

# South America Stocks

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

Not present Present Preferred

Stock	B/Bmsy	Time Series Types			
		U/Umsy	B/Bmgt	U/Umgt	
1. ACMACKSARG [Argentine chub mackerel Southern Argentina]	TB SSB	ER F	TB SSB	ER F	
2. AFLONCH [Alfonsino Chile]	TB SSB	ER F	TB SSB	ER F	
3. ARGANCHONARG [Argentine anchoita Northern Argentina]	TB SSB	ER F	TB SSB	ER F	
4. ARGANCHOSARG [Argentine anchoita Southern Argentina]	TB SSB	ER F	TB SSB	ER F	
5. ARGHAKENARG [Argentine hake Northern Argentina]	TB SSB	ER F	TB SSB	ER F	
6. ARGHAKESARG [Argentine hake Southern Argentina]	TB SSB	ER F	TB SSB	ER F	
7. BSQLOBSTERCSCH [Yellow squat lobster Central-Southern Chile]	TB SSB	ER F	TB SSB	ER F	
8. BSQLOBSTERNCH [Yellow squat lobster Northern Chile]	TB SSB	ER F	TB SSB	ER F	
9. CHERRCHVX [Chilean Herring Chile Region V-X]	TB SSB	ER F	TB SSB	ER F	
10. CHTRACCH [Chilean jack mackerel Chilean EEZ and offshore]	TB SSB	ER F	TB SSB	ER F	
11. CSARDCSCH [Chilean sardine Central-Southern Chile]	TB SSB	ER F	TB SSB	ER F	
12. NSHRIMPCSCH [Nylon shrimp Central-Southern Chile]	TB SSB	ER F	TB SSB	ER F	
13. NSHRIMPCH [Nylon shrimp Northern Chile]	TB SSB	ER F	TB SSB	ER F	
14. OROUGHYCH [Orange roughy Chile]	TB SSB	ER F	TB SSB	ER F	
15. PANCHCCH [Peruvian Anchoveta Central Chile]	TB SSB	ER F	TB SSB	ER F	
16. PANCHCSCH [Peruvian Anchoveta Central-Southern Chile]	TB SSB	ER F	TB SSB	ER F	
17. PANCHNCHSP [Peruvian Anchoveta Northern Chile Southern Peru]	TB SSB	ER F	TB SSB	ER F	
18. PANCHPERUNC [Peruvian anchoveta North-Central Peru]	TB SSB	ER F	TB SSB	ER F	
19. PATGRENADIERCH [Patagonian grenadier Chile]	TB SSB	ER F	TB SSB	ER F	
20. PATGRENADIERARG [Patagonian grenadier Southern Argentina]	TB SSB	ER F	TB SSB	ER F	
21. PCEELARGS [Pink Cusk-eel Southern Argentina]	TB SSB	ER F	TB SSB	ER F	
22. PCEELCSCH [Pink cusk-eel Central-Southern Chile]	TB SSB	ER F	TB SSB	ER F	
23. PCEELSCH [Pink cusk-eel Southern Chile]	TB SSB	ER F	TB SSB	ER F	
24. PTOOTHFISHCH [Patagonian Toothfish Chile]	TB SSB	ER F	TB SSB	ER F	
25. RSQLOBSTERCSCH [Red squat lobster Central-Southern Chile]	TB SSB	ER F	TB SSB	ER F	
26. RSQLOBSTERNCH [Red squat lobster Northern Chile]	TB SSB	ER F	TB SSB	ER F	
27. SBREAMCH [Deepwater Cardinalfish Chile]	TB SSB	ER F	TB SSB	ER F	
28. SBWHITARGS [Southern blue whiting Southern Argentina]	TB SSB	ER F	TB SSB	ER F	
29. SBWHITCH [Southern blue whiting Chile]	TB SSB	ER F	TB SSB	ER F	
30. SOUTHHAKECH [Southern hake Chile]	TB SSB	ER F	TB SSB	ER F	
31. SPHAKECH [South Pacific Hake Chile]	TB SSB	ER F	TB SSB	ER F	
32. SSARDCH [Southern sardine Chile]	TB SSB	ER F	TB SSB	ER F	
33. YNOSEKACSCH [Yellownose skate Central-Southern Chile]	TB SSB	ER F	TB SSB	ER F	
34. YNOSEKASCH [Yellownose skate Southern Chile]	TB SSB	ER F	TB SSB	ER F	

## Argentine chub mackerel Southern Argentina [ACMACKSARG]

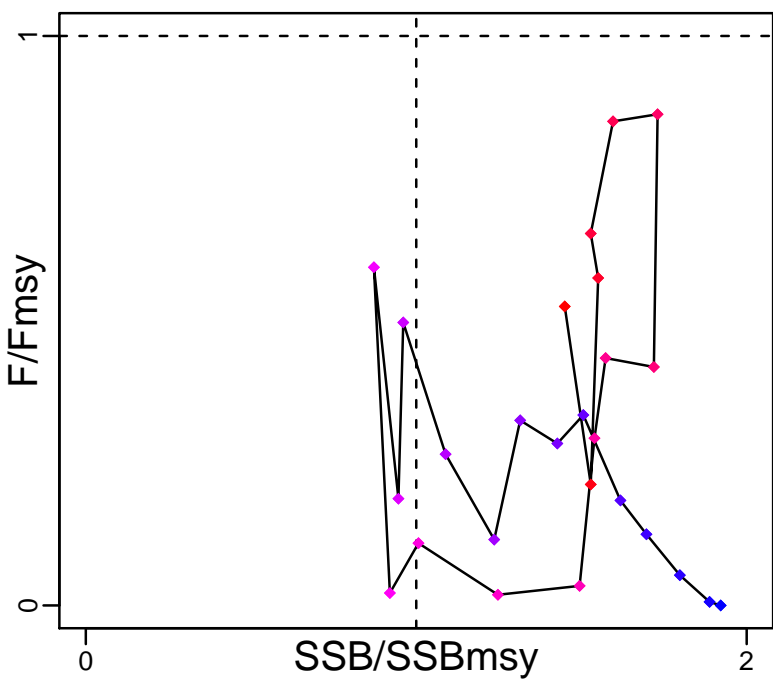
Metadata	
<b>Scientific Name</b>	Scomber colias
<b>Current Assess ID</b>	INIDEP-ACMACKSARG-1989-2016-BURATTI
<b>Area</b>	Southern Argentina
<b>Management Authority</b>	Consejo Federal Pesquero, Argentina national management
<b>Assessor</b>	Instituto Nacional de Investigacion y Desarrollo Pesquero
<b>Asmts in RAM</b>	2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-pr-MT	2016	89,000
<b>Fmsy</b>	Fmsy-pr-1/yr	2016	0.32
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	89,000
<b>Fmgt</b>	Fmgt-1/yr	2016	0.32
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2016	0.38
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	59,000
<b>Flim</b>	Flim-1/yr	2016	0.81
<b>ERlim</b>	-	-	-

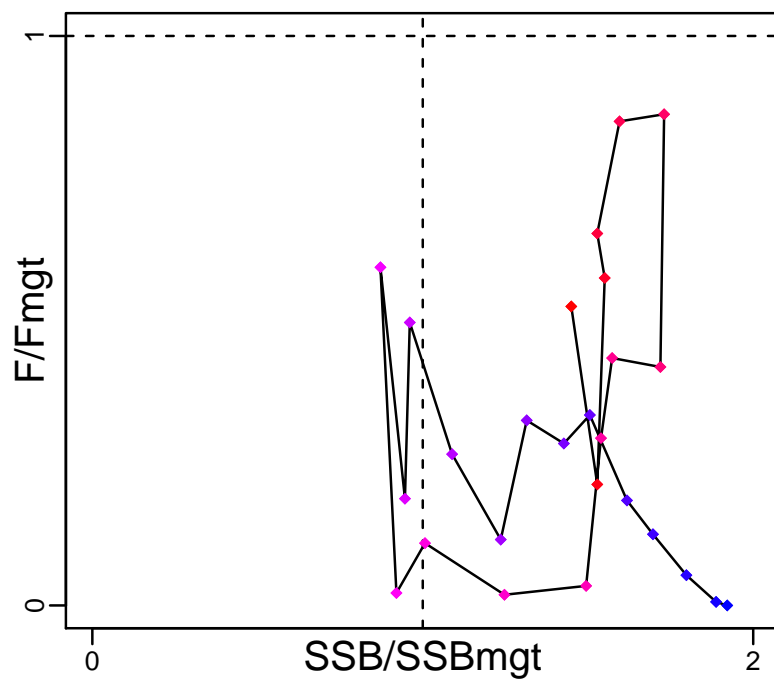
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	168,000	-	-
<b>SSB</b>	SSB-MT	2016	129,000	Both	1 to 10
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$2.58 \times 10^8$	Both	1
<b>F</b>	F-1/yr	2016	0.168	Both	1 to 10
<b>ER</b>	ER-calc-ratio	2016	0.096	Both	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2016	9280		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-pr-MT	2016	1.449		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2016	0.525		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	1.449		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.525		
<b>ER/ERmgt</b>	-	-	-		

# Argentine chub mackerel Southern Argentina [ACMACKSARG]

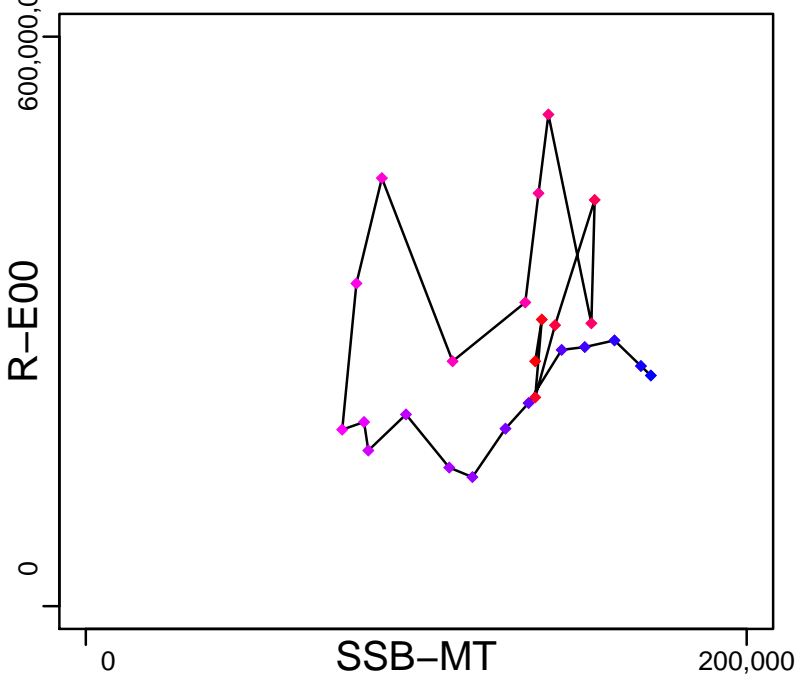
Kobe MSYpref (1989–2016–BURATTI)



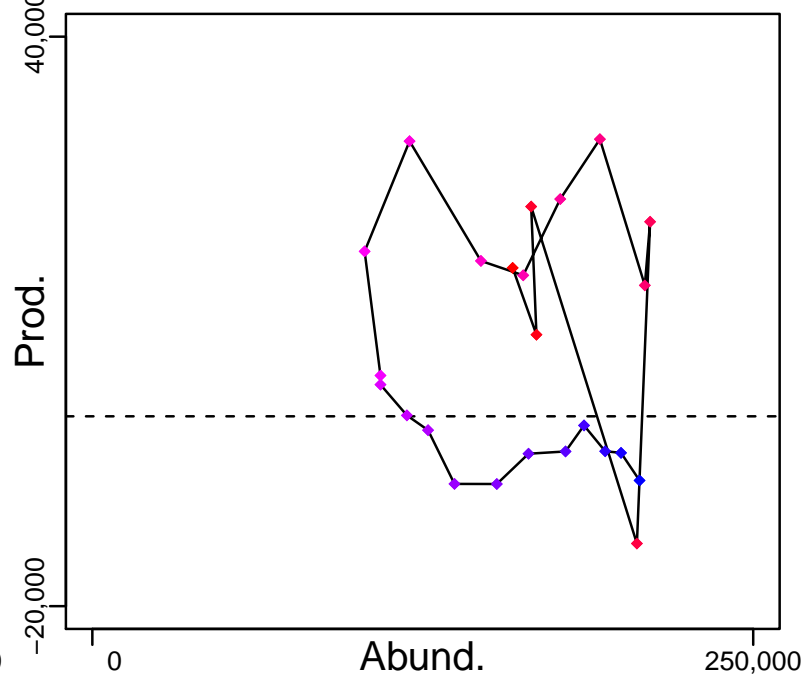
Kobe MGTpref (1989–2016–BURATTI)



Spawner Recruit (1989–2016–BURATTI)



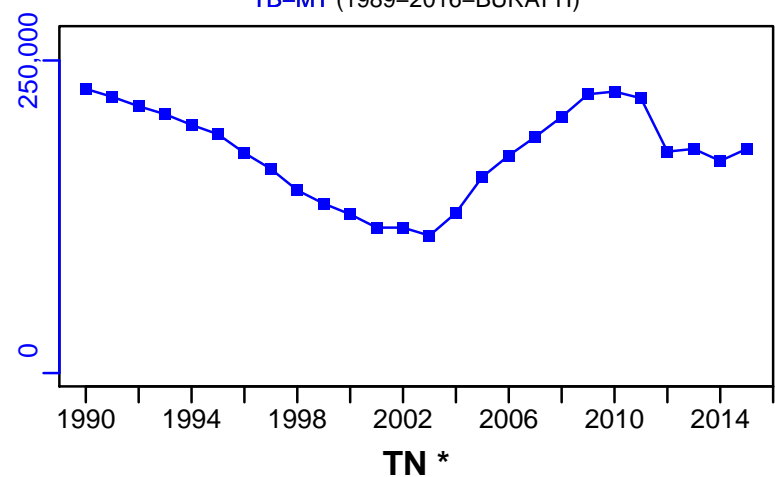
Production (1989–2016–BURATTI)



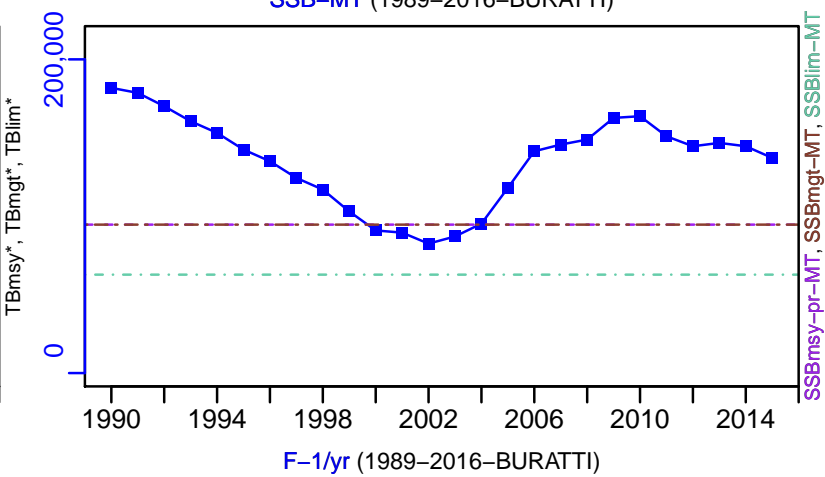
◆ Start Year ◆ End Year \* No Data

# Argentine chub mackerel Southern Argentina [ACMACKSARG]

TB-MT (1989–2016–BURATTI)

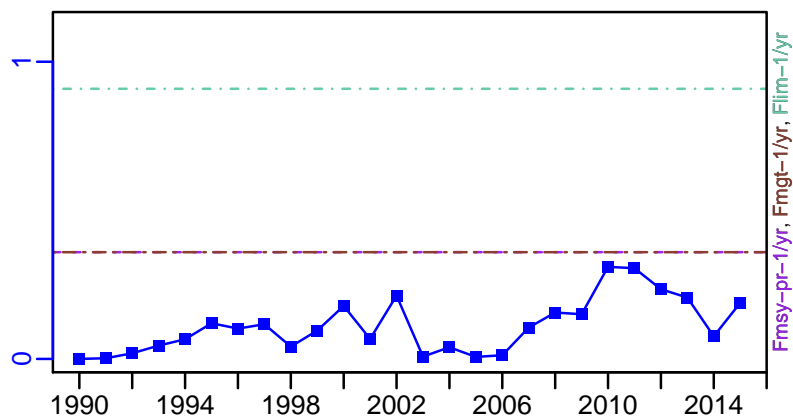
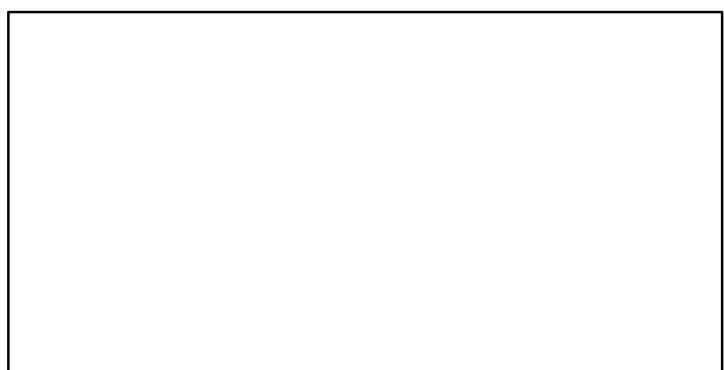


SSB-MT (1989–2016–BURATTI)

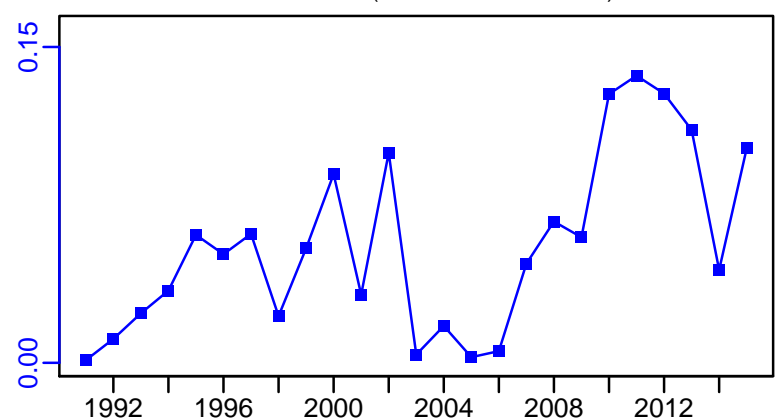


TN \*

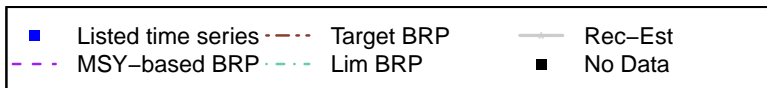
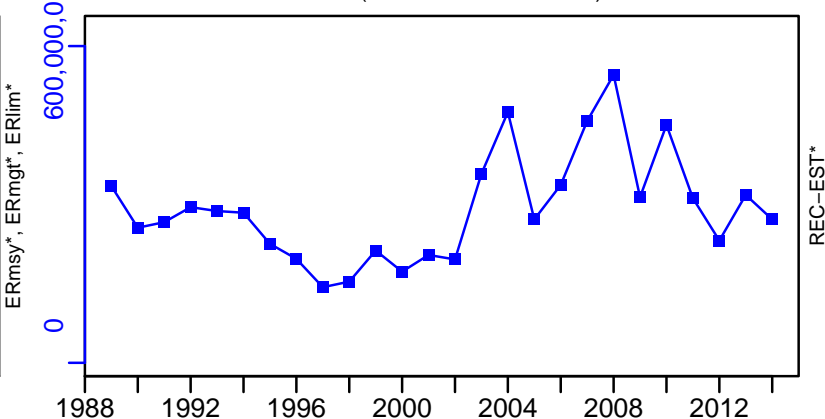
F-1/yr (1989–2016–BURATTI)



ER-calc-ratio (1989–2016–BURATTI)

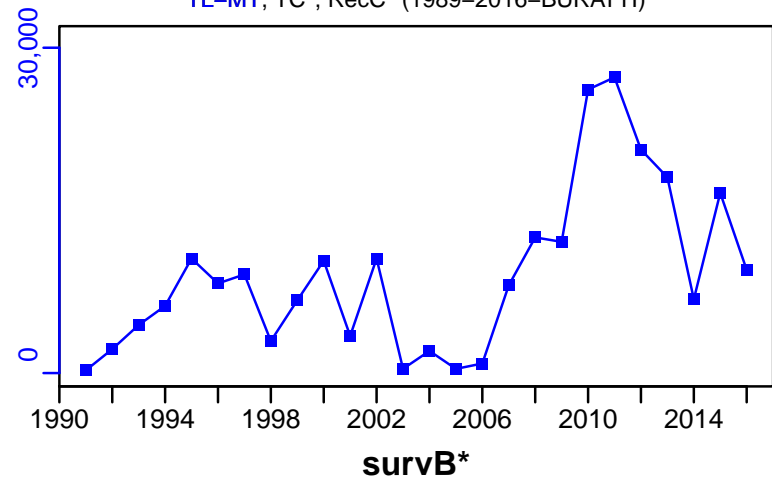


R-E00 (1989–2016–BURATTI)

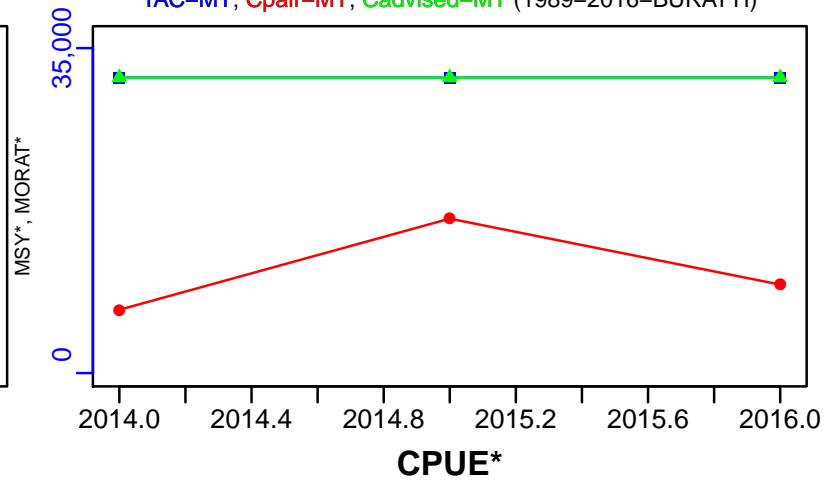


# Argentine chub mackerel Southern Argentina [ACMACKSARG]

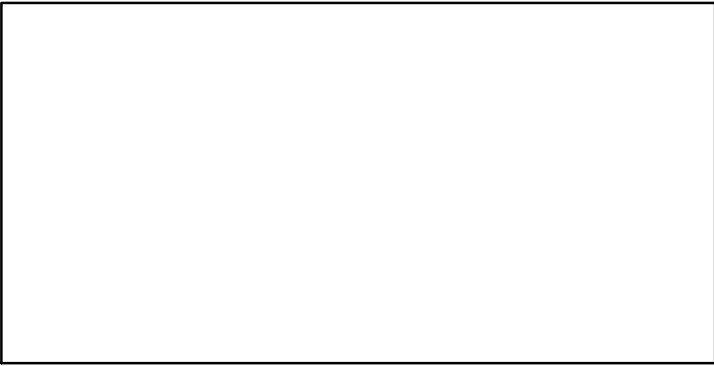
TL-MT, TC\*, RecC\* (1989-2016-BURATTI)



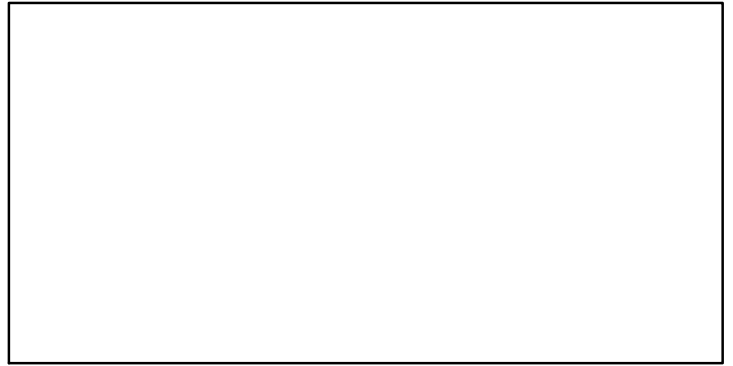
TAC-MT, Cpair-MT, Cadvised-MT (1989-2016-BURATTI)



EFFORT\*



CdivMSY\*



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

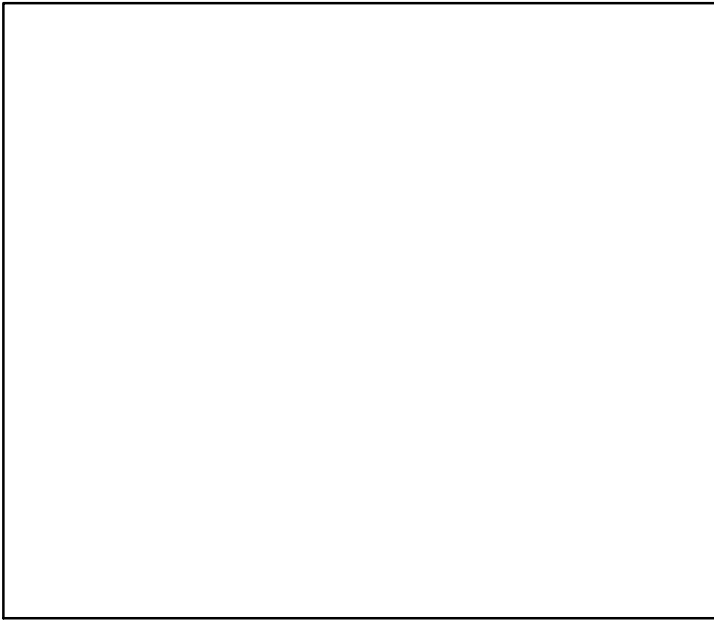
## Alfonsino Chile [AFLONCH]

Metadata	
<b>Scientific Name</b>	Beryx splendens
<b>Current Assess ID</b>	SPRFMO-AFLONCH-1998-2011-CHING
<b>Area</b>	Chilean EEZ and offshore
<b>Management Authority</b>	South Pacific Regional Fisheries Management Organization
<b>Assessor</b>	South Pacific Regional Fisheries Management Organization
<b>Asmts in RAM</b>	2011

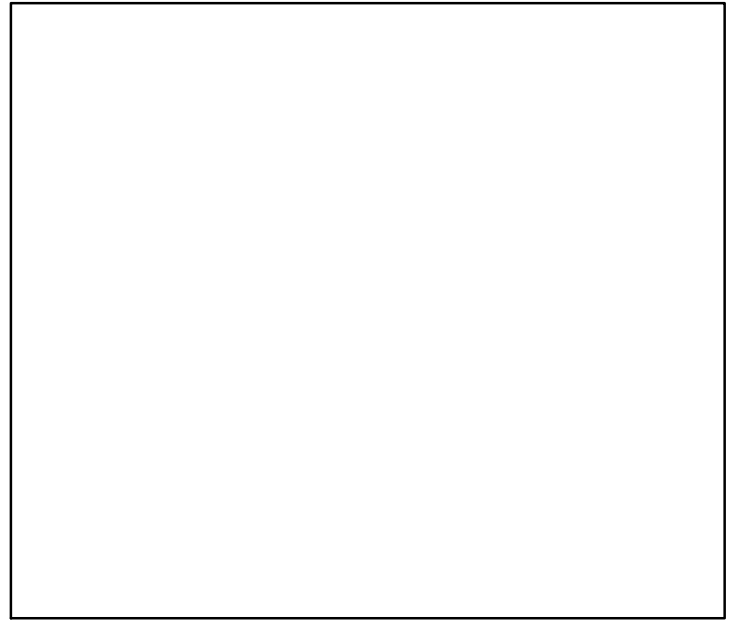
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2011	11,600	-	-
SSB	SSB-MT	2011	944	-	-
TN	-	-	-	-	-
R	R-E00	2011	4370	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2011	0.018	-	-
TC	-	-	-		
TL	TL-MT	2011	204		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

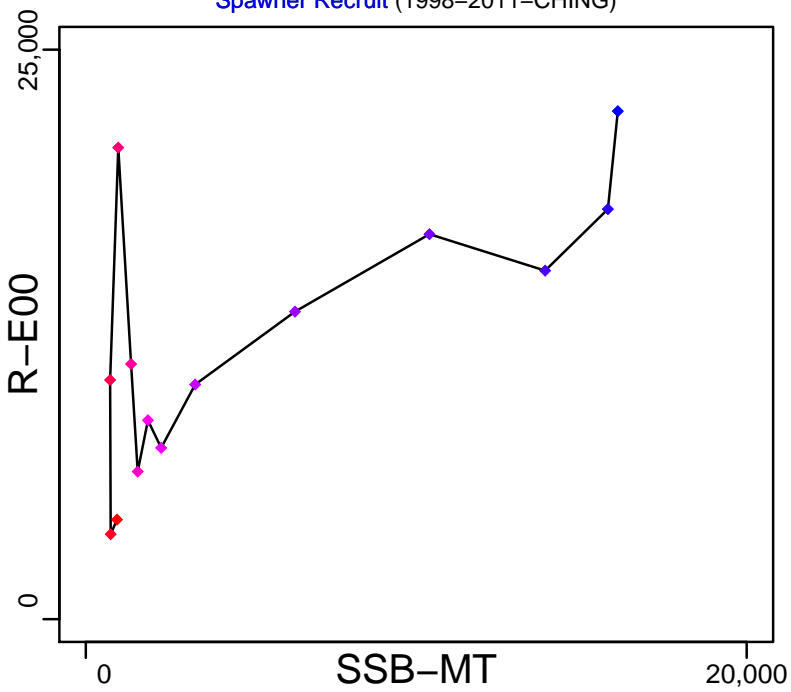
Kobe MSY\*



Kobe MGT\*

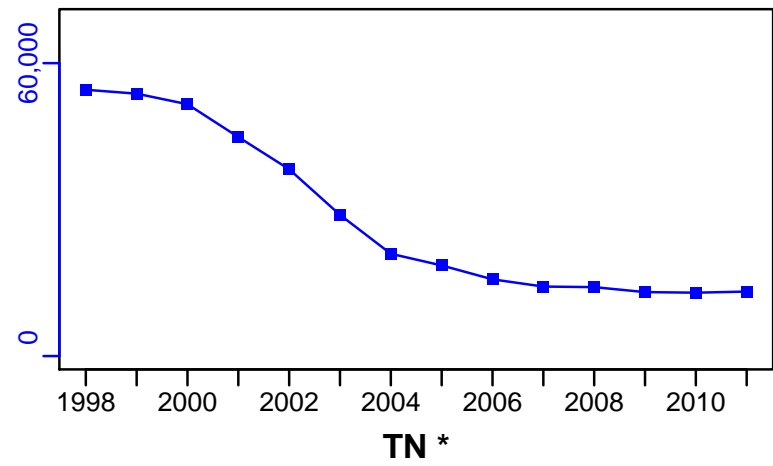


Spawner Recruit (1998–2011–CHING)

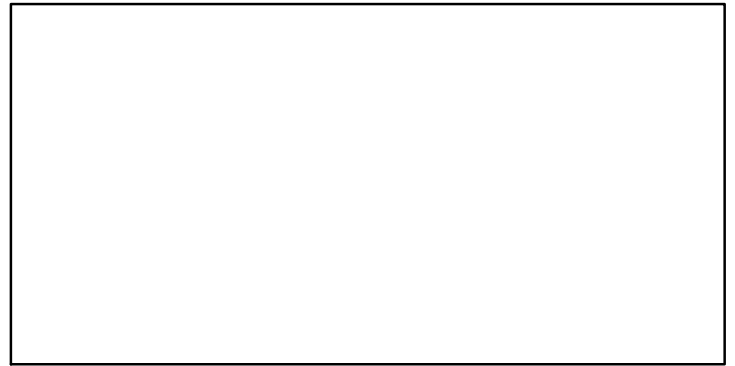
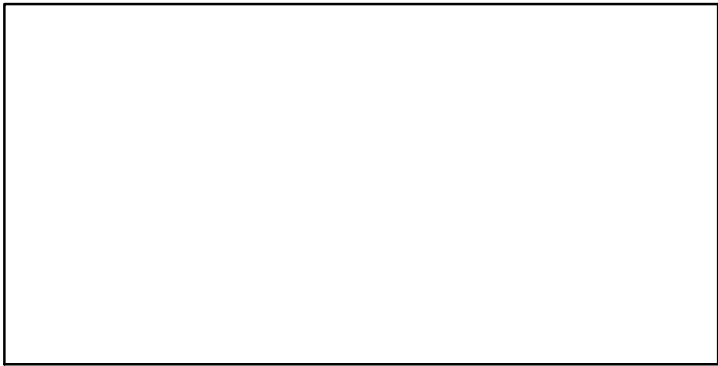
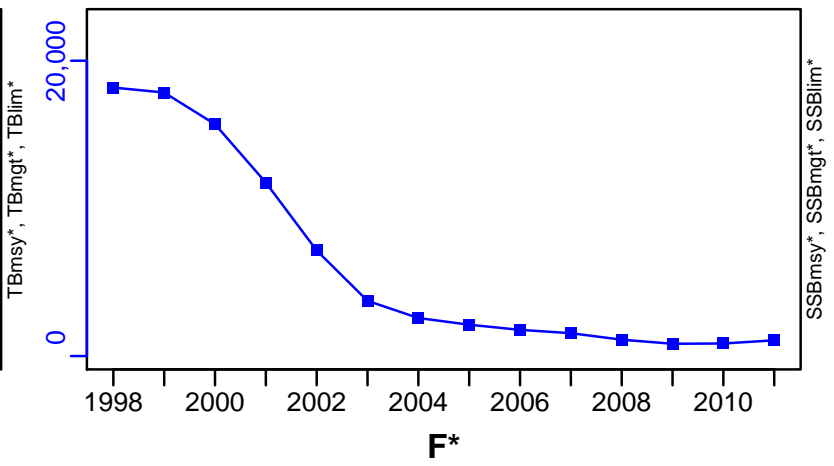


# Alfonsino Chile [AFLONCH]

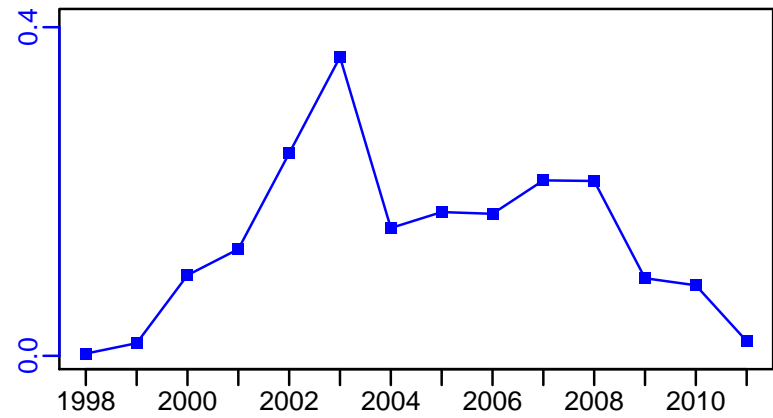
TB-MT (1998–2011–CHING)



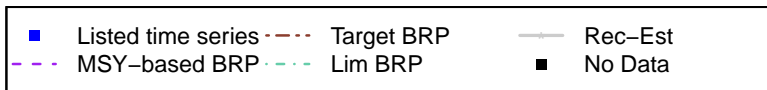
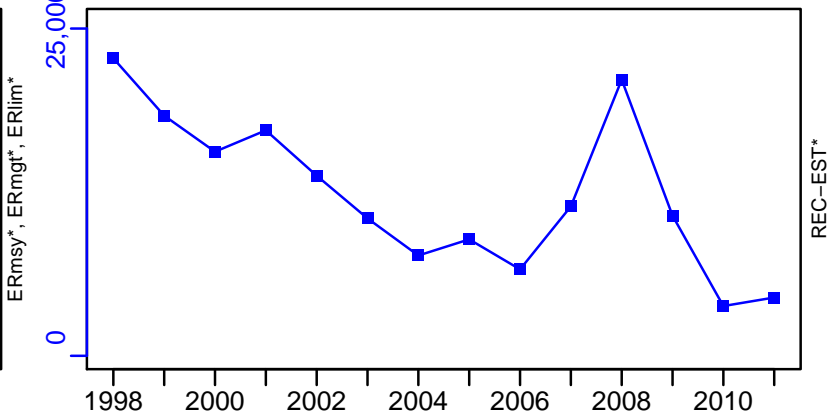
SSB-MT (1998–2011–CHING)



ER-calc-ratio (1998–2011–CHING)



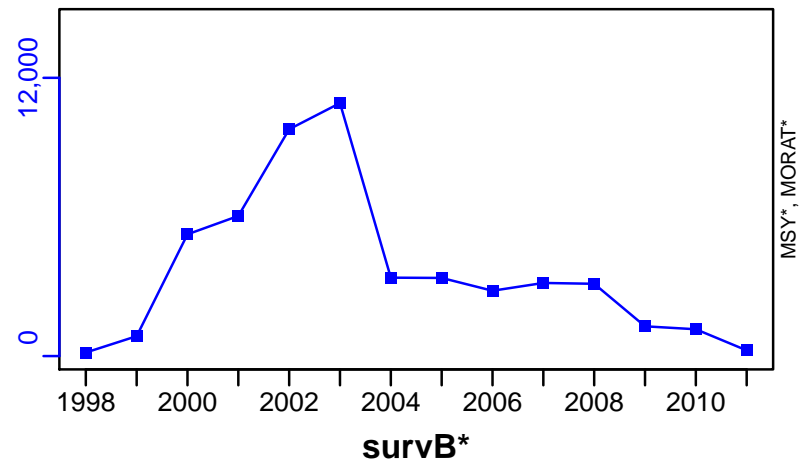
R-E00 (1998–2011–CHING)



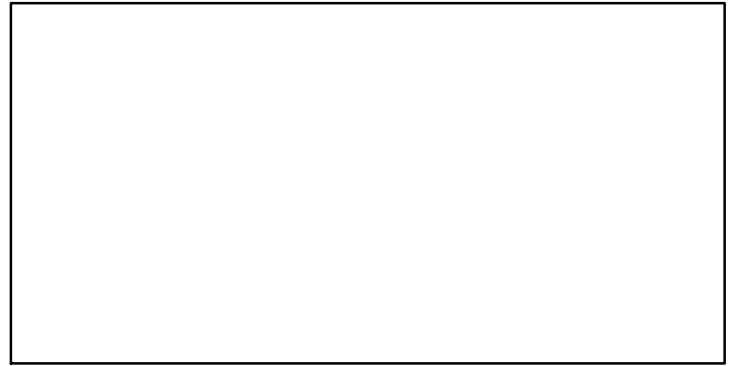


# Alfonsino Chile [AFLONCH]

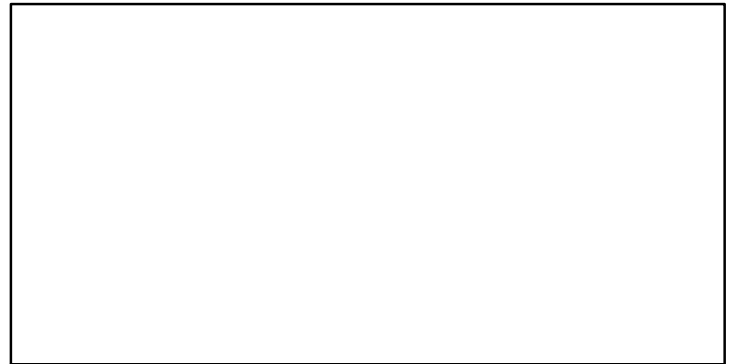
TL-MT, TC\*, RecC\* (1998-2011-CHING)



TAC\*, Cpair\*, Cadv\*



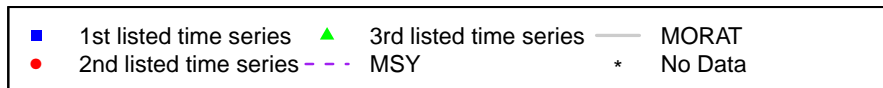
CPUE\*



EFFORT\*



CdivMSY\*



## Argentine anchoita Northern Argentina [ARGANCHONARG]

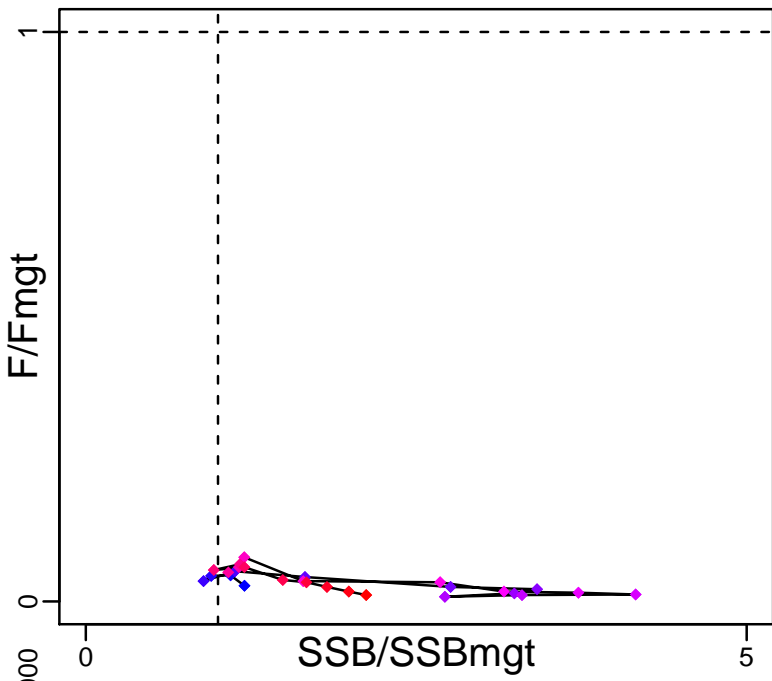
Metadata	
<b>Scientific Name</b>	Engraulis anchoita
<b>Current Assess ID</b>	INIDEP-ARGANCHONARG-1989-2016-PARMA
<b>Area</b>	Northern Argentina
<b>Management Authority</b>	Consejo Federal Pesquero, Argentina national management
<b>Assessor</b>	Instituto Nacional de Investigacion y Desarrollo Pesquero
<b>Asmts in RAM</b>	2007, 2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2007	1,047,948
<b>SSBmsy</b>	SSBmsy-MT	2007	748,152
<b>Fmsy</b>	Fmsy-1/yr	2007	0.19
<b>ERmsy</b>	ERmsy-ratio	2007	0.405
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	890,000
<b>Fmgt</b>	Fmgt-1/yr	2016	0.98
<b>ERmgt</b>	-	-	-
<b>TB0</b>	TB0-MT	2016	3,370,285
<b>SSB0</b>	SSB0-MT	2016	2,196,036
<b>MSY</b>	MSY-MT	2015	222,163
<b>M</b>	M-1/yr	2016	1.01
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	293,000
<b>Flim</b>	Flim-1/yr	2016	4.4
<b>ERlim</b>	-	-	-

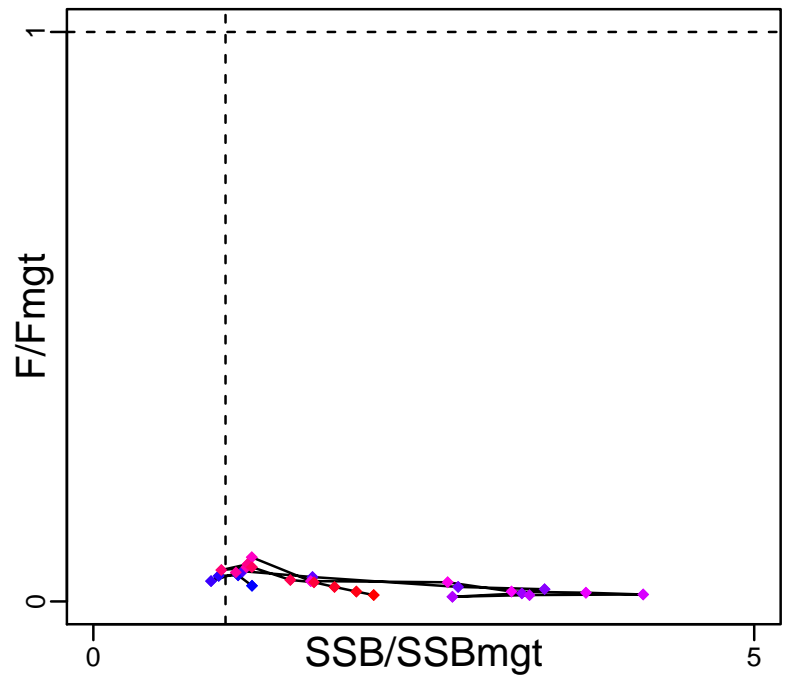
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	2,380,000	Both	1+
<b>SSB</b>	SSB-MT	2016	1,890,000	Both	2+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$2.29 \times 10^{11}$	Both	1
<b>F</b>	F-1/yr	2016	0.011	Both	-
<b>ER</b>	ER-calc-ratio	2016	0.005	-	-
<b>TC</b>	TC-MT	2016	12,500		
<b>TL</b>	TL-MT	2016	12,100		
<b>TB/TBmsy</b>	TB-MT/TBmsy-MT	2007	1.088		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2007	1.363		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2007	0.169		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2007	0.053		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	2.121		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.011		
<b>ER/ERmgt</b>	-	-	-		

# Argentine anchoita Northern Argentina [ARGANCHONARG]

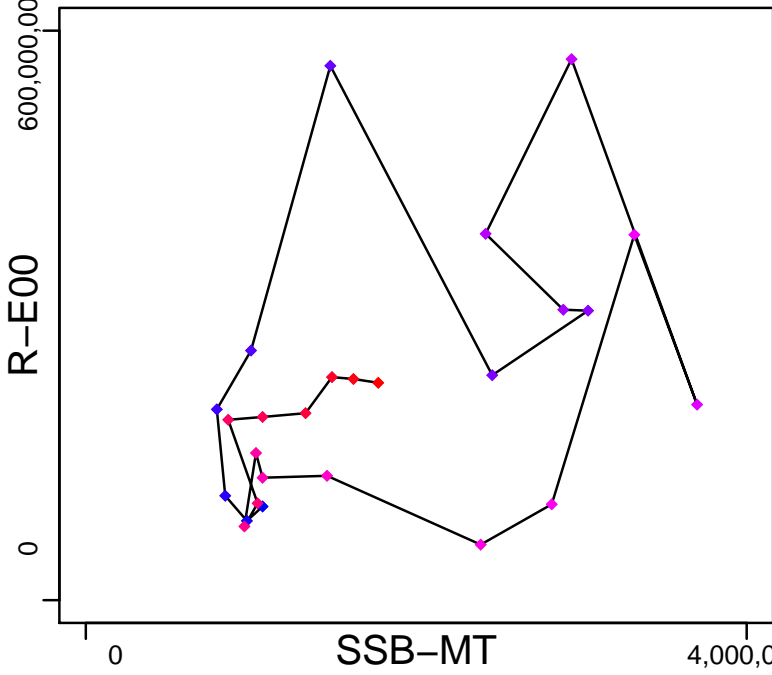
Kobe MSYpref (1989–2016–PARMA)



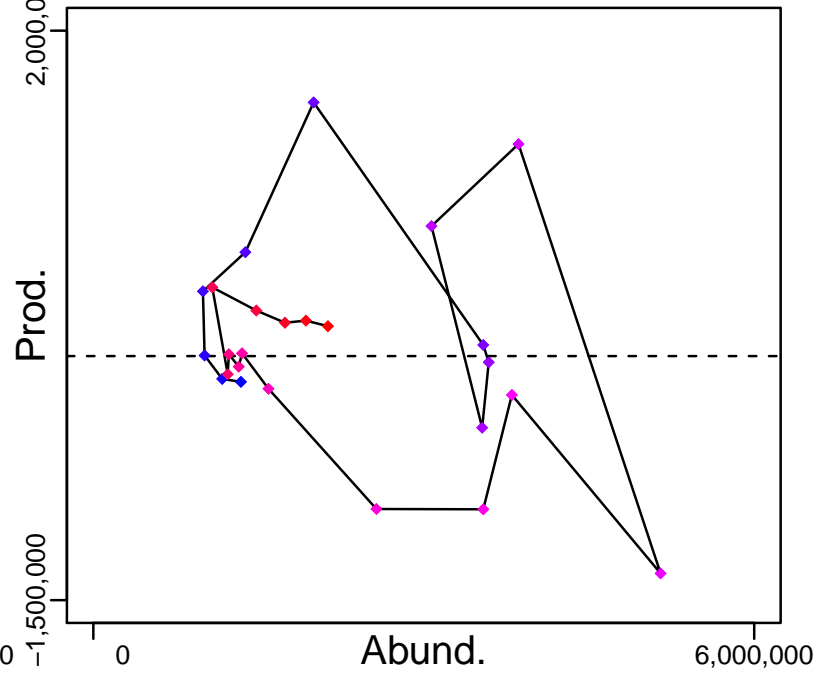
Kobe MGTpref (1989–2016–PARMA)



Spawner Recruit (1989–2016–PARMA)

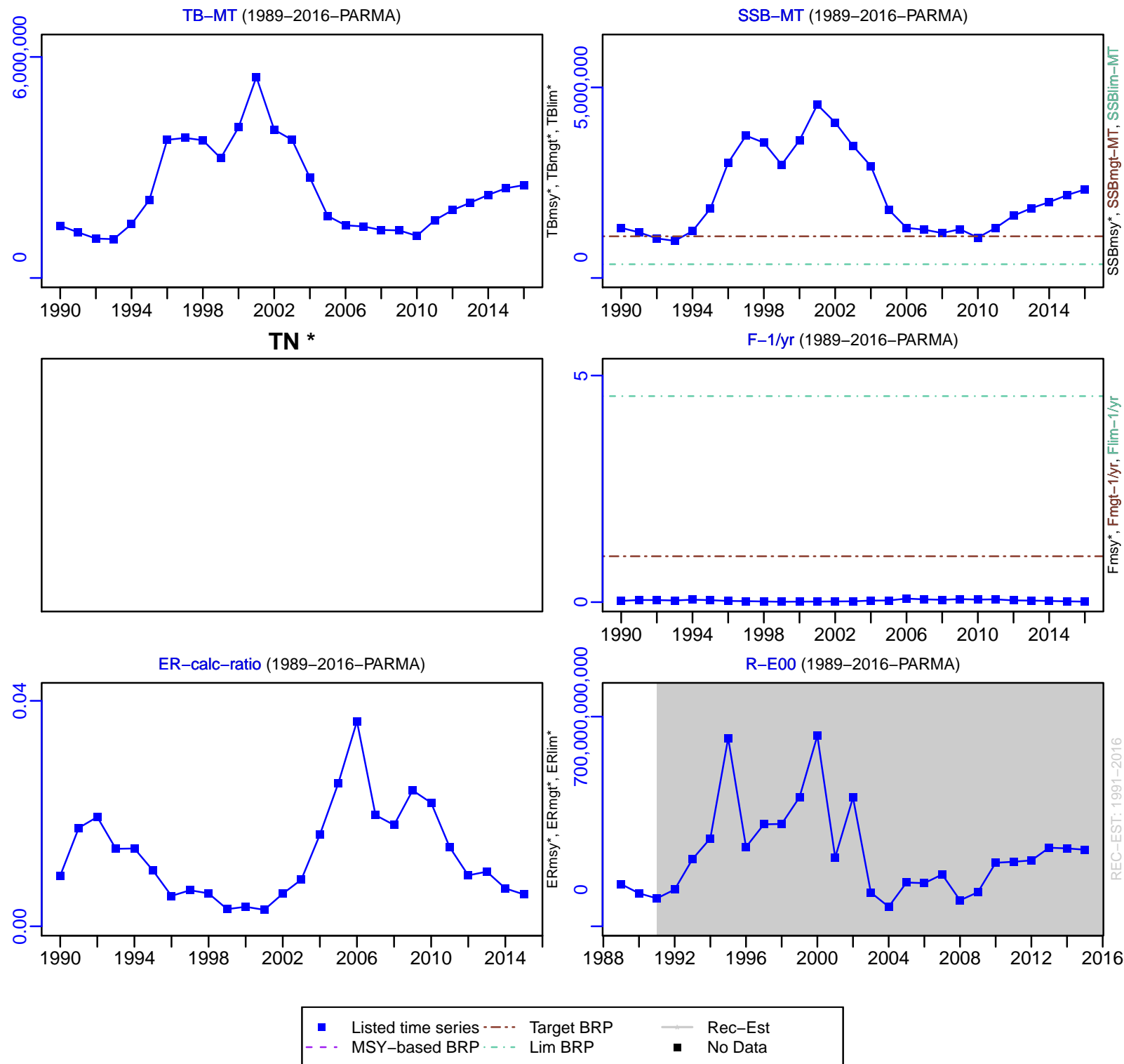


Production (1989–2016–PARMA)



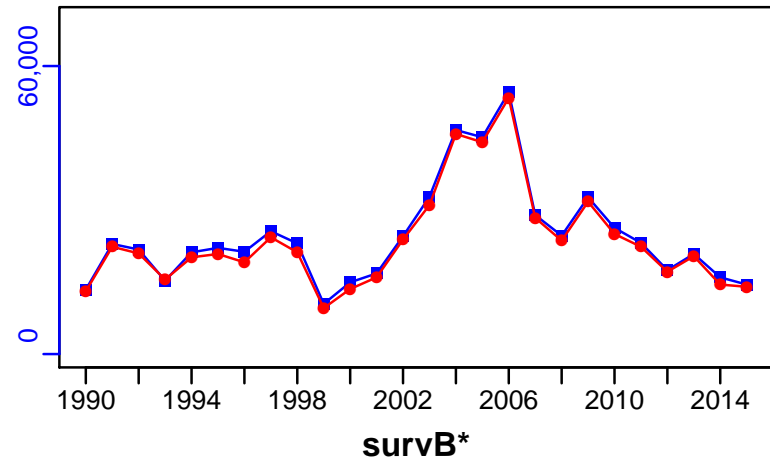
◆ Start Year ◆ End Year \* No Data

# Argentine anchoita Northern Argentina [ARGANCHONARG]

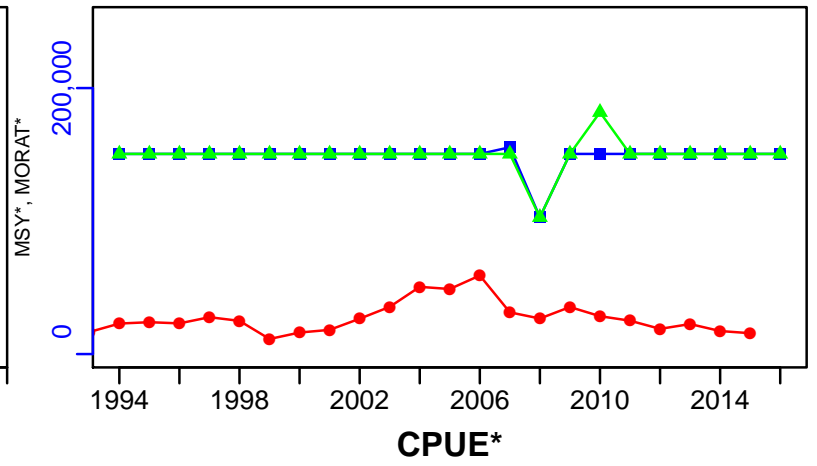


# Argentine anchoita Northern Argentina [ARGANCHONARG]

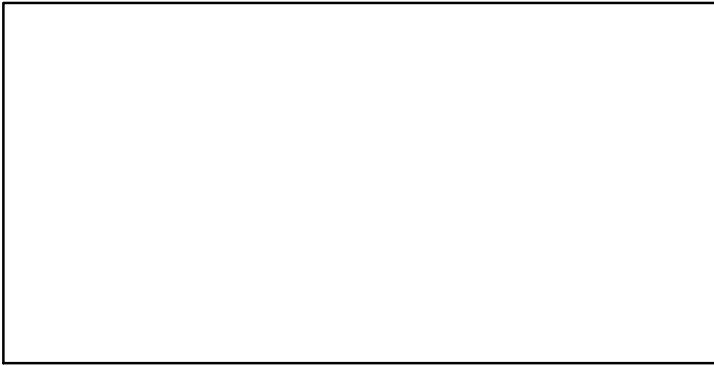
TC-MT, TL-MT, RecC\* (1989–2016–PARMA)



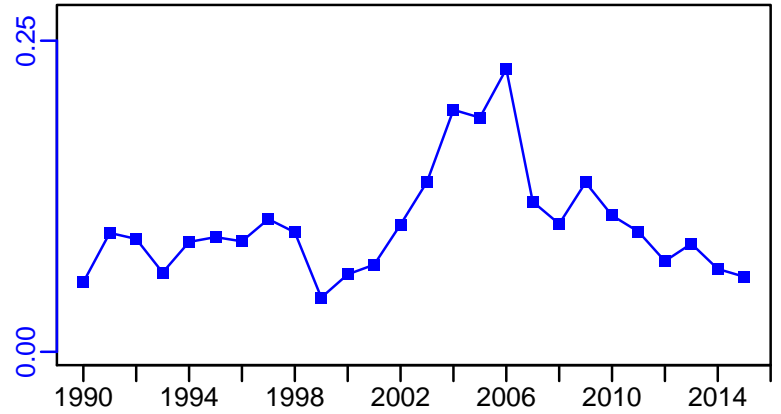
TAC-MT, Cpair-MT, Cadvised-MT (1989–2016–PARMA)



EFFORT\*



CdivMSY-ratio (1989–2015–ORLANDO)



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

## Argentine anchoita Southern Argentina [ARGANCHOSARG]

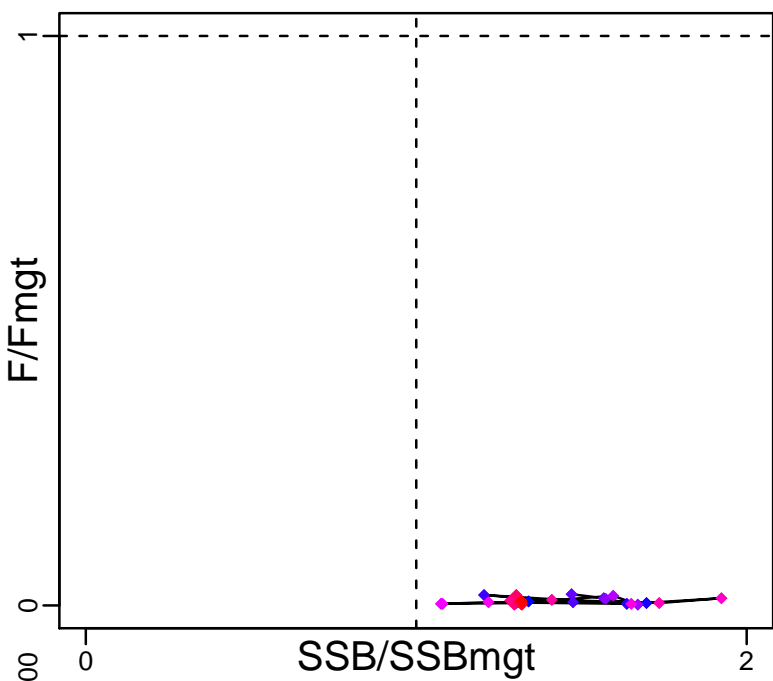
Metadata	
<b>Scientific Name</b>	Engraulis anchoita
<b>Current Assess ID</b>	INIDEP-ARGANCHOSARG-1989-2015-BURATTI
<b>Area</b>	Southern Argentina
<b>Management Authority</b>	Consejo Federal Pesquero, Argentina national management
<b>Assessor</b>	Instituto Nacional de Investigacion y Desarrollo Pesquero
<b>Asmts in RAM</b>	2015, 2007

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2007	733,419
<b>SSBmsy</b>	SSBmsy-MT	2007	298,839
<b>Fmsy</b>	Fmsy-1/yr	2007	0.17
<b>ERmsy</b>	ERmsy-ratio	2007	0.395
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2015	548,161
<b>Fmgt</b>	Fmgt-1/yr	2015	0.71
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2015	454,000
<b>M</b>	M-1/yr	2015	0.98
<b>TBlim</b>	TBlim-MT	2007	350,000
<b>SSBlim</b>	SSBlim-MT	2015	339,700
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

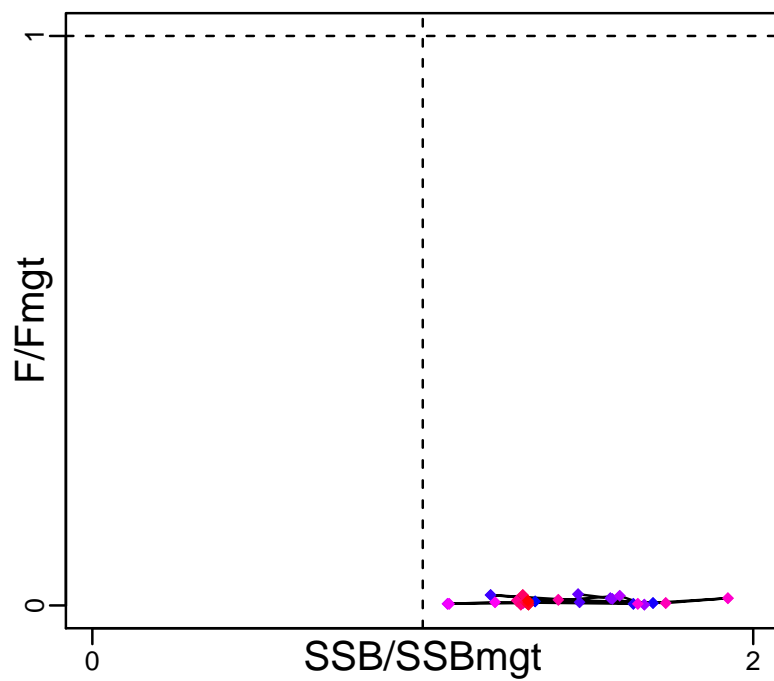
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	1,250,000	Both	1+
<b>SSB</b>	SSB-MT	2015	723,000	Both	2+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$1.42 \times 10^{11}$	Both	1
<b>F</b>	F-1/yr	2015	0.006	Both	1 to 6
<b>ER</b>	ER-calc-ratio	2015	0.002	-	-
<b>TC</b>	TC-MT	2015	2280		
<b>TL</b>	TL-MT	2015	2280		
<b>TB/TBmsy</b>	TB-MT/TBmsy-MT	2007	2.277		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2007	3.135		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2007	0.035		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2007	0.005		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2015	1.318		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	0.008		
<b>ER/ERmgt</b>	-	-	-		

# Argentine anchoita Southern Argentina [ARGANCHOSARG]

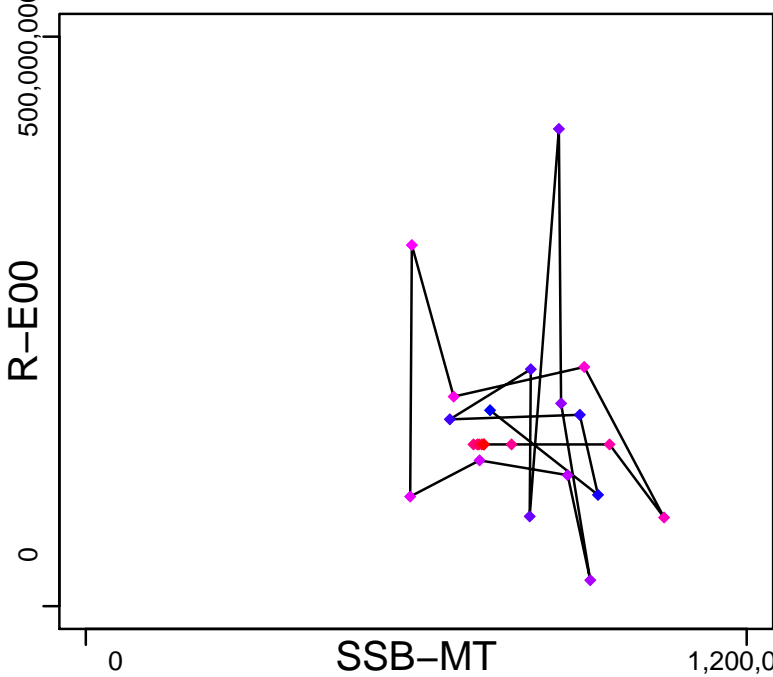
Kobe MSYpref (1989–2015–BURATTI)



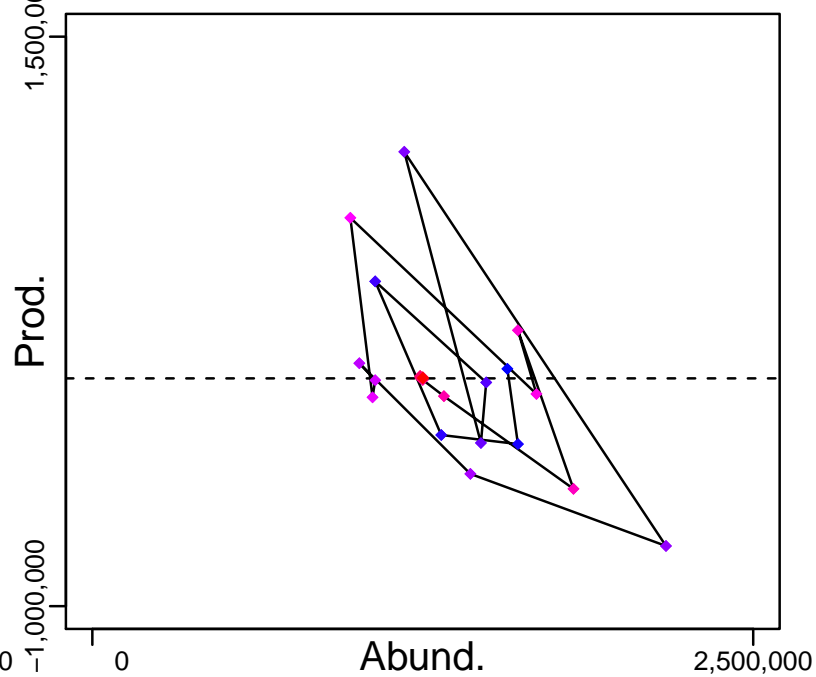
Kobe MGTpref (1989–2015–BURATTI)



Spawner Recruit (1989–2015–BURATTI)

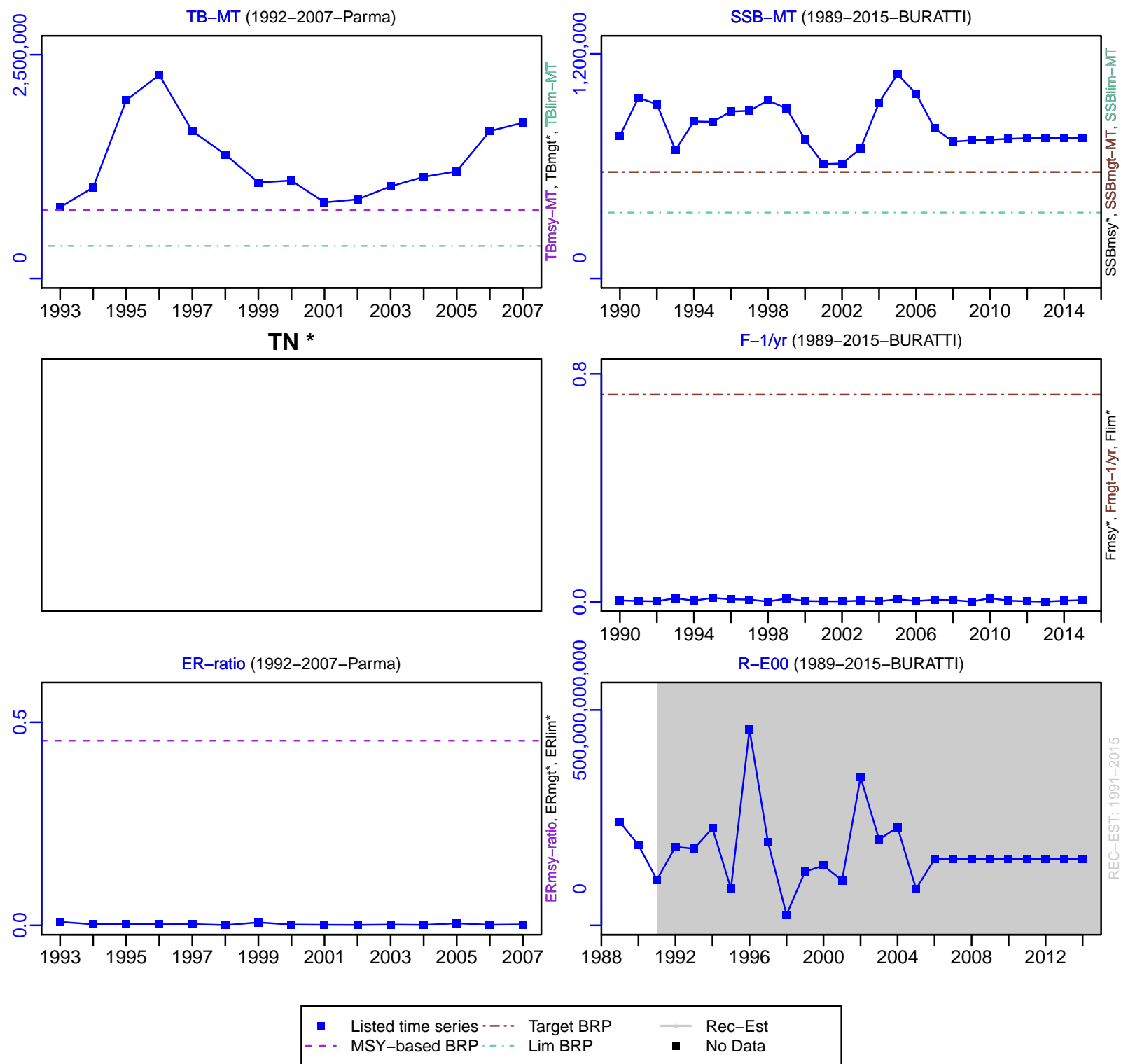


Production (1989–2015–BURATTI)



◆ Start Year ◆ End Year \* No Data

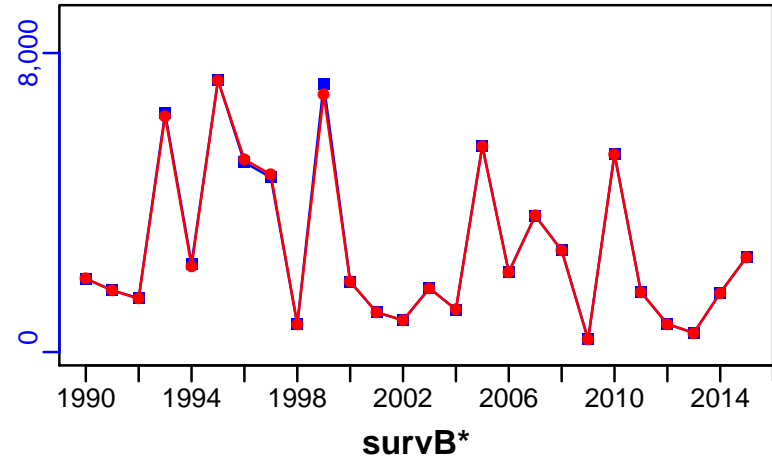
# Argentine anchoita Southern Argentina [ARGANCHOSARG]



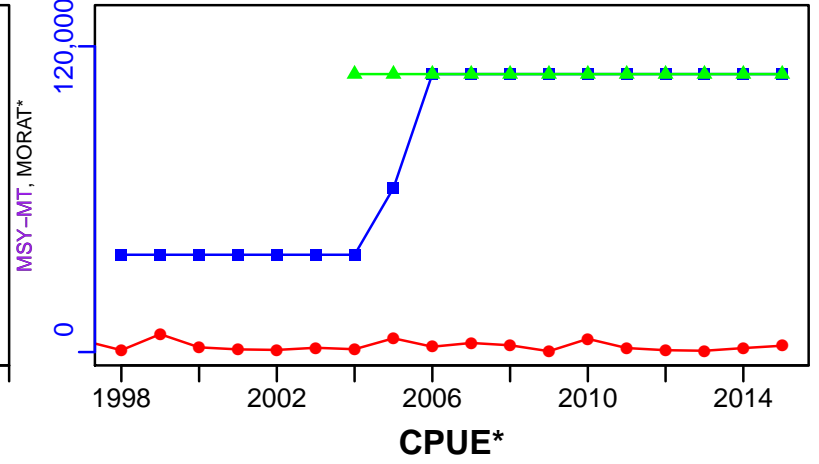


# Argentine anchoita Southern Argentina [ARGANCHOSARG]

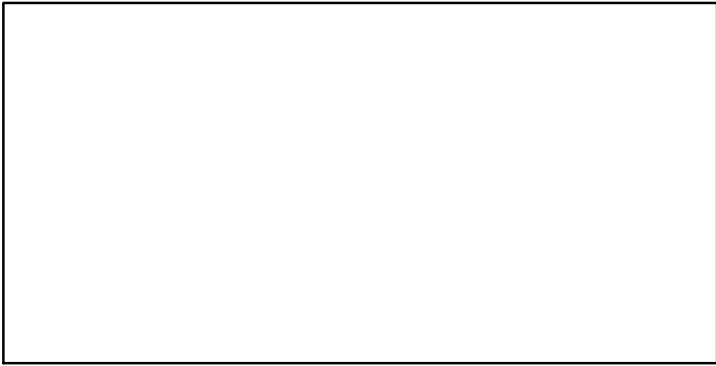
TC-MT, TL-MT, RecC\* (1989-2015-BURATTI)



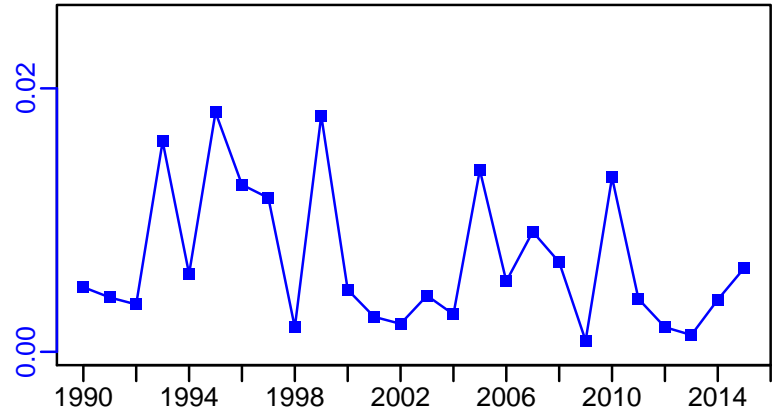
TAC-MT, Cpair-MT, Cadvised-MT (1989-2015-BURATTI)



EFFORT\*



CdivMSY-ratio (1989-2015-BURATTI)



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

## Argentine hake Northern Argentina [ARGHAKENARG]

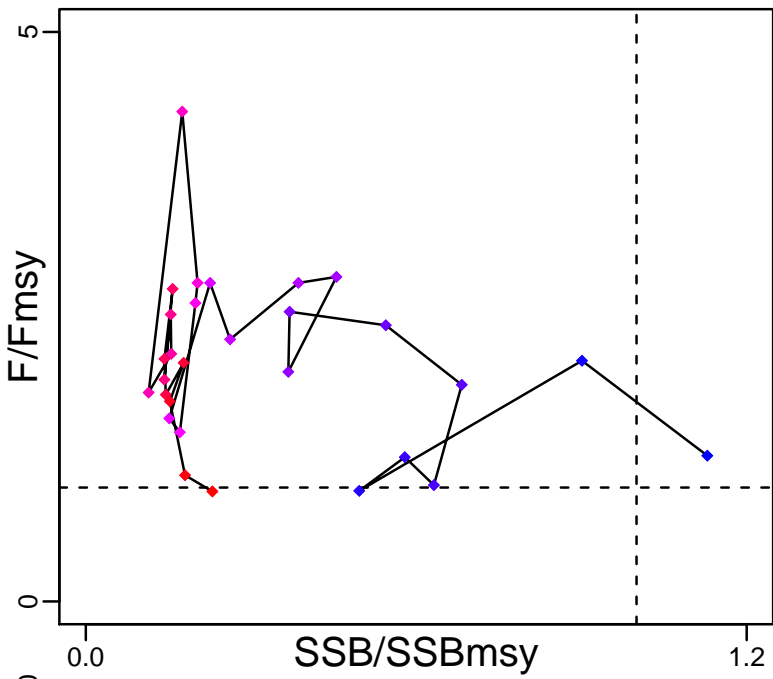
Metadata	
<b>Scientific Name</b>	Merluccius hubbsi
<b>Current Assess ID</b>	INIDEP-ARGHAKENARG-1985-2014-PARMA
<b>Area</b>	Northern Argentina
<b>Management Authority</b>	Consejo Federal Pesquero, Argentina national management
<b>Assessor</b>	Instituto Nacional de Investigacion y Desarrollo Pesquero
<b>Asmts in RAM</b>	2014, 2011

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2014	435,082
<b>Fmsy</b>	Fmsy-1/yr	2014	0.379
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2014	0.3
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2014	230,000
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

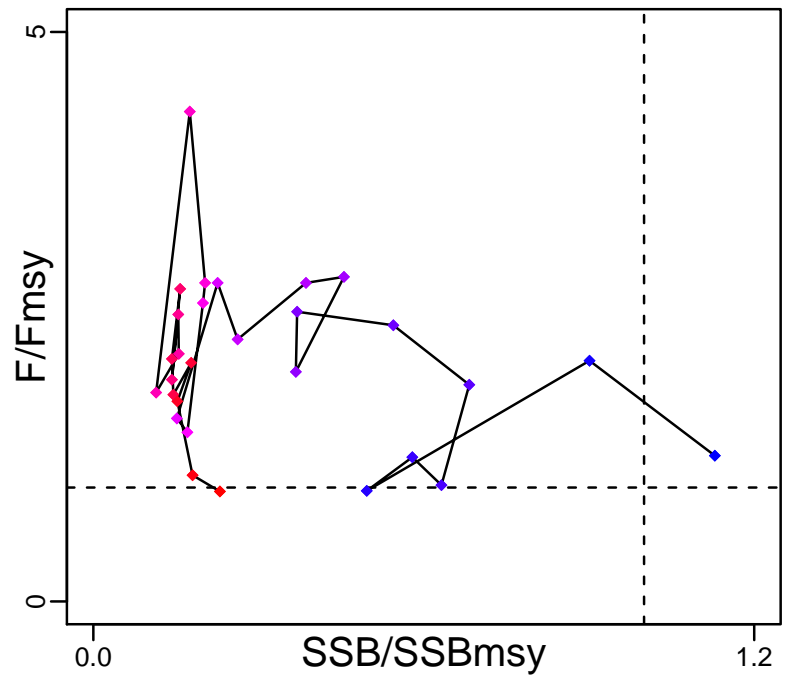
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2014	146,000	Both	-
<b>SSB</b>	SSB-MT	2014	$1 \times 10^5$	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2014	$3.22 \times 10^8$	-	-
<b>F</b>	F-1/yr	2014	0.366	Both	3 to 6
<b>ER</b>	ER-calc-ratio	2014	0.286	-	-
<b>TC</b>	TC-MT	2014	41,800		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2014	0.23		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2014	0.966		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Argentine hake Northern Argentina [ARGHAKENARG]

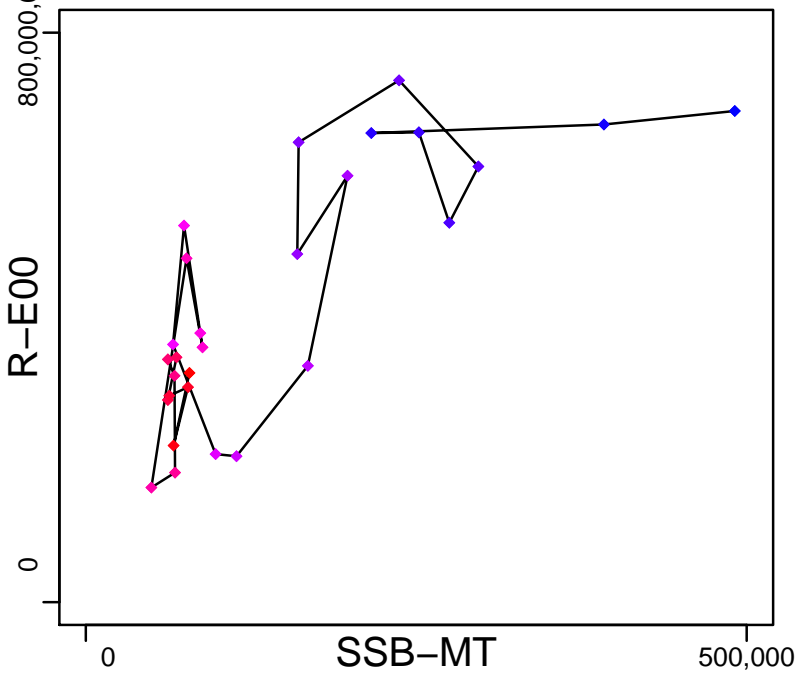
Kobe MSYpref (1985–2014–PARMA)



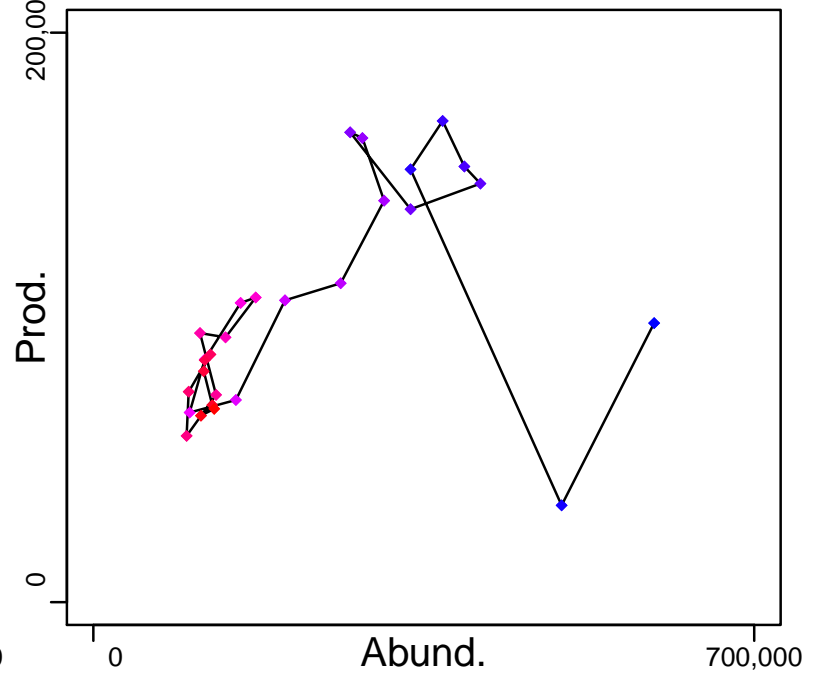
Kobe MGTpref (1985–2014–PARMA)



Spawner Recruit (1985–2014–PARMA)



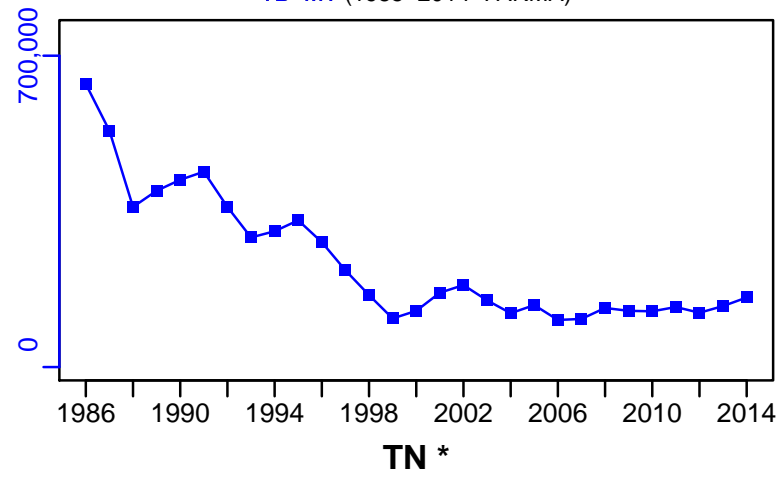
Production (1985–2014–PARMA)



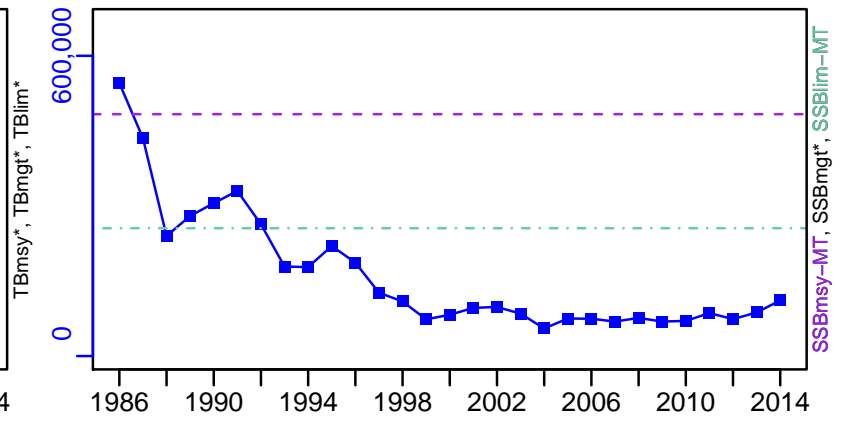
◆ Start Year ◆ End Year \* No Data

# Argentine hake Northern Argentina [ARGHAKENARG]

TB-MT (1985-2014-PARMA)

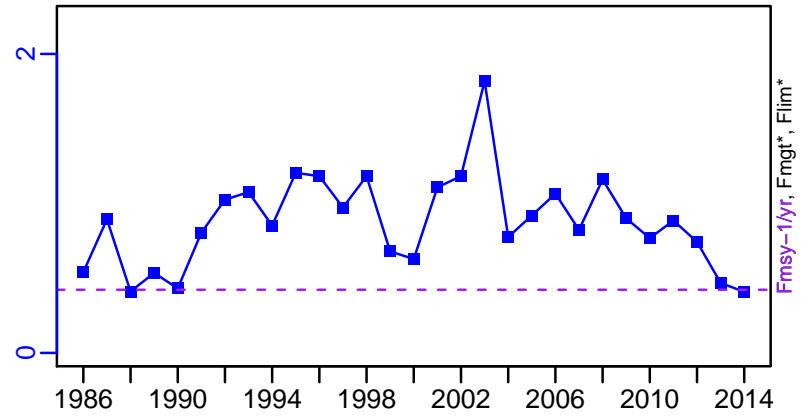
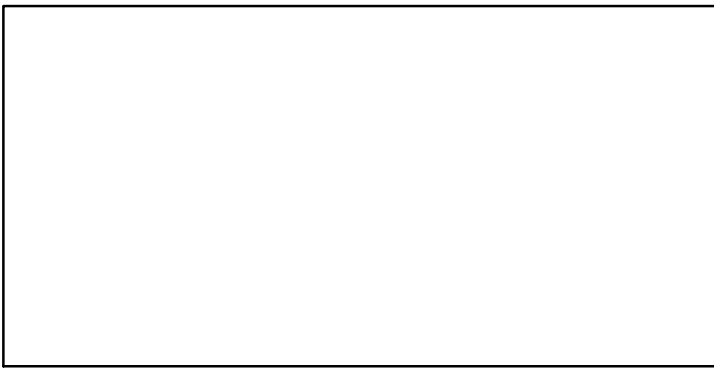


SSB-MT (1985-2014-PARMA)

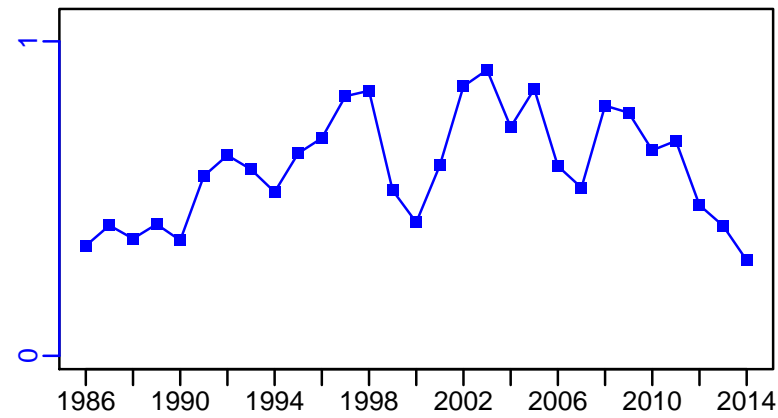


TN \*

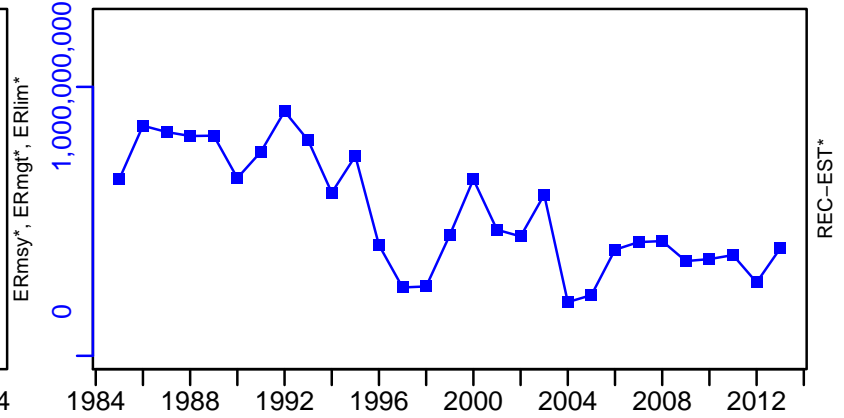
F-1/yr (1985-2014-PARMA)



ER-calc-ratio (1985-2014-PARMA)

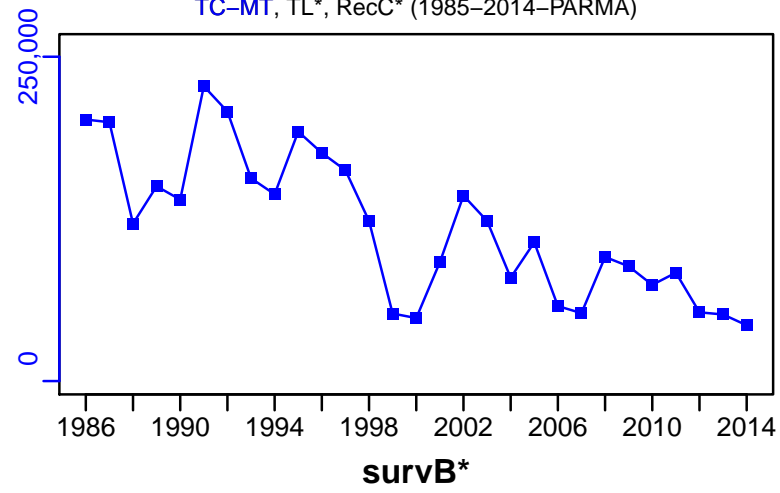


R-E00 (1985-2014-PARMA)

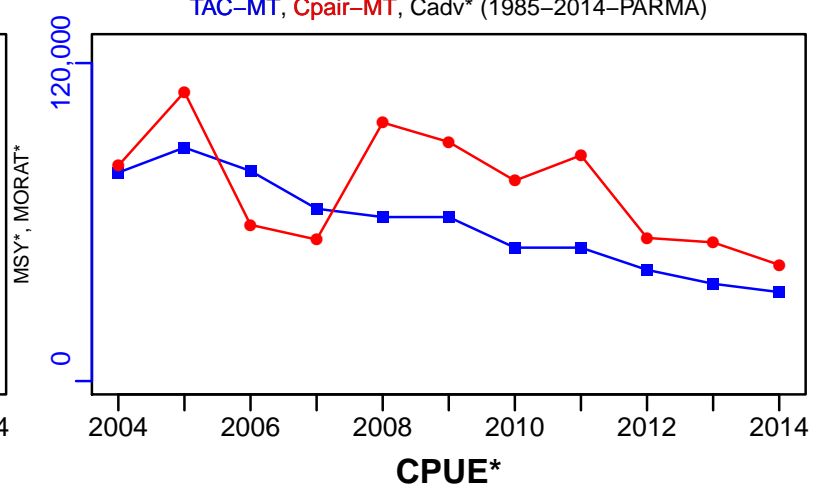


# Argentine hake Northern Argentina [ARGHAKENARG]

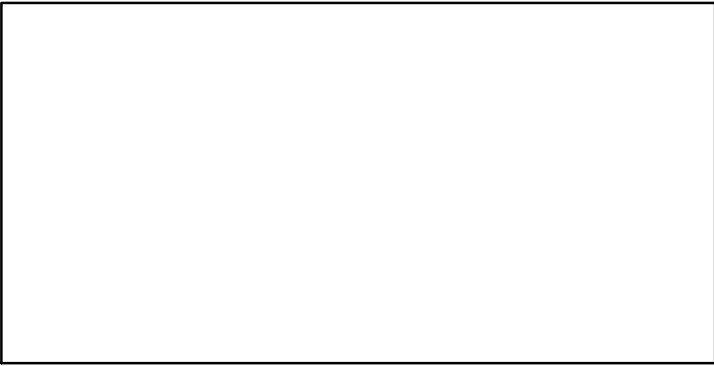
TC-MT, TL\*, RecC\* (1985-2014-PARMA)



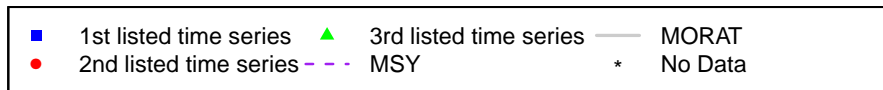
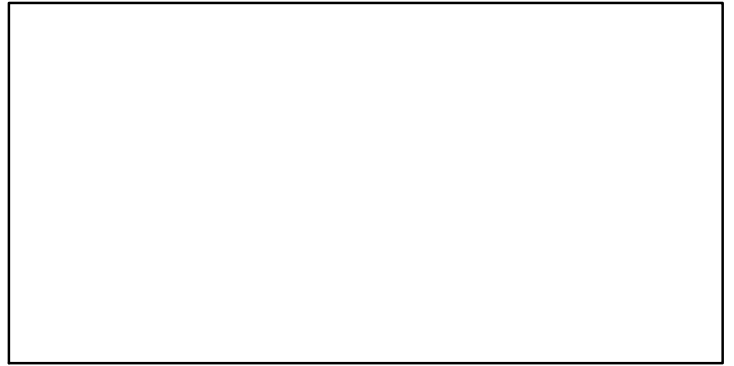
TAC-MT, Cpair-MT, Cadv\* (1985-2014-PARMA)



EFFORT\*



CdivMSY\*



## Argentine hake Southern Argentina [ARGHAKESARG]

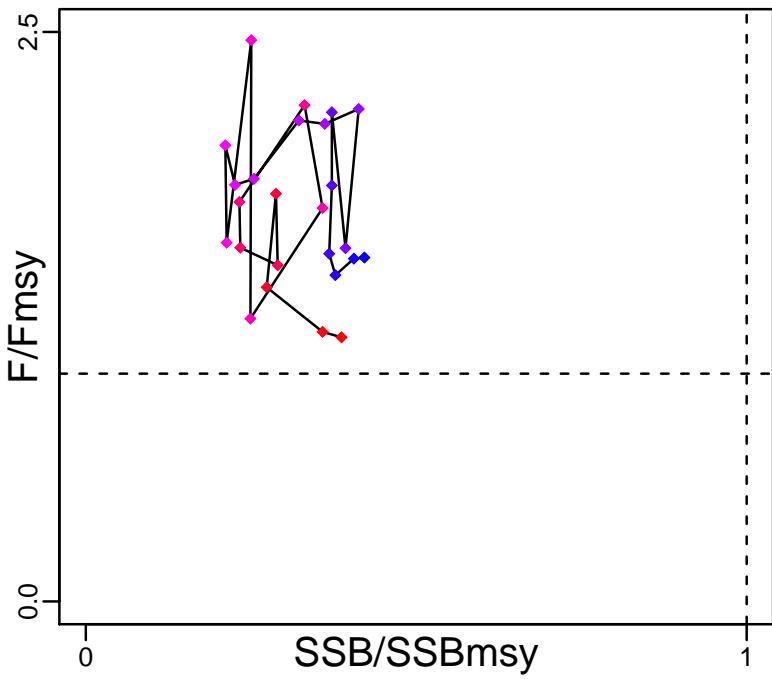
Metadata	
<b>Scientific Name</b>	Merluccius hubbsi
<b>Current Assess ID</b>	INIDEP-ARGHAKESARG-1986-2015-PARMA
<b>Area</b>	Southern Argentina
<b>Management Authority</b>	Consejo Federal Pesquero, Argentina national management
<b>Assessor</b>	Instituto Nacional de Investigacion y Desarrollo Pesquero
<b>Asmts in RAM</b>	2015, 2011

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2015	1,501,500
<b>Fmsy</b>	Fmsy-1/yr	2015	0.414
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2015	$6 \times 10^5$
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2015	0.3
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

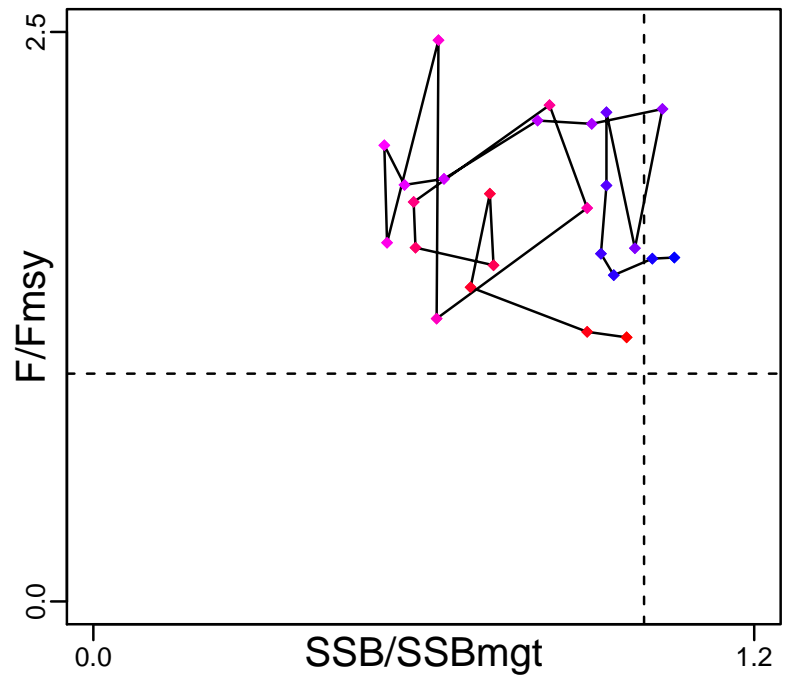
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	909,000	-	-
<b>SSB</b>	SSB-MT	2015	581,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	1,870,000	-	-
<b>F</b>	F-1/yr	2015	0.48	Both	3 to 6
<b>ER</b>	ER-ratio	2015	0.671	Both	-
<b>TC</b>	TC-MT	2015	321,000		
<b>TL</b>	TL-MT	2015	294,000		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2015	0.387		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2015	1.159		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2015	0.968		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Argentine hake Southern Argentina [ARGHAKESARG]

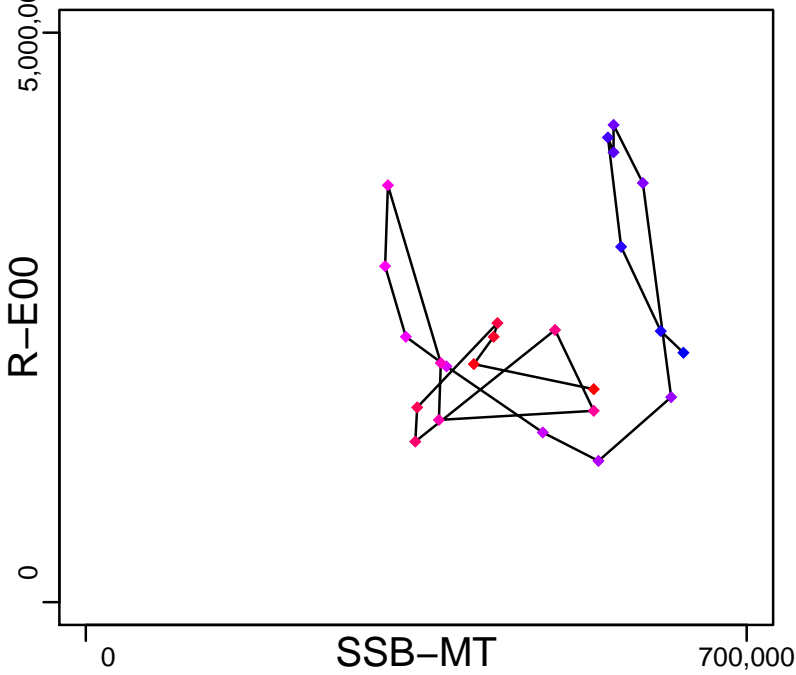
Kobe MSYpref (1986–2015–PARMA)



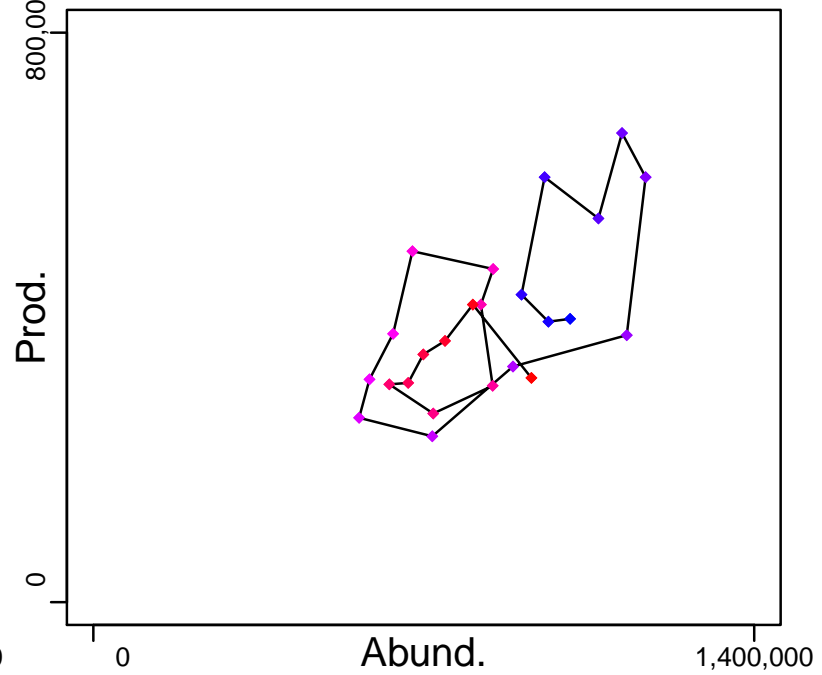
Kobe MGTpref (1986–2015–PARMA)



Spawner Recruit (1986–2015–PARMA)



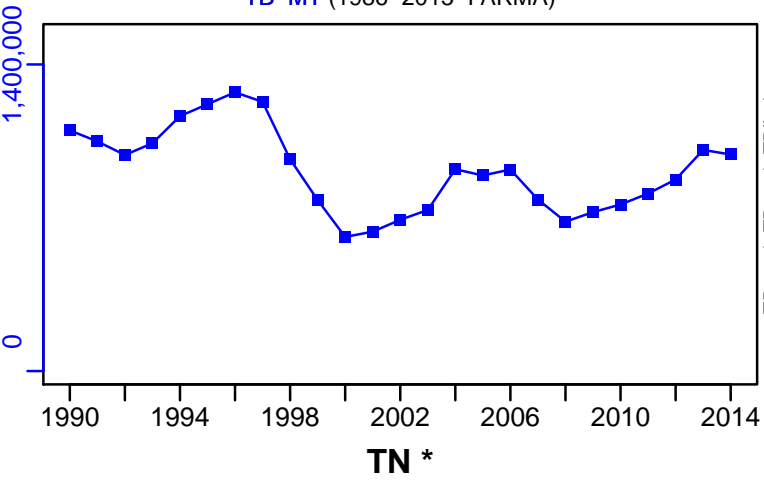
Production (1986–2015–PARMA)



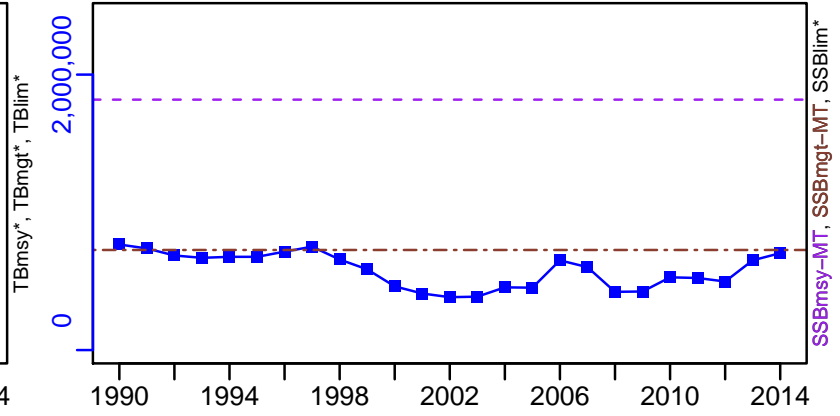
◆ Start Year ◆ End Year \* No Data

# Argentine hake Southern Argentina [ARGHAKESARG]

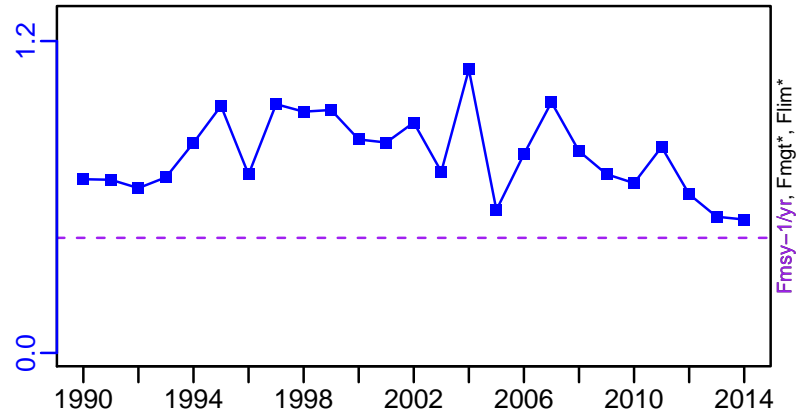
TB-MT (1986–2015–PARMA)



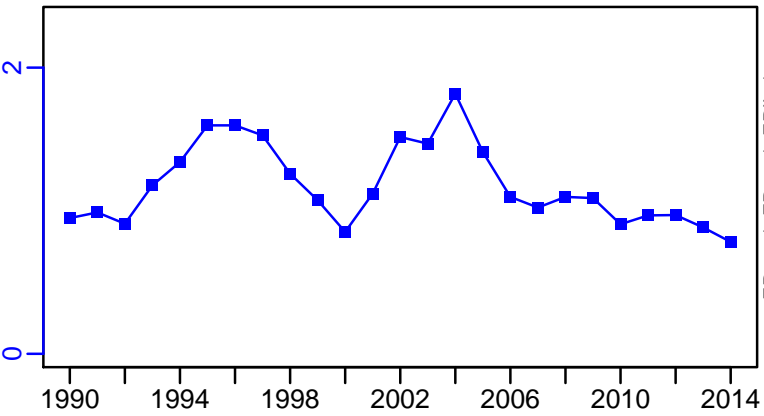
SSB-MT (1986–2015–PARMA)



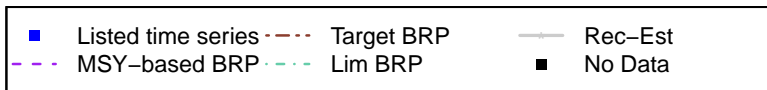
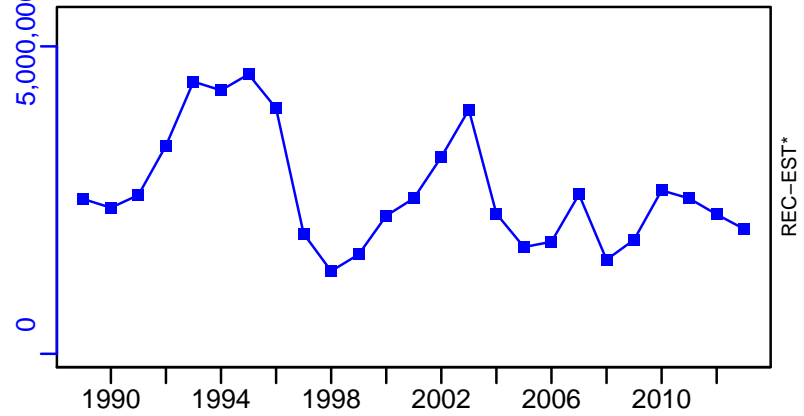
F-1/yr (1986–2015–PARMA)



ER-ratio (1986–2015–PARMA)



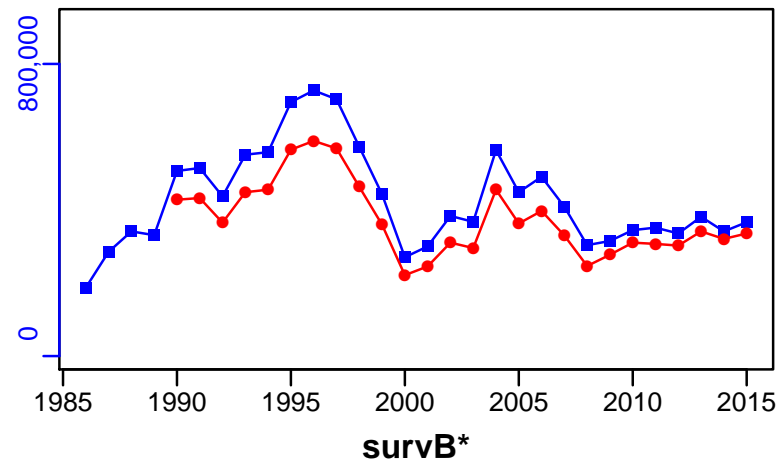
R-E00 (1986–2015–PARMA)



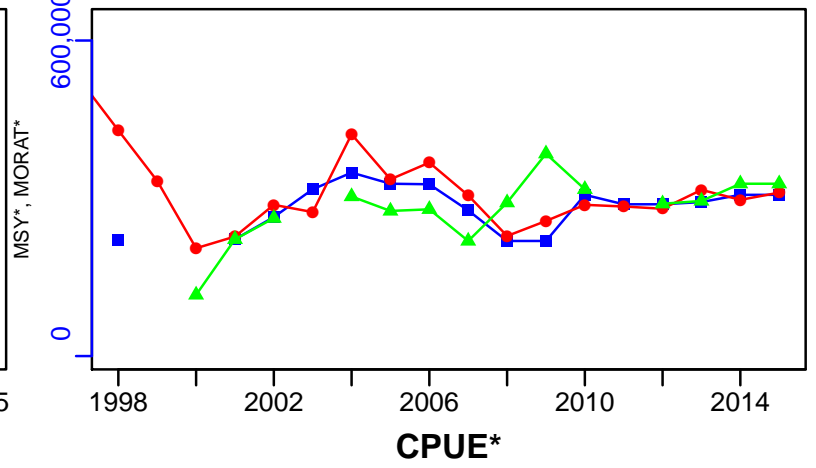


# Argentine hake Southern Argentina [ARGHAKESARG]

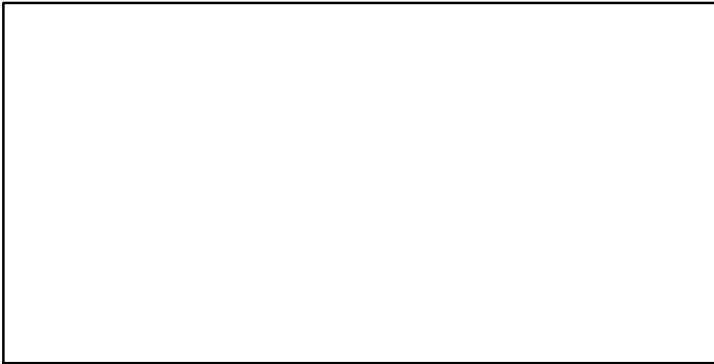
TC-MT, TL-MT, RecC\* (1986–2015–PARMA)



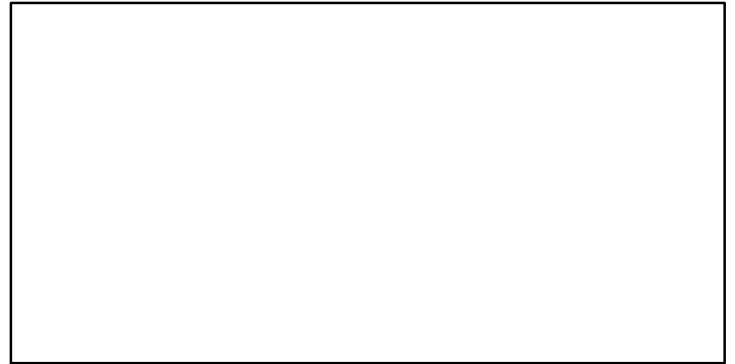
TAC-MT, Cpair-MT, Cadvised-MT (1986–2015–PARMA)



EFFORT\*



CdivMSY\*



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

## Yellow squat lobster Central-Southern Chile [BSQLOBSTERCSCH]

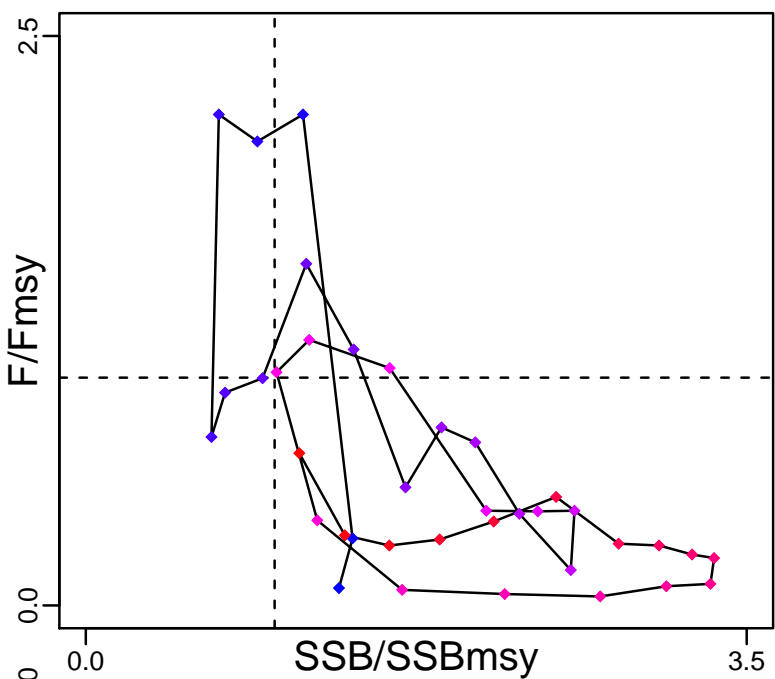
Metadata	
<b>Scientific Name</b>	Cervimunida johni
<b>Current Assess ID</b>	IFOPCH-BSQLOBSTERCSCH-1976-2015-PARMA
<b>Area</b>	Central-Southern Chile
<b>Management Authority</b>	Subsecretaria de Pesca
<b>Assessor</b>	Instituto de Fomento Pesquero - Chilean Fisheries Development Institute
<b>Asmts in RAM</b>	2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-pr-MT	2015	5139
<b>Fmsy</b>	Fmsy-pr-1/yr	2015	0.38
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2015	5139
<b>Fmgt</b>	Fmgt-1/yr	2015	0.38
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2015	0.3
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

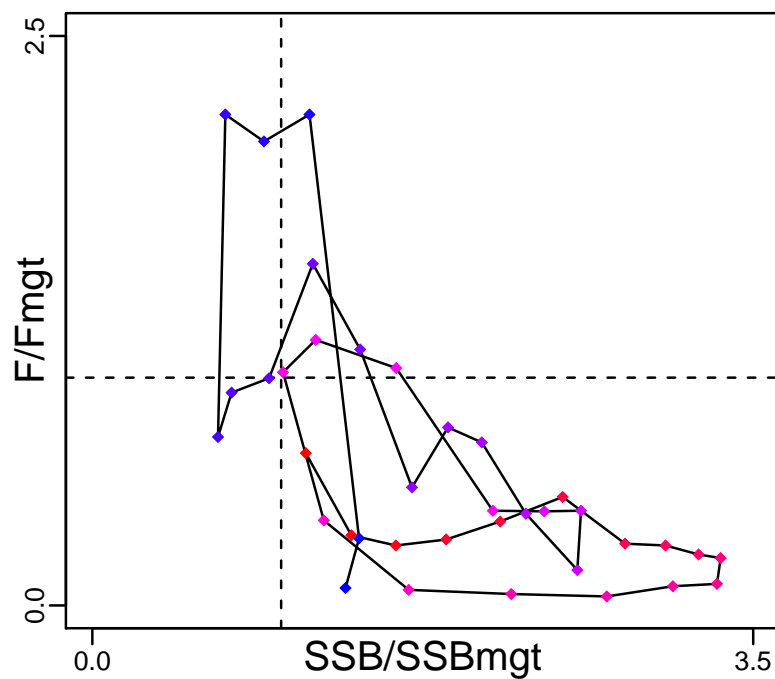
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	23,300	-	-
<b>SSB</b>	SSB-MT	2015	5810	Females	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$2.74 \times 10^8$	-	3
<b>F</b>	F-1/yr	2015	0.254	-	-
<b>ER</b>	ER-calc-ratio	2015	0.139	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2015	3250		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-pr-MT	2015	1.131		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2015	0.668		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2015	1.131		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	0.668		
<b>ER/ERmgt</b>	-	-	-		

# Yellow squat lobster Central–Southern Chile [BSQLOBSTERCSCH]

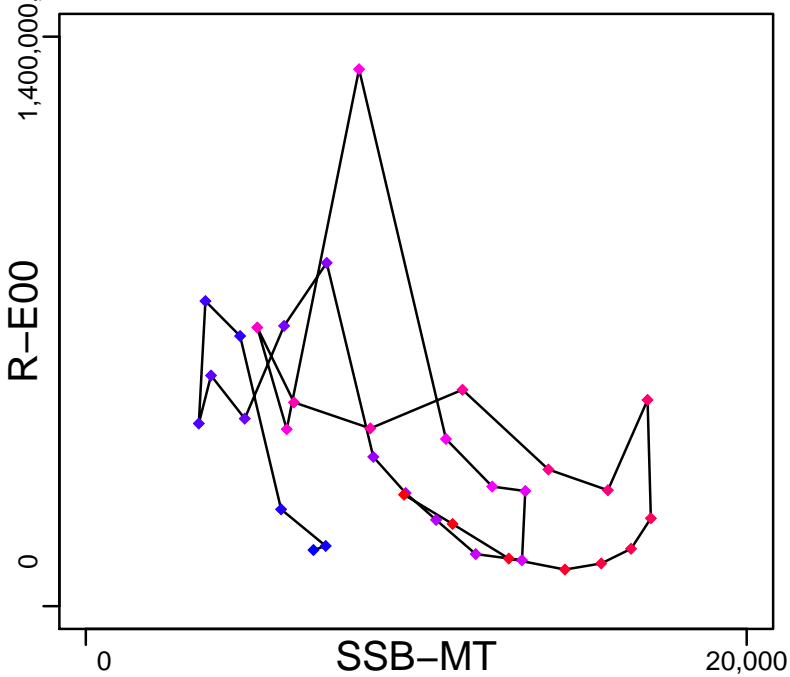
Kobe MSYpref (1976–2015–PARMA)



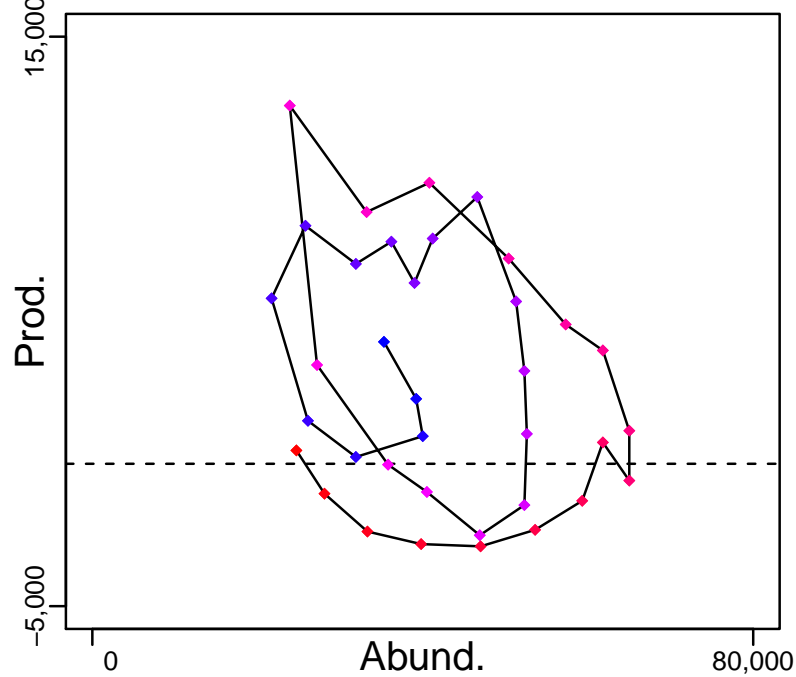
Kobe MGTpref (1976–2015–PARMA)



Spawner Recruit (1976–2015–PARMA)



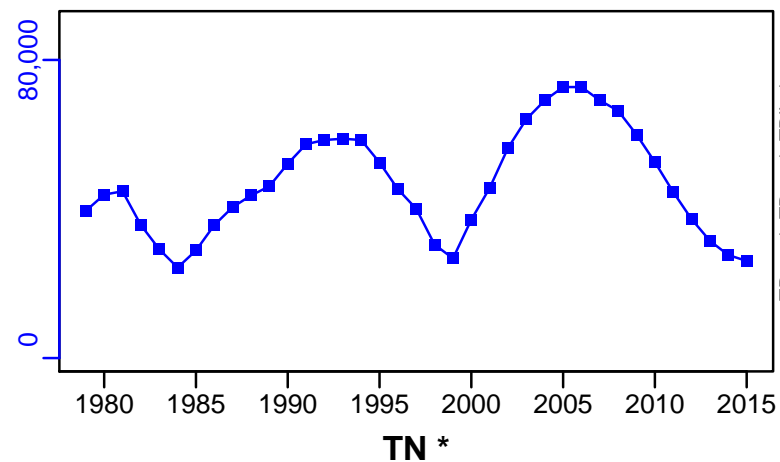
Production (1976–2015–PARMA)



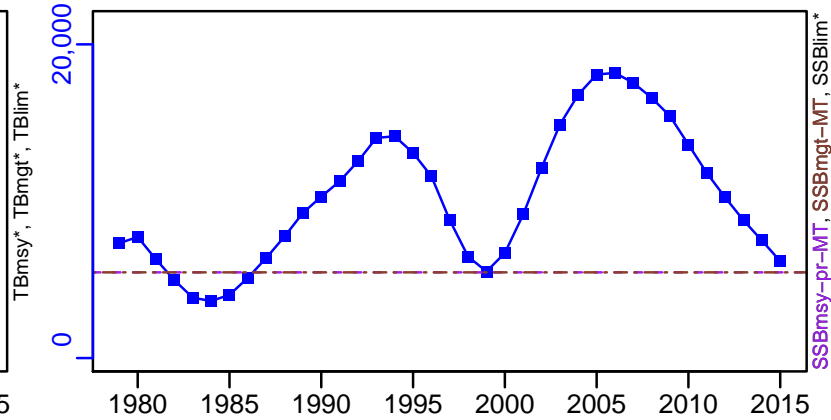
◆ Start Year ◆ End Year \* No Data

# Yellow squat lobster Central–Southern Chile [BSQLOBSTERCSCH]

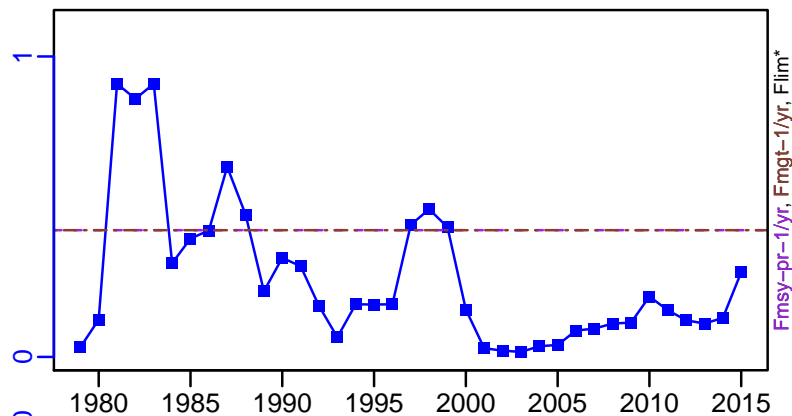
TB–MT (1976–2015–PARMA)



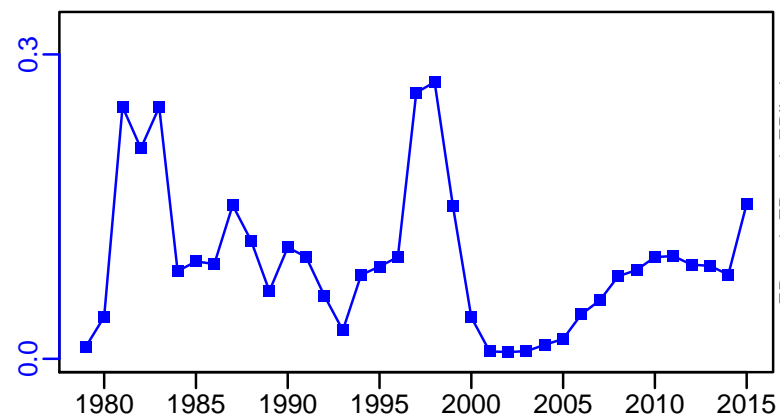
SSB–MT (1976–2015–PARMA)



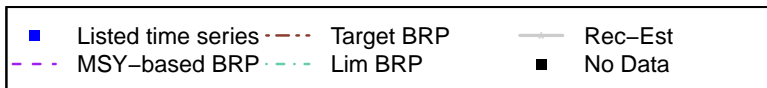
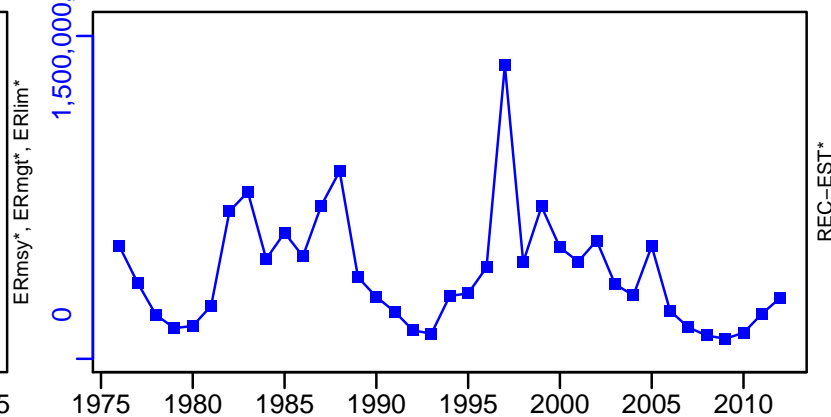
F–1/yr (1976–2015–PARMA)



ER–calc–ratio (1976–2015–PARMA)



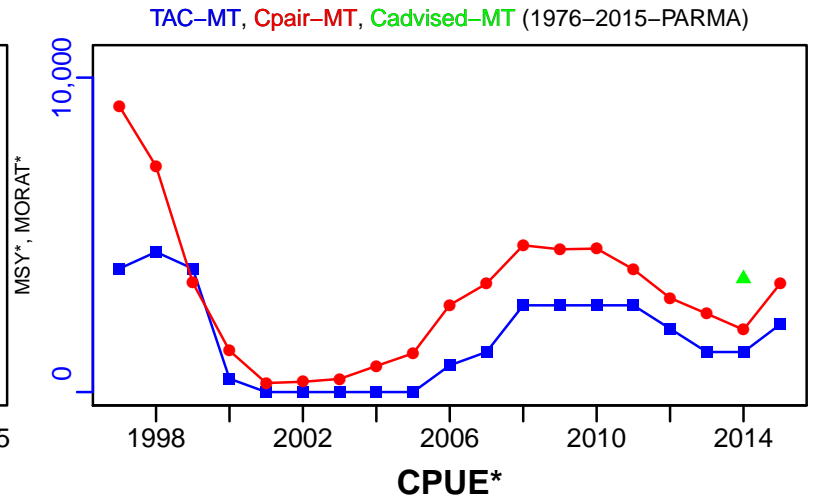
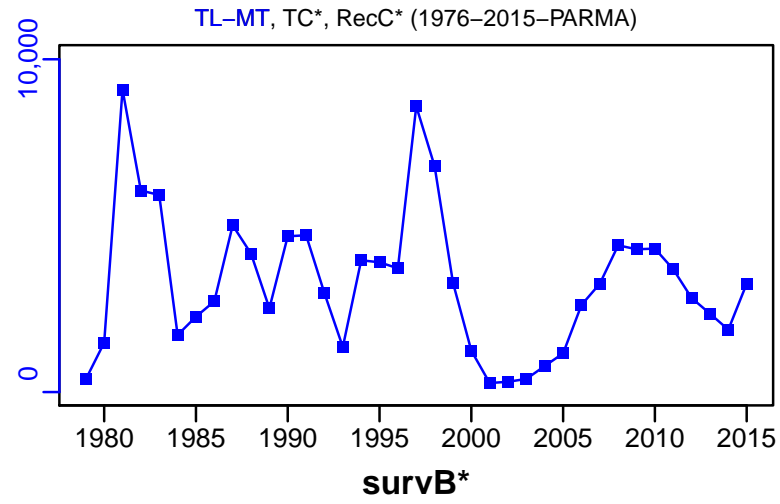
R–E00 (1976–2015–PARMA)



# Yellow squat lobster Central–Southern Chile [BSQLOBSTERCSCH]

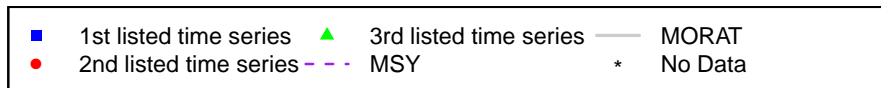
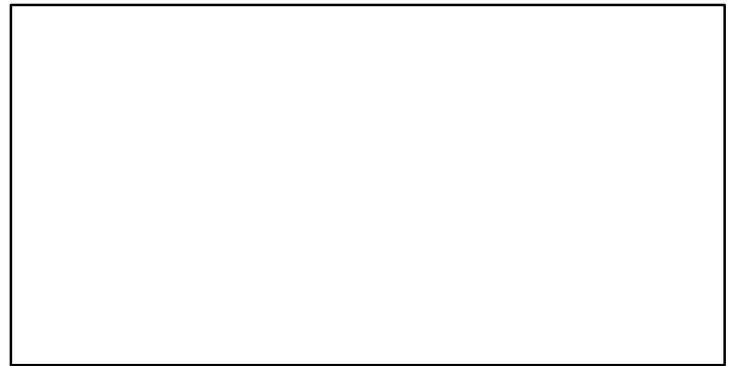
TL–MT, TC\*, RecC\* (1976–2015–PARMA)

TAC–MT, Cpair–MT, Cadvised–MT (1976–2015–PARMA)



EFFORT\*

CdivMSY\*



## Yellow squat lobster Northern Chile [BSQLOBSTERNCH]

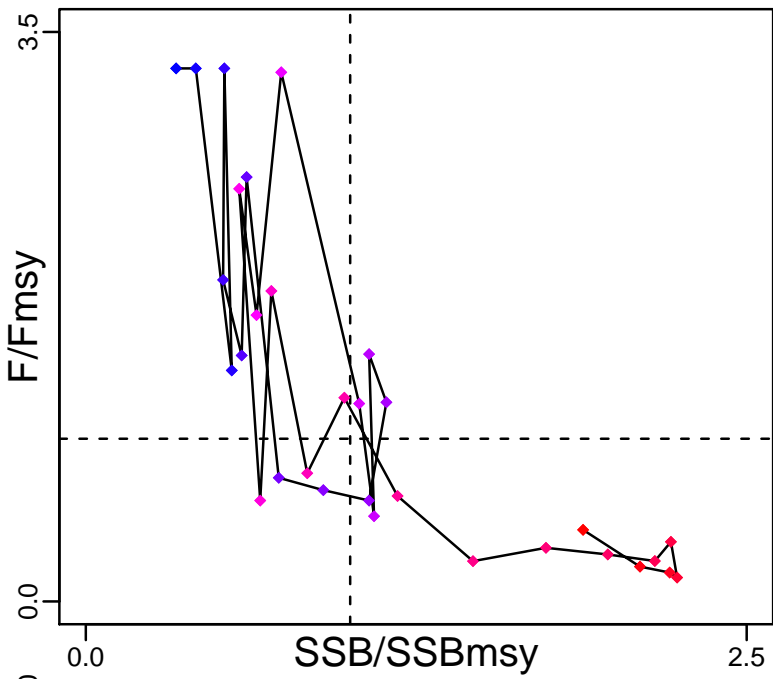
Metadata	
<b>Scientific Name</b>	Cervimunida johni
<b>Current Assess ID</b>	IFOPCH-BSQLOBSTERNCH-1982-2015-PARMA
<b>Area</b>	Northern Chile
<b>Management Authority</b>	Subsecretaria de Pesca
<b>Assessor</b>	Instituto de Fomento Pesquero - Chilean Fisheries Development Institute
<b>Asmts in RAM</b>	2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-pr-MT	2015	2137
<b>Fmsy</b>	Fmsy-pr-1/yr	2015	0.25
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2015	2137
<b>Fmgt</b>	Fmgt-1/yr	2015	0.25
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2015	0.3
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

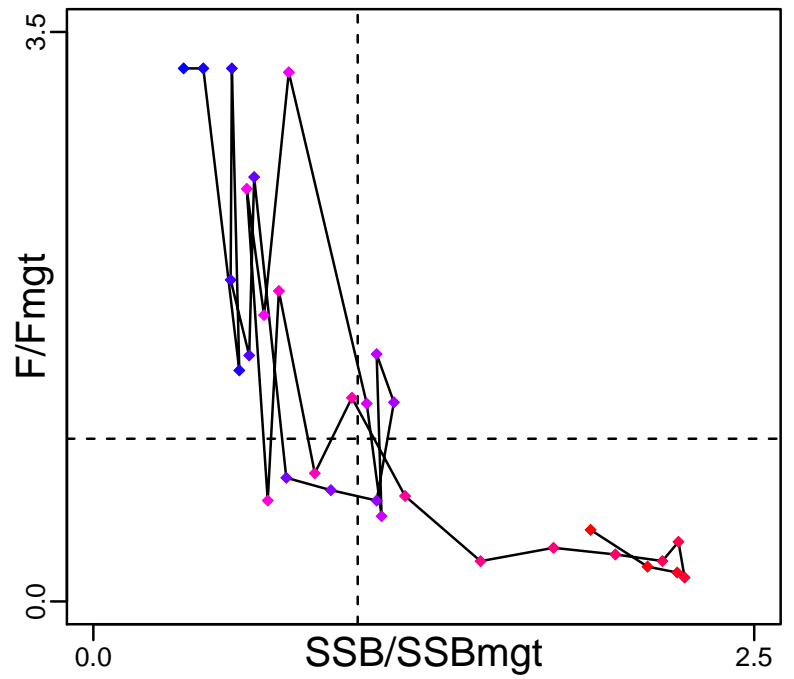
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	19,100	-	-
<b>SSB</b>	SSB-MT	2015	4020	Females	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$1.65 \times 10^8$	-	3
<b>F</b>	F-1/yr	2015	0.11	-	-
<b>ER</b>	ER-calc-ratio	2015	0.066	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2015	1260		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-pr-MT	2015	1.881		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2015	0.44		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2015	1.881		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	0.44		
<b>ER/ERmgt</b>	-	-	-		

# Yellow squat lobster Northern Chile [BSQLOBSTERNCH]

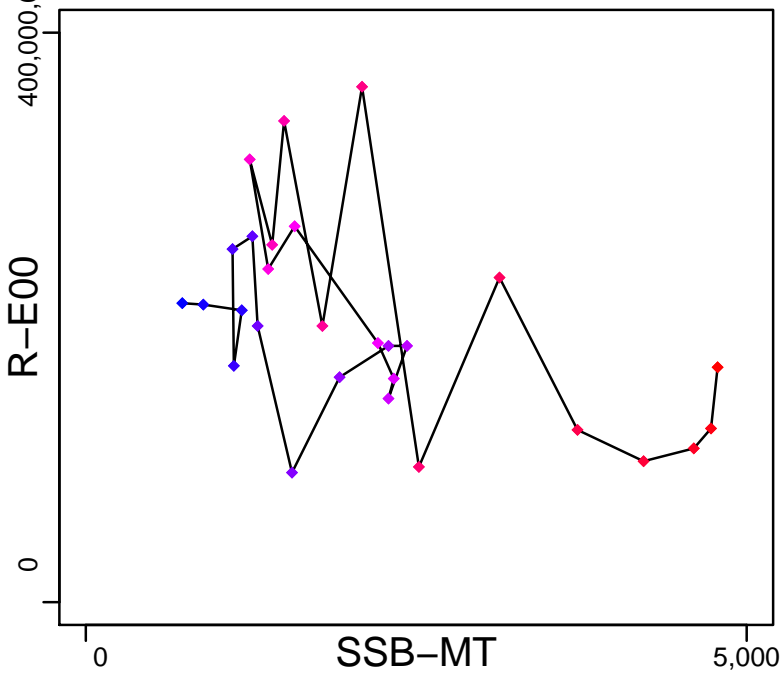
Kobe MSYpref (1982–2015–PARMA)



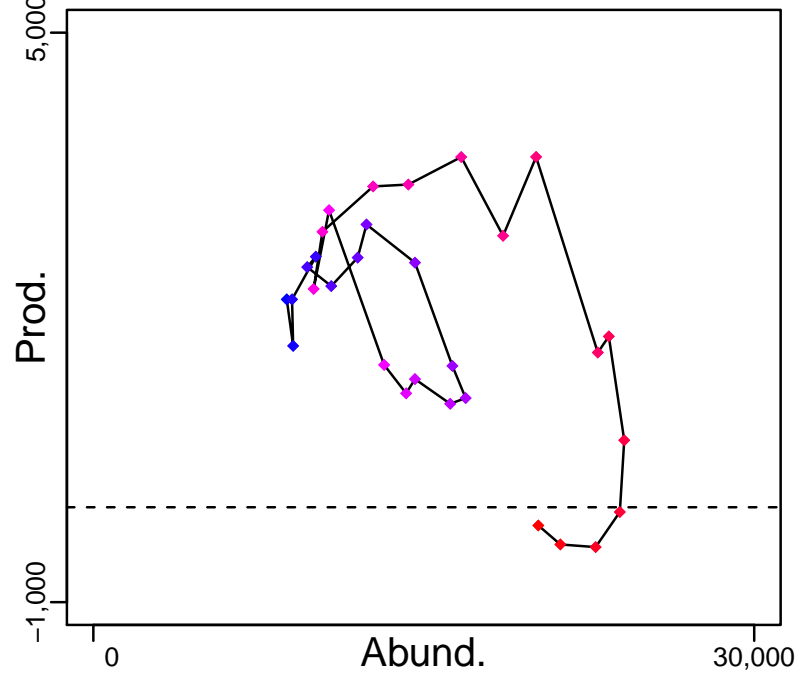
Kobe MGTpref (1982–2015–PARMA)



Spawner Recruit (1982–2015–PARMA)



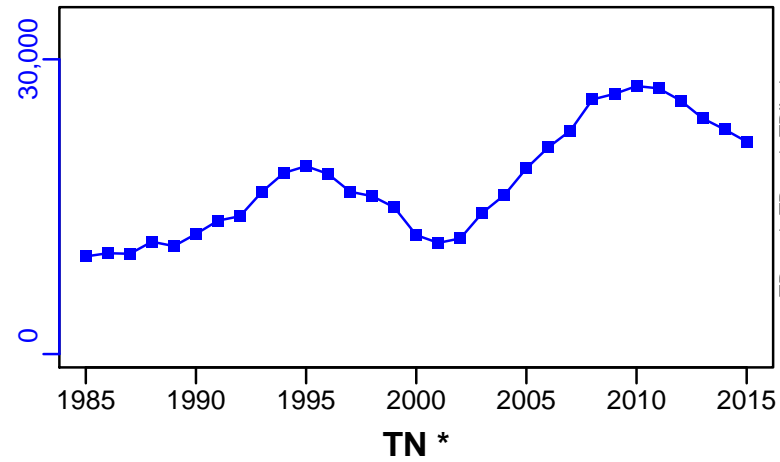
Production (1982–2015–PARMA)



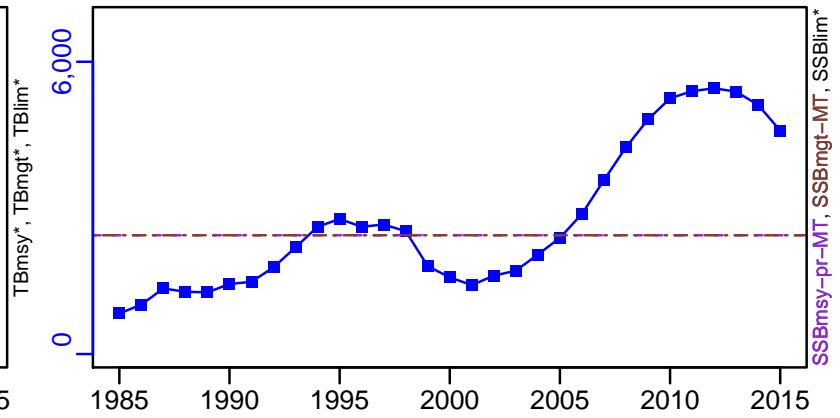
◆ Start Year ◆ End Year \* No Data

# Yellow squat lobster Northern Chile [BSQLOBSTERNCH]

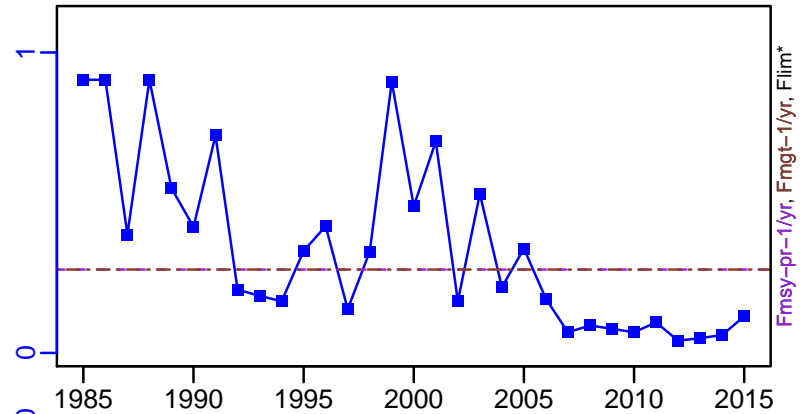
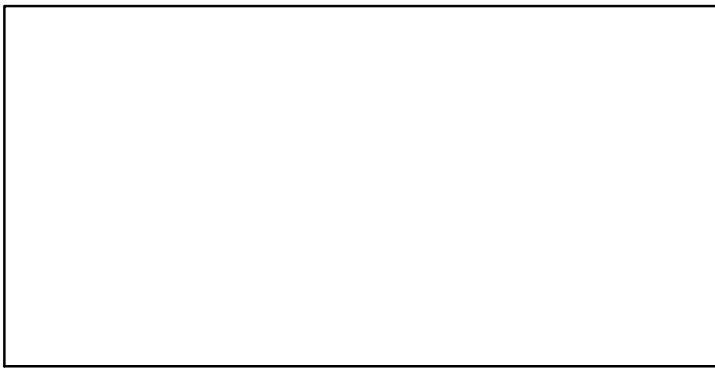
TB-MT (1982-2015-PARMA)



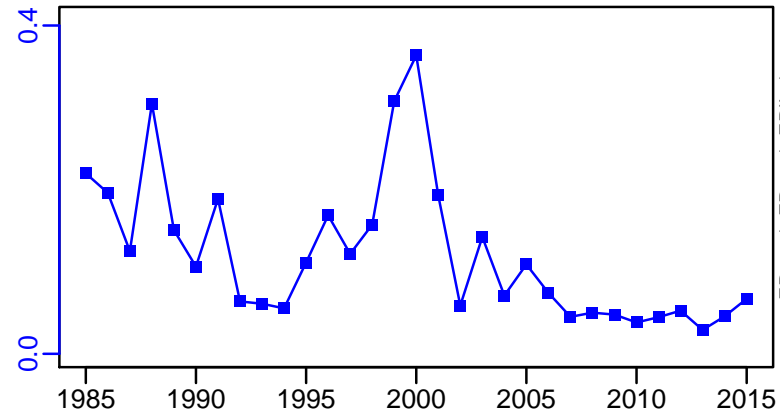
SSB-MT (1982-2015-PARMA)



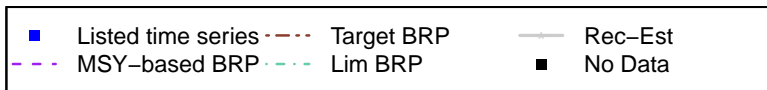
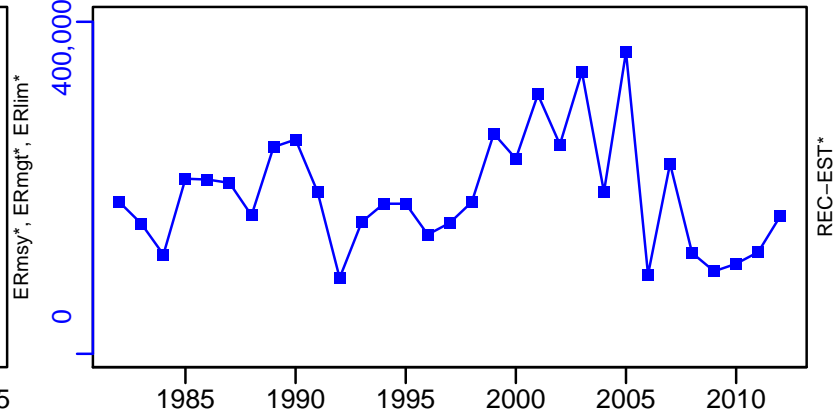
F-1/yr (1982-2015-PARMA)



ER-calc-ratio (1982-2015-PARMA)



R-E00 (1982-2015-PARMA)

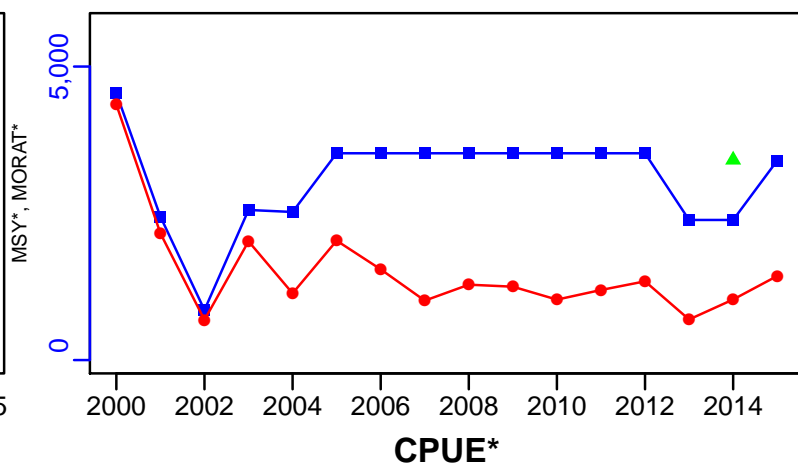
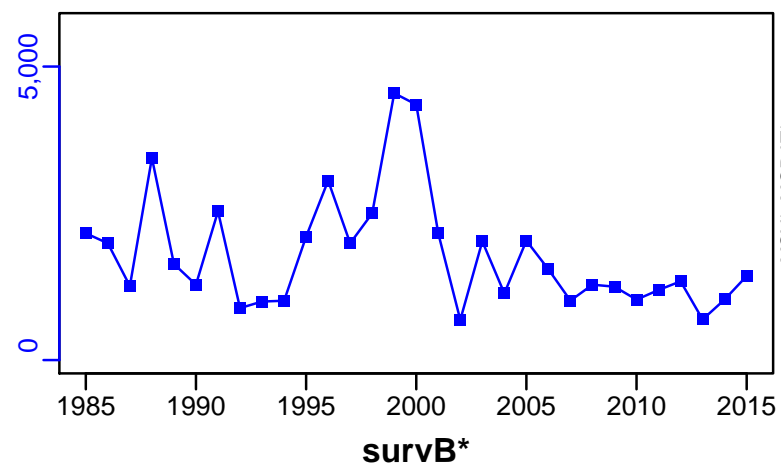




# Yellow squat lobster Northern Chile [BSQLOBSTERNCH]

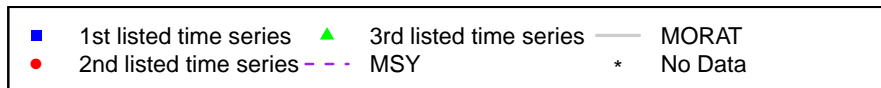
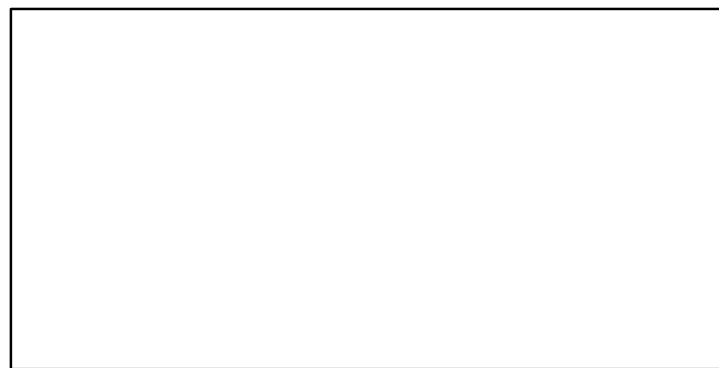
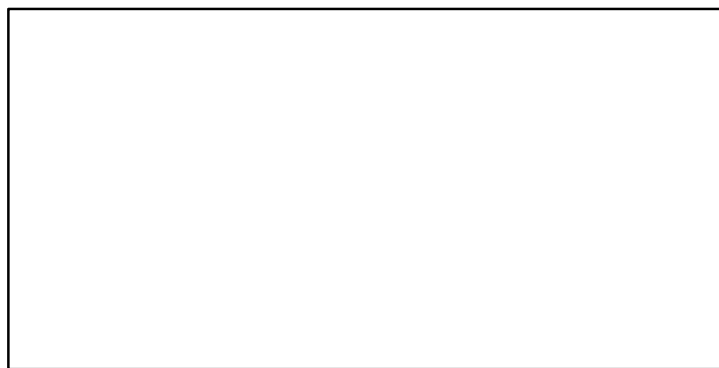
TL-MT, TC\*, RecC\* (1982-2015-PARMA)

TAC-MT, Cpair-MT, Cadvised-MT (1982-2015-PARMA)



EFFORT\*

CdivMSY\*



## Chilean Herring Chile Region V-X [CHERRCHVX]

Metadata	
<b>Scientific Name</b>	Clupea bentincki
<b>Current Assess ID</b>	IFOPCH-CHERRCHVX-1960-2012-CHING
<b>Area</b>	Central-Southern Chile
<b>Management Authority</b>	Subsecretaria de Pesca
<b>Assessor</b>	Instituto de Fomento Pesquero - Chilean Fisheries Development Institute
<b>Asmts in RAM</b>	2012

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2012	4,190,000	-	-
SSB	SSB-MT	2012	1,620,000	-	-
TN	-	-	-	-	-
R	R-E00	2012	$7.41 \times 10^{10}$	-	-
F	F-1/yr	2012	0.262	-	-
ER	ER-calc-ratio	2012	0.221	-	-
TC	-	-	-		
TL	TL-MT	2012	833,000		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

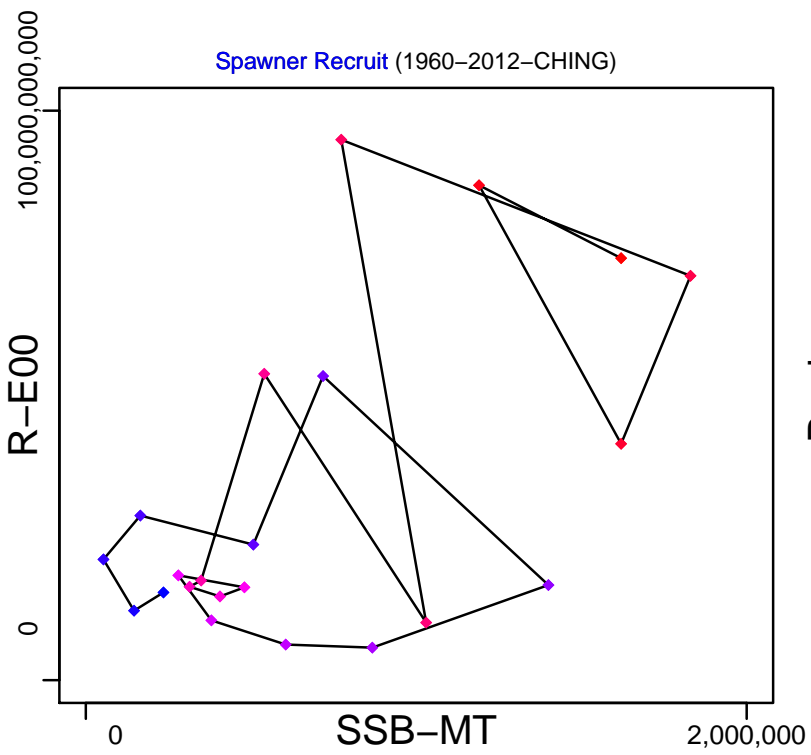
Kobe MSY\*



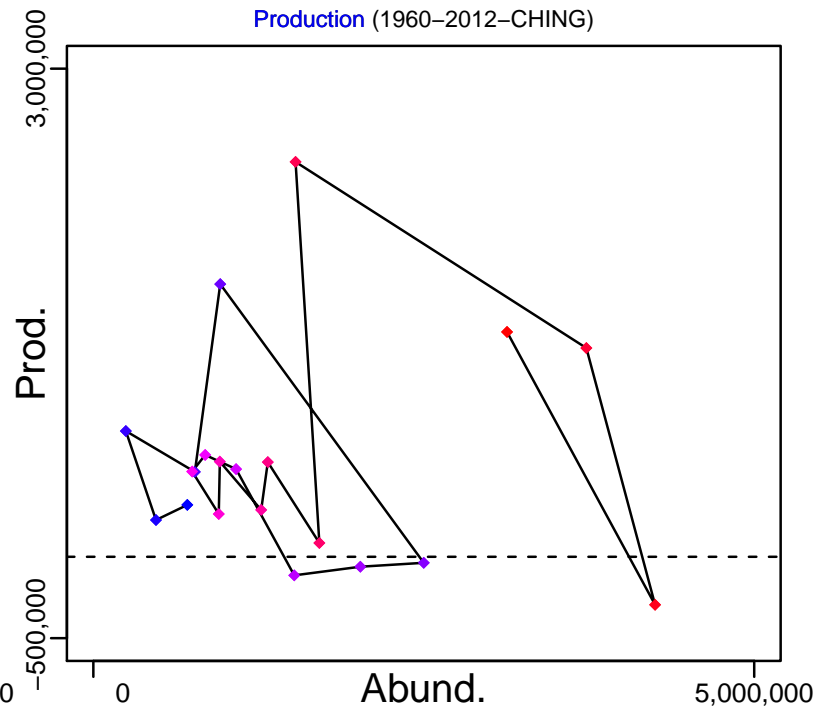
Kobe MGT\*



Spawner Recruit (1960–2012–CHING)

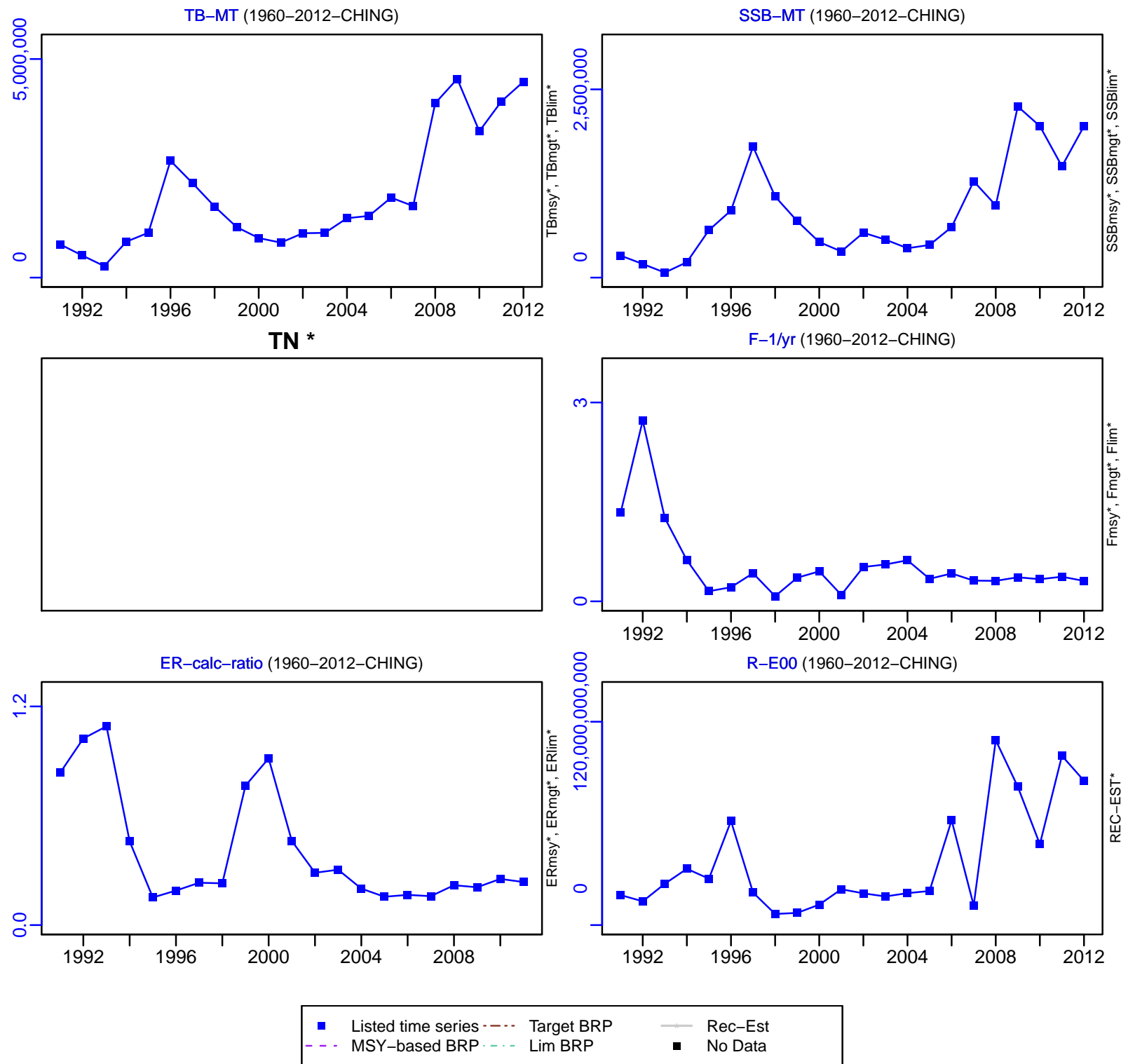


Production (1960–2012–CHING)



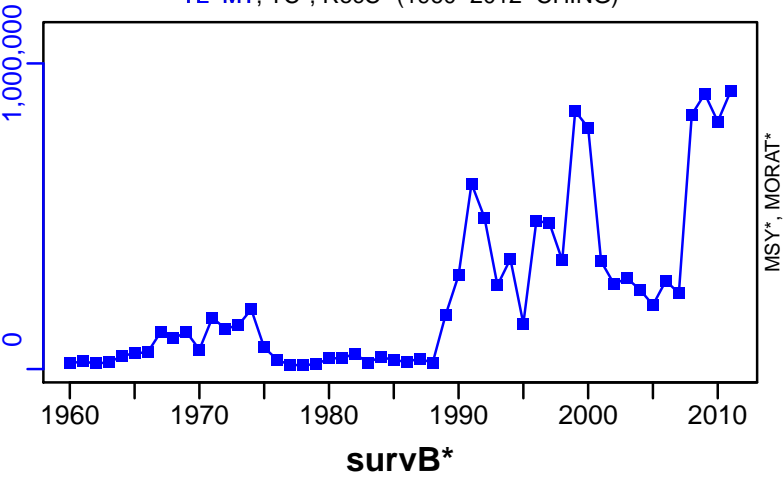
◆ Start Year ◆ End Year \* No Data

# Chilean Herring Chile Region V-X [CHERRCHVX]

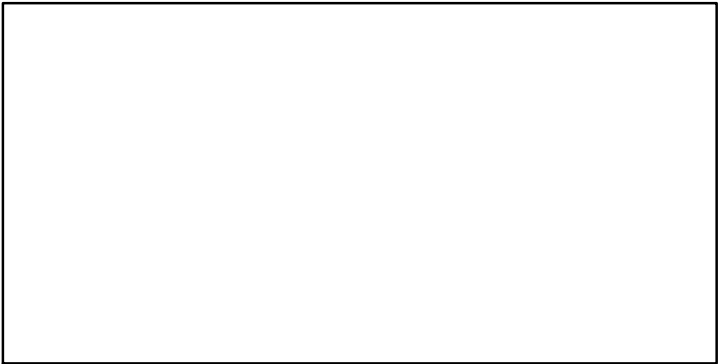


Chilean Herring Chile Region V-X [CHERRCHVX]

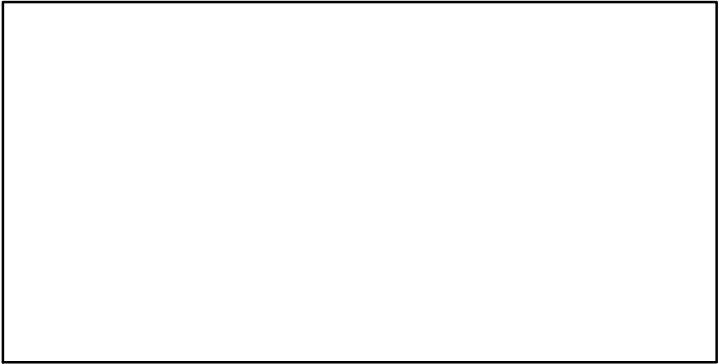
TL-MT, TC\*, RecC\* (1960-2012-CHING)



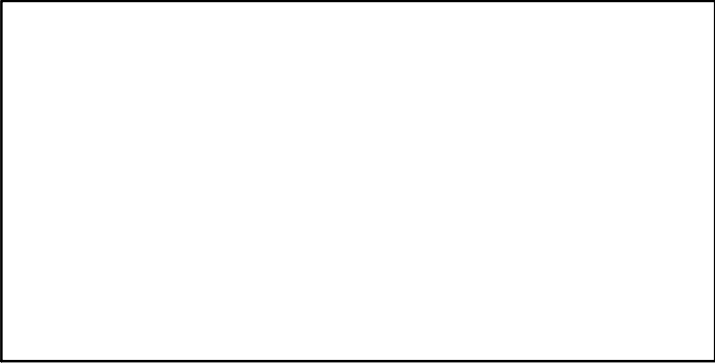
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



CdivMSY\*



## Chilean jack mackerel Chilean EEZ and offshore [CHTRACCH]

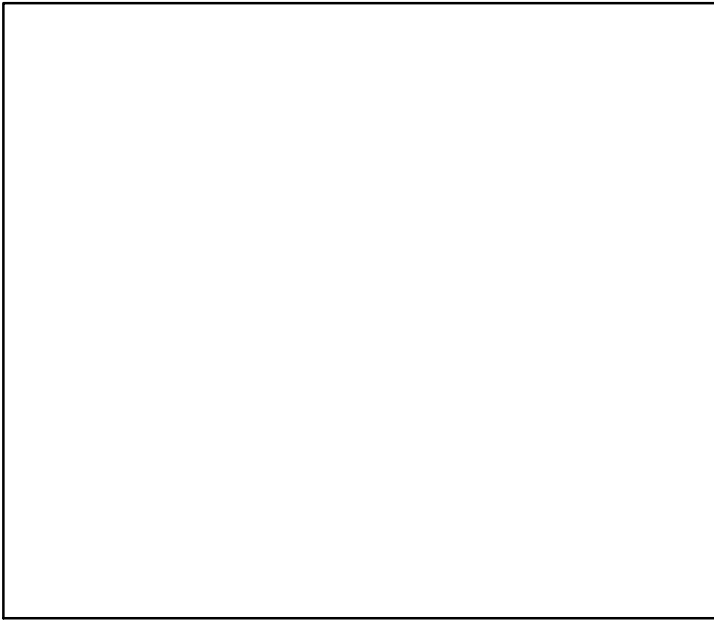
Metadata	
<b>Scientific Name</b>	Trachurus murphyi
<b>Current Assess ID</b>	SPRFMO-CHTRACCH-1969-2015-PARMA
<b>Area</b>	Chilean EEZ and offshore
<b>Management Authority</b>	South Pacific Regional Fisheries Management Organization
<b>Assessor</b>	South Pacific Regional Fisheries Management Organization
<b>Asmts in RAM</b>	2010, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERMgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2015	0.23
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

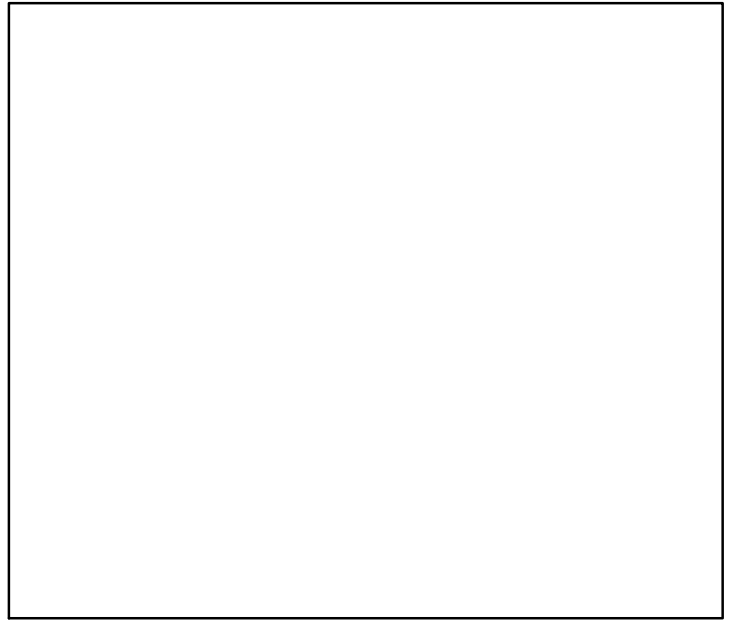
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2010	2,360,000	-	-
<b>SSB</b>	SSB-MT	2015	2,720,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$1.25 \times 10^{10}$	-	1
<b>F</b>	F-1/yr	2015	0.18	-	1 to 12
<b>ER</b>	ER-ratio	2010	0.315	-	-
<b>TC</b>	TC-MT	2015	434,000		
<b>TL</b>	TL-MT	2015	434,000		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERMgt</b>	-	-	-		

Chilean jack mackerel Chilean EEZ and offshore [CHTRACCH]

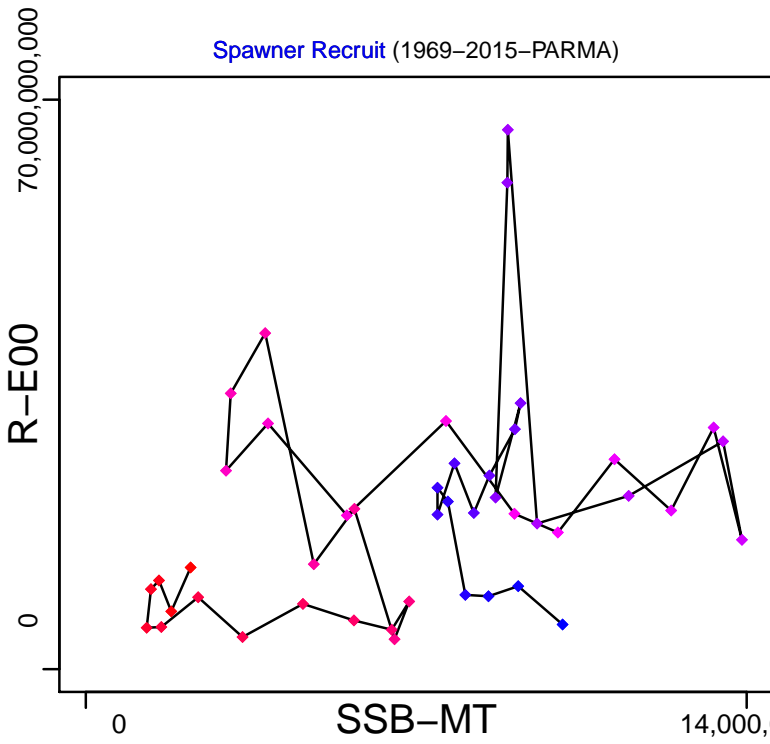
Kobe MSY\*



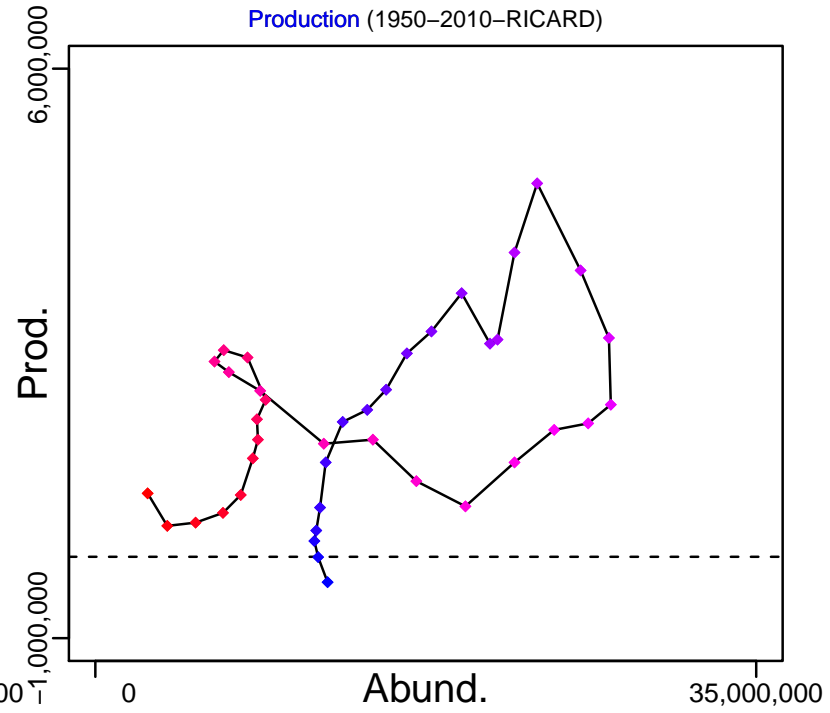
Kobe MGT\*



Spawner Recruit (1969–2015–PARMA)



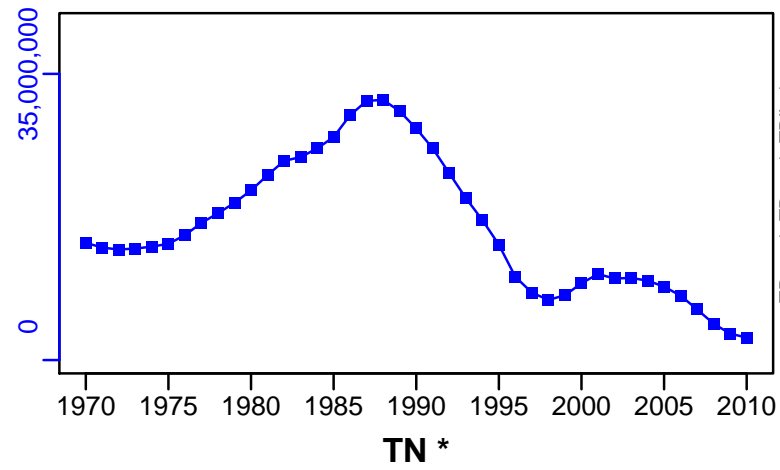
Production (1950–2010–RICARD)



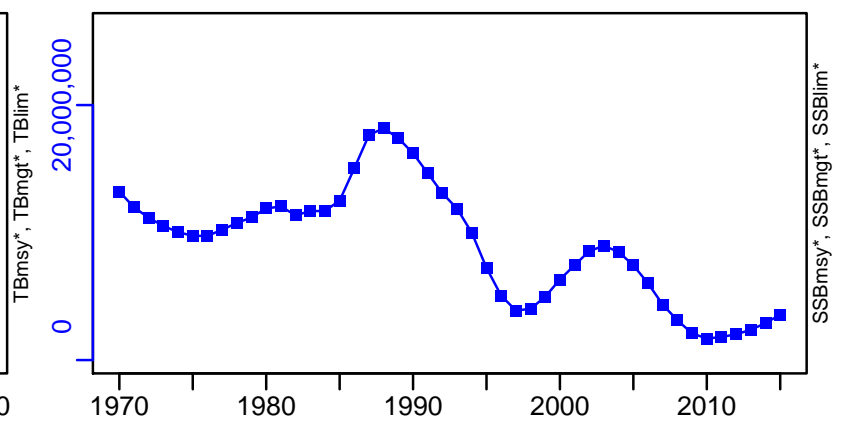
◆ Start Year ◆ End Year \* No Data

# Chilean jack mackerel Chilean EEZ and offshore [CHTRACCH]

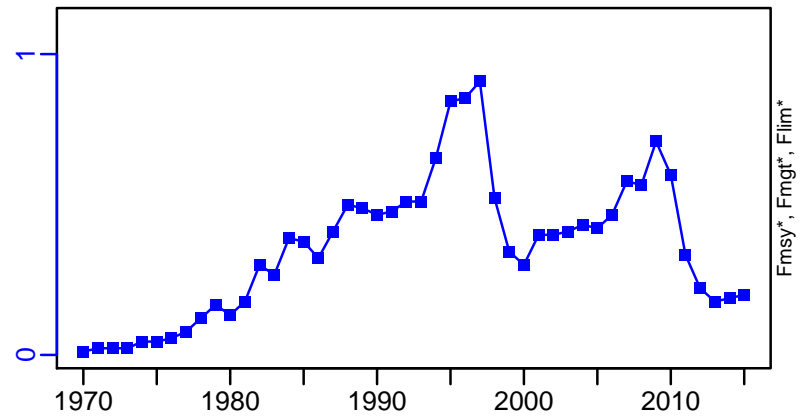
TB-MT (1950–2010–RICARD)



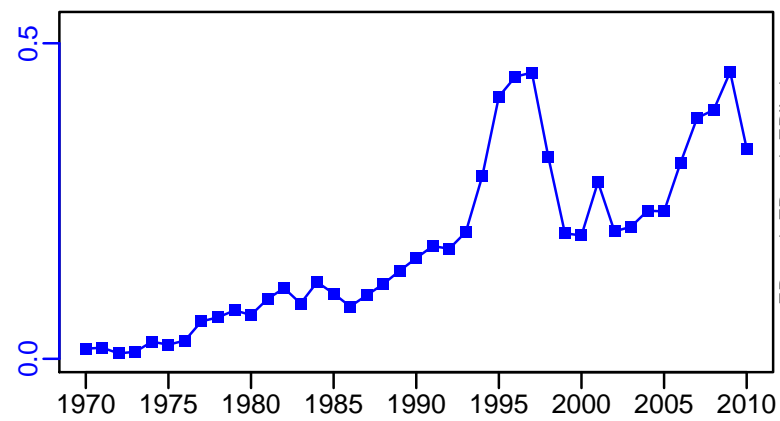
SSB-MT (1969–2015–PARMA)



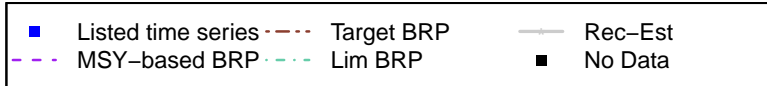
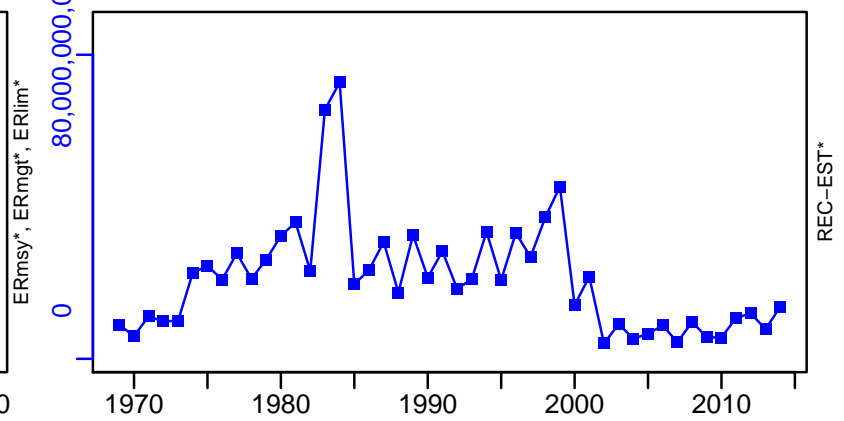
F-1/yr (1969–2015–PARMA)



ER-ratio (1950–2010–RICARD)



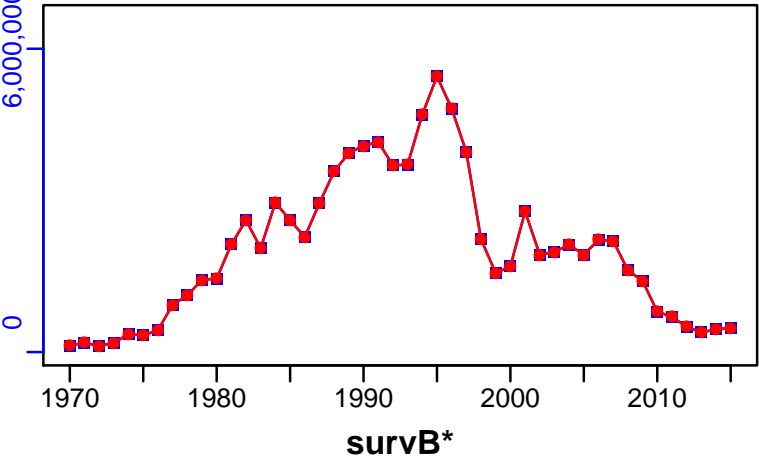
R-E00 (1969–2015–PARMA)



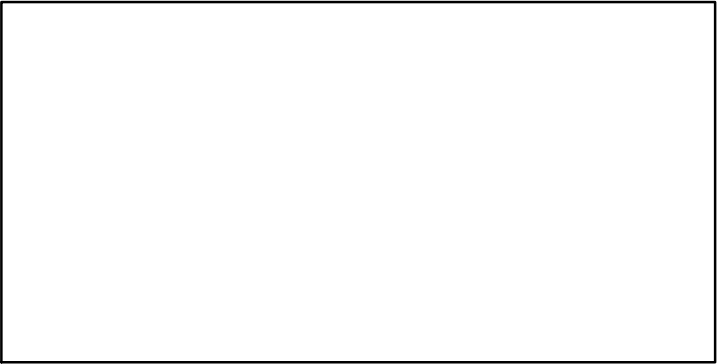
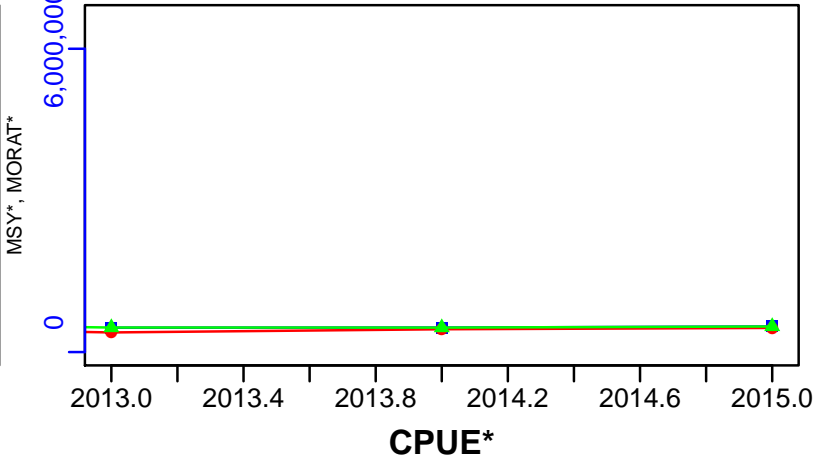


Chilean jack mackerel Chilean EEZ and offshore [CHTRACCH]

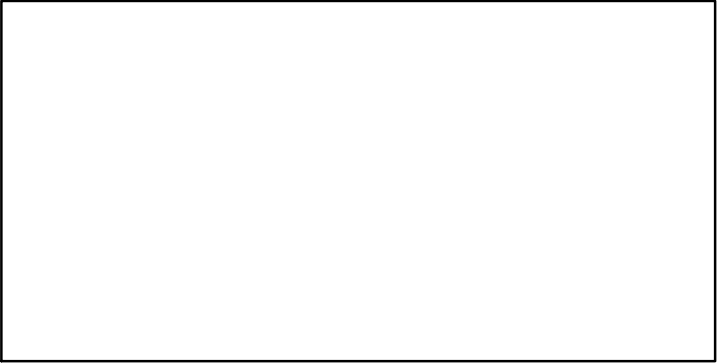
TC-MT, TL-MT, RecC\* (1969-2015-PARMA)



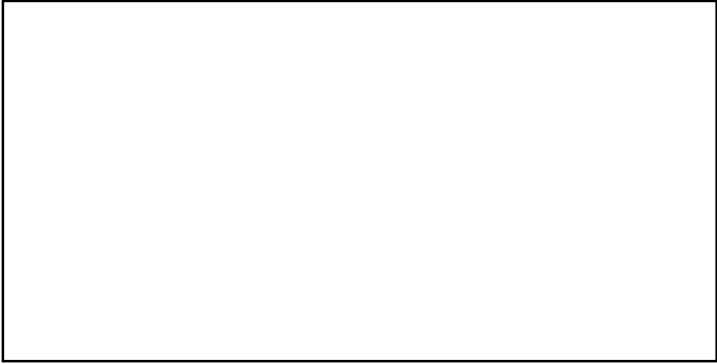
TAC-MT, Cpair-MT, Cadvised-MT (1969-2015-PARMA)



EFFORT\*



CdivMSY\*



## Chilean sardine Central-Southern Chile [CSARDCSCH]

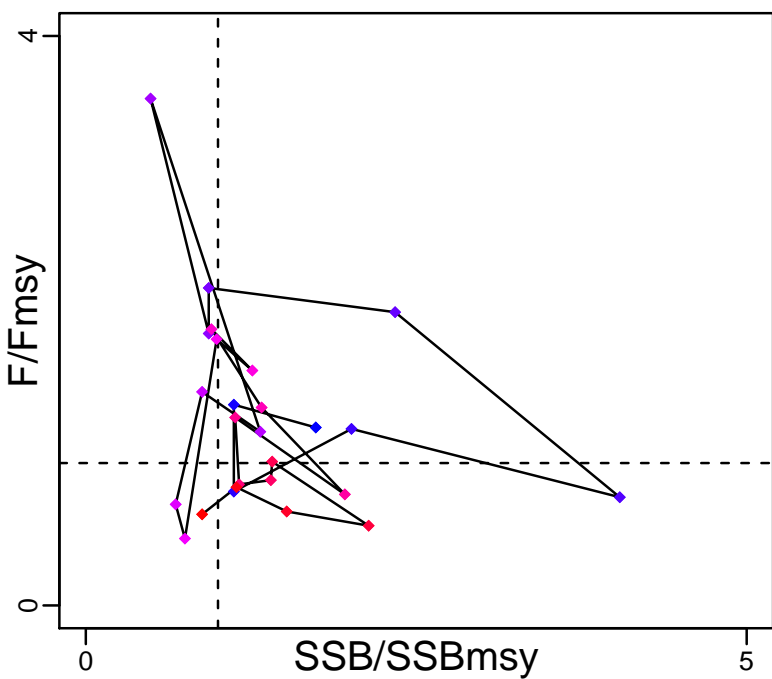
Metadata	
<b>Scientific Name</b>	Strangomera bentincki
<b>Current Assess ID</b>	IFOPCH-CSARDCSCH-1990-2015-PARMA
<b>Area</b>	Central-Southern Chile
<b>Management Authority</b>	Subsecretaria de Pesca
<b>Assessor</b>	Instituto de Fomento Pesquero - Chilean Fisheries Development Institute
<b>Asmts in RAM</b>	2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-extr-MT	2015	642,609
<b>Fmsy</b>	Fmsy-extr-1/yr	2015	0.325
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2015	889,000
<b>Fmgt</b>	Fmgt-1/yr	2015	0.26
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2015	1
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2015	444,000
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

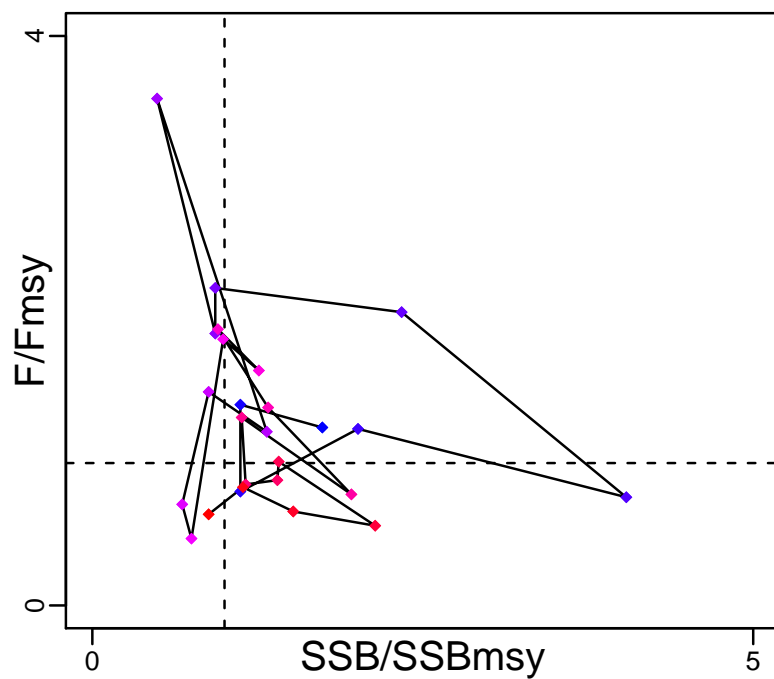
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	1,760,000	-	-
<b>SSB</b>	SSB-MT	2015	1,320,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	54,600	-	-
<b>F</b>	F-1/yr	2015	0.191	-	-
<b>ER</b>	ER-calc-ratio	2015	0.245	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2015	431,000		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSBdivSSBmsy-dimensionless	2015	0.88		
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2015	0.64		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2015	1.485		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	0.735		
<b>ER/ERmgt</b>	-	-	-		

# Chilean sardine Central–Southern Chile [CSARDCSCH]

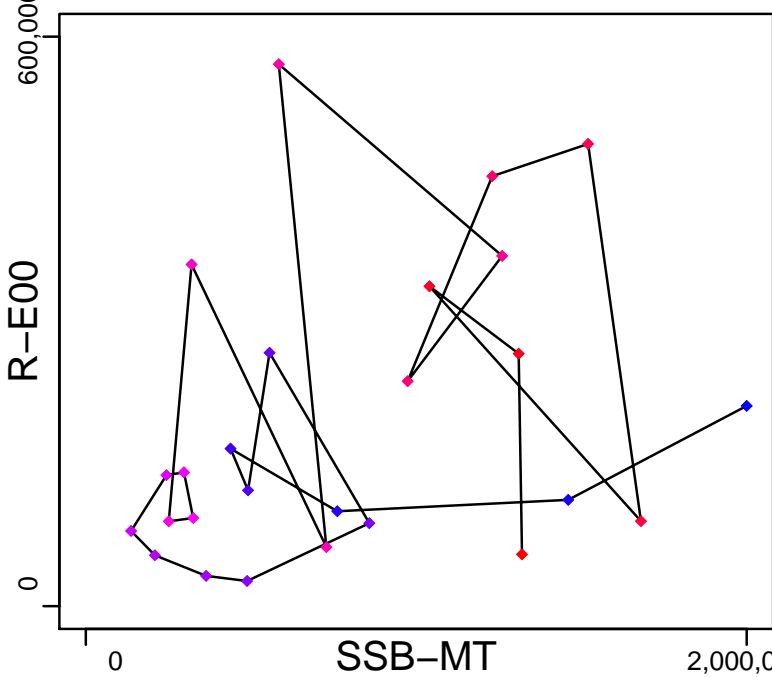
Kobe MSYpref (1990–2015–PARMA)



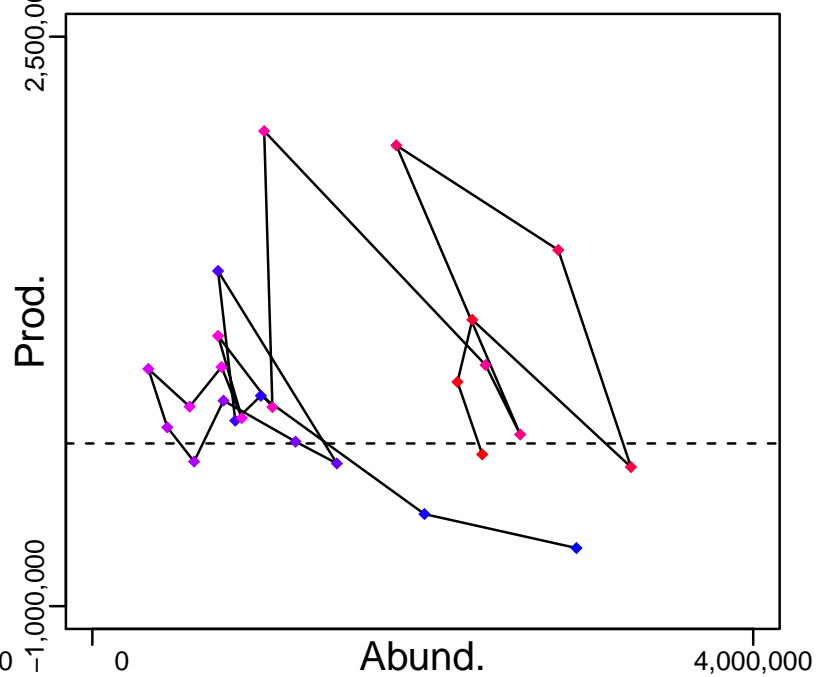
Kobe MGTpref (1990–2015–PARMA)



Spawner Recruit (1990–2015–PARMA)



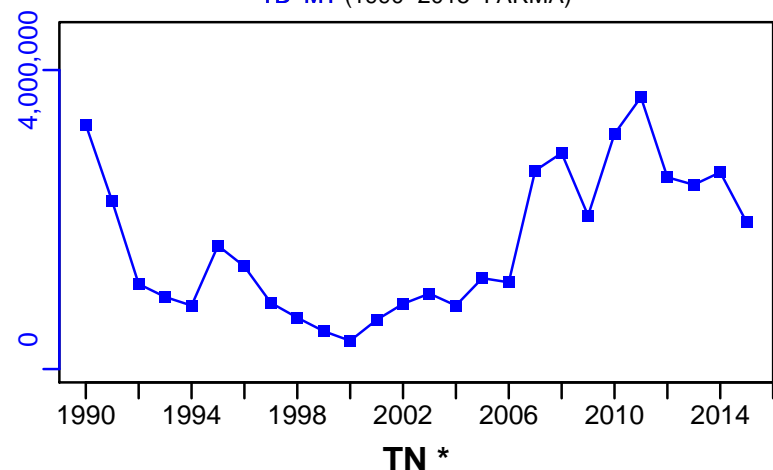
Production (1990–2015–PARMA)



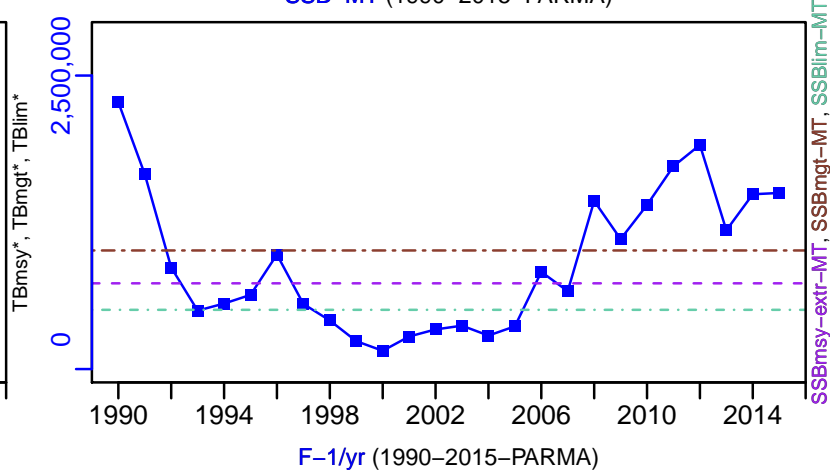
◆ Start Year ◆ End Year \* No Data

# Chilean sardine Central–Southern Chile [CSARDCSCH]

TB-MT (1990–2015–PARMA)



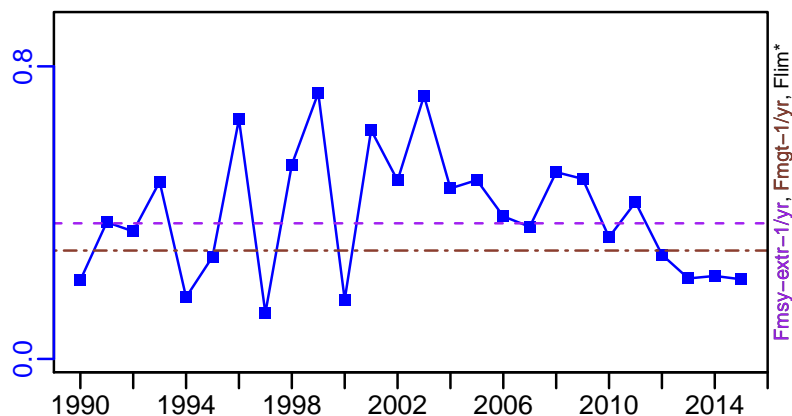
SSB-MT (1990–2015–PARMA)



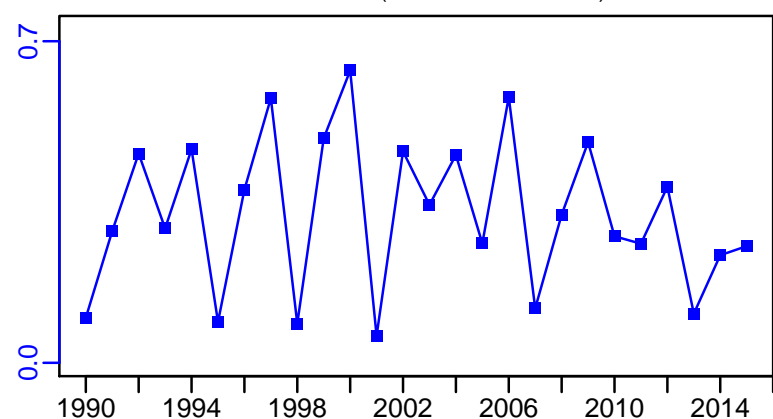
TN \*



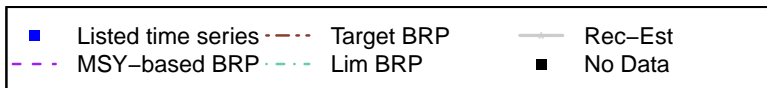
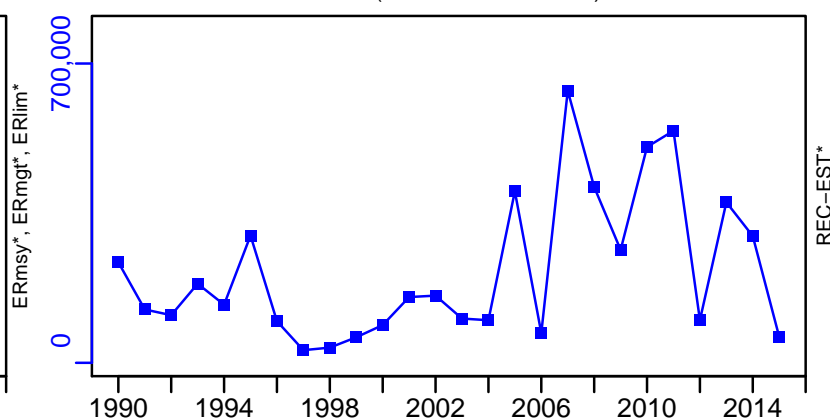
F-1/yr (1990–2015–PARMA)



ER-calc-ratio (1990–2015–PARMA)

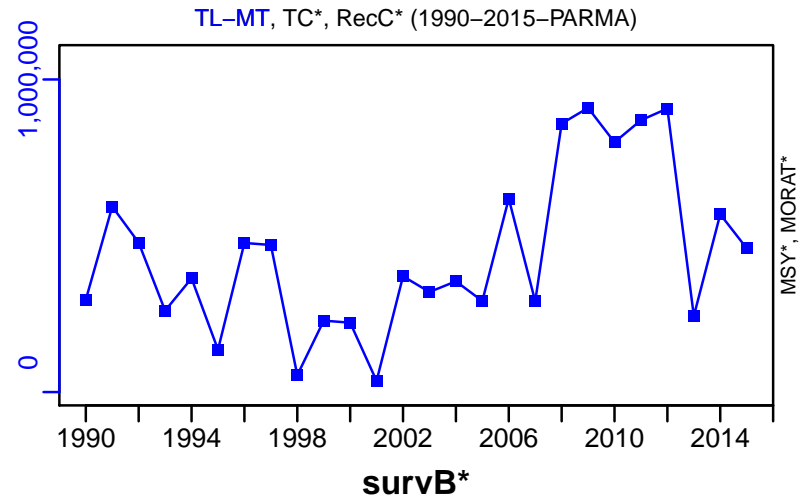


R-E00 (1990–2015–PARMA)

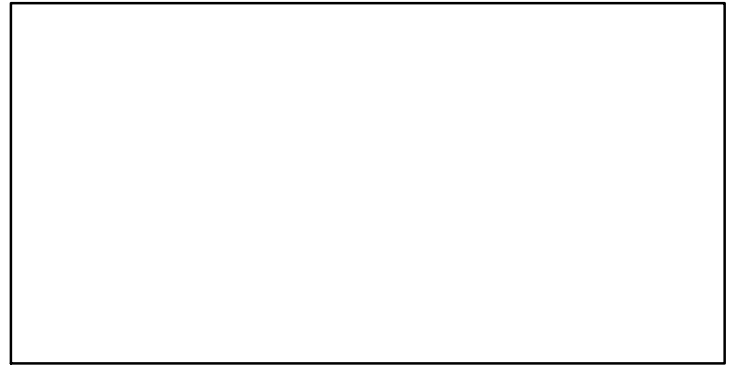


# Chilean sardine Central–Southern Chile [CSARDCSCH]

TL–MT, TC\*, RecC\* (1990–2015–PARMA)



TAC\*, Cpair\*, Cadv\*



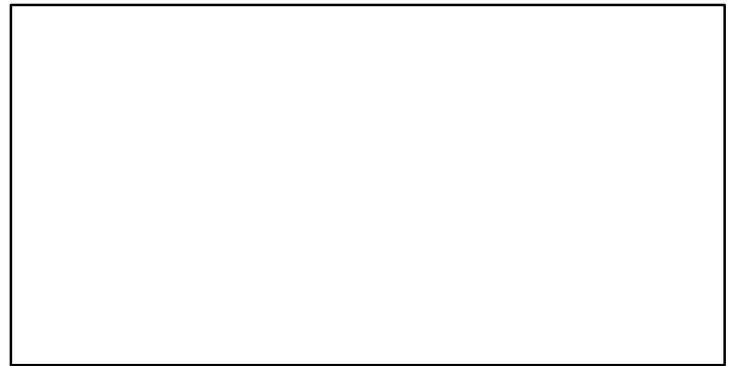
CPUE\*



EFFORT\*



CdivMSY\*



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

## Nylon shrimp Central-Southern Chile [NSHRIMPCSCH]

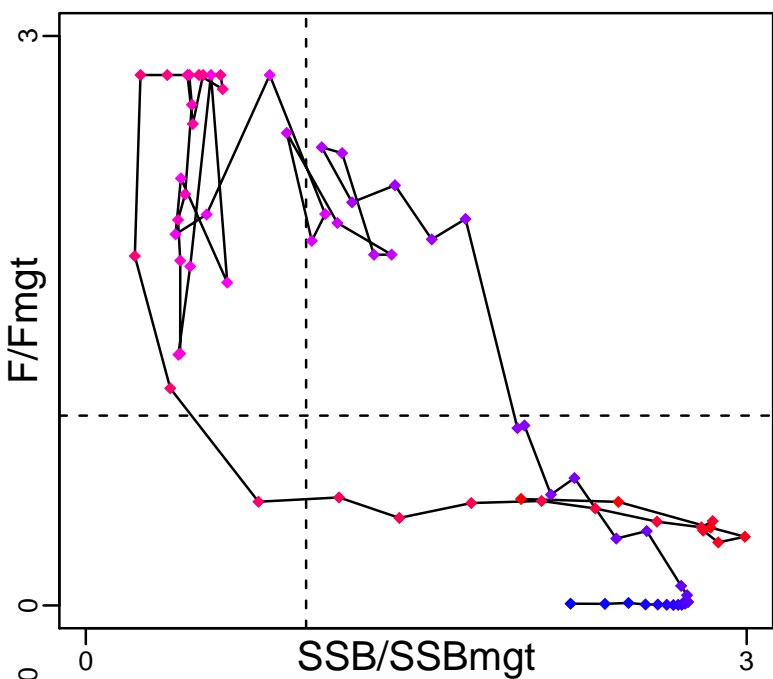
Metadata	
<b>Scientific Name</b>	Heterocarpus reedi
<b>Current Assess ID</b>	IFOPCH-NSHRIMPCSCH-1944-2016-PARMA
<b>Area</b>	Central-Southern Chile
<b>Management Authority</b>	Subsecretaria de Pesca
<b>Assessor</b>	Instituto de Fomento Pesquero - Chilean Fisheries Development Institute
<b>Asmts in RAM</b>	2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	5287
<b>Fmgt</b>	Fmgt-1/yr	2016	0.293
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2016	11,750
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2016	0.36
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

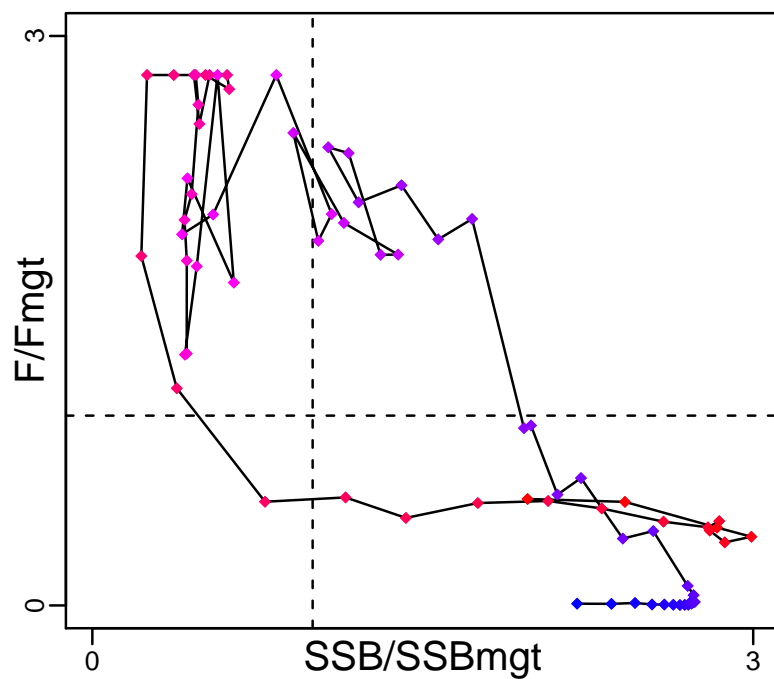
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	37,900	Both	-
<b>SSB</b>	SSB-MT	2016	10,400	Females	1 to 6
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$1.41 \times 10^9$	Females	1
<b>F</b>	F-1/yr	2016	0.164	Females	-
<b>ER</b>	ER-calc-ratio	2016	0.08	-	-
<b>TC</b>	-	-	-	-	-
<b>TL</b>	TL-MT	2016	3040	-	-
<b>TB/TBmsy</b>	-	-	-	-	-
<b>SSB/SSBmsy</b>	-	-	-	-	-
<b>F/Fmsy</b>	-	-	-	-	-
<b>ER/ERmsy</b>	-	-	-	-	-
<b>TB/TBmgt</b>	-	-	-	-	-
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	1.976	-	-
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.561	-	-
<b>ER/ERmgt</b>	-	-	-	-	-

# Nylon shrimp Central–Southern Chile [NSHRIMPCSCH]

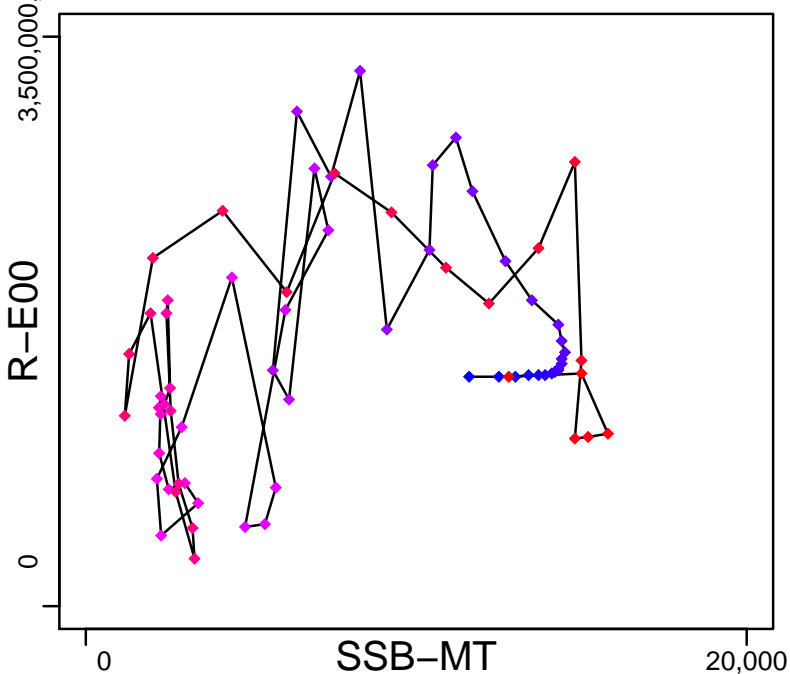
Kobe MSYpref (1944–2016–PARMA)



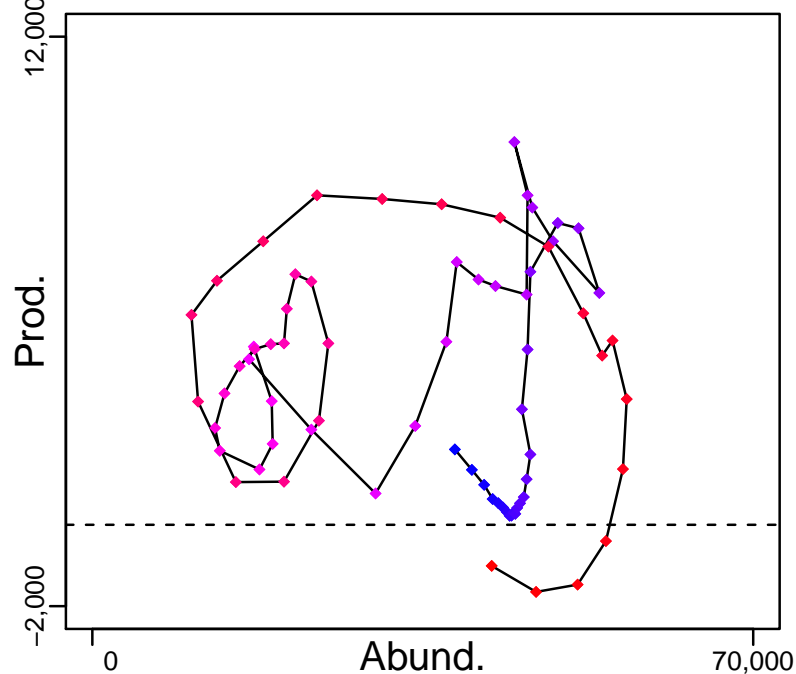
Kobe MGTpref (1944–2016–PARMA)



Spawner Recruit (1944–2016–PARMA)



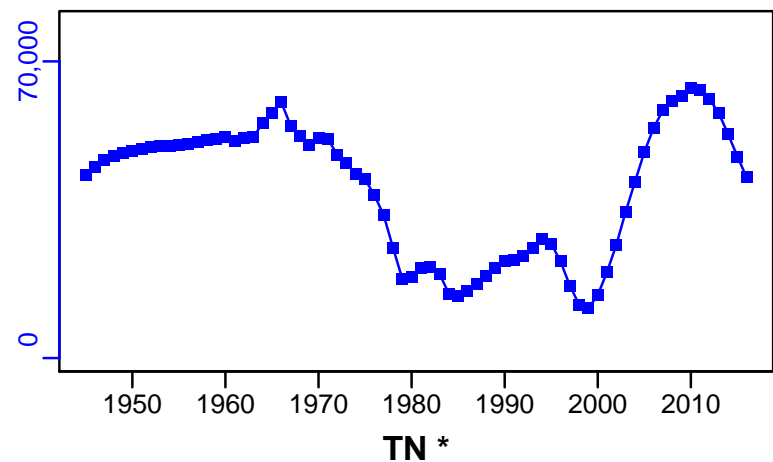
Production (1944–2016–PARMA)



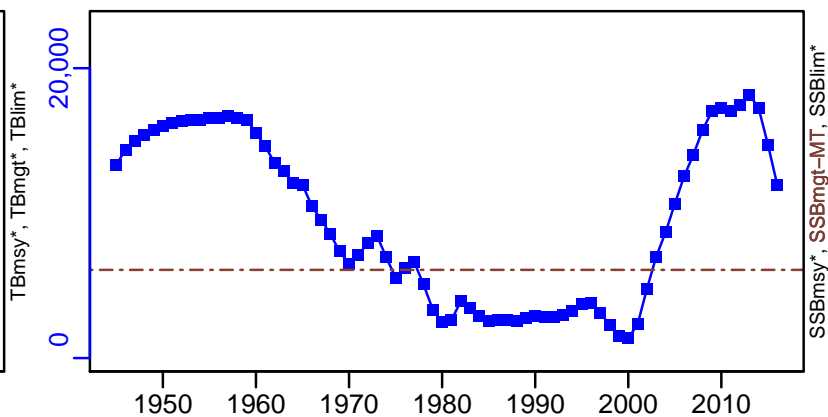
◆ Start Year ◆ End Year \* No Data

# Nylon shrimp Central–Southern Chile [NSHRIMPCSCH]

TB–MT (1944–2016–PARMA)

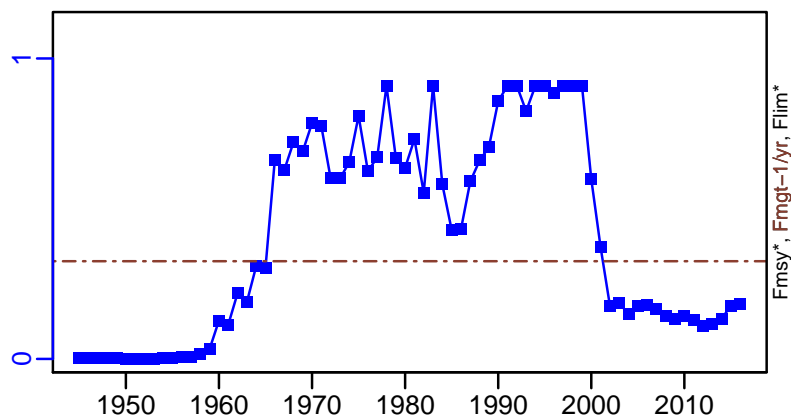
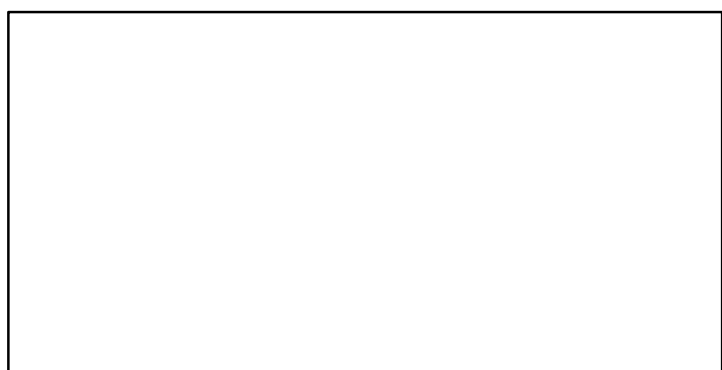


SSB–MT (1944–2016–PARMA)

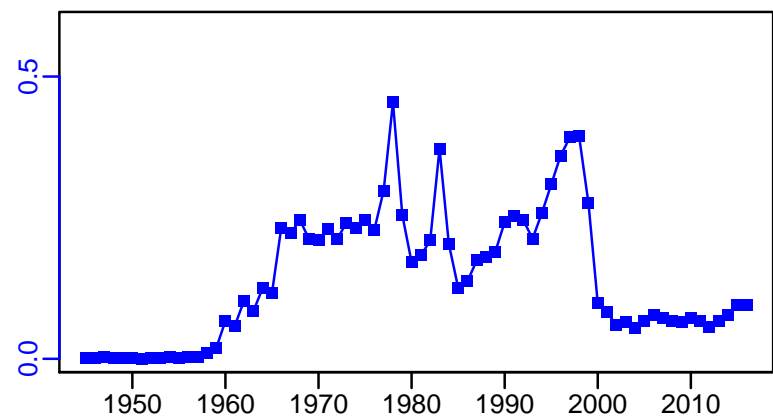


$TN^*$

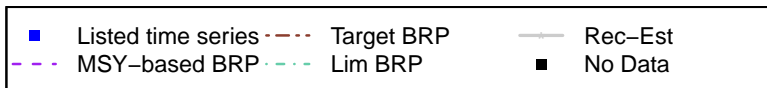
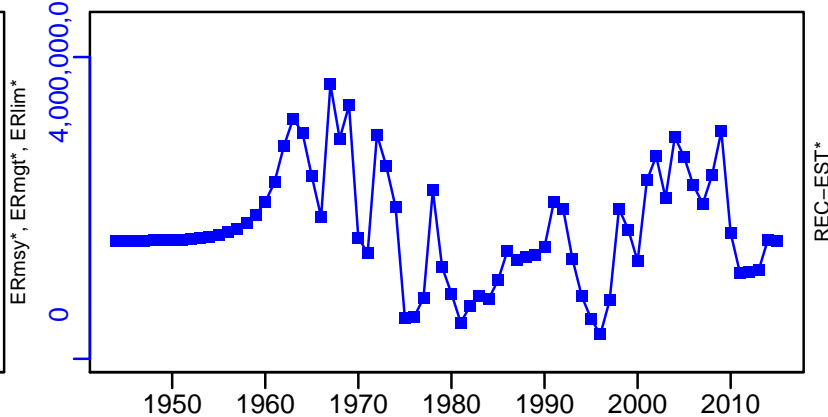
F–1/yr (1944–2016–PARMA)



ER–calc–ratio (1944–2016–PARMA)



R–E00 (1944–2016–PARMA)

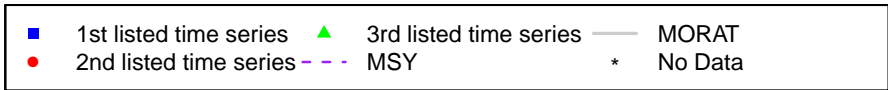
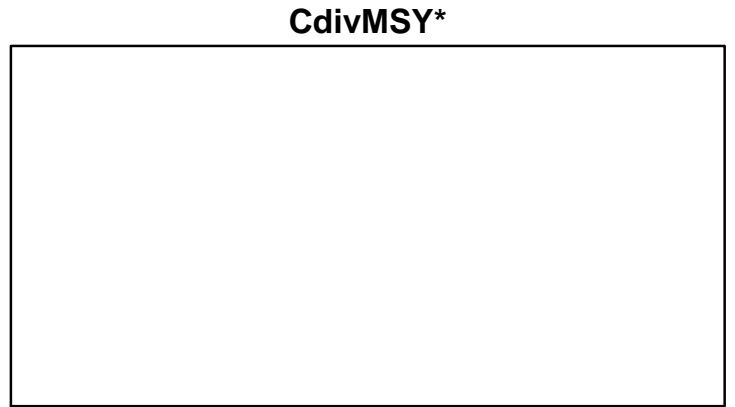
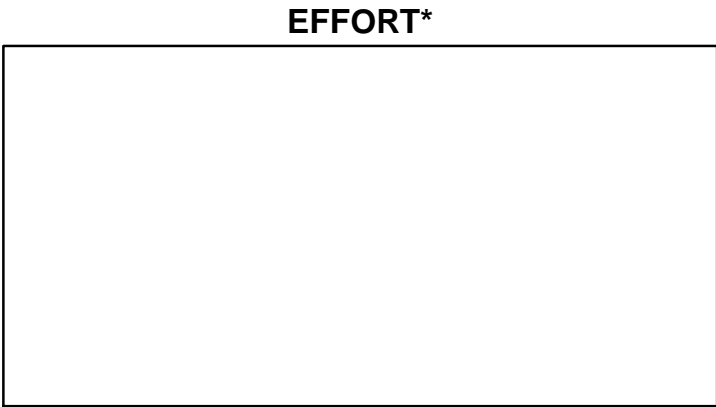
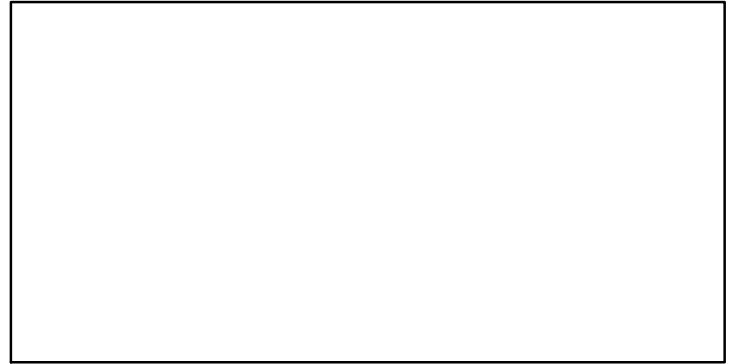
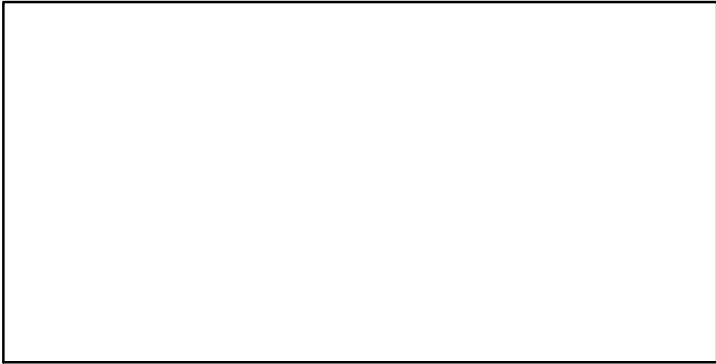
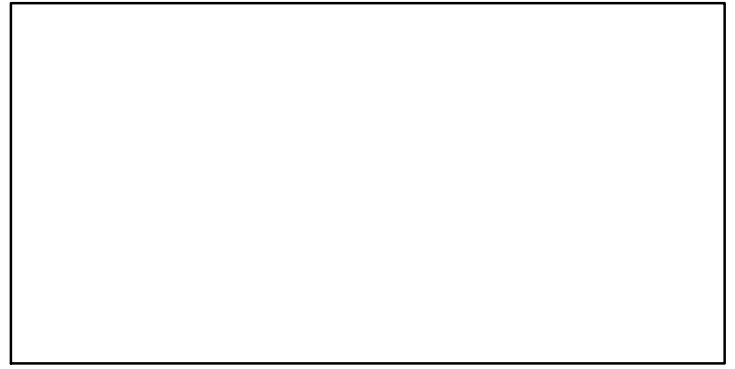
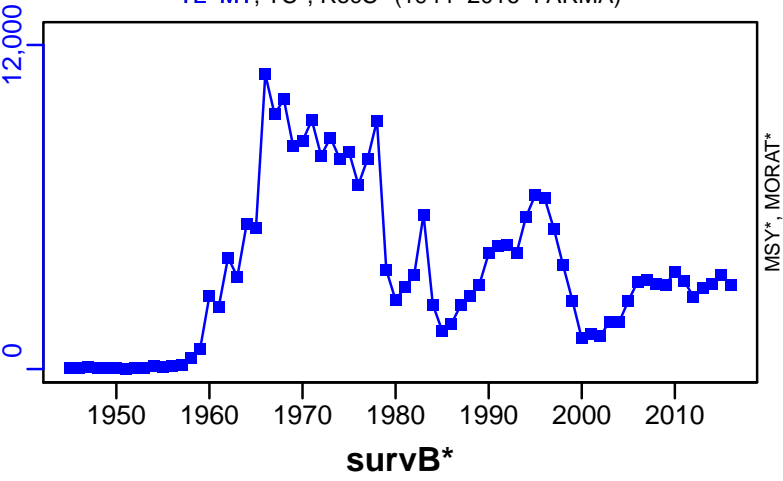




# Nylon shrimp Central–Southern Chile [NSHRIMPCSCH]

TL–MT, TC\*, RecC\* (1944–2016–PARMA)

TAC\*, Cpair\*, Cadv\*



## Nylon shrimp Northern Chile [NSHRIMPNCH]

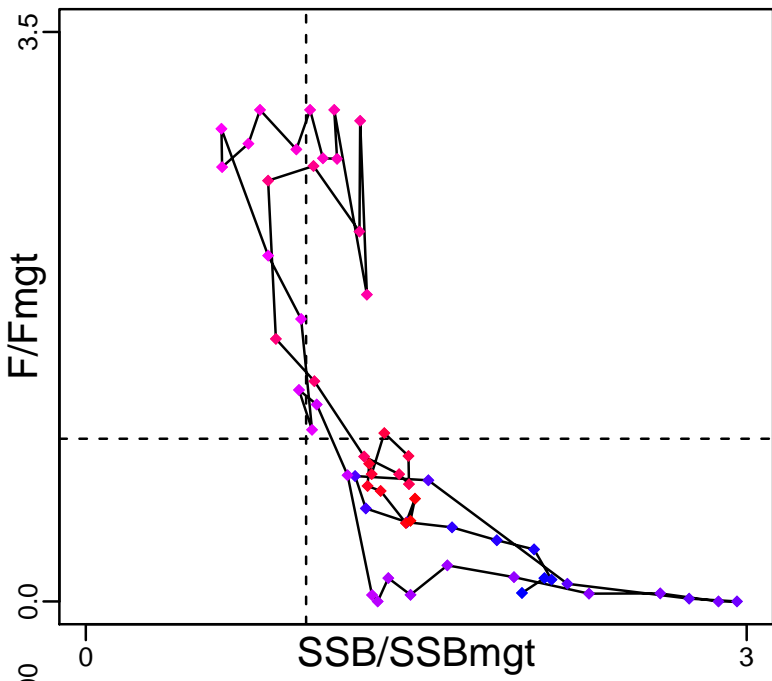
Metadata	
<b>Scientific Name</b>	Heterocarpus reedi
<b>Current Assess ID</b>	IFOPCH-NSHRIMPNCH-1960-2016-PARMA
<b>Area</b>	Northern Chile
<b>Management Authority</b>	Subsecretaria de Pesca
<b>Assessor</b>	Instituto de Fomento Pesquero - Chilean Fisheries Development Institute
<b>Asmts in RAM</b>	2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	2261
<b>Fmgt</b>	Fmgt-1/yr	2016	0.271
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2016	5025
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2016	0.36
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

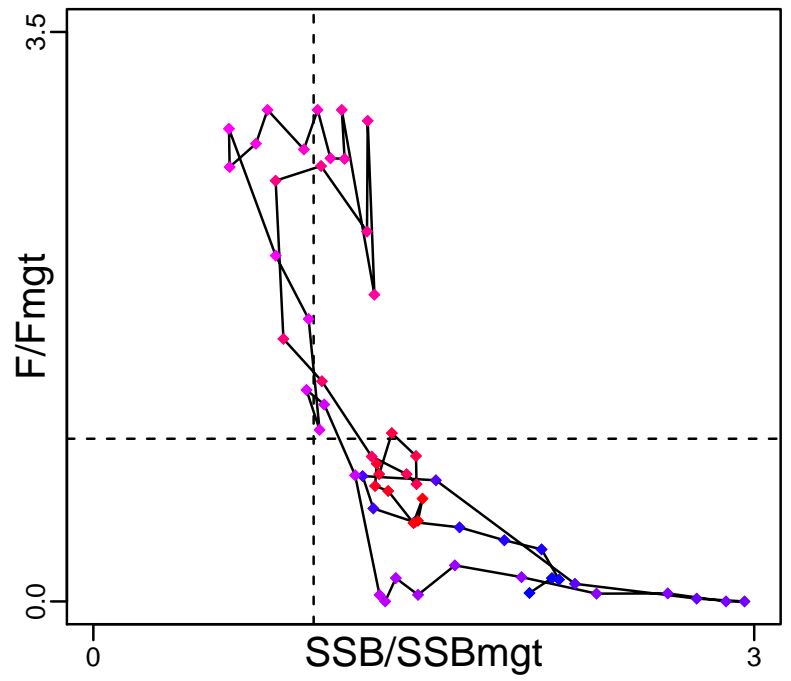
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	13,000	Both	-
<b>SSB</b>	SSB-MT	2016	3330	Females	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$6.26 \times 10^8$	Females	1
<b>F</b>	F-1/yr	2016	0.134	Females	-
<b>ER</b>	ER-calc-ratio	2016	0.062	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2016	803		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	1.474		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.496		
<b>ER/ERmgt</b>	-	-	-		

# Nylon shrimp Northern Chile [NSHRIMPNCH]

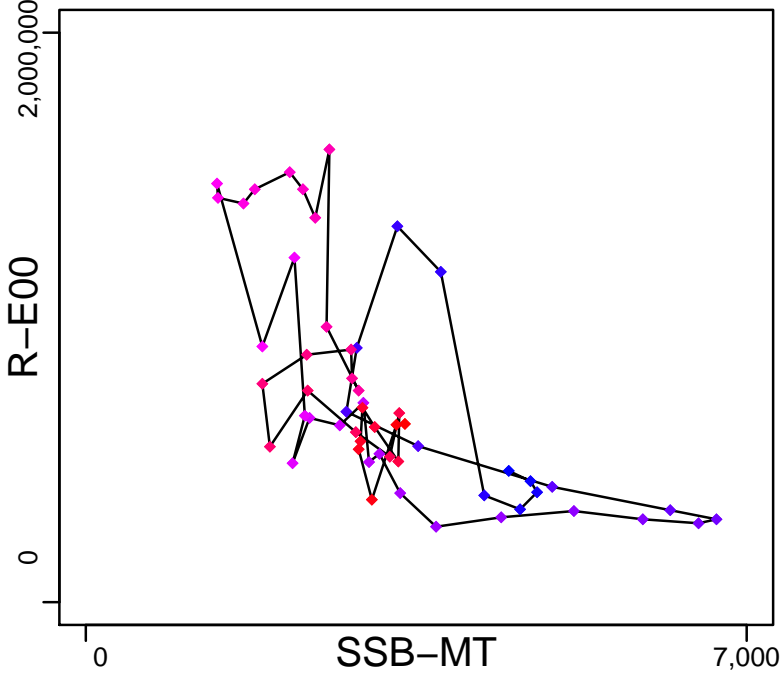
Kobe MSYpref (1960–2016–PARMA)



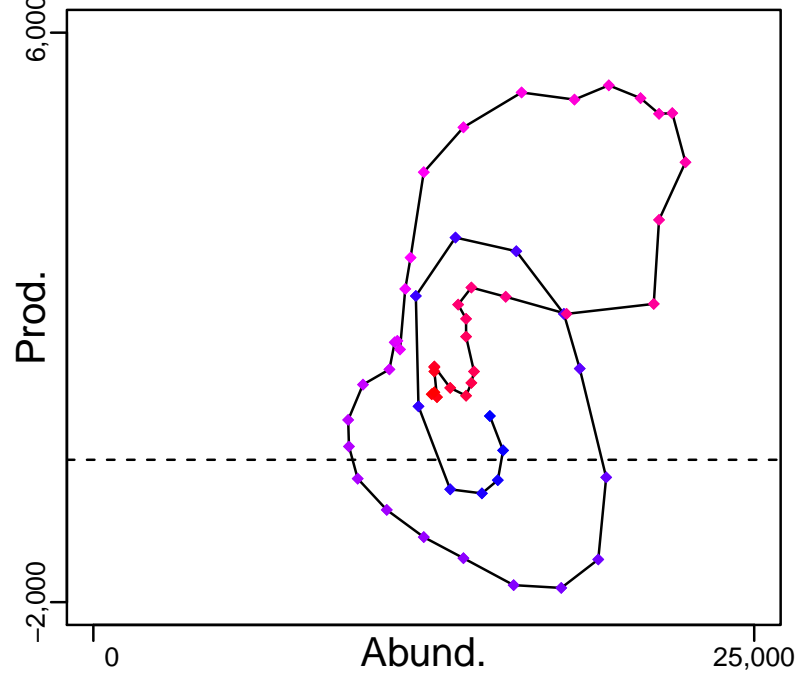
Kobe MGTpref (1960–2016–PARMA)



Spawner Recruit (1960–2016–PARMA)



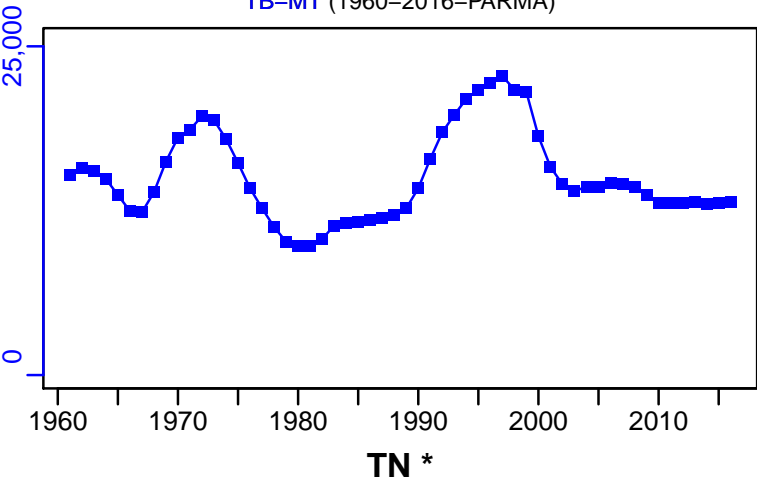
Production (1960–2016–PARMA)



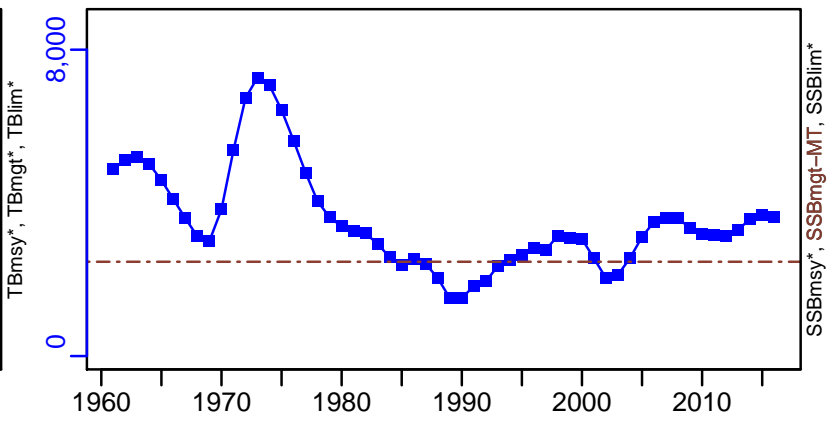
◆ Start Year ◆ End Year \* No Data

# Nylon shrimp Northern Chile [NSHRIMPNCH]

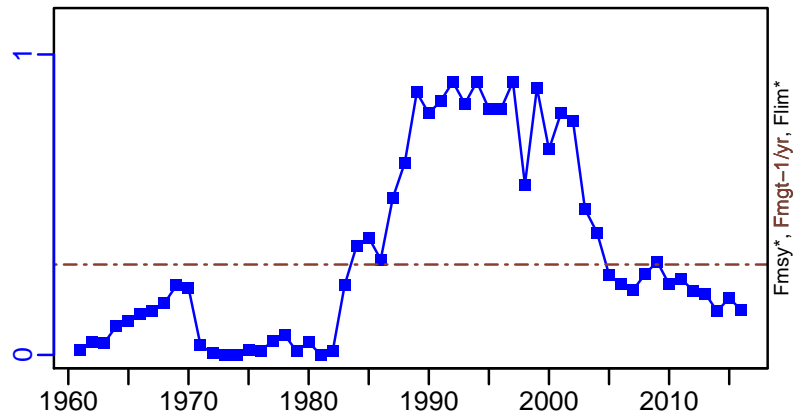
TB-MT (1960–2016–PARMA)



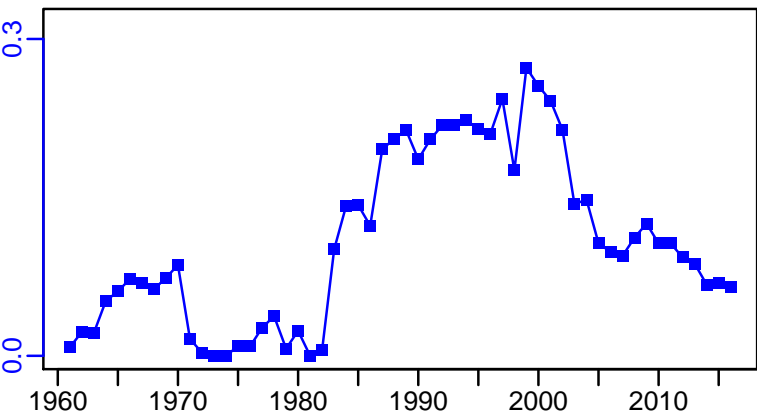
SSB-MT (1960–2016–PARMA)



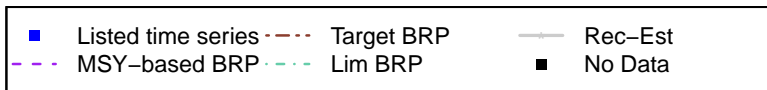
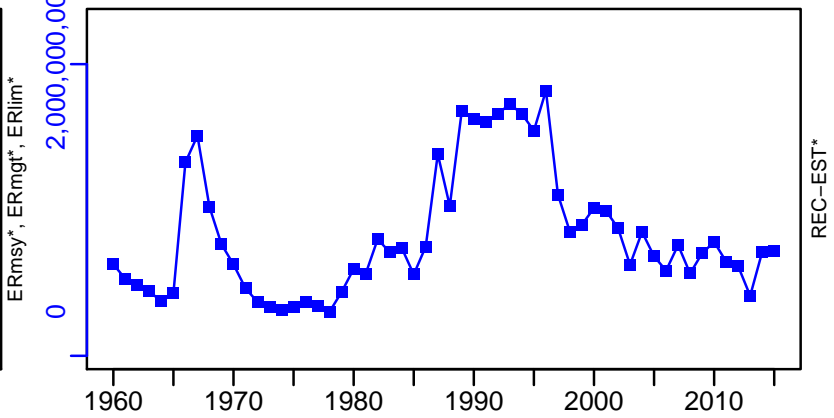
F-1/yr (1960–2016–PARMA)



ER-calc-ratio (1960–2016–PARMA)

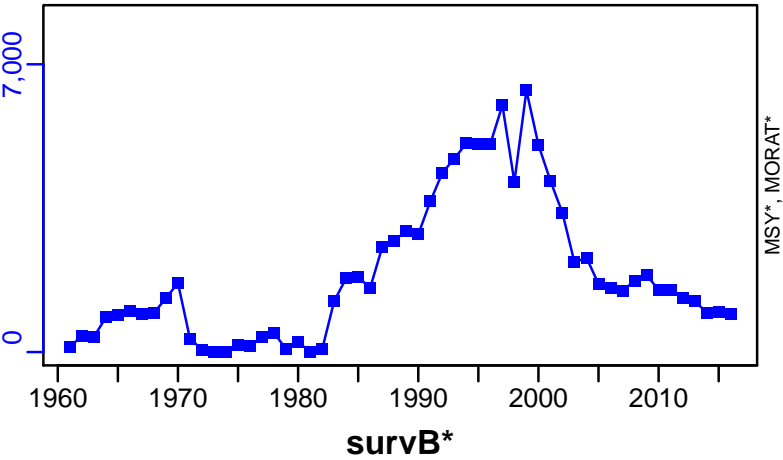


R-E00 (1960–2016–PARMA)



Nylon shrimp Northern Chile [NSHRIMPNCH]

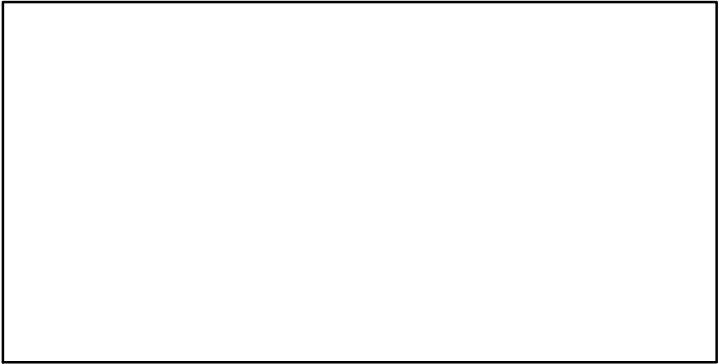
TL-MT, TC\*, RecC\* (1960–2016–PARMA)



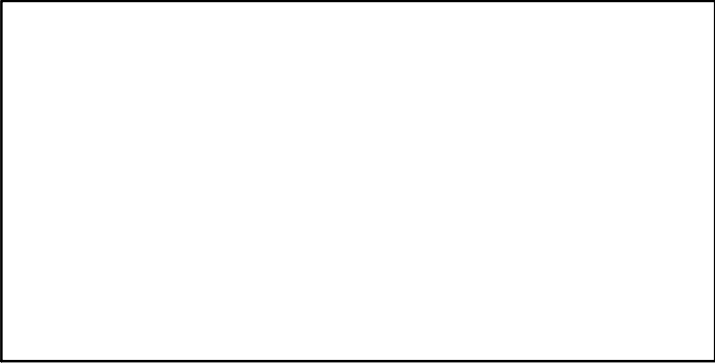
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



CdivMSY\*



## Orange roughy Chile [OROUGHYCH]

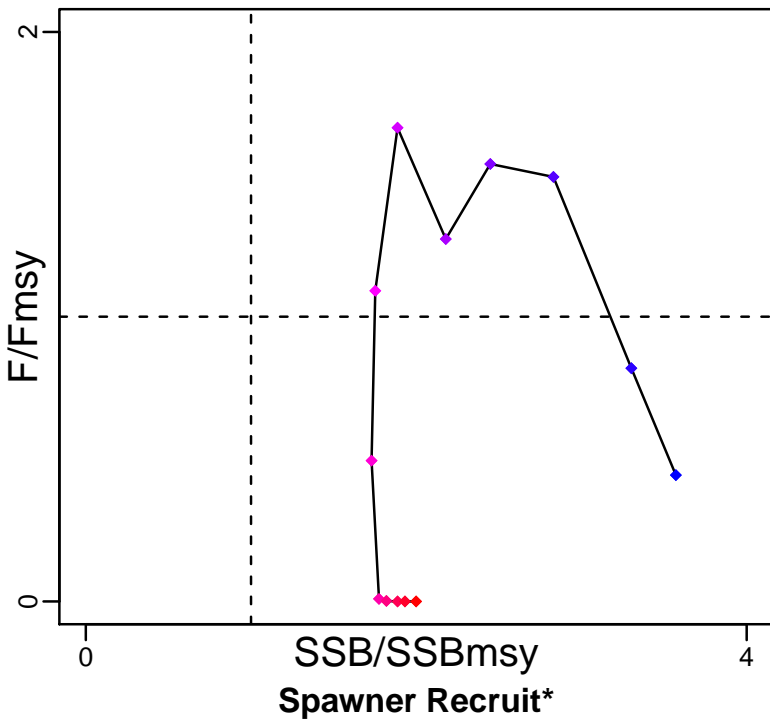
Metadata	
<b>Scientific Name</b>	Hoplostethus atlanticus
<b>Current Assess ID</b>	SPRFMO-OROUGHYCH-1999-2011-PARMA
<b>Area</b>	Chilean EEZ and offshore
<b>Management Authority</b>	South Pacific Regional Fisheries Management Organization
<b>Assessor</b>	South Pacific Regional Fisheries Management Organization
<b>Asmts in RAM</b>	2011

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-pr-MT	2011	4452
<b>Fmsy</b>	Fmsy-1/yr	2011	0.11
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2011	0.045
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

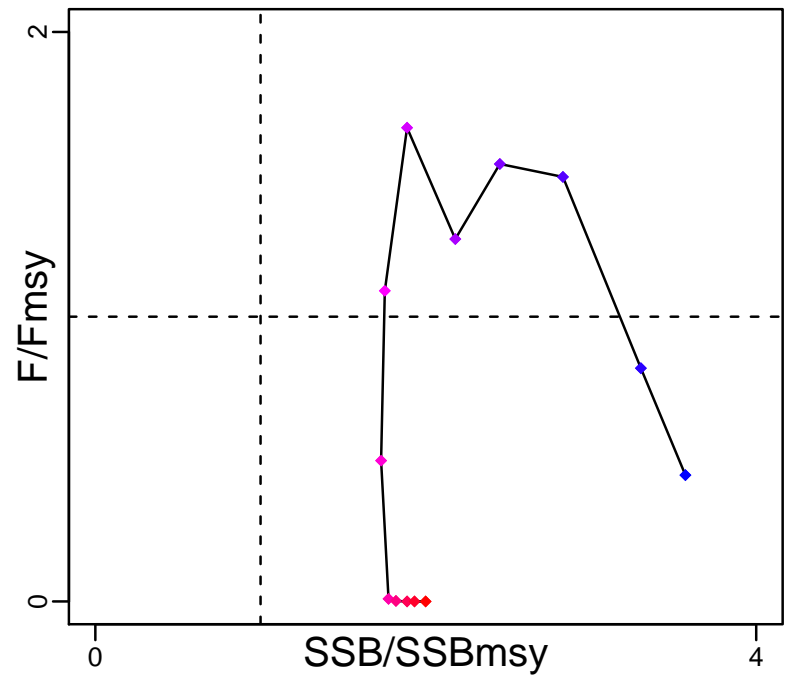
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2011	23,600	-	-
<b>SSB</b>	SSB-MT	2011	8900	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	F-1/yr	2011	0	-	-
<b>ER</b>	ER-calc-ratio	2011	0	-	-
<b>TC</b>	TC-MT	2011	0		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-pr-MT	2011	1.999		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2011	0		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Orange roughy Chile [OROUGHYCH]

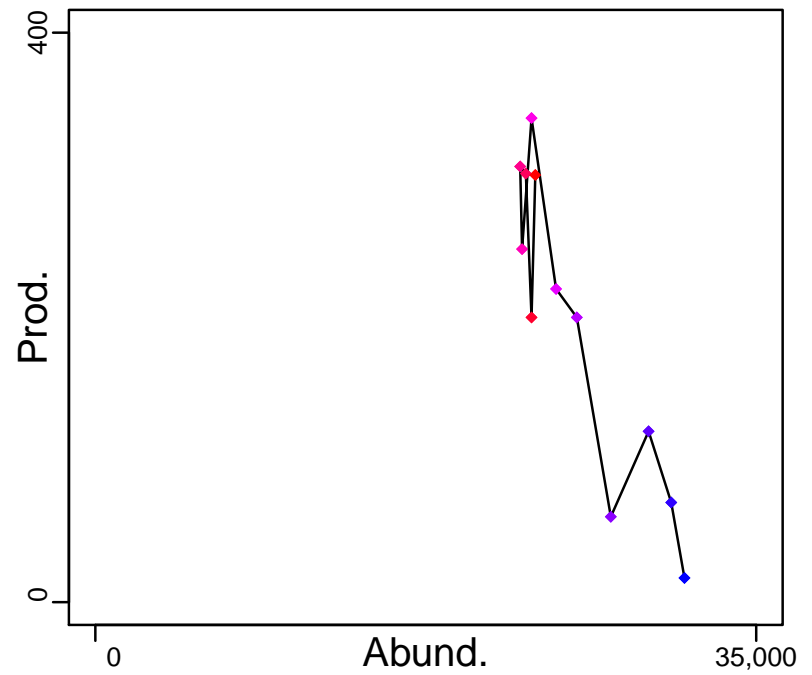
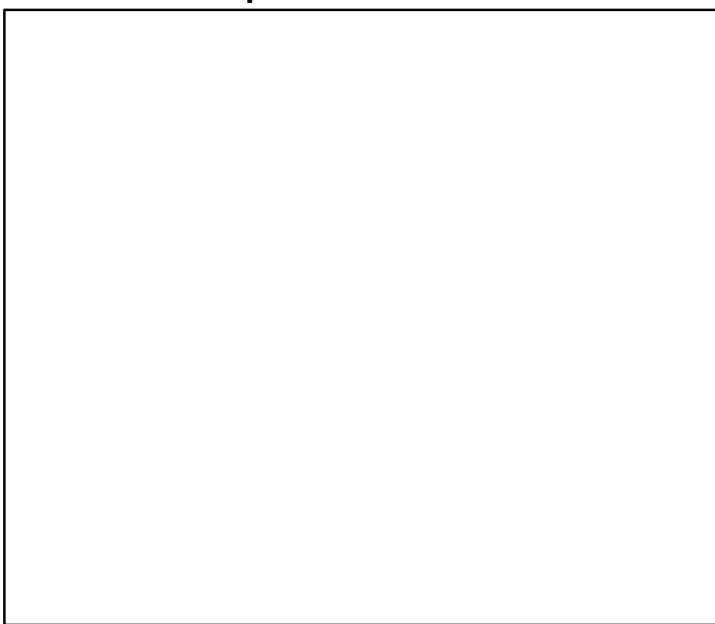
Kobe MSYpref (1999–2011–PARMA)



Kobe MGTpref (1999–2011–PARMA)



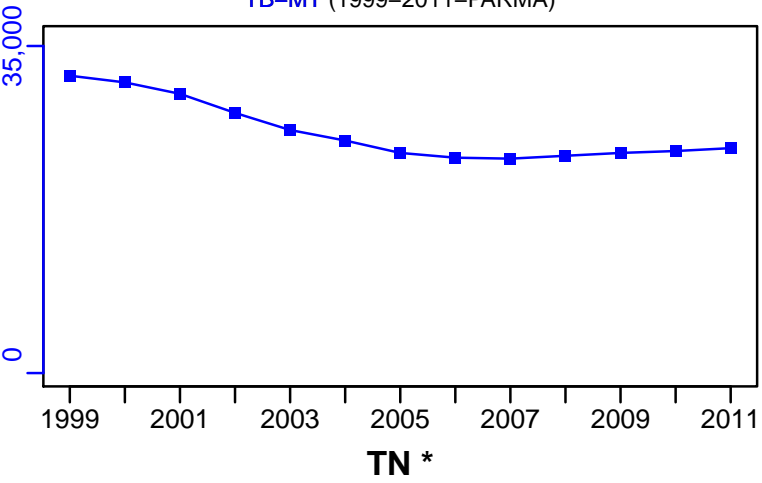
Production (1999–2011–PARMA)



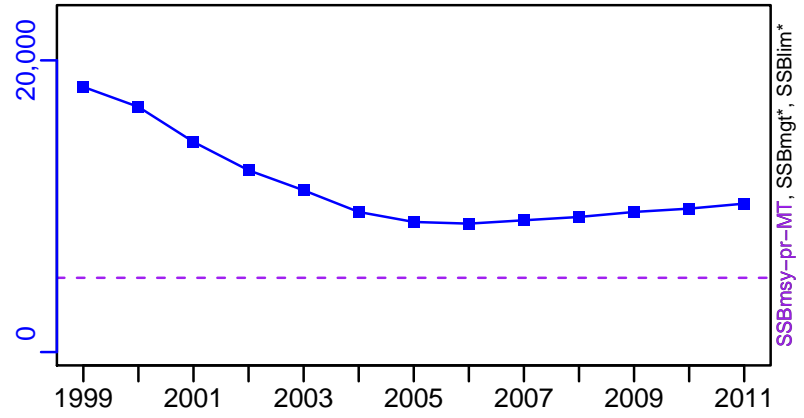
◆ Start Year ◆ End Year \* No Data

# Orange roughy Chile [OROUGHYCH]

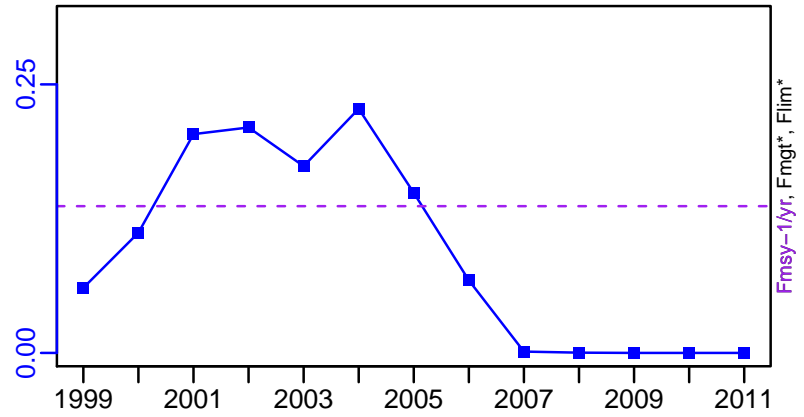
TB-MT (1999–2011–PARMA)



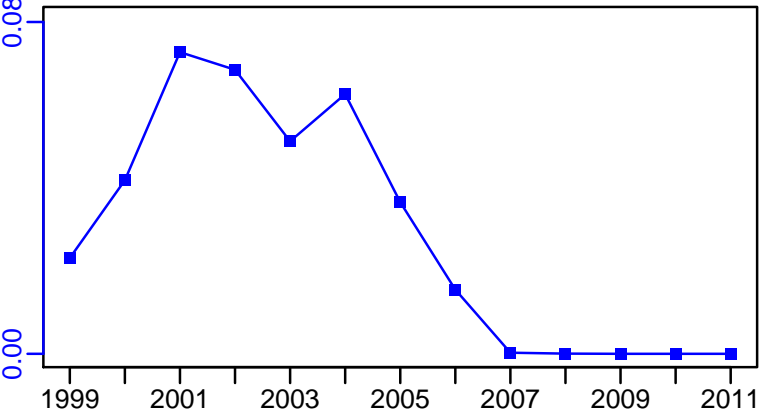
SSB-MT (1999–2011–PARMA)



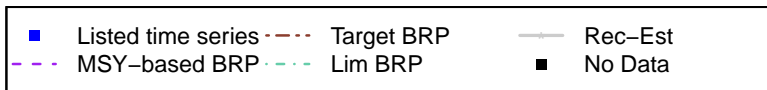
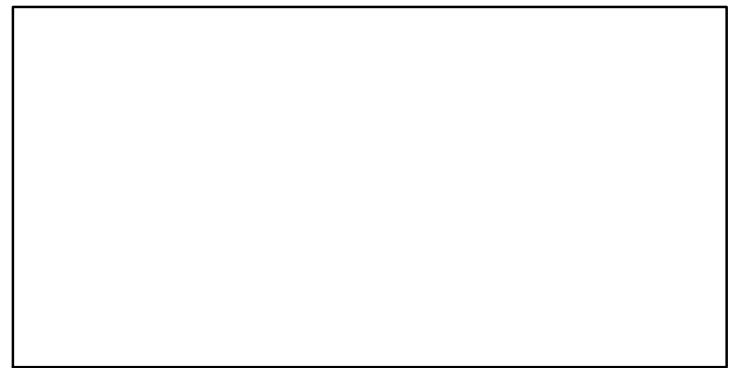
F-1/yr (1999–2011–PARMA)



ER-calc-ratio (1999–2011–PARMA)



Recruits\*

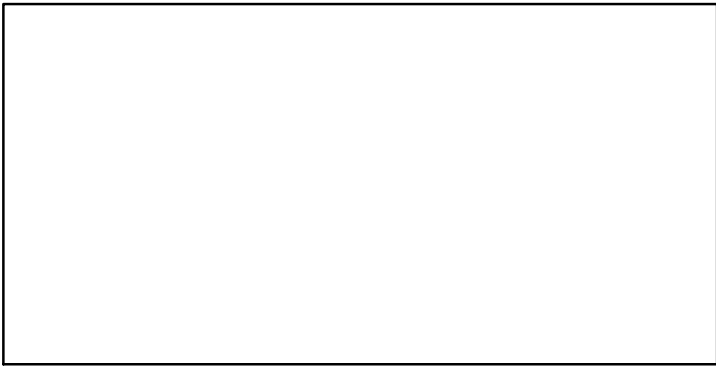
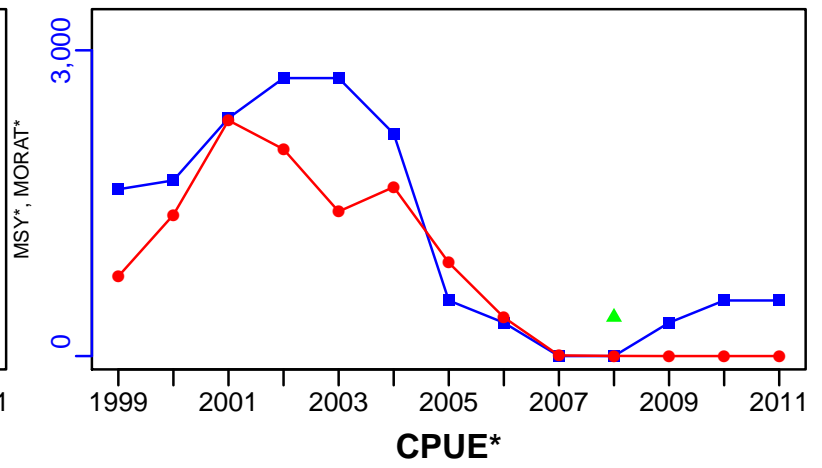
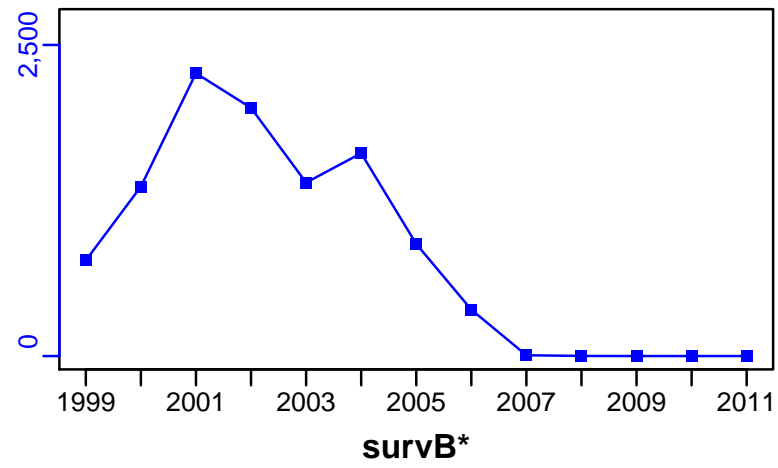




# Orange roughy Chile [OROUGHYCH]

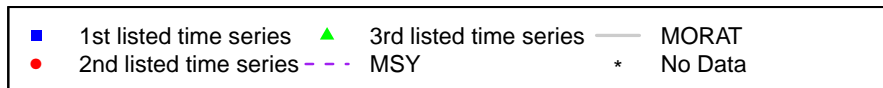
TC-MT, TL\*, RecC\* (1999-2011-PARMA)

TAC-MT, Cpair-MT, Cadvised-MT (1999-2011-PARMA)



EFFORT\*

CdivMSY\*



## Peruvian Anchoveta Central Chile [PANCHCCH]

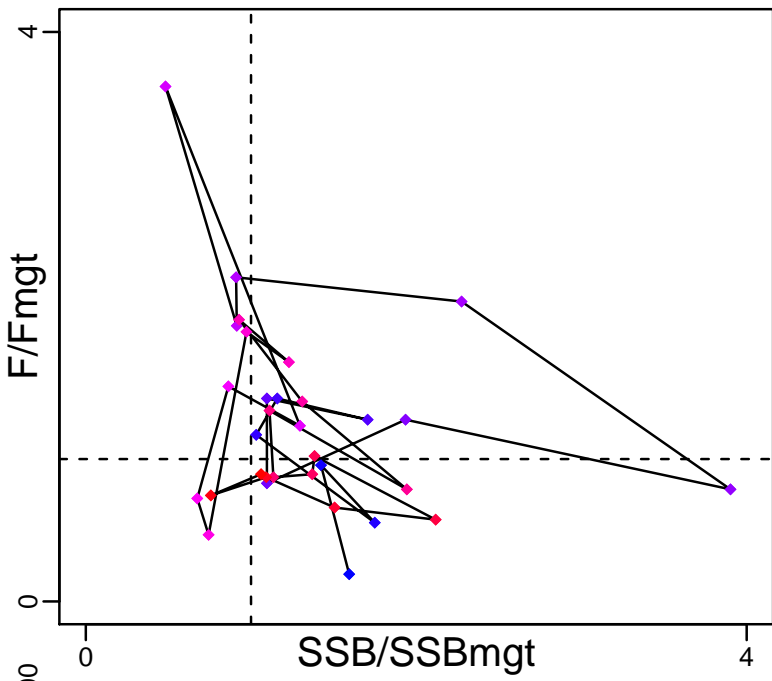
Metadata	
<b>Scientific Name</b>	Engraulis ringens
<b>Current Assess ID</b>	IFOPCH-PANCHCCH-1985-2016-PARMA
<b>Area</b>	Central Chile
<b>Management Authority</b>	Subsecretaria de Pesca
<b>Assessor</b>	Instituto de Fomento Pesquero - Chilean Fisheries Development Institute
<b>Asmts in RAM</b>	2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	51,000
<b>Fmgt</b>	Fmgt-1/yr	2016	0.47
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2016	92,500
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2016	1.3
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

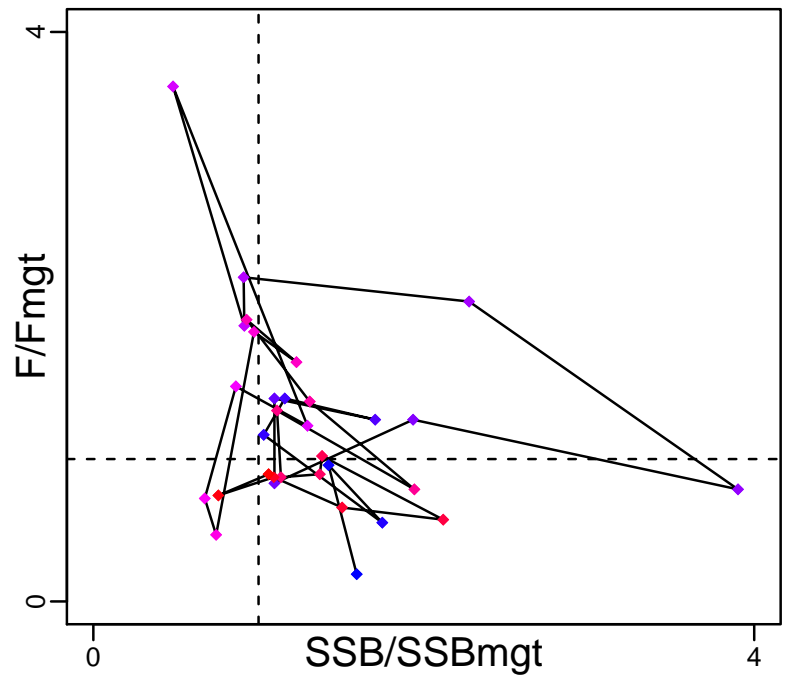
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	395,000	-	-
<b>SSB</b>	SSB-MT	2016	54,100	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$5.23 \times 10^8$	-	-
<b>F</b>	F-1/yr	2016	0.42	-	-
<b>ER</b>	ER-calc-ratio	2016	0.092	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2016	36,400		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	1.061		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.894		
<b>ER/ERmgt</b>	-	-	-		

# Peruvian Anchoveta Central Chile [PANCHCCH]

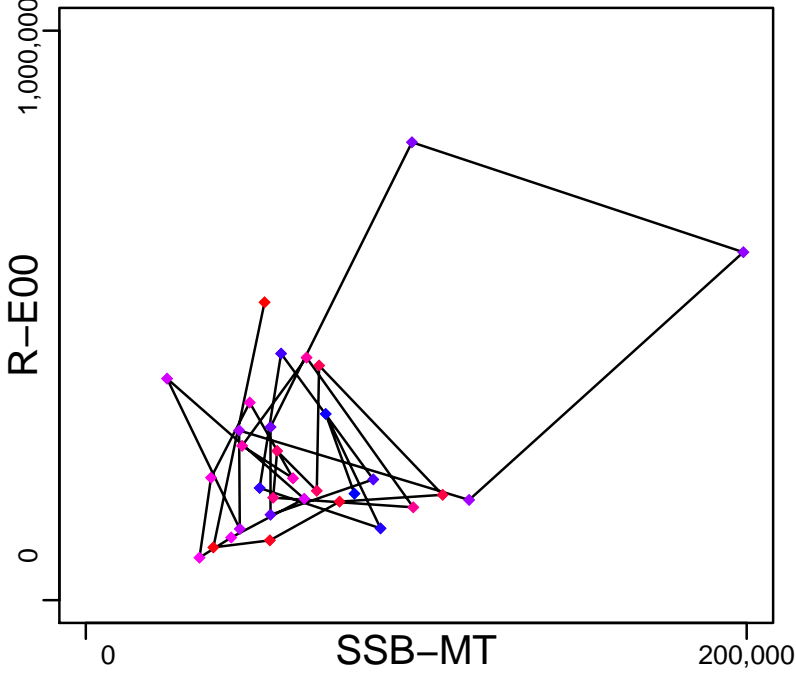
Kobe MSYpref (1985–2016–PARMA)



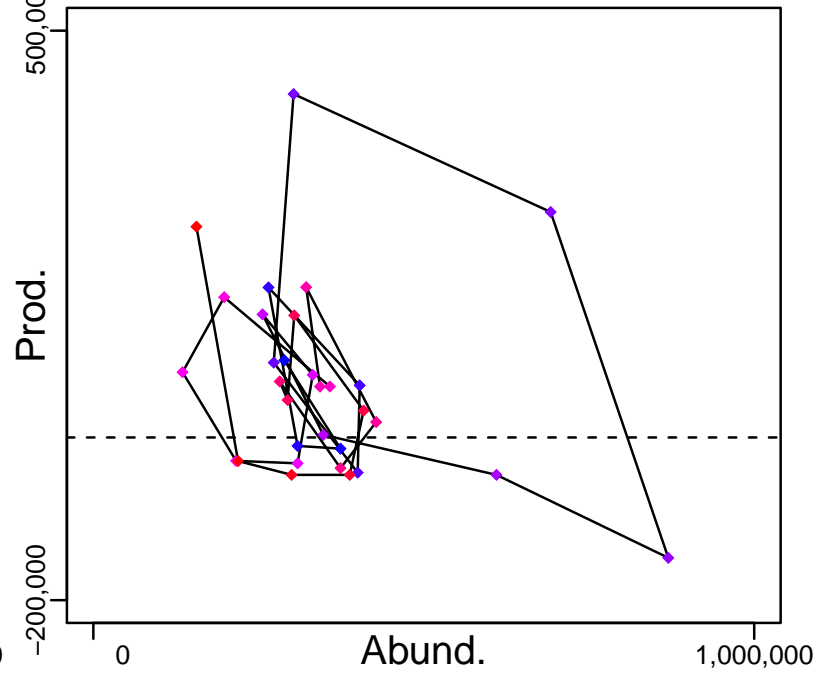
Kobe MGTpref (1985–2016–PARMA)



Spawner Recruit (1985–2016–PARMA)

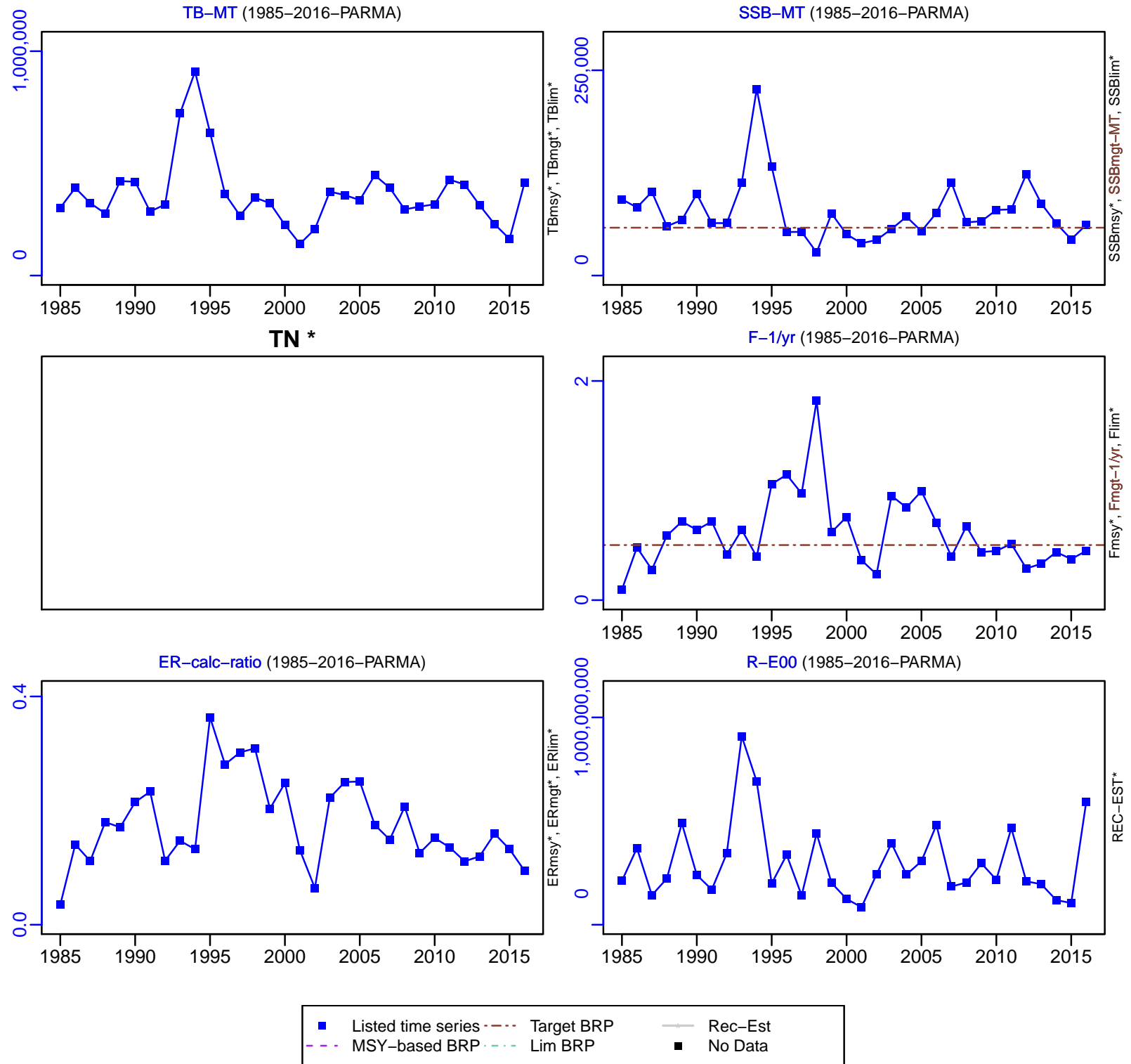


Production (1985–2016–PARMA)



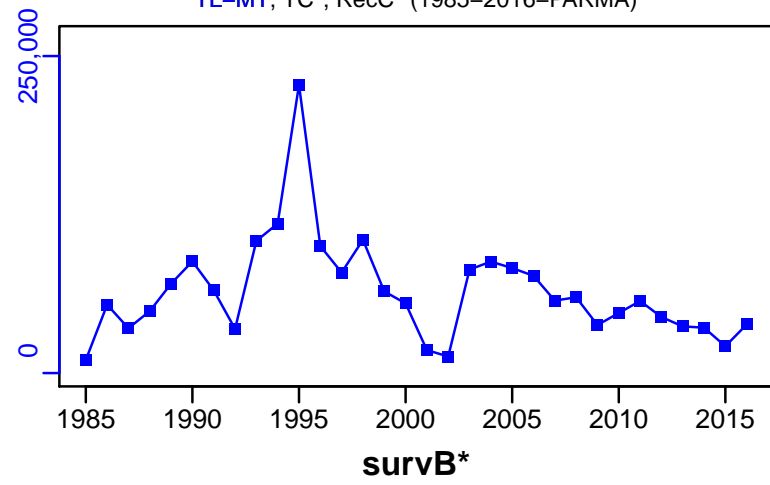
◆ Start Year ◆ End Year \* No Data

# Peruvian Anchoveta Central Chile [PANCHCCH]

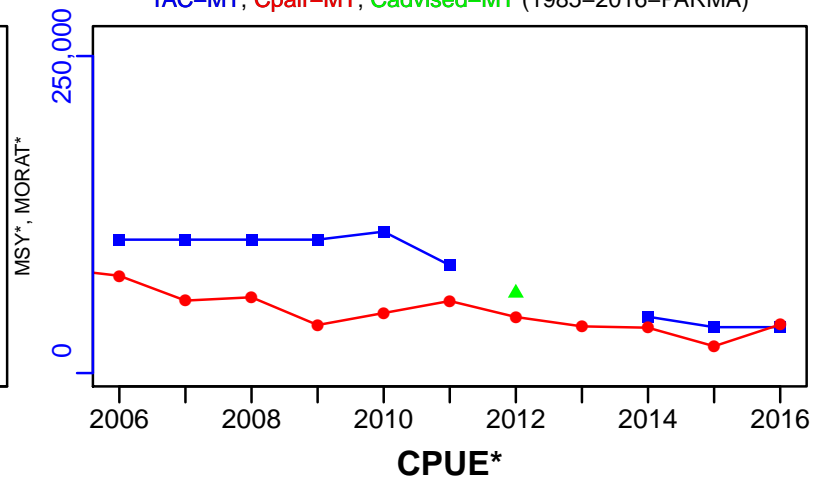


# Peruvian Anchoveta Central Chile [PANCHCCH]

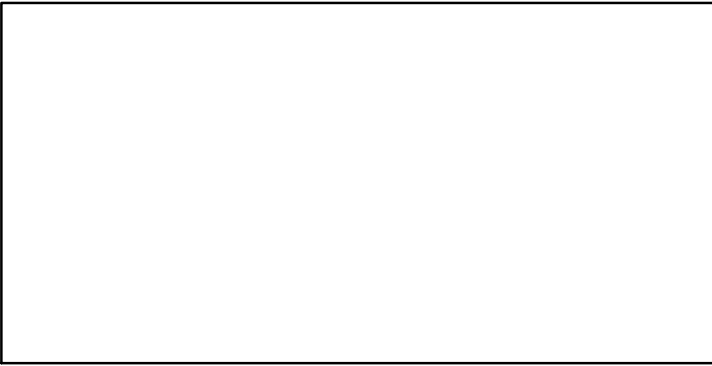
TL-MT, TC\*, RecC\* (1985–2016–PARMA)



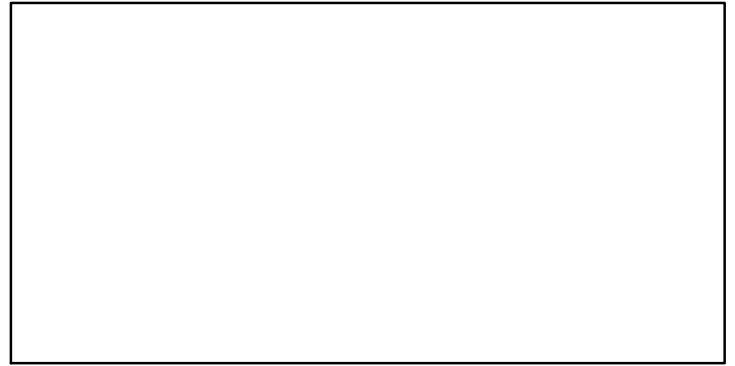
TAC-MT, Cpair-MT, Cadvised-MT (1985–2016–PARMA)



EFFORT\*



CdivMSY\*



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

## Peruvian Anchoveta Central-Southern Chile [PANCHCSCH]

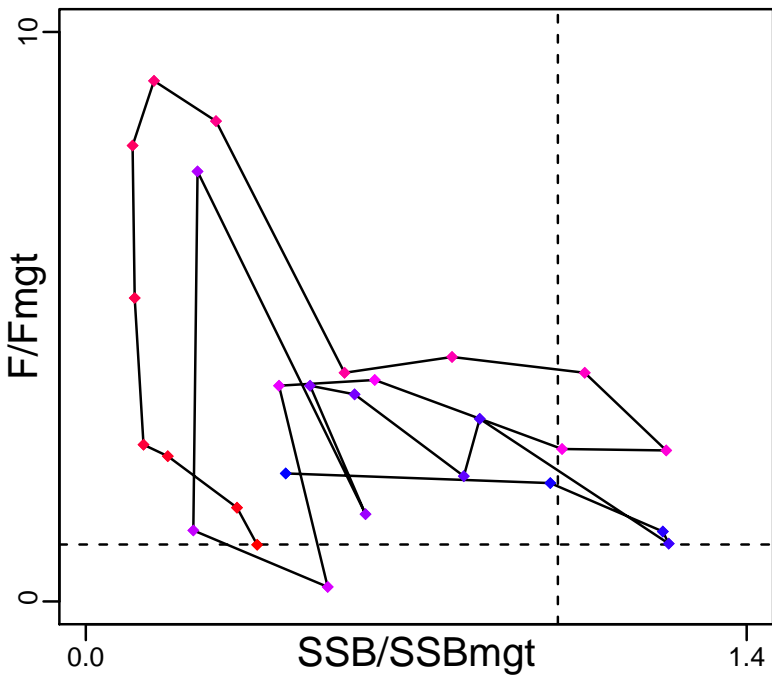
Metadata	
<b>Scientific Name</b>	Engraulis ringens
<b>Current Assess ID</b>	IFOPCH-PANCHCSCH-1990-2016-PARMA
<b>Area</b>	Central-Southern Chile
<b>Management Authority</b>	Subsecretaria de Pesca
<b>Assessor</b>	Instituto de Fomento Pesquero - Chilean Fisheries Development Institute
<b>Asmts in RAM</b>	2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	562,000
<b>Fmgt</b>	Fmgt-1/yr	2016	0.396
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2016	0.7
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	281,000
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

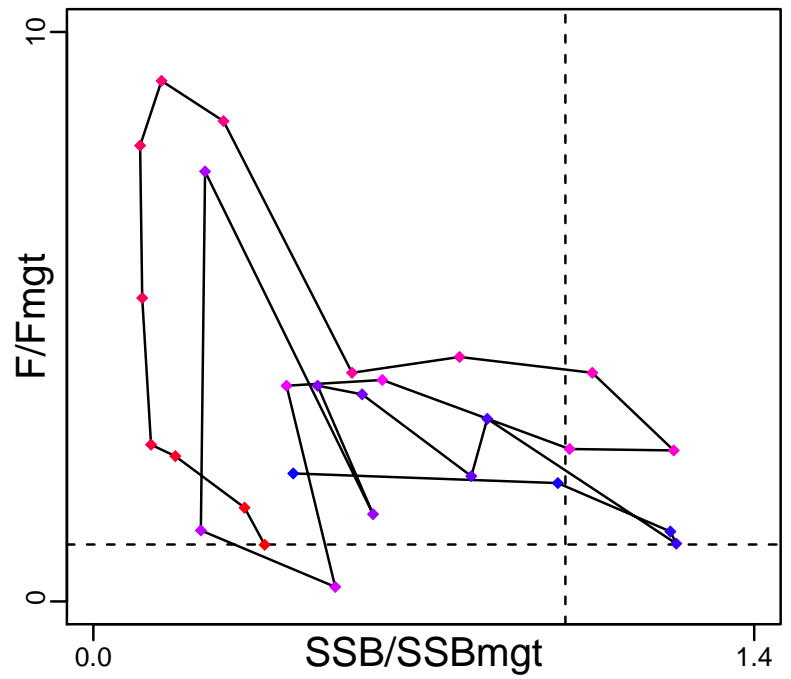
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	433,000	-	-
<b>SSB</b>	SSB-MT	2016	204,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	52,000	-	-
<b>F</b>	F-1/yr	2016	0.394	-	-
<b>ER</b>	ER-calc-ratio	2016	0.103	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2016	44,600		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	0.363		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.995		
<b>ER/ERmgt</b>	-	-	-		

# Peruvian Anchoveta Central–Southern Chile [PANCHCSCH]

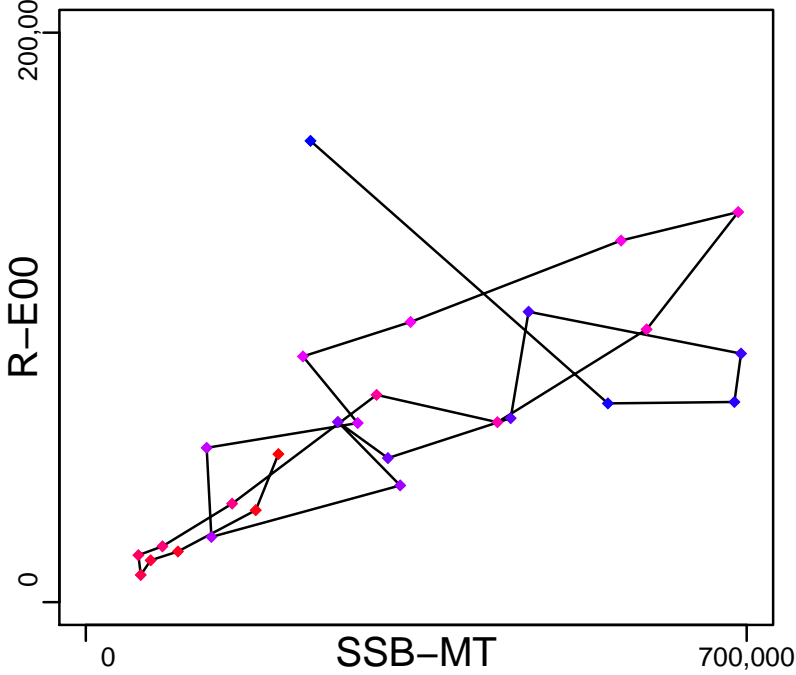
Kobe MSYpref (1990–2016–PARMA)



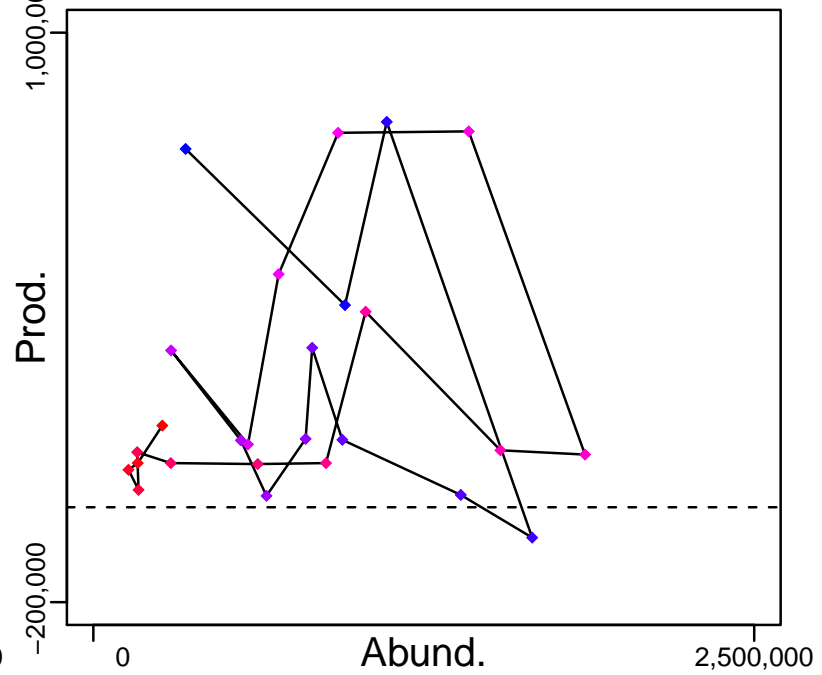
Kobe MGTpref (1990–2016–PARMA)



Spawner Recruit (1990–2016–PARMA)



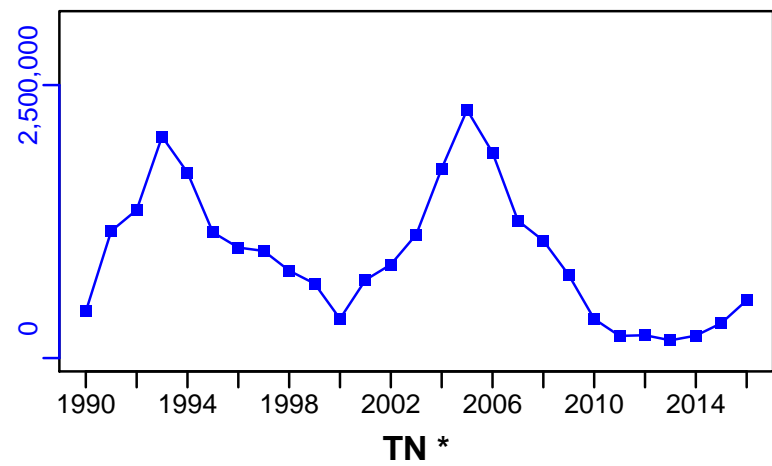
Production (1990–2016–PARMA)



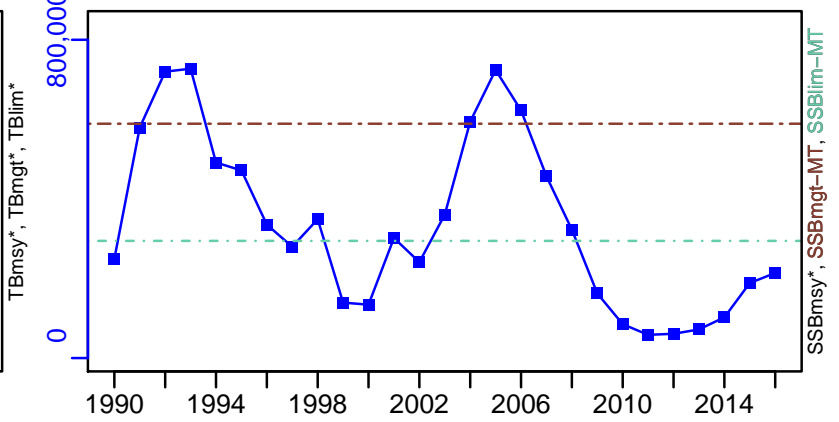
◆ Start Year ◆ End Year \* No Data

# Peruvian Anchoveta Central–Southern Chile [PANCHCSCH]

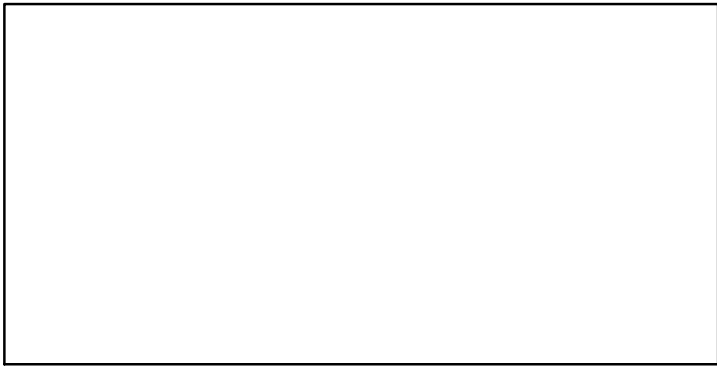
TB–MT (1990–2016–PARMA)



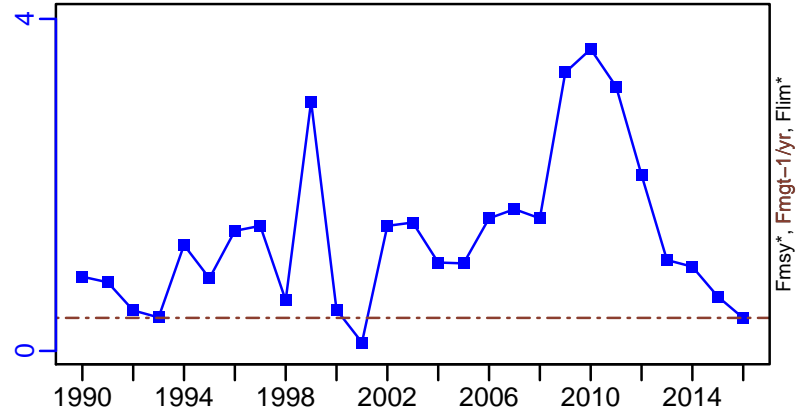
SSB–MT (1990–2016–PARMA)



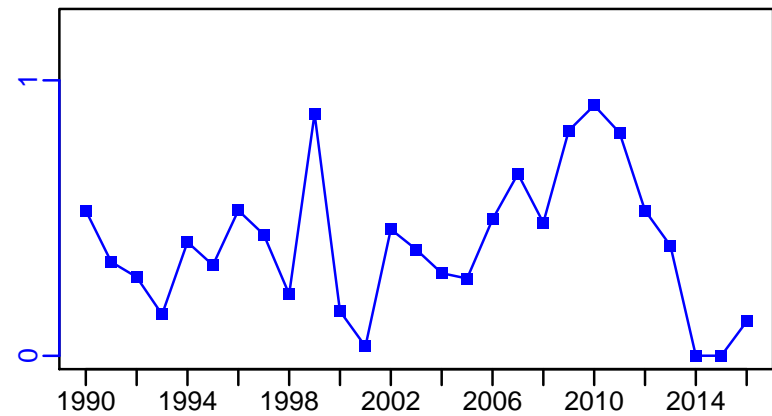
TN \*



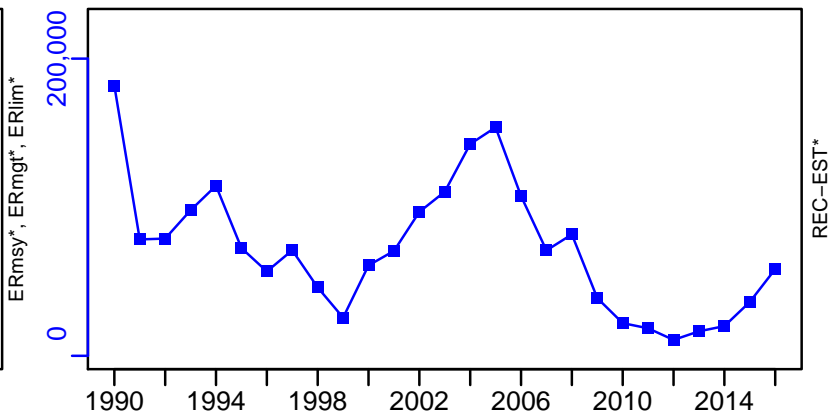
F–1/yr (1990–2016–PARMA)



ER–calc–ratio (1990–2016–PARMA)



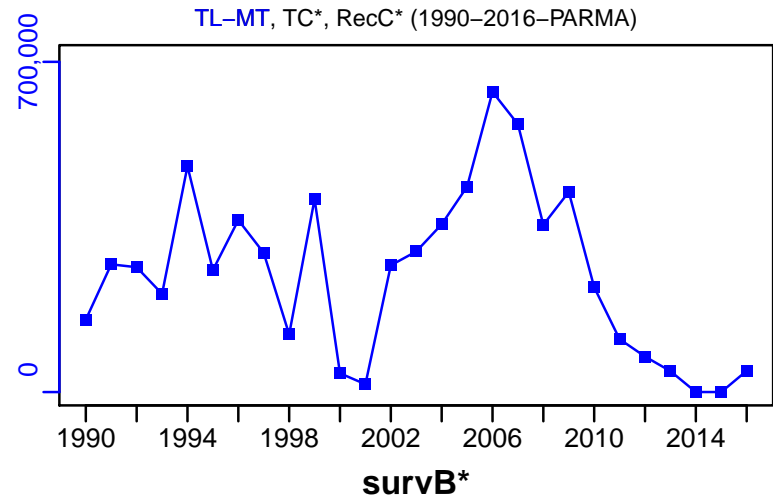
R–E00 (1990–2016–PARMA)



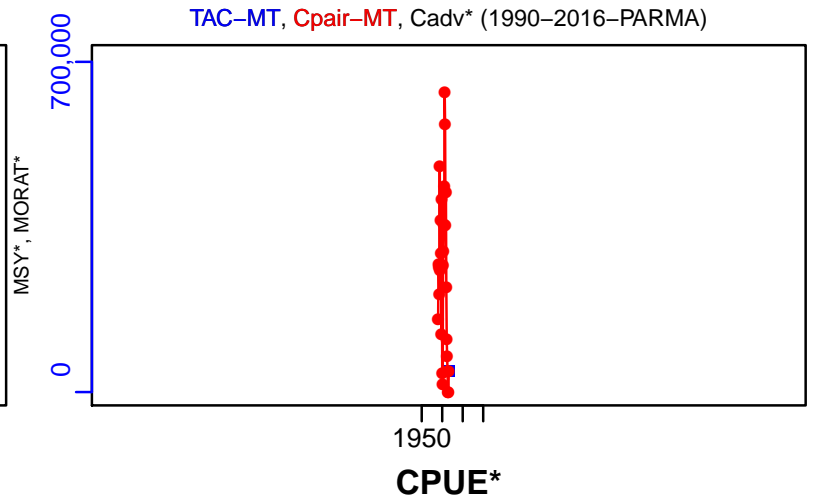


# Peruvian Anchoveta Central–Southern Chile [PANCHCSCH]

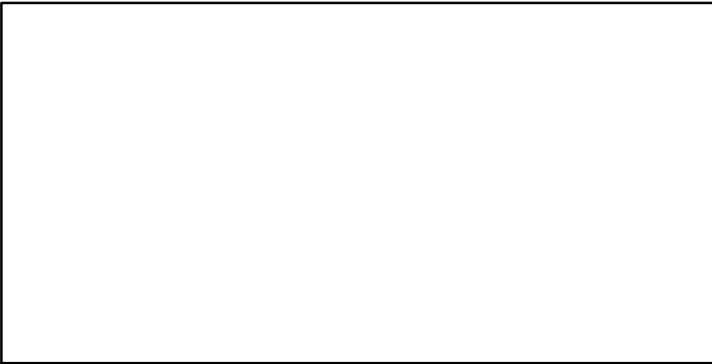
TL–MT, TC\*, RecC\* (1990–2016–PARMA)



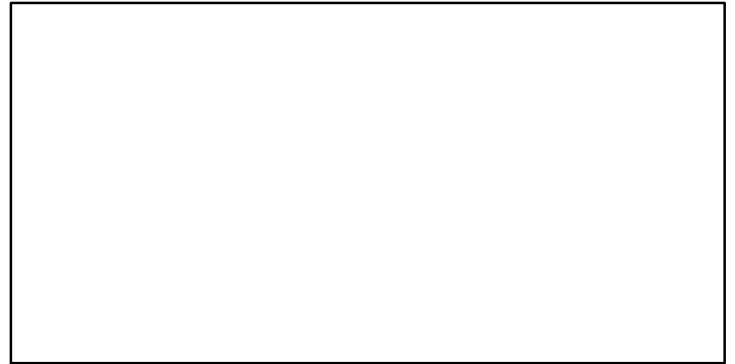
TAC–MT, Cpair–MT, Cadv\* (1990–2016–PARMA)



EFFORT\*



CdivMSY\*



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

## Peruvian Anchoveta Northern Chile Southern Peru [PANCHNCHSP]

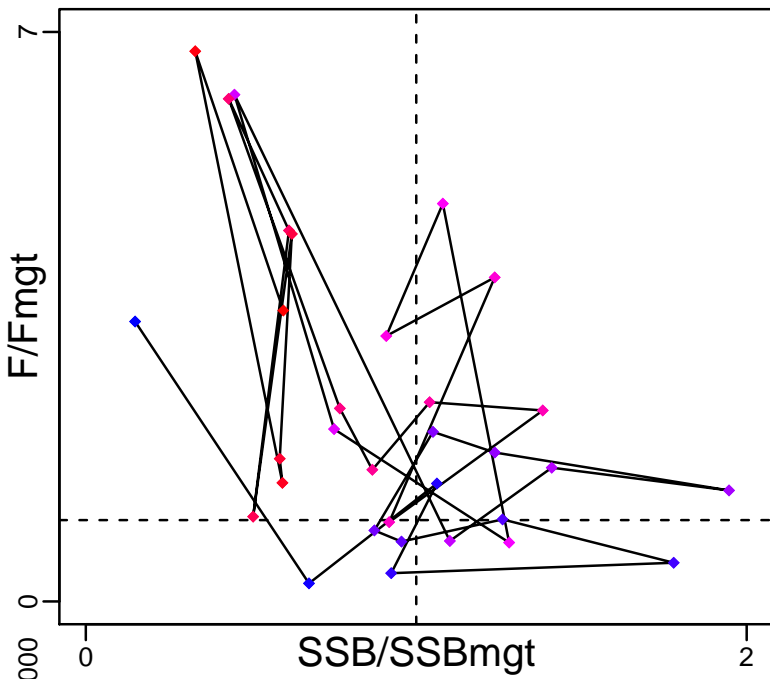
Metadata	
<b>Scientific Name</b>	Engraulis ringens
<b>Current Assess ID</b>	IFOPCH-PANCHNCHSP-1984-2015-PARMA
<b>Area</b>	Northern Chile Southern Peru
<b>Management Authority</b>	Subsecretaria de Pesca
<b>Assessor</b>	Instituto de Fomento Pesquero - Chilean Fisheries Development Institute
<b>Asmts in RAM</b>	2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2015	2,021,000
Fmgt	Fmgt-1/yr	2015	1.18
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2015	1
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

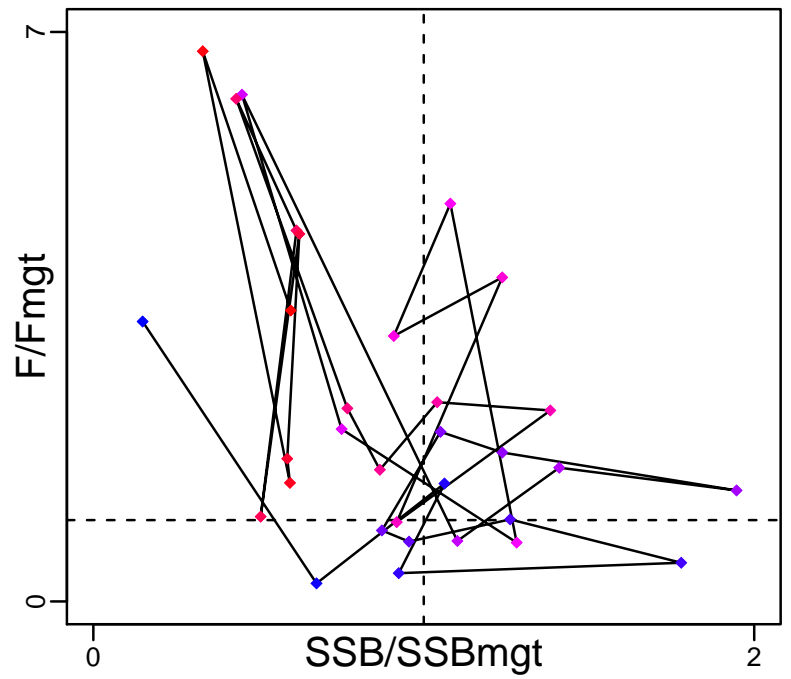
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2015	5,210,000	-	-
SSB	SSB-MT	2015	1,210,000	-	-
TN	-	-	-	-	-
R	R-E00	2015	$9.46 \times 10^{11}$	-	-
F	F-1/yr	2015	4.22	-	-
ER	ER-calc-ratio	2015	0.231	-	-
TC	-	-	-		
TL	TL-MT	2015	1,200,000		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2015	0.598		
F/Fmgt	F-1/yr/Fmgt-1/yr	2015	3.576		
ER/ERmgt	-	-	-		

Peruvian Anchoveta Northern Chile Southern Peru [PANCHNCHSP]

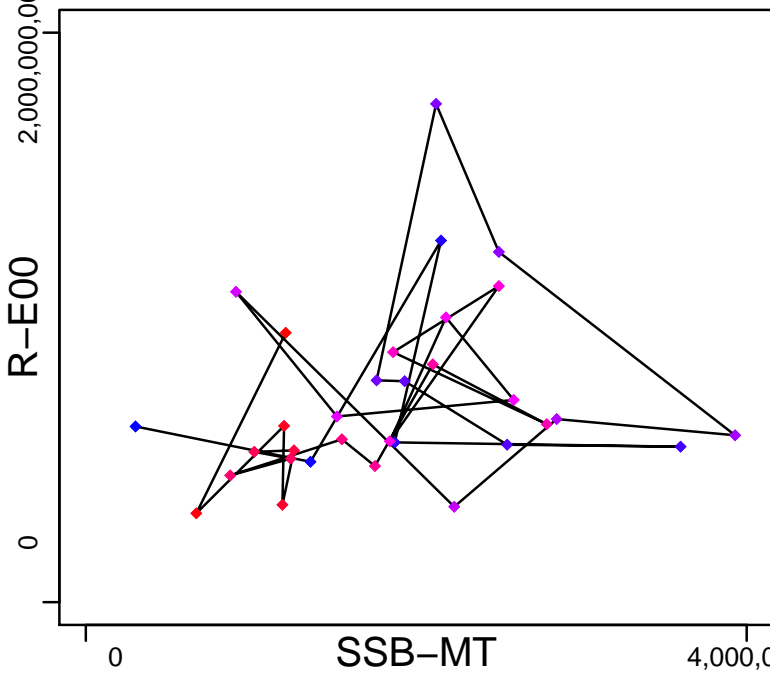
Kobe MSYpref (1984–2015–PARMA)



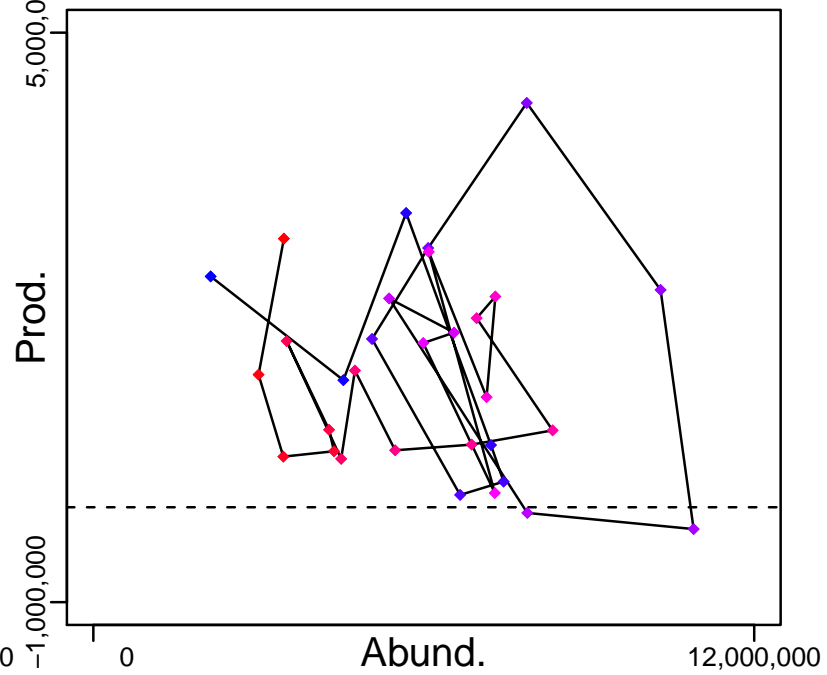
Kobe MGTpref (1984–2015–PARMA)



Spawner Recruit (1984–2015–PARMA)



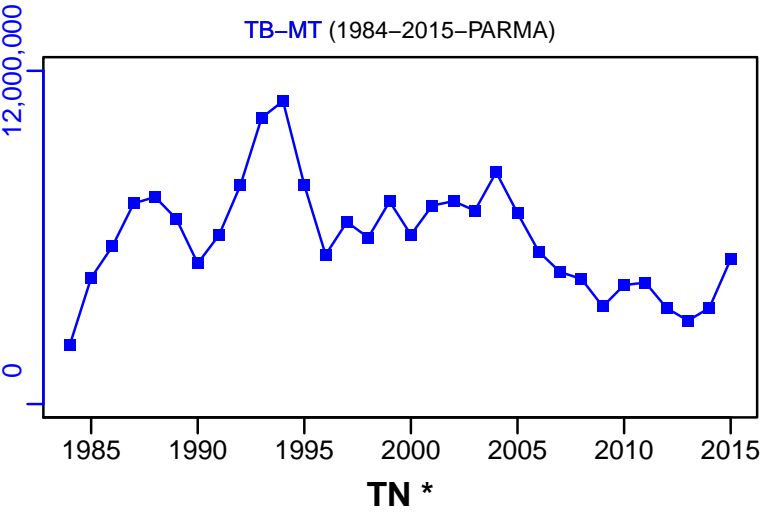
Production (1984–2015–PARMA)



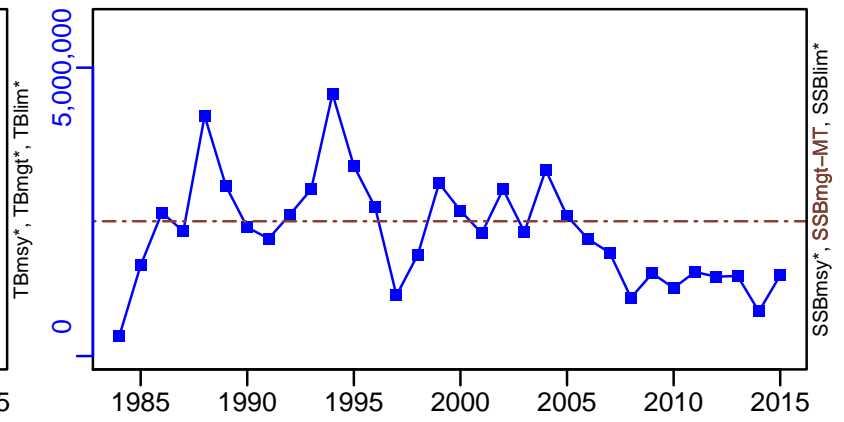
◆ Start Year ◆ End Year \* No Data

# Peruvian Anchoveta Northern Chile Southern Peru [PANCHNCHSP]

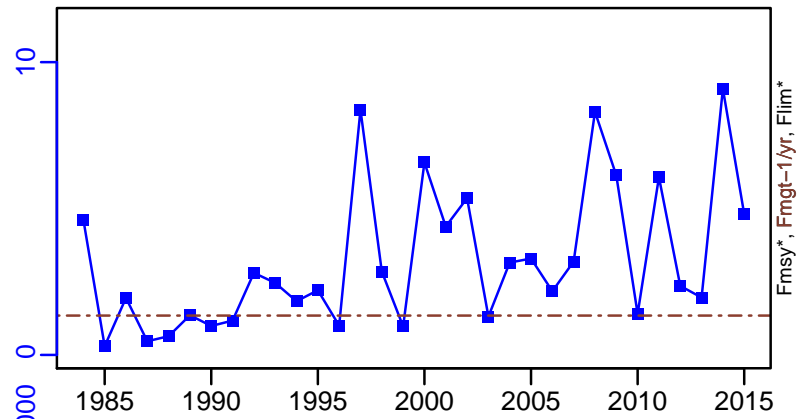
TB-MT (1984-2015-PARMA)



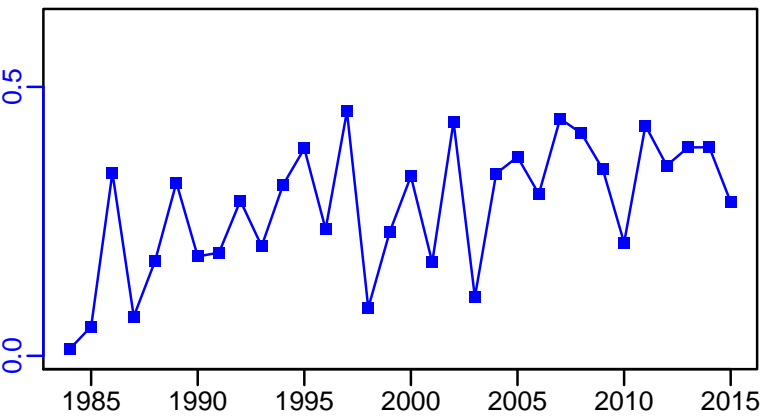
SSB-MT (1984-2015-PARMA)



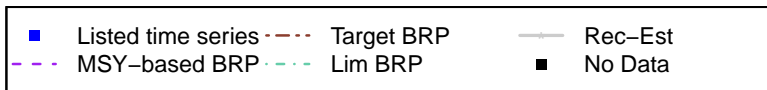
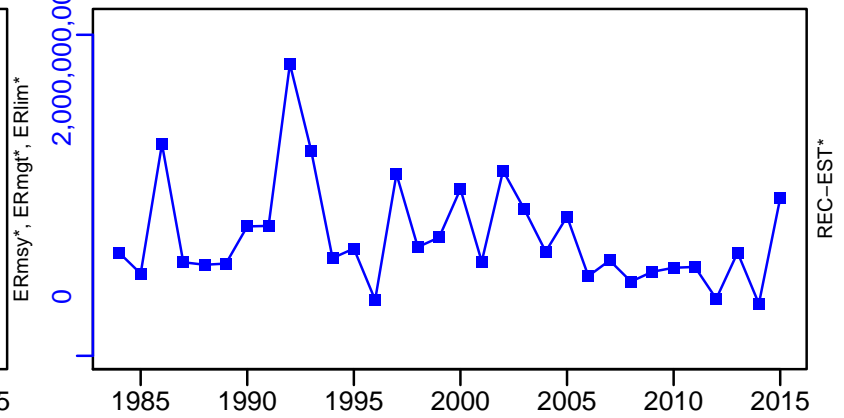
F-1/yr (1984-2015-PARMA)



ER-calc-ratio (1984-2015-PARMA)



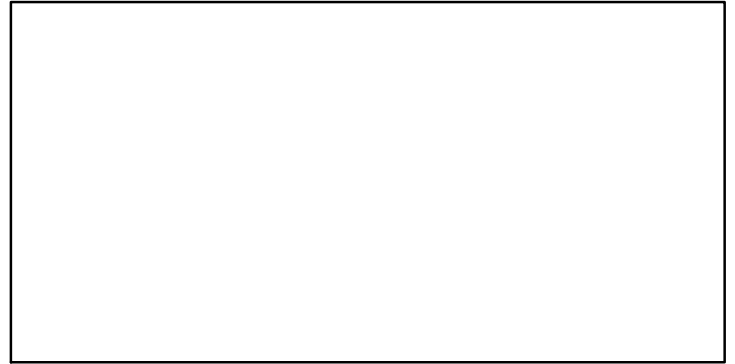
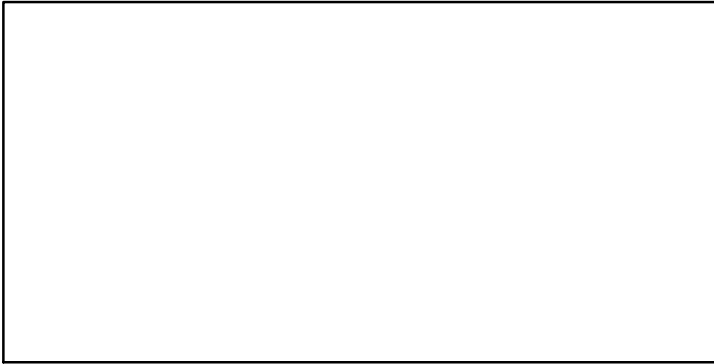
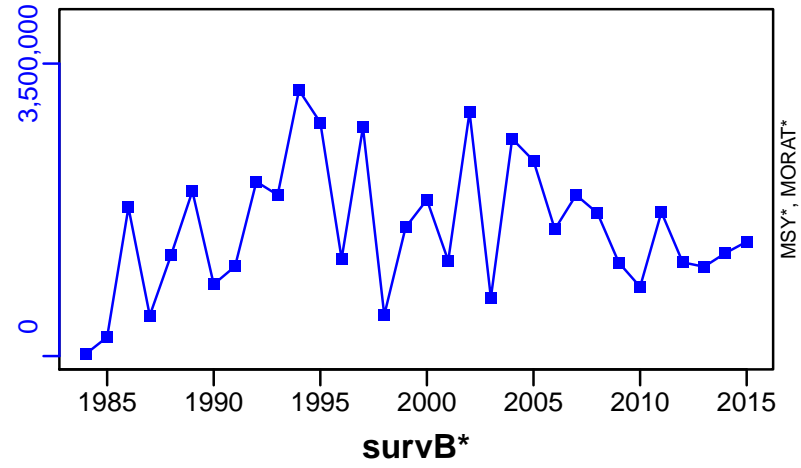
R-E00 (1984-2015-PARMA)



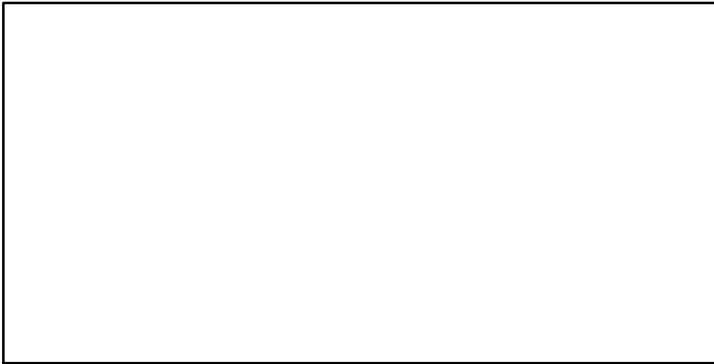
Peruvian Anchoveta Northern Chile Southern Peru [PANCHNCHSP]

TL-MT, TC\*, RecC\* (1984–2015–PARMA)

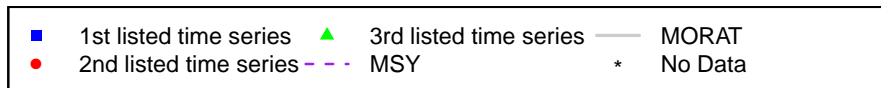
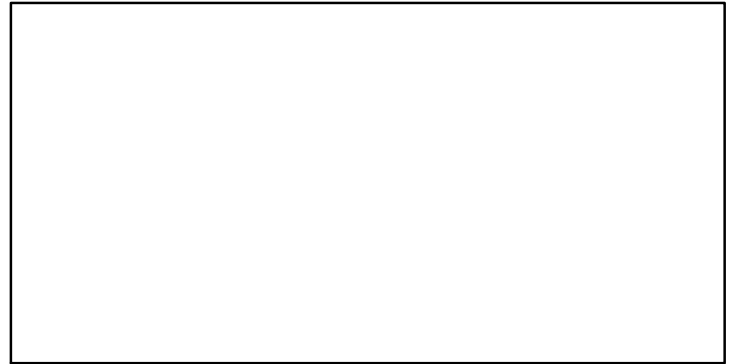
TAC\*, Cpair\*, Cadv\*



EFFORT\*



CdivMSY\*



## Peruvian anchoveta North-Central Peru [PANCHPERUNC]

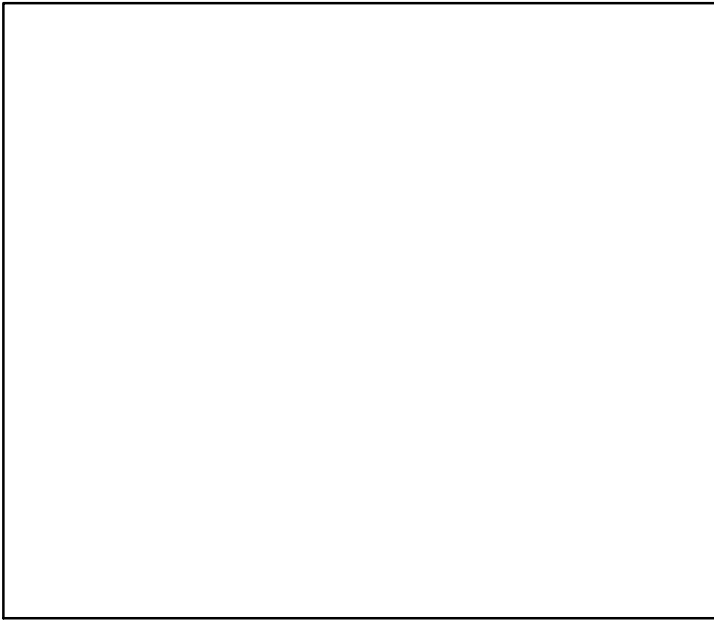
Metadata	
<b>Scientific Name</b>	Engraulis ringens
<b>Current Assess ID</b>	IMARPE-PANCHPERUNC-1959-2016-HILBORN
<b>Area</b>	North-Central Peruvian coast
<b>Management Authority</b>	Instituto del Mar del Peru, Peru national management
<b>Assessor</b>	Instituto del Mar del Peru
<b>Asmts in RAM</b>	2008, 2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-pr-MT	2016	6,660,000
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	TBmgt-MT	2016	6,660,000
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERMgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

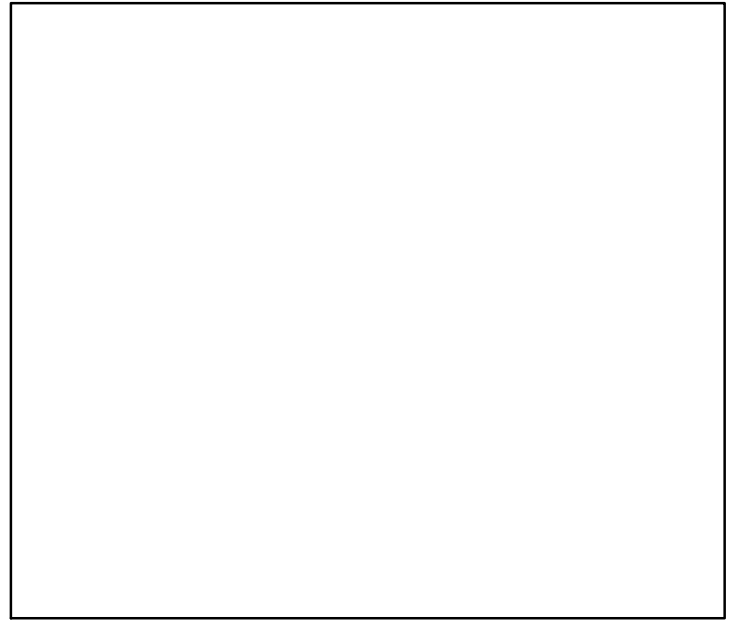
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	10,200,000	Both	-
<b>SSB</b>	SSB-MT	2008	6,590,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$1.81 \times 10^8$	Both	-
<b>F</b>	F-1/yr	2008	0.588	-	-
<b>ER</b>	ER-calc-ratio	2016	0.326	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2016	2,540,000		
<b>TB/TBmsy</b>	TB-MT/TBmsy-pr-MT	2016	1.53		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	TB-MT/TBmgt-MT	2016	1.53		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERMgt</b>	-	-	-		

Peruvian anchoveta North-Central Peru [PANCHPERUNC]

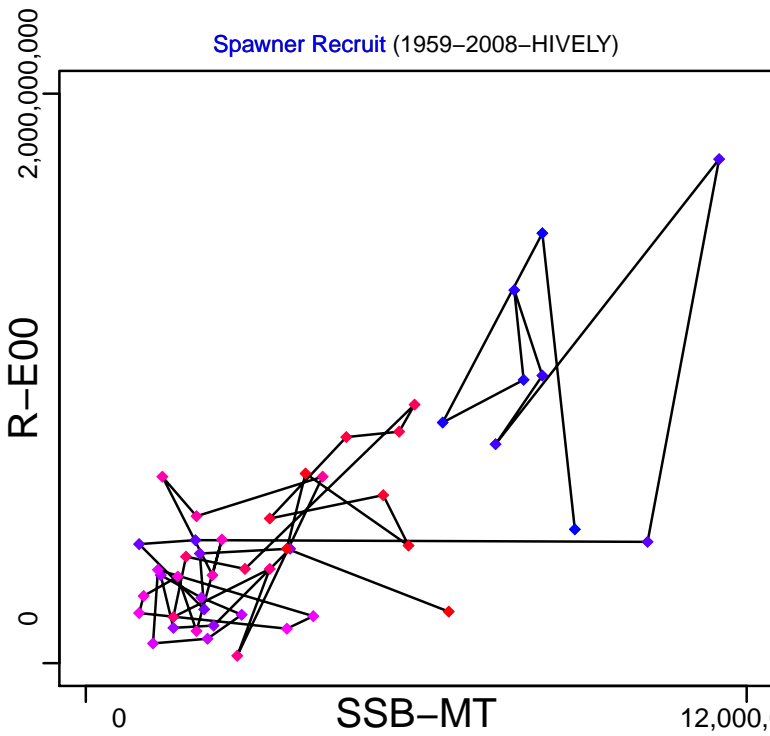
Kobe MSY\*



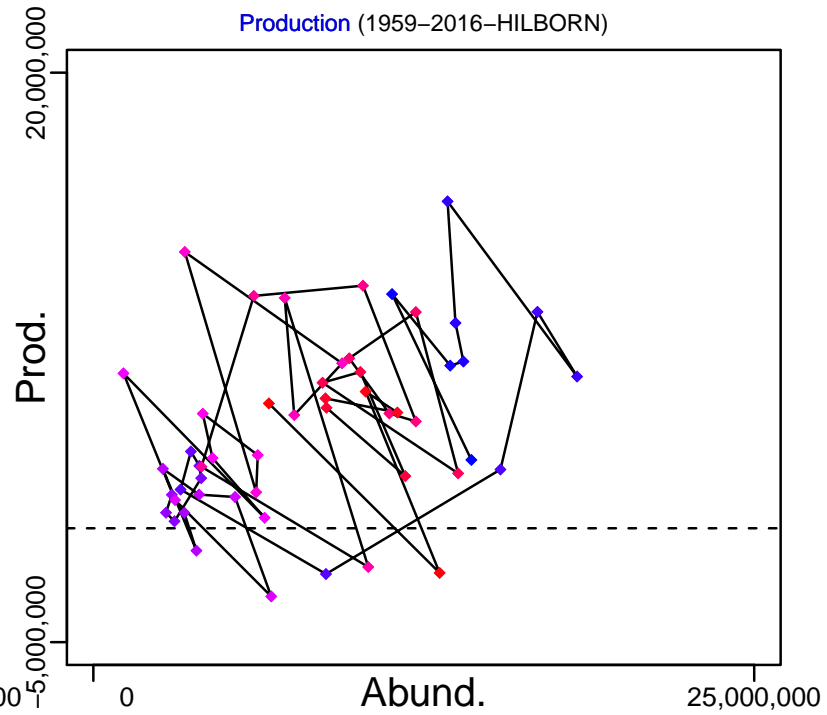
Kobe MGT\*



Spawner Recruit (1959–2008–HIVELY)



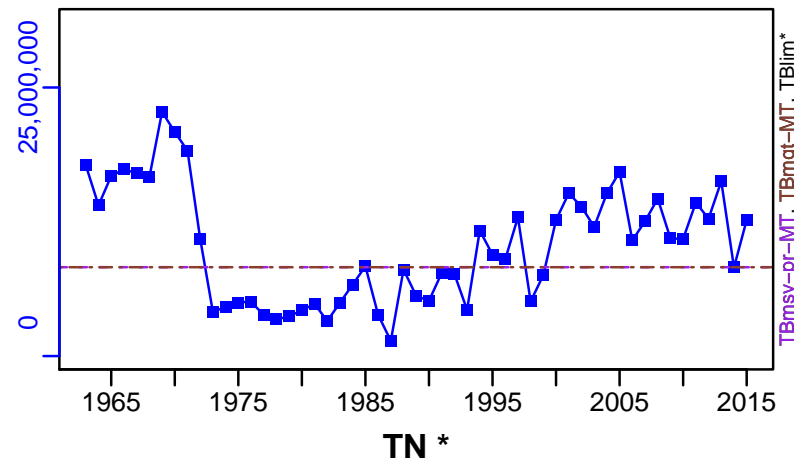
Production (1959–2016–HILBORN)



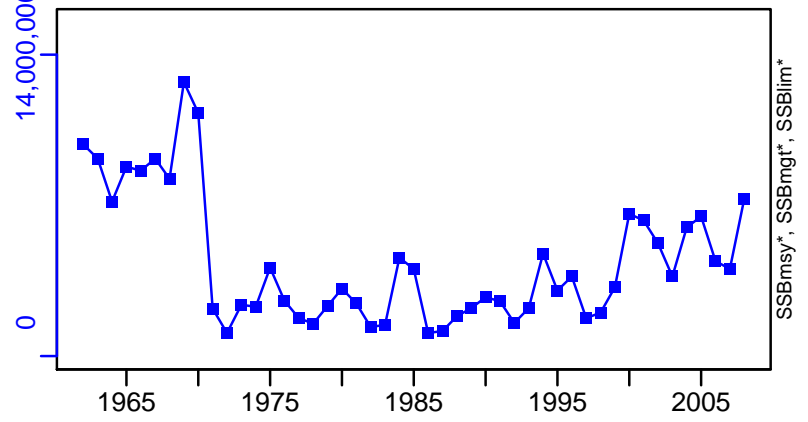
◆ Start Year ◆ End Year \* No Data

# Peruvian anchoveta North-Central Peru [PANCHPERUNC]

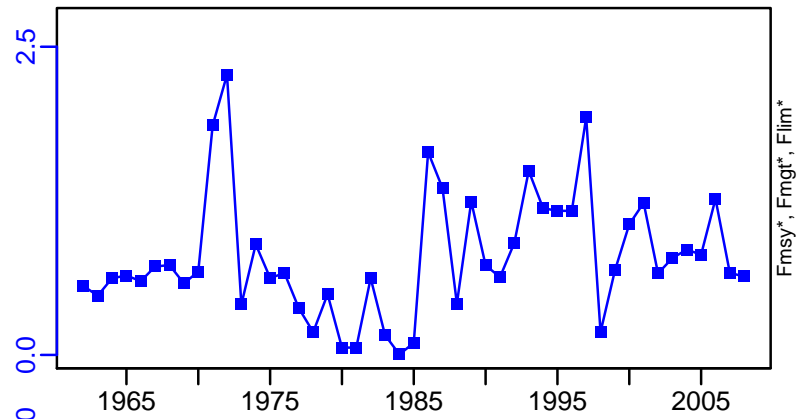
TB-MT (1959-2016-HILBORN)



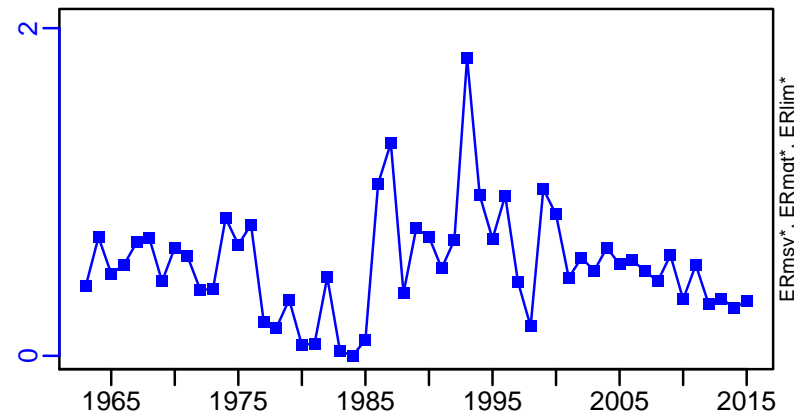
SSB-MT (1959-2008-HIVELY)



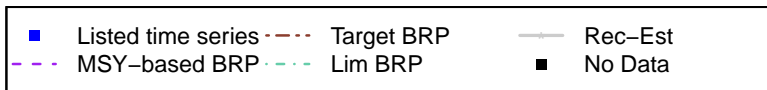
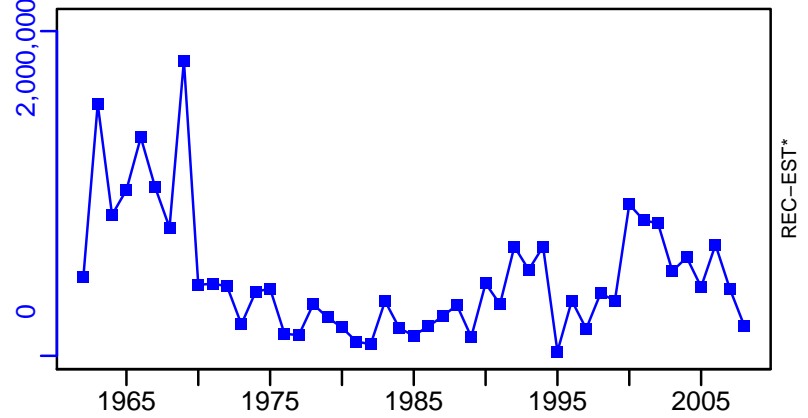
F-1/yr (1959-2008-HIVELY)



ER-calc-ratio (1959-2016-HILBORN)



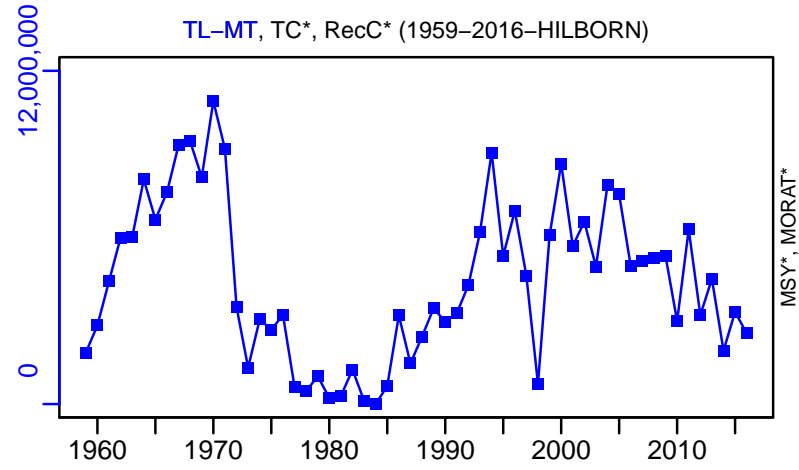
R-E00 (1959-2016-HILBORN)



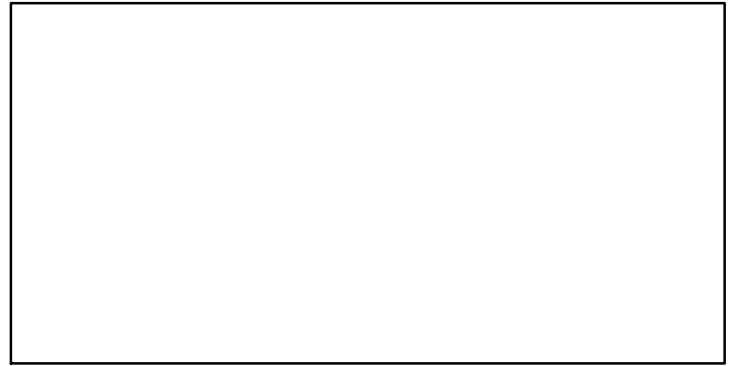


# Peruvian anchoveta North-Central Peru [PANCHPERUNC]

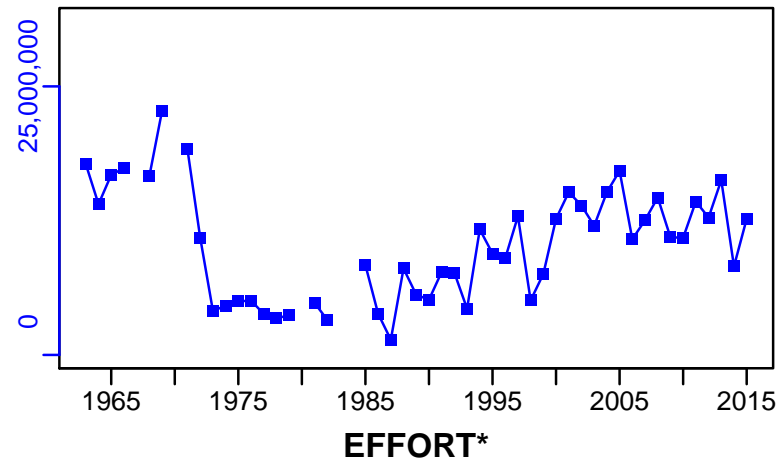
TL-MT, TC\*, RecC\* (1959-2016-HILBORN)



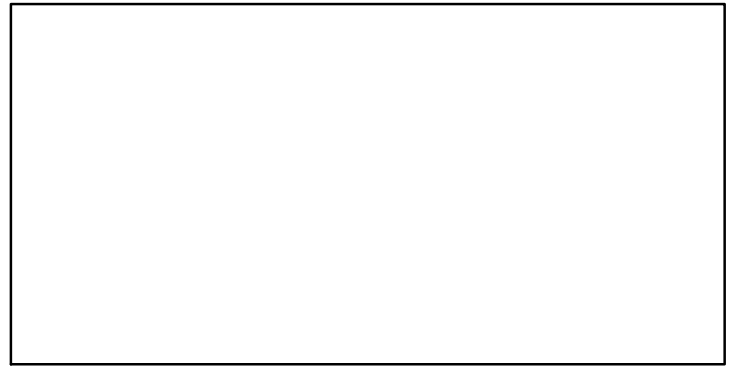
TAC\*, Cpair\*, Cadv\*



survB-MT (1959-2016-HILBORN)



CPUE\*



CdivMSY\*



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

## Patagonian grenadier Chile [PATGRENADIERCH]

Metadata	
<b>Scientific Name</b>	Macruronus magellanicus
<b>Current Assess ID</b>	IFOPCH-PATGRENADIERCH-1977-2015-PAYA
<b>Area</b>	Central-Southern Chile
<b>Management Authority</b>	Subsecretaria de Pesca
<b>Assessor</b>	Instituto de Fomento Pesquero - Chilean Fisheries Development Institute
<b>Asmts in RAM</b>	2012, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-pr-MT	2015	466,000
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2015	0.35
<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	409,000	Both	-
<b>SSB</b>	SSB-MT	2015	196,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$6.52 \times 10^8$	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2015	0.14	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2015	39,100		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-pr-MT	2015	0.421		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Patagonian grenadier Chile [PATGRENADIERCH]

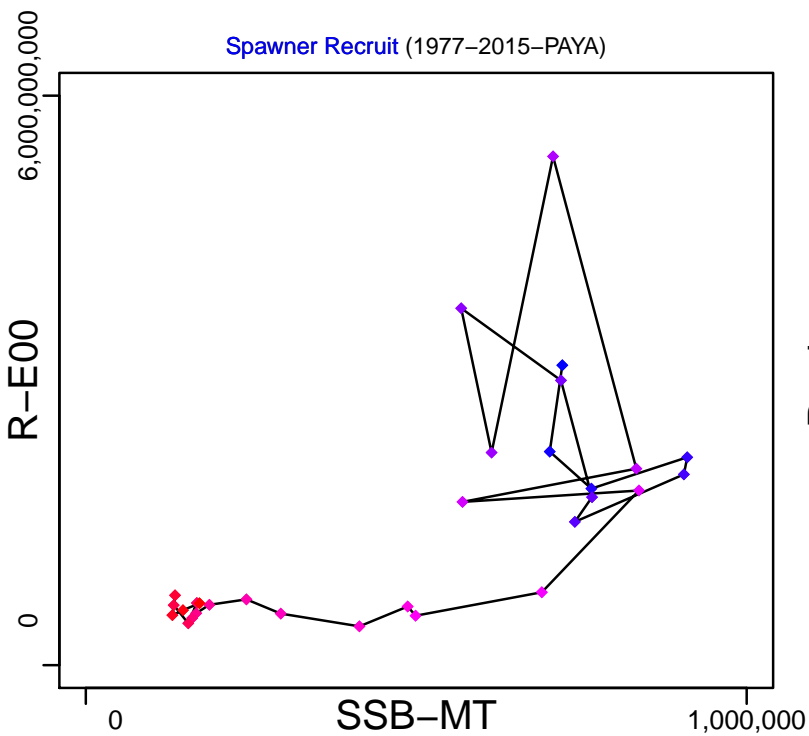
Kobe MSY\*



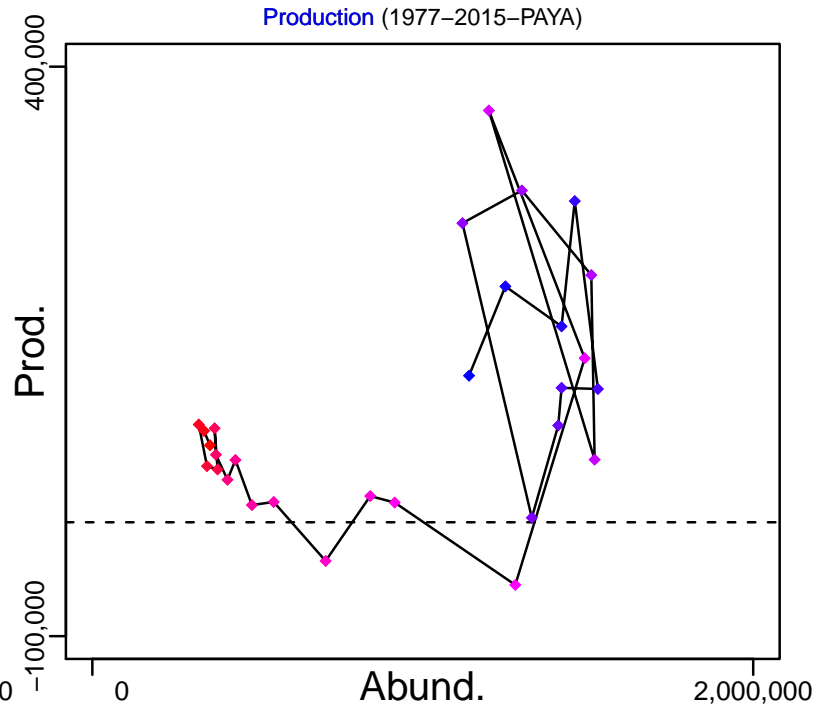
Kobe MGT\*



Spawner Recruit (1977–2015–PAYA)



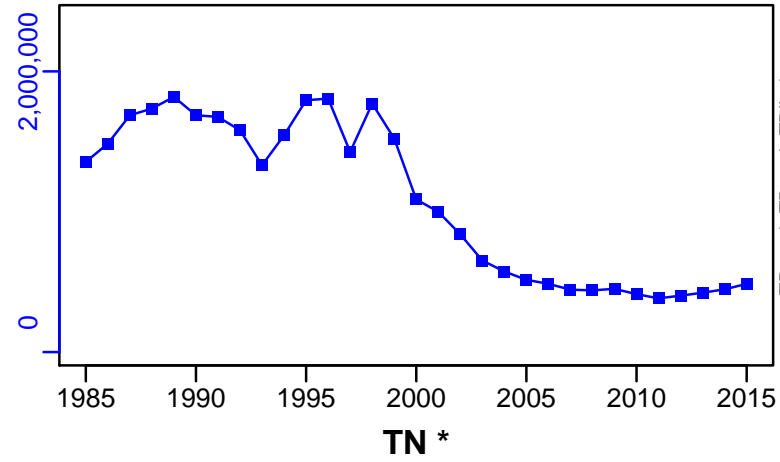
Production (1977–2015–PAYA)



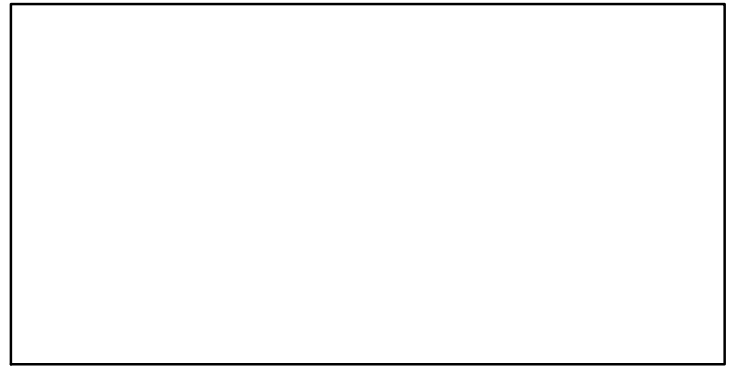
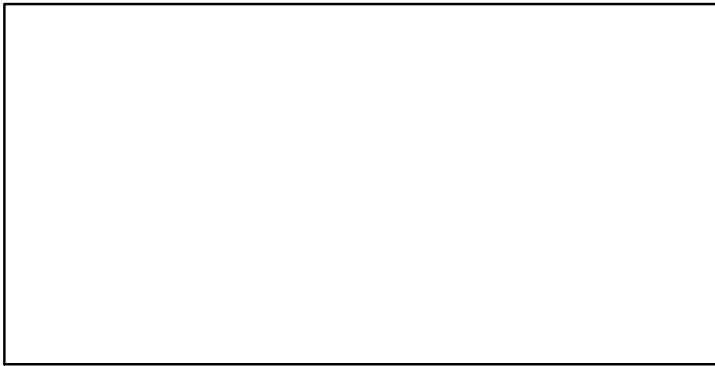
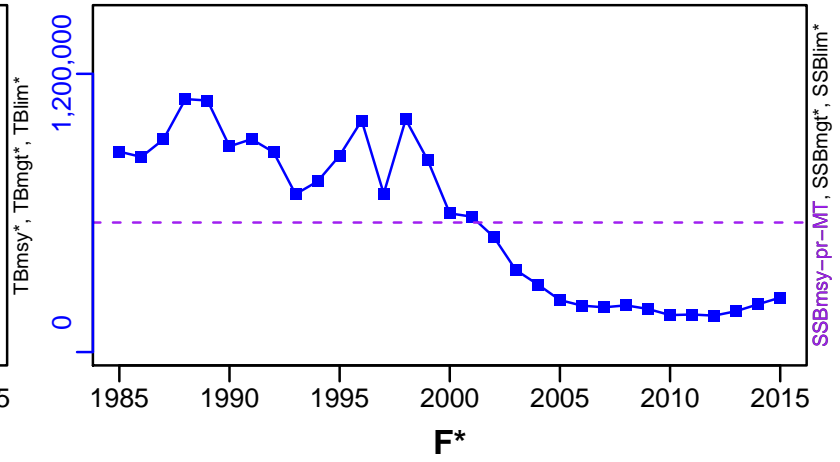
◆ Start Year ◆ End Year \* No Data

# Patagonian grenadier Chile [PATGRENADIERCH]

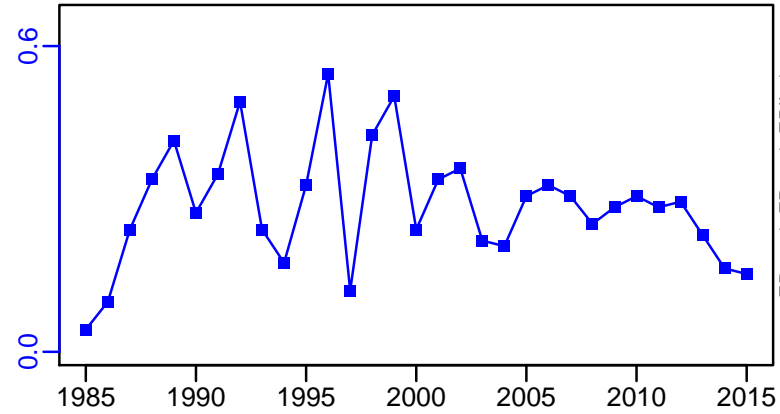
TB-MT (1977-2015-PAYA)



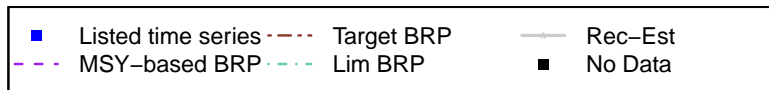
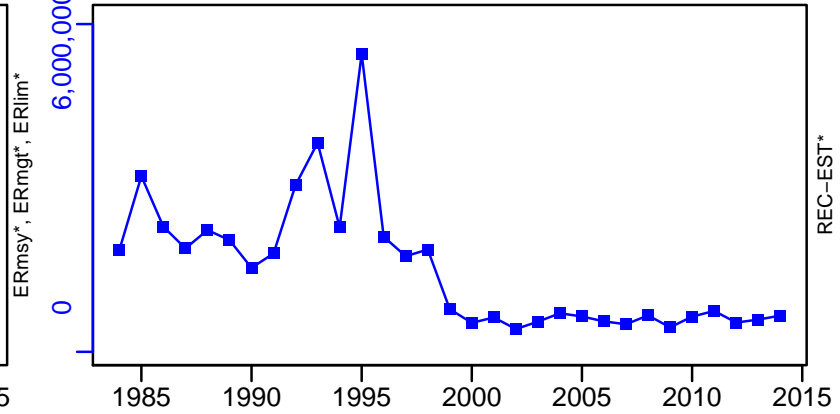
SSB-MT (1977-2015-PAYA)



ER-ratio (1977-2015-PAYA)

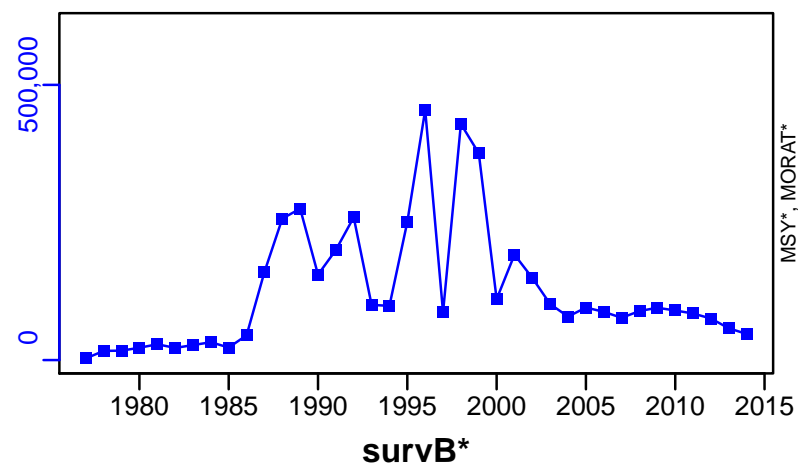


R-E00 (1977-2015-PAYA)

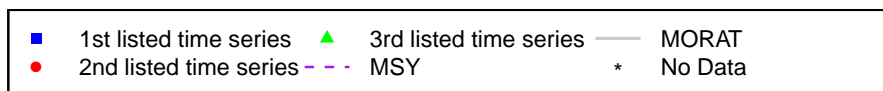
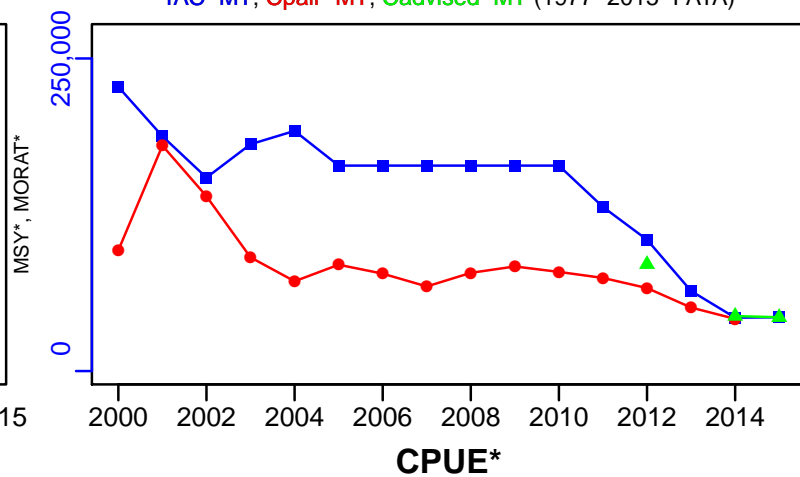


# Patagonian grenadier Chile [PATGRENIADIERCH]

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



TAC-MT, Cpair-MT, Cadvised-MT (1977-2015-PAYA)



## Patagonian grenadier Southern Argentina [PATGRENADIERSARG]

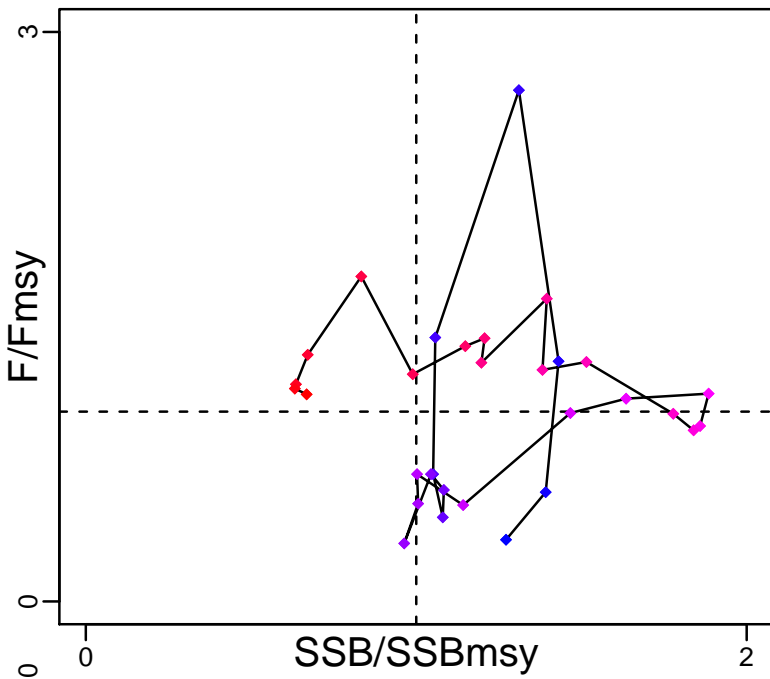
Metadata	
<b>Scientific Name</b>	Macruronus magellanicus
<b>Current Assess ID</b>	INIDEP-PATGRENADIERSARG-1983-2015-PARMA
<b>Area</b>	Southern Argentina
<b>Management Authority</b>	Consejo Federal Pesquero, Argentina national management
<b>Assessor</b>	Instituto Nacional de Investigacion y Desarrollo Pesquero
<b>Asmts in RAM</b>	2006, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2006	642,031
<b>SSBmsy</b>	SSBmsy-pr-MT	2015	308,244
<b>Fmsy</b>	Fmsy-pr-1/yr	2015	0.264
<b>ERmsy</b>	ERmsy-ratio	2006	0.206
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2015	492,240
<b>MSY</b>	MSY-MT	2006	132,131
<b>M</b>	M-1/yr	2015	0.35
<b>TBlim</b>	TBlim-MT	2006	415,041
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

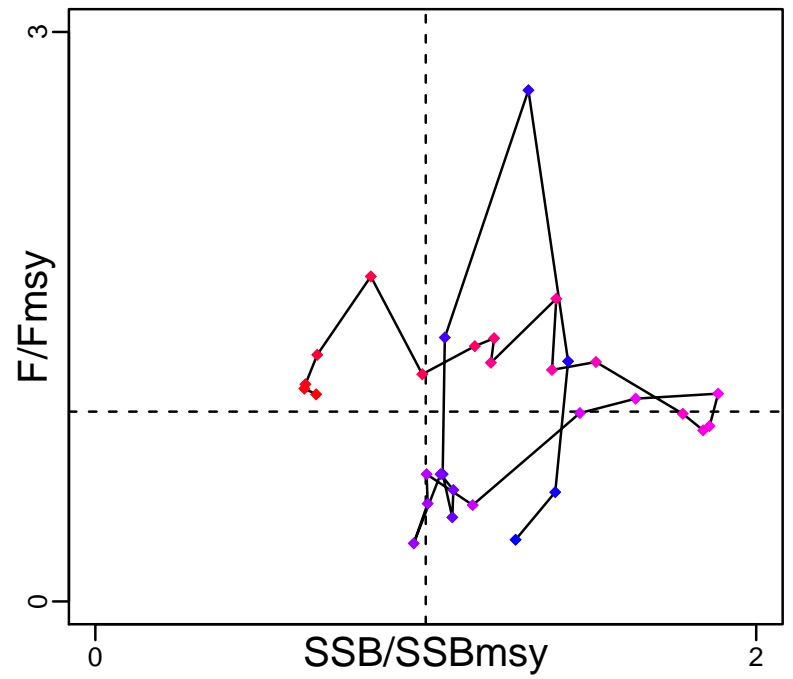
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	$4 \times 10^5$	-	1+
<b>SSB</b>	SSB-MT	2015	206,000	-	3+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	338,000	-	1
<b>F</b>	F-1/yr	2015	0.288	-	4 to 11+
<b>ER</b>	ER-calc-ratio	2015	0.176	-	-
<b>TC</b>	TC-MT	2015	70,500		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	TB-MT/TBmsy-MT	2006	2.149		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-pr-MT	2015	0.668		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2015	1.091		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2006	0.534		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Patagonian grenadier Southern Argentina [PATGRENADIERSARG]

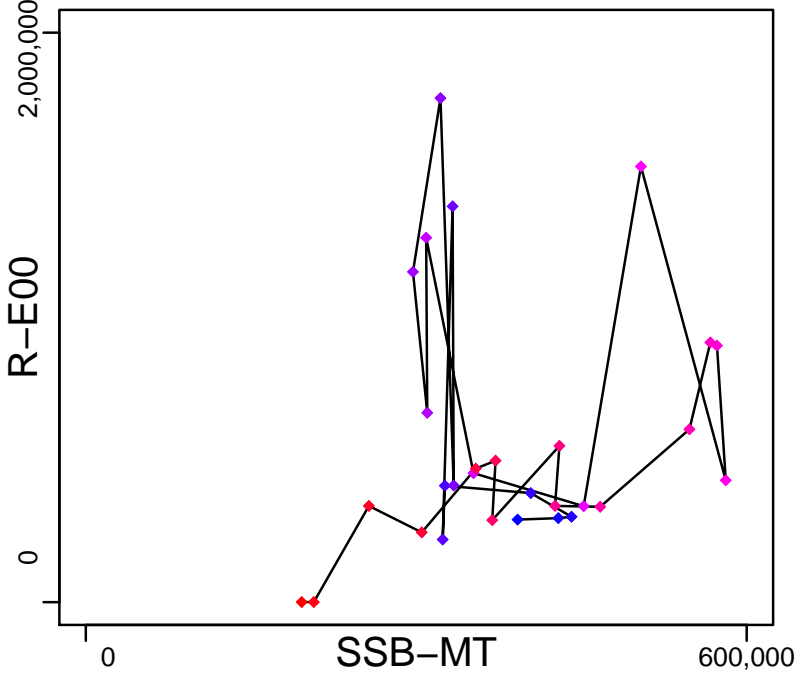
Kobe MSYpref (1983–2015–PARMA)



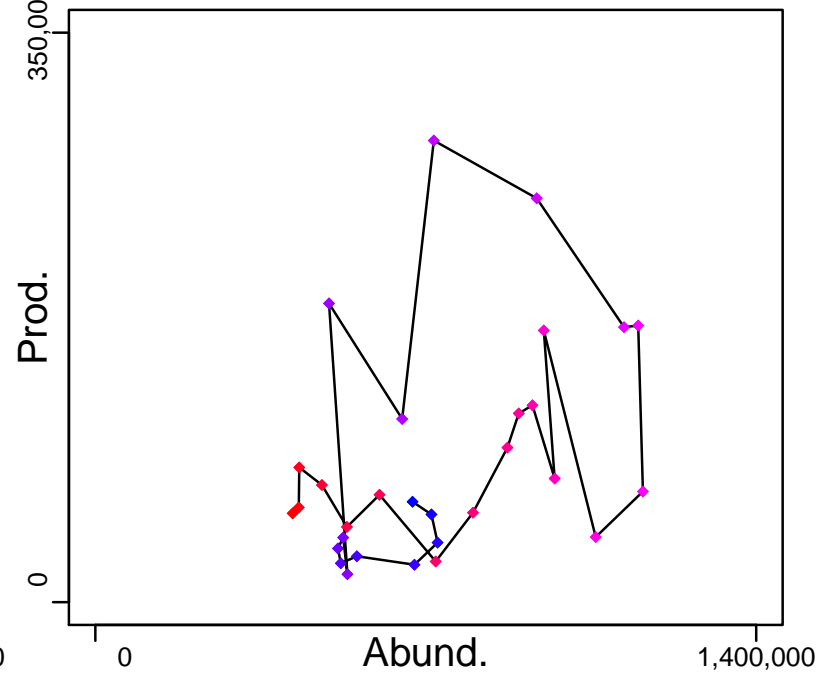
Kobe MGTpref (1983–2015–PARMA)



Spawner Recruit (1983–2015–PARMA)



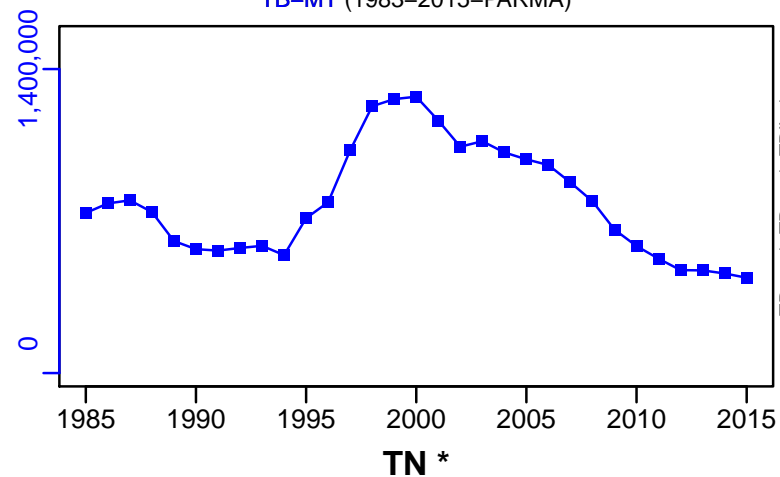
Production (1983–2015–PARMA)



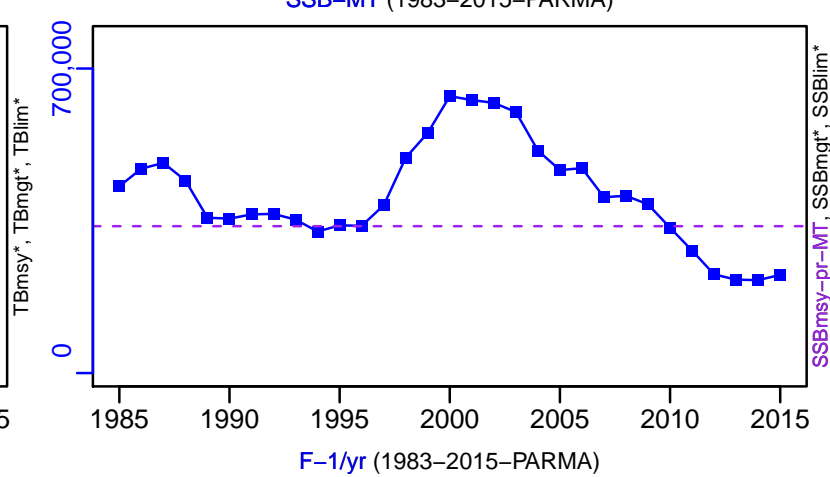
◆ Start Year ◆ End Year \* No Data

# Patagonian grenadier Southern Argentina [PATGRENADIERSARG]

TB-MT (1983-2015-PARMA)



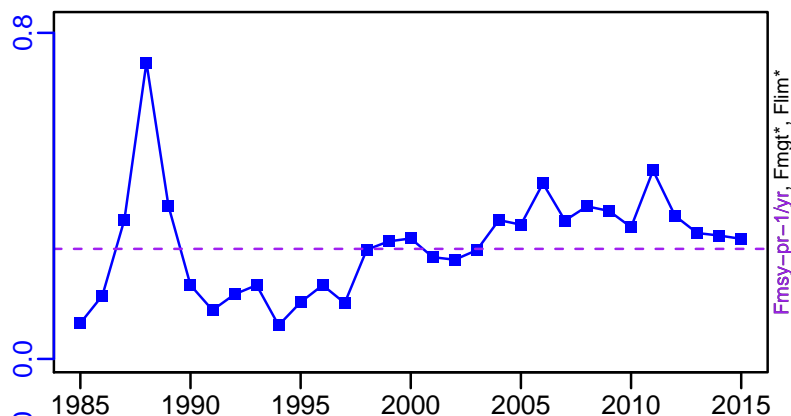
SSB-MT (1983-2015-PARMA)



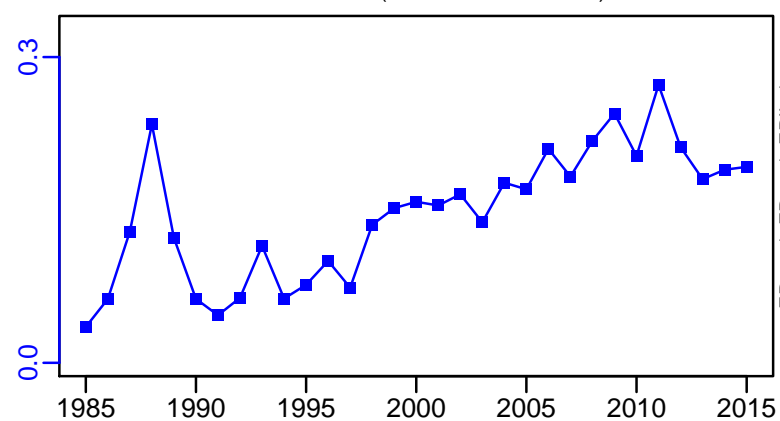
TN \*



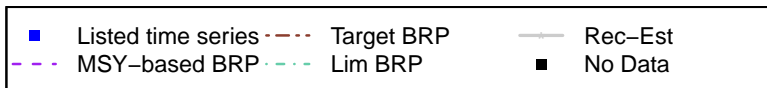
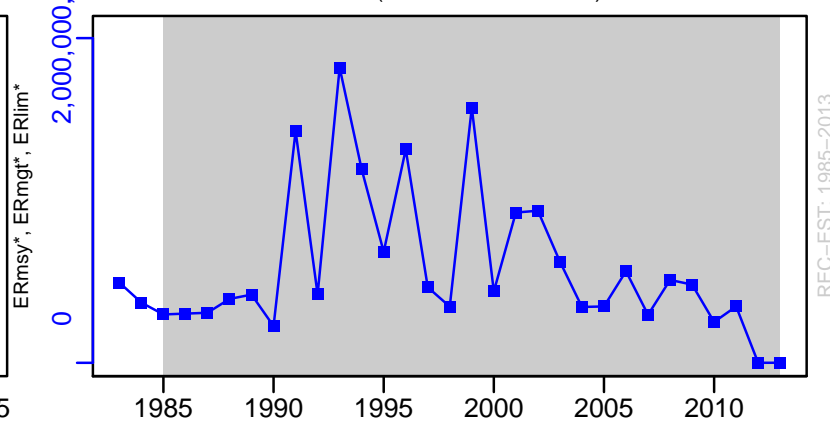
F-1/yr (1983-2015-PARMA)



ER-calc-ratio (1983-2015-PARMA)



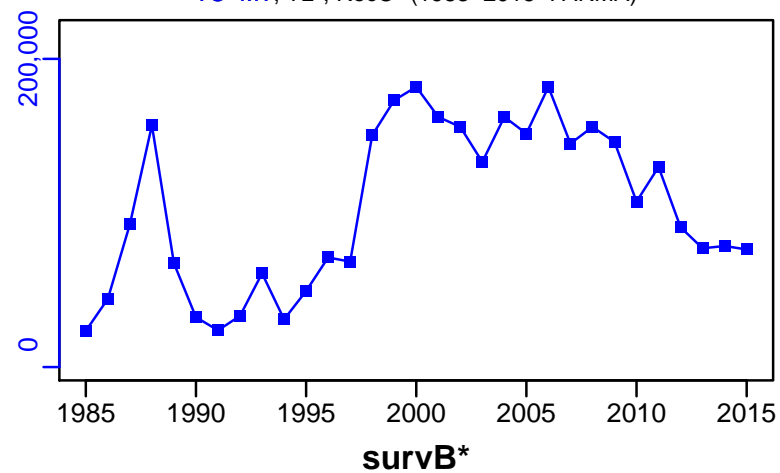
R-E00 (1983-2015-PARMA)



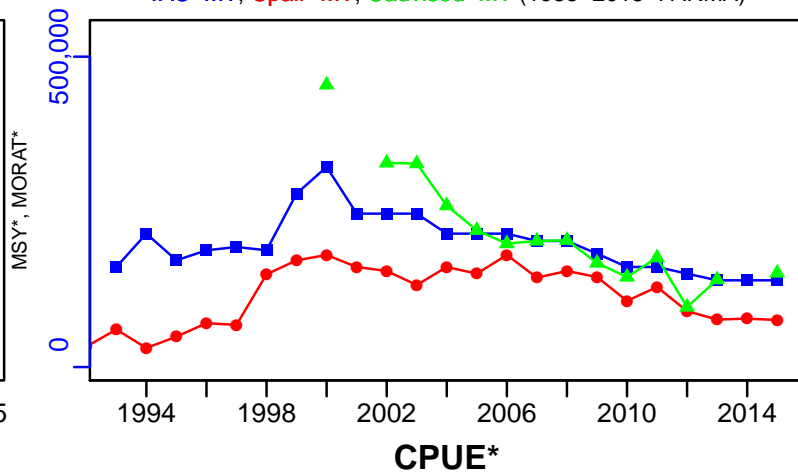


# Patagonian grenadier Southern Argentina [PATGRENADIERSARG]

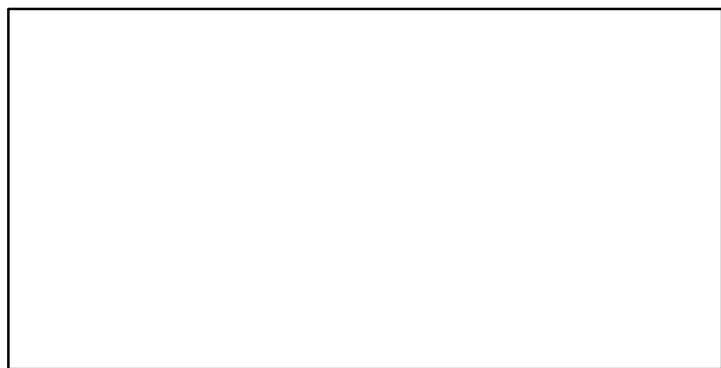
TC-MT, TL\*, RecC\* (1983–2015–PARMA)



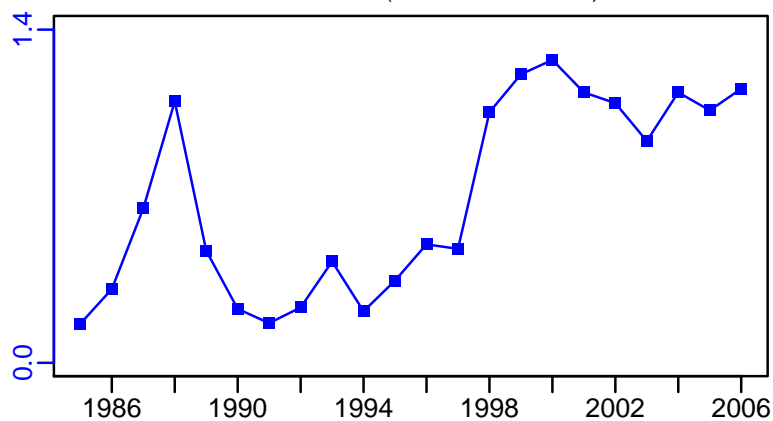
TAC-MT, Cpair-MT, Cadvised-MT (1983–2015–PARMA)



EFFORT\*



CdivMSY-ratio (1983–2006–Parma)



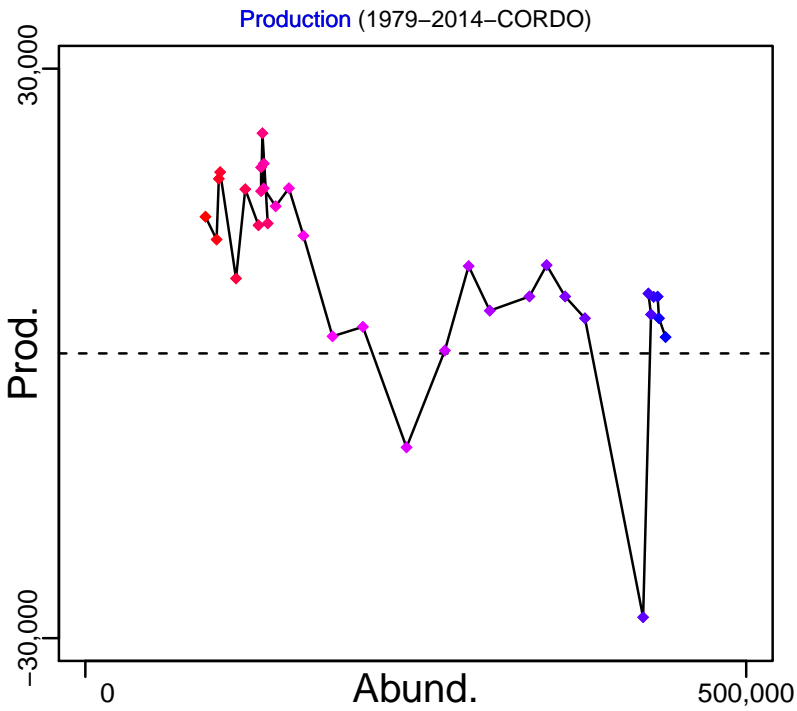
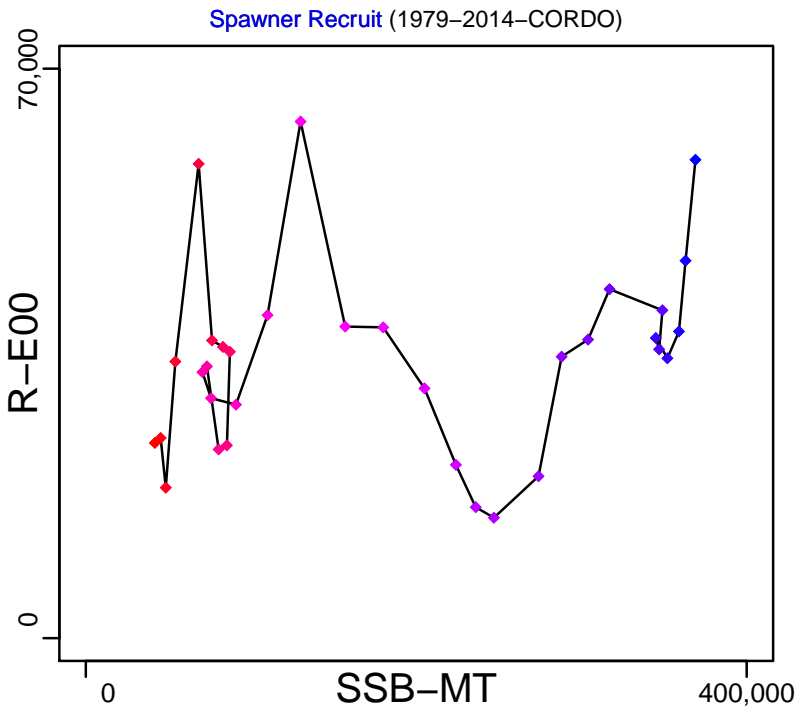
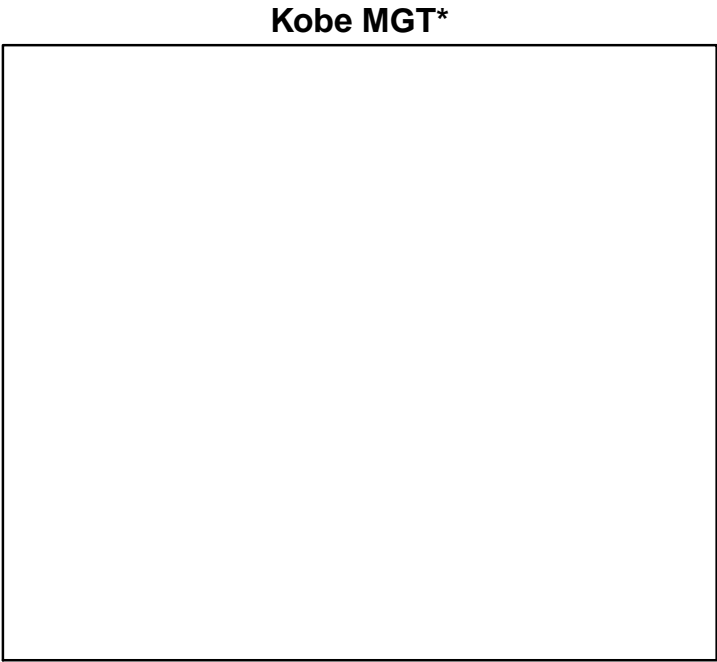
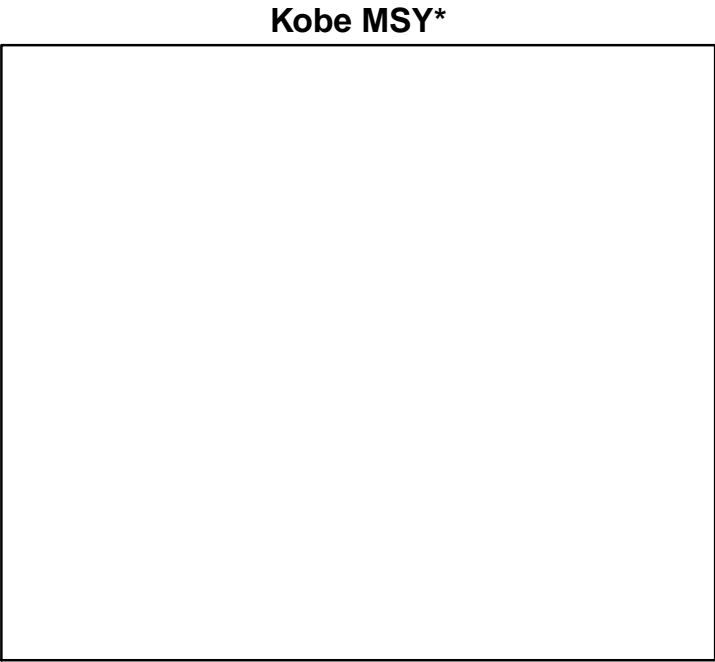
■ 1st listed time series    ▲ 3rd listed time series    — MORAT  
● 2nd listed time series    - - - MSY    \* No Data

## Pink Cusk-eel Southern Argentina [PCEELARGS]

Metadata	
<b>Scientific Name</b>	Genypterus blacodes
<b>Current Assess ID</b>	INIDEP-PCEELARGS-1979-2014-CORDO
<b>Area</b>	Southern Argentina
<b>Management Authority</b>	Consejo Federal Pesquero, Argentina national management
<b>Assessor</b>	Instituto Nacional de Investigacion y Desarrollo Pesquero
<b>Asmts in RAM</b>	2014

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2014	110,823
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2014	11,700
M	M-1/yr	2014	0.2
TBlim	-	-	-
SSBlim	SSBlim-MT	2014	73,882
Flim	-	-	-
ERlim	-	-	-

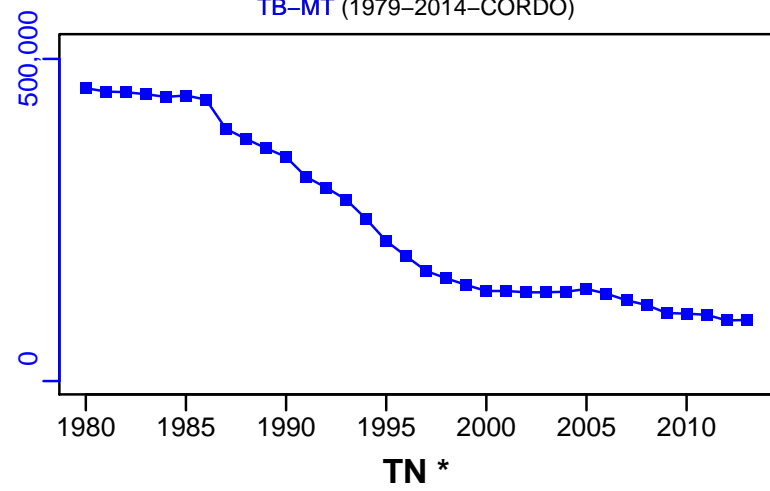
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2014	91,600	-	-
SSB	SSB-MT	2014	48,000	-	-
TN	-	-	-	-	-
R	R-E00	2014	24,000	Both	1
F	F-1/yr	2014	0.139	-	-
ER	ER-calc-ratio	2014	0.117	-	-
TC	TC-MT	2014	9480		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2014	0.433		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



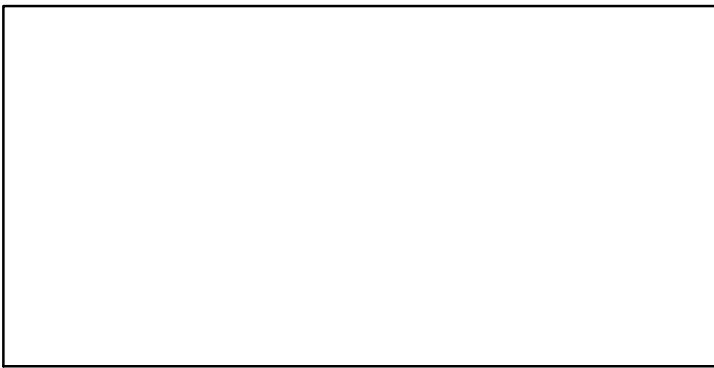
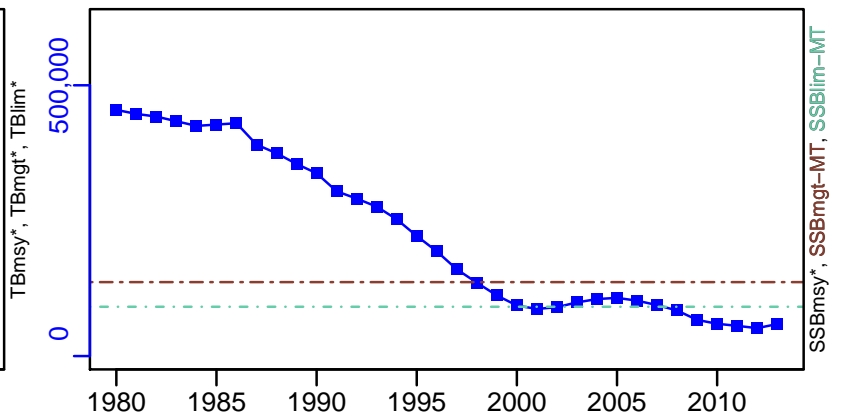
◆ Start Year ◆ End Year \* No Data

# Pink Cusk-eel Southern Argentina [PCEELARGS]

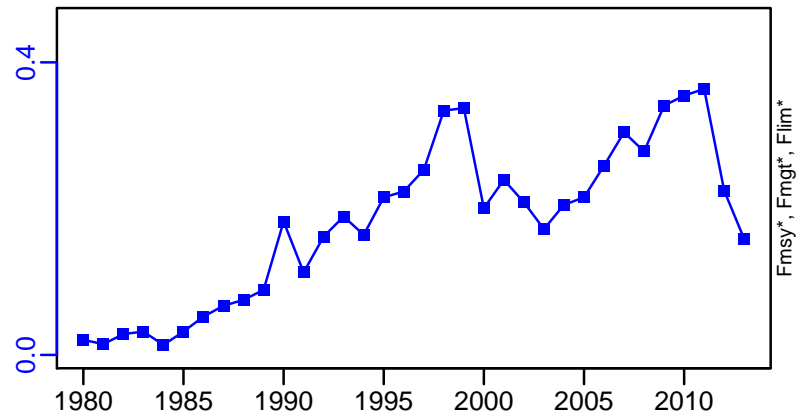
TB-MT (1979–2014–CORDO)



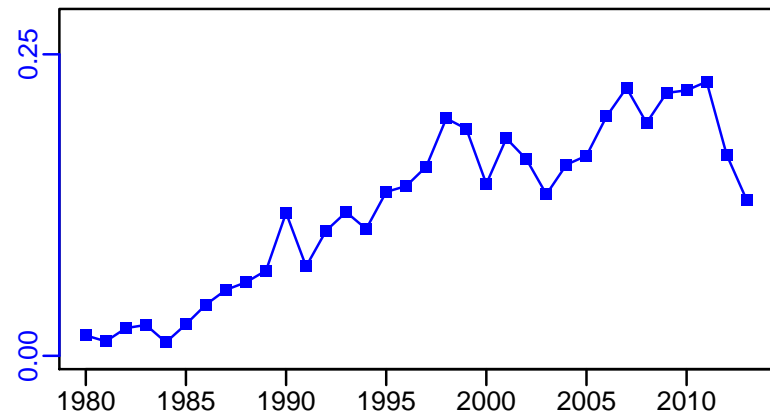
SSB-MT (1979–2014–CORDO)



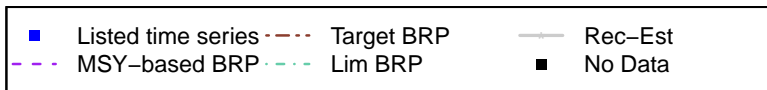
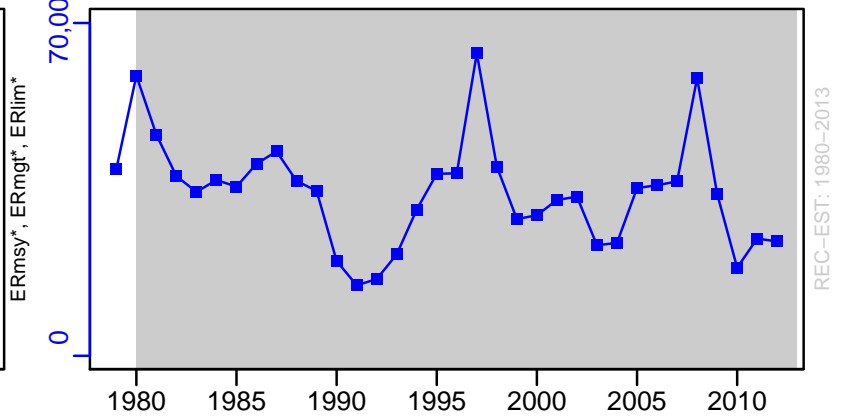
F-1/yr (1979–2014–CORDO)



ER-calc-ratio (1979–2014–CORDO)

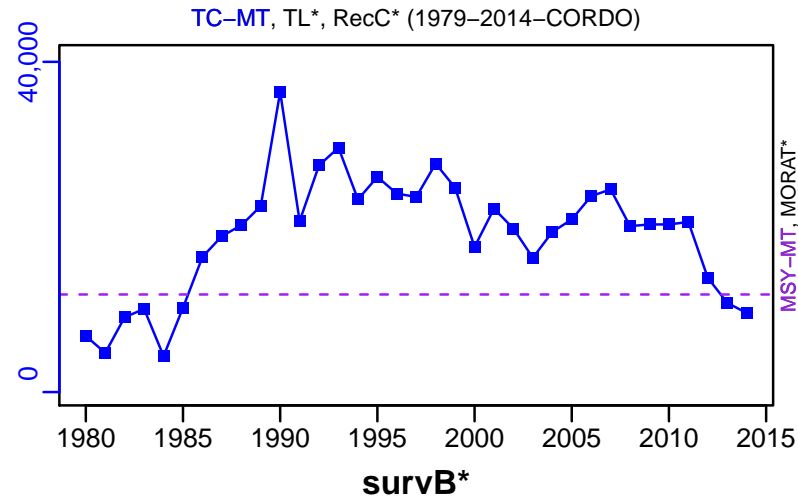


R-E00 (1979–2014–CORDO)

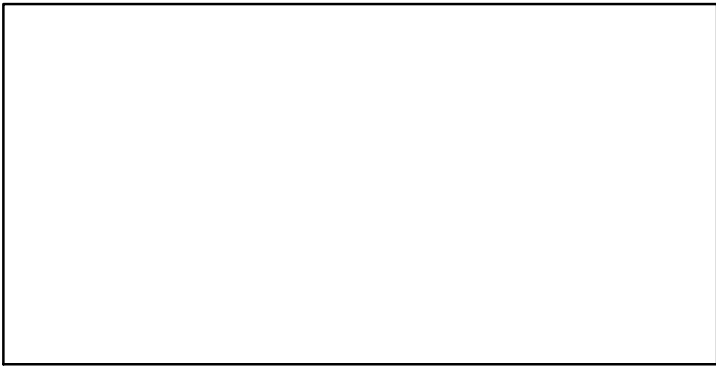
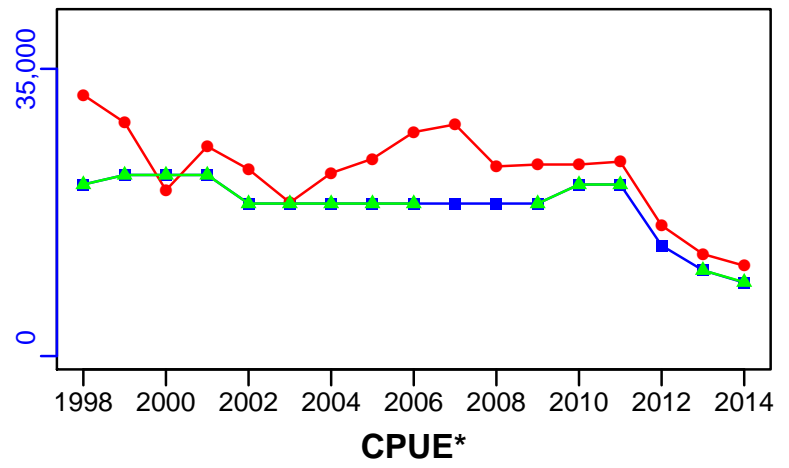


# Pink Cusk-eel Southern Argentina [PCEELARGS]

TC-MT, TL\*, RecC\* (1979-2014-CORDO)



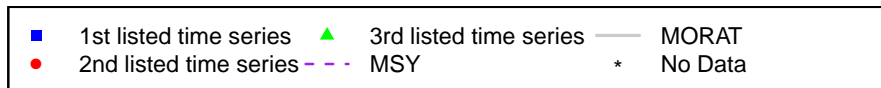
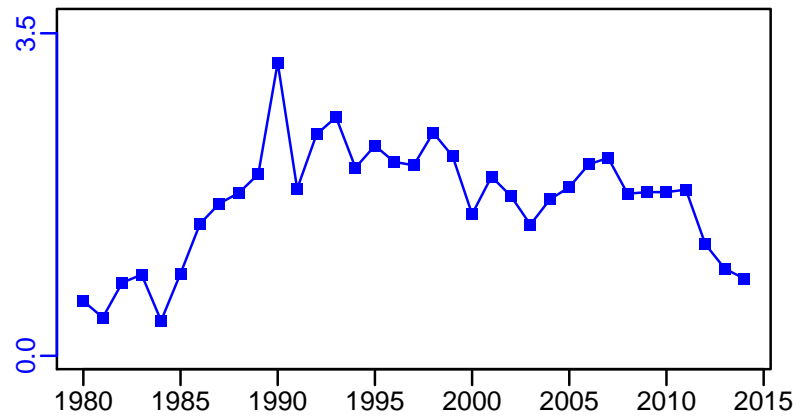
TAC-MT, Cpair-MT, Cadvised-MT (1979-2014-CORDO)



EFFORT\*



CdivMSY-ratio (1979-2014-CORDO)



## Pink cusk-eel Central-Southern Chile [PCEELCSCH]

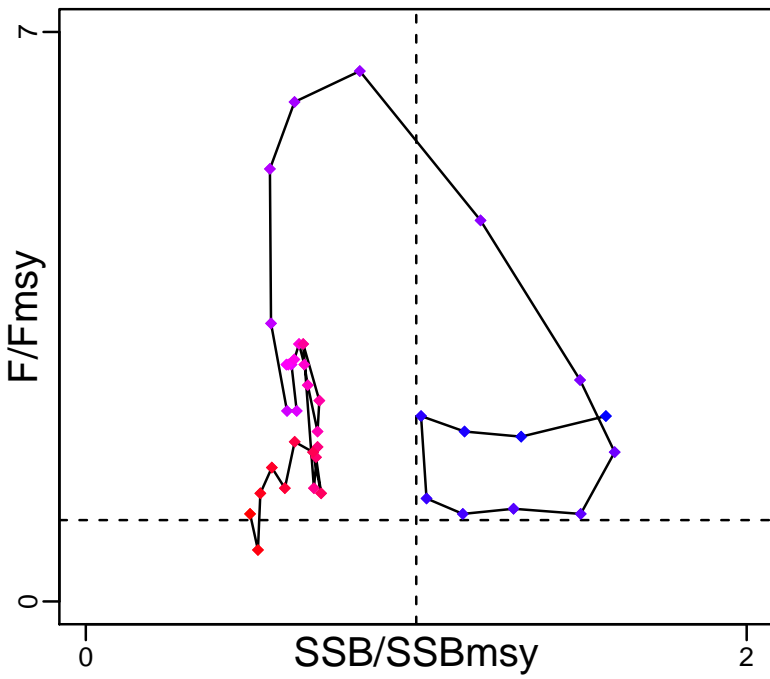
Metadata	
<b>Scientific Name</b>	Genypterus blacodes
<b>Current Assess ID</b>	IFOPCH-PCEELCSCH-1975-2015-PARMA
<b>Area</b>	Central-Southern Chile
<b>Management Authority</b>	Subsecretaria de Pesca
<b>Assessor</b>	Instituto de Fomento Pesquero - Chilean Fisheries Development Institute
<b>Asmts in RAM</b>	2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-pr-MT	2015	7492
<b>Fmsy</b>	Fmsy-pr-1/yr	2015	0.158
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2015	18,700
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2015	0.27
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2015	3746
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

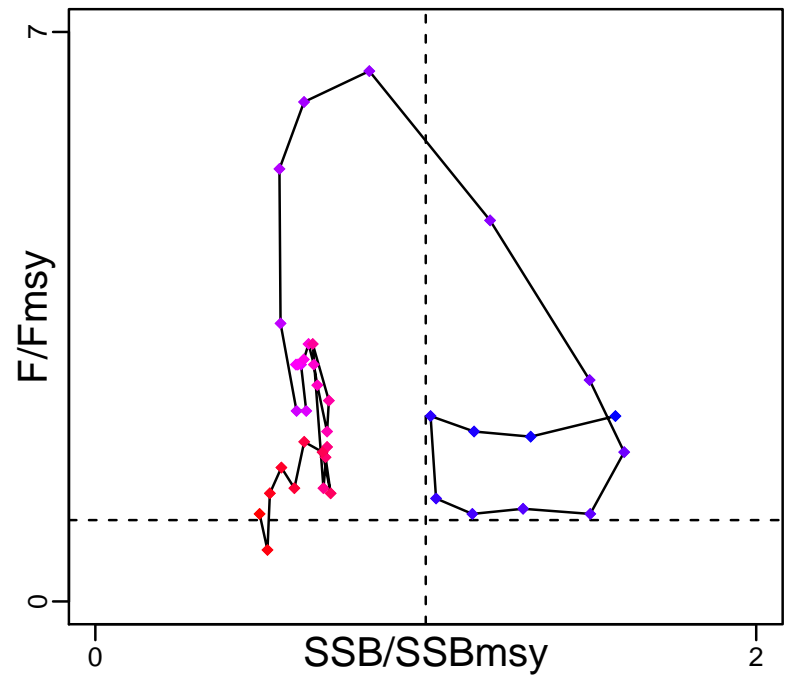
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	12,000	-	-
<b>SSB</b>	SSB-MT	2015	3720	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	4,150,000	-	3
<b>F</b>	F-1/yr	2015	0.17	-	-
<b>ER</b>	ER-calc-ratio	2015	0.07	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2015	833		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-pr-MT	2015	0.497		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2015	1.076		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Pink cusk-eel Central-Southern Chile [PCEELCSCH]

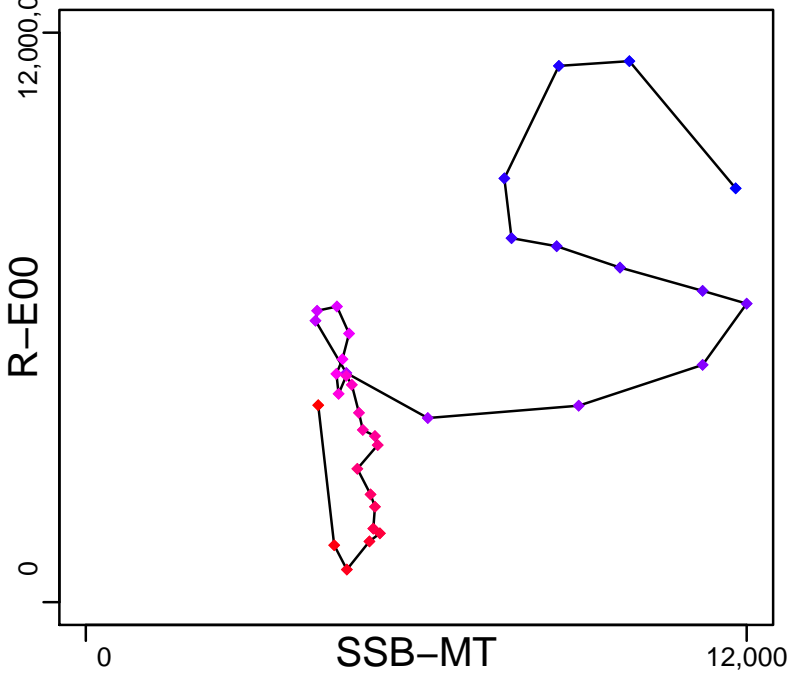
Kobe MSYpref (1975–2015–PARMA)



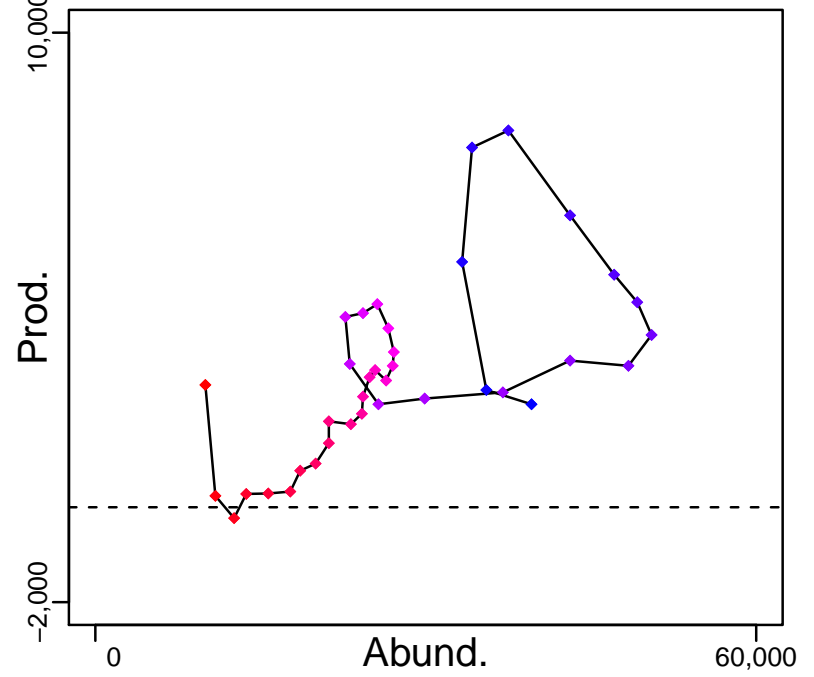
Kobe MGTpref (1975–2015–PARMA)



Spawner Recruit (1975–2015–PARMA)



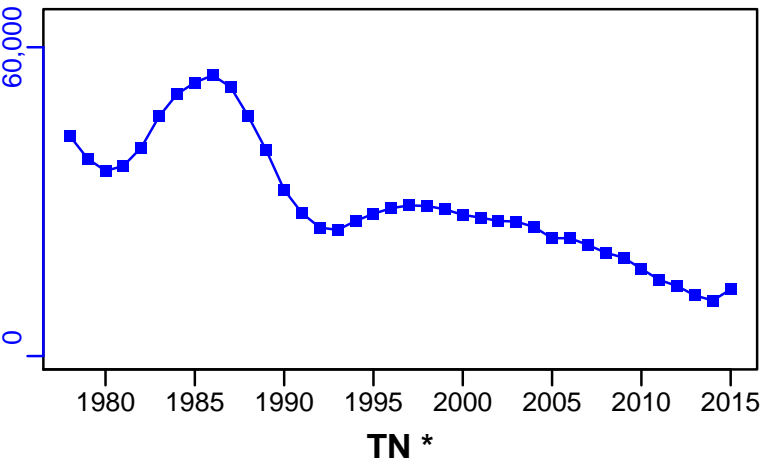
Production (1975–2015–PARMA)



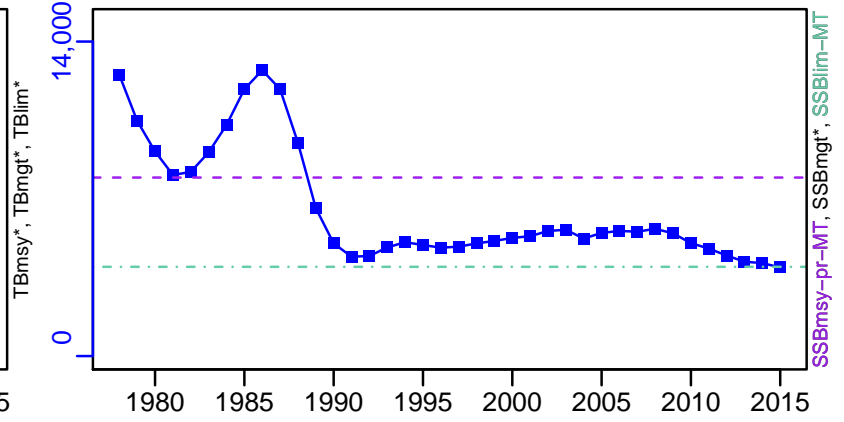
◆ Start Year ◆ End Year \* No Data

# Pink cusk-eel Central-Southern Chile [PCEELCSCH]

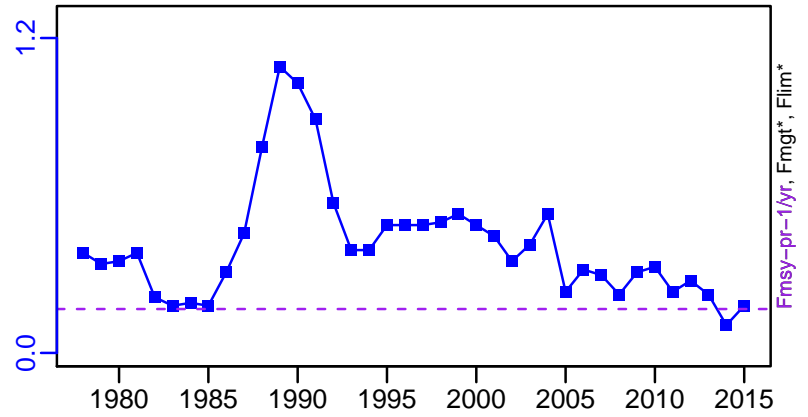
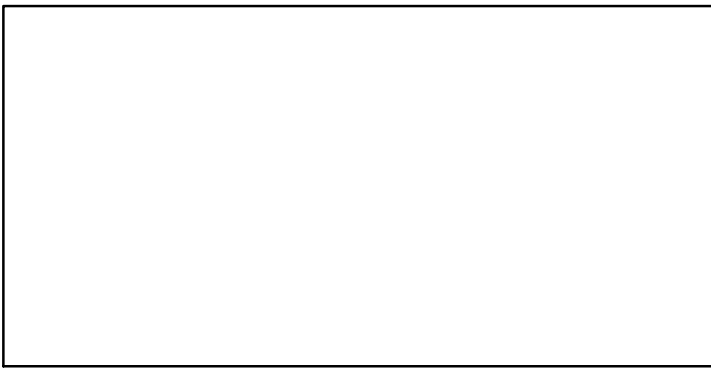
TB-MT (1975-2015-PARMA)



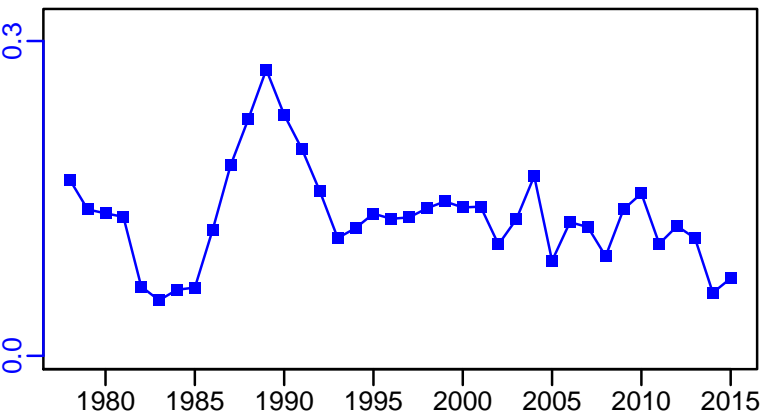
SSB-MT (1975-2015-PARMA)



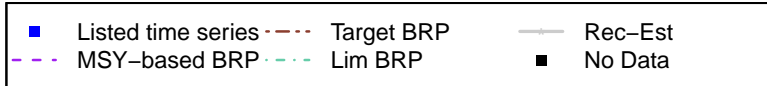
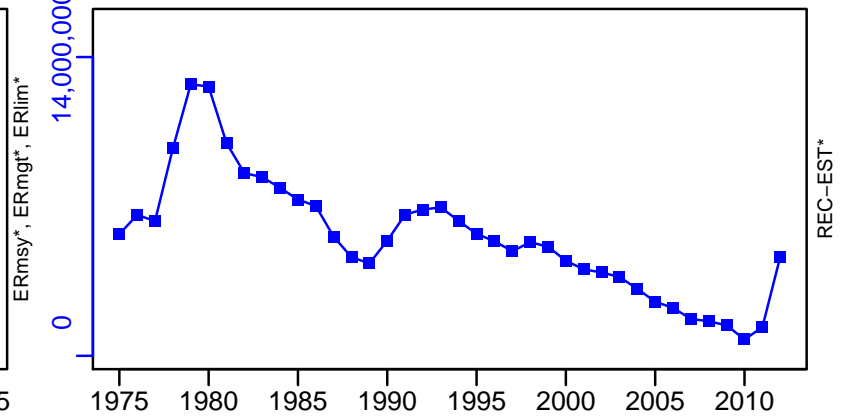
F-1/yr (1975-2015-PARMA)



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



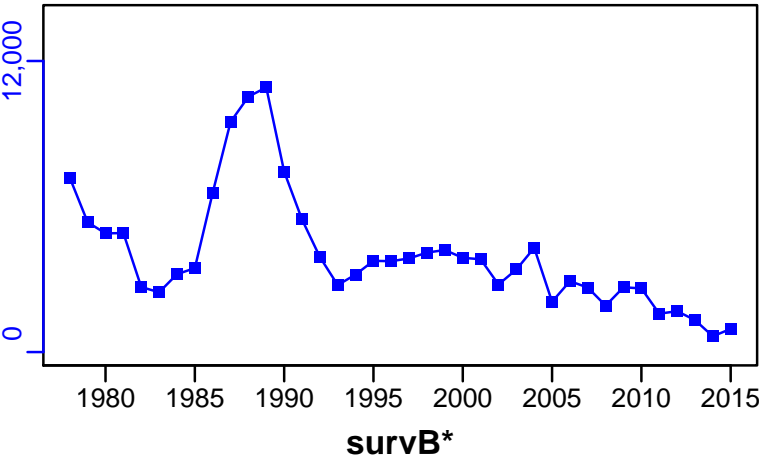
R-E00 (1975-2015-PARMA)



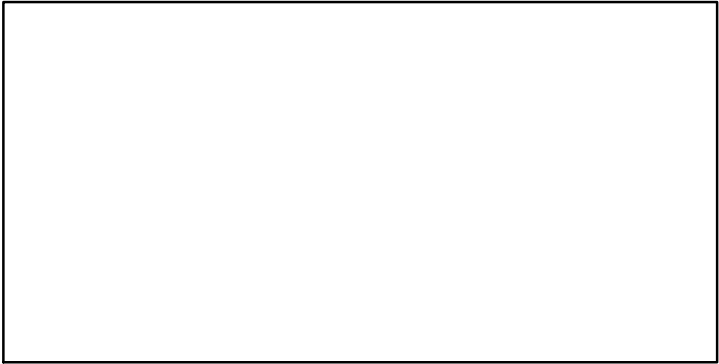
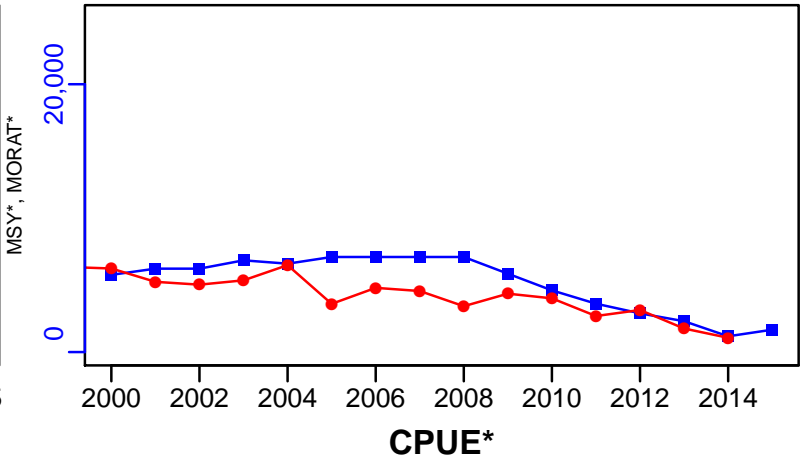


Pink cusk-eel Central-Southern Chile [PCEELCSCH]

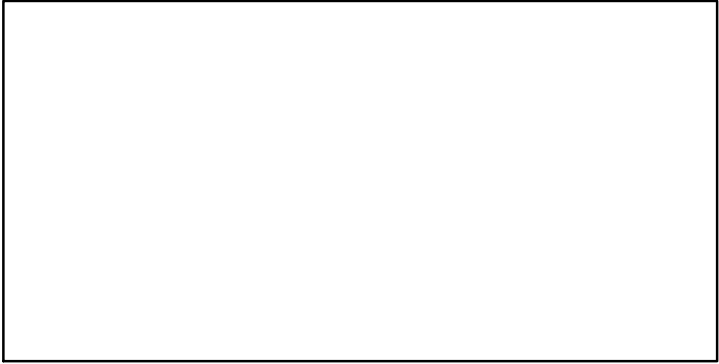
TL-MT, TC\*, RecC\* (1975-2015-PARMA)



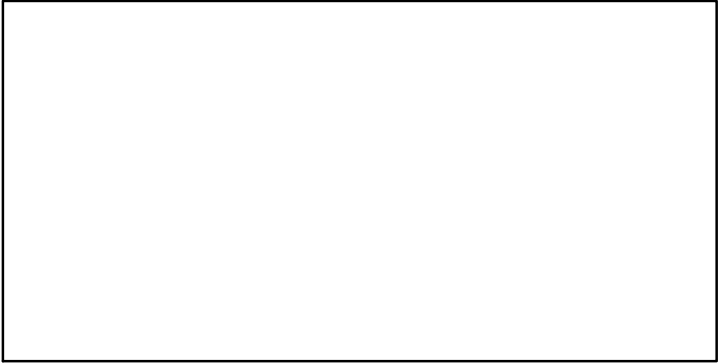
TAC-MT, Cpair-MT, Cadv\* (1975-2015-PARMA)



EFFORT\*



CdivMSY\*



## Pink cusk-eel Southern Chile [PCEELSCH]

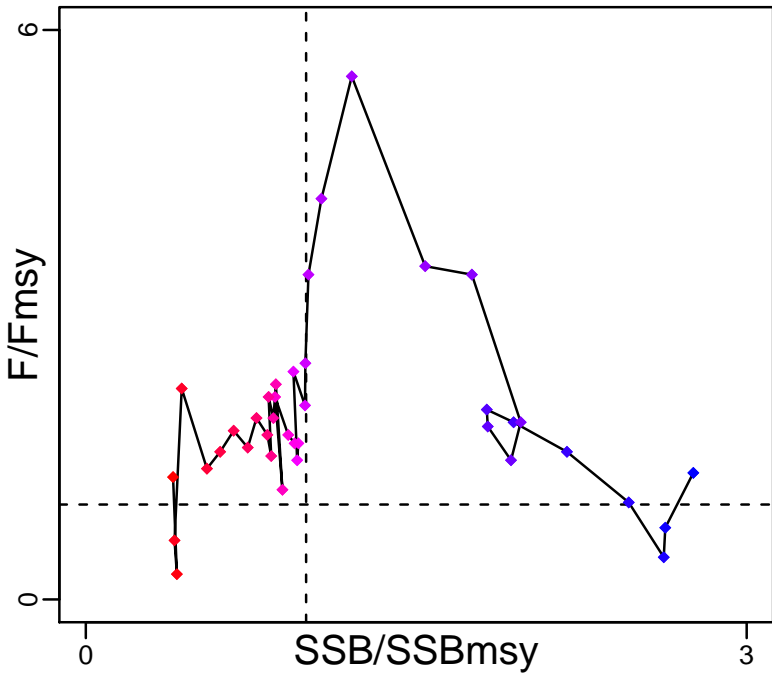
Metadata	
<b>Scientific Name</b>	Genypterus blacodes
<b>Current Assess ID</b>	IFOPCH-PCEELSCH-1975-2015-PARMA
<b>Area</b>	Southern Chile
<b>Management Authority</b>	Subsecretaria de Pesca
<b>Assessor</b>	Instituto de Fomento Pesquero - Chilean Fisheries Development Institute
<b>Asmts in RAM</b>	2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-pr-MT	2015	3650
<b>Fmsy</b>	Fmsy-pr-1/yr	2015	0.225
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2015	18,700
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2015	0.23
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2015	1825
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

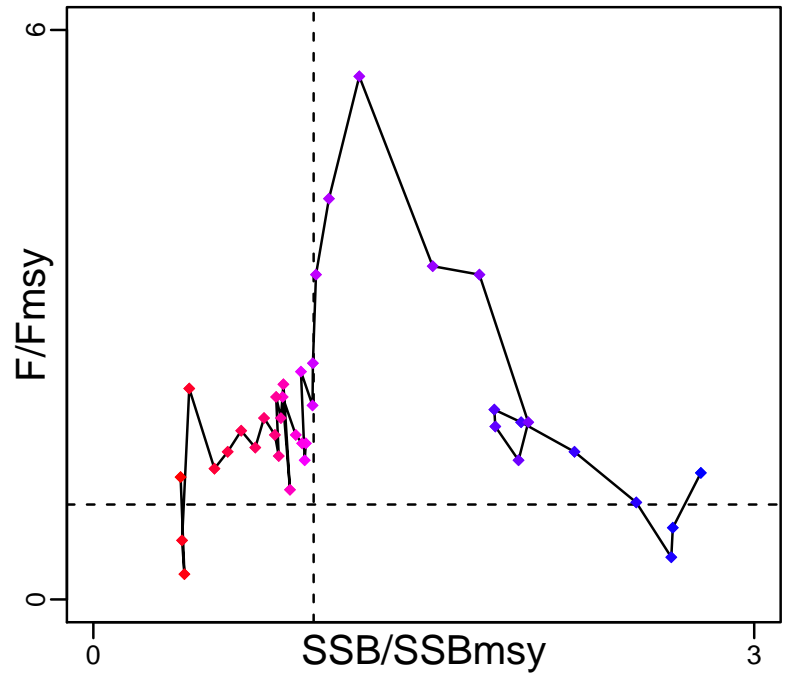
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	5410	-	-
<b>SSB</b>	SSB-MT	2015	1450	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	1,980,000	-	3
<b>F</b>	F-1/yr	2015	0.29	-	-
<b>ER</b>	ER-calc-ratio	2015	0.087	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2015	472		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-pr-MT	2015	0.396		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2015	1.289		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Pink cusk-eel Southern Chile [PCEELSCH]

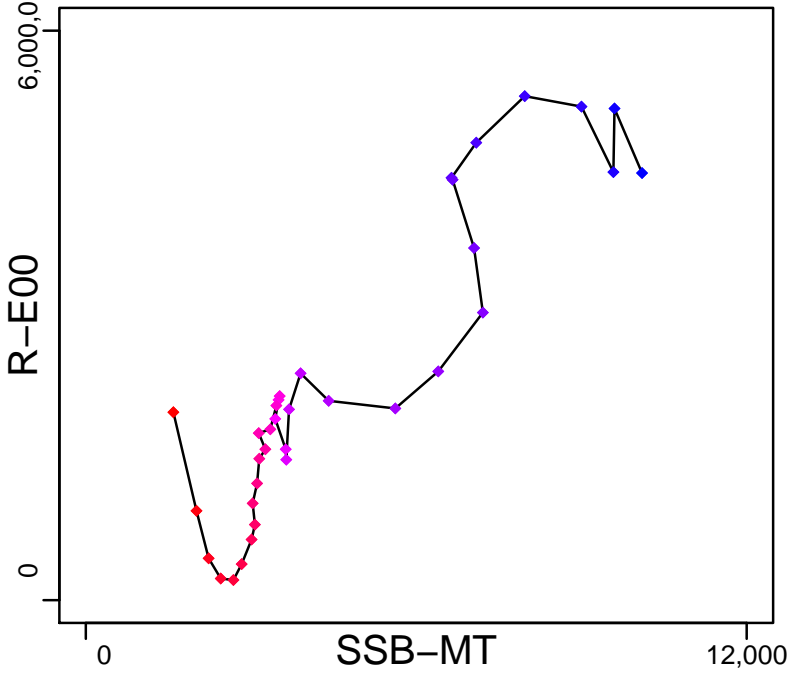
Kobe MSYpref (1975–2015–PARMA)



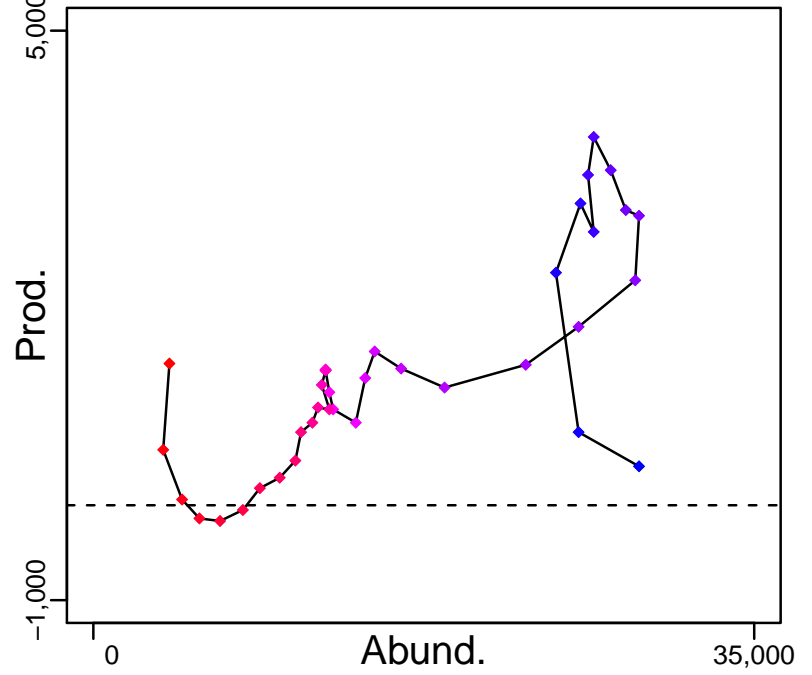
Kobe MGTpref (1975–2015–PARMA)



Spawner Recruit (1975–2015–PARMA)



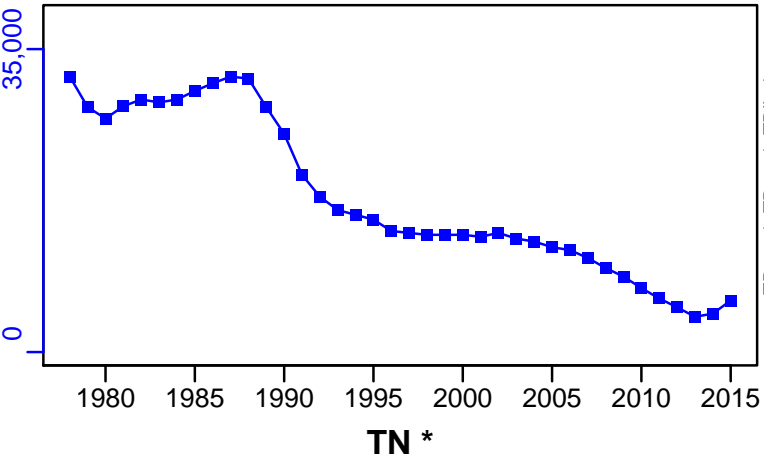
Production (1975–2015–PARMA)



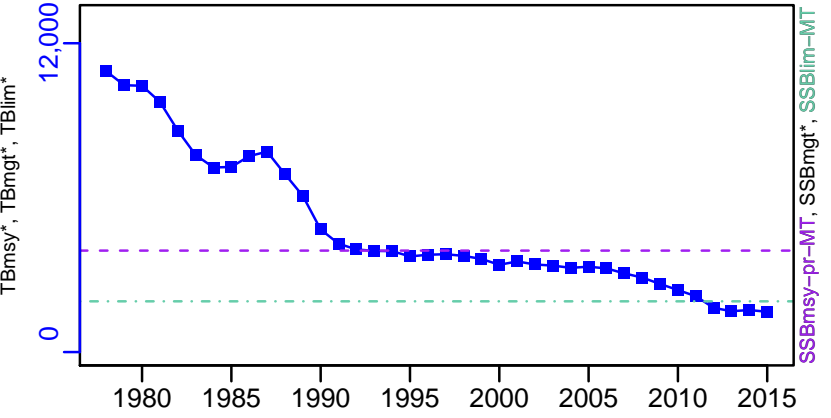
◆ Start Year ◆ End Year \* No Data

# Pink cusk-eel Southern Chile [PCEELSCH]

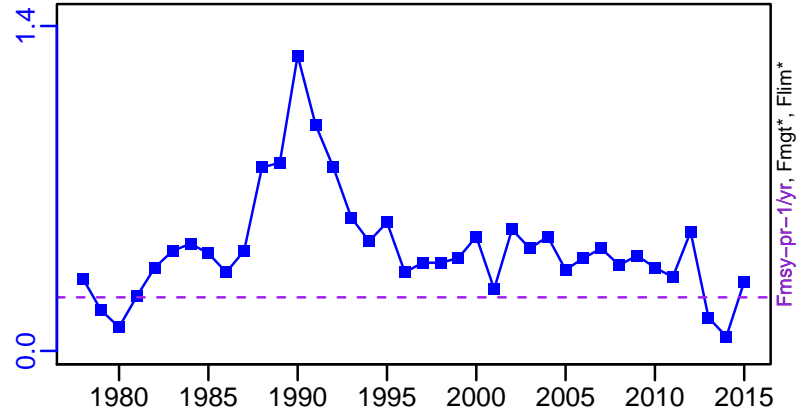
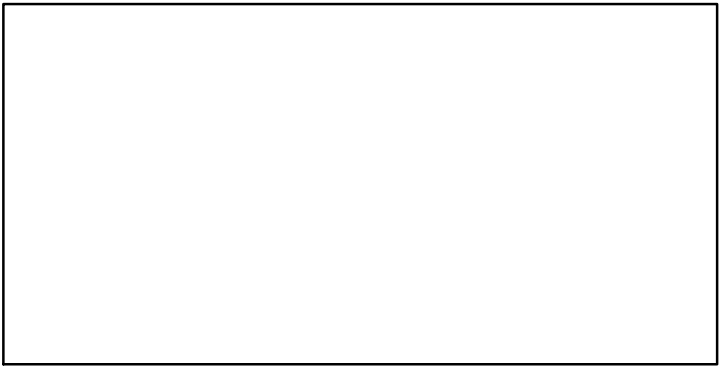
TB-MT (1975-2015-PARMA)



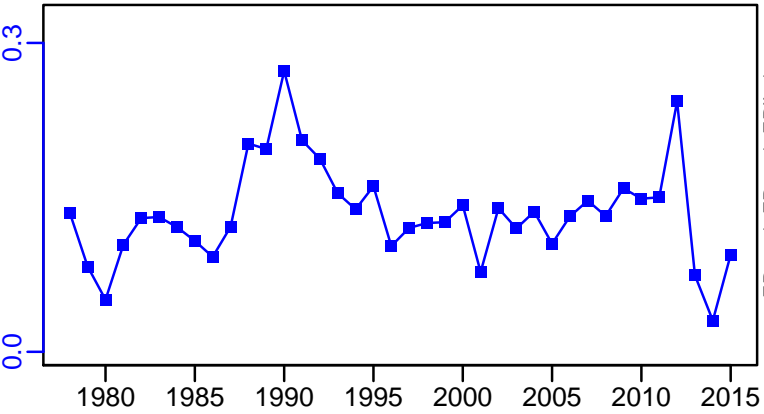
SSB-MT (1975-2015-PARMA)



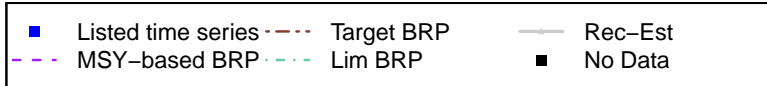
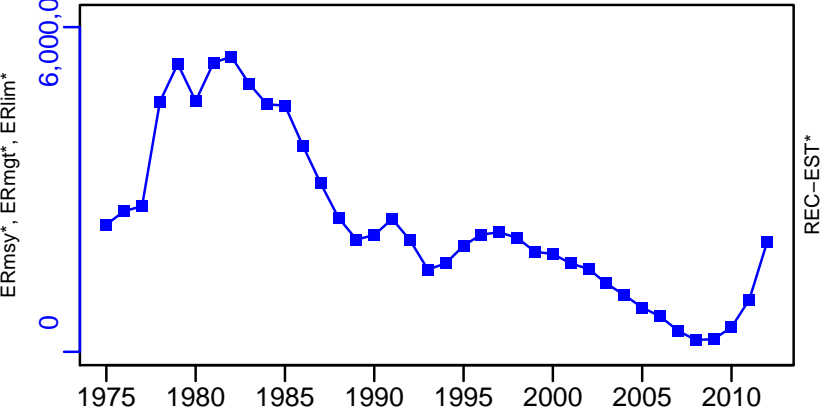
F-1/yr (1975-2015-PARMA)



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



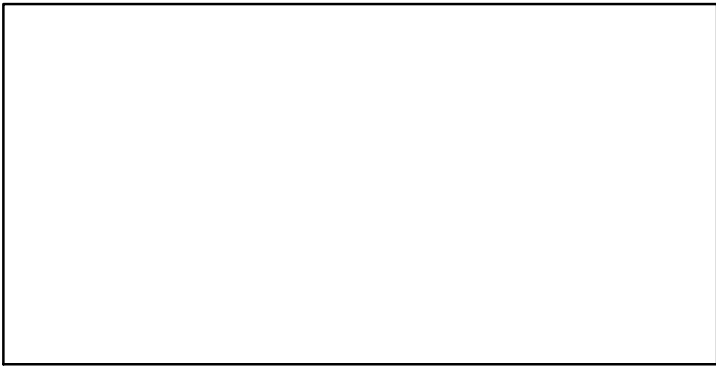
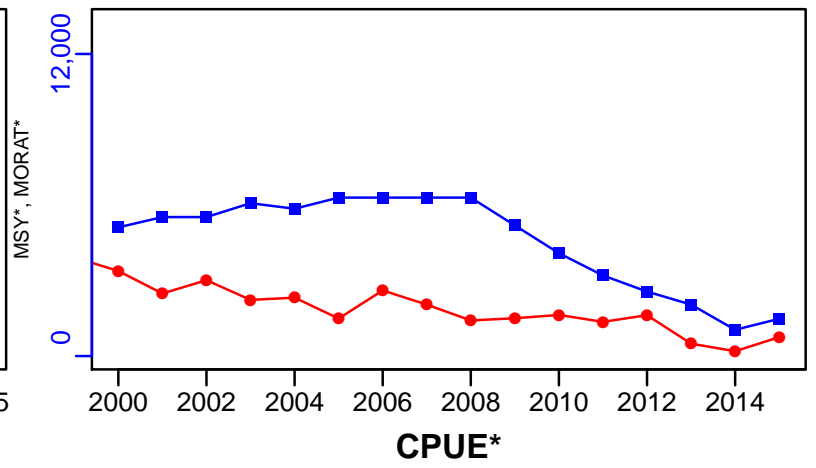
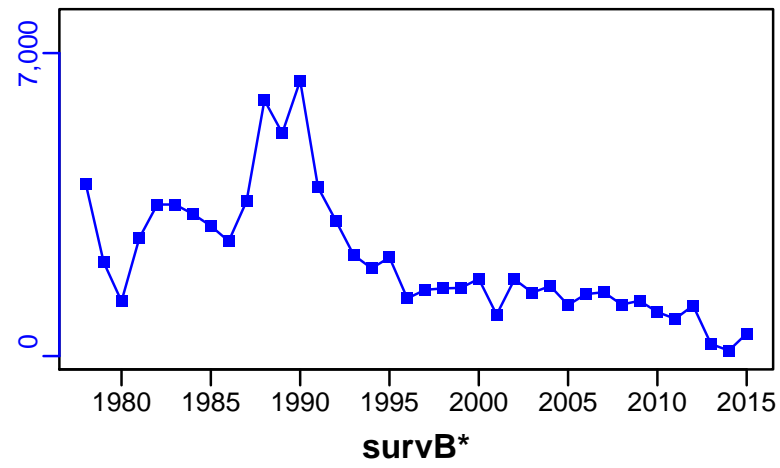
R-E00 (1975-2015-PARMA)



# Pink cusk-eel Southern Chile [PCEELSCH]

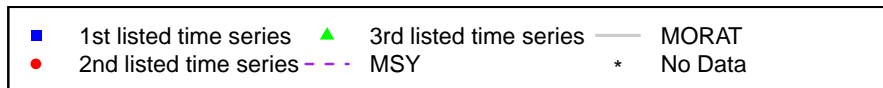
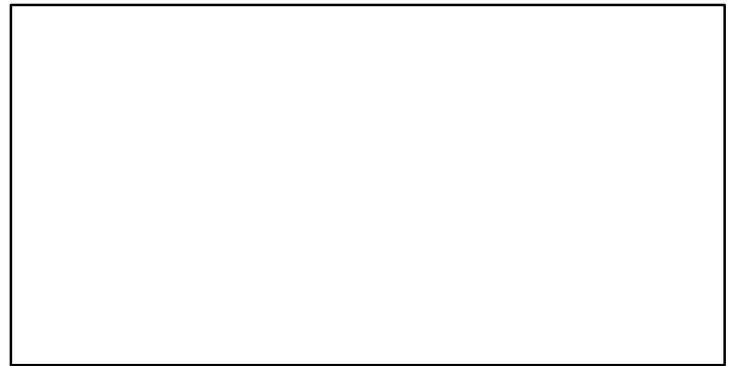
TL-MT, TC\*, RecC\* (1975-2015-PARMA)

TAC-MT, Cpair-MT, Cadv\* (1975-2015-PARMA)



EFFORT\*

CdivMSY\*



## Patagonian Toothfish Chile [PTOOTHFISHCH]

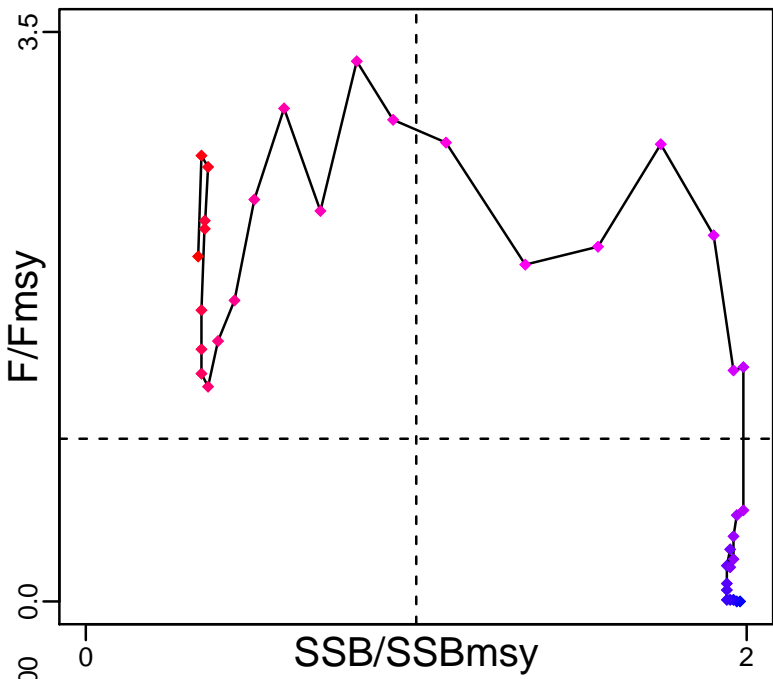
Metadata	
<b>Scientific Name</b>	Dissostichus eleginoides
<b>Current Assess ID</b>	IFP-PTOOTHFISHCH-1975-2014-TASCHERI
<b>Area</b>	South Chile Argentina
<b>Management Authority</b>	Separate management by Chile (SUBPESCA) and Argentina (CFP)
<b>Assessor</b>	Instituto de Fomento Pesquero - Chilean Fisheries Development Institute
<b>Asmts in RAM</b>	2014, 2011

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-pr-MT	2014	96,304
<b>Fmsy</b>	Fmsy-pr-1/yr	2014	0.073
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2014	0.15
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

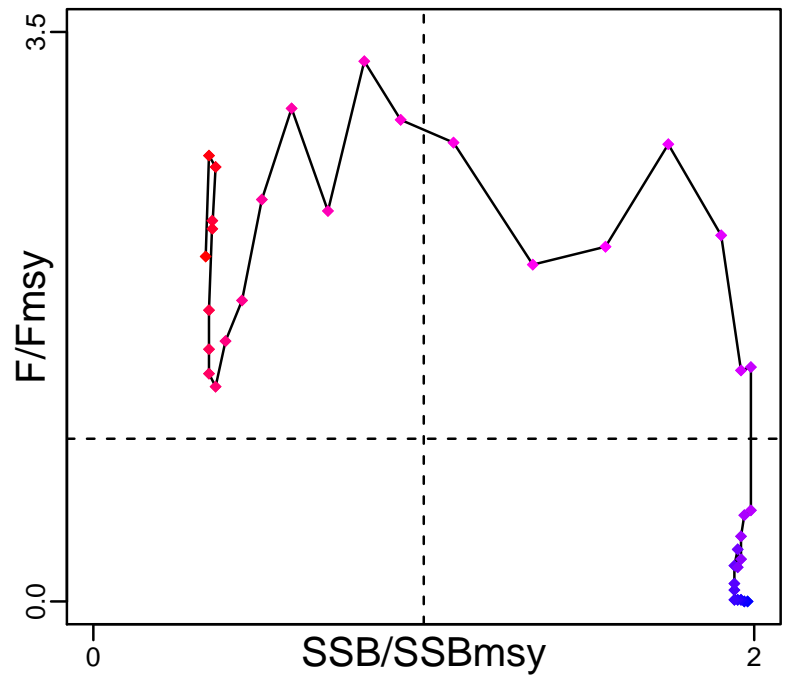
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2014	59,800	-	-
<b>SSB</b>	SSB-MT	2014	32,600	-	3 to 30+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2014	$2.99 \times 10^9$	-	3
<b>F</b>	F-1/yr	2014	0.15	-	-
<b>ER</b>	ER-ratio	2014	0.13	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2014	6100		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSBdivSSBmsy-dimensionless	2014	0.34		
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2014	2.12		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Patagonian Toothfish Chile [PTOOTHFISHCH]

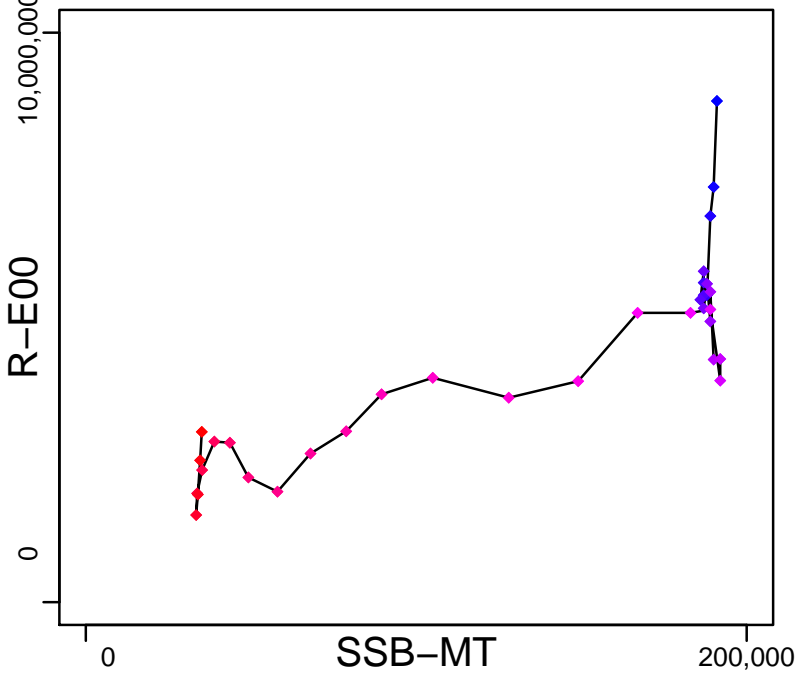
Kobe MSYpref (1975–2014–TASCHERI)



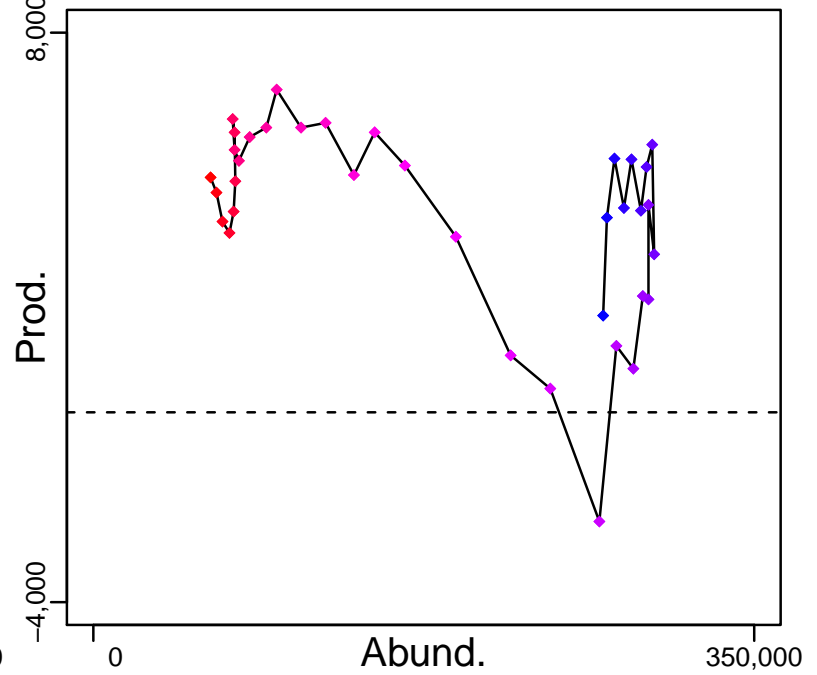
Kobe MGTpref (1975–2014–TASCHERI)



Spawner Recruit (1975–2014–TASCHERI)



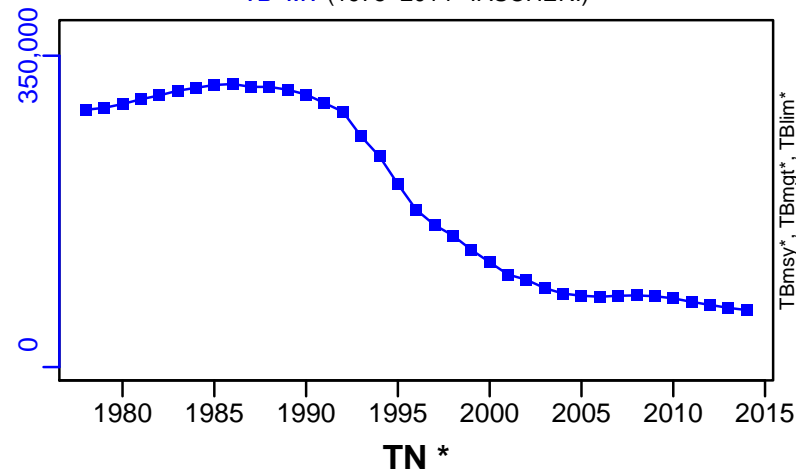
Production (1975–2014–TASCHERI)



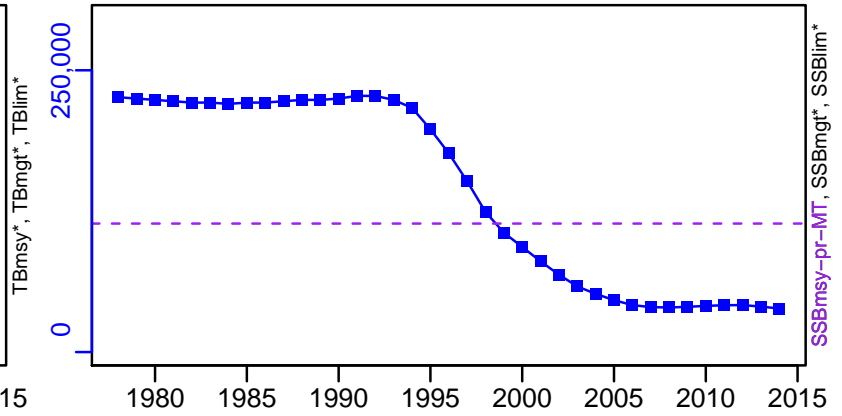
◆ Start Year ◆ End Year \* No Data

# Patagonian Toothfish Chile [PTOOTHFISHCH]

TB-MT (1975–2014–TASCHERI)

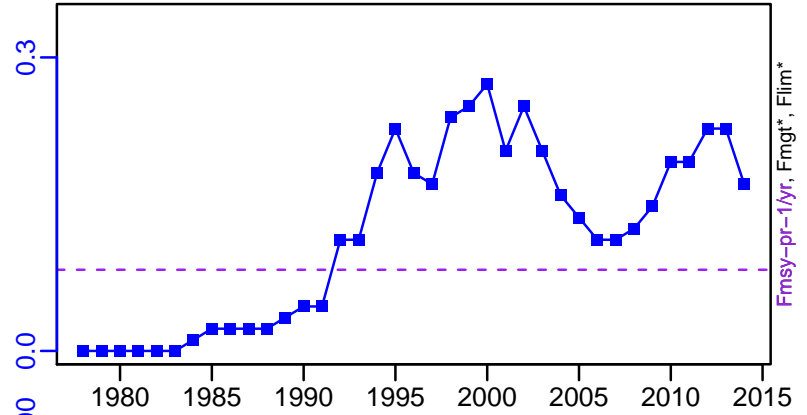
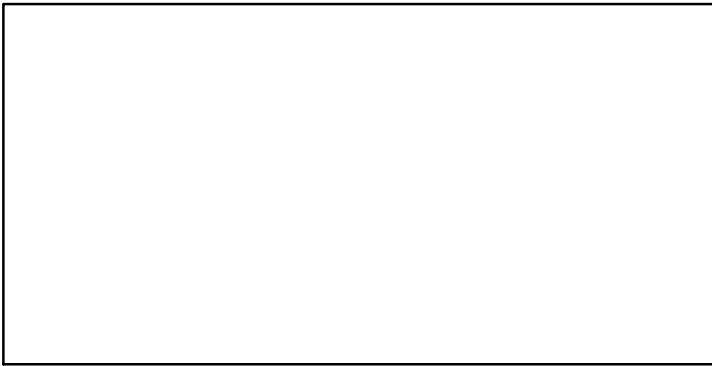


SSB-MT (1975–2014–TASCHERI)

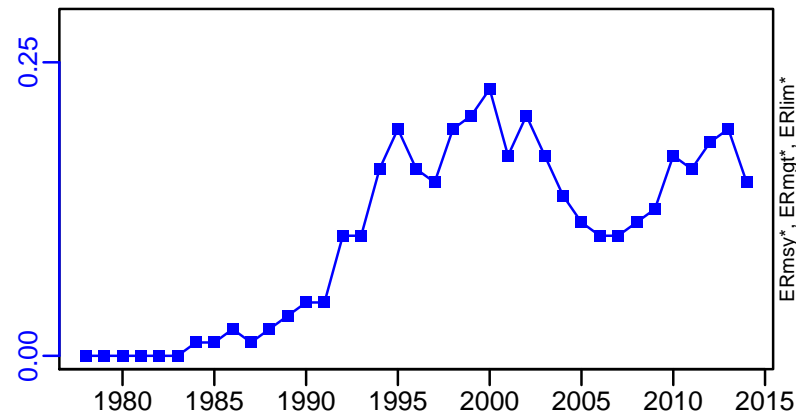


TN \*

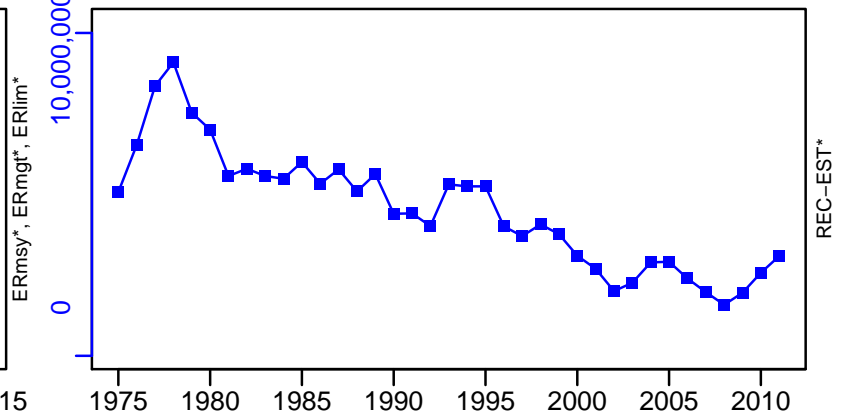
F-1/yr (1975–2014–TASCHERI)



ER-ratio (1975–2014–TASCHERI)



R-E00 (1975–2014–TASCHERI)

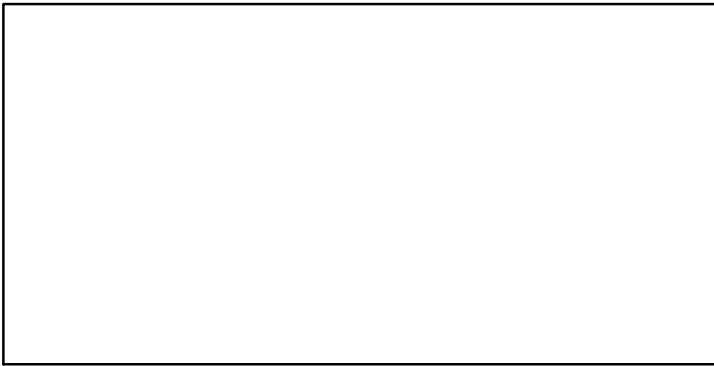
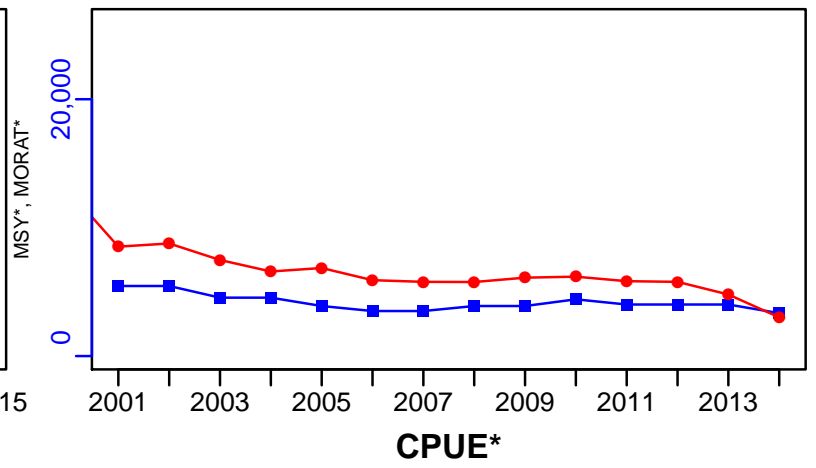
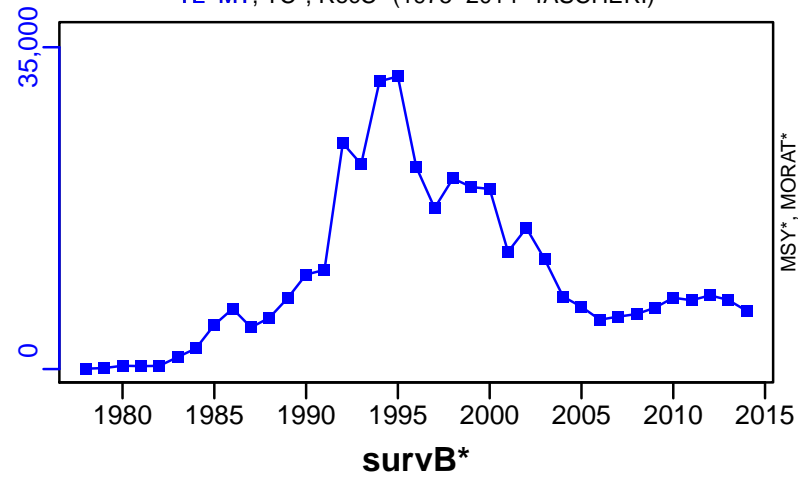




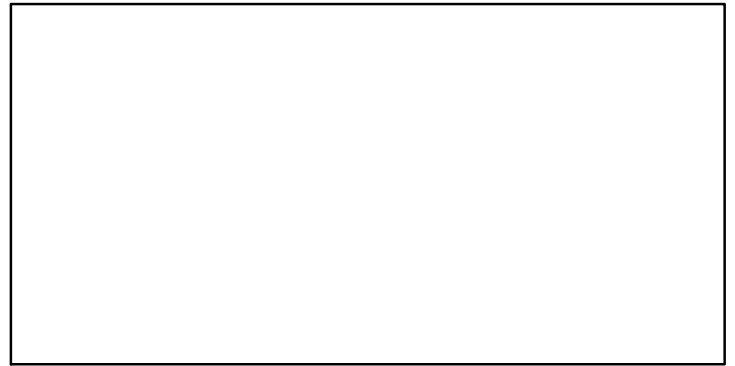
# Patagonian Toothfish Chile [PTOOTHFISHCH]

TL-MT, TC\*, RecC\* (1975-2014-TASCHERI)

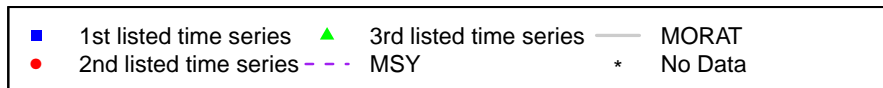
TAC-MT, Cpair-MT, Cadv\* (1975-2014-TASCHERI)



EFFORT\*



CdivMSY\*



## Red squat lobster Central-Southern Chile [RSQLOBSTERCSCH]

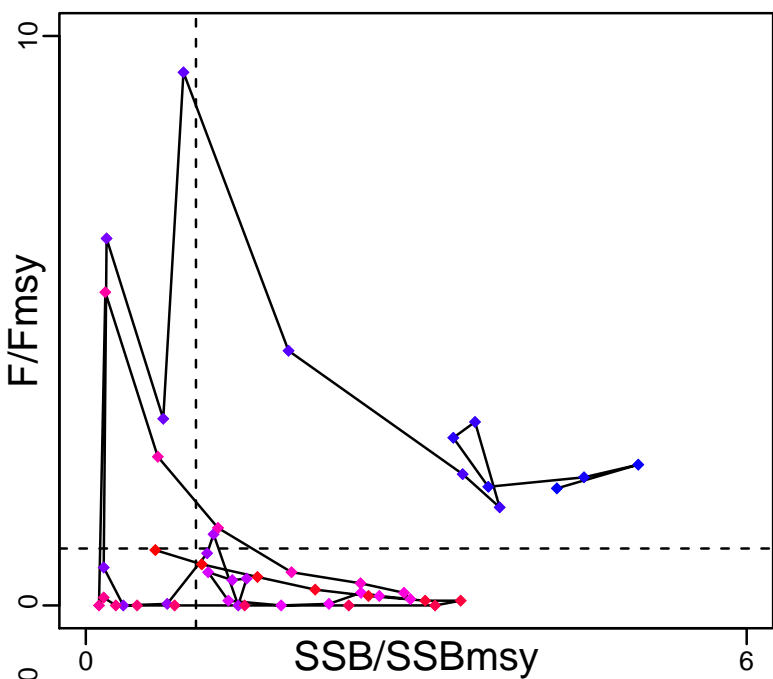
Metadata	
<b>Scientific Name</b>	Pleuroncodes monodon
<b>Current Assess ID</b>	IFOPCH-RSQLOBSTERCSCH-1968-2015-PARMA
<b>Area</b>	Central-Southern Chile
<b>Management Authority</b>	Subsecretaria de Pesca
<b>Assessor</b>	Instituto de Fomento Pesquero - Chilean Fisheries Development Institute
<b>Asmts in RAM</b>	2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-pr-MT	2015	22,330
<b>Fmsy</b>	Fmsy-pr-1/yr	2015	0.36
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2015	22,330
<b>Fmgt</b>	Fmgt-1/yr	2015	0.36
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2015	0.35
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

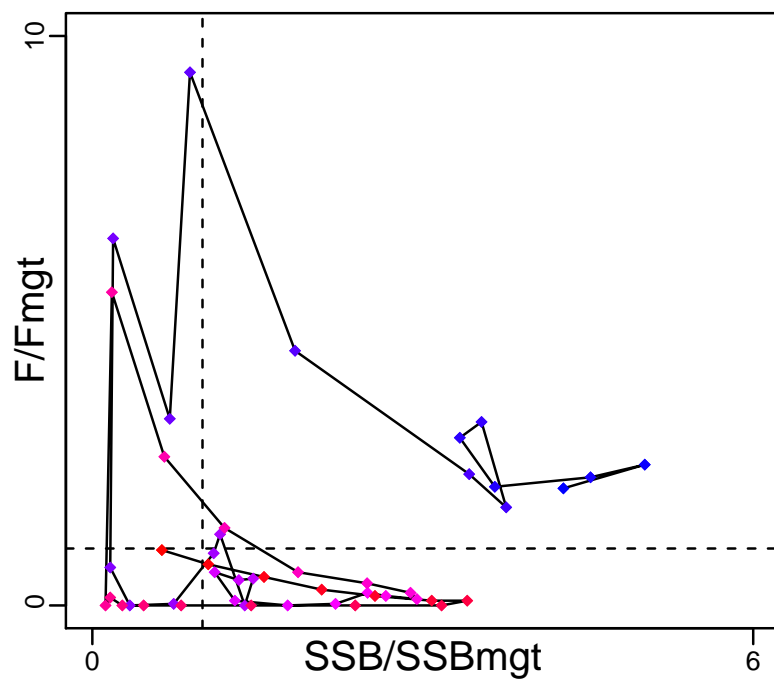
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	24,400	Both	-
<b>SSB</b>	SSB-MT	2015	14,100	Both	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$2.78 \times 10^8$	Both	1
<b>F</b>	F-1/yr	2015	0.35	Both	-
<b>ER</b>	ER-calc-ratio	2015	0.226	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2015	5520		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-pr-MT	2015	0.631		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2015	0.972		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2015	0.631		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	0.972		
<b>ER/ERmgt</b>	-	-	-		

# Red squat lobster Central-Southern Chile [RSQLOBSTERCSCH]

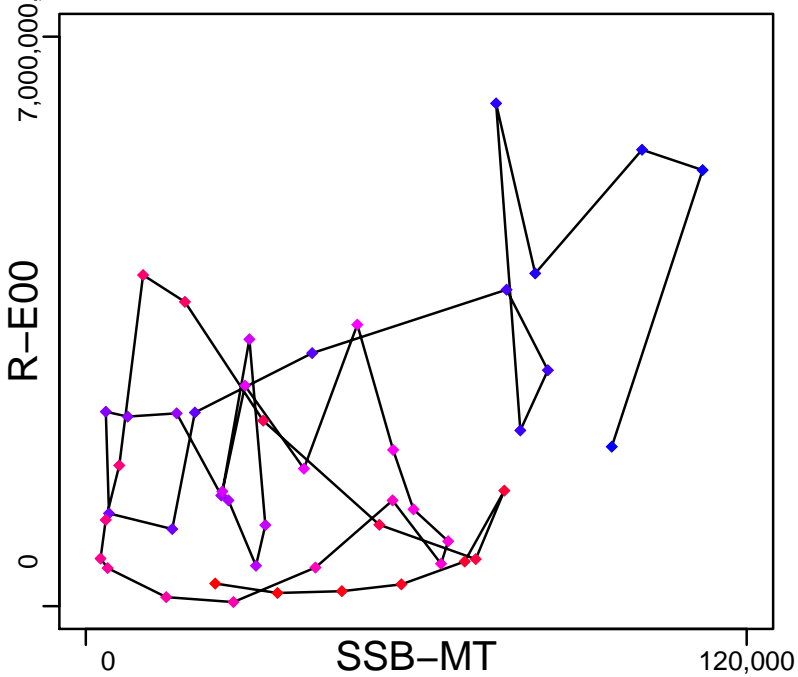
Kobe MSYpref (1968–2015–PARMA)



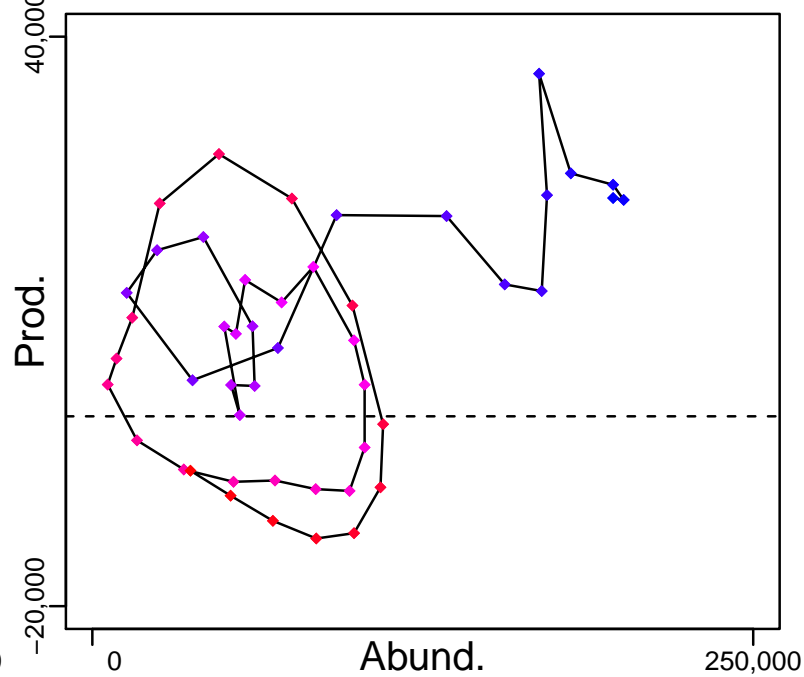
Kobe MGTpref (1968–2015–PARMA)



Spawner Recruit (1968–2015–PARMA)



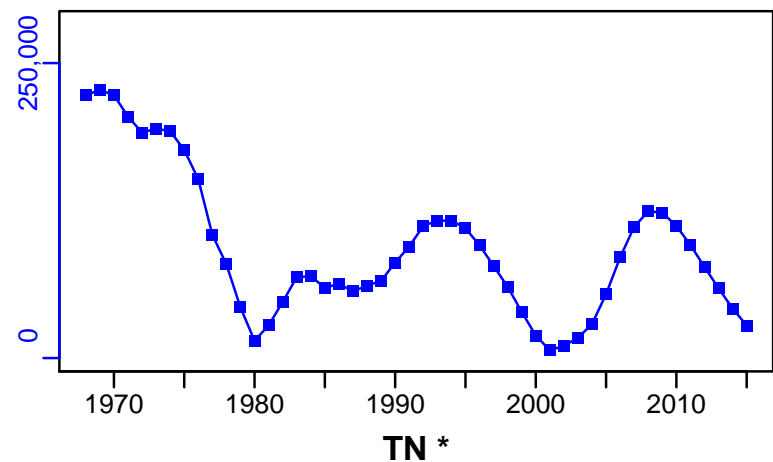
Production (1968–2015–PARMA)



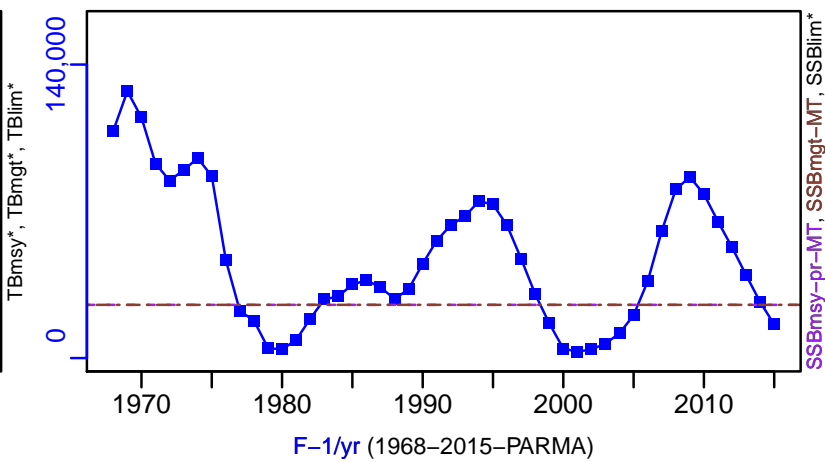
◆ Start Year ◆ End Year \* No Data

# Red squat lobster Central-Southern Chile [RSQLOBSTERCSCH]

TB-MT (1968-2015-PARMA)



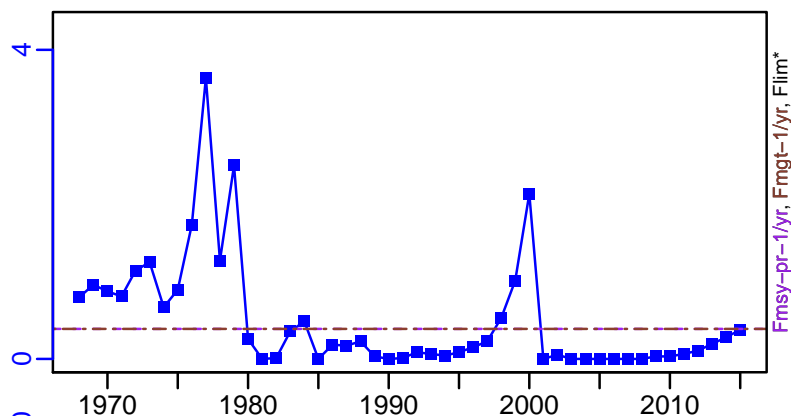
SSB-MT (1968-2015-PARMA)



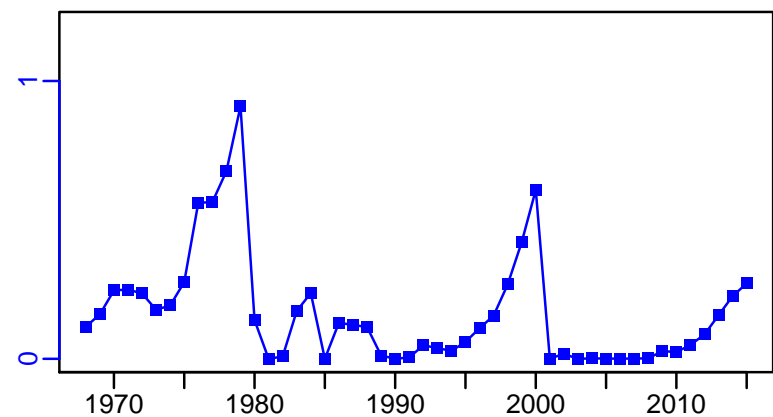
TN \*



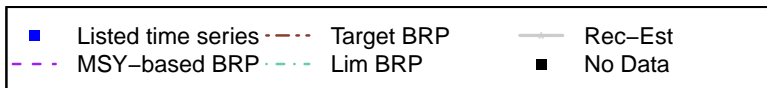
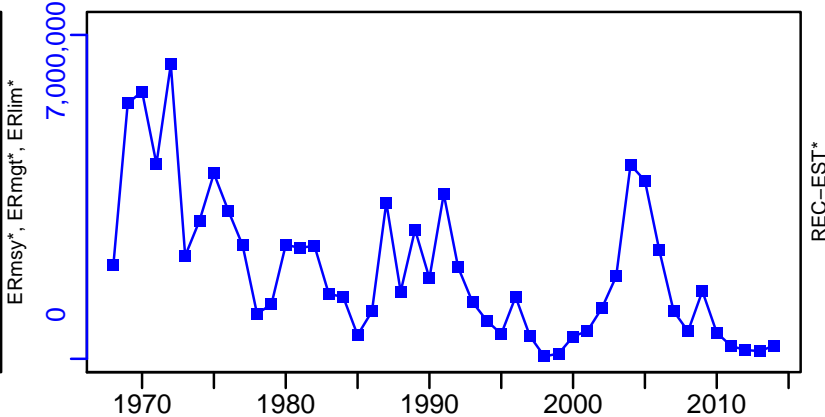
F-1/yr (1968-2015-PARMA)



ER-calc-ratio (1968-2015-PARMA)

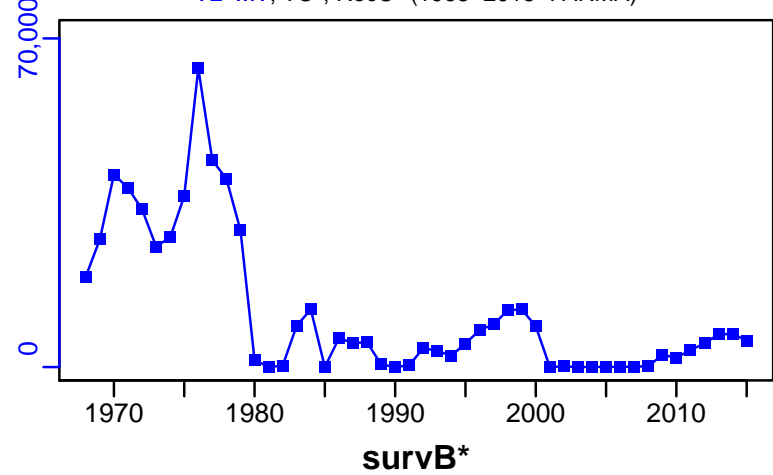


R-E00 (1968-2015-PARMA)

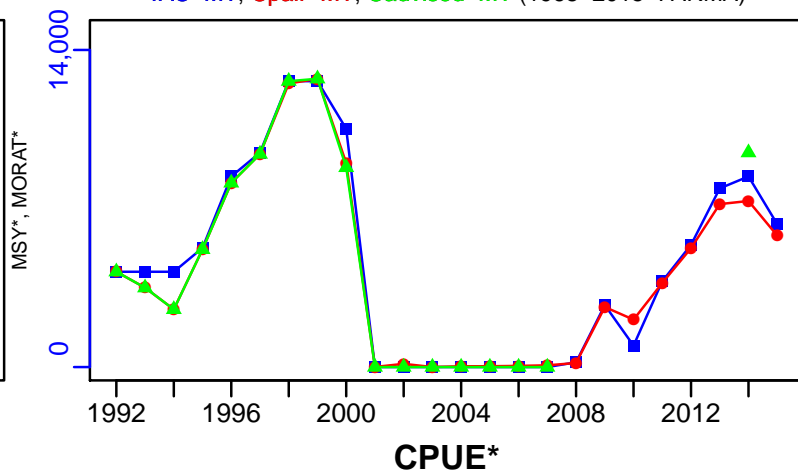


# Red squat lobster Central–Southern Chile [RSQLOBSTERCSCH]

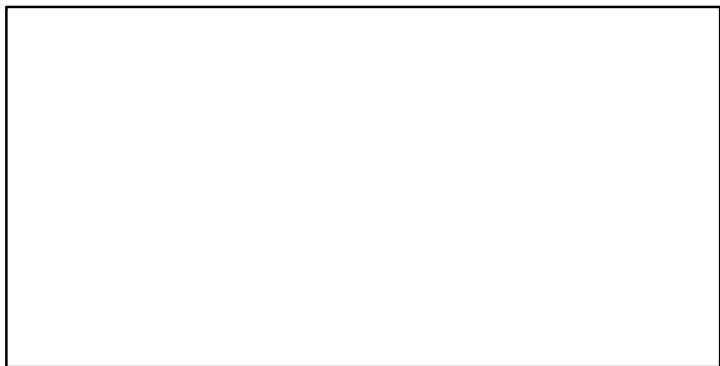
TL–MT, TC\*, RecC\* (1968–2015–PARMA)



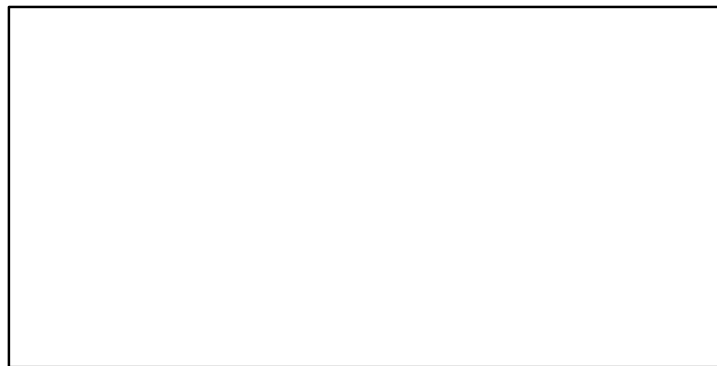
TAC–MT, Cpair–MT, Cadvised–MT (1968–2015–PARMA)



EFFORT\*



CdivMSY\*



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

## Red squat lobster Northern Chile [RSQLOBSTERNCH]

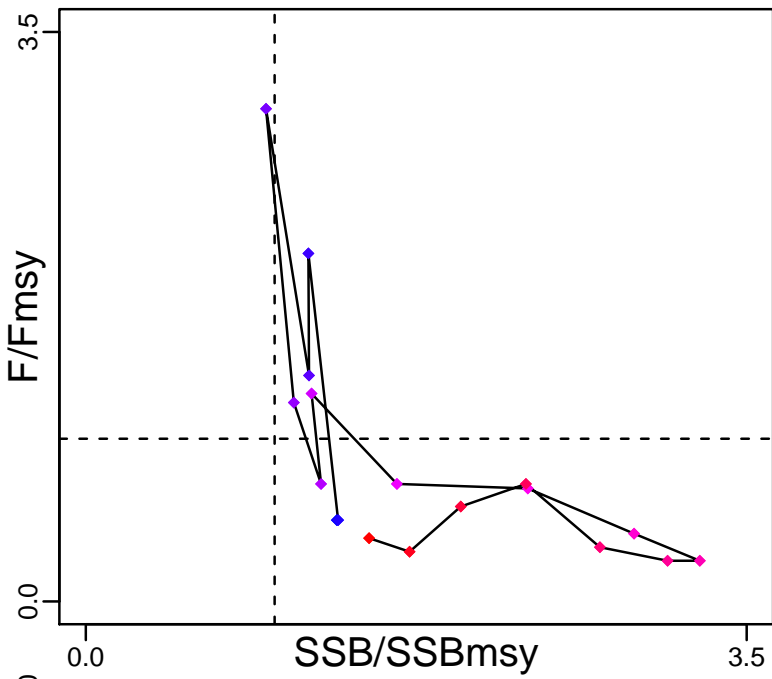
Metadata	
<b>Scientific Name</b>	Pleuroncodes monodon
<b>Current Assess ID</b>	IFOPCH-RSQLOBSTERNCH-1969-2015-PARMA
<b>Area</b>	Northern Chile
<b>Management Authority</b>	Subsecretaria de Pesca
<b>Assessor</b>	Instituto de Fomento Pesquero - Chilean Fisheries Development Institute
<b>Asmts in RAM</b>	2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-pr-MT	2015	2986
<b>Fmsy</b>	Fmsy-pr-1/yr	2015	0.36
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2015	2986
<b>Fmgt</b>	Fmgt-1/yr	2015	0.36
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2015	0.35
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

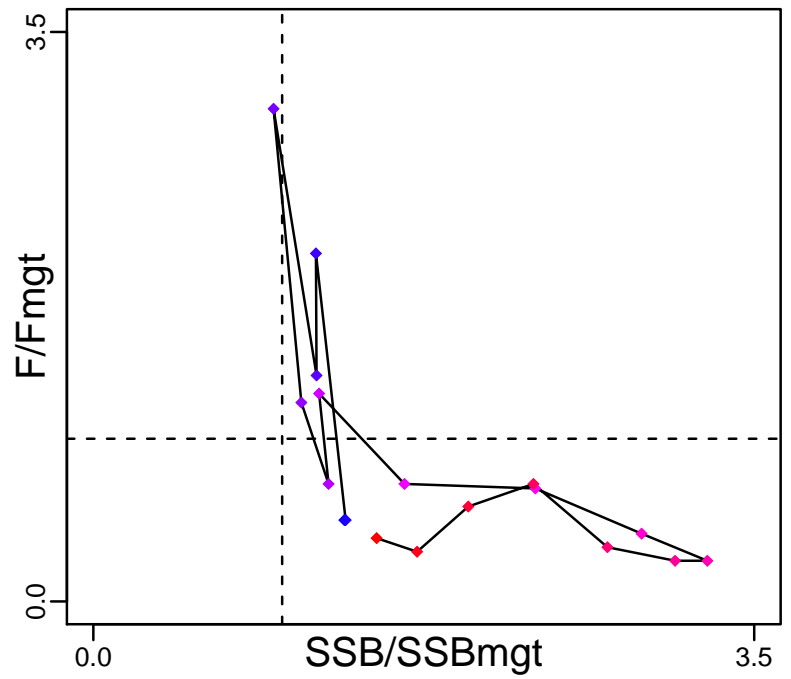
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	7010	Both	-
<b>SSB</b>	SSB-MT	2015	4480	Both	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$1.93 \times 10^8$	Both	1
<b>F</b>	F-1/yr	2015	0.14	Both	-
<b>ER</b>	ER-calc-ratio	2015	0.086	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2015	602		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-pr-MT	2015	1.5		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2015	0.389		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2015	1.5		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	0.389		
<b>ER/ERmgt</b>	-	-	-		

# Red squat lobster Northern Chile [RSQLOBSTERNCH]

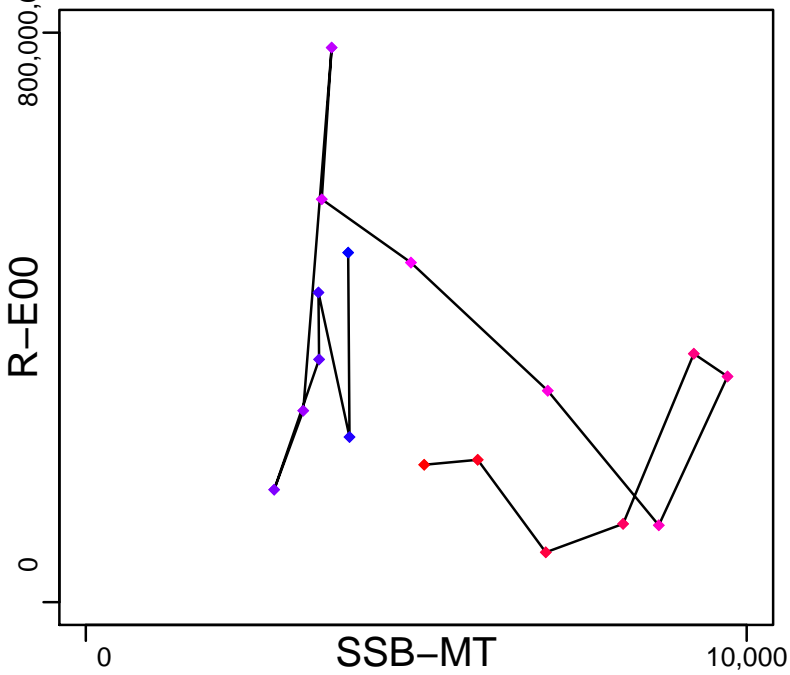
Kobe MSYpref (1969–2015–PARMA)



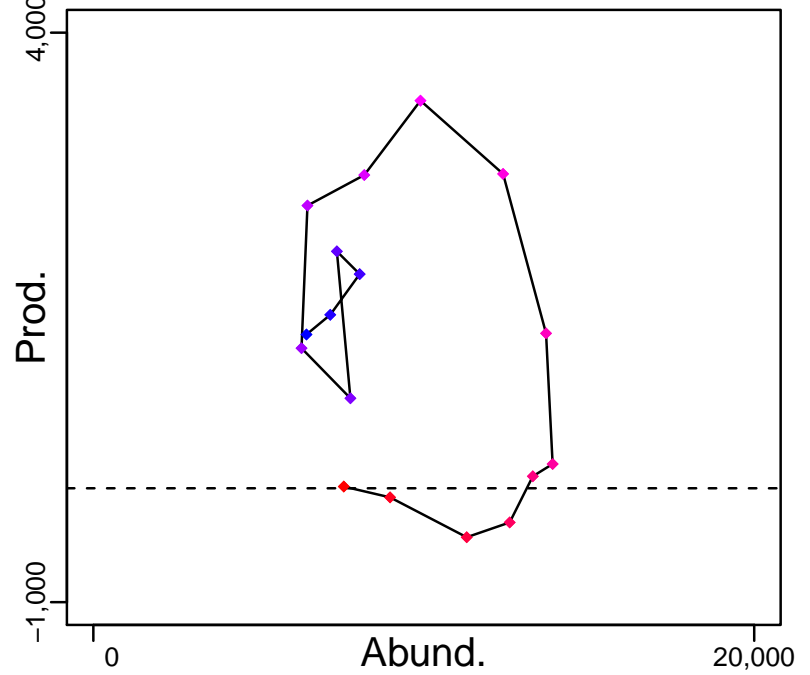
Kobe MGTpref (1969–2015–PARMA)



Spawner Recruit (1969–2015–PARMA)



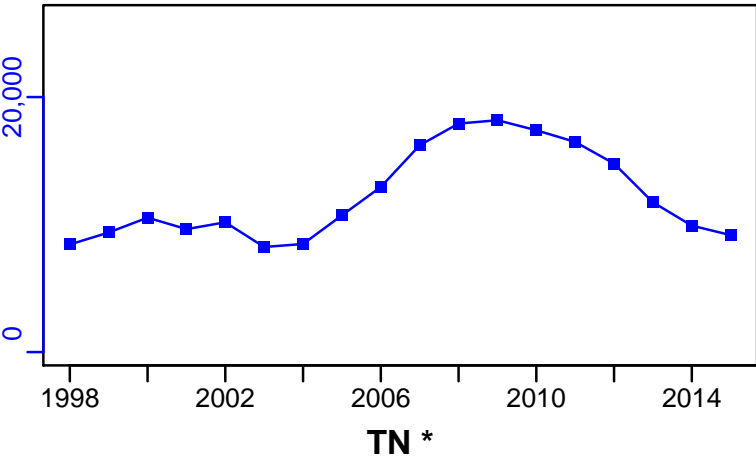
Production (1969–2015–PARMA)



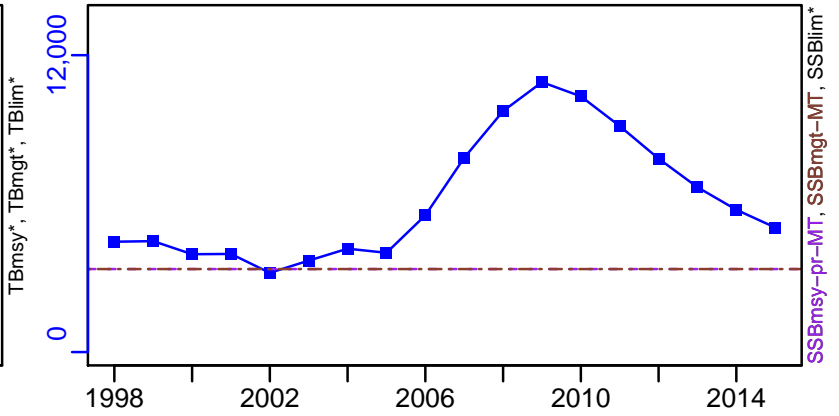
◆ Start Year ◆ End Year \* No Data

# Red squat lobster Northern Chile [RSQLOBSTERNCH]

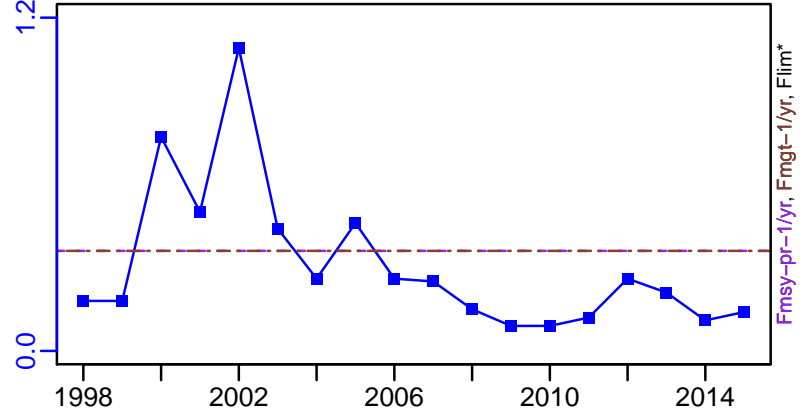
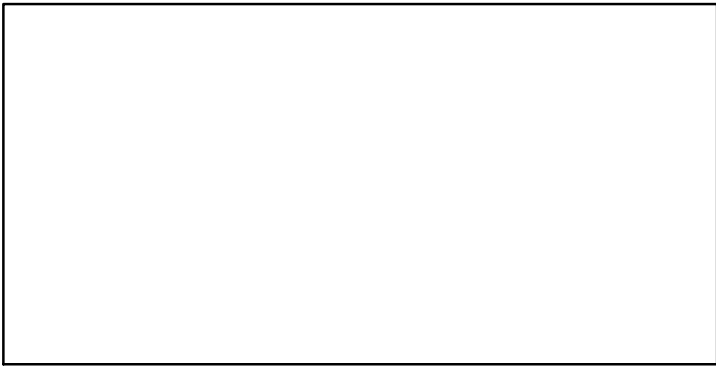
TB-MT (1969-2015-PARMA)



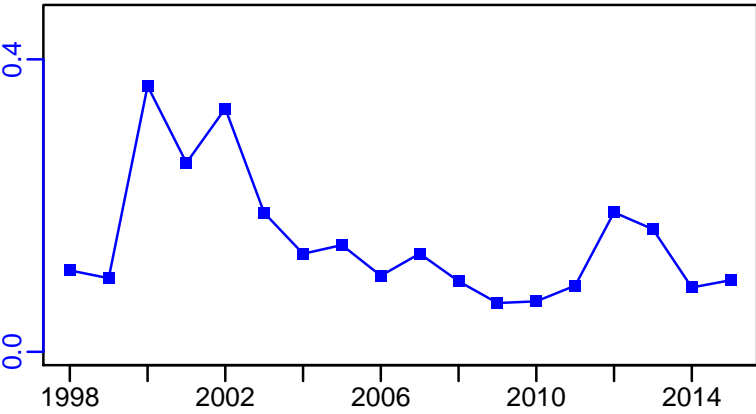
SSB-MT (1969-2015-PARMA)



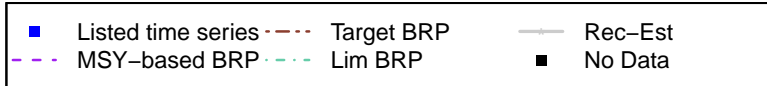
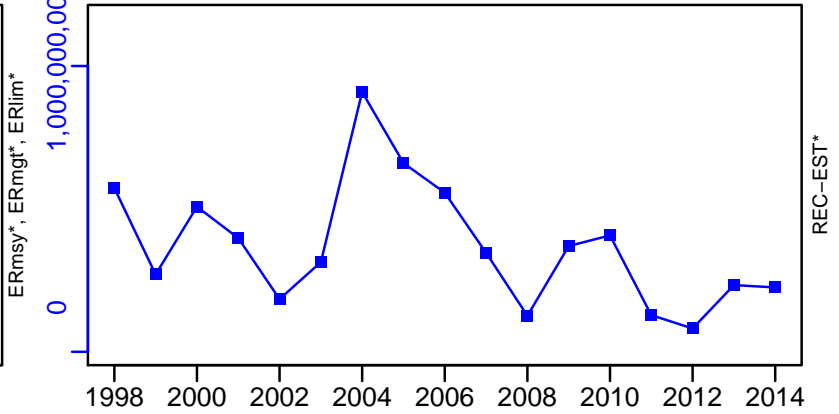
F-1/yr (1969-2015-PARMA)



ER-calc-ratio (1969-2015-PARMA)



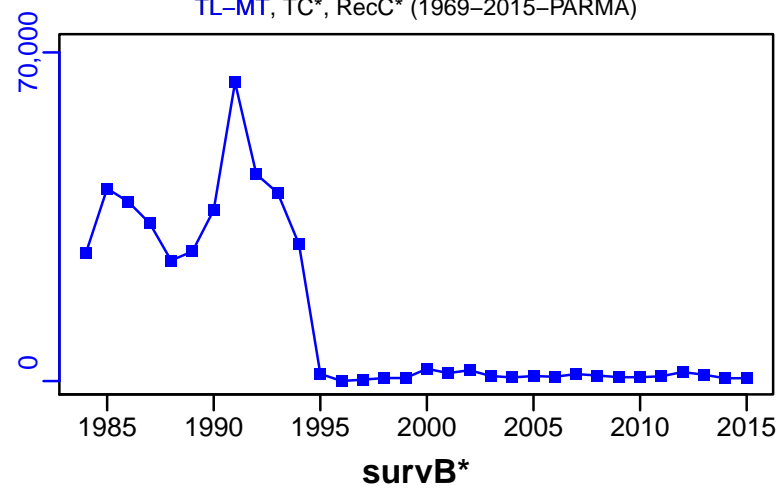
R-E00 (1969-2015-PARMA)



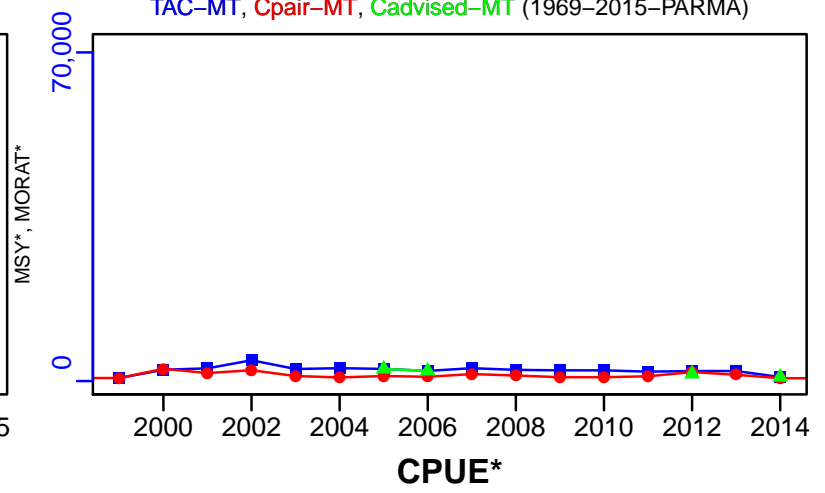


# Red squat lobster Northern Chile [RSQLOBSTERNCH]

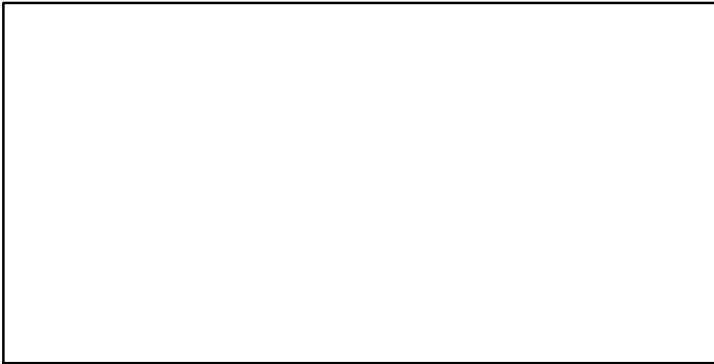
TL-MT, TC\*, RecC\* (1969-2015-PARMA)



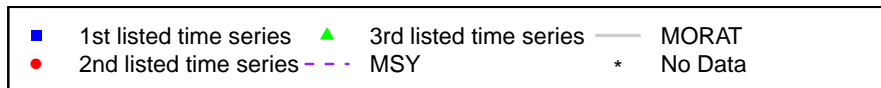
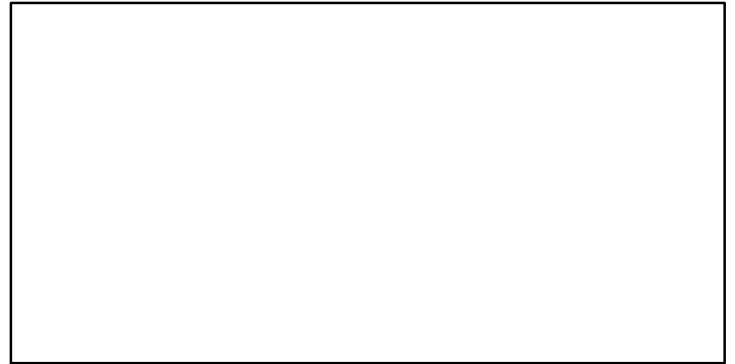
TAC-MT, Cpair-MT, Cadvised-MT (1969-2015-PARMA)



**EFFORT\***



**CdivMSY\***



## Deepwater Cardinalfish Chile [SBREAMCH]

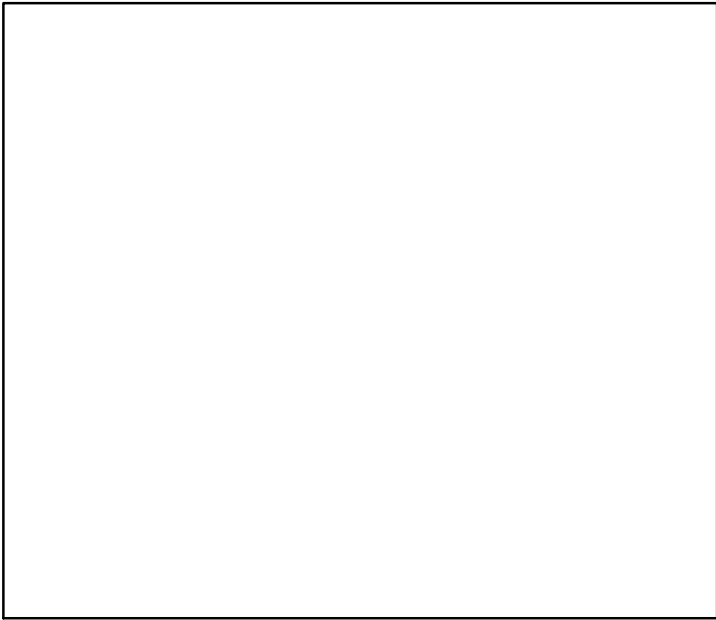
Metadata	
<b>Scientific Name</b>	Epigonus crassicaudus
<b>Current Assess ID</b>	SPRFMO-SBREAMCH-1989-2011-CHING
<b>Area</b>	Chilean EEZ and offshore
<b>Management Authority</b>	South Pacific Regional Fisheries Management Organization
<b>Assessor</b>	South Pacific Regional Fisheries Management Organization
<b>Asmts in RAM</b>	2011

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

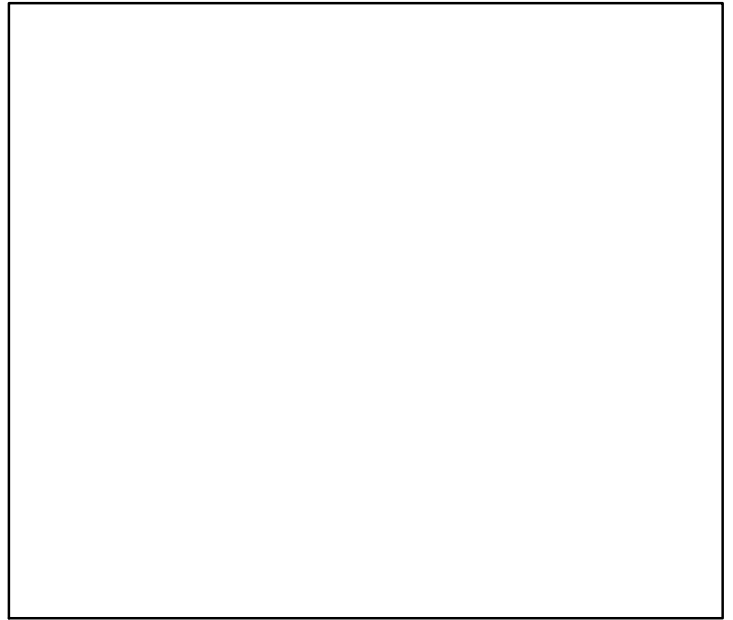
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2011	920	-	-
SSB	SSB-MT	2011	607	-	-
TN	-	-	-	-	-
R	R-E00	2011	553,000	-	-
F	F-1/yr	2011	12.2	-	-
ER	ER-calc-ratio	2011	0.097	-	-
TC	-	-	-		
TL	TL-MT	2011	89		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

# Deepwater Cardinalfish Chile [SBREAMCH]

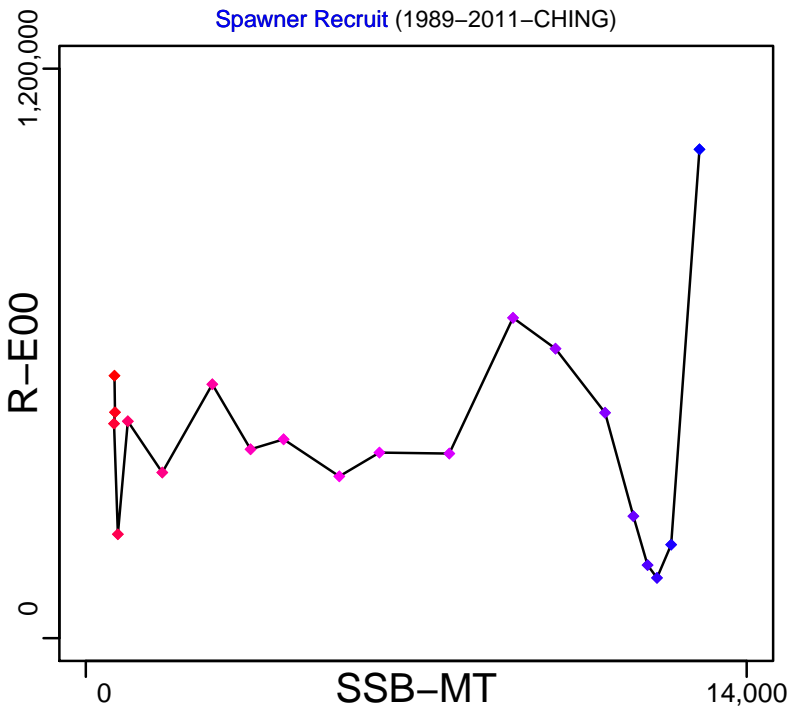
Kobe MSY\*



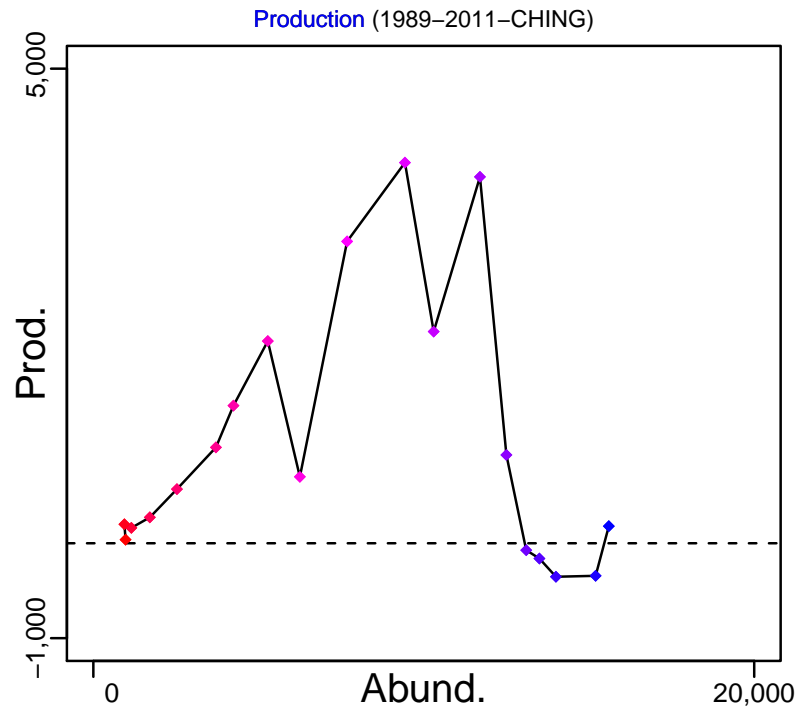
Kobe MGT\*



Spawner Recruit (1989–2011–CHING)



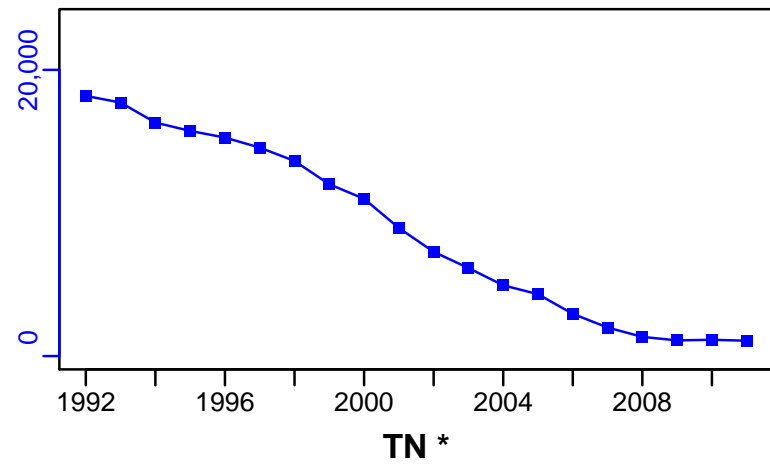
Production (1989–2011–CHING)



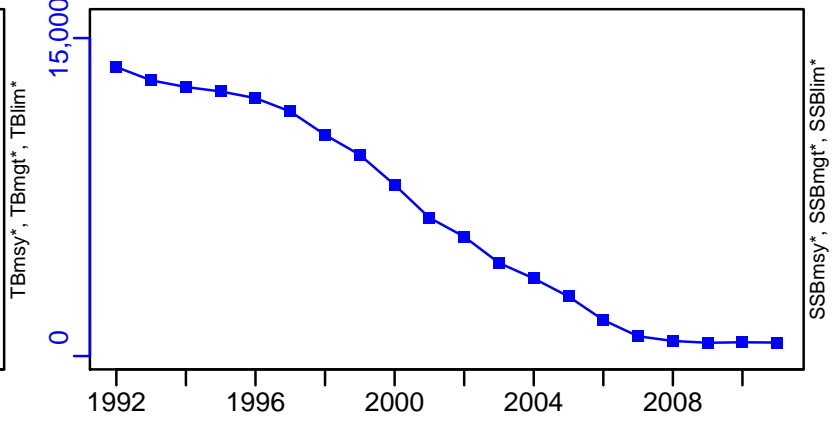
◆ Start Year ◆ End Year \* No Data

# Deepwater Cardinalfish Chile [SBREAMCH]

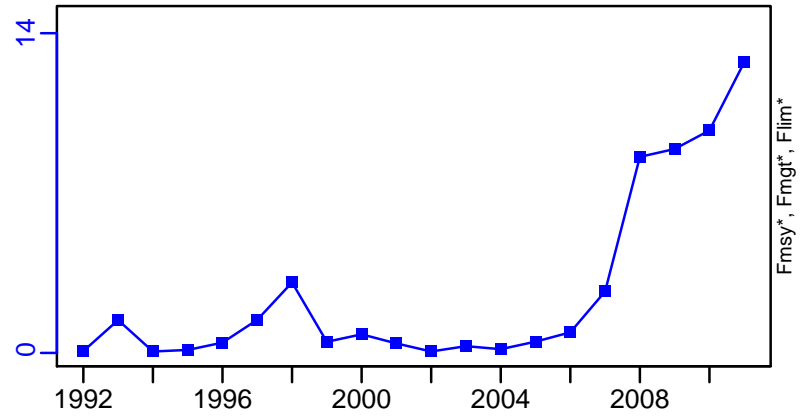
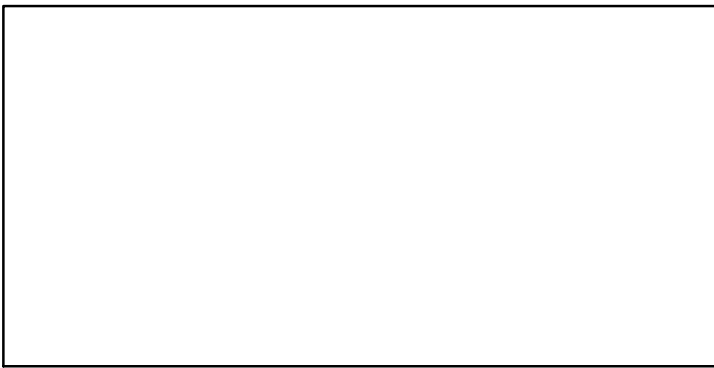
TB-MT (1989–2011–CHING)



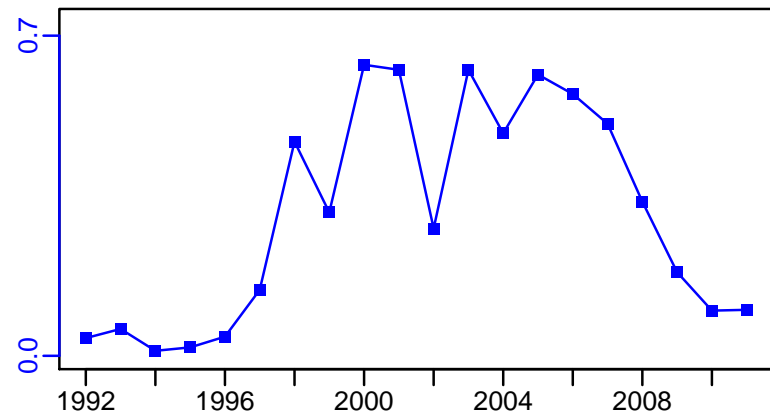
SSB-MT (1989–2011–CHING)



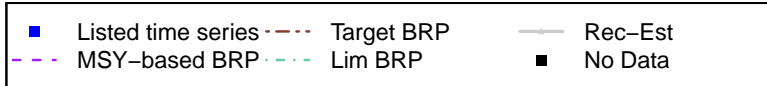
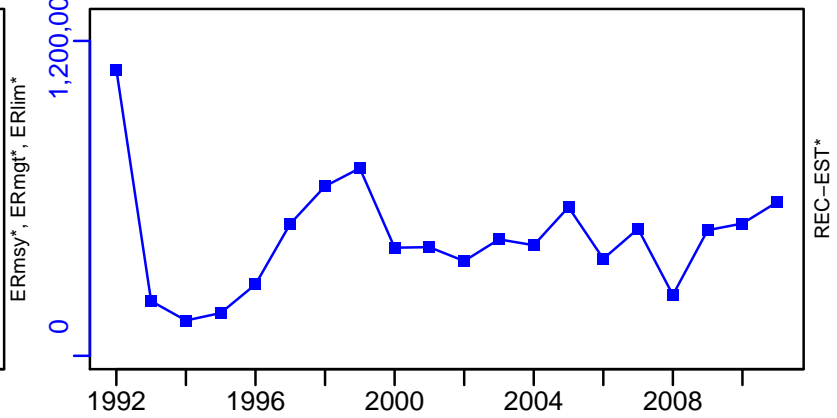
F-1/yr (1989–2011–CHING)



ER-calc-ratio (1989–2011–CHING)



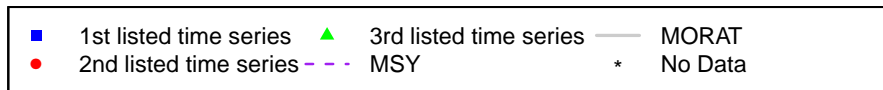
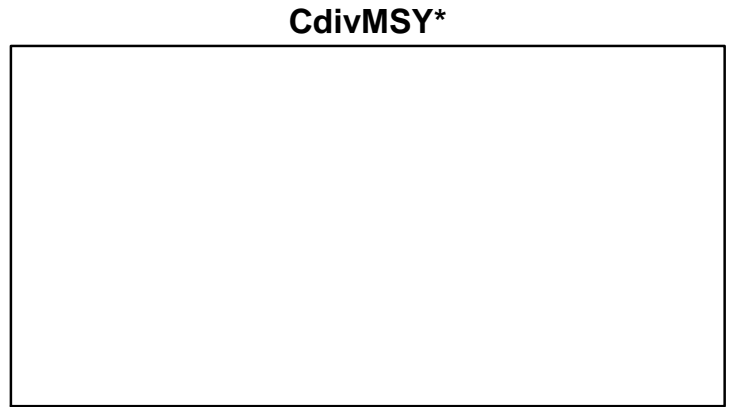
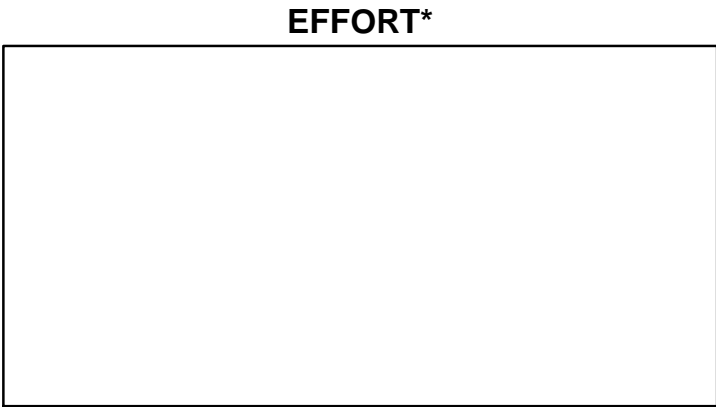
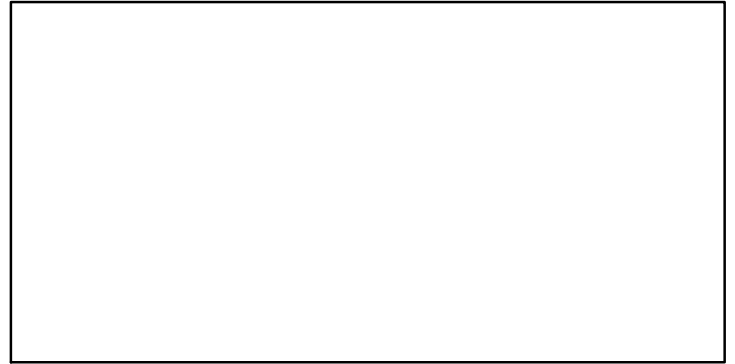
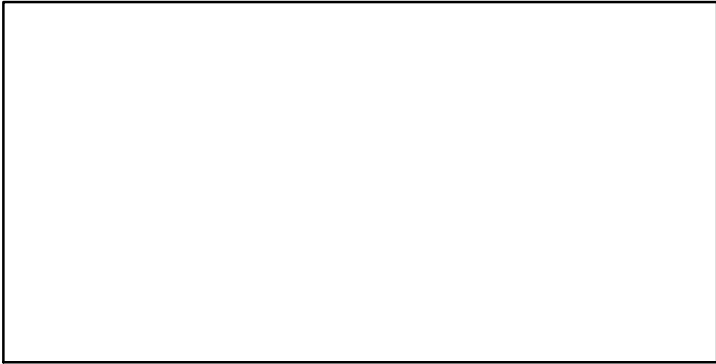
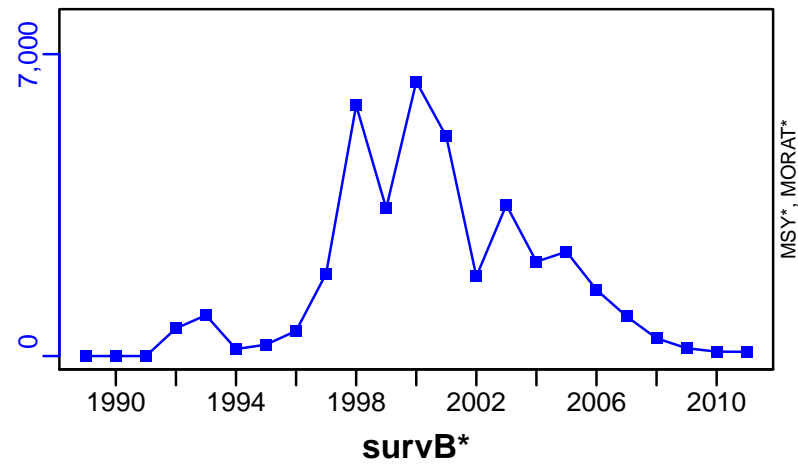
R-E00 (1989–2011–CHING)



# Deepwater Cardinalfish Chile [SBREAMCH]

TL-MT, TC\*, RecC\* (1989-2011-CHING)

TAC\*, Cpair\*, Cadv\*



## Southern blue whiting Southern Argentina [SBWHITARGS]

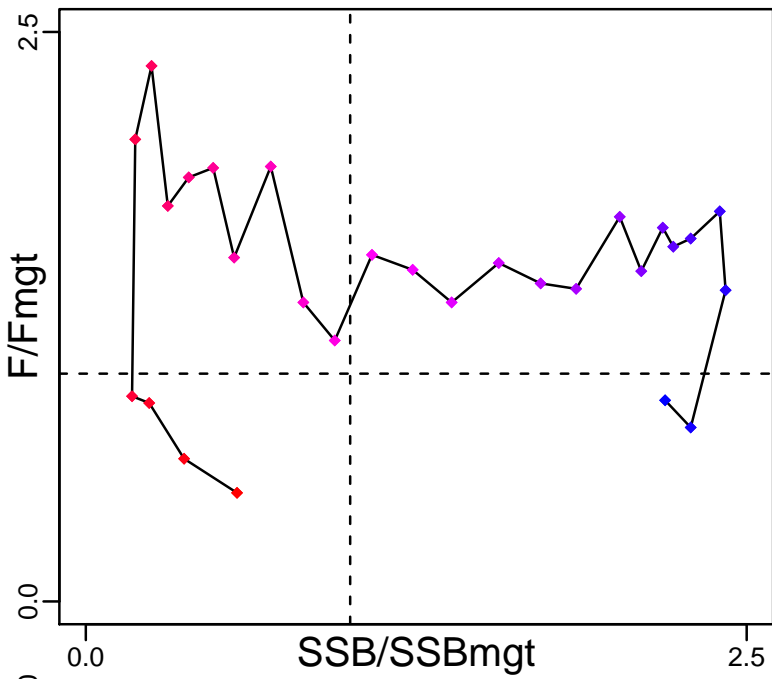
Metadata	
<b>Scientific Name</b>	Micromesistius australis
<b>Current Assess ID</b>	INIDEP-SBWHITARGS-1985-2015-PARMA
<b>Area</b>	Southern Argentina
<b>Management Authority</b>	Consejo Federal Pesquero, Argentina national management
<b>Assessor</b>	Instituto Nacional de Investigacion y Desarrollo Pesquero
<b>Asmts in RAM</b>	2007, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2015	454,500
Fmgt	Fmgt-1/yr	2015	0.168
ERmgt	-	-	-
TB0	-	-	-
SSB0	SSB0-MT	2015	1,515,000
MSY	-	-	-
M	M-1/yr	2015	0.15
TBlim	-	-	-
SSBlim	SSBlim-MT	2015	303,000
Flim	-	-	-
ERlim	-	-	-

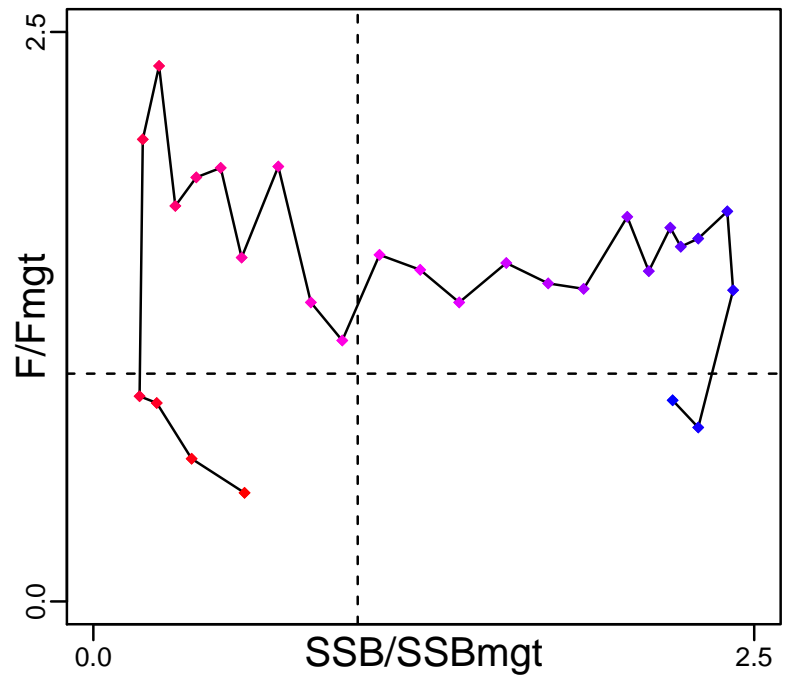
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2015	425,000	-	1+
SSB	SSB-MT	2015	260,000	Both	3+
TN	-	-	-	-	-
R	R-E00	2015	$2.93 \times 10^8$	-	1
F	F-1/yr	2015	0.08	-	7 to 21+
ER	ER-calc-ratio	2015	0.035	-	-
TC	TC-MT	2015	21,400		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2015	0.572		
F/Fmgt	F-1/yr/Fmgt-1/yr	2015	0.477		
ER/ERmgt	-	-	-		

# Southern blue whiting Southern Argentina [SBWHITARGS]

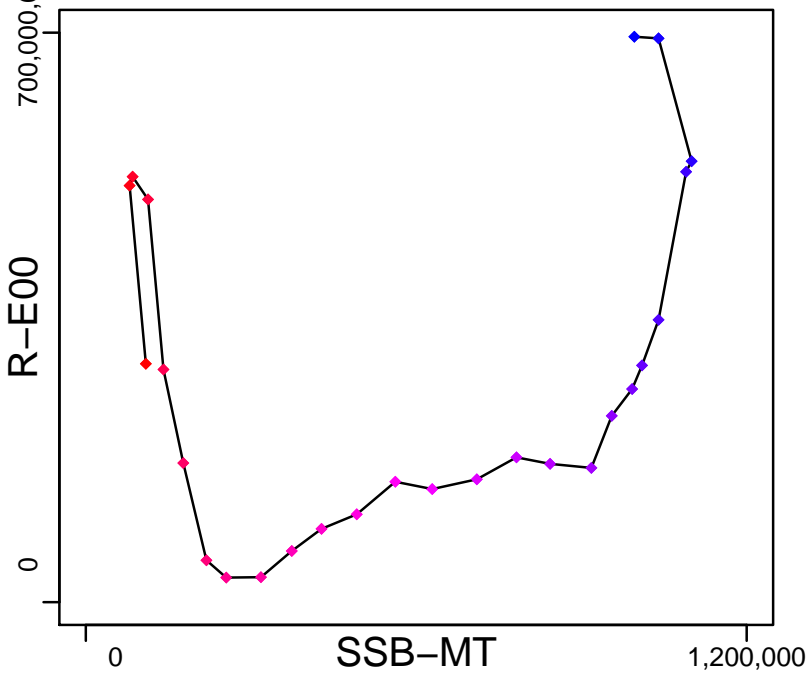
Kobe MSYpref (1985–2015–PARMA)



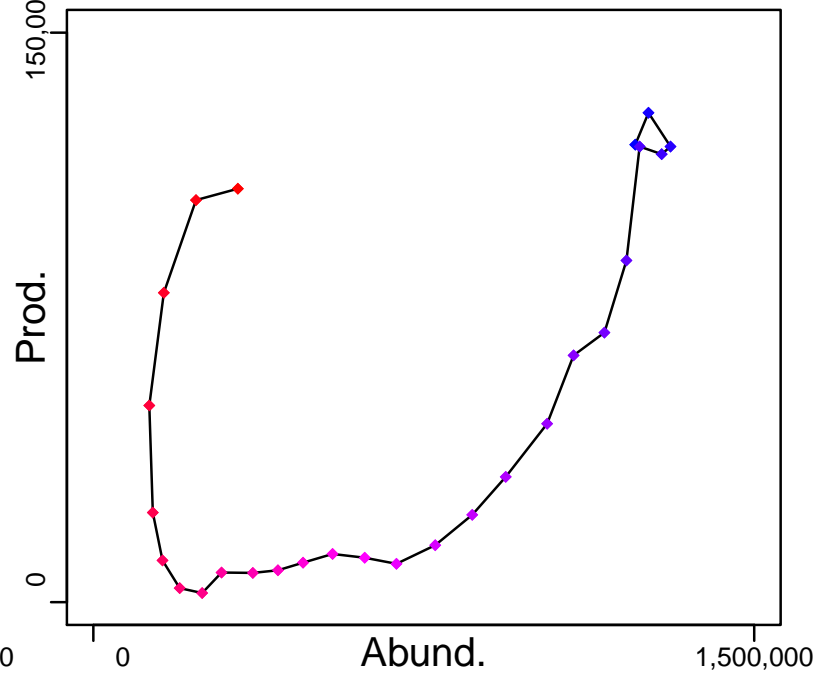
Kobe MGTpref (1985–2015–PARMA)



Spawner Recruit (1985–2015–PARMA)



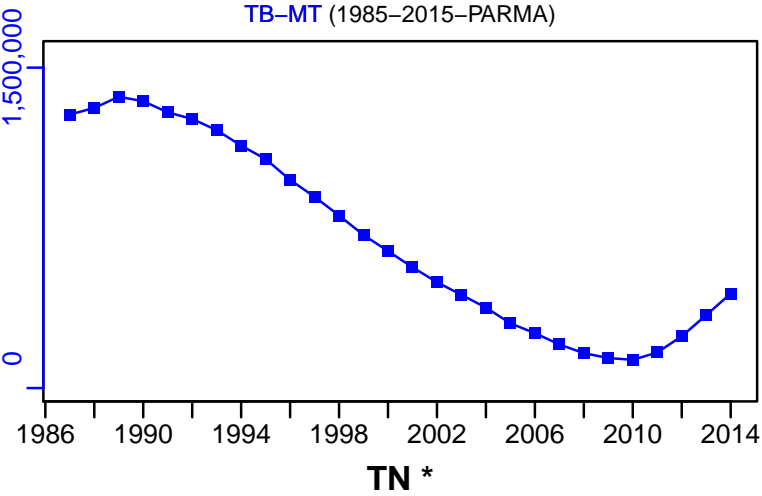
Production (1985–2015–PARMA)



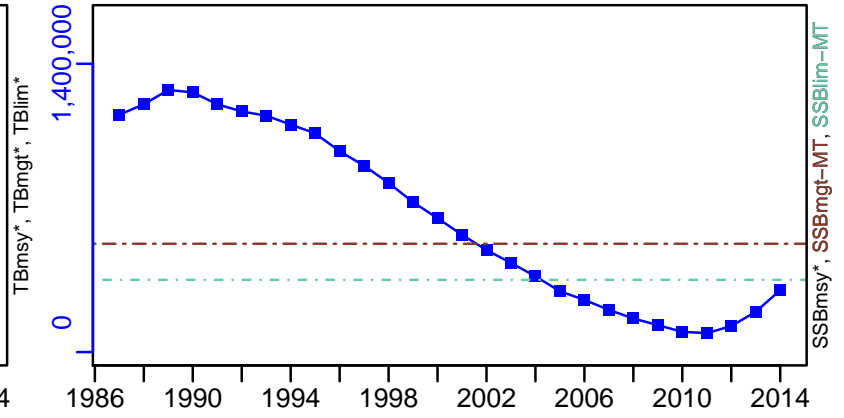
◆ Start Year ◆ End Year \* No Data

# Southern blue whiting Southern Argentina [SBWHITARGS]

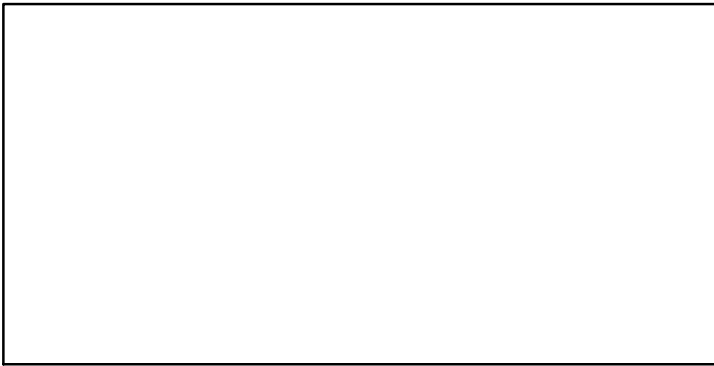
TB-MT (1985-2015-PARMA)



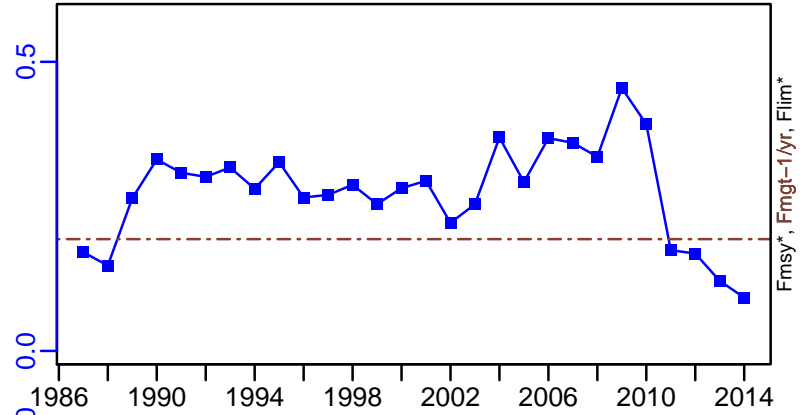
SSB-MT (1985-2015-PARMA)



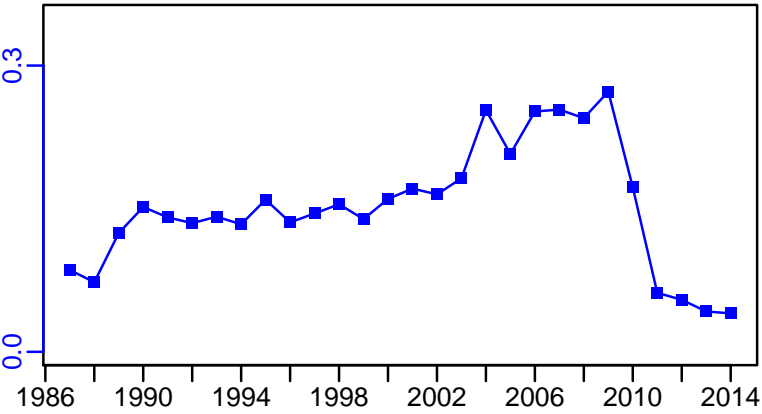
TN \*



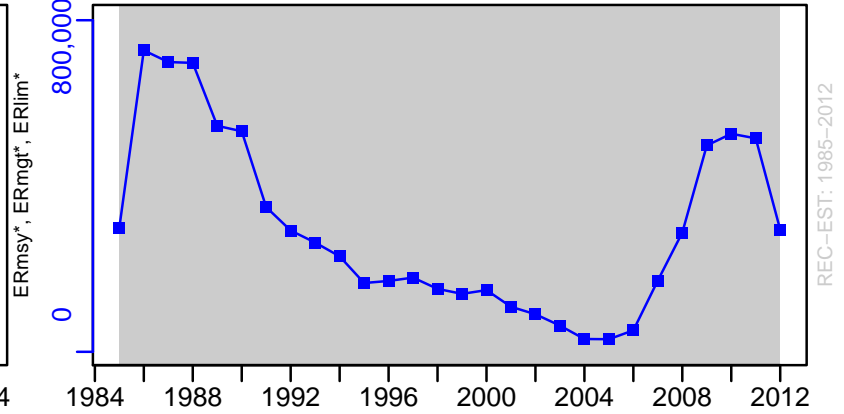
F-1/yr (1985-2015-PARMA)



ER-calc-ratio (1985-2015-PARMA)



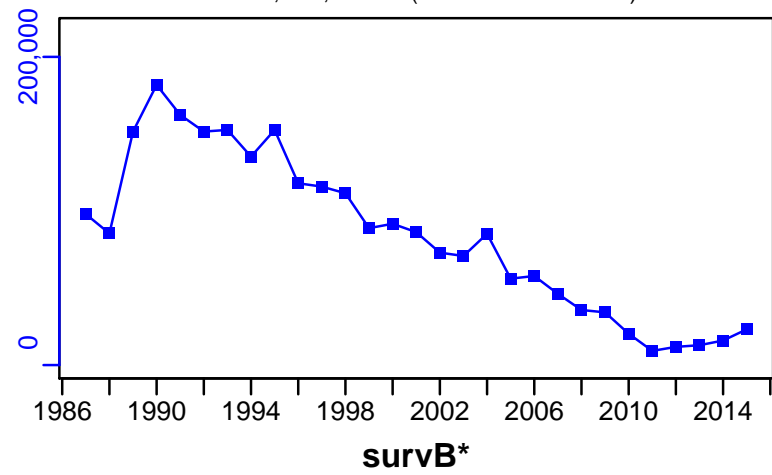
R-E00 (1985-2015-PARMA)



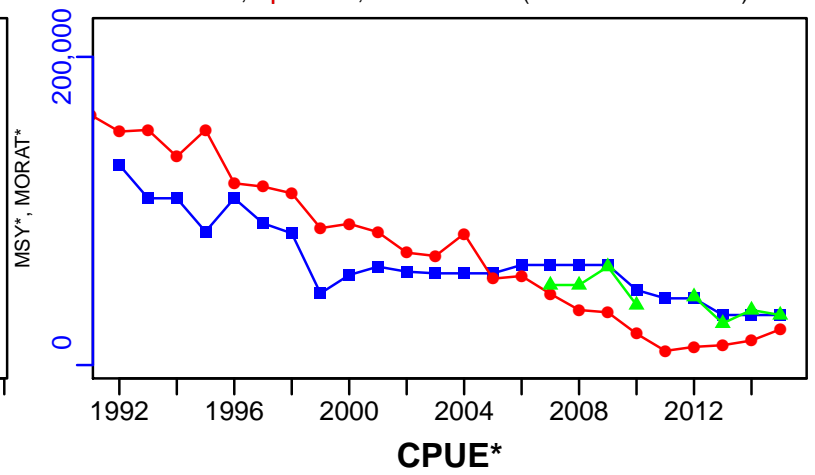


# Southern blue whiting Southern Argentina [SBWHITARGS]

TC-MT, TL\*, RecC\* (1985-2015-PARMA)



TAC-MT, Cpair-MT, Cadvised-MT (1985-2015-PARMA)



EFFORT\*



CdivMSY\*



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

## Southern blue whiting Chile [SBWHITCH]

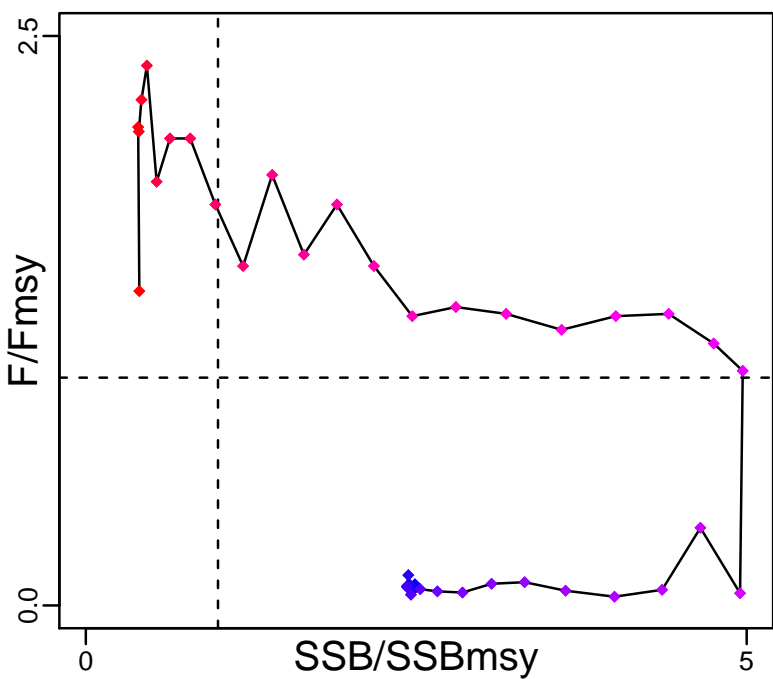
Metadata	
<b>Scientific Name</b>	Micromesistius australis
<b>Current Assess ID</b>	IFOPCH-SBWHITCH-1977-2016-PARMA
<b>Area</b>	Central-Southern Chile
<b>Management Authority</b>	Subsecretaria de Pesca
<b>Assessor</b>	Instituto de Fomento Pesquero - Chilean Fisheries Development Institute
<b>Asmts in RAM</b>	2015, 2016, 2012

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-pr-MT	2016	160,606
<b>Fmsy</b>	Fmsy-extr-1/yr	2016	0.132
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	160,606
<b>Fmgt</b>	Fmgt-1/yr	2015	0.2
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2016	401,516
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2016	0.18
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

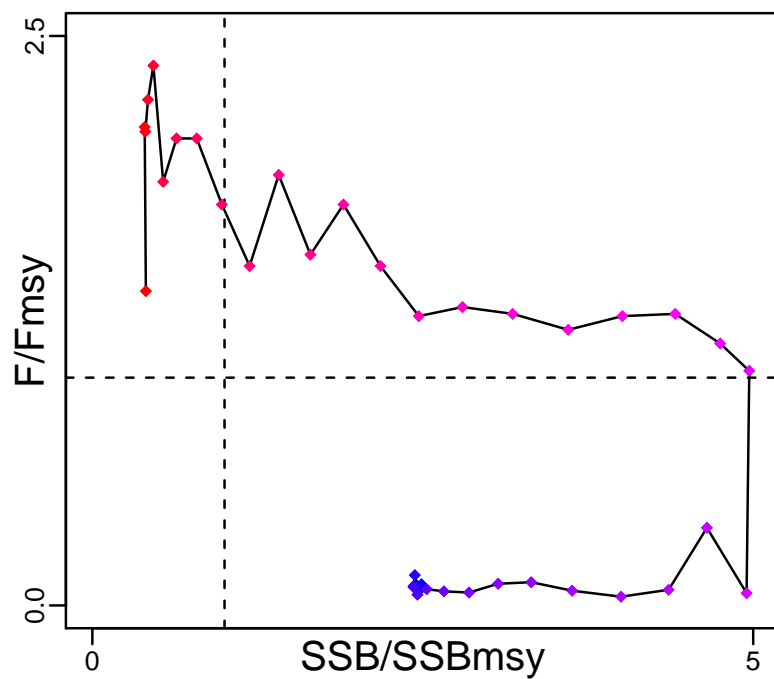
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	159,000	Both	-
<b>SSB</b>	SSB-MT	2016	65,000	Both	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	94,900	-	-
<b>F</b>	F-1/yr	2016	0.183	Both	-
<b>ER</b>	ER-calc-ratio	2016	0.086	-	-
<b>TC</b>	TC-MT	2016	13,900		
<b>TL</b>	TL-MT	2015	16,600		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSBdivSSBmsy-dimensionless	2016	0.405		
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2016	1.38		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	0.405		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	1.02		
<b>ER/ERmgt</b>	-	-	-		

# Southern blue whiting Chile [SBWHITCH]

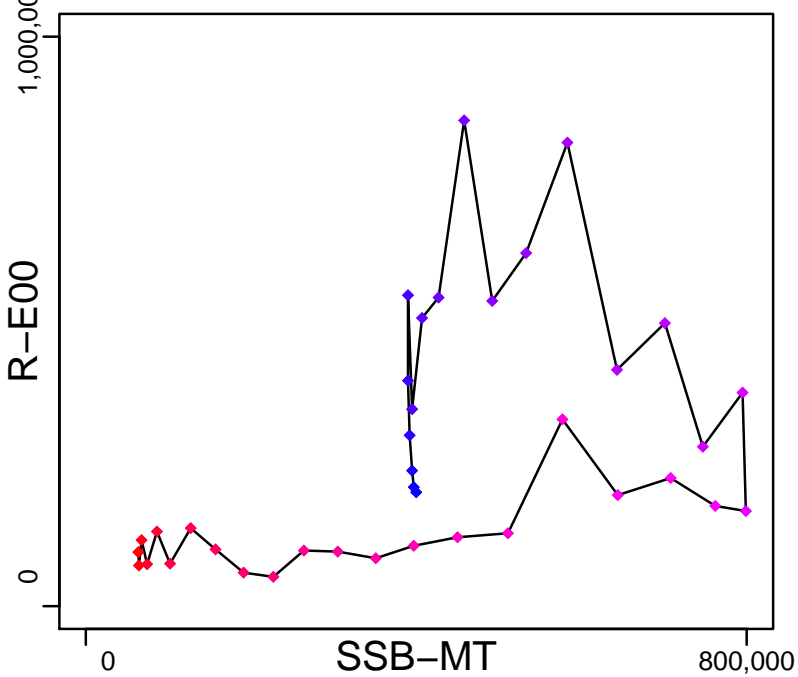
Kobe MSYpref (1977–2016–PARMA)



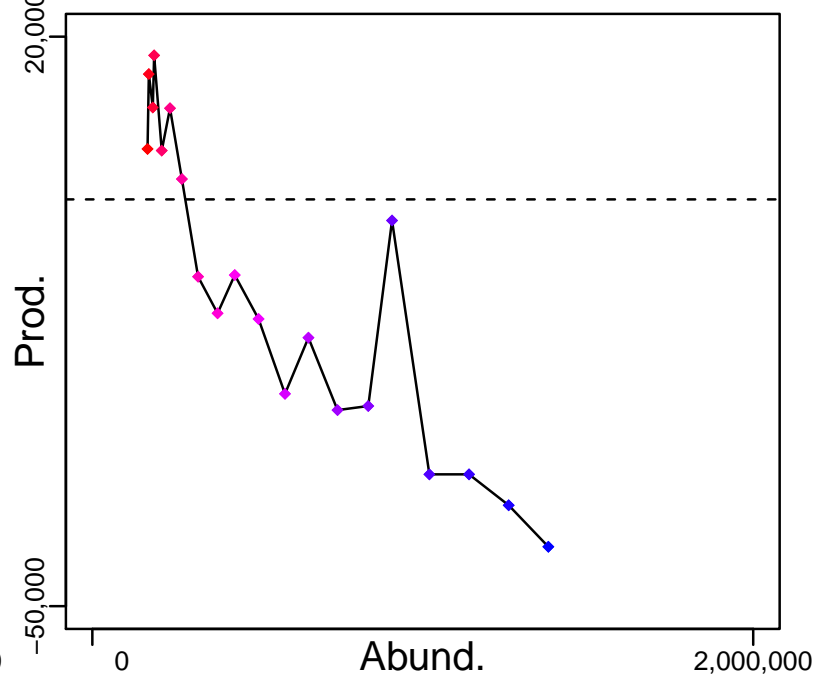
Kobe MGTpref (1977–2016–PARMA)



Spawner Recruit (1977–2016–PARMA)



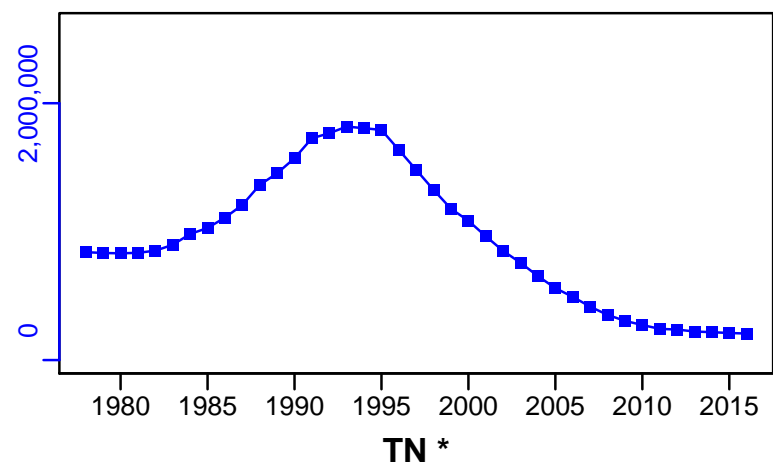
Production (1977–2016–PARMA)



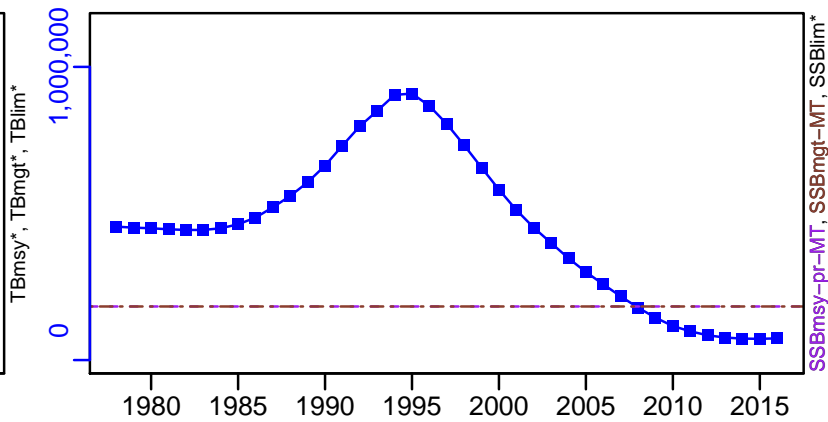
◆ Start Year ◆ End Year \* No Data

# Southern blue whiting Chile [SBWHITCH]

TB-MT (1977-2016-PARMA)



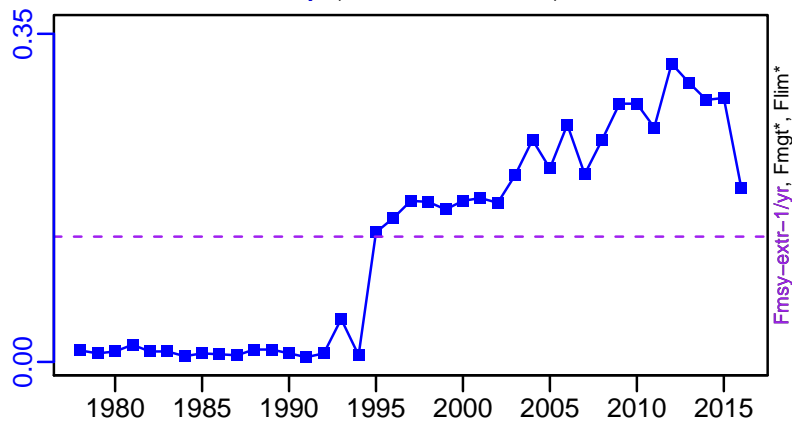
SSB-MT (1977-2016-PARMA)



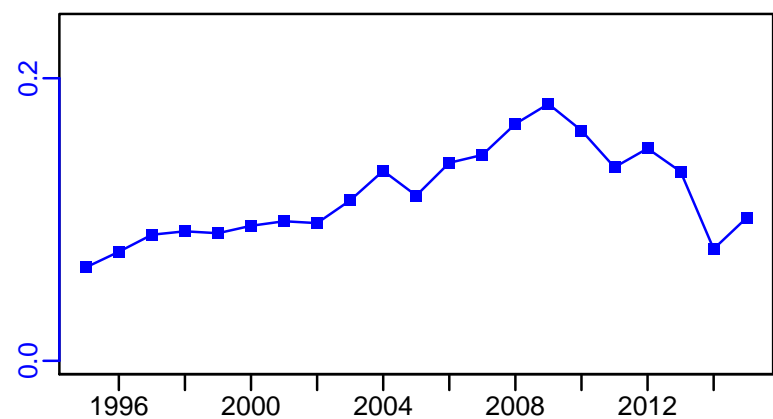
TN \*



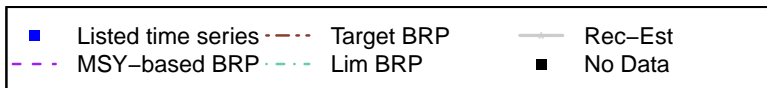
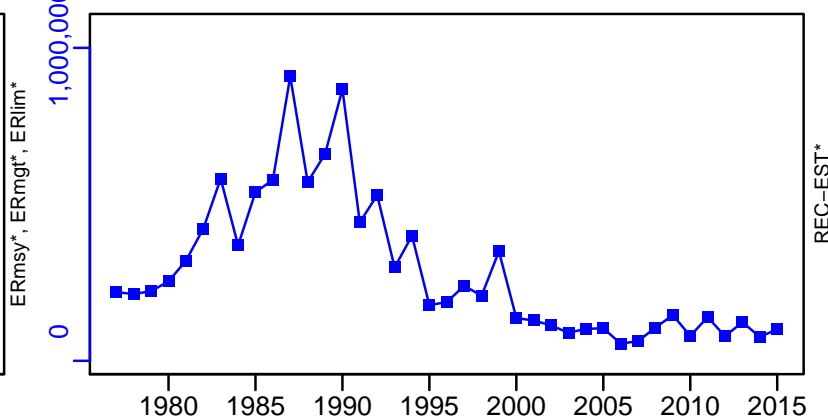
F-1/yr (1977-2016-PARMA)



ER-calc-ratio (1977-2016-PARMA)

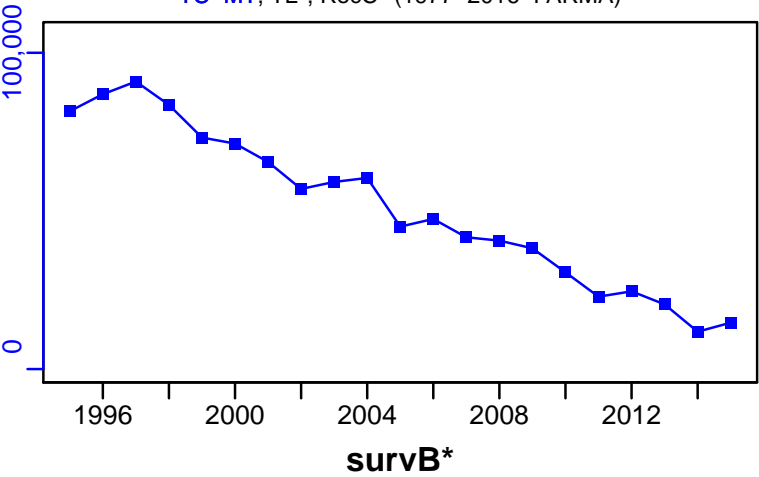


R-E00 (1977-2016-PARMA)

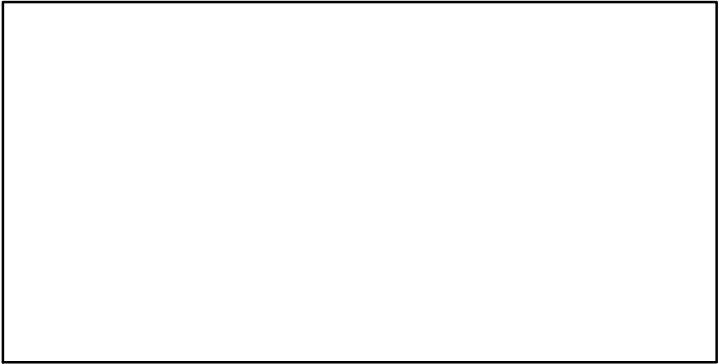
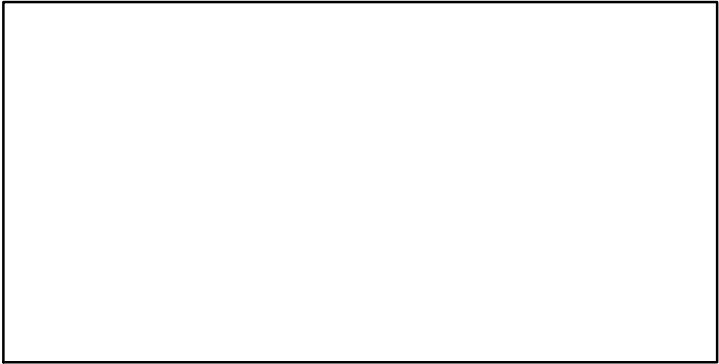
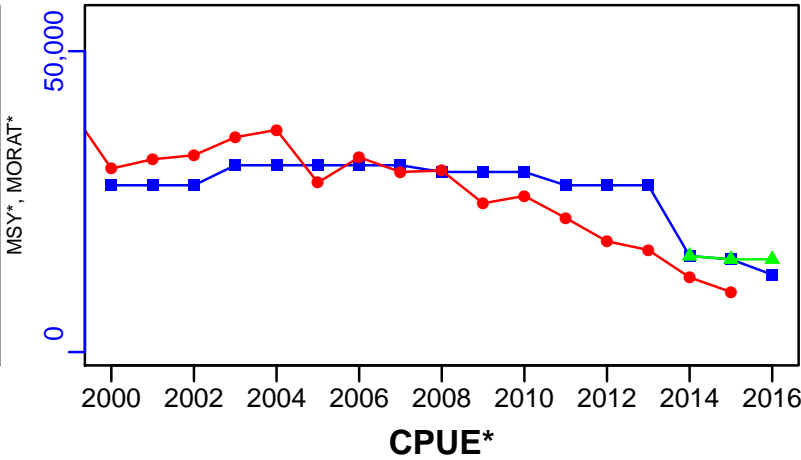


Southern blue whiting Chile [SBWHITCH]

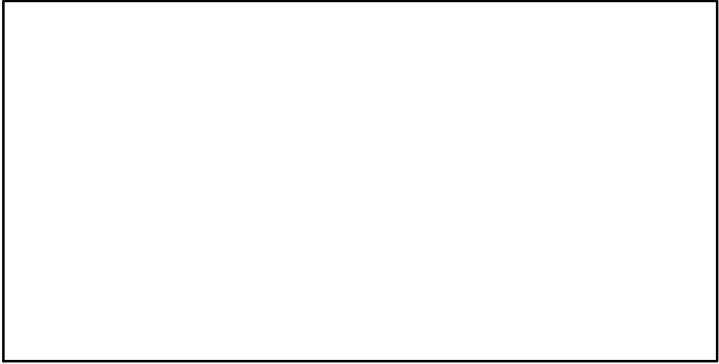
TC-MT, TL\*, RecC\* (1977-2016-PARMA)



TAC-MT, Cpair-MT, Cadvised-MT (1977-2016-PARMA)



EFFORT\*



CdivMSY\*



## Southern hake Chile [SOUTHHAKECH]

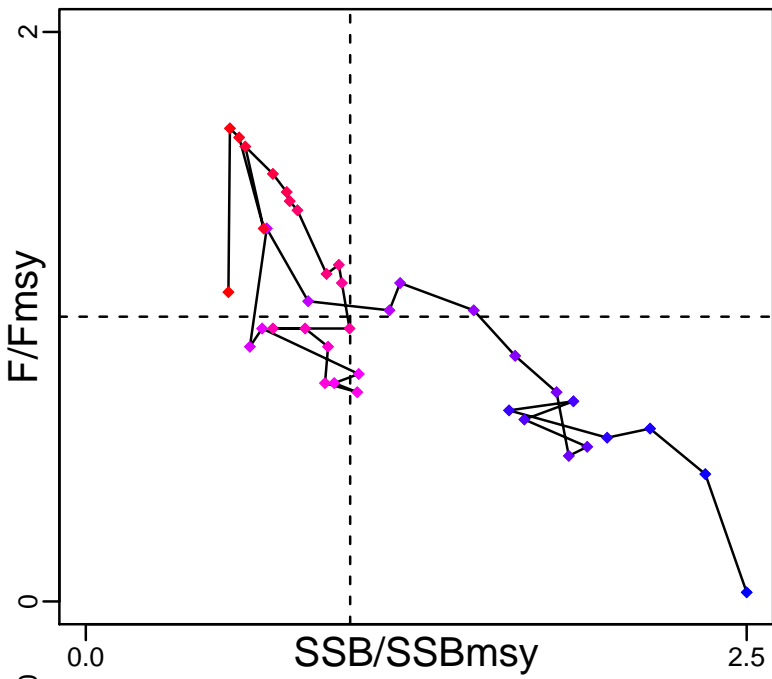
Metadata	
<b>Scientific Name</b>	Merluccius australis
<b>Current Assess ID</b>	IFOPCH-SOUTHHAKECH-1977-2015-PARMA
<b>Area</b>	Central-Southern Chile
<b>Management Authority</b>	Subsecretaria de Pesca
<b>Assessor</b>	Instituto de Fomento Pesquero - Chilean Fisheries Development Institute
<b>Asmts in RAM</b>	2011, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-pr-MT	2015	172,400
<b>Fmsy</b>	Fmsy-pr-1/yr	2015	0.313
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2015	172,400
<b>Fmgt</b>	Fmgt-1/yr	2015	0.313
<b>ERmgt</b>	-	-	-
<b>TB0</b>	TB0-MT	2015	940,000
<b>SSB0</b>	SSB0-MT	2015	431,000
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2015	0.21
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

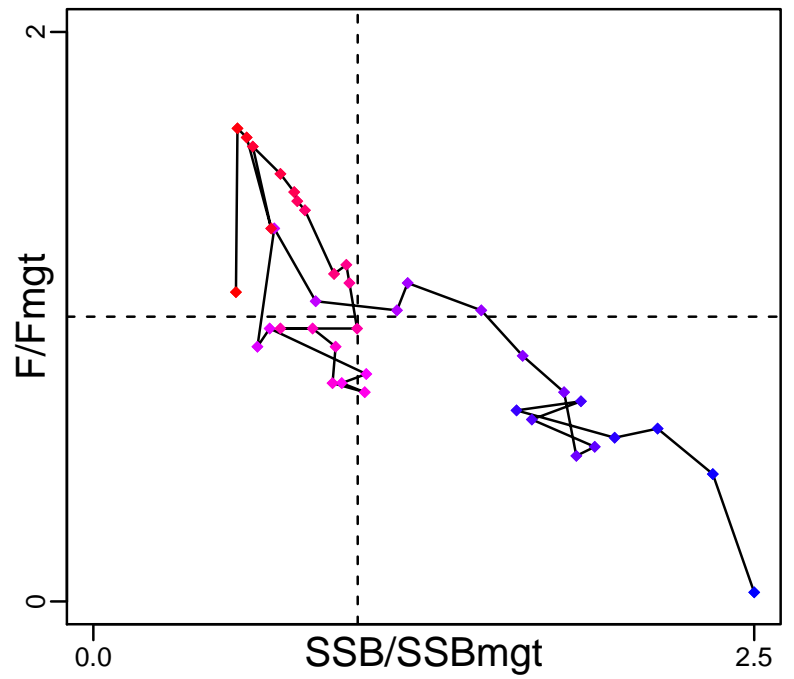
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	294,000	-	-
<b>SSB</b>	SSB-MT	2015	93,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$8.5 \times 10^7$	Both	1
<b>F</b>	F-1/yr	2015	0.34	Both	-
<b>ER</b>	ER-calc-ratio	2015	0.058	-	-
<b>TC</b>	TC-MT	2015	22,800		
<b>TL</b>	TL-MT	2015	16,200		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-pr-MT	2015	0.539		
<b>F/Fmsy</b>	F-1/yr/Fmsy-pr-1/yr	2015	1.086		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2015	0.539		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	1.086		
<b>ER/ERmgt</b>	-	-	-		

# Southern hake Chile [SOUTHHAKECH]

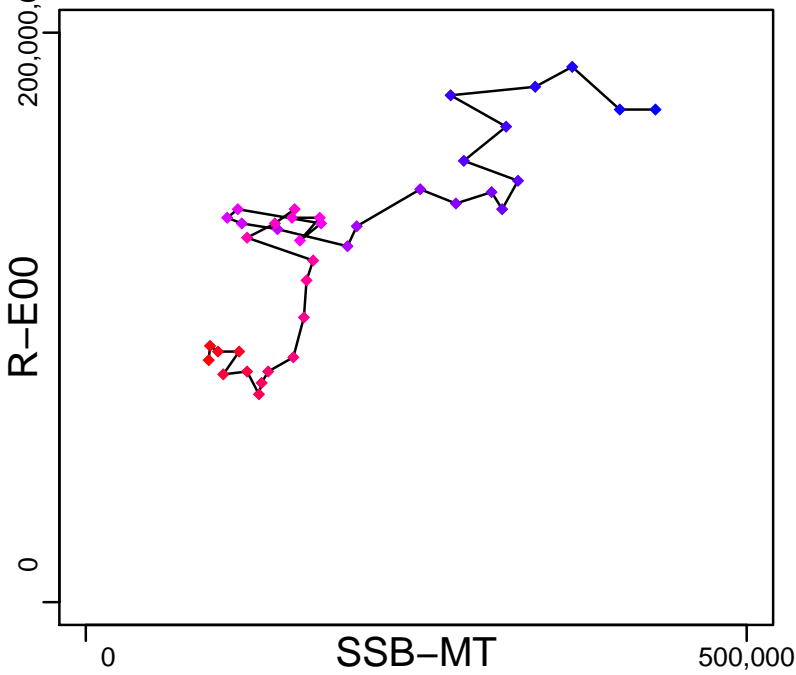
Kobe MSYpref (1977–2015–PARMA)



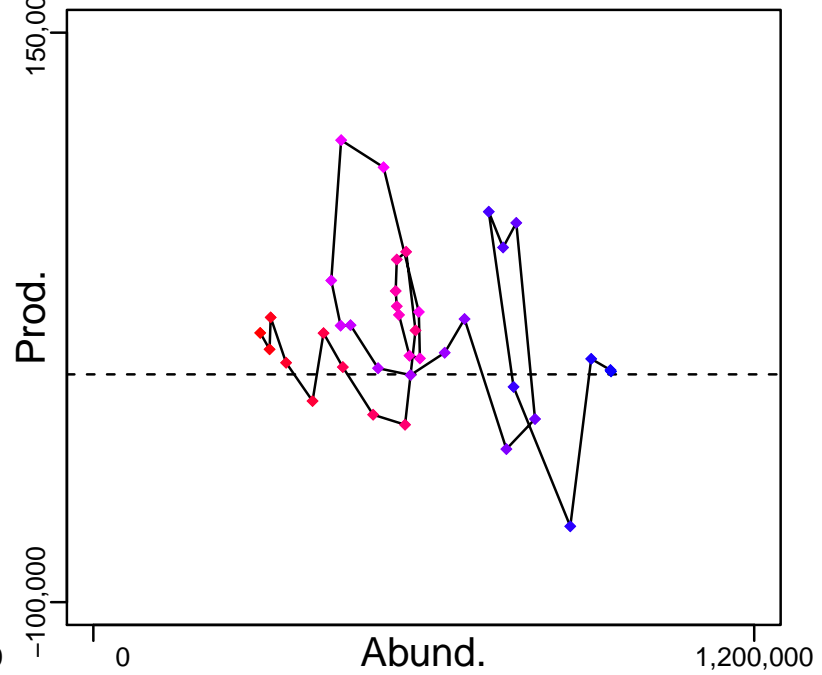
Kobe MGTpref (1977–2015–PARMA)



Spawner Recruit (1977–2015–PARMA)



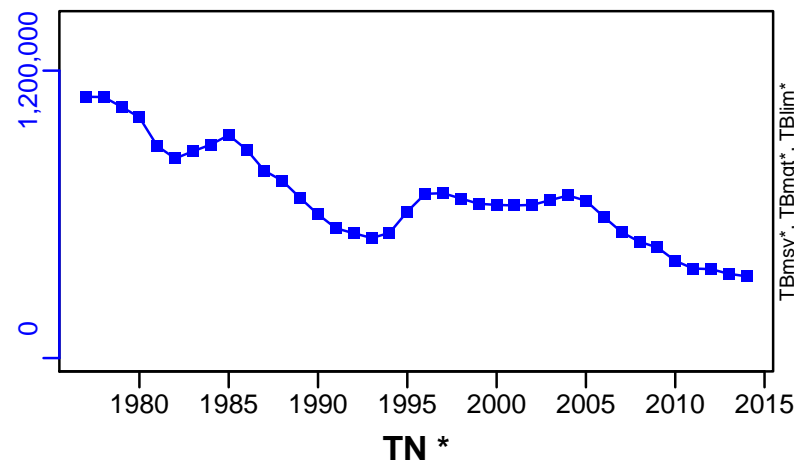
Production (1977–2015–PARMA)



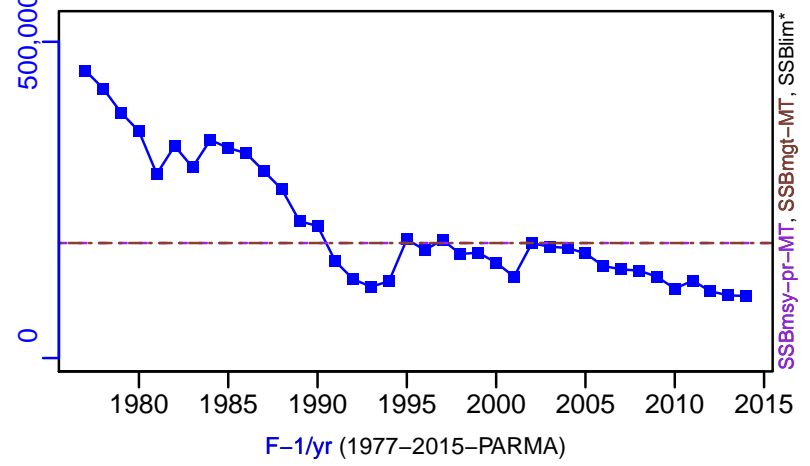
◆ Start Year ◆ End Year \* No Data

# Southern hake Chile [SOUTHHAKECH]

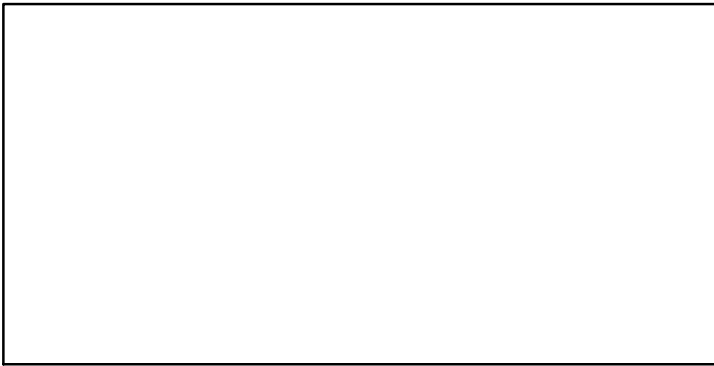
TB-MT (1977-2015-PARMA)



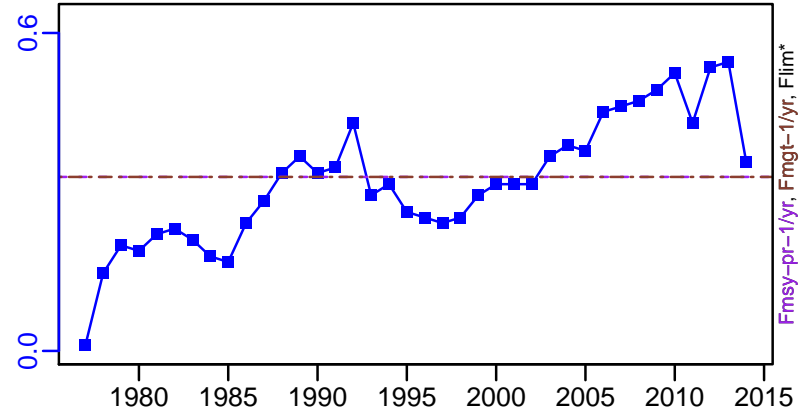
SSB-MT (1977-2015-PARMA)



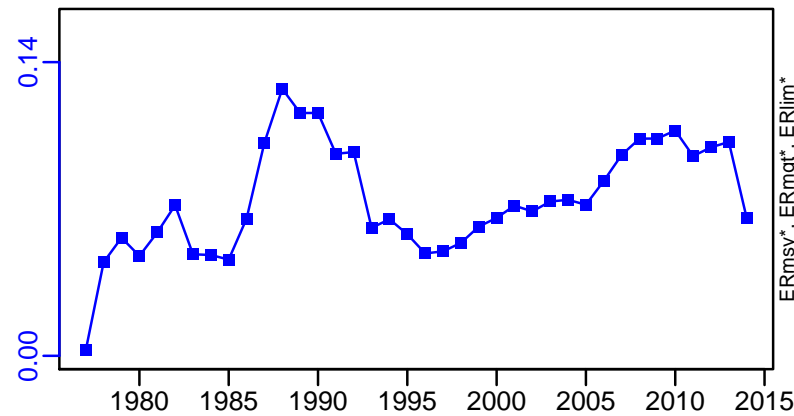
TN \*



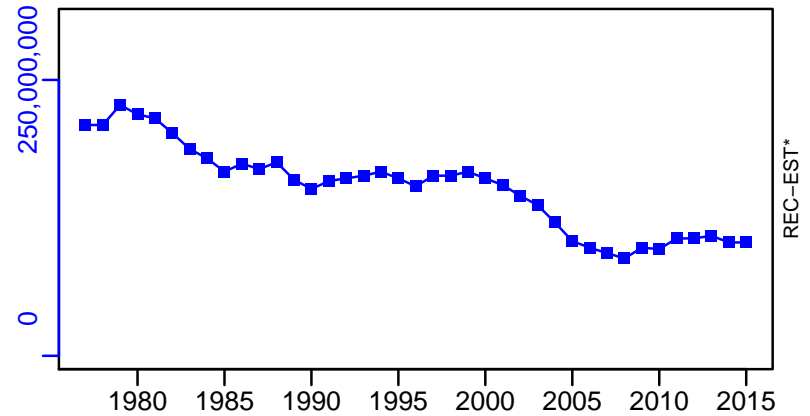
F-1/yr (1977-2015-PARMA)



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



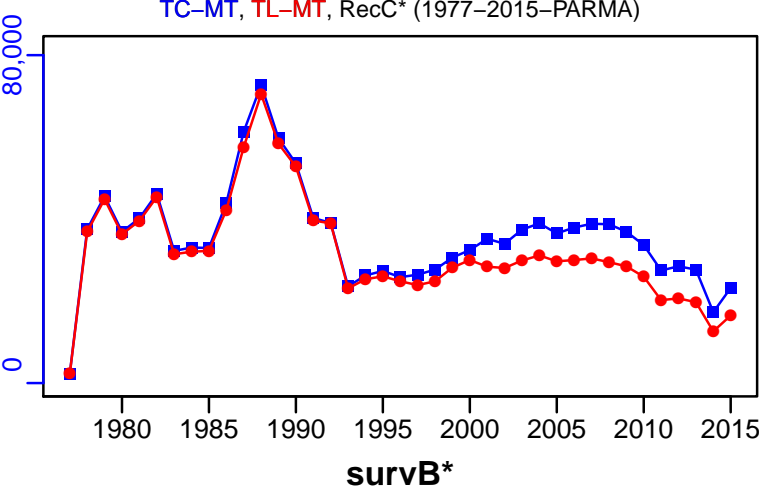
R-E00 (1977-2015-PARMA)



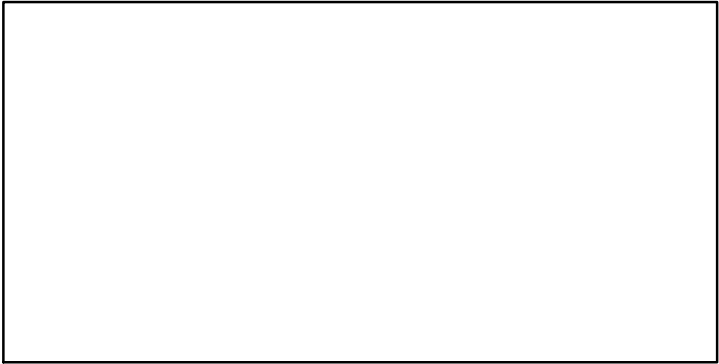
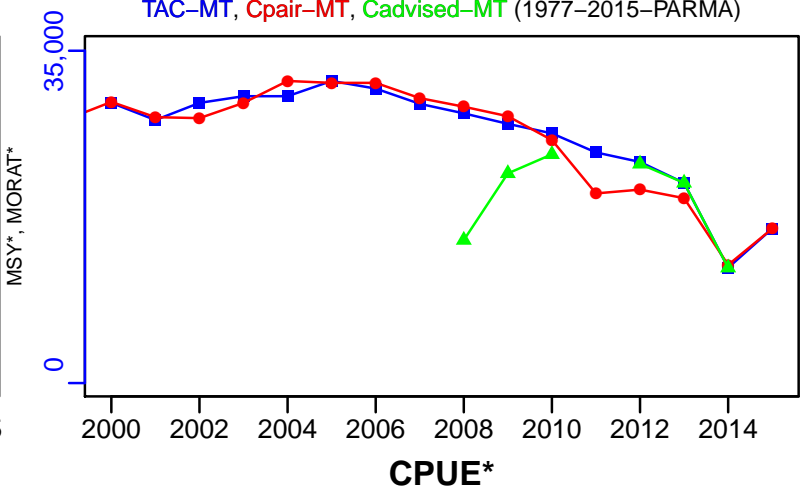


Southern hake Chile [SOUTHHAKECH]

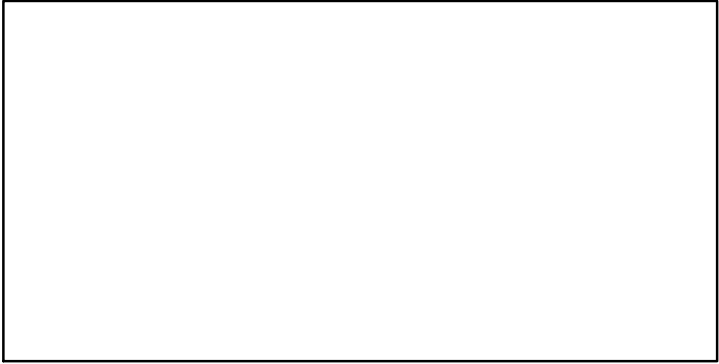
TC-MT, TL-MT, RecC\* (1977-2015-PARMA)



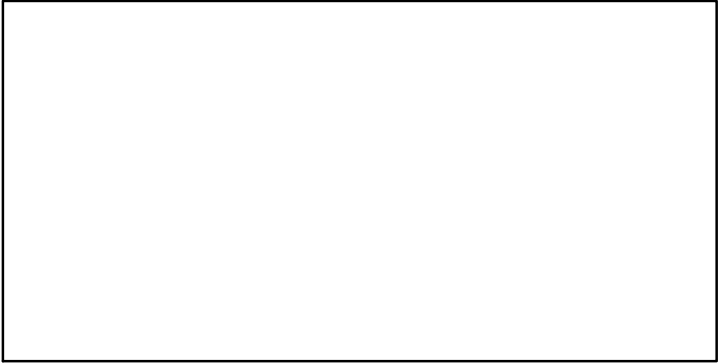
TAC-MT, Cpair-MT, Cadvised-MT (1977-2015-PARMA)



EFFORT\*



CdivMSY\*



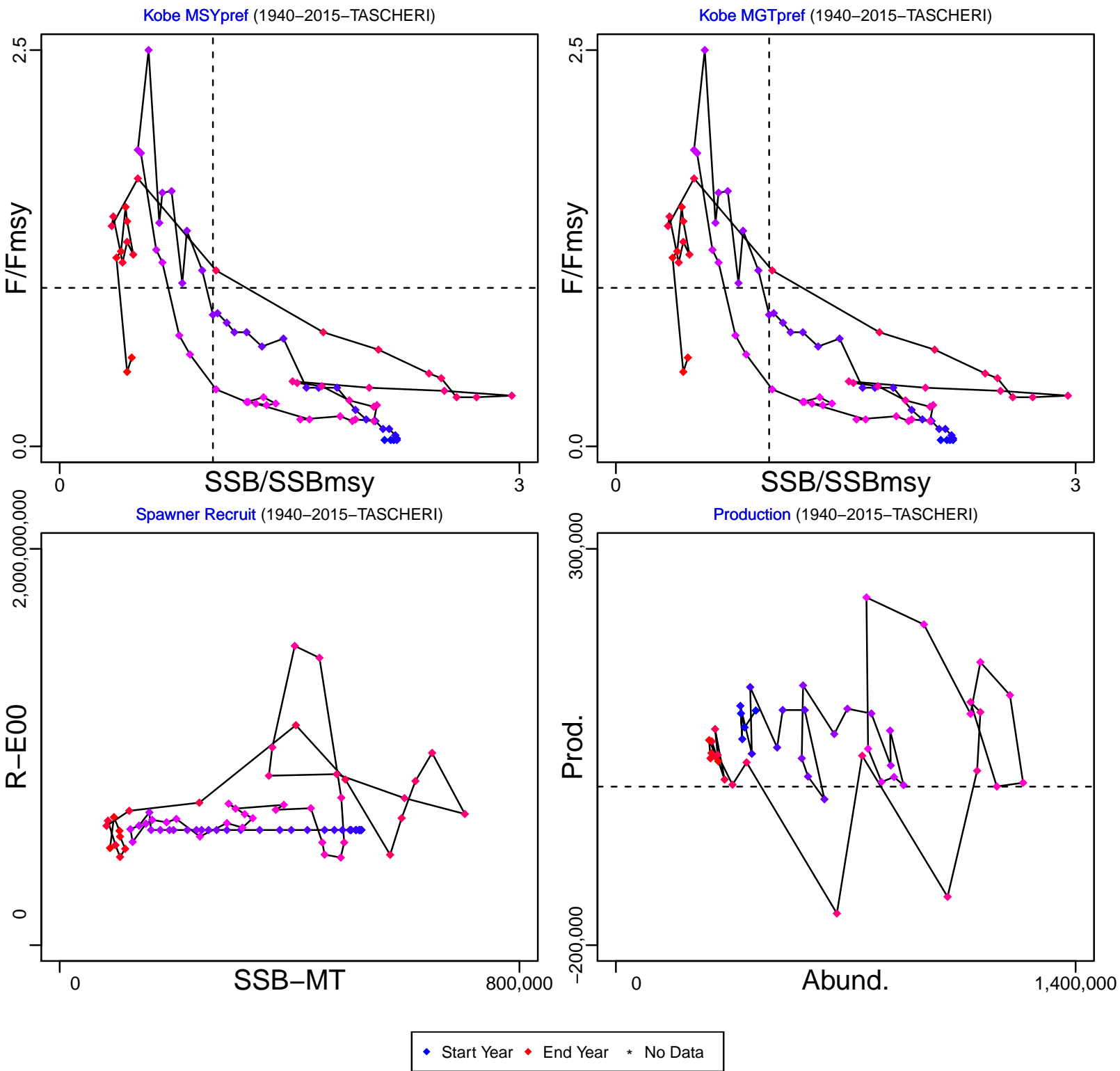
## South Pacific Hake Chile [SPHAKETCH]

Metadata	
<b>Scientific Name</b>	Merluccius gayi
<b>Current Assess ID</b>	IFOPCH-SPHAKETCH-1940-2015-TASCHERI
<b>Area</b>	Central-Southern Chile
<b>Management Authority</b>	Subsecretaria de Pesca
<b>Assessor</b>	Instituto de Fomento Pesquero - Chilean Fisheries Development Institute
<b>Asmts in RAM</b>	2015, 2012

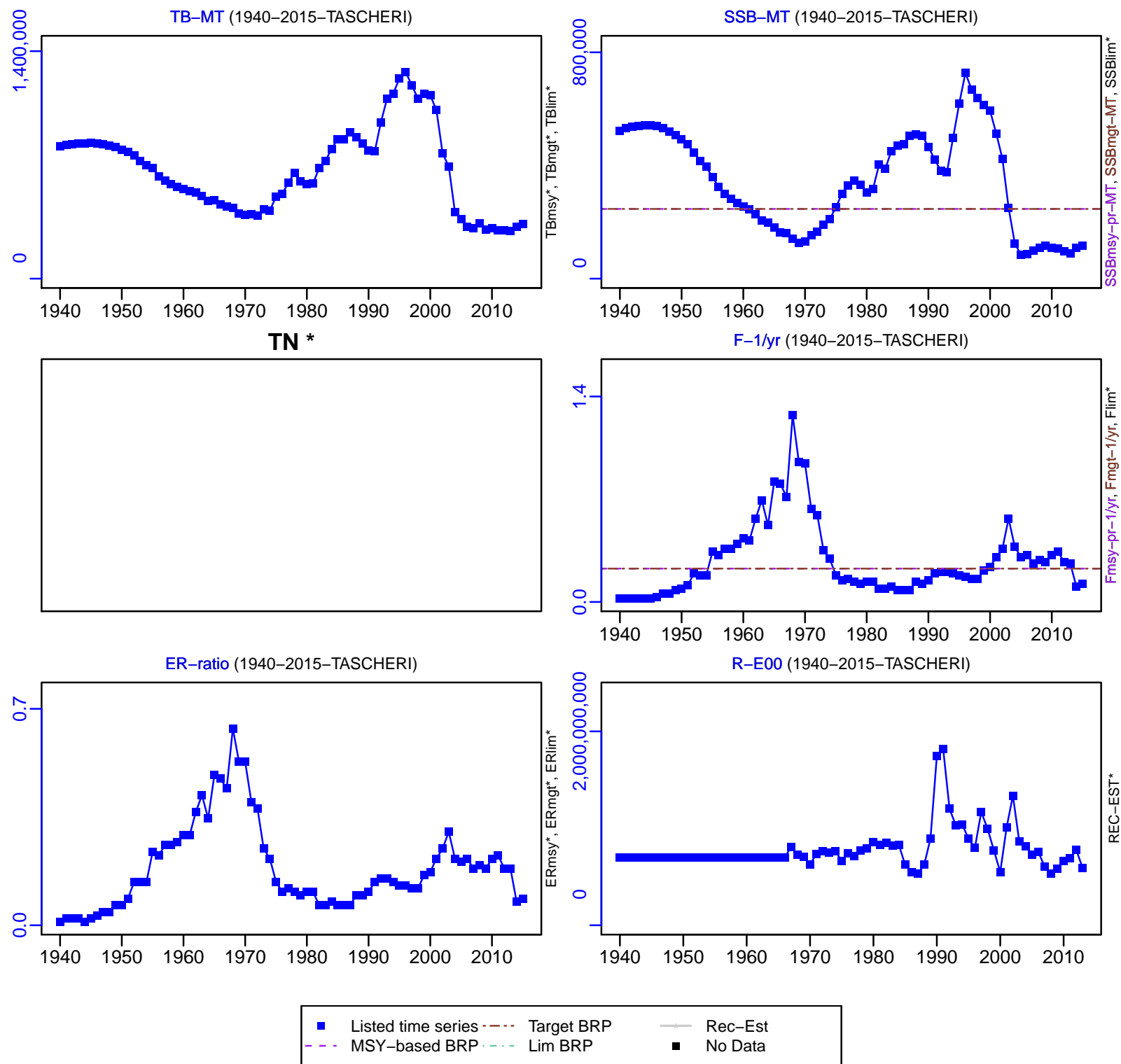
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-pr-MT	2015	238,840
<b>Fmsy</b>	Fmsy-pr-1/yr	2015	0.2
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2015	238,840
<b>Fmgt</b>	Fmgt-1/yr	2015	0.2
<b>ERMgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2015	597,100
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2015	0.33
<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	326,000	Both	2+
<b>SSB</b>	SSB-MT	2015	112,000	-	2+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$4.9 \times 10^8$	-	2
<b>F</b>	F-1/yr	2015	0.11	-	-
<b>ER</b>	ER-ratio	2015	0.08	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2015	19,300		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSBdivSSBmsy-dimensionless	2015	0.47		
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2015	0.56		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2015	0.469		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	0.55		
<b>ER/ERMgt</b>	-	-	-		

# South Pacific Hake Chile [SPHAKECH]

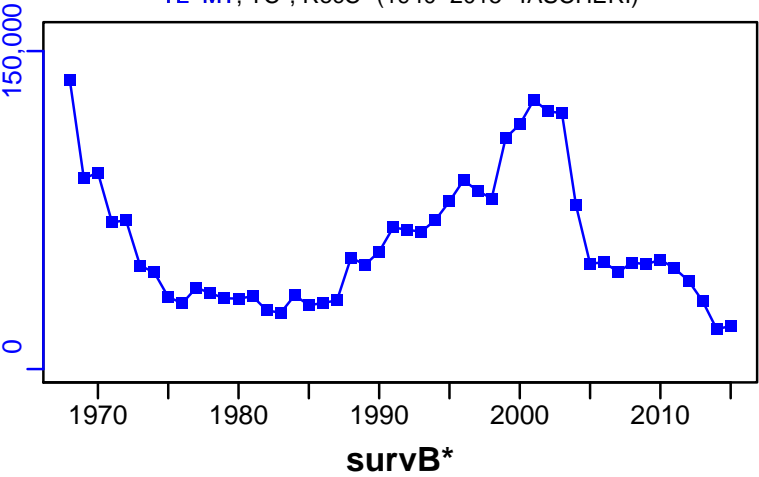


# South Pacific Hake Chile [SPHAKECH]

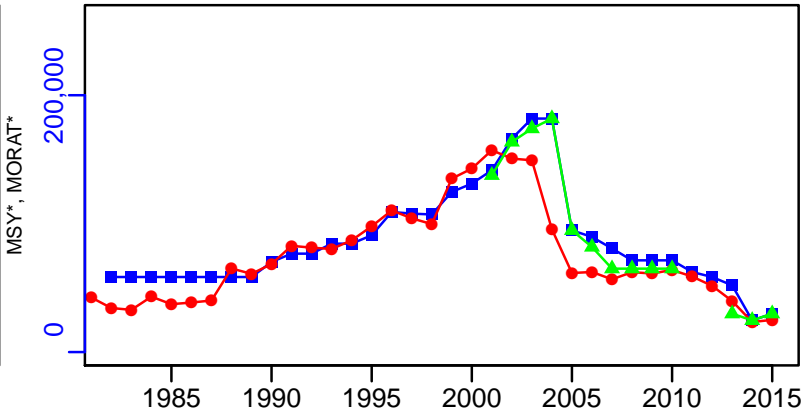


South Pacific Hake Chile [SPHAKECH]

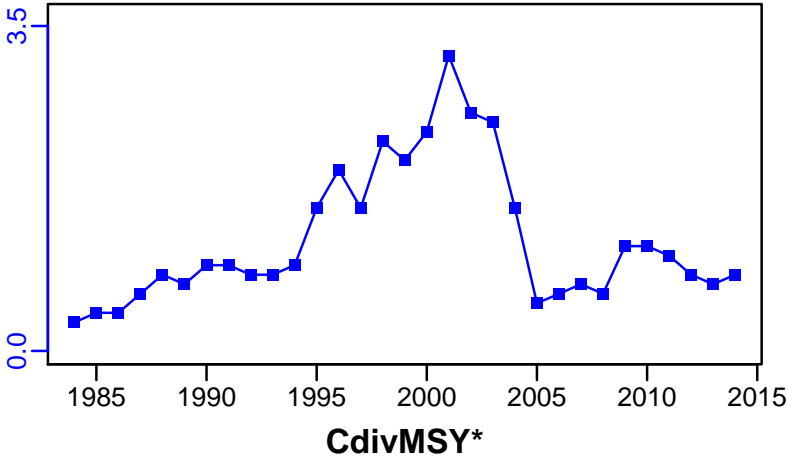
TL-MT, TC\*, RecC\* (1940-2015-TASCHERI)



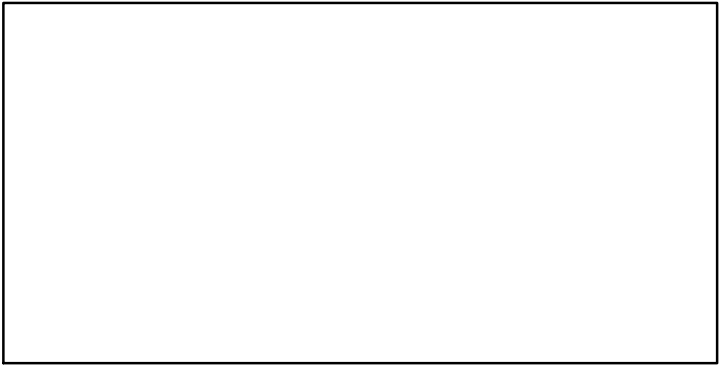
TAC-MT, Cpair-MT, Cadvised-MT (1940-2015-TASCHERI)



CPUE-index (1940-2015-TASCHERI)



EFFORT\*



CdivMSY\*



## Southern sardine Chile [SSARDCH]

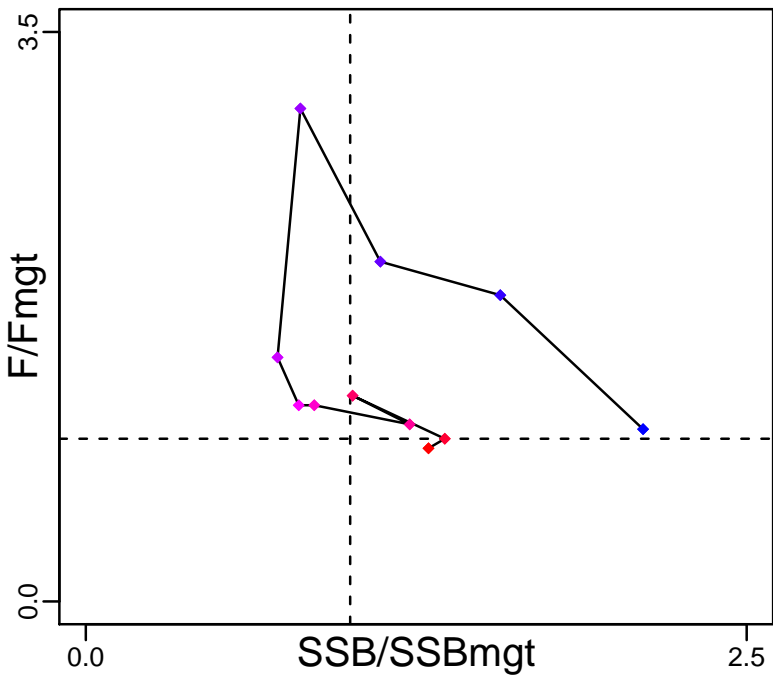
Metadata	
<b>Scientific Name</b>	Sprattus fuegensis
<b>Current Assess ID</b>	IFOPCH-SSARDCH-2006-2016-PARMA
<b>Area</b>	Central-Southern Chile
<b>Management Authority</b>	Subsecretaria de Pesca
<b>Assessor</b>	Instituto de Fomento Pesquero - Chilean Fisheries Development Institute
<b>Asmts in RAM</b>	2012, 2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	32,400
<b>Fmgt</b>	Fmgt-1/yr	2016	0.34
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2016	1.1
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

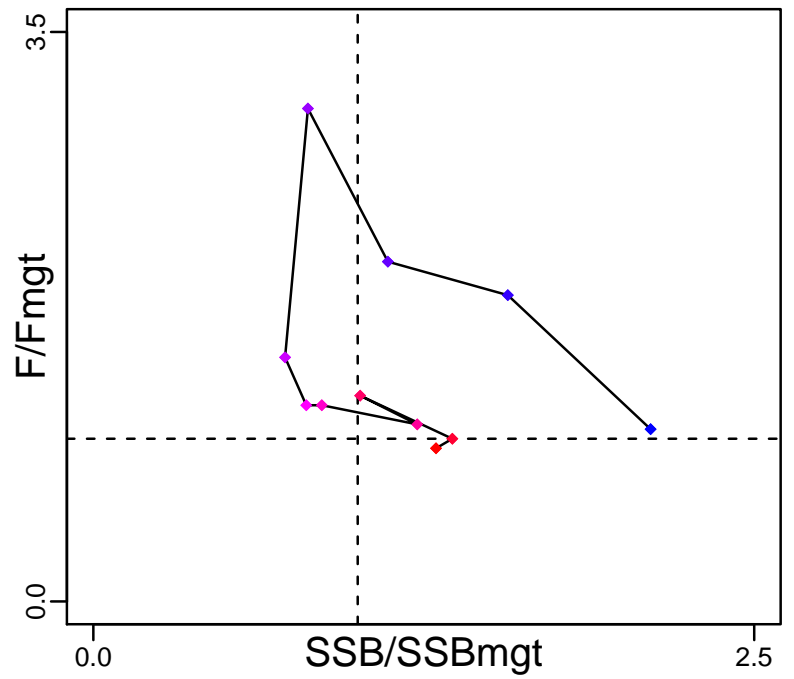
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	140,000	-	-
<b>SSB</b>	SSB-MT	2016	42,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	8,080,000	-	-
<b>F</b>	F-1/yr	2016	0.32	-	-
<b>ER</b>	ER-calc-ratio	2016	0.143	-	-
<b>TC</b>	TC-MT	2012	14,300		
<b>TL</b>	TL-MT	2016	20,000		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	1.296		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.941		
<b>ER/ERmgt</b>	-	-	-		

# Southern sardine Chile [SSARDCH]

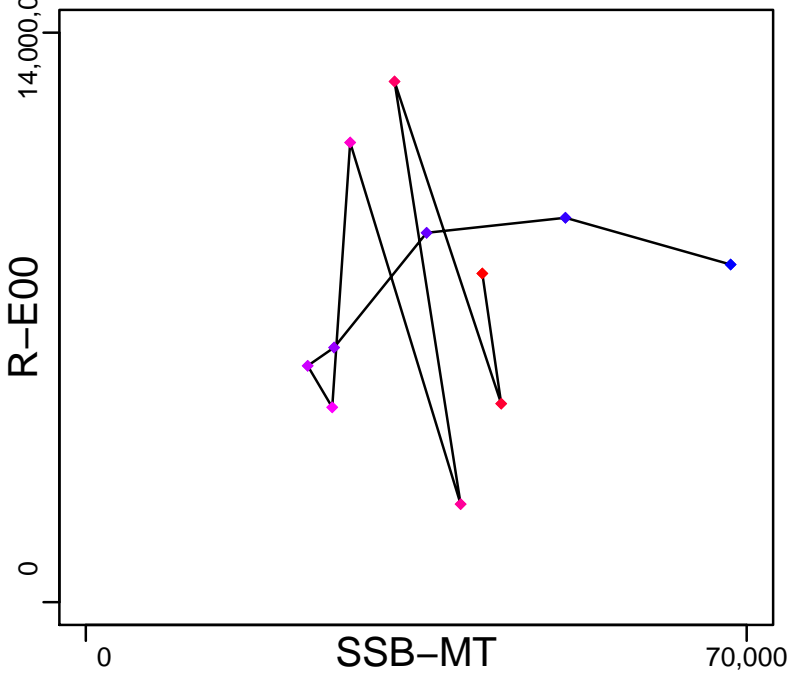
Kobe MSYpref (2006–2016–PARMA)



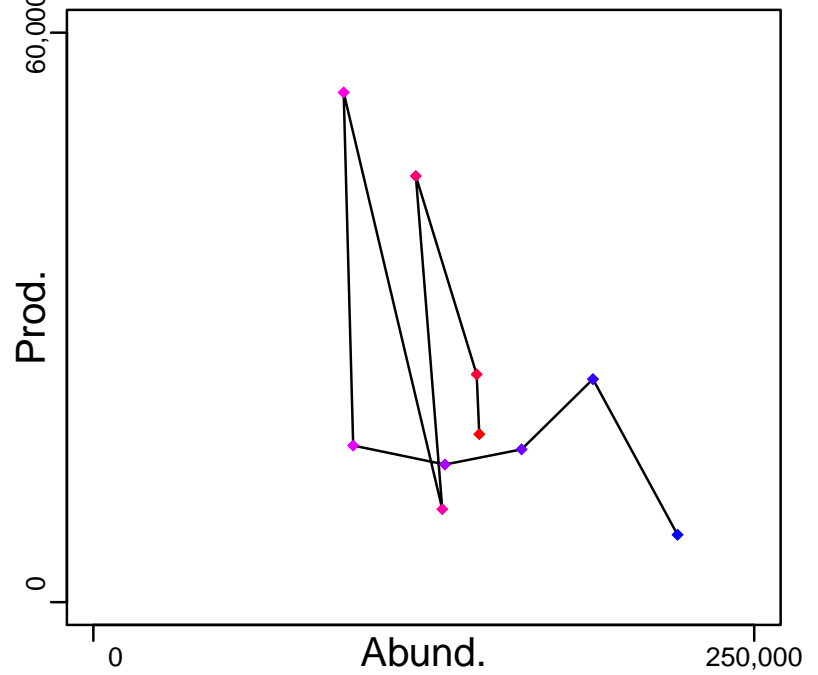
Kobe MGTpref (2006–2016–PARMA)



Spawner Recruit (2006–2016–PARMA)

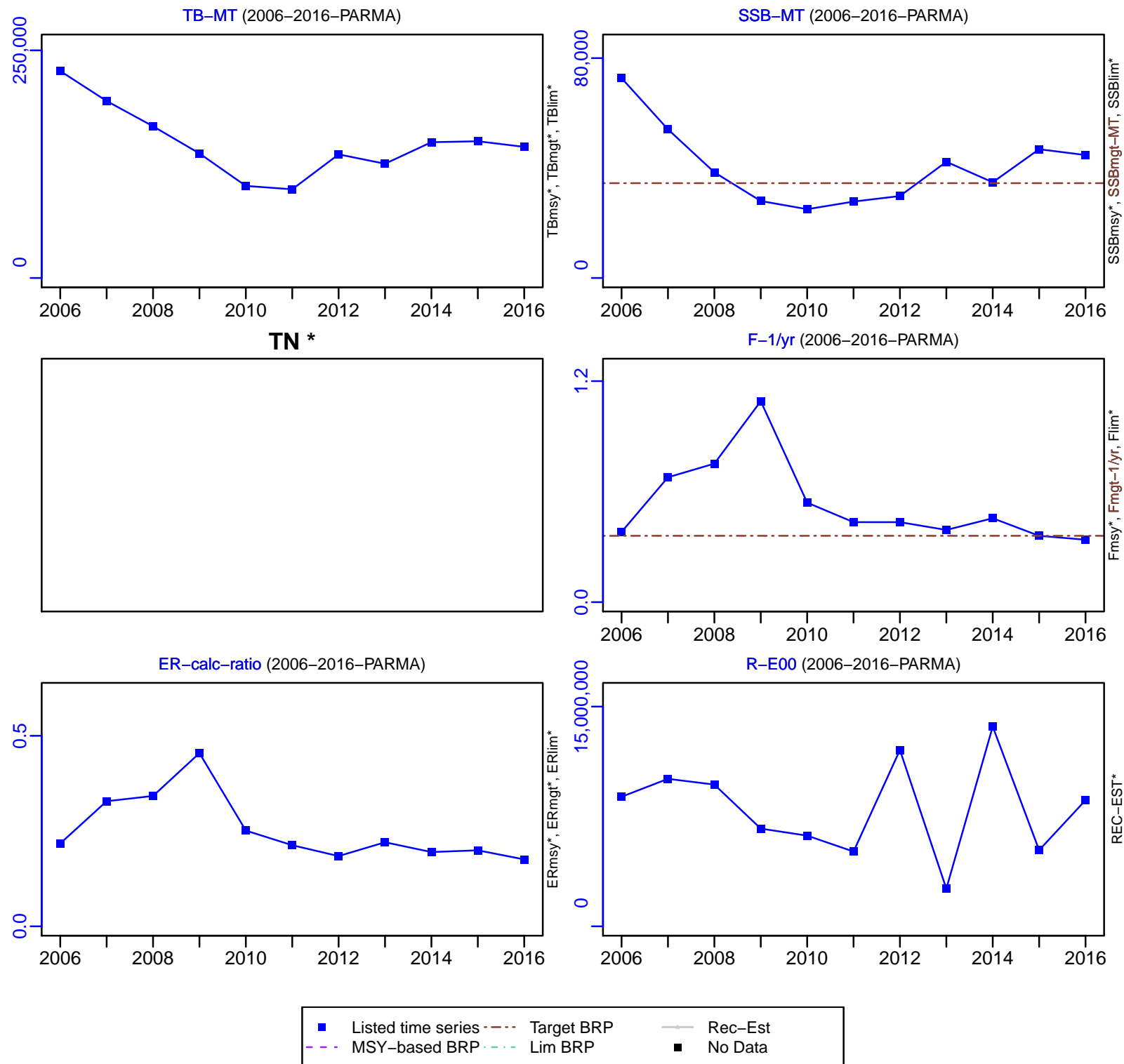


Production (2006–2016–PARMA)



◆ Start Year ◆ End Year \* No Data

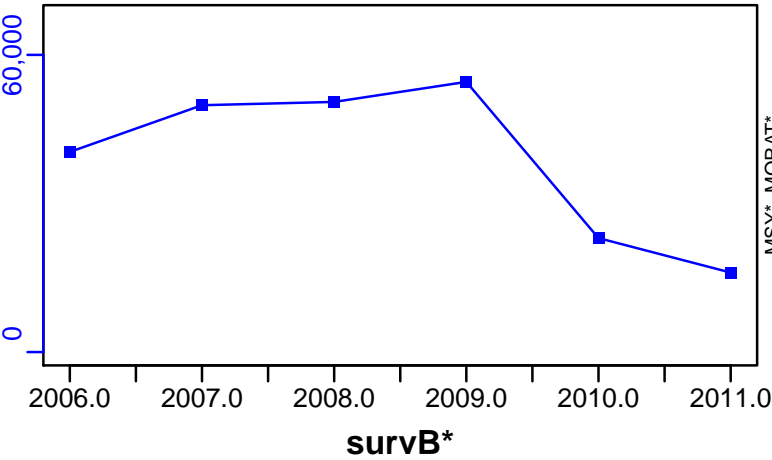
# Southern sardine Chile [SSARDCH]



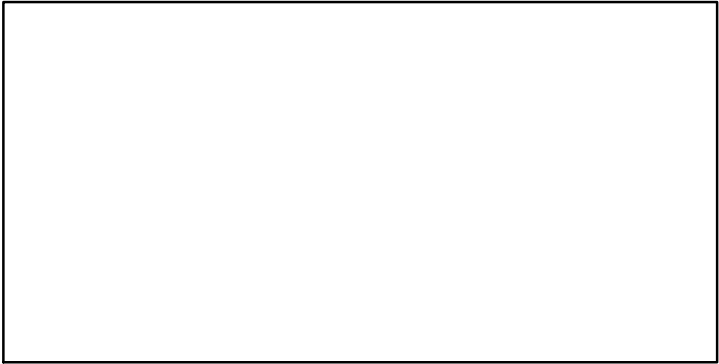
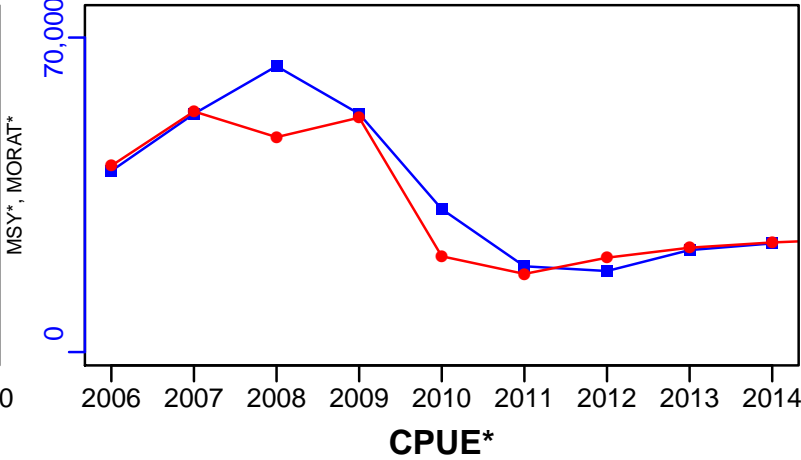


Southern sardine Chile [SSARDCH]

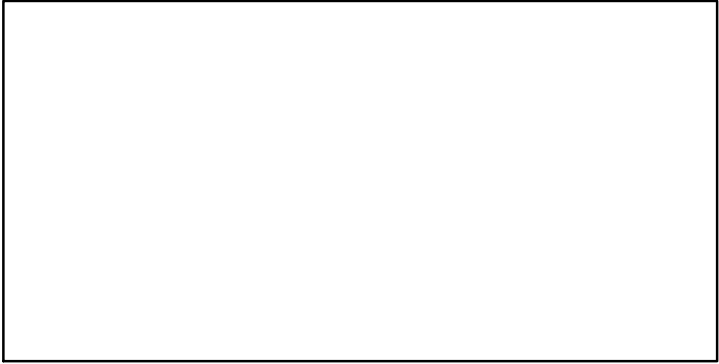
TC-MT, TL\*, RecC\* (2006-2012-CHING)



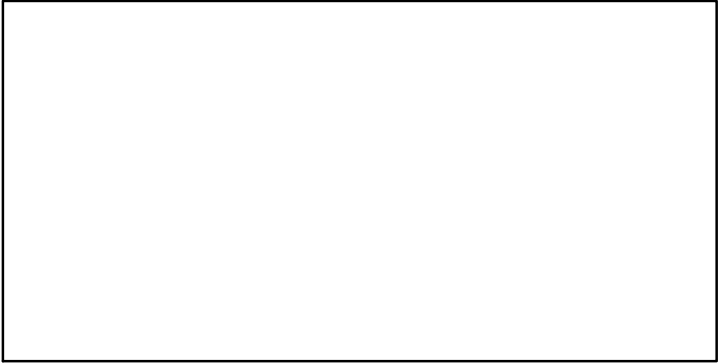
TAC-MT, Cpair-MT, Cadv\* (2006-2016-PARMA)



EFFORT\*



CdivMSY\*



## Yellownose skate Central-Southern Chile [YNOSESKACSCH]

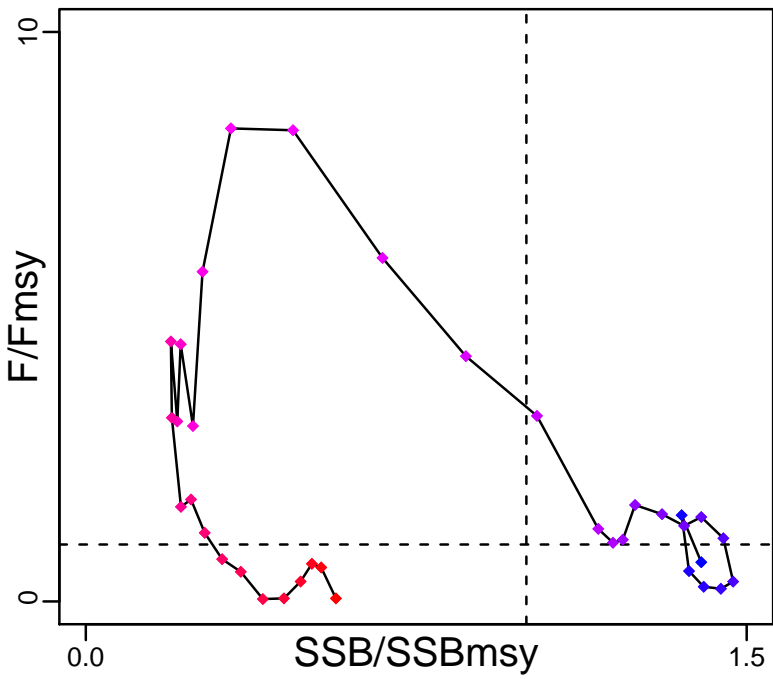
Metadata	
<b>Scientific Name</b>	Zearaja chilensis
<b>Current Assess ID</b>	IFOPCH-YNOSESKACSCH-1978-2014-PARMA
<b>Area</b>	Central-Southern Chile
<b>Management Authority</b>	Subsecretaria de Pesca
<b>Assessor</b>	Instituto de Fomento Pesquero - Chilean Fisheries Development Institute
<b>Asmts in RAM</b>	2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-pr-MT	2014	1797
<b>Fmsy</b>	Fmsy-1/yr	2014	0.062
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2014	1797
<b>Fmgt</b>	Fmgt-1/yr	2014	0.062
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2014	3993
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2014	0.14
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2014	898
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

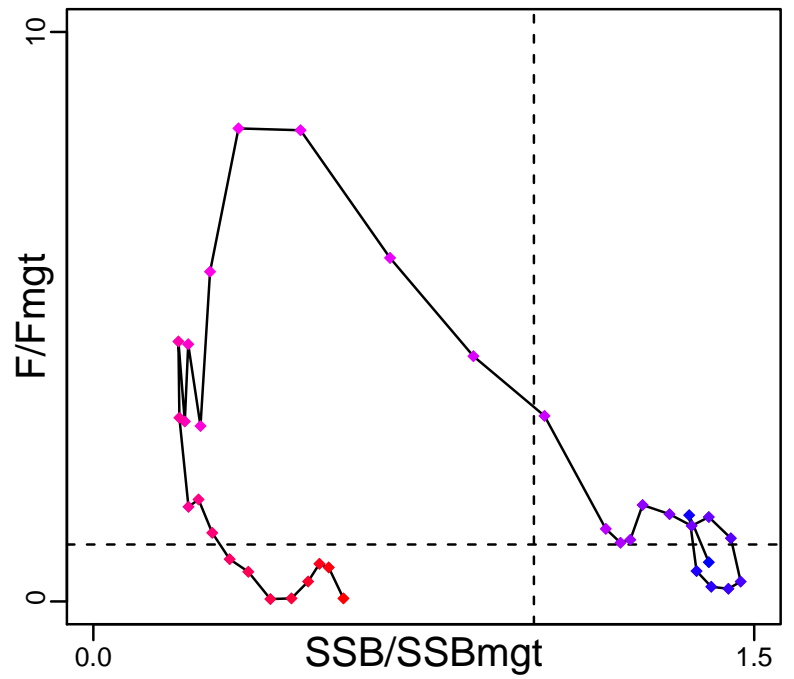
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2014	6090	-	-
<b>SSB</b>	SSB-MT	2014	1020	Females	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2014	253,000	-	1
<b>F</b>	F-1/yr	2014	0.003	Females	-
<b>ER</b>	ER-calc-ratio	2014	0.002	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2014	15		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-pr-MT	2014	0.568		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2014	0.053		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2014	0.568		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	0.053		
<b>ER/ERmgt</b>	-	-	-		

# Yellownose skate Central–Southern Chile [YNOSESKACSCH]

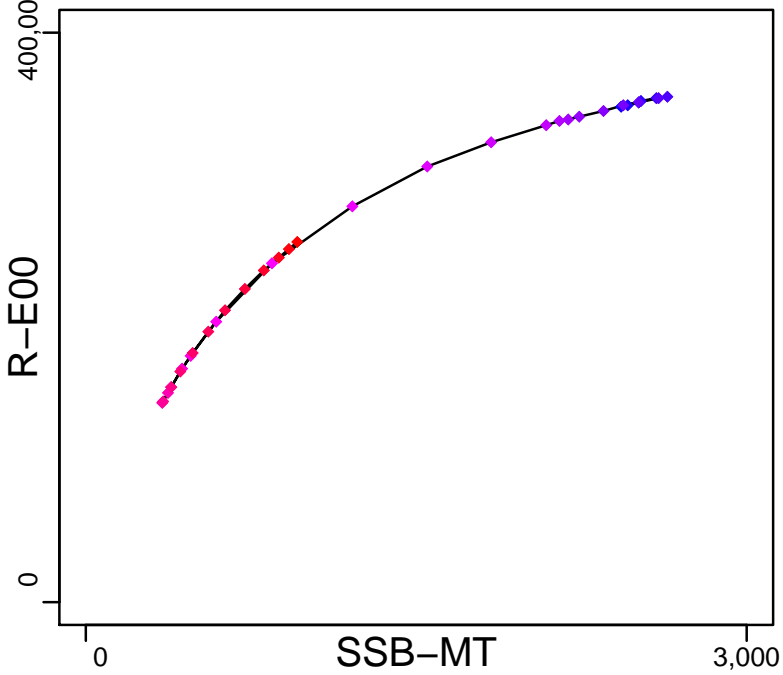
Kobe MSY<sub>pref</sub> (1978–2014–PARMA)



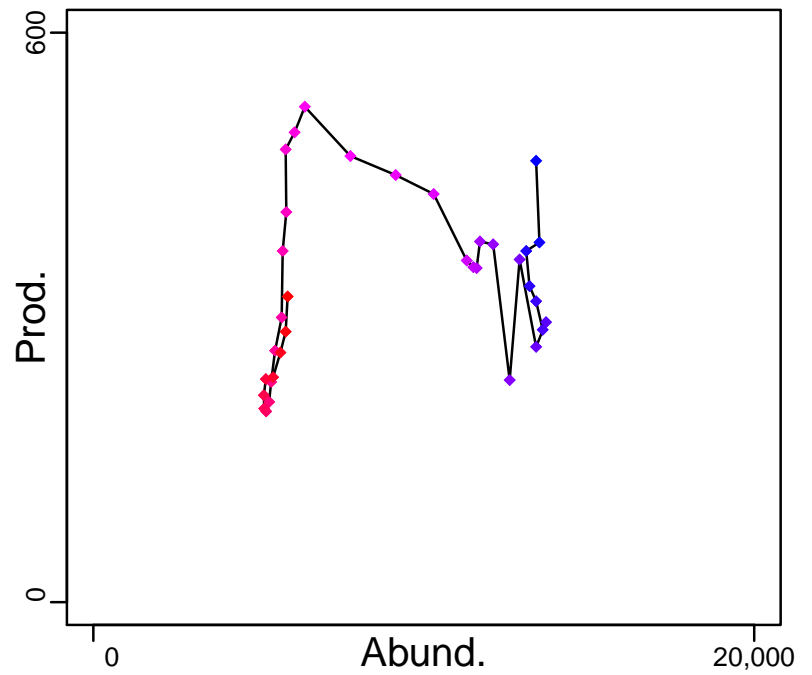
Kobe MGT<sub>pref</sub> (1978–2014–PARMA)



Spawner Recruit (1978–2014–PARMA)



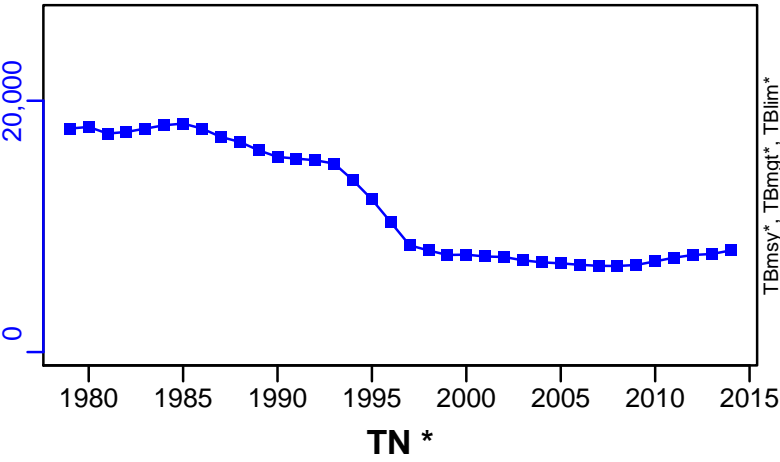
Production (1978–2014–PARMA)



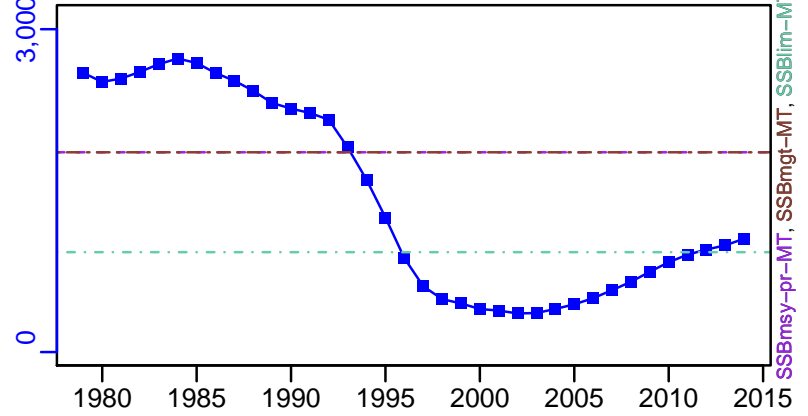
◆ Start Year ◆ End Year \* No Data

# Yellownose skate Central–Southern Chile [YNOSESKACSCH]

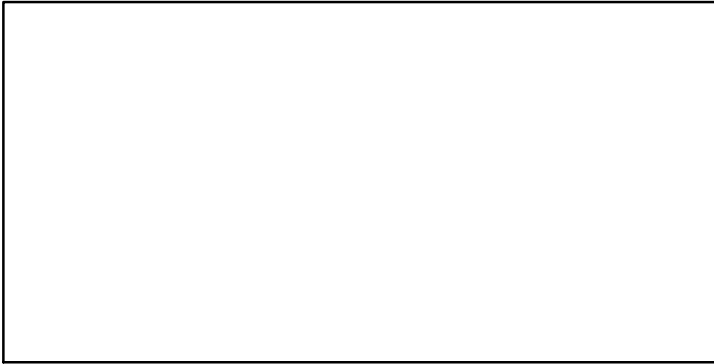
TB–MT (1978–2014–PARMA)



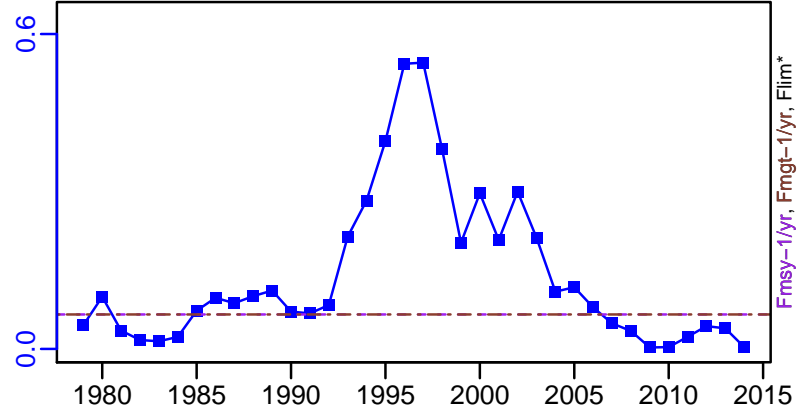
SSB–MT (1978–2014–PARMA)



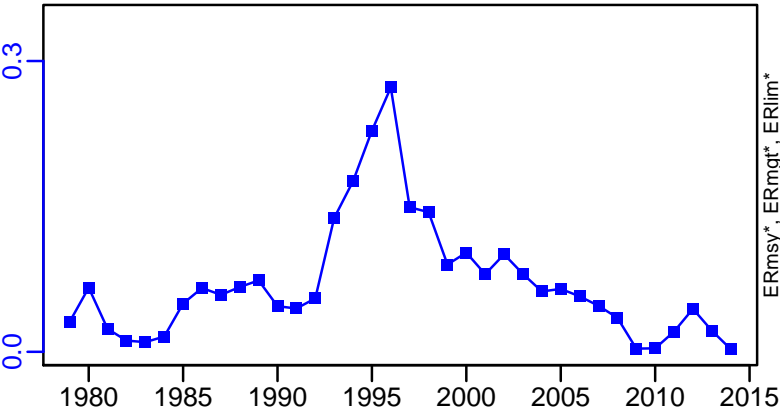
TN \*



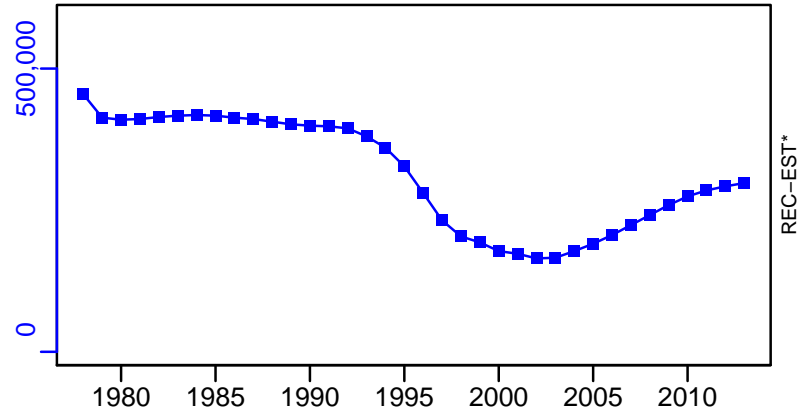
F–1/yr (1978–2014–PARMA)



ER–calc–ratio (1978–2014–PARMA)



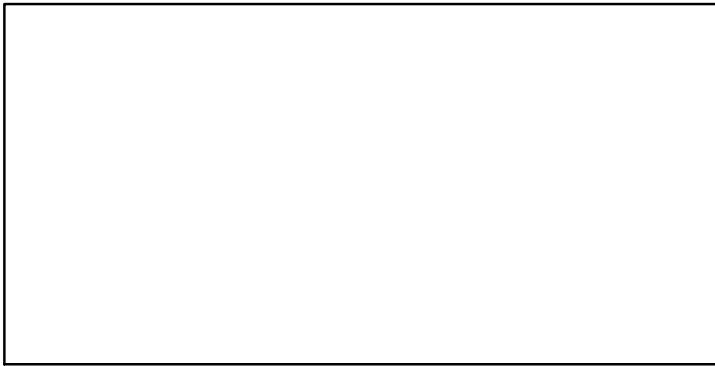
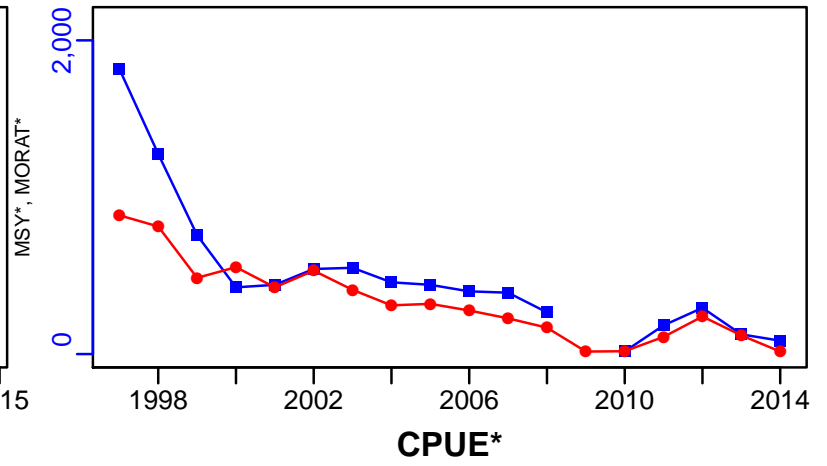
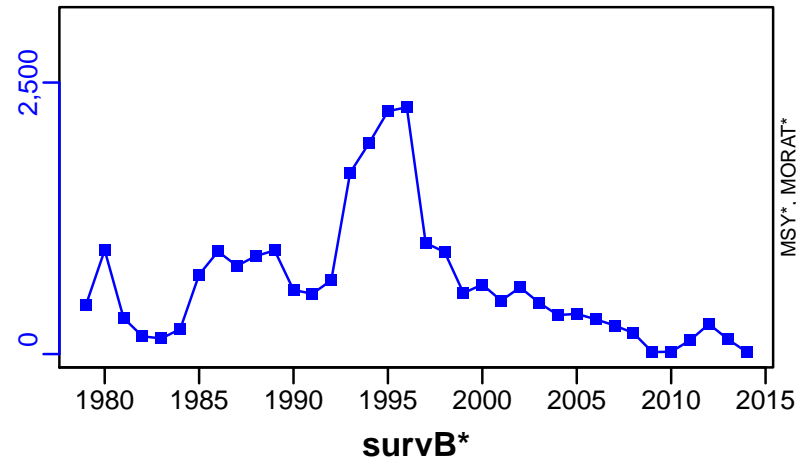
R–E00 (1978–2014–PARMA)



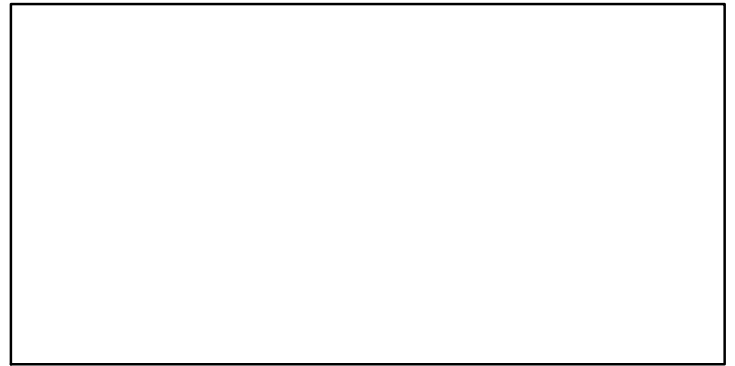
# Yellownose skate Central–Southern Chile [YNOSESKACSCH]

TL–MT, TC\*, RecC\* (1978–2014–PARMA)

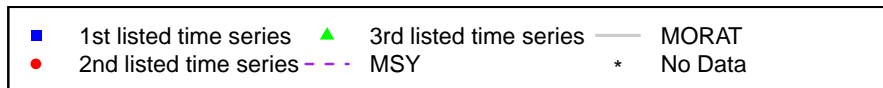
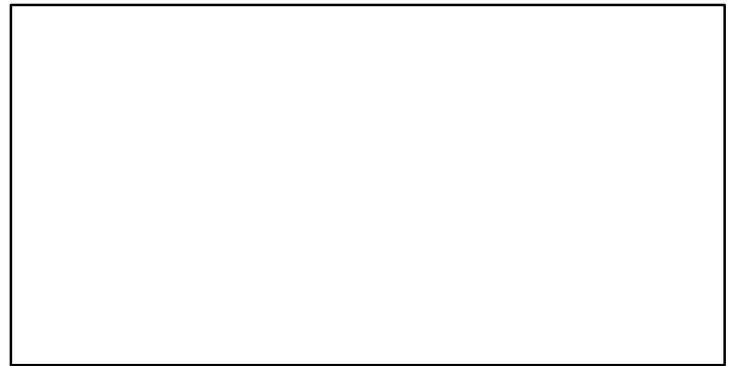
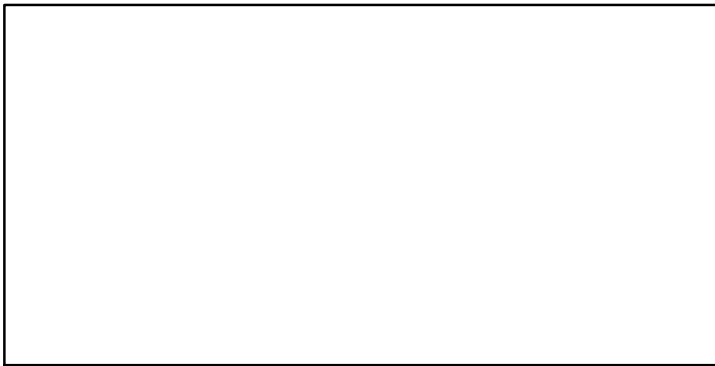
TAC–MT, Cpair–MT, Cadv\* (1978–2014–PARMA)



EFFORT\*



CdivMSY\*



## Yellownose skate Southern Chile [YNOSESKASCH]

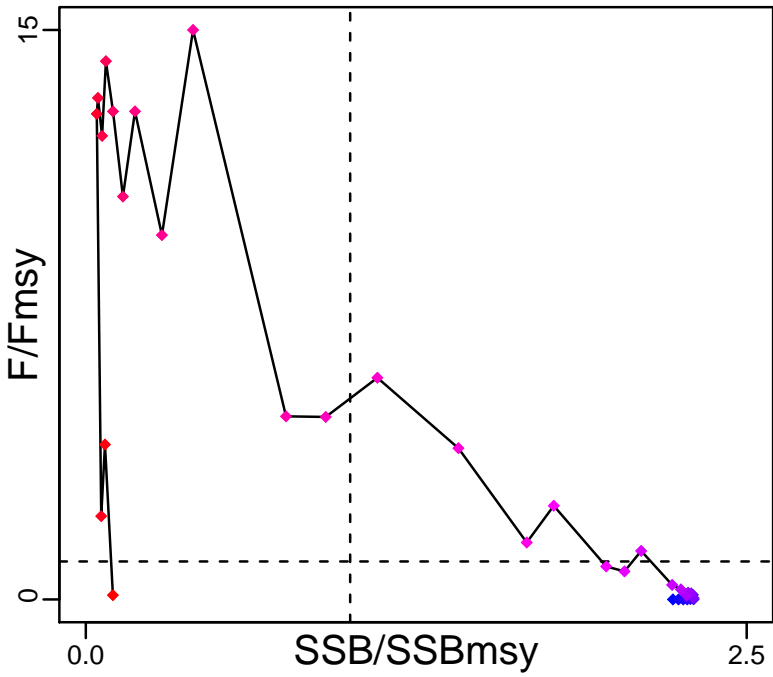
Metadata	
<b>Scientific Name</b>	Zearaja chilensis
<b>Current Assess ID</b>	IFOPCH-YNOSESKASCH-1978-2014-PARMA
<b>Area</b>	Southern Chile
<b>Management Authority</b>	Subsecretaria de Pesca
<b>Assessor</b>	Instituto de Fomento Pesquero - Chilean Fisheries Development Institute
<b>Asmts in RAM</b>	2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-pr-MT	2014	3327
<b>Fmsy</b>	Fmsy-1/yr	2014	0.062
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2014	3327
<b>Fmgt</b>	Fmgt-1/yr	2014	0.062
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2014	7394
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2014	0.14
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2014	1664
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

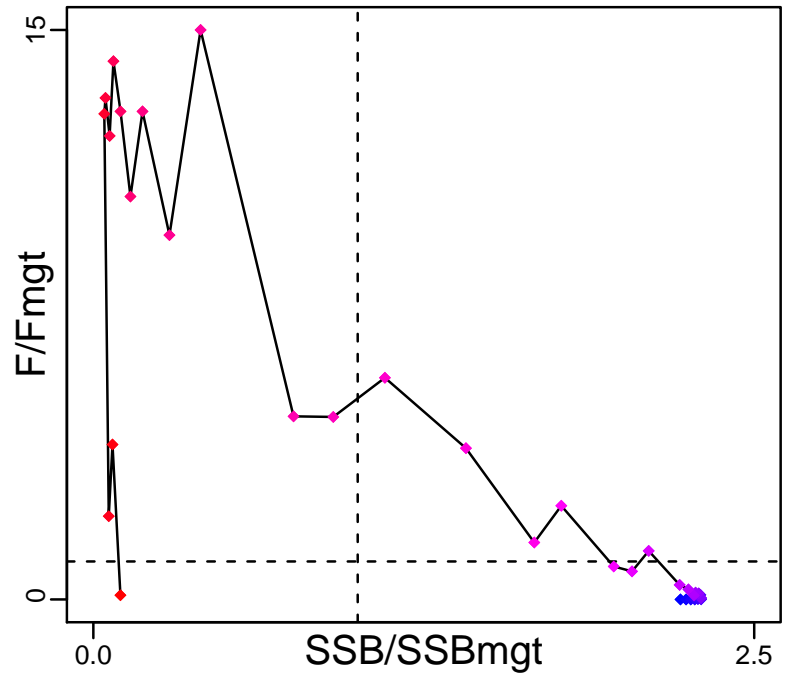
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2014	3850	-	-
<b>SSB</b>	SSB-MT	2014	341	Females	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2014	113	-	1
<b>F</b>	F-1/yr	2014	0.007	Females	-
<b>ER</b>	ER-calc-ratio	2014	0.004	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2014	16		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-pr-MT	2014	0.102		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2014	0.112		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2014	0.102		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	0.112		
<b>ER/ERmgt</b>	-	-	-		

# Yellownose skate Southern Chile [YNOSESKASCH]

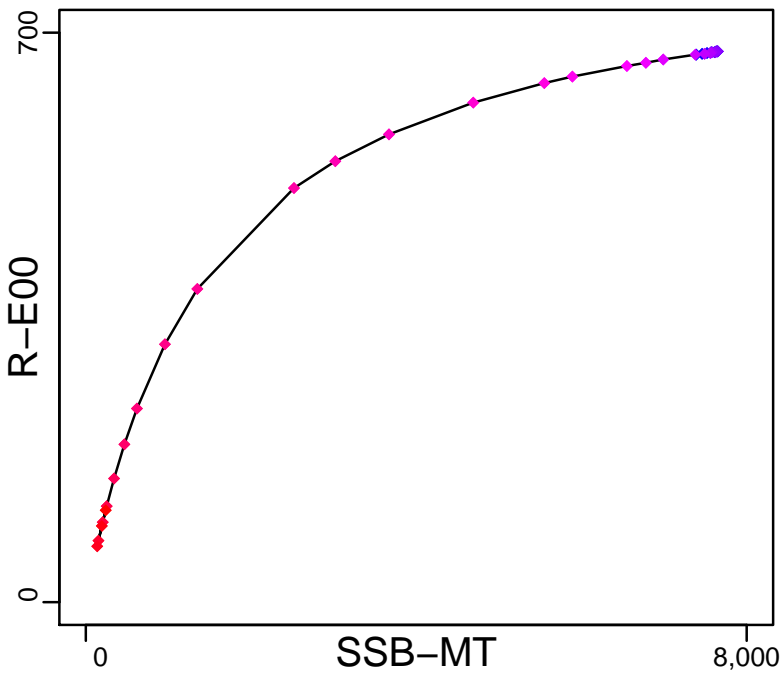
Kobe MSYpref (1978–2014–PARMA)



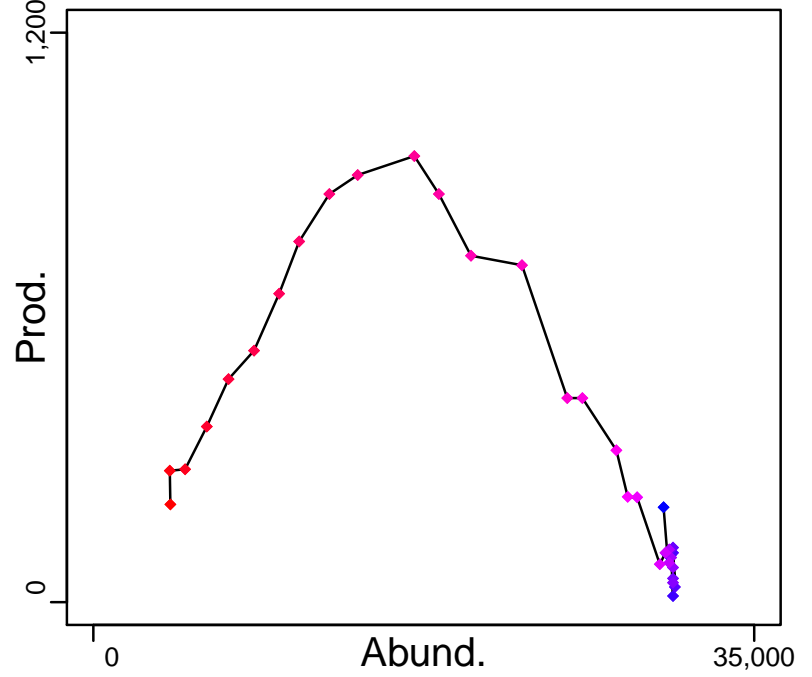
Kobe MGTpref (1978–2014–PARMA)



Spawner Recruit (1978–2014–PARMA)



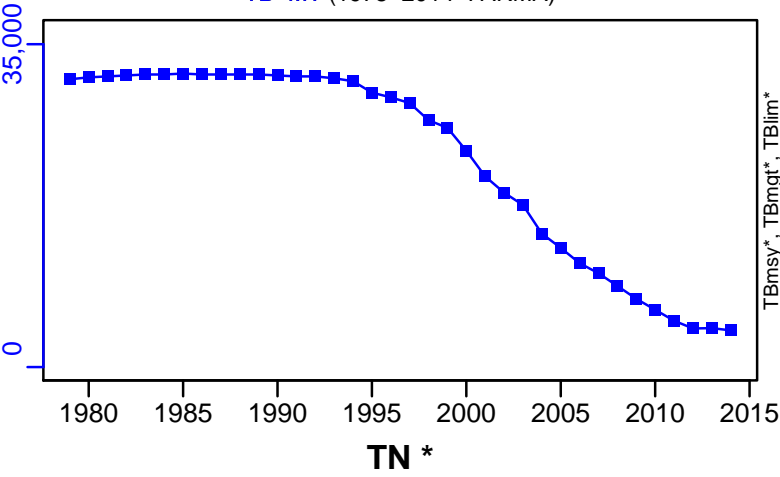
Production (1978–2014–PARMA)



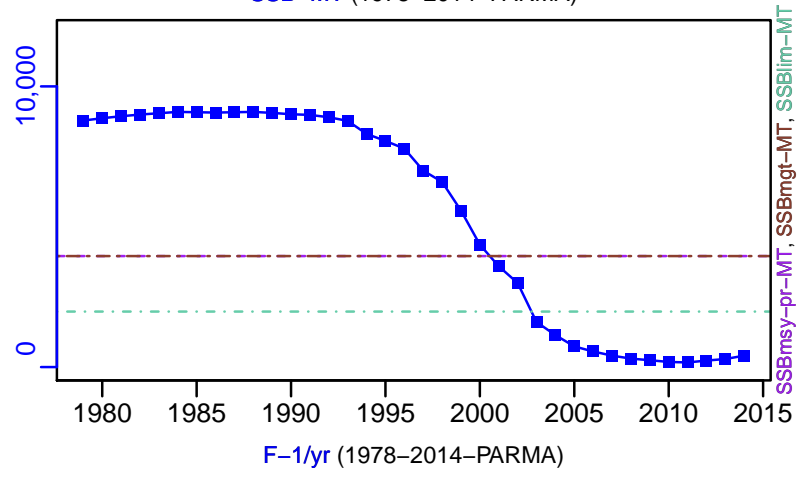
◆ Start Year ◆ End Year \* No Data

# Yellownose skate Southern Chile [YNOSESKASCH]

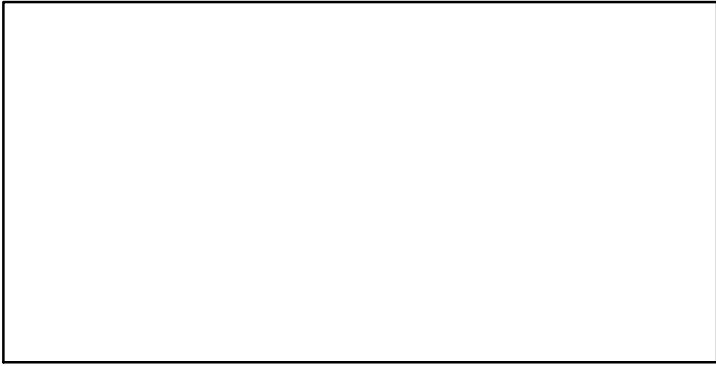
TB-MT (1978-2014-PARMA)



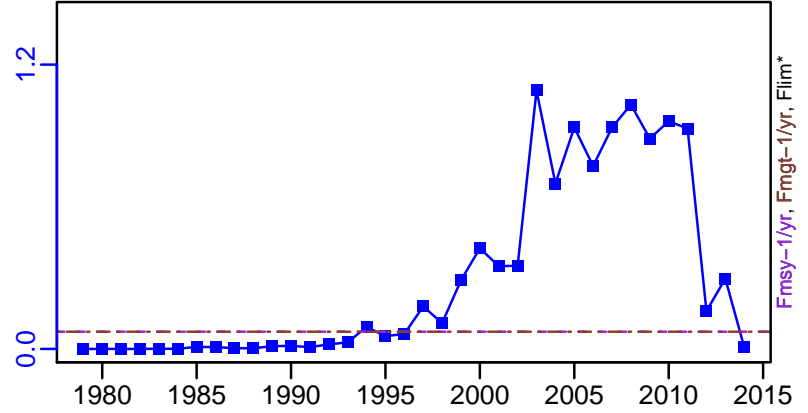
SSB-MT (1978-2014-PARMA)



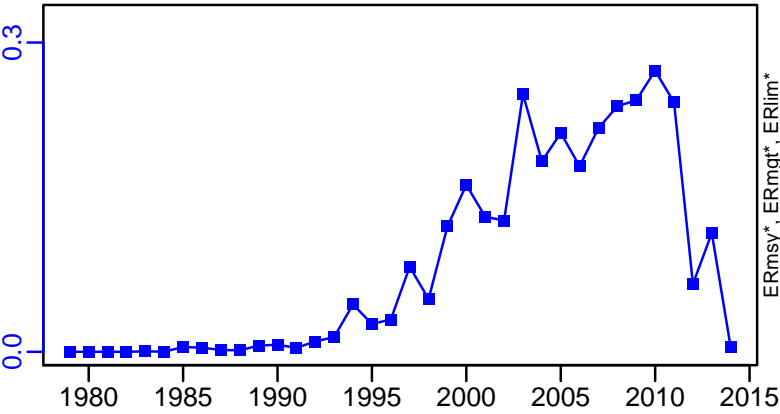
TN \*



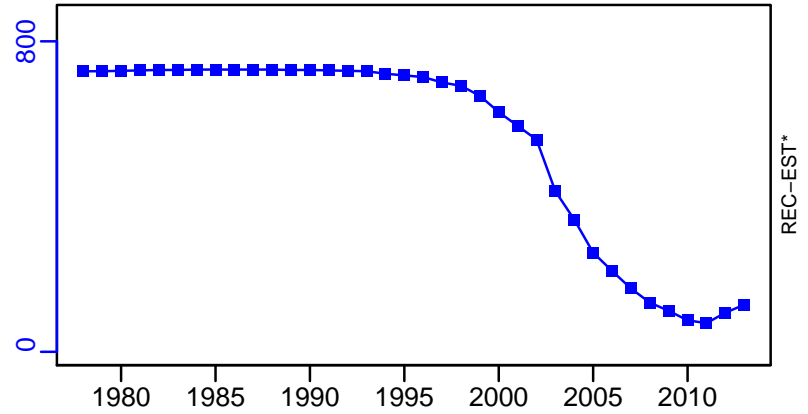
F-1/yr (1978-2014-PARMA)



ER-calc-ratio (1978-2014-PARMA)



R-E00 (1978-2014-PARMA)

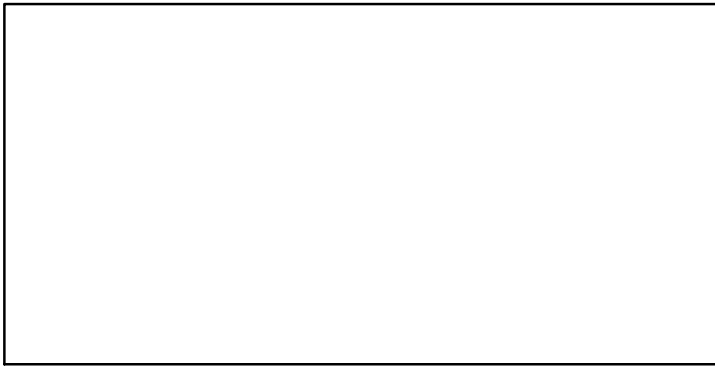
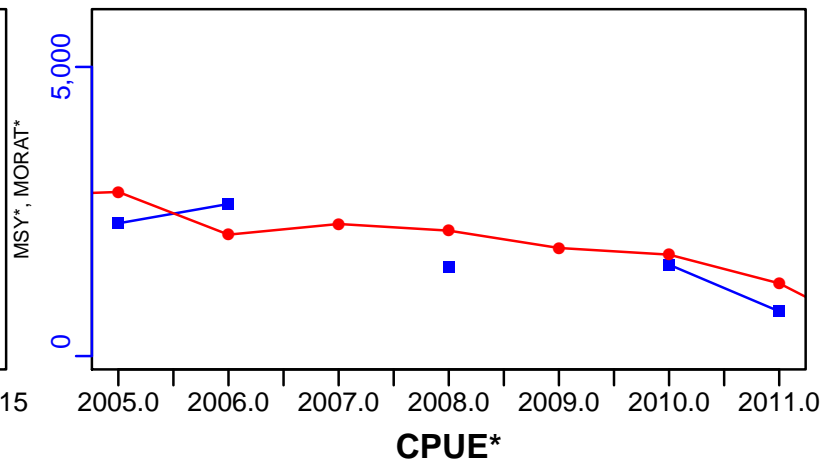
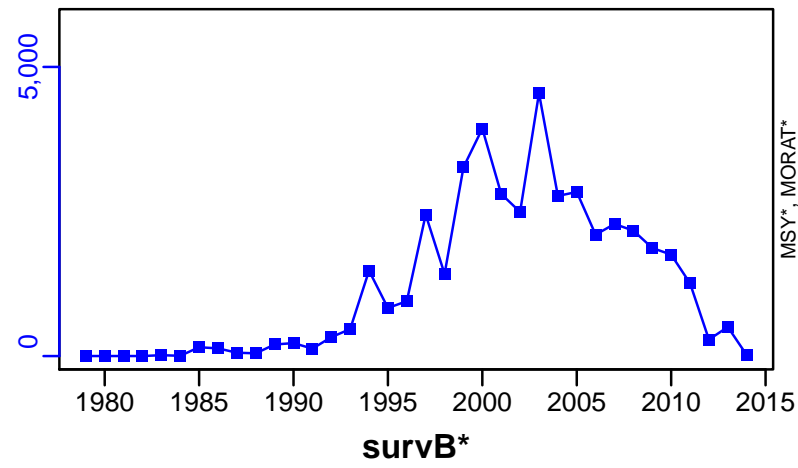




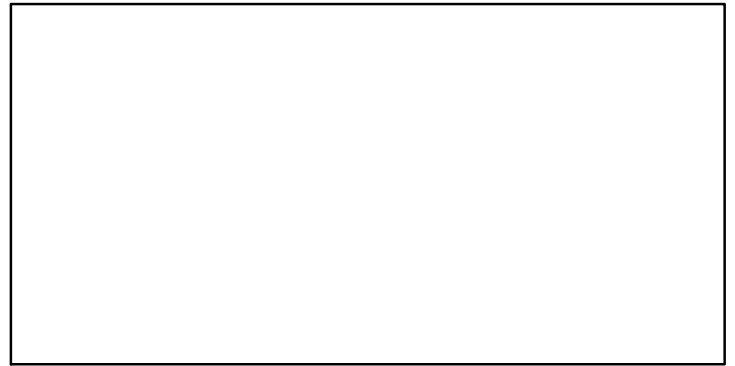
# Yellownose skate Southern Chile [YNOSESKASCH]

TL-MT, TC\*, RecC\* (1978–2014–PARMA)

TAC-MT, Cpair-MT, Cadv\* (1978–2014–PARMA)



EFFORT\*



CdivMSY\*

