

carangids-mackerels Stocks

v4.44 (Apr-02-2019)

Not present Present Preferred

Stock	Time Series Types			
	B/Bmsy	U/Umsy	B/Bmgt	U/Umgt
1. ACMACKSARG [Argentine chub mackerel Southern Argentina]	TB SSB	ER F	TB SSB	ER F
2. ASCADECS [Amberstripe scad East China Sea]	TB SSB	ER F	TB SSB	ER F
3. BJMACKXa2 [Blue jack mackerel Azores (Xa2)]	TB SSB	ER F	TB SSB	ER F
4. BMACKECS [Spotted mackerel East China Sea]	TB SSB	ER F	TB SSB	ER F
5. BMACKPJP [Spotted mackerel Pacific Coast of Japan]	TB SSB	ER F	TB SSB	ER F
6. CHMACKWA [Cunene Horse Mackerel West Africa]	TB SSB	ER F	TB SSB	ER F
7. CHTRACCH [Chilean jack mackerel Chilean EEZ and offshore]	TB SSB	ER F	TB SSB	ER F
8. CMACKPCOAST [Pacific chub mackerel Pacific Coast]	TB SSB	ER F	TB SSB	ER F
9. CMACKPJP [Chub mackerel Pacific Coast of Japan]	TB SSB	ER F	TB SSB	ER F
10. CMACKTSST [Chub mackerel Tsushima Strait]	TB SSB	ER F	TB SSB	ER F
11. CMACKWA [Chub Mackerel West Africa]	TB SSB	ER F	TB SSB	ER F
12. CTRACSA [Cape horse mackerel South Africa South coast]	TB SSB	ER F	TB SSB	ER F
13. FSCADWA [False Scad West Africa]	TB SSB	ER F	TB SSB	ER F
14. GRAMBERGM [Greater amberjack Gulf of Mexico]	TB SSB	ER F	TB SSB	ER F
15. GRAMBERSATLC [Greater amberjack Southern Atlantic coast]	TB SSB	ER F	TB SSB	ER F
16. HMACKIIa-IVa-Vb-VIa-VII-VIII [Horse mackerel IIa-IVa-Vb-VIa-VII-VIII]	TB SSB	ER F	TB SSB	ER F
17. HMACKIIIa-IVbc-VIId [Horse mackerel IIIa-IVbc-VIId]	TB SSB	ER F	TB SSB	ER F
18. HMACKIXa [Horse mackerel Portugese Waters -East]	TB SSB	ER F	TB SSB	ER F
19. HMACKWA [Horse Mackerel West Africa]	TB SSB	ER F	TB SSB	ER F
20. JAMBERJPN [Japanese amberjack Japan]	TB SSB	ER F	TB SSB	ER F
21. JMACKPJP [Japanese jack mackerel Pacific Coast of Japan]	TB SSB	ER F	TB SSB	ER F
22. JMACKTSST [Japanese jack mackerel Tsushima Strait]	TB SSB	ER F	TB SSB	ER F
23. KMACKGM [King mackerel Gulf of Mexico]	TB SSB	ER F	TB SSB	ER F
24. KMACKSATLC [King mackerel Southern Atlantic Coast]	TB SSB	ER F	TB SSB	ER F
25. MACKNEICES [Mackerel ICES Northeast Atlantic]	TB SSB	ER F	TB SSB	ER F
26. MACKNWATLSA3-4 [Mackerel Northwest Atlantic (NAFO Subareas 3 and 4)]	TB SSB	ER F	TB SSB	ER F
27. MHMACKMEDGSA29 [Mediterranean horse mackerel Black Sea]	TB SSB	ER F	TB SSB	ER F
28. SPANMACKECS [Japanese Spanish mackerel East China Sea]	TB SSB	ER F	TB SSB	ER F
29. SPANMACKGM [Spanish mackerel Gulf of Mexico]	TB SSB	ER F	TB SSB	ER F
30. SPANMACKSATLC [Spanish mackerel Southern Atlantic Coast]	TB SSB	ER F	TB SSB	ER F
31. SPANMACKSETO [Japanese Spanish mackerel Inland Sea of Japan]	TB SSB	ER F	TB SSB	ER F
32. TREVALLYTRE7 [Trevally New Zealand Areas TRE 7]	TB SSB	ER F	TB SSB	ER F

Argentine chub mackerel Southern Argentina [ACMACKSARG]

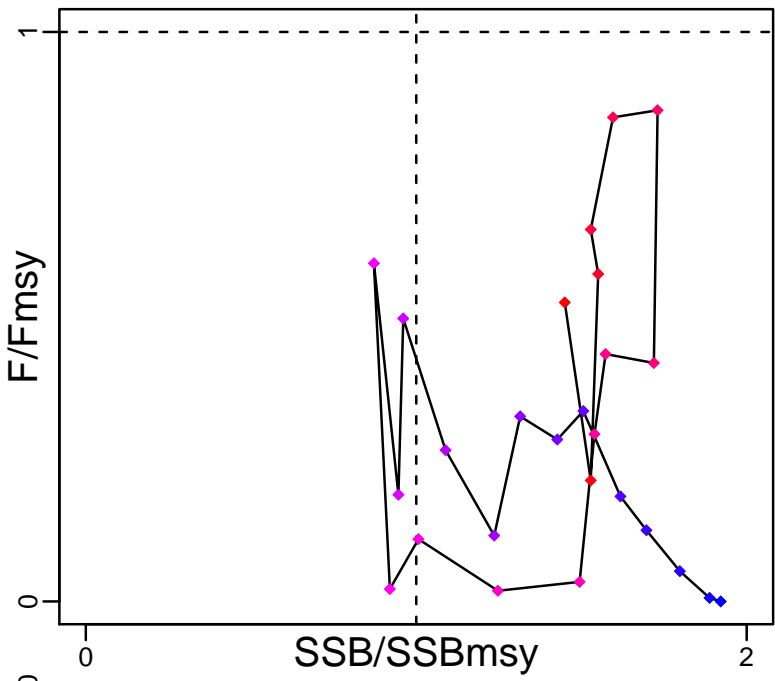
Metadata	
Scientific Name	Scomber colias
Current Assess ID	INIDEP-ACMACKSARG-1989-2016-BURATTI
Area	Southern Argentina
Management Authority	Consejo Federal Pesquero, Argentina national management
Assessor	Instituto Nacional de Investigacion y Desarrollo Pesquero
Asmts in RAM	2016

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

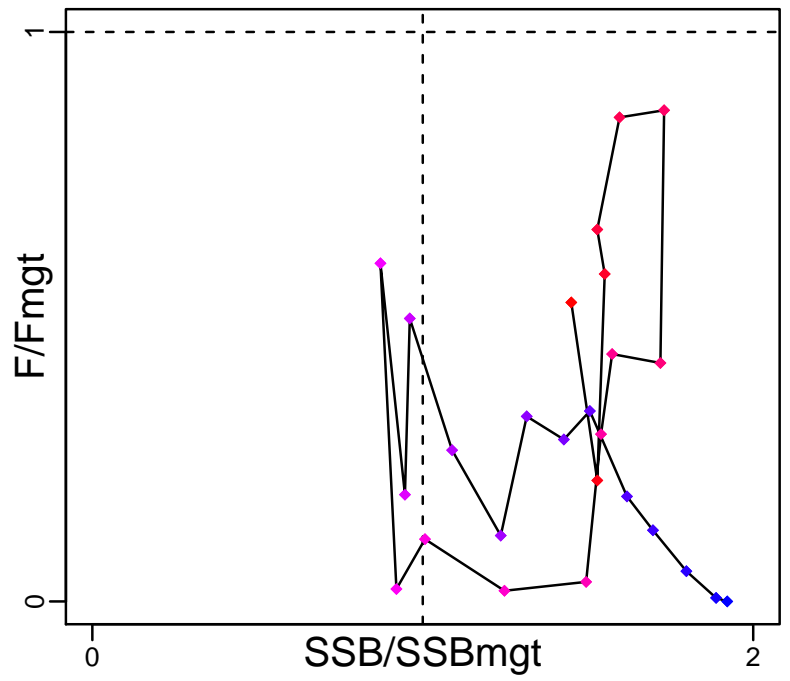
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2016	168,000	-	-
SSB	SSB-MT	2016	129,000	Both	1 to 10
TN	-	-	-	-	-
R	R-E00	2016	2.58×10^8	Both	1
F	F-1/yr	2016	0.168	Both	1 to 10
ER	ER-calc-ratio	2016	0.096	Both	-
TC	-	-	-		
TL	TL-MT	2016	9280		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSB-MT/SSBmsy-pr-MT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

Argentine chub mackerel Southern Argentina [ACMACKSARG]

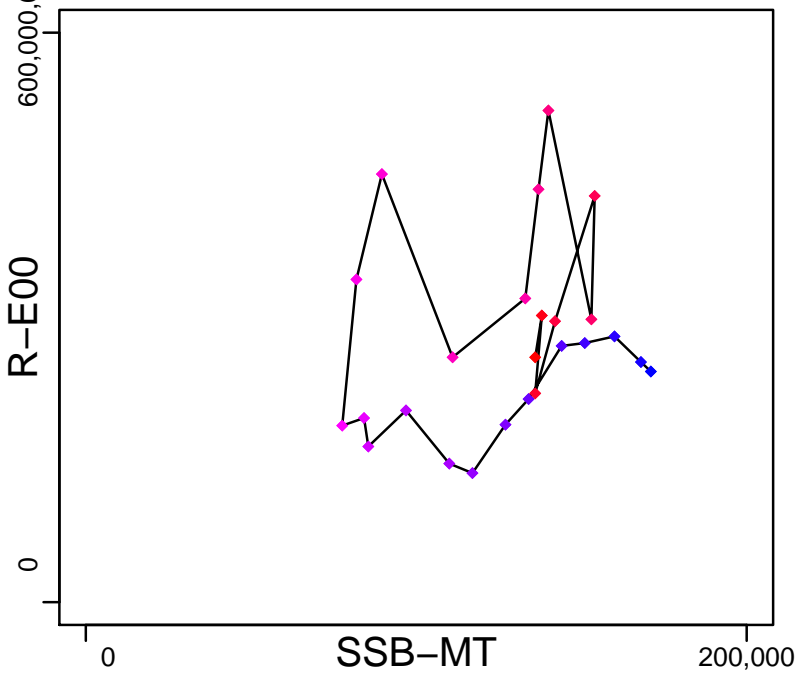
Kobe MSYpref (1989–2016–BURATTI)



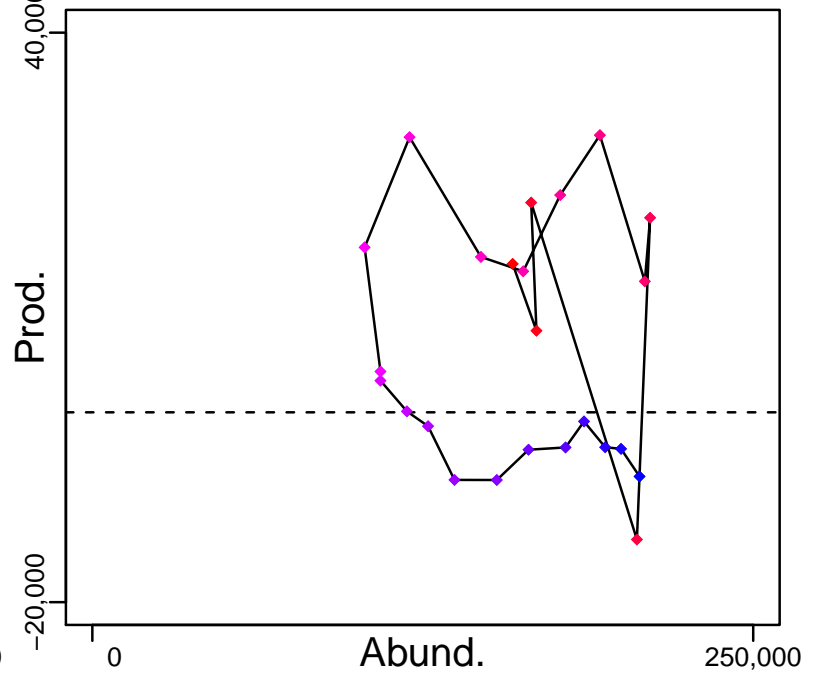
Kobe MGTpref (1989–2016–BURATTI)



Spawner Recruit (1989–2016–BURATTI)



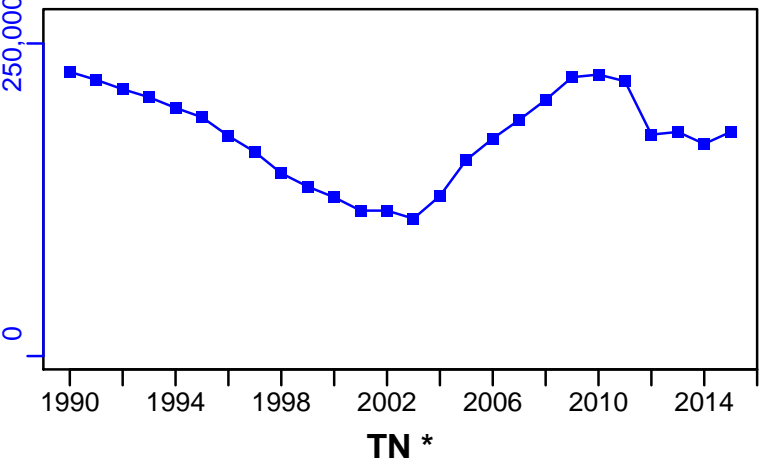
Production (1989–2016–BURATTI)



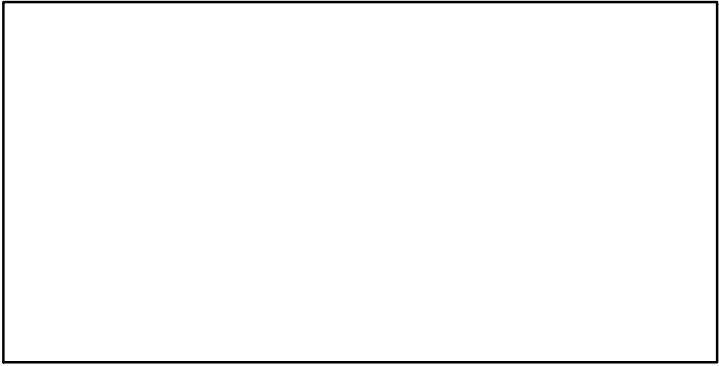
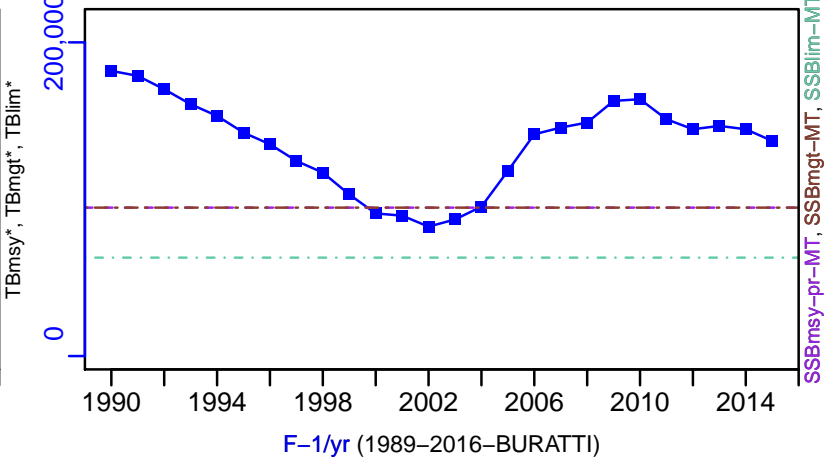
◆ Start Year ◆ End Year * No Data

Argentine chub mackerel Southern Argentina [ACMACKSARG]

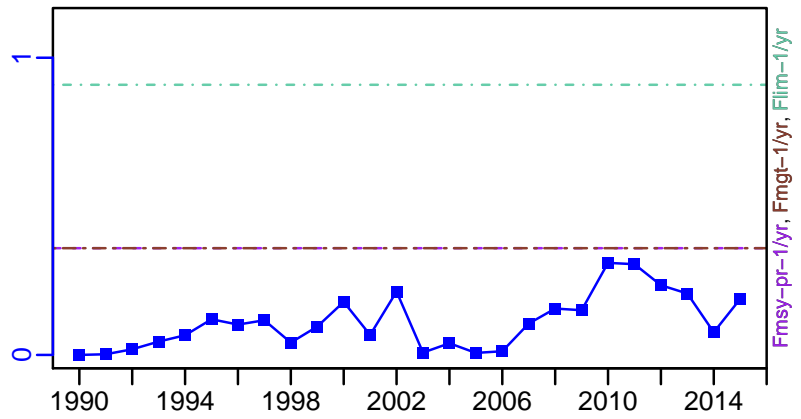
TB-MT (1989-2016-BURATTI)



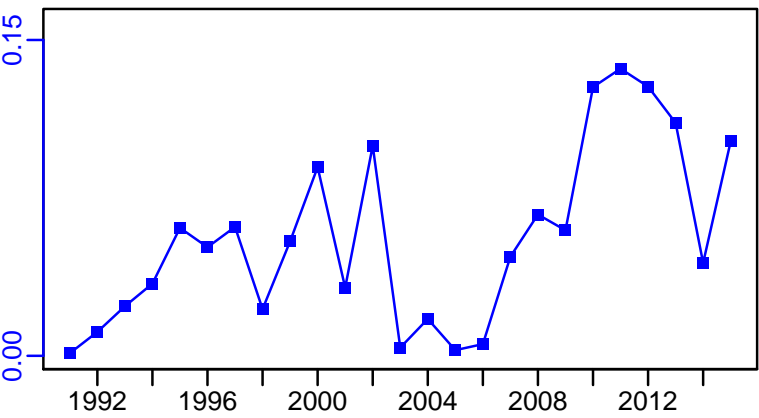
SSB-MT (1989-2016-BURATTI)



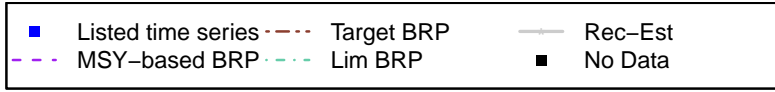
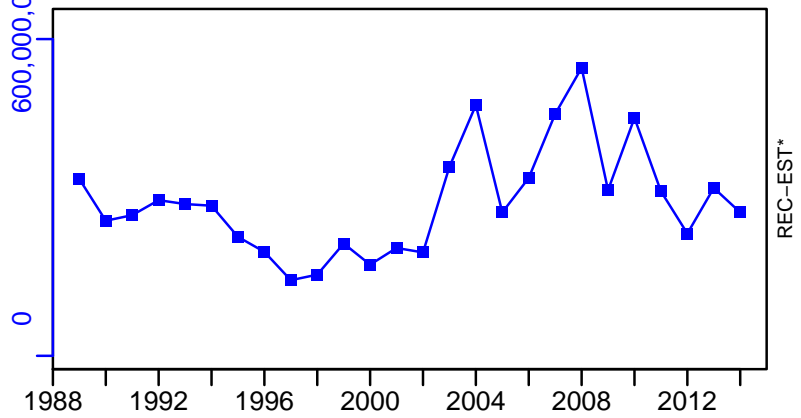
F-1/yr (1989-2016-BURATTI)



ER-calc-ratio (1989-2016-BURATTI)

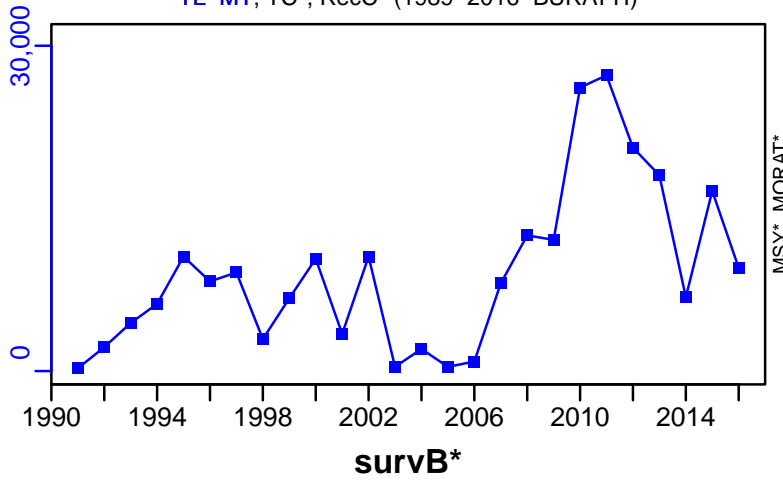


R-E00 (1989-2016-BURATTI)

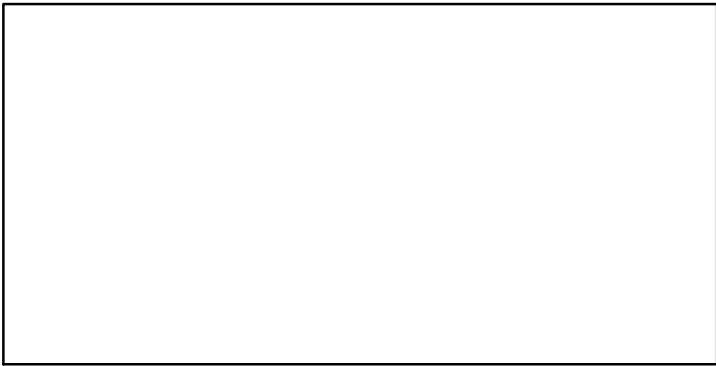
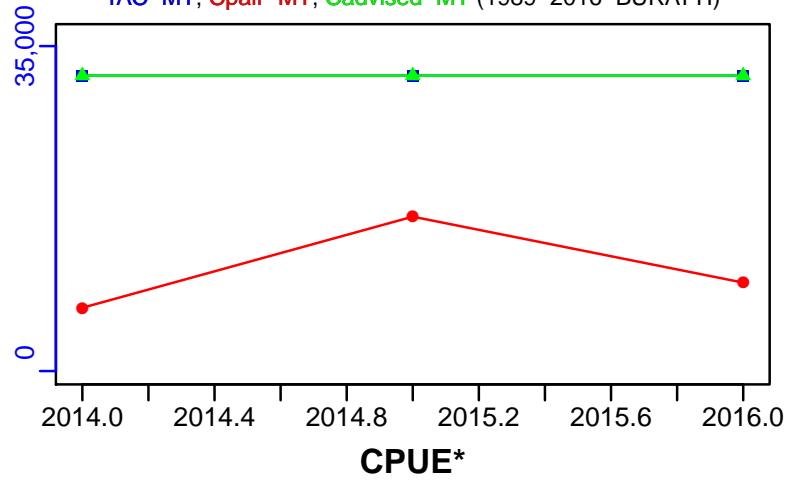


Argentine chub mackerel Southern Argentina [ACMACKSARG]

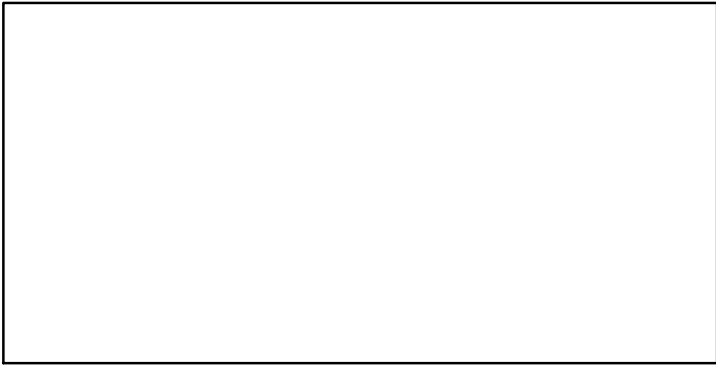
TL-MT, TC*, RecC* (1989-2016-BURATTI)



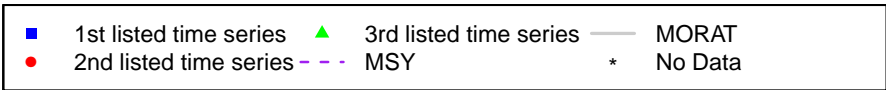
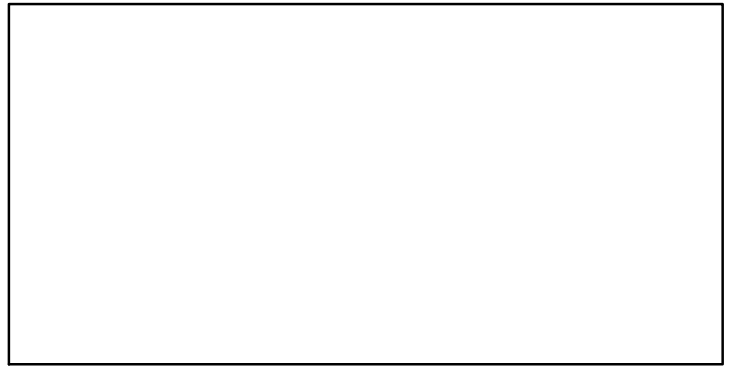
TAC-MT, Cpair-MT, Cadvised-MT (1989-2016-BURATTI)



EFFORT*



CdivMSY*



Amberstripe scad East China Sea [ASCADECS]

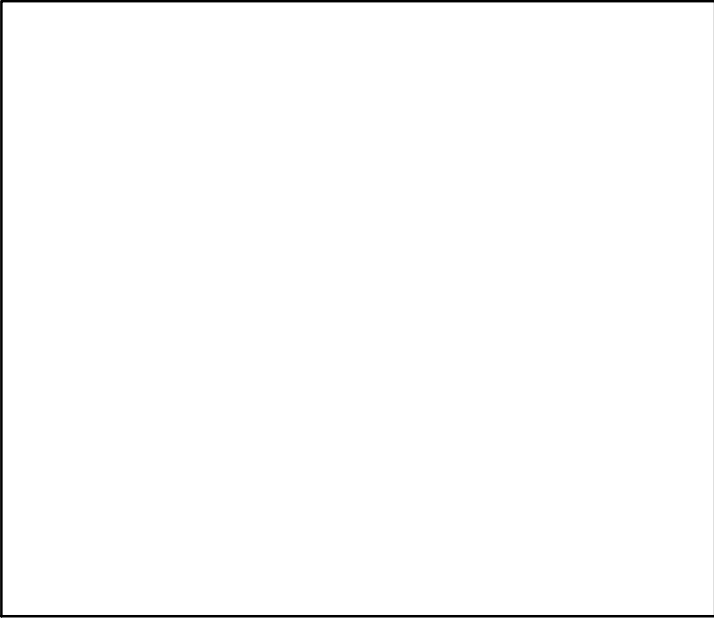
Metadata	
Scientific Name	Decapterus muroadsi
Current Assess ID	FAFRFJ-ASCADECS-1973-2013-JPNIMP2016
Area	East China Sea
Management Authority	Fisheries Agency of Japan
Assessor	Fisheries Agency and Fisheries Research Agency of Japan
Asmts in RAM	2013

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

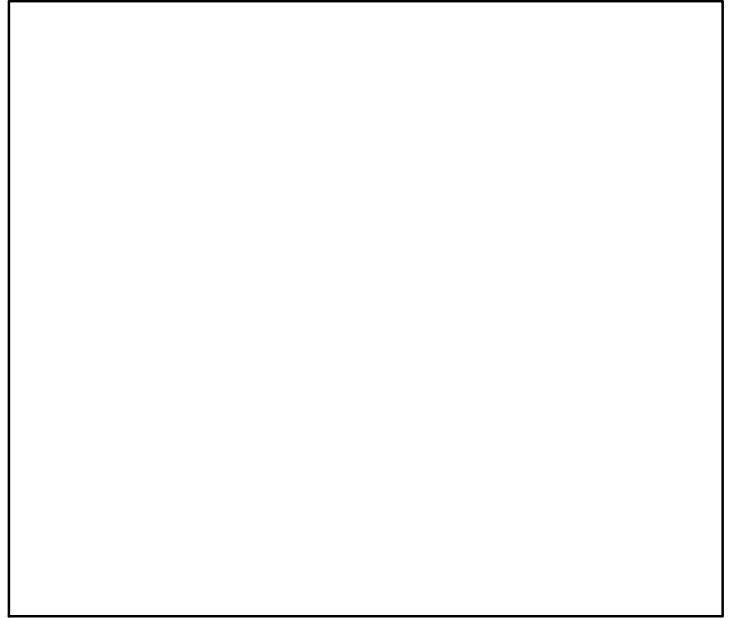
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2013	6780		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Amberstripe scad East China Sea [ASCADECS]

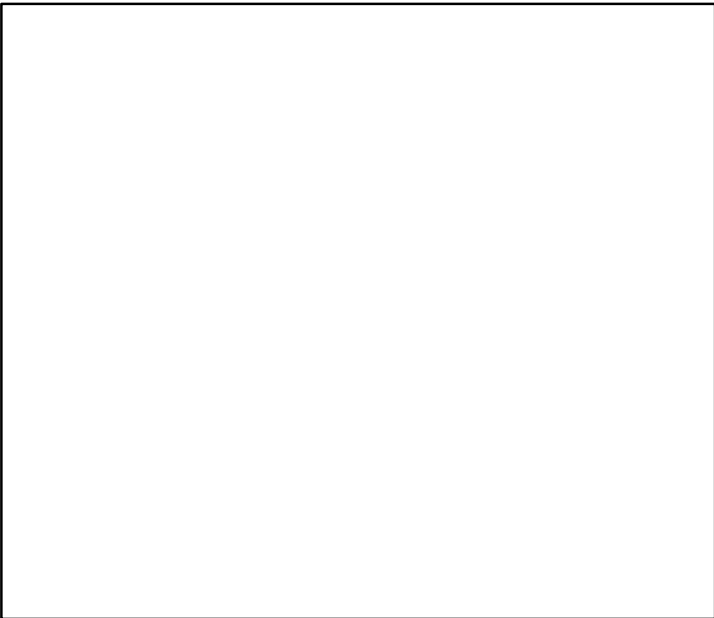
Kobe MSY*



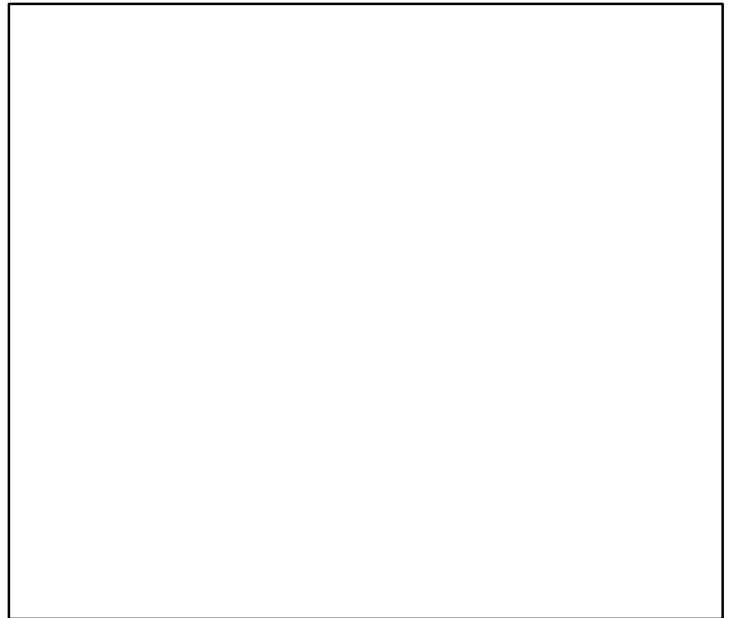
Kobe MGT*



Spawner Recruit*



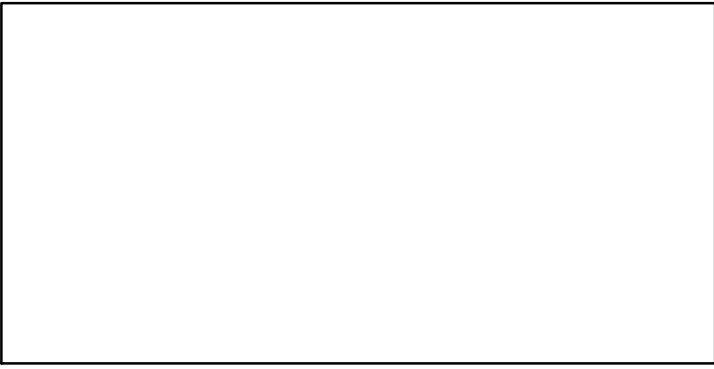
Production*



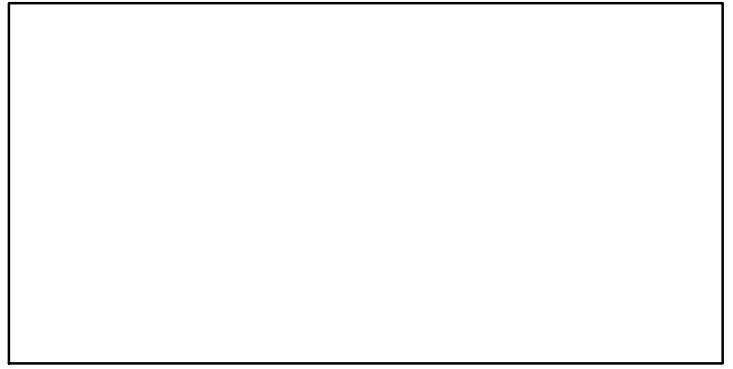
◆ Start Year ◆ End Year * No Data

Amberstripe scad East China Sea [ASCADECS]

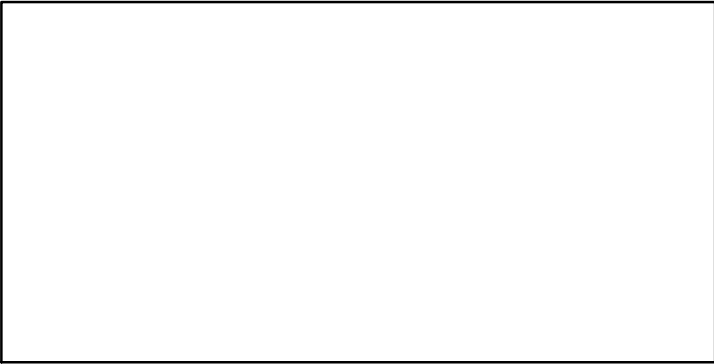
TB*



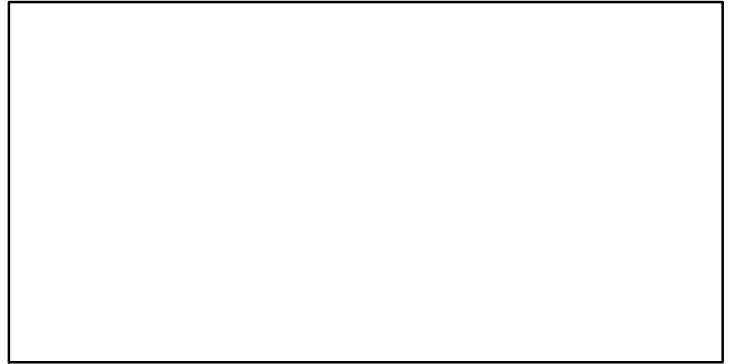
SSB*



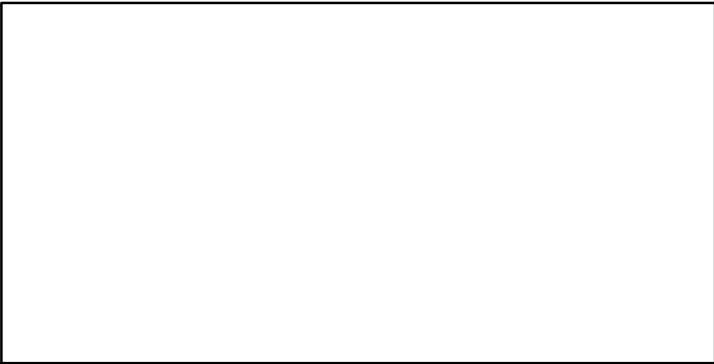
TN *



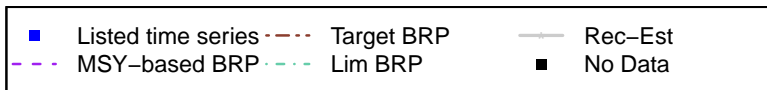
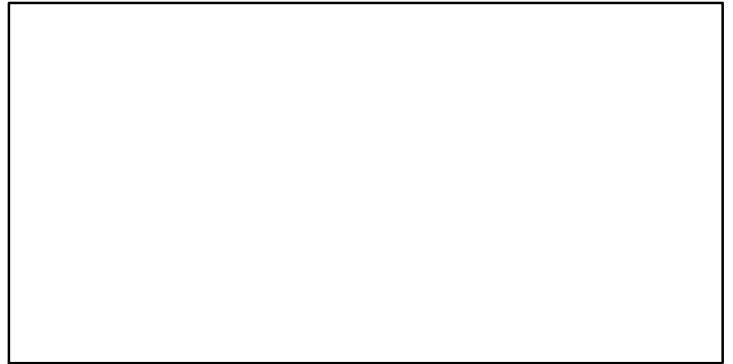
F*



ER*



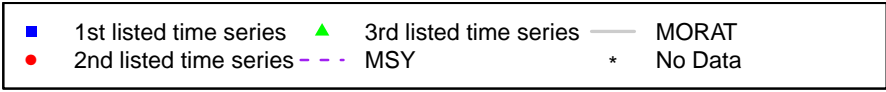
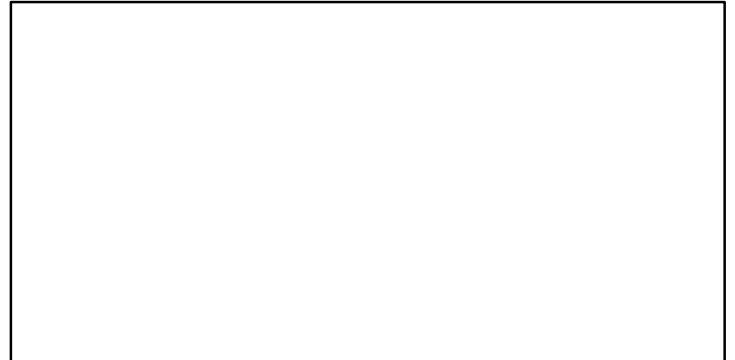
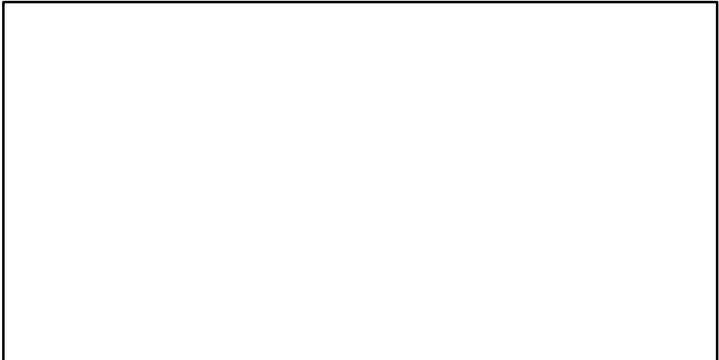
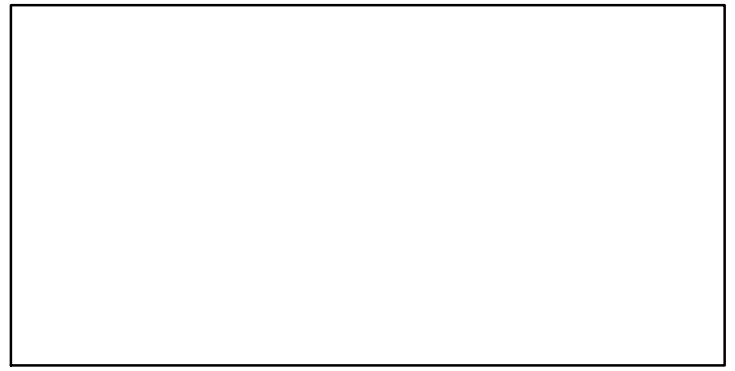
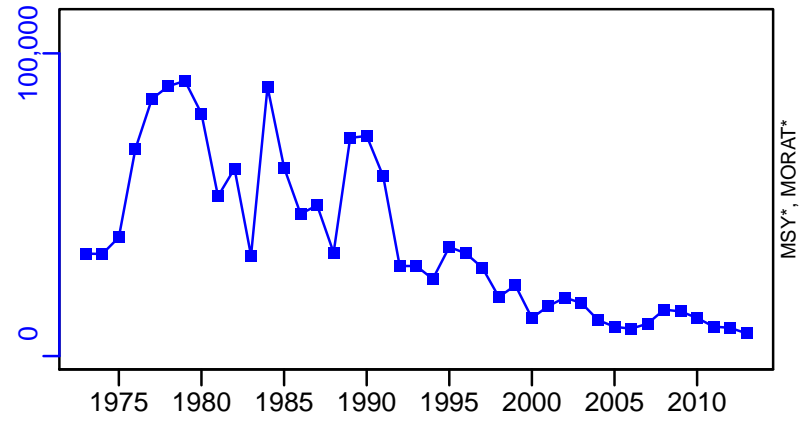
Recruits*



Amberstripe scad East China Sea [ASCADECS]

TC-MT, TL*, RecC* (1973-2013-JPNIMP2016)

TAC*, Cpair*, Cadv*



Blue jack mackerel Azores (Xa2) [BJMACKXa2]

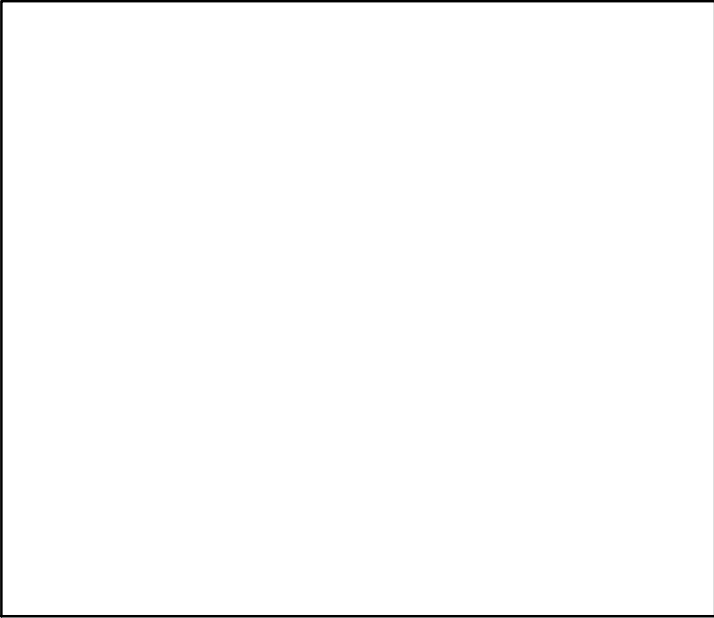
Metadata	
Scientific Name	Trachurus picturatus
Current Assess ID	WGHANSA-BJMACKXa2-1978-2017-ICESIMP2018
Area	Azores (Xa2)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Southern Horse Mackerel, Anchovy and Sardine
Asmts in RAM	2016, 2017

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

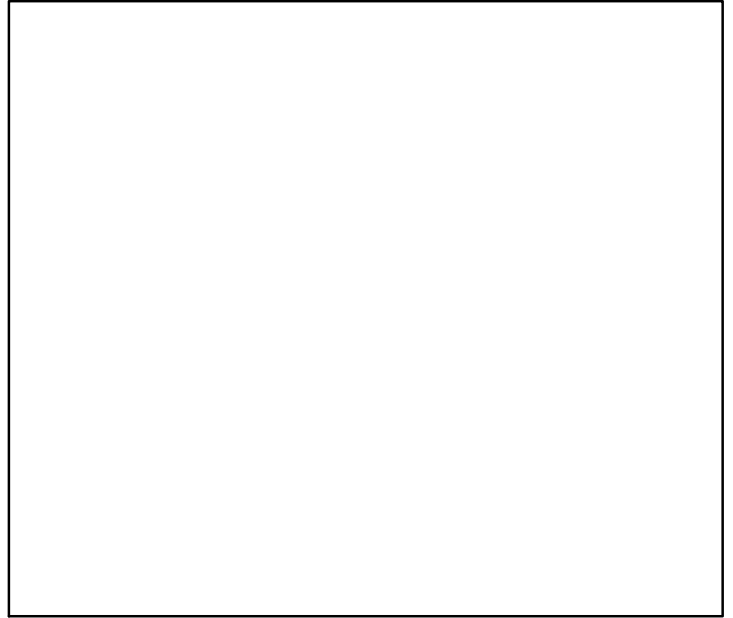
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	1140		
TL	TL-MT	2017	991		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Blue jack mackerel Azores (Xa2) [BJMACKXa2]

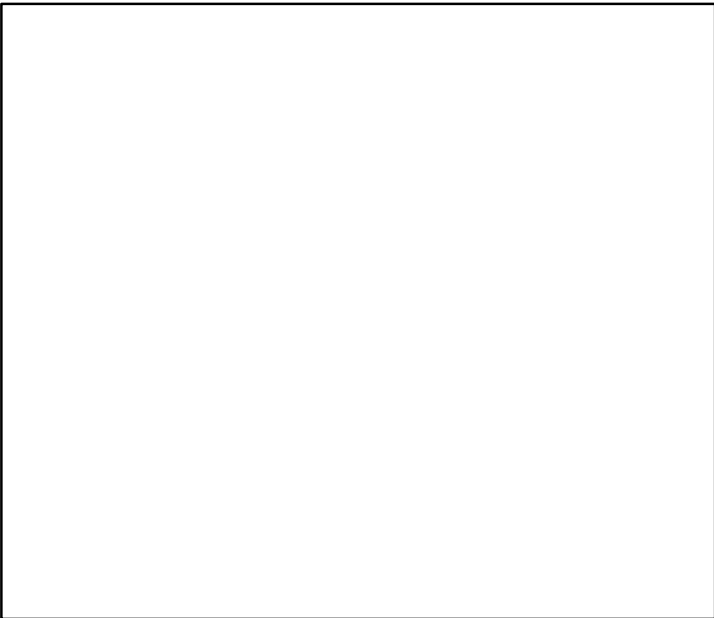
Kobe MSY*



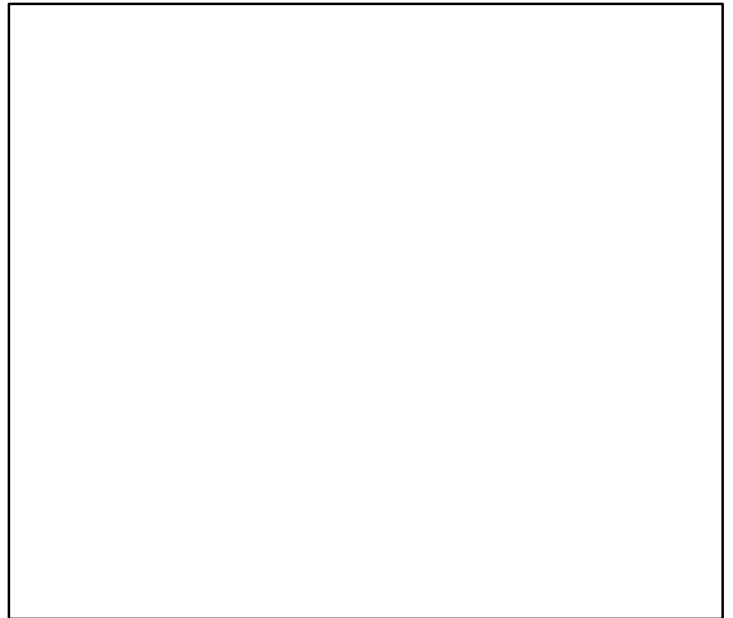
Kobe MGT*



Spawner Recruit*



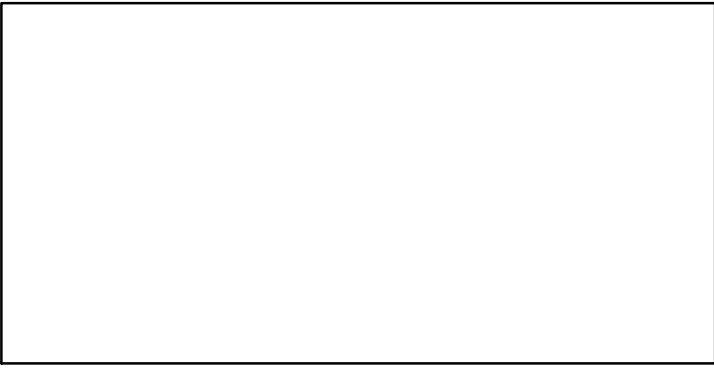
Production*



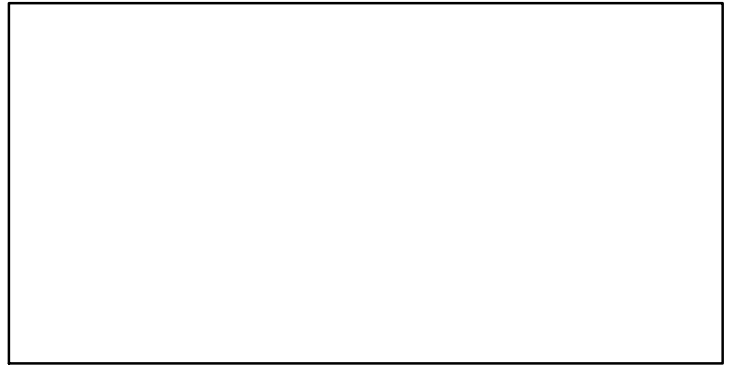
◆ Start Year ◆ End Year * No Data

Blue jack mackerel Azores (Xa2) [BJMACKXa2]

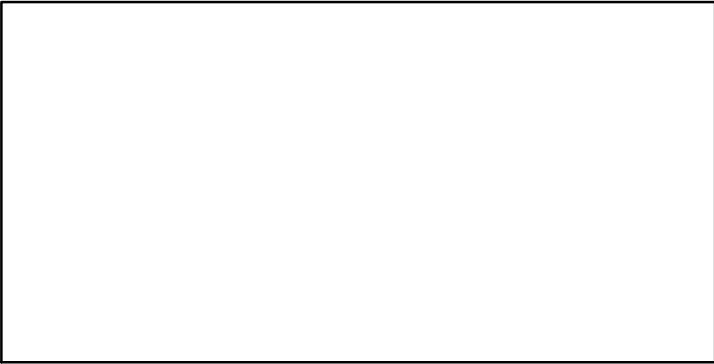
TB*



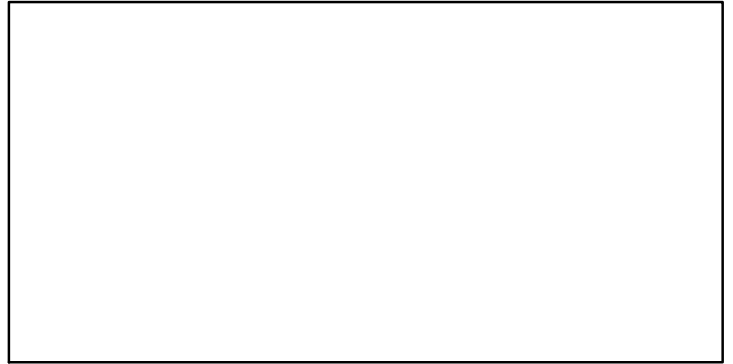
SSB*



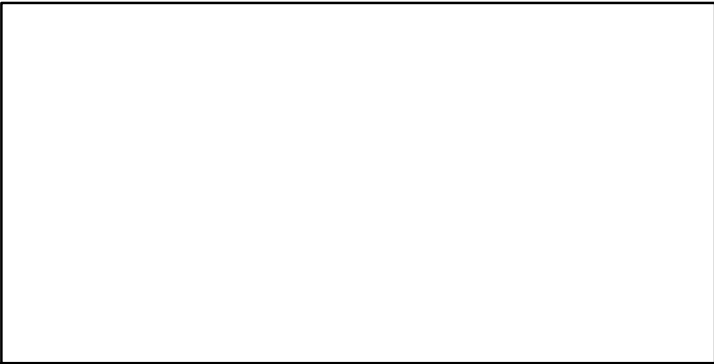
TN *



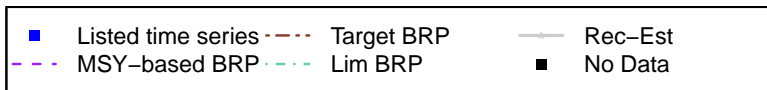
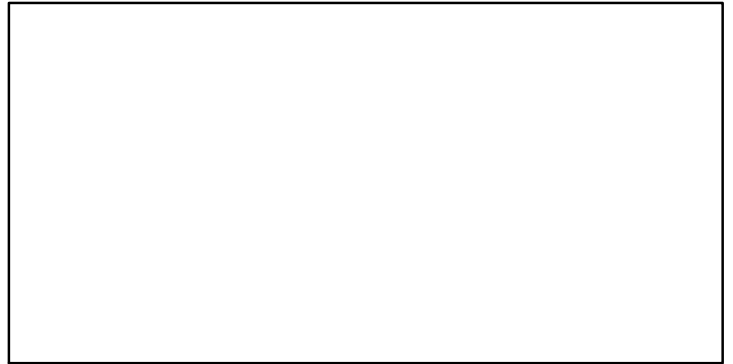
F*



ER*



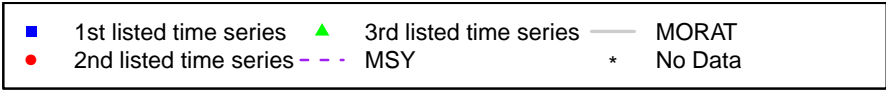
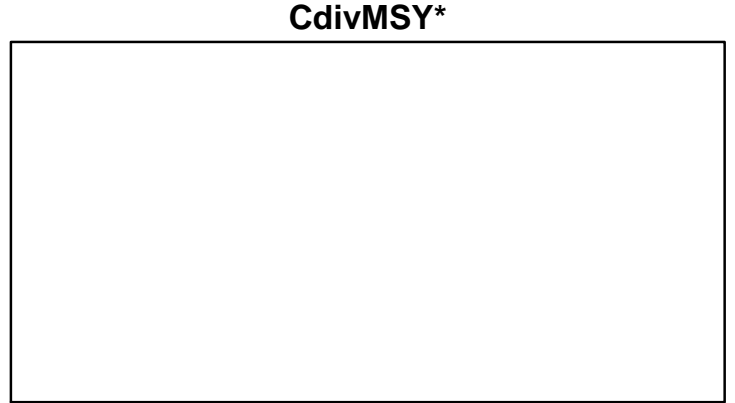
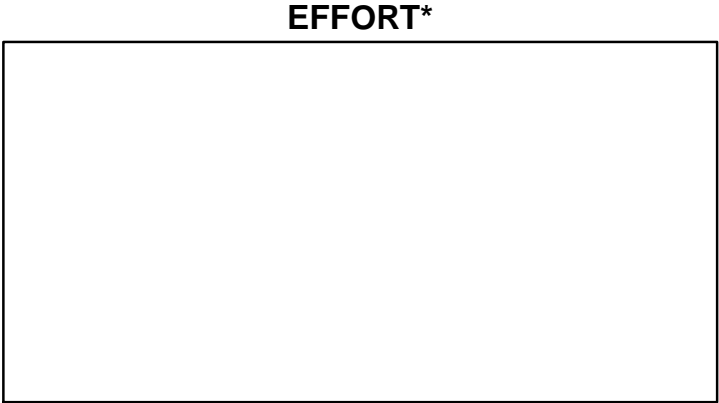
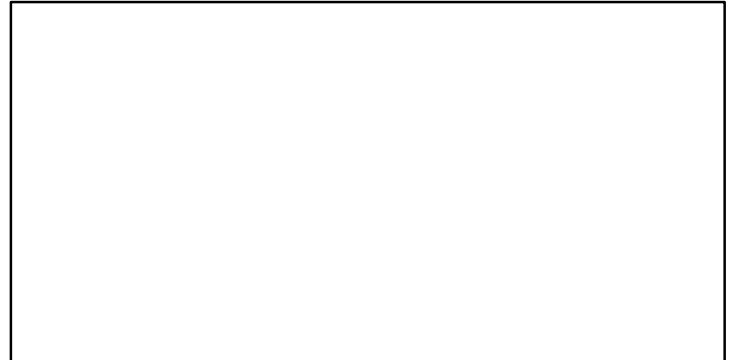
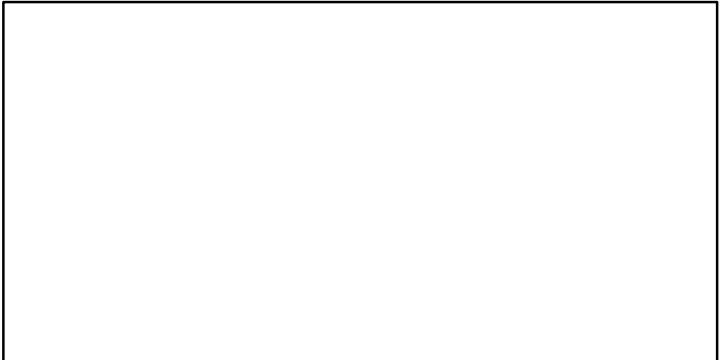
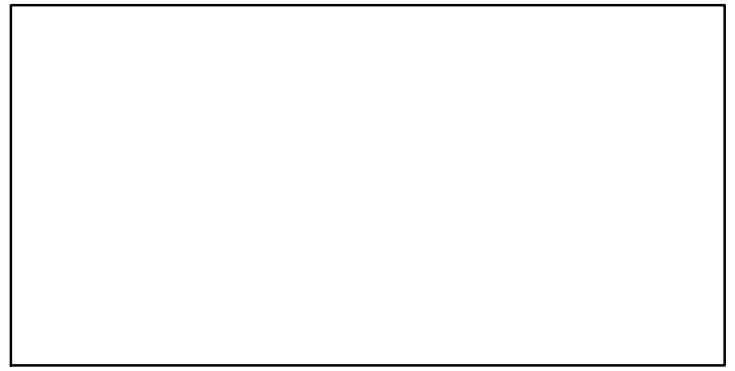
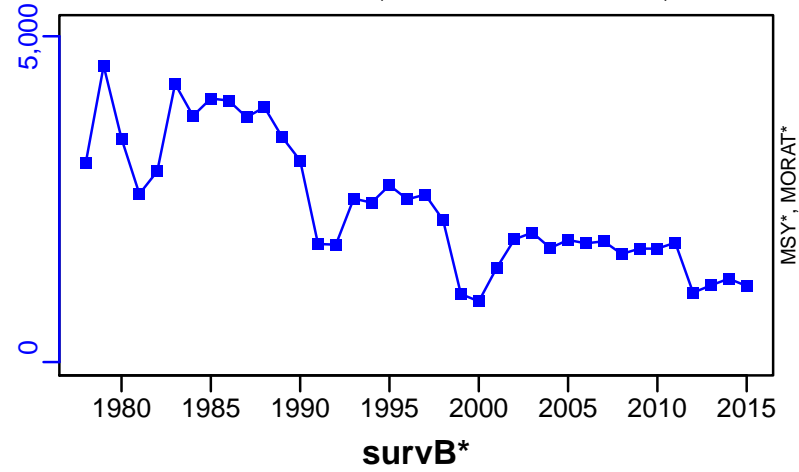
Recruits*



Blue jack mackerel Azores (Xa2) [BJMACKXa2]

TC-MT, TL*, RecC* (1978-2016-ICESIMP2016)

TAC*, Cpair*, Cadv*



Spotted mackerel East China Sea [BMACKECS]

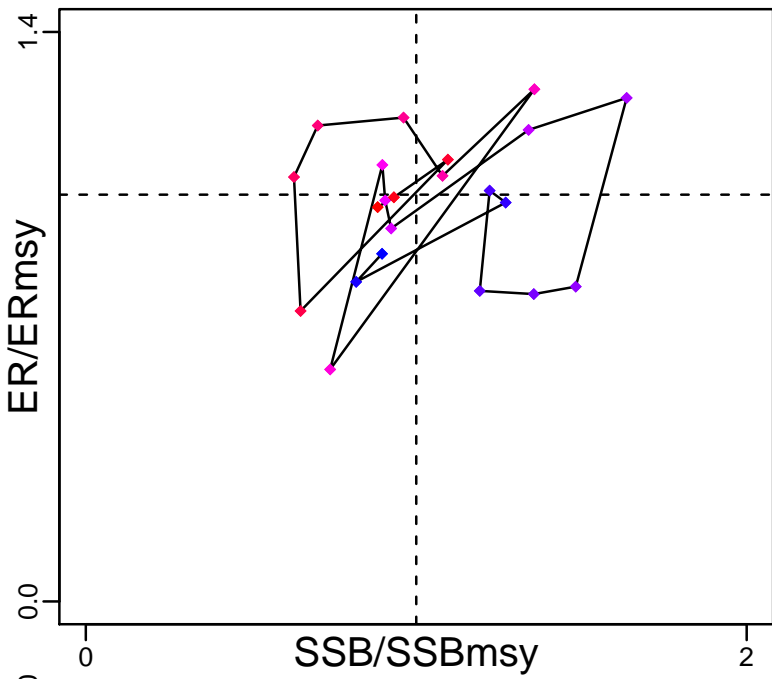
Metadata	
Scientific Name	Scomber australasicus
Current Assess ID	FAFRFJ-BMACKECS-1992-2013-JPNIMP2016
Area	East China Sea
Management Authority	Fisheries Agency of Japan
Assessor	Fisheries Agency and Fisheries Research Agency of Japan
Asmts in RAM	2013

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2013	140,403
SSBmsy	SSBmsy-MT	2013	51,957
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2013	0.39
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2013	54,757
M	M-1/yr	2013	0.4
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

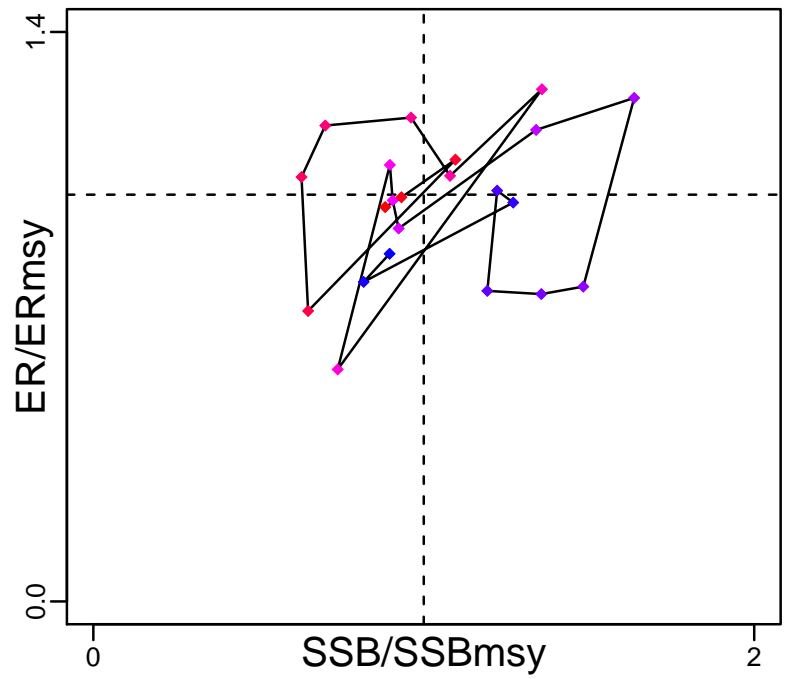
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2013	134,000	-	0
SSB	SSB-MT	2013	45,900	Both	1
TN	-	-	-	-	-
R	R-E00	2013	3.01×10^8	-	0
F	-	-	-	-	-
ER	ER-calc-ratio	2013	0.378	-	-
TC	TC-MT	2013	50,600		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2013	0.954		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2013	0.883		
F/Fmsy	-	-	-		
ER/ERmsy	ER-calc-ratio/ERmsy-ratio	2013	0.969		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Spotted mackerel East China Sea [BMACKECS]

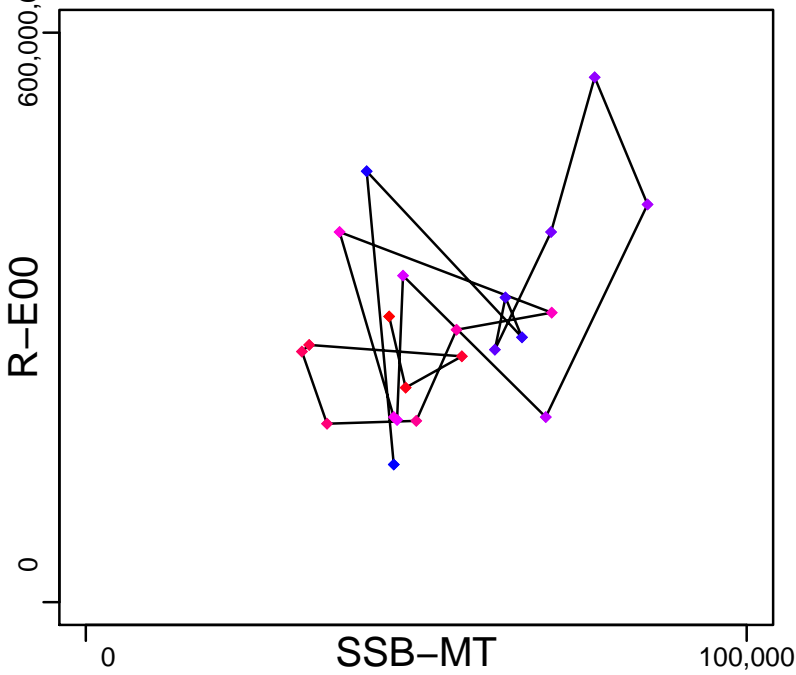
Kobe MSYpref (1992–2013–JPNIMP2016)



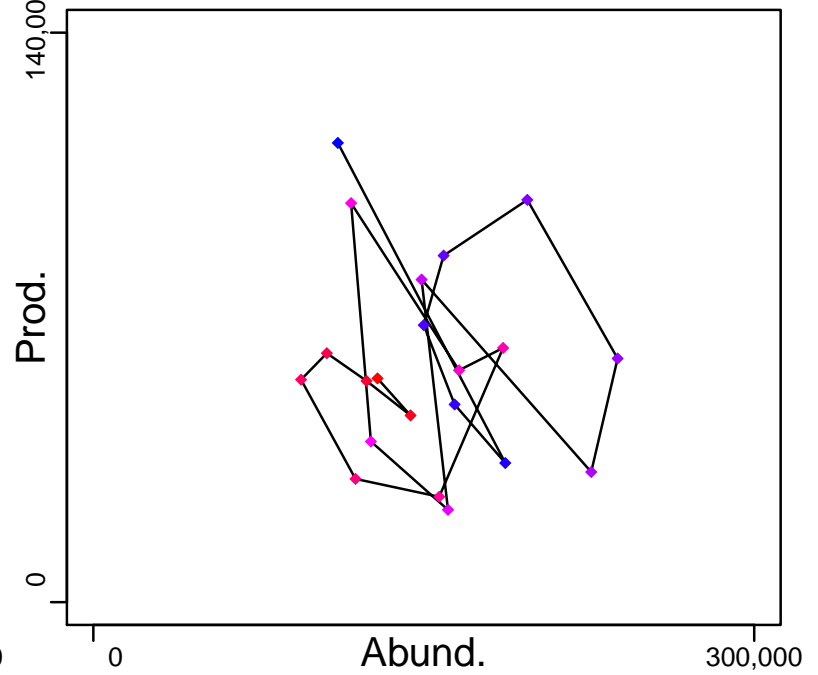
Kobe MGTpref (1992–2013–JPNIMP2016)



Spawner Recruit (1992–2013–JPNIMP2016)



Production (1992–2013–JPNIMP2016)

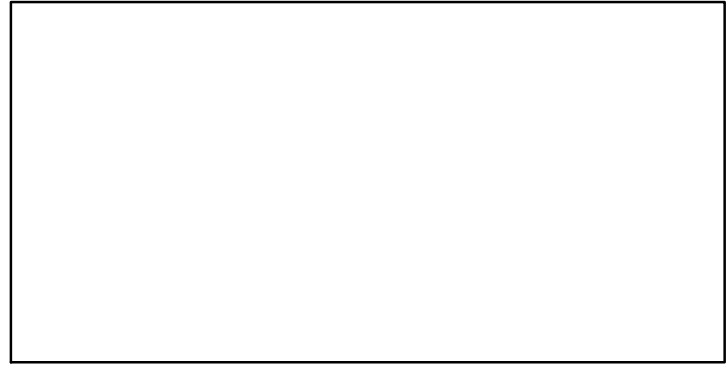
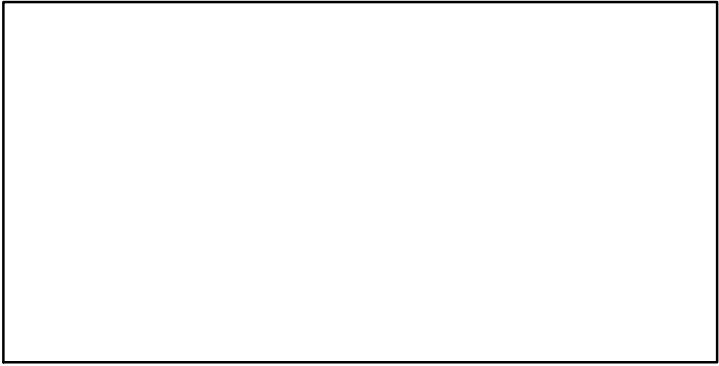
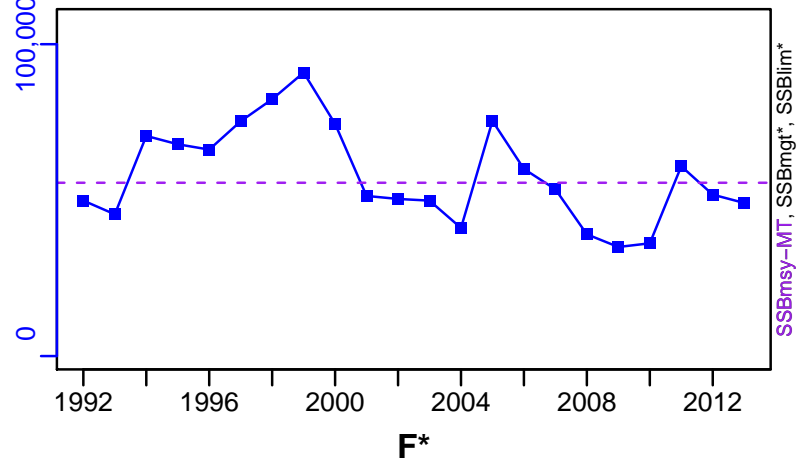
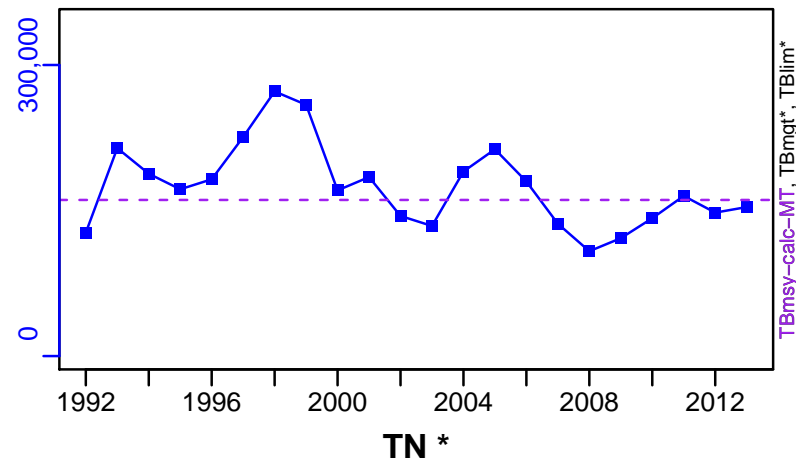


◆ Start Year ◆ End Year * No Data

Spotted mackerel East China Sea [BMACKECS]

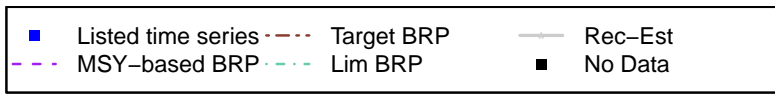
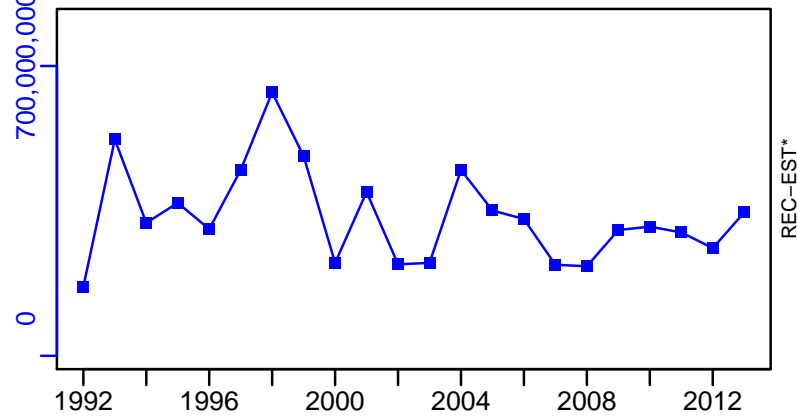
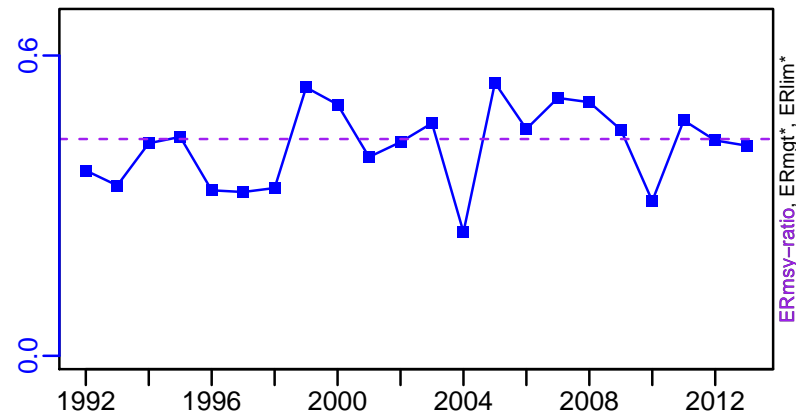
TB-MT (1992-2013-JPNIMP2016)

SSB-MT (1992-2013-JPNIMP2016)



ER-calc-ratio (1992-2013-JPNIMP2016)

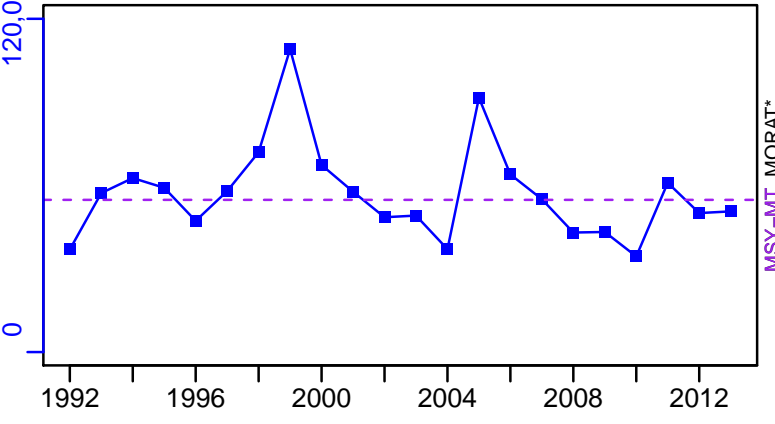
R-E00 (1992-2013-JPNIMP2016)



Spotted mackerel East China Sea [BMACKECS]

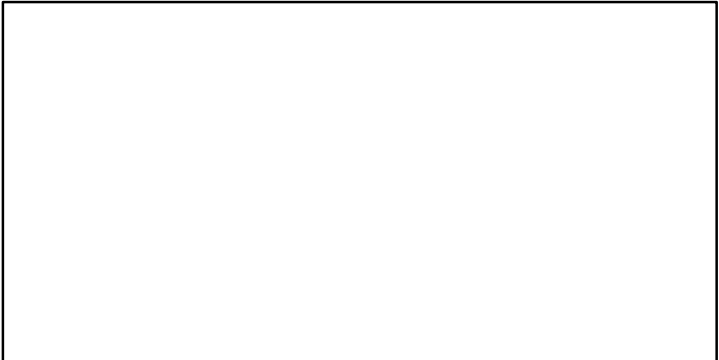
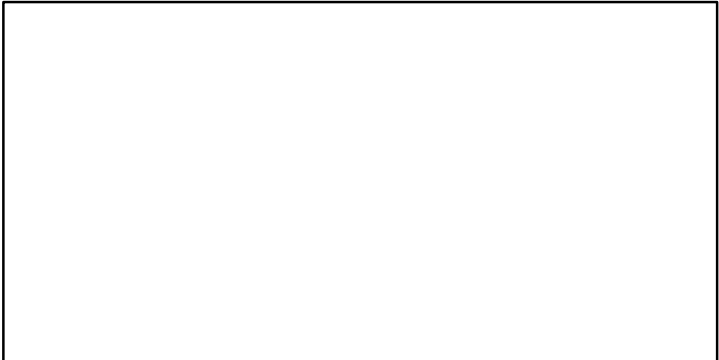
TC-MT, TL*, RecC* (1992-2013-JPNIMP2016)

TAC*, Cpair*, Cadv*



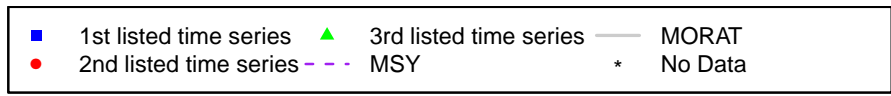
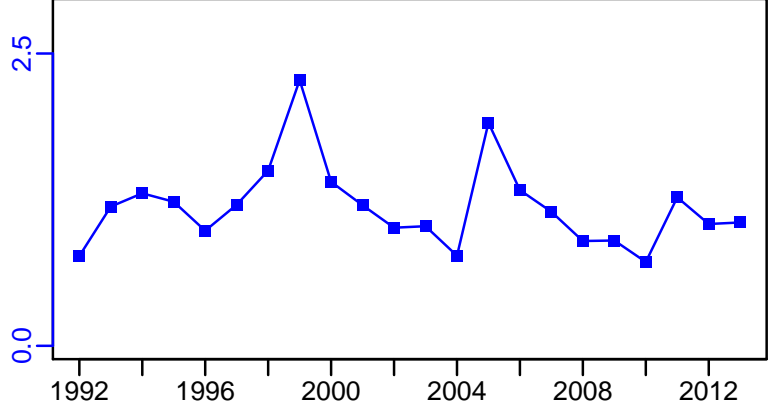
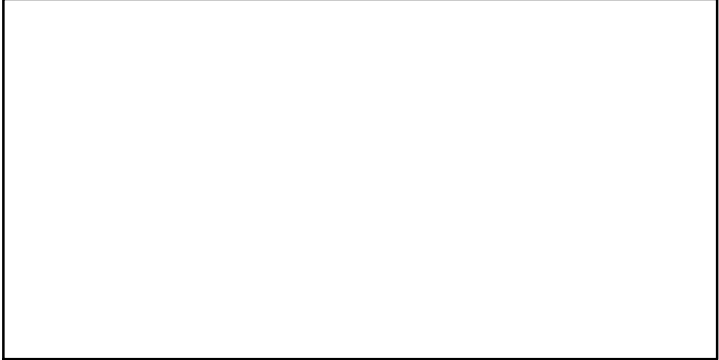
survB*

CPUE*



EFFORT*

CdivMSY-ratio (1992-2013-JPNIMP2016)



Spotted mackerel Pacific Coast of Japan [BMACKPJPN]

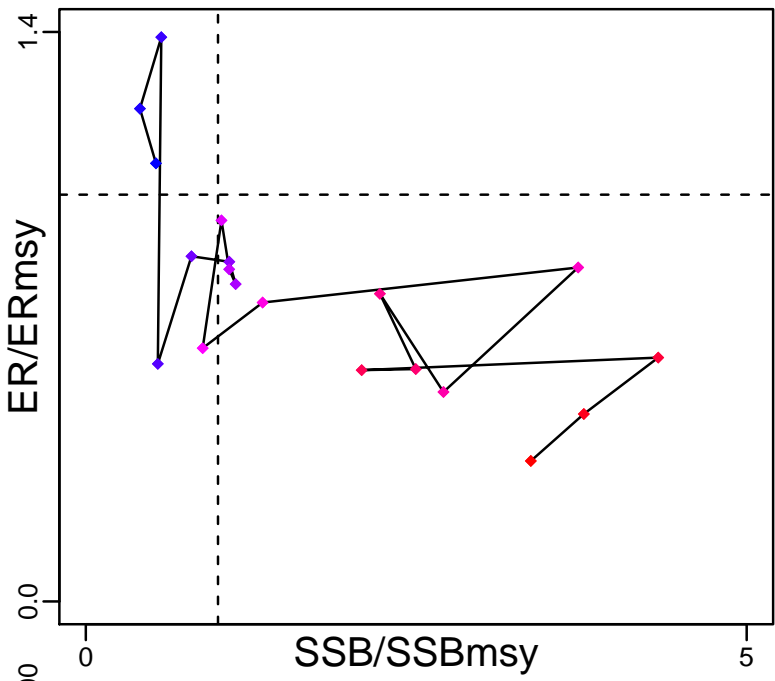
Metadata	
Scientific Name	Scomber australasicus
Current Assess ID	FAFRFJ-BMACKPJPN-1982-2013-JPNIMP2016
Area	Pacific Coast of Japan
Management Authority	Fisheries Agency of Japan
Assessor	Fisheries Agency and Fisheries Research Agency of Japan
Asmts in RAM	2013

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2013	369,685
SSBmsy	SSBmsy-MT	2013	91,814
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2013	0.394
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2013	145,656
M	M-1/yr	2013	0.4
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

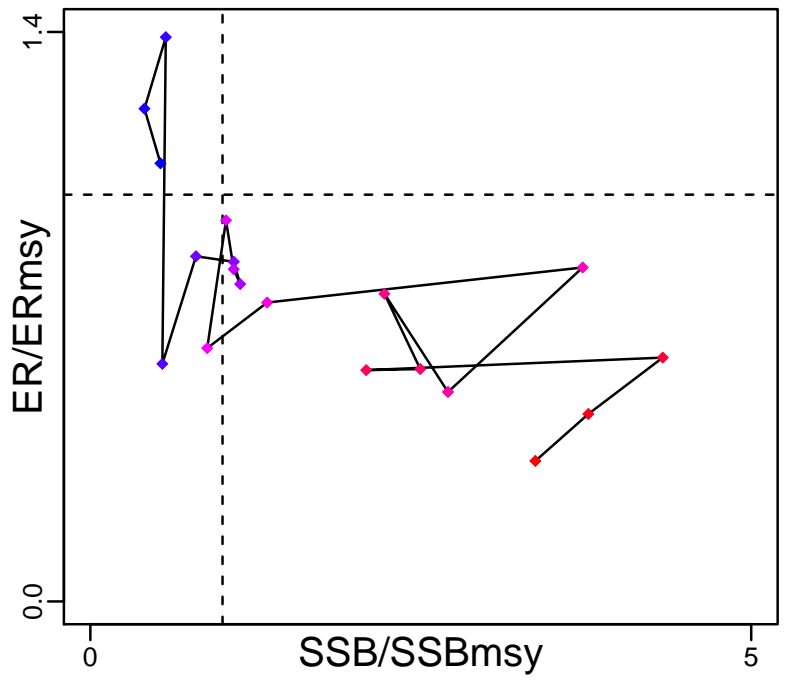
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2013	785,000	-	0
SSB	SSB-MT	2013	309,000	Both	2
TN	-	-	-	-	-
R	R-E00	2013	1.22×10^9	-	0
F	-	-	-	-	-
ER	ER-calc-ratio	2013	0.136	-	-
TC	TC-MT	2013	107,000		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2013	2.122		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2013	3.367		
F/Fmsy	-	-	-		
ER/ERmsy	ER-calc-ratio/ERmsy-ratio	2013	0.345		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Spotted mackerel Pacific Coast of Japan [BMACKPJPN]

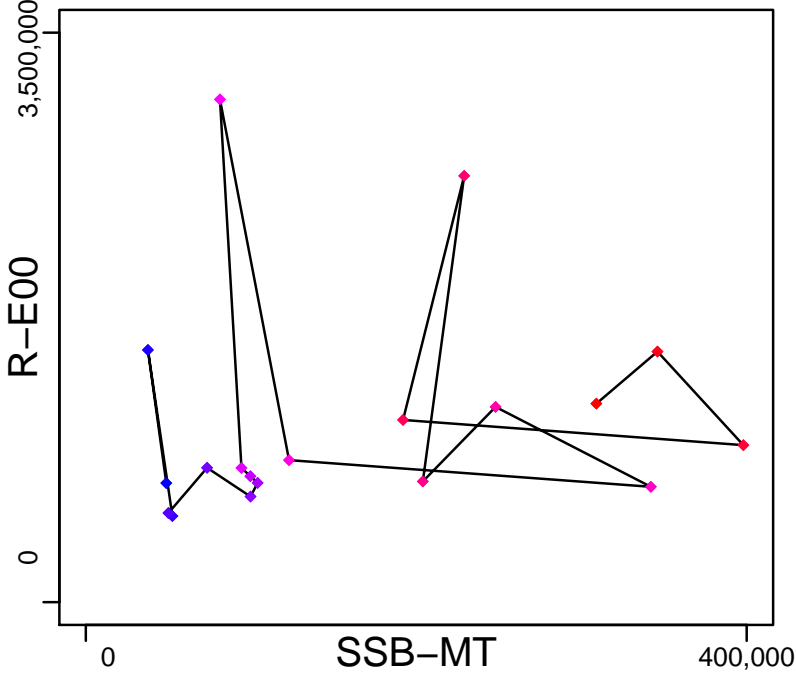
Kobe MSYpref (1982-2013-JPNIMP2016)



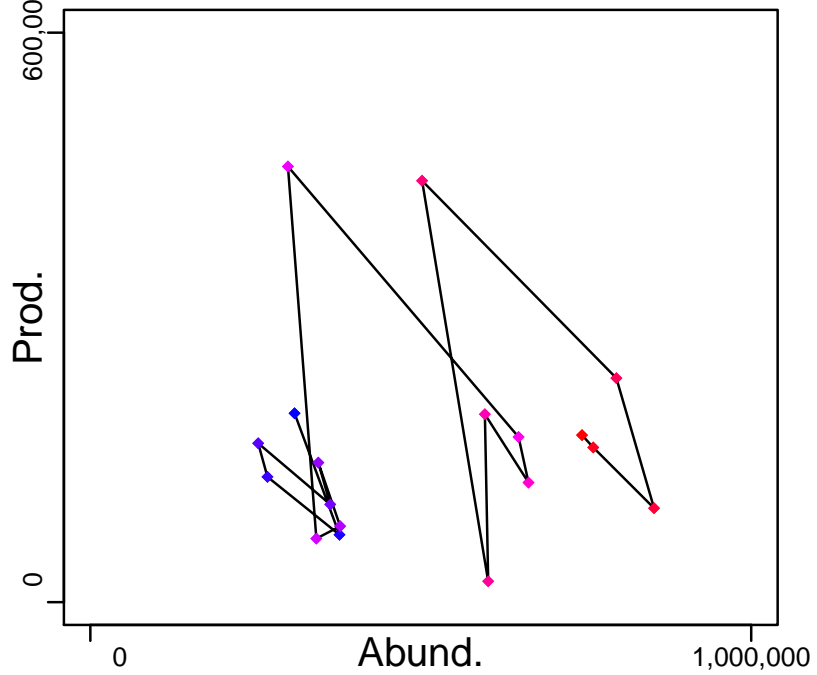
Kobe MGTpref (1982-2013-JPNIMP2016)



Spawner Recruit (1982-2013-JPNIMP2016)



Production (1982-2013-JPNIMP2016)

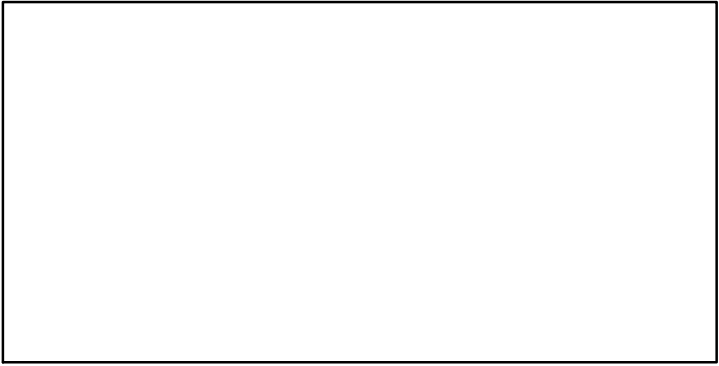
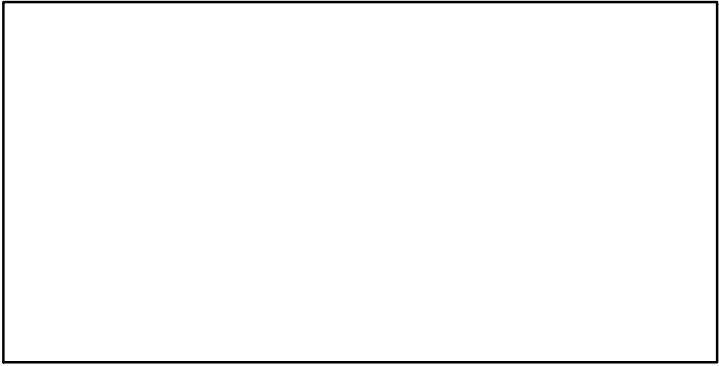
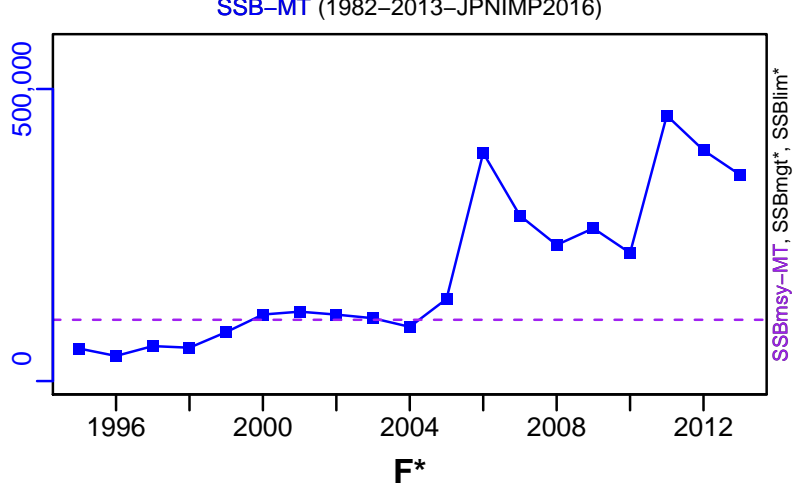
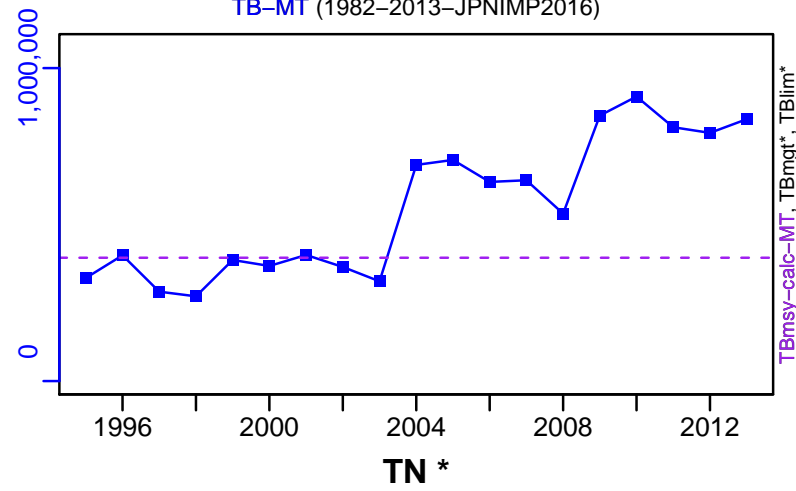


◆ Start Year ◆ End Year * No Data

Spotted mackerel Pacific Coast of Japan [BMACKPJPN]

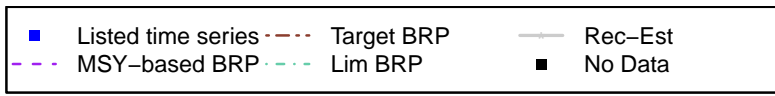
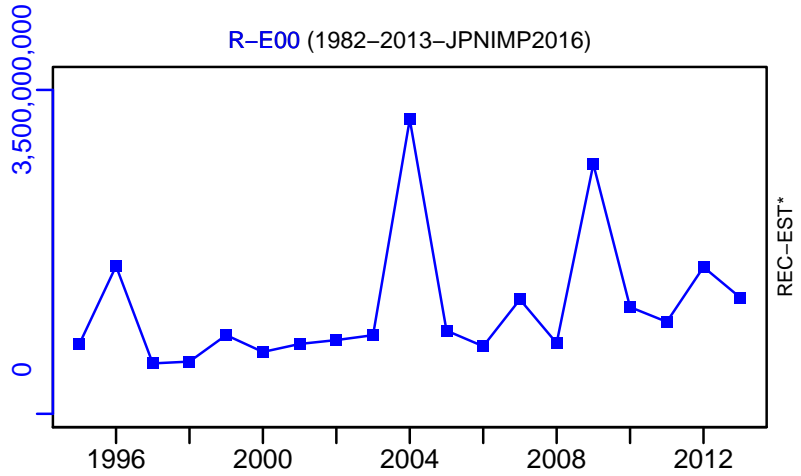
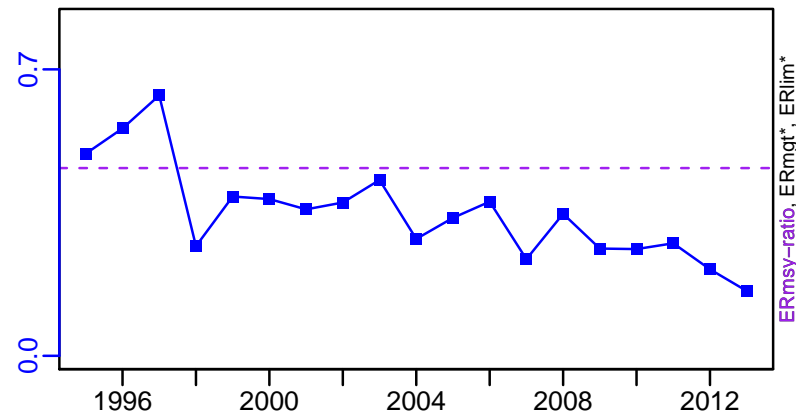
TB-MT (1982-2013-JPNIMP2016)

SSB-MT (1982-2013-JPNIMP2016)



ER-calc-ratio (1982-2013-JPNIMP2016)

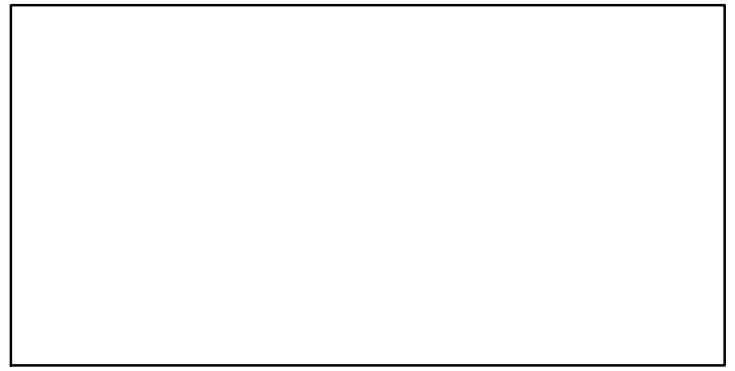
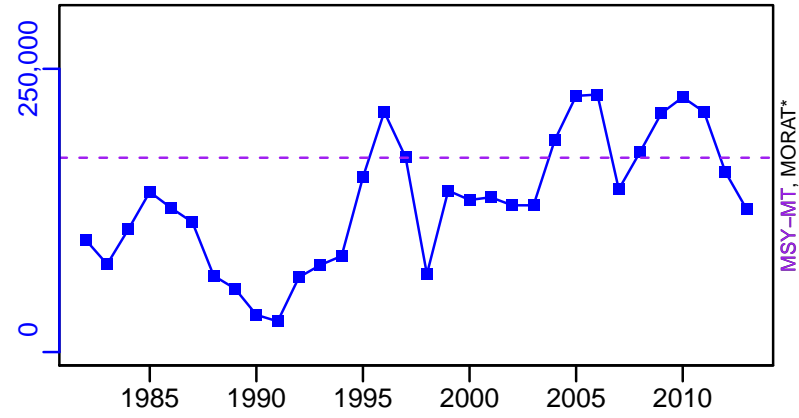
R-E00 (1982-2013-JPNIMP2016)



Spotted mackerel Pacific Coast of Japan [BMACKPJPN]

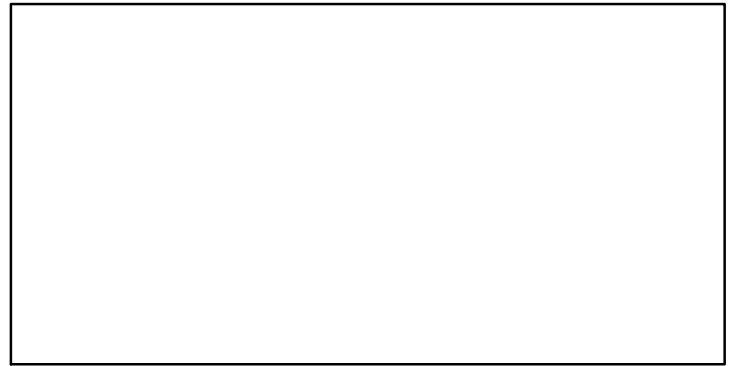
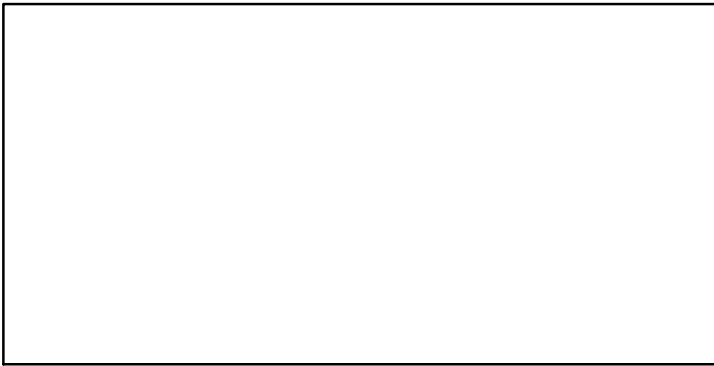
TC-MT, TL*, RecC* (1982-2013-JPNIMP2016)

TAC*, Cpair*, Cadv*



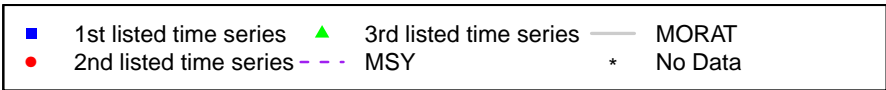
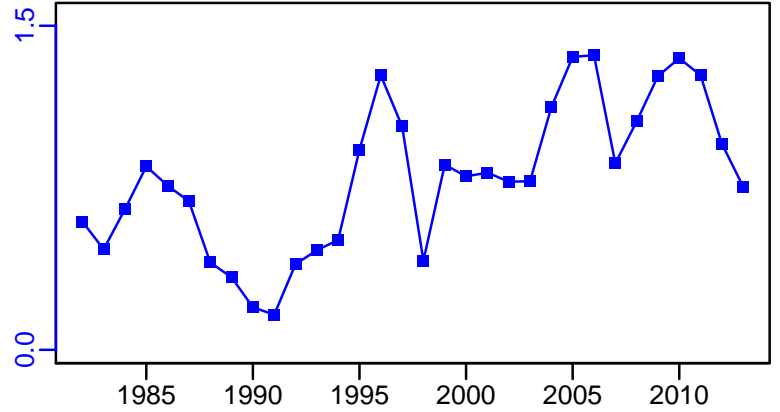
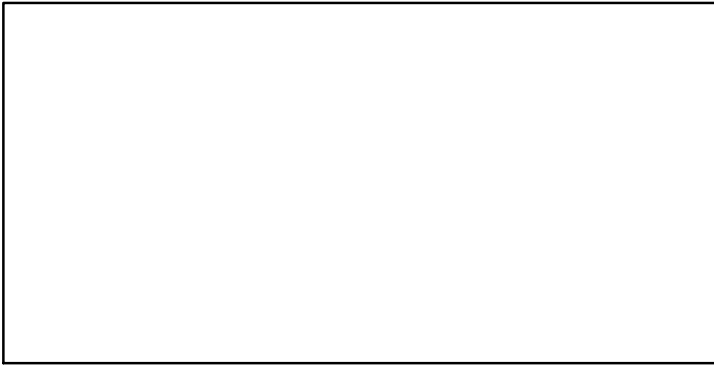
survB*

CPUE*



EFFORT*

CdivMSY-ratio (1982-2013-JPNIMP2016)



Cunene Horse Mackerel West Africa [CHMACKWA]

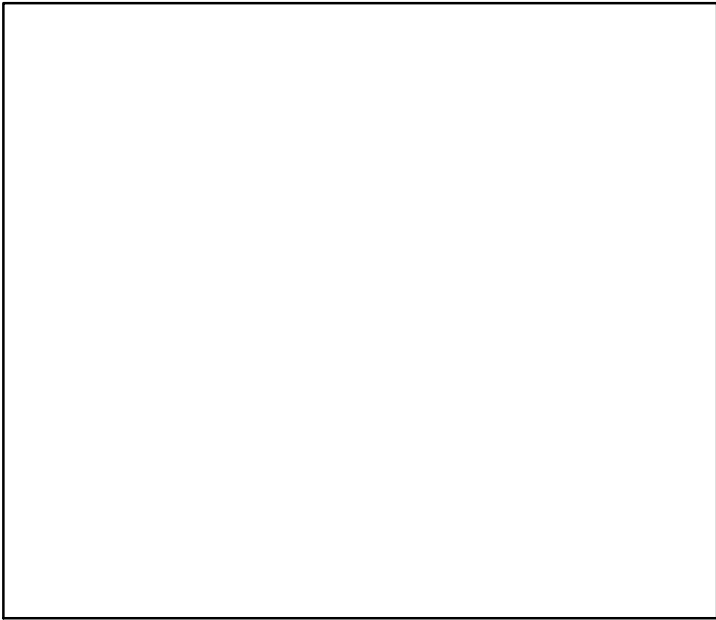
Metadata	
Scientific Name	Trachurus trecae
Current Assess ID	FAO-SPNWA-CHMACKWA-1990-2010-CHING
Area	West Africa
Management Authority	Food and Agriculture Organization of the United Nations
Assessor	FAO Working Group on the Assessment of Small Pelagic Fish Off Northwest Africa
Asmts in RAM	2010

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2010	0.53
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

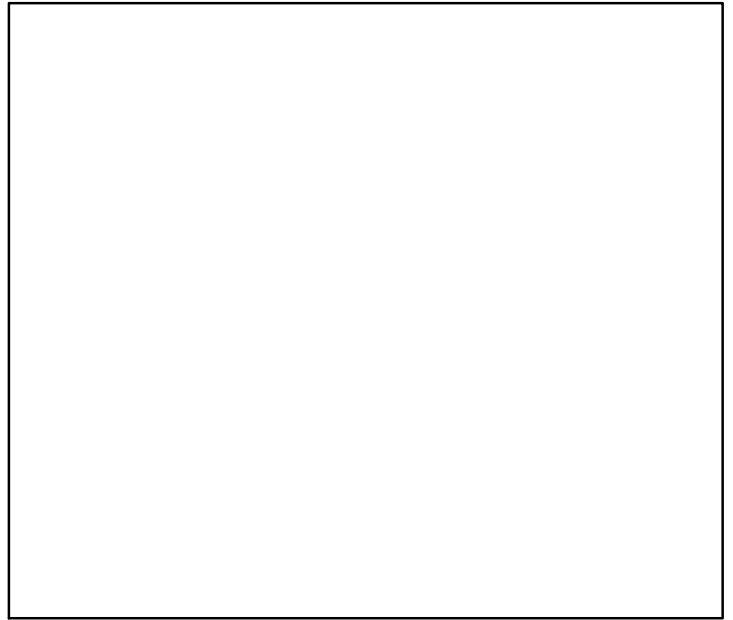
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2010	253,000	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-1/yr	2010	1.39	-	-
ER	ER-calc-ratio	2010	1.391	-	-
TC	TC-MT	2010	352,000		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2010	2.623		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Cunene Horse Mackerel West Africa [CHMACKWA]

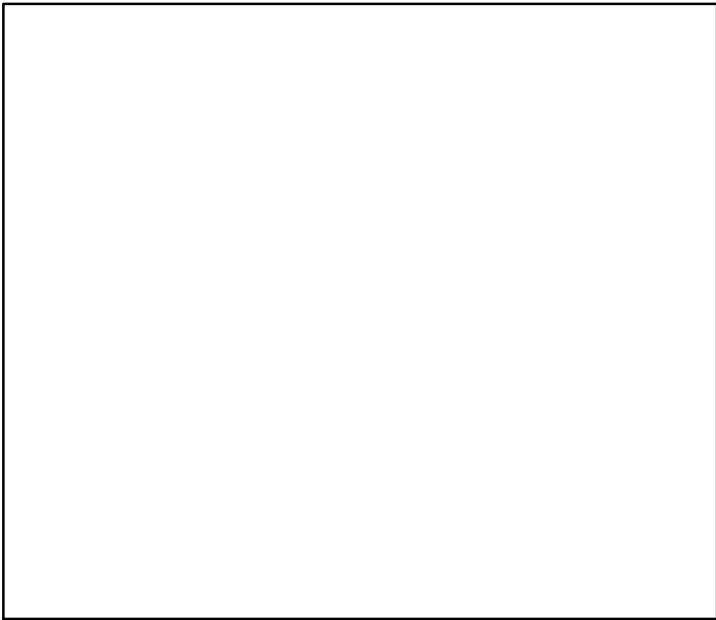
Kobe MSY*



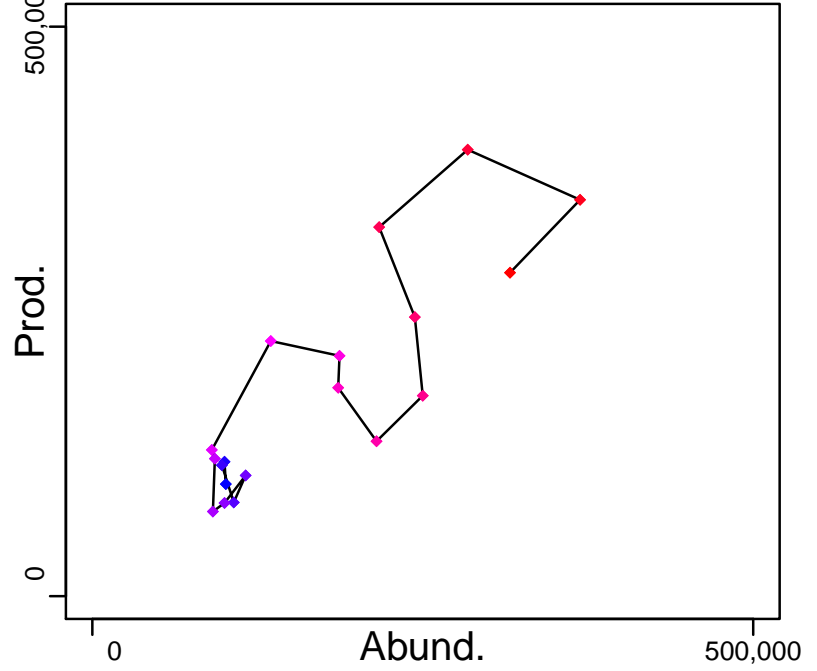
Kobe MGT*



Spawner Recruit*



Production (1990–2010–CHING)

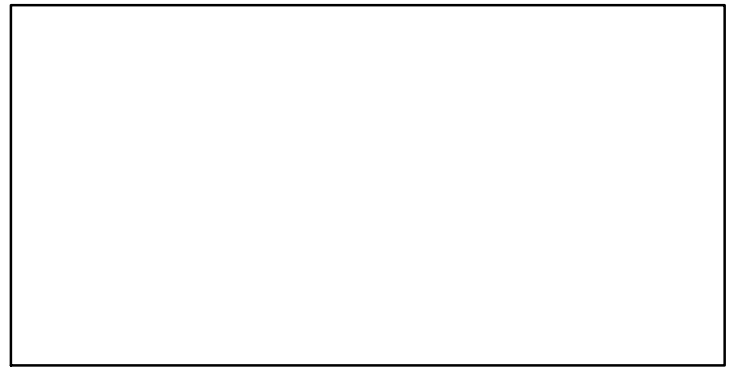
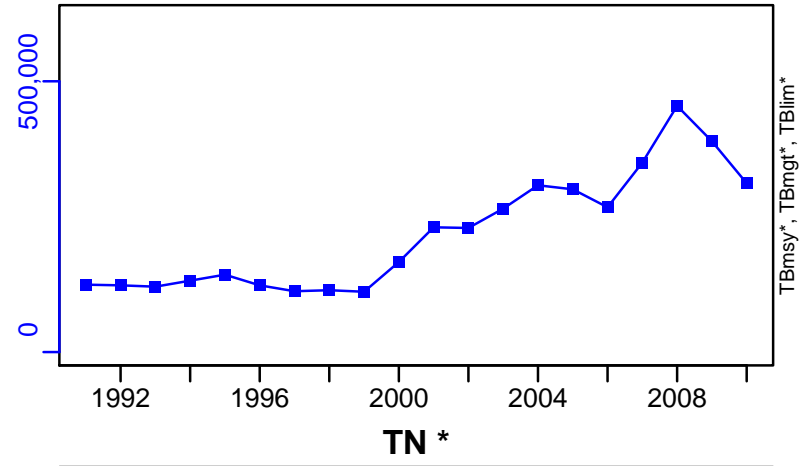


◆ Start Year ◆ End Year * No Data

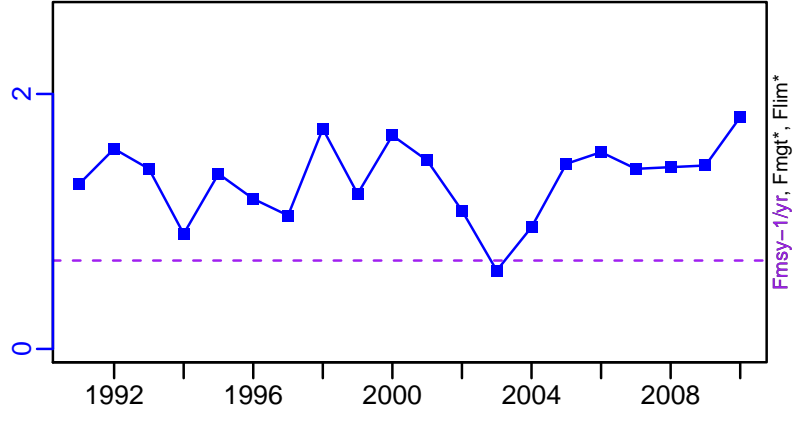
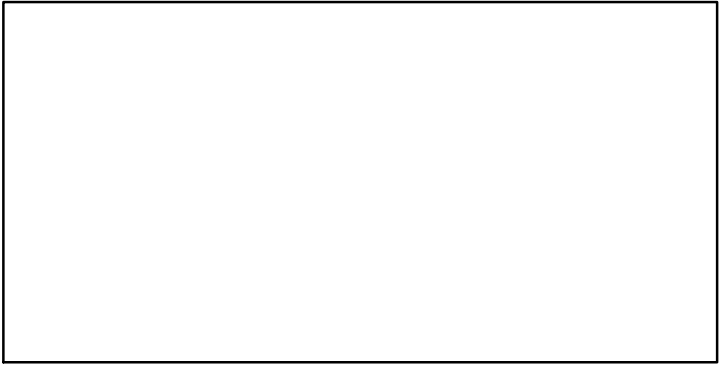
Cunene Horse Mackerel West Africa [CHMACKWA]

TB-MT (1990-2010-CHING)

SSB*

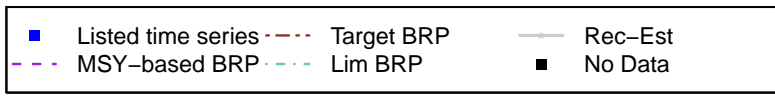
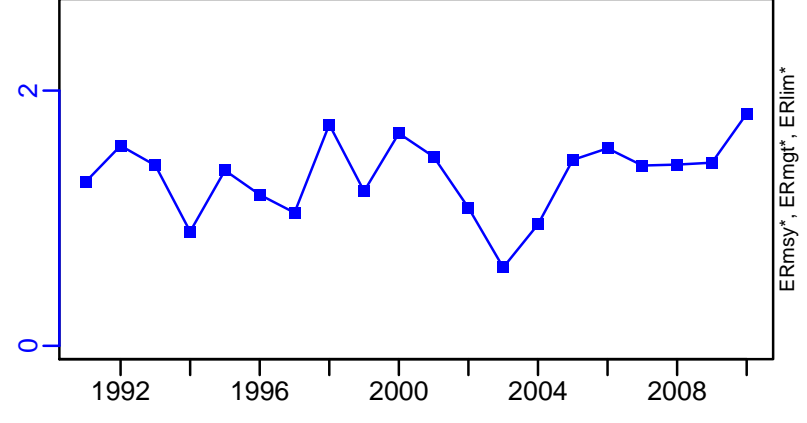


F-1/yr (1990-2010-CHING)



ER-calc-ratio (1990-2010-CHING)

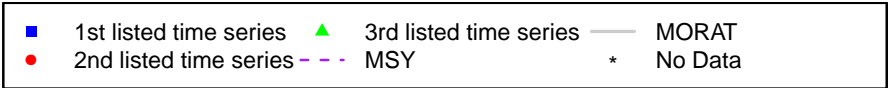
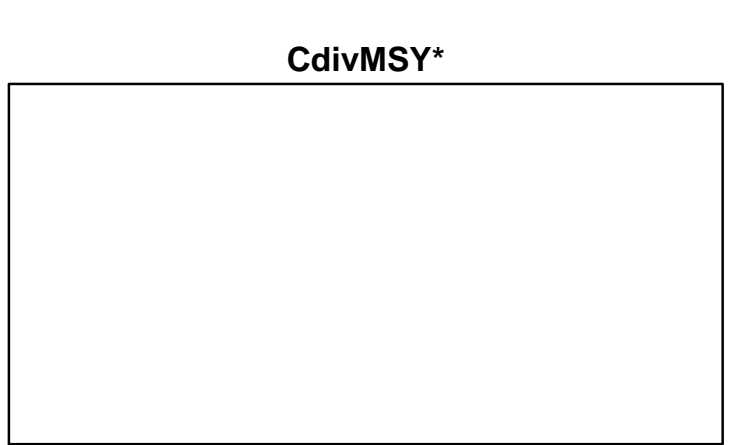
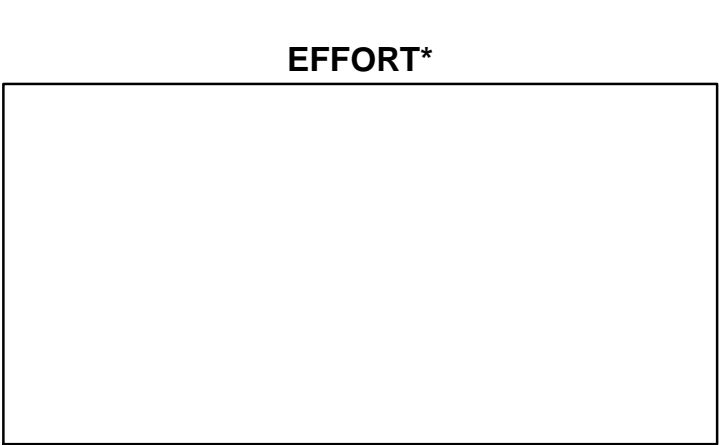
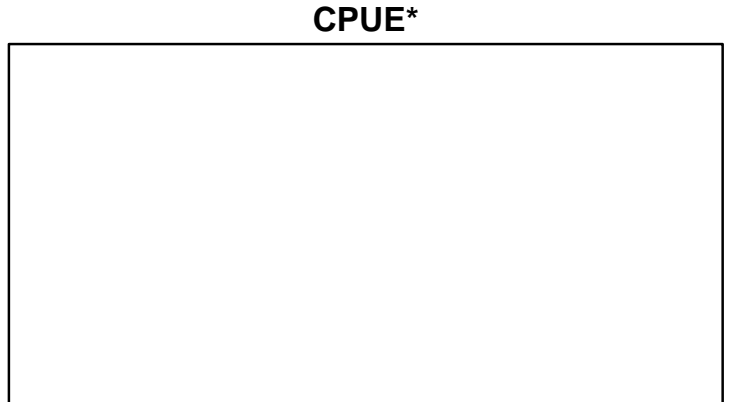
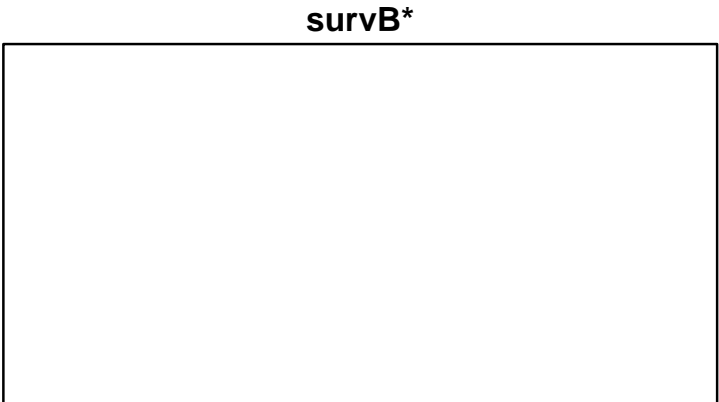
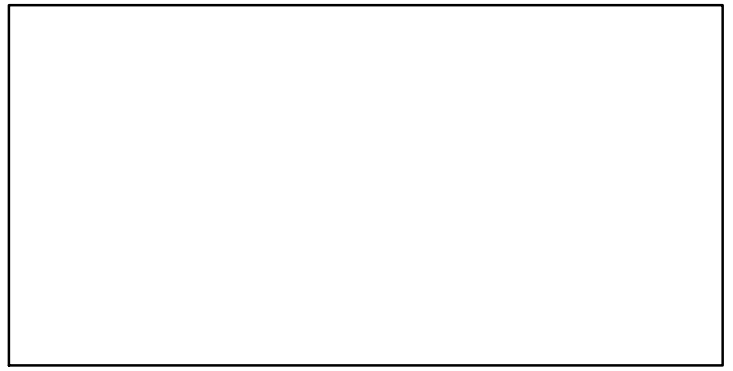
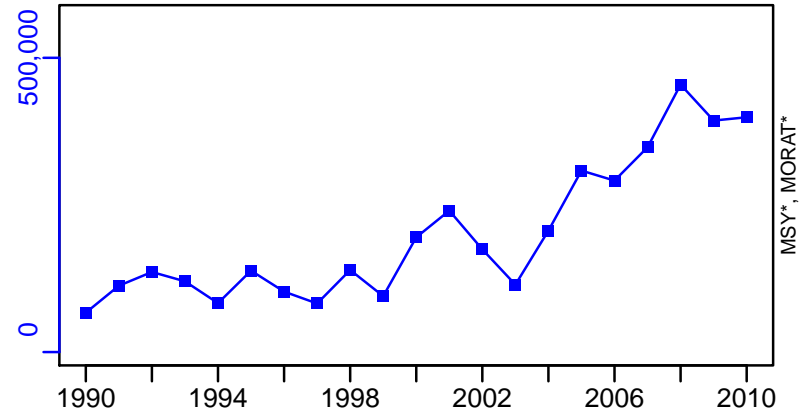
Recruits*



Cunene Horse Mackerel West Africa [CHMACKWA]

TC-MT, TL*, RecC* (1990-2010-CHING)

TAC*, Cpair*, Cadv*



Chilean jack mackerel Chilean EEZ and offshore [CHTRACCH]

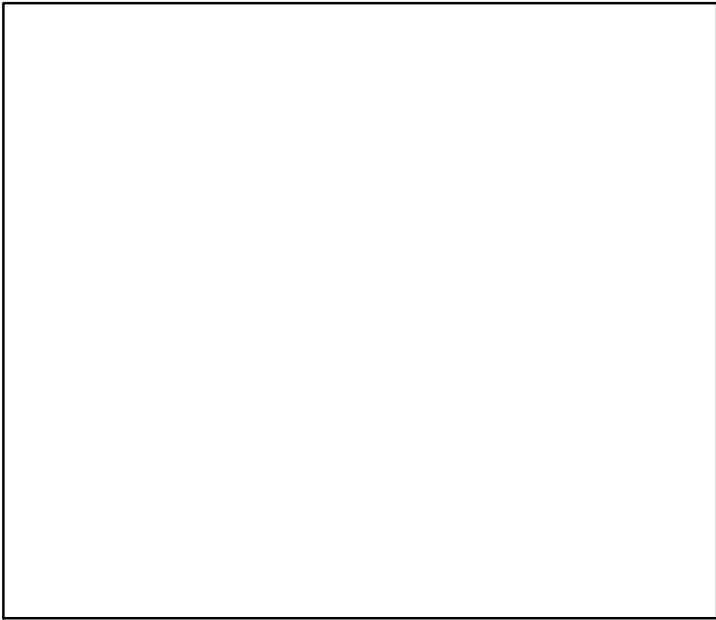
Metadata	
Scientific Name	Trachurus murphyi
Current Assess ID	SPRFMO-CHTRACCH-1969-2015-PARMA
Area	Chilean EEZ and offshore
Management Authority	South Pacific Regional Fisheries Management Organization
Assessor	South Pacific Regional Fisheries Management Organization
Asmts in RAM	2010, 2015

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

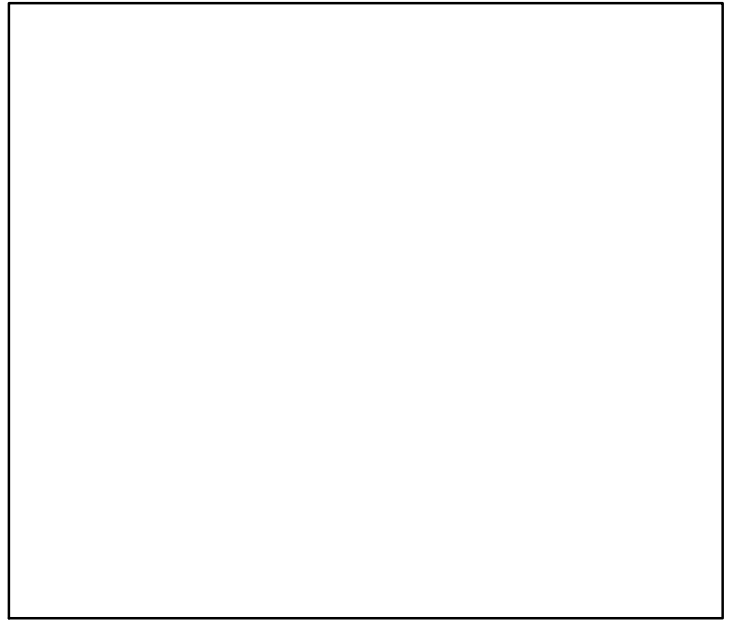
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2010	2,360,000	-	-
SSB	SSB-MT	2015	2,720,000	-	-
TN	-	-	-	-	-
R	R-E00	2015	1.25×10^{10}	-	1
F	F-1/yr	2015	0.18	-	1 to 12
ER	ER-ratio	2010	0.315	-	-
TC	TC-MT	2015	434,000		
TL	TL-MT	2015	434,000		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy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

Chilean jack mackerel Chilean EEZ and offshore [CHTRACCH]

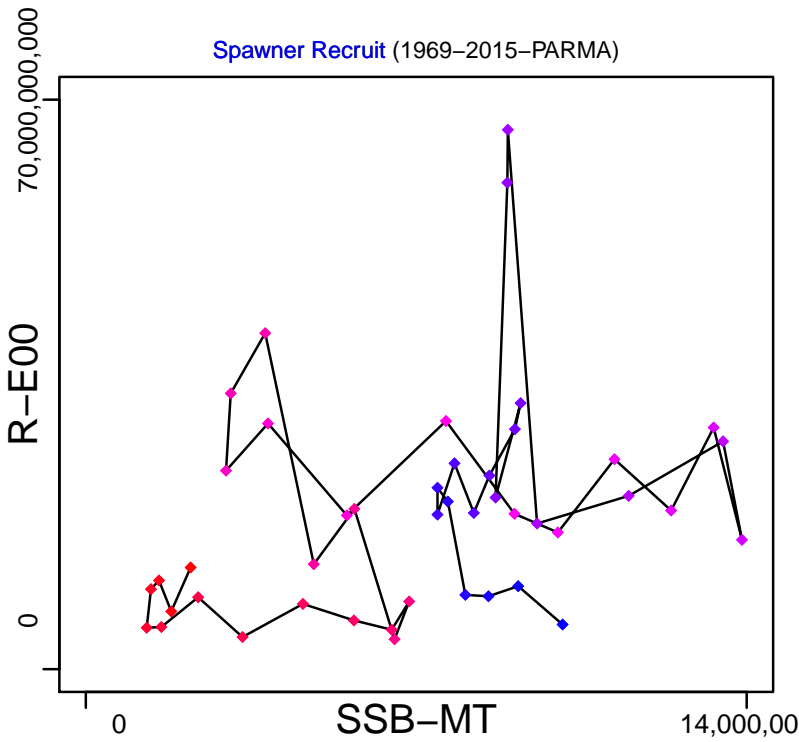
Kobe MSY*



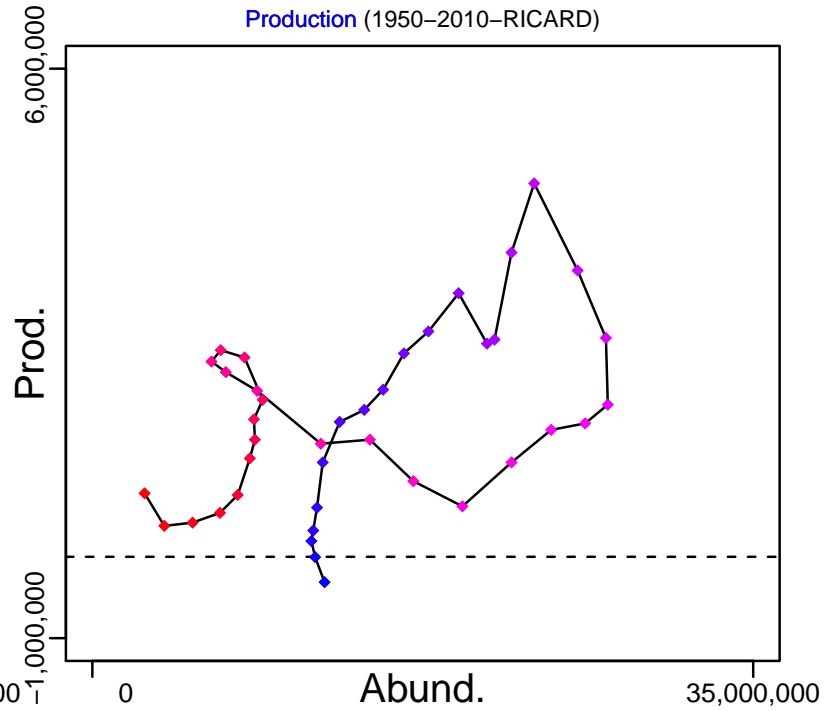
Kobe MGT*



Spawner Recruit (1969–2015–PARMA)



Production (1950–2010–RICARD)

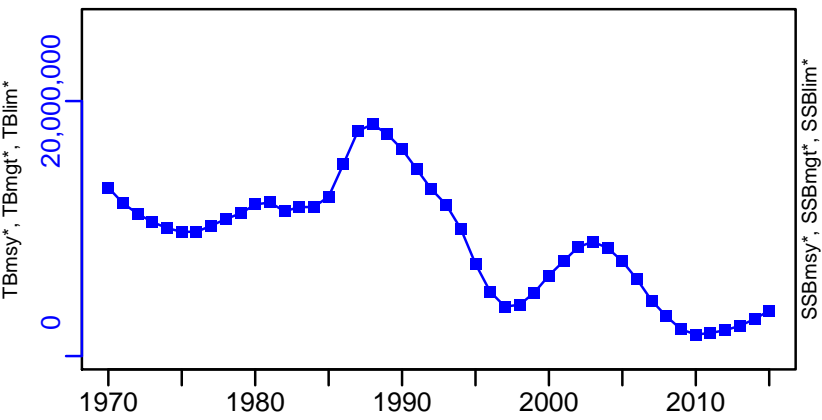
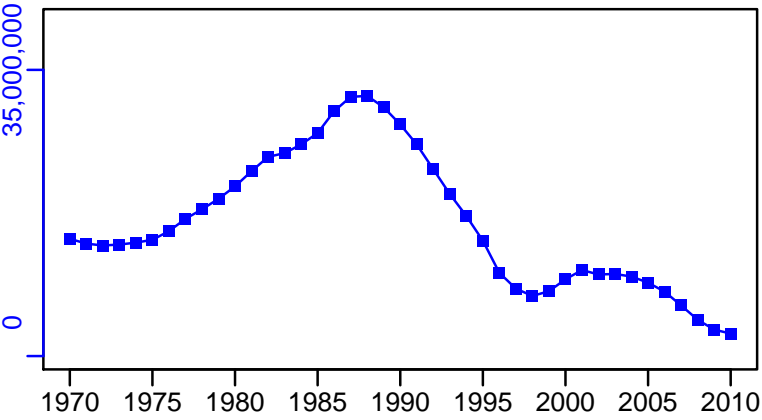


◆ Start Year ◆ End Year * No Data

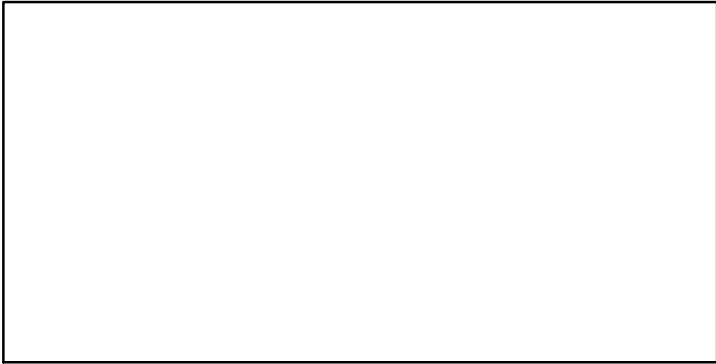
Chilean jack mackerel Chilean EEZ and offshore [CHTRACCH]

TB-MT (1950-2010-RICARD)

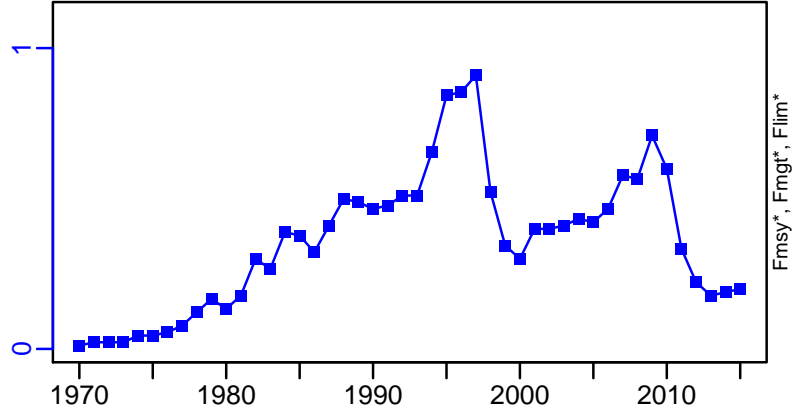
SSB-MT (1969-2015-PARMA)



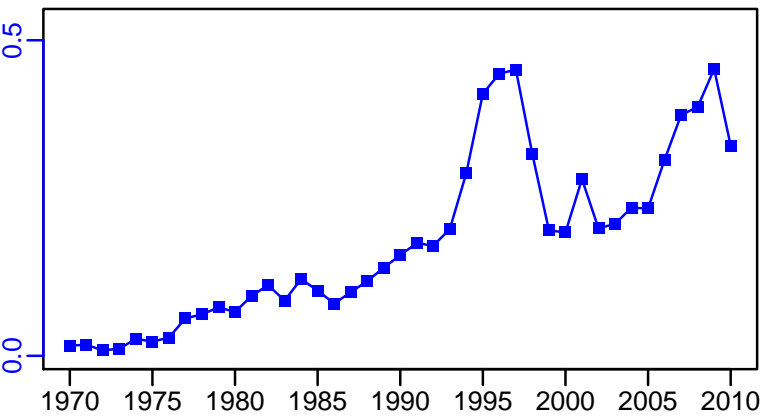
TN *



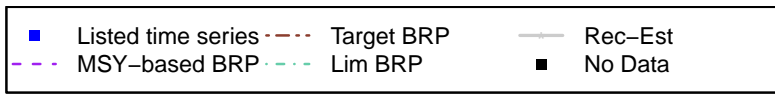
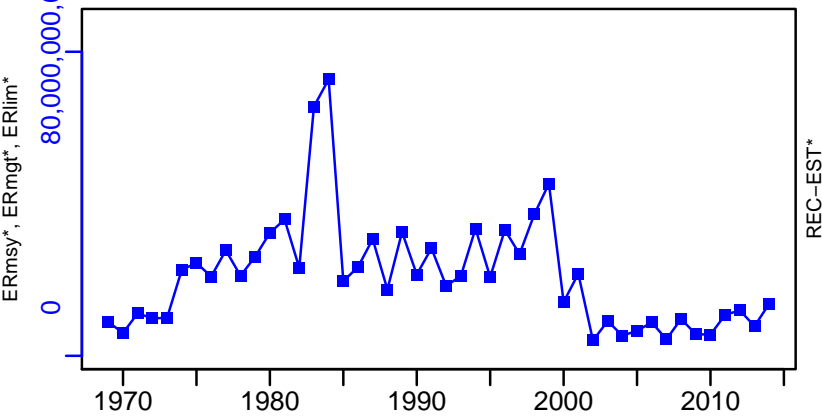
F-1/yr (1969-2015-PARMA)



ER-ratio (1950-2010-RICARD)



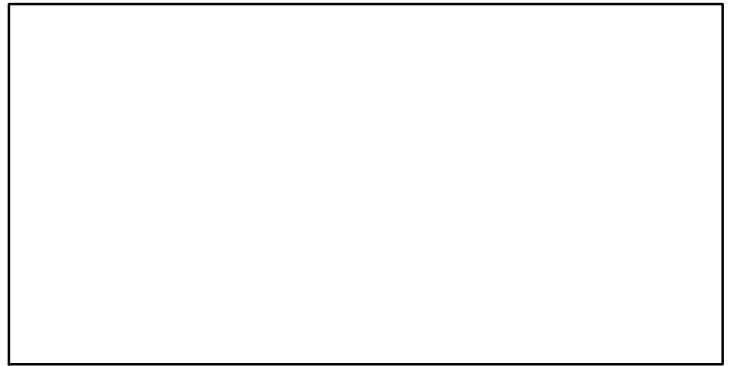
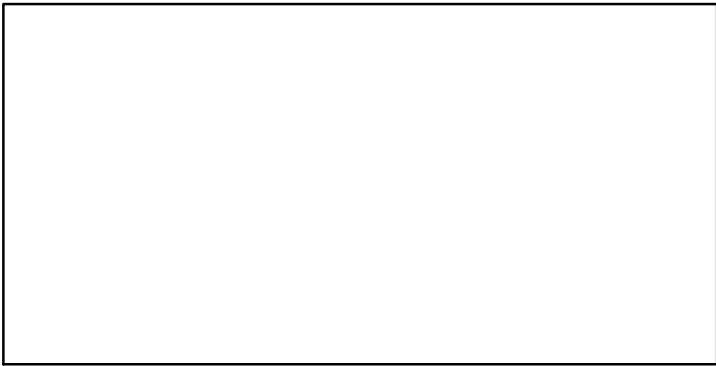
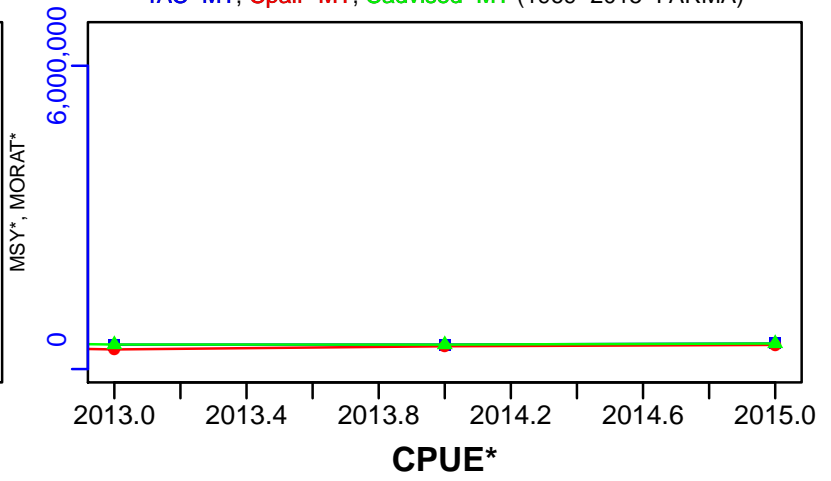
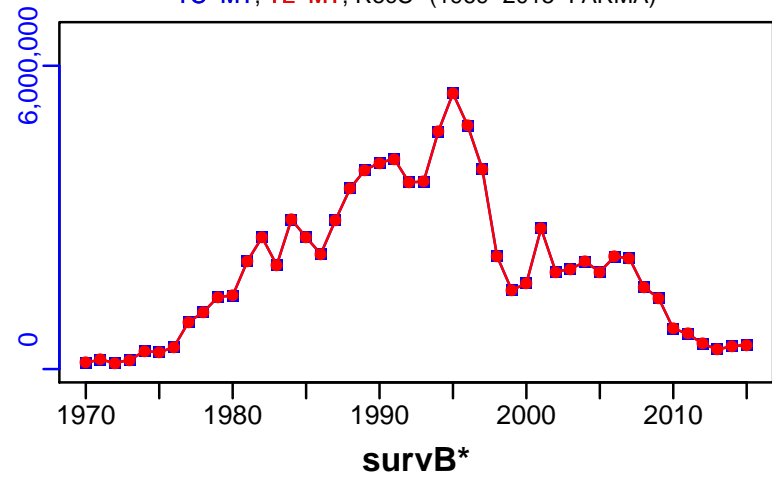
R-E00 (1969-2015-PARMA)



Chilean jack mackerel Chilean EEZ and offshore [CHTRACCH]

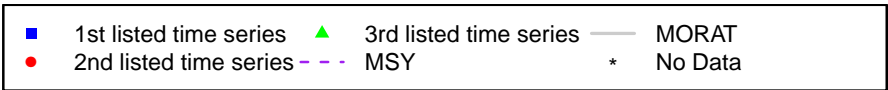
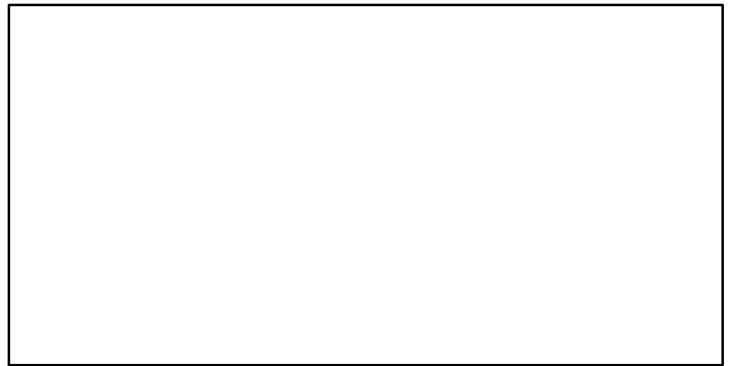
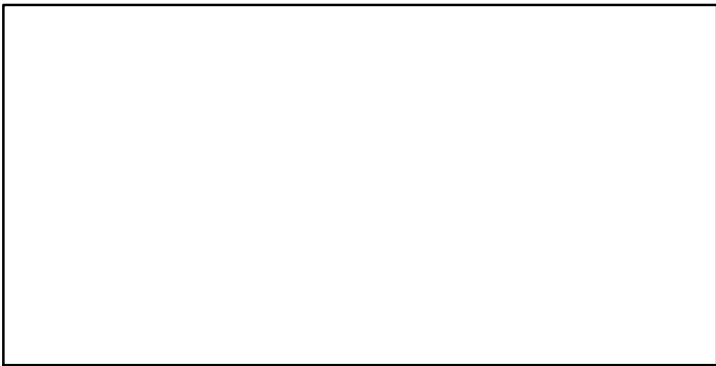
TC-MT, TL-MT, RecC* (1969-2015-PARMA)

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



EFFORT*

CdivMSY*



Pacific chub mackerel Pacific Coast [CMACKPCOAST]

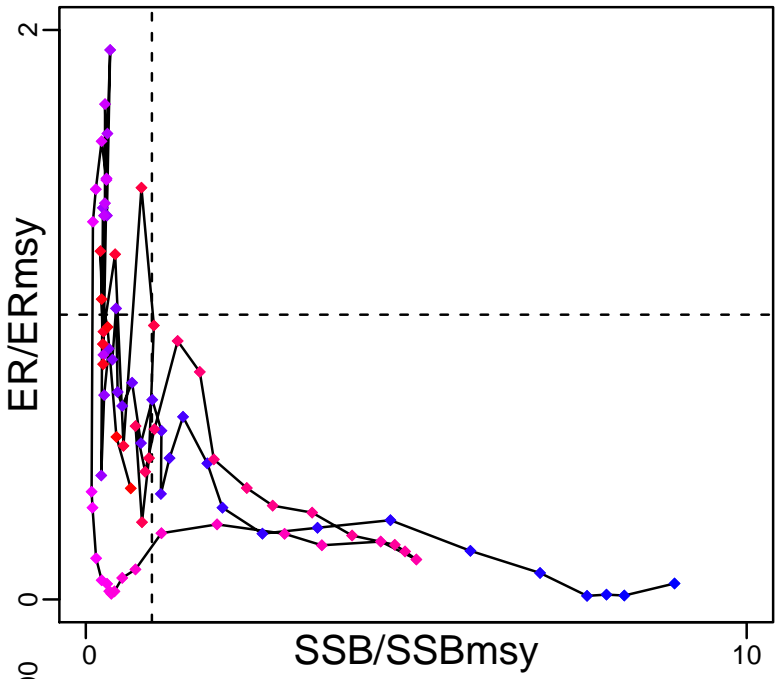
Metadata	
Scientific Name	Scomber japonicus
Current Assess ID	SWFSC-CMACKPCOAST-1983-2015-SISIMP2016
Area	Pacific Coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Southwest Fisheries Science Center
Asmts in RAM	2008, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2008	125,285
SSBmsy	SSBmsy-MT	2008	122,357
Fmsy	Fmsy-1/yr	2008	0.138
ERmsy	ERmsy-ratio	2008	0.184
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	SSB0-MT	2008	182,791
MSY	MSY-MT	2008	23,048
M	M-1/yr	2008	0.5
TBlim	TBlim-MT	2015	18,200
SSBlim	SSBlim-MT	2008	29,420
Flim	-	-	-
ERlim	-	-	-

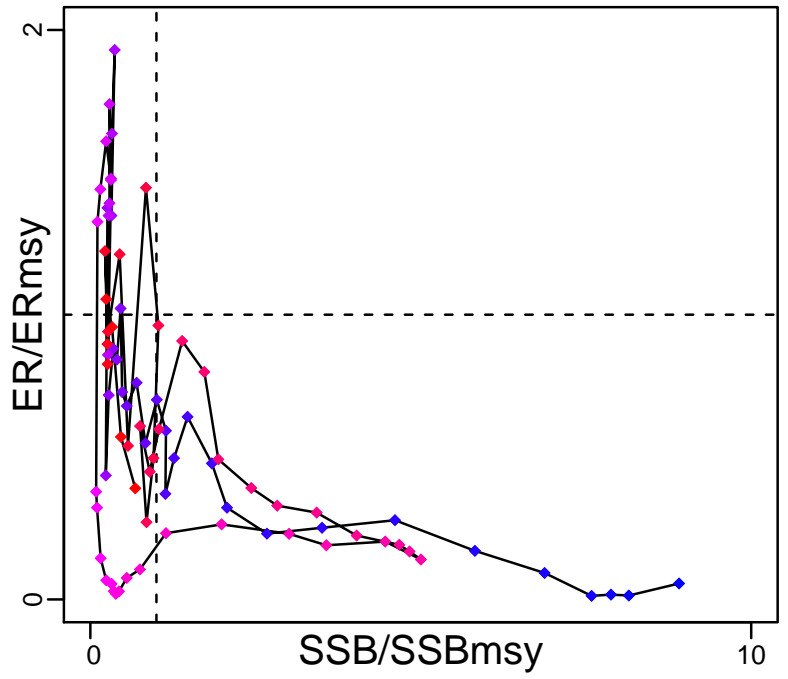
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2015	120,000	Both	1+
SSB	SSB-E00eggs	2015	40,800	Females	-
TN	-	-	-	-	-
R	R-E00	2015	3.01×10^8	-	0
F	F-1/yr	2008	0.087	-	-
ER	ER-ratio	2015	0.104	-	-
TC	TC-MT	2015	10,100		
TL	TL-MT	2008	13,700		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2008	0.68		
F/Fmsy	F-1/yr/Fmsy-1/yr	2008	0.633		
ER/ERmsy	ER-ratio/ERmsy-ratio	2008	0.39		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Pacific chub mackerel Pacific Coast [CMACKPCOAST]

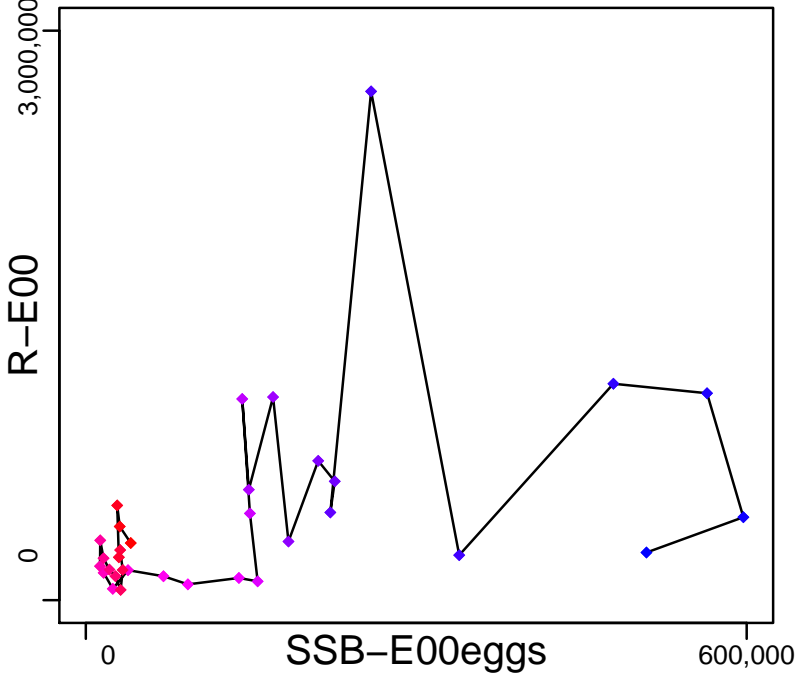
Kobe MSYpref (1929–2008–PINSKY)



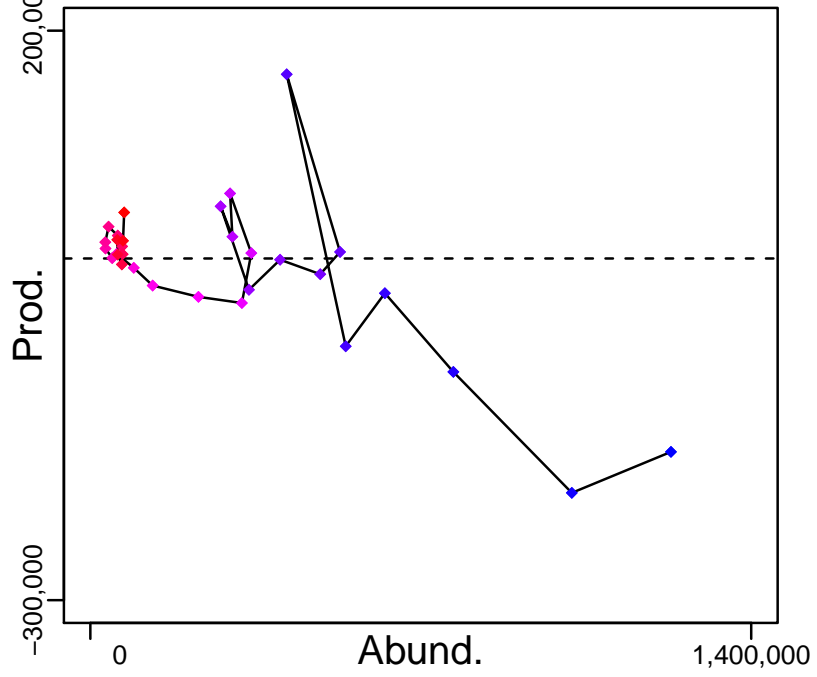
Kobe MGTpref (1929–2008–PINSKY)



Spawner Recruit (1983–2015–SISIMP2016)



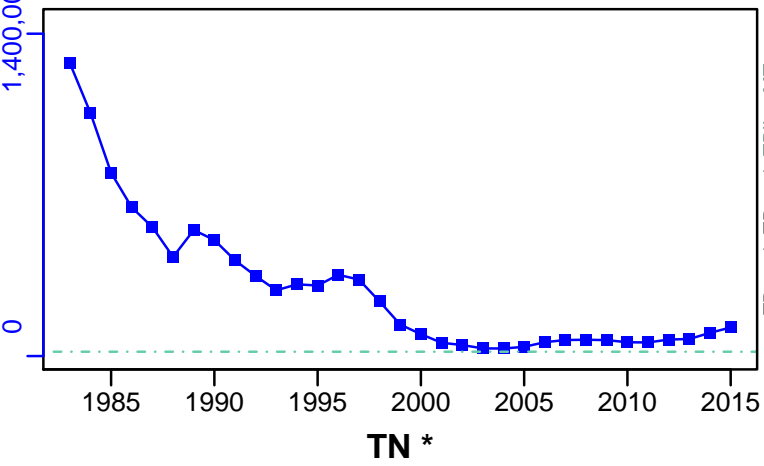
Production (1983–2015–SISIMP2016)



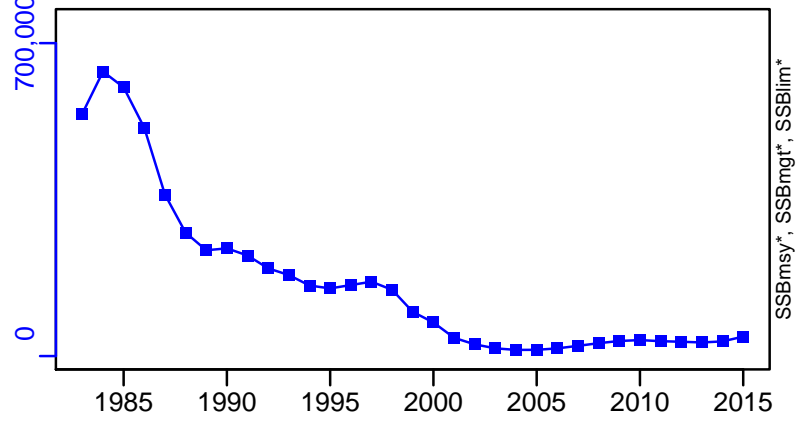
◆ Start Year ◆ End Year * No Data

Pacific chub mackerel Pacific Coast [CMAACKPCOAST]

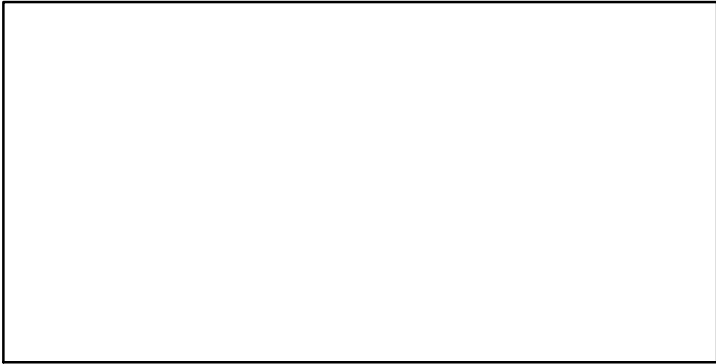
TB-MT (1983-2015-SISIMP2016)



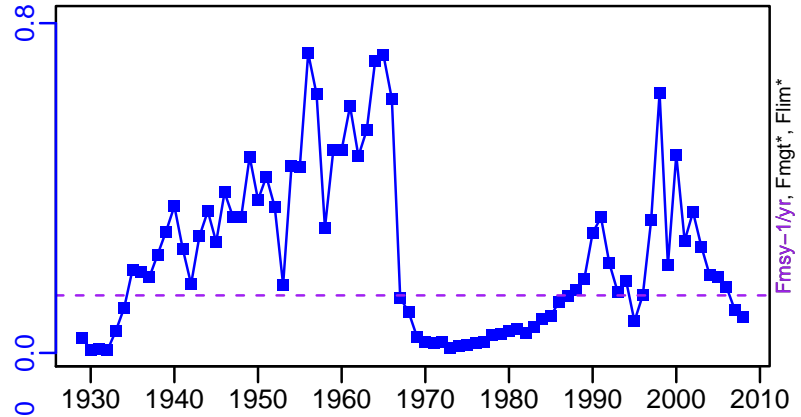
SSB-E00eggs (1983-2015-SISIMP2016)



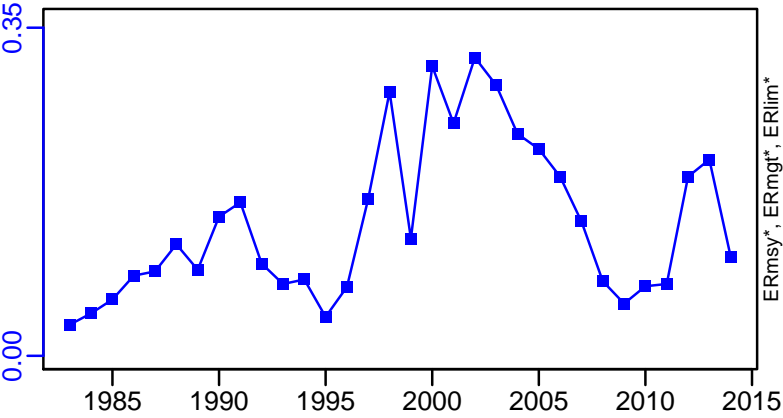
TN *



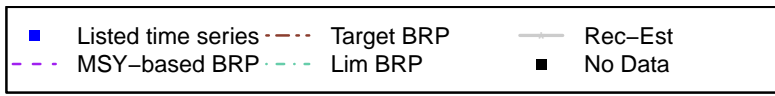
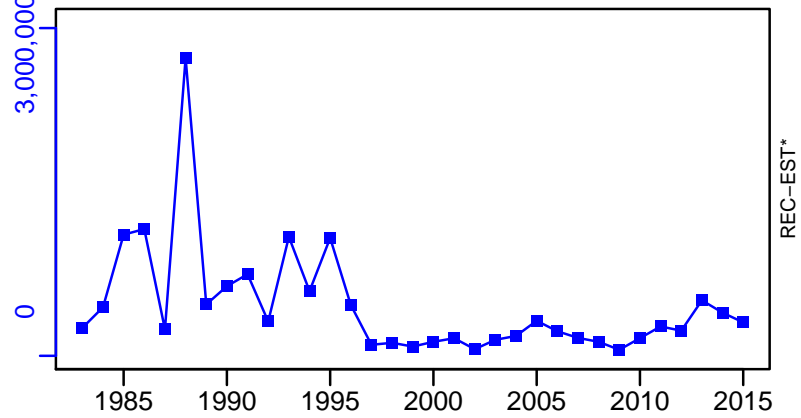
F-1/yr (1929-2008-PINSKY)



ER-ratio (1983-2015-SISIMP2016)



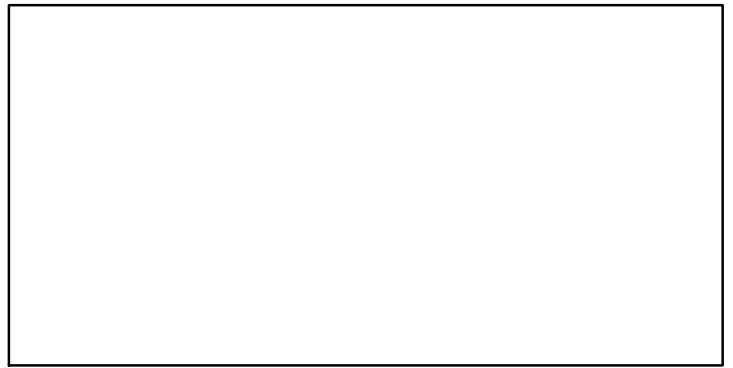
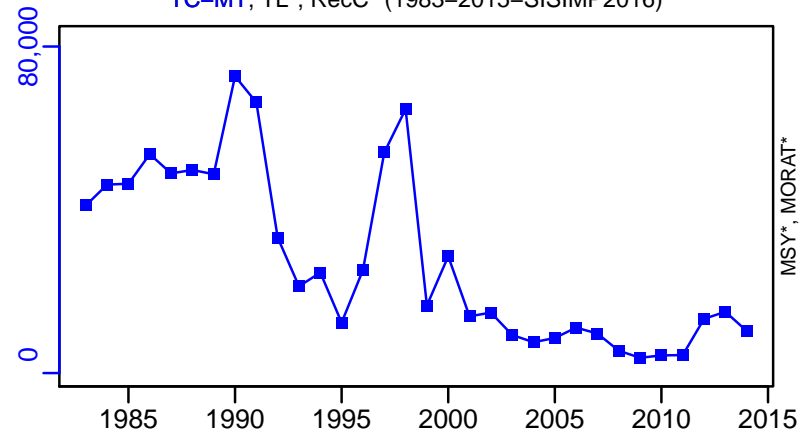
R-E00 (1983-2015-SISIMP2016)



Pacific chub mackerel Pacific Coast [CMACKPCOAST]

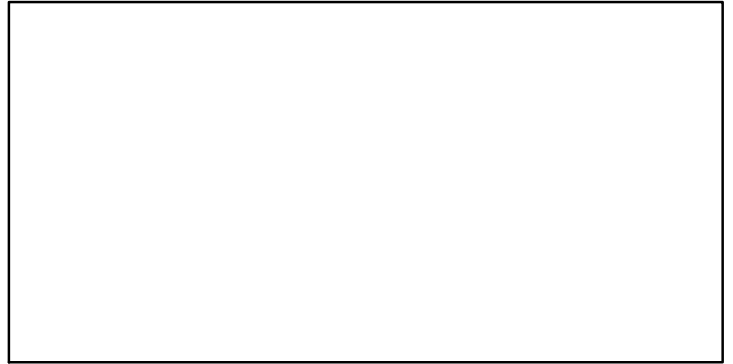
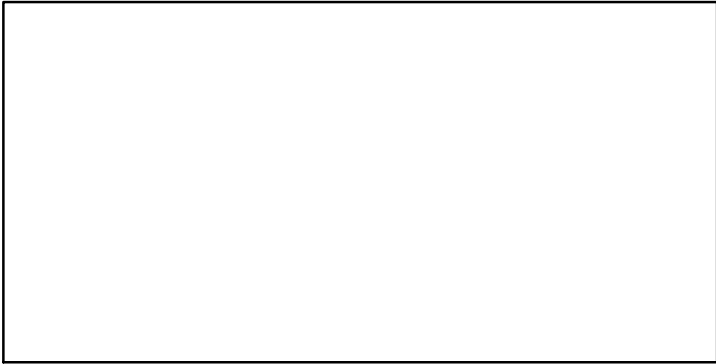
TC-MT, TL*, RecC* (1983-2015-SISIMP2016)

TAC*, Cpair*, Cadv*



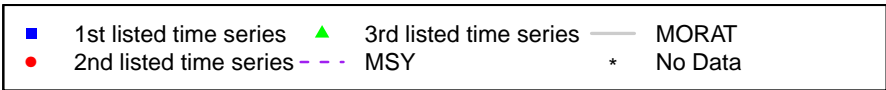
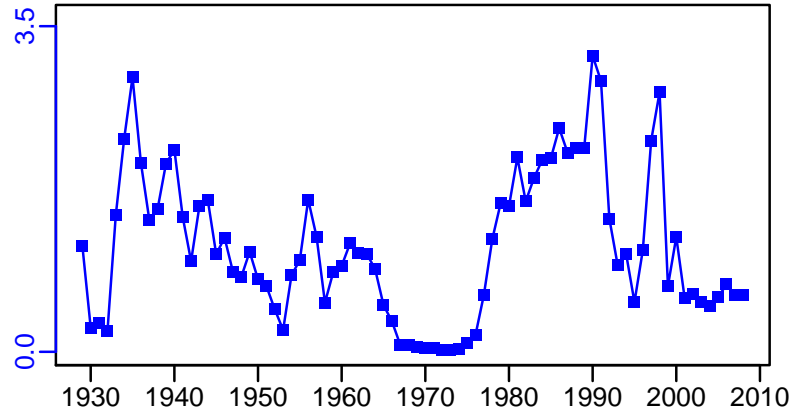
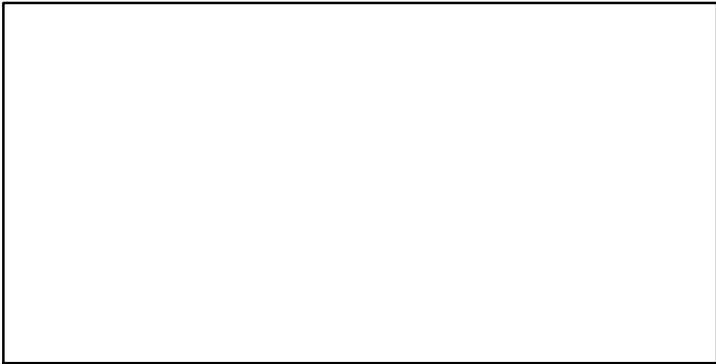
survB*

CPUE*



EFFORT*

CdivMSY-ratio (1929-2008-PINSKY)



Chub mackerel Pacific Coast of Japan [CMACKPJPN]

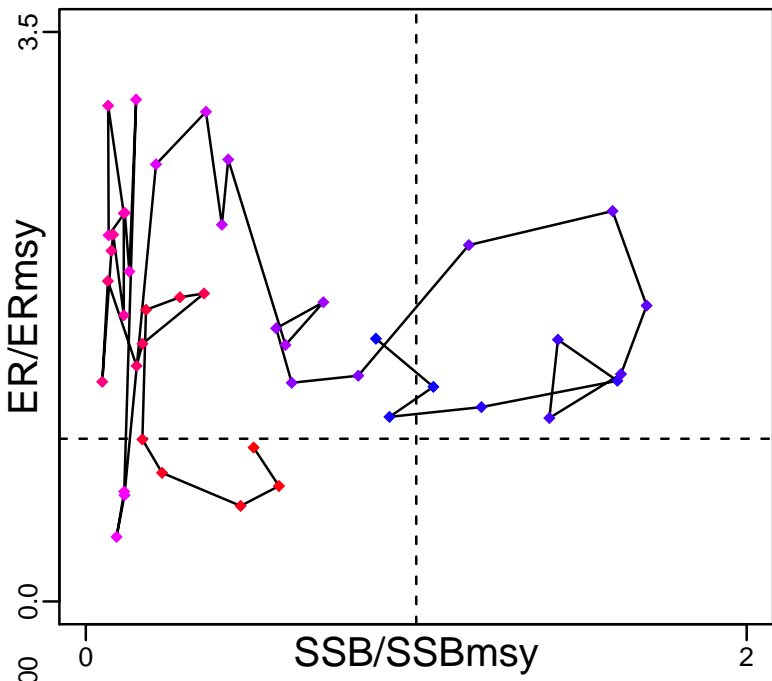
Metadata	
Scientific Name	Scomber japonicus
Current Assess ID	FAFRFJ-CMACKPJPN-1970-2013-JPNIMP2016
Area	Pacific Coast of Japan
Management Authority	Fisheries Agency of Japan
Assessor	Fisheries Agency and Fisheries Research Agency of Japan
Asmts in RAM	2009, 2013

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2013	2,077,724
SSBmsy	SSBmsy-MT	2013	812,856
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2013	0.171
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2013	355,291
M	M-1/yr	2013	0.4
TBlim	TBlim-MT	2009	450
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

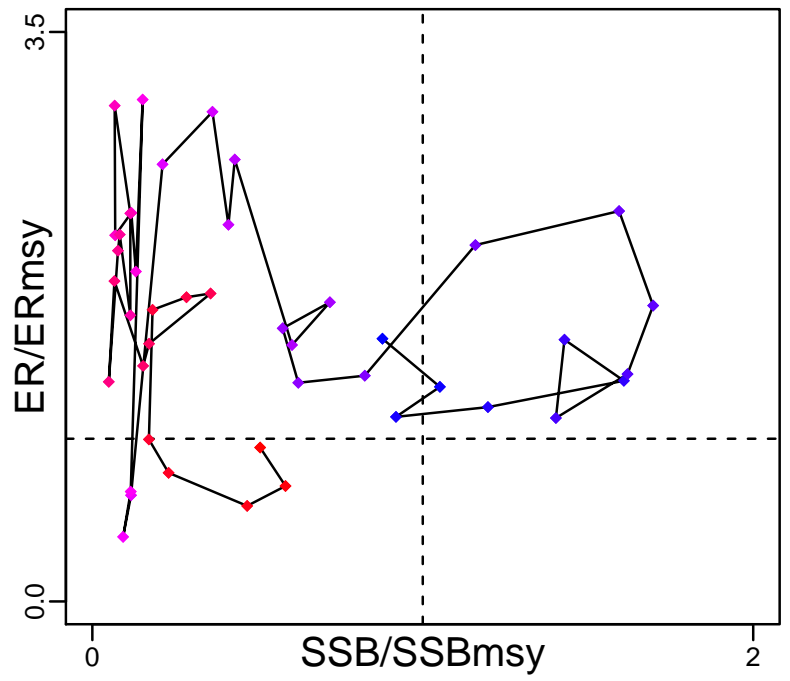
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2013	1,360,000	-	0
SSB	SSB-MT	2013	413,000	Both	2
TN	-	-	-	-	-
R	R-E00	2013	5.53×10^9	-	0
F	F-1/yr	2009	0.28	Both	0 to 5
ER	ER-calc-ratio	2013	0.162	-	-
TC	TC-MT	2013	220,000		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2013	0.655		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2013	0.508		
F/Fmsy	-	-	-		
ER/ERmsy	ER-calc-ratio/ERmsy-ratio	2013	0.946		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Chub mackerel Pacific Coast of Japan [CMACKPJPN]

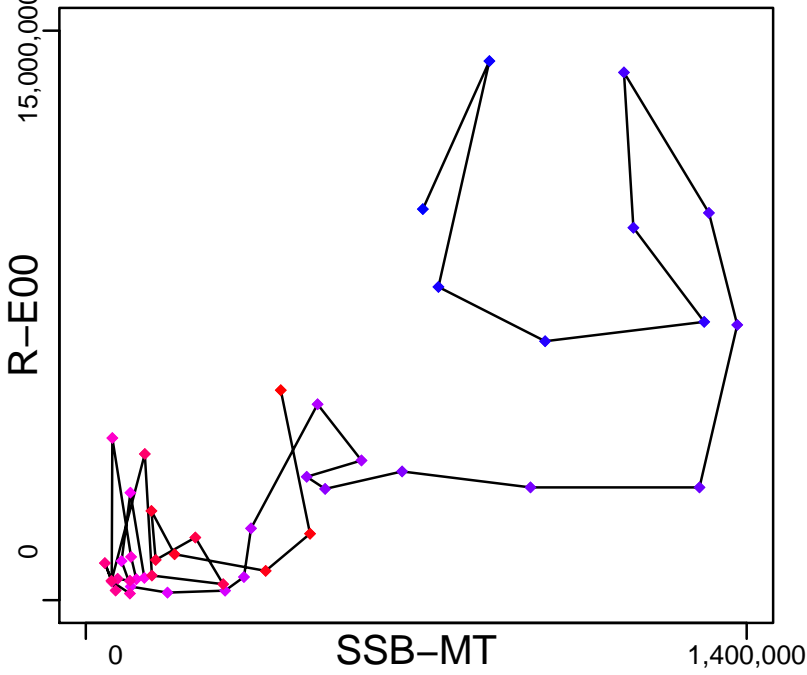
Kobe MSYpref (1970–2013–JPNIMP2016)



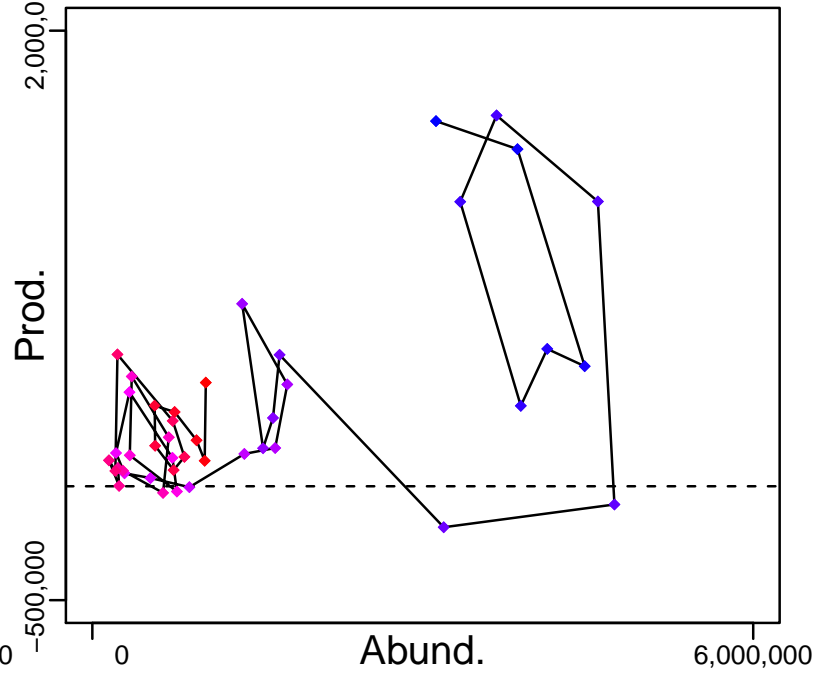
Kobe MGTpref (1970–2013–JPNIMP2016)



Spawner Recruit (1970–2013–JPNIMP2016)



Production (1970–2013–JPNIMP2016)

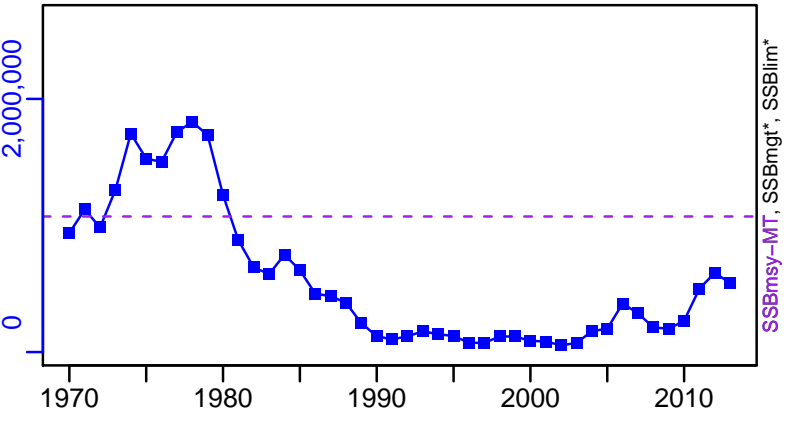
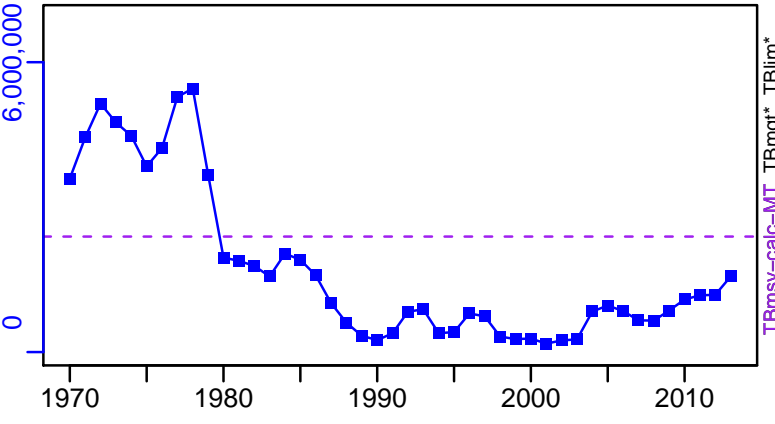


◆ Start Year ◆ End Year * No Data

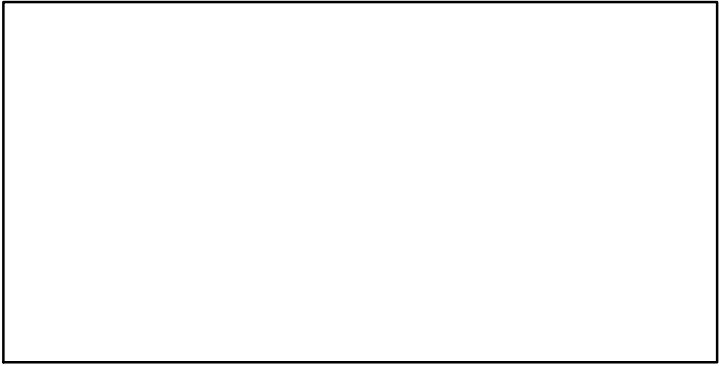
Chub mackerel Pacific Coast of Japan [CMACKPJPJN]

TB-MT (1970-2013-JPNIMP2016)

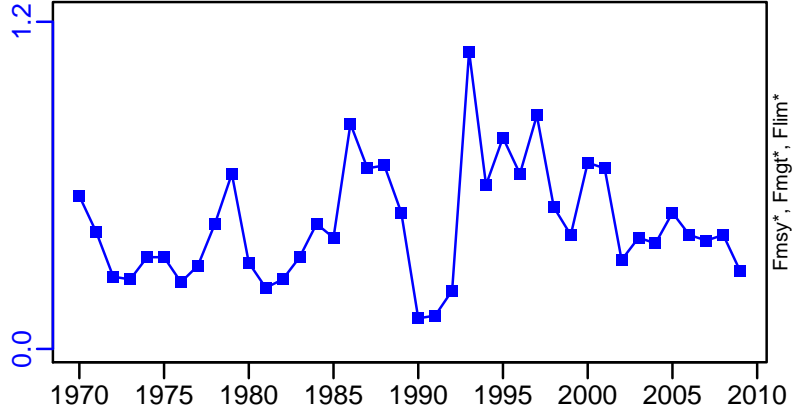
SSB-MT (1970-2013-JPNIMP2016)



TN *

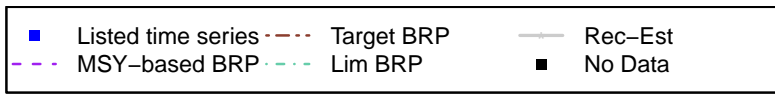
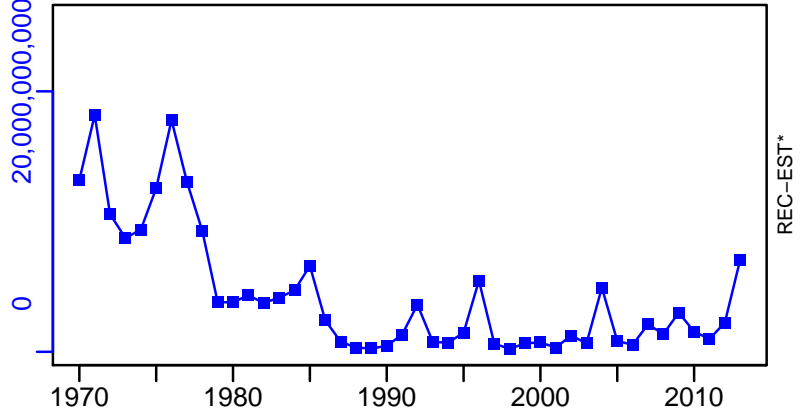
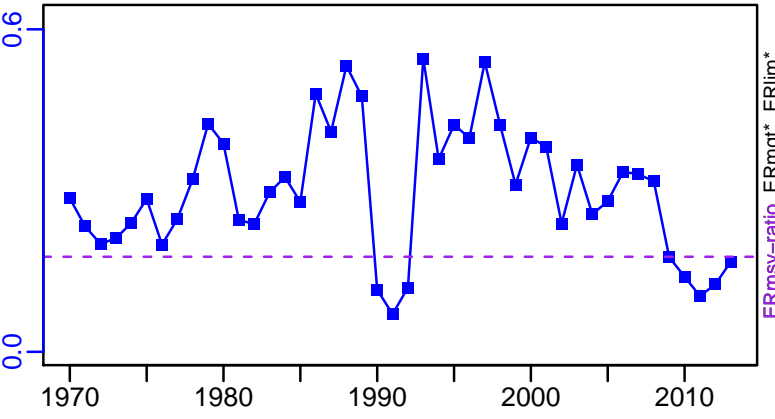


F-1/yr (1970-2009-ONO)



ER-calc-ratio (1970-2013-JPNIMP2016)

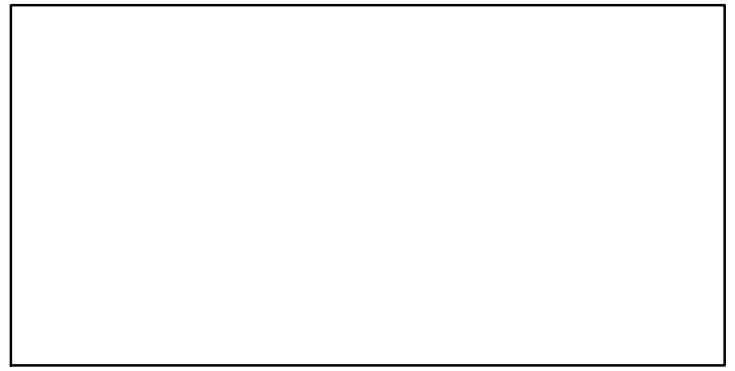
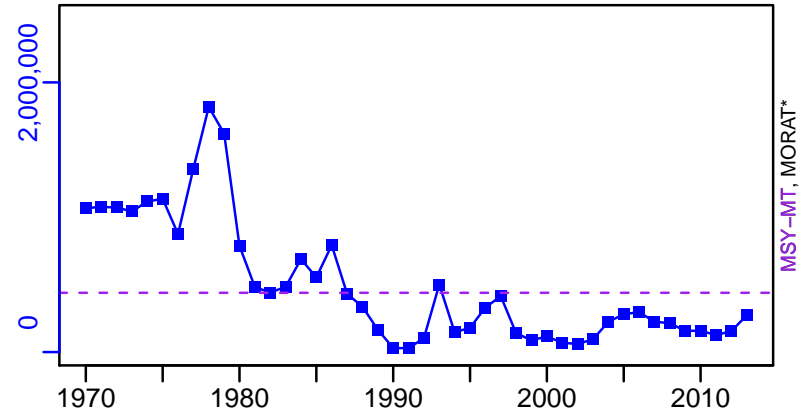
R-E00 (1970-2013-JPNIMP2016)



Chub mackerel Pacific Coast of Japan [CMACKPJPN]

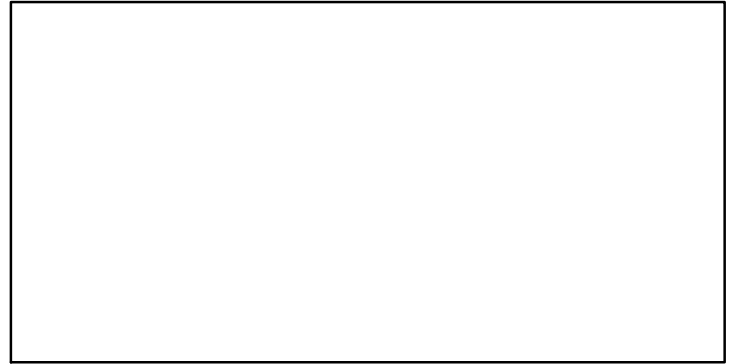
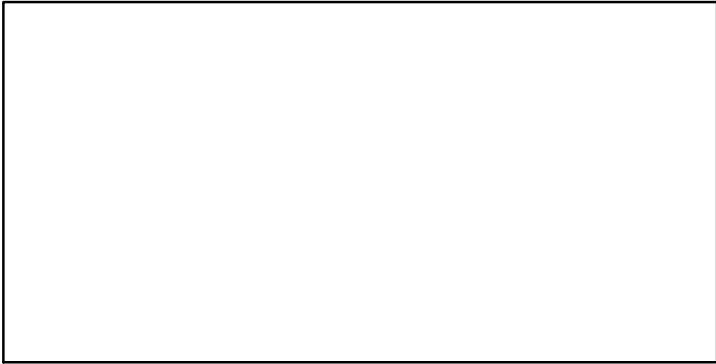
TC-MT, TL*, RecC* (1970-2013-JPNIMP2016)

TAC*, Cpair*, Cadv*



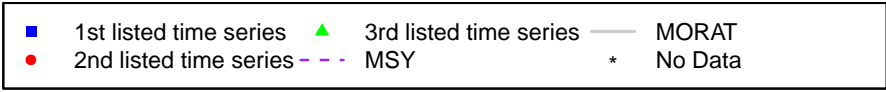
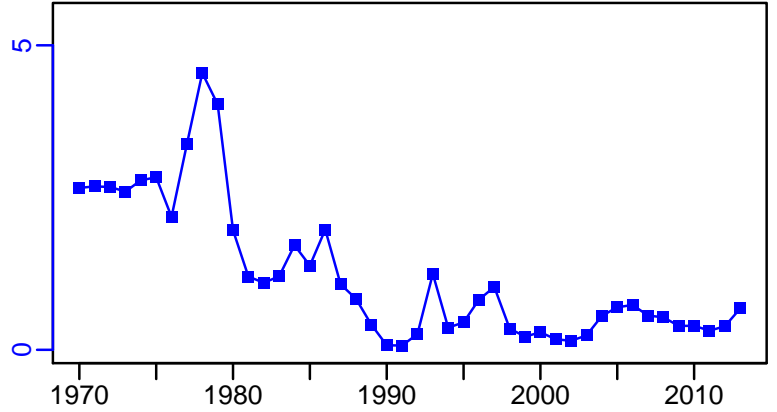
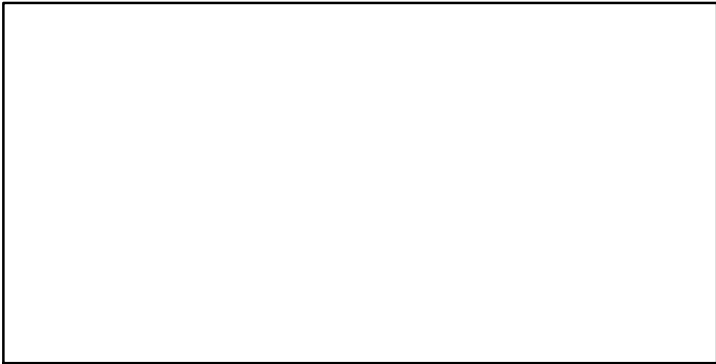
survB*

CPUE*



EFFORT*

CdivMSY-ratio (1970-2013-JPNIMP2016)



Chub mackerel Tsushima Strait [CMACKTSST]

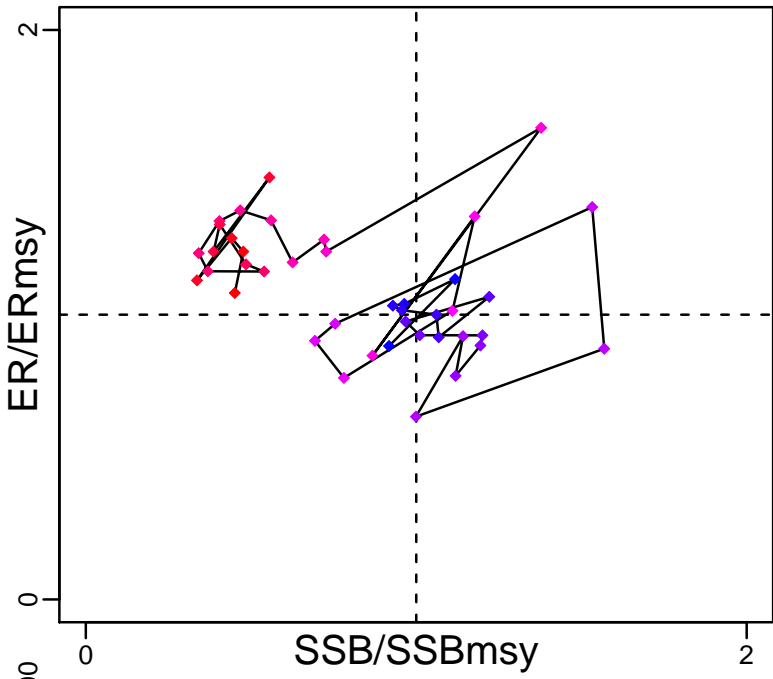
Metadata	
Scientific Name	Scomber japonicus
Current Assess ID	FAFRFJ-CMACKTSST-1973-2013-JPNIMP2016
Area	Tsushima Strait
Management Authority	Fisheries Agency of Japan
Assessor	Fisheries Agency and Fisheries Research Agency of Japan
Asmts in RAM	2013

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2013	899,288
SSBmsy	SSBmsy-MT	2013	339,714
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2013	0.362
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2013	325,542
M	M-1/yr	2013	0.4
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

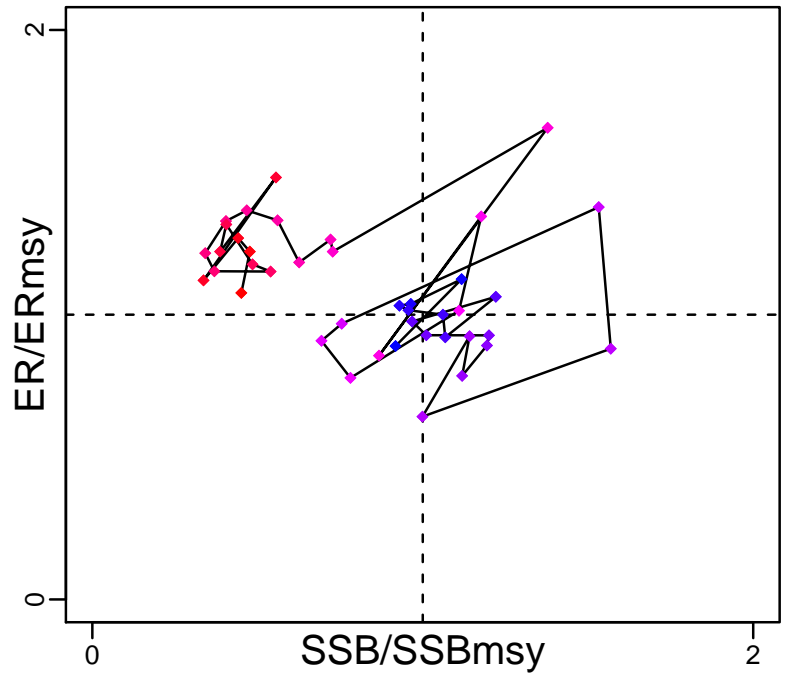
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2013	428,000	-	0
SSB	SSB-MT	2013	153,000	Both	1
TN	-	-	-	-	-
R	R-E00	2013	8.98×10^8	-	0
F	-	-	-	-	-
ER	ER-calc-ratio	2013	0.39	-	-
TC	TC-MT	2013	167,000		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2013	0.476		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2013	0.451		
F/Fmsy	-	-	-		
ER/ERmsy	ER-calc-ratio/ERmsy-ratio	2013	1.076		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Chub mackerel Tsushima Strait [CMAACKTSST]

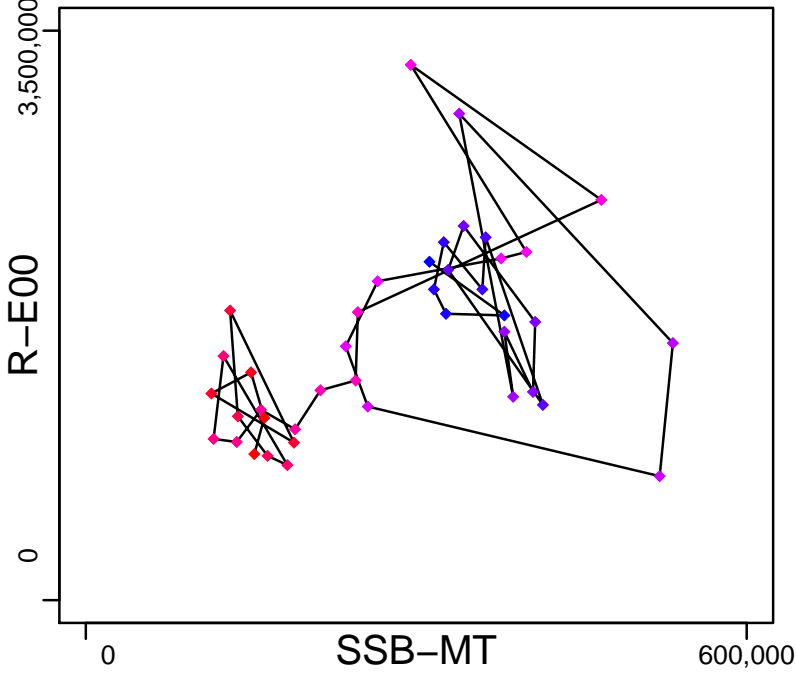
Kobe MSYpref (1973–2013–JPNIMP2016)



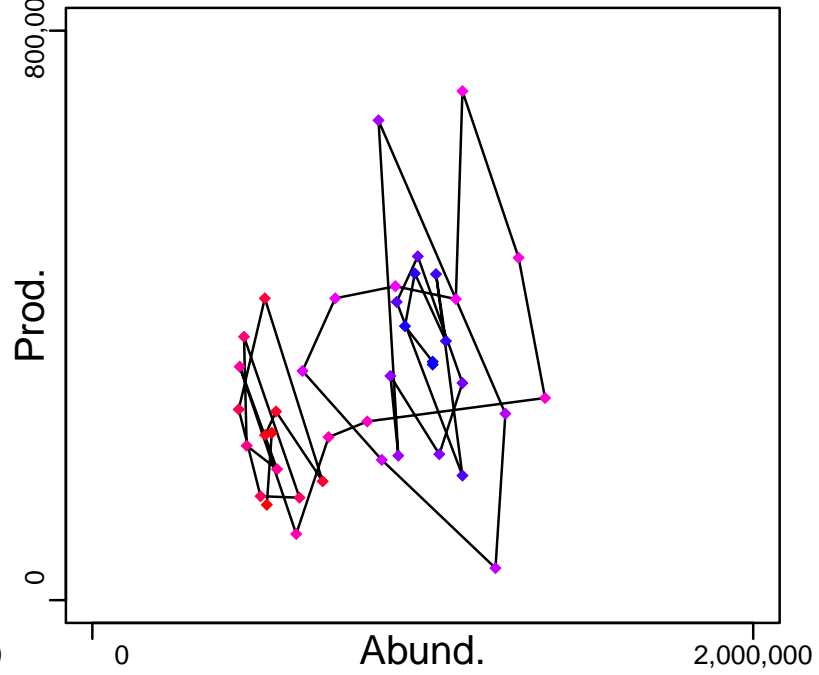
Kobe MGTpref (1973–2013–JPNIMP2016)



Spawner Recruit (1973–2013–JPNIMP2016)



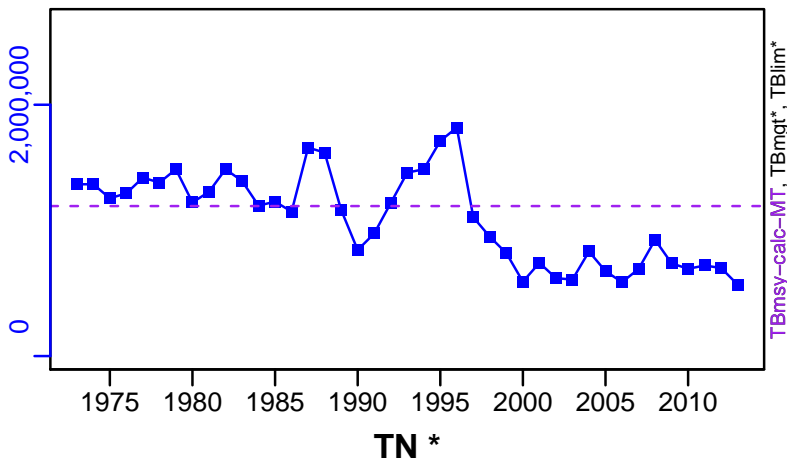
Production (1973–2013–JPNIMP2016)



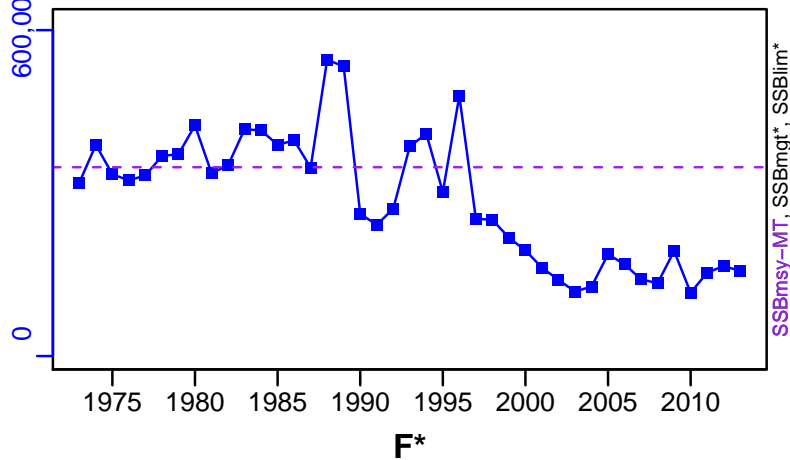
◆ Start Year ◆ End Year * No Data

Chub mackerel Tsushima Strait [CMACKTSST]

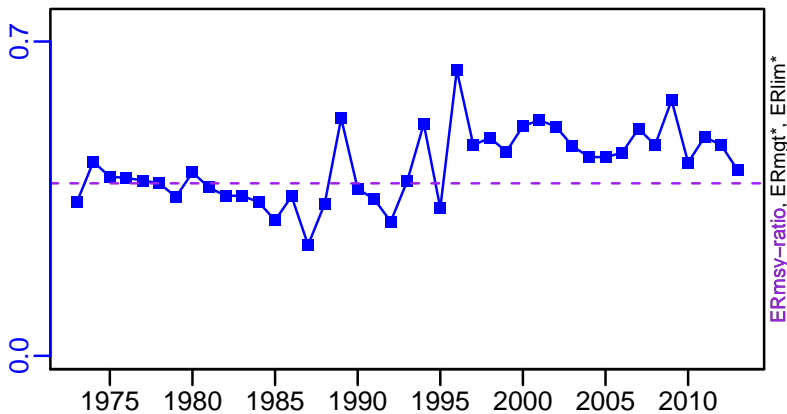
TB-MT (1973-2013-JPNIMP2016)



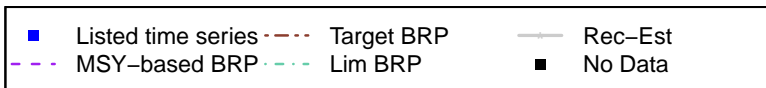
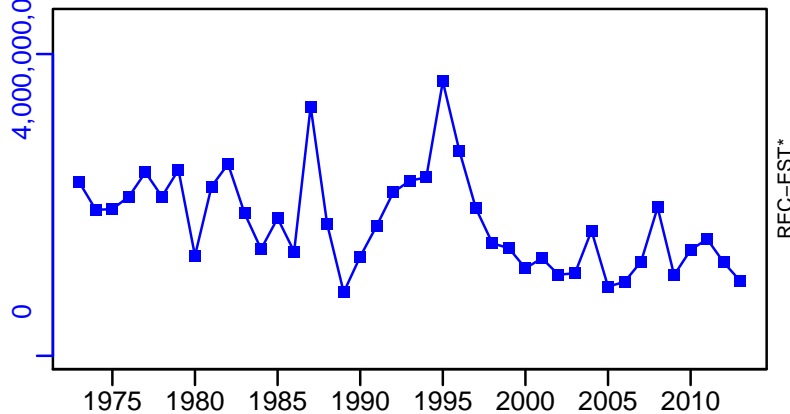
SSB-MT (1973-2013-JPNIMP2016)



ER-calc-ratio (1973-2013-JPNIMP2016)



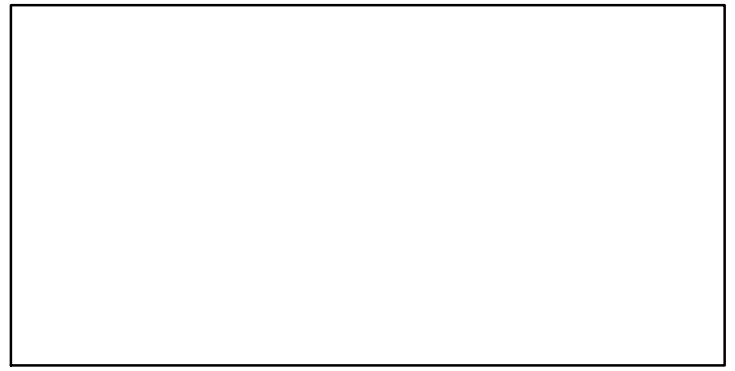
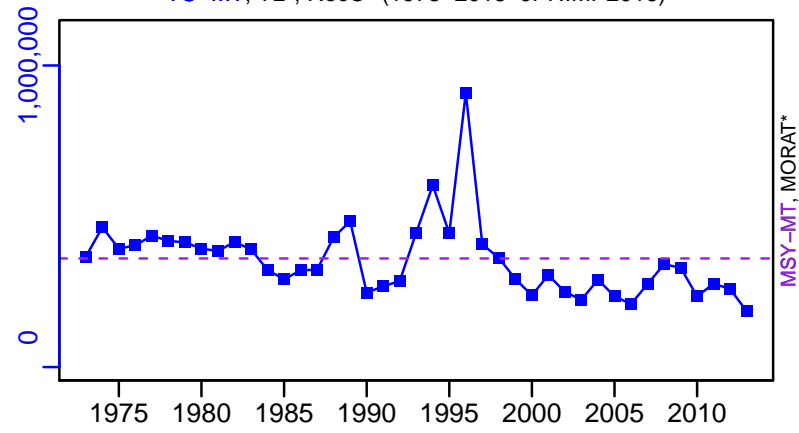
R-E00 (1973-2013-JPNIMP2016)



Chub mackerel Tsushima Strait [CMACKTSST]

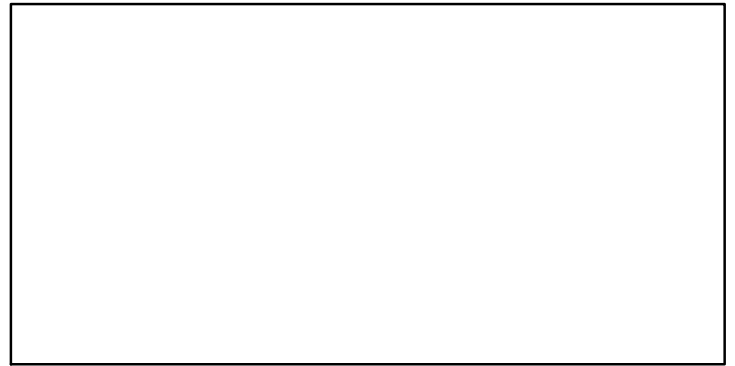
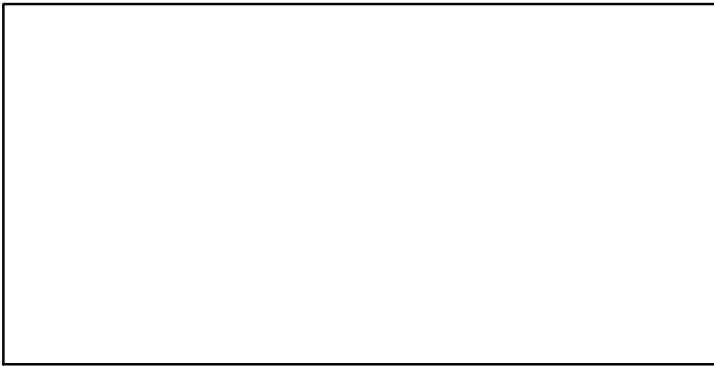
TC-MT, TL*, RecC* (1973-2013-JPNIMP2016)

TAC*, Cpair*, Cadv*



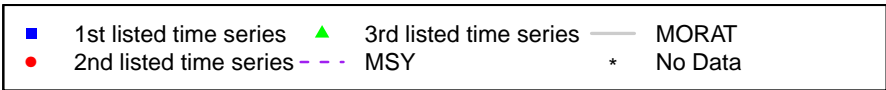
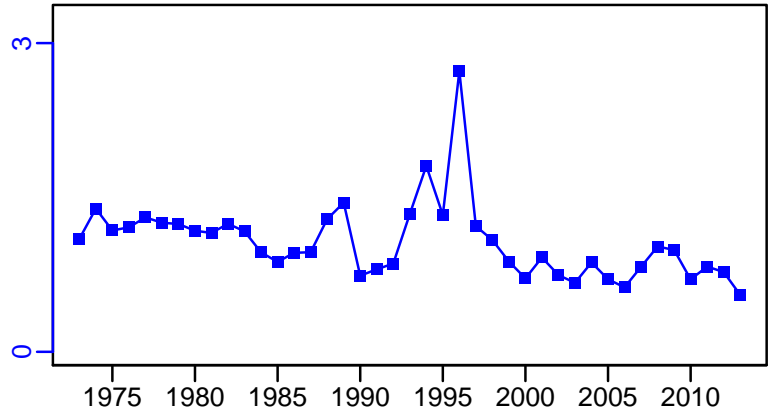
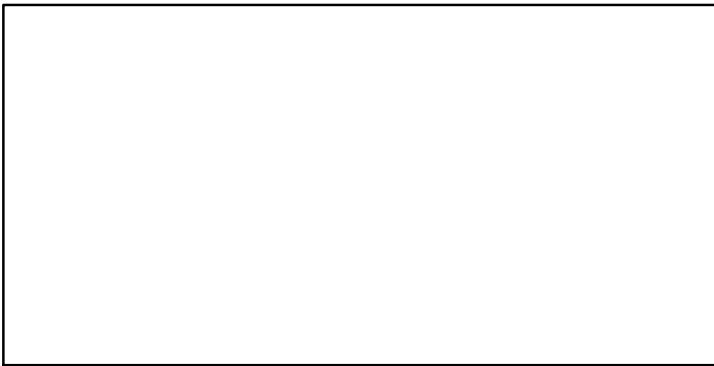
survB*

CPUE*



EFFORT*

CdivMSY-ratio (1973-2013-JPNIMP2016)



Chub Mackerel West Africa [CMACKWA]

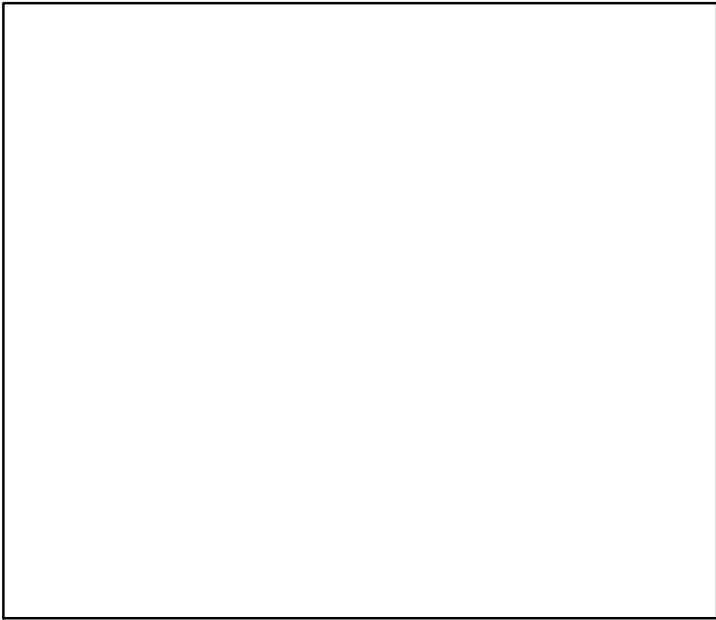
Metadata	
Scientific Name	Scomber japonicus
Current Assess ID	FAO-SPNWA-CMACKWA-1990-2010-CHING
Area	West Africa
Management Authority	Food and Agriculture Organization of the United Nations
Assessor	FAO Working Group on the Assessment of Small Pelagic Fish Off Northwest Africa
Asmts in RAM	2010

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2010	0.67
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

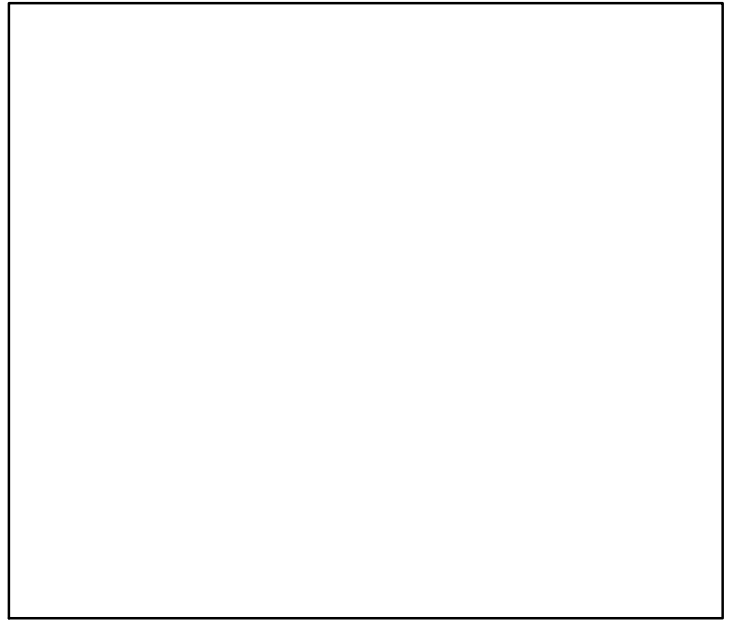
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2010	262,000	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-1/yr	2010	0.79	-	-
ER	ER-calc-ratio	2010	0.786	-	-
TC	TC-MT	2010	206,000		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2010	1.179		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Chub Mackerel West Africa [CMACKWA]

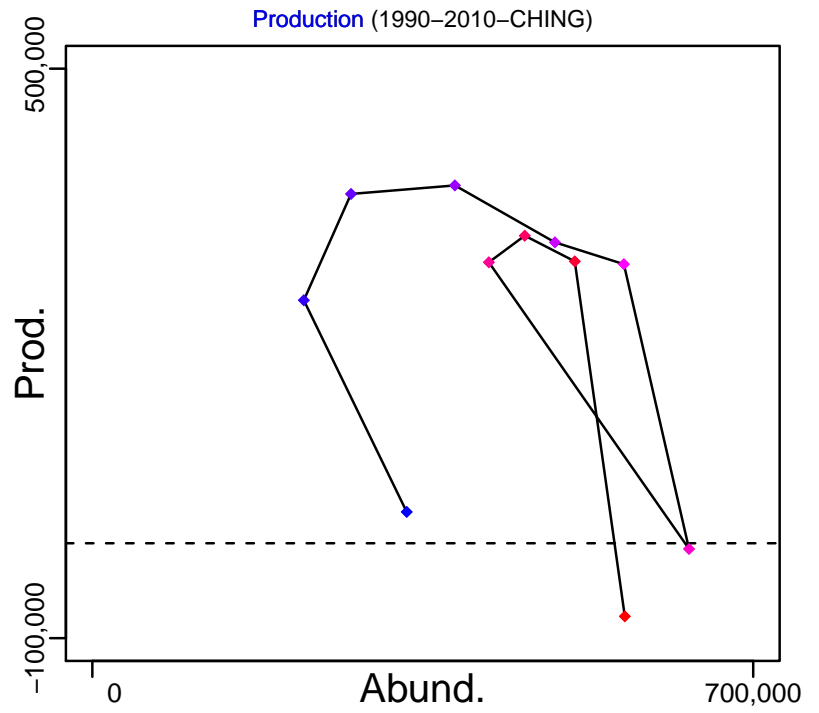
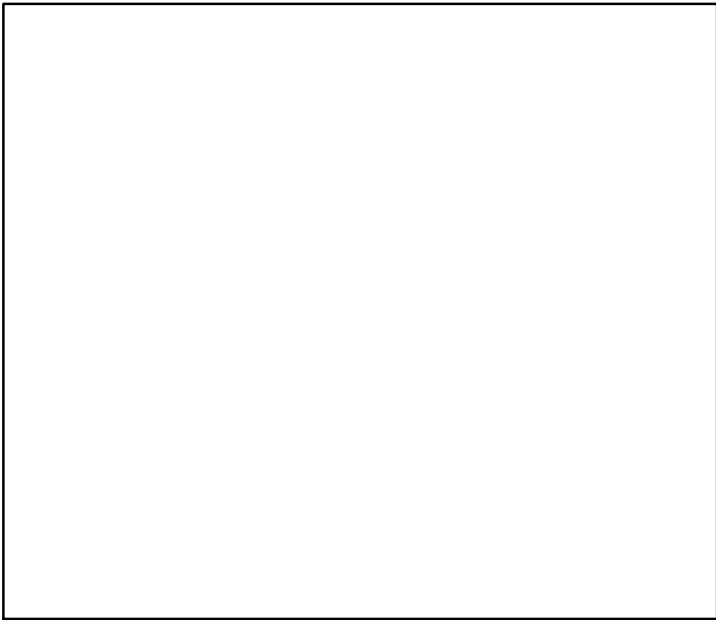
Kobe MSY*



Kobe MGT*



Spawner Recruit*

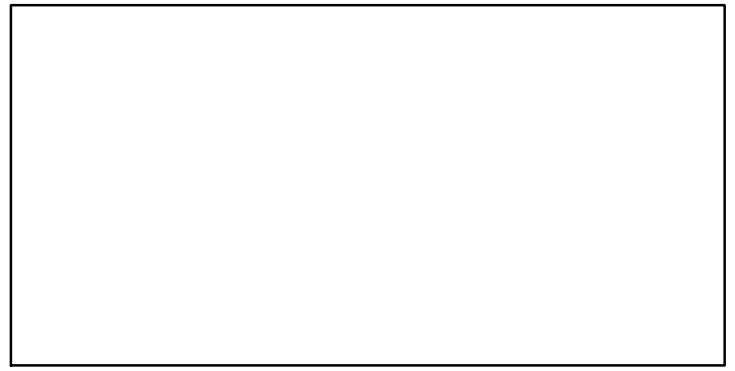
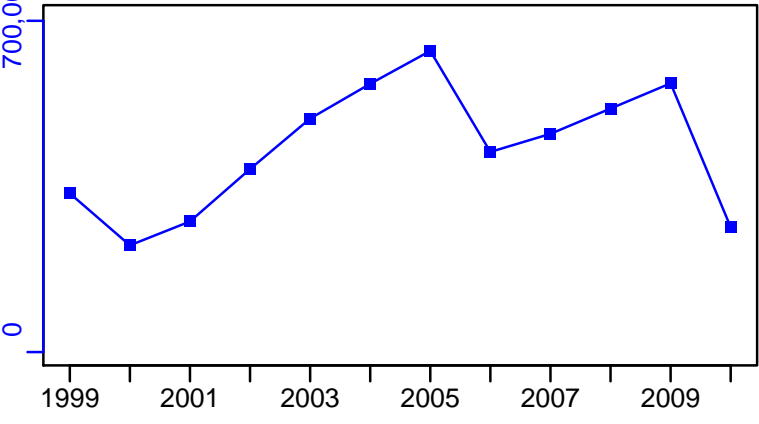


◆ Start Year ◆ End Year * No Data

Chub Mackerel West Africa [CMACKWA]

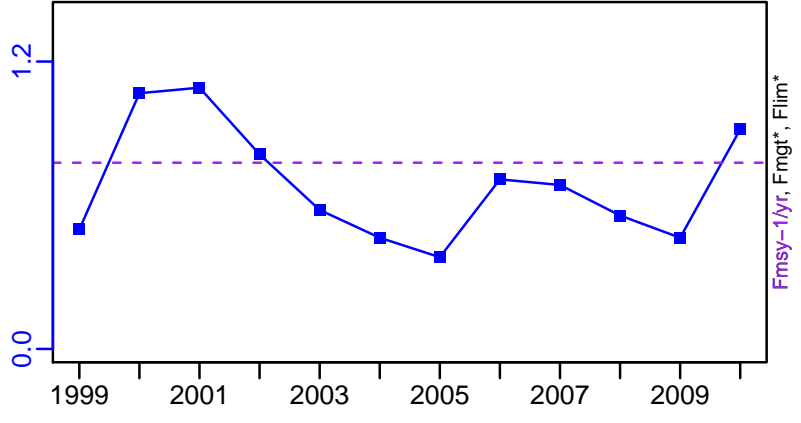
TB-MT (1990-2010-CHING)

SSB*



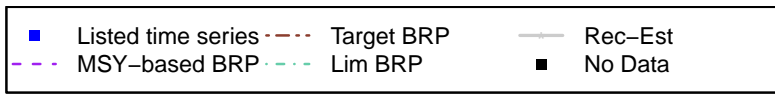
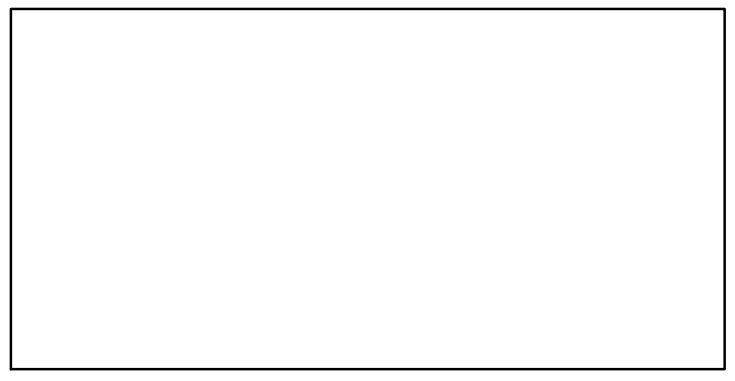
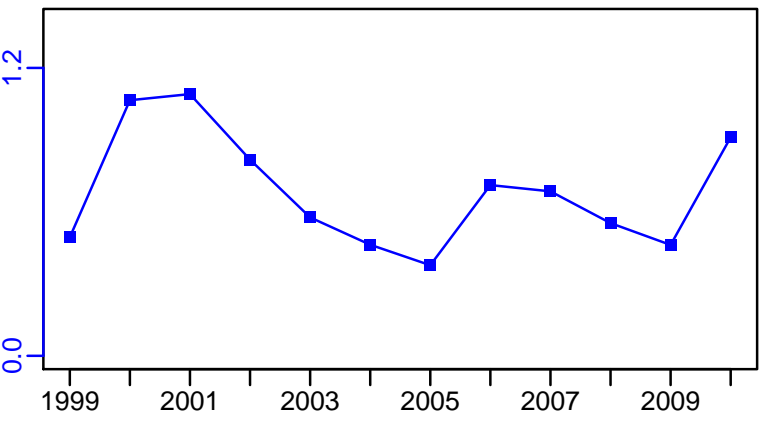
TN *

F-1/yr (1990-2010-CHING)



ER-calc-ratio (1990-2010-CHING)

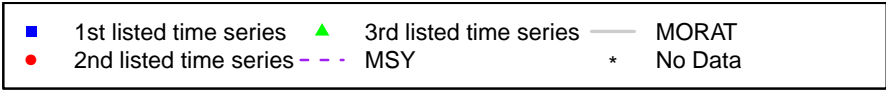
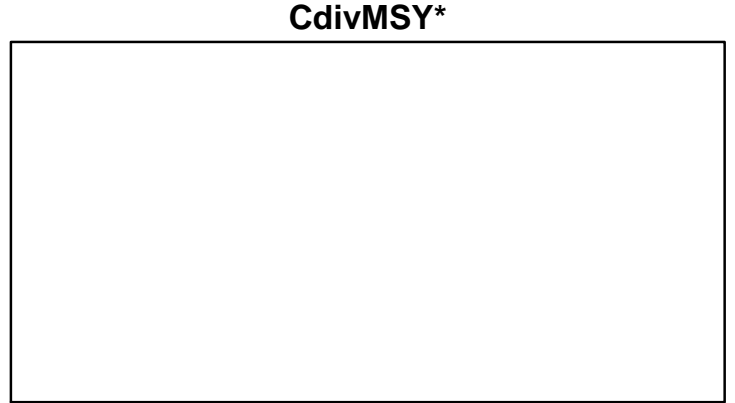
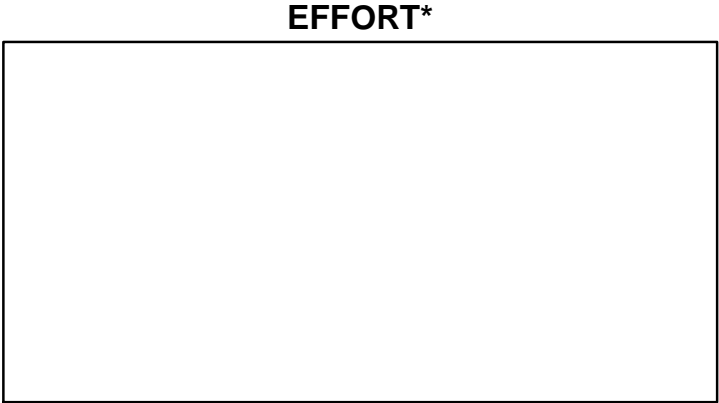
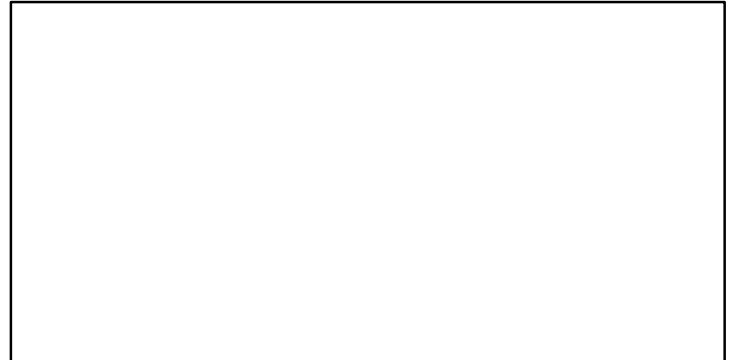
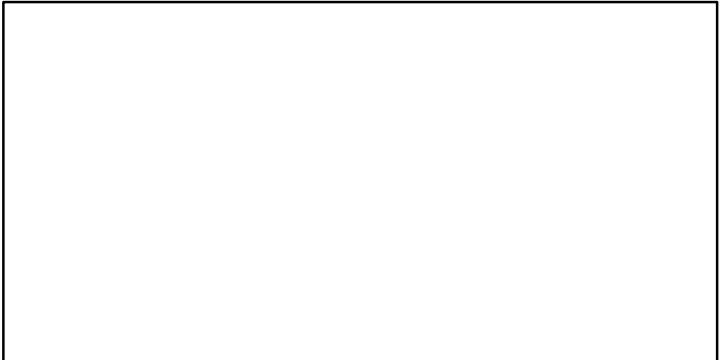
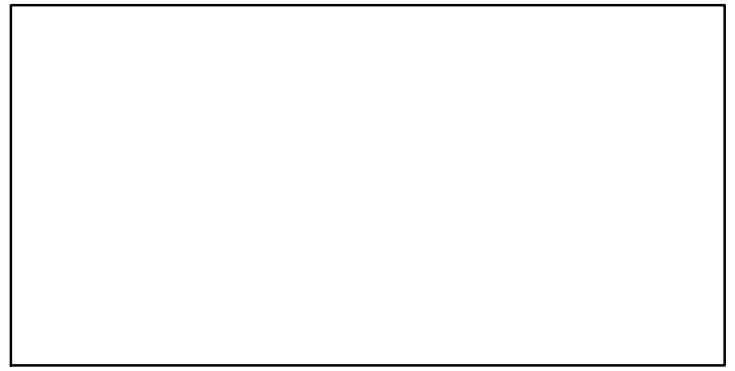
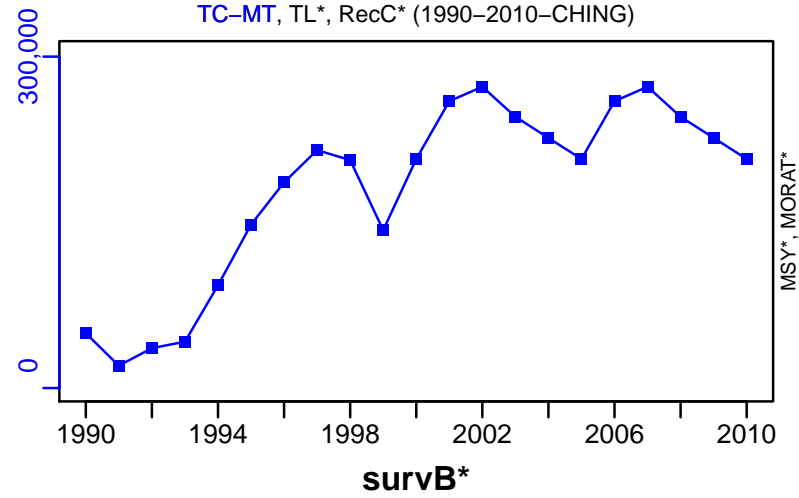
Recruits*



Chub Mackerel West Africa [CMACKWA]

TC-MT, TL*, RecC* (1990-2010-CHING)

TAC*, Cpair*, Cadv*



Cape horse mackerel South Africa South coast [CTRACSA]

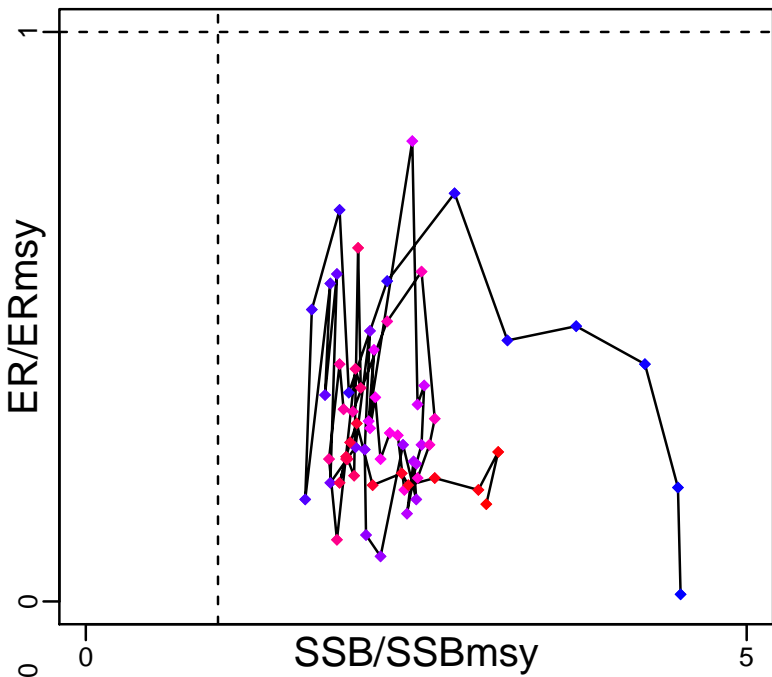
Metadata	
Scientific Name	Trachurus capensis
Current Assess ID	MARAM-CTRACSA-1949-2013-Furman
Area	South Africa South coast
Management Authority	South African national management, Fisheries Branch of Department of Agriculture, Forestry and Fisheries
Assessor	Marine Resource Assessment and Management Group, Department of Mathematics and Applied Mathematics, University of Cape Town, Rondebosch, 7701, South Africa
Asmts in RAM	2013

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-MT	2013	307,654
SSBmsy	SSBmsy-MT	2013	234,635
Fmsy	Fmsy-1/yr	2013	0.19
ERmsy	ERmsy-ratio	2013	0.24
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2013	1,052,609
SSB0	SSB0-MT	2013	960,562
MSY	MSY-MT	2013	72,924
M	M-1/yr	2013	0.3
TBlim	TBlim-MT	2013	366,474
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

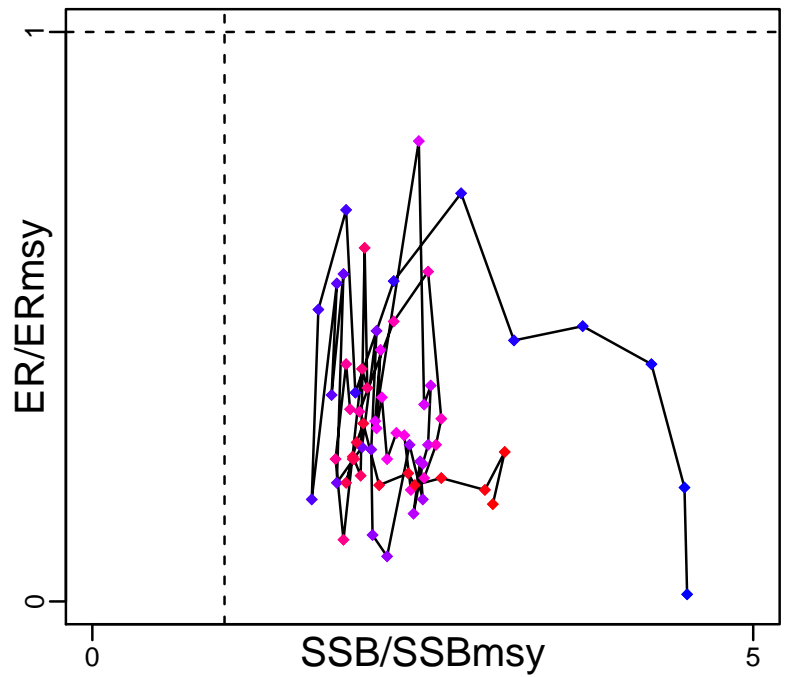
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2013	731,000	-	0+
SSB	SSB-MT	2013	606,000	Both	3+
TN	-	-	-	-	-
R	R-E00	2013	1.46×10^9	-	0
F	-	-	-	-	-
ER	ER-ratio	2013	0.041	-	-
TC	TC-MT	2013	29,700		
TL	TL-MT	2013	29,700		
TB/TBmsy	TBdivTBmsy-dimensionless	2013	2.48		
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2013	2.85		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2013	0.171		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Cape horse mackerel South Africa South coast [CTRACSA]

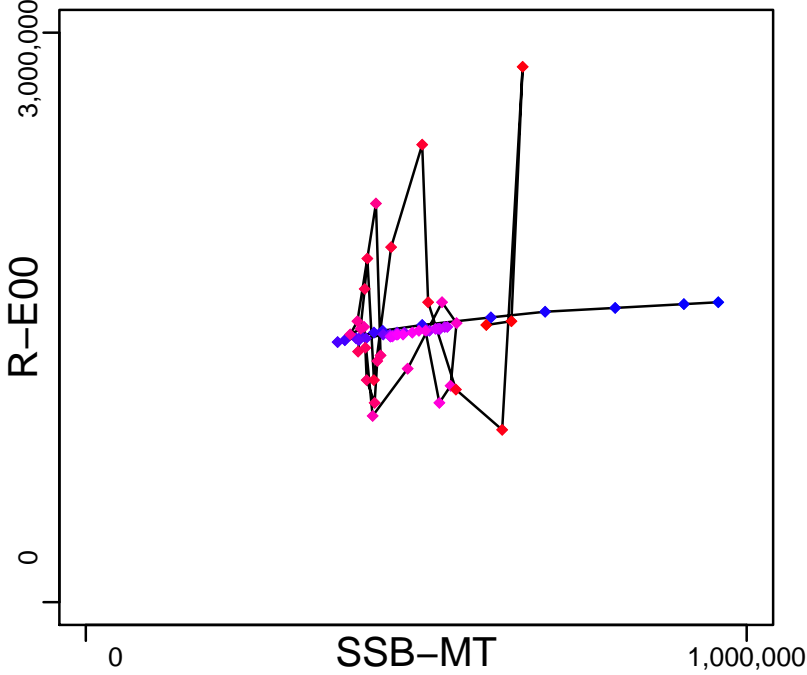
Kobe MSYpref (1949–2013–Furman)



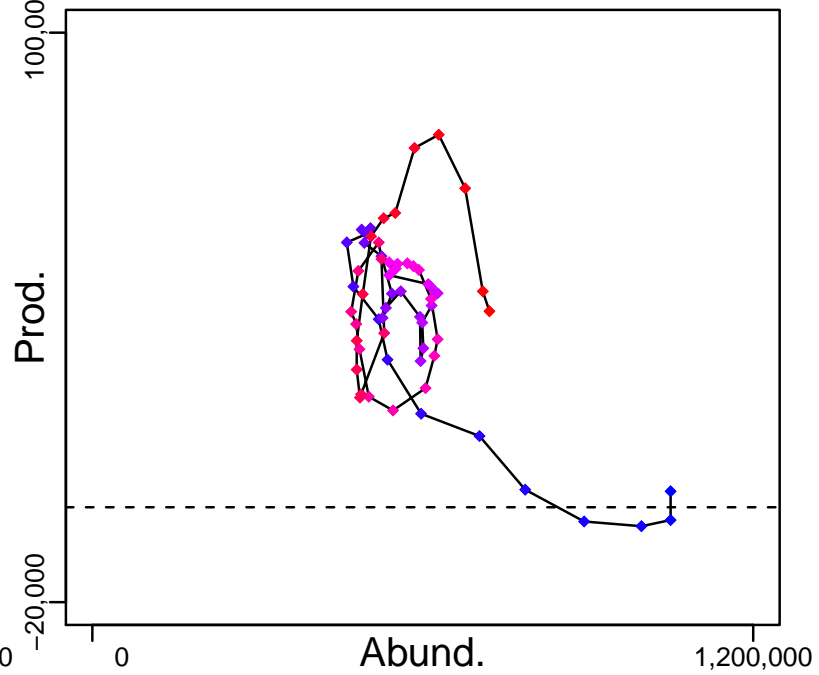
Kobe MGTpref (1949–2013–Furman)



Spawner Recruit (1949–2013–Furman)



Production (1949–2013–Furman)

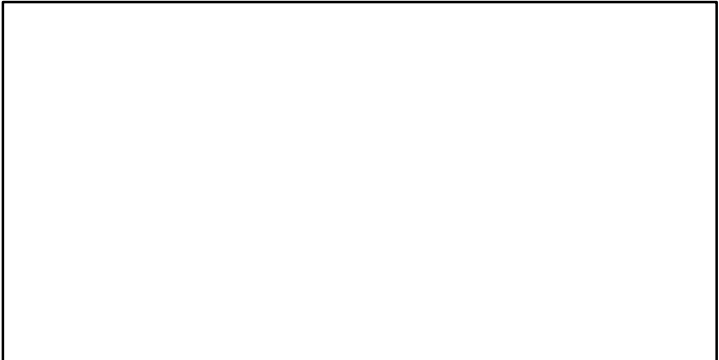
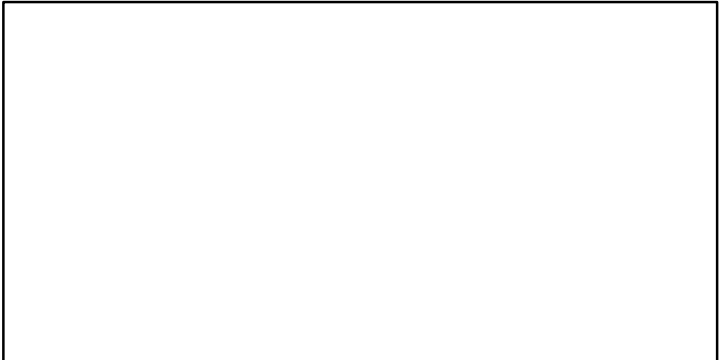
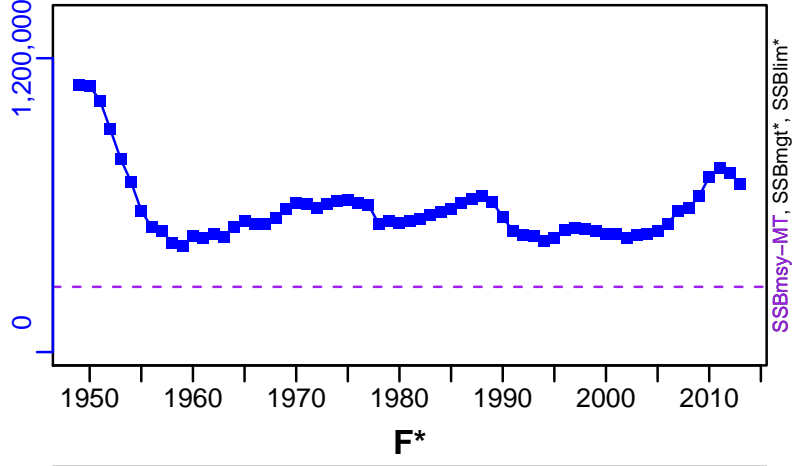
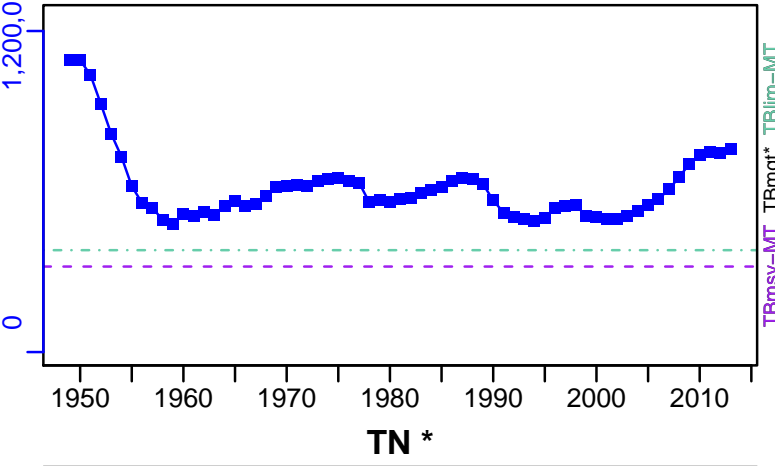


◆ Start Year ◆ End Year * No Data

Cape horse mackerel South Africa South coast [CTRACSA]

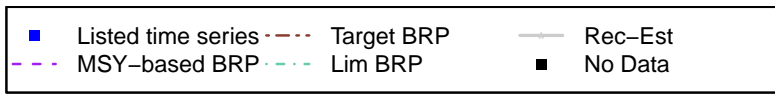
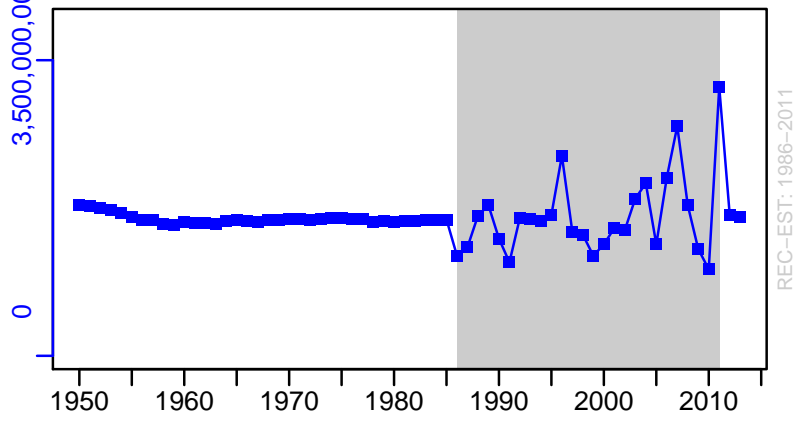
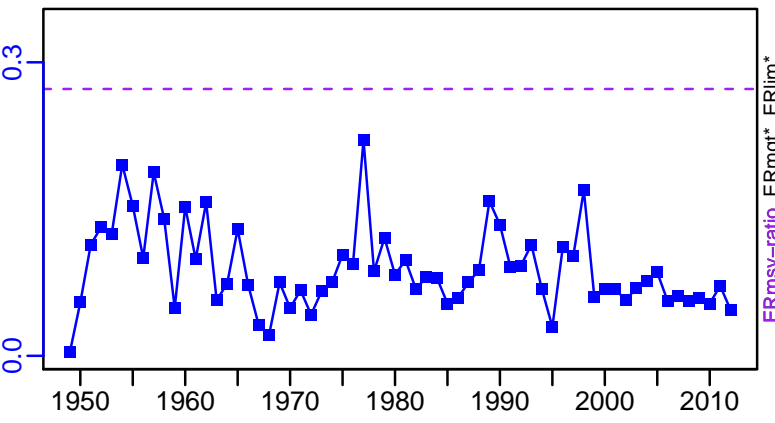
TB-MT (1949-2013-Furman)

SSB-MT (1949-2013-Furman)



ER-ratio (1949-2013-Furman)

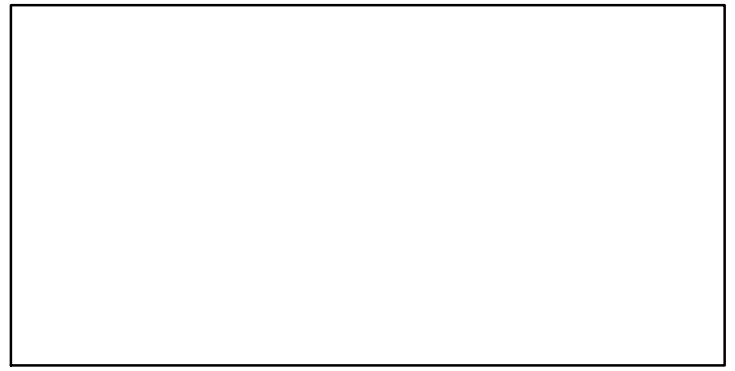
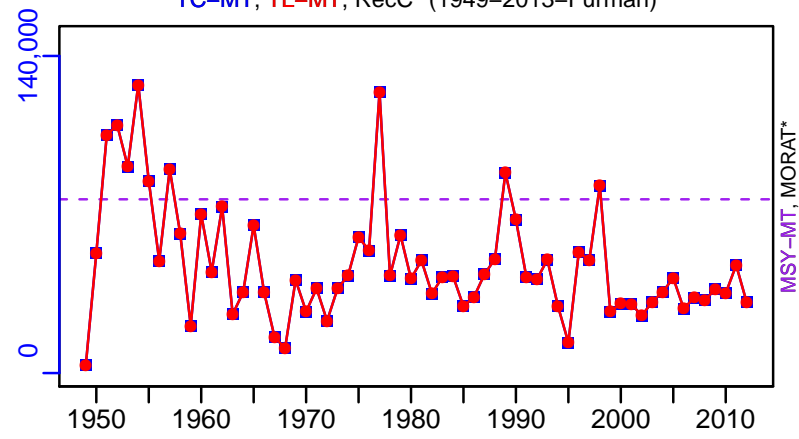
R-E00 (1949-2013-Furman)



Cape horse mackerel South Africa South coast [CTRACSA]

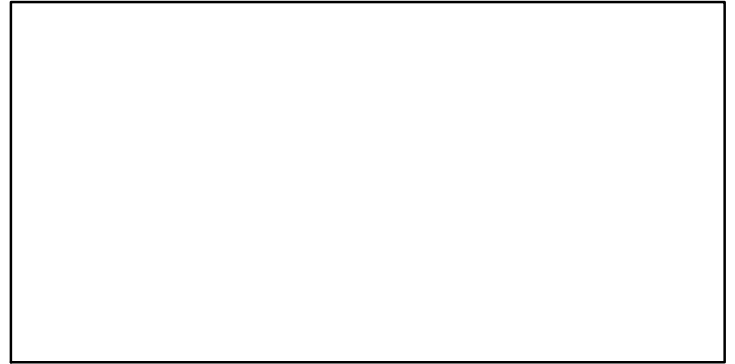
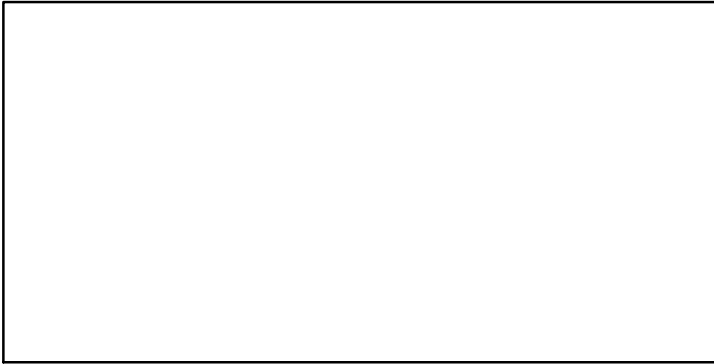
TC-MT, TL-MT, RecC* (1949-2013-Furman)

TAC*, Cpair*, Cadv*



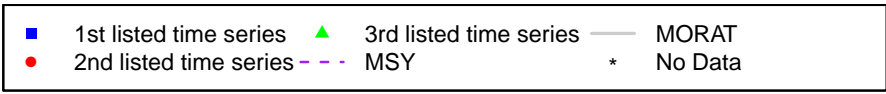
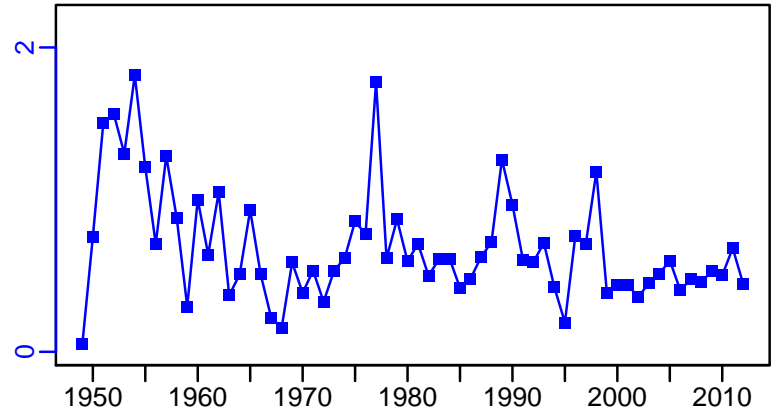
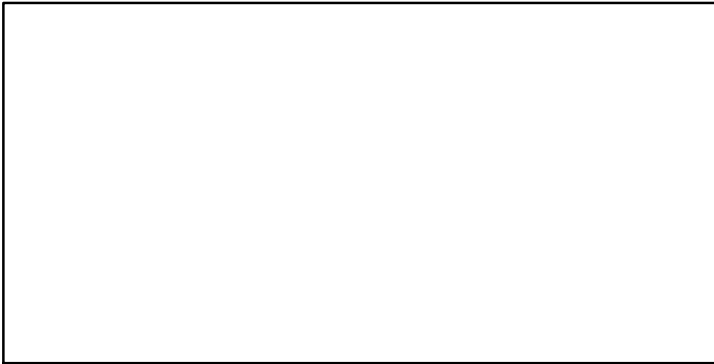
survB*

CPUE*



EFFORT*

CdivMSY-ratio (1949-2013-Furman)



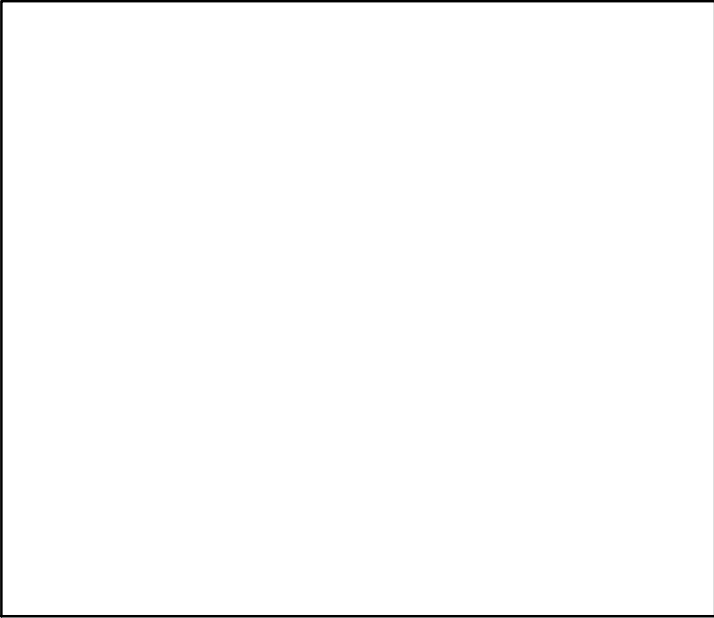
False Scad West Africa [FSCADWA]

Metadata	
Scientific Name	Caranx rhonchus
Current Assess ID	FAO-SPNWA-FSCADWA-1990-2010-CHING
Area	West Africa
Management Authority	Food and Agriculture Organization of the United Nations
Assessor	FAO Working Group on the Assessment of Small Pelagic Fish Off Northwest Africa
Asmts in RAM	2010

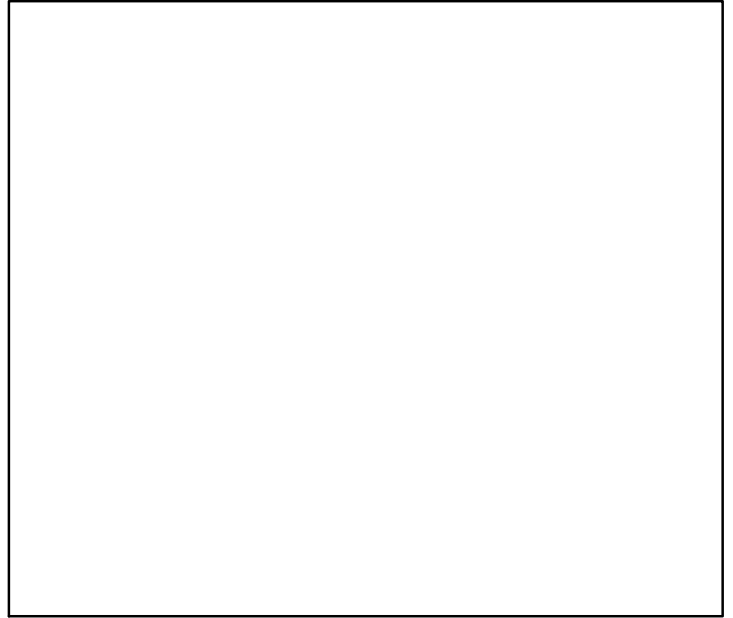
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2010	99,000	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-1/yr	2010	0.63	-	-
ER	ER-calc-ratio	2010	0.626	-	-
TC	TC-MT	2010	62,000		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

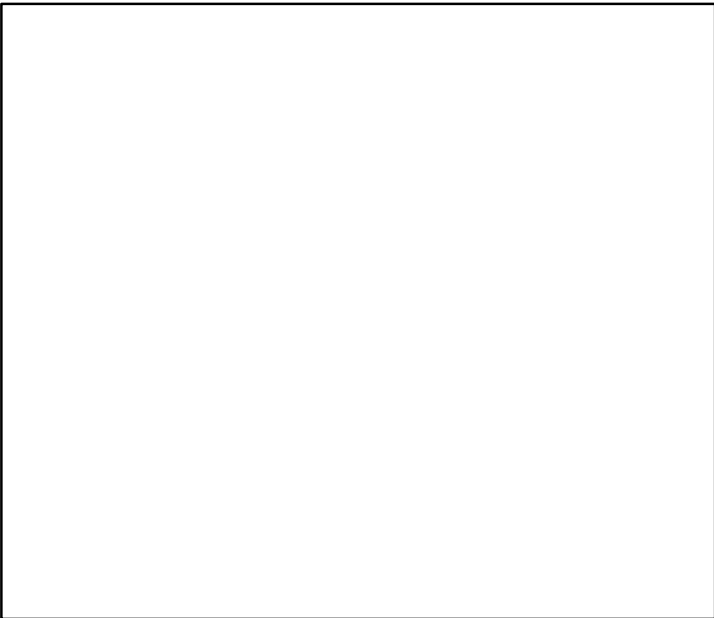
Kobe MSY*



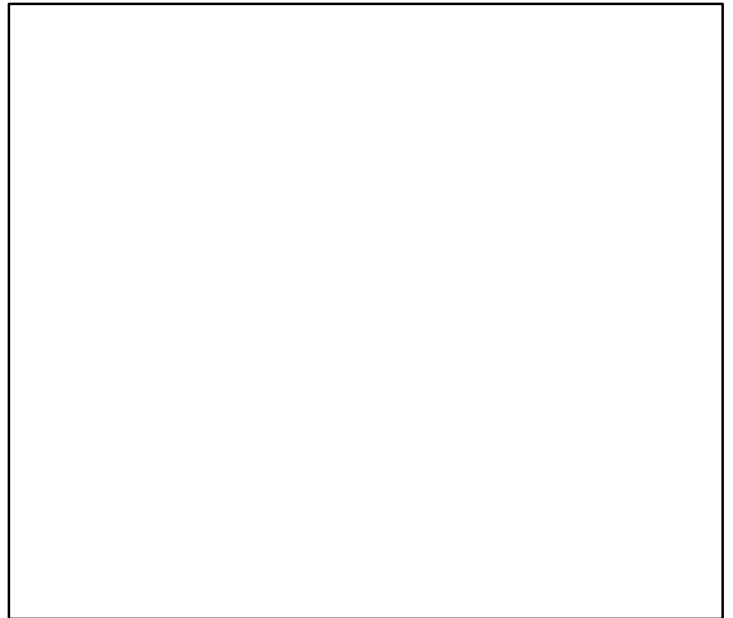
Kobe MGT*



Spawner Recruit*



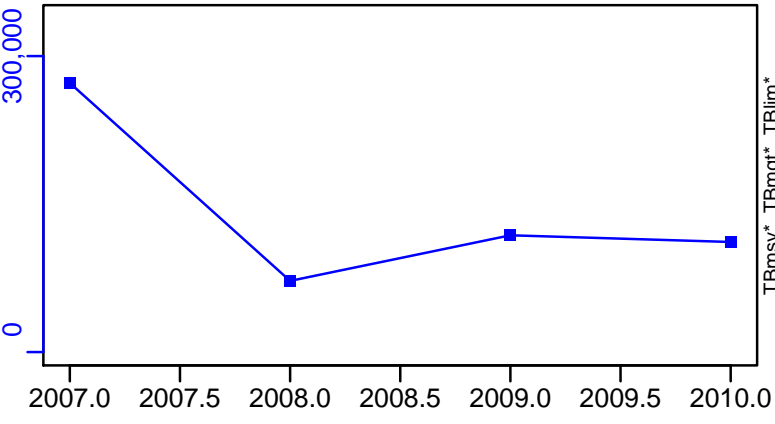
Production*



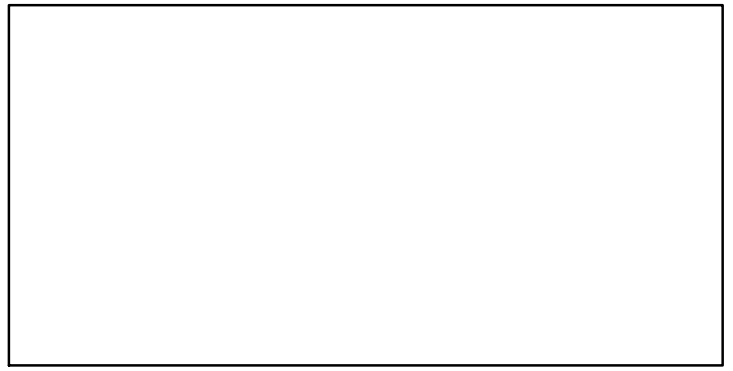
◆ Start Year ◆ End Year * No Data

False Scad West Africa [FSCADWA]

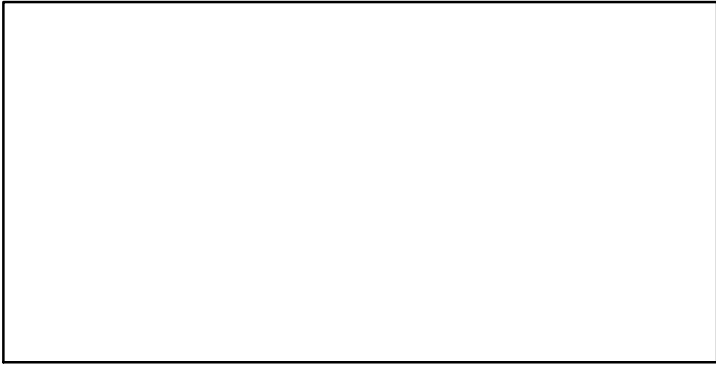
TB-MT (1990-2010-CHING)



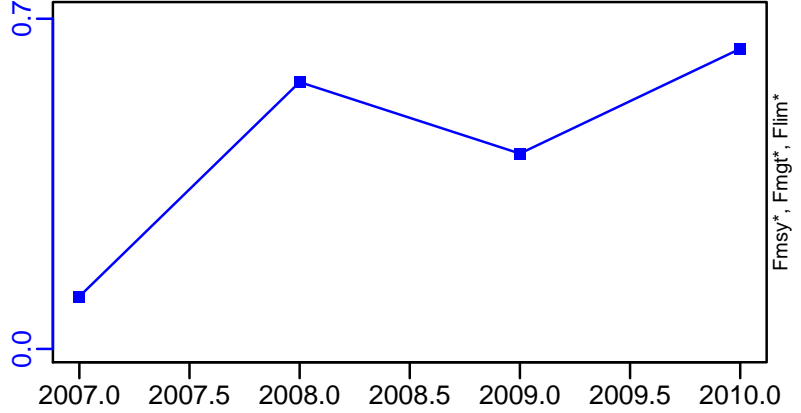
SSB*



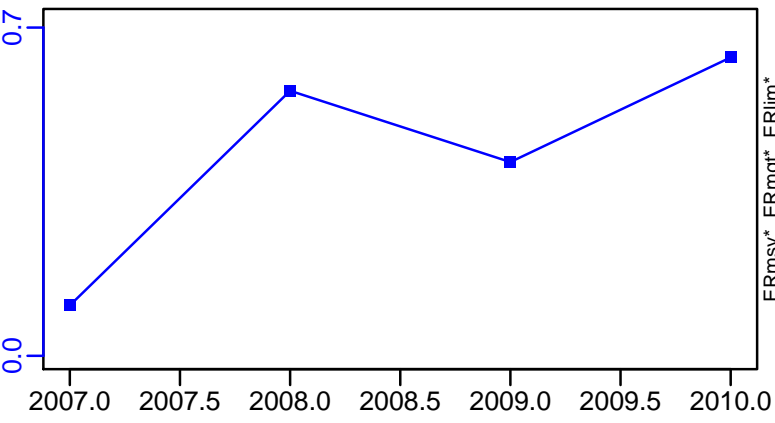
TN *



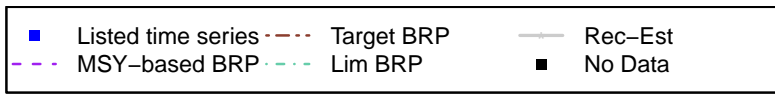
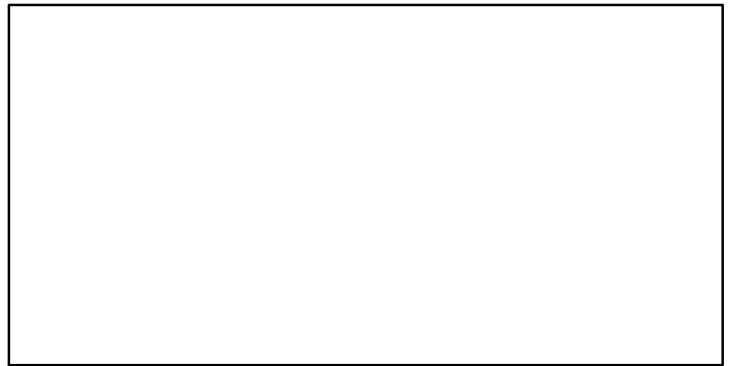
F-1/yr (1990-2010-CHING)



ER-calc-ratio (1990-2010-CHING)



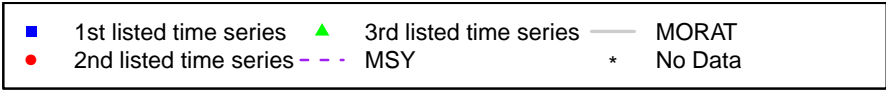
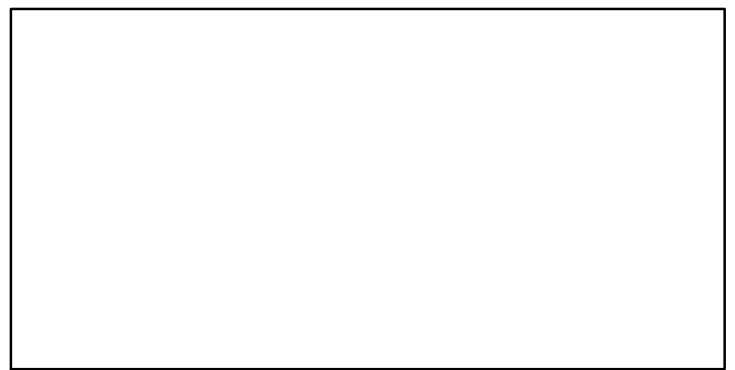
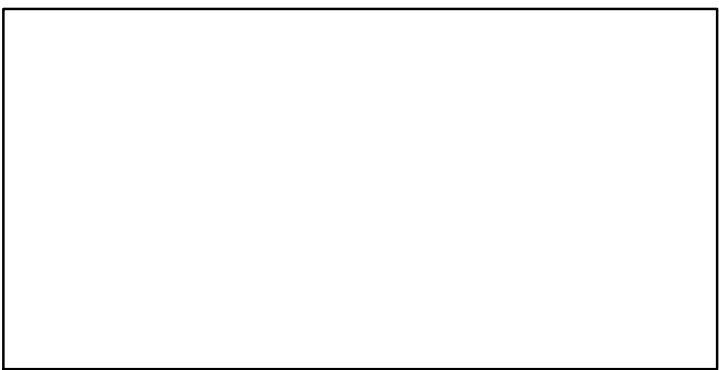
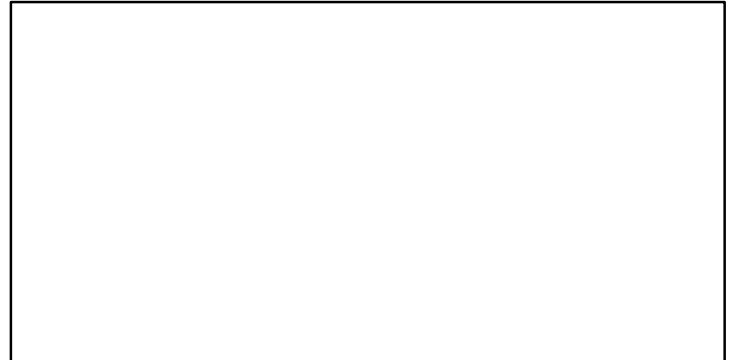
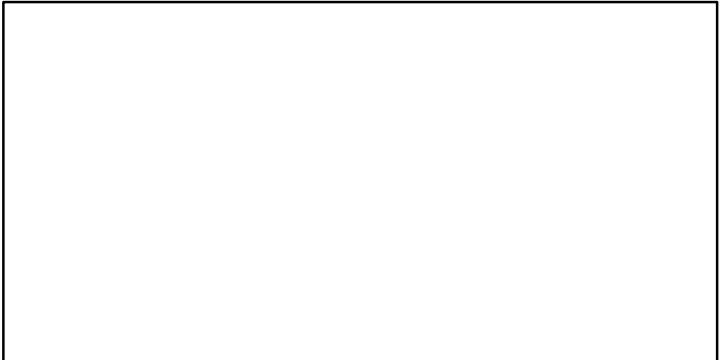
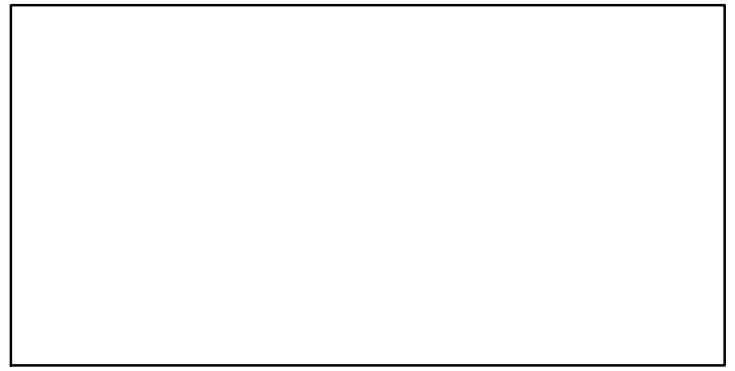
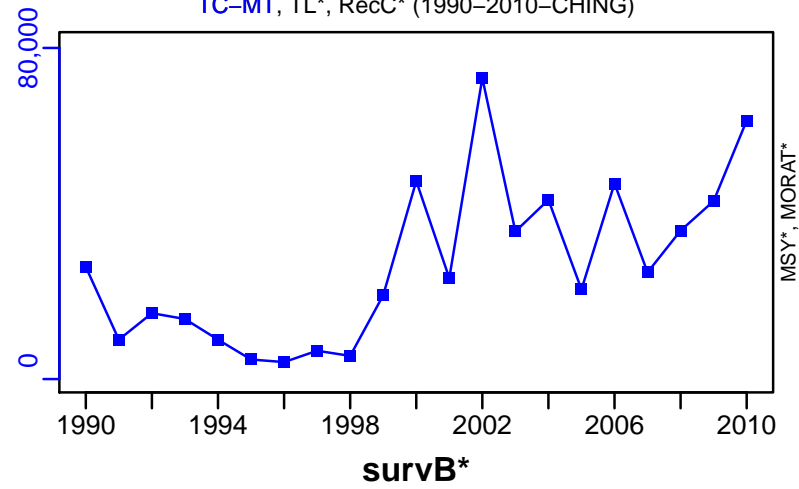
Recruits*



False Scad West Africa [FSCADWA]

TC-MT, TL*, RecC* (1990-2010-CHING)

TAC*, Cpair*, Cadv*



Greater amberjack Gulf of Mexico [GRAMBERGM]

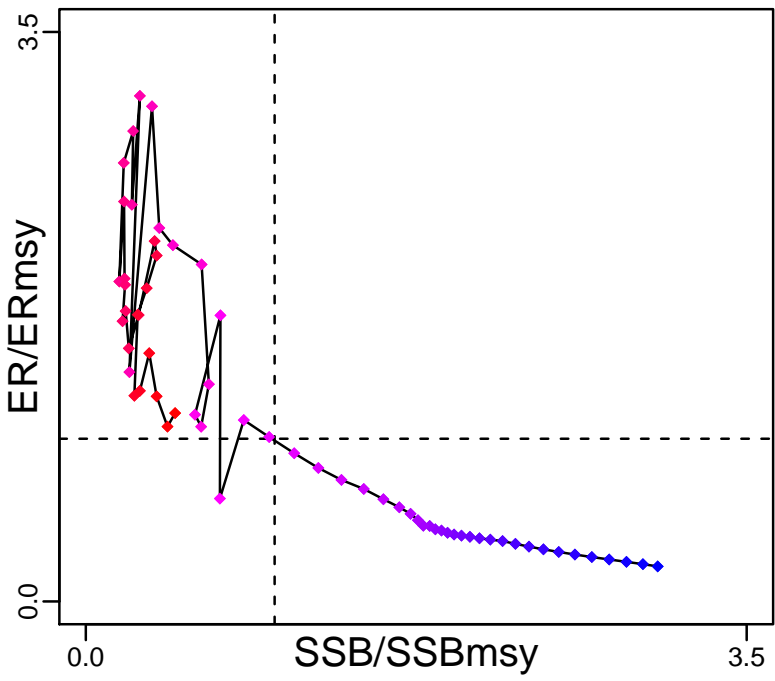
Metadata	
Scientific Name	Seriola dumerili
Current Assess ID	SEFSC-GRAMBERGM-1950-2012-SISIMP2016
Area	Gulf of Mexico
Management Authority	National Marine Fisheries Service, US national management
Assessor	Southeast Fisheries Science Center
Asmts in RAM	2012, 2004

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2012	7422
SSBmsy	SSBmsy-MT	2012	4627
Fmsy	Fmsy-1/yr	2004	0.568
ERmsy	ERmsy-ratio	2012	0.22
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2012	0.17
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2012	1633
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2012	3357
Flim	Flim-1/yr	2004	0.568
ERlim	ERlim-ratio	2012	0.22

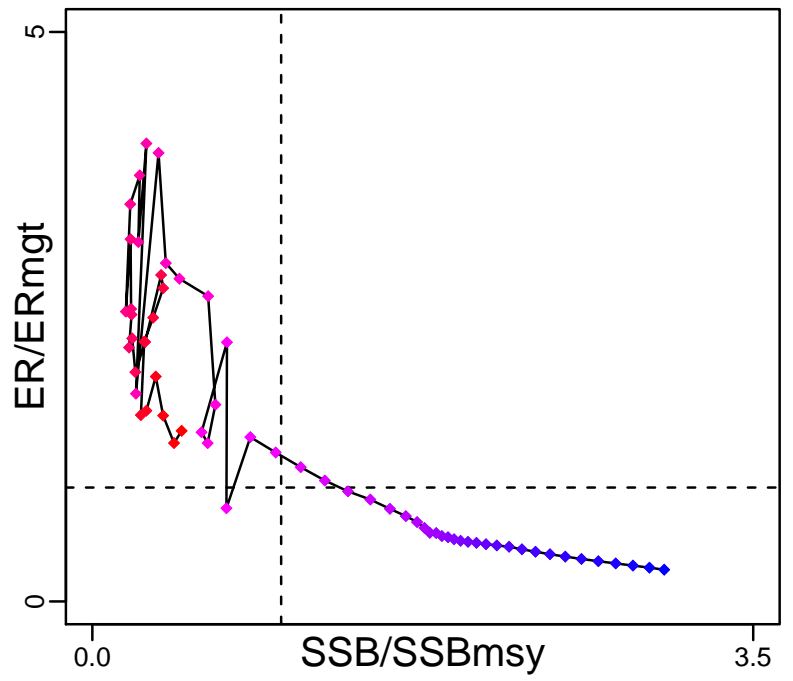
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2012	3860	-	1+
SSB	SSB-MT	2012	2190	Females	3+
TN	-	-	-	-	-
R	R-E00	2012	3×10^6	-	0
F	F-1/yr	2004	0.87	-	-
ER	ER-ratio	2012	0.255	-	-
TC	TC-MT	2012	983		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2012	0.52		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2012	0.473		
F/Fmsy	F-1/yr/Fmsy-1/yr	2004	1.532		
ER/ERmsy	ER-ratio/ERmsy-ratio	2012	1.157		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Greater amberjack Gulf of Mexico [GRAMBERGM]

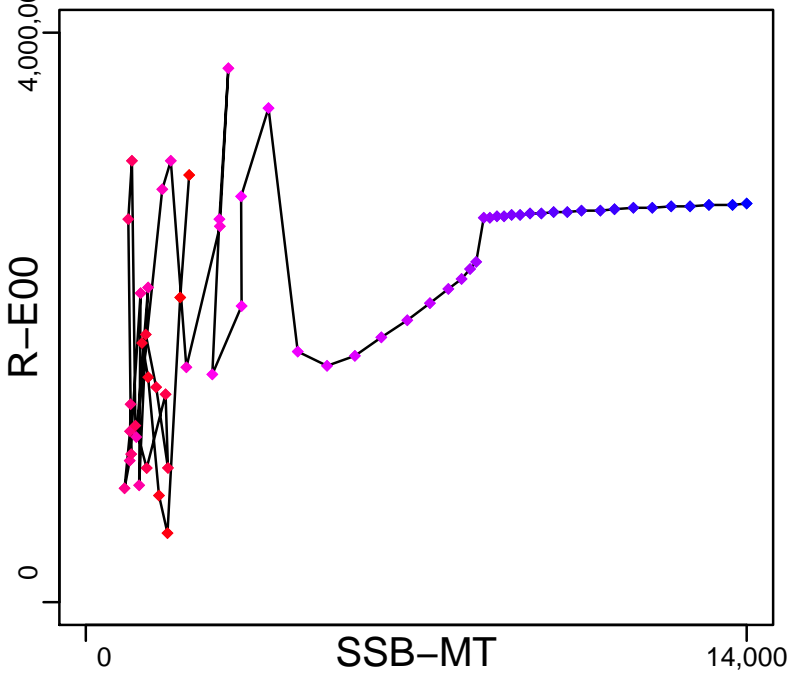
Kobe MSYpref (1950–2012–SISIMP2016)



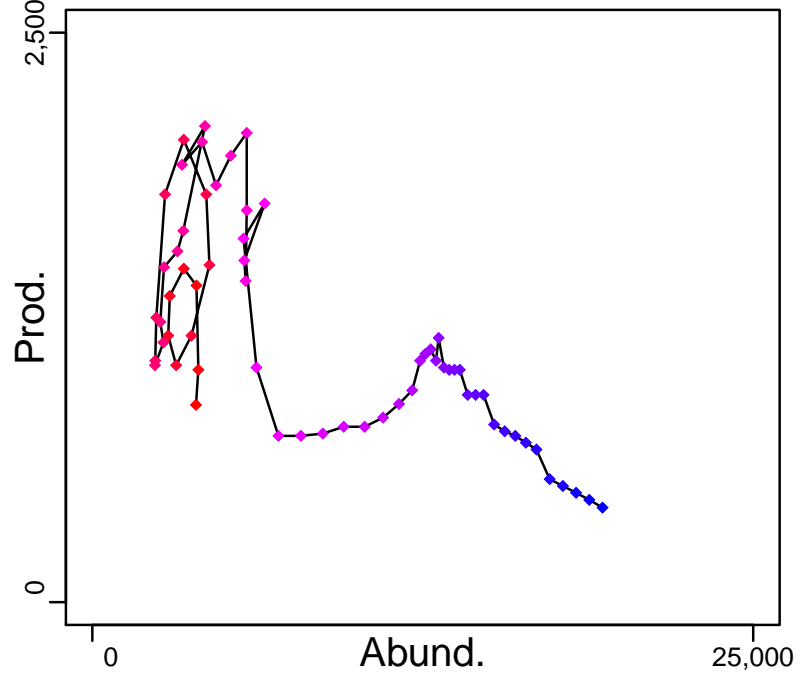
Kobe MGTpref (1950–2012–SISIMP2016)



Spawner Recruit (1950–2012–SISIMP2016)



Production (1950–2012–SISIMP2016)

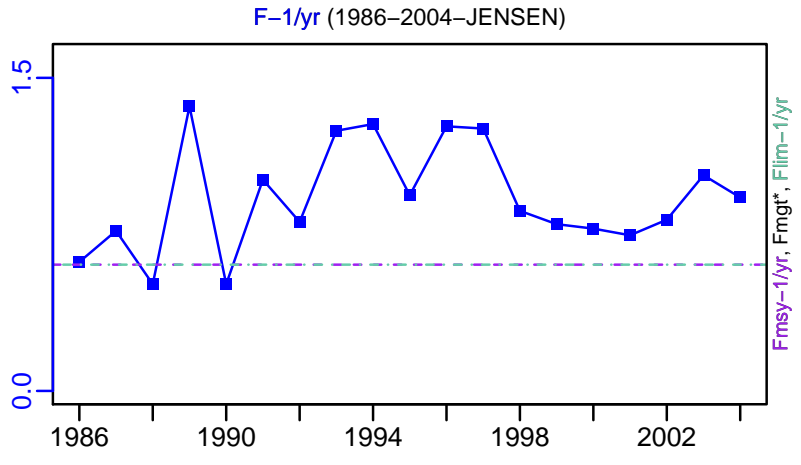
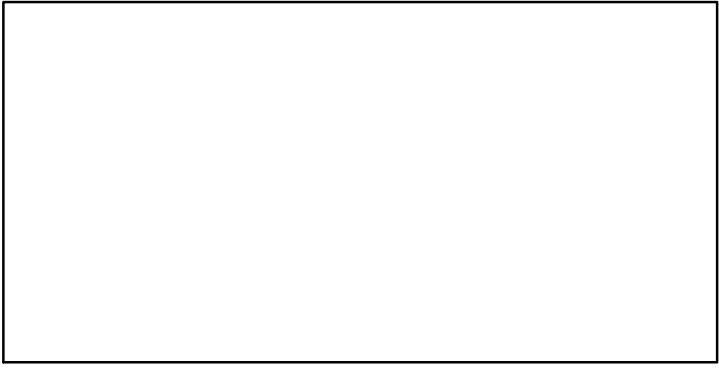
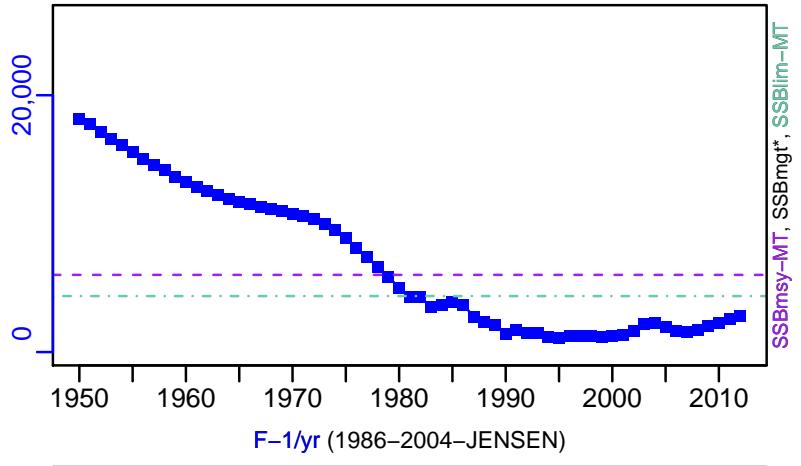
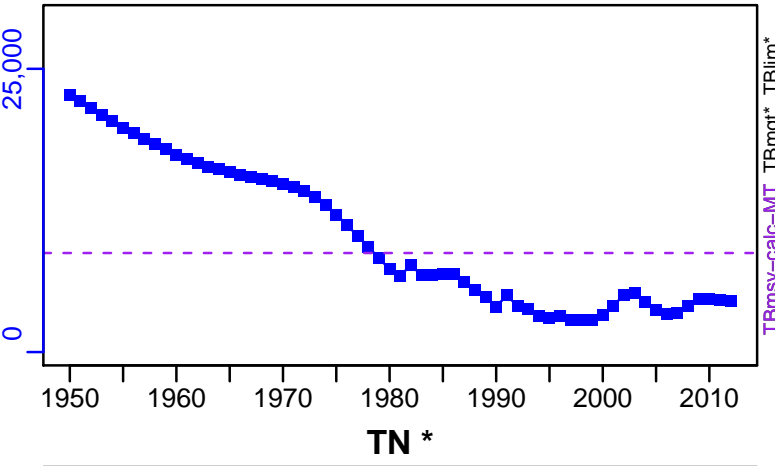


◆ Start Year ◆ End Year * No Data

Greater amberjack Gulf of Mexico [GRAMBERGM]

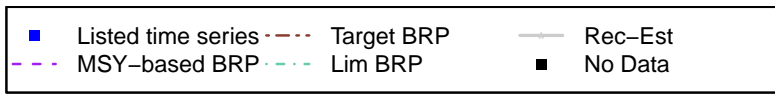
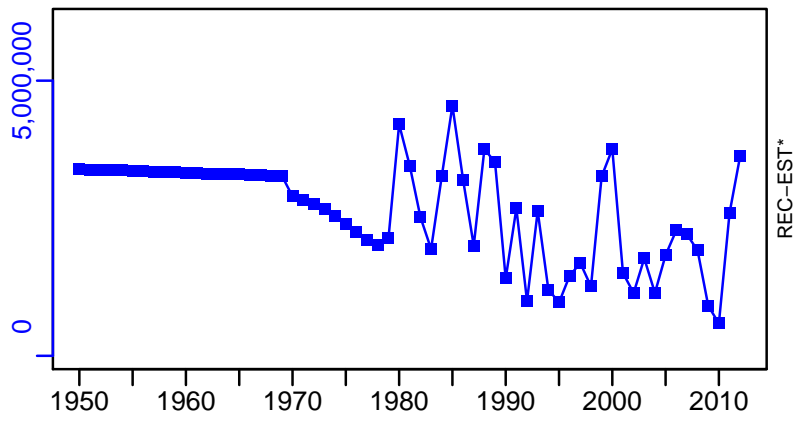
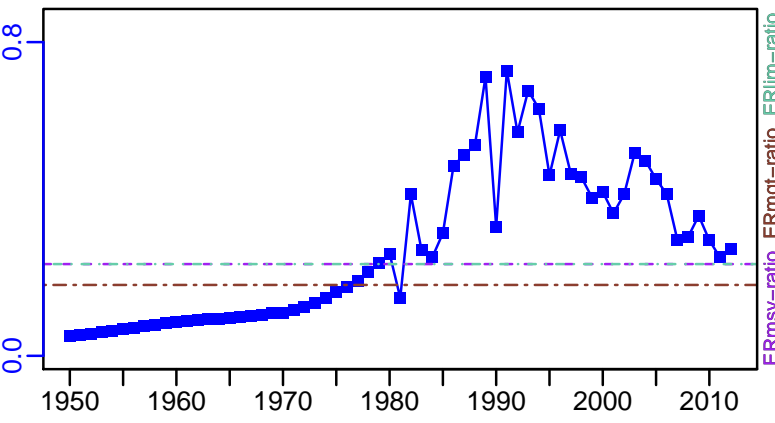
TB-MT (1950-2012-SISIMP2016)

SSB-MT (1950-2012-SISIMP2016)



ER-ratio (1950-2012-SISIMP2016)

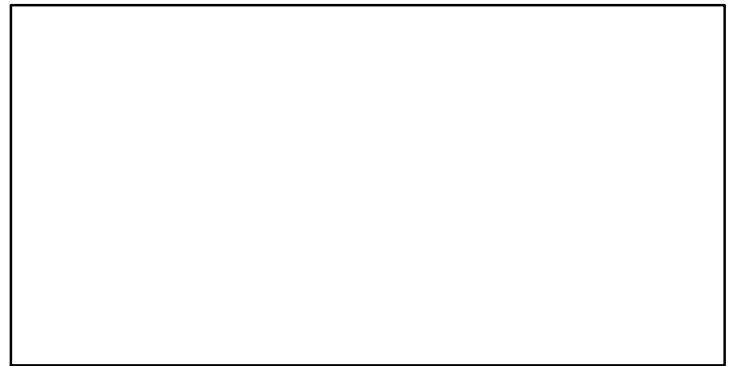
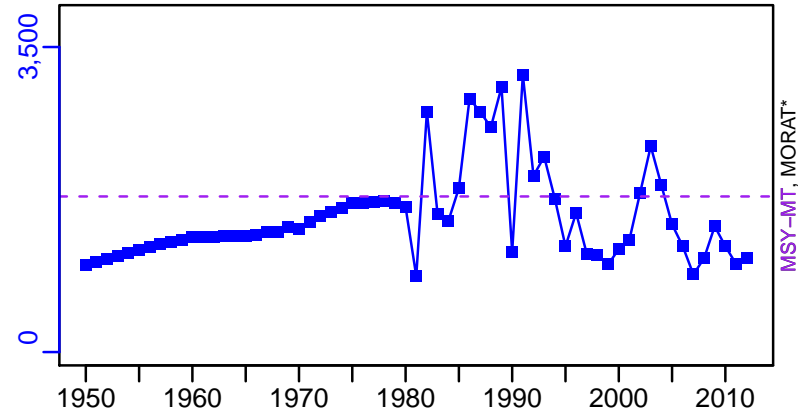
R-E00 (1950-2012-SISIMP2016)



Greater amberjack Gulf of Mexico [GRAMBERGM]

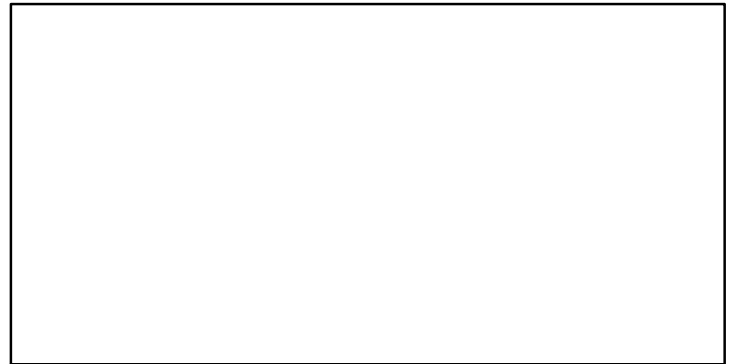
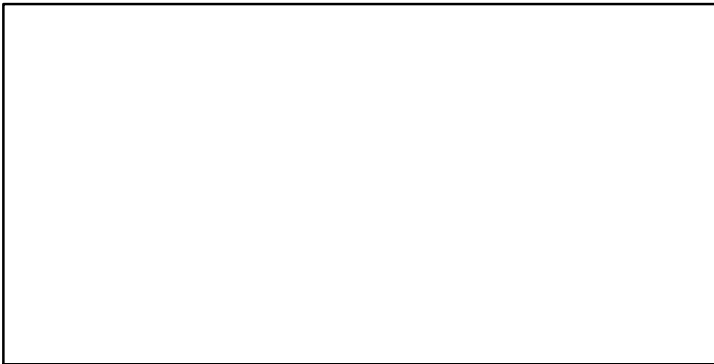
TC-MT, TL*, RecC* (1950-2012-SISIMP2016)

TAC*, Cpair*, Cadv*



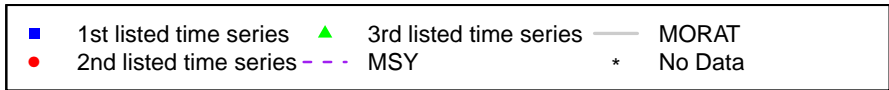
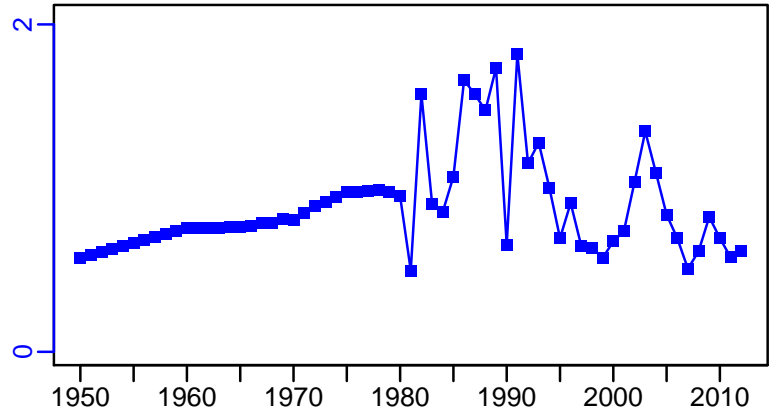
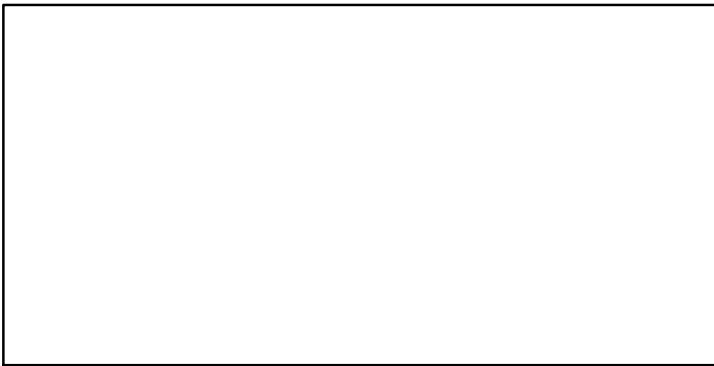
survB*

CPUE*



EFFORT*

CdivMSY-ratio (1950-2012-SISIMP2016)



Greater amberjack Southern Atlantic coast [GRAMBERSATLC]

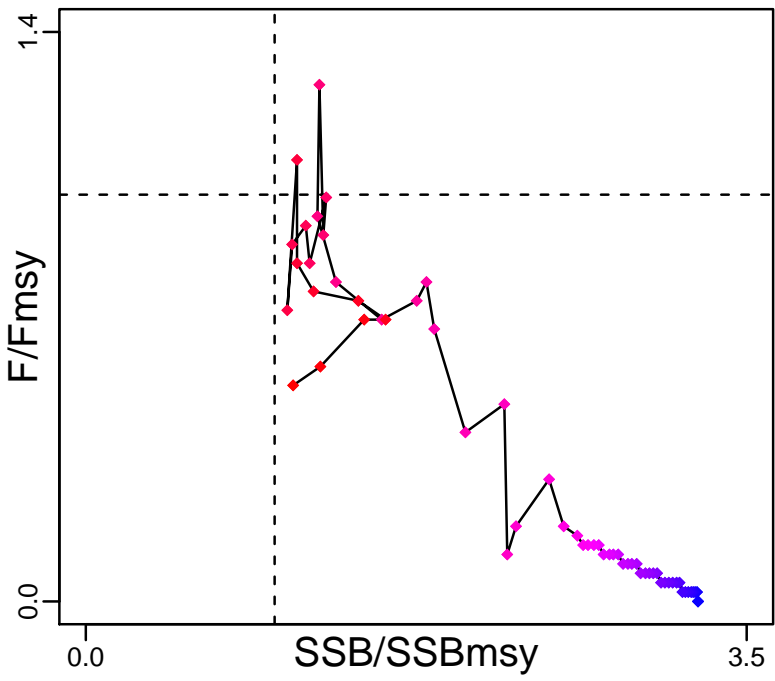
Metadata	
Scientific Name	Seriola dumerili
Current Assess ID	SEFSC-GRAMBERSATLC-1946-2006-JENSEN
Area	Southern Atlantic coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Southeast Fisheries Science Center
Asmts in RAM	2006

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-MT	2006	5491
SSBmsy	SSBmsy-MT	2006	1940
Fmsy	Fmsy-1/yr	2006	0.433
ERmsy	ERmsy-ratio	2006	0.166
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2006	909
M	M-1/yr	2006	0.25
TBlim	TBlim-MT	2006	1455
SSBlim	-	-	-
Flim	Flim-1/yr	2006	0.433
ERlim	-	-	-

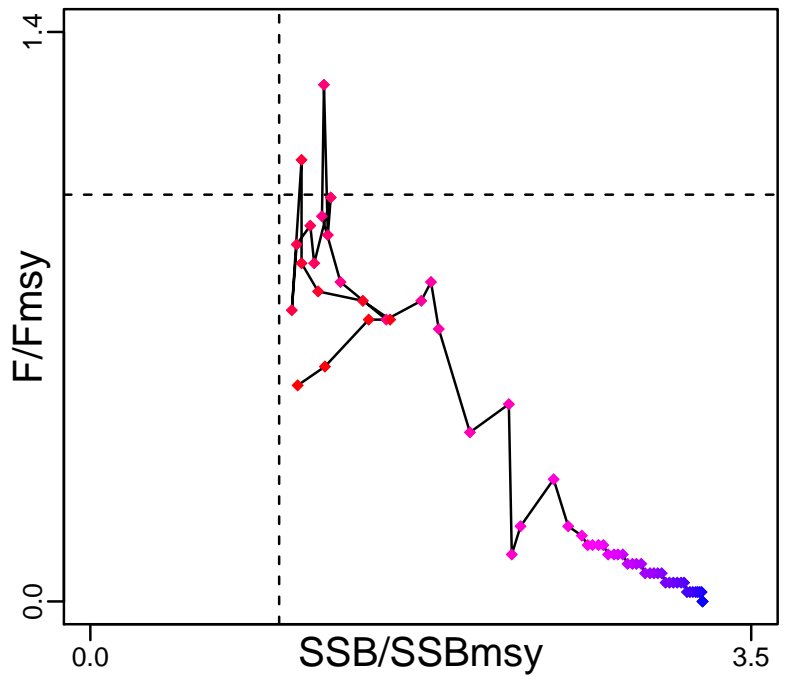
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2006	5620	-	-
SSB	SSB-MT	2006	2130	-	1.3+
TN	-	-	-	-	-
R	R-E00	2006	498,000	-	-
F	F-1/yr	2006	0.23	-	-
ER	-	-	-	-	-
TC	-	-	-	-	-
TL	-	-	-	-	-
TB/TBmsy	TB-MT/TBmsy-MT	2006	1.023	-	-
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2006	1.098	-	-
F/Fmsy	F-1/yr/Fmsy-1/yr	2006	0.531	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

Greater amberjack Southern Atlantic coast [GRAMBERSATLC]

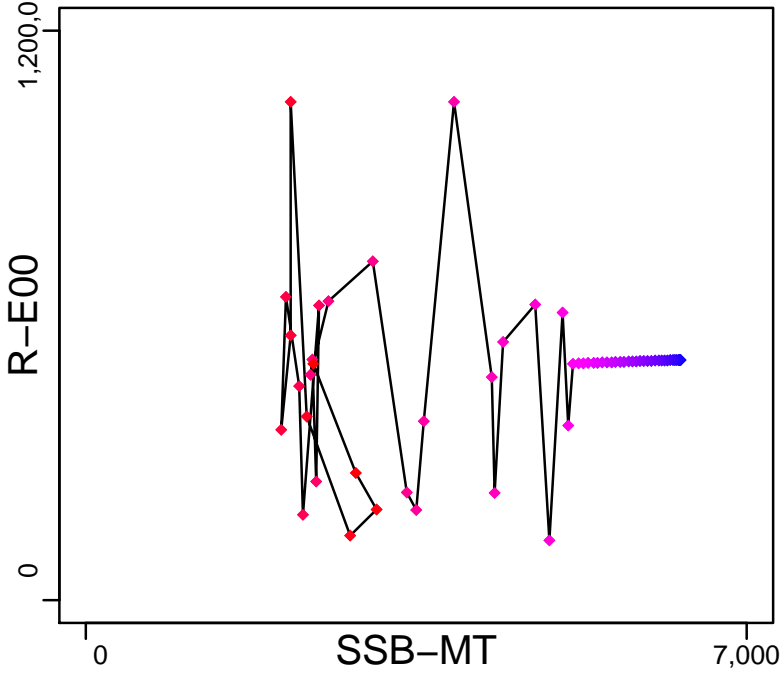
Kobe MSYpref (1946–2006–JENSEN)



Kobe MGTpref (1946–2006–JENSEN)



Spawner Recruit (1946–2006–JENSEN)



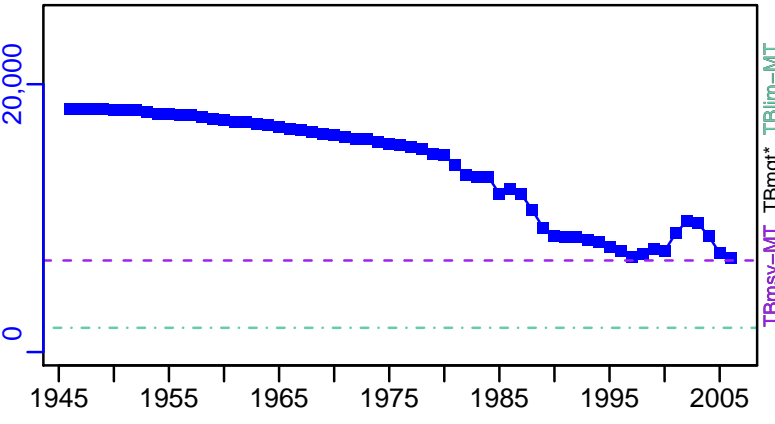
Production*



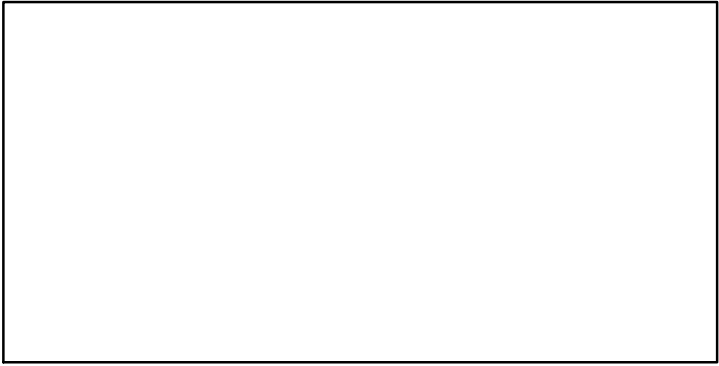
◆ Start Year ◆ End Year * No Data

Greater amberjack Southern Atlantic coast [GRAMBERSATLC]

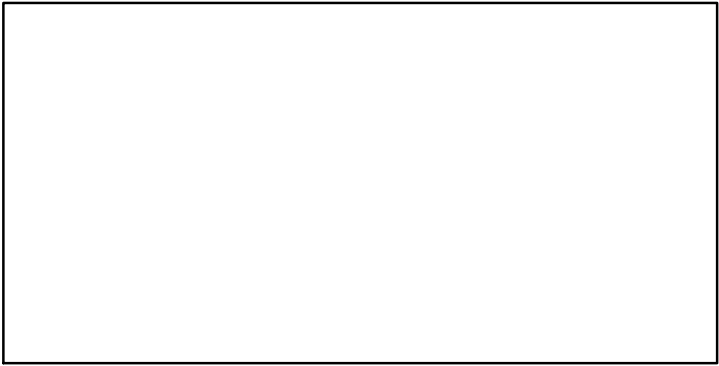
TB-MT (1946-2006-JENSEN)



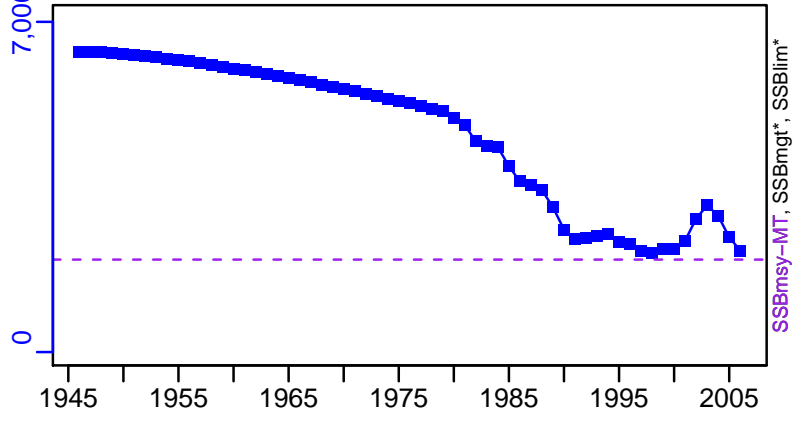
TN *



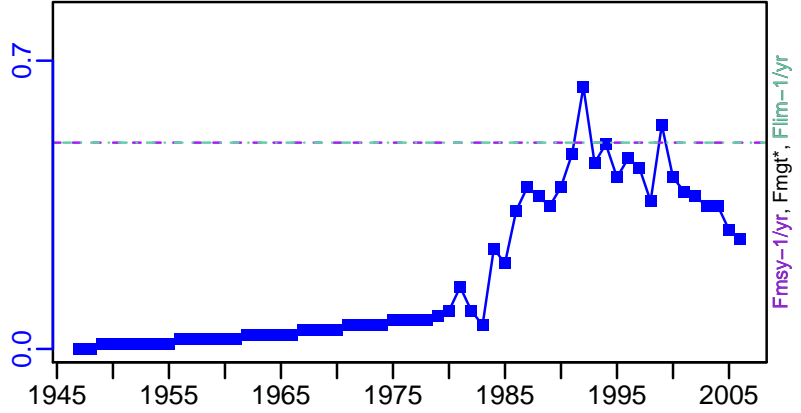
ER*



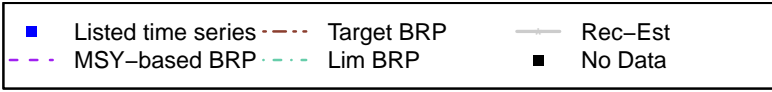
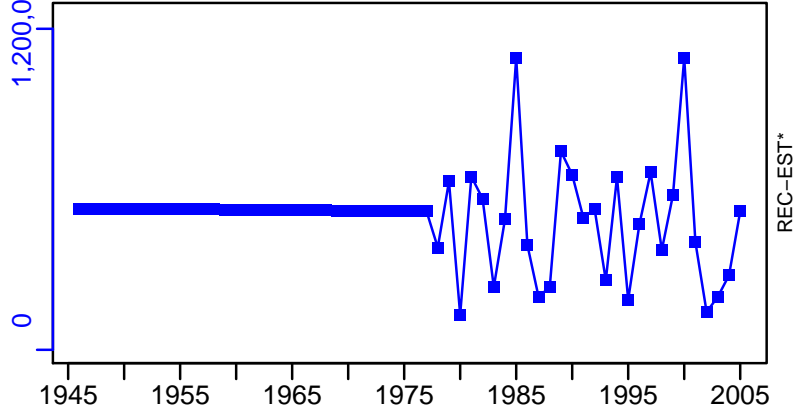
SSB-MT (1946-2006-JENSEN)



F-1/yr (1946-2006-JENSEN)

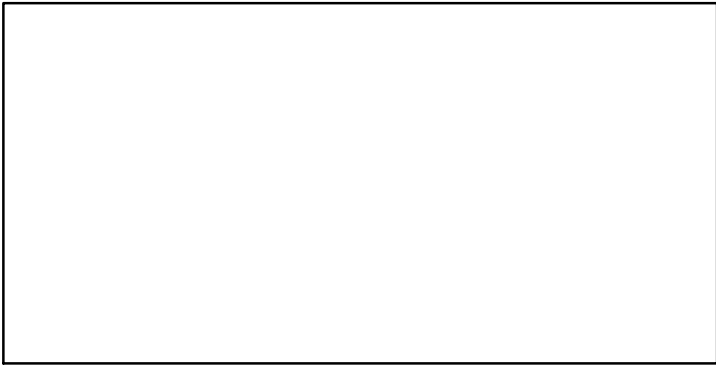


R-E00 (1946-2006-JENSEN)

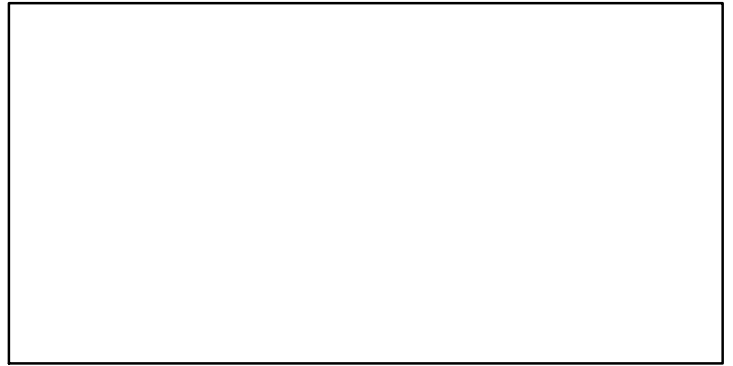


Greater amberjack Southern Atlantic coast [GRAMBERSATLC]

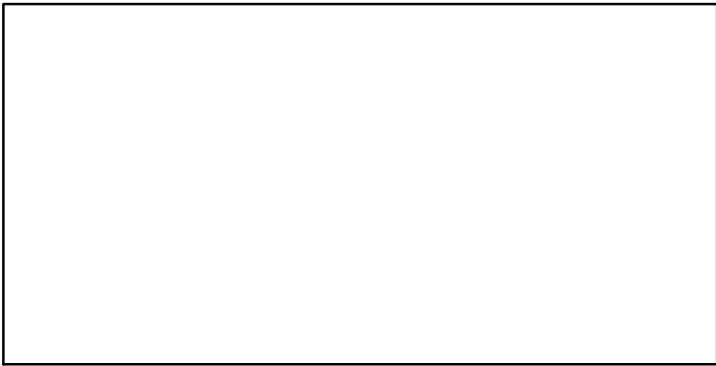
TC*, TL*, RecC*



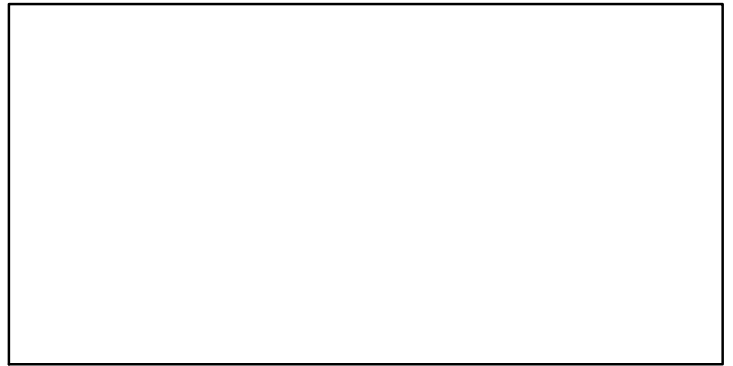
TAC*, Cpair*, Cadv*



survB*



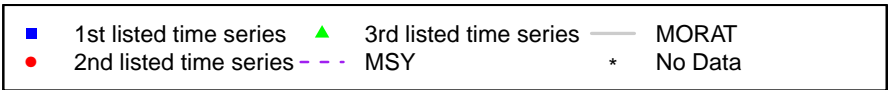
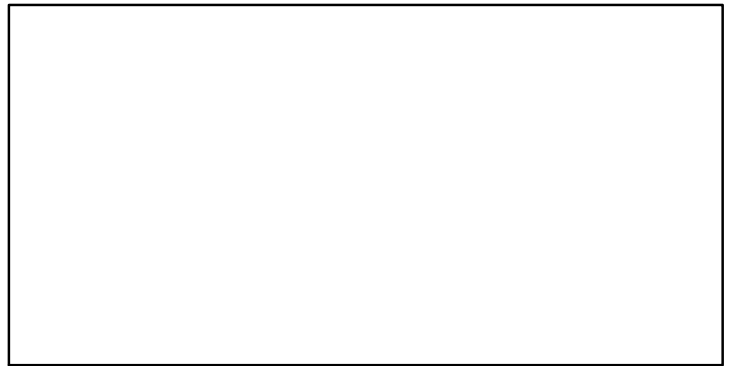
CPUE*



EFFORT*



CdivMSY*



Horse mackerel IIa-IVa-Vb-VIa-VII-VIII [HMACKIIa-IVa-Vb-VIa-VII-VIII]

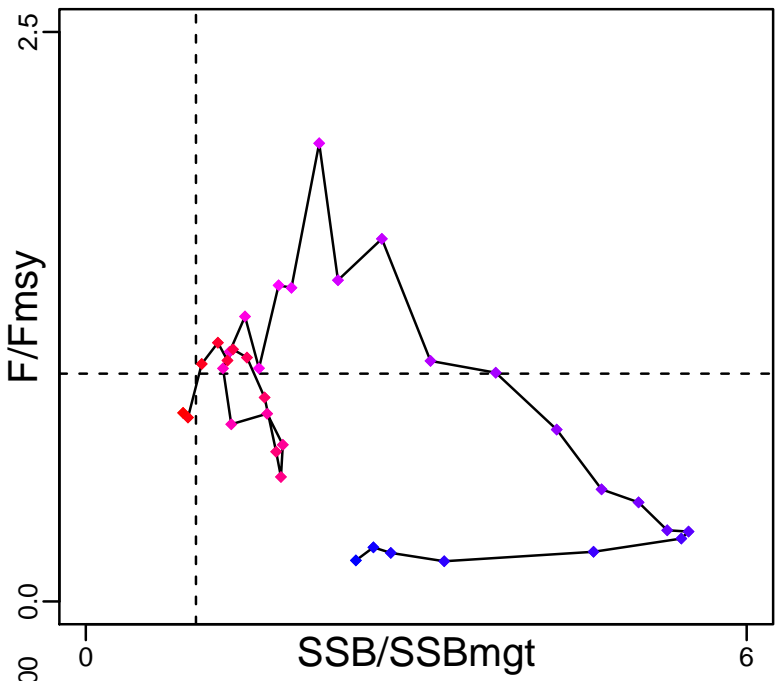
Metadata	
Scientific Name	Trachurus trachurus
Current Assess ID	WGWIDE-HMACKIIa-IVa-Vb-VIa-VII-VIII-1982-2017-ICESIMP2018
Area	IIa-IVa-Vb-VIa-VII-VIII
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Widely Distributed Stocks
Asmts in RAM	2013, 2014, 2015, 2016, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2017	0.108
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2017	911,588
Fmgt	Fmgt-1/yr	2017	0.108
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2017	661,917
Flim	Flim-1/yr	2017	0.151
ERlim	-	-	-

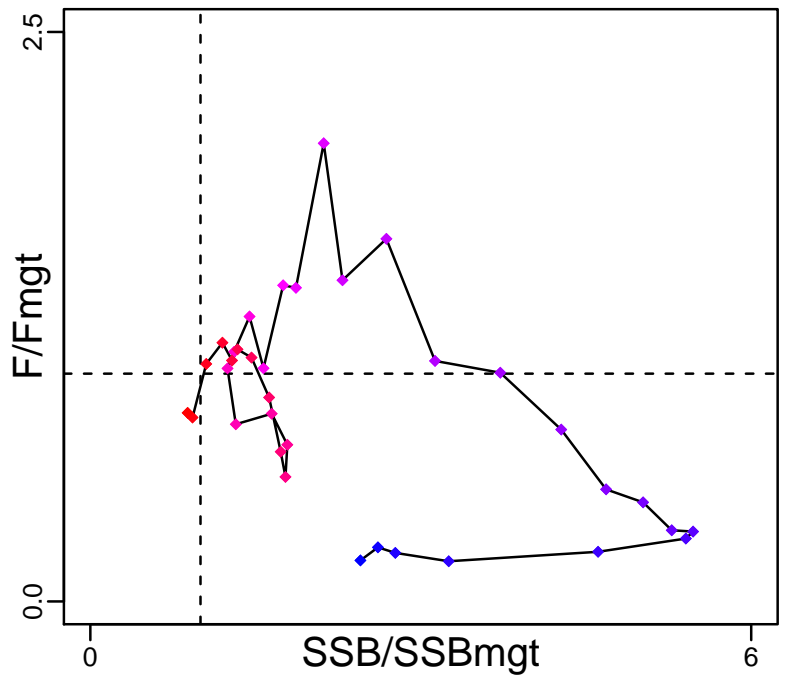
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2017	1,070,000	Both	-
SSB	SSB-MT	2017	782,000	Both	-
TN	-	-	-	-	-
R	R-E00	2017	2.52×10^9	-	0
F	F-1/yr	2017	0.089	-	1 to 10
ER	ER-calc-ratio	2017	0.098	-	-
TC	TC-MT	2017	98,800		
TL	TL-MT	2017	98,800		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	0.828		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2017	0.858		
F/Fmgt	F-1/yr/Fmgt-1/yr	2017	0.828		
ER/ERmgt	-	-	-		

Horse mackerel IIa-IVa-Vb-VIa-VII-VIII [HMACKIIa-IVa-Vb-VIa-VII-VIII]

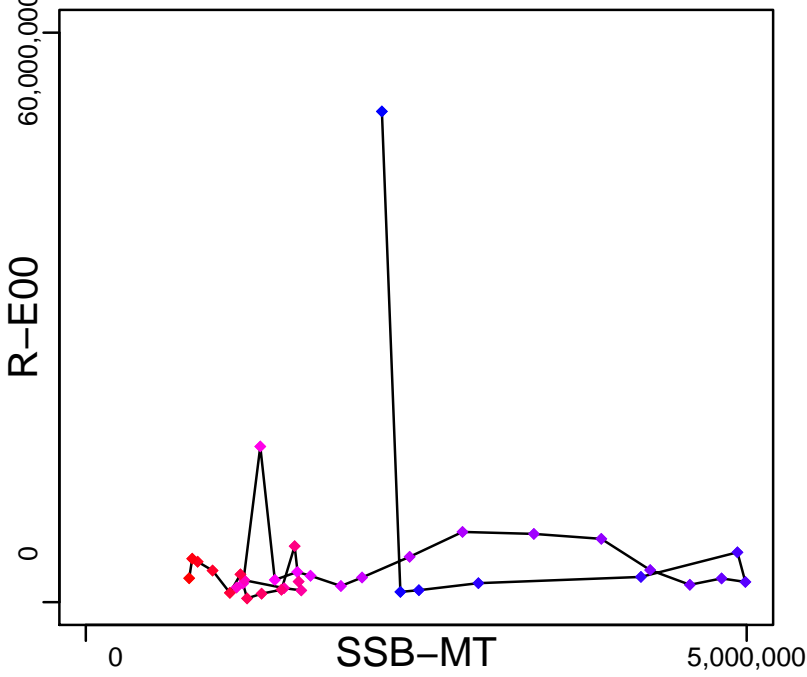
Kobe MSYpref (1982-2017-ICESIMP2018)



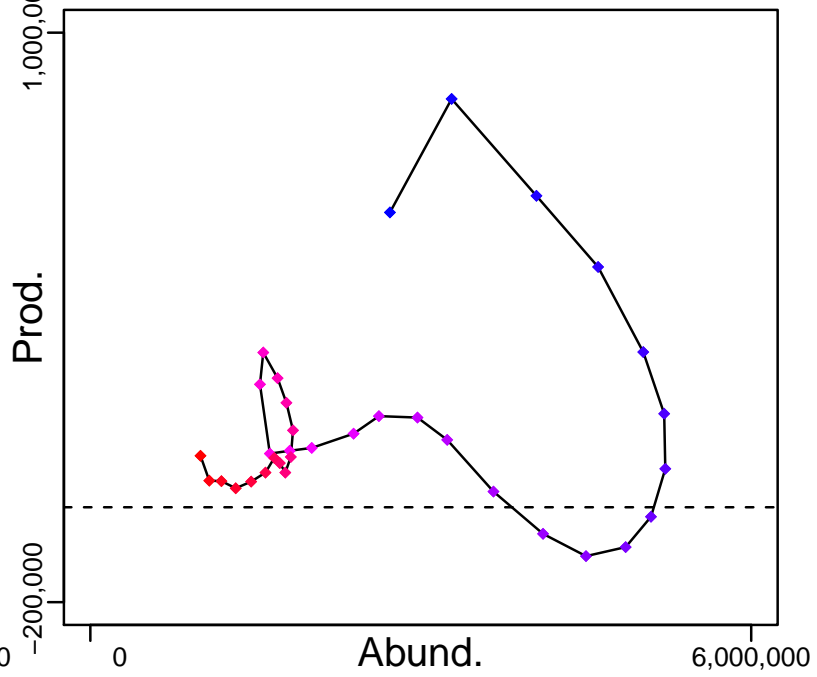
Kobe MGTpref (1982-2017-ICESIMP2018)



Spawner Recruit (1982-2017-ICESIMP2018)



Production (1982-2017-ICESIMP2018)

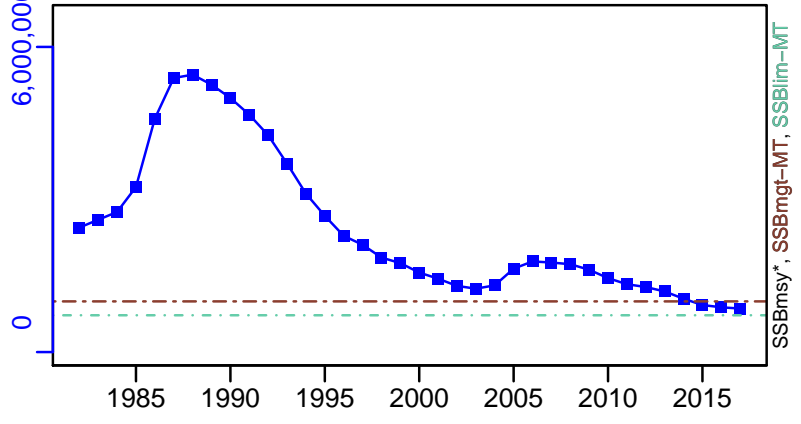
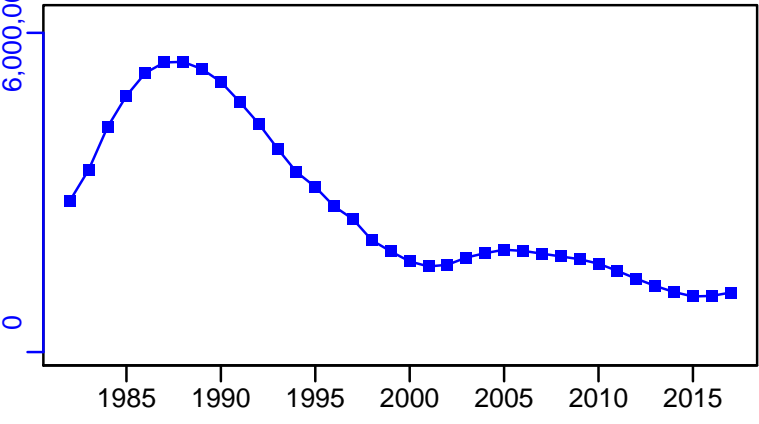


◆ Start Year ◆ End Year * No Data

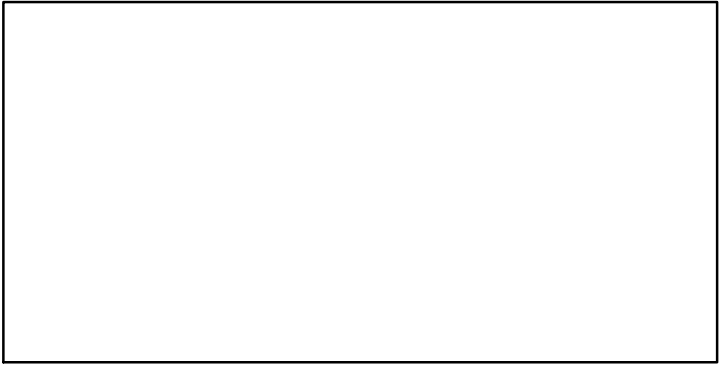
Horse mackerel IIa-IVa-Vb-VIa-VII-VIII [HMACKIIa-IVa-Vb-VIa-VII-VIII]

TB-MT (1982-2017-ICESIMP2018)

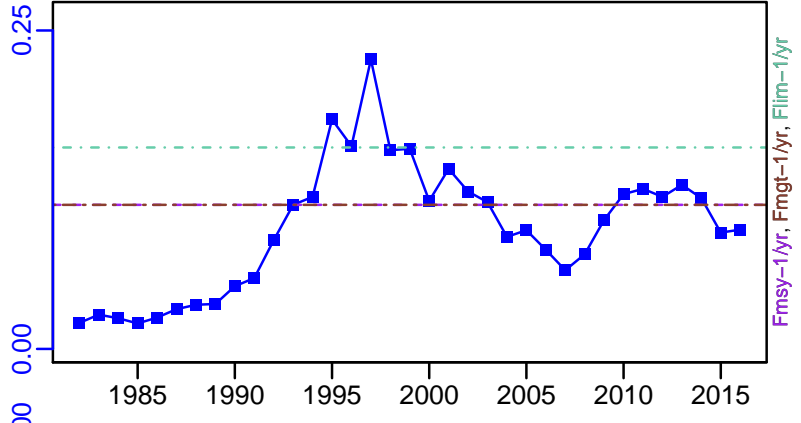
SSB-MT (1982-2017-ICESIMP2018)



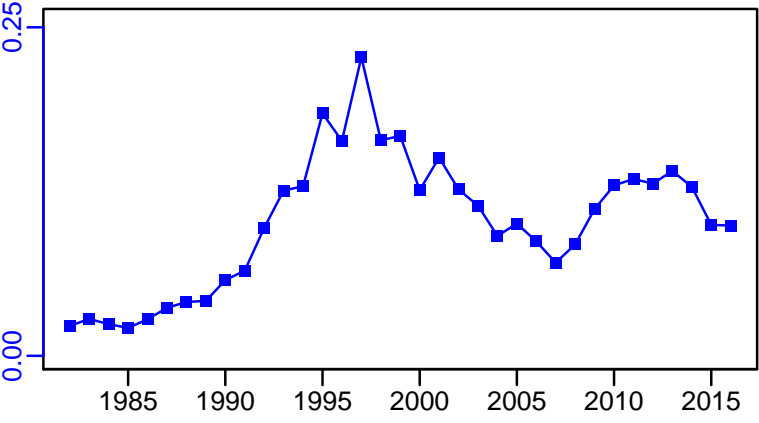
TN *



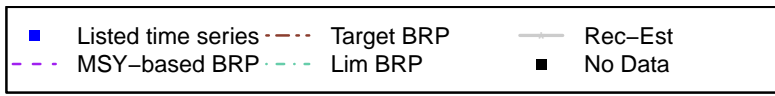
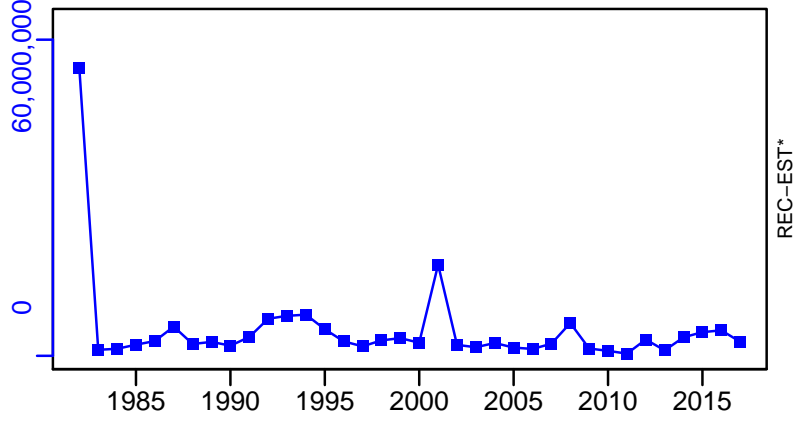
F-1/yr (1982-2017-ICESIMP2018)



ER-calc-ratio (1982-2017-ICESIMP2018)



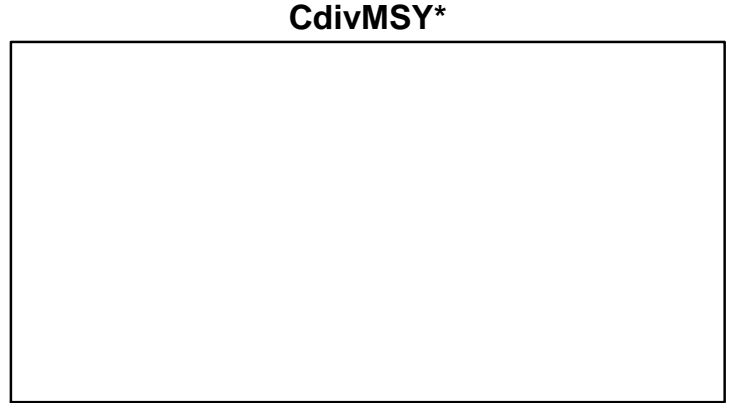
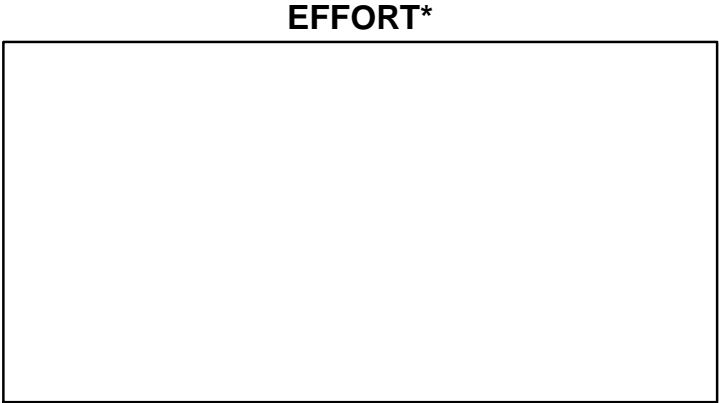
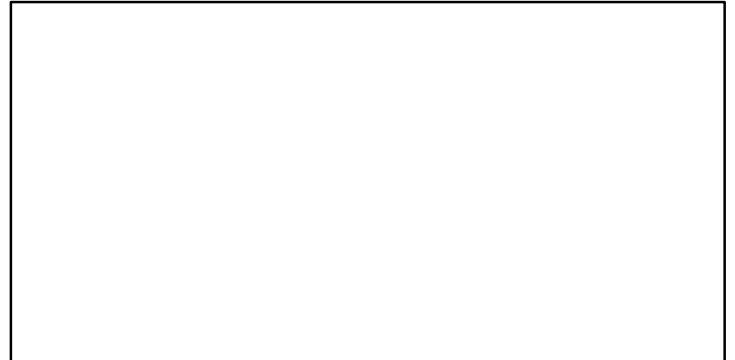
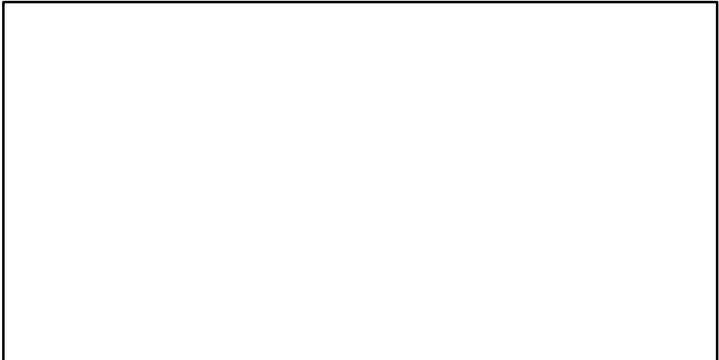
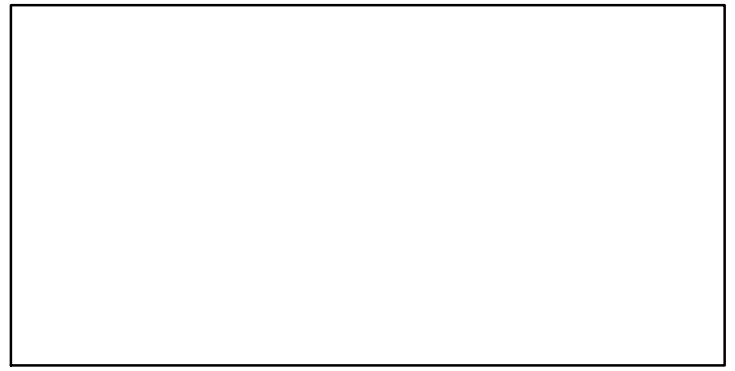
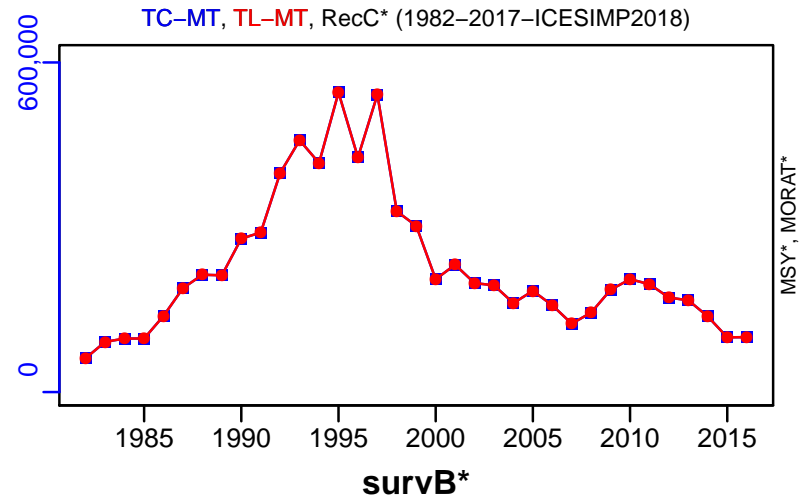
R-E00 (1982-2017-ICESIMP2018)



Horse mackerel IIa-IVa-Vb-VIa-VII-VIII [HMACKIIa-IVa-Vb-VIa-VII-VIII]

TC-MT, TL-MT, RecC* (1982-2017-ICESIMP2018)

TAC*, Cpair*, Cadv*



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

Horse mackerel IIIa-IVbc-VIId [HMACKIIIa-IVbc-VIId]

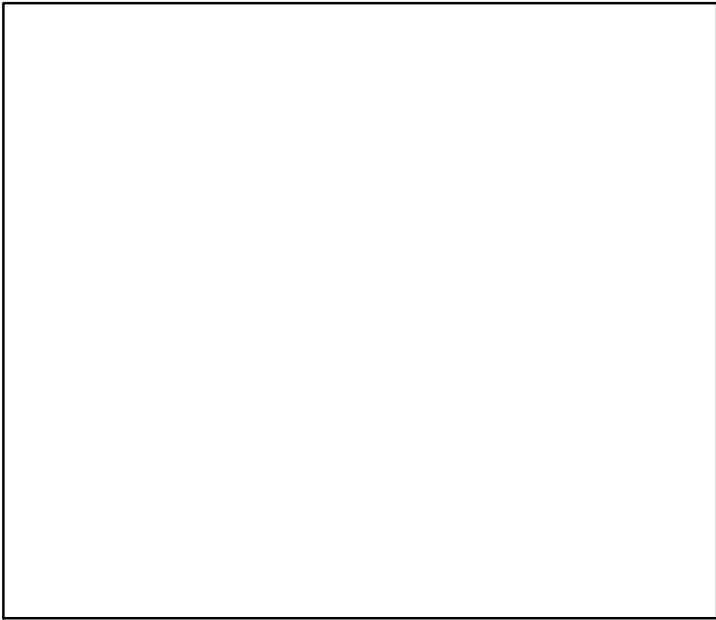
Metadata	
Scientific Name	Trachurus trachurus
Current Assess ID	WGWIDE-HMACKIIIa-IVbc-VIId-1982-2016-ICESIMP2018
Area	IIIa-IVbc-VIId
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Widely Distributed Stocks
Asmts in RAM	2015, 2015, 2016

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

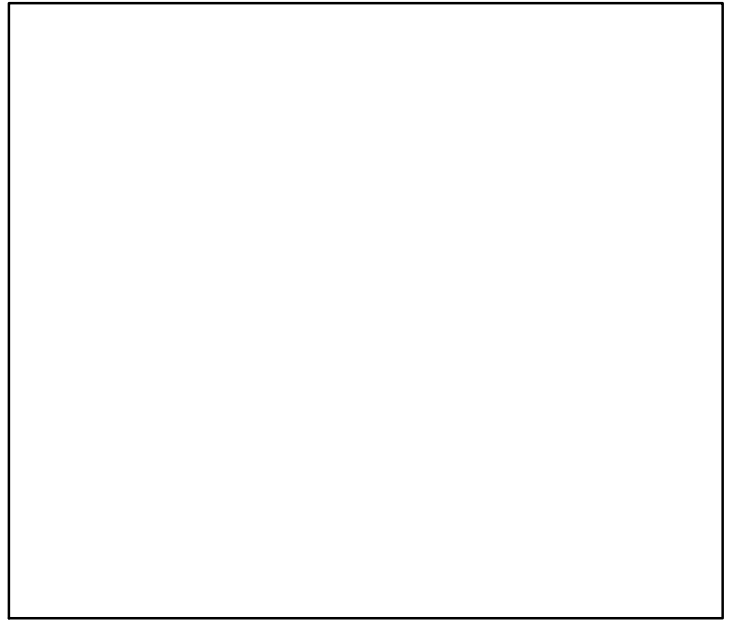
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	16,900		
TL	TL-MT	2016	13,800		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Horse mackerel IIIa-IVbc-VIId [HMACKIIIa-IVbc-VIId]

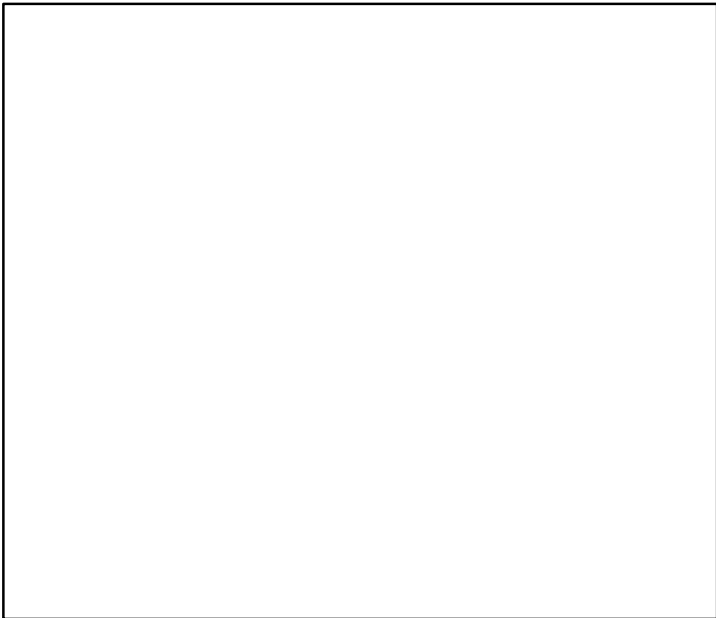
Kobe MSY*



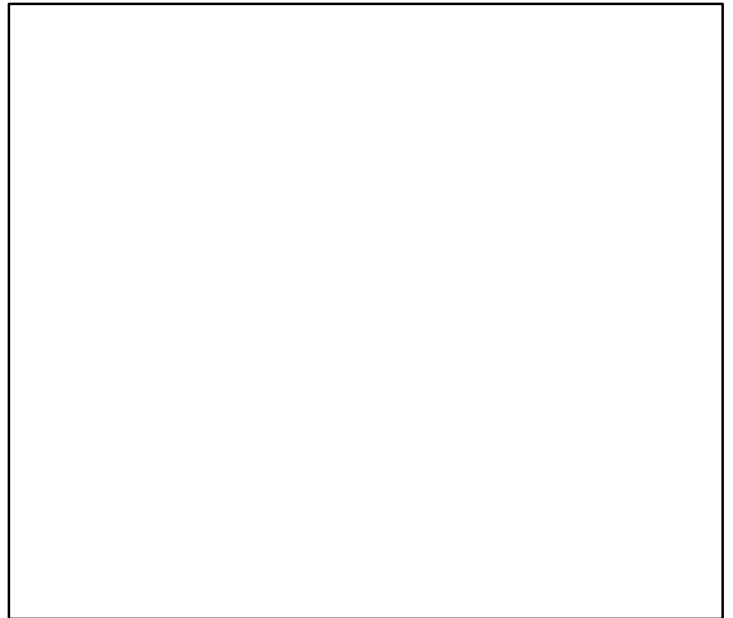
Kobe MGT*



Spawner Recruit*



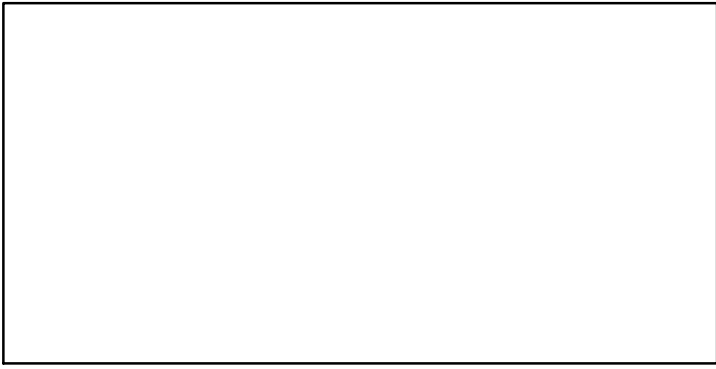
Production*



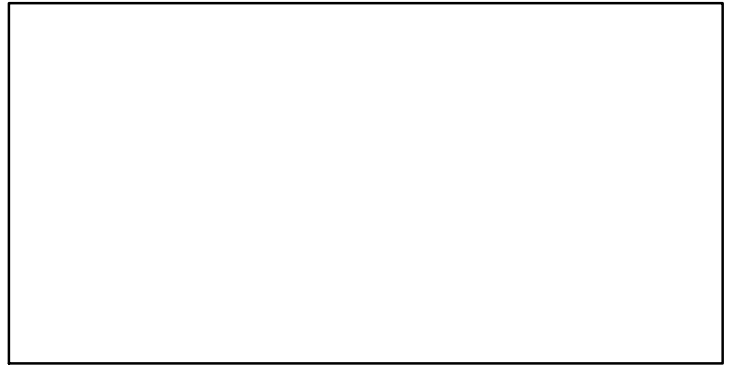
◆ Start Year ◆ End Year * No Data

Horse mackerel IIIa-IVbc-VIId [HMACKIIIa-IVbc-VIId]

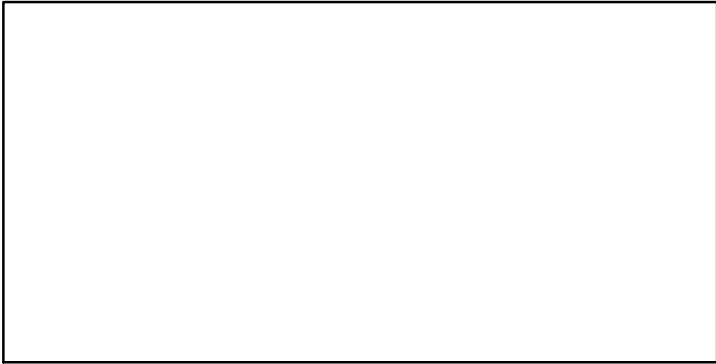
TB*



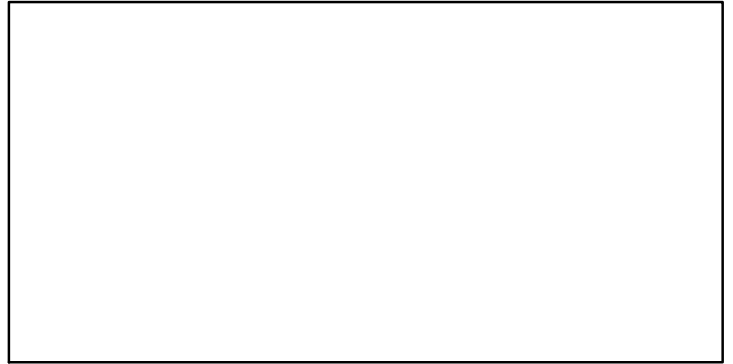
SSB*



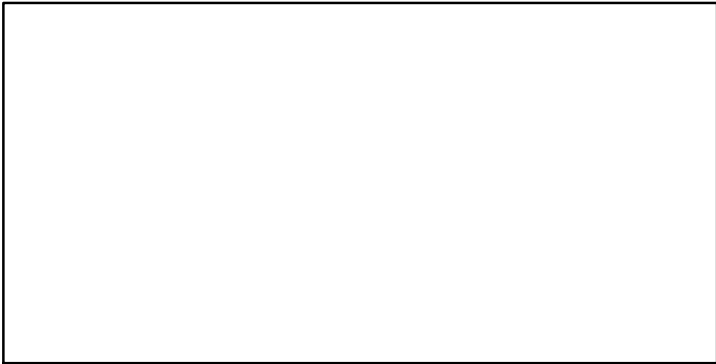
TN *



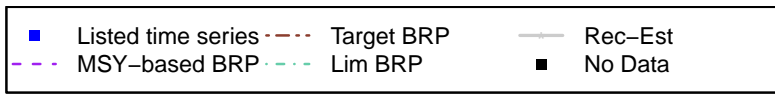
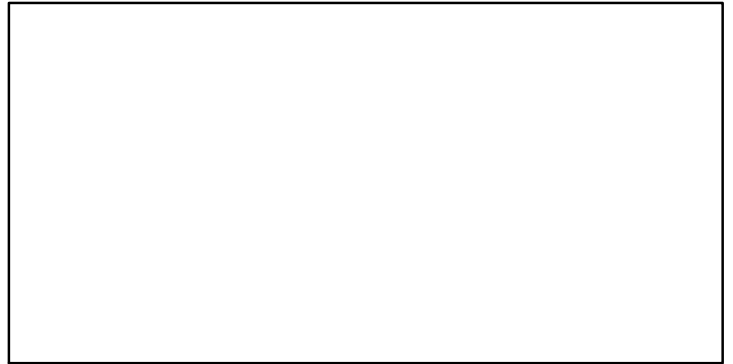
F*



ER*



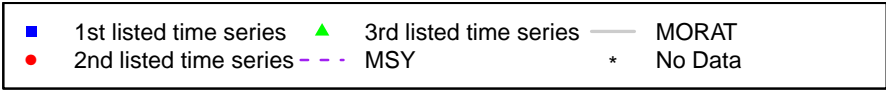
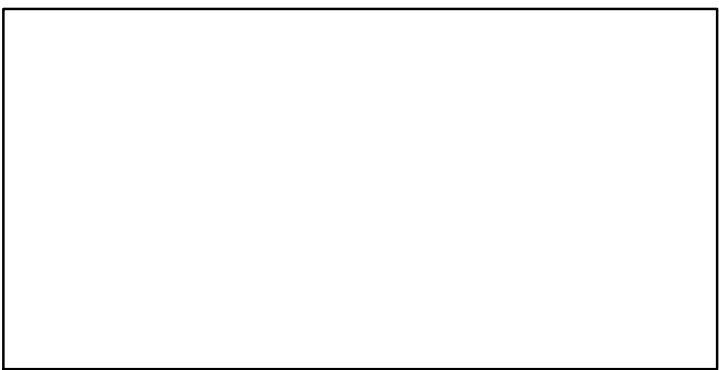
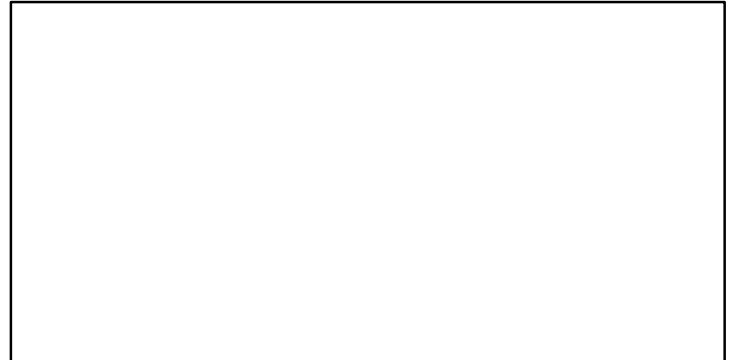
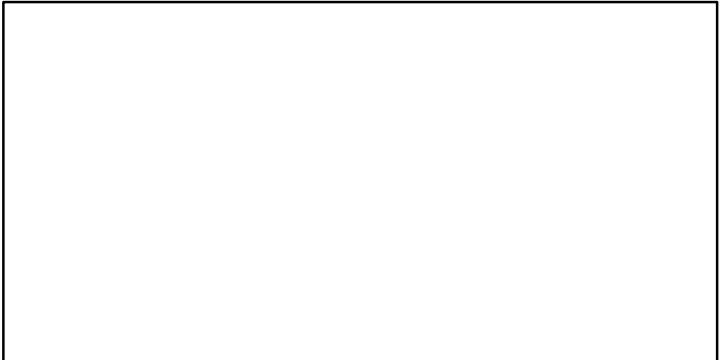
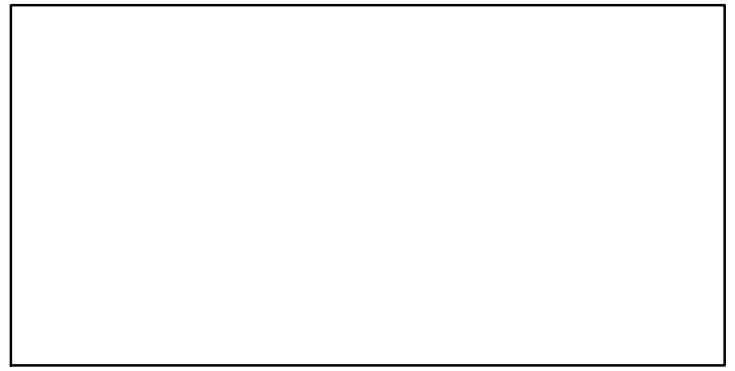
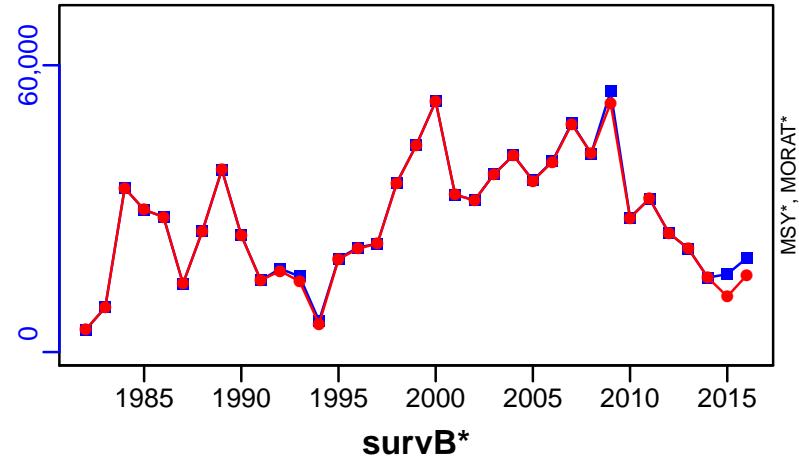
Recruits*



Horse mackerel IIIa-IVbc-VIId [HMACKIIIa-IVbc-VIId]

TC-MT, TL-MT, RecC* (1982-2016-ICESIMP2018)

TAC*, Cpair*, Cadv*



Horse mackerel Portugese Waters -East [HMACKIXa]

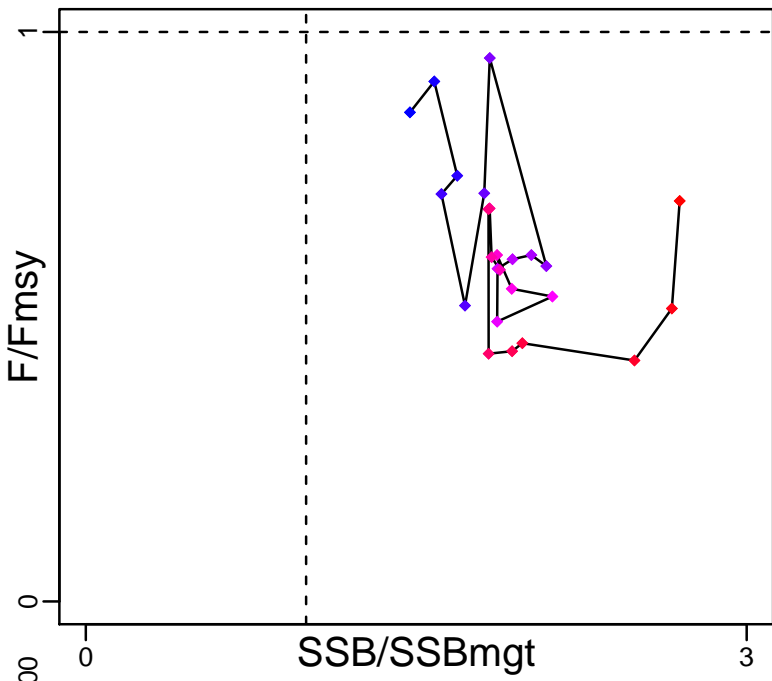
Metadata	
Scientific Name	Trachurus trachurus
Current Assess ID	WGHANSA-HMACKIXa-1992-2018-ICESIMP2018
Area	Portugese Waters -East
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Southern Horse Mackerel, Anchovy and Sardine
Asmts in RAM	2013, 2014, 2015, 2016, 2017, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2017	0.11
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2018	181,000
Fmgt	Fmgt-1/yr	2017	0.11
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2018	103,000
Flim	Flim-1/yr	2017	0.19
ERlim	-	-	-

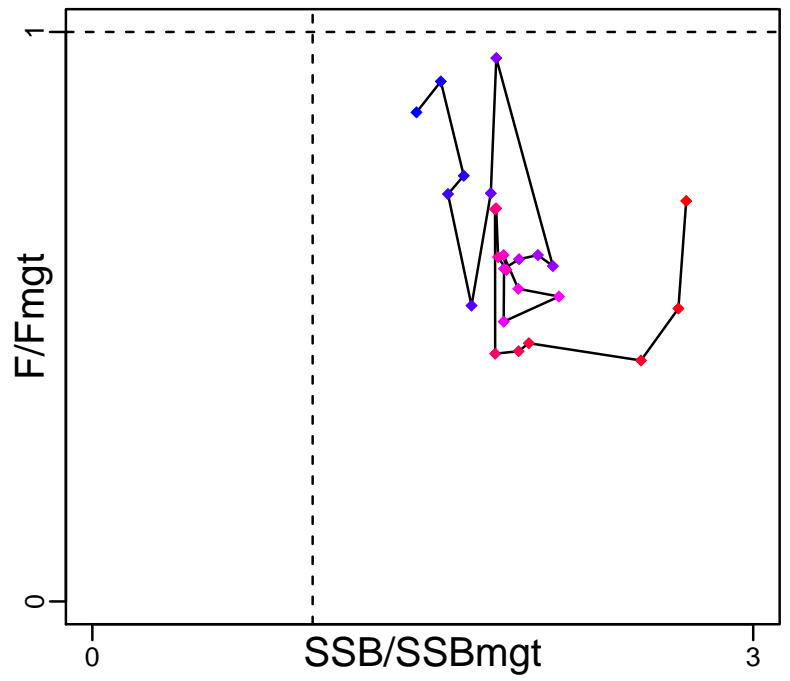
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-MT	2018	816,000	Both	-
TN	-	-	-	-	-
R	R-E00	2018	4.46×10^9	-	0
F	F-1/yr	2017	0.077	-	2 to 10
ER	-	-	-	-	-
TC	TC-MT	2018	36,900		
TL	TL-MT	2018	36,900		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	0.703		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2018	4.507		
F/Fmgt	F-1/yr/Fmgt-1/yr	2017	0.703		
ER/ERmgt	-	-	-		

Horse mackerel Portuguese Waters –East [HMACKIXa]

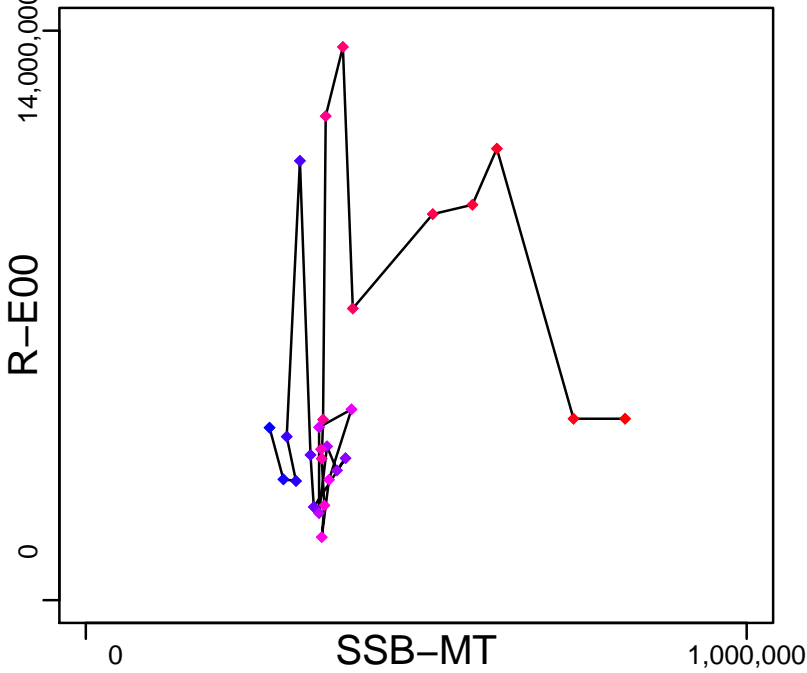
Kobe MSYpref (1992–2017–ICESIMP2018)



Kobe MGTpref (1992–2017–ICESIMP2018)



Spawner Recruit (1992–2018–ICESIMP2018)



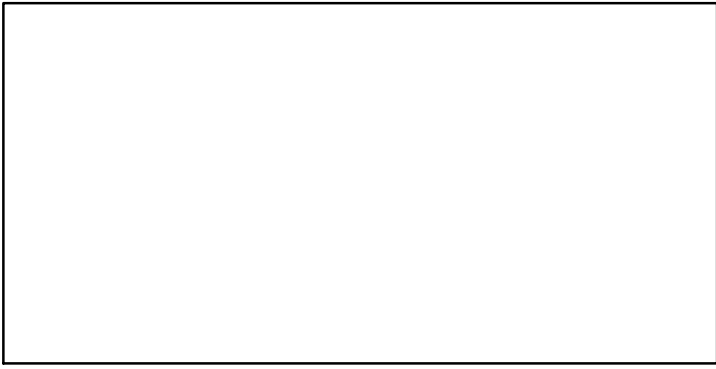
Production*



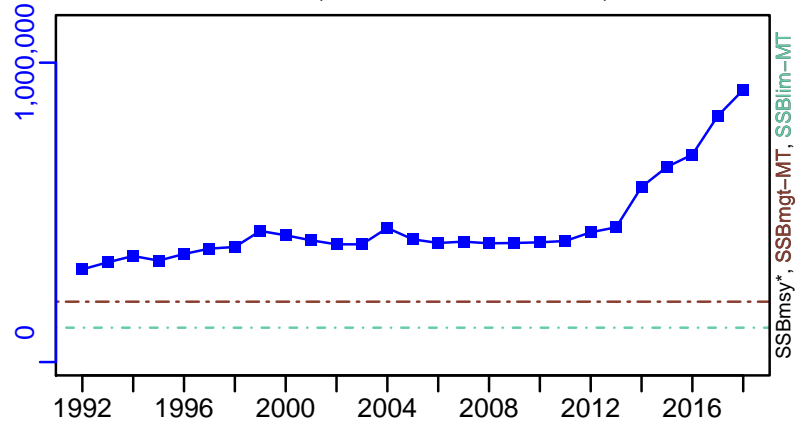
◆ Start Year ◆ End Year * No Data

Horse mackerel Portuguese Waters –East [HMACKIXa]

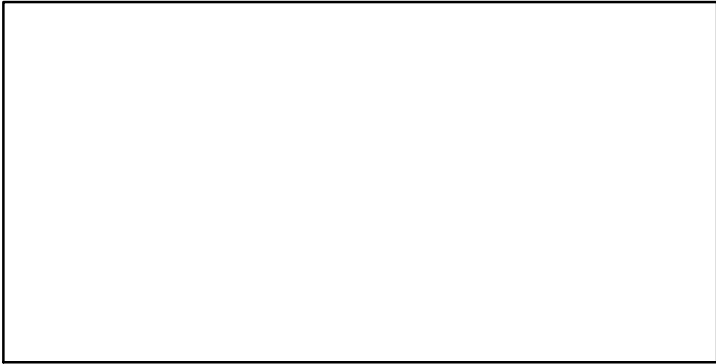
TB*



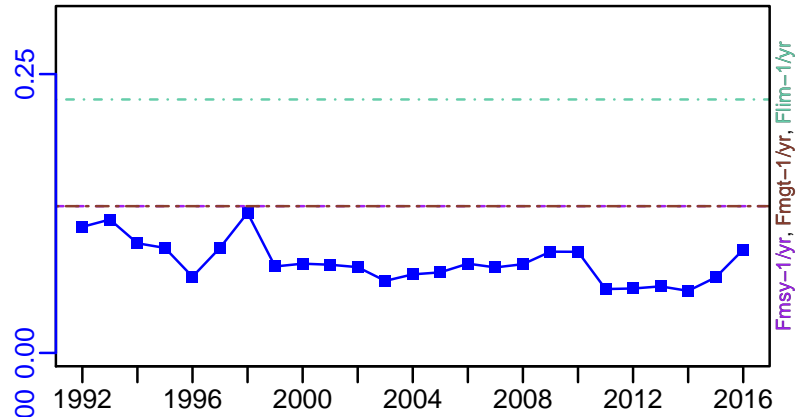
SSB-MT (1992–2018–ICESIMP2018)



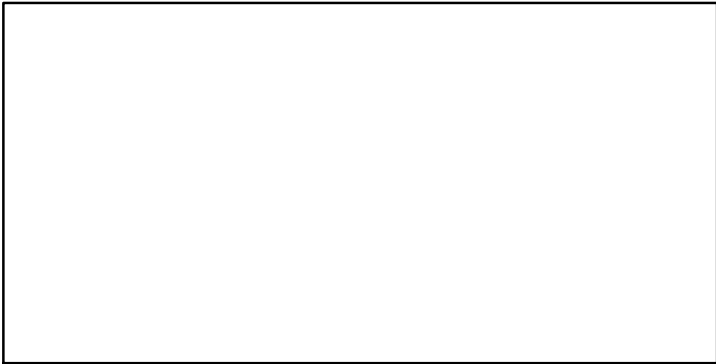
TN *



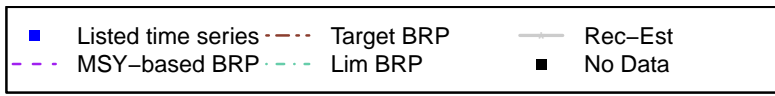
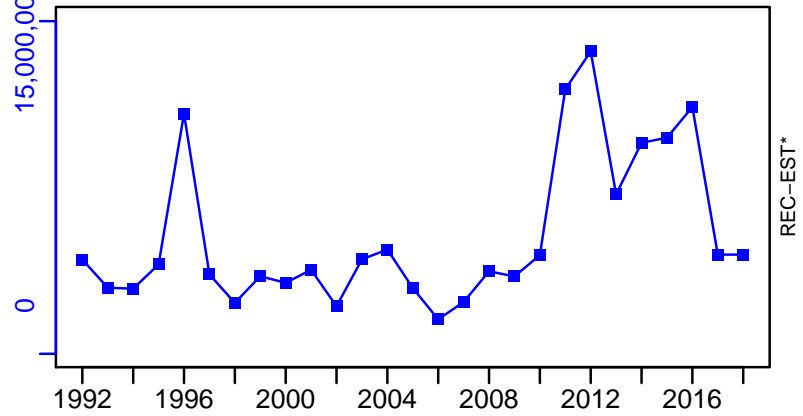
F-1/yr (1992–2017–ICESIMP2018)



ER*

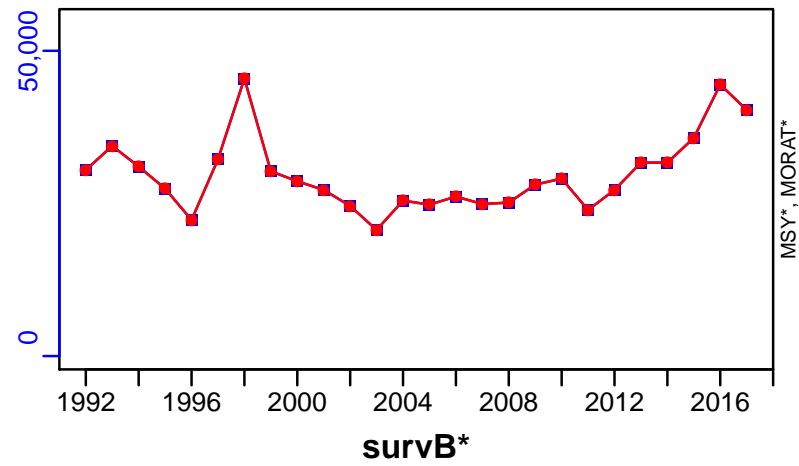


R-E00 (1992–2018–ICESIMP2018)

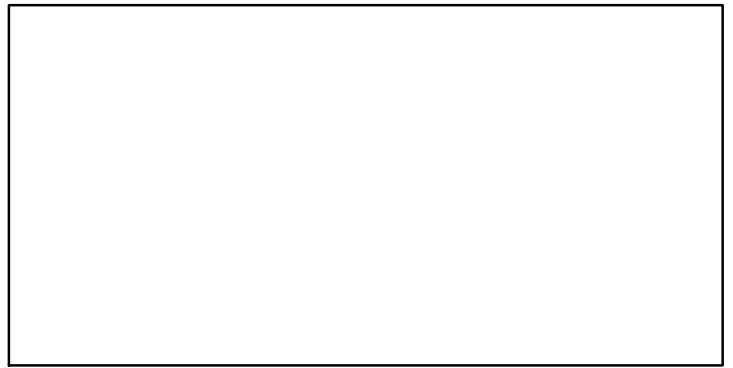


Horse mackerel Portuguese Waters –East [HMACKIXa]

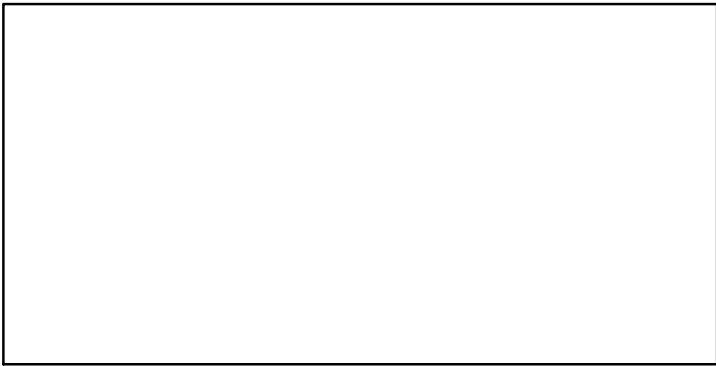
TC-MT, TL-MT, RecC* (1992–2018–ICESIMP2018)



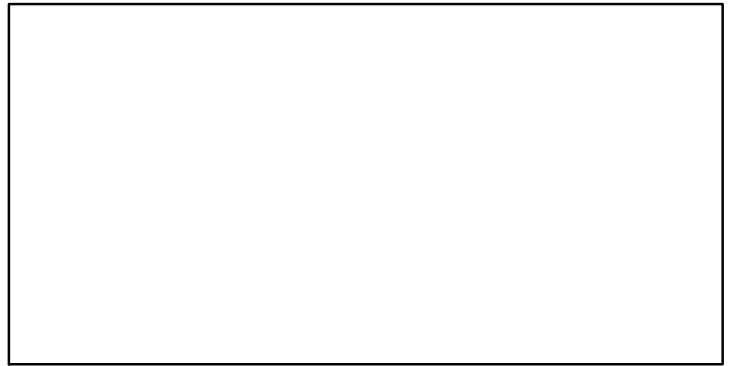
TAC*, Cpair*, Cadv*



survB*



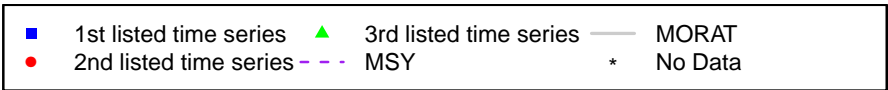
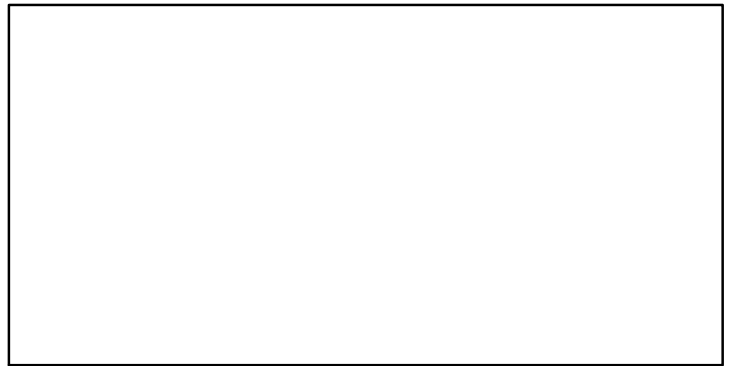
CPUE*



EFFORT*



CdivMSY*



Horse Mackerel West Africa [HMACKWA]

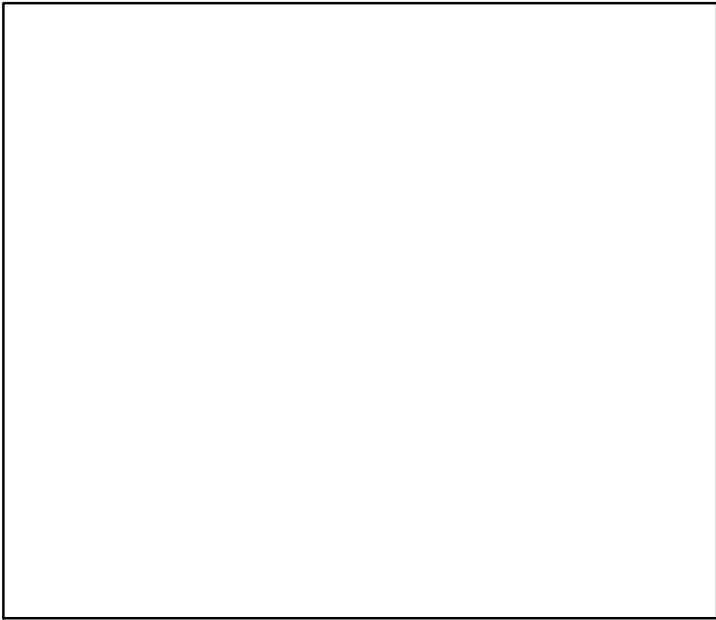
Metadata	
Scientific Name	Trachurus trachurus
Current Assess ID	FAO-SPNWA-HMACKWA-1990-2010-CHING
Area	West Africa
Management Authority	Food and Agriculture Organization of the United Nations
Assessor	FAO Working Group on the Assessment of Small Pelagic Fish Off Northwest Africa
Asmts in RAM	2010

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2010	0.31
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

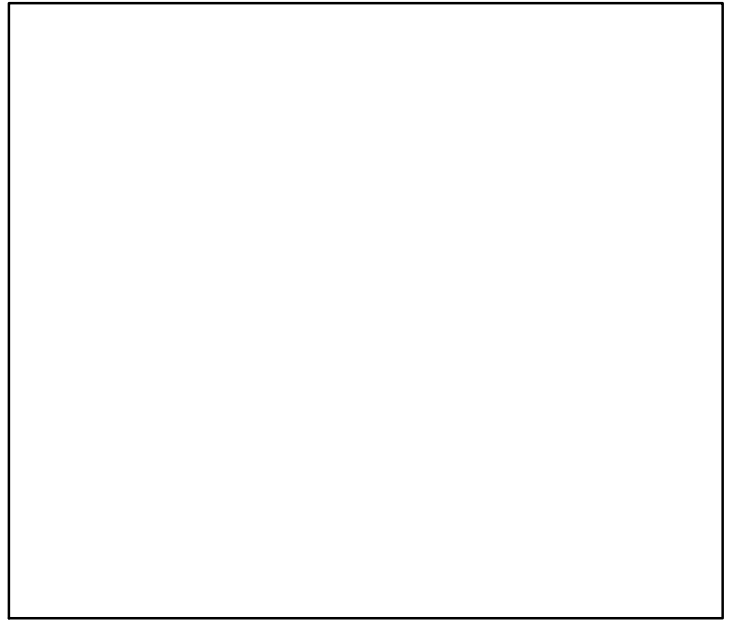
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2010	153,000	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-1/yr	2010	0.72	-	-
ER	ER-calc-ratio	2010	0.719	-	-
TC	TC-MT	2010	110,000		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2010	2.323		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Horse Mackerel West Africa [HMACKWA]

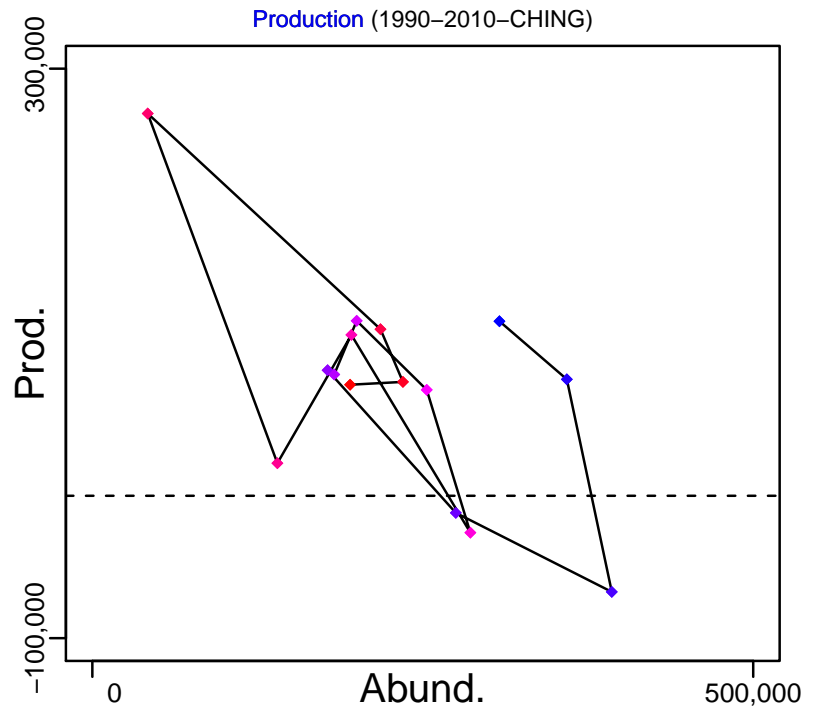
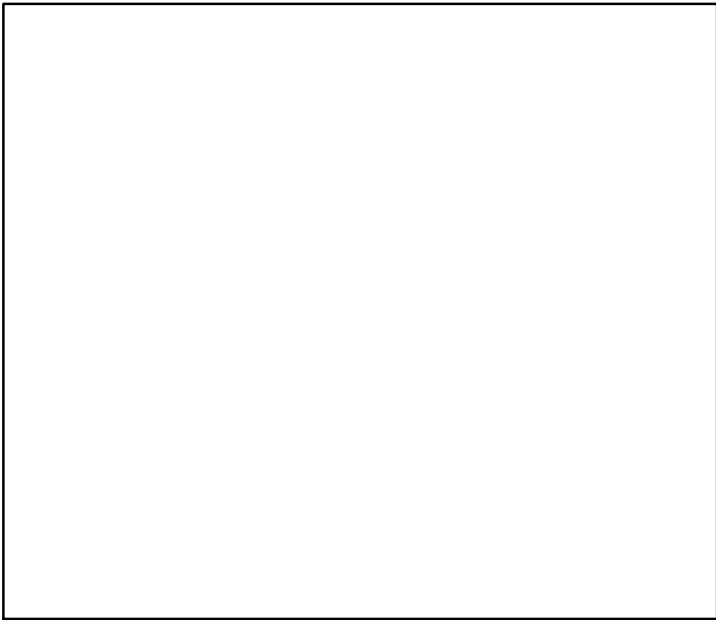
Kobe MSY*



Kobe MGT*



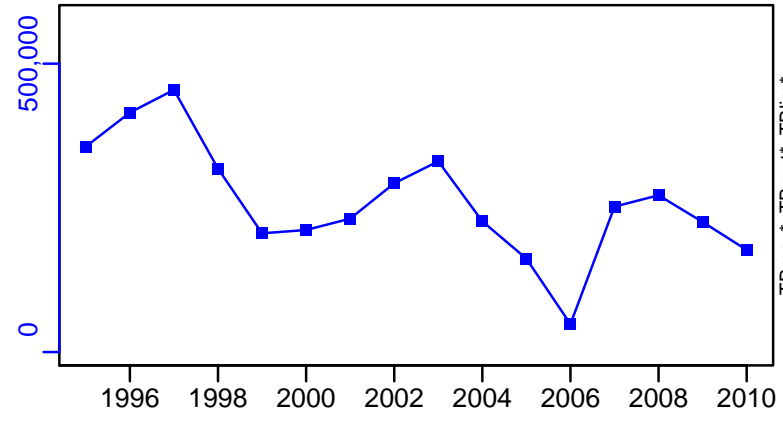
Spawner Recruit*



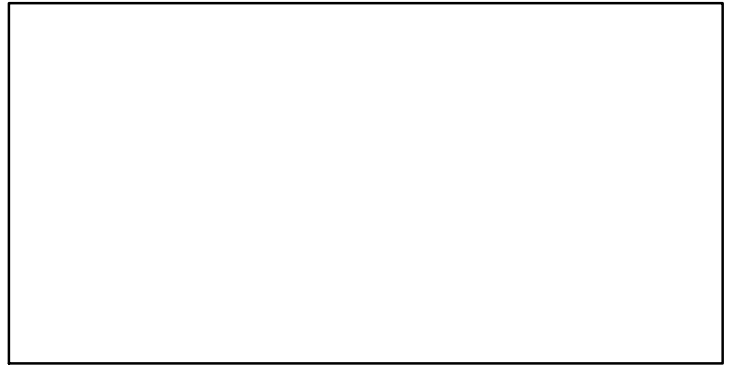
◆ Start Year ◆ End Year * No Data

Horse Mackerel West Africa [HMACKWA]

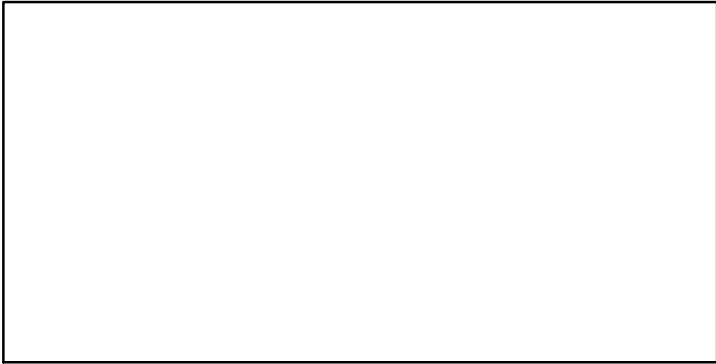
TB-MT (1990-2010-CHING)



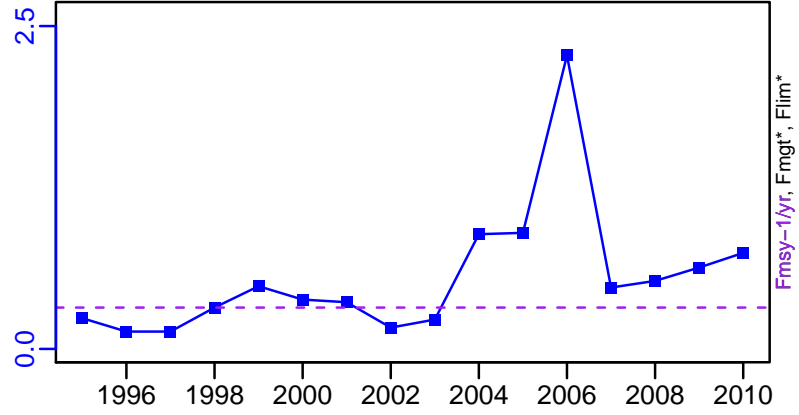
SSB*



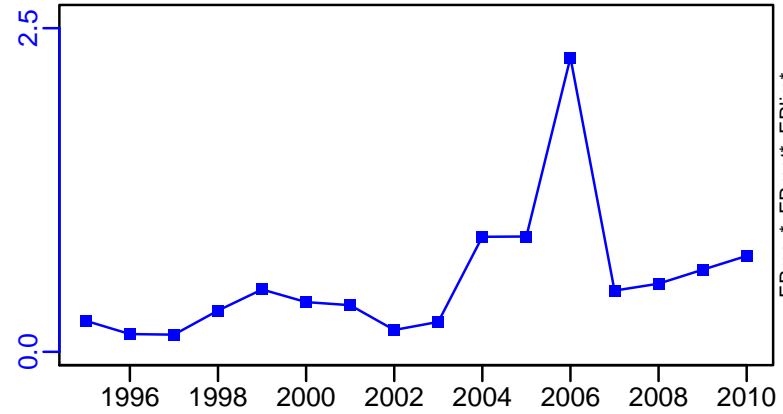
TN *



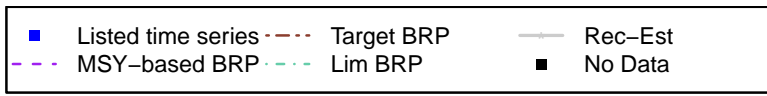
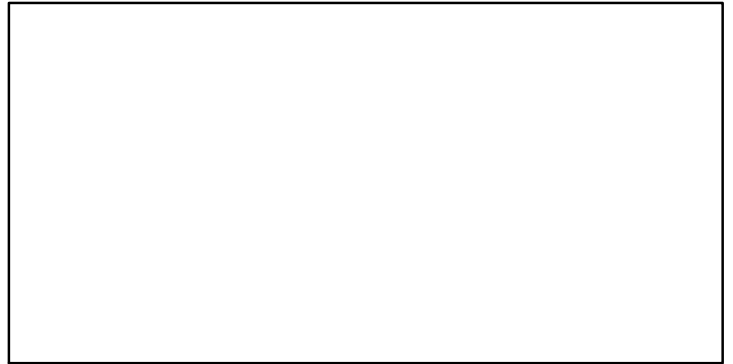
F-1/yr (1990-2010-CHING)



ER-calc-ratio (1990-2010-CHING)



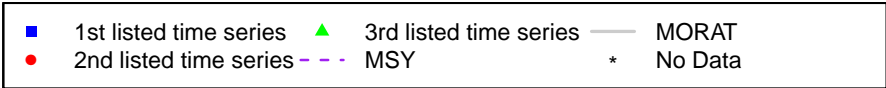
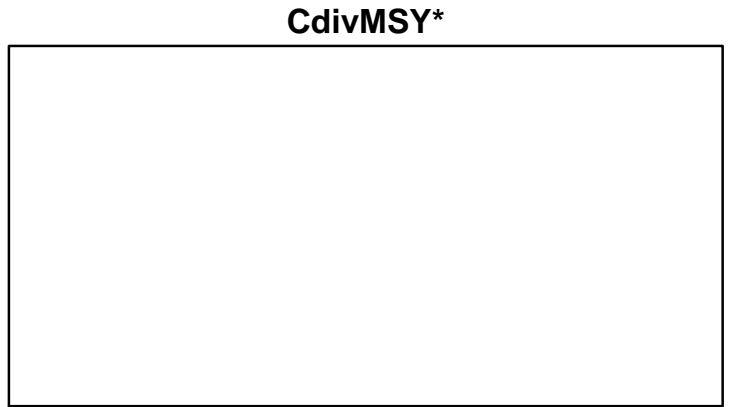
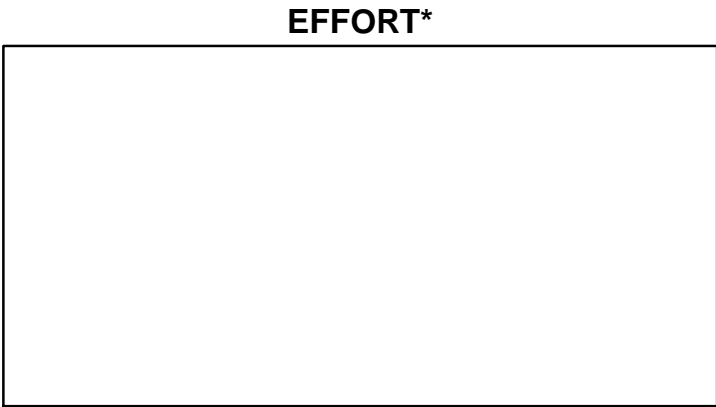
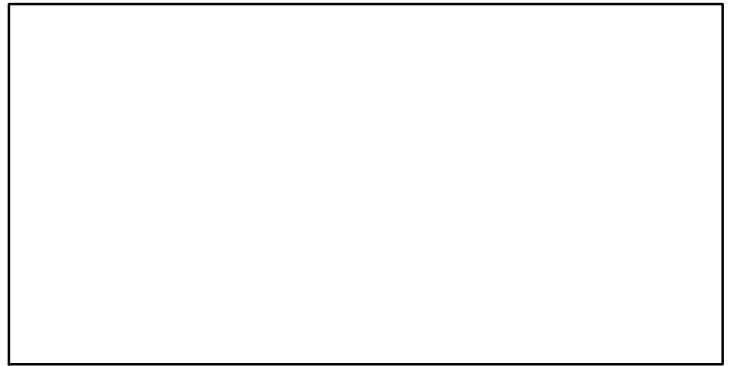
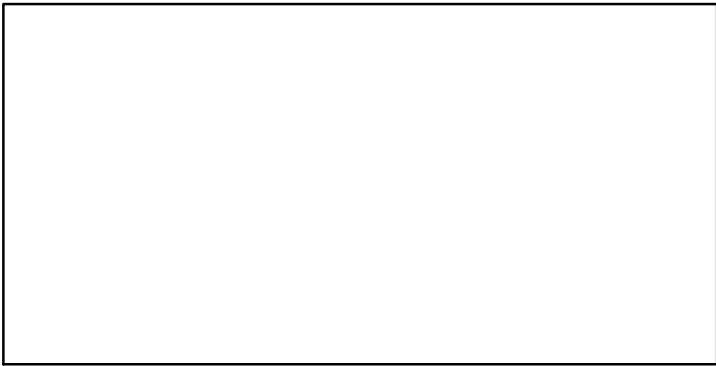
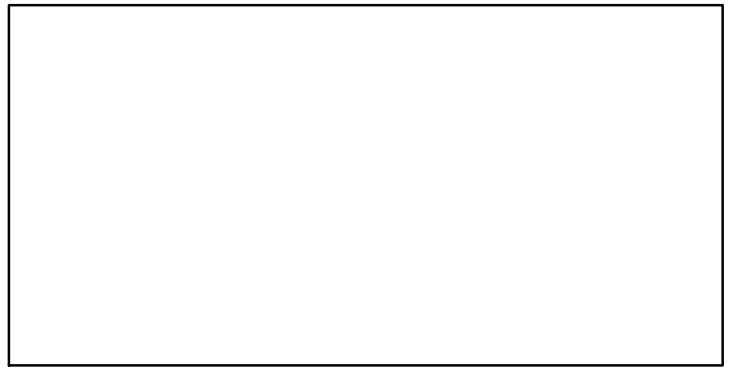
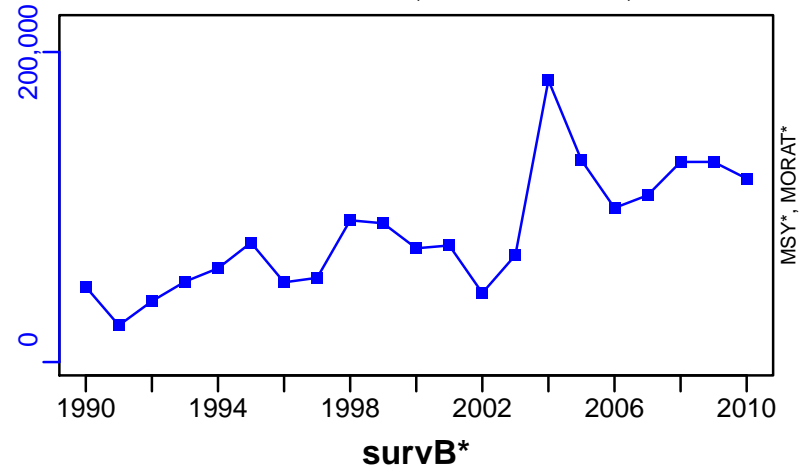
Recruits*



Horse Mackerel West Africa [HMACKWA]

TC-MT, TL*, RecC* (1990-2010-CHING)

TAC*, Cpair*, Cadv*



Japanese amberjack Japan [JAMBERJPN]

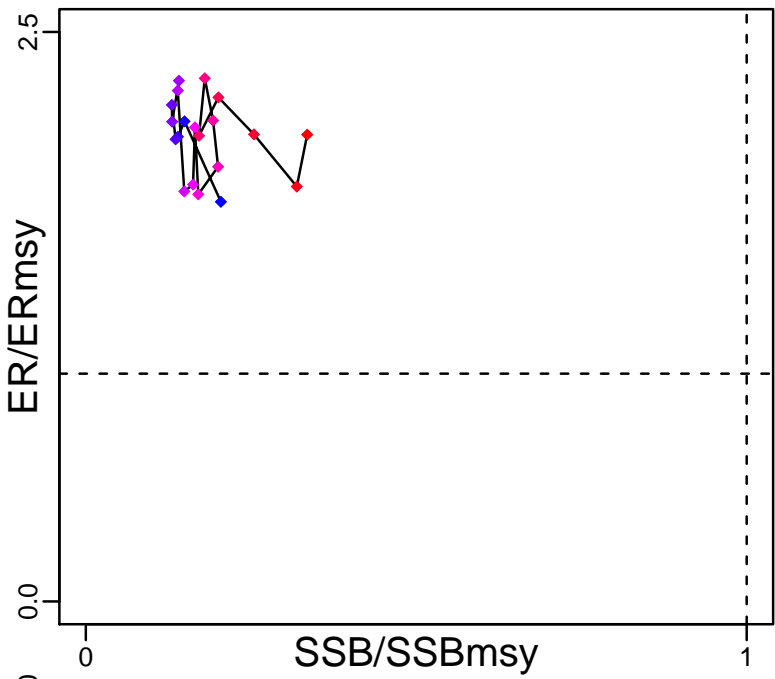
Metadata	
Scientific Name	Seriola quinqueradiata
Current Assess ID	FAFRFJ-JAMBERJPN-1952-2013-JPNIMP2016
Area	Japan
Management Authority	Fisheries Agency of Japan
Assessor	Fisheries Agency and Fisheries Research Agency of Japan
Asmts in RAM	2013

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2013	615,892
SSBmsy	SSBmsy-MT	2013	381,043
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2013	0.219
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2013	134,880
M	M-1/yr	2013	0.3
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

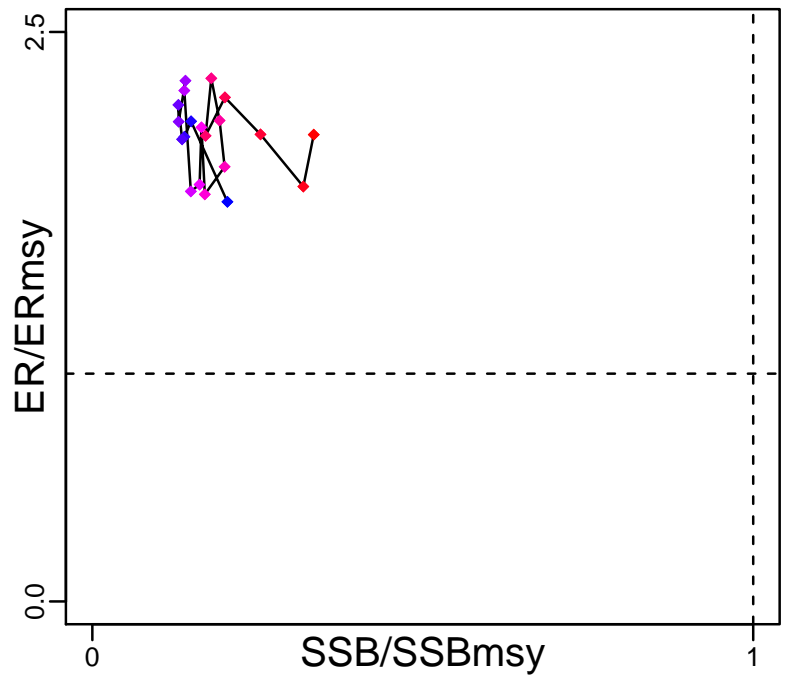
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2013	294,000	-	0
SSB	SSB-MT	2013	128,000	Both	2
TN	-	-	-	-	-
R	R-E00	2013	1.39×10^8	-	0
F	-	-	-	-	-
ER	ER-calc-ratio	2013	0.449	-	-
TC	TC-MT	2013	132,000		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2013	0.477		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2013	0.335		
F/Fmsy	-	-	-		
ER/ERmsy	ER-calc-ratio/ERmsy-ratio	2013	2.049		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Japanese amberjack Japan [JAMBERJPN]

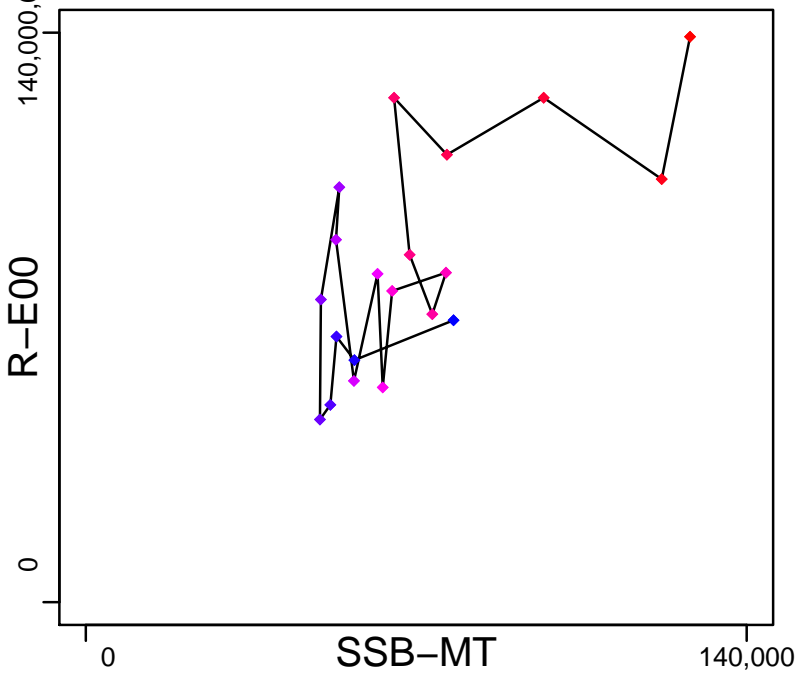
Kobe MSYpref (1952–2013–JPNIMP2016)



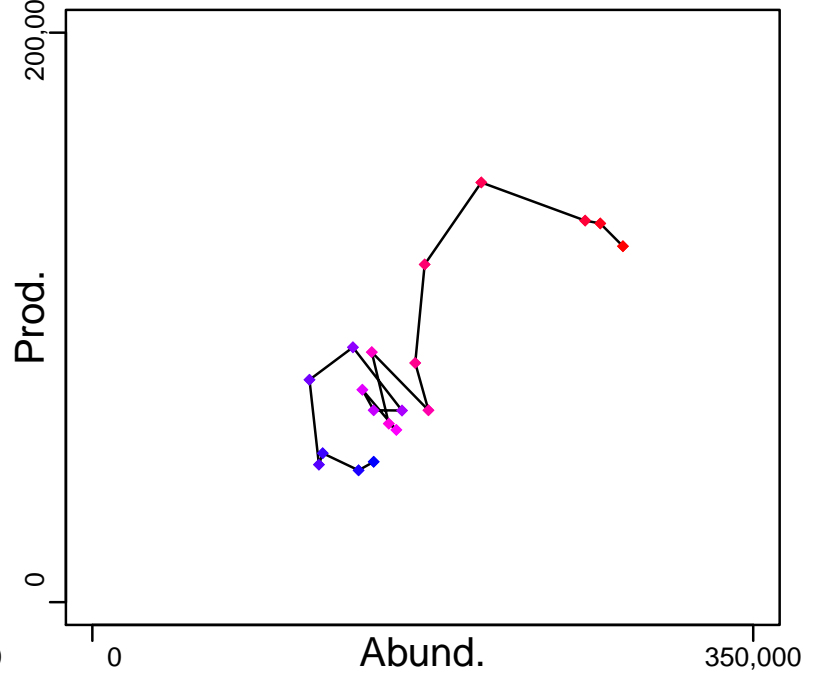
Kobe MGTpref (1952–2013–JPNIMP2016)



Spawner Recruit (1952–2013–JPNIMP2016)



Production (1952–2013–JPNIMP2016)

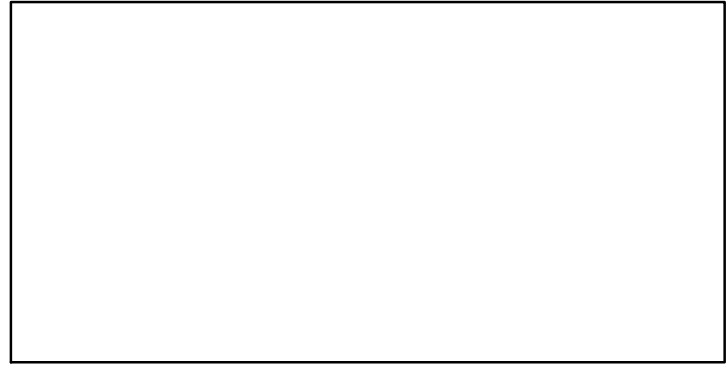
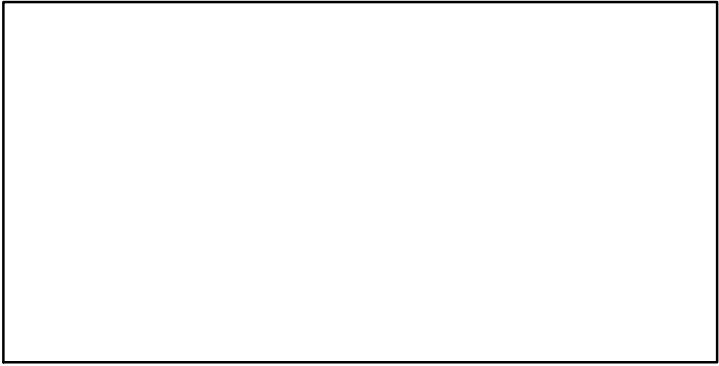
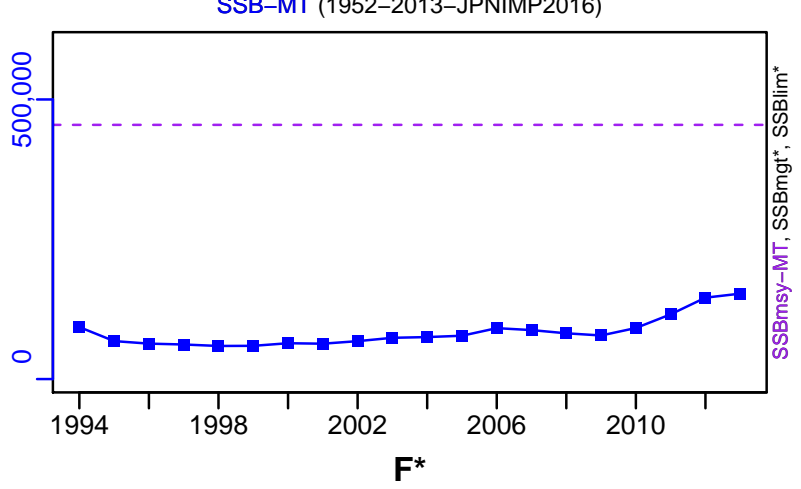
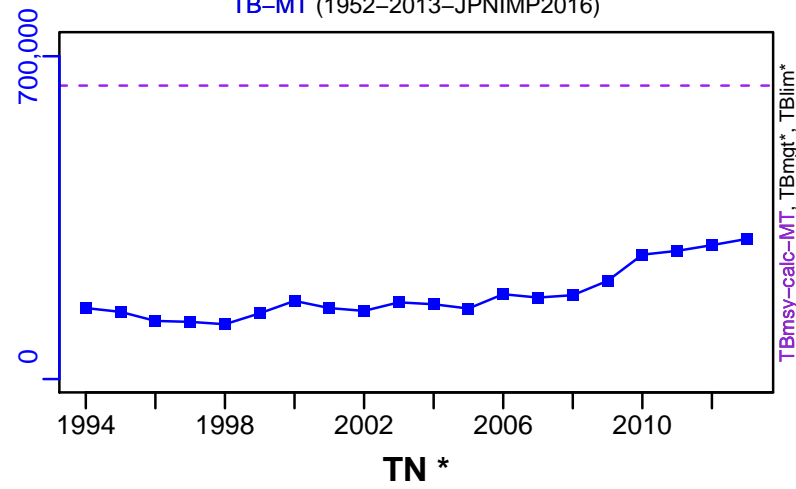


◆ Start Year ◆ End Year * No Data

Japanese amberjack Japan [JAMBERJPN]

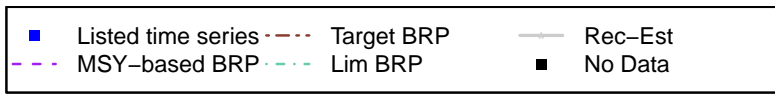
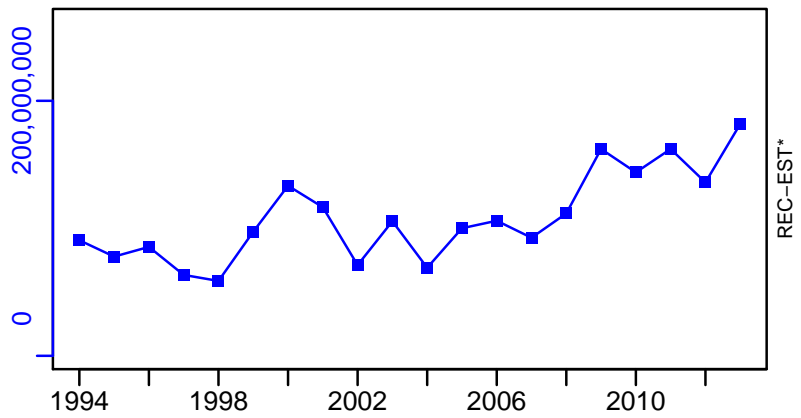
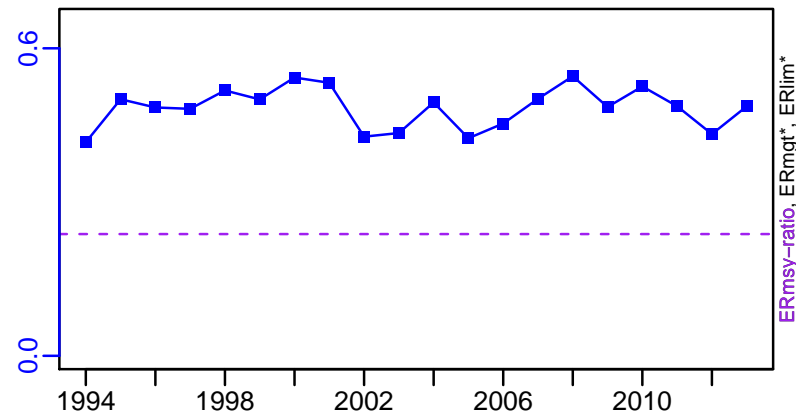
TB-MT (1952-2013-JPNIMP2016)

SSB-MT (1952-2013-JPNIMP2016)



ER-calc-ratio (1952-2013-JPNIMP2016)

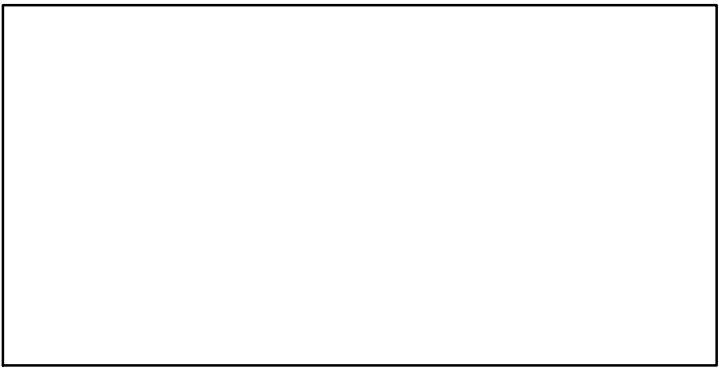
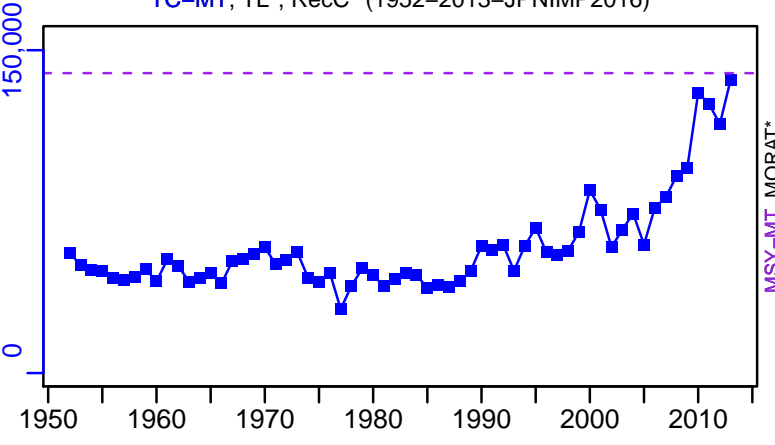
R-E00 (1952-2013-JPNIMP2016)



Japanese amberjack Japan [JAMBERJPN]

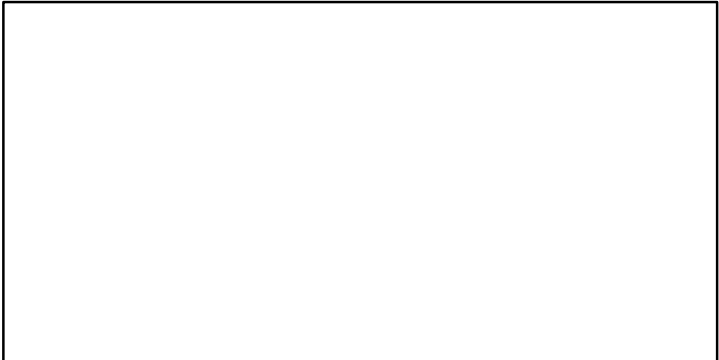
TC-MT, TL*, RecC* (1952-2013-JPNIMP2016)

TAC*, Cpair*, Cadv*

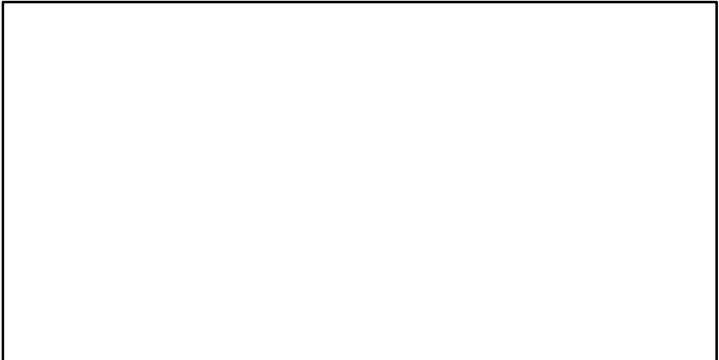


MSY-MT, MORAT*

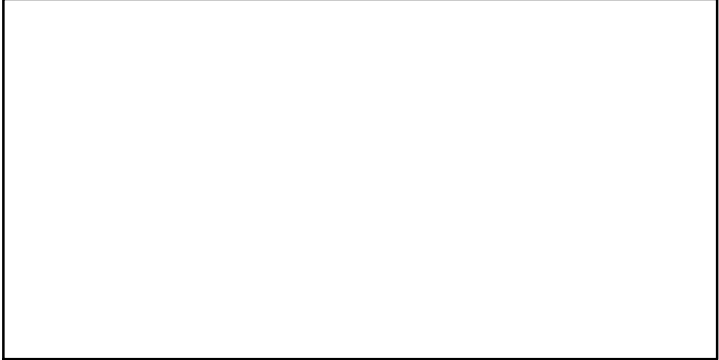
survB*



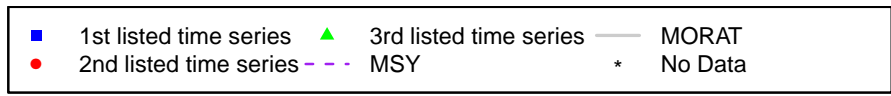
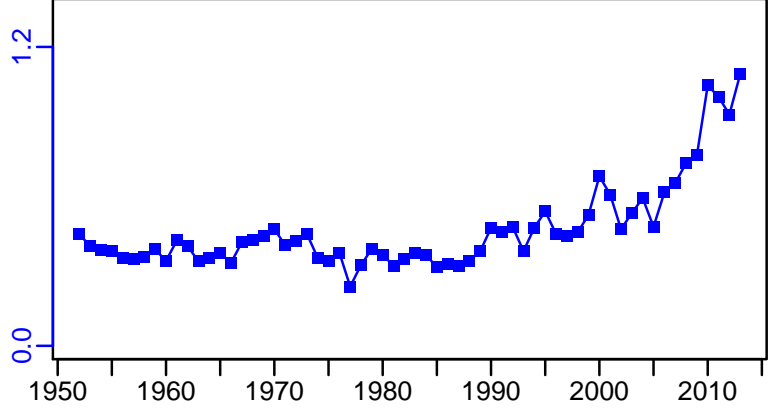
CPUE*



EFFORT*



CdivMSY-ratio (1952-2013-JPNIMP2016)



Japanese jack mackerel Pacific Coast of Japan [JMACKPJPN]

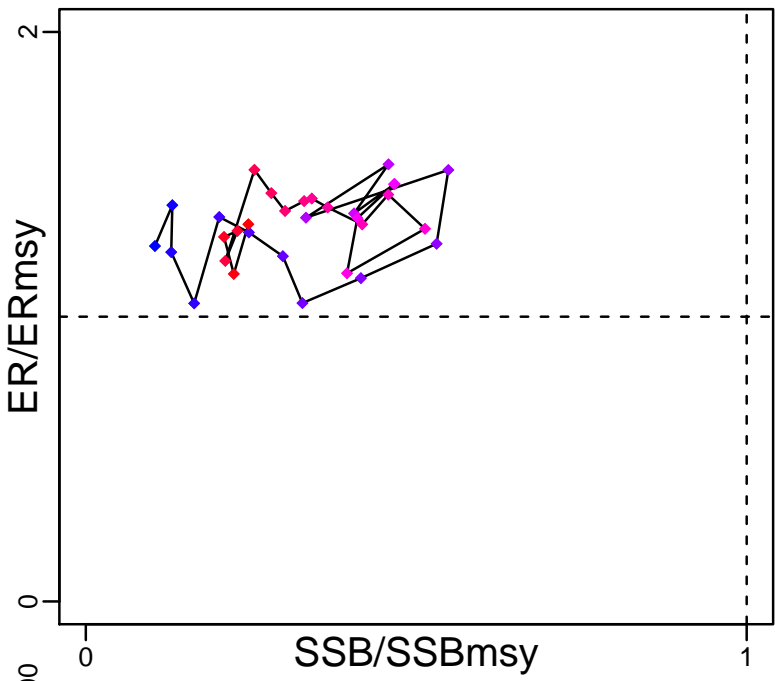
Metadata	
Scientific Name	Trachurus japonicus
Current Assess ID	FAFRFJ-JMACKPJPN-1982-2013-JPNIMP2016
Area	Pacific Coast of Japan
Management Authority	Fisheries Agency of Japan
Assessor	Fisheries Agency and Fisheries Research Agency of Japan
Asmts in RAM	2009, 2013

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2013	208,037
SSBmsy	SSBmsy-MT	2013	116,600
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2013	0.341
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2013	70,941
M	M-1/yr	2013	0.5
TBlim	TBlim-MT	2009	24
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

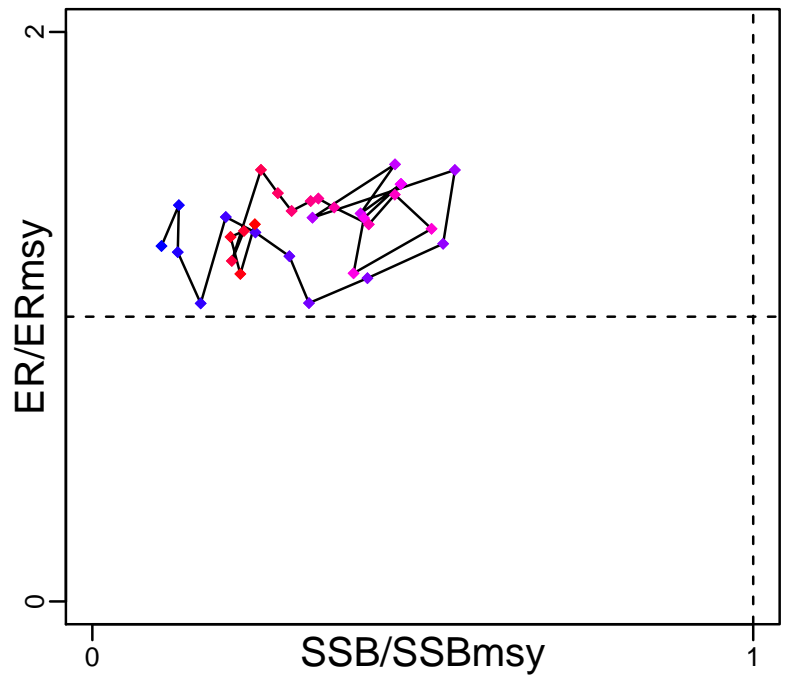
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2013	61,100	-	0
SSB	SSB-MT	2013	28,700	Both	1
TN	-	-	-	-	-
R	R-E00	2013	5.55×10^8	-	0
F	F-1/yr	2009	1.26	Both	0 to 2
ER	ER-calc-ratio	2013	0.452	-	-
TC	TC-MT	2013	27,600		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2013	0.294		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2013	0.246		
F/Fmsy	-	-	-		
ER/ERmsy	ER-calc-ratio/ERmsy-ratio	2013	1.325		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Japanese jack mackerel Pacific Coast of Japan [JMACKPJPN]

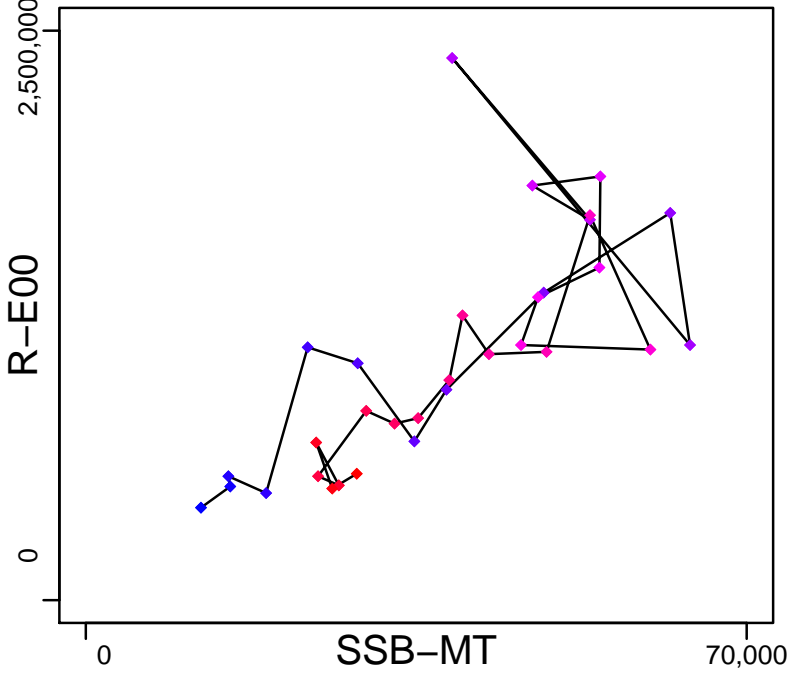
Kobe MSYpref (1982–2013–JPNIMP2016)



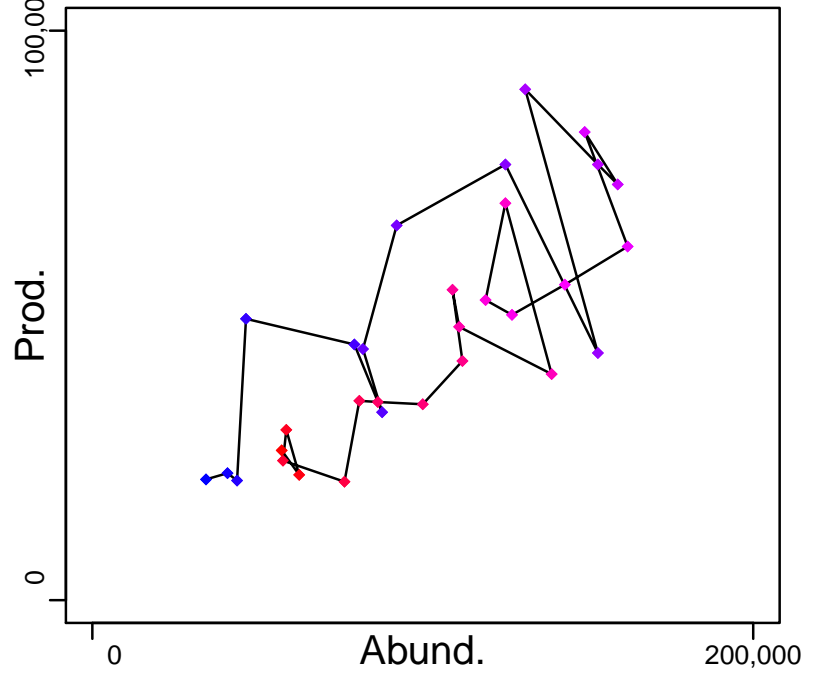
Kobe MGTpref (1982–2013–JPNIMP2016)



Spawner Recruit (1982–2013–JPNIMP2016)



Production (1982–2013–JPNIMP2016)

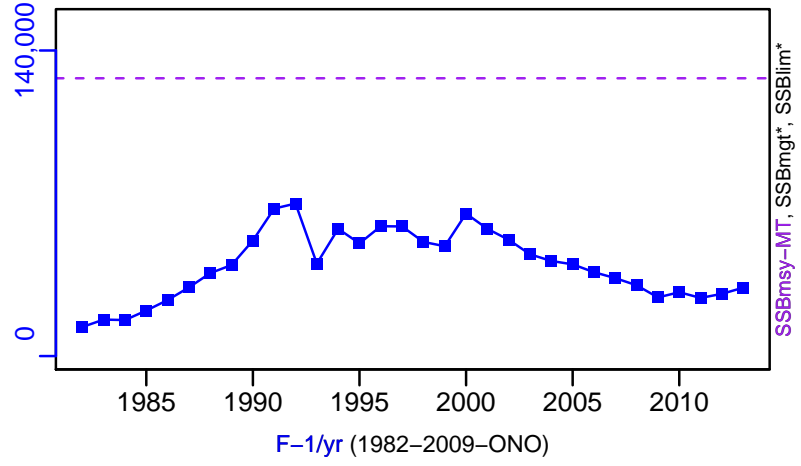
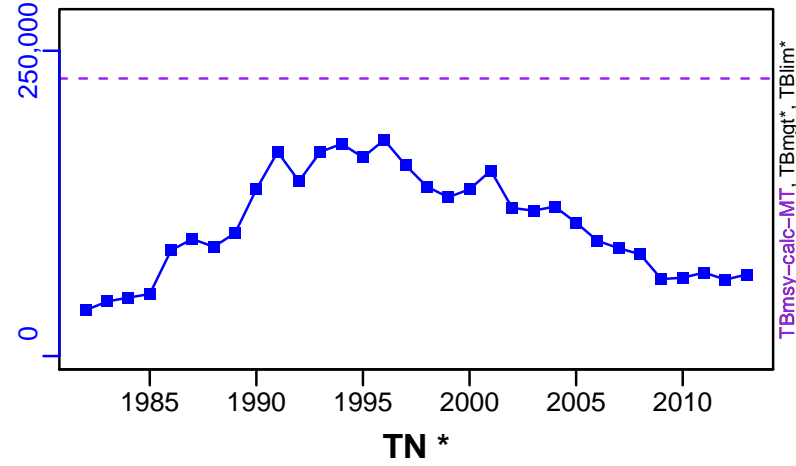


◆ Start Year ◆ End Year * No Data

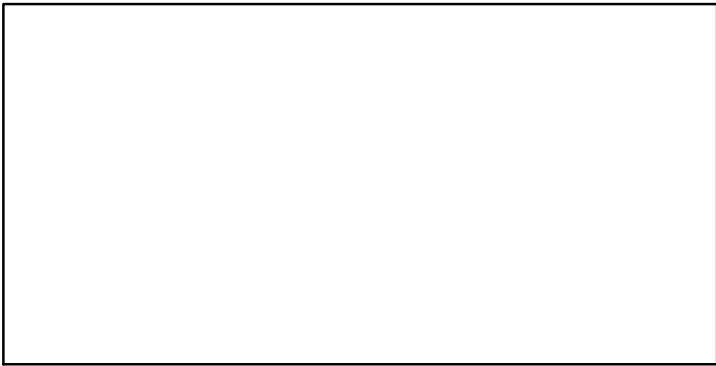
Japanese jack mackerel Pacific Coast of Japan [JMACKPJPN]

TB-MT (1982-2013-JPNIMP2016)

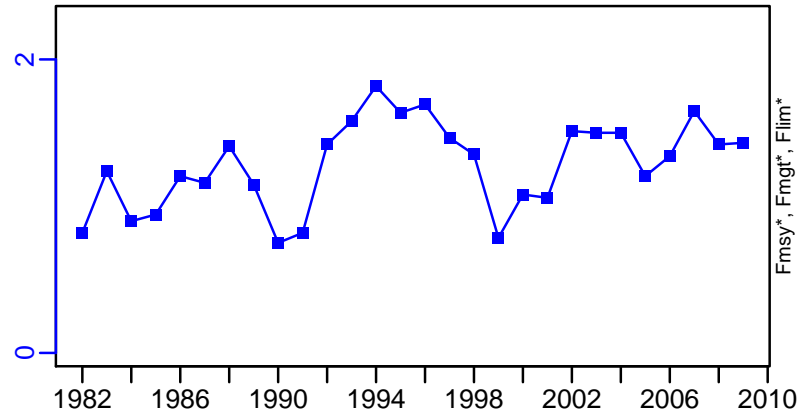
SSB-MT (1982-2013-JPNIMP2016)



TN *

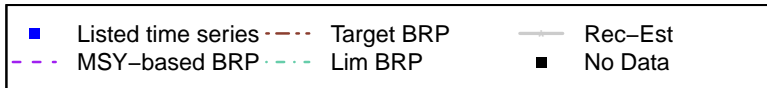
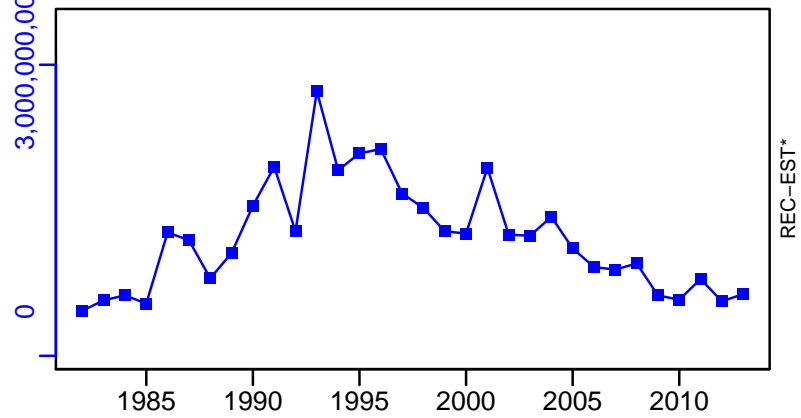
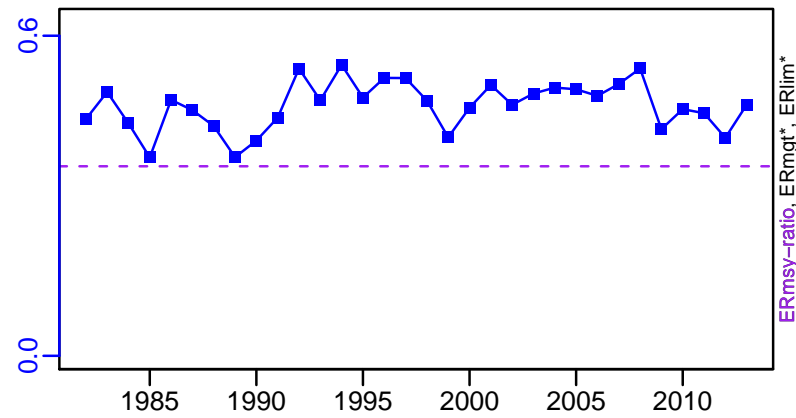


F-1/yr (1982-2009-ONO)



ER-calc-ratio (1982-2013-JPNIMP2016)

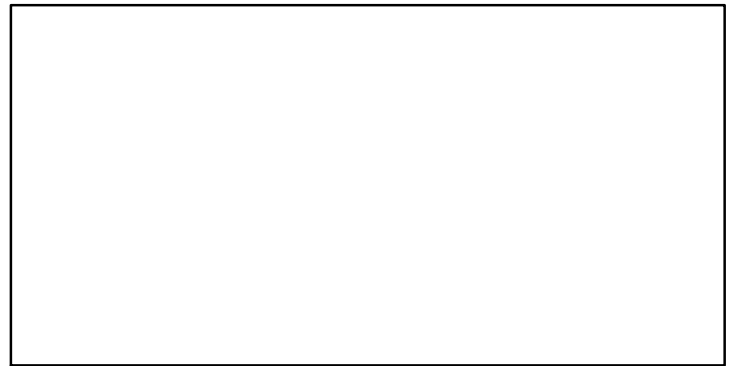
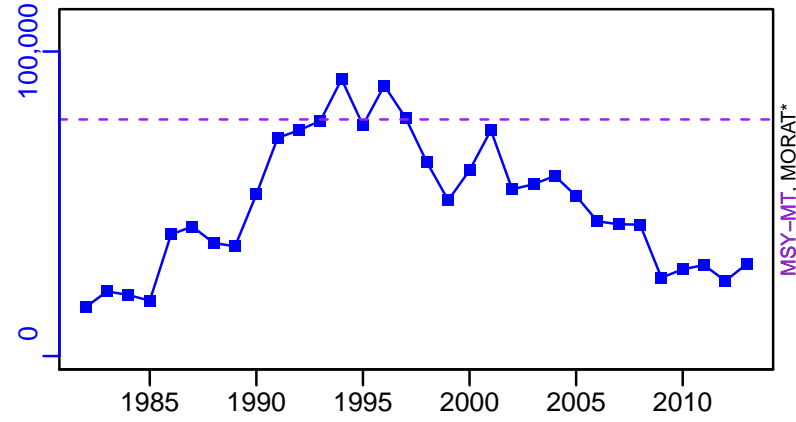
R-E00 (1982-2013-JPNIMP2016)



Japanese jack mackerel Pacific Coast of Japan [JMACKPJPN]

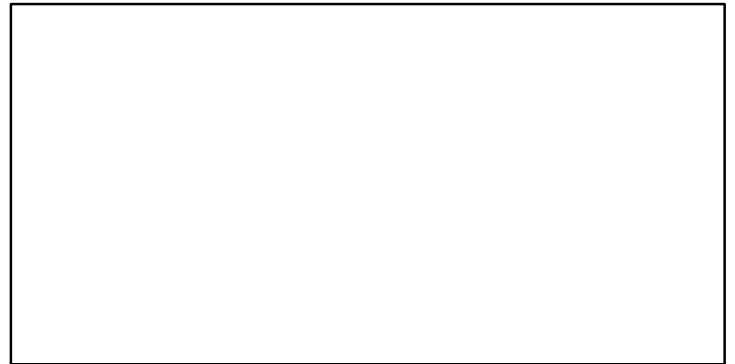
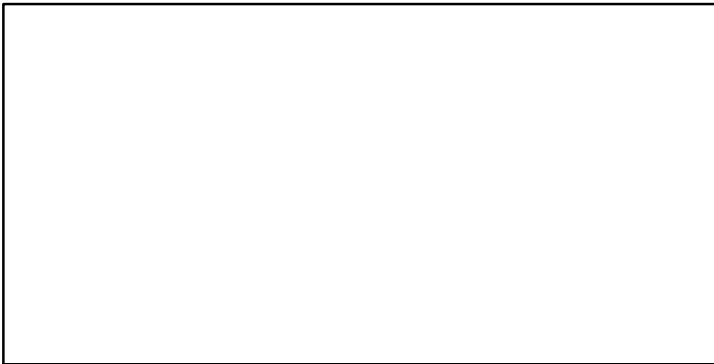
TC-MT, TL*, RecC* (1982-2013-JPNIMP2016)

TAC*, Cpair*, Cadv*



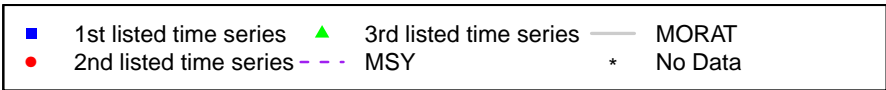
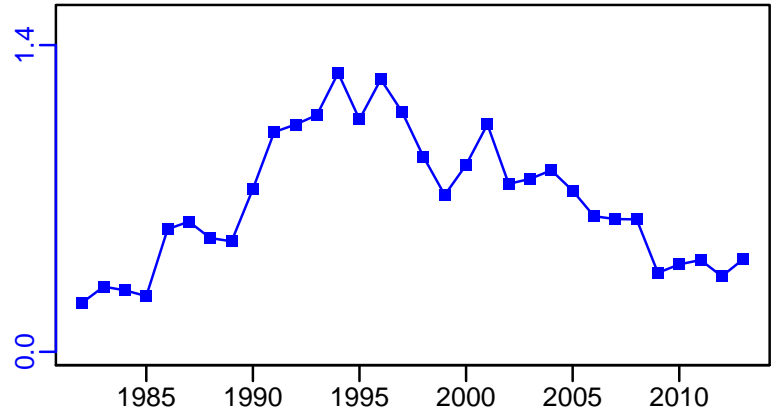
survB*

CPUE*



EFFORT*

CdivMSY-ratio (1982-2013-JPNIMP2016)



Japanese jack mackerel Tsushima Strait [JMACKTSST]

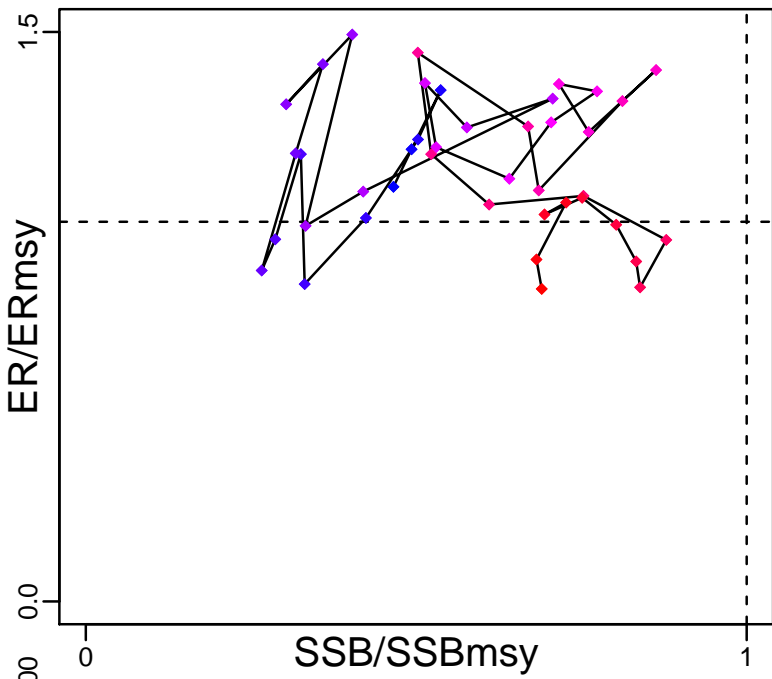
Metadata	
Scientific Name	Trachurus japonicus
Current Assess ID	FAFRFJ-JMACKTSST-1973-2013-JPNIMP2016
Area	Tsushima Strait
Management Authority	Fisheries Agency of Japan
Assessor	Fisheries Agency and Fisheries Research Agency of Japan
Asmts in RAM	2010, 2013

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2013	528,740
SSBmsy	SSBmsy-MT	2013	292,056
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2013	0.332
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2013	175,542
M	M-1/yr	2013	0.5
TBlim	-	-	-
SSBlim	SSBlim-MT	2010	150,000
Flim	-	-	-
ERlim	-	-	-

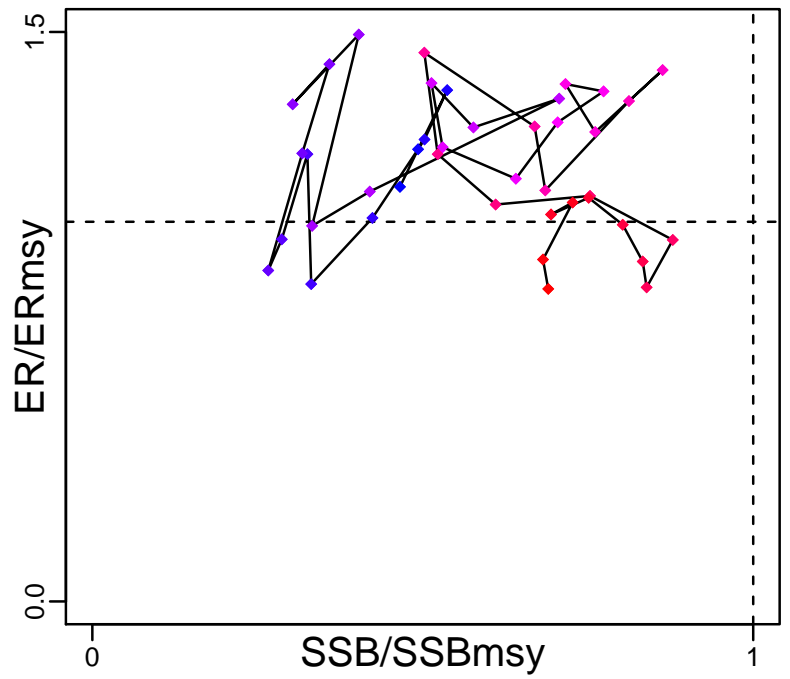
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2013	440,000	-	0
SSB	SSB-MT	2013	201,000	Both	1
TN	-	-	-	-	-
R	R-E00	2013	5.98×10^9	-	0
F	F-1/yr	2010	0.736	-	0 to 3
ER	ER-calc-ratio	2013	0.273	-	-
TC	TC-MT	2013	120,000		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2013	0.833		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2013	0.69		
F/Fmsy	-	-	-		
ER/ERmsy	ER-calc-ratio/ERmsy-ratio	2013	0.823		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Japanese jack mackerel Tsushima Strait [JMACKTSST]

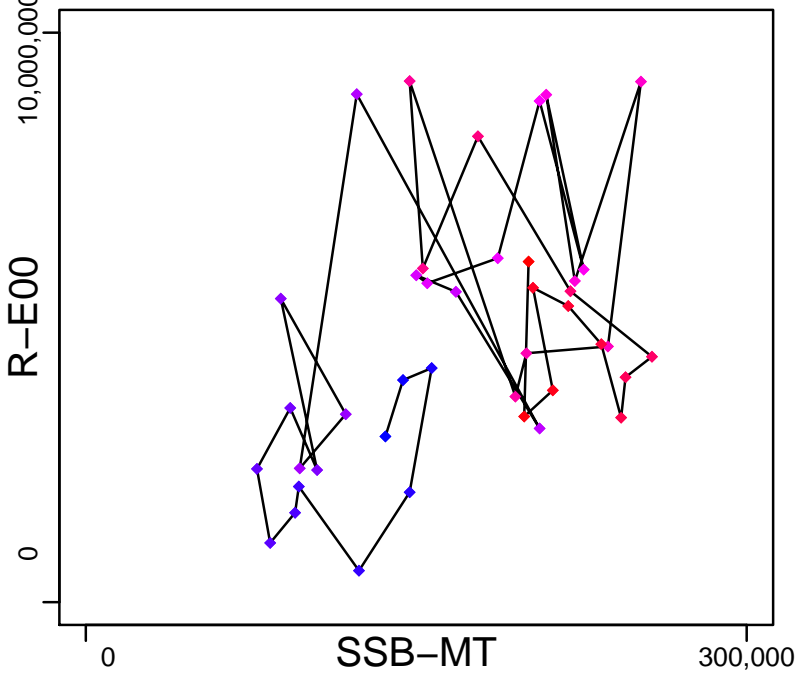
Kobe MSYpref (1973–2013–JPNIMP2016)



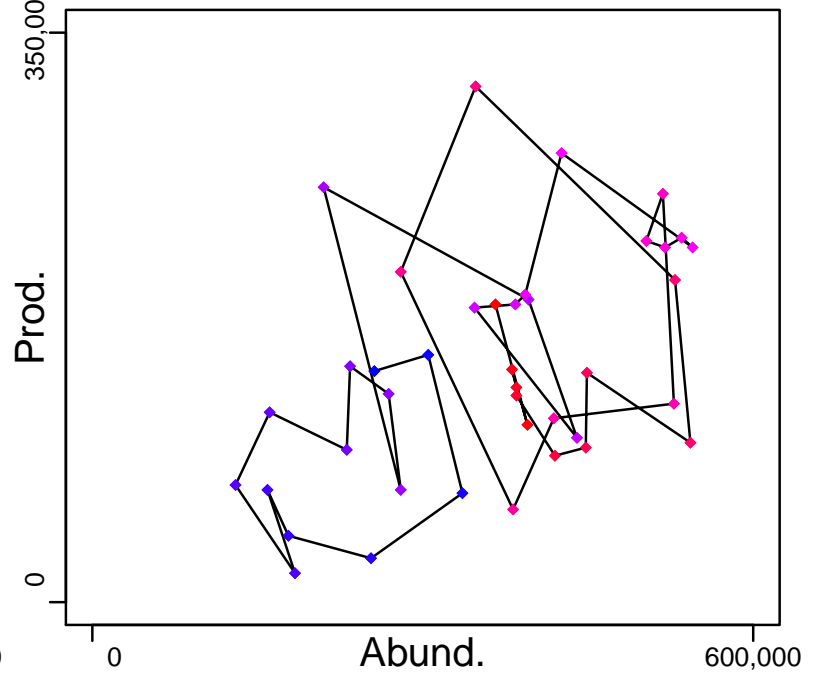
Kobe MGTpref (1973–2013–JPNIMP2016)



Spawner Recruit (1973–2013–JPNIMP2016)



Production (1973–2013–JPNIMP2016)

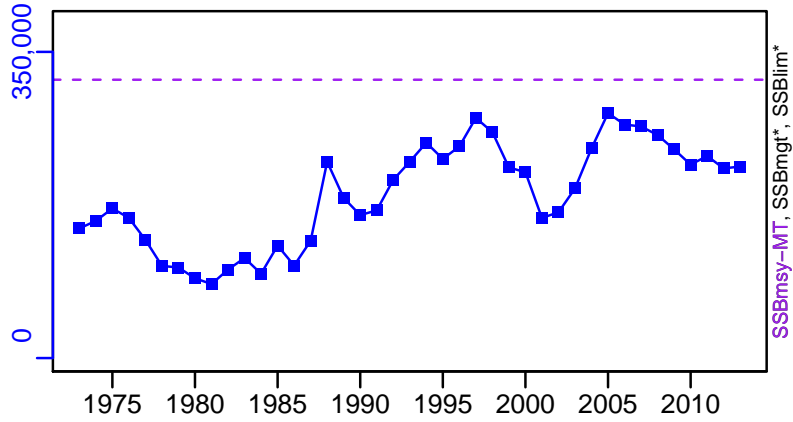
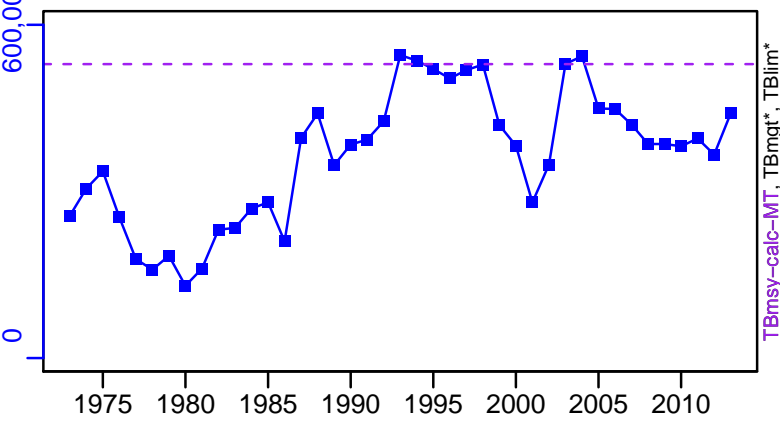


◆ Start Year ◆ End Year * No Data

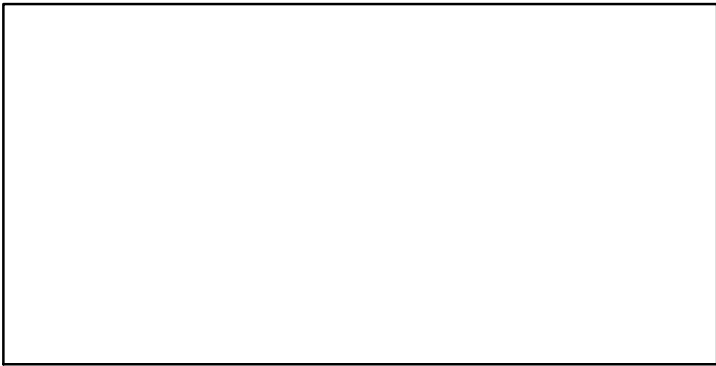
Japanese jack mackerel Tsushima Strait [JMACKTSST]

TB-MT (1973-2013-JPNIMP2016)

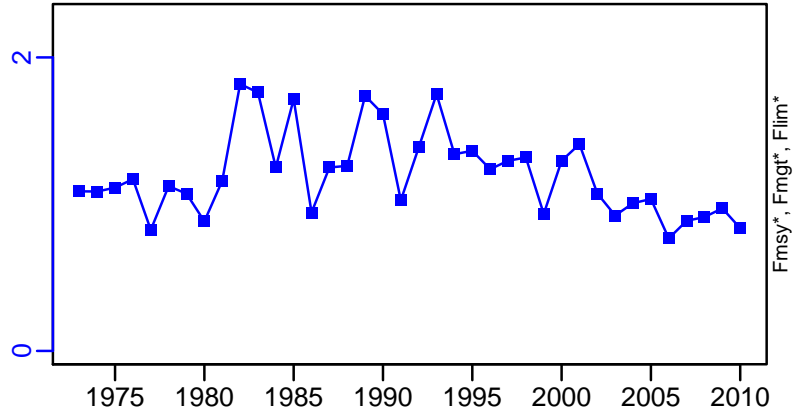
SSB-MT (1973-2013-JPNIMP2016)



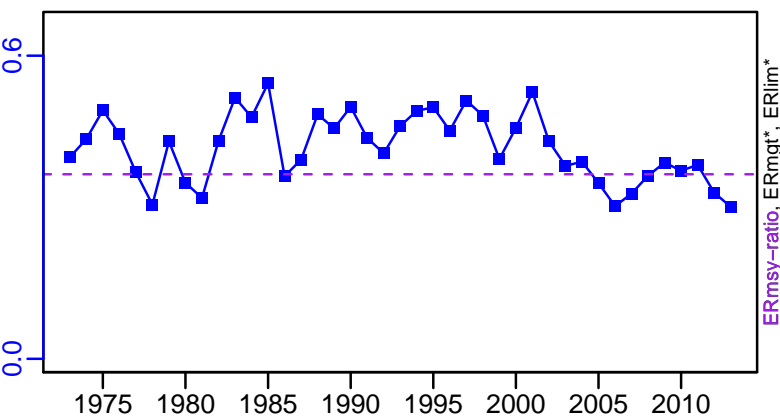
TN *



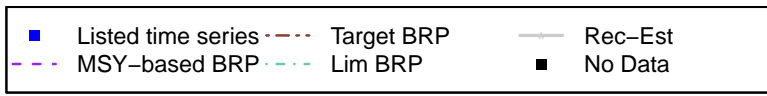
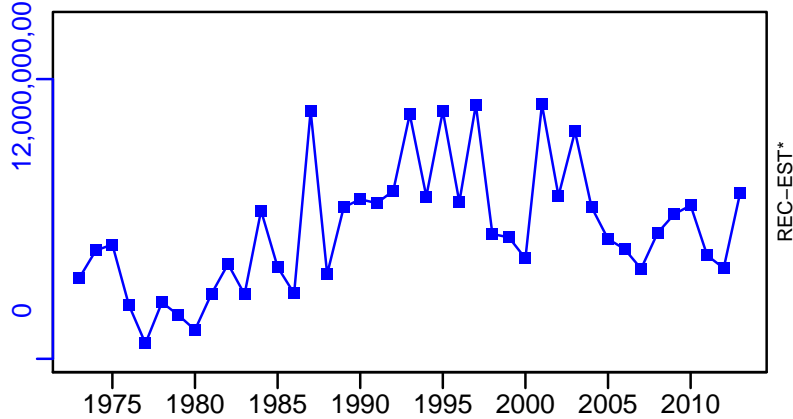
F-1/yr (1973-2010-ONO)



ER-calc-ratio (1973-2013-JPNIMP2016)



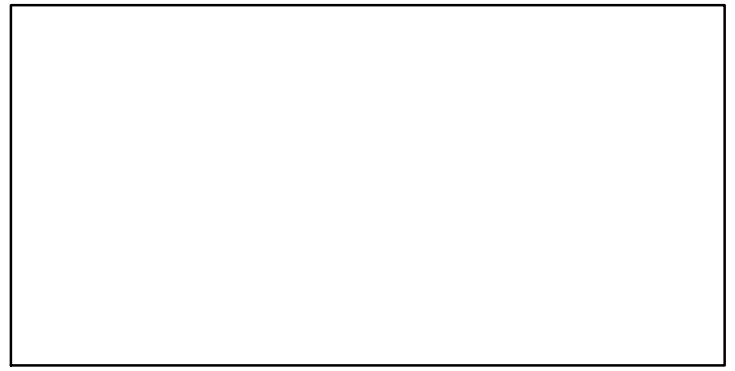
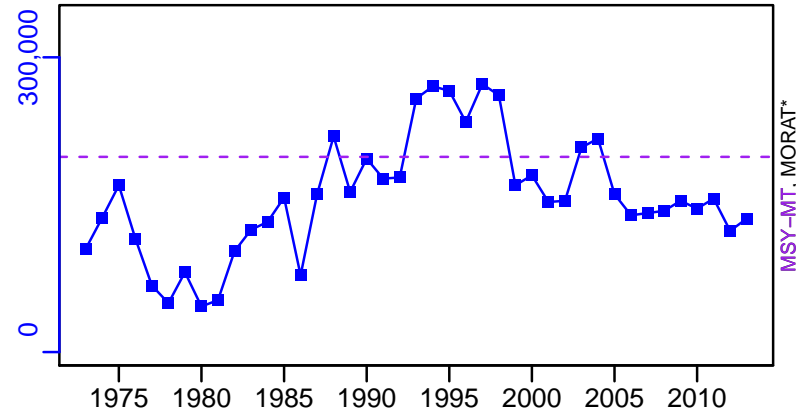
R-E00 (1973-2013-JPNIMP2016)



Japanese jack mackerel Tsushima Strait [JMACKTSST]

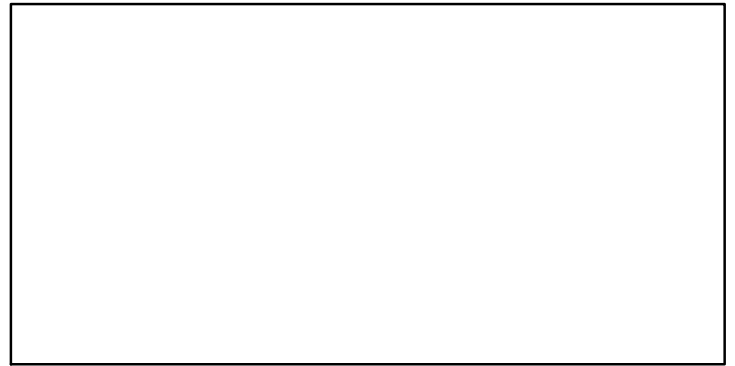
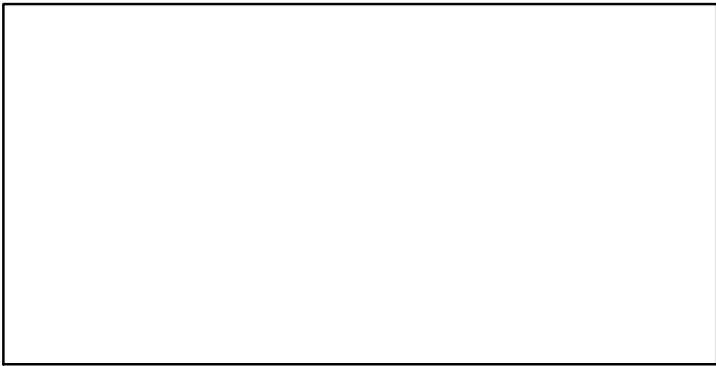
TC-MT, TL*, RecC* (1973-2013-JPNIMP2016)

TAC*, Cpair*, Cadv*



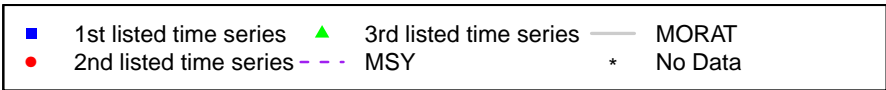
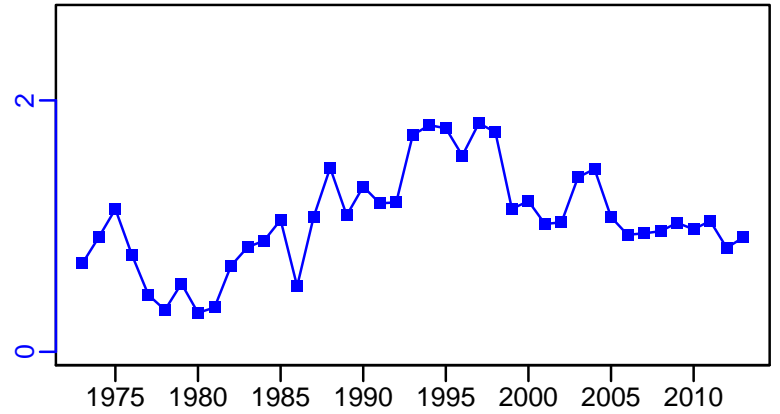
survB*

CPUE*



EFFORT*

CdivMSY-ratio (1973-2013-JPNIMP2016)



King mackerel Gulf of Mexico [KMACKGM]

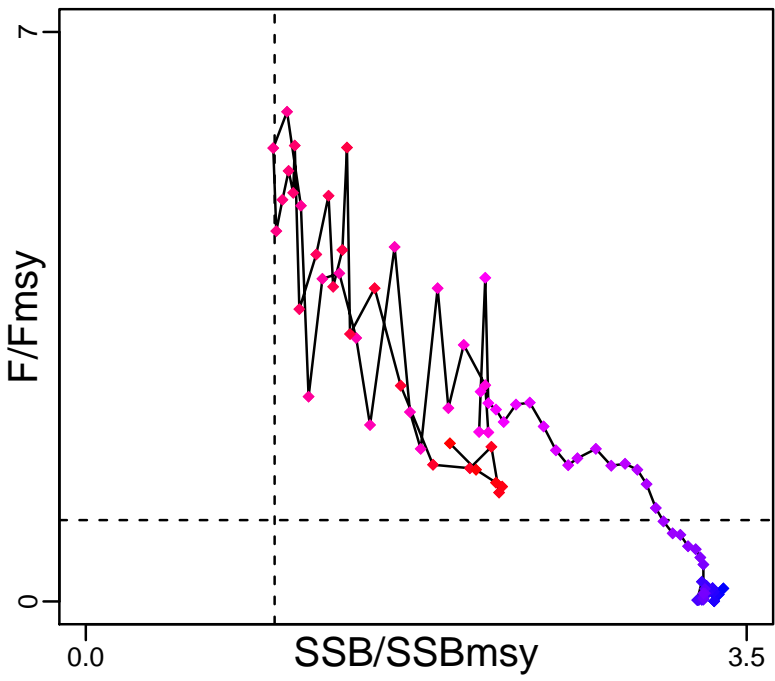
Metadata	
Scientific Name	Scomberomorus cavalla
Current Assess ID	SEFSC-KMACKGM-1929-2012-HIVELY
Area	Gulf of Mexico
Management Authority	National Marine Fisheries Service, US national management
Assessor	Southeast Fisheries Science Center
Asmts in RAM	2012

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-pr-E00eggs	2012	1,229,070,000
Fmsy	Fmsy-pr-1/yr	2012	0.164
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-E00eggs	2012	1,229,070,000
Fmgt	Fmgt-1/yr	2012	0.123
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2012	0.16
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

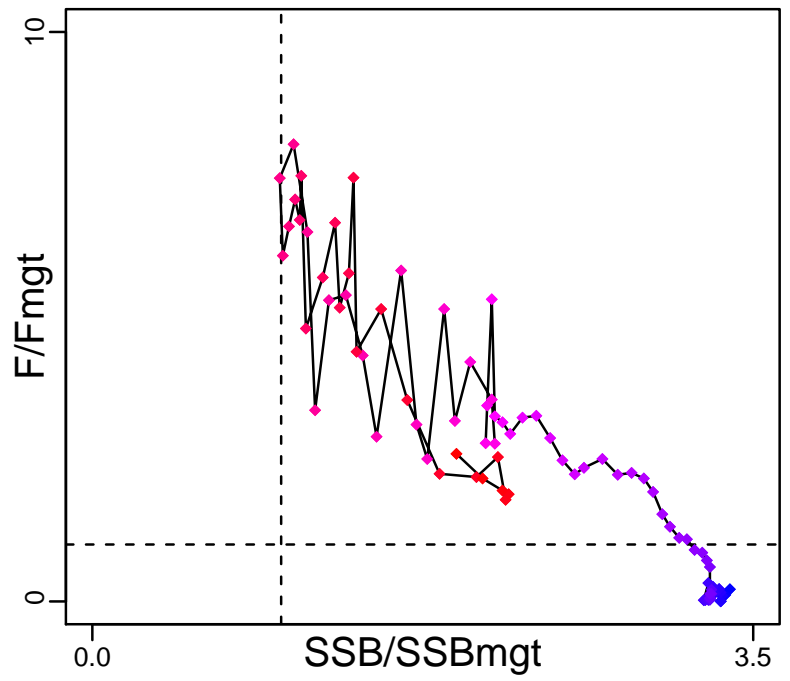
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-E00eggs	2012	2.37×10^9	-	-
TN	-	-	-	-	-
R	R-E00	2012	3,940,000	-	0
F	F-1/yr	2012	0.318	-	-
ER	-	-	-	-	-
TC	-	-	-	-	-
TL	TL-MT	2012	863	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	SSB-E00eggs/SSBmsy-pr-E00eggs	2012	1.928	-	-
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2012	1.943	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	SSB-E00eggs/SSBmgt-E00eggs	2012	1.928	-	-
F/Fmgt	F-1/yr/Fmgt-1/yr	2012	2.592	-	-
ER/ERmgt	-	-	-	-	-

King mackerel Gulf of Mexico [KMACKGM]

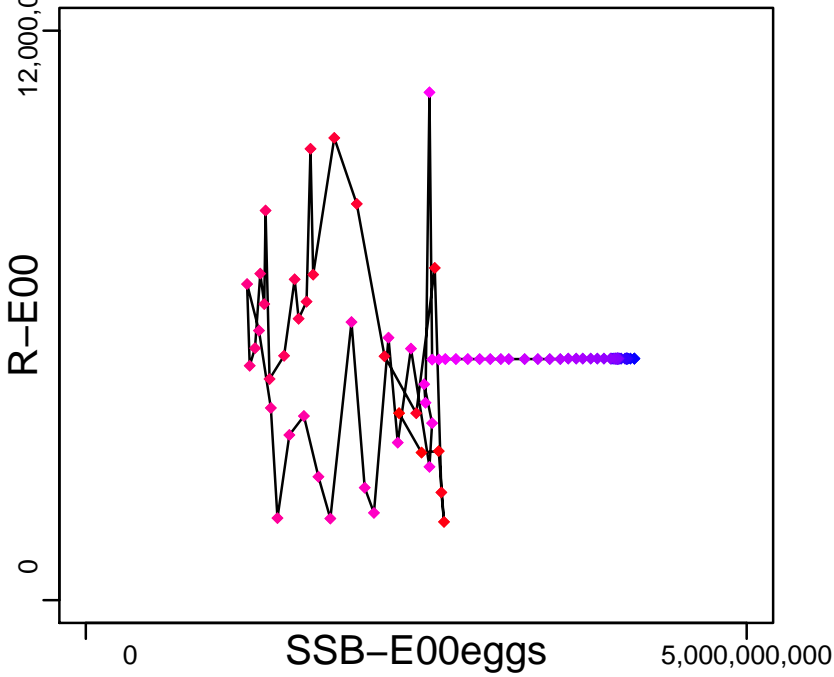
Kobe MSYpref (1929–2012–HIVELY)



Kobe MGTpref (1929–2012–HIVELY)



Spawner Recruit (1929–2012–HIVELY)



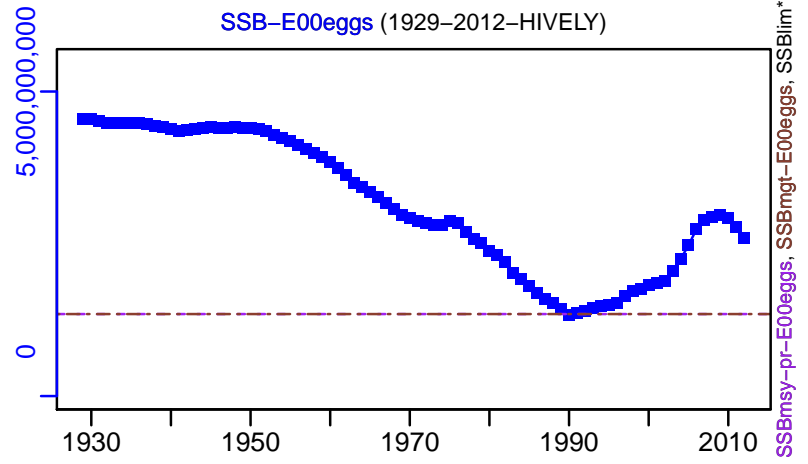
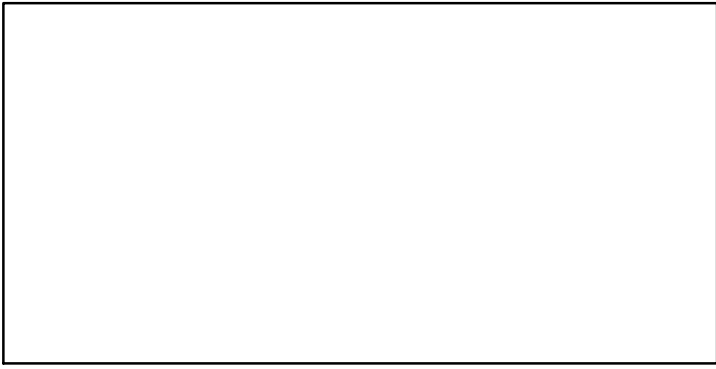
Production*



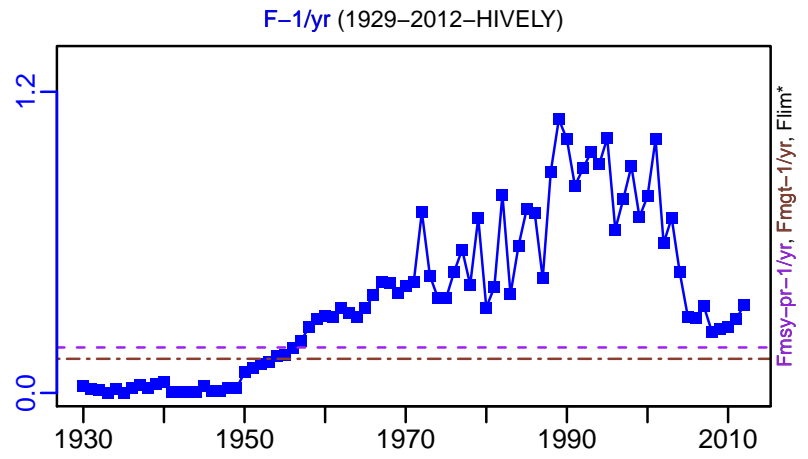
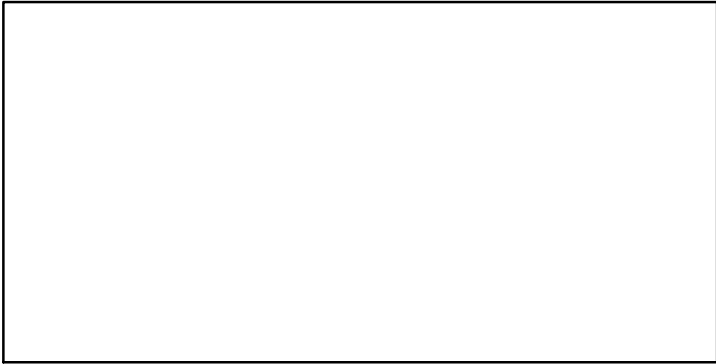
◆ Start Year ◆ End Year * No Data

King mackerel Gulf of Mexico [KMACKGM]

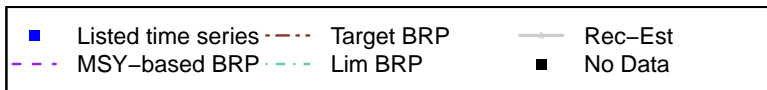
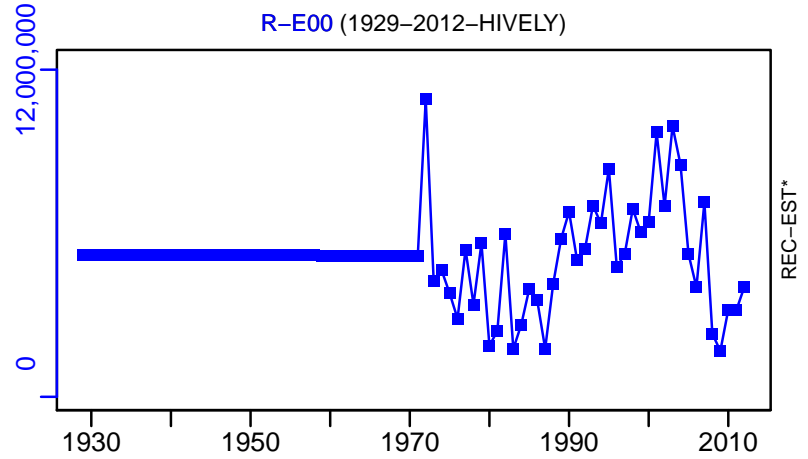
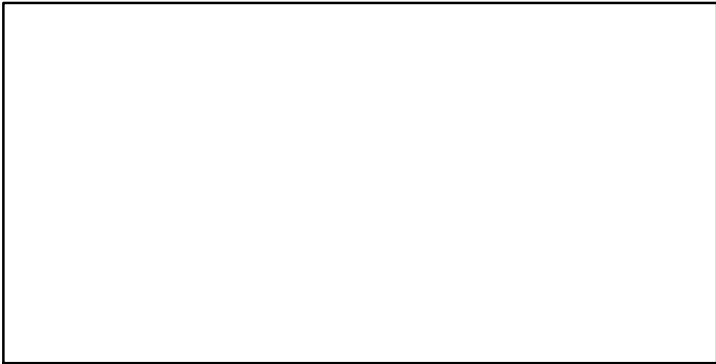
TB*



TN *



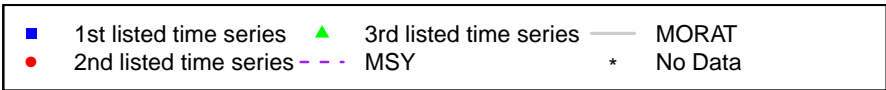
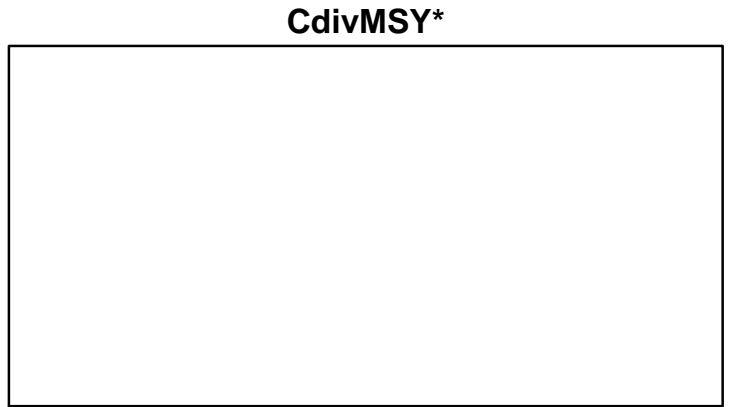
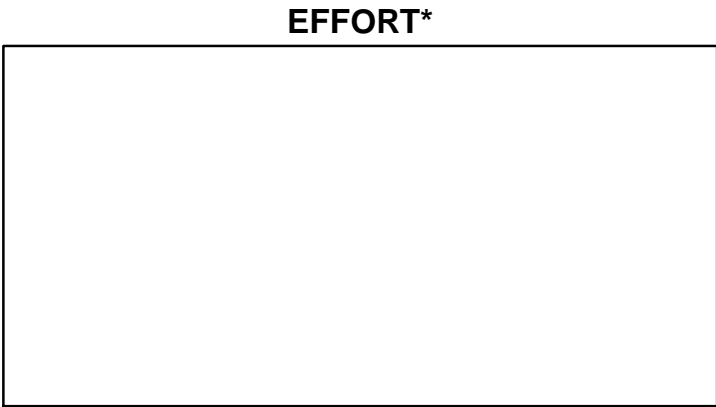
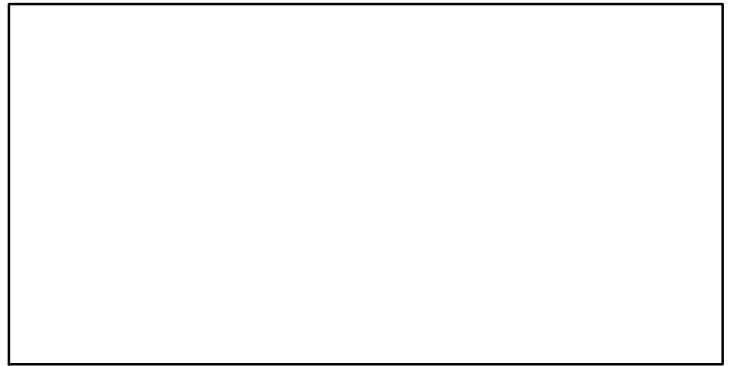
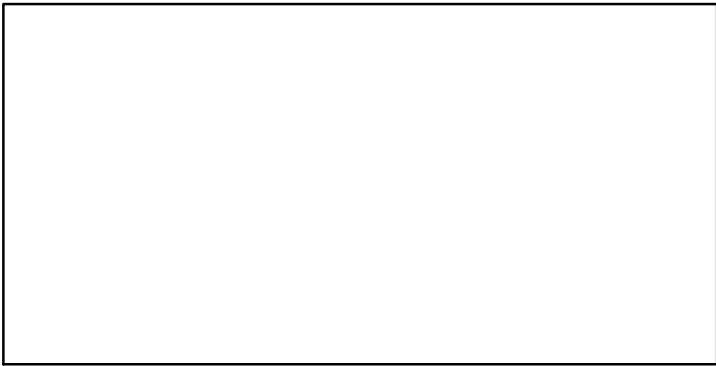
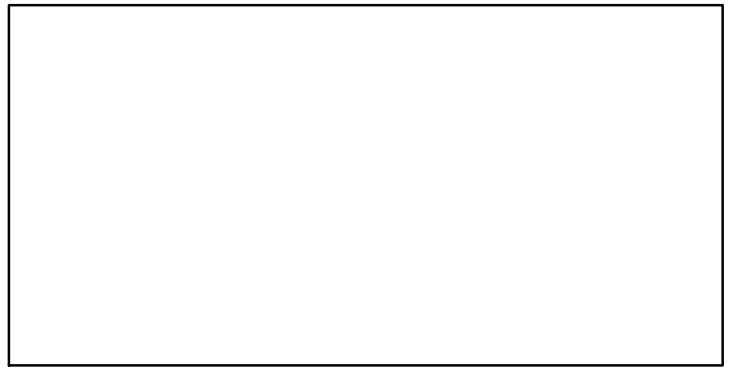
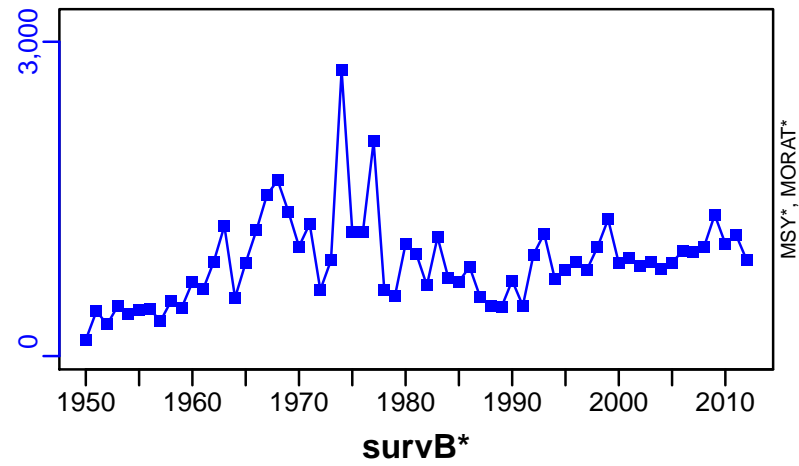
ER*



King mackerel Gulf of Mexico [KMACKGM]

TL-MT, TC*, RecC* (1929-2012-HIVELY)

TAC*, Cpair*, Cadv*



King mackerel Southern Atlantic Coast [KMACKSATLC]

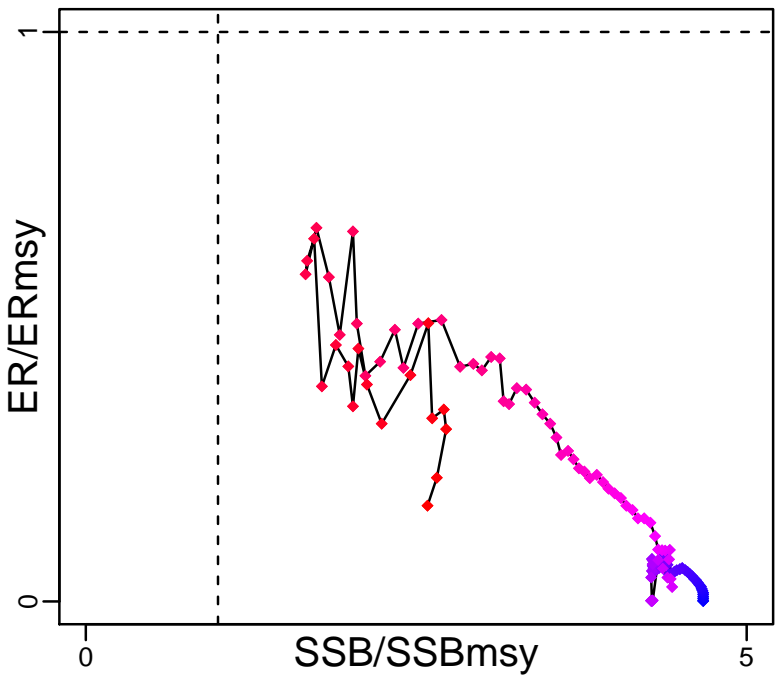
Metadata	
Scientific Name	Scomberomorus cavalla
Current Assess ID	SEFSC-KMACKSATLC-1901-2012-HIVELY
Area	Southern Atlantic coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Southeast Fisheries Science Center
Asmts in RAM	2012

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-pr-E00eggs	2012	1.702×10^9
Fmsy	-	-	-
ERmsy	ERmsy-pr-ratio	2012	0.157
TBmgt	-	-	-
SSBmgt	SSBmgt-E00eggs	2012	1.702×10^9
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2012	0.118
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

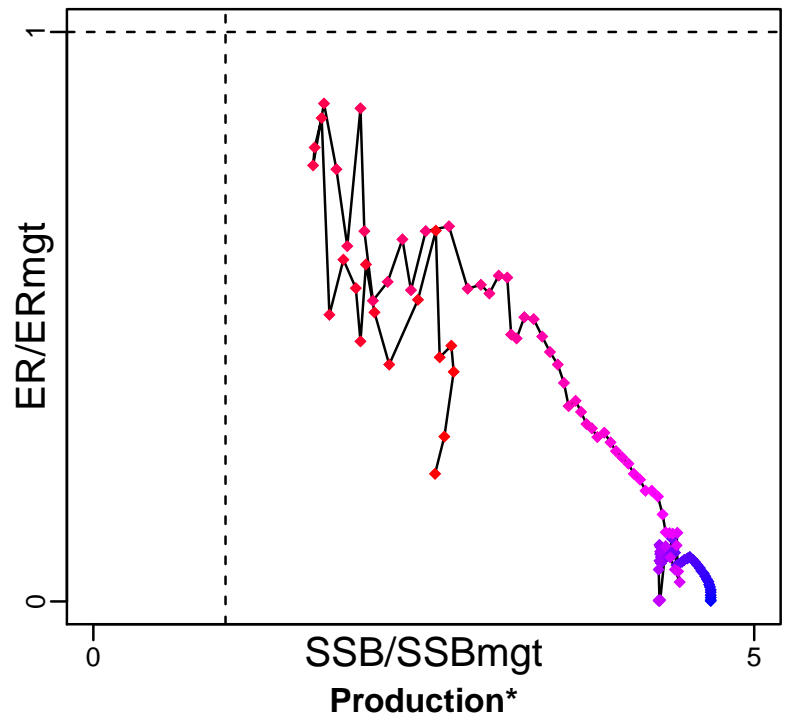
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-E00eggs	2012	4.4×10^9	-	-
TN	-	-	-	-	-
R	R-E00	2012	2,510,000	-	0
F	-	-	-	-	-
ER	ER-ratio	2012	0.026	-	-
TC	-	-	-	-	-
TL	TL-MT	2012	1110	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	SSB-E00eggs/SSBmsy-pr-E00eggs	2012	2.585	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	ER-ratio/ERmsy-pr-ratio	2012	0.168	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	SSB-E00eggs/SSBmgt-E00eggs	2012	2.585	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

King mackerel Southern Atlantic Coast [KMACKSATLC]

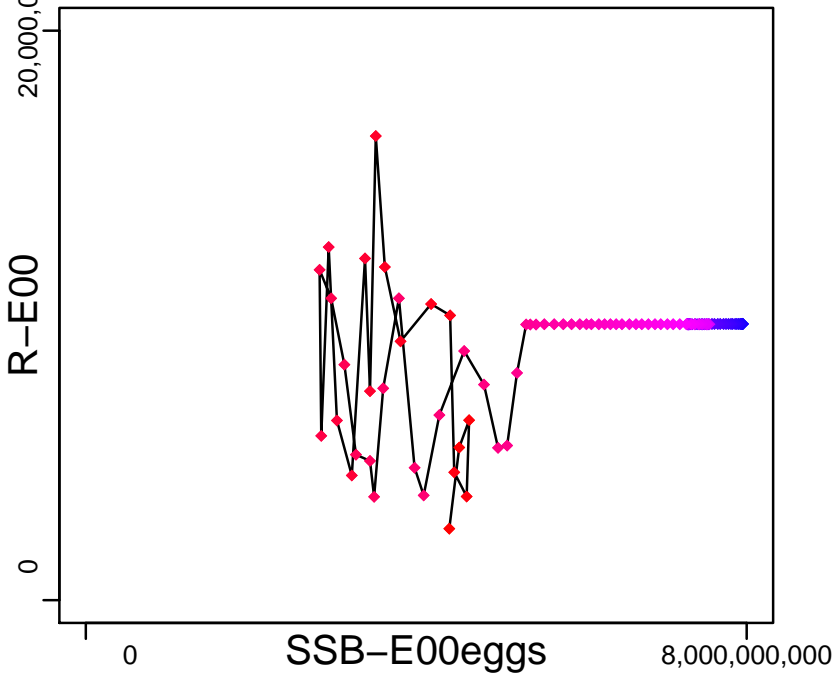
Kobe MSYpref (1901–2012–HIVELY)



Kobe MGTpref (1901–2012–HIVELY)



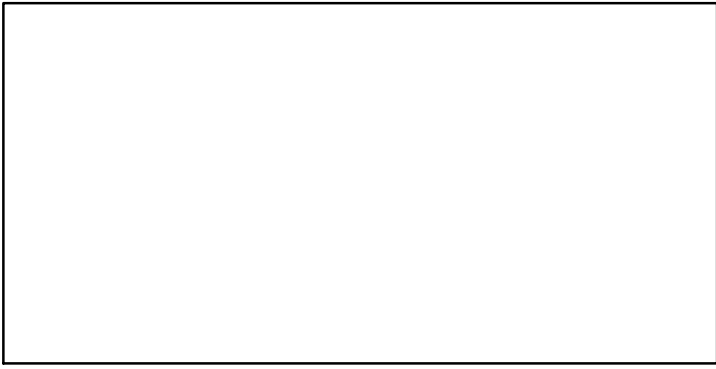
Spawner Recruit (1901–2012–HIVELY)



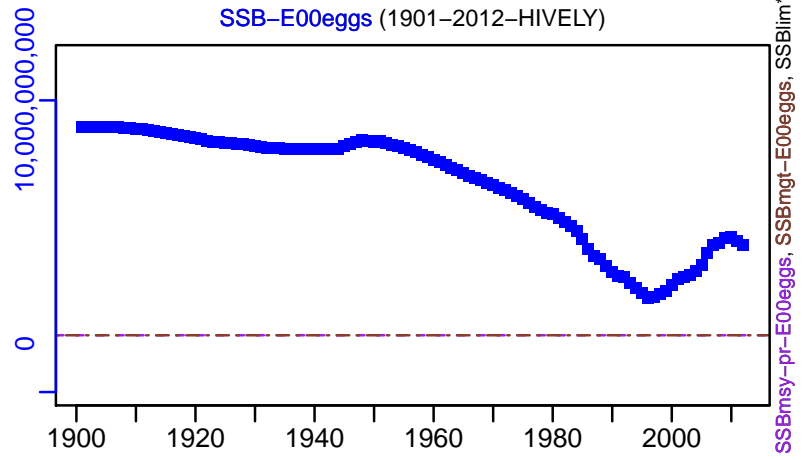
◆ Start Year ◆ End Year * No Data

King mackerel Southern Atlantic Coast [KMACKSATLC]

TB*

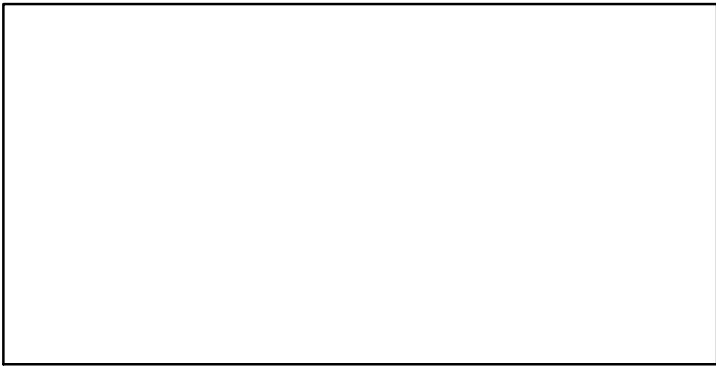


SSB-E00eggs (1901-2012-HIVELY)

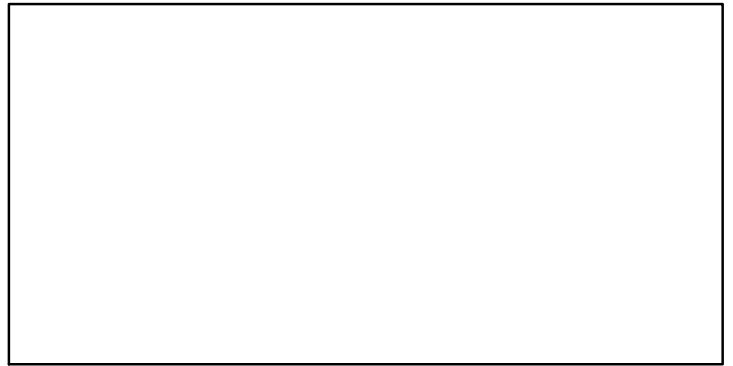


SSBmsy-pr-E00eggs, SSBmgt-E00eggs, SSBlim*

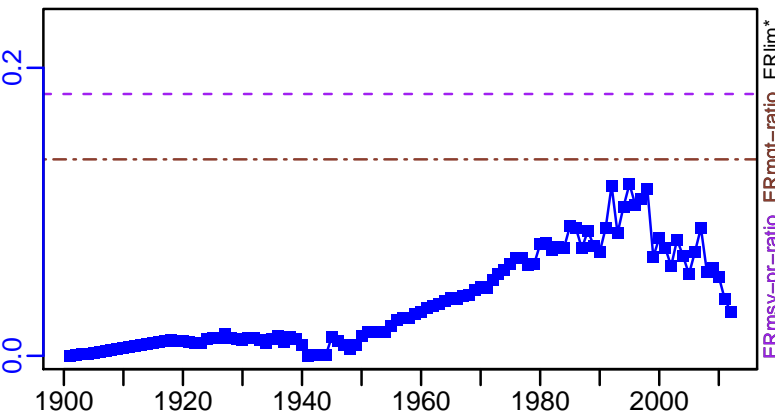
TN *



F*

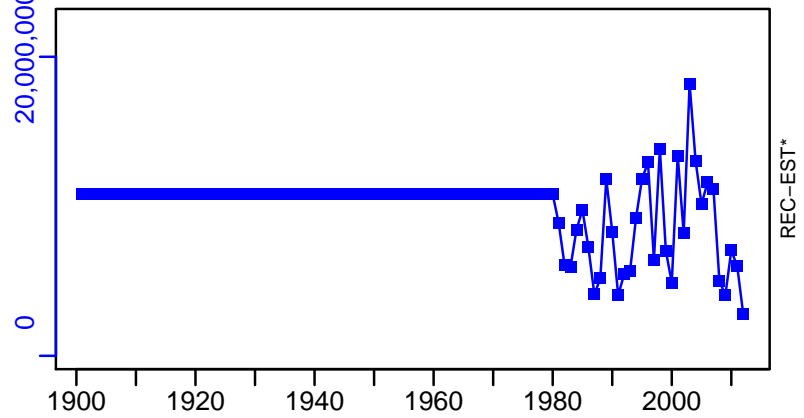


ER-ratio (1901-2012-HIVELY)

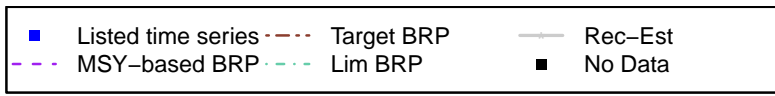


ERmsy-pr-ratio, ERmgt-ratio, ERlim*

R-E00 (1901-2012-HIVELY)



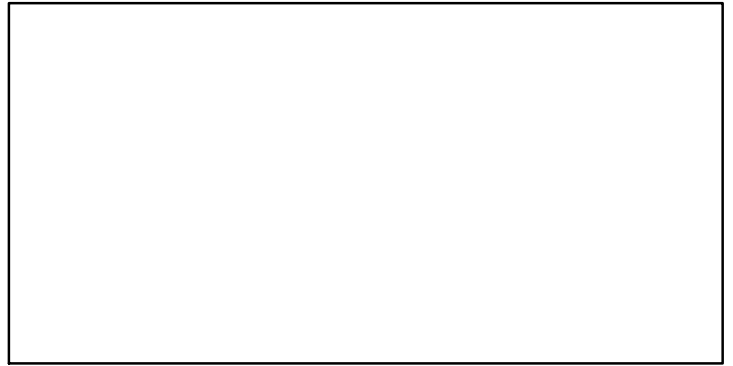
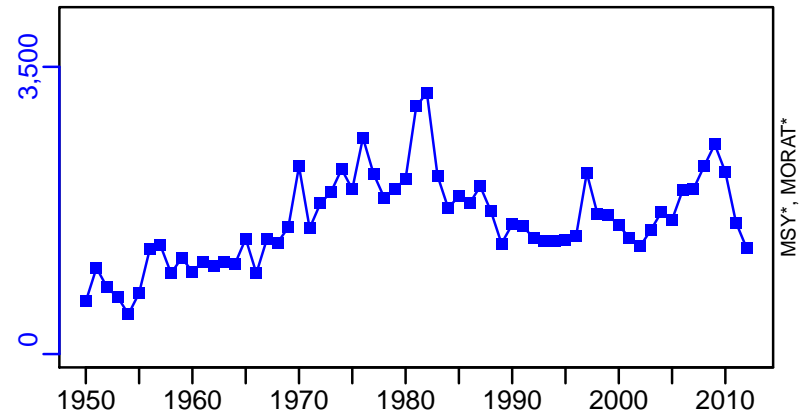
REC-EST*



King mackerel Southern Atlantic Coast [KMACKSATLC]

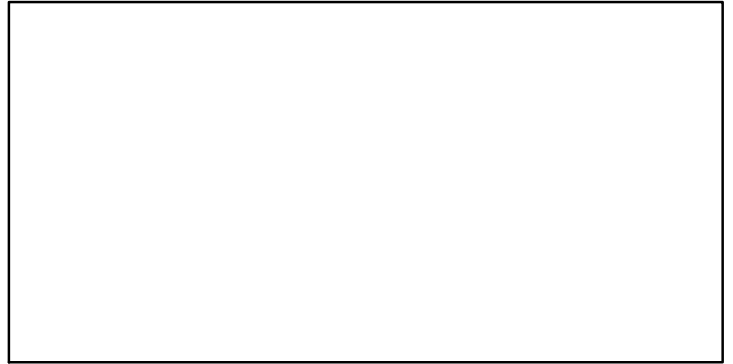
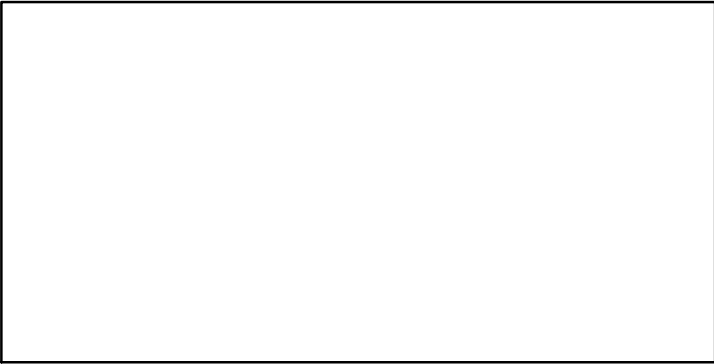
TL-MT, TC*, RecC* (1901-2012-HIVELY)

TAC*, Cpair*, Cadv*



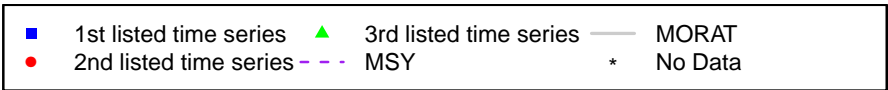
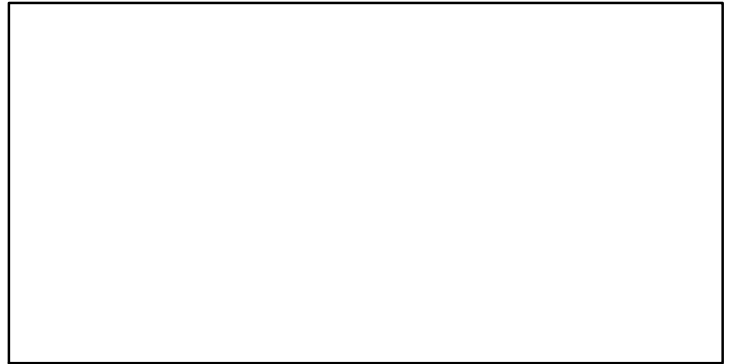
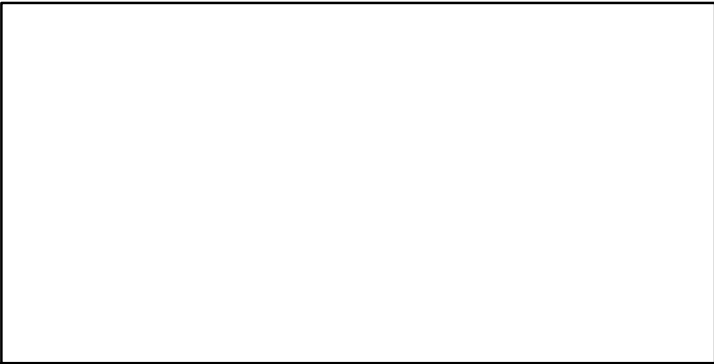
survB*

CPUE*



EFFORT*

CdivMSY*



Mackerel ICES Northeast Atlantic [MACKNEICES]

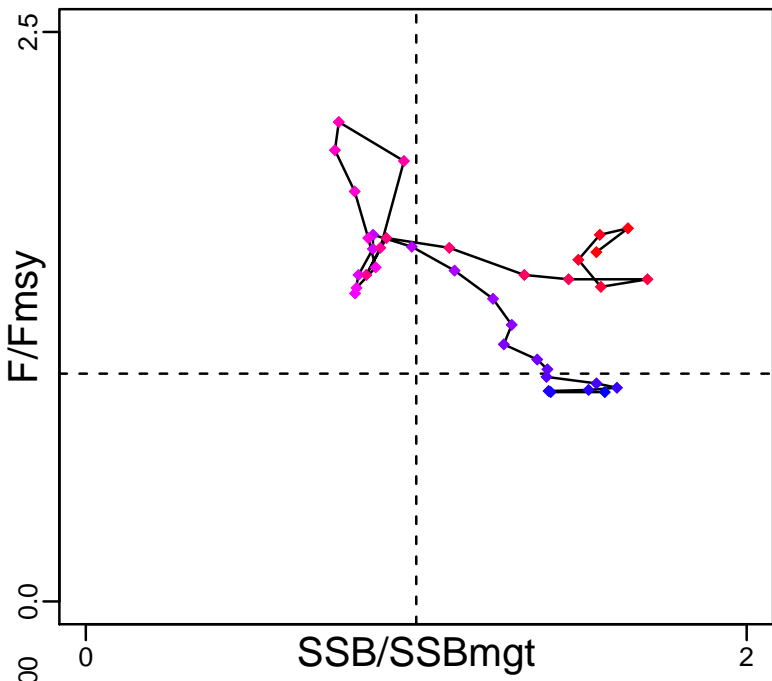
Metadata	
Scientific Name	Scomber scombrus
Current Assess ID	WGWIDE-MACKNEICES-1980-2017-ICESIMP2018
Area	Ila-IIIabd-IV-Vb-VI-VII-VIIIabcde-XII-XIV-Ixa
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Widely Distributed Stocks
Asmts in RAM	2007, 2013, 2014, 2015, 2016, 2017

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2017	0.21
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2017	2,570,000
Fmgt	Fmgt-1/yr	2017	0.21
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2007	0.15
TBlim	-	-	-
SSBlim	SSBlim-MT	2017	1,940,000
Flim	Flim-1/yr	2017	0.48
ERlim	-	-	-

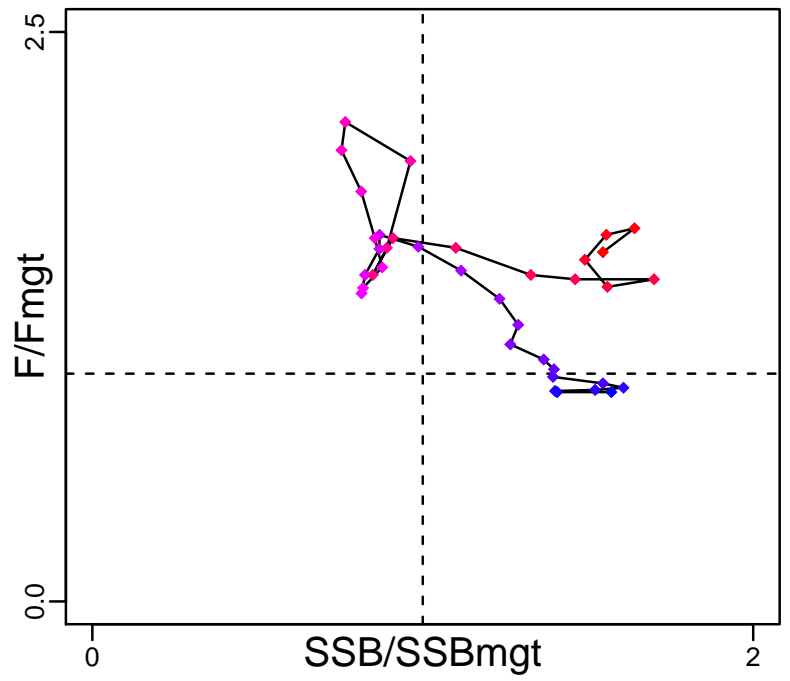
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2017	4,750,000	Both	-
SSB	SSB-MT	2017	3,440,000	Both	-
TN	-	-	-	-	-
R	R-E00	2017	4.26 × 10 ⁹	-	0
F	F-1/yr	2017	0.322	-	4 to 8
ER	ER-calc-ratio	2017	0.23	-	-
TC	TC-MT	2017	1,090,000		
TL	TL-MT	2016	1,200,000		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2017	1.533		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2017	1.34		
F/Fmgt	F-1/yr/Fmgt-1/yr	2017	1.533		
ER/ERmgt	-	-	-		

Mackerel ICES Northeast Atlantic [MACKNEICES]

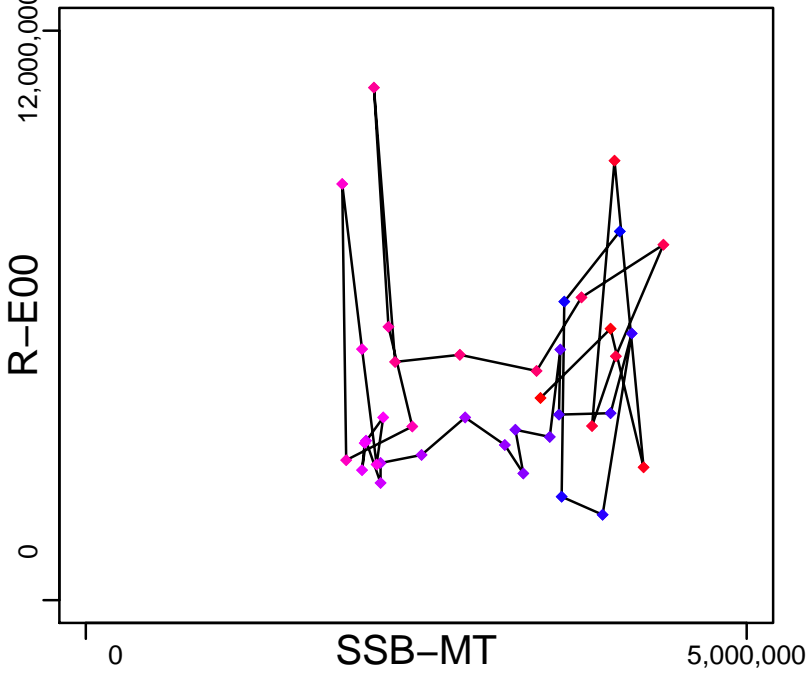
Kobe MSYpref (1980–2017–ICESIMP2018)



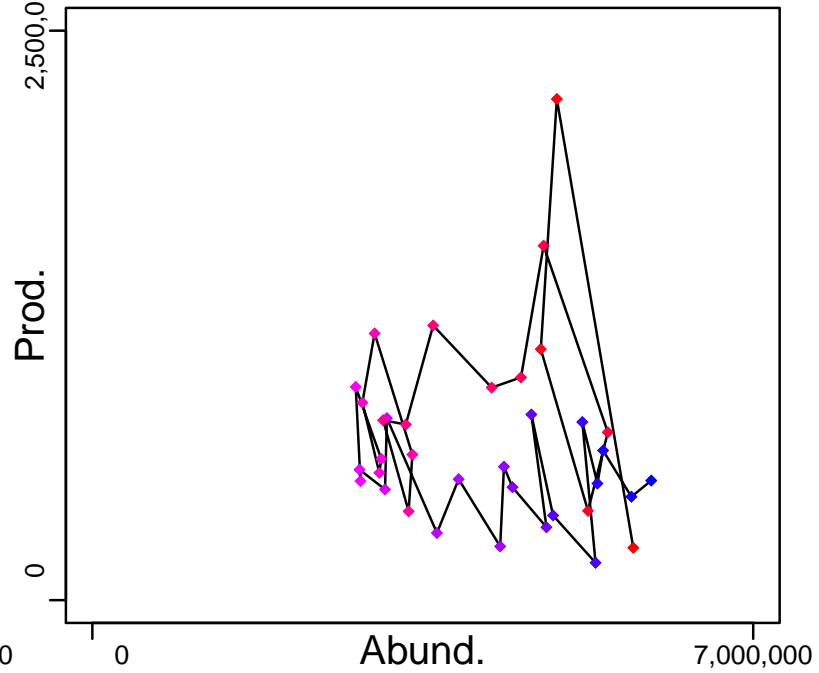
Kobe MGTpref (1980–2017–ICESIMP2018)



Spawner Recruit (1980–2017–ICESIMP2018)



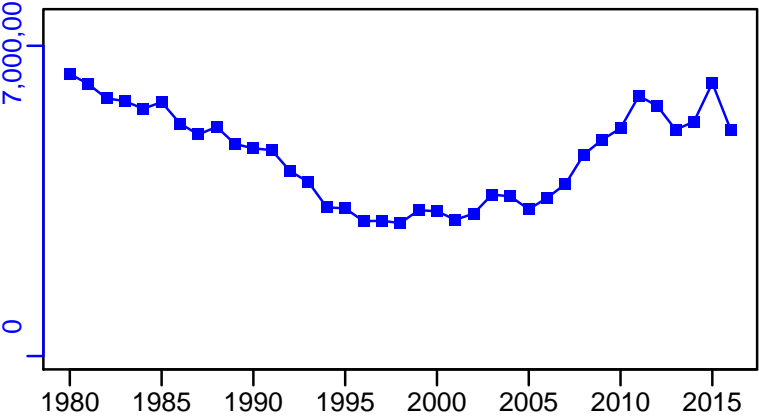
Production (1980–2017–ICESIMP2018)



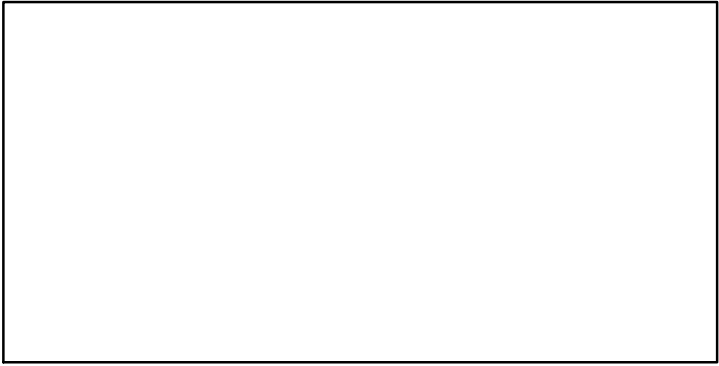
◆ Start Year ◆ End Year * No Data

Mackerel ICES Northeast Atlantic [MACKNEICES]

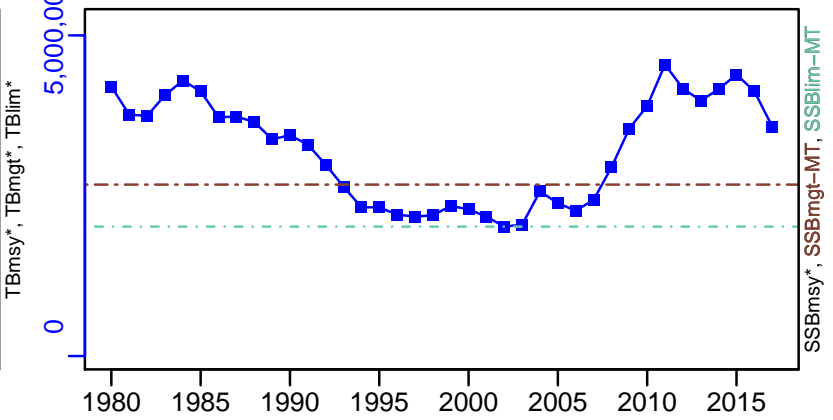
TB-MT (1980-2017-ICESIMP2018)



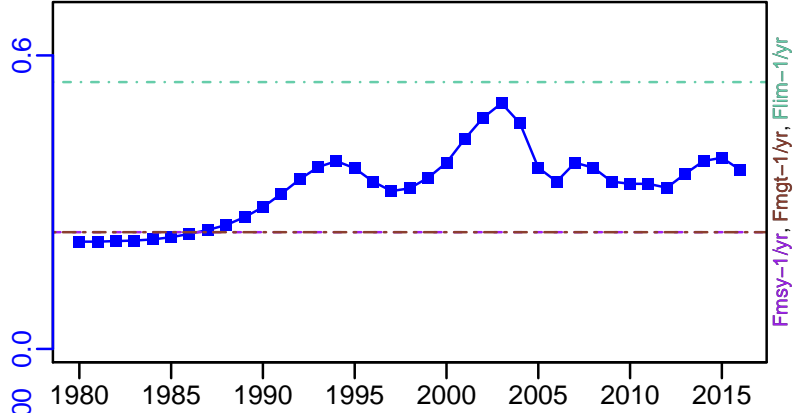
TN *



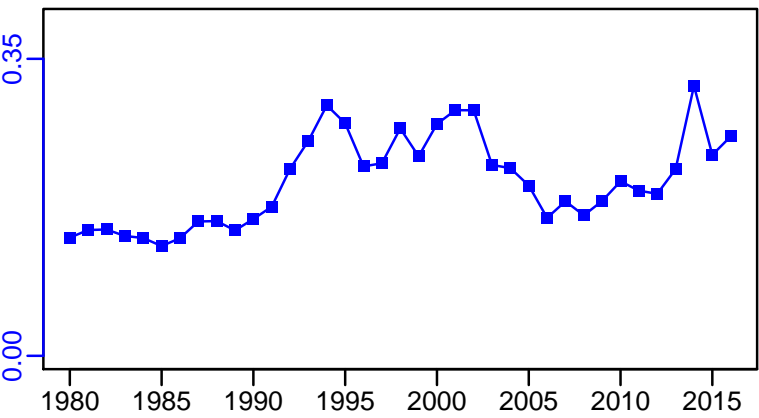
SSB-MT (1980-2017-ICESIMP2018)



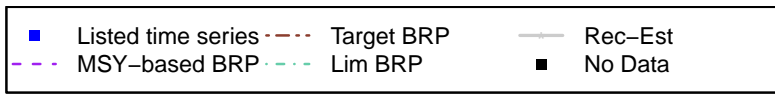
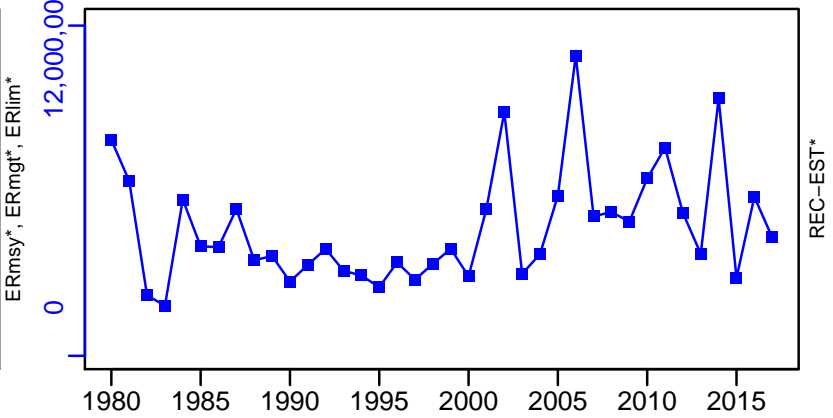
F-1/yr (1980-2017-ICESIMP2018)



ER-calc-ratio (1980-2017-ICESIMP2018)



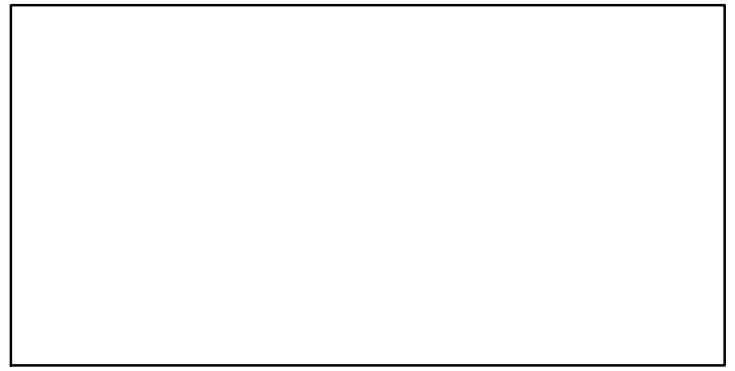
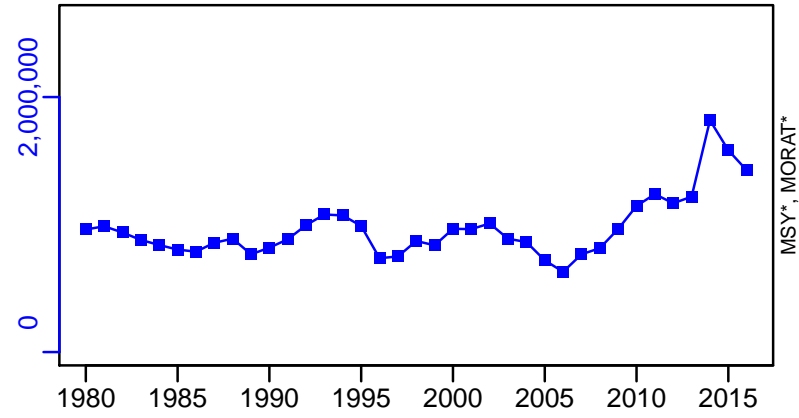
R-E00 (1980-2017-ICESIMP2018)



Mackerel ICES Northeast Atlantic [MACKNEICES]

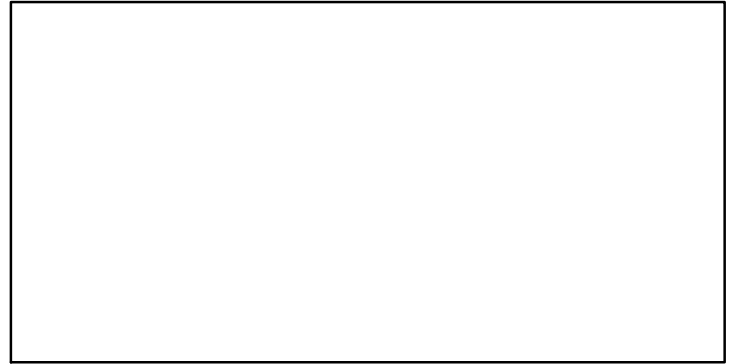
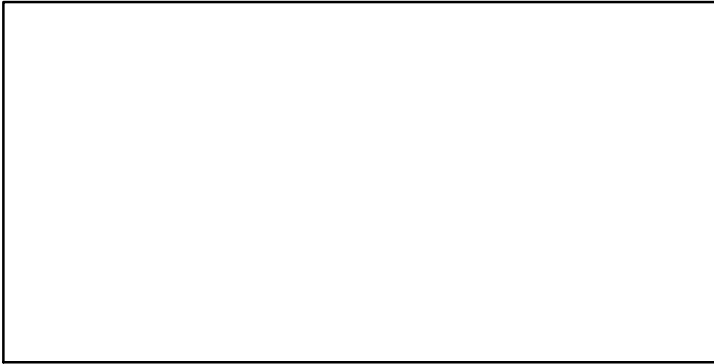
TC-MT, TL*, RecC* (1980-2017-ICESIMP2018)

TAC*, Cpair*, Cadv*



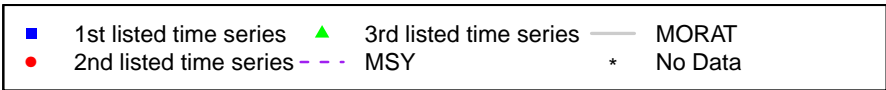
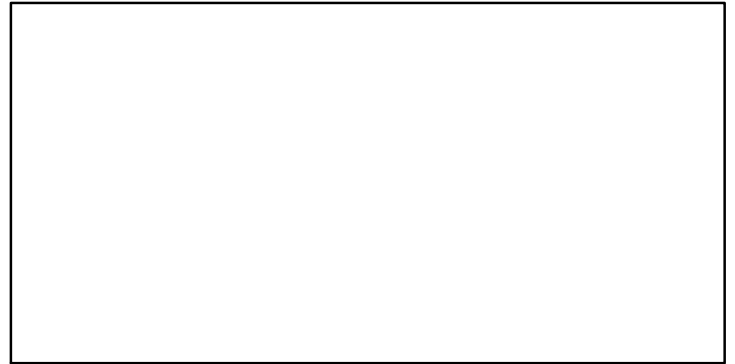
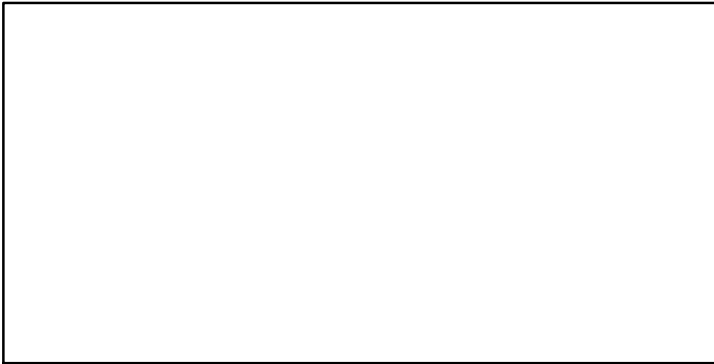
survB*

CPUE*



EFFORT*

CdivMSY*



Mackerel Northwest Atlantic (NAFO Subareas 3 and 4) [MACKNWATLSA3-4]

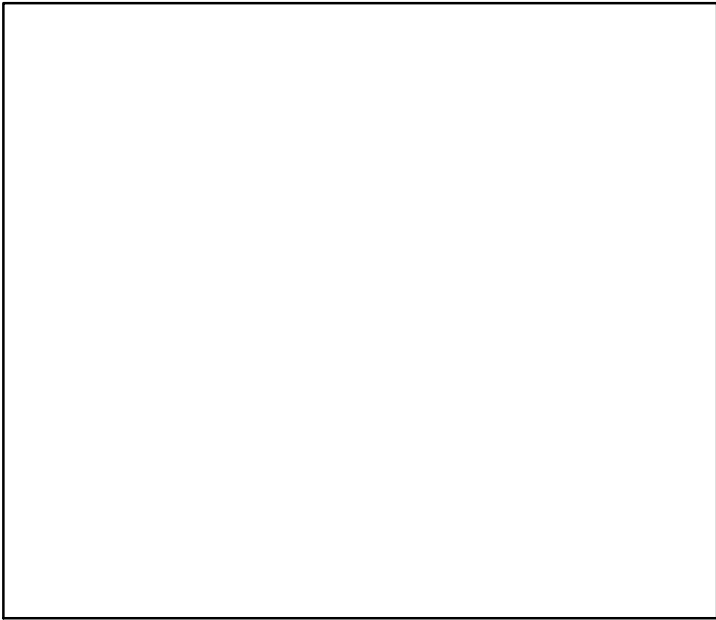
Metadata	
Scientific Name	Scomber scombrus
Current Assess ID	DFO-MACKNWATLSA3-4-1968-2014-WATSON
Area	Northwest Atlantic (NAFO Subareas 3 and 4)
Management Authority	Department of Fisheries and Oceans, Canada national management
Assessor	Department of Fisheries and Oceans
Asmts in RAM	2014, 2011

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

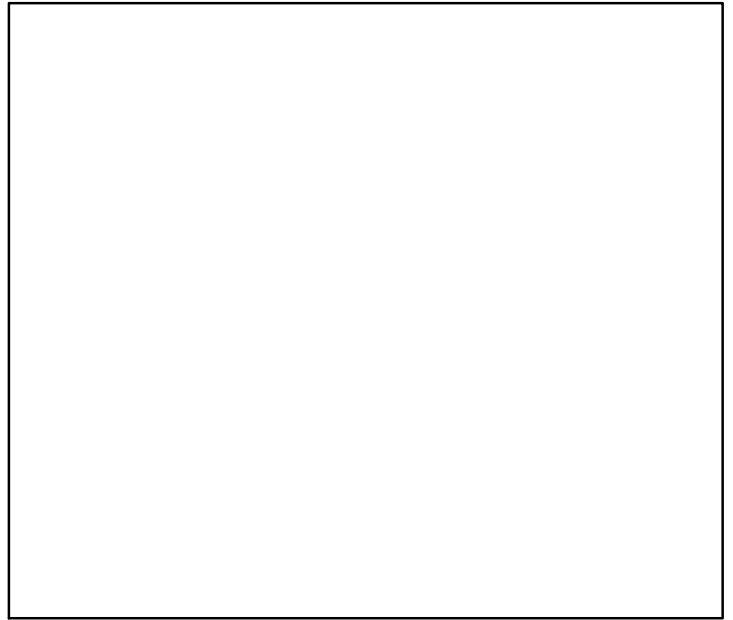
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2014	13,400	-	-
SSB	SSB-MT	2014	12,500	-	1.37
TN	-	-	-	-	-
R	R-E00	2014	77,100,000	-	-
F	F-1/yr	2011	0.468	-	8+
ER	ER-calc-ratio	2014	0.554	-	-
TC	-	-	-	-	-
TL	TL-MT	2014	7430	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

Mackerel Northwest Atlantic (NAFO Subareas 3 and 4) [MACKNWATLSA3-4]

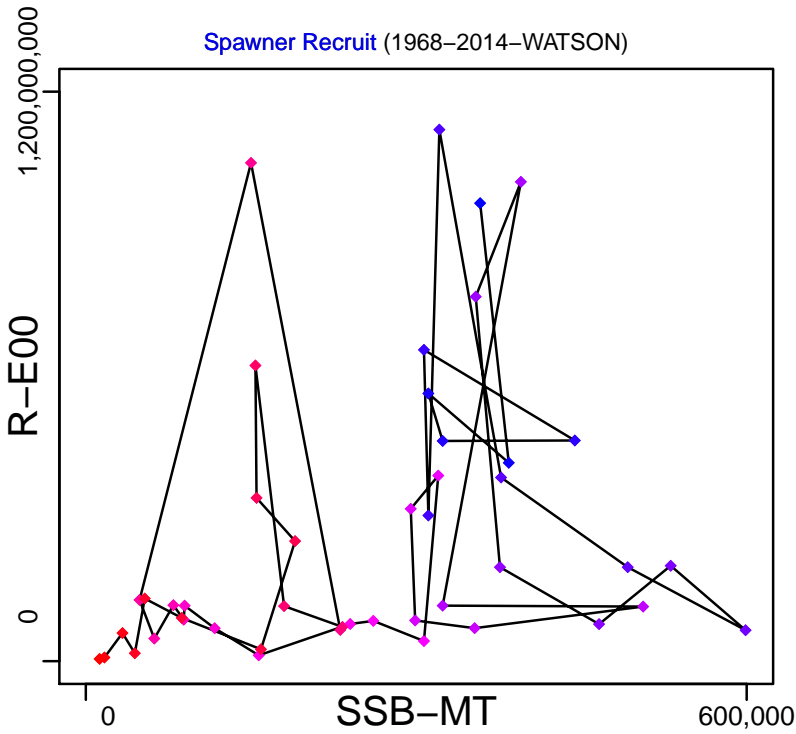
Kobe MSY*



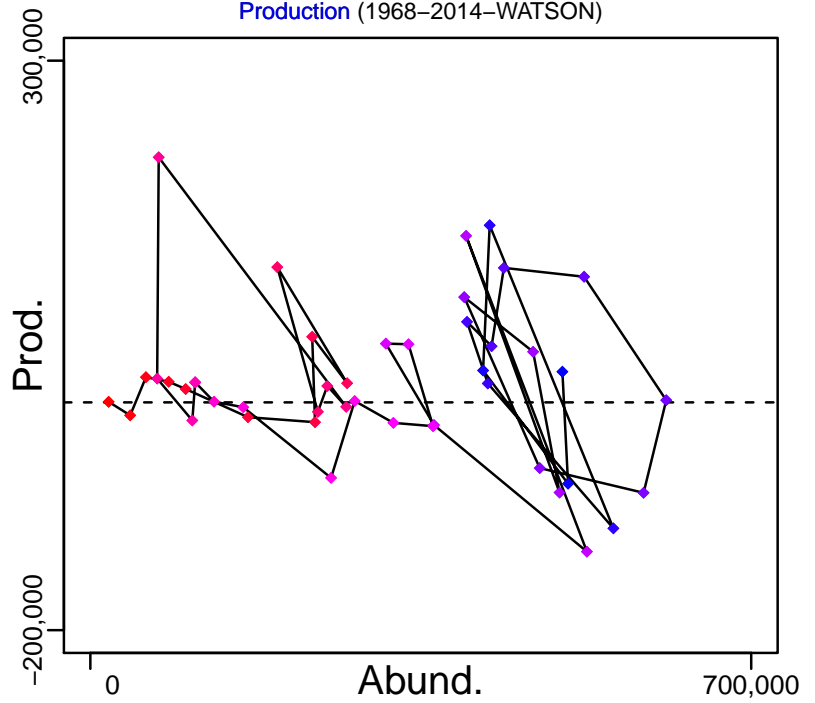
Kobe MGT*



Spawner Recruit (1968-2014-WATSON)



Production (1968-2014-WATSON)

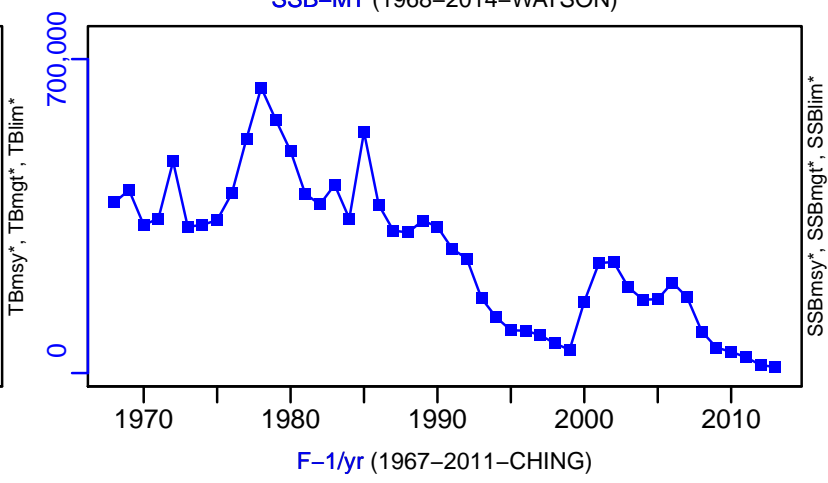
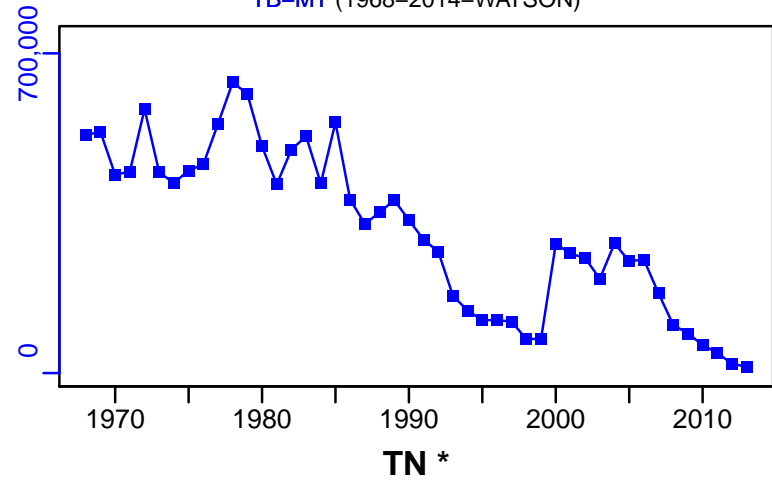


◆ Start Year ◆ End Year * No Data

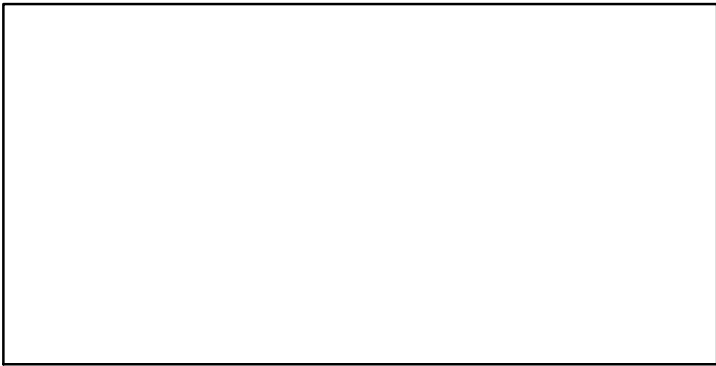
Mackerel Northwest Atlantic (NAFO Subareas 3 and 4) [MACKNWATLSA3-4]

TB-MT (1968-2014-WATSON)

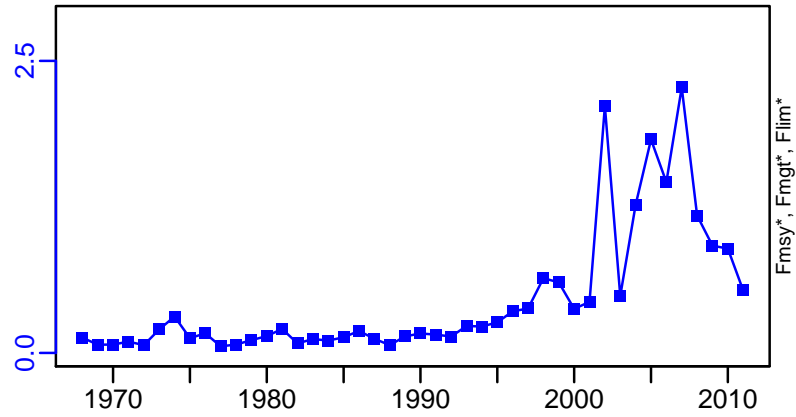
SSB-MT (1968-2014-WATSON)



TN *

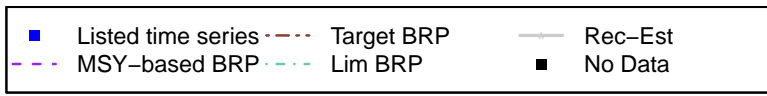
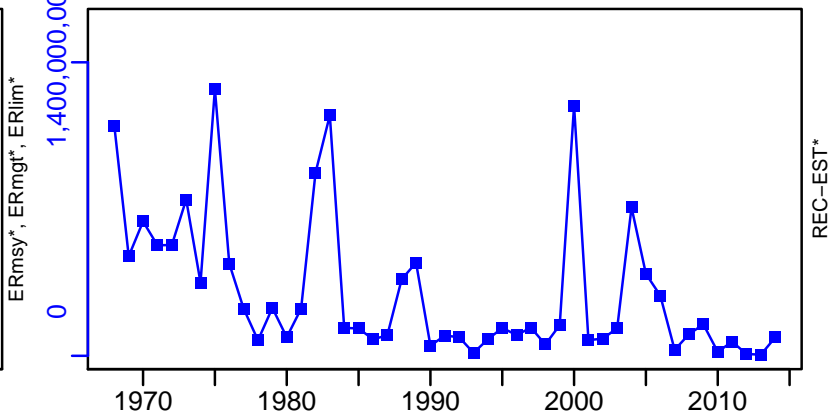
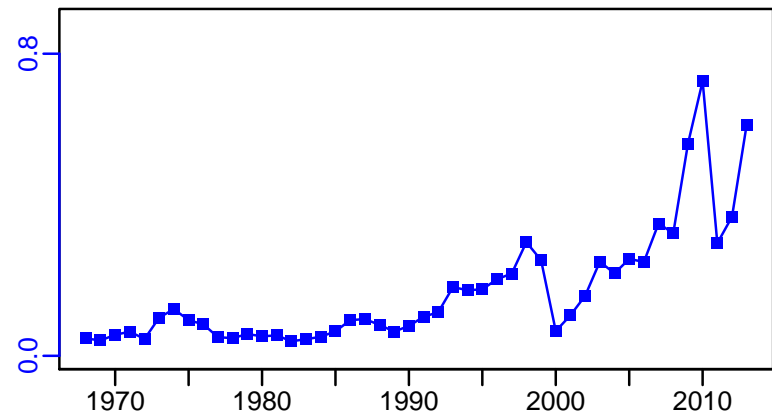


F-1/yr (1967-2011-CHING)



ER-calc-ratio (1968-2014-WATSON)

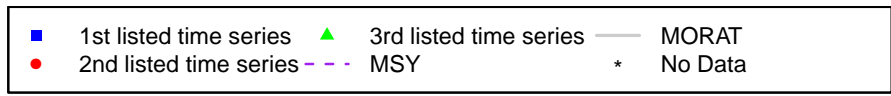
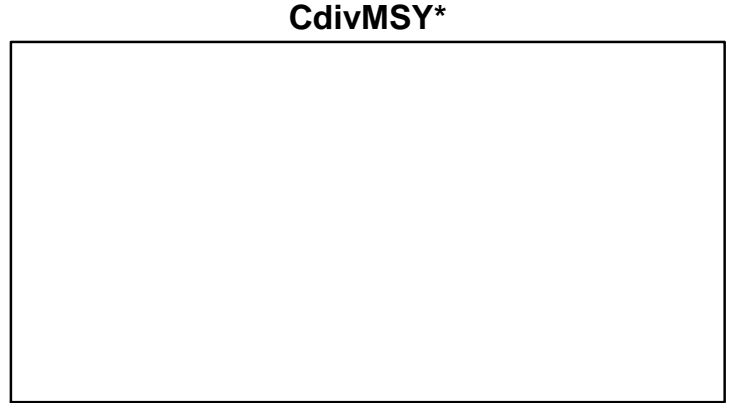
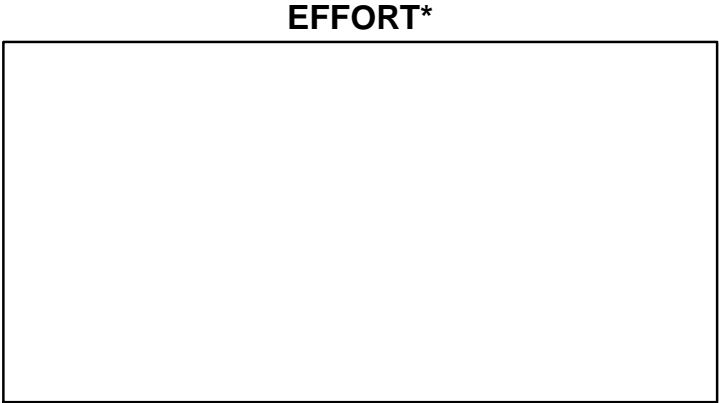
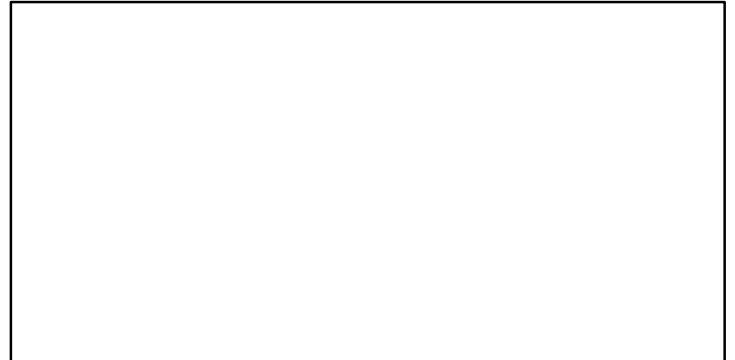
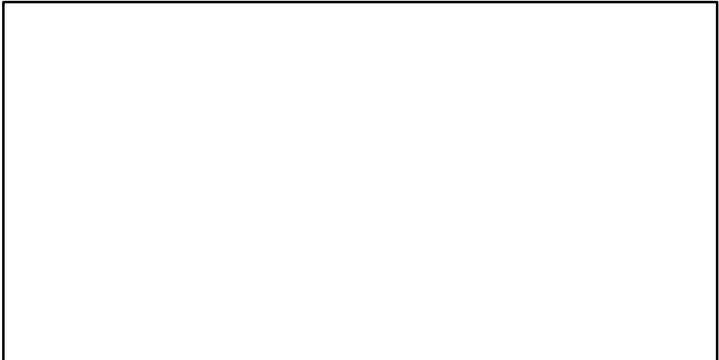
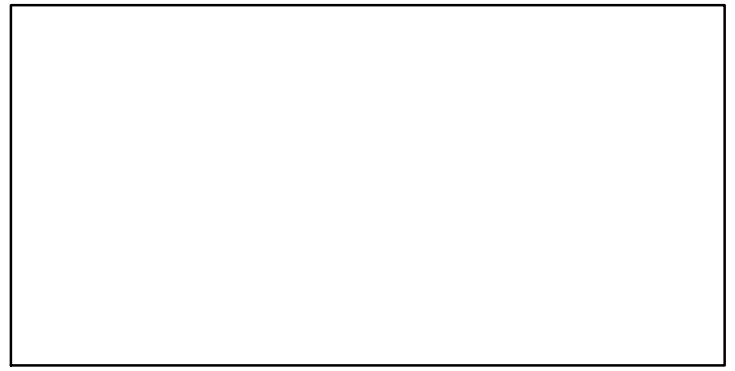
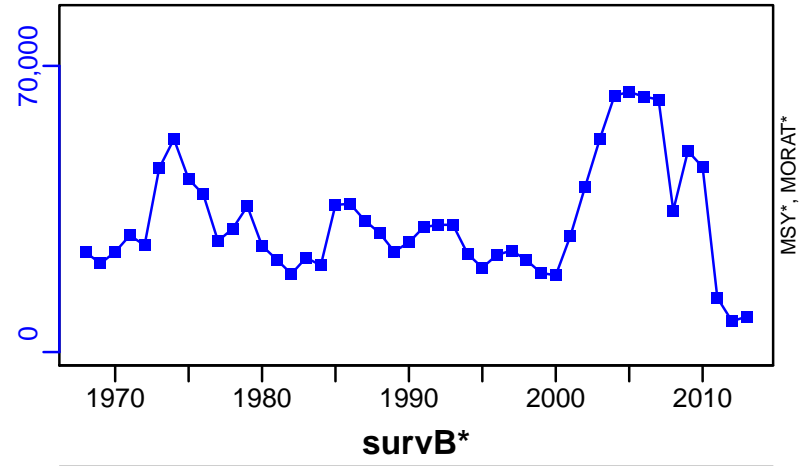
R-E00 (1968-2014-WATSON)



Mackerel Northwest Atlantic (NAFO Subareas 3 and 4) [MACKNWATLSA3-4]

TL-MT, TC*, RecC* (1968-2014-WATSON)

TAC*, Cpair*, Cadv*



Mediterranean horse mackerel Black Sea [MHMACKMEDGSA29]

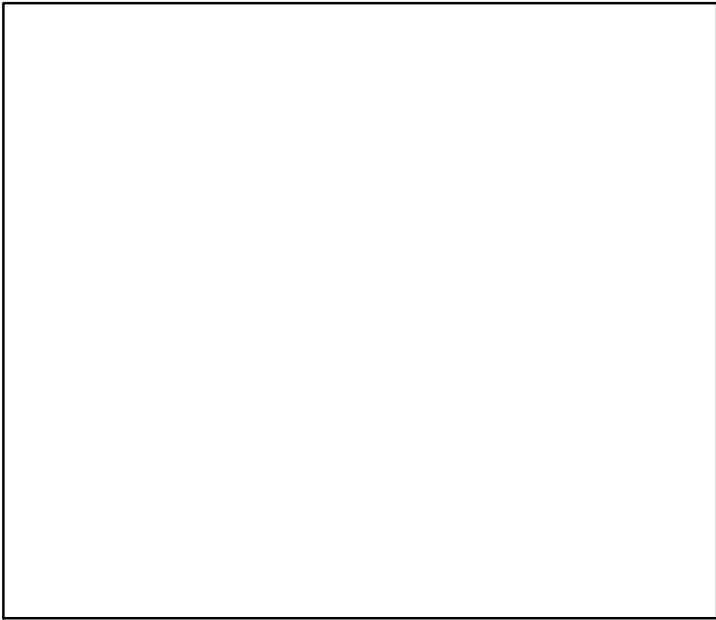
Metadata	
Scientific Name	Trachurus mediterraneus
Current Assess ID	STECF-MHMACKMEDGSA29-2005-2014-OSIO
Area	Black Sea
Management Authority	General Fisheries Council for the Mediterranean, DG MARE, and national states
Assessor	Scientific, Technical and Economic Committee for Fisheries
Asmts in RAM	2014

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2014	0.27
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	Fmgt-1/yr	2014	0.27
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

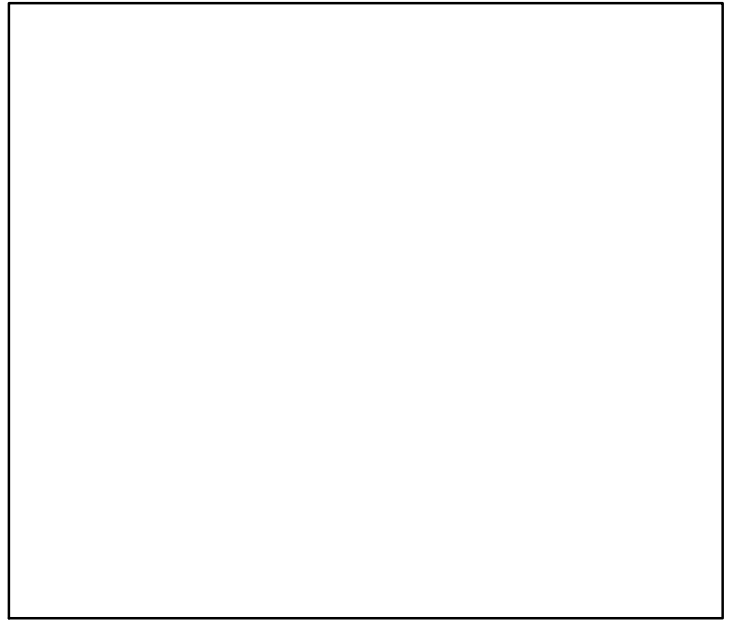
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-MT	2014	18,500	-	1+
TN	-	-	-	-	-
R	R-E00	2014	3.56×10^9	-	-
F	F-1/yr	2014	1.47	-	-
ER	-	-	-	-	-
TC	TC-MT	2014	12,400		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2014	5.444		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	F-1/yr/Fmgt-1/yr	2014	5.444		
ER/ERmgt	-	-	-		

Mediterranean horse mackerel Black Sea [MHMACKMEDGSA29]

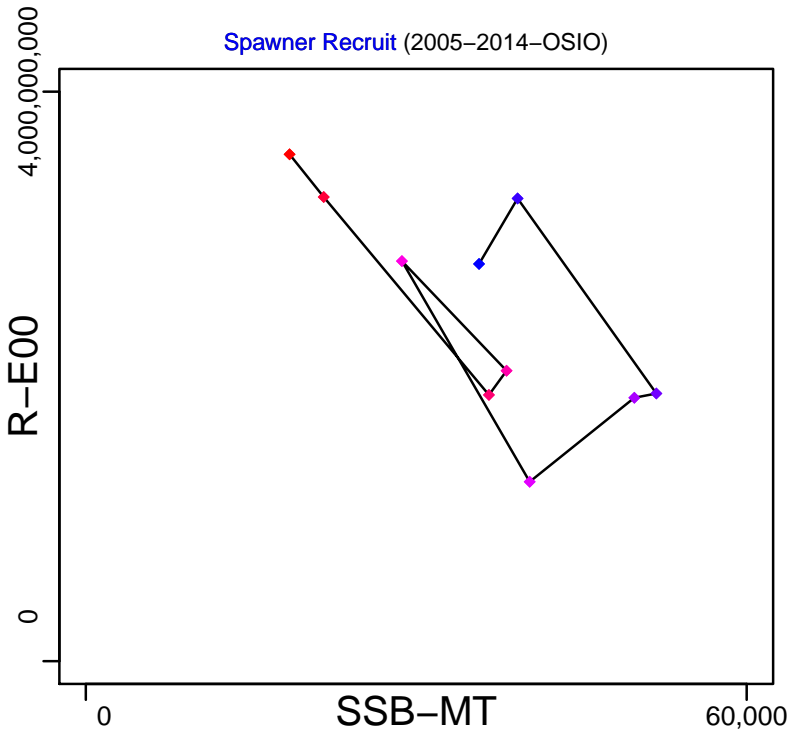
Kobe MSY*



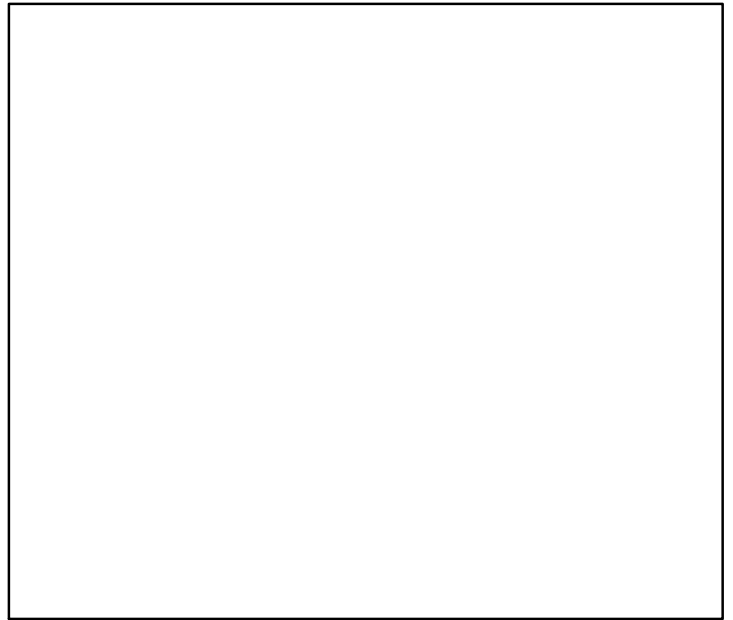
Kobe MGT*



Spawner Recruit (2005-2014-OSIO)



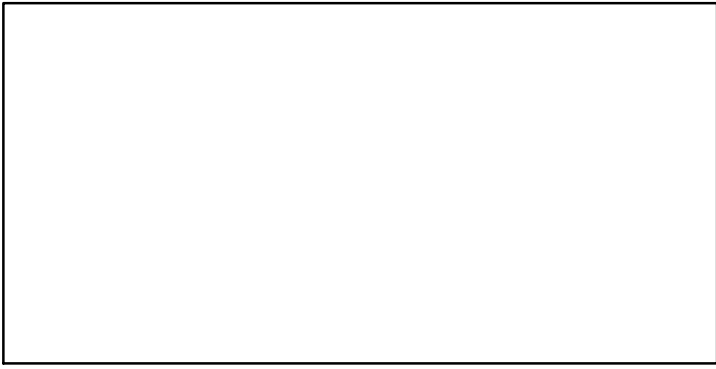
Production*



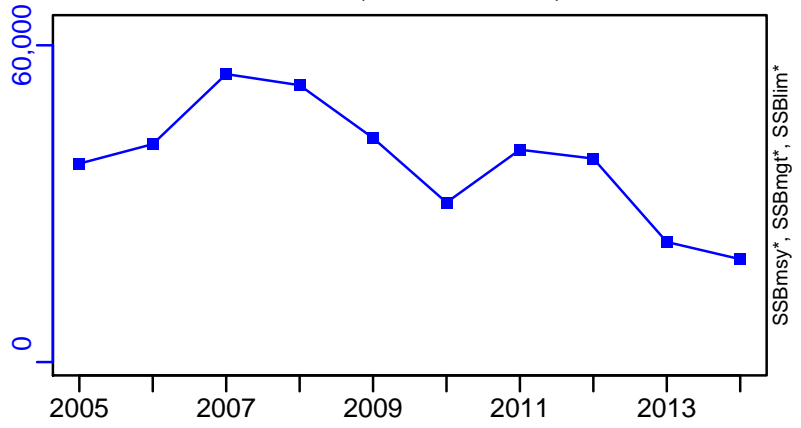
◆ Start Year ◆ End Year * No Data

Mediterranean horse mackerel Black Sea [MHMACKMEDGSA29]

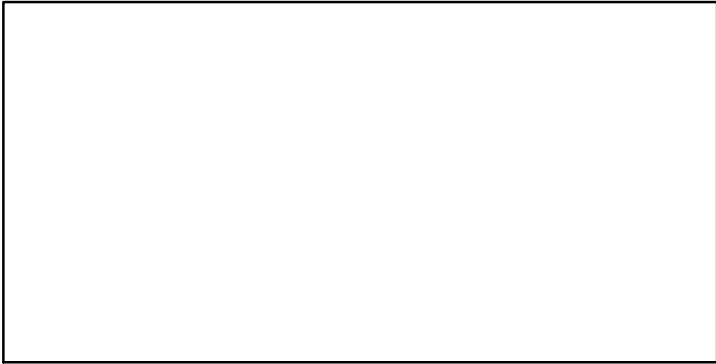
TB*



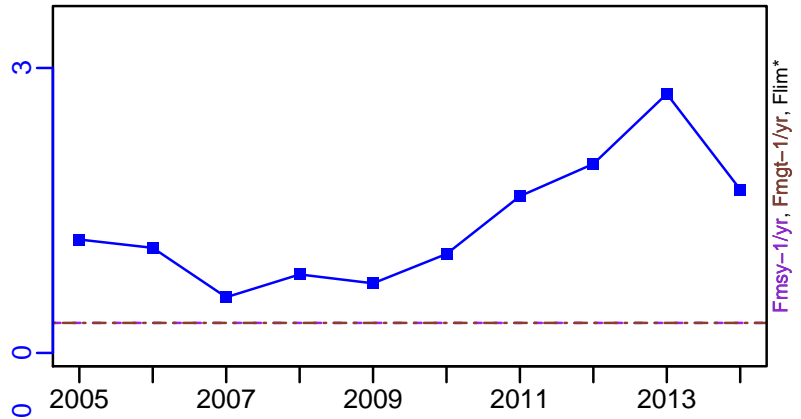
SSB-MT (2005-2014-OSIO)



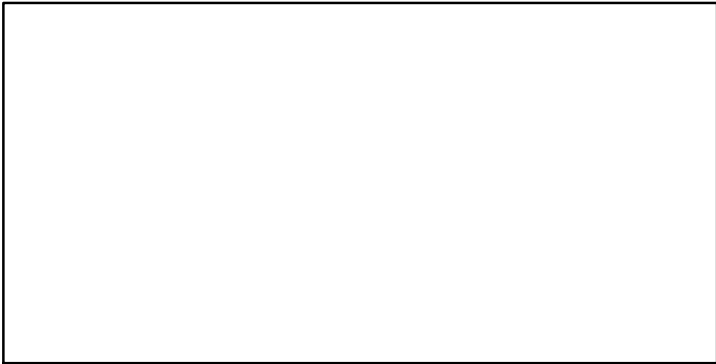
TN *



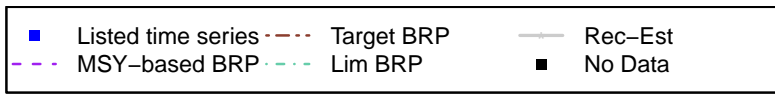
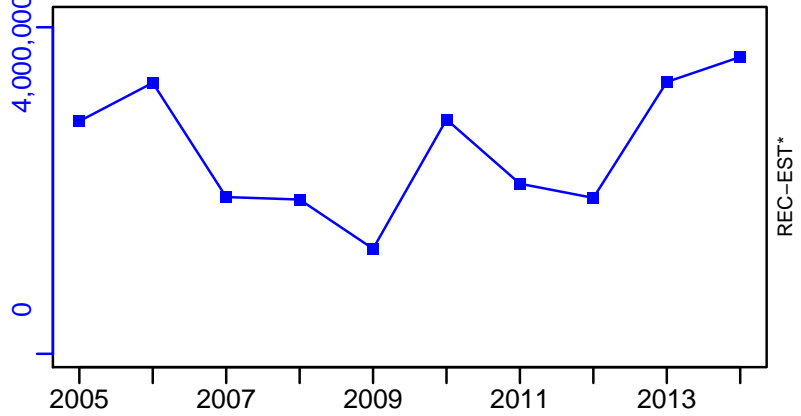
F-1/yr (2005-2014-OSIO)



ER*



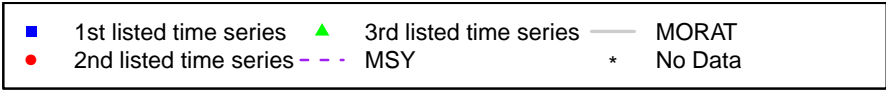
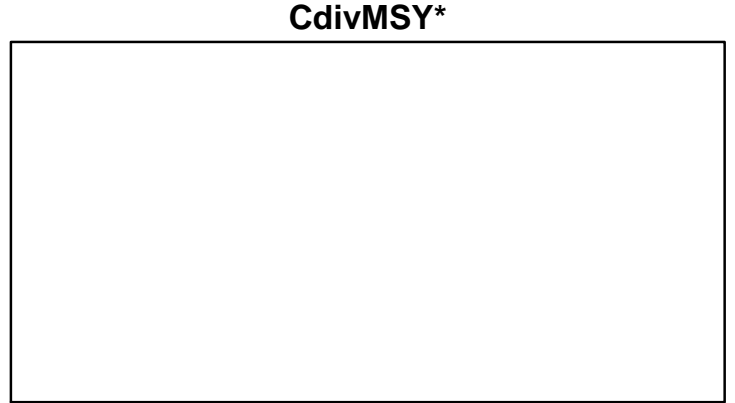
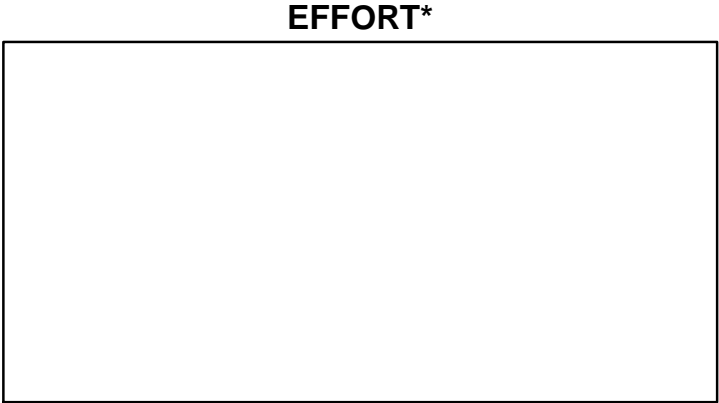
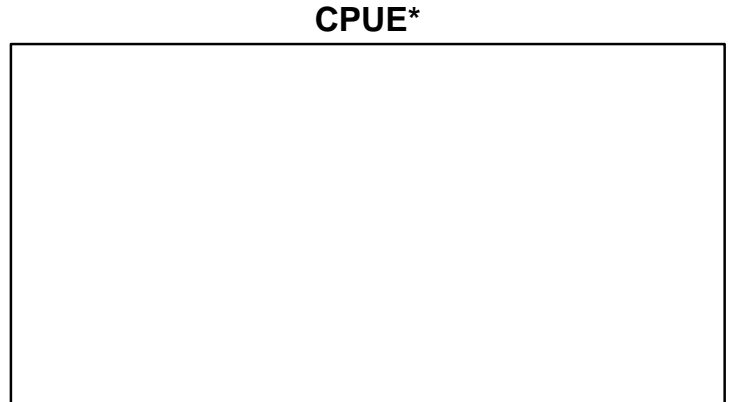
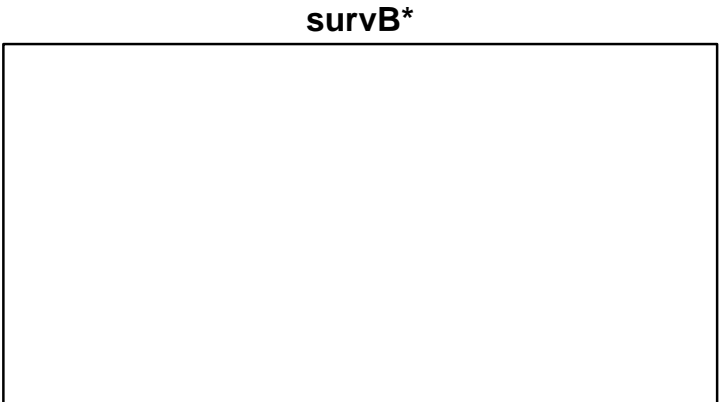
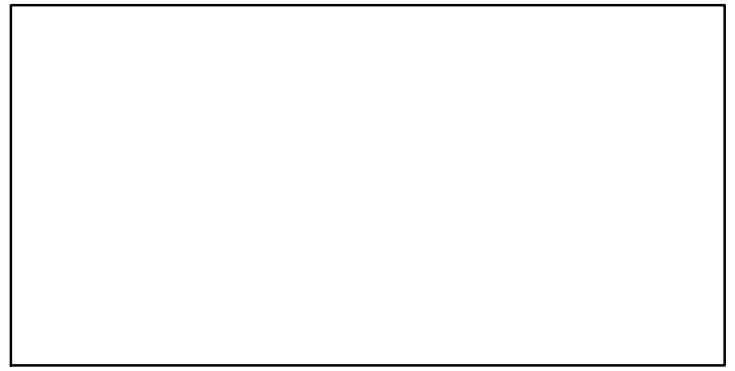
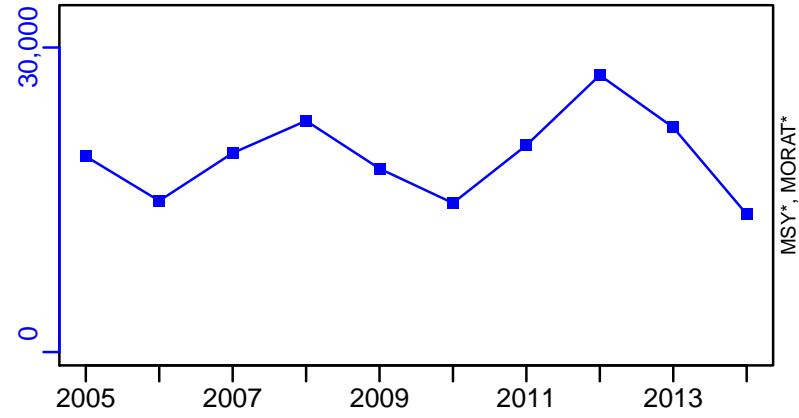
R-E00 (2005-2014-OSIO)



Mediterranean horse mackerel Black Sea [MHMACKMEDGSA29]

TC-MT, TL*, RecC* (2005-2014-OSIO)

TAC*, Cpair*, Cadv*



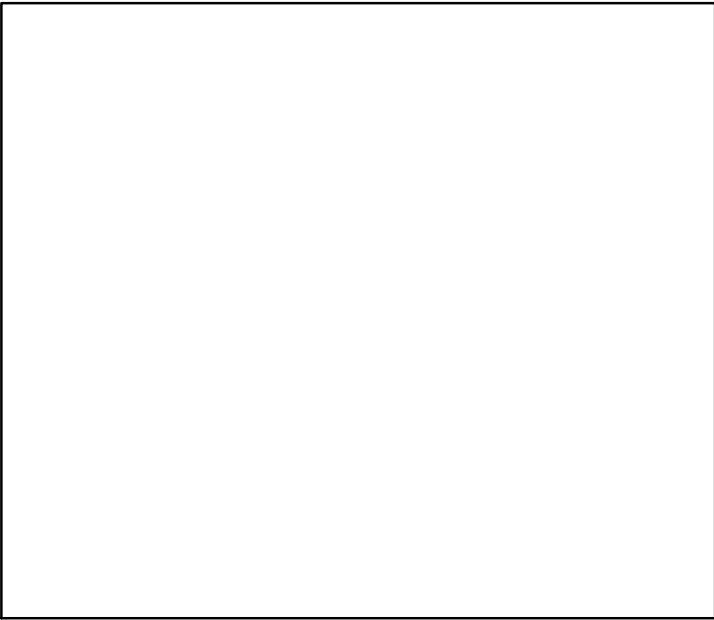
Japanese Spanish mackerel East China Sea [SPANMACKECS]

Metadata	
Scientific Name	Scomberomorus niphonius
Current Assess ID	FAFRFJ-SPANMACKECS-1984-2013-JPNIMP2016
Area	East China Sea
Management Authority	Fisheries Agency of Japan
Assessor	Fisheries Agency and Fisheries Research Agency of Japan
Asmts in RAM	2013

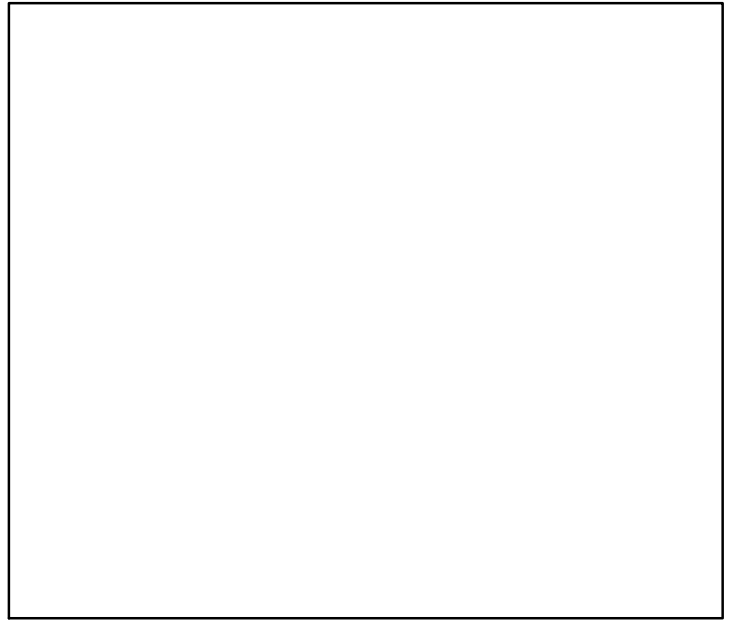
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2013	12,200		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

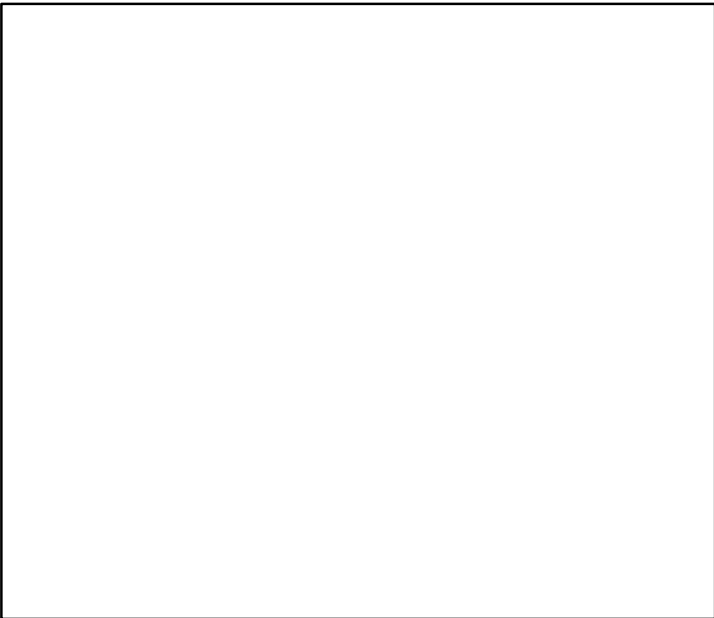
Kobe MSY*



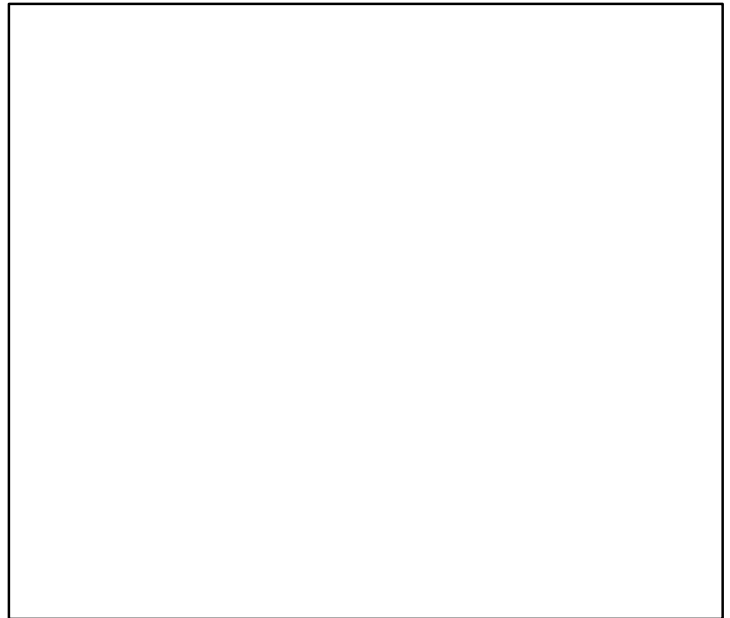
Kobe MGT*



Spawner Recruit*



Production*



◆ Start Year ◆ End Year * No Data

Japanese Spanish mackerel East China Sea [SPANMACKECS]

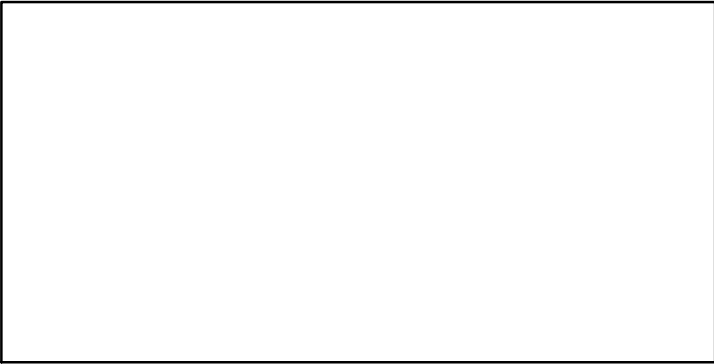
TB*



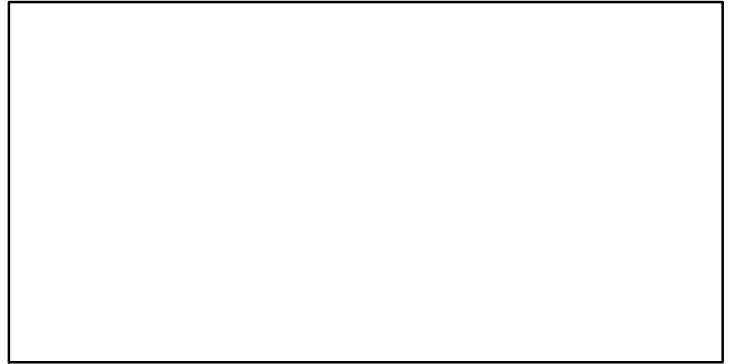
SSB*



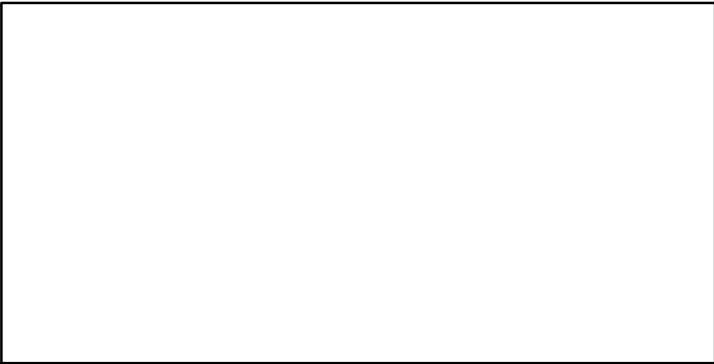
TN *



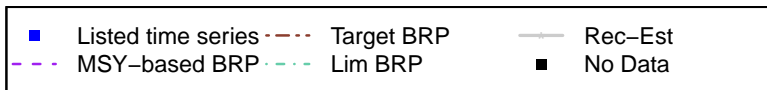
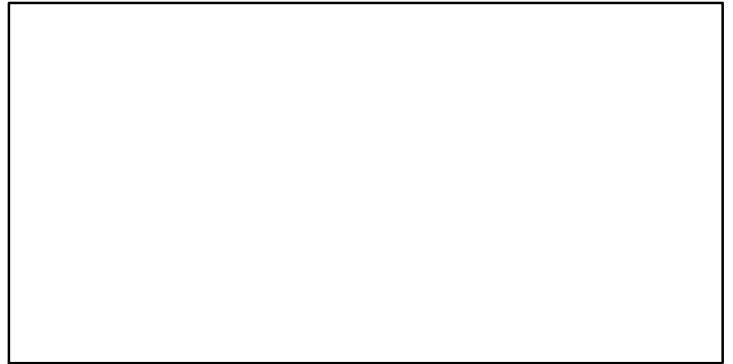
F*



ER*



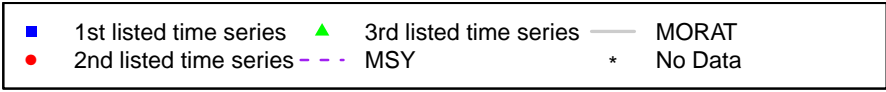
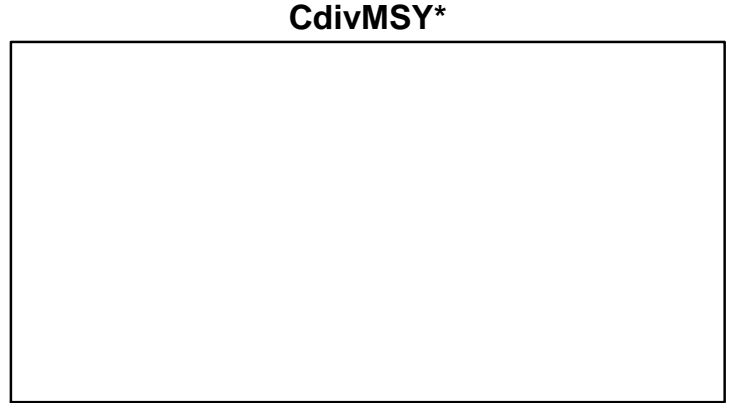
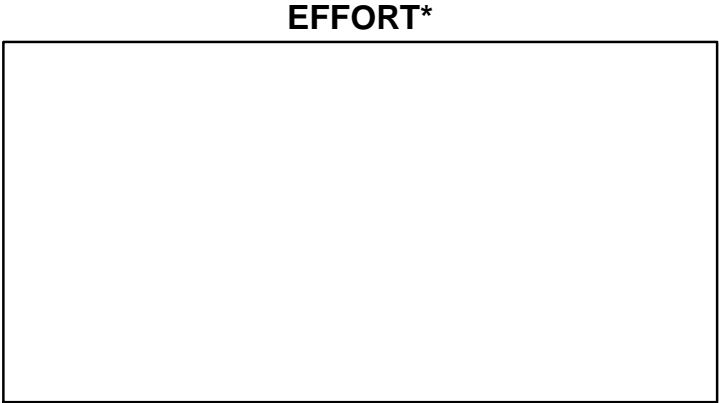
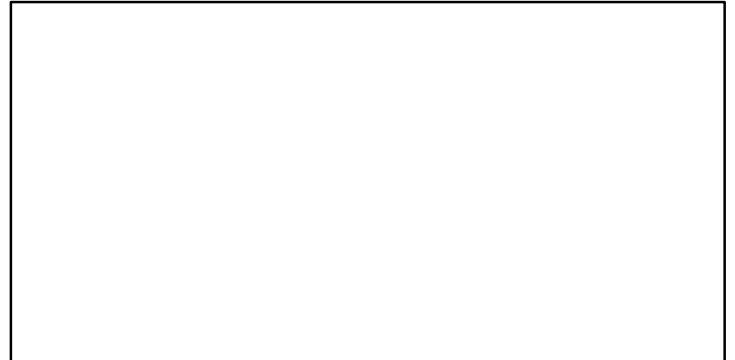
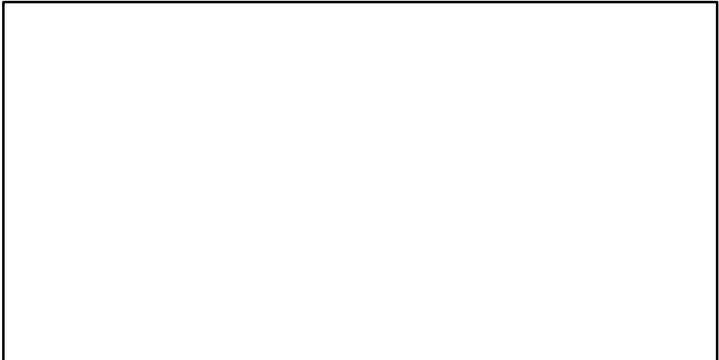
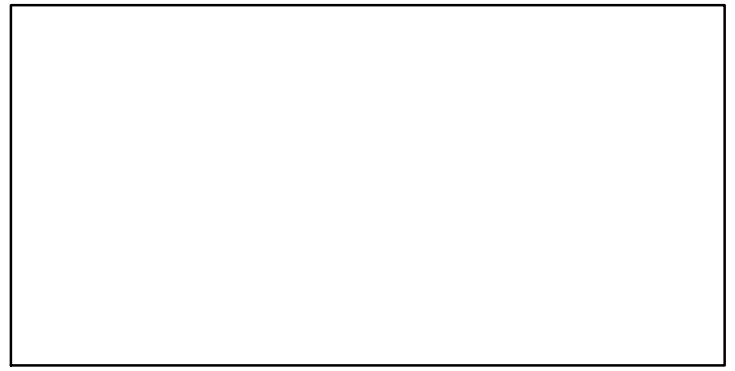
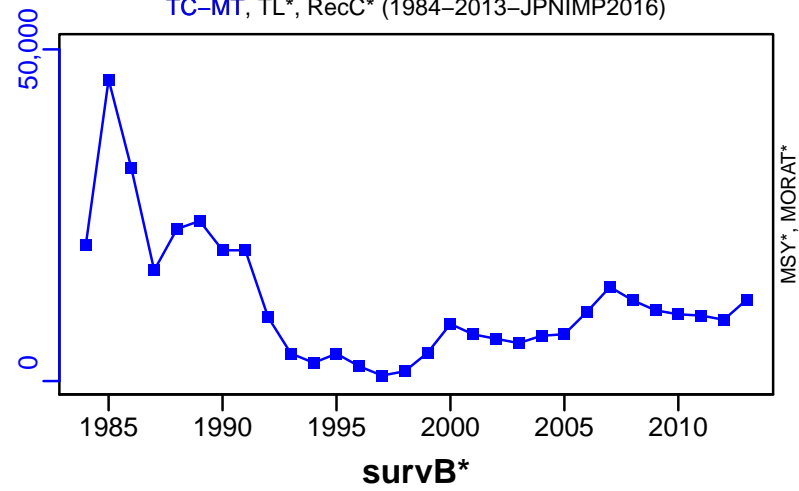
Recruits*



Japanese Spanish mackerel East China Sea [SPANMACKECS]

TC-MT, TL*, RecC* (1984-2013-JPNIMP2016)

TAC*, Cpair*, Cadv*



Spanish mackerel Gulf of Mexico [SPANMACKGM]

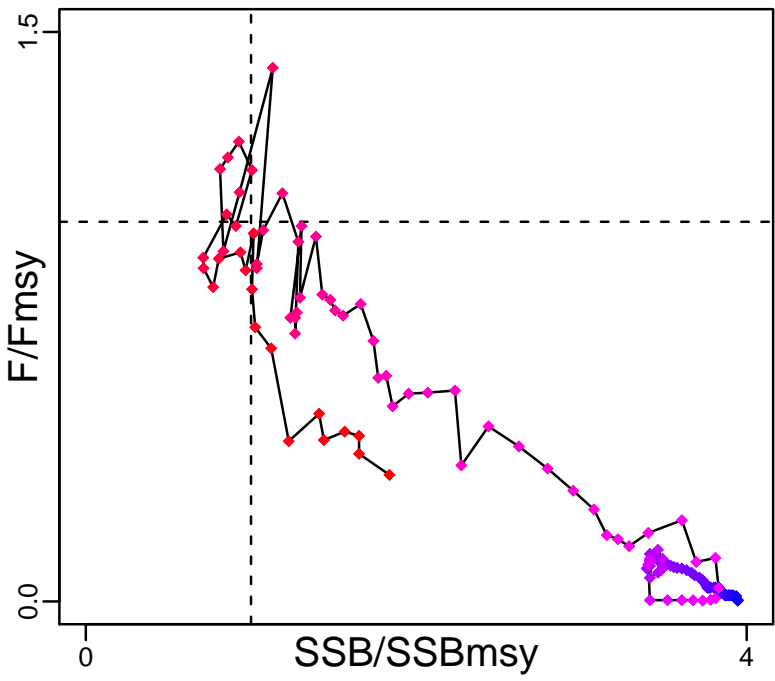
Metadata	
Scientific Name	Scomberomorus maculatus
Current Assess ID	SEFSC-SPANMACKGM-1886-2011-HIVELY
Area	Gulf of Mexico
Management Authority	National Marine Fisheries Service, US national management
Assessor	Southeast Fisheries Science Center
Asmts in RAM	2011

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-pr-MT	2011	10,339
Fmsy	Fmsy-pr-1/yr	2011	0.36
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

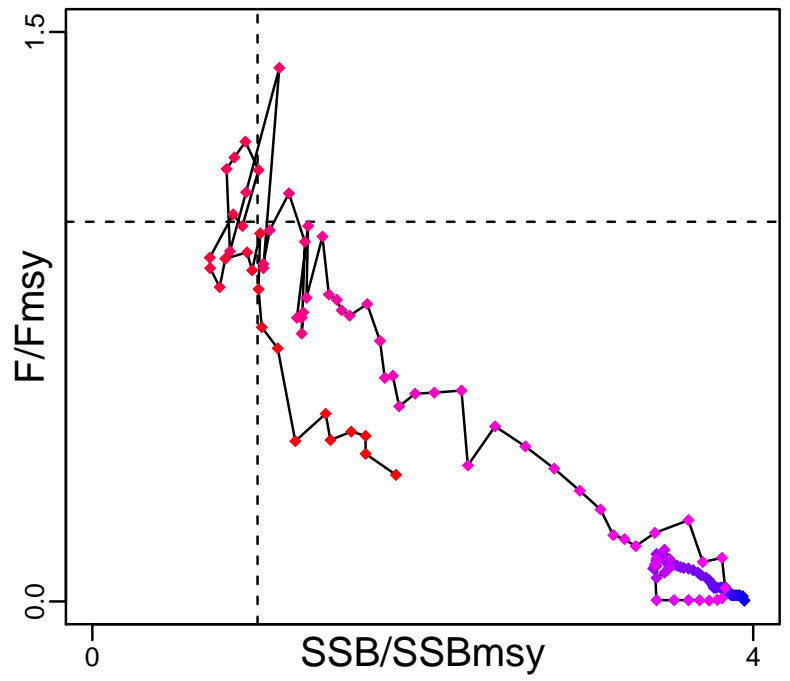
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2011	28,400	-	-
SSB	SSB-MT	2011	19,000	-	0.2+
TN	-	-	-	-	-
R	R-E00	2011	31,500,000	-	-
F	F-1/yr	2011	0.12	-	-
ER	ER-calc-ratio	2011	0.023	-	-
TC	-	-	-	-	-
TL	TL-MT	2011	567	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	SSB-MT/SSBmsy-pr-MT	2011	1.838	-	-
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2011	0.333	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-

Spanish mackerel Gulf of Mexico [SPANMACKGM]

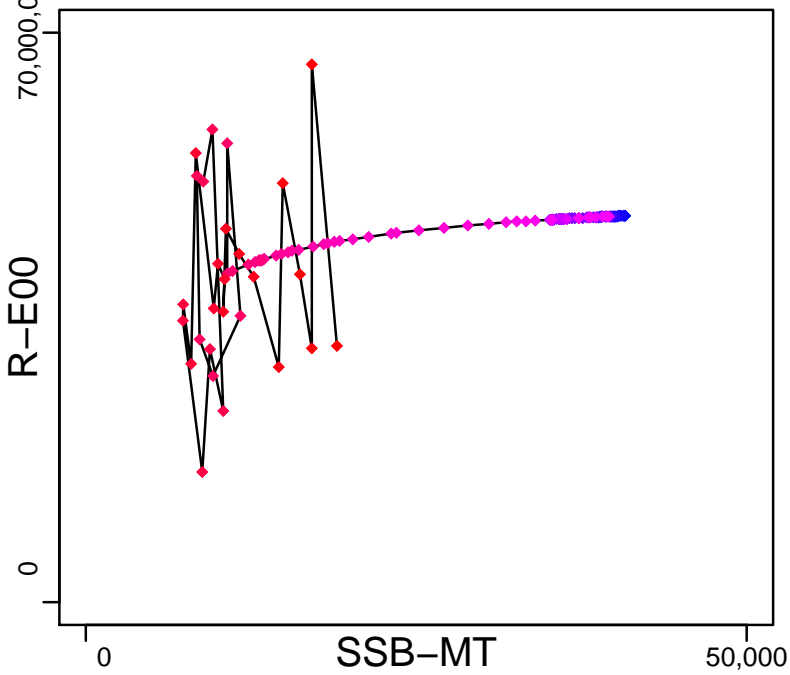
Kobe MSYpref (1886–2011–HIVELY)



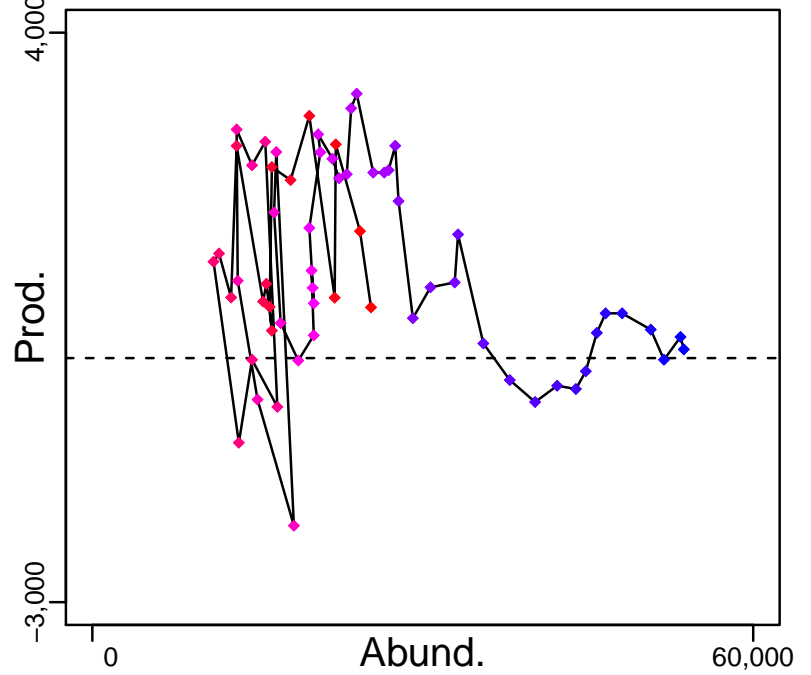
Kobe MGTpref (1886–2011–HIVELY)



Spawner Recruit (1886–2011–HIVELY)



Production (1886–2011–HIVELY)

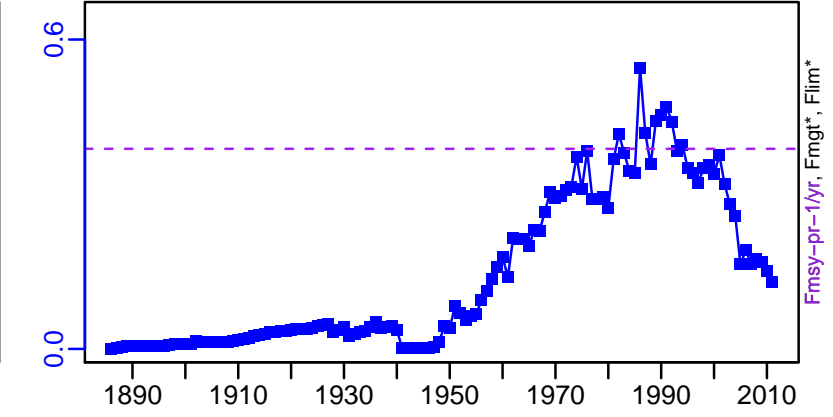
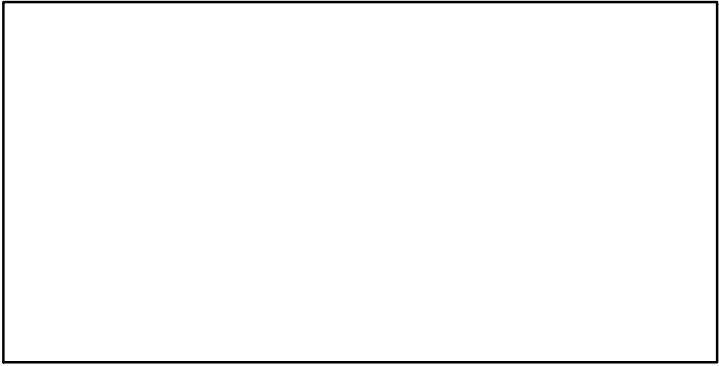
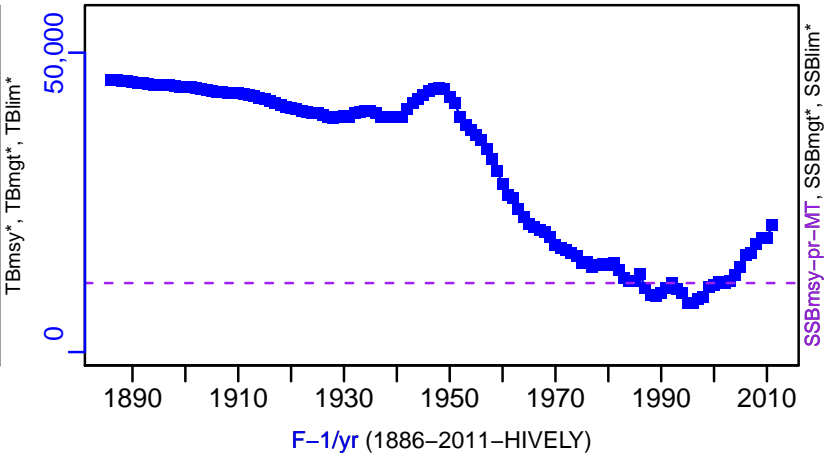
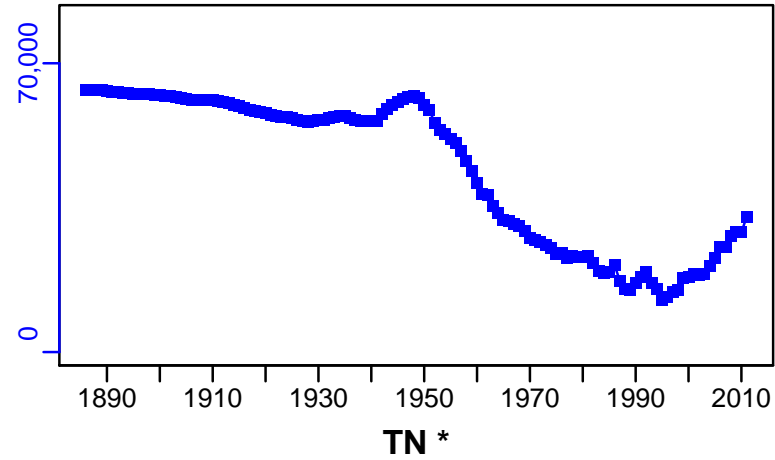


◆ Start Year ◆ End Year * No Data

Spanish mackerel Gulf of Mexico [SPANMACKGM]

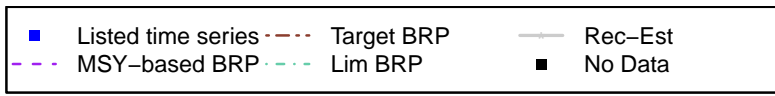
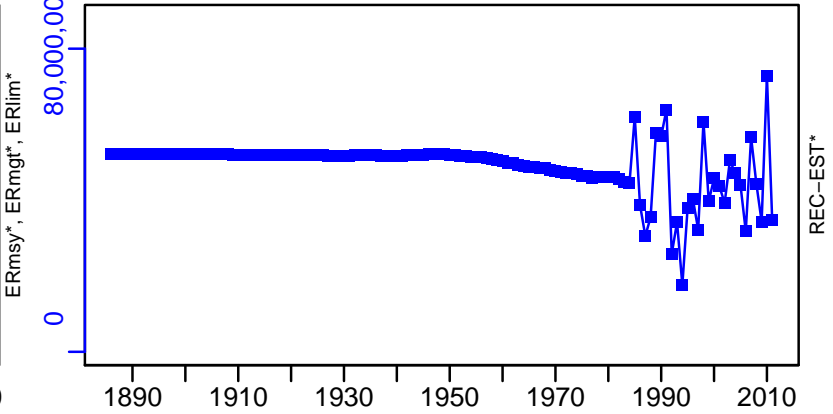
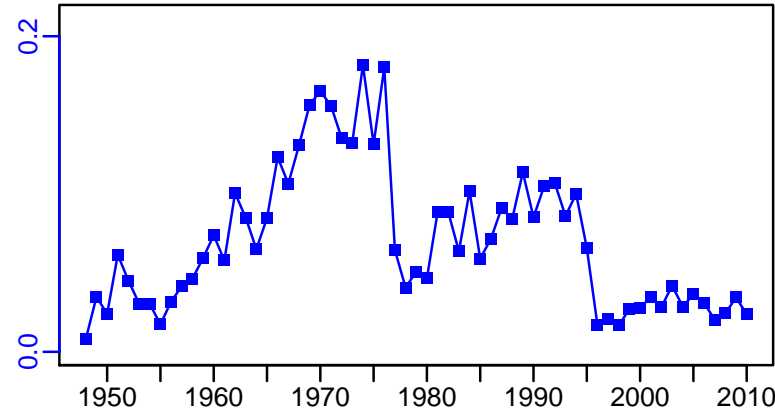
TB-MT (1886-2011-HIVELY)

SSB-MT (1886-2011-HIVELY)



ER-calc-ratio (1886-2011-HIVELY)

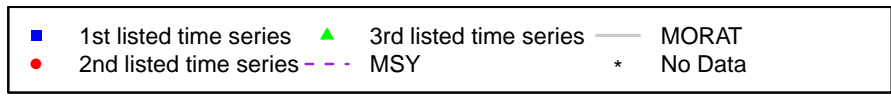
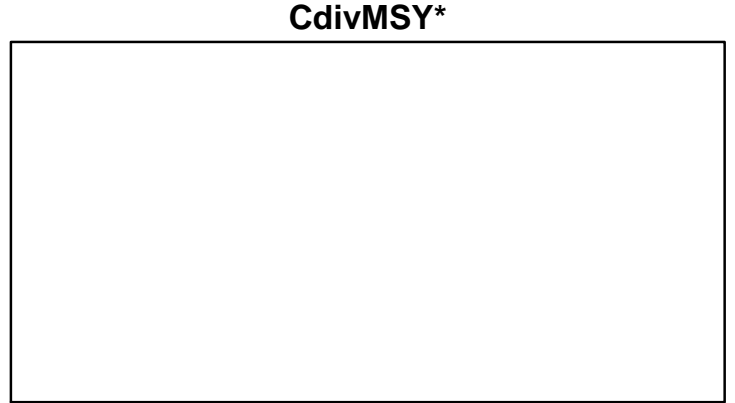
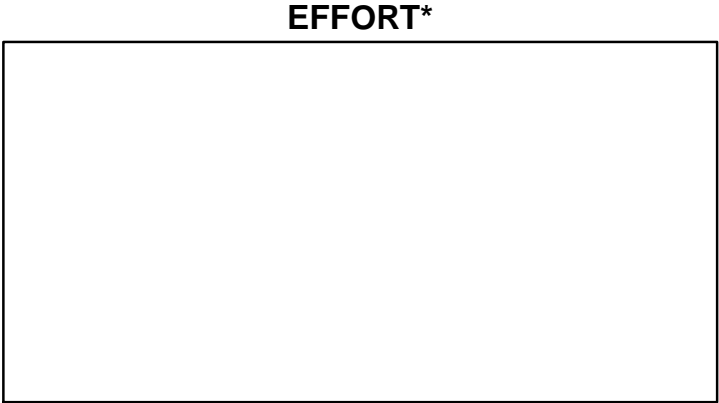
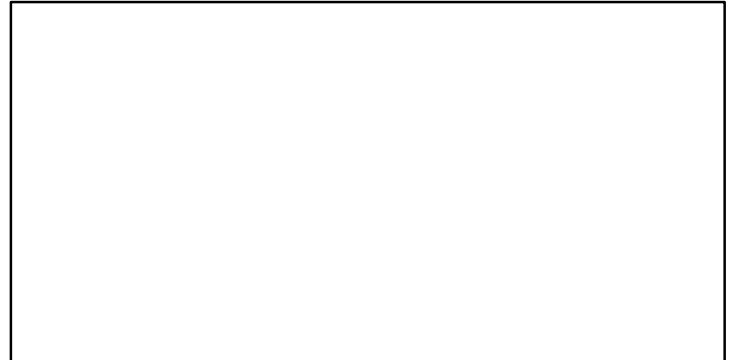
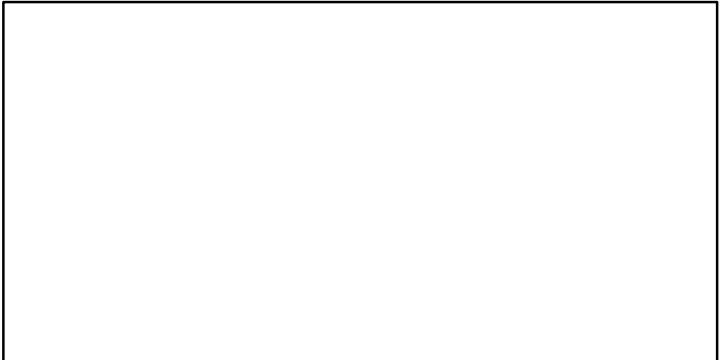
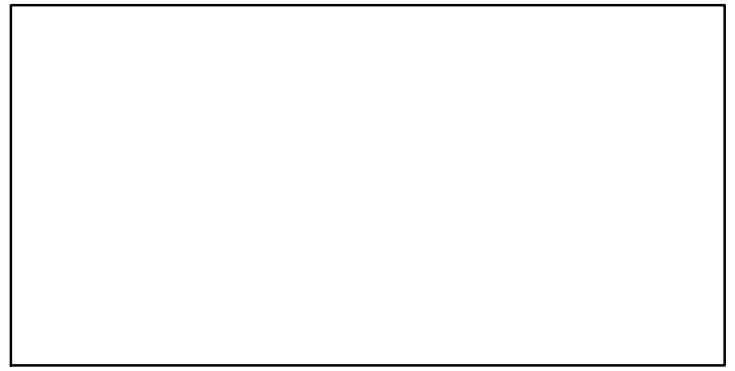
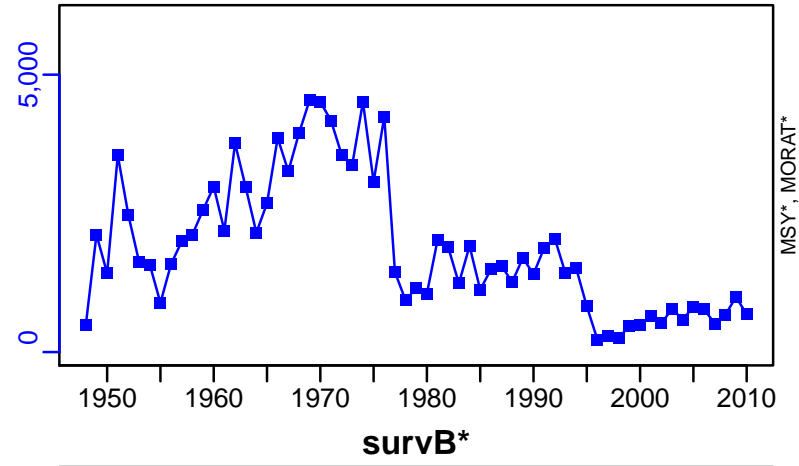
R-E00 (1886-2011-HIVELY)



Spanish mackerel Gulf of Mexico [SPANMACKGM]

TL-MT, TC*, RecC* (1886-2011-HIVELY)

TAC*, Cpair*, Cadv*



Spanish mackerel Southern Atlantic Coast [SPANMACKSATLC]

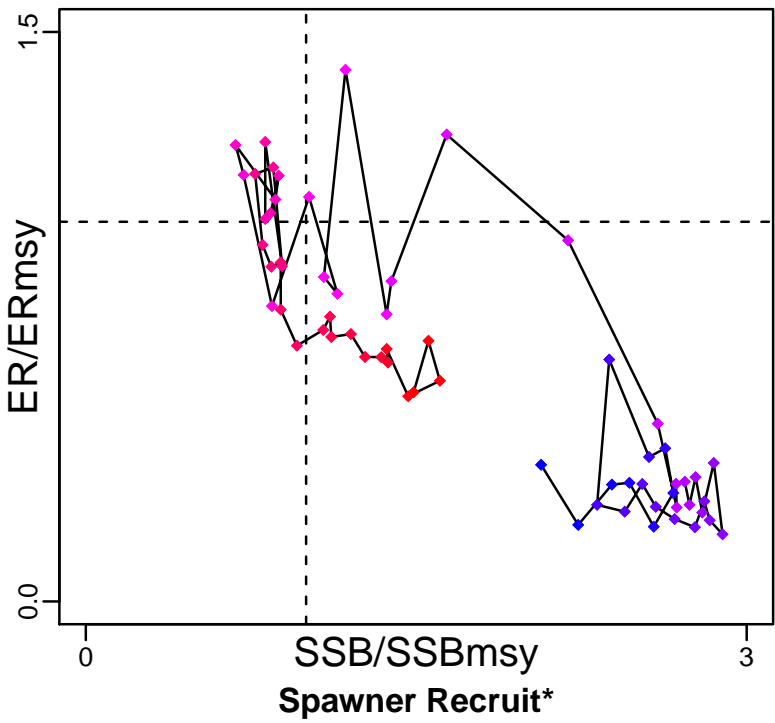
Metadata	
Scientific Name	Scomberomorus maculatus
Current Assess ID	SEFSC-SPANMACKSATLC-1950-2012-HIVELY
Area	Southern Atlantic coast
Management Authority	National Marine Fisheries Service, US national management
Assessor	Southeast Fisheries Science Center
Asmts in RAM	2012

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-MT	2012	9548
SSBmsy	SSBmsy-MT	2012	3266
Fmsy	Fmsy-pr-1/yr	2012	0.69
ERmsy	ERmsy-calc-ratio	2012	0.288
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2012	3266
Fmgt	Fmgt-1/yr	2012	0.518
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2012	2750
M	M-1/yr	2012	0.35
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

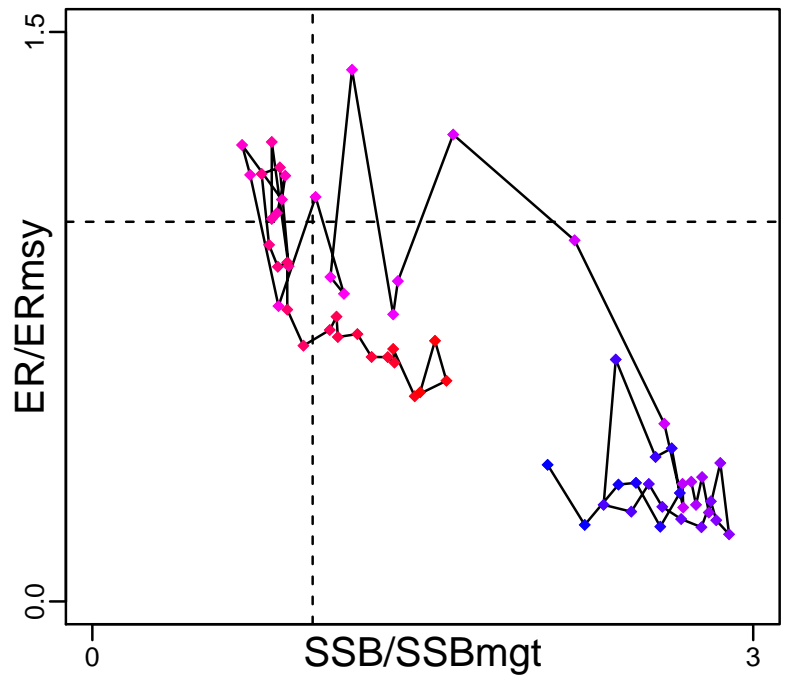
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2012	11,400	-	-
SSB	SSB-MT	2012	4860	Females	0.7+
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-1/yr	2012	0.361	-	-
ER	ER-calc-ratio	2012	0.159	-	-
TC	-	-	-	-	-
TL	TL-MT	2012	1920	-	-
TB/TBmsy	TB-MT/TBmsy-MT	2012	1.194	-	-
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2012	1.488	-	-
F/Fmsy	F-1/yr/Fmsy-pr-1/yr	2012	0.523	-	-
ER/ERmsy	ER-calc-ratio/ERmsy-calc-ratio	2012	0.551	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2012	1.488	-	-
F/Fmgt	F-1/yr/Fmgt-1/yr	2012	0.698	-	-
ER/ERmgt	-	-	-	-	-

Spanish mackerel Southern Atlantic Coast [SPANMACKSATLC]

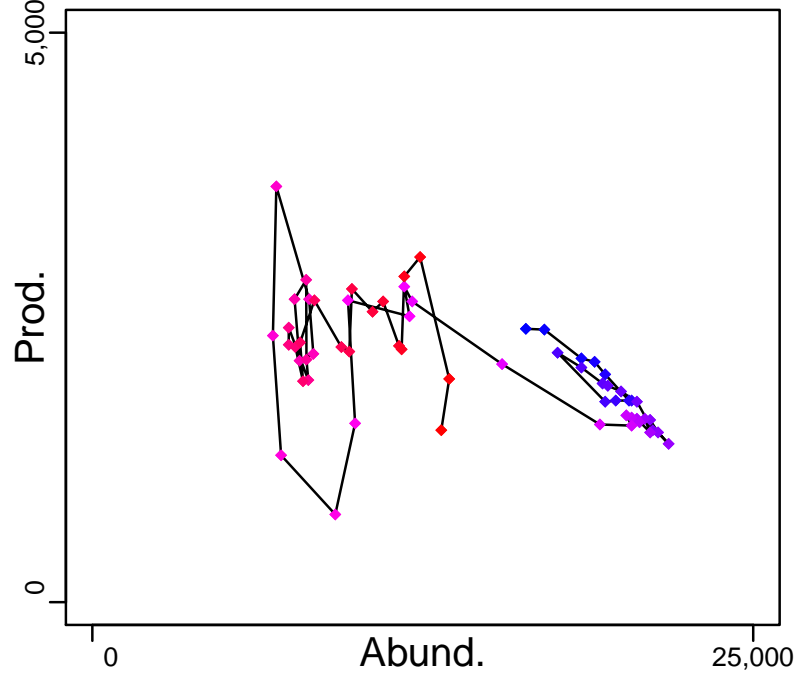
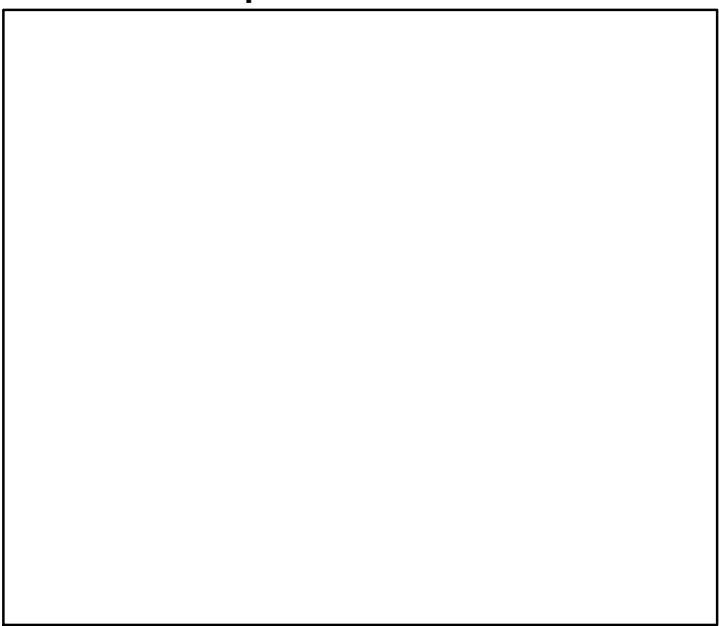
Kobe MSYpref (1950–2012–HIVELY)



Kobe MGTpref (1950–2012–HIVELY)



Production (1950–2012–HIVELY)

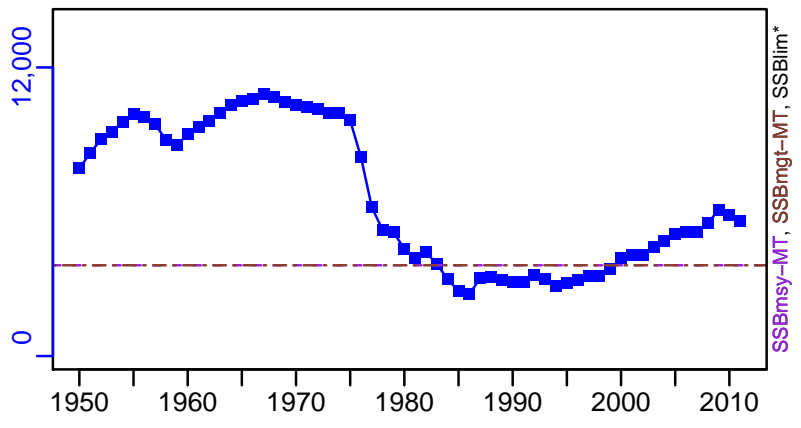
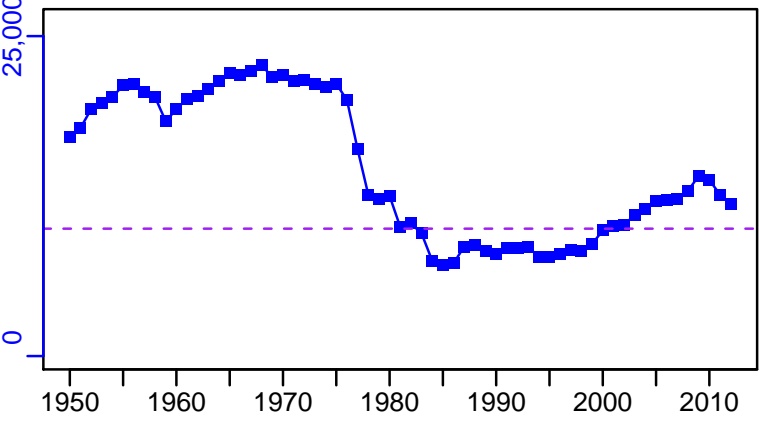


◆ Start Year ◆ End Year * No Data

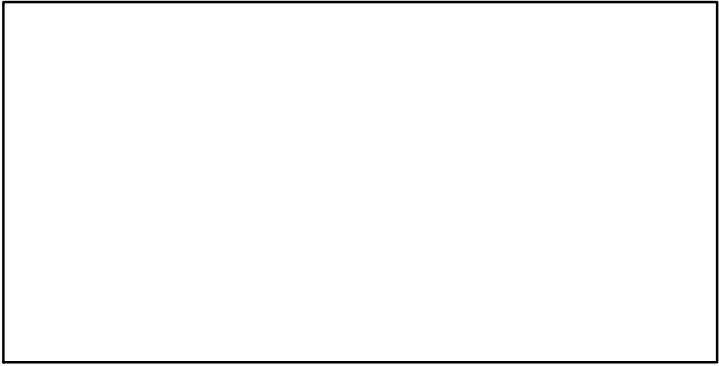
Spanish mackerel Southern Atlantic Coast [SPANMACKSATLC]

TB-MT (1950-2012-HIVELY)

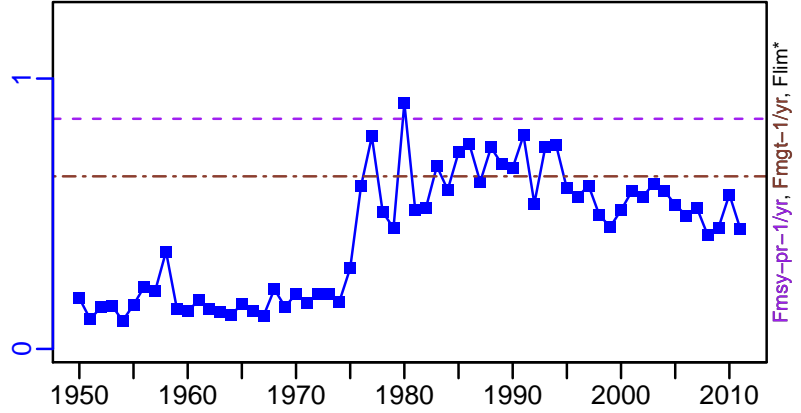
SSB-MT (1950-2012-HIVELY)



TN *



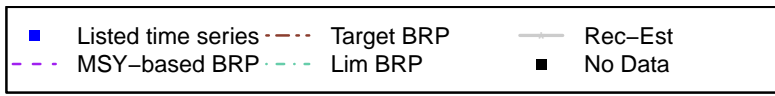
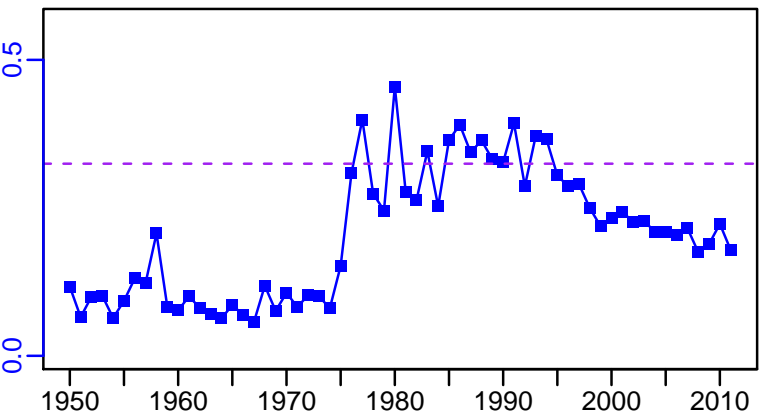
F-1/yr (1950-2012-HIVELY)



Recruits*



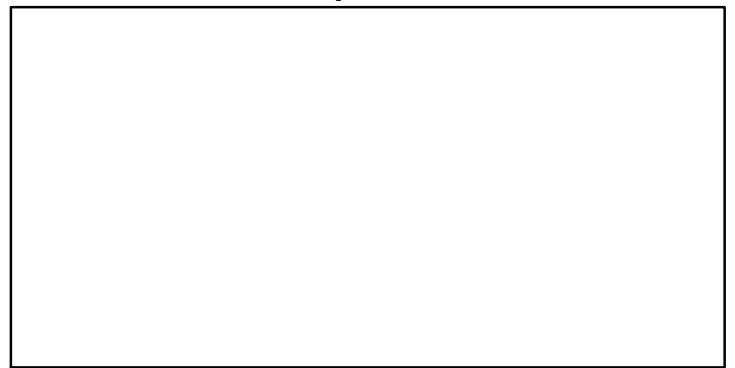
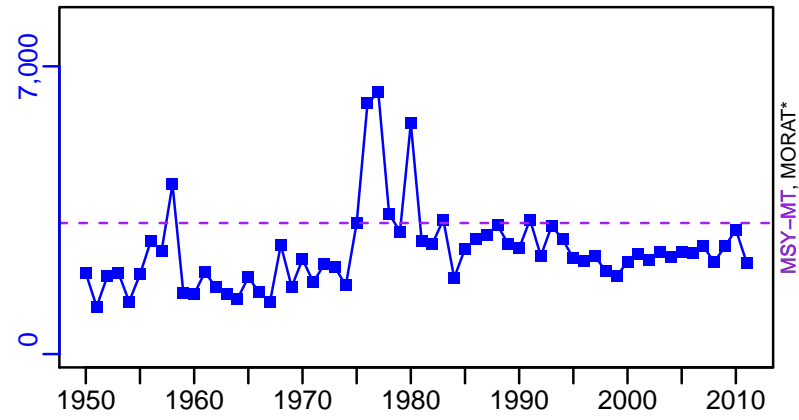
ER-calc-ratio (1950-2012-HIVELY)



Spanish mackerel Southern Atlantic Coast [SPANMACKSATLC]

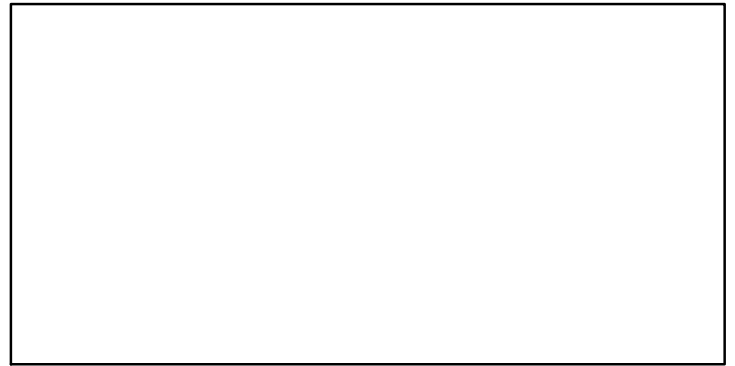
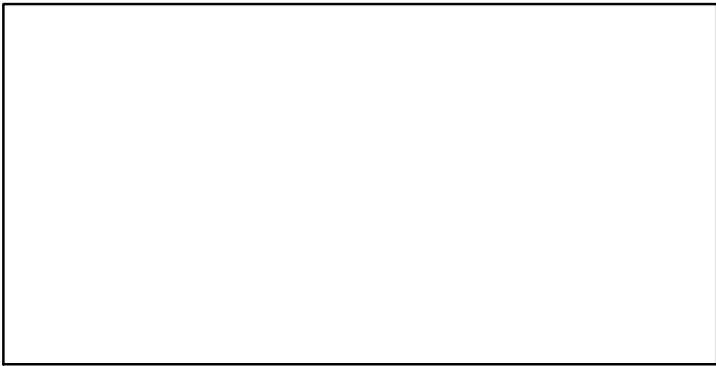
TL-MT, TC*, RecC* (1950-2012-HIVELY)

TAC*, Cpair*, Cadv*



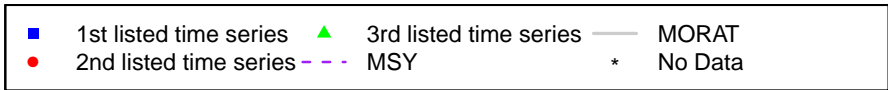
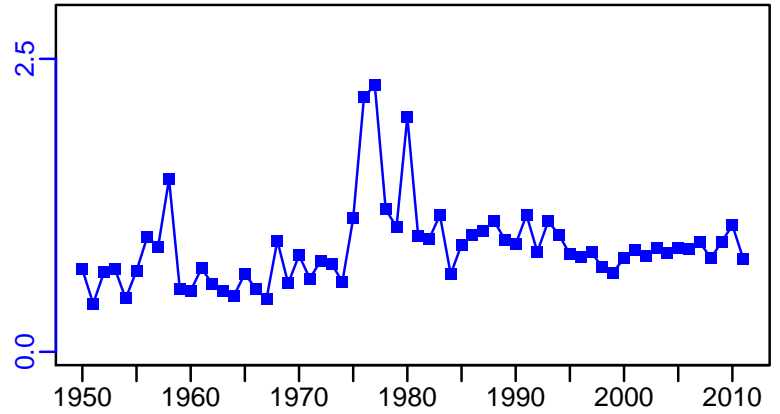
survB*

CPUE*



EFFORT*

CdivMSY-ratio (1950-2012-HIVELY)



Japanese Spanish mackerel Inland Sea of Japan [SPANMACKSETO]

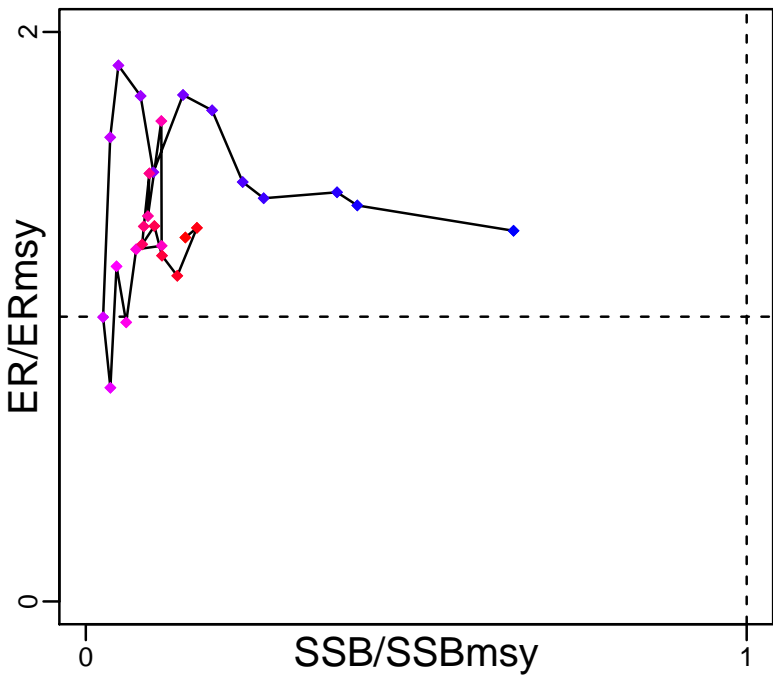
Metadata	
Scientific Name	Scomberomorus niphonius
Current Assess ID	FAFRFJ-SPANMACKSETO-1987-2013-JPNIMP2016
Area	Inland Sea of Japan
Management Authority	Fisheries Agency of Japan
Assessor	Fisheries Agency and Fisheries Research Agency of Japan
Asmts in RAM	2010, 2013

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-calc-MT	2013	24,474
SSBmsy	SSBmsy-MT	2013	16,707
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2013	0.283
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2013	6926
M	M-1/yr	2013	0.3
TBlim	-	-	-
SSBlim	SSBlim-MT	2010	3979
Flim	-	-	-
ERlim	-	-	-

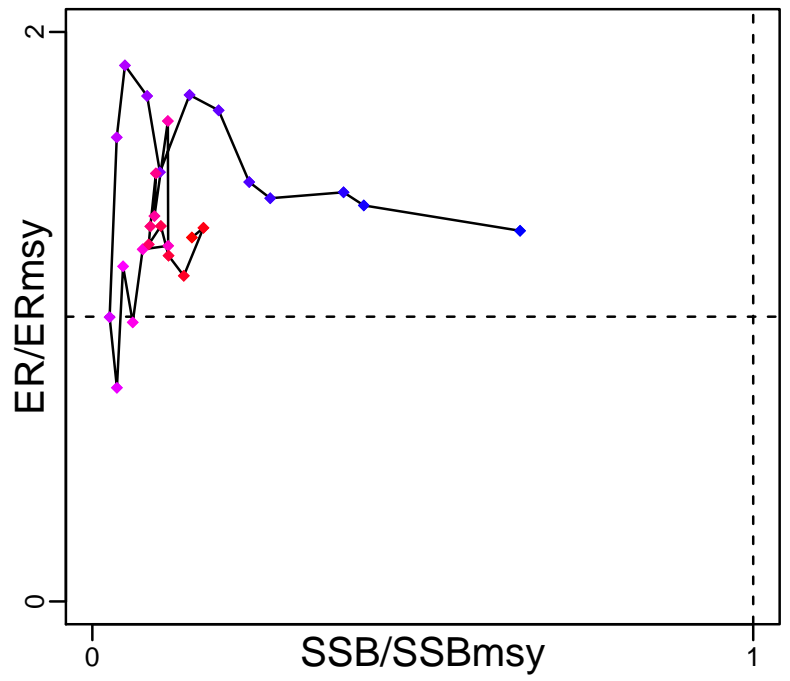
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2013	4930	-	0
SSB	SSB-MT	2013	2520	Both	1
TN	-	-	-	-	-
R	R-E00	2013	1,410,000	-	0
F	F-1/yr	2010	0.93	-	0 to 5
ER	ER-calc-ratio	2013	0.362	-	-
TC	TC-MT	2013	1780		
TL	-	-	-		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2013	0.201		
SSB/SSBmsy	SSB-MT/SSBmsy-MT	2013	0.151		
F/Fmsy	-	-	-		
ER/ERmsy	ER-calc-ratio/ERmsy-ratio	2013	1.278		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Japanese Spanish mackerel Inland Sea of Japan [SPANMACKSETO]

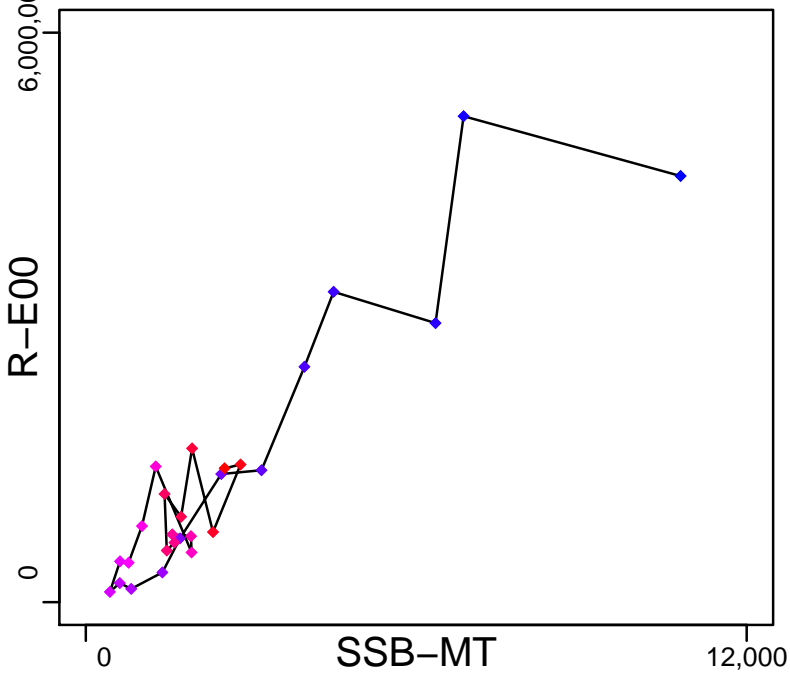
Kobe MSYpref (1987–2013–JPNIMP2016)



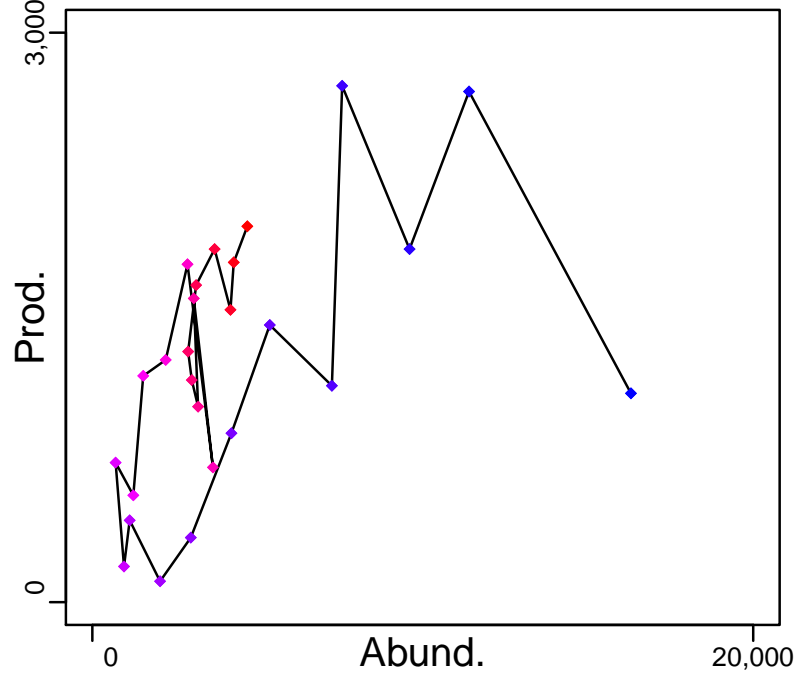
Kobe MGTpref (1987–2013–JPNIMP2016)



Spawner Recruit (1987–2013–JPNIMP2016)



Production (1987–2013–JPNIMP2016)

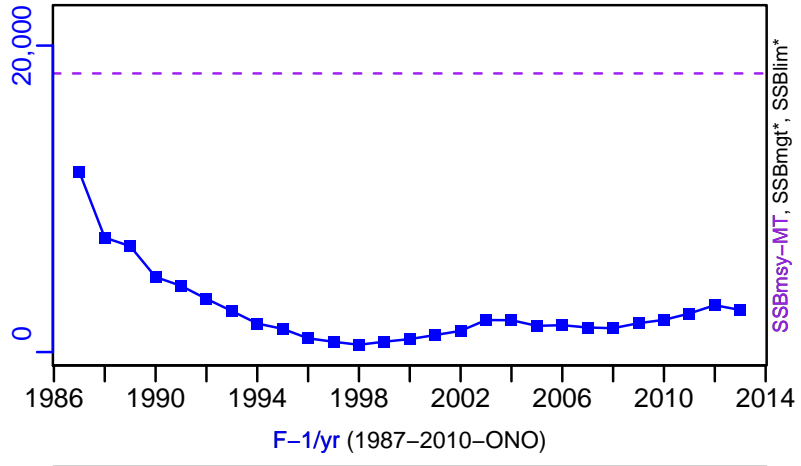
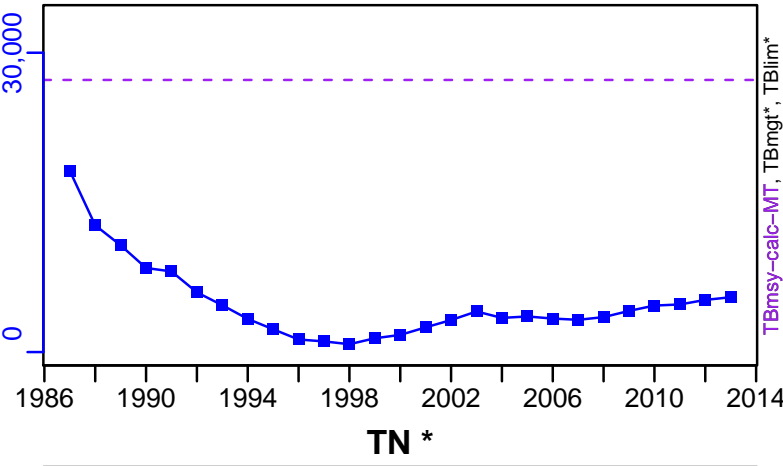


◆ Start Year ◆ End Year * No Data

Japanese Spanish mackerel Inland Sea of Japan [SPANMACKSETO]

TB-MT (1987-2013-JPNIMP2016)

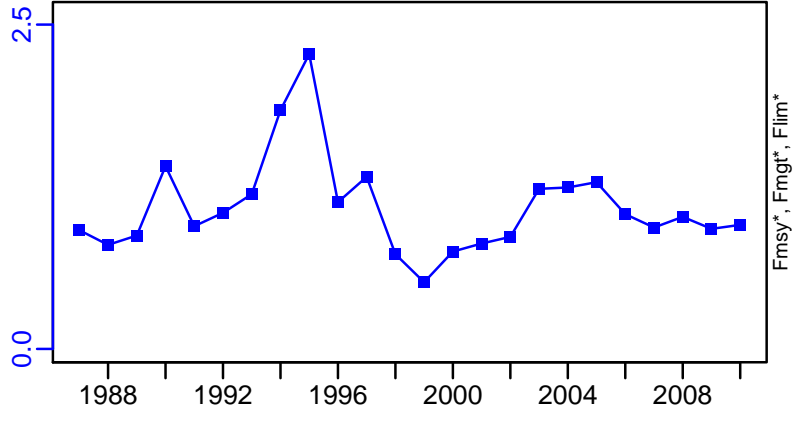
SSB-MT (1987-2013-JPNIMP2016)



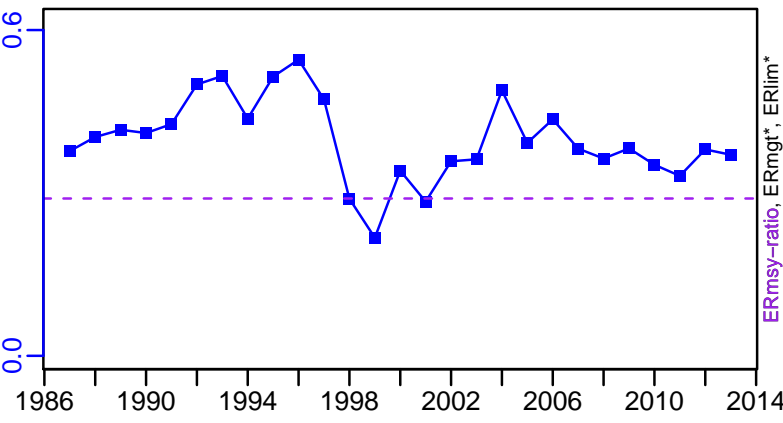
TN *



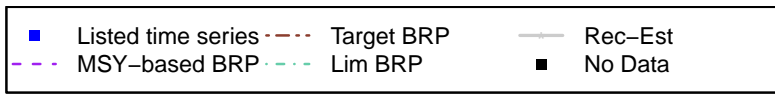
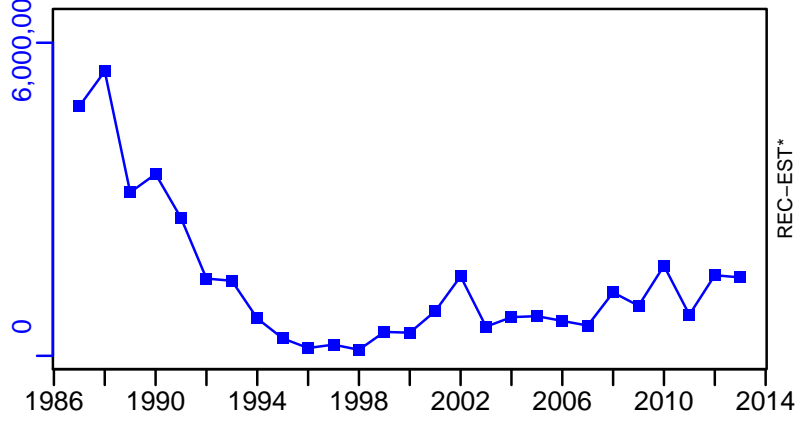
F-1/yr (1987-2010-ONO)



ER-calc-ratio (1987-2013-JPNIMP2016)



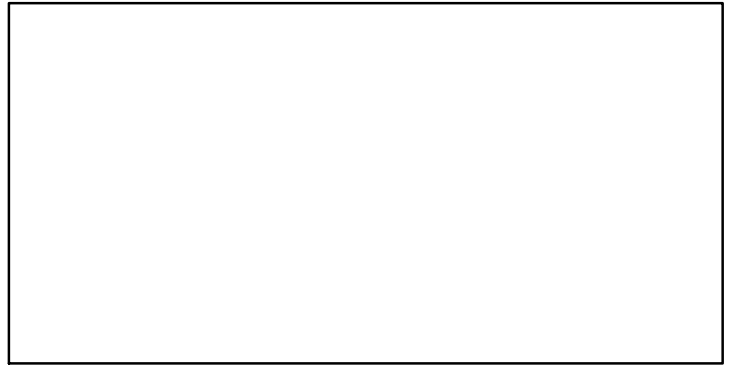
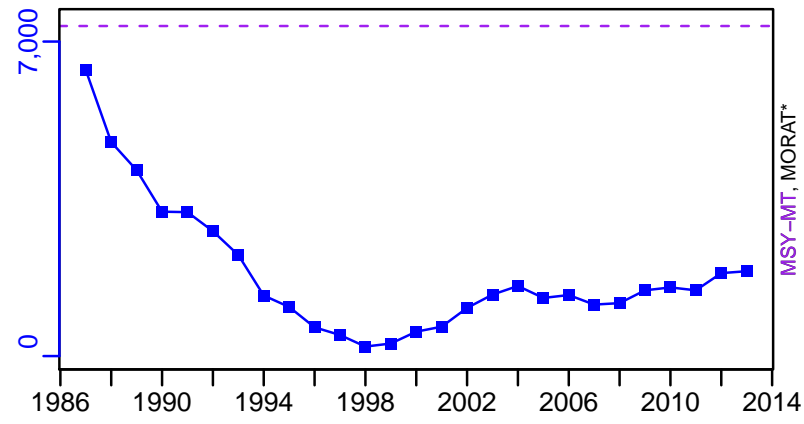
R-E00 (1987-2013-JPNIMP2016)



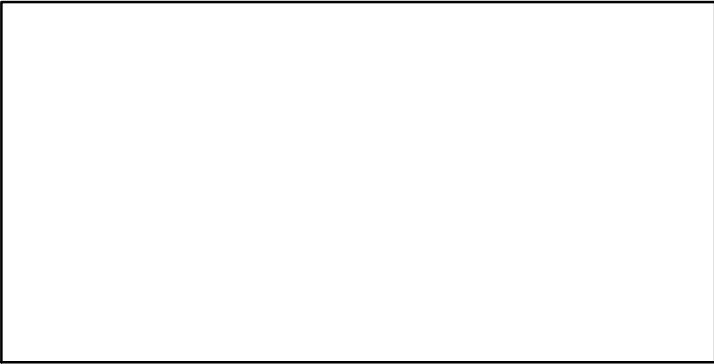
Japanese Spanish mackerel Inland Sea of Japan [SPANMACKSETO]

TC-MT, TL*, RecC* (1987-2013-JPNIMP2016)

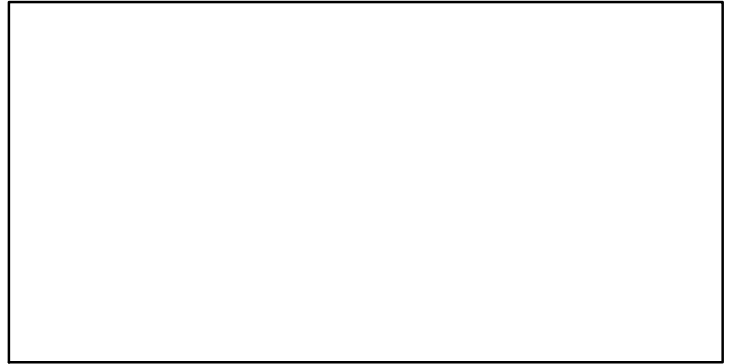
TAC*, Cpair*, Cadv*



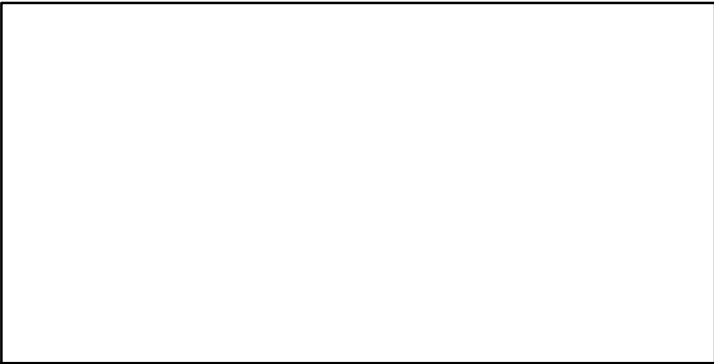
survB*



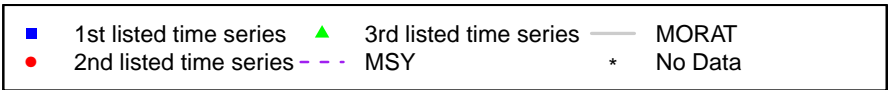
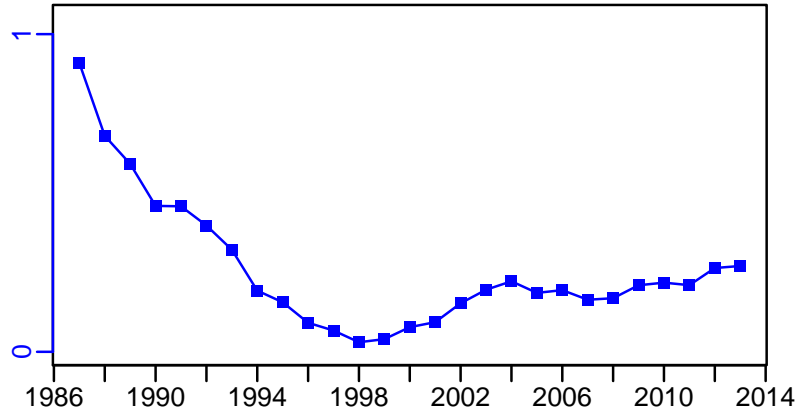
CPUE*



EFFORT*



CdivMSY-ratio (1987-2013-JPNIMP2016)



Trevally New Zealand Areas TRE 7 [TREVALLYTRE7]

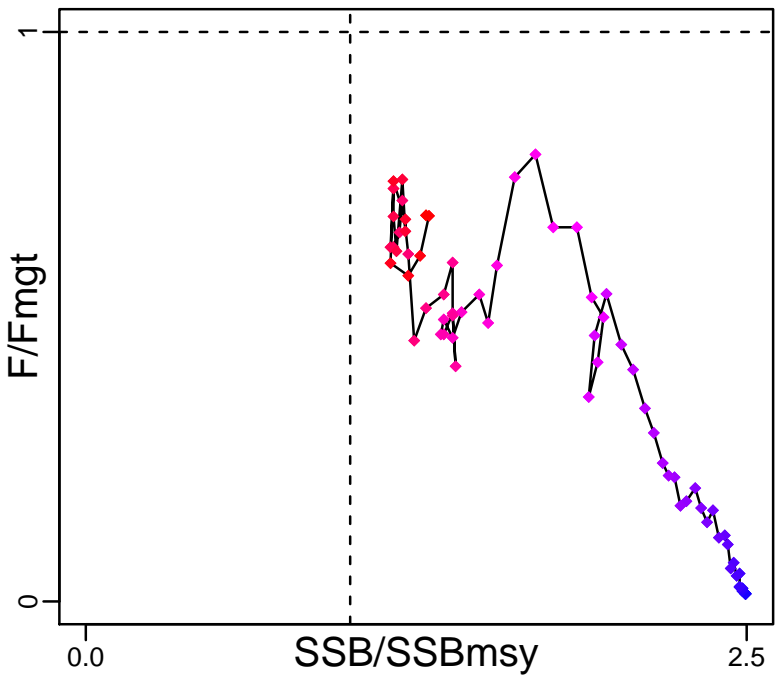
Metadata	
Scientific Name	Pseudocaranx dentex
Current Assess ID	NZMFishINSHOREWG-TREVALLYTRE7-1944-2014-LANGLEY
Area	New Zealand Areas TRE 7
Management Authority	Ministry of Fisheries, New Zealand national management
Assessor	Inshore Working Group
Asmts in RAM	2005, 2014

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

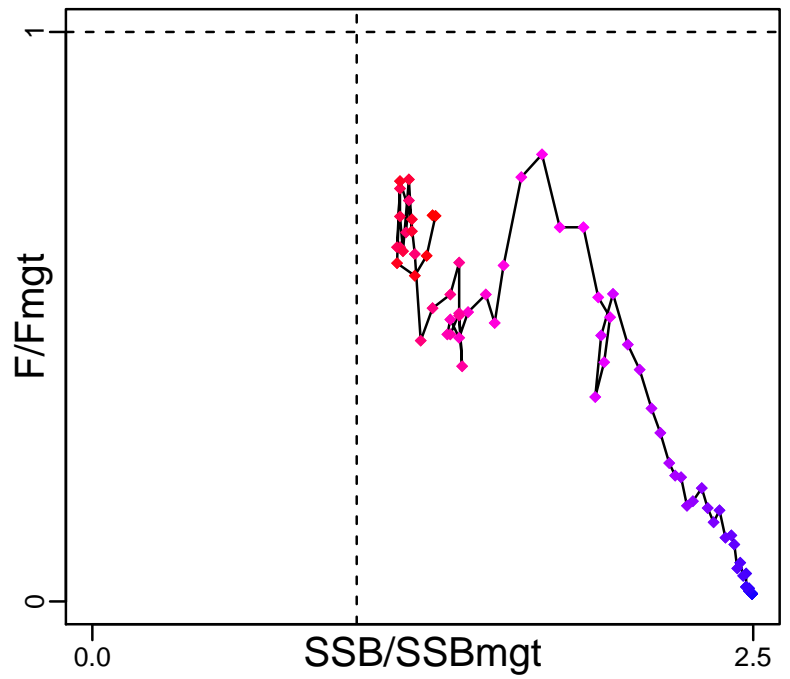
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2005	28,200	-	1
SSB	SSB-MT	2014	11,500	Females	4 to 40+
TN	-	-	-	-	-
R	R-E00	2014	3,530,000	Both	0
F	F-1/yr	2005	0.094	-	-
ER	ER-ratio	2005	0.087	-	-
TC	TC-MT	2014	1530		
TL	TL-MT	2014	1440		
TB/TBmsy	TB-MT/TBmsy-calc-MT	2005	1.045		
SSB/SSBmsy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

Trevally New Zealand Areas TRE 7 [TREVALLYTRE7]

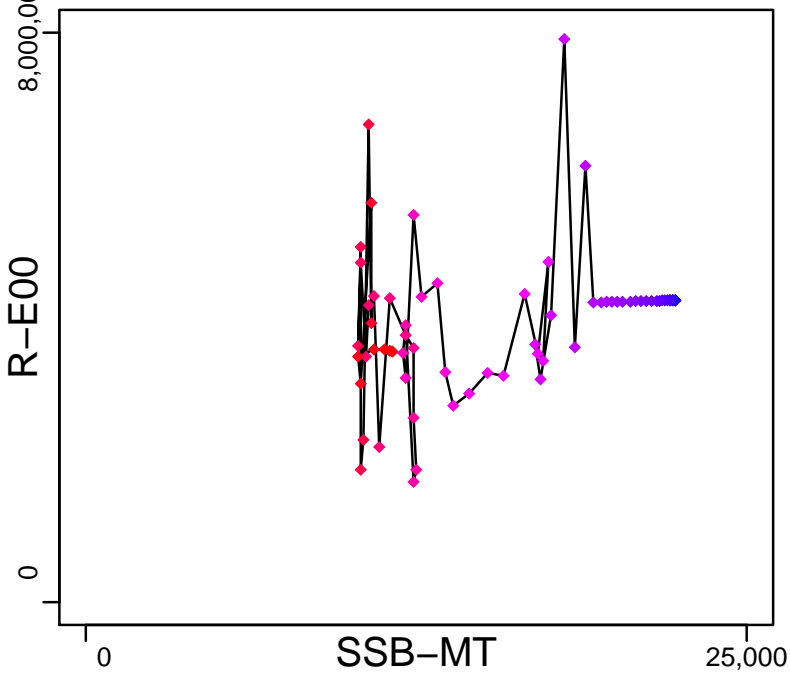
Kobe MSYpref (1944–2014–LANGLEY)



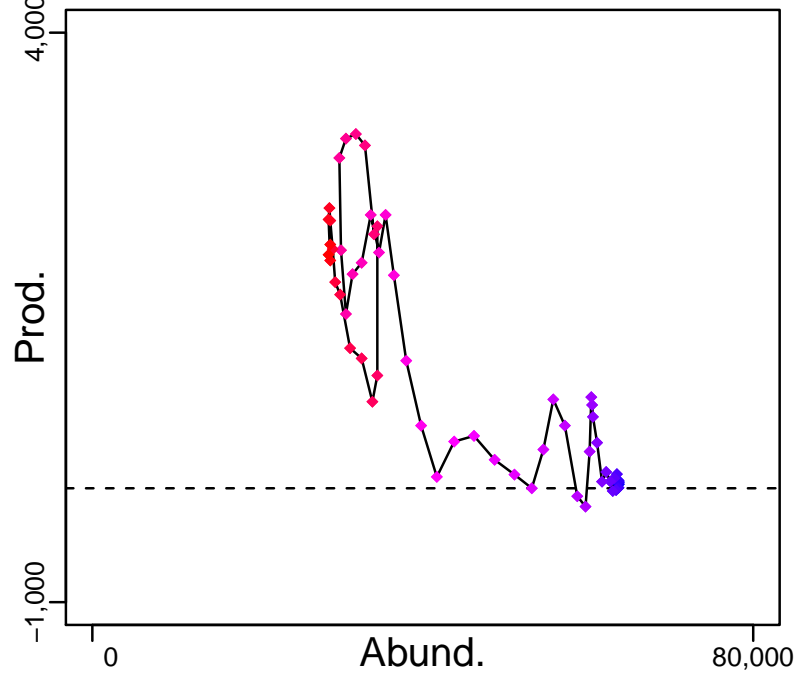
Kobe MGTpref (1944–2014–LANGLEY)



Spawner Recruit (1944–2014–LANGLEY)



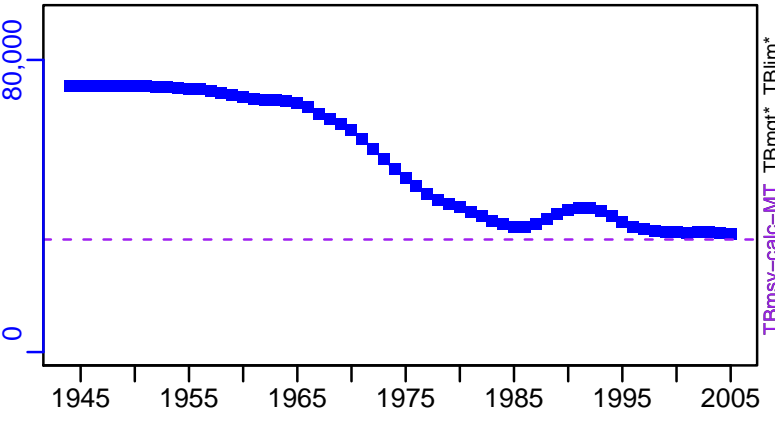
Production (1944–2005–JENSEN)



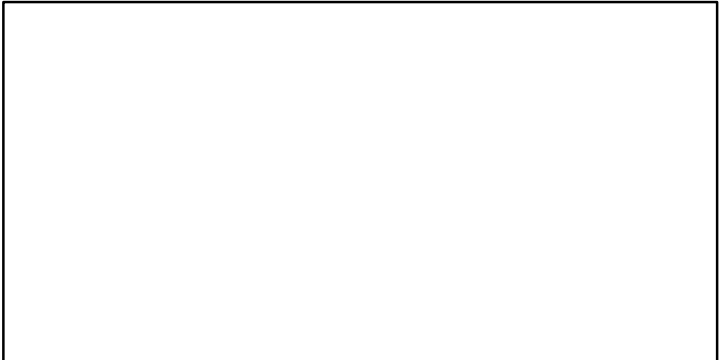
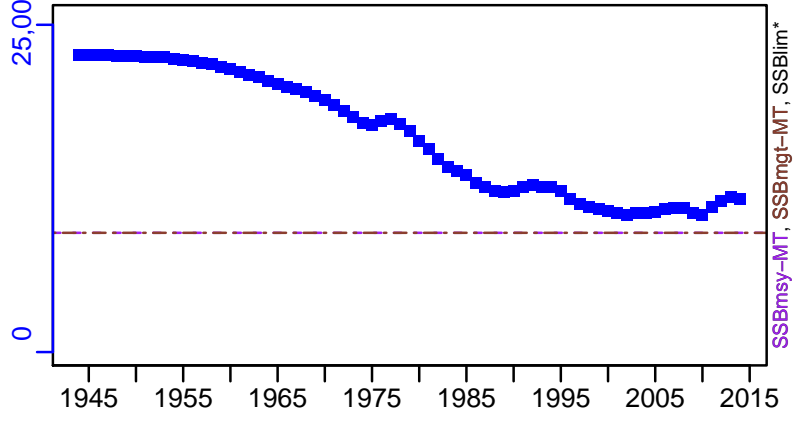
◆ Start Year ◆ End Year * No Data

Trevally New Zealand Areas TRE 7 [TREVALLYTRE7]

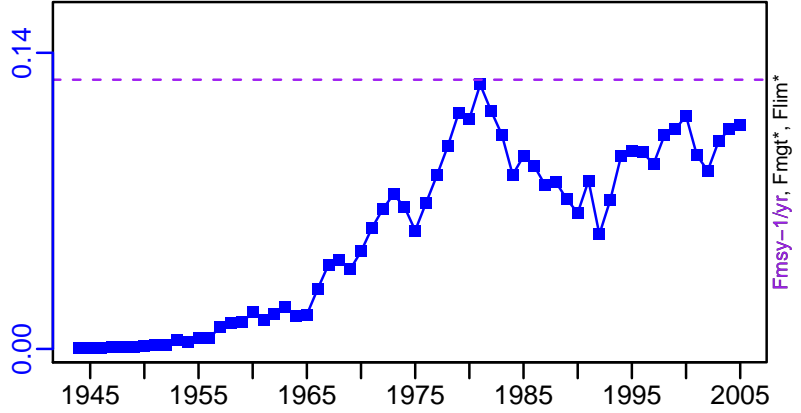
TB-MT (1944-2005-JENSEN)



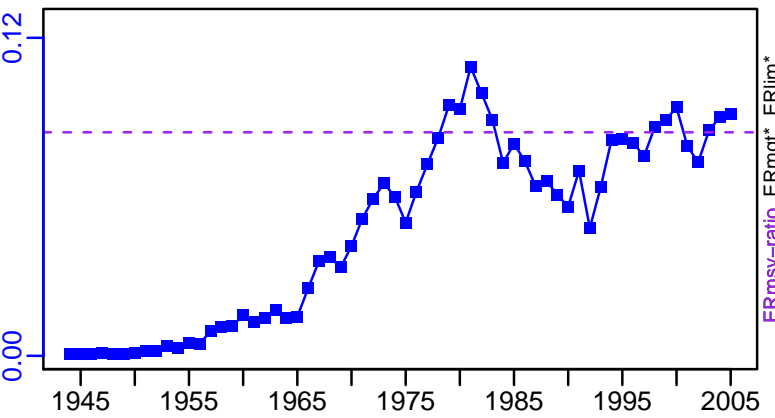
SSB-MT (1944-2014-LANGLEY)



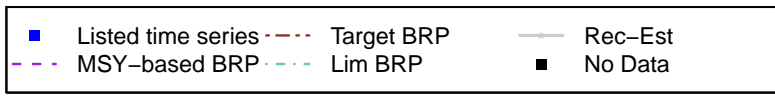
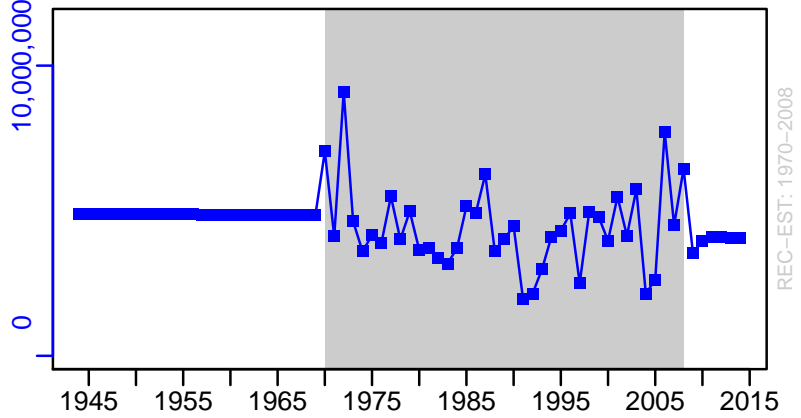
F-1/yr (1944-2005-JENSEN)



ER-ratio (1944-2005-JENSEN)



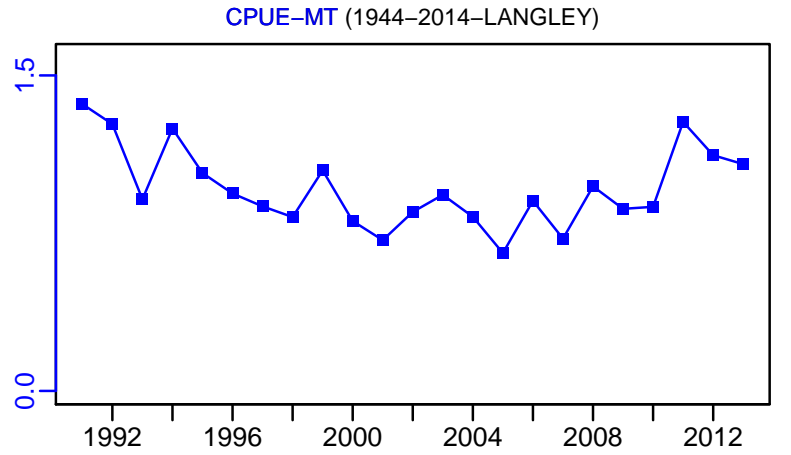
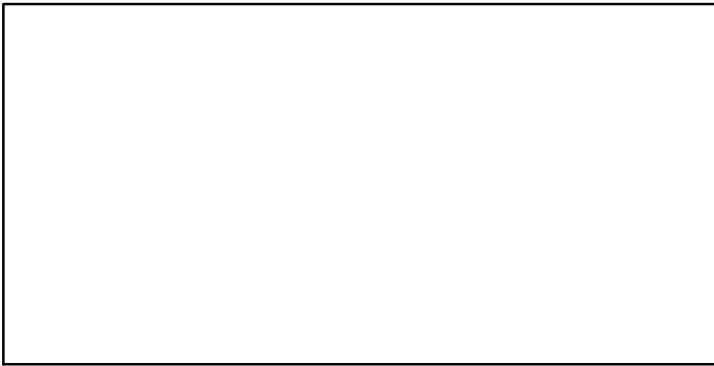
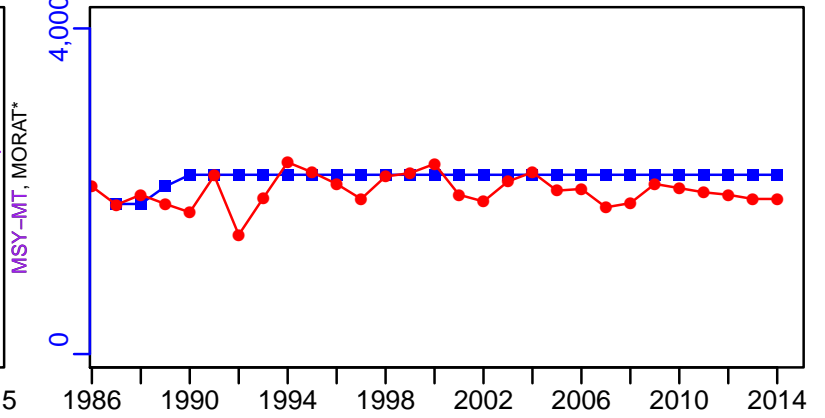
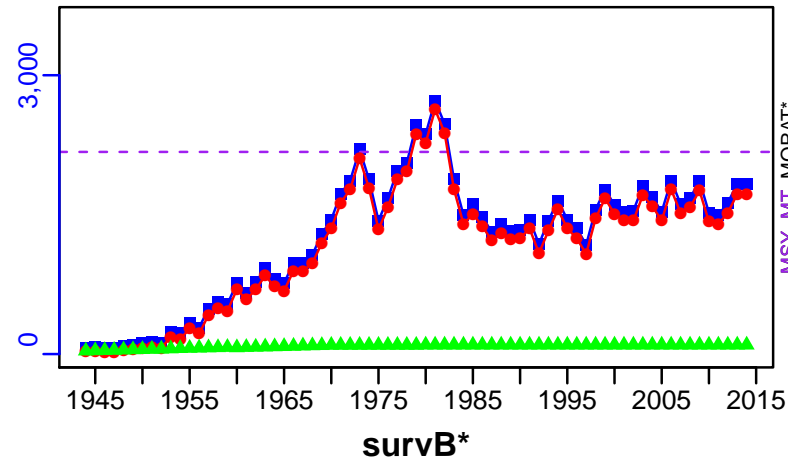
R-E00 (1944-2014-LANGLEY)



Trevally New Zealand Areas TRE 7 [TREVALLYTRE7]

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

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



EFFORT*

