

# New Zealand Stocks

## v4.495 (Apr-21-2021)

Not present Present Preferred

Stock	B/Bmsy	Time Series Types			
		U/Umsy	B/Bmgt	U/Umgt	
1. AUSSALMONNZ [Australian salmon New Zealand]	TB SSB	ER F	TB SSB	ER F	
2. BKCDLFENI [Black cardinalfish East coast of North Island]	TB SSB	ER F	TB SSB	ER F	
3. BLACKOREOPR [Black oreo Pukaki Rise]	TB SSB	ER F	TB SSB	ER F	
4. BLACKOREOWECR [Black oreo West end of Chatham Rise]	TB SSB	ER F	TB SSB	ER F	
5. BNSNZ [Bluenose New Zealand]	TB SSB	ER F	TB SSB	ER F	
6. DOYSFS [Dredge oyster Foveax Strait]	TB SSB	ER F	TB SSB	ER F	
7. GEMFISHNZ [Common gemfish New Zealand]	TB SSB	ER F	TB SSB	ER F	
8. GSTRGZRSTA7 [Giant stargazer NZ Area STA7]	TB SSB	ER F	TB SSB	ER F	
9. HOKIENZ [Hoki Eastern New Zealand]	TB SSB	ER F	TB SSB	ER F	
10. HOKIWNZ [Hoki Western New Zealand]	TB SSB	ER F	TB SSB	ER F	
11. NZLINGLIN3-4 [Ling New Zealand Areas LIN 3 and 4]	TB SSB	ER F	TB SSB	ER F	
12. NZLINGLIN5-6 [Ling New Zealand Areas LIN 5 and 6]	TB SSB	ER F	TB SSB	ER F	
13. NZLINGLIN6b [Ling New Zealand Areas LIN 6b]	TB SSB	ER F	TB SSB	ER F	
14. NZLINGLIN72 [Ling New Zealand Areas LIN 72]	TB SSB	ER F	TB SSB	ER F	
15. NZLINGLIN7WC [Ling New Zealand Areas LIN 7WC-WCSI]	TB SSB	ER F	TB SSB	ER F	
16. NZSNAPNZ1BOP-HAGU [New Zealand snapper New Zealand SNA 1 Bay of Plenty and Hauraki Gulf]	TB SSB	ER F	TB SSB	ER F	
17. NZSNAPNZ1ENLD [New Zealand snapper New Zealand SNA 1 east Northland]	TB SSB	ER F	TB SSB	ER F	
18. NZSNAPNZ7 [New Zealand snapper New Zealand SNA 7]	TB SSB	ER F	TB SSB	ER F	
19. NZSNAPNZ8 [New Zealand snapper New Zealand Area 8 (Auckland and Central West)]	TB SSB	ER F	TB SSB	ER F	
20. OROUGHYESCR [Orange roughy East and South Chatham Rise]	TB SSB	ER F	TB SSB	ER F	
21. OROUGHYNWCR [Orange roughy Northwest Chatham Rise]	TB SSB	ER F	TB SSB	ER F	
22. OROUGHYNZ7A [Orange roughy New Zealand Challenger Plateau]	TB SSB	ER F	TB SSB	ER F	
23. OROUGHYNZMEC [Orange roughy New Zealand Mid East Coast]	TB SSB	ER F	TB SSB	ER F	
24. PAUANPAU5A [Paua NZ Area North PAUA 5A]	TB SSB	ER F	TB SSB	ER F	
25. PAUAPAU5B [Paua New Zealand Area PAU 5B (Stewart Island)]	TB SSB	ER F	TB SSB	ER F	
26. PAUAPAU5D [Paua New Zealand Area PAU 5D (Otago)]	TB SSB	ER F	TB SSB	ER F	
27. PAUAPAU7 [Paua New Zealand Area PAU 7 (Marlborough)]	TB SSB	ER F	TB SSB	ER F	
28. PAUASPAU5A [Paua NZ Area South PAUA 5A]	TB SSB	ER F	TB SSB	ER F	
29. RROCKLOBSTERCRA1 [Red rock lobster New Zealand Area CRA1]	TB SSB	ER F	TB SSB	ER F	
30. RROCKLOBSTERCRA2 [Red rock lobster New Zealand Area CRA2]	TB SSB	ER F	TB SSB	ER F	
31. RROCKLOBSTERCRA3 [Red rock lobster New Zealand Area CRA3]	TB SSB	ER F	TB SSB	ER F	
32. RROCKLOBSTERCRA4 [Red rock lobster New Zealand Area CRA4]	TB SSB	ER F	TB SSB	ER F	
33. RROCKLOBSTERCRA5 [Red rock lobster New Zealand Area CRA5]	TB SSB	ER F	TB SSB	ER F	
34. RROCKLOBSTERCRA7 [Red rock lobster New Zealand Area CRA7]	TB SSB	ER F	TB SSB	ER F	
35. RROCKLOBSTERCRA8 [Red rock lobster New Zealand Area CRA8]	TB SSB	ER F	TB SSB	ER F	
36. SBWHITACIR [Southern blue whiting Campbell Island Rise]	TB SSB	ER F	TB SSB	ER F	

37. SCMPBP [Scampi Bay of Plenty]	TB SSB	ER F	TB SSB	ER F
38. SCMPMB [Scampi Mernoo Bank]	TB SSB	ER F	TB SSB	ER F
39. SCMPWHB [Scampi Wairarapa/Hawke Bay]	TB SSB	ER F	TB SSB	ER F
40. SMOOTHOREOBP [Smooth oreo Bounty Plateau]	TB SSB	ER F	TB SSB	ER F
41. SMOOTHOREOCR [Smooth oreo Chatham Rise]	TB SSB	ER F	TB SSB	ER F
42. SMOOTHOREOEPR [Smooth oreo East Pukaki Rise]	TB SSB	ER F	TB SSB	ER F
43. SMOOTHOREOSLD [Smooth oreo Southland]	TB SSB	ER F	TB SSB	ER F
44. SMOOTHOREOWECR [Smooth oreo West end of Chatham Rise]	TB SSB	ER F	TB SSB	ER F
45. SOUTHHAKECR [Southern hake Chatham Rise]	TB SSB	ER F	TB SSB	ER F
46. SOUTHHAKESA [Southern hake Sub-Antarctic]	TB SSB	ER F	TB SSB	ER F
47. SOUTHHAKEWCSI [Southern hake West Coast South Island]	TB SSB	ER F	TB SSB	ER F
48. TARAKNZ [Tarakihi Sub-Antarctic]	TB SSB	ER F	TB SSB	ER F
49. TREVALLYTRE7 [Trevally New Zealand Areas TRE 7]	TB SSB	ER F	TB SSB	ER F

## Australian salmon New Zealand [AUSSALMONNZ]

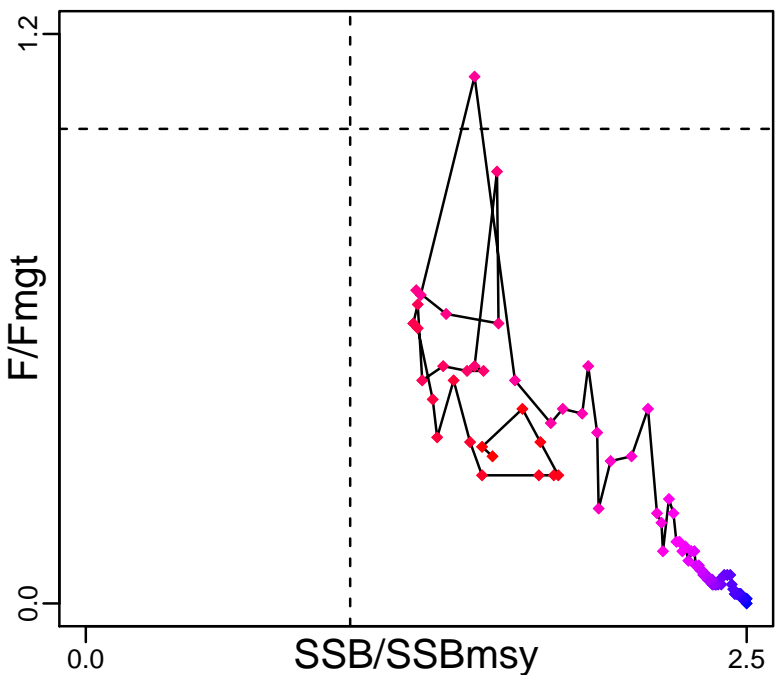
Metadata	
<b>Scientific Name</b>	Arripis trutta
<b>Current Assess ID</b>	NIWA-AUSSALMONNZ-1929-2013-FU
<b>Area</b>	New Zealand
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2013, 2006

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2006	28,246
<b>SSBmsy</b>	SSBmsy-MT	2013	17,680
<b>Fmsy</b>	Fmsy-1/yr	2006	0.32
<b>ERmsy</b>	ERmsy-ratio	2006	0.119
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2013	22,984
<b>Fmgt</b>	Fmgt-1/yr	2013	0.215
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2013	44,200
<b>MSY</b>	MSY-MT	2006	3372
<b>M</b>	M-1/yr	2013	0.2
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

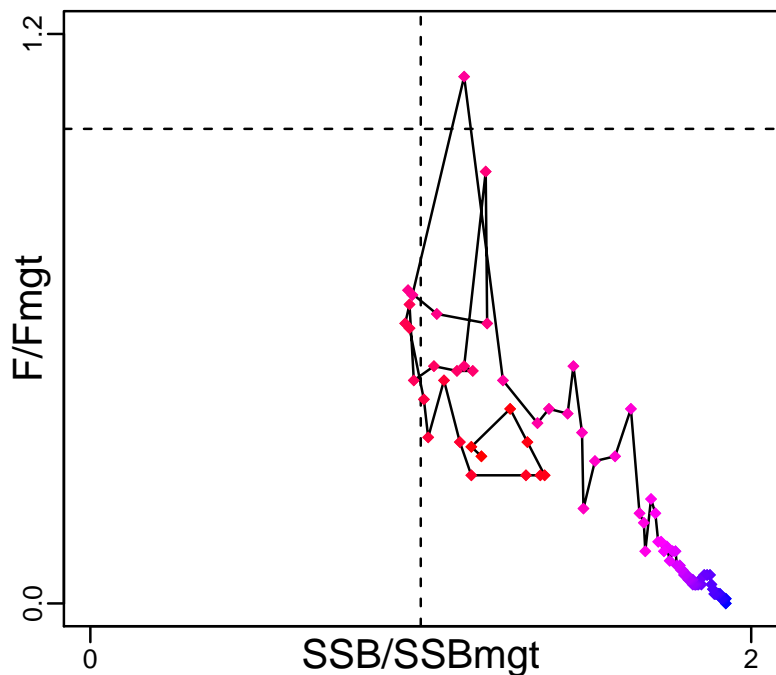
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2006	22,600	-	1+
<b>SSB</b>	SSB-MT	2013	27,200	-	4 to 20
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2013	7,430,000	Both	-
<b>F</b>	F-1/yr	2013	0.07	Both	-
<b>ER</b>	ER-ratio	2006	0.099	-	-
<b>TC</b>	TC-MT	2013	1680		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	TB-MT/TBmsy-calc-MT	2006	0.8		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2013	1.538		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2006	0.328		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2006	0.83		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2013	1.183		
<b>F/Fmgt</b>	FdivFmgt-dimensionless	2013	0.31		
<b>ER/ERmgt</b>	-	-	-		

# Australian salmon New Zealand [AUSSALMONNZ]

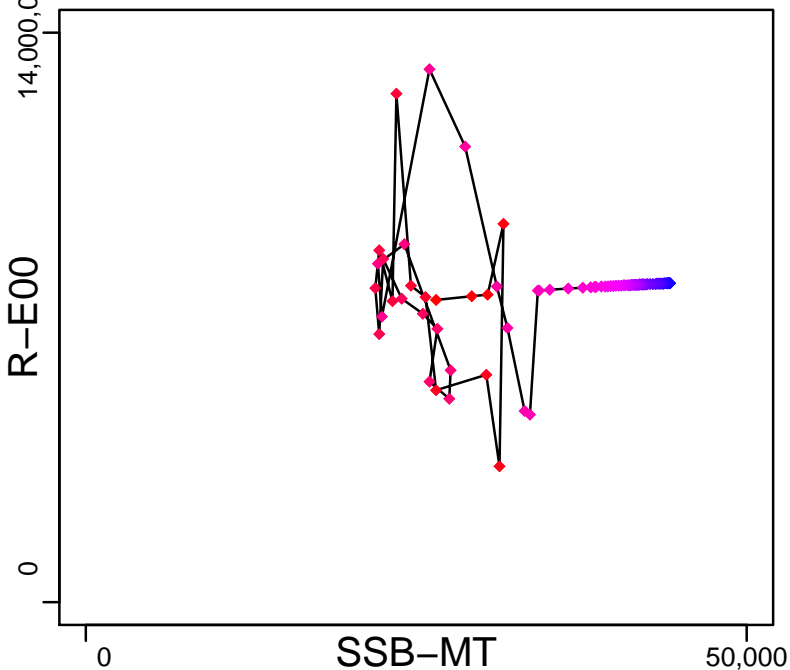
Kobe MSYpref (1929–2013–FU)



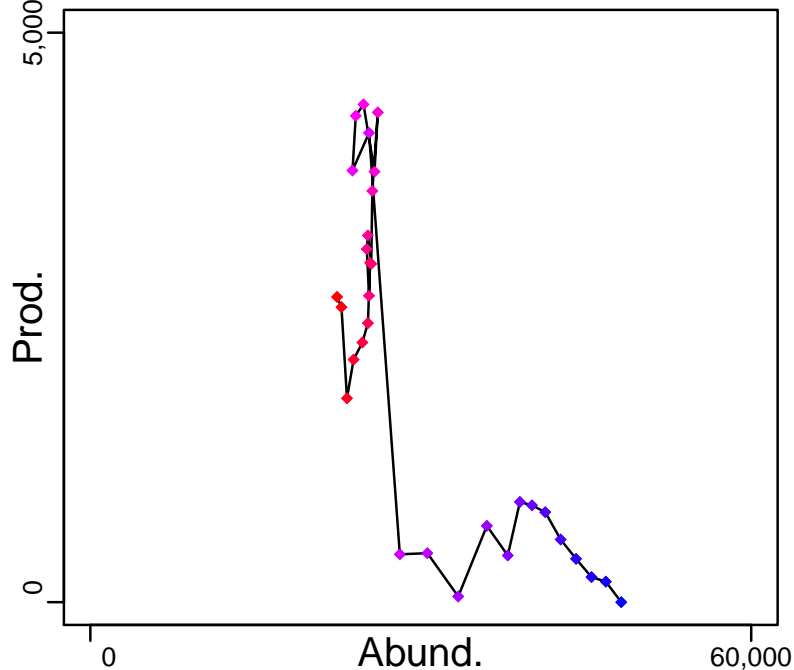
Kobe MGTpref (1929–2013–FU)



Spawner Recruit (1929–2013–FU)



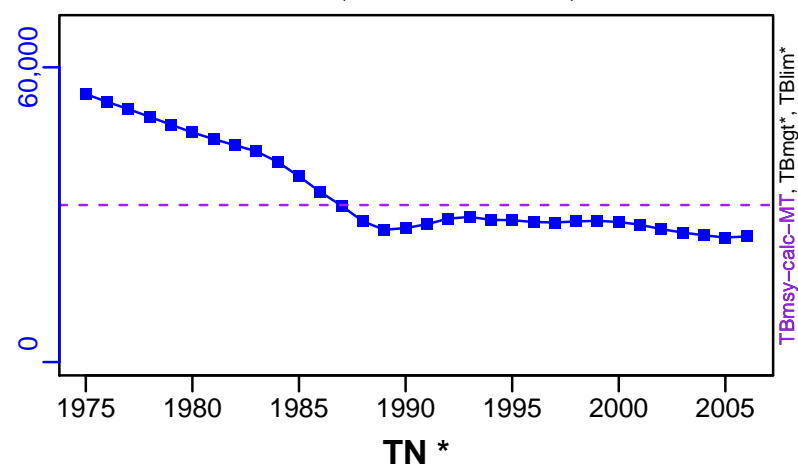
Production (1975–2006–JENSEN)



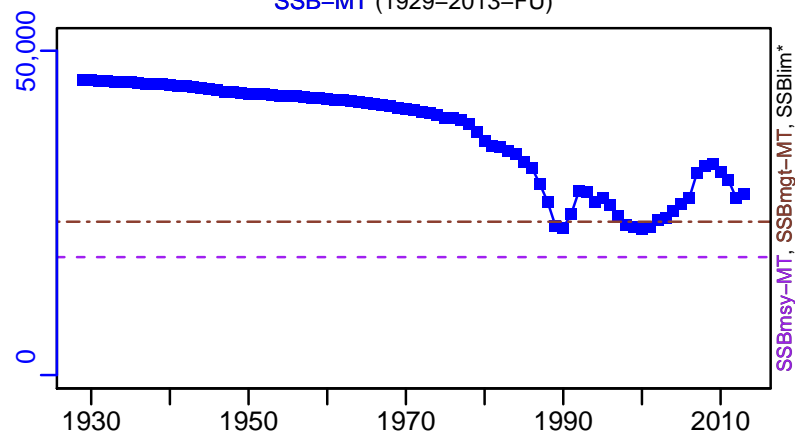
◆ Start Year ◆ End Year \* No Data

# Australian salmon New Zealand [AUSSALMONNZ]

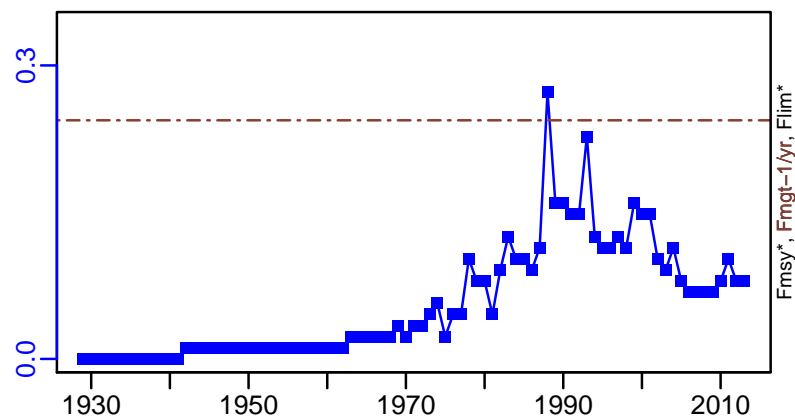
TB-MT (1975–2006–JENSEN)



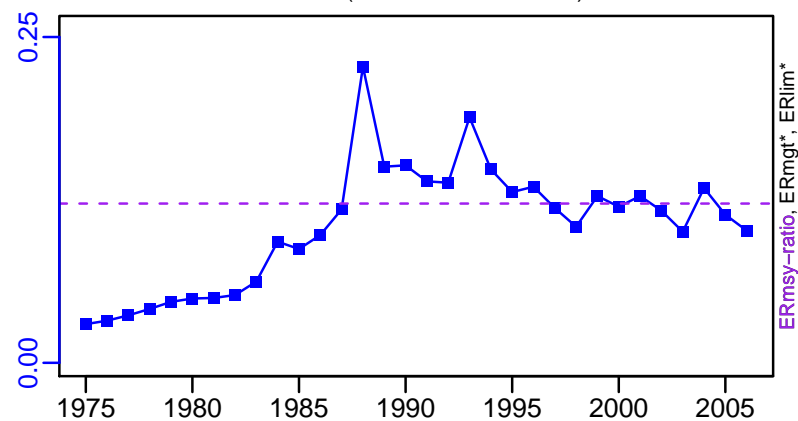
SSB-MT (1929–2013–FU)



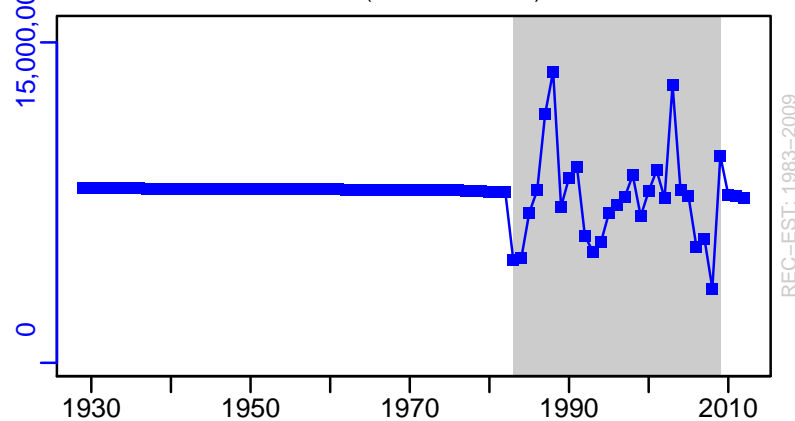
F-1/yr (1929–2013–FU)



ER-ratio (1975–2006–JENSEN)

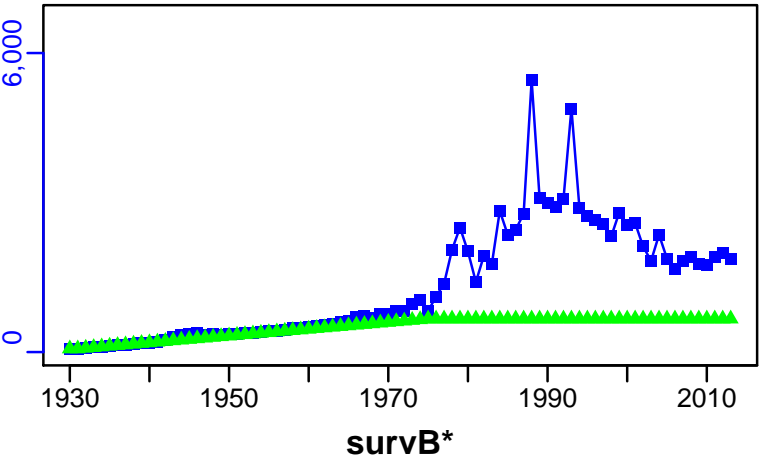


R-E00 (1929–2013–FU)

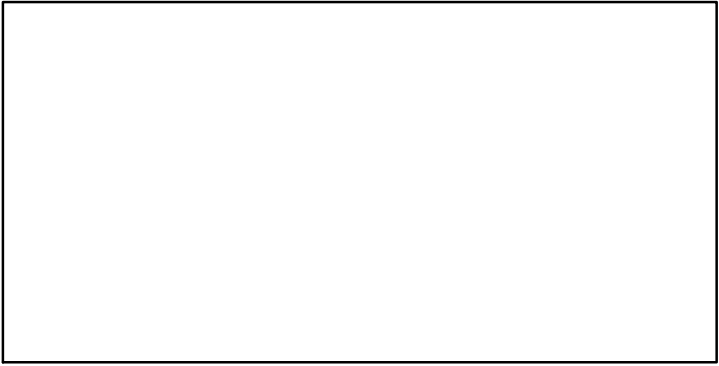
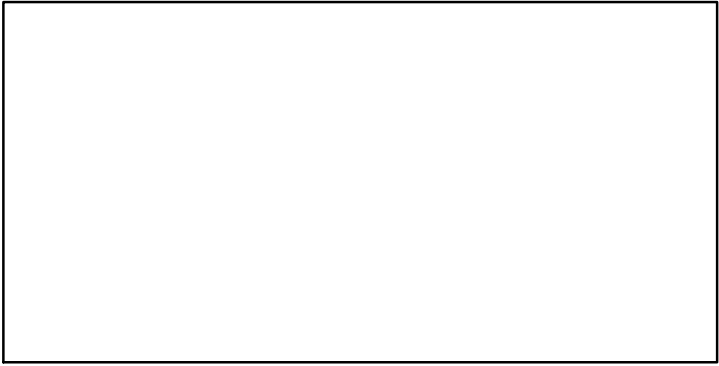
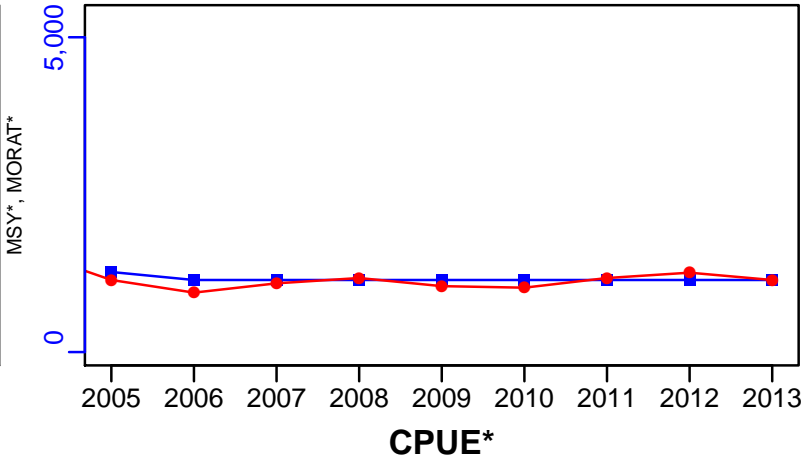


Australian salmon New Zealand [AUSSALMONNZ]

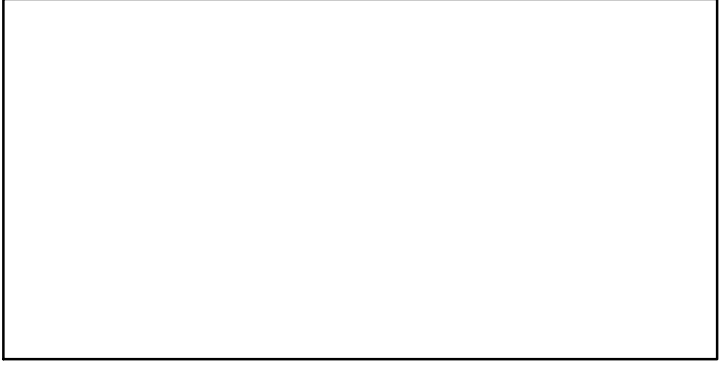
TC-MT, TL\*, RecC-MT (1929-2013-FU)



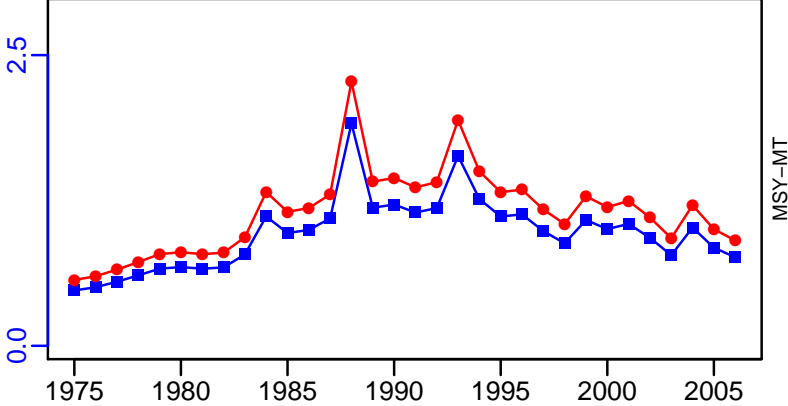
TAC-MT, Cpair-MT, Cadv\* (1929-2013-FU)



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1975-2006-JENSEN)



## Black cardinalfish East coast of North Island [BKCDLFENI]

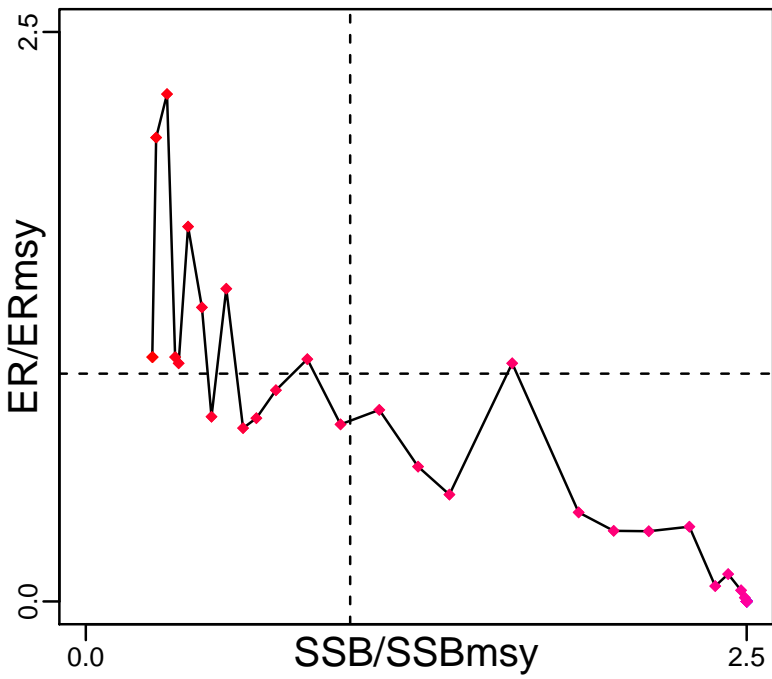
Metadata	
<b>Scientific Name</b>	Epigonus telescopus
<b>Current Assess ID</b>	NIWA-BKCDLFENI-1923-2009-CORDUE
<b>Area</b>	East coast of North Island
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2009

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2009	6055
<b>SSBmsy</b>	SSBmsy-MT	2009	14,322
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2009	0.11
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2009	14,322
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2009	35,804
<b>MSY</b>	MSY-MT	2009	666
<b>M</b>	M-1/yr	2009	0.04
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

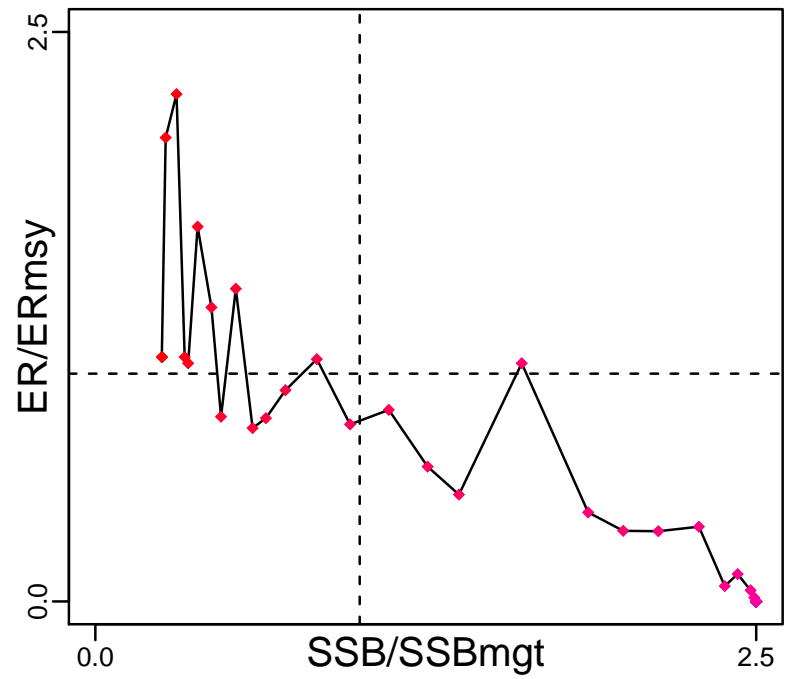
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2009	3620	Both	39.5
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2009	982,000	-	1
<b>F</b>	F-1/yr	2009	0.457	-	-
<b>ER</b>	ER-ratio	2009	0.118	-	-
<b>TC</b>	TC-MT	2009	980		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2009	0.253		
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2009	4.16		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2009	1.073		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2009	0.253		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Black cardinalfish East coast of North Island [BKCDLFENI]

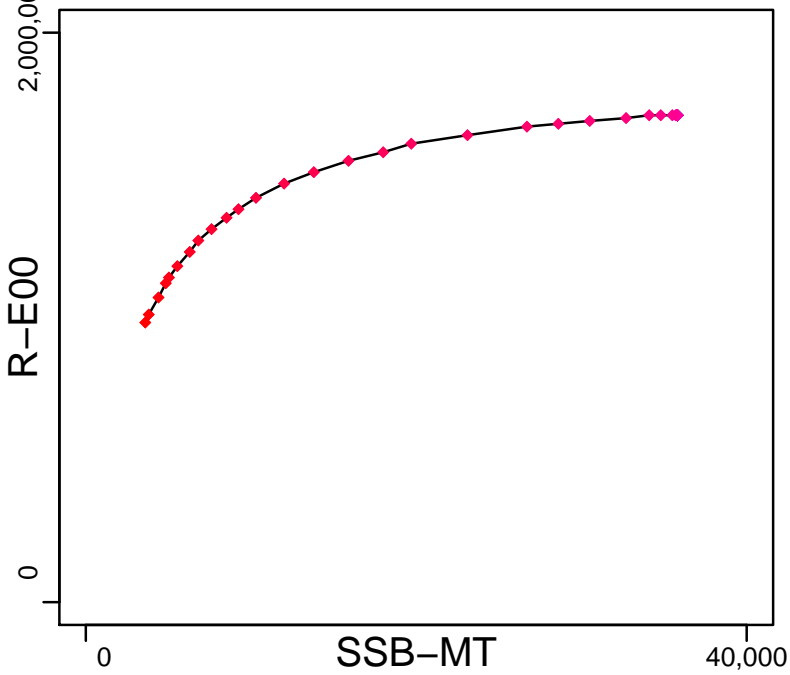
Kobe MSYpref (1923–2009–CORDUE)



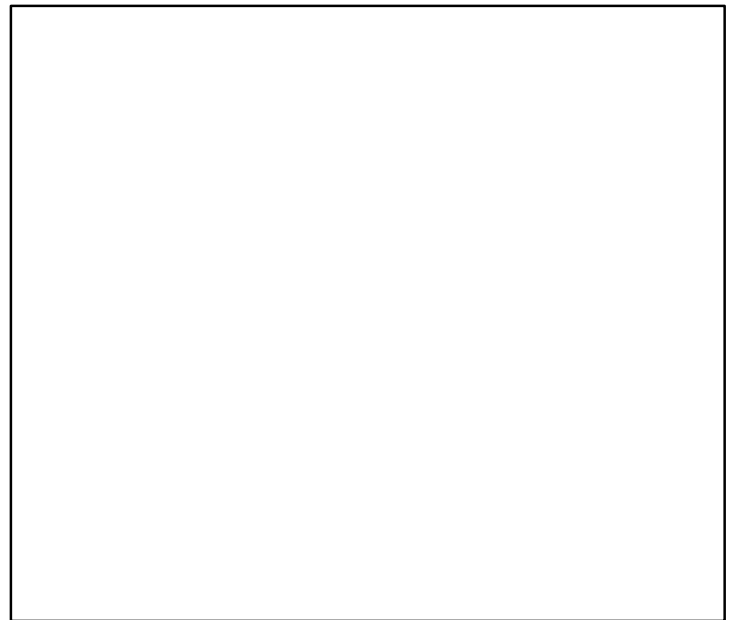
Kobe MGTpref (1923–2009–CORDUE)



Spawner Recruit (1923–2009–CORDUE)



Production\*



◆ Start Year ◆ End Year \* No Data

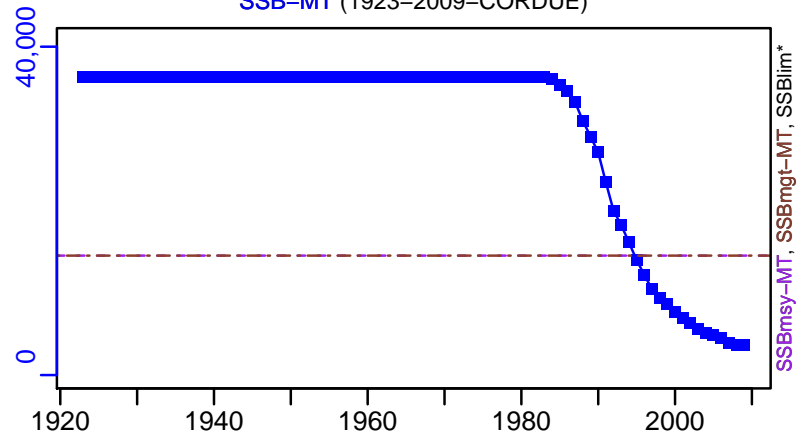


Black cardinalfish East coast of North Island [BKCDLFENI]

TB\*



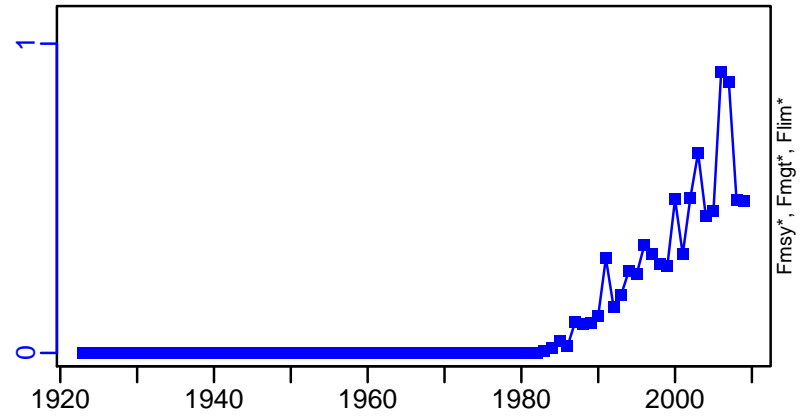
SSB-MT (1923-2009-CORDUE)



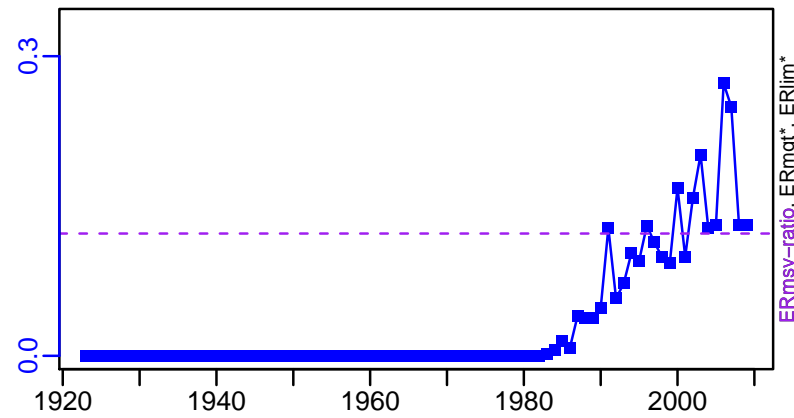
TN \*



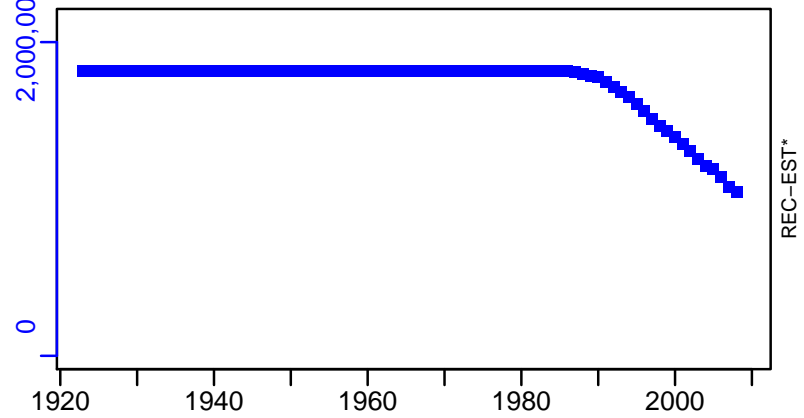
F-1/yr (1923-2009-CORDUE)



ER-ratio (1923-2009-CORDUE)

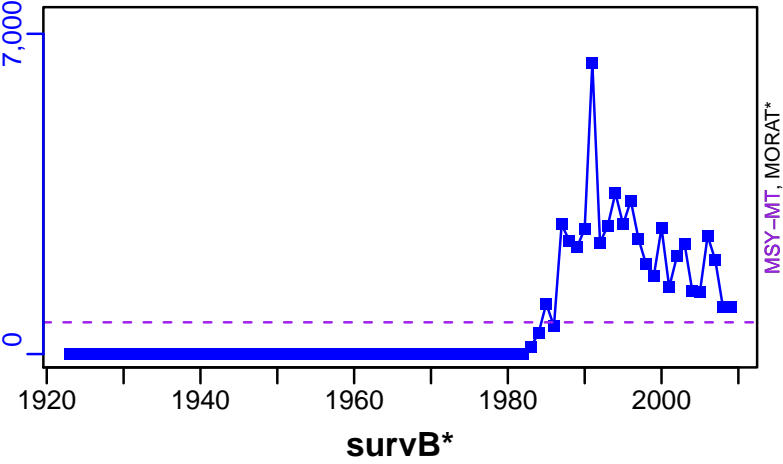


R-E00 (1923-2009-CORDUE)

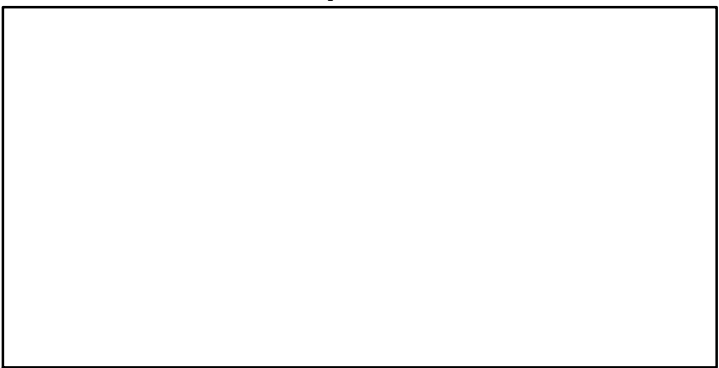


Black cardinalfish East coast of North Island [BKCDLFENI]

TC-MT, TL\*, RecC\* (1923-2009-CORDUE)



TAC\*, Cpair\*, Cadv\*



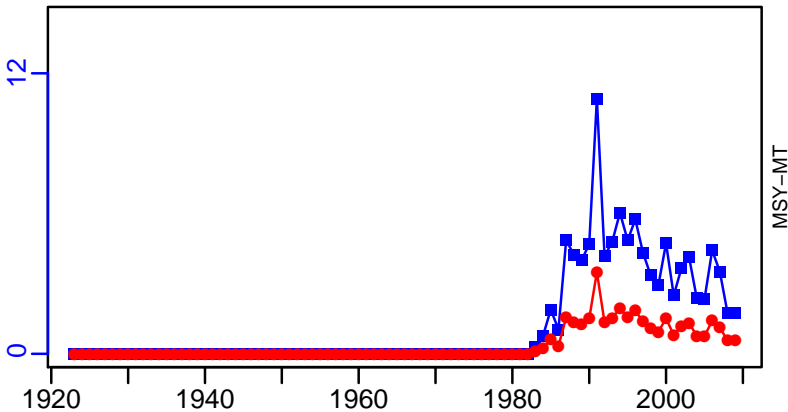
CPUE\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1923-2009-CORDUE)



## Black oreo Pukaki Rise [BLACKOREOPR]

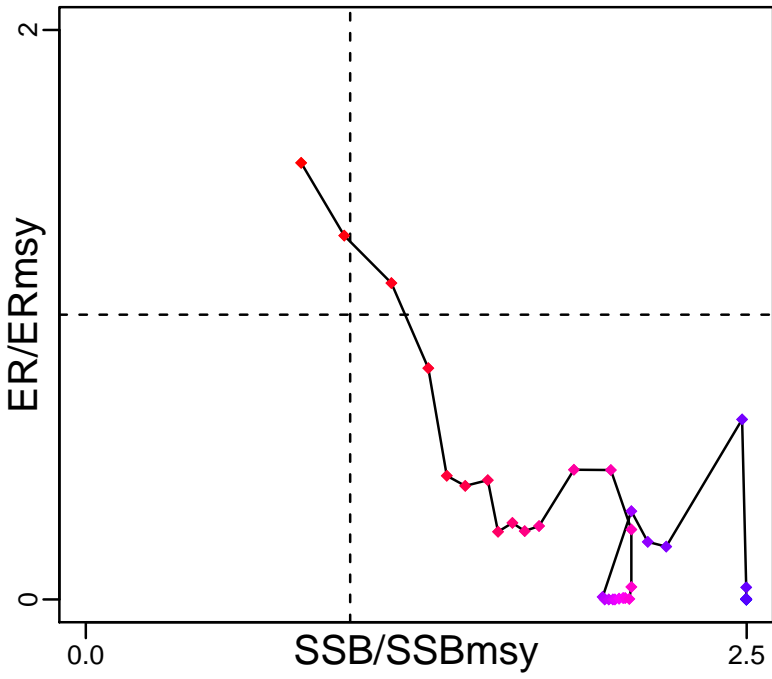
Metadata	
<b>Scientific Name</b>	Allocyttus niger
<b>Current Assess ID</b>	NIWA-BLACKOREOPR-1974-2009-CORDUE
<b>Area</b>	Pukaki Rise
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2009

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2009	7444
<b>SSBmsy</b>	SSBmsy-MT	2009	12,889
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2009	0.09
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2009	12,889
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2009	32,224
<b>MSY</b>	MSY-MT	2009	670
<b>M</b>	M-1/yr	2009	0.04
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

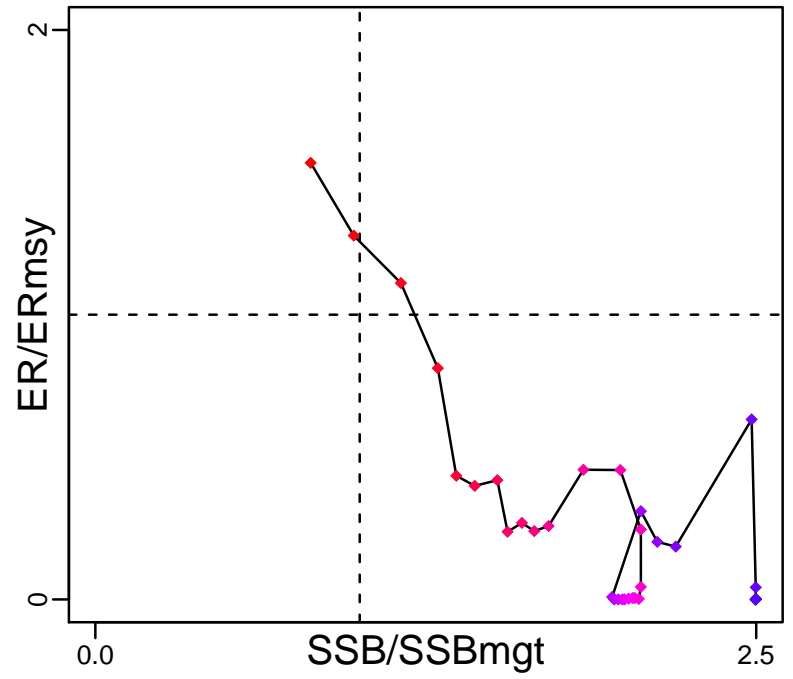
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2009	10,500	Both	37.7
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2009	6,230,000	-	5
<b>F</b>	F-1/yr	2009	0.301	-	-
<b>ER</b>	ER-ratio	2009	0.138	-	-
<b>TC</b>	TC-MT	2009	3350		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2009	0.815		
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2009	3.5		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2009	1.533		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2009	0.815		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Black oreo Pukaki Rise [BLACKOREOPR]

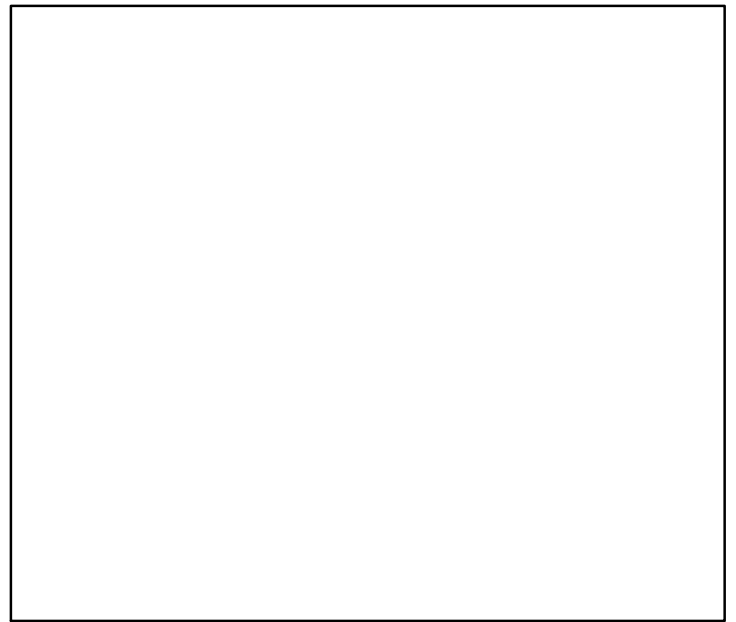
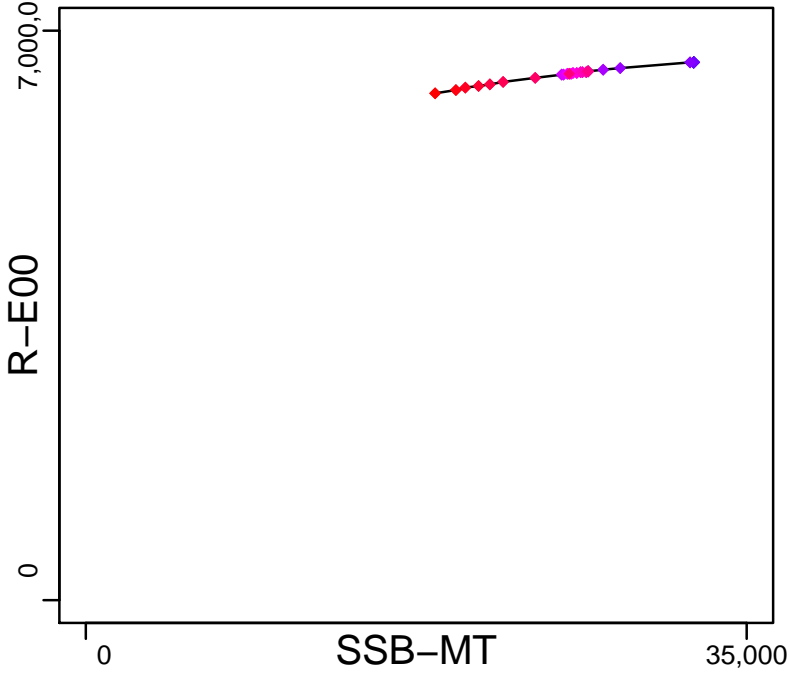
Kobe MSYpref (1974–2009–CORDUE)



Kobe MGTpref (1974–2009–CORDUE)



Spawner Recruit (1974–2009–CORDUE)



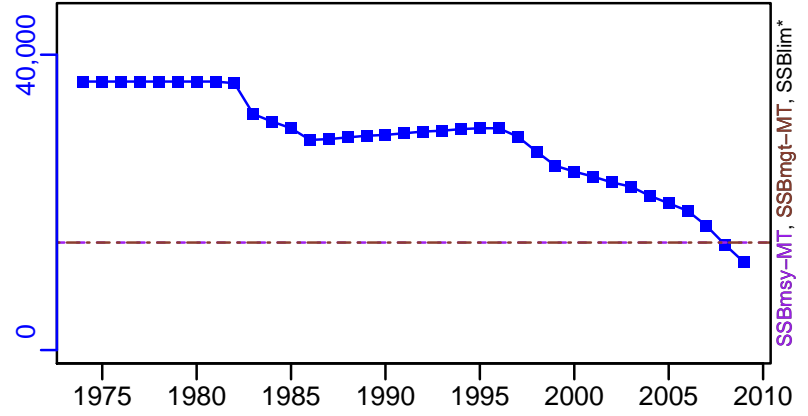
◆ Start Year ◆ End Year \* No Data

# Black oreo Pukaki Rise [BLACKKOREOPR]

TB\*



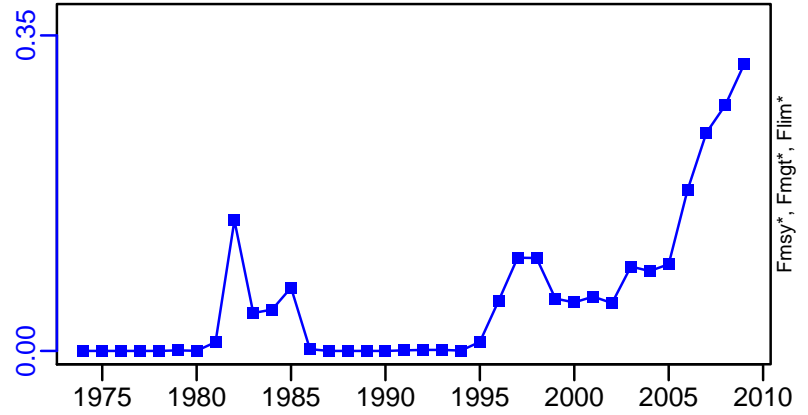
SSB-MT (1974-2009-CORDUE)



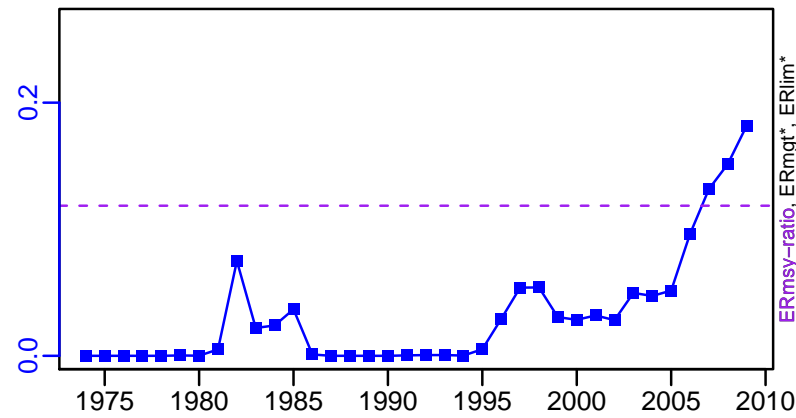
TN \*



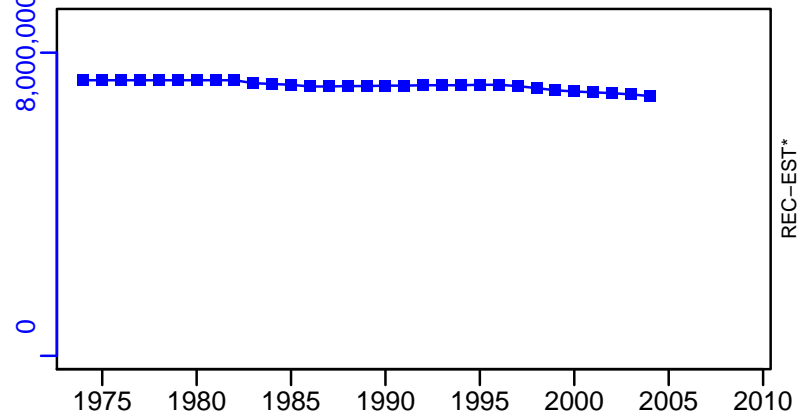
F-1/yr (1974-2009-CORDUE)



ER-ratio (1974-2009-CORDUE)

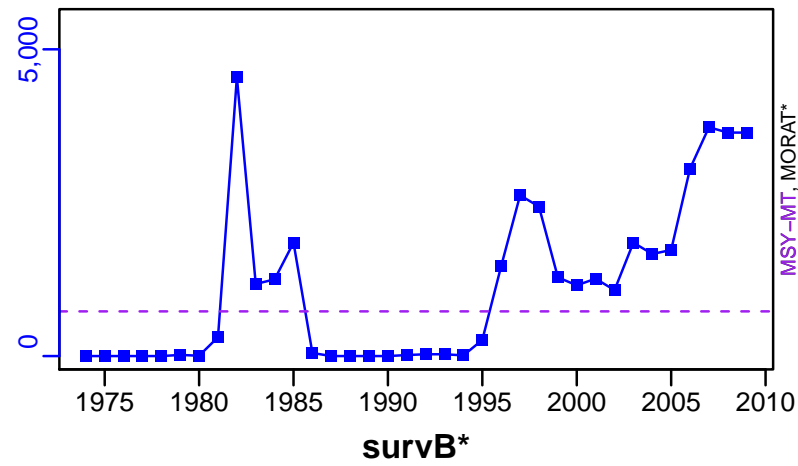


R-E00 (1974-2009-CORDUE)



# Black oreo Pukaki Rise [BLACKKOREOPR]

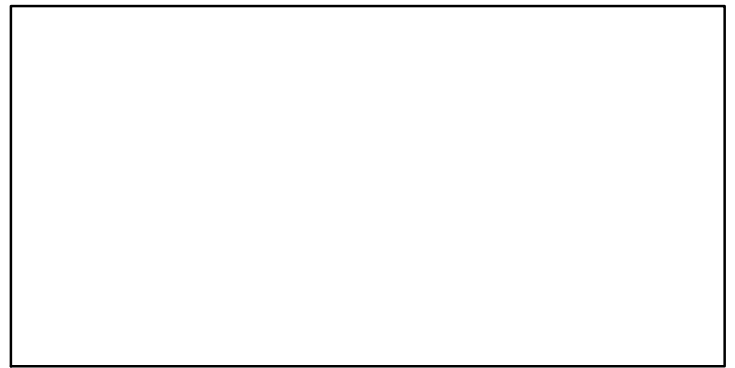
TC-MT, TL\*, RecC\* (1974-2009-CORDUE)



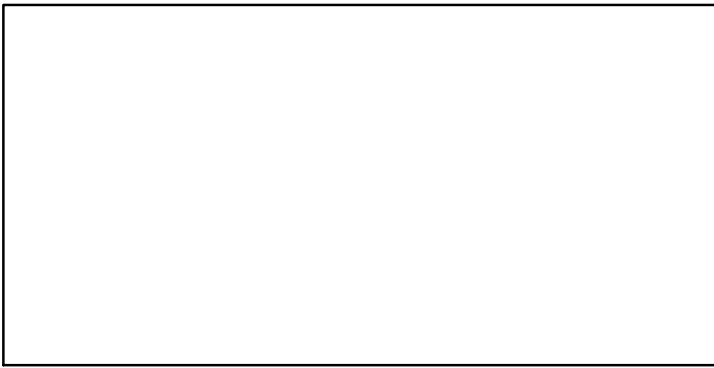
TAC\*, Cpair\*, Cadv\*



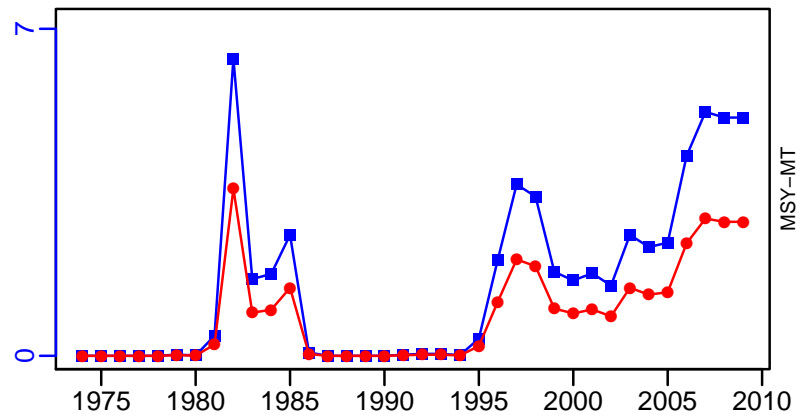
CPUE\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1974-2009-CORDUE)



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

## Black oreo West end of Chatham Rise [BLACKOREOWECR]

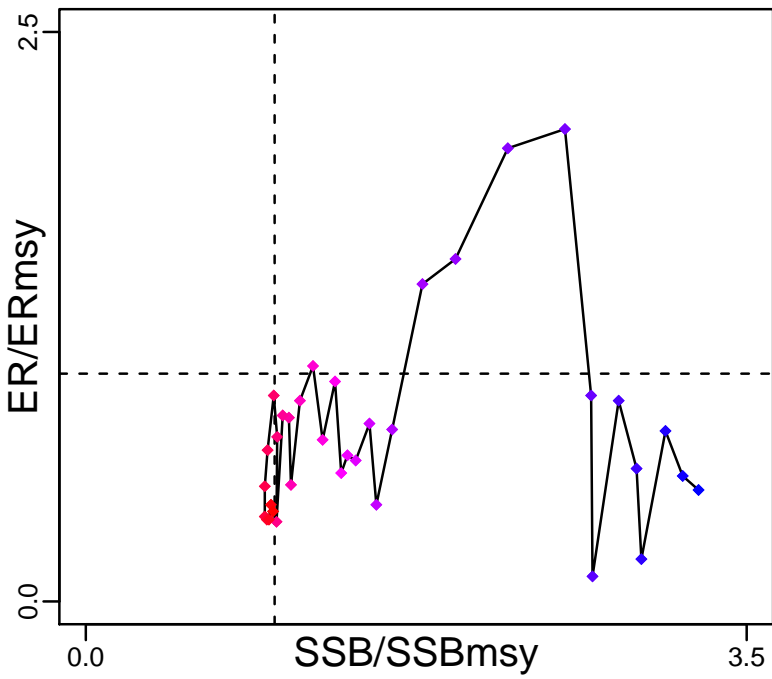
Metadata	
<b>Scientific Name</b>	Allocyttus niger
<b>Current Assess ID</b>	NZMFishDEEPWATER-BLACKOREOWECR-1973-2007-JENSEN
<b>Area</b>	West end of Chatham Rise
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	Deepwater Working Group
<b>Asmts in RAM</b>	2007

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2007	63,082
<b>SSBmsy</b>	SSBmsy-MT	2007	27,427
<b>Fmsy</b>	Fmsy-1/yr	2007	0.034
<b>ERmsy</b>	ERmsy-ratio	2007	0.031
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2007	88,923
<b>MSY</b>	MSY-MT	2007	1947
<b>M</b>	M-1/yr	2007	0.044
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

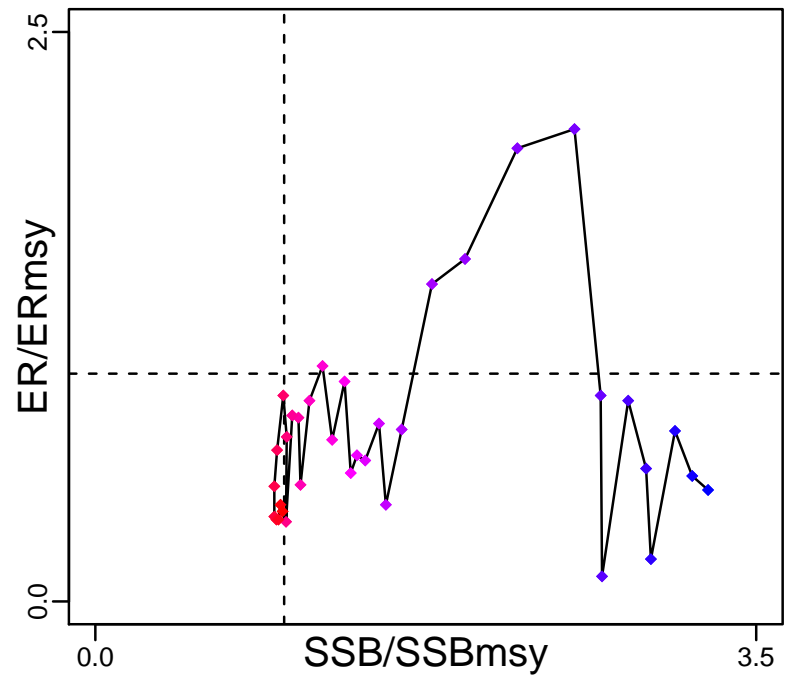
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2007	144,000	-	1
<b>SSB</b>	SSB-MT	2007	27,200	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2007	$1.9 \times 10^7$	-	1
<b>F</b>	F-1/yr	2007	0.028	-	-
<b>ER</b>	ER-ratio	2007	0.012	-	-
<b>TC</b>	TC-MT	2007	1770		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	TB-MT/TBmsy-calc-MT	2007	2.283		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2007	0.992		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2007	0.824		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2007	0.395		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Black oreo West end of Chatham Rise [BLACKOREOWECR]

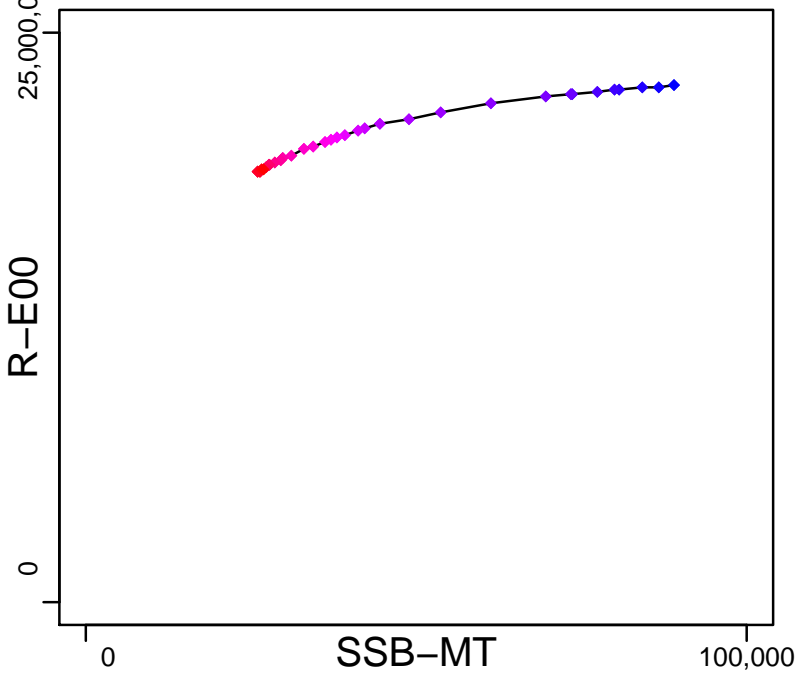
Kobe MSYpref (1973–2007–JENSEN)



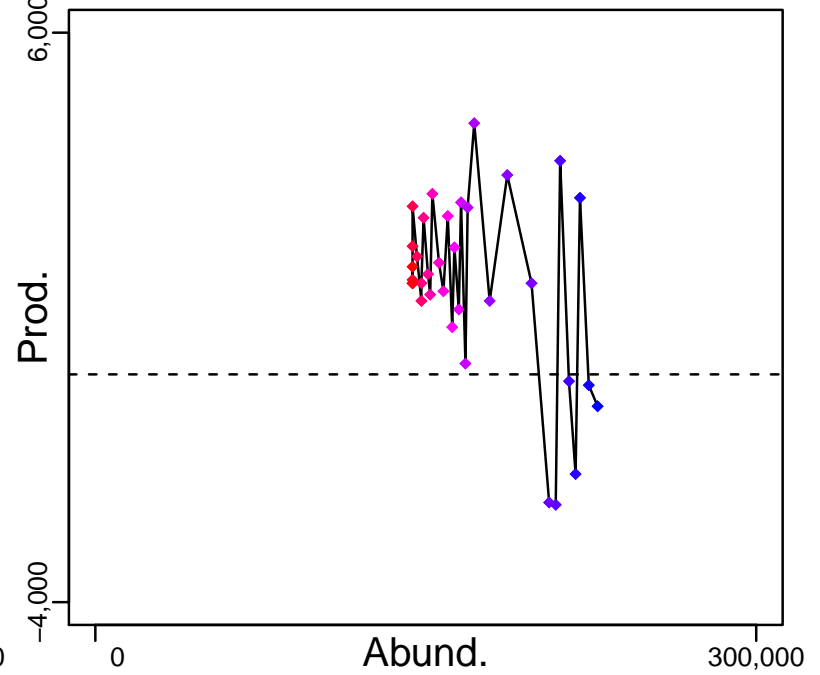
Kobe MGTpref (1973–2007–JENSEN)



Spawner Recruit (1973–2007–JENSEN)



Production (1973–2007–JENSEN)

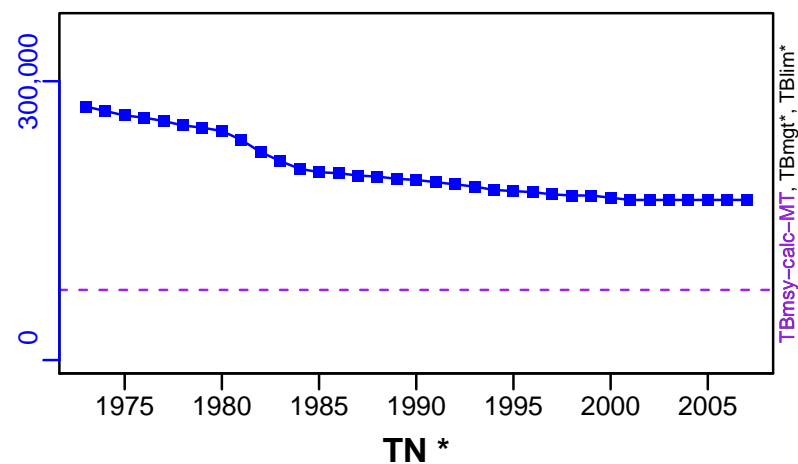


◆ Start Year ◆ End Year \* No Data

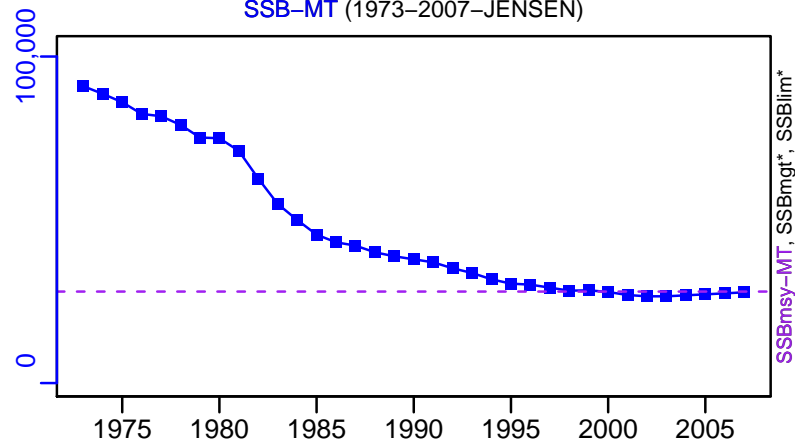


# Black oreo West end of Chatham Rise [BLACKOREOWECR]

TB-MT (1973-2007-JENSEN)



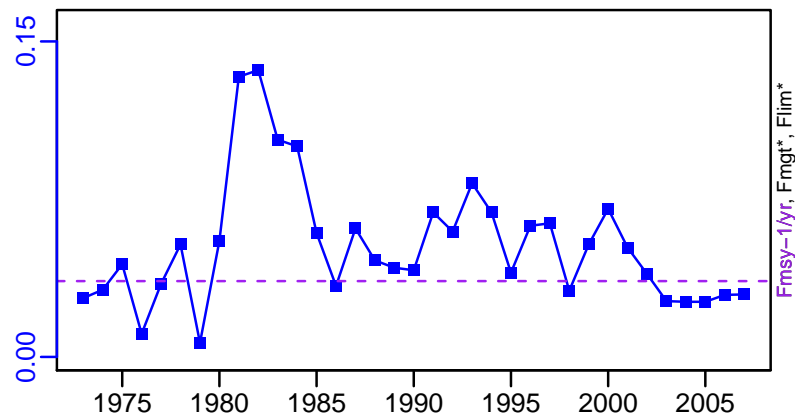
SSB-MT (1973-2007-JENSEN)



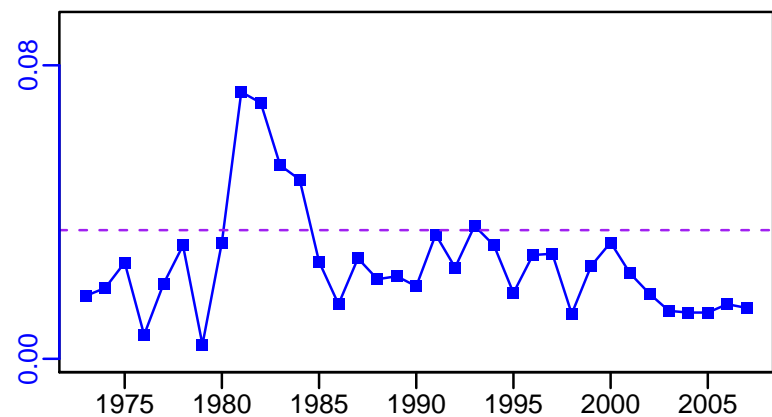
TN \*



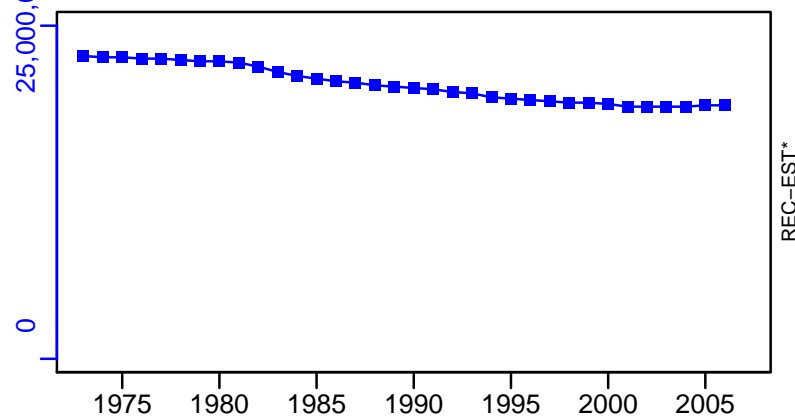
F-1/yr (1973-2007-JENSEN)



ER-ratio (1973-2007-JENSEN)

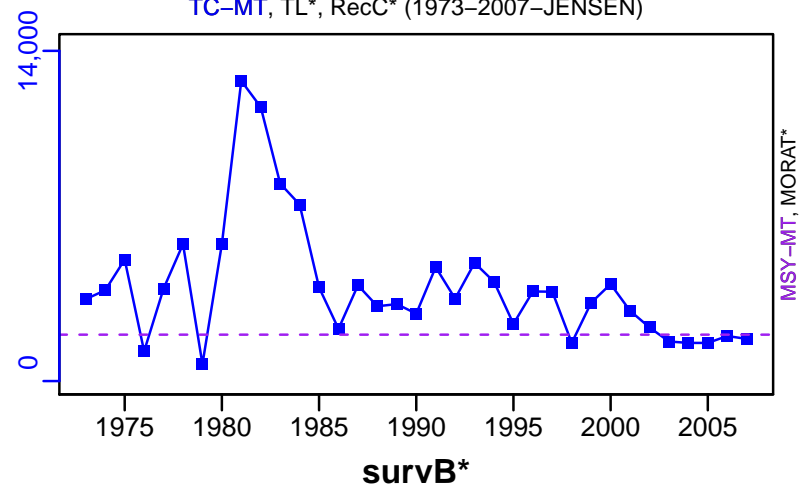


R-E00 (1973-2007-JENSEN)



# Black oreo West end of Chatham Rise [BLACKOREOWECR]

TC-MT, TL\*, RecC\* (1973-2007-JENSEN)



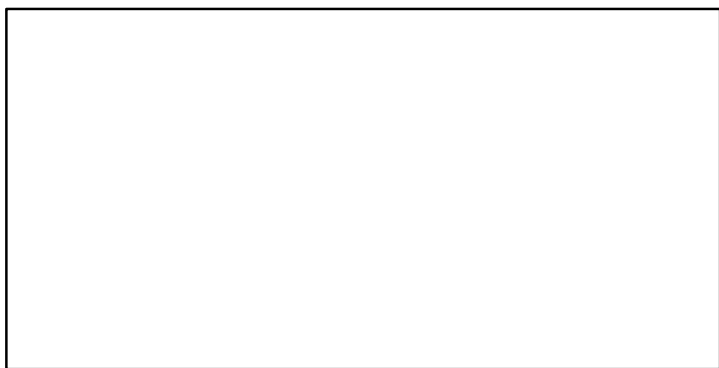
TAC\*, Cpair\*, Cadv\*



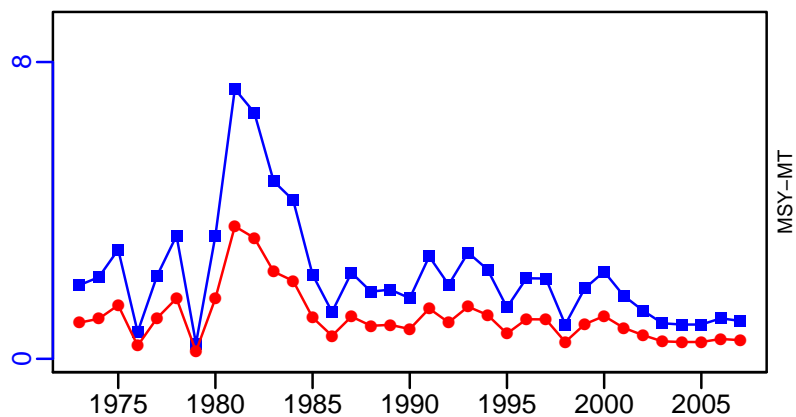
CPUE\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1973-2007-JENSEN)



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

## Bluenose New Zealand [BNSNZ]

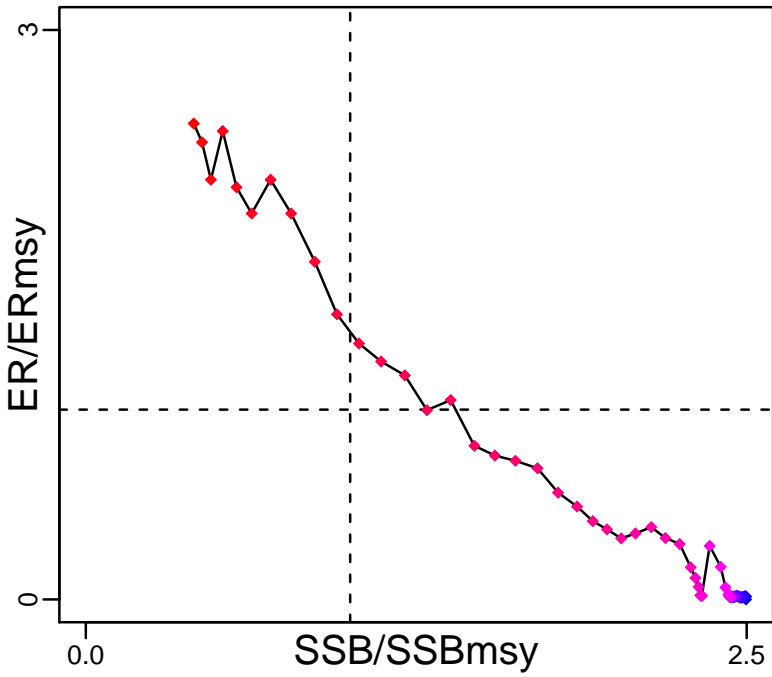
Metadata	
<b>Scientific Name</b>	Hyperoglyphe antarctica
<b>Current Assess ID</b>	NZMFishINSHOREWG-BNSNZ-1935-2011-CORDUE
<b>Area</b>	New Zealand
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	Inshore Working Group
<b>Asmts in RAM</b>	2011

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2011	23,867
<b>SSBmsy</b>	SSBmsy-MT	2011	16,737
<b>Fmsy</b>	Fmsy-1/yr	2011	0.08
<b>ERmsy</b>	ERmsy-ratio	2011	0.051
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2011	16,737
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2011	41,843
<b>MSY</b>	MSY-MT	2011	1209
<b>M</b>	M-1/yr	2011	0.08
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

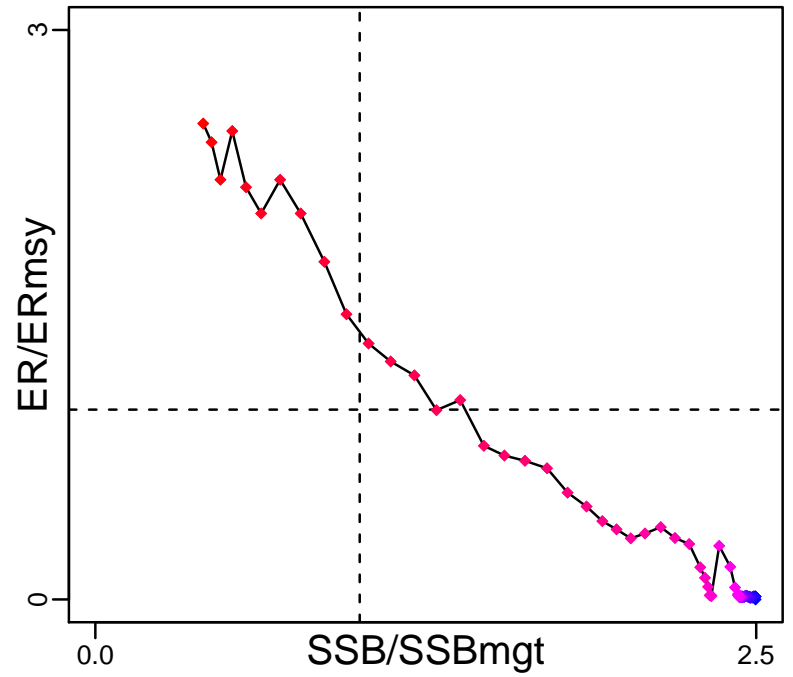
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2011	6830	Both	17+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2011	1,010,000	-	1
<b>F</b>	F-1/yr	2011	0.206	-	-
<b>ER</b>	ER-ratio	2011	0.127	-	-
<b>TC</b>	TC-MT	2011	2000		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2011	0.408		
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2011	2.71		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2011	2.507		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2011	0.408		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Bluenose New Zealand [BNSNZ]

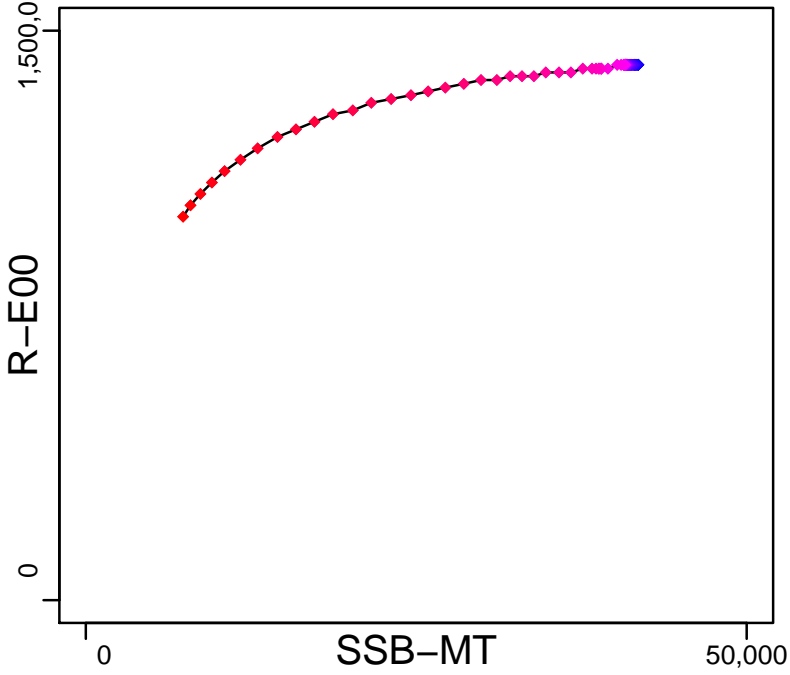
Kobe MSYpref (1935–2011–CORDUE)



Kobe MGTpref (1935–2011–CORDUE)



Spawner Recruit (1935–2011–CORDUE)



Production\*



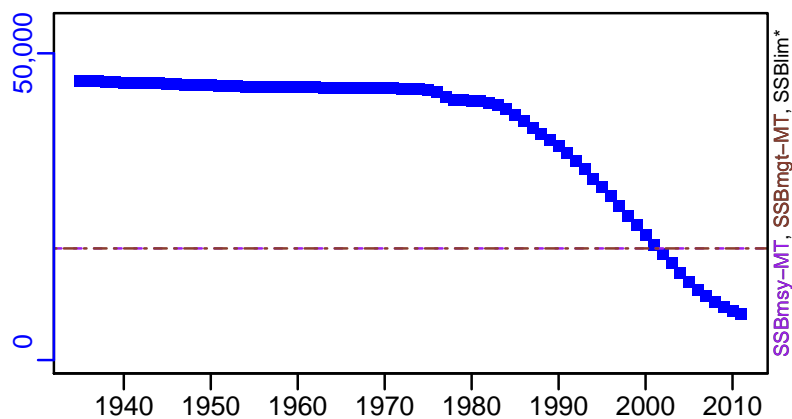
◆ Start Year ◆ End Year \* No Data

# Bluenose New Zealand [BNSNZ]

TB\*



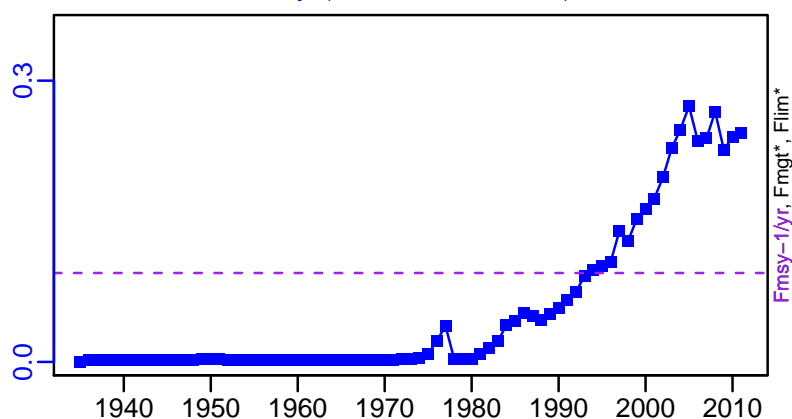
SSB-MT (1935-2011-CORDUE)



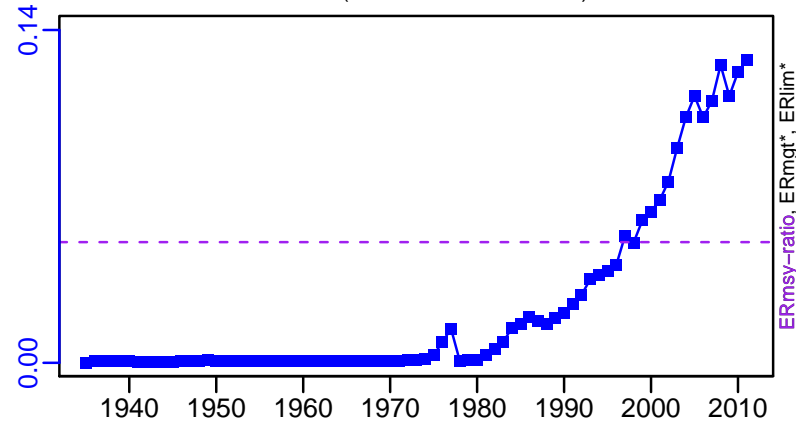
TN \*



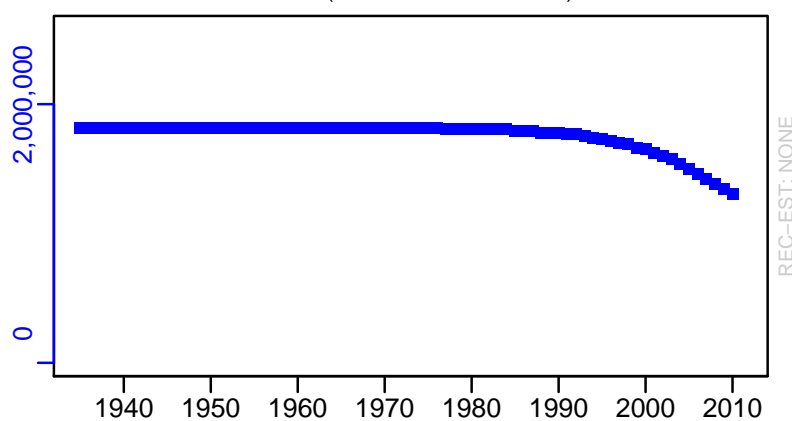
F-1/yr (1935-2011-CORDUE)



ER-ratio (1935-2011-CORDUE)

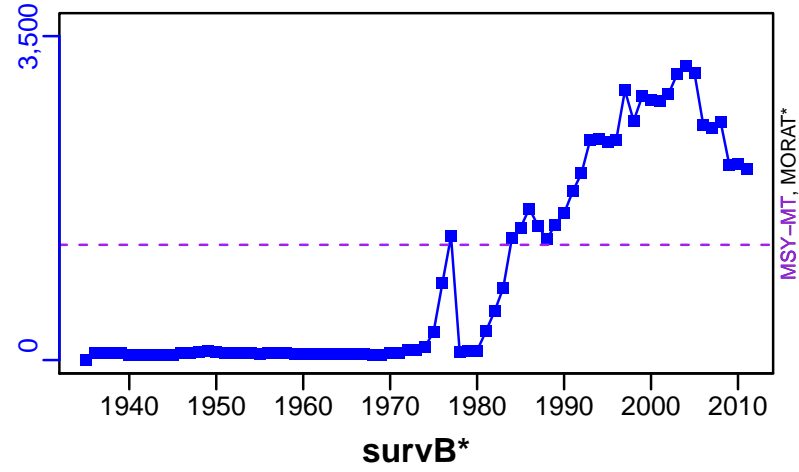


R-E00 (1935-2011-CORDUE)



# Bluenose New Zealand [BNSNZ]

TC-MT, TL\*, RecC\* (1935-2011-CORDUE)



TAC\*, Cpair\*, Cadv\*



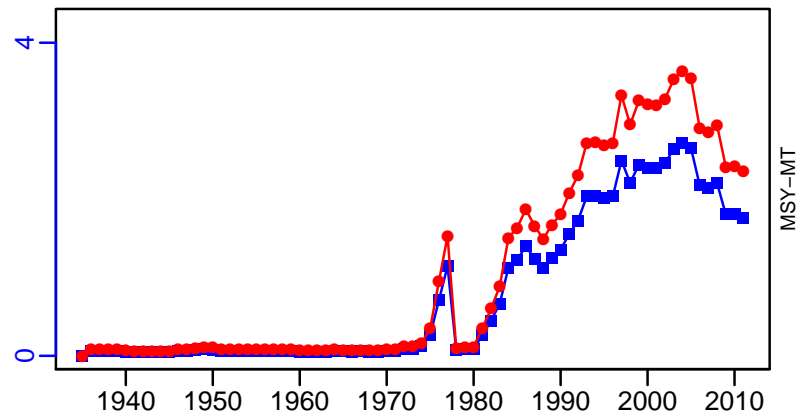
CPUE\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1935-2011-CORDUE)



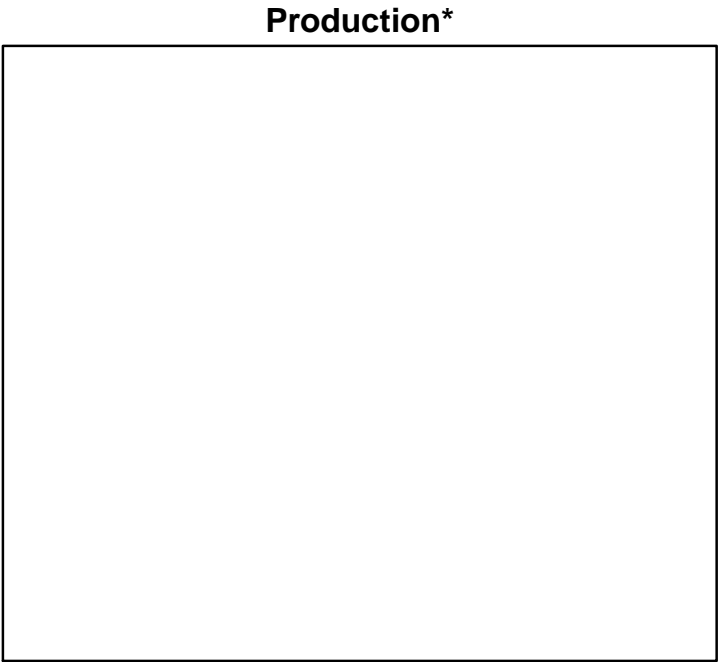
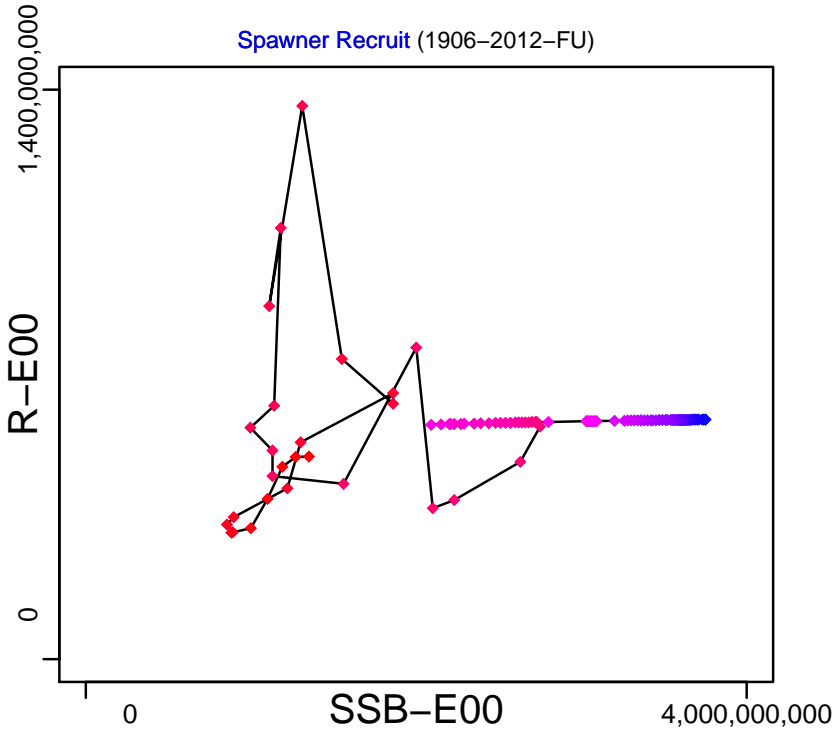
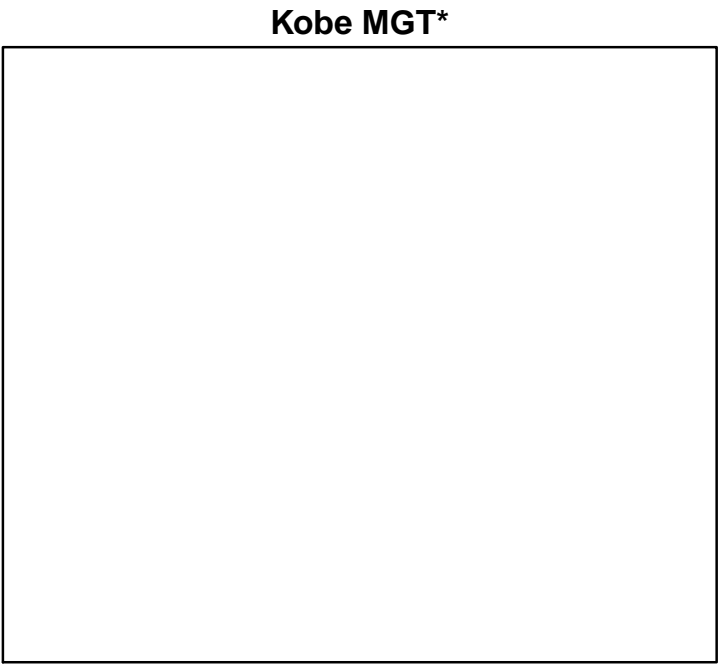
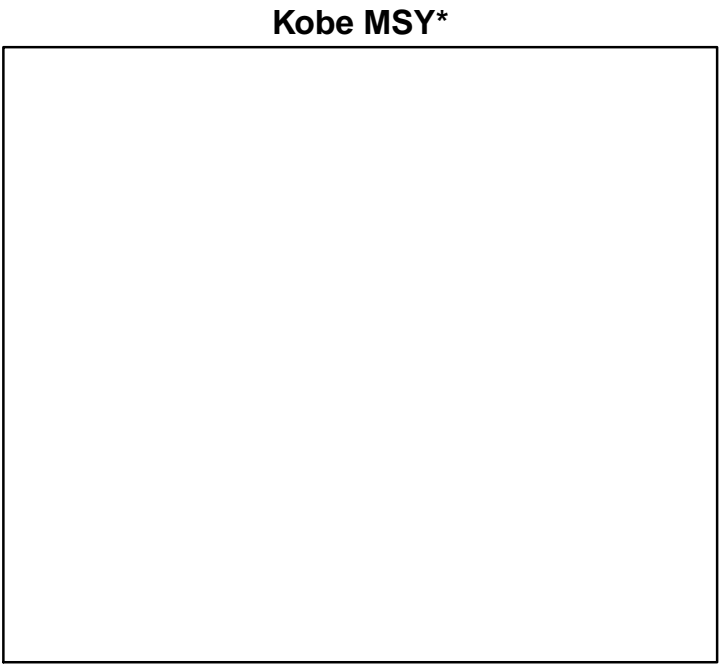
■ 1st listed time series    ▲ 3rd listed time series    — MORAT  
● 2nd listed time series    - - - MSY    \* No Data

## Dredge oyster Foveax Strait [DOYSFS]

Metadata	
<b>Scientific Name</b>	Ostrea chilensis
<b>Current Assess ID</b>	NIWA-DOYSFS-1906-2012-FU
<b>Area</b>	Foveax Strait
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2012

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-E00	2012	1,501,772,000
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2012	0.1
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-E00	2012	$1.44 \times 10^9$	-	-
TN	-	-	-	-	-
R	R-E00	2012	$4.98 \times 10^8$	Both	-
F	F-1/yr	2012	0.01	Both	-
ER	-	-	-	-	-
TC	TC-E00	2012	12,600,000		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSBdivSSBmgt-dimensionless	2012	0.9		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

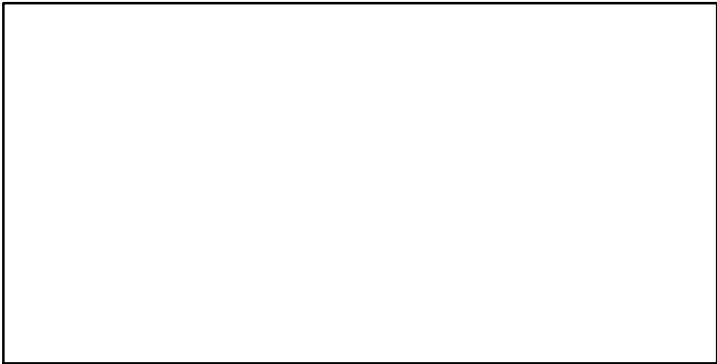


◆ Start Year ◆ End Year \* No Data

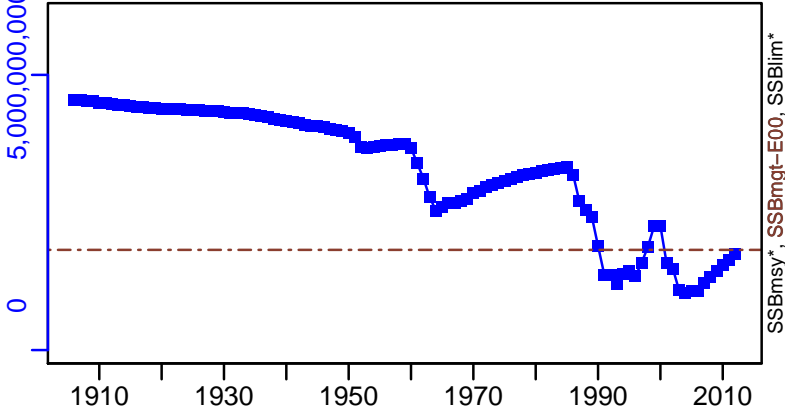


Dredge oyster Foveax Strait [DOYSFS]

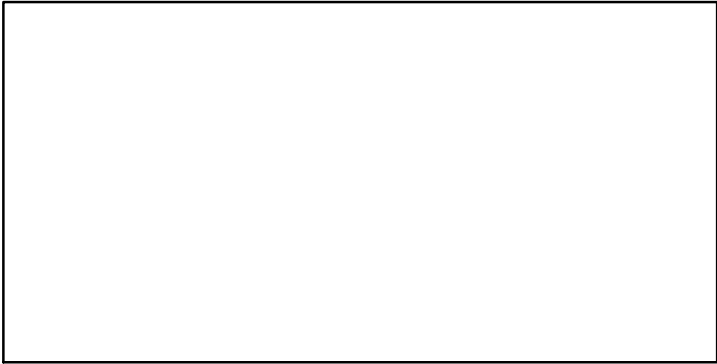
TB\*



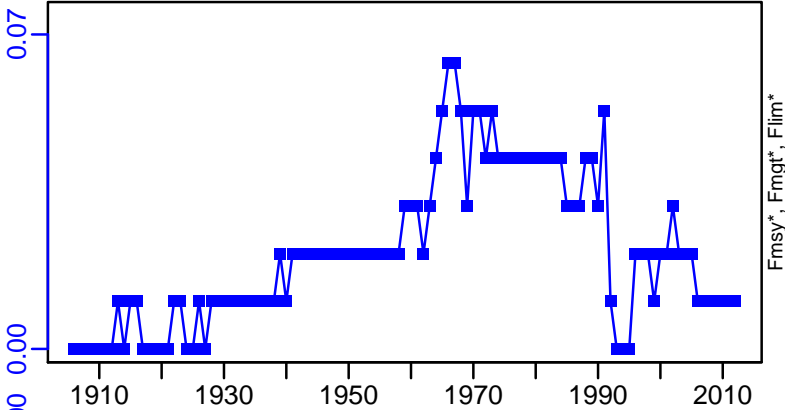
SSB-E00 (1906–2012–FU)



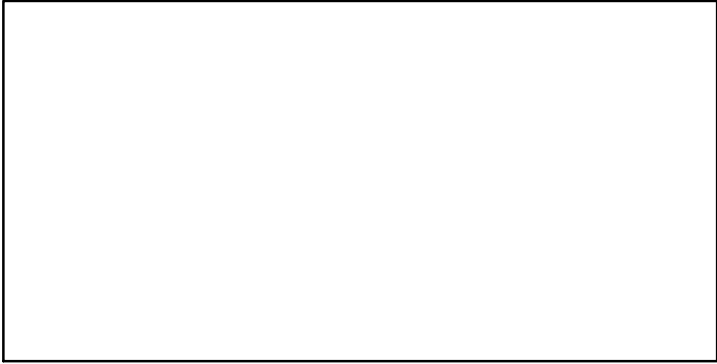
TN \*



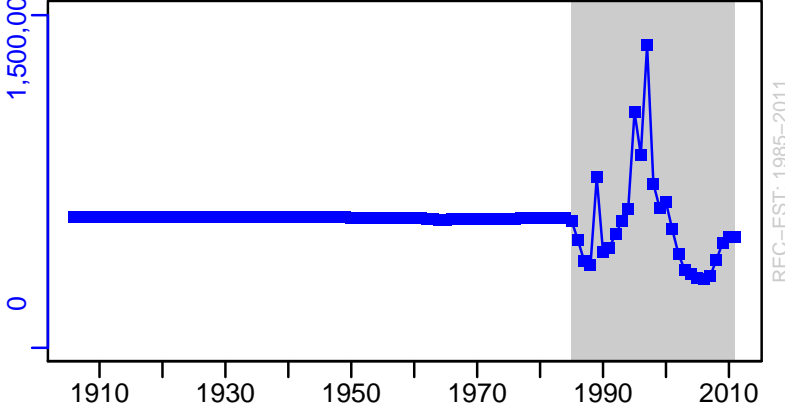
F-1/yr (1906–2012–FU)



ER\*

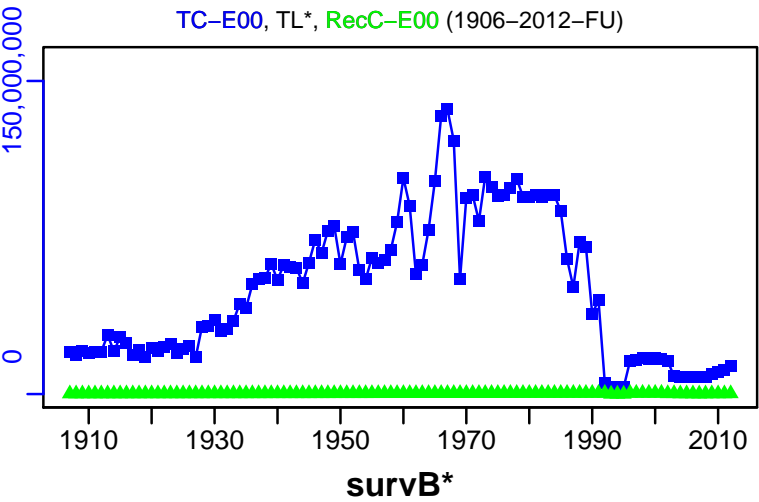


R-E00 (1906–2012–FU)

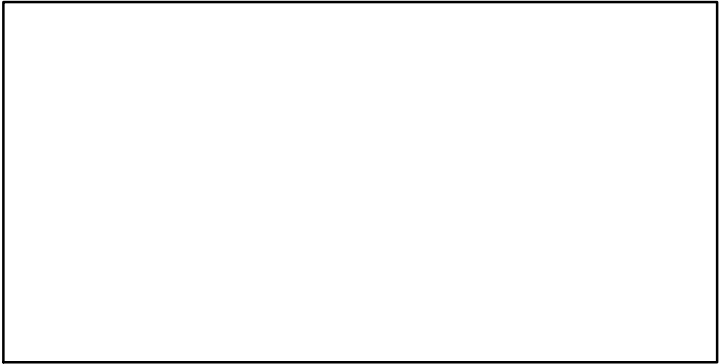
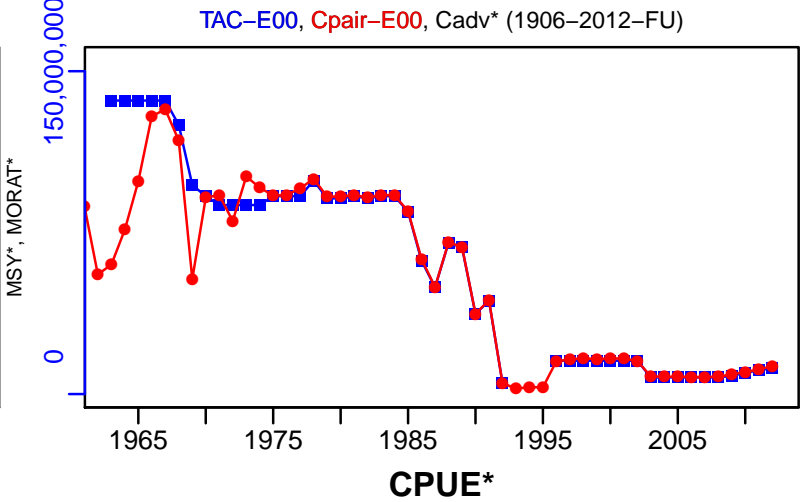


Dredge oyster Foveax Strait [DOYSFS]

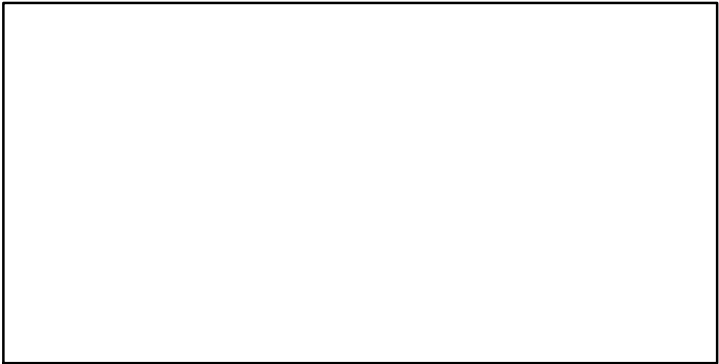
TC-E00, TL\*, RecC-E00 (1906-2012-FU)



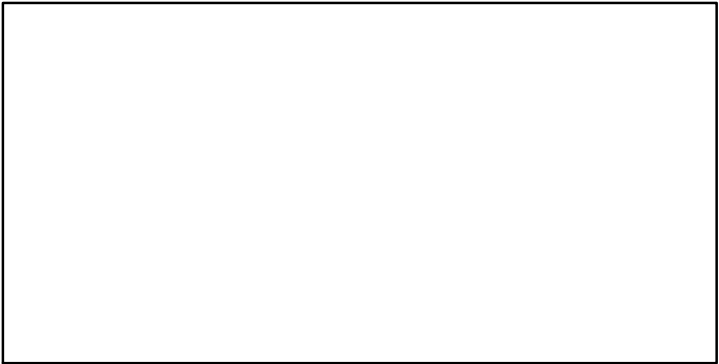
TAC-E00, Cpair-E00, Cadv\* (1906-2012-FU)



EFFORT\*



CdivMSY\*



## Common gemfish New Zealand [GEMFISHNZ]

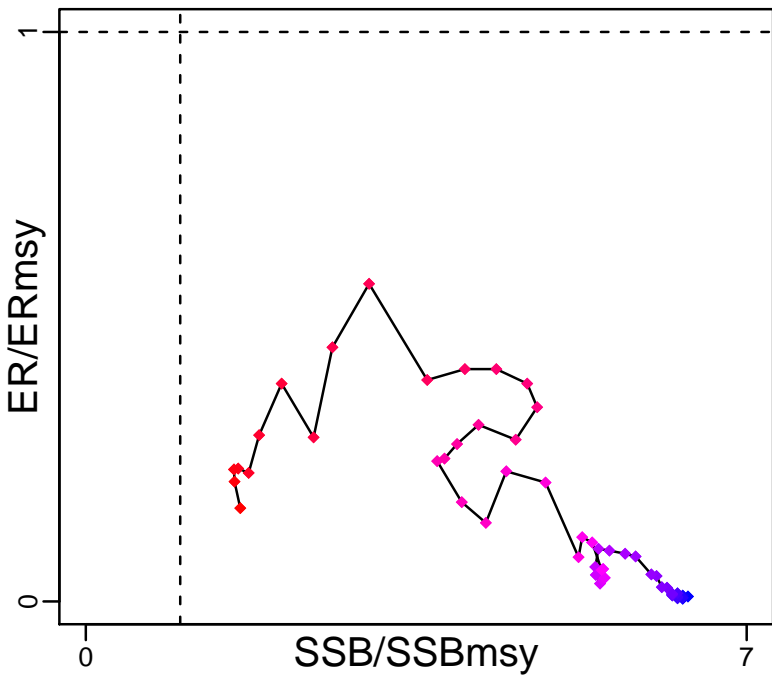
Metadata	
<b>Scientific Name</b>	Rexea solandri
<b>Current Assess ID</b>	NZMFishMIDDEPTHSWG-GEMFISHNZ-1952-2007-JENSEN
<b>Area</b>	New Zealand
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	Middle Depths Working Group
<b>Asmts in RAM</b>	2007

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2007	4565
<b>SSBmsy</b>	SSBmsy-MT	2007	1803
<b>Fmsy</b>	Fmsy-1/yr	2007	0.29
<b>ERmsy</b>	ERmsy-ratio	2007	0.314
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2007	11,485
<b>MSY</b>	MSY-MT	2007	1432
<b>M</b>	M-1/yr	2007	0.24
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

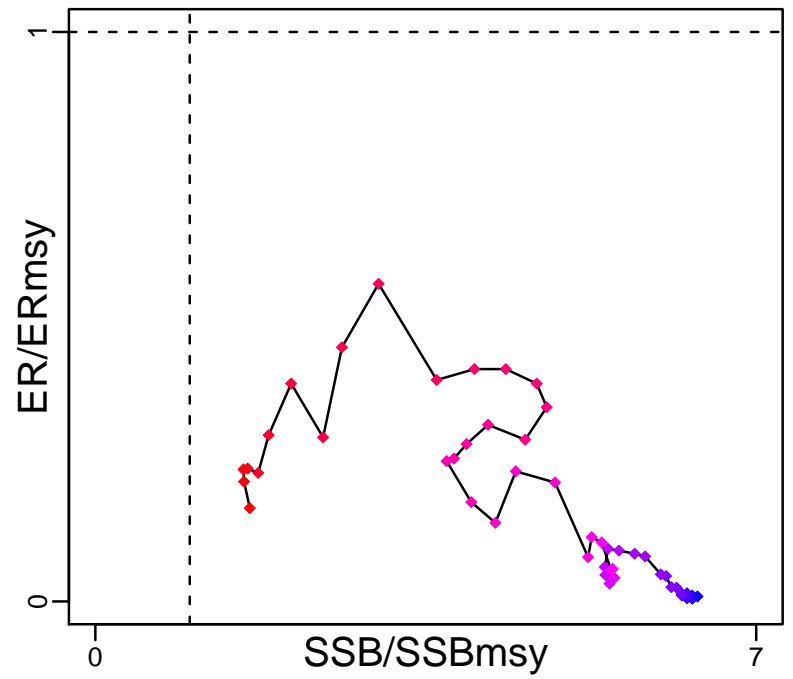
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2007	8020	-	1
<b>SSB</b>	SSB-MT	2007	2950	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2007	1,930,000	-	1
<b>F</b>	F-1/yr	2007	0.124	-	-
<b>ER</b>	ER-ratio	2007	0.051	-	-
<b>TC</b>	TC-MT	2007	412		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	TB-MT/TBmsy-calc-MT	2007	1.757		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2007	1.636		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2007	0.428		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2007	0.164		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Common gemfish New Zealand [GEMFISHNZ]

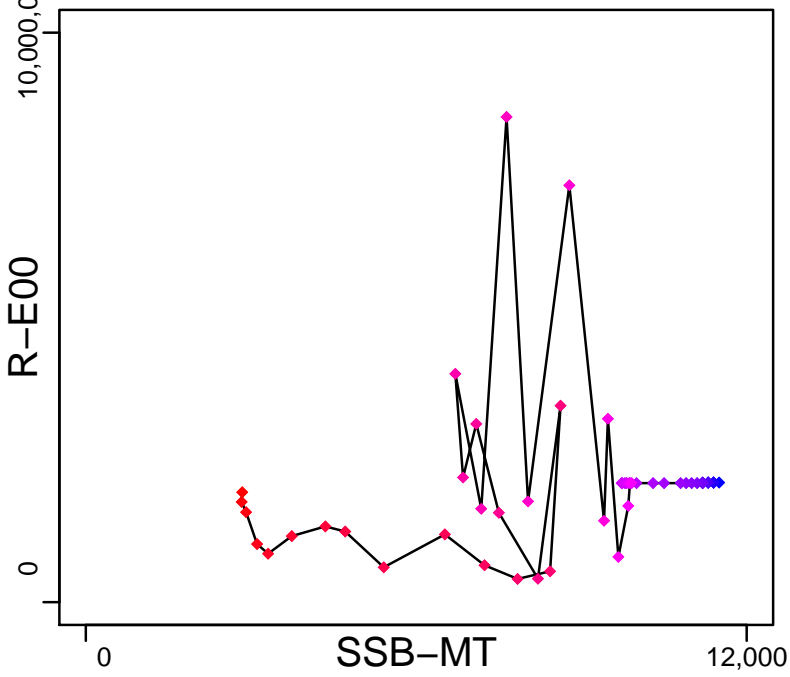
Kobe MSYpref (1952–2007–JENSEN)



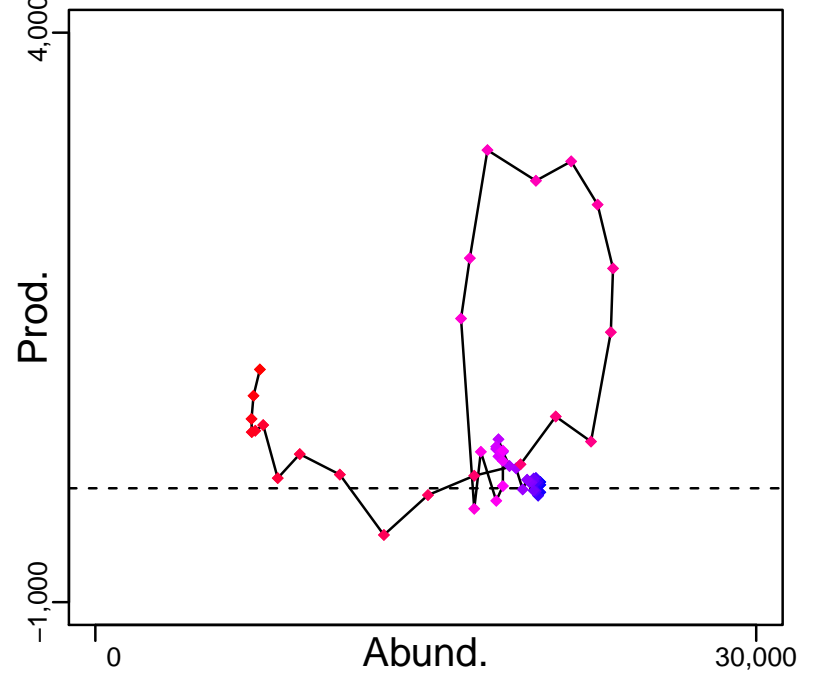
Kobe MGTpref (1952–2007–JENSEN)



Spawner Recruit (1952–2007–JENSEN)



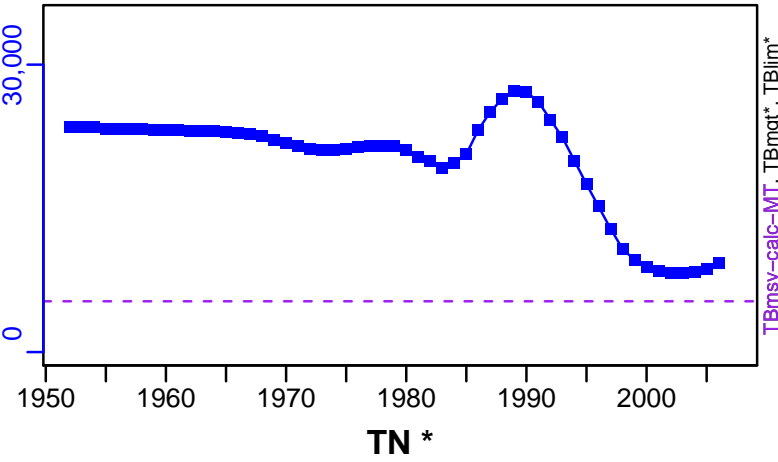
Production (1952–2007–JENSEN)



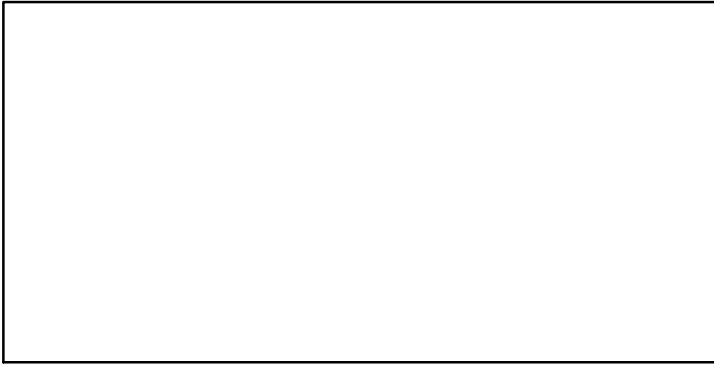
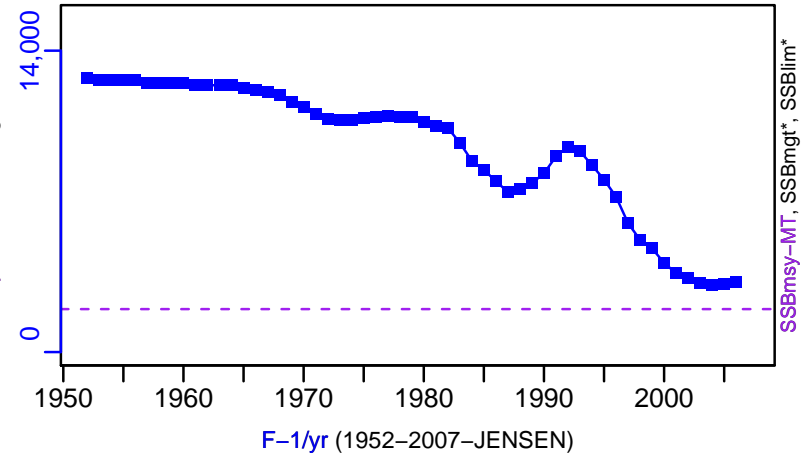
◆ Start Year ◆ End Year \* No Data

# Common gemfish New Zealand [GEMFISHNZ]

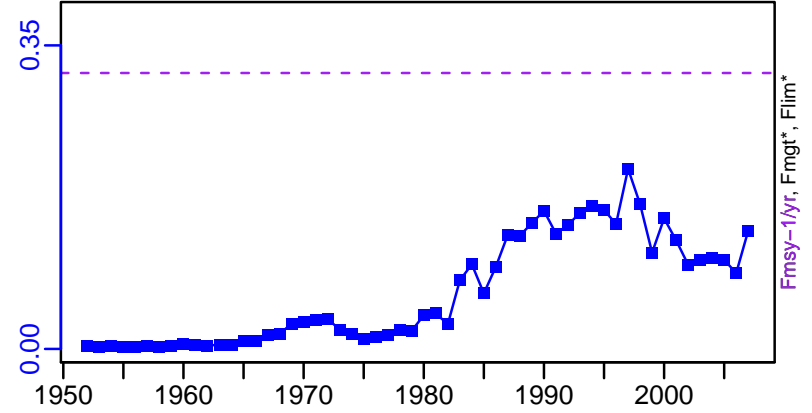
TB-MT (1952-2007-JENSEN)



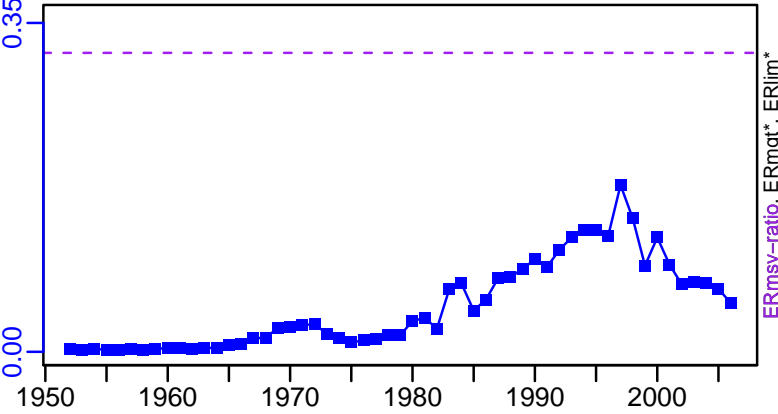
SSB-MT (1952-2007-JENSEN)



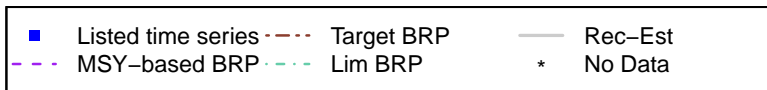
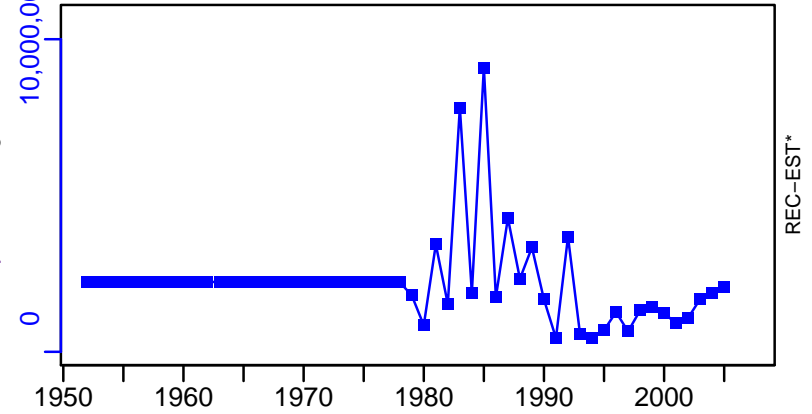
F-1/yr (1952-2007-JENSEN)



ER-ratio (1952-2007-JENSEN)

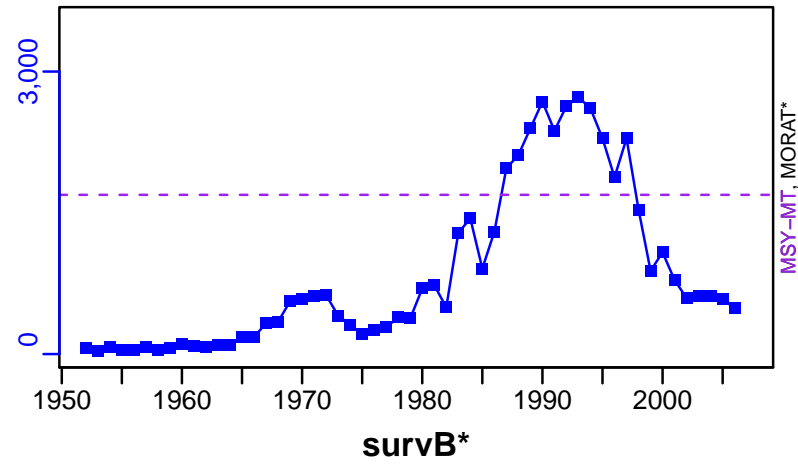


R-E00 (1952-2007-JENSEN)



# Common gemfish New Zealand [GEMFISHNZ]

TC-MT, TL\*, RecC\* (1952-2007-JENSEN)



TAC\*, Cpair\*, Cadv\*



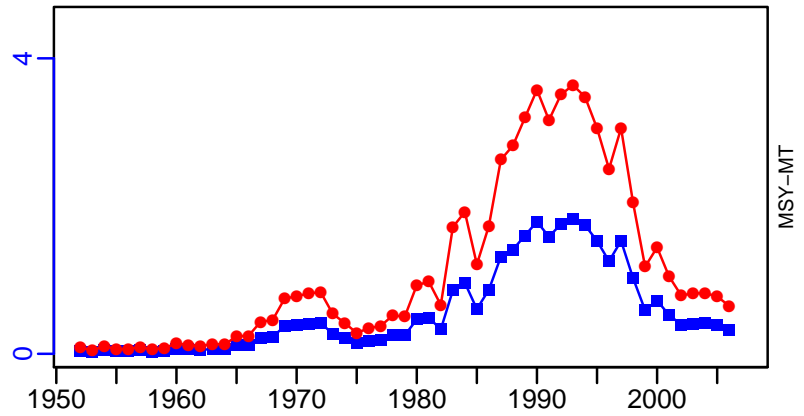
CPUE\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1952-2007-JENSEN)



## Giant stargazer NZ Area STA7 [GSTRGZRSTA7]

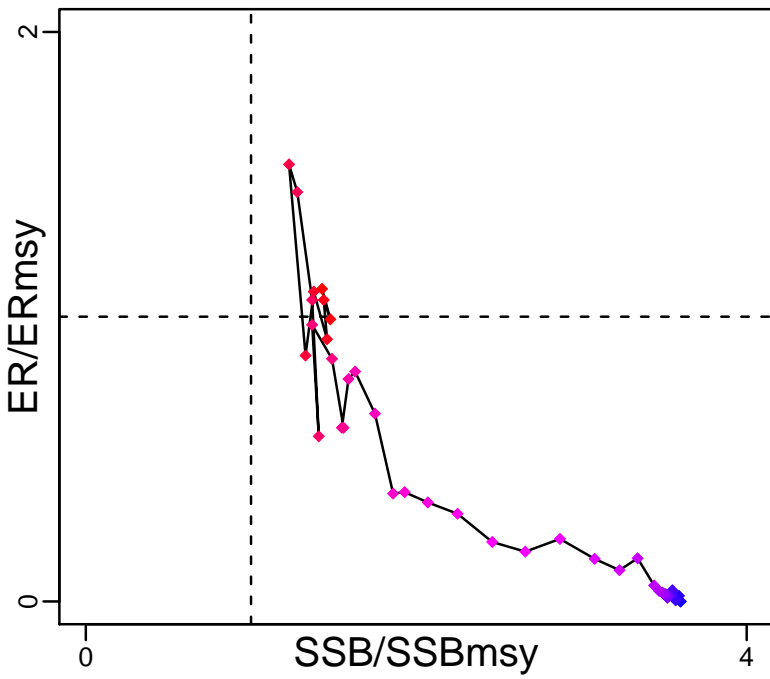
Metadata	
<b>Scientific Name</b>	Kathetostoma giganteum
<b>Current Assess ID</b>	NIWA-GSTRGZRSTA7-1964-2007-CORDUE
<b>Area</b>	NZ Area STA7
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2007

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2007	5906
<b>SSBmsy</b>	SSBmsy-MT	2007	2568
<b>Fmsy</b>	Fmsy-1/yr	2007	0.38
<b>ERmsy</b>	ERmsy-ratio	2007	0.103
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2007	9237
<b>MSY</b>	MSY-MT	2007	608
<b>M</b>	M-1/yr	2007	0.18
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

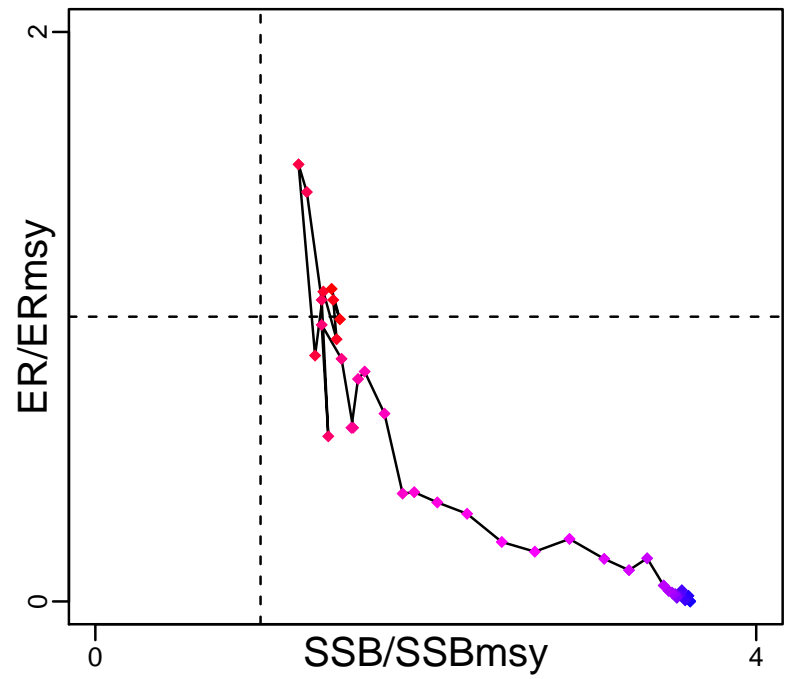
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2007	3680	Both	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2007	1,180,000	-	0
<b>F</b>	F-1/yr	2007	0.486	-	-
<b>ER</b>	ER-ratio	2007	0.113	-	-
<b>TC</b>	TC-MT	2007	958		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSBdivSSBmsy-dimensionless	2007	1.43		
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2007	1.28		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2007	1.098		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Giant stargazer NZ Area STA7 [GSTRGZRSTA7]

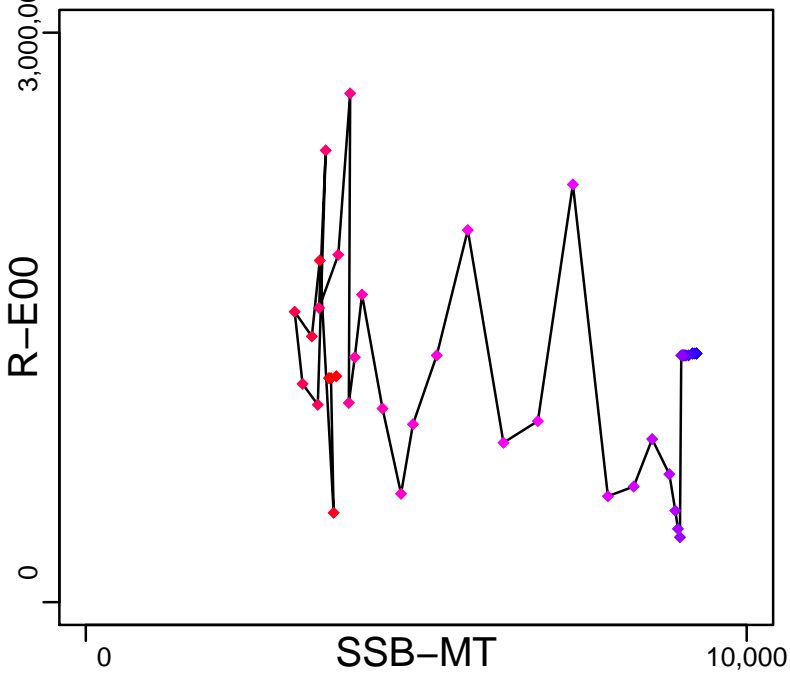
Kobe MSYpref (1964–2007–CORDUE)



Kobe MGTpref (1964–2007–CORDUE)



Spawner Recruit (1964–2007–CORDUE)



Production\*



◆ Start Year ◆ End Year \* No Data

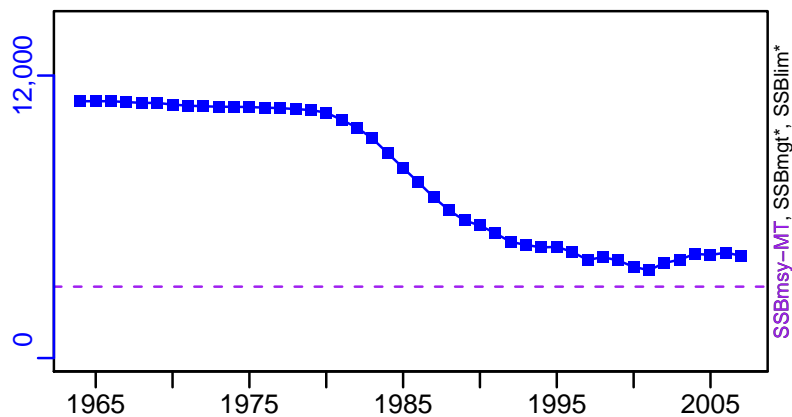


# Giant stargazer NZ Area STA7 [GSTRGZRSTA7]

TB\*



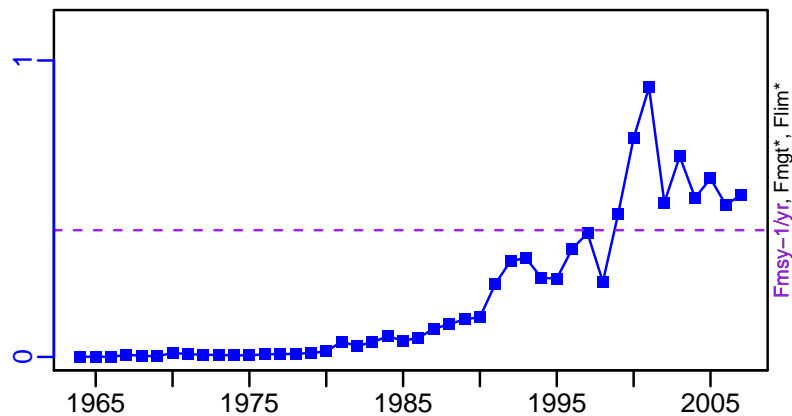
SSB-MT (1964–2007–CORDUE)



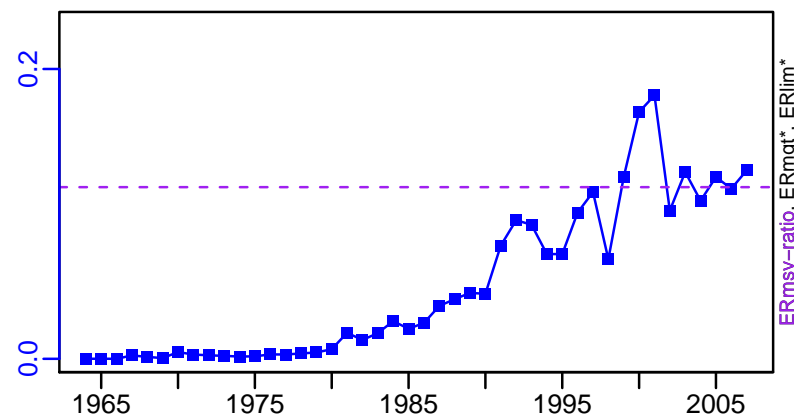
TN \*



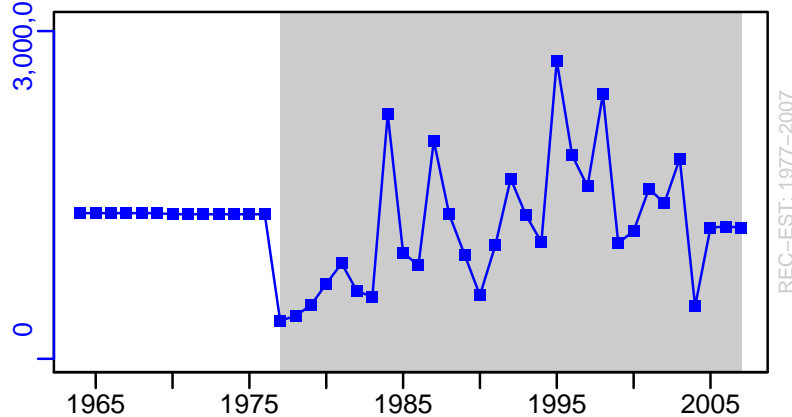
F-1/yr (1964–2007–CORDUE)



ER-ratio (1964–2007–CORDUE)

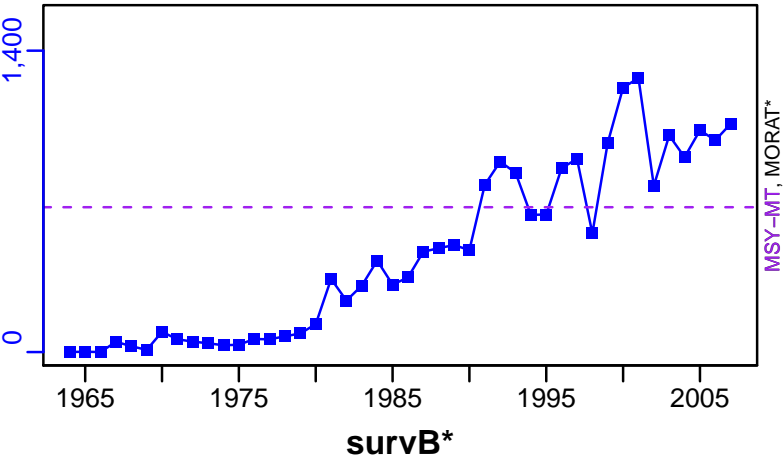


R-E00 (1964–2007–CORDUE)



Giant stargazer NZ Area STA7 [GSTRGZRSTA7]

TC-MT, TL\*, RecC\* (1964-2007-CORDUE)



TAC\*, Cpair\*, Cadv\*



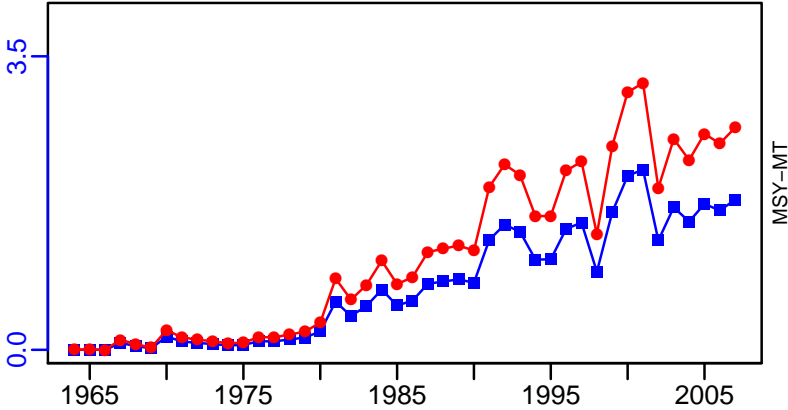
CPUE\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1964-2007-CORDUE)



## Hoki Eastern New Zealand [HOKIENZ]

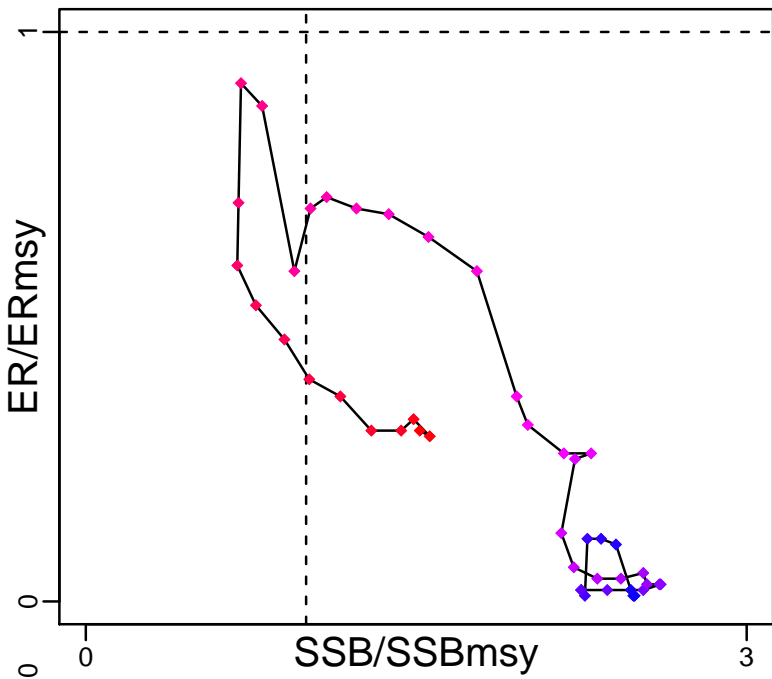
Metadata	
<b>Scientific Name</b>	Macruronus novaezelandiae
<b>Current Assess ID</b>	NIWA-HOKIENZ-1970-2015-FU
<b>Area</b>	Eastern New Zealand
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2012, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2015	252,069
<b>SSBmsy</b>	SSBmsy-MT	2015	177,430
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2015	0.29
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2015	188,519
<b>Fmgt</b>	-	-	-
<b>ERMgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2015	443,574
<b>MSY</b>	MSY-MT	2015	73,100
<b>M</b>	M-1/yr	2015	0.29
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

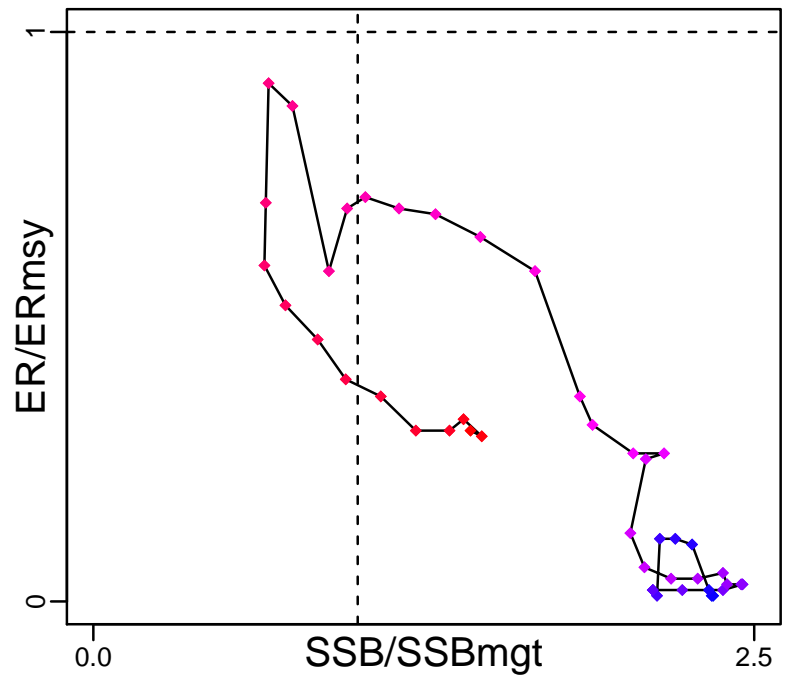
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2015	269,000	-	3+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$7.24 \times 10^8$	Both	-
<b>F</b>	F-1/yr	2012	0.107	-	-
<b>ER</b>	ER-ratio	2015	0.087	Both	-
<b>TC</b>	TC-MT	2015	60,000		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	1.516		
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2012	0.382		
<b>ER/ERmsy</b>	ERdivERmsy-dimensionless	2015	0.3		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2015	1.427		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERMgt</b>	-	-	-		

# Hoki Eastern New Zealand [HOKIENZ]

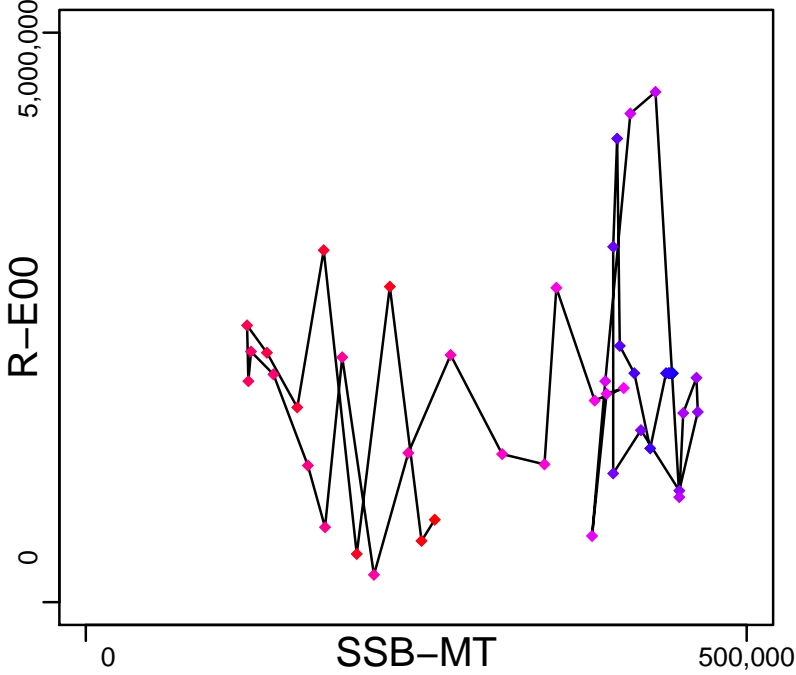
Kobe MSYpref (1970–2015–FU)



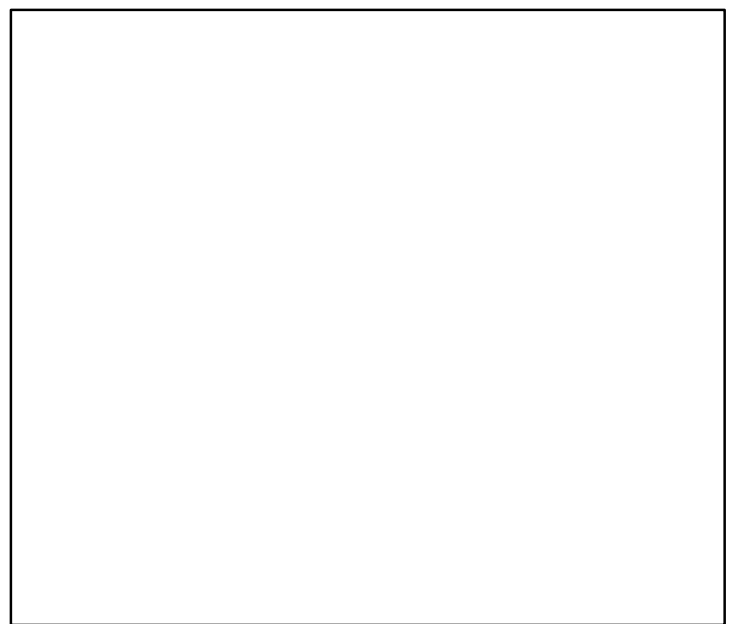
Kobe MGTpref (1970–2015–FU)



Spawner Recruit (1970–2015–FU)



Production\*



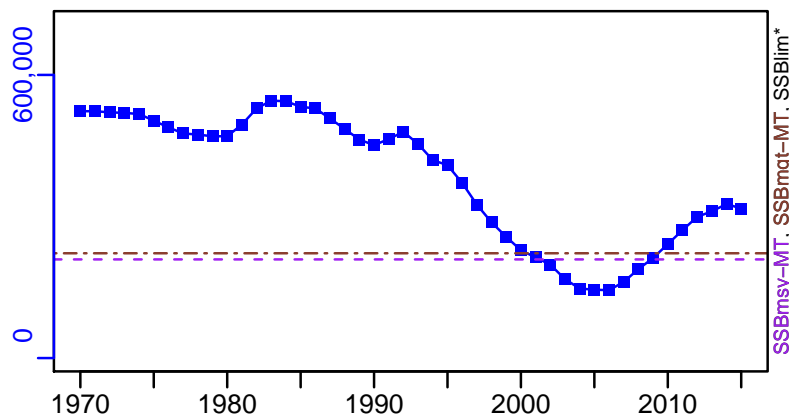
◆ Start Year ◆ End Year \* No Data

# Hoki Eastern New Zealand [HOKIENZ]

TB\*



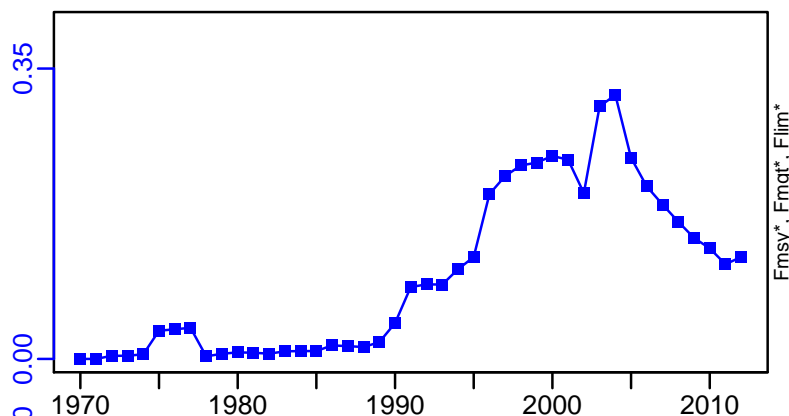
SSB-MT (1970–2015–FU)



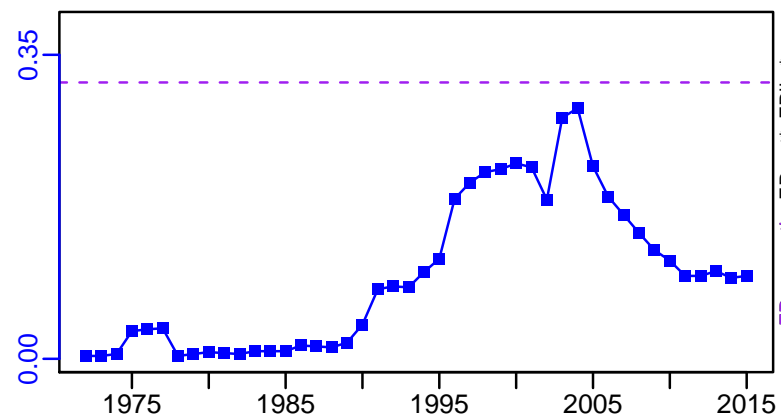
TN \*



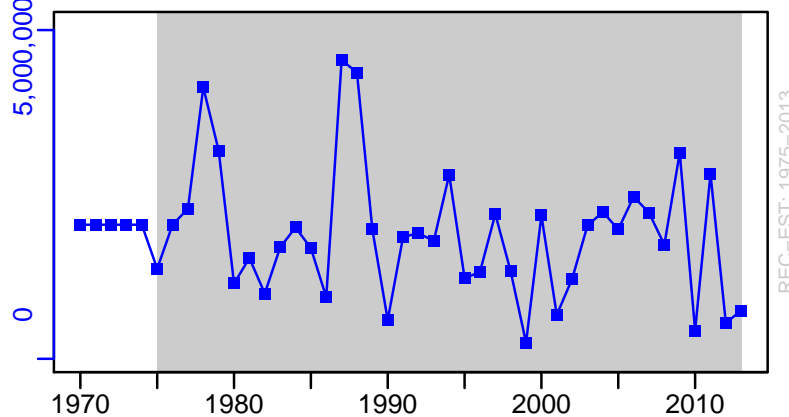
F-1/yr (1970–2012–CORDUE)



ER-ratio (1970–2015–FU)

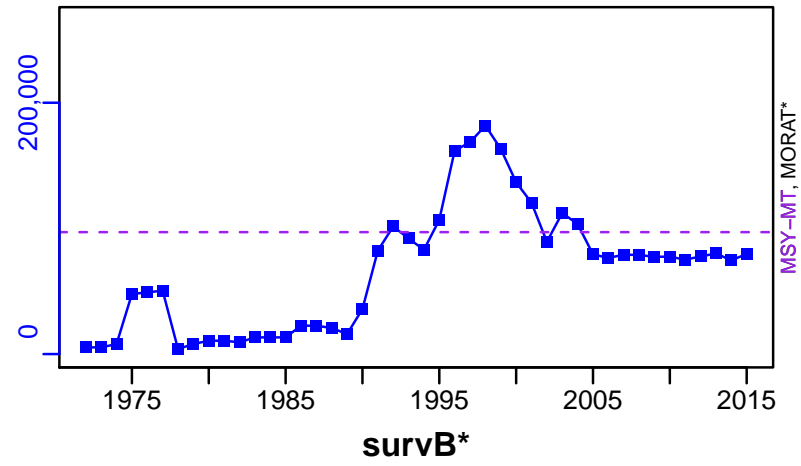


R-E00 (1970–2015–FU)



# Hoki Eastern New Zealand [HOKIENZ]

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



TAC\*, Cpair\*, Cadv\*



survB\*



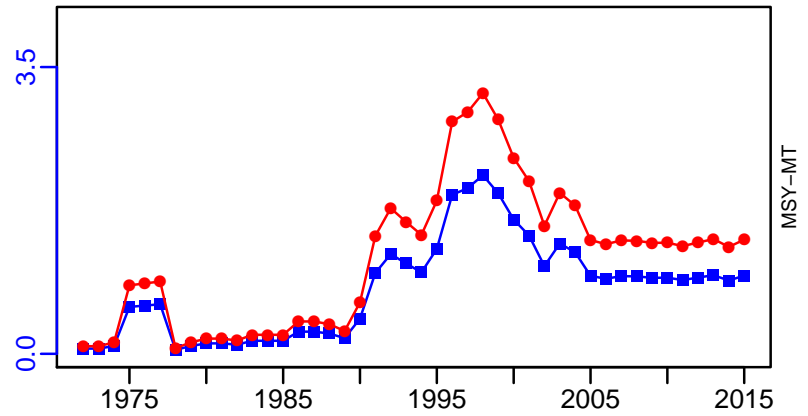
CPUE\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1970-2015-FU)



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

## Hoki Western New Zealand [HOKIWNZ]

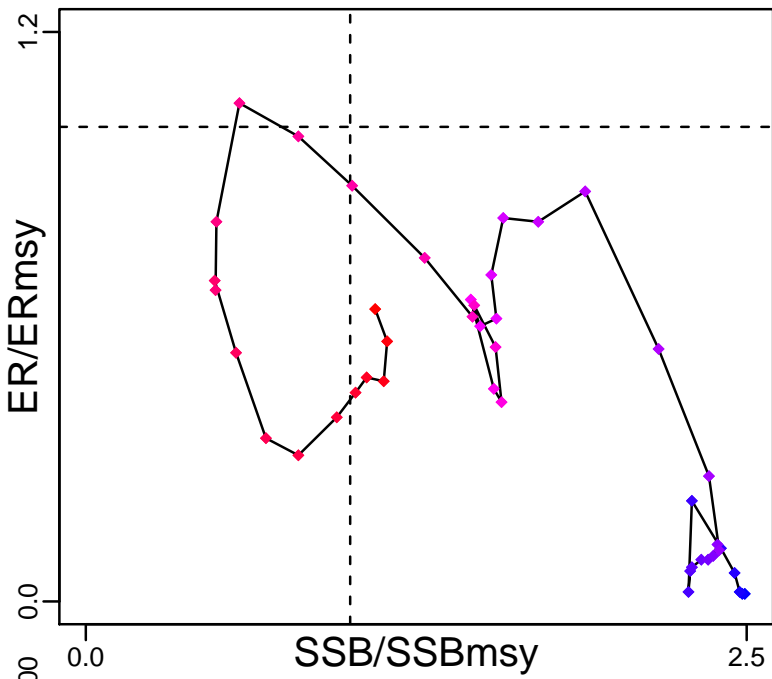
Metadata	
<b>Scientific Name</b>	Macruronus novaezelandiae
<b>Current Assess ID</b>	NIWA-HOKIWNZ-1970-2015-FU
<b>Area</b>	Western New Zealand
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2012, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2015	479,200
<b>SSBmsy</b>	SSBmsy-MT	2015	309,678
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2015	0.25
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2015	329,032
<b>Fmgt</b>	-	-	-
<b>ERMgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2015	774,194
<b>MSY</b>	MSY-MT	2015	119,800
<b>M</b>	M-1/yr	2015	0.29
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

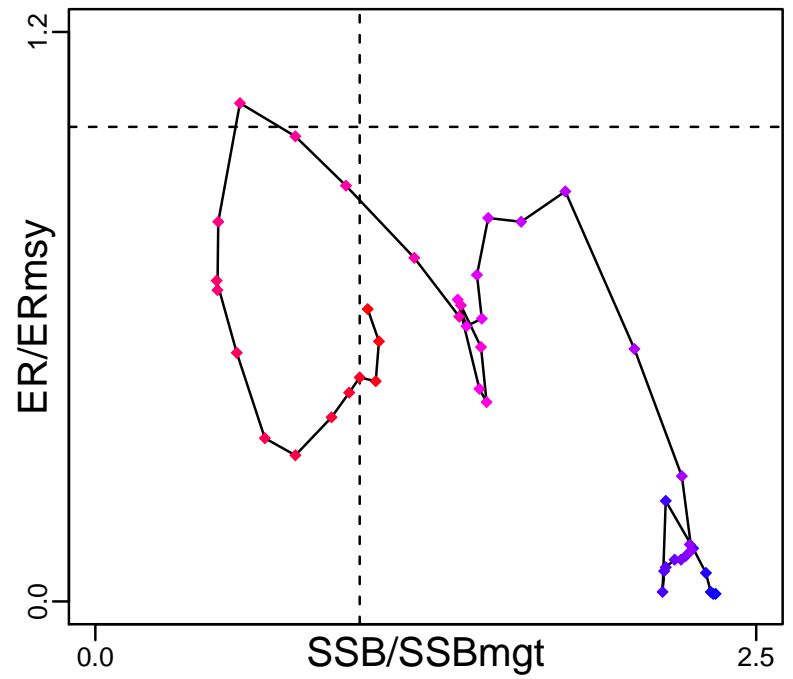
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2015	339,000	-	3+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$1.11 \times 10^9$	Both	-
<b>F</b>	F-1/yr	2012	0.137	-	-
<b>ER</b>	ER-ratio	2015	0.154	Both	-
<b>TC</b>	TC-MT	2015	$1 \times 10^5$		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	1.095		
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2012	0.547		
<b>ER/ERmsy</b>	ERdivERmsy-dimensionless	2015	0.616		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2015	1.03		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERMgt</b>	-	-	-		

# Hoki Western New Zealand [HOKIWNZ]

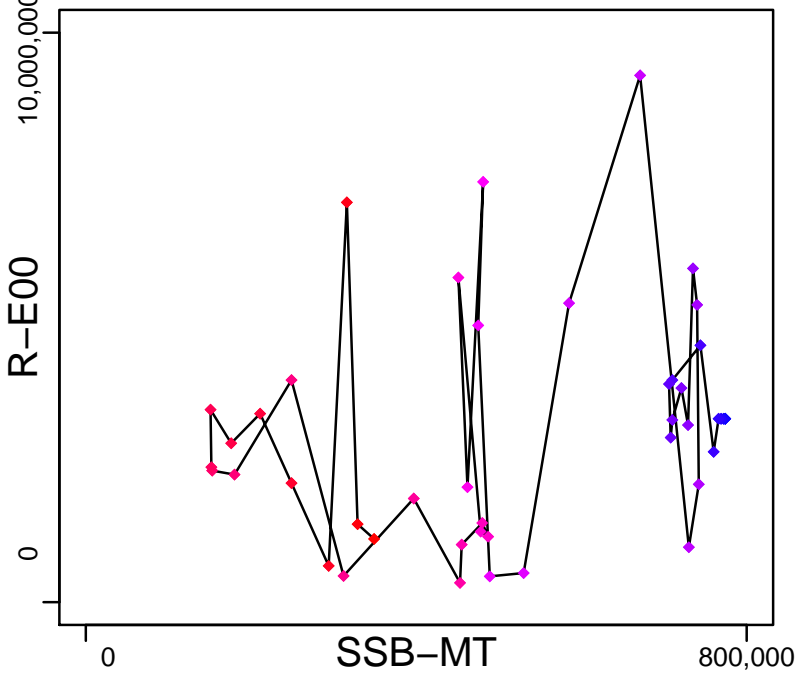
Kobe MSYpref (1970–2015–FU)



Kobe MGTpref (1970–2015–FU)



Spawner Recruit (1970–2015–FU)



Production\*



◆ Start Year ◆ End Year \* No Data

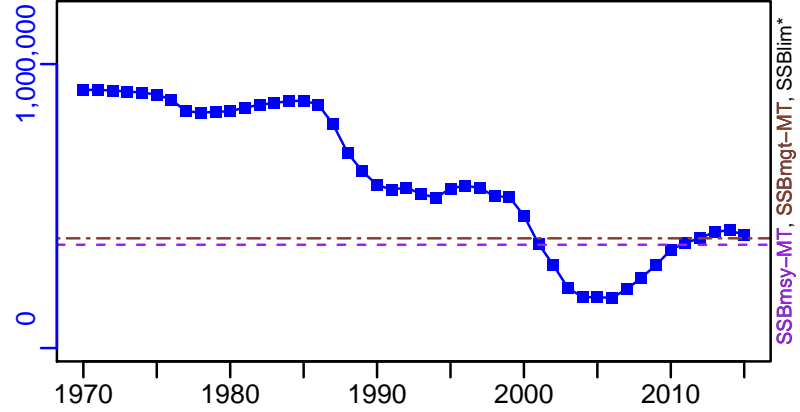


# Hoki Western New Zealand [HOKIWNZ]

TB\*



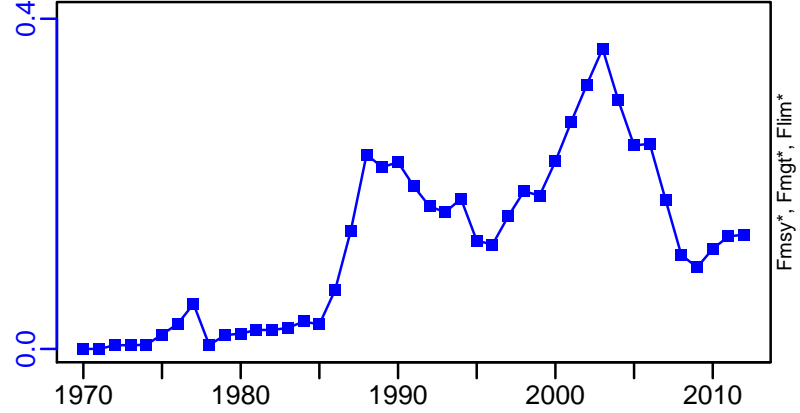
SSB-MT (1970–2015–FU)



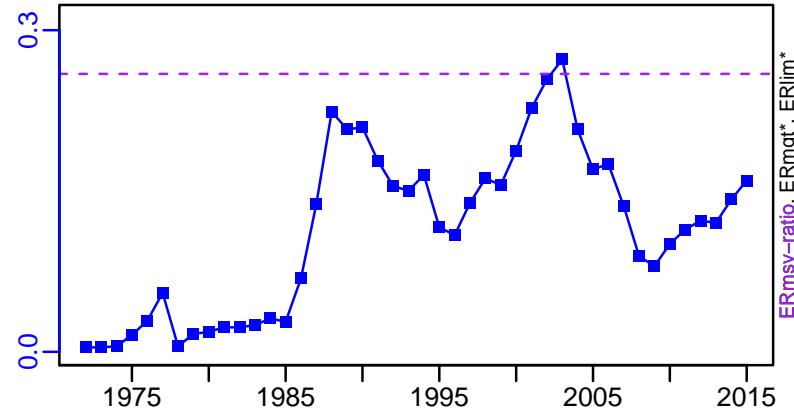
TN \*



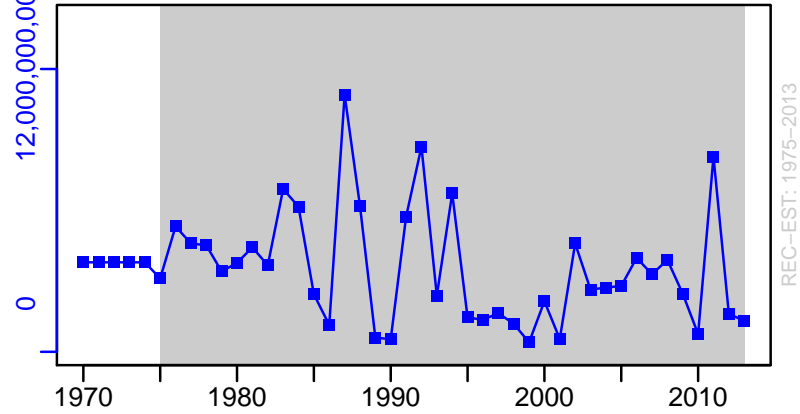
F-1/yr (1970–2012–CORDUE)



ER-ratio (1970–2015–FU)

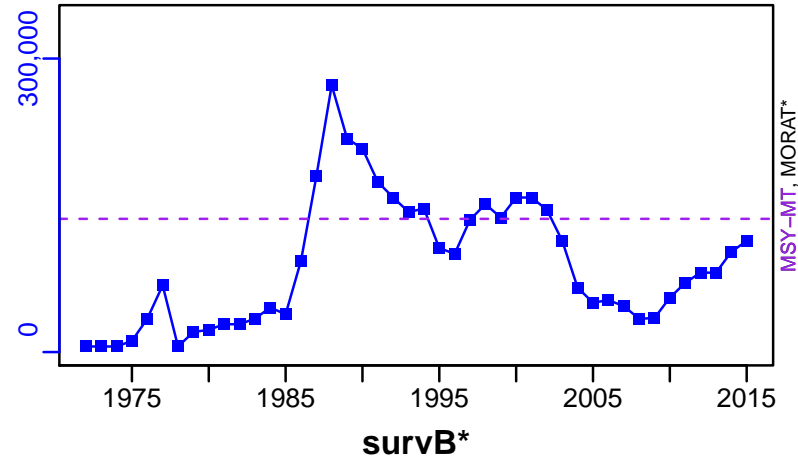


R-E00 (1970–2015–FU)



# Hoki Western New Zealand [HOKIWNZ]

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



TAC\*, Cpair\*, Cadv\*



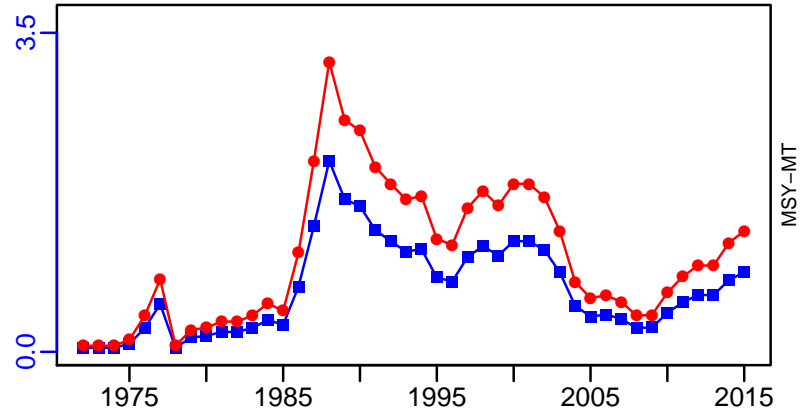
CPUE\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1970-2015-FU)



## Ling New Zealand Areas LIN 3 and 4 [NZLINGLIN3-4]

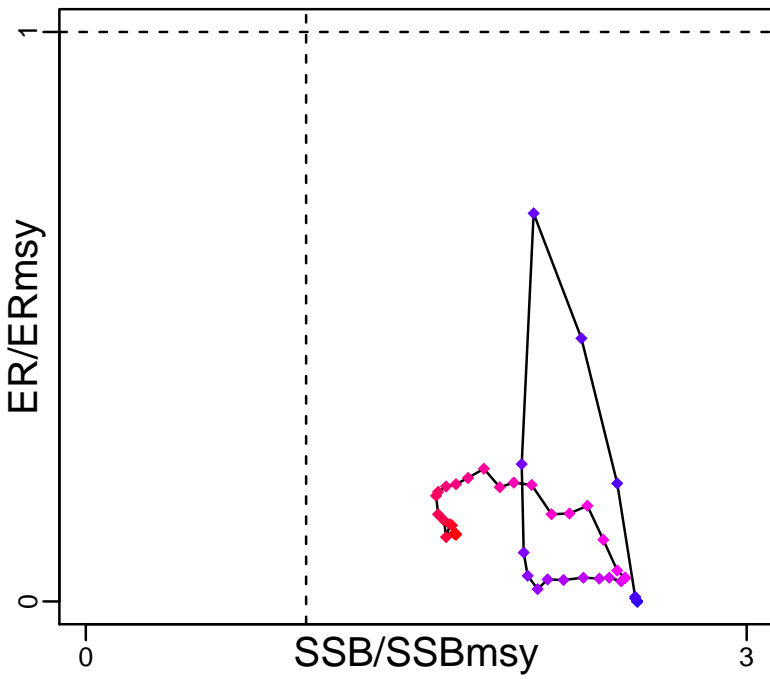
Metadata	
<b>Scientific Name</b>	Genypterus blacodes
<b>Current Assess ID</b>	NIWA-NZLINGLIN3-4-1968-2014-FU
<b>Area</b>	New Zealand Areas LIN 3 and 4
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2011, 2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2014	17,362
<b>SSBmsy</b>	SSBmsy-MT	2014	52,140
<b>Fmsy</b>	Fmsy-1/yr	2011	0.19
<b>ERmsy</b>	ERmsy-ratio	2014	0.37
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2014	52,140
<b>Fmgt</b>	-	-	-
<b>ERMgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2014	130,349
<b>MSY</b>	MSY-MT	2014	6424
<b>M</b>	M-1/yr	2014	0.18
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

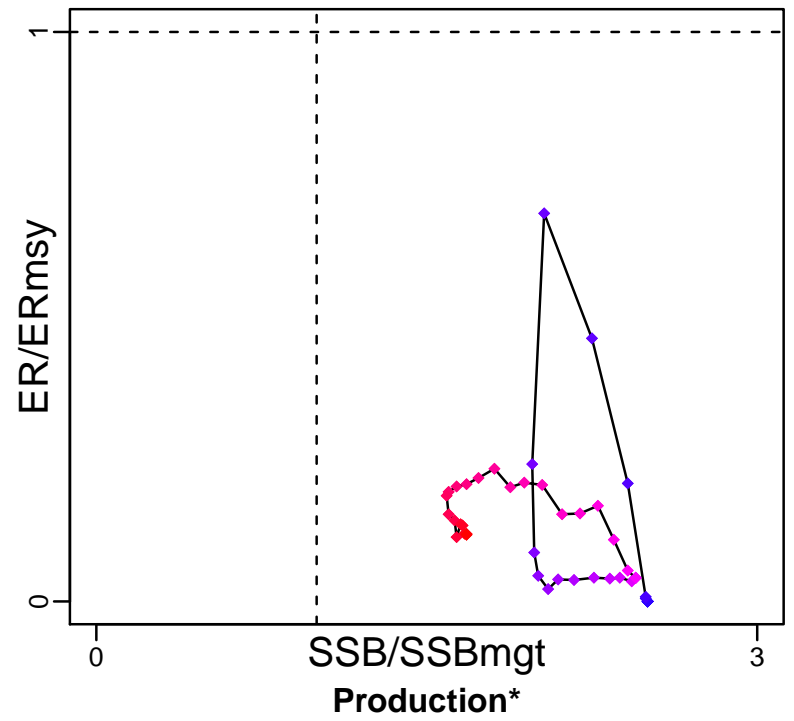
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2014	73,400	-	3 to 25
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2014	7,800,000	Both	-
<b>F</b>	F-1/yr	2011	0.023	-	-
<b>ER</b>	ER-ratio	2011	0.009	-	-
<b>TC</b>	TC-MT	2014	3590		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2014	1.408		
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2011	0.123		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2011	0.117		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2014	1.408		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERMgt</b>	-	-	-		

Ling New Zealand Areas LIN 3 and 4 [NZLINGLIN3-4]

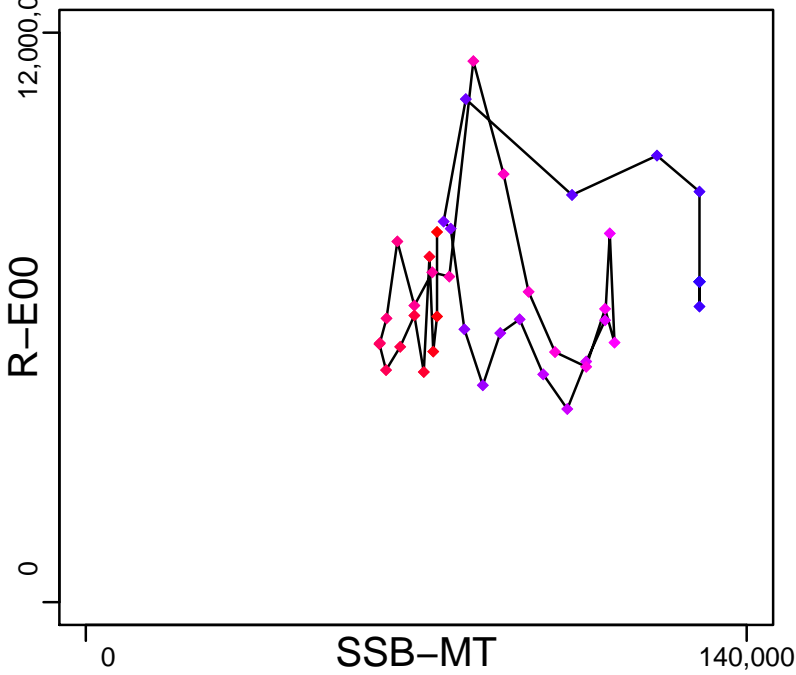
Kobe MSYpref (1968–2011–CORDUE)



Kobe MGTpref (1968–2011–CORDUE)



Spawner Recruit (1968–2014–FU)



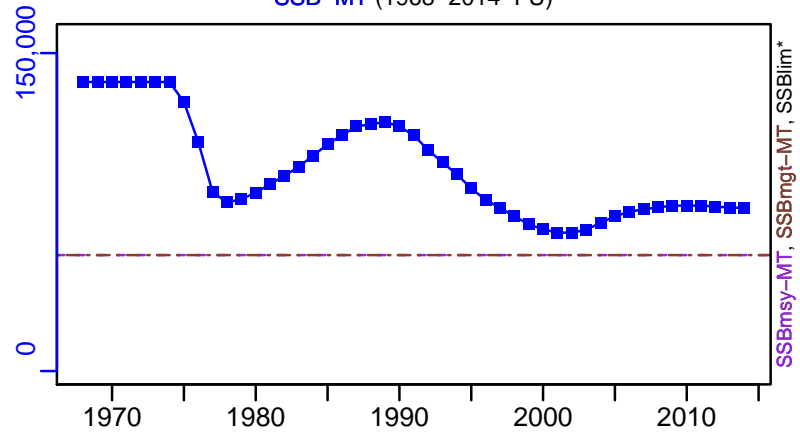
◆ Start Year ◆ End Year \* No Data

Ling New Zealand Areas LIN 3 and 4 [NZLINGLIN3-4]

TB\*



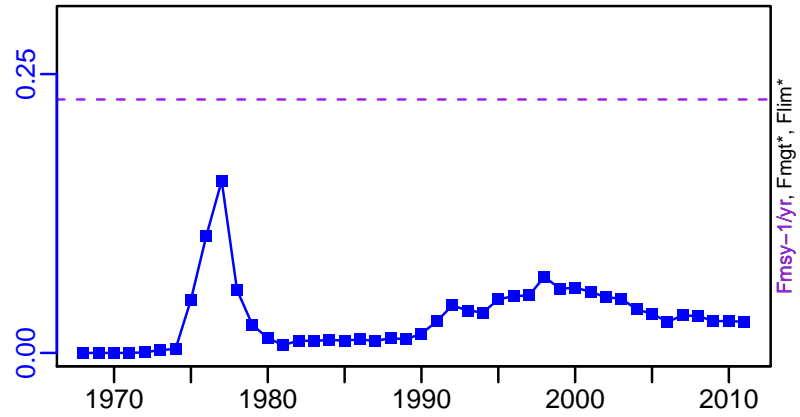
SSB-MT (1968–2014–FU)



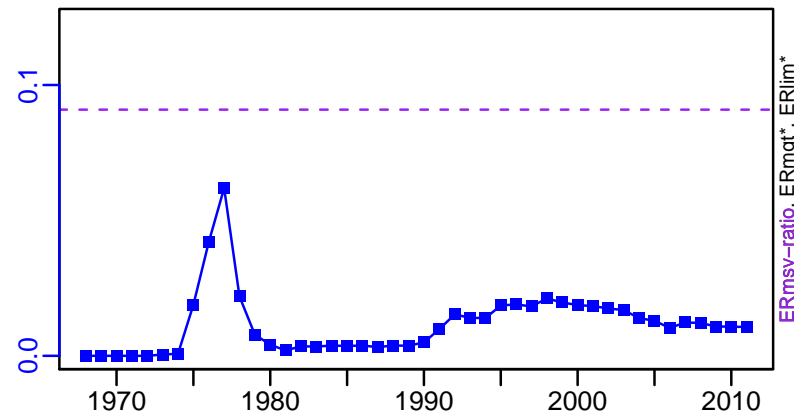
TN \*



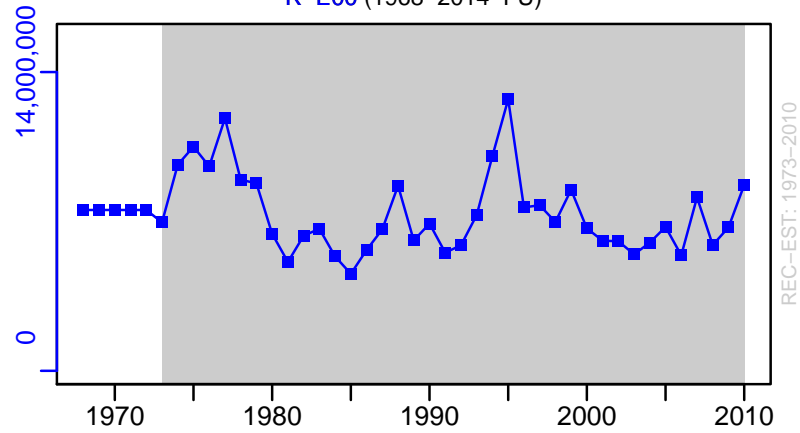
F-1/yr (1968–2011–CORDUE)



ER-ratio (1968–2011–CORDUE)

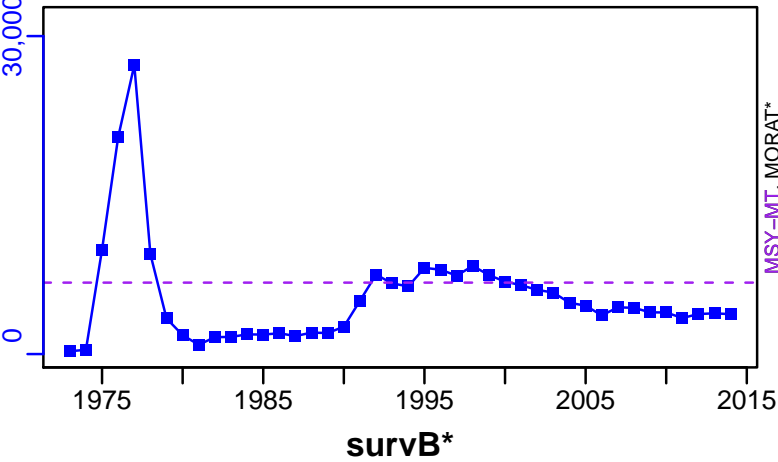


R-E00 (1968–2014–FU)

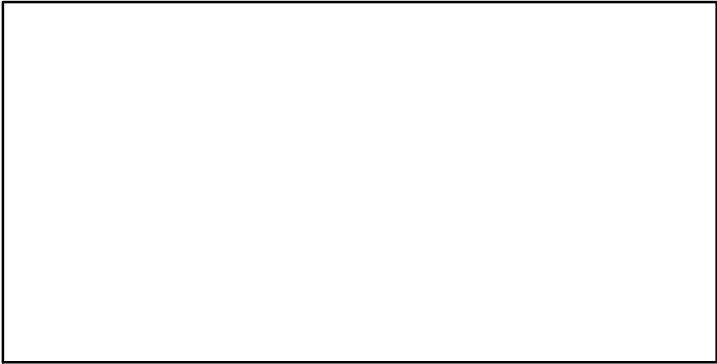
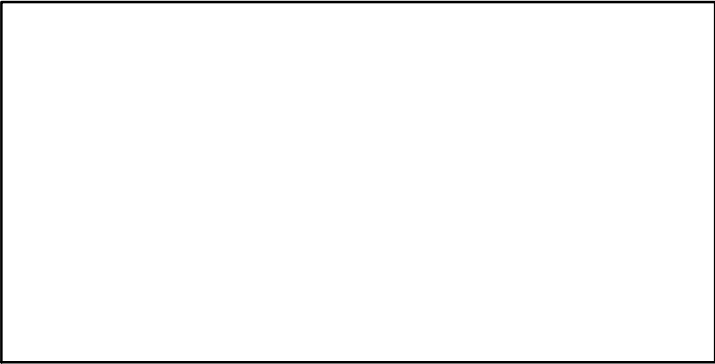
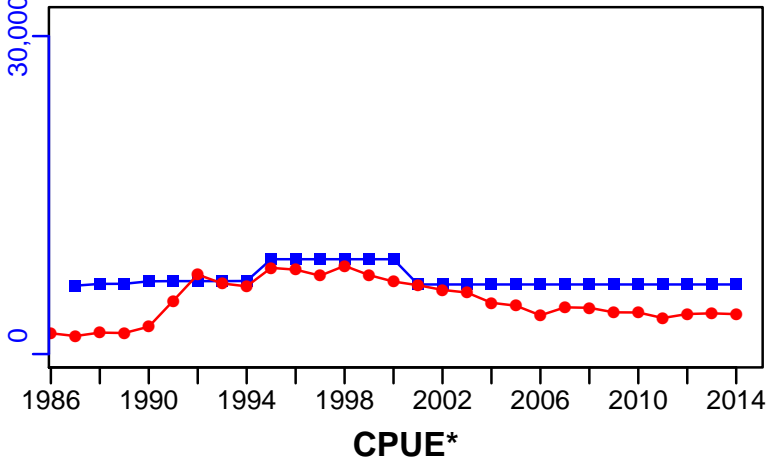


Ling New Zealand Areas LIN 3 and 4 [NZLINGLIN3-4]

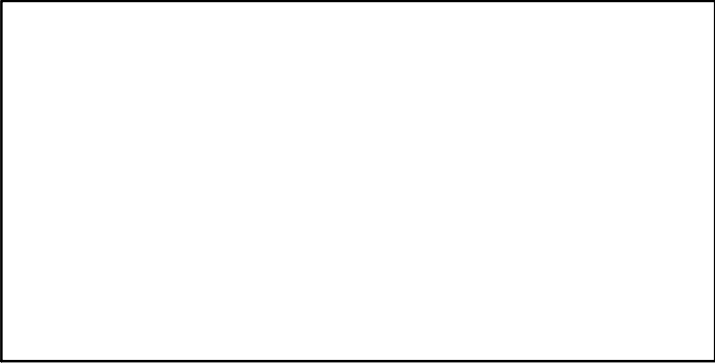
TC-MT, TL\*, RecC\* (1968-2014-FU)



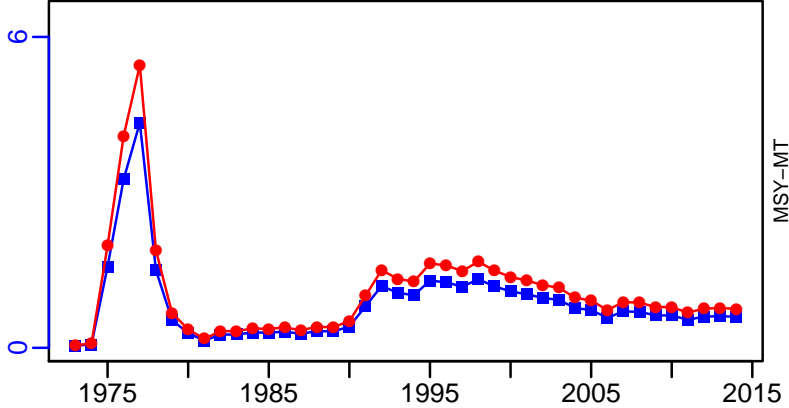
TAC-MT, Cpair-MT, Cadv\* (1968-2014-FU)



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1968-2014-FU)



## Ling New Zealand Areas LIN 5 and 6 [NZLINGLIN5-6]

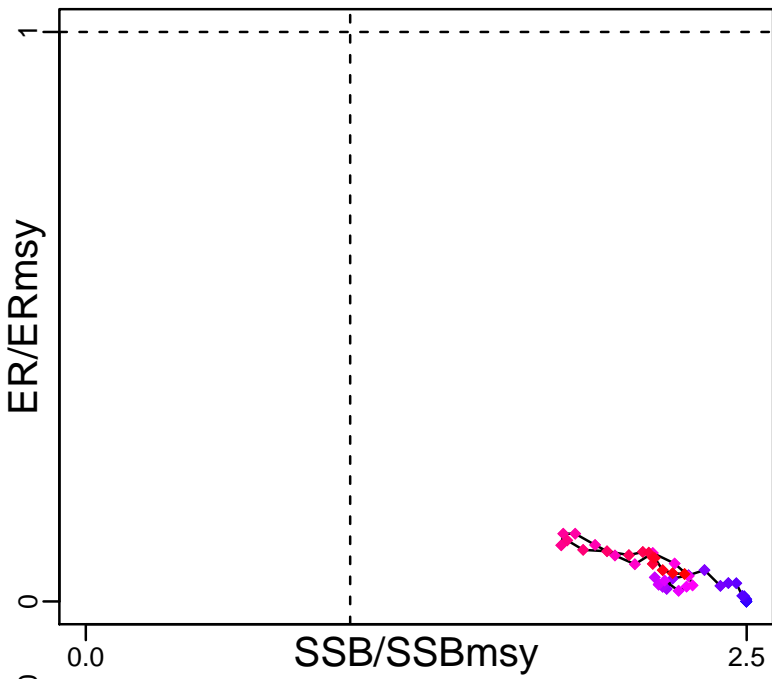
Metadata	
<b>Scientific Name</b>	Genypterus blacodes
<b>Current Assess ID</b>	NIWA-NZLINGLIN5-6-1968-2014-FU
<b>Area</b>	New Zealand Areas LIN 5 and 6
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2011, 2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2011	159,694
<b>SSBmsy</b>	SSBmsy-MT	2014	122,923
<b>Fmsy</b>	Fmsy-1/yr	2011	0.49
<b>ERmsy</b>	ERmsy-ratio	2011	0.162
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2014	122,923
<b>Fmgt</b>	-	-	-
<b>ERMgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2014	307,308
<b>MSY</b>	MSY-MT	2014	23,827
<b>M</b>	M-1/yr	2014	0.228
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

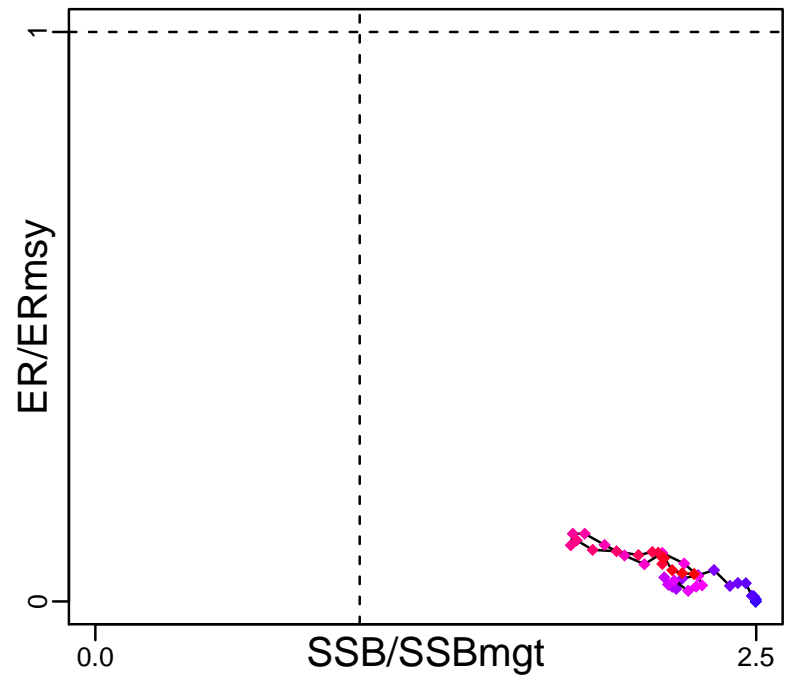
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2014	274,000	Both	3 to 25
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2014	53,300,000	-	-
<b>F</b>	F-1/yr	2011	0.02	-	-
<b>ER</b>	ER-ratio	2011	0.008	-	-
<b>TC</b>	TC-MT	2014	5780		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2014	2.229		
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2011	0.041		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2011	0.048		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2014	2.229		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERMgt</b>	-	-	-		

# Ling New Zealand Areas LIN 5 and 6 [NZLINGLIN5-6]

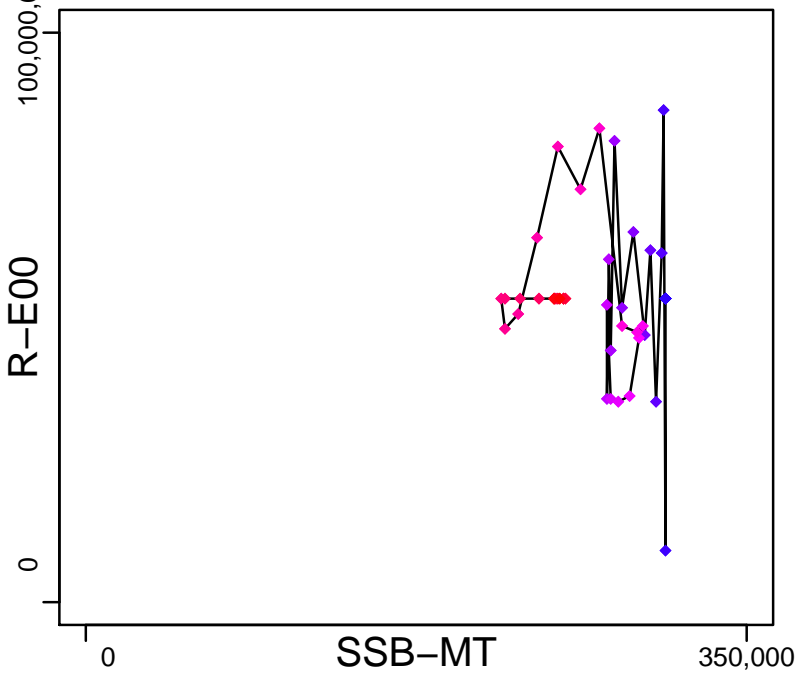
Kobe MSY<sub>pref</sub> (1968–2011–CORDUE)



Kobe MGT<sub>pref</sub> (1968–2011–CORDUE)



Spawner Recruit (1968–2014–FU)



◆ Start Year ◆ End Year \* No Data

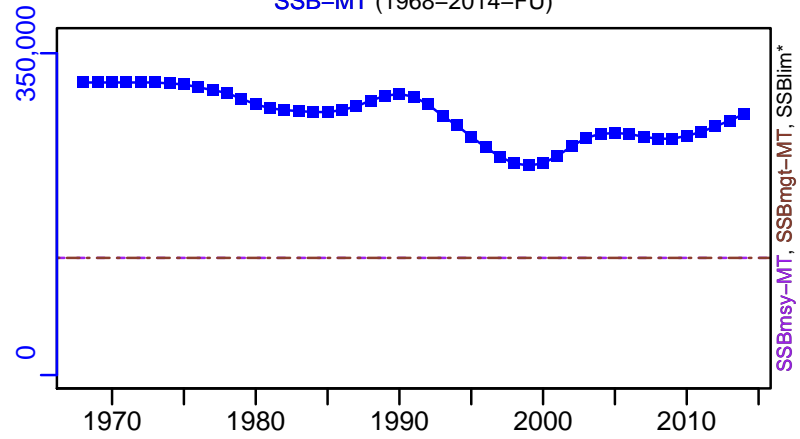


Ling New Zealand Areas LIN 5 and 6 [NZLINGLIN5-6]

TB\*



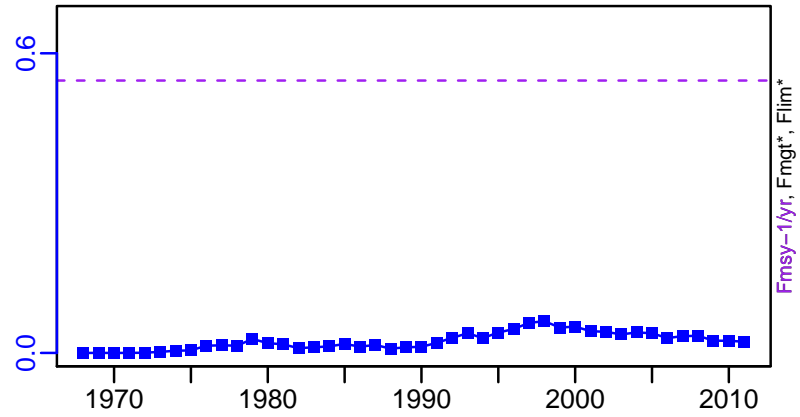
SSB-MT (1968-2014-FU)



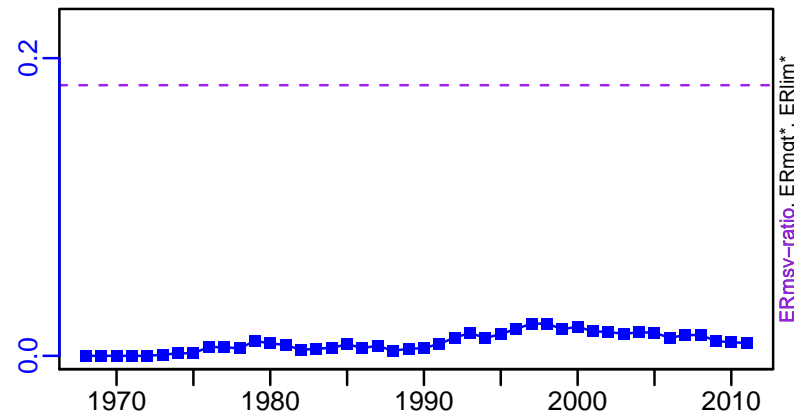
TN \*



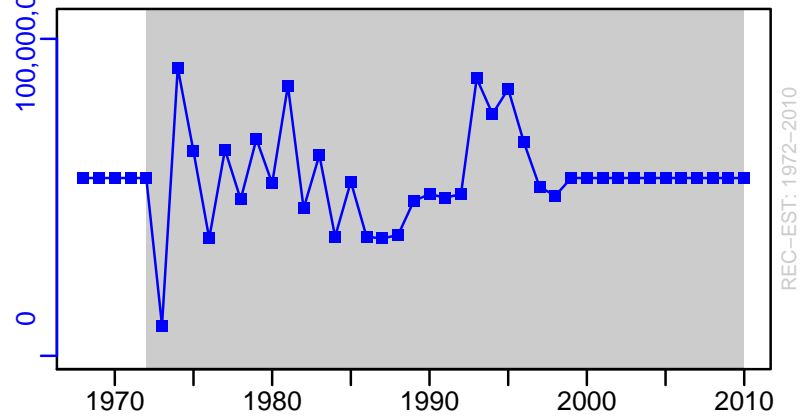
F-1/yr (1968-2011-CORDUE)



ER-ratio (1968-2011-CORDUE)

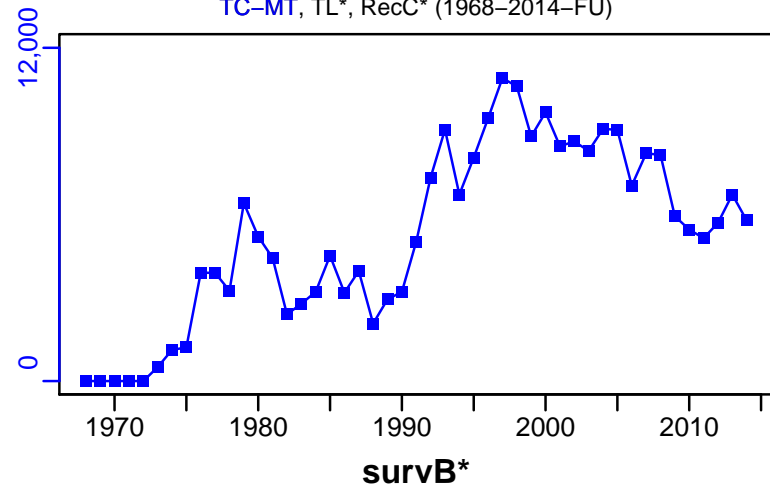


R-E00 (1968-2014-FU)

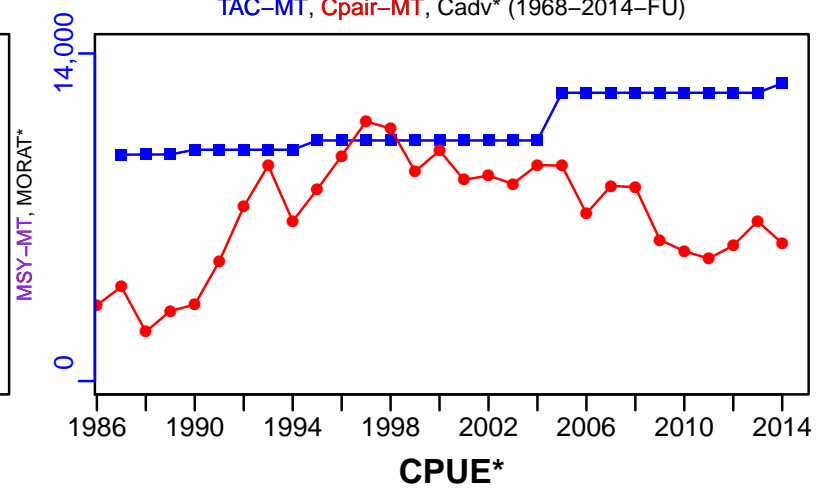


# Ling New Zealand Areas LIN 5 and 6 [NZLINGLIN5-6]

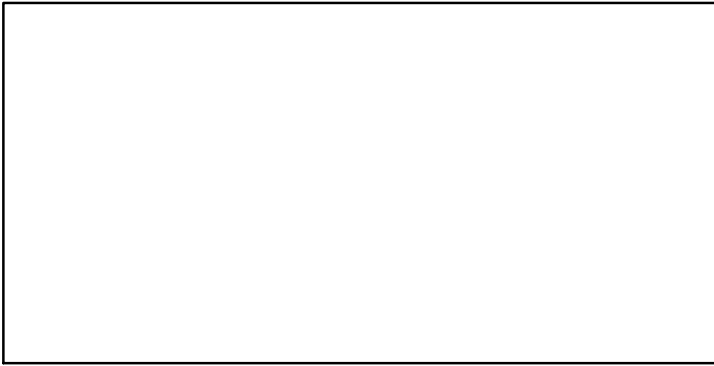
TC-MT, TL\*, RecC\* (1968-2014-FU)



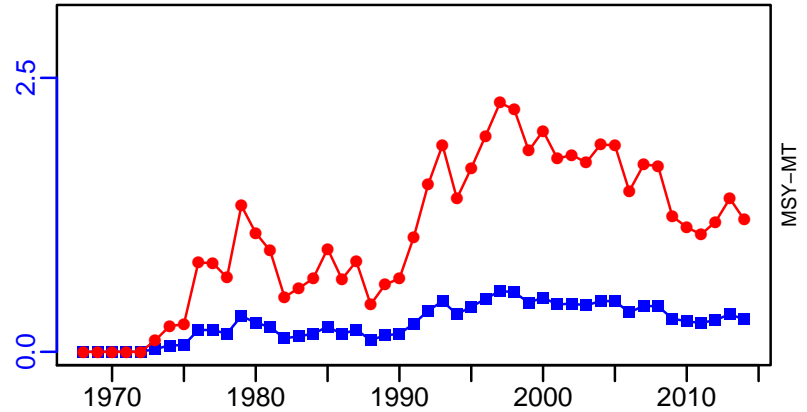
TAC-MT, Cpair-MT, Cadv\* (1968-2014-FU)



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1968-2014-FU)



## Ling New Zealand Areas LIN 6b [NZLINGLIN6b]

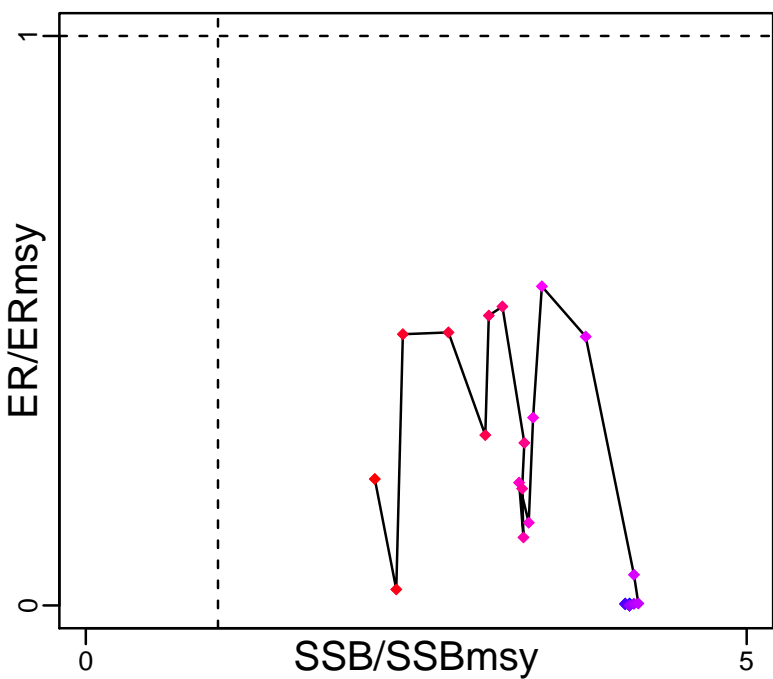
Metadata	
<b>Scientific Name</b>	Genypterus blacodes
<b>Current Assess ID</b>	NZMFishMIDDEPTHSWG-NZLINGLIN6b-1980-2006-JENSEN
<b>Area</b>	New Zealand Areas LIN 6b
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	Middle Depths Working Group
<b>Asmts in RAM</b>	2006

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2006	4725
<b>SSBmsy</b>	SSBmsy-MT	2006	3014
<b>Fmsy</b>	Fmsy-1/yr	2006	0.308
<b>ERmsy</b>	ERmsy-ratio	2006	0.189
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2006	12,363
<b>MSY</b>	MSY-MT	2006	894
<b>M</b>	M-1/yr	2006	0.18
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

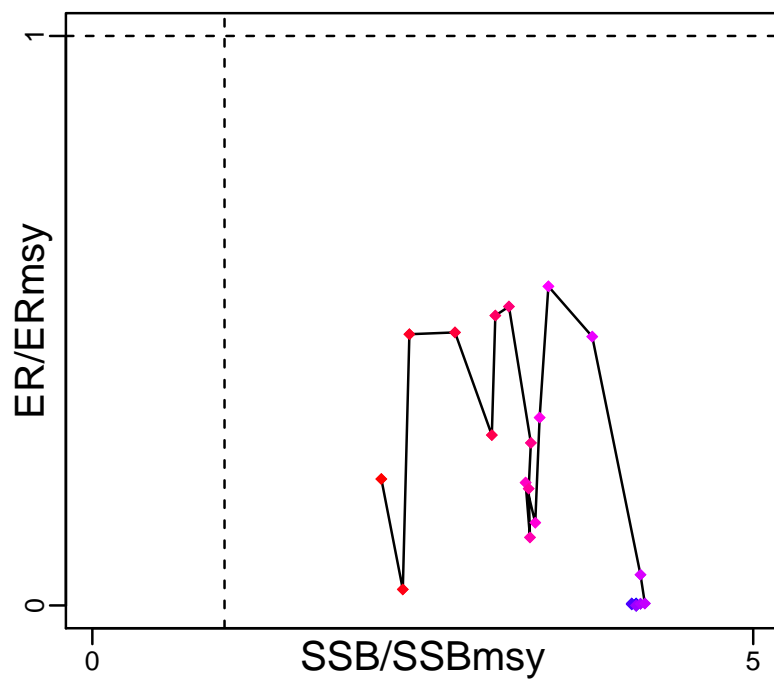
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2006	9520	-	3
<b>SSB</b>	SSB-MT	2006	6590	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2006	888,000	-	3
<b>F</b>	F-1/yr	2006	0.035	-	-
<b>ER</b>	ER-ratio	2006	0.042	-	-
<b>TC</b>	TC-MT	2006	400		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	TB-MT/TBmsy-calc-MT	2006	2.015		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2006	2.186		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2006	0.113		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2006	0.222		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Ling New Zealand Areas LIN 6b [NZLINGLIN6b]

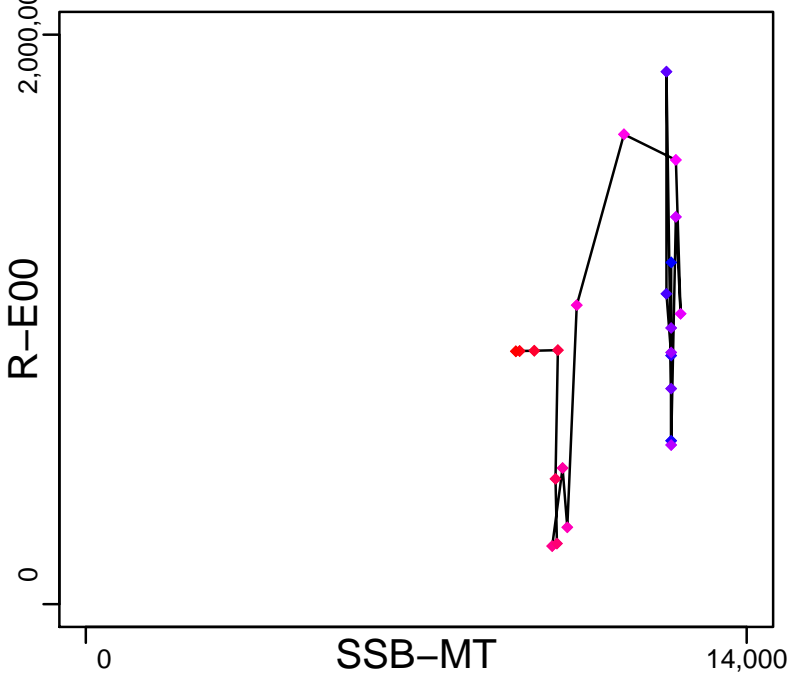
Kobe MSYpref (1980–2006–JENSEN)



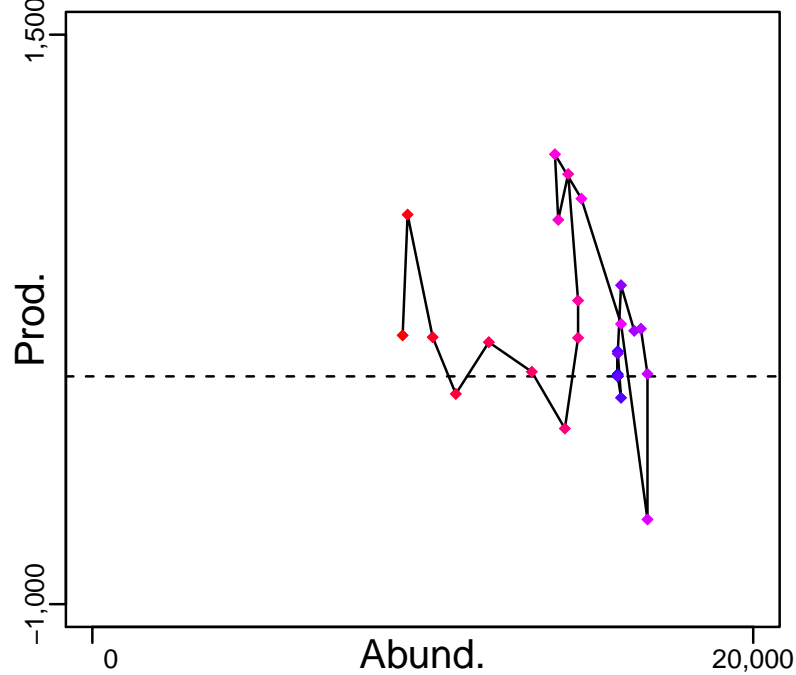
Kobe MGTpref (1980–2006–JENSEN)



Spawner Recruit (1980–2006–JENSEN)



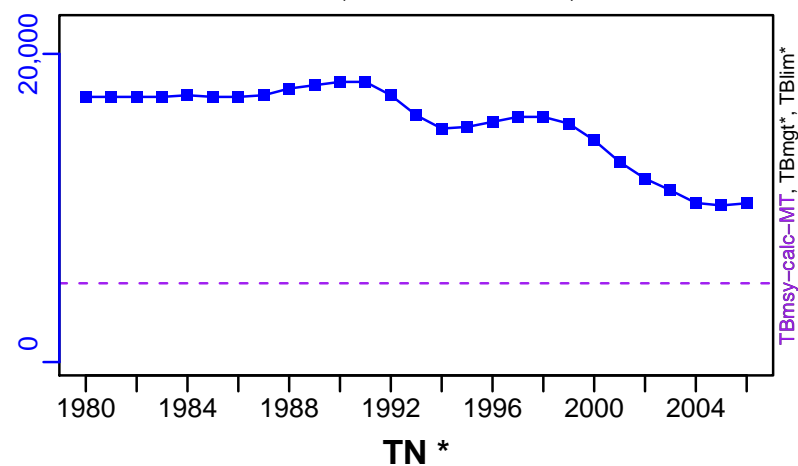
Production (1980–2006–JENSEN)



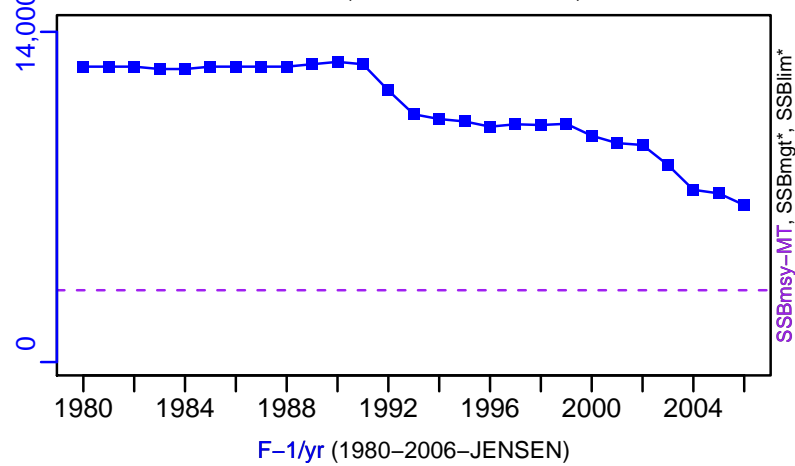
◆ Start Year ◆ End Year \* No Data

# Ling New Zealand Areas LIN 6b [NZLINGLIN6b]

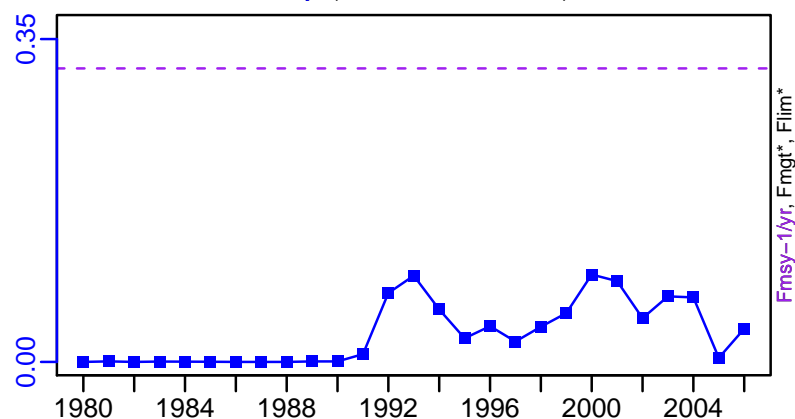
TB-MT (1980-2006-JENSEN)



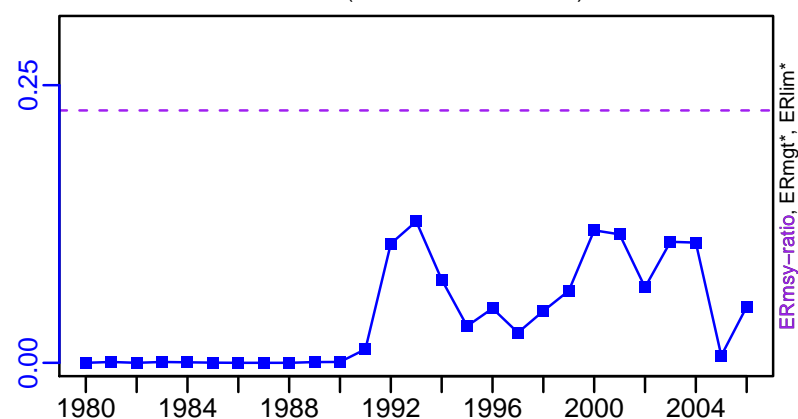
SSB-MT (1980-2006-JENSEN)



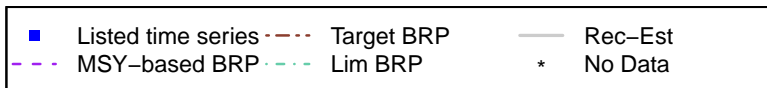
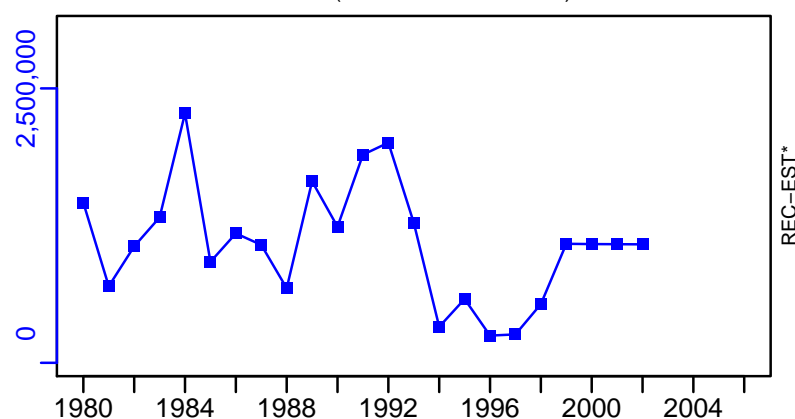
F-1/yr (1980-2006-JENSEN)



ER-ratio (1980-2006-JENSEN)

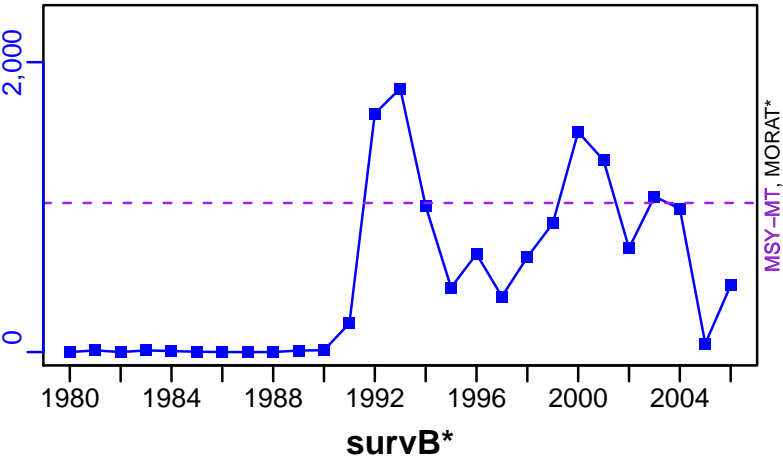


R-E00 (1980-2006-JENSEN)



Ling New Zealand Areas LIN 6b [NZLINGLIN6b]

TC-MT, TL\*, RecC\* (1980-2006-JENSEN)



TAC\*, Cpair\*, Cadv\*



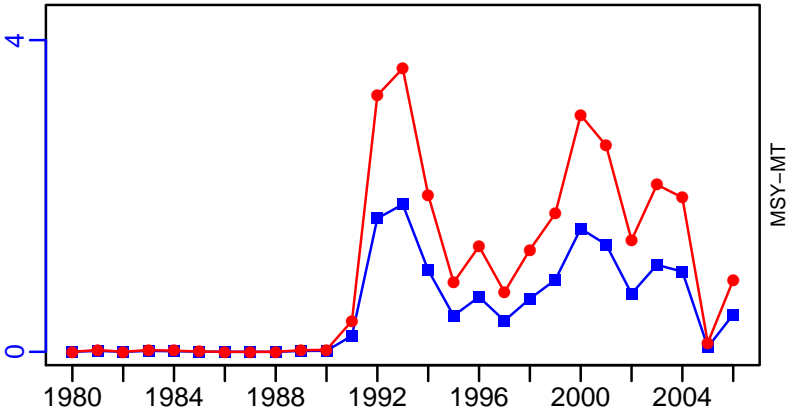
CPUE\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1980-2006-JENSEN)



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

## Ling New Zealand Areas LIN 72 [NZLINGLIN72]

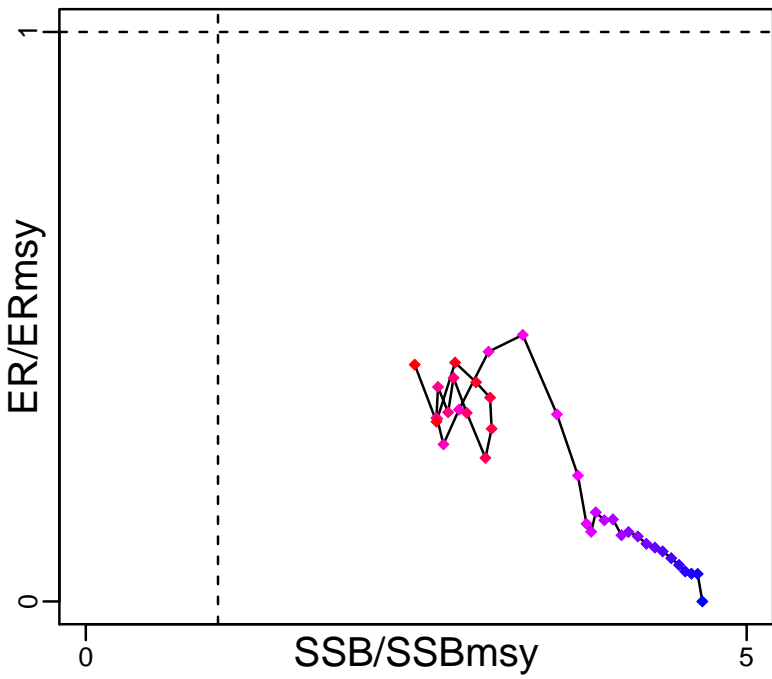
Metadata	
<b>Scientific Name</b>	Genypterus blacodes
<b>Current Assess ID</b>	NZMFishMIDDEPTHSWG-NZLINGLIN72-1968-2010-FU
<b>Area</b>	New Zealand Areas LIN 72
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	Middle Depths Working Group
<b>Asmts in RAM</b>	2010, 2007

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2010	1877
<b>SSBmsy</b>	SSBmsy-MT	2010	2952
<b>Fmsy</b>	Fmsy-1/yr	2007	0.246
<b>ERmsy</b>	ERmsy-ratio	2010	0.29
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2010	2952
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2010	7380
<b>MSY</b>	MSY-MT	2010	544
<b>M</b>	M-1/yr	2010	0.204
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

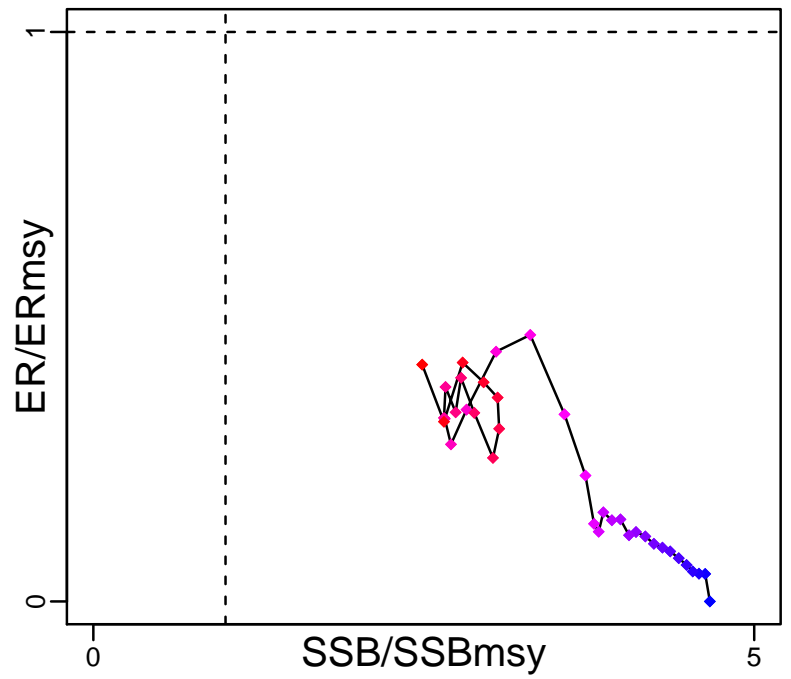
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2007	5590	-	3
<b>SSB</b>	SSB-MT	2010	3450	Both	3 to 25
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2010	197,000	Both	-
<b>F</b>	F-1/yr	2007	0.08	-	-
<b>ER</b>	ER-ratio	2007	0.08	-	-
<b>TC</b>	TC-MT	2010	220		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	TB-MT/TBmsy-calc-MT	2007	2.098		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2010	1.169		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2007	0.323		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2007	0.416		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2010	1.169		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Ling New Zealand Areas LIN 72 [NZLINGLIN72]

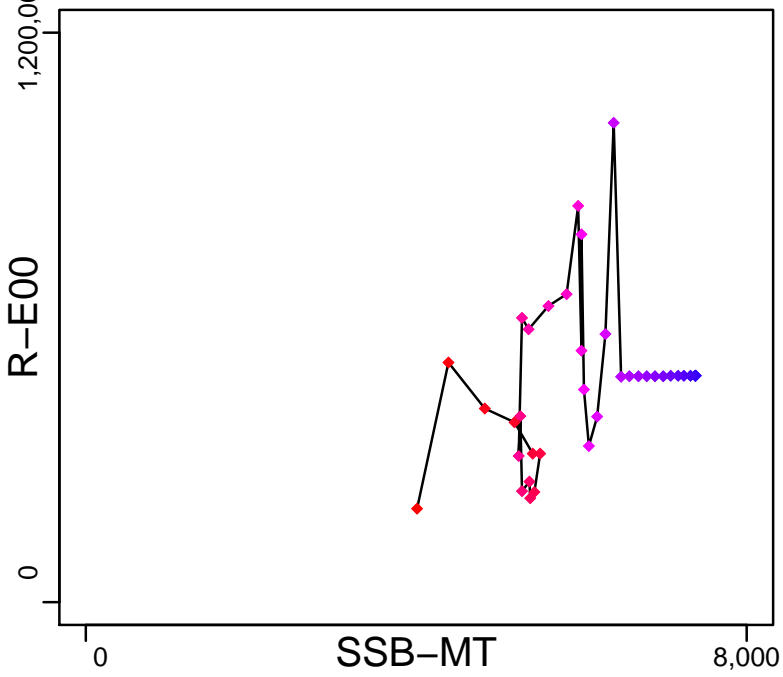
Kobe MSYpref (1972–2007–JENSEN)



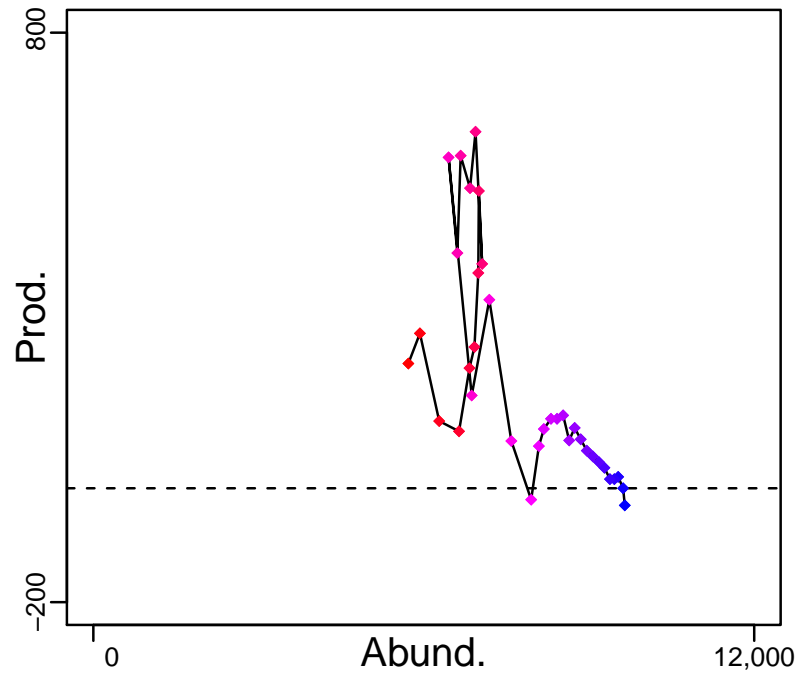
Kobe MGTpref (1972–2007–JENSEN)



Spawner Recruit (1968–2010–FU)



Production (1972–2007–JENSEN)

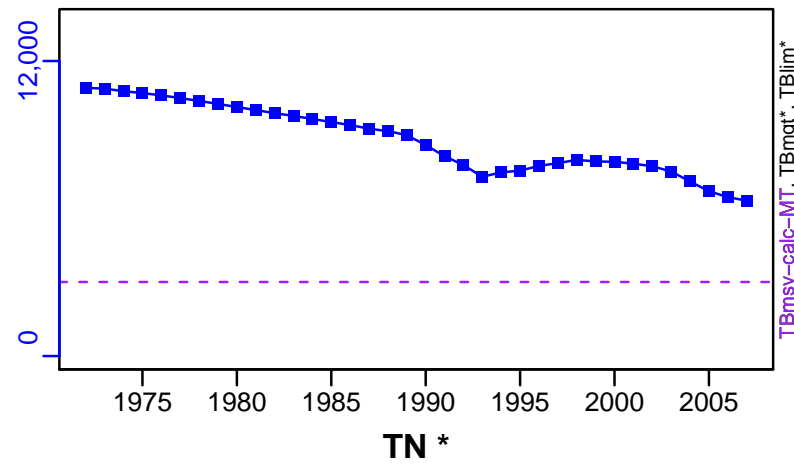


◆ Start Year ◆ End Year \* No Data

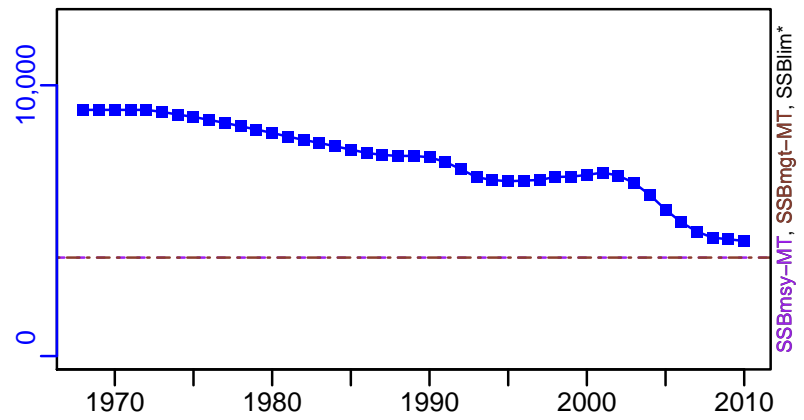


# Ling New Zealand Areas LIN 72 [NZLINGLIN72]

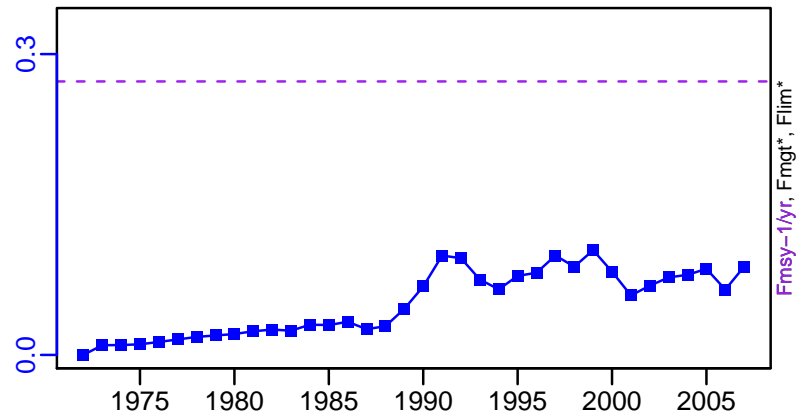
TB-MT (1972-2007-JENSEN)



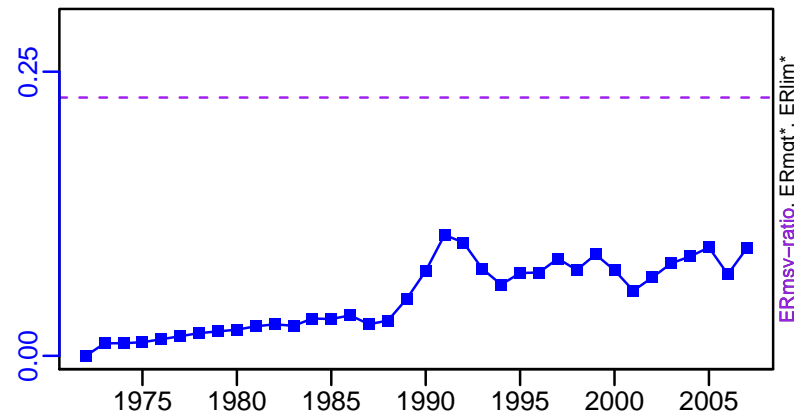
SSB-MT (1968-2010-FU)



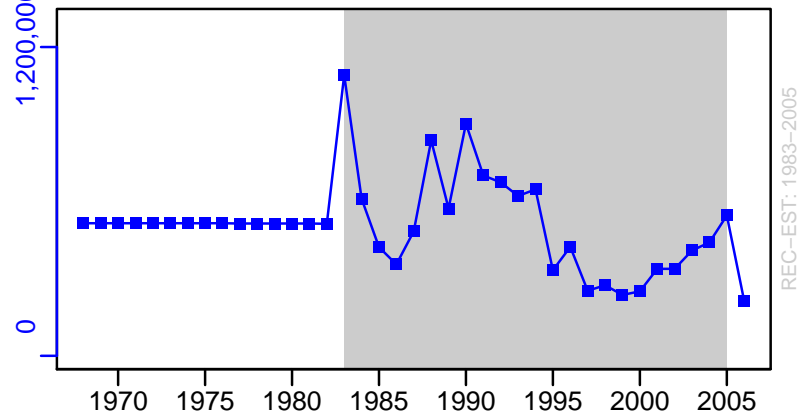
F-1/yr (1972-2007-JENSEN)



ER-ratio (1972-2007-JENSEN)



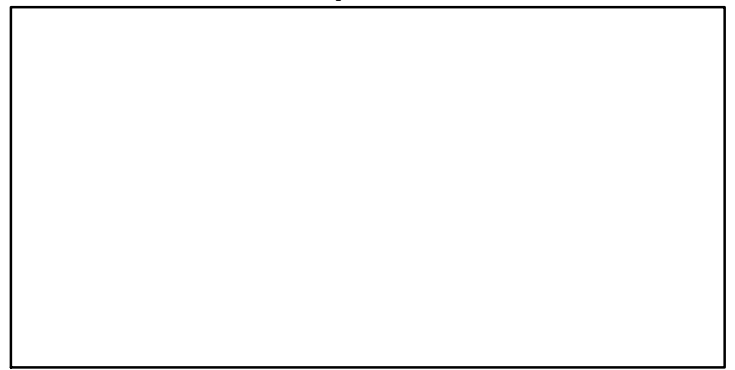
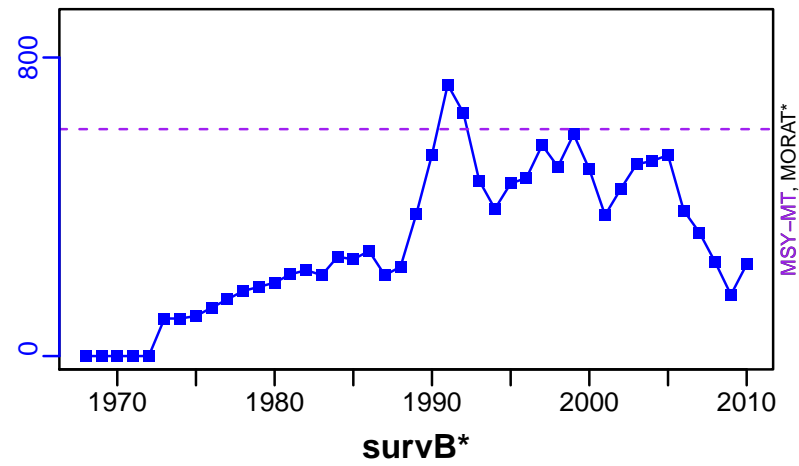
R-E00 (1968-2010-FU)



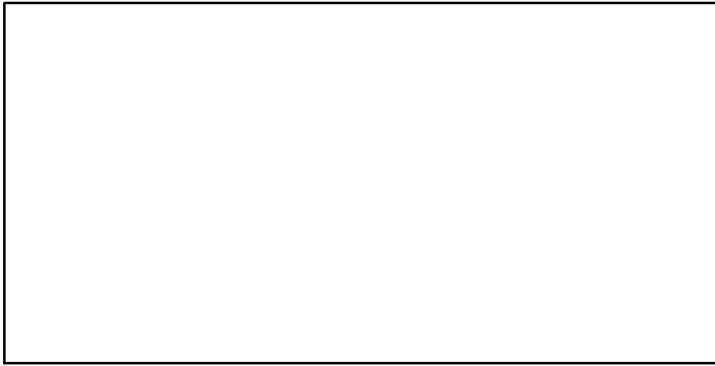
# Ling New Zealand Areas LIN 72 [NZLINGLIN72]

TC-MT, TL\*, RecC\* (1968-2010-FU)

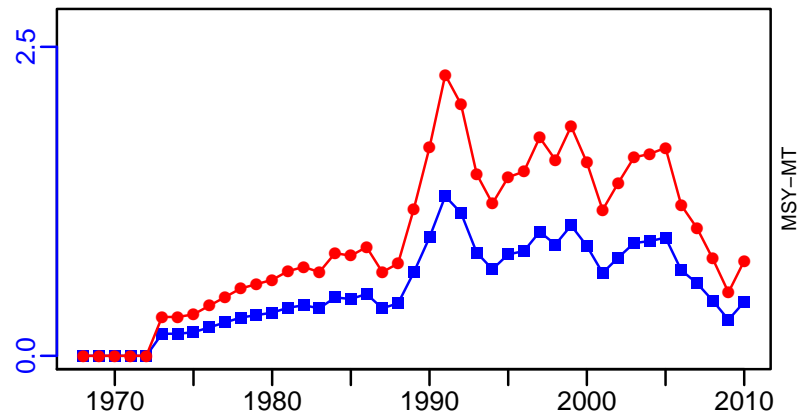
TAC\*, Cpair\*, Cadv\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1968-2010-FU)



## Ling New Zealand Areas LIN 7WC-WCSI [NZLINGLIN7WC]

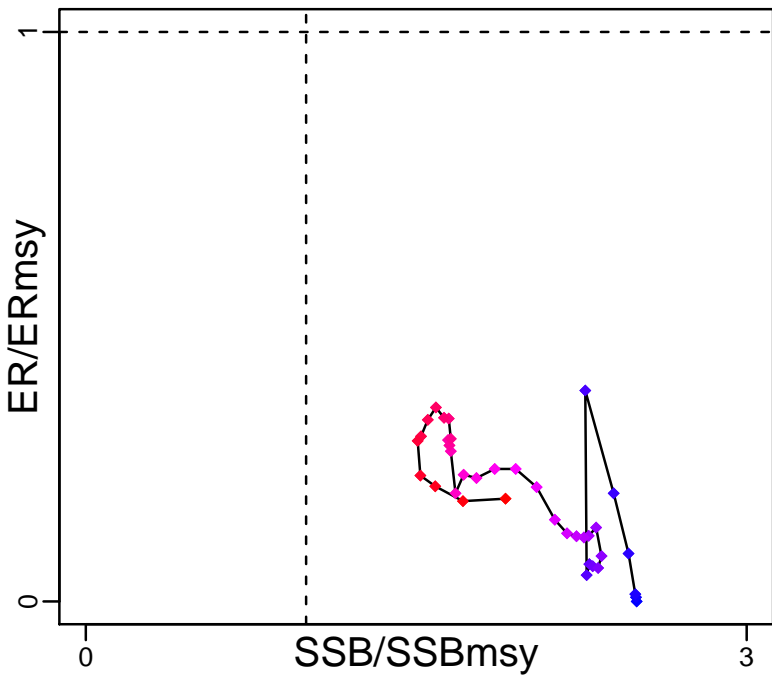
Metadata	
<b>Scientific Name</b>	Genypterus blacodes
<b>Current Assess ID</b>	NZMFishMIDDEPTHSWG-NZLINGLIN7WC-1968-2012-FU
<b>Area</b>	New Zealand Areas LIN 7WC-WCSI
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	Middle Depths Working Group
<b>Asmts in RAM</b>	2012, 2008

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2008	43,937
<b>SSBmsy</b>	SSBmsy-MT	2012	29,785
<b>Fmsy</b>	Fmsy-1/yr	2008	0.202
<b>ERmsy</b>	ERmsy-ratio	2008	0.138
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2012	29,785
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2012	74,463
<b>MSY</b>	MSY-MT	2012	5150
<b>M</b>	M-1/yr	2012	0.22
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

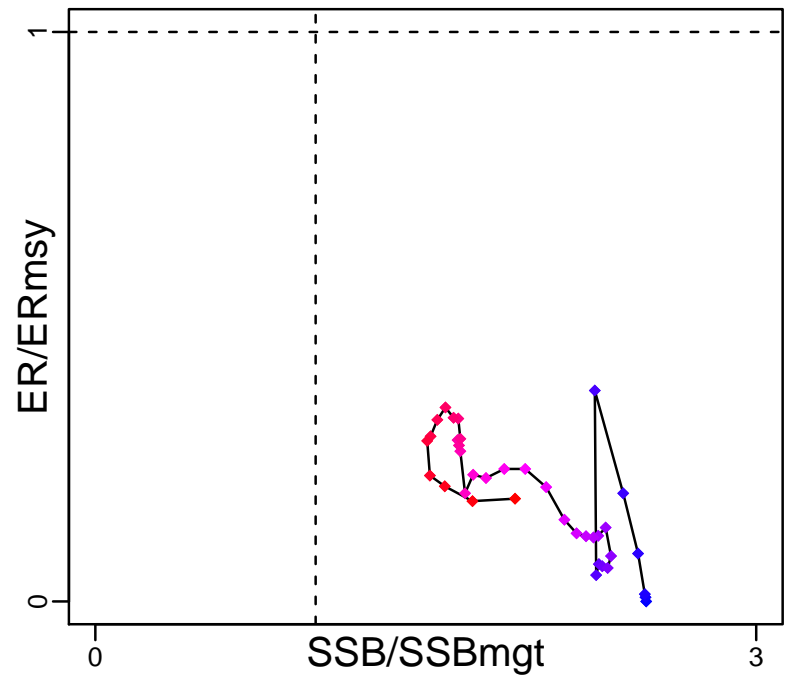
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2008	96,400	-	3
<b>SSB</b>	SSB-MT	2012	46,600	-	3 to 25
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2012	10,500,000	Both	-
<b>F</b>	F-1/yr	2008	0.027	-	-
<b>ER</b>	ER-ratio	2008	0.025	-	-
<b>TC</b>	TC-MT	2012	2350		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	TB-MT/TBmsy-calc-MT	2008	2.194		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2012	1.565		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2008	0.134		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2008	0.18		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2012	1.565		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Ling New Zealand Areas LIN 7WC–WCSI [NZLINGLIN7WC]

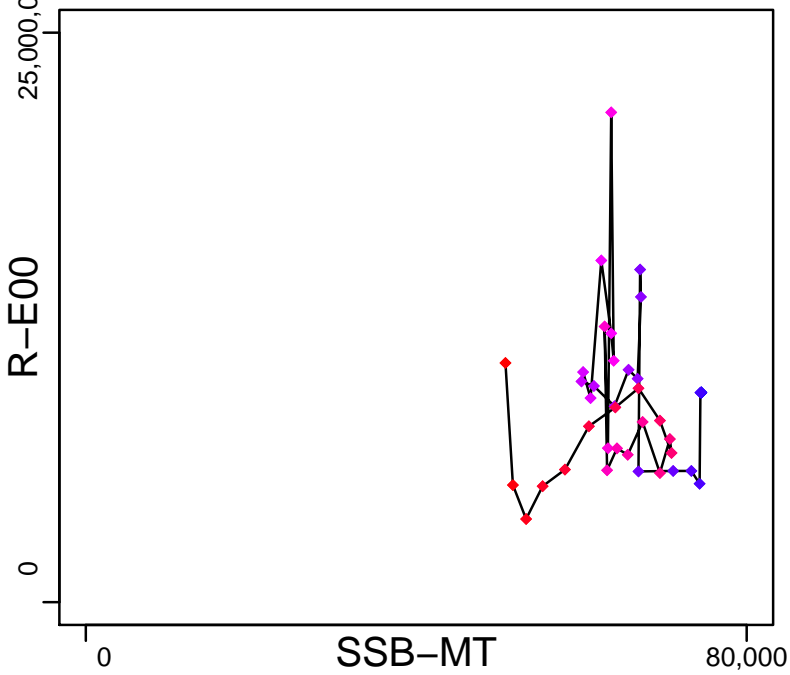
Kobe MSYpref (1972–2008–JENSEN)



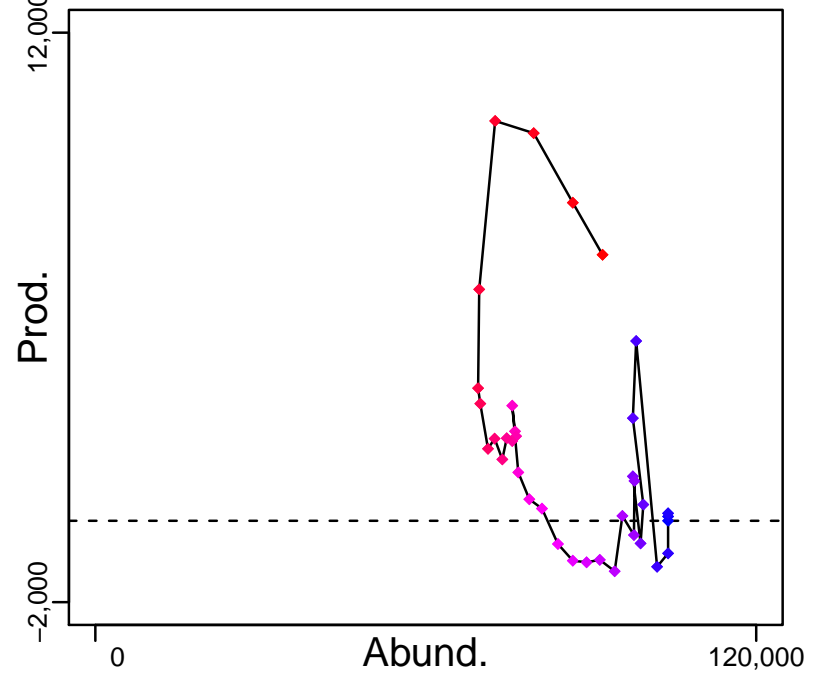
Kobe MGTpref (1972–2008–JENSEN)



Spawner Recruit (1968–2012–FU)



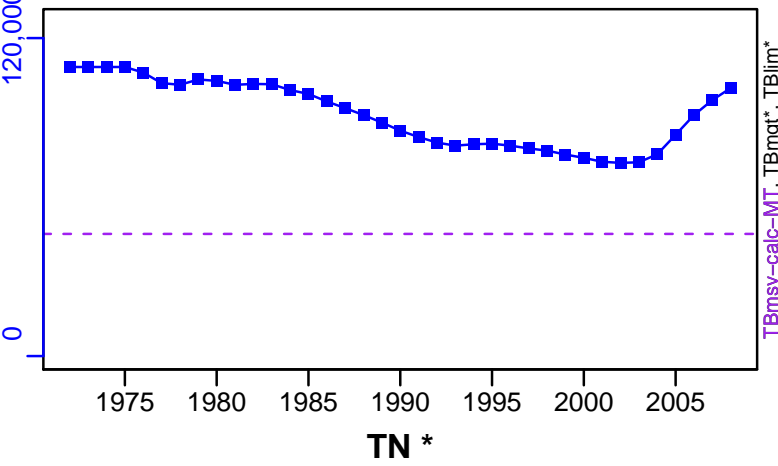
Production (1972–2008–JENSEN)



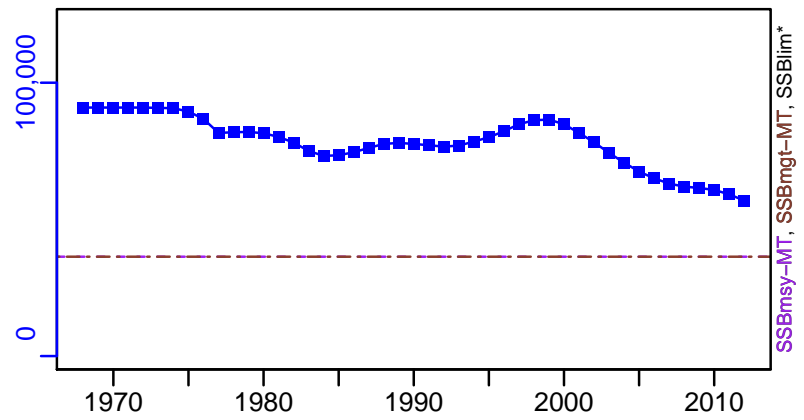
◆ Start Year ◆ End Year \* No Data

# Ling New Zealand Areas LIN 7WC-WCSI [NZLINGLIN7WC]

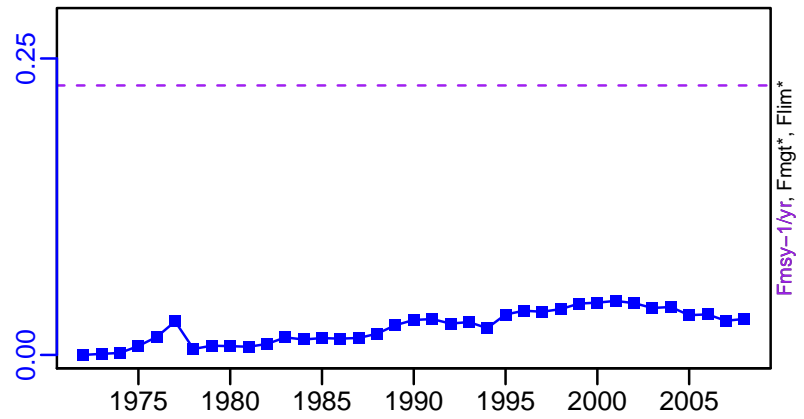
TB-MT (1972-2008-JENSEN)



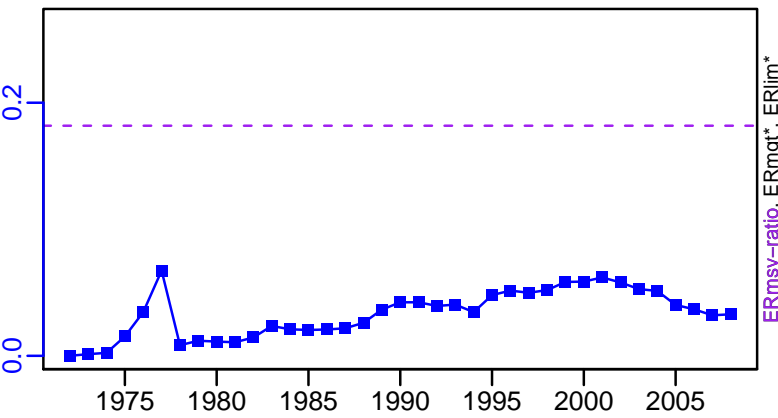
SSB-MT (1968-2012-FU)



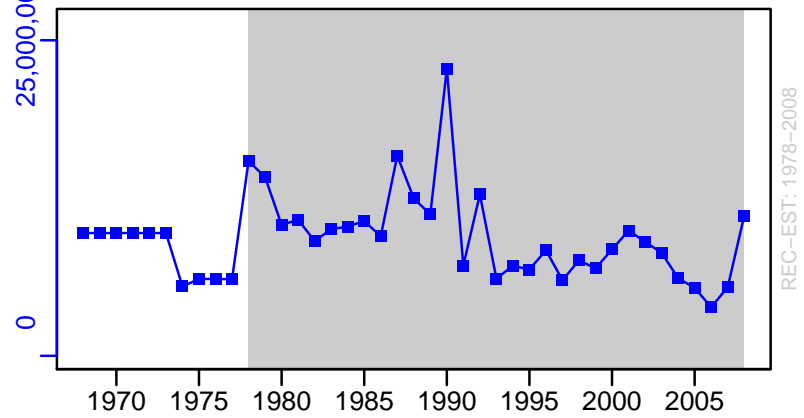
F-1/yr (1972-2008-JENSEN)



ER-ratio (1972-2008-JENSEN)



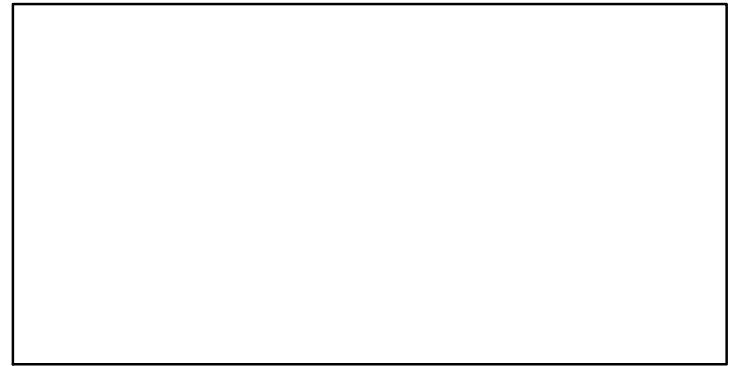
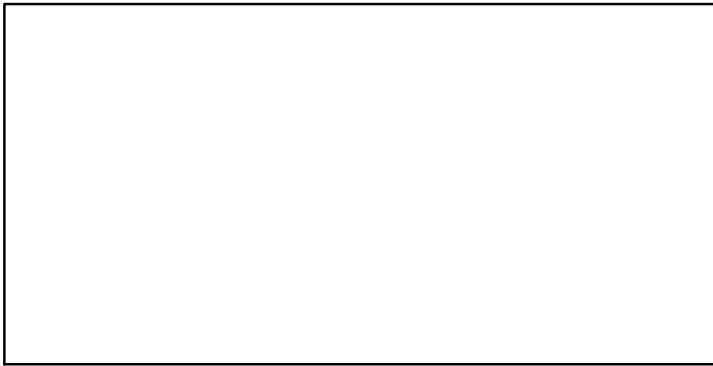
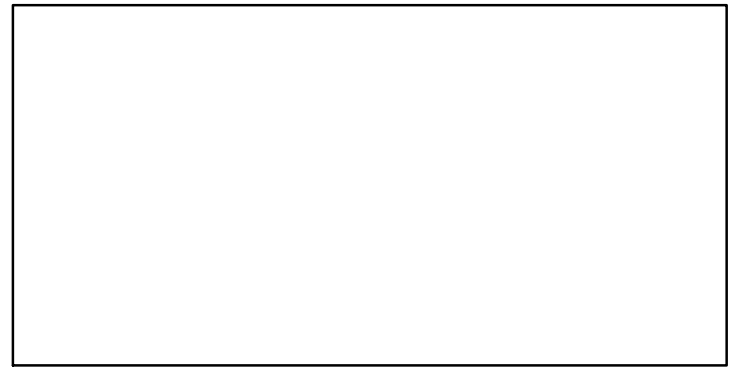
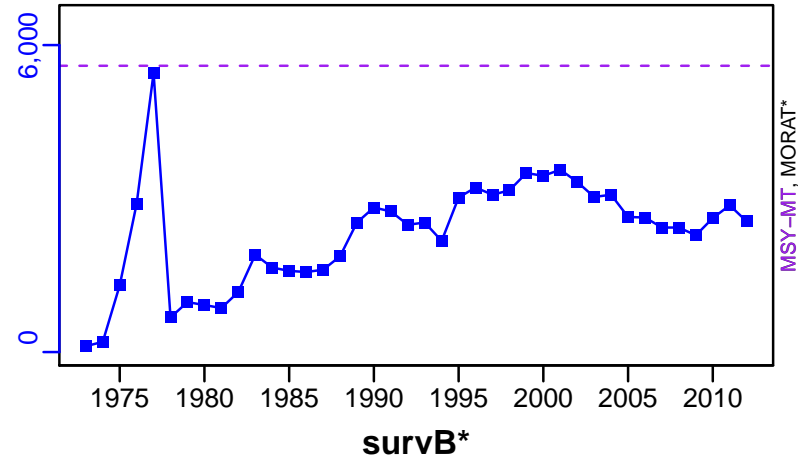
R-E00 (1968-2012-FU)



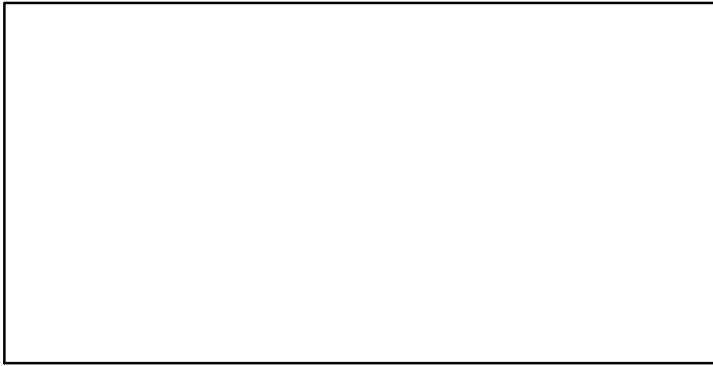
# Ling New Zealand Areas LIN 7WC–WCSI [NZLINGLIN7WC]

TC–MT, TL\*, RecC\* (1968–2012–FU)

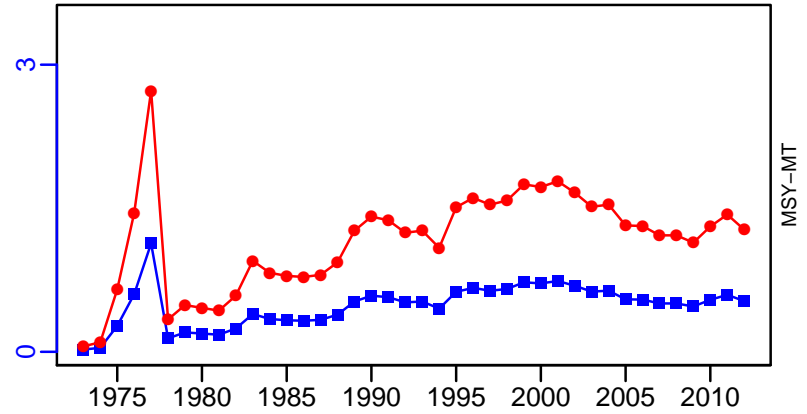
TAC\*, Cpair\*, Cadv\*



EFFORT\*



TC–MT/MSY–MT, CdivMEANC–ratio, (1968–2012–FU)

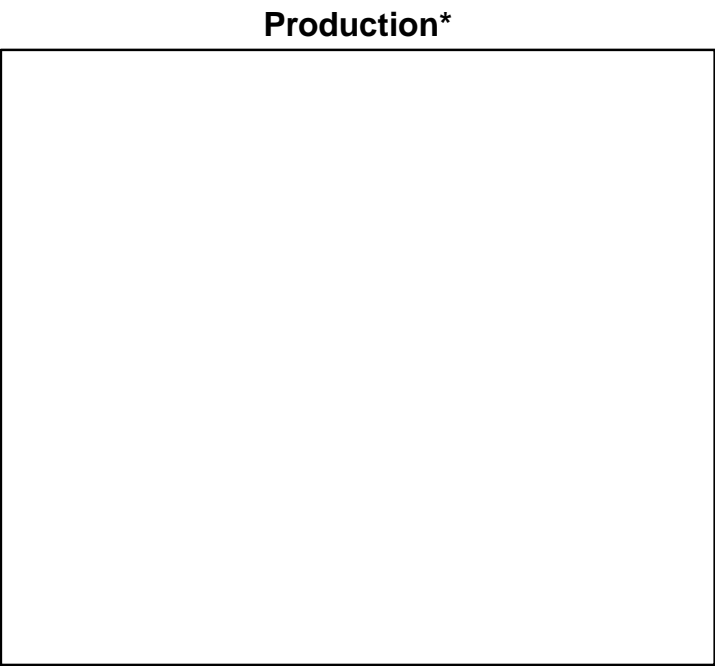
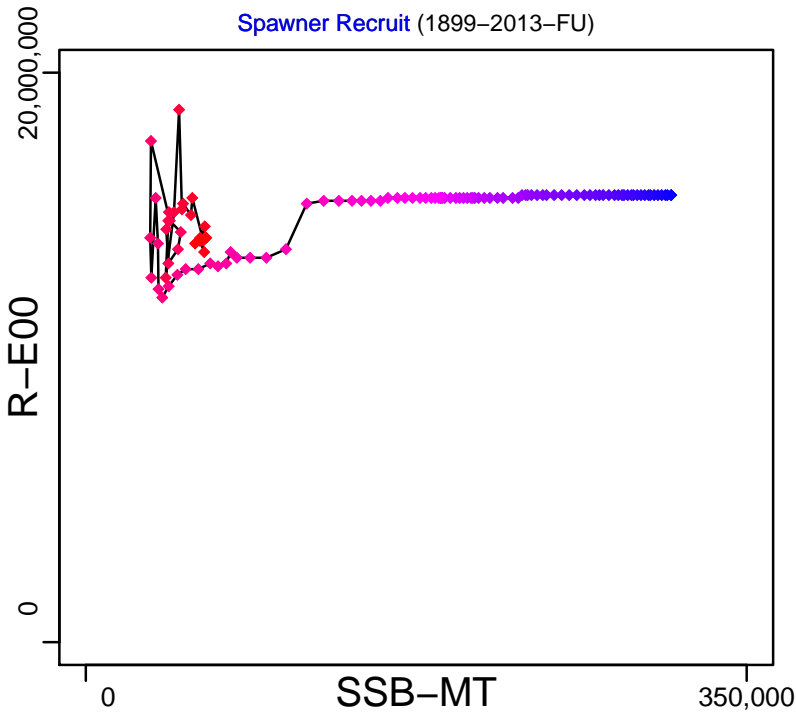
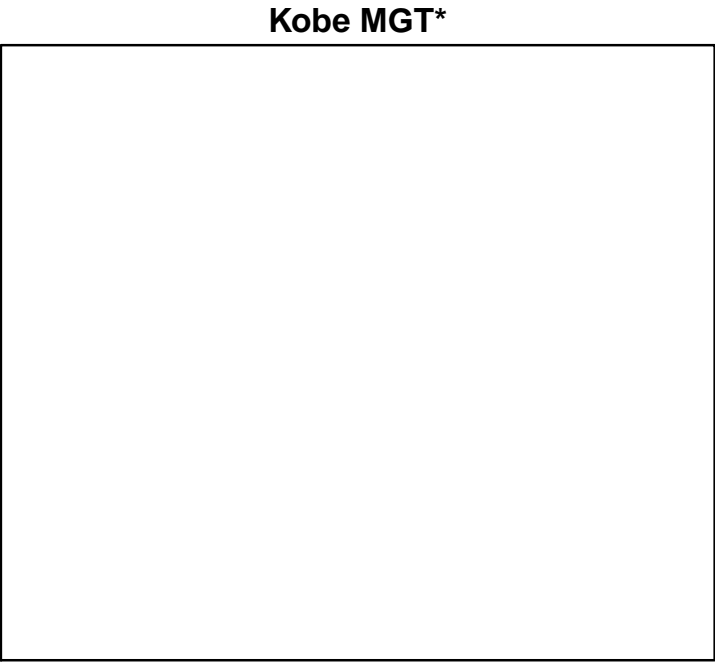


**New Zealand snapper New Zealand SNA 1 Bay of Plenty and Hauraki Gulf  
[NZSNAPNZ1BOP-HAGU]**

Metadata	
<b>Scientific Name</b>	Chrysophrys auratus
<b>Current Assess ID</b>	NIWA-NZSNAPNZ1BOP-HAGU-1899-2013-FU
<b>Area</b>	New Zealand SNA 1 Bay of Plenty and Hauraki Gulf
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2013

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2013	122,479
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2013	122,479
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2013	306,198
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2013	0.075
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2013	55,600	-	4 to 20
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2013	$1.4 \times 10^7$	Both	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	-	-	-	-	-
<b>TC</b>	TC-MT	2013	2300		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2013	0.454		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2013	0.454		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		



◆ Start Year ◆ End Year \* No Data

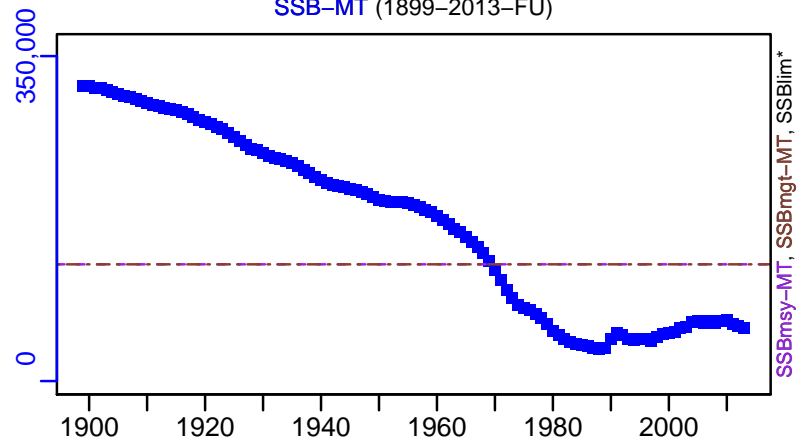


New Zealand snapper New Zealand SNA 1 Bay of Plenty and Hauraki Gulf [NZSNAPNZ1BOP-HAGU]

TB\*



SSB-MT (1899-2013-FU)



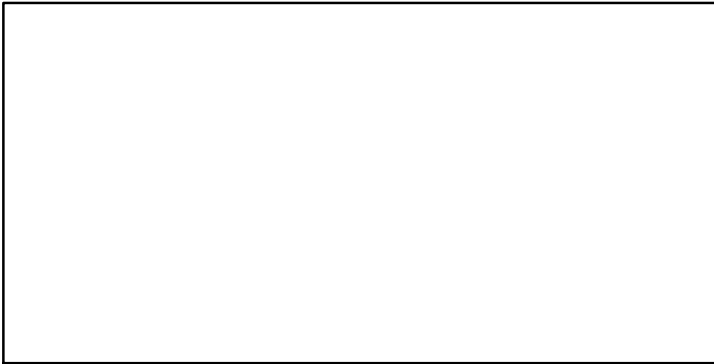
TN \*



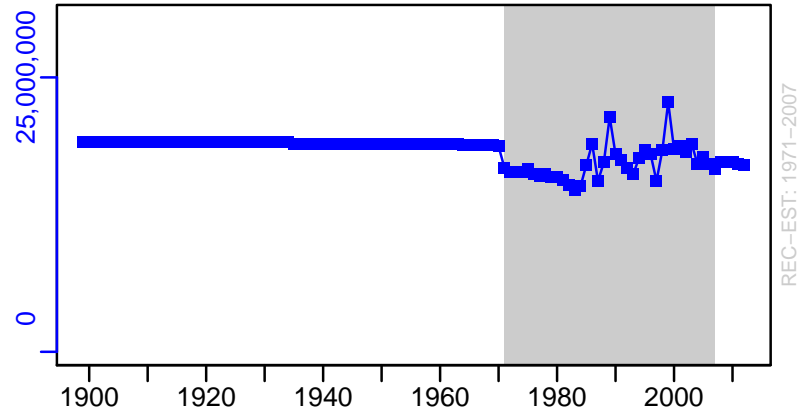
F\*



ER\*



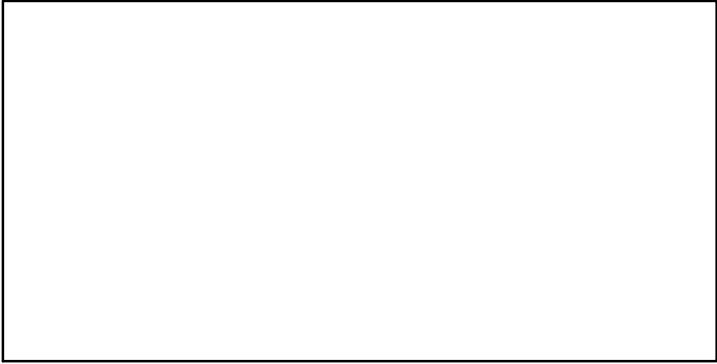
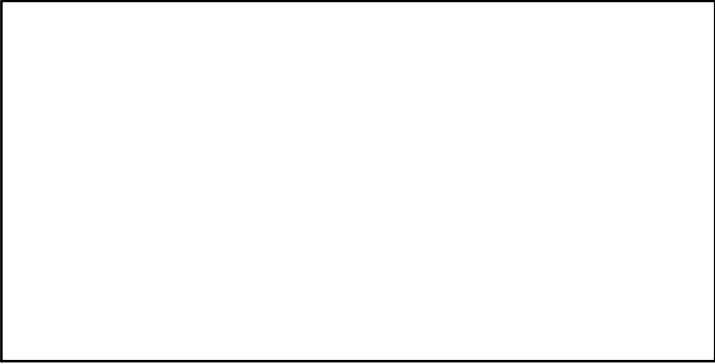
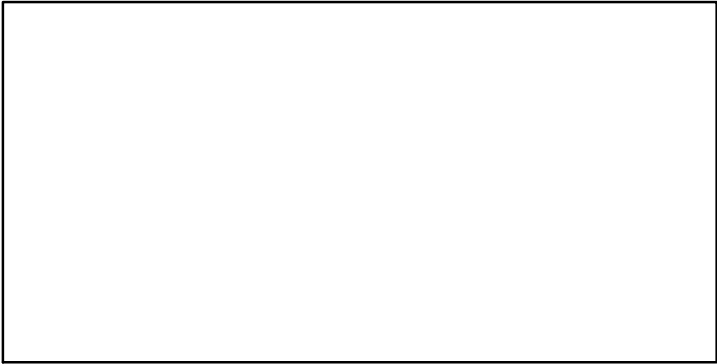
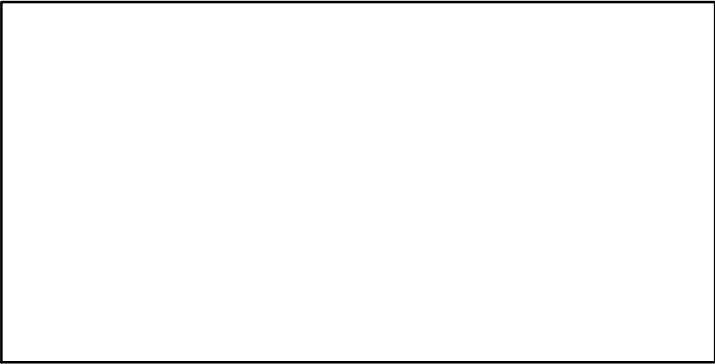
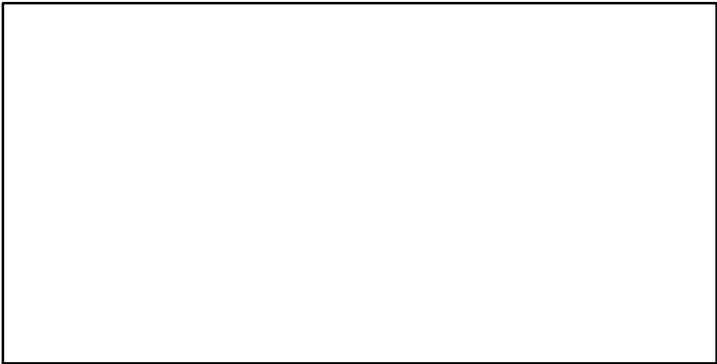
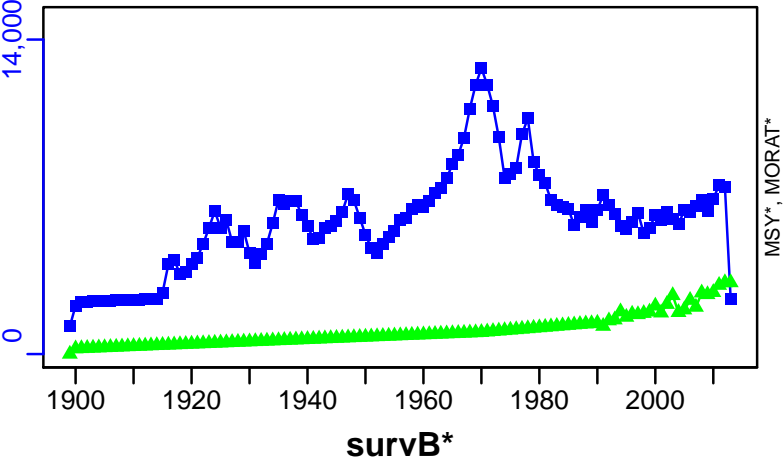
R-E00 (1899-2013-FU)



New Zealand snapper New Zealand SNA 1 Bay of Plenty and Hauraki Gulf [NZSNAPNZ1BOP-HAGU]

TC-MT, TL\*, RecC-MT (1899-2013-FU)

TAC\*, Cpair\*, Cadv\*



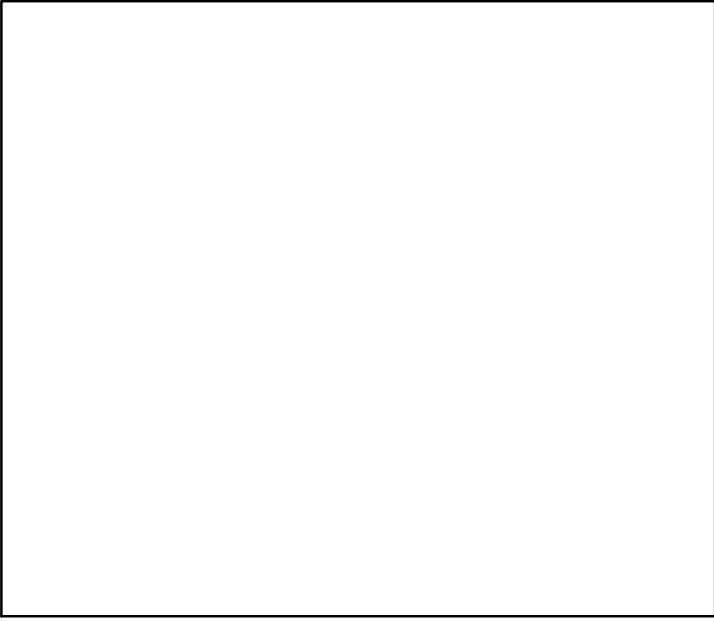
## New Zealand snapper New Zealand SNA 1 east Northland [NZSNAPNZ1ENLD]

Metadata	
<b>Scientific Name</b>	Chrysophrys auratus
<b>Current Assess ID</b>	NIWA-NZSNAPNZ1ENLD-1899-2013-FU
<b>Area</b>	New Zealand SNA 1 east Northland
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2013

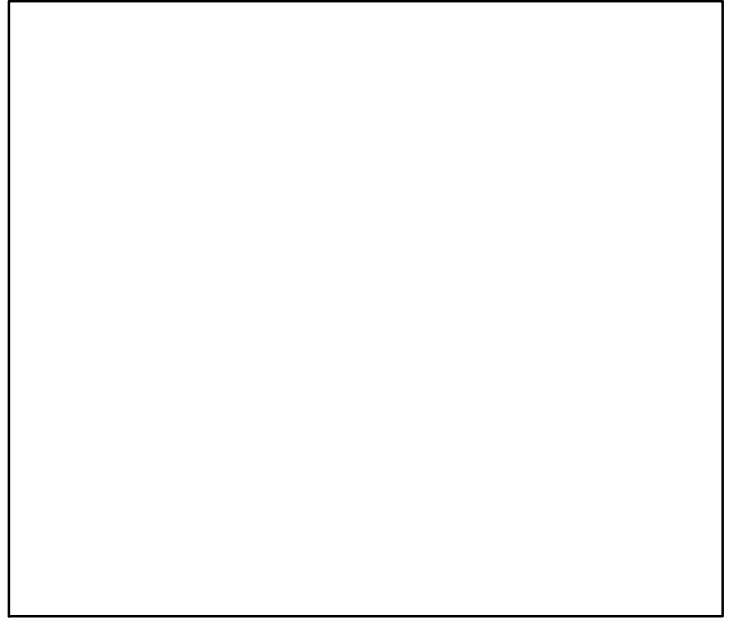
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2013	28,570
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2013	28,570
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2013	71,425
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2013	0.075
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2013	16,200	-	4 to 20
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2013	3,730,000	Both	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	-	-	-	-	-
<b>TC</b>	TC-MT	2013	1750		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2013	0.567		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2013	0.567		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

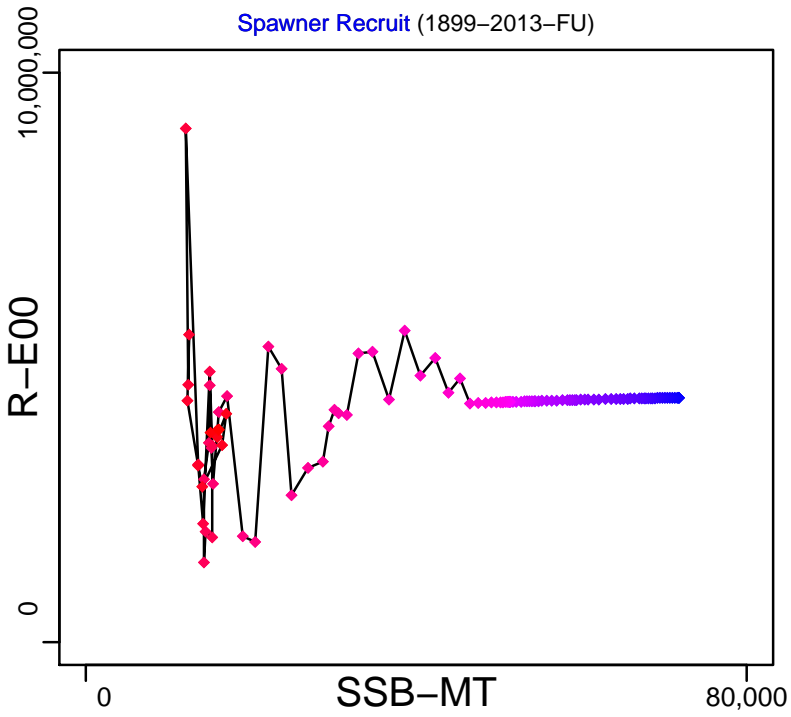
**Kobe MSY\***



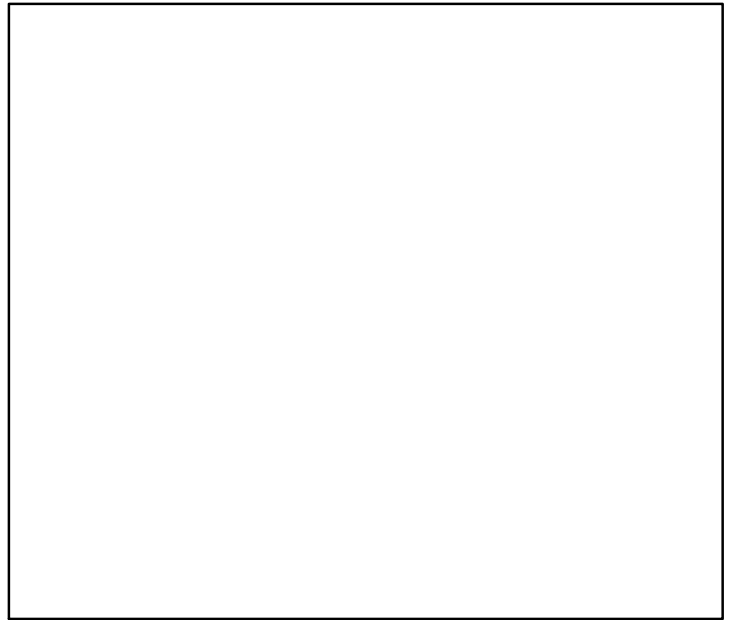
**Kobe MGT\***



**Spawner Recruit (1899–2013–FU)**



**Production\***



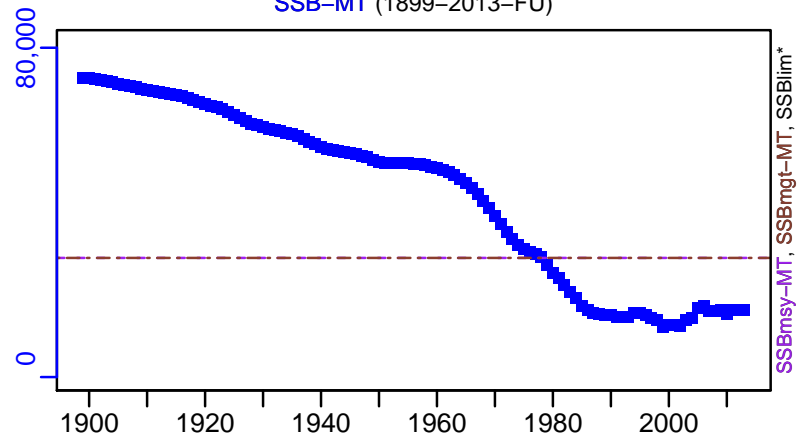
◆ Start Year ◆ End Year \* No Data

# New Zealand snapper New Zealand SNA 1 east Northland [NZSNAPNZ1ENLD]

TB\*



SSB-MT (1899–2013–FU)



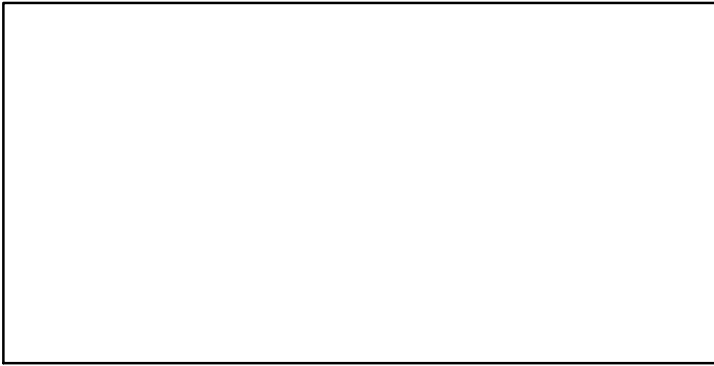
TN \*



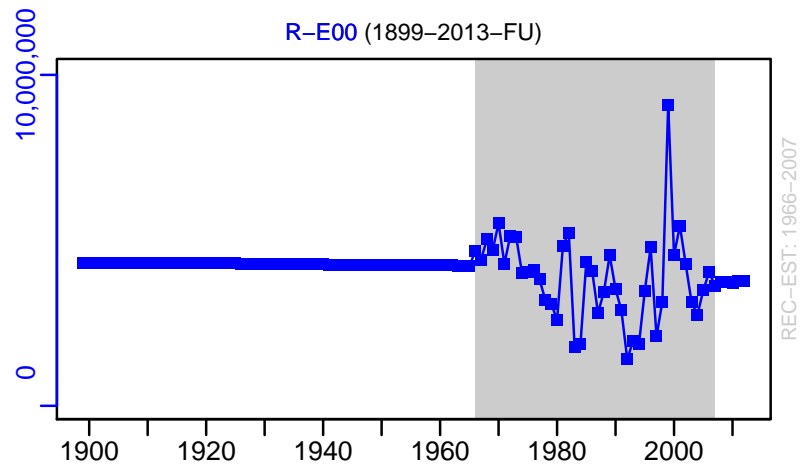
F\*



ER\*



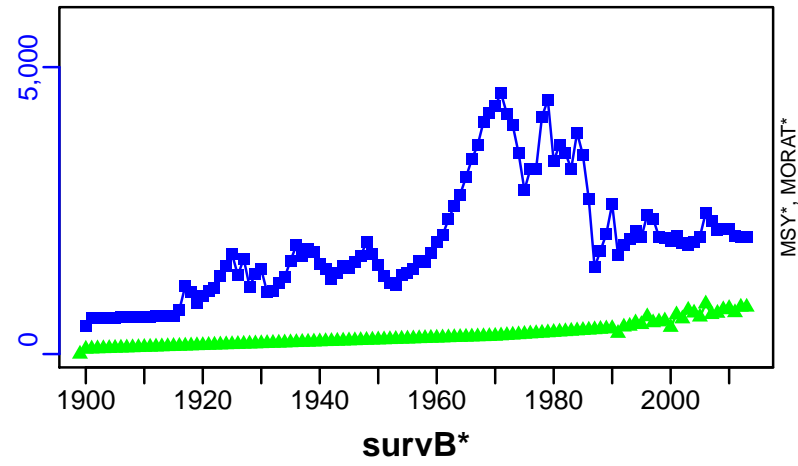
R-E00 (1899–2013–FU)



New Zealand snapper New Zealand SNA 1 east Northland [NZSNAPNZ1ENLD]

TC-MT, TL\*, RecC-MT (1899-2013-FU)

TAC\*, Cpair\*, Cadv\*



## New Zealand snapper New Zealand SNA 7 [NZSNAPNZ7]

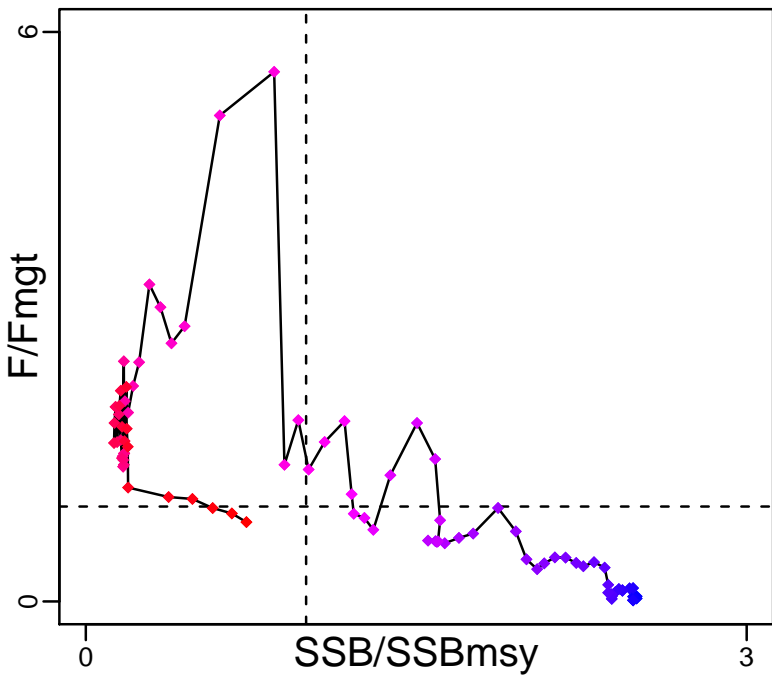
Metadata	
<b>Scientific Name</b>	Chrysophrys auratus
<b>Current Assess ID</b>	NZMFishINSHOREWG-NZSNAPNZ7-1931-2014-LANGLEY
<b>Area</b>	New Zealand SNA 7
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	Inshore Working Group
<b>Asmts in RAM</b>	2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2014	6199
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2014	6199
<b>Fmgt</b>	Fmgt-1/yr	2014	0.056
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2014	15,497
<b>MSY</b>	MSY-MT	2014	699
<b>M</b>	M-1/yr	2014	0.075
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

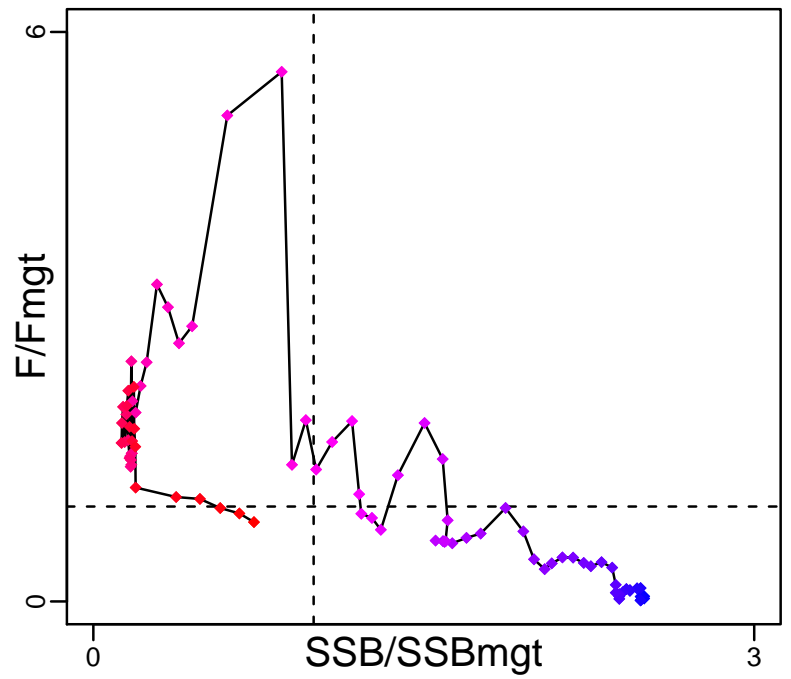
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2014	4520	Females	3 to 30+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2014	757,000	Both	0
<b>F</b>	-	-	-	-	-
<b>ER</b>	-	-	-	-	-
<b>TC</b>	TC-MT	2014	426		
<b>TL</b>	TL-MT	2014	200		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2014	0.729		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2014	0.729		
<b>F/Fmgt</b>	FdivFmgt-dimensionless	2014	0.836		
<b>ER/ERmgt</b>	-	-	-		

# New Zealand snapper New Zealand SNA 7 [NZSNAPNZ7]

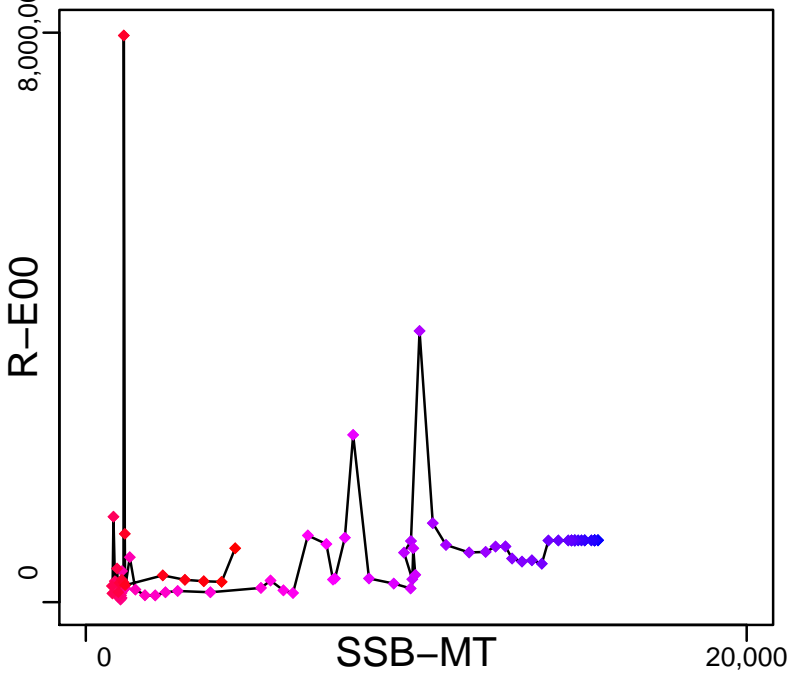
Kobe MSYpref (1931–2014–LANGLEY)



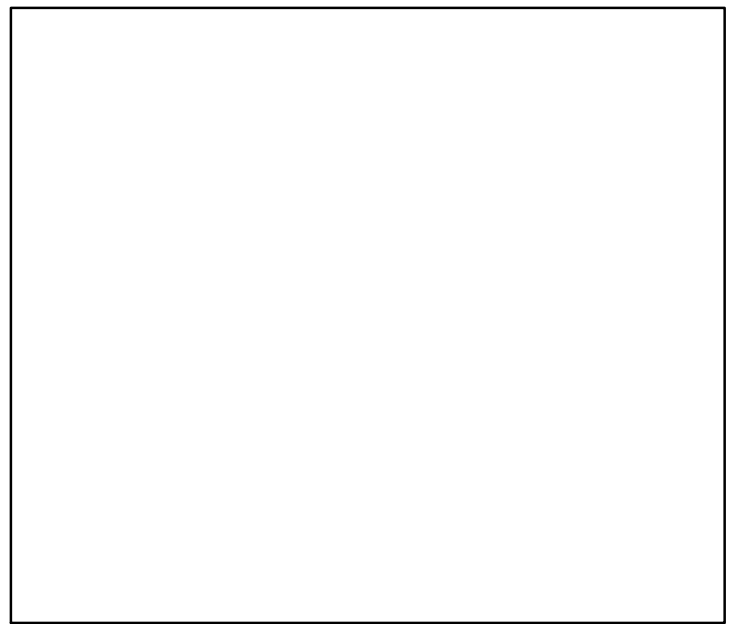
Kobe MGTpref (1931–2014–LANGLEY)



Spawner Recruit (1931–2014–LANGLEY)



Production\*



◆ Start Year ◆ End Year \* No Data

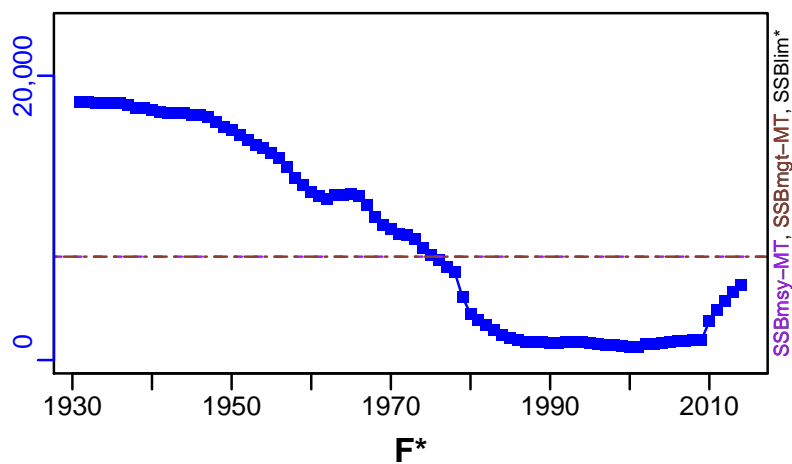


# New Zealand snapper New Zealand SNA 7 [NZSNAPNZ7]

TB\*



SSB-MT (1931-2014-LANGLEY)



TN \*



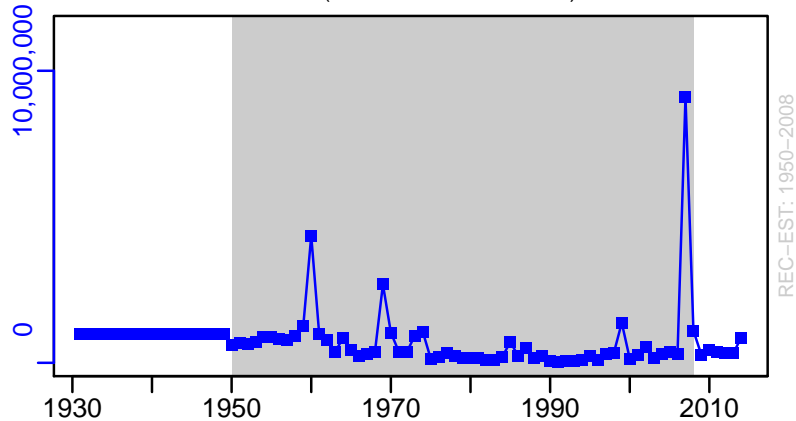
F\*



ER\*

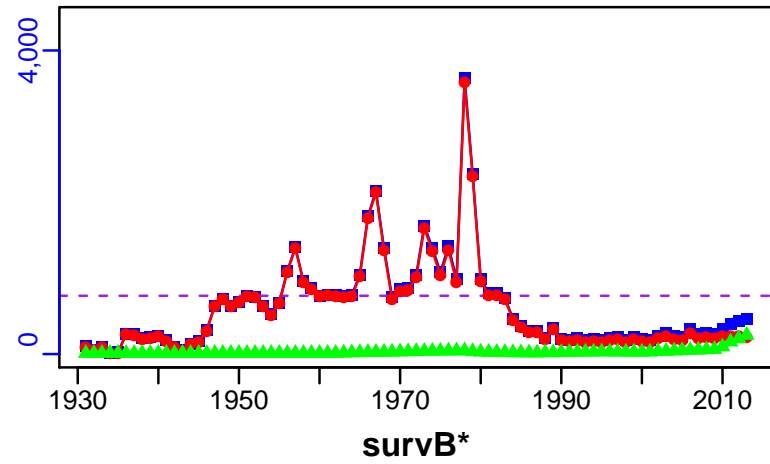


R-E00 (1931-2014-LANGLEY)

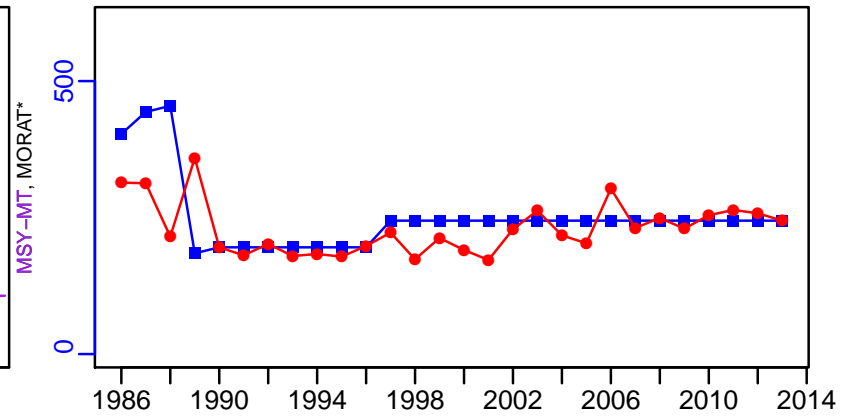


# New Zealand snapper New Zealand SNA 7 [NZSNAPNZ7]

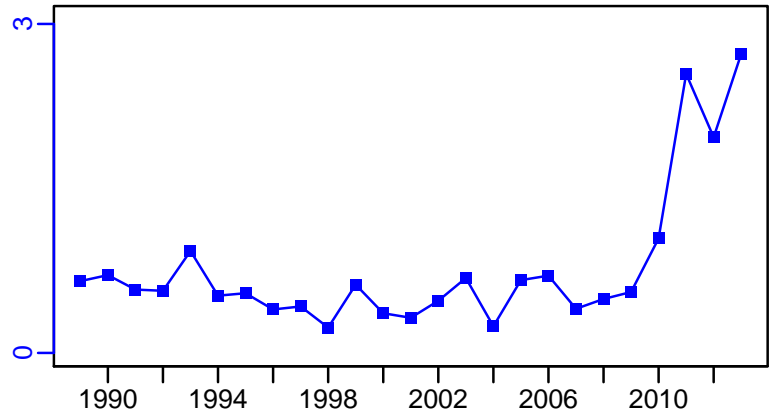
TC-MT, TL-MT, RecC-MT (1931-2014-LANGLEY)



TAC-MT, Cpair-MT, Cadv\* (1931-2014-LANGLEY)



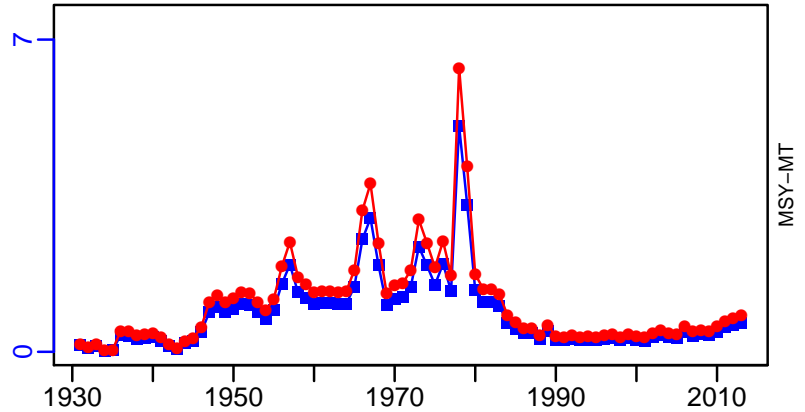
CPUE-index (1931-2014-LANGLEY)



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1931-2014-LANGLEY)



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

**New Zealand snapper New Zealand Area 8 (Auckland and Central West)  
[NZSNAPNZ8]**

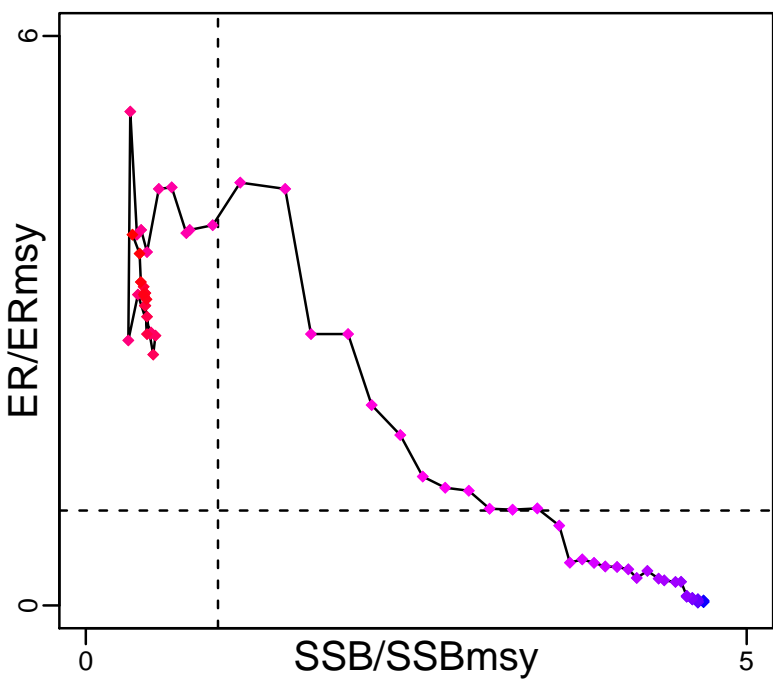
Metadata	
<b>Scientific Name</b>	Chrysophrys auratus
<b>Current Assess ID</b>	NZMFishINSHOREWG-NZSNAPNZ8-1931-2005-JENSEN
<b>Area</b>	New Zealand Area 8 (Auckland and Central West)
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	Inshore Working Group
<b>Asmts in RAM</b>	2005

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2005	37,979
<b>SSBmsy</b>	SSBmsy-MT	2005	23,536
<b>Fmsy</b>	Fmsy-1/yr	2005	0.092
<b>ERmsy</b>	ERmsy-ratio	2005	0.06
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2005	120,884
<b>MSY</b>	MSY-MT	2005	2285
<b>M</b>	M-1/yr	2005	0.051
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

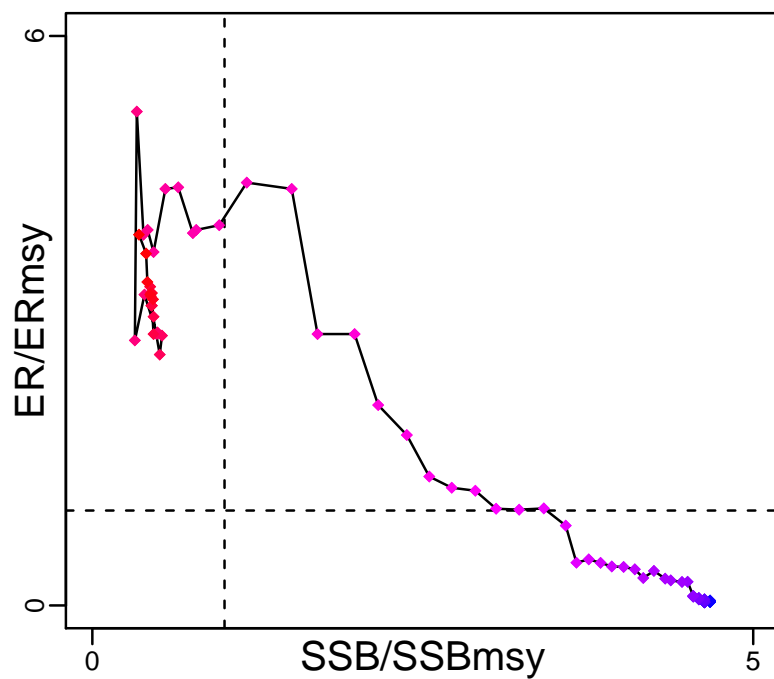
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2005	8310	-	3
<b>SSB</b>	SSB-MT	2005	8310	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2005	1,770,000	-	3
<b>F</b>	F-1/yr	2005	0.23	-	-
<b>ER</b>	ER-ratio	2005	0.235	-	-
<b>TC</b>	TC-MT	2005	1950		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	TB-MT/TBmsy-calc-MT	2005	0.219		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2005	0.353		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2005	2.492		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2005	3.906		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# New Zealand snapper New Zealand Area 8 (Auckland and Central West) [NZSNAPNZ8]

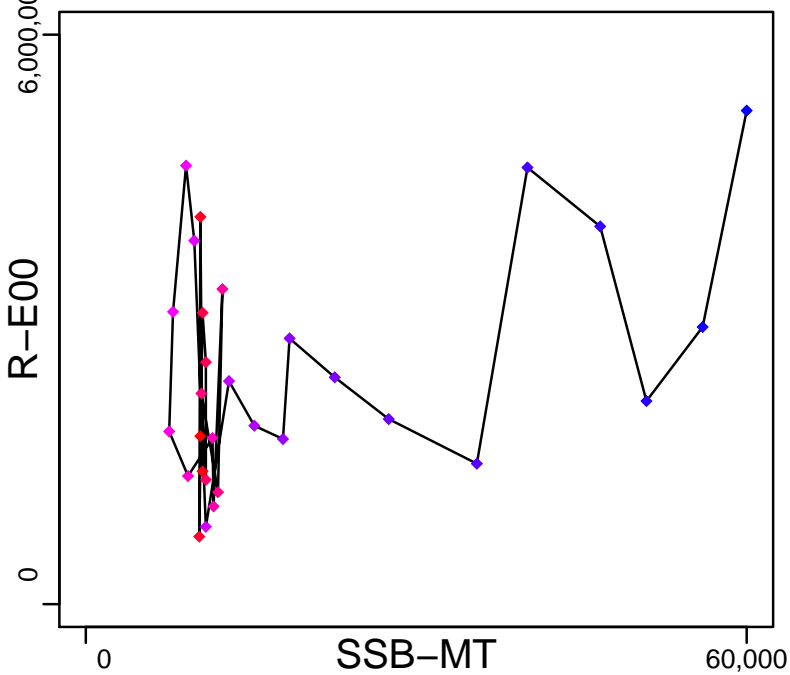
Kobe MSYpref (1931–2005–JENSEN)



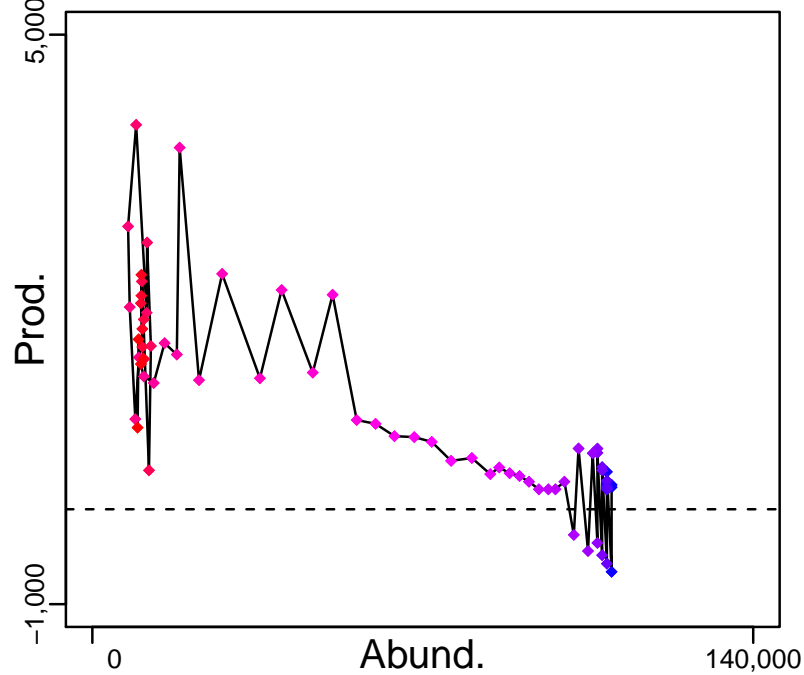
Kobe MGTpref (1931–2005–JENSEN)



Spawner Recruit (1931–2005–JENSEN)



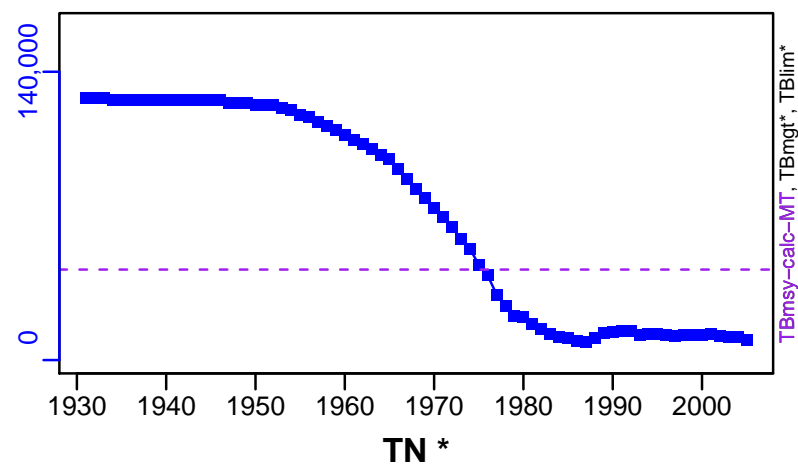
Production (1931–2005–JENSEN)



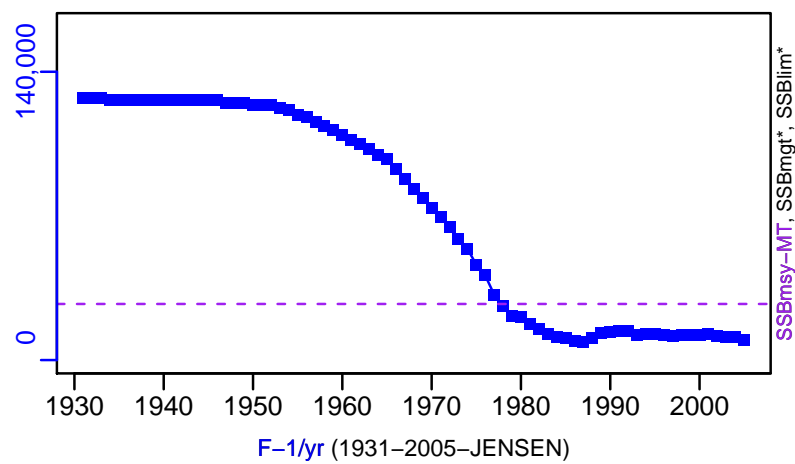
◆ Start Year ◆ End Year \* No Data

# New Zealand snapper New Zealand Area 8 (Auckland and Central West) [NZSNAPNZ8]

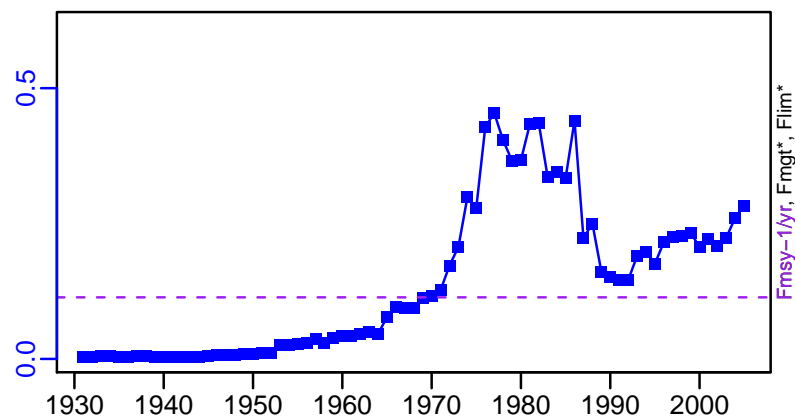
TB-MT (1931-2005-JENSEN)



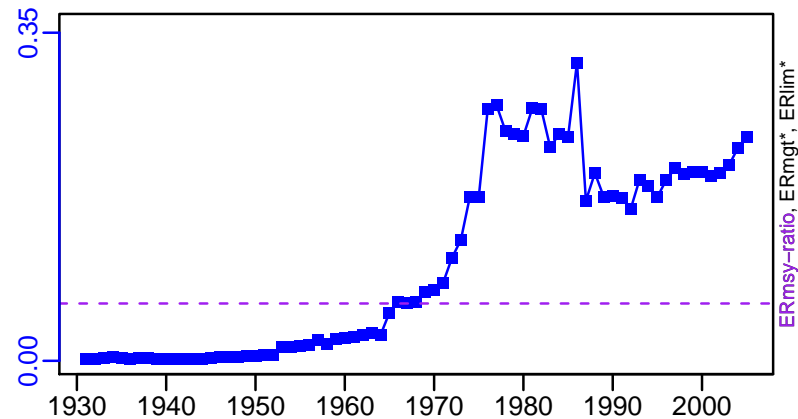
SSB-MT (1931-2005-JENSEN)



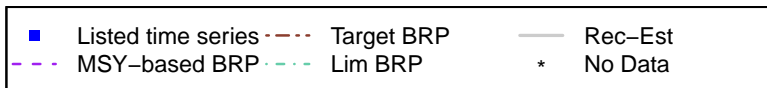
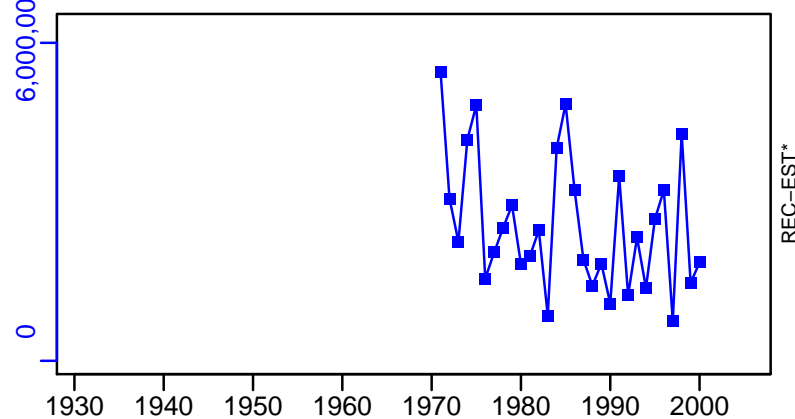
F-1/yr (1931-2005-JENSEN)



ER-ratio (1931-2005-JENSEN)



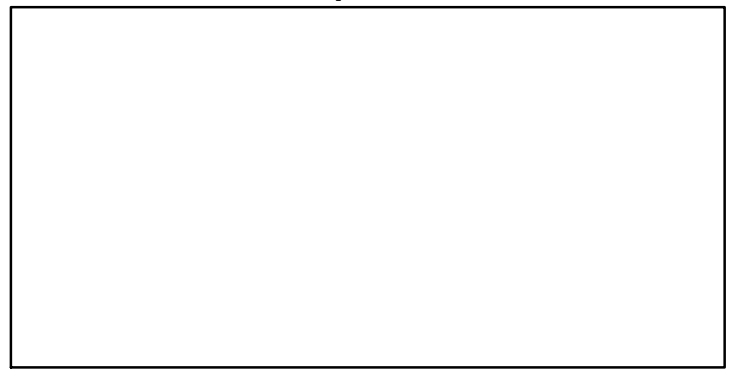
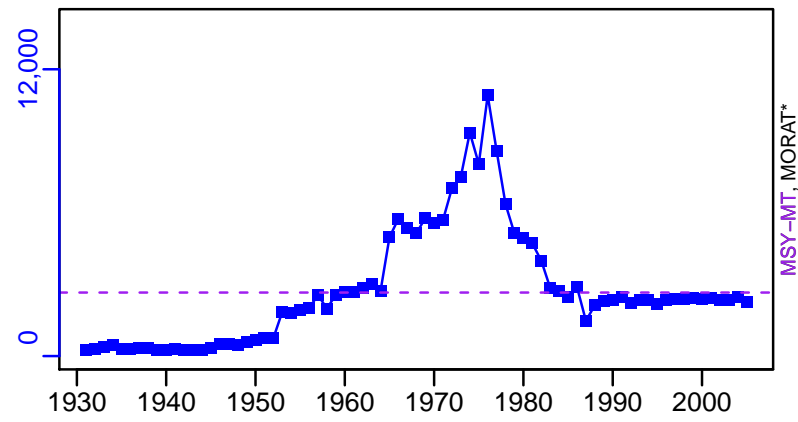
R-E00 (1931-2005-JENSEN)



# New Zealand snapper New Zealand Area 8 (Auckland and Central West) [NZSNAPNZ8]

TC-MT, TL\*, RecC\* (1931-2005-JENSEN)

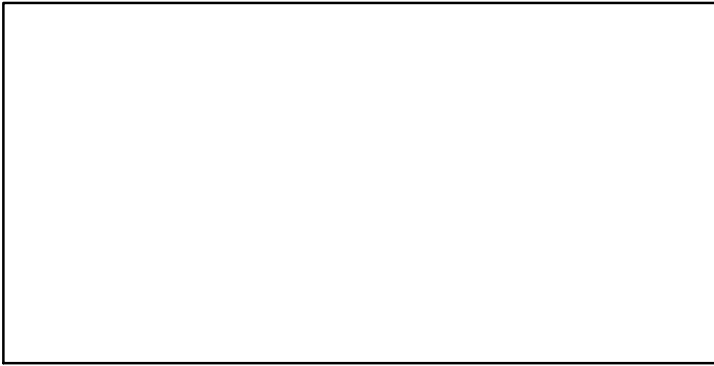
TAC\*, Cpair\*, Cadv\*



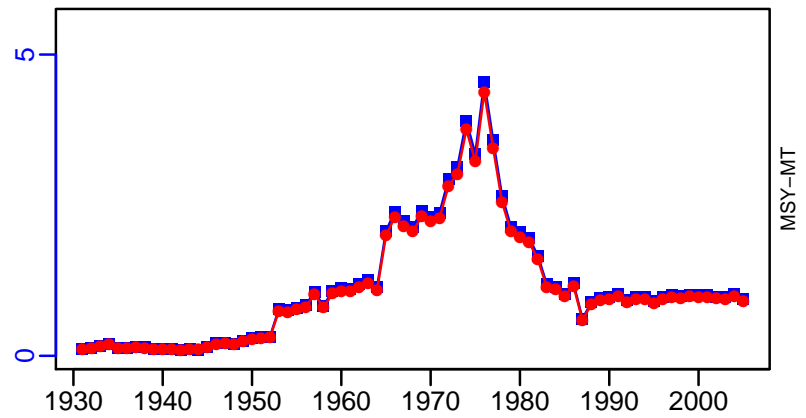
CPUE\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1931-2005-JENSEN)



## Orange roughy East and South Chatham Rise [OROUGHYESCR]

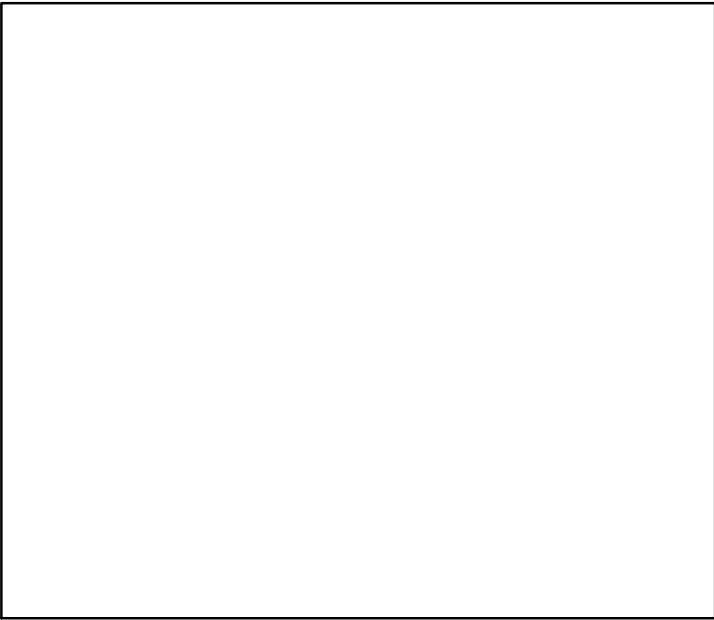
Metadata	
<b>Scientific Name</b>	Hoplostethus atlanticus
<b>Current Assess ID</b>	NIWA-OROUGHYESCR-1910-2014-FU
<b>Area</b>	East and South Chatham Rise
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2014	112,000
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2014	112,000
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	ERmgt-ratio	2014	0.053
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2014	320,000
<b>MSY</b>	MSY-MT	2014	8640
<b>M</b>	M-1/yr	2014	0.045
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

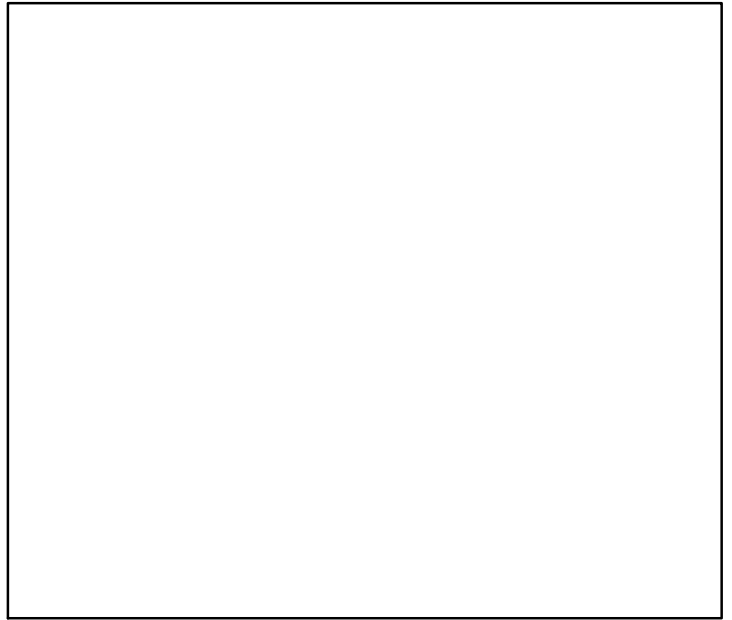
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2014	94,700	-	40+
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	-	-	-	-	-
<b>TC</b>	TC-MT	2014	3260		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSBdivSSBmsy-dimensionless	2014	0.85		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2014	0.846		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Orange roughy East and South Chatham Rise [OROUGHYESCR]

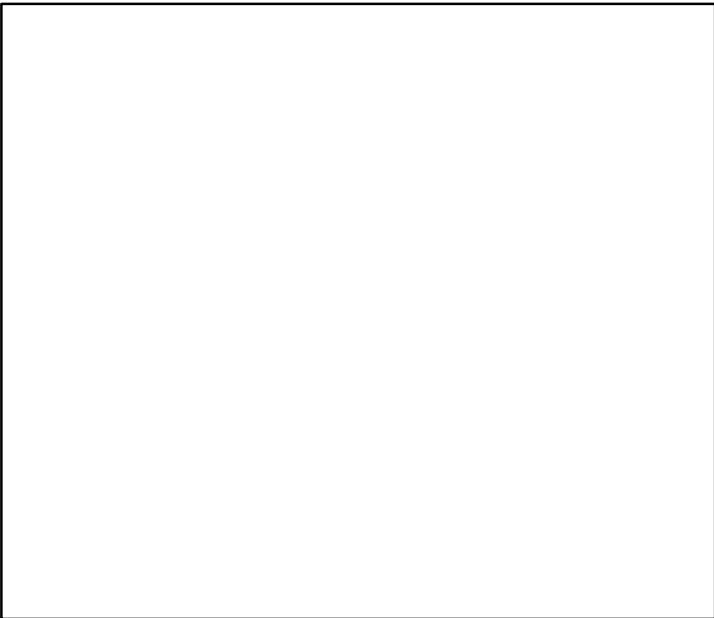
**Kobe MSY\***



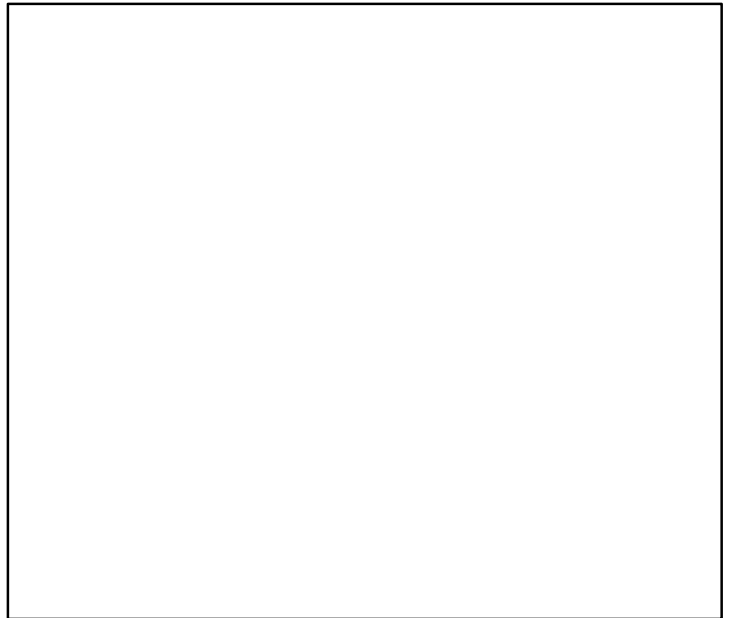
**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data

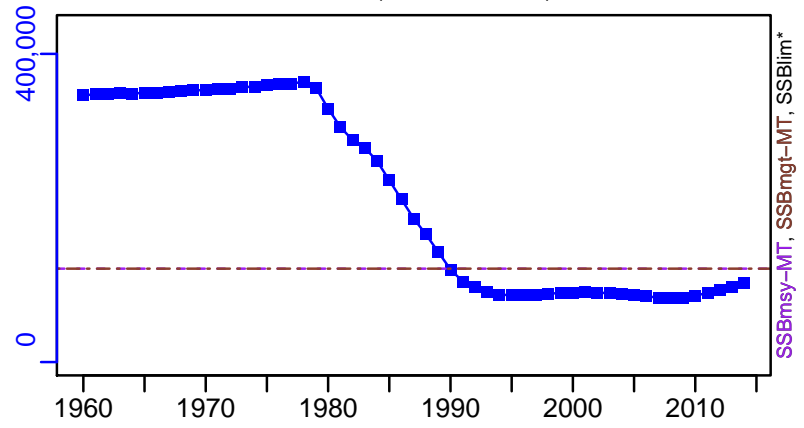


Orange roughy East and South Chatham Rise [OROUGHYESCR]

TB\*



SSB-MT (1910–2014–FU)



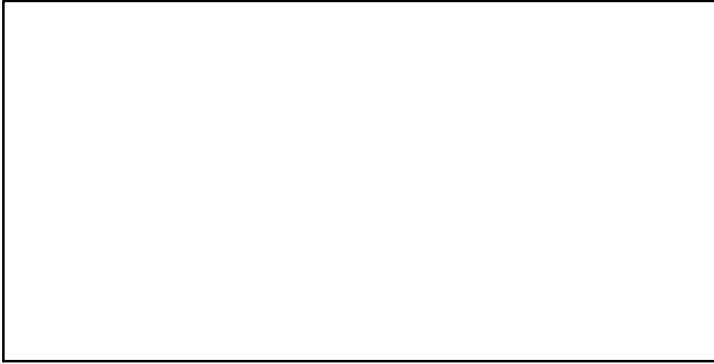
TN \*



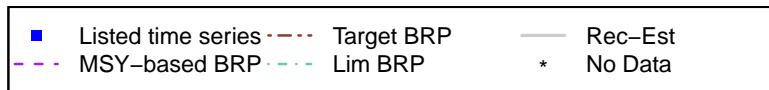
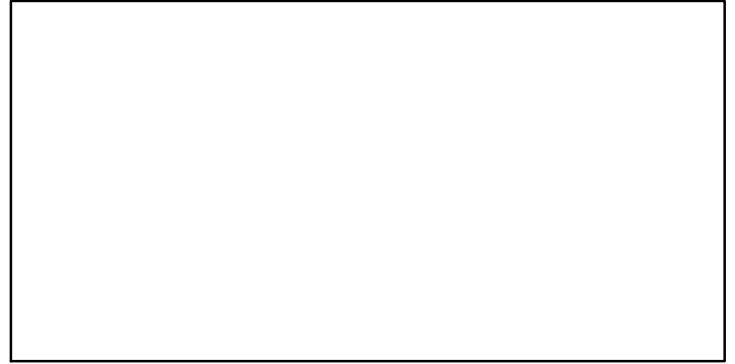
F\*



ER\*



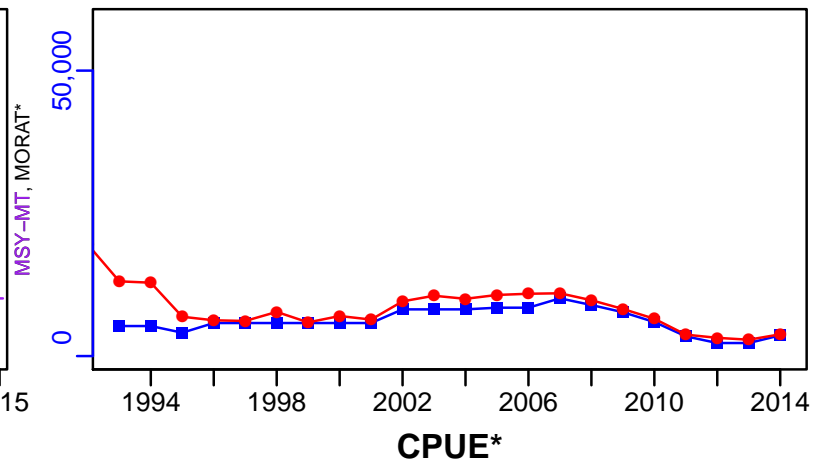
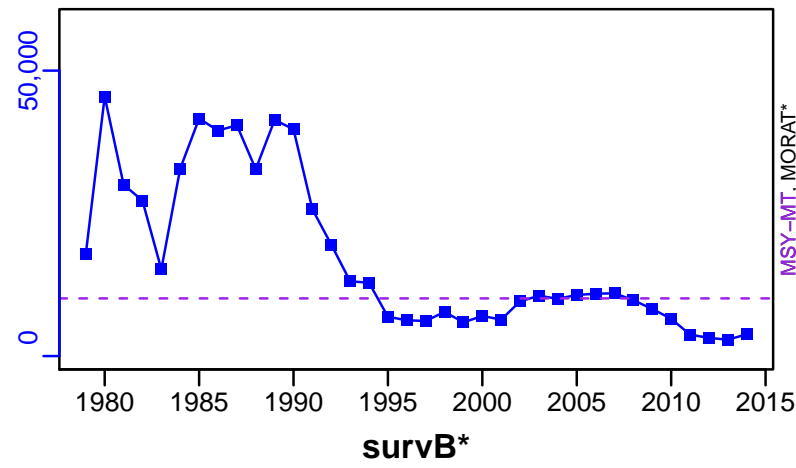
Recruits\*



# Orange roughy East and South Chatham Rise [OROUGHYESCR]

TC-MT, TL\*, RecC\* (1910-2014-FU)

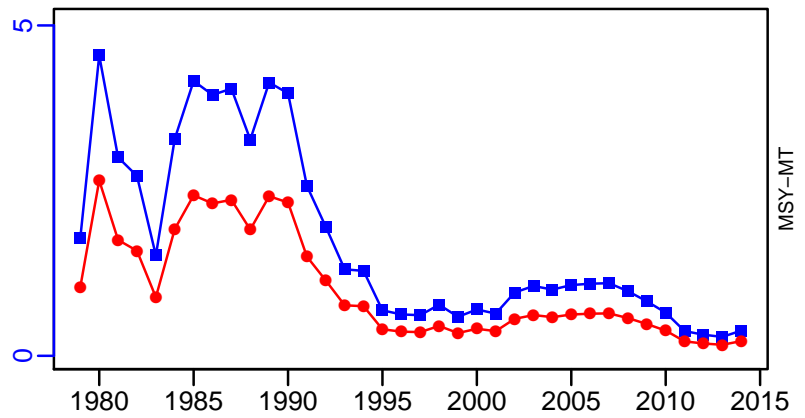
TAC-MT, Cpair-MT, Cadv\* (1910-2014-FU)



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1910-2014-FU)



## Orange roughy Northwest Chatham Rise [OROUGHYNWCR]

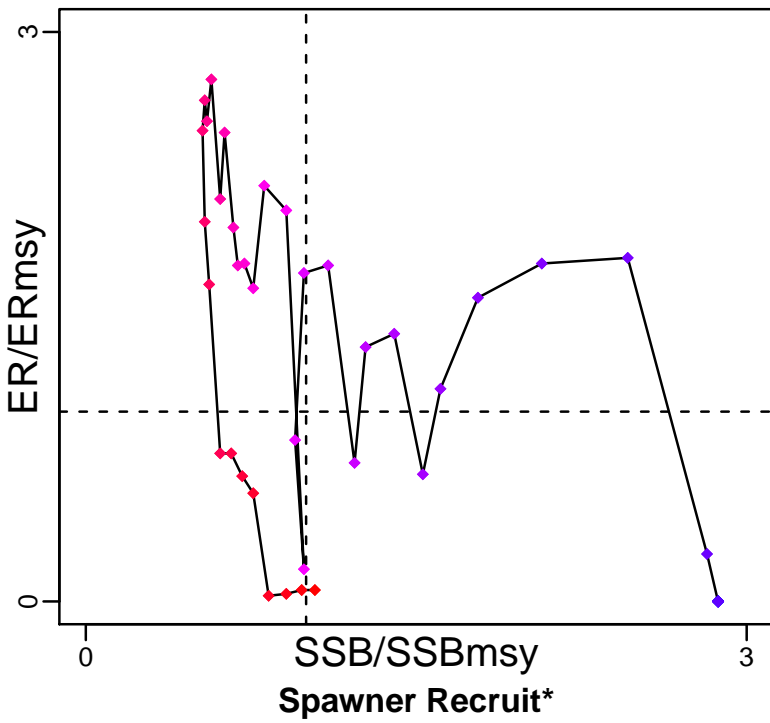
Metadata	
<b>Scientific Name</b>	Hoplostethus atlanticus
<b>Current Assess ID</b>	NIWA-OROUGHYNWCR-1910-2014-FU
<b>Area</b>	Northwest Chatham Rise
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2014	16,052
<b>SSBmsy</b>	SSBmsy-MT	2014	23,100
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2014	0.086
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2014	23,100
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	ERmgt-ratio	2014	0.053
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2014	66,000
<b>MSY</b>	MSY-MT	2014	1386
<b>M</b>	M-1/yr	2014	0.045
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

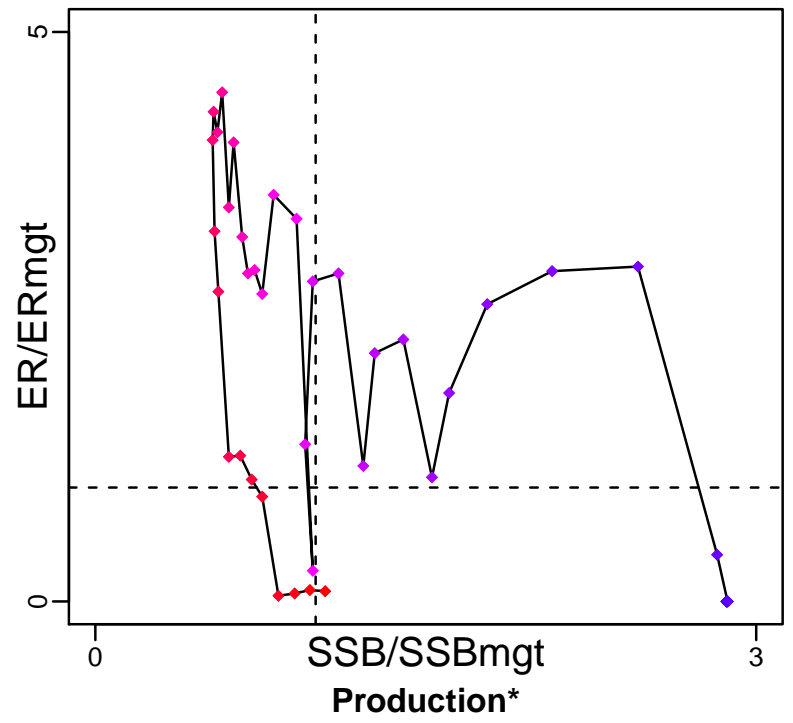
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2014	24,100	-	40+
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2014	0.005	-	-
<b>TC</b>	TC-MT	2014	116		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSBdivSSBmsy-dimensionless	2014	1.04		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ERdivERmsy-dimensionless	2014	0.06		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2014	1.043		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Orange roughy Northwest Chatham Rise [OROUGHYNWCR]

Kobe MSYpref (1910–2014–FU)



Kobe MGTpref (1910–2014–FU)



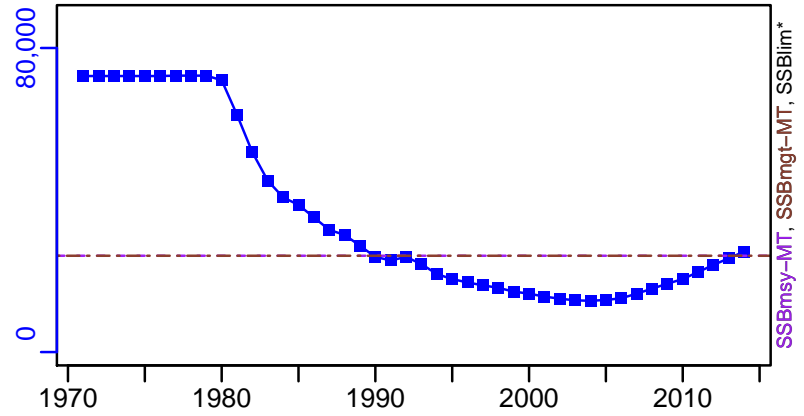
◆ Start Year ◆ End Year \* No Data

# Orange roughy Northwest Chatham Rise [OROUGHYNWCR]

TB\*



SSB-MT (1910–2014–FU)



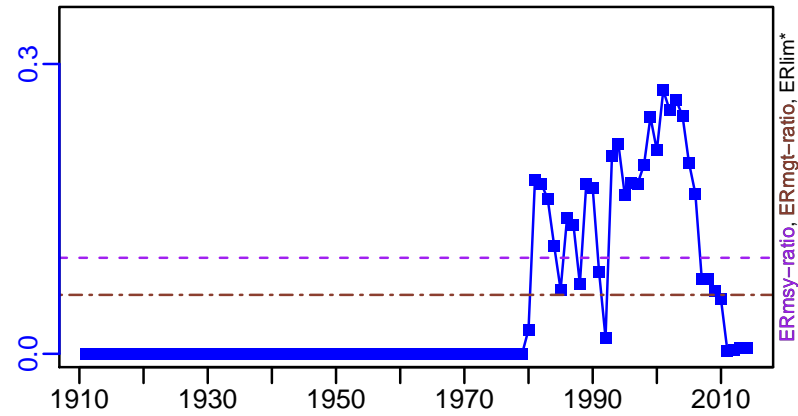
TN \*



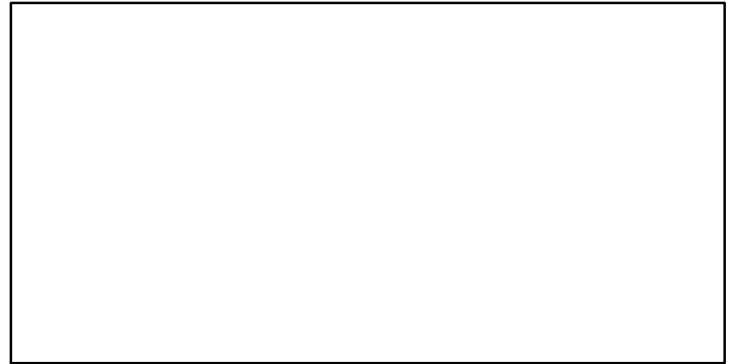
F\*



ER-ratio (1910–2014–FU)

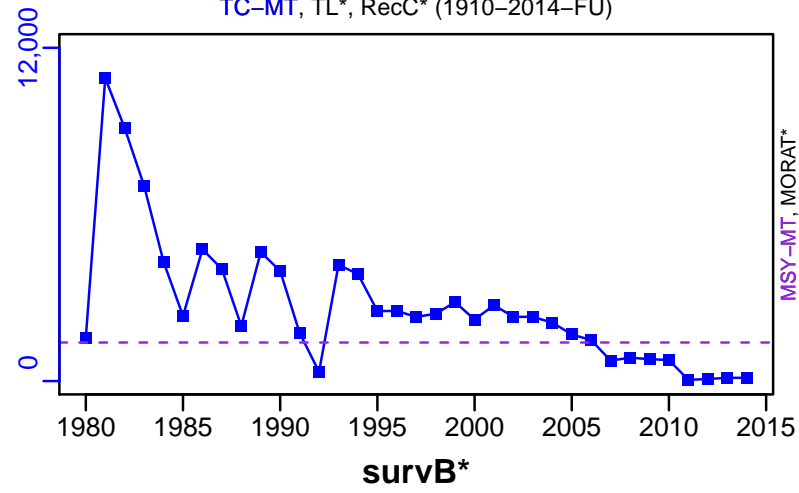


Recruits\*

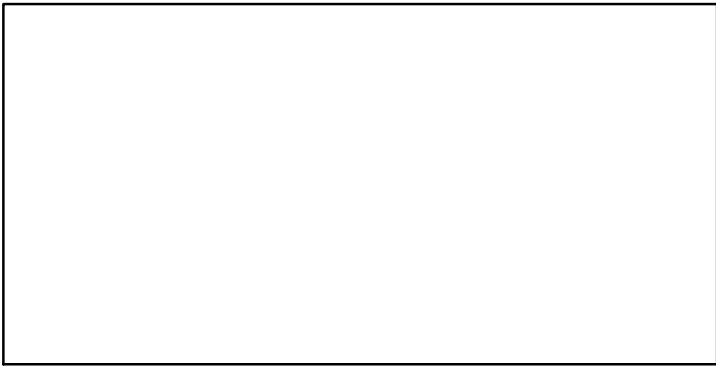
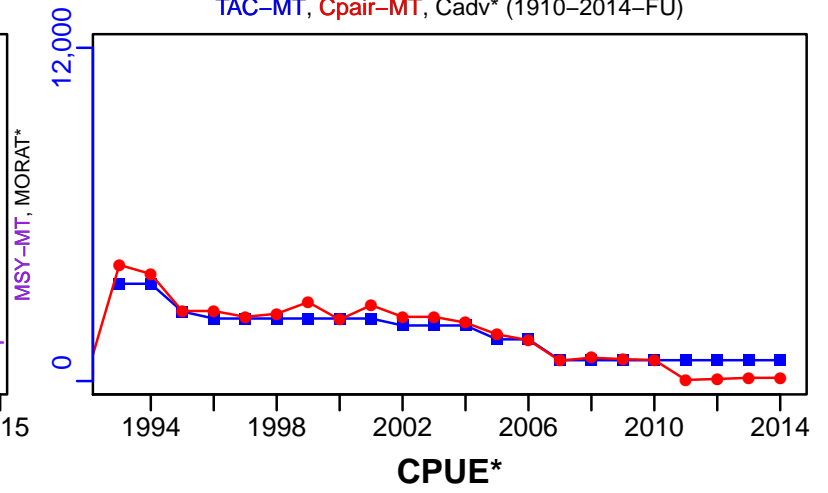


# Orange roughy Northwest Chatham Rise [OROUGHYNWCR]

TC-MT, TL\*, RecC\* (1910-2014-FU)



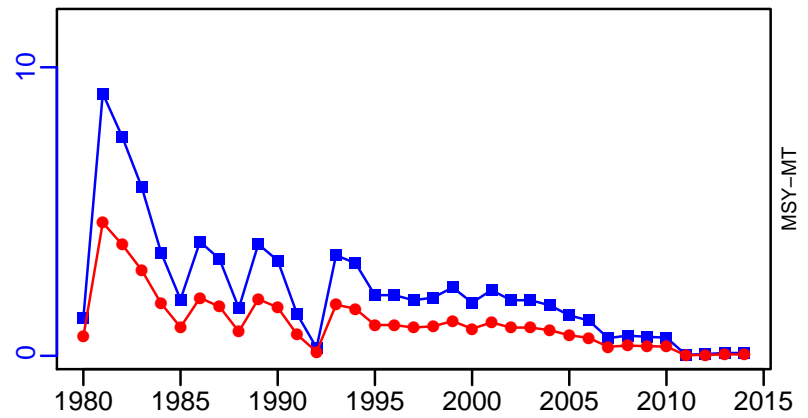
TAC-MT, Cpair-MT, Cadv\* (1910-2014-FU)



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1910-2014-FU)



## Orange roughy New Zealand Challenger Plateau [OROUGHYNZ7A]

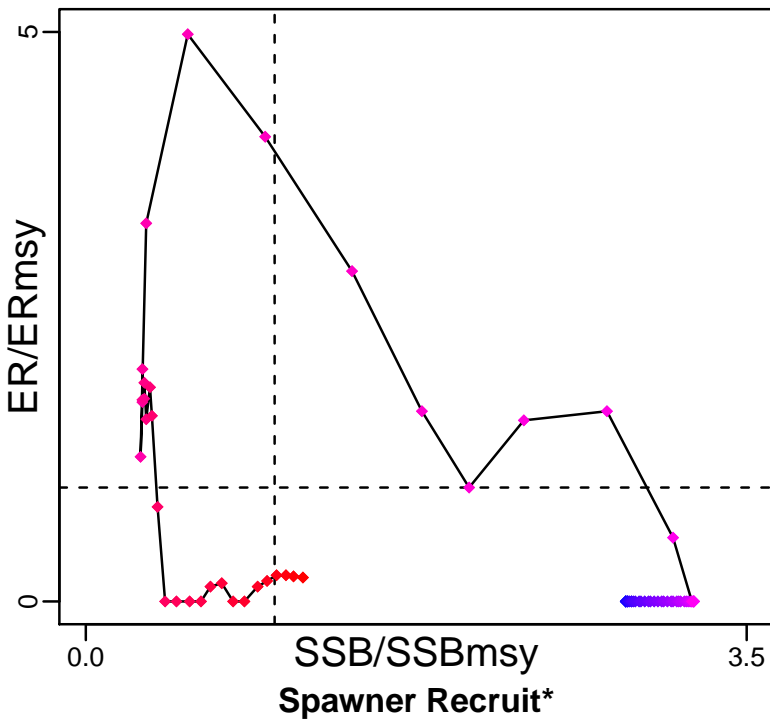
Metadata	
<b>Scientific Name</b>	Hoplostethus atlanticus
<b>Current Assess ID</b>	NIWA-OROUGHYNZ7A-1910-2014-FU
<b>Area</b>	New Zealand Challenger Plateau
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2014	20,764
<b>SSBmsy</b>	SSBmsy-MT	2014	30,800
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2014	0.089
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2014	30,800
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	ERmgt-ratio	2014	0.054
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2014	88,000
<b>MSY</b>	MSY-MT	2014	1848
<b>M</b>	M-1/yr	2014	0.045
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

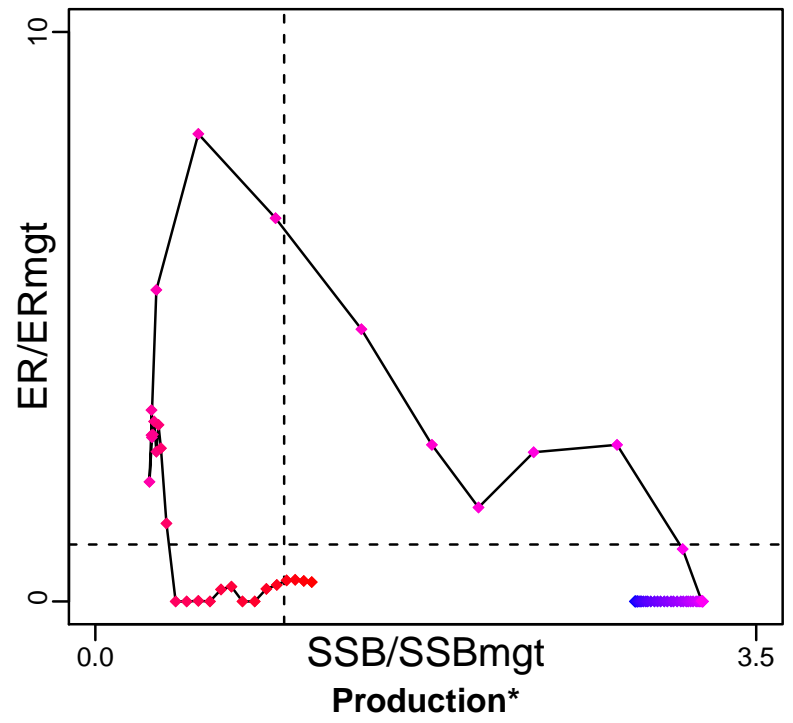
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2014	35,300	-	40+
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2014	0.02	Both	-
<b>TC</b>	TC-MT	2014	539		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSBdivSSBmsy-dimensionless	2014	1.15		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ERdivERmsy-dimensionless	2014	0.21		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2014	1.146		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Orange roughy New Zealand Challenger Plateau [OROUGHYNZ7A]

Kobe MSYpref (1910–2014–FU)



Kobe MGTpref (1910–2014–FU)



◆ Start Year ◆ End Year \* No Data

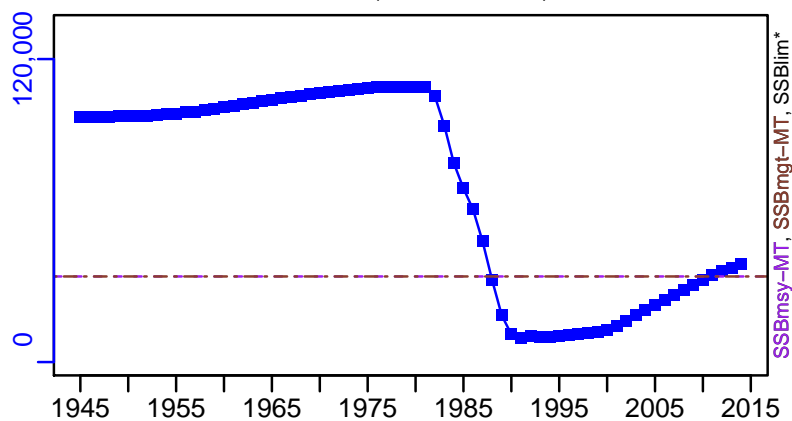


# Orange roughy New Zealand Challenger Plateau [OROUGHYNZ7A]

TB\*



SSB-MT (1910-2014-FU)



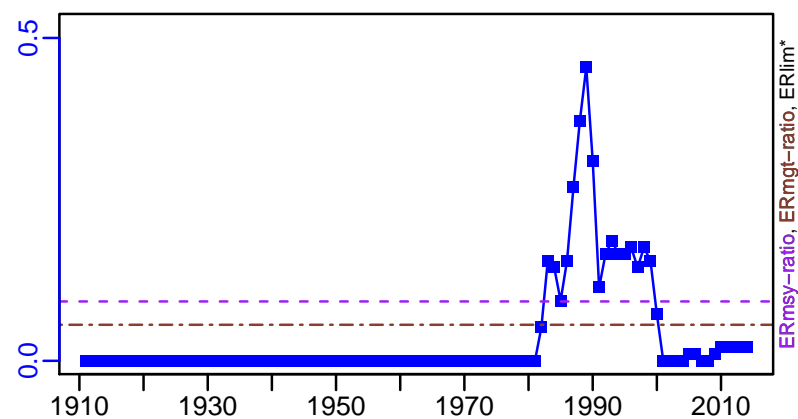
TN \*



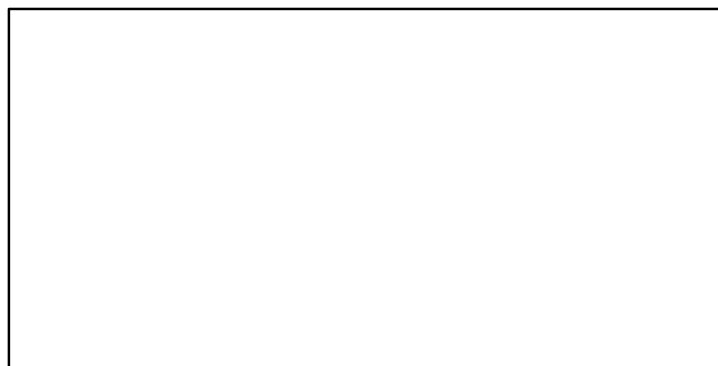
F\*



ER-ratio (1910-2014-FU)



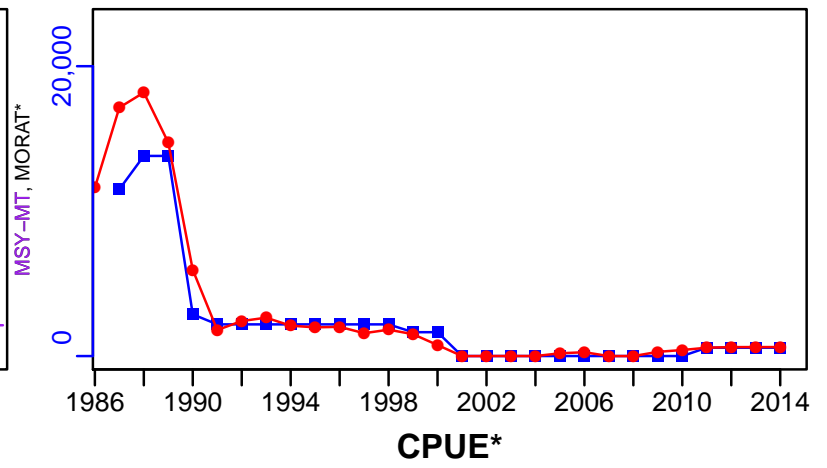
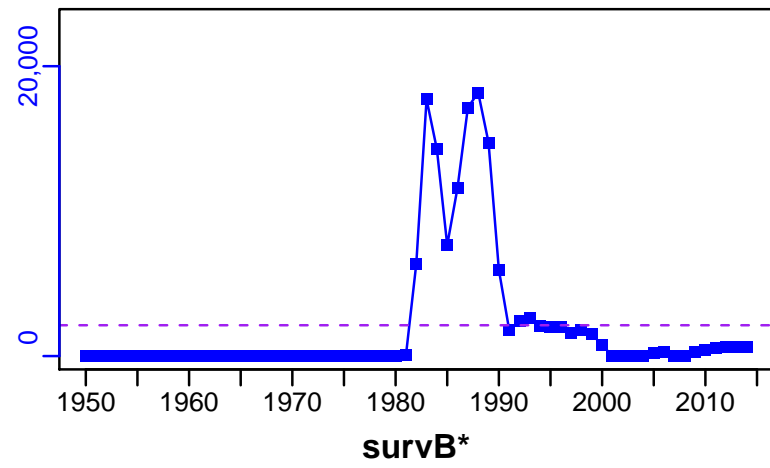
Recruits\*



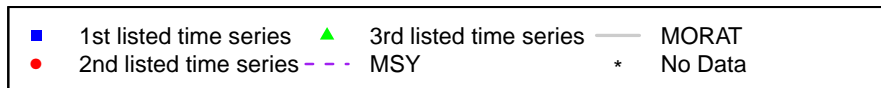
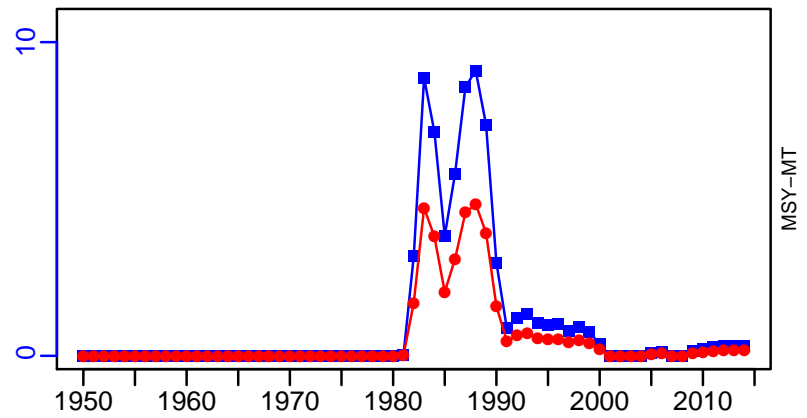
# Orange roughy New Zealand Challenger Plateau [OROUGHYNZ7A]

TC-MT, TL\*, RecC\* (1910-2014-FU)

TAC-MT, Cpair-MT, Cadv\* (1910-2014-FU)



TC-MT/MSY-MT, CdivMEANC-ratio, (1910-2014-FU)



## Orange roughy New Zealand Mid East Coast [OROUGHYNZMEC]

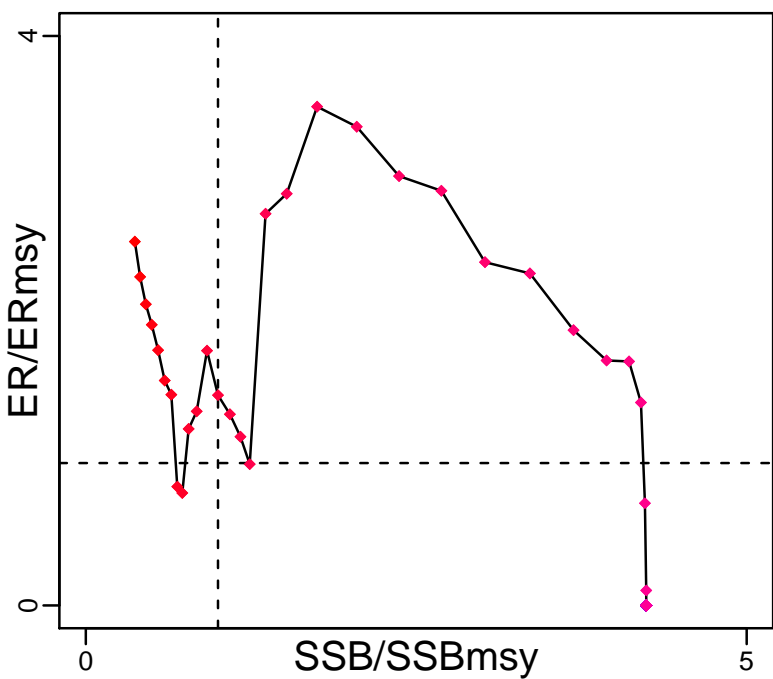
Metadata	
<b>Scientific Name</b>	Hoplostethus atlanticus
<b>Current Assess ID</b>	NIWA-OROUGHYNZMEC-1882-2014-FU
<b>Area</b>	New Zealand Mid East Coast
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2014, 2011

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2011	55,297
<b>SSBmsy</b>	SSBmsy-MT	2014	33,250
<b>Fmsy</b>	Fmsy-1/yr	2011	0.04
<b>ERmsy</b>	ERmsy-ratio	2011	0.029
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2014	33,250
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	ERmgt-ratio	2014	0.051
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2014	95,000
<b>MSY</b>	MSY-MT	2014	2214
<b>M</b>	M-1/yr	2014	0.045
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

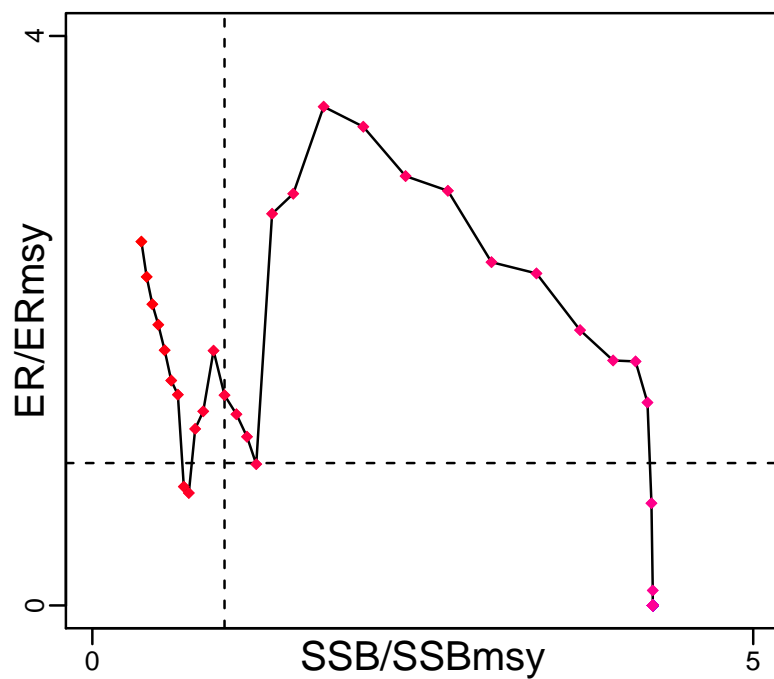
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2014	13,500	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2011	2,530,000	-	1
<b>F</b>	F-1/yr	2011	0.1	-	-
<b>ER</b>	ER-ratio	2011	0.074	-	-
<b>TC</b>	TC-MT	2014	982		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSBdivSSBmsy-dimensionless	2014	0.4		
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2011	2.5		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2011	2.555		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2014	0.406		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Orange roughy New Zealand Mid East Coast [OROUGHYNZMEC]

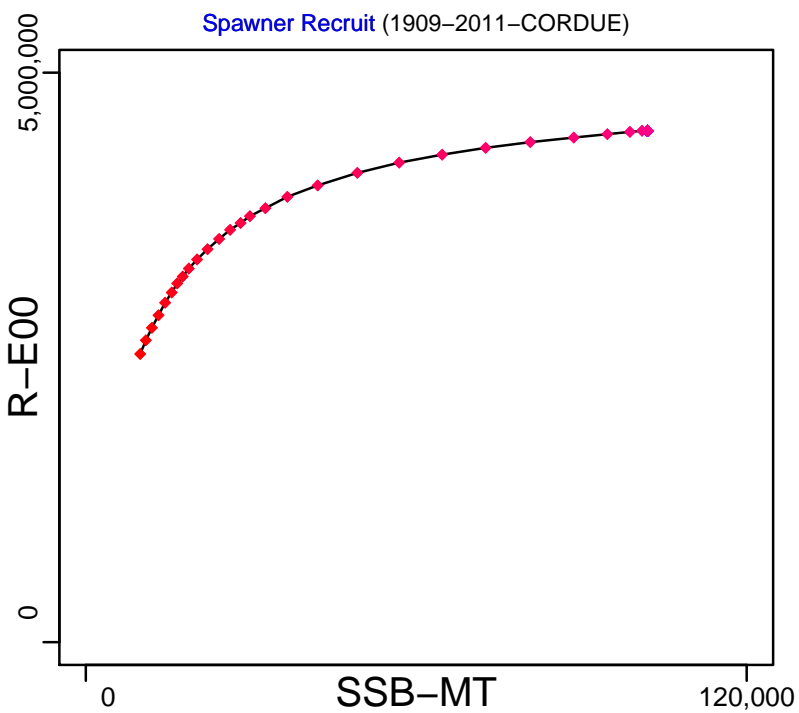
Kobe MSY<sub>pref</sub> (1909–2011–CORDUE)



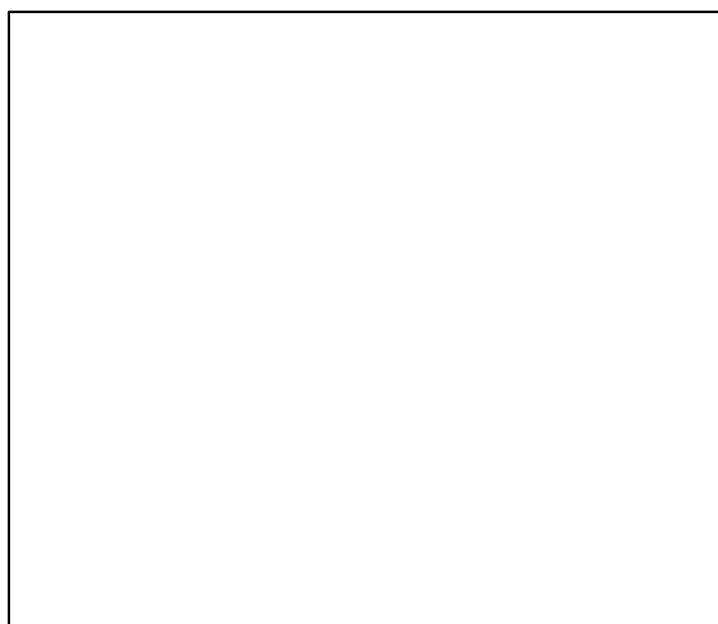
Kobe MGT<sub>pref</sub> (1909–2011–CORDUE)



Spawner Recruit (1909–2011–CORDUE)



Production\*



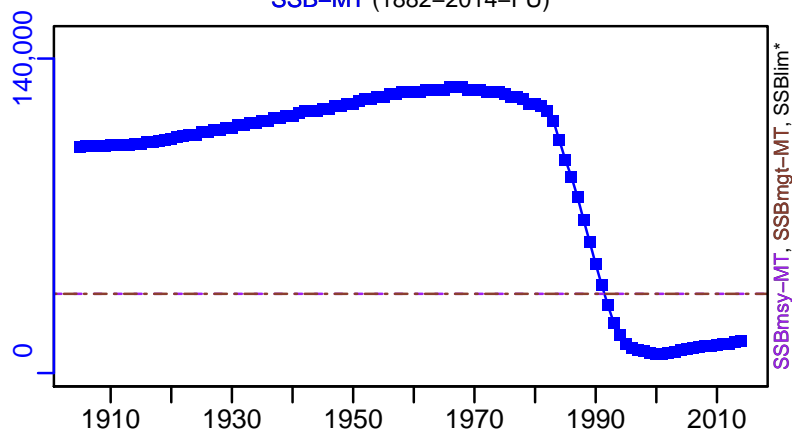
◆ Start Year ◆ End Year \* No Data

# Orange roughy New Zealand Mid East Coast [OROUGHYNZMEC]

TB\*



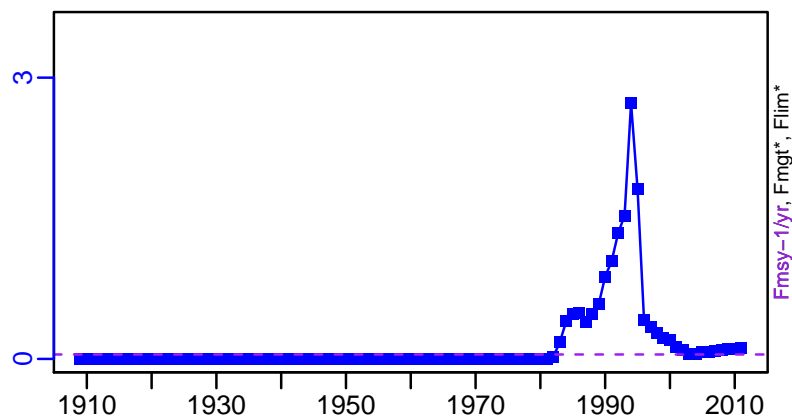
SSB-MT (1882-2014-FU)



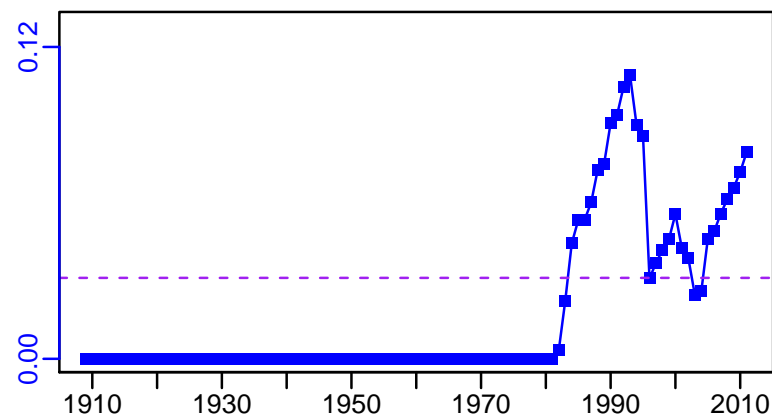
TN \*



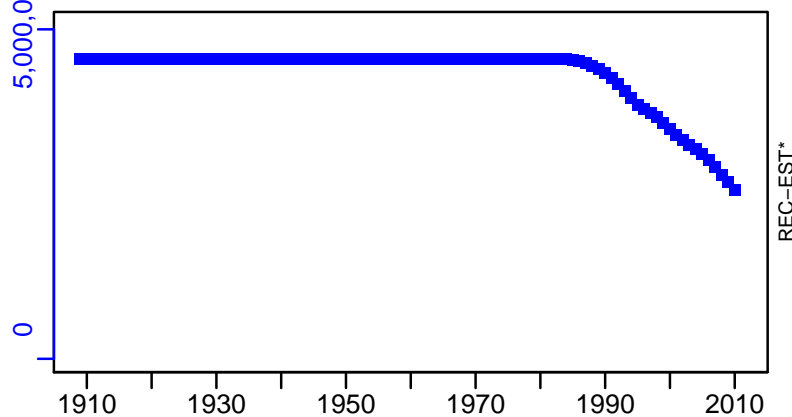
F-1/yr (1909-2011-CORDUE)



ER-ratio (1909-2011-CORDUE)

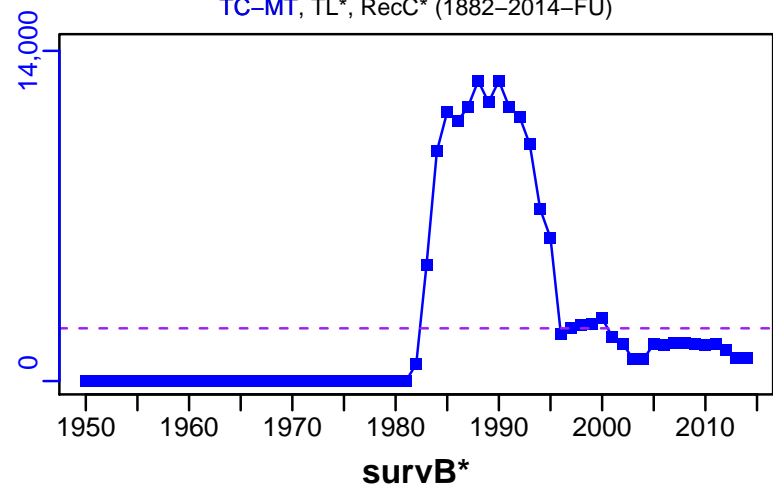


R-E00 (1909-2011-CORDUE)

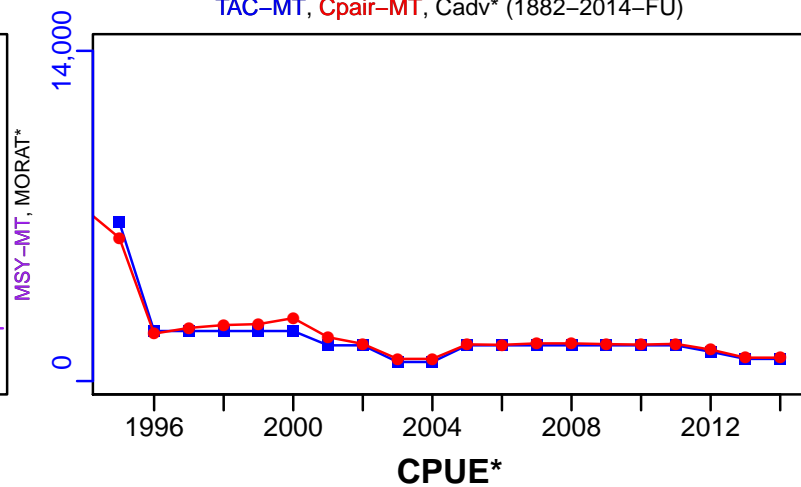


# Orange roughy New Zealand Mid East Coast [OROUGHYNZMEC]

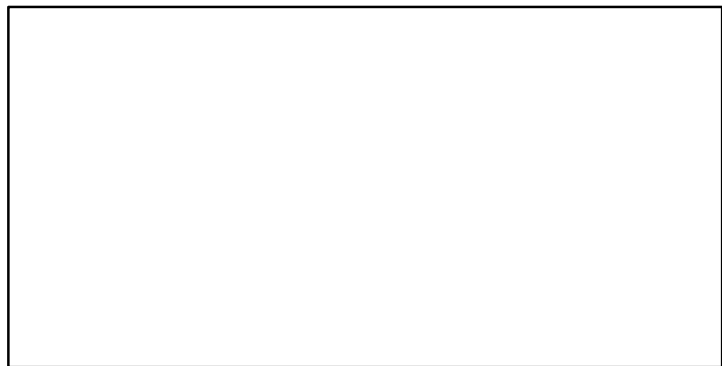
TC-MT, TL\*, RecC\* (1882-2014-FU)



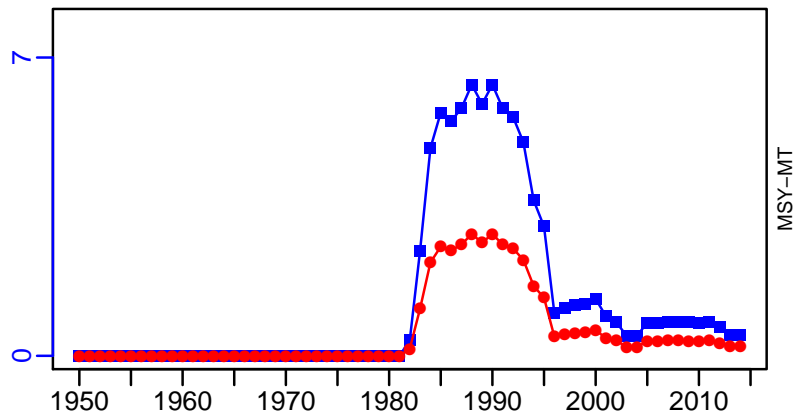
TAC-MT, Cpair-MT, Cadv\* (1882-2014-FU)



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1882-2014-FU)



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

## Paua NZ Area North PAUA 5A [PAUANPAU5A]

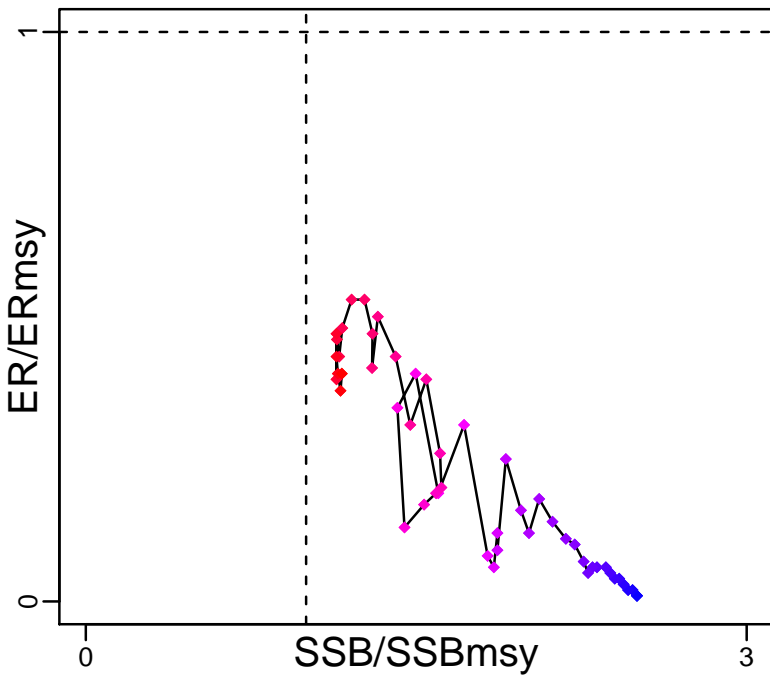
Metadata	
<b>Scientific Name</b>	Haliotis iris
<b>Current Assess ID</b>	NIWA-PAUANPAU5A-1965-2014-FU
<b>Area</b>	NZ Area North PAUA 5A
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2010, 2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2014	187
<b>SSBmsy</b>	SSBmsy-MT	2014	496
<b>Fmsy</b>	Fmsy-extr-1/yr	2010	0.51
<b>ERmsy</b>	ERmsy-ratio	2014	0.39
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2014	496
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	ERmgt-ratio	2014	0.21
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2014	1239
<b>MSY</b>	MSY-MT	2014	73
<b>M</b>	M-1/yr	2014	0.15
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

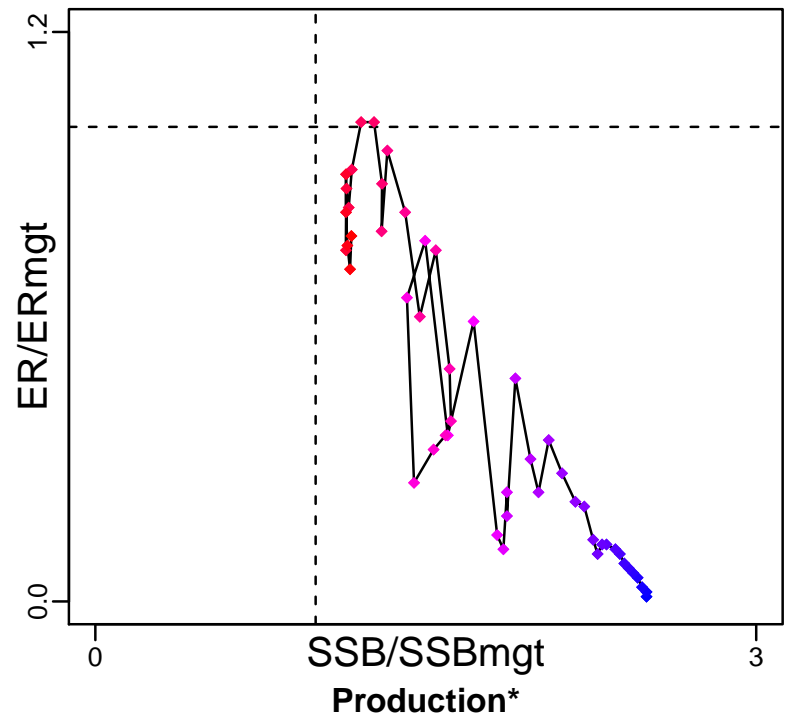
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2014	576	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2014	602,000	Both	-
<b>F</b>	F-1/yr	2010	0.328	-	-
<b>ER</b>	ER-ratio	2014	0.16	Both	-
<b>TC</b>	TC-MT	2014	64		
<b>TL</b>	TL-MT	2014	64		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2014	1.162		
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2010	0.643		
<b>ER/ERmsy</b>	ERdivERmsy-dimensionless	2014	0.4		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2014	1.162		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Paua NZ Area North PAUA 5A [PAUANPAU5A]

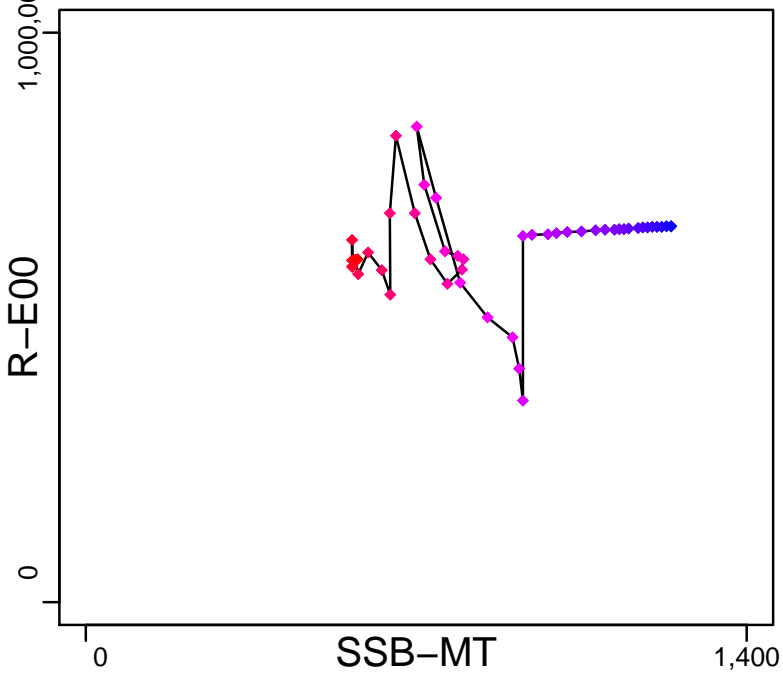
Kobe MSYpref (1965–2014–FU)



Kobe MGTpref (1965–2014–FU)



Spawner Recruit (1965–2014–FU)



◆ Start Year ◆ End Year \* No Data

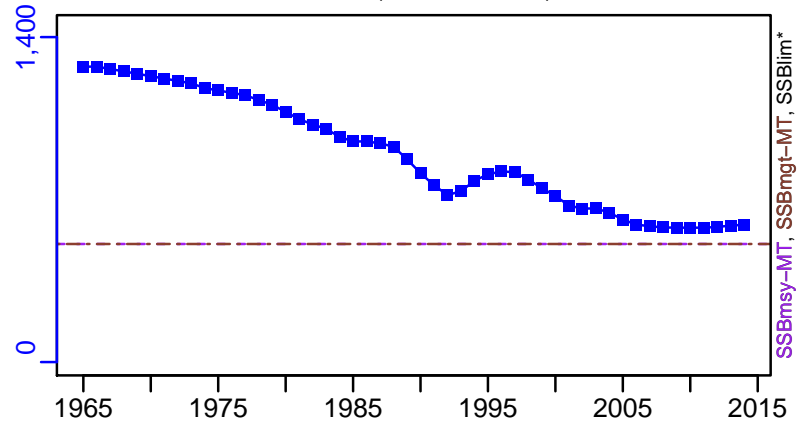


Paua NZ Area North PAUA 5A [PAUANPAU5A]

TB\*



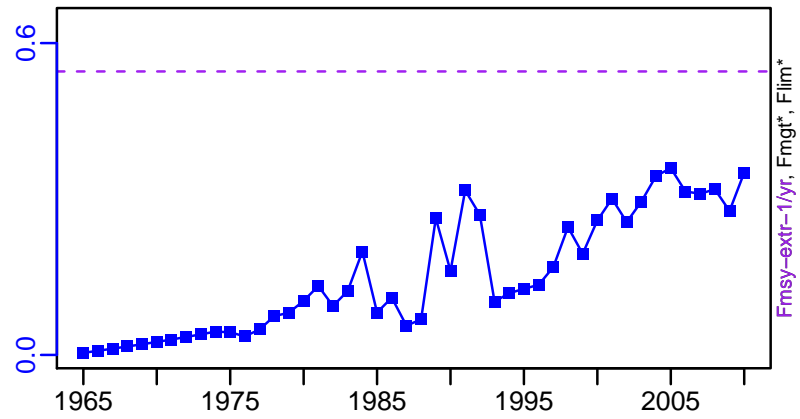
SSB-MT (1965–2014–FU)



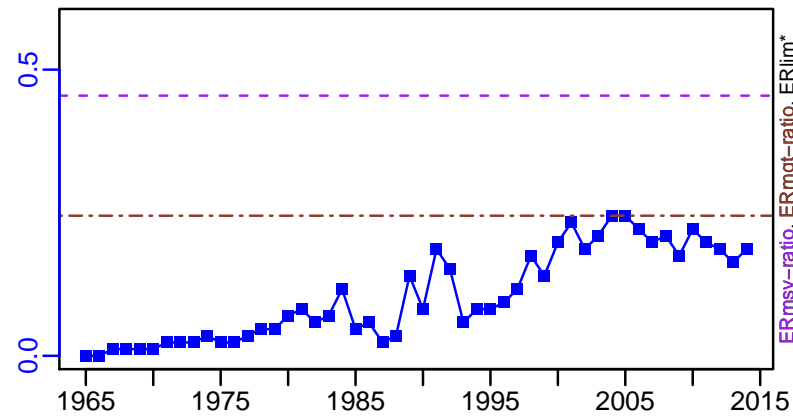
TN \*



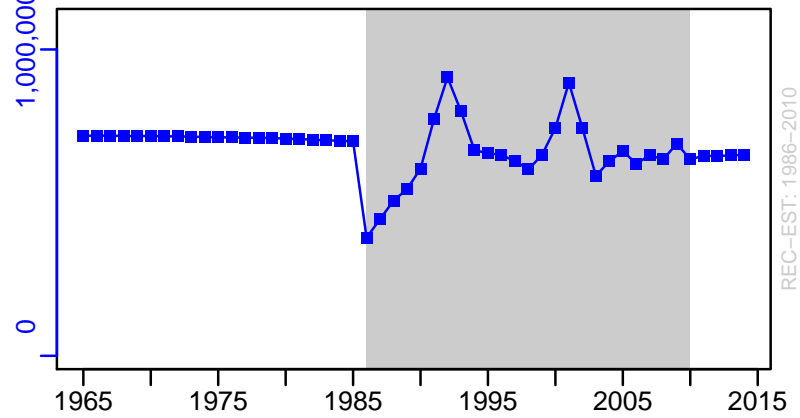
F-1/yr (1965–2010–CORDUE)



ER-ratio (1965–2014–FU)



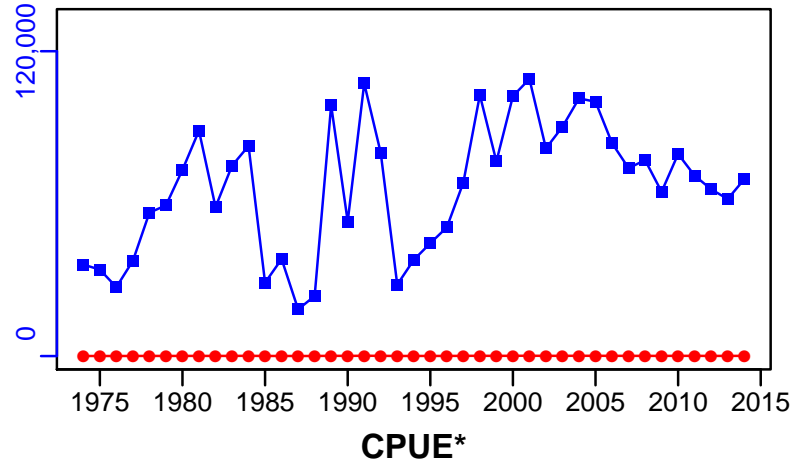
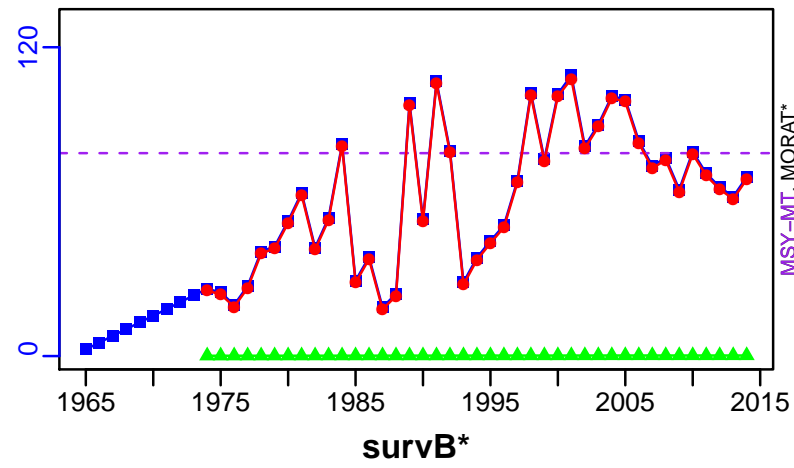
R-E00 (1965–2014–FU)



# Paua NZ Area North PAUA 5A [PAUANPAU5A]

TC-MT, TL-MT, RecC-MT (1965–2014–FU)

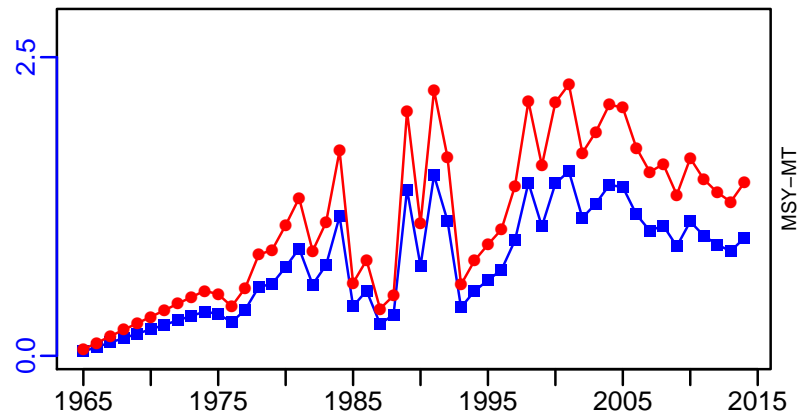
TAC-MT, Cpair-MT, Cadv\* (1965–2014–FU)



**EFFORT\***



TC-MT/MSY-MT, CdivMEANC-ratio, (1965–2014–FU)



## Paua New Zealand Area PAU 5B (Stewart Island) [PAUAPAU5B]

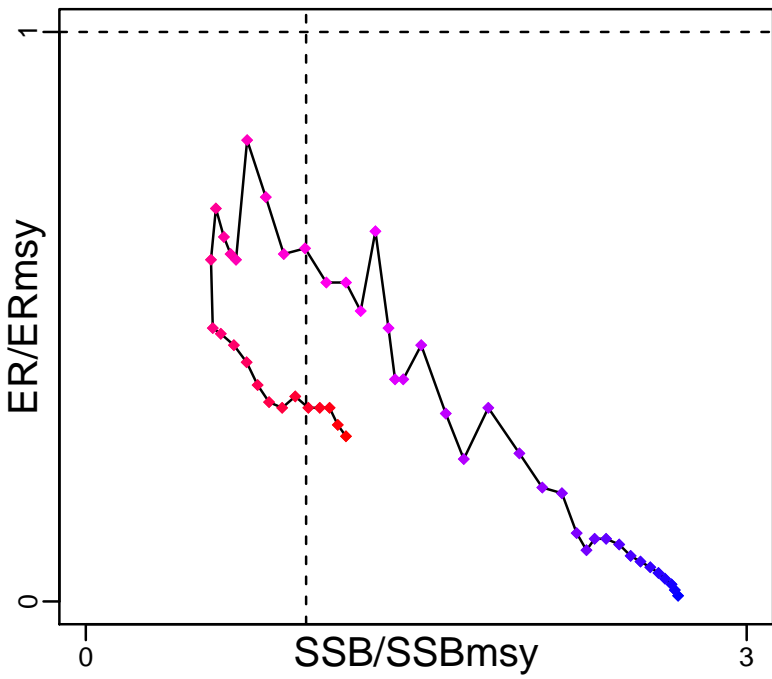
Metadata	
<b>Scientific Name</b>	Haliotis iris
<b>Current Assess ID</b>	NZMFishSHELLFISHWG-PAUAPAU5B-1965-2013-FU
<b>Area</b>	New Zealand Area PAU 5B (Stewart Island)
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	Shellfish Working Group
<b>Asmts in RAM</b>	2007, 2013

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2013	284
<b>SSBmsy</b>	SSBmsy-MT	2013	1346
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2013	0.67
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2013	1346
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	ERmgt-ratio	2013	0.3
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2013	3366
<b>MSY</b>	MSY-MT	2013	190
<b>M</b>	M-1/yr	2013	0.15
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

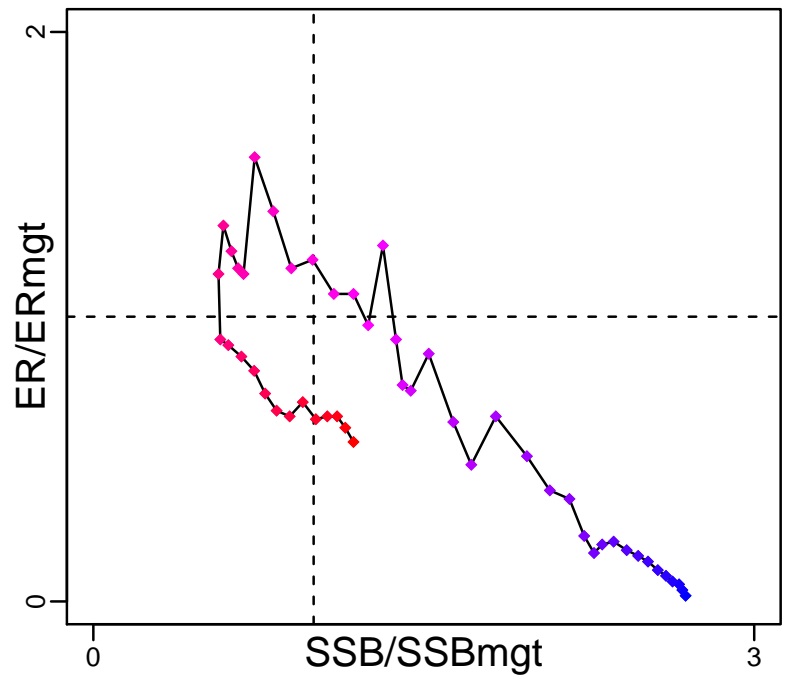
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2007	1570	-	-
<b>SSB</b>	SSB-MT	2013	1590	Both	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2013	$1 \times 10^6$	Both	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2013	0.11	Both	-
<b>TC</b>	TC-MT	2013	101		
<b>TL</b>	TL-MT	2013	72		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2013	1.181		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ERdivERmsy-dimensionless	2013	0.29		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2013	1.181		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Paua New Zealand Area PAU 5B (Stewart Island) [PAUAPAU5B]

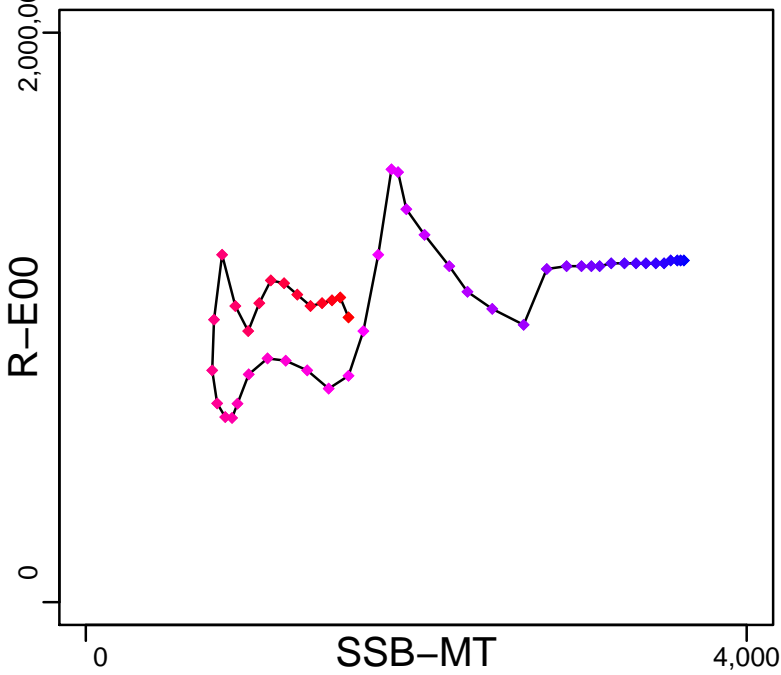
Kobe MSY<sub>pref</sub> (1965–2013–FU)



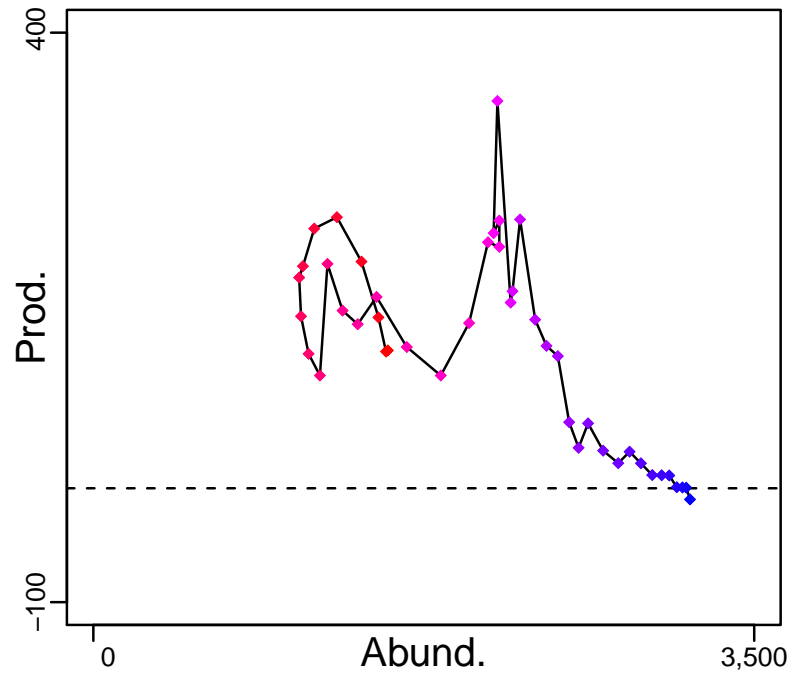
Kobe MGT<sub>pref</sub> (1965–2013–FU)



Spawner Recruit (1965–2013–FU)



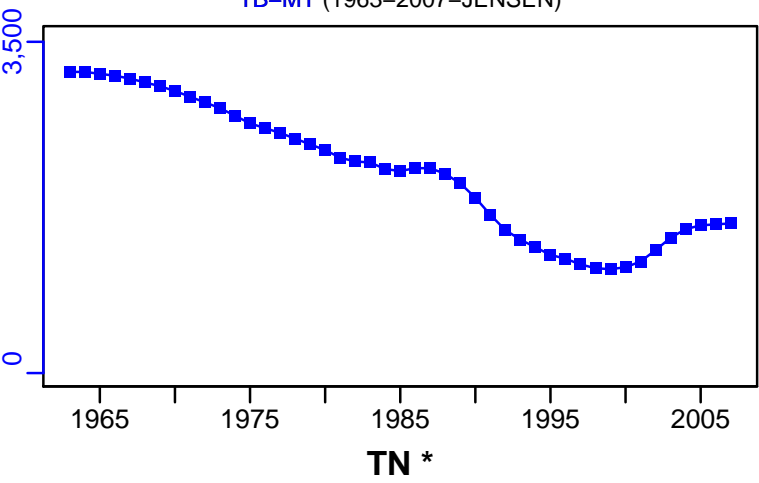
Production (1963–2007–JENSEN)



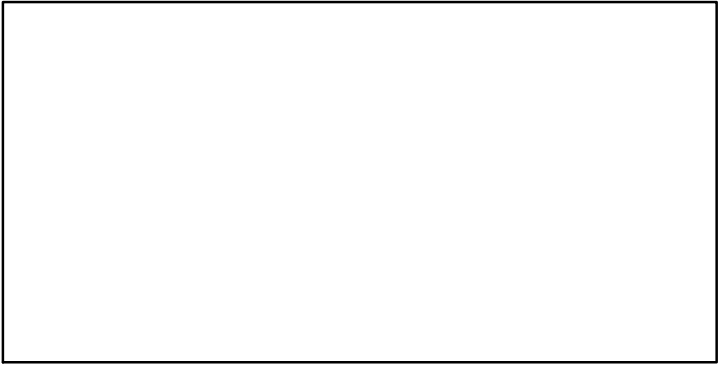
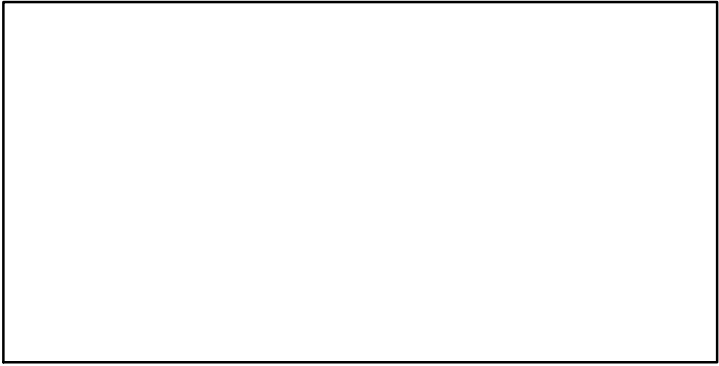
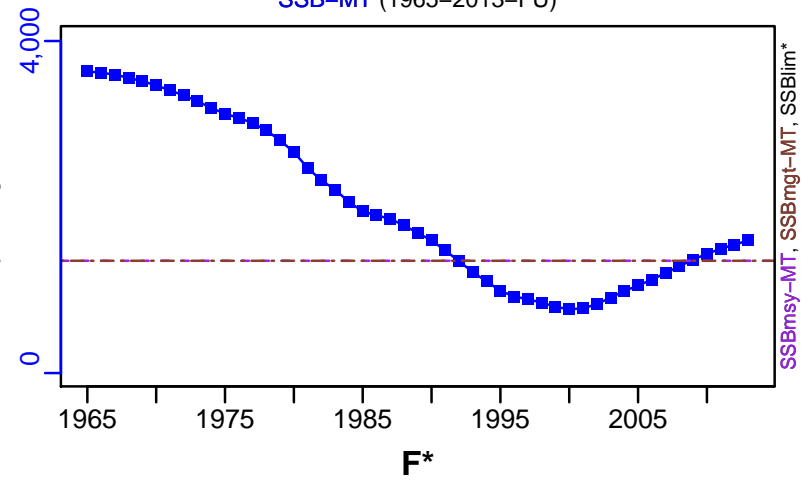
◆ Start Year ◆ End Year \* No Data

Paua New Zealand Area PAU 5B (Stewart Island) [PAUAPAU5B]

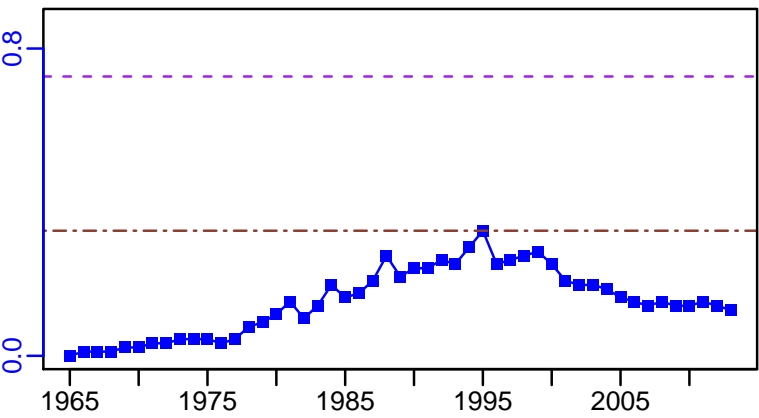
TB-MT (1963–2007–JENSEN)



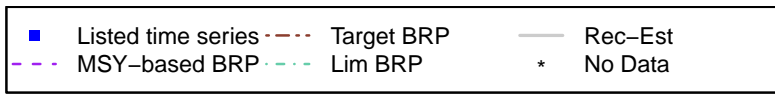
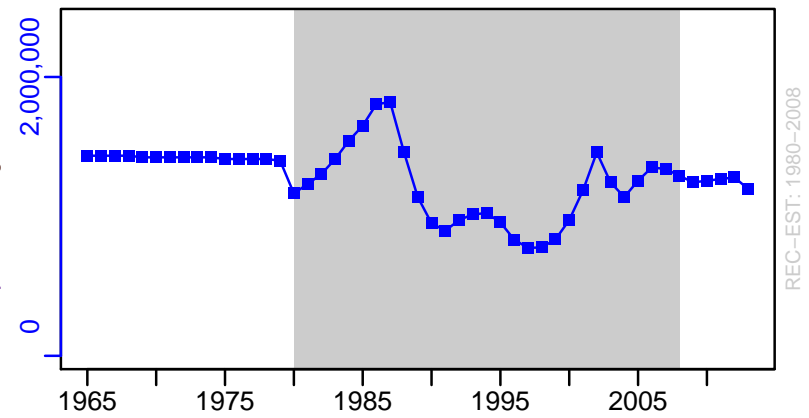
SSB-MT (1965–2013–FU)



ER-ratio (1965–2013–FU)



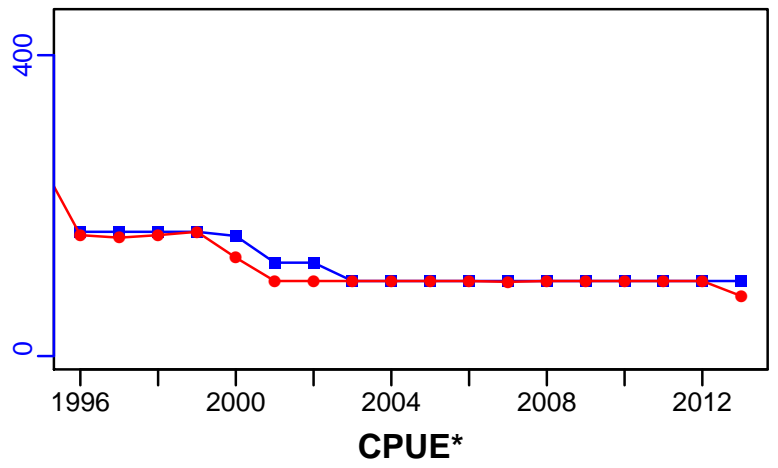
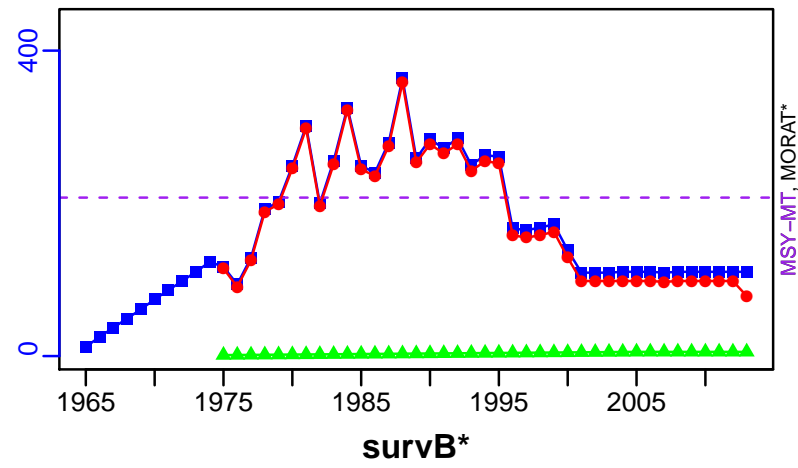
R-E00 (1965–2013–FU)



# Paua New Zealand Area PAU 5B (Stewart Island) [PAUAPAU5B]

TC-MT, TL-MT, RecC-MT (1965–2013–FU)

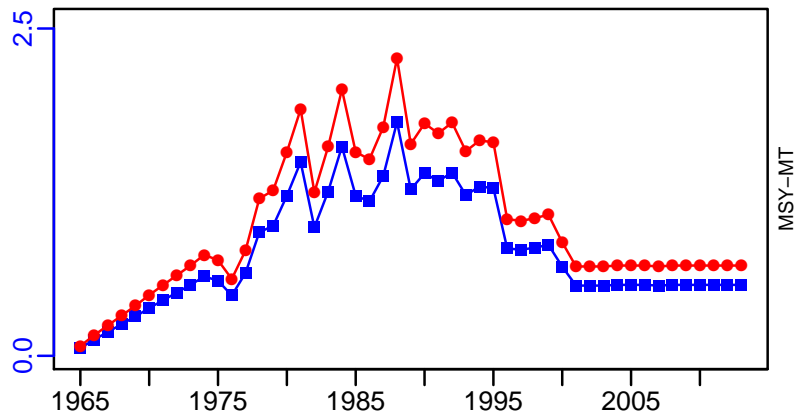
TAC-MT, Cpair-MT, Cadv\* (1965–2013–FU)



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1965–2013–FU)



## Paua New Zealand Area PAU 5D (Otago) [PAUAPAU5D]

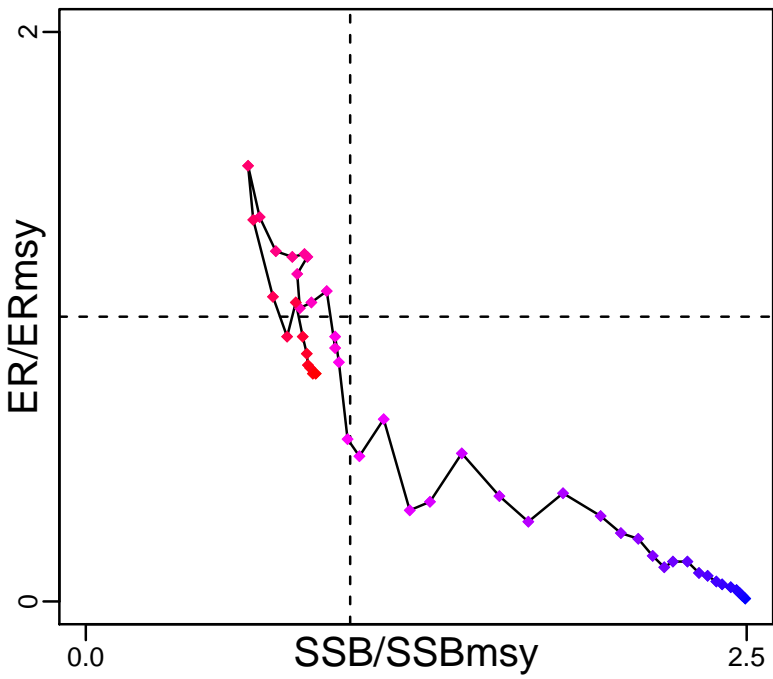
Metadata	
<b>Scientific Name</b>	Haliotis iris
<b>Current Assess ID</b>	NZMFishSHELLFISHWG-PAUAPAU5D-1965-2012-FU
<b>Area</b>	New Zealand Area PAU 5D (Otago)
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	Shellfish Working Group
<b>Asmts in RAM</b>	2006, 2012

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2012	465
<b>SSBmsy</b>	SSBmsy-MT	2012	914
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2012	0.26
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2012	914
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	ERmgt-ratio	2012	0.16
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2012	2285
<b>MSY</b>	MSY-MT	2012	121
<b>M</b>	M-1/yr	2012	0.15
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

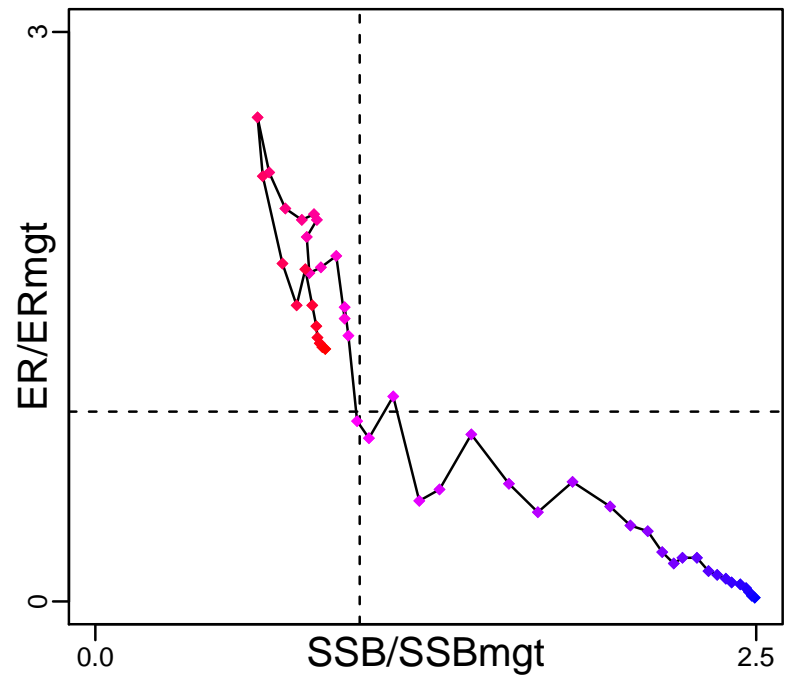
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2006	400	-	-
<b>SSB</b>	SSB-MT	2012	795	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2012	884,000	Both	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2012	0.21	Both	-
<b>TC</b>	TC-MT	2012	111		
<b>TL</b>	TL-MT	2012	89		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2012	0.87		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ERdivERmsy-dimensionless	2012	0.8		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2012	0.87		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Paua New Zealand Area PAU 5D (Otago) [PAUAPAU5D]

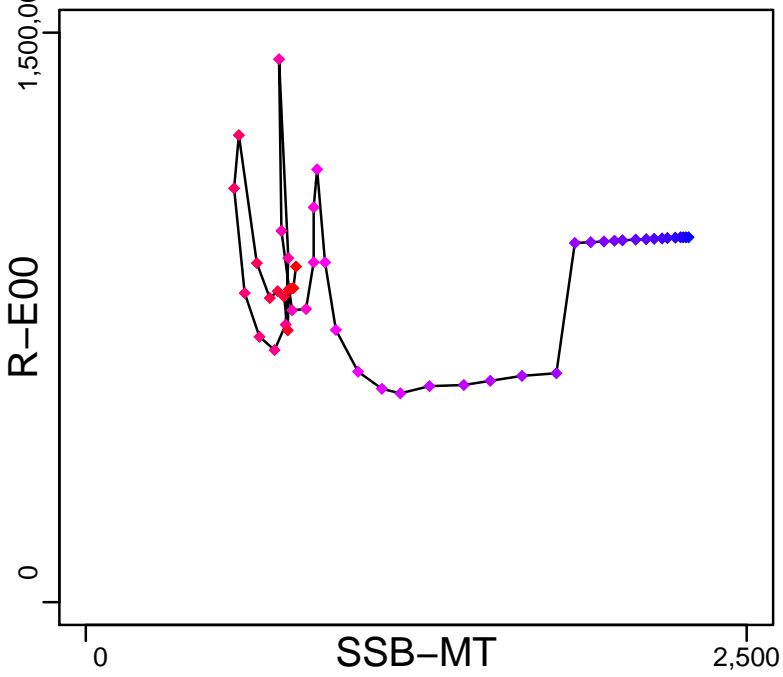
Kobe MSYpref (1965–2012–FU)



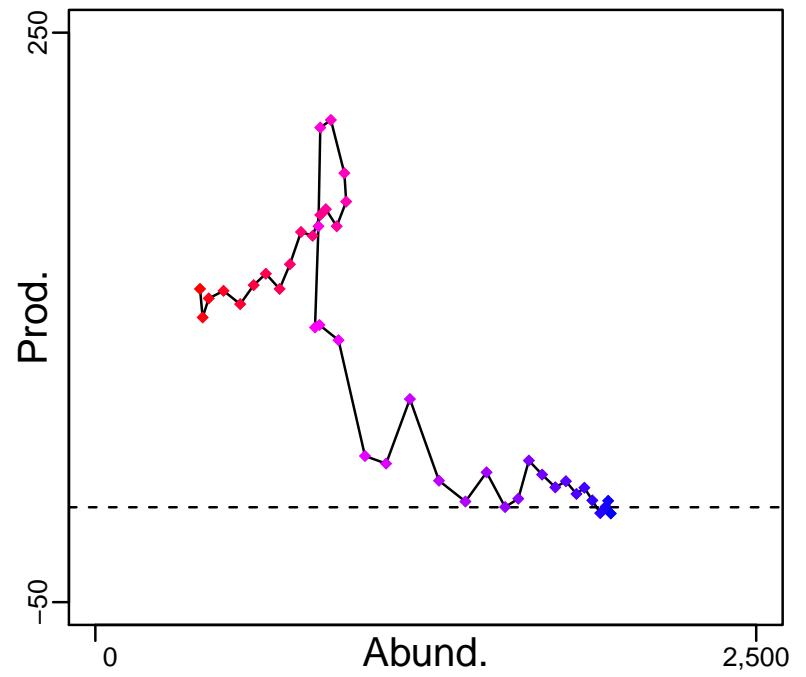
Kobe MGTpref (1965–2012–FU)



Spawner Recruit (1965–2012–FU)



Production (1964–2006–JENSEN)

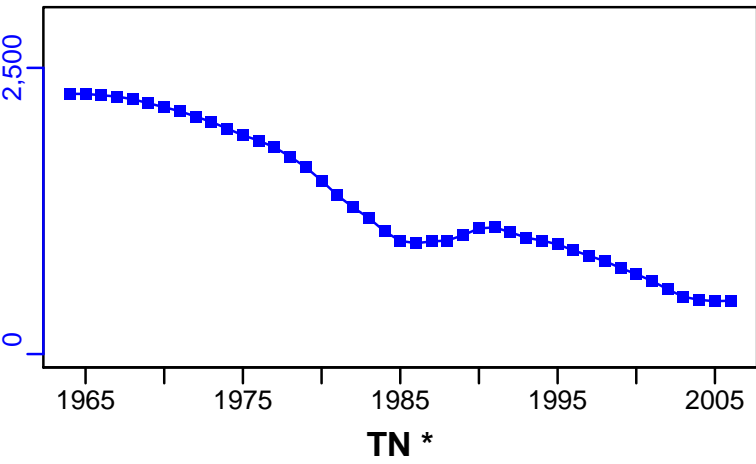


◆ Start Year ◆ End Year \* No Data

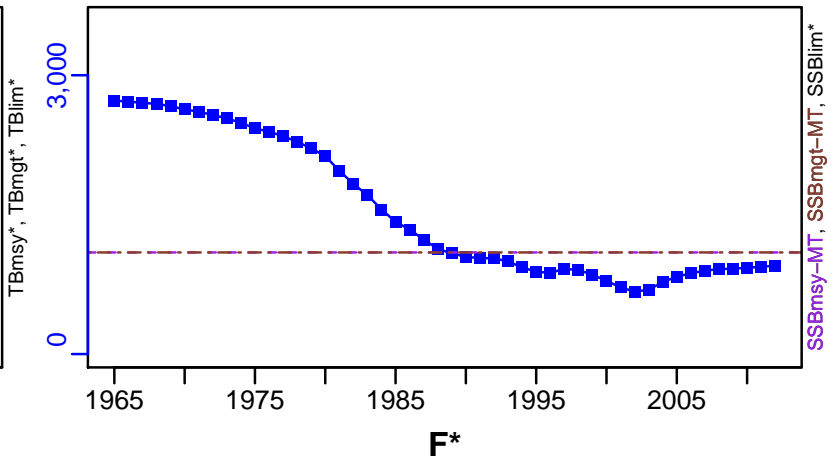


# Paua New Zealand Area PAU 5D (Otago) [PAUAPAU5D]

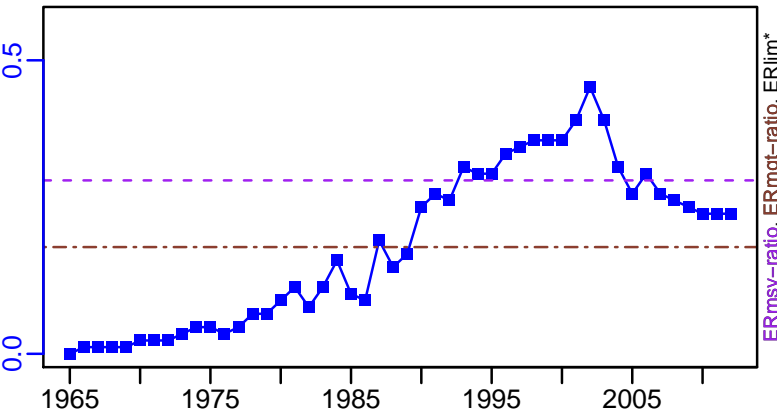
TB-MT (1964–2006–JENSEN)



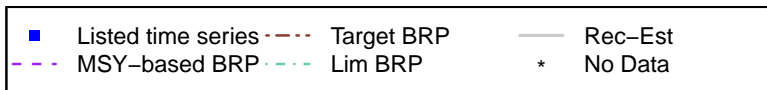
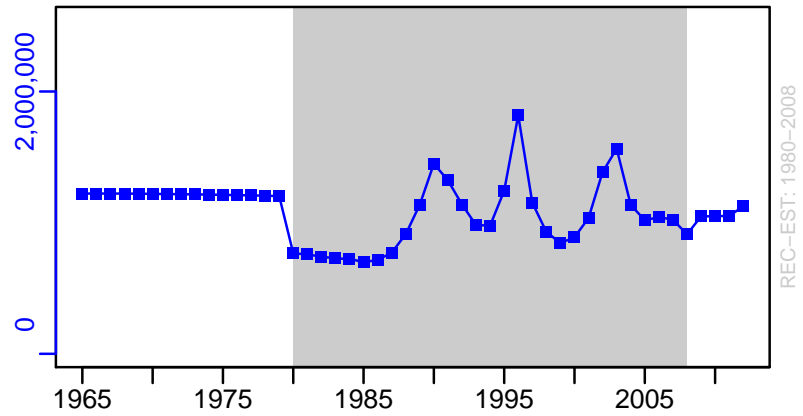
SSB-MT (1965–2012–FU)



ER-ratio (1965–2012–FU)



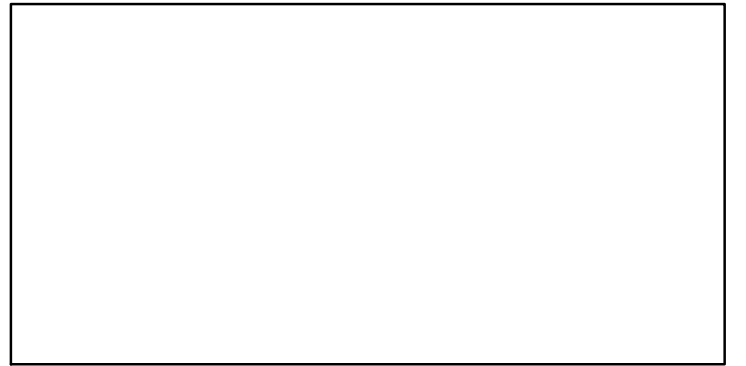
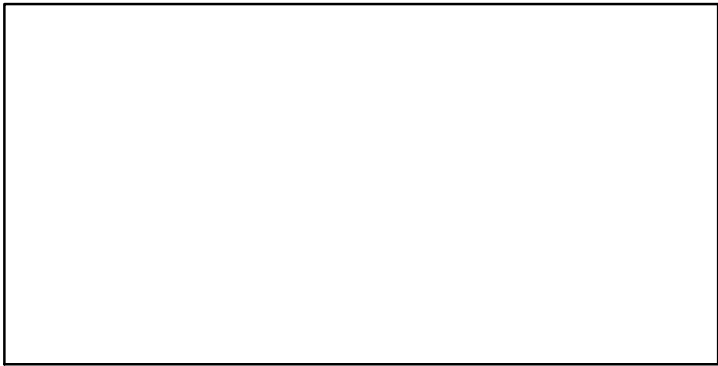
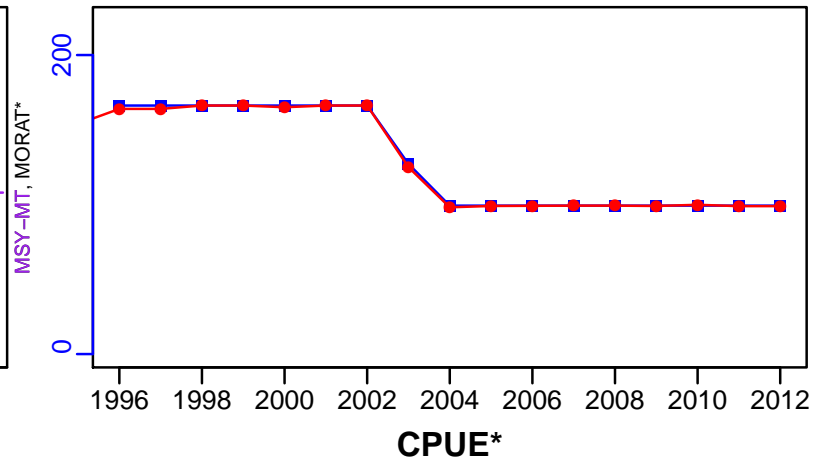
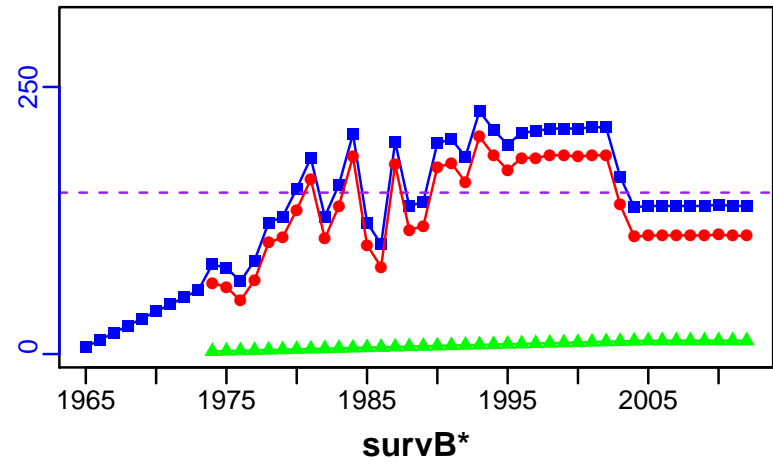
R-E00 (1965–2012–FU)



# Paua New Zealand Area PAU 5D (Otago) [PAUAPAU5D]

TC-MT, TL-MT, RecC-MT (1965-2012-FU)

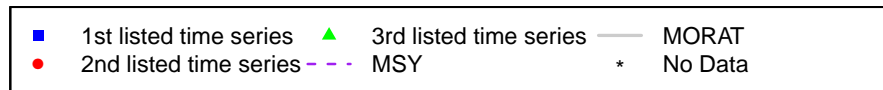
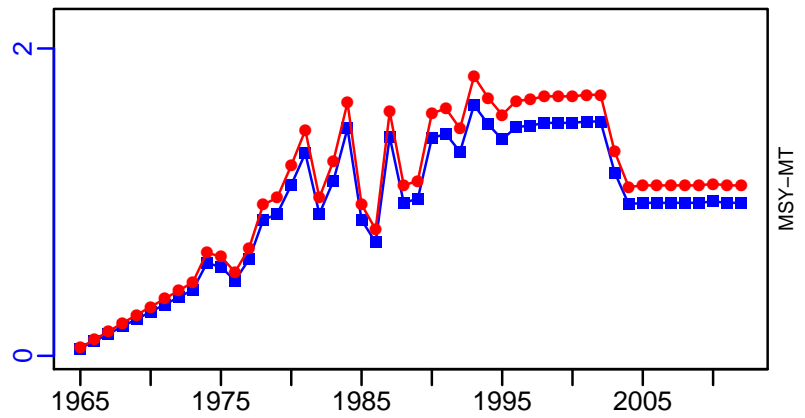
TAC-MT, Cpair-MT, Cadv\* (1965-2012-FU)



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1965-2012-FU)



## Paua New Zealand Area PAU 7 (Marlborough) [PAUAPAU7]

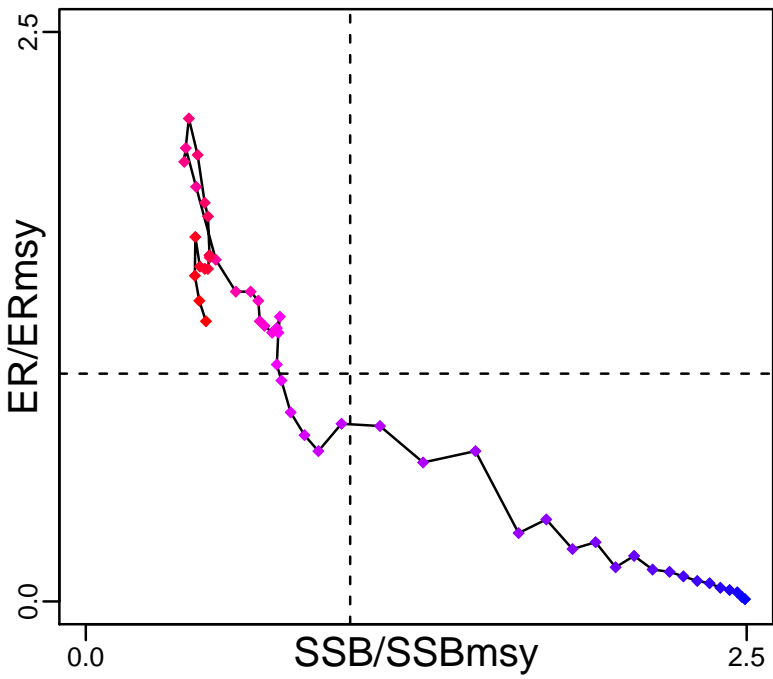
Metadata	
<b>Scientific Name</b>	Haliotis iris
<b>Current Assess ID</b>	NIWA-PAUAPAU7-1965-2015-FU
<b>Area</b>	New Zealand Area PAU 7 (Marlborough)
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2011, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2015	559
<b>SSBmsy</b>	SSBmsy-MT	2015	1716
<b>Fmsy</b>	Fmsy-extr-1/yr	2011	0.33
<b>ERmsy</b>	ERmsy-ratio	2015	0.37
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2015	1716
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	ERmgt-ratio	2015	0.19
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2015	4291
<b>MSY</b>	MSY-MT	2015	207
<b>M</b>	M-1/yr	2015	0.11
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

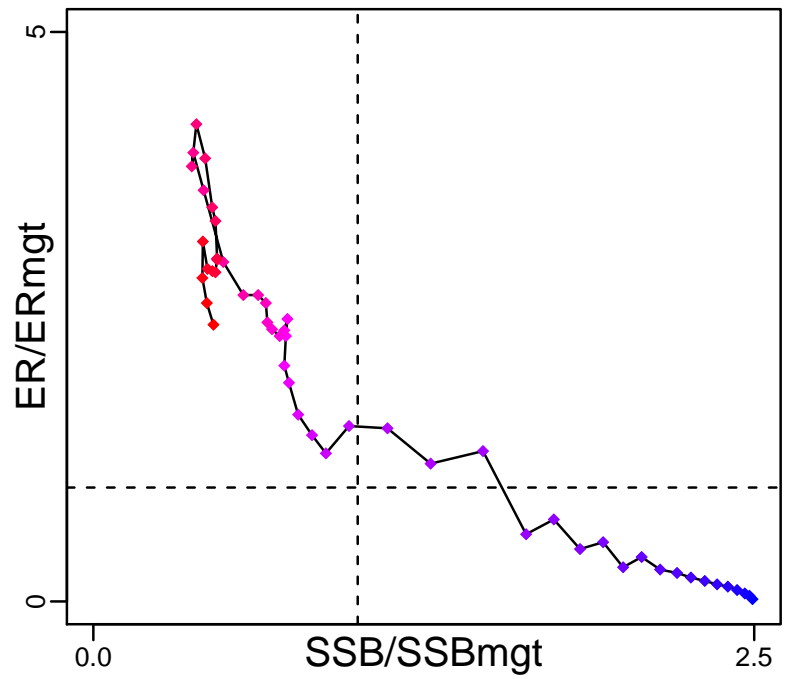
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2015	780	Both	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	1,180,000	Both	-
<b>F</b>	F-1/yr	2011	0.429	-	-
<b>ER</b>	ER-ratio	2015	0.46	Both	-
<b>TC</b>	TC-MT	2015	143		
<b>TL</b>	TL-MT	2015	135		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	0.454		
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2011	1.3		
<b>ER/ERmsy</b>	ERdivERmsy-dimensionless	2015	1.23		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2015	0.454		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Paua New Zealand Area PAU 7 (Marlborough) [PAU7PAU7]

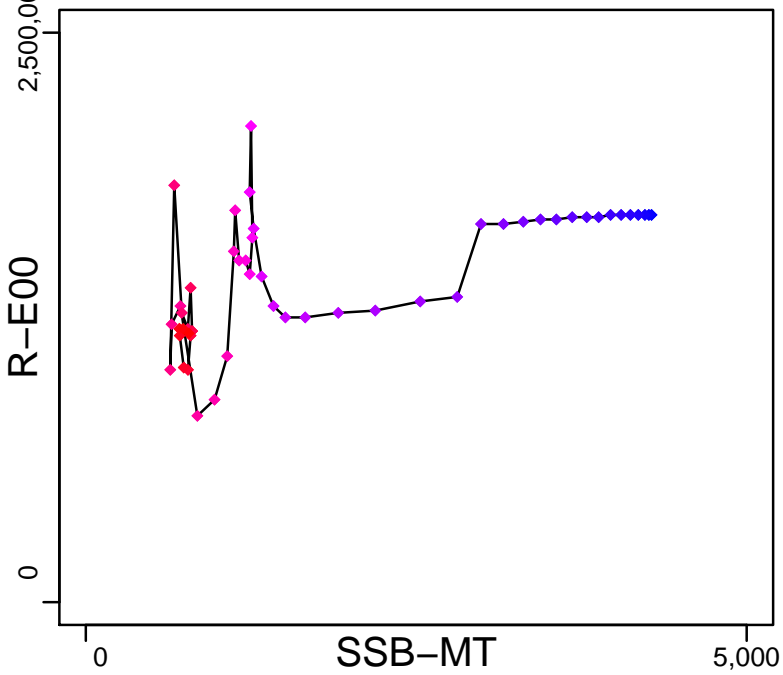
Kobe MSYpref (1965–2015–FU)



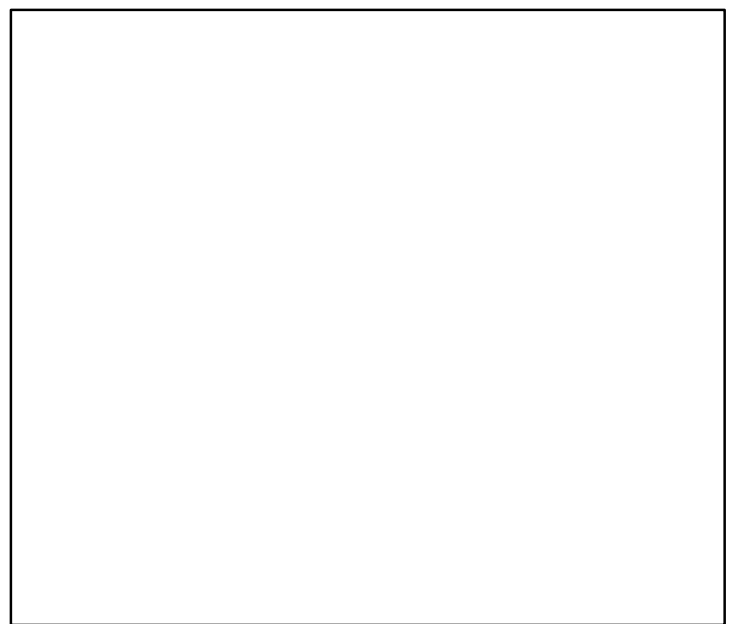
Kobe MGTpref (1965–2015–FU)



Spawner Recruit (1965–2015–FU)



Production\*



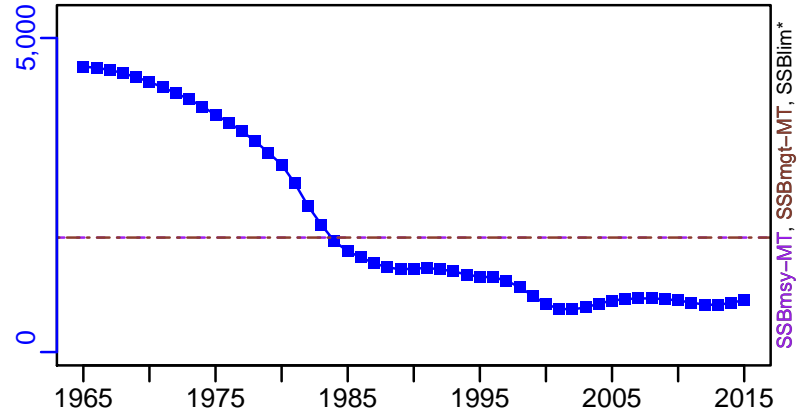
◆ Start Year ◆ End Year \* No Data

Paua New Zealand Area PAU 7 (Marlborough) [PAU7PAU7]

TB\*



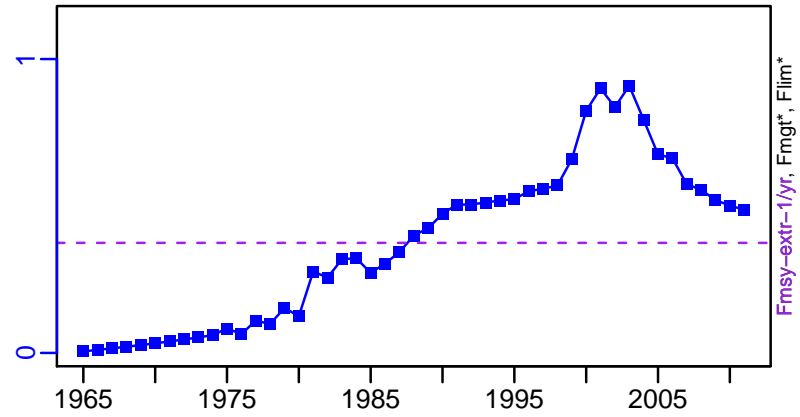
SSB-MT (1965–2015–FU)



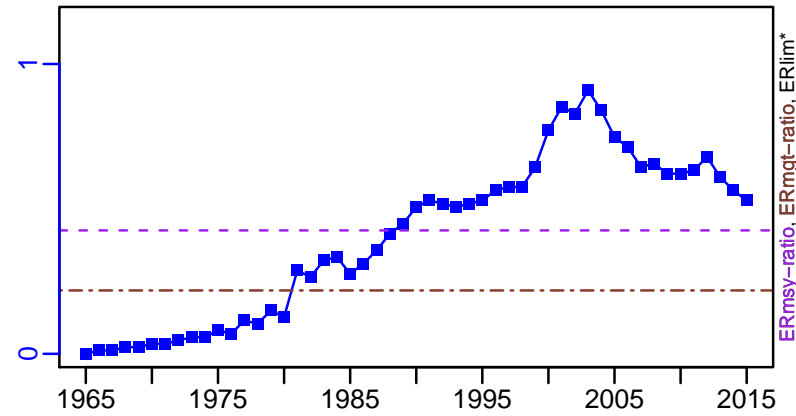
TN \*



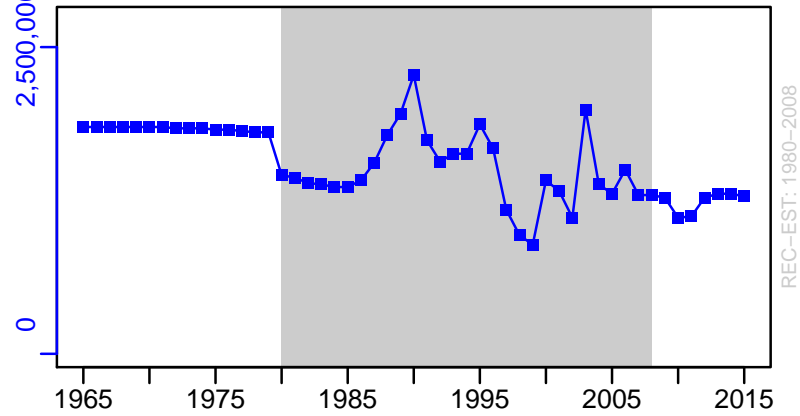
F-1/yr (1965–2011–CORDUE)



ER-ratio (1965–2015–FU)



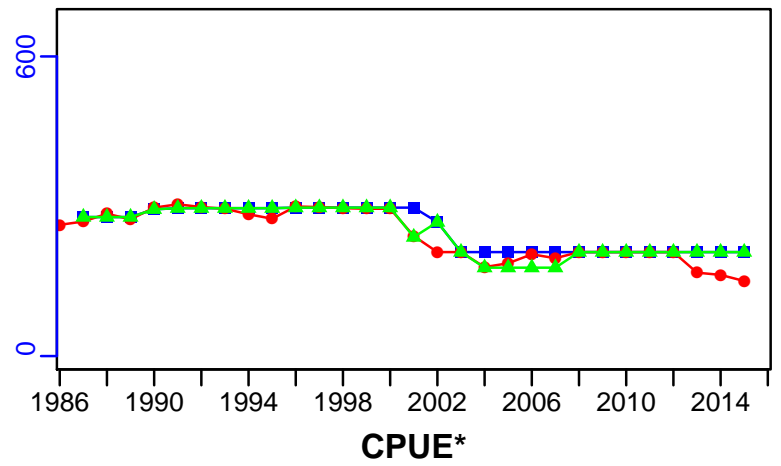
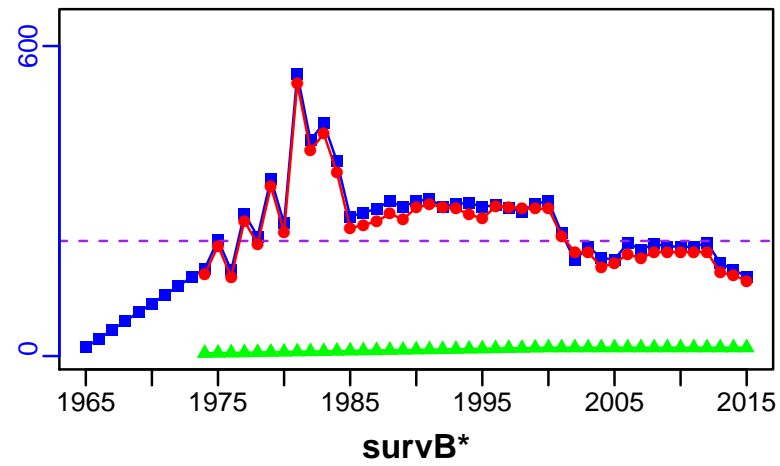
R-E00 (1965–2015–FU)



# Paua New Zealand Area PAU 7 (Marlborough) [PAUAPAU7]

TC-MT, TL-MT, RecC-MT (1965-2015-FU)

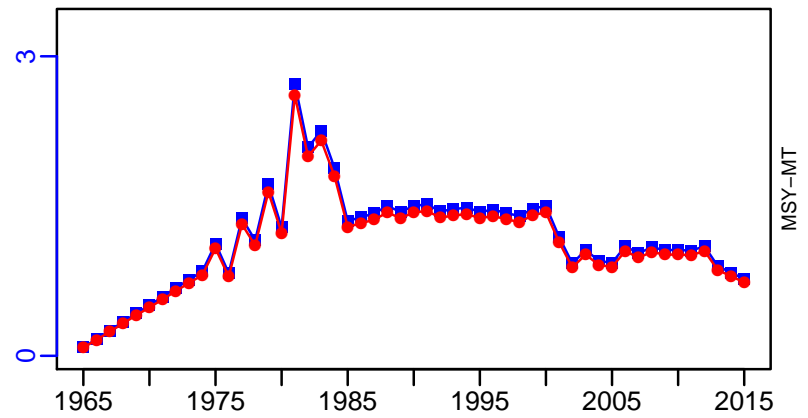
TAC-MT, Cpair-MT, Cadvised-MT (1965-2015-FU)



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1965-2015-FU)



## Paua NZ Area South PAUA 5A [PAUASPAU5A]

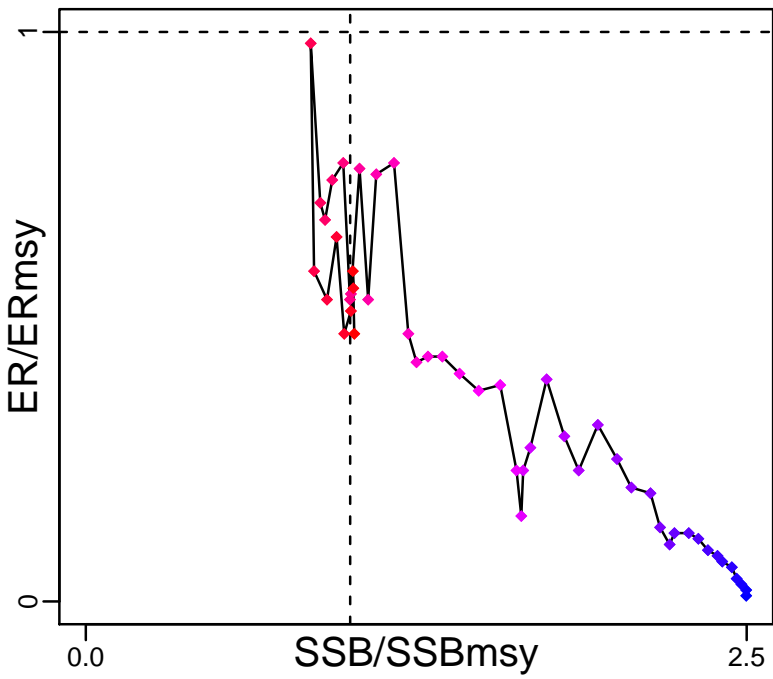
Metadata	
<b>Scientific Name</b>	Haliotis iris
<b>Current Assess ID</b>	NIWA-PAUASPAU5A-1965-2014-FU
<b>Area</b>	NZ Area South PAUA 5A
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2009, 2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2014	248
<b>SSBmsy</b>	SSBmsy-MT	2014	552
<b>Fmsy</b>	Fmsy-extr-1/yr	2009	0.21
<b>ERmsy</b>	ERmsy-ratio	2014	0.23
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2014	552
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	ERmgt-ratio	2014	0.13
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2014	1381
<b>MSY</b>	MSY-MT	2014	57
<b>M</b>	M-1/yr	2014	0.11
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

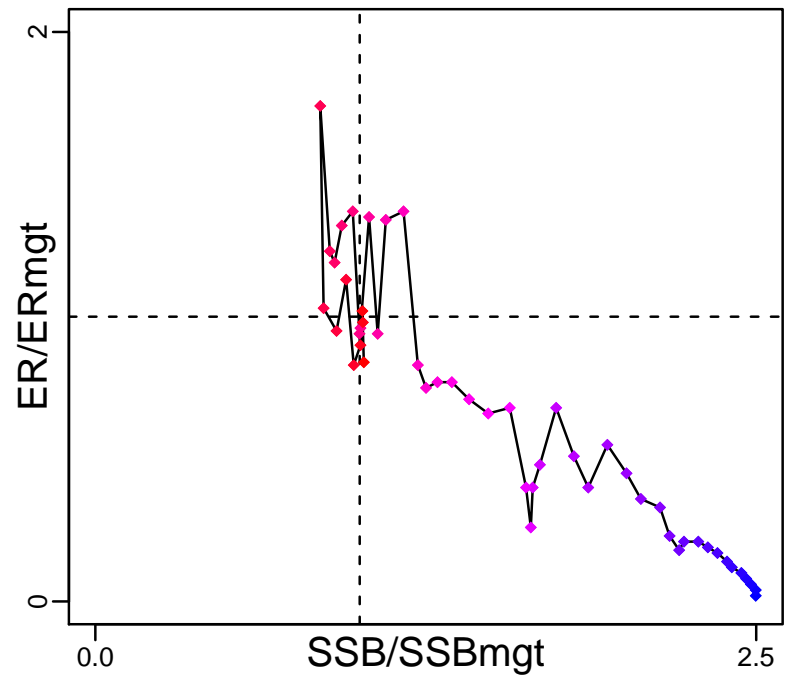
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2014	561	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2014	376,000	Both	-
<b>F</b>	F-1/yr	2009	0.222	-	-
<b>ER</b>	ER-ratio	2014	0.11	Both	-
<b>TC</b>	TC-MT	2014	46		
<b>TL</b>	TL-MT	2014	39		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2014	1.016		
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2009	1.06		
<b>ER/ERmsy</b>	ERdivERmsy-dimensionless	2014	0.47		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2014	1.016		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Paua NZ Area South PAUA 5A [PAUASPAU5A]

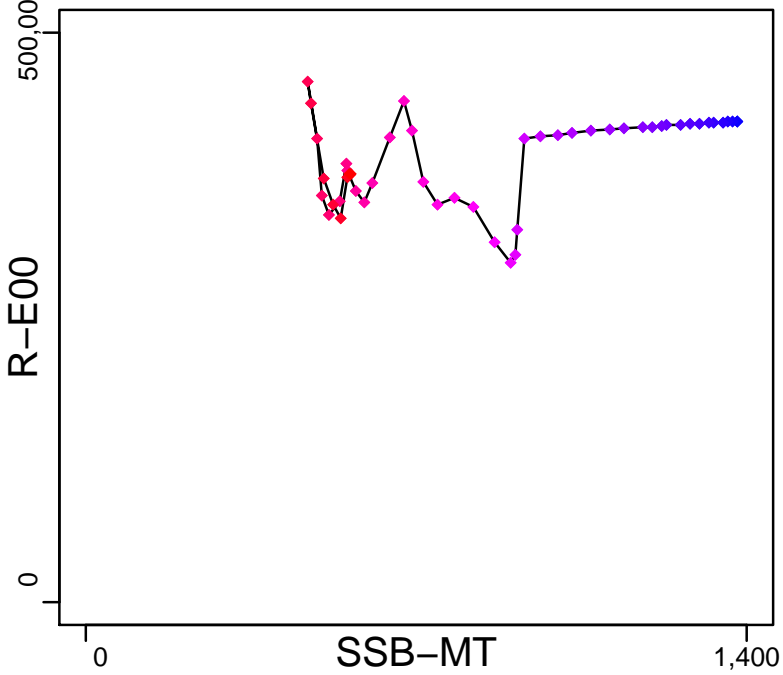
Kobe MSYpref (1965–2014–FU)



Kobe MGTpref (1965–2014–FU)



Spawner Recruit (1965–2014–FU)



◆ Start Year ◆ End Year \* No Data

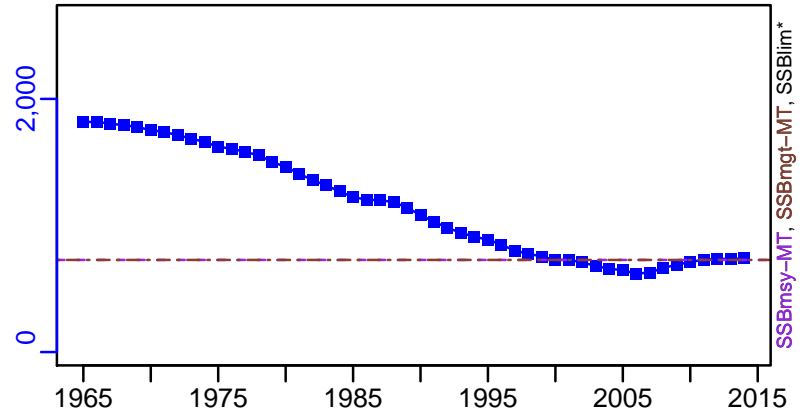


Paua NZ Area South PAUA 5A [PAUASPAU5A]

TB\*



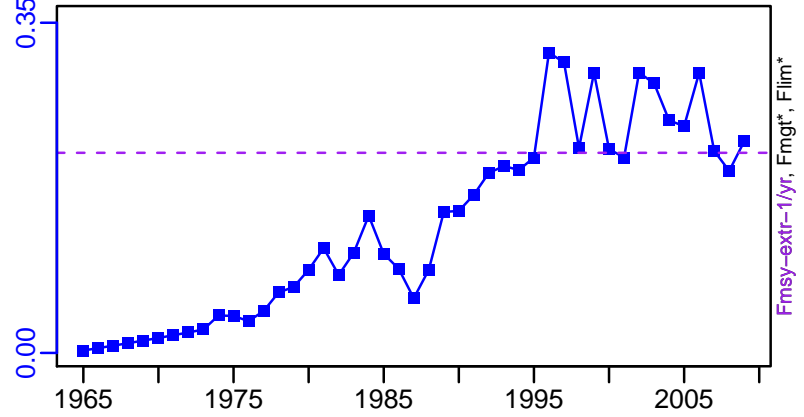
SSB-MT (1965–2014–FU)



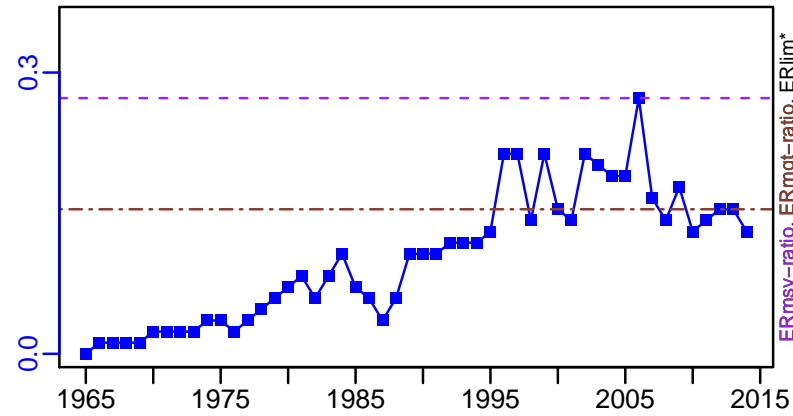
TN \*



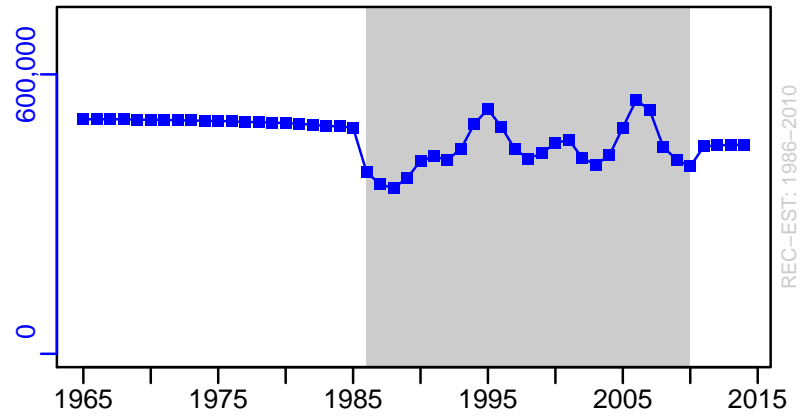
F-1/yr (1965–2009–CORDUE)



ER-ratio (1965–2014–FU)



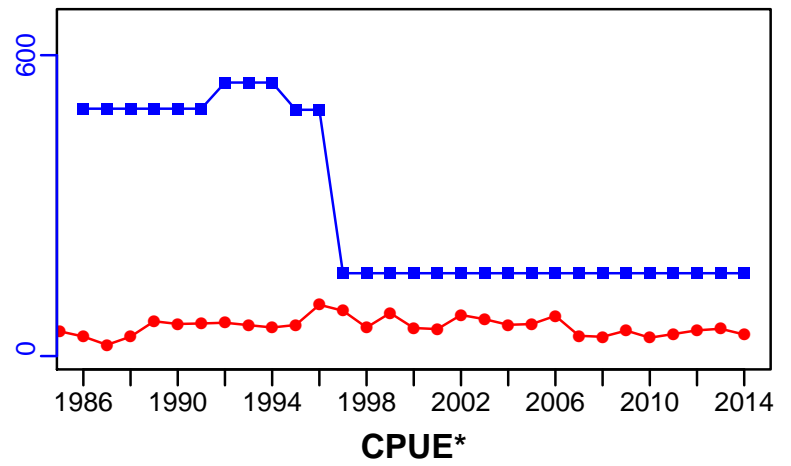
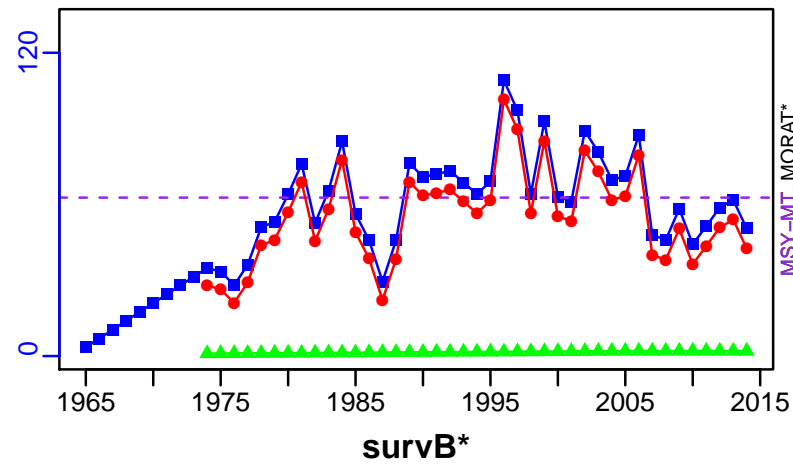
R-E00 (1965–2014–FU)



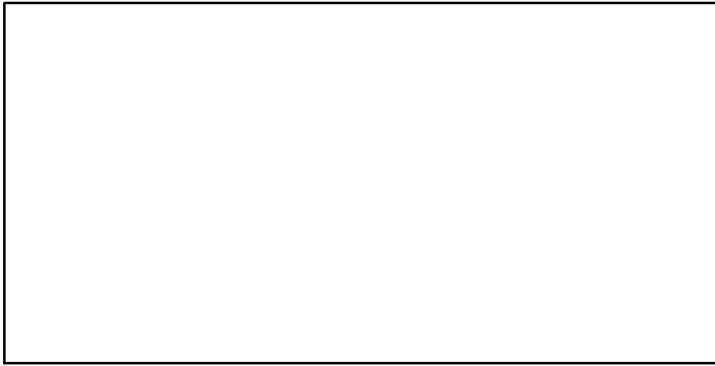
# Paua NZ Area South PAUA 5A [PAUASPAU5A]

TC-MT, TL-MT, RecC-MT (1965–2014–FU)

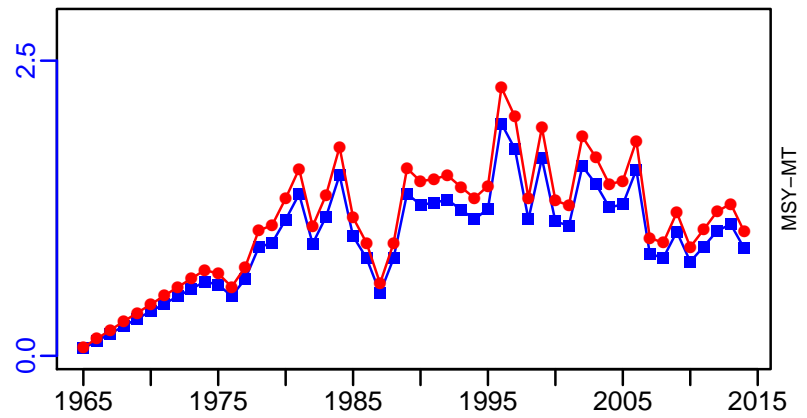
TAC-MT, Cpair-MT, Cadv\* (1965–2014–FU)



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1965–2014–FU)



## Red rock lobster New Zealand Area CRA1 [RROCKLOBSTERCRA1]

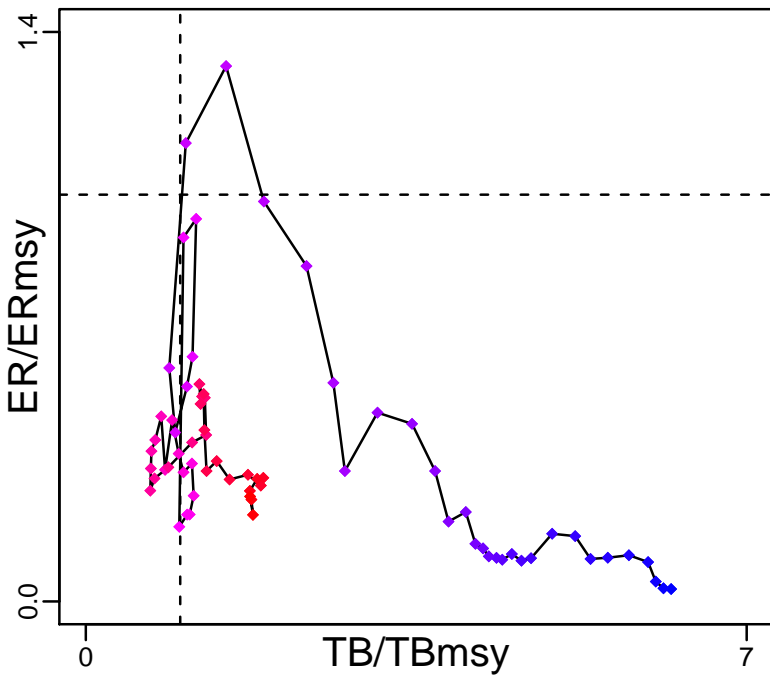
Metadata	
<b>Scientific Name</b>	Jasus edwardsii
<b>Current Assess ID</b>	NZMFishLOBSTERWG-RROCKLOBSTERCRA1-1945-2014-STARR
<b>Area</b>	New Zealand Area CRA1
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	Lobster Working Group
<b>Asmts in RAM</b>	2001, 2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2014	492
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-calc-ratio	2014	0.327
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2014	161
<b>M</b>	M-1/yr	2014	0.125
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

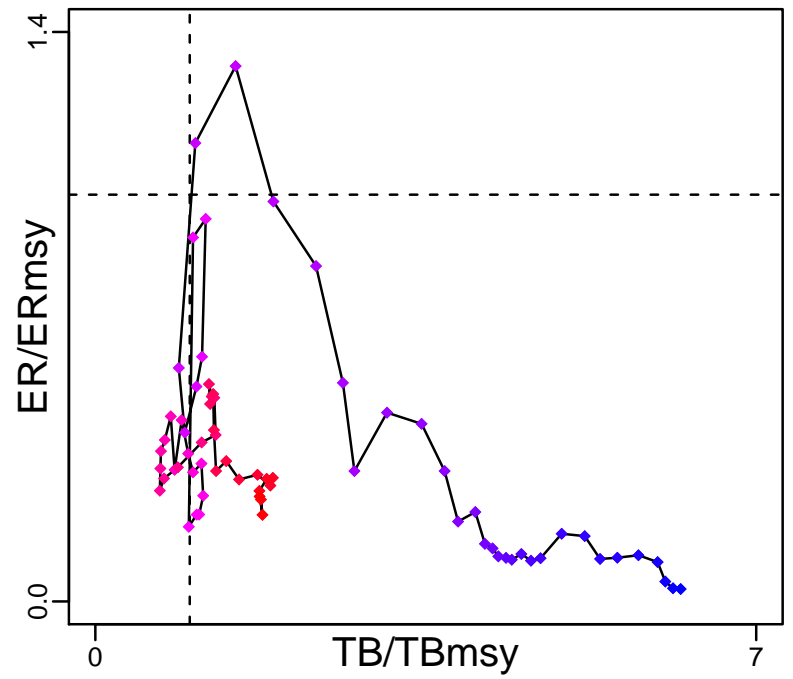
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2014	851	Both	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2014	384,000	Both	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2014	0.084	Both	-
<b>TC</b>	TC-MT	2014	257		
<b>TL</b>	TL-MT	2014	130		
<b>TB/TBmsy</b>	TB-MT/TBmsy-MT	2014	1.73		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-calc-ratio	2014	0.258		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Red rock lobster New Zealand Area CRA1 [RROCKLOBSTERCRA1]

Kobe MSYpref (1945–2014–STARR)



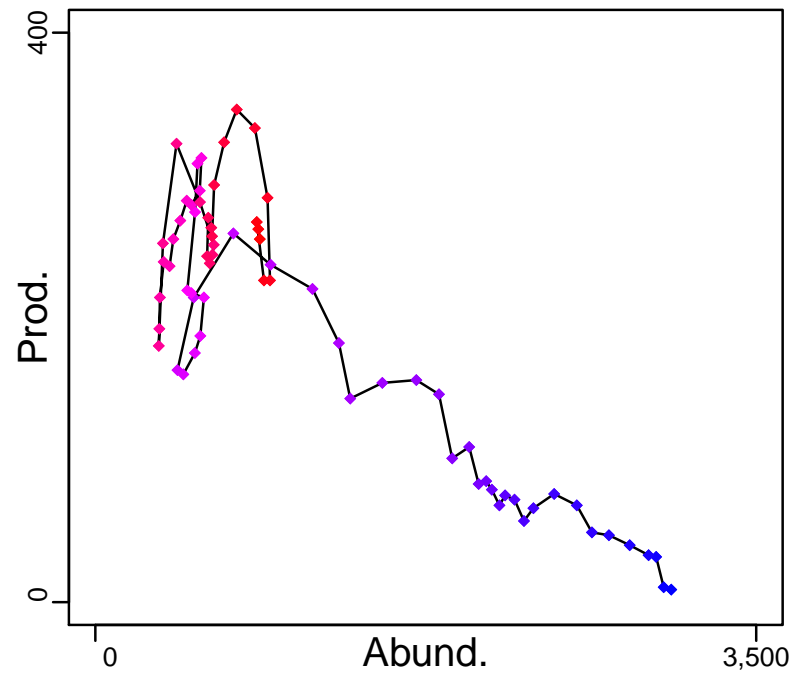
Kobe MGTpref (1945–2014–STARR)



Spawner Recruit\*



Production (1945–2014–STARR)

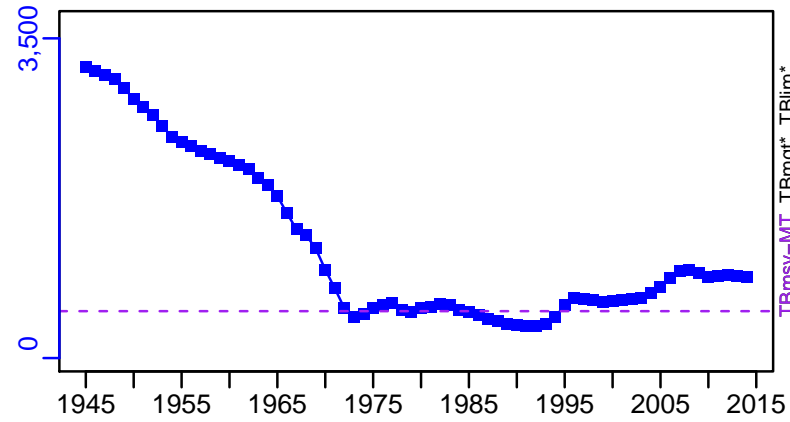


◆ Start Year ◆ End Year \* No Data

# Red rock lobster New Zealand Area CRA1 [RROCKLOBSTERCRA1]

TB-MT (1945–2014–STARR)

SSB\*



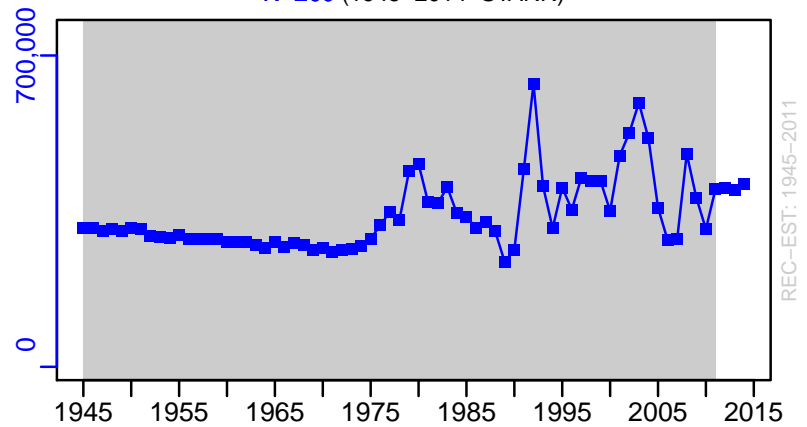
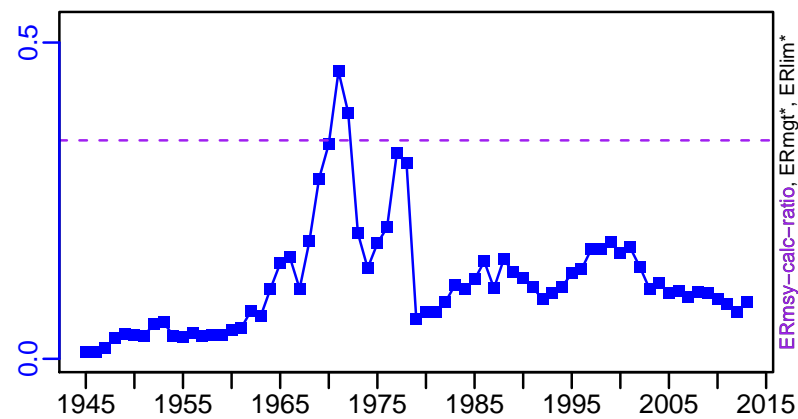
TN \*

F\*



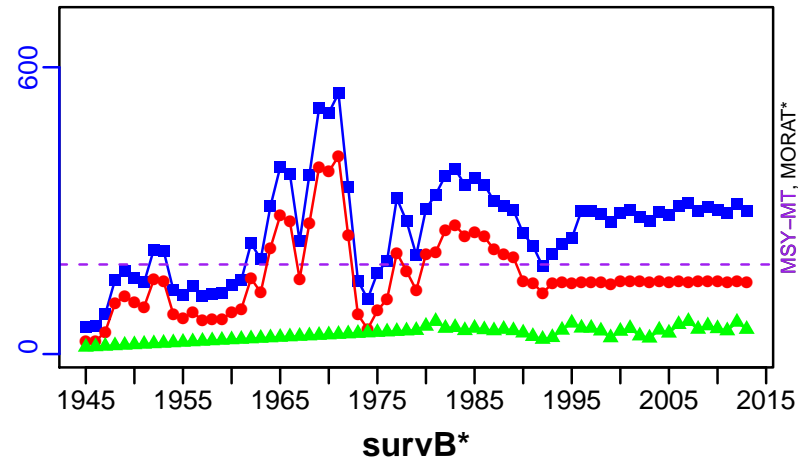
ER-ratio (1945–2014–STARR)

R-E00 (1945–2014–STARR)

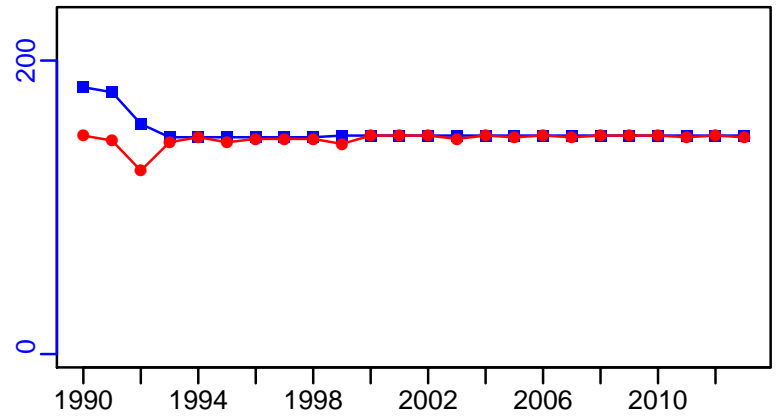


# Red rock lobster New Zealand Area CRA1 [RROCKLOBSTERCRA1]

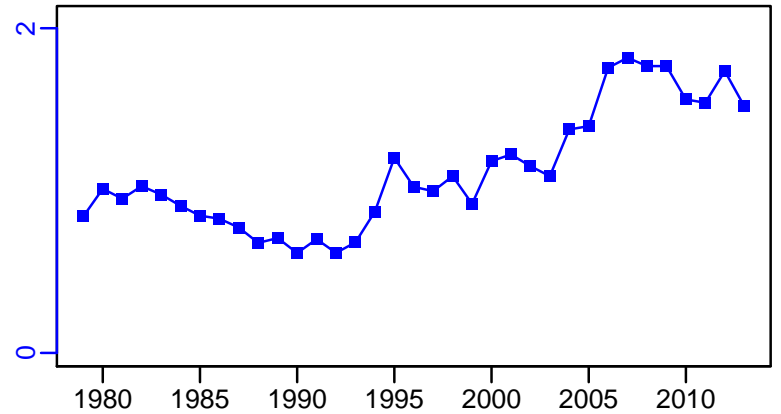
TC-MT, TL-MT, RecC-MT (1945-2014-STARR)



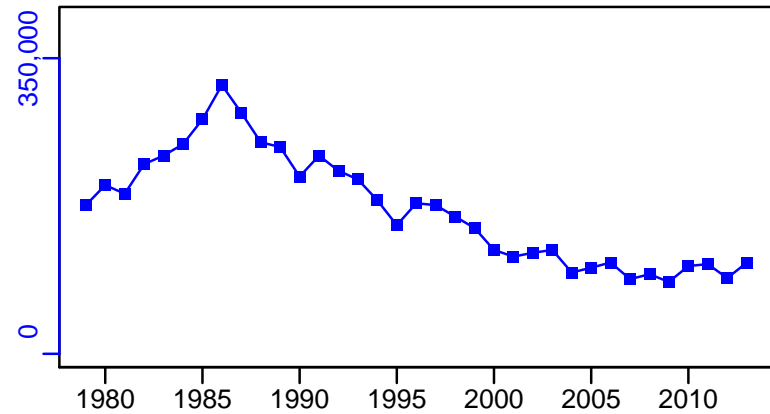
TAC-MT, Cpair-MT, Cadv\* (1945-2014-STARR)



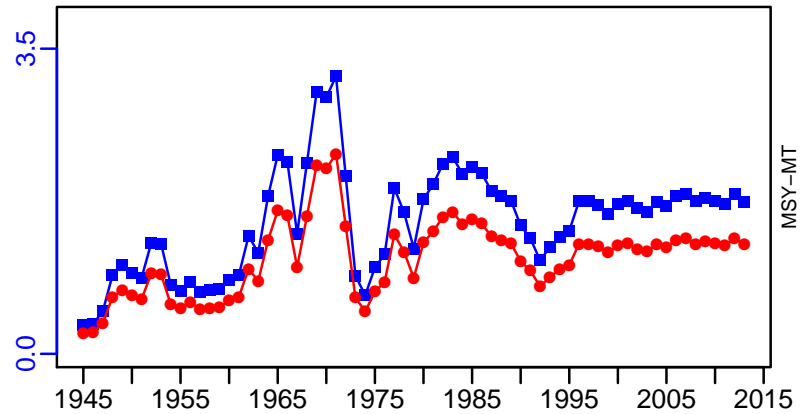
CPUE-kg/potlift (1945-2014-STARR)



EFFORT-potlift (1945-2014-STARR)



TC-MT/MSY-MT, CdivMEANC-ratio, (1945-2014-STARR)



## Red rock lobster New Zealand Area CRA2 [RROCKLOBSTERCRA2]

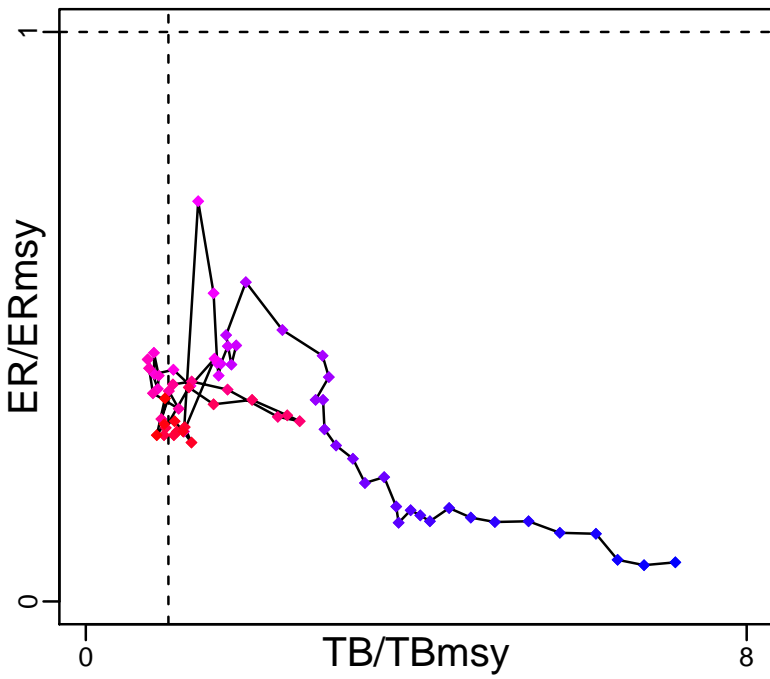
Metadata	
<b>Scientific Name</b>	Jasus edwardsii
<b>Current Assess ID</b>	NZMFishLOBSTERWG-RROCKLOBSTERCRA2-1945-2013-STARR
<b>Area</b>	New Zealand Area CRA2
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	Lobster Working Group
<b>Asmts in RAM</b>	2001, 2013

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2013	343
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-calc-ratio	2013	0.774
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2013	266
<b>M</b>	M-1/yr	2013	0.161
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

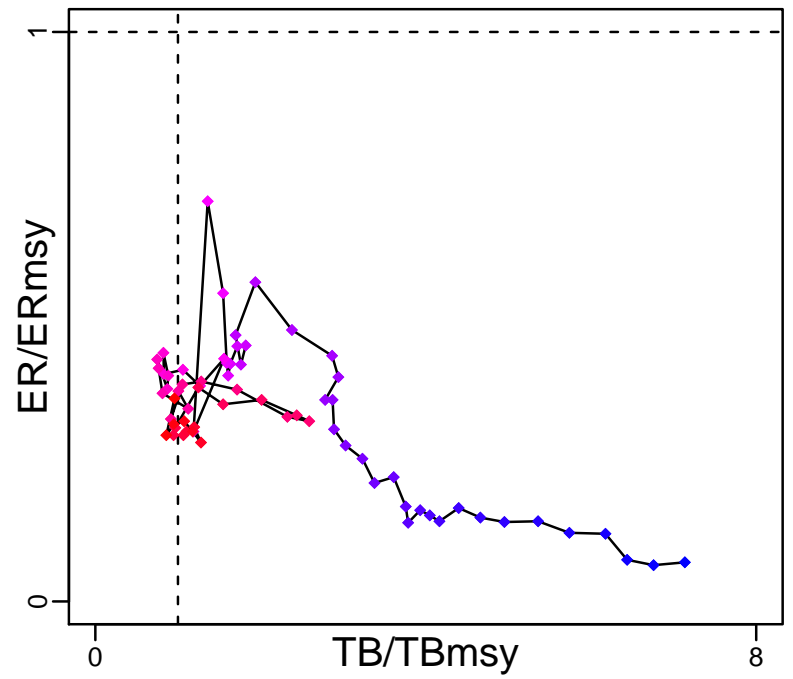
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2013	366	Both	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2013	627,000	Both	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2013	0.276	Both	-
<b>TC</b>	TC-MT	2013	389		
<b>TL</b>	TL-MT	2013	233		
<b>TB/TBmsy</b>	TB-MT/TBmsy-MT	2013	1.066		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-calc-ratio	2013	0.357		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Red rock lobster New Zealand Area CRA2 [RROCKLOBSTERCRA2]

Kobe MSYpref (1945–2013–STARR)



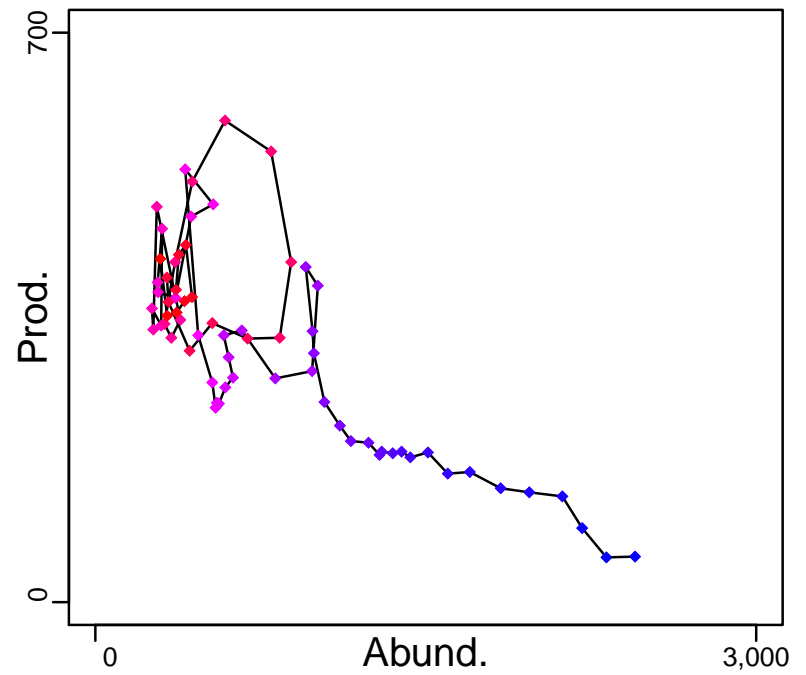
Kobe MGTpref (1945–2013–STARR)



Spawner Recruit\*



Production (1945–2013–STARR)



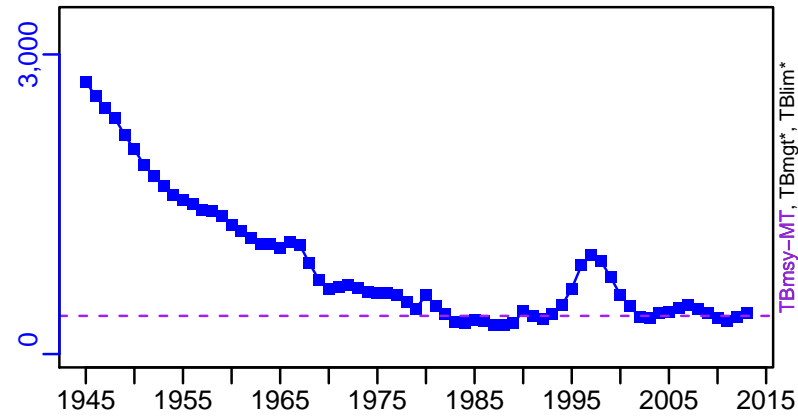
◆ Start Year ◆ End Year \* No Data



# Red rock lobster New Zealand Area CRA2 [RROCKLOBSTERCRA2]

TB-MT (1945–2013–STARR)

SSB\*



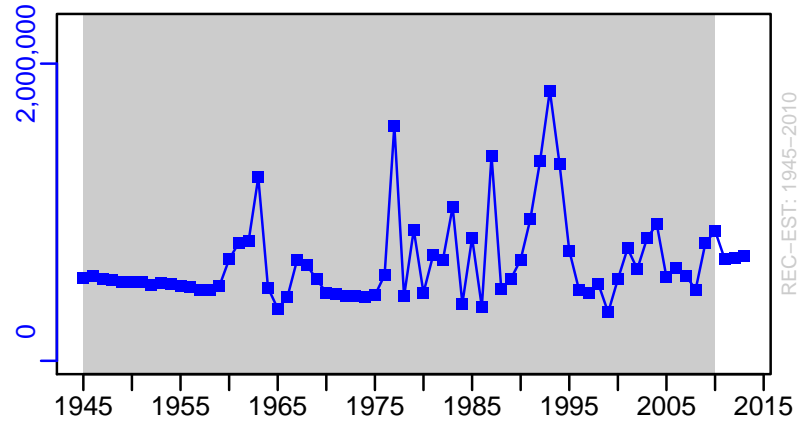
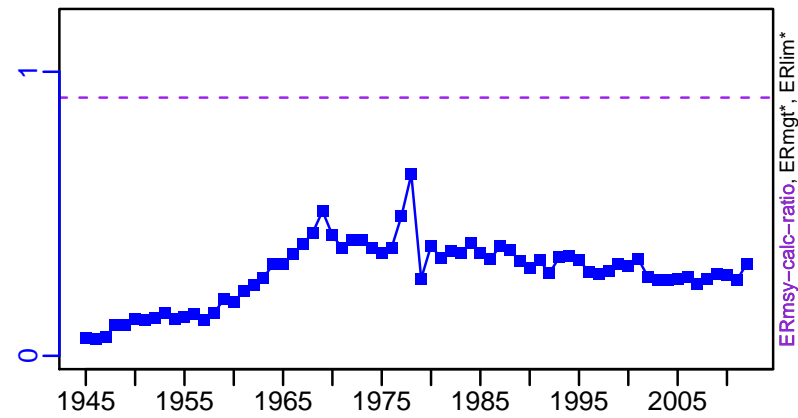
TN \*

F\*



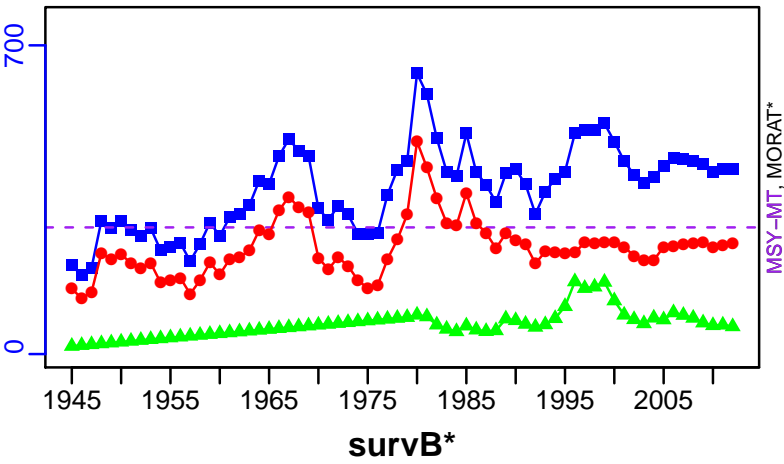
ER-ratio (1945–2013–STARR)

R-E00 (1945–2013–STARR)

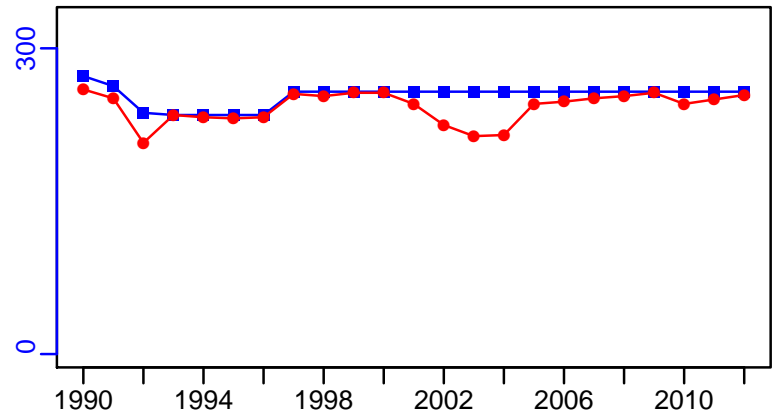


# Red rock lobster New Zealand Area CRA2 [RROCKLOBSTERCRA2]

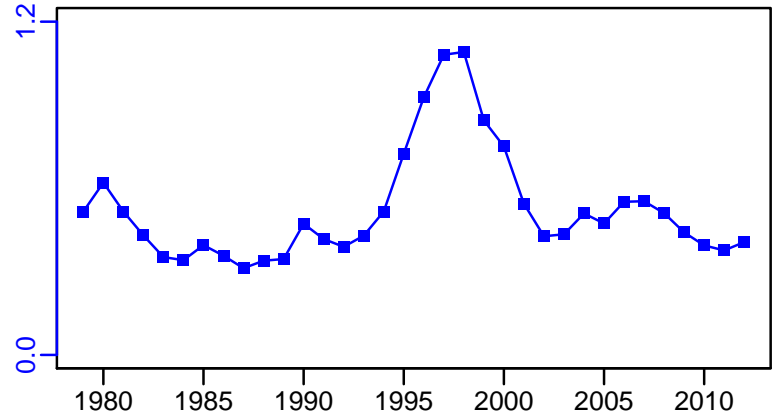
TC-MT, TL-MT, RecC-MT (1945-2013-STARR)



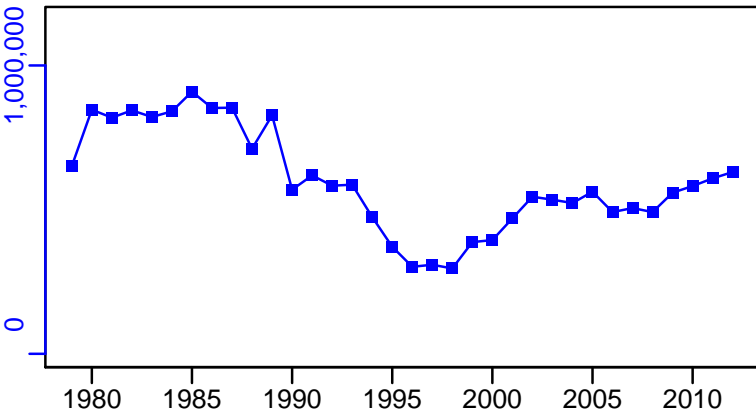
TAC-MT, Cpair-MT, Cadv\* (1945-2013-STARR)



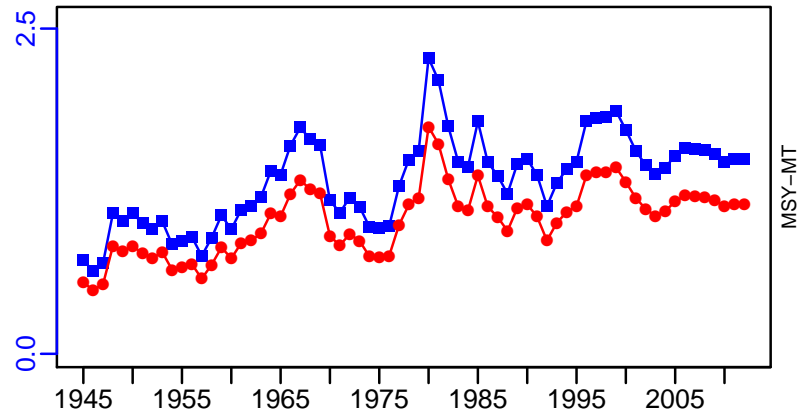
CPUE-kg/potlift (1945-2013-STARR)



EFFORT-potlift (1945-2013-STARR)



TC-MT/MSY-MT, CdivMEANC-ratio, (1945-2013-STARR)



## Red rock lobster New Zealand Area CRA3 [RROCKLOBSTERCRA3]

Metadata	
<b>Scientific Name</b>	Jasus edwardsii
<b>Current Assess ID</b>	NZMFishLOBSTERWG-RROCKLOBSTERCRA3-1945-2014-STARR
<b>Area</b>	New Zealand Area CRA3
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	Lobster Working Group
<b>Asmts in RAM</b>	2007, 2014

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2014	212
M	M-1/yr	2014	0.251
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2014	2840	Both	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	R-E00	2014	1,290,000	Both	-
F	-	-	-	-	-
ER	ER-ratio	2014	0.238	Both	-
TC	TC-MT	2014	354		
TL	TL-MT	2014	224		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

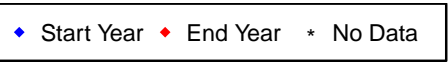
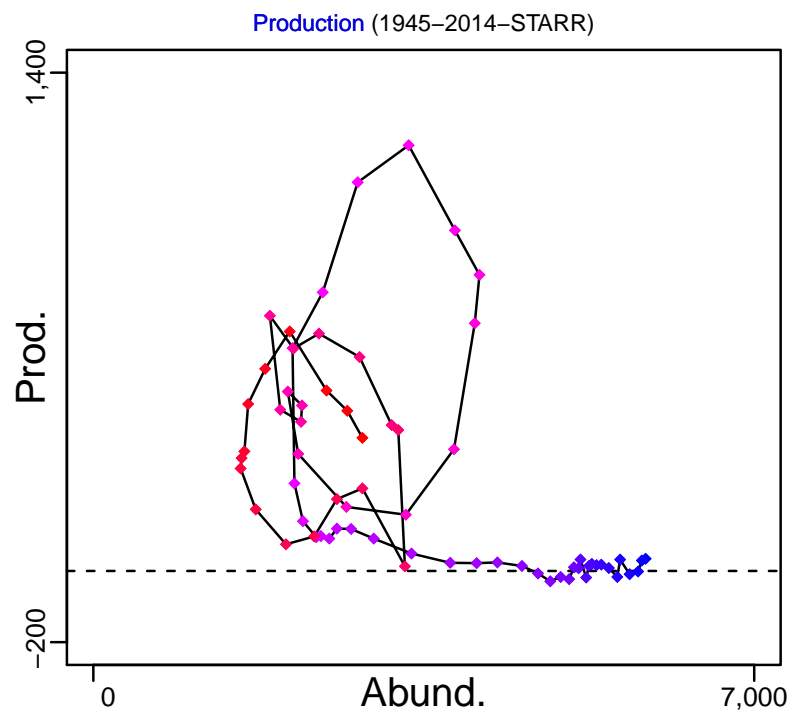
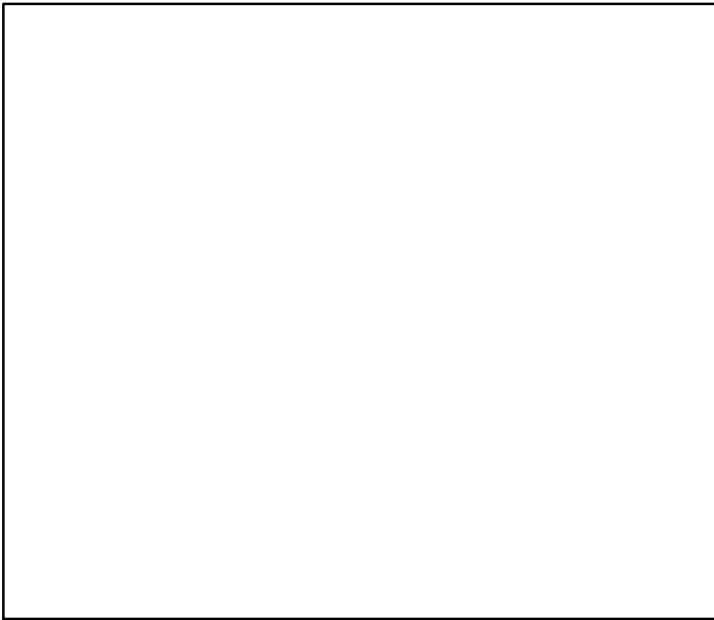
Kobe MSY\*



Kobe MGT\*



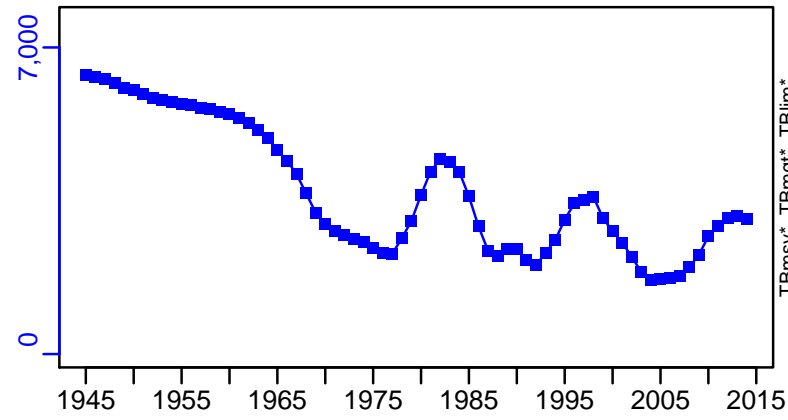
Spawner Recruit\*



# Red rock lobster New Zealand Area CRA3 [RROCKLOBSTERCRA3]

TB-MT (1945–2014–STARR)

SSB\*



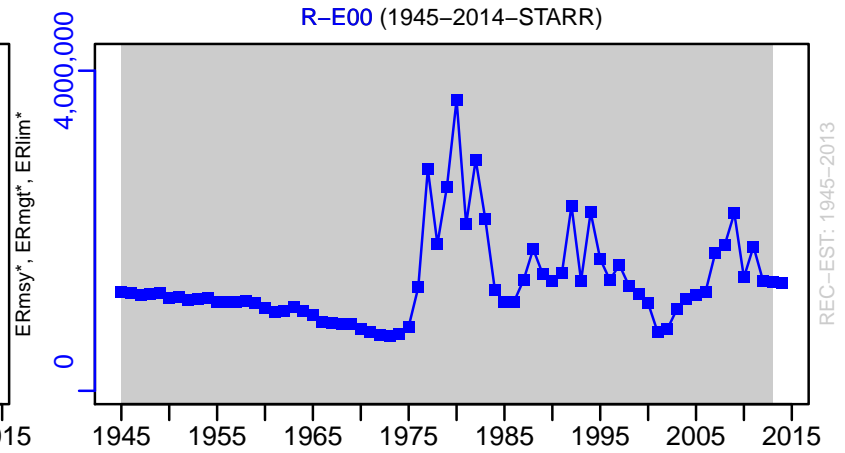
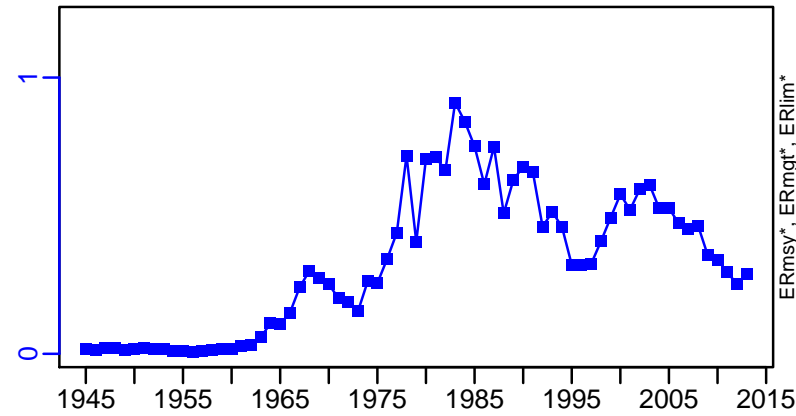
TN \*

F\*



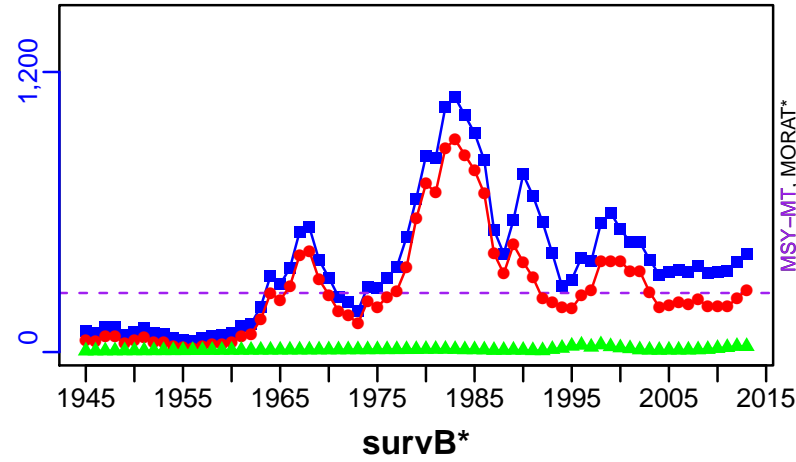
ER-ratio (1945–2014–STARR)

R-E00 (1945–2014–STARR)

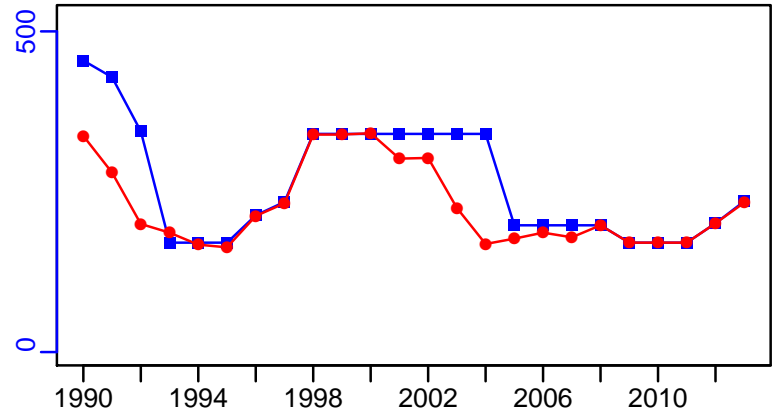


# Red rock lobster New Zealand Area CRA3 [RROCKLOBSTERCRA3]

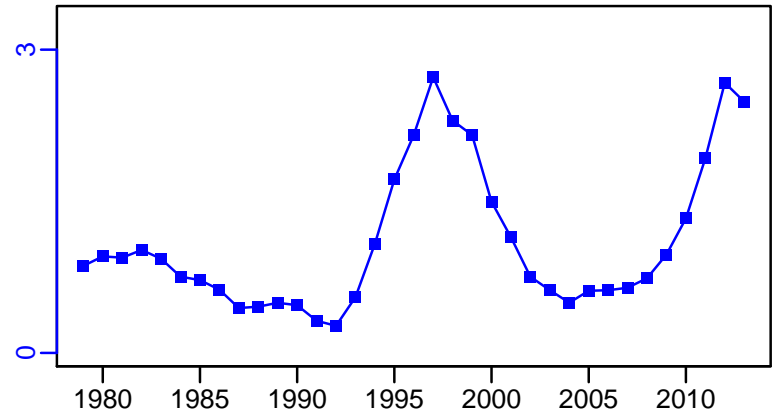
TC-MT, TL-MT, RecC-MT (1945-2014-STARR)



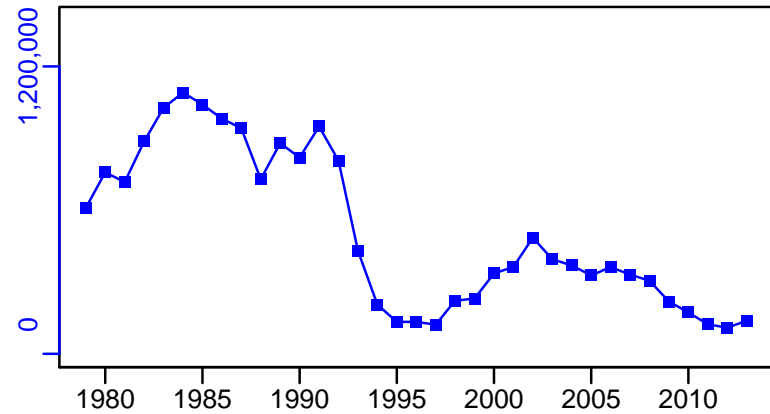
TAC-MT, Cpair-MT, Cadv\* (1945-2014-STARR)



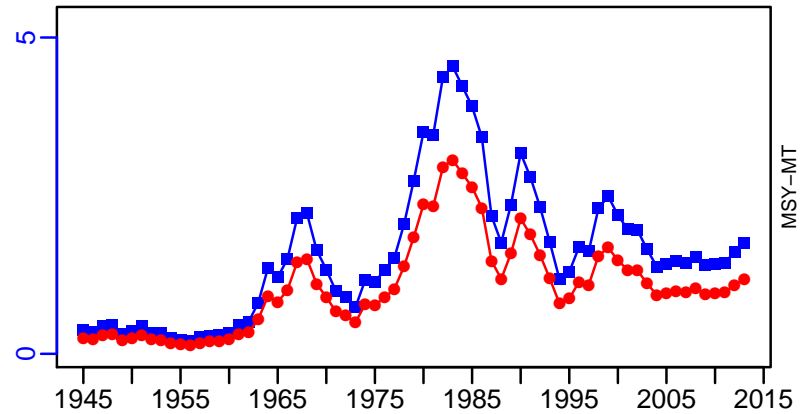
CPUE-kg/potlift (1945-2014-STARR)



EFFORT-potlift (1945-2014-STARR)



TC-MT/MSY-MT, CdivMEANC-ratio, (1945-2014-STARR)



## Red rock lobster New Zealand Area CRA4 [RROCKLOBSTERCRA4]

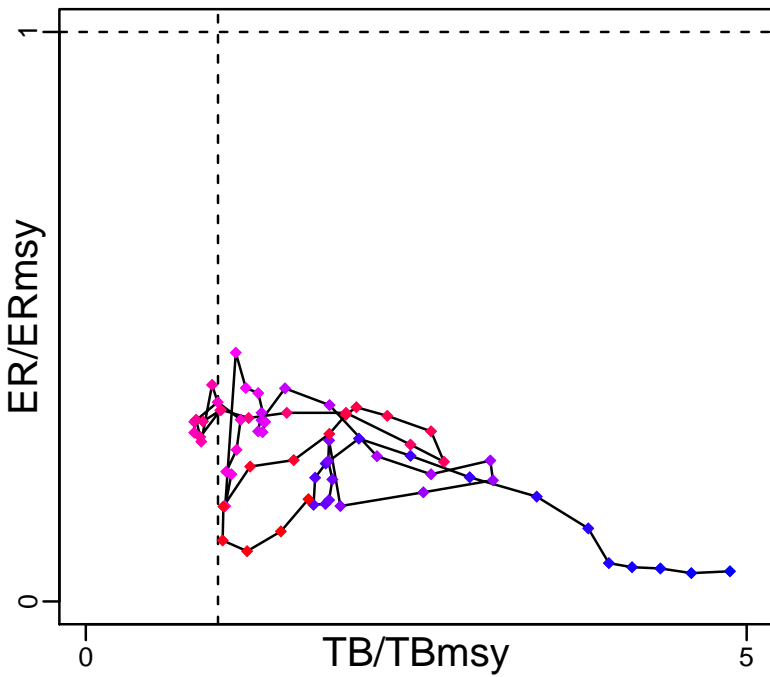
Metadata	
<b>Scientific Name</b>	Jasus edwardsii
<b>Current Assess ID</b>	NZMFishLOBSTERWG-RROCKLOBSTERCRA4-1945-2011-STARR
<b>Area</b>	New Zealand Area CRA4
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	Lobster Working Group
<b>Asmts in RAM</b>	2005, 2011

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2011	513
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-calc-ratio	2011	1.326
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2011	680
<b>M</b>	M-1/yr	2011	0.322
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

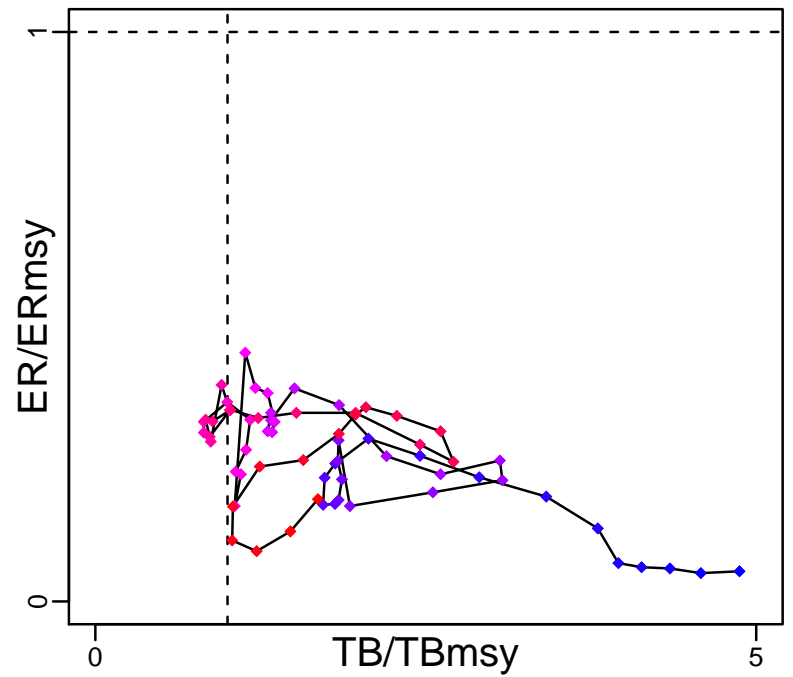
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2011	863	Both	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2011	5,750,000	Both	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2011	0.238	Both	-
<b>TC</b>	TC-MT	2011	533		
<b>TL</b>	TL-MT	2011	415		
<b>TB/TBmsy</b>	TB-MT/TBmsy-MT	2011	1.682		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-calc-ratio	2011	0.18		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Red rock lobster New Zealand Area CRA4 [RROCKLOBSTERCRA4]

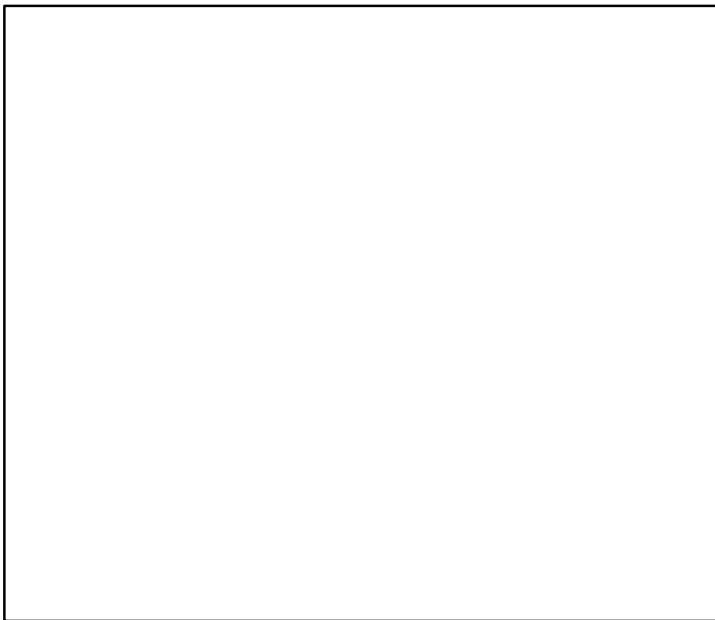
Kobe MSYpref (1945–2011–STARR)



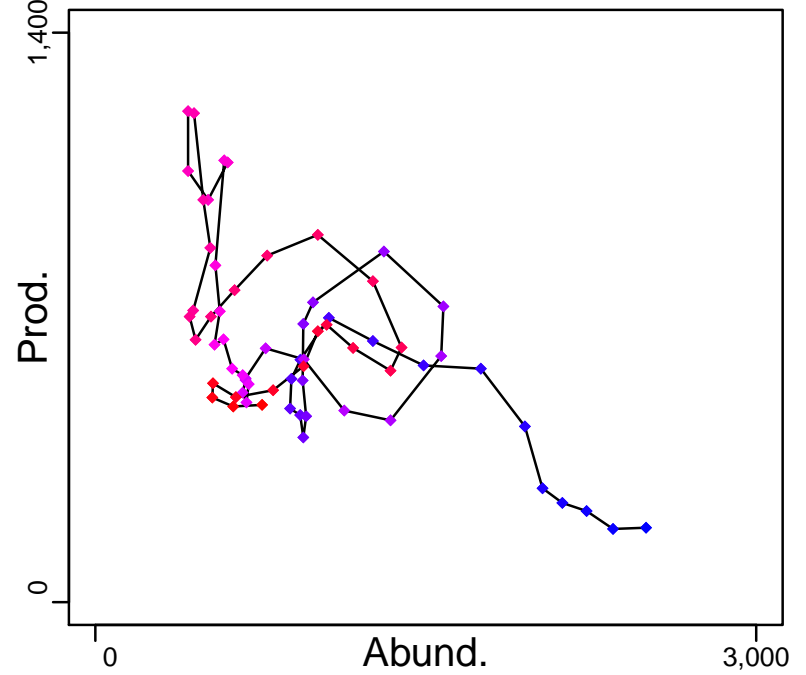
Kobe MGTpref (1945–2011–STARR)



Spawner Recruit\*



Production (1945–2011–STARR)



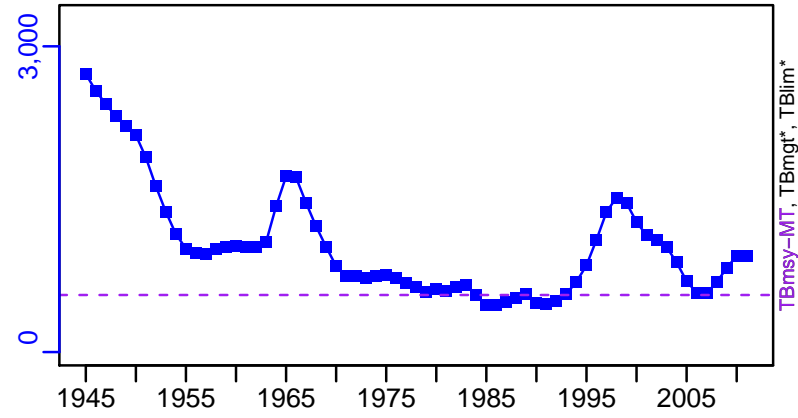
◆ Start Year ◆ End Year \* No Data



# Red rock lobster New Zealand Area CRA4 [RROCKLOBSTERCRA4]

TB-MT (1945-2011-STARR)

SSB\*



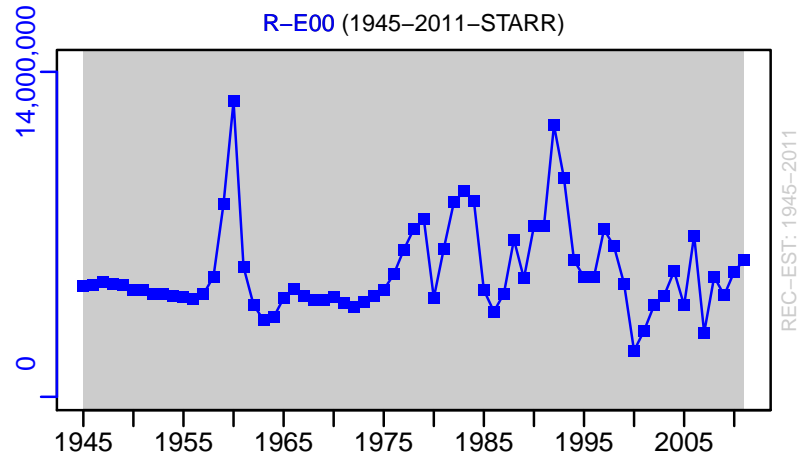
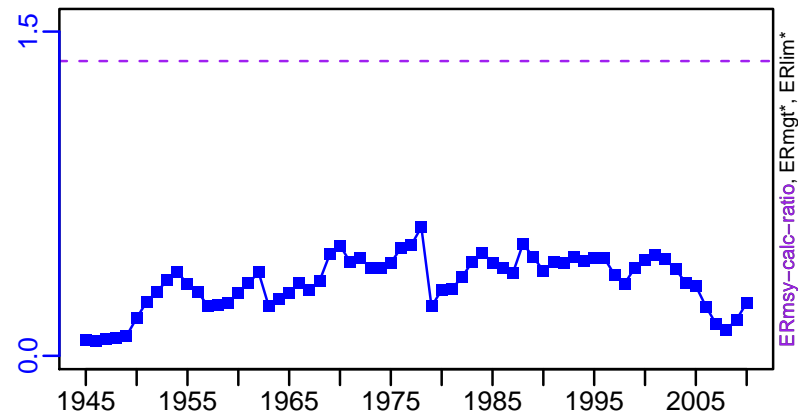
TN \*

F\*



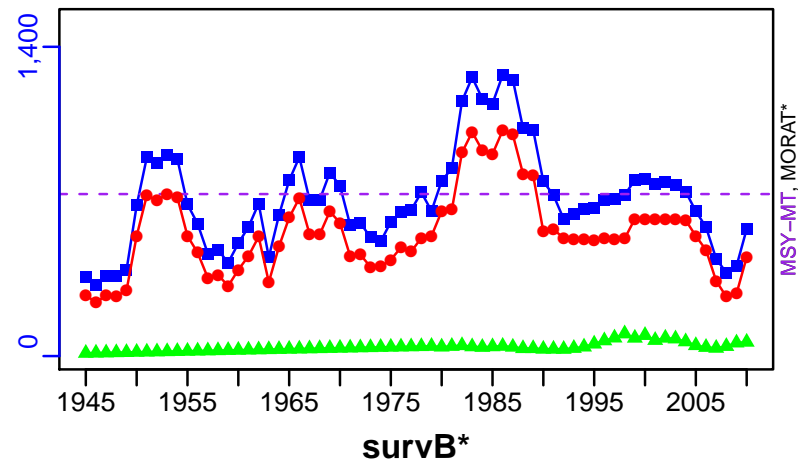
ER-ratio (1945-2011-STARR)

R-E00 (1945-2011-STARR)

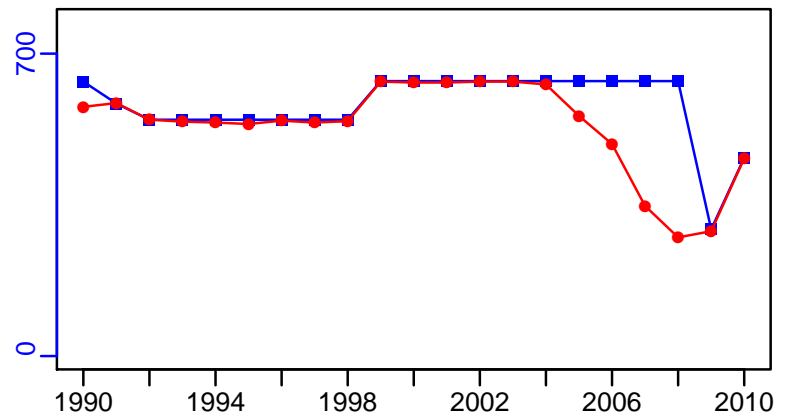


# Red rock lobster New Zealand Area CRA4 [RROCKLOBSTERCRA4]

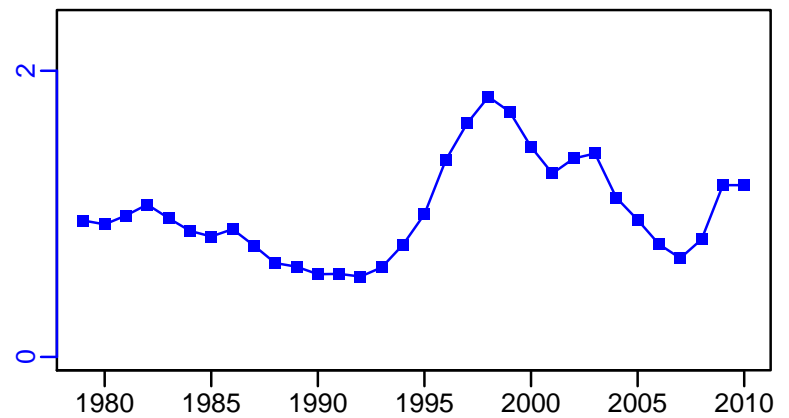
TC-MT, TL-MT, RecC-MT (1945-2011-STARR)



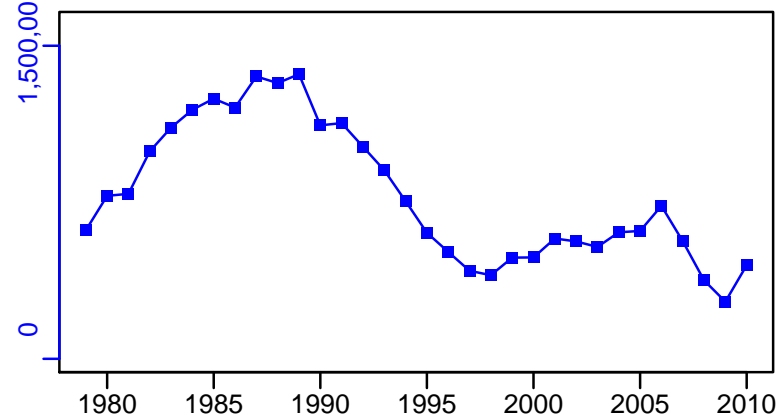
TAC-MT, Cpair-MT, Cadv\* (1945-2011-STARR)



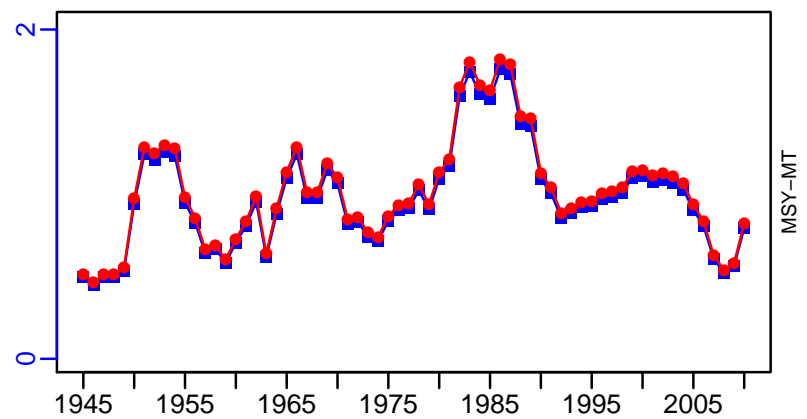
CPUE-kg/potlift (1945-2011-STARR)



EFFORT-potlift (1945-2011-STARR)



TC-MT/MSY-MT, CdivMEANC-ratio, (1945-2011-STARR)



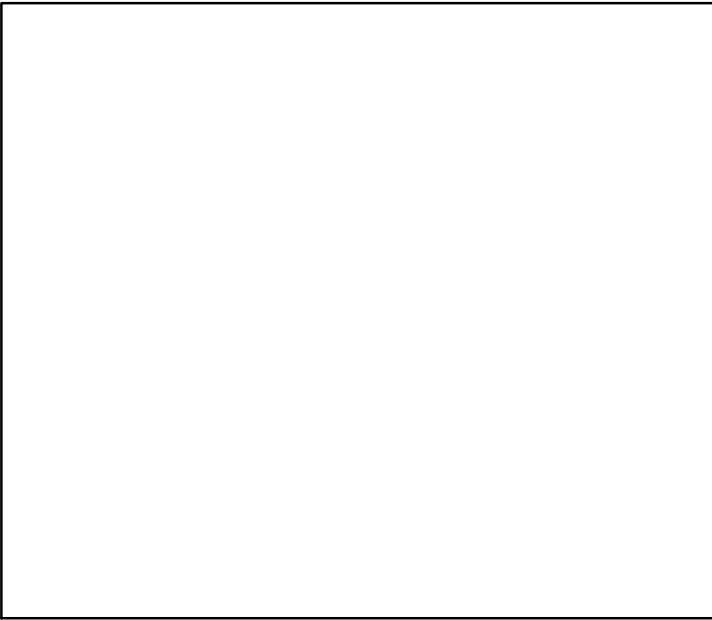
## Red rock lobster New Zealand Area CRA5 [RROCKLOBSTERCRA5]

Metadata	
<b>Scientific Name</b>	Jasus edwardsii
<b>Current Assess ID</b>	NZMFishLOBSTERWG-RROCKLOBSTERCRA5-1945-2015-STARR
<b>Area</b>	New Zealand Area CRA5
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	Lobster Working Group
<b>Asmts in RAM</b>	2002, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2015	560
M	M-1/yr	2015	0.132
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2015	5050	Both	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	R-E00	2015	1,010,000	Both	-
F	-	-	-	-	-
ER	ER-ratio	2015	0.164	Both	-
TC	TC-MT	2015	472		
TL	TL-MT	2015	349		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

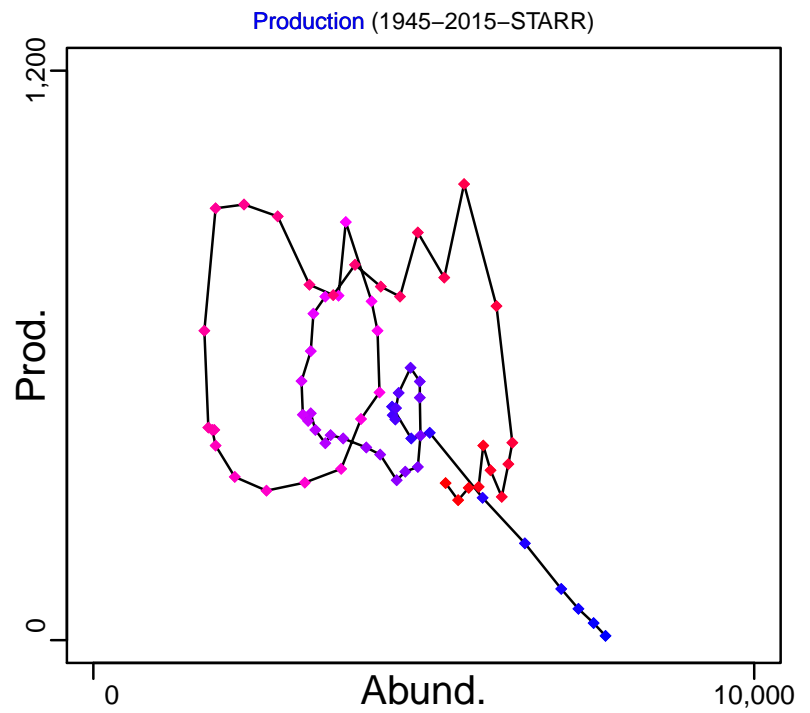
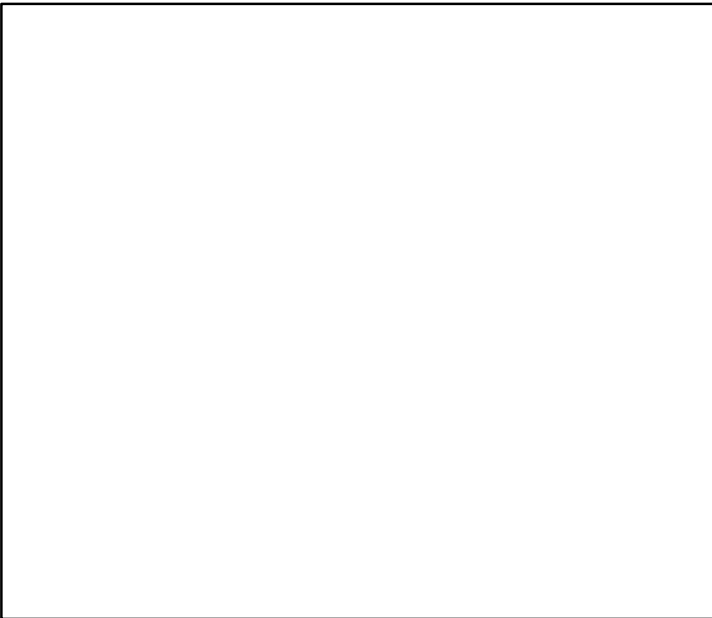
Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*

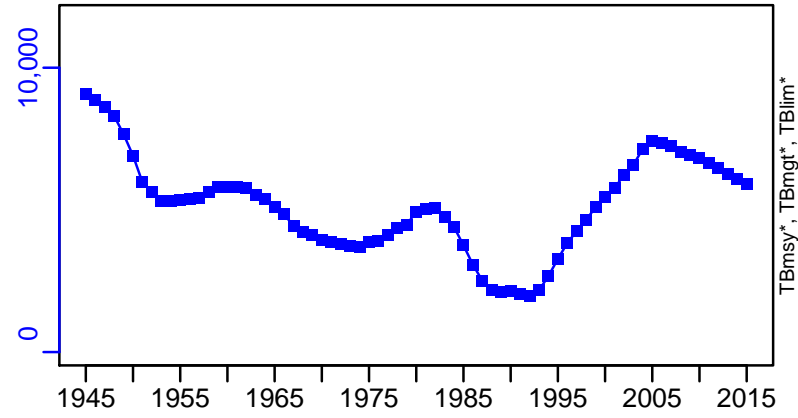


◆ Start Year ◆ End Year \* No Data

# Red rock lobster New Zealand Area CRA5 [RROCKLOBSTERCRA5]

TB-MT (1945–2015–STARR)

SSB\*



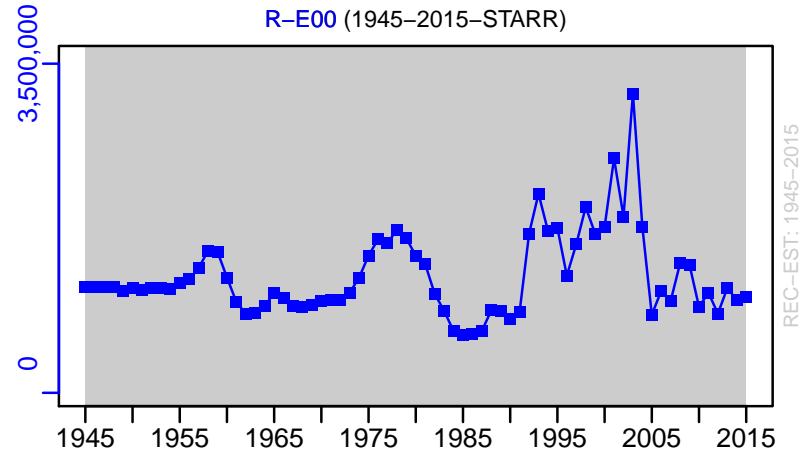
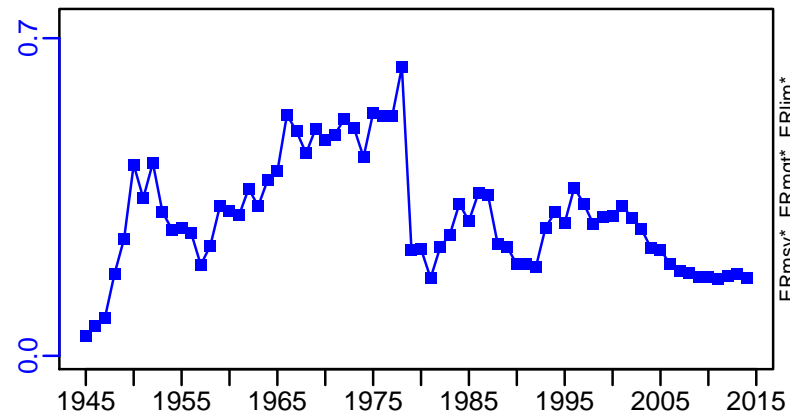
TN \*

F\*



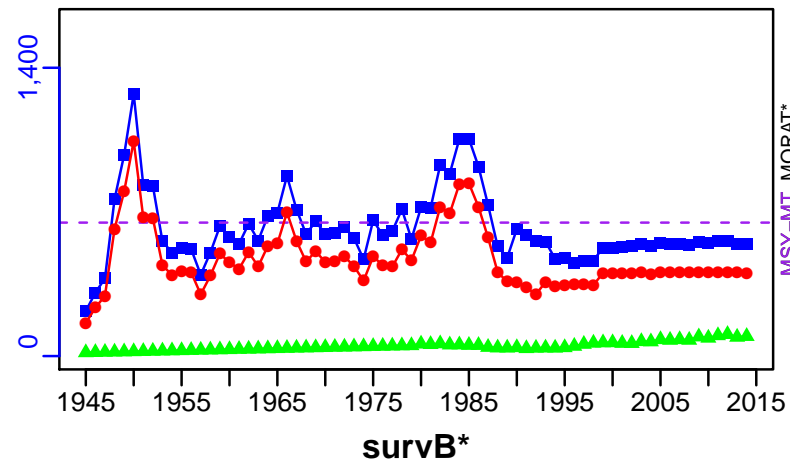
ER-ratio (1945–2015–STARR)

R-E00 (1945–2015–STARR)

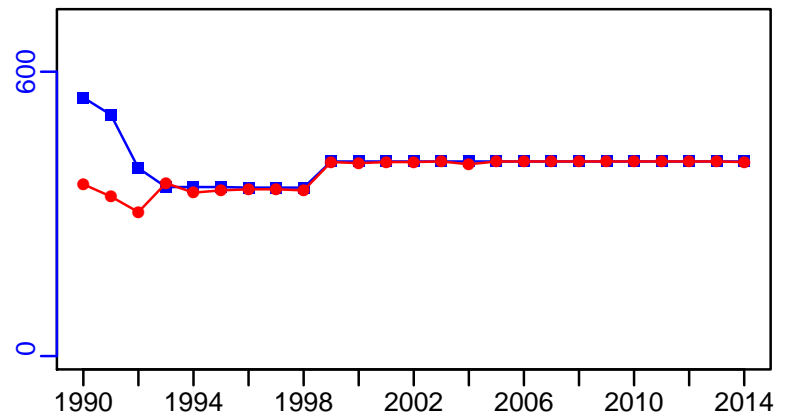


# Red rock lobster New Zealand Area CRA5 [RROCKLOBSTERCRA5]

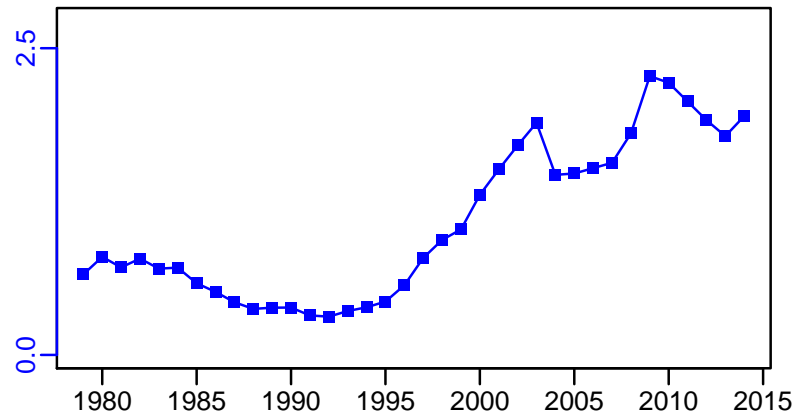
TC-MT, TL-MT, RecC-MT (1945-2015-STARR)



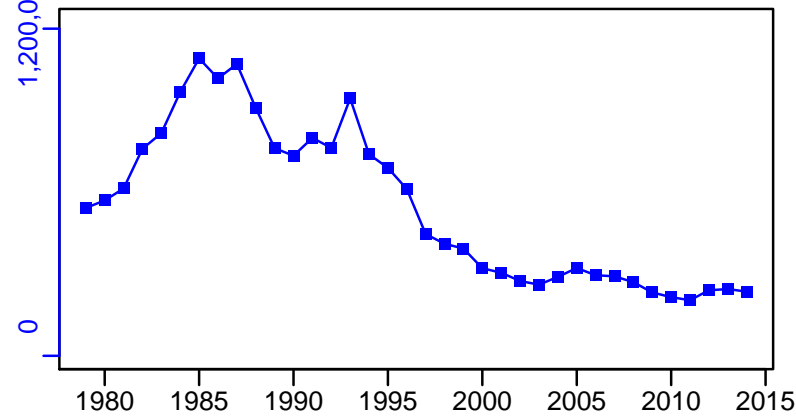
TAC-MT, Cpair-MT, Cadv\* (1945-2015-STARR)



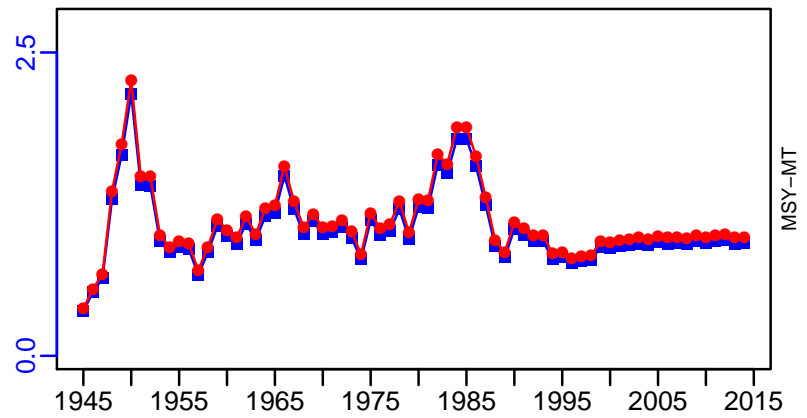
CPUE-kg/potlift (1945-2015-STARR)



EFFORT-potlift (1945-2015-STARR)



TC-MT/MSY-MT, CdivMEANC-ratio, (1945-2015-STARR)



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

## Red rock lobster New Zealand Area CRA7 [RROCKLOBSTERCRA7]

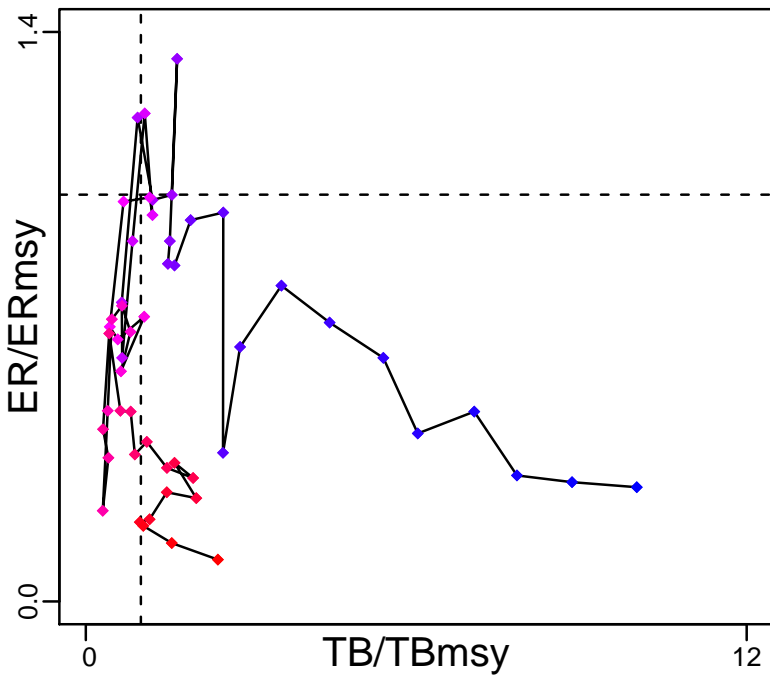
Metadata	
<b>Scientific Name</b>	Jasus edwardsii
<b>Current Assess ID</b>	NZMFishLOBSTERWG-RROCKLOBSTERCRA7-1963-2015-STARR
<b>Area</b>	New Zealand Area CRA7
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	Lobster Working Group
<b>Asmts in RAM</b>	2015, 2005

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2015	400
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-calc-ratio	2015	0.484
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2015	194
<b>M</b>	M-1/yr	2015	0.103
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

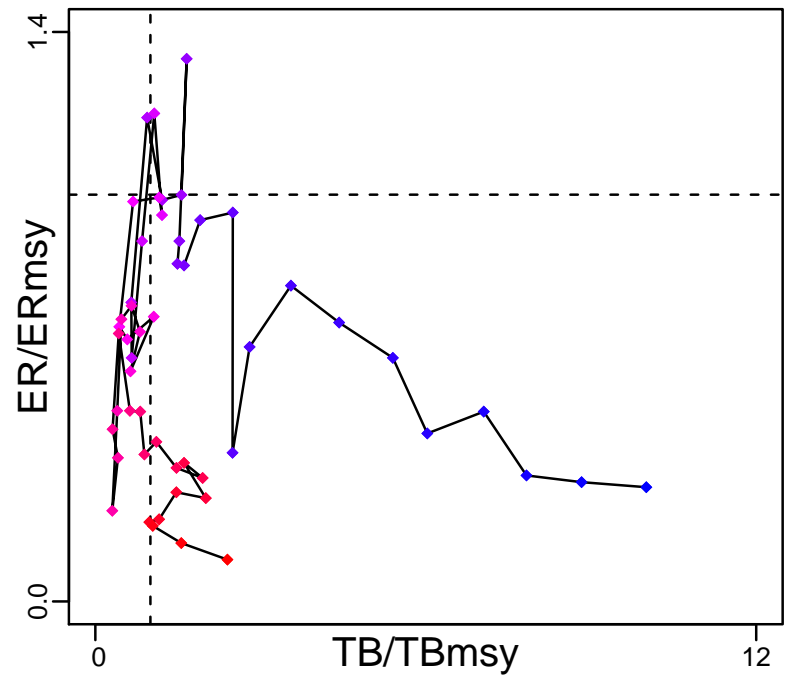
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	962	Both	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	871,000	Both	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2015	0.05	Both	-
<b>TC</b>	TC-MT	2015	75		
<b>TL</b>	TL-MT	2015	66		
<b>TB/TBmsy</b>	TB-MT/TBmsy-MT	2015	2.406		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-calc-ratio	2015	0.103		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Red rock lobster New Zealand Area CRA7 [RROCKLOBSTERCRA7]

Kobe MSYpref (1963–2015–STARR)



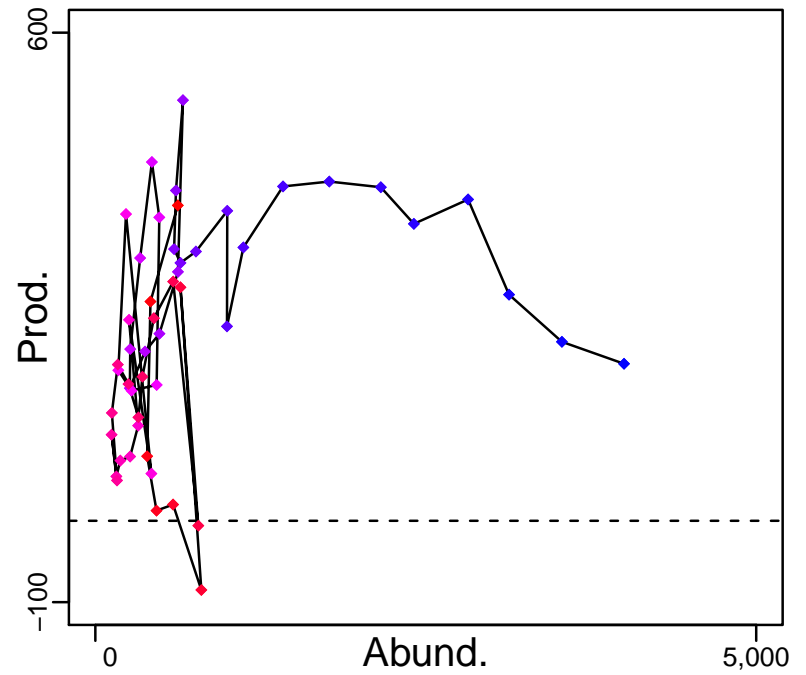
Kobe MGTpref (1963–2015–STARR)



Spawner Recruit\*



Production (1963–2015–STARR)



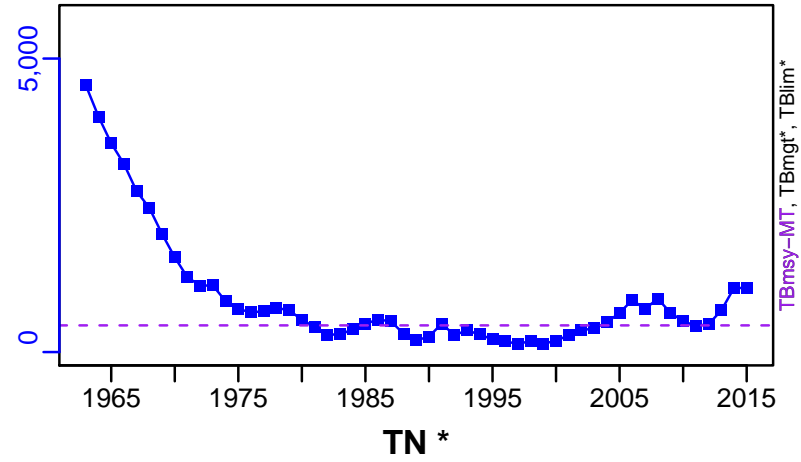
◆ Start Year ◆ End Year \* No Data



# Red rock lobster New Zealand Area CRA7 [RROCKLOBSTERCRA7]

TB-MT (1963–2015–STARR)

SSB\*



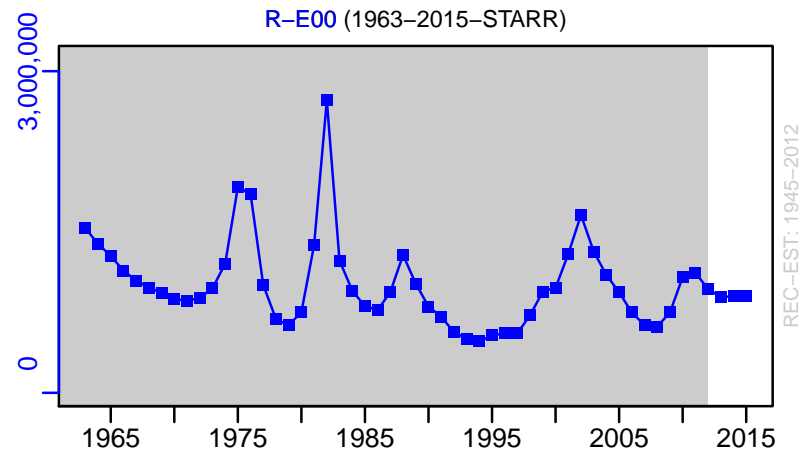
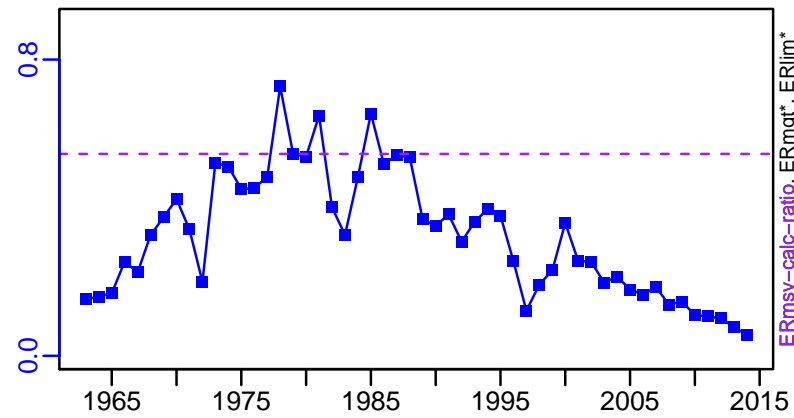
TN \*

F\*



ER-ratio (1963–2015–STARR)

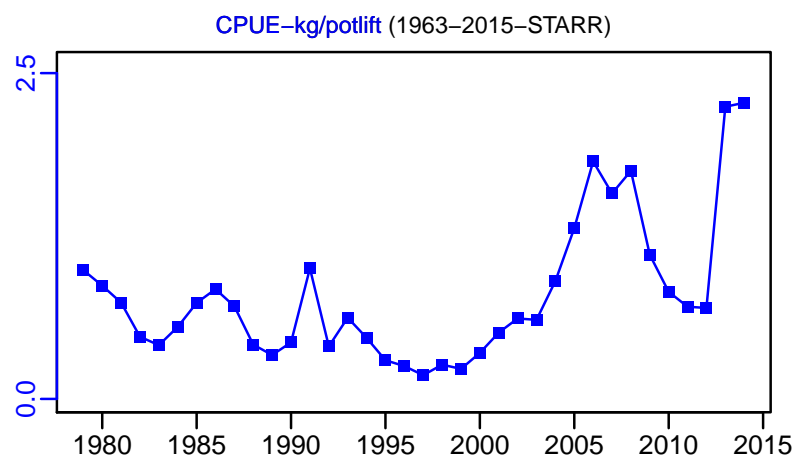
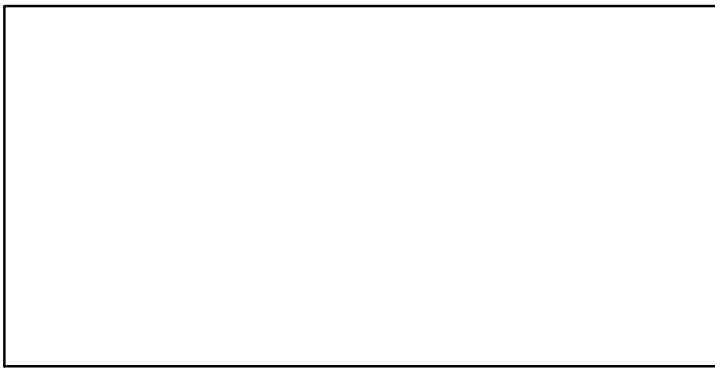
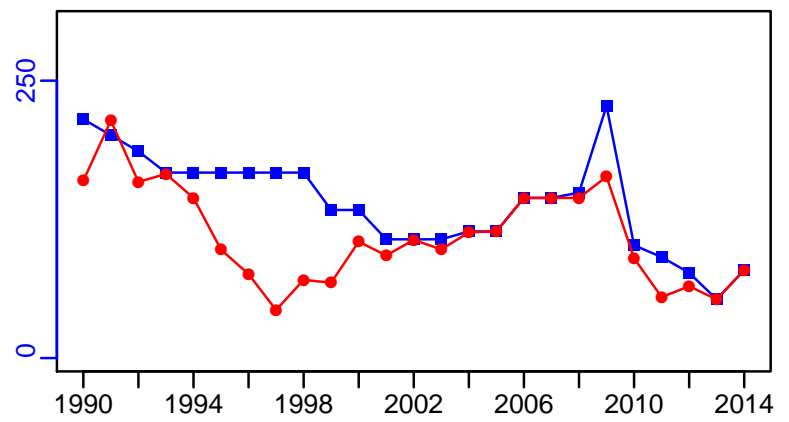
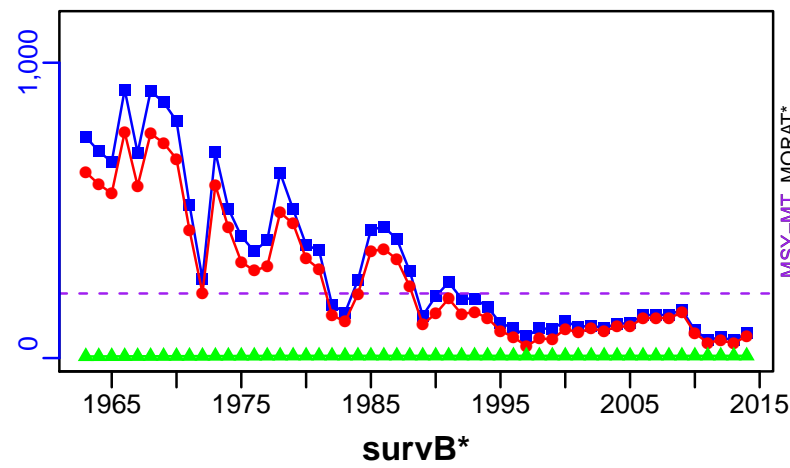
R-E00 (1963–2015–STARR)



# Red rock lobster New Zealand Area CRA7 [RROCKLOBSTERCRA7]

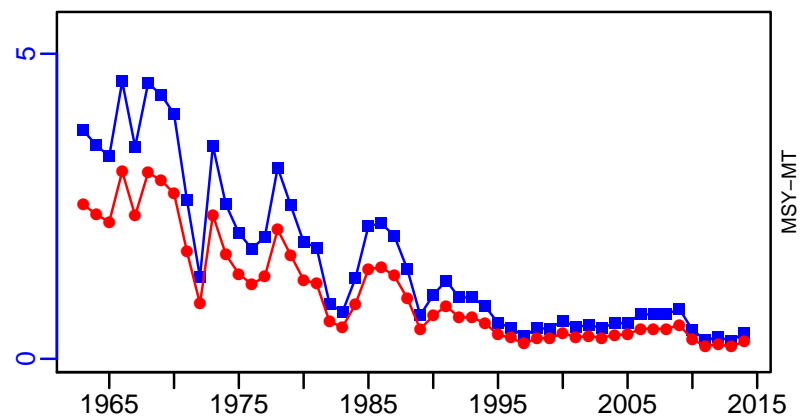
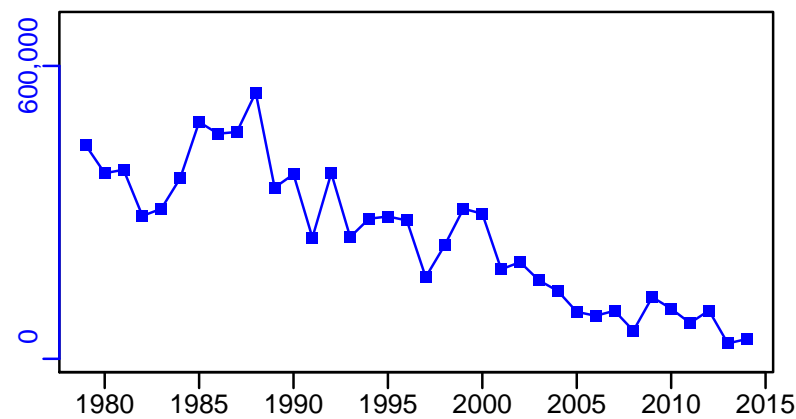
TC-MT, TL-MT, RecC-MT (1963-2015-STARR)

TAC-MT, Cpair-MT, Cadv\* (1963-2015-STARR)



EFFORT-potlift (1963-2015-STARR)

TC-MT/MSY-MT, CdivMEANC-ratio, (1963-2015-STARR)



## Red rock lobster New Zealand Area CRA8 [RROCKLOBSTERCRA8]

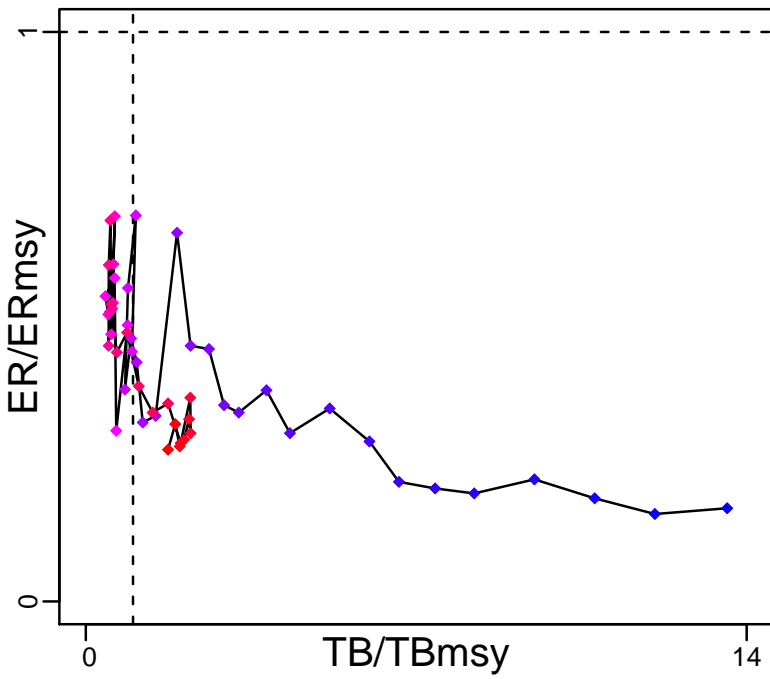
Metadata	
<b>Scientific Name</b>	Jasus edwardsii
<b>Current Assess ID</b>	NZMFishLOBSTERWG-RROCKLOBSTERCRA8-1963-2015-STARR
<b>Area</b>	New Zealand Area CRA8
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	Lobster Working Group
<b>Asmts in RAM</b>	2015, 2005

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2015	1568
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-calc-ratio	2015	0.69
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2015	1083
<b>M</b>	M-1/yr	2015	0.095
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

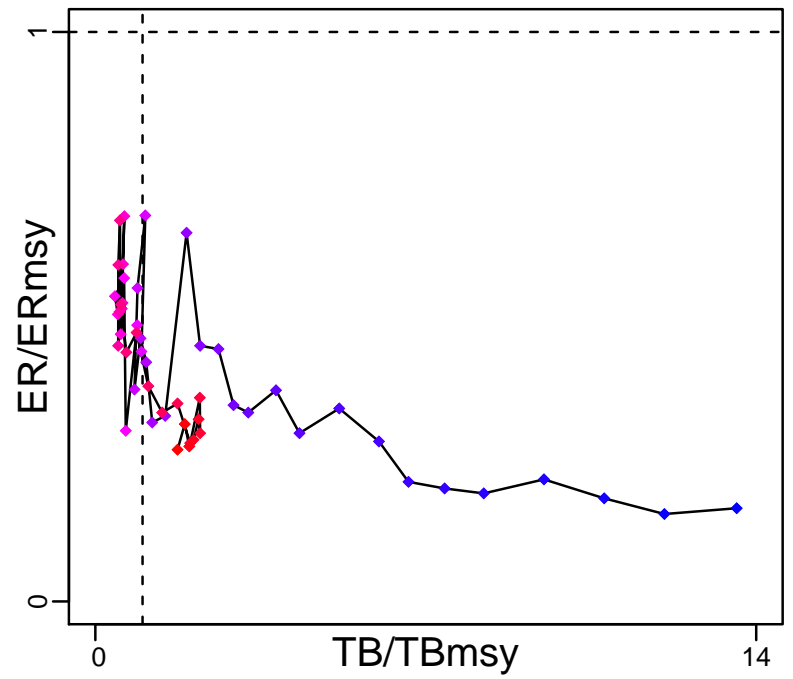
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	2630	Both	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	1,140,000	Both	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2015	0.184	Both	-
<b>TC</b>	TC-MT	2015	1010		
<b>TL</b>	TL-MT	2015	960		
<b>TB/TBmsy</b>	TB-MT/TBmsy-MT	2015	1.678		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-calc-ratio	2015	0.266		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Red rock lobster New Zealand Area CRA8 [RROCKLOBSTERCRA8]

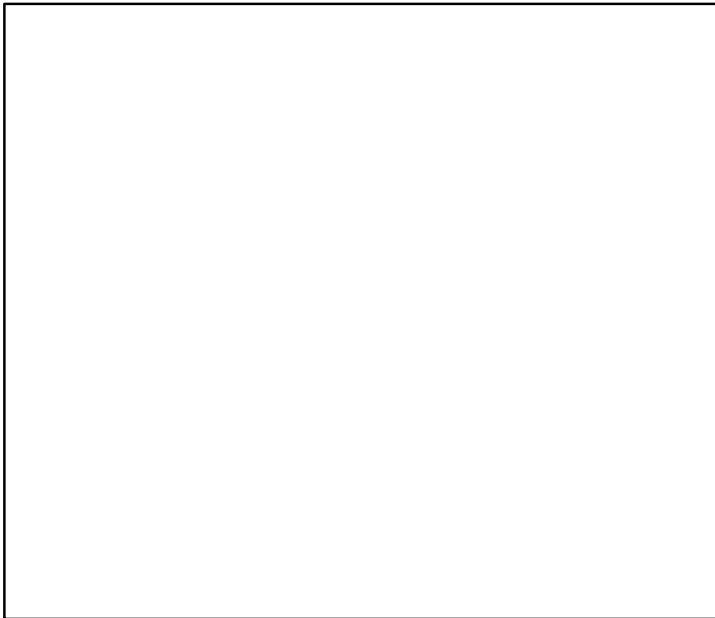
Kobe MSYpref (1963–2015–STARR)



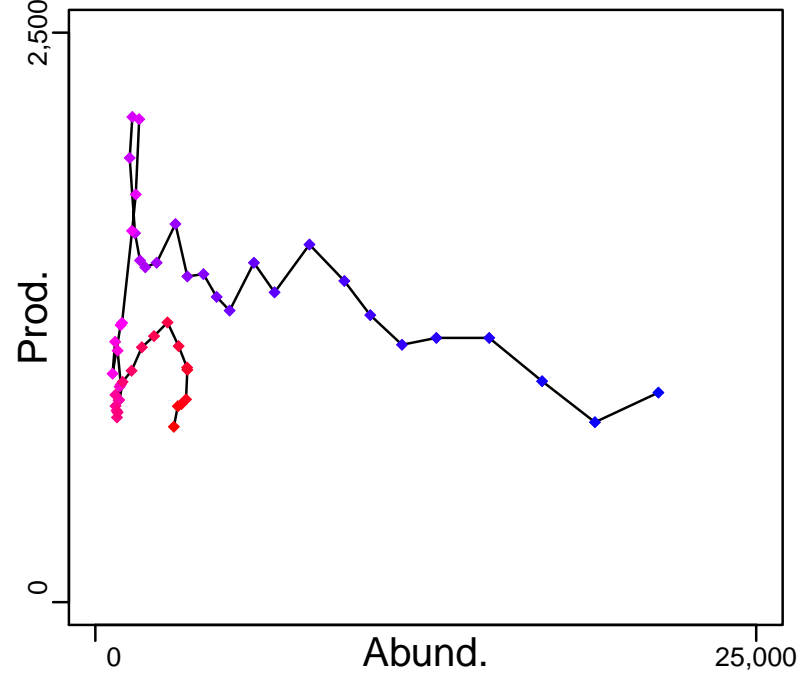
Kobe MGTpref (1963–2015–STARR)



Spawner Recruit\*



Production (1963–2015–STARR)

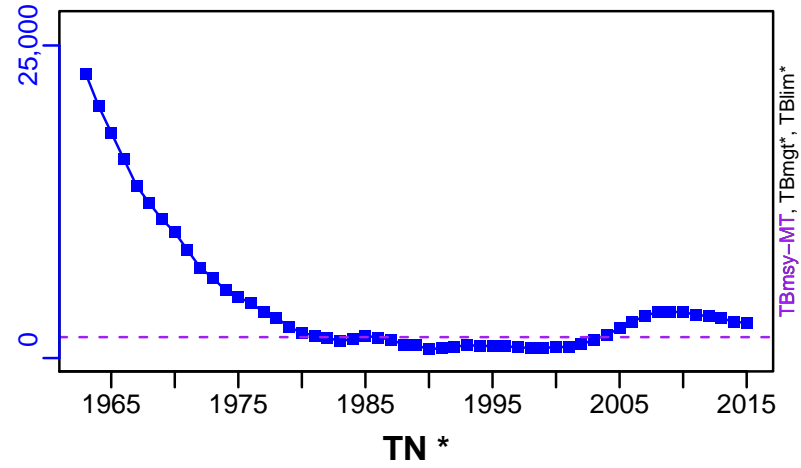


◆ Start Year ◆ End Year \* No Data

# Red rock lobster New Zealand Area CRA8 [RROCKLOBSTERCRA8]

TB-MT (1963–2015–STARR)

SSB\*



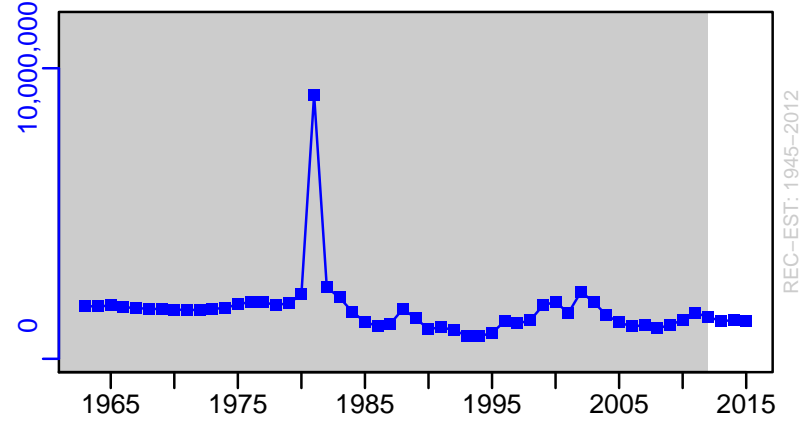
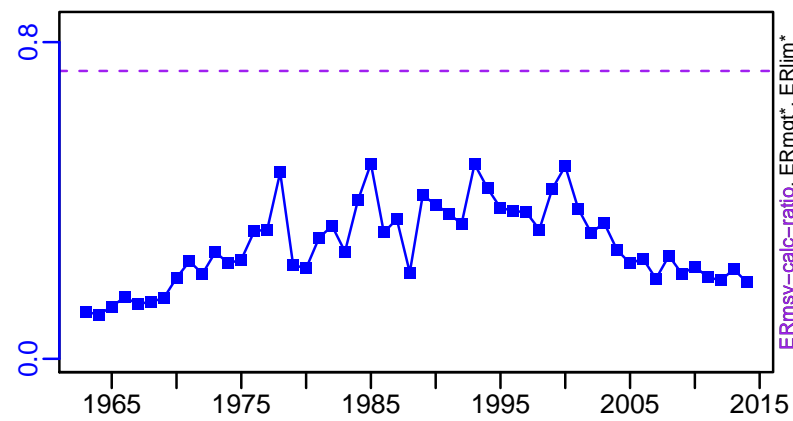
TN \*

F\*



ER-ratio (1963–2015–STARR)

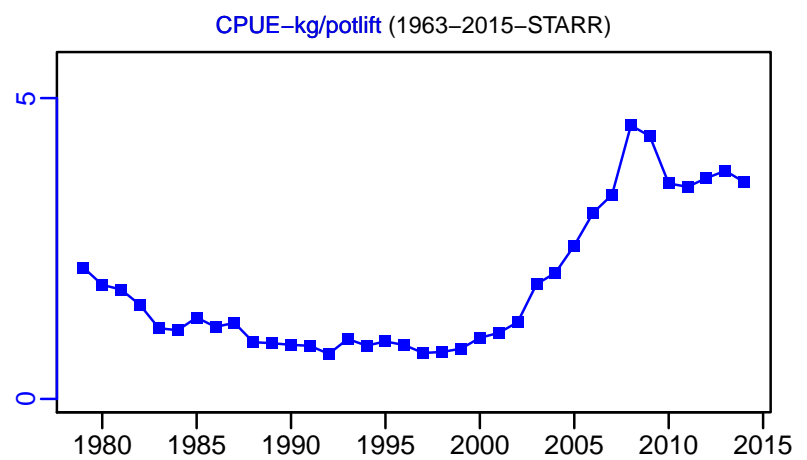
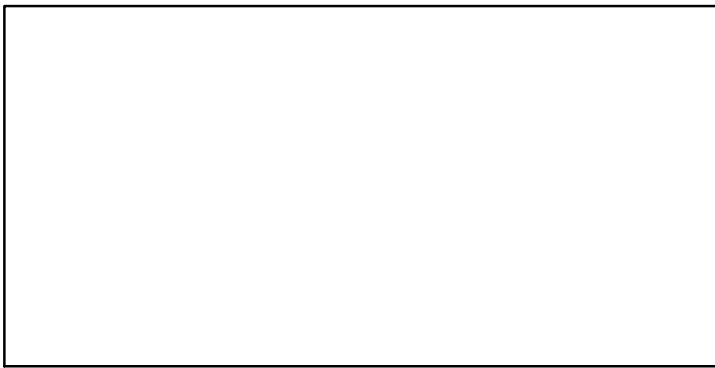
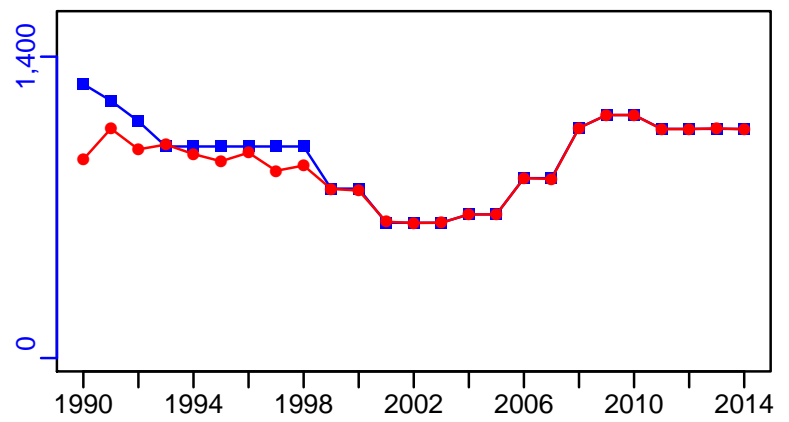
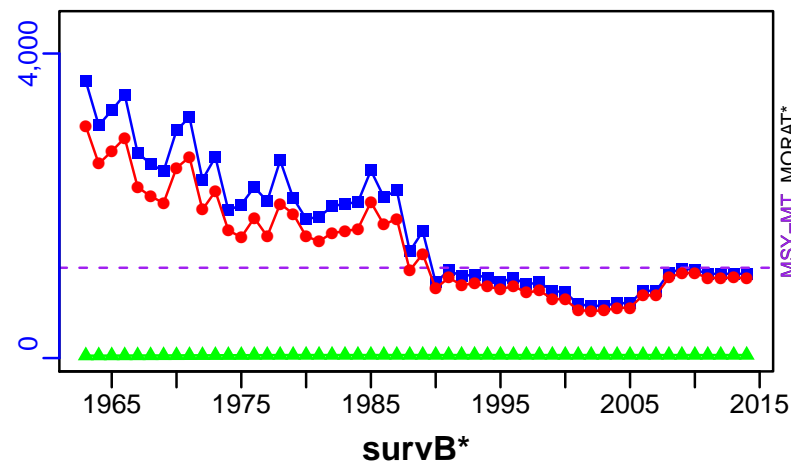
R-E00 (1963–2015–STARR)



# Red rock lobster New Zealand Area CRA8 [RROCKLOBSTERCRA8]

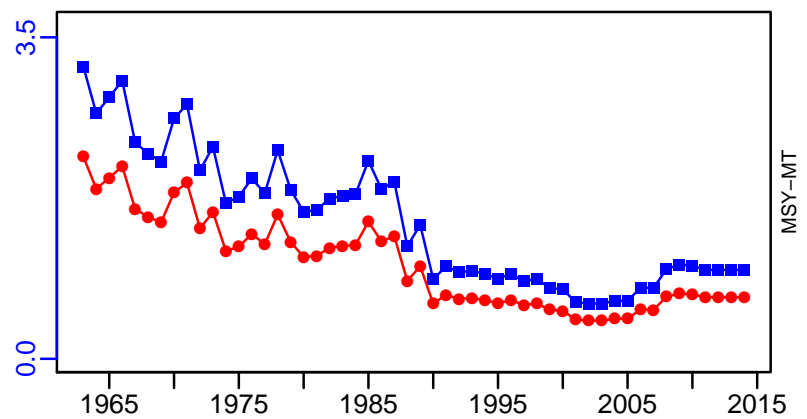
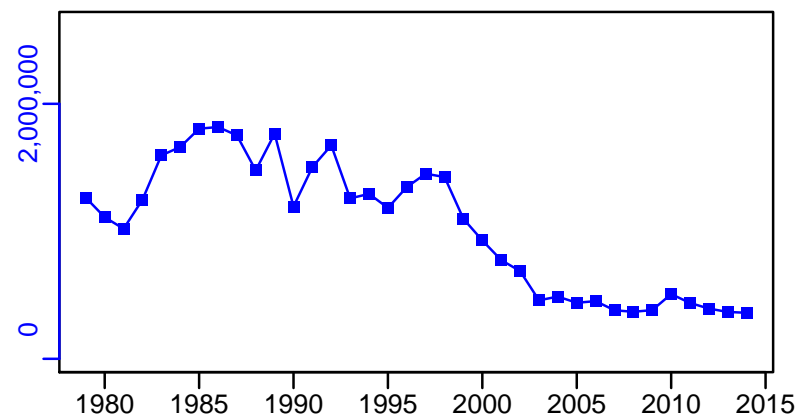
TC-MT, TL-MT, RecC-MT (1963-2015-STARR)

TAC-MT, Cpair-MT, Cadv\* (1963-2015-STARR)



EFFORT-potlift (1963-2015-STARR)

TC-MT/MSY-MT, CdivMEANC-ratio, (1963-2015-STARR)

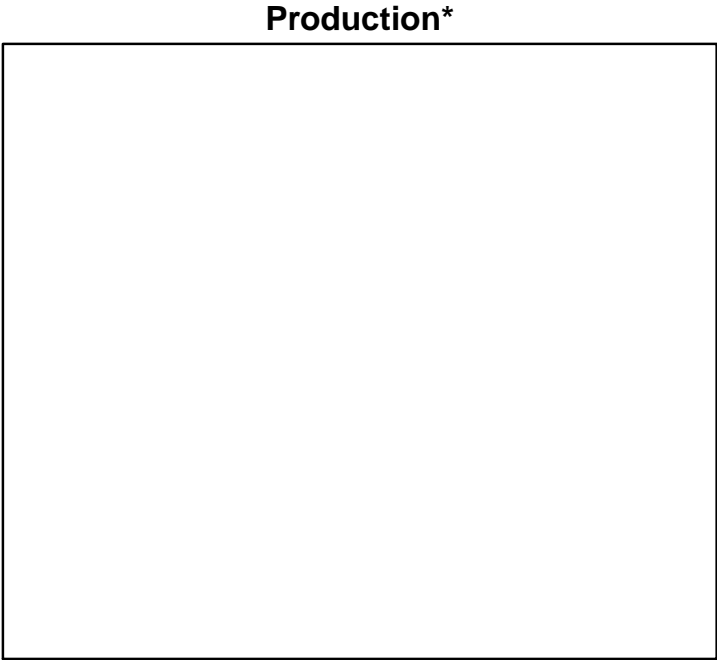
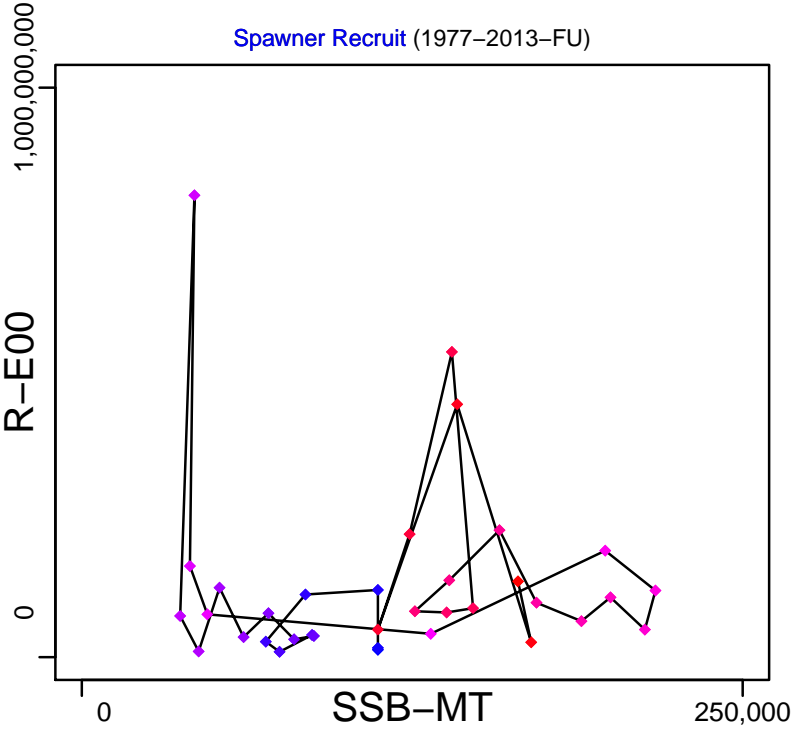
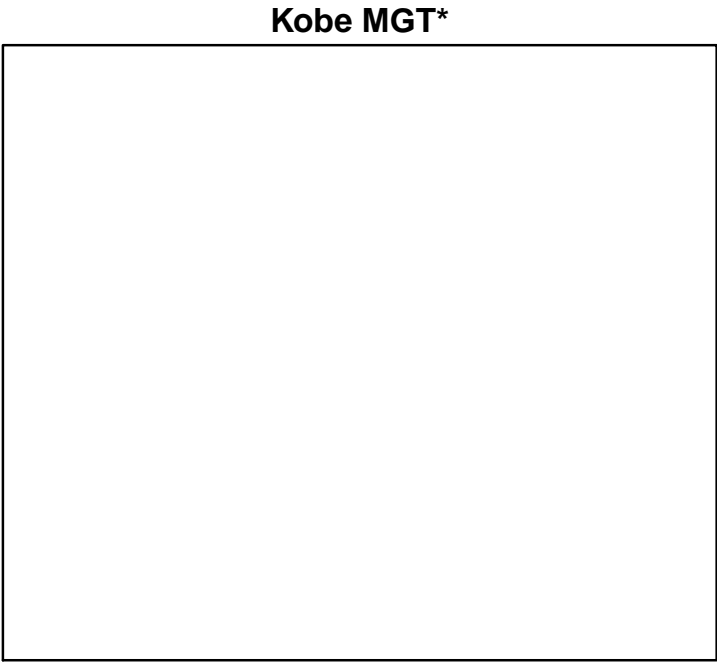


## Southern blue whiting Campbell Island Rise [SBWHITACIR]

Metadata	
<b>Scientific Name</b>	Micromesistius australis
<b>Current Assess ID</b>	NZMFishMIDDEPTHSWG-SBWHITACIR-1977-2013-FU
<b>Area</b>	Campbell Island Rise
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	Middle Depths Working Group
<b>Asmts in RAM</b>	2013, 2011

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2013	134,634
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2013	134,634
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2013	336,585
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2013	0.2
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2013	196,000	-	2 to 15
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2013	$1.33 \times 10^8$	Both	-
<b>F</b>	F-1/yr	2011	0.145	-	-
<b>ER</b>	ER-ratio	2013	0.14	Both	2 to 15
<b>TC</b>	TC-MT	2013	28,600		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2013	1.456		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2013	1.456		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		



◆ Start Year ◆ End Year \* No Data

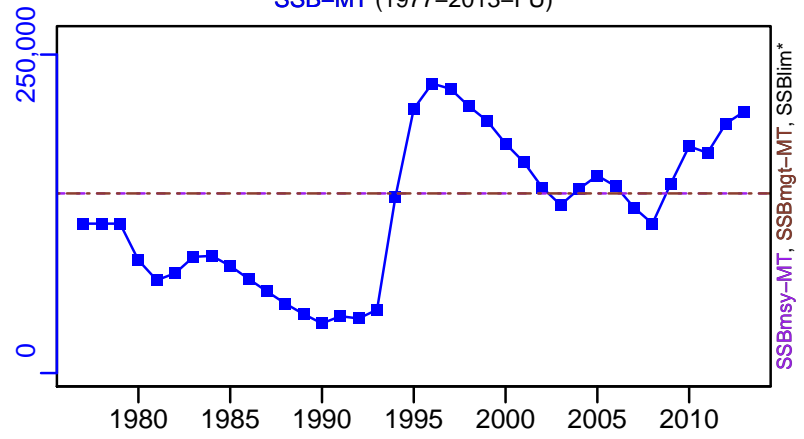


# Southern blue whiting Campbell Island Rise [SBWHITACIR]

TB\*



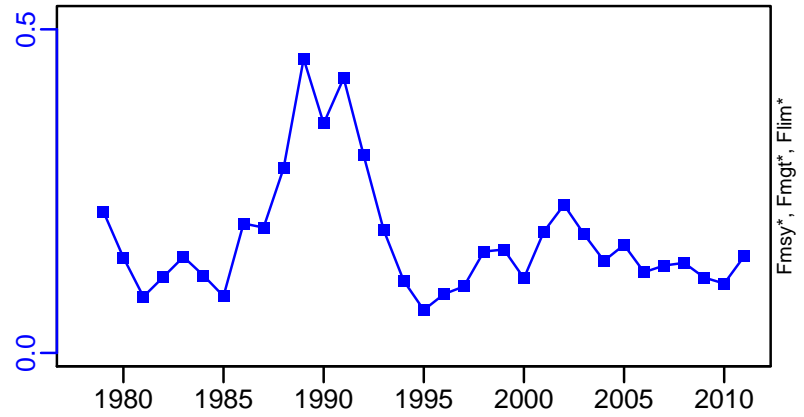
SSB-MT (1977-2013-FU)



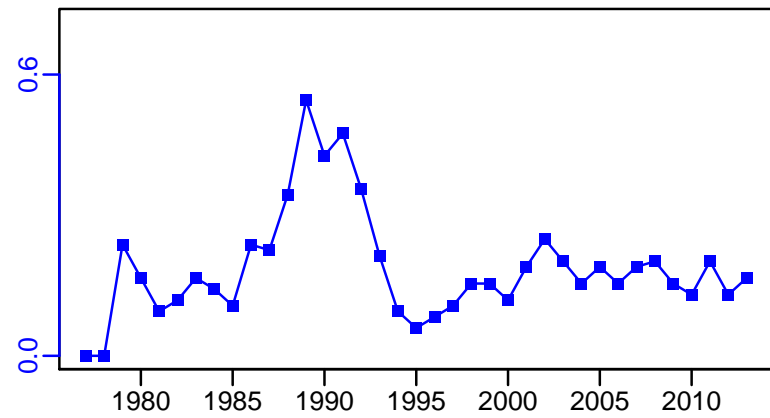
TN \*



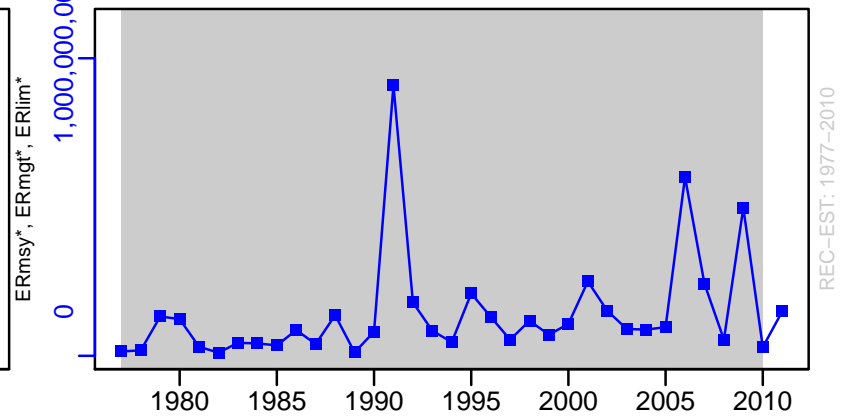
F-1/yr (1978-2011-CHING)



ER-ratio (1977-2013-FU)

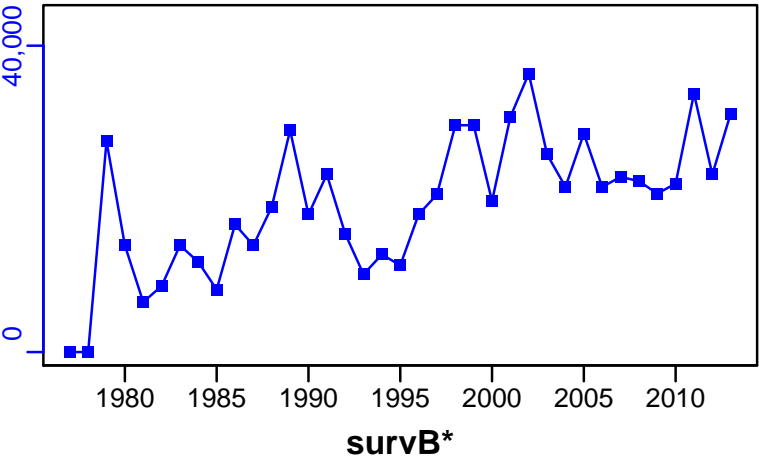


R-E00 (1977-2013-FU)

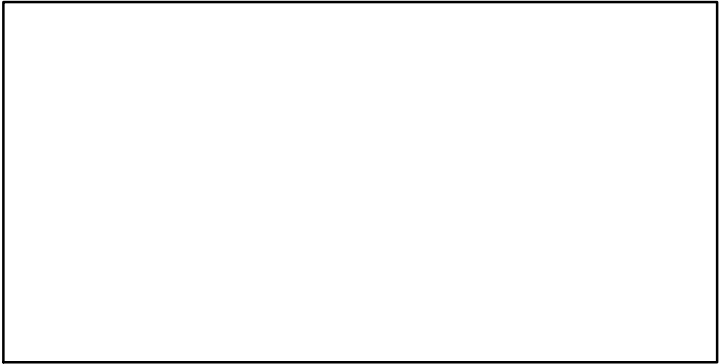
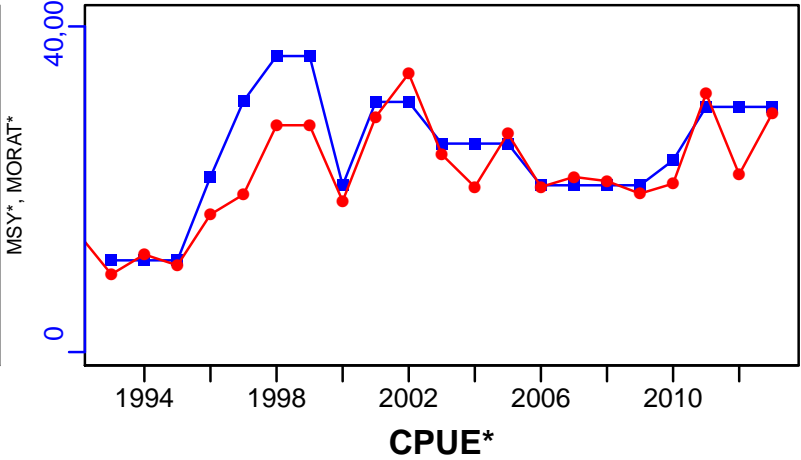


Southern blue whiting Campbell Island Rise [SBWHITACIR]

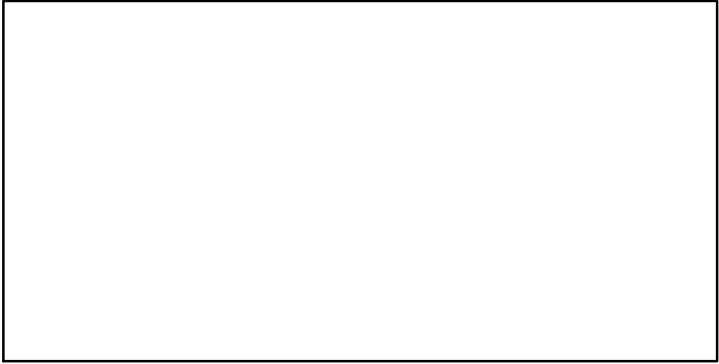
TC-MT, TL\*, RecC\* (1977-2013-FU)



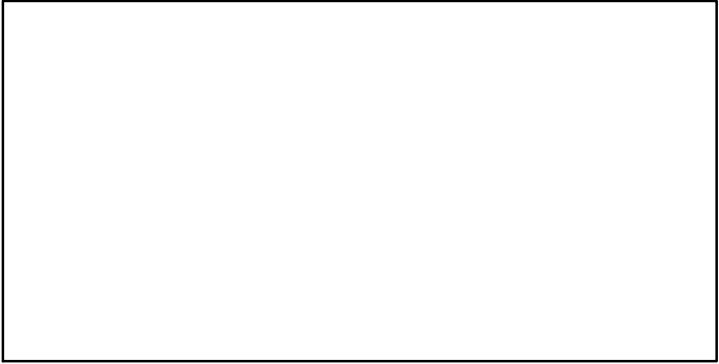
TAC-MT, Cpair-MT, Cadv\* (1977-2013-FU)



EFFORT\*



CdivMSY\*



## Scampi Bay of Plenty [SCMPBP]

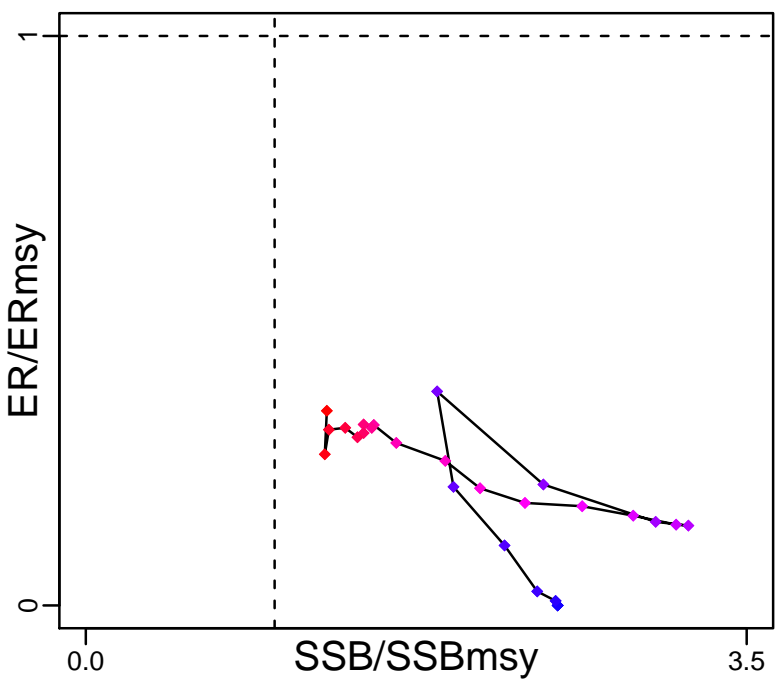
Metadata	
<b>Scientific Name</b>	Metanephrops challengeri
<b>Current Assess ID</b>	NIWA-SCMPBP-1985-2012-FU
<b>Area</b>	Bay of Plenty
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2010, 2012

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2012	3805
<b>SSBmsy</b>	SSBmsy-MT	2012	1912
<b>Fmsy</b>	Fmsy-1/yr	2010	0.54
<b>ERmsy</b>	ERmsy-ratio	2012	0.09
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2012	1912
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2012	4779
<b>MSY</b>	MSY-MT	2012	342
<b>M</b>	M-1/yr	2012	0.3
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

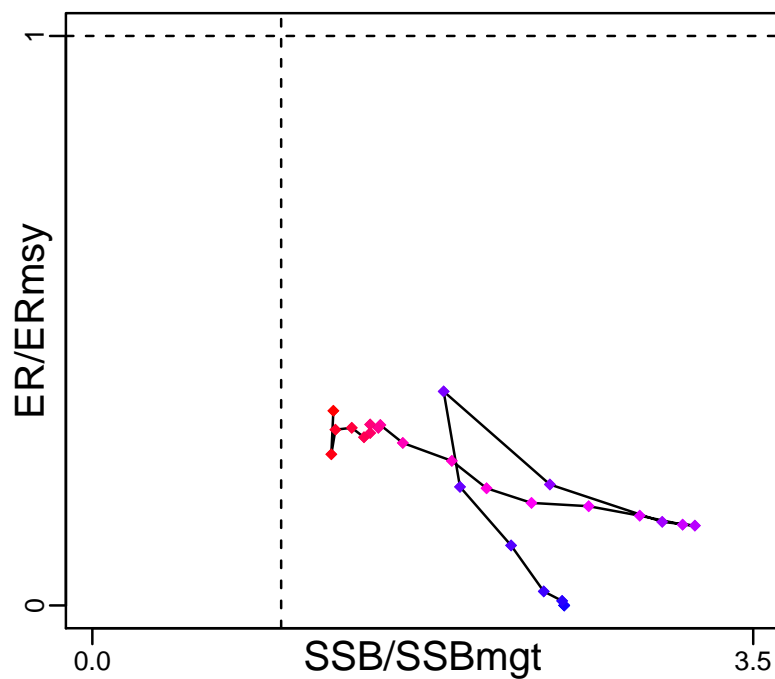
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2012	3460	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2012	46,200,000	Both	-
<b>F</b>	F-1/yr	2012	0.15	Females	-
<b>ER</b>	ER-ratio	2010	0.041	-	-
<b>TC</b>	TC-MT	2012	114		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2012	1.81		
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2010	0.253		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2010	0.342		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2012	1.81		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Scampi Bay of Plenty [SCMPBP]

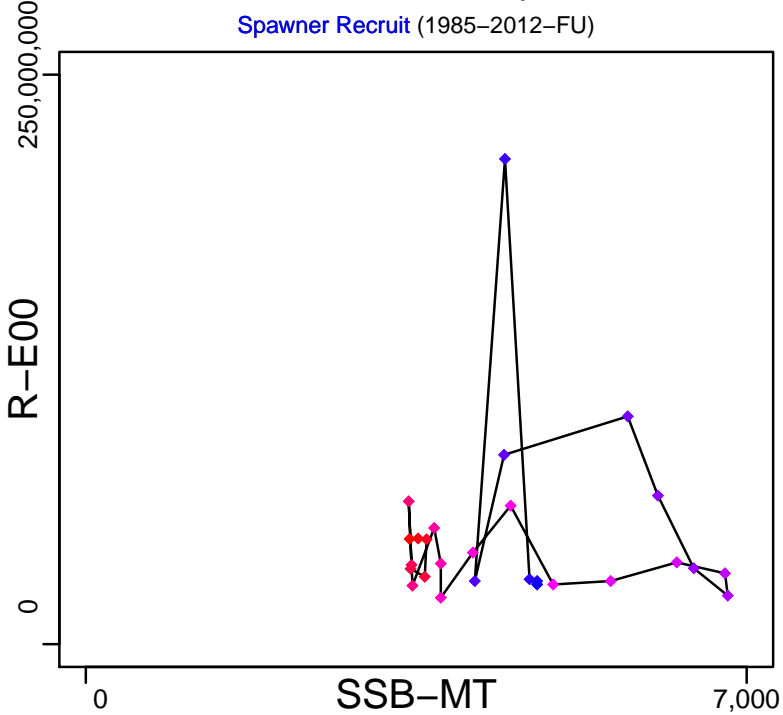
Kobe MSYpref (1985–2010–CORDUE)



Kobe MGTpref (1985–2010–CORDUE)



Spawner Recruit (1985–2012–FU)



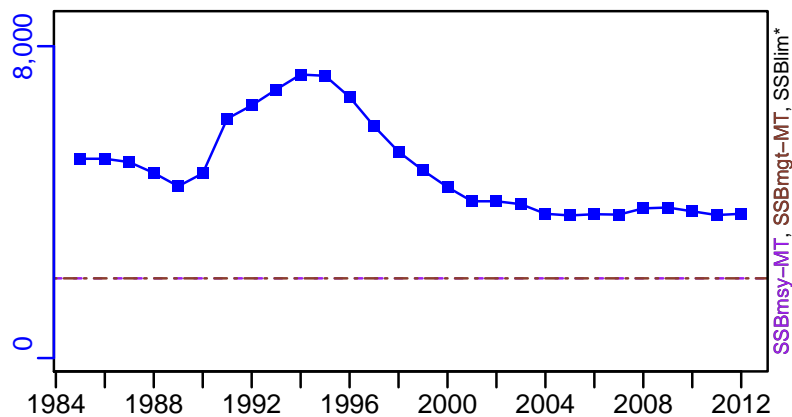
◆ Start Year ◆ End Year \* No Data

# Scampi Bay of Plenty [SCMPBP]

TB\*



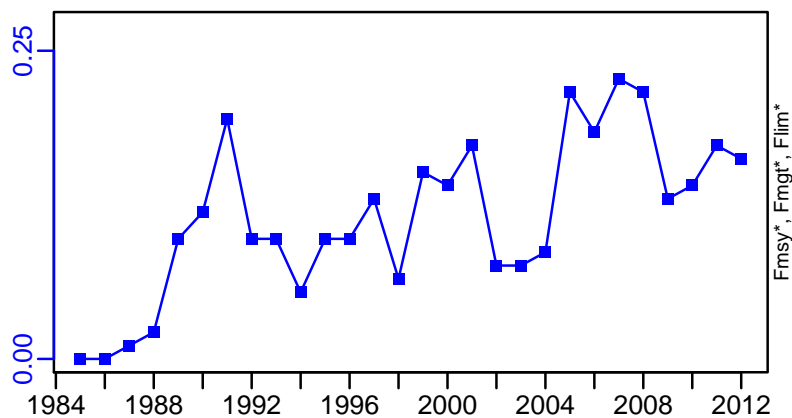
SSB-MT (1985–2012–FU)



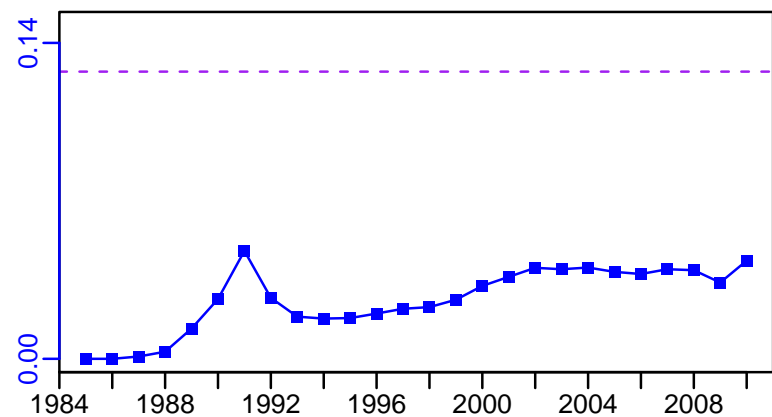
TN \*



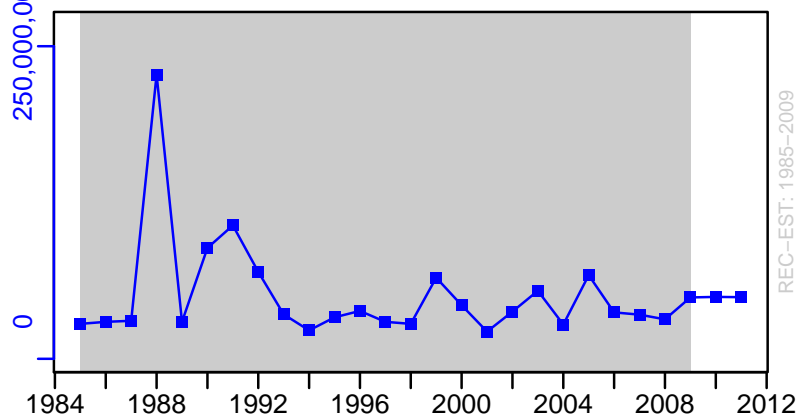
F-1/yr (1985–2012–FU)



ER-ratio (1985–2010–CORDUE)



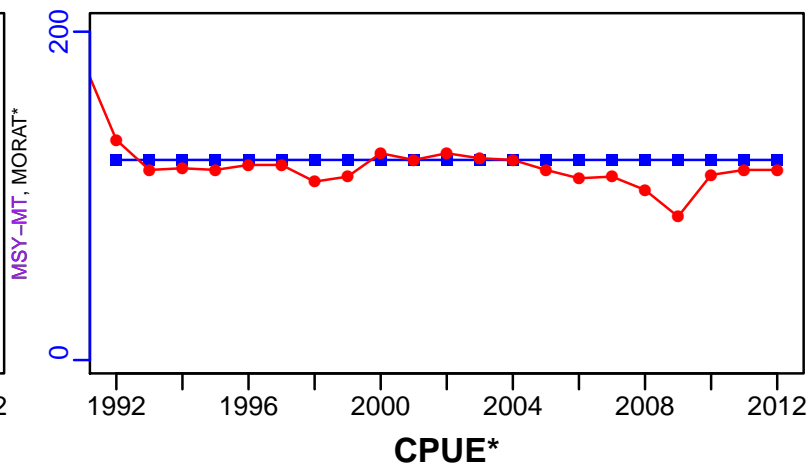
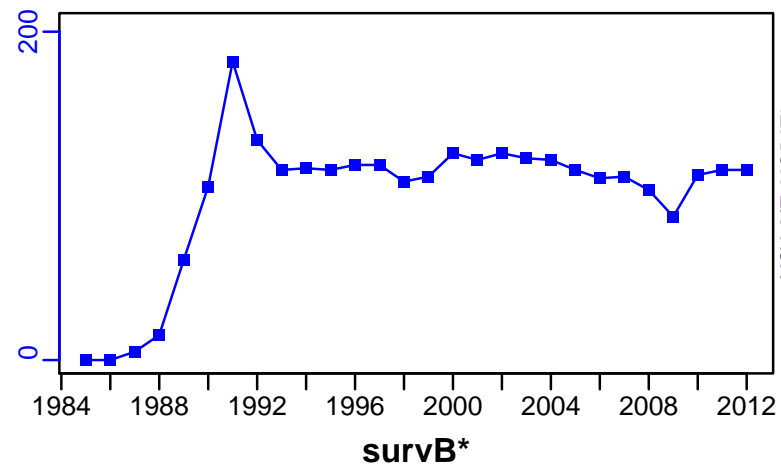
R-E00 (1985–2012–FU)



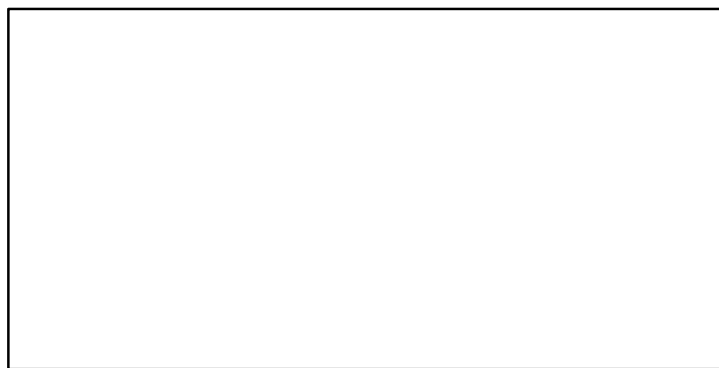
# Scampi Bay of Plenty [SCMPBP]

TC-MT, TL\*, RecC\* (1985-2012-FU)

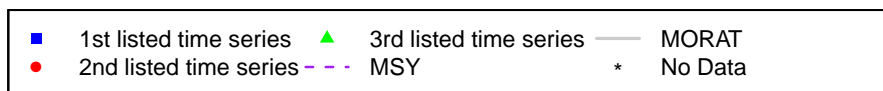
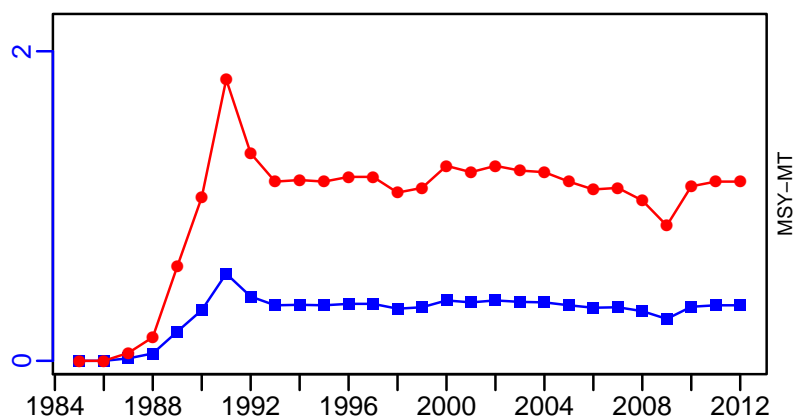
TAC-MT, Cpair-MT, Cadv\* (1985-2012-FU)



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1985-2012-FU)

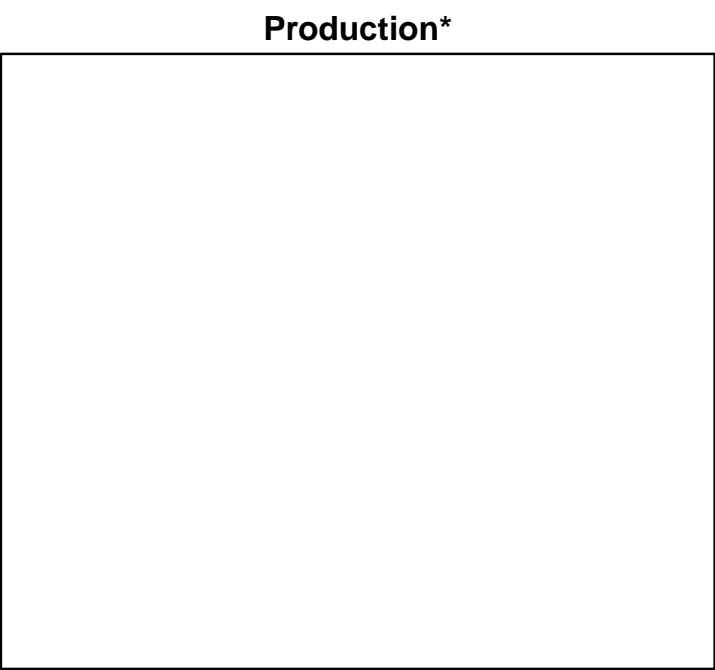
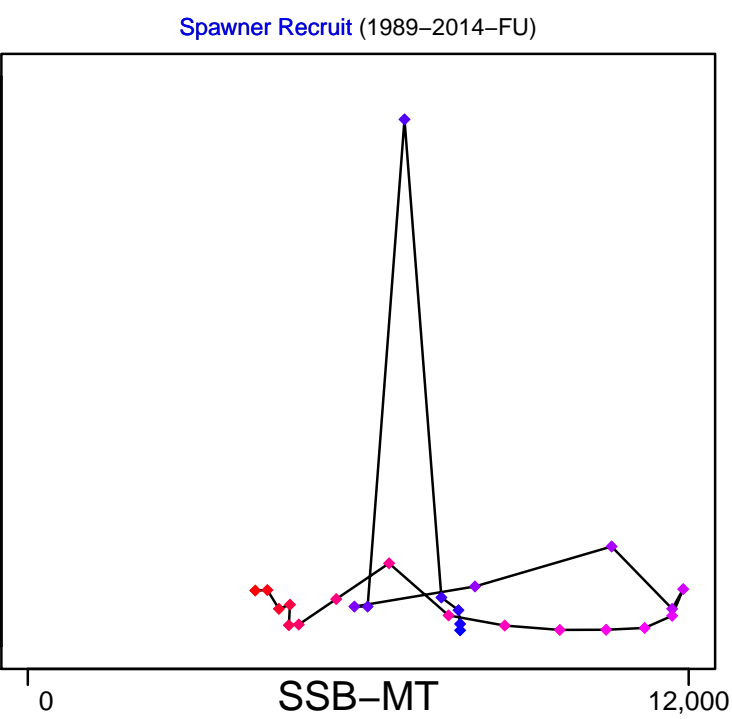
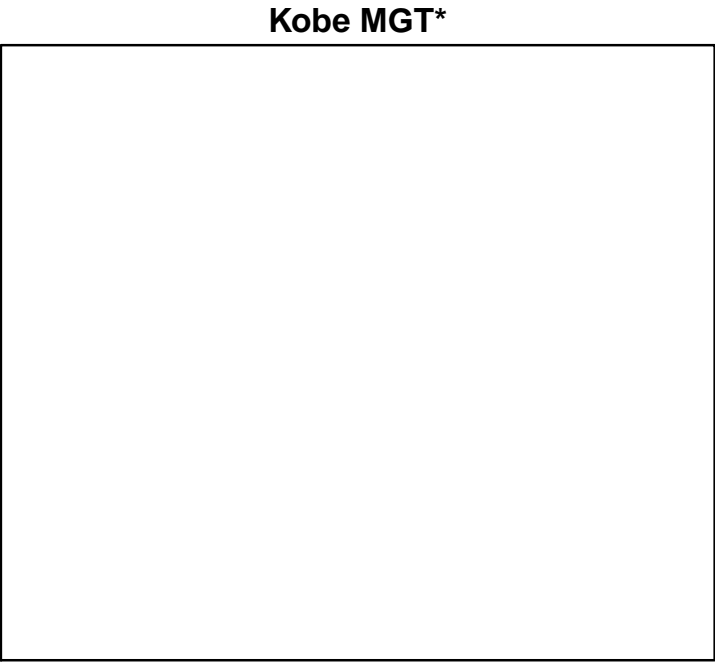


## Scampi Mernoo Bank [SCMPMB]

Metadata	
<b>Scientific Name</b>	Metanephrops challengeri
<b>Current Assess ID</b>	NIWA-SCMPMB-1989-2014-FU
<b>Area</b>	Mernoo Bank
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2014	3138
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2014	3138
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2014	7845
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2014	0.25
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2014	3990	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2014	58,600,000	Both	-
<b>F</b>	F-1/yr	2014	0.05	Both	-
<b>ER</b>	-	-	-	-	-
<b>TC</b>	TC-MT	2014	266		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2014	1.272		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2014	1.272		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

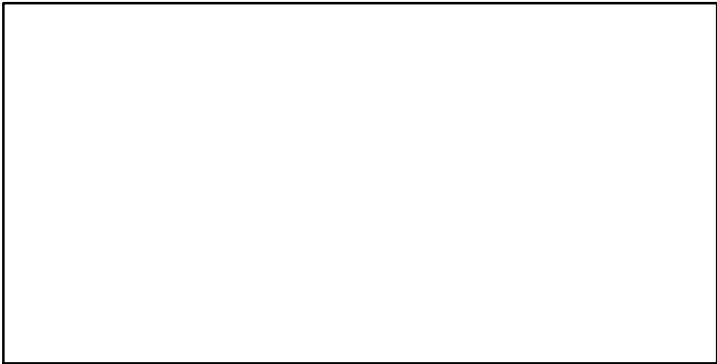


◆ Start Year ◆ End Year \* No Data

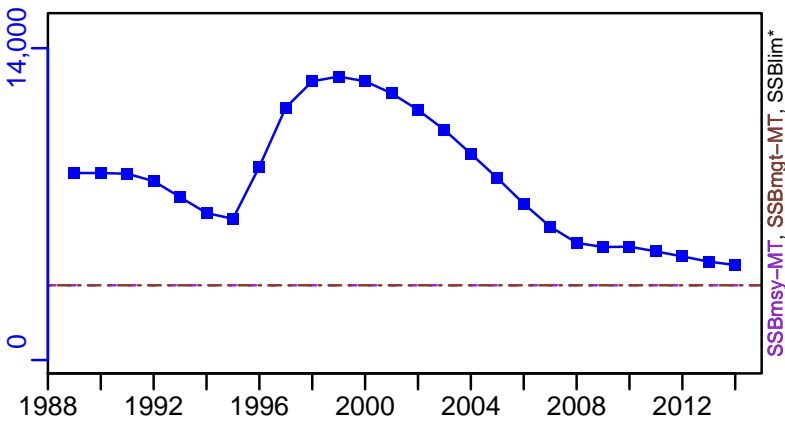


Scampi Mernoo Bank [SCMPMB]

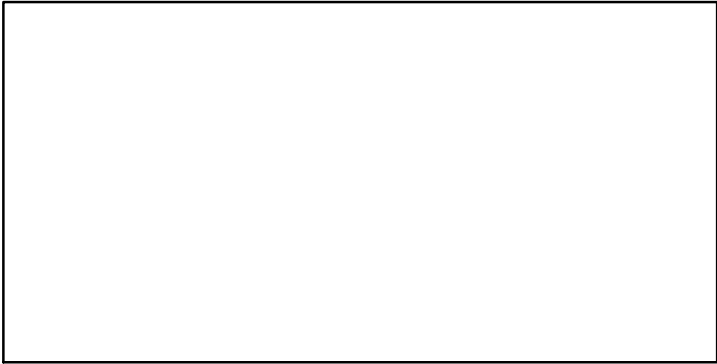
TB\*



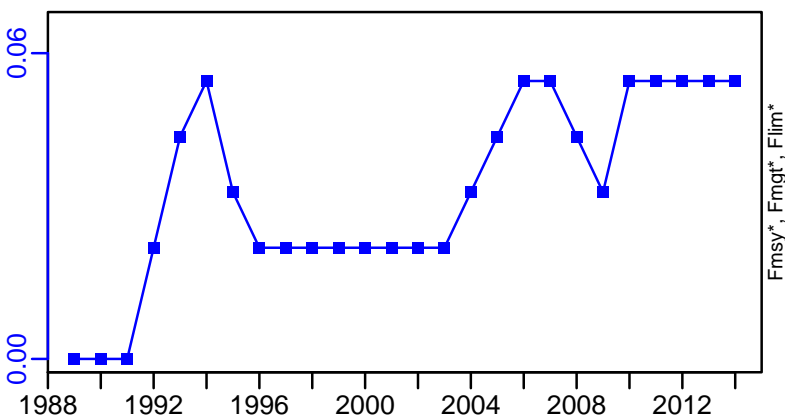
SSB-MT (1989-2014-FU)



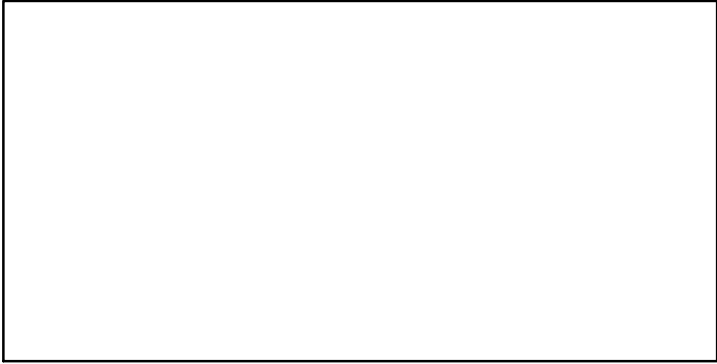
TN \*



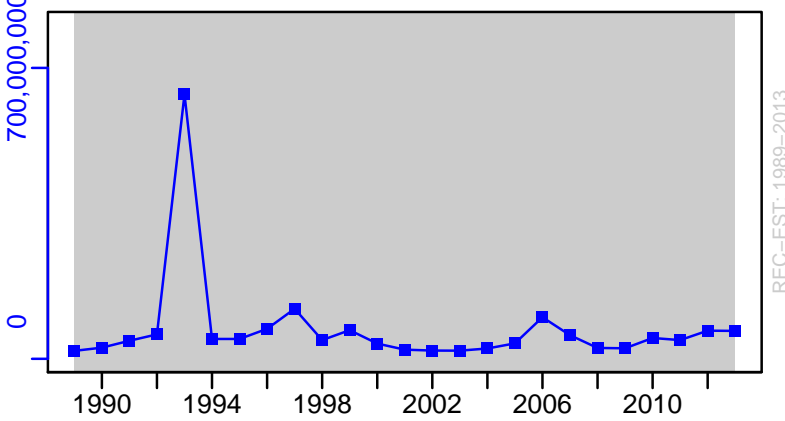
F-1/yr (1989-2014-FU)



ER\*



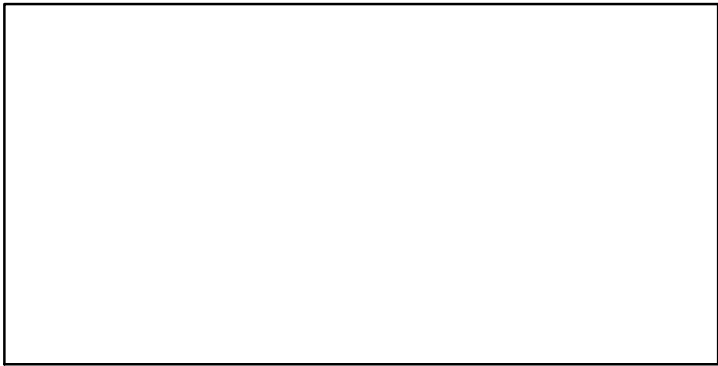
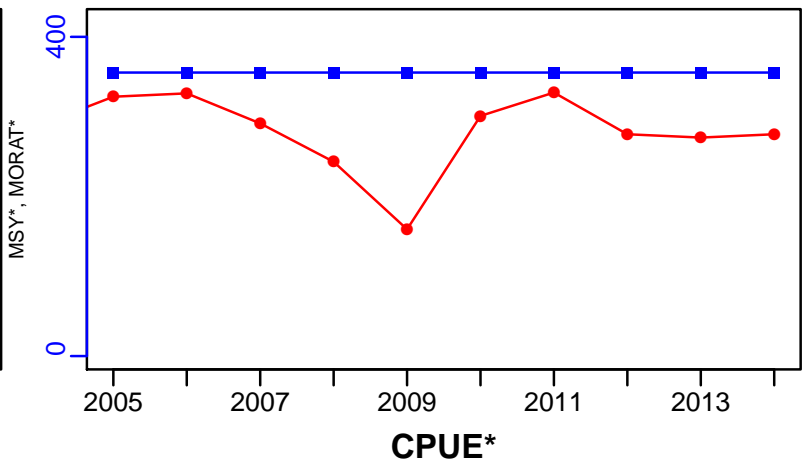
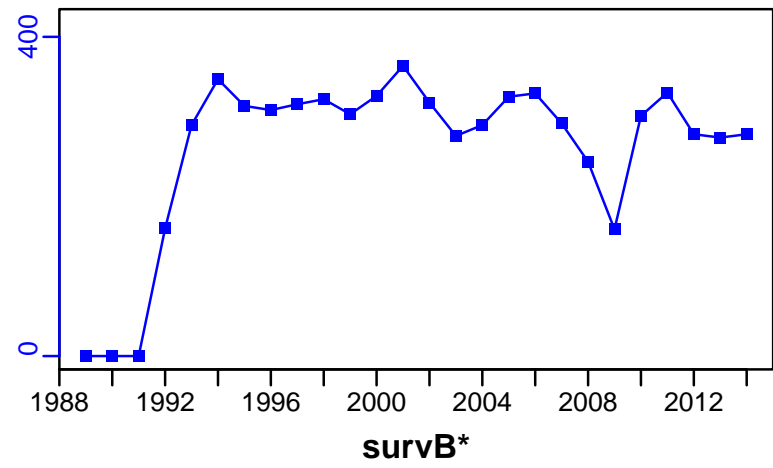
R-E00 (1989-2014-FU)



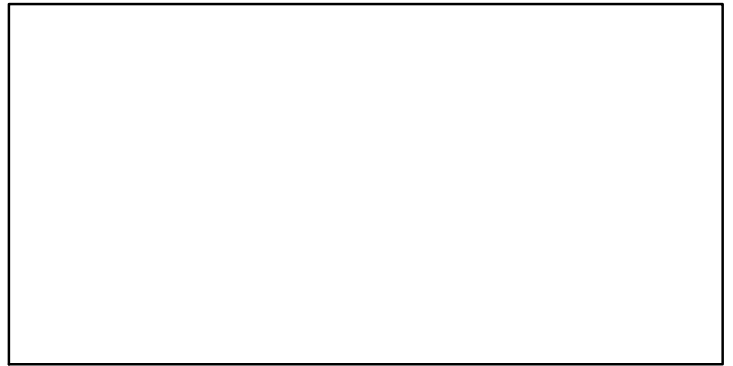
# Scampi Mernoo Bank [SCMPMB]

TC-MT, TL\*, RecC\* (1989-2014-FU)

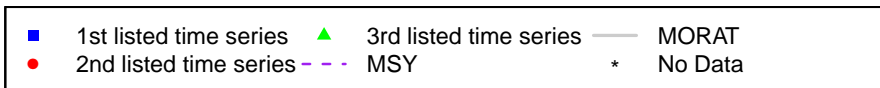
TAC-MT, Cpair-MT, Cadv\* (1989-2014-FU)



**EFFORT\***



**CdivMSY\***



## Scampi Wairarapa/Hawke Bay [SCMPWHB]

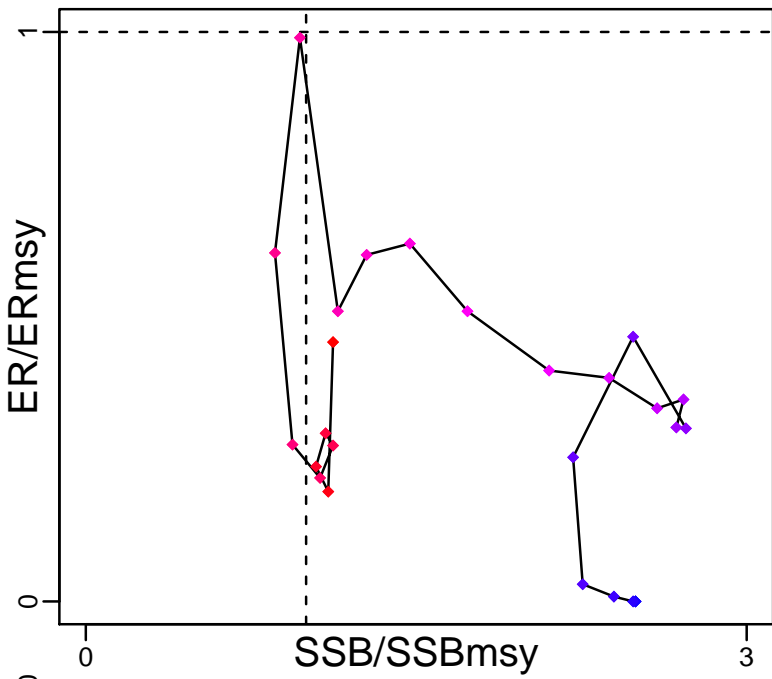
Metadata	
<b>Scientific Name</b>	Metanephrops challengeri
<b>Current Assess ID</b>	NIWA-SCMPWHB-1985-2012-FU
<b>Area</b>	Wairarapa/Hawke Bay
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2010, 2012

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2012	942
<b>SSBmsy</b>	SSBmsy-MT	2012	1066
<b>Fmsy</b>	Fmsy-1/yr	2010	0.51
<b>ERmsy</b>	ERmsy-ratio	2012	0.206
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2012	1066
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2012	2664
<b>MSY</b>	MSY-MT	2012	194
<b>M</b>	M-1/yr	2012	0.3
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

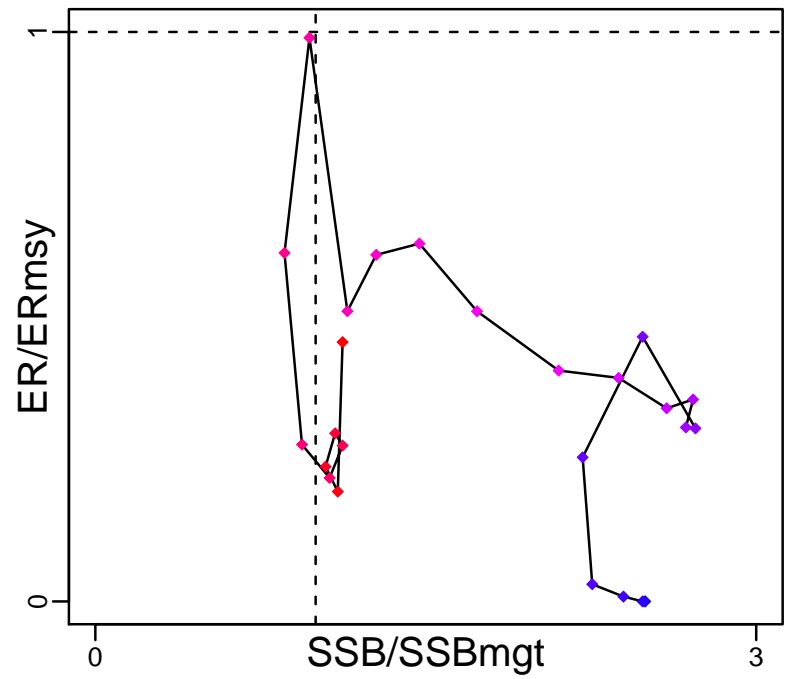
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2012	1610	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2012	13,200,000	Both	-
<b>F</b>	F-1/yr	2012	0.1	Both	-
<b>ER</b>	ER-ratio	2010	0.053	-	-
<b>TC</b>	TC-MT	2012	98		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2012	1.511		
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2010	0.335		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2010	0.455		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2012	1.511		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Scampi Wairarapa/Hawke Bay [SCMPWHB]

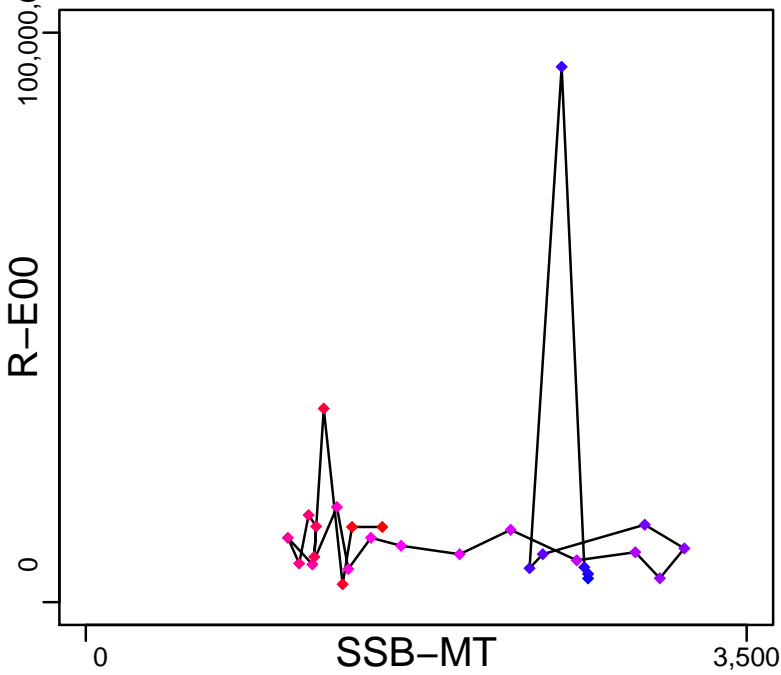
Kobe MSYpref (1985–2010–CORDUE)



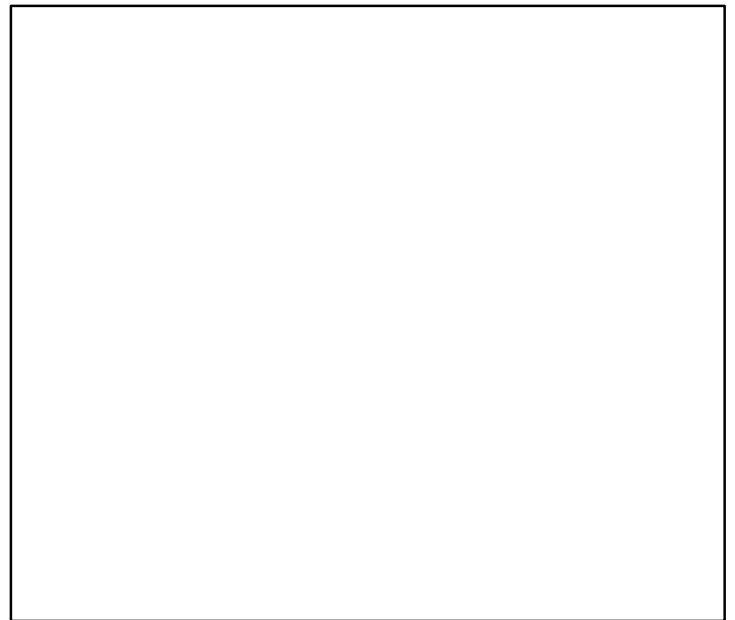
Kobe MGTpref (1985–2010–CORDUE)



Spawner Recruit (1985–2012–FU)



Production\*



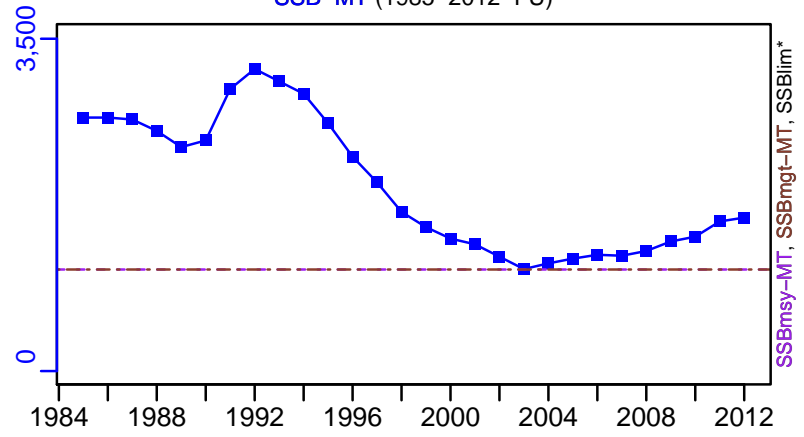
◆ Start Year ◆ End Year \* No Data

# Scampi Wairarapa/Hawke Bay [SCMPWHB]

TB\*



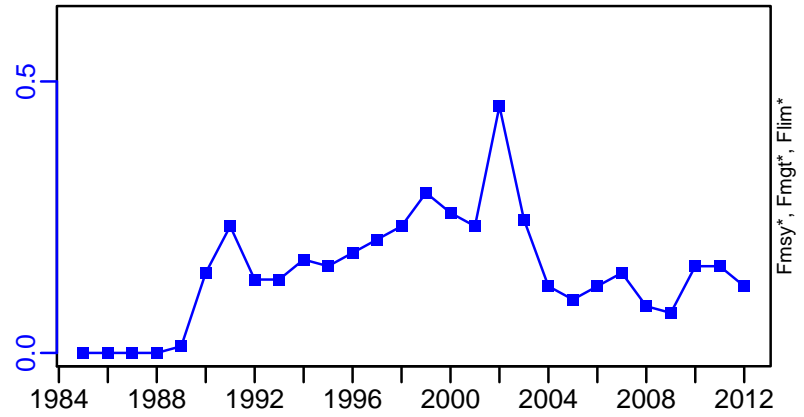
SSB-MT (1985–2012–FU)



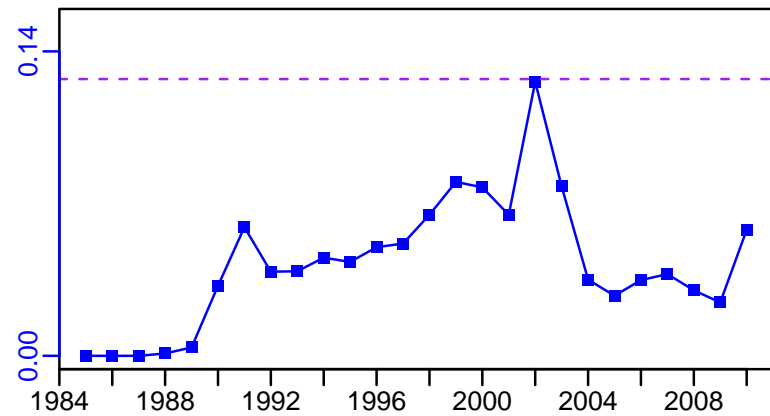
TN \*



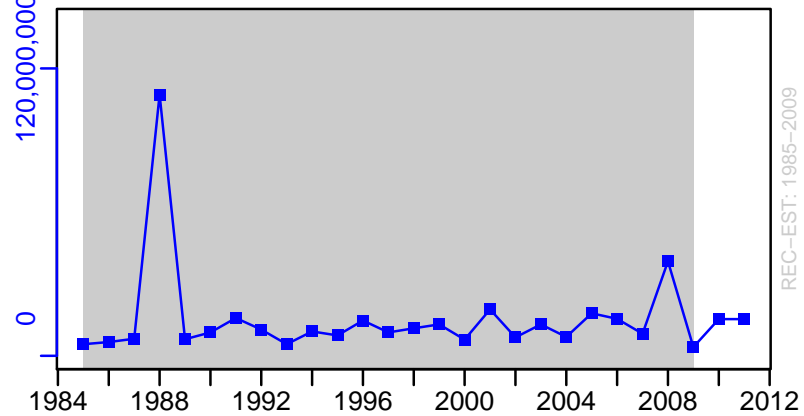
F-1/yr (1985–2012–FU)



ER-ratio (1985–2010–CORDUE)

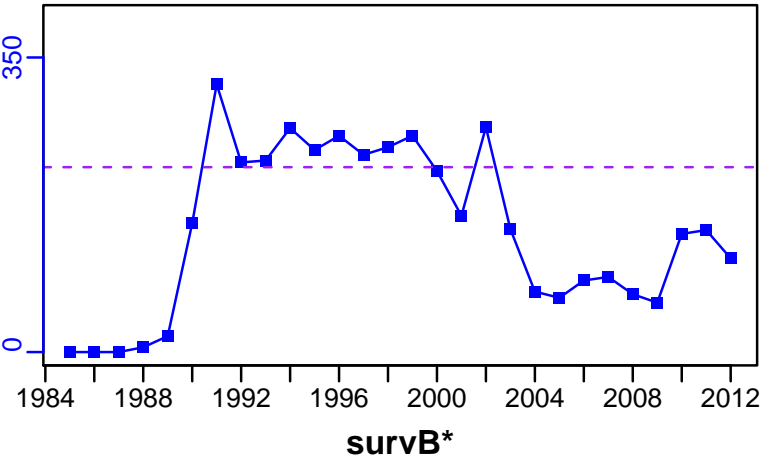


R-E00 (1985–2012–FU)

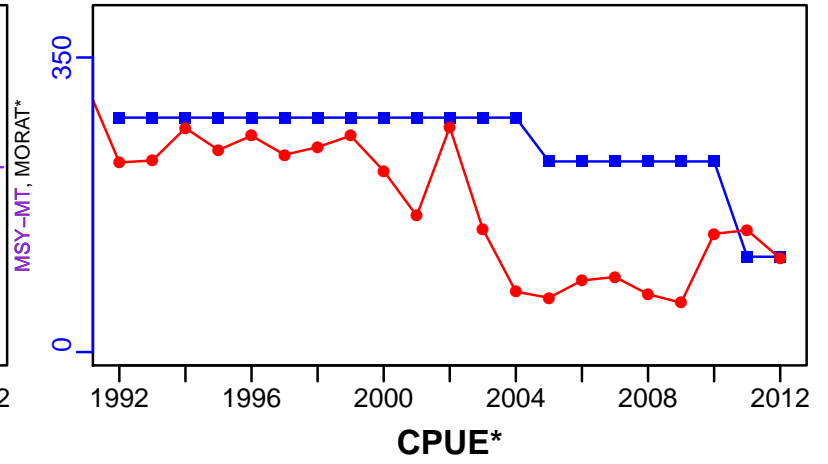


# Scampi Wairarapa/Hawke Bay [SCMPWHB]

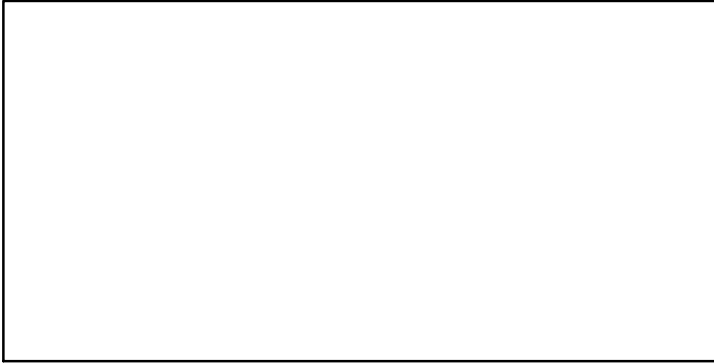
TC-MT, TL\*, RecC\* (1985-2012-FU)



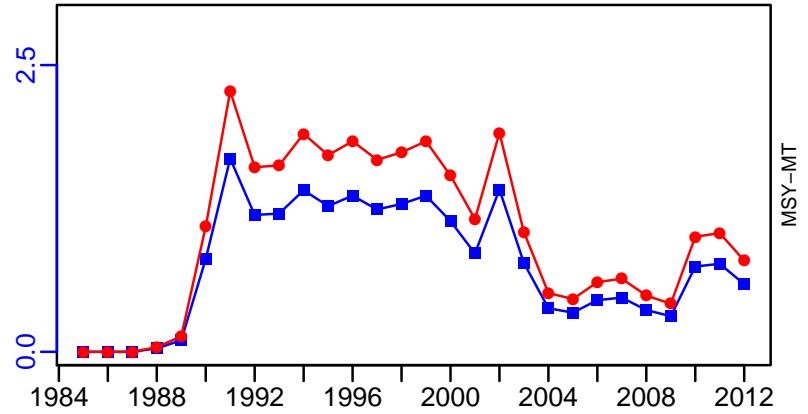
TAC-MT, Cpair-MT, Cadv\* (1985-2012-FU)



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1985-2012-FU)



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

## Smooth oreo Bounty Plateau [SMOOTHOREOBP]

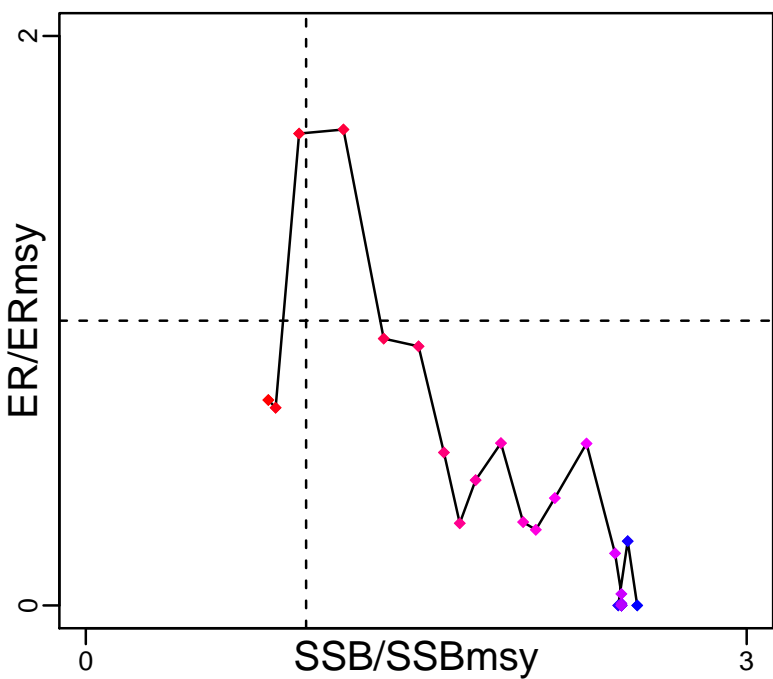
Metadata	
<b>Scientific Name</b>	Pseudocyttus maculatus
<b>Current Assess ID</b>	NIWA-SMOOTHOREOBP-1983-2008-CORDUE
<b>Area</b>	Bounty Plateau
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2008

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2008	6386
<b>SSBmsy</b>	SSBmsy-MT	2008	6951
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2008	0.07
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2008	6951
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2008	17,378
<b>MSY</b>	MSY-MT	2008	447
<b>M</b>	M-1/yr	2008	0.06
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

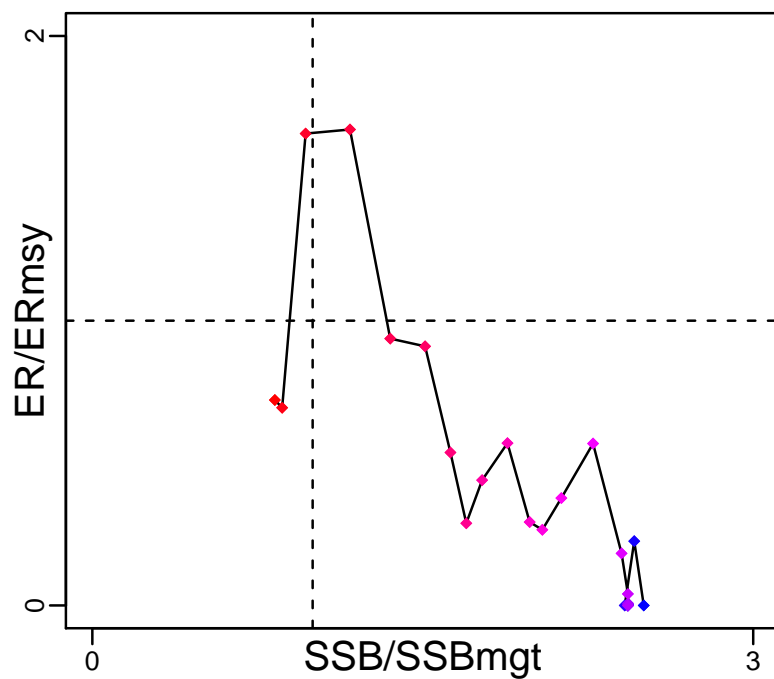
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2008	5760	Both	25+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2008	2,620,000	-	1
<b>F</b>	F-1/yr	2008	0.102	-	-
<b>ER</b>	ER-ratio	2008	0.05	-	-
<b>TC</b>	TC-MT	2008	670		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2008	0.829		
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2008	1.42		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2008	0.721		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2008	0.829		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Smooth oreo Bounty Plateau [SMOOTHOREOBP]

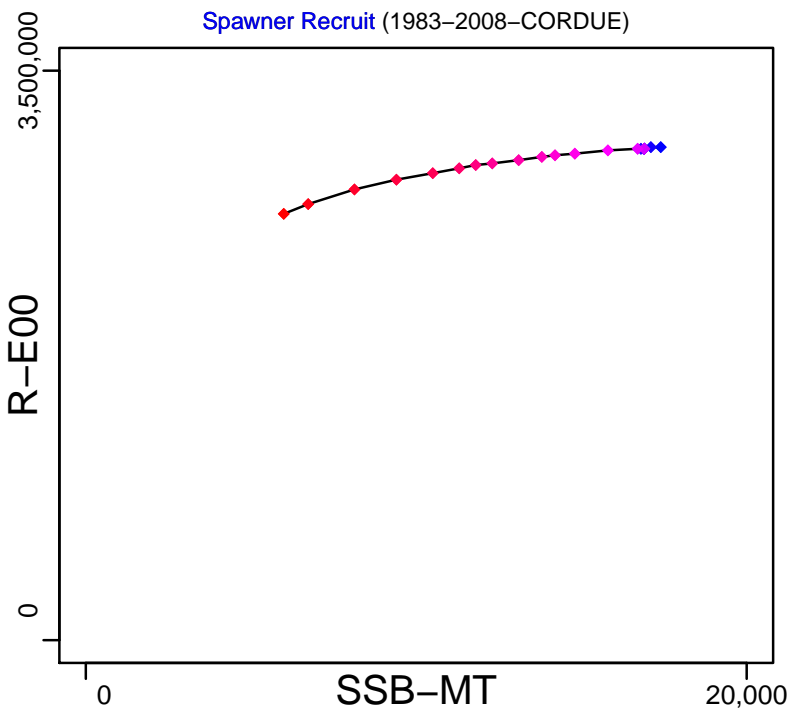
Kobe MSYpref (1983–2008–CORDUE)



Kobe MGTpref (1983–2008–CORDUE)



Spawner Recruit (1983–2008–CORDUE)



Production\*



◆ Start Year ◆ End Year \* No Data

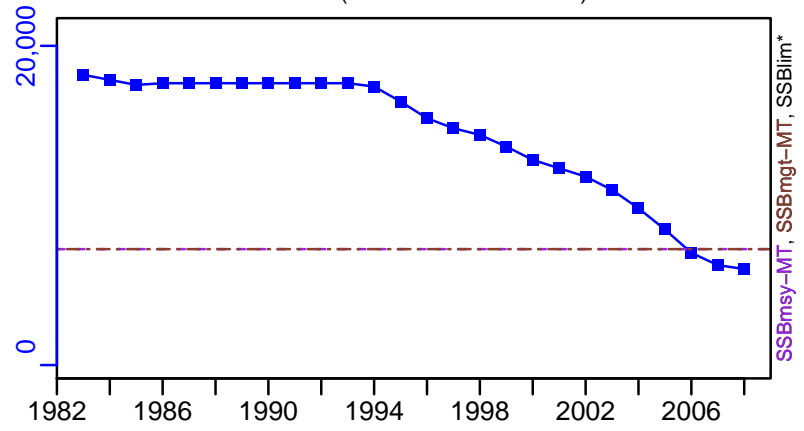


# Smooth oreo Bounty Plateau [SMOOTHOREOBP]

TB\*



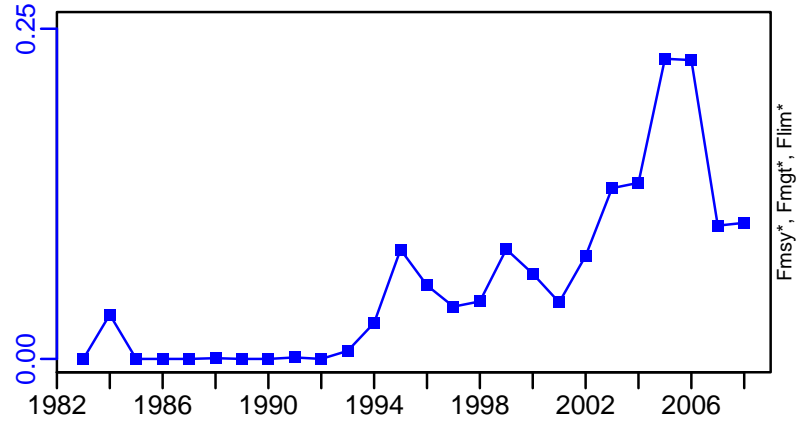
SSB-MT (1983–2008–CORDUE)



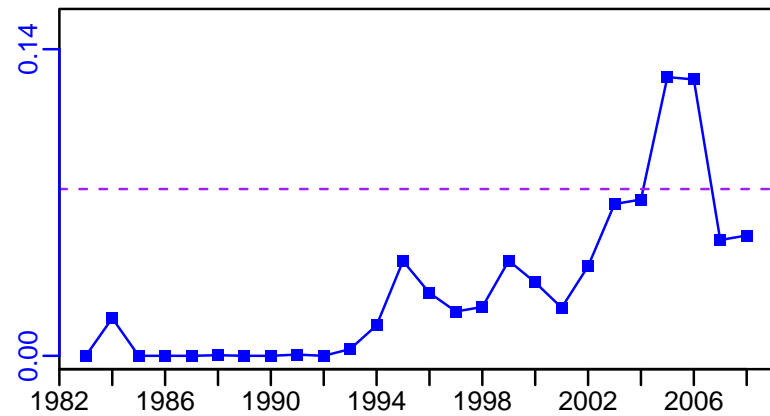
TN \*



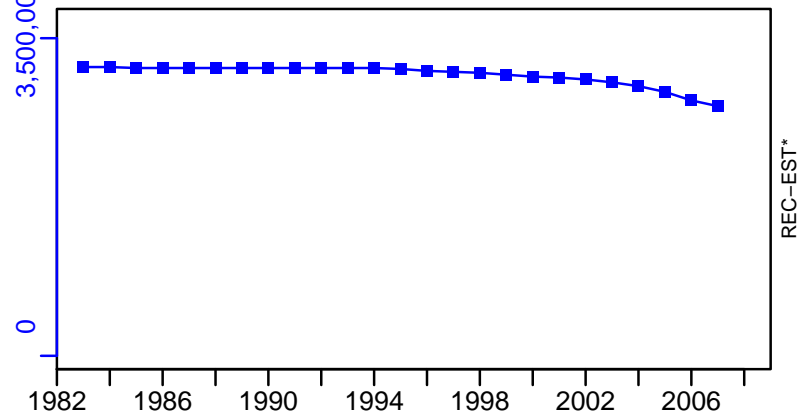
F-1/yr (1983–2008–CORDUE)



ER-ratio (1983–2008–CORDUE)

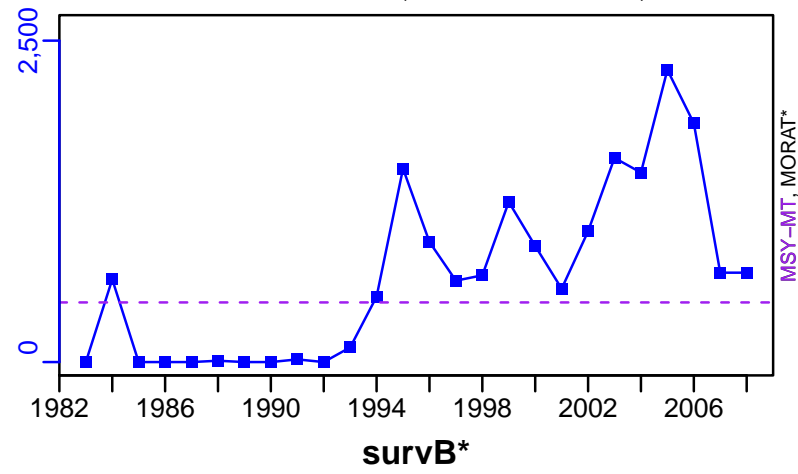


R-E00 (1983–2008–CORDUE)



# Smooth oreo Bounty Plateau [SMOOTHOREOBP]

TC-MT, TL\*, RecC\* (1983-2008-CORDUE)



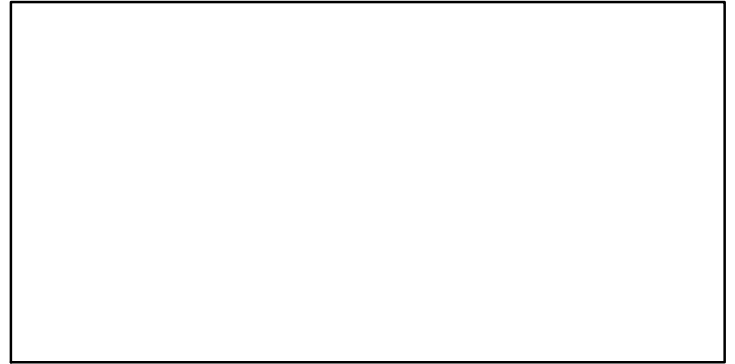
TAC\*, Cpair\*, Cadv\*



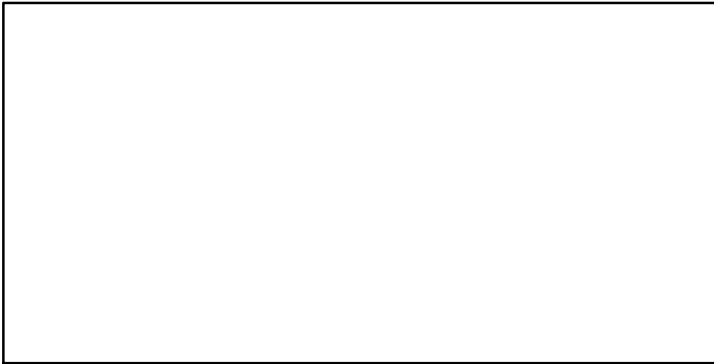
survB\*



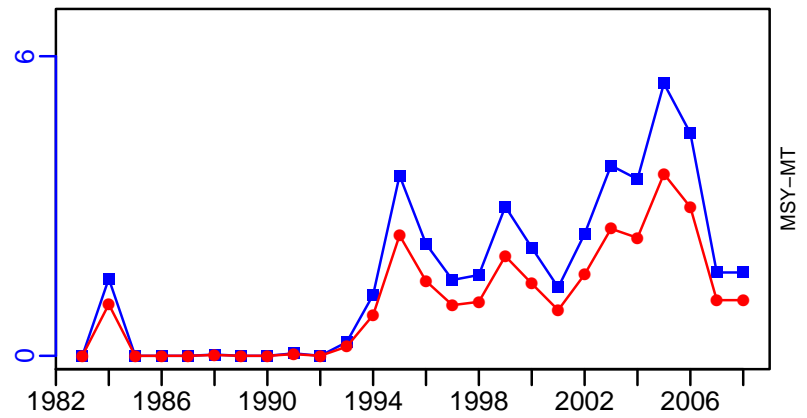
CPUE\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1983-2008-CORDUE)



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

## Smooth oreo Chatham Rise [SMOOTHOREOCR]

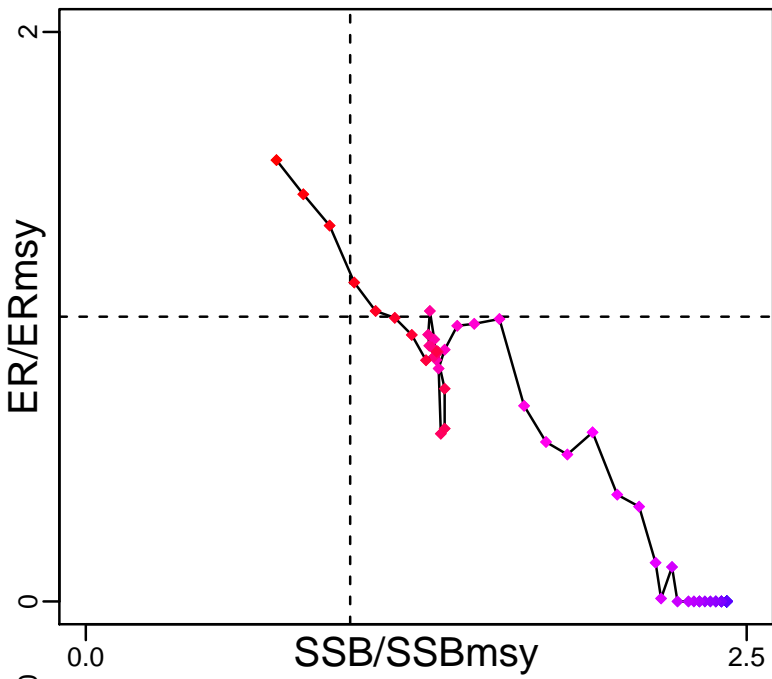
Metadata	
<b>Scientific Name</b>	Pseudocyttus maculatus
<b>Current Assess ID</b>	NIWA-SMOOTHOREOCR-1955-2013-FU
<b>Area</b>	Chatham Rise
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2013, 2010

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2013	15,768
<b>SSBmsy</b>	SSBmsy-MT	2013	48,252
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2013	0.19
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2013	48,252
<b>Fmgt</b>	-	-	-
<b>ERMgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2013	120,629
<b>MSY</b>	MSY-MT	2013	2996
<b>M</b>	M-1/yr	2013	0.06
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

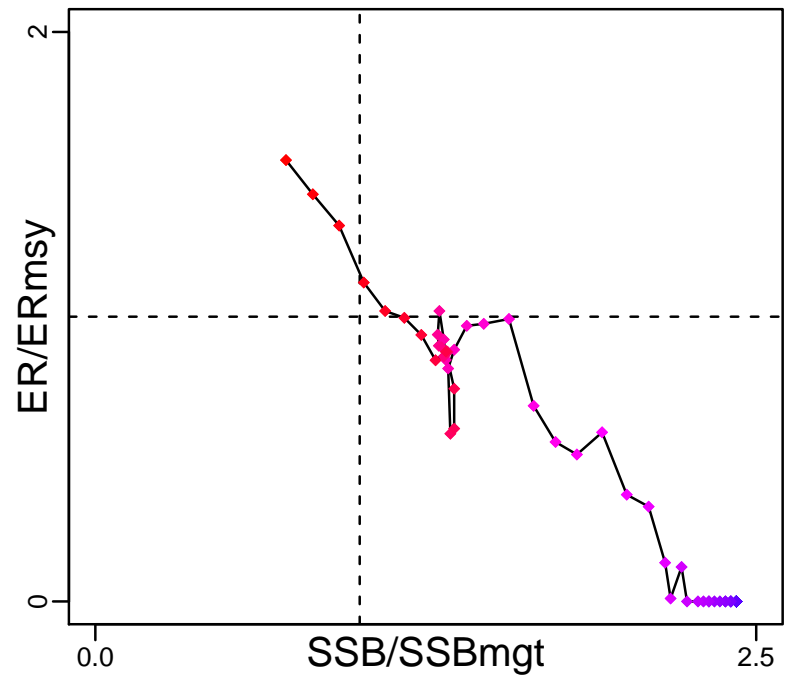
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2013	34,800	-	1 to 70
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2013	17,400,000	Both	1 to 70
<b>F</b>	F-1/yr	2010	0.095	-	-
<b>ER</b>	ER-ratio	2013	0.155	Both	1 to 70
<b>TC</b>	TC-MT	2013	5960		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2013	0.721		
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2010	1.03		
<b>ER/ERmsy</b>	ERdivERmsy-dimensionless	2013	1.55		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2013	0.721		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERMgt</b>	-	-	-		

# Smooth oreo Chatham Rise [SMOOTHOREOCR]

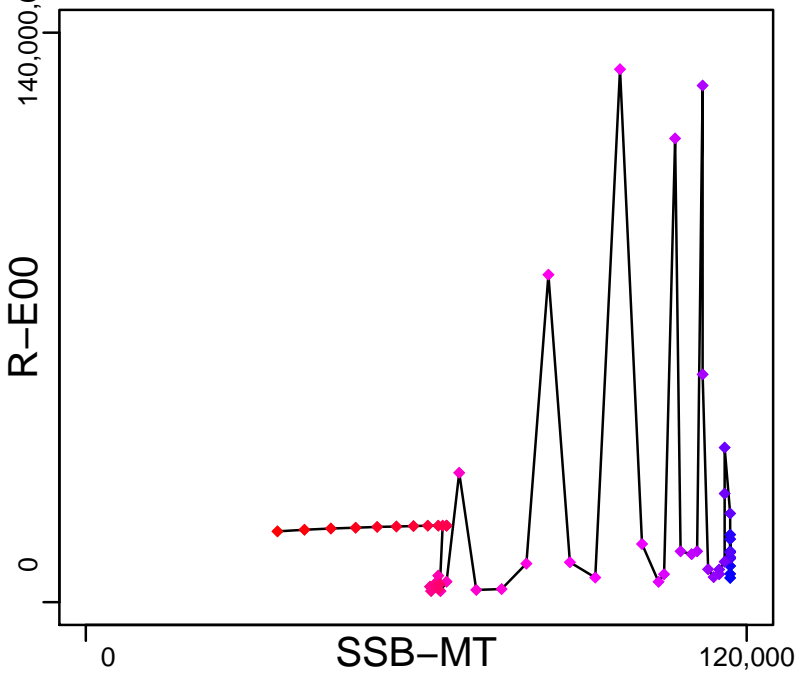
Kobe MSYpref (1955–2013–FU)



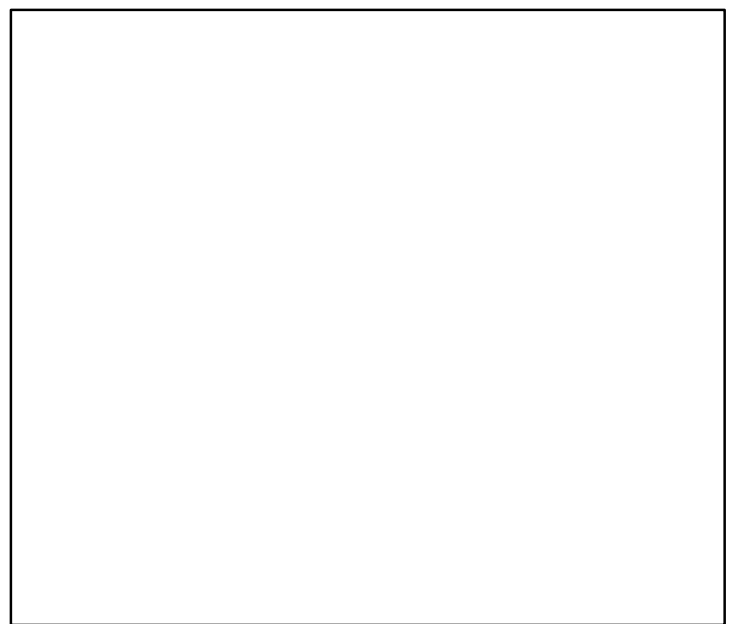
Kobe MGTpref (1955–2013–FU)



Spawner Recruit (1955–2013–FU)



Production\*



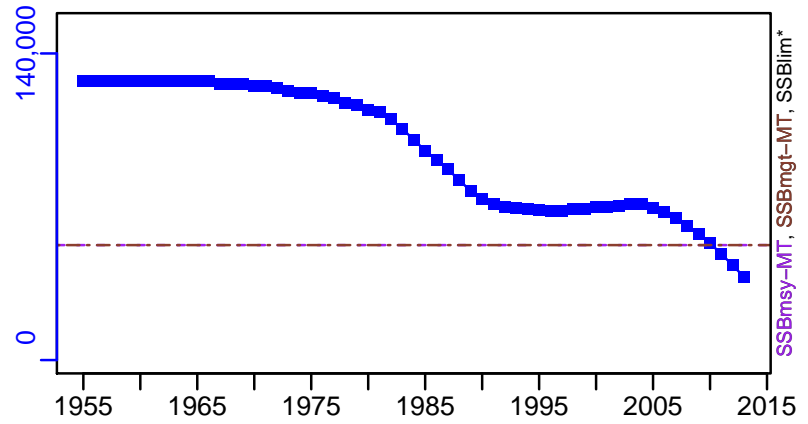
◆ Start Year ◆ End Year \* No Data

# Smooth oreo Chatham Rise [SMOOTHOREOCR]

TB\*



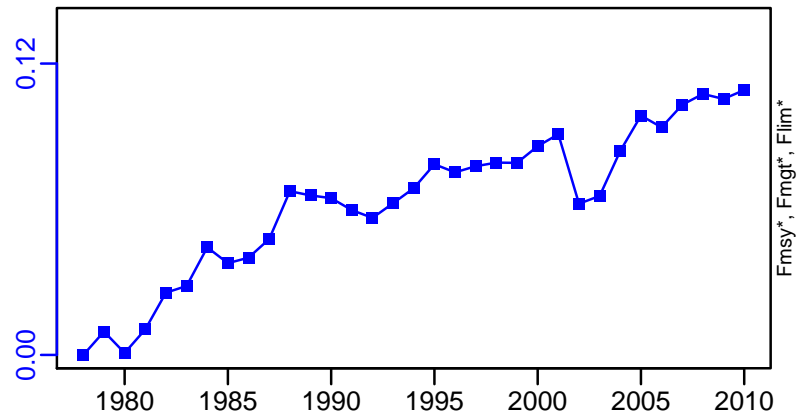
SSB-MT (1955–2013–FU)



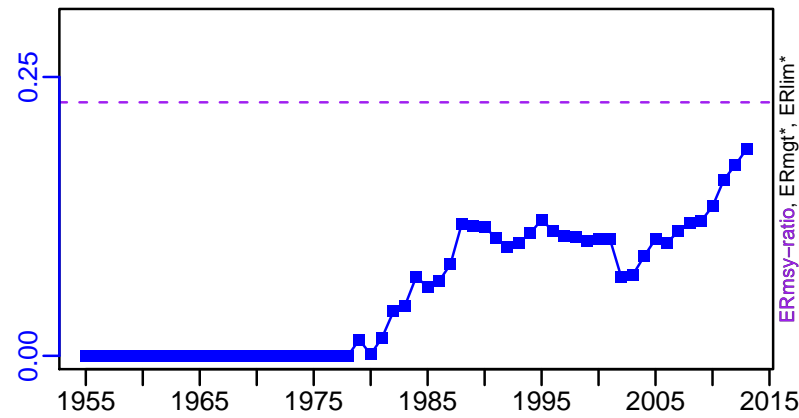
TN \*



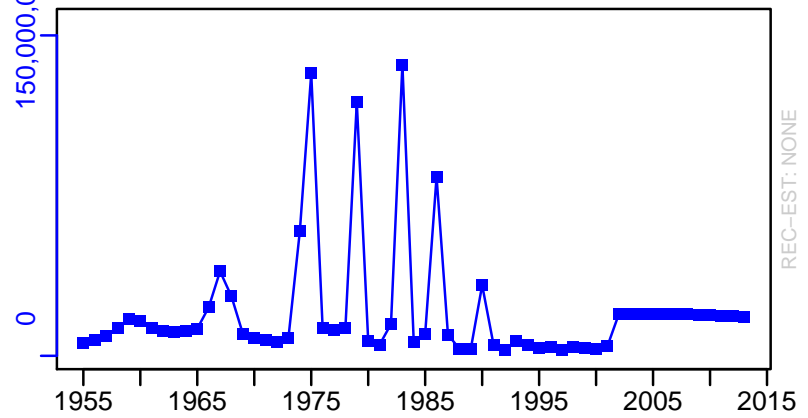
F-1/yr (1978–2010–CORDUE)



ER-ratio (1955–2013–FU)



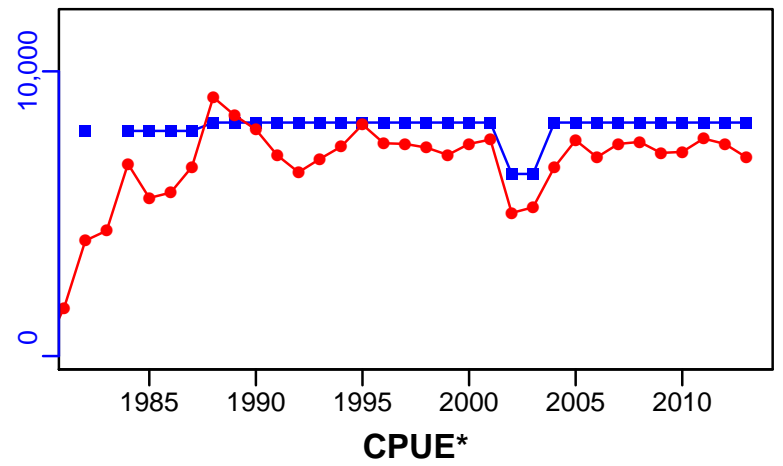
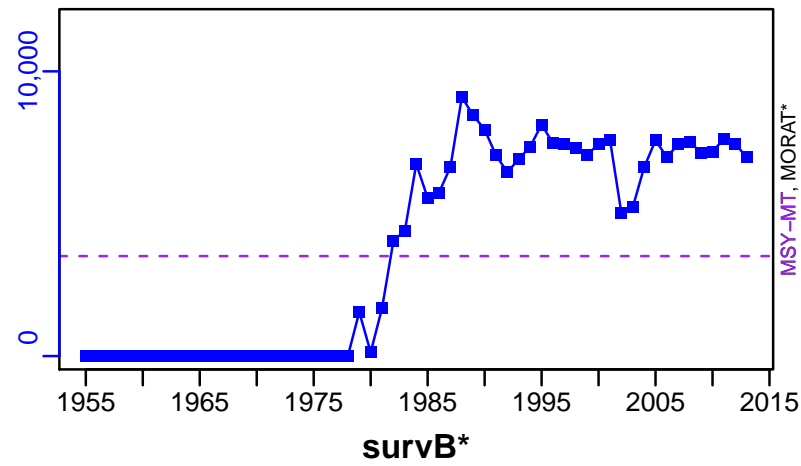
R-E00 (1955–2013–FU)



# Smooth oreo Chatham Rise [SMOOTHOREOCR]

TC-MT, TL\*, RecC\* (1955-2013-FU)

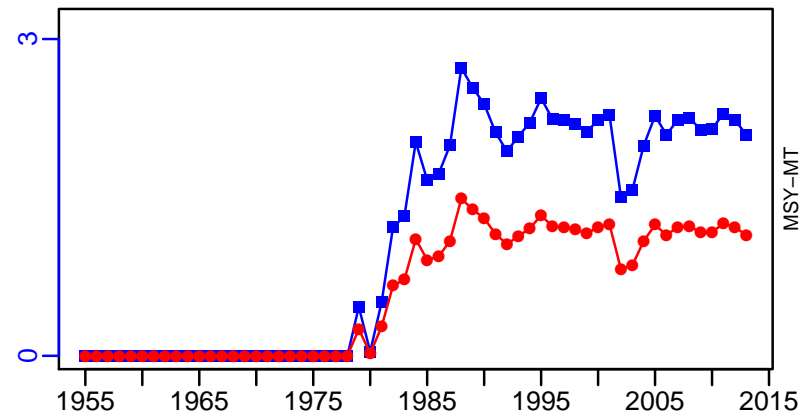
TAC-MT, Cpair-MT, Cadv\* (1955-2013-FU)



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1955-2013-FU)



## Smooth oreo East Pukaki Rise [SMOOTHOREOEPR]

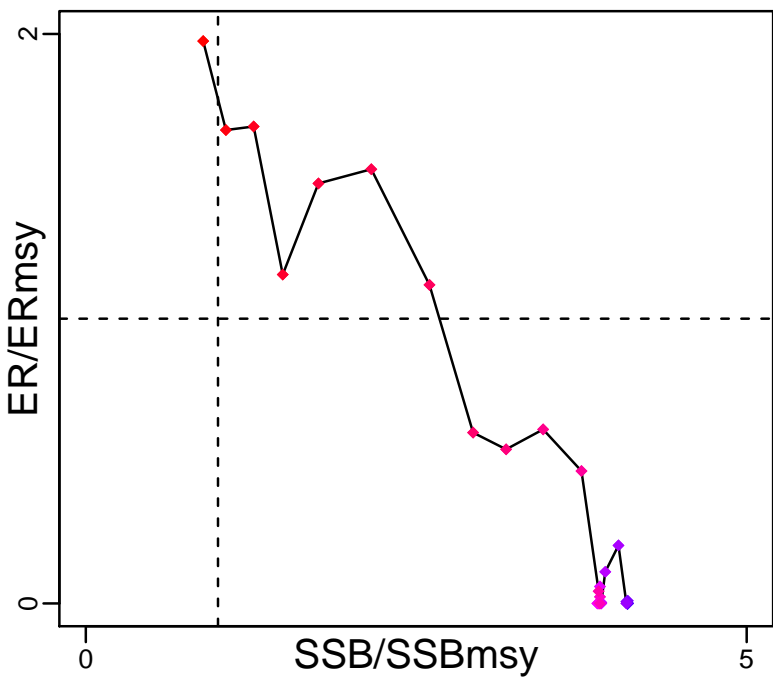
Metadata	
<b>Scientific Name</b>	Pseudocyttus maculatus
<b>Current Assess ID</b>	NIWA-SMOOTHOREOEPR-1973-2006-CORDUE
<b>Area</b>	East Pukaki Rise
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2006

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2006	5538
<b>SSBmsy</b>	SSBmsy-MT	2006	4239
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2006	0.08
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2006	17,372
<b>MSY</b>	MSY-MT	2006	443
<b>M</b>	M-1/yr	2006	0.06
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

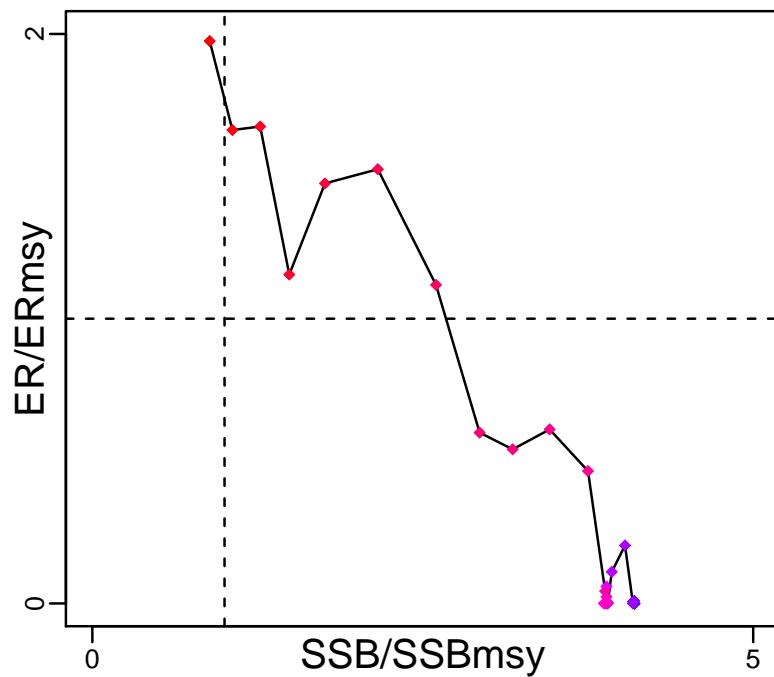
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2006	3760	Both	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2006	2,180,000	-	5
<b>F</b>	F-1/yr	2006	0.268	-	-
<b>ER</b>	ER-ratio	2006	0.158	-	-
<b>TC</b>	TC-MT	2006	1370		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSBdivSSBmsy-dimensionless	2006	0.888		
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2006	3.35		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2006	1.975		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Smooth oreo East Pukaki Rise [SMOOTHOREOEPR]

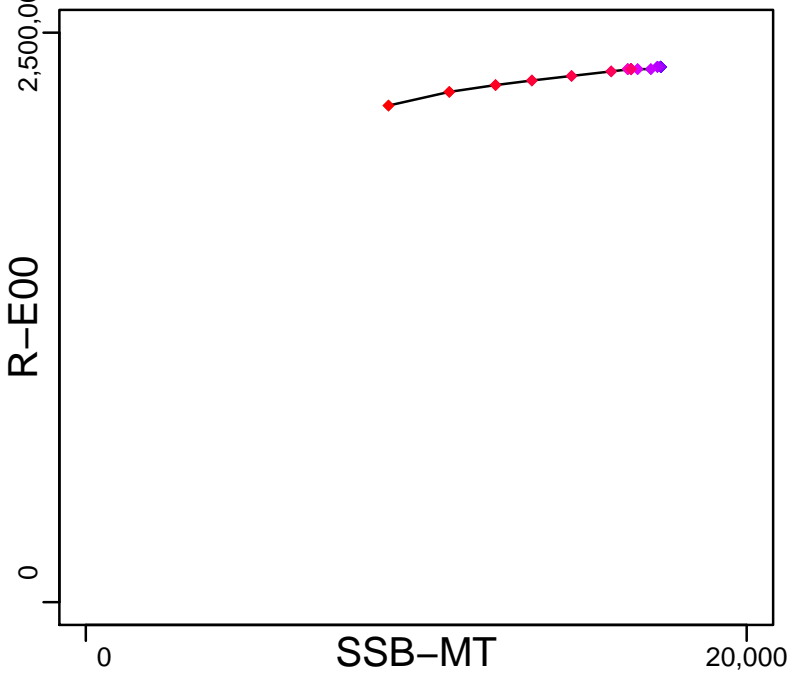
Kobe MSYpref (1973–2006–CORDUE)



Kobe MGTpref (1973–2006–CORDUE)



Spawner Recruit (1973–2006–CORDUE)



Production\*



◆ Start Year ◆ End Year \* No Data

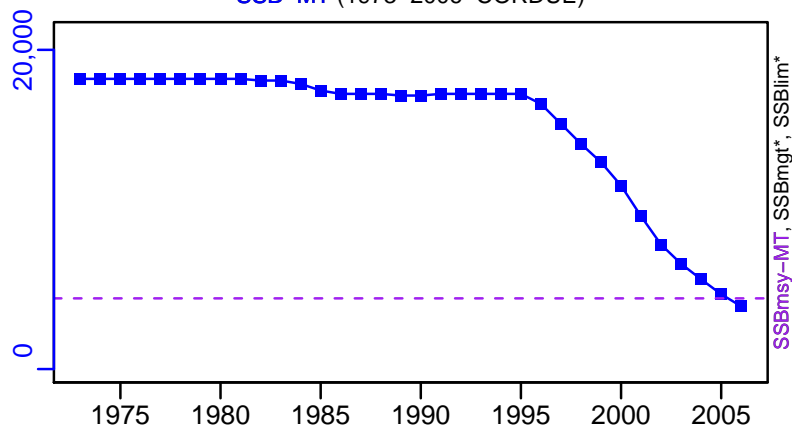


# Smooth oreo East Pukaki Rise [SMOOTHOREOEPR]

TB\*



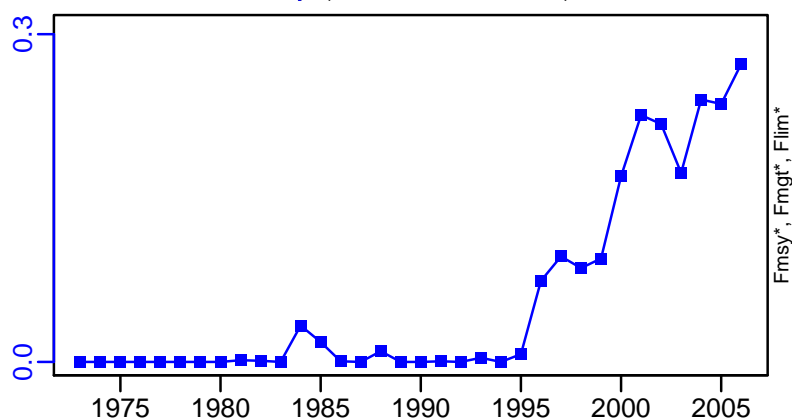
SSB-MT (1973-2006-CORDUE)



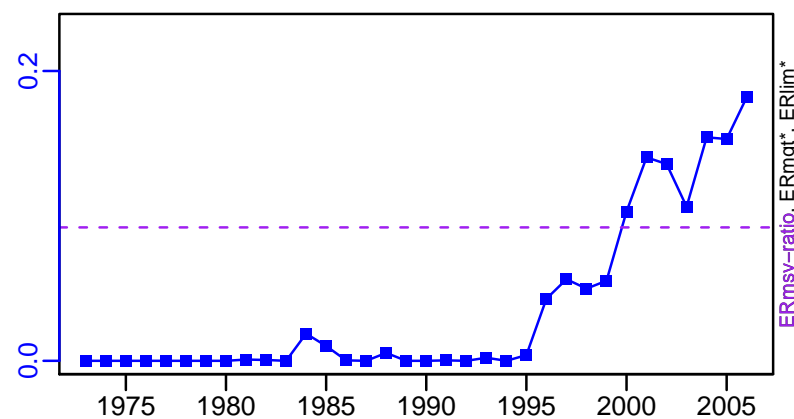
TN \*



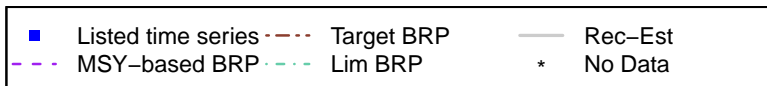
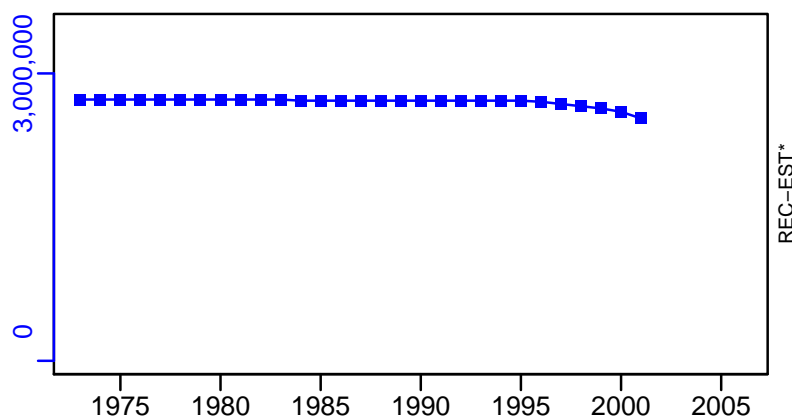
F-1/yr (1973-2006-CORDUE)



ER-ratio (1973-2006-CORDUE)

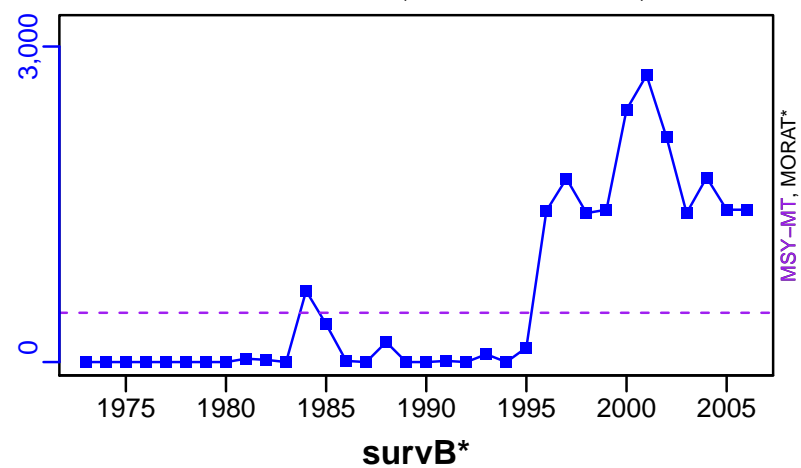


R-E00 (1973-2006-CORDUE)



# Smooth oreo East Pukaki Rise [SMOOTHOREOEPR]

TC-MT, TL\*, RecC\* (1973–2006–CORDUE)



TAC\*, Cpair\*, Cadv\*



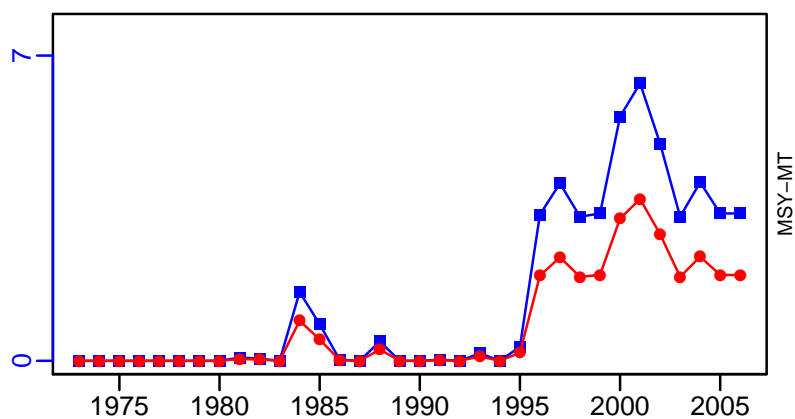
CPUE\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1973–2006–CORDUE)



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

## Smooth oreo Southland [SMOOTHOREOSLD]

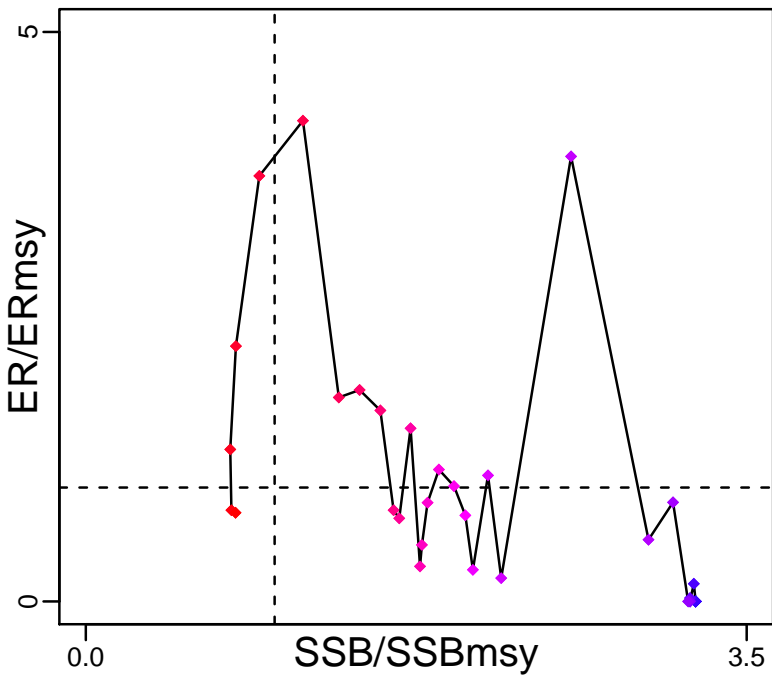
Metadata	
<b>Scientific Name</b>	Pseudocyttus maculatus
<b>Current Assess ID</b>	NIWA-SMOOTHOREOSLD-1973-2007-CORDUE
<b>Area</b>	Southland
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2007

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2007	11,999
<b>SSBmsy</b>	SSBmsy-MT	2007	5217
<b>Fmsy</b>	Fmsy-1/yr	2007	0.08
<b>ERmsy</b>	ERmsy-ratio	2007	0.035
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2007	16,829
<b>MSY</b>	MSY-MT	2007	421
<b>M</b>	M-1/yr	2007	0.06
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

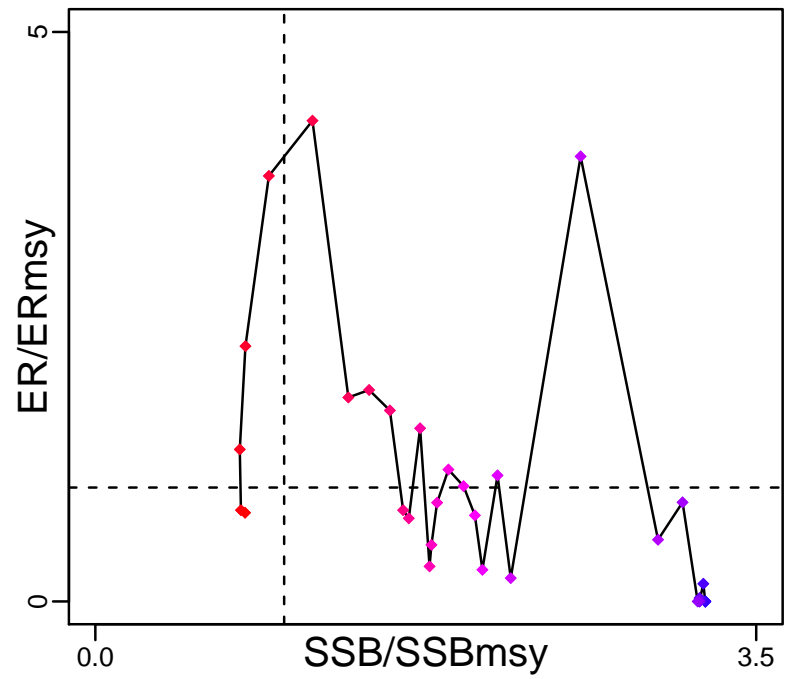
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2007	4140	Both	25+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2007	1,980,000	-	5
<b>F</b>	F-1/yr	2007	0.056	-	-
<b>ER</b>	ER-ratio	2007	0.027	-	-
<b>TC</b>	TC-MT	2007	260		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSBdivSSBmsy-dimensionless	2007	0.793		
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2007	0.718		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2007	0.779		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Smooth oreo Southland [SMOOTHOREOSLD]

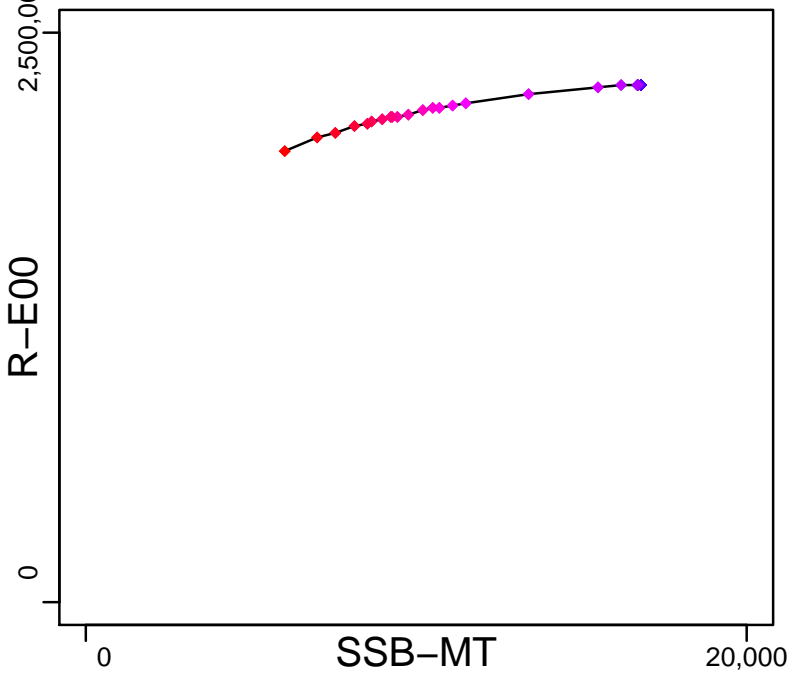
Kobe MSYpref (1973–2007–CORDUE)



Kobe MGTpref (1973–2007–CORDUE)



Spawner Recruit (1973–2007–CORDUE)



Production\*



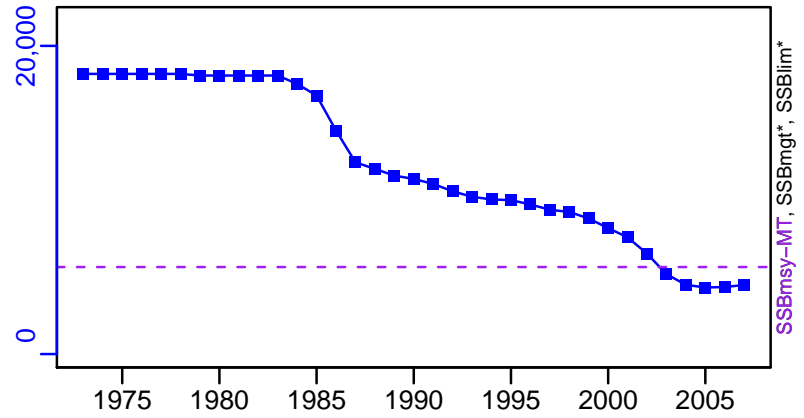
◆ Start Year ◆ End Year \* No Data

# Smooth oreo Southland [SMOOTHOREOSLD]

TB\*



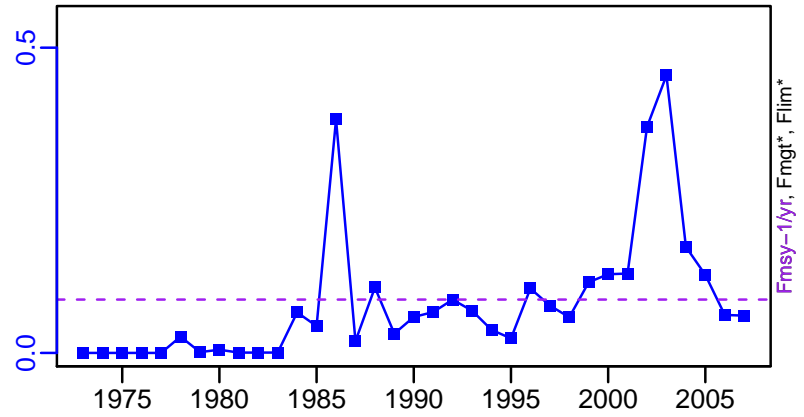
SSB-MT (1973-2007-CORDUE)



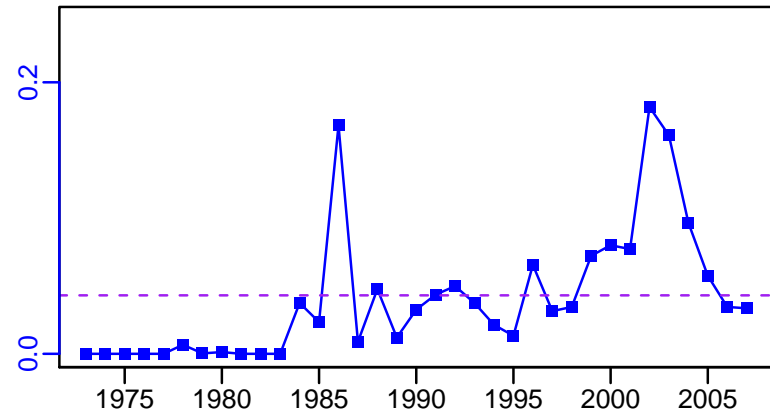
TN \*



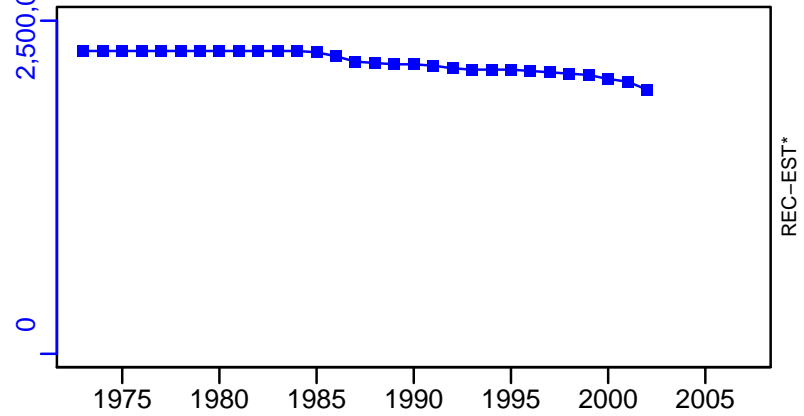
F-1/yr (1973-2007-CORDUE)



ER-ratio (1973-2007-CORDUE)

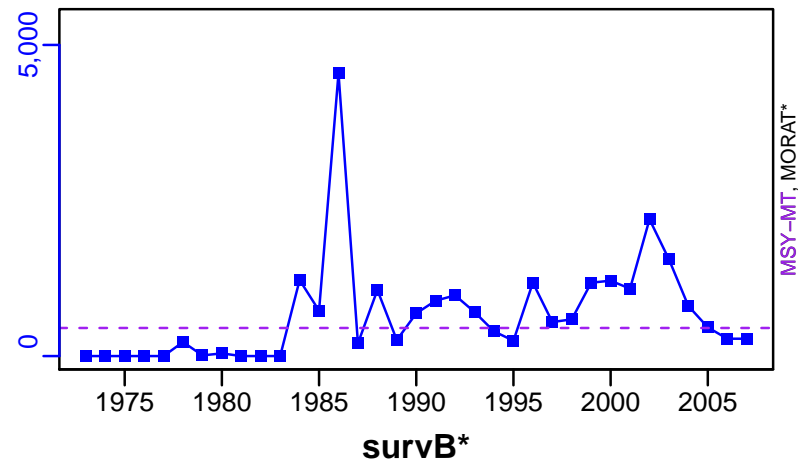


R-E00 (1973-2007-CORDUE)



# Smooth oreo Southland [SMOOTHOREOSLD]

TC-MT, TL\*, RecC\* (1973-2007-CORDUE)



TAC\*, Cpair\*, Cadv\*



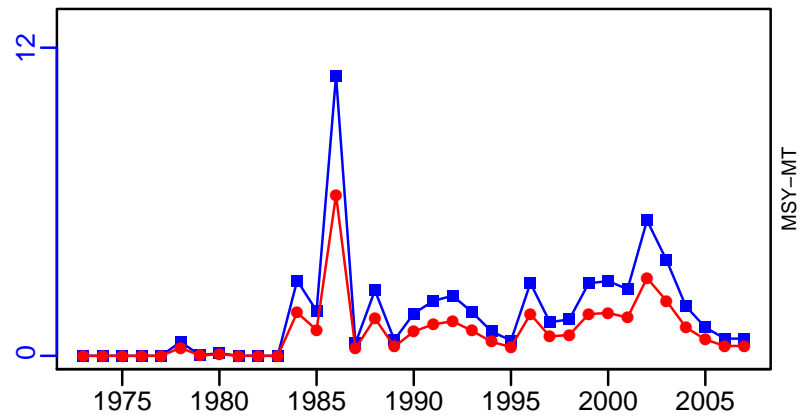
CPUE\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1973-2007-CORDUE)



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

## Smooth oreo West end of Chatham Rise [SMOOTHOREOWECCR]

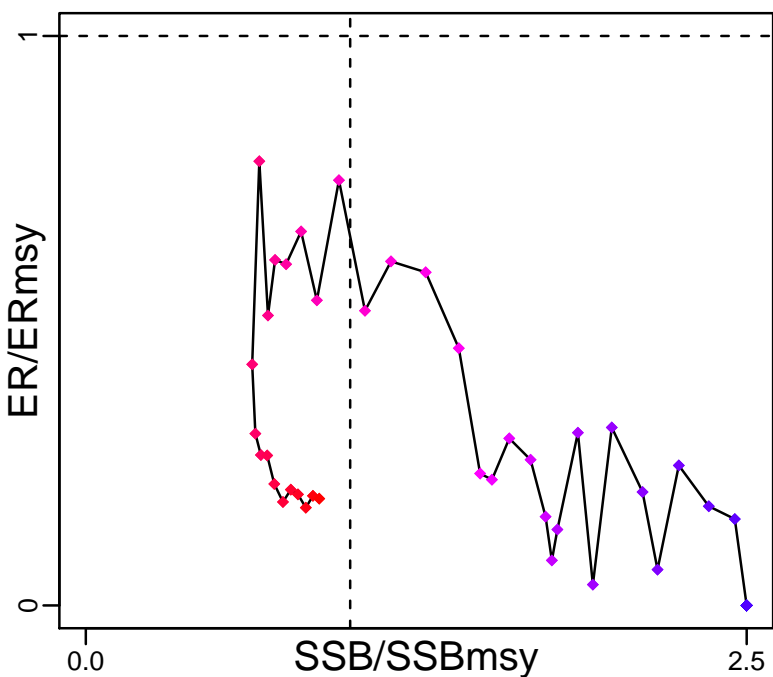
Metadata	
<b>Scientific Name</b>	Pseudocyttus maculatus
<b>Current Assess ID</b>	NIWA-SMOOTHOREOWECCR-1965-2009-CORDUE
<b>Area</b>	West end of Chatham Rise
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2009

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2009	18,158
<b>SSBmsy</b>	SSBmsy-MT	2009	33,522
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2009	0.12
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2009	33,522
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2009	83,805
<b>MSY</b>	MSY-MT	2009	2179
<b>M</b>	M-1/yr	2009	0.06
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

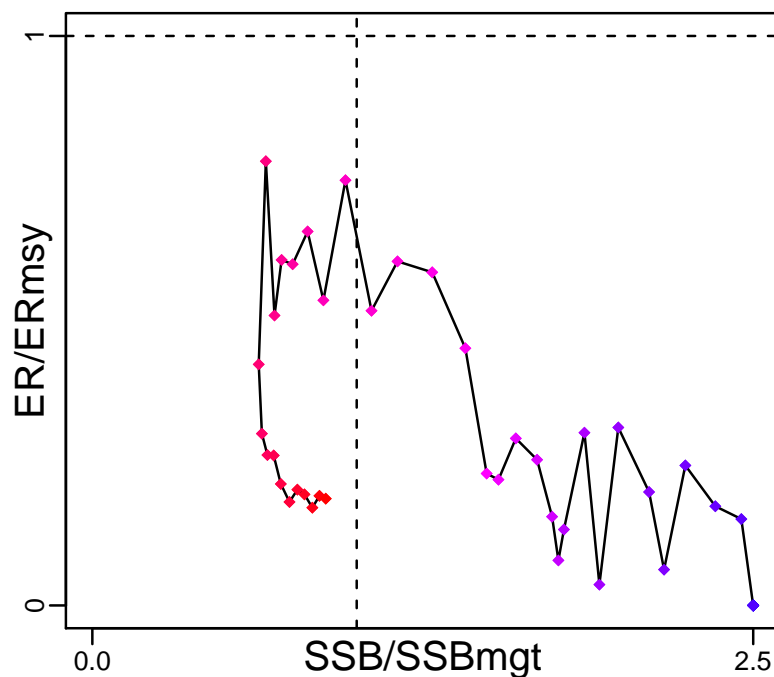
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2009	29,600	Both	25+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2009	9,930,000	-	5
<b>F</b>	F-1/yr	2009	0.059	-	-
<b>ER</b>	ER-ratio	2009	0.022	-	-
<b>TC</b>	TC-MT	2009	1530		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2009	0.883		
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2009	0.494		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2009	0.188		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2009	0.883		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Smooth oreo West end of Chatham Rise [SMOOTHOREOWECR]

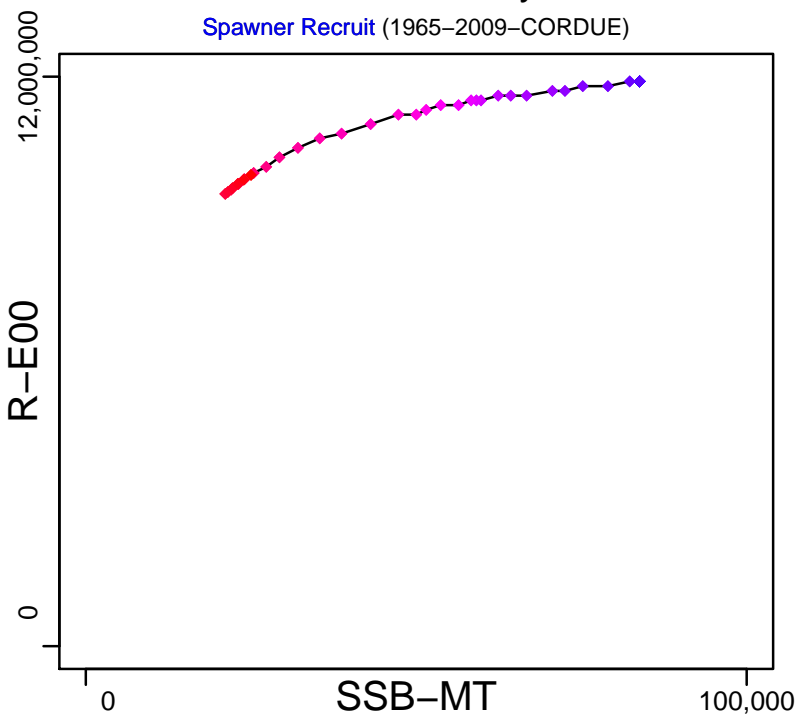
Kobe MSYpref (1965–2009–CORDUE)



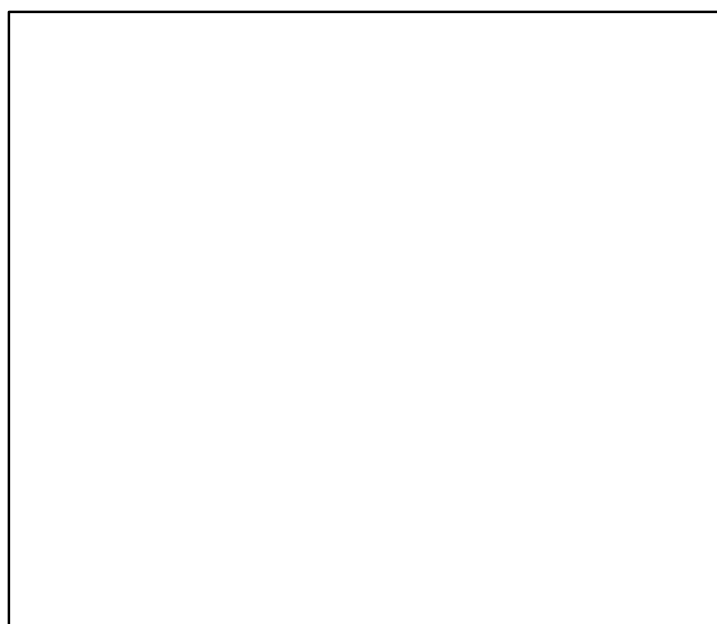
Kobe MGTpref (1965–2009–CORDUE)



Spawner Recruit (1965–2009–CORDUE)



Production\*

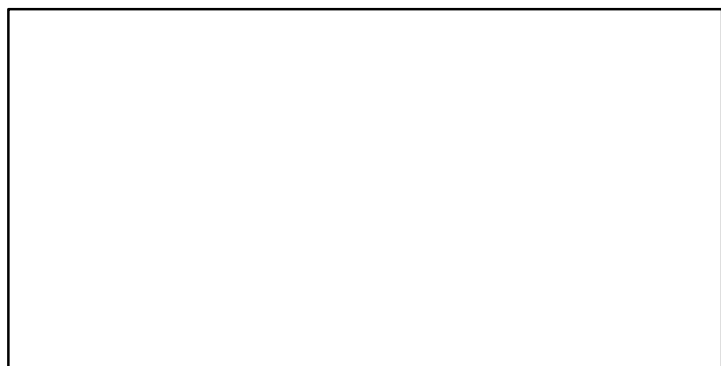


◆ Start Year ◆ End Year \* No Data

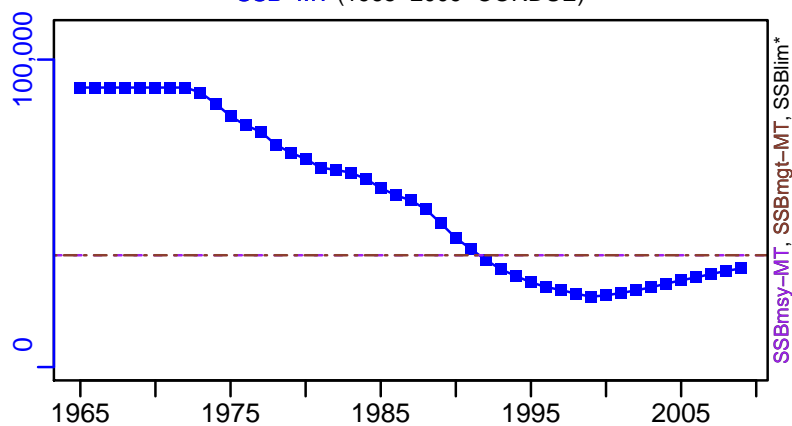


# Smooth oreo West end of Chatham Rise [SMOOTHOREOWECCR]

TB\*



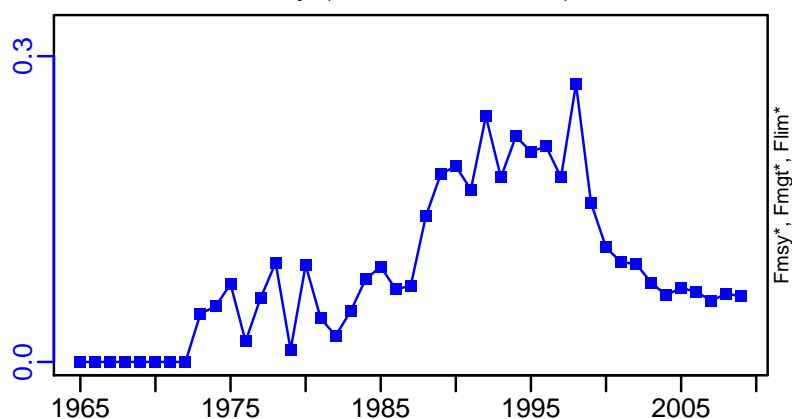
SSB-MT (1965-2009-CORDUE)



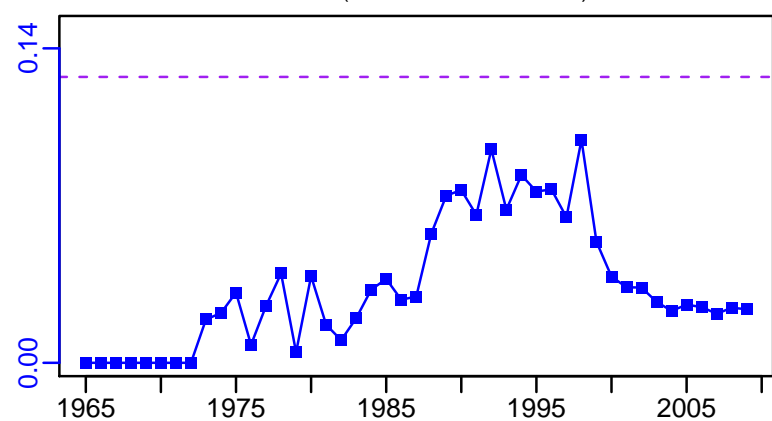
TN \*



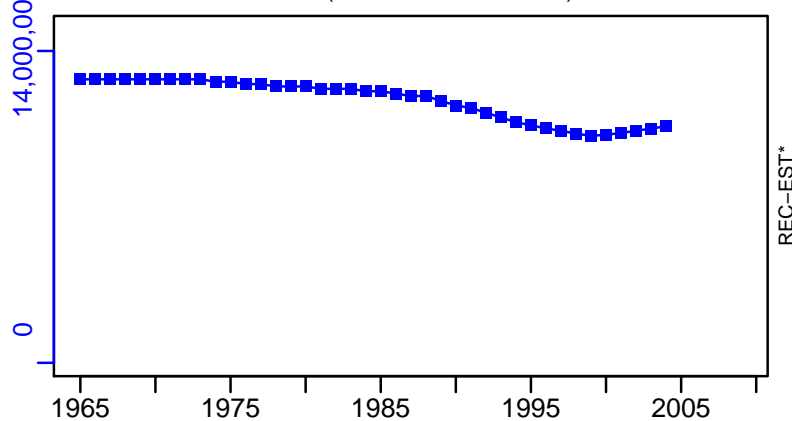
F-1/yr (1965-2009-CORDUE)



ER-ratio (1965-2009-CORDUE)

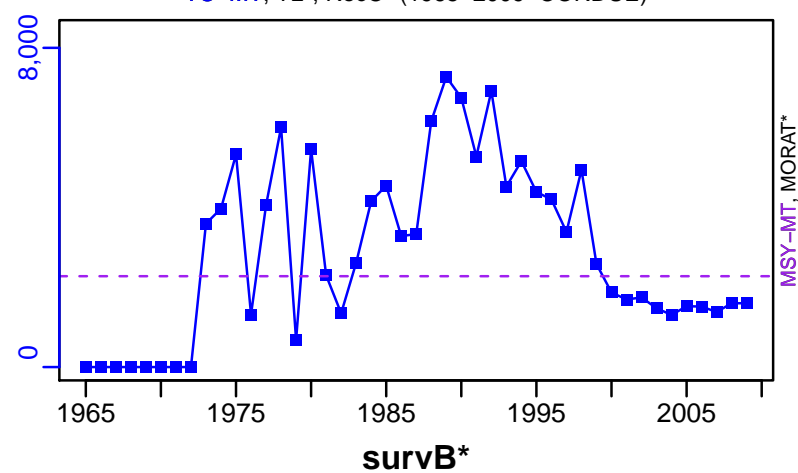


R-E00 (1965-2009-CORDUE)



# Smooth oreo West end of Chatham Rise [SMOOTHOREOWECR]

TC-MT, TL\*, RecC\* (1965–2009–CORDUE)



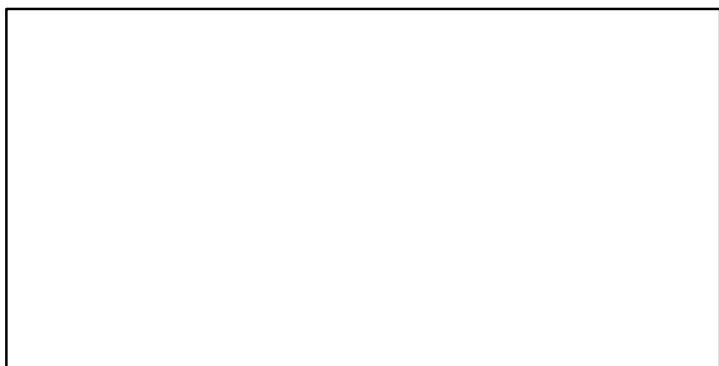
TAC\*, Cpair\*, Cadv\*



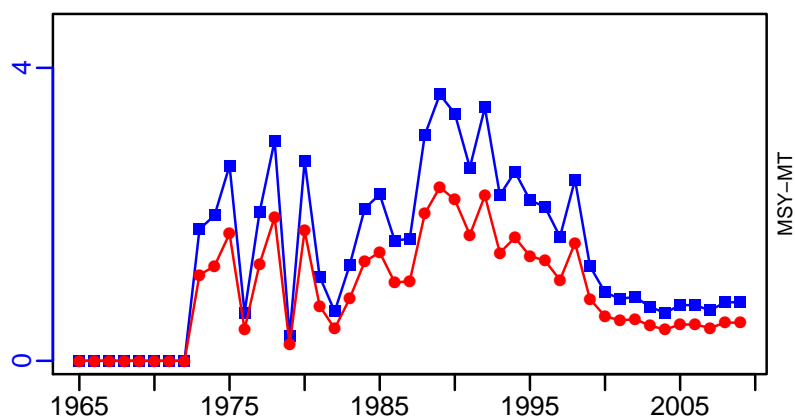
CPUE\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1965–2009–CORDUE)



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

## Southern hake Chatham Rise [SOUTHHAKECR]

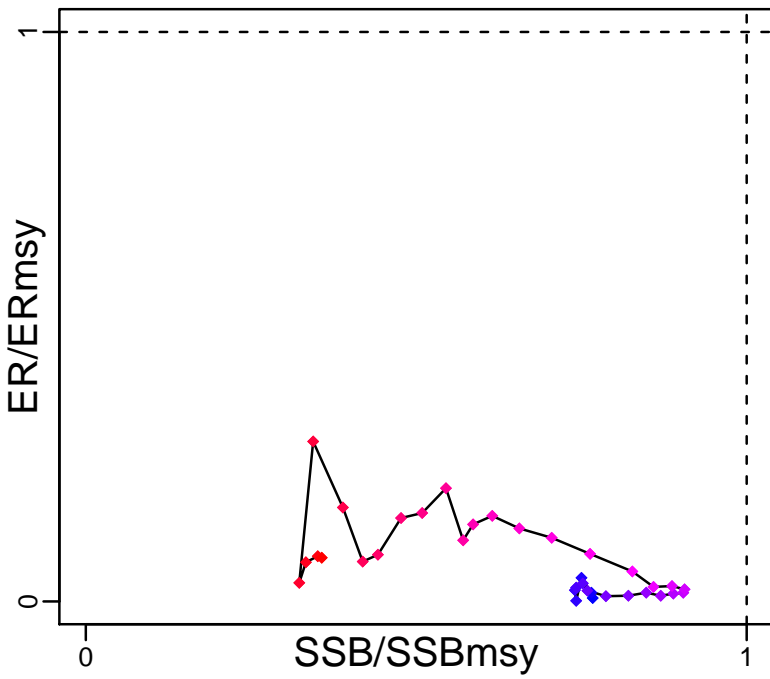
Metadata	
<b>Scientific Name</b>	Merluccius australis
<b>Current Assess ID</b>	NIWA-SOUTHHAKECR-1974-2012-FU
<b>Area</b>	Chatham Rise
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2012, 2010

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2012	10,626
<b>SSBmsy</b>	SSBmsy-MT	2012	19,938
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2012	0.39
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2012	19,938
<b>Fmgt</b>	-	-	-
<b>ERMgt</b>	-	-	-
<b>TB0</b>	TB0-MT	2010	88,920
<b>SSB0</b>	SSB0-MT	2012	49,845
<b>MSY</b>	MSY-MT	2012	4144
<b>M</b>	M-1/yr	2012	0.19
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

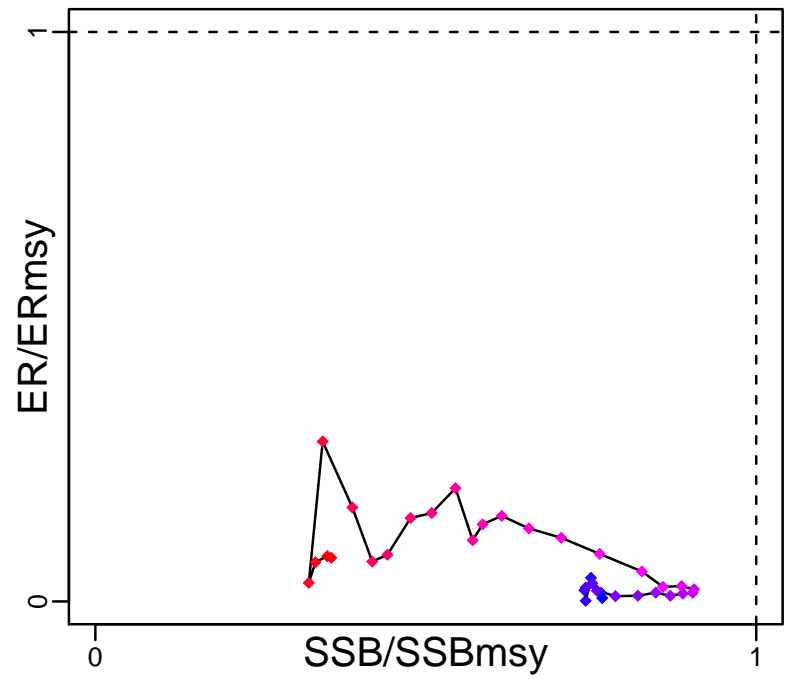
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2012	24,600	-	1 to 30
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2012	4,350,000	Both	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2010	0.026	-	-
<b>TC</b>	TC-MT	2012	950		
<b>TL</b>	TL-MT	2012	161		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2012	1.234		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2010	0.077		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2012	1.234		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERMgt</b>	-	-	-		

# Southern hake Chatham Rise [SOUTHHAKECR]

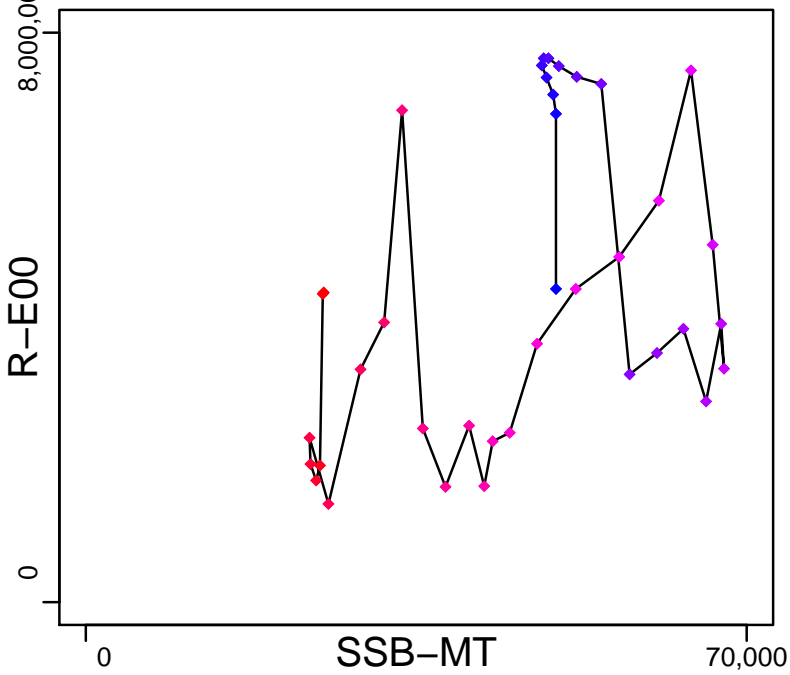
Kobe MSYpref (1975–2010–CHING)



Kobe MGTpref (1975–2010–CHING)



Spawner Recruit (1974–2012–FU)



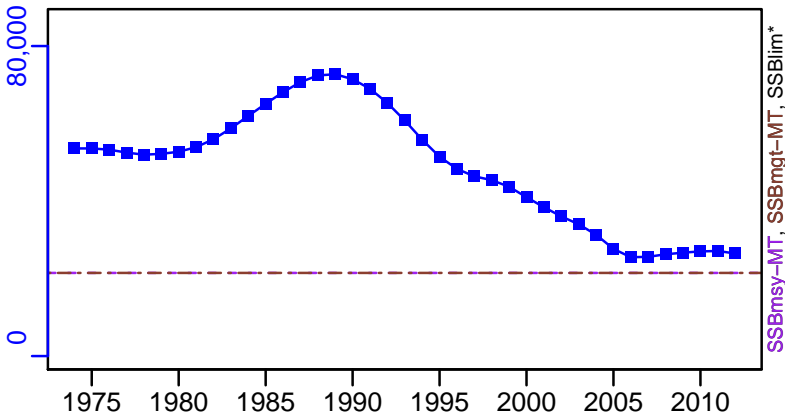
◆ Start Year ◆ End Year \* No Data

Southern hake Chatham Rise [SOUTHHAKECR]

TB\*



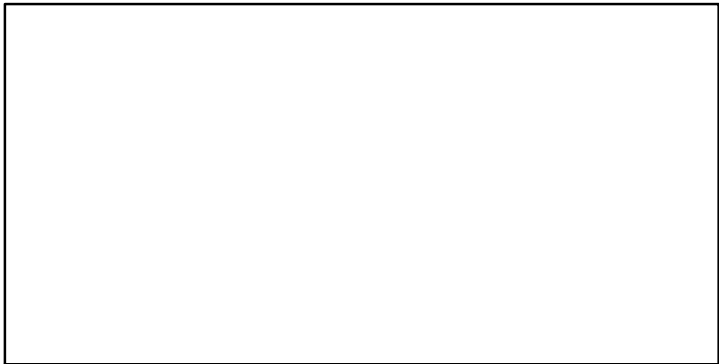
SSB-MT (1974–2012–FU)



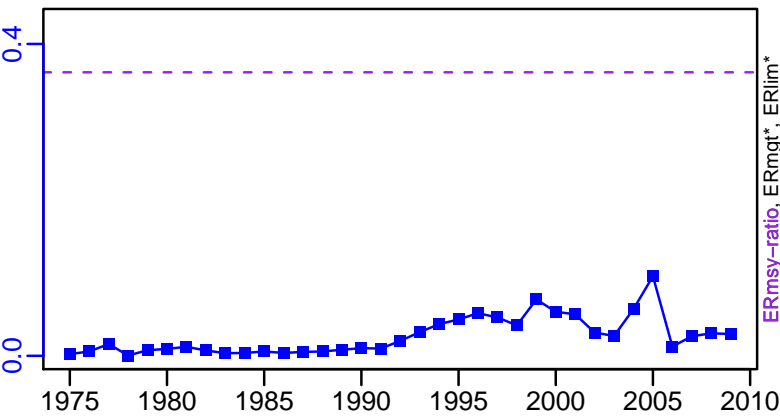
TN \*



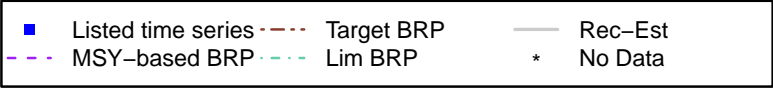
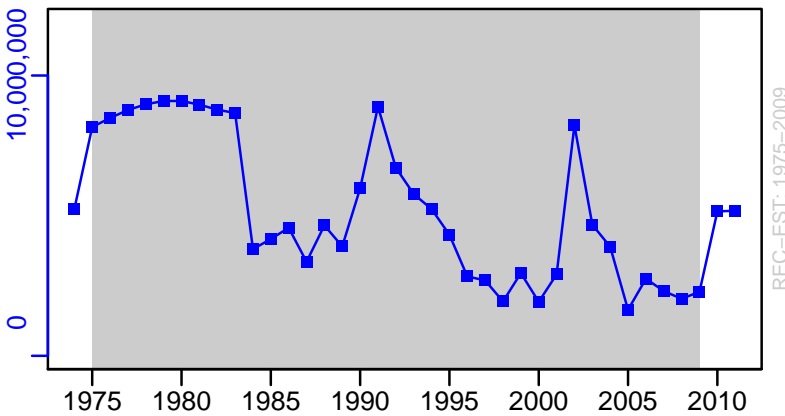
F\*



ER-ratio (1975–2010–CHING)

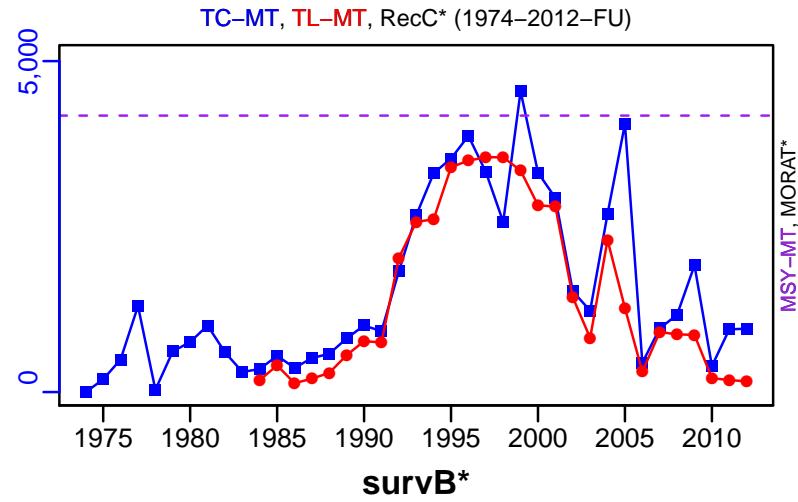


R-E00 (1974–2012–FU)

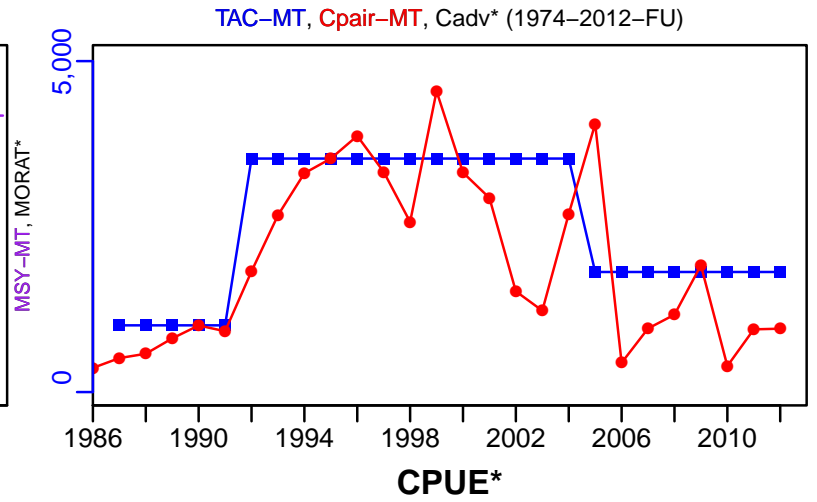


# Southern hake Chatham Rise [SOUTHHAKECR]

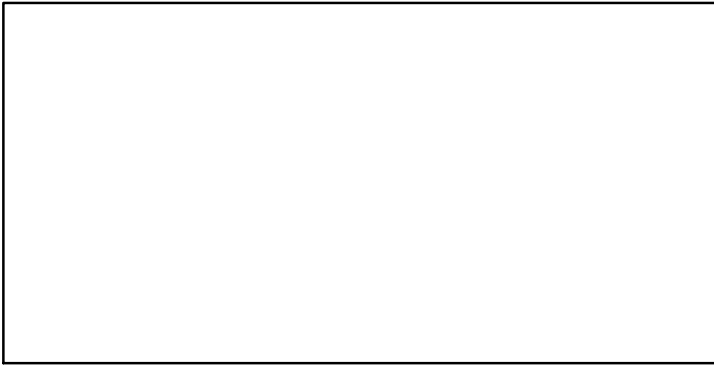
TC-MT, TL-MT, RecC\* (1974–2012–FU)



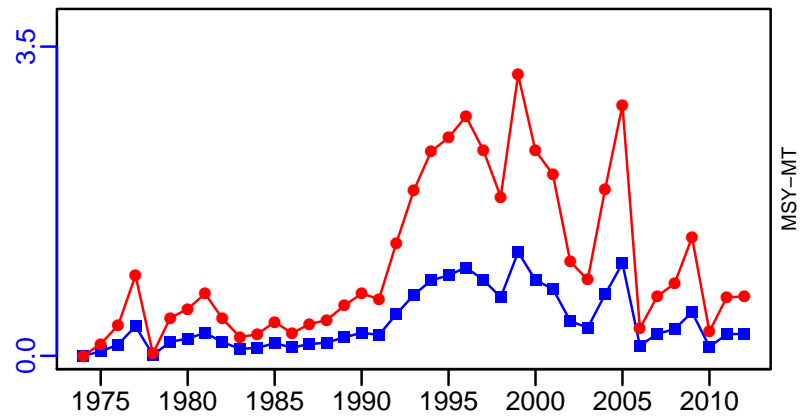
TAC-MT, Cpair-MT, Cadv\* (1974–2012–FU)



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1974–2012–FU)



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

## Southern hake Sub-Antarctic [SOUTHHAKESA]

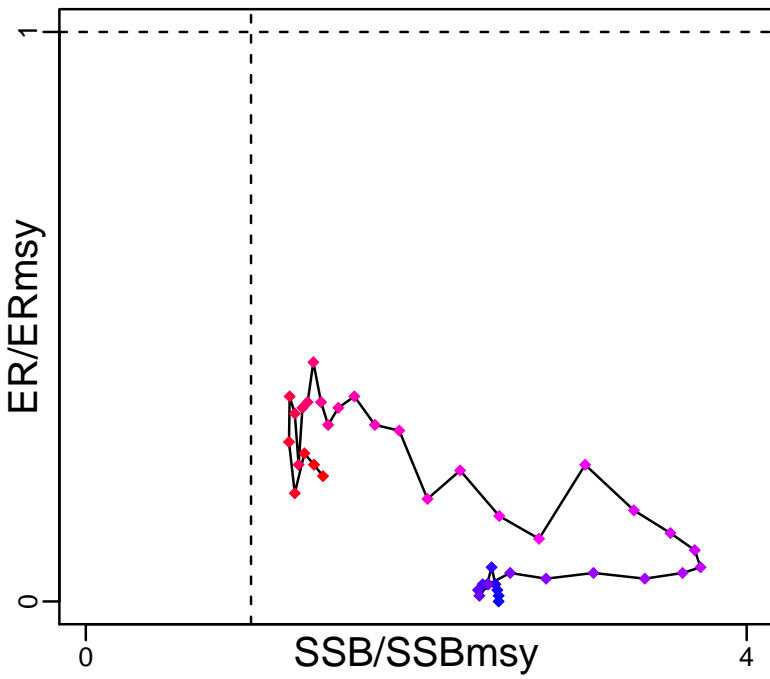
Metadata	
<b>Scientific Name</b>	Merluccius australis
<b>Current Assess ID</b>	NIWA-SOUTHHAKESA-1974-2014-FU
<b>Area</b>	Sub-Antarctic
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2011, 2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2014	20,249
<b>SSBmsy</b>	SSBmsy-MT	2014	25,774
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2014	0.214
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2014	25,774
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2014	64,436
<b>MSY</b>	MSY-MT	2014	4341
<b>M</b>	M-1/yr	2014	0.29
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

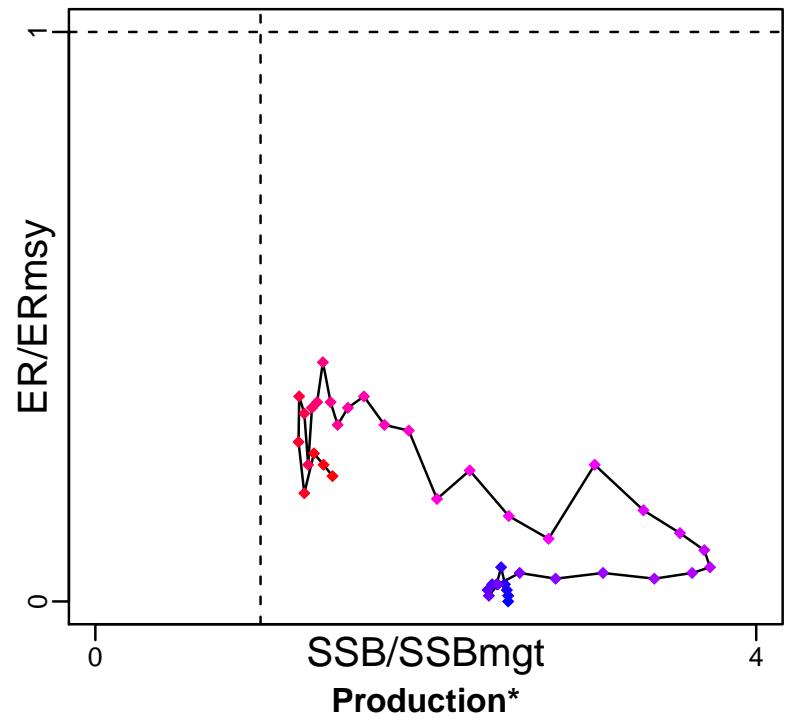
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2014	37,000	-	1 to 30
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2014	8,260,000	Both	-
<b>F</b>	F-1/yr	2011	0.051	-	-
<b>ER</b>	ER-ratio	2014	0.048	Both	-
<b>TC</b>	TC-MT	2014	1800		
<b>TL</b>	TL-MT	2014	1880		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2014	1.436		
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2011	0.108		
<b>ER/ERmsy</b>	ERdivERmsy-dimensionless	2014	0.22		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2014	1.436		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Southern hake Sub-Antarctic [SOUTHHAKEsa]

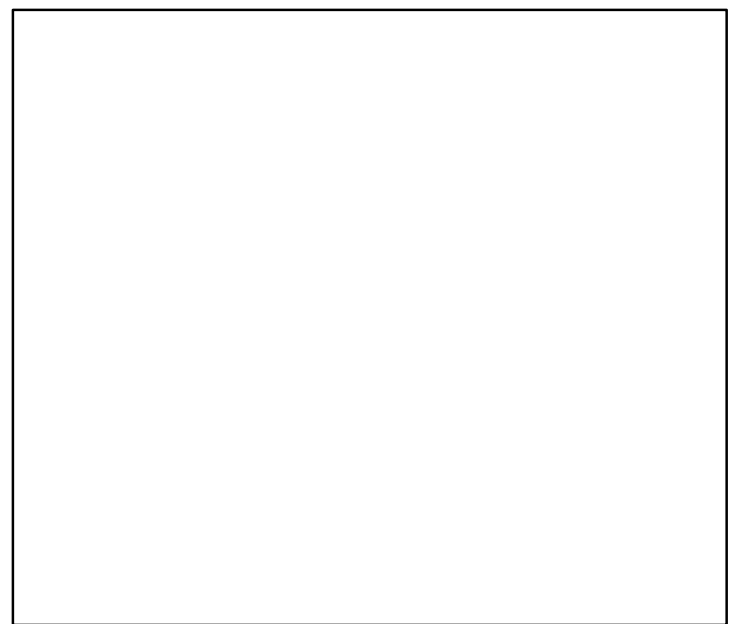
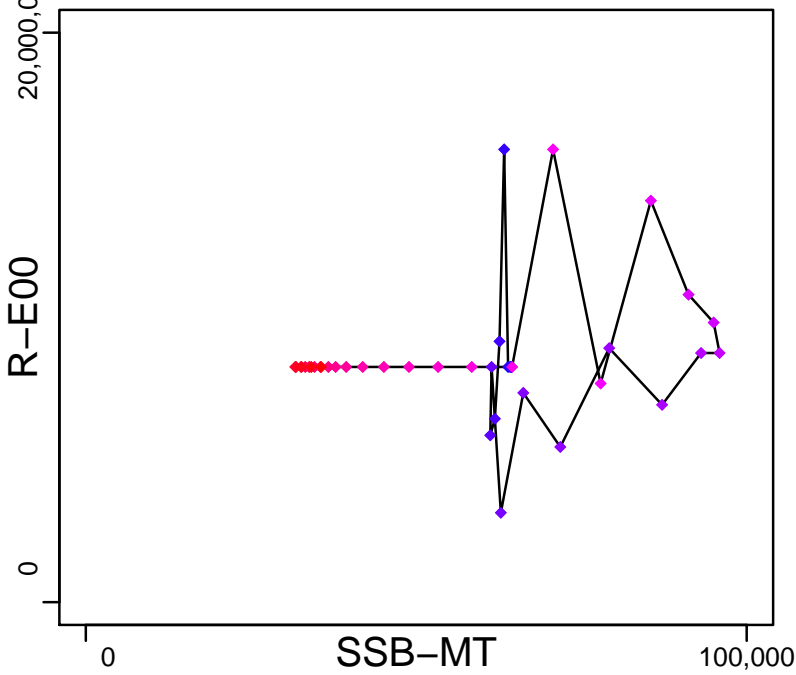
Kobe MSYpref (1974–2014–FU)



Kobe MGTpref (1974–2014–FU)



Spawner Recruit (1974–2014–FU)



◆ Start Year ◆ End Year \* No Data

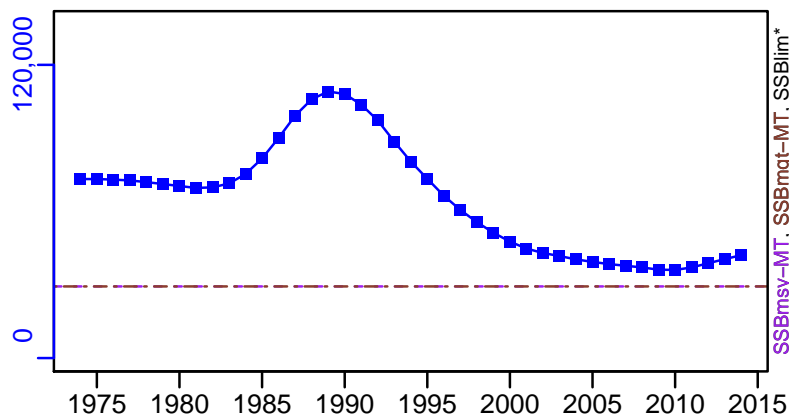


# Southern hake Sub-Antarctic [SOUTHHAKEsa]

TB\*



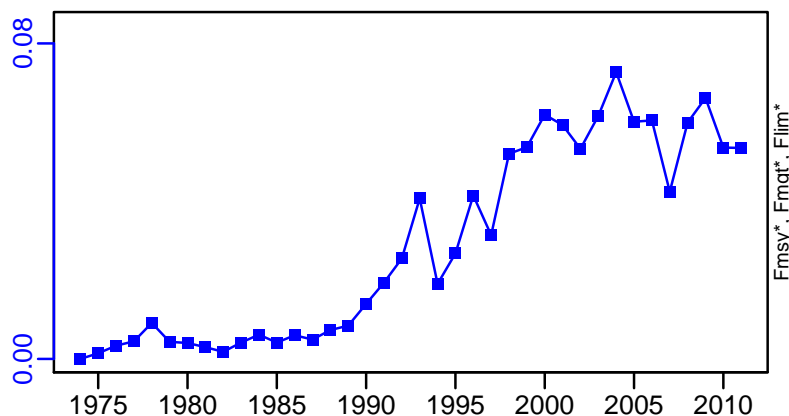
SSB-MT (1974–2014–FU)



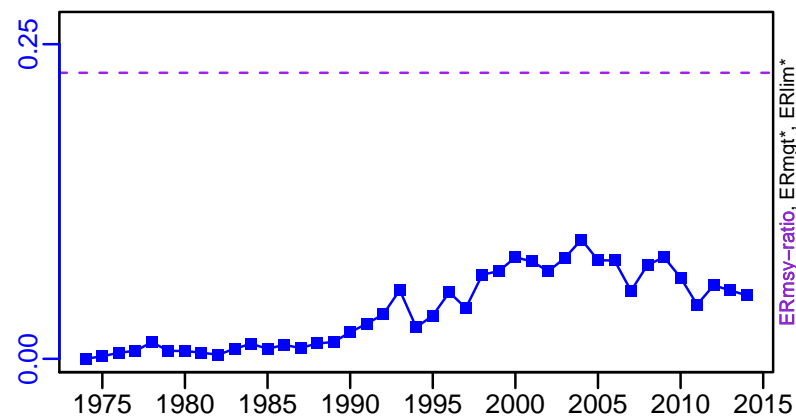
TN \*



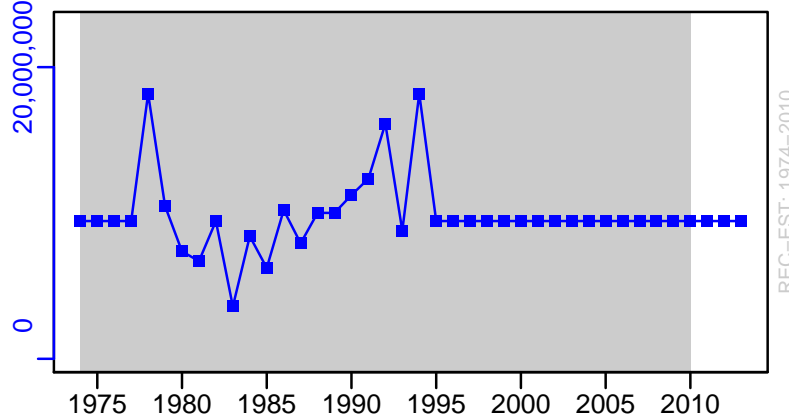
F-1/yr (1974–2011–CORDUE)



ER-ratio (1974–2014–FU)



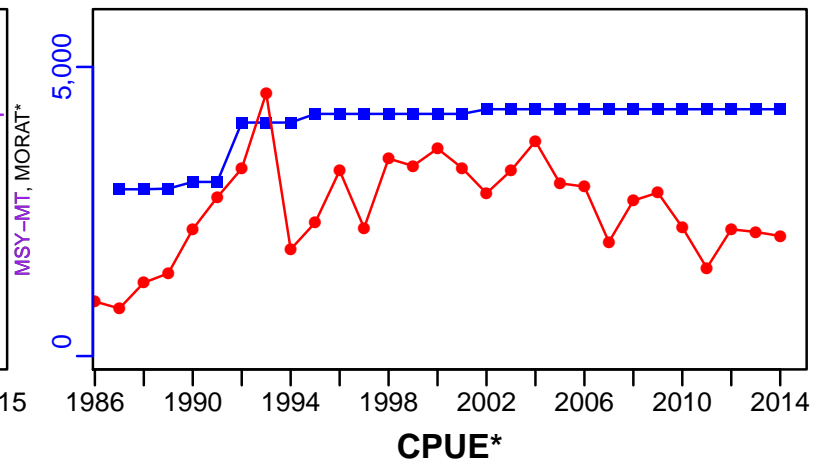
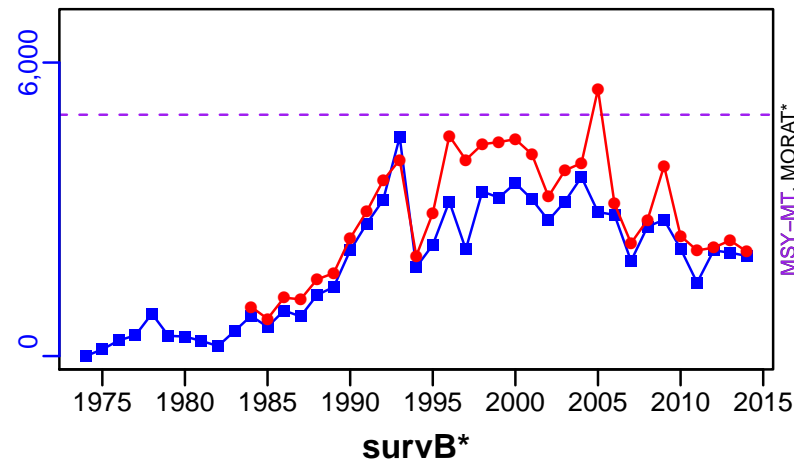
R-E00 (1974–2014–FU)



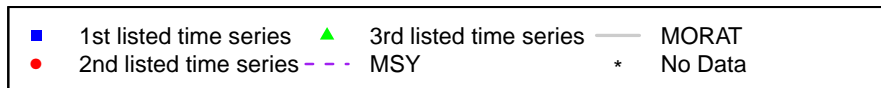
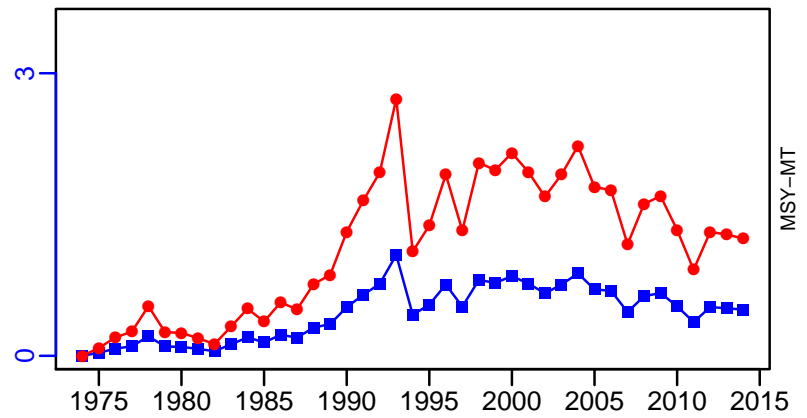
# Southern hake Sub-Antarctic [SOUTHAKESA]

TC-MT, TL-MT, RecC\* (1974–2014–FU)

TAC-MT, Cpair-MT, Cadv\* (1974–2014–FU)



TC-MT/MSY-MT, CdivMEANC-ratio, (1974–2014–FU)



## Southern hake West Coast South Island [SOUTHHAKEWCSI]

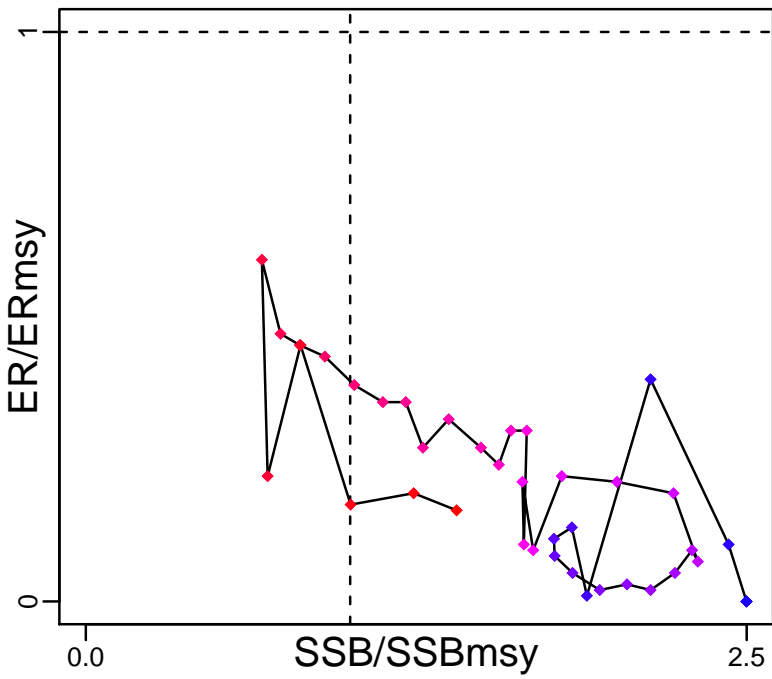
Metadata	
<b>Scientific Name</b>	Merluccius australis
<b>Current Assess ID</b>	NIWA-SOUTHHAKEWCSI-1973-2012-FU
<b>Area</b>	West Coast South Island
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2012

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2012	11,376
<b>SSBmsy</b>	SSBmsy-MT	2012	36,930
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-pr-ratio	2012	0.71
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2012	36,930
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2012	92,326
<b>MSY</b>	MSY-MT	2012	8077
<b>M</b>	M-1/yr	2012	0.19
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

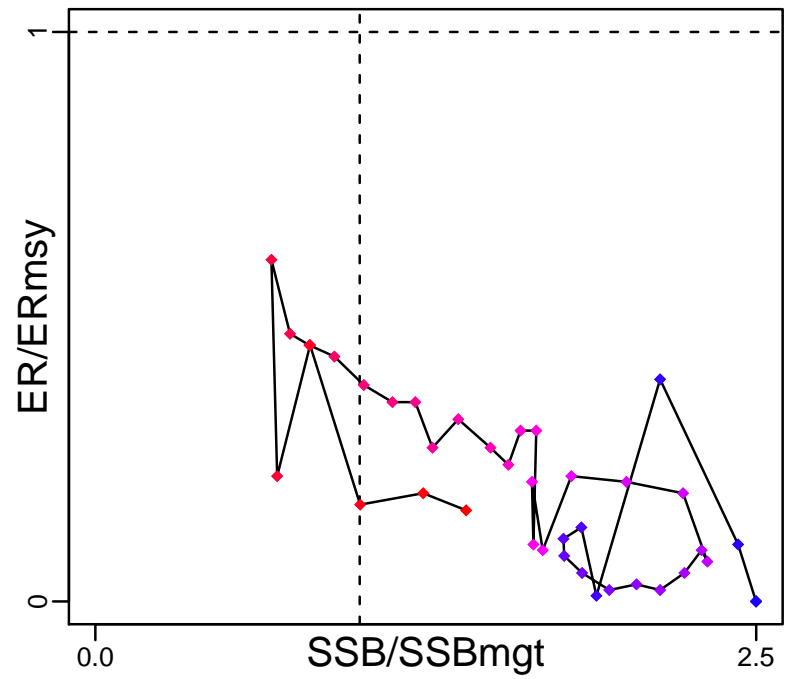
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2012	51,800	-	1 to 30
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2012	1,850,000	Both	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2012	0.11	-	-
<b>TC</b>	TC-MT	2012	3600		
<b>TL</b>	TL-MT	2012	4460		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2012	1.403		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ERdivERmsy-dimensionless	2012	0.16		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2012	1.403		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Southern hake West Coast South Island [SOUTHHAKEWCSI]

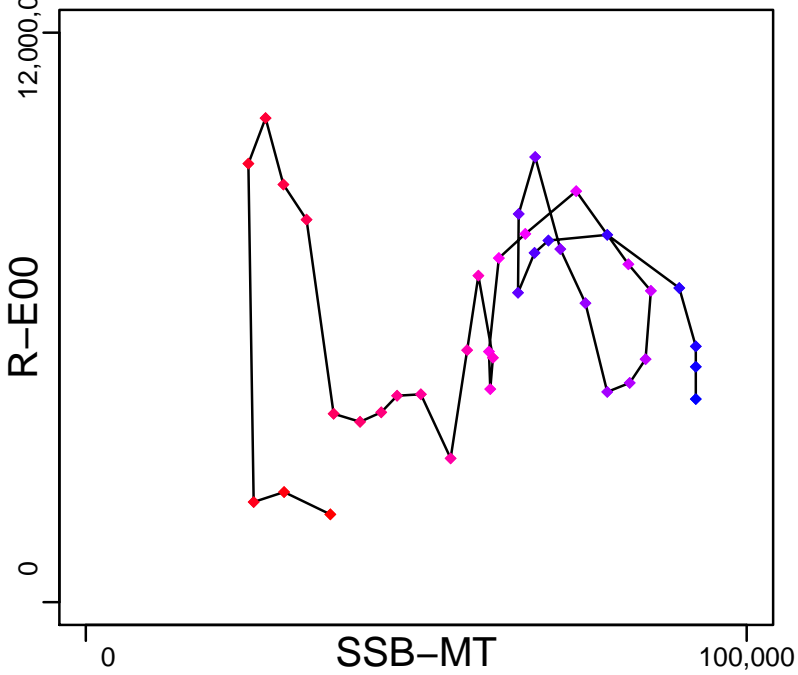
Kobe MSYpref (1973–2012–FU)



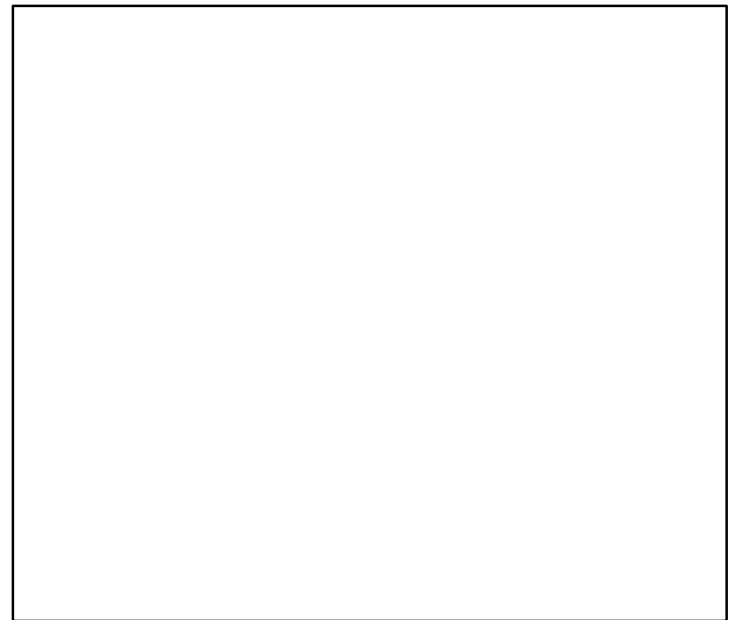
Kobe MGTpref (1973–2012–FU)



Spawner Recruit (1973–2012–FU)



Production\*



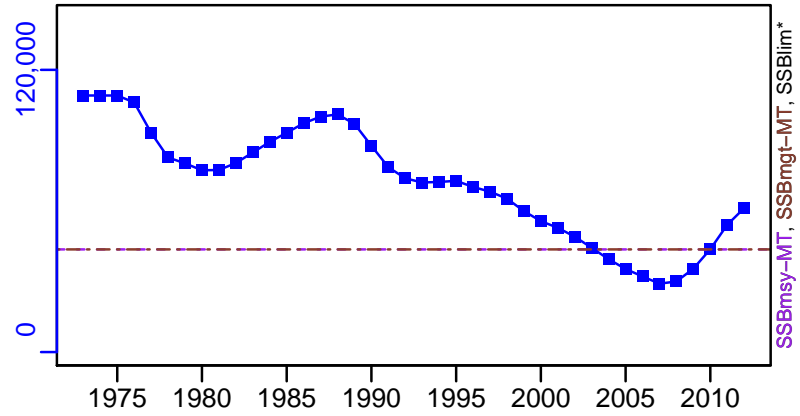
◆ Start Year ◆ End Year \* No Data

# Southern hake West Coast South Island [SOUTHHAKEWCSI]

TB\*



SSB-MT (1973–2012–FU)



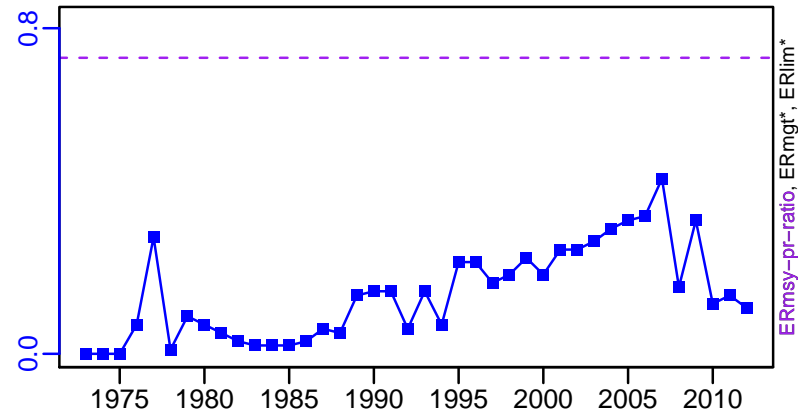
TN \*



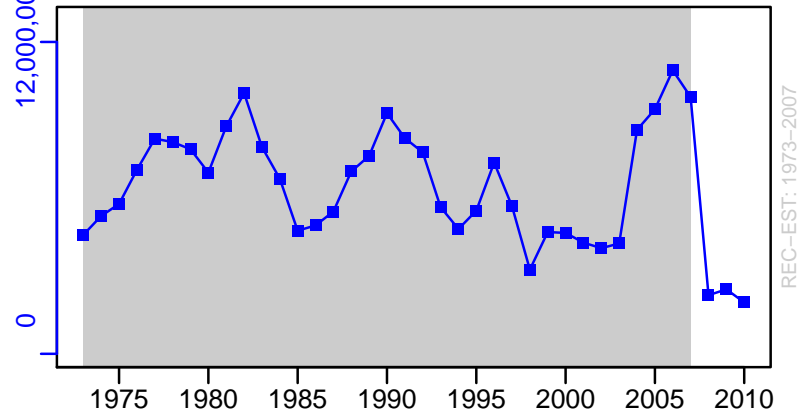
F\*



ER-ratio (1973–2012–FU)

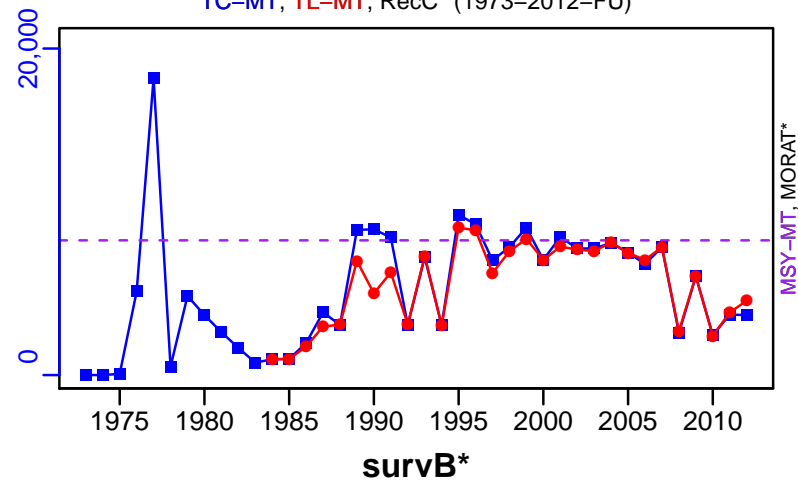


R-E00 (1973–2012–FU)

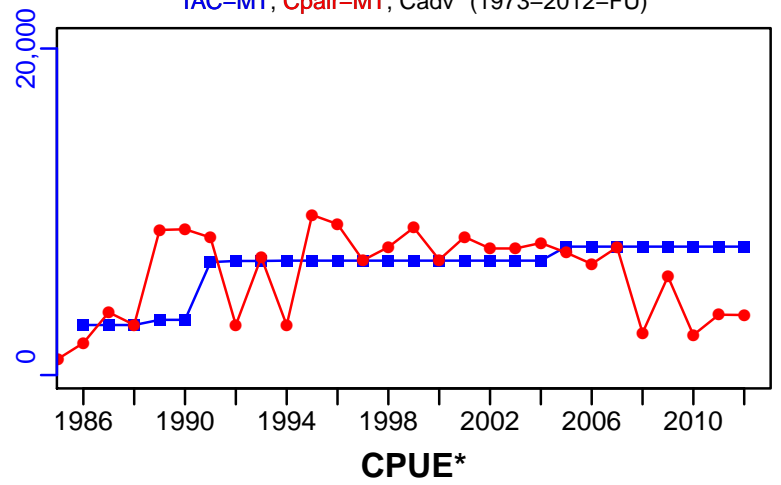


# Southern hake West Coast South Island [SOUTHHAKEWCSI]

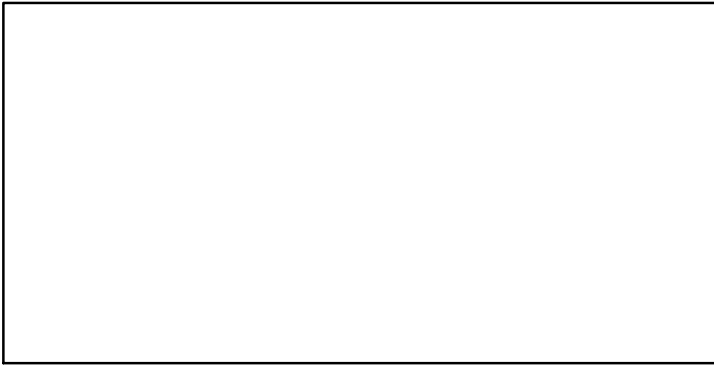
TC-MT, TL-MT, RecC\* (1973–2012–FU)



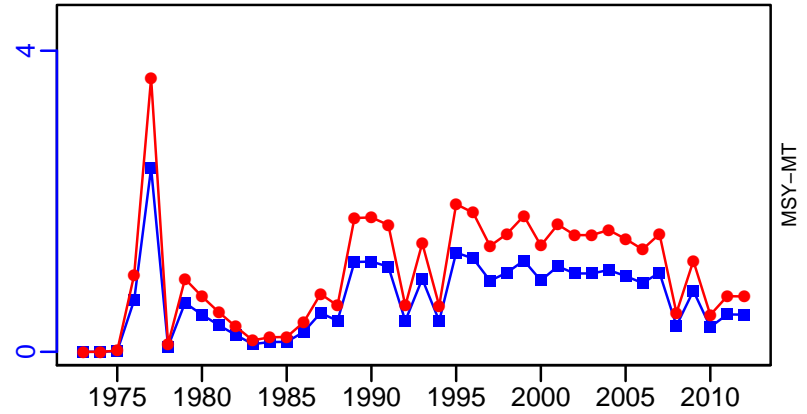
TAC-MT, Cpair-MT, Cadv\* (1973–2012–FU)



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1973–2012–FU)



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

## Tarakihi Sub-Antarctic [TARAKNZ]

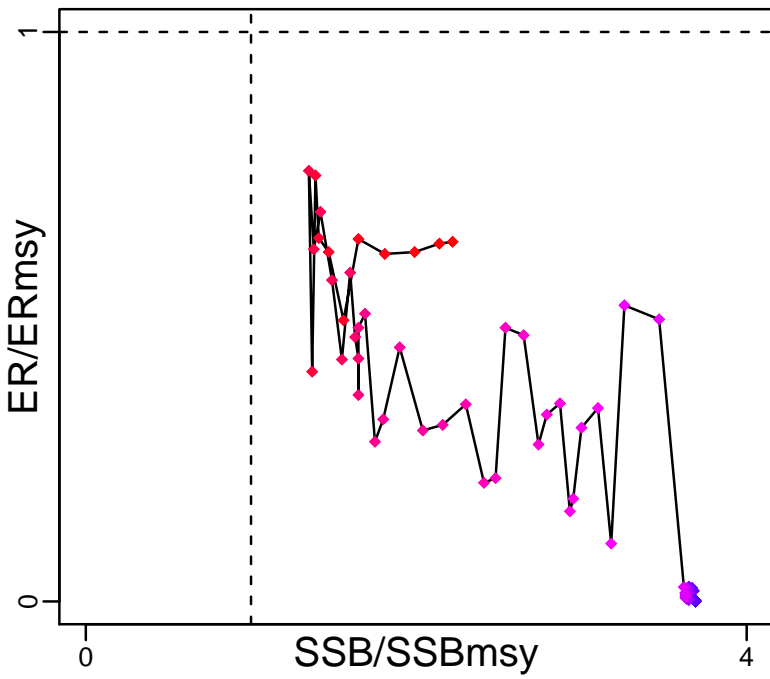
Metadata	
<b>Scientific Name</b>	Nemadactylus macropterus
<b>Current Assess ID</b>	NIWA-TARAKNZ-1932-2007-CORDUE
<b>Area</b>	Sub-Antarctic
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	National Institute of Water and Atmospheric Research
<b>Asmts in RAM</b>	2007

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2007	11,187
<b>SSBmsy</b>	SSBmsy-MT	2007	4864
<b>Fmsy</b>	Fmsy-1/yr	2007	0.1
<b>ERmsy</b>	ERmsy-ratio	2007	0.061
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2007	17,950
<b>MSY</b>	MSY-MT	2007	682
<b>M</b>	M-1/yr	2007	0.1
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

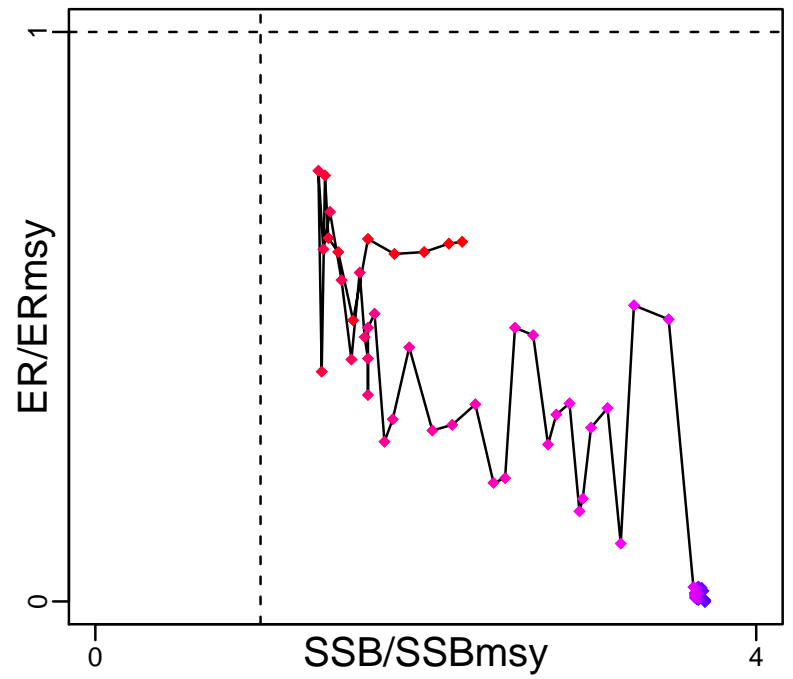
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2007	10,800	Both	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2007	2,310,000	-	0
<b>F</b>	F-1/yr	2007	0.077	-	-
<b>ER</b>	ER-ratio	2007	0.038	-	-
<b>TC</b>	TC-MT	2007	957		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSBdivSSBmsy-dimensionless	2007	2.22		
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2007	0.766		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2007	0.632		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Tarakihi Sub-Antarctic [TARAKNZ]

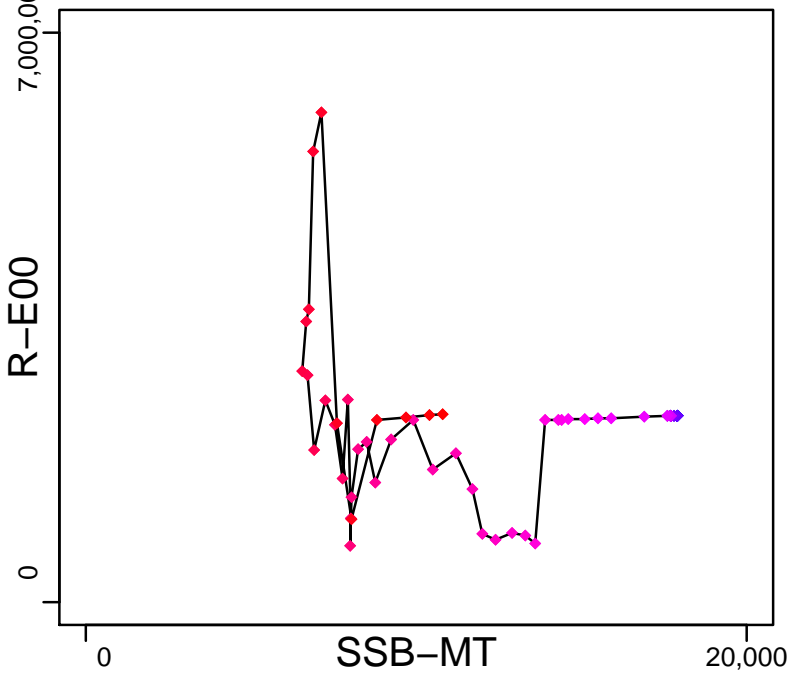
Kobe MSYpref (1932–2007–CORDUE)



Kobe MGTpref (1932–2007–CORDUE)



Spawner Recruit (1932–2007–CORDUE)



Production\*



◆ Start Year ◆ End Year \* No Data

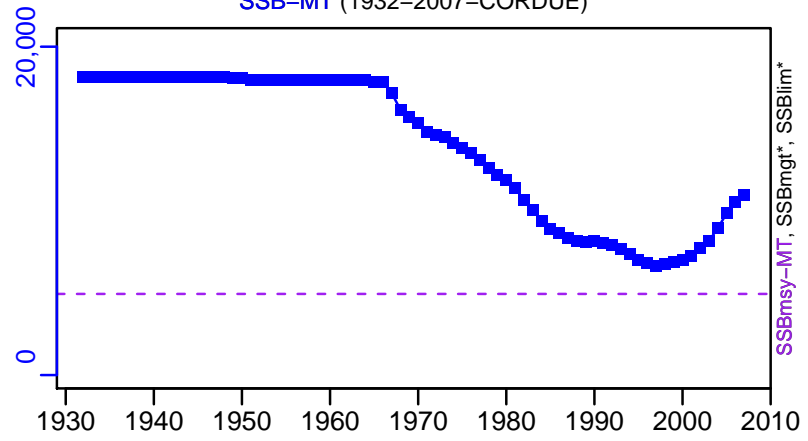


# Tarakihi Sub-Antarctic [TARAKNZ]

TB\*



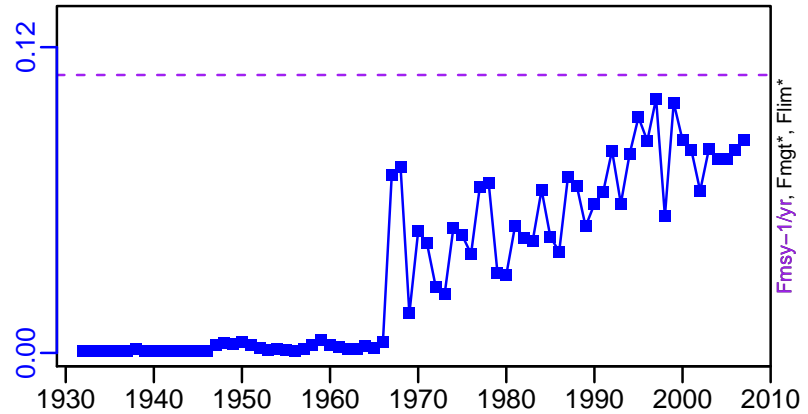
SSB-MT (1932-2007-CORDUE)



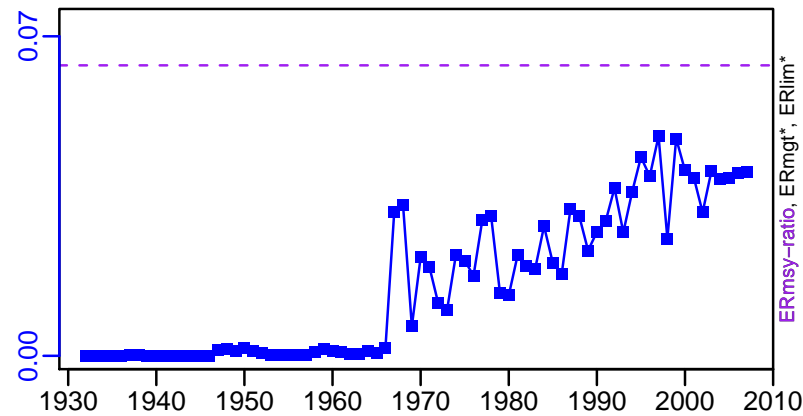
TN \*



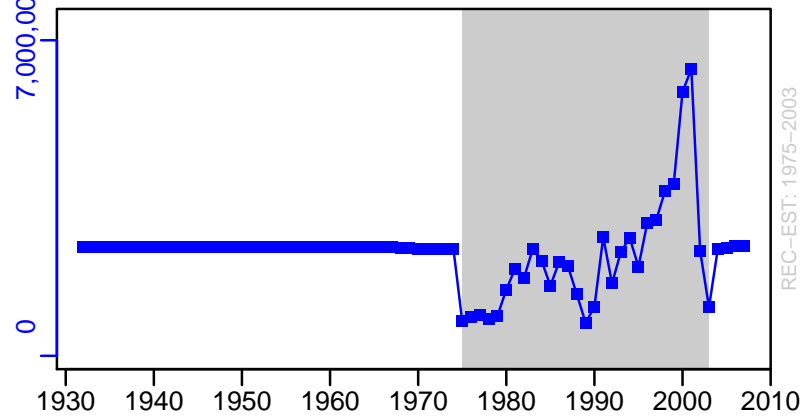
F-1/yr (1932-2007-CORDUE)



ER-ratio (1932-2007-CORDUE)



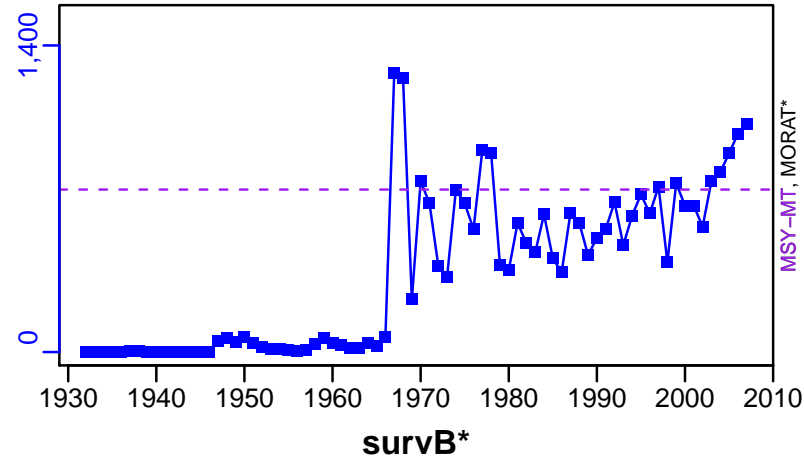
R-E00 (1932-2007-CORDUE)



# Tarakihi Sub-Antarctic [TARAKNZ]

TC-MT, TL\*, RecC\* (1932-2007-CORDUE)

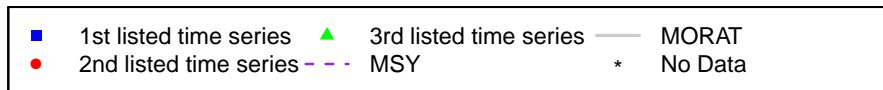
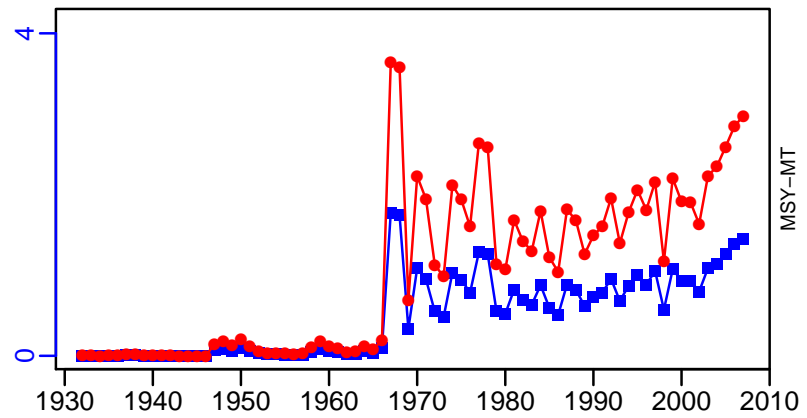
TAC\*, Cpair\*, Cadv\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1932-2007-CORDUE)



## Trevally New Zealand Areas TRE 7 [TREVALLYTRE7]

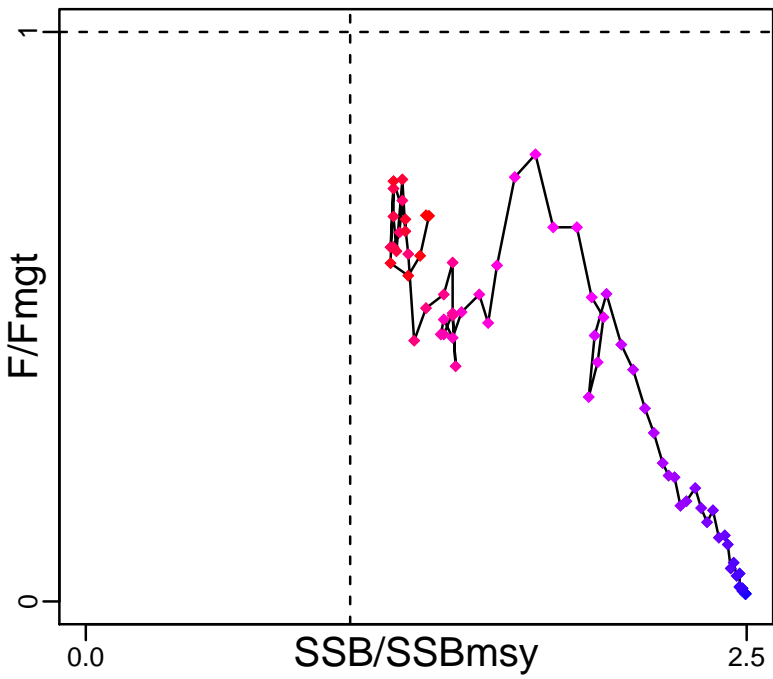
Metadata	
<b>Scientific Name</b>	Pseudocaranx dentex
<b>Current Assess ID</b>	NZMFishINSHOREWG-TREVALLYTRE7-1944-2014-LANGLEY
<b>Area</b>	New Zealand Areas TRE 7
<b>Management Authority</b>	Ministry of Fisheries, New Zealand national management
<b>Assessor</b>	Inshore Working Group
<b>Asmts in RAM</b>	2005, 2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-calc-MT	2005	26,990
<b>SSBmsy</b>	SSBmsy-MT	2014	8936
<b>Fmsy</b>	Fmsy-1/yr	2005	0.113
<b>ERmsy</b>	ERmsy-ratio	2005	0.08
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2014	8936
<b>Fmgt</b>	Fmgt-1/yr	2014	0.088
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2014	22,339
<b>MSY</b>	MSY-MT	2014	1818
<b>M</b>	M-1/yr	2014	0.1
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

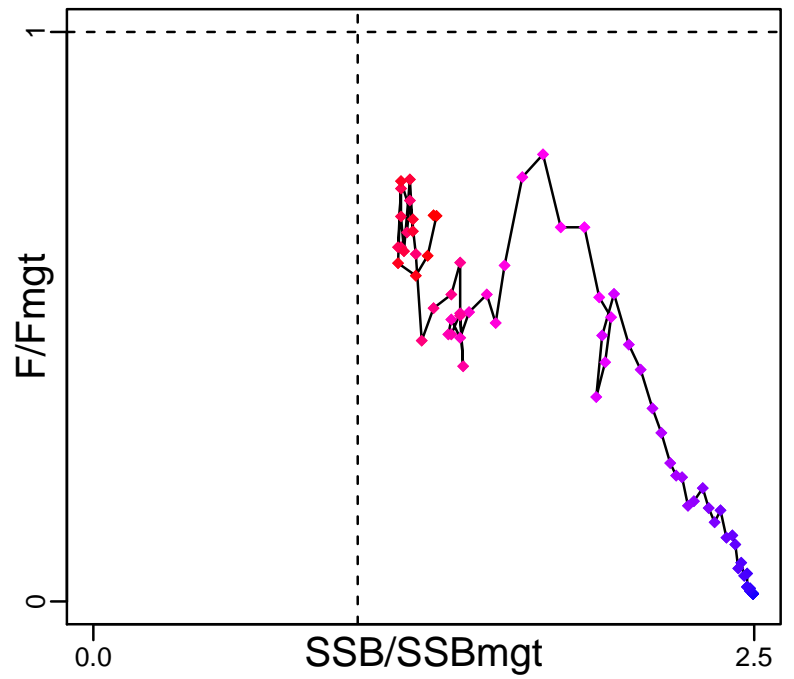
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2005	28,200	-	1
<b>SSB</b>	SSB-MT	2014	11,500	Females	4 to 40+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2014	3,530,000	Both	0
<b>F</b>	F-1/yr	2005	0.094	-	-
<b>ER</b>	ER-ratio	2005	0.087	-	-
<b>TC</b>	TC-MT	2014	1530		
<b>TL</b>	TL-MT	2014	1440		
<b>TB/TBmsy</b>	TB-MT/TBmsy-calc-MT	2005	1.045		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2014	1.287		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2005	0.83		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2005	1.082		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2014	1.287		
<b>F/Fmgt</b>	FdivFmgt-dimensionless	2014	0.678		
<b>ER/ERmgt</b>	-	-	-		

# Trevally New Zealand Areas TRE 7 [TREVALLYTRE7]

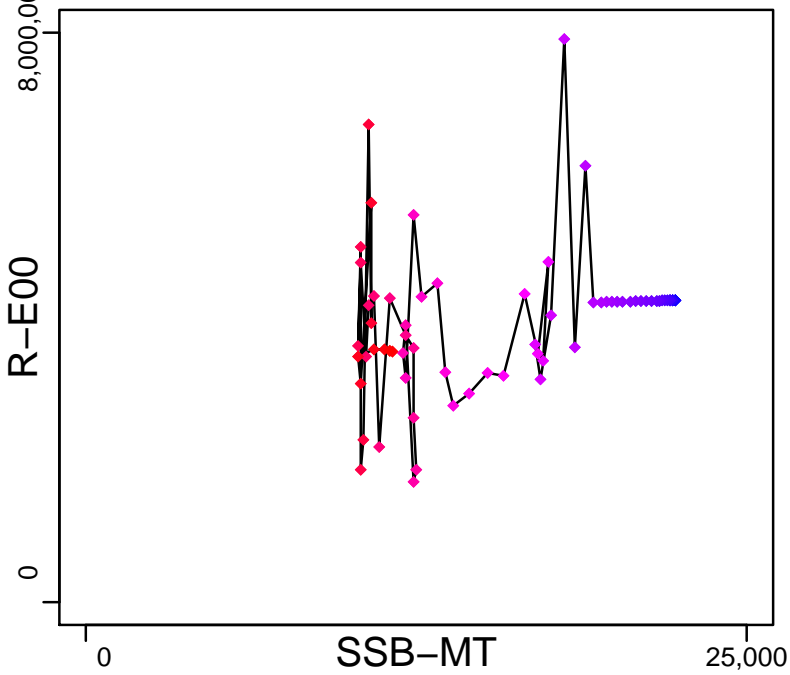
Kobe MSYpref (1944–2014–LANGLEY)



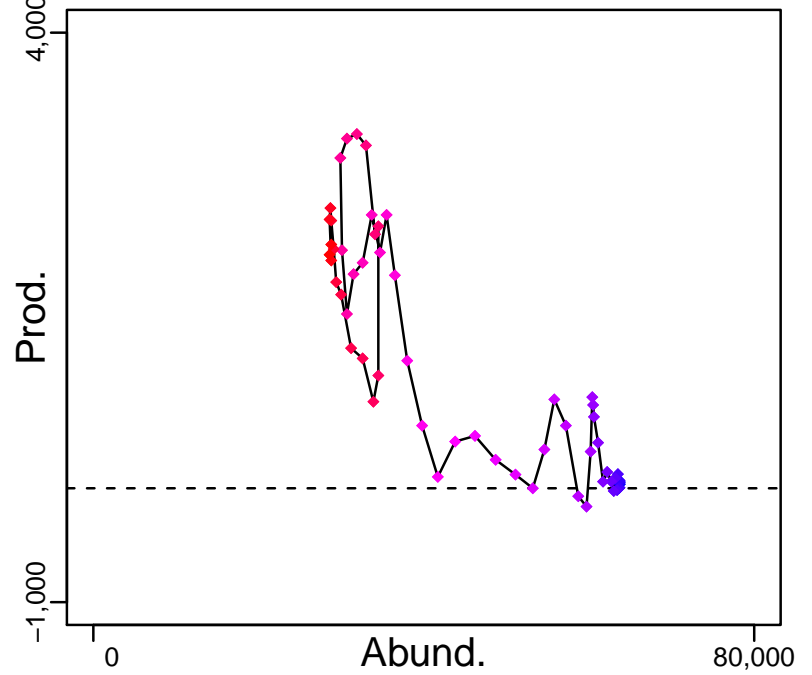
Kobe MGTpref (1944–2014–LANGLEY)



Spawner Recruit (1944–2014–LANGLEY)



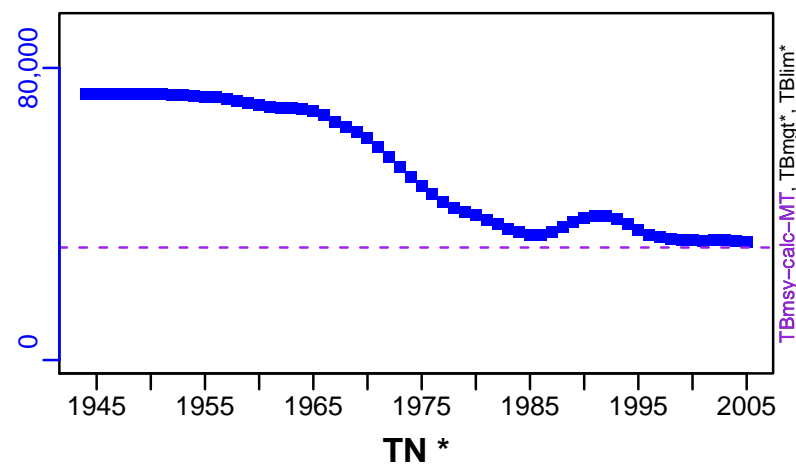
Production (1944–2005–JENSEN)



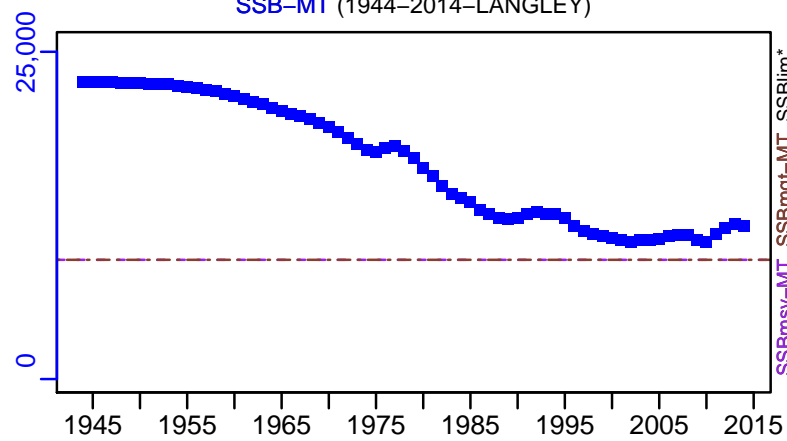
◆ Start Year ◆ End Year \* No Data

# Trevally New Zealand Areas TRE 7 [TREVALLYTRE7]

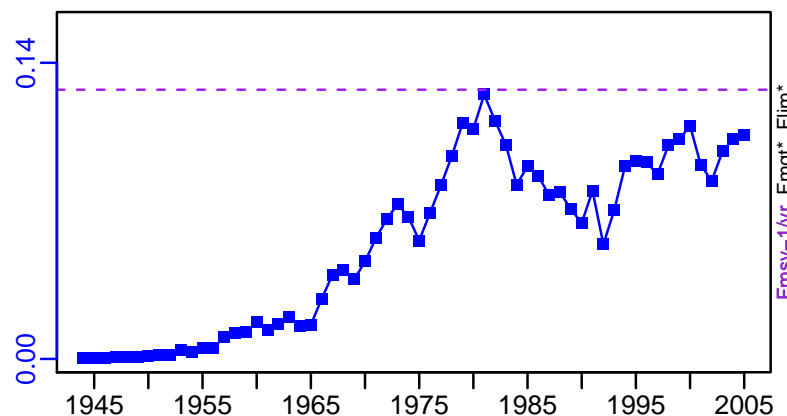
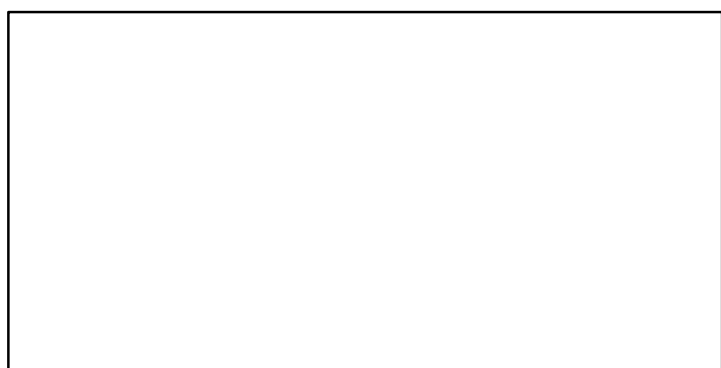
TB-MT (1944-2005-JENSEN)



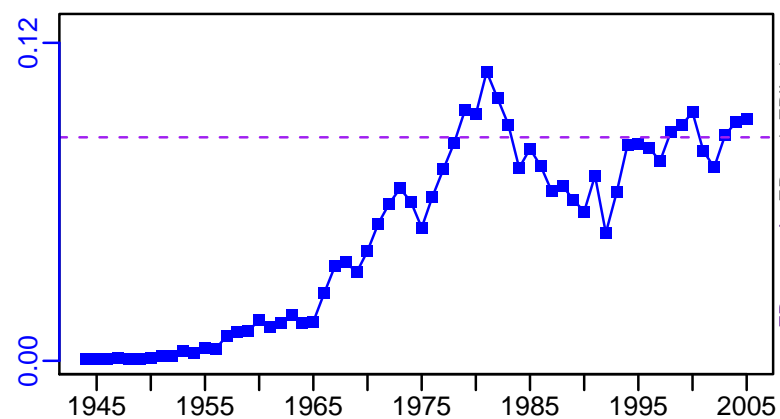
SSB-MT (1944-2014-LANGLEY)



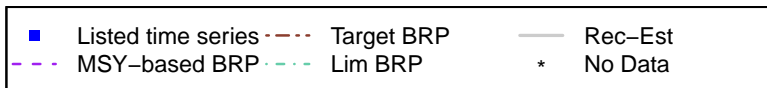
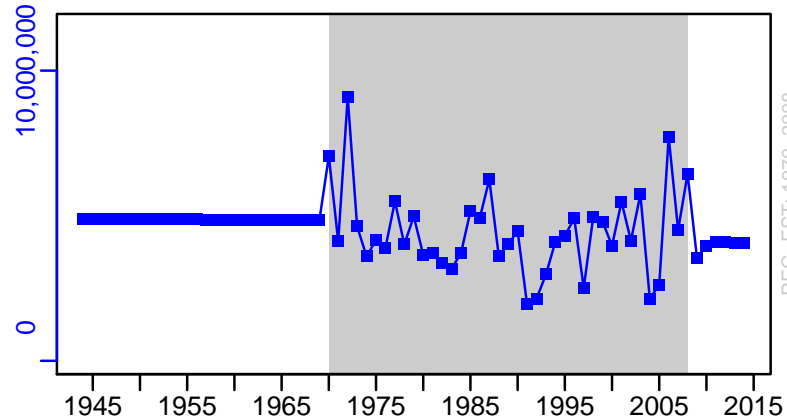
F-1/yr (1944-2005-JENSEN)



ER-ratio (1944-2005-JENSEN)

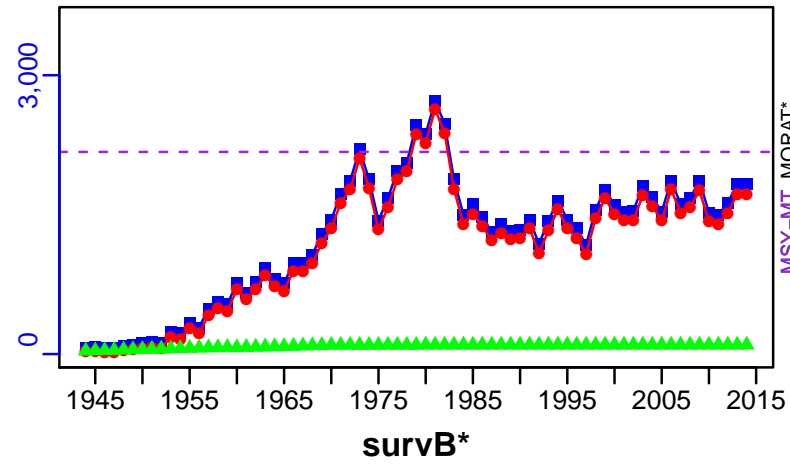


R-E00 (1944-2014-LANGLEY)

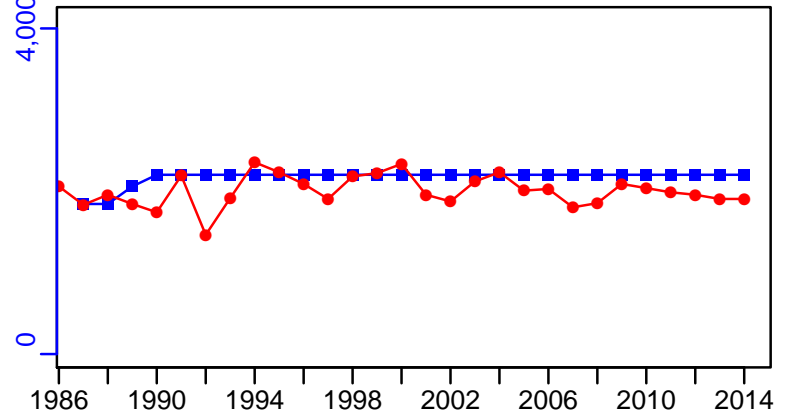


# Trevally New Zealand Areas TRE 7 [TREVALLYTRE7]

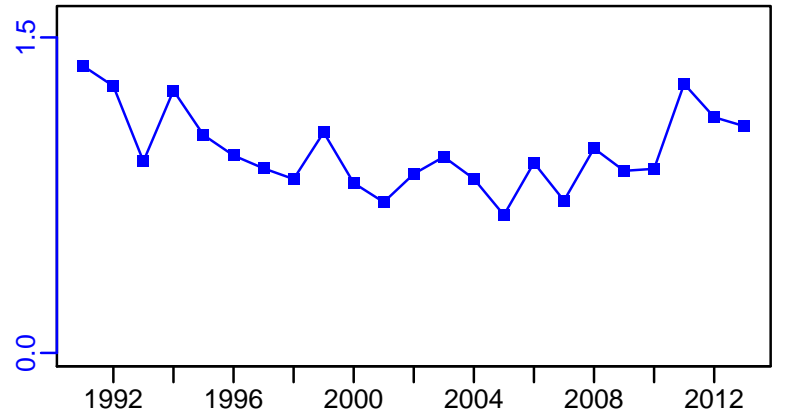
TC-MT, TL-MT, RecC-MT (1944-2014-LANGLEY)



TAC-MT, Cpair-MT, Cadv\* (1944-2014-LANGLEY)



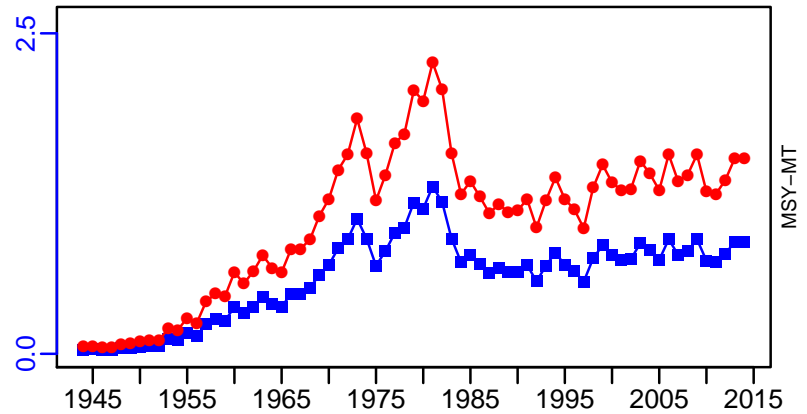
CPUE-MT (1944-2014-LANGLEY)



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1944-2014-LANGLEY)



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