

# Indian Ocean Stocks

## v4.491 (Jan-06-2020)

Not present Present Preferred

Stock	Time Series Types			
	B/Bmsy	U/Umsy	B/Bmgt	U/Umgmt
1. ALBAIO [Albacore tuna Indian Ocean]	TB SSB	ER F	TB SSB	ER F
2. BIGEYEIO [Bigeye tuna Indian Ocean]	TB SSB	ER F	TB SSB	ER F
3. BLKMARLINIO [Black marlin Indian Ocean]	TB SSB	ER F	TB SSB	ER F
4. BMARLINIO [Indo Pacific blue marlin Indian Ocean]	TB SSB	ER F	TB SSB	ER F
5. SBT [Southern bluefin tuna Southern Oceans]	TB SSB	ER F	TB SSB	ER F
6. SKJCIIO [Skipjack tuna Indian Ocean]	TB SSB	ER F	TB SSB	ER F
7. STMARLINIO [Striped marlin Indian Ocean]	TB SSB	ER F	TB SSB	ER F
8. SWORADIO [Swordfish Indian Ocean]	TB SSB	ER F	TB SSB	ER F
9. YFINEIO [Yellowfin tuna Indian Ocean]	TB SSB	ER F	TB SSB	ER F

## Albacore tuna Indian Ocean [ALBAIO]

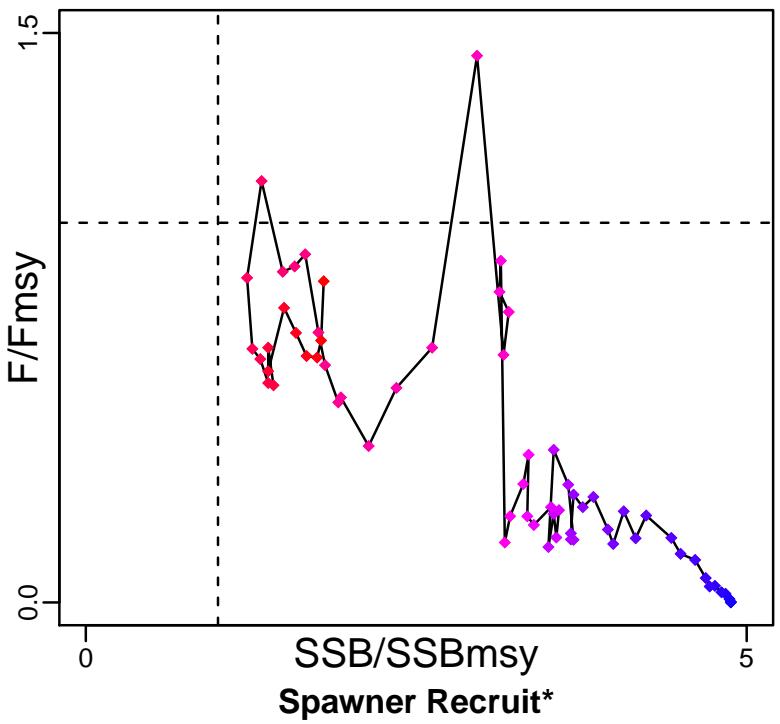
Metadata	
<b>Scientific Name</b>	Thunnus alalunga
<b>Current Assess ID</b>	IOTC-ALBAIO-1950-2016-PONS
<b>Area</b>	Indian Ocean
<b>Management Authority</b>	Indian Ocean Tuna Commission
<b>Assessor</b>	Indian Ocean Tuna Commission
<b>Asmts in RAM</b>	2014, 2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-extr-MT	2016	30,007
<b>Fmsy</b>	Fmsy-1/yr	2014	0.06
<b>ERmsy</b>	ERmsy-conv-ratio	2016	0.077
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2014	187,325
<b>MSY</b>	MSY-MT	2016	38,800
<b>M</b>	M-1/yr	2014	0.3
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

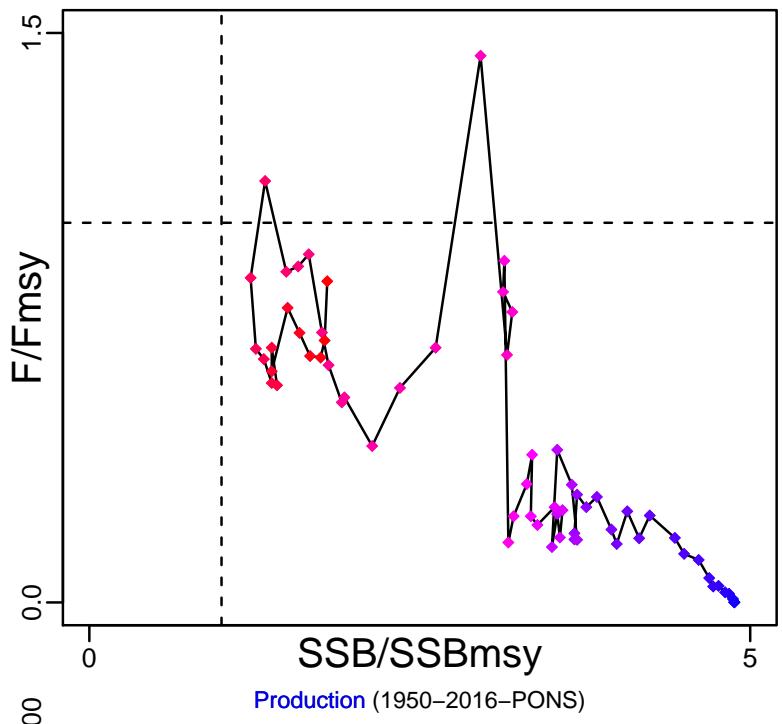
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2016	54,100	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	-	-	-	-	-	
<b>F</b>	-	-	-	-	-	
<b>ER</b>	ER-calc-ratio	2016	0.043	-	-	
<b>TC</b>	-	-	-			
<b>TL</b>	TL-MT	2016	36,000			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSBdivSSBmsy-dimensionless	2016	1.8			
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2016	0.846			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-conv-ratio	2016	0.563			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

Albacore tuna Indian Ocean [ALBAIO]

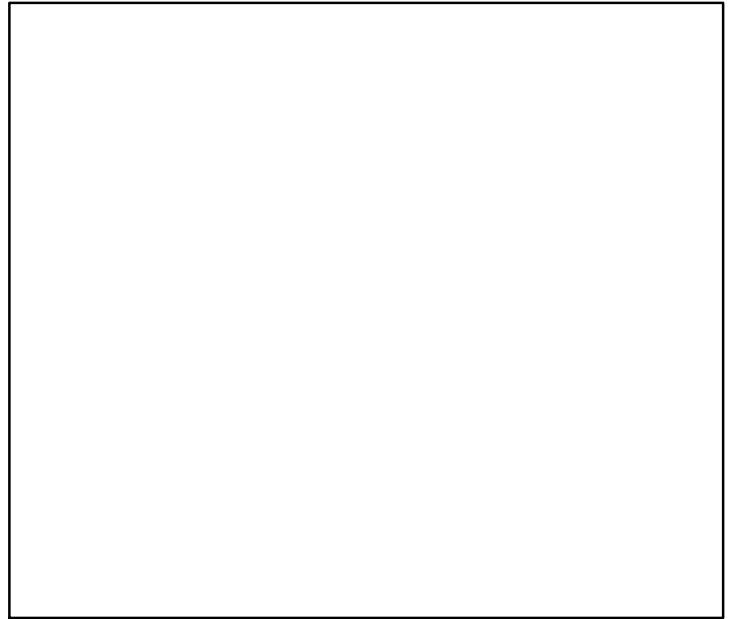
Kobe MSYpref (1950–2016–PONS)



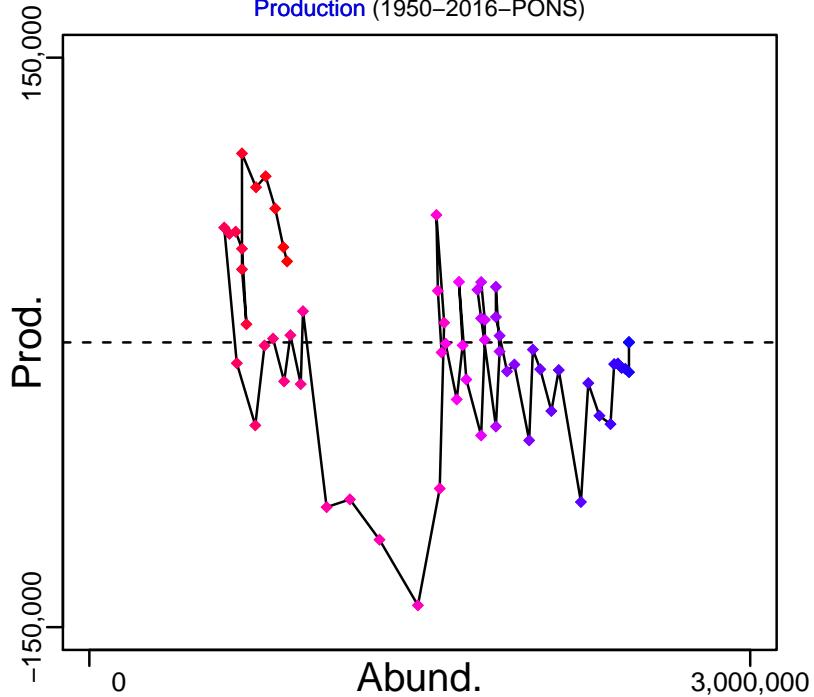
Kobe MGTPref (1950–2016–PONS)



Spawner Recruit\*



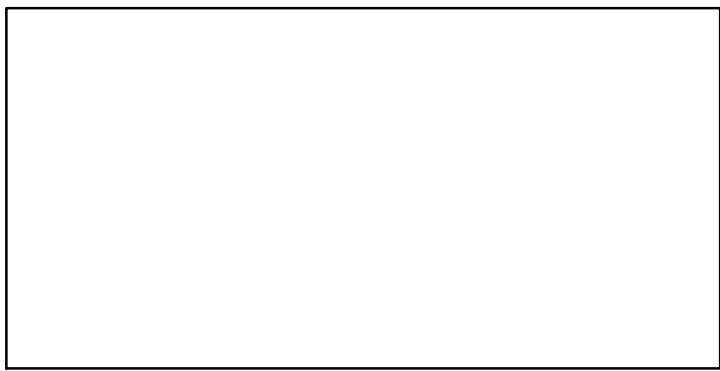
Production (1950–2016–PONS)



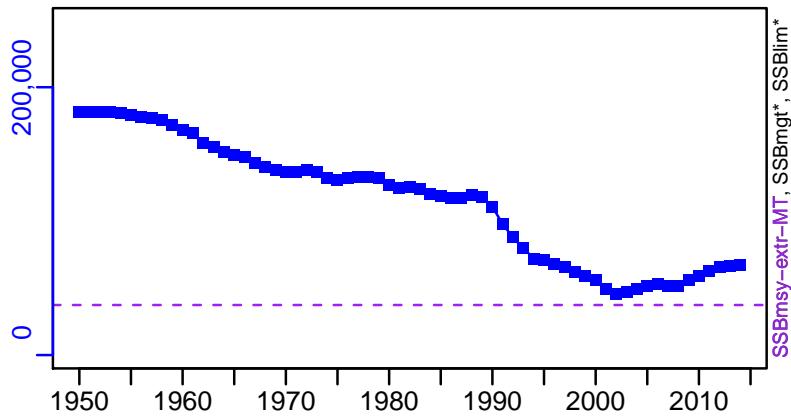
◆ Start Year ◆ End Year \* No Data

Albacore tuna Indian Ocean [ALBAIO]

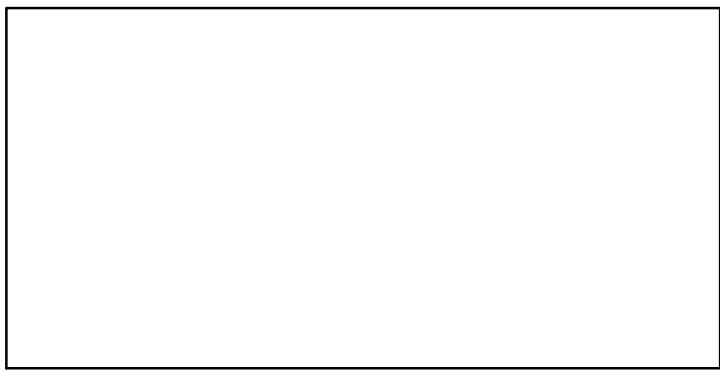
**TB\***



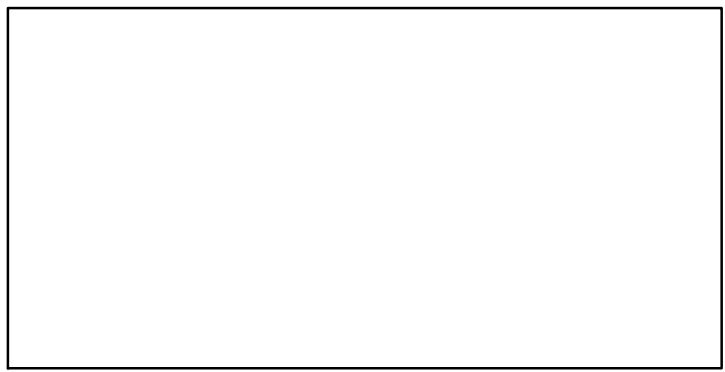
**SSB-MT** (1950–2016–PONS)



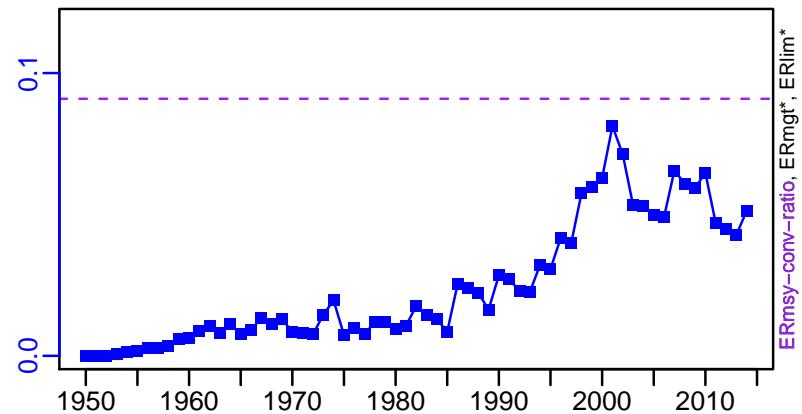
**TN \***



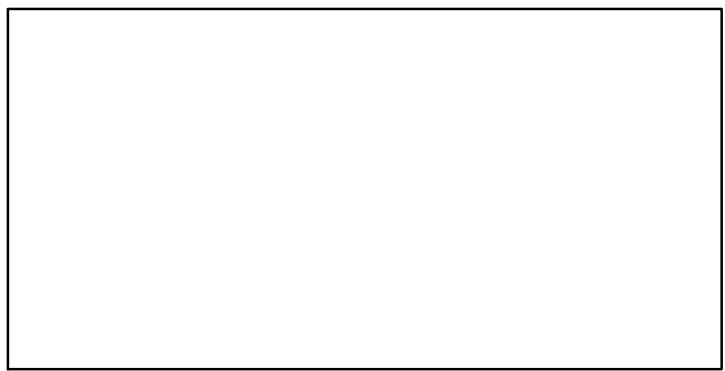
**F\***



**ER-calc-ratio** (1950–2016–PONS)



**Recruits\***

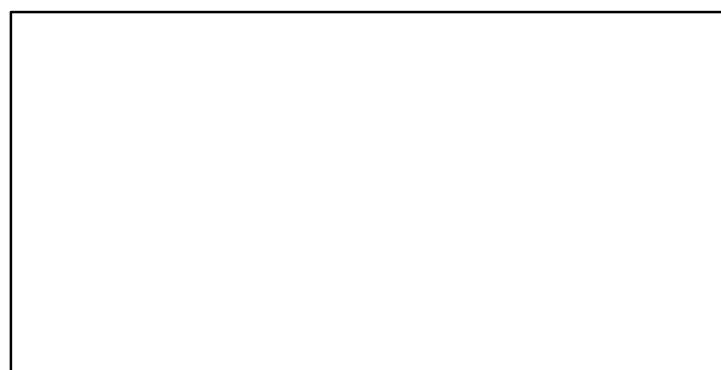
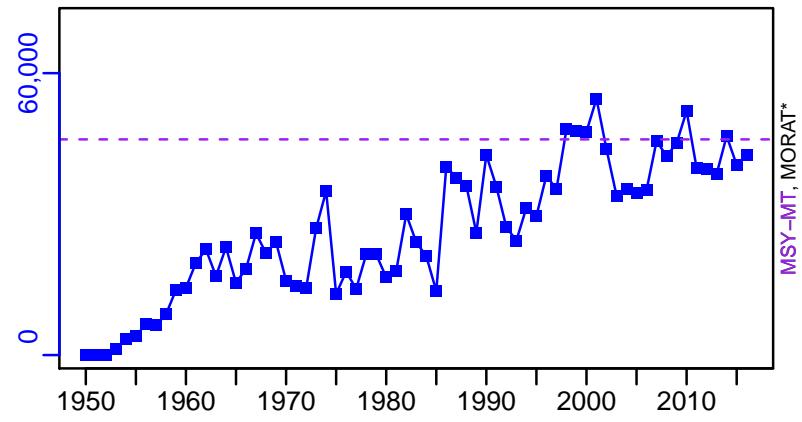


- |                      |              |           |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP      | ··· Lim BRP  | * No Data |

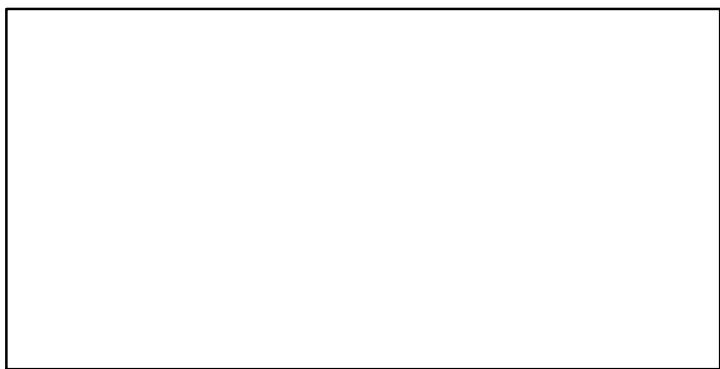
Albacore tuna Indian Ocean [ALBAIO]

TL-MT, TC\*, RecC\* (1950–2016–PONS)

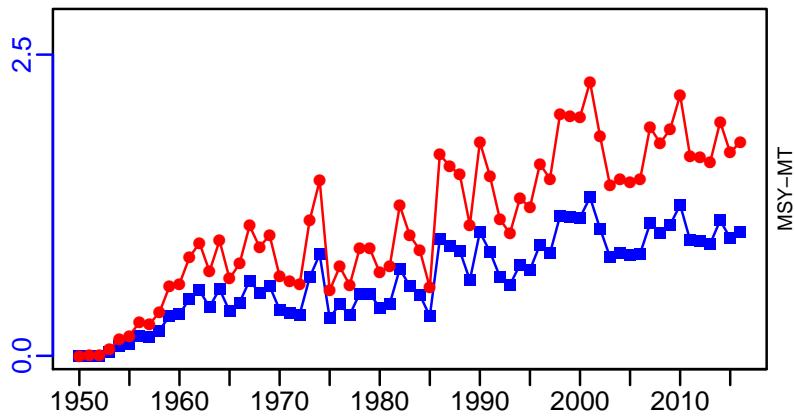
TAC\*, Cpair\*, Cadv\*



EFFORT\*



TL-MT/MSY-MT, CdivMEANC-ratio, (1950–2016–PONS)



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

## Bigeye tuna Indian Ocean [BIGEYEIO]

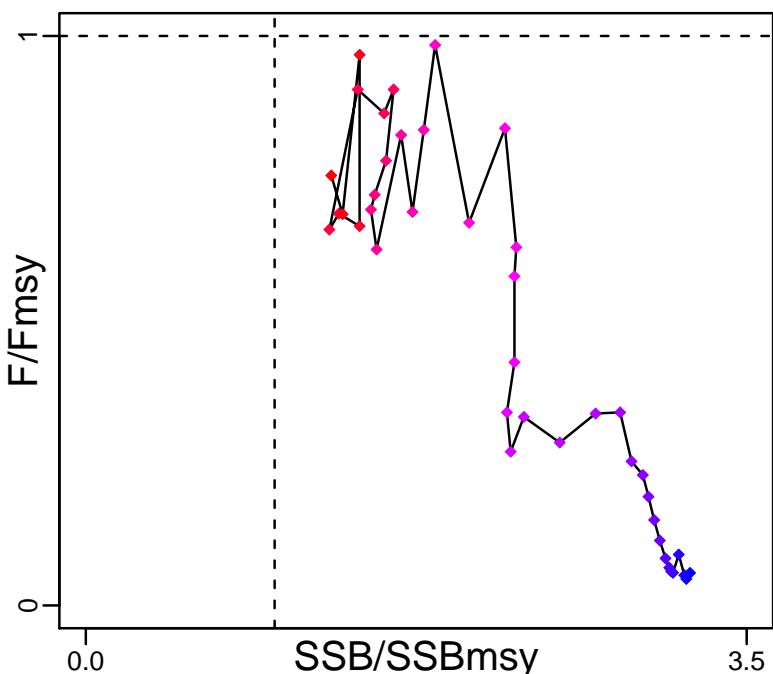
<b>Metadata</b>	
<b>Scientific Name</b>	Thunnus obesus
<b>Current Assess ID</b>	IOTC-BIGEYEIO-1950-2016-PONS
<b>Area</b>	Indian Ocean
<b>Management Authority</b>	Indian Ocean Tuna Commission
<b>Assessor</b>	Indian Ocean Tuna Commission
<b>Asmts in RAM</b>	2014, 2016

<b>Reference Points</b>			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-extr-MT	2016	514,747
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-conv-ratio	2016	0.129
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2014	1,674,570
<b>MSY</b>	MSY-MT	2016	104,000
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

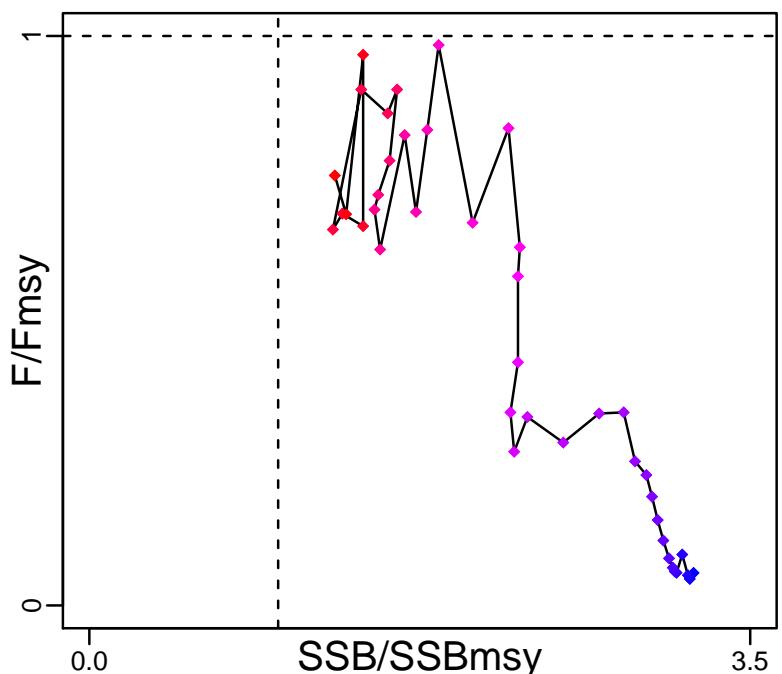
<b>Time Series</b>						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2016	685,000	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2014	108,000	-	-	
<b>F</b>	-	-	-	-	-	
<b>ER</b>	ER-calc-ratio	2016	0.084	-	-	
<b>TC</b>	TC-MT	2014	105,000			
<b>TL</b>	TL-MT	2016	87,600			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSBdivSSBmsy-dimensionless	2016	1.3			
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2016	0.755			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-conv-ratio	2016	0.654			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

**Bigeye tuna Indian Ocean [BIGEYEIO]**

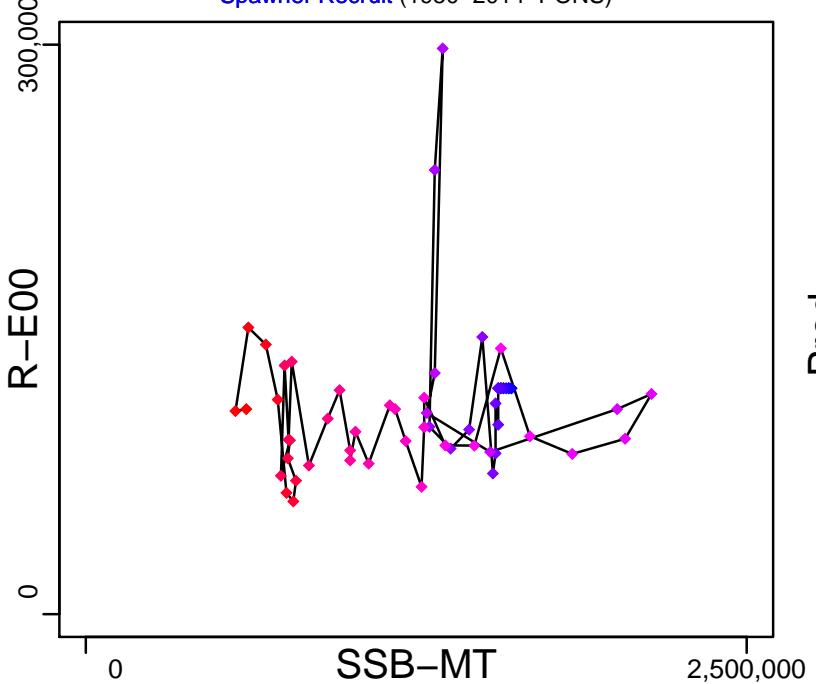
Kobe MSYpref (1950–2016–PONS)



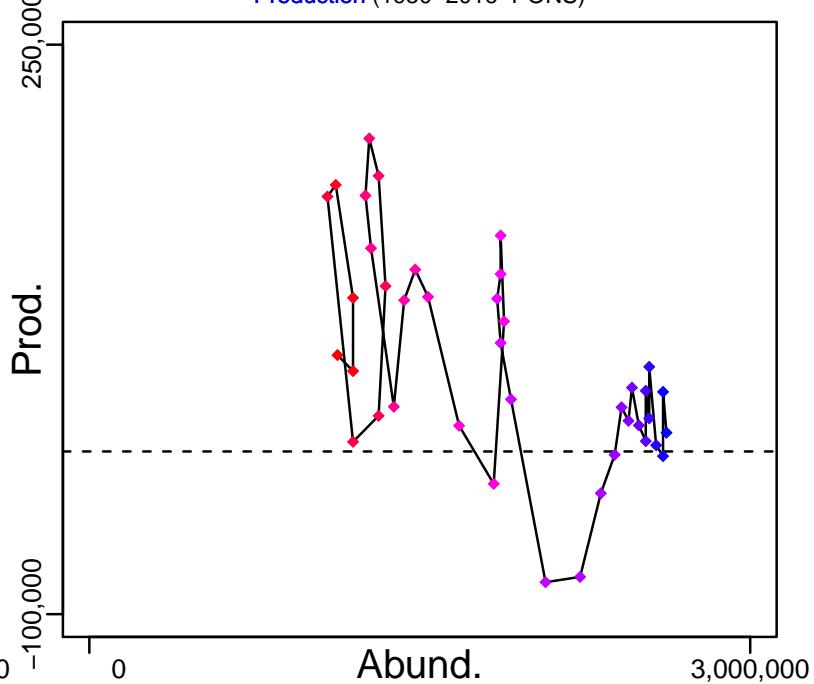
Kobe MGTPref (1950–2016–PONS)



Spawner Recruit (1950–2014–PONS)



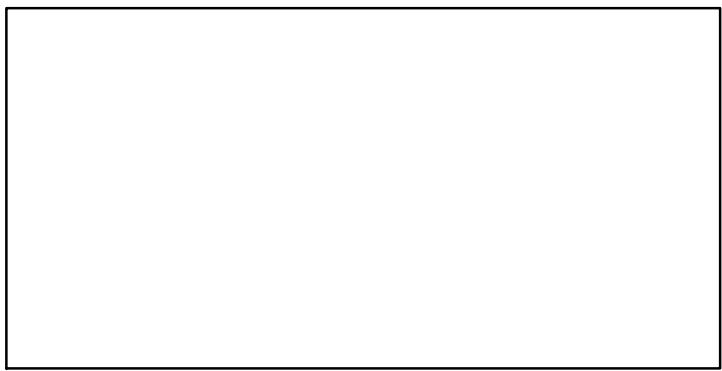
Production (1950–2016–PONS)



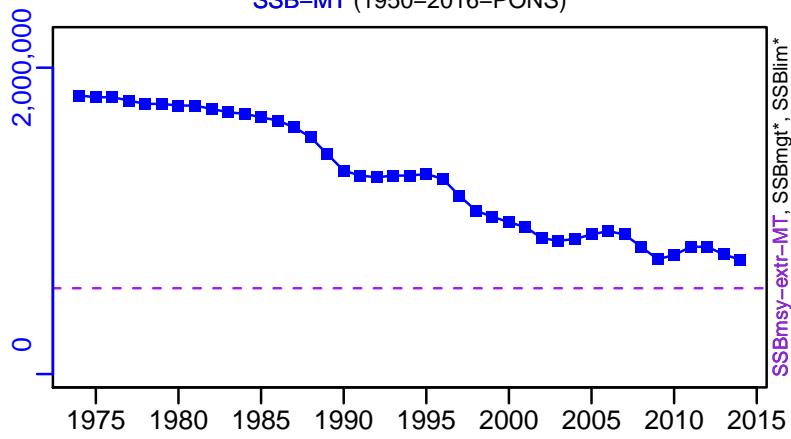
◆ Start Year   ◆ End Year   \* No Data

### Bigeye tuna Indian Ocean [BIGEYEIO]

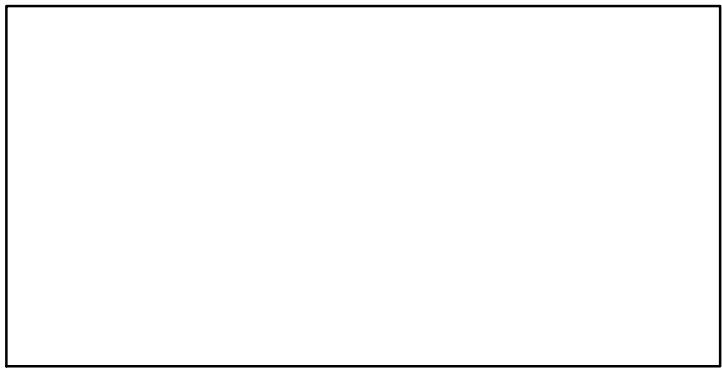
**TB\***



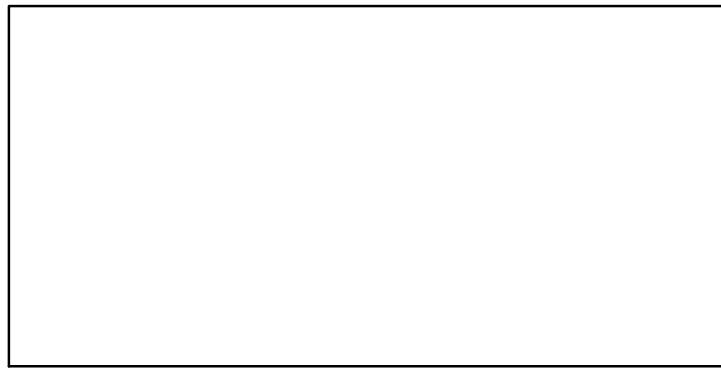
**SSB-MT (1950–2016–PONS)**



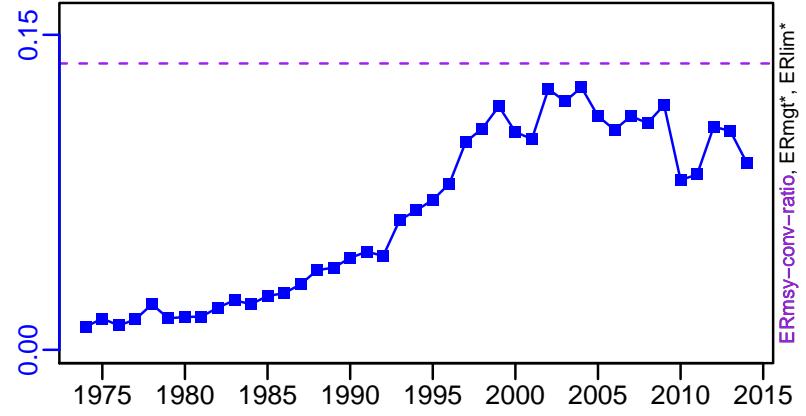
**TN \***



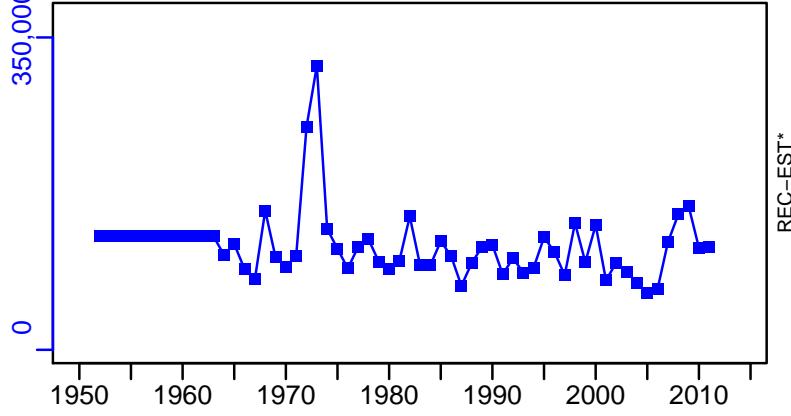
**F\***



**ER-calc-ratio (1950–2016–PONS)**



**R-E00 (1950–2014–PONS)**

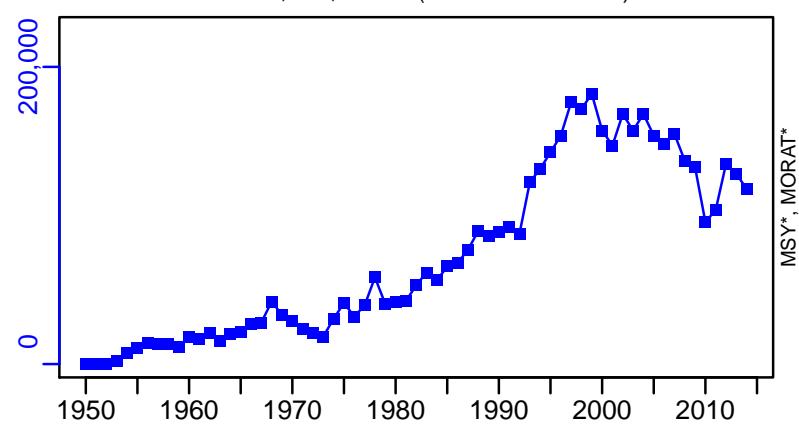


- |                      |              |           |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| - - - MSY-based BRP  | --- Lim BRP  | * No Data |

**Bigeye tuna Indian Ocean [BIGEYEIO]**

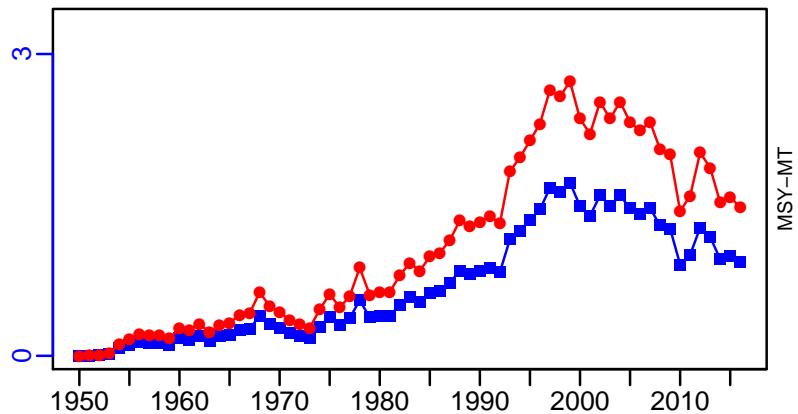
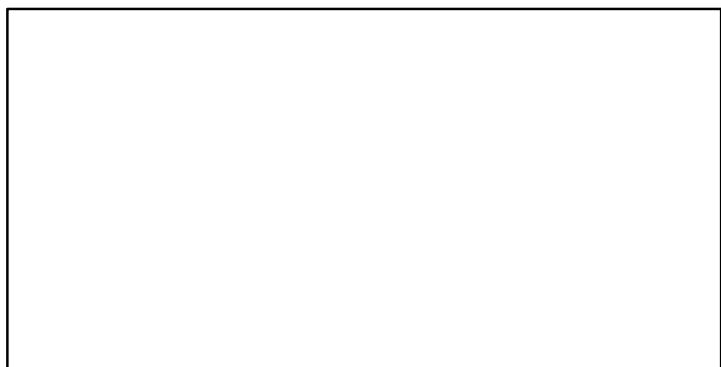
TC-MT, TL\*, RecC\* (1950–2014–PONS)

TAC\*, Cpair\*, Cadv\*



**EFFORT\***

TL-MT/MSY-MT, CdivMEANC-ratio, (1950–2016–PONS)



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

## Black marlin Indian Ocean [BLKMARLINIO]

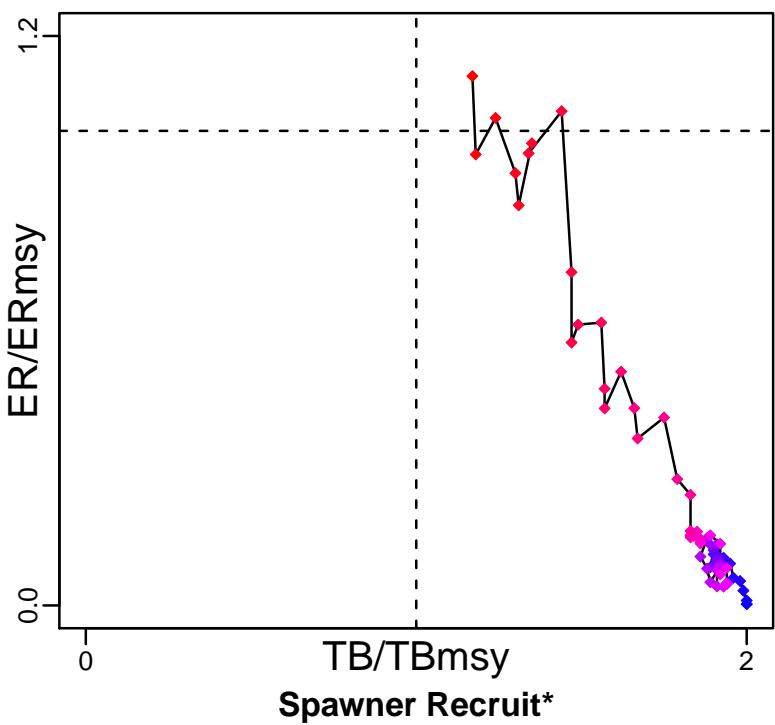
<b>Metadata</b>	
<b>Scientific Name</b>	Istiompax indica
<b>Current Assess ID</b>	IOTC-BLKMARLINIO-1950-2014-PONS
<b>Area</b>	Indian Ocean
<b>Management Authority</b>	Indian Ocean Tuna Commission
<b>Assessor</b>	Indian Ocean Tuna Commission
<b>Asmts in RAM</b>	2014

<b>Reference Points</b>			
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Value</b>
<b>TBmsy</b>	TBmsy-MT	2014	29,735
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-calc-ratio	2014	0.289
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	TB0-MT	2014	73,000
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2014	8605
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

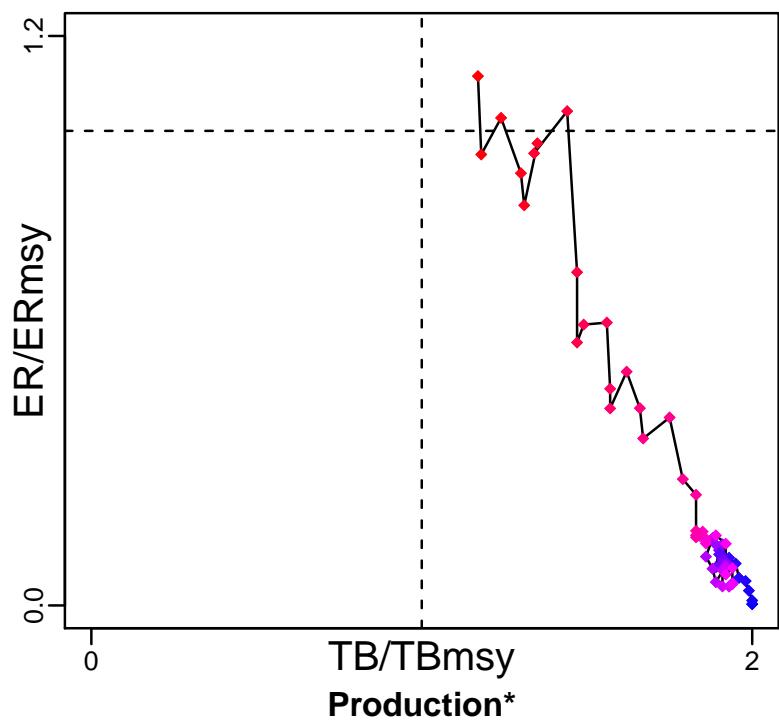
<b>Time Series</b>						
<b>Type</b>	<b>ID</b>	<b>Asmt Year</b>	<b>Curr Value</b>	<b>Sex</b>	<b>Age</b>	
<b>TB</b>	TB-MT	2014	34,700	-	-	
<b>SSB</b>	-	-	-	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	-	-	-	-	-	
<b>F</b>	-	-	-	-	-	
<b>ER</b>	ER-calc-ratio	2014	0.323	-	-	
<b>TC</b>	TC-MT	2014	17,700			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	TBdivTBmsy-dimensionless	2014	1.17			
<b>SSB/SSBmsy</b>	-	-	-			
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2014	1.03			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-calc-ratio	2014	1.115			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

**Black marlin Indian Ocean [BLKMARLINIO]**

Kobe MSYpref (1950–2014–PONS)



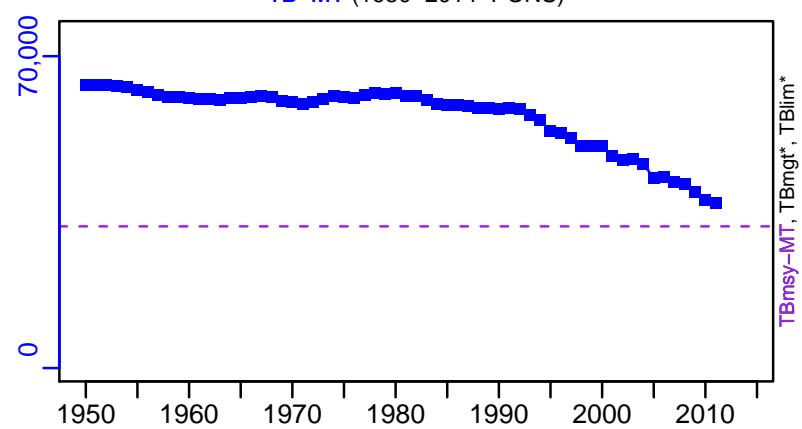
Kobe MGTPref (1950–2014–PONS)



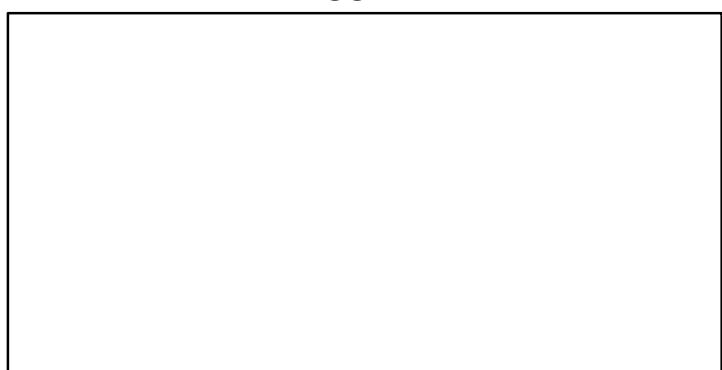
- ◆ Start Year
- ◆ End Year
- \* No Data

**Black marlin Indian Ocean [BLKMARLINIO]**

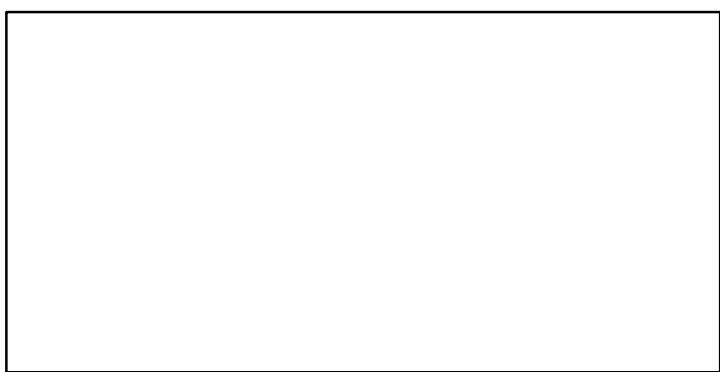
TB-MT (1950–2014-PONS)



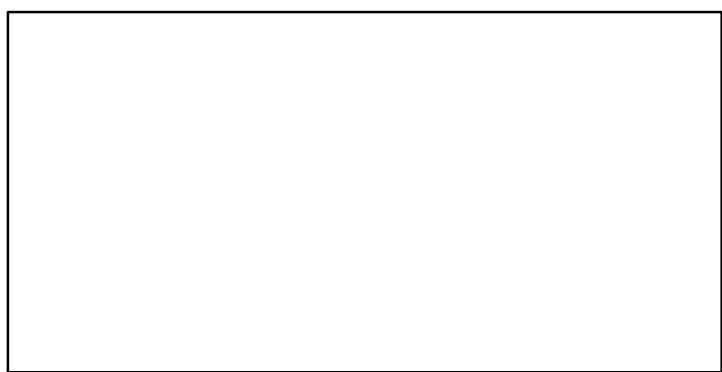
**SSB\***



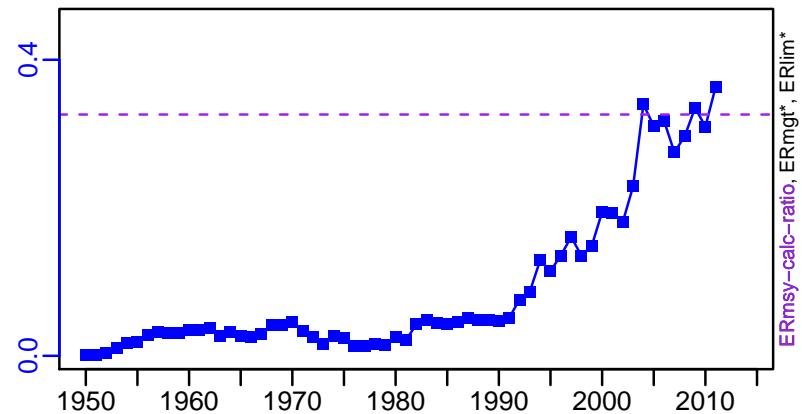
**TN \***



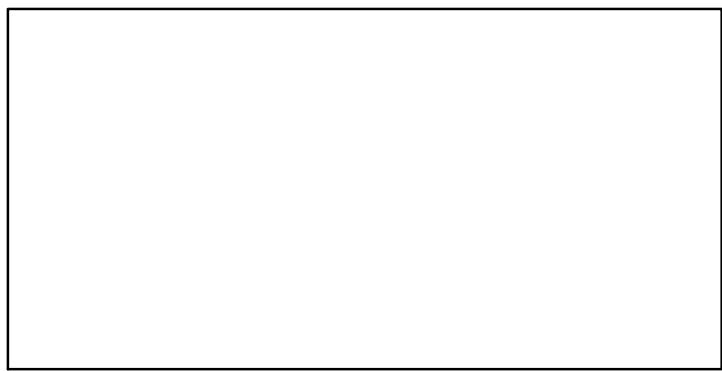
**F\***



ER-calc-ratio (1950–2014-PONS)



**Recruits\***

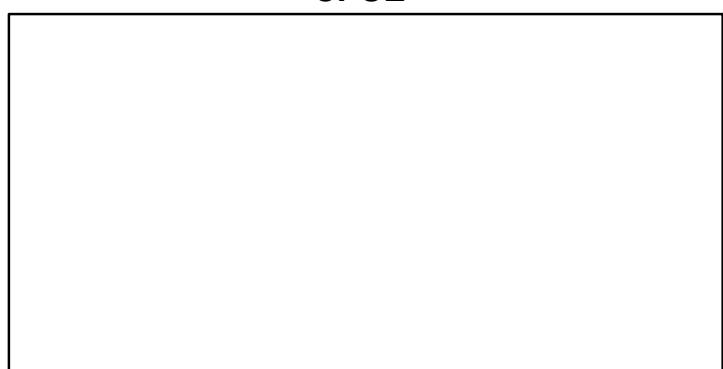
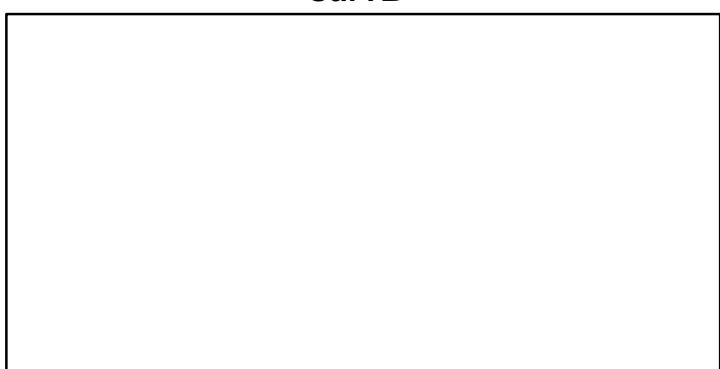
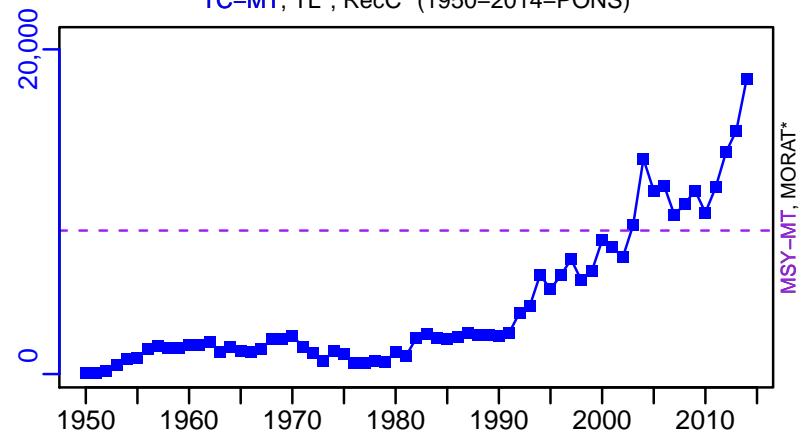


- |                      |              |           |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| - - - MSY-based BRP  | ··· Lim BRP  | * No Data |

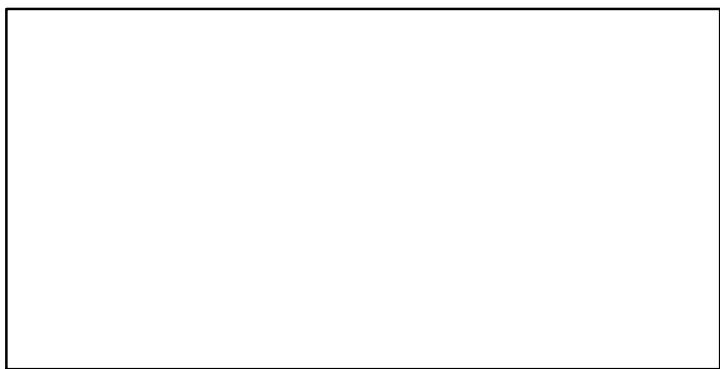
**Black marlin Indian Ocean [BLKMARLINIO]**

TC-MT, TL\*, RecC\* (1950–2014–PONS)

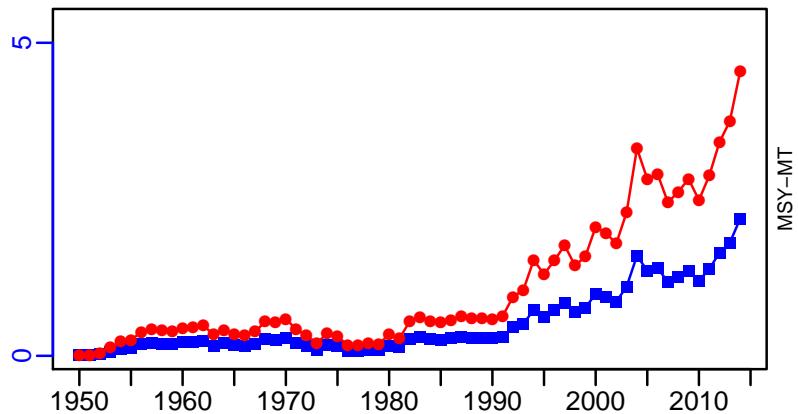
TAC\*, Cpair\*, Cadv\*



**EFFORT\***



TC-MT/MSY-MT, CdivMEANC-ratio, (1950–2014–PONS)



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

## Indo Pacific blue marlin Indian Ocean [BMARLINIO]

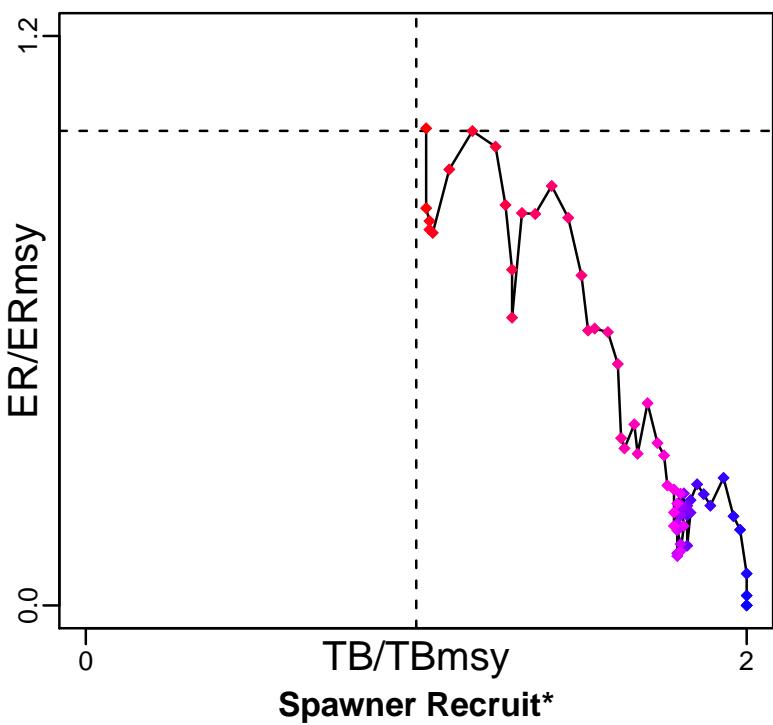
<b>Metadata</b>	
<b>Scientific Name</b>	Makaira mazara
<b>Current Assess ID</b>	IOTC-BMARLINIO-1950-2014-PONS
<b>Area</b>	Indian Ocean
<b>Management Authority</b>	Indian Ocean Tuna Commission
<b>Assessor</b>	Indian Ocean Tuna Commission
<b>Asmts in RAM</b>	2014

<b>Reference Points</b>			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2014	96,913
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-calc-ratio	2014	0.098
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	TB0-MT	2014	259,000
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2014	9524
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

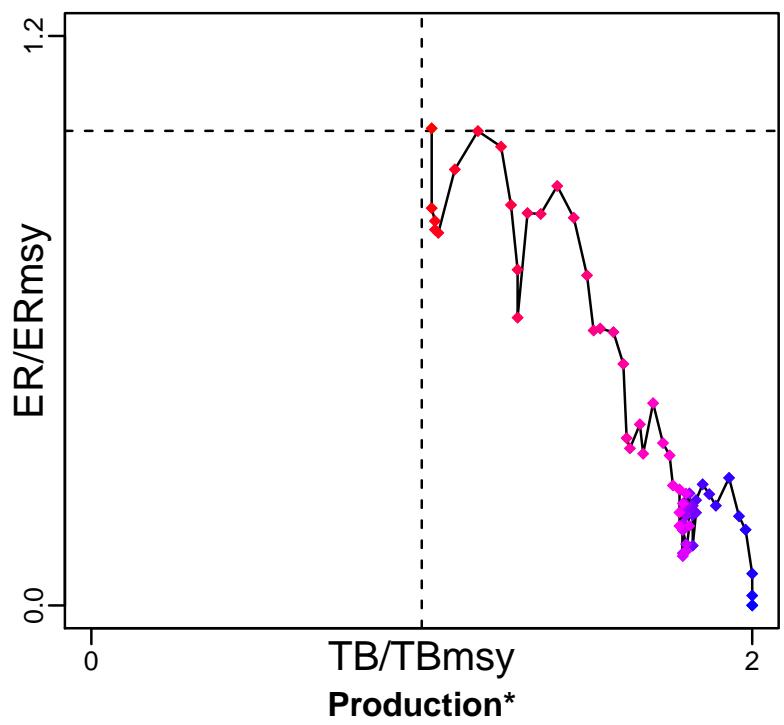
<b>Time Series</b>						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2014	99,900	-	-	
<b>SSB</b>	-	-	-	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	-	-	-	-	-	
<b>F</b>	-	-	-	-	-	
<b>ER</b>	ER-calc-ratio	2014	0.099	-	-	
<b>TC</b>	TC-MT	2014	14,200			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	TBdivTBmsy-dimensionless	2014	1.03			
<b>SSB/SSBmsy</b>	-	-	-			
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2014	1.05			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-calc-ratio	2014	1.005			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

**Indo Pacific blue marlin Indian Ocean [BMARLINIO]**

Kobe MSYpref (1950–2014–PONS)



Kobe MGTPref (1950–2014–PONS)



Spawner Recruit\*

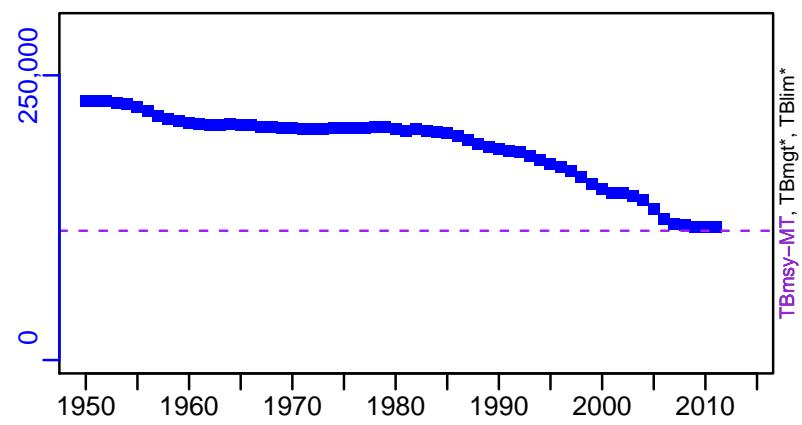
Production\*

◆ Start Year    ♦ End Year    \* No Data

**Indo Pacific blue marlin Indian Ocean [BMARLINIO]**

TB-MT (1950–2014–PONS)

**SSB\***



**TN \***

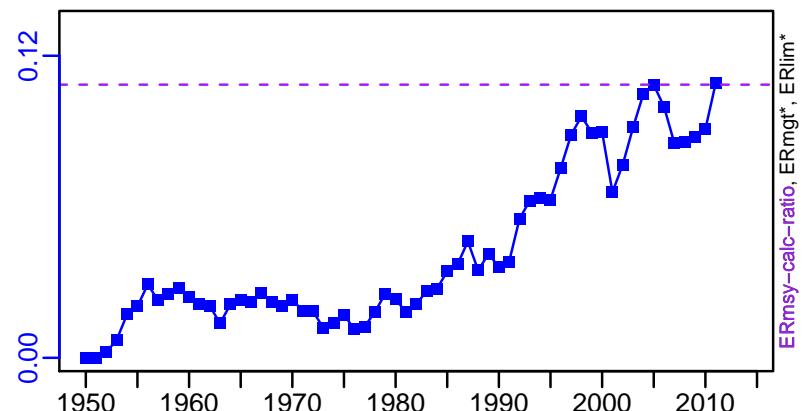


**F\***



ER-calc-ratio (1950–2014–PONS)

**Recruits\***

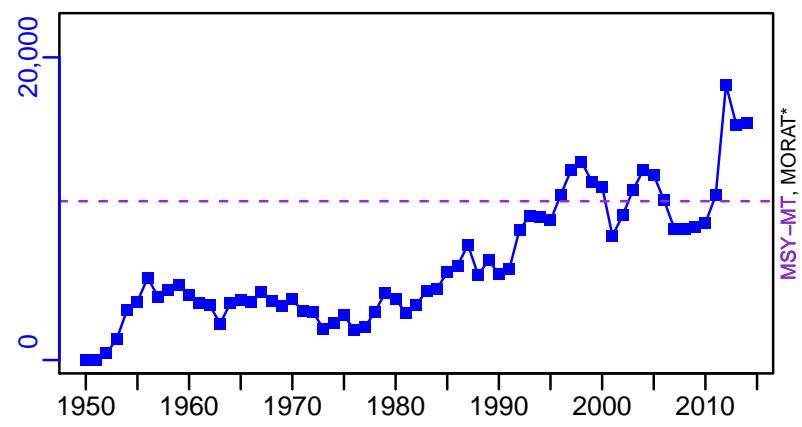


- |                      |              |           |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP      | --- Lim BRP  | * No Data |

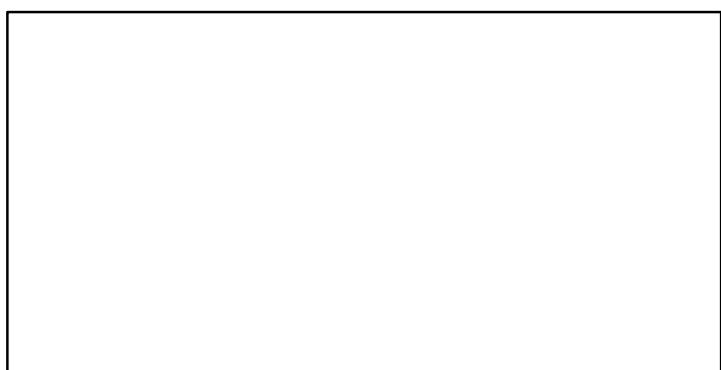
**Indo Pacific blue marlin Indian Ocean [BMARLINIO]**

TC-MT, TL\*, RecC\* (1950–2014–PONS)

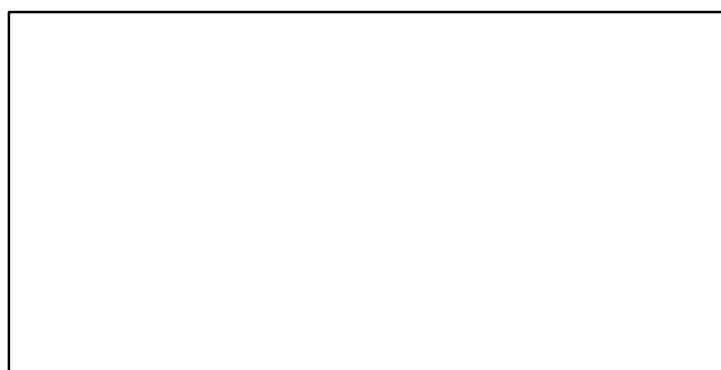
TAC\*, Cpair\*, Cadv\*



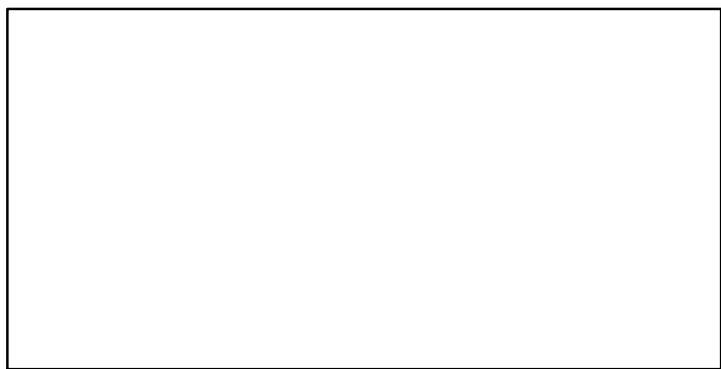
**survB\***



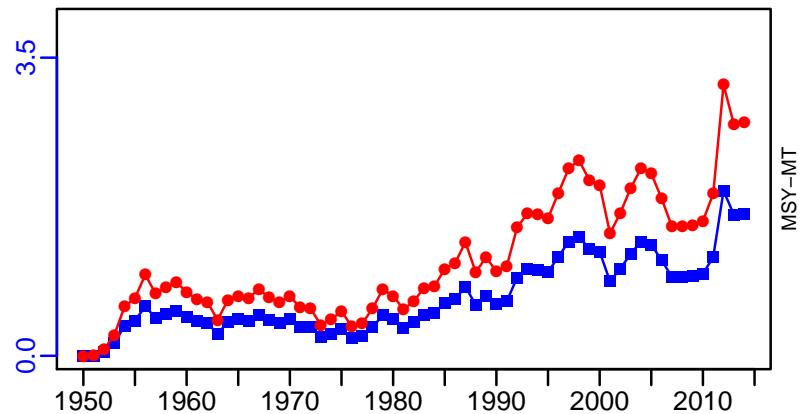
**CPUE\***



**EFFORT\***



TC-MT/MSY-MT, CdivMEANC-ratio, (1950–2014–PONS)



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

## Southern bluefin tuna Southern Oceans [SBT]

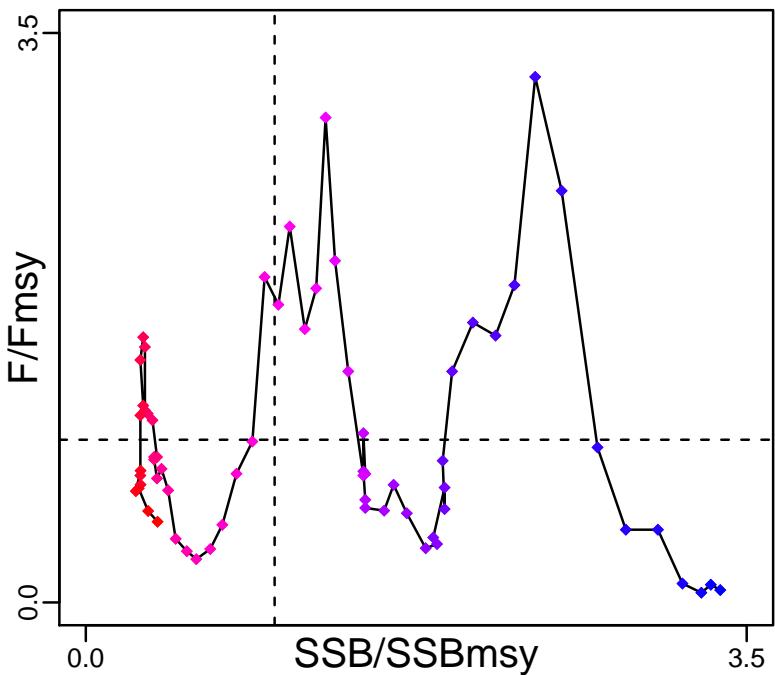
Metadata	
<b>Scientific Name</b>	Thunnus maccoyii
<b>Current Assess ID</b>	CCSBT-SC-SBT-1931-2016-PONS
<b>Area</b>	Southern Oceans
<b>Management Authority</b>	Commission for the Conservation of Southern Bluefin Tuna
<b>Assessor</b>	CCSBT Scientific Committee
<b>Asmts in RAM</b>	2016, 2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2014	515,839
<b>SSBmsy</b>	SSBmsy-extr-MT	2016	341,425
<b>Fmsy</b>	Fmsy-extr-1/yr	2014	0.088
<b>ERmsy</b>	ERmsy-ratio	2014	0.355
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	SSB0-MT	2014	845,207
<b>MSY</b>	MSY-MT	2014	33,000
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

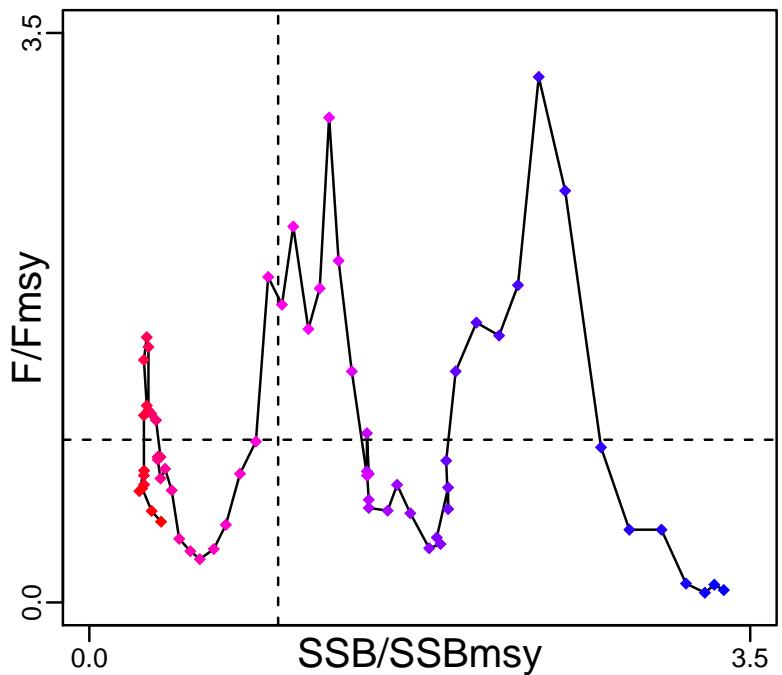
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2016	1,070,000	-	-	
<b>SSB</b>	SSB-MT	2016	130,000	-	10+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2016	3,810,000	-	-	
<b>F</b>	F-1/yr	2014	0.058	-	-	
<b>ER</b>	ER-calc-ratio	2016	0.013	-	-	
<b>TC</b>	TC-MT	2014	11,700			
<b>TL</b>	TL-MT	2016	14,400			
<b>TB/TBmsy</b>	TBdivTBmsy-dimensionless	2014	0.653			
<b>SSB/SSBmsy</b>	SSBdivSSBmsy-dimensionless	2016	0.38			
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2016	0.496			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-ratio	2014	0.11			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

### Southern bluefin tuna Southern Oceans [SBT]

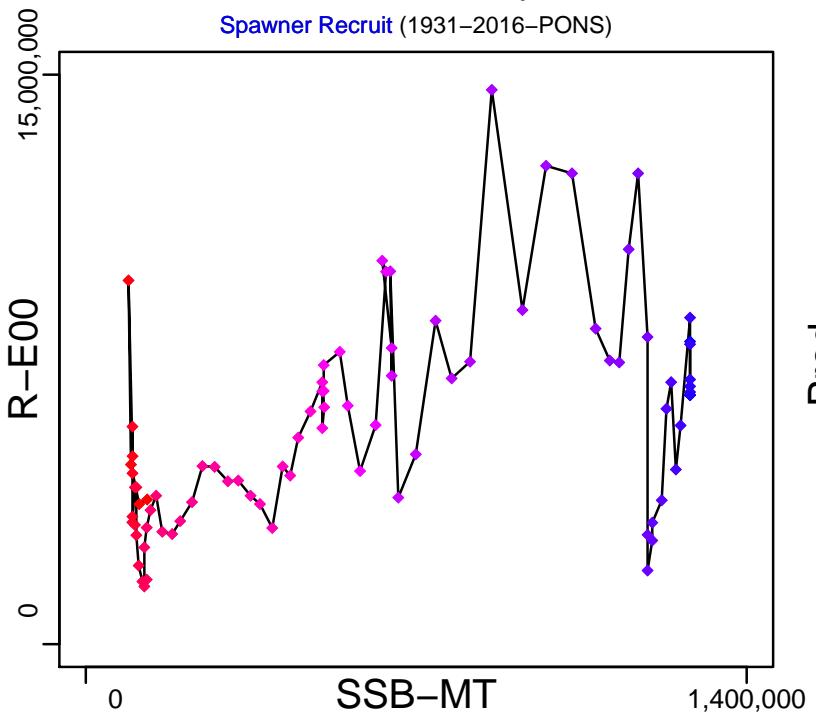
Kobe MSYpref (1931–2016–PONS)



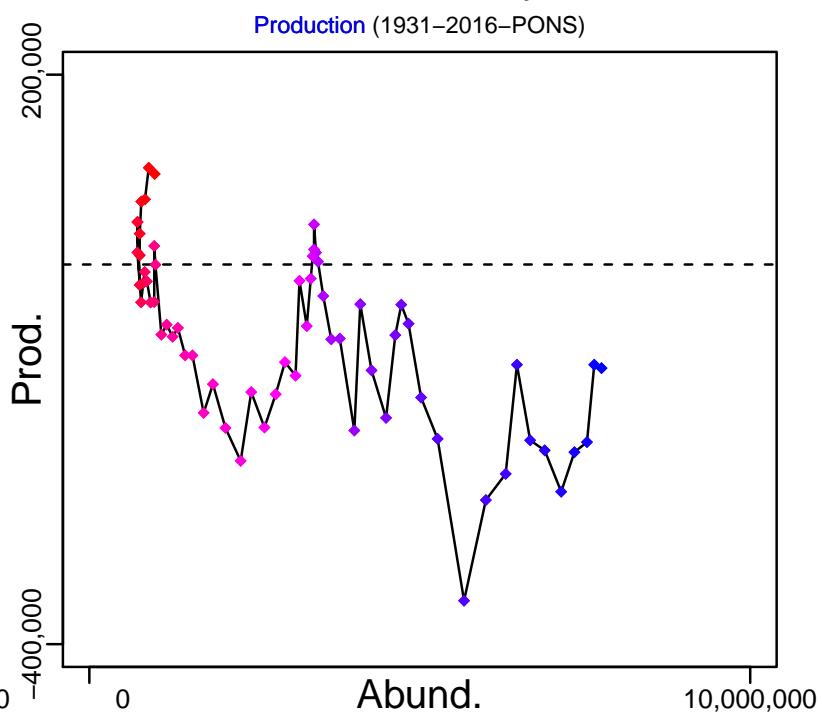
Kobe MGTPref (1931–2016–PONS)



Spawner Recruit (1931–2016–PONS)



Production (1931–2016–PONS)

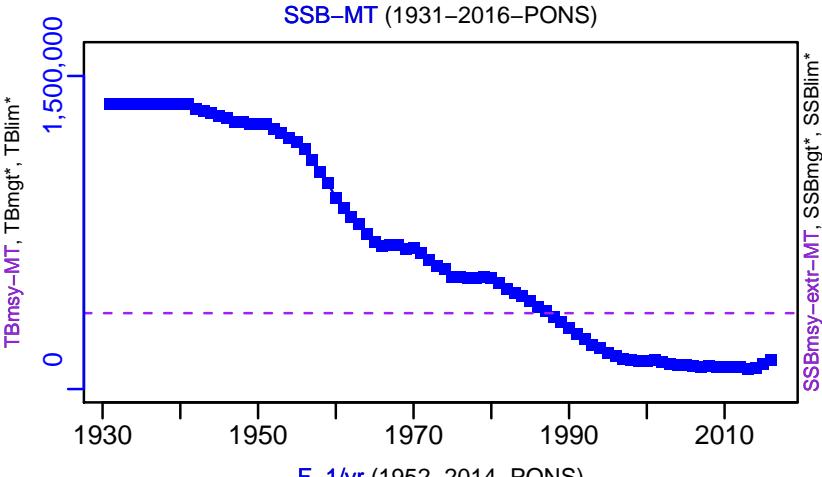
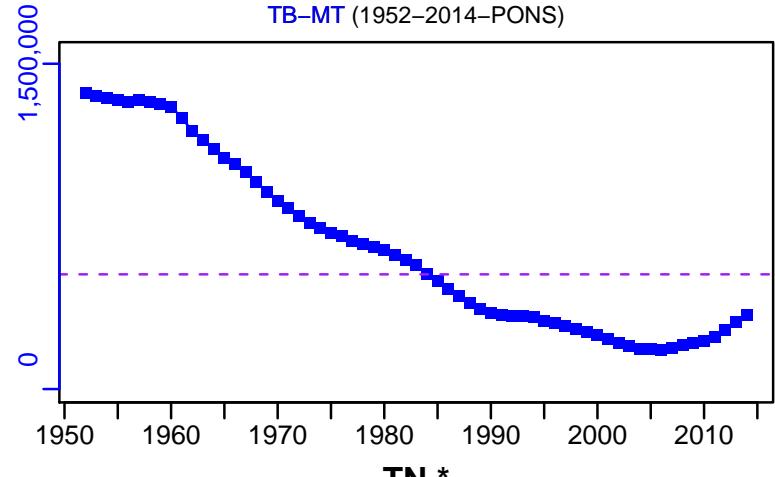


◆ Start Year ◆ End Year \* No Data

### Southern bluefin tuna Southern Oceans [SBT]

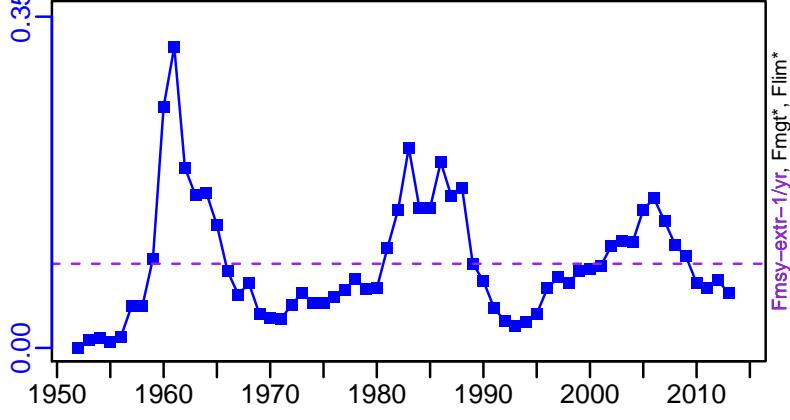
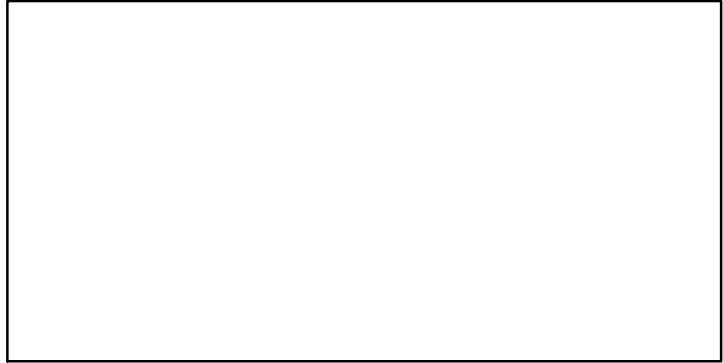
TB-MT (1952–2014–PONS)

SSB-MT (1931–2016–PONS)



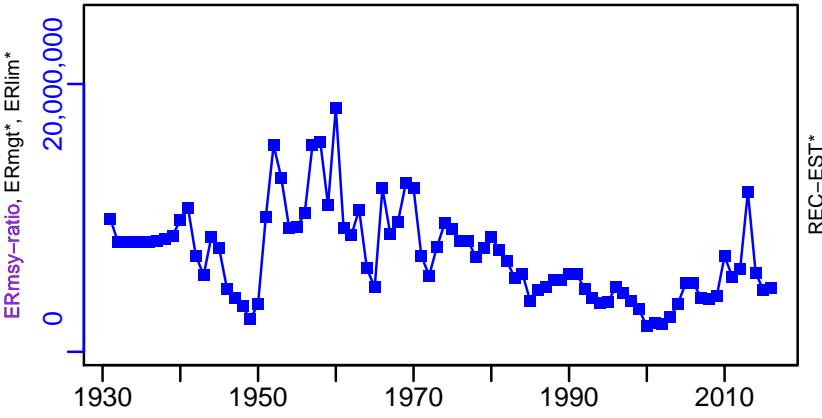
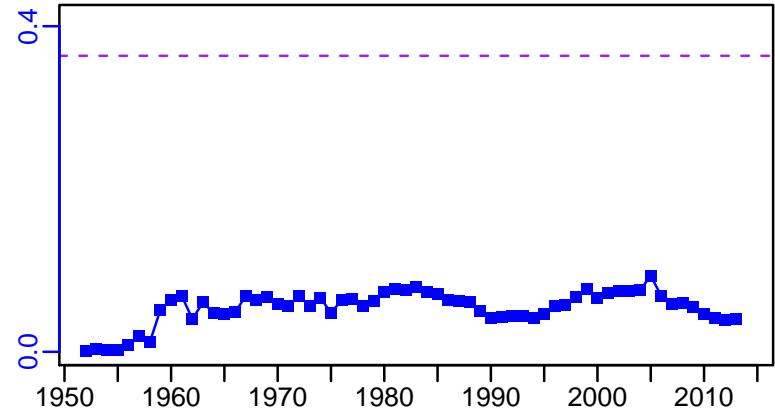
**TN \***

**F-1/yr (1952–2014–PONS)**



**ER-calc-ratio (1952–2014–PONS)**

**R-E00 (1931–2016–PONS)**



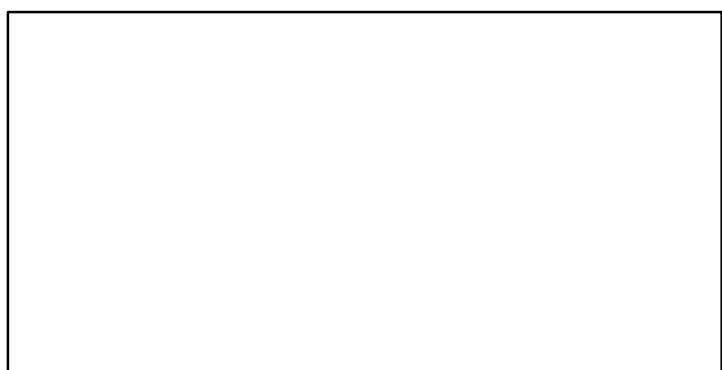
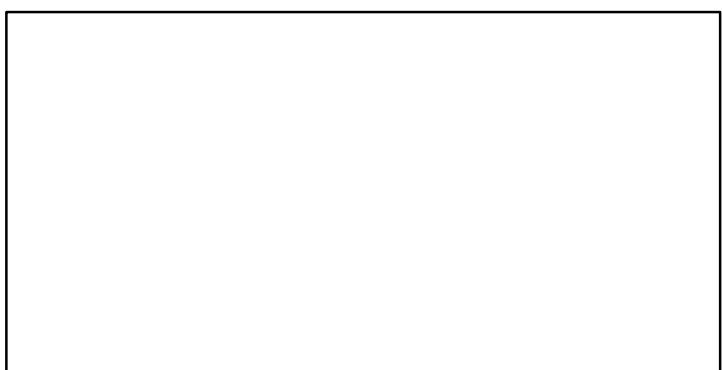
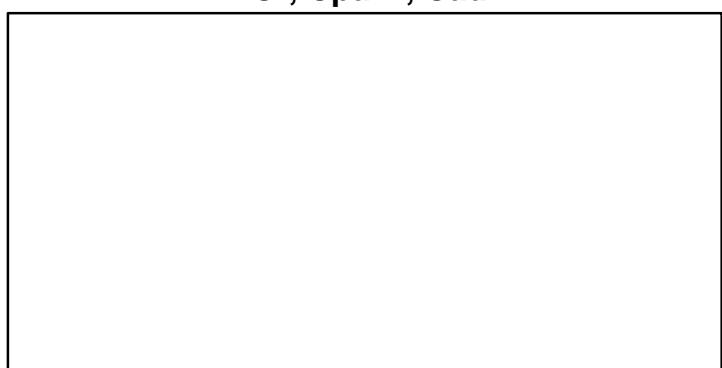
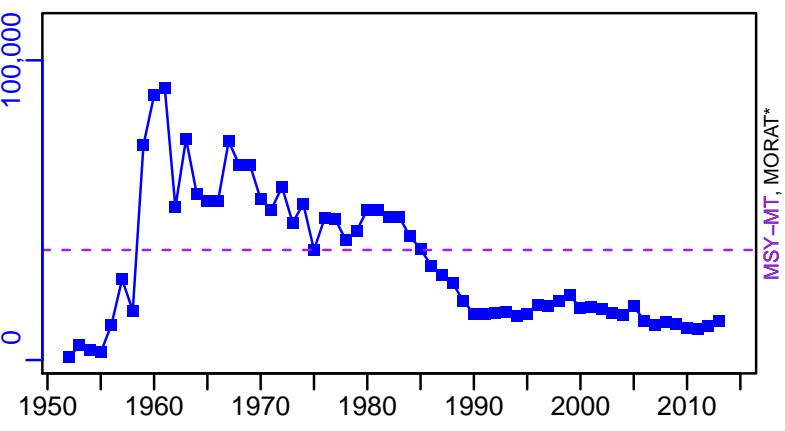
**REC-EST\***

- |                      |              |           |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| - - - MSY-based BRP  | - - Lim BRP  | * No Data |

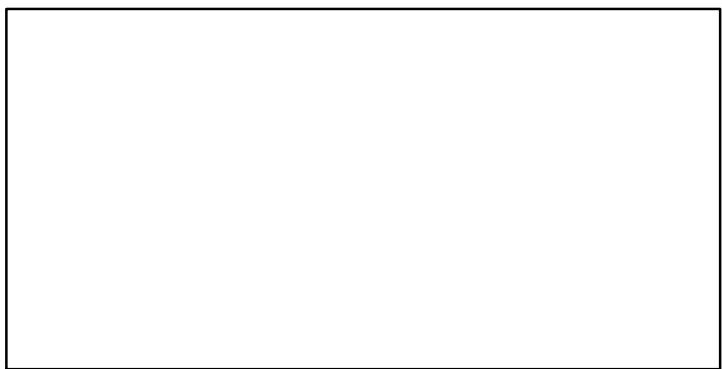
Southern bluefin tuna Southern Oceans [SBT]

TC-MT, TL\*, RecC\* (1952–2014–PONS)

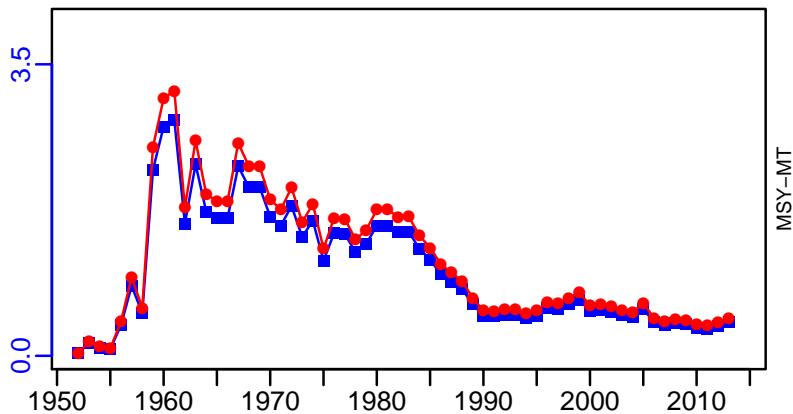
TAC\*, Cpair\*, Cadv\*



EFFORT\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1952–2014–PONS)



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

## Skipjack tuna Indian Ocean [SKJCIO]

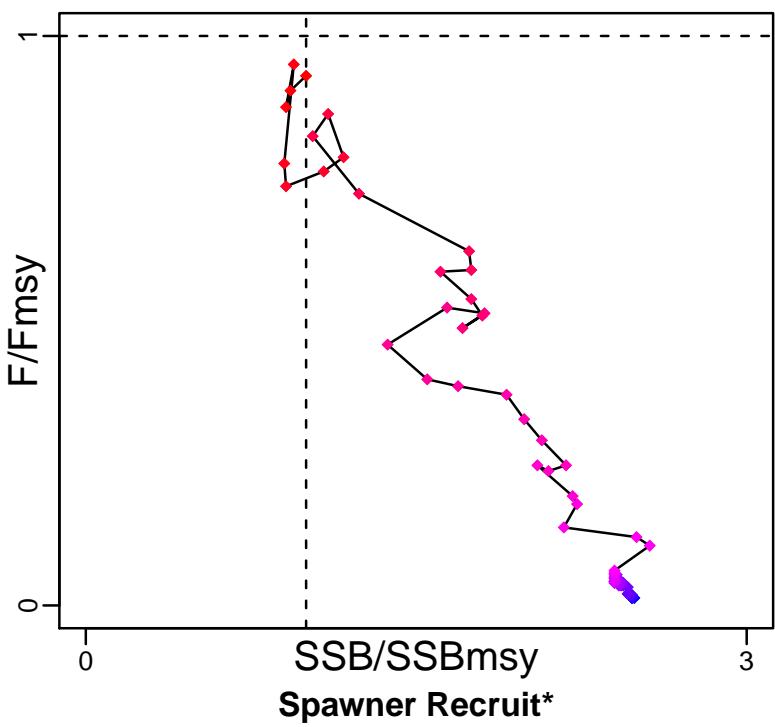
Metadata	
Scientific Name	Katsuwonus pelamis
Current Assess ID	IOTC-SKJCIO-1950-2016-PONS
Area	Indian Ocean
Management Authority	Indian Ocean Tuna Commission
Assessor	Indian Ocean Tuna Commission
Asmts in RAM	2014, 2016

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-MT	2014	788,806
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-calc-ratio	2014	0.529
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2016	510,000
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

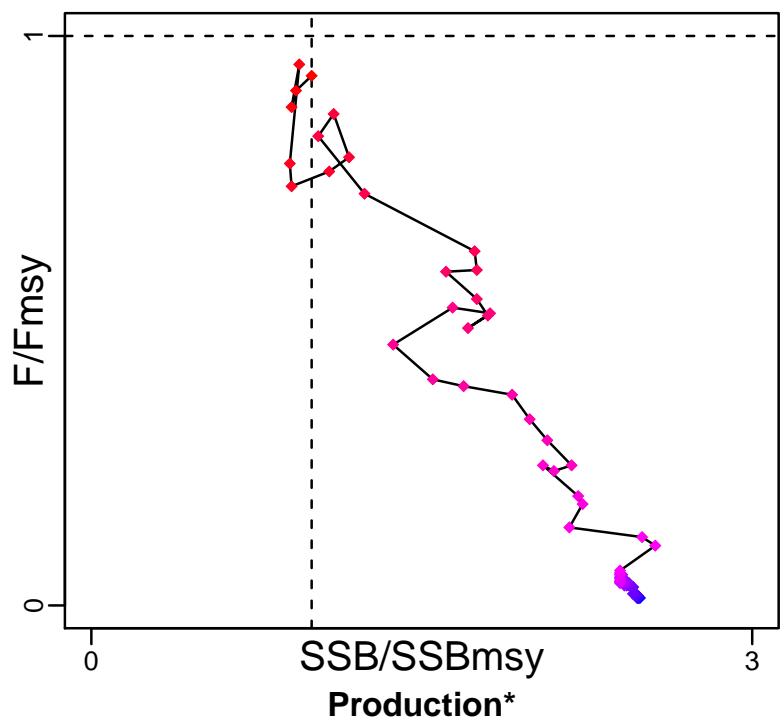
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
TB	TB-MT	2014	947,000	-	-	
SSB	-	-	-	-	-	
TN	-	-	-	-	-	
R	-	-	-	-	-	
F	-	-	-	-	-	
ER	ER-calc-ratio	2014	0.404	-	-	
TC	TC-MT	2014	441,000			
TL	TL-MT	2016	471,000			
TB/TBmsy	TBdivTBmsy-dimensionless	2014	1.15			
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2016	1			
F/Fmsy	FdivFmsy-dimensionless	2016	0.93			
ER/ERmsy	ER-calc-ratio/ERmsy-calc-ratio	2014	0.765			
TB/TBmgt	-	-	-			
SSB/SSBmgt	-	-	-			
F/Fmgt	-	-	-			
ER/ERmgt	-	-	-			

Skipjack tuna Indian Ocean [SKJCIO]

Kobe MSYpref (1950–2016–PONS)



Kobe MGTPref (1950–2016–PONS)



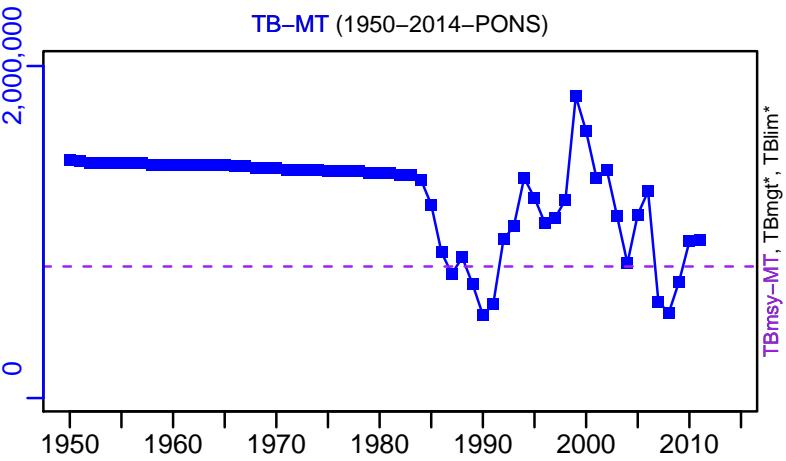
Spawner Recruit\*

Production\*

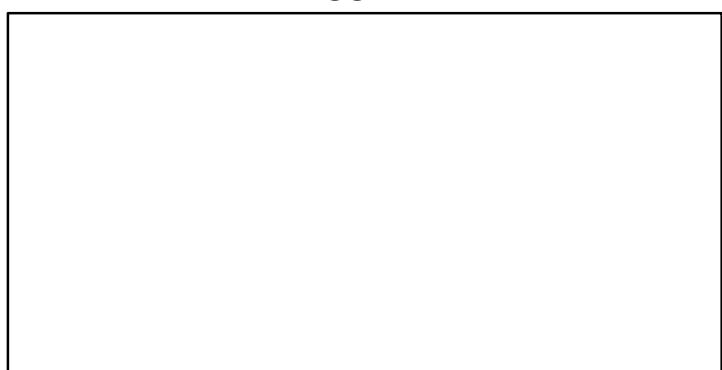
◆ Start Year ◆ End Year \* No Data

Skipjack tuna Indian Ocean [SKJCIO]

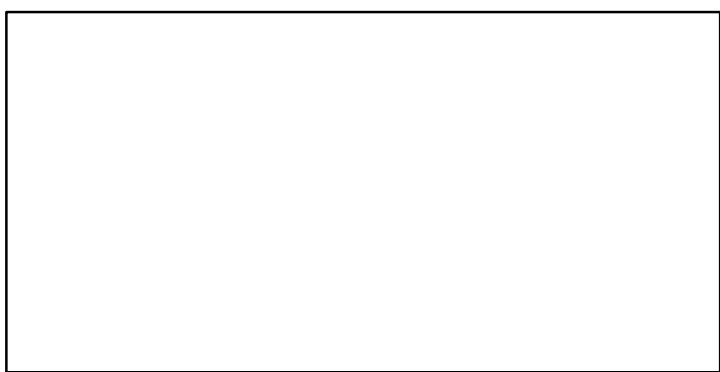
TB-MT (1950–2014–PONS)



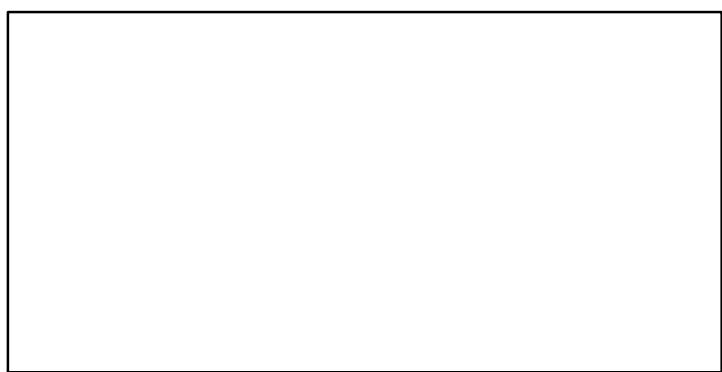
SSB\*



TN \*

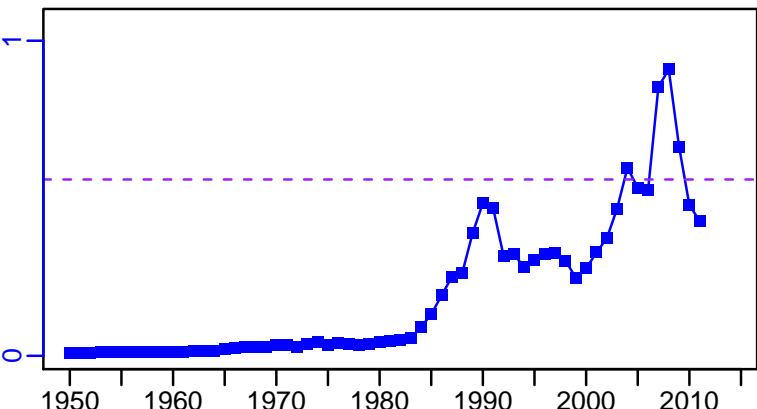


F\*

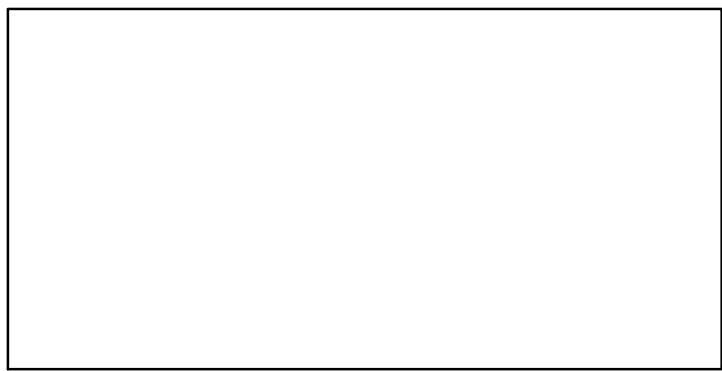


ER-calc-ratio (1950–2014–PONS)

ER<sub>msy</sub>-calc-ratio, ER<sub>mgt</sub>, ER<sub>lim</sub>\*



Recruits\*

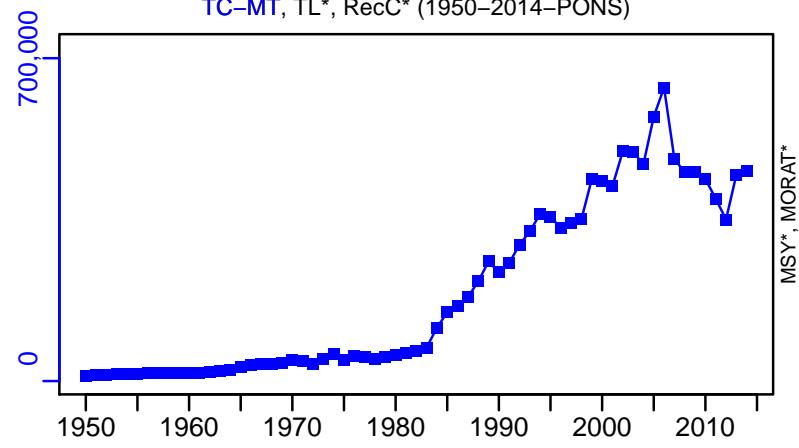


- |                      |              |           |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP      | — Lim BRP    | * No Data |

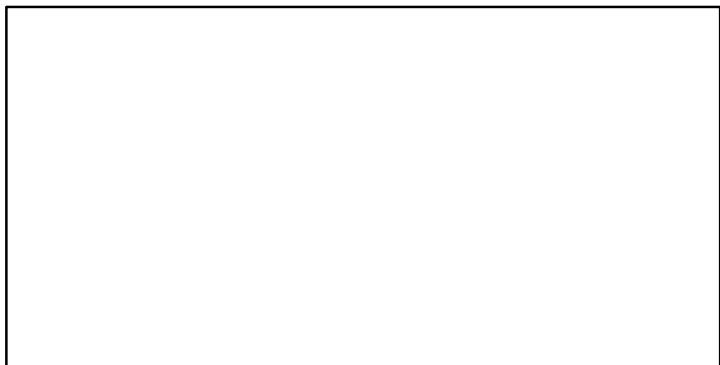
Skipjack tuna Indian Ocean [SKJCIO]

TC-MT, TL\*, RecC\* (1950–2014–PONS)

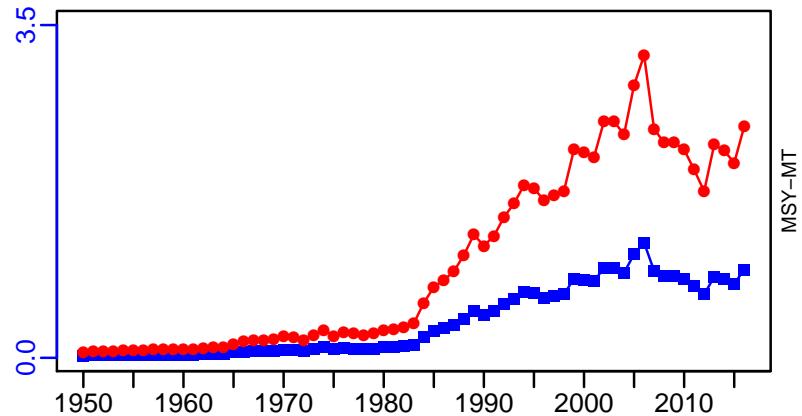
TAC\*, Cpair\*, Cadv\*



**EFFORT\***



TL-MT/MSY-MT, CdivMEANC-ratio, (1950–2016–PONS)



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

## Striped marlin Indian Ocean [STMARLINIO]

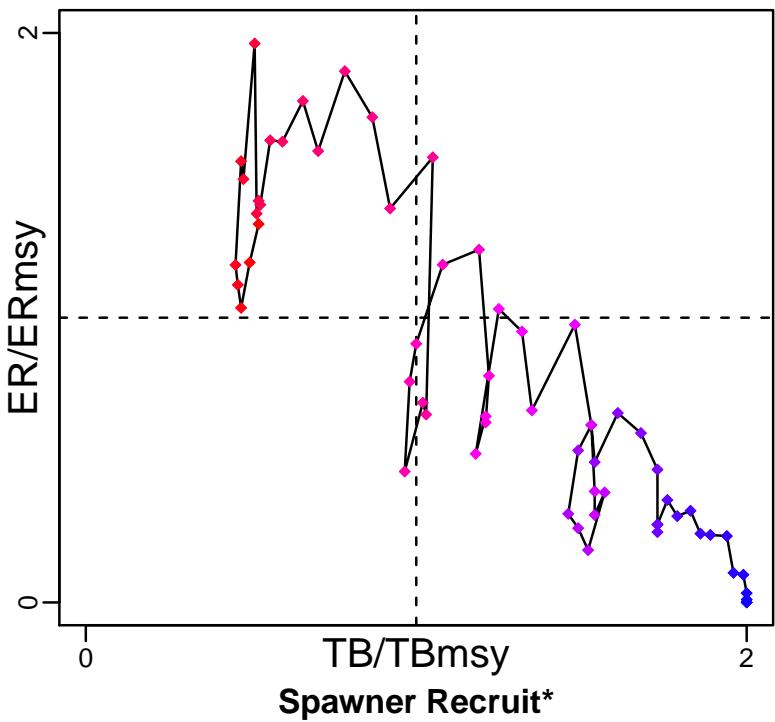
<b>Metadata</b>	
<b>Scientific Name</b>	Kajikia audax
<b>Current Assess ID</b>	IOTC-STMARLINIO-1950-2014-PONS
<b>Area</b>	Indian Ocean
<b>Management Authority</b>	Indian Ocean Tuna Commission
<b>Assessor</b>	Indian Ocean Tuna Commission
<b>Asmts in RAM</b>	2014

<b>Reference Points</b>			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2014	28,313
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-calc-ratio	2014	0.149
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	TB0-MT	2014	61,450
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2014	4218
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

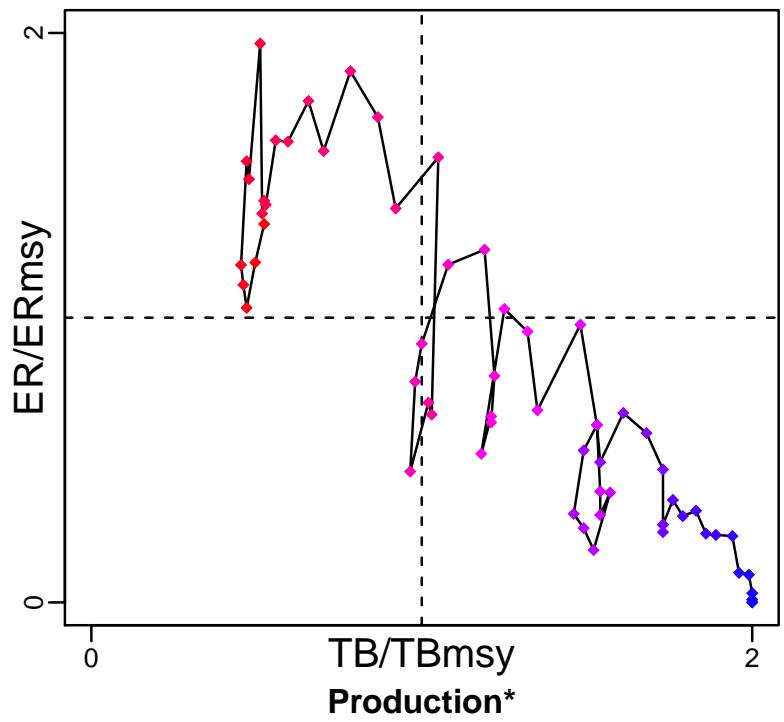
<b>Time Series</b>						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	TB-MT	2014	14,800	-	-	
<b>SSB</b>	-	-	-	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	-	-	-	-	-	
<b>F</b>	-	-	-	-	-	
<b>ER</b>	ER-calc-ratio	2014	0.198	-	-	
<b>TC</b>	TC-MT	2014	3990			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	TBdivTBmsy-dimensionless	2014	0.523			
<b>SSB/SSBmsy</b>	-	-	-			
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2014	1.12			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-calc-ratio	2014	1.329			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

**Striped marlin Indian Ocean [STMARLINIO]**

Kobe MSYpref (1950–2014–PONS)



Kobe MGTPref (1950–2014–PONS)



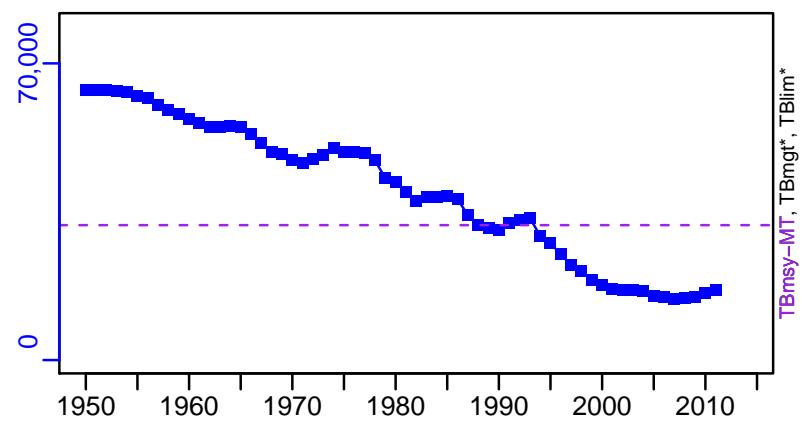
Spawner Recruit\*

Production\*

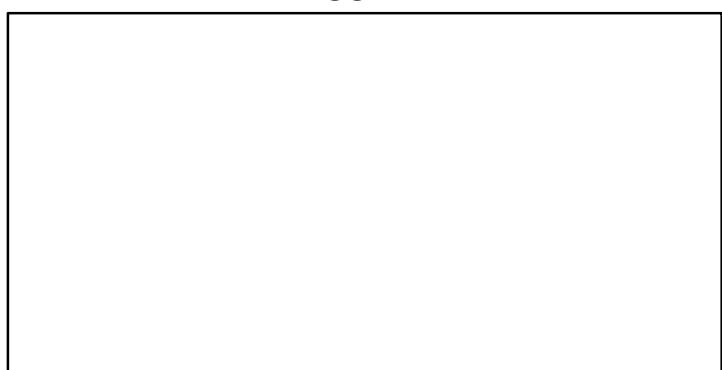
◆ Start Year   ◆ End Year   \* No Data

**Striped marlin Indian Ocean [STMARLINIO]**

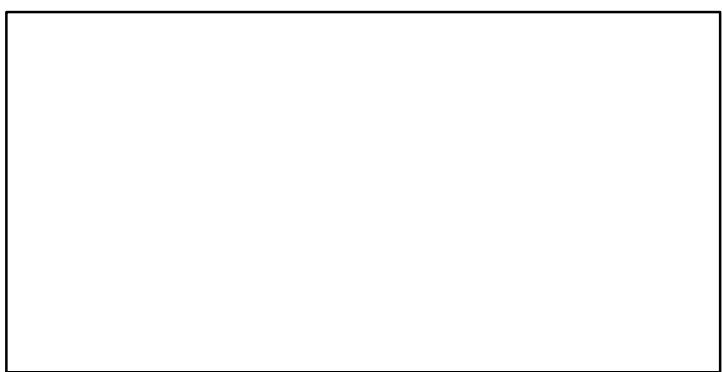
TB-MT (1950–2014-PONS)



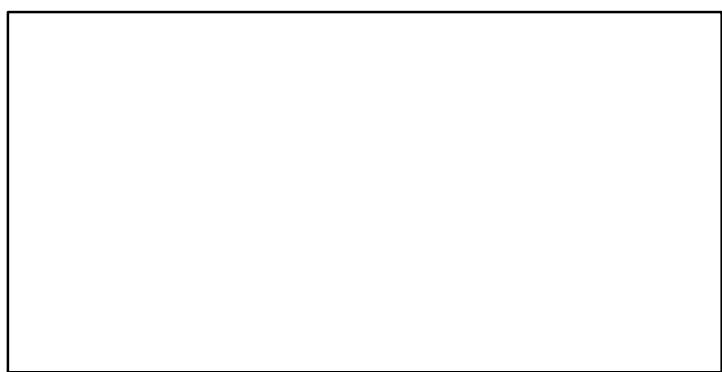
**SSB\***



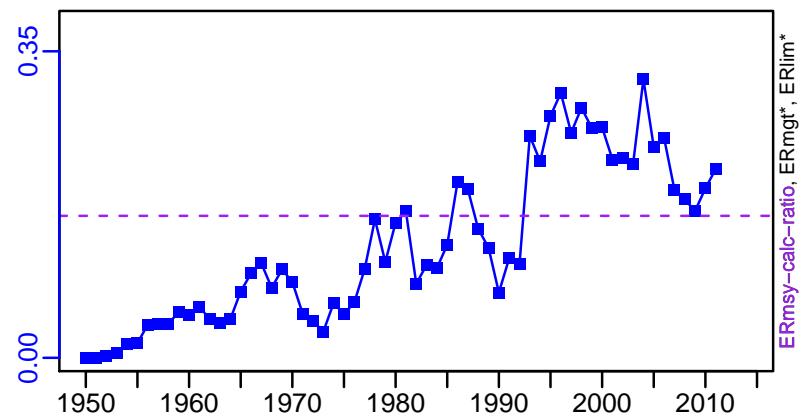
**TN \***



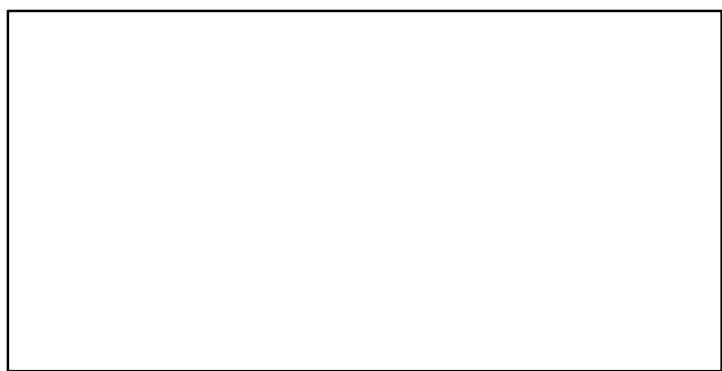
**F\***



ER-calc-ratio (1950–2014-PONS)



**Recruits\***

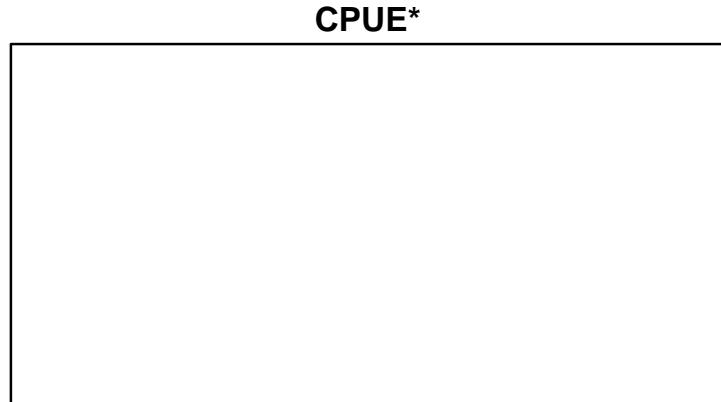
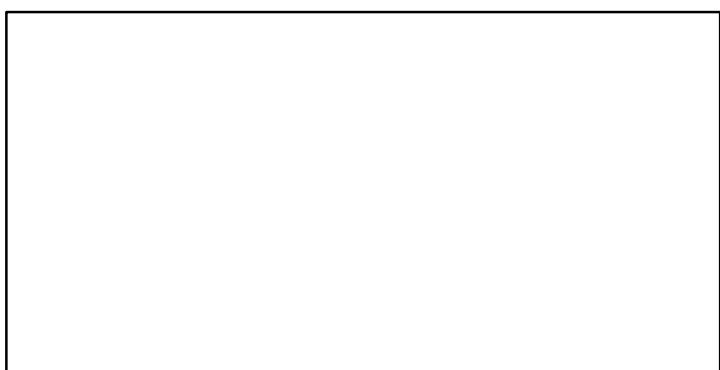
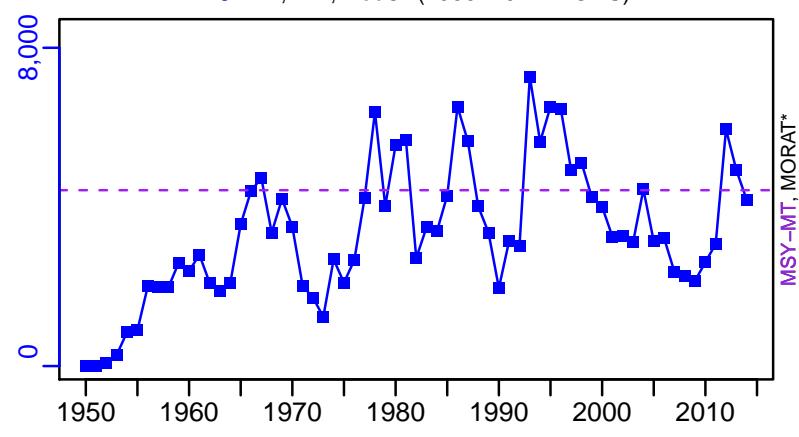


- |                      |              |           |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| - - - MSY-based BRP  | --- Lim BRP  | * No Data |

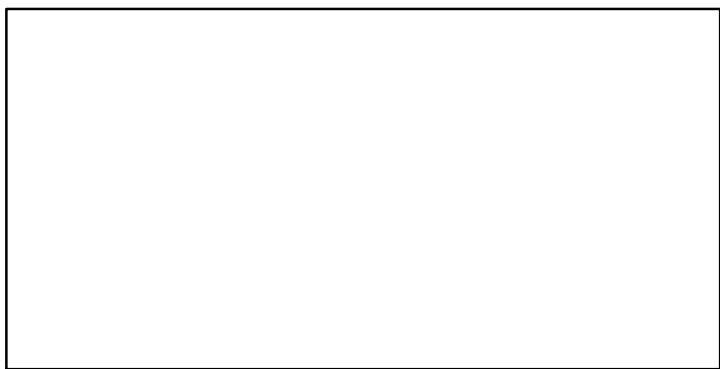
**Striped marlin Indian Ocean [STMARLINIO]**

TC-MT, TL\*, RecC\* (1950–2014–PONS)

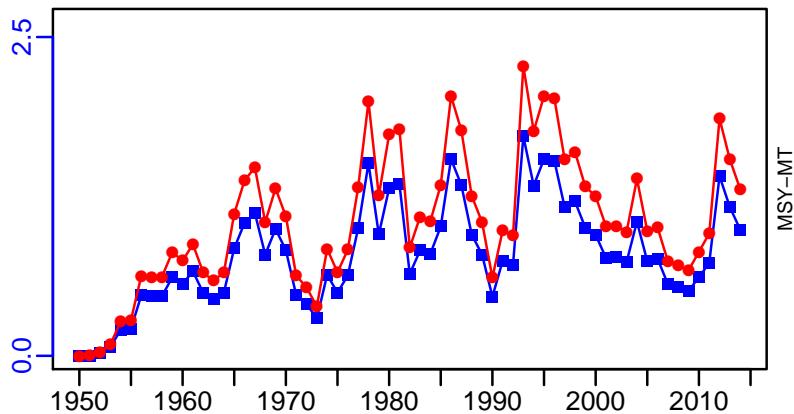
TAC\*, Cpair\*, Cadv\*



**EFFORT\***



TC-MT/MSY-MT, CdivMEANC-ratio, (1950–2014–PONS)



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

## Swordfish Indian Ocean [WORDIO]

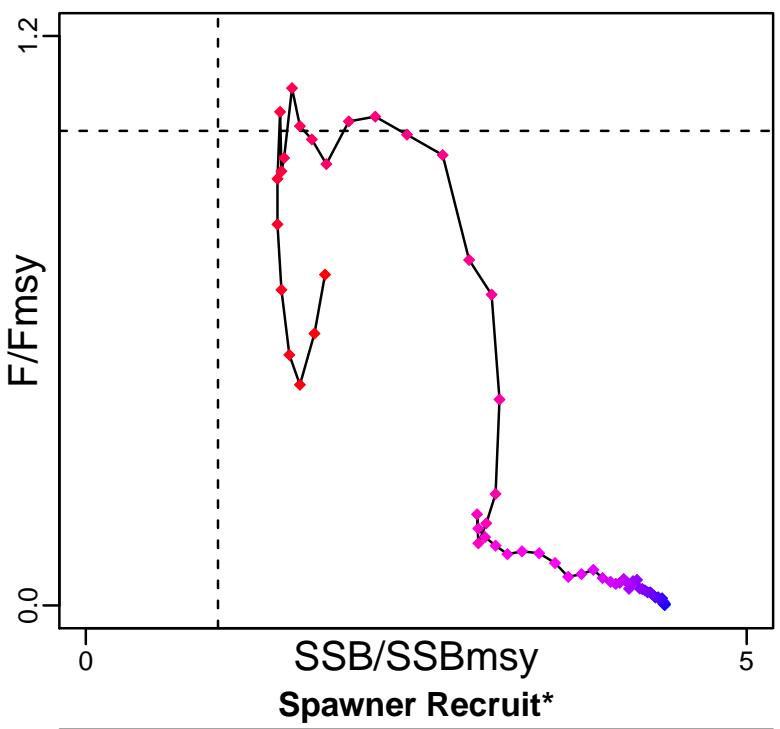
<b>Metadata</b>	
<b>Scientific Name</b>	Xiphias gladius
<b>Current Assess ID</b>	IOTC-SWORDIO-1950-2014-PONS
<b>Area</b>	Indian Ocean
<b>Management Authority</b>	Indian Ocean Tuna Commission
<b>Assessor</b>	Indian Ocean Tuna Commission
<b>Asmts in RAM</b>	2014

<b>Reference Points</b>			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2014	17,000
<b>Fmsy</b>	Fmsy-1/yr	2014	0.12
<b>ERmsy</b>	ERmsy-conv-ratio	2014	1.365
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2014	27,100
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

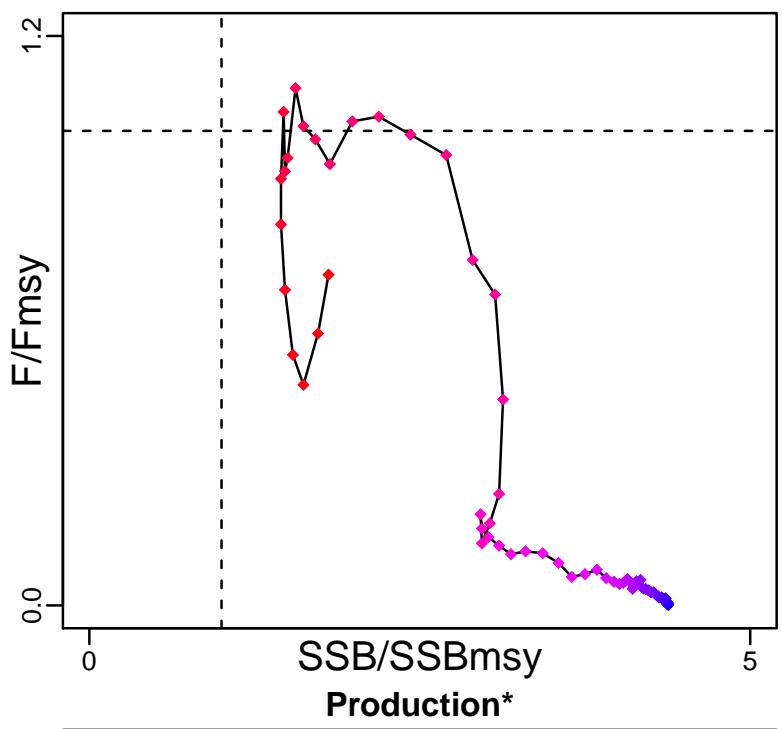
<b>Time Series</b>						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2014	30,800	Females	10+	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	-	-	-	-	-	
<b>F</b>	F-1/yr	2014	0.08	-	-	
<b>ER</b>	ER-calc-ratio	2014	0.825	-	-	
<b>TC</b>	TC-MT	2014	29,900			
<b>TL</b>	-	-	-			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSBdivSSBmsy-dimensionless	2014	1.81			
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2014	0.697			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-conv-ratio	2014	0.605			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

Swordfish Indian Ocean [SWORDIO]

Kobe MSYpref (1950–2014–PONS)



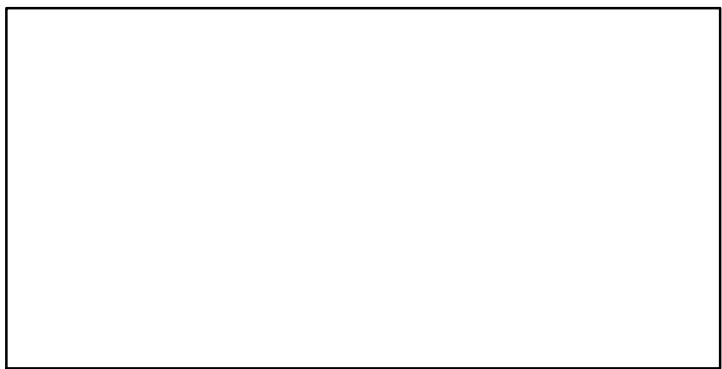
Kobe MGTPref (1950–2014–PONS)



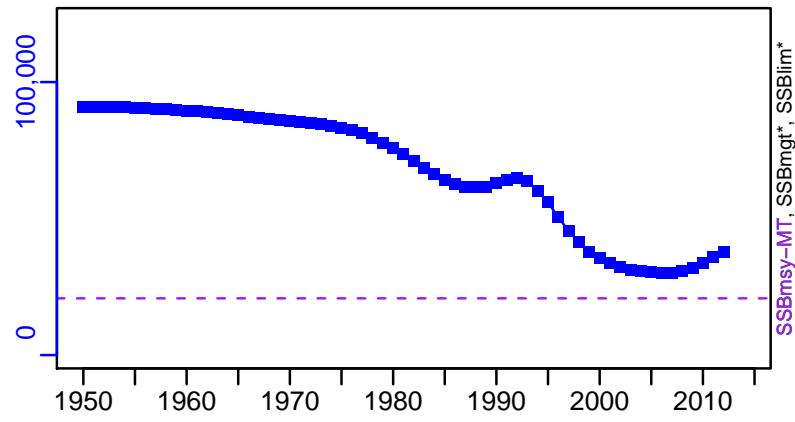
◆ Start Year   ◆ End Year   \* No Data

Swordfish Indian Ocean [SWORDIO]

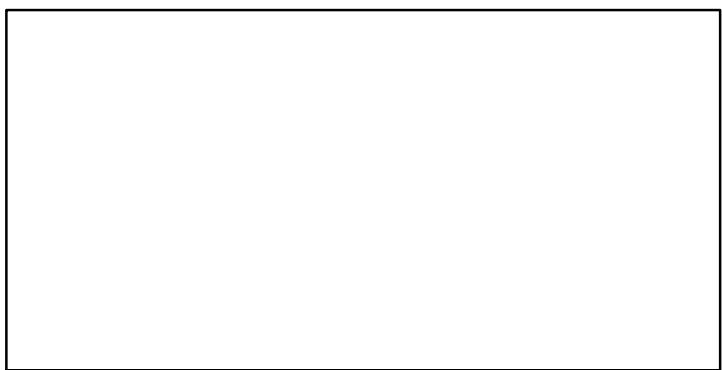
**TB\***



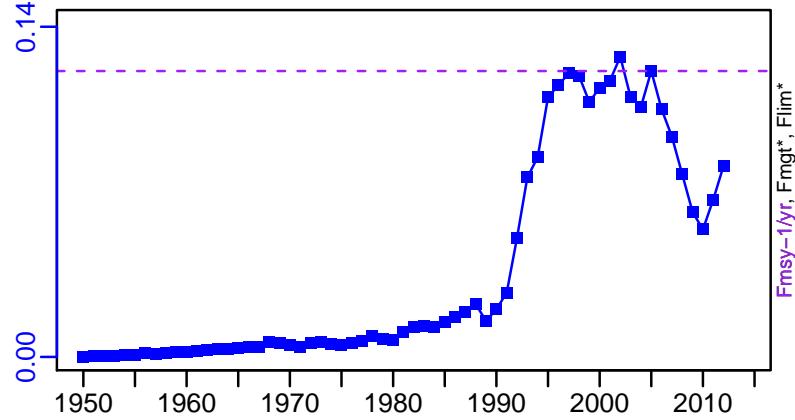
**SSB-MT** (1950–2014–PONS)



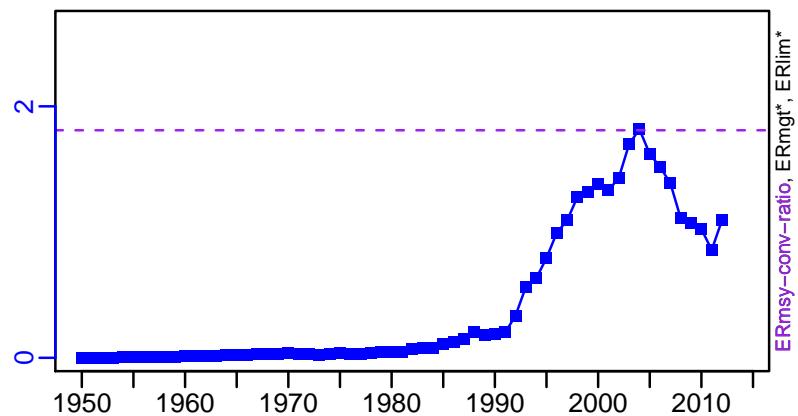
**TN \***



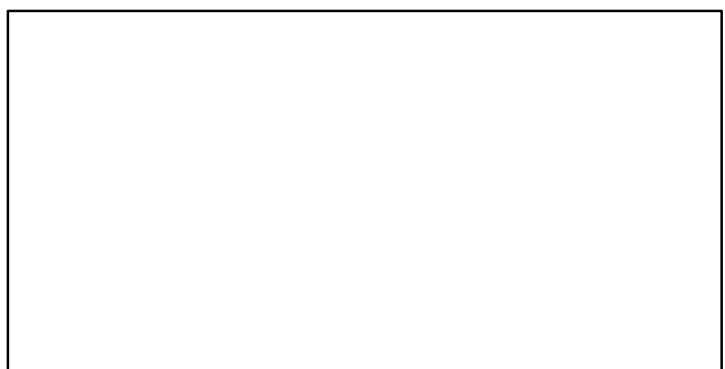
**F-1/yr** (1950–2014–PONS)



**ER-calc-ratio** (1950–2014–PONS)



**Recruits\***

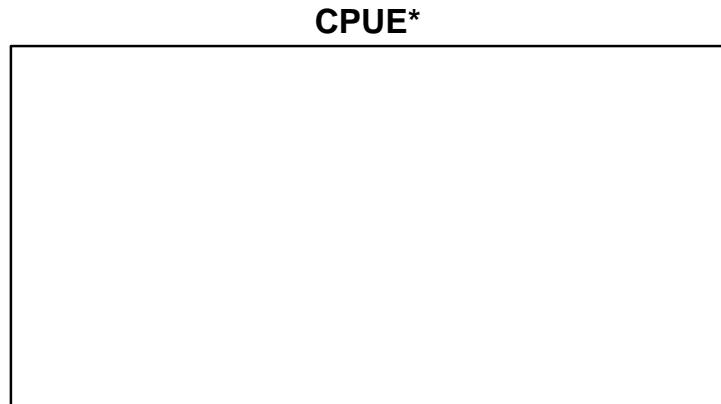
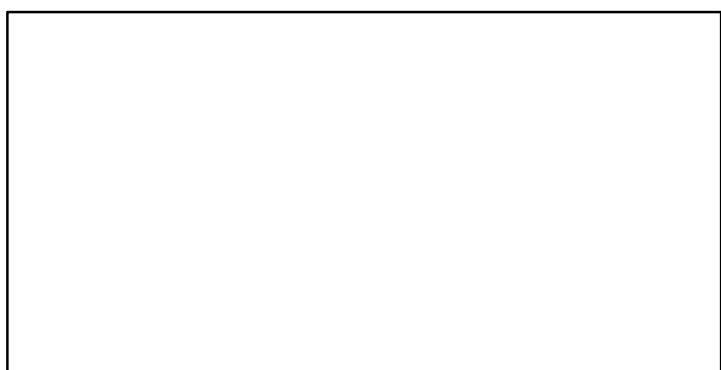
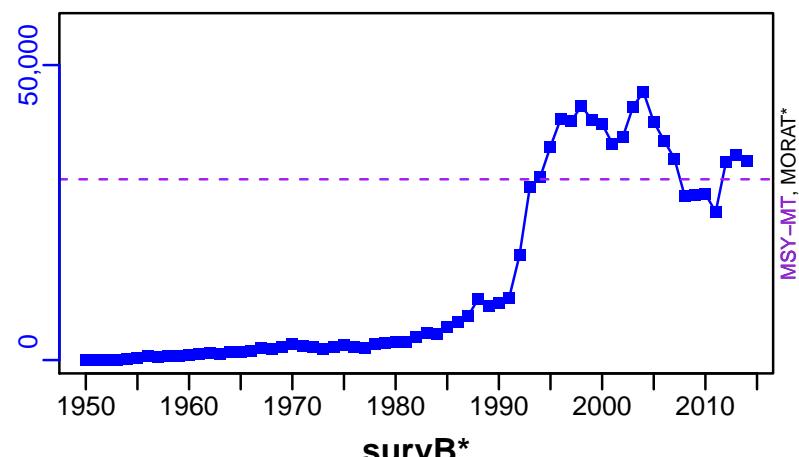


- |                      |              |           |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| - - MSY-based BRP    | ·· Lim BRP   | * No Data |

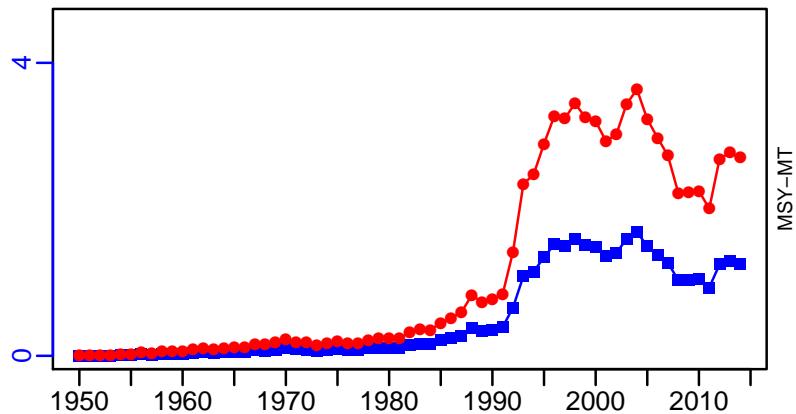
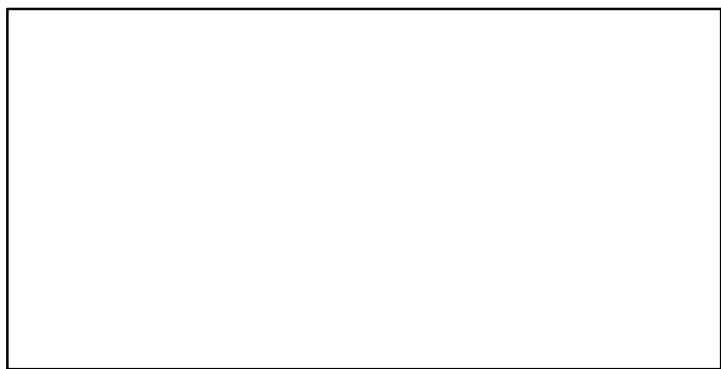
Swordfish Indian Ocean [SWORDIO]

TC-MT, TL\*, RecC\* (1950–2014–PONS)

TAC\*, Cpair\*, Cadv\*



TC-MT/MSY-MT, CdivMEANC-ratio, (1950–2014–PONS)



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

## Yellowfin tuna Indian Ocean [YFINEIO]

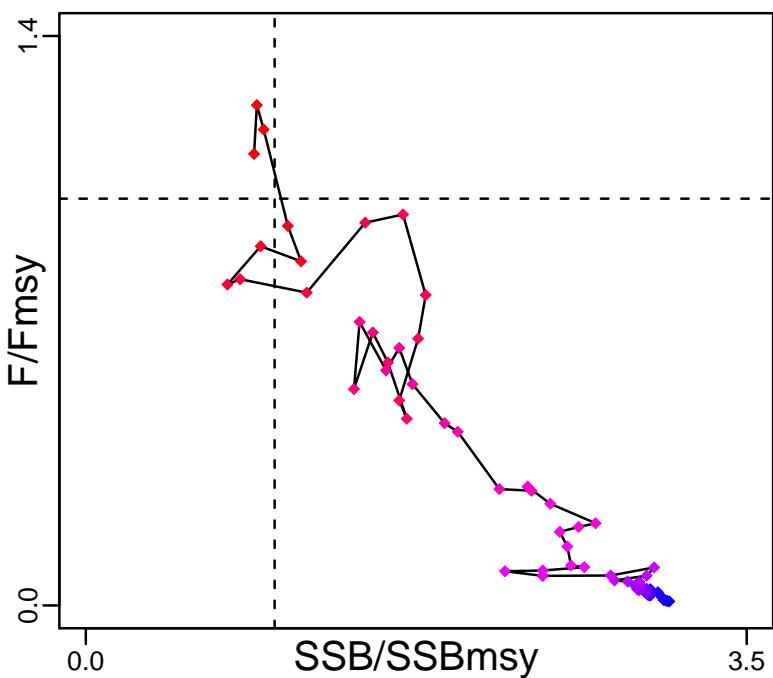
Metadata	
<b>Scientific Name</b>	Thunnus albacares
<b>Current Assess ID</b>	IOTC-YFINEIO-1950-2016-PONS
<b>Area</b>	Indian Ocean
<b>Management Authority</b>	Indian Ocean Tuna Commission
<b>Assessor</b>	Indian Ocean Tuna Commission
<b>Asmts in RAM</b>	2014, 2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2014	1,346,000
<b>SSBmsy</b>	SSBmsy-extr-MT	2016	946,908
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-calc-ratio	2014	0.255
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	TB0-MT	2014	3,596,000
<b>SSB0</b>	SSB0-MT	2014	2,910,000
<b>MSY</b>	MSY-MT	2016	422,000
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

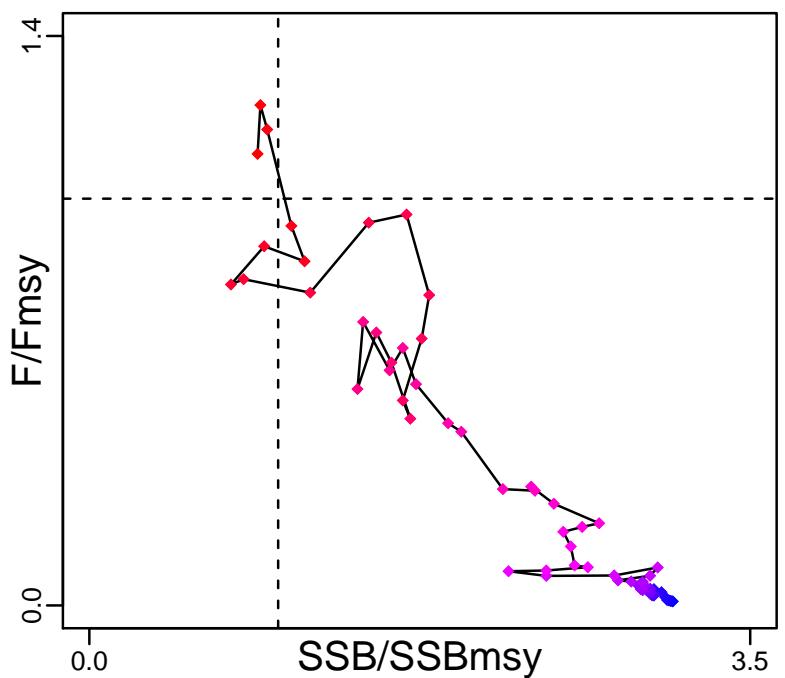
Time Series						
Type	ID	Asmt Year	Curr Value	Sex	Age	
<b>TB</b>	-	-	-	-	-	
<b>SSB</b>	SSB-MT	2016	844,000	-	-	
<b>TN</b>	-	-	-	-	-	
<b>R</b>	R-E00	2014	99,700,000	-	-	
<b>F</b>	-	-	-	-	-	
<b>ER</b>	ER-calc-ratio	2016	0.211	-	-	
<b>TC</b>	TC-MT	2014	438,000			
<b>TL</b>	TL-MT	2016	427,000			
<b>TB/TBmsy</b>	-	-	-			
<b>SSB/SSBmsy</b>	SSBdivSSBmsy-dimensionless	2016	0.891			
<b>F/Fmsy</b>	FdivFmsy-dimensionless	2016	1.11			
<b>ER/ERmsy</b>	ER-calc-ratio/ERmsy-calc-ratio	2014	0.449			
<b>TB/TBmgt</b>	-	-	-			
<b>SSB/SSBmgt</b>	-	-	-			
<b>F/Fmgt</b>	-	-	-			
<b>ER/ERmgt</b>	-	-	-			

Yellowfin tuna Indian Ocean [YFINEIO]

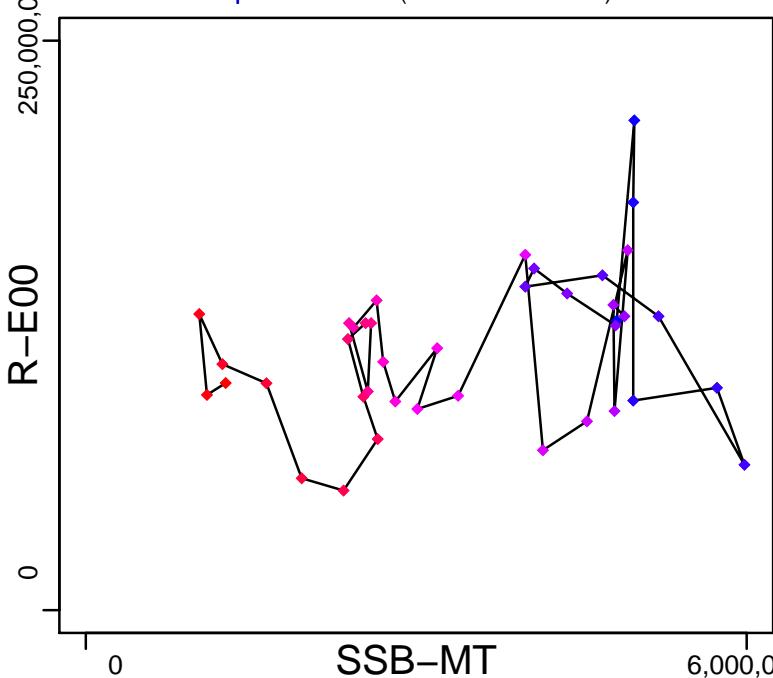
Kobe MSYpref (1950–2016–PONS)



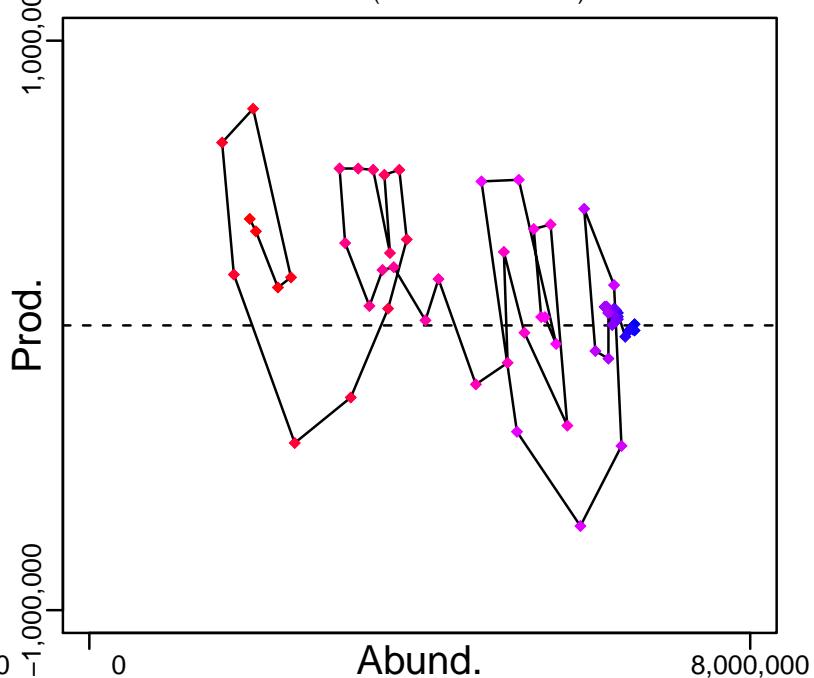
Kobe MGTPref (1950–2016–PONS)



Spawner Recruit (1950–2014–PONS)



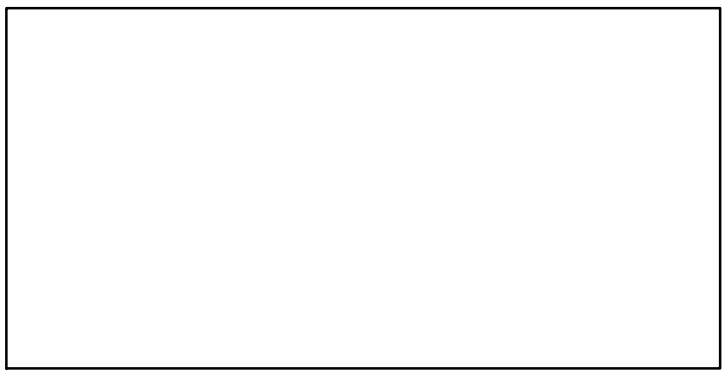
Production (1950–2016–PONS)



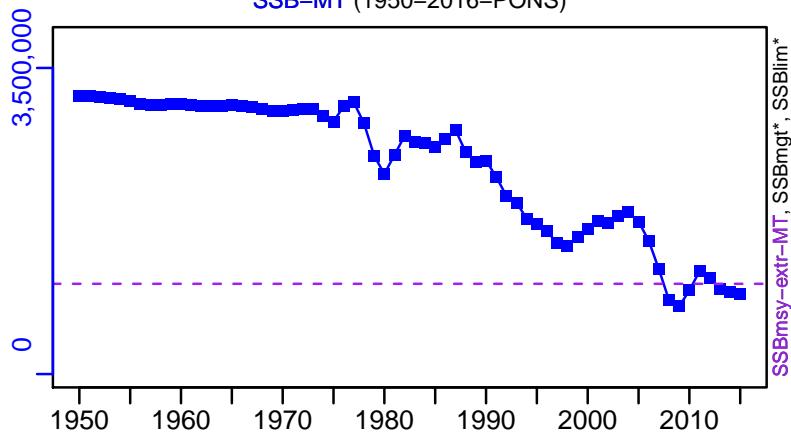
◆ Start Year ◆ End Year \* No Data

Yellowfin tuna Indian Ocean [YFINEIO]

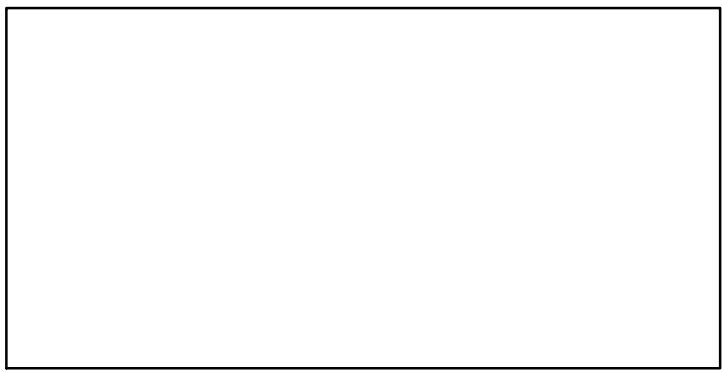
**TB\***



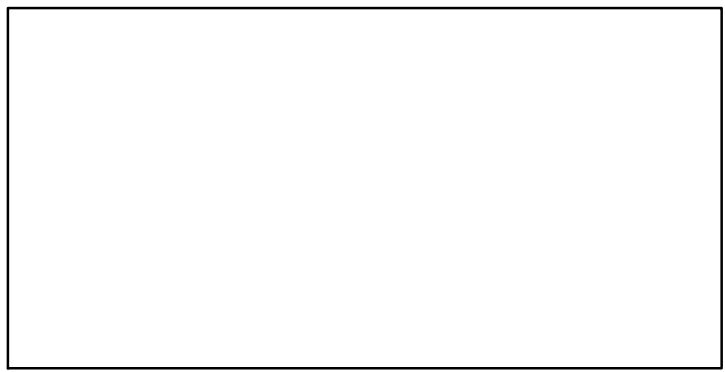
**SSB-MT (1950–2016–PONS)**



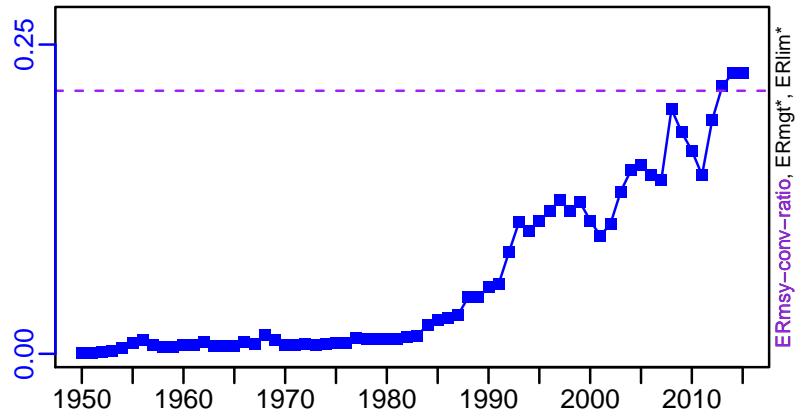
**TN \***



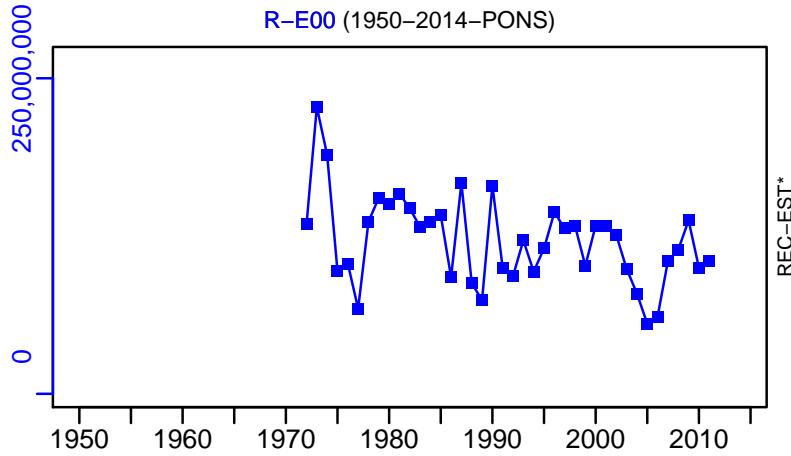
**F\***



**ER-calc-ratio (1950–2016–PONS)**



**R-E00 (1950–2014–PONS)**

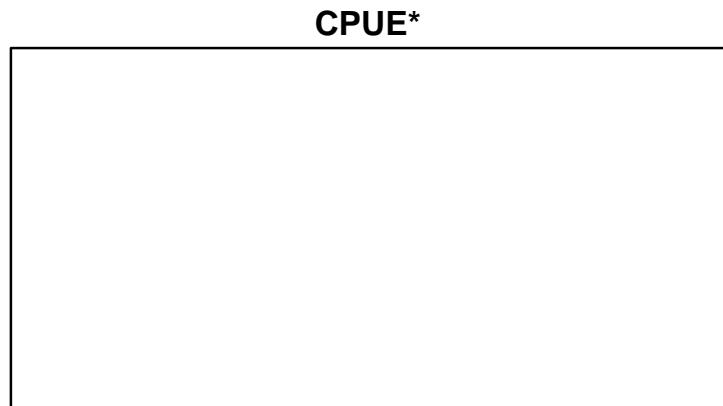
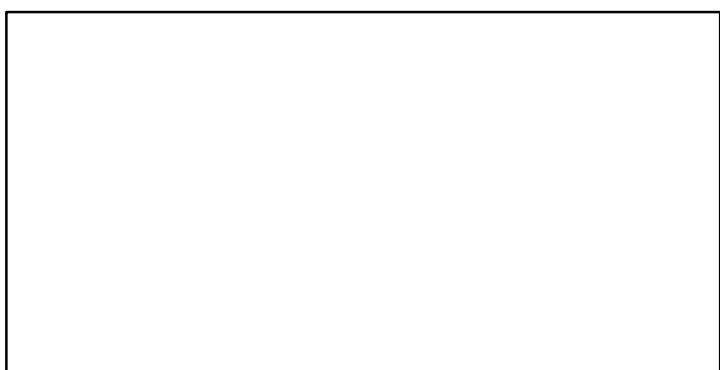
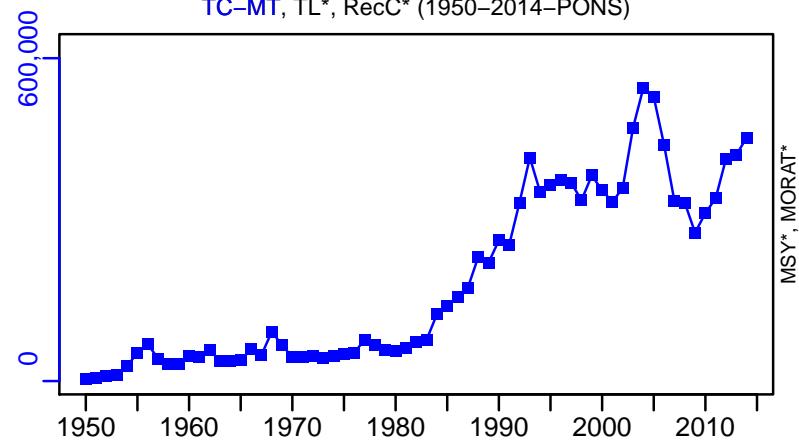


- |                      |              |           |
|----------------------|--------------|-----------|
| ■ Listed time series | — Target BRP | — Rec-Est |
| — MSY-based BRP      | ··· Lim BRP  | * No Data |

**Yellowfin tuna Indian Ocean [YFINEIO]**

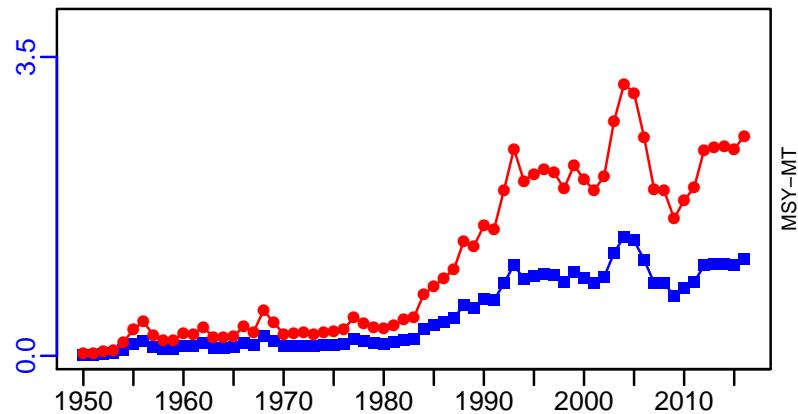
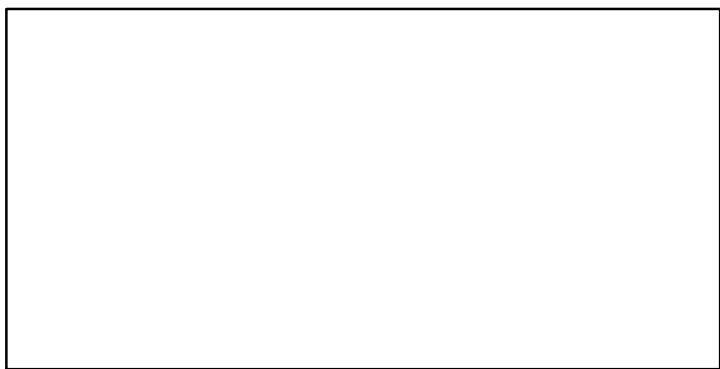
TC-MT, TL\*, RecC\* (1950–2014–PONS)

TAC\*, Cpair\*, Cadv\*



**EFFORT\***

TL-MT/MSY-MT, CdivMEANC-ratio, (1950–2016–PONS)



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