

Indian Ocean Stocks

v4.61 (Apr-02-2023)

Not present Present Preferred

Stock	B/Bmsy	Time Series Types			
		U/Umsy	B/Bmgt	U/Umgt	
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. BLSHARIO [Blue shark Indian Ocean]	TB SSB	ER F	TB SSB	ER F	
5. BMARLINIO [Indo Pacific blue marlin Indian Ocean]	TB SSB	ER F	TB SSB	ER F	
6. IPSAILIO [Indo-Pacific sailfish Indian Ocean]	TB SSB	ER F	TB SSB	ER F	
7. SBT [Southern bluefin tuna Southern Oceans]	TB SSB	ER F	TB SSB	ER F	
8. SKJCIO [Skipjack tuna Indian Ocean]	TB SSB	ER F	TB SSB	ER F	
9. STMARLINIO [Striped marlin Indian Ocean]	TB SSB	ER F	TB SSB	ER F	
10. SWORDIO [Swordfish Indian Ocean]	TB SSB	ER F	TB SSB	ER F	
11. YFINEIO [Yellowfin tuna Indian Ocean]	TB SSB	ER F	TB SSB	ER F	

Albacore tuna Indian Ocean [ALBAIO]

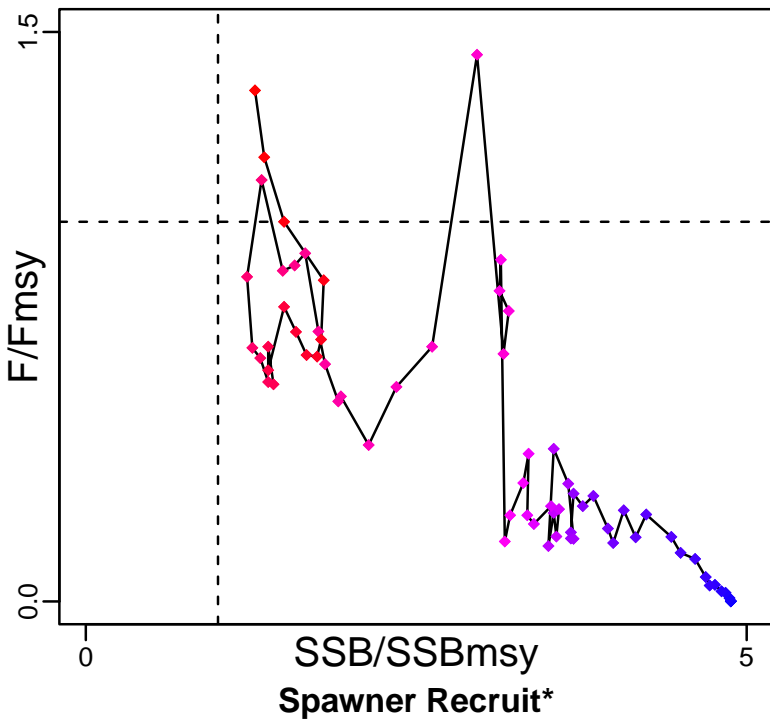
Metadata	
Scientific Name	Thunnus alalunga
Current Assess ID	IOTC-ALBAIO-1950-2020-SMITH
Area	Indian Ocean
Management Authority	Indian Ocean Tuna Commission
Assessor	Indian Ocean Tuna Commission
Asmts in RAM	2014, 2016, 2020

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-extr-MT	2020	110,491
Fmsy	Fmsy-1/yr	2014	0.06
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	SSB0-MT	2014	187,325
MSY	MSY-MT	2020	93,933
M	M-1/yr	2014	0.3
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

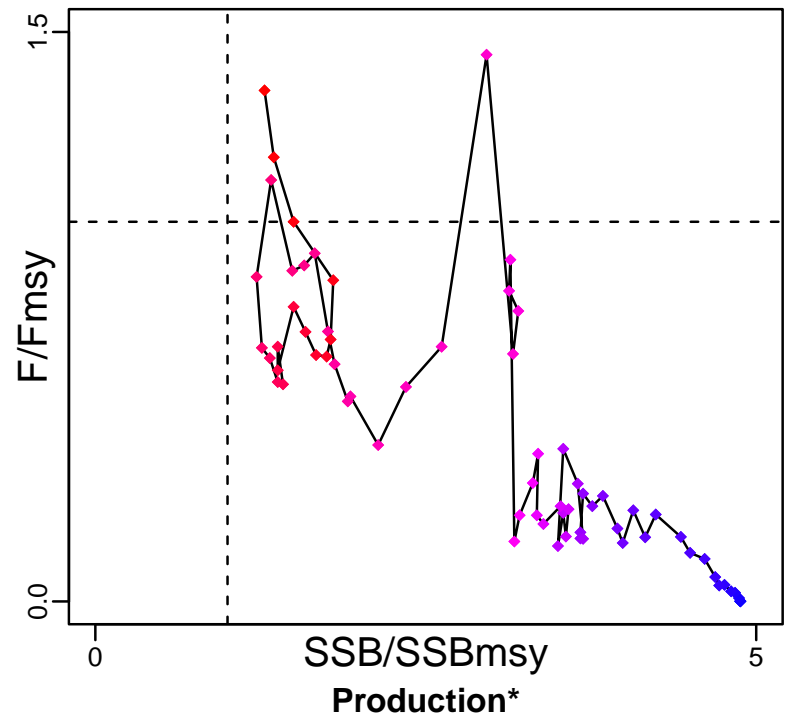
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-MT	2020	203,400	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2020	38,082		
TL	TL-MT	2016	36,000		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2020	1.28		
F/Fmsy	FdivFmsy-dimensionless	2020	1.346		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Albacore tuna Indian Ocean [ALBAIO]

Kobe MSYpref (1950–2020–SMITH)



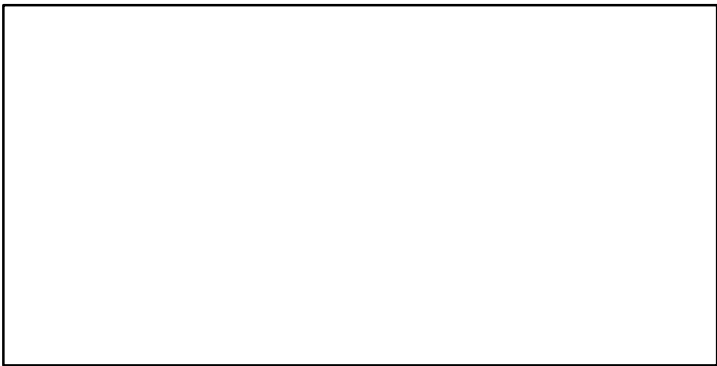
Kobe MGTpref (1950–2020–SMITH)



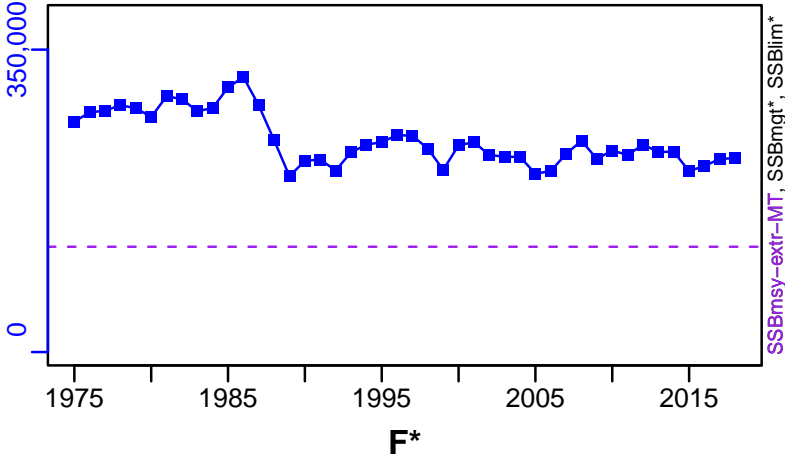
◆ Start Year ◆ End Year * No Data

Albacore tuna Indian Ocean [ALBAIO]

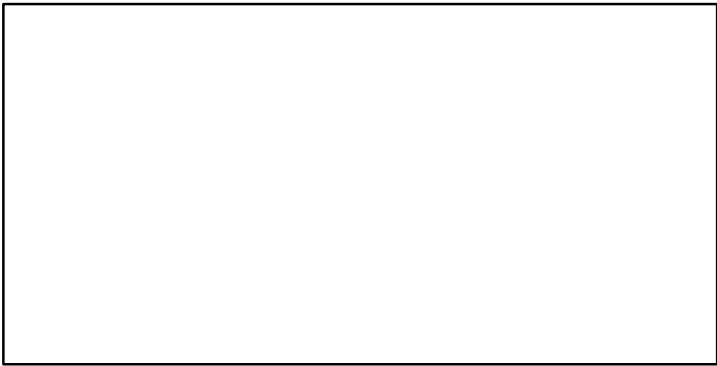
TB*



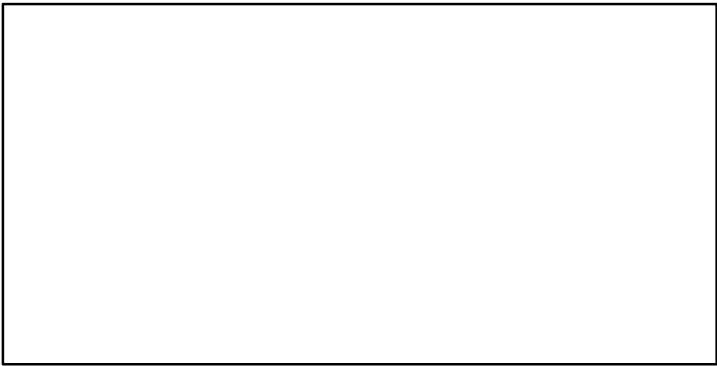
SSB-MT (1950-2020-SMITH)



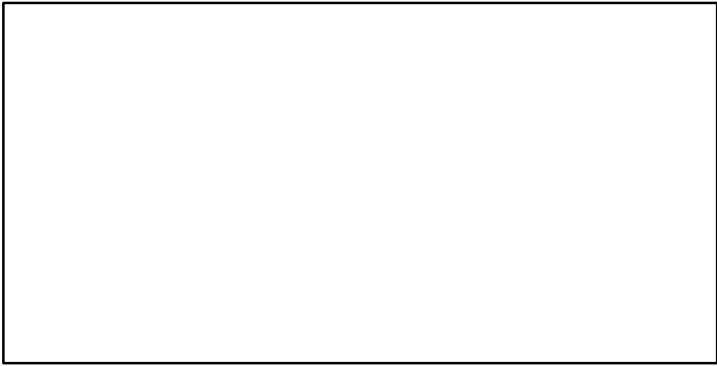
TN *



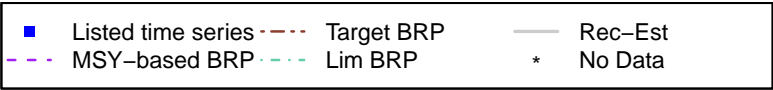
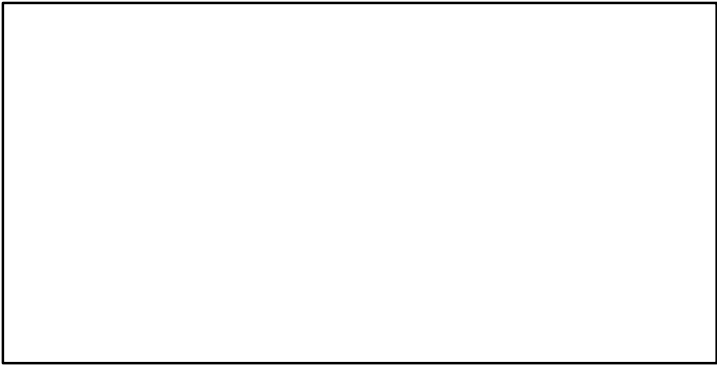
F*



ER*

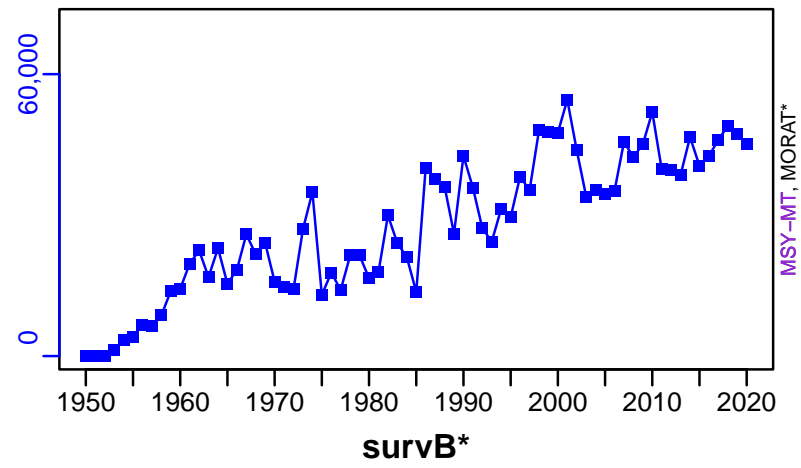


Recruits*



Albacore tuna Indian Ocean [ALBAIO]

TC-MT, TL*, RecC* (1950-2020-SMITH)



TAC*, Cpair*, Cadv*



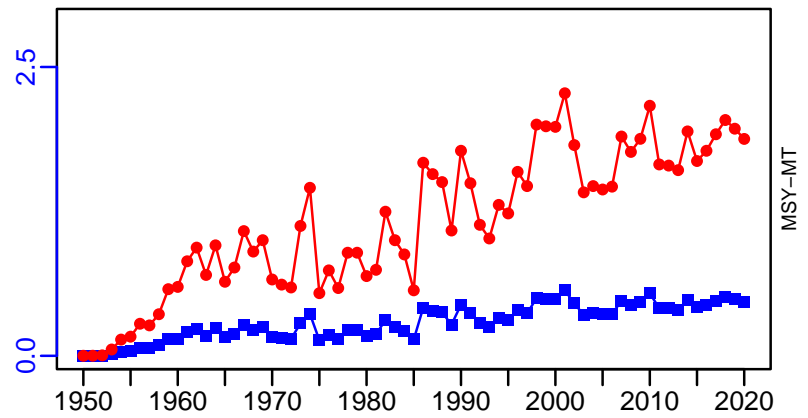
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1950-2020-SMITH)



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

Bigeye tuna Indian Ocean [BIGEYEIO]

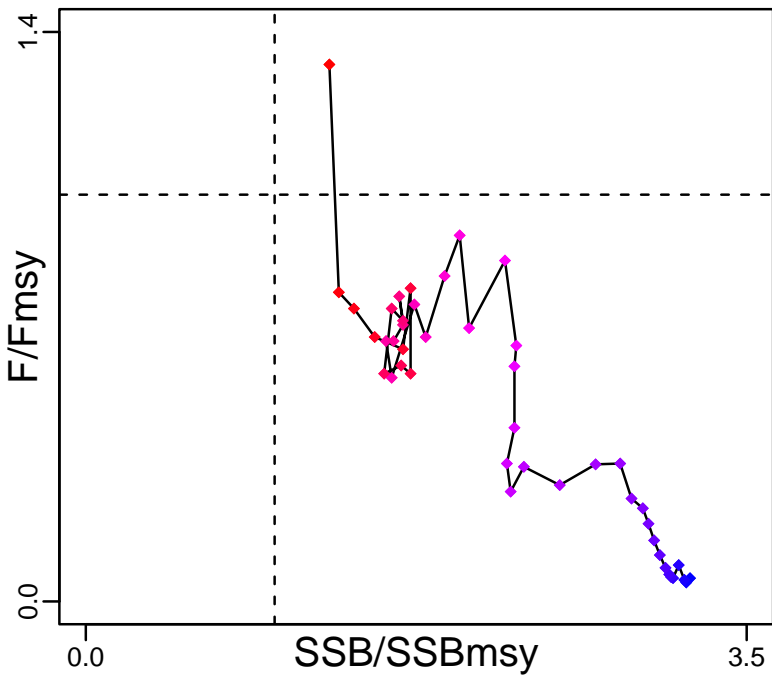
Metadata	
Scientific Name	Thunnus obesus
Current Assess ID	IOTC-BIGEYEIO-1950-2020-SMITH
Area	Indian Ocean
Management Authority	Indian Ocean Tuna Commission
Assessor	Indian Ocean Tuna Commission
Asmts in RAM	2014, 2016, 2020

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-extr-MT	2020	593,381
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	SSB0-MT	2014	1,674,570
MSY	MSY-MT	2020	86,236
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

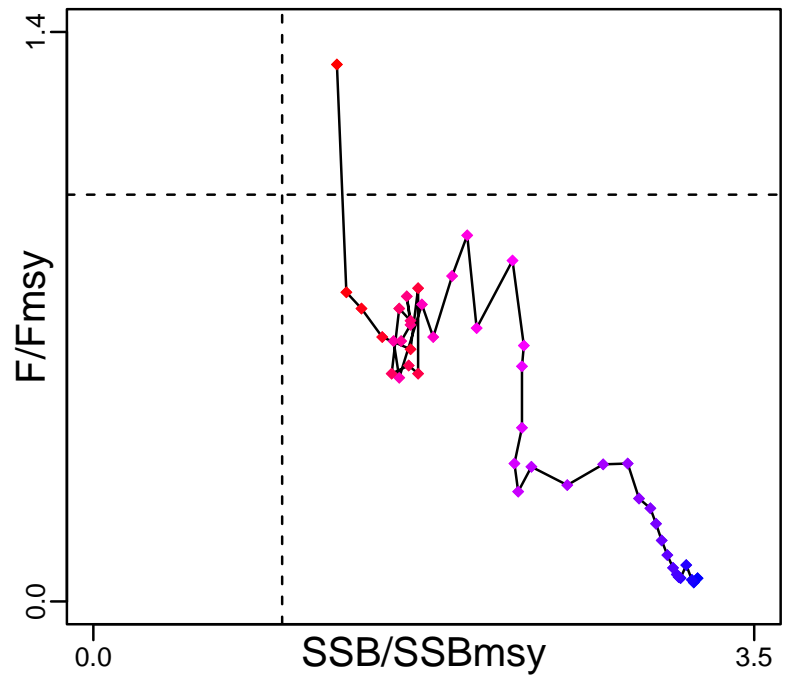
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-MT	2020	714,158	-	-
TN	-	-	-	-	-
R	R-E00	2014	108,000	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2020	83,498		
TL	TL-MT	2016	87,600		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2020	1.29		
F/Fmsy	FdivFmsy-dimensionless	2020	1.32		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Bigeye tuna Indian Ocean [BIGEYEIO]

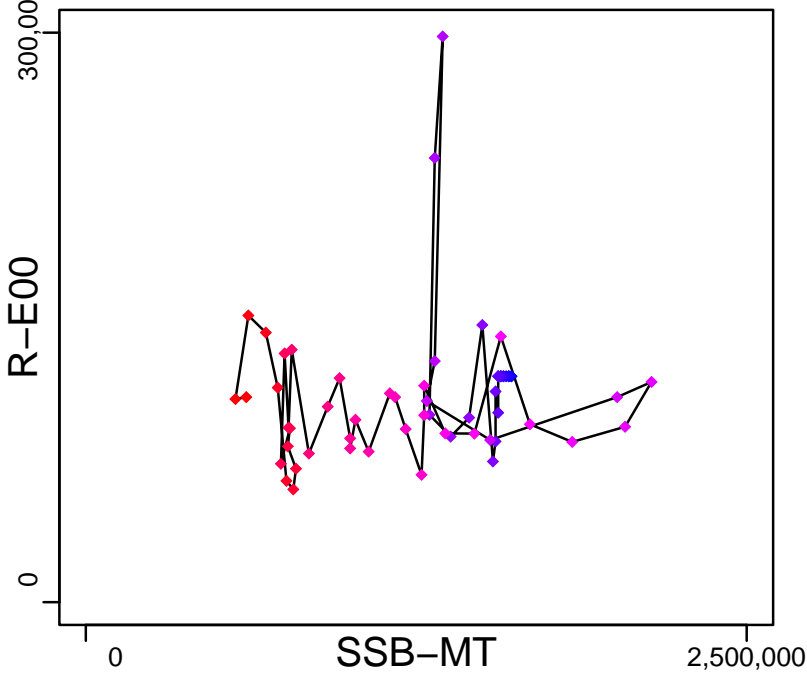
Kobe MSYpref (1950–2020–SMITH)



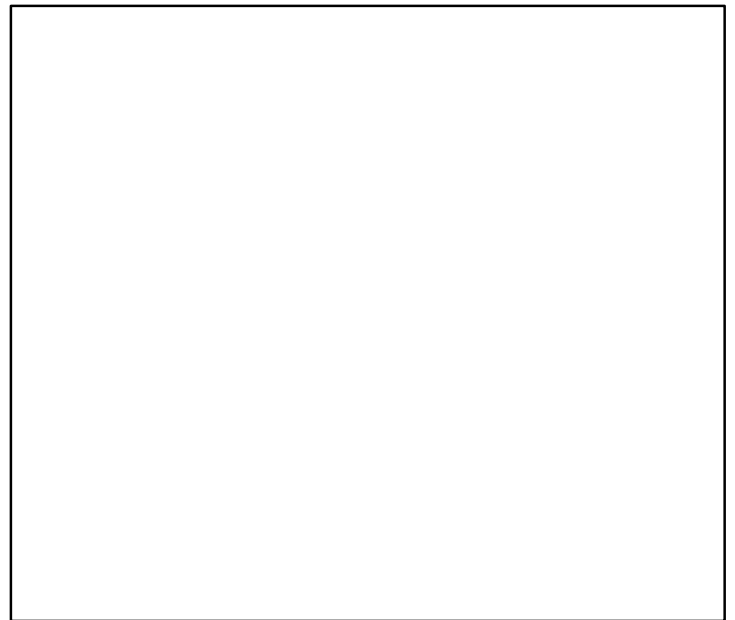
Kobe MGTpref (1950–2020–SMITH)



Spawner Recruit (1950–2014–PONS)



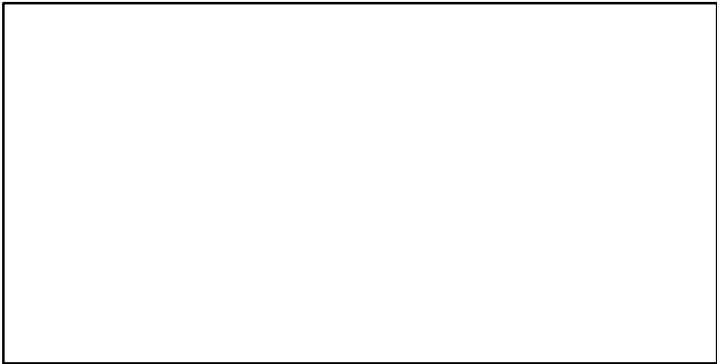
Production*



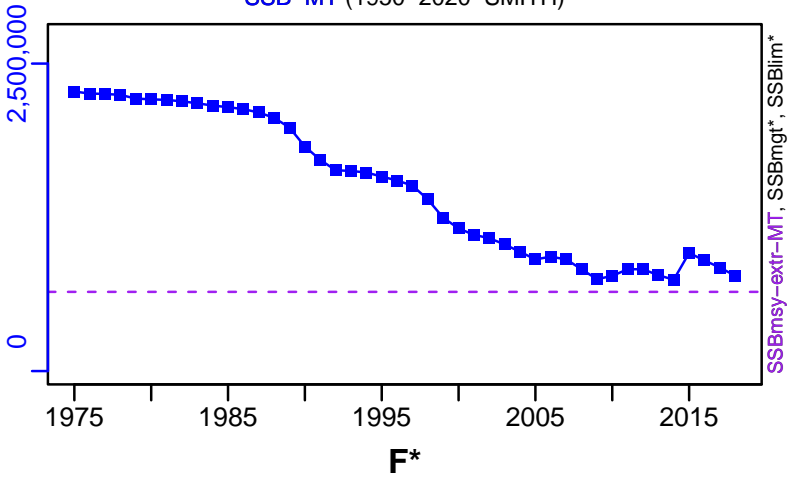
◆ Start Year ◆ End Year * No Data

Bigeye tuna Indian Ocean [BIGEYEIO]

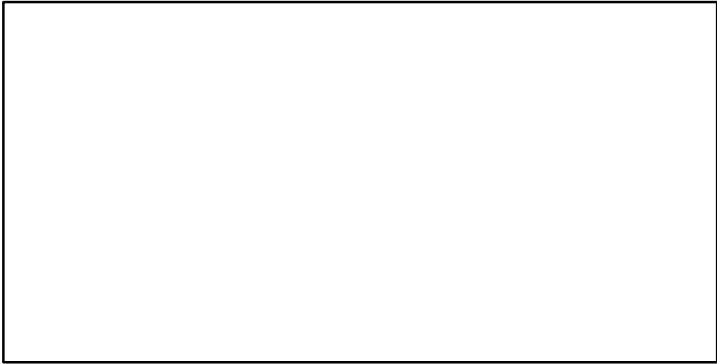
TB*



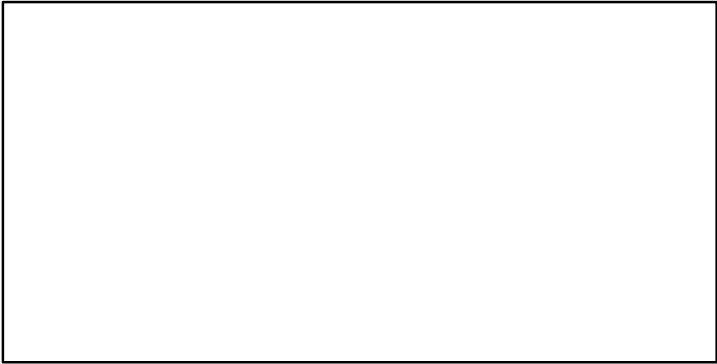
SSB-MT (1950-2020-SMITH)



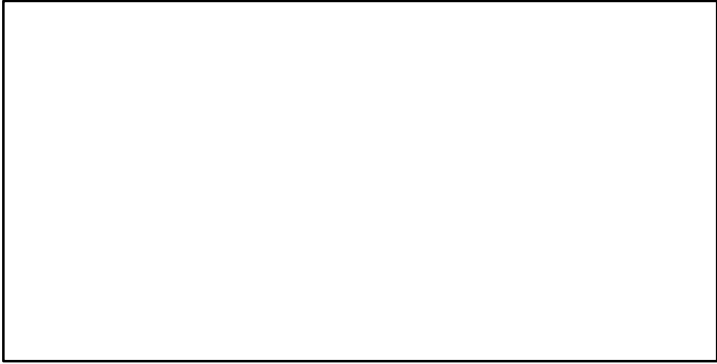
TN *



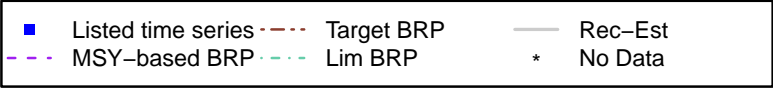
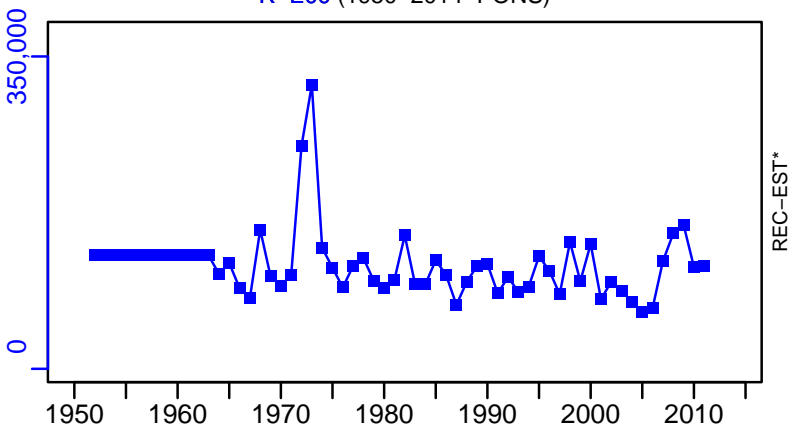
F*



ER*

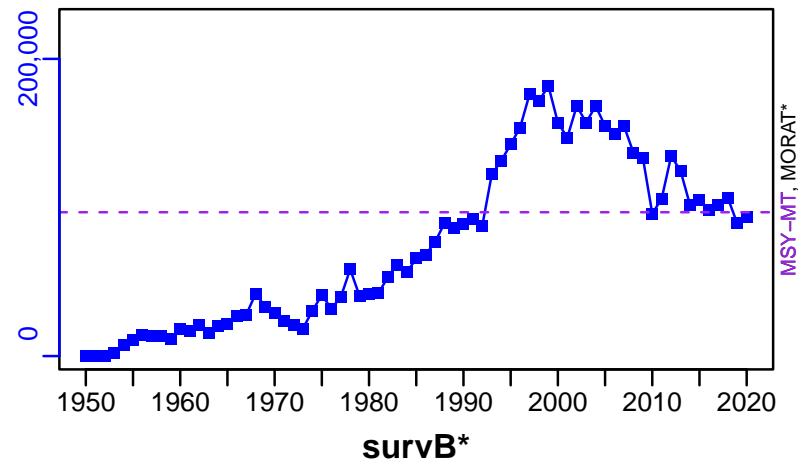


R-E00 (1950-2014-PONS)



Bigeye tuna Indian Ocean [BIGEYEIO]

TC-MT, TL*, RecC* (1950–2020–SMITH)



TAC*, Cpair*, Cadv*



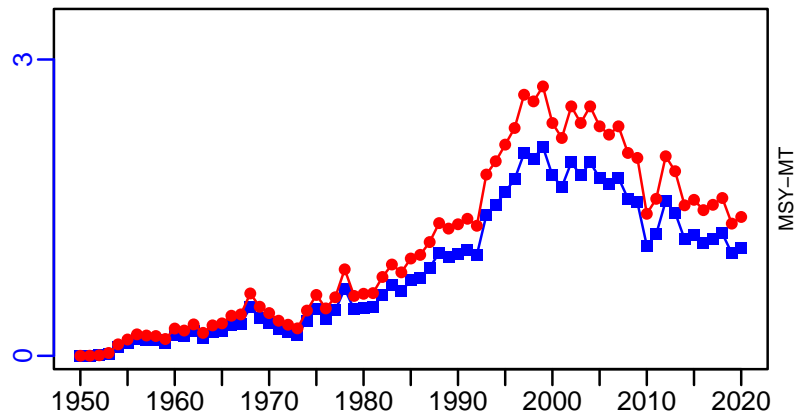
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1950–2020–SMITH)



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

Black marlin Indian Ocean [BLKMARLINIO]

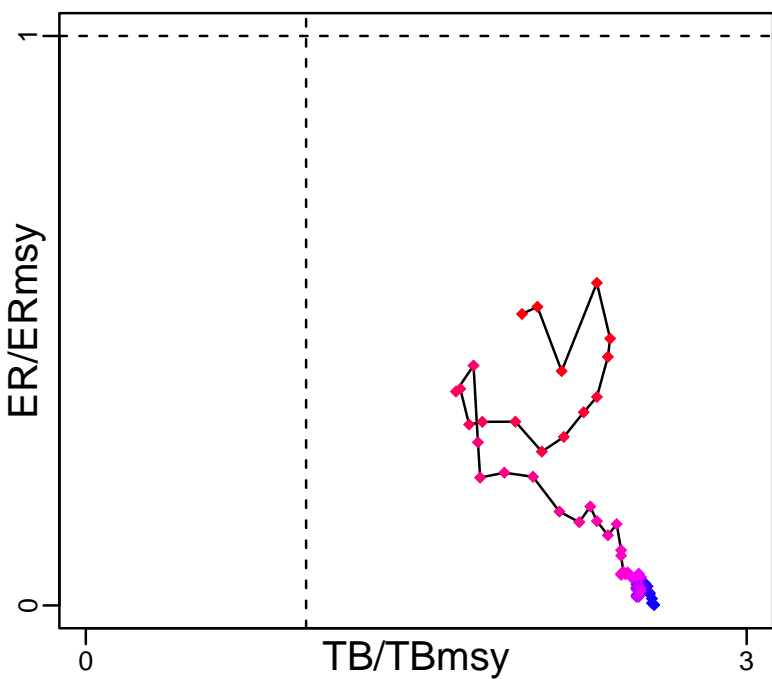
Metadata	
Scientific Name	Istiompax indica
Current Assess ID	IOTC-BLKMARLINIO-1950-2020-SMITH
Area	Indian Ocean
Management Authority	Indian Ocean Tuna Commission
Assessor	Indian Ocean Tuna Commission
Asmts in RAM	2014, 2018, 2020

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-extr-MT	2020	90,501
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-calc-ratio	2020	0.191
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2014	73,000
SSB0	-	-	-
MSY	MSY-MT	2020	17,301
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

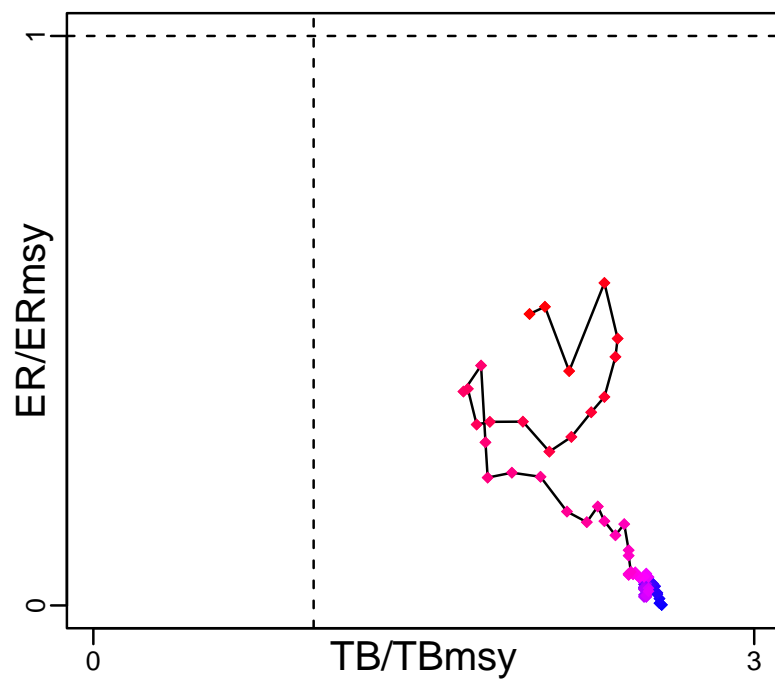
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2020	184,400	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2020	0.098	-	-
TC	TC-MT	2020	16,977		
TL	TL-MT	2018	16,459		
TB/TBmsy	TBdivTBmsy-dimensionless	2020	1.98		
SSB/SSBmsy	-	-	-		
F/Fmsy	FdivFmsy-dimensionless	2020	0.53		
ER/ERmsy	ER-calc-ratio/ERmsy-calc-ratio	2020	0.512		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Black marlin Indian Ocean [BLKMARLINIO]

Kobe MSYpref (1950–2020–SMITH)



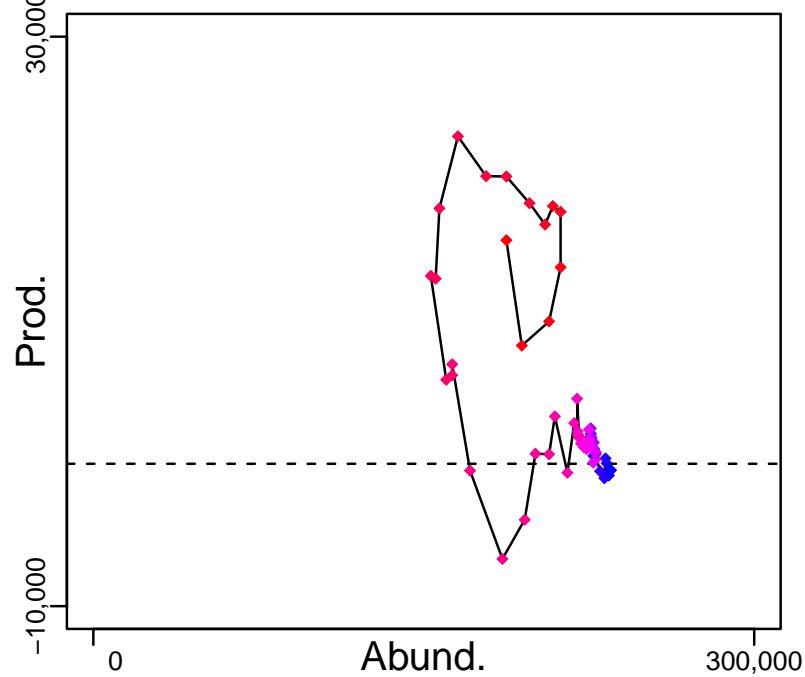
Kobe MGTpref (1950–2020–SMITH)



Spawner Recruit*



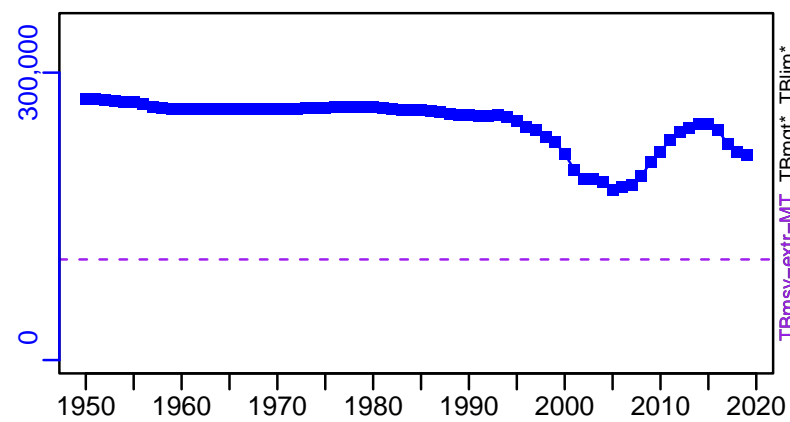
Production (1950–2020–SMITH)



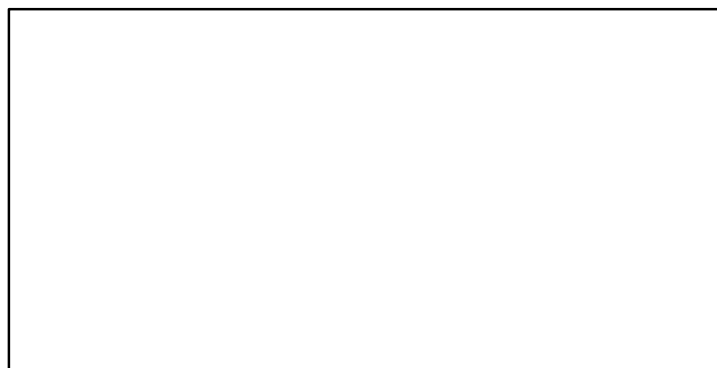
◆ Start Year ◆ End Year * No Data

Black marlin Indian Ocean [BLKMARLINIO]

TB-MT (1950-2020-SMITH)



SSB*



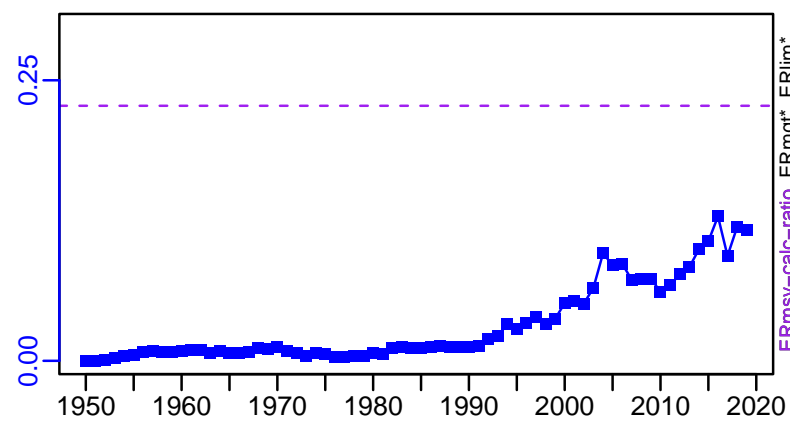
TN *



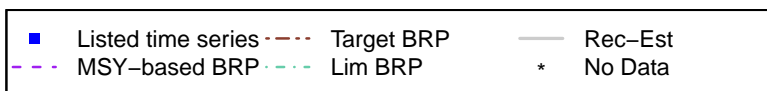
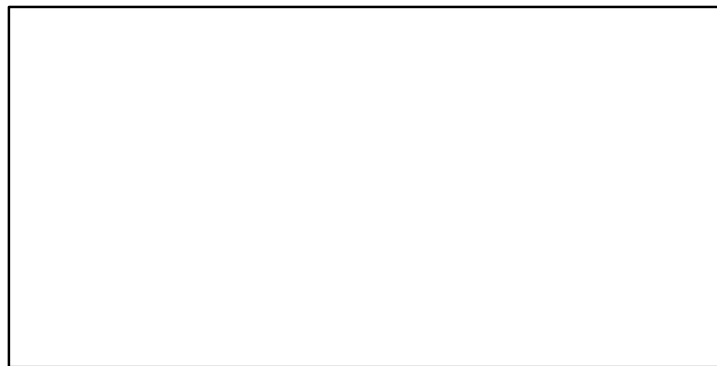
F*



ER-calc-ratio (1950-2020-SMITH)

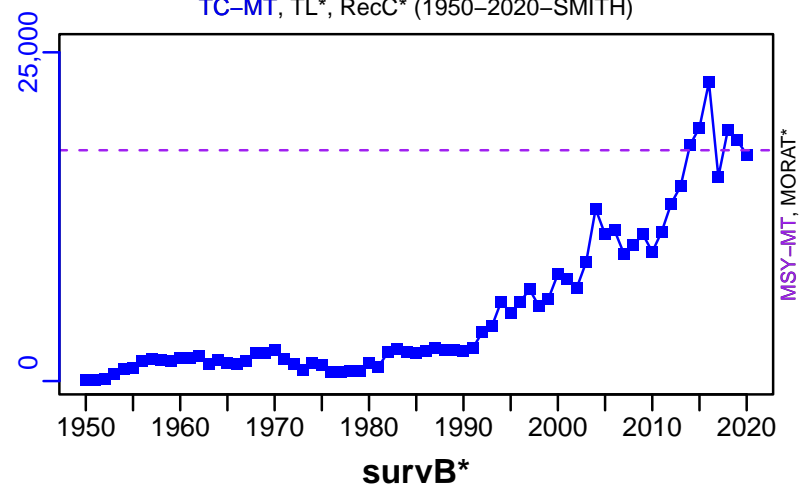


Recruits*



Black marlin Indian Ocean [BLKMARLINIO]

TC-MT, TL*, RecC* (1950–2020–SMITH)



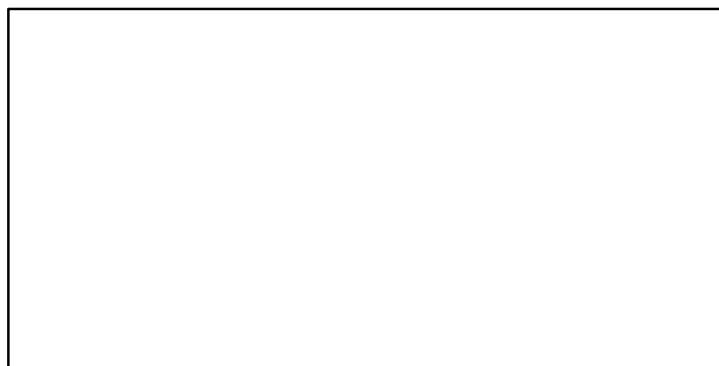
TAC*, Cpair*, Cadv*



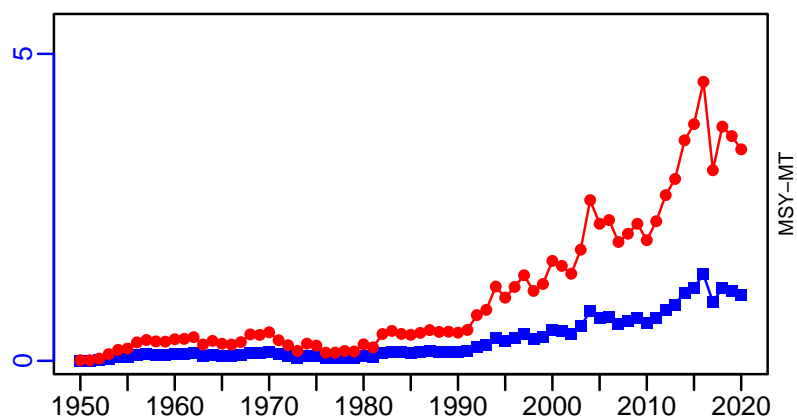
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1950–2020–SMITH)



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

Blue shark Indian Ocean [BLSHARIO]

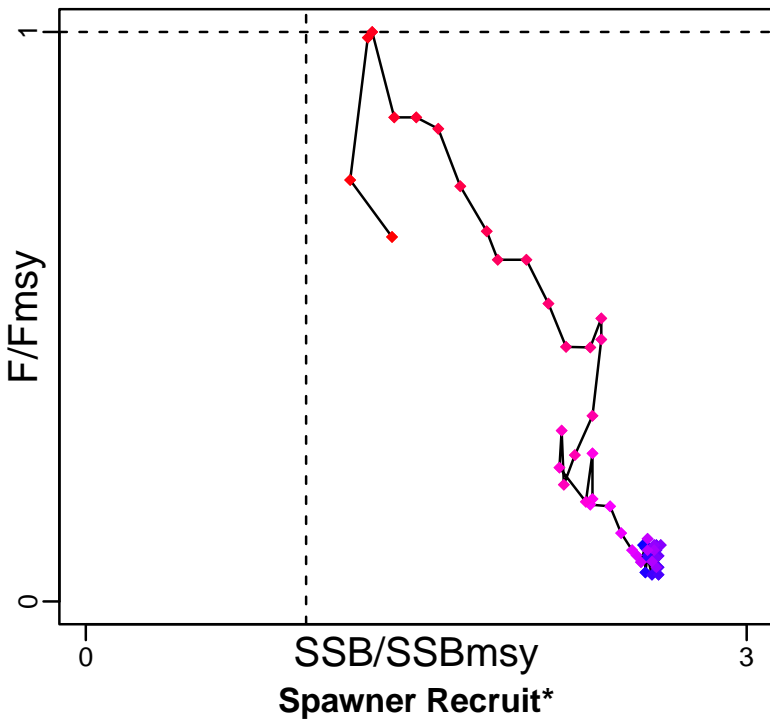
Metadata	
Scientific Name	Prionace glauca
Current Assess ID	IOTC-BLSHARIO-1970-2019-SMITH
Area	Indian Ocean
Management Authority	Indian Ocean Tuna Commission
Assessor	Indian Ocean Tuna Commission
Asmts in RAM	2018, 2019

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-extr-MT	2019	39,017
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2019	36,000
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

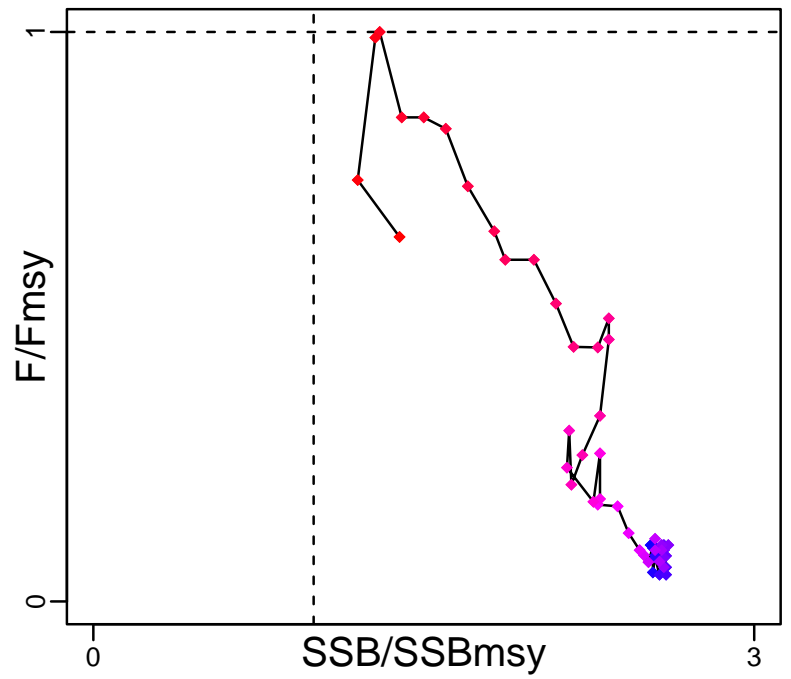
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2019	351,960	-	-
SSB	SSB-MT	2019	46,320	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2019	0.123	-	-
TC	TC-MT	2019	43,420		
TL	TL-MT	2018	22,385		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2019	1.39		
F/Fmsy	FdivFmsy-dimensionless	2019	0.64		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Blue shark Indian Ocean [BLSHARIO]

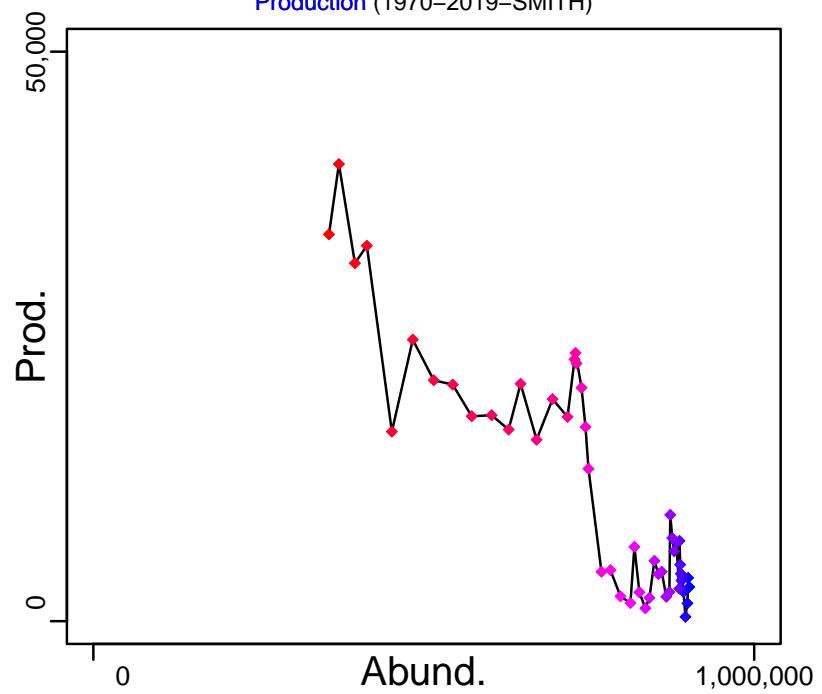
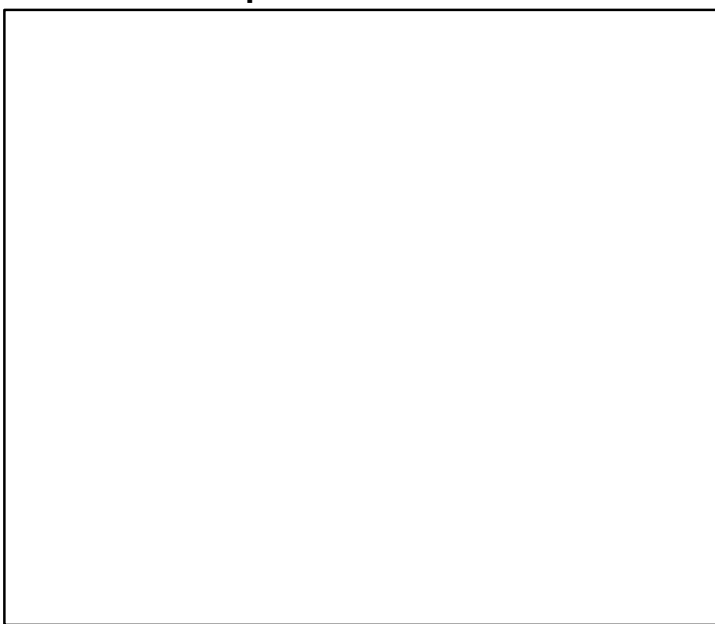
Kobe MSYpref (1970–2019–SMITH)



Kobe MGTpref (1970–2019–SMITH)



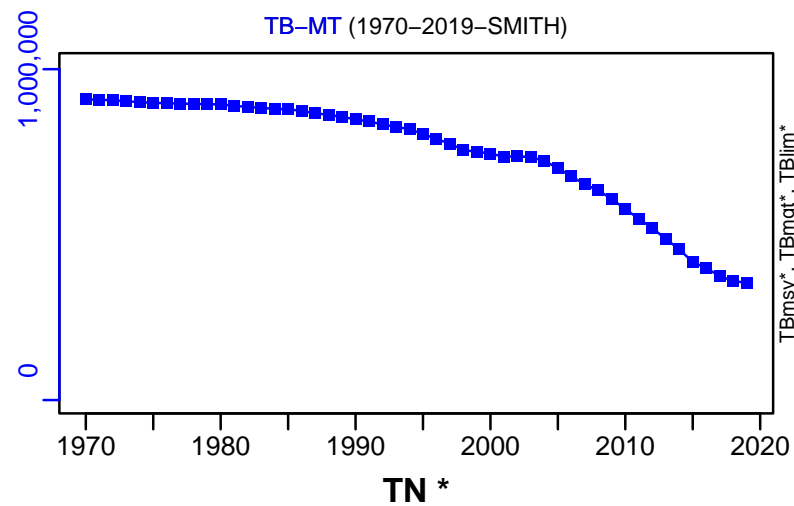
Production (1970–2019–SMITH)



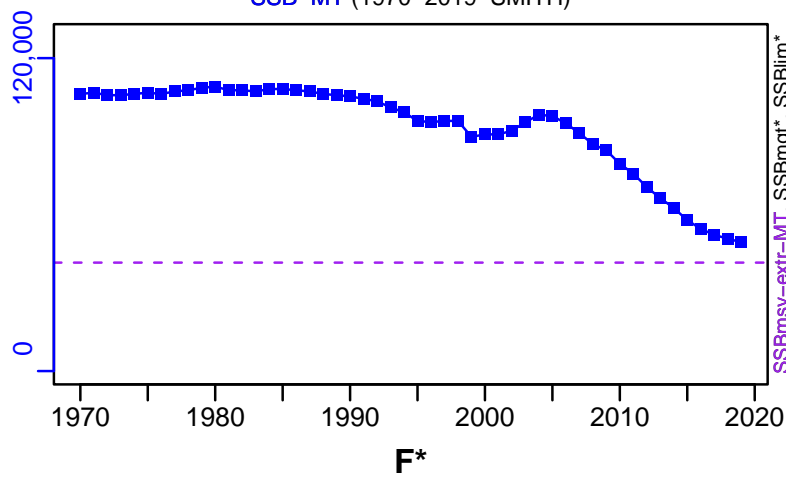
◆ Start Year ◆ End Year * No Data

Blue shark Indian Ocean [BLSHARIO]

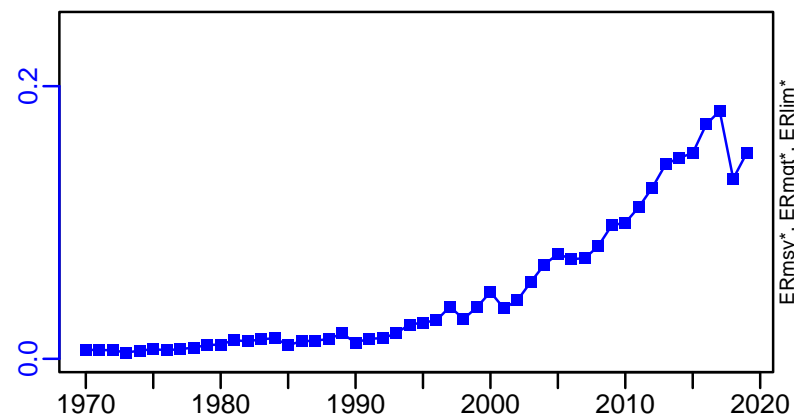
TB-MT (1970-2019-SMITH)



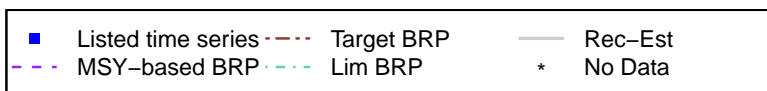
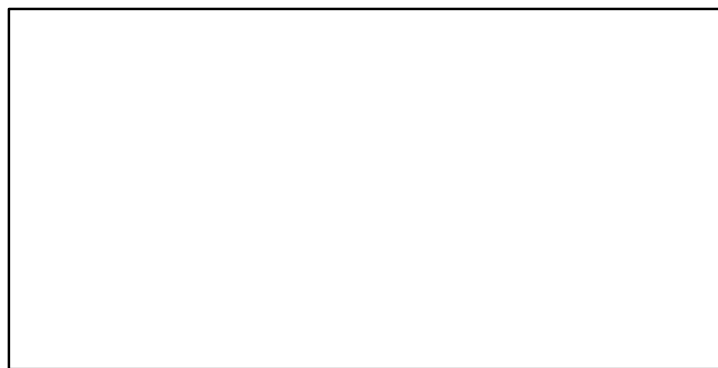
SSB-MT (1970-2019-SMITH)



ER-calc-ratio (1970-2019-SMITH)

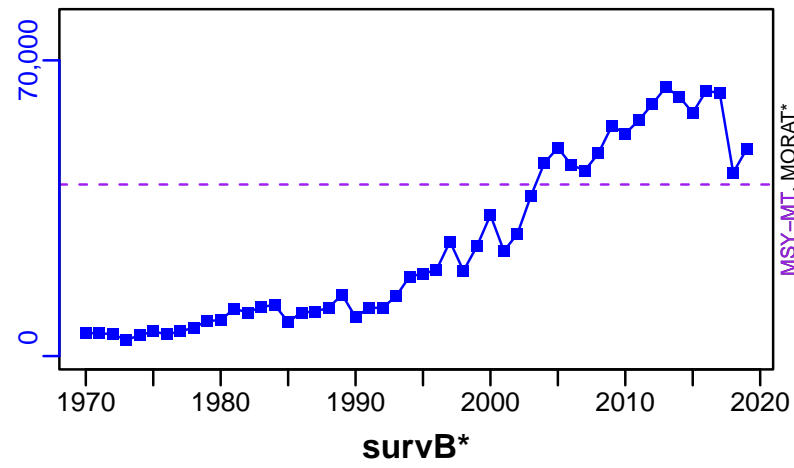


Recruits*



Blue shark Indian Ocean [BLSHARIO]

TC-MT, TL*, RecC* (1970–2019–SMITH)



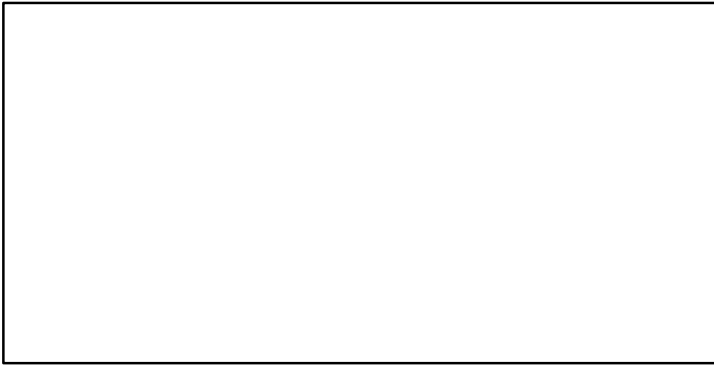
TAC*, Cpair*, Cadv*



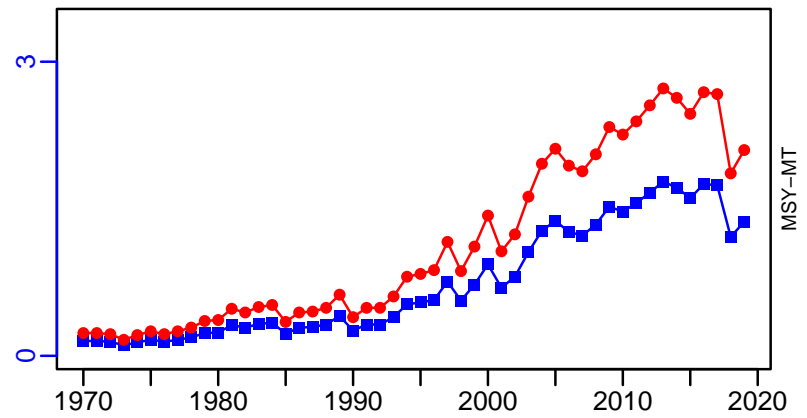
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1970–2019–SMITH)



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

Indo Pacific blue marlin Indian Ocean [BMARLINIO]

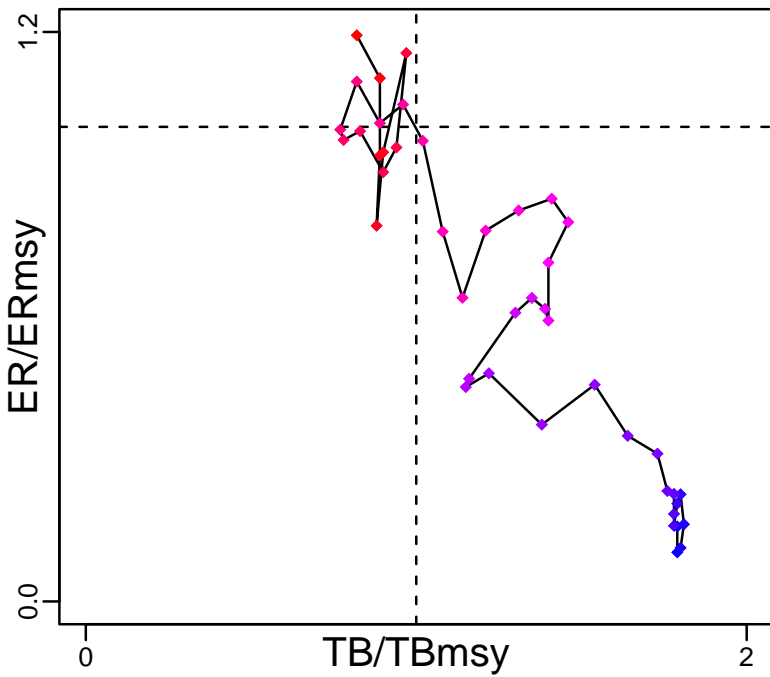
Metadata	
Scientific Name	Makaira mazara
Current Assess ID	IOTC-BMARLINIO-1950-2020-SMITH
Area	Indian Ocean
Management Authority	Indian Ocean Tuna Commission
Assessor	Indian Ocean Tuna Commission
Asmts in RAM	2014, 2018, 2020

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-extr-MT	2020	45,428
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-calc-ratio	2020	0.22
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2014	259,000
SSB0	-	-	-
MSY	MSY-MT	2020	9980
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

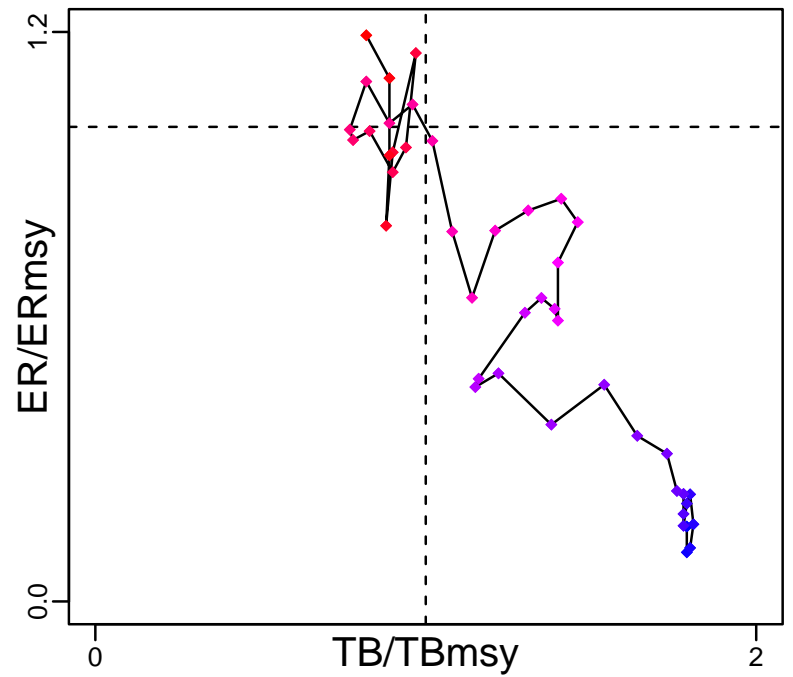
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2020	37,660	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2020	0.262	-	-
TC	TC-MT	2020	6958		
TL	TL-MT	2018	7811		
TB/TBmsy	TBdivTBmsy-dimensionless	2020	0.82		
SSB/SSBmsy	-	-	-		
F/Fmsy	FdivFmsy-dimensionless	2020	1.47		
ER/ERmsy	ER-calc-ratio/ERmsy-calc-ratio	2020	1.193		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Indo Pacific blue marlin Indian Ocean [BMARLINIO]

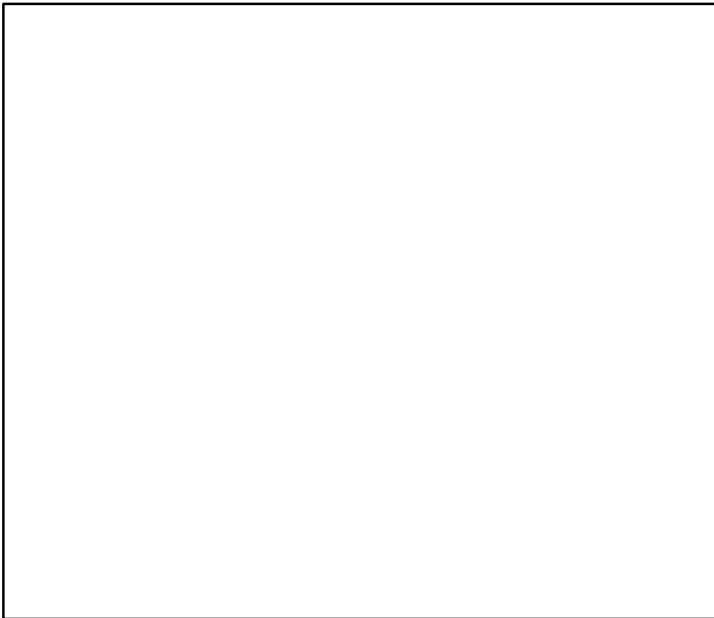
Kobe MSYpref (1950–2020–SMITH)



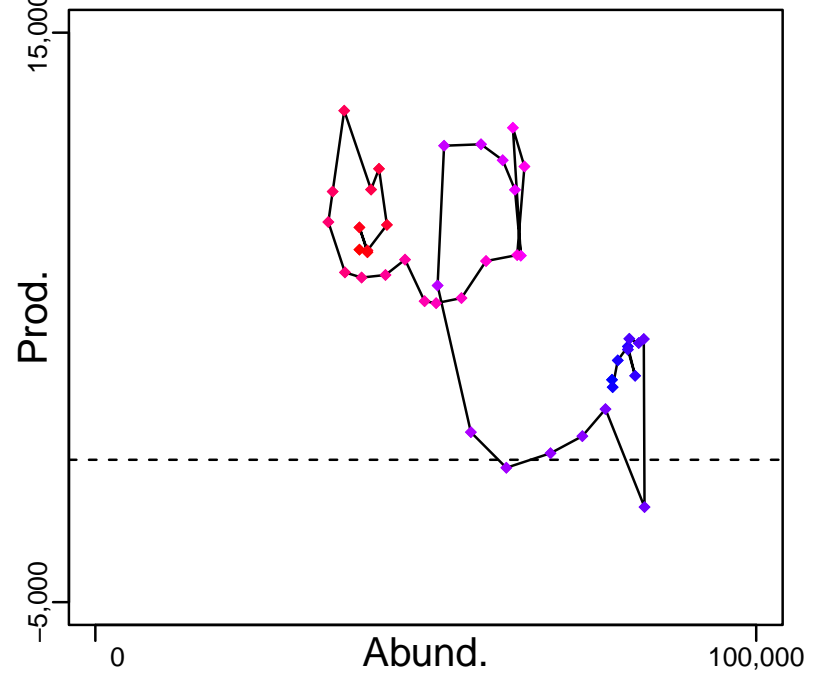
Kobe MGTpref (1950–2020–SMITH)



Spawner Recruit*



Production (1950–2020–SMITH)

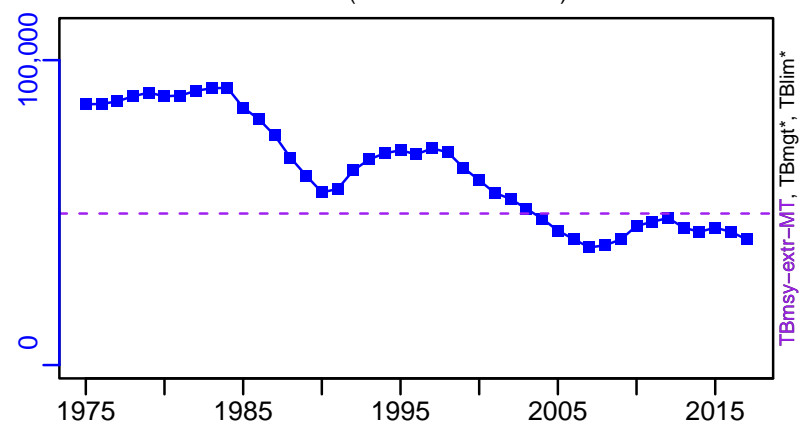


◆ Start Year ◆ End Year * No Data

Indo Pacific blue marlin Indian Ocean [BMARLINIO]

TB-MT (1950-2020-SMITH)

SSB*



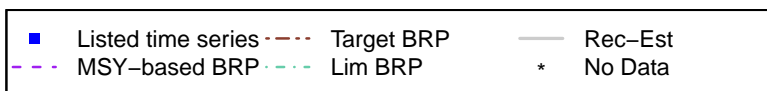
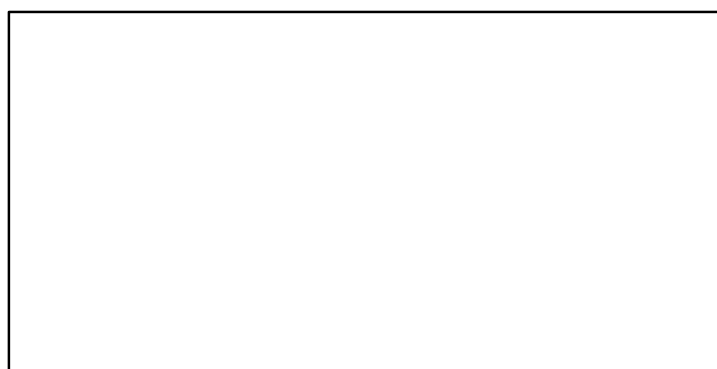
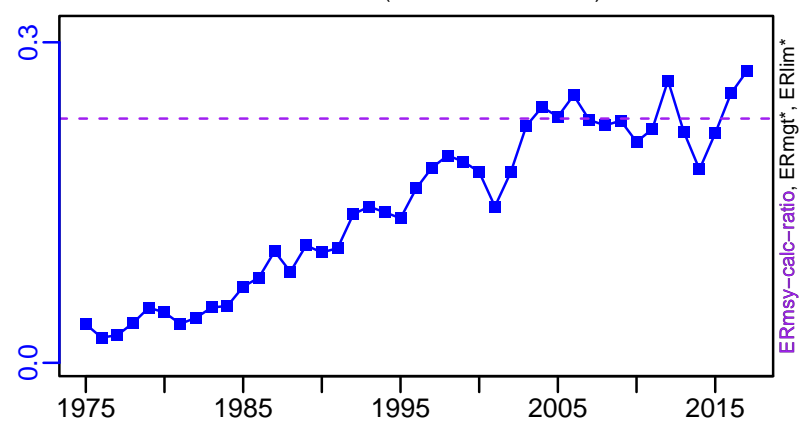
TN *

F*



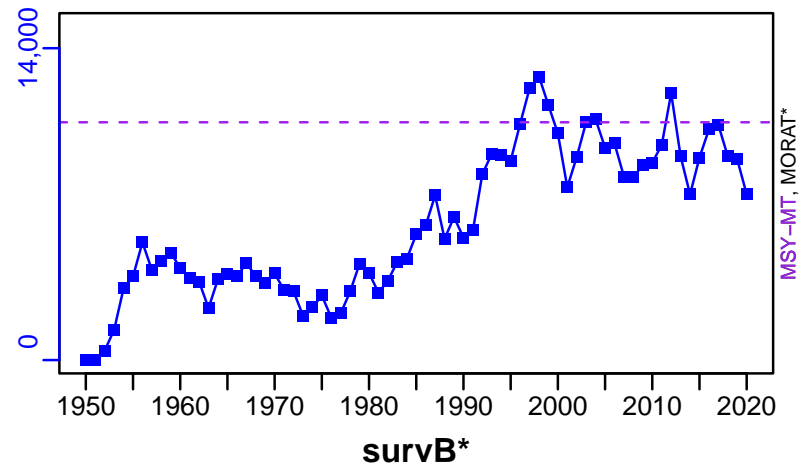
ER-calc-ratio (1950-2020-SMITH)

Recruits*



Indo Pacific blue marlin Indian Ocean [BMARLINIO]

TC-MT, TL*, RecC* (1950-2020-SMITH)



TAC*, Cpair*, Cadv*



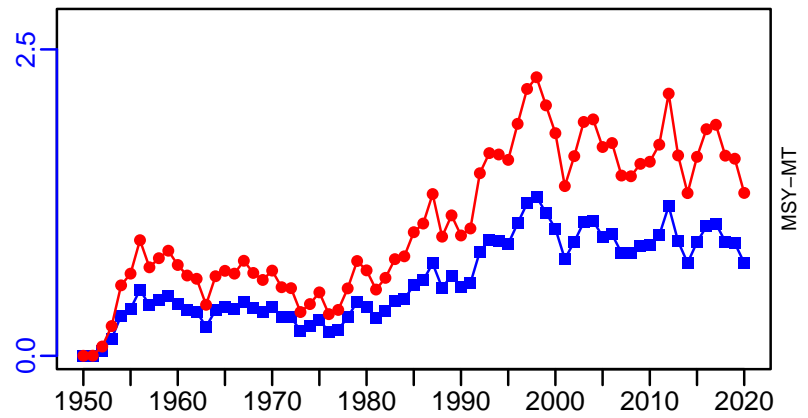
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1950-2020-SMITH)



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

Indo-Pacific sailfish Indian Ocean [IPSAILIO]

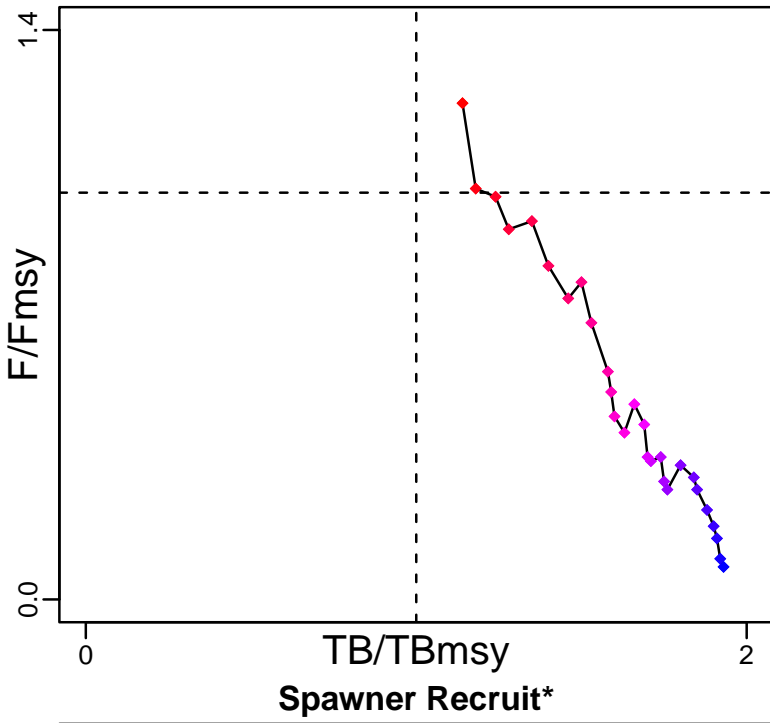
Metadata	
Scientific Name	Istiophorus platypterus
Current Assess ID	IOTC-IPSAILIO-1980-2019-SMITH
Area	Indian Ocean
Management Authority	Indian Ocean Tuna Commission
Assessor	Indian Ocean Tuna Commission
Asmts in RAM	2018, 2019

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2019	23,900
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

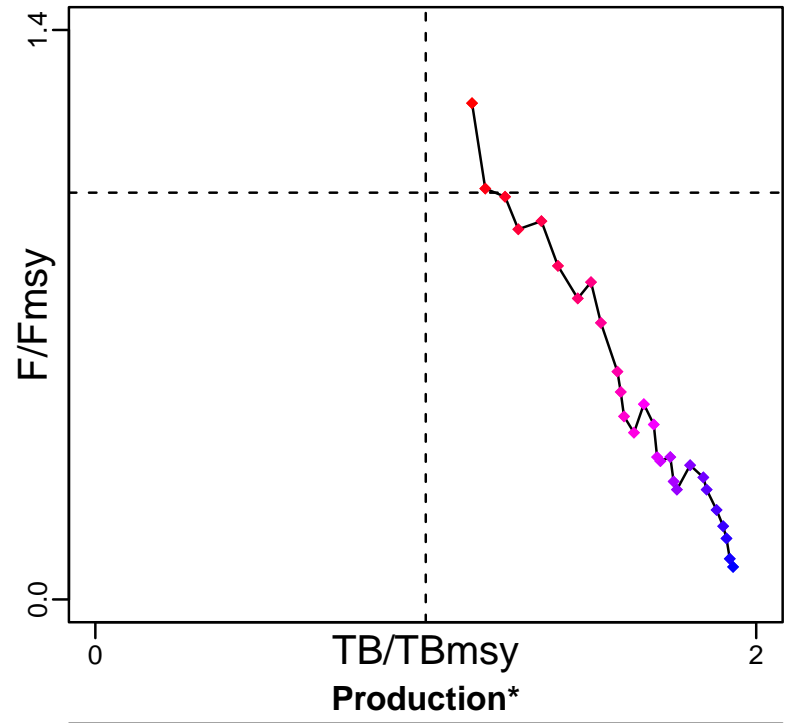
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2019	29,635		
TL	TL-MT	2018	32,287		
TB/TBmsy	TBdivTBmsy-dimensionless	2019	1.14		
SSB/SSBmsy	-	-	-		
F/Fmsy	FdivFmsy-dimensionless	2019	1.22		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Indo-Pacific sailfish Indian Ocean [IPSAILIO]

Kobe MSYpref (1980–2019–SMITH)

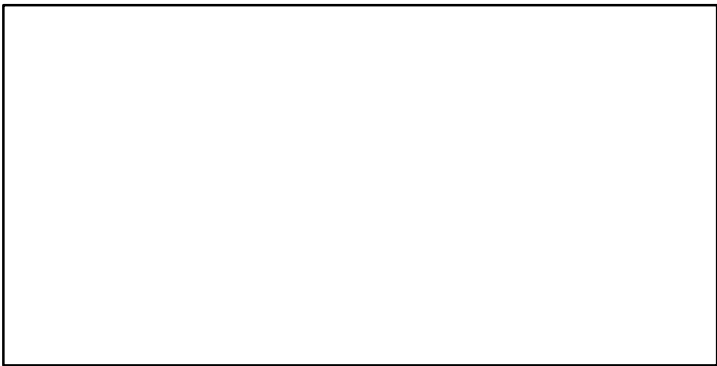


Kobe MGTpref (1980–2019–SMITH)

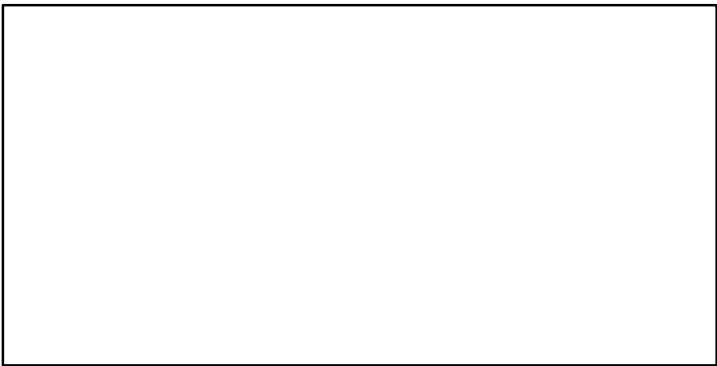


◆ Start Year ◆ End Year * No Data

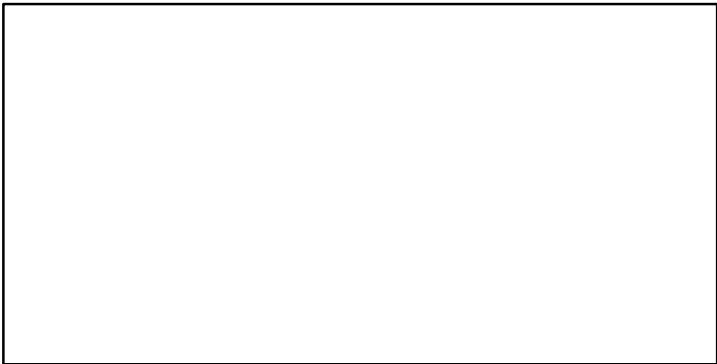
TB*



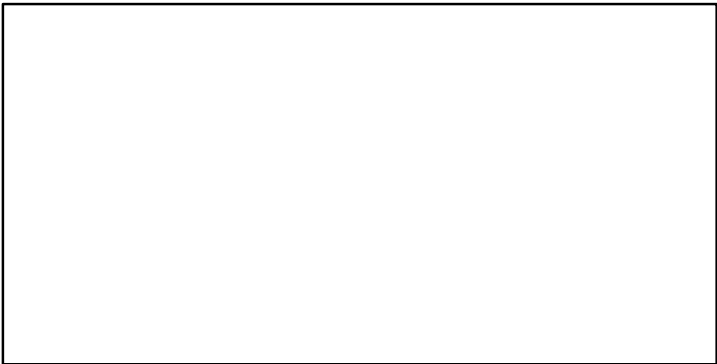
SSB*



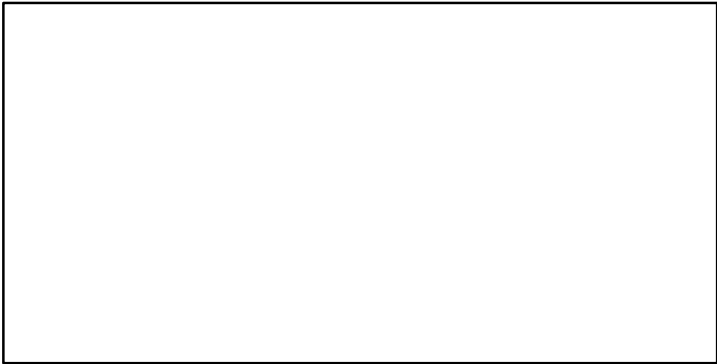
TN *



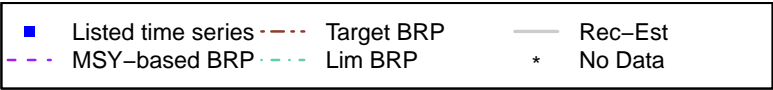
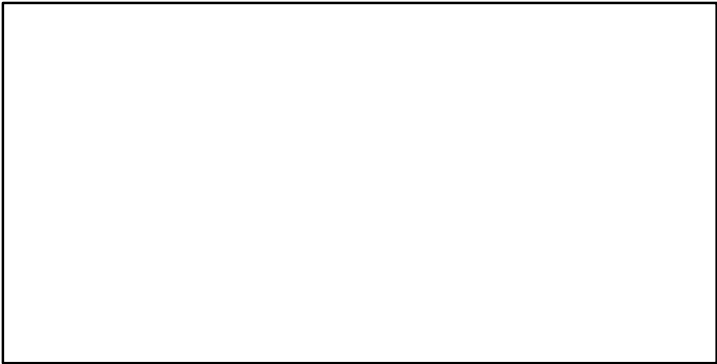
F*



ER*

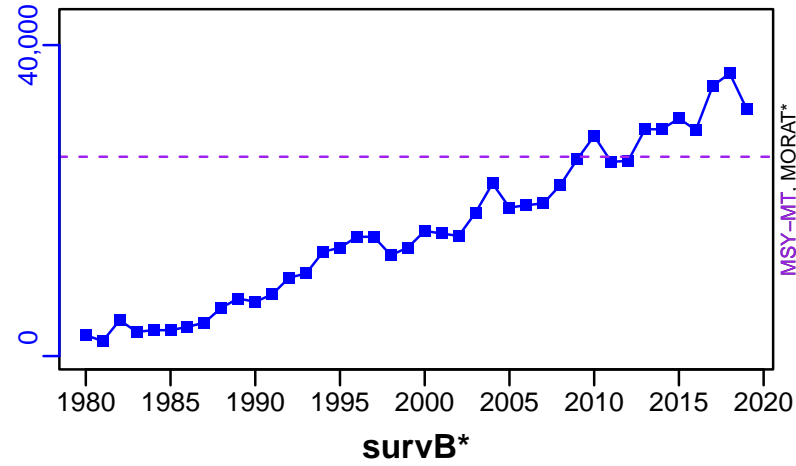


Recruits*



Indo-Pacific sailfish Indian Ocean [IPSAILIO]

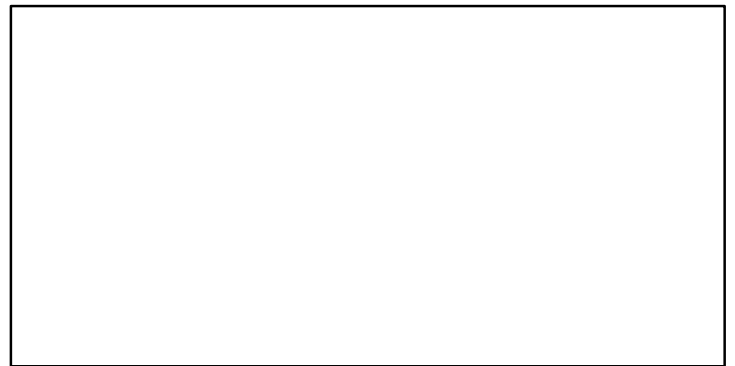
TC-MT, TL*, RecC* (1980–2019–SMITH)



TAC*, Cpair*, Cadv*



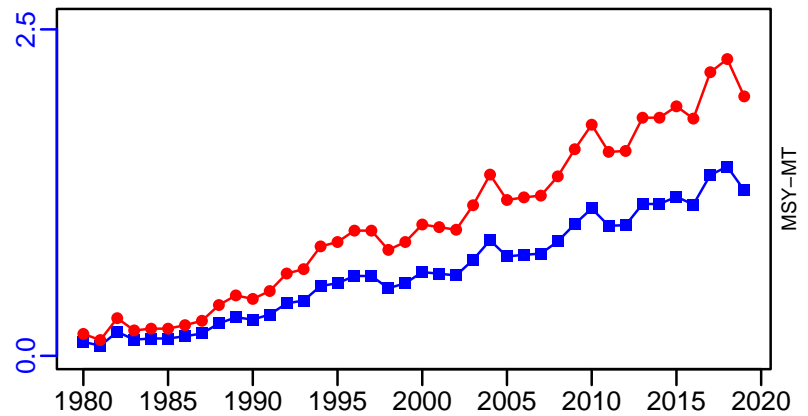
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1980–2019–SMITH)



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

Southern bluefin tuna Southern Oceans [SBT]

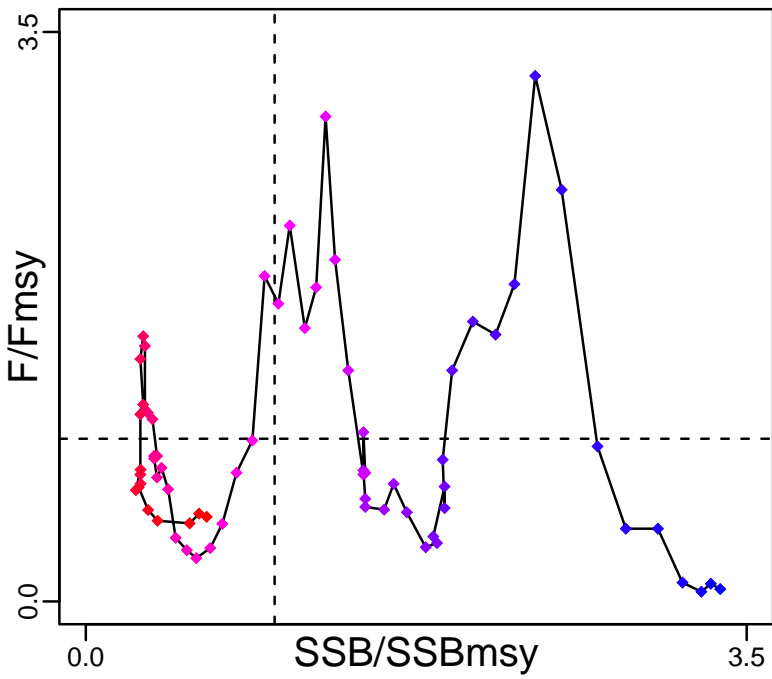
Metadata	
Scientific Name	Thunnus maccoyii
Current Assess ID	CCSBT-SC-SBT-1931-2020-SMITH
Area	Southern Oceans
Management Authority	Commission for the Conservation of Southern Bluefin Tuna
Assessor	CCSBT Scientific Committee
Asmts in RAM	2016, 2020, 2014

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-MT	2014	515,839
SSBmsy	SSBmsy-extr-MT	2020	341,425
Fmsy	Fmsy-extr-1/yr	2020	0.089
ERmsy	ERmsy-ratio	2014	0.355
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	SSB0-MT	2014	845,207
MSY	MSY-MT	2020	33,207
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

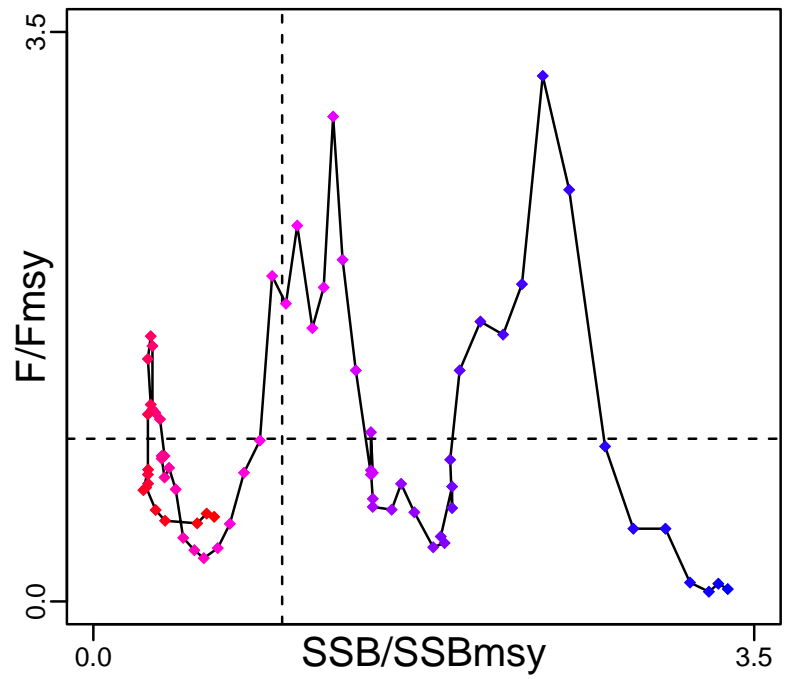
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2016	1,070,000	-	-
SSB	SSB-MT	2020	130,000	Females	-
TN	-	-	-	-	-
R	R-E00	2016	3,810,000	-	-
F	F-1/yr	2020	0.058	-	-
ER	ER-calc-ratio	2016	0.013	-	-
TC	TC-MT	2014	11,700		
TL	TL-MT	2020	16,441		
TB/TBmsy	TBdivTBmsy-dimensionless	2014	0.653		
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2020	0.69		
F/Fmsy	FdivFmsy-dimensionless	2020	0.52		
ER/ERmsy	ER-calc-ratio/ERmsy-ratio	2014	0.11		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Southern bluefin tuna Southern Oceans [SBT]

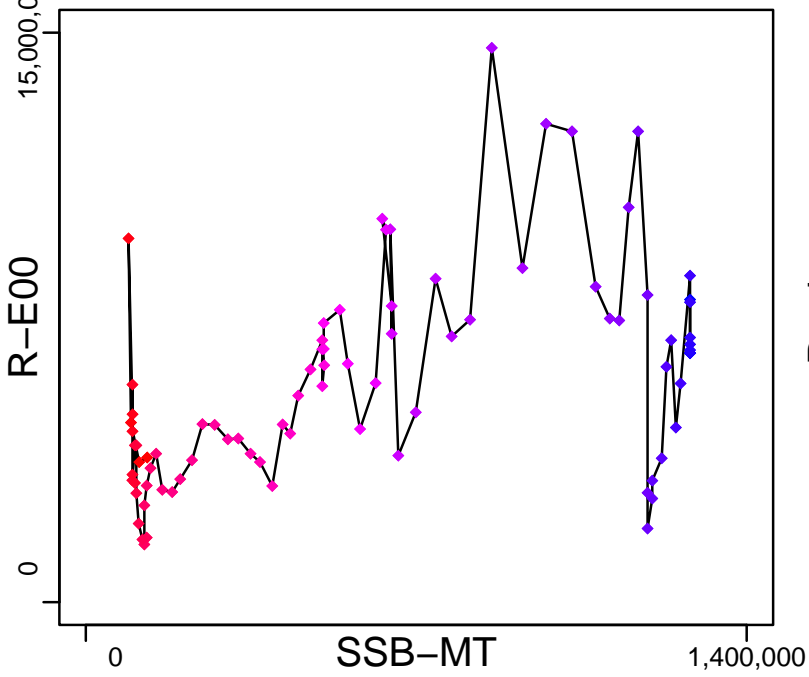
Kobe MSYpref (1931–2020–SMITH)



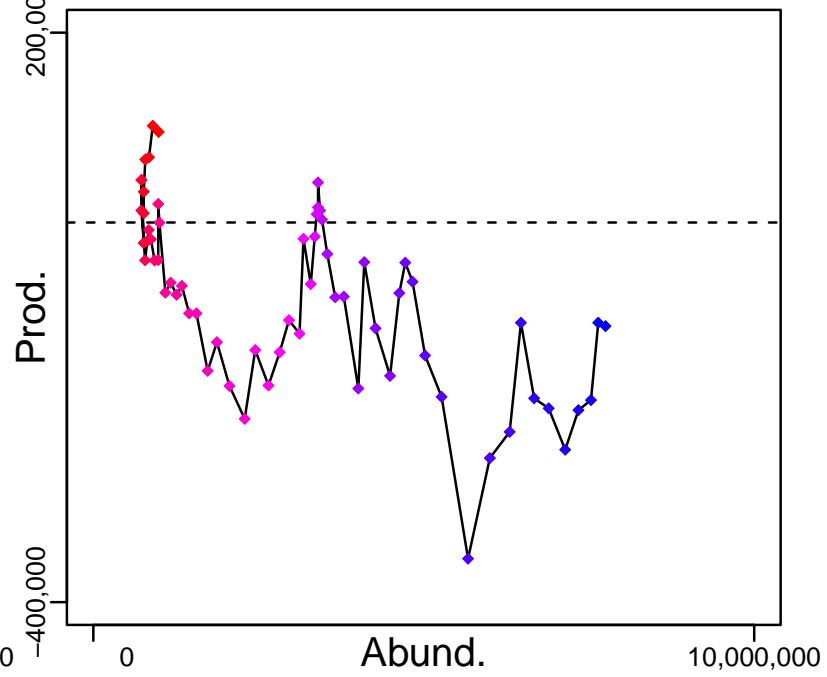
Kobe MGTpref (1931–2020–SMITH)



Spawner Recruit (1931–2016–PONS)

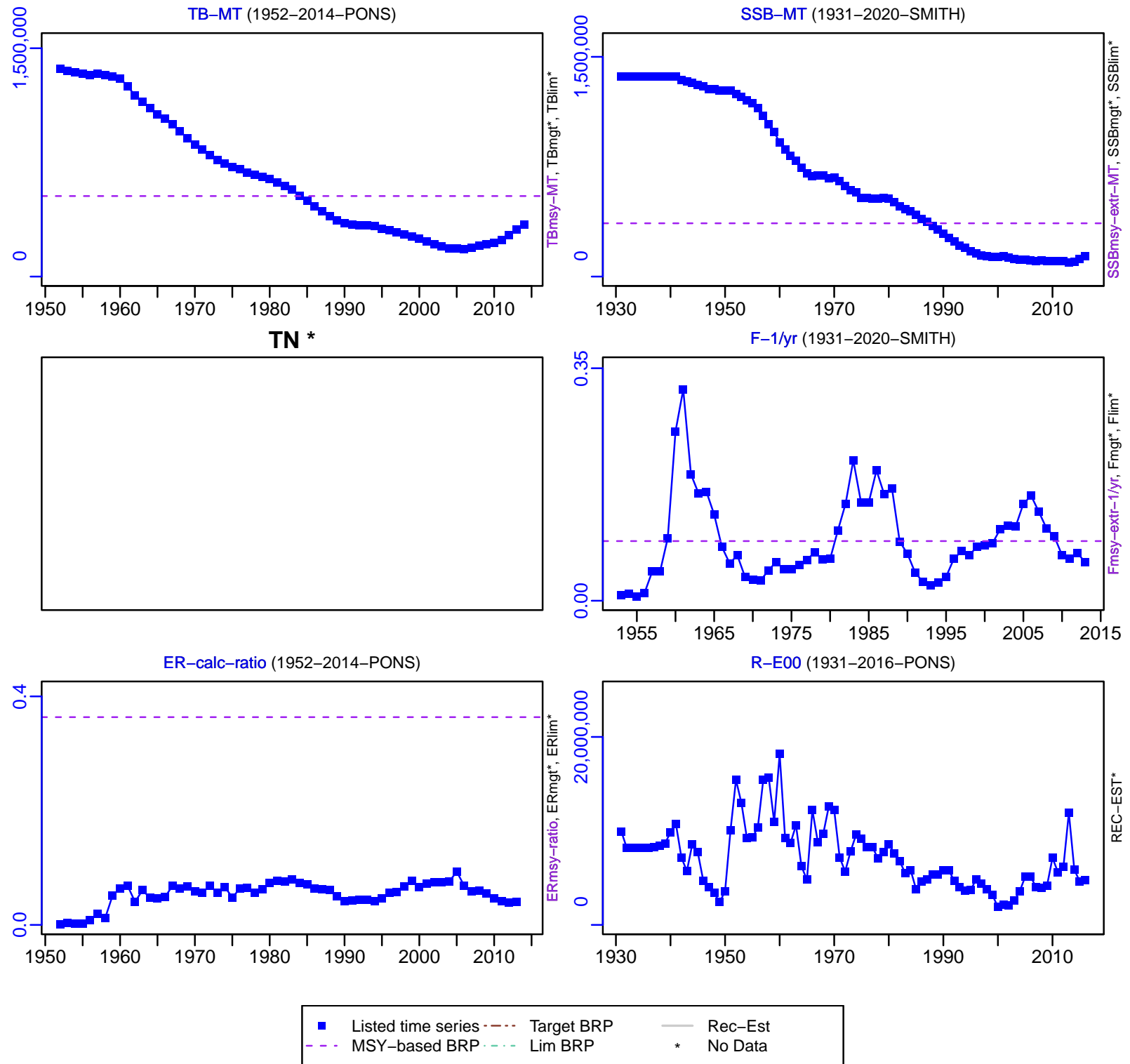


Production (1931–2016–PONS)



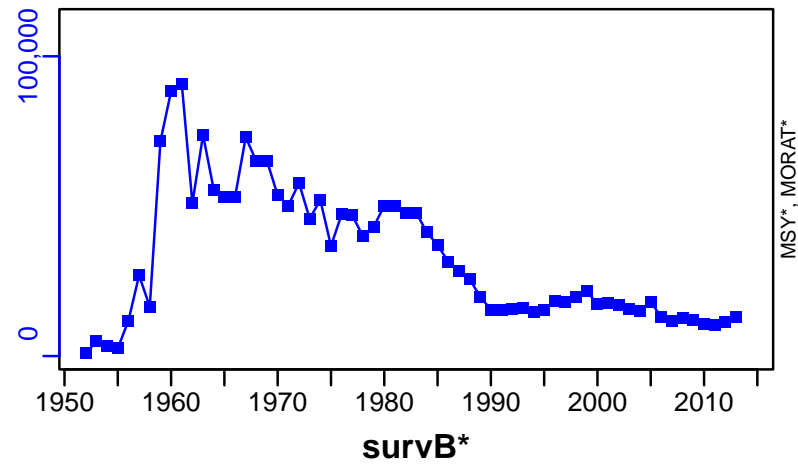
◆ Start Year ◆ End Year * No Data

Southern bluefin tuna Southern Oceans [SBT]



Southern bluefin tuna Southern Oceans [SBT]

TC-MT, TL*, RecC* (1952-2014-PONS)



TAC*, Cpair*, Cadv*



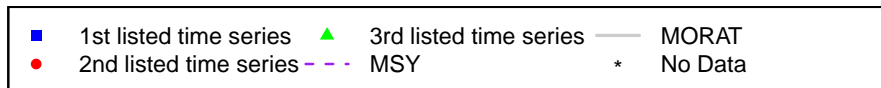
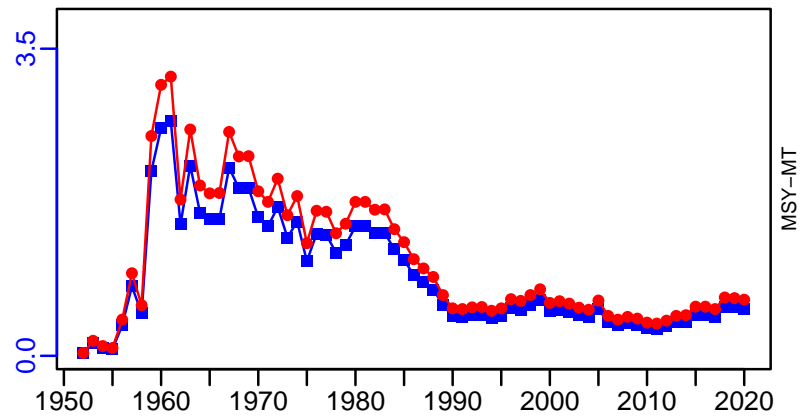
CPUE*



EFFORT*



TL-MT/MSY-MT, CdivMEANC-ratio, (1931-2020-SMITH)



Skipjack tuna Indian Ocean [SKJCIO]

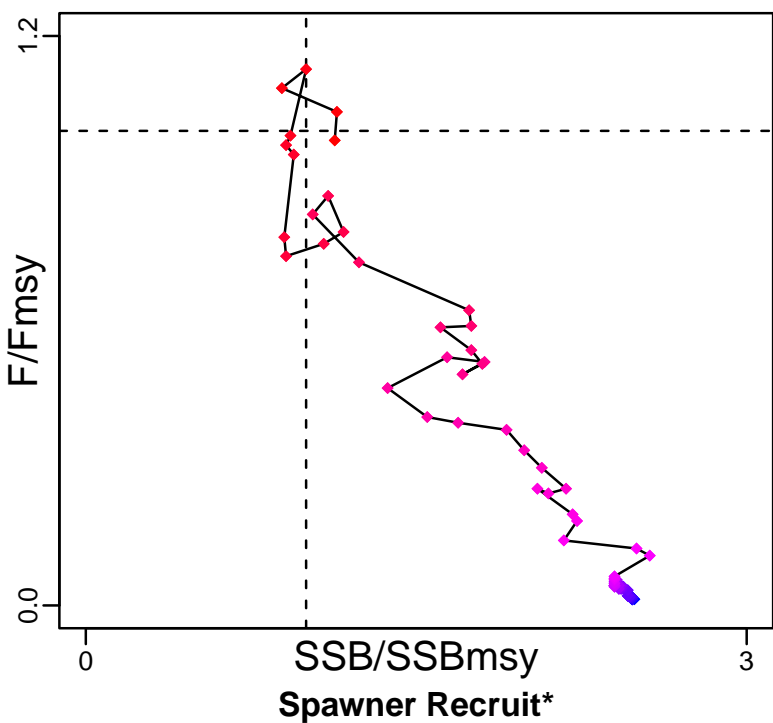
Metadata	
Scientific Name	Katsuwonus pelamis
Current Assess ID	IOTC-SKJCIO-1950-2019-SMITH
Area	Indian Ocean
Management Authority	Indian Ocean Tuna Commission
Assessor	Indian Ocean Tuna Commission
Asmts in RAM	2014, 2016, 2019

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-MT	2014	788,806
SSBmsy	SSBmsy-extr-MT	2019	521,631
Fmsy	-	-	-
ERmsy	ERmsy-calc-ratio	2014	0.529
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2019	574,000
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

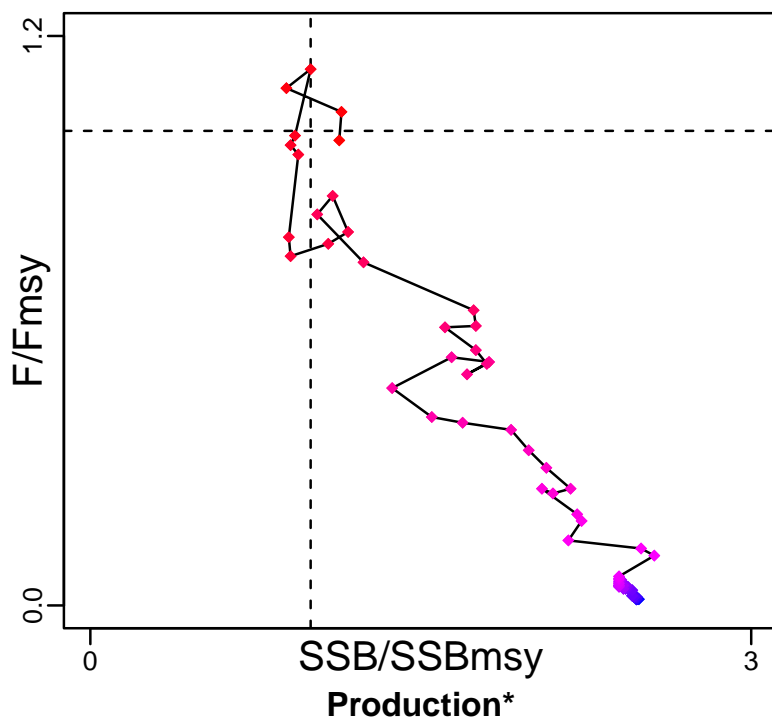
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2014	947,000	-	-
SSB	SSB-MT	2019	615,000	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2014	0.404	-	-
TC	TC-MT	2019	547,248		
TL	TL-MT	2016	471,000		
TB/TBmsy	TBdivTBmsy-dimensionless	2014	1.15		
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2019	1.13		
F/Fmsy	FdivFmsy-dimensionless	2019	0.98		
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 (1950–2019–SMITH)



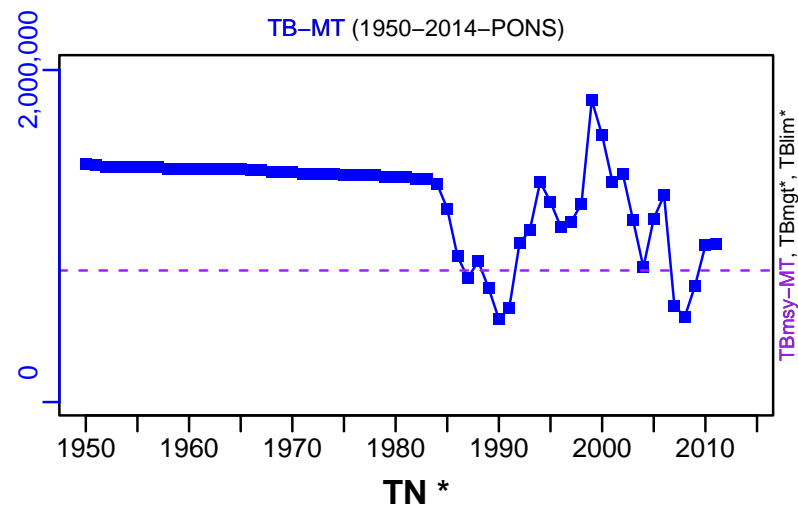
Kobe MGTpref (1950–2019–SMITH)



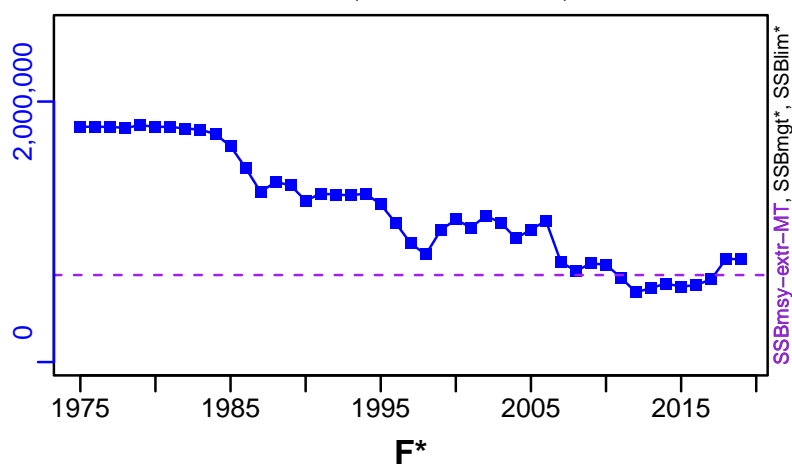
◆ Start Year ◆ End Year * No Data

Skipjack tuna Indian Ocean [SKJCIO]

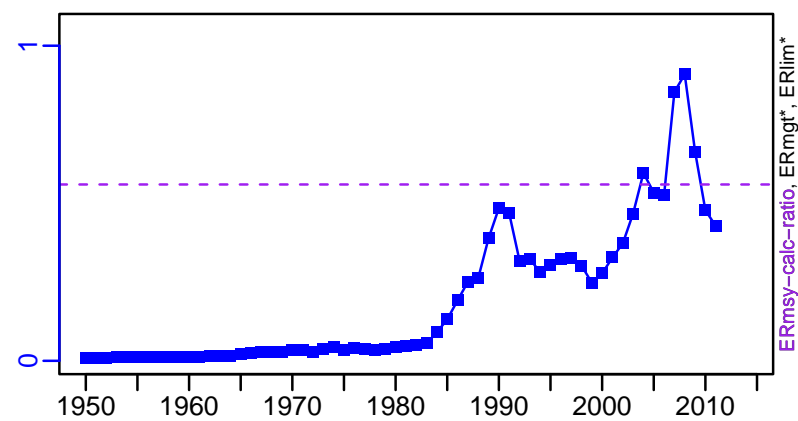
TB-MT (1950–2014–PONS)



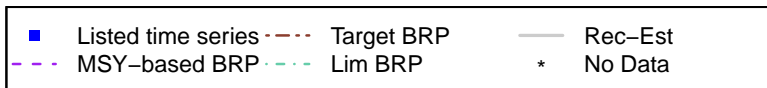
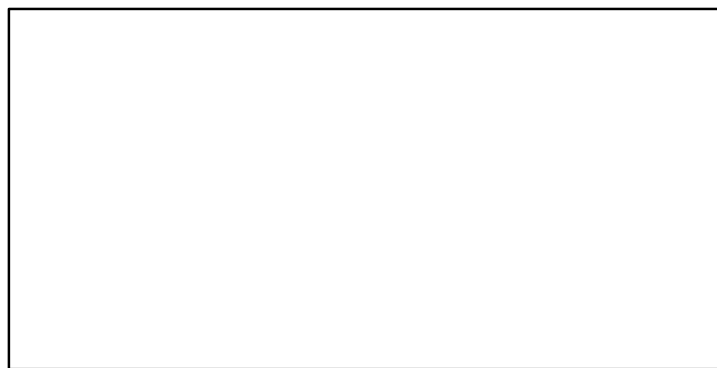
SSB-MT (1950–2019–SMITH)



ER-calc-ratio (1950–2014–PONS)

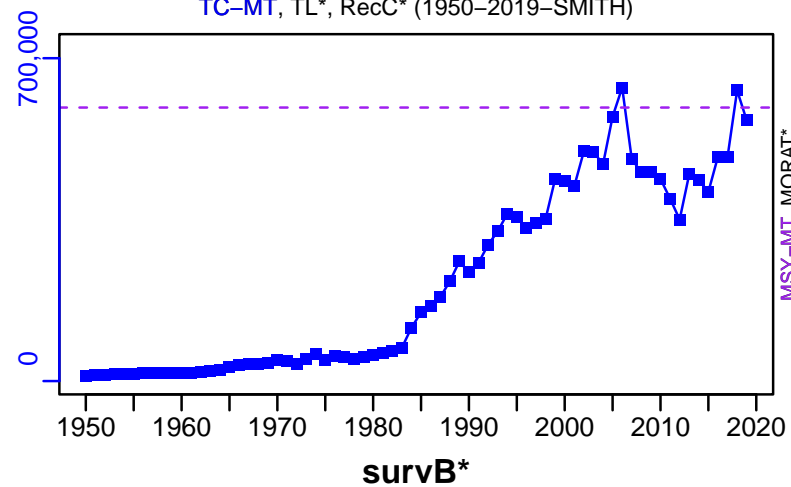


Recruits*



Skipjack tuna Indian Ocean [SKJCIO]

TC-MT, TL*, RecC* (1950–2019–SMITH)



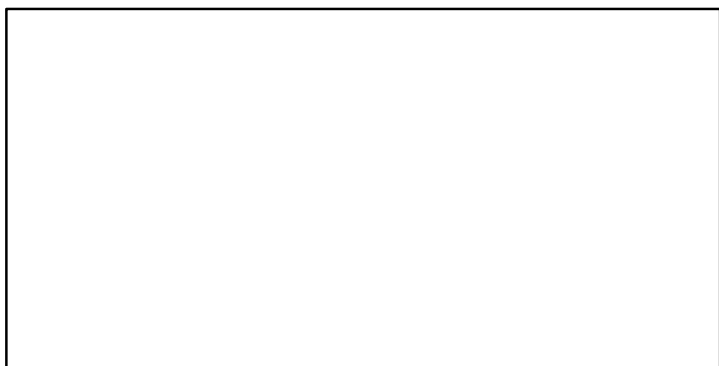
TAC*, Cpair*, Cadv*



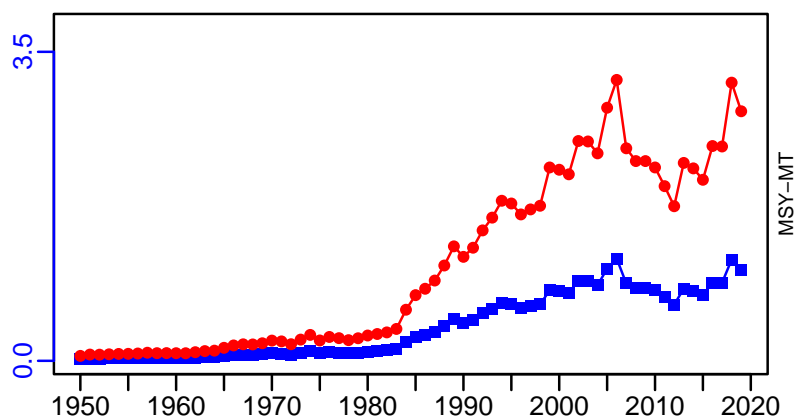
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1950–2019–SMITH)



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

Striped marlin Indian Ocean [STMARLINIO]

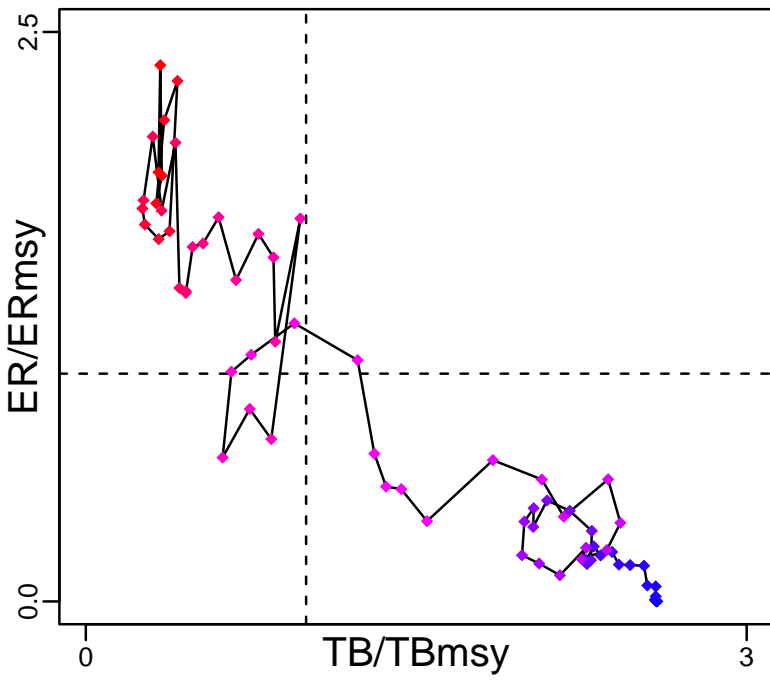
Metadata	
Scientific Name	Kajikia audax
Current Assess ID	IOTC-STMARLINIO-1950-2018-PONS
Area	Indian Ocean
Management Authority	Indian Ocean Tuna Commission
Assessor	Indian Ocean Tuna Commission
Asmts in RAM	2014, 2018

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-extr-MT	2018	19,169
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-calc-ratio	2018	0.247
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2014	61,450
SSB0	-	-	-
MSY	MSY-MT	2018	4730
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

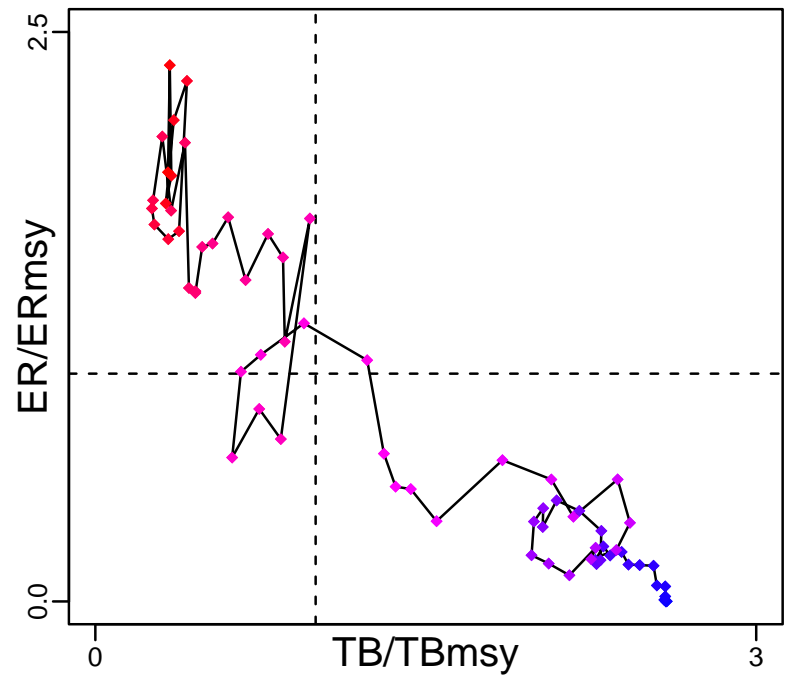
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2018	5610	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-calc-ratio	2018	0.465	-	-
TC	TC-MT	2014	3990		
TL	TL-MT	2018	2604		
TB/TBmsy	TBdivTBmsy-dimensionless	2018	0.33		
SSB/SSBmsy	-	-	-		
F/Fmsy	FdivFmsy-dimensionless	2018	1.99		
ER/ERmsy	ER-calc-ratio/ERmsy-calc-ratio	2018	1.884		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Striped marlin Indian Ocean [STMARLINIO]

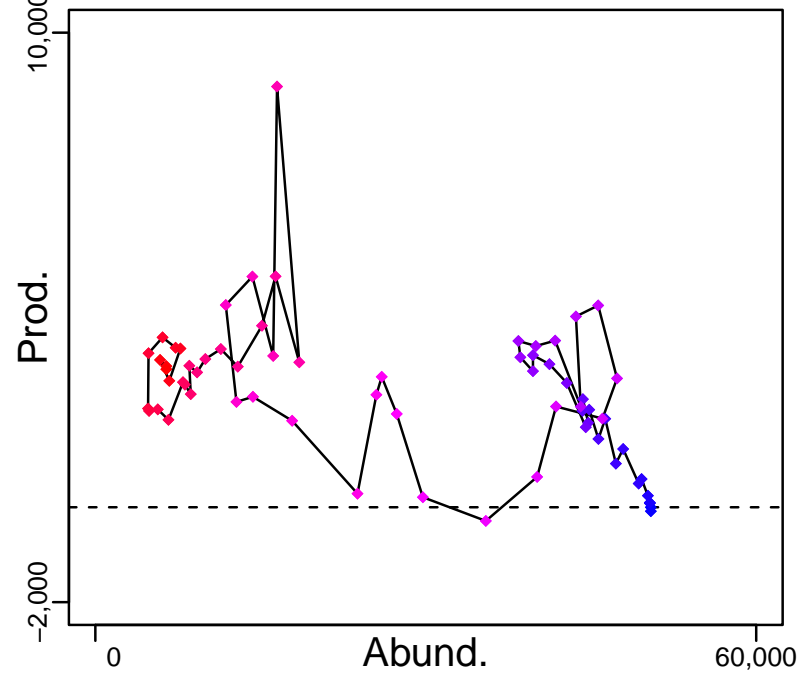
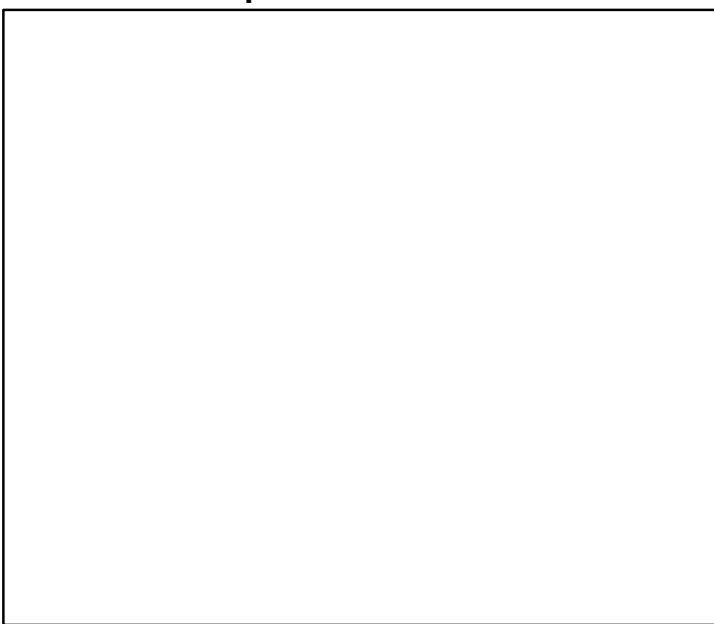
Kobe MSYpref (1950–2018–PONS)



Kobe MGTpref (1950–2018–PONS)



Production (1950–2018–PONS)

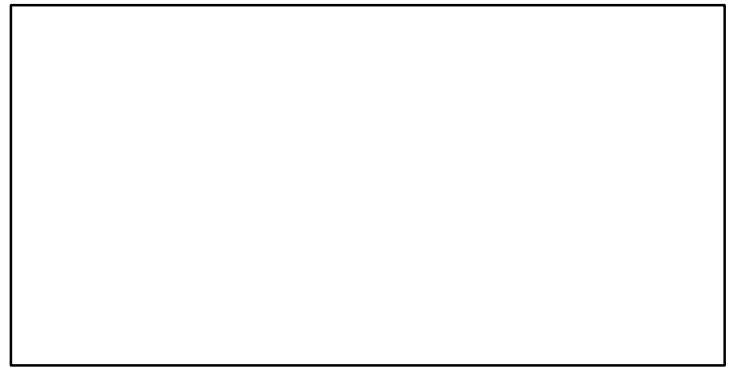
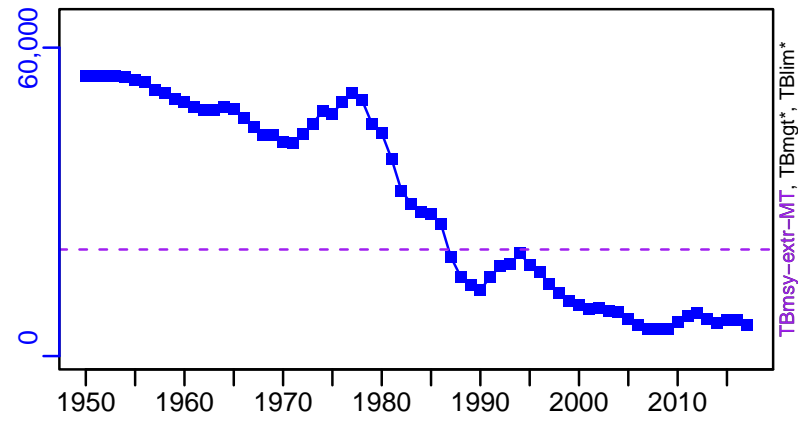


◆ Start Year ◆ End Year * No Data

Striped marlin Indian Ocean [STMARLINIO]

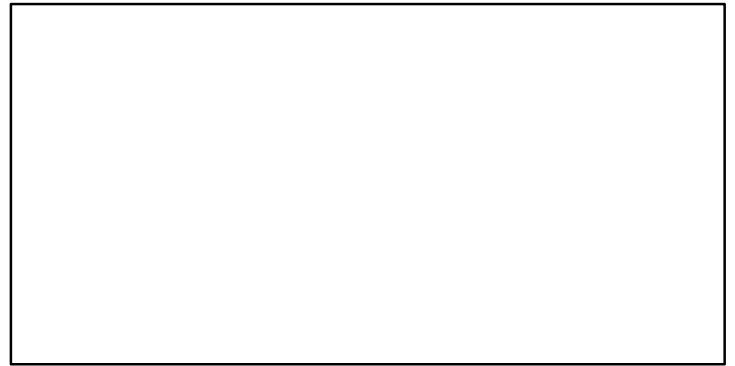
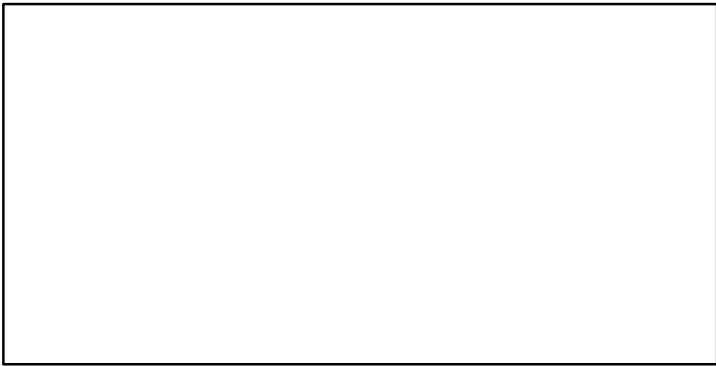
TB-MT (1950-2018-PONS)

SSB*



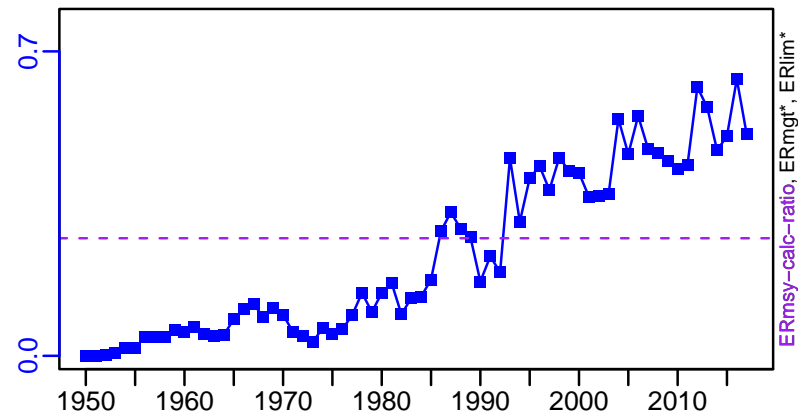
TN *

F*



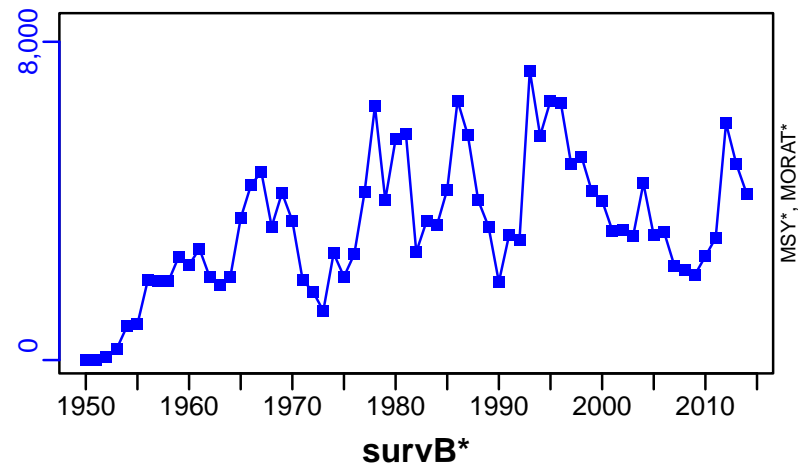
ER-calc-ratio (1950-2018-PONS)

Recruits*



Striped marlin Indian Ocean [STMARLINIO]

TC-MT, TL*, RecC* (1950–2014–PONS)



TAC*, Cpair*, Cadv*



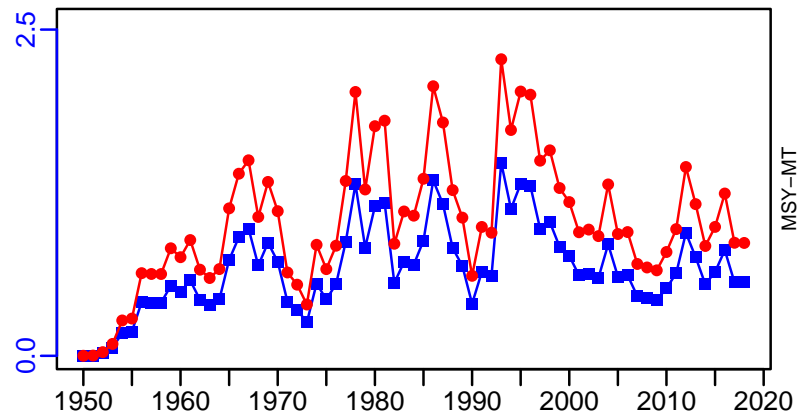
CPUE*



EFFORT*



TL-MT/MSY-MT, CdivMEANC-ratio, (1950–2018–PONS)



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

Swordfish Indian Ocean [SWORDIO]

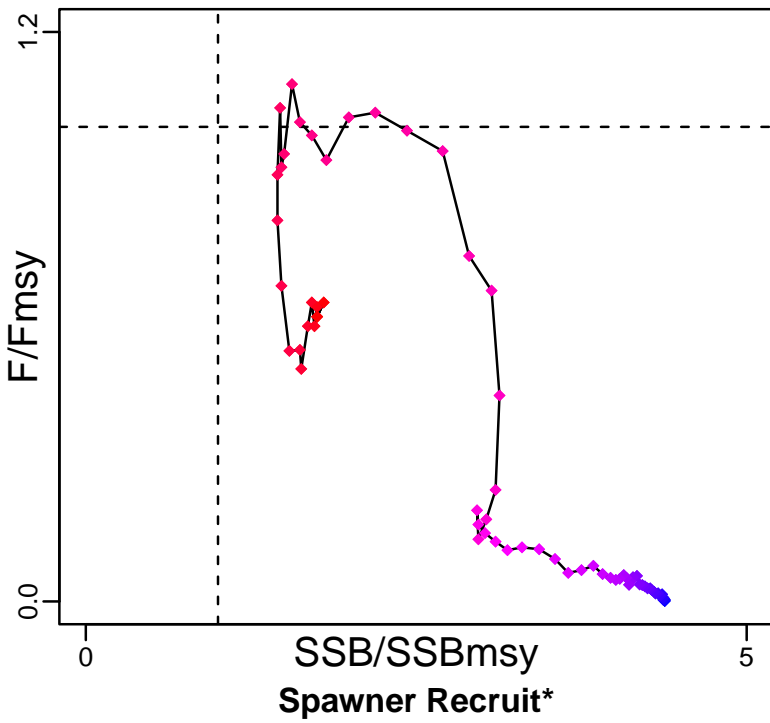
Metadata	
Scientific Name	Xiphias gladius
Current Assess ID	IOTC-SWORDIO-1950-2020-SMITH
Area	Indian Ocean
Management Authority	Indian Ocean Tuna Commission
Assessor	Indian Ocean Tuna Commission
Asmts in RAM	2014, 2018, 2020

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	SSBmsy-extr-MT	2020	72,256
Fmsy	Fmsy-1/yr	2014	0.12
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	MSY-MT	2020	33,000
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

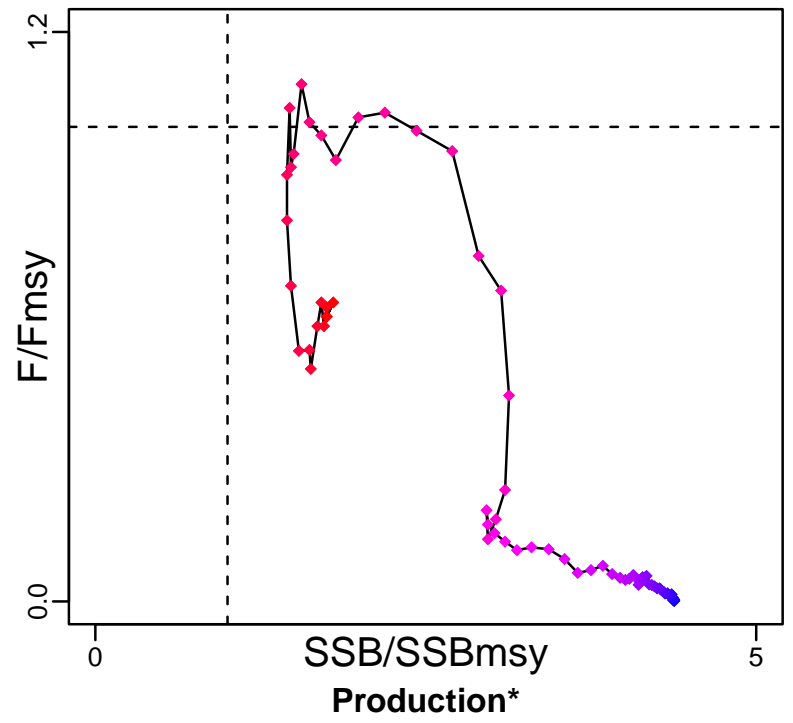
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-MT	2020	102,000	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-1/yr	2014	0.08	-	-
ER	-	-	-	-	-
TC	TC-MT	2020	26,005		
TL	TL-MT	2018	30,844		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2020	1.75		
F/Fmsy	FdivFmsy-dimensionless	2020	0.6		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Swordfish Indian Ocean [SWORDIO]

Kobe MSYpref (1950–2020–SMITH)



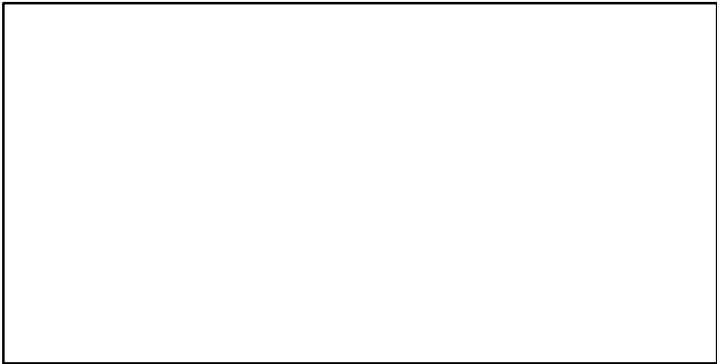
Kobe MGTpref (1950–2020–SMITH)



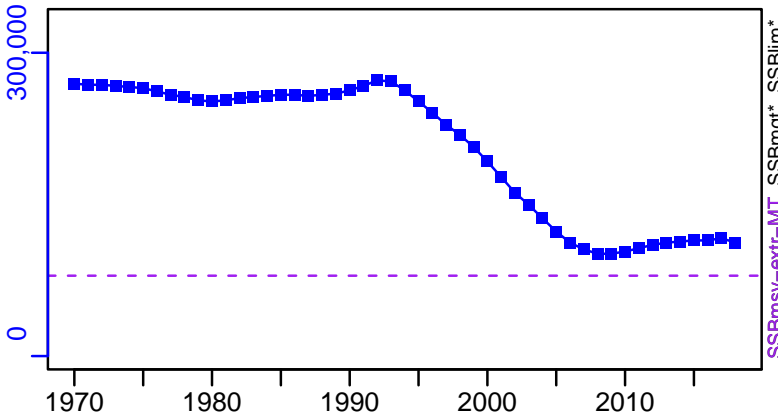
◆ Start Year ◆ End Year * No Data

Swordfish Indian Ocean [SWORDIO]

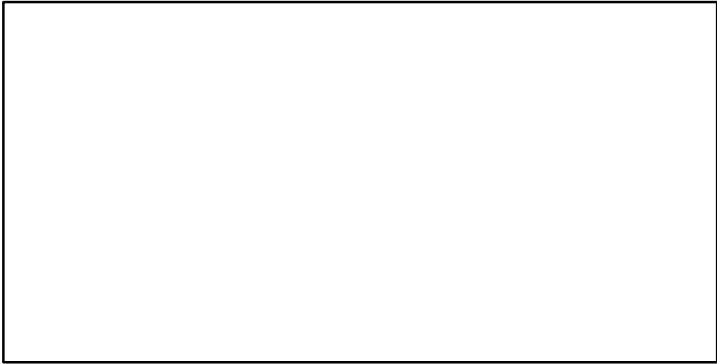
TB*



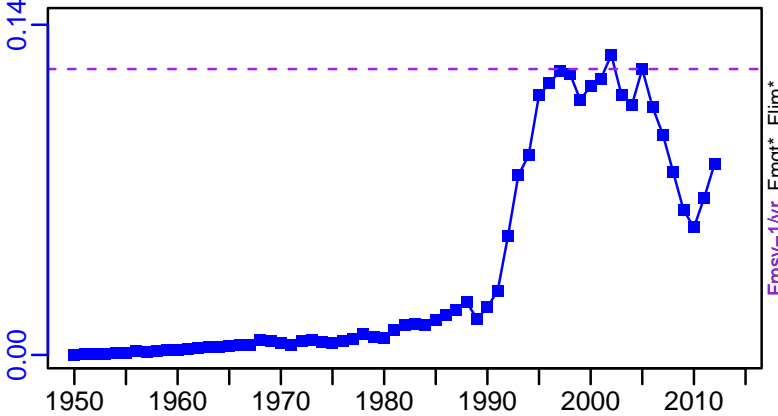
SSB-MT (1950-2020-SMITH)



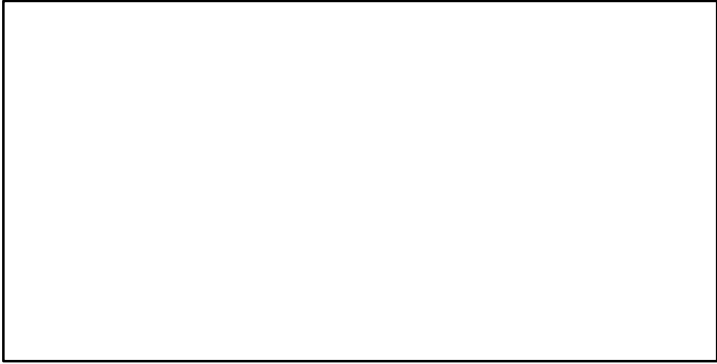
TN *



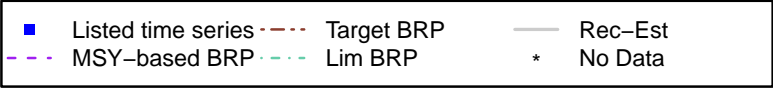
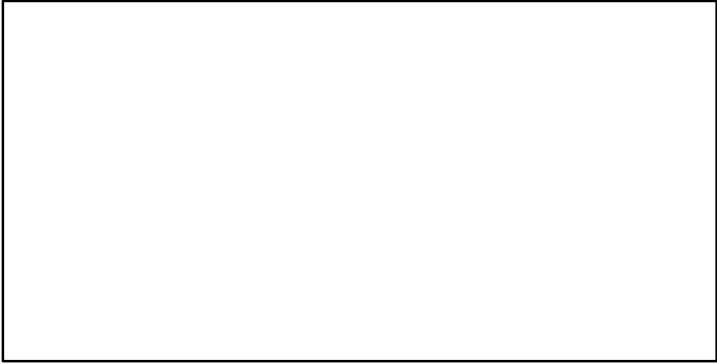
F-1/yr (1950-2014-PONS)



ER*

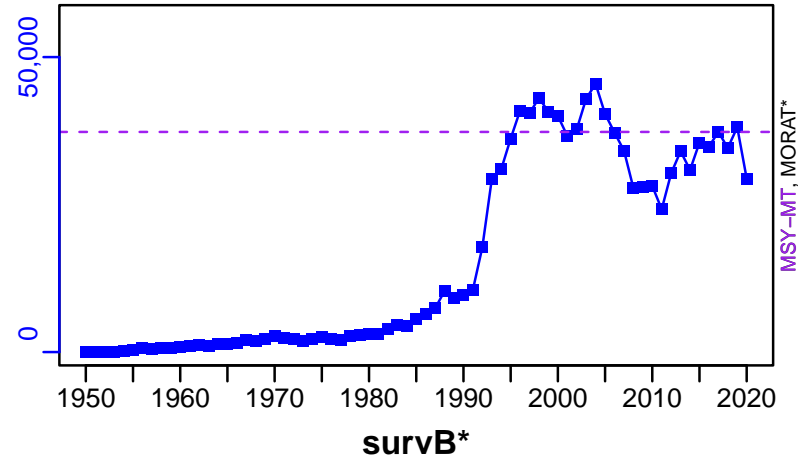


Recruits*



Swordfish Indian Ocean [SWORDIO]

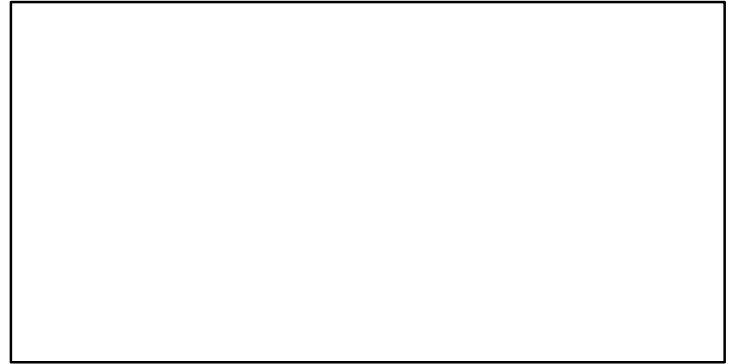
TC-MT, TL*, RecC* (1950–2020–SMITH)



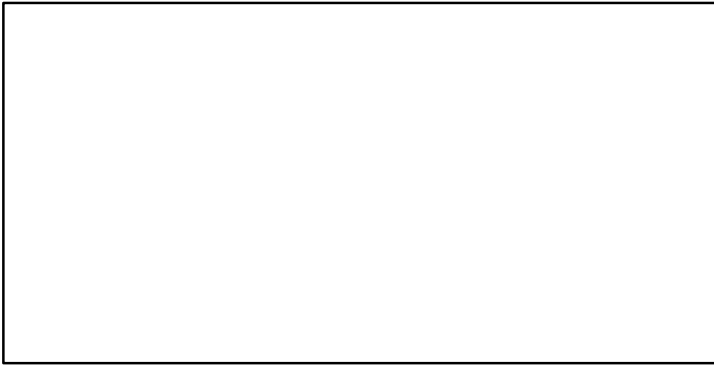
TAC*, Cpair*, Cadv*



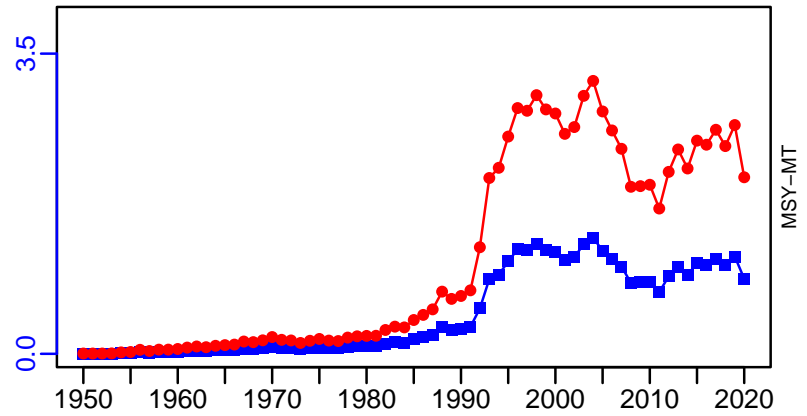
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1950–2020–SMITH)



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

Yellowfin tuna Indian Ocean [YFINEIO]

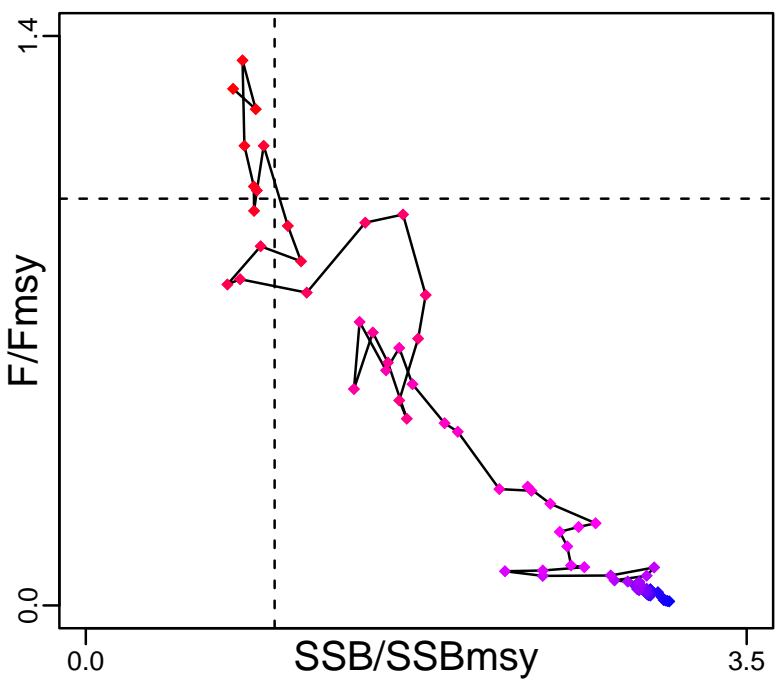
Metadata	
Scientific Name	Thunnus albacares
Current Assess ID	IOTC-YFINEIO-1950-2020-SMITH
Area	Indian Ocean
Management Authority	Indian Ocean Tuna Commission
Assessor	Indian Ocean Tuna Commission
Asmts in RAM	2014, 2016, 2020

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	TBmsy-MT	2014	1,346,000
SSBmsy	SSBmsy-extr-MT	2020	975,055
Fmsy	-	-	-
ERmsy	ERmsy-calc-ratio	2014	0.255
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	TB0-MT	2014	3,596,000
SSB0	SSB0-MT	2014	2,910,000
MSY	MSY-MT	2020	394,000
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

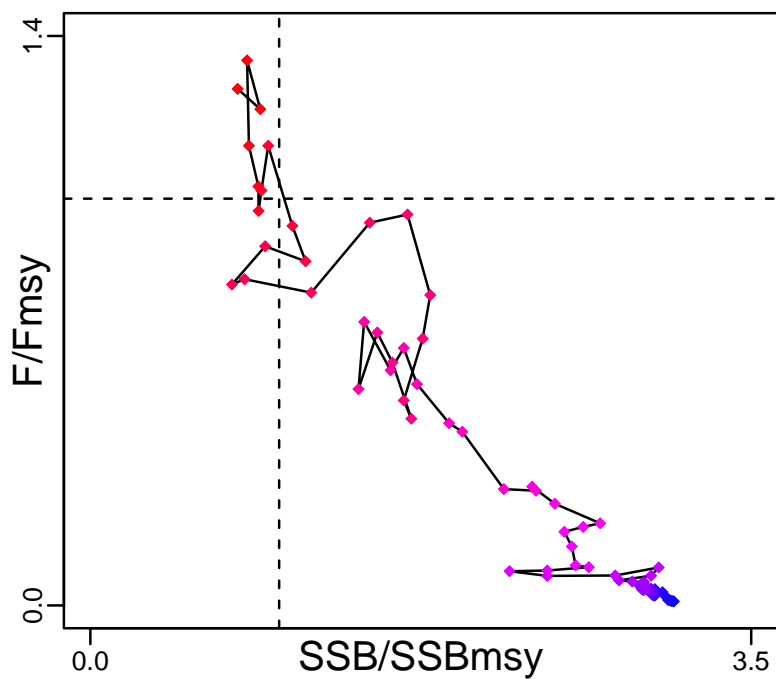
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-MT	2020	883,400	-	-
TN	-	-	-	-	-
R	R-E00	2014	99,700,000	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2020	432,623		
TL	TL-MT	2016	427,000		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2020	0.78		
F/Fmsy	FdivFmsy-dimensionless	2020	1.27		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Yellowfin tuna Indian Ocean [YFINEIO]

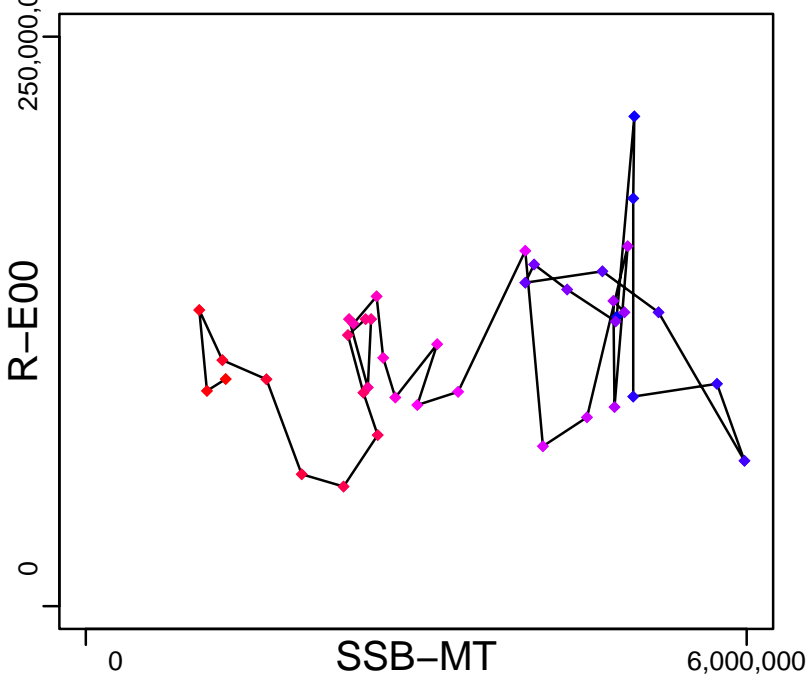
Kobe MSYpref (1950–2020–SMITH)



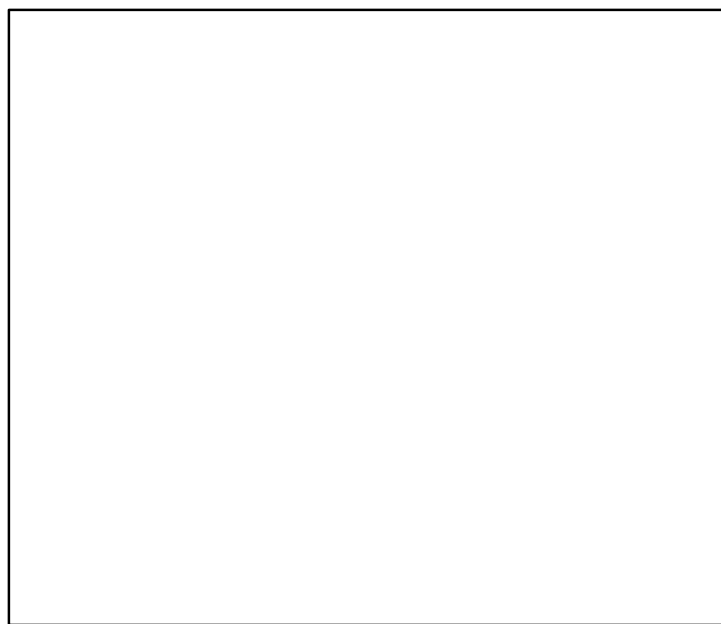
Kobe MGTpref (1950–2020–SMITH)



Spawner Recruit (1950–2014–PONS)



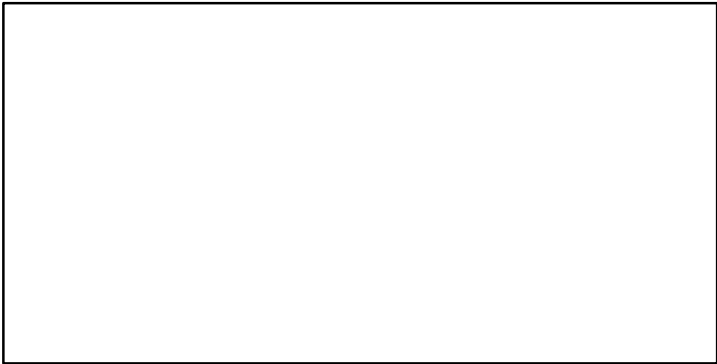
Production*



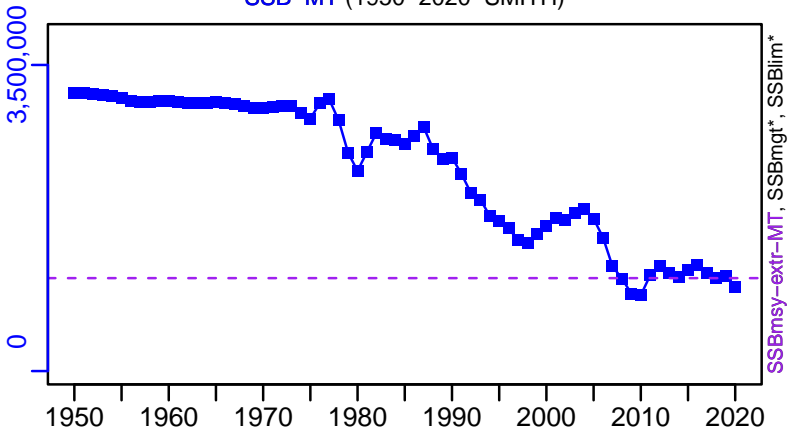
◆ Start Year ◆ End Year * No Data

Yellowfin tuna Indian Ocean [YFINEIO]

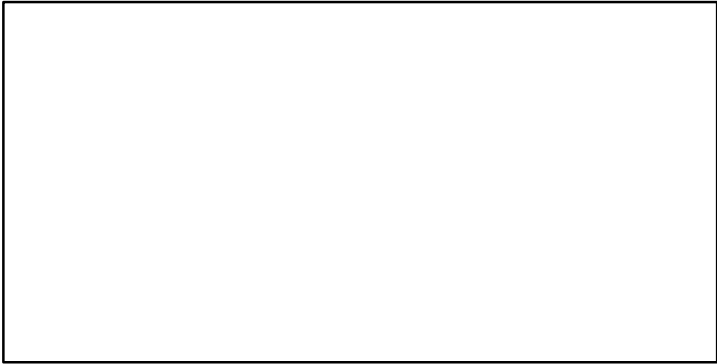
TB*



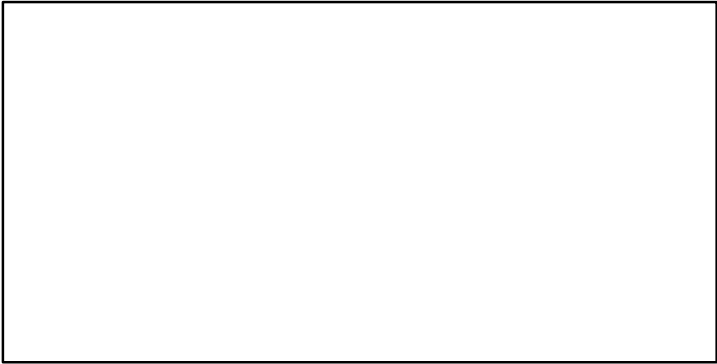
SSB-MT (1950–2020–SMITH)



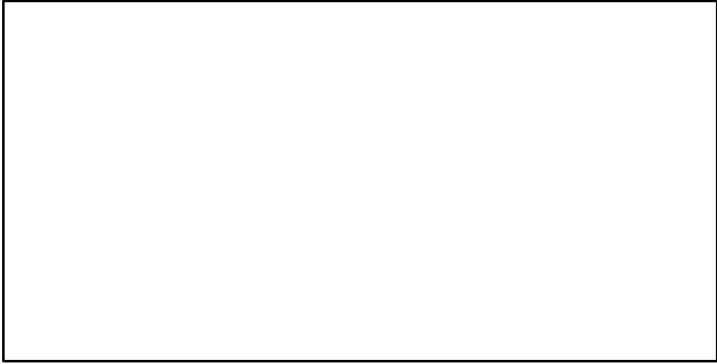
TN *



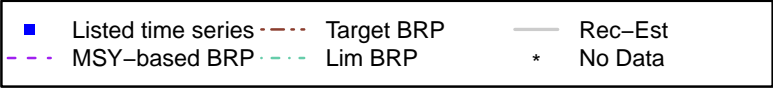
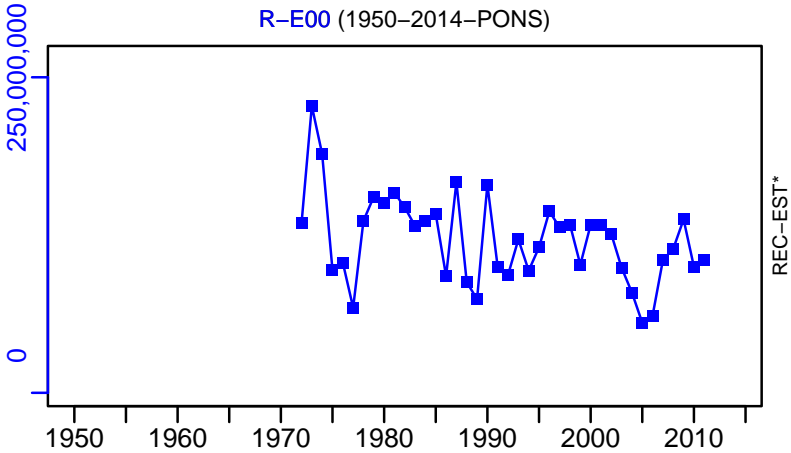
F*



ER*

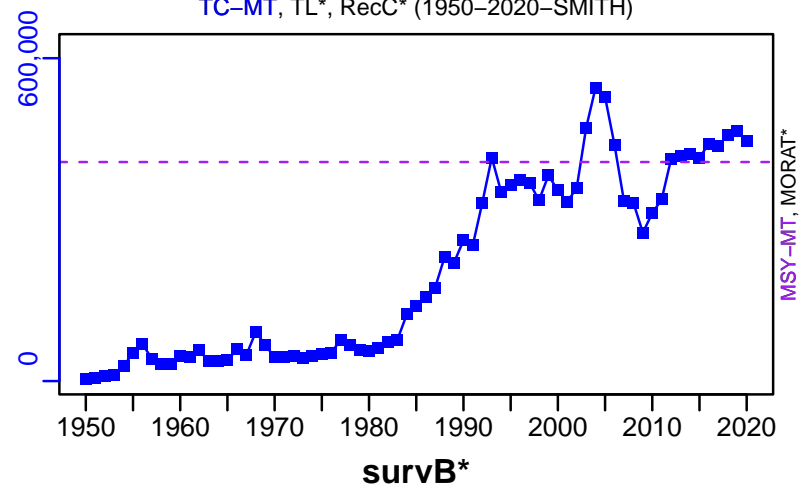


R-E00 (1950–2014–PONS)



Yellowfin tuna Indian Ocean [YFINEIO]

TC-MT, TL*, RecC* (1950–2020–SMITH)



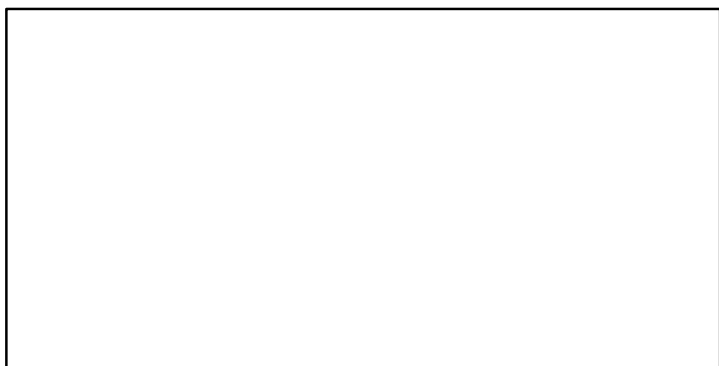
TAC*, Cpair*, Cadv*



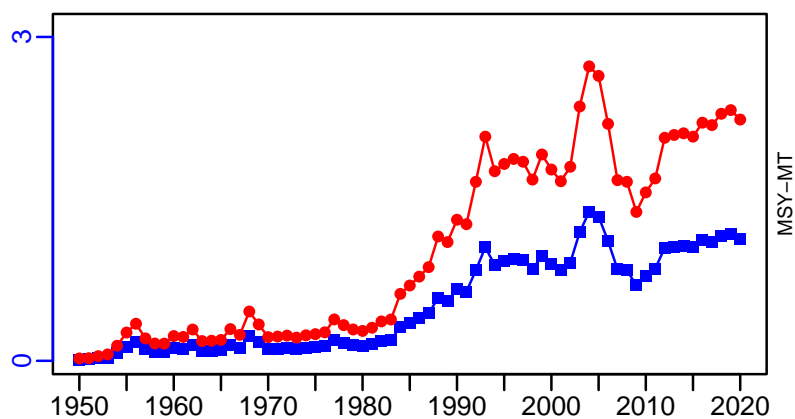
CPUE*



EFFORT*



TC-MT/MSY-MT, CdivMEANC-ratio, (1950–2020–SMITH)



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