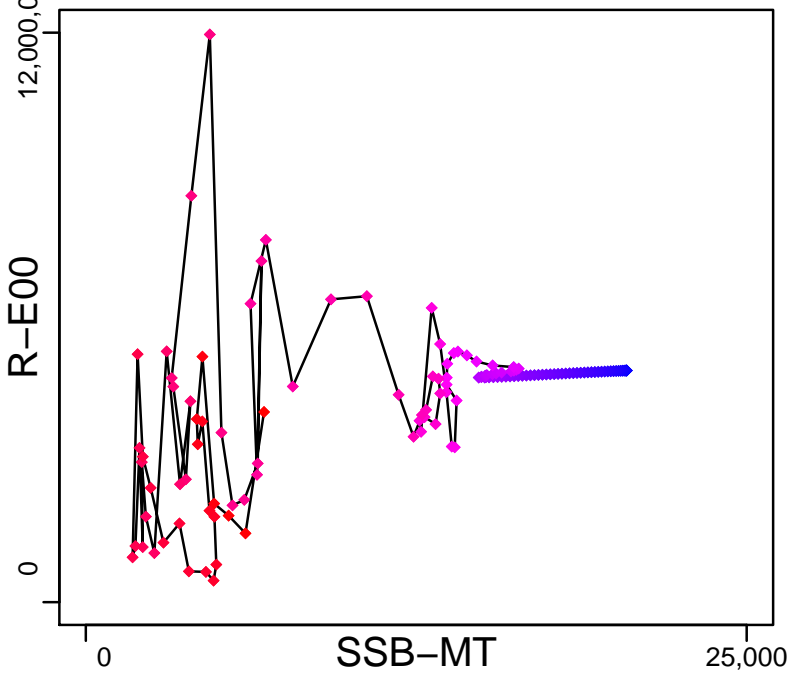
Kobe MSYpref (1889–2017–SISIMP2021)



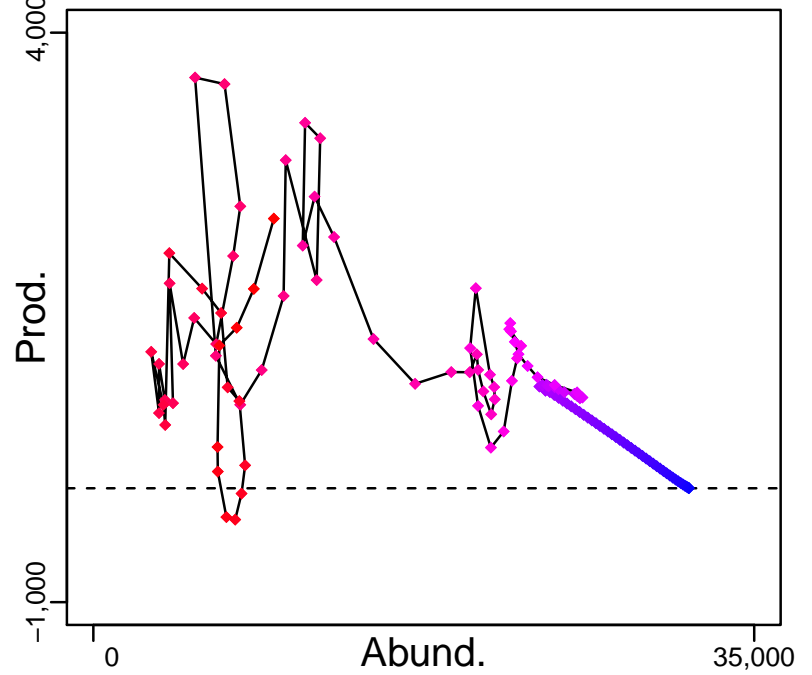
Kobe MGTpref (1889–2017–SISIMP2021)



Spawner Recruit (1889–2017–SISIMP2021)



Production (1889–2017–SISIMP2021)

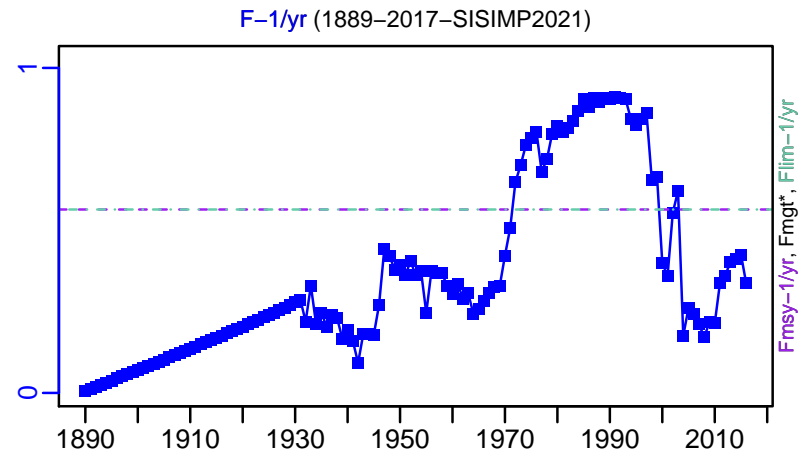
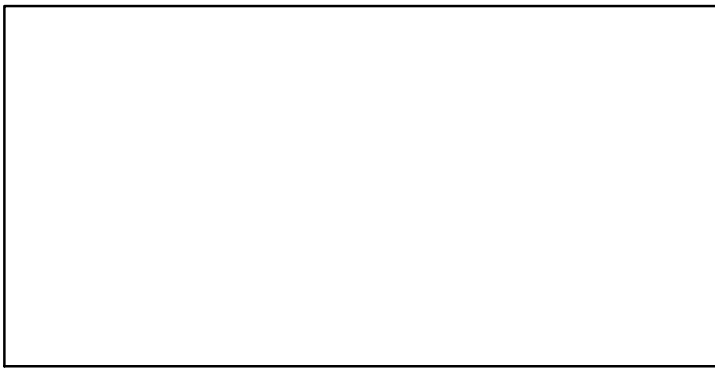
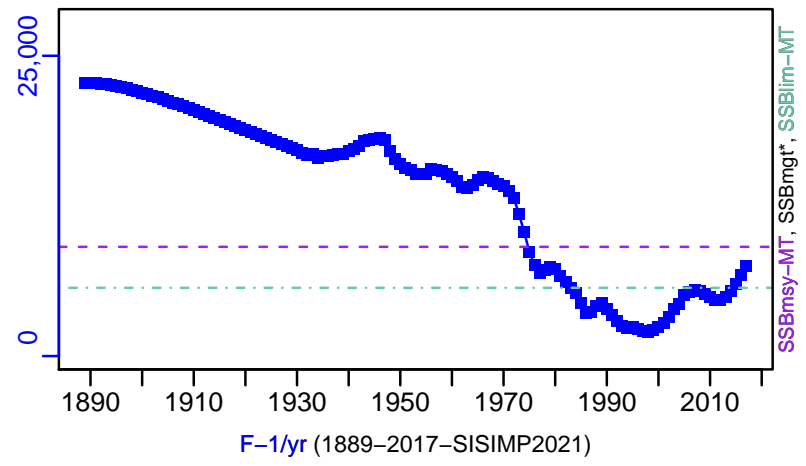
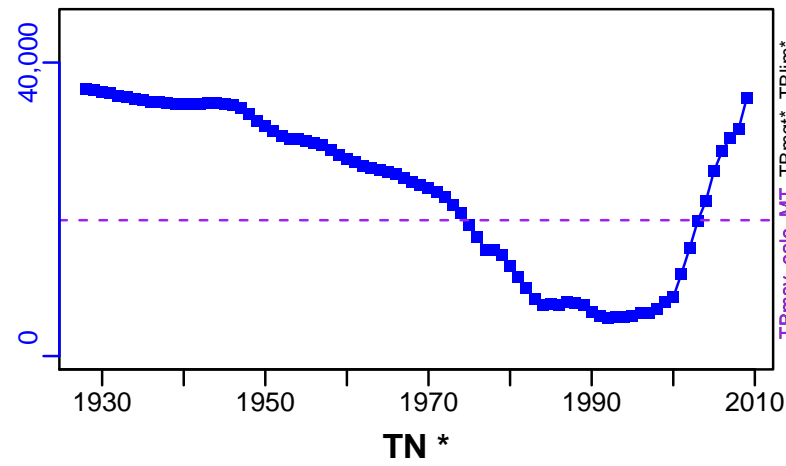


◆ Start Year ◆ End Year * No Data

Lingcod Southern Pacific Coast [LINGCODSPCOAST]

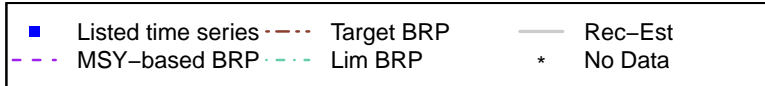
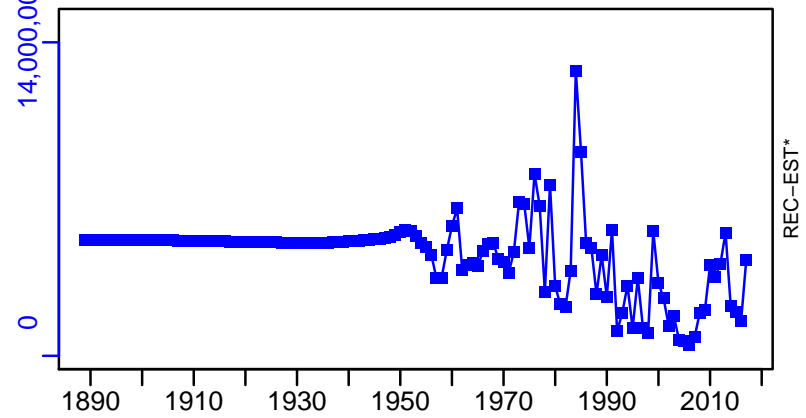
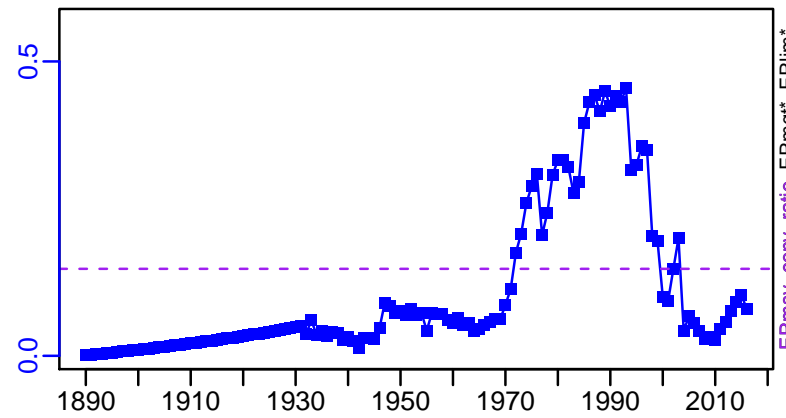
TB-MT (1928-2009-STACHURA)

SSB-MT (1889-2017-SISIMP2021)



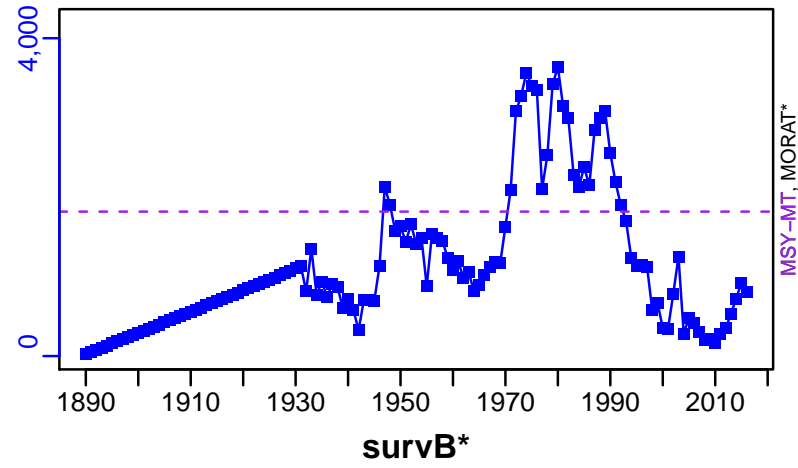
ER-calc-ratio (1889-2017-SISIMP2021)

R-E00 (1889-2017-SISIMP2021)



Lingcod Southern Pacific Coast [LINGCODSPCOAST]

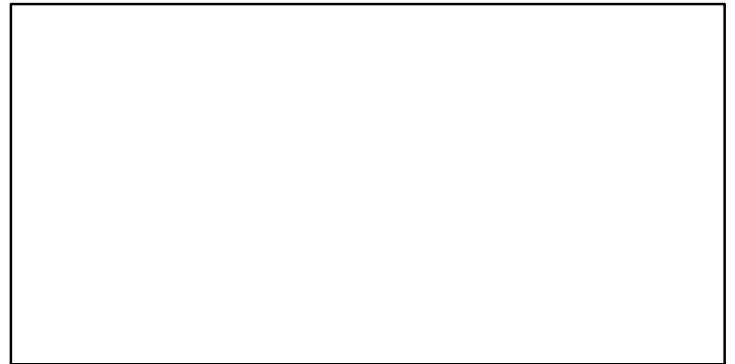
TC-MT, TL*, RecC* (1889–2017–SISIMP2021)



TAC*, Cpair*, Cadv*



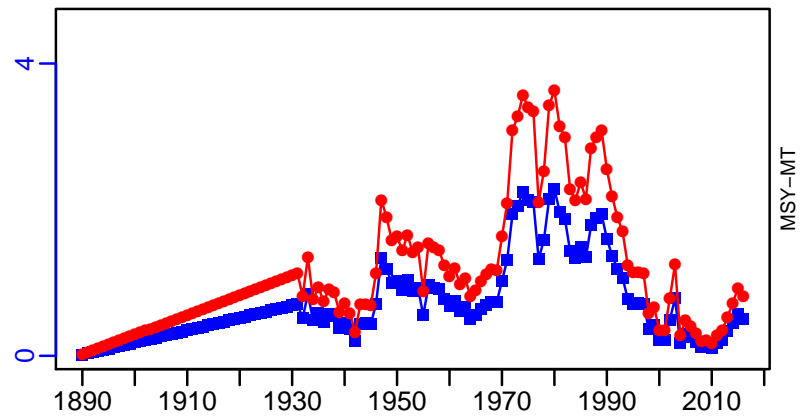
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1889–2017–SISIMP2021)



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

Longnose skate Pacific Coast [LNOSESKAPCOAST]

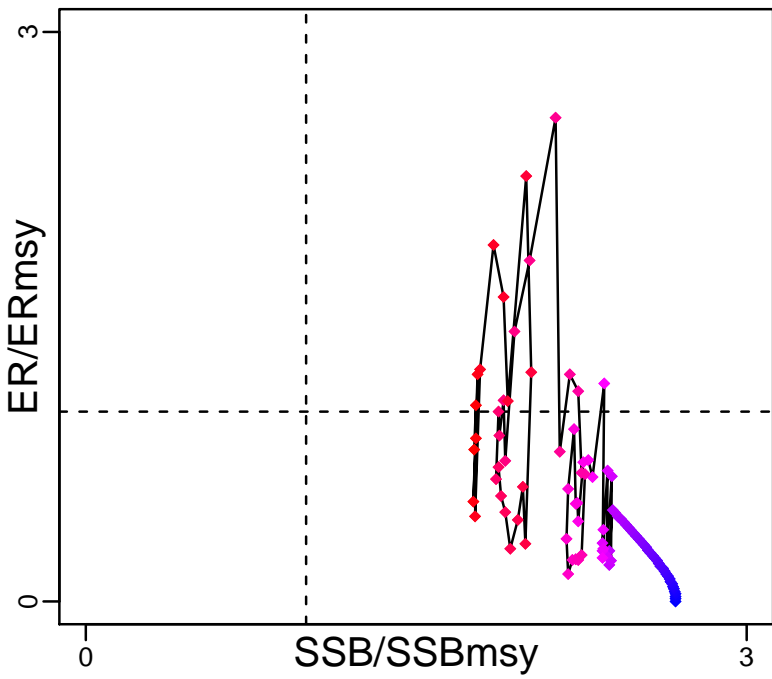
Metadata	
Scientific Name	Raja rhina
Current Assess ID	NWFSC-LNOSESKAPCOAST-1915-2007-BRANCH
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2007

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2007	46,963
SSBmsy	SSBmsy-MT	2007	2626
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2007	0.027
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	SSB0-MT	2007	7034
MSY	MSY-MT	2007	1268
M	M-1/yr	2007	0.2
TBlim	TBlim-MT	2007	4617
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

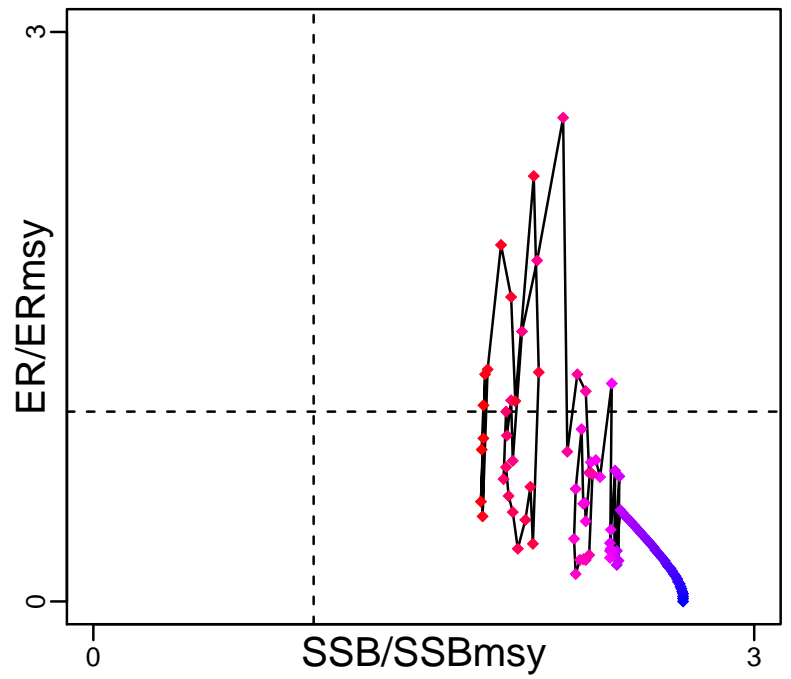
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2007	71,200	-	0+
SSB	SSB-MT	2007	4630	Females	-
TN	-	-	-	-	-
R	R-E00	2007	12,900,000	-	0
F	-	-	-	-	-
ER	ER-ratio	2007	0.022	-	-
TC	TC-MT	2007	899		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2007	1.516		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2007	1.763		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2007	0.8		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Longnose skate Pacific Coast [LNOSESKAPCOAST]

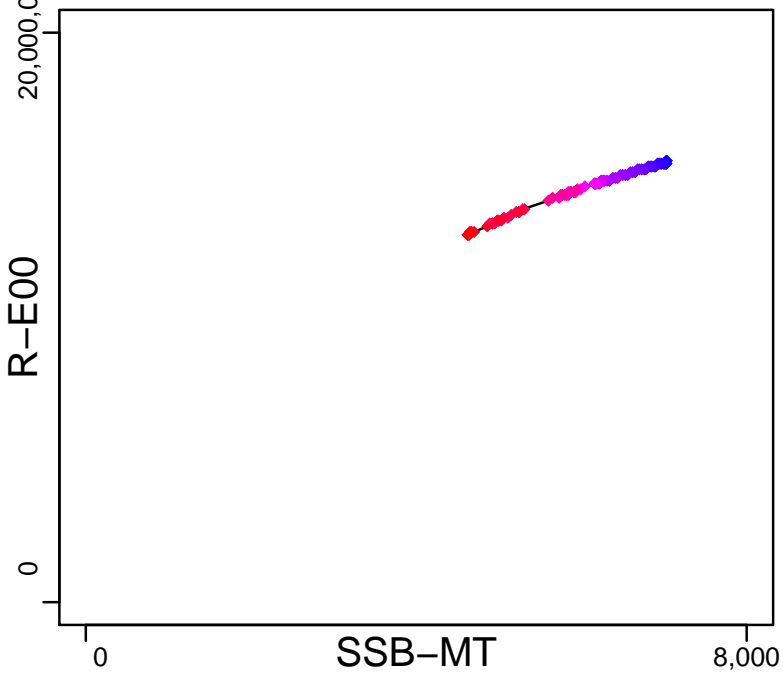
Kobe MSYpref (1915–2007–BRANCH)



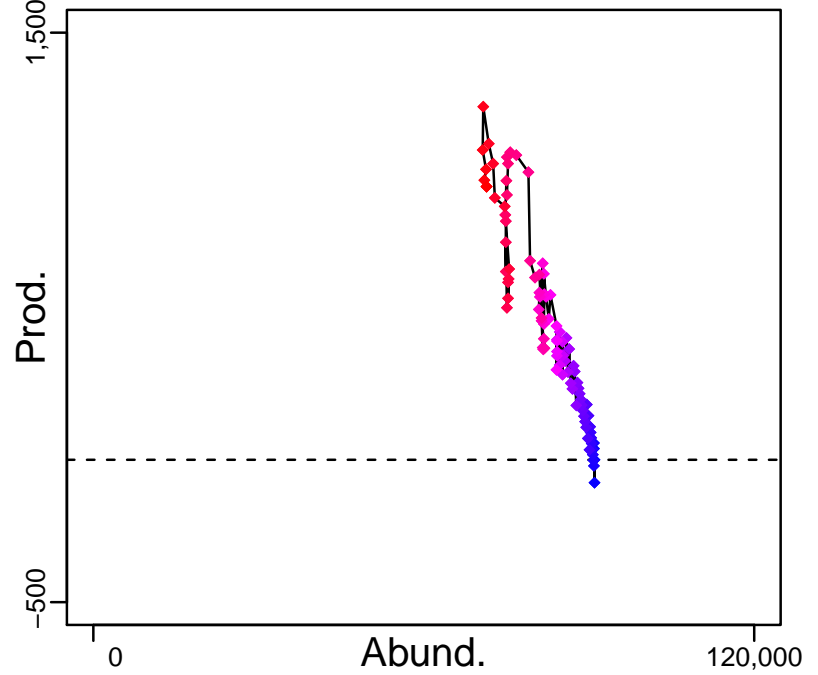
Kobe MGTpref (1915–2007–BRANCH)



Spawner Recruit (1915–2007–BRANCH)



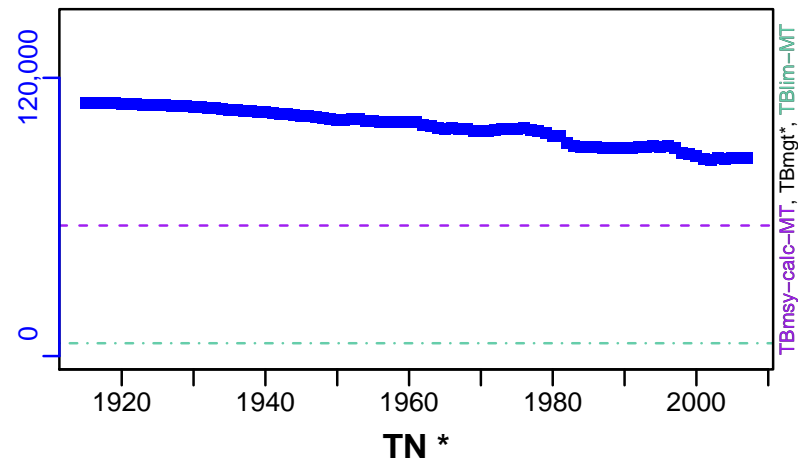
Production (1915–2007–BRANCH)



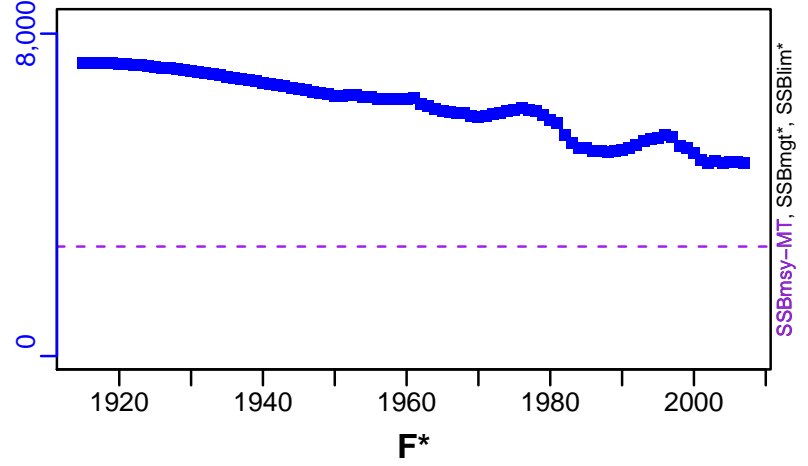
◆ Start Year ◆ End Year * No Data

Longnose skate Pacific Coast [LNOSESKAPCOAST]

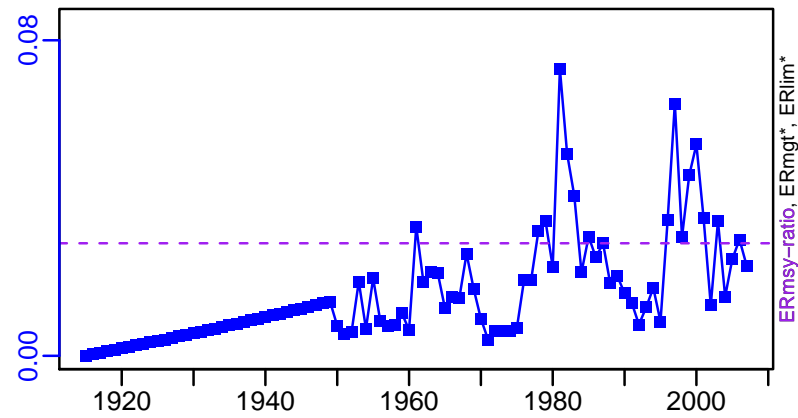
TB-MT (1915-2007-BRANCH)



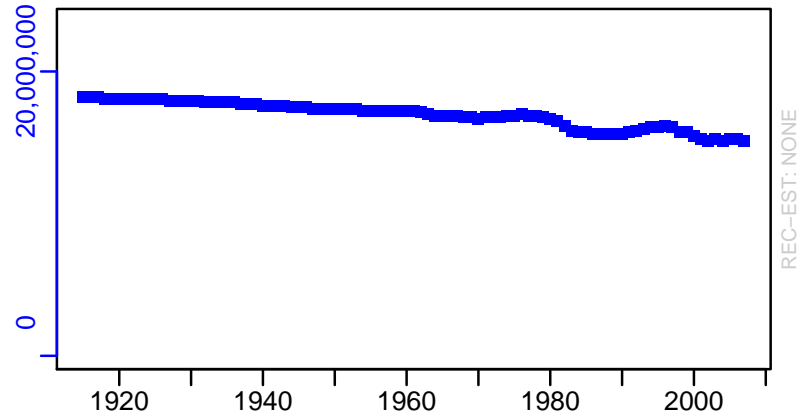
SSB-MT (1915-2007-BRANCH)



ER-ratio (1915-2007-BRANCH)



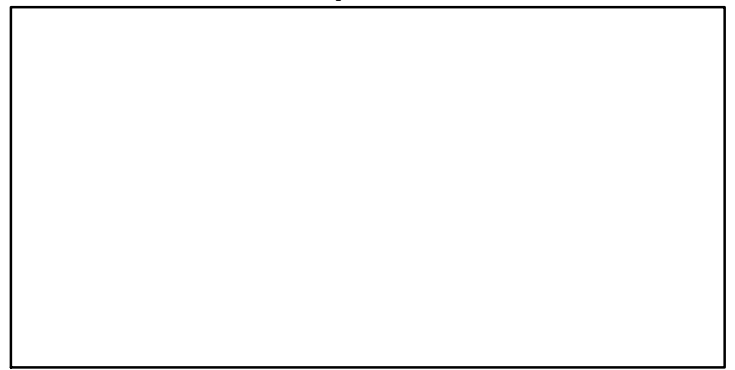
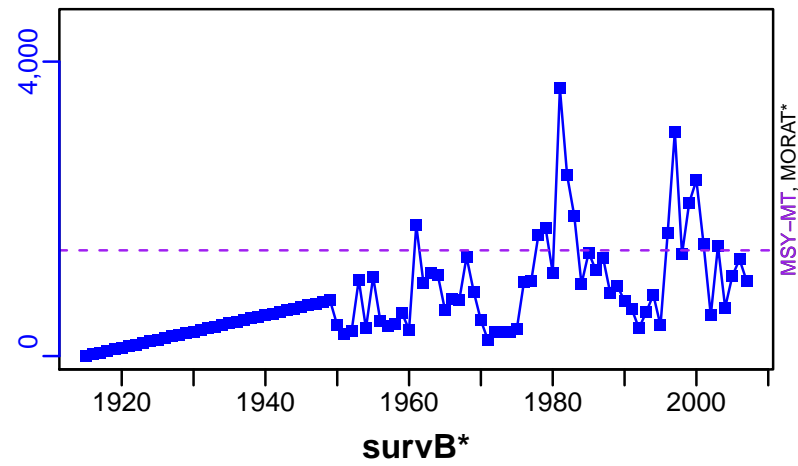
R-E00 (1915-2007-BRANCH)



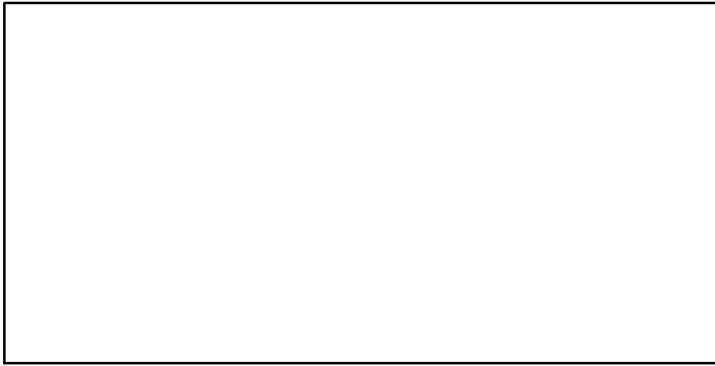
Longnose skate Pacific Coast [LNOSESKAPCOAST]

TC-MT, TL*, RecC* (1915-2007-BRANCH)

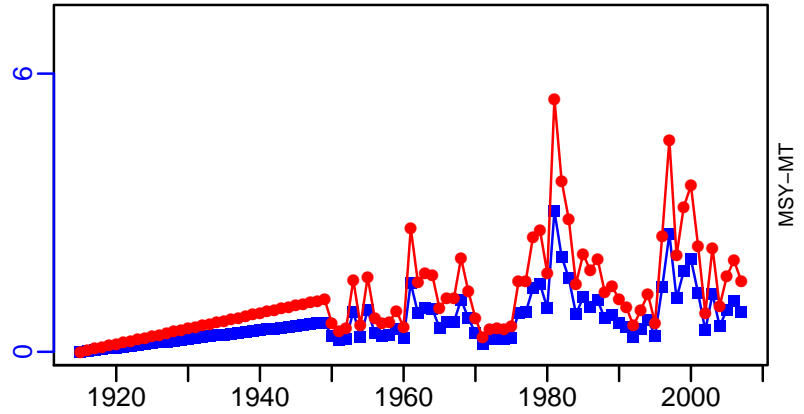
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1915-2007-BRANCH)



Longspine thornyhead Pacific Coast [LSTHORNHPCOAST]

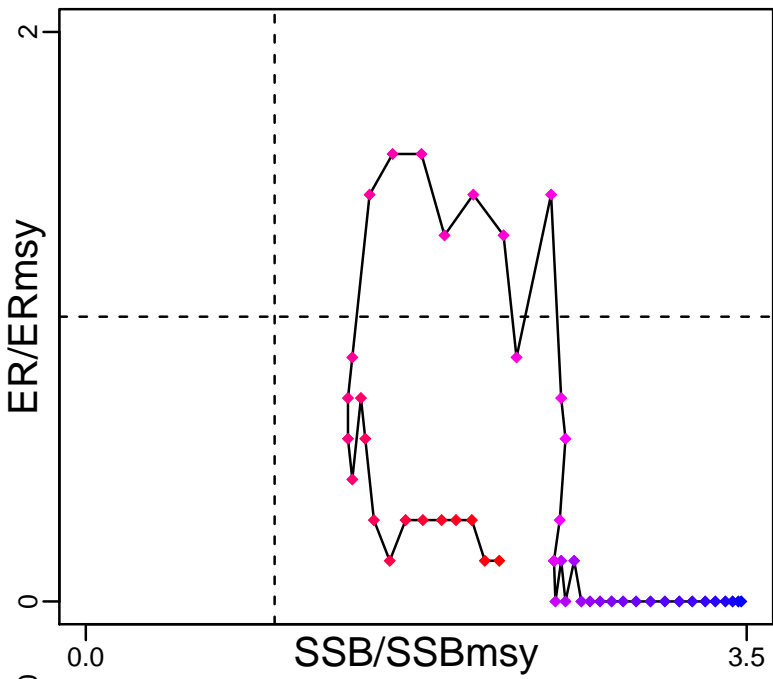
Metadata	
Scientific Name	Sebastes altivelis
Current Assess ID	NWFSC-LSTHORNHPCOAST-1964-2012-HIVELY
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2012

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2012	36,129
SSBmsy	SSBmsy-MT	2012	13,108
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2012	0.07
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2012	15,654
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2012	0.06
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2012	2529
M	M-1/yr	2012	0.11
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

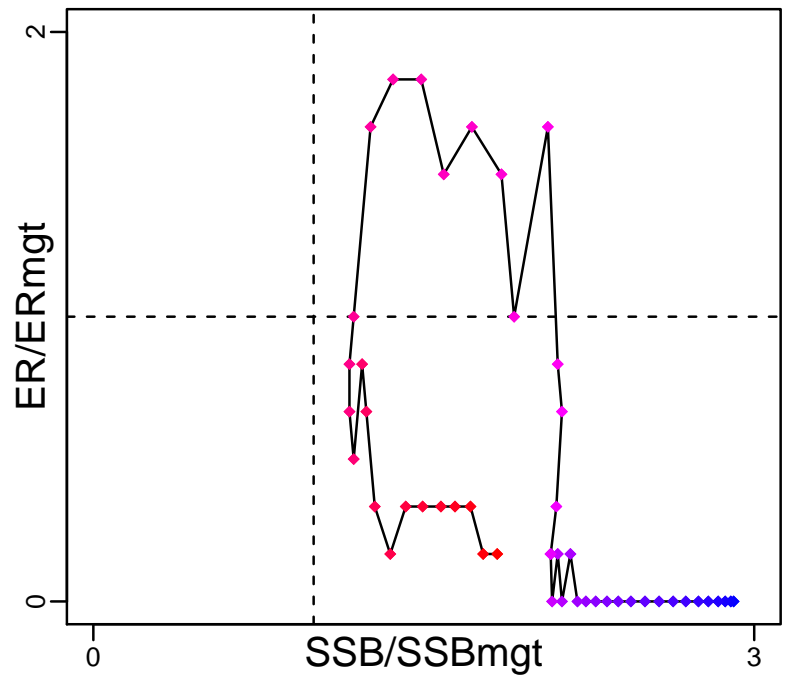
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2012	68,300	-	2+
SSB	SSB-MT	2012	28,700	Females	12 to 15
TN	-	-	-	-	-
R	R-E00	2012	1.33×10^8	-	0
F	-	-	-	-	-
ER	ER-ratio	2012	0.01	-	-
TC	TC-MT	2012	871		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2012	1.89		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2012	2.19		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2012	0.143		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2012	1.833		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Longspine thornyhead Pacific Coast [LSTHORNHPCOAST]

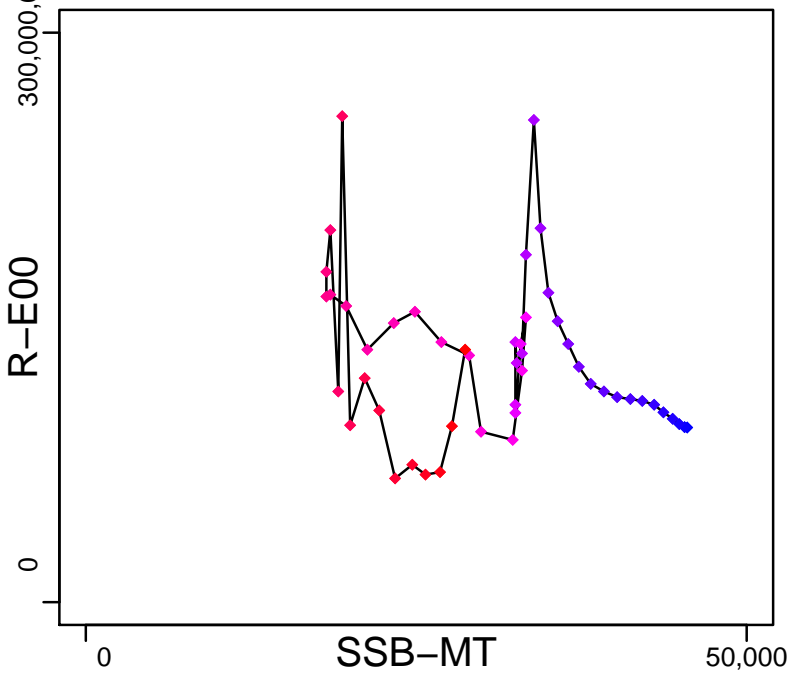
Kobe MSYpref (1964–2012–HIVELY)



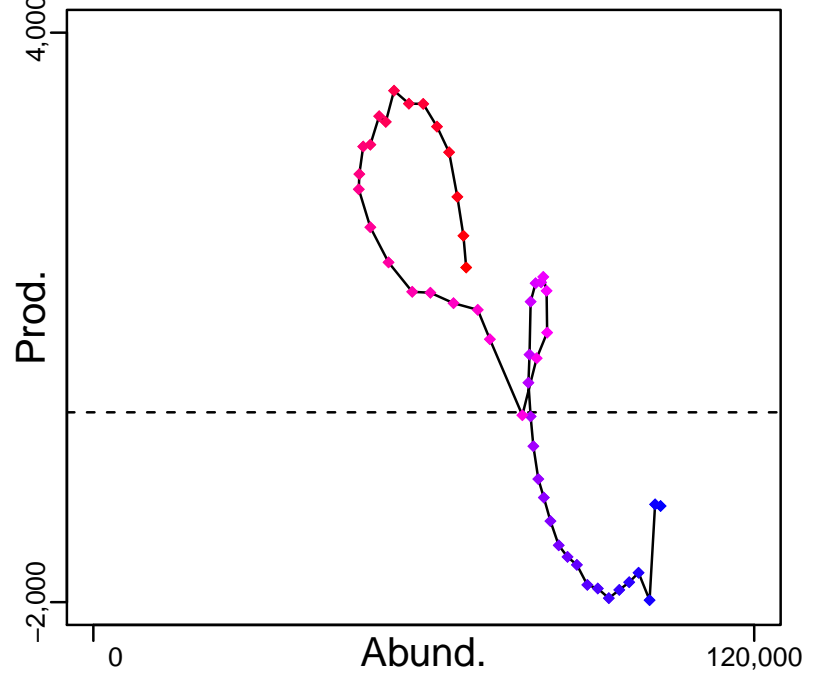
Kobe MGTpref (1964–2012–HIVELY)



Spawner Recruit (1964–2012–HIVELY)



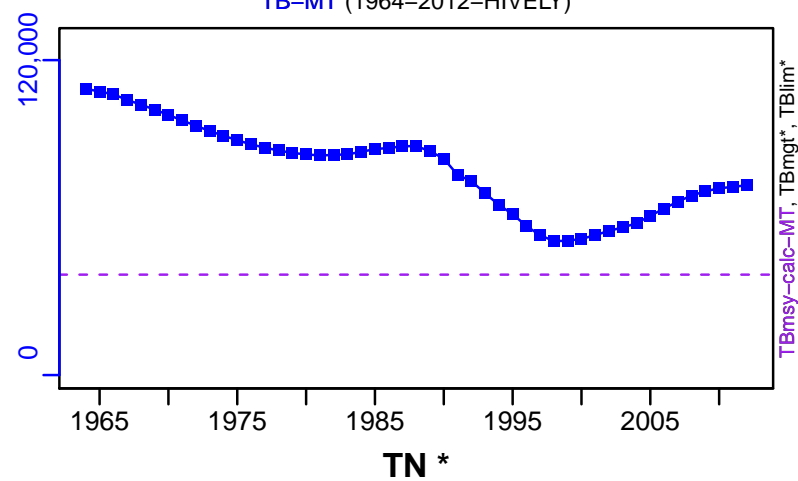
Production (1964–2012–HIVELY)



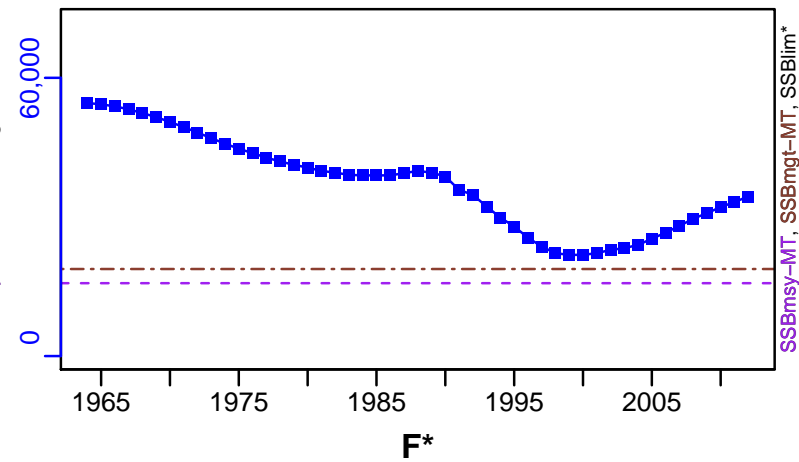
◆ Start Year ◆ End Year * No Data

Longspine thornyhead Pacific Coast [LSTHORNHPCOAST]

TB-MT (1964–2012–HIVELY)



SSB-MT (1964–2012–HIVELY)

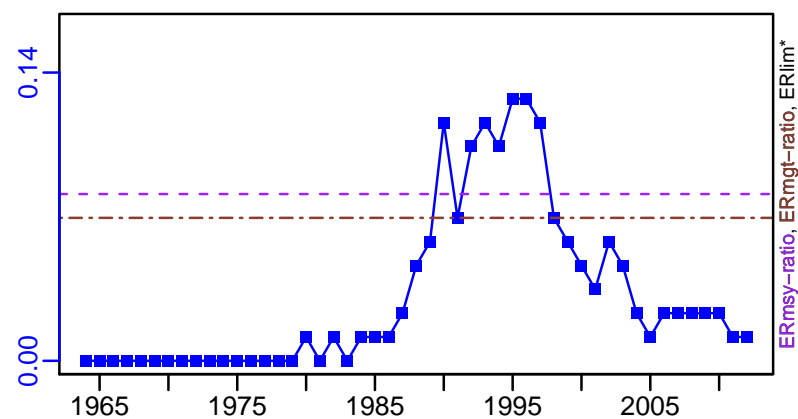


TN *

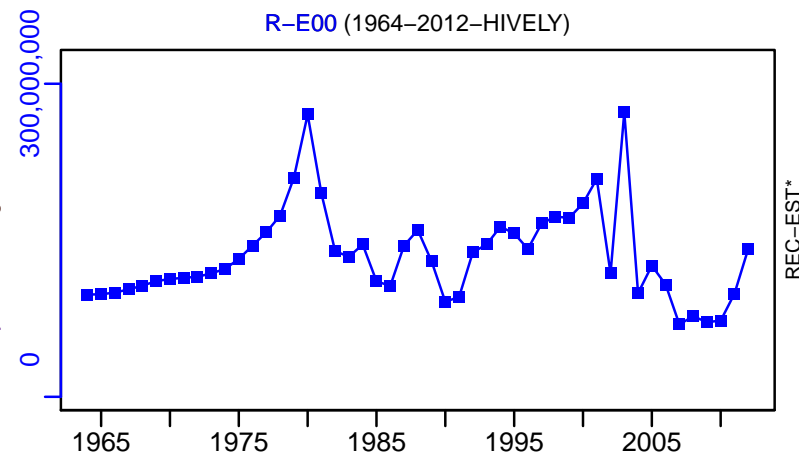
F*



ER-ratio (1964–2012–HIVELY)



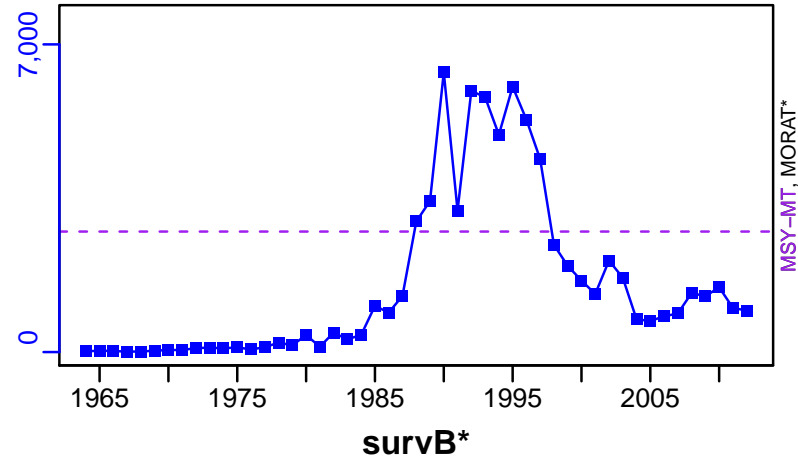
R-E00 (1964–2012–HIVELY)



Longspine thornyhead Pacific Coast [LSTHORNHPCOAST]

TC-MT, TL*, RecC* (1964–2012–HIVELY)

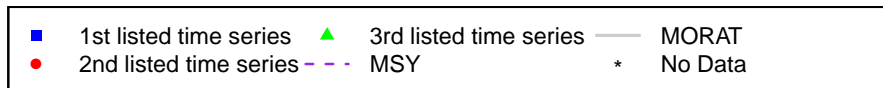
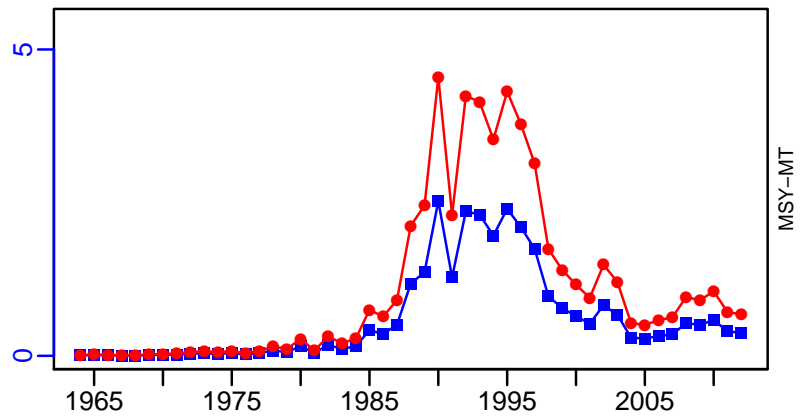
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1964–2012–HIVELY)



Pacific geoduck Washington [PGEODWA]

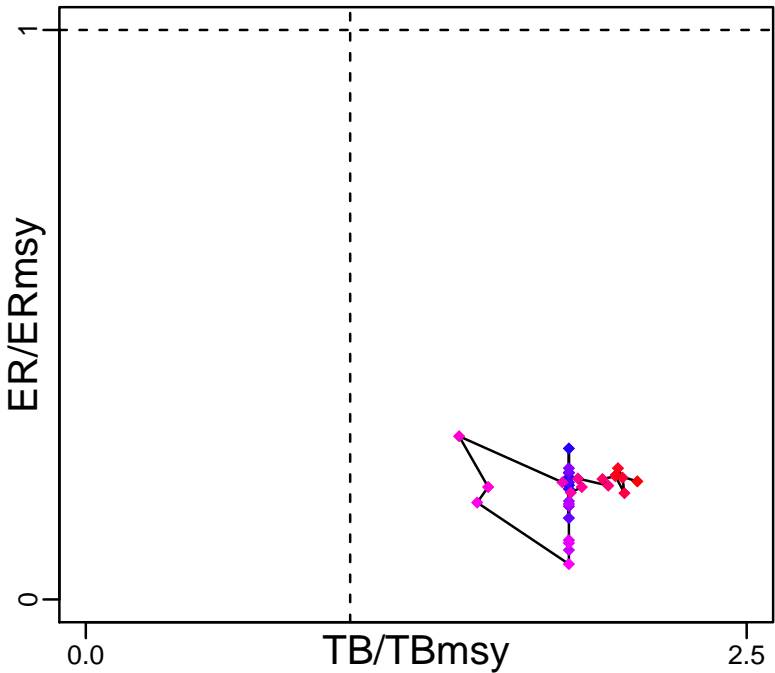
Metadata	
Scientific Name	Panopea generosa
Current Assess ID	WDFW-PGEODWA-1980-2010-HIVELY
Area	Washington
Management Authority	State of Washington
Assessor	Washington Department of Fish and Wildlife
Asmts in RAM	2010

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2010	40,932
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-est-ratio	2010	0.121
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2010	4956
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

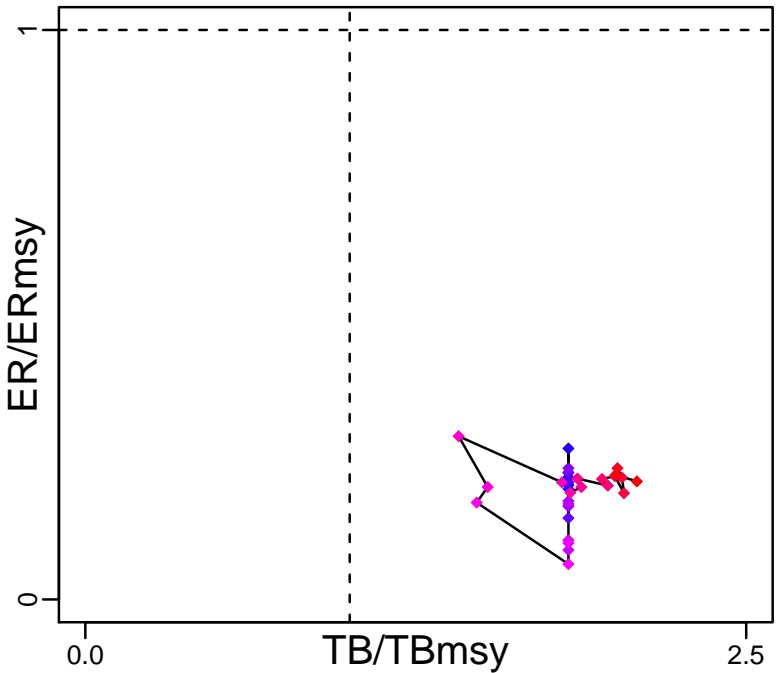
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2010	85,400	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2010	0.025	-	-
TC	TC-MT	2010	2150		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-est-MT	2010	2.086		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-est-ratio	2010	0.207		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Pacific geoduck Washington [PGEODWA]

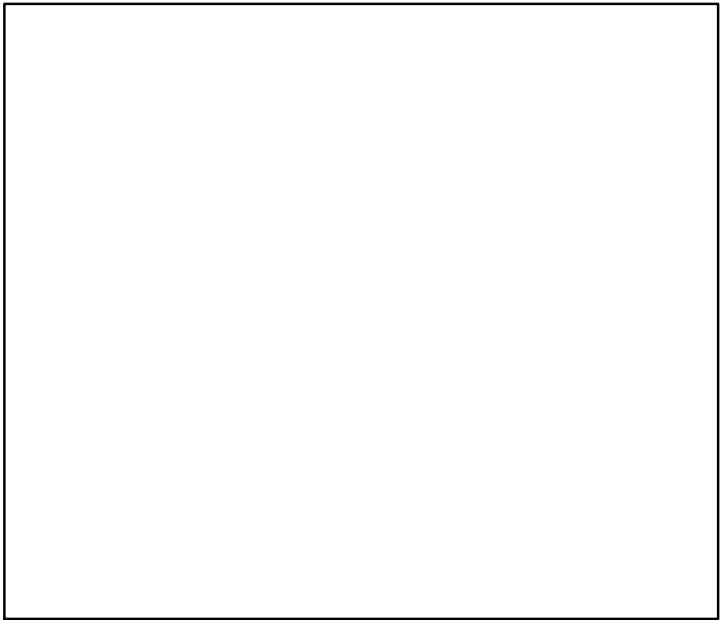
Kobe MSYpref (1980–2010–HIVELY)



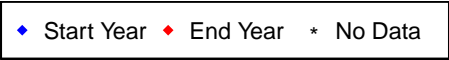
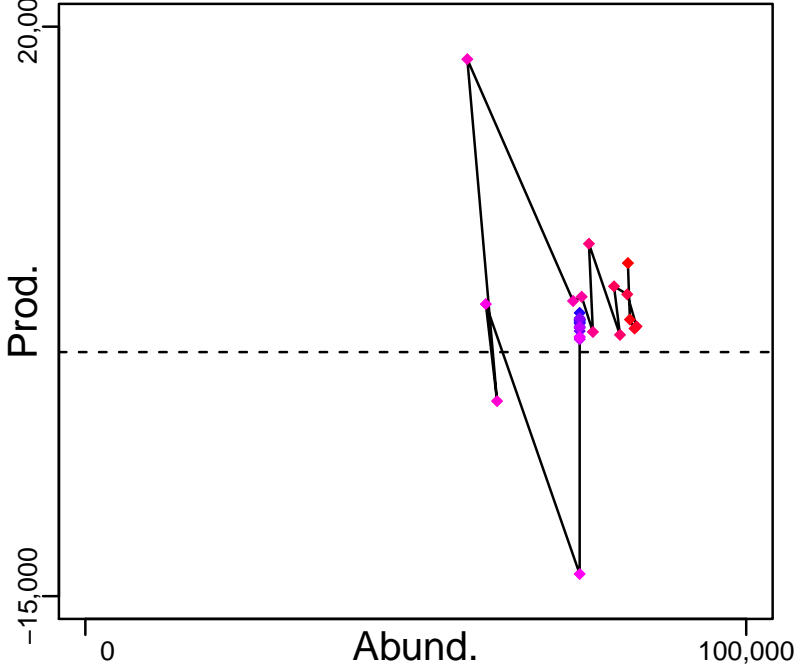
Kobe MGTpref (1980–2010–HIVELY)



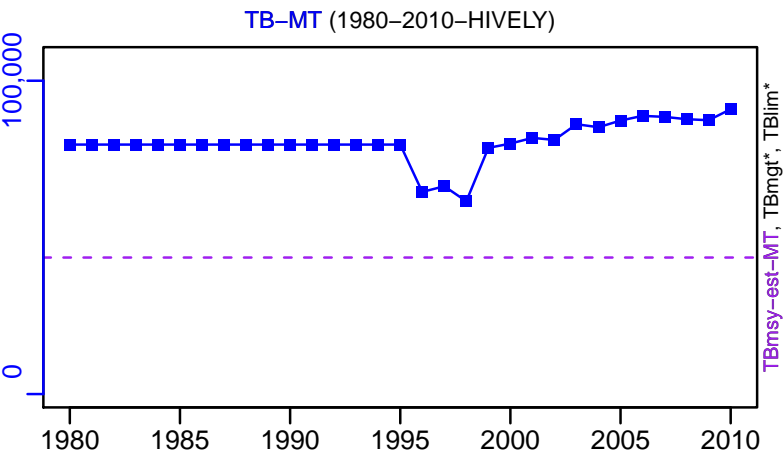
Spawner Recruit*



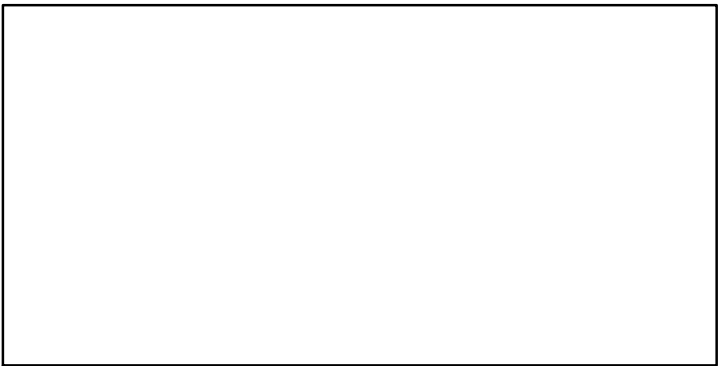
Production (1980–2010–HIVELY)



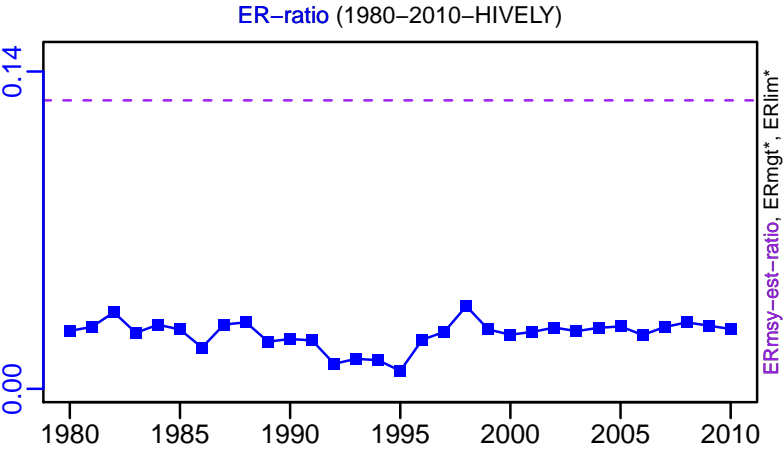
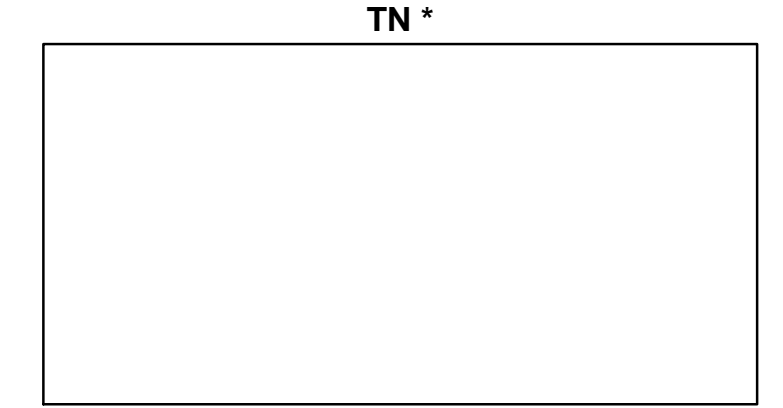
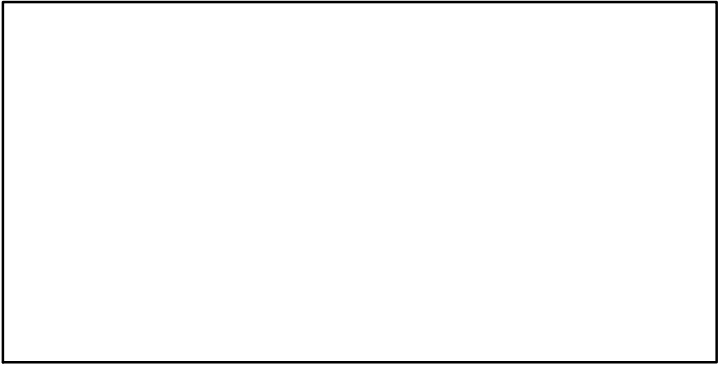
Pacific geoduck Washington [PGEODWA]



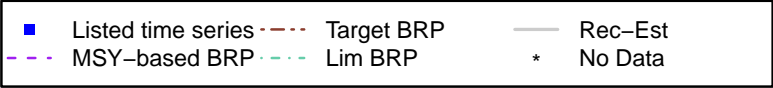
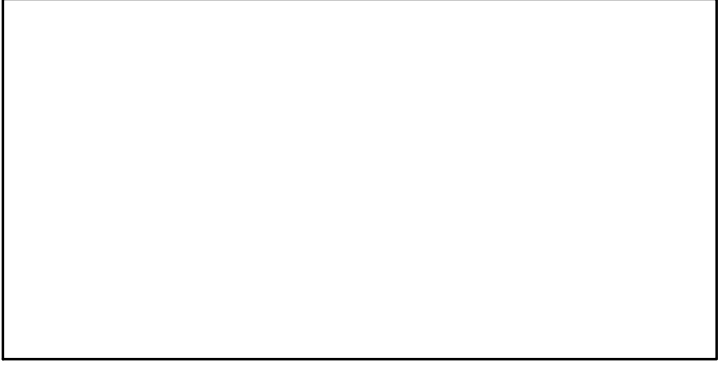
SSB*



F*

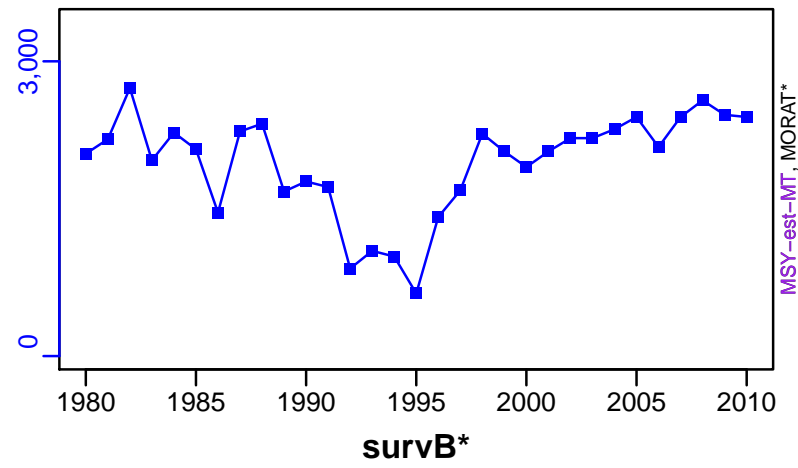


Recruits*



Pacific geoduck Washington [PGEODWA]

TC-MT, TL*, RecC* (1980-2010-HIVELY)



TAC*, Cpair*, Cadv*



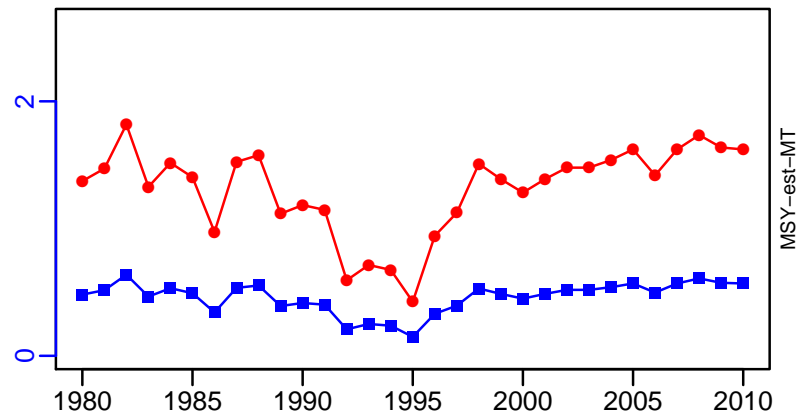
CPUE*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1980-2010-HIVELY)



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

Pacific hake Pacific Coast [PHAKEPCOAST]

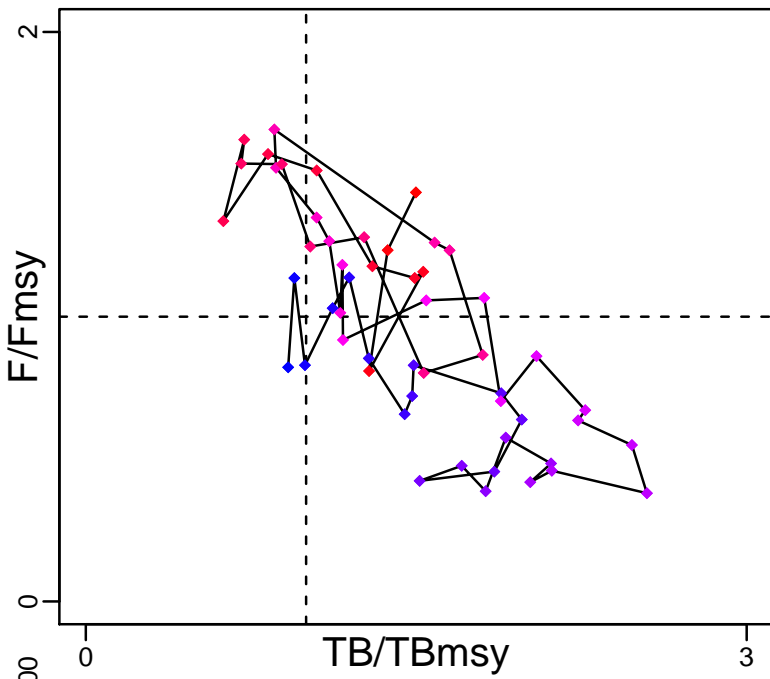
Metadata	
Scientific Name	Merluccius productus
Current Assess ID	PFMC-PHAKEPCOAST-1966-2018-SISIMP2021
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Pacific Fishery Management Council
Asmts in RAM	2015, 2016, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2016	1,222,892
SSBmsy	SSBmsy-MT	2017	945,000
Fmsy	Fmsy-1/yr	2018	0.6
ERmsy	ERmsy-ratio	2016	0.332
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2016	959,000
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2016	0.19
TB0	-	-	-
SSB0	SSB0-MT	2016	2,397,000
MSY	MSY-MT	2018	813
M	M-1/yr	2016	0.226
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

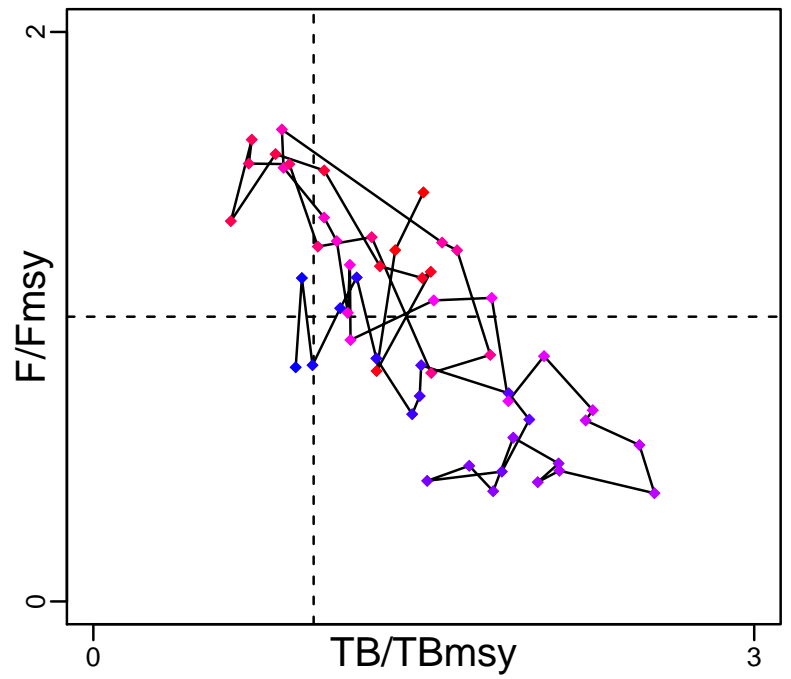
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2018	3,557,240	-	-
SSB	SSB-MT	2018	1,356,528	-	-
TN	-	-	-	-	-
R	R-E00	2018	1,034,920,000	-	0
F	F-1/yr	2018	0.862	-	-
ER	ER-calc-ratio	2018	0.097	-	-
TC	TC-MT	2018	354,231		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-est-MT	2018	1.457		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2017	2.253		
F/Fmsy	F-1/yr/Fmsy-1/yr	2018	1.436		
ER/ERmsy	ER-ratio/ERmsy-ratio	2016	0.202		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2016	1.971		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Pacific hake Pacific Coast [PHAKEPCOAST]

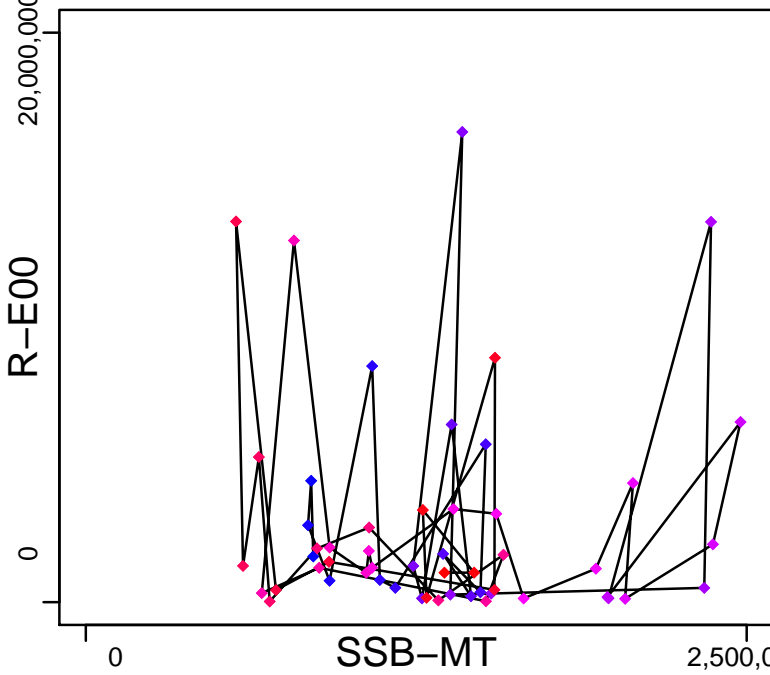
Kobe MSY_{pref} (1966–2018–SISIMP2021)



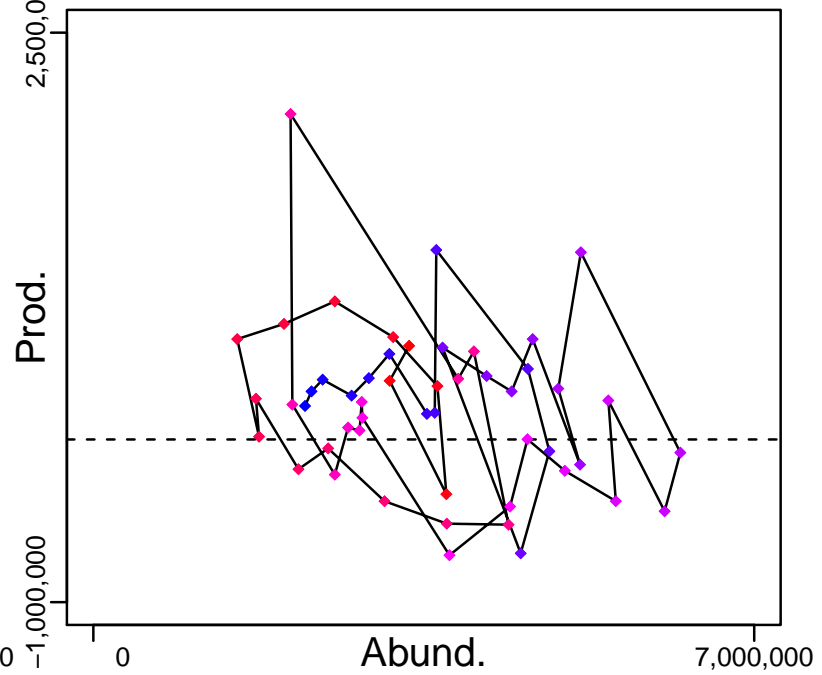
Kobe MGT_{pref} (1966–2018–SISIMP2021)



Spawner Recruit (1966–2018–SISIMP2021)

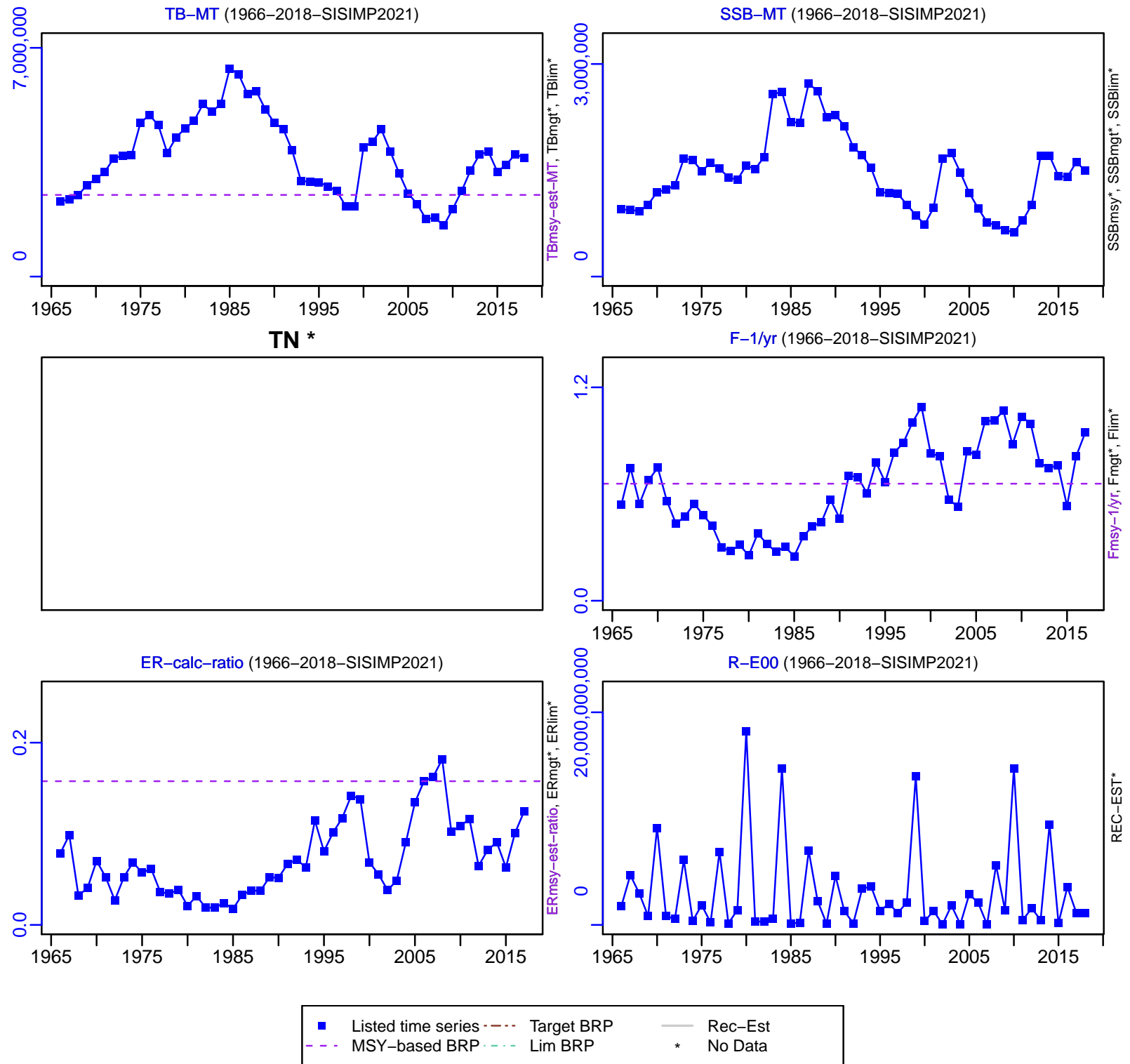


Production (1966–2018–SISIMP2021)



◆ Start Year ◆ End Year * No Data

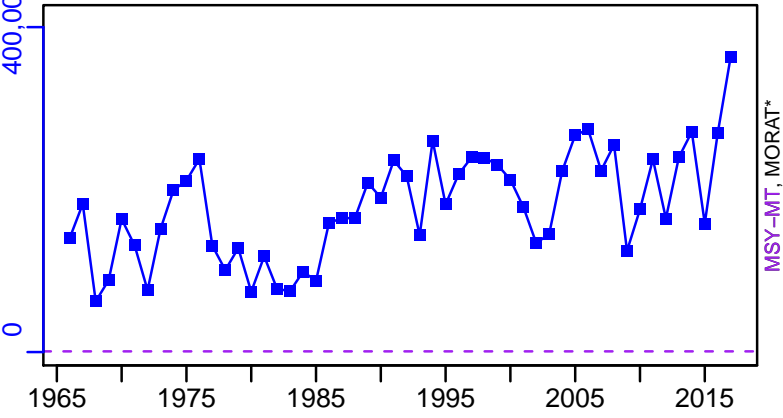
Pacific hake Pacific Coast [PHAKEPCOAST]



Pacific hake Pacific Coast [PHAKEPCOAST]

TC-MT, TL*, RecC* (1966-2018-SISIMP2021)

TAC*, Cpair*, Cadv*



survB*



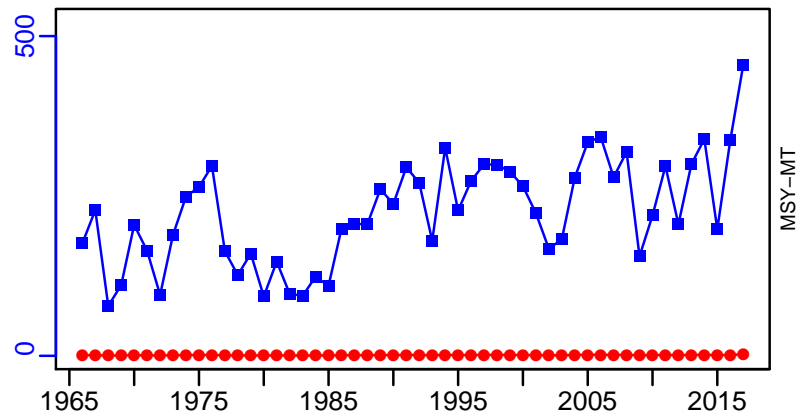
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1966-2018-SISIMP2021)



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

Pacific ocean perch Pacific Coast [POPERCHPCOAST]

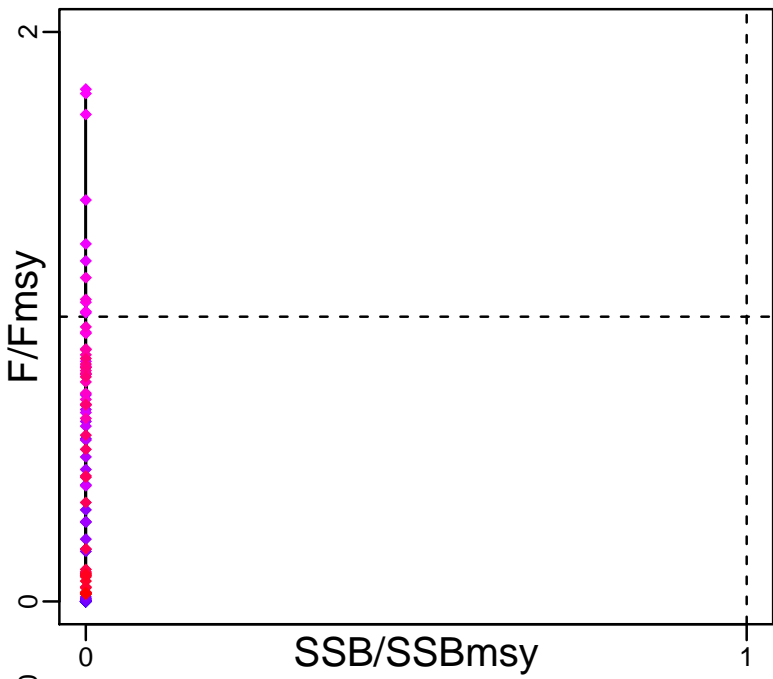
Metadata	
Scientific Name	Sebastes alutus
Current Assess ID	NWFSC-POPERCHPCOAST-1918-2017-SISIMP2021
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2017, 2011

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2011	50,381
SSBmsy	SSBmsy-E00eggs	2017	2,755,667,969
Fmsy	Fmsy-1/yr	2017	0.5
ERmsy	ERmsy-ratio	2011	0.021
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERMgt	-	-	-
TB0	-	-	-
SSB0	SSB0-E00eggs	2011	6.56×10^{12}
MSY	MSY-MT	2017	1808
M	M-1/yr	2011	0.05
TBlim	-	-	-
SSBlim	SSBlim-E00eggs	2017	1,722,292,969
Flim	Flim-1/yr	2017	0.5
ERlim	-	-	-

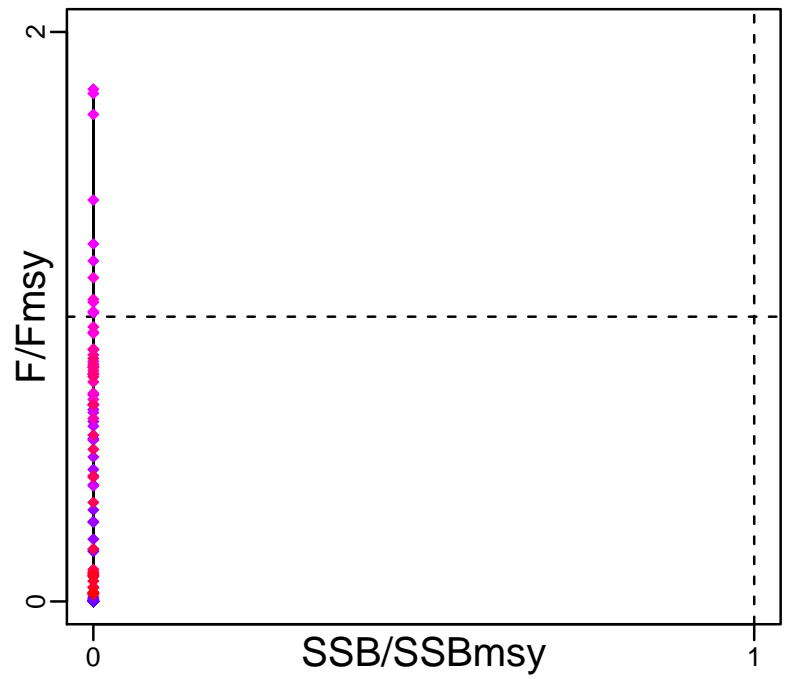
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2017	128,529	-	-
SSB	SSB-E00eggs	2017	5280	-	-
TN	-	-	-	-	-
R	R-E00	2017	11,253,100	-	0
F	F-1/yr	2017	0.013	-	-
ER	ER-calc-ratio	2017	0.001	-	-
TC	TC-MT	2017	68		
TL	TL-MT	2011	91		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2011	0.506		
SSB/SSBmsy	SSB-E00eggs/SSBmsy-E00eggs	2017	0		
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	0.027		
ER/ERmsy	ER-calc-ratio/ERmsy-ratio	2011	0.275		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERMgt	-	-	-		

Pacific ocean perch Pacific Coast [POPERCHPCOAST]

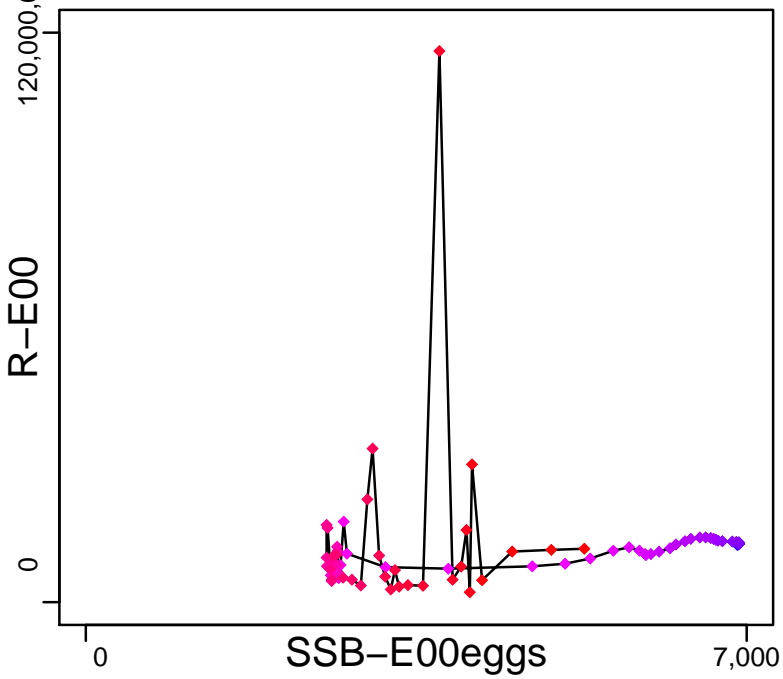
Kobe MSY_{pref} (1918–2017–SISIMP2021)



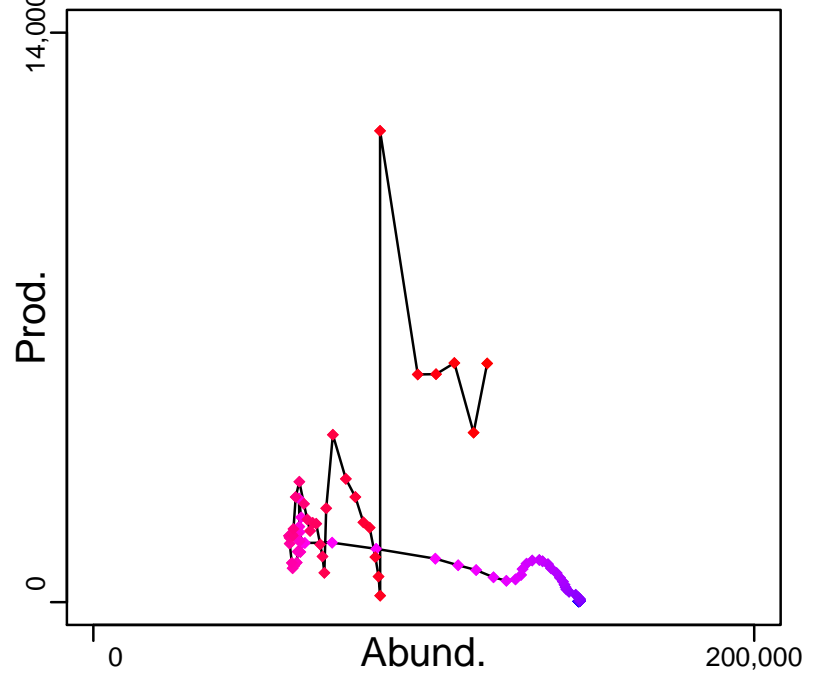
Kobe MGT_{pref} (1918–2017–SISIMP2021)



Spawner Recruit (1918–2017–SISIMP2021)

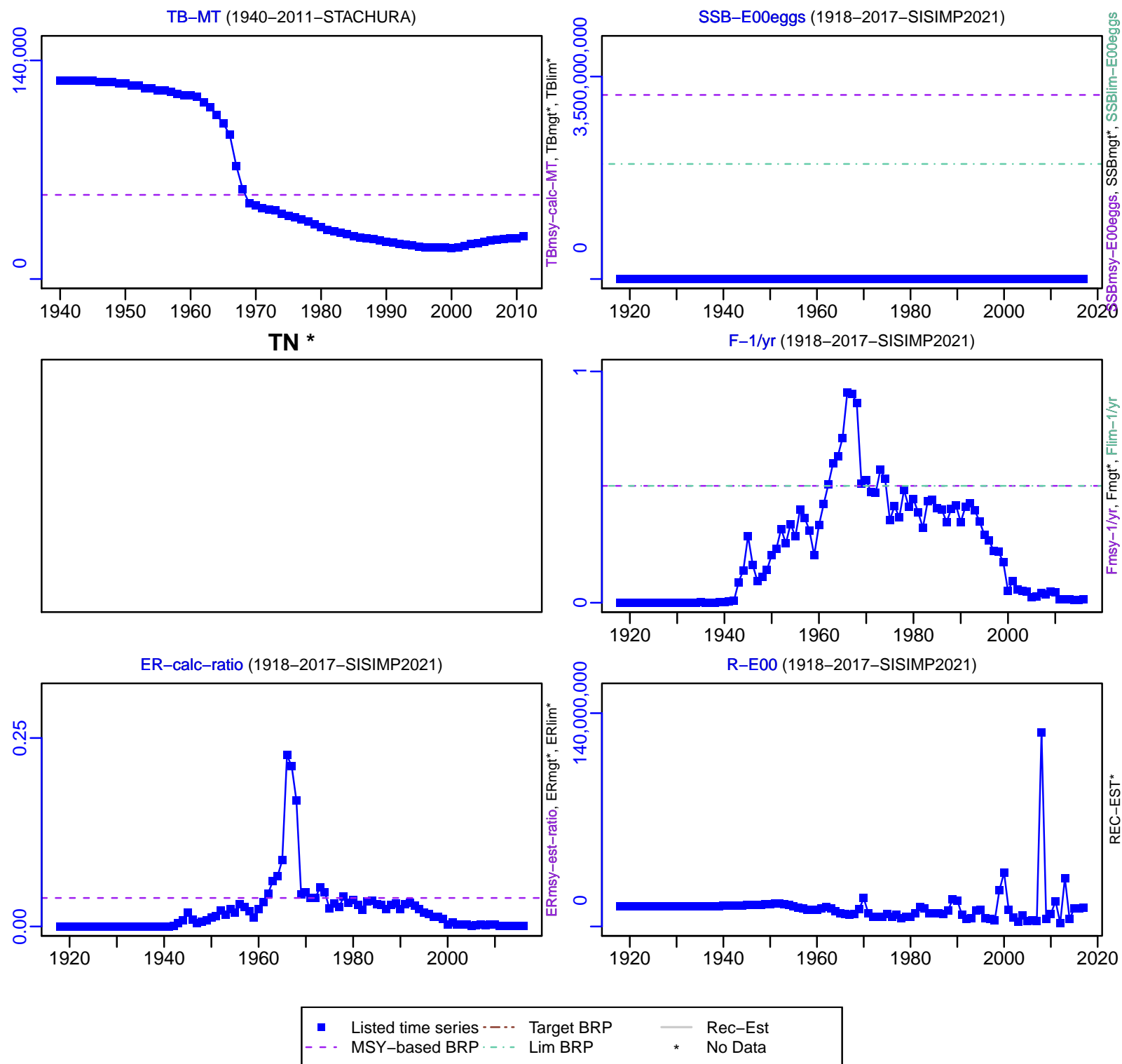


Production (1918–2017–SISIMP2021)



◆ Start Year ◆ End Year * No Data

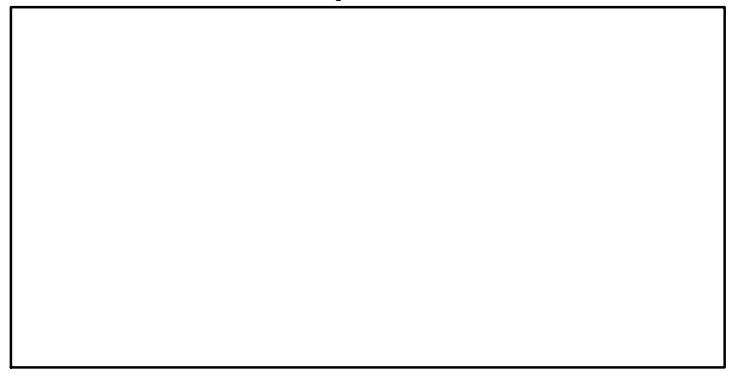
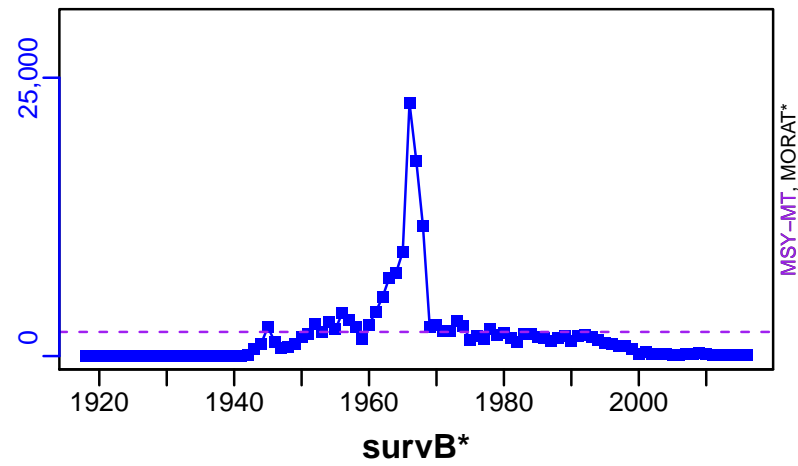
Pacific ocean perch Pacific Coast [POPERCHPCOAST]



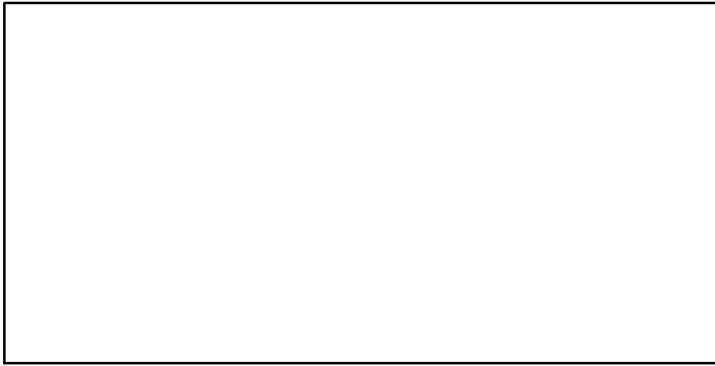
Pacific ocean perch Pacific Coast [POPERCHPCOAST]

TC-MT, TL*, RecC* (1918-2017-SISIMP2021)

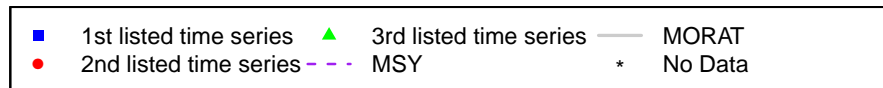
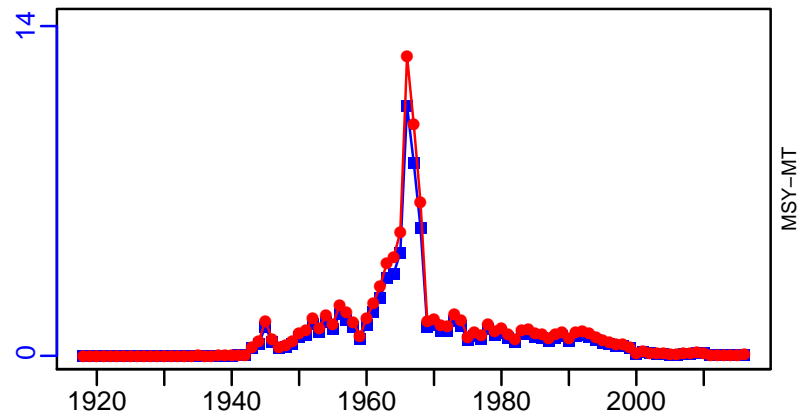
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1918-2017-SISIMP2021)



Petrale sole Pacific Coast [PSOLEPCOAST]

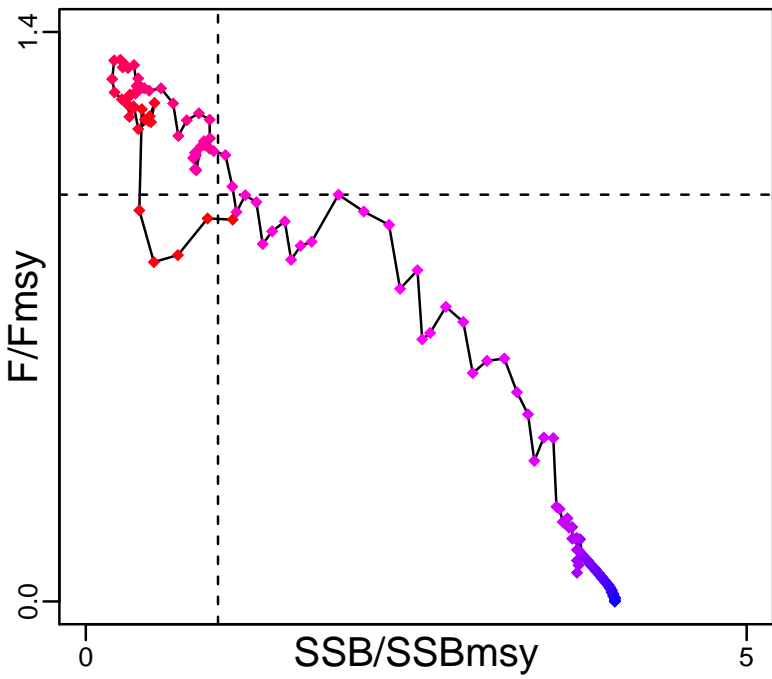
Metadata	
Scientific Name	Eopsetta jordani
Current Assess ID	NWFSC-PSOLEPCOAST-1876-2015-SISIMP2016
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2015, 2011

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2011	11,764
SSBmsy	SSBmsy-MT	2015	8369
Fmsy	Fmsy-1/yr	2015	0.7
ERmsy	ERmsy-ratio	2011	0.22
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2011	41,352
SSB0	SSB0-MT	2011	26,278
MSY	MSY-MT	2011	2588
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2015	4185
Flim	Flim-1/yr	2015	0.7
ERlim	-	-	-

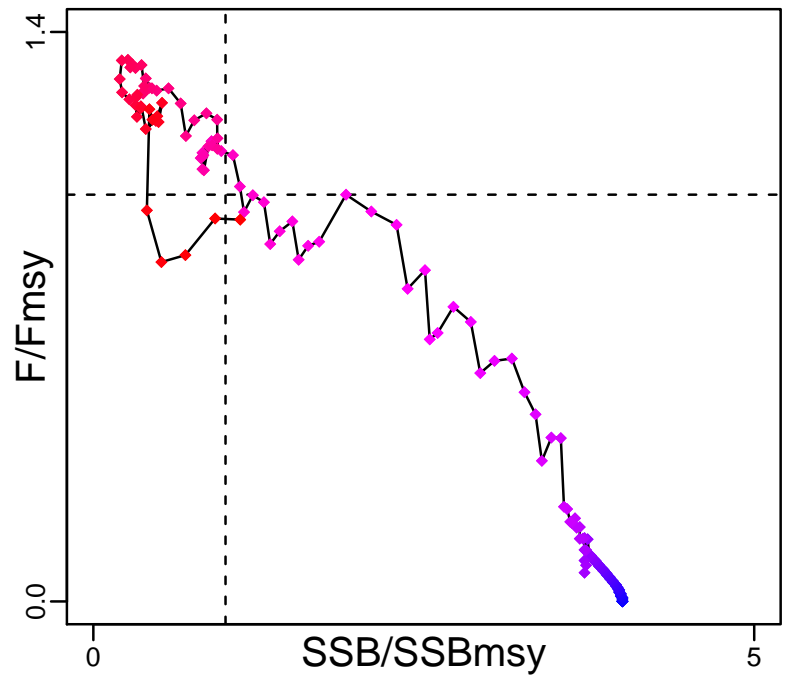
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2015	19,400	-	3+
SSB	SSB-MT	2015	10,300	Females	-
TN	-	-	-	-	-
R	R-E00	2015	14,600,000	-	0
F	F-1/yr	2015	0.657	-	-
ER	ER-calc-ratio	2015	0.127	-	-
TC	TC-MT	2015	2360		
TL	TL-MT	2011	701		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2011	1.012		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2015	1.231		
F/Fmsy	F-1/yr/Fmsy-1/yr	2015	0.939		
ER/ERmsy	ER-ratio/ERmsy-ratio	2011	0.386		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Petrale sole Pacific Coast [PSOLEPCOAST]

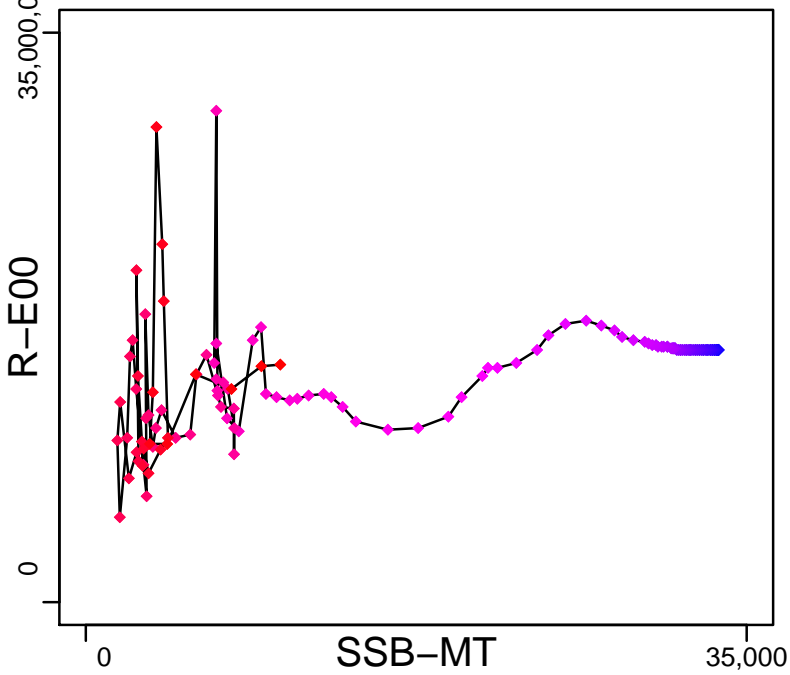
Kobe MSY_{pref} (1876–2015–SISIMP2016)



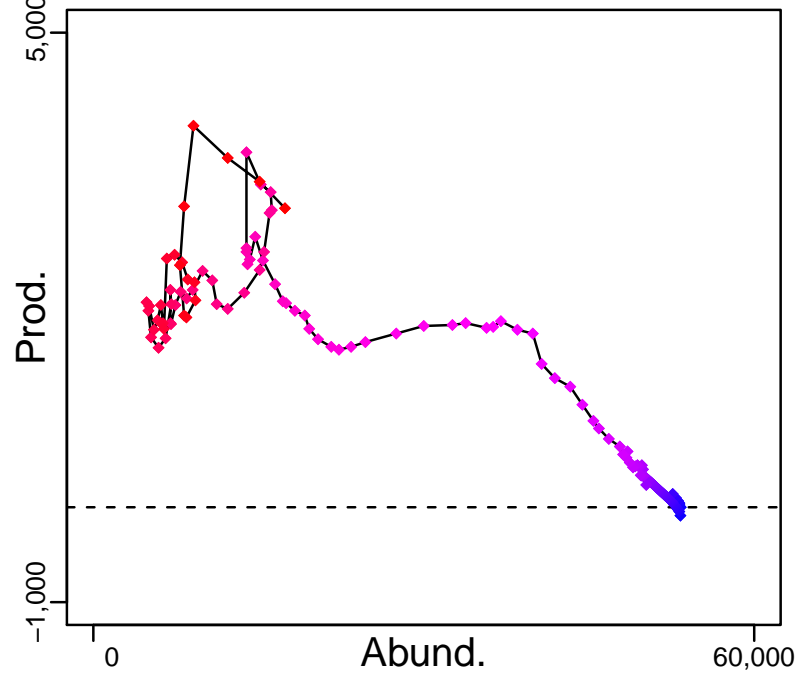
Kobe MGT_{pref} (1876–2015–SISIMP2016)



Spawner Recruit (1876–2015–SISIMP2016)



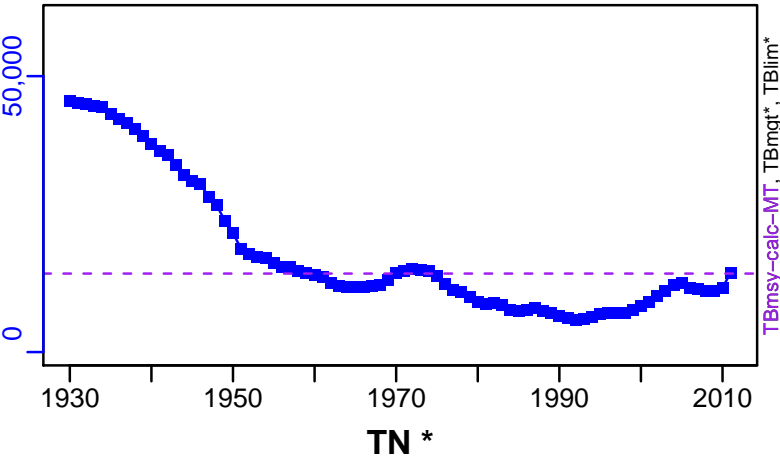
Production (1876–2015–SISIMP2016)



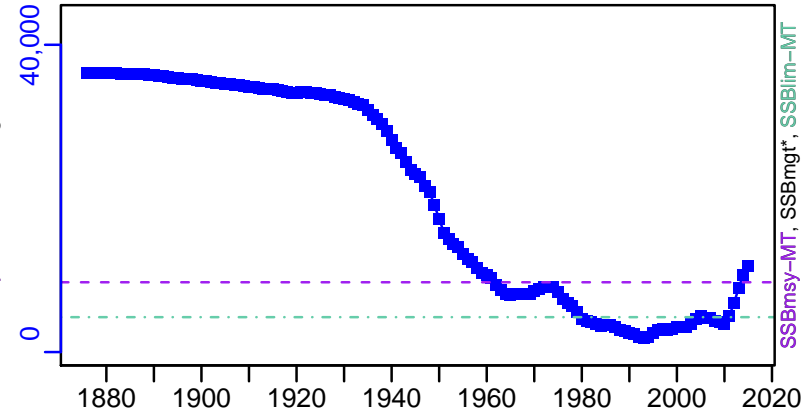
◆ Start Year ◆ End Year * No Data

Petrale sole Pacific Coast [PSOLEPCOAST]

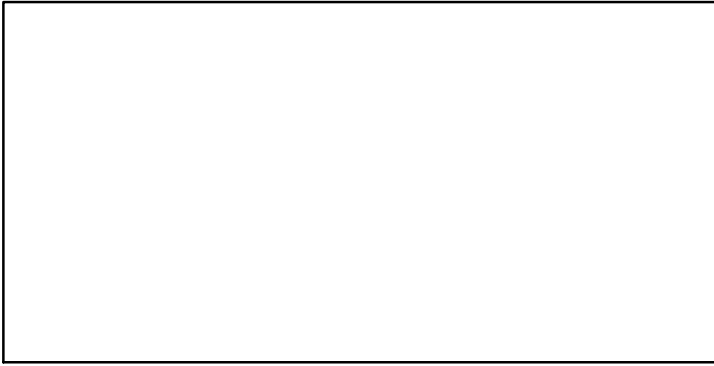
TB-MT (1930–2011–CHING)



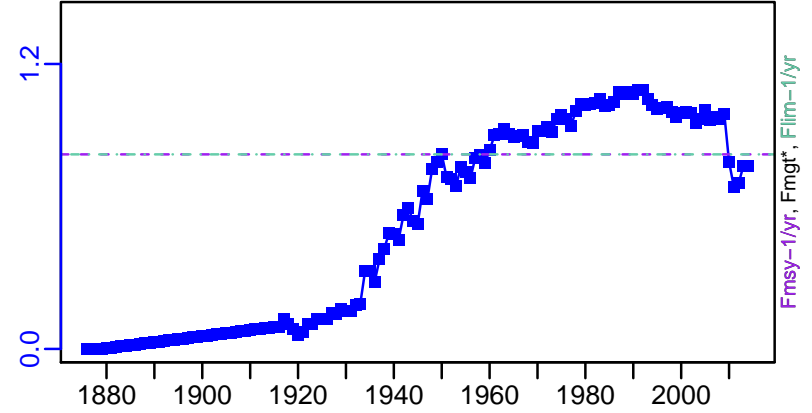
SSB-MT (1876–2015–SISIMP2016)



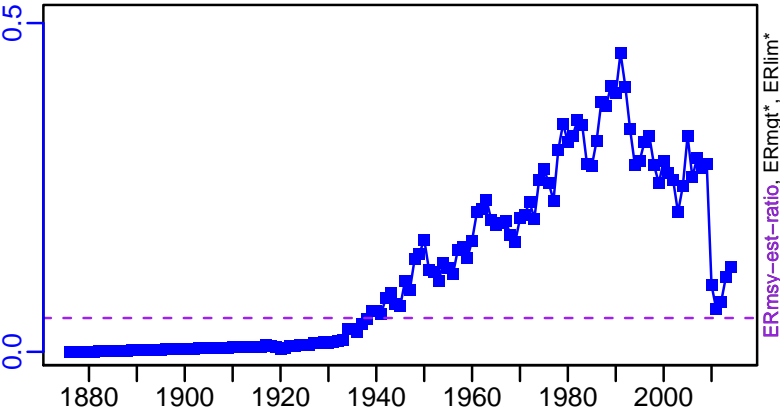
TN *



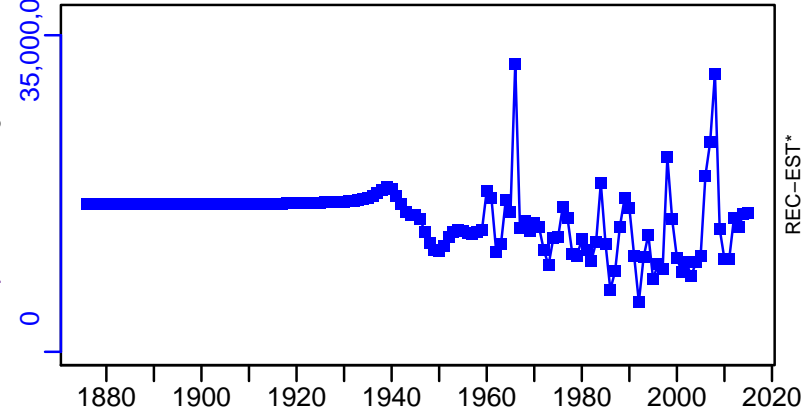
F-1/yr (1876–2015–SISIMP2016)



ER-calc-ratio (1876–2015–SISIMP2016)



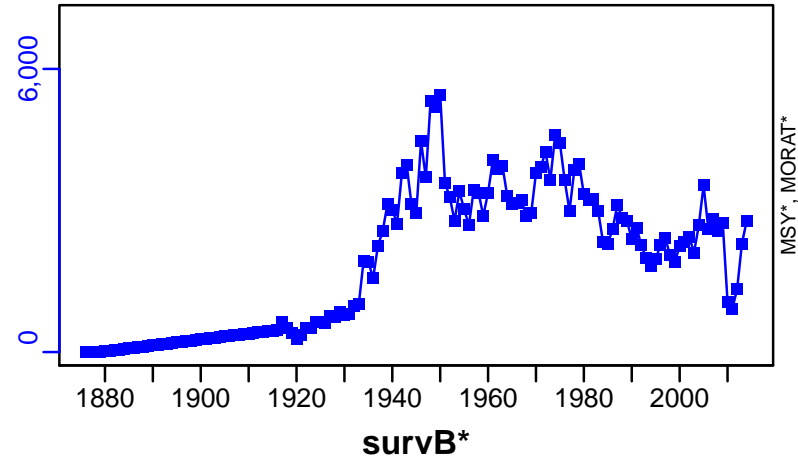
R-E00 (1876–2015–SISIMP2016)



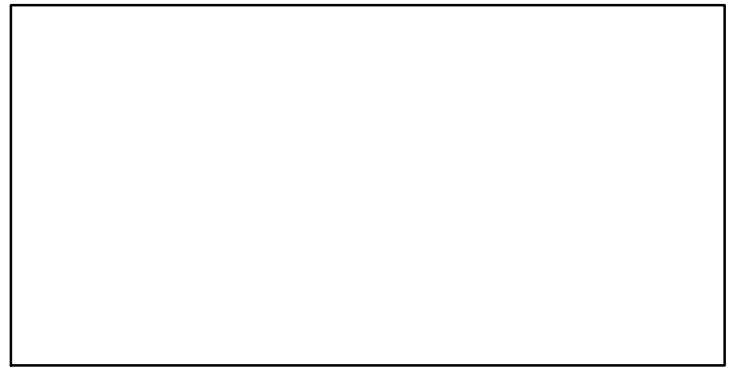
Petrale sole Pacific Coast [PSOLEPCOAST]

TC-MT, TL*, RecC* (1876-2015-SISIMP2016)

TAC*, Cpair*, Cadv*



MSY*, MORAT*

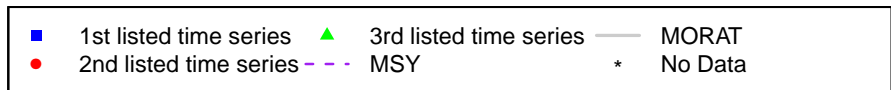
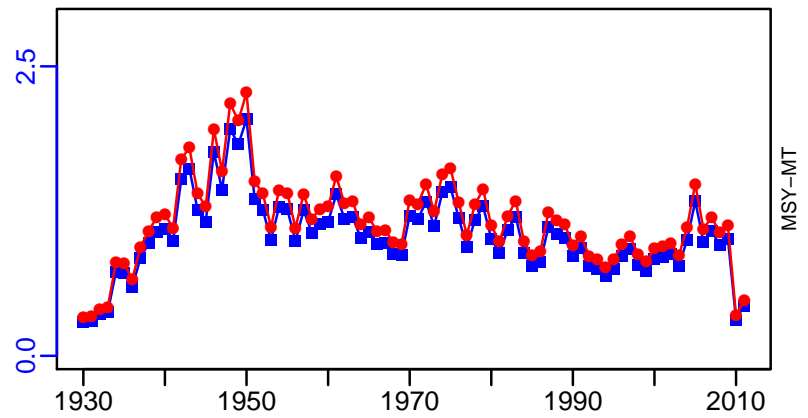


CPUE*

EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1930-2011-CHING)



Rex sole Pacific Coast [REXSOLEPCOAST]

Metadata	
Scientific Name	Glyptocephalus zachirus
Current Assess ID	NWFSC-REXSOLEPCOAST-1896-2012-SISIMP2016
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2012

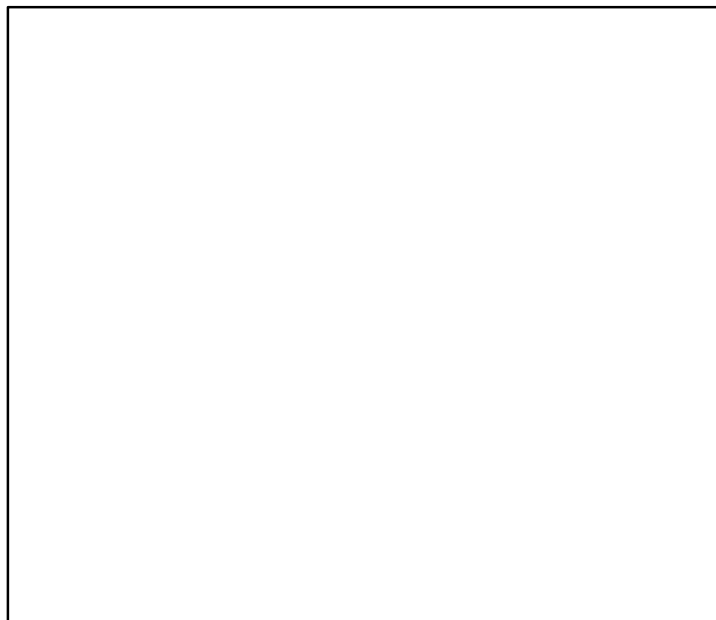
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2012	0.7
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2012	1646
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2012	0.7
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2012	18,500	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-1/yr	2012	0.131	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2012	0.187		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY*



Kobe MGT*



Spawner Recruit*



Production*

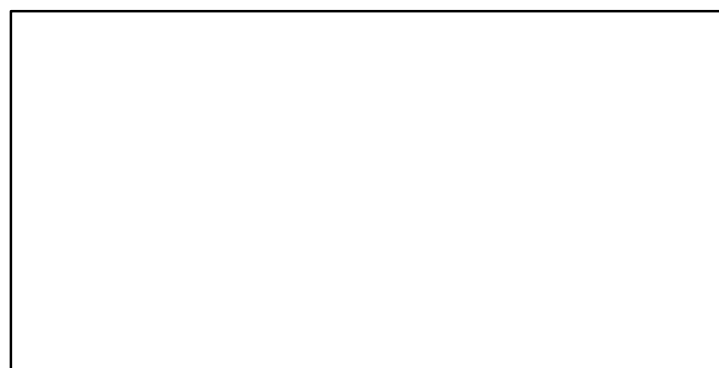
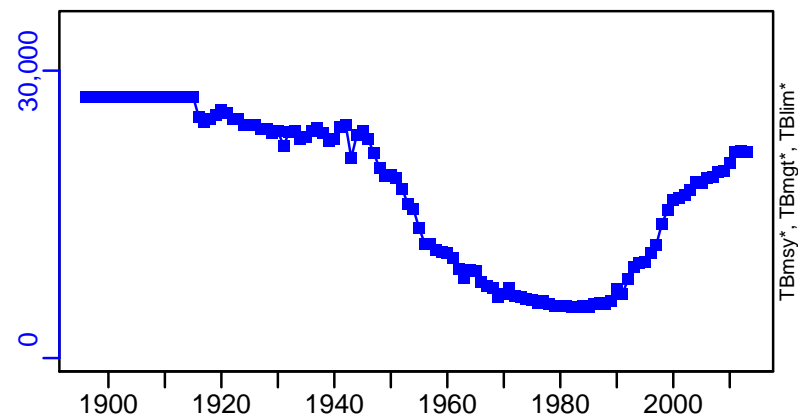


◆ Start Year ◆ End Year * No Data

Rex sole Pacific Coast [REXSOLEPCOAST]

TB-MT (1896–2012–SISIMP2016)

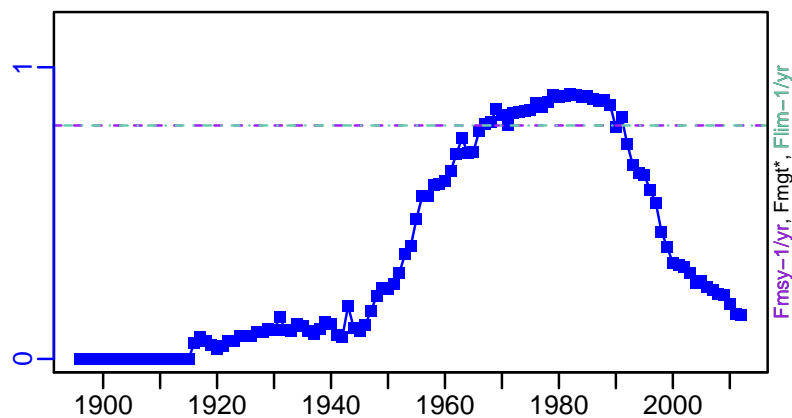
SSB*



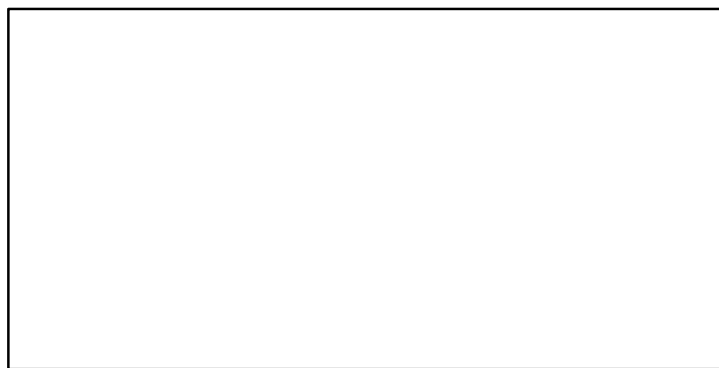
TN *



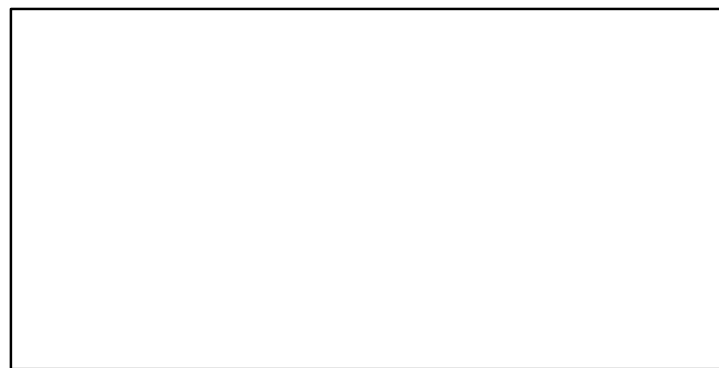
F-1/yr (1896–2012–SISIMP2016)



ER*

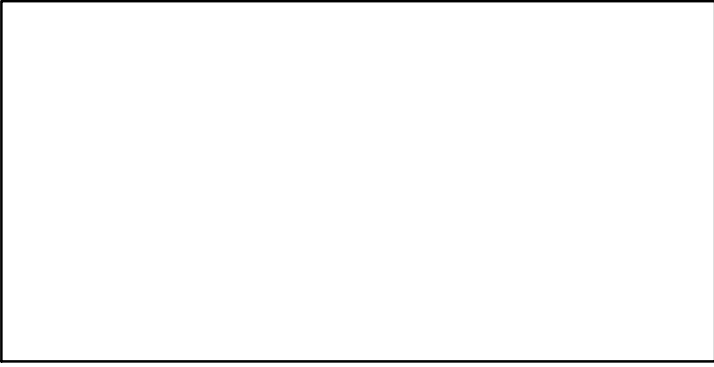


Recruits*

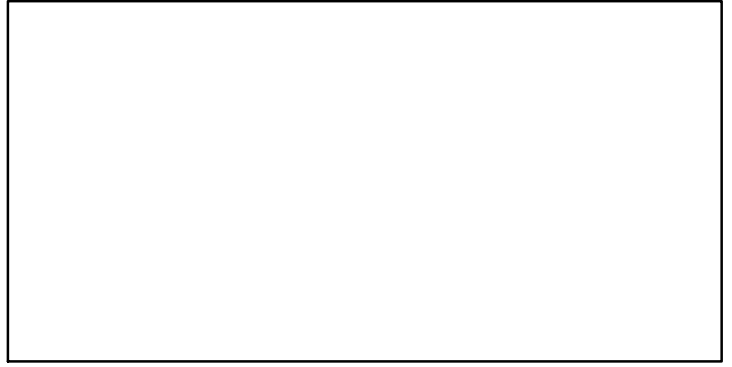


Rex sole Pacific Coast [REXSOLEPCOAST]

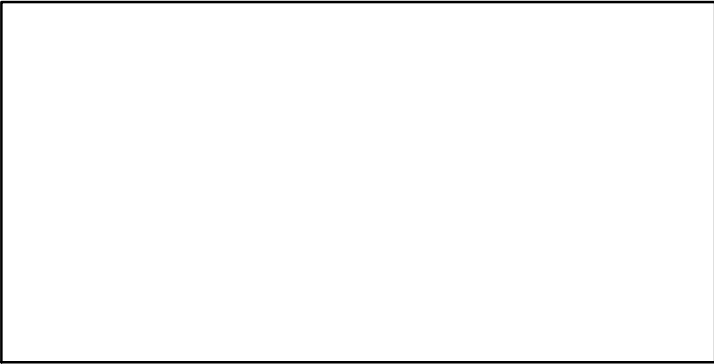
TC*, TL*, RecC*



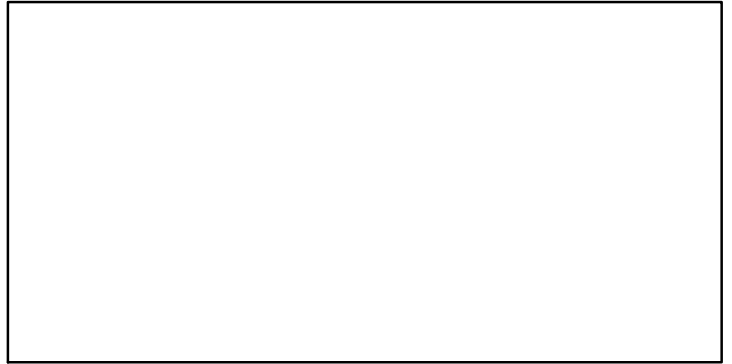
TAC*, Cpair*, Cadv*



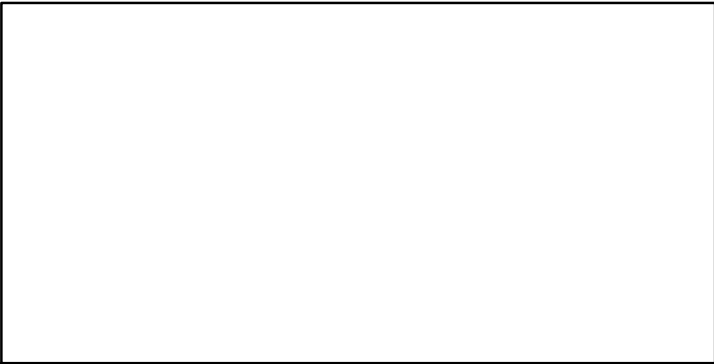
survB*



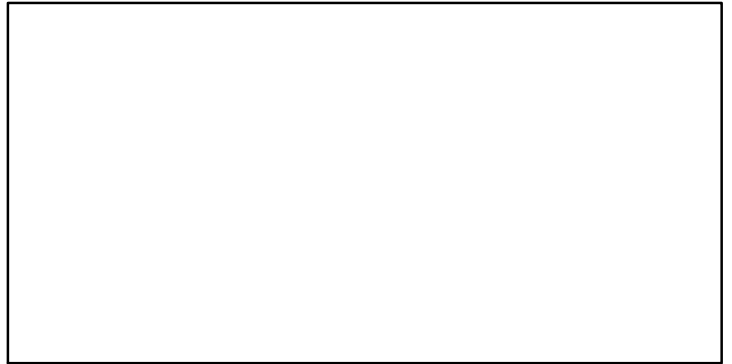
CPUE*



EFFORT*



CdivMSY*



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

Sablefish Pacific Coast [SABLEFPCOAST]

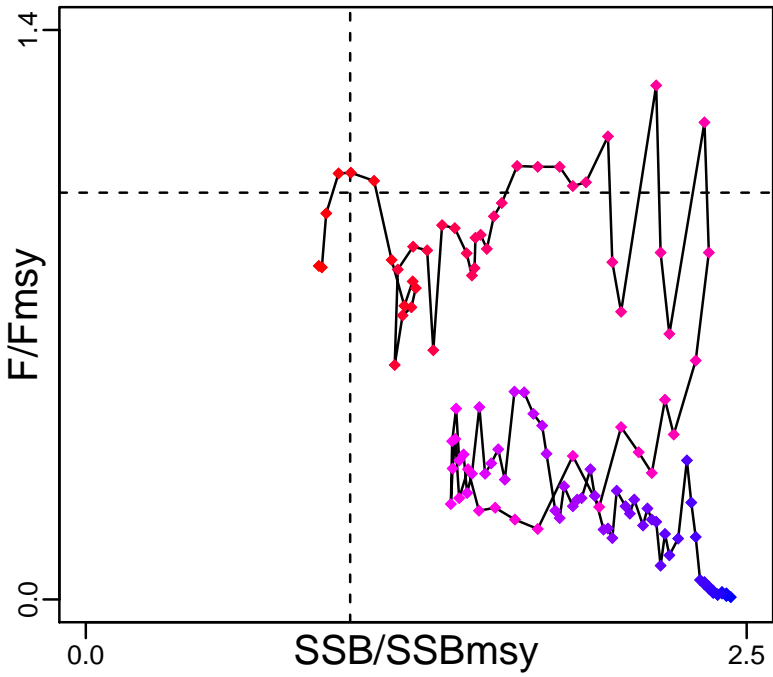
Metadata	
Scientific Name	Anoplopoma fimbria
Current Assess ID	NWFSC-SABLEFPCOAST-1900-2015-SISIMP2016
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2011, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-MT	2015	60,249
Fmsy	Fmsy-1/yr	2015	0.55
ERmsy	ERmsy-conv-ratio	2015	0.058
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2011	537,893
SSB0	SSB0-MT	2011	182,136
MSY	MSY-MT	2015	7476
M	M-1/yr	2011	0.08
TBlim	-	-	-
SSBlim	SSBlim-MT	2015	37,656
Flim	Flim-1/yr	2015	0.55
ERlim	-	-	-

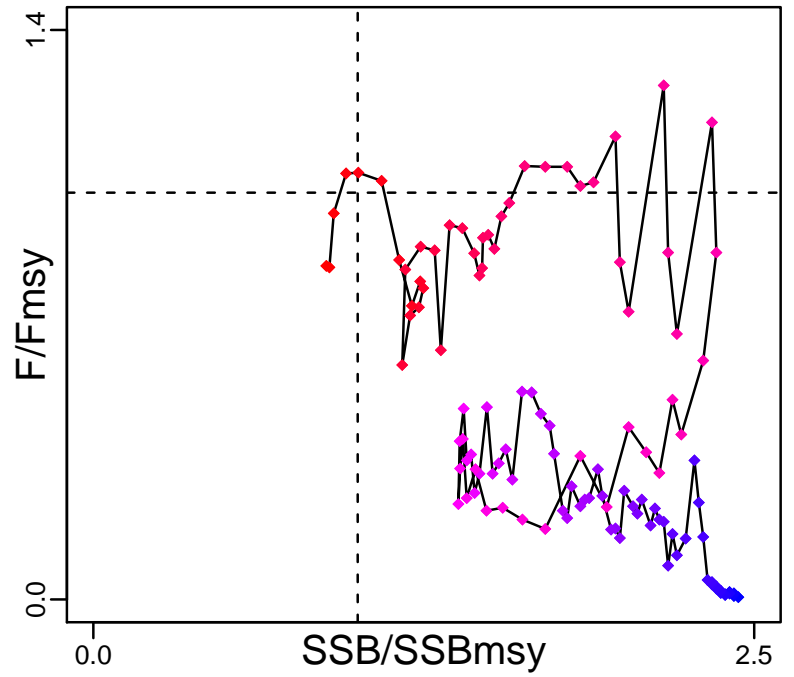
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2015	168,000	-	4+
SSB	SSB-MT	2015	52,000	Females	-
TN	-	-	-	-	-
R	R-E00	2015	13,100,000	-	0
F	F-1/yr	2015	0.451	-	-
ER	ER-calc-ratio	2015	0.026	-	-
TC	TC-MT	2015	4460		
TL	TL-MT	2011	6820		
TB/TBmsy	TB-MT/(TB0-MT*0.368)	2011	1.041		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2015	0.863		
F/Fmsy	F-1/yr/Fmsy-1/yr	2015	0.82		
ER/ERmsy	ER-calc-ratio/ERmsy-conv-ratio	2015	0.444		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Sablefish Pacific Coast [SABLEFPCOAST]

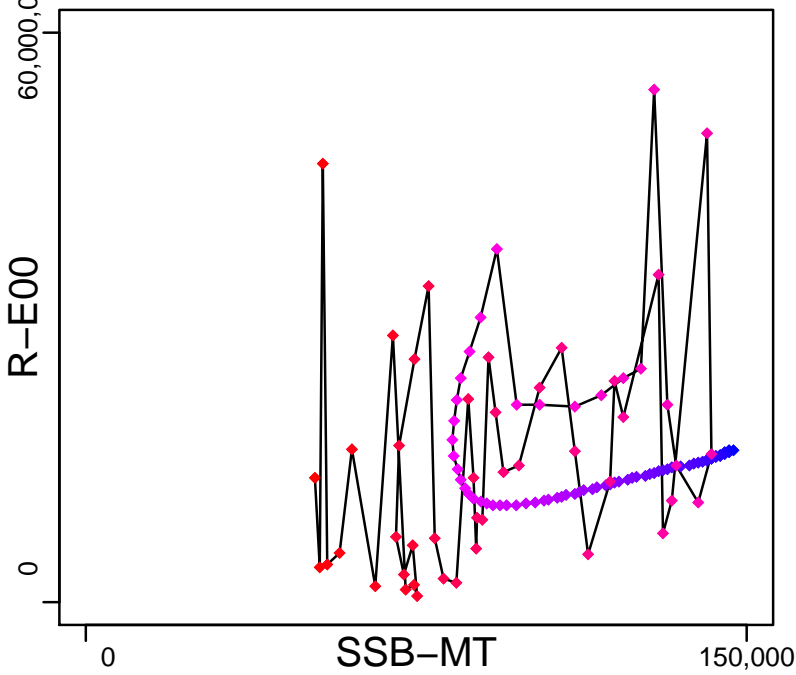
Kobe MSYpref (1900–2015–SISIMP2016)



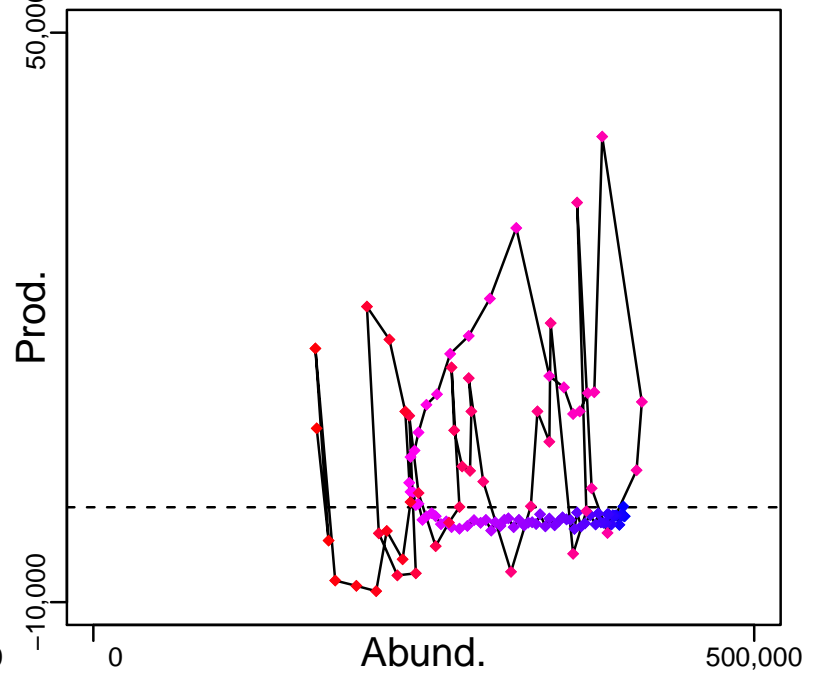
Kobe MGTpref (1900–2015–SISIMP2016)



Spawner Recruit (1900–2015–SISIMP2016)



Production (1900–2015–SISIMP2016)

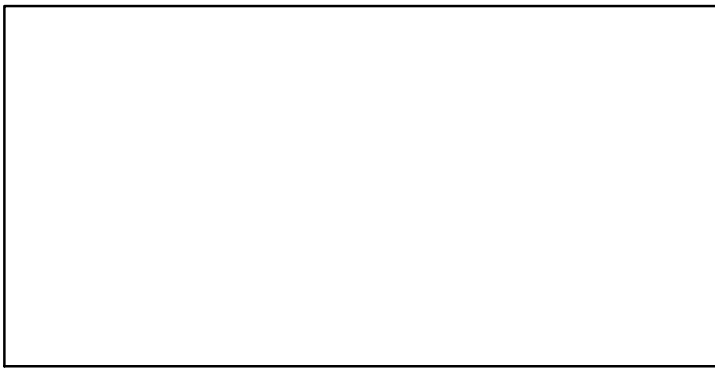
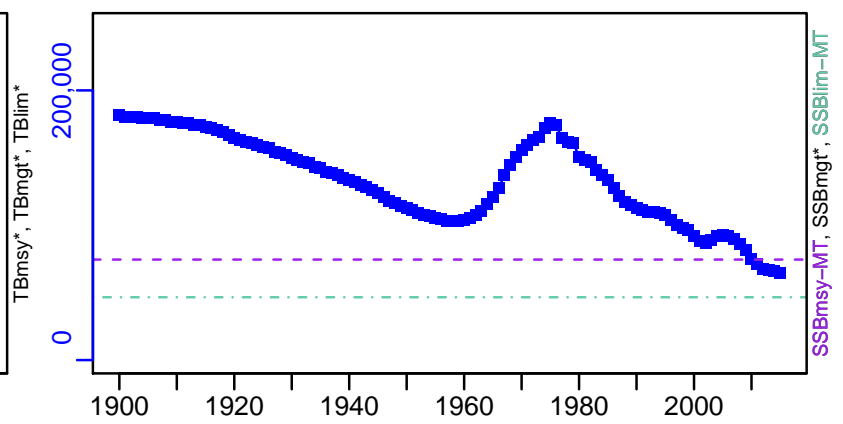
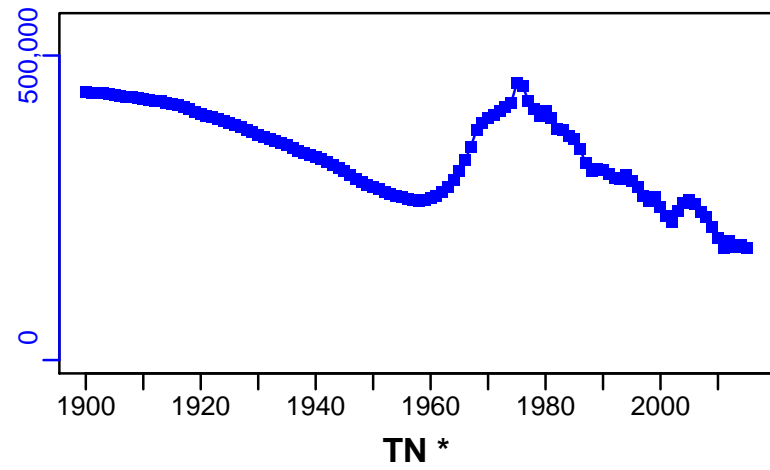


◆ Start Year ◆ End Year * No Data

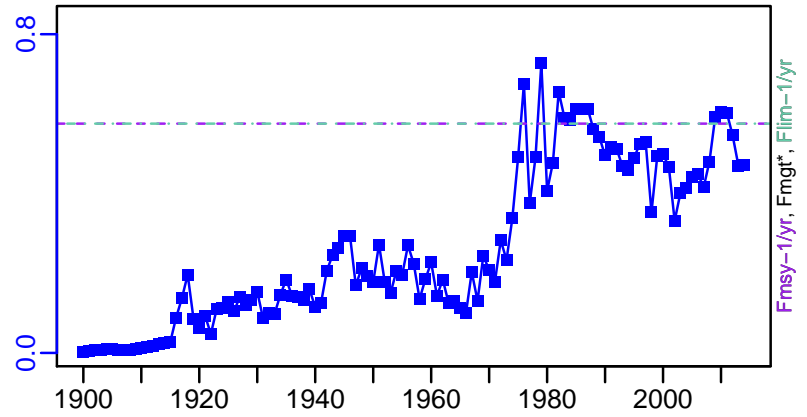
Sablefish Pacific Coast [SABLEFPCOAST]

TB-MT (1900–2015–SISIMP2016)

SSB-MT (1900–2015–SISIMP2016)

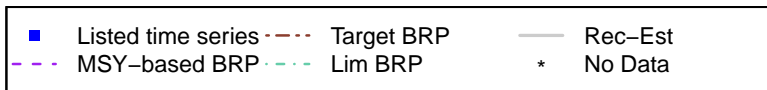
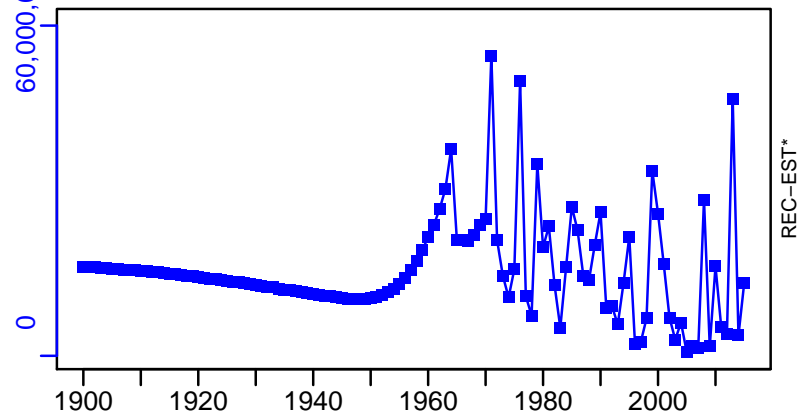
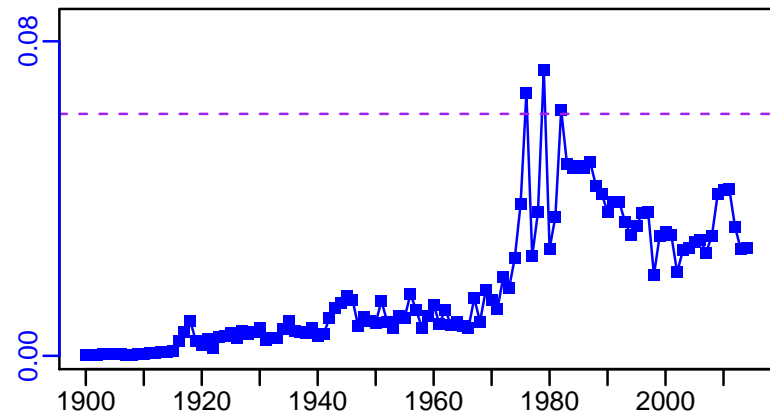


F-1/yr (1900–2015–SISIMP2016)



ER-calc-ratio (1900–2015–SISIMP2016)

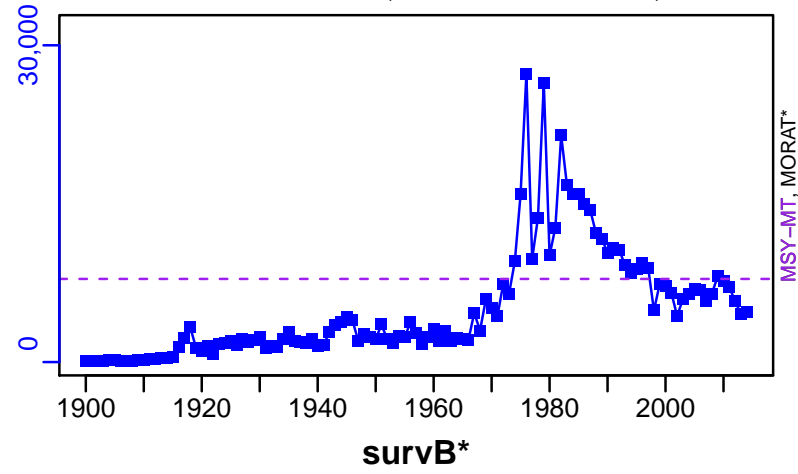
R-E00 (1900–2015–SISIMP2016)



Sablefish Pacific Coast [SABLEFPCOAST]

TC-MT, TL*, RecC* (1900–2015–SISIMP2016)

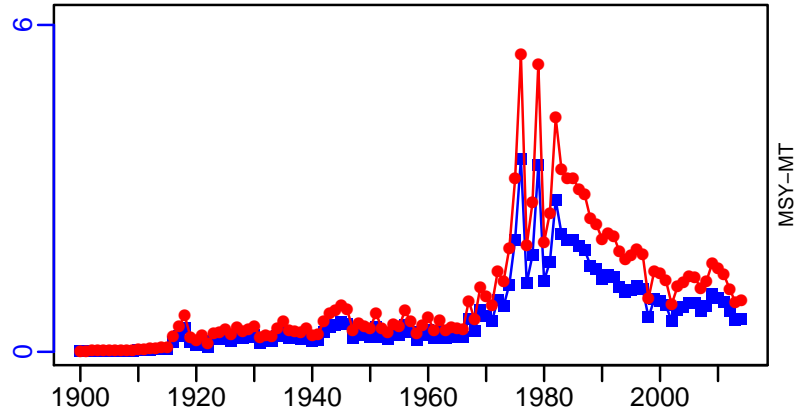
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1900–2015–SISIMP2016)



Pacific sardine Pacific Coast [SARDPCOAST]

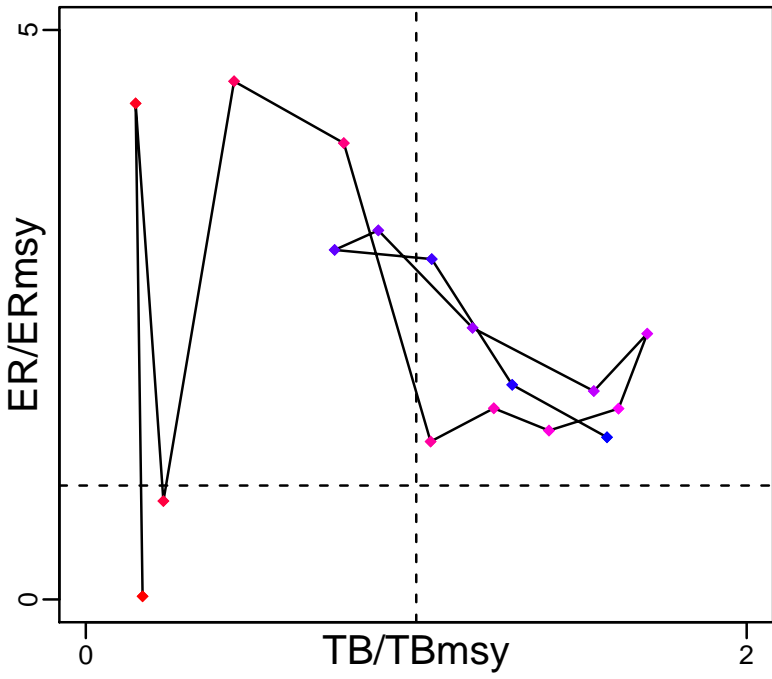
Metadata	
Scientific Name	Sardinops sagax
Current Assess ID	SWFSC-SARDPCOAST-2000-2018-SISIMP2021
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Southwest Fisheries Science Center
Asmts in RAM	2007, 2016, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2016	575,022
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-est-ratio	2016	0.056
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-est-MT	2016	32,285
M	M-1/yr	2007	0.4
TBlim	TBlim-MT	2018	50,000
SSBlim	SSBlim-MT	2016	50,000
Flim	-	-	-
ERlim	-	-	-

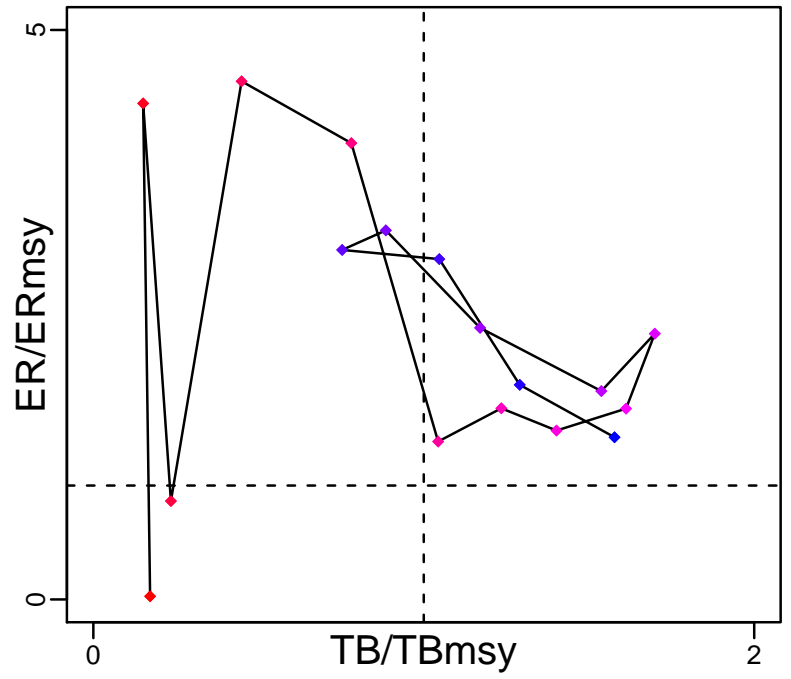
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2018	52,065	-	-
SSB	SSB-MT	2016	65,100	-	-
TN	-	-	-	-	-
R	R-E00	2018	688,669,000	-	0
F	-	-	-	-	-
ER	ER-calc-ratio	2018	0.042	-	-
TC	TC-MT	2018	1810		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-est-MT	2016	0.172		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2016	0.028		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Pacific sardine Pacific Coast [SARDPCOAST]

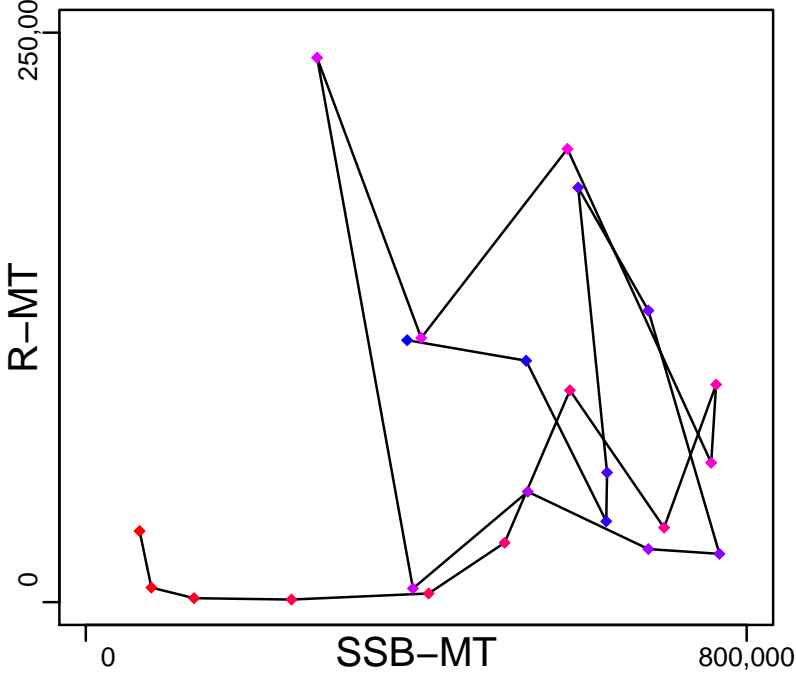
Kobe MSY_{pref} (1994–2016–SISIMP2016)



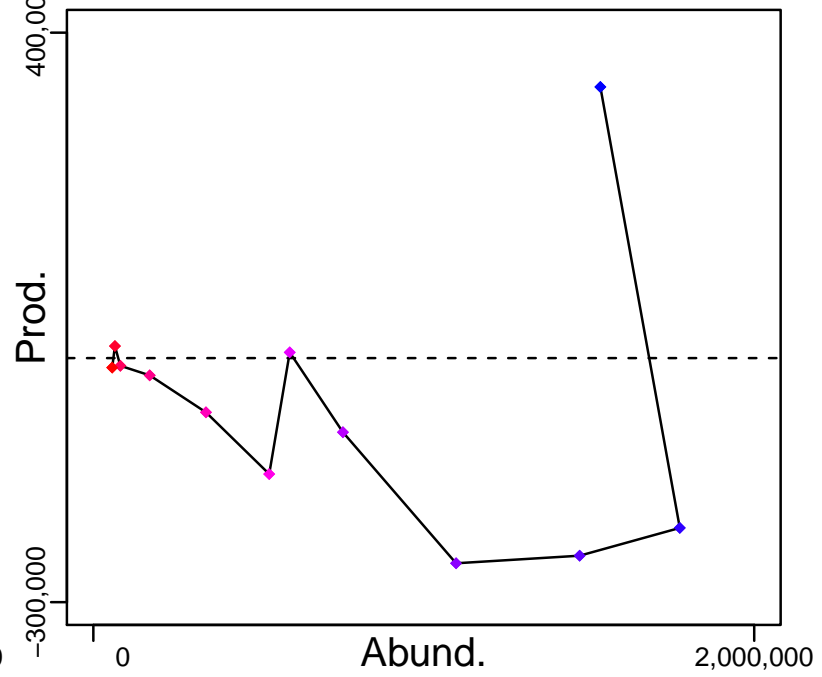
Kobe MGT_{pref} (1994–2016–SISIMP2016)



Spawner Recruit (1994–2016–SISIMP2016)



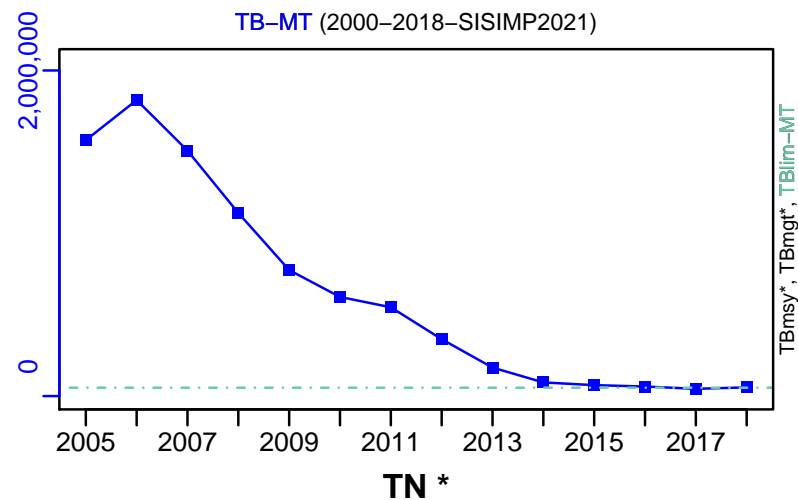
Production (2000–2018–SISIMP2021)



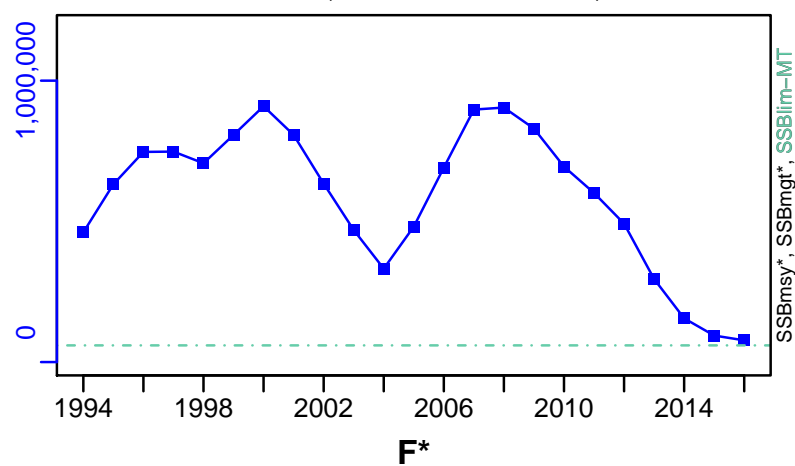
◆ Start Year ◆ End Year * No Data

Pacific sardine Pacific Coast [SARDPCOAST]

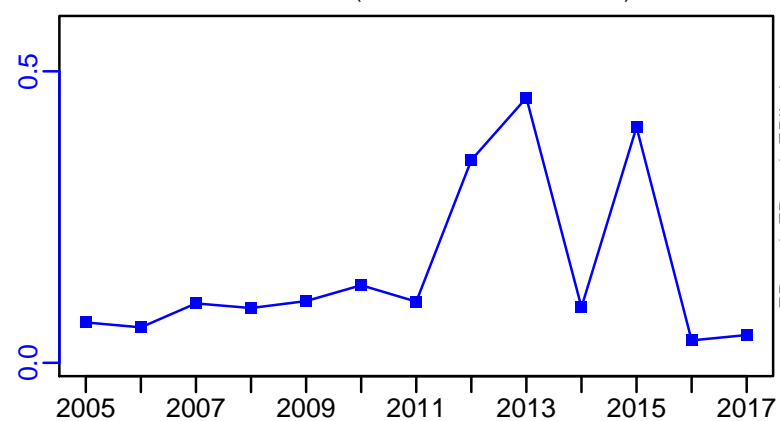
TB-MT (2000–2018–SISIMP2021)



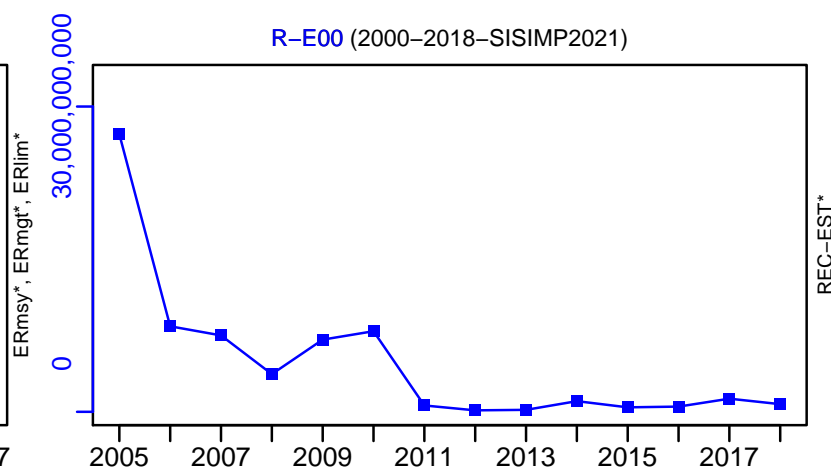
SSB-MT (1994–2016–SISIMP2016)



ER-calc-ratio (2000–2018–SISIMP2021)

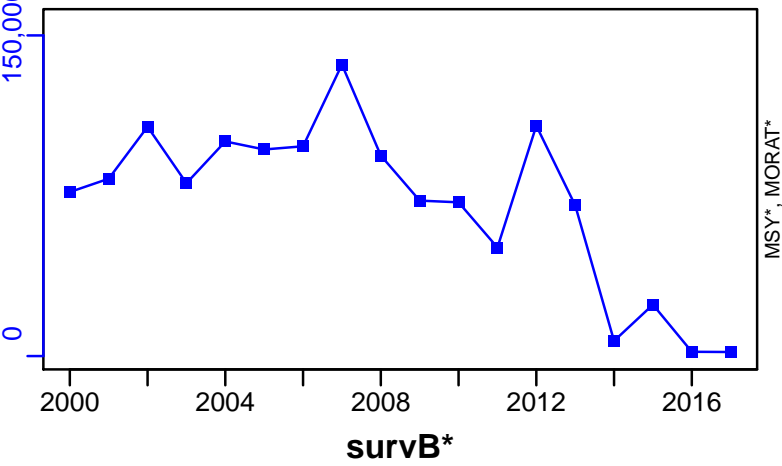


R-E00 (2000–2018–SISIMP2021)



Pacific sardine Pacific Coast [SARDPCOAST]

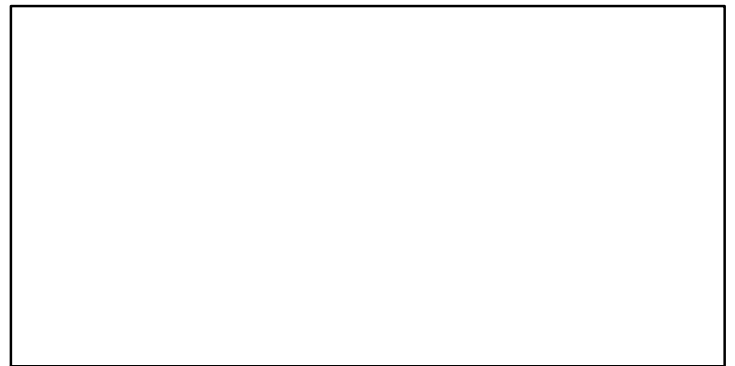
TC-MT, TL*, RecC* (2000–2018–SISIMP2021)



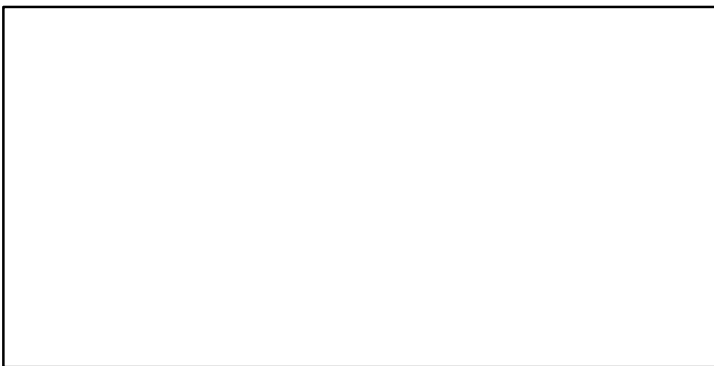
TAC*, Cpair*, Cadv*



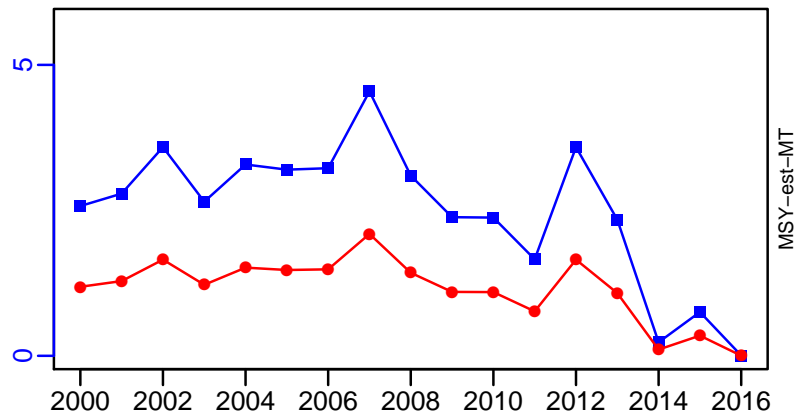
CPUE*



EFFORT*



TC-MT/MSY-est-MT, CdivMEANC-ratio, (1994–2016–SISIMP2016)



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

Shortbelly rockfish Pacific Coast [SBELLYROCKPCOAST]

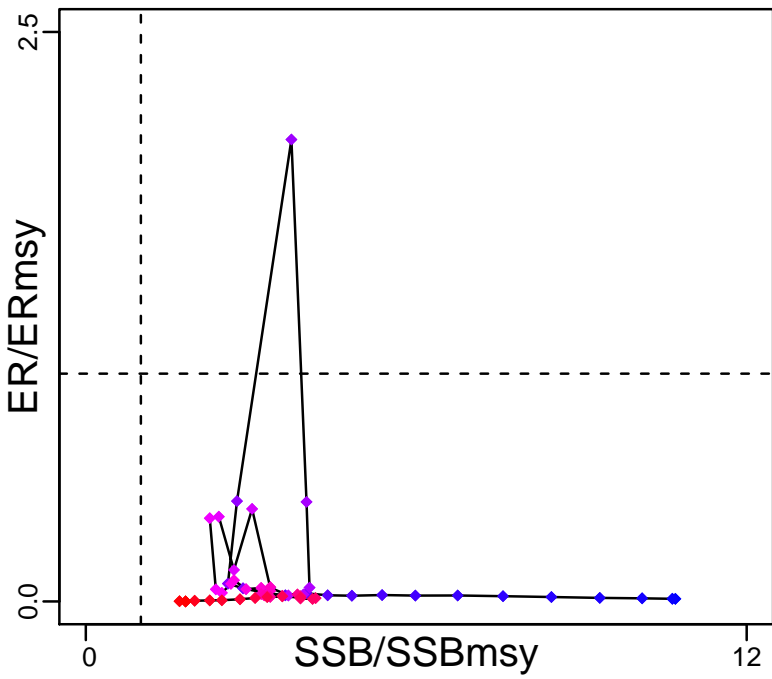
Metadata	
Scientific Name	Sebastes jordani
Current Assess ID	SWFSC-SBELLYROCKPCOAST-1950-2005-BRANCH
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Southwest Fisheries Science Center
Asmts in RAM	2005

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2005	26,948
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-est-ratio	2005	0.029
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2005	98,400
SSB0	SSB0-MT	2005	49,500
MSY	MSY-est-MT	2005	789
M	M-1/yr	2005	0.26
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

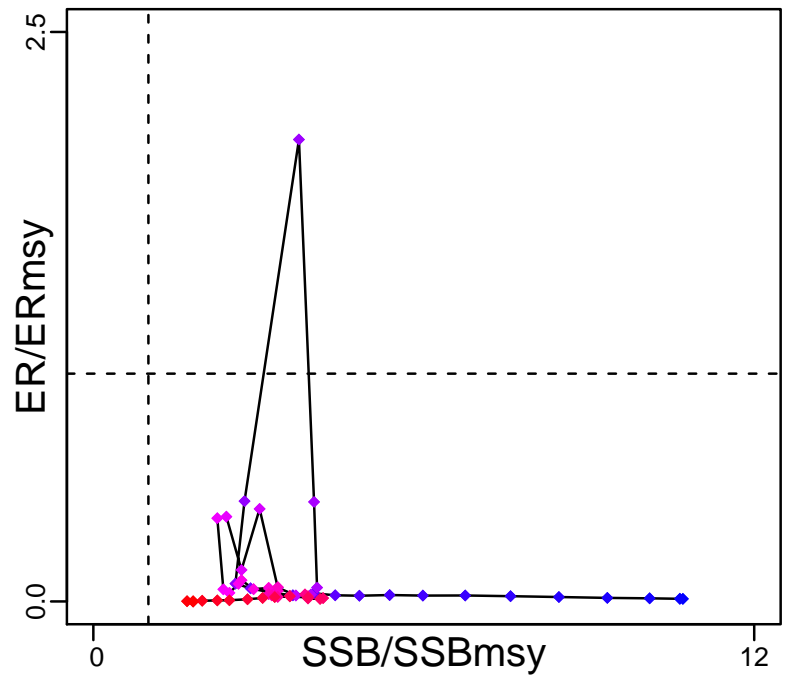
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2005	64,000	-	1+
SSB	SSB-MT	2005	33,000	Females	2+
TN	-	-	-	-	-
R	R-E00	2005	9000	-	0
F	F-1/yr	2005	0	Both	1+
ER	ER-ratio	2005	0	-	-
TC	TC-MT	2005	0		
TL	-	-	-		
TB/TBmsy	TB-MT/(TB0-MT*0.368)	2005	1.767		
SSB/SSBmsy	SSB-MT/(SSB0-MT*0.368)	2005	1.812		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-est-ratio	2005	0		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Shortbelly rockfish Pacific Coast [SBELLYROCKPCOAST]

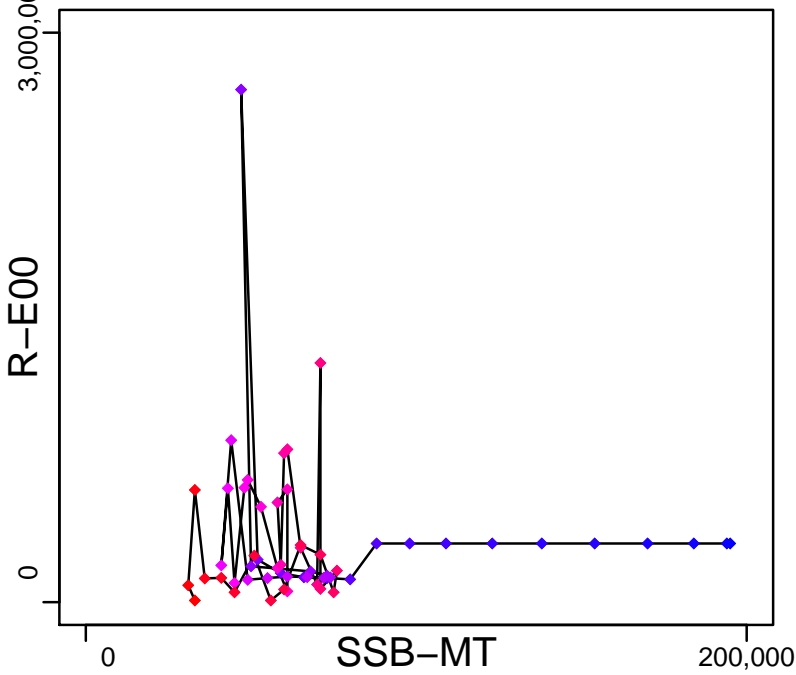
Kobe MSYpref (1950–2005–BRANCH)



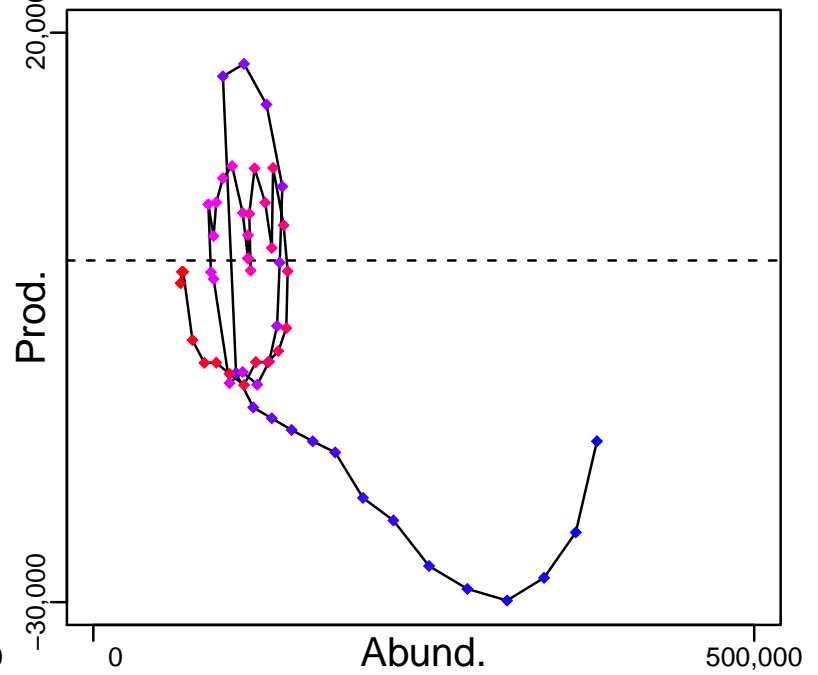
Kobe MGTpref (1950–2005–BRANCH)



Spawner Recruit (1950–2005–BRANCH)



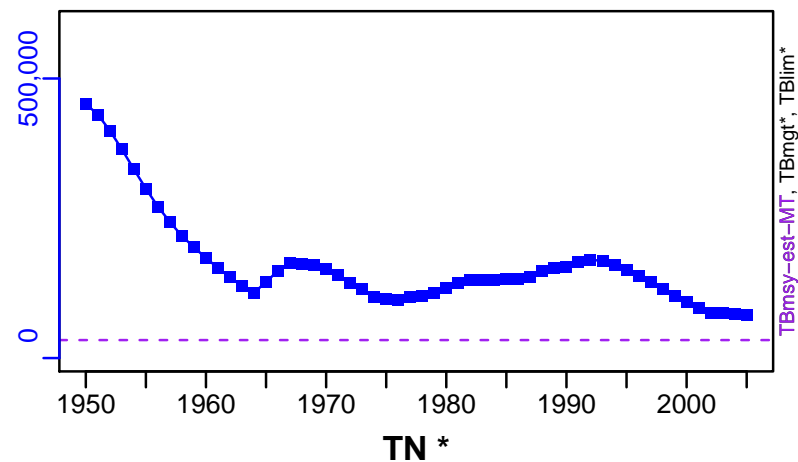
Production (1950–2005–BRANCH)



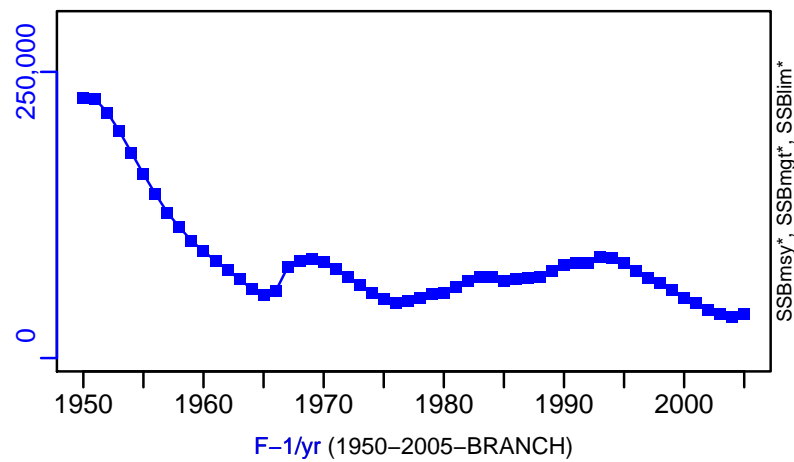
◆ Start Year ◆ End Year * No Data

Shortbelly rockfish Pacific Coast [SBELLYROCKPCOAST]

TB-MT (1950-2005-BRANCH)



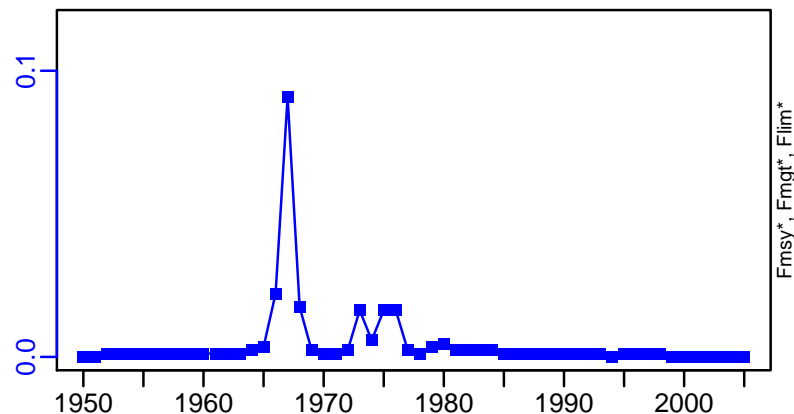
SSB-MT (1950-2005-BRANCH)



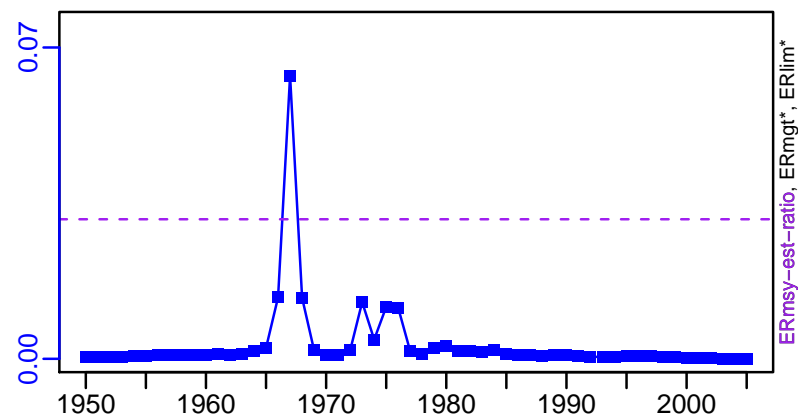
TN *



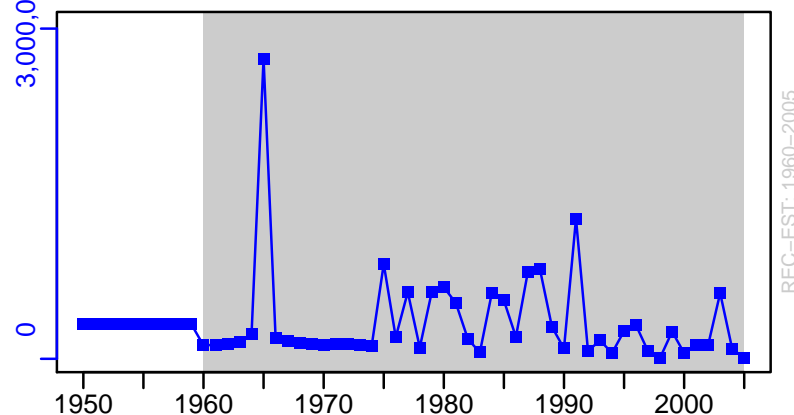
F-1/yr (1950-2005-BRANCH)



ER-ratio (1950-2005-BRANCH)



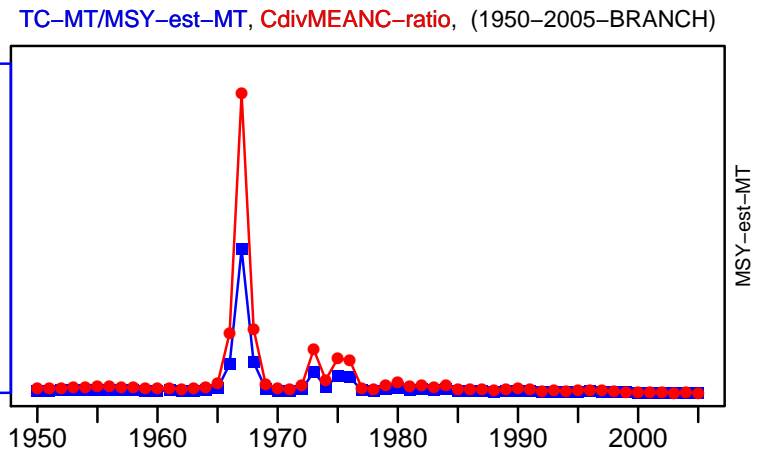
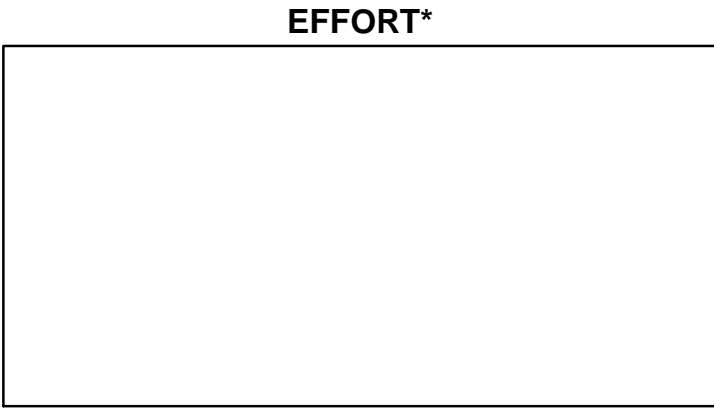
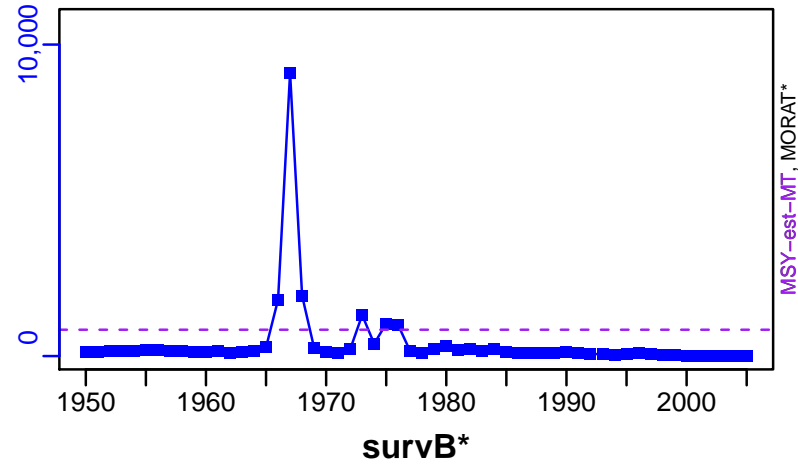
R-E00 (1950-2005-BRANCH)



Shortbelly rockfish Pacific Coast [SBELLYROCKPCOAST]

TC-MT, TL*, RecC* (1950-2005-BRANCH)

TAC*, Cpair*, Cadv*



Sharpchin rockfish Pacific Coast [SHCROCKPCOAST]

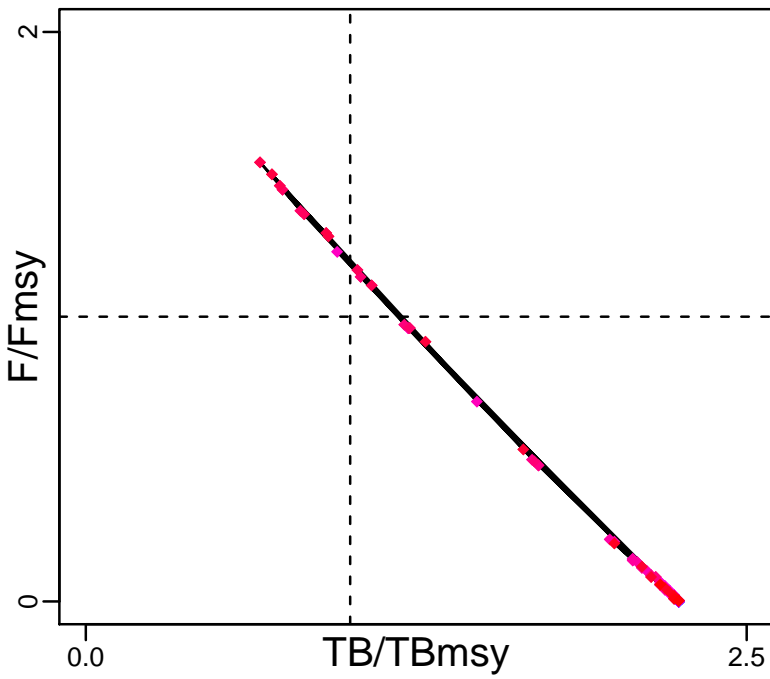
Metadata	
Scientific Name	Sebastes zacentrus
Current Assess ID	NWFSC-SHCROCKPCOAST-1892-2012-SISIMP2016
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2012

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-est-MT	2012	5752
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2012	0.5
ERmsy	ERmsy-est-ratio	2012	0.209
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2012	270
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	Flim-1/yr	2012	0.5
ERlim	-	-	-

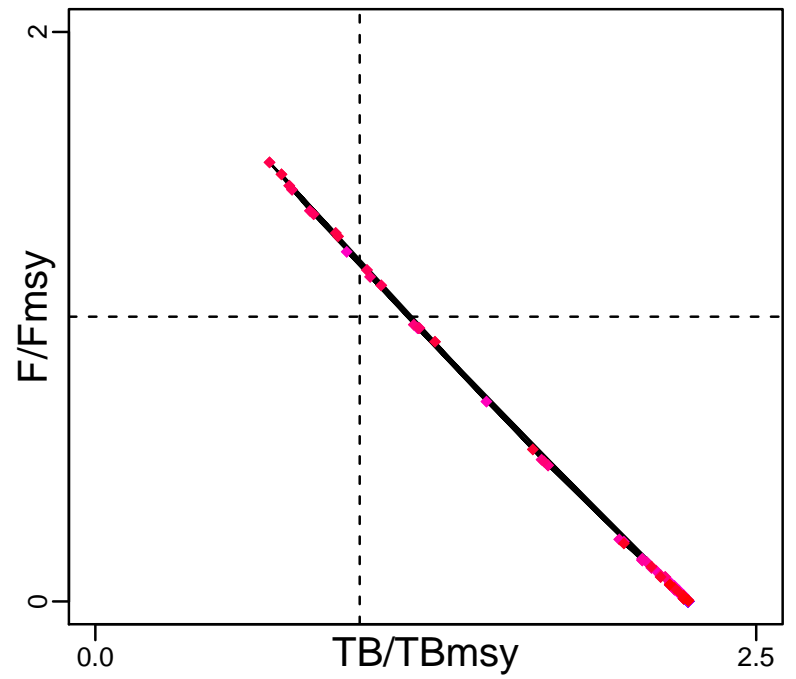
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2012	12,800	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-1/yr	2012	0.03	-	-
ER	ER-calc-ratio	2012	0.001	-	-
TC	TC-MT	2012	14		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-est-MT	2012	2.225		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2012	0.06		
ER/ERmsy	ER-calc-ratio/ERmsy-est-ratio	2012	0.005		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Sharpchin rockfish Pacific Coast [SHCROCKPCOAST]

Kobe MSY_{pref} (1892–2012–SISIMP2016)



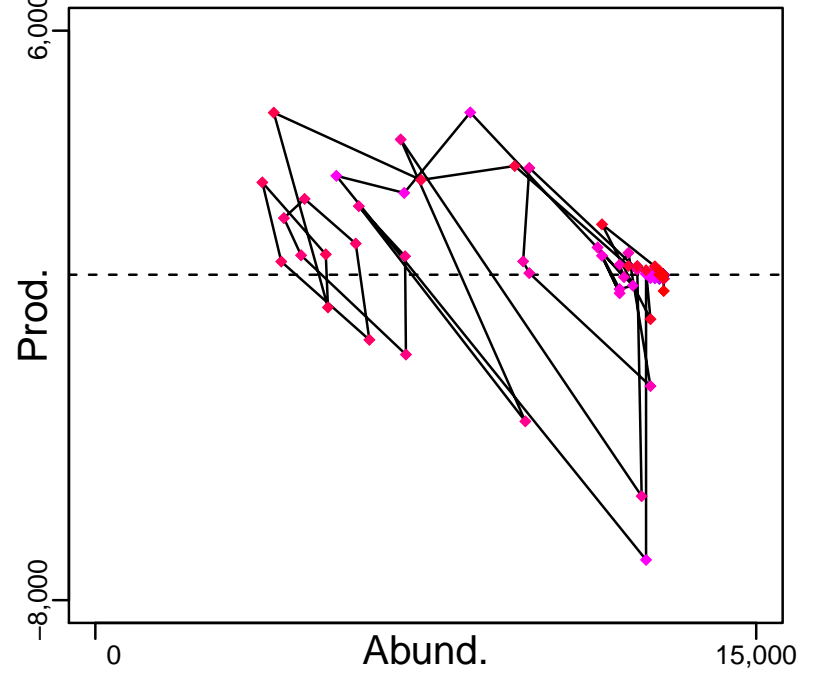
Kobe MGT_{pref} (1892–2012–SISIMP2016)



Spawner Recruit*



Production (1892–2012–SISIMP2016)

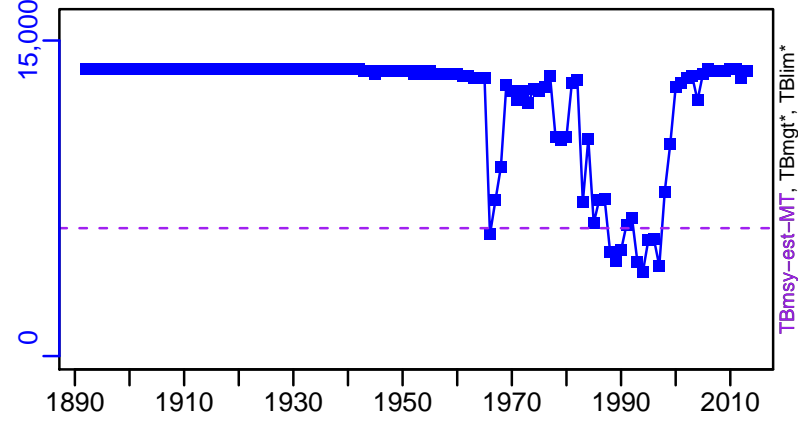


◆ Start Year ◆ End Year * No Data

Sharpchin rockfish Pacific Coast [SHCROCKPCOAST]

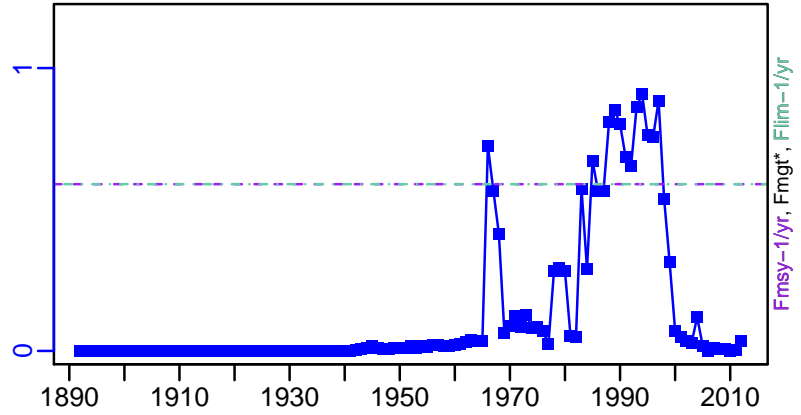
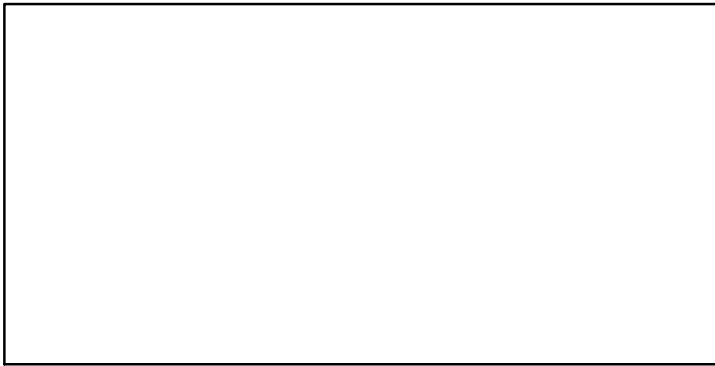
TB-MT (1892-2012-SISIMP2016)

SSB*



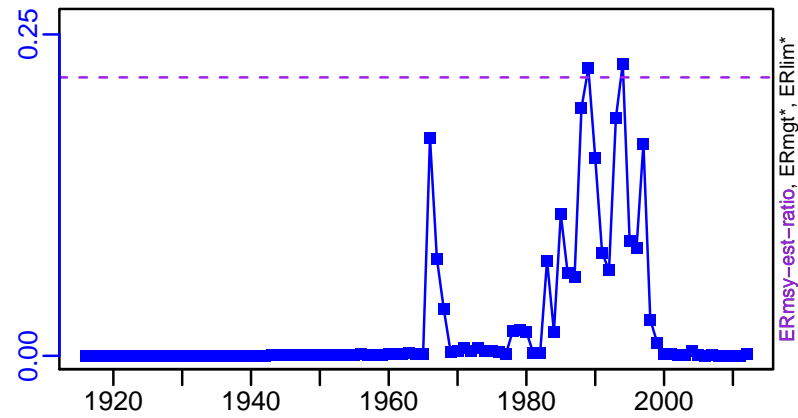
TN *

F-1/yr (1892-2012-SISIMP2016)



ER-calc-ratio (1892-2012-SISIMP2016)

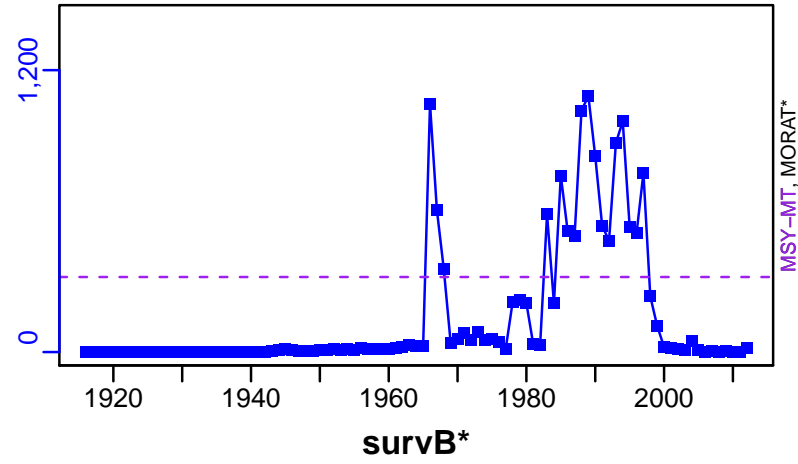
Recruits*



Sharpchin rockfish Pacific Coast [SHCROCKPCOAST]

TC-MT, TL*, RecC* (1892-2012-SISIMP2016)

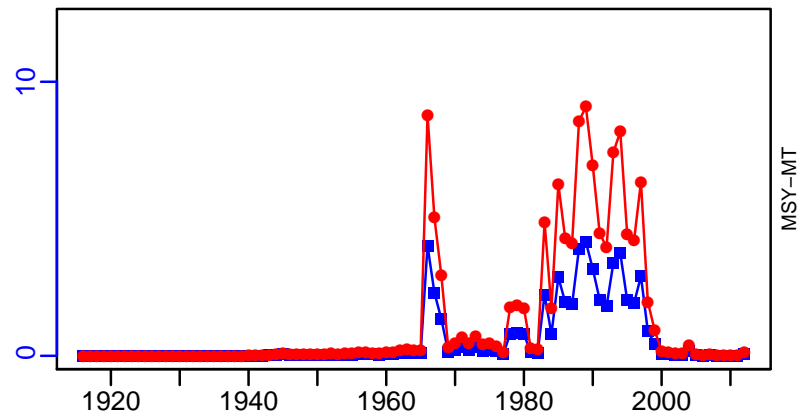
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1892-2012-SISIMP2016)



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

Splitnose rockfish Pacific Coast [SNROCKPCOAST]

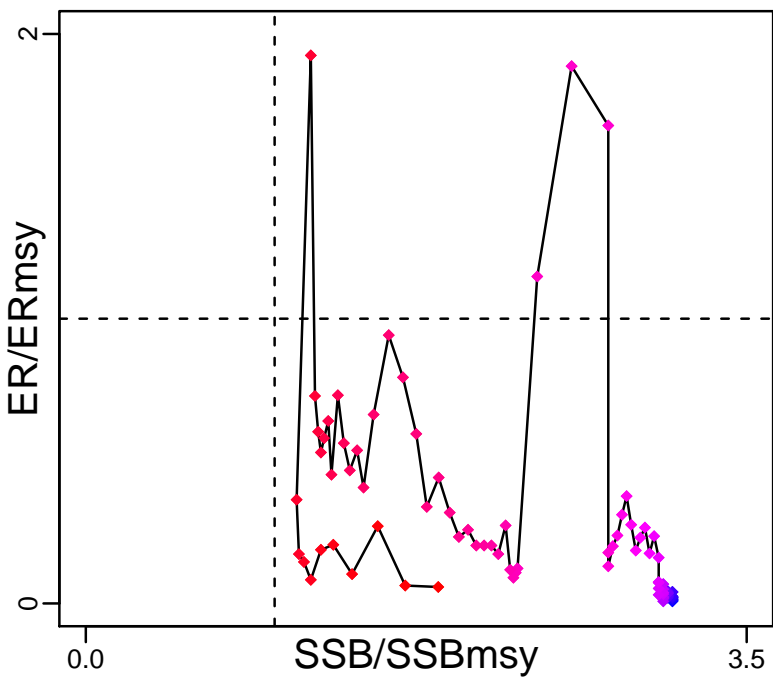
Metadata	
Scientific Name	Sebastes diploproa
Current Assess ID	NWFSC-SNROCKPCOAST-1905-2009-STANTON
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2009

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2009	31,859
SSBmsy	SSBmsy-E00eggs	2009	4.12×10^9
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2009	0.04
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2009	87,584
SSB0	-	-	-
MSY	MSY-MT	2009	1268
M	M-1/yr	2009	0.048
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

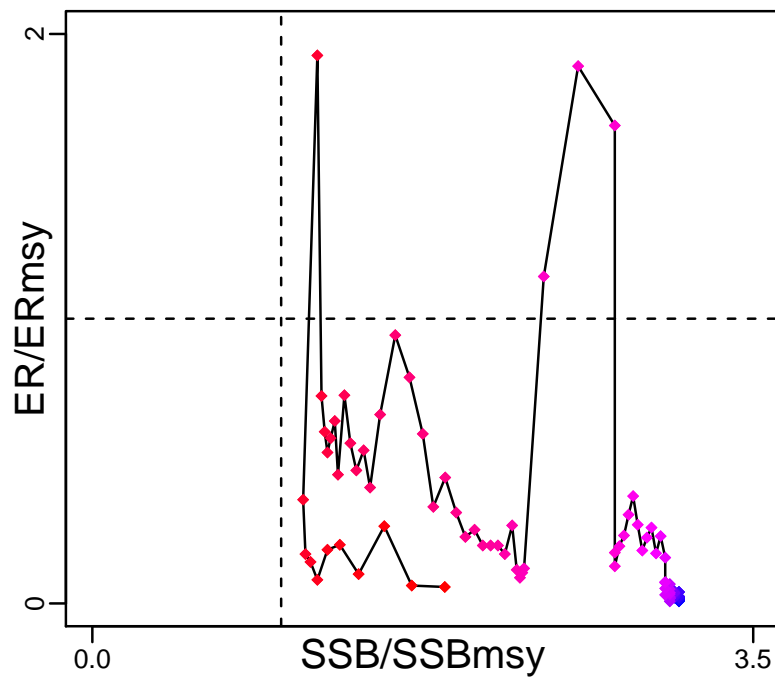
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2009	70,200	-	4+
SSB	SSB-E00eggs	2009	8.43×10^9	Females	-
TN	-	-	-	-	-
R	R-E00	2009	12,700,000	-	0
F	-	-	-	-	-
ER	ER-ratio	2009	0.002	-	-
TC	TC-MT	2009	66		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2009	2.203		
SSB/SSBmsy	SSB-E00eggs/SSBmsy-E00eggs	2009	2.046		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2009	0.058		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Splitnose rockfish Pacific Coast [SNROCKPCOAST]

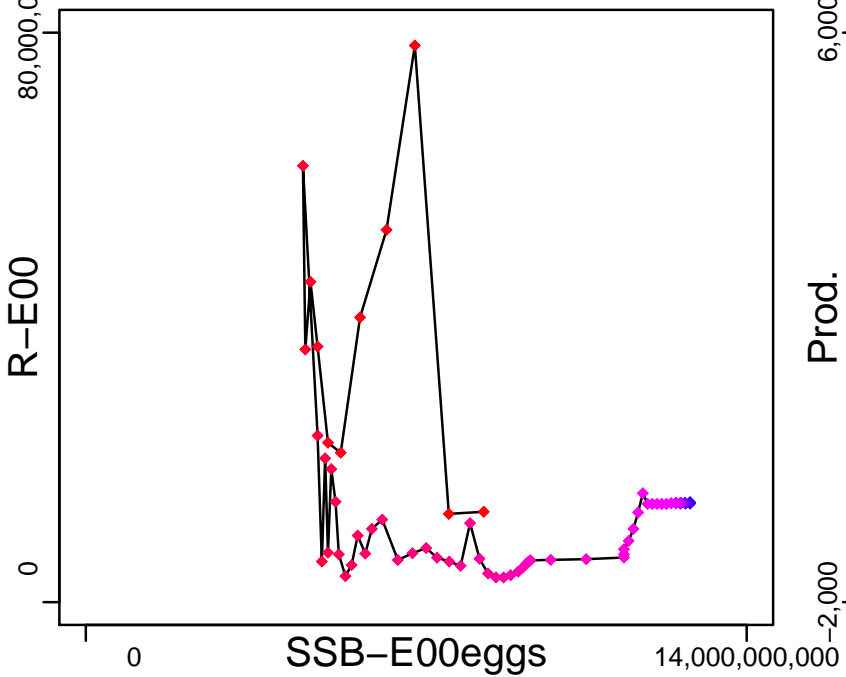
Kobe MSYpref (1905–2009–STANTON)



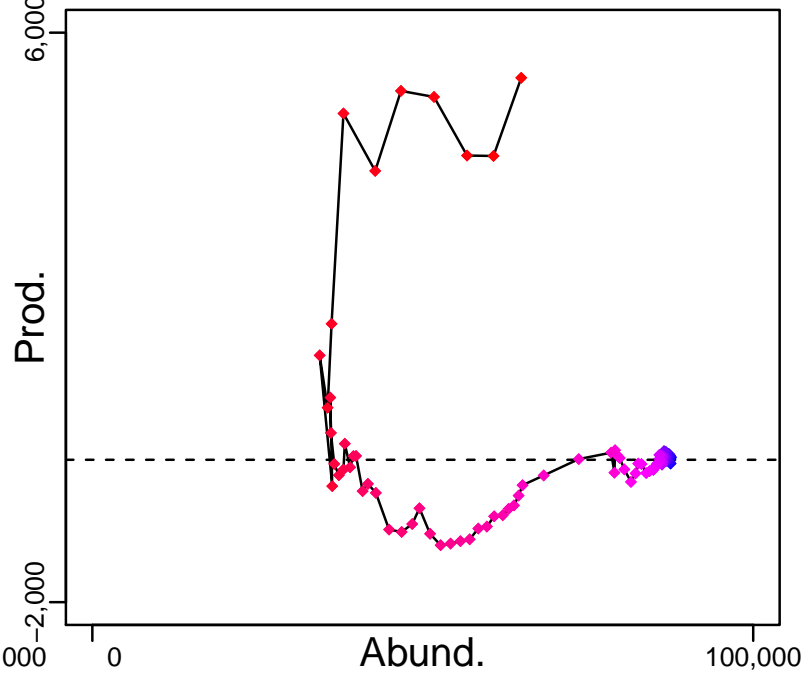
Kobe MGTpref (1905–2009–STANTON)



Spawner Recruit (1905–2009–STANTON)



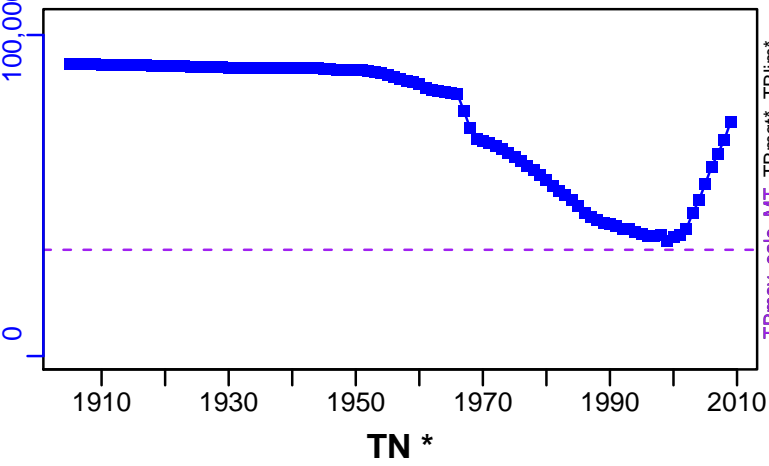
Production (1905–2009–STANTON)



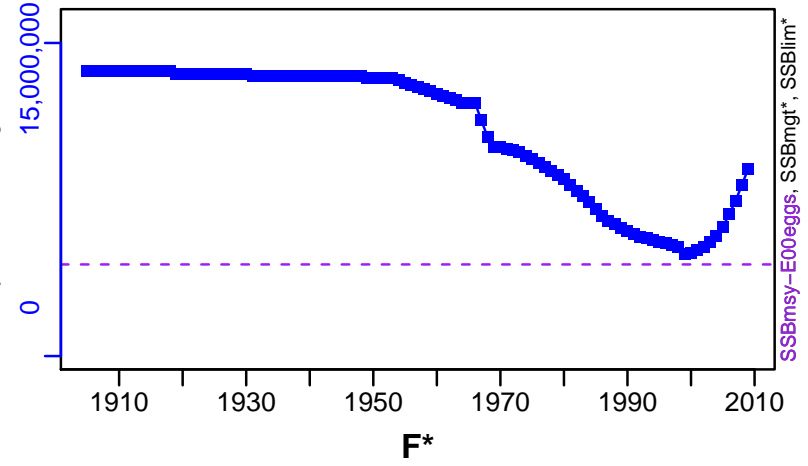
◆ Start Year ◆ End Year * No Data

Splitnose rockfish Pacific Coast [SNROCKPCOAST]

TB-MT (1905-2009-STANTON)



SSB-E00eggs (1905-2009-STANTON)



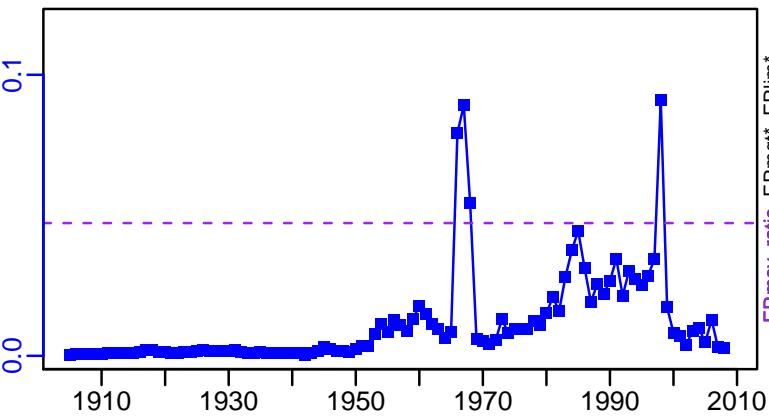
TN *



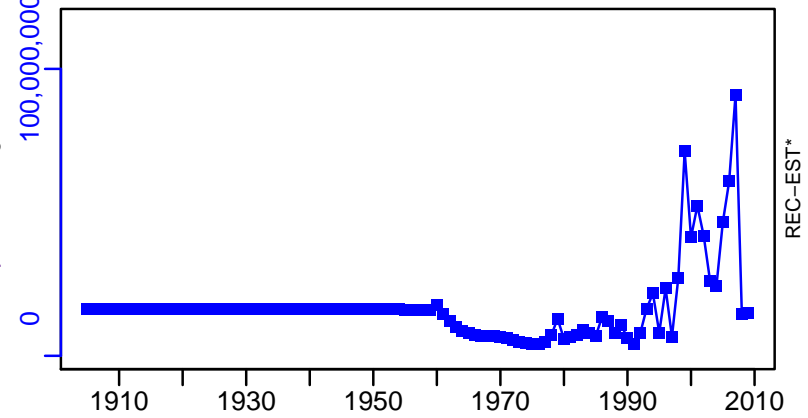
F*



ER-ratio (1905-2009-STANTON)



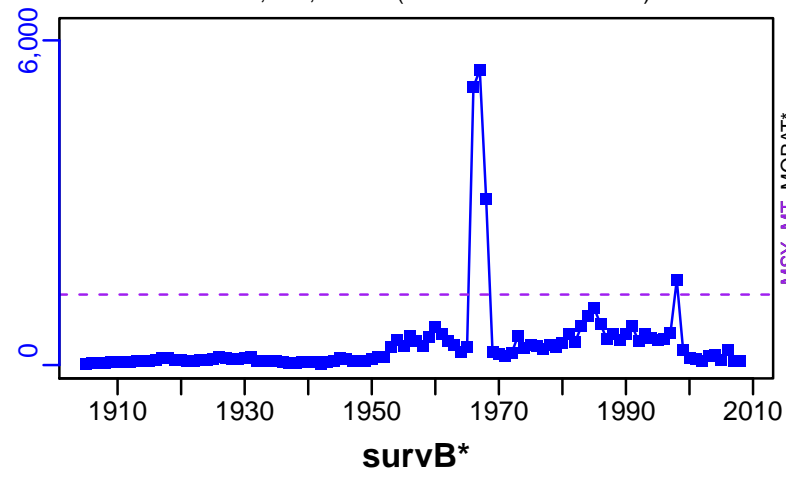
R-E00 (1905-2009-STANTON)



Splitnose rockfish Pacific Coast [SNROCKPCOAST]

TC-MT, TL*, RecC* (1905-2009-STANTON)

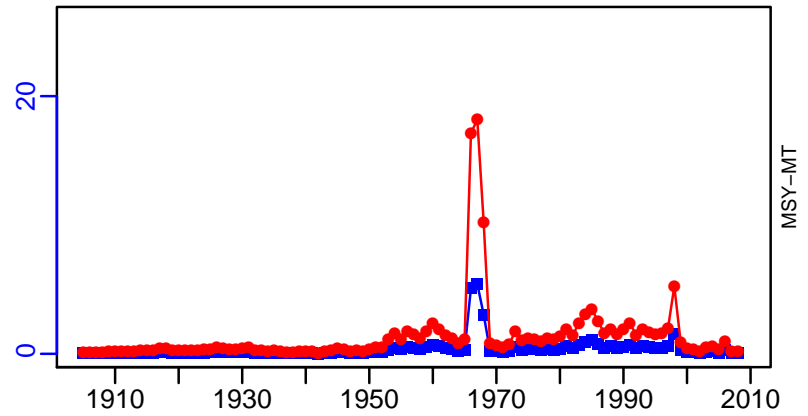
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1905-2009-STANTON)



Spotted spiny dogfish Pacific Coast [SPSDOGPCOAST]

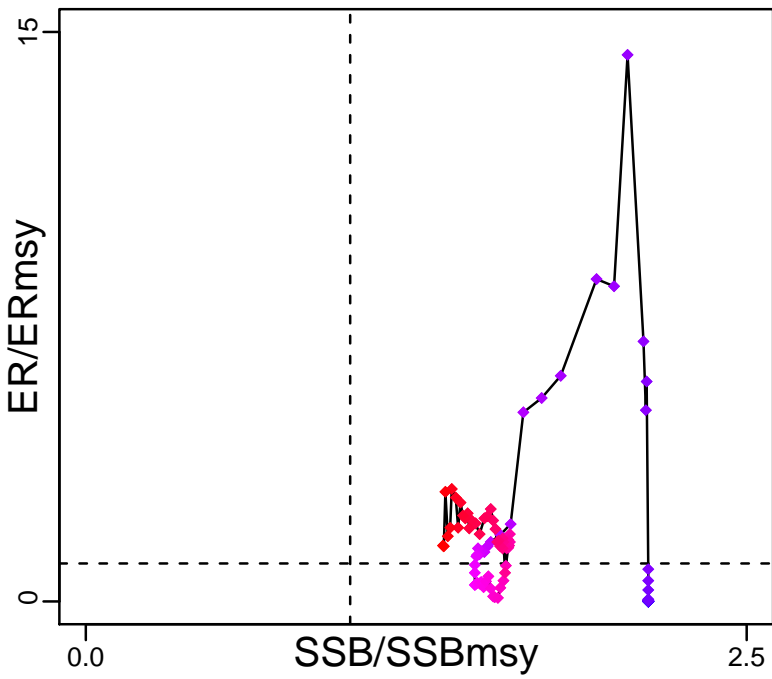
Metadata	
Scientific Name	Squalus suckleyi
Current Assess ID	NWFSC-SPSDOGPCOAST-1916-2011-STACHURA
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2011

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2011	160,000
SSBmsy	SSFmsy-E00	2011	33,229,000
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2011	0.005
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2011	304,105
SSB0	-	-	-
MSY	MSY-MT	2011	848
M	M-1/yr	2011	0.064
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

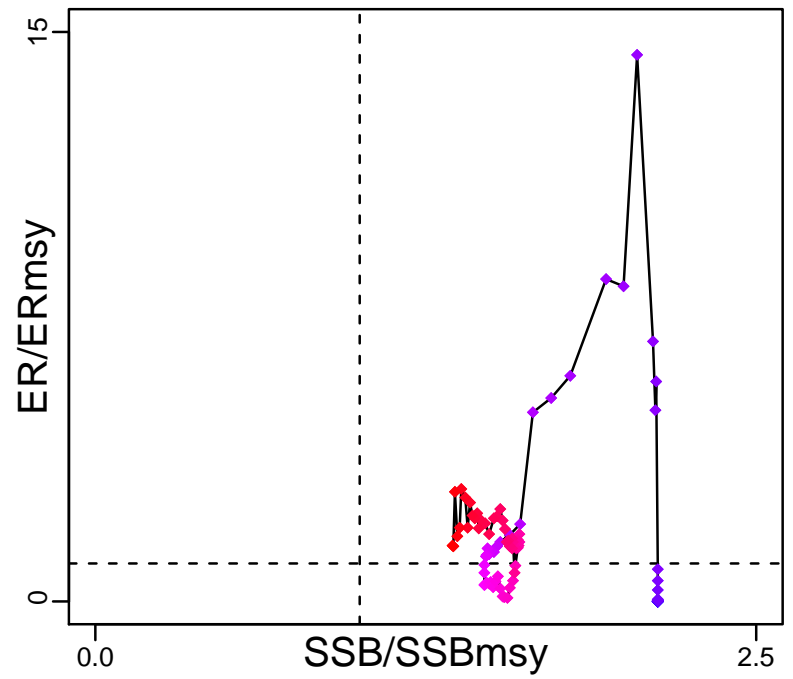
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2011	217,000	-	1+
SSB	SSF-E00	2011	44,600,000	Females	35.5+
TN	-	-	-	-	-
R	R-E00	2011	17,500,000	-	0
F	-	-	-	-	-
ER	ER-ratio	2011	0.008	-	-
TC	TC-MT	2011	1160		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2011	1.356		
SSB/SSBmsy	SSF-E00/SSFmsy-E00	2011	1.342		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2011	1.472		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Spotted spiny dogfish Pacific Coast [SPSDOGPCOAST]

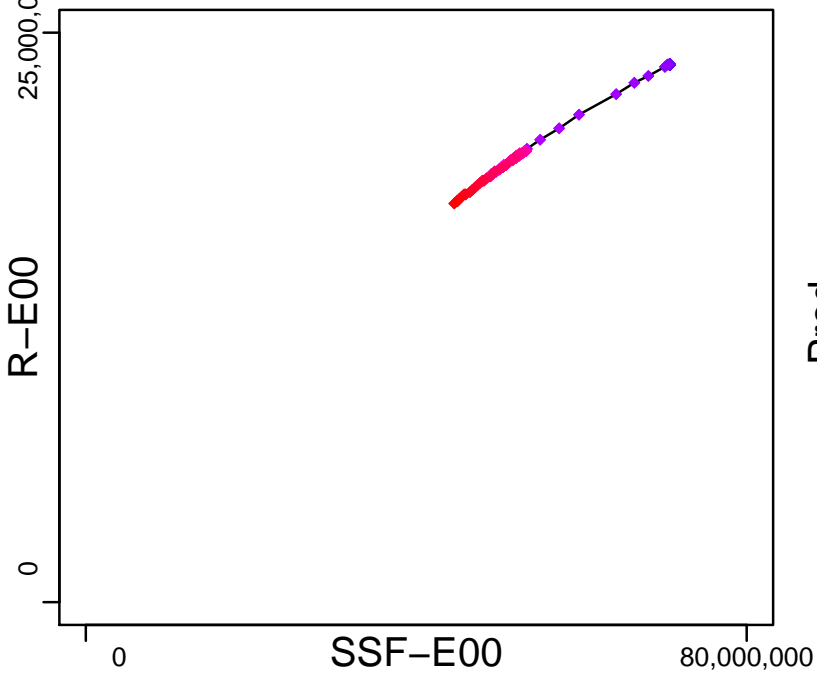
Kobe MSYpref (1916–2011–STACHURA)



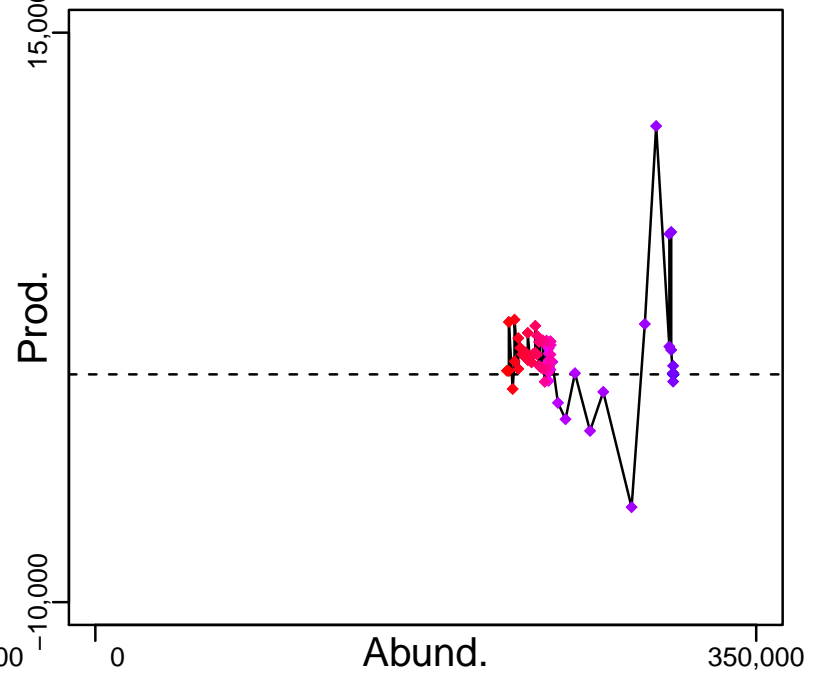
Kobe MGTpref (1916–2011–STACHURA)



Spawner Recruit (1916–2011–STACHURA)



Production (1916–2011–STACHURA)

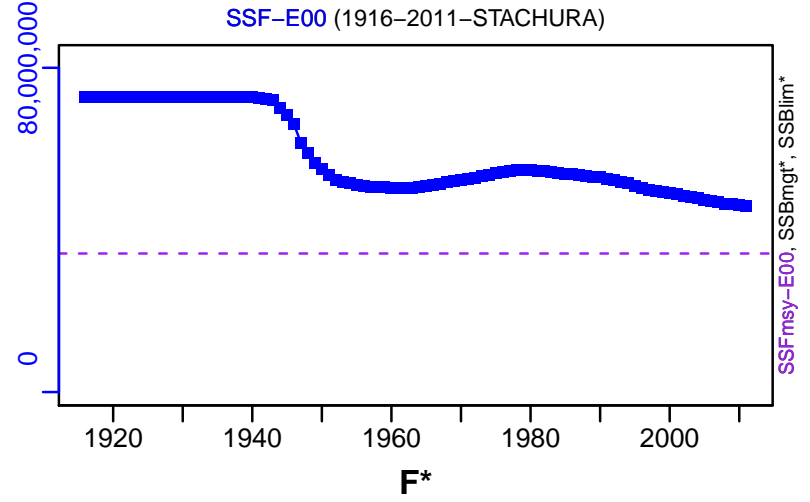
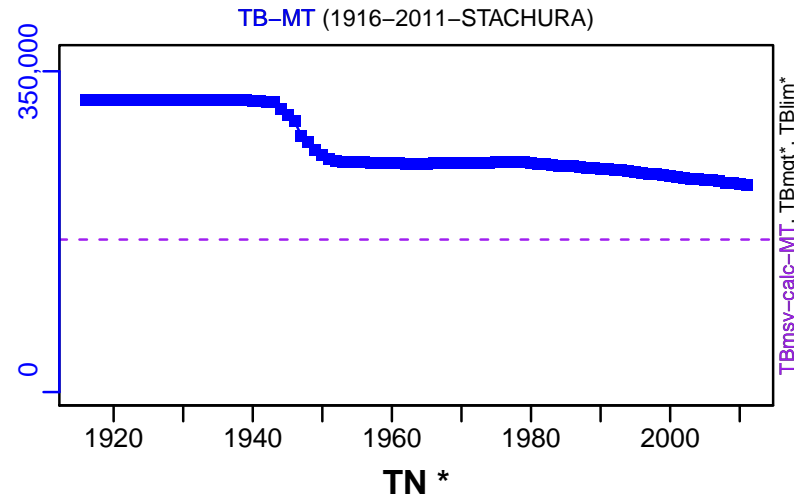


◆ Start Year ◆ End Year * No Data

Spotted spiny dogfish Pacific Coast [SPSDOGPCOAST]

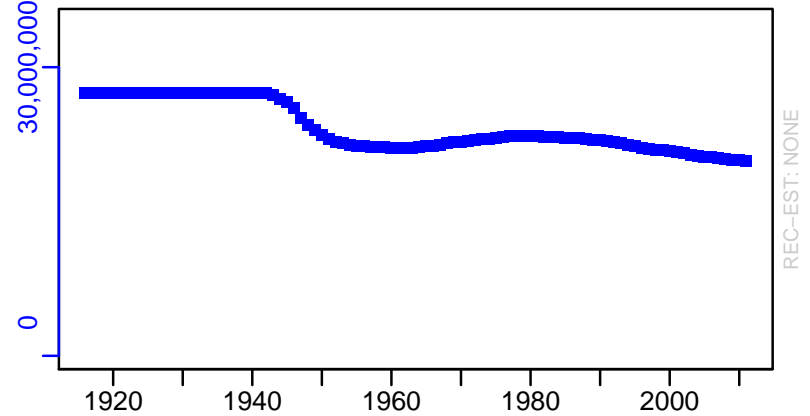
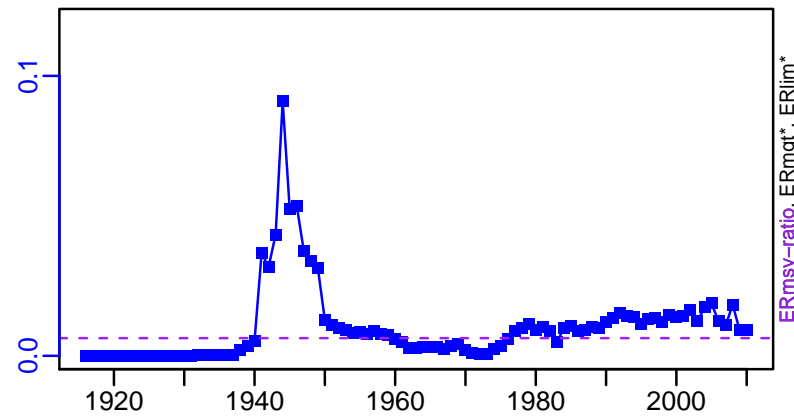
TB-MT (1916-2011-STACHURA)

SSF-E00 (1916-2011-STACHURA)



ER-ratio (1916-2011-STACHURA)

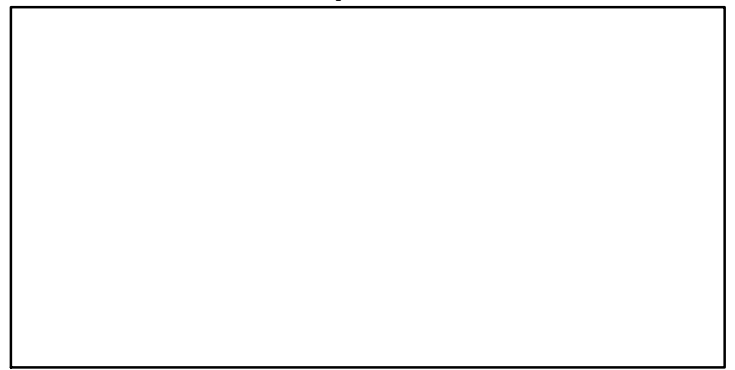
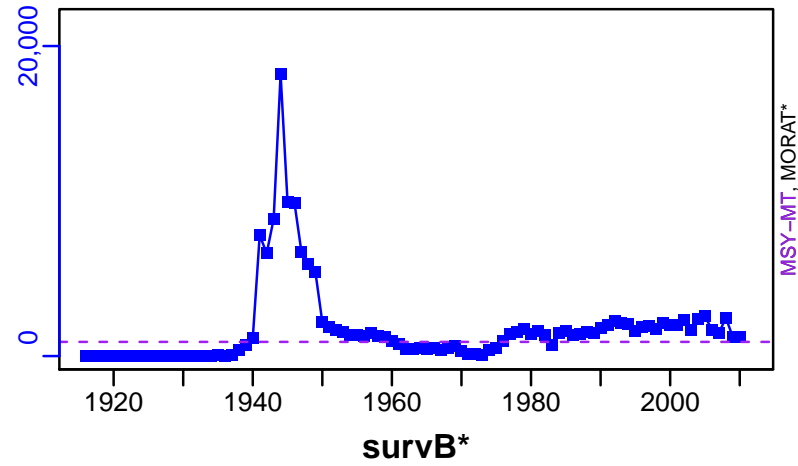
R-E00 (1916-2011-STACHURA)



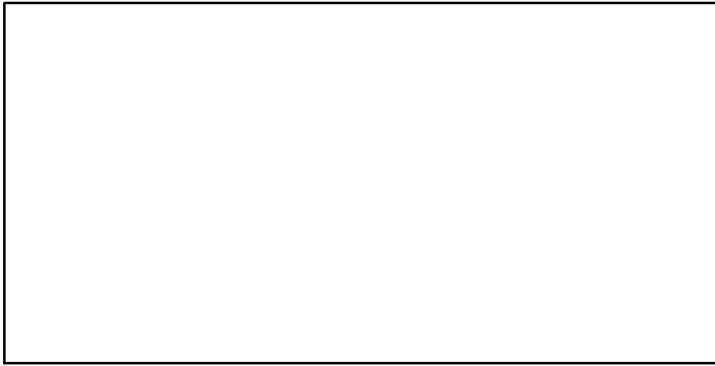
Spotted spiny dogfish Pacific Coast [SPSDOGPCOAST]

TC-MT, TL*, RecC* (1916-2011-STACHURA)

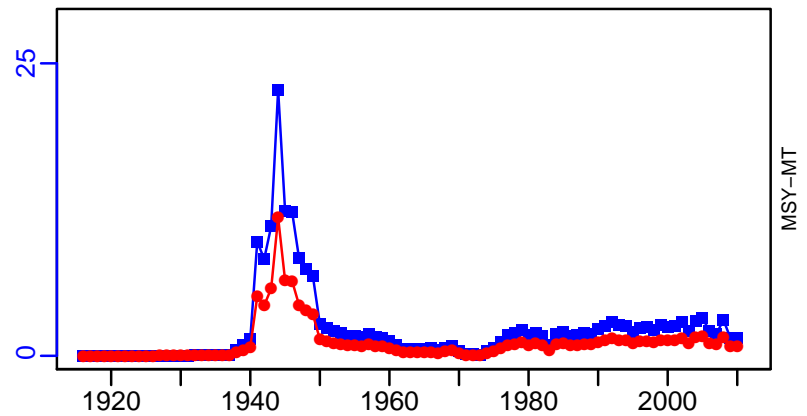
TAC*, Cpair*, Cadv*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1916-2011-STACHURA)



Shortspine thornyhead Pacific Coast [SSTHORNHPCOAST]

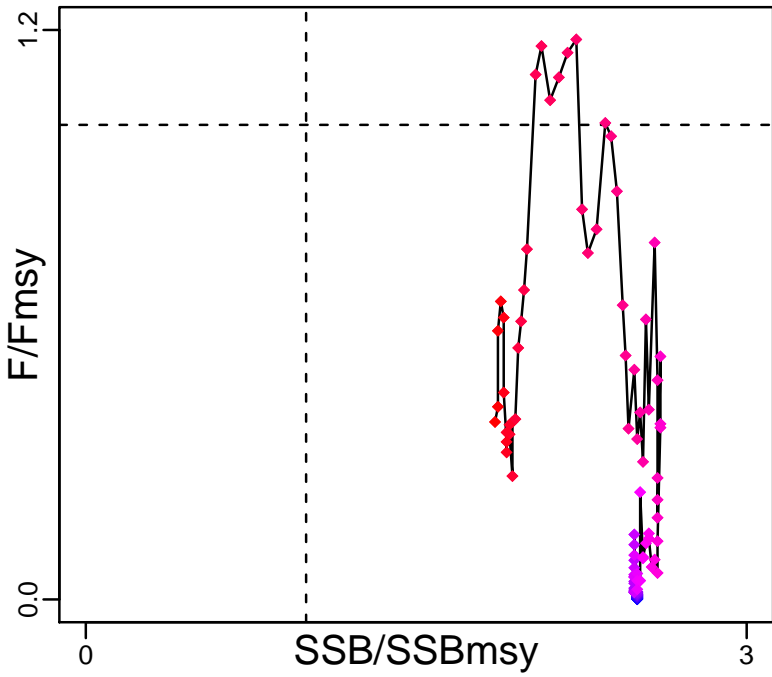
Metadata	
Scientific Name	Sebastes albus
Current Assess ID	NWFSC-SSTHORNHPCOAST-1901-2013-SISIMP2016
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2005, 2013

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-MT	2005	86,000
SSBmsy	SSBmsy-MT	2013	75,906
Fmsy	Fmsy-1/yr	2013	0.5
ERmsy	ERmsy-ratio	2005	0.018
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2005	230,500
SSB0	SSB0-MT	2005	130,646
MSY	MSY-MT	2013	2034
M	M-1/yr	2005	0.05
TBlim	-	-	-
SSBlim	SSBlim-MT	2013	47,441
Flim	Flim-1/yr	2013	0.5
ERlim	-	-	-

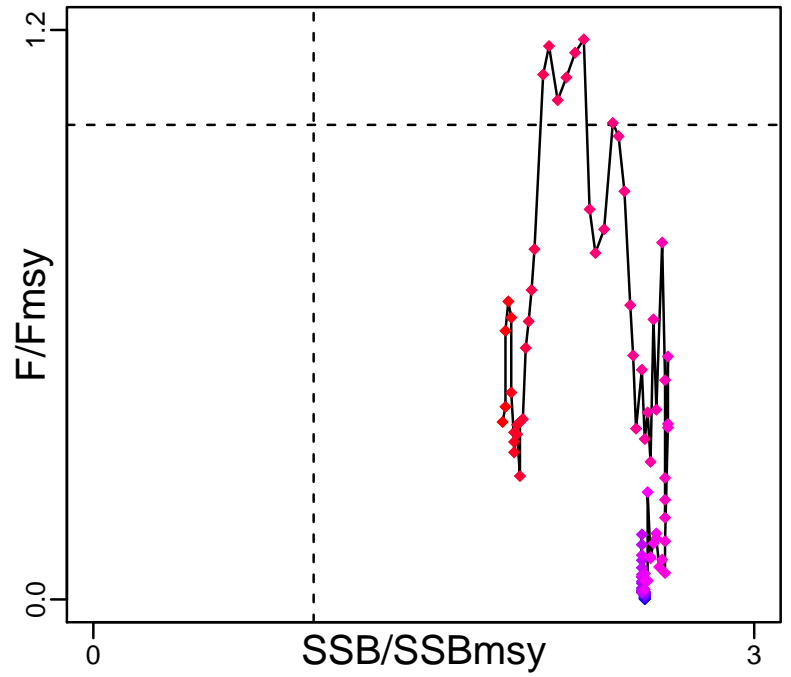
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2013	244,000	-	1+
SSB	SSB-MT	2013	141,000	Females	-
TN	-	-	-	-	-
R	R-E00	2013	28,800,000	-	0
F	F-1/yr	2013	0.187	-	-
ER	ER-calc-ratio	2013	0.004	-	-
TC	TC-MT	2013	911		
TL	TL-MT	2005	867		
TB/TBmsy	TB-MT/TBmsy-MT	2005	1.686		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2013	1.858		
F/Fmsy	F-1/yr/Fmsy-1/yr	2013	0.374		
ER/ERmsy	ER-ratio/ERmsy-ratio	2005	0.265		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Shortspine thornyhead Pacific Coast [SSTHORNHPCOAST]

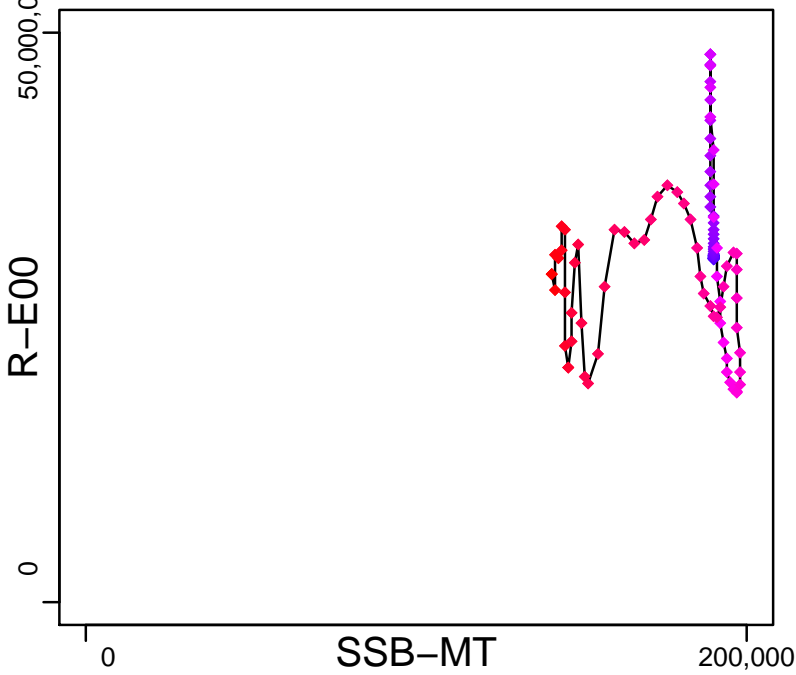
Kobe MSY_{pref} (1901–2013–SISIMP2016)



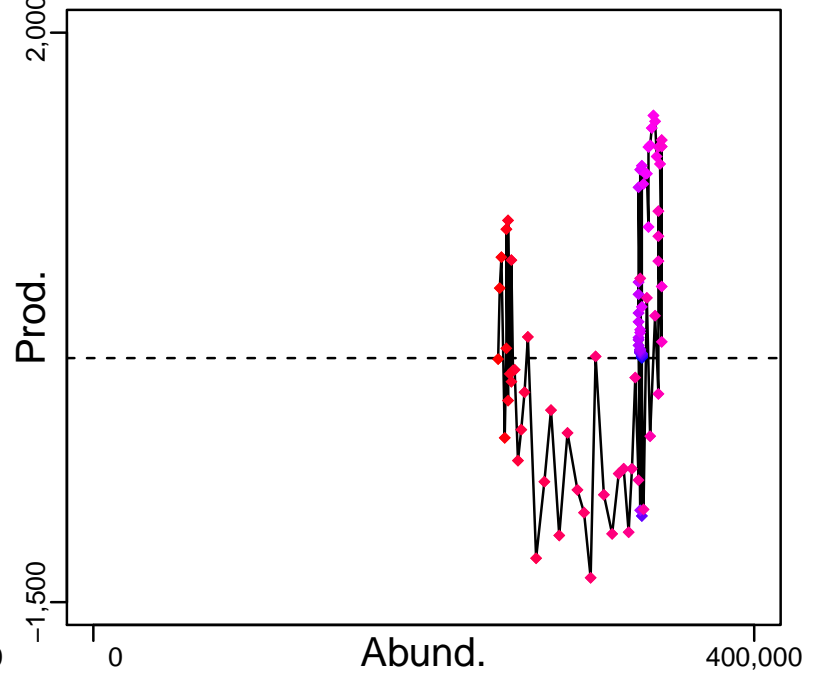
Kobe MGT_{pref} (1901–2013–SISIMP2016)



Spawner Recruit (1901–2013–SISIMP2016)



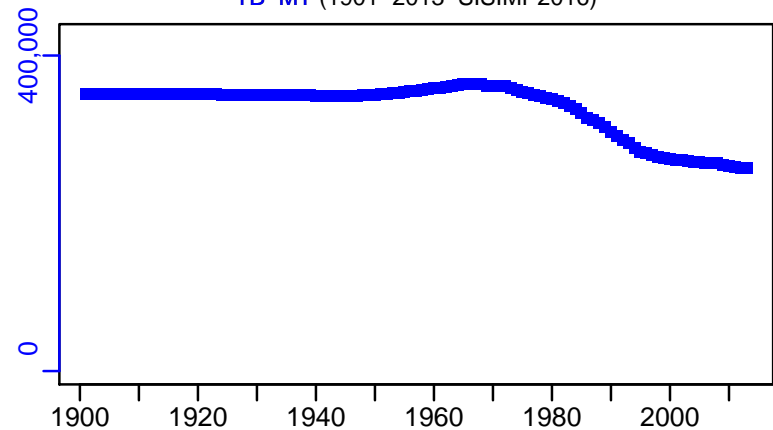
Production (1901–2013–SISIMP2016)



◆ Start Year ◆ End Year * No Data

Shortspine thornyhead Pacific Coast [SSTHORNHPCOAST]

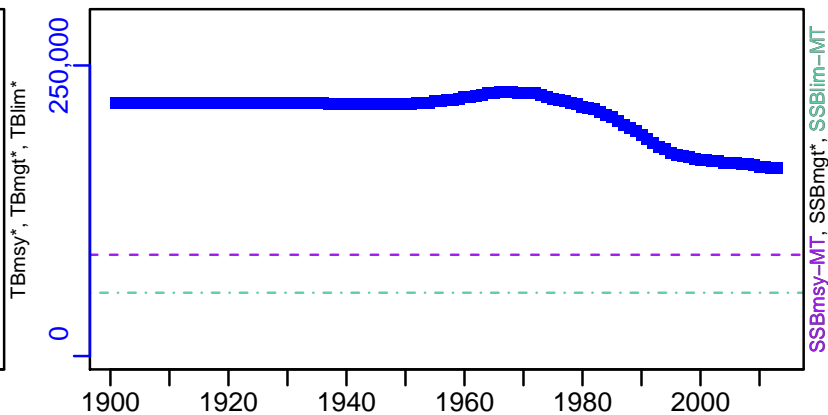
TB-MT (1901-2013-SISIMP2016)



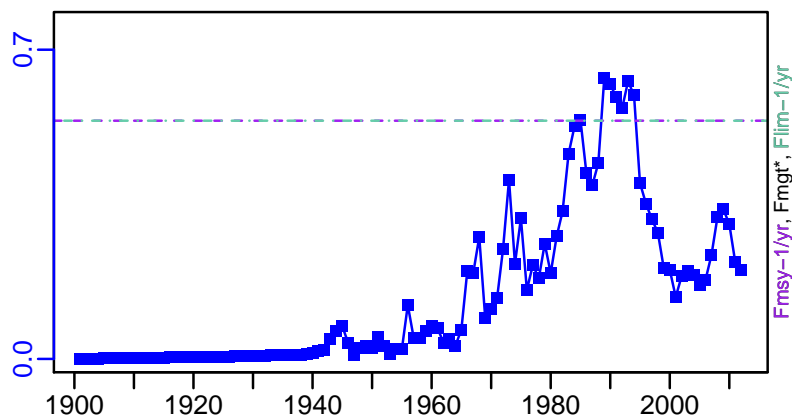
TN *



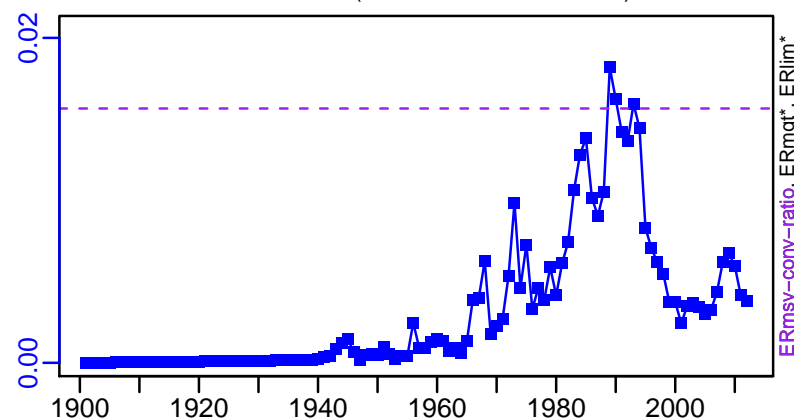
SSB-MT (1901-2013-SISIMP2016)



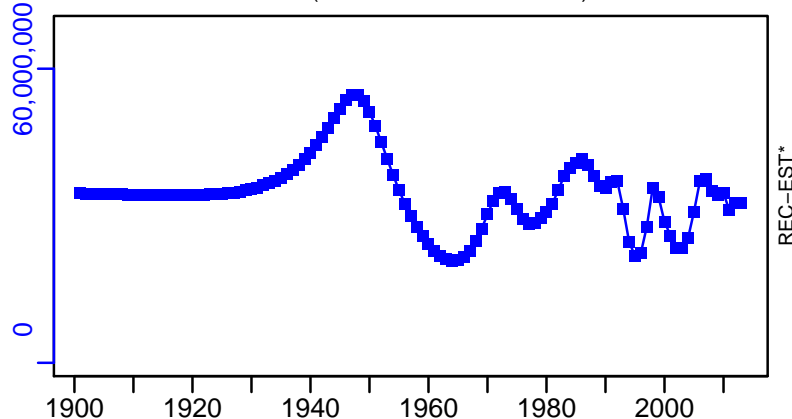
F-1/yr (1901-2013-SISIMP2016)



ER-calc-ratio (1901-2013-SISIMP2016)



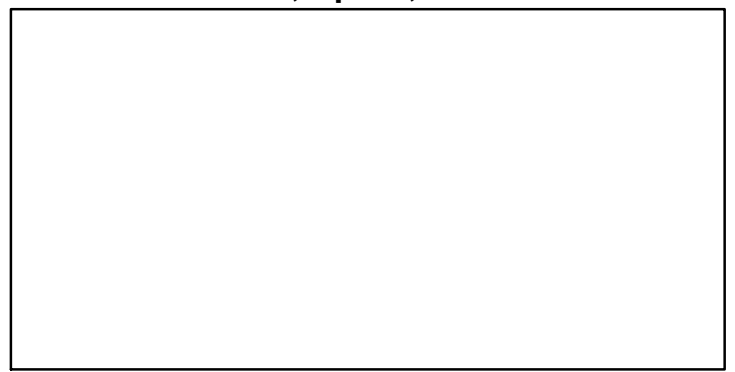
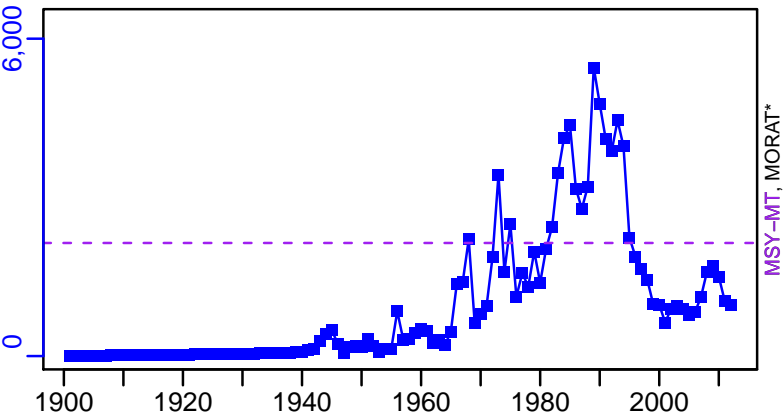
R-E00 (1901-2013-SISIMP2016)



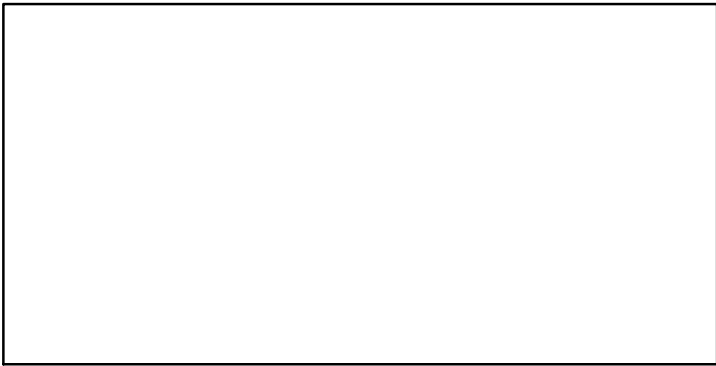
Shortspine thornyhead Pacific Coast [SSTHORNHPCOAST]

TC-MT, TL*, RecC* (1901-2013-SISIMP2016)

TAC*, Cpair*, Cadv*



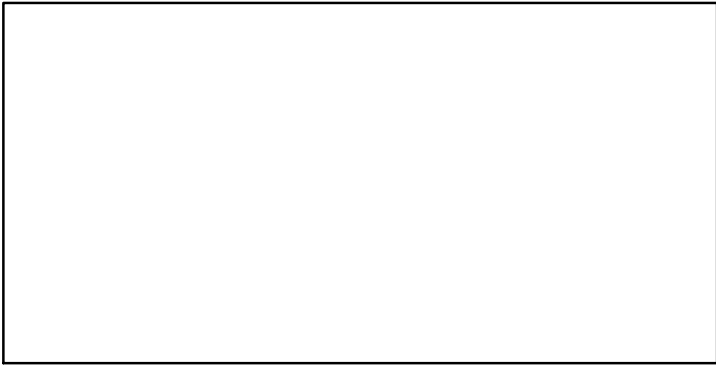
survB*



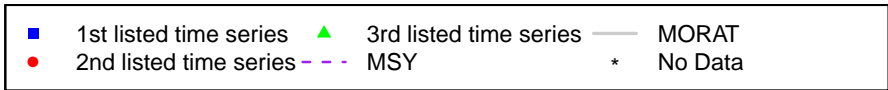
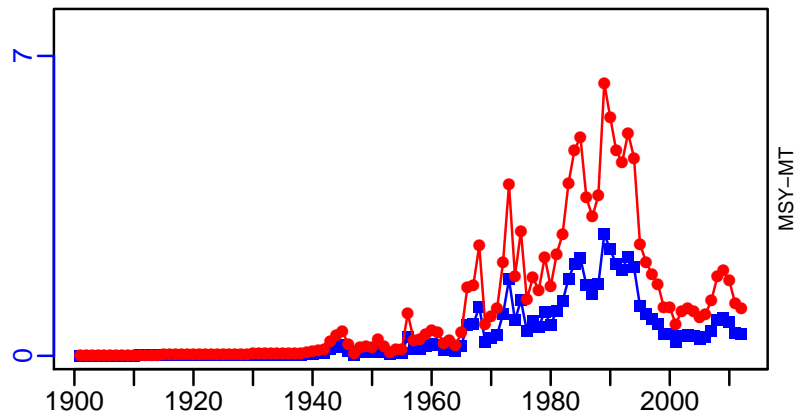
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1901-2013-SISIMP2016)



Starry flounder Northern Pacific Coast [STFLOUNNPCOAST]

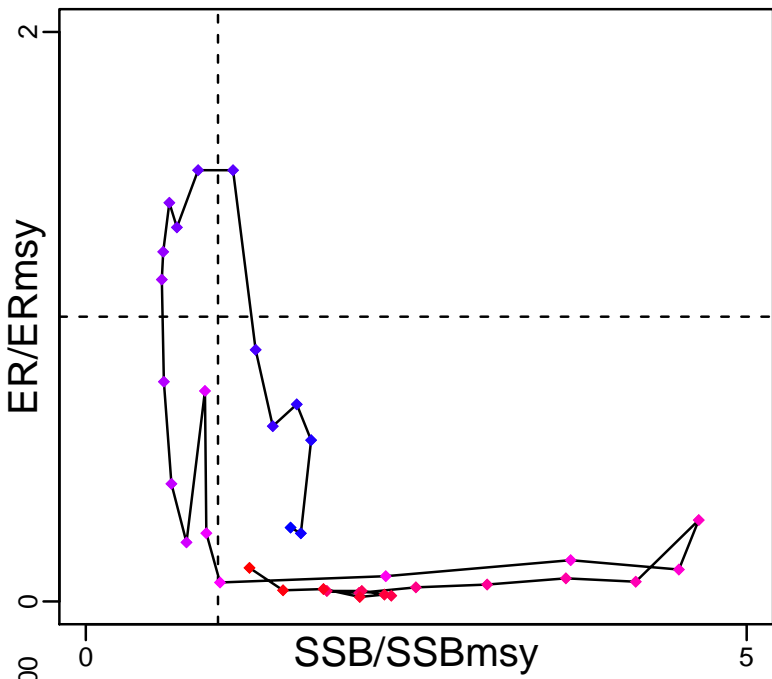
Metadata	
Scientific Name	Platichthys stellatus
Current Assess ID	SWFSC-STFLOUNNPCOAST-1970-2005-STANTON
Area	Northern Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Southwest Fisheries Science Center
Asmts in RAM	2005

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2005	4840
SSBmsy	SSBmsy-pr-MT	2005	1930
Fmsy	-	-	-
ERmsy	ERmsy-pr-ratio	2005	0.169
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2005	12,102
SSB0	SSB0-MT	2005	4824
MSY	MSY-MT	2005	818
M	M-1/yr	2005	0.3
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

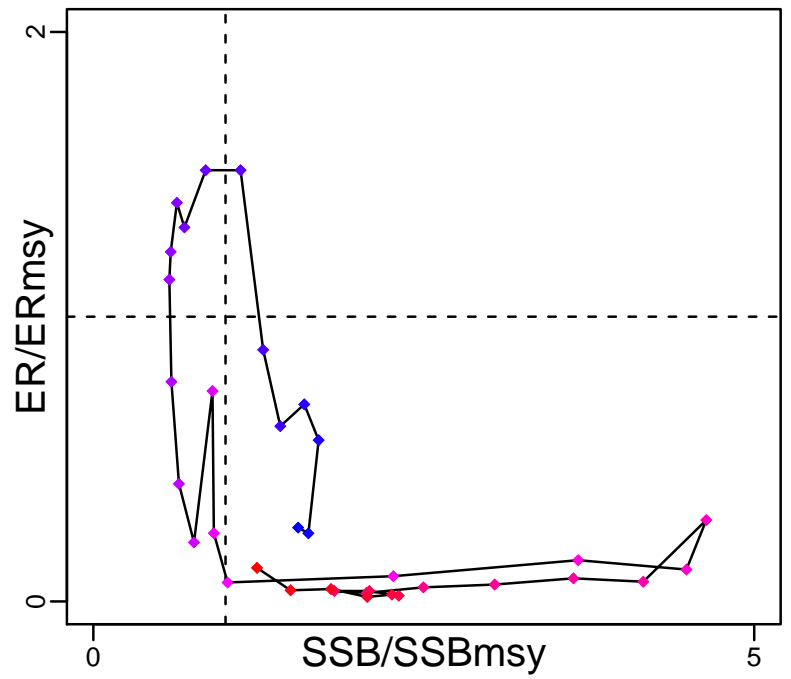
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2005	5440	-	2+
SSB	SSB-MT	2005	2120	Females	3+
TN	-	-	-	-	-
R	R-E00	2005	1.6×10^9	-	0
F	-	-	-	-	-
ER	ER-calc-ratio	2005	0.02	-	-
TC	TC-MT	2005	104		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2005	1.124		
SSB/SSBmsy	SSB-MT/SSBmsy-pr-MT	2005	1.098		
F/Fmsy	-	-	-		
ER/ERmsy	ER-calc-ratio/ERmsy-pr-ratio	2005	0.118		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Starry flounder Northern Pacific Coast [STFLOUNNPCOAST]

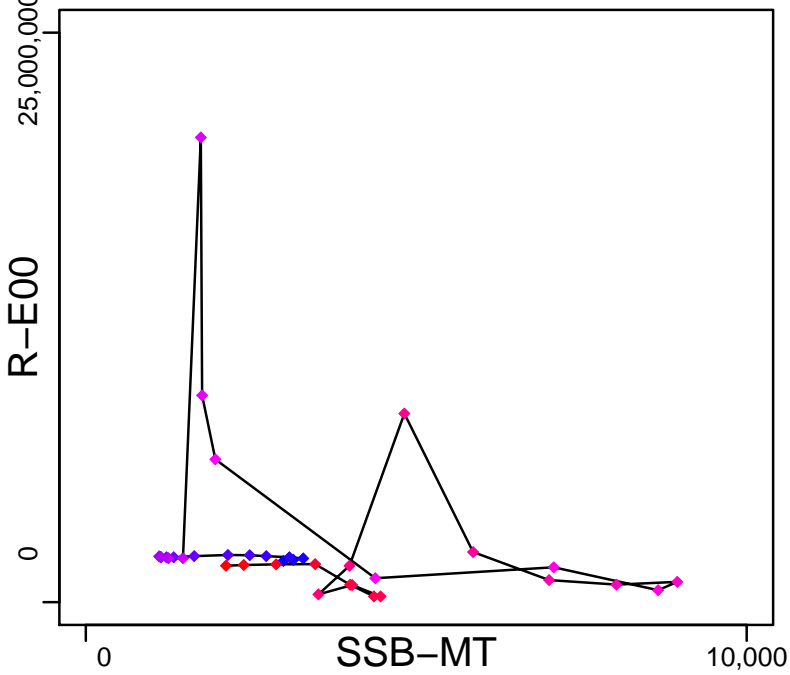
Kobe MSYpref (1970–2005–STANTON)



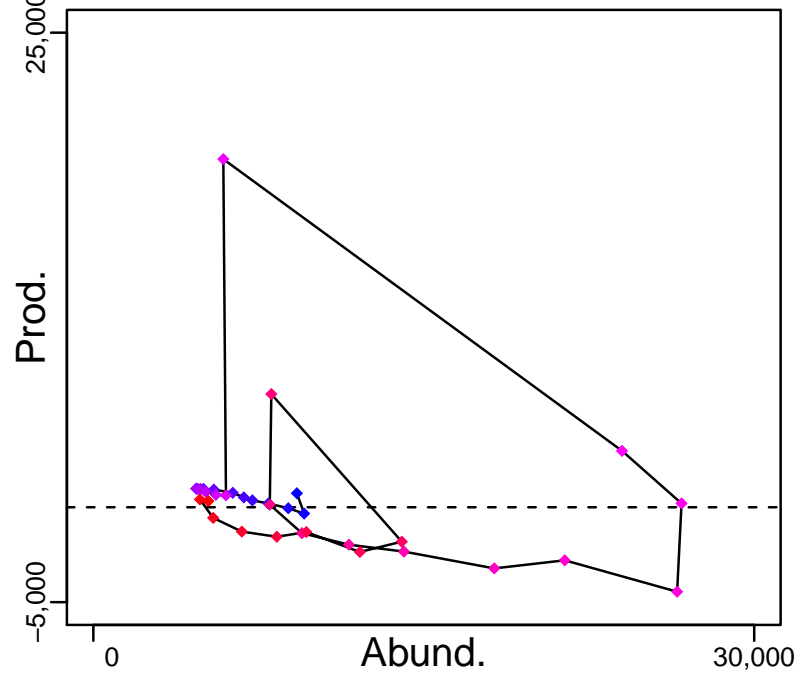
Kobe MGTpref (1970–2005–STANTON)



Spawner Recruit (1970–2005–STANTON)



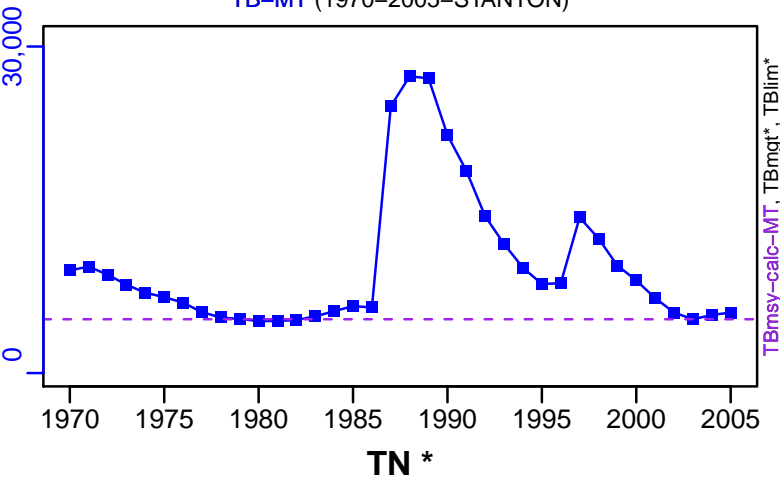
Production (1970–2005–STANTON)



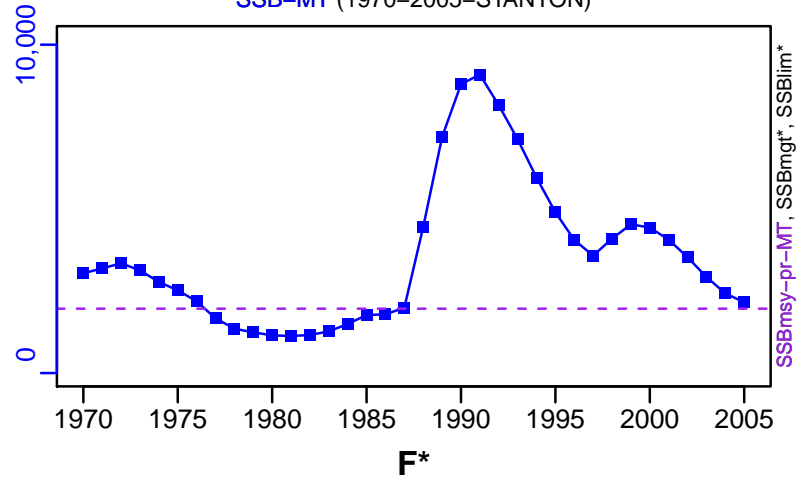
◆ Start Year ◆ End Year * No Data

Starry flounder Northern Pacific Coast [STFLOUNNPCOAST]

TB-MT (1970-2005-STANTON)



SSB-MT (1970-2005-STANTON)



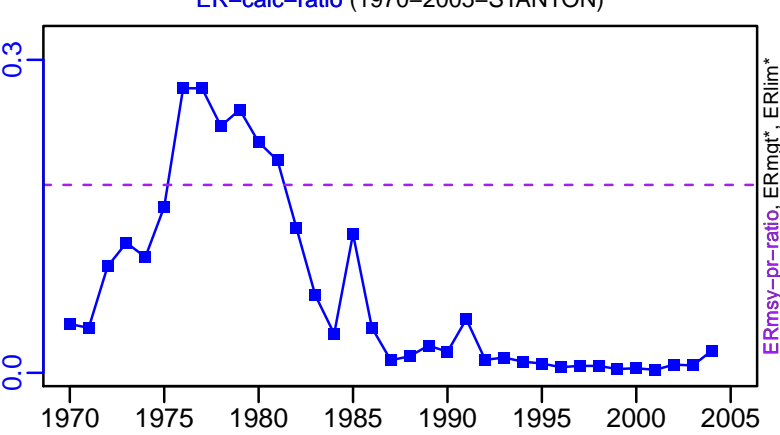
TN *



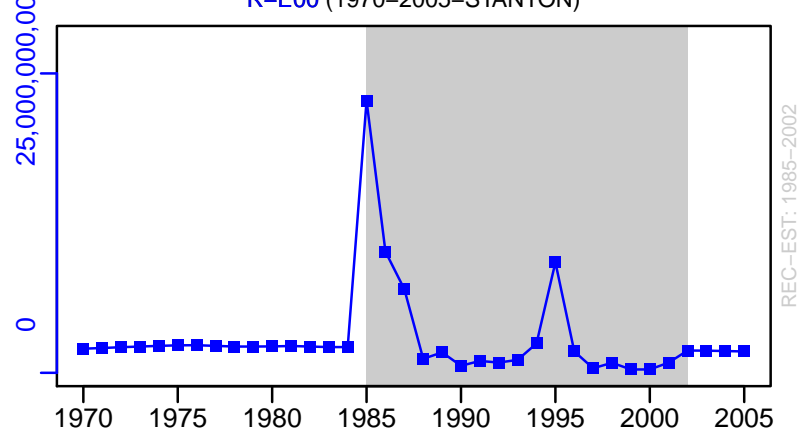
F*



ER-calc-ratio (1970-2005-STANTON)

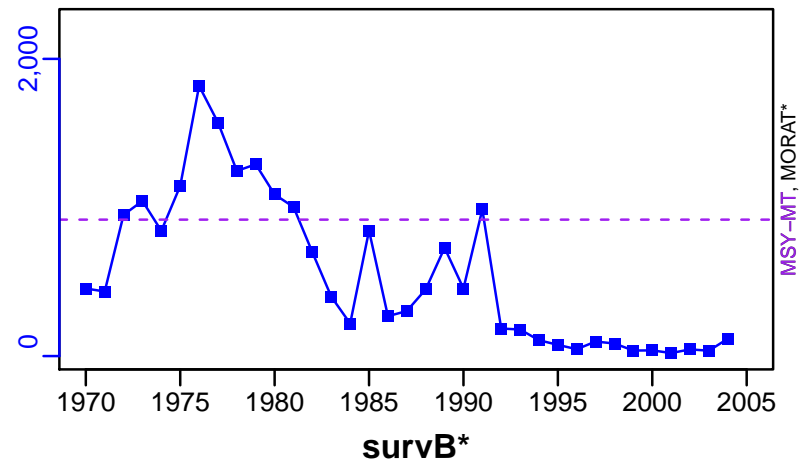


R-E00 (1970-2005-STANTON)



Starry flounder Northern Pacific Coast [STFLOUNNPCOAST]

TC-MT, TL*, RecC* (1970-2005-STANTON)



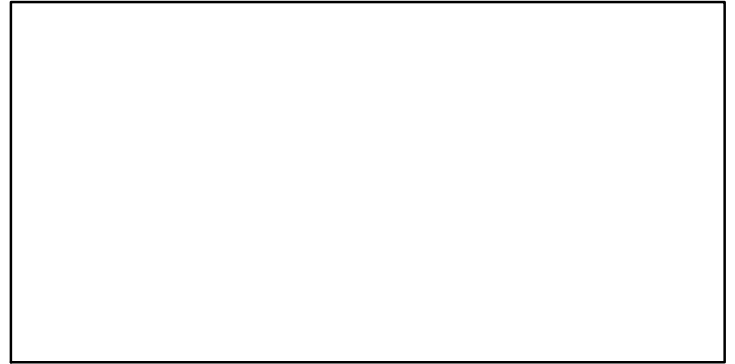
TAC*, Cpair*, Cadv*



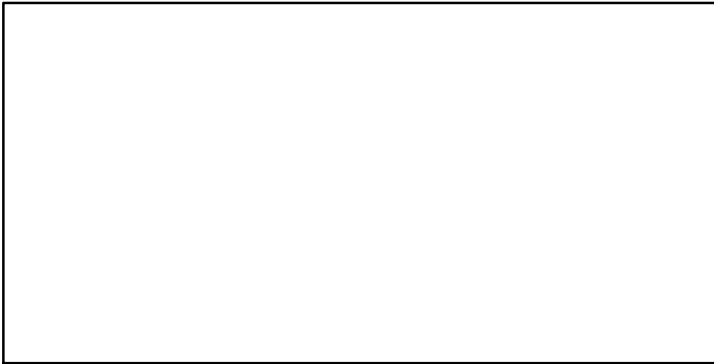
survB*



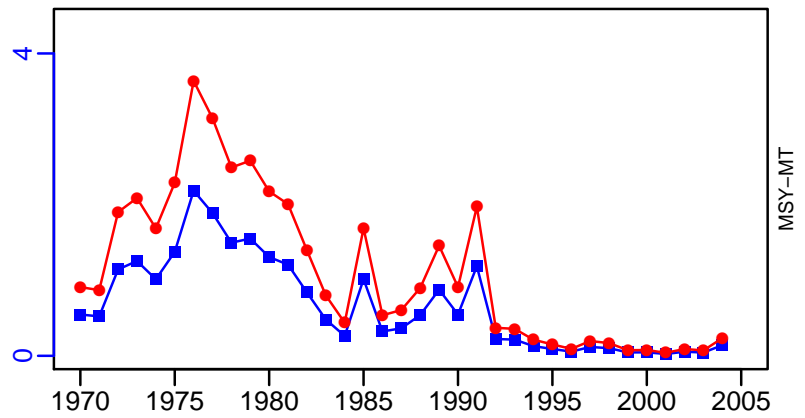
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1970-2005-STANTON)



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

Starry flounder Southern Pacific Coast [STFLOUNSPCOAST]

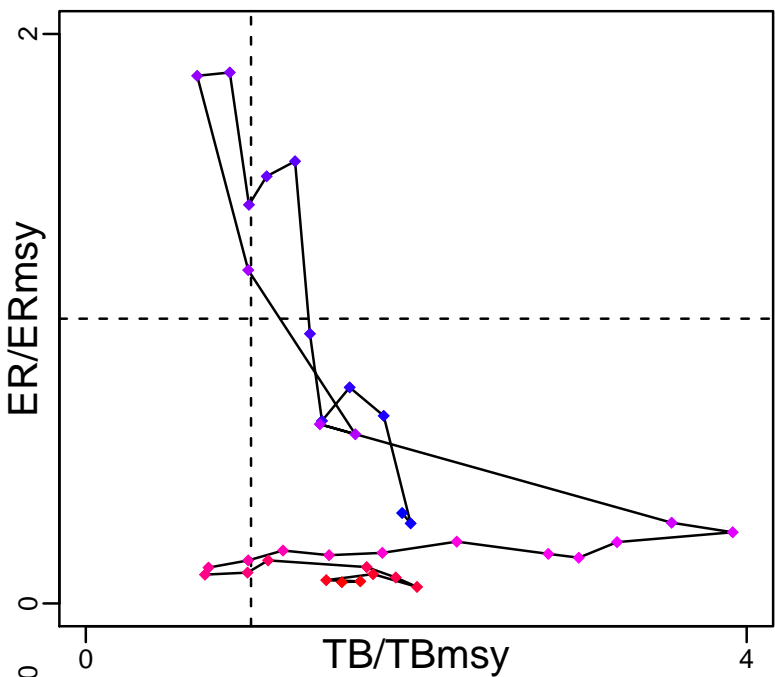
Metadata	
Scientific Name	Platichthys stellatus
Current Assess ID	SWFSC-STFLOUNSPCOAST-1970-2005-STANTON
Area	Southern Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Southwest Fisheries Science Center
Asmts in RAM	2005

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-MT	2005	2329
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-calc-ratio	2005	0.17
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2005	5854
SSB0	SSB0-MT	2005	2334
MSY	MSY-MT	2005	396
M	M-1/yr	2005	0.3
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

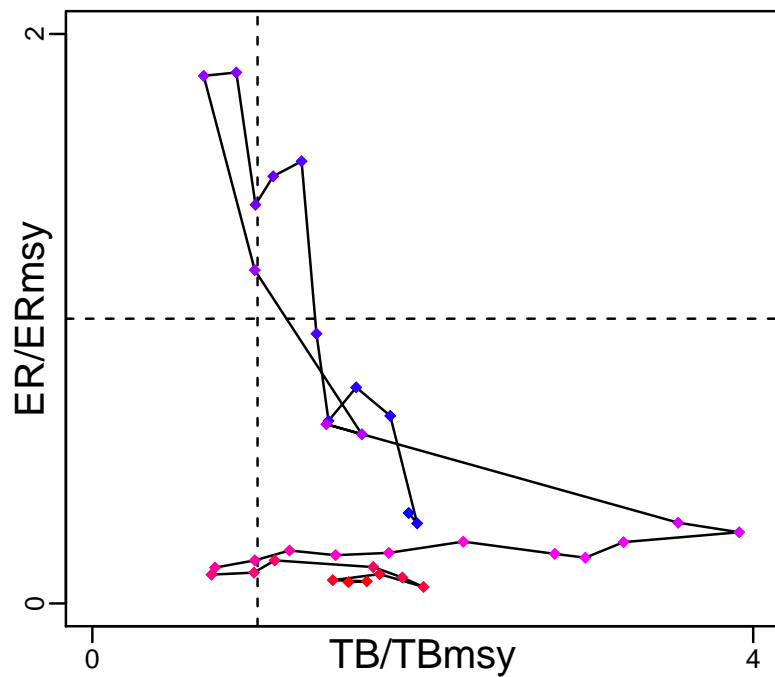
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2005	3460	-	2+
SSB	SSB-MT	2005	1450	Females	3+
TN	-	-	-	-	-
R	R-E00	2005	8.07×10^8	-	0
F	-	-	-	-	-
ER	ER-ratio	2005	0.013	-	-
TC	TC-MT	2005	46		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-MT	2005	1.485		
SSB/SSBmsy	SSB-MT/(SSB0-MT*0.368)	2005	1.688		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-calc-ratio	2005	0.075		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Starry flounder Southern Pacific Coast [STFLOUNSPCOAST]

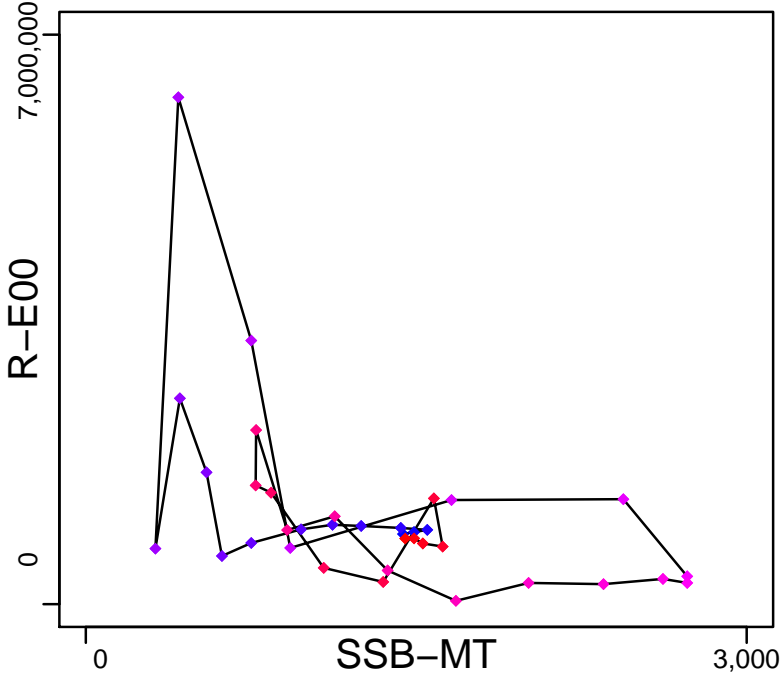
Kobe MSYpref (1970–2005–STANTON)



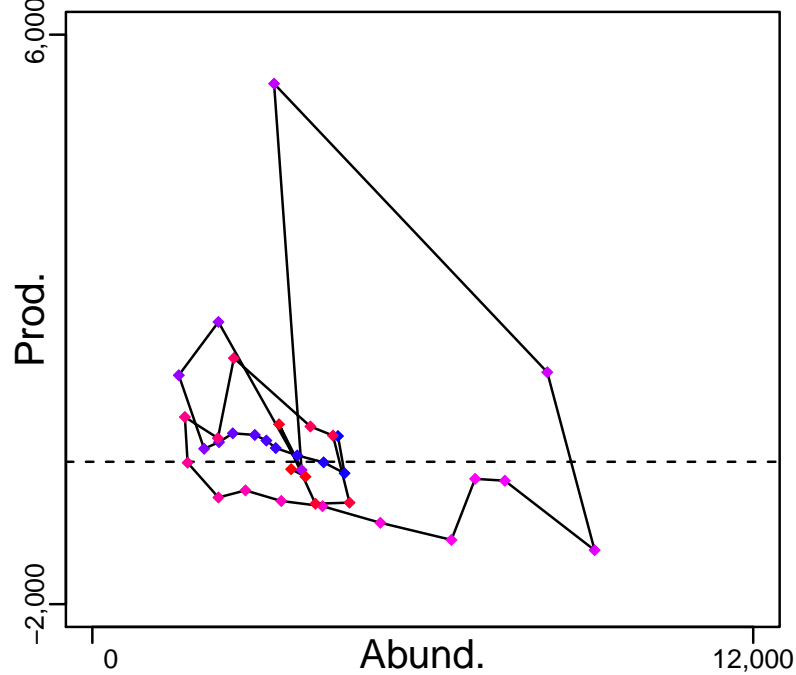
Kobe MGTpref (1970–2005–STANTON)



Spawner Recruit (1970–2005–STANTON)



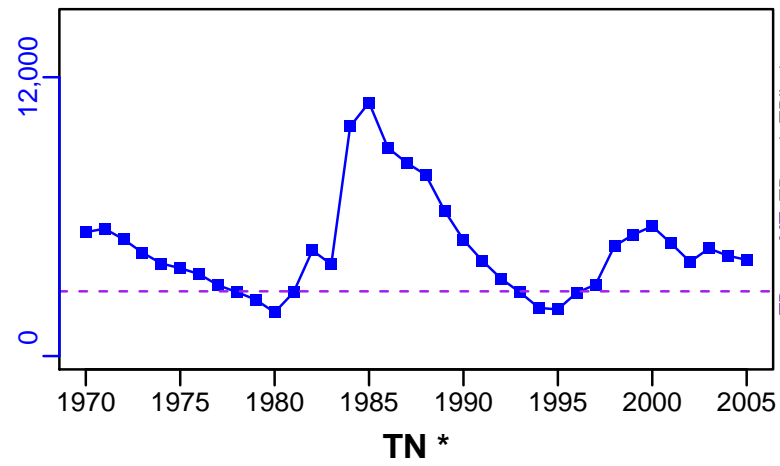
Production (1970–2005–STANTON)



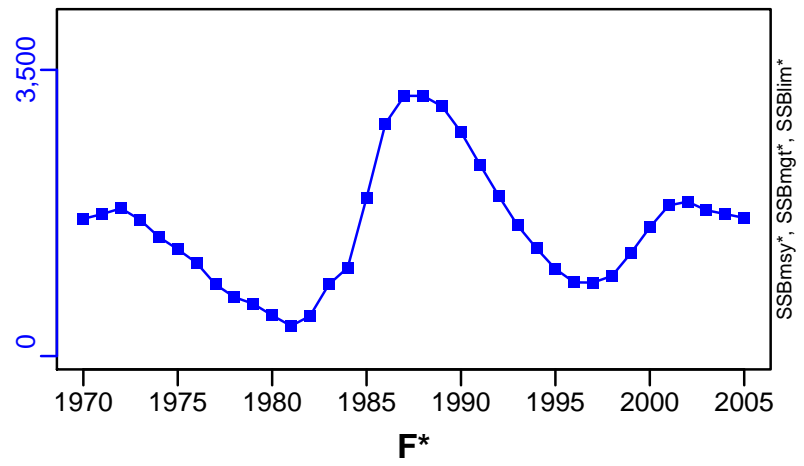
◆ Start Year ◆ End Year * No Data

Starry flounder Southern Pacific Coast [STFLOUNSPCOAST]

TB-MT (1970–2005–STANTON)

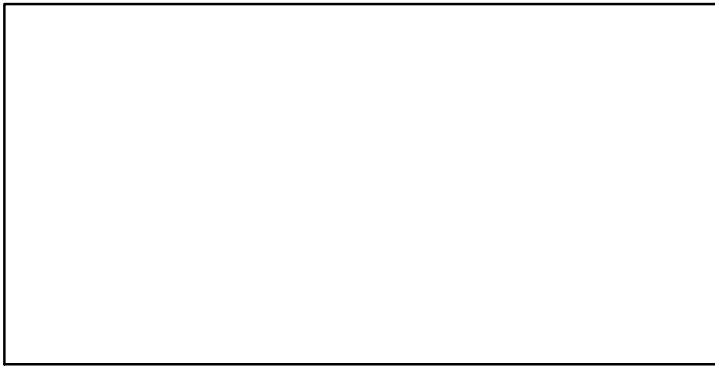


SSB-MT (1970–2005–STANTON)

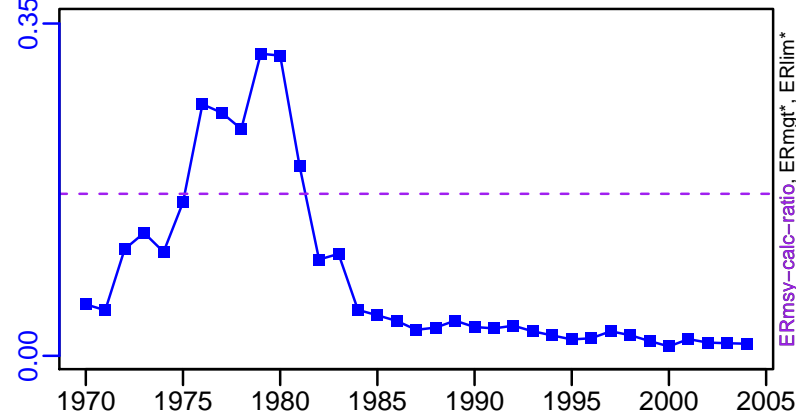


TN *

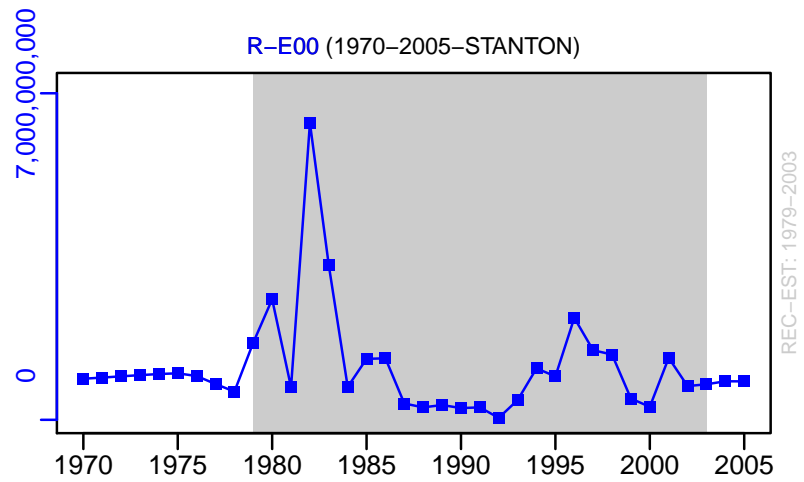
F*



ER-ratio (1970–2005–STANTON)

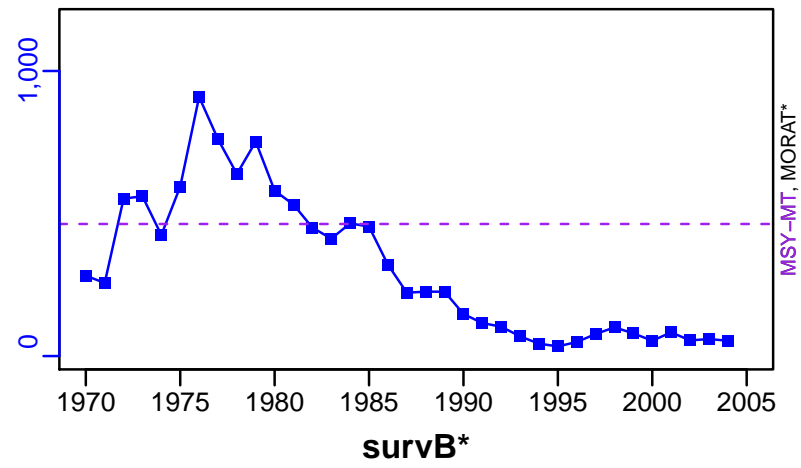


R-E00 (1970–2005–STANTON)



Starry flounder Southern Pacific Coast [STFLOUNSPCOAST]

TC-MT, TL*, RecC* (1970-2005-STANTON)



TAC*, Cpair*, Cadv*



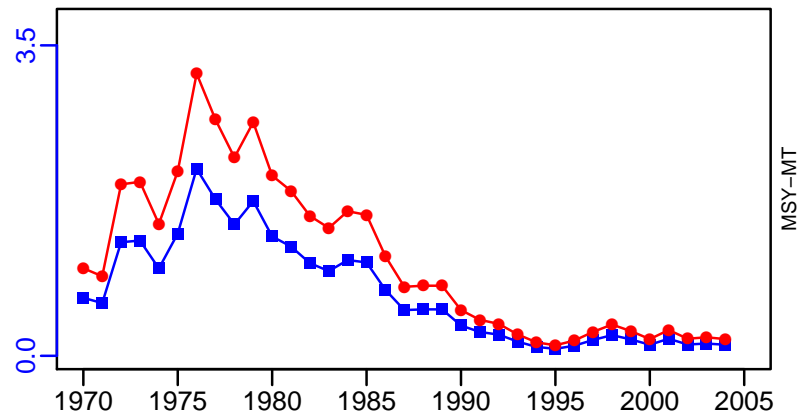
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1970-2005-STANTON)



Widow rockfish Pacific Coast [WROCKPCOAST]

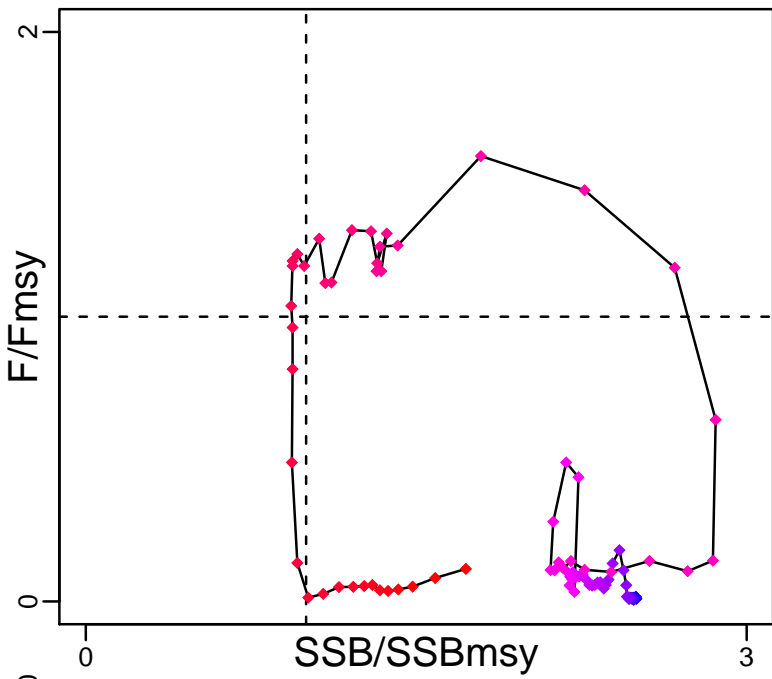
Metadata	
Scientific Name	Sebastes entomelas
Current Assess ID	NWFSC-WROCKPCOAST-1916-2015-SISIMP2016
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2011, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2011	45,750
SSBmsy	SSBmsy-MT	2015	32,283
Fmsy	Fmsy-1/yr	2015	0.5
ERmsy	ERmsy-ratio	2011	0.12
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2011	28,451
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	SSB0-MT	2011	71,126
MSY	MSY-MT	2015	7776
M	M-1/yr	2011	0.12
TBlim	-	-	-
SSBlim	SSBlim-MT	2015	20,177
Flim	Flim-1/yr	2015	0.5
ERlim	-	-	-

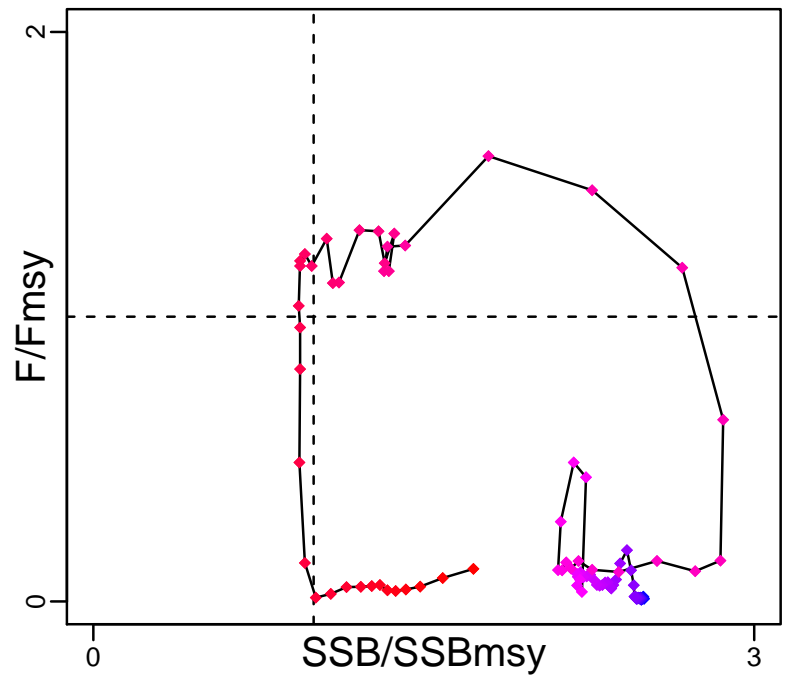
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2015	132,000	Both	4+
SSB	SSB-MT	2015	60,600	Females	-
TN	-	-	-	-	-
R	R-E00	2015	53,400,000	-	0
F	F-1/yr	2015	0.057	-	-
ER	ER-calc-ratio	2015	0.006	-	-
TC	TC-MT	2015	726		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2011	1.491		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2015	1.877		
F/Fmsy	F-1/yr/Fmsy-1/yr	2015	0.114		
ER/ERmsy	ER-ratio/ERmsy-ratio	2011	0.019		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2011	1.276		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Widow rockfish Pacific Coast [WROCKPCOAST]

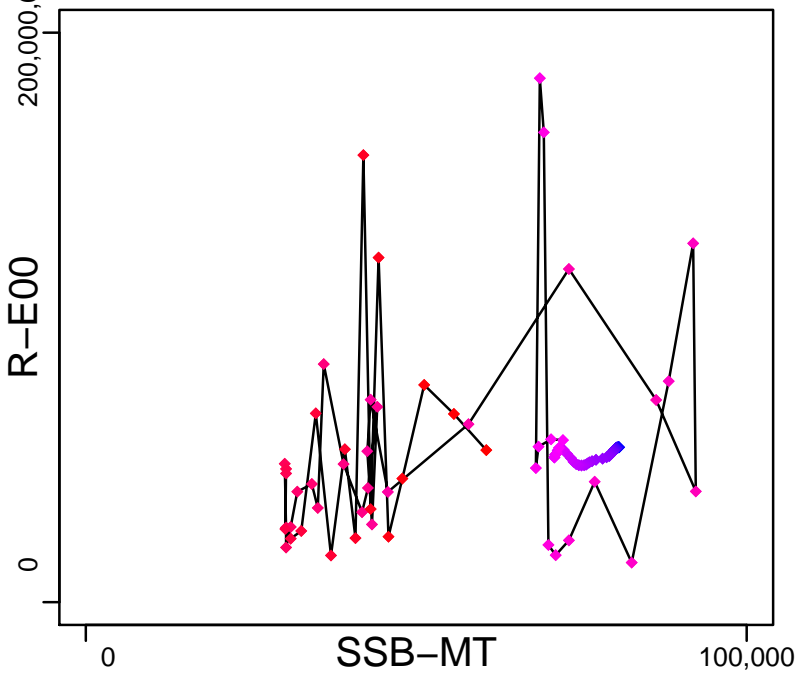
Kobe MSYpref (1916–2015–SISIMP2016)



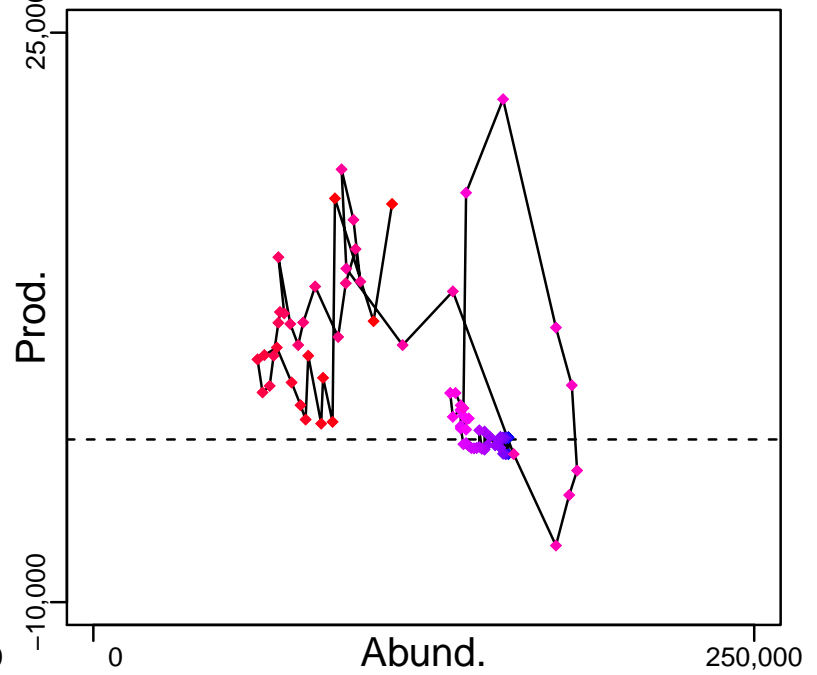
Kobe MGTpref (1916–2015–SISIMP2016)



Spawner Recruit (1916–2015–SISIMP2016)



Production (1916–2015–SISIMP2016)

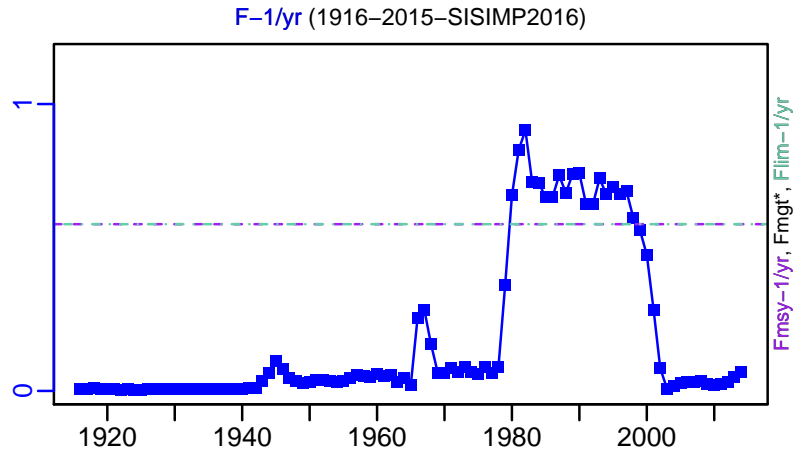
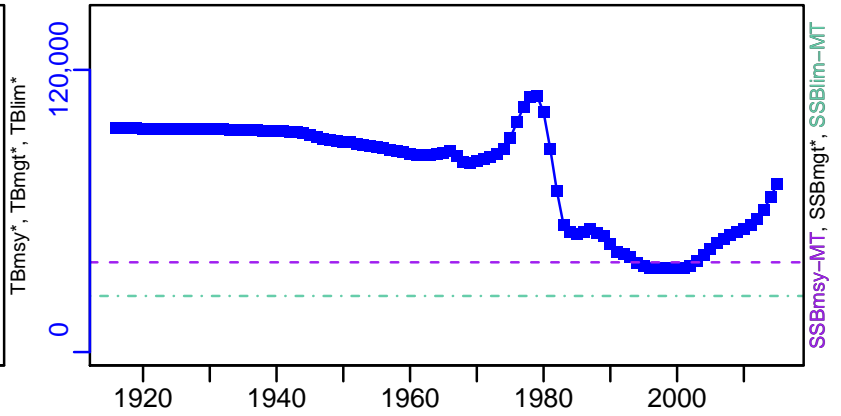
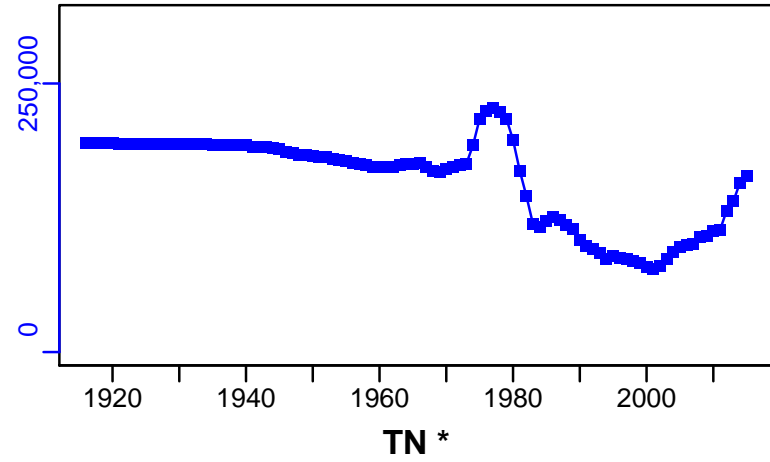


◆ Start Year ◆ End Year * No Data

Widow rockfish Pacific Coast [WROCKPCOAST]

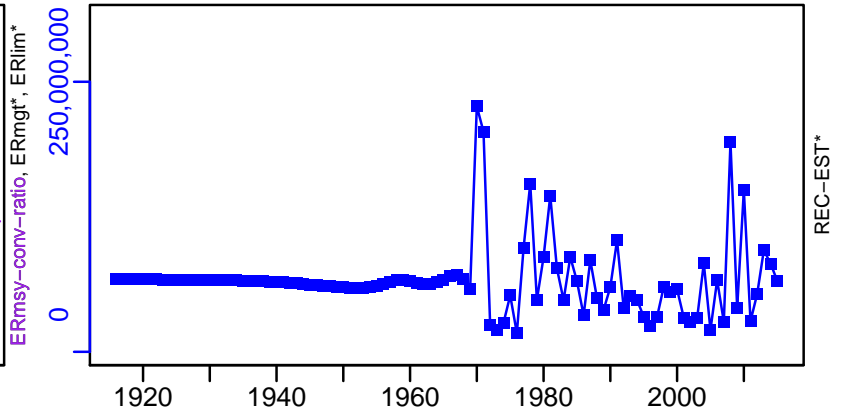
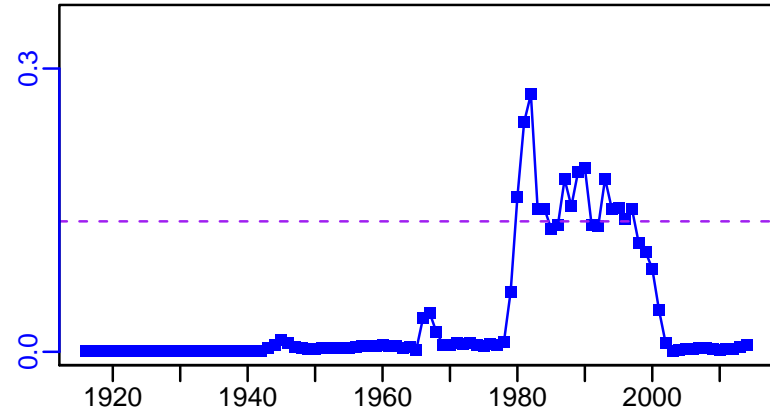
TB-MT (1916-2015-SISIMP2016)

SSB-MT (1916-2015-SISIMP2016)



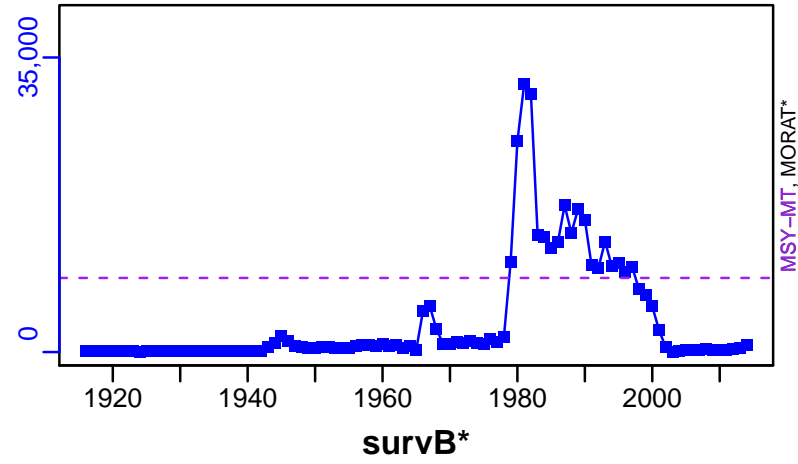
ER-calc-ratio (1916-2015-SISIMP2016)

R-E00 (1916-2015-SISIMP2016)



Widow rockfish Pacific Coast [WROCKPCOAST]

TC-MT, TL*, RecC* (1916-2015-SISIMP2016)



TAC*, Cpair*, Cadv*



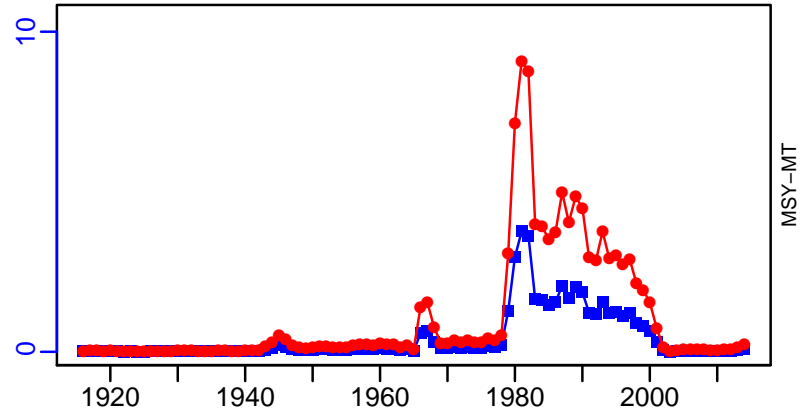
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1916-2015-SISIMP2016)



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

Yelloweye rockfish Pacific Coast [YEYEROCKPCOAST]

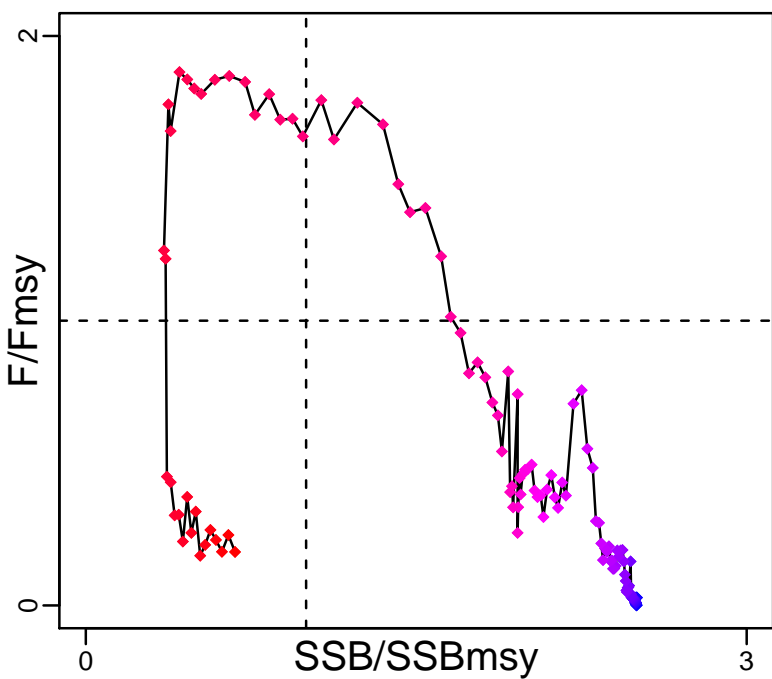
Metadata	
Scientific Name	Sebastes ruberrimus
Current Assess ID	NWFSC-YEYEROCKPCOAST-1889-2017-SISIMP2021
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2017, 2011, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2011	3706
SSBmsy	SSBmsy-E00eggs	2017	455,619,995
Fmsy	Fmsy-1/yr	2017	0.5
ERmsy	ERmsy-ratio	2011	0.017
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2011	8882
SSB0	SSB0-E00eggs	2011	1.03×10^9
MSY	MSY-MT	2017	109
M	M-1/yr	2011	0.046
TBlim	-	-	-
SSBlim	SSBlim-E00eggs	2017	284,760,010
Flim	Flim-1/yr	2017	0.5
ERlim	-	-	-

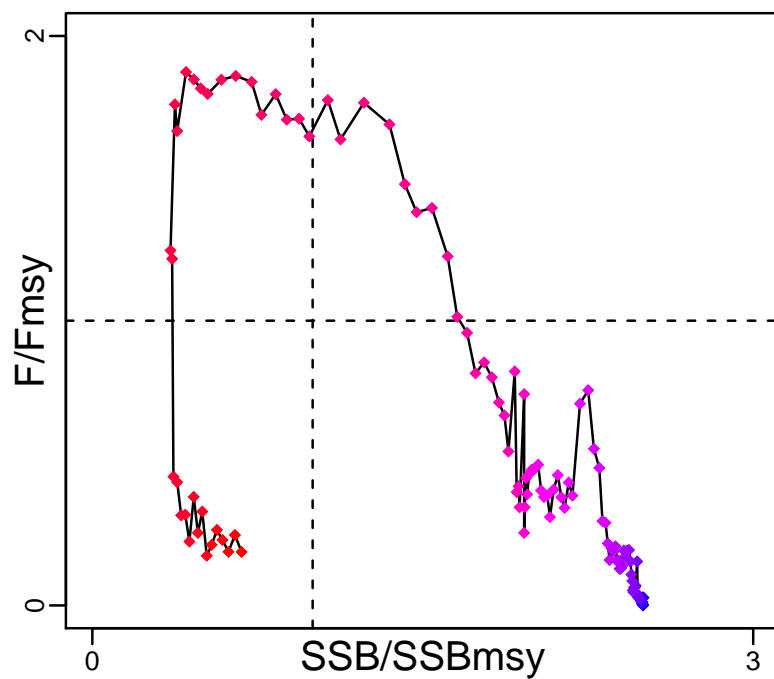
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2017	3432	-	-
SSB	SSB-E00eggs	2017	323,130,000	-	-
TN	-	-	-	-	-
R	R-E00	2017	176,200	-	0
F	F-1/yr	2017	0.094	-	-
ER	ER-calc-ratio	2017	0.003	-	-
TC	TC-MT	2017	10		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2011	0.591		
SSB/SSBmsy	SSB-E00eggs/SSBmsy-E00eggs	2017	0.709		
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	0.188		
ER/ERmsy	ER-calc-ratio/ERmsy-ratio	2011	0.312		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Yelloweye rockfish Pacific Coast [YEYEROCKPCOAST]

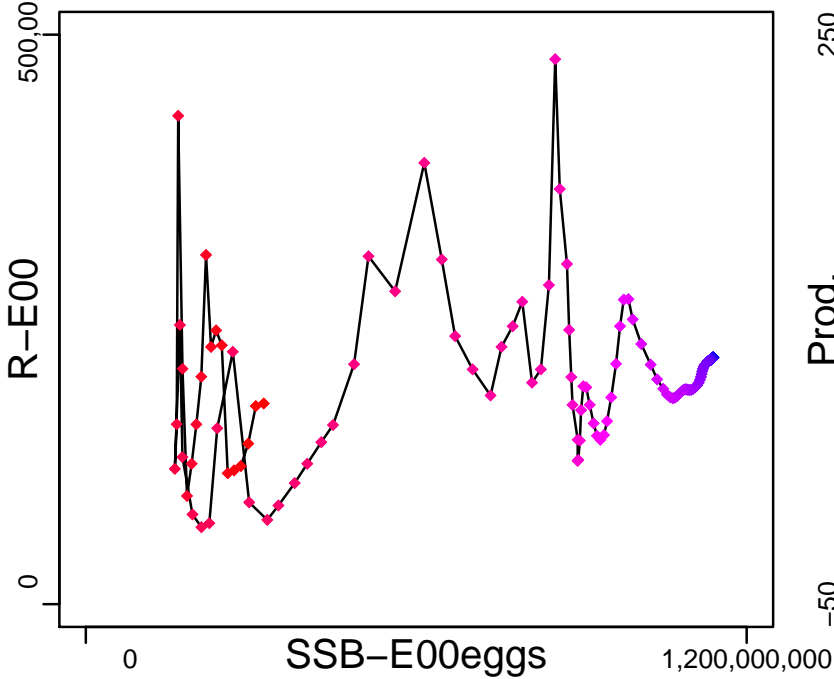
Kobe MSYpref (1889–2017–SISIMP2021)



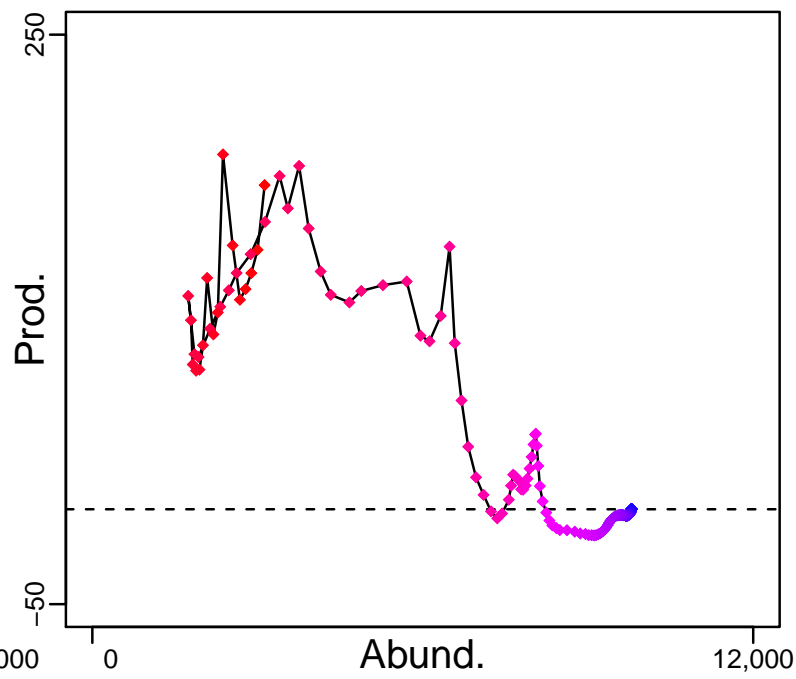
Kobe MGTpref (1889–2017–SISIMP2021)



Spawner Recruit (1889–2017–SISIMP2021)

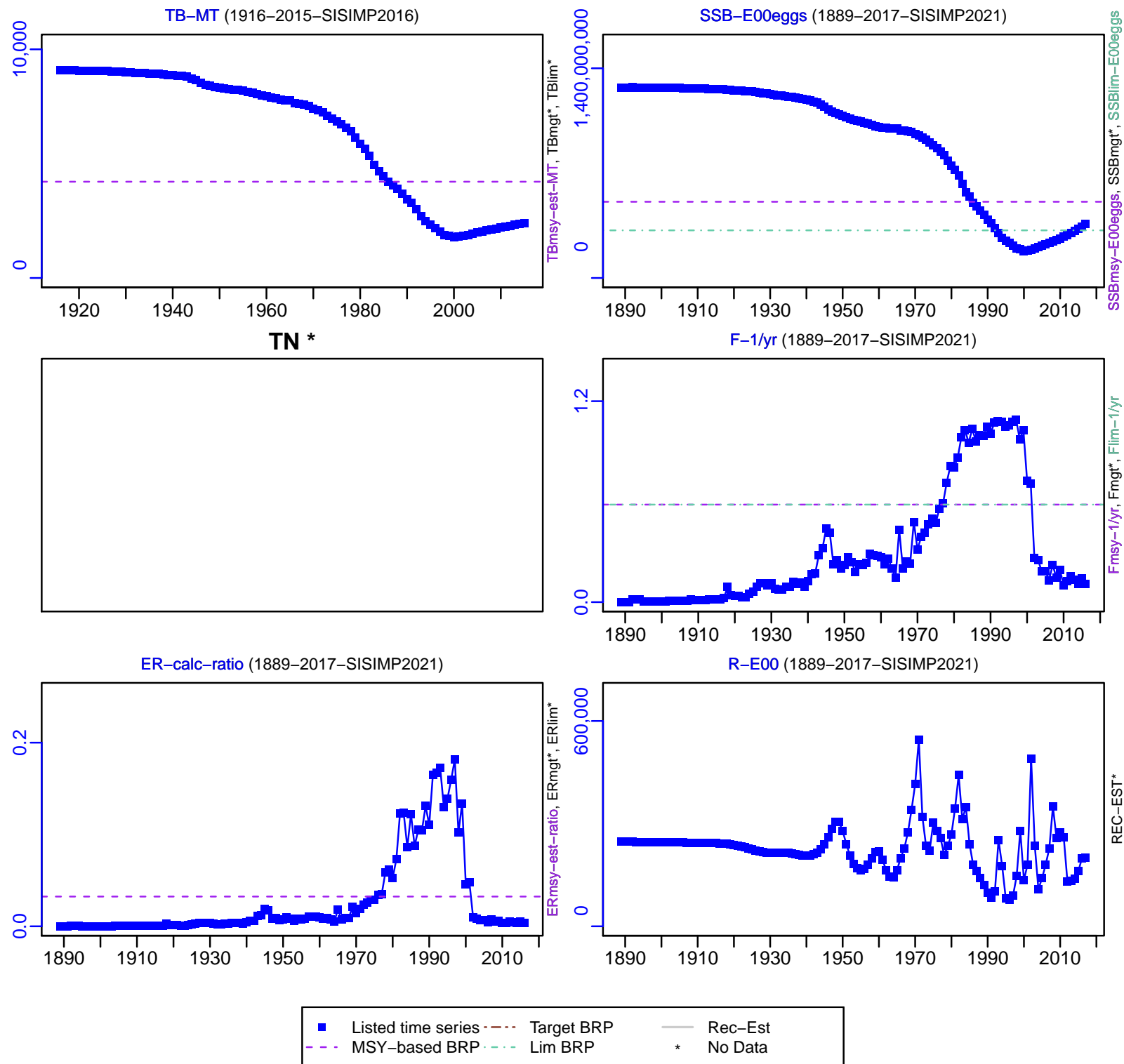


Production (1889–2017–SISIMP2021)



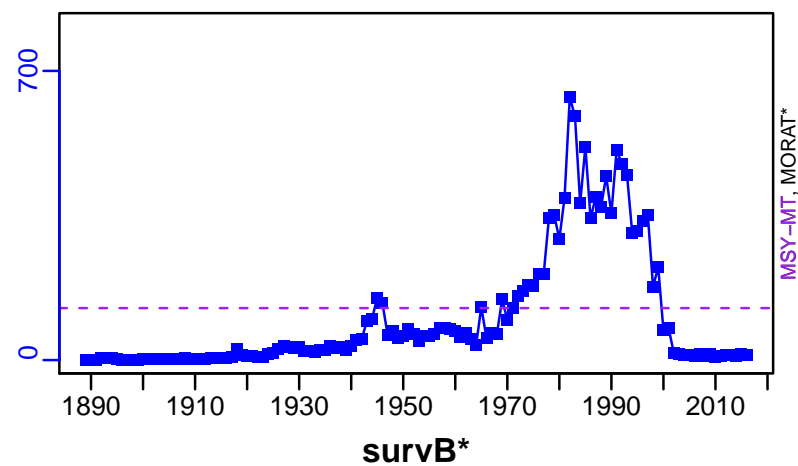
◆ Start Year ◆ End Year * No Data

Yelloweye rockfish Pacific Coast [YEYEROCKPCOAST]



Yelloweye rockfish Pacific Coast [YEYEROCKPCOAST]

TC-MT, TL*, RecC* (1889–2017–SISIMP2021)



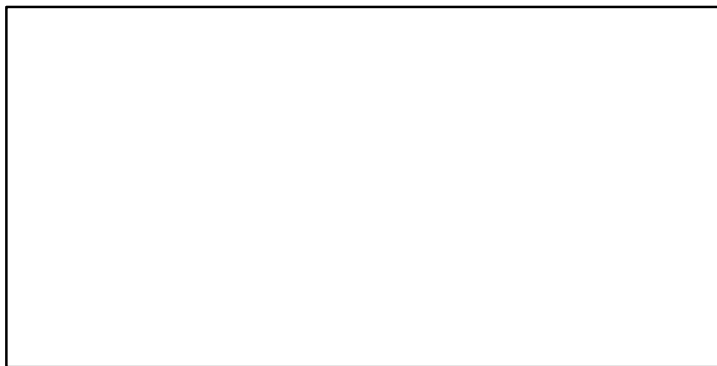
TAC*, Cpair*, Cadv*



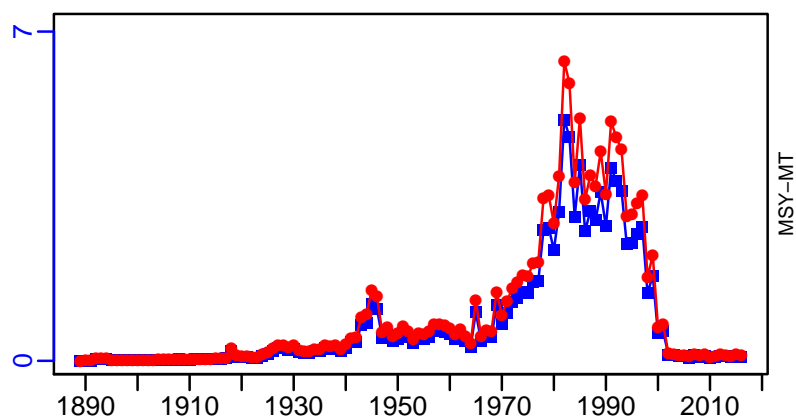
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1889–2017–SISIMP2021)



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

Yellowtail rockfish Northern Pacific Coast [YTROCKNPCOAST]

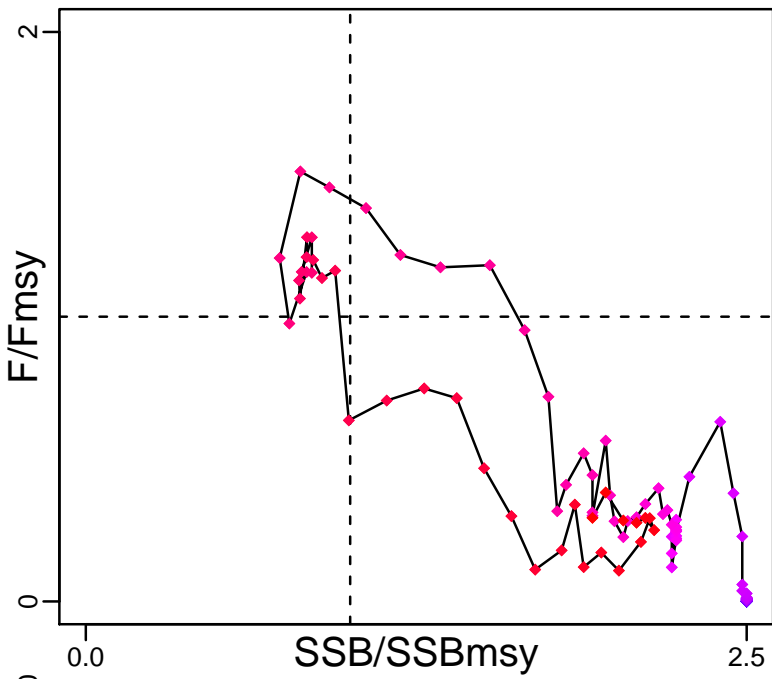
Metadata	
Scientific Name	Sebastes flavidus
Current Assess ID	NWFSC-YTROCKNPCOAST-1889-2017-SISIMP2021
Area	Northern Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Northwest Fisheries Science Center
Asmts in RAM	2017, 2012, 2005

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2005	37,123
SSBmsy	SSBmsy-E00eggs	2017	6×10^{12}
Fmsy	Fmsy-1/yr	2017	0.5
ERmsy	ERmsy-ratio	2005	0.126
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2005	120,024
SSB0	SSB0-MT	2005	31,016
MSY	MSY-MT	2017	5434
M	M-1/yr	2005	0.11
TBlim	-	-	-
SSBlim	SSBlim-E00eggs	2017	4×10^{12}
Flim	Flim-1/yr	2017	0.5
ERlim	-	-	-

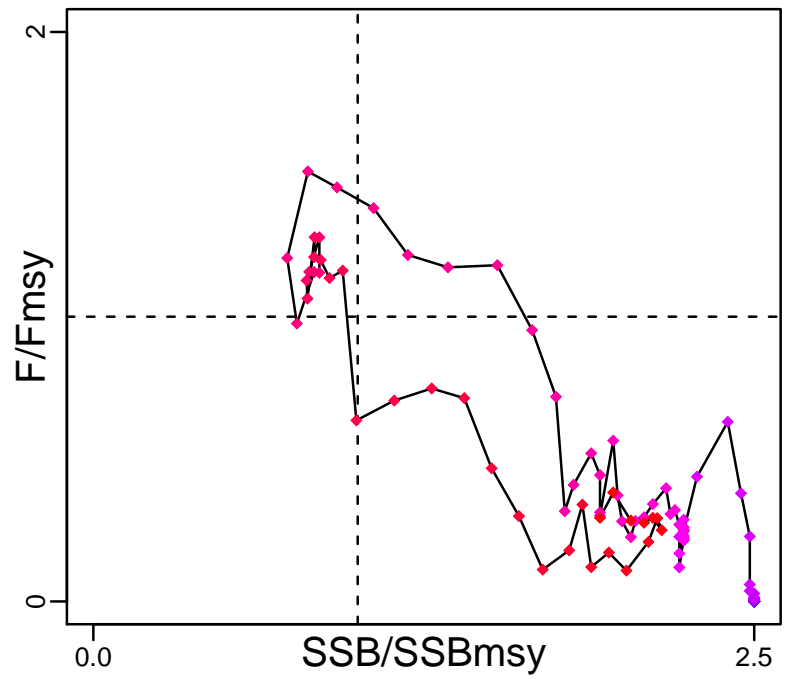
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2017	124,456	-	-
SSB	SSB-E00eggs	2017	1.13×10^{13}	-	-
TN	-	-	-	-	-
R	R-E00	2017	49,090,800	-	0
F	F-1/yr	2017	0.147	-	-
ER	ER-calc-ratio	2017	0.012	-	-
TC	TC-MT	2017	1449		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2005	1.999		
SSB/SSBmsy	SSB-E00eggs/SSBmsy-E00eggs	2017	1.883		
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	0.294		
ER/ERmsy	ER-ratio/ERmsy-ratio	2005	0.172		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Yellowtail rockfish Northern Pacific Coast [YTROCKNPCOAST]

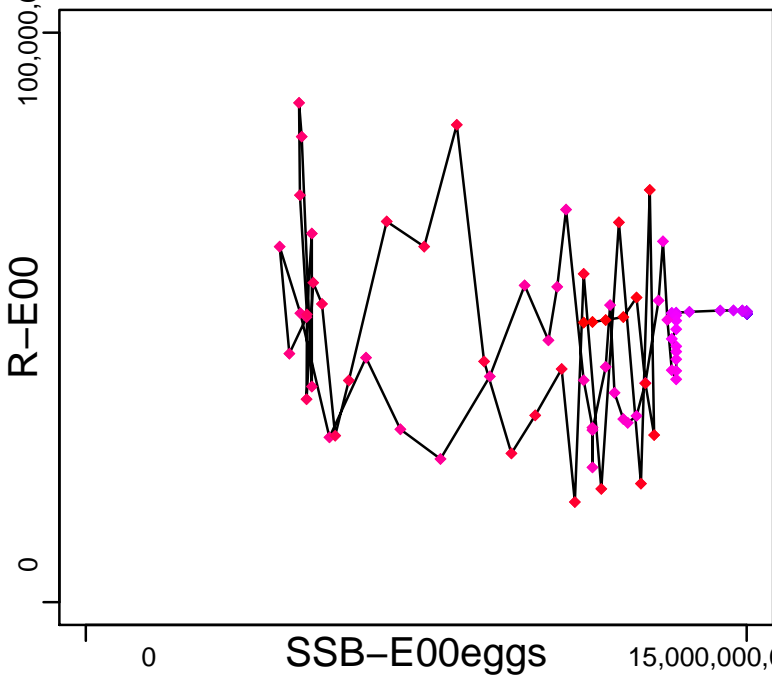
Kobe MSYpref (1889–2017–SISIMP2021)



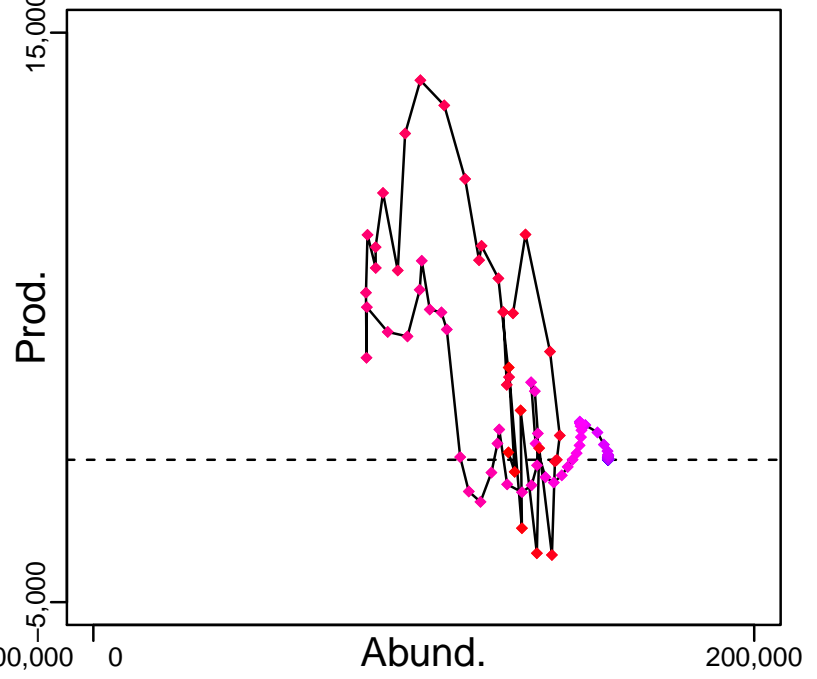
Kobe MGTpref (1889–2017–SISIMP2021)



Spawner Recruit (1889–2017–SISIMP2021)



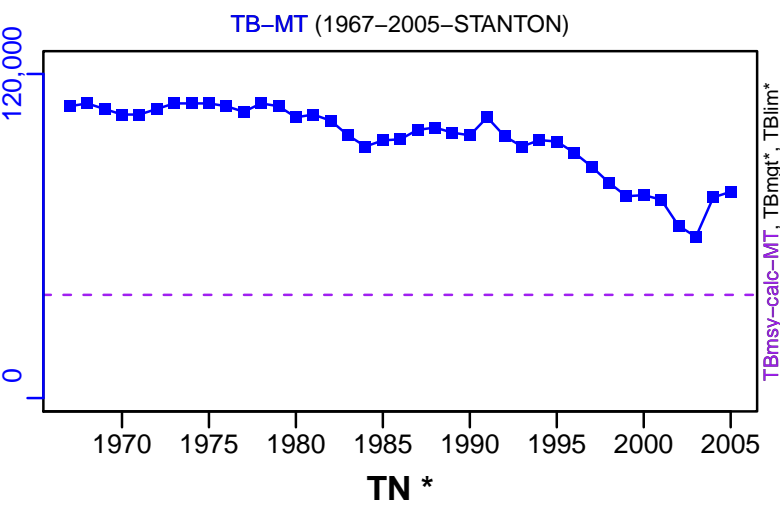
Production (1889–2017–SISIMP2021)



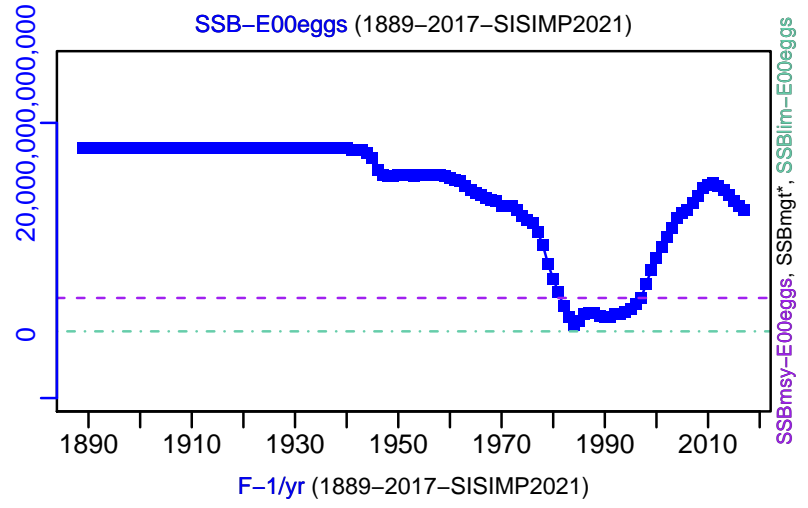
◆ Start Year ◆ End Year * No Data

Yellowtail rockfish Northern Pacific Coast [YTROCKNPCOAST]

TB-MT (1967-2005-STANTON)



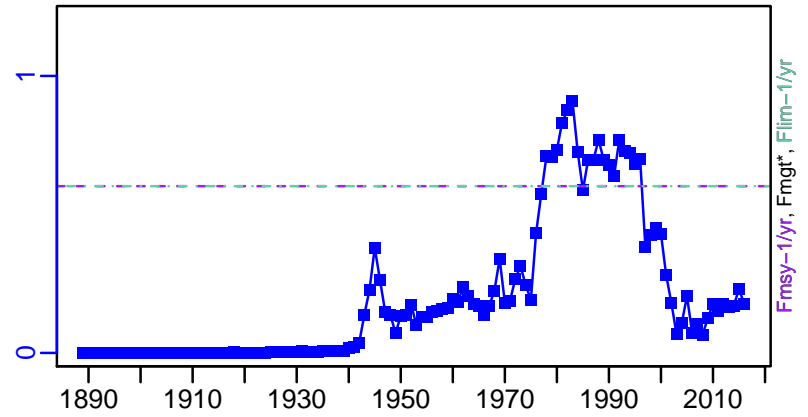
SSB-E00eggs (1889-2017-SISIMP2021)



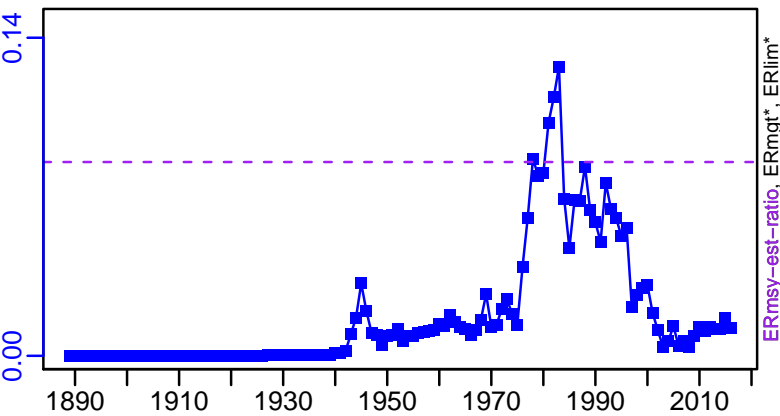
TN *



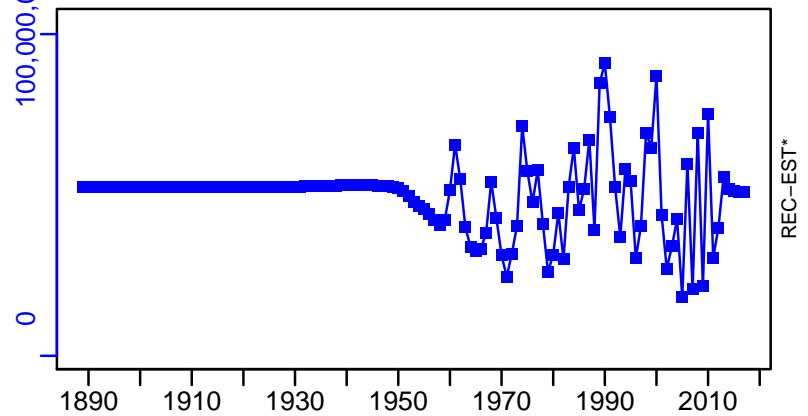
F-1/yr (1889-2017-SISIMP2021)



ER-calc-ratio (1889-2017-SISIMP2021)

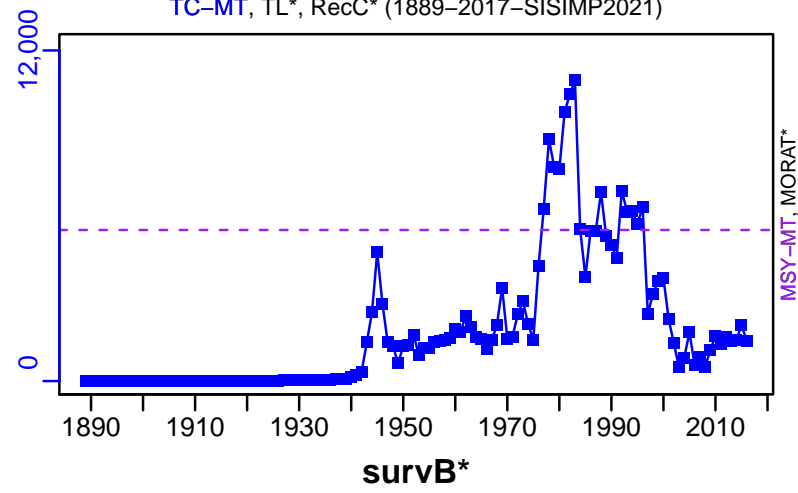


R-E00 (1889-2017-SISIMP2021)



Yellowtail rockfish Northern Pacific Coast [YTROCKNPCOAST]

TC-MT, TL*, RecC* (1889-2017-SISIMP2021)



TAC*, Cpair*, Cadv*



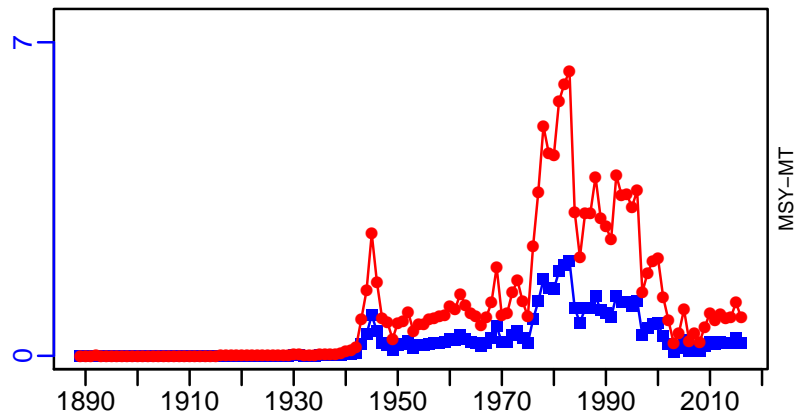
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1889-2017-SISIMP2021)



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