

# European Union Stocks

## v4.25 (Jan-28-2018)

1. Anchovy Portugese Waters -East [ANCHIXa]
2. Anchovy ICES VIII [ANCHOBAYB]
3. Black bellied angler VIIIc-IXa [ANGLVIIIc-IXa]
4. Black bellied angler VII and VIIIabd [ANGLVII-VIIIabd]
5. Blue jack mackerel Azores (Xa2) [BJMACKXa2]
6. Blue ling I-II-IIIa-IVa-VIII-IX-XII [BLINGI-II-IIIa-IVa-VIII-IX-XII]
7. Boarfish VI and VIII [BOARVI-VIII]
8. Brill Baltic Areas 22-32 [BRILL2232]
9. Blue Whiting Northeast Atlantic [BWHITNEA]
10. Atlantic cod Baltic Areas 22 and 24 [CODBA2224]
11. Atlantic cod Baltic Areas 25-32 [CODBA2532]
12. Atlantic cod IIIa (west) and IV-VIId [CODIIIaW-IV-VIId]
13. Atlantic cod Irish Sea [CODIS]
14. Atlantic cod Kattegat [CODKAT]
15. Atlantic cod West of Scotland [CODVIa]
16. Atlantic Cod Celtic Sea [CODVllek]
17. Tusk Va and XIV [CUSKVa-XIV]
18. Tusk Rockall Bank [CUSKVib]
19. Tusk North of Azores [CUSKXII]
20. Dab VII-VIIIabd [DAB2232]
21. European seabass IVbc and VII [EBASSIVbc-VII]
22. European seabass VIa and VIIb-j [EBASSVIa-VIIb-j]
23. European seabass VIIIc and IXa [EBASSVIIIc-IXa]
24. European flounder Subdivisions 22-23 [EFLOUN2223]
25. European flounder Subdivisions 24-25 [EFLOUN2425]
26. European flounder Subdivisions 26-28 [EFLOUN26-28]
27. European flounder Subdivisions 27 and 29-32 [EFLOUN27-2932]
28. European pollack IIIa and North Sea [EPOLLIV-IIIa]
29. European pollack VIII and IXa [EPOLLVIII-IXa]
30. Fourspotted megrim ICES VIIIc-IXa [FMEG8c9a]
31. Greater forkbeard Northeast Atlantic [GFORKNEATL]
32. Grey gurnard IIIa, VIId and North Sea [GGURNIIIa-IV-VIId]
33. Greenland halibut NAFO 01ABCDEF [GHAL01ABCDEF]
34. Greenland halibut V-VI-XII-XIV [GHALV-VI-XII-XIV]
35. Golden Redfish V-VI-XII-XIV [GOLDREDV-VI-XII-XIV]
36. Haddock Irish Sea [HADIS]
37. Haddock North Sea and IIIa-VIa [HADNS-IIIa-VIa]
38. Haddock Rockall Bank [HADROCK]
39. Haddock ICES VIIb-k [HADVIIb-k]
40. Hake Northeast Atlantic North [HAKENRTN]
41. Hake Northeast Atlantic South [HAKESOTH]
42. Herring ICES 22-24-IIIa [HERR2224IIIa]
43. Herring Subdivisions 25-29 and 32 [HERR2529-32]
44. Herring ICES 30 [HERR30]
45. Herring ICES 31 [HERR31]
46. Herring Northern Irish Sea [HERRNIRS]
47. Herring IIIa, VIId and North Sea [HERRNS-IIIa-VIId]
48. Herring ICES 28 [HERRRIGA]
49. Herring ICES VIIa-g-h-j [HERRSIRS]
50. Herring ICES VIa [HERRVIa]

51. Herring ICES VIa-VIIb-VIIc [HERRVIaVIIbc]
52. Horse mackerel IIa-IVa-Vb-VIa-VII-VIII [HMACKIIa-IVa-Vb-VIa-VII-VIII]
53. Horse mackerel IIIa-IVbc-VIIId [HMACKIIIa-IVbc-VIIId]
54. Horse mackerel Portugese Waters -East [HMACKIXa]
55. Ling Iceland Grounds [LINGVa]
56. Mackerel ICES Northeast Atlantic [MACKNEICES]
57. Megrin ICES VIIIc-IXa [MEG8c9a]
58. Megrin spp. IVa and VIa [MEGSPPIVa-VIa]
59. Megrin VII-VIIIabd [MEGVII-VIIIabd]
60. Norway lobster Noup (FU 10) [NEPHFU10]
61. Norway lobster North Minch (FU 11) [NEPHFU11]
62. Norway lobster South Minch (FU 12) [NEPHFU12]
63. Norway lobster Firth of Clyde and Sound of Jura (FU 13) [NEPHFU13]
64. Norway lobster Irish Sea East (FU 14) [NEPHFU14]
65. Norway lobster Irish Sea West (FU 15) [NEPHFU15]
66. Norway lobster Porcupine Bank (FU 16) [NEPHFU16]
67. Norway lobster Aran Grounds (FU 17) [NEPHFU17]
68. Norway lobster South East and West of IRL (FU 19) [NEPHFU19]
69. Norway lobster Labadie, Jones and Cockburn (FU 20-21) [NEPHFU2021]
70. Norway lobster Smalls (FU 22) [NEPHFU22]
71. Norway lobster North Galicia (FU 25) [NEPHFU25]
72. Norway lobster West Galicia and North Portugal (FU 26-27) [NEPHFU2627]
73. Norway lobster South-West and South Portugal (FU 28-29) [NEPHFU2829]
74. Norway lobster Gulf of Cadiz (FU 30) [NEPHFU30]
75. Norway lobster Cantabrian Sea (FU 31) [NEPHFU31]
76. Norway lobster Norwegian Deep (FU 32) [NEPHFU32]
77. Norway lobster Off Horn Reef (FU 33) [NEPHFU33]
78. Norway lobster Devil's Hole (FU 34) [NEPHFU34]
79. Norway lobster Skagerak Kattegat (FU 3-4) [NEPHFU3-4]
80. Norway lobster Botney Cut - Silver Pit (FU 5) [NEPHFU5]
81. Norway lobster Farn Deep (FU 6) [NEPHFU6]
82. Norway lobster Fladen Ground (FU 7) [NEPHFU7]
83. Norway lobster Firth of Forth (FU 8) [NEPHFU8]
84. Norway lobster Moray Firth (FU 9) [NEPHFU9]
85. Norway pout IIIa and North Sea [NPOUTIIIa-IV]
86. Orange roughy Northeast Atlantic [OROUGHYNEATL]
87. Northern shrimp IIIa (west) and IVa (east) [PANDALIIIaW-IVaE]
88. Northern shrimp Northern North Sea [PANDALIVa]
89. European Plaice Subdivisions 21-23 [PLAIC2123]
90. European Plaice Subdivisions 24-32 [PLAIC2432]
91. European Plaice ICES VIIId [PLAIC7d]
92. European Plaice ICES VIIIf-g [PLAICCELT]
93. European Plaice ICES VIIe [PLAICECHW]
94. European Plaice ICES IIIa [PLAICIIIa]
95. European Plaice Irish Sea [PLAICIS]
96. European Plaice North Sea [PLAICNS]
97. European Plaice VIIbc [PLAICVIIbc]
98. European Plaice VIIh-k [PLAICVIIh-k]
99. European Plaice VIII and IXa [PLAICVIII-IXa]
100. Pollock ICES IIIa, VI and North Sea [POLLNS-VI-IIIa]
101. Red seabream IX [RBRMIX]
102. Red seabream VI-VII-VIII [RBRMVI-VII-VIII]
103. Red seabream Azores Grounds [RBRMX]
104. Beaked Redfish Areas V-XII-XIV and NAFO Subareas 1-2 [REDDEEPSH1-2-V-XII-XIV]
105. Beaked Redfish Southeast Greenland [REDDEEPXIVb]
106. Redfish species NAFO 1 [REDFISHSPP1]

107. Roughhead grenadier Northeast Atlantic [RHGRENNEATL]
108. Roundnose grenadier I-II-IV-Va2-VIII-IX-XIVab2 [RNGENI-II-IV-Va2-VIII-IX-XIVab2]
109. Roundnose grenadier Mid-Atlantic Ridge [RNGENMATLR]
110. Roundnose grenadier Vb-VI-VII-XIIb [RNGENVb-VI-VII-XIIb]
111. Roundnose grenadier Kattegat and Skagerrak [RNGRENIIa]
112. European pilchard ICES VIIIc-IXa [SARDPVIIIc-IXa]
113. Sand eel SA 1 [SEELNSSA1]
114. Sand eel SA 2 [SEELNSSA2]
115. Sand eel SA 3 [SEELNSSA3]
116. Sand eel SA 5 [SEELNSSA5]
117. Sand eel SA 6 [SEELNSSA6]
118. Sand eel SA 7 [SEELNSSA7]
119. Common sole Celtic Sea [SOLECS]
120. Common sole 22-24-IIIa [SOLEIIa-2224]
121. Common sole Irish Sea [SOLEIS]
122. Common sole North Sea [SOLENS]
123. Common sole VIIbc [SOLEVIIbc]
124. Common sole ICES VIId [SOLEVIId]
125. Common sole Western English Channel [SOLEVIIe]
126. Common sole VIIh-k [SOLEVIIh-k]
127. Common sole VIIIab [SOLEVIIIab]
128. Sprat ICES Baltic Areas 22-32 [SPRAT22-32]
129. Sprat Kattegat and Skagerrak [SPRATIIa]
130. Sprat North Sea [SPRATNS]
131. Sprat VIId [SPRATVIId]
132. Sprat VI and VIIabcfghijk [SPRATVI-VIIabcfghijk]
133. Spurdog Northeast Atlantic [SPURDNEATL]
134. Turbot Baltic Areas 22-32 [TUR2232]
135. Turbot North Sea [TURIV]
136. White anglerfish VIIIc-IXa [WANGLVIIIc-IXa]
137. White anglerfish VII and VIIIabd [WANGLVII-VIIIabd]
138. Whiting NS-VIId [WHITNS-VIId]
139. Whiting ICES VIa [WHITVIa]
140. Whiting ICES VIIe-k [WHITVIIek]
141. Whiting VIII and IXa [WHITVIII-IXa]

## Anchovy Portuguese Waters -East [ANCHIXa]

Metadata	
<b>Scientific Name</b>	Engraulis encrasicolus
<b>Current Assess ID</b>	WGHANSA-ANCHIXa-1989-2016-ICESIMP2016
<b>Area</b>	Portugese Waters -East
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Southern Horse Mackerel, Anchovy and Sardine
<b>Asmts in RAM</b>	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2016	0.25	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2016	9420		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year    ◆ End Year    \* No Data

Anchovy Portuguese Waters –East [ANCHIXa]

TB\*



SSB\*



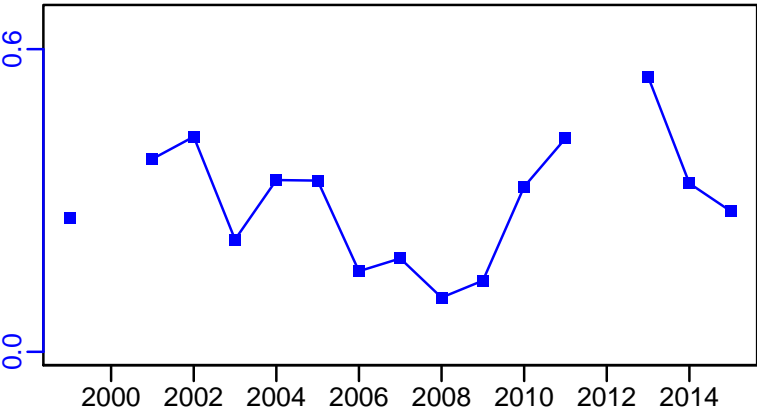
TN \*



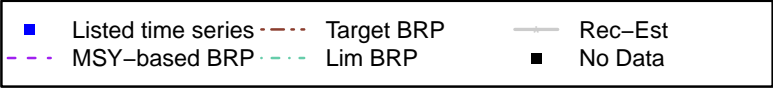
F\*



ER-ratio (1989–2016–ICESIMP2016)

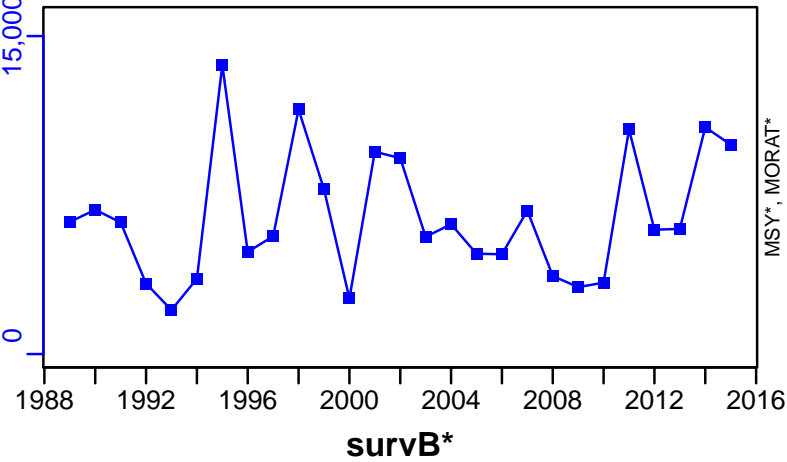


Recruits\*



Anchovy Portuguese Waters –East [ANCHIXa]

TL–MT, TC\*, RecC\* (1989–2016–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Anchovy ICES VIII [ANCHOBAYB]

Metadata	
<b>Scientific Name</b>	Engraulis encrasicolus
<b>Current Assess ID</b>	WGHANSA-ANCHOBAYB-1986-2015-ICESIMP2016
<b>Area</b>	Bay of Biscay
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Southern Horse Mackerel, Anchovy and Sardine
<b>Asmts in RAM</b>	2013, 2014, 2015, 2007

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2013	33,000
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2007	1.2
<b>TBlim</b>	TBlim-MT	2014	21,000
<b>SSBlim</b>	SSBlim-MT	2015	21,000
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

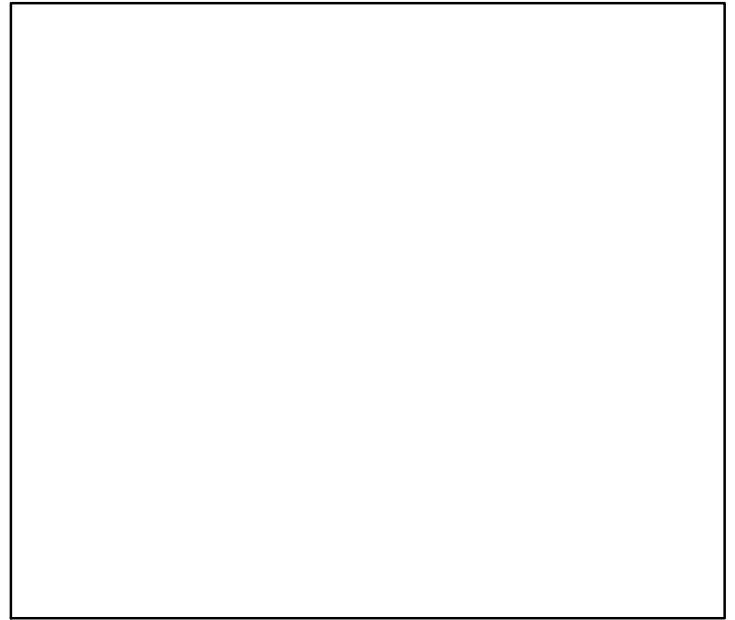
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2014	66,200	-	-
<b>SSB</b>	SSB-MT	2015	147,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-MT	2015	134,000	-	1
<b>F</b>	F-1/yr	2014	0.22	-	1+
<b>ER</b>	ER-ratio	2015	0.17	-	-
<b>TC</b>	TC-MT	2015	25,100		
<b>TL</b>	TL-MT	2015	25,100		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2013	1.7		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		



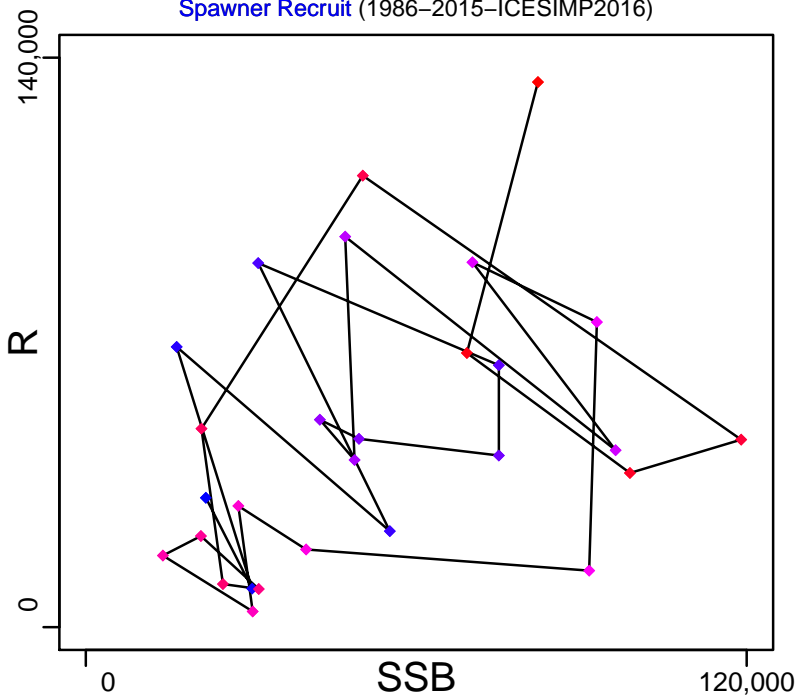
Kobe MSY\*



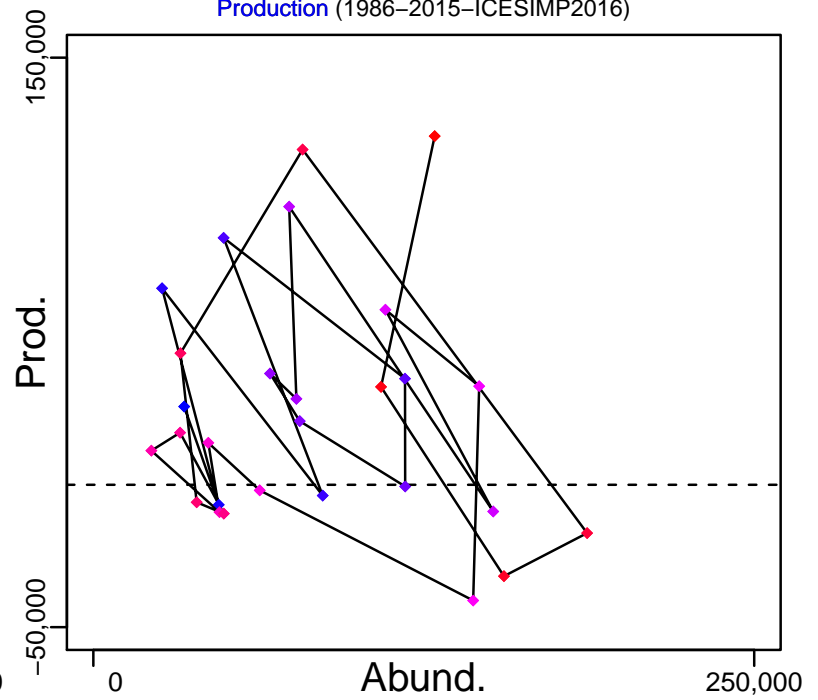
Kobe MGT\*



Spawner Recruit (1986–2015–ICESIMP2016)



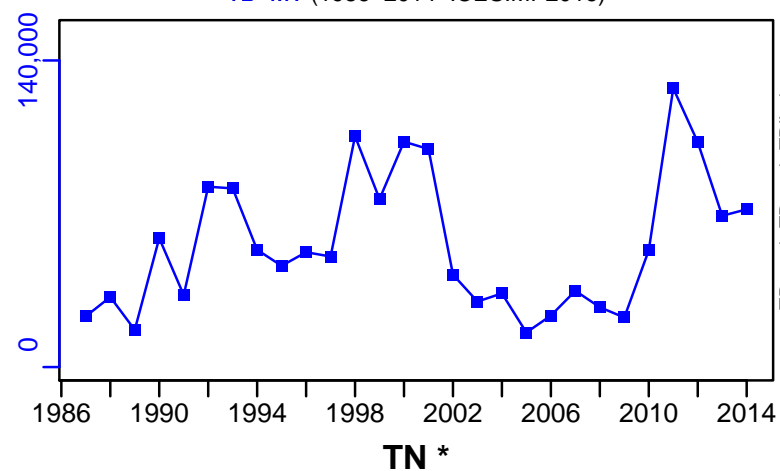
Production (1986–2015–ICESIMP2016)



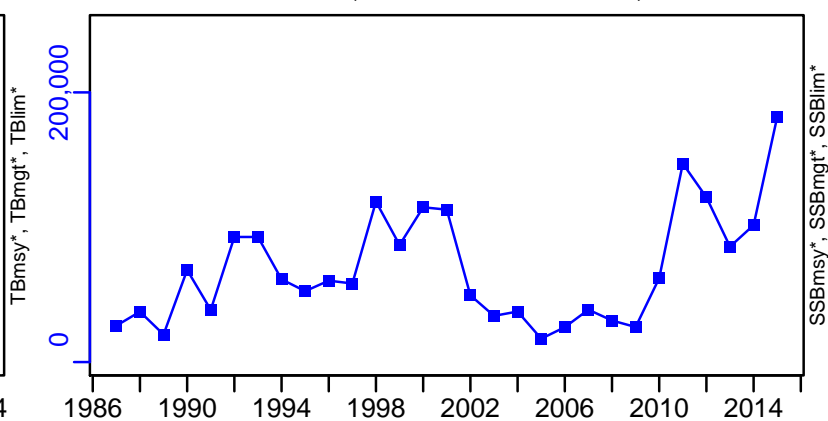
◆ Start Year ◆ End Year \* No Data

# Anchovy ICES VIII [ANCHOBAYB]

TB-MT (1986–2014–ICESIMP2016)



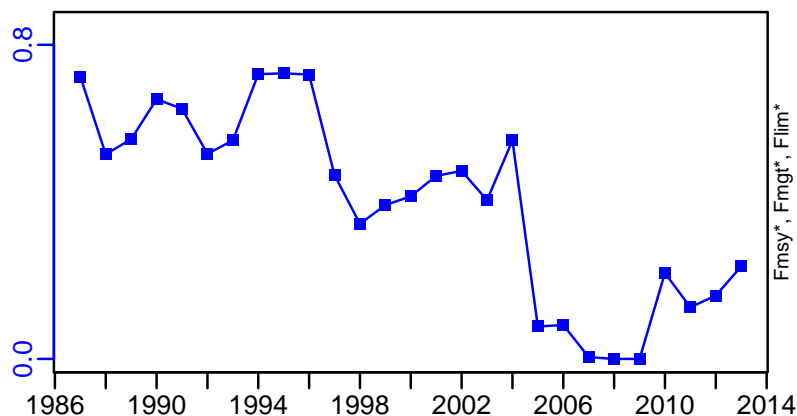
SSB-MT (1986–2015–ICESIMP2016)



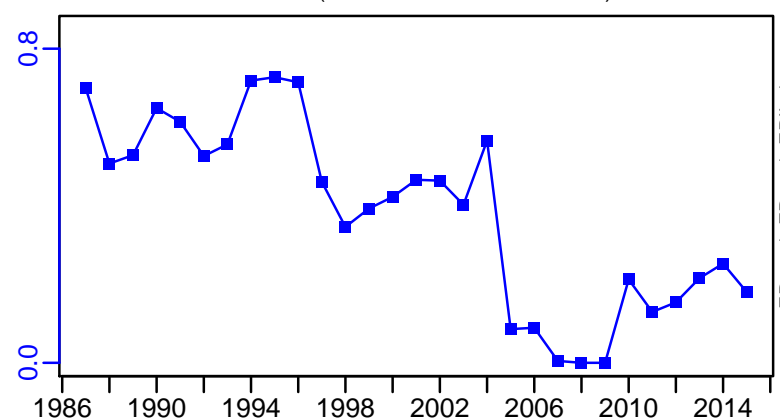
TN \*



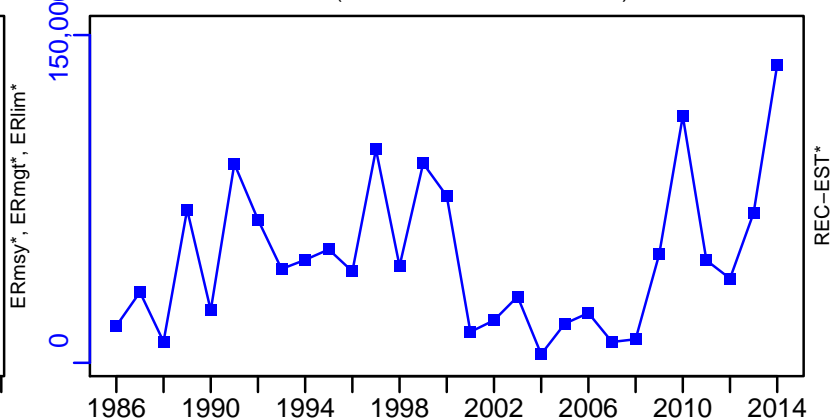
F-1/yr (1986–2014–ICESIMP2016)



ER-ratio (1986–2015–ICESIMP2016)



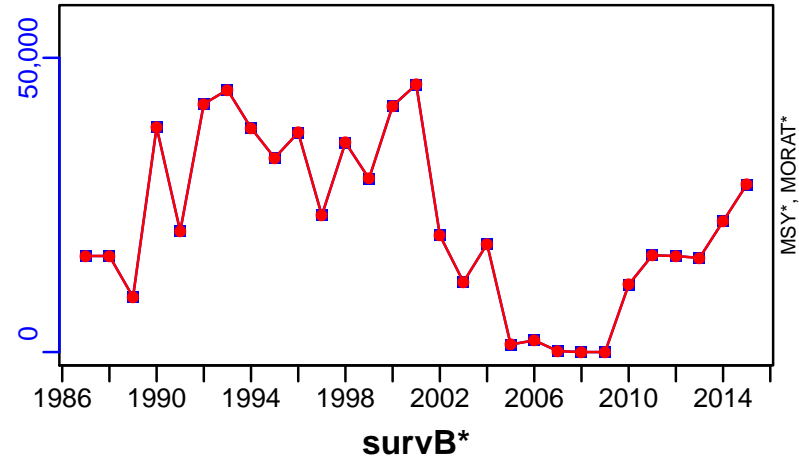
R-MT (1986–2015–ICESIMP2016)



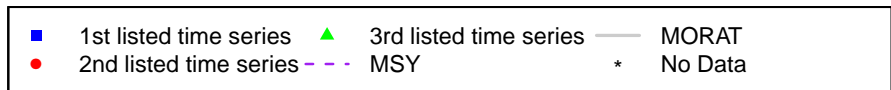
# Anchovy ICES VIII [ANCHOBAYB]

TC-MT, TL-MT, RecC\* (1986–2015–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Black bellied angler VIIIc-IXa [ANGLVIIIc-IXa]

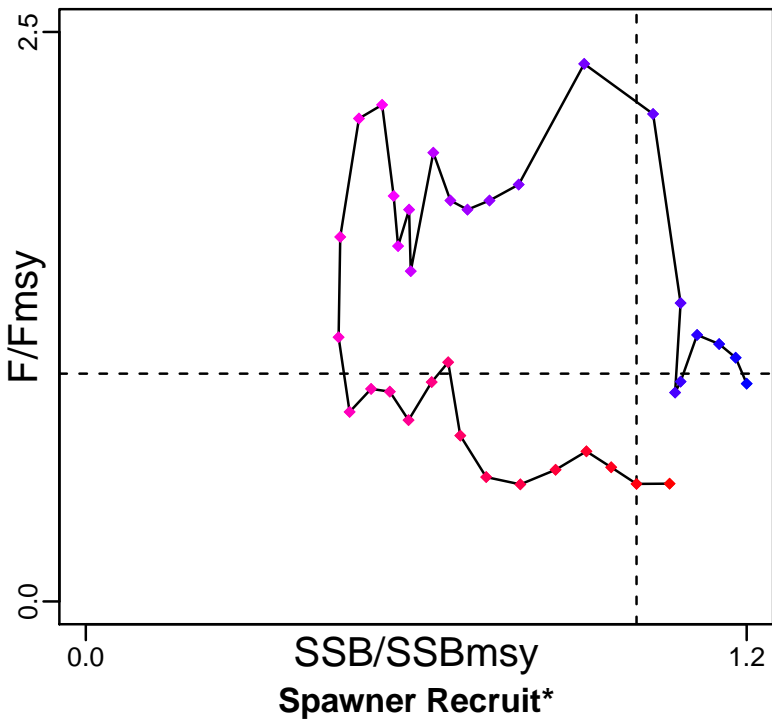
Metadata	
<b>Scientific Name</b>	Lophius budegassa
<b>Current Assess ID</b>	WGBIE-ANGLVIIIc-IXa-1980-2016-ICESIMP2016
<b>Area</b>	VIIIc-IXa
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
<b>Asmts in RAM</b>	2014, 2015, 2016, 2011, 2012, 2013

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

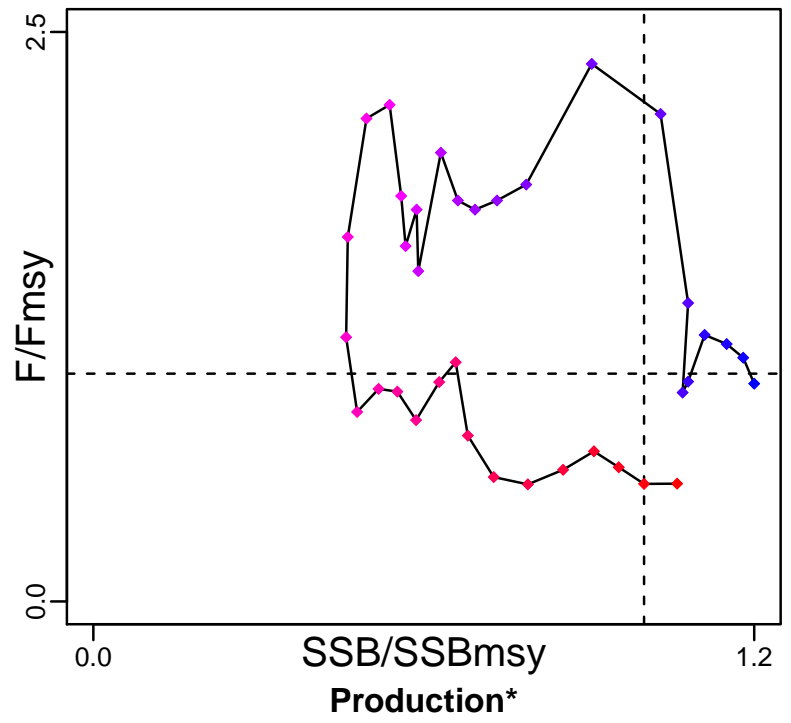
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	10,300		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

# Black bellied angler VIIIc-IXa [ANGLVIIIc-IXa]

Kobe MSYpref (1980–2016–ICESIMP2016)



Kobe MGTpref (1980–2016–ICESIMP2016)



◆ Start Year ◆ End Year \* No Data

Black bellied angler VIIIc-IXa [ANGLVIIIc-IXa]

TB\*



SSB\*



TN \*



F\*



ER\*



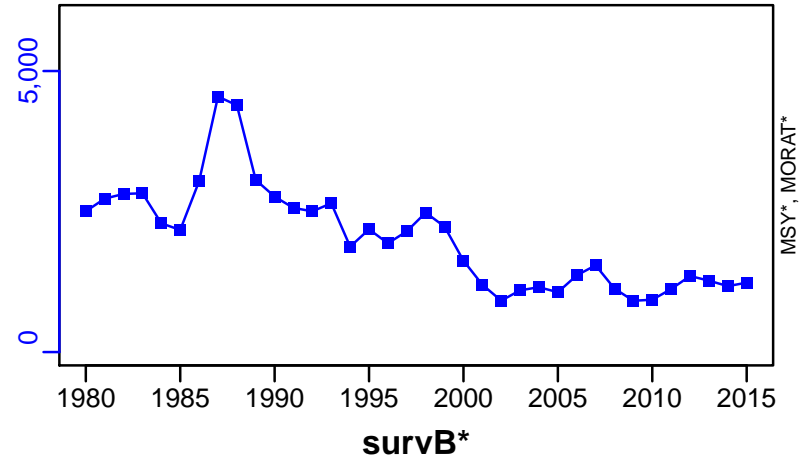
Recruits\*



# Black bellied angler VIIIc-IXa [ANGLVIIIc-IXa]

TL-MT, TC\*, RecC\* (1980-2016-ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Black bellied angler VII and VIIIabd [ANGLVII-VIIIabd]

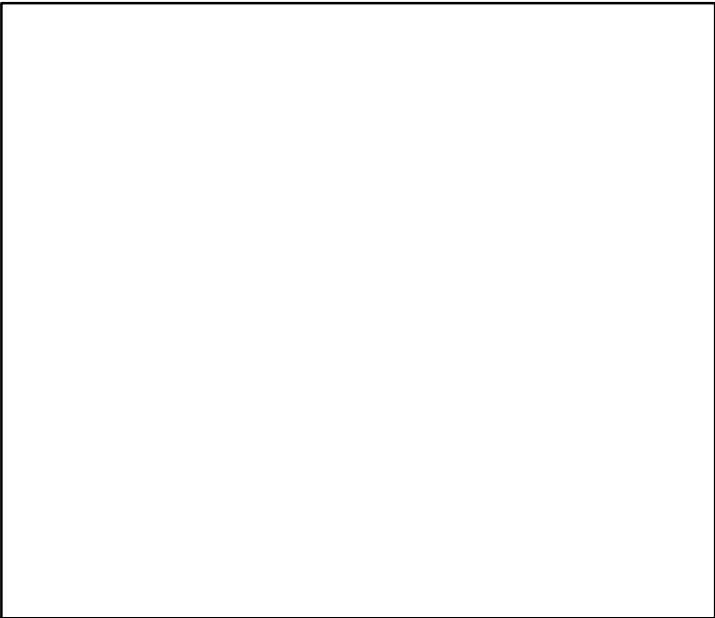
Metadata	
<b>Scientific Name</b>	Lophius budegassa
<b>Current Assess ID</b>	WGBIE-ANGLVII-VIIIabd-1986-2016-ICESIMP2016
<b>Area</b>	VII and VIIIabd
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
<b>Asmts in RAM</b>	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	1040		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2016	1.11		
F/Fmsy	FdivFmsy-dimensionless	2016	0.52		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



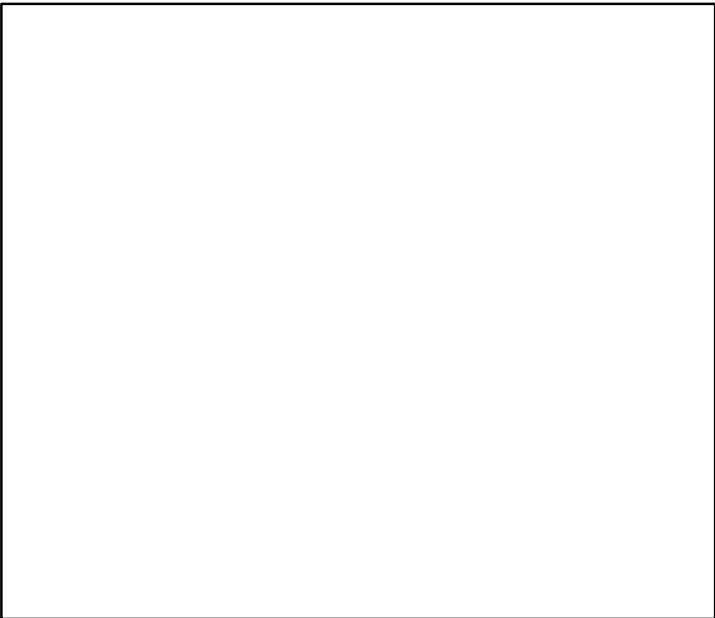
Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

Black bellied angler VII and VIIIabd [ANGLVII-VIIIabd]

TB\*



SSB\*



TN \*



F\*



ER\*

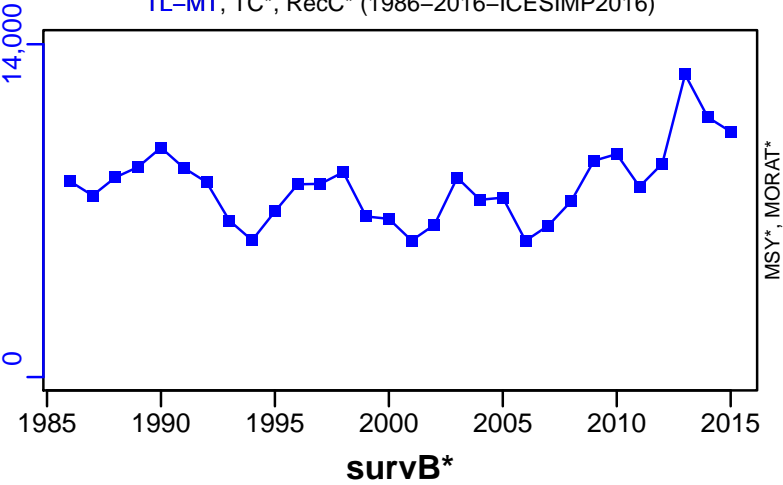


Recruits\*

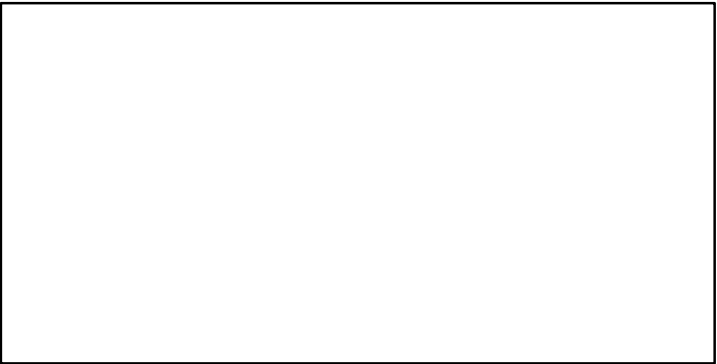


Black bellied angler VII and VIIIabd [ANGLVII–VIIIabd]

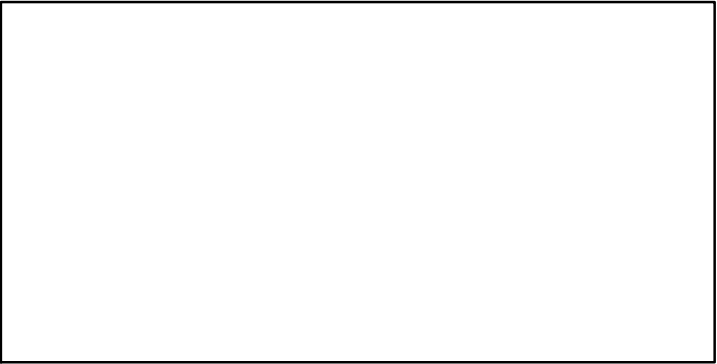
TL–MT, TC\*, RecC\* (1986–2016–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Blue jack mackerel Azores (Xa2) [BJMACKXa2]

Metadata	
<b>Scientific Name</b>	Trachurus picturatus
<b>Current Assess ID</b>	WGHANSA-BJMACKXa2-1978-2016-ICESIMP2016
<b>Area</b>	Azores (Xa2)
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Southern Horse Mackerel, Anchovy and Sardine
<b>Asmts in RAM</b>	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	1140		
TL	TL-MT	2016	874		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

Blue jack mackerel Azores (Xa2) [BJMACKXa2]

TB\*



SSB\*



TN \*



F\*



ER\*



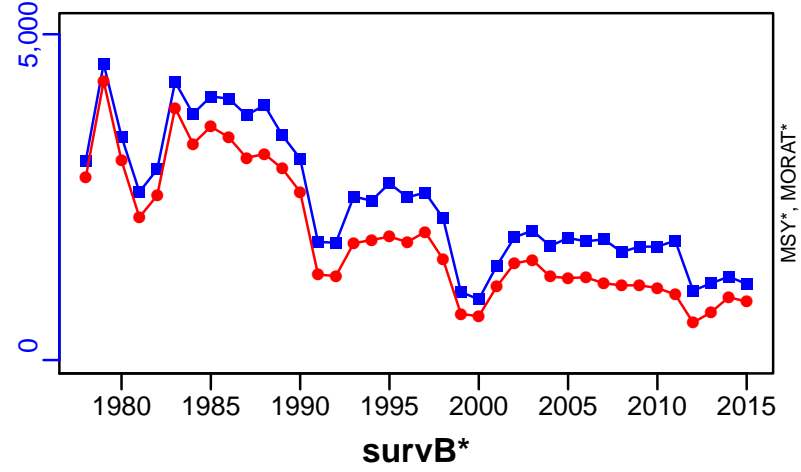
Recruits\*



# Blue jack mackerel Azores (Xa2) [BJMACKXa2]

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

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Blue ling I-II-IIIa-IVa-VIII-IX-XII [BLINGI-II-IIIa-IVa-VIII-IX-XII]

Metadata	
<b>Scientific Name</b>	Molva dypterygia
<b>Current Assess ID</b>	WGDEEP-BLINGI-II-IIIa-IVa-VIII-IX-XII-1988-2015-ICESIMP2016
<b>Area</b>	I-II-IIIa-IVa-VIII-IX-XII
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
<b>Asmts in RAM</b>	2015

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2015	240		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data

Blue ling I–II–IIIa–IVa–VIII–IX–XII [BLINGI–II–IIIa–IVa–VIII–IX–XII]

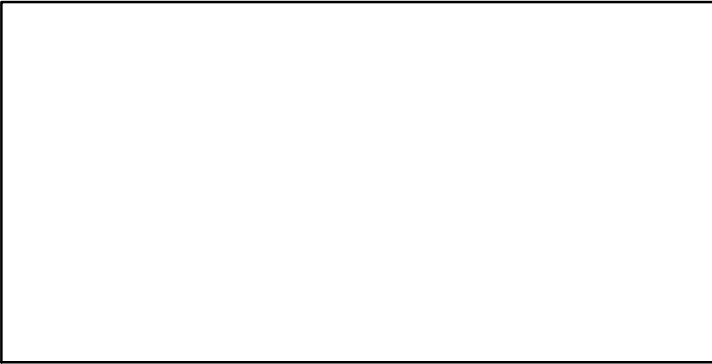
**TB\***



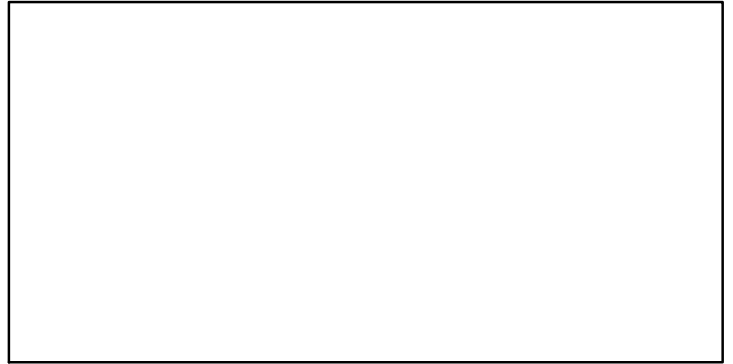
**SSB\***



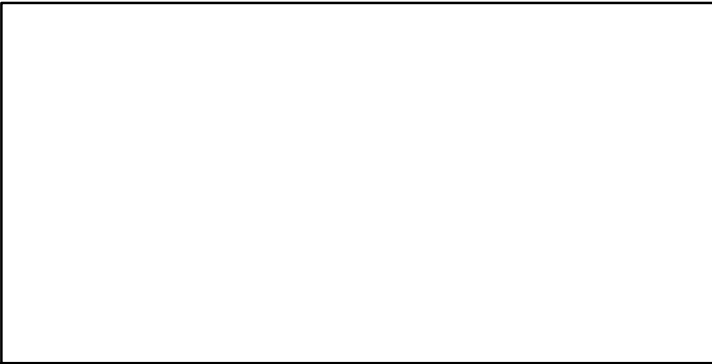
**TN \***



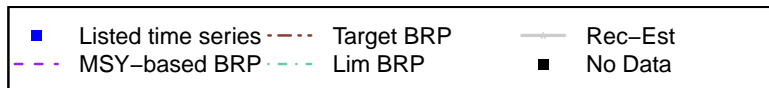
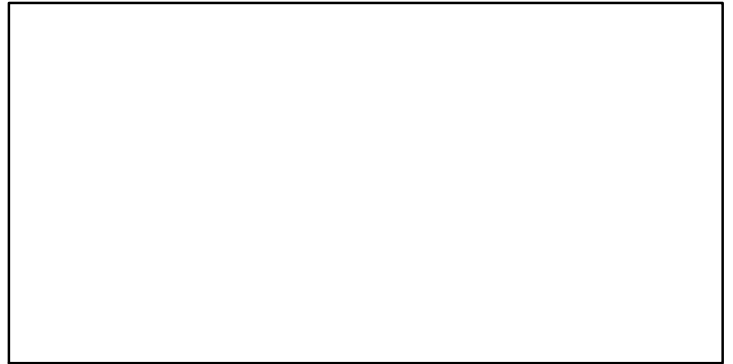
**F\***



**ER\***



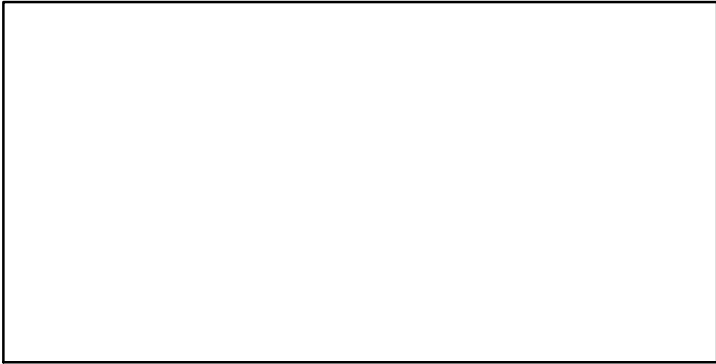
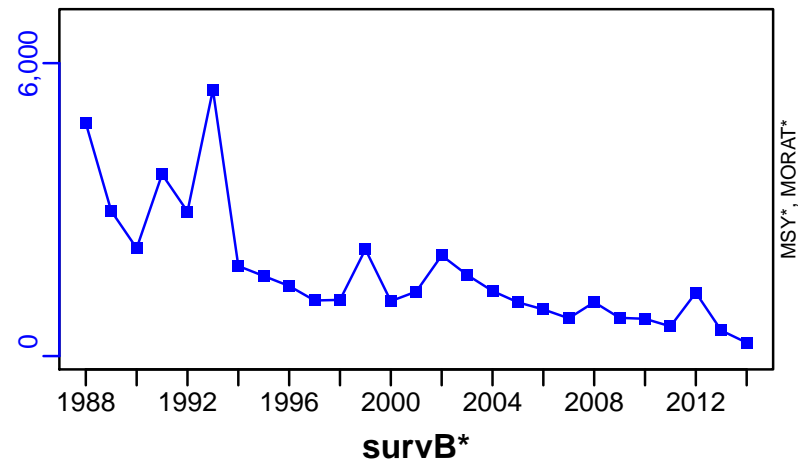
**Recruits\***



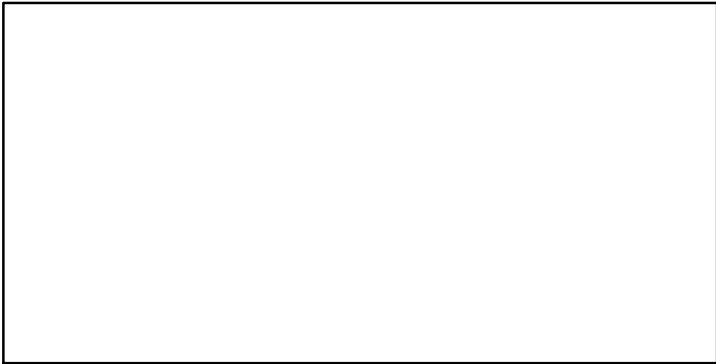
Blue ling I–II–IIIa–IVa–VIII–IX–XII [BLINGI–II–IIIa–IVa–VIII–IX–XII]

TC–MT, TL\*, RecC\* (1988–2015–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Boarfish VI and VIII [BOARVI-VIII]

Metadata	
<b>Scientific Name</b>	Capros aper
<b>Current Assess ID</b>	WGWIDE-BOARVI-VIII-2001-2015-ICESIMP2016
<b>Area</b>	VI and VIII
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Widely Distributed Stocks
<b>Asmts in RAM</b>	2013, 2014, 2015

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	F-relative	2015	1.85	-	1 to 14
ER	-	-	-	-	-
TC	TC-MT	2015	45,200		
TL	TL-MT	2015	43,400		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



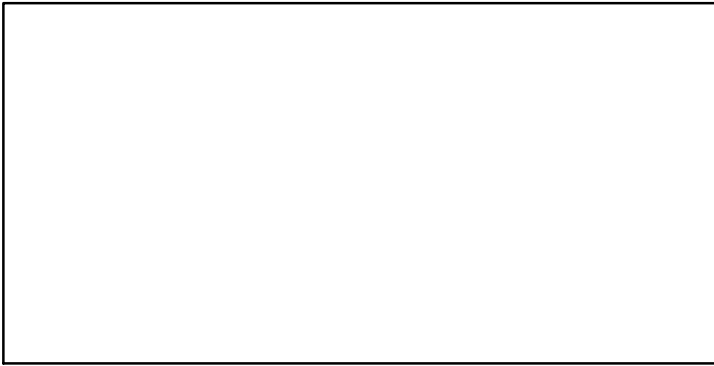
**Production\***



◆ Start Year   ◆ End Year   \* No Data

# Boarfish VI and VIII [BOARVI–VIII]

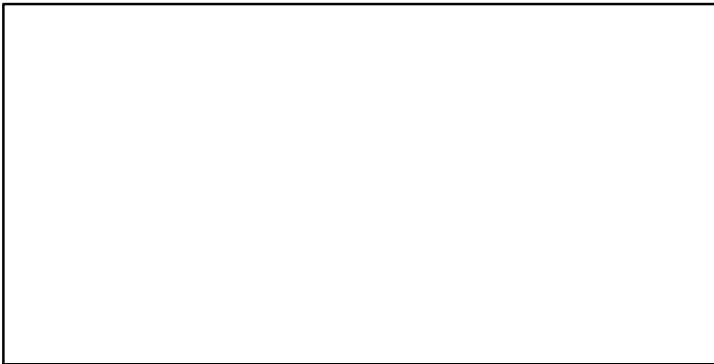
TB\*



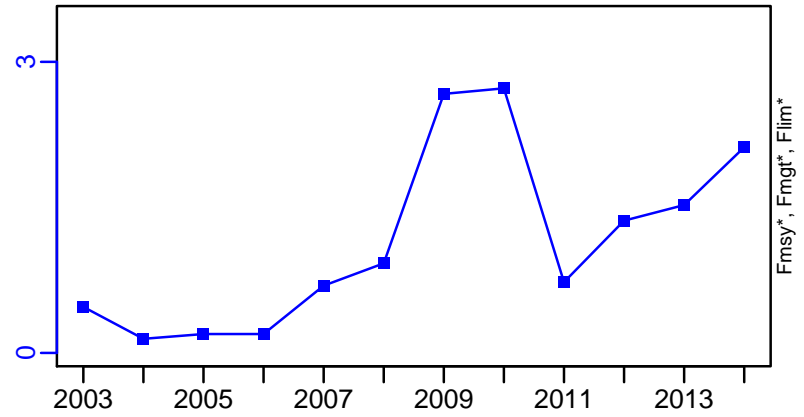
SSB\*



TN \*



F<sub>relative</sub> (2001–2015–ICESIMP2016)



ER\*

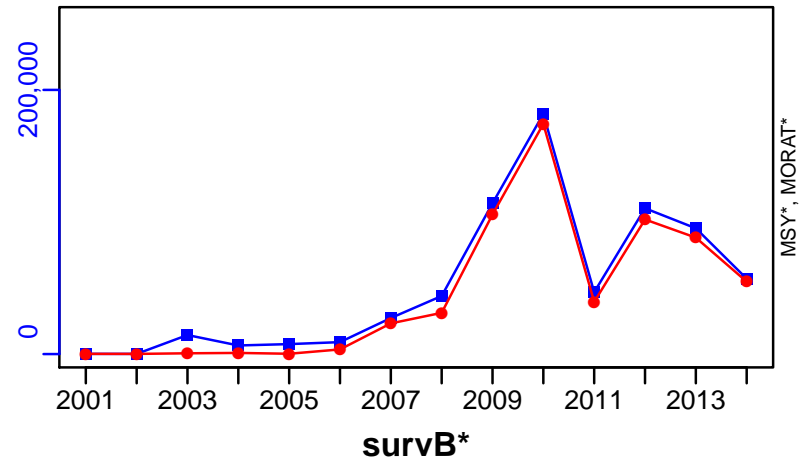


Recruits\*



# Boarfish VI and VIII [BOARVI–VIII]

TC–MT, TL–MT, RecC\* (2001–2015–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Brill Baltic Areas 22-32 [BRILL2232]

Metadata	
Scientific Name	Scophthalmus rhombus
Current Assess ID	WGBFAS-BRILL2232-1970-2016-ICESIMP2016
Area	Baltic Areas 22-32
Management Authority	International Council for the Exploration of the Sea
Assessor	Baltic Fisheries Assessment Working Group
Asmts in RAM	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	40		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

TB\*



SSB\*



TN \*



F\*



ER\*



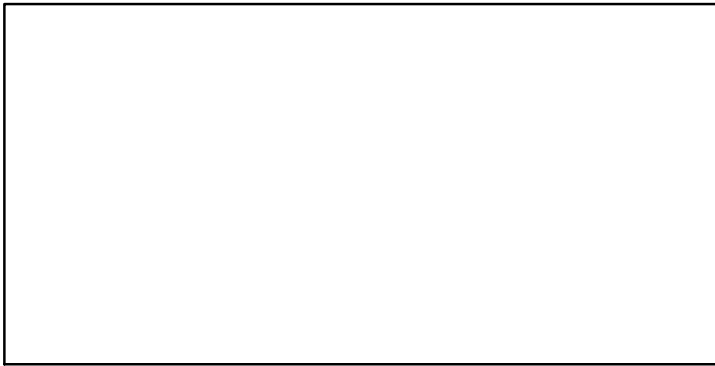
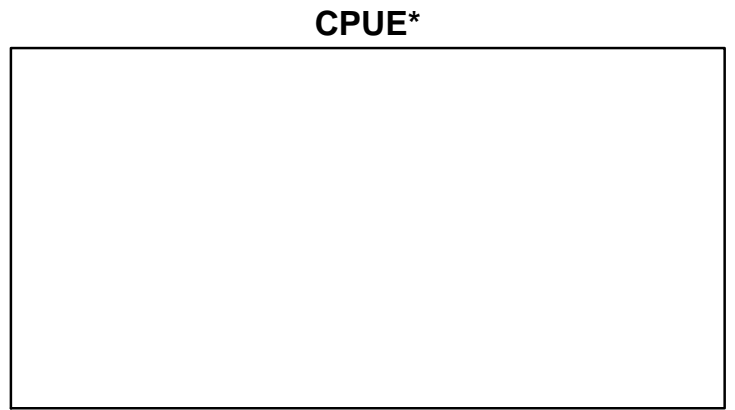
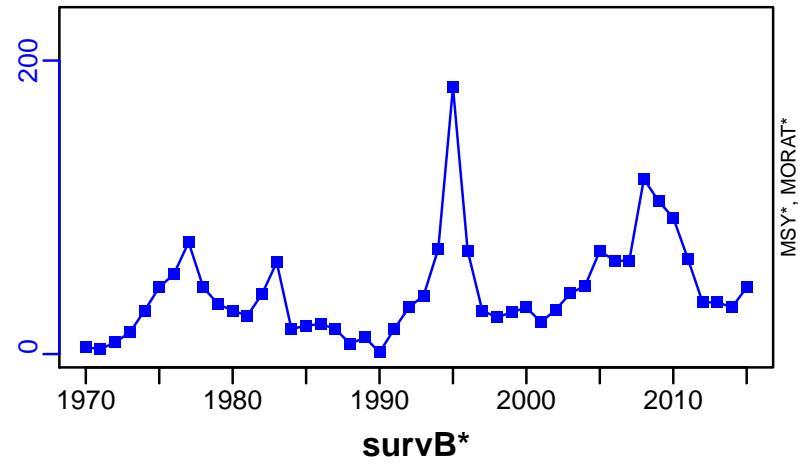
Recruits\*



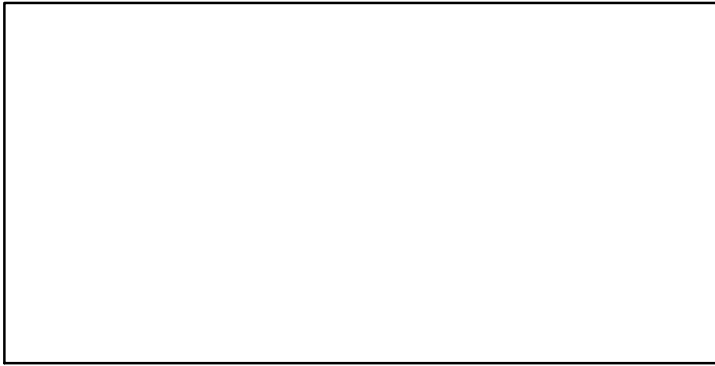
# Brill Baltic Areas 22–32 [BRILL2232]

TL–MT, TC\*, RecC\* (1970–2016–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Blue Whiting Northeast Atlantic [BWHITNEA]

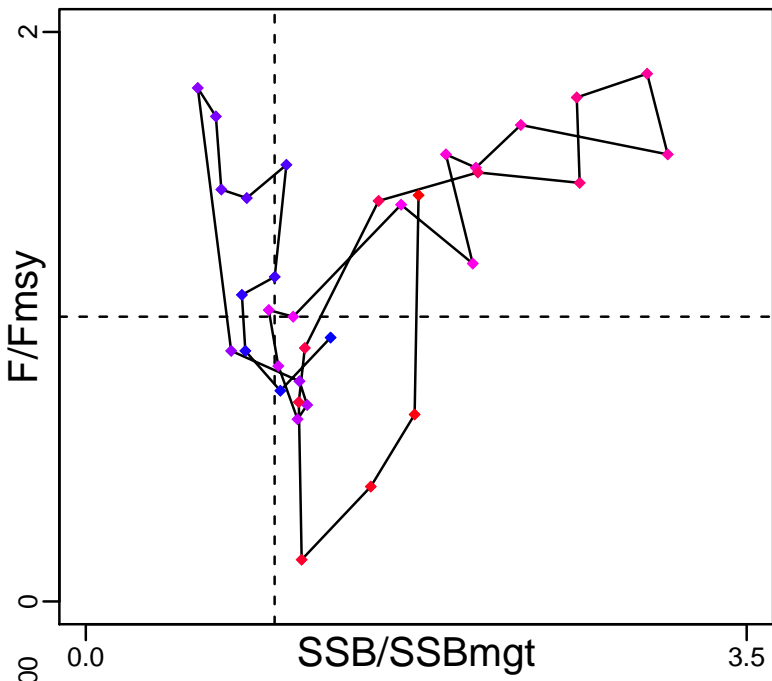
Metadata	
<b>Scientific Name</b>	Micromesistius poutassou
<b>Current Assess ID</b>	WGWIDE-BWHITNEA-1980-2015-ICESIMP2016
<b>Area</b>	Northeast Atlantic
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Widely Distributed Stocks
<b>Asmts in RAM</b>	2012, 2013, 2014, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2015	0.3
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2015	2,250,000
<b>Fmgt</b>	Fmgt-1/yr	2015	0.3
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2015	1,500,000
<b>Flim</b>	Flim-1/yr	2015	0.48
<b>ERlim</b>	-	-	-

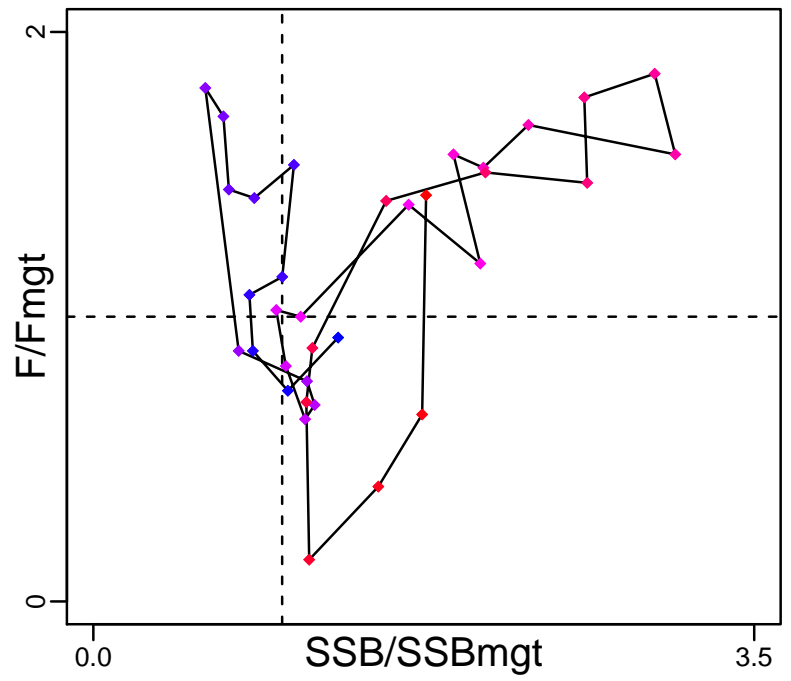
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	5,320,000	-	-
<b>SSB</b>	SSB-MT	2015	3,620,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$2.33 \times 10^{10}$	-	1
<b>F</b>	F-1/yr	2015	0.43	-	3 to 7
<b>ER</b>	ER-calc-ratio	2015	0.22	-	-
<b>TC</b>	TC-MT	2015	1,150,000		
<b>TL</b>	TL-MT	2014	614,000		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2015	1.43		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2015	1.61		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	1.43		
<b>ER/ERmgt</b>	-	-	-		

# Blue Whiting Northeast Atlantic [BWHITNEA]

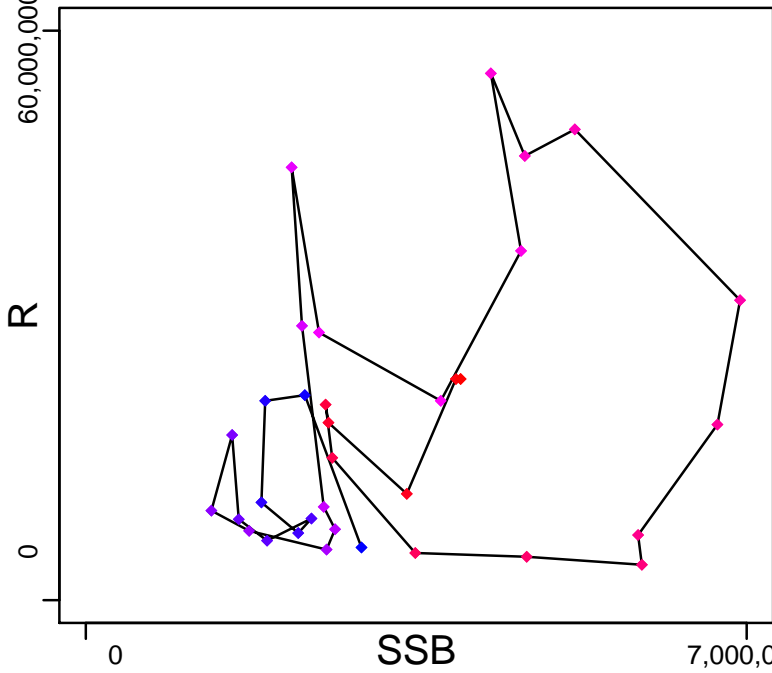
Kobe MSYpref (1980–2015–ICESIMP2016)



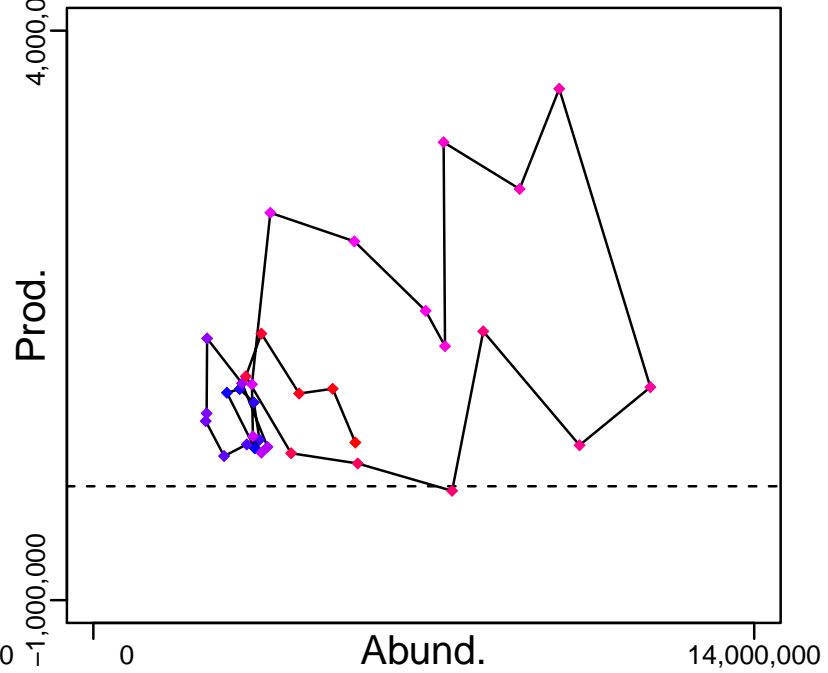
Kobe MGTpref (1980–2015–ICESIMP2016)



Spawner Recruit (1980–2015–ICESIMP2016)



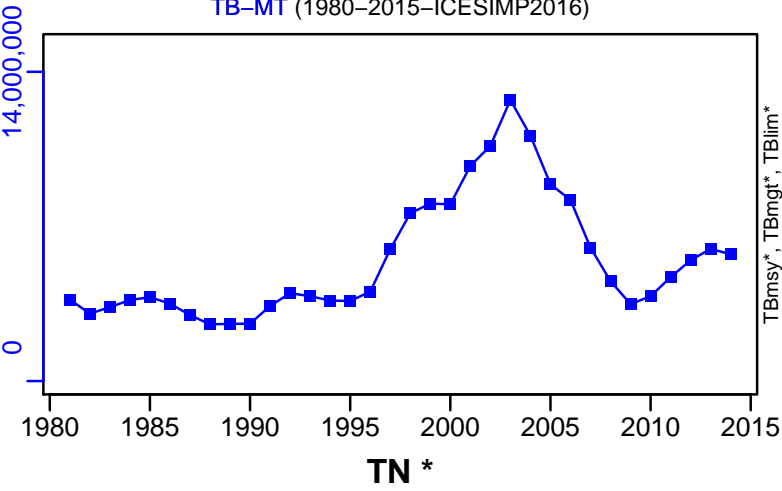
Production (1980–2015–ICESIMP2016)



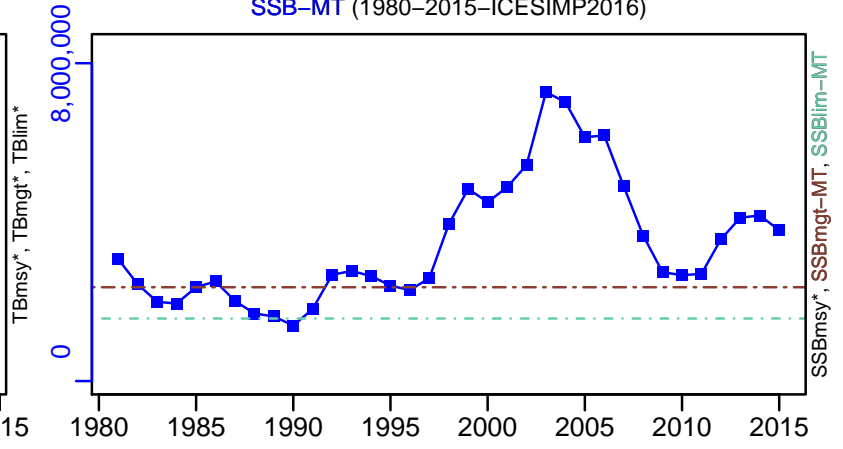
◆ Start Year ◆ End Year \* No Data

# Blue Whiting Northeast Atlantic [BWHITNEA]

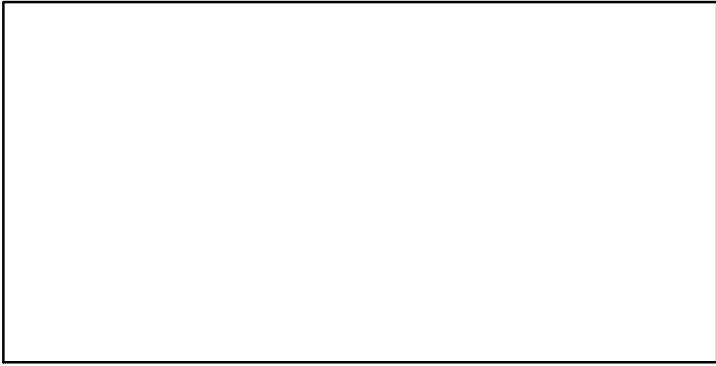
TB-MT (1980–2015–ICESIMP2016)



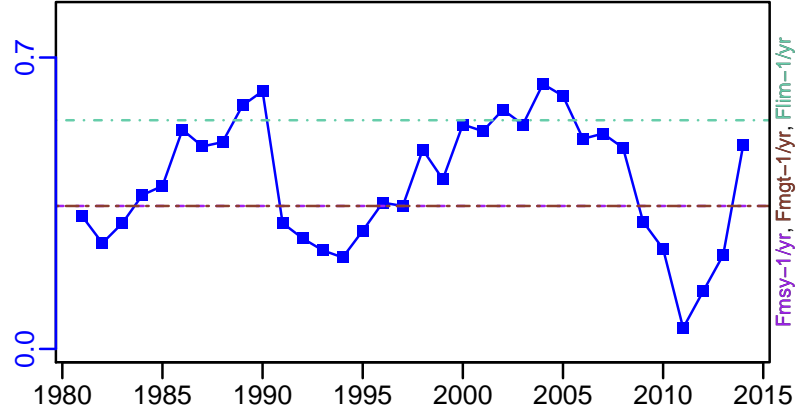
SSB-MT (1980–2015–ICESIMP2016)



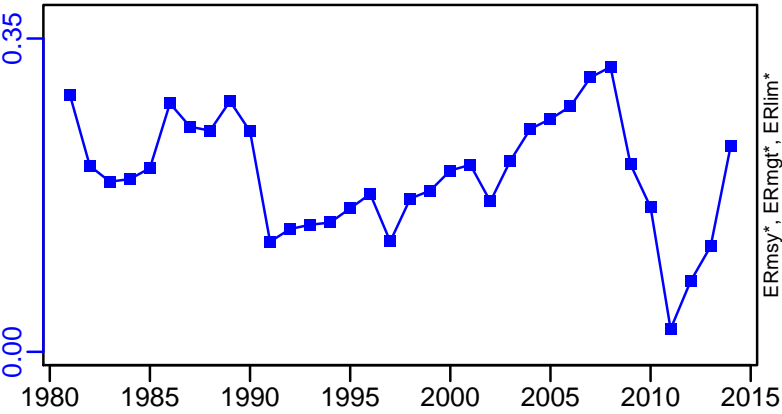
TN \*



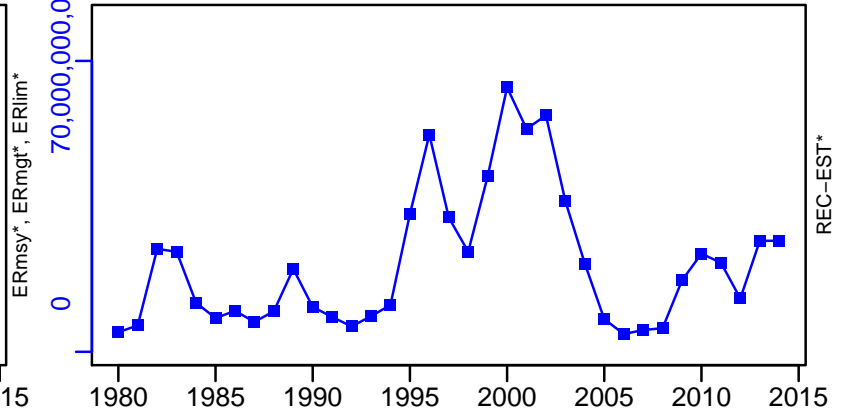
F-1/yr (1980–2015–ICESIMP2016)



ER-calc-ratio (1980–2015–ICESIMP2016)

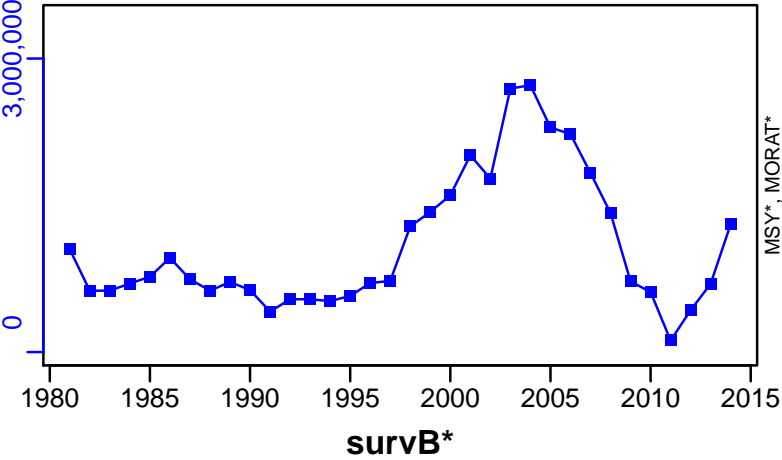


R-E00 (1980–2015–ICESIMP2016)

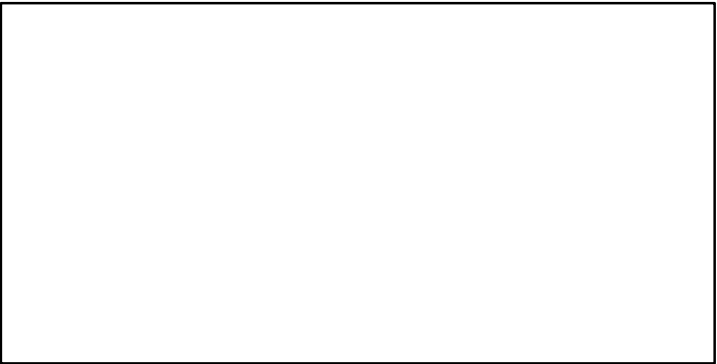


Blue Whiting Northeast Atlantic [BWHITNEA]

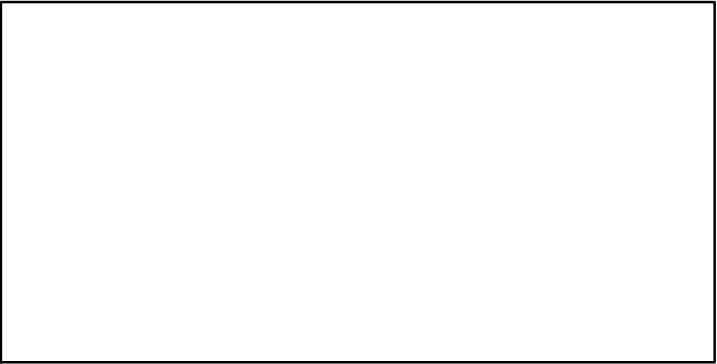
TC-MT, TL\*, RecC\* (1980-2015-ICESIMP2016)



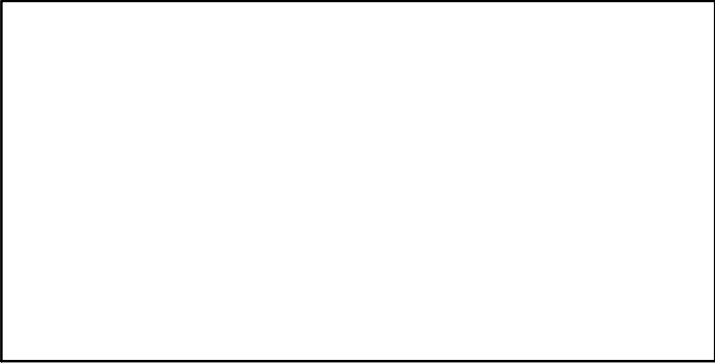
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Atlantic cod Baltic Areas 22 and 24 [CODBA2224]

Metadata	
<b>Scientific Name</b>	Gadus morhua
<b>Current Assess ID</b>	WGBFAS-CODBA2224-1993-2016-ICESIMP2016
<b>Area</b>	Western Baltic
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Baltic Fisheries Assessment Working Group
<b>Asmts in RAM</b>	2012, 2013, 2014, 2015, 2016

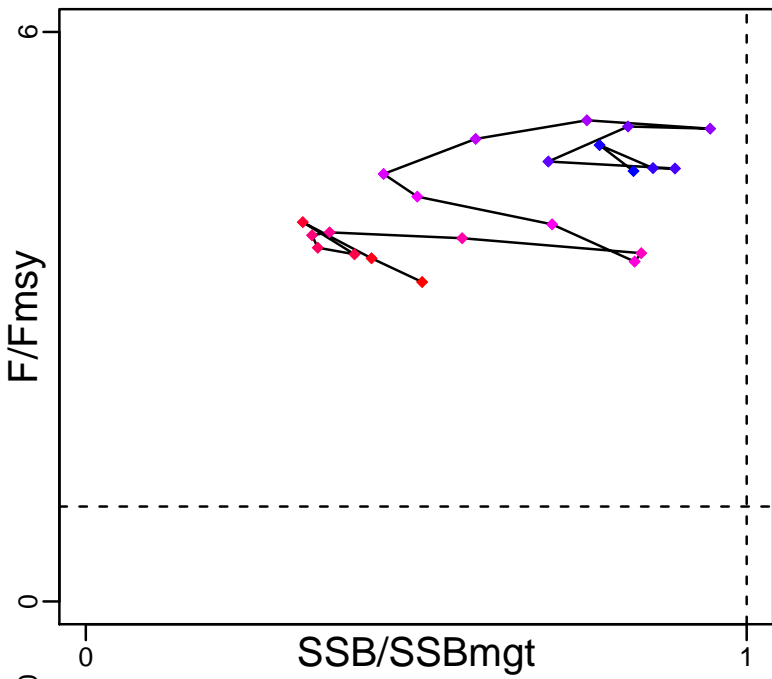
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.26
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	38,400
<b>Fmgt</b>	Fmgt-1/yr	2016	0.26
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2012	23,000
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	27,400
<b>Flim</b>	Flim-1/yr	2016	1.01
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	22,400	-	-
<b>SSB</b>	SSB-MT	2016	19,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	1,090,000	-	1
<b>F</b>	F-1/yr	2016	0.88	-	3 to 5
<b>ER</b>	ER-calc-ratio	2016	0.36	-	-
<b>TC</b>	TC-MT	2016	8820		
<b>TL</b>	TL-MT	2016	8370		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	3.37		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	0.5		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	3.37		
<b>ER/ERmgt</b>	-	-	-		

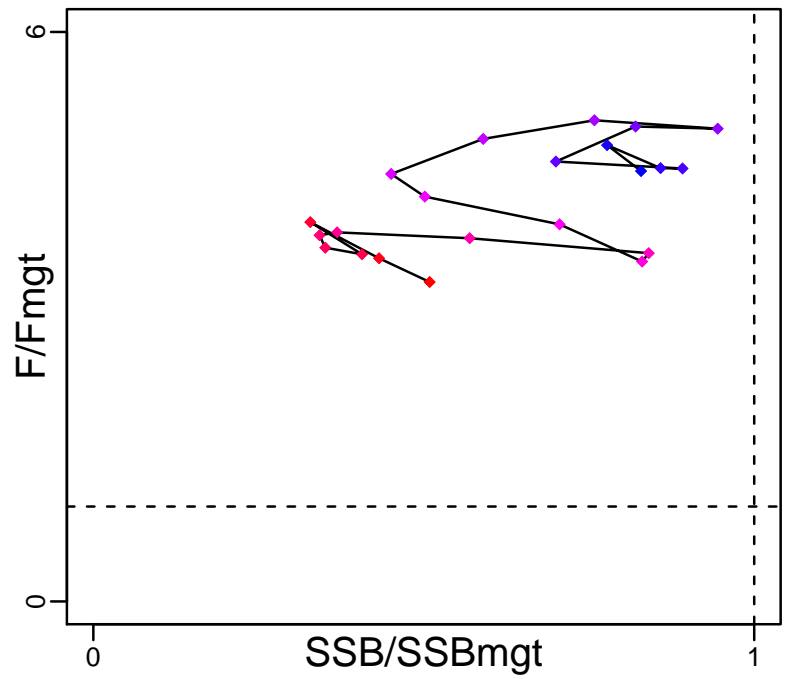


# Atlantic cod Baltic Areas 22 and 24 [CODBA2224]

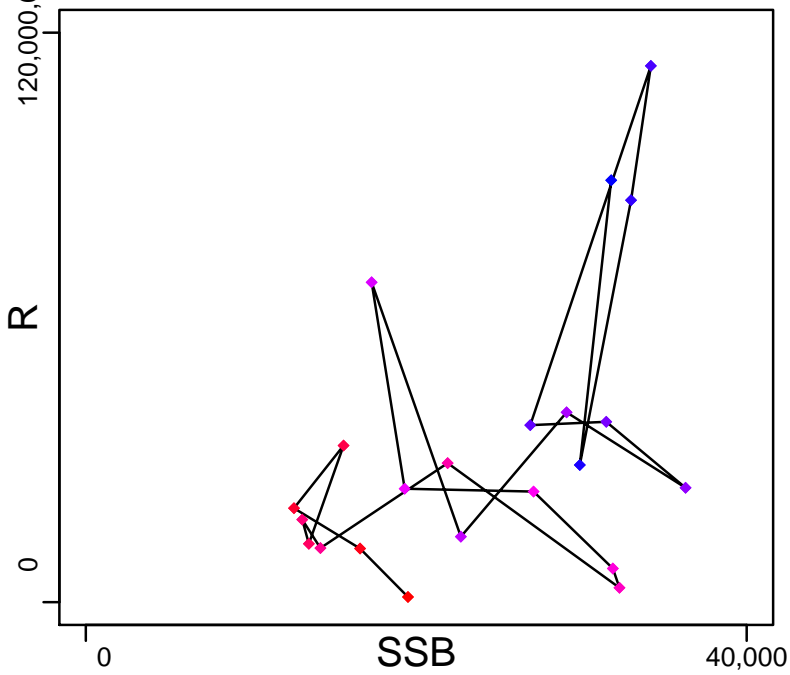
Kobe MSYpref (1993–2016–ICESIMP2016)



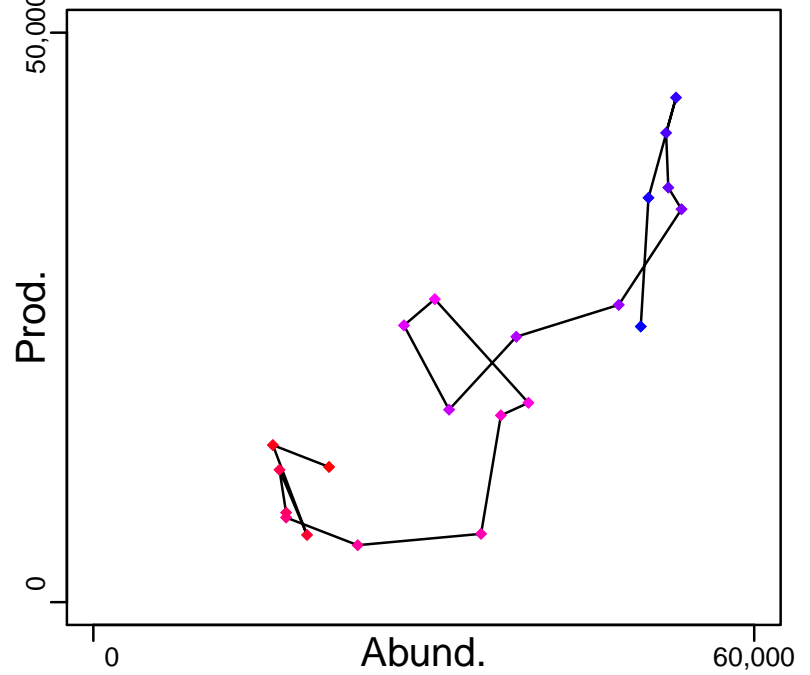
Kobe MGTpref (1993–2016–ICESIMP2016)



Spawner Recruit (1993–2016–ICESIMP2016)



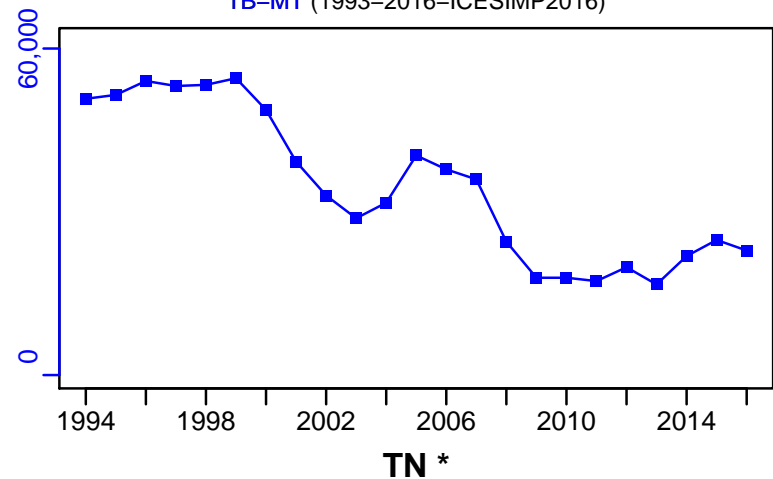
Production (1993–2016–ICESIMP2016)



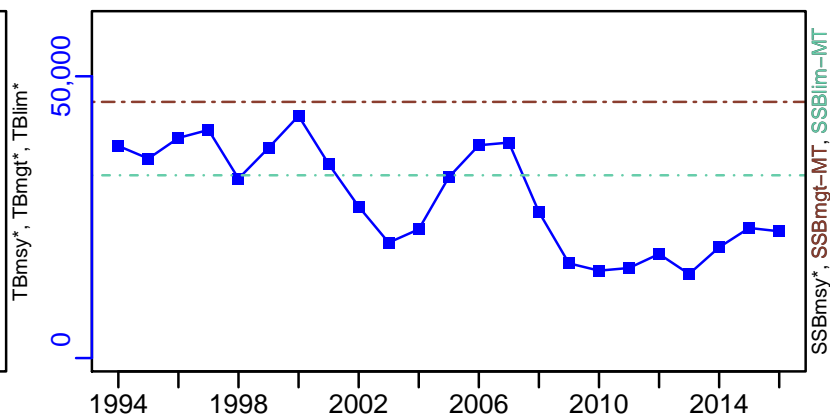
◆ Start Year ◆ End Year \* No Data

# Atlantic cod Baltic Areas 22 and 24 [CODBA2224]

TB-MT (1993–2016–ICESIMP2016)



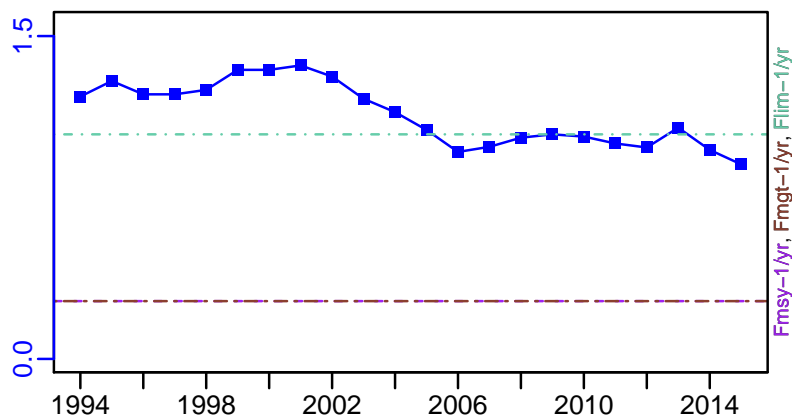
SSB-MT (1993–2016–ICESIMP2016)



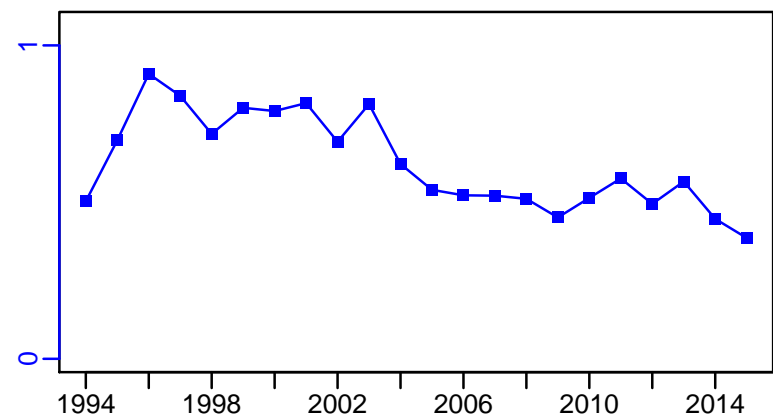
TN \*



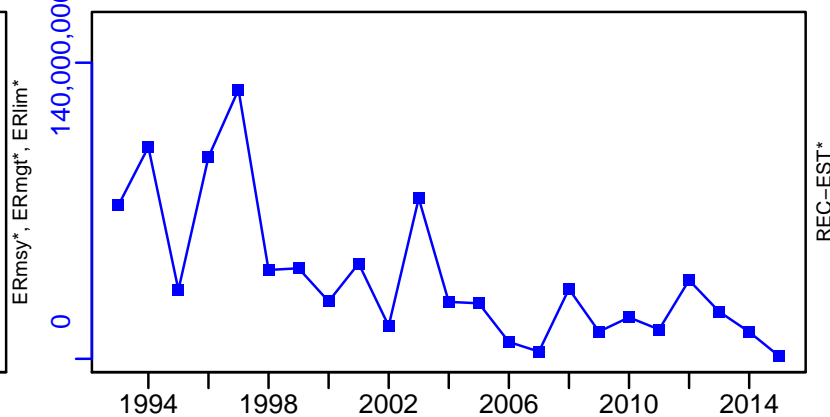
F-1/yr (1993–2016–ICESIMP2016)



ER-calc-ratio (1993–2016–ICESIMP2016)

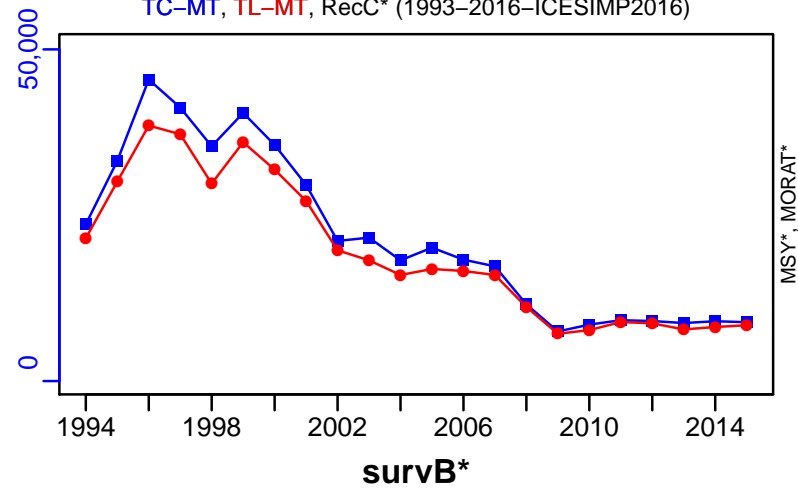


R-E00 (1993–2016–ICESIMP2016)



# Atlantic cod Baltic Areas 22 and 24 [CODBA2224]

TC-MT, TL-MT, RecC\* (1993–2016–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



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

## Atlantic cod Baltic Areas 25-32 [CODBA2532]

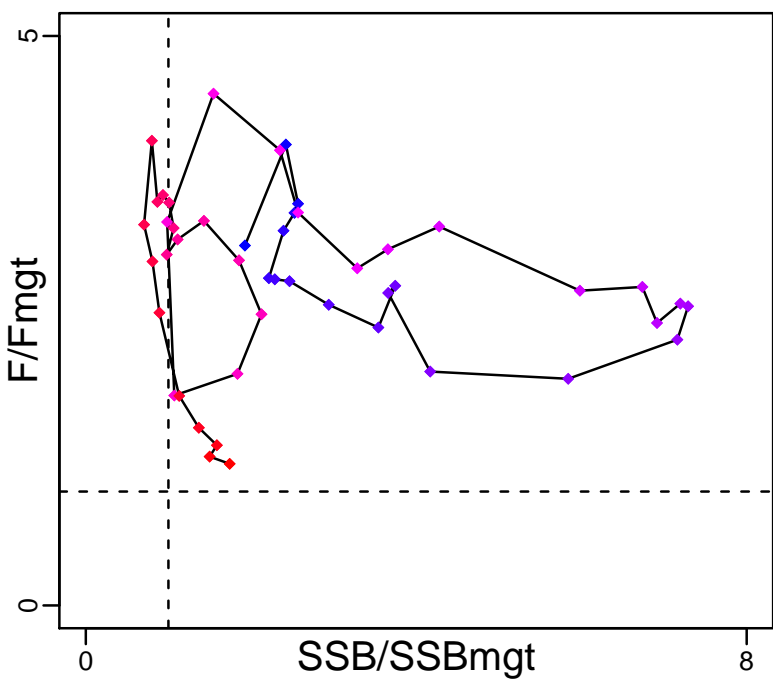
Metadata	
<b>Scientific Name</b>	Gadus morhua
<b>Current Assess ID</b>	WGBFAS-CODBA2532-1965-2016-ICESIMP2016
<b>Area</b>	Eastern Baltic
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Baltic Fisheries Assessment Working Group
<b>Asmts in RAM</b>	2013, 2016, 2012

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2012	0.3
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2013	88,200
<b>Fmgt</b>	Fmgt-1/yr	2013	0.3
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2013	63,000
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

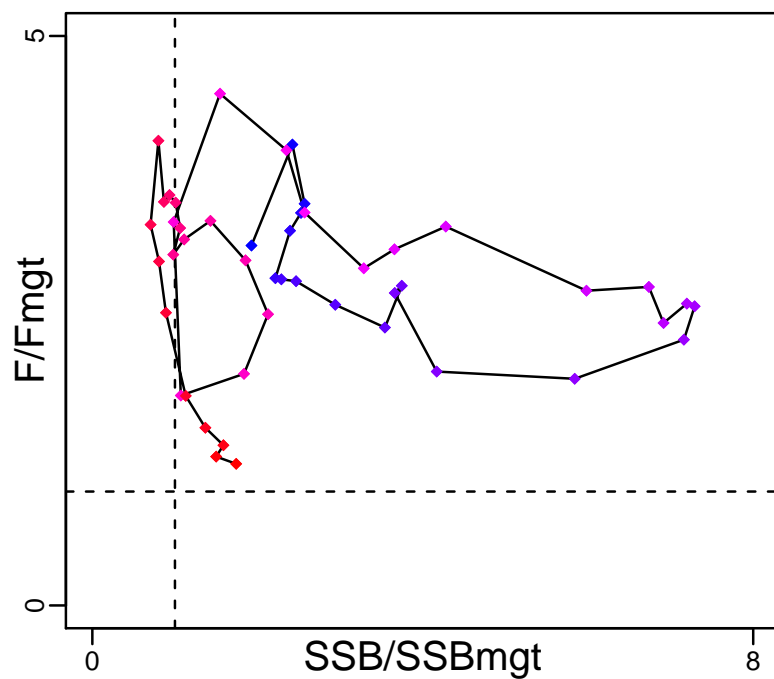
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2013	233,000	-	-
<b>SSB</b>	SSB-MT	2013	180,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2013	$2.54 \times 10^8$	-	2
<b>F</b>	F-1/yr	2013	0.37	-	4 to 6
<b>ER</b>	ER-ratio	2016	0.34	-	-
<b>TC</b>	TC-MT	2016	49,600		
<b>TL</b>	TL-MT	2016	37,300		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2012	0.86		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2013	2.04		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2013	1.24		
<b>ER/ERmgt</b>	-	-	-		

# Atlantic cod Baltic Areas 25-32 [CODBA2532]

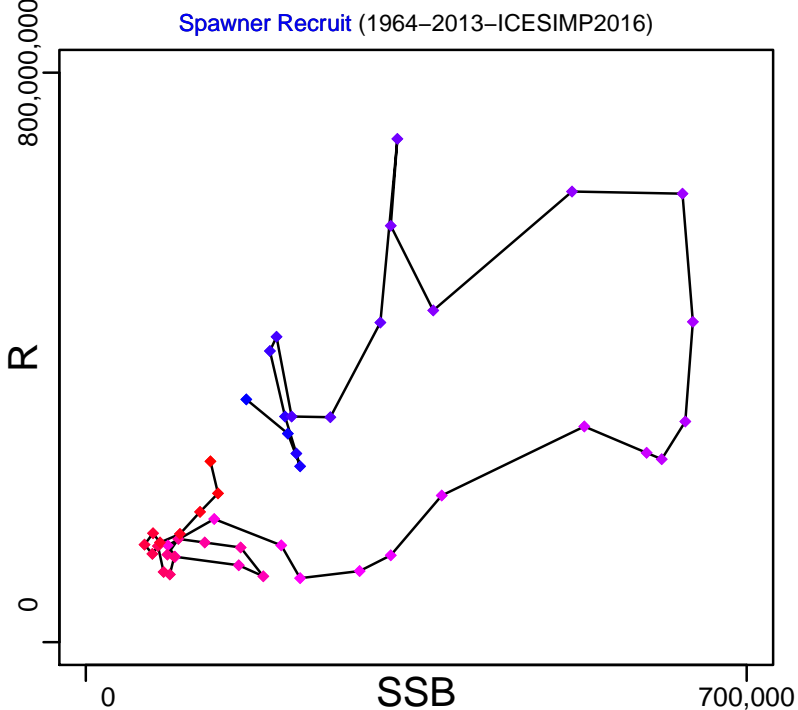
Kobe MSYpref (1964-2013-ICESIMP2016)



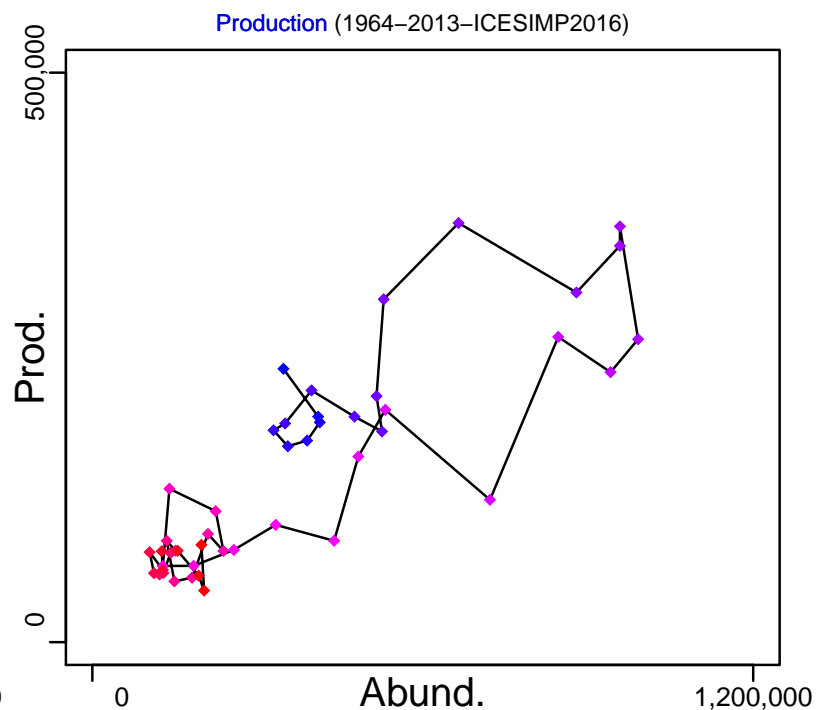
Kobe MGTpref (1964-2013-ICESIMP2016)



Spawner Recruit (1964-2013-ICESIMP2016)



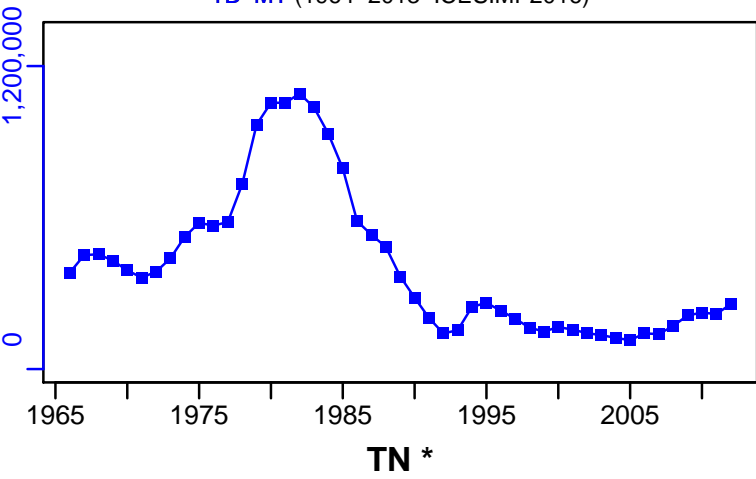
Production (1964-2013-ICESIMP2016)



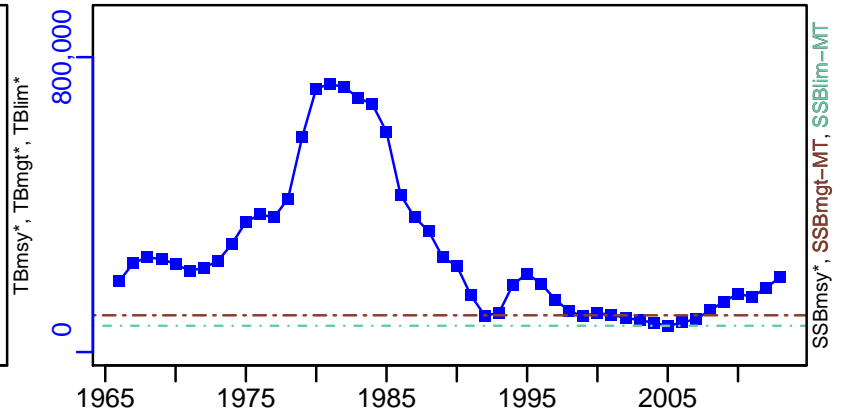
◆ Start Year ◆ End Year \* No Data

# Atlantic cod Baltic Areas 25–32 [CODBA2532]

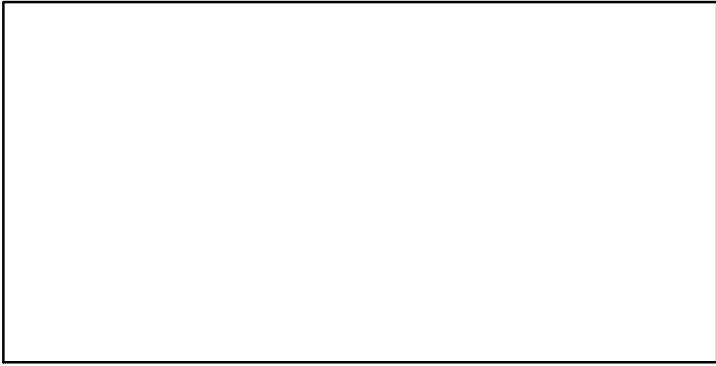
TB–MT (1964–2013–ICESIMP2016)



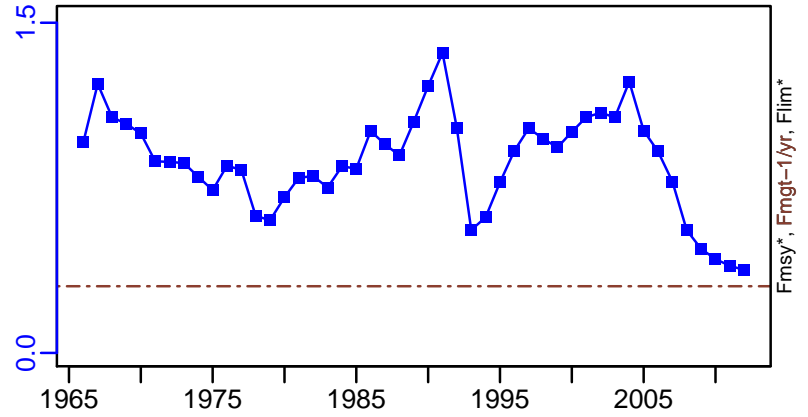
SSB–MT (1964–2013–ICESIMP2016)



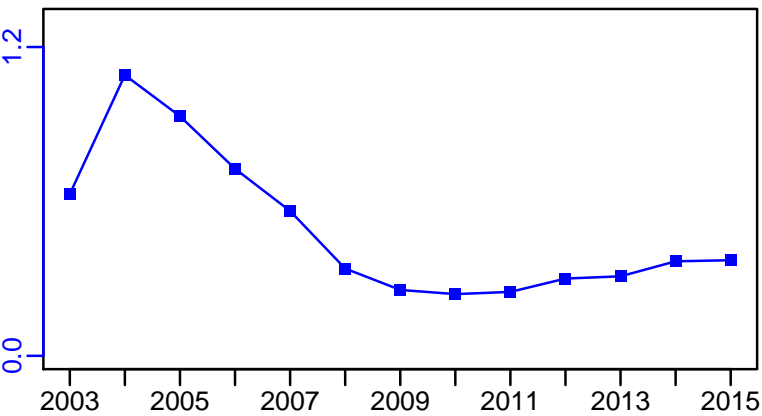
TN \*



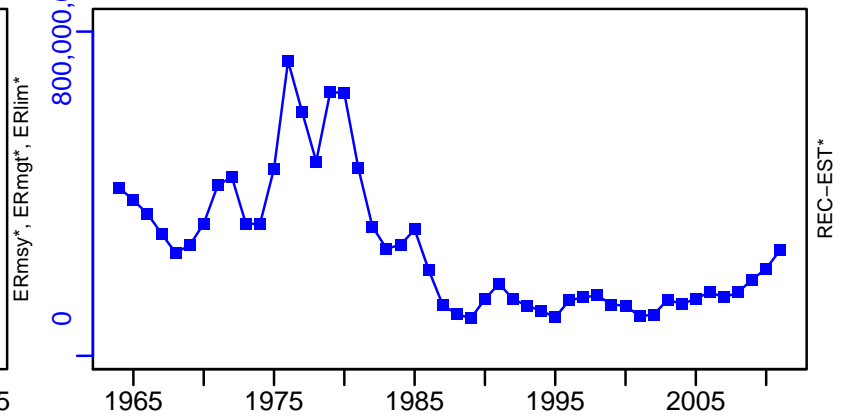
F–1/yr (1964–2013–ICESIMP2016)



ER–ratio (1965–2016–ICESIMP2016)



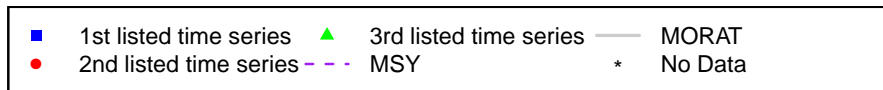
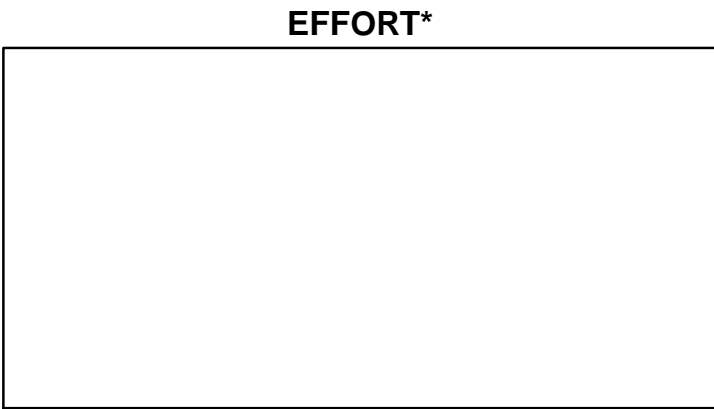
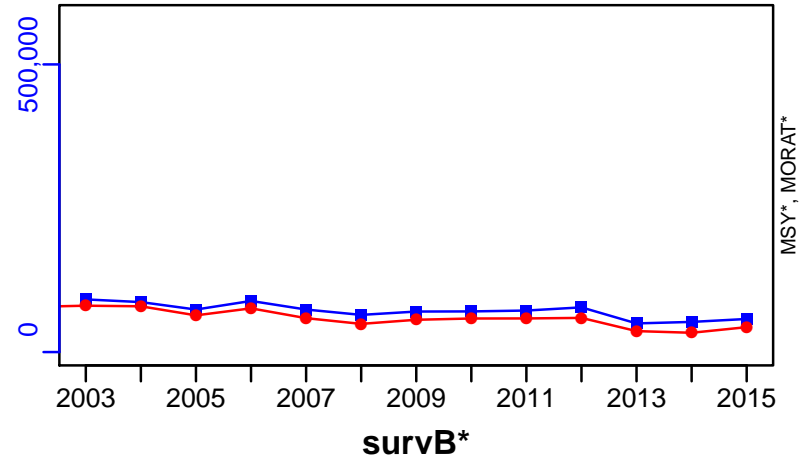
R–E00 (1964–2013–ICESIMP2016)



# Atlantic cod Baltic Areas 25–32 [CODBA2532]

TC–MT, TL–MT, RecC\* (1965–2016–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



## Atlantic cod IIIa (west) and IV-VIId [CODIIIaW-IV-VIId]

Metadata	
<b>Scientific Name</b>	Gadus morhua
<b>Current Assess ID</b>	WGNSSK-CODIIIaW-IV-VIId-1962-2016-ICESIMP2016
<b>Area</b>	IIIa (west) and IV-VIId
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
<b>Asmts in RAM</b>	2011, 2013, 2014, 2015, 2016

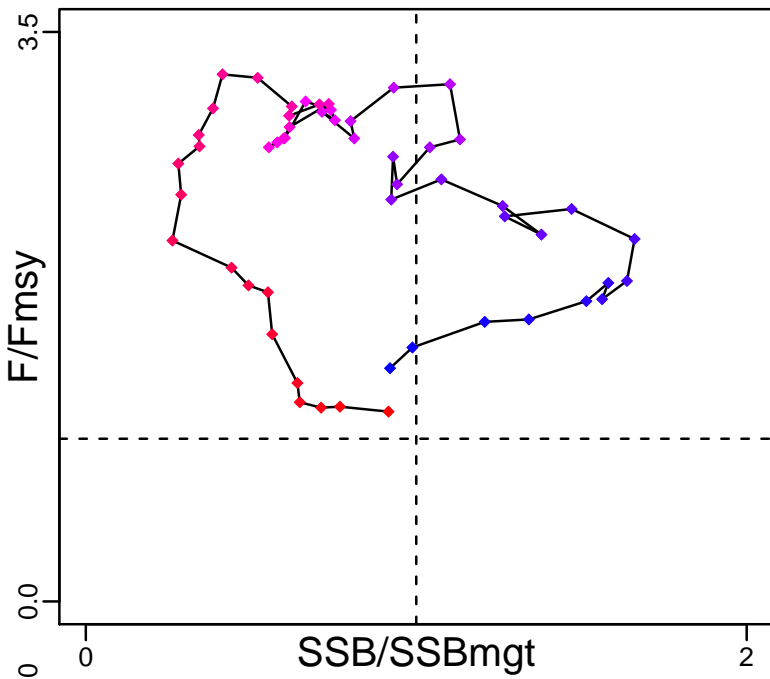
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.33
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	165,000
<b>Fmgt</b>	Fmgt-1/yr	2016	0.33
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	TBlim-MT	2011	70,000
<b>SSBlim</b>	SSBlim-MT	2016	118,000
<b>Flim</b>	Flim-1/yr	2016	0.58
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	288,000	-	-
<b>SSB</b>	SSB-MT	2016	161,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$1.96 \times 10^8$	-	1
<b>F</b>	F-1/yr	2016	0.38	-	2 to 4
<b>ER</b>	ER-calc-ratio	2016	0.18	-	-
<b>TC</b>	TC-MT	2016	52,300		
<b>TL</b>	TL-MT	2016	38,600		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	1.17		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	0.98		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	1.17		
<b>ER/ERmgt</b>	-	-	-		

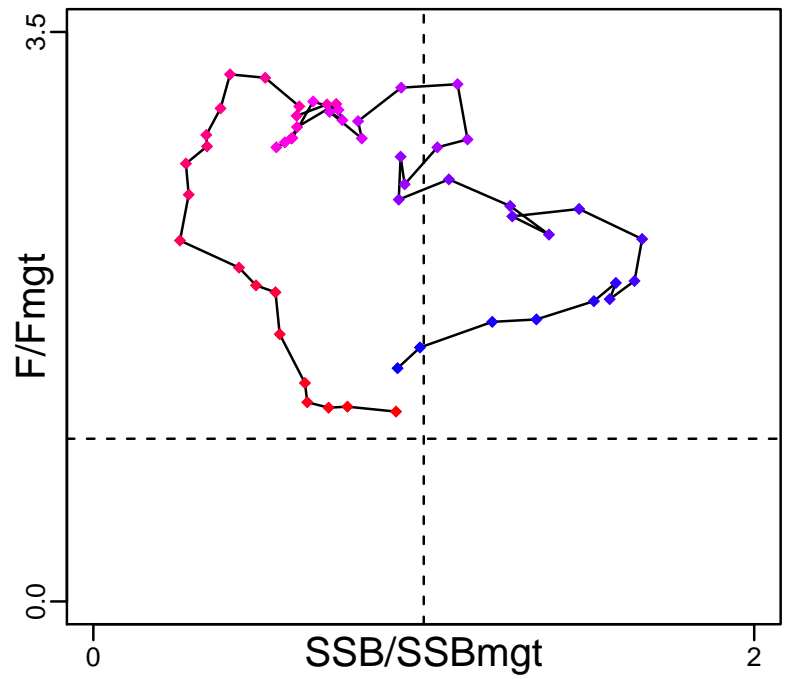


# Atlantic cod IIIa (west) and IV-VIId [CODIIIaW-IV-VIId]

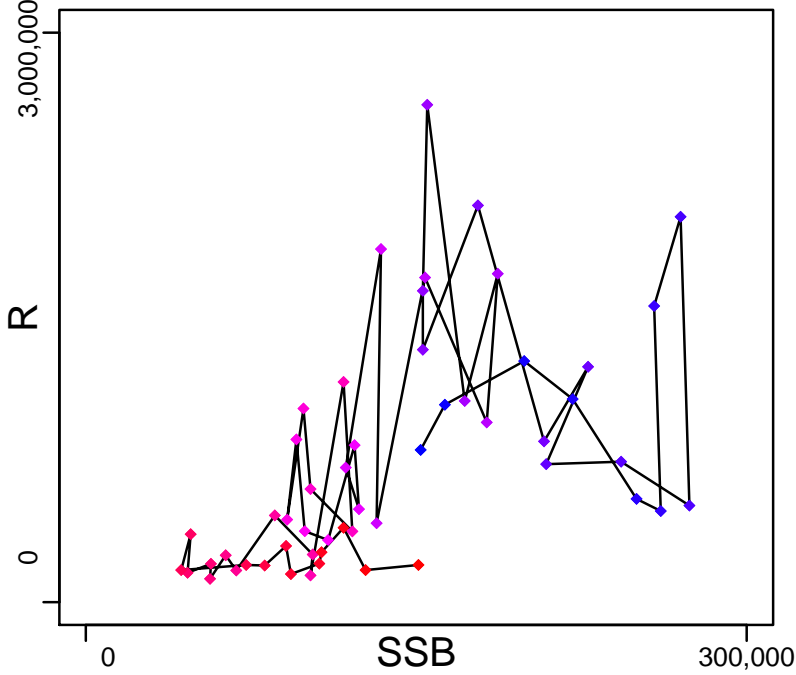
Kobe MSYpref (1962–2016–ICESIMP2016)



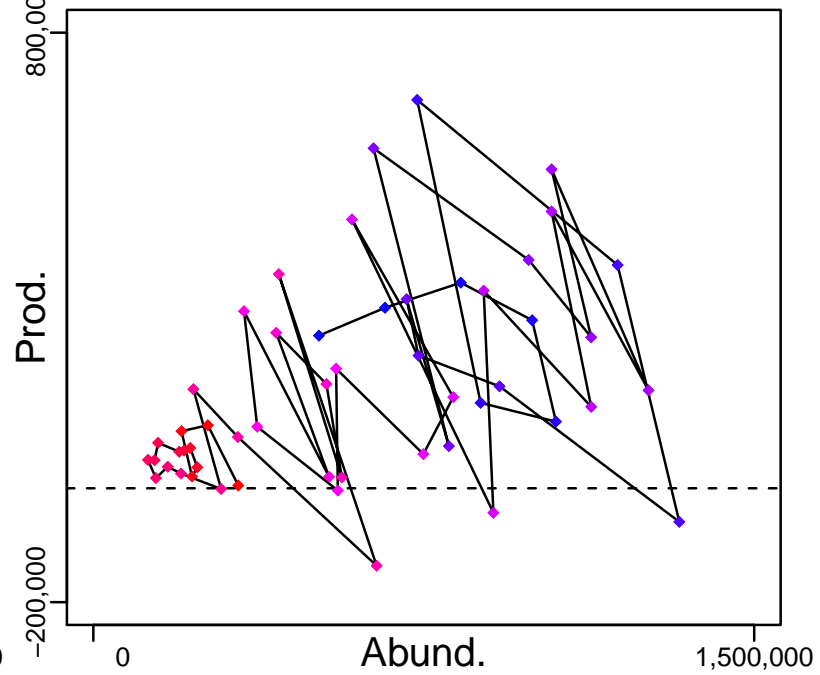
Kobe MGTpref (1962–2016–ICESIMP2016)



Spawner Recruit (1962–2016–ICESIMP2016)

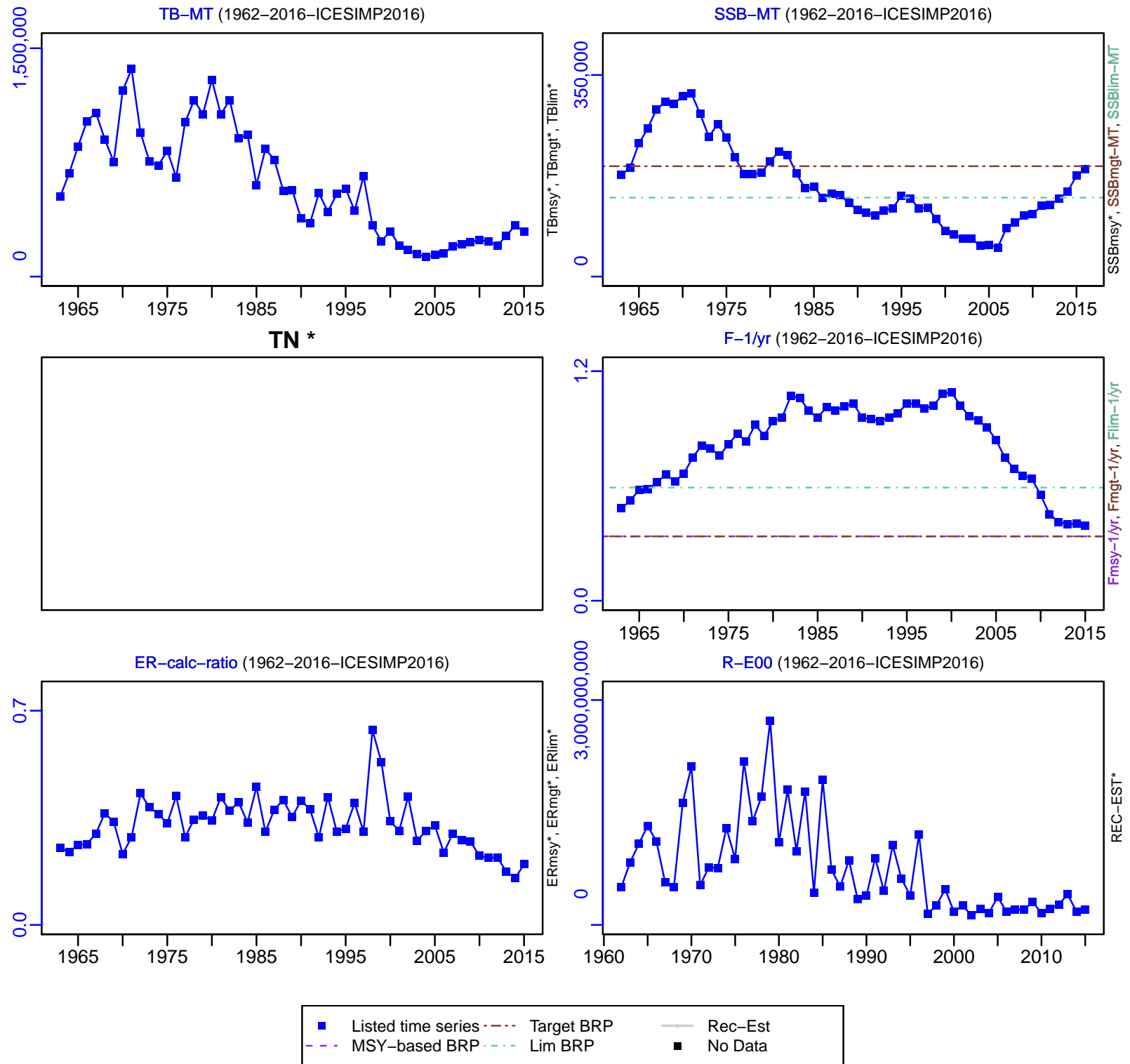


Production (1962–2016–ICESIMP2016)



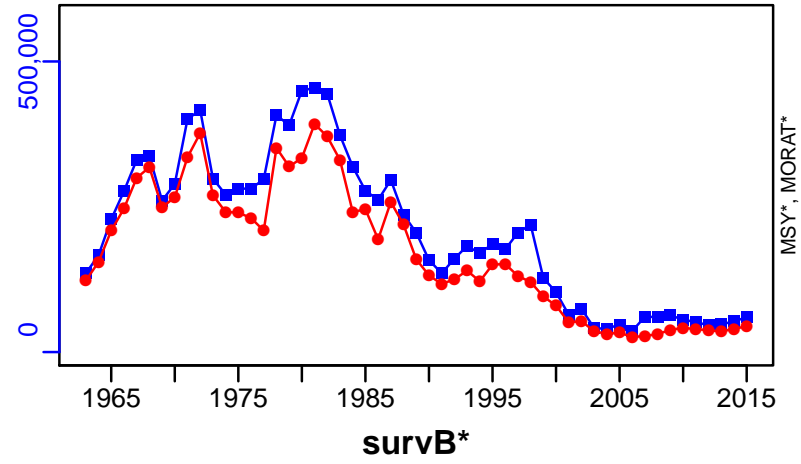
◆ Start Year ◆ End Year \* No Data

# Atlantic cod IIIa (west) and IV-VIId [CODIIIaW-IV-VIId]



# Atlantic cod IIIa (west) and IV-VIId [CODIIIaW-IV-VIId]

TC-MT, TL-MT, RecC\* (1962-2016-ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



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

## Atlantic cod Irish Sea [CODIS]

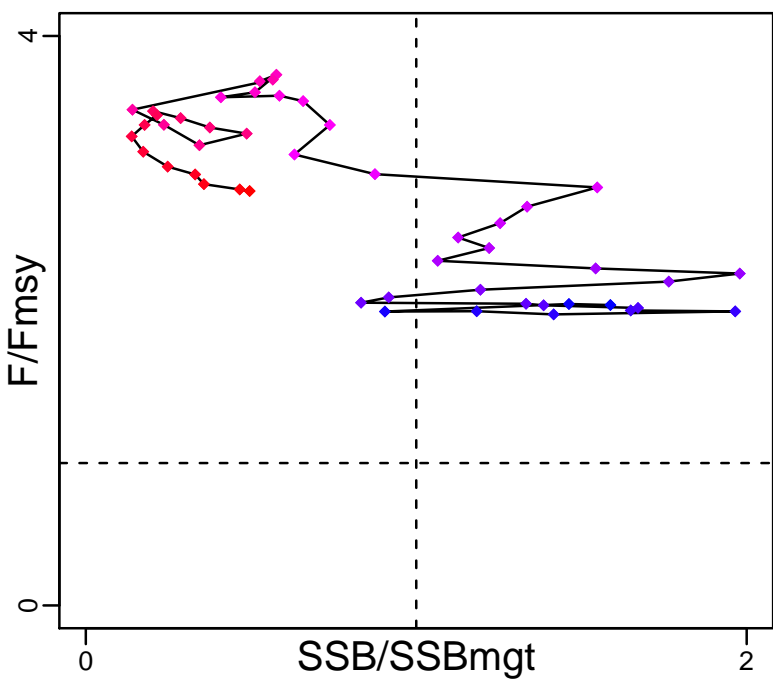
Metadata	
<b>Scientific Name</b>	Gadus morhua
<b>Current Assess ID</b>	WGCSE-CODIS-1967-2016-ICESIMP2016
<b>Area</b>	Irish Sea
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2010, 2013, 2014, 2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.37
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	10,000
<b>Fmgt</b>	Fmgt-1/yr	2016	0.37
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2010	0.2
<b>TBlim</b>	TBlim-MT	2010	6000
<b>SSBlim</b>	SSBlim-MT	2016	6000
<b>Flim</b>	Flim-1/yr	2016	1.33
<b>ERlim</b>	-	-	-

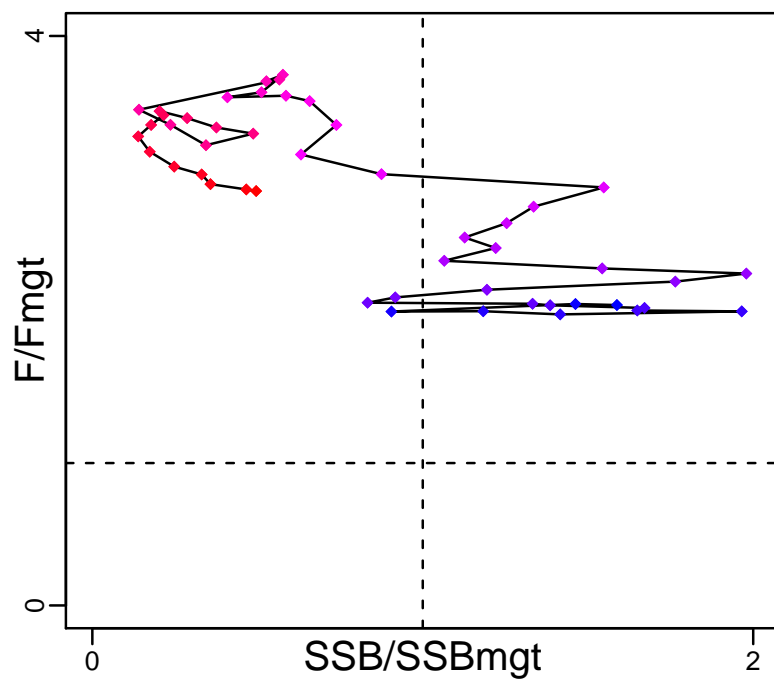
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	6610	-	-
<b>SSB</b>	SSB-MT	2016	5270	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	1,130,000	-	1
<b>F</b>	F-1/yr	2016	1.08	-	2 to 4
<b>ER</b>	ER-calc-ratio	2016	0.06	-	-
<b>TC</b>	TC-MT	2016	385		
<b>TL</b>	TL-MT	2016	161		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	2.91		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	0.53		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	2.91		
<b>ER/ERmgt</b>	-	-	-		

# Atlantic cod Irish Sea [CODIS]

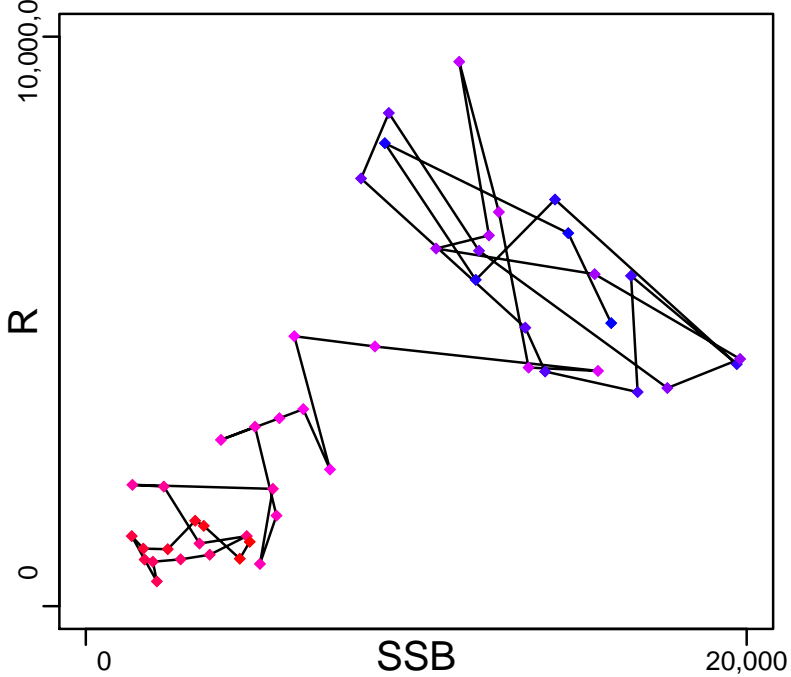
Kobe MSYpref (1967–2016–ICESIMP2016)



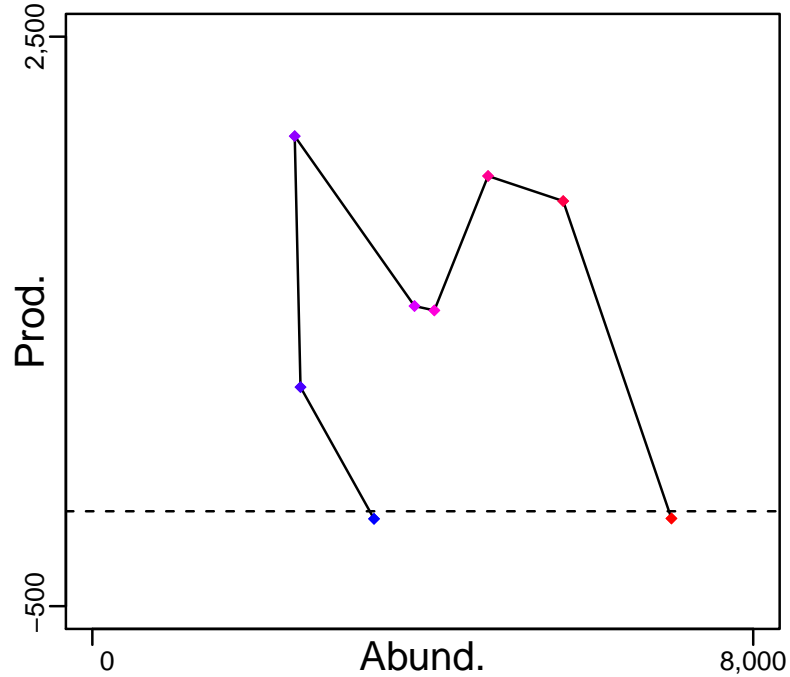
Kobe MGTpref (1967–2016–ICESIMP2016)



Spawner Recruit (1967–2016–ICESIMP2016)



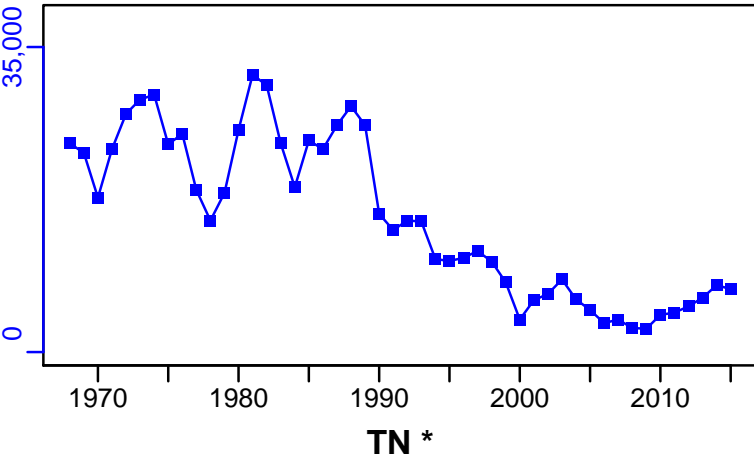
Production (1967–2016–ICESIMP2016)



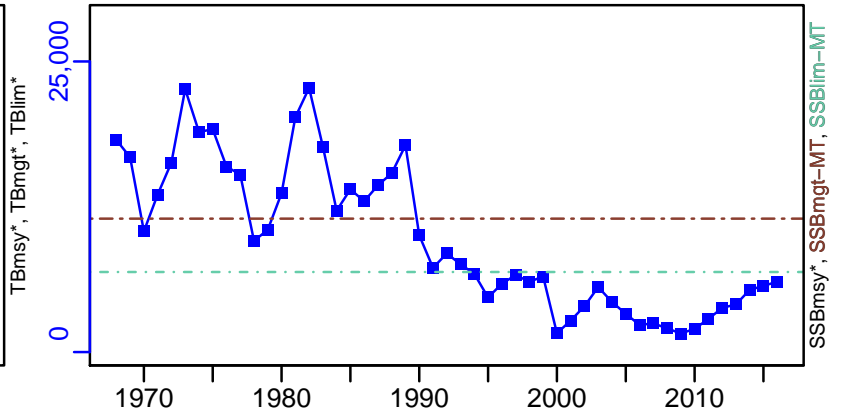
◆ Start Year ◆ End Year \* No Data

# Atlantic cod Irish Sea [CODIS]

TB-MT (1967–2016–ICESIMP2016)



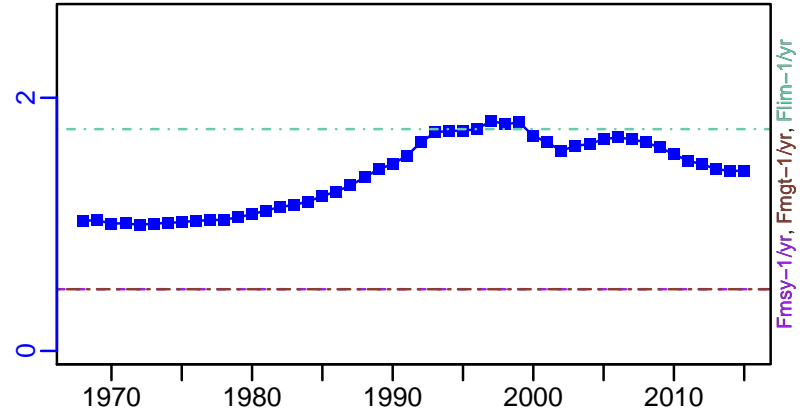
SSB-MT (1967–2016–ICESIMP2016)



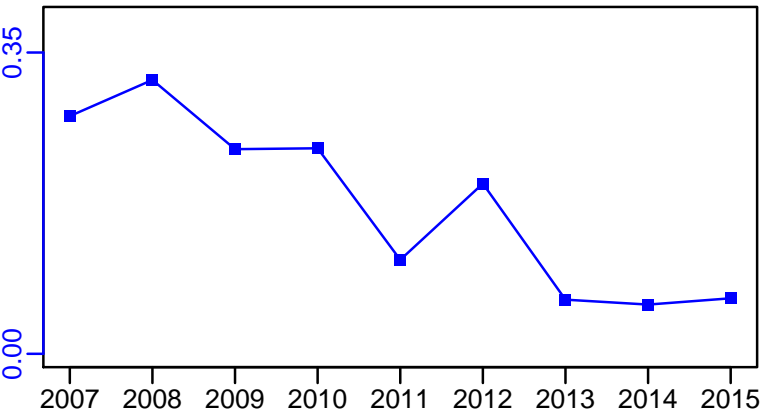
TN \*



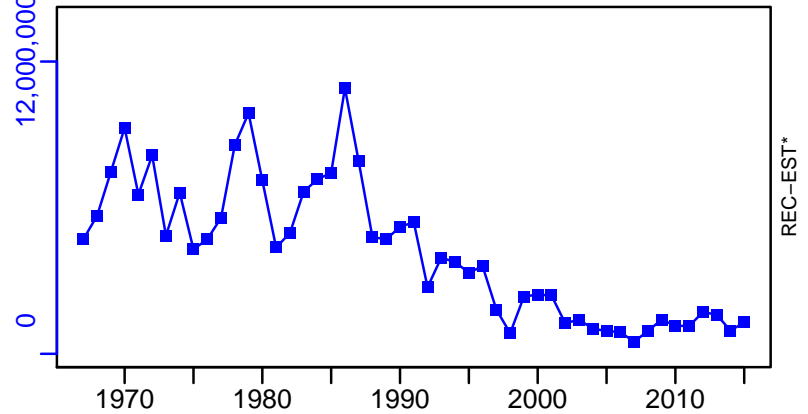
F-1/yr (1967–2016–ICESIMP2016)



ER-calc-ratio (1967–2016–ICESIMP2016)

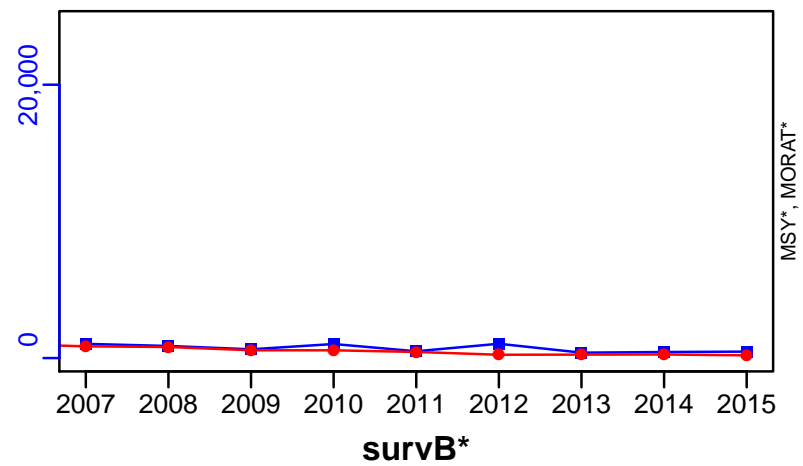


R-E00 (1967–2016–ICESIMP2016)



# Atlantic cod Irish Sea [CODIS]

TC-MT, TL-MT, RecC\* (1967–2016–ICESIMP2016)



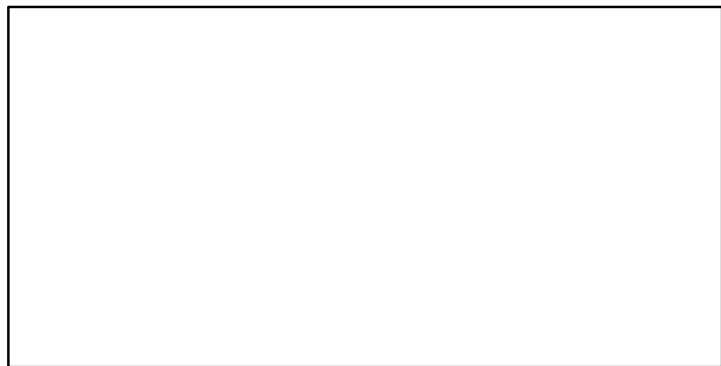
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



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

## Atlantic cod Kattegat [CODKAT]

Metadata	
<b>Scientific Name</b>	Gadus morhua
<b>Current Assess ID</b>	WGBFAS-CODKAT-1996-2016-ICESIMP2016
<b>Area</b>	Kattegat and Skagerrak
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Baltic Fisheries Assessment Working Group
<b>Asmts in RAM</b>	2012, 2015, 2016

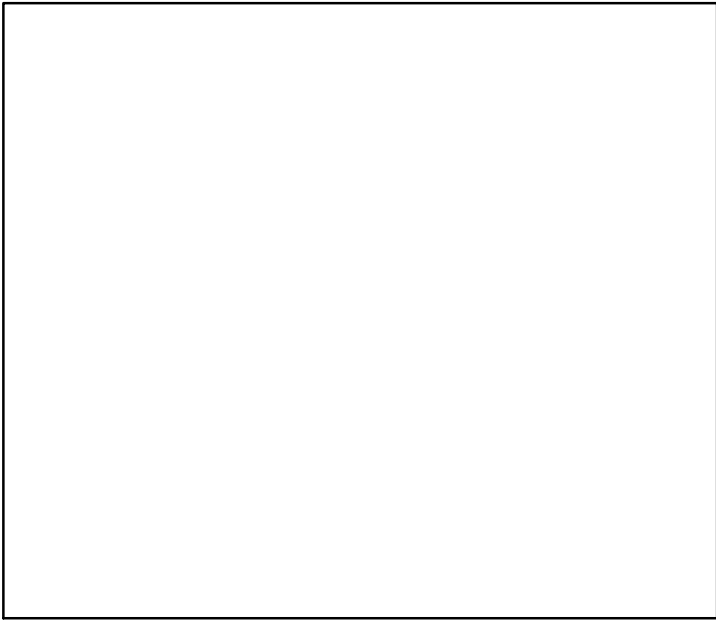
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-relative	2015	10,500
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	TBlim-MT	2012	6400
SSBlim	SSBlim-relative	2015	6400
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-relative	2016	2	-	-
TN	-	-	-	-	-
R	R-relative	2016	0	-	1
F	F-relative	2016	0.39	-	-
ER	ER-ratio	2012	0.1	-	-
TC	TC-MT	2016	508		
TL	TL-MT	2016	107		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



Atlantic cod Kattegat [CODKAT]

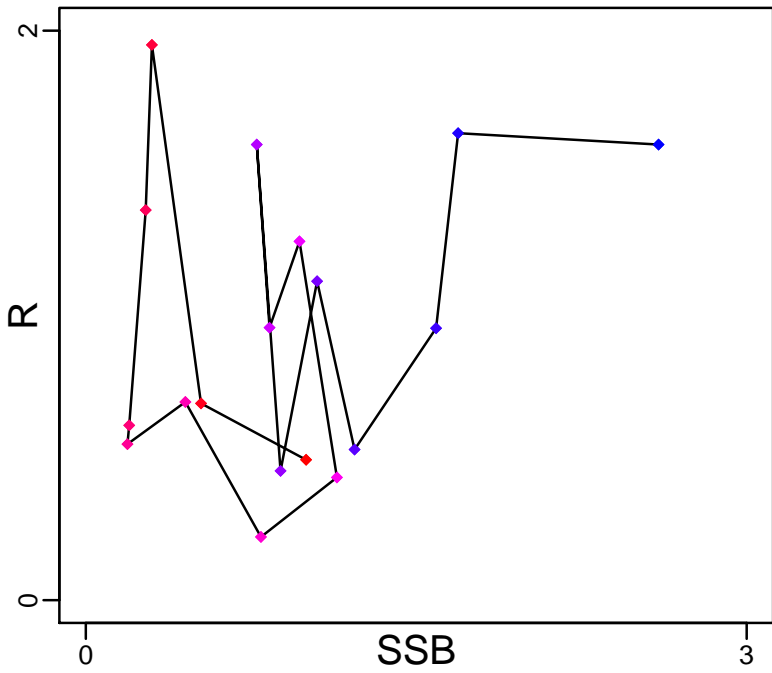
Kobe MSY\*



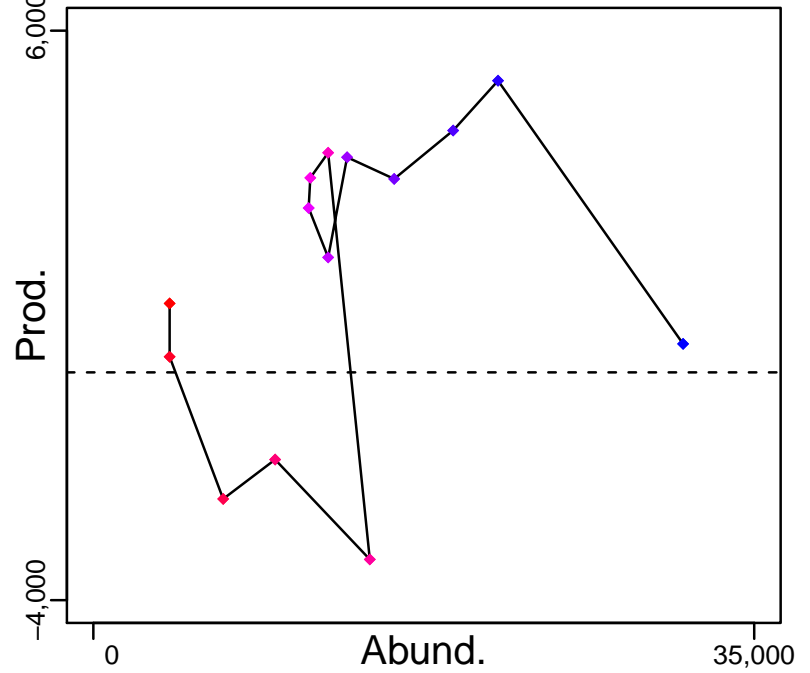
Kobe MGT\*



Spawner Recruit (1996–2016–ICESIMP2016)



Production (1971–2012–CHING)



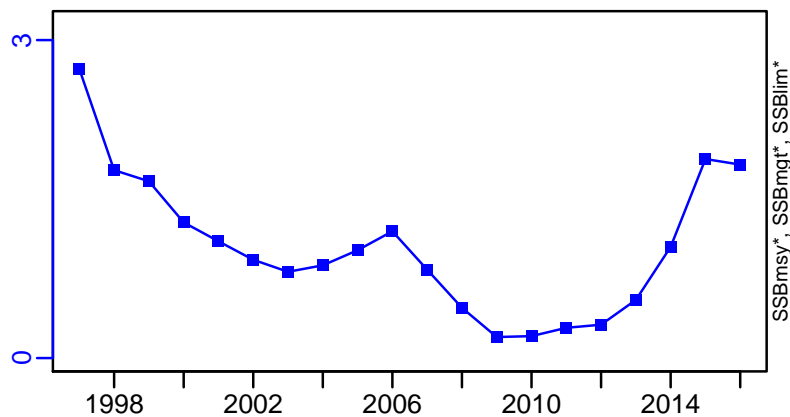
◆ Start Year ◆ End Year \* No Data

# Atlantic cod Kattegat [CODKAT]

TB\*



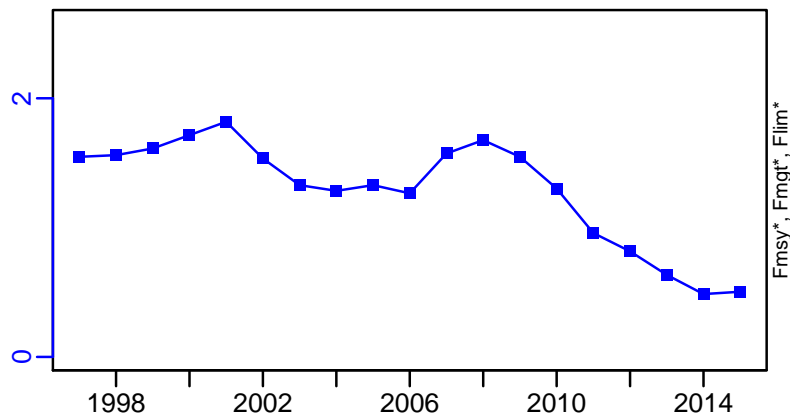
SSB-relative (1996–2016–ICESIMP2016)



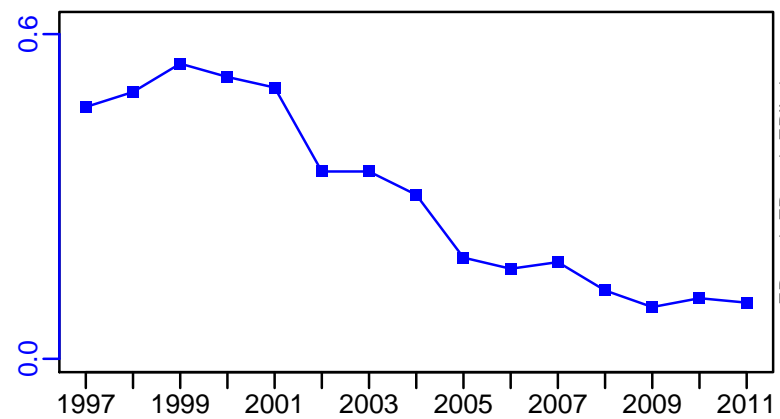
TN \*



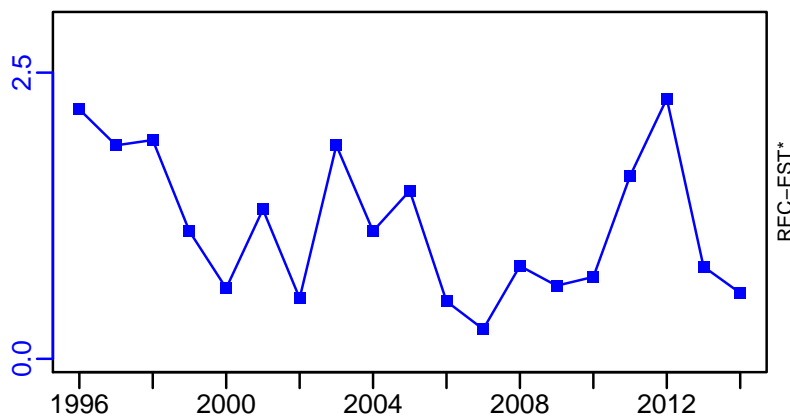
F-relative (1996–2016–ICESIMP2016)



ER-ratio (1971–2012–CHING)

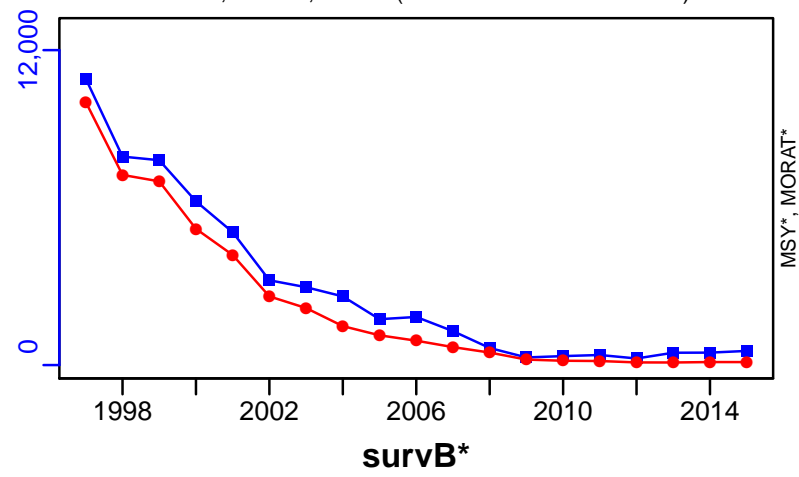


R-relative (1996–2016–ICESIMP2016)



# Atlantic cod Kattegat [CODKAT]

TC-MT, TL-MT, RecC\* (1996–2016–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Atlantic cod West of Scotland [CODVla]

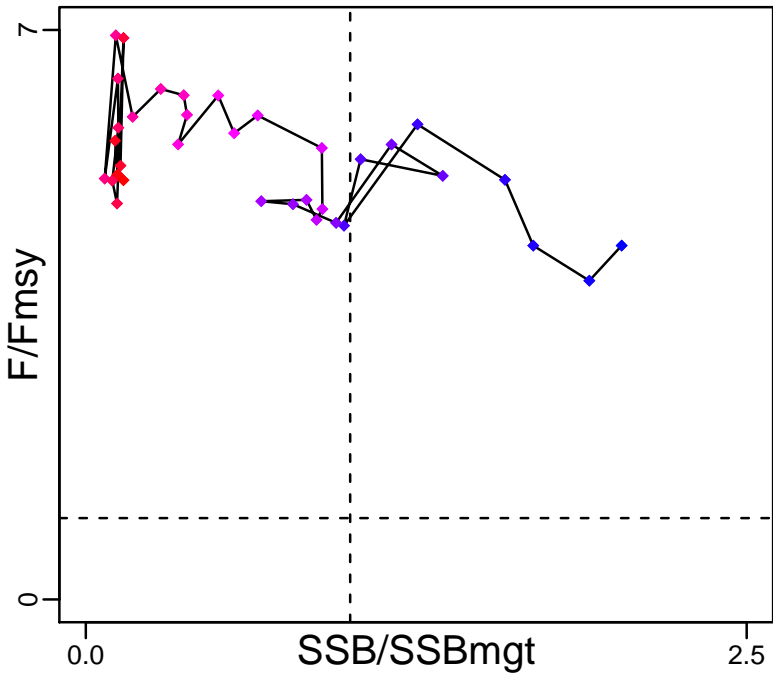
Metadata	
<b>Scientific Name</b>	Gadus morhua
<b>Current Assess ID</b>	WGCSE-CODVla-1981-2016-ICESIMP2016
<b>Area</b>	West of Scotland
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2013, 2014, 2015, 2012, 2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-pr-MT	2012	22,000
<b>Fmsy</b>	Fmsy-1/yr	2016	0.17
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	20,000
<b>Fmgt</b>	Fmgt-1/yr	2016	0.17
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	14,000
<b>Flim</b>	Flim-1/yr	2016	0.82
<b>ERlim</b>	-	-	-

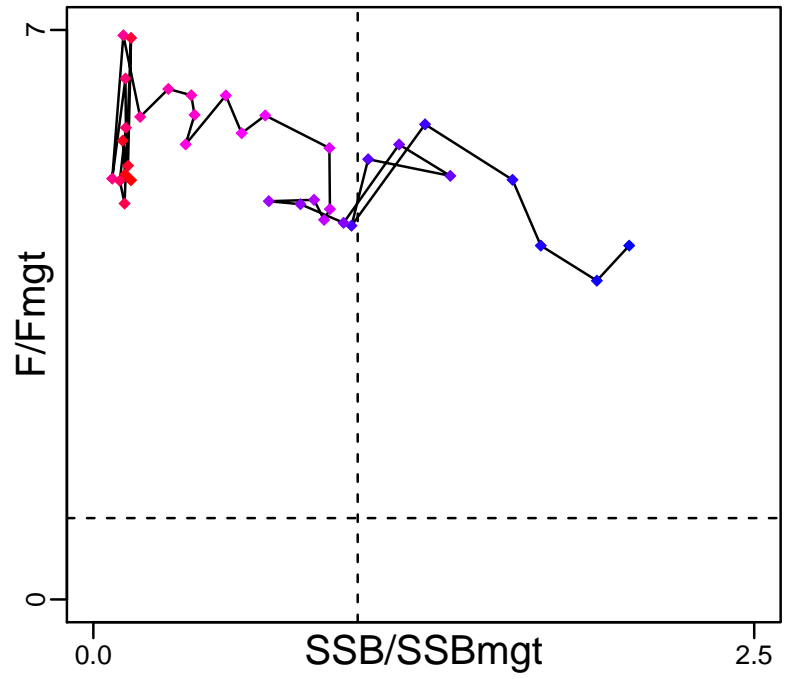
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	4270	-	-
<b>SSB</b>	SSB-MT	2016	2680	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	3,780,000	-	-
<b>F</b>	F-1/yr	2016	0.88	-	-
<b>ER</b>	ER-calc-ratio	2016	0.37	-	-
<b>TC</b>	TC-MT	2016	1750		
<b>TL</b>	TL-MT	2016	770		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-pr-MT	2012	0.17		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	5.15		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	0.13		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	5.15		
<b>ER/ERmgt</b>	-	-	-		

# Atlantic cod West of Scotland [CODVla]

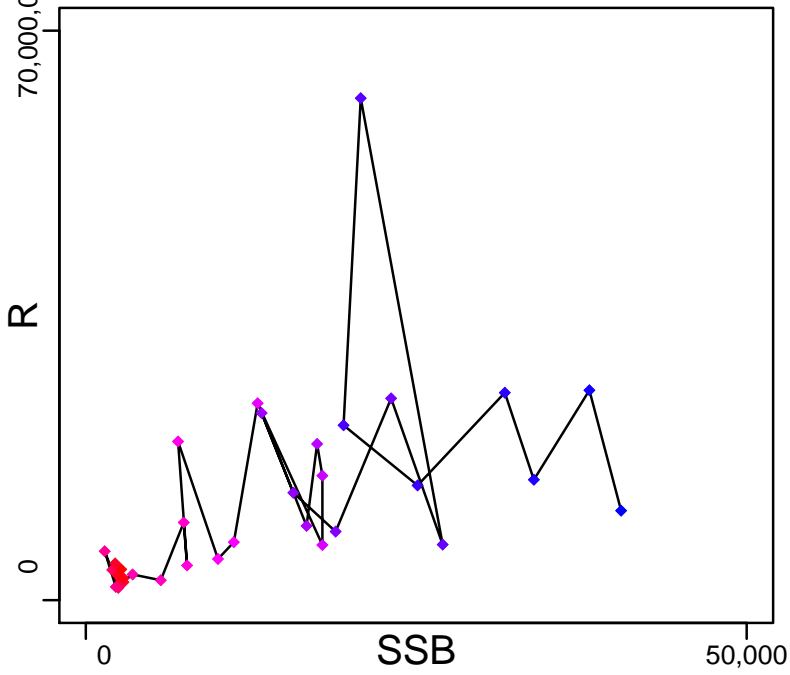
Kobe MSYpref (1981–2016–ICESIMP2016)



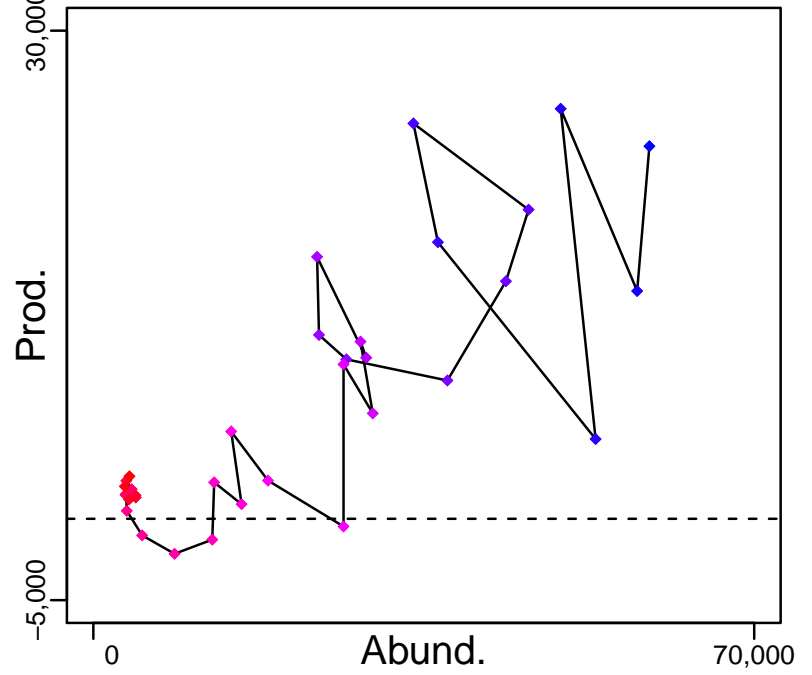
Kobe MGTpref (1981–2016–ICESIMP2016)



Spawner Recruit (1981–2016–ICESIMP2016)



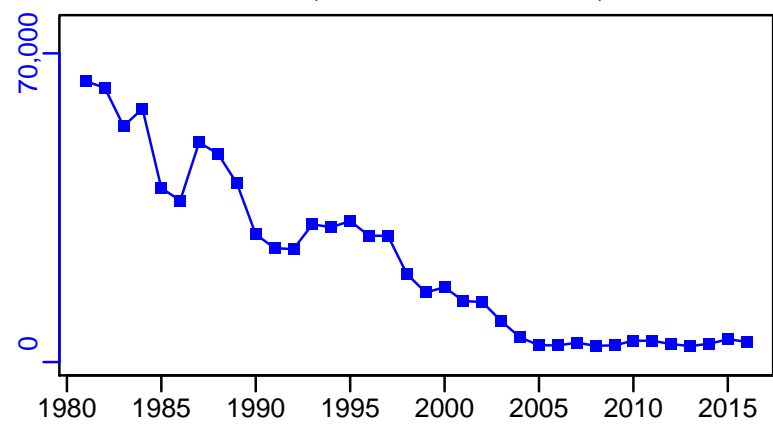
Production (1981–2016–ICESIMP2016)



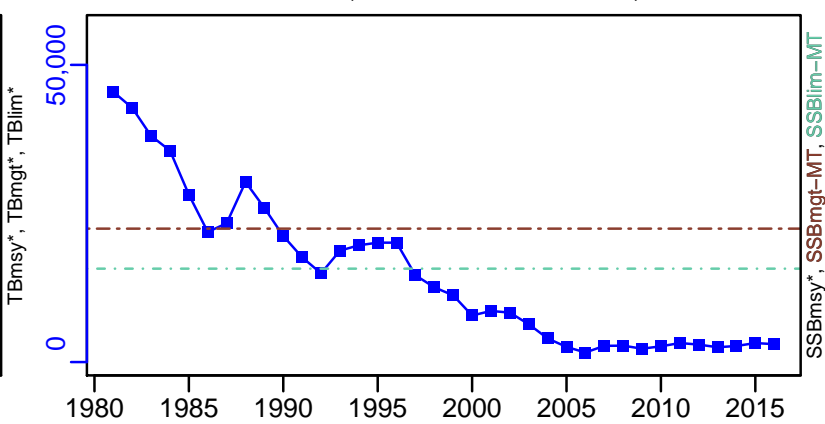
◆ Start Year ◆ End Year \* No Data

# Atlantic cod West of Scotland [CODVla]

TB-MT (1981–2016–ICESIMP2016)



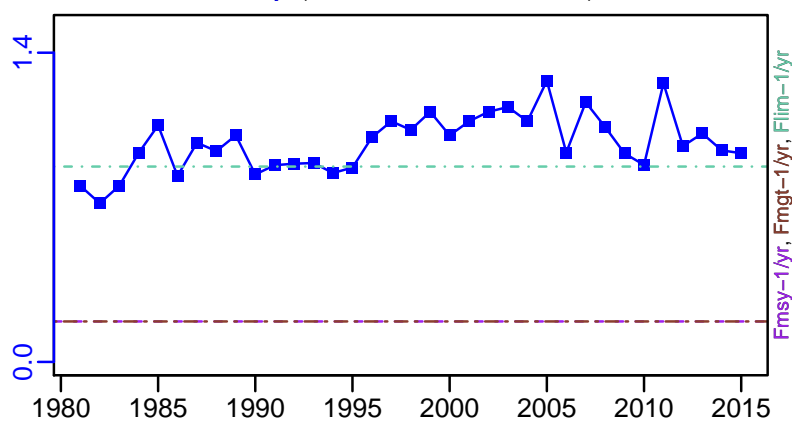
SSB-MT (1981–2016–ICESIMP2016)



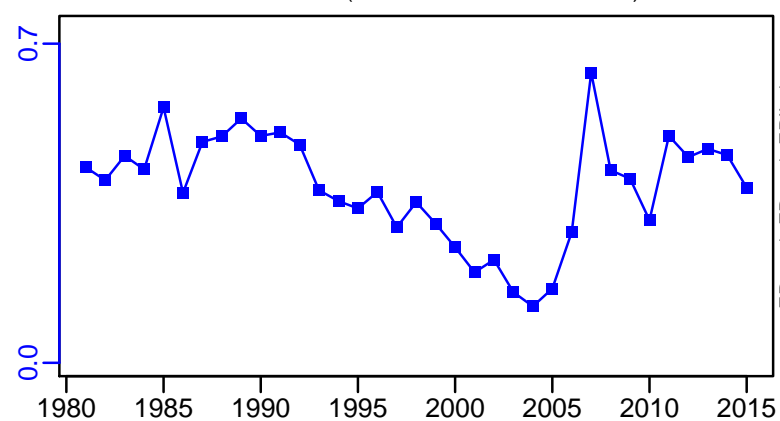
TN \*



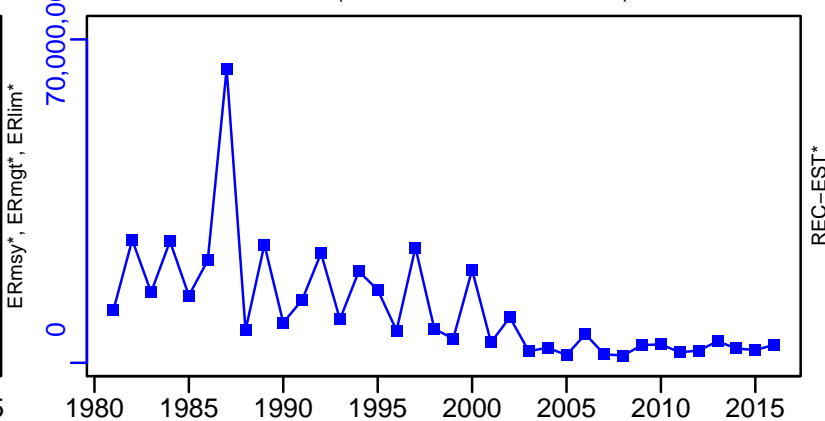
F-1/yr (1981–2016–ICESIMP2016)



ER-calc-ratio (1981–2016–ICESIMP2016)



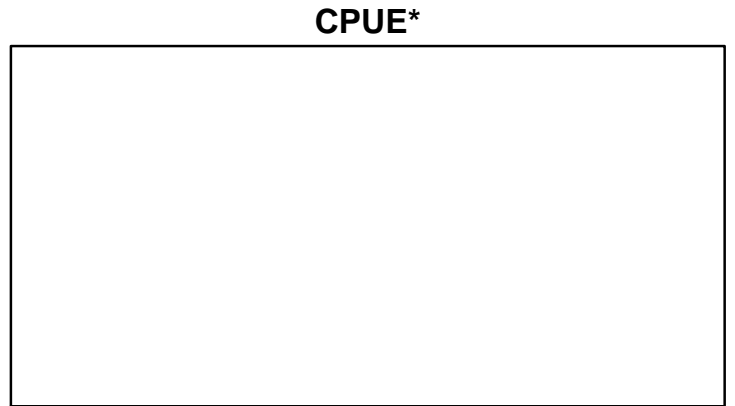
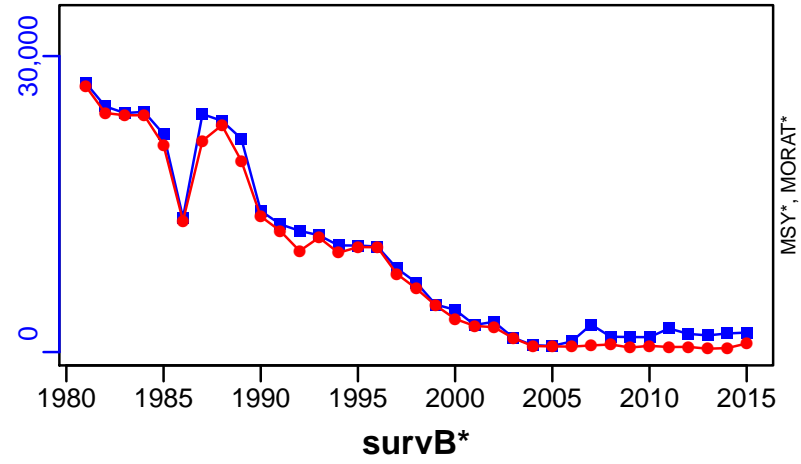
R-E00 (1981–2016–ICESIMP2016)



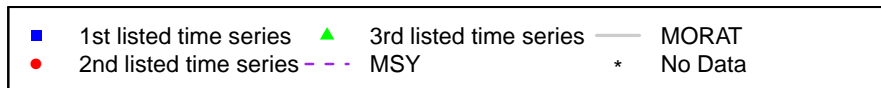
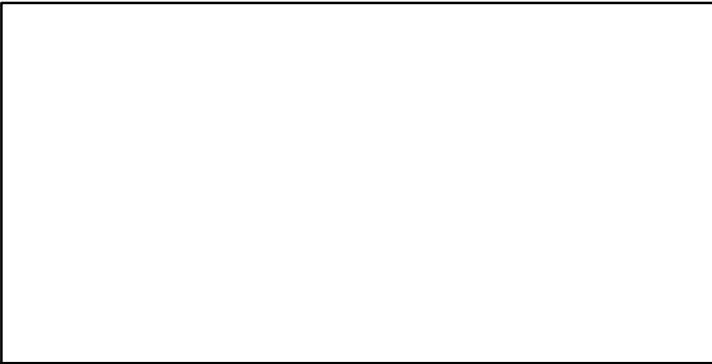
# Atlantic cod West of Scotland [CODVla]

TC-MT, TL-MT, RecC\* (1981–2016–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Atlantic Cod Celtic Sea [CODVllek]

Metadata	
<b>Scientific Name</b>	Gadus morhua
<b>Current Assess ID</b>	WGCSE-CODVllek-1970-2016-ICESIMP2016
<b>Area</b>	Celtic Sea
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2012, 2013, 2014, 2015, 2016

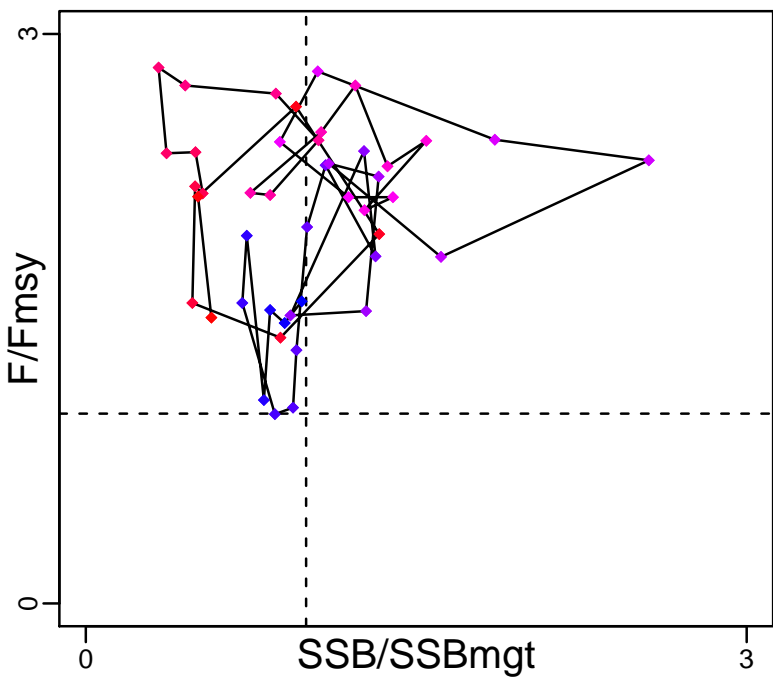
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.35
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	10,300
<b>Fmgt</b>	Fmgt-1/yr	2016	0.35
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2012	10,300
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	7300
<b>Flim</b>	Flim-1/yr	2016	0.8
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	10,100	-	-
<b>SSB</b>	SSB-MT	2016	8040	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	2,740,000	-	1
<b>F</b>	F-1/yr	2016	0.53	-	2 to 5
<b>ER</b>	ER-calc-ratio	2016	0.47	-	-
<b>TC</b>	TC-MT	2016	4720		
<b>TL</b>	TL-MT	2016	4150		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	1.51		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	0.78		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	1.51		
<b>ER/ERmgt</b>	-	-	-		

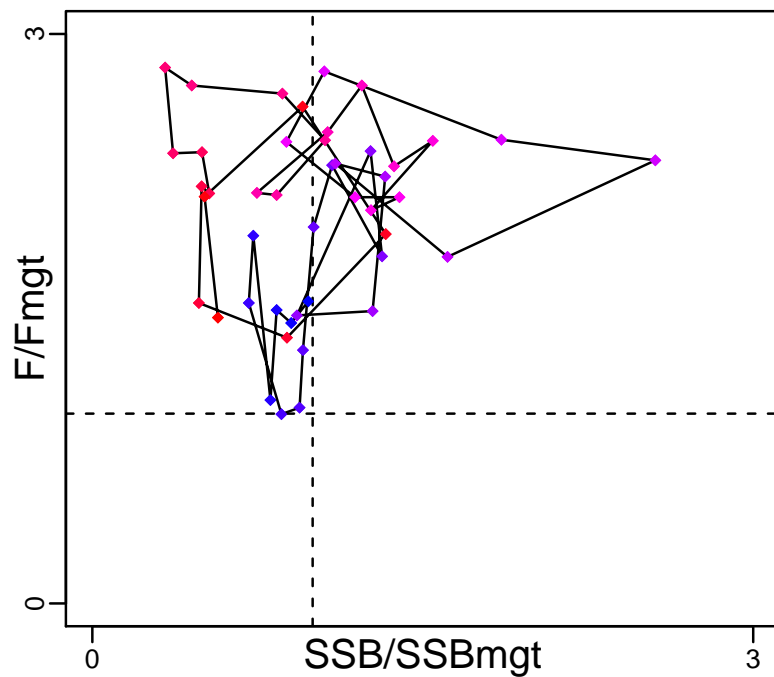


# Atlantic Cod Celtic Sea [CODVllek]

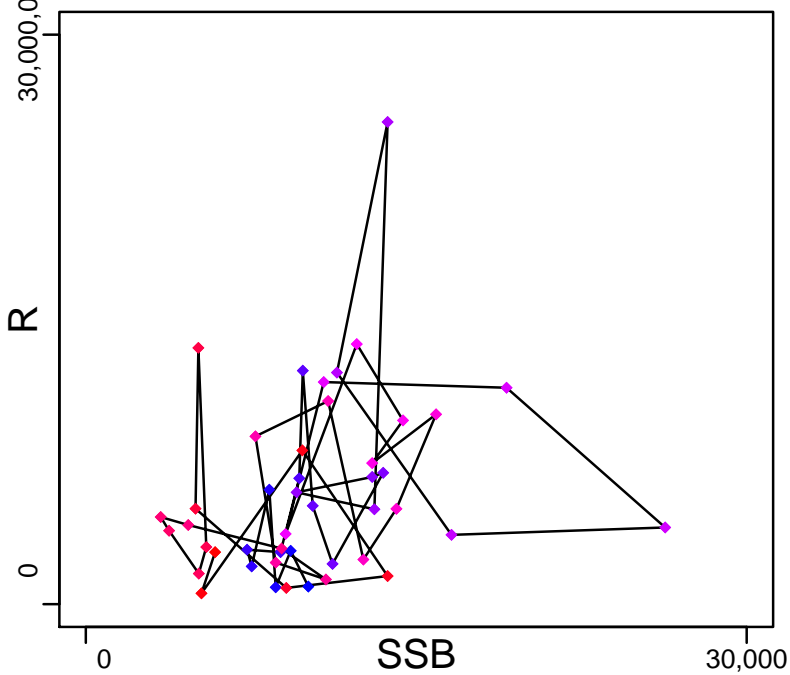
Kobe MSYpref (1970–2016–ICESIMP2016)



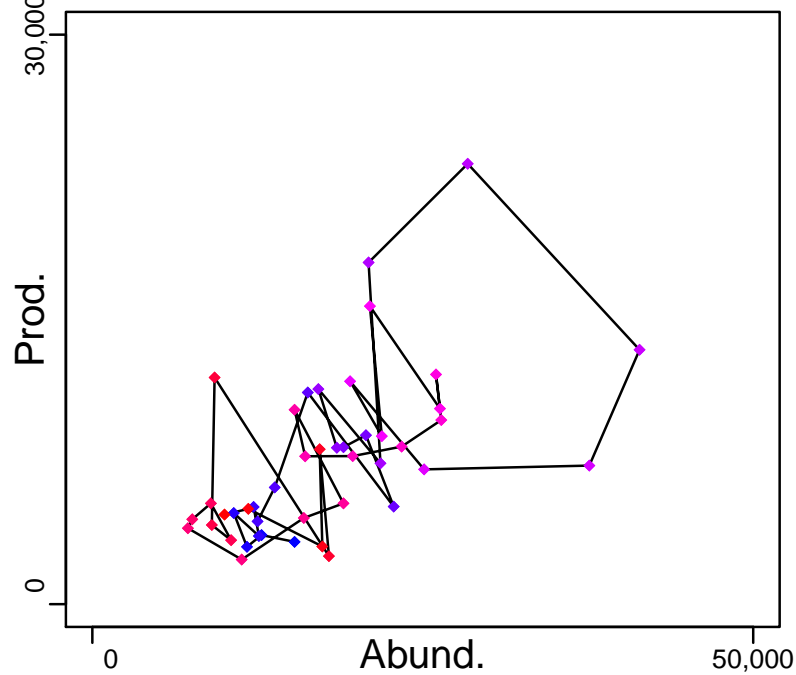
Kobe MGTpref (1970–2016–ICESIMP2016)



Spawner Recruit (1970–2016–ICESIMP2016)

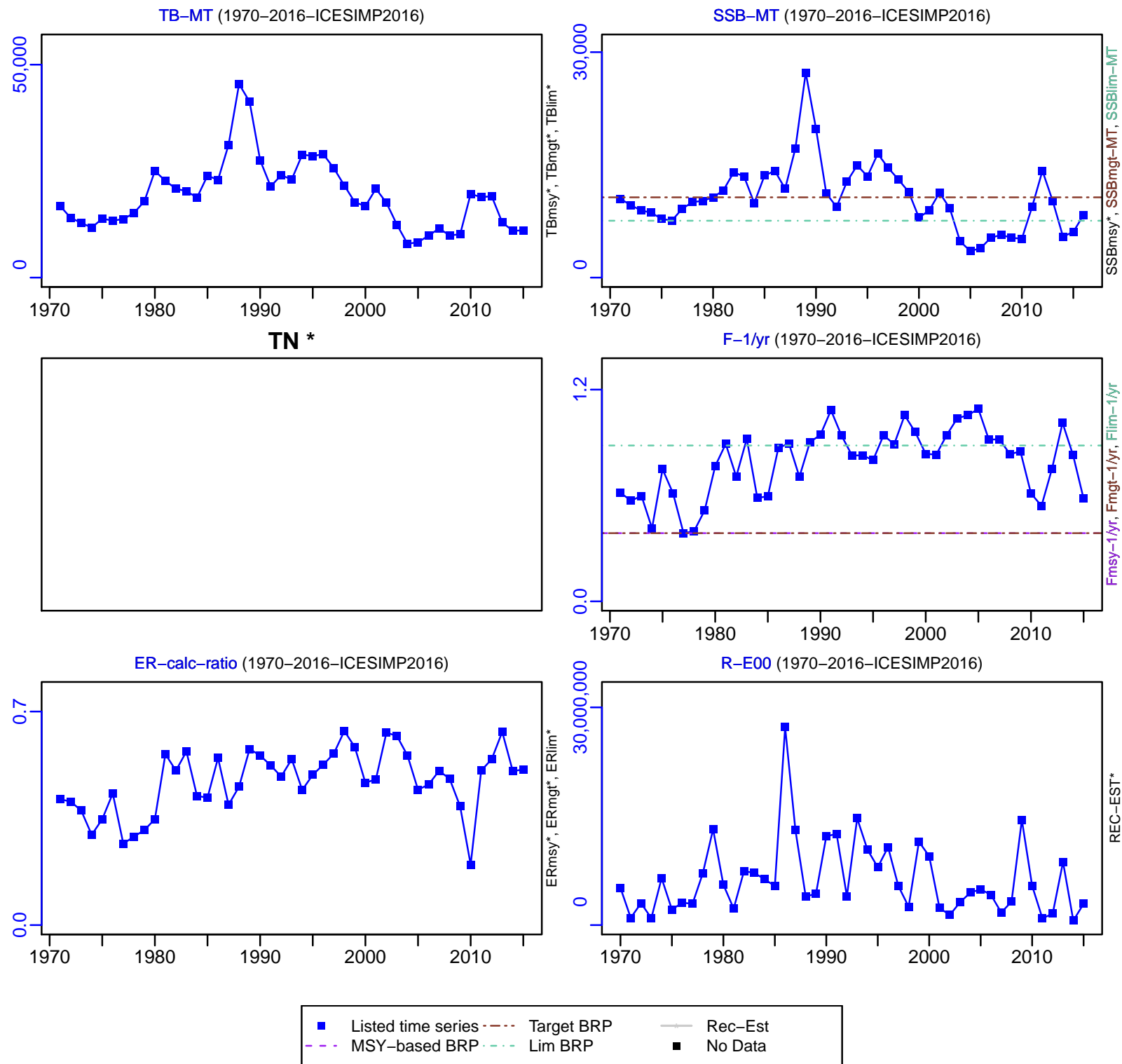


Production (1970–2016–ICESIMP2016)



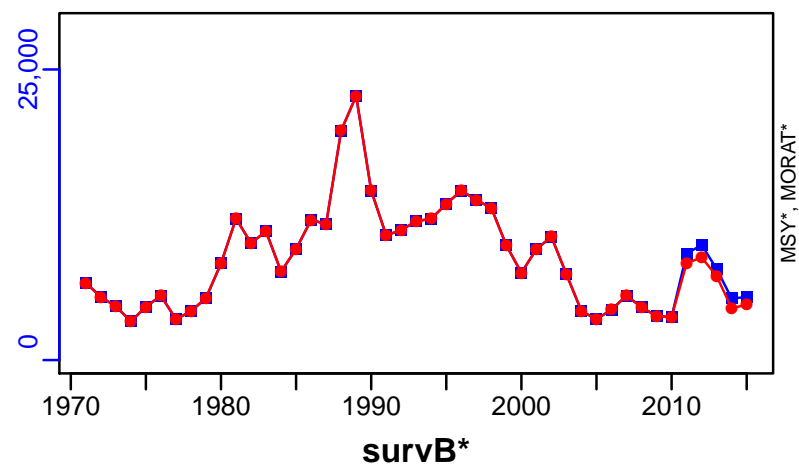
◆ Start Year ◆ End Year \* No Data

# Atlantic Cod Celtic Sea [CODVilek]



# Atlantic Cod Celtic Sea [CODVllek]

TC-MT, TL-MT, RecC\* (1970–2016–ICESIMP2016)



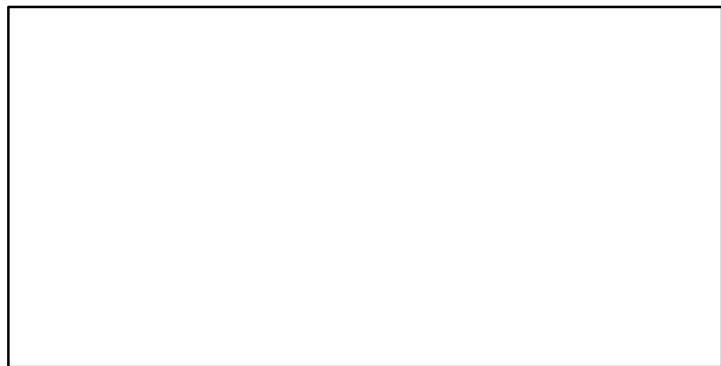
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



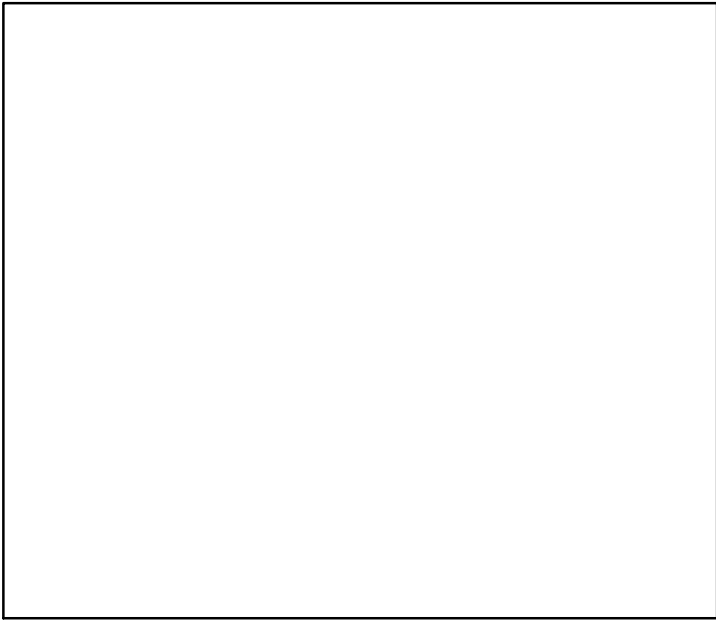
## Tusk Va and XIV [CUSKVa-XIV]

Metadata	
<b>Scientific Name</b>	Brosme brosme
<b>Current Assess ID</b>	WGDEEP-CUSKVa-XIV-1981-2016-ICESIMP2016
<b>Area</b>	Va and XIV
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
<b>Asmts in RAM</b>	2014, 2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2016	0.2
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	Fmgt-1/yr	2016	0.2
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2016	22,400	-	-
SSB	SSB-MT	2016	6920	-	-
TN	-	-	-	-	-
R	R-E00	2016	10,600,000	-	-
F	F-1/yr	2016	0.22	-	-
ER	ER-calc-ratio	2016	0.22	-	-
TC	TC-MT	2016	4820		
TL	TL-MT	2014	6260		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2016	1.1		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	F-1/yr/Fmgt-1/yr	2016	1.1		
ER/ERmgt	-	-	-		

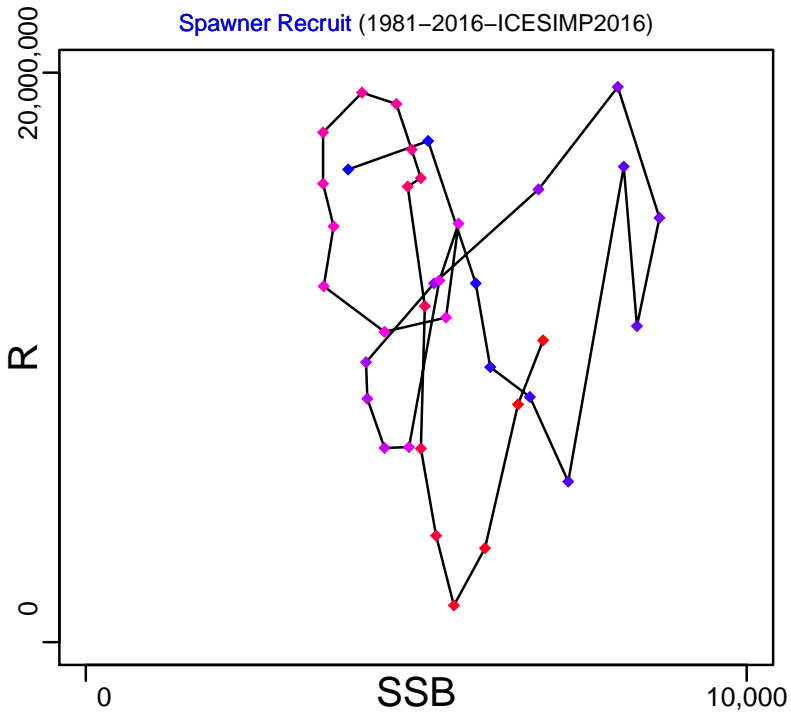
Kobe MSY\*



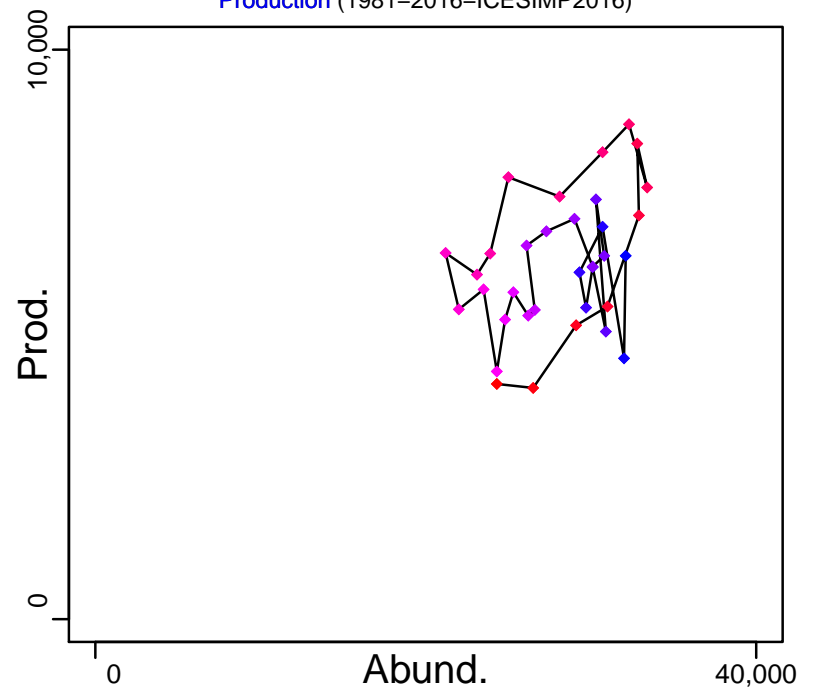
Kobe MGT\*



Spawner Recruit (1981–2016–ICESIMP2016)



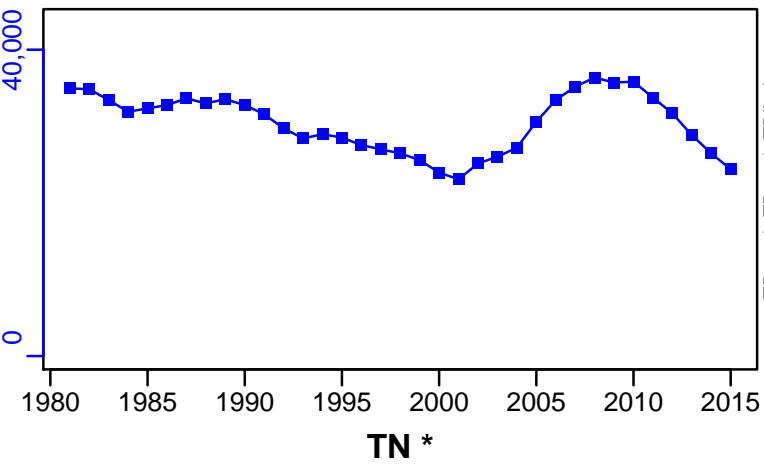
Production (1981–2016–ICESIMP2016)



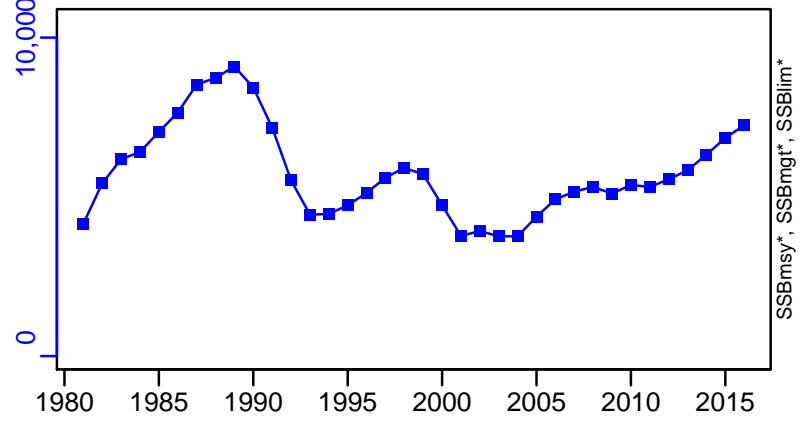
◆ Start Year ◆ End Year \* No Data

# Tusk Va and XIV [CUSKVa–XIV]

TB–MT (1981–2016–ICESIMP2016)



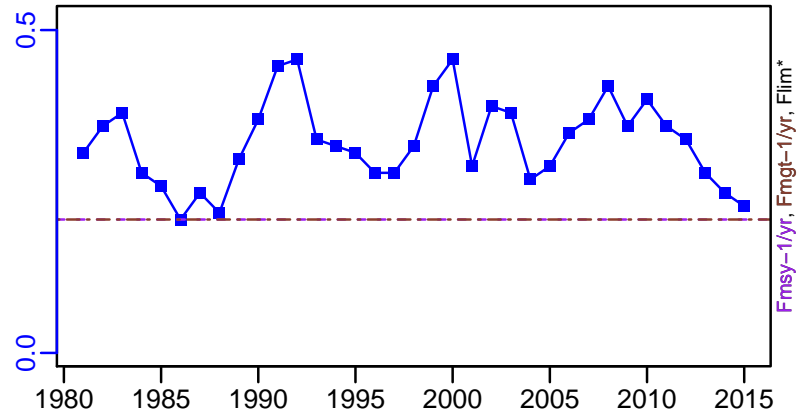
SSB–MT (1981–2016–ICESIMP2016)



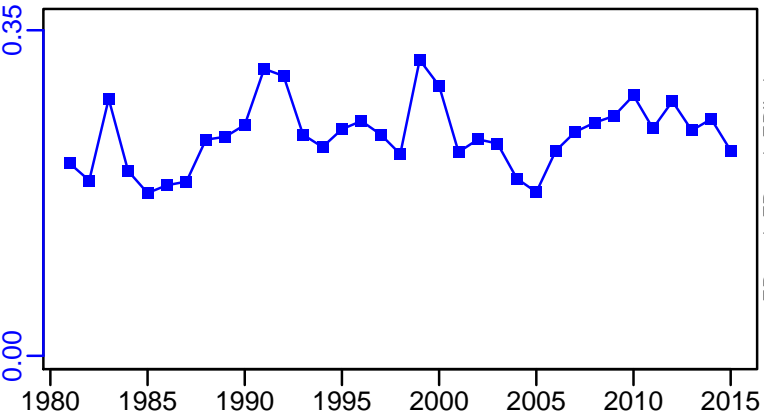
TN \*



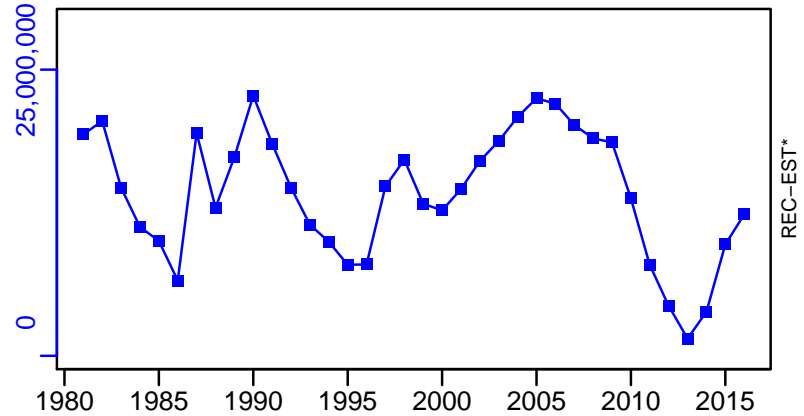
F–1/yr (1981–2016–ICESIMP2016)



ER–calc–ratio (1981–2016–ICESIMP2016)



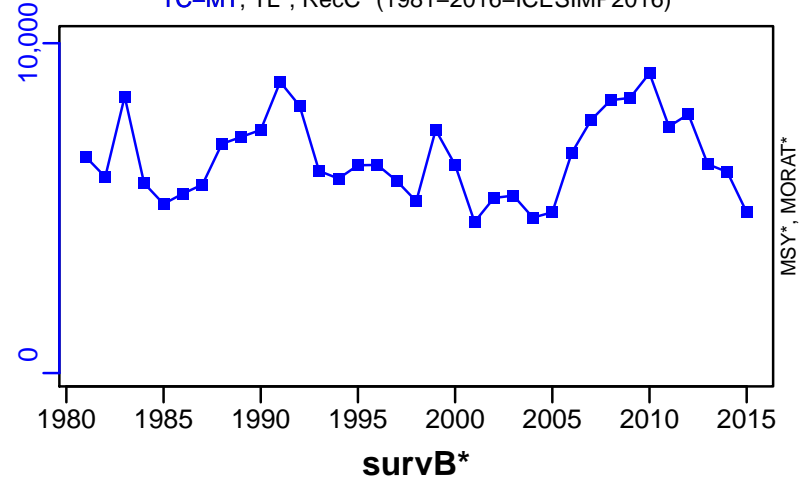
R–E00 (1981–2016–ICESIMP2016)



# Tusk Va and XIV [CUSKVa–XIV]

TC–MT, TL\*, RecC\* (1981–2016–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



CPUE\*

EFFORT\*

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

## Tusk Rockall Bank [CUSKVlb]

Metadata	
<b>Scientific Name</b>	Brosme brosme
<b>Current Assess ID</b>	WGDEEP-CUSKVlb-1988-2016-ICESIMP2016
<b>Area</b>	Rockall Bank
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
<b>Asmts in RAM</b>	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	226		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERMgt	-	-	-		



**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



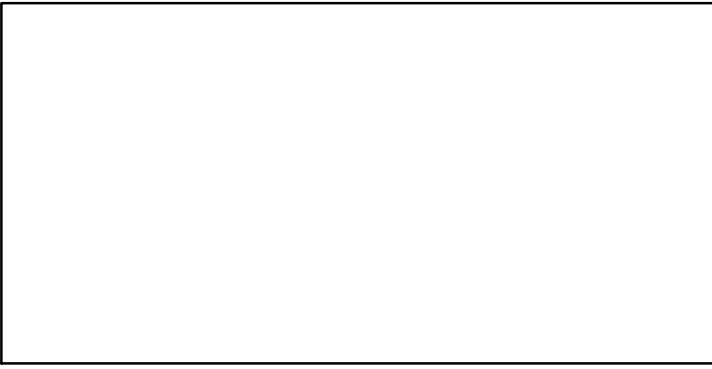
**Production\***



◆ Start Year   ◆ End Year   \* No Data

Tusk Rockall Bank [CUSKVlb]

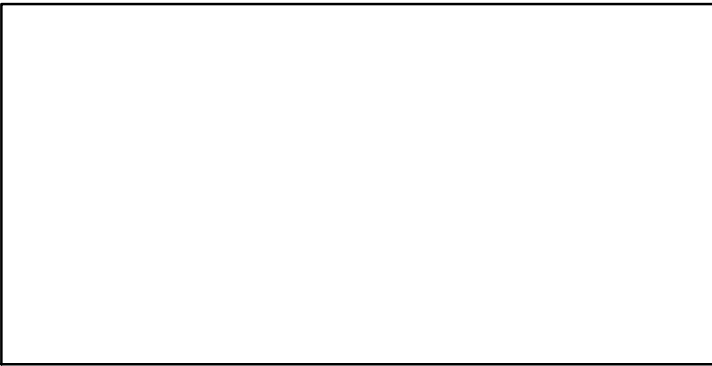
**TB\***



**SSB\***



**TN \***



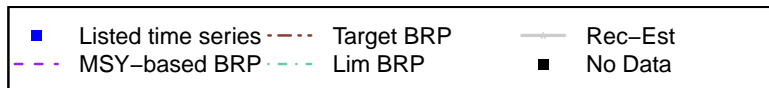
**F\***



**ER\***

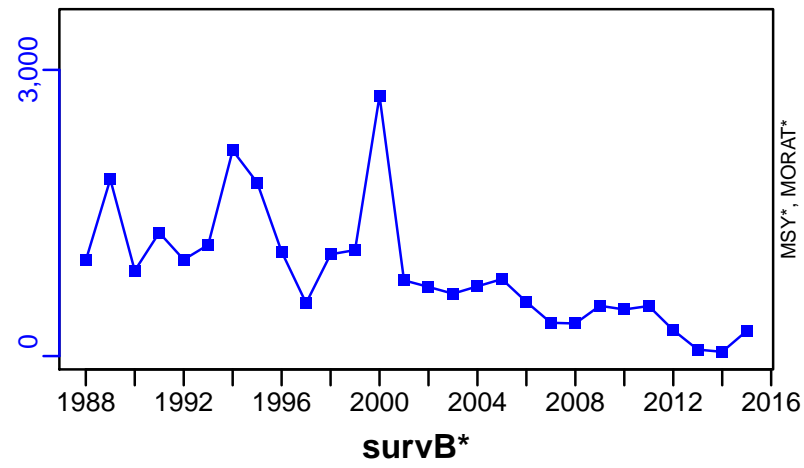


**Recruits\***



Tusk Rockall Bank [CUSKVlb]

TL-MT, TC\*, RecC\* (1988–2016–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



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

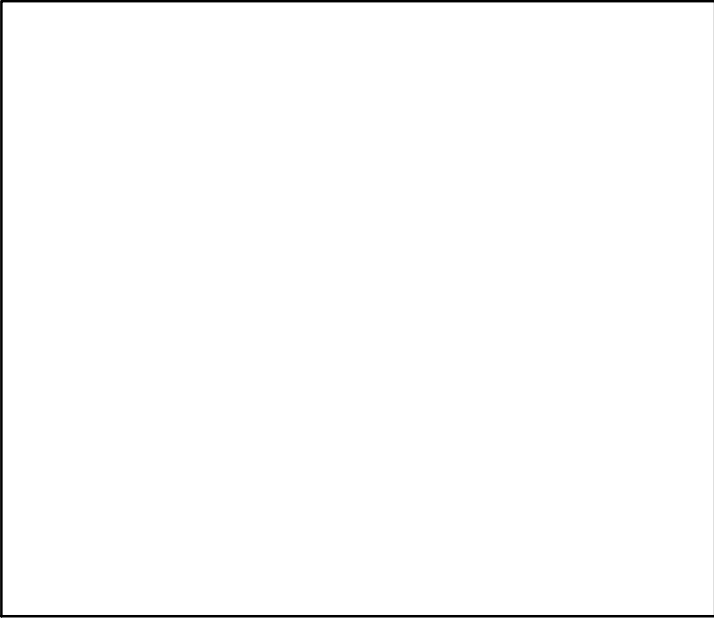
## Tusk North of Azores [CUSKXII]

Metadata	
<b>Scientific Name</b>	Brosme brosme
<b>Current Assess ID</b>	WGDEEP-CUSKXII-1988-2015-ICESIMP2016
<b>Area</b>	North of Azores
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
<b>Asmts in RAM</b>	2015

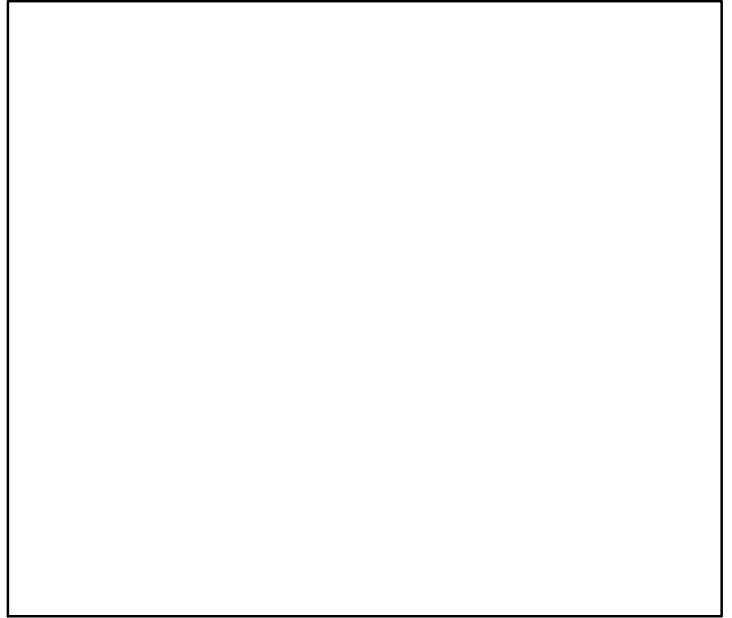
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	0		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

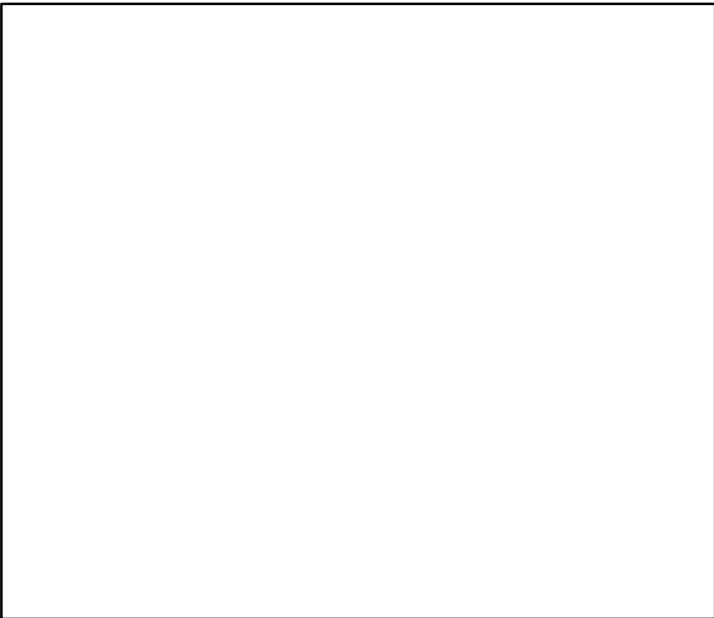
**Kobe MSY\***



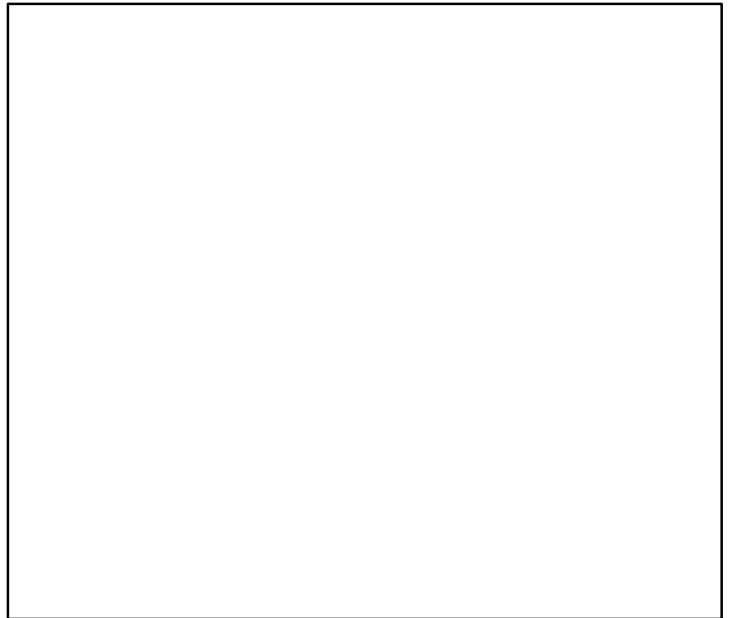
**Kobe MGT\***



**Spawner Recruit\***



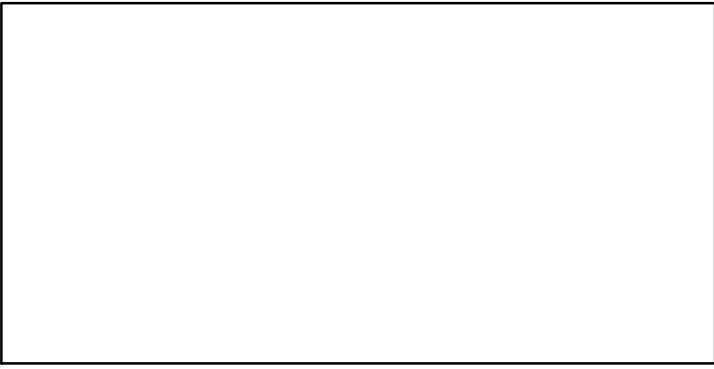
**Production\***



◆ Start Year ◆ End Year \* No Data

Tusk North of Azores [CUSKXII]

**TB\***



**SSB\***



**TN \***



**F\***



**ER\***



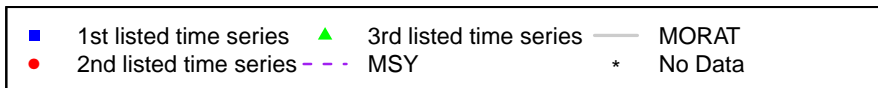
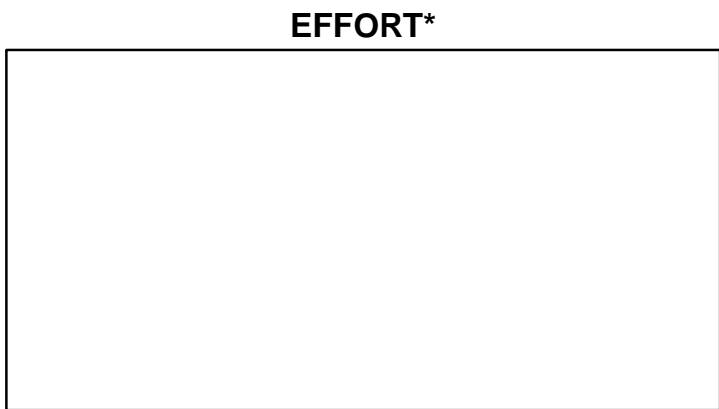
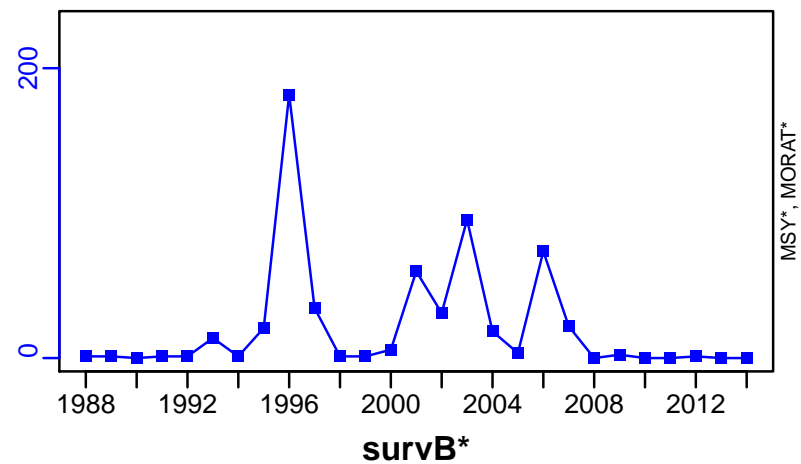
**Recruits\***



# Tusk North of Azores [CUSKXII]

TL-MT, TC\*, RecC\* (1988–2015–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



## Dab VII-VIIIabd [DAB2232]

Metadata	
<b>Scientific Name</b>	Limanda limanda
<b>Current Assess ID</b>	WGBFAS-DAB2232-1970-2016-ICESIMP2016
<b>Area</b>	Baltic Areas 22-32
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Baltic Fisheries Assessment Working Group
<b>Asmts in RAM</b>	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	1270		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year   ◆ End Year   \* No Data

**TB\***



**SSB\***



**TN \***



**F\***



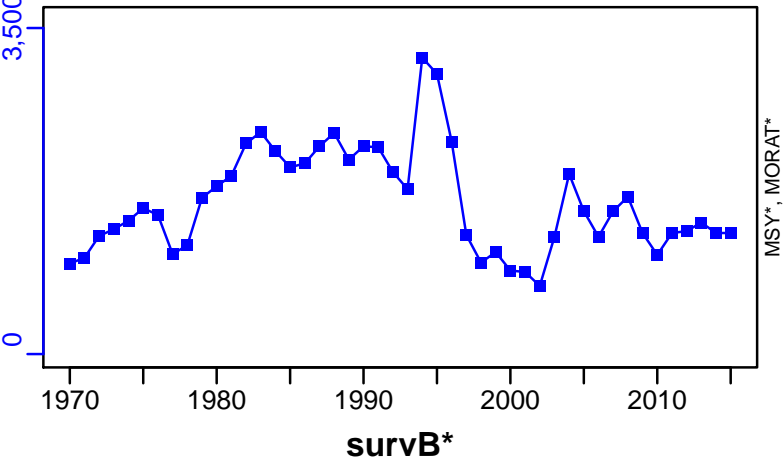
**ER\***



**Recruits\***



TL–MT, TC\*, RecC\* (1970–2016–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## European seabass IVbc and VII [EBASSIVbc-VII]

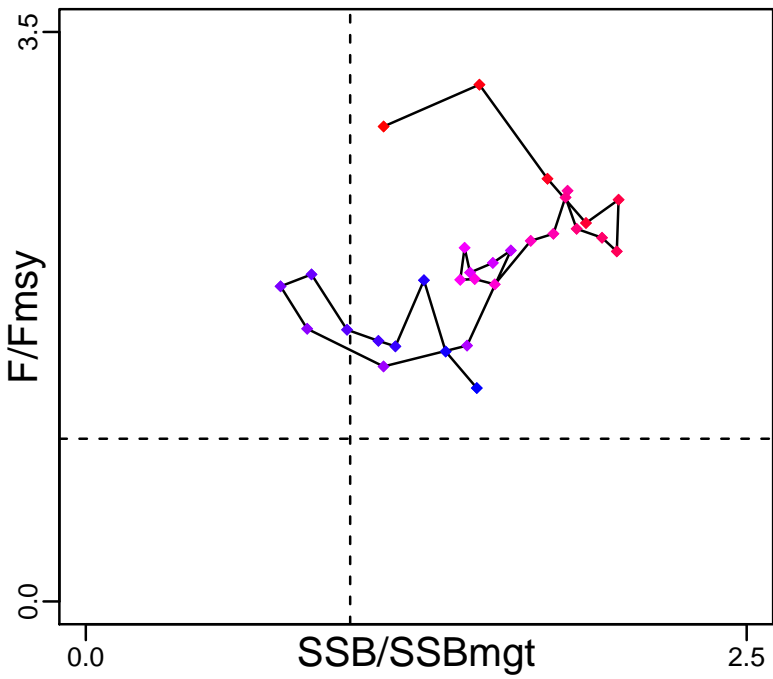
Metadata	
<b>Scientific Name</b>	Dicentrarchus labrax
<b>Current Assess ID</b>	WGCSE-EBASSIVbc-VII-1985-2016-ICESIMP2016
<b>Area</b>	IVbc and VII
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2014, 2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2015	0.13
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	12,673
<b>Fmgt</b>	Fmgt-1/yr	2015	0.13
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	8075
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

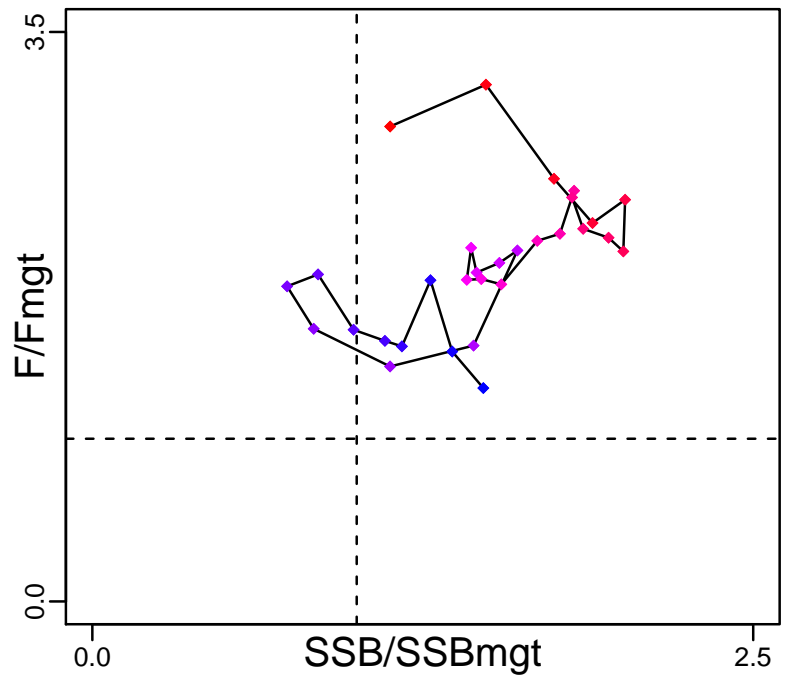
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	9290	-	-
<b>SSB</b>	SSB-MT	2016	7320	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	6,470,000	-	0
<b>F</b>	F-1/yr	2016	0.3	-	5 to 11
<b>ER</b>	ER-calc-ratio	2016	0.19	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2016	2840		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2015	2.92		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	0.58		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	2.92		
<b>ER/ERmgt</b>	-	-	-		

# European seabass IVbc and VII [EBASSIVbc-VII]

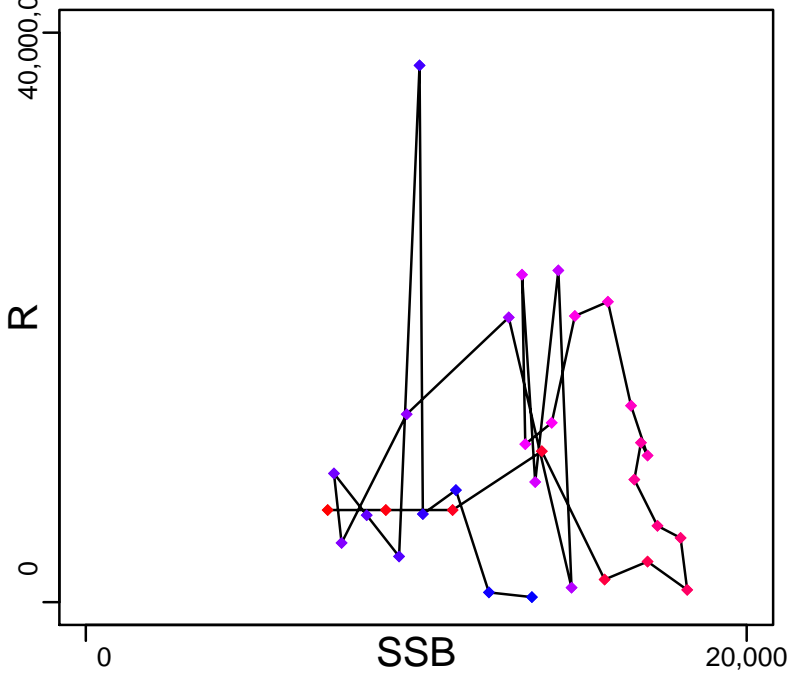
Kobe MSYpref (1985–2015–ICESIMP2016)



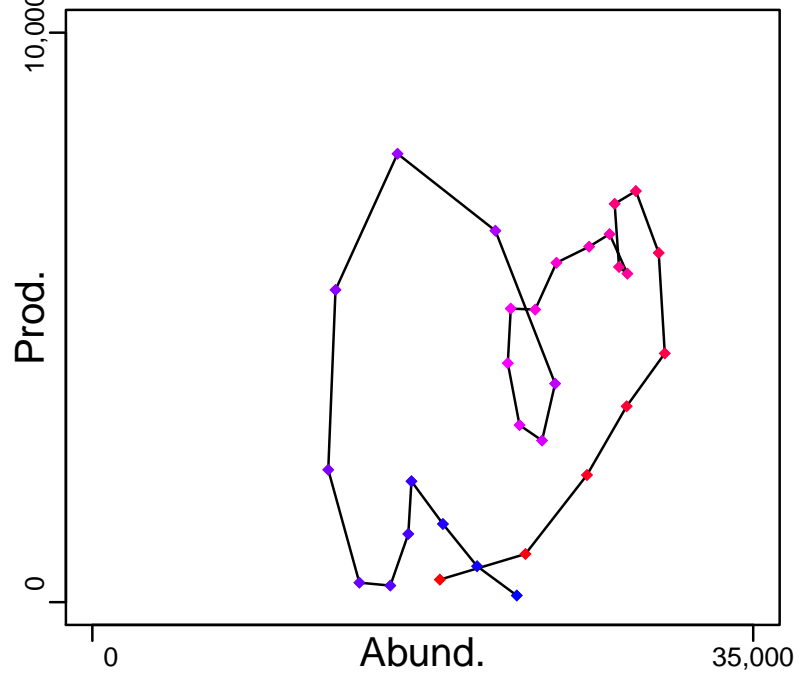
Kobe MGTpref (1985–2015–ICESIMP2016)



Spawner Recruit (1985–2016–ICESIMP2016)



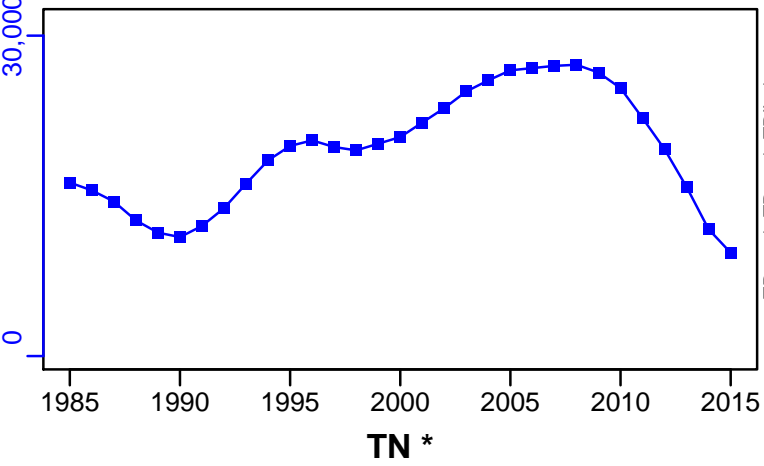
Production (1985–2016–ICESIMP2016)



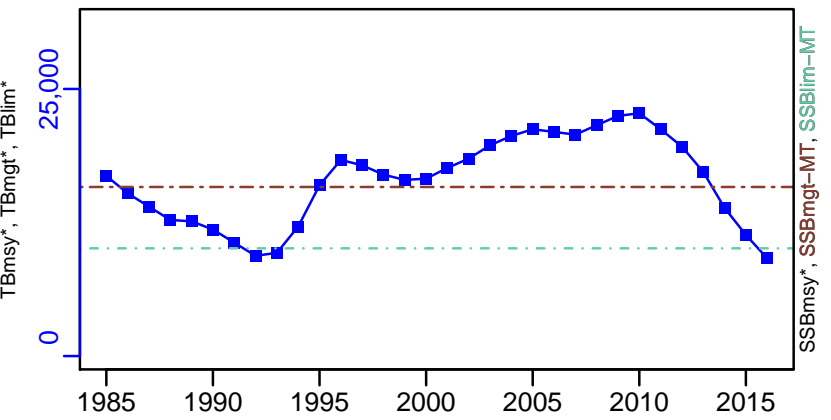
◆ Start Year ◆ End Year \* No Data

# European seabass IVbc and VII [EBASSIVbc-VII]

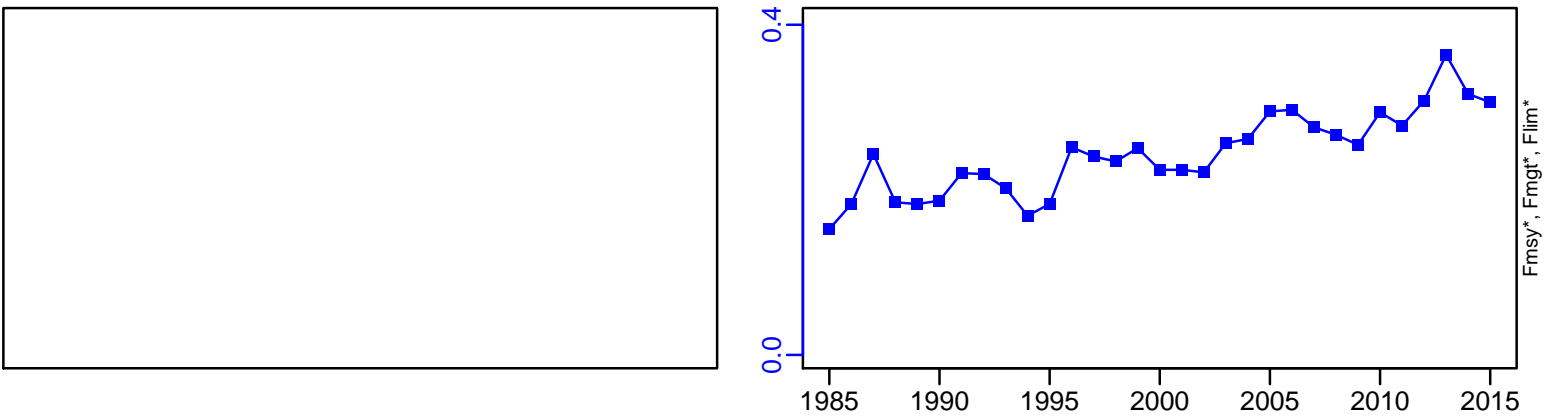
TB-MT (1985–2015–ICESIMP2016)



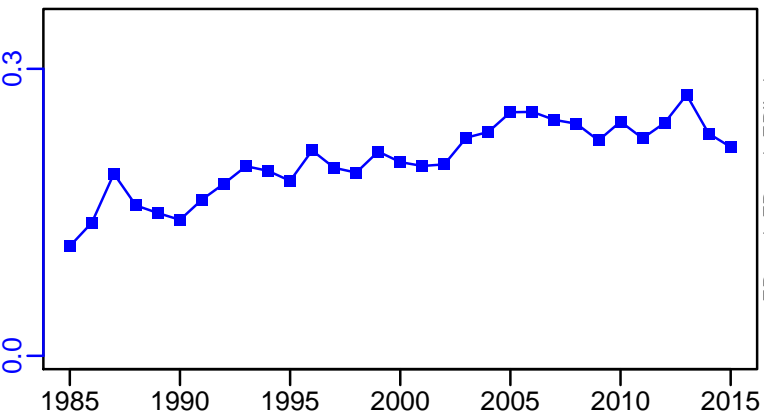
SSB-MT (1985–2016–ICESIMP2016)



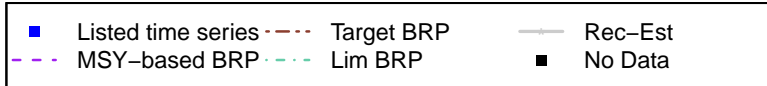
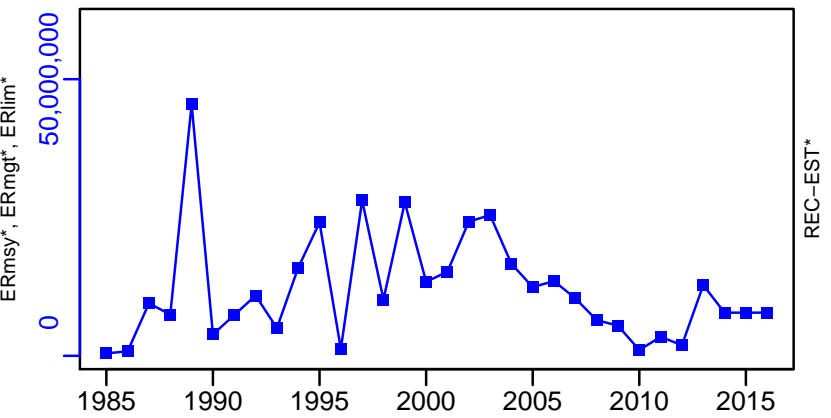
F-1/yr (1985–2016–ICESIMP2016)



ER-calc-ratio (1985–2016–ICESIMP2016)



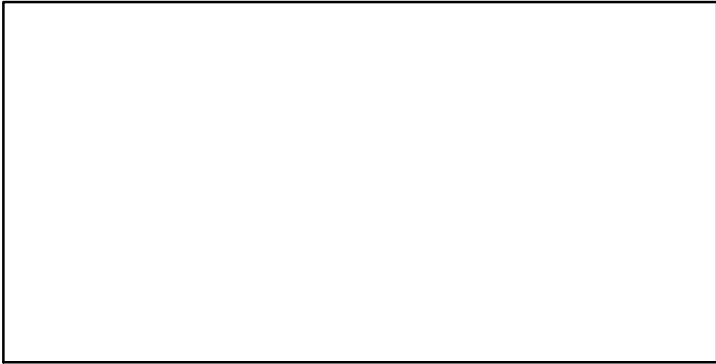
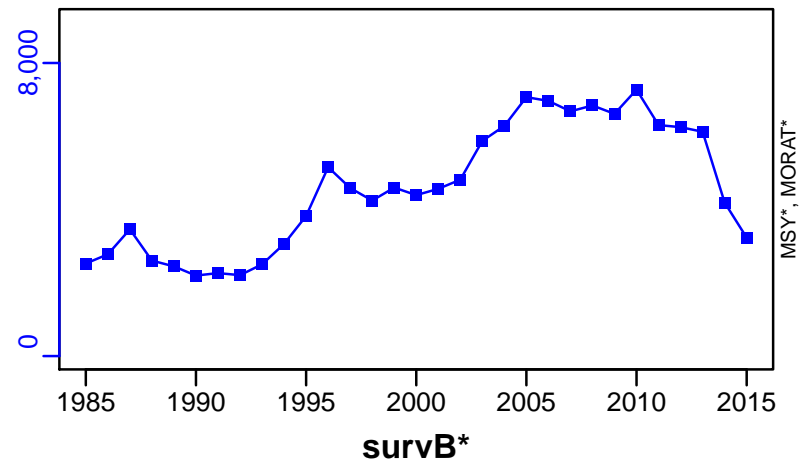
R-E00 (1985–2016–ICESIMP2016)



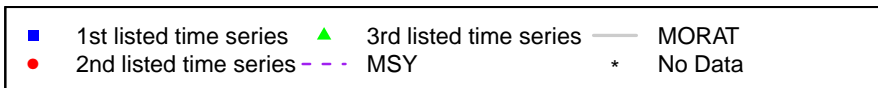
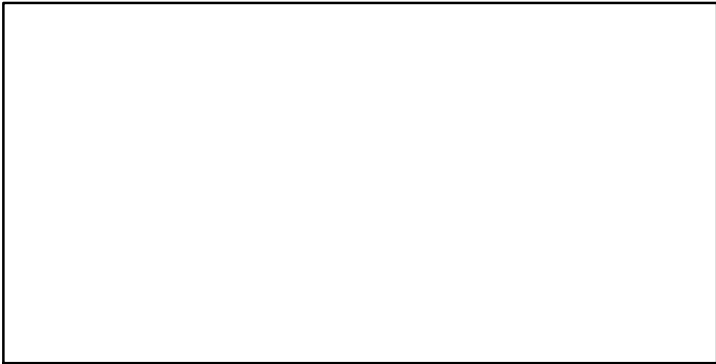
# European seabass IVbc and VII [EBASSIVbc-VII]

TL-MT, TC\*, RecC\* (1985-2016-ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## European seabass Vla and VIIb-j [EBASSVla-VIIb-j]

Metadata	
<b>Scientific Name</b>	Dicentrarchus labrax
<b>Current Assess ID</b>	WGCSE-EBASSVla-VIIb-j-1995-2015-ICESIMP2016
<b>Area</b>	Vla and VIIb-j
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2015

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2015	2		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data

European seabass VIa and VIIb-j [EBASSVIa-VIIb-j]

TB\*



SSB\*



TN \*



F\*



ER\*



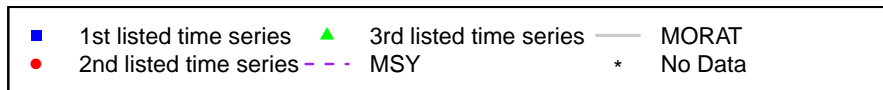
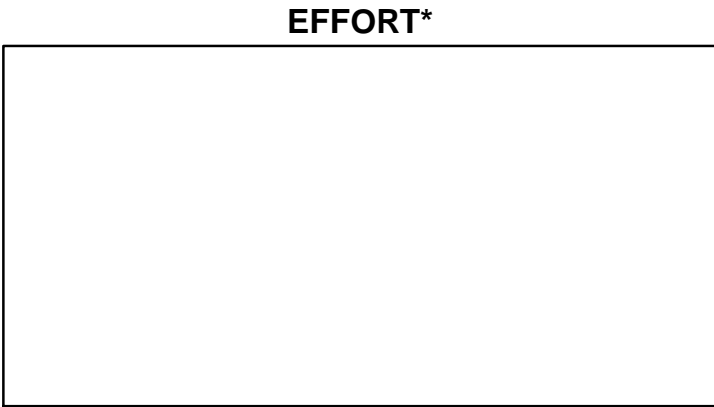
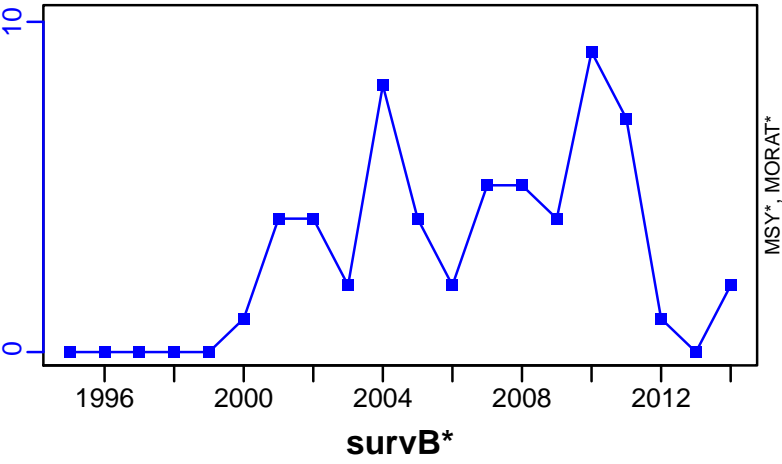
Recruits\*



# European seabass Vla and VIIb-j [EBASSVla-VIIb-j]

TC-MT, TL\*, RecC\* (1995-2015-ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



## European seabass VIIIc and IXa [EBASSVIIIc-IXa]

Metadata	
<b>Scientific Name</b>	Dicentrarchus labrax
<b>Current Assess ID</b>	WGBIE-EBASSVIIIc-IXa-1978-2015-ICESIMP2016
<b>Area</b>	VIIIc-IXa
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
<b>Asmts in RAM</b>	2015

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2015	917		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data

European seabass VIIIc and IXa [EBASSVIIIc-IXa]

TB\*



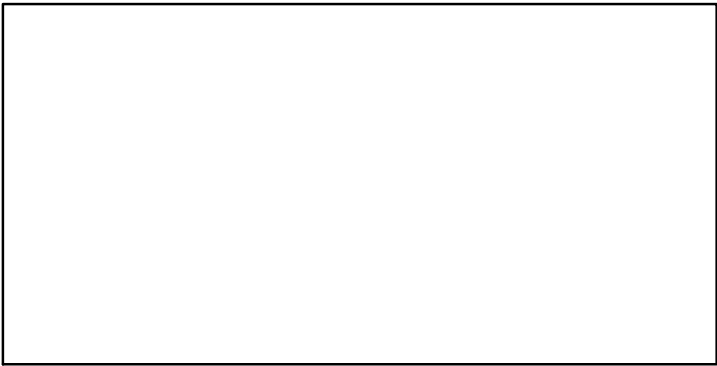
SSB\*



TN \*



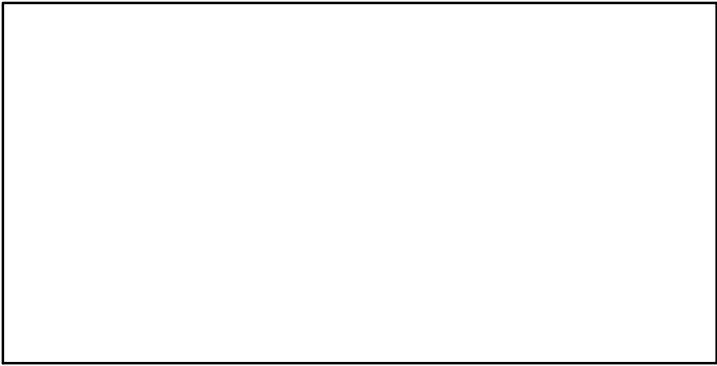
F\*



ER\*



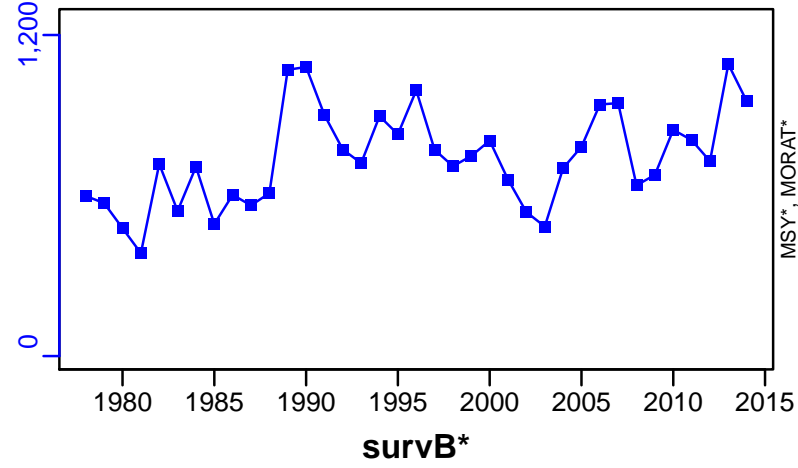
Recruits\*



# European seabass VIIIc and IXa [EBASSVIIIc-IXa]

TC-MT, TL\*, RecC\* (1978-2015-ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## European flounder Subdivisions 22-23 [EFLOUN2223]

Metadata	
Scientific Name	Platichthys flesus
Current Assess ID	WGBFAS-EFLOUN2223-1973-2016-ICESIMP2016
Area	Subdivisions 22-23
Management Authority	International Council for the Exploration of the Sea
Assessor	Baltic Fisheries Assessment Working Group
Asmts in RAM	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	1130		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



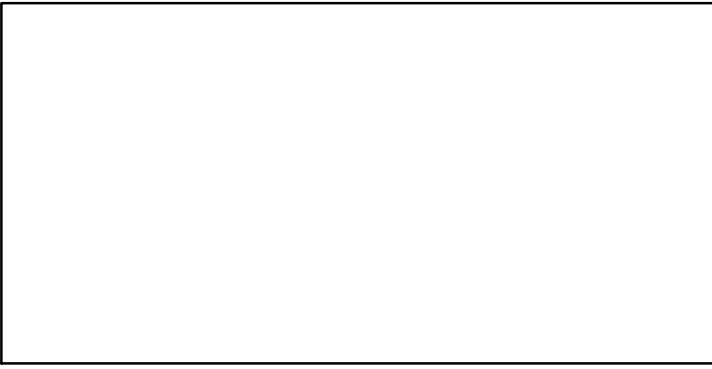
**Production\***



◆ Start Year ◆ End Year \* No Data

European flounder Subdivisions 22–23 [EFLOUN2223]

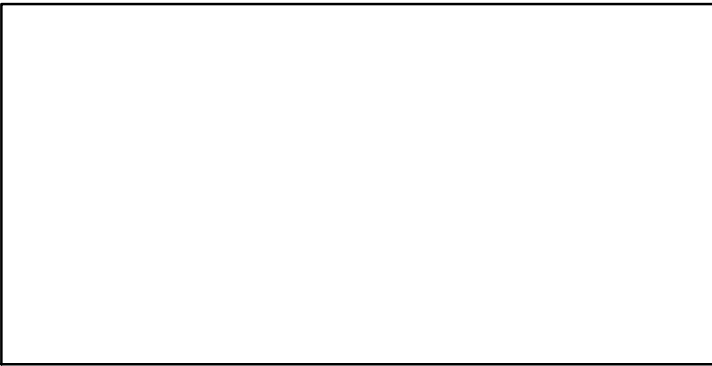
**TB\***



**SSB\***



**TN \***



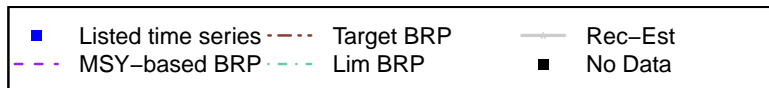
**F\***



**ER\***



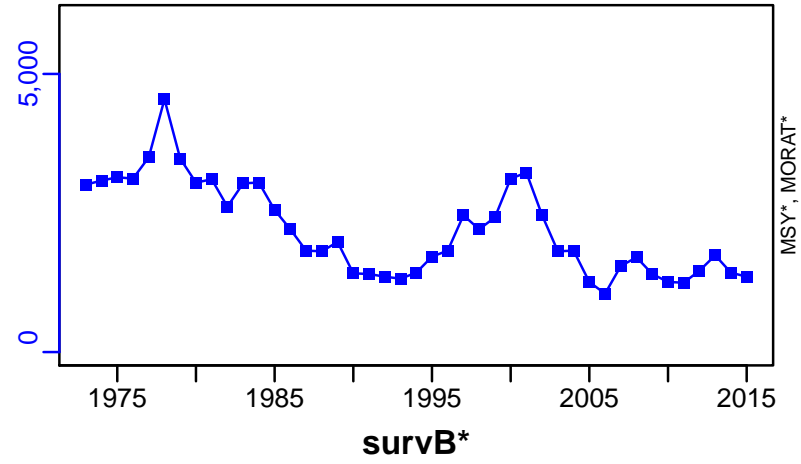
**Recruits\***



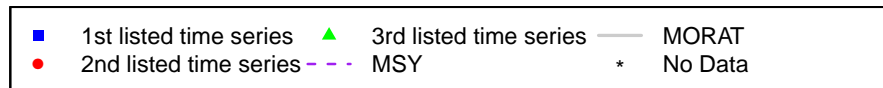
# European flounder Subdivisions 22–23 [EFLOUN2223]

TL–MT, TC\*, RecC\* (1973–2016–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## European flounder Subdivisions 24-25 [EFLOUN2425]

Metadata	
<b>Scientific Name</b>	Platichthys flesus
<b>Current Assess ID</b>	WGBFAS-EFLOUN2425-1973-2016-ICESIMP2016
<b>Area</b>	Subdivisions 24-25
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Baltic Fisheries Assessment Working Group
<b>Asmts in RAM</b>	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	11,100		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



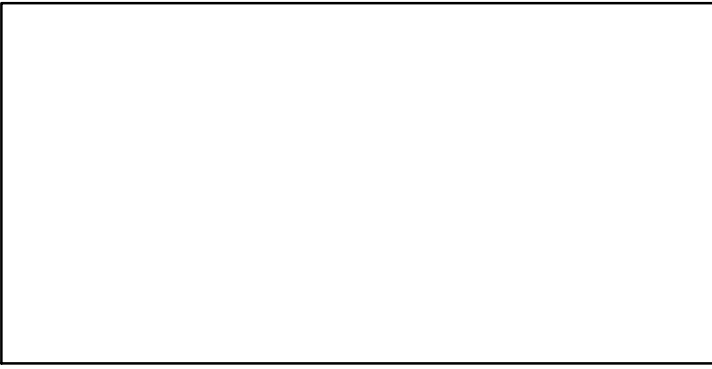
**Production\***



◆ Start Year ◆ End Year \* No Data

European flounder Subdivisions 24–25 [EFLOUN2425]

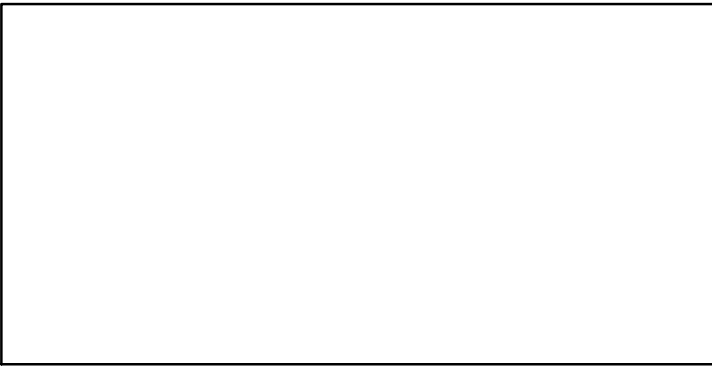
**TB\***



**SSB\***



**TN \***



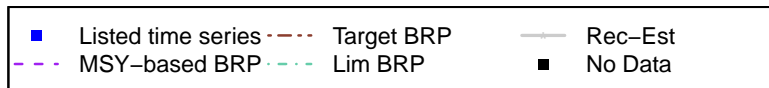
**F\***



**ER\***



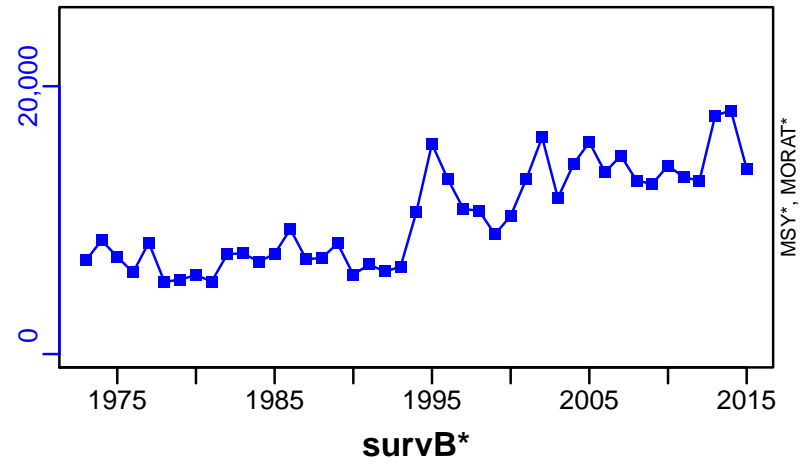
**Recruits\***



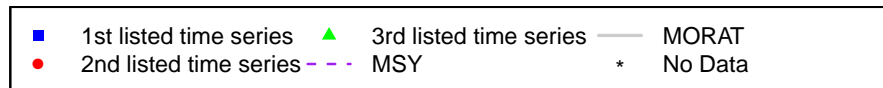
# European flounder Subdivisions 24–25 [EFLOUN2425]

TL–MT, TC\*, RecC\* (1973–2016–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## European flounder Subdivisions 26-28 [EFLOUN26-28]

Metadata	
<b>Scientific Name</b>	Platichthys flesus
<b>Current Assess ID</b>	WGBFAS-EFLOUN26-28-1996-2016-ICESIMP2016
<b>Area</b>	Subdivisions 26-28
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Baltic Fisheries Assessment Working Group
<b>Asmts in RAM</b>	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	4440		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



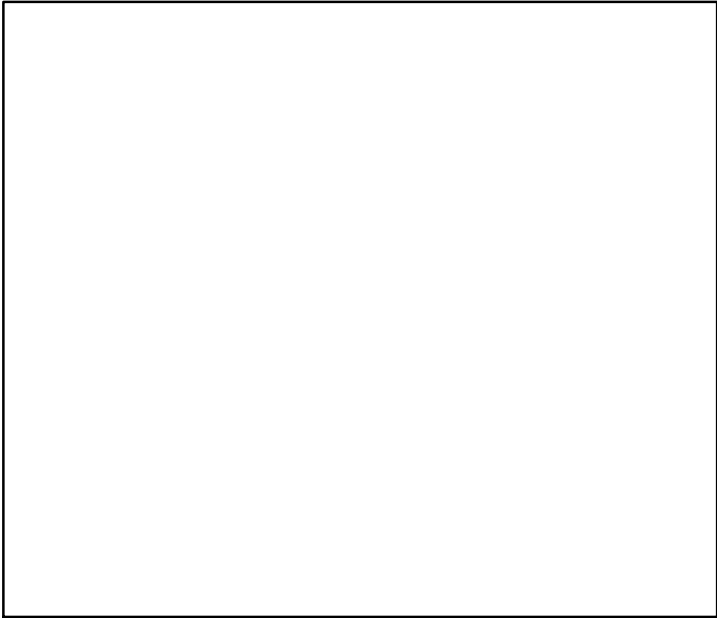
Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

**TB\***



**SSB\***



**TN \***



**F\***



**ER\***



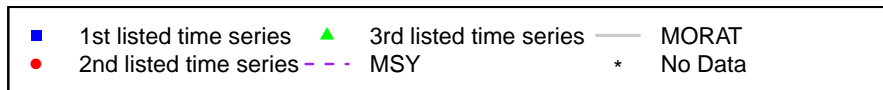
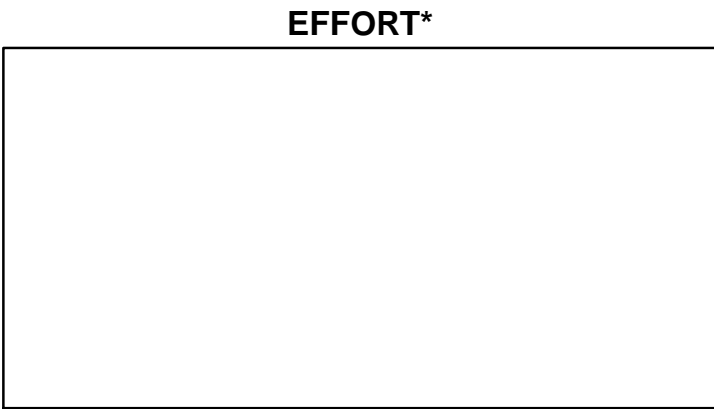
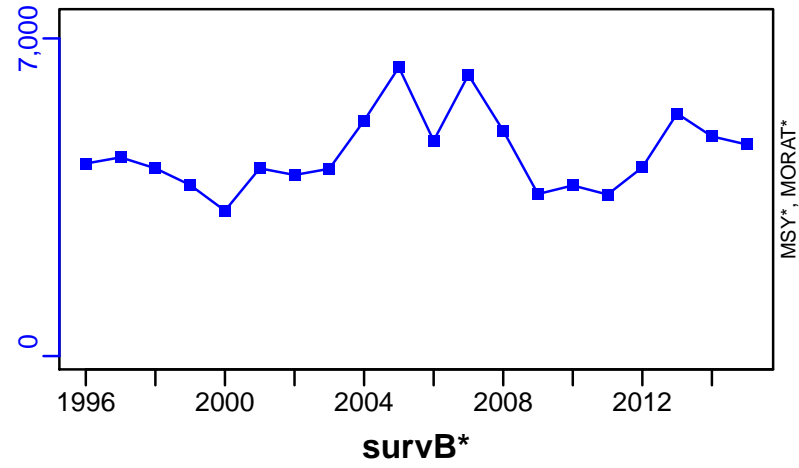
**Recruits\***



# European flounder Subdivisions 26–28 [EFLOUN26–28]

TL–MT, TC\*, RecC\* (1996–2016–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



## European flounder Subdivisions 27 and 29-32 [EFLOUN27-2932]

Metadata	
<b>Scientific Name</b>	Platichthys flesus
<b>Current Assess ID</b>	WGBFAS-EFLOUN27-2932-1980-2016-ICESIMP2016
<b>Area</b>	Subdivisions 27 and 29-32
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Baltic Fisheries Assessment Working Group
<b>Asmts in RAM</b>	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	176		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***

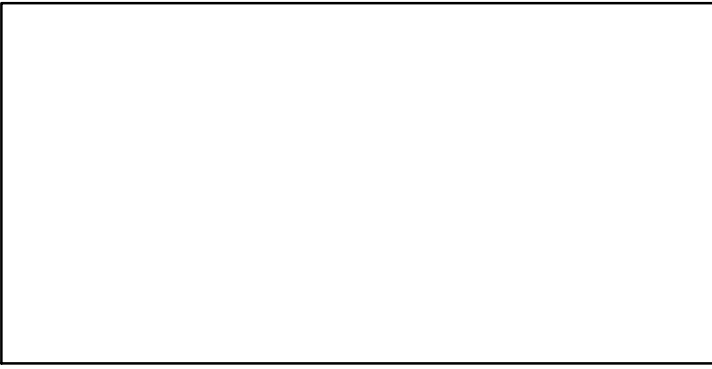


**Production\***



◆ Start Year   ◆ End Year   \* No Data

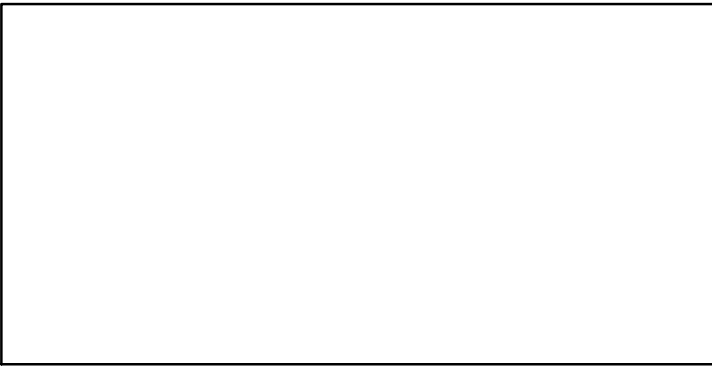
**TB\***



**SSB\***



**TN \***



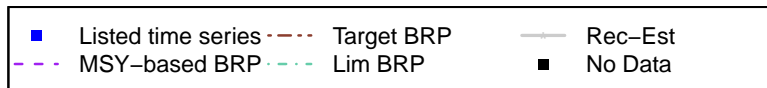
**F\***



**ER\***



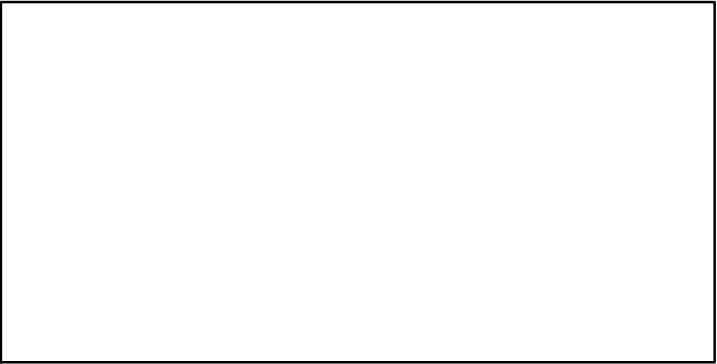
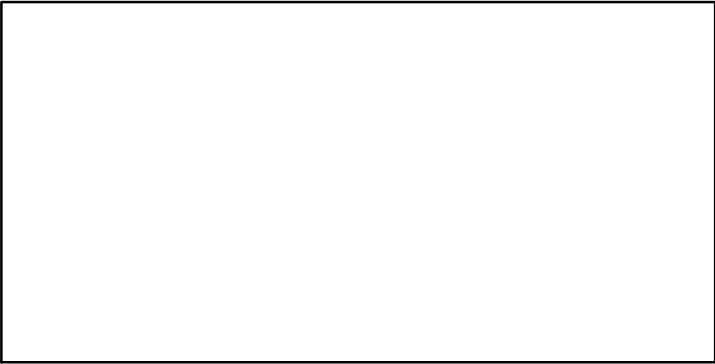
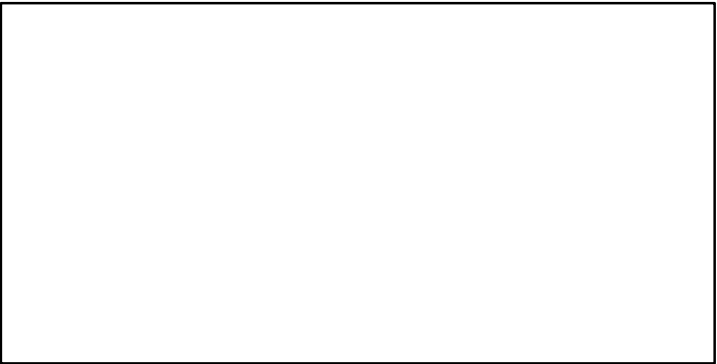
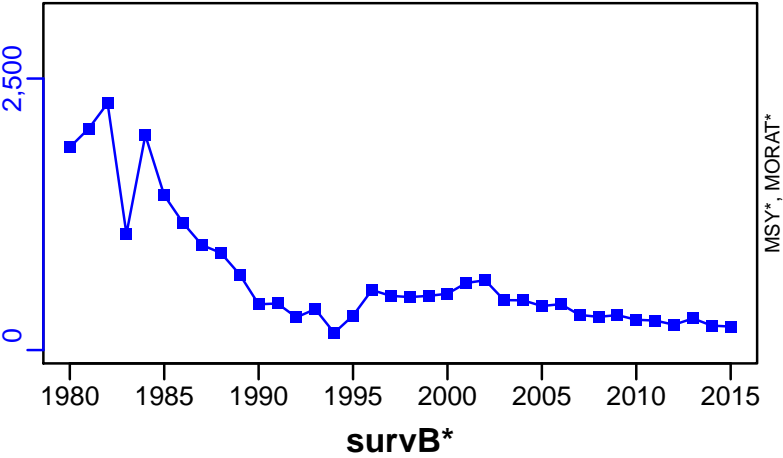
**Recruits\***



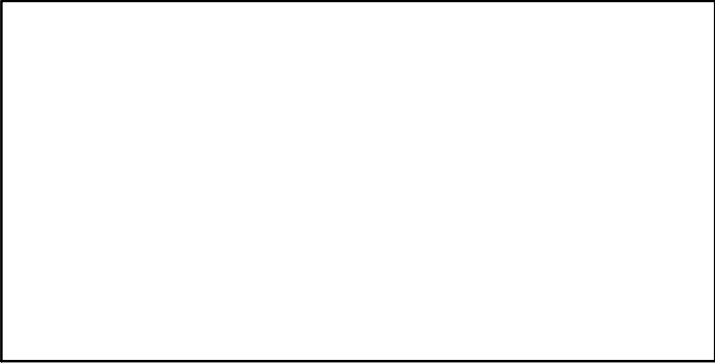
European flounder Subdivisions 27 and 29–32 [EFLOUN27–2932]

TL–MT, TC\*, RecC\* (1980–2016–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## European pollack IIIa and North Sea [EPOLLIV-IIIa]

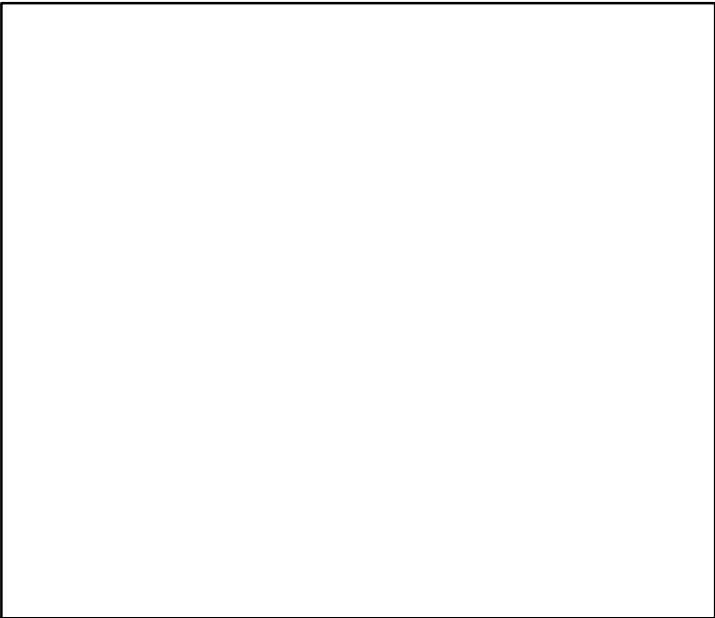
Metadata	
<b>Scientific Name</b>	Pollachius pollachius
<b>Current Assess ID</b>	WGNSSK-EPOLLIV-IIIa-1977-2016-ICESIMP2016
<b>Area</b>	IIIa and North Sea
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
<b>Asmts in RAM</b>	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-	-	-
TL	TL-MT	2016	1970	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-



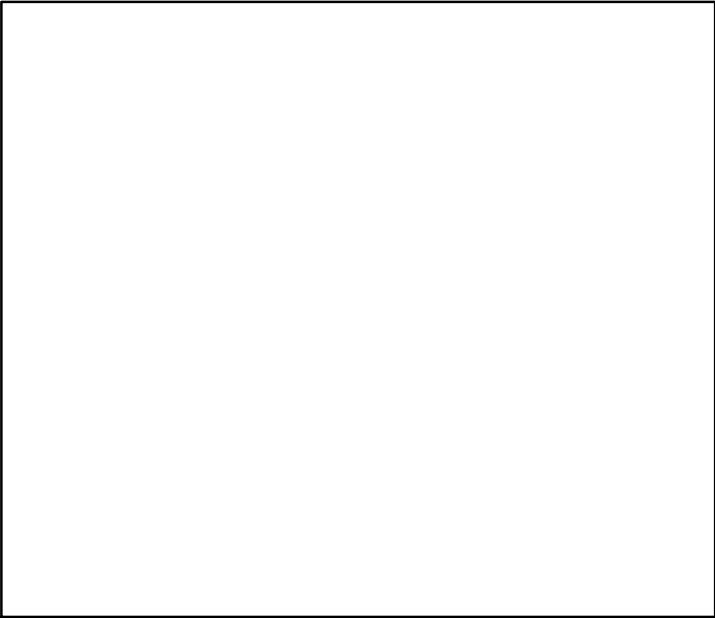
Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year    ◆ End Year    \* No Data

European pollack IIIa and North Sea [EPOLLIV-IIIa]

TB\*



SSB\*



TN \*



F\*



ER\*

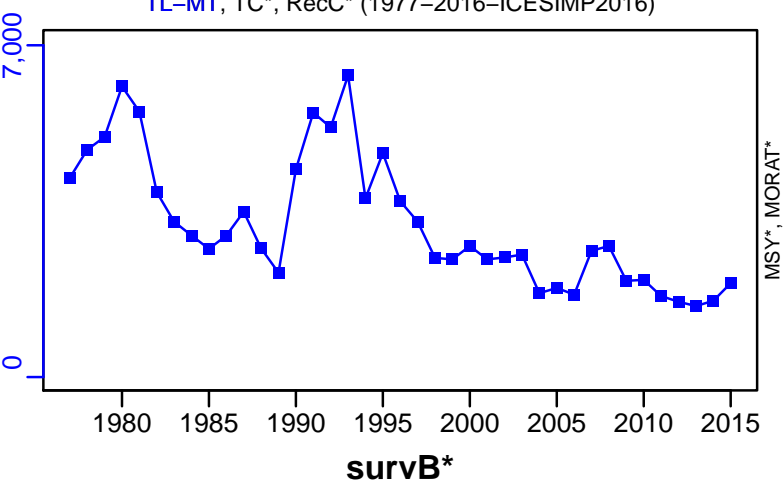


Recruits\*



European pollack IIIa and North Sea [EPOLLIV-IIIa]

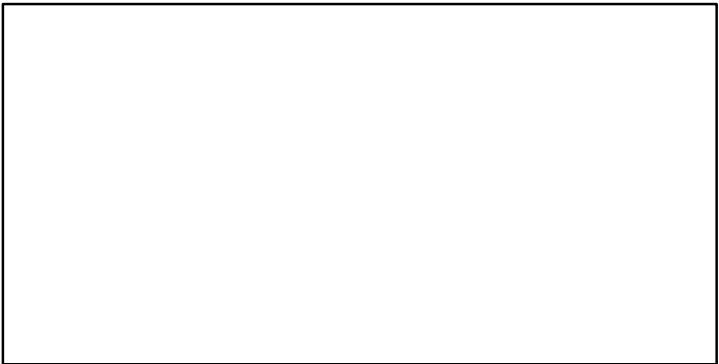
TL-MT, TC\*, RecC\* (1977-2016-ICESIMP2016)



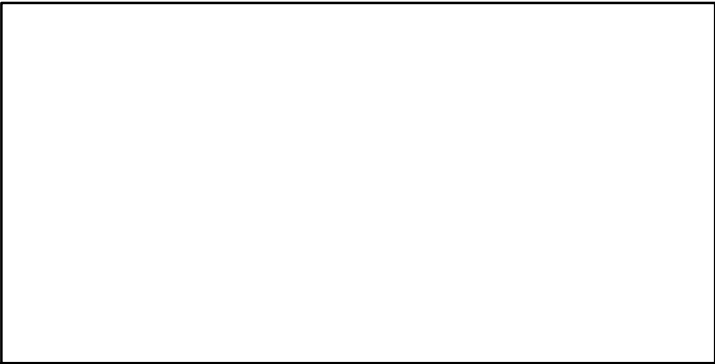
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## European pollack VIII and IXa [EPOLLVIII-IXa]

Metadata	
<b>Scientific Name</b>	Pollachius pollachius
<b>Current Assess ID</b>	WGBIE-EPOLLVIII-IXa-1985-2016-ICESIMP2016
<b>Area</b>	VIII and IXa
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
<b>Asmts in RAM</b>	2015, 2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	1610		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year    ◆ End Year    \* No Data

European pollack VIII and IXa [EPOLLVIII-IXa]

TB\*



SSB\*



TN \*



F\*



ER\*



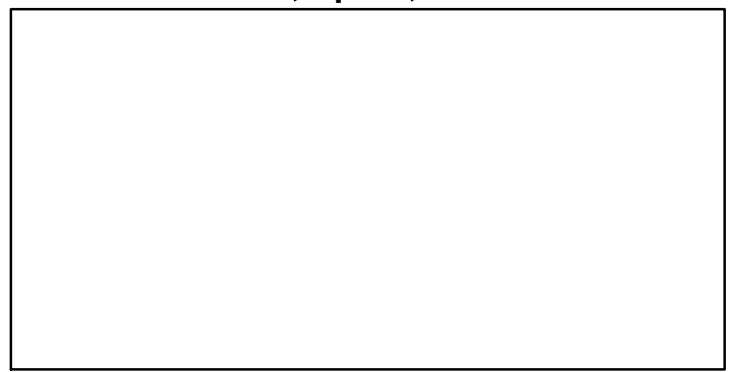
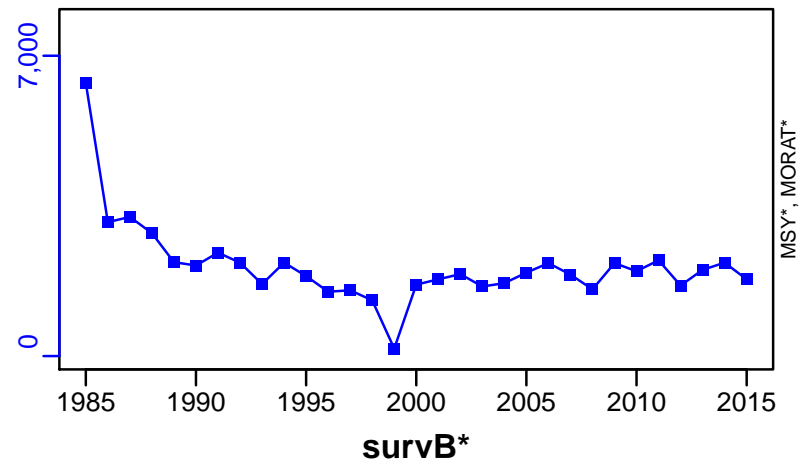
Recruits\*



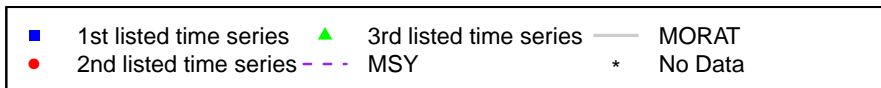
# European pollack VIII and IXa [EPOLLVIII-IXa]

TL-MT, TC\*, RecC\* (1985–2016–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Fourspotted megrim ICES VIIIc-IXa [FMEG8c9a]

Metadata	
<b>Scientific Name</b>	Lepidorhombus boscii
<b>Current Assess ID</b>	WGBIE-FMEG8c9a-1986-2016-ICESIMP2016
<b>Area</b>	VIIIc-IXa
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
<b>Asmts in RAM</b>	2014, 2015, 2016, 2010, 2013

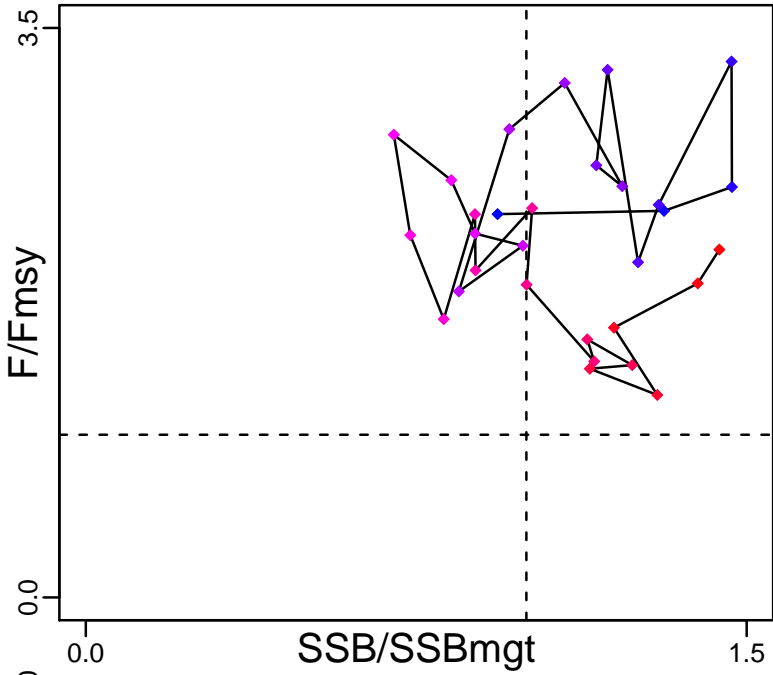
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.19
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	4600
<b>Fmgt</b>	Fmgt-1/yr	2016	0.19
<b>ERMgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2010	0.2
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	3300
<b>Flim</b>	Flim-1/yr	2016	0.57
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	7910	-	-
<b>SSB</b>	SSB-MT	2016	7180	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	43,300,000	-	0
<b>F</b>	F-1/yr	2016	0.41	-	2 to 4
<b>ER</b>	ER-calc-ratio	2016	0.22	-	-
<b>TC</b>	TC-MT	2016	1750		
<b>TL</b>	TL-MT	2016	1150		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	2.14		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	1.56		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	2.14		
<b>ER/ERMgt</b>	-	-	-		

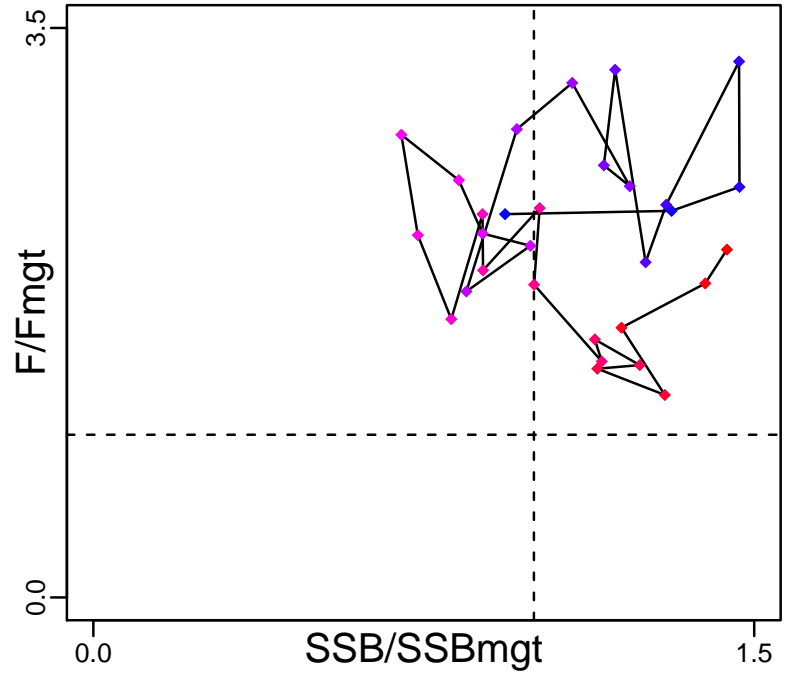


Fourspotted megrim ICES VIIIc-IXa [FMEG8c9a]

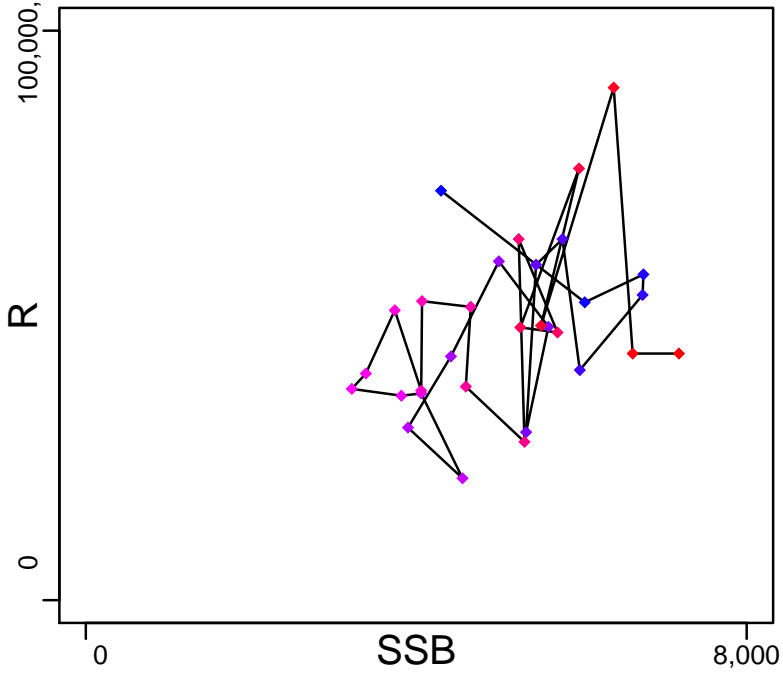
Kobe MSYpref (1986–2016–ICESIMP2016)



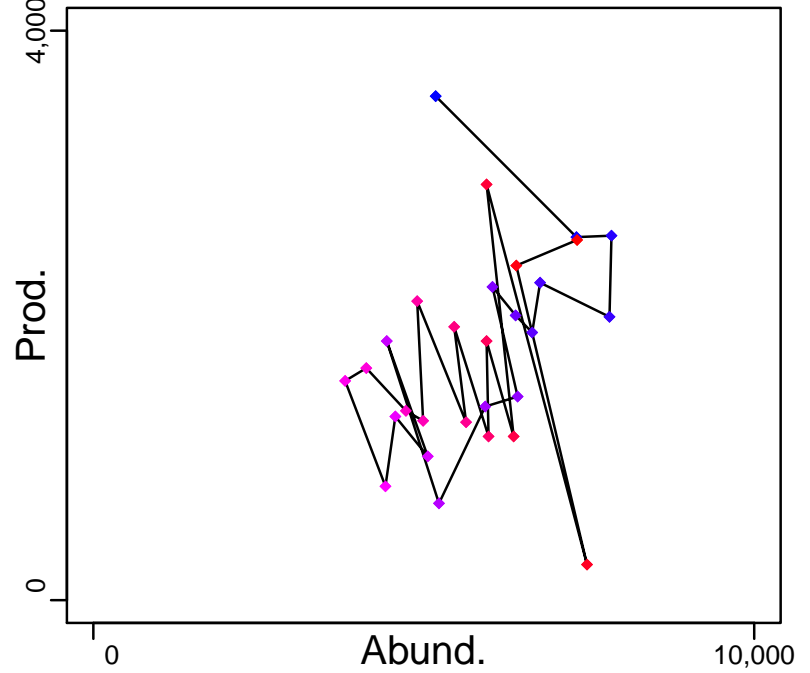
Kobe MGTpref (1986–2016–ICESIMP2016)



Spawner Recruit (1986–2016–ICESIMP2016)



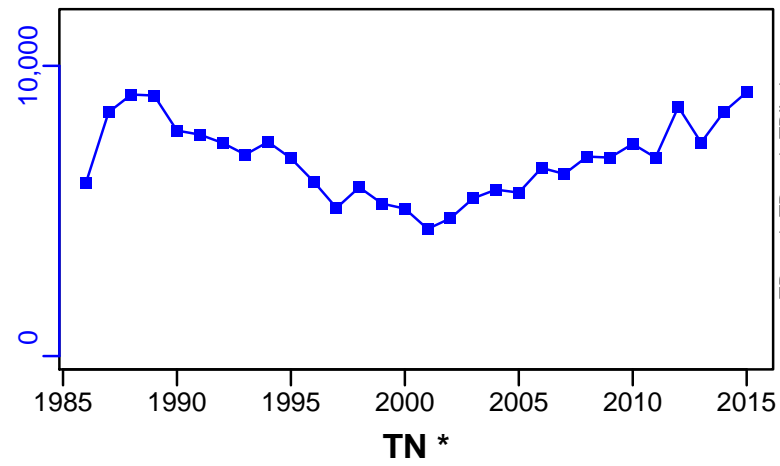
Production (1986–2016–ICESIMP2016)



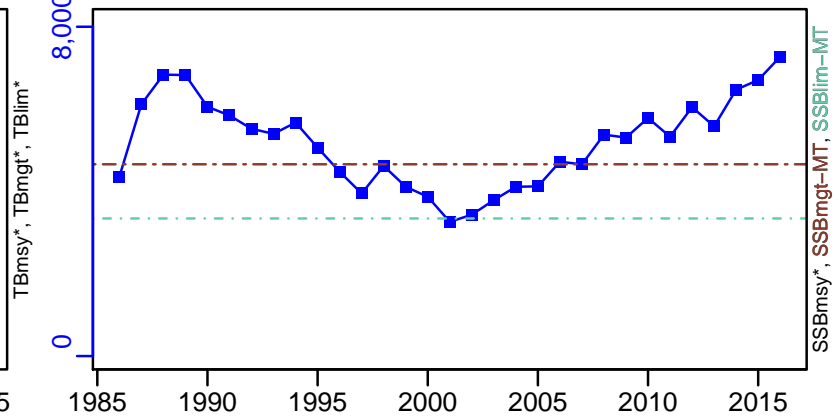
◆ Start Year ◆ End Year \* No Data

# Fourspotted megrim ICES VIIIc-IXa [FMEG8c9a]

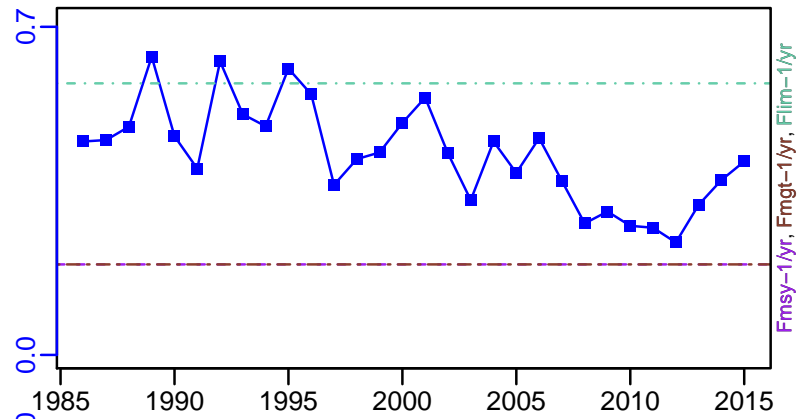
TB-MT (1986–2016–ICESIMP2016)



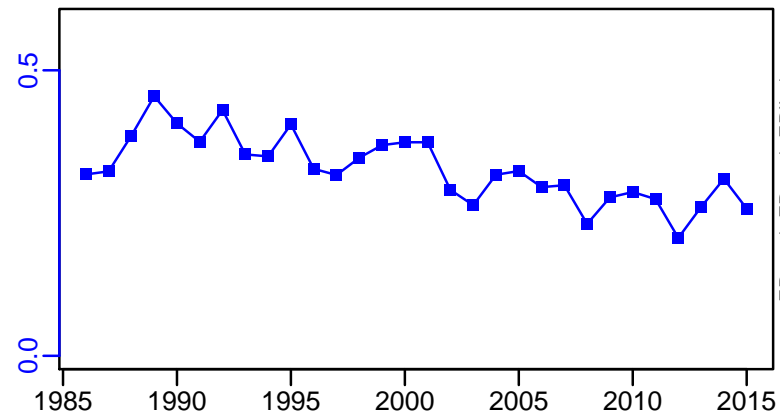
SSB-MT (1986–2016–ICESIMP2016)



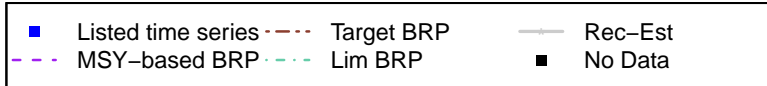
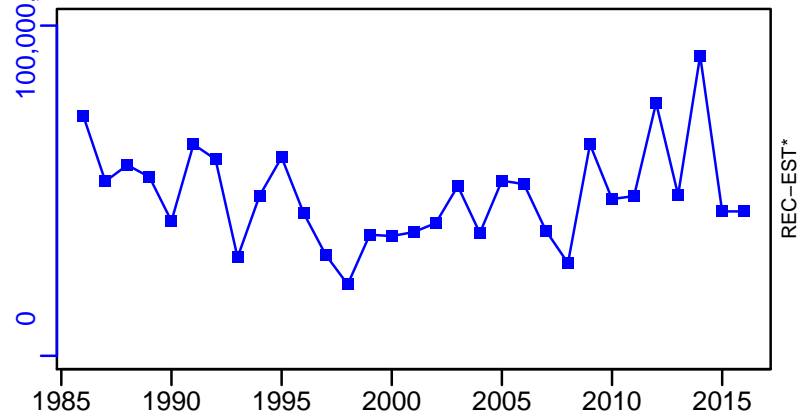
F-1/yr (1986–2016–ICESIMP2016)



ER-calc-ratio (1986–2016–ICESIMP2016)



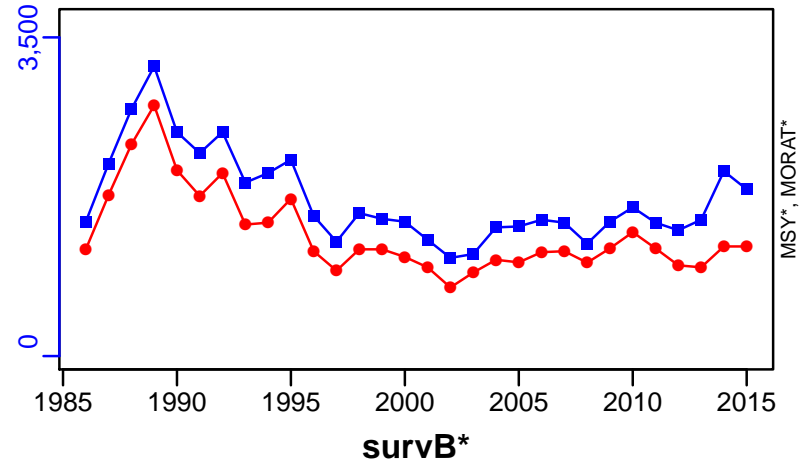
R-E00 (1986–2016–ICESIMP2016)



# Fourspotted megrim ICES VIIIc-IXa [FMEG8c9a]

TC-MT, TL-MT, RecC\* (1986-2016-ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Greater forkbeard Northeast Atlantic [GFORKNEATL]

Metadata	
<b>Scientific Name</b>	Phycis blennoides
<b>Current Assess ID</b>	WGDEEP-GFORKNEATL-2005-2016-ICESIMP2016
<b>Area</b>	Northeast Atlantic
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
<b>Asmts in RAM</b>	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	2170		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

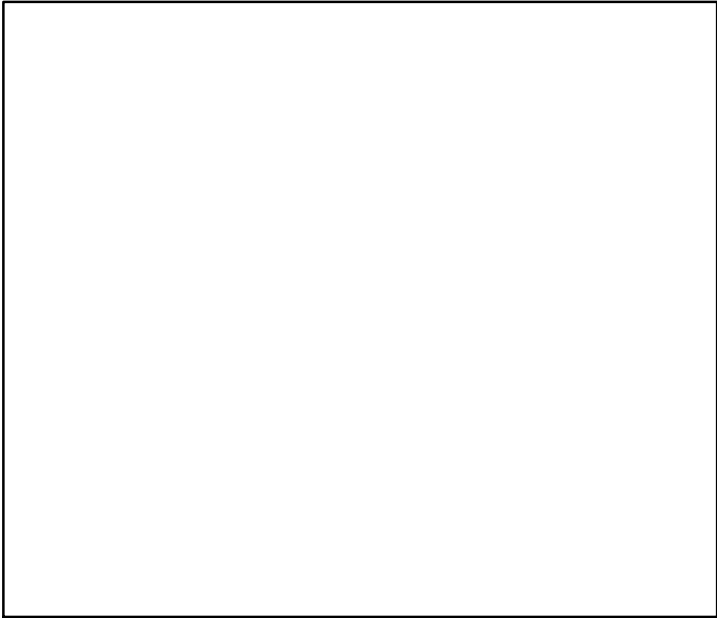
Kobe MSY\*



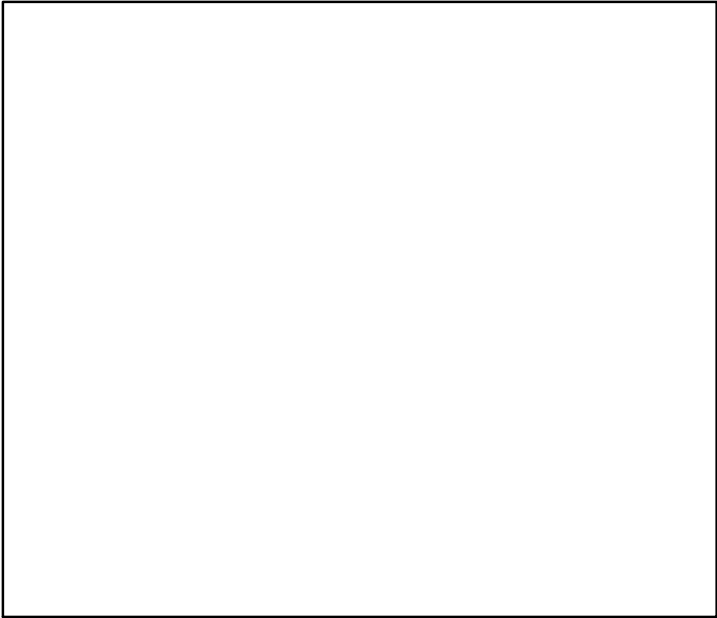
Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

Greater forkbeard Northeast Atlantic [GFORKNEATL]

TB\*



SSB\*



TN \*



F\*



ER\*

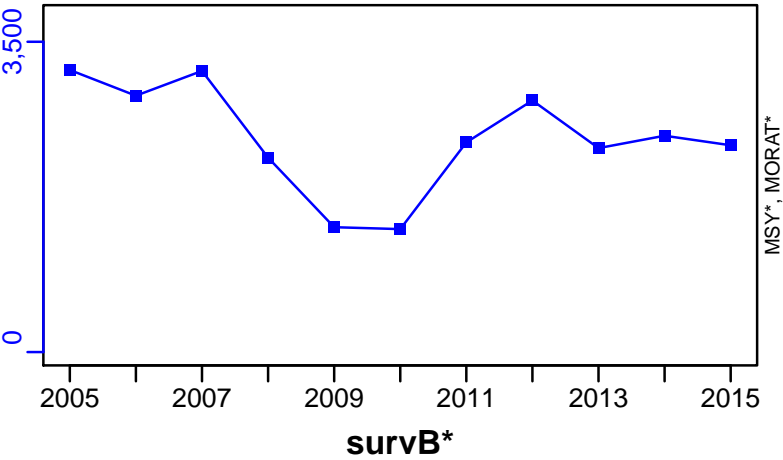


Recruits\*



Greater forkbeard Northeast Atlantic [GFORKNEATL]

TL-MT, TC\*, RecC\* (2005–2016–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Grey gurnard IIIa, VIId and North Sea [GGURNIIIa-IV-VIId]

Metadata	
<b>Scientific Name</b>	Eutrigla gurnardus
<b>Current Assess ID</b>	WGNSSK-GGURNIIIa-IV-VIId-1983-2016-ICESIMP2016
<b>Area</b>	IIIa, VIId and North Sea
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
<b>Asmts in RAM</b>	2016

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

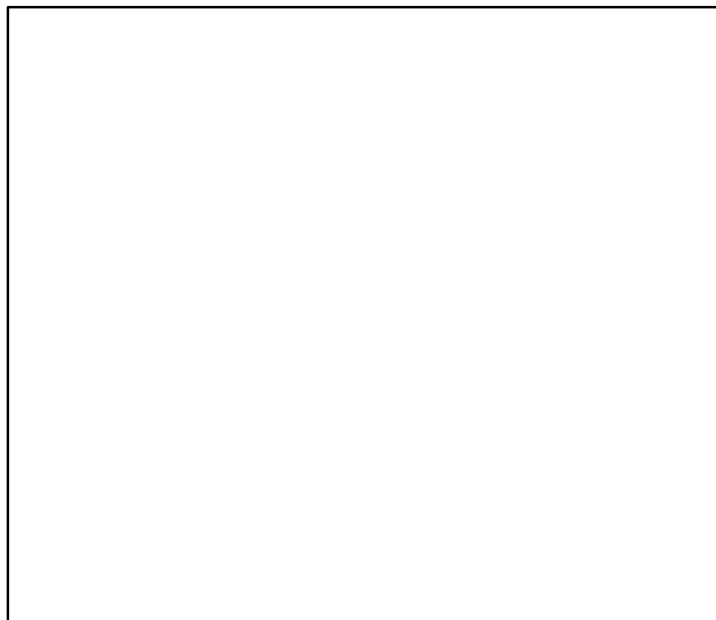
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	2030		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data

Grey gurnard IIIa, VIId and North Sea [GGURNIIIa–IV–VIId]

**TB\***



**SSB\***



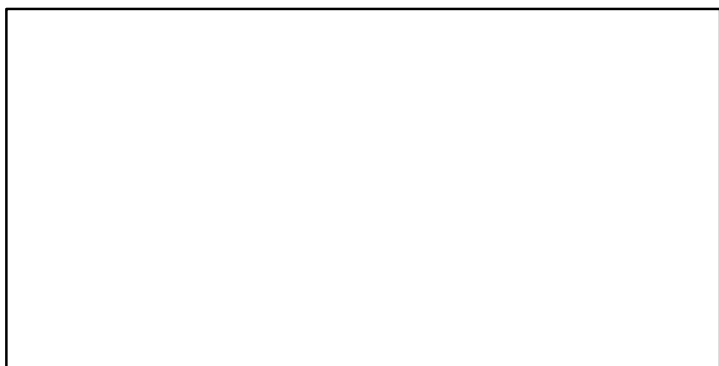
**TN \***



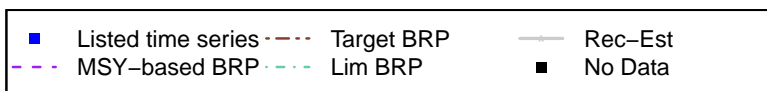
**F\***



**ER\***



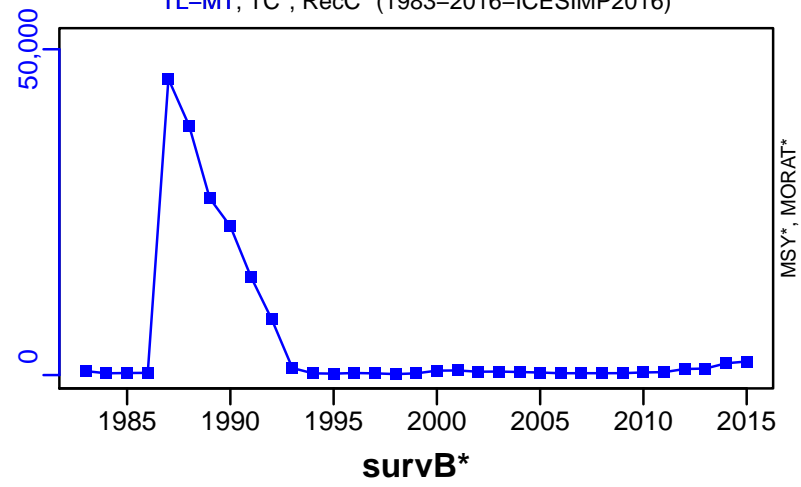
**Recruits\***



# Grey gurnard IIIa, VIId and North Sea [GGURNIIIa-IV-VIId]

TL-MT, TC\*, RecC\* (1983-2016-ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Greenland halibut NAFO 01ABCDEF [GHAL01ABCDEF]

Metadata	
<b>Scientific Name</b>	Reinhardtius hippoglossoides
<b>Current Assess ID</b>	NAFO-SC-GHAL01ABCDEF-1987-2006-PREFONTAINE
<b>Area</b>	NAFO divisions 01ABCDEF
<b>Management Authority</b>	Northwest Atlantic Fisheries Organization
<b>Assessor</b>	NAFO Scientific Council
<b>Asmts in RAM</b>	2006

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2006	0.22
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-1-MT	2006	12,200		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



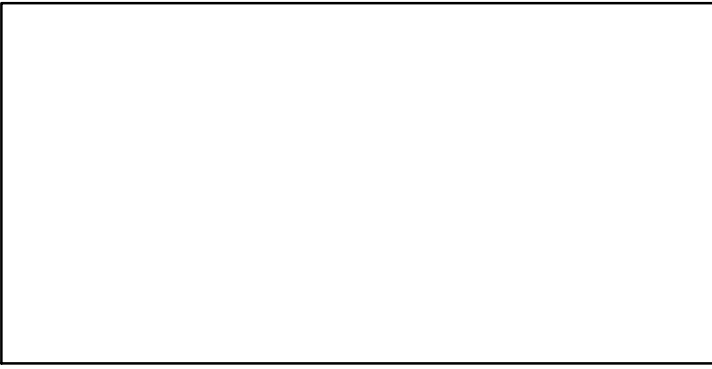
**Production\***



◆ Start Year ◆ End Year \* No Data

Greenland halibut NAFO 01ABCDEF [GHAL01ABCDEF]

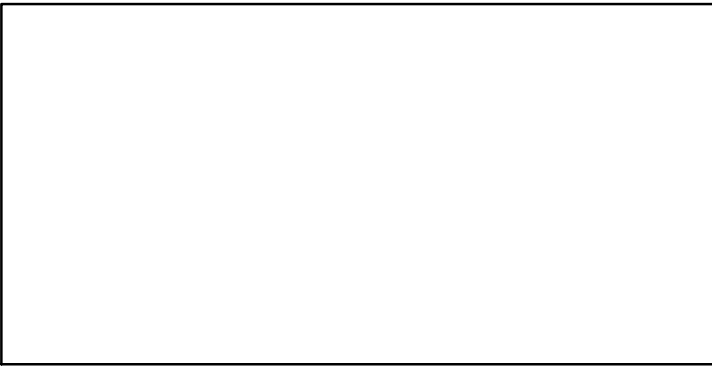
**TB\***



**SSB\***



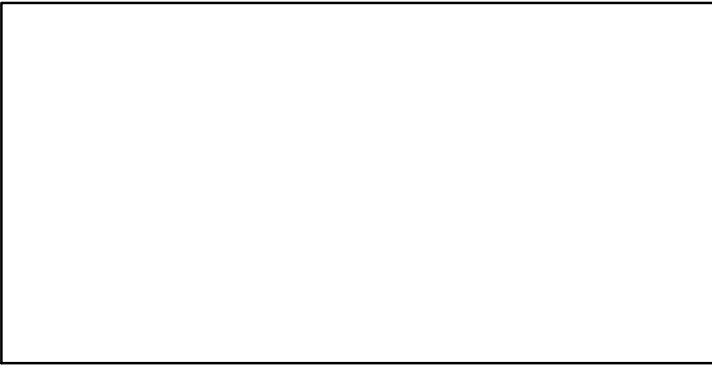
**TN \***



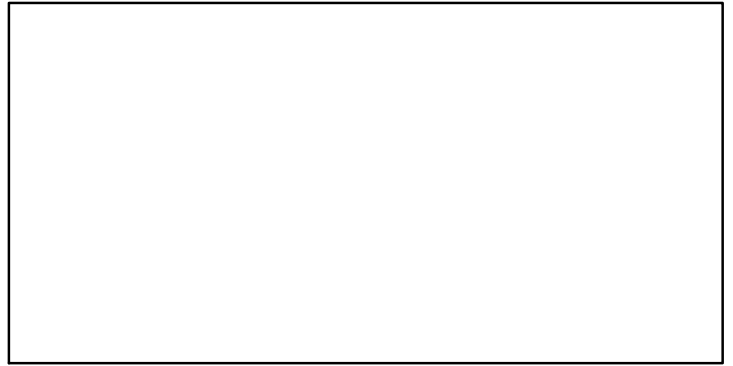
**F\***



**ER\***



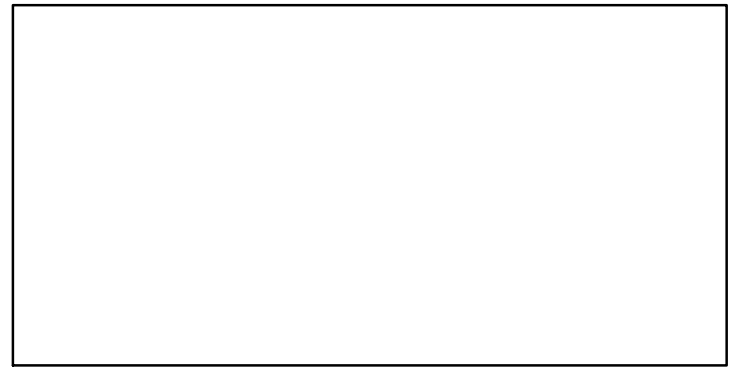
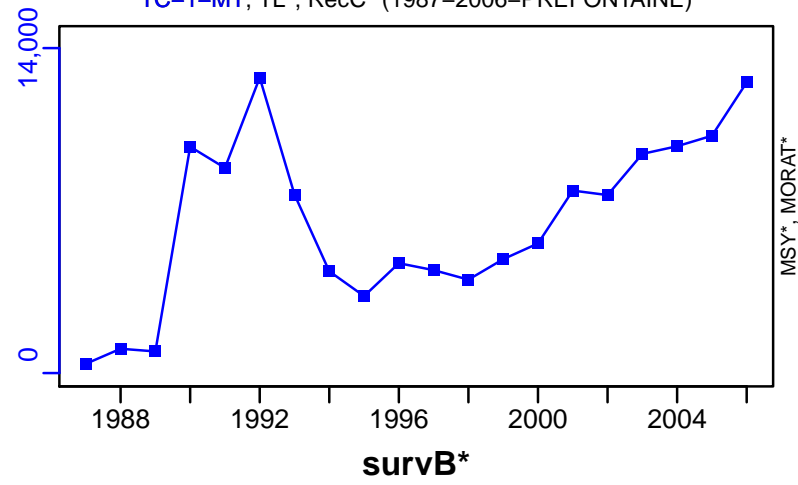
**Recruits\***



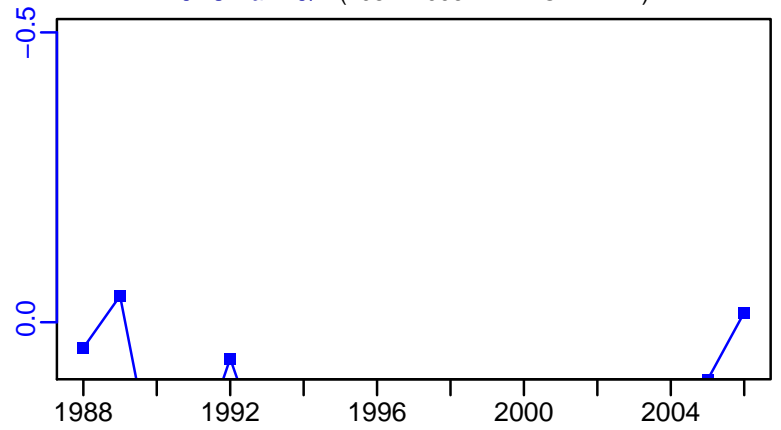
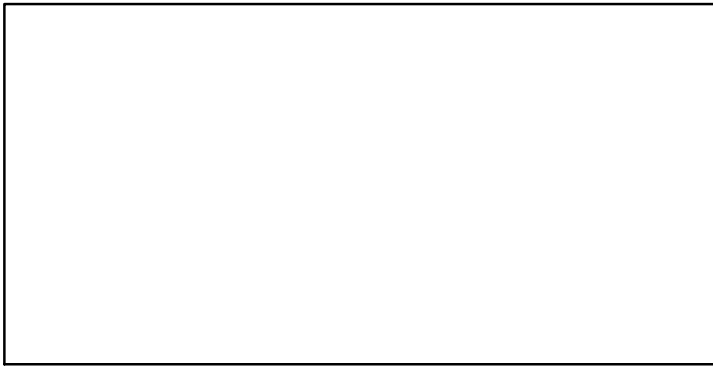
# Greenland halibut NAFO 01ABCDEF [GHAL01ABCDEF]

TC-1-MT, TL\*, RecC\* (1987-2006-PREFONTAINE)

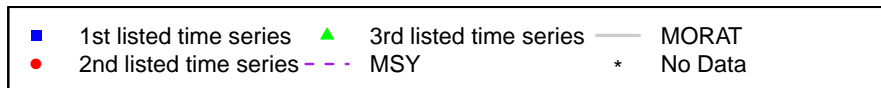
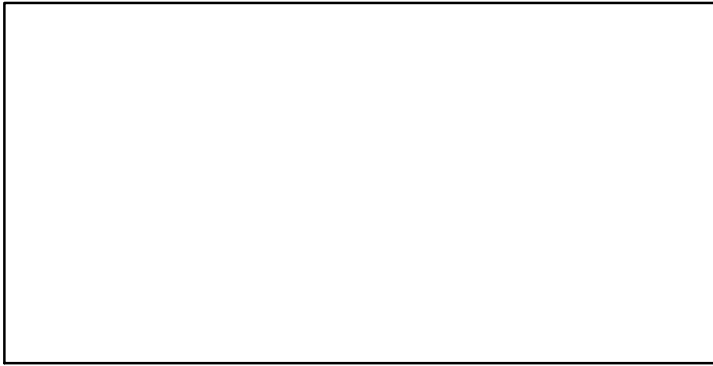
TAC\*, Cpair\*, Cadv\*



CPUE<sub>raw</sub>-C/E (1987-2006-PREFONTAINE)



EFFORT\*



## Greenland halibut V-VI-XII-XIV [GHALV-VI-XII-XIV]

Metadata	
<b>Scientific Name</b>	Reinhardtius hippoglossoides
<b>Current Assess ID</b>	NWWG-GHALV-VI-XII-XIV-1960-2016-ICESIMP2016
<b>Area</b>	V-VI-XII-XIV
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	North-Western Working Group
<b>Asmts in RAM</b>	2012, 2013, 2014, 2015, 2016

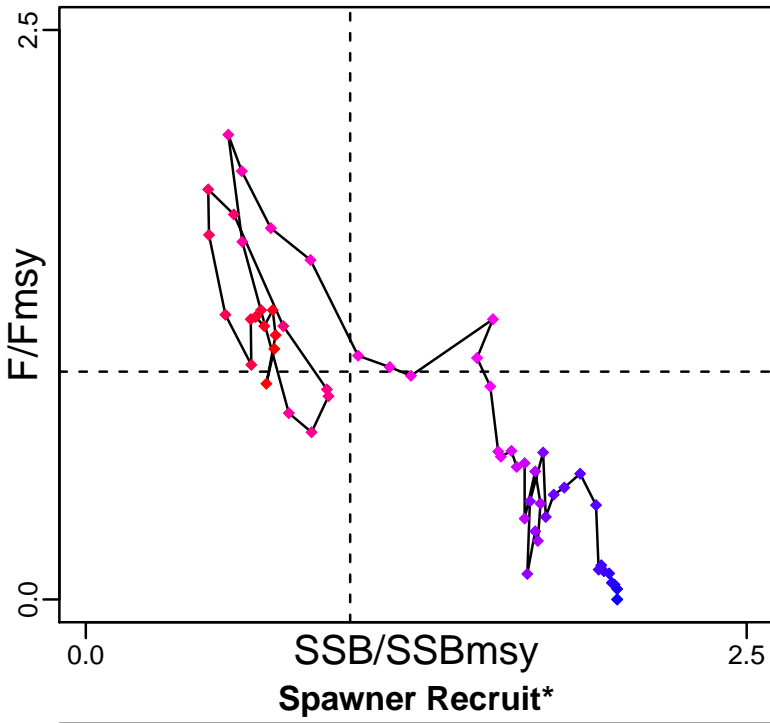
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	25,700		
TL	TL-MT	2016	25,700		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2016	0.73		
F/Fmsy	FdivFmsy-dimensionless	2016	1.1		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

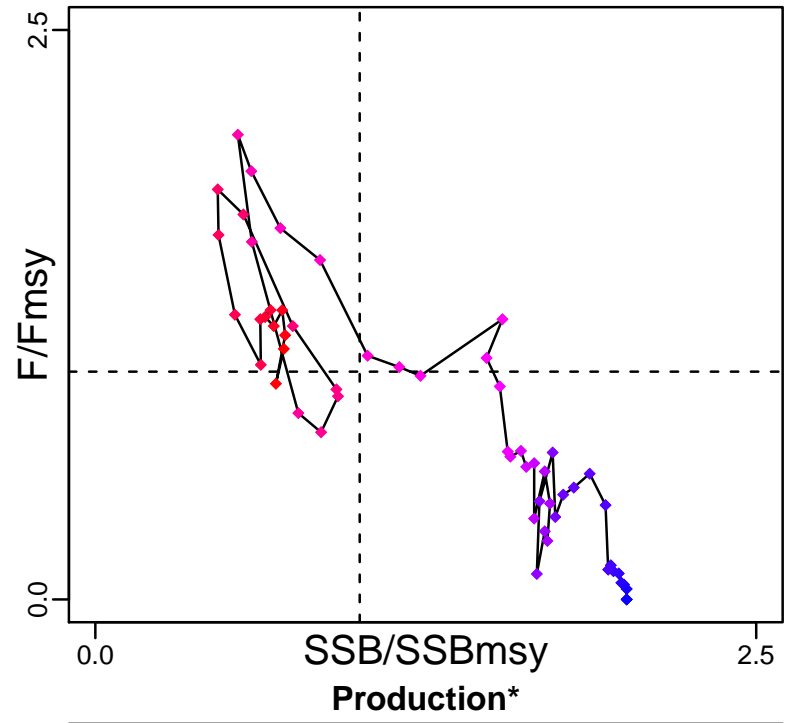


# Greenland halibut V-VI-XII-XIV [GHALV-VI-XII-XIV]

Kobe MSYpref (1960–2016–ICESIMP2016)



Kobe MGTpref (1960–2016–ICESIMP2016)



◆ Start Year ◆ End Year \* No Data

Greenland halibut V–VI–XII–XIV [GHALV–VI–XII–XIV]

**TB\***



**SSB\***



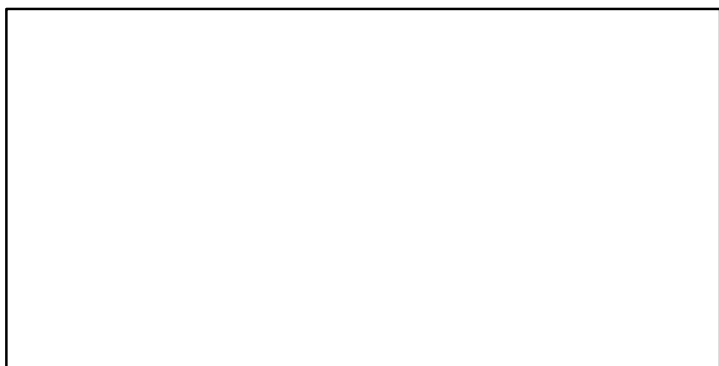
**TN \***



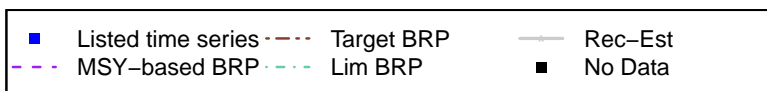
**F\***



**ER\***

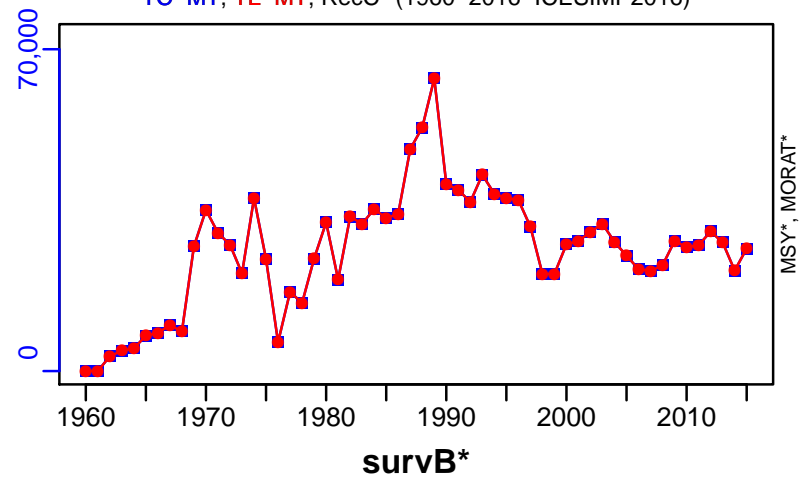


**Recruits\***



# Greenland halibut V-VI-XII-XIV [GHALV-VI-XII-XIV]

TC-MT, TL-MT, RecC\* (1960-2016-ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Golden Redfish V-VI-XII-XIV [GOLDREDV-VI-XII-XIV]

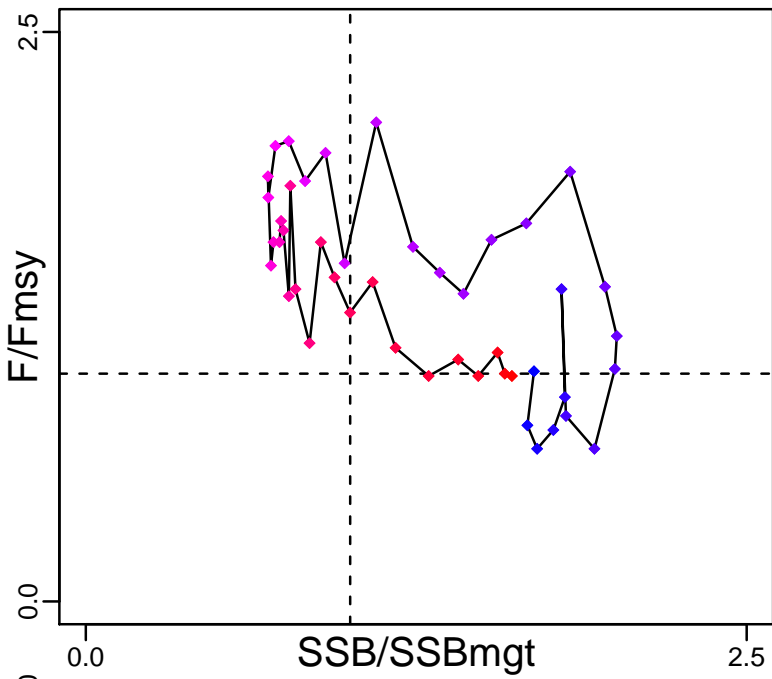
Metadata	
<b>Scientific Name</b>	Sebastes norvegicus
<b>Current Assess ID</b>	NWWG-GOLDREDV-VI-XII-XIV-1971-2016-ICESIMP2016
<b>Area</b>	V-VI-XII-XIV
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	North-Western Working Group
<b>Asmts in RAM</b>	2014, 2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2016	0.1
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2016	220,000
Fmgt	Fmgt-1/yr	2016	0.1
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	SSBlim-MT	2016	160,000
Flim	Flim-1/yr	2016	0.23
ERlim	-	-	-

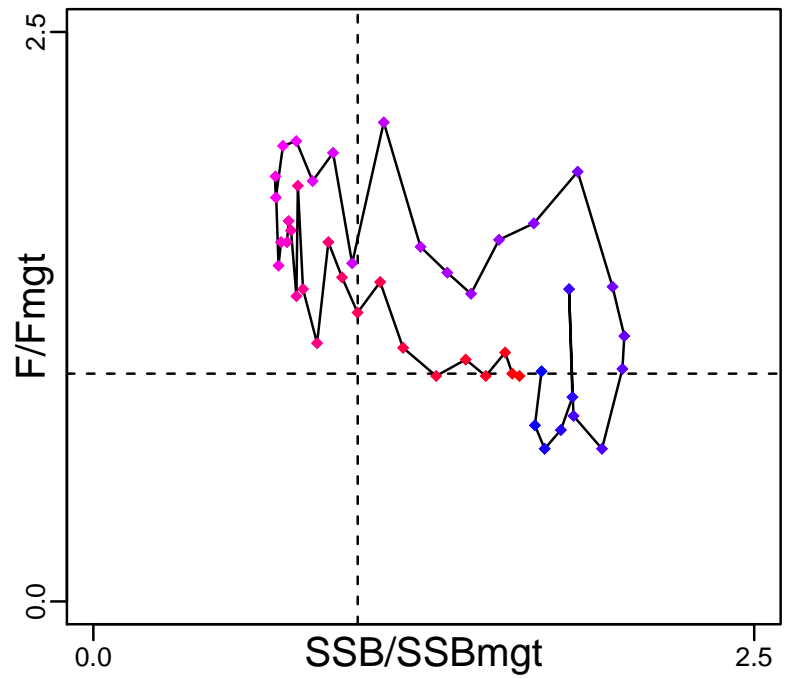
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2016	528,000	-	-
SSB	SSB-MT	2016	355,000	-	-
TN	-	-	-	-	-
R	R-E00	2016	$5.4 \times 10^7$	-	0
F	F-1/yr	2016	0.1	-	-
ER	ER-calc-ratio	2016	0.1	-	-
TC	TC-MT	2016	51,600		
TL	TL-MT	2016	51,600		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2016	0.99		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2016	1.61		
F/Fmgt	F-1/yr/Fmgt-1/yr	2016	0.99		
ER/ERmgt	-	-	-		

# Golden Redfish V-VI-XII-XIV [GOLDREDV-VI-XII-XIV]

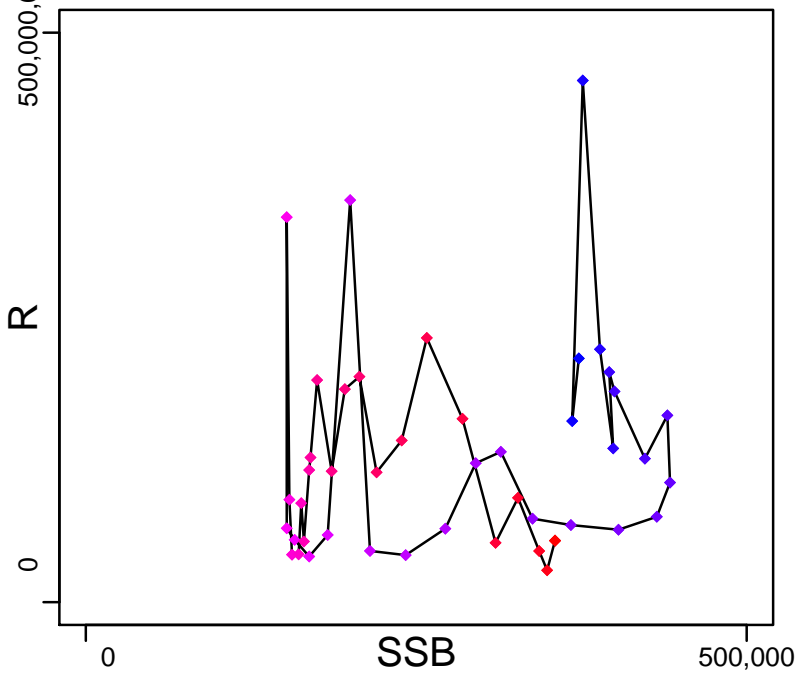
Kobe MSYpref (1971-2016-ICESIMP2016)



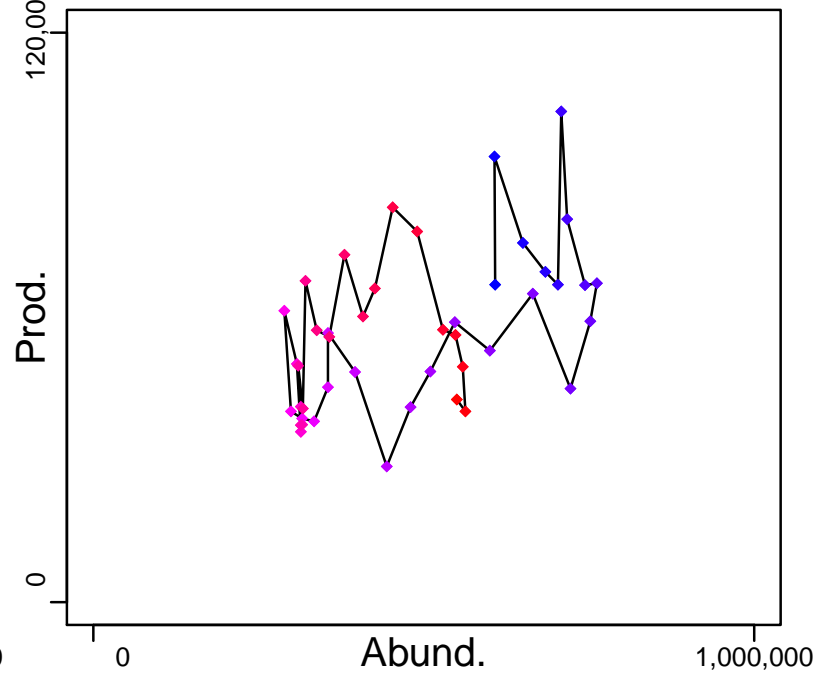
Kobe MGTpref (1971-2016-ICESIMP2016)



Spawner Recruit (1971-2016-ICESIMP2016)



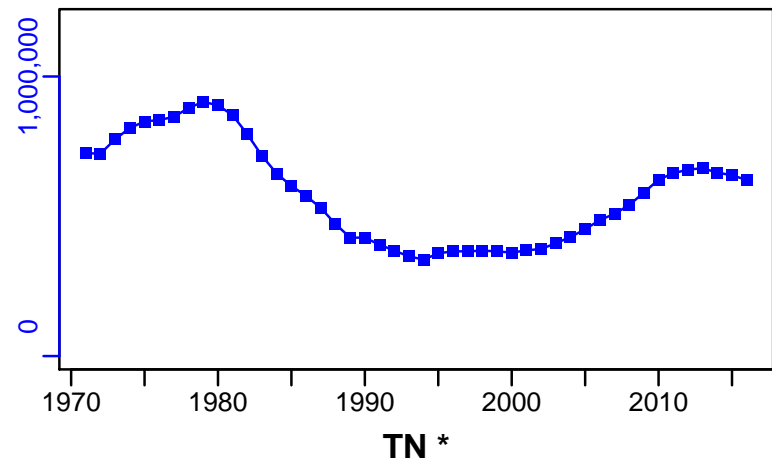
Production (1971-2016-ICESIMP2016)



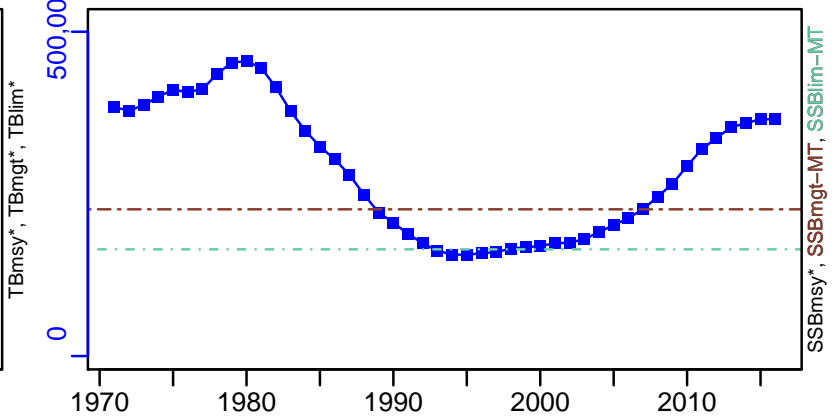
◆ Start Year ◆ End Year \* No Data

# Golden Redfish V-VI-XII-XIV [GOLDREDV-VI-XII-XIV]

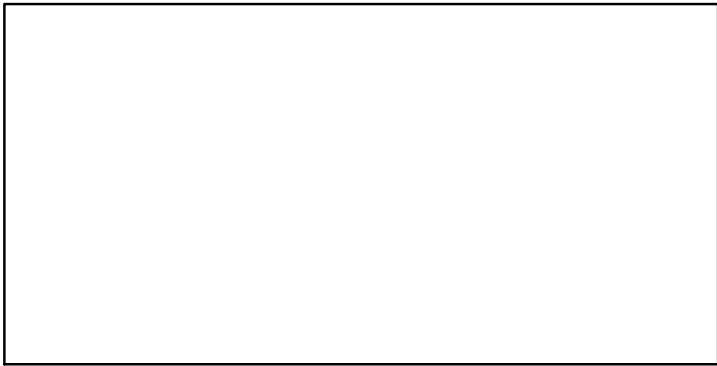
TB-MT (1971-2016-ICESIMP2016)



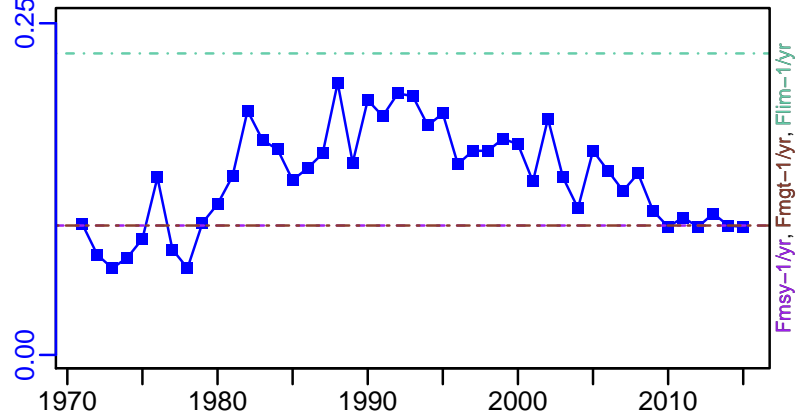
SSB-MT (1971-2016-ICESIMP2016)



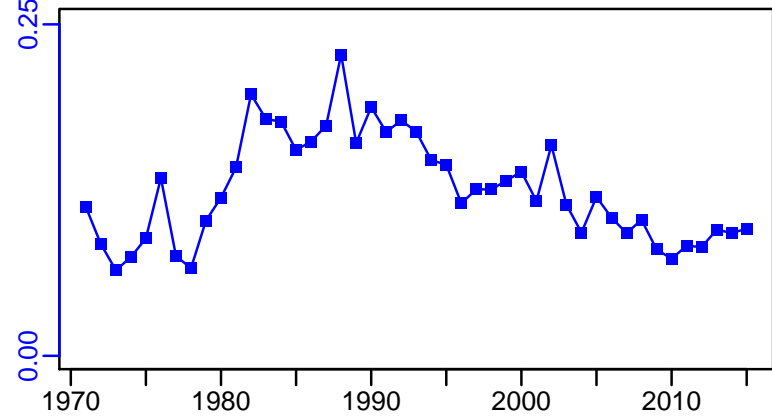
TN \*



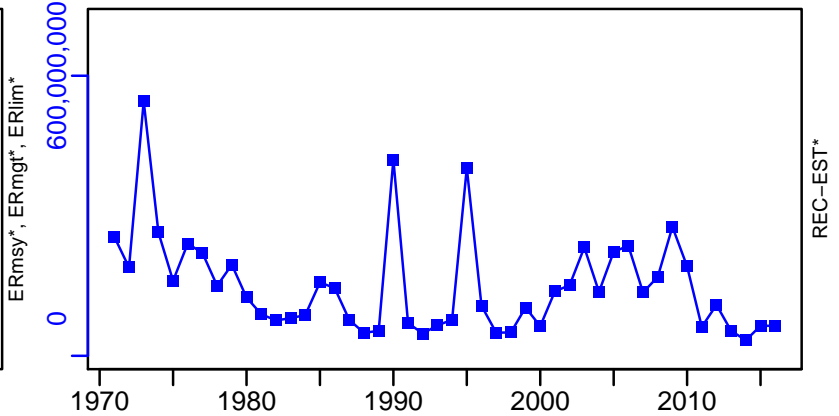
F-1/yr (1971-2016-ICESIMP2016)



ER-calc-ratio (1971-2016-ICESIMP2016)



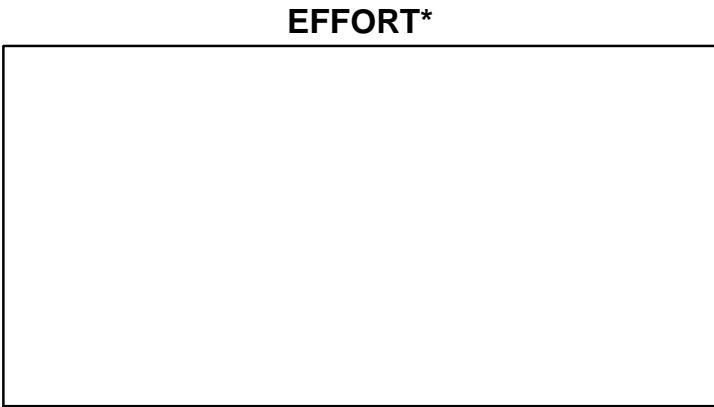
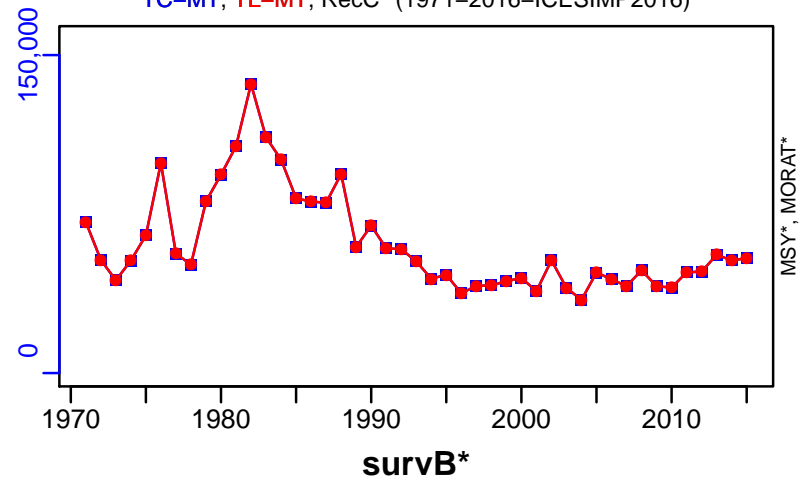
R-E00 (1971-2016-ICESIMP2016)



# Golden Redfish V-VI-XII-XIV [GOLDREDV-VI-XII-XIV]

TC-MT, TL-MT, RecC\* (1971-2016-ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



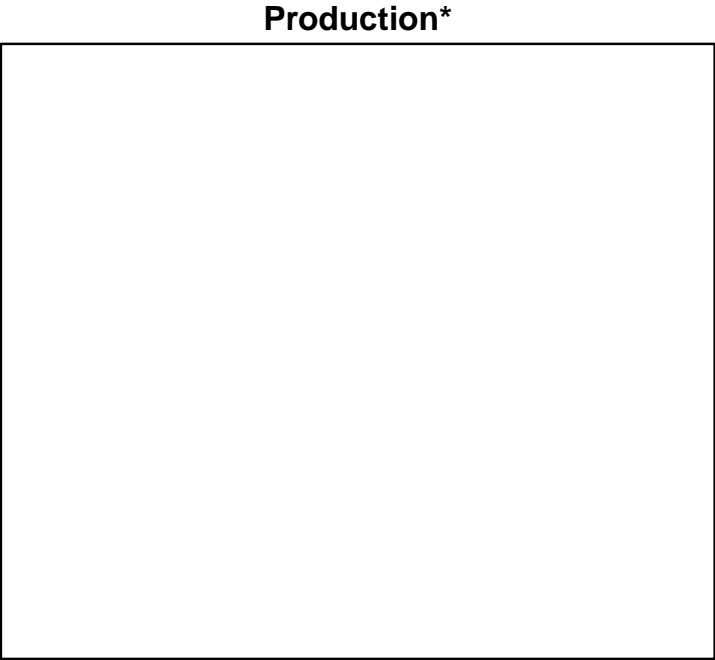
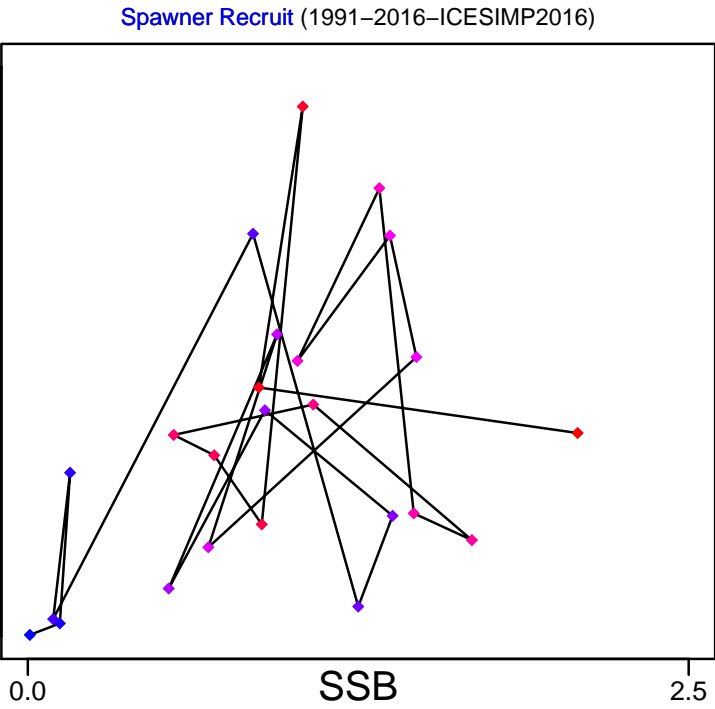
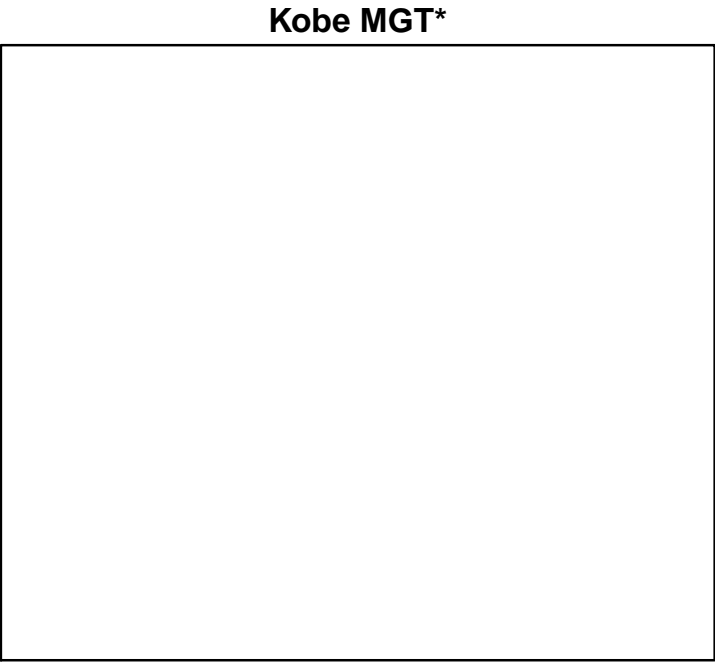
## Haddock Irish Sea [HADIS]

Metadata	
<b>Scientific Name</b>	Melanogrammus aeglefinus
<b>Current Assess ID</b>	WGCSE-HADIS-1991-2016-ICESIMP2016
<b>Area</b>	Irish Sea
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2014, 2015, 2016, 2012

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-relative	2012	1	-	-
SSB	SSB-relative	2016	3	-	-
TN	-	-	-	-	-
R	R-relative	2016	1	-	1
F	F-relative	2016	0.86	-	-
ER	-	-	-	-	-
TC	TC-MT	2015	1010		
TL	TL-MT	2016	832		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

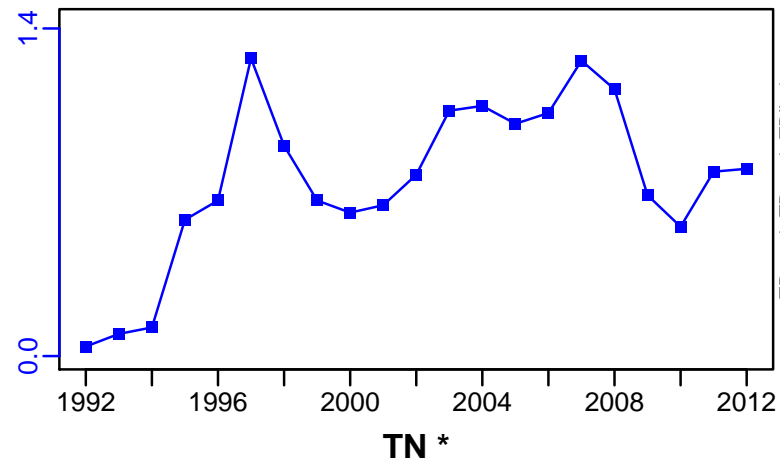




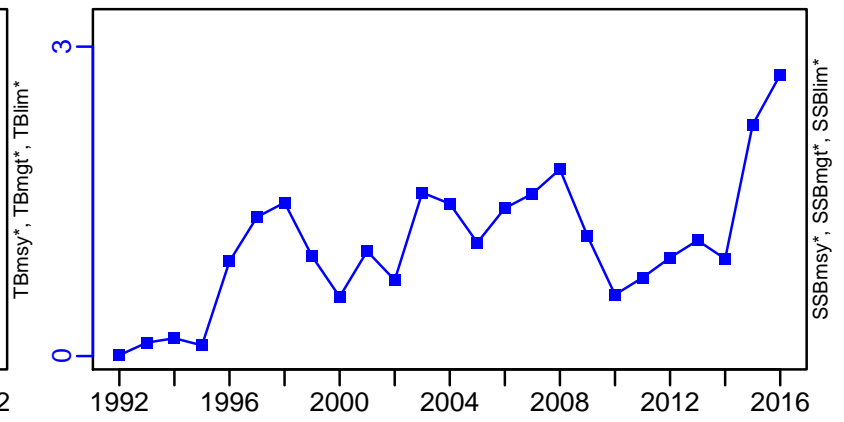
◆ Start Year ◆ End Year \* No Data

# Haddock Irish Sea [HADIS]

TB-relative (1972–2012–CHING)

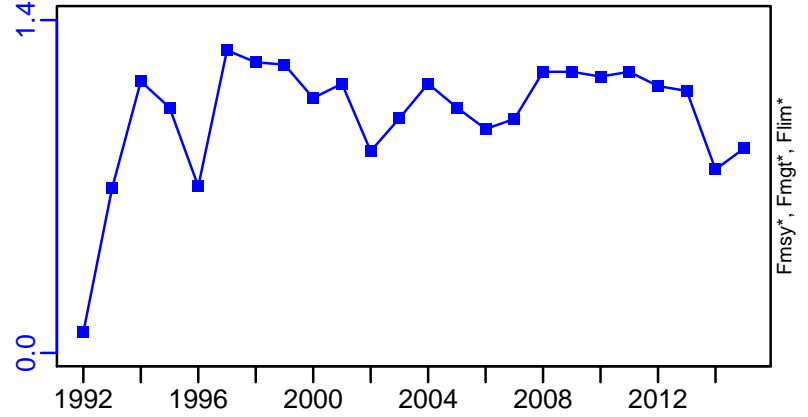


SSB-relative (1991–2016–ICESIMP2016)



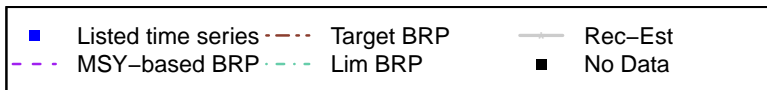
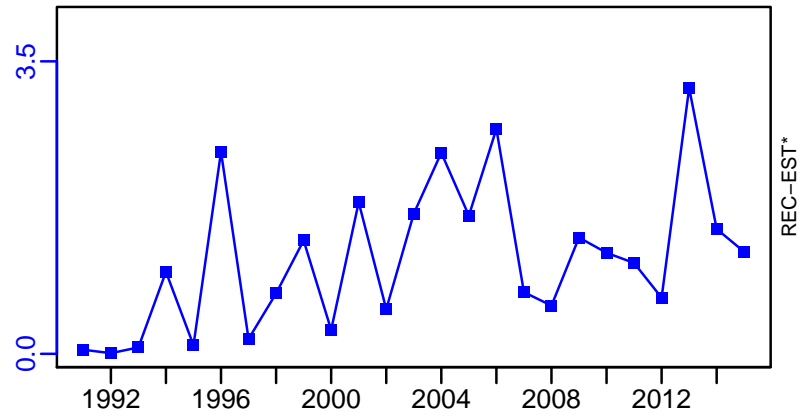
TN \*

F-relative (1991–2016–ICESIMP2016)



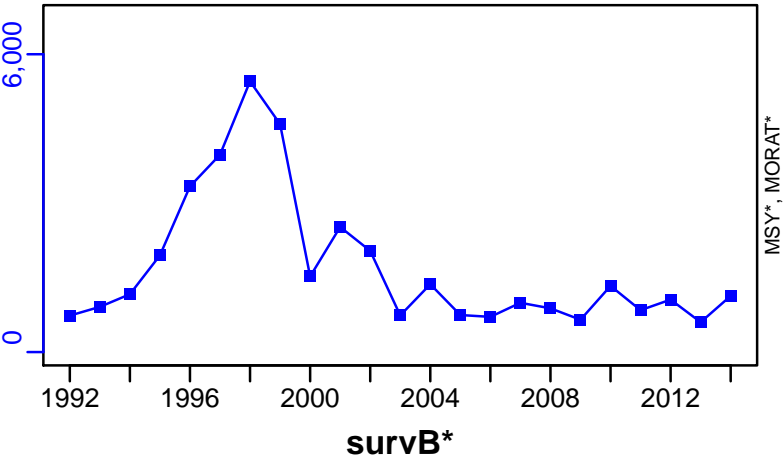
ER\*

R-relative (1991–2016–ICESIMP2016)



Haddock Irish Sea [HADIS]

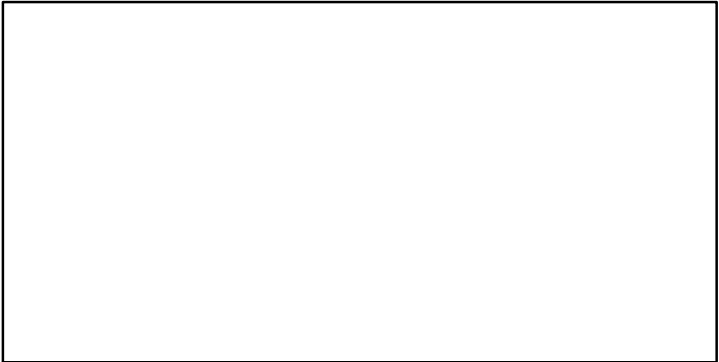
TC-MT, TL\*, RecC\* (1991-2015-ICESIMP2016)



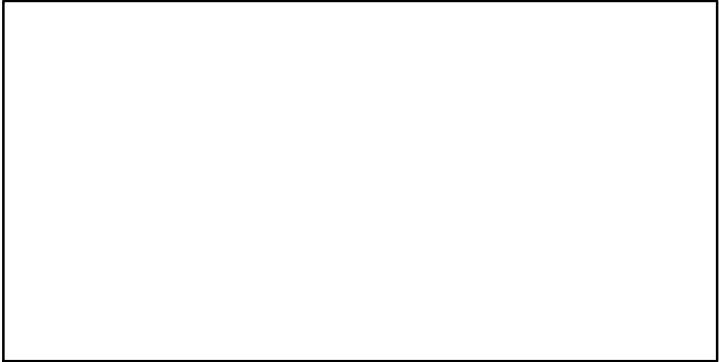
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Haddock North Sea and IIIa-VIa [HADNS-IIIa-VIa]

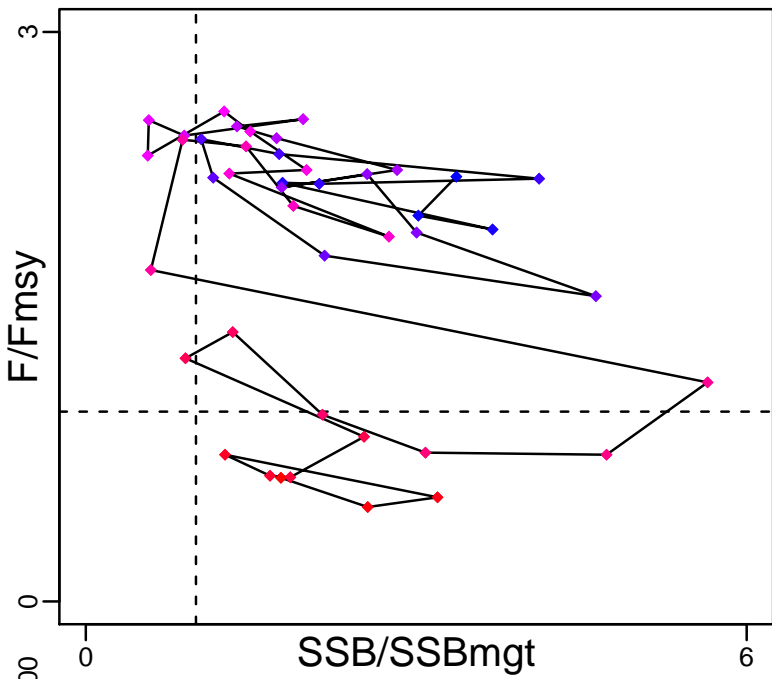
Metadata	
<b>Scientific Name</b>	Melanogrammus aeglefinus
<b>Current Assess ID</b>	WGNSSK-HADNS-IIIa-VIa-1972-2015-ICESIMP2016
<b>Area</b>	North Sea and IIIa-VIa
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
<b>Asmts in RAM</b>	2014, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2015	0.37
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2015	88,000
<b>Fmgt</b>	Fmgt-1/yr	2015	0.37
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2015	63,000
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

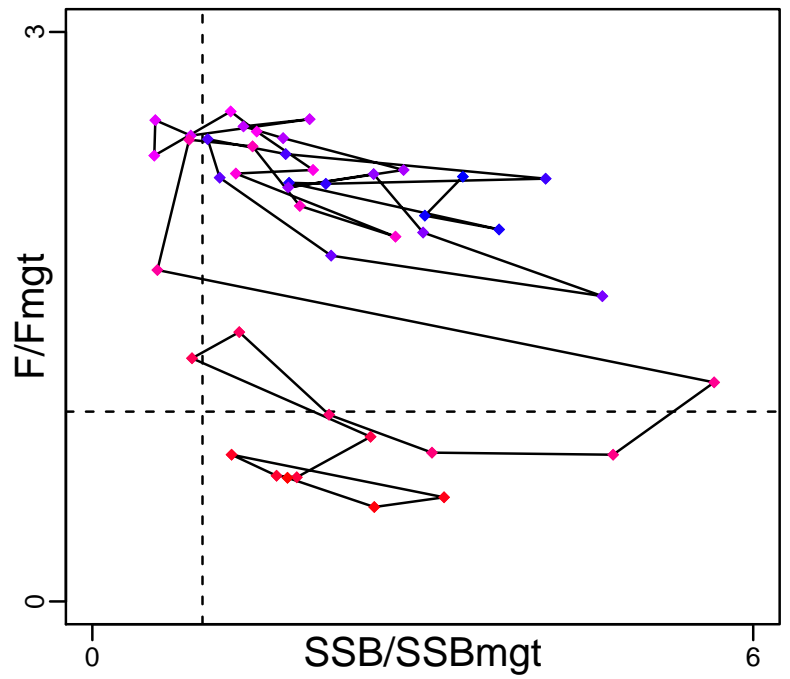
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	501,000	-	-
<b>SSB</b>	SSB-MT	2015	146,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$1.21 \times 10^9$	-	0
<b>F</b>	F-1/yr	2015	0.24	-	-
<b>ER</b>	ER-calc-ratio	2015	0.1	-	-
<b>TC</b>	TC-MT	2015	46,300		
<b>TL</b>	TL-MT	2015	39,800		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2015	0.65		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2015	1.66		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	0.65		
<b>ER/ERmgt</b>	-	-	-		

# Haddock North Sea and Illa-Via [HADNS-Illa-Via]

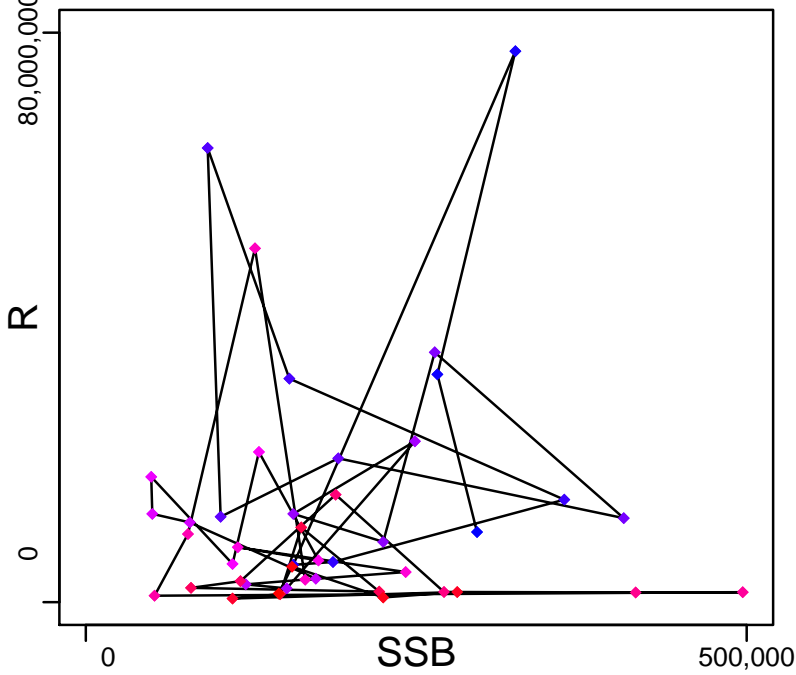
Kobe MSYpref (1972–2015–ICESIMP2016)



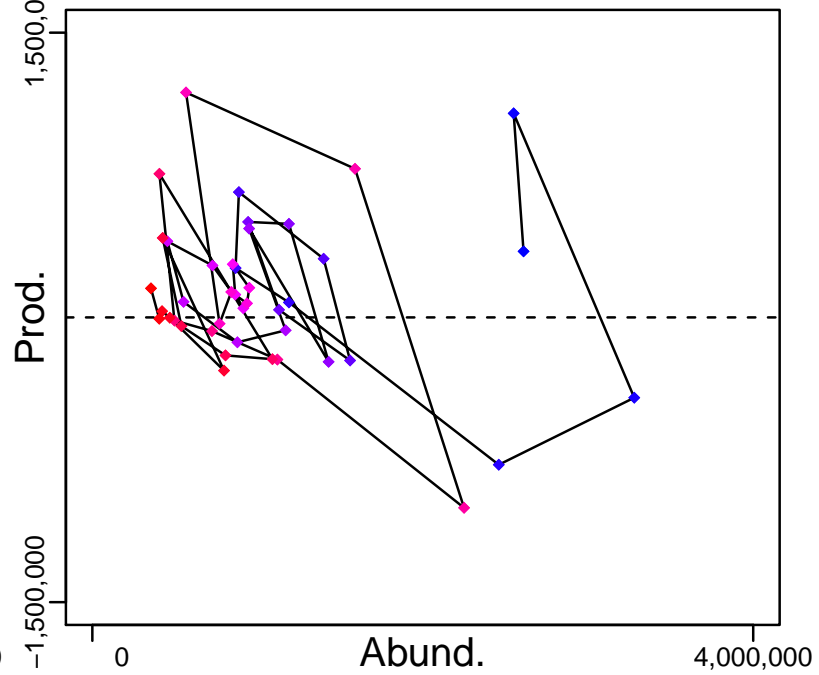
Kobe MGTpref (1972–2015–ICESIMP2016)



Spawner Recruit (1972–2015–ICESIMP2016)



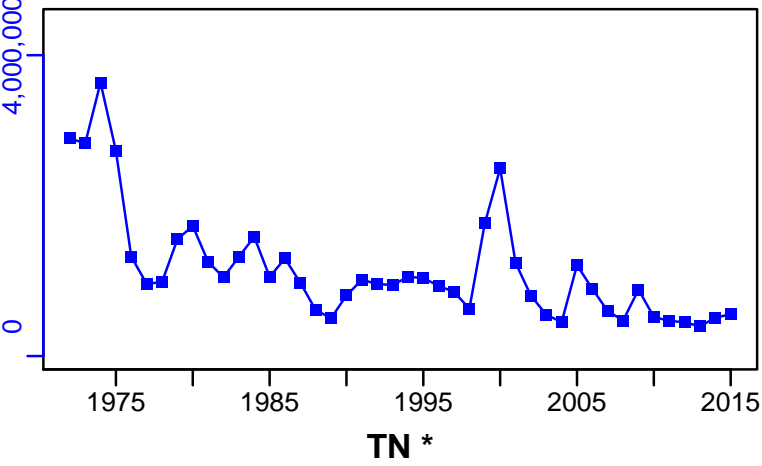
Production (1972–2015–ICESIMP2016)



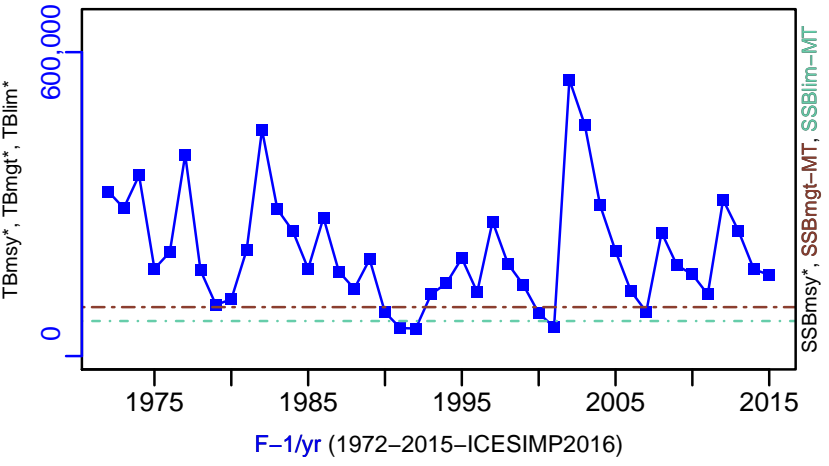
◆ Start Year ◆ End Year \* No Data

# Haddock North Sea and Illa-Via [HADNS-Illa-Via]

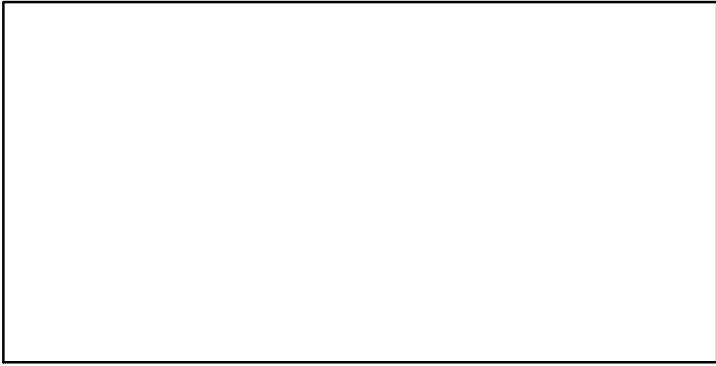
TB-MT (1972–2015–ICESIMP2016)



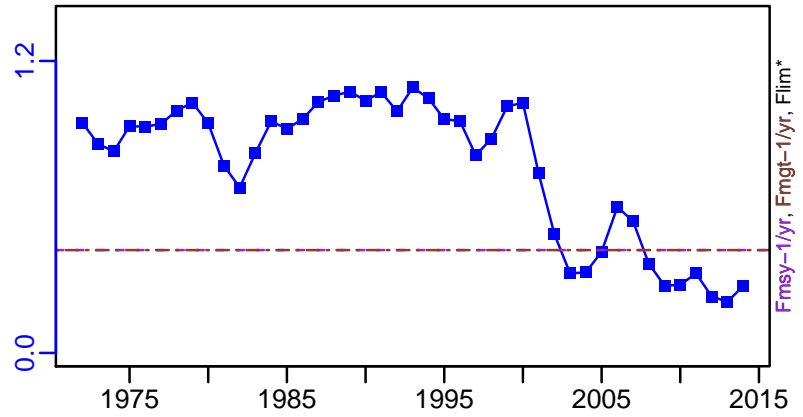
SSB-MT (1972–2015–ICESIMP2016)



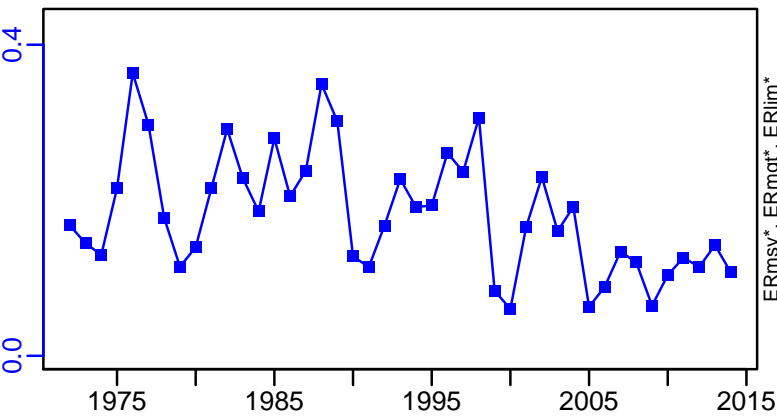
TN \*



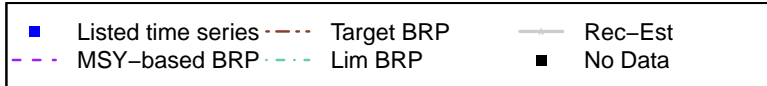
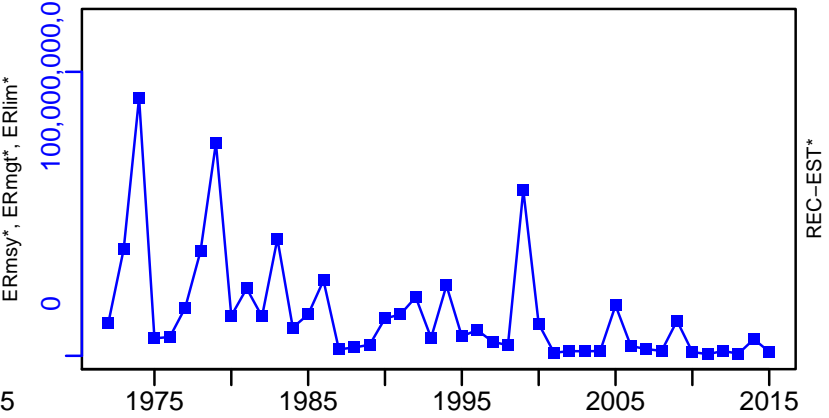
F-1/yr (1972–2015–ICESIMP2016)



ER-calc-ratio (1972–2015–ICESIMP2016)

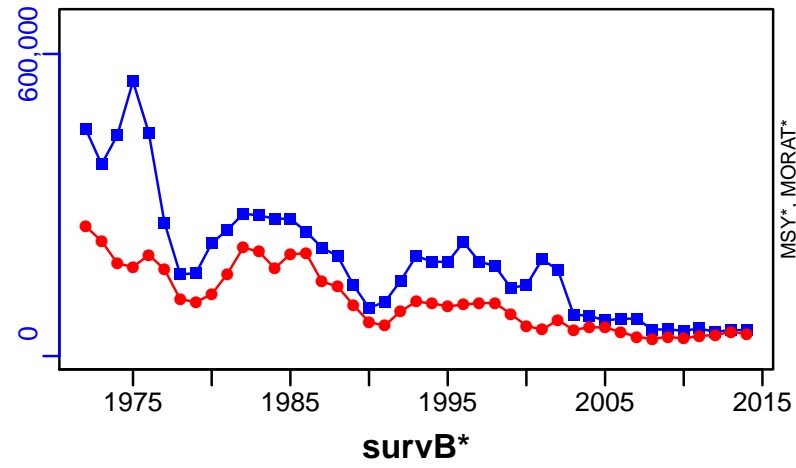


R-E00 (1972–2015–ICESIMP2016)



Haddock North Sea and Illa-Via [HADNS-Illa-Via]

TC-MT, TL-MT, RecC\* (1972–2015–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Haddock Rockall Bank [HADROCK]

Metadata	
<b>Scientific Name</b>	Melanogrammus aeglefinus
<b>Current Assess ID</b>	WGCSE-HADROCK-1990-2016-ICESIMP2016
<b>Area</b>	Rockall Bank
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2013, 2014, 2015, 2016, 2012

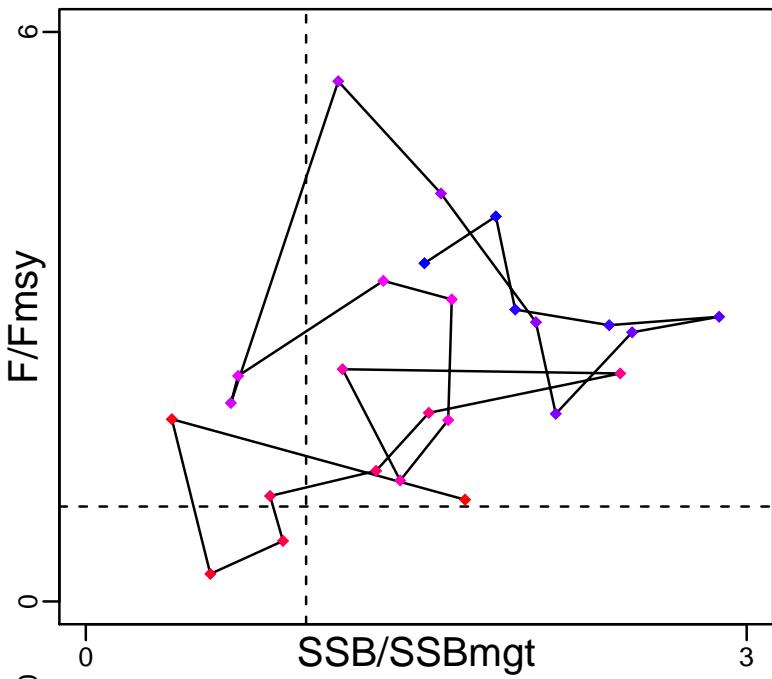
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.2
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	10,200
<b>Fmgt</b>	Fmgt-1/yr	2016	0.2
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2012	9000
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	6800
<b>Flim</b>	Flim-1/yr	2016	0.69
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	28,300	-	-
<b>SSB</b>	SSB-MT	2016	23,600	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	11,300,000	-	1
<b>F</b>	F-1/yr	2016	0.21	-	2 to 5
<b>ER</b>	ER-calc-ratio	2016	0.11	-	-
<b>TC</b>	TC-MT	2016	2970		
<b>TL</b>	TL-MT	2016	2450		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	1.07		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	2.31		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	1.07		
<b>ER/ERmgt</b>	-	-	-		

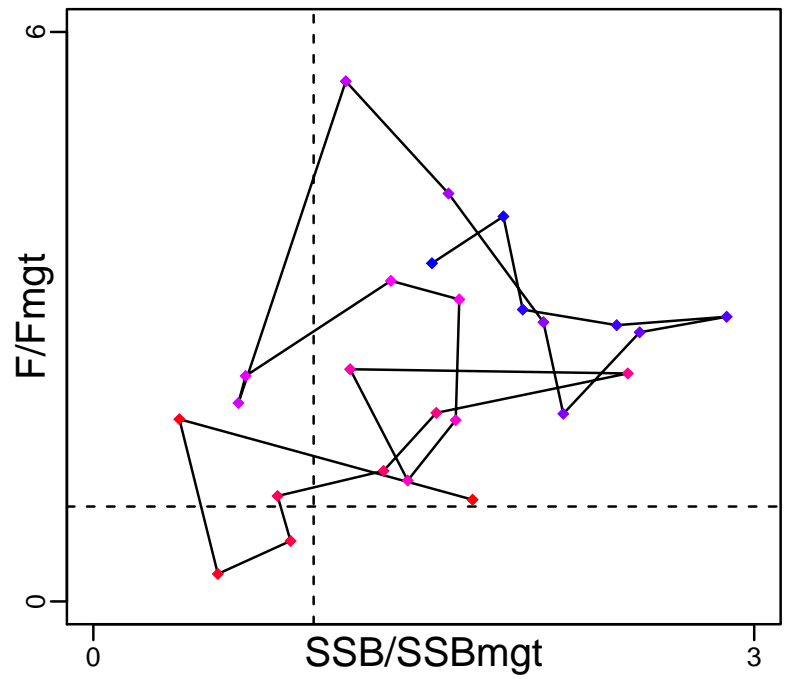


# Haddock Rockall Bank [HADROCK]

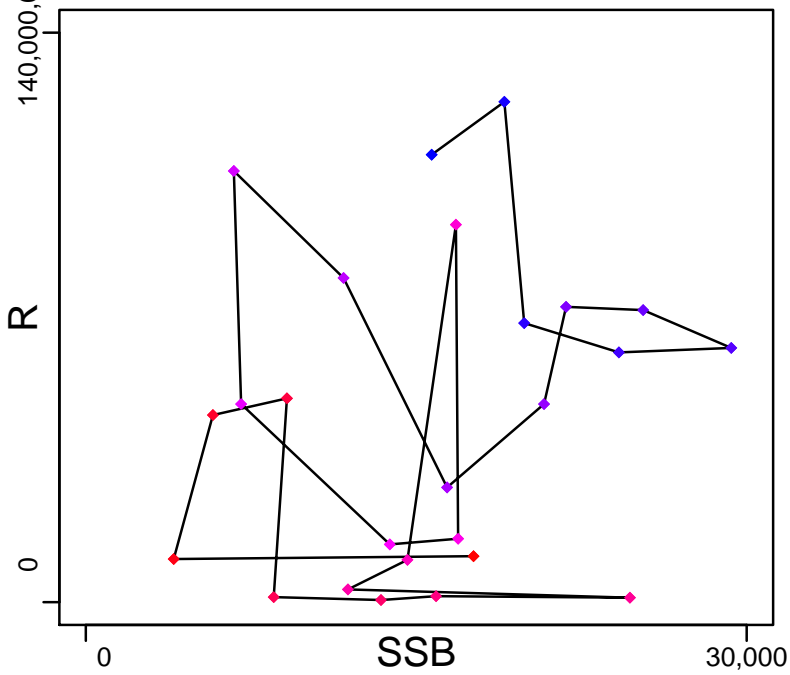
Kobe MSYpref (1990–2016–ICESIMP2016)



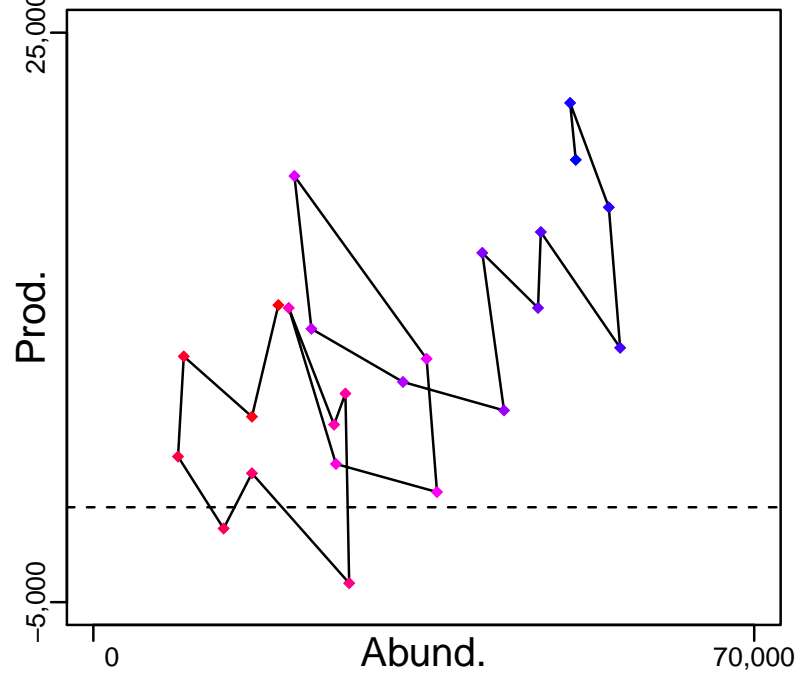
Kobe MGTpref (1990–2016–ICESIMP2016)



Spawner Recruit (1990–2016–ICESIMP2016)



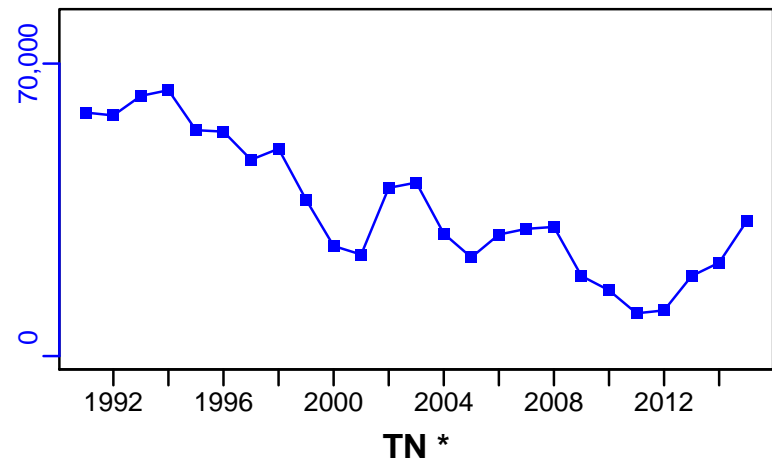
Production (1990–2016–ICESIMP2016)



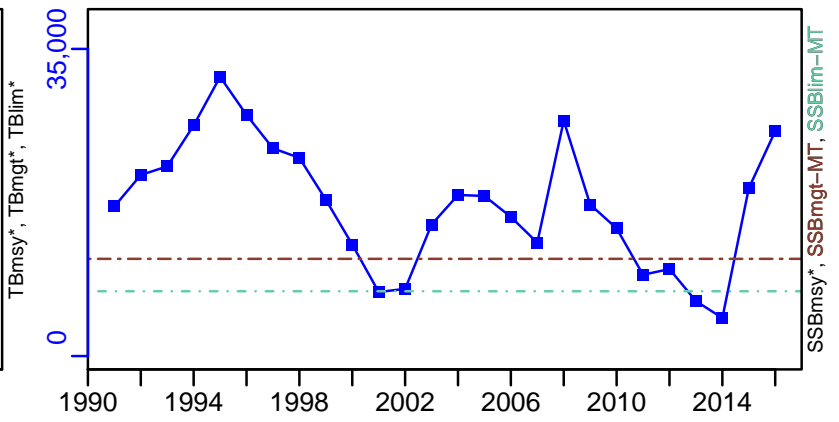
◆ Start Year ◆ End Year \* No Data

# Haddock Rockall Bank [HADROCK]

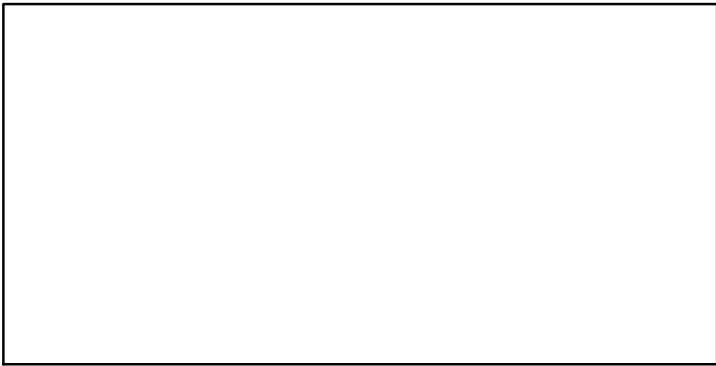
TB-MT (1990–2016–ICESIMP2016)



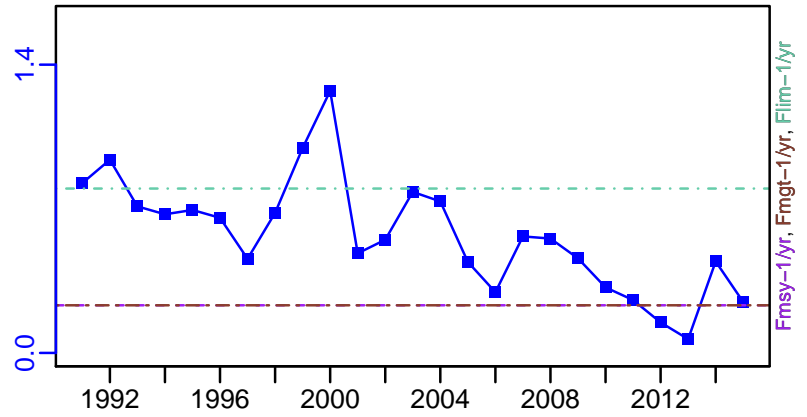
SSB-MT (1990–2016–ICESIMP2016)



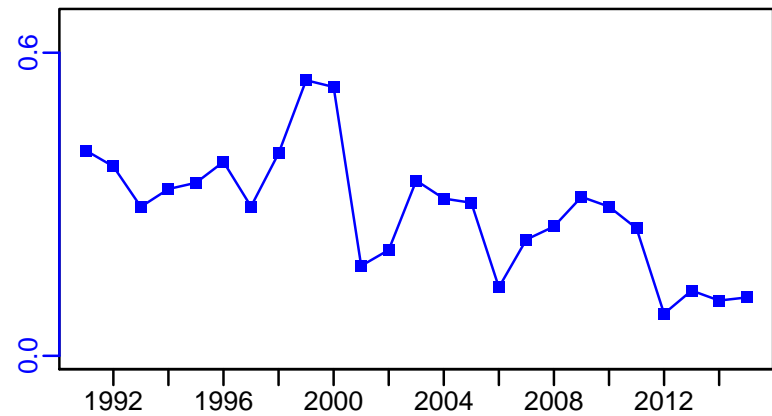
TN \*



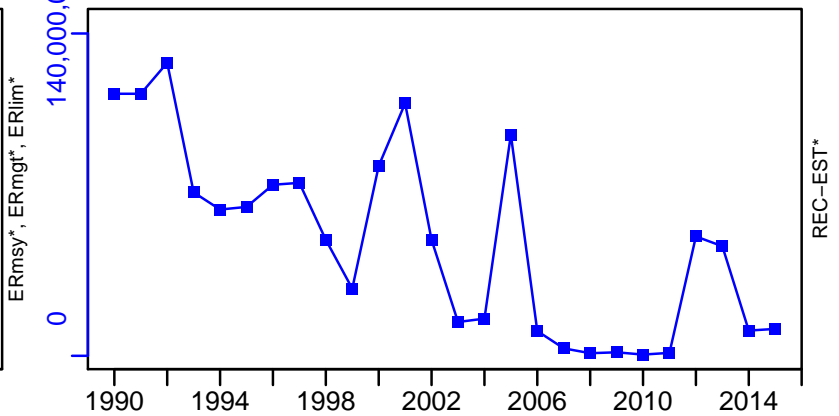
F-1/yr (1990–2016–ICESIMP2016)



ER-calc-ratio (1990–2016–ICESIMP2016)

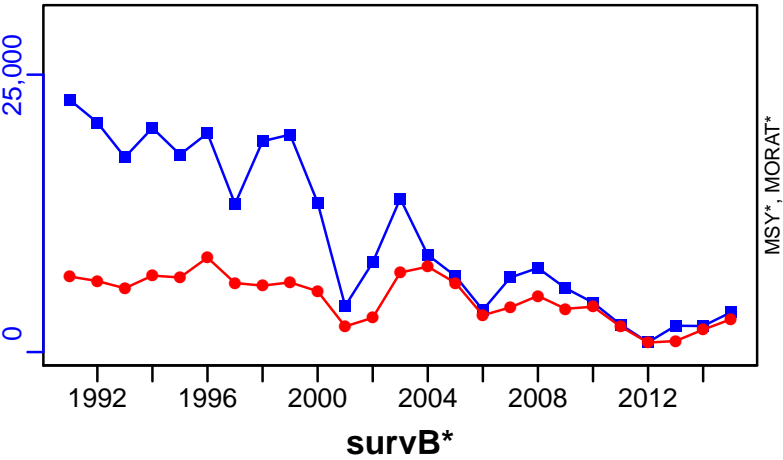


R-E00 (1990–2016–ICESIMP2016)



Haddock Rockall Bank [HADROCK]

TC-MT, TL-MT, RecC\* (1990-2016-ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Haddock ICES VIIb-k [HADVIIb-k]

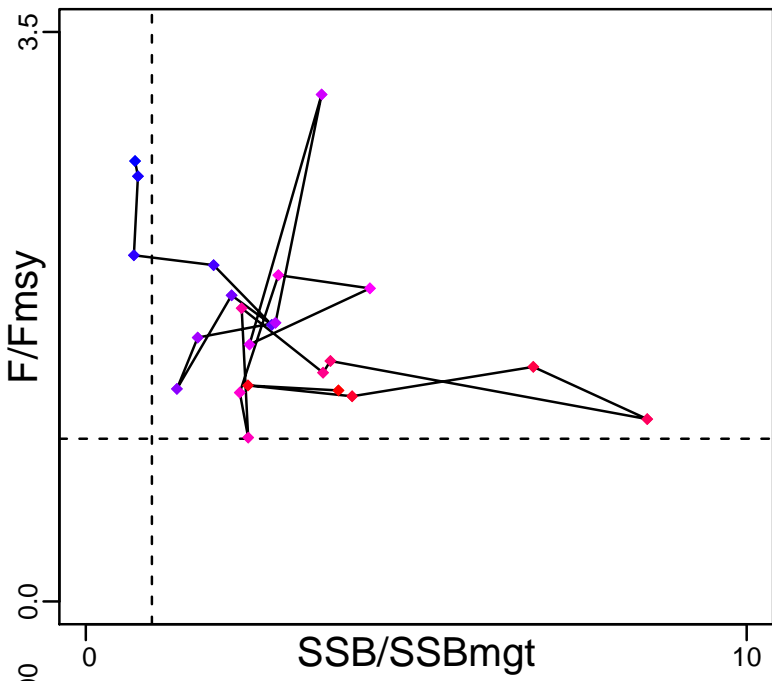
Metadata	
<b>Scientific Name</b>	Melanogrammus aeglefinus
<b>Current Assess ID</b>	WGCSE-HADVIIb-k-1993-2016-ICESIMP2016
<b>Area</b>	ICES VIIb-k
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2013, 2014, 2015, 2016, 2012

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.4
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	10,000
<b>Fmgt</b>	Fmgt-1/yr	2016	0.4
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	6700
<b>Flim</b>	Flim-1/yr	2016	1.41
<b>ERlim</b>	-	-	-

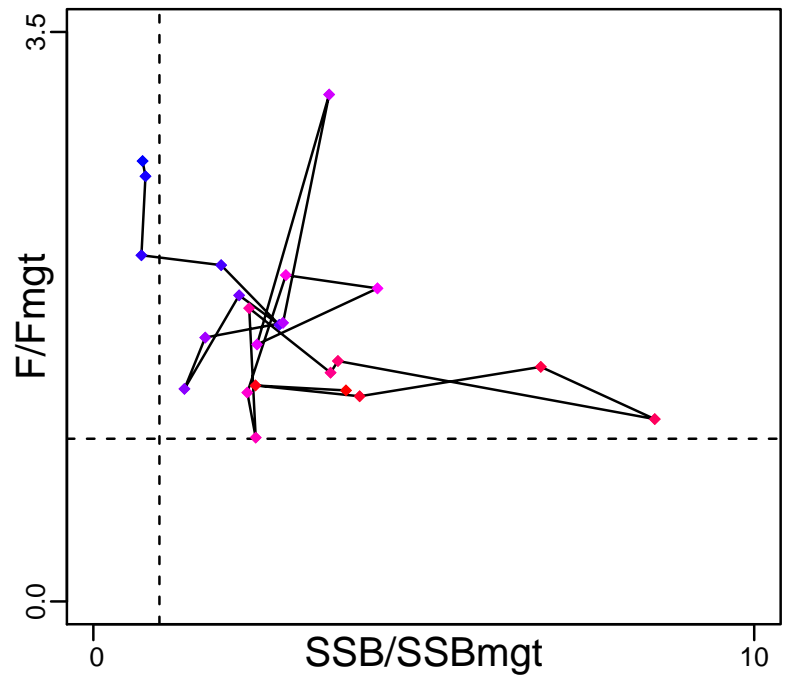
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	67,800	-	-
<b>SSB</b>	SSB-MT	2016	26,100	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$2.66 \times 10^8$	-	0
<b>F</b>	F-1/yr	2016	0.52	-	3 to 5
<b>ER</b>	ER-calc-ratio	2016	0.22	-	-
<b>TC</b>	TC-MT	2016	15,200		
<b>TL</b>	TL-MT	2016	8550		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	1.3		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	2.61		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	1.3		
<b>ER/ERmgt</b>	-	-	-		

# Haddock ICES VIIb-k [HADVIIb-k]

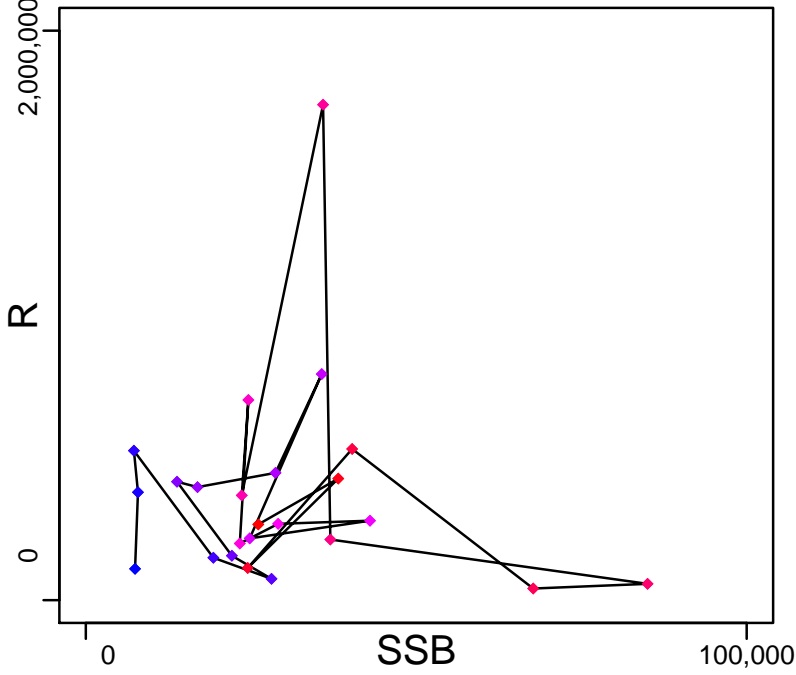
Kobe MSYpref (1993–2016–ICESIMP2016)



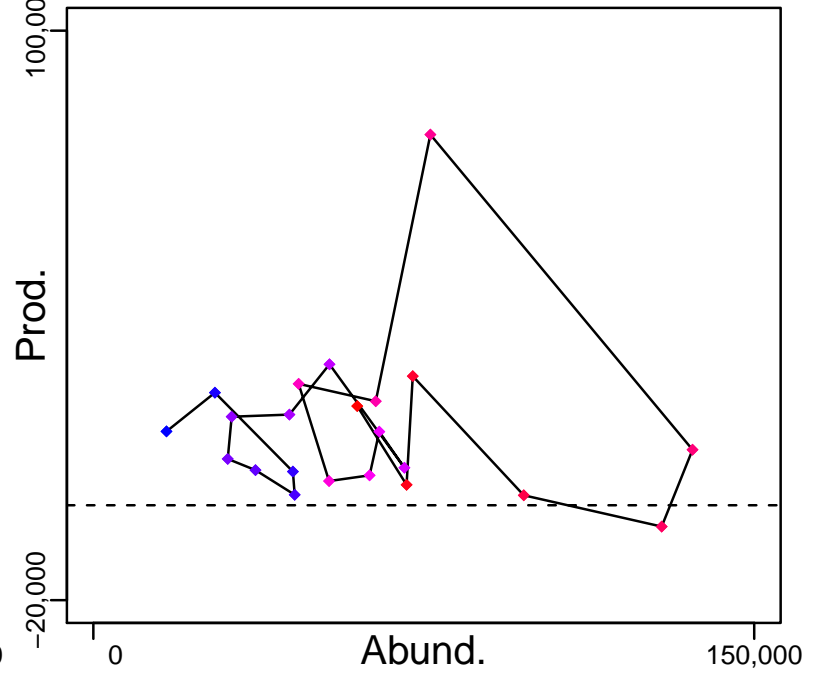
Kobe MGTpref (1993–2016–ICESIMP2016)



Spawner Recruit (1993–2016–ICESIMP2016)

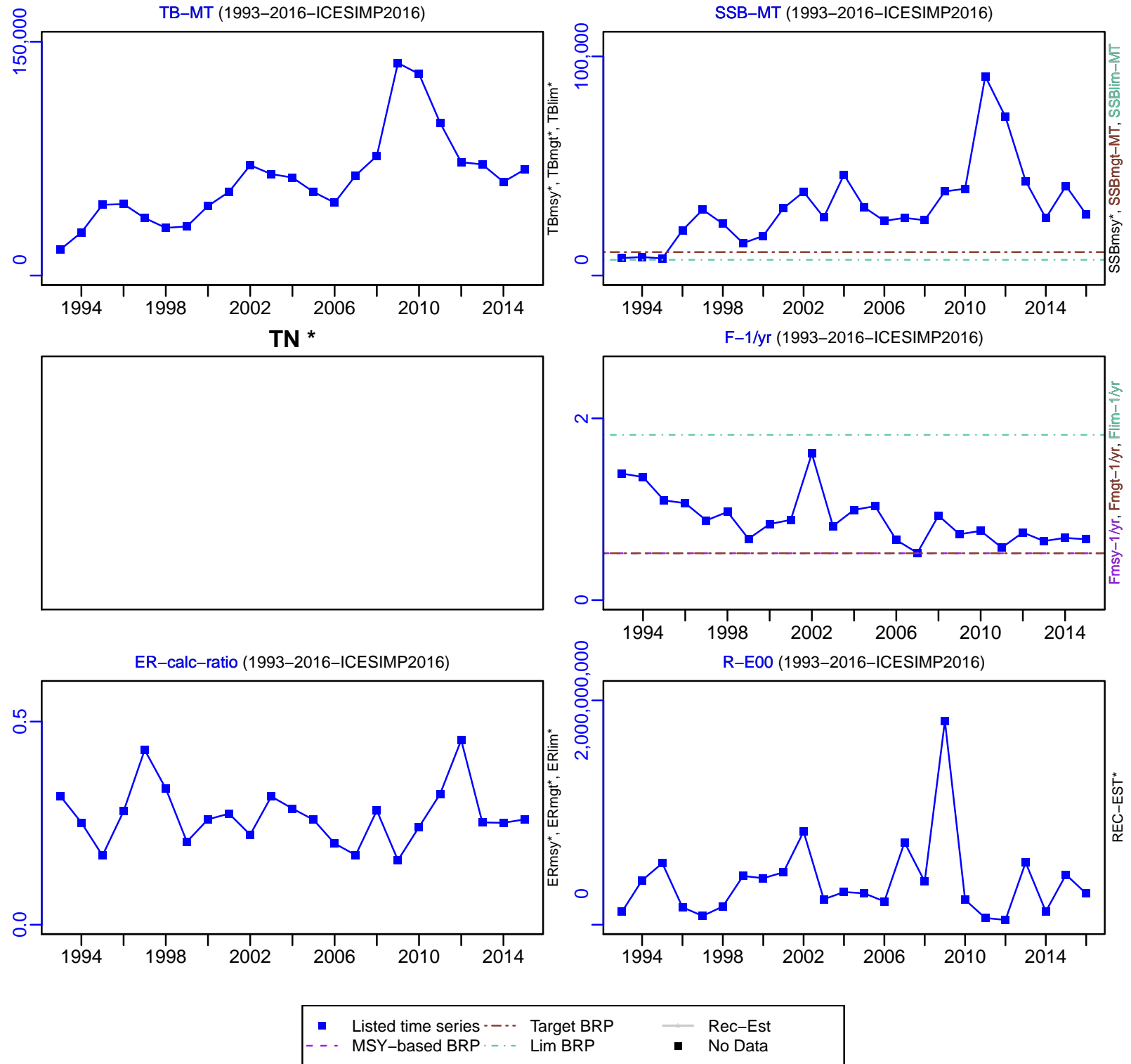


Production (1993–2016–ICESIMP2016)



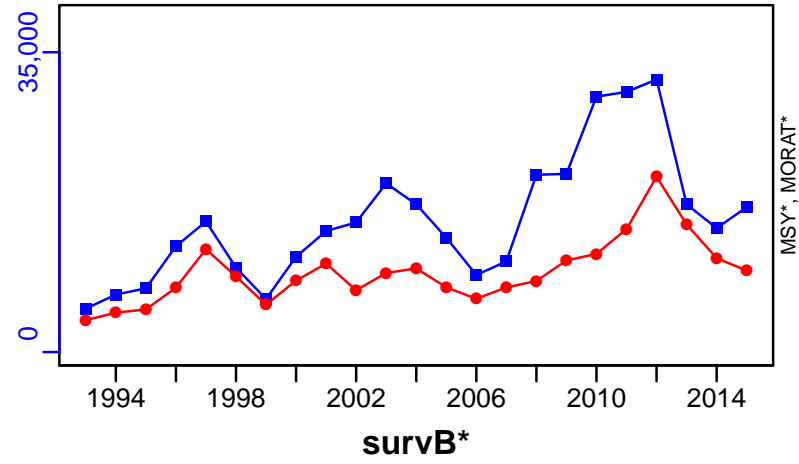
◆ Start Year ◆ End Year \* No Data

# Haddock ICES VIIb-k [HADVIIb-k]



# Haddock ICES VIIb-k [HADVIIb-k]

TC-MT, TL-MT, RecC\* (1993–2016–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Hake Northeast Atlantic North [HAKENRTN]

Metadata	
<b>Scientific Name</b>	Merluccius merluccius
<b>Current Assess ID</b>	WGBIE-HAKENRTN-1978-2016-ICESIMP2016
<b>Area</b>	IIIa-IV-VI-VII-VIIIabd
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
<b>Asmts in RAM</b>	2013, 2014, 2015, 2016, 2011

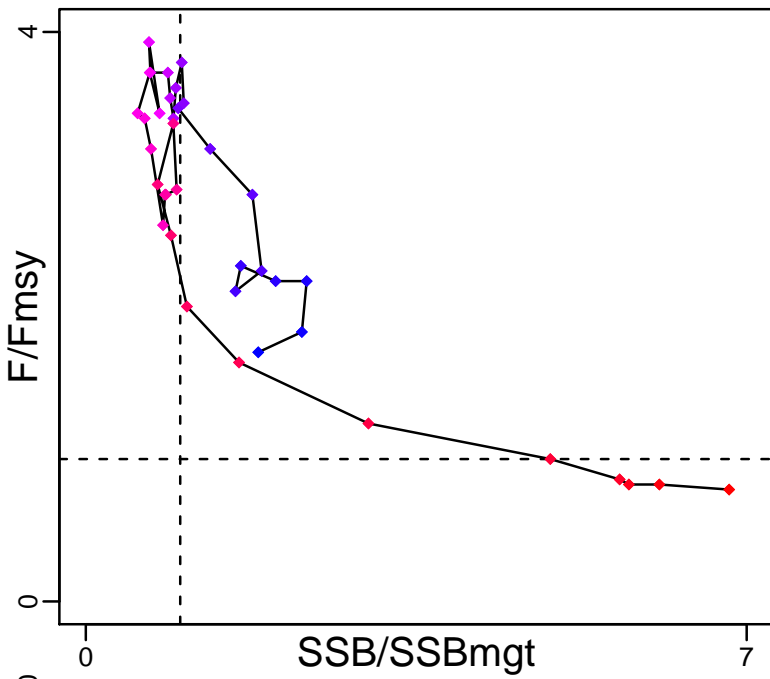
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.28
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	45,000
<b>Fmgt</b>	Fmgt-1/yr	2016	0.28
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	32,000
<b>Flim</b>	Flim-1/yr	2016	0.87
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	364,000	-	-
<b>SSB</b>	SSB-MT	2016	330,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$3.16 \times 10^8$	-	0
<b>F</b>	F-1/yr	2016	0.22	-	-
<b>ER</b>	ER-calc-ratio	2016	0.28	-	-
<b>TC</b>	TC-MT	2016	101,000		
<b>TL</b>	TL-MT	2016	93,700		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	0.79		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	7.33		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.79		
<b>ER/ERmgt</b>	-	-	-		

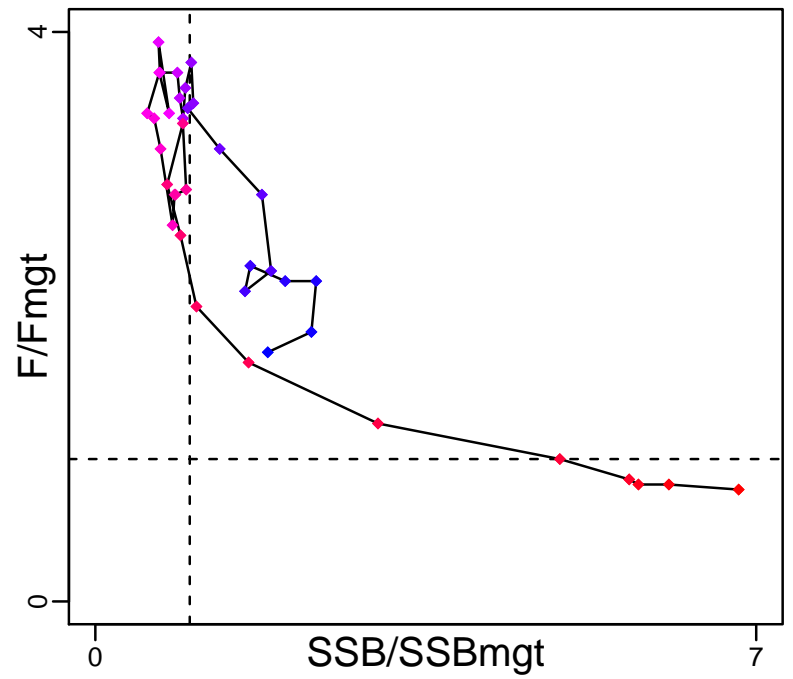


# Hake Northeast Atlantic North [HAKENRTN]

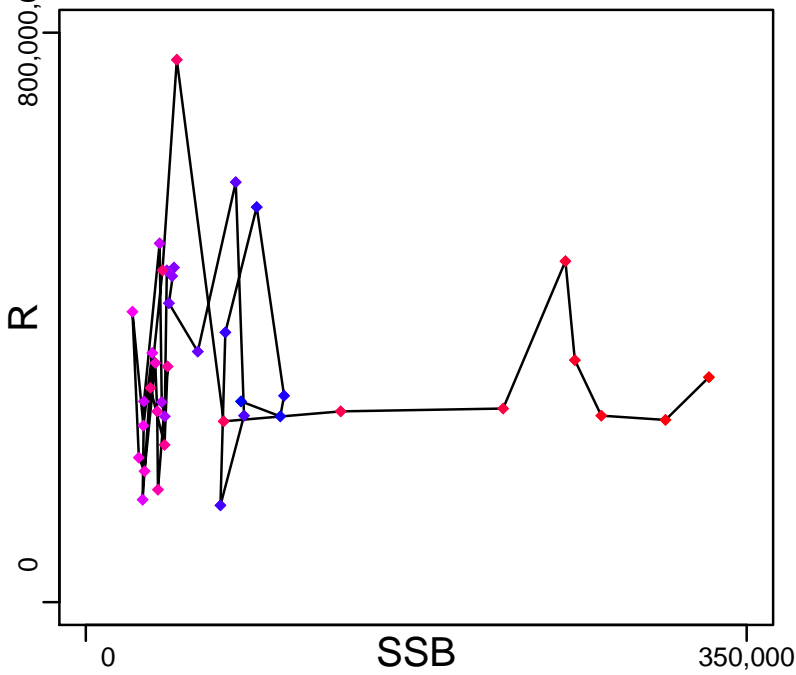
Kobe MSYpref (1978–2016–ICESIMP2016)



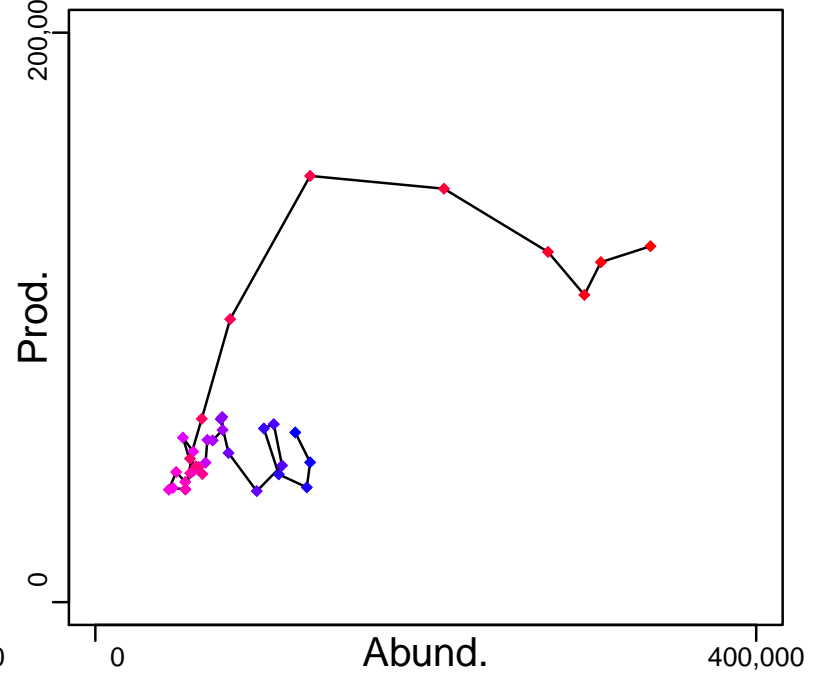
Kobe MGTpref (1978–2016–ICESIMP2016)



Spawner Recruit (1978–2016–ICESIMP2016)



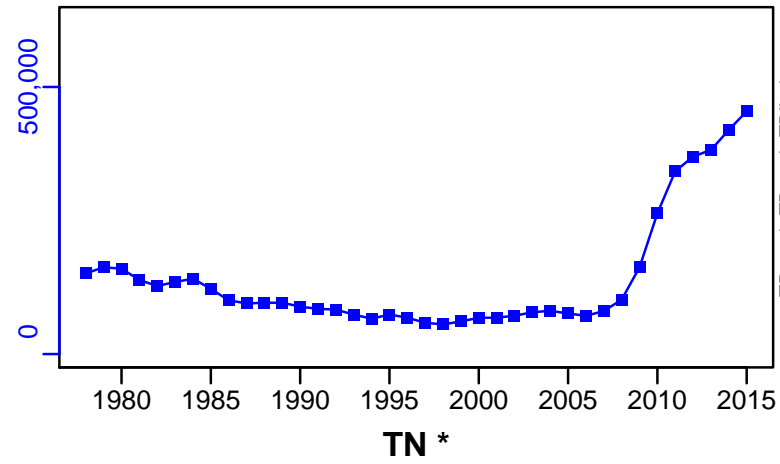
Production (1978–2016–ICESIMP2016)



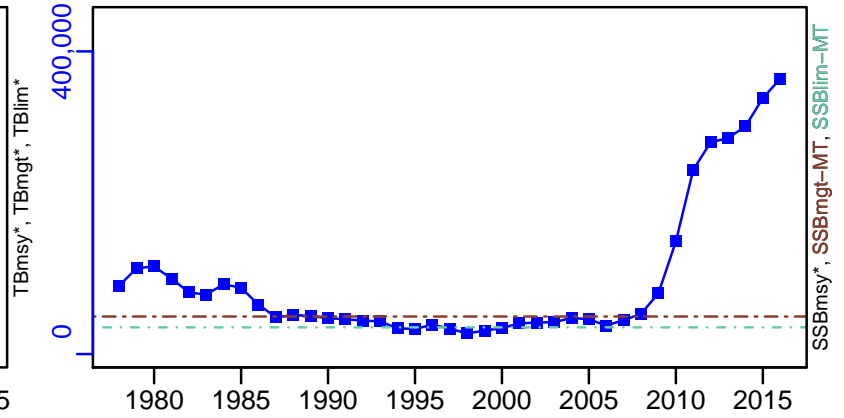
◆ Start Year ◆ End Year \* No Data

# Hake Northeast Atlantic North [HAKENRTN]

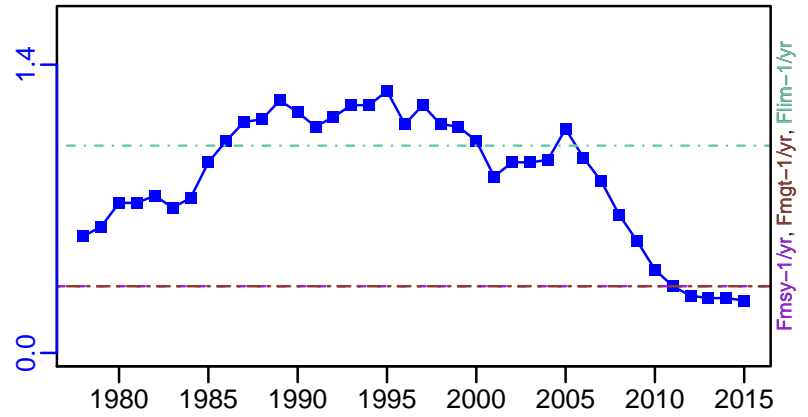
TB-MT (1978–2016–ICESIMP2016)



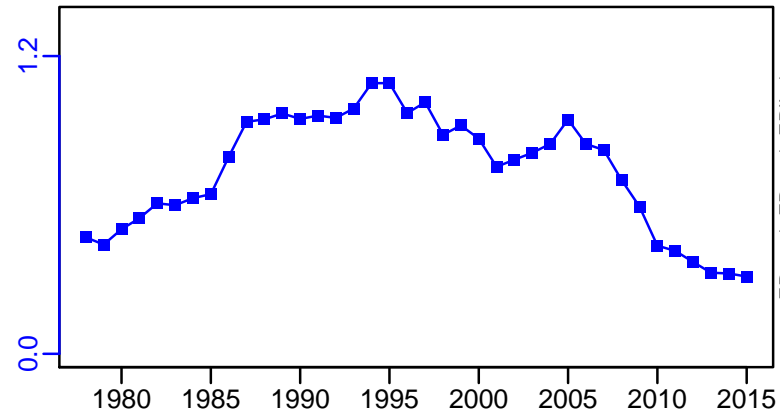
SSB-MT (1978–2016–ICESIMP2016)



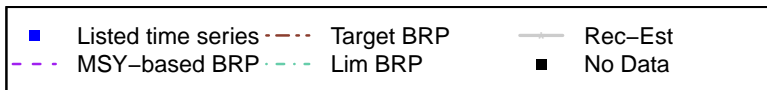
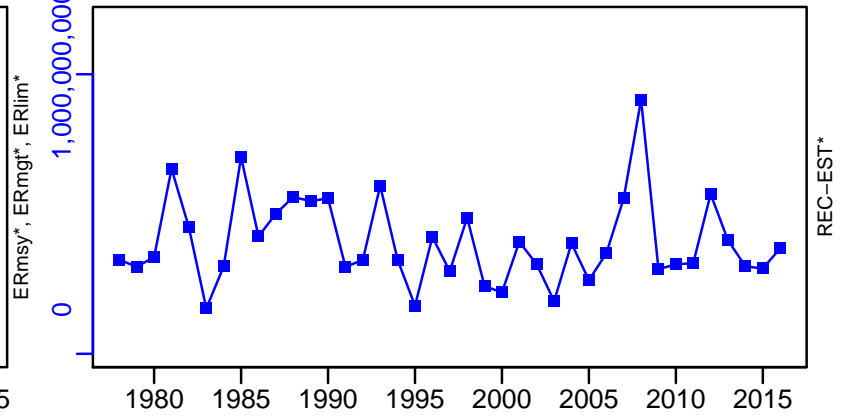
F-1/yr (1978–2016–ICESIMP2016)



ER-calc-ratio (1978–2016–ICESIMP2016)

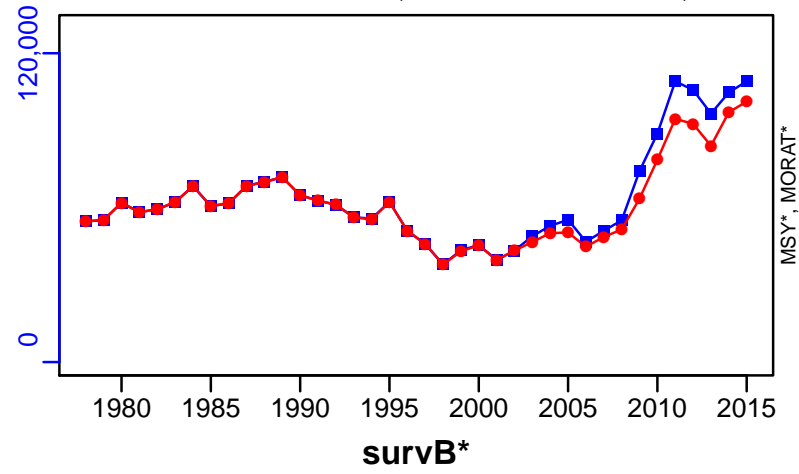


R-E00 (1978–2016–ICESIMP2016)



# Hake Northeast Atlantic North [HAKENRTN]

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



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



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

## Hake Northeast Atlantic South [HAKESOTH]

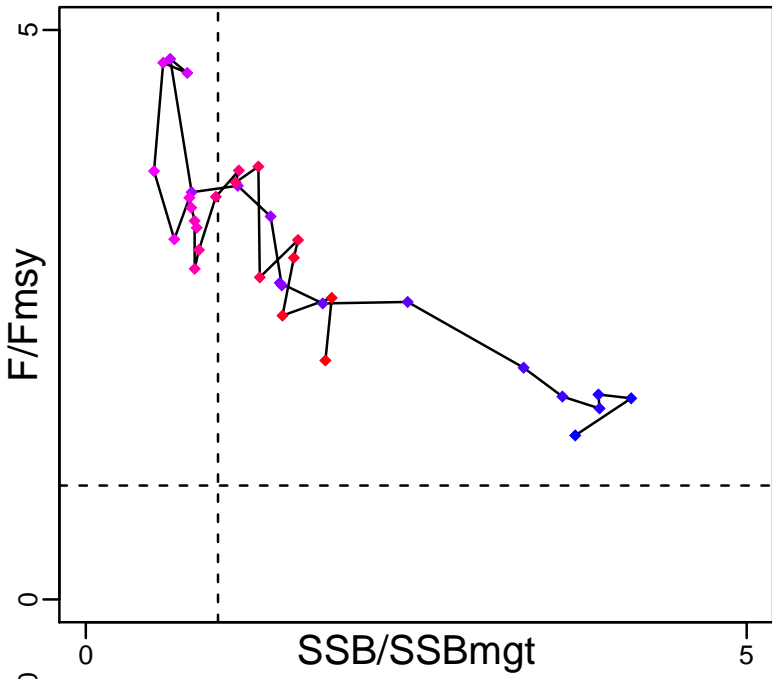
Metadata	
<b>Scientific Name</b>	Merluccius merluccius
<b>Current Assess ID</b>	WGBIE-HAKESOTH-1982-2016-ICESIMP2016
<b>Area</b>	VIIIc-IXa
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
<b>Asmts in RAM</b>	2014, 2015, 2016, 2011, 2013

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.25
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	11,100
<b>Fmgt</b>	Fmgt-1/yr	2016	0.25
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	8000
<b>Flim</b>	Flim-1/yr	2016	1.05
<b>ERlim</b>	-	-	-

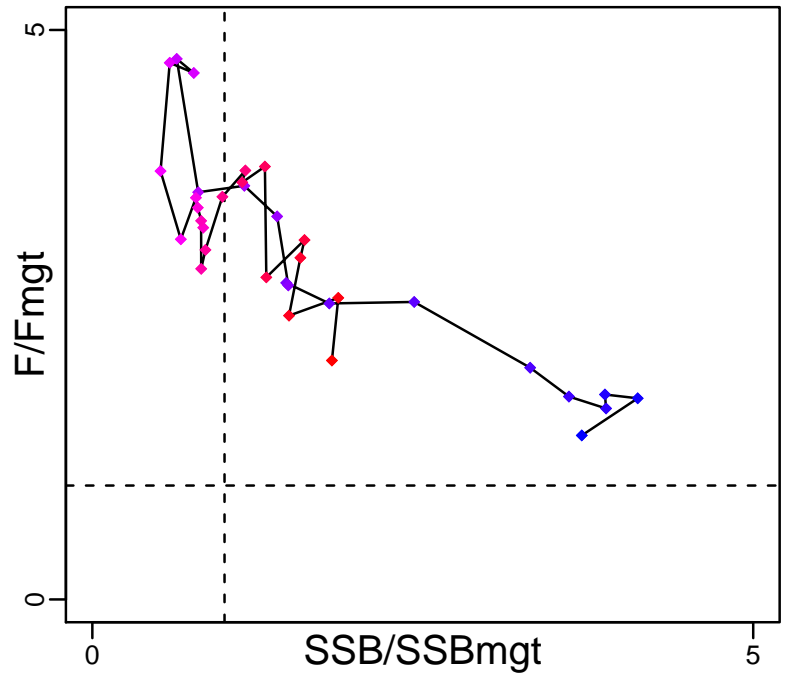
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	26,600	-	-
<b>SSB</b>	SSB-MT	2016	23,100	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	79,300,000	-	0
<b>F</b>	F-1/yr	2016	0.52	-	1 to 3
<b>ER</b>	ER-calc-ratio	2016	0.52	-	-
<b>TC</b>	TC-MT	2016	13,800		
<b>TL</b>	TL-MT	2016	11,500		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	2.1		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	2.08		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	2.1		
<b>ER/ERmgt</b>	-	-	-		

# Hake Northeast Atlantic South [HAKESOTH]

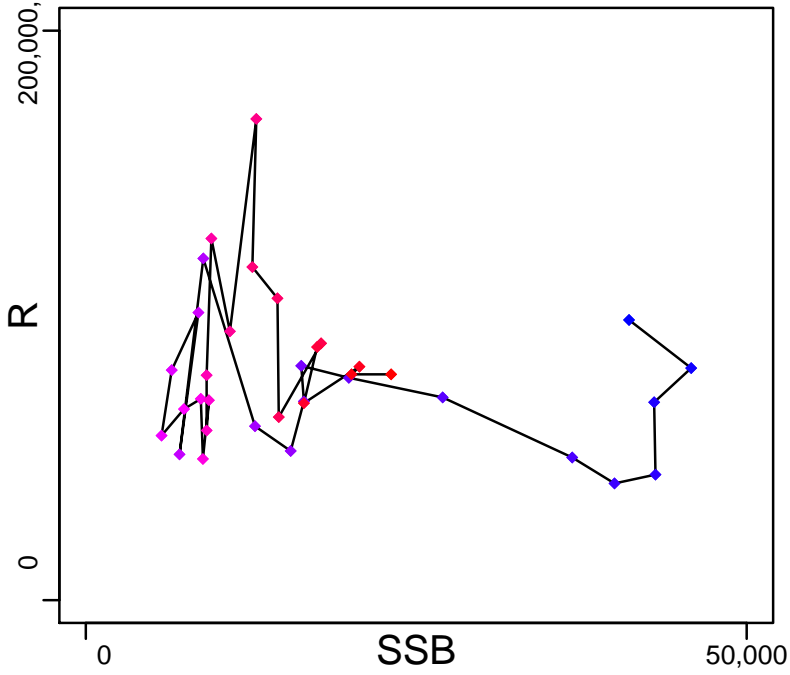
Kobe MSYpref (1982–2016–ICESIMP2016)



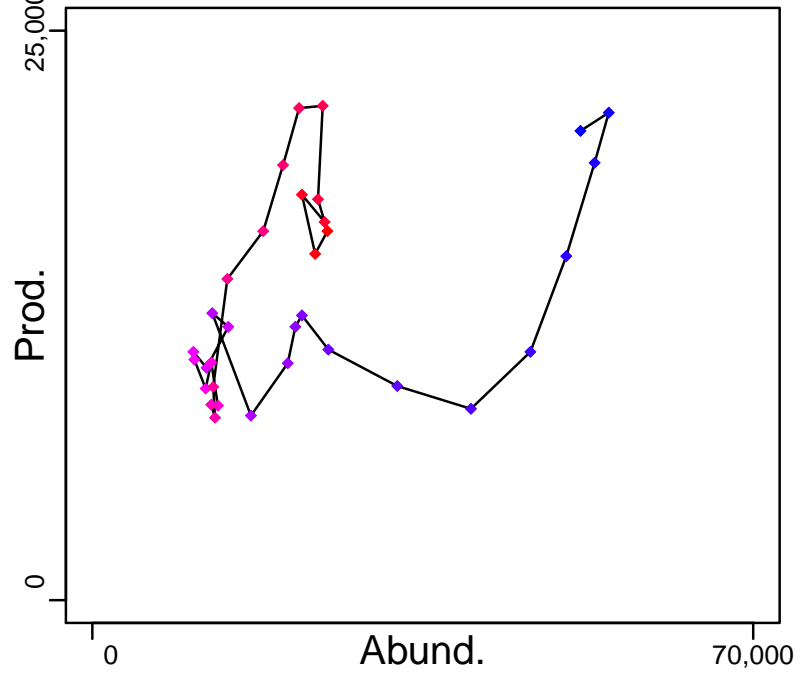
Kobe MGTpref (1982–2016–ICESIMP2016)



Spawner Recruit (1982–2016–ICESIMP2016)



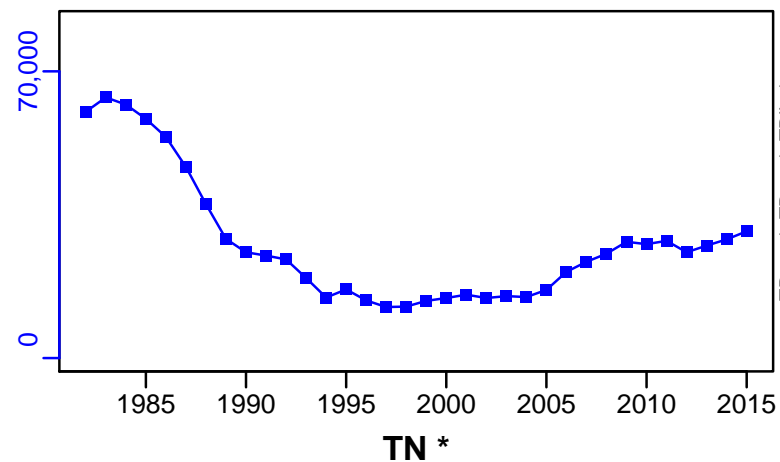
Production (1982–2016–ICESIMP2016)



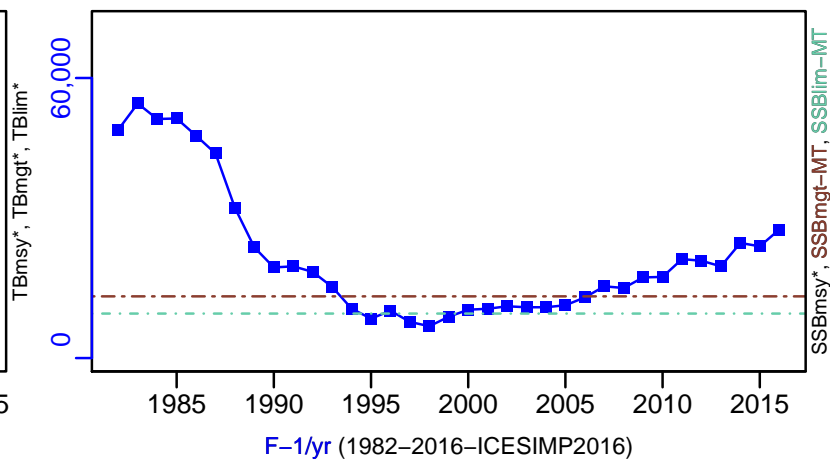
◆ Start Year ◆ End Year \* No Data

# Hake Northeast Atlantic South [HAKESOTH]

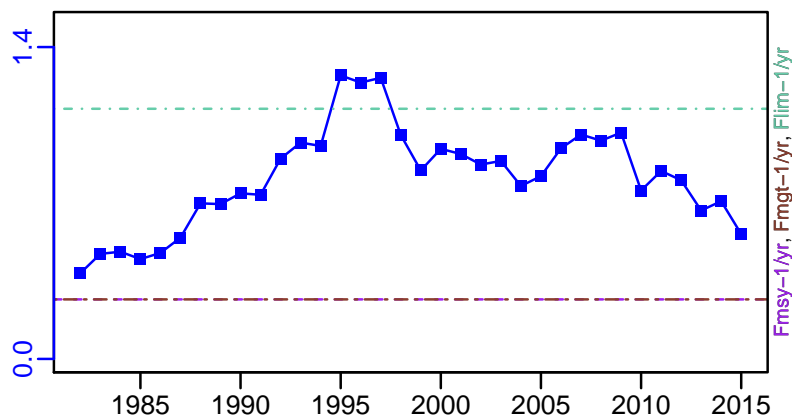
TB-MT (1982–2016–ICESIMP2016)



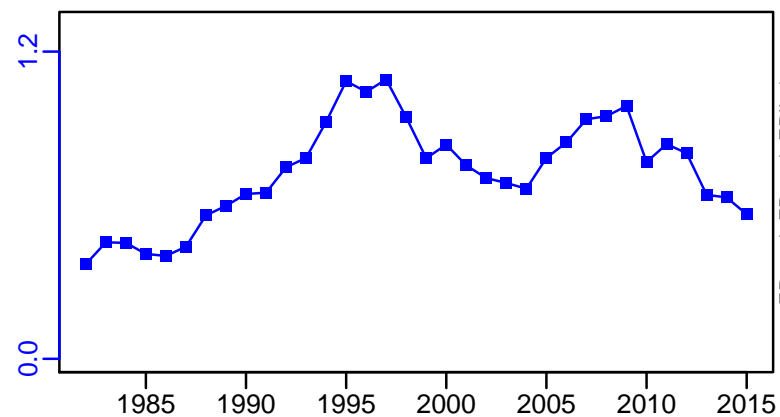
SSB-MT (1982–2016–ICESIMP2016)



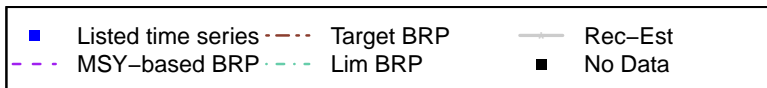
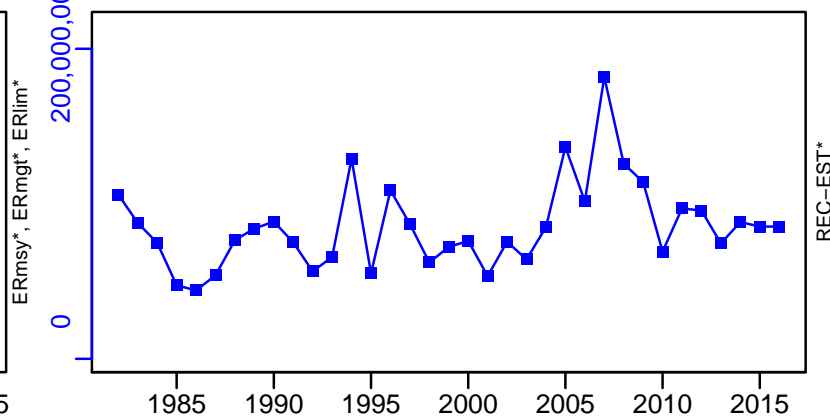
F-1/yr (1982–2016–ICESIMP2016)



ER-calc-ratio (1982–2016–ICESIMP2016)

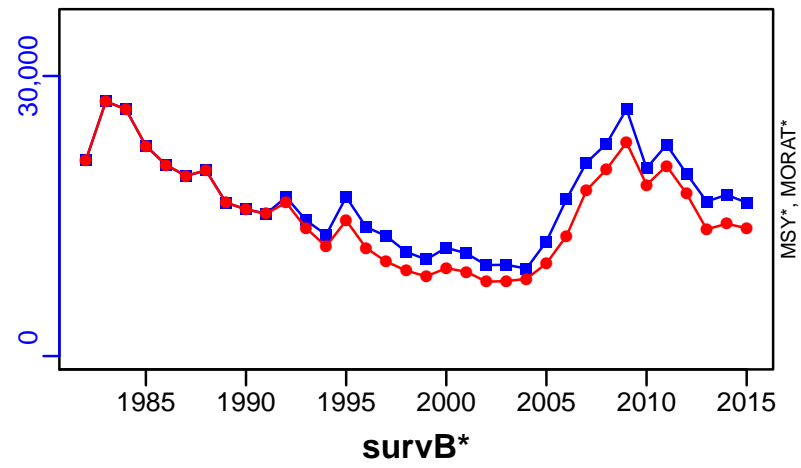


R-E00 (1982–2016–ICESIMP2016)

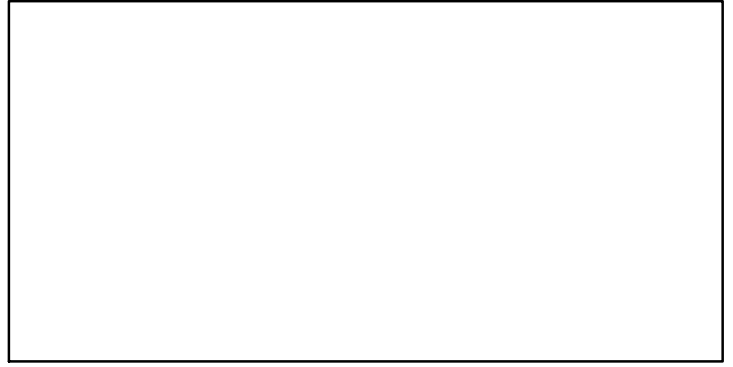


# Hake Northeast Atlantic South [HAKESOTH]

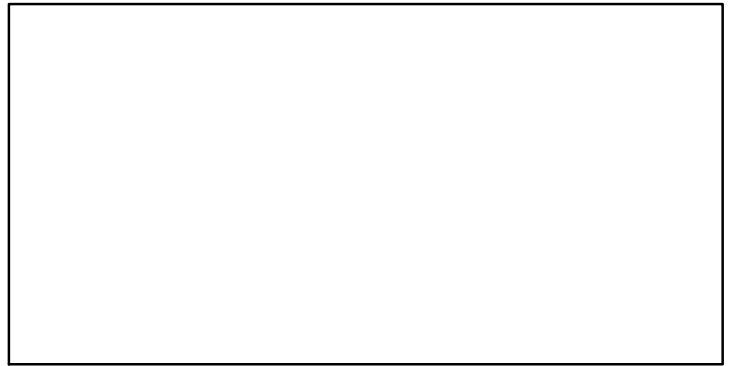
TC-MT, TL-MT, RecC\* (1982–2016–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



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

## Herring ICES 22-24-IIIa [HERR2224IIIa]

Metadata	
<b>Scientific Name</b>	Clupea harengus
<b>Current Assess ID</b>	HAWG-HERR2224IIIa-1991-2016-ICESIMP2016
<b>Area</b>	22-24-IIIa
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Herring Assessment Working Group for the Area South of 62N
<b>Asmts in RAM</b>	2011, 2013, 2014, 2015, 2016

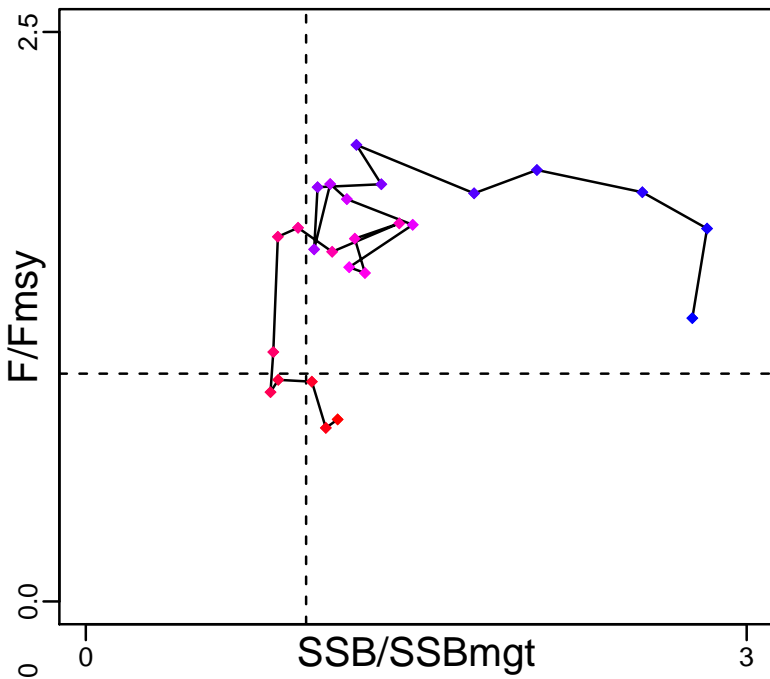
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2011	110,000
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.32
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	110,000
<b>Fmgt</b>	Fmgt-1/yr	2016	0.32
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	90,000
<b>Flim</b>	Flim-1/yr	2016	0.52
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	205,000	-	-
<b>SSB</b>	SSB-MT	2016	143,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$1.86 \times 10^9$	-	0
<b>F</b>	F-1/yr	2016	0.26	-	3 to 6
<b>ER</b>	ER-calc-ratio	2016	0.18	-	-
<b>TC</b>	TC-MT	2016	37,500		
<b>TL</b>	TL-MT	2016	37,500		
<b>TB/TBmsy</b>	TB-MT/TBmsy-MT	2011	1.49		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	0.8		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	1.3		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.8		
<b>ER/ERmgt</b>	-	-	-		

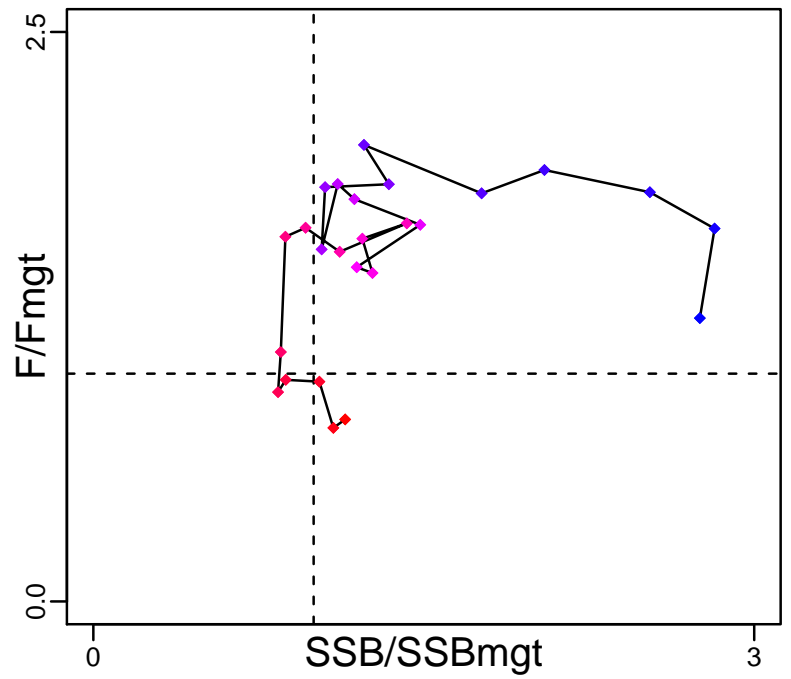


# Herring ICES 22-24-IIIa [HERR2224IIIa]

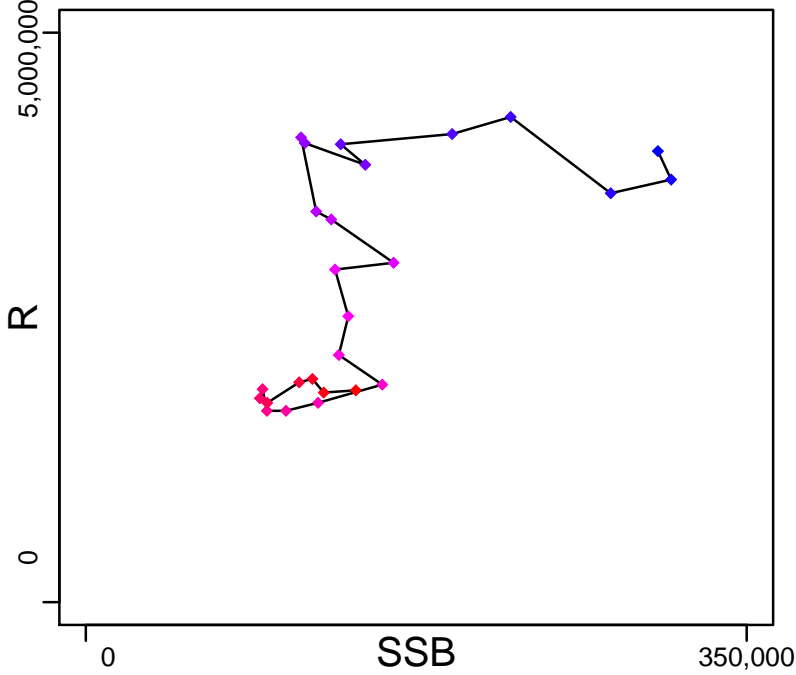
Kobe MSYpref (1991-2016-ICESIMP2016)



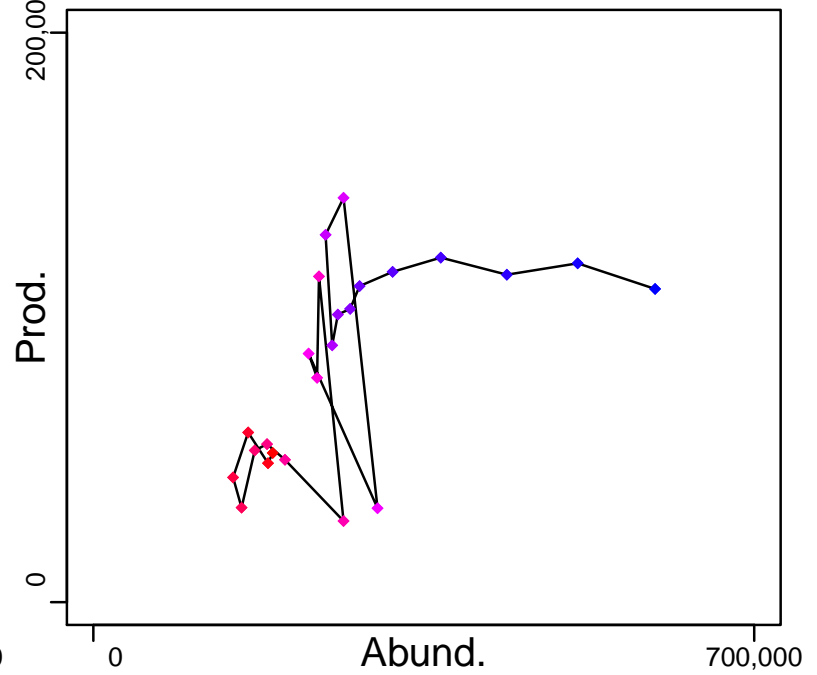
Kobe MGTpref (1991-2016-ICESIMP2016)



Spawner Recruit (1991-2016-ICESIMP2016)



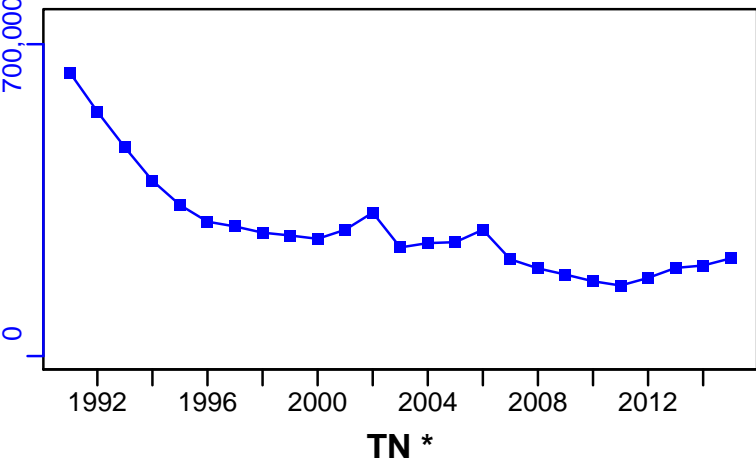
Production (1991-2016-ICESIMP2016)



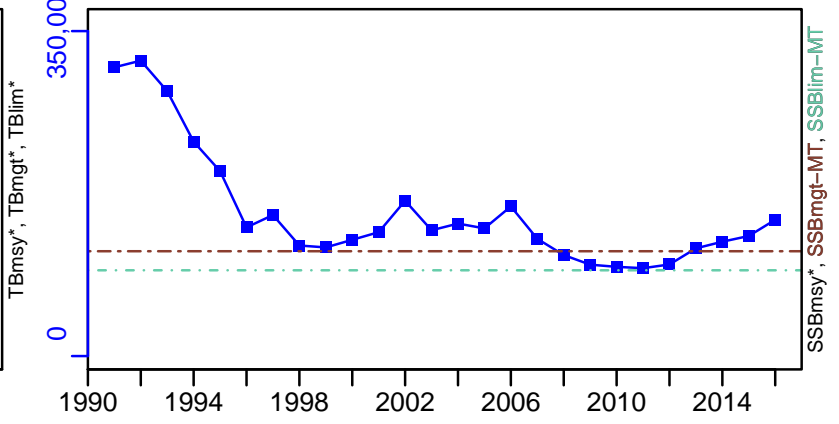
◆ Start Year ◆ End Year \* No Data

# Herring ICES 22-24-IIIa [HERR2224IIIa]

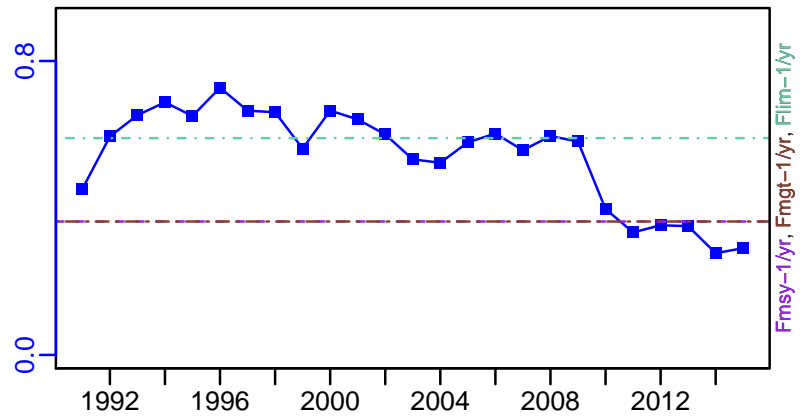
TB-MT (1991-2016-ICESIMP2016)



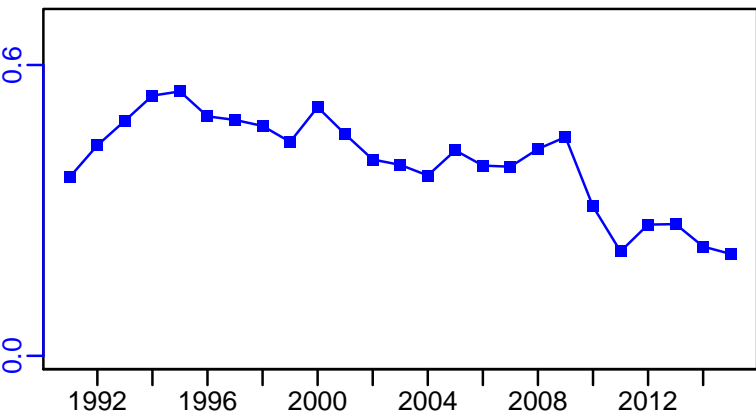
SSB-MT (1991-2016-ICESIMP2016)



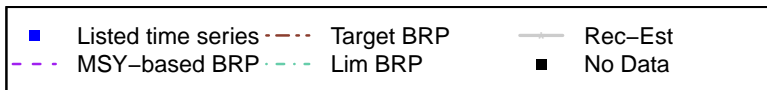
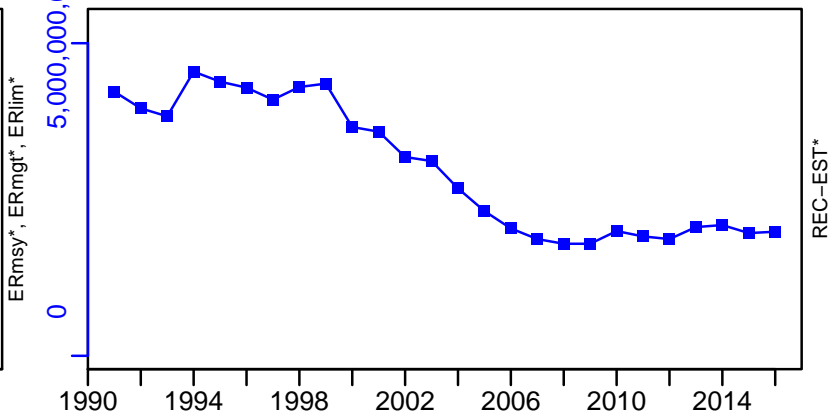
F-1/yr (1991-2016-ICESIMP2016)



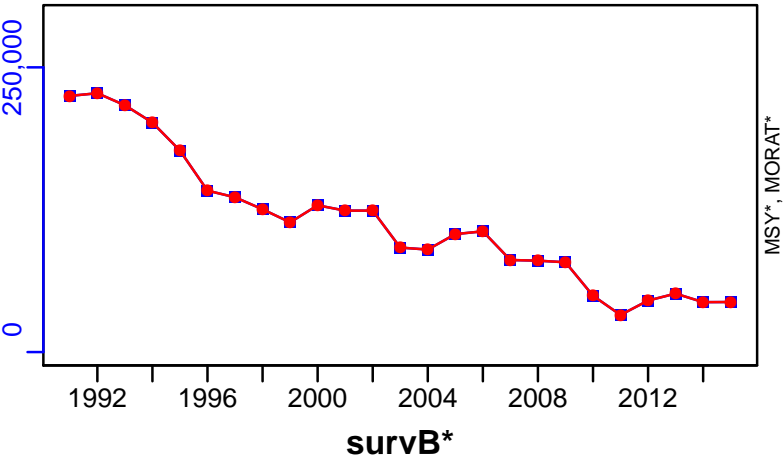
ER-calc-ratio (1991-2016-ICESIMP2016)



R-E00 (1991-2016-ICESIMP2016)



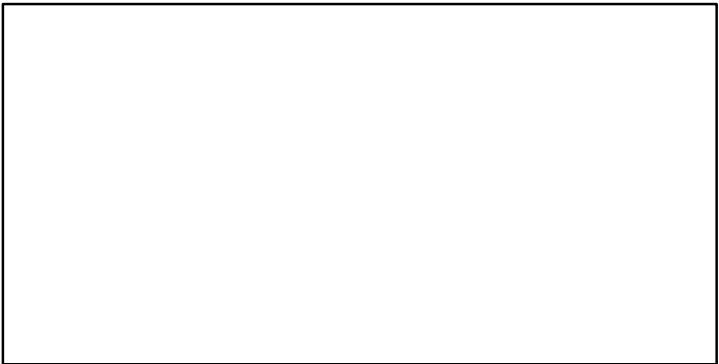
TC-MT, TL-MT, RecC\* (1991-2016-ICESIMP2016)



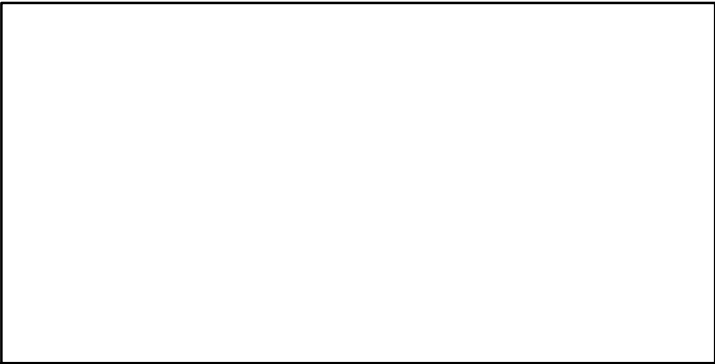
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Herring Subdivisions 25-29 and 32 [HERR2529-32]

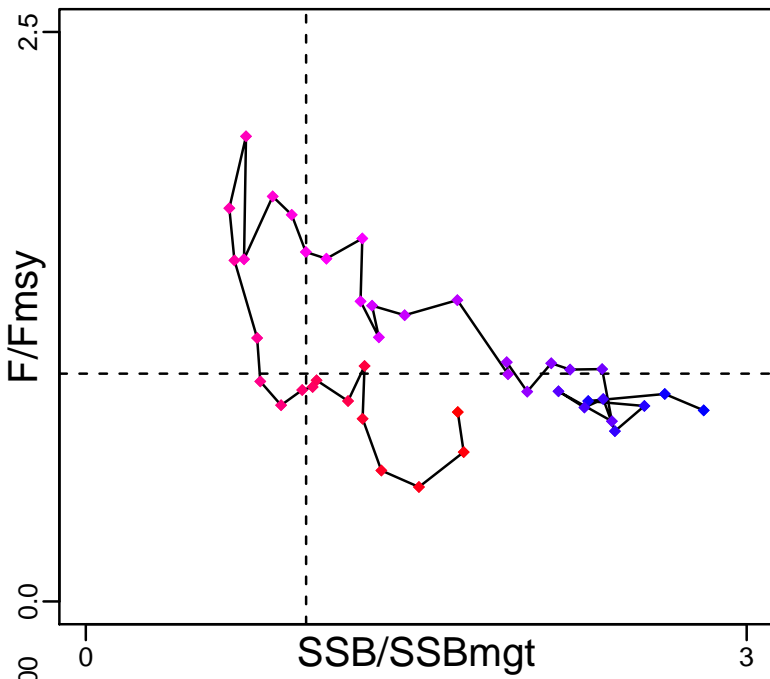
Metadata	
<b>Scientific Name</b>	Clupea harengus
<b>Current Assess ID</b>	WGBFAS-HERR2529-32-1973-2016-ICESIMP2016
<b>Area</b>	Subdivisions 25-29 and 32
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Baltic Fisheries Assessment Working Group
<b>Asmts in RAM</b>	2013, 2014, 2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.22
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	$6 \times 10^5$
<b>Fmgt</b>	Fmgt-1/yr	2016	0.22
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	430,000
<b>Flim</b>	Flim-1/yr	2016	0.52
<b>ERlim</b>	-	-	-

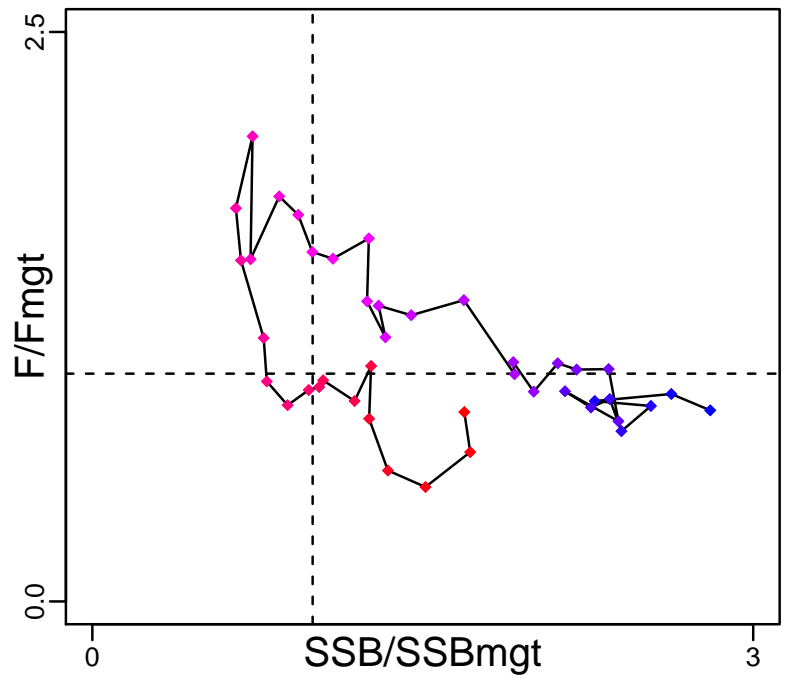
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	1,460,000	-	-
<b>SSB</b>	SSB-MT	2016	1,060,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$1.82 \times 10^{10}$	-	1
<b>F</b>	F-1/yr	2016	0.18	-	3 to 6
<b>ER</b>	ER-calc-ratio	2016	0.12	-	-
<b>TC</b>	TC-MT	2016	174,000		
<b>TL</b>	TL-MT	2016	174,000		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	0.83		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	1.76		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.83		
<b>ER/ERmgt</b>	-	-	-		

# Herring Subdivisions 25–29 and 32 [HERR2529–32]

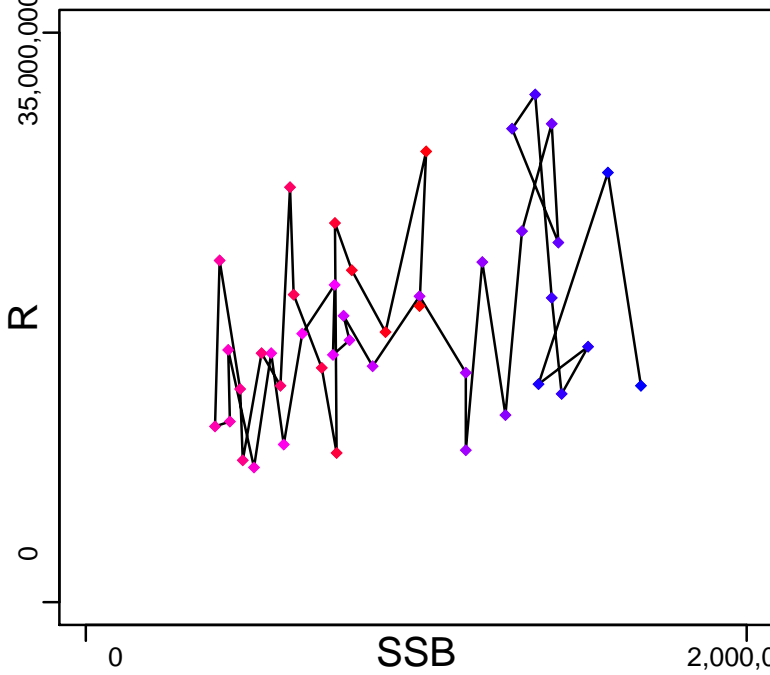
Kobe MSYpref (1973–2016–ICESIMP2016)



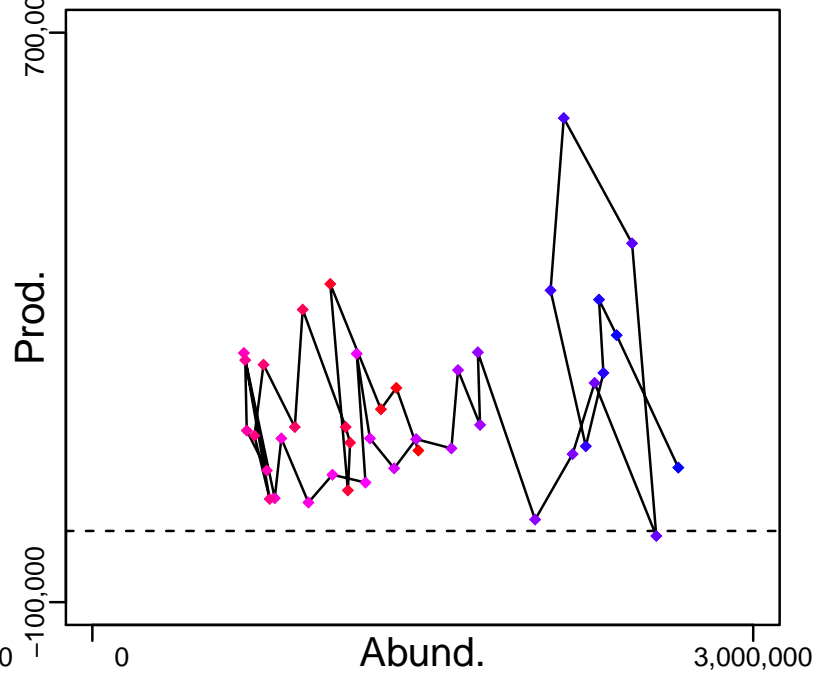
Kobe MGTpref (1973–2016–ICESIMP2016)



Spawner Recruit (1973–2016–ICESIMP2016)

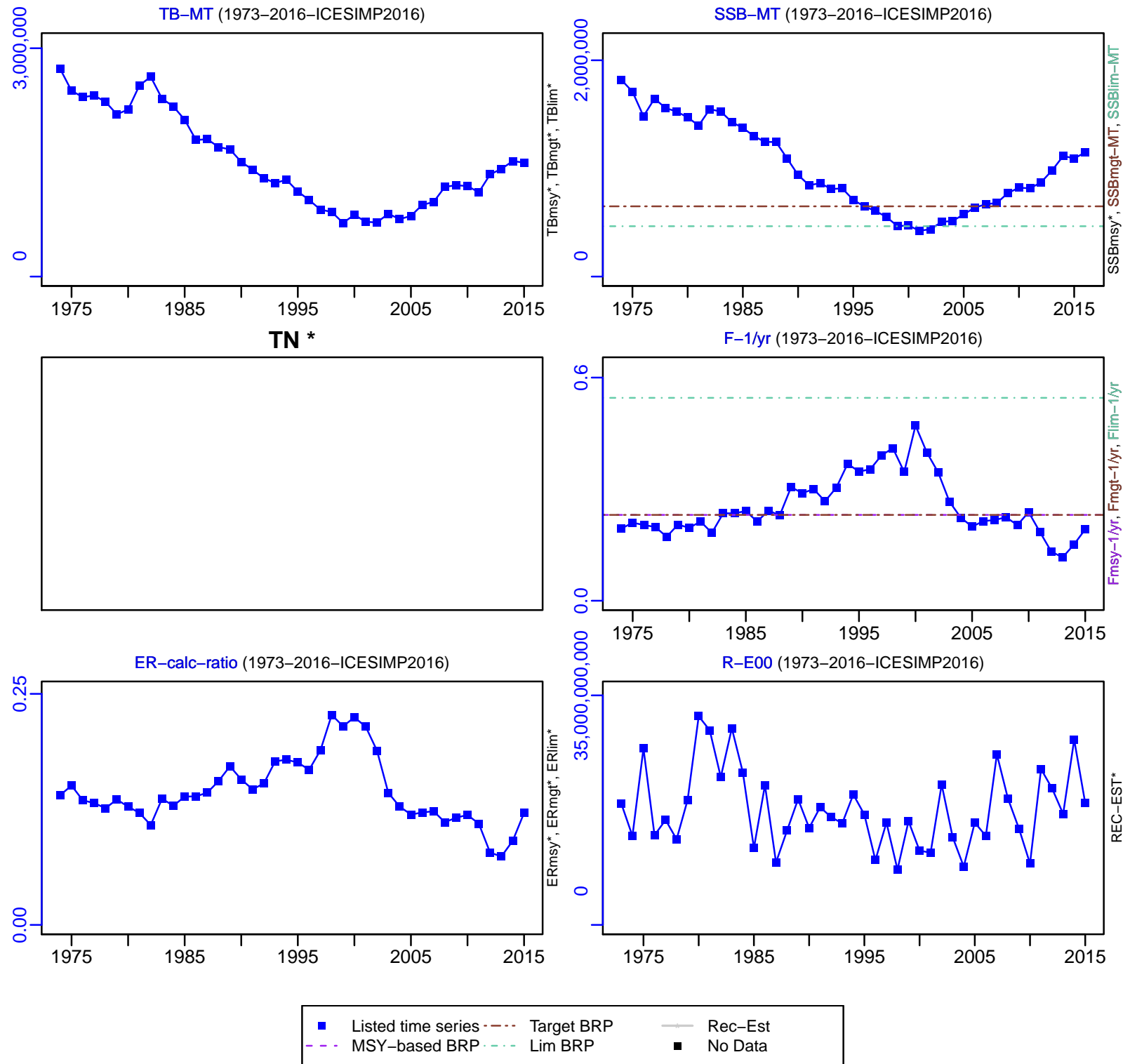


Production (1973–2016–ICESIMP2016)



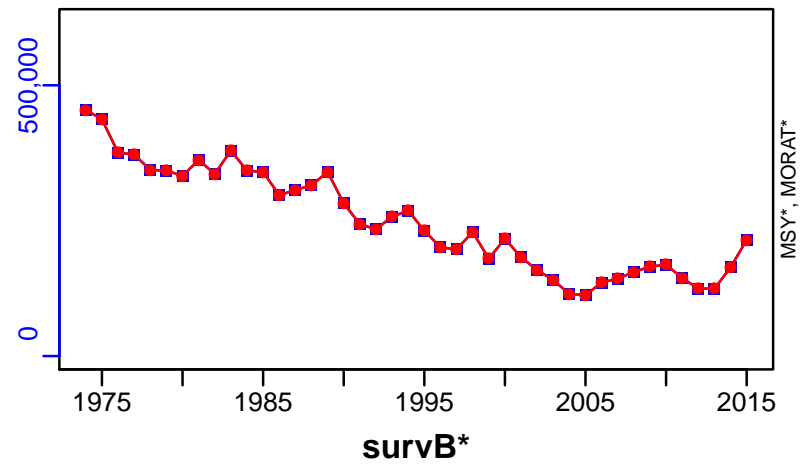
◆ Start Year ◆ End Year \* No Data

# Herring Subdivisions 25–29 and 32 [HERR2529–32]



Herring Subdivisions 25–29 and 32 [HERR2529–32]

TC–MT, TL–MT, RecC\* (1973–2016–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



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

## Herring ICES 30 [HERR30]

Metadata	
<b>Scientific Name</b>	Clupea harengus
<b>Current Assess ID</b>	WGBFAS-HERR30-1972-2016-ICESIMP2016
<b>Area</b>	Bothnian Sea
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Baltic Fisheries Assessment Working Group
<b>Asmts in RAM</b>	2011, 2013, 2014, 2015, 2016

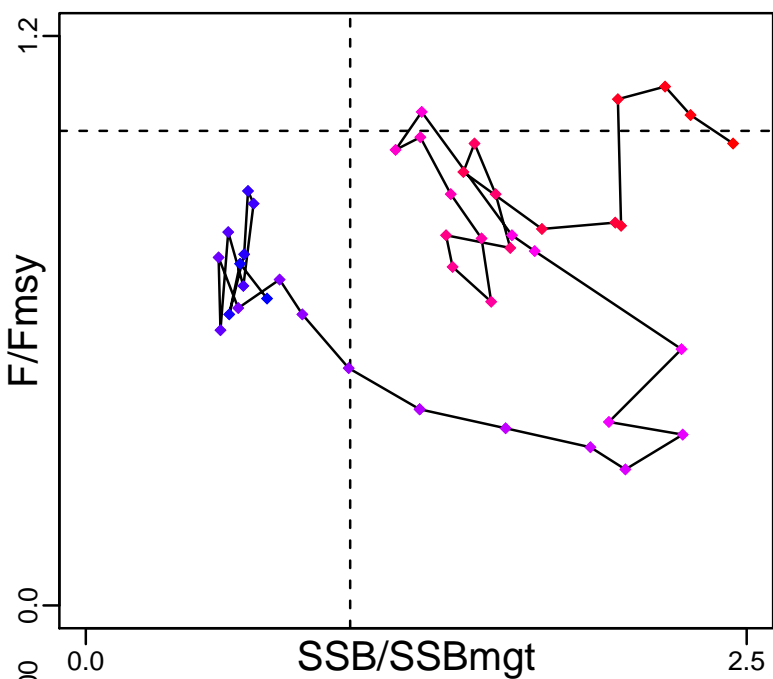
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	TBmsy-MT	2011	$2 \times 10^5$
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.15
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	316,000
<b>Fmgt</b>	Fmgt-1/yr	2016	0.15
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2011	0.2
<b>TBlim</b>	TBlim-MT	2011	290,000
<b>SSBlim</b>	-	-	-
<b>Flim</b>	Flim-1/yr	2011	0.3
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	1,110,000	-	-
<b>SSB</b>	SSB-MT	2016	952,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$8.03 \times 10^9$	-	1
<b>F</b>	F-1/yr	2016	0.15	-	3 to 7
<b>ER</b>	ER-calc-ratio	2016	0.1	-	-
<b>TC</b>	TC-MT	2015	111,000		
<b>TL</b>	TL-MT	2016	110,000		
<b>TB/TBmsy</b>	TB-MT/TBmsy-MT	2011	3.78		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	0.97		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	3.01		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.97		
<b>ER/ERmgt</b>	-	-	-		

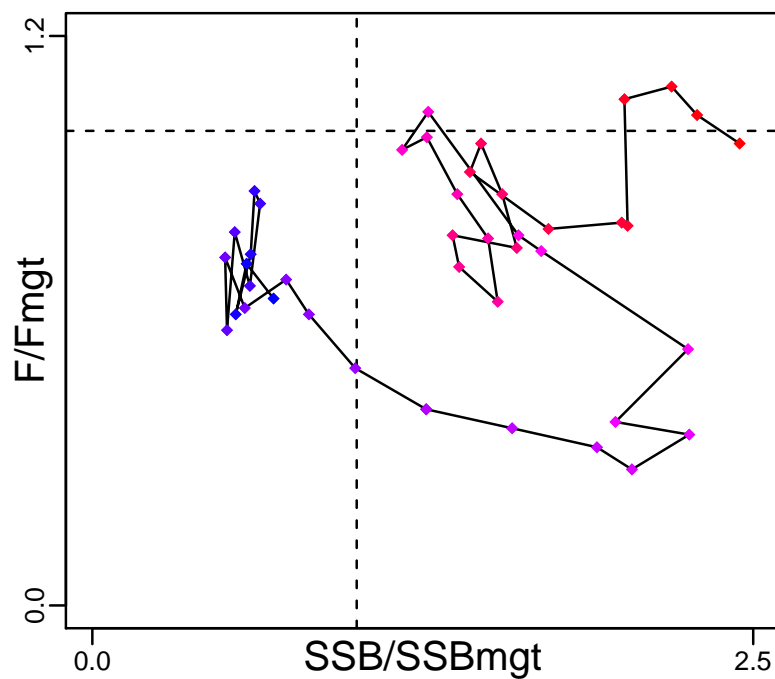


# Herring ICES 30 [HERR30]

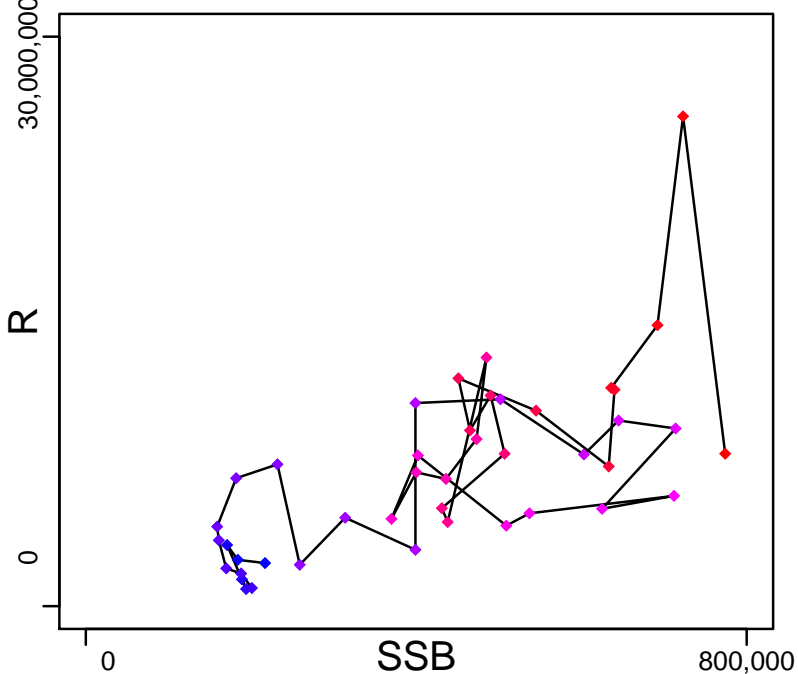
Kobe MSYpref (1972–2016–ICESIMP2016)



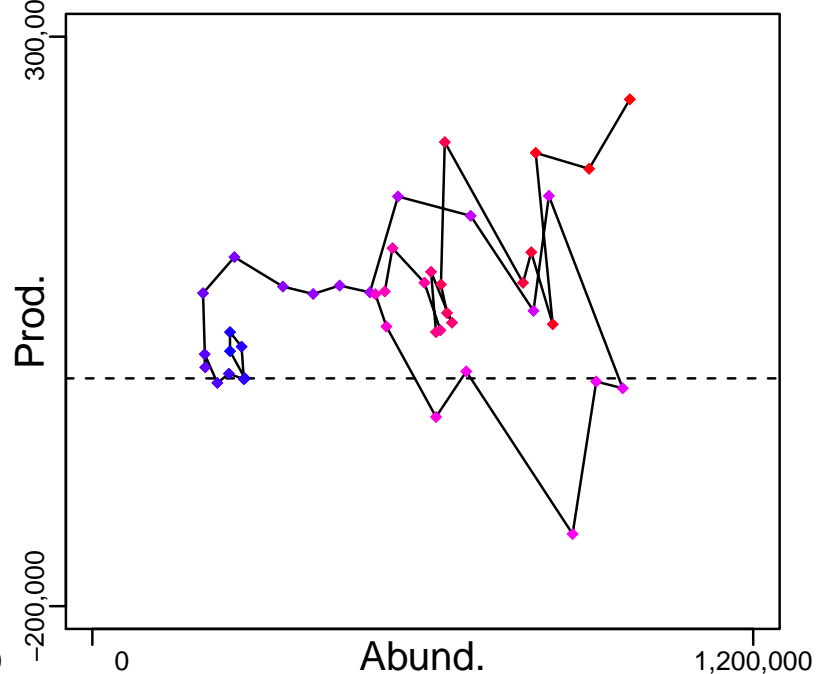
Kobe MGTpref (1972–2016–ICESIMP2016)



Spawner Recruit (1972–2016–ICESIMP2016)

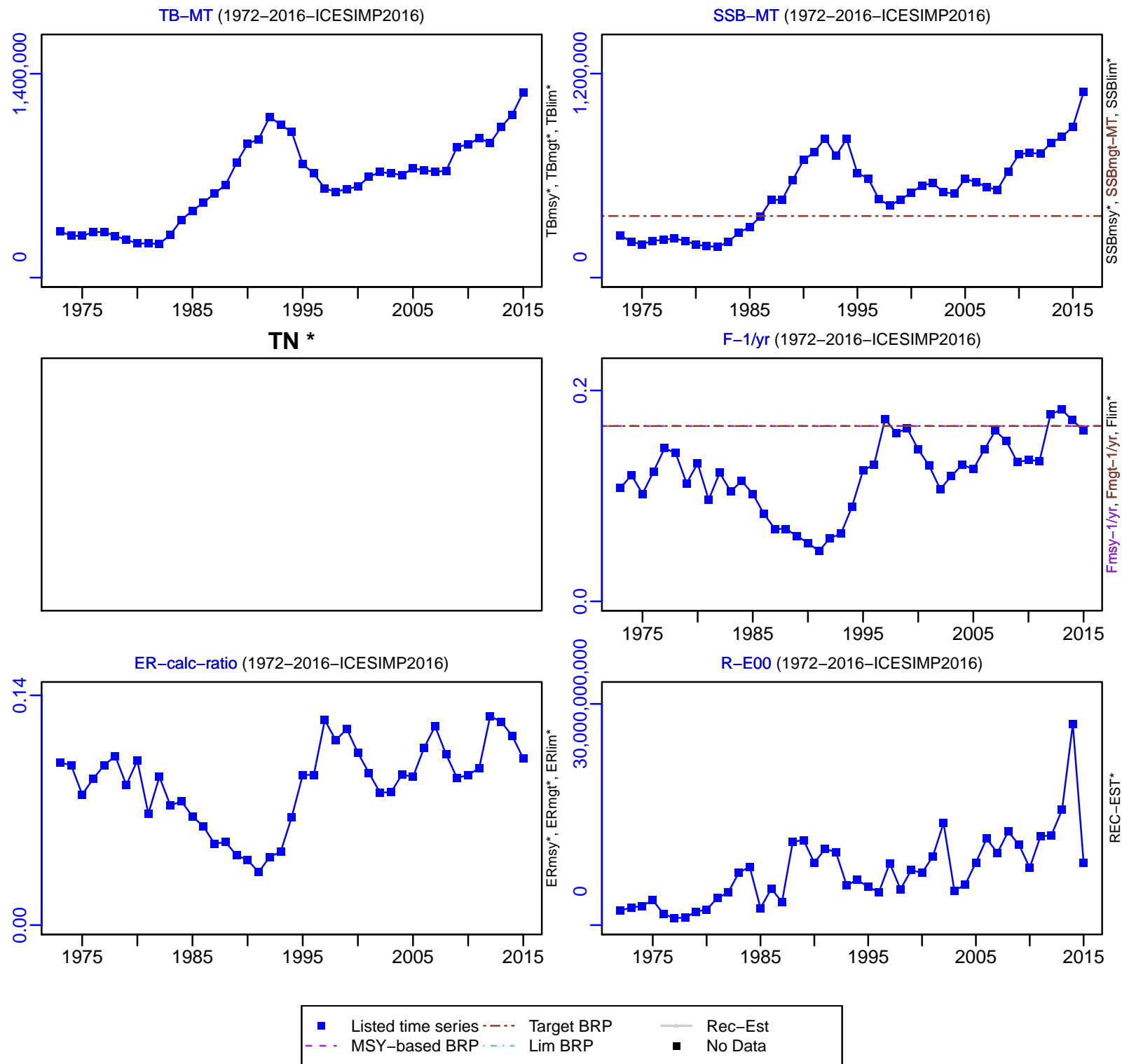


Production (1972–2016–ICESIMP2016)



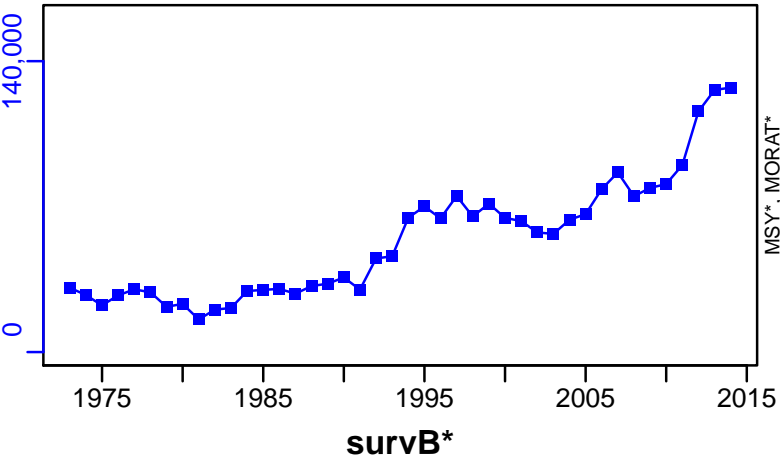
◆ Start Year ◆ End Year \* No Data

# Herring ICES 30 [HERR30]



Herring ICES 30 [HERR30]

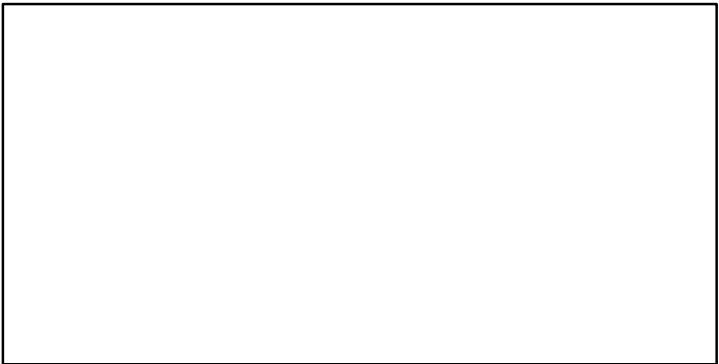
TC-MT, TL\*, RecC\* (1972-2015-ICESIMP2016)



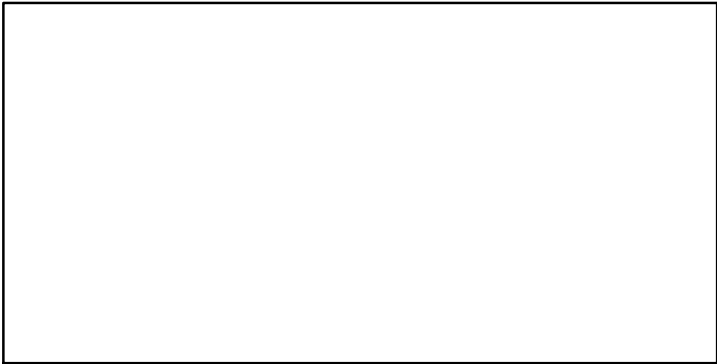
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Herring ICES 31 [HERR31]

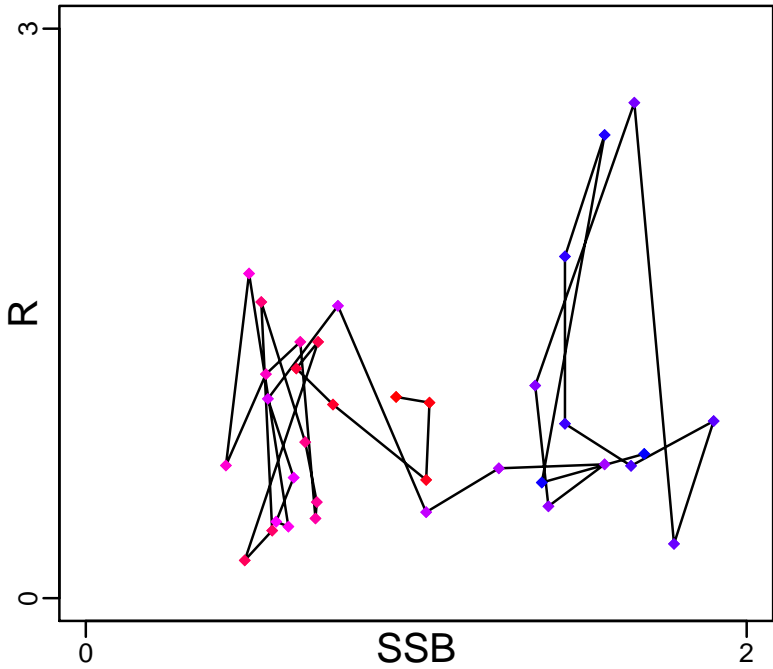
Metadata	
<b>Scientific Name</b>	Clupea harengus
<b>Current Assess ID</b>	WGBFAS-HERR31-1979-2016-ICESIMP2016
<b>Area</b>	Bothnian Bay
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Baltic Fisheries Assessment Working Group
<b>Asmts in RAM</b>	2010, 2014, 2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2010	0.15
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

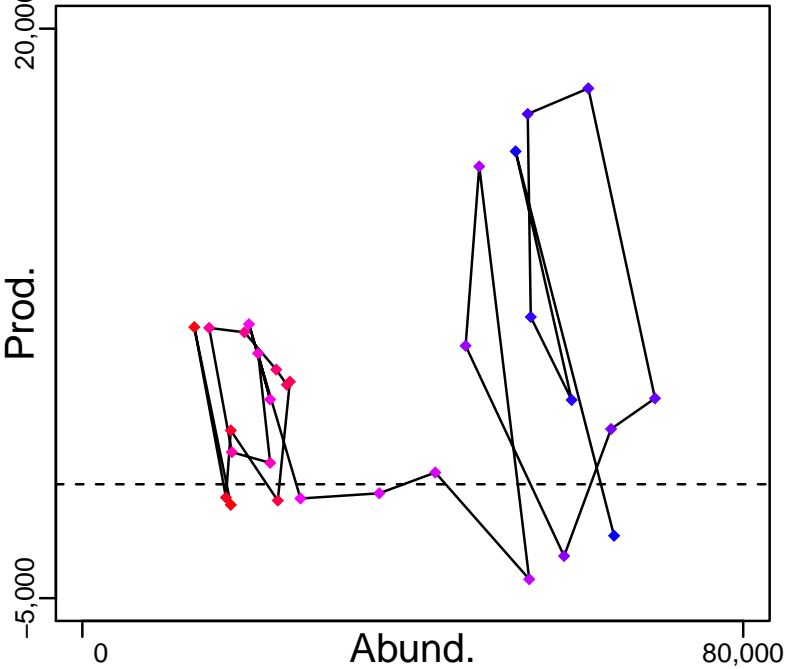
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-relative	2016	1	-	-
TN	-	-	-	-	-
R	R-relative	2016	1	-	1
F	F-relative	2016	0.78	-	3 to 7
ER	ER-ratio	2010	0.11	-	-
TC	TC-MT	2016	4530		
TL	TL-MT	2016	4530		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



Spawner Recruit (1979–2016–ICESIMP2016)



Production (1979–2010–NEUBAUER)



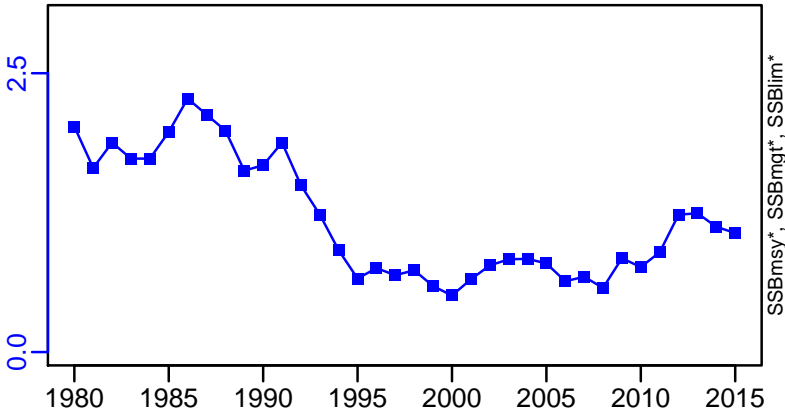
◆ Start Year ◆ End Year \* No Data

Herring ICES 31 [HERR31]

TB\*



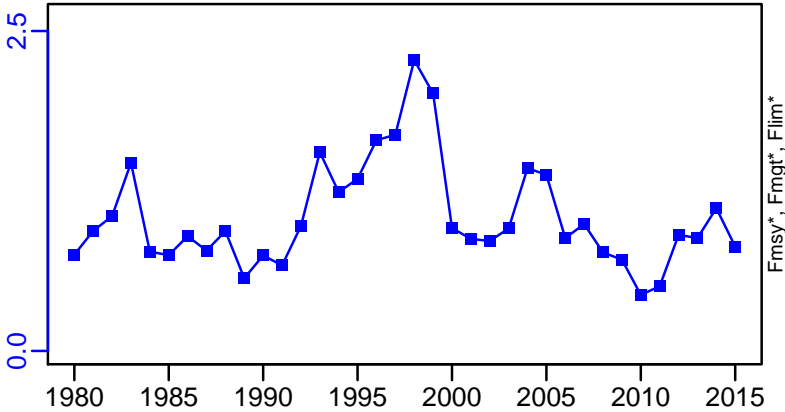
SSB-relative (1979–2016–ICESIMP2016)



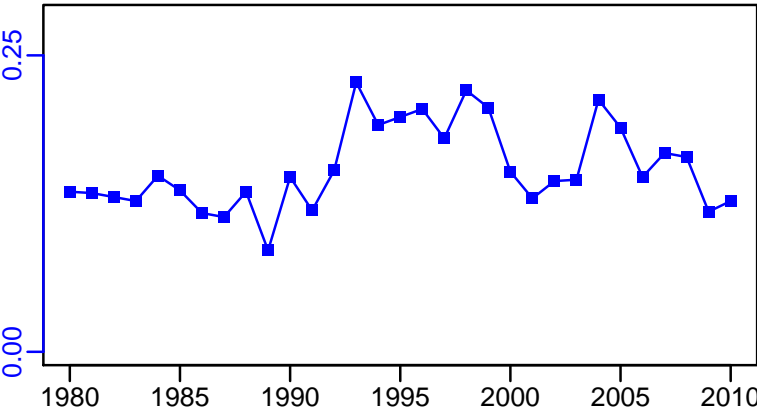
TN \*



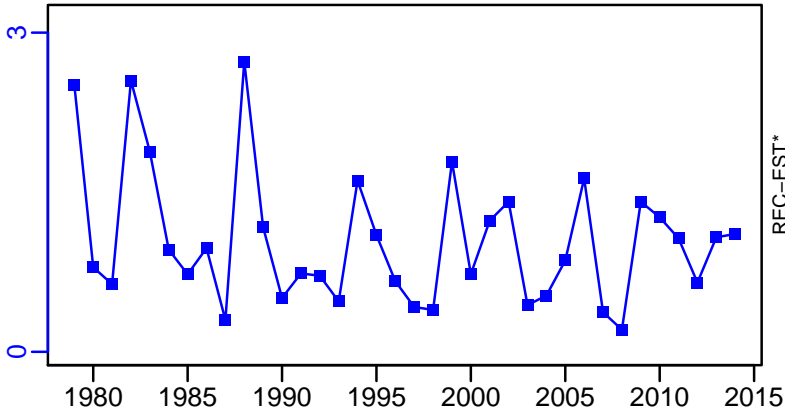
F-relative (1979–2016–ICESIMP2016)



ER-ratio (1979–2010–NEUBAUER)

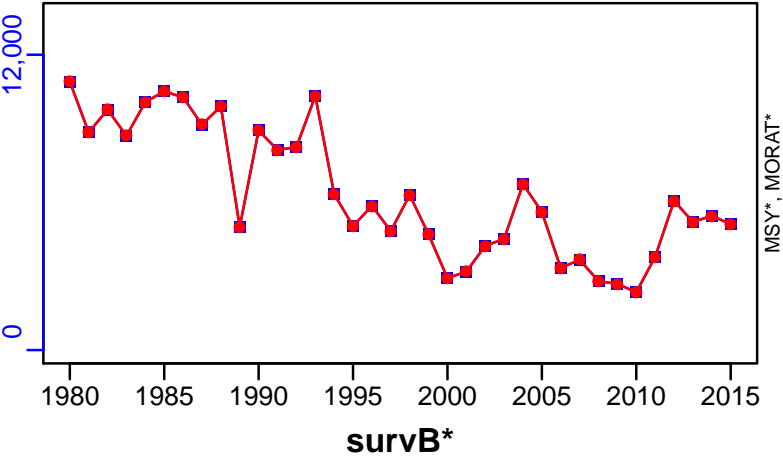


R-relative (1979–2016–ICESIMP2016)

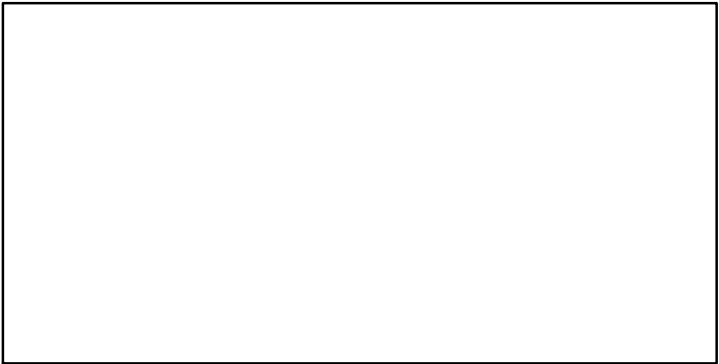


Herring ICES 31 [HERR31]

TC-MT, TL-MT, RecC\* (1979-2016-ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Herring Northern Irish Sea [HERRNIRS]

Metadata	
<b>Scientific Name</b>	Clupea harengus
<b>Current Assess ID</b>	HAWG-HERRNIRS-1960-2016-ICESIMP2016
<b>Area</b>	Irish Sea
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Herring Assessment Working Group for the Area South of 62N
<b>Asmts in RAM</b>	2010, 2013, 2014, 2015, 2016

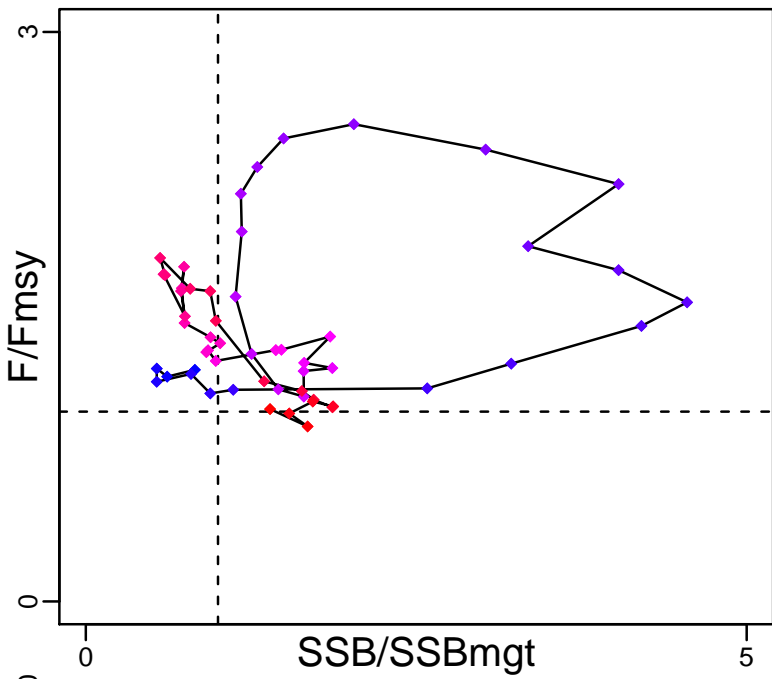
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.26
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	9500
<b>Fmgt</b>	Fmgt-1/yr	2016	0.26
<b>ERMgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	TBlim-MT	2010	6000
<b>SSBlim</b>	SSBlim-MT	2016	6000
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	33,300	-	-
<b>SSB</b>	SSB-MT	2016	13,200	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$1.53 \times 10^8$	-	1
<b>F</b>	F-1/yr	2016	0.26	-	4 to 6
<b>ER</b>	ER-calc-ratio	2016	0.15	-	-
<b>TC</b>	TC-MT	2016	4870		
<b>TL</b>	TL-MT	2016	4870		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	1.01		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	1.39		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	1.01		
<b>ER/ERMgt</b>	-	-	-		

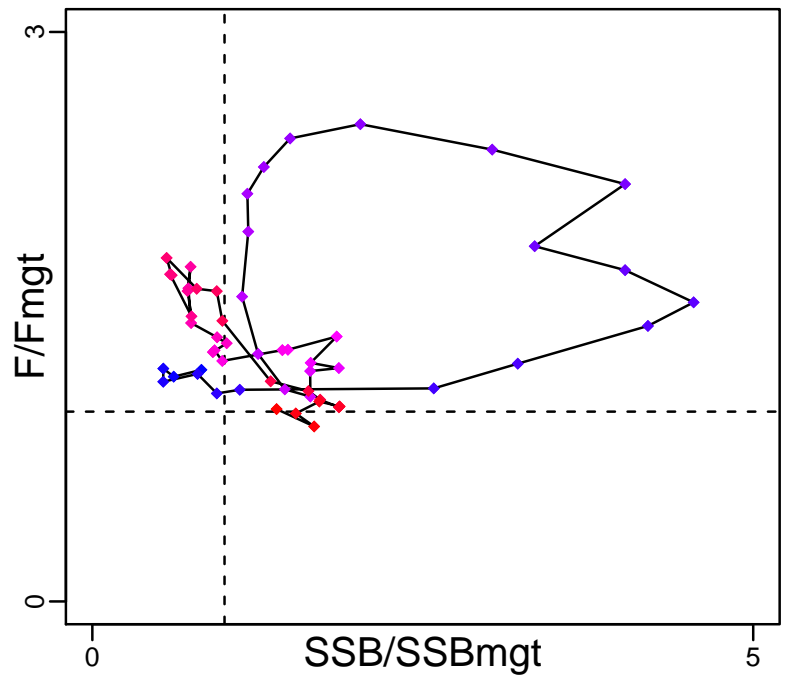


# Herring Northern Irish Sea [HERRNIRS]

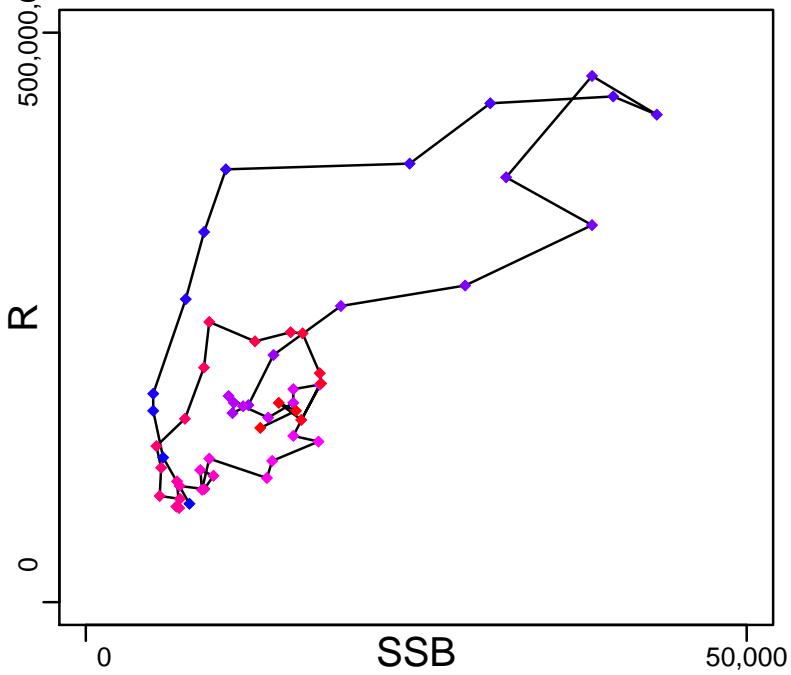
Kobe MSYpref (1960–2016–ICESIMP2016)



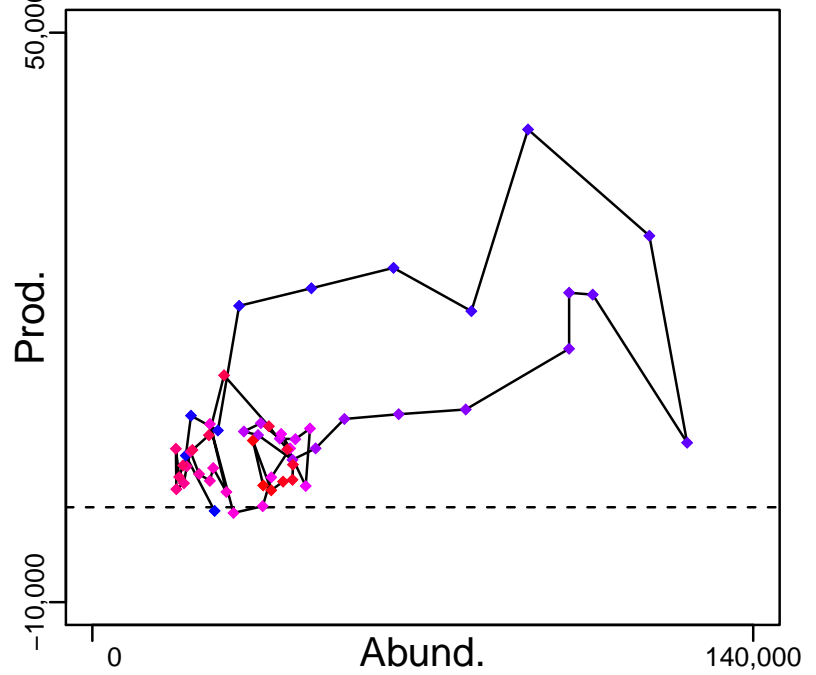
Kobe MGTpref (1960–2016–ICESIMP2016)



Spawner Recruit (1960–2016–ICESIMP2016)

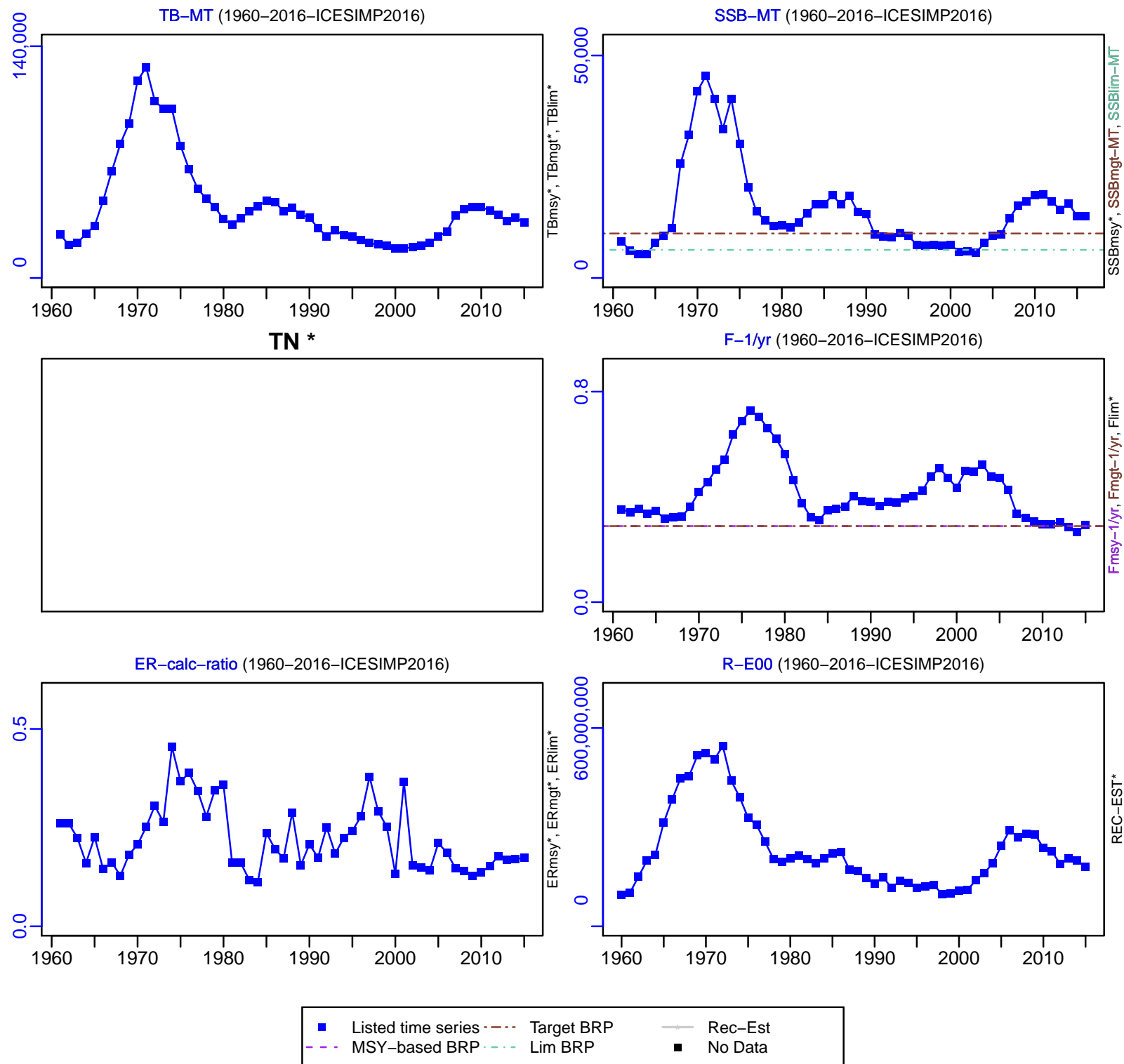


Production (1960–2016–ICESIMP2016)



◆ Start Year ◆ End Year \* No Data

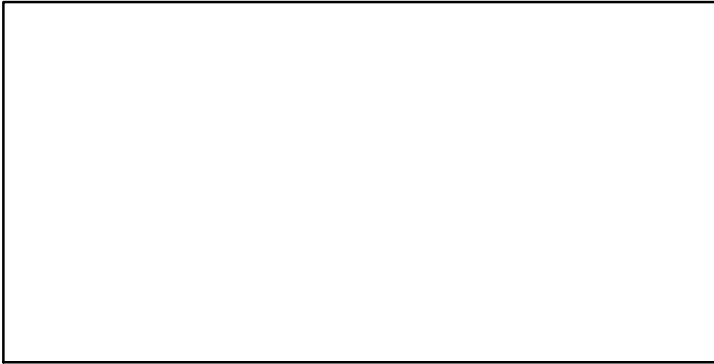
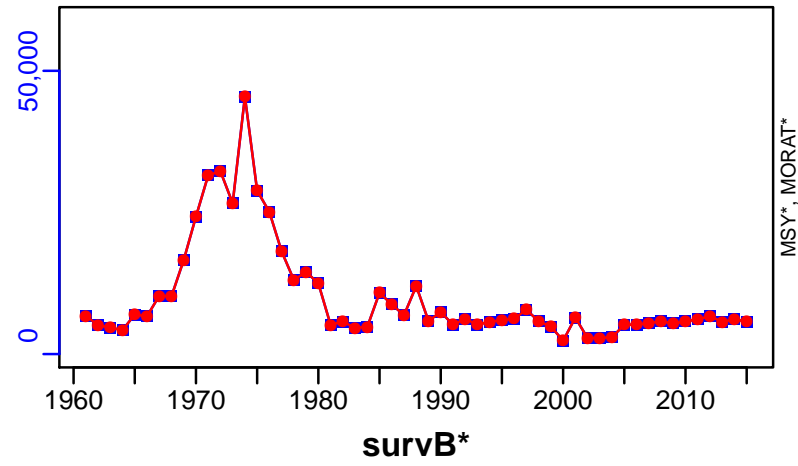
# Herring Northern Irish Sea [HERRNIRS]



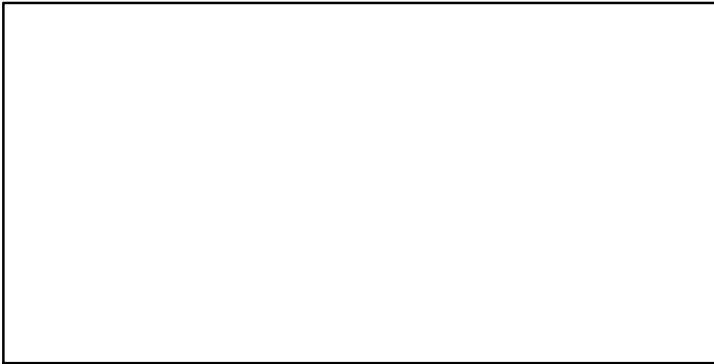
# Herring Northern Irish Sea [HERRNIRS]

TC-MT, TL-MT, RecC\* (1960–2016–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Herring IIIa, VIId and North Sea [HERRNS-IIIa-VIId]

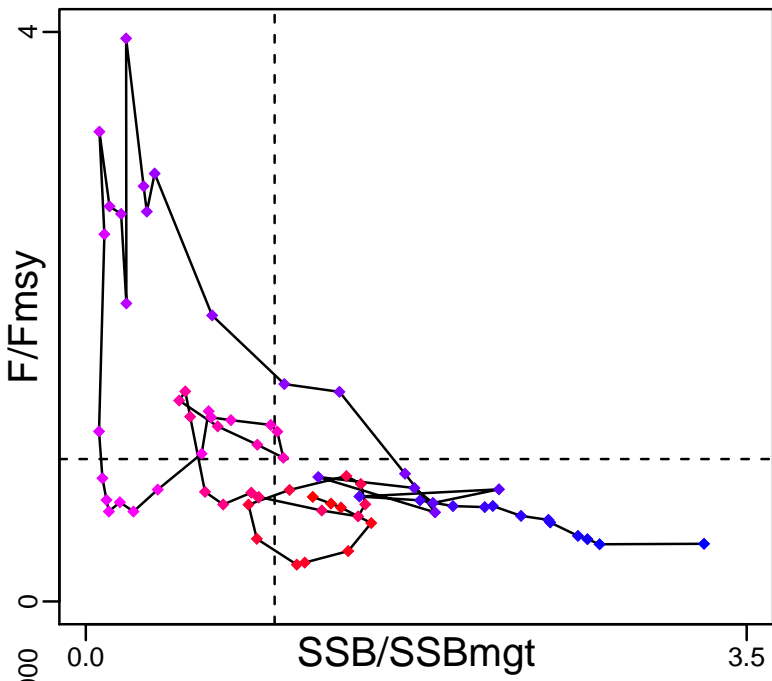
Metadata	
<b>Scientific Name</b>	Clupea harengus
<b>Current Assess ID</b>	HAWG-HERRNS-IIIa-VIId-1947-2016-ICESIMP2016
<b>Area</b>	IIIa, VIId and North Sea
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Herring Assessment Working Group for the Area South of 62N
<b>Asmts in RAM</b>	2013, 2014, 2015, 2016, 2011

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.33
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	1,500,000
<b>Fmgt</b>	Fmgt-1/yr	2016	0.33
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	TBlim-MT	2011	$8 \times 10^5$
<b>SSBlim</b>	SSBlim-MT	2016	$8 \times 10^5$
<b>Flim</b>	Flim-1/yr	2016	0.39
<b>ERlim</b>	-	-	-

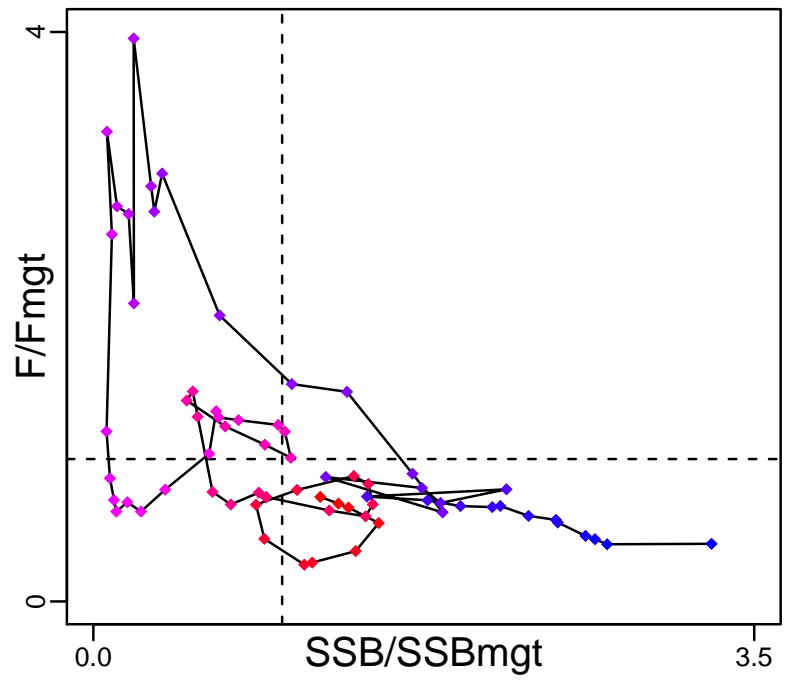
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	3,840,000	-	-
<b>SSB</b>	SSB-MT	2016	2,010,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$2.34 \times 10^{10}$	-	-
<b>F</b>	F-1/yr	2016	0.24	-	-
<b>ER</b>	ER-calc-ratio	2016	0.13	-	-
<b>TC</b>	TC-MT	2016	494,000		
<b>TL</b>	TL-MT	2015	517,000		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	0.73		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	1.34		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.73		
<b>ER/ERmgt</b>	-	-	-		

# Herring IIIa, VIId and North Sea [HERRNS-IIIa-VIId]

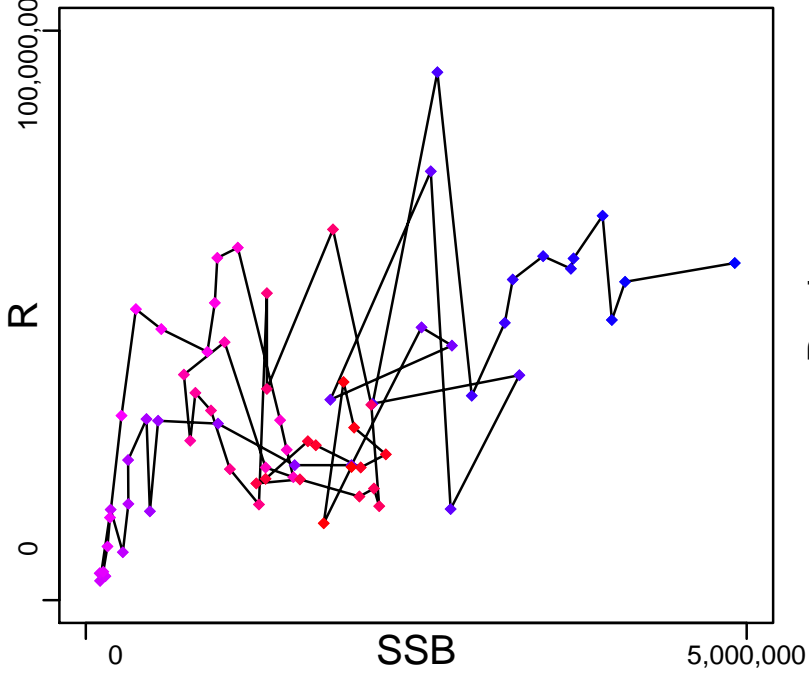
Kobe MSYpref (1947–2016–ICESIMP2016)



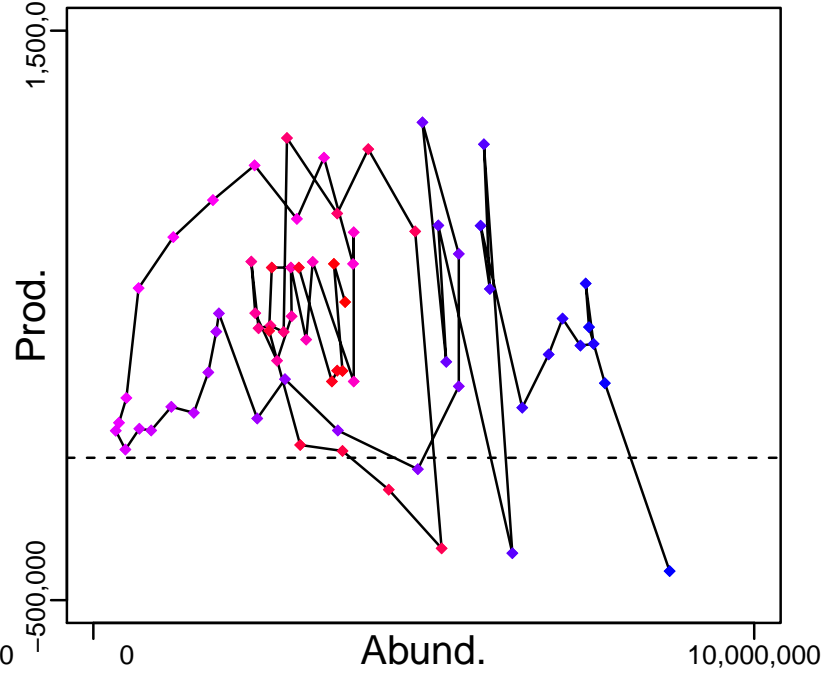
Kobe MGTpref (1947–2016–ICESIMP2016)



Spawner Recruit (1947–2016–ICESIMP2016)



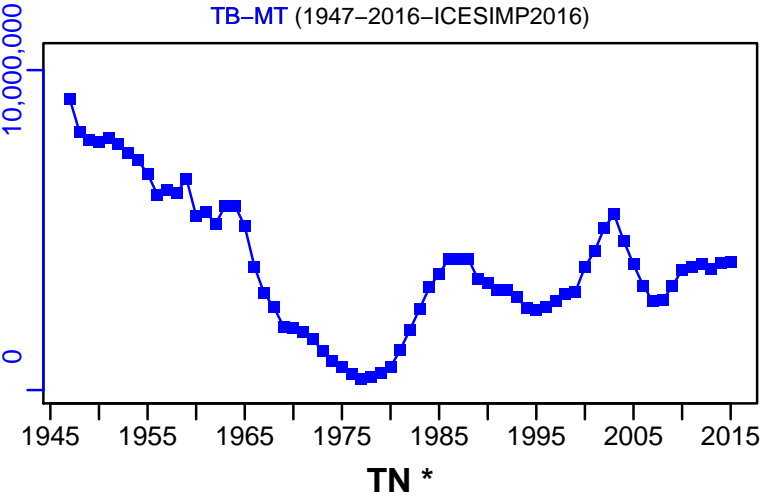
Production (1947–2016–ICESIMP2016)



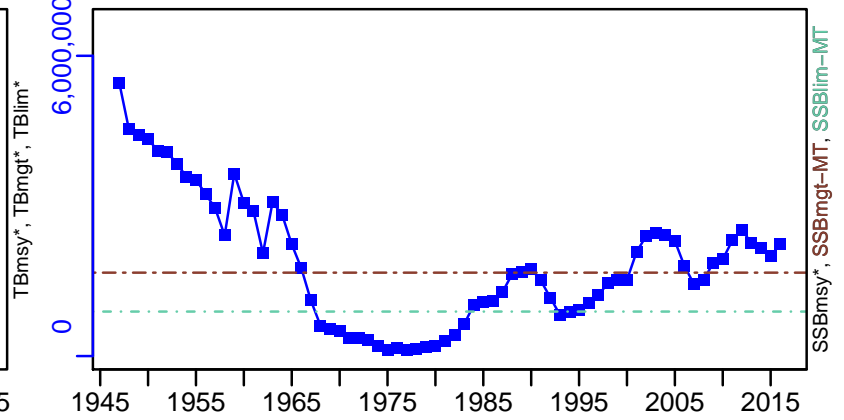
◆ Start Year ◆ End Year \* No Data

# Herring IIIa, VIId and North Sea [HERRNS-IIIa-VIId]

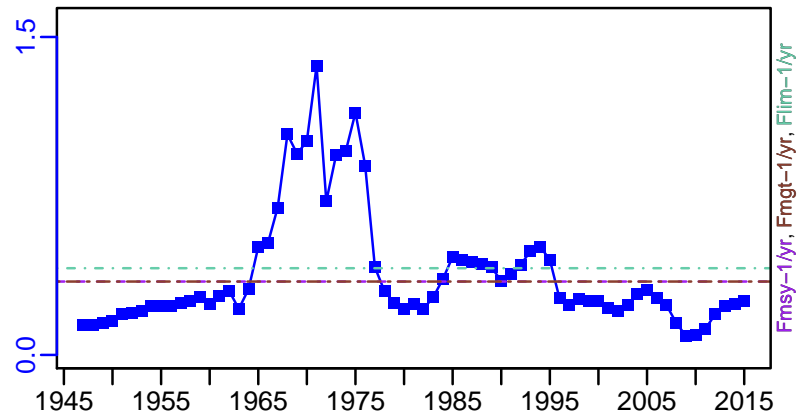
TB-MT (1947–2016–ICESIMP2016)



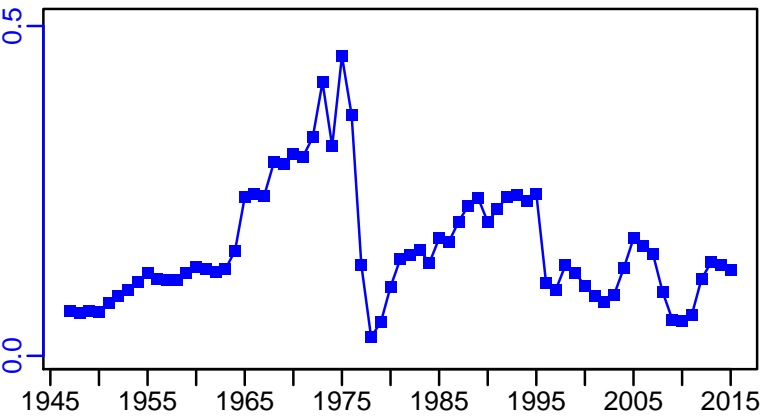
SSB-MT (1947–2016–ICESIMP2016)



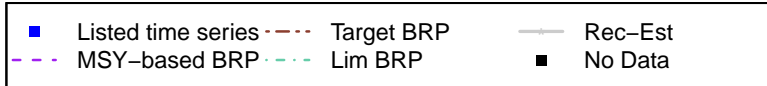
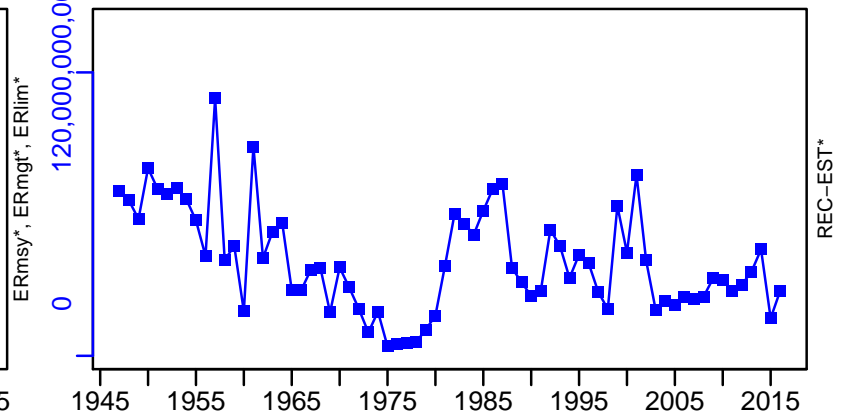
F-1/yr (1947–2016–ICESIMP2016)



ER-calc-ratio (1947–2016–ICESIMP2016)



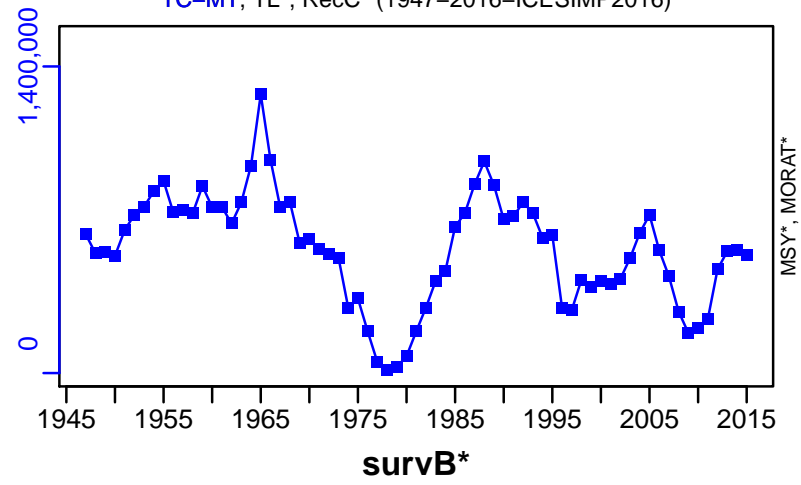
R-E00 (1947–2016–ICESIMP2016)



# Herring IIIa, VIId and North Sea [HERRNS-IIIa-VIId]

TC-MT, TL\*, RecC\* (1947-2016-ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Herring ICES 28 [HERRRIGA]

Metadata	
<b>Scientific Name</b>	Clupea harengus
<b>Current Assess ID</b>	WGBFAS-HERRRIGA-1976-2016-ICESIMP2016
<b>Area</b>	Gulf of Riga East of Gotland
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Baltic Fisheries Assessment Working Group
<b>Asmts in RAM</b>	2011, 2013, 2014, 2015, 2016

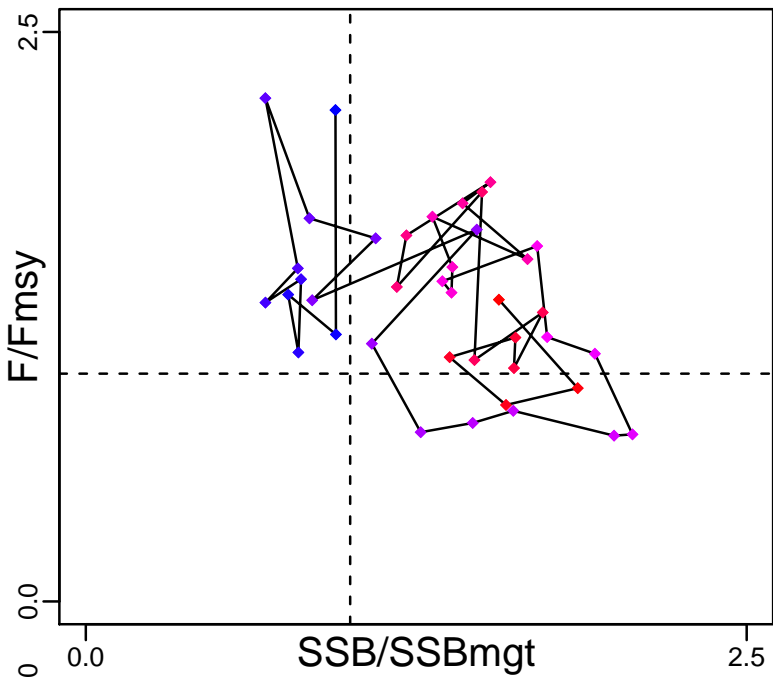
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	SSBmsy-MT	2011	60,000
<b>Fmsy</b>	Fmsy-1/yr	2016	0.32
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	60,000
<b>Fmgt</b>	Fmgt-1/yr	2016	0.32
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2011	0.2
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	40,800
<b>Flim</b>	Flim-1/yr	2016	0.88
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	128,000	-	-
<b>SSB</b>	SSB-MT	2016	78,200	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$2.99 \times 10^9$	-	1
<b>F</b>	F-1/yr	2016	0.42	-	3 to 7
<b>ER</b>	ER-calc-ratio	2016	0.26	-	-
<b>TC</b>	TC-MT	2016	32,900		
<b>TL</b>	TL-MT	2016	32,900		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSB-MT/SSBmsy-MT	2011	1.26		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	1.32		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	1.3		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	1.32		
<b>ER/ERmgt</b>	-	-	-		

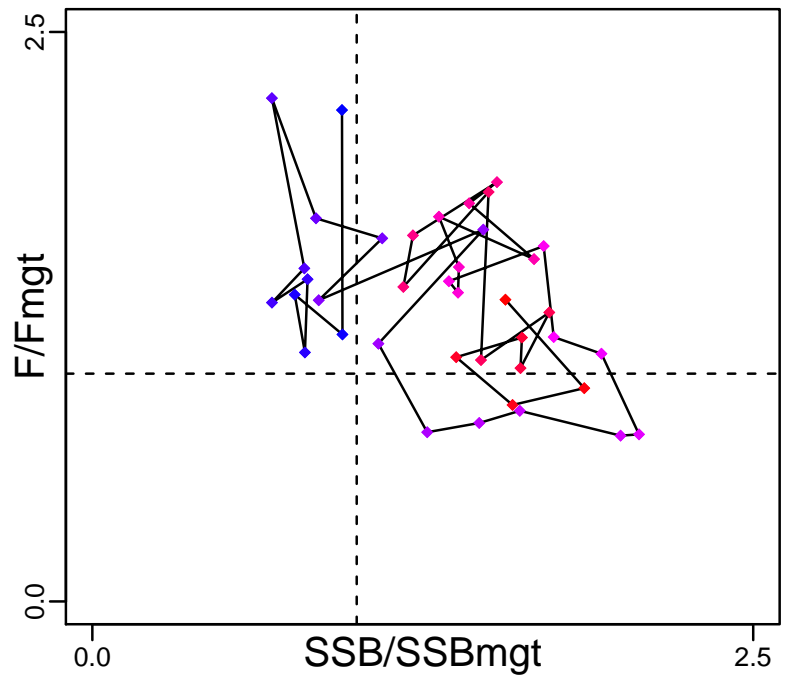


# Herring ICES 28 [HERRRIGA]

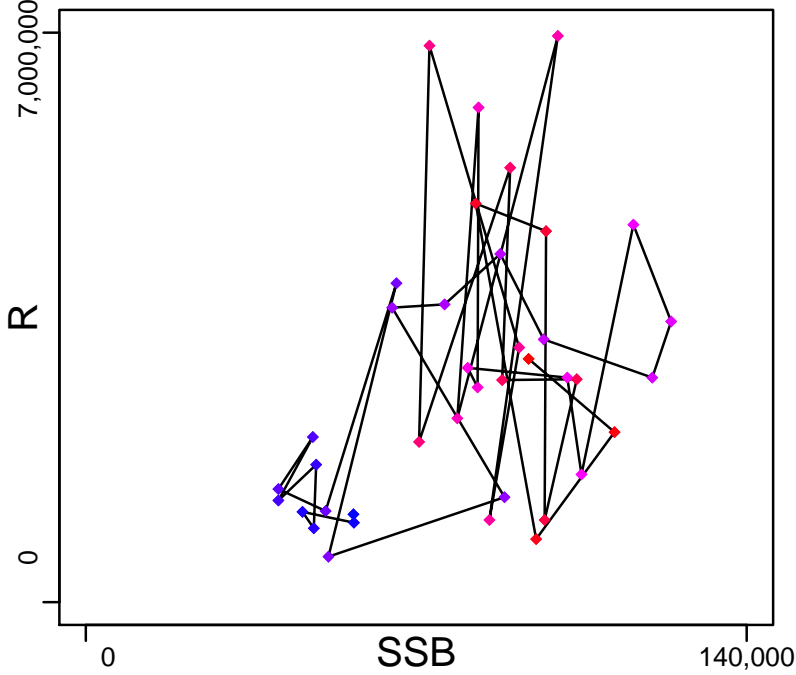
Kobe MSYpref (1976–2016–ICESIMP2016)



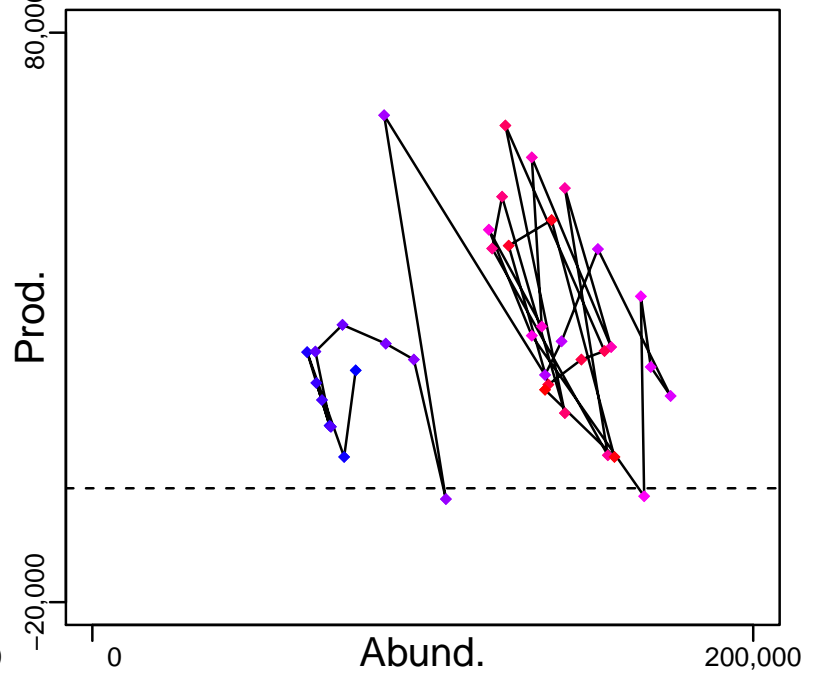
Kobe MGTpref (1976–2016–ICESIMP2016)



Spawner Recruit (1976–2016–ICESIMP2016)

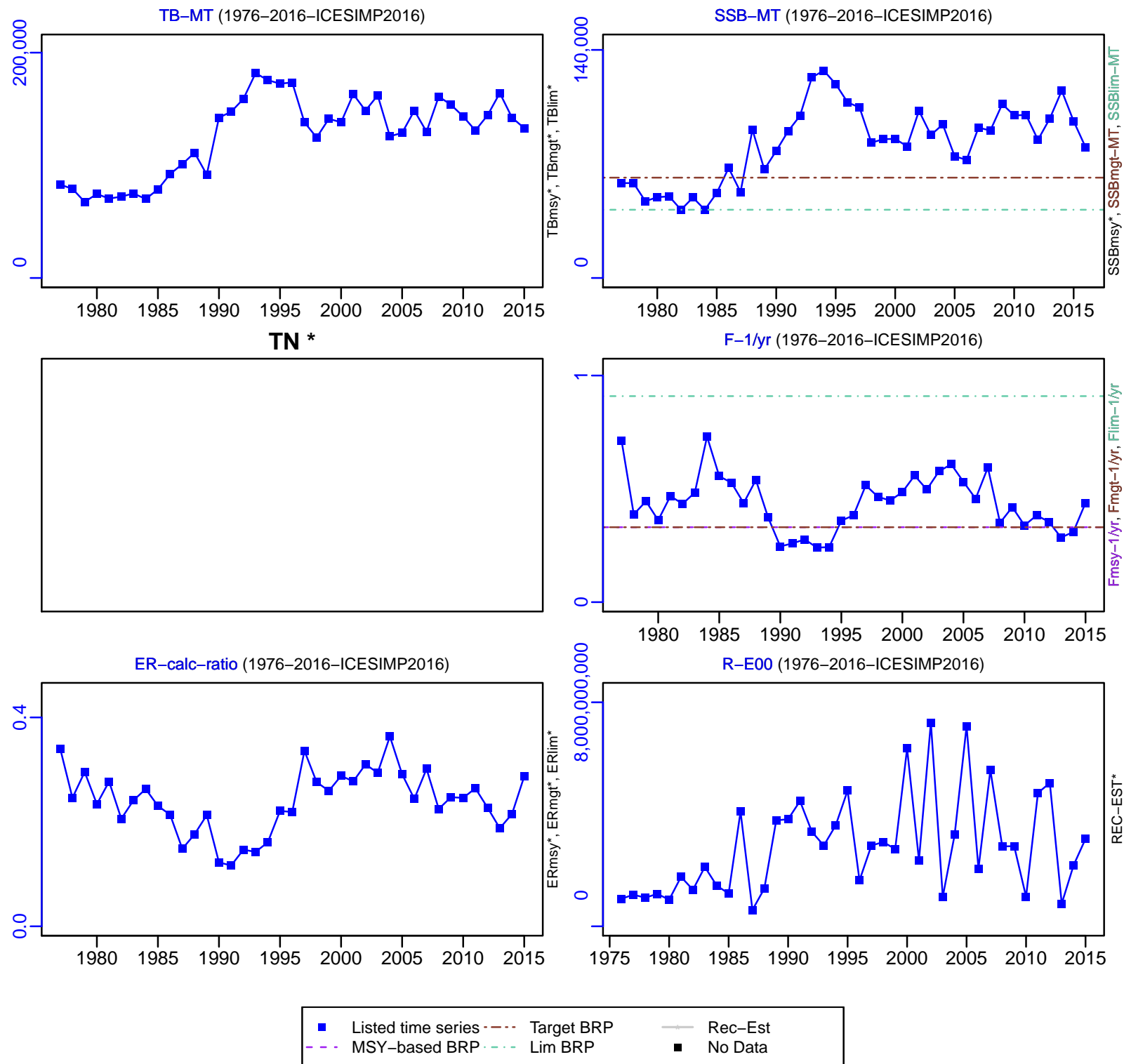


Production (1976–2016–ICESIMP2016)



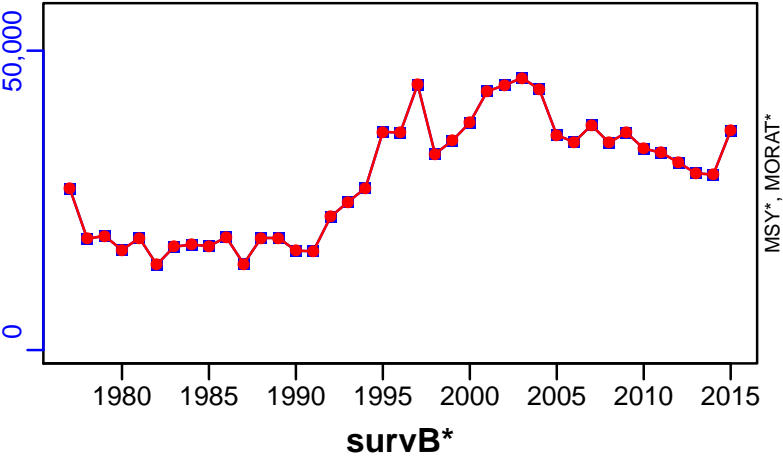
◆ Start Year ◆ End Year \* No Data

# Herring ICES 28 [HERRRIGA]



Herring ICES 28 [HERRRIGA]

TC-MT, TL-MT, RecC\* (1976-2016-ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Herring ICES VIIa-g-h-j [HERRSIRS]

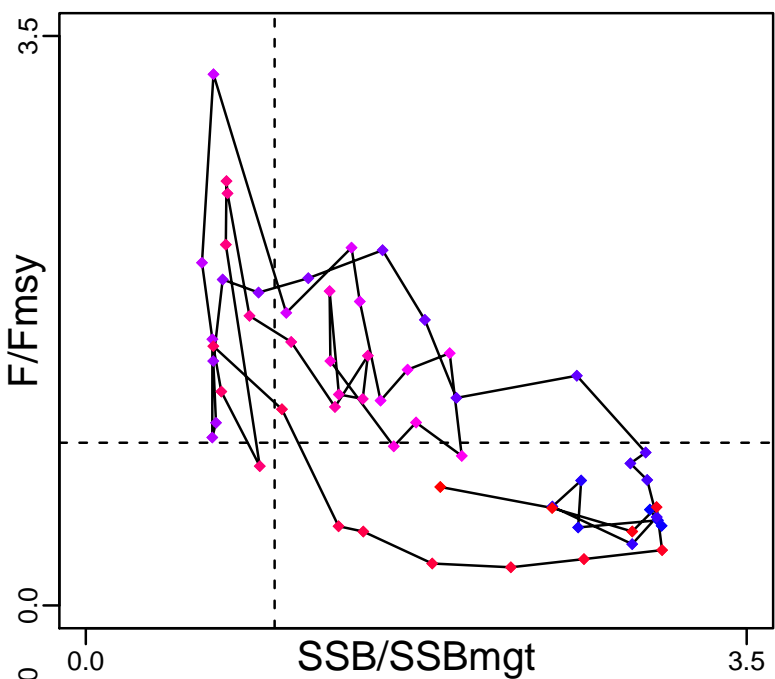
Metadata	
<b>Scientific Name</b>	Clupea harengus
<b>Current Assess ID</b>	HAWG-HERRSIRS-1957-2016-ICESIMP2016
<b>Area</b>	ICES VIIa-g-h-j
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Herring Assessment Working Group for the Area South of 62N
<b>Asmts in RAM</b>	2010, 2012, 2013, 2014, 2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.26
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	54,000
<b>Fmgt</b>	Fmgt-1/yr	2016	0.26
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	TBlim-MT	2010	26,000
<b>SSBlim</b>	SSBlim-MT	2016	33,000
<b>Flim</b>	Flim-1/yr	2016	0.61
<b>ERlim</b>	-	-	-

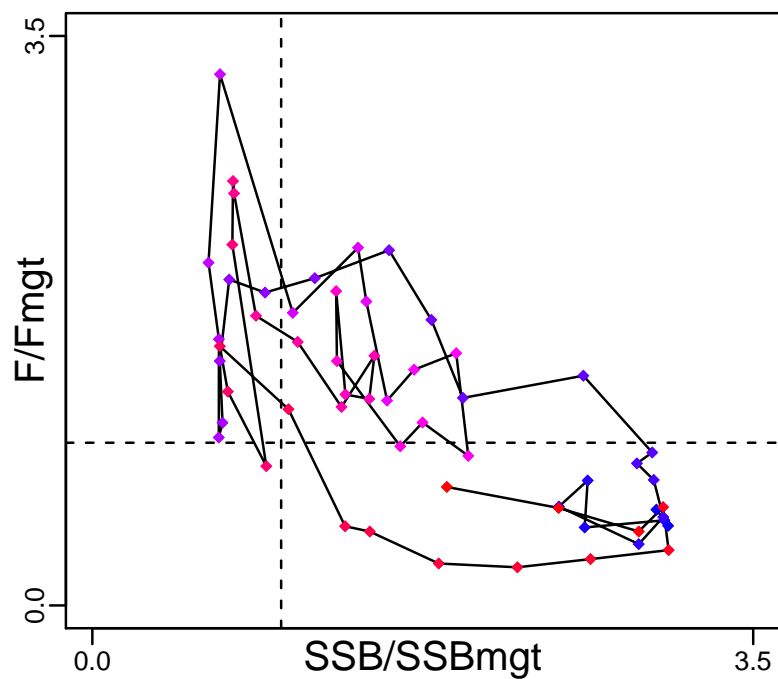
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	145,000	-	-
<b>SSB</b>	SSB-MT	2016	84,900	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$5.38 \times 10^8$	-	1
<b>F</b>	F-1/yr	2016	0.19	-	2 to 5
<b>ER</b>	ER-calc-ratio	2016	0.13	-	-
<b>TC</b>	TC-MT	2016	18,400		
<b>TL</b>	TL-MT	2014	16,100		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	0.73		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	1.57		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.73		
<b>ER/ERmgt</b>	-	-	-		

# Herring ICES VIIa-g-h-j [HERRSIRS]

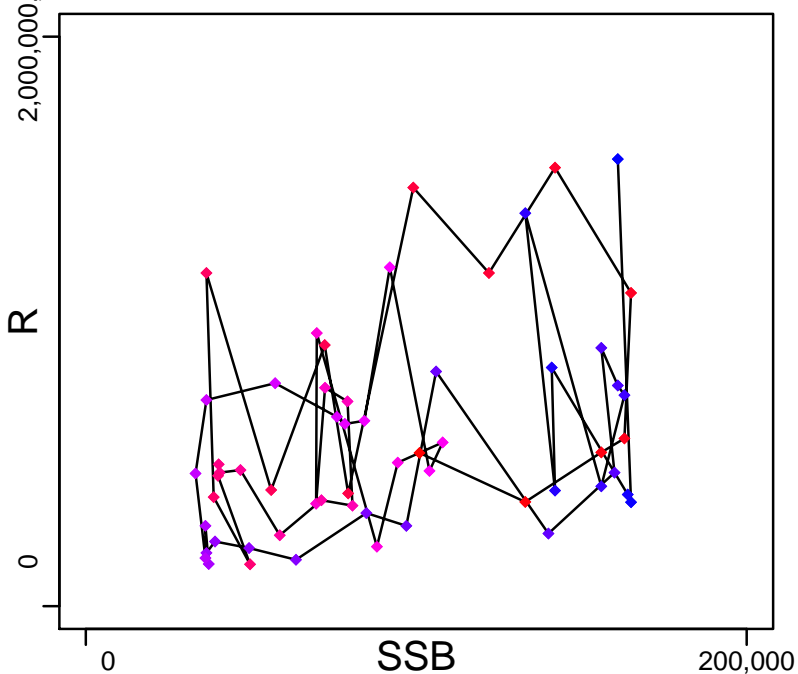
Kobe MSYpref (1957–2016–ICESIMP2016)



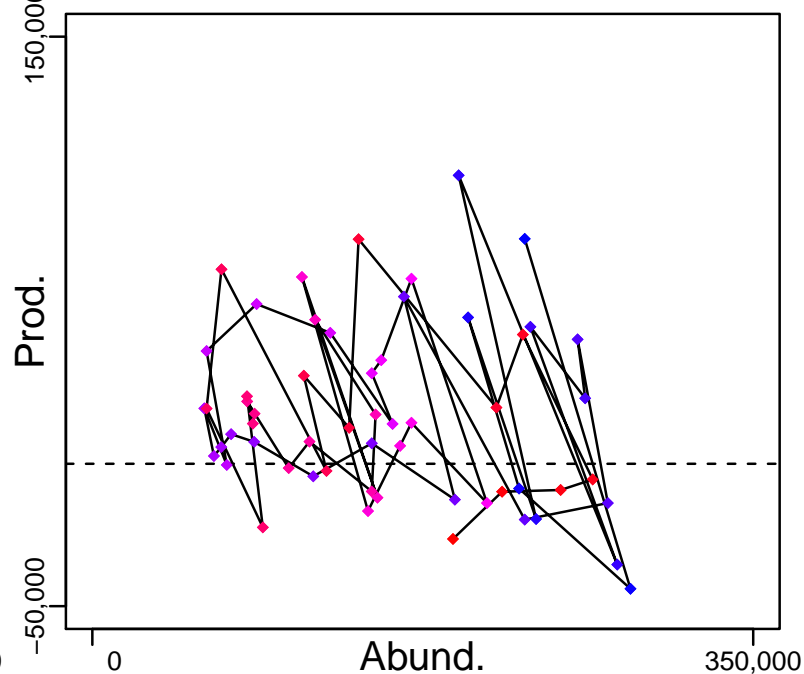
Kobe MGTpref (1957–2016–ICESIMP2016)



Spawner Recruit (1957–2016–ICESIMP2016)



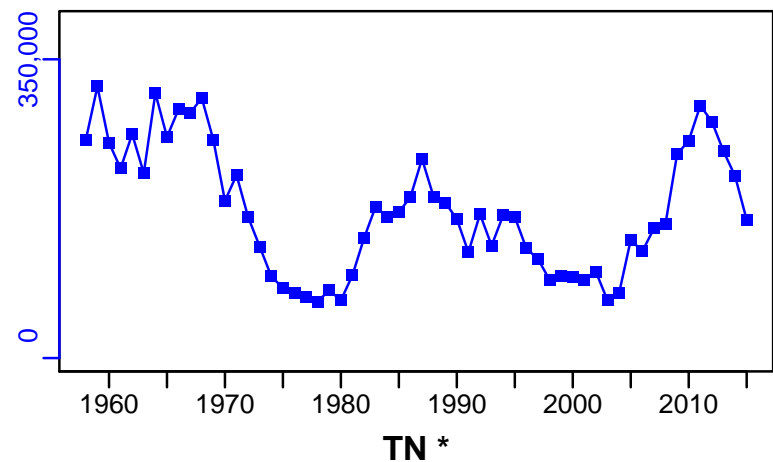
Production (1957–2016–ICESIMP2016)



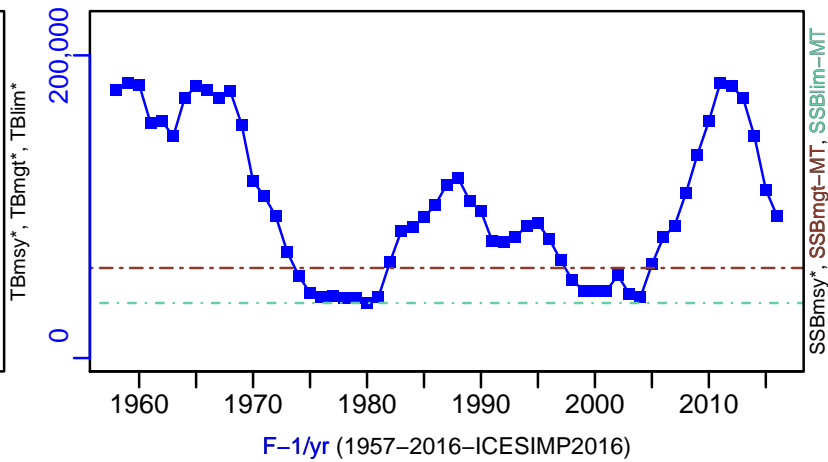
◆ Start Year ◆ End Year \* No Data

# Herring ICES VIIa-g-h-j [HERRSIRS]

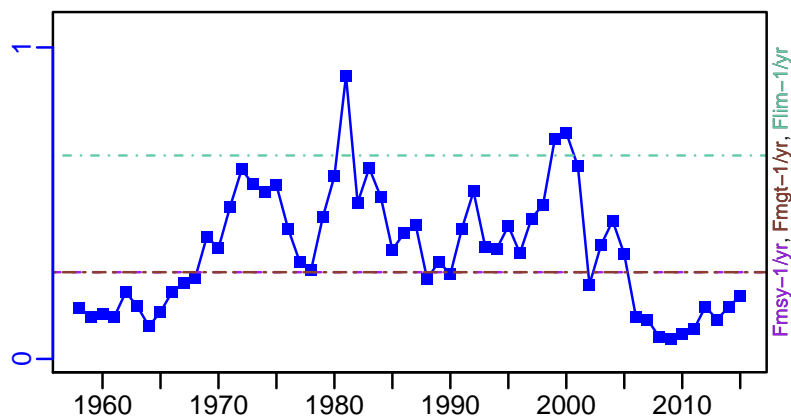
TB-MT (1957-2016-ICESIMP2016)



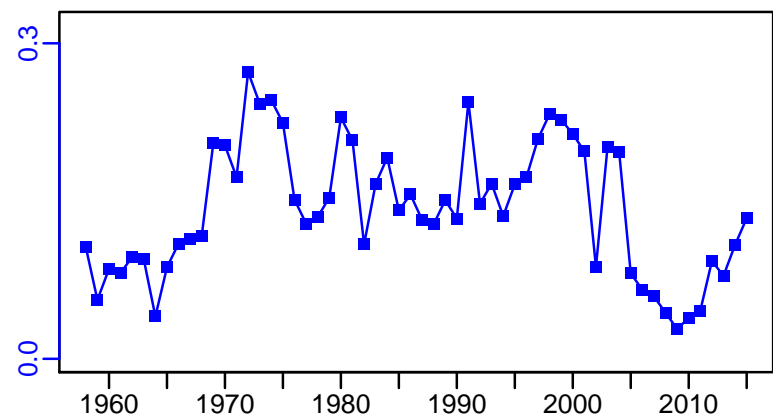
SSB-MT (1957-2016-ICESIMP2016)



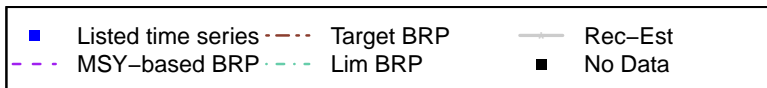
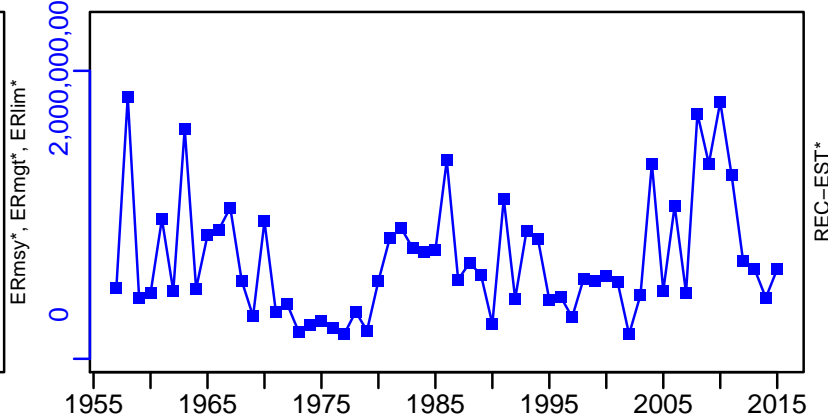
F-1/yr (1957-2016-ICESIMP2016)



ER-calc-ratio (1957-2016-ICESIMP2016)



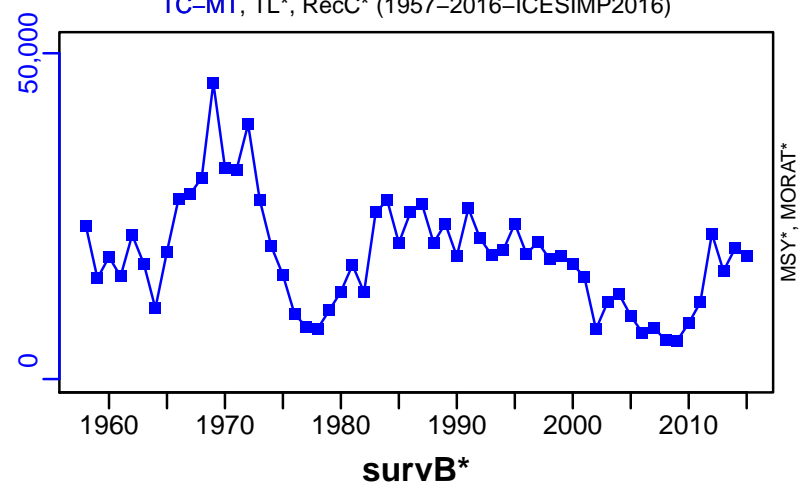
R-E00 (1957-2016-ICESIMP2016)



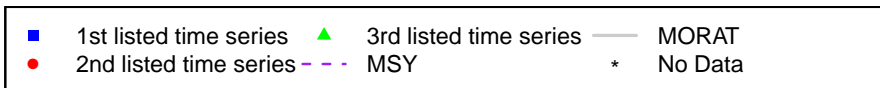
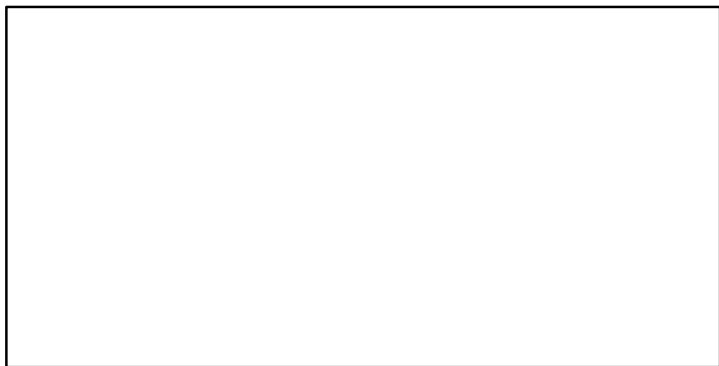
# Herring ICES VIIa-g-h-j [HERRSIRS]

TC-MT, TL\*, RecC\* (1957-2016-ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Herring ICES VIa [HERRVIa]

Metadata	
<b>Scientific Name</b>	Clupea harengus
<b>Current Assess ID</b>	HAWG-HERRVIa-1956-2014-ICESIMP2016
<b>Area</b>	West of Scotland
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Herring Assessment Working Group for the Area South of 62N
<b>Asmts in RAM</b>	2010, 2013, 2014

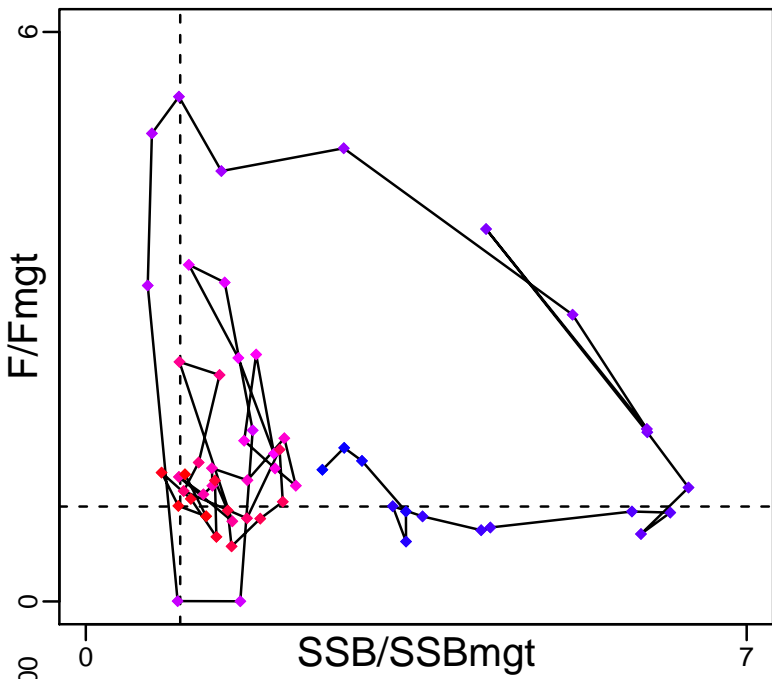
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2010	0.25
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2014	75,000
<b>Fmgt</b>	Fmgt-1/yr	2014	0.2
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	TBlim-MT	2010	50,000
<b>SSBlim</b>	SSBlim-MT	2014	50,000
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2014	114,000	-	-
<b>SSB</b>	SSB-MT	2014	78,800	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2014	$6 \times 10^8$	-	1
<b>F</b>	F-1/yr	2014	0.27	-	3 to 6 ringer
<b>ER</b>	ER-calc-ratio	2014	0.2	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2014	23,000		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2010	1.06		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2014	1.05		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	1.34		
<b>ER/ERmgt</b>	-	-	-		

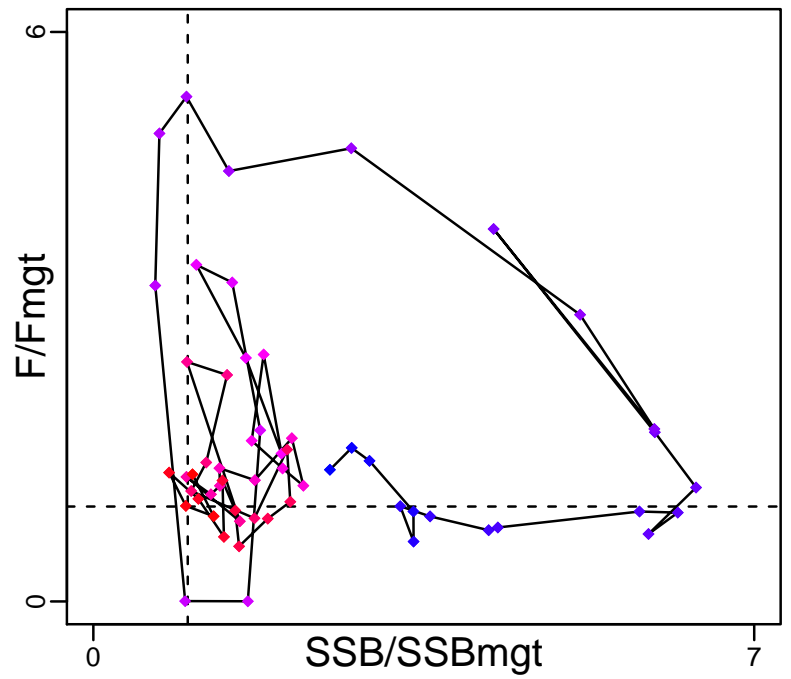


# Herring ICES Vla [HERRVla]

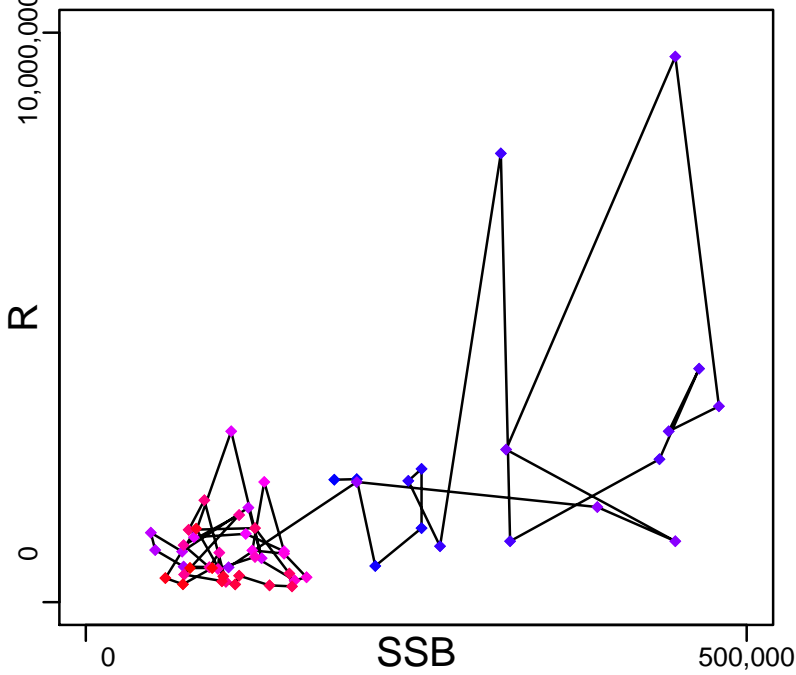
Kobe MSYpref (1956–2014–ICESIMP2016)



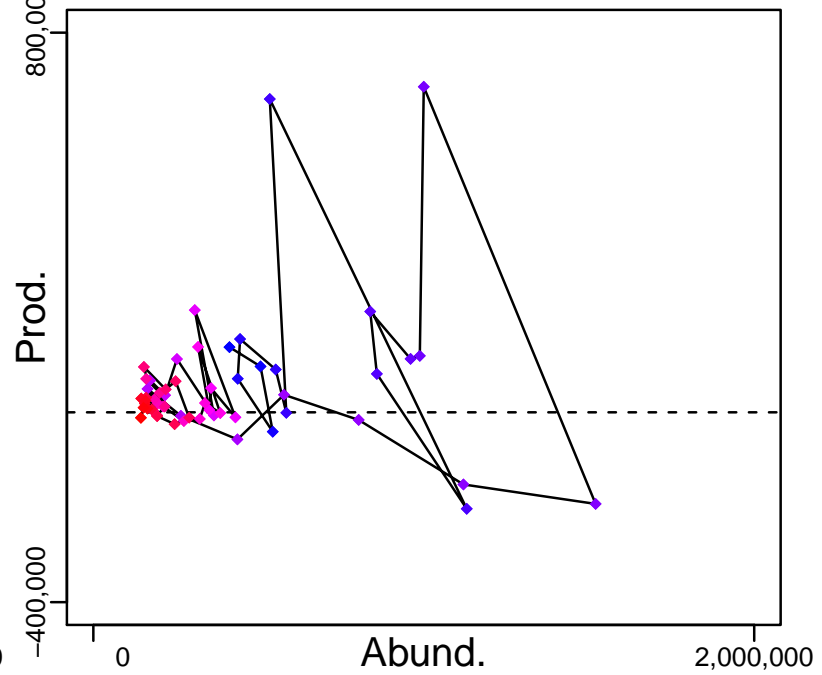
Kobe MGTpref (1956–2014–ICESIMP2016)



Spawner Recruit (1956–2014–ICESIMP2016)



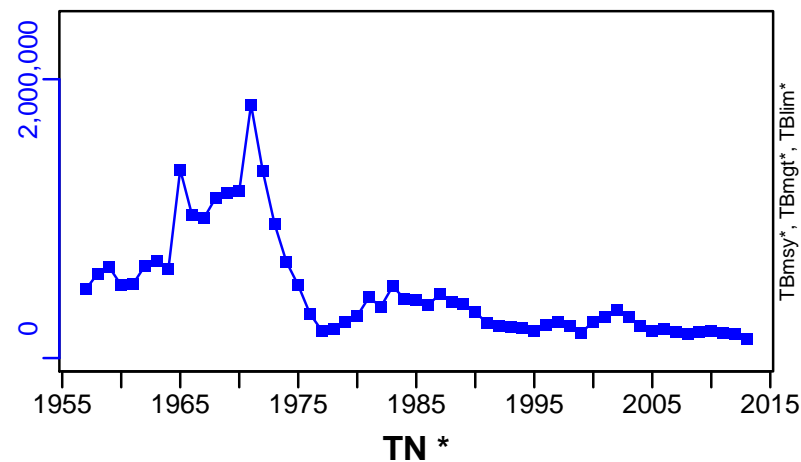
Production (1956–2014–ICESIMP2016)



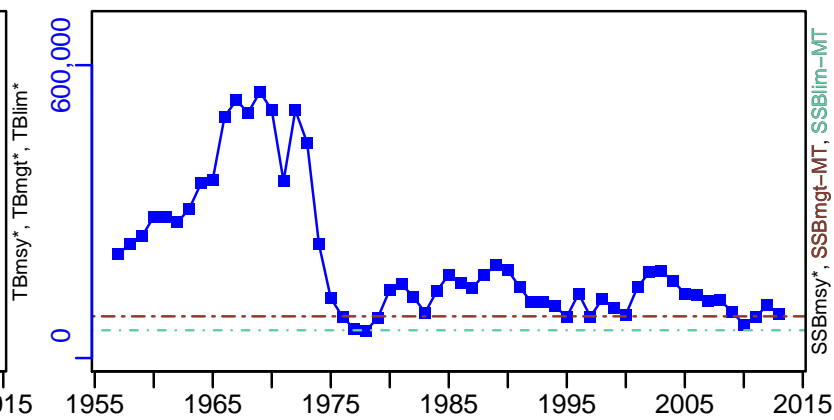
◆ Start Year ◆ End Year \* No Data

# Herring ICES Vla [HERRVla]

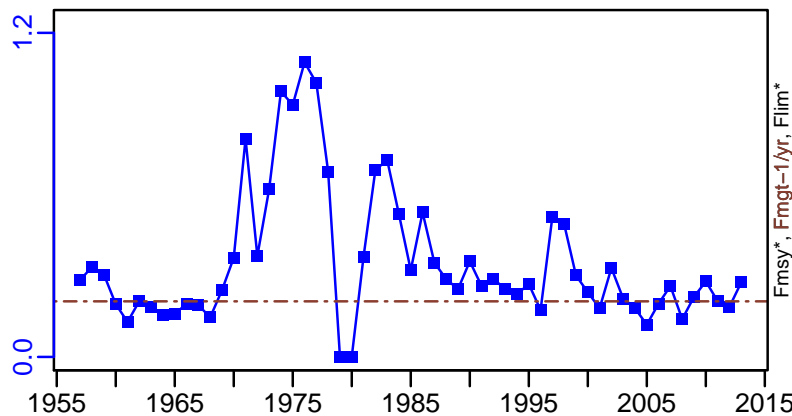
TB-MT (1956–2014–ICESIMP2016)



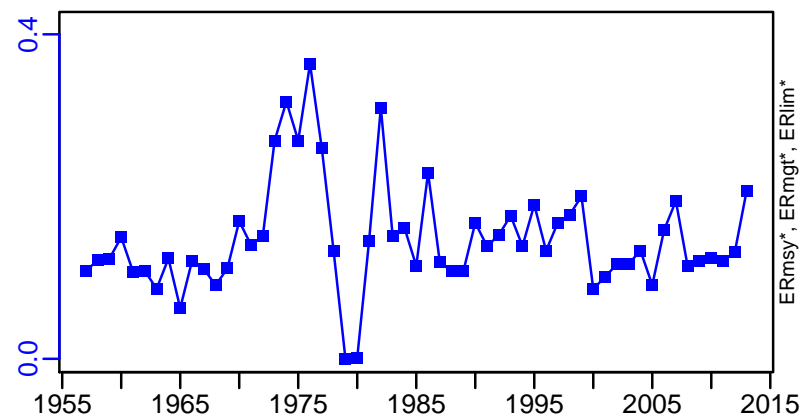
SSB-MT (1956–2014–ICESIMP2016)



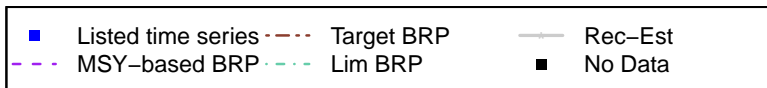
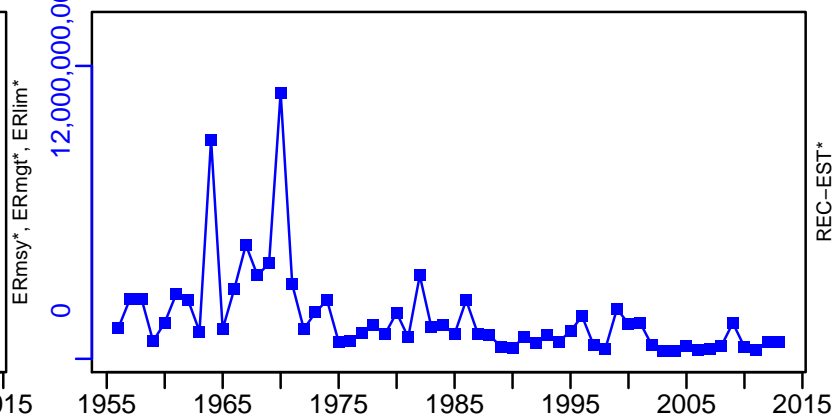
F-1/yr (1956–2014–ICESIMP2016)



ER-calc-ratio (1956–2014–ICESIMP2016)

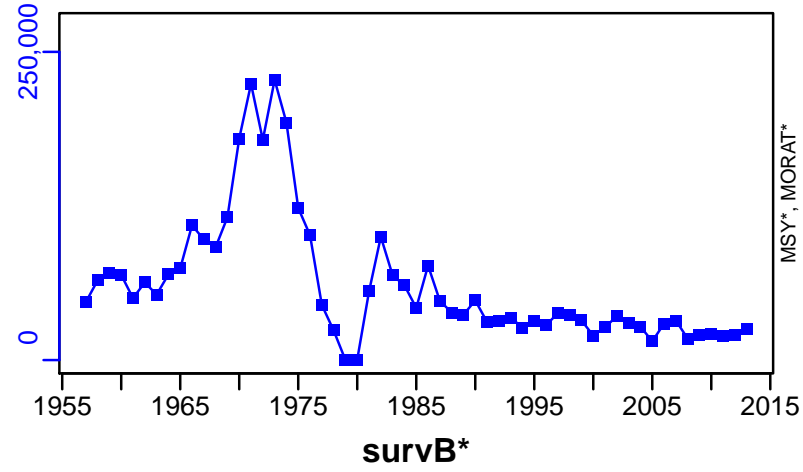


R-E00 (1956–2014–ICESIMP2016)

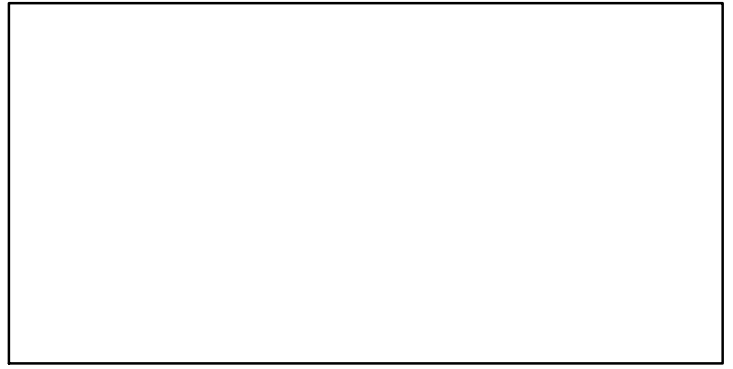


Herring ICES VIa [HERRVIa]

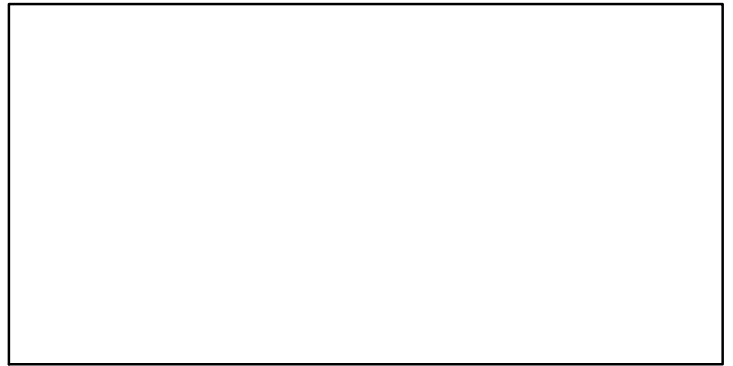
TL-MT, TC\*, RecC\* (1956–2014–ICESIMP2016)



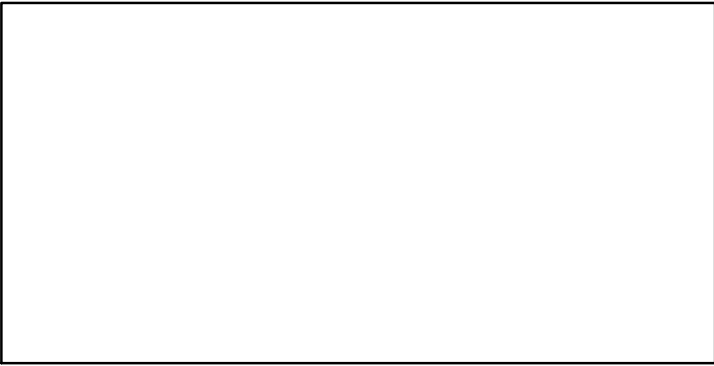
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



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

## Herring ICES VIa-VIIb-VIIc [HERRVIaVIIbc]

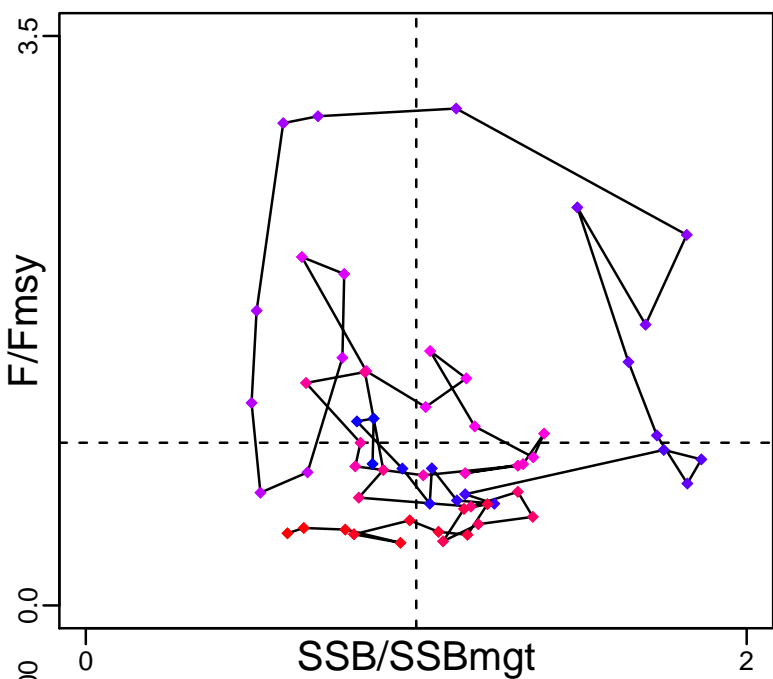
Metadata	
<b>Scientific Name</b>	Clupea harengus
<b>Current Assess ID</b>	HAWG-HERRVIaVIIbc-1956-2016-ICESIMP2016
<b>Area</b>	VIa, VIIb and VIIc
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Herring Assessment Working Group for the Area South of 62N
<b>Asmts in RAM</b>	2010, 2013, 2014, 2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.16
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	410,000
<b>Fmgt</b>	Fmgt-1/yr	2016	0.16
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	TBlim-MT	2010	81,000
<b>SSBlim</b>	SSBlim-MT	2016	250,000
<b>Flim</b>	Flim-1/yr	2016	0.3
<b>ERlim</b>	-	-	-

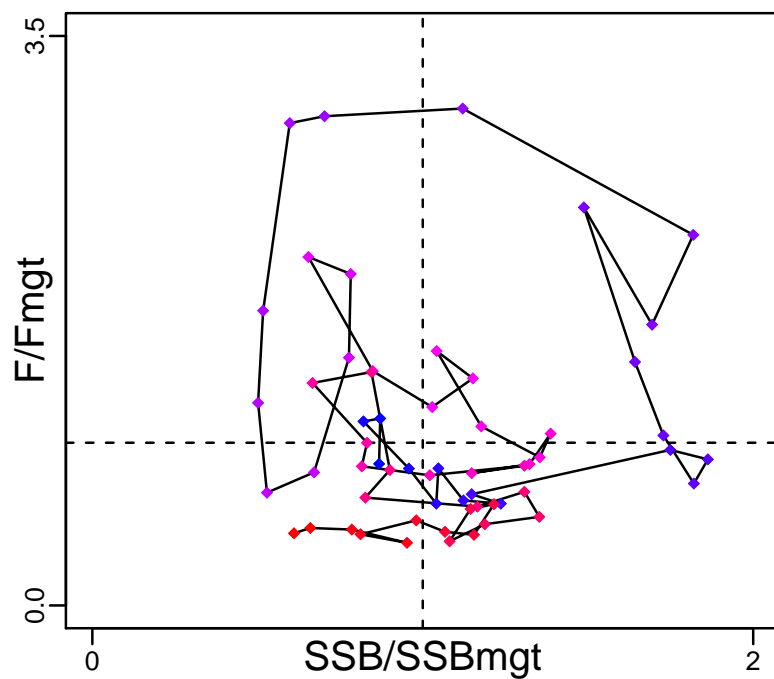
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	419,000	-	-
<b>SSB</b>	SSB-MT	2016	214,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$9.09 \times 10^8$	-	1
<b>F</b>	F-1/yr	2016	0.07	-	3 to 6
<b>ER</b>	ER-calc-ratio	2016	0.05	-	-
<b>TC</b>	TC-MT	2016	19,900		
<b>TL</b>	TL-MT	2015	27,100		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	0.44		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	0.52		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.44		
<b>ER/ERmgt</b>	-	-	-		

# Herring ICES VIa–VIIb–VIIc [HERRVIaVIIbc]

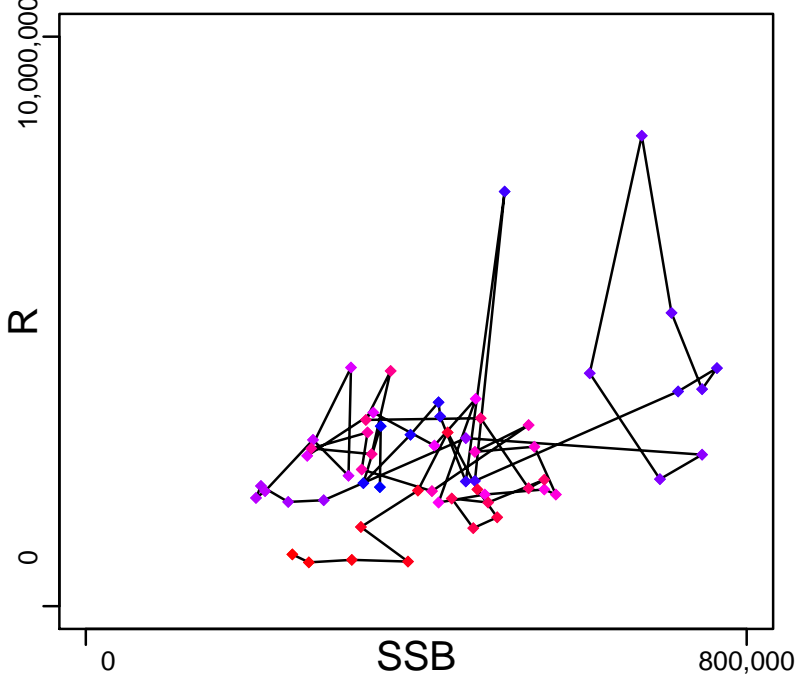
Kobe MSYpref (1956–2016–ICESIMP2016)



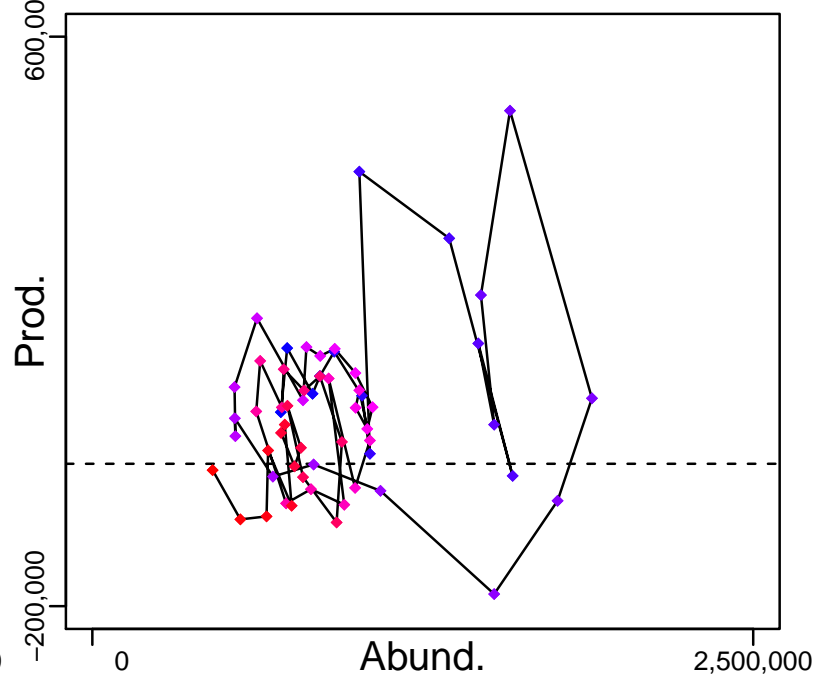
Kobe MGTpref (1956–2016–ICESIMP2016)



Spawner Recruit (1956–2016–ICESIMP2016)



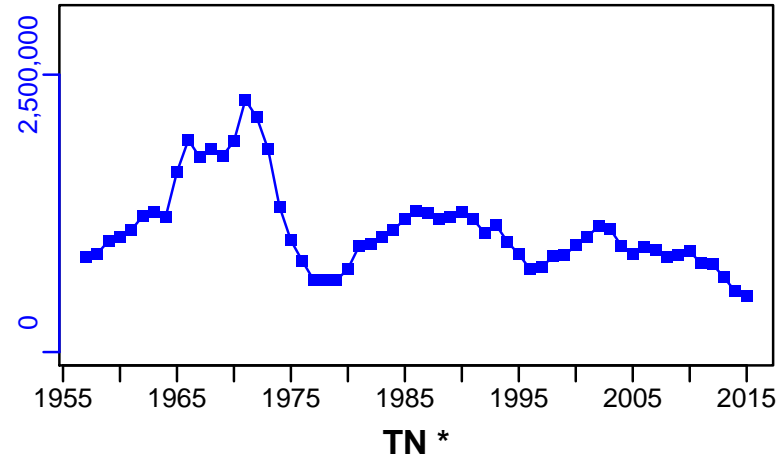
Production (1956–2016–ICESIMP2016)



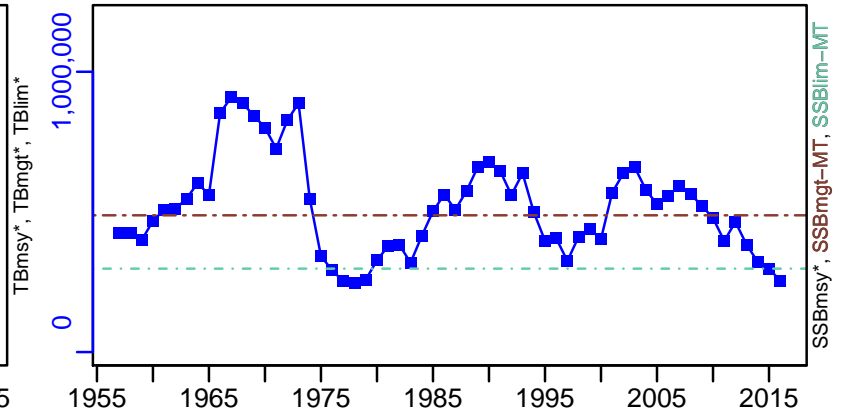
◆ Start Year ◆ End Year \* No Data

# Herring ICES VIa-VIIb-VIIc [HERRVIaVIIbc]

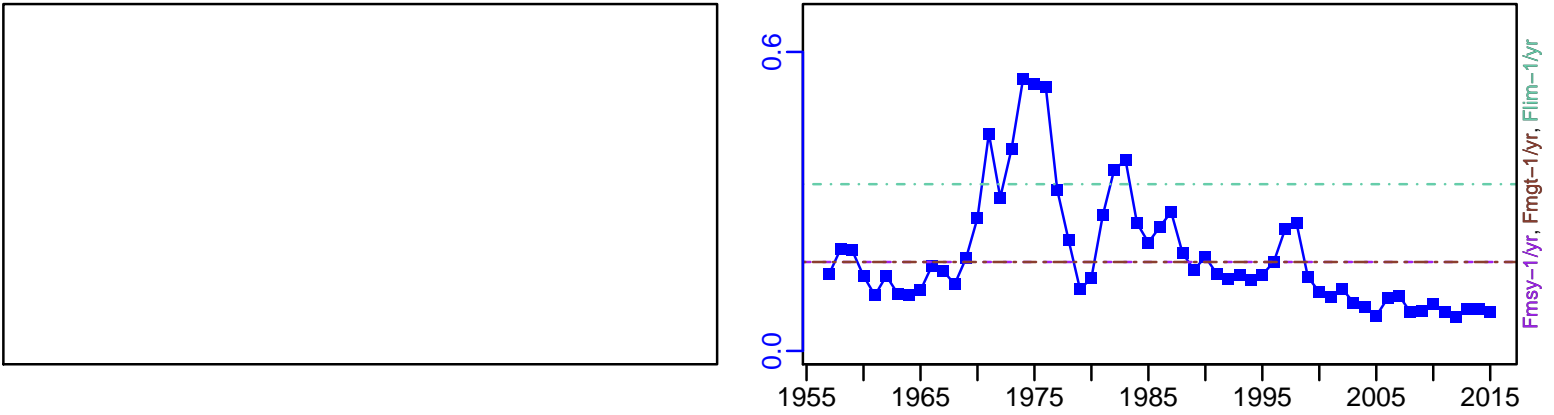
TB-MT (1956-2016-ICESIMP2016)



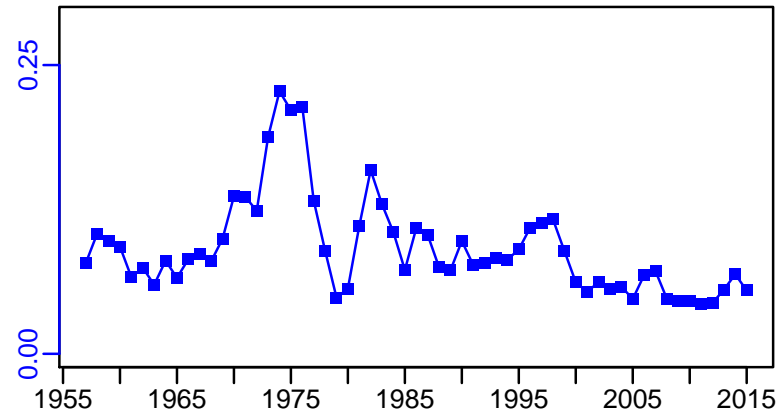
SSB-MT (1956-2016-ICESIMP2016)



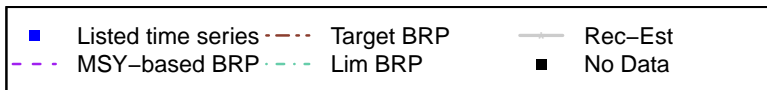
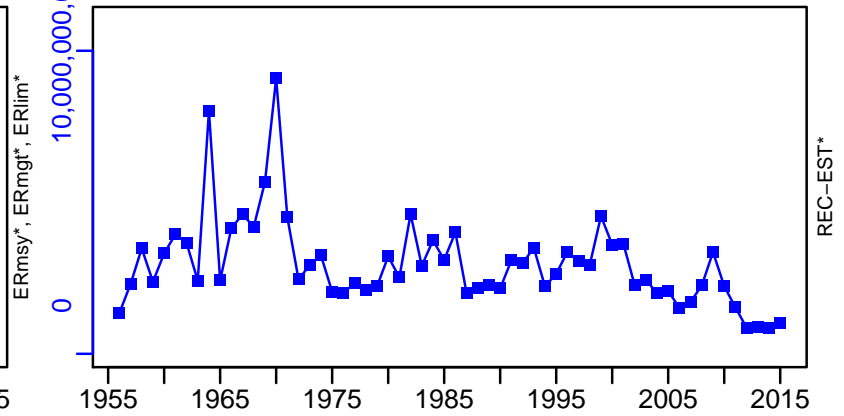
F-1/yr (1956-2016-ICESIMP2016)



ER-calc-ratio (1956-2016-ICESIMP2016)

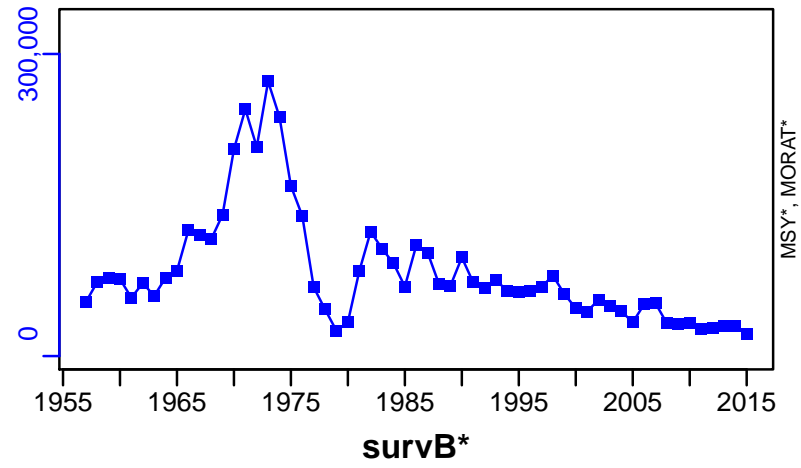


R-E00 (1956-2016-ICESIMP2016)



Herring ICES VIa–VIIb–VIIc [HERRVIaVIIbc]

TC–MT, TL\*, RecC\* (1956–2016–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



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

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

Metadata	
<b>Scientific Name</b>	Trachurus trachurus
<b>Current Assess ID</b>	WGWIDE-HMACKIIa-IVa-Vb-VIa-VII-VIII-1982-2015-ICESIMP2016
<b>Area</b>	IIa-IVa-Vb-VIa-VII-VIII
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Widely Distributed Stocks
<b>Asmts in RAM</b>	2013, 2014, 2015

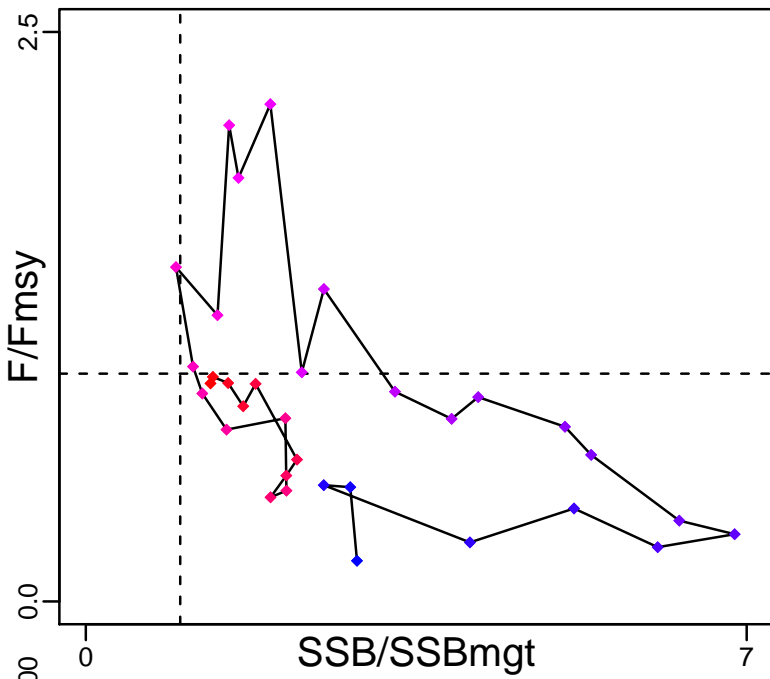
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2015	0.13
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2015	634,577
<b>Fmgt</b>	Fmgt-1/yr	2015	0.13
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	1,140,000	-	-
<b>SSB</b>	SSB-MT	2015	724,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$2.45 \times 10^9$	-	0
<b>F</b>	F-1/yr	2015	0.12	-	1 to 10
<b>ER</b>	ER-calc-ratio	2015	0.11	-	-
<b>TC</b>	TC-MT	2015	129,000		
<b>TL</b>	TL-MT	2014	161,000		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2015	0.96		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2015	1.14		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	0.96		
<b>ER/ERmgt</b>	-	-	-		

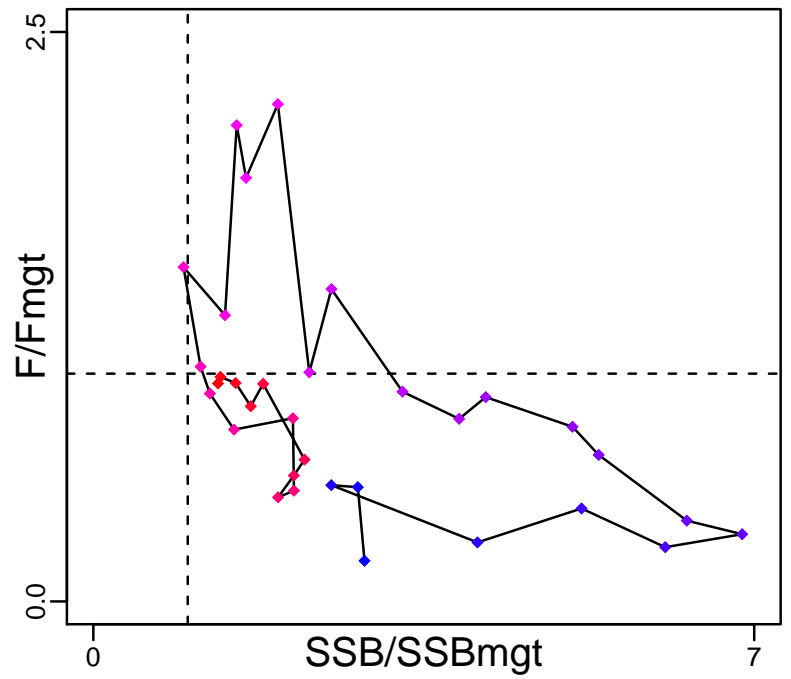


Horse mackerel IIa-IVa-Vb-VIa-VII-VIII [HMACKIIa-IVa-Vb-VIa-VII-VIII]

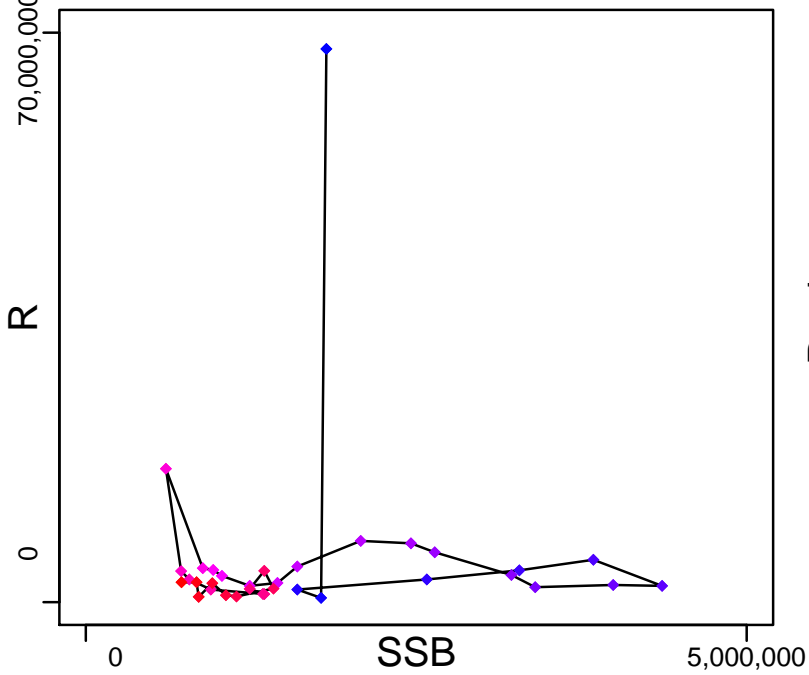
Kobe MSYpref (1982-2015-ICESIMP2016)



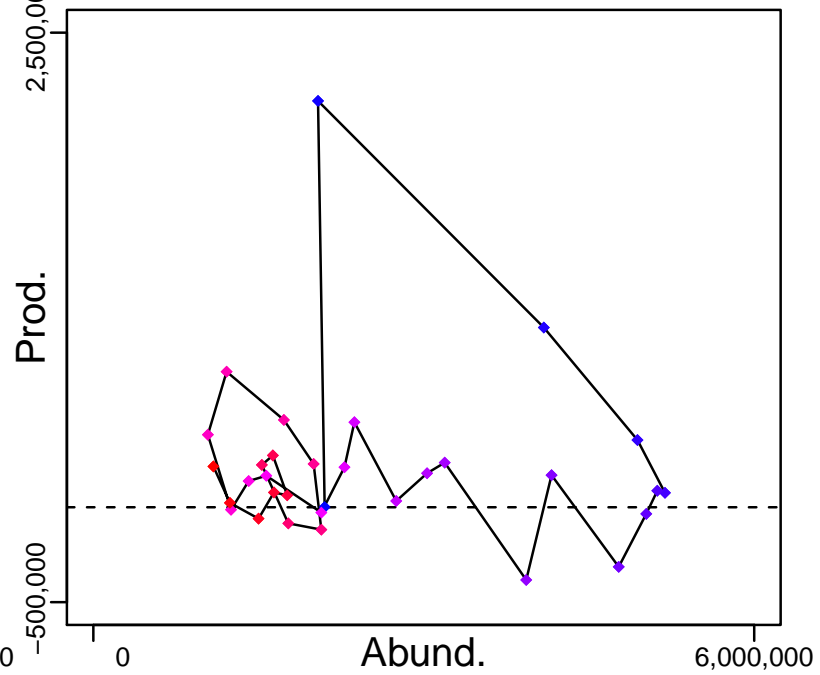
Kobe MGTpref (1982-2015-ICESIMP2016)



Spawner Recruit (1982-2015-ICESIMP2016)



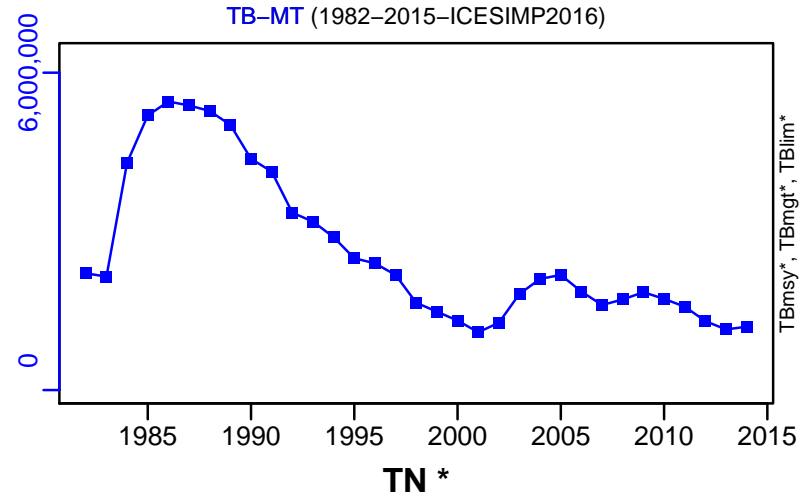
Production (1982-2015-ICESIMP2016)



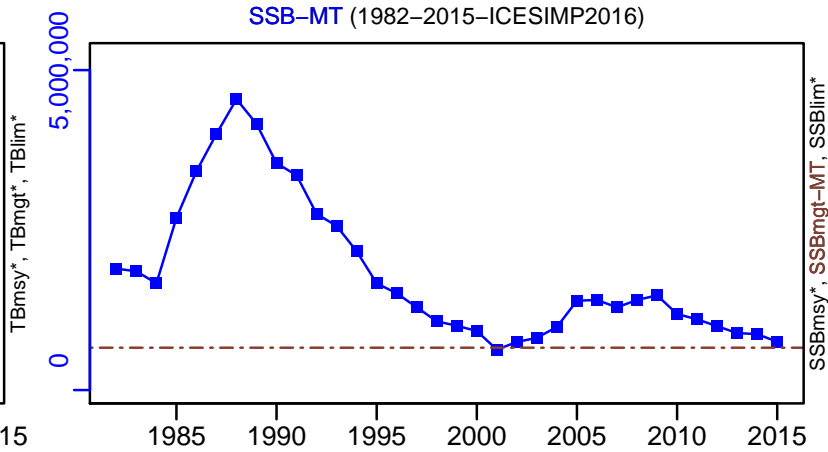
◆ Start Year ◆ End Year \* No Data

# Horse mackerel IIa-IVa-Vb-VIa-VII-VIII [HMAcKIIa-IVa-Vb-VIa-VII-VIII]

TB-MT (1982-2015-ICESIMP2016)



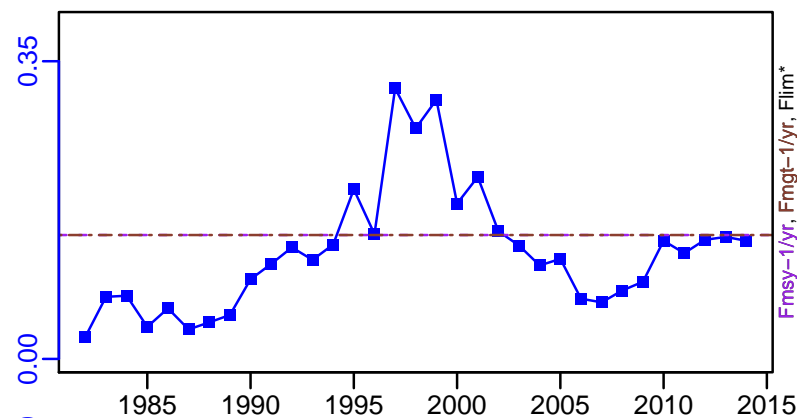
SSB-MT (1982-2015-ICESIMP2016)



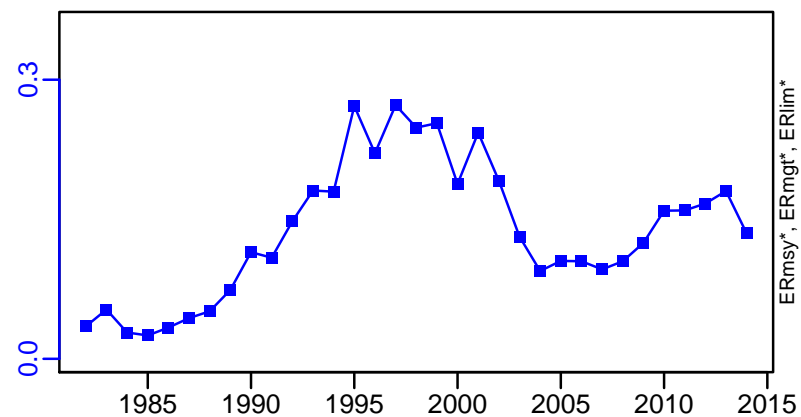
TN \*



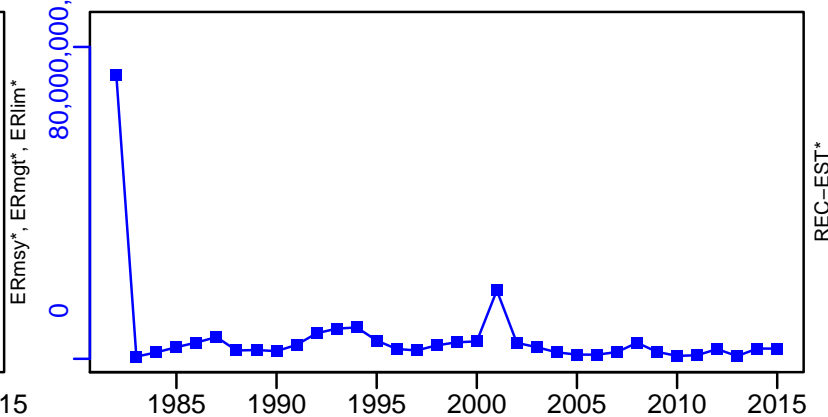
F-1/yr (1982-2015-ICESIMP2016)



ER-calc-ratio (1982-2015-ICESIMP2016)



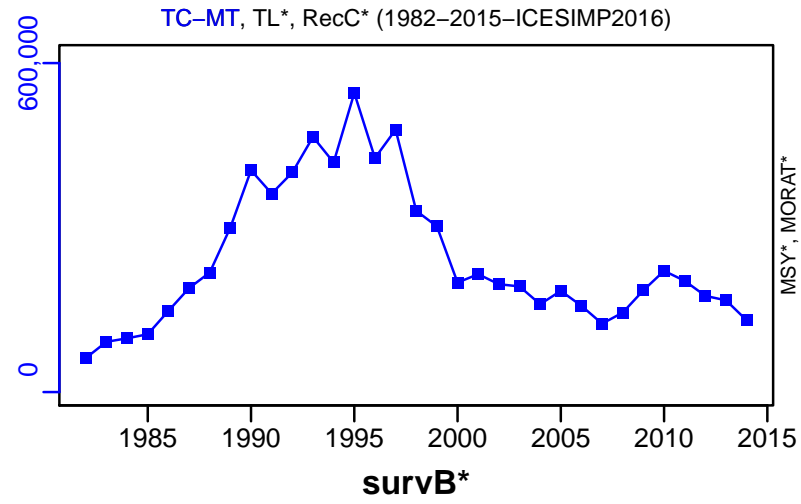
R-E00 (1982-2015-ICESIMP2016)



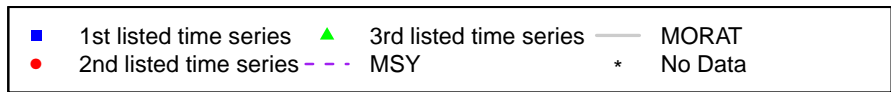
Horse mackerel IIa–IVa–Vb–VIa–VII–VIII [HMACKIIa–IVa–Vb–VIa–VII–VIII]

TC–MT, TL\*, RecC\* (1982–2015–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



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

Metadata	
<b>Scientific Name</b>	Trachurus trachurus
<b>Current Assess ID</b>	WGWIDE-HMACKIIIa-IVbc-VIId-1982-2015-ICESIMP2016
<b>Area</b>	IIIa-IVbc-VIId
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Widely Distributed Stocks
<b>Asmts in RAM</b>	2015

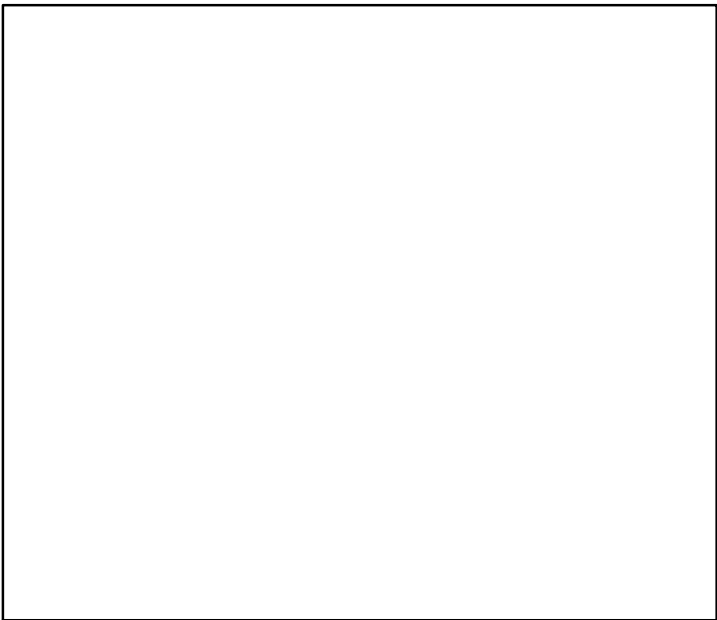
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	13,400		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

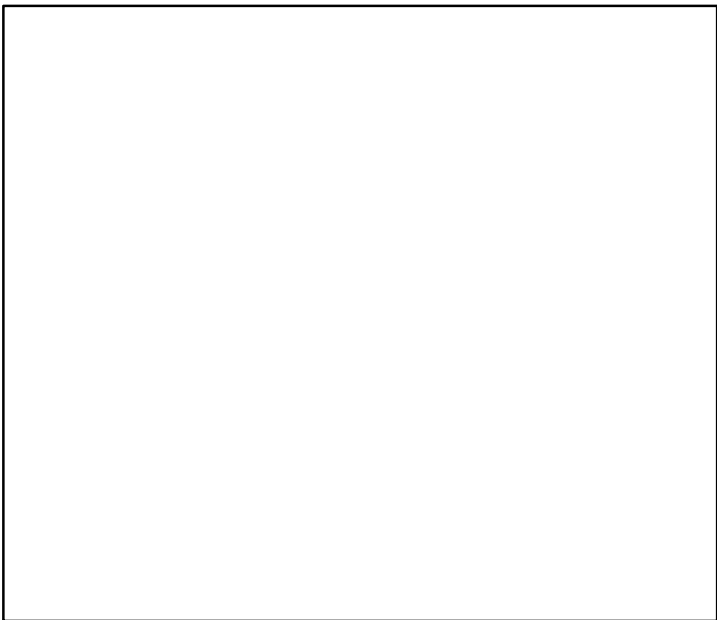
**Kobe MSY\***



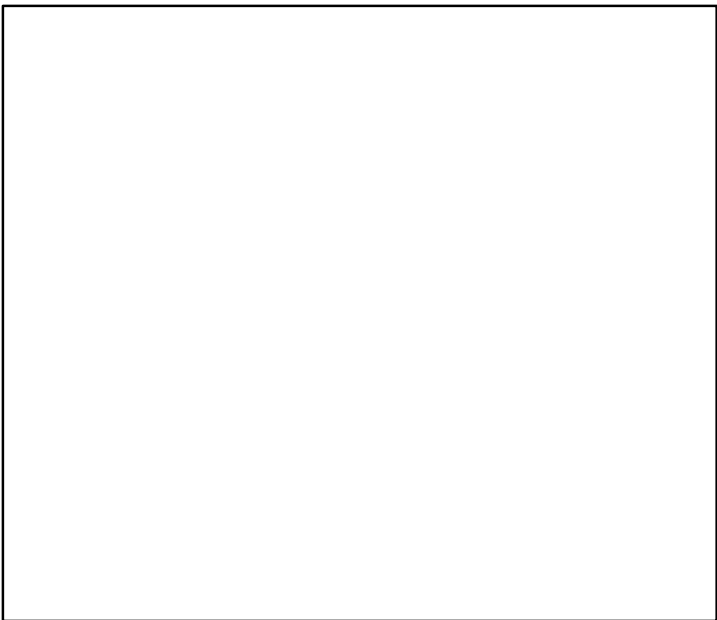
**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year    ◆ End Year    \* No Data

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

**TB\***



**SSB\***



**TN \***



**F\***



**ER\***

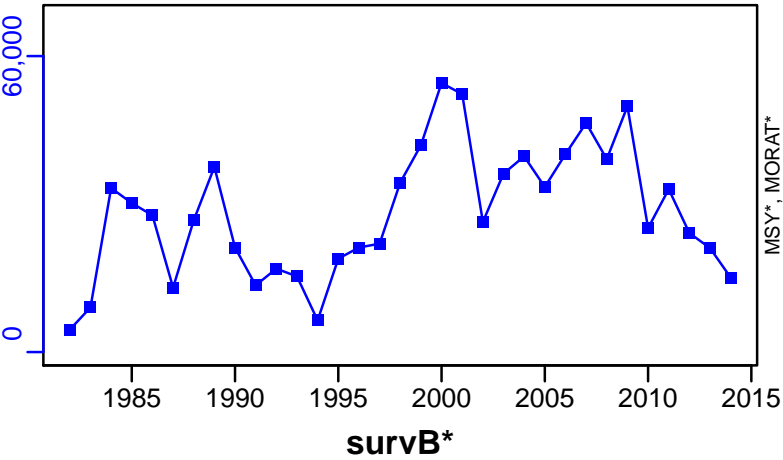


**Recruits\***



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

TL–MT, TC\*, RecC\* (1982–2015–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Horse mackerel Portuguese Waters -East [HMACKIXa]

Metadata	
<b>Scientific Name</b>	Trachurus trachurus
<b>Current Assess ID</b>	WGHANSA-HMACKIXa-1992-2016-ICESIMP2016
<b>Area</b>	Portuguese Waters -East
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Southern Horse Mackerel, Anchovy and Sardine
<b>Asmts in RAM</b>	2013, 2014, 2015, 2016

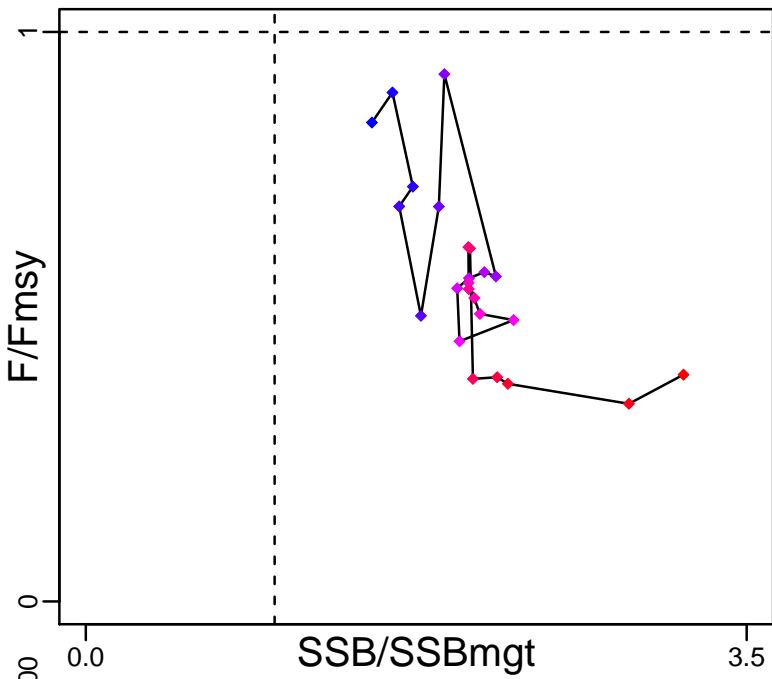
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.11
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	181,000
<b>Fmgt</b>	Fmgt-1/yr	2016	0.11
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	103,000
<b>Flim</b>	Flim-1/yr	2016	0.19
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2016	622,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$4.06 \times 10^9$	-	0
<b>F</b>	F-1/yr	2016	0.04	-	2 to 10
<b>ER</b>	ER-calc-ratio	2016	0.04	-	-
<b>TC</b>	TC-MT	2016	32,700		
<b>TL</b>	TL-MT	2016	32,700		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	0.4		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	3.43		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.4		
<b>ER/ERmgt</b>	-	-	-		

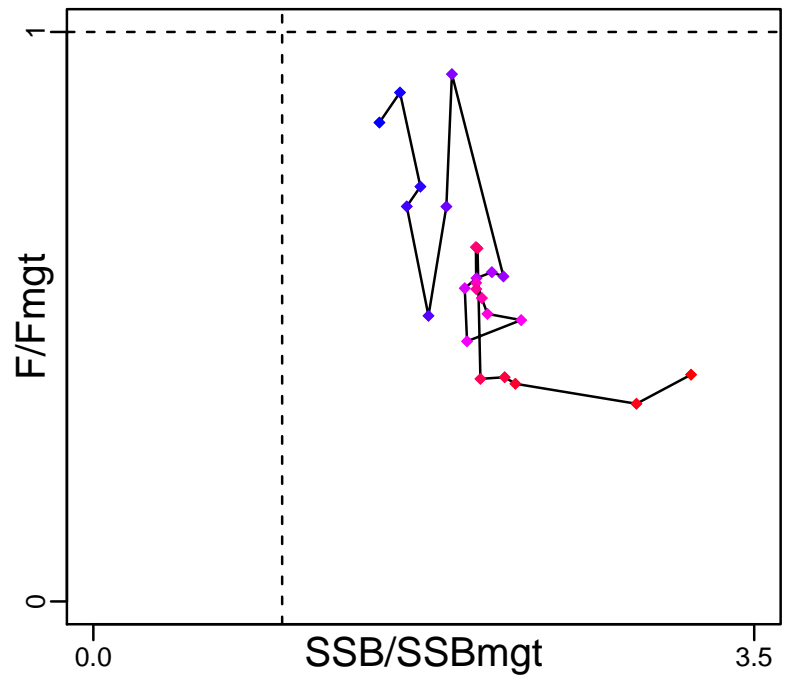


# Horse mackerel Portuguese Waters –East [HMACKIXa]

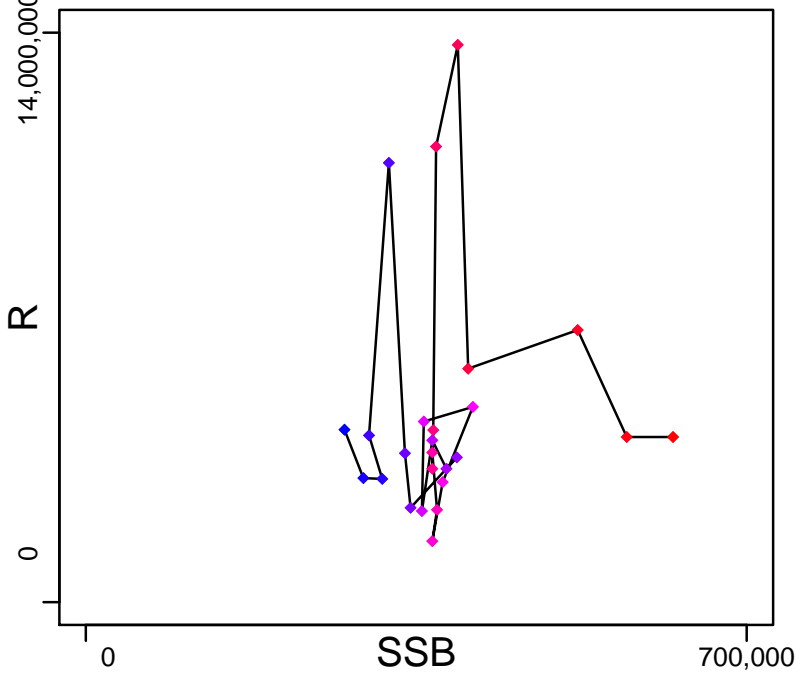
Kobe MSYpref (1992–2016–ICESIMP2016)



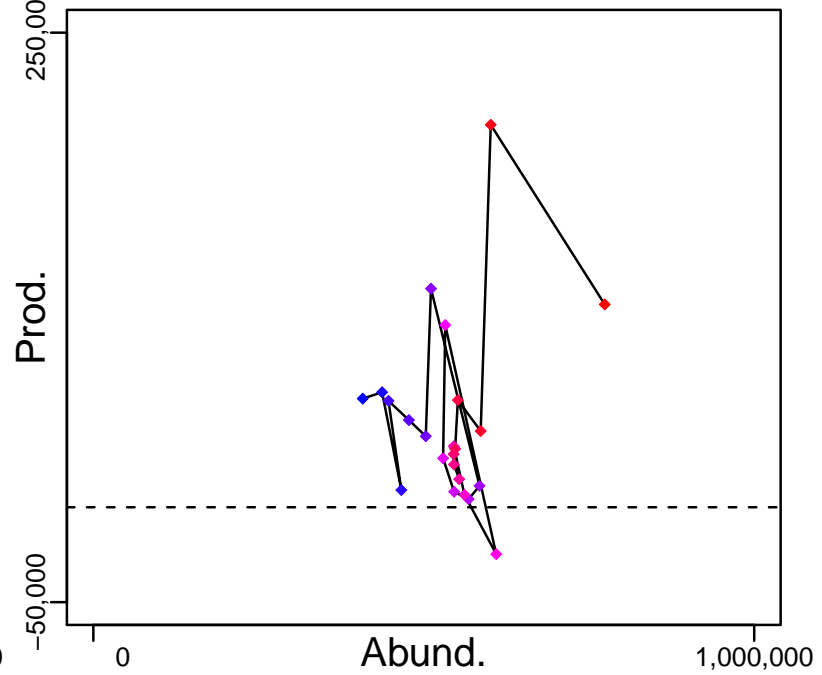
Kobe MGTpref (1992–2016–ICESIMP2016)



Spawner Recruit (1992–2016–ICESIMP2016)



Production (1992–2016–ICESIMP2016)



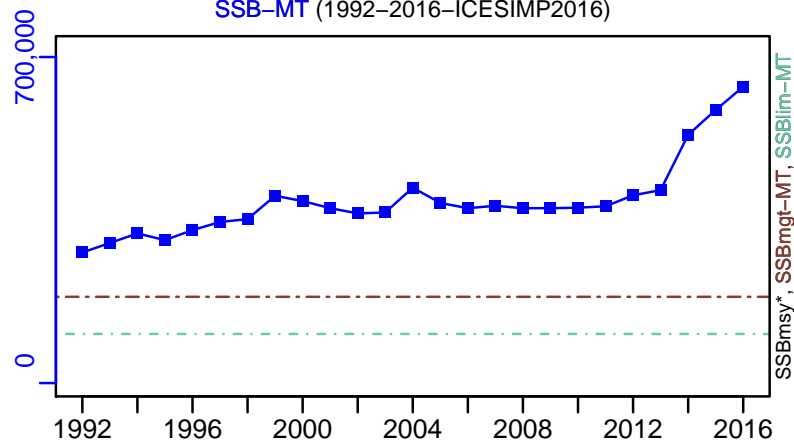
◆ Start Year ◆ End Year \* No Data

# Horse mackerel Portuguese Waters –East [HMACKIXa]

TB\*



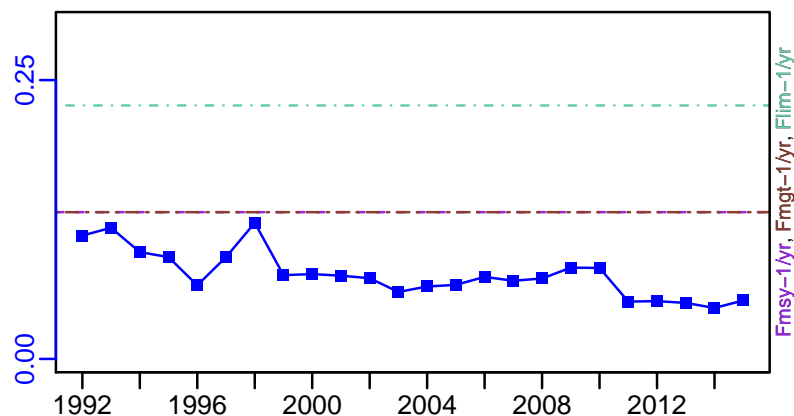
SSB-MT (1992–2016–ICESIMP2016)



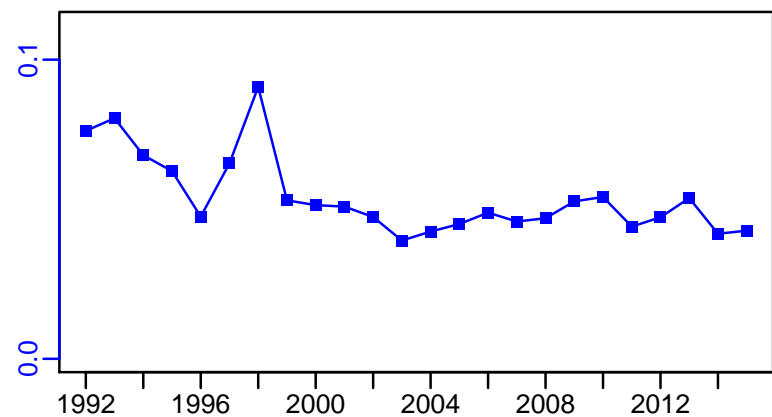
TN \*



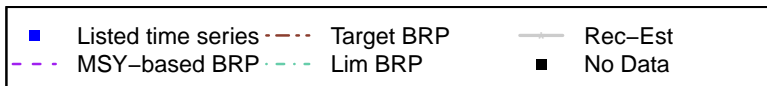
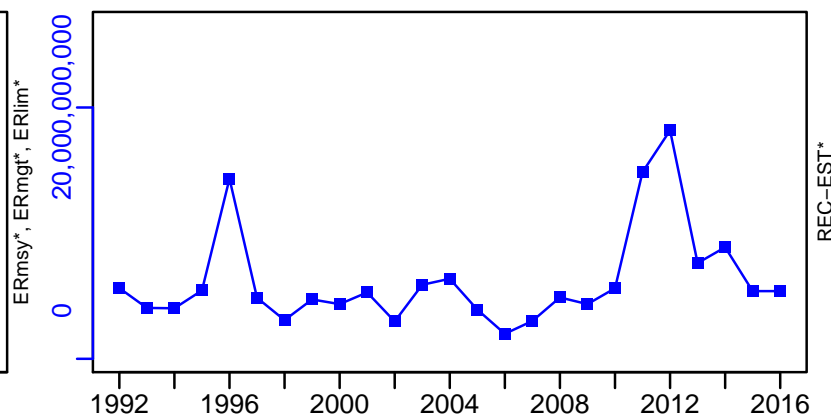
F-1/yr (1992–2016–ICESIMP2016)



ER-calc-ratio (1992–2016–ICESIMP2016)

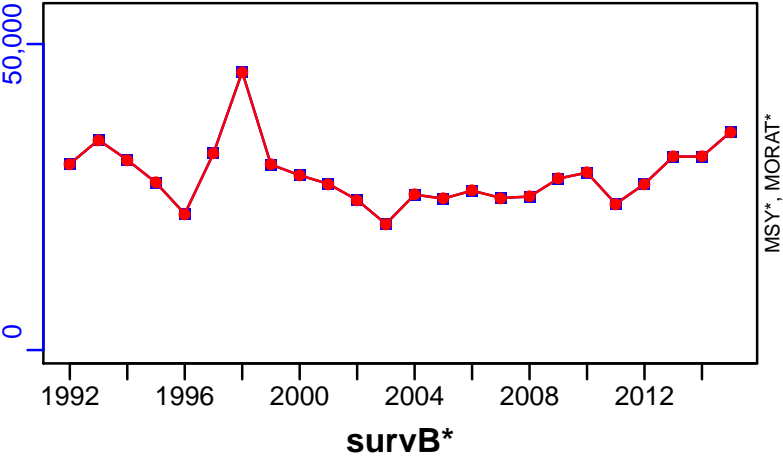


R-E00 (1992–2016–ICESIMP2016)



Horse mackerel Portuguese Waters –East [HMACKIXa]

TC–MT, TL–MT, RecC\* (1992–2016–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Ling Iceland Grounds [LINGVa]

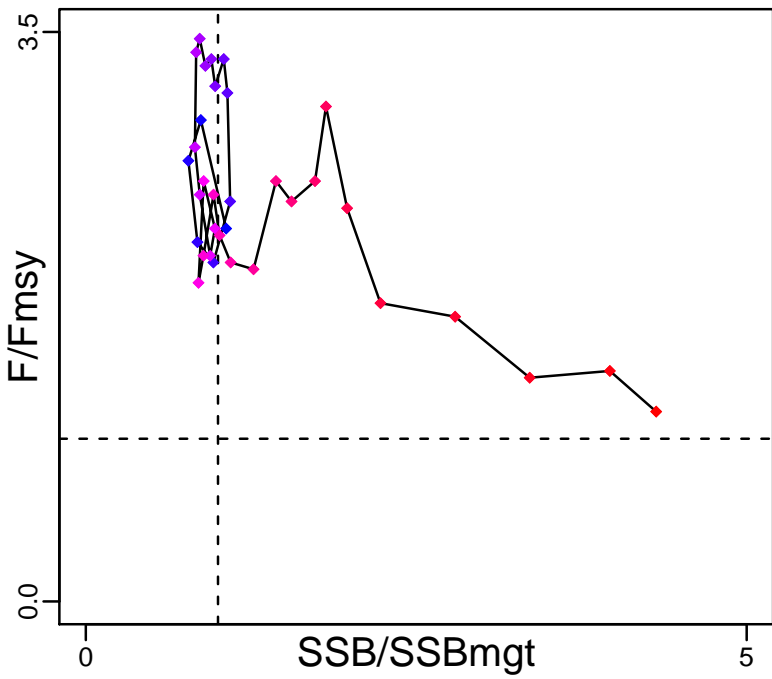
Metadata	
<b>Scientific Name</b>	Molva molva
<b>Current Assess ID</b>	WGDEEP-LINGVa-1982-2016-ICESIMP2016
<b>Area</b>	Iceland Grounds
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
<b>Asmts in RAM</b>	2014, 2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.24
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	9500
<b>Fmgt</b>	Fmgt-1/yr	2016	0.24
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	8600
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

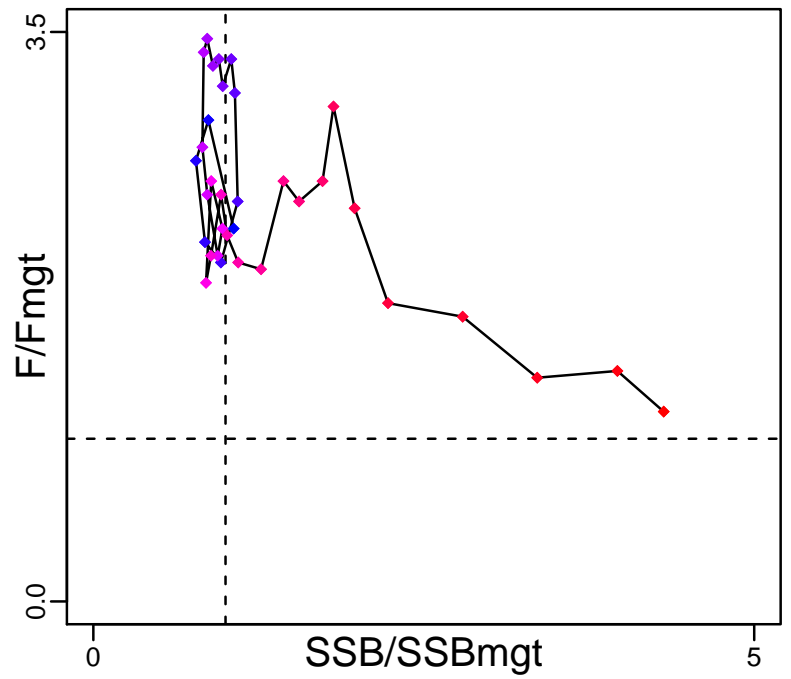
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	56,100	-	-
<b>SSB</b>	SSB-MT	2016	42,600	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	1,480,000	-	-
<b>F</b>	F-1/yr	2016	0.28	-	-
<b>ER</b>	ER-calc-ratio	2016	0.22	-	-
<b>TC</b>	TC-MT	2016	12,900		
<b>TL</b>	TL-MT	2014	11,700		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	1.17		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	4.48		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	1.17		
<b>ER/ERmgt</b>	-	-	-		

# Ling Iceland Grounds [LINGVa]

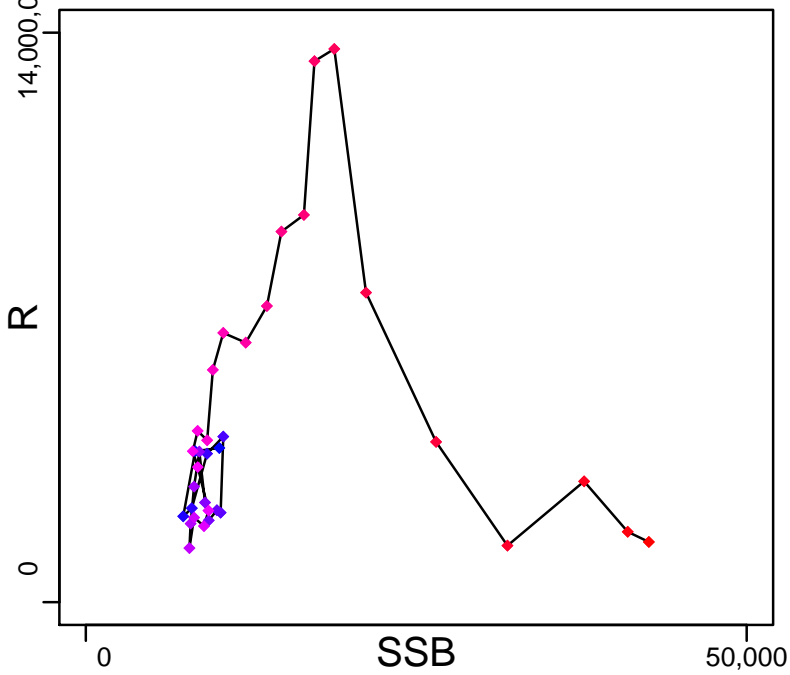
Kobe MSYpref (1982–2016–ICESIMP2016)



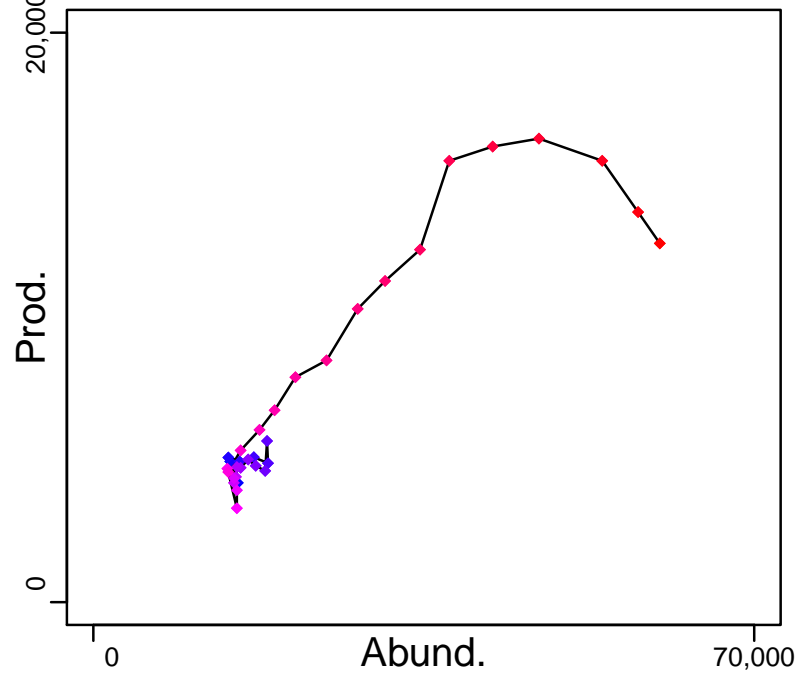
Kobe MGTpref (1982–2016–ICESIMP2016)



Spawner Recruit (1982–2016–ICESIMP2016)



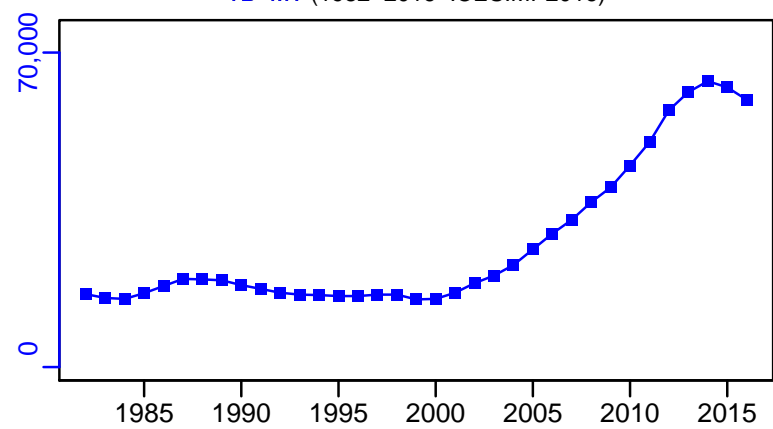
Production (1982–2016–ICESIMP2016)



◆ Start Year ◆ End Year \* No Data

# Ling Iceland Grounds [LINGVa]

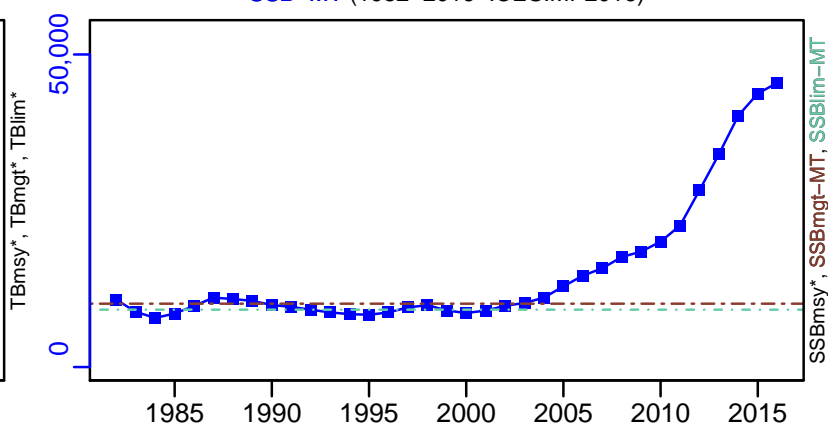
TB-MT (1982–2016–ICESIMP2016)



TN \*

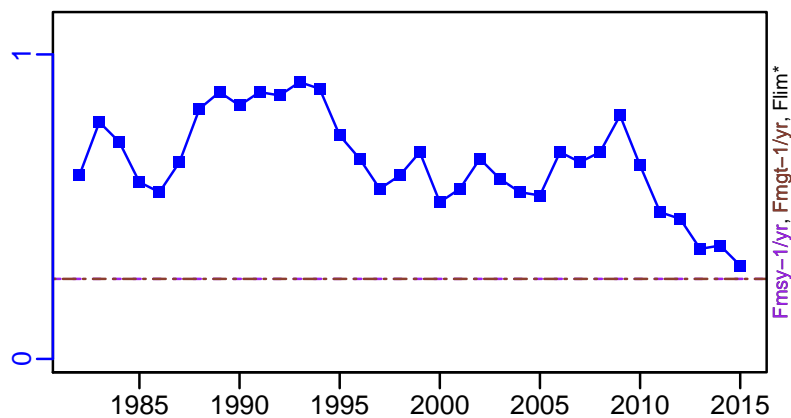


SSB-MT (1982–2016–ICESIMP2016)



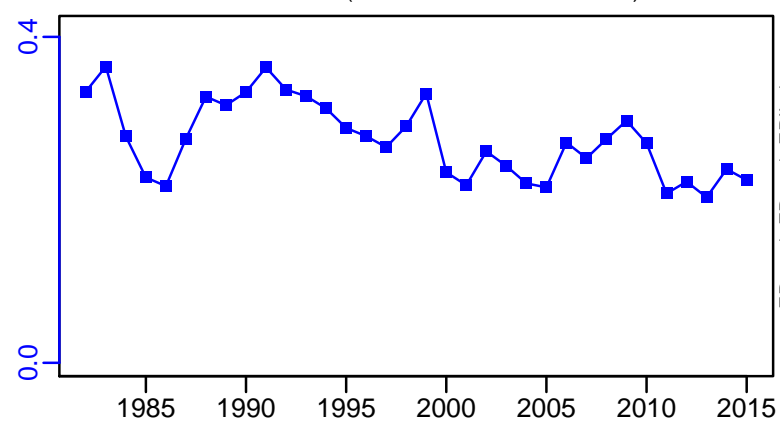
SSBmsy\*, SSBmgt-MT, SSBlim-MT

F-1/yr (1982–2016–ICESIMP2016)

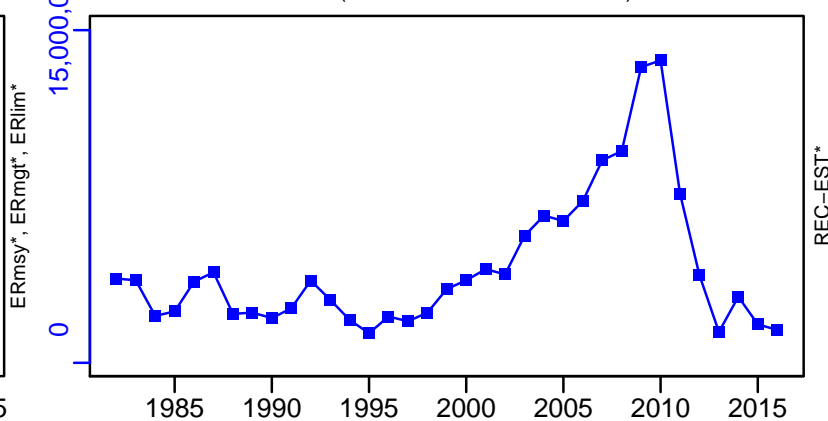


Fmsy-1/yr, Fmgt-1/yr, Flim\*

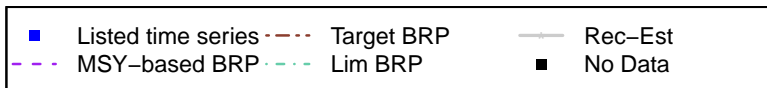
ER-calc-ratio (1982–2016–ICESIMP2016)



R-E00 (1982–2016–ICESIMP2016)

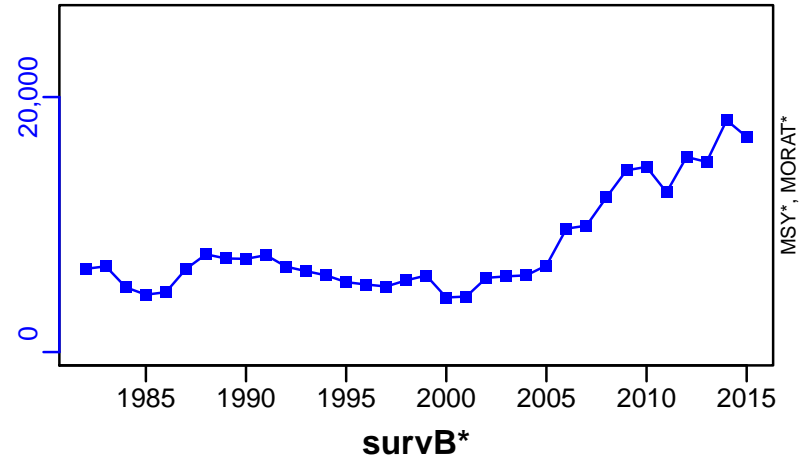


REC-EST\*



# Ling Iceland Grounds [LINGVa]

TC-MT, TL\*, RecC\* (1982-2016-ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



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

## Mackerel ICES Northeast Atlantic [MACKNEICES]

Metadata	
<b>Scientific Name</b>	Scomber scombrus
<b>Current Assess ID</b>	WGwide-MACKNEICES-1980-2014-ICESIMP2016
<b>Area</b>	IIa-IIIabd-IV-Vb-VI-VII-VIIIabcde-XII-XIV-Ixa
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Widely Distributed Stocks
<b>Asmts in RAM</b>	2007, 2013, 2014

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	Fmsy-1/yr	2014	0.25
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	Fmgt-1/yr	2014	0.25
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2007	0.15
TBlim	-	-	-
SSBlim	SSBlim-MT	2014	1,840,000
Flim	Flim-1/yr	2014	0.39
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2014	5,610,000	-	-
SSB	SSB-MT	2014	4,420,000	-	-
TN	-	-	-	-	-
R	R-E00	2014	$4.27 \times 10^9$	-	0
F	F-1/yr	2014	0.22	-	4 to 8
ER	ER-calc-ratio	2014	0.17	-	-
TC	TC-MT	2014	932,000		
TL	TL-MT	2014	927,000		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	F-1/yr/Fmsy-1/yr	2014	0.87		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	F-1/yr/Fmgt-1/yr	2014	0.87		
ER/ERmgt	-	-	-		



Mackerel ICES Northeast Atlantic [MACKNEICES]

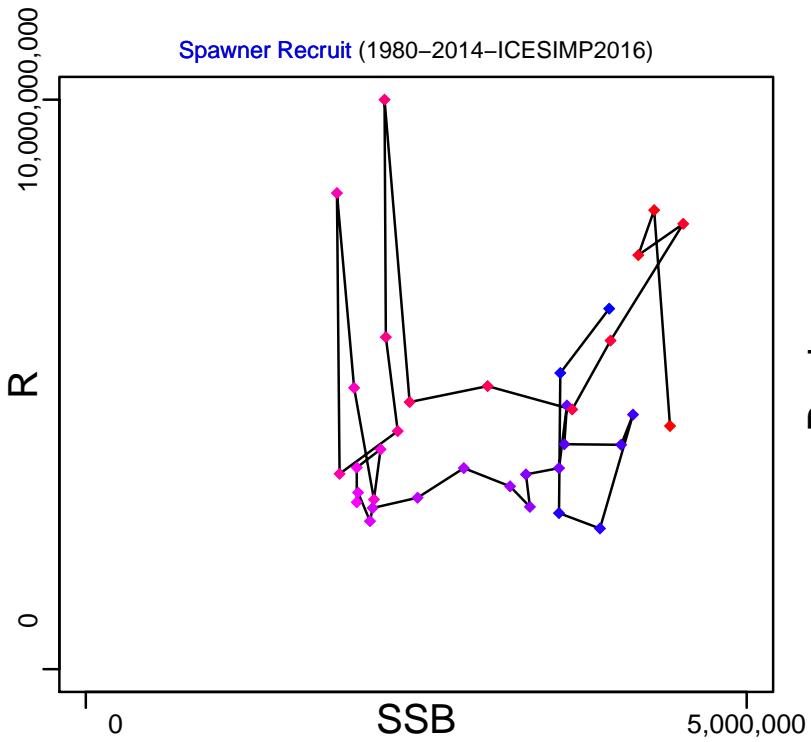
Kobe MSY\*



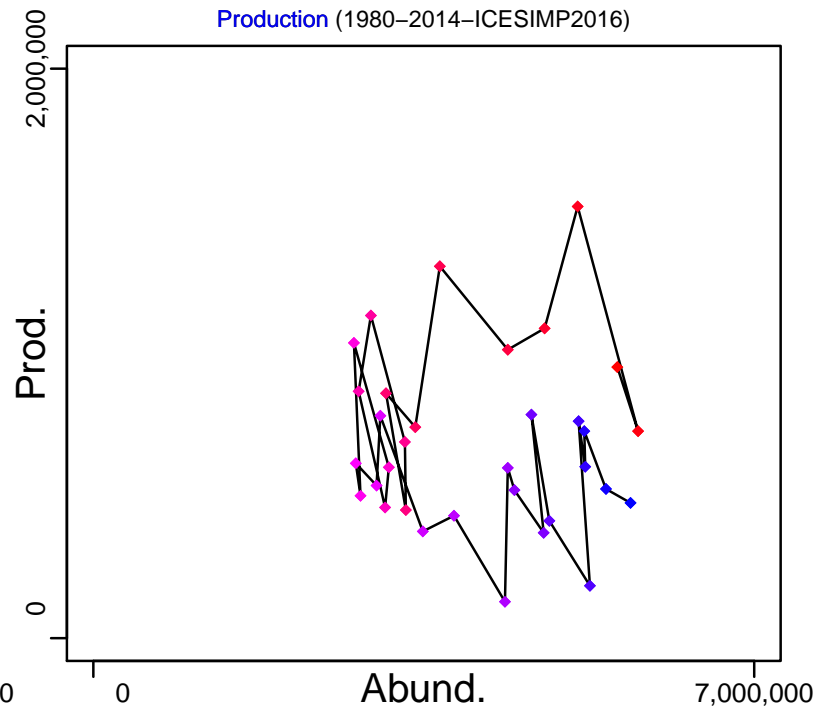
Kobe MGT\*



Spawner Recruit (1980–2014–ICESIMP2016)



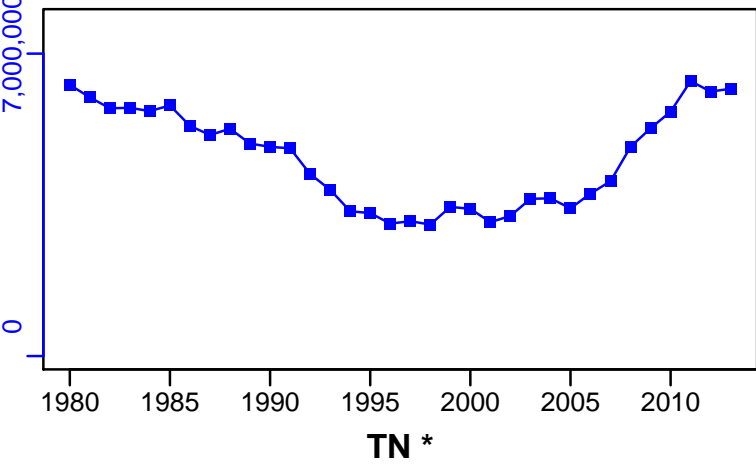
Production (1980–2014–ICESIMP2016)



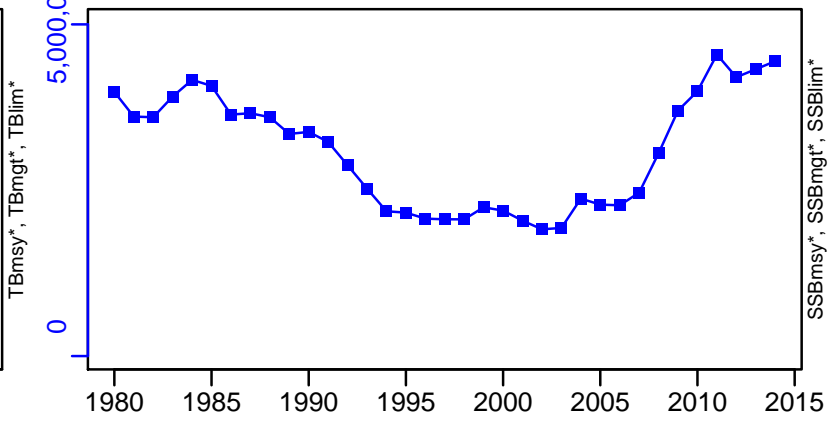
◆ Start Year ◆ End Year \* No Data

# Mackerel ICES Northeast Atlantic [MACKNEICES]

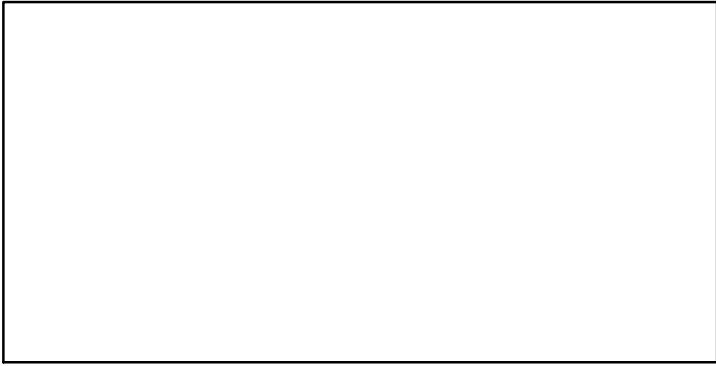
TB-MT (1980–2014–ICESIMP2016)



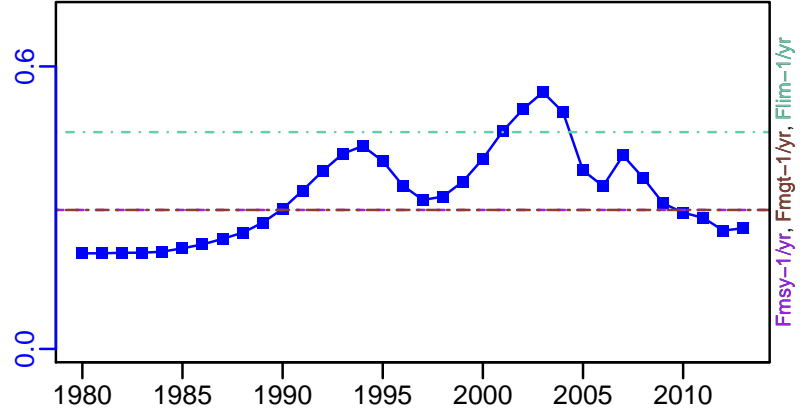
SSB-MT (1980–2014–ICESIMP2016)



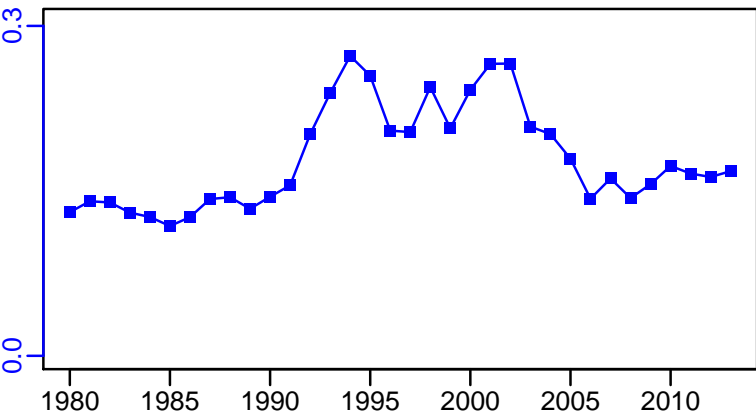
TN \*



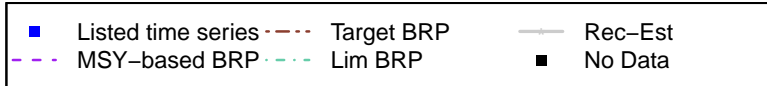
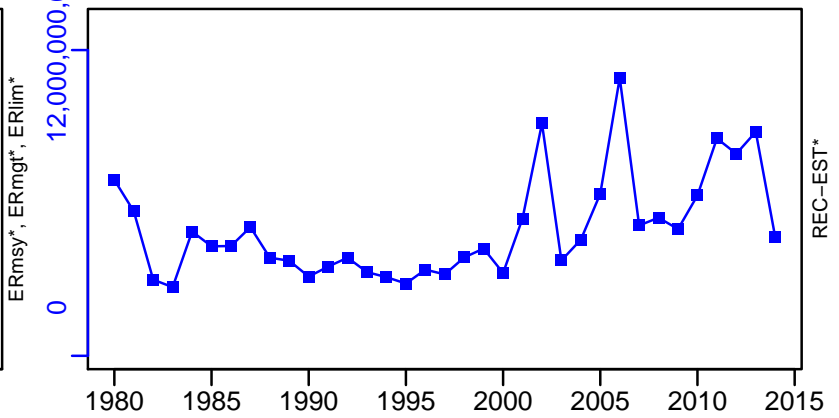
F-1/yr (1980–2014–ICESIMP2016)



ER-calc-ratio (1980–2014–ICESIMP2016)

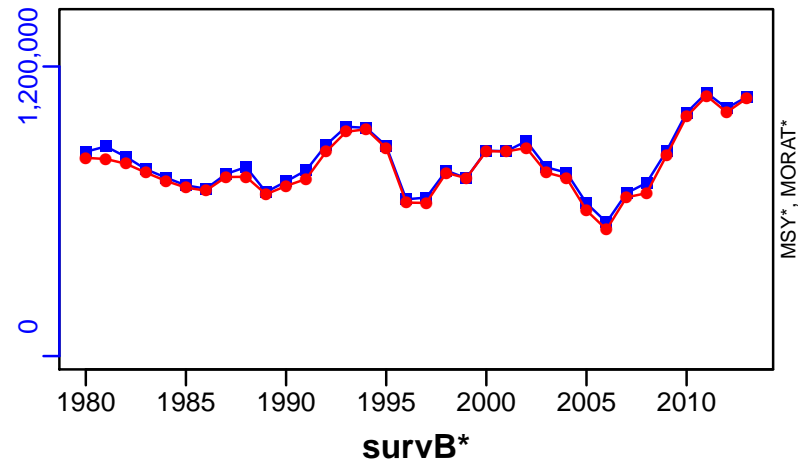


R-E00 (1980–2014–ICESIMP2016)



# Mackerel ICES Northeast Atlantic [MACKNEICES]

TC-MT, TL-MT, RecC\* (1980-2014-ICESIMP2016)



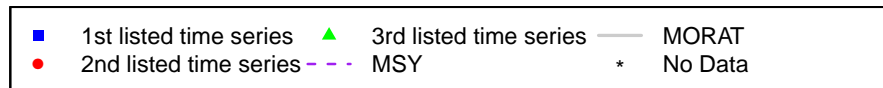
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Megrim ICES VIIIc-IXa [MEG8c9a]

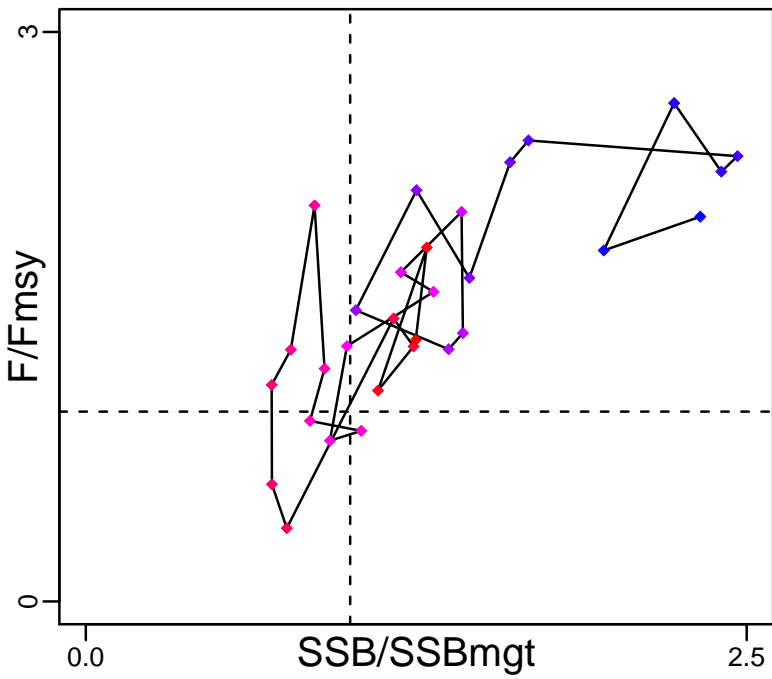
Metadata	
<b>Scientific Name</b>	Lepidorhombus whiffiagonis
<b>Current Assess ID</b>	WGBIE-MEG8c9a-1985-2016-ICESIMP2016
<b>Area</b>	VIIIc-IXa
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
<b>Asmts in RAM</b>	2014, 2015, 2016, 2010, 2013

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.19
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	980
<b>Fmgt</b>	Fmgt-1/yr	2016	0.19
<b>ERMgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2010	0.2
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	700
<b>Flim</b>	Flim-1/yr	2016	0.45
<b>ERlim</b>	-	-	-

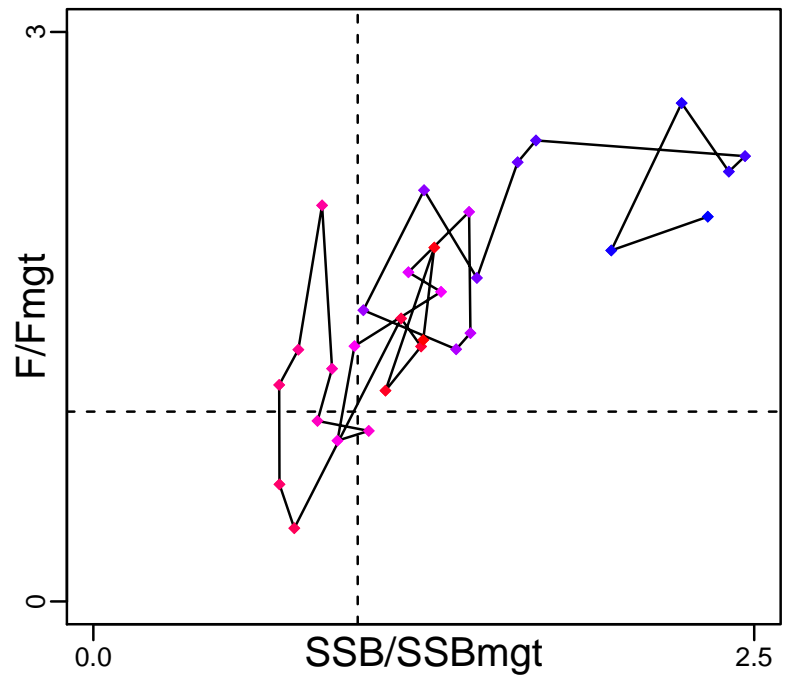
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	1480	-	-
<b>SSB</b>	SSB-MT	2016	1090	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	3,300,000	-	1
<b>F</b>	F-1/yr	2016	0.26	-	2 to 4
<b>ER</b>	ER-calc-ratio	2016	0.2	-	-
<b>TC</b>	TC-MT	2016	297		
<b>TL</b>	TL-MT	2016	276		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	1.38		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	1.11		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	1.38		
<b>ER/ERMgt</b>	-	-	-		

Megrim ICES VIIIc-IXa [MEG8c9a]

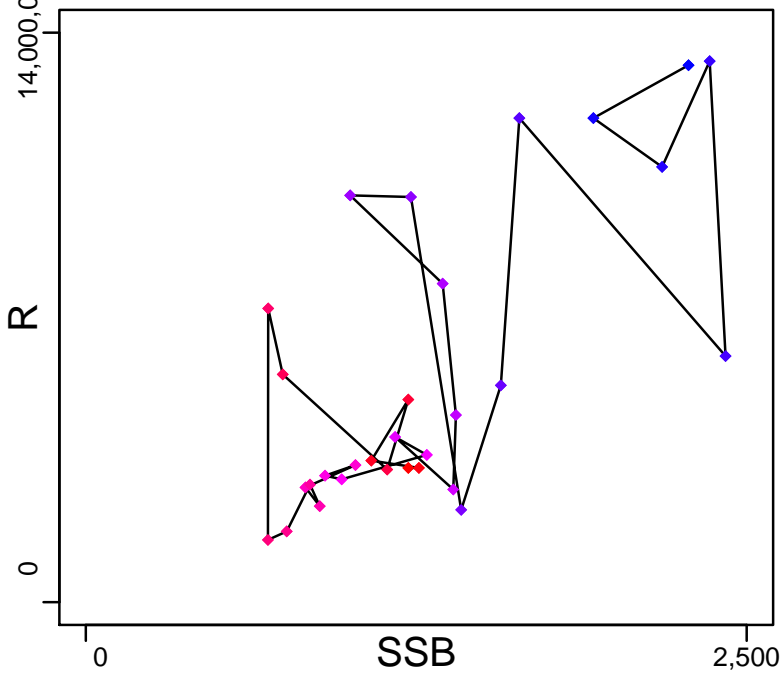
Kobe MSYpref (1985–2016–ICESIMP2016)



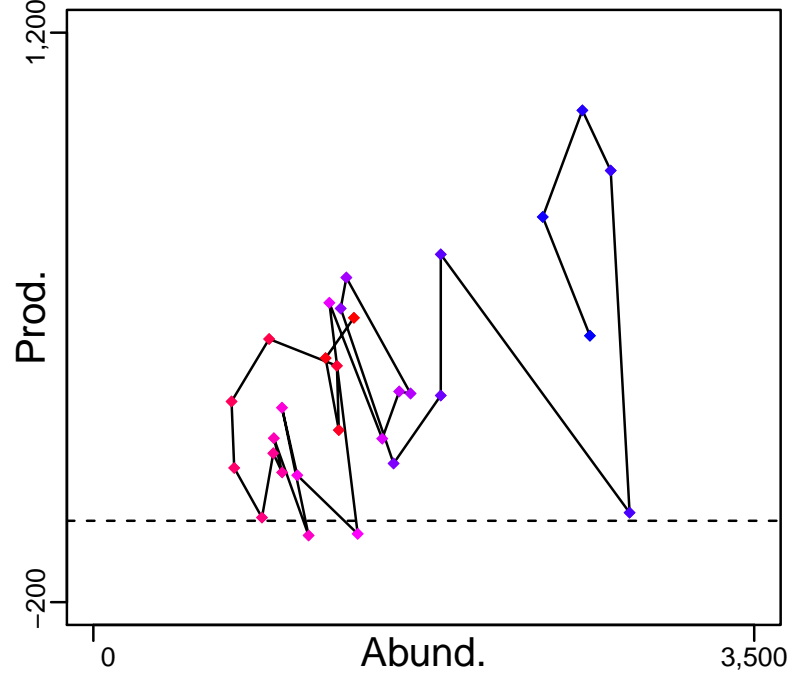
Kobe MGTpref (1985–2016–ICESIMP2016)



Spawner Recruit (1985–2016–ICESIMP2016)



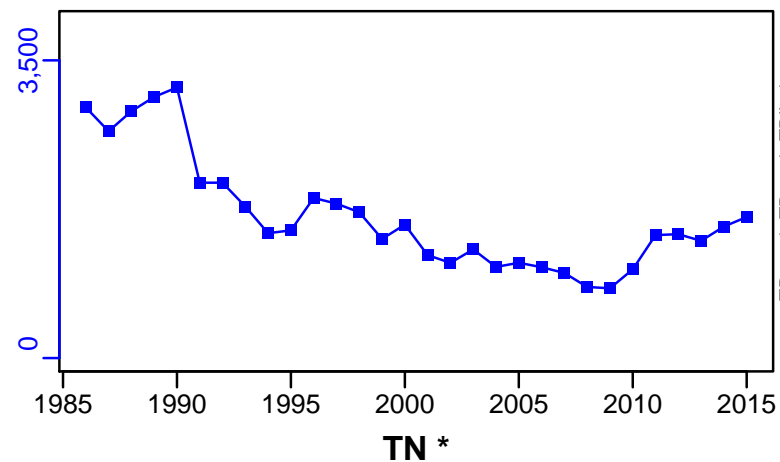
Production (1985–2016–ICESIMP2016)



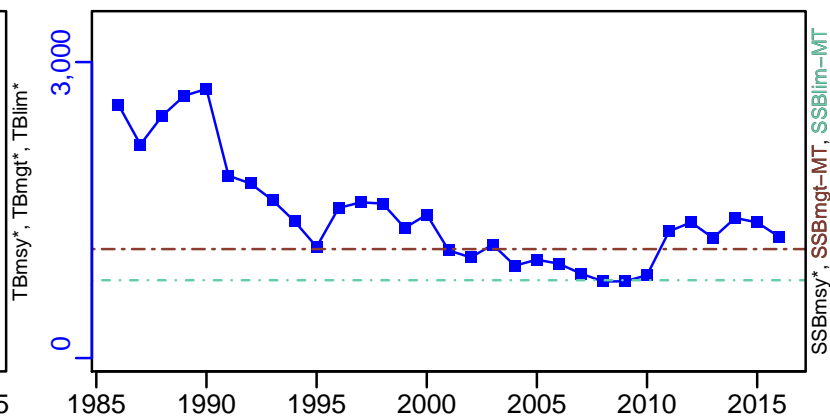
◆ Start Year ◆ End Year \* No Data

# Megrim ICES VIIIc-IXa [MEG8c9a]

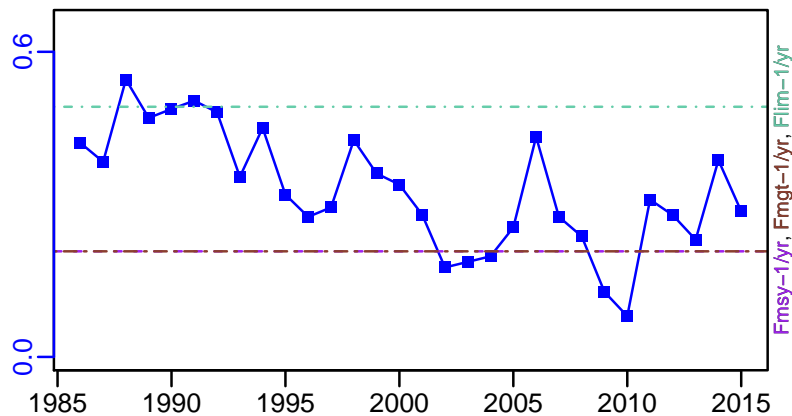
TB-MT (1985–2016–ICESIMP2016)



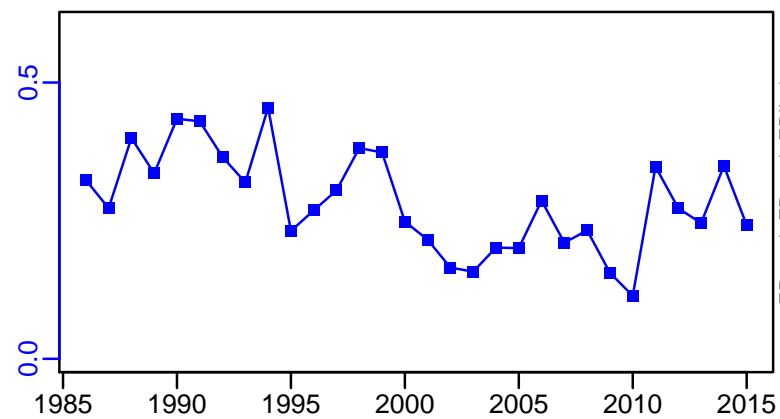
SSB-MT (1985–2016–ICESIMP2016)



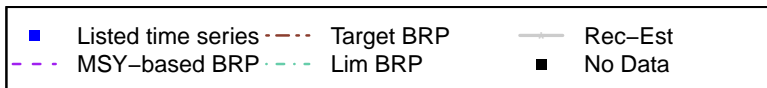
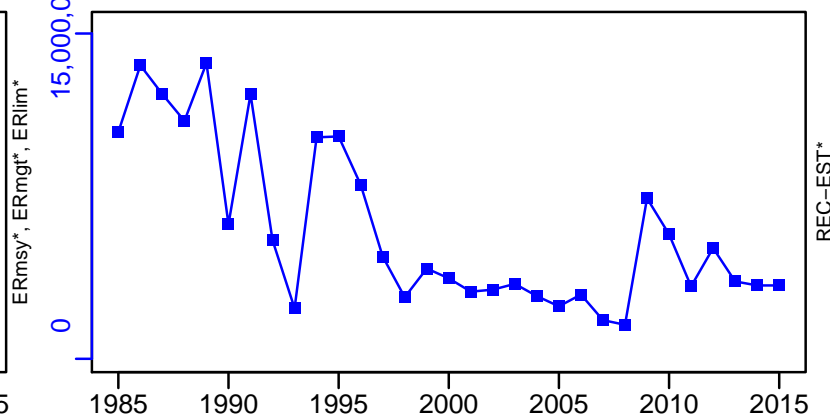
F-1/yr (1985–2016–ICESIMP2016)



ER-calc-ratio (1985–2016–ICESIMP2016)

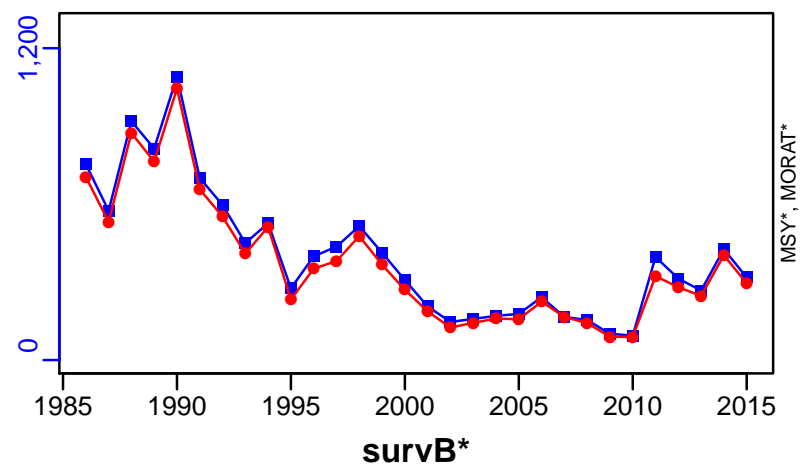


R-E00 (1985–2016–ICESIMP2016)



Megrim ICES VIIIc-IXa [MEG8c9a]

TC-MT, TL-MT, RecC\* (1985-2016-ICESIMP2016)



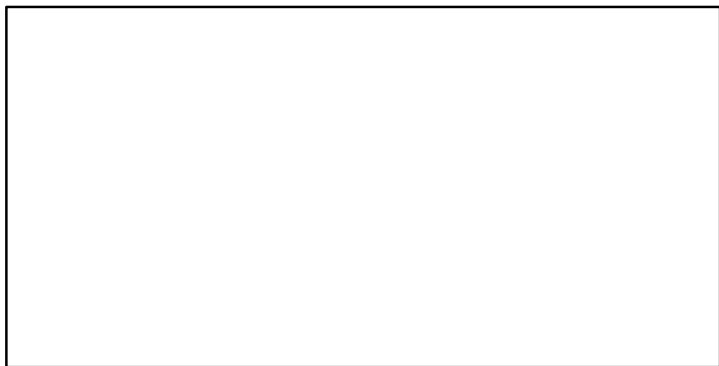
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



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

## Megrim spp. IVa and VIa [MEGSPPIVa-VIa]

Metadata	
<b>Scientific Name</b>	Lepidorhombus spp.
<b>Current Assess ID</b>	WGCSE-MEGSPPIVa-VIa-1985-2015-ICESIMP2016
<b>Area</b>	IVa and VIa
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2012, 2013, 2015

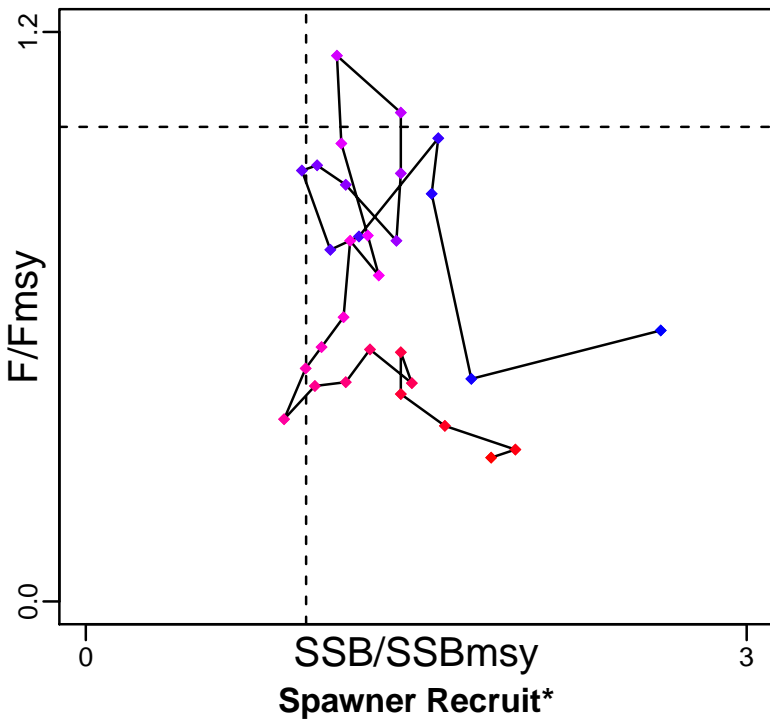
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2015	2810		
TL	TL-MT	2015	2500		
TB/TBmsy	-	-	-		
SSB/SSBmsy	SSBdivSSBmsy-dimensionless	2015	1.84		
F/Fmsy	FdivFmsy-dimensionless	2015	0.3		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

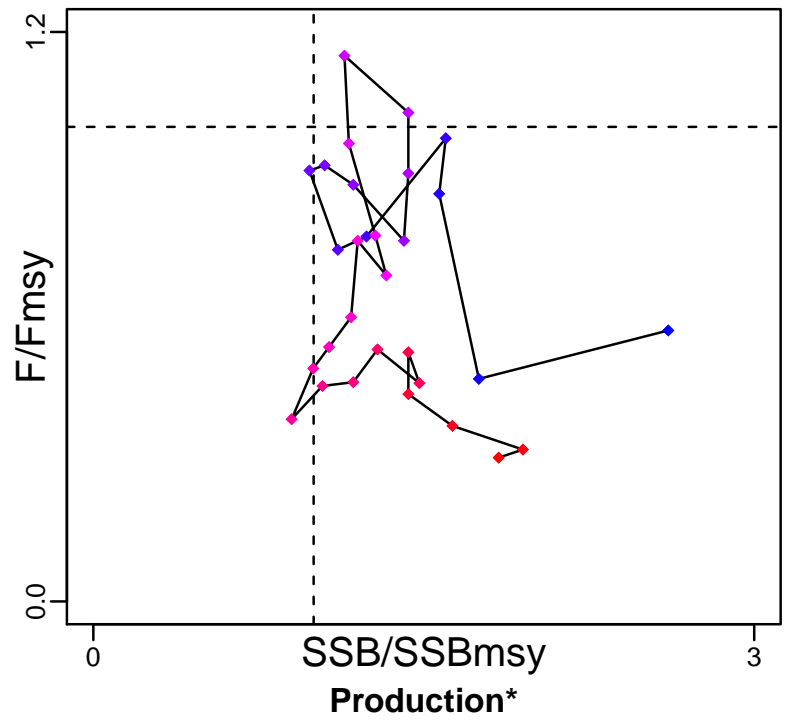


Megrim spp. IVa and VIa [MEGSPPIVa-VIa]

Kobe MSYpref (1985–2015–ICESIMP2016)



Kobe MGTpref (1985–2015–ICESIMP2016)



◆ Start Year ◆ End Year \* No Data

Megrim spp. IVa and VIa [MEGSPPIVa-VIa]

**TB\***



**SSB\***



**TN \***



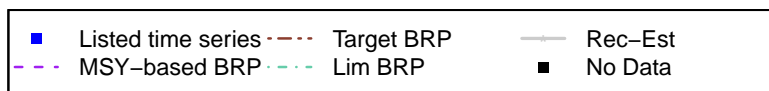
**F\***



**ER\***



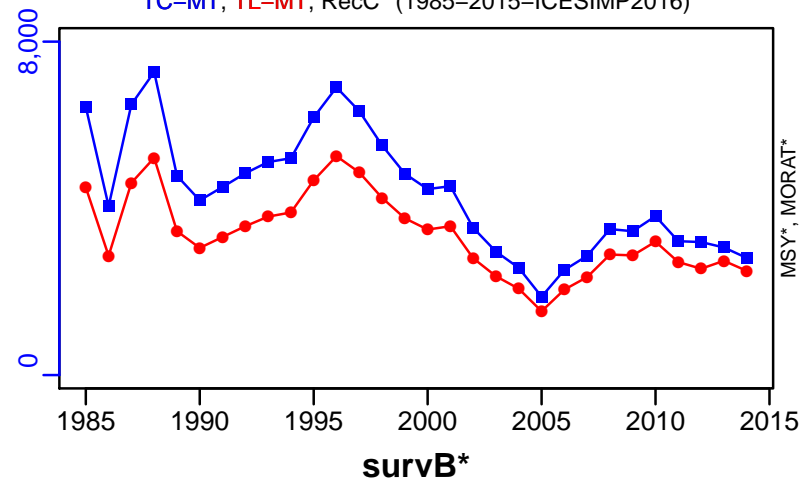
**Recruits\***



Megrim spp. IVa and VIa [MEGSPPIVa-VIa]

TC-MT, TL-MT, RecC\* (1985-2015-ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



MSY\*, MORAT\*

survB\*

CPUE\*

EFFORT\*

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

## Megrim VII-VIIIabd [MEGVII-VIIIabd]

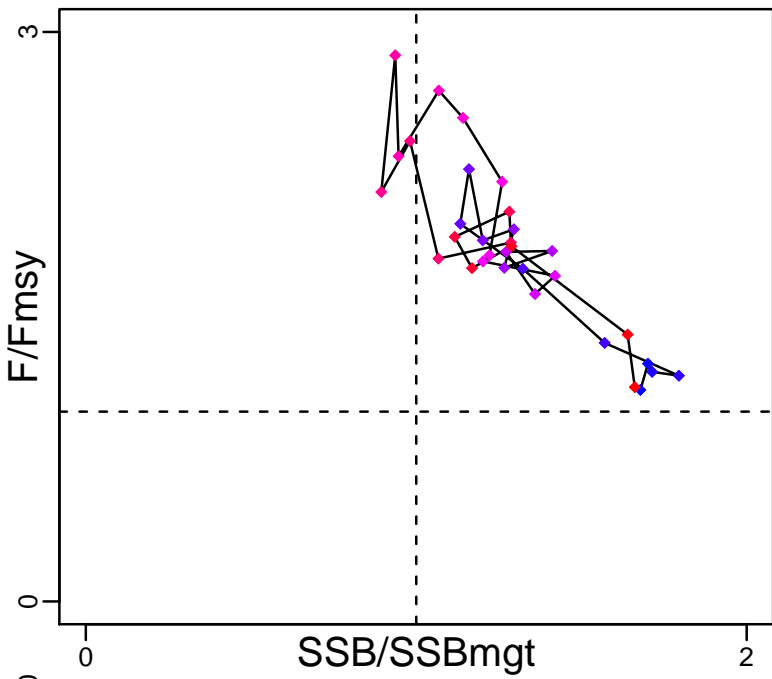
Metadata	
<b>Scientific Name</b>	Lepidorhombus whiffiagonis
<b>Current Assess ID</b>	WGBIE-MEGVII-VIIIabd-1983-2016-ICESIMP2016
<b>Area</b>	VII and VIIIabd
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
<b>Asmts in RAM</b>	2014, 2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.19
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	41,800
<b>Fmgt</b>	Fmgt-1/yr	2016	0.19
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	37,100
<b>Flim</b>	Flim-1/yr	2016	0.53
<b>ERlim</b>	-	-	-

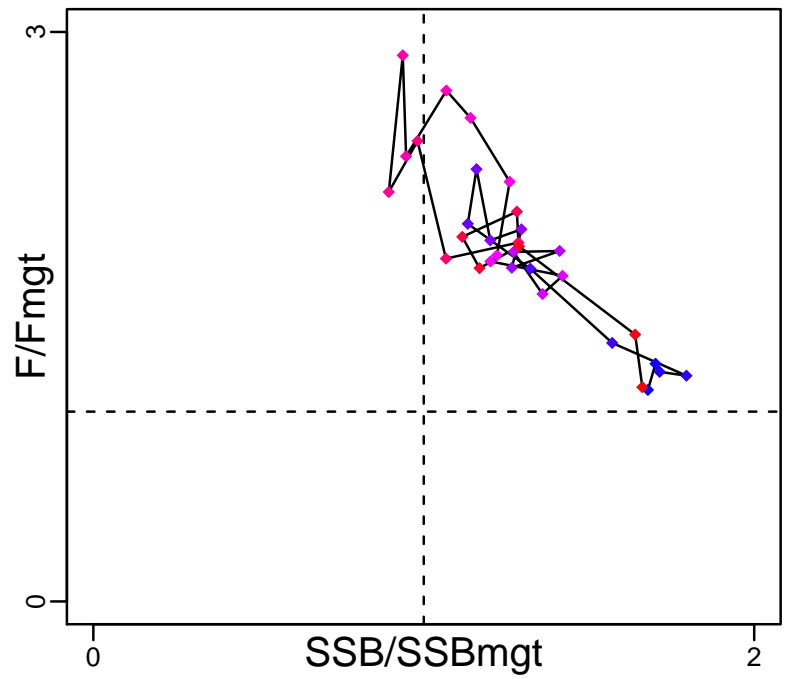
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	93,500	-	-
<b>SSB</b>	SSB-MT	2016	80,600	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$2.35 \times 10^8$	-	1
<b>F</b>	F-1/yr	2016	0.22	-	3 to 6
<b>ER</b>	ER-calc-ratio	2016	0.14	-	-
<b>TC</b>	TC-MT	2016	13,100		
<b>TL</b>	TL-MT	2016	11,600		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	1.13		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	1.93		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	1.13		
<b>ER/ERmgt</b>	-	-	-		

Megrim VII–VIIIabd [MEGVII–VIIIabd]

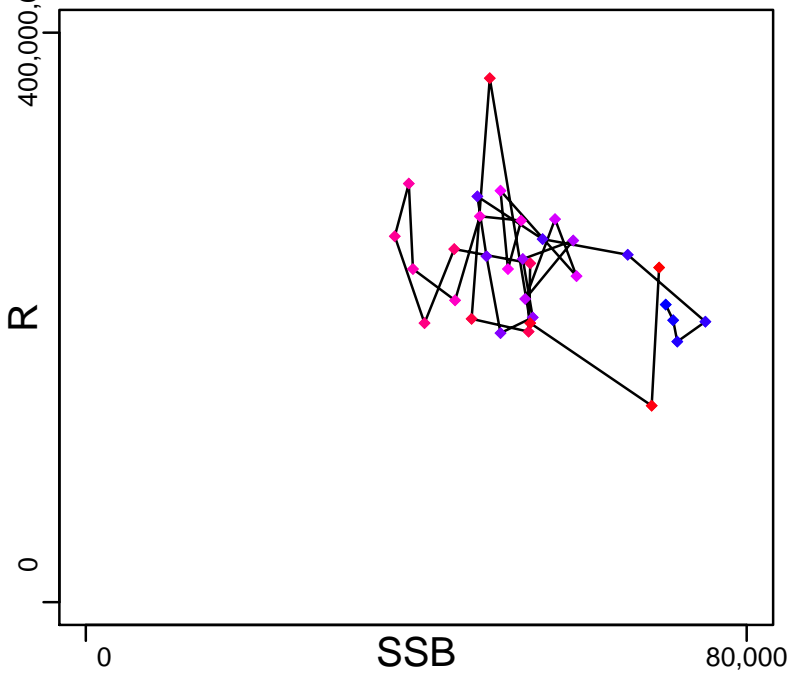
Kobe MSYpref (1983–2016–ICESIMP2016)



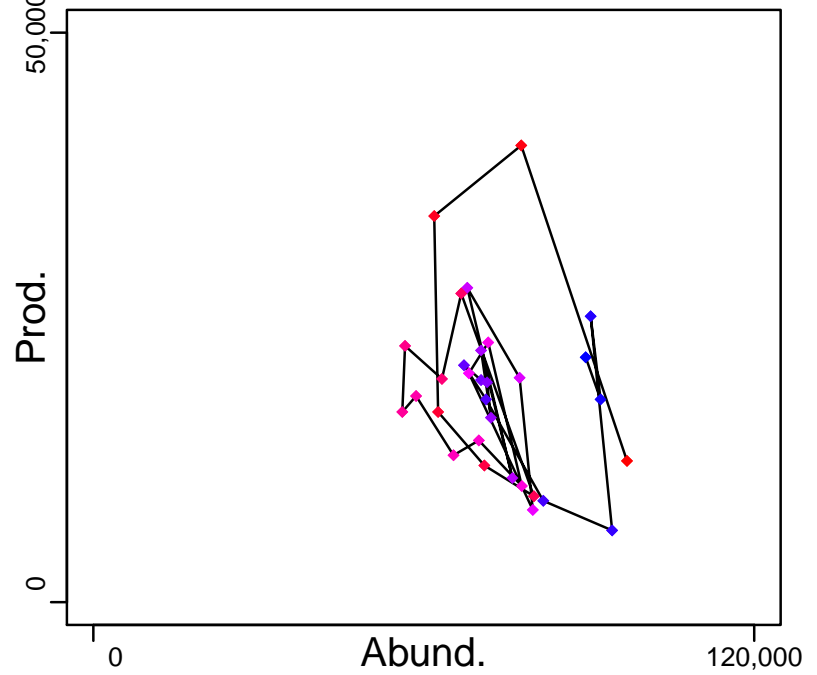
Kobe MGTpref (1983–2016–ICESIMP2016)



Spawner Recruit (1983–2016–ICESIMP2016)



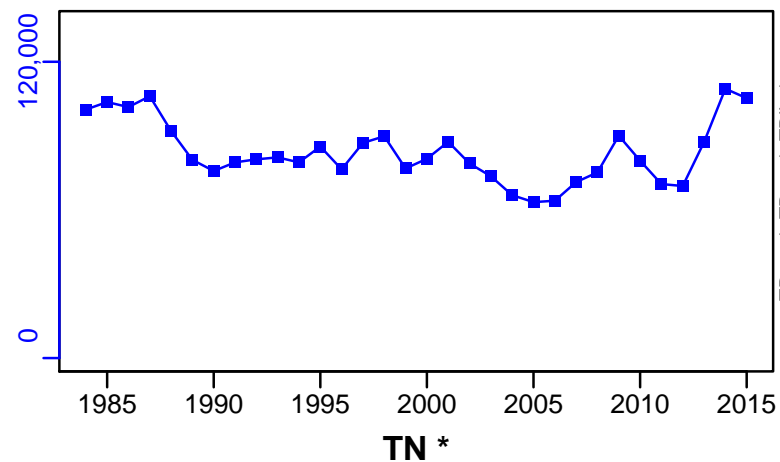
Production (1983–2016–ICESIMP2016)



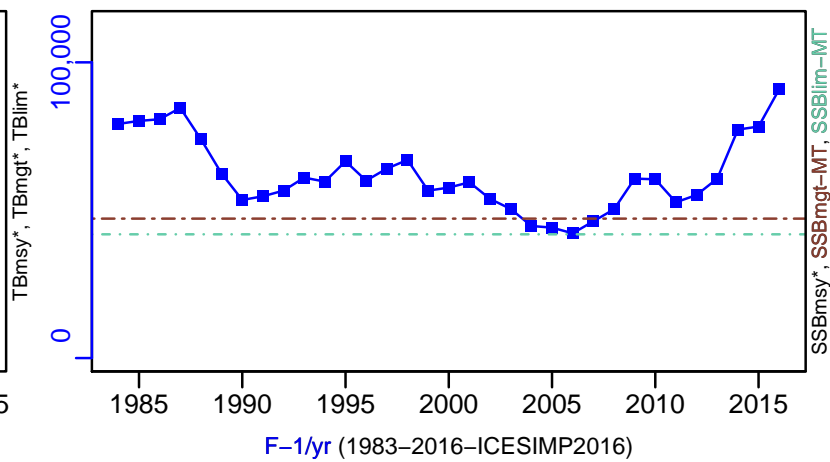
◆ Start Year ◆ End Year \* No Data

# Megrim VII-VIIIabd [MEGVII-VIIIabd]

TB-MT (1983–2016–ICESIMP2016)



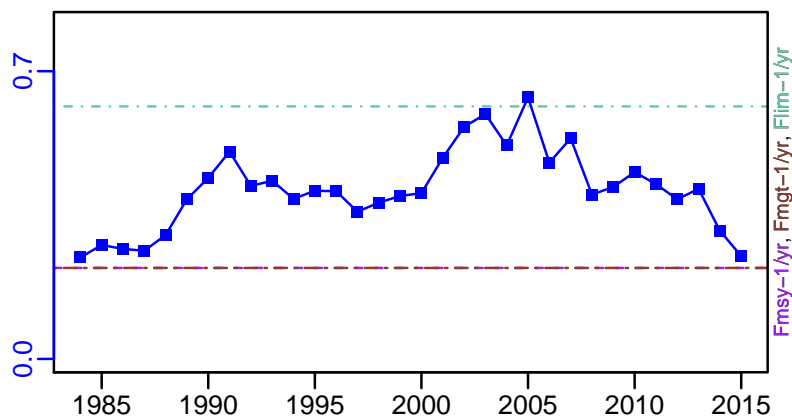
SSB-MT (1983–2016–ICESIMP2016)



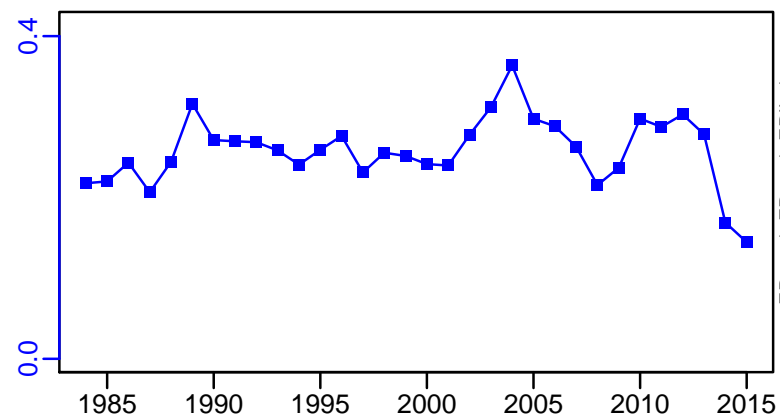
TN \*



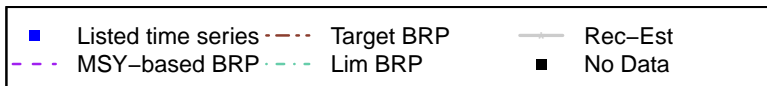
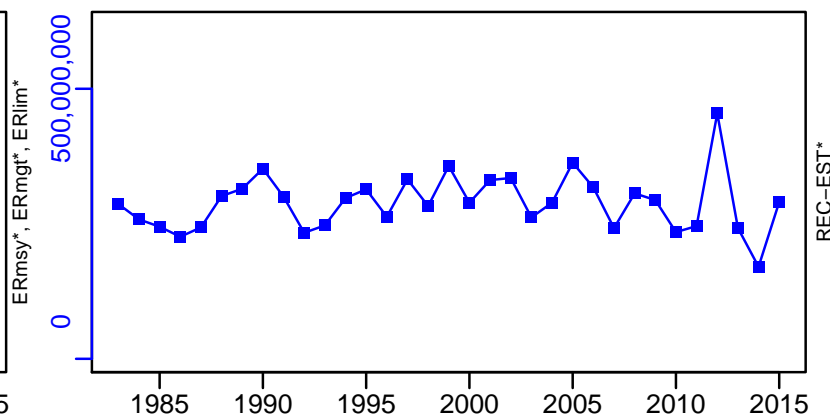
F-1/yr (1983–2016–ICESIMP2016)



ER-calc-ratio (1983–2016–ICESIMP2016)



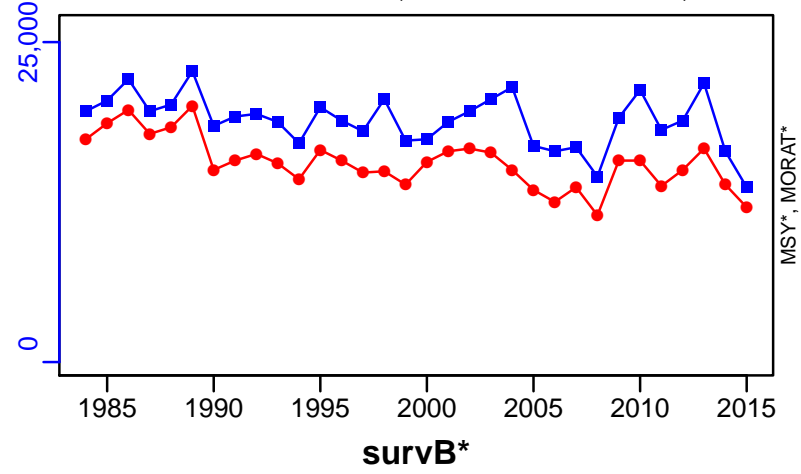
R-E00 (1983–2016–ICESIMP2016)



# Megrin VII–VIIIabd [MEGVII–VIIIabd]

TC–MT, TL–MT, RecC\* (1983–2016–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Norway lobster Noup (FU 10) [NEPHFU10]

Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	WGNSSK-NEPHFU10-1981-2016-ICESIMP2016
<b>Area</b>	Noup (FU 10)
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
<b>Asmts in RAM</b>	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	15		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



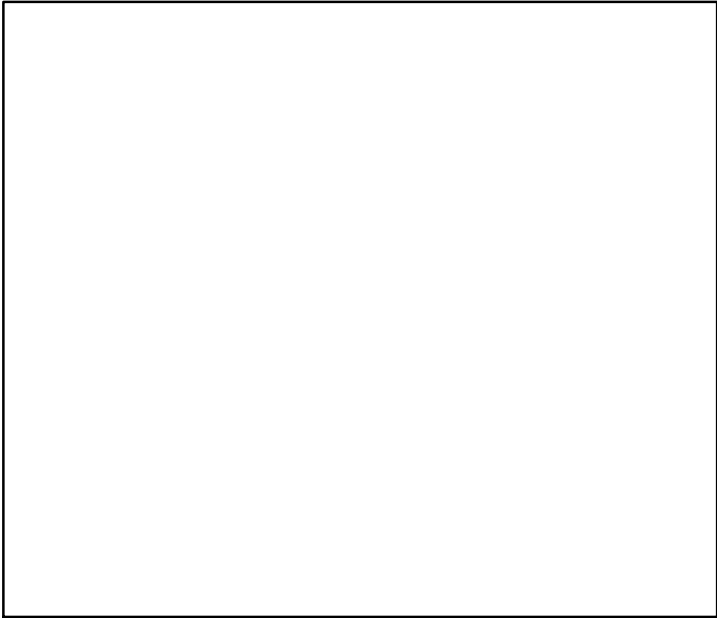
Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

TB\*



SSB\*



TN \*



F\*



ER\*

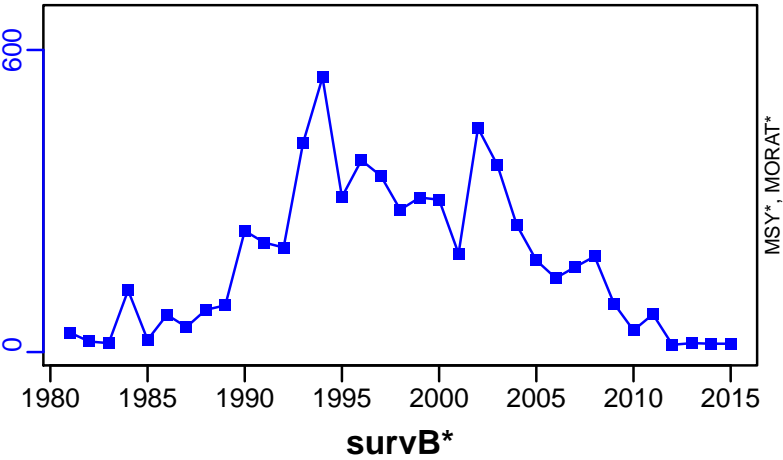


Recruits\*



Norway lobster Noup (FU 10) [NEPHFU10]

TL-MT, TC\*, RecC\* (1981-2016-ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Norway lobster North Minch (FU 11) [NEPHFU11]

Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	WGCSE-NEPHFU11-1981-2015-ICESIMP2016
<b>Area</b>	North Minch (FU 11)
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2015	0.11
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2015	0.11
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2015	0.1	-	-
TC	-	-	-		
TL	TL-MT	2015	3240		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2015	0.88		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

# Norway lobster North Minch (FU 11) [NEPHFU11]

TB\*



SSB\*



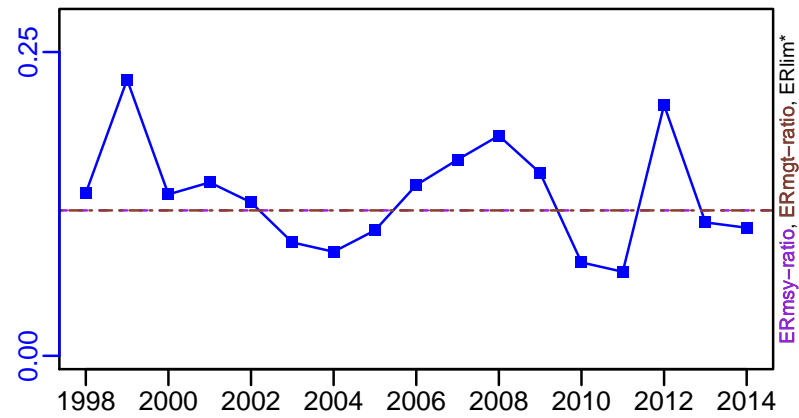
TN \*



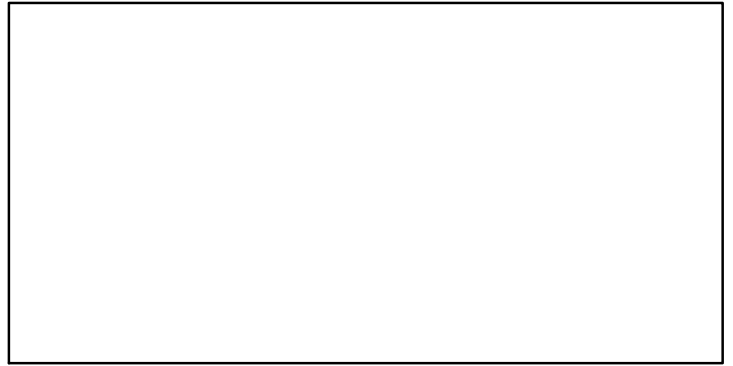
F\*



ER-ratio (1981–2015–ICESIMP2016)

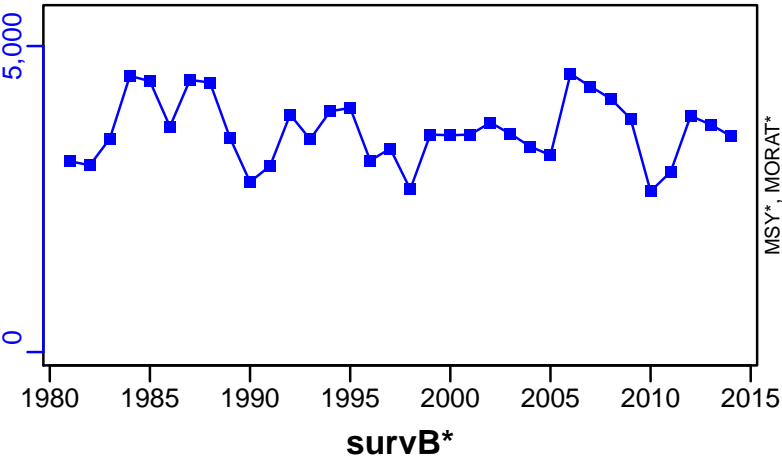


Recruits\*



Norway lobster North Minch (FU 11) [NEPHFU11]

TL-MT, TC\*, RecC\* (1981-2015-ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Norway lobster South Minch (FU 12) [NEPHFU12]

Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	WGCSE-NEPHFU12-1981-2015-ICESIMP2016
<b>Area</b>	South Minch (FU 12)
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2015	0.12
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2015	0.12
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2015	0.06	-	-
TC	-	-	-		
TL	TL-MT	2015	3160		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2015	0.47		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

TB\*



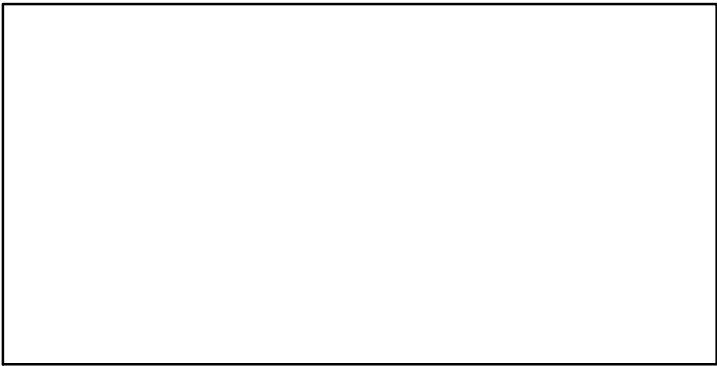
SSB\*



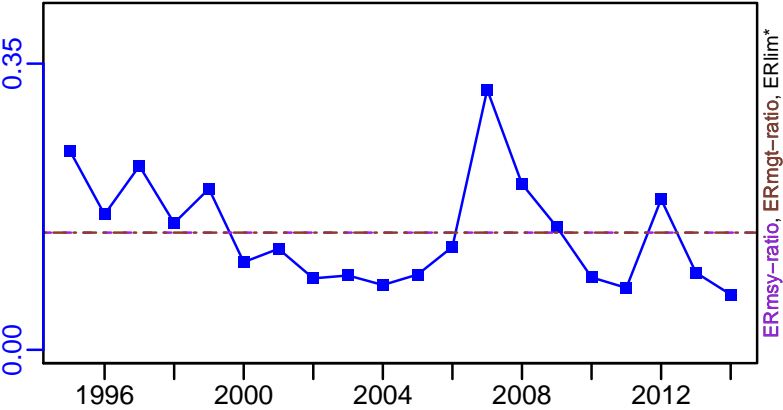
TN \*



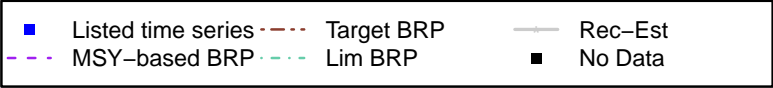
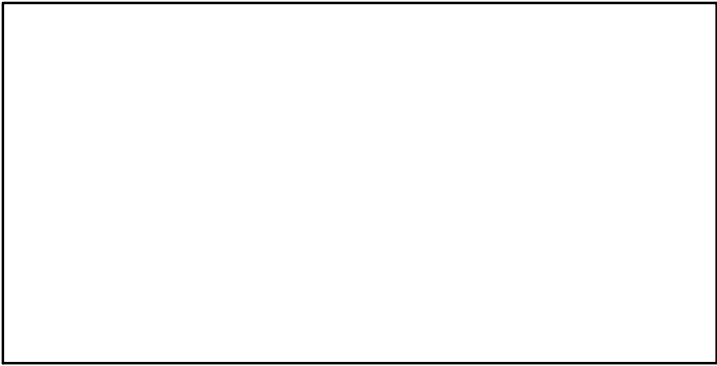
F\*



ER-ratio (1981–2015–ICESIMP2016)



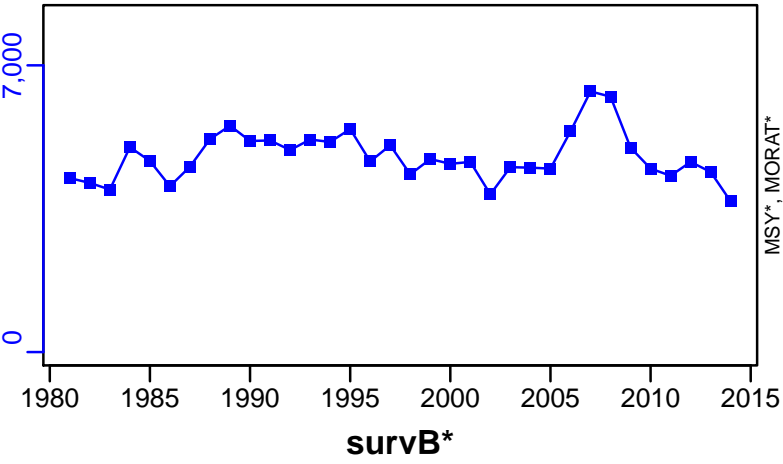
Recruits\*



# Norway lobster South Minch (FU 12) [NEPHFU12]

TL-MT, TC\*, RecC\* (1981-2015-ICESIMP2016)

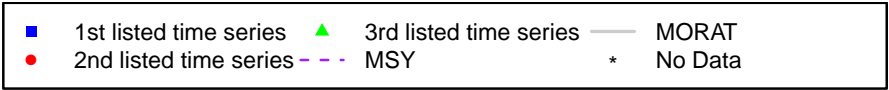
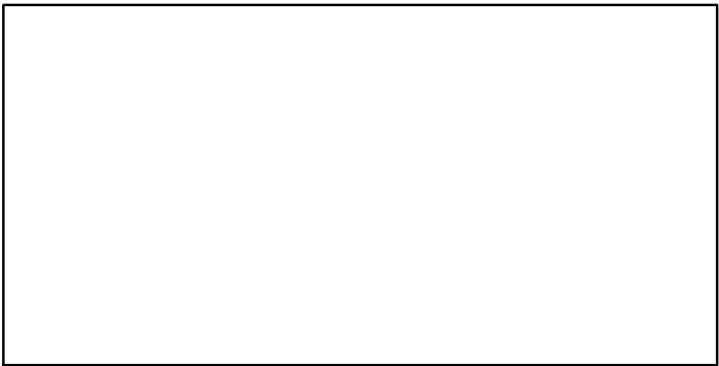
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Norway lobster Firth of Clyde and Sound of Jura (FU 13) [NEPHFU13]

Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	WGCSE-NEPHFU13-1981-2015-ICESIMP2016
<b>Area</b>	Firth of Clyde and Sound of Jura (FU 13)
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2015

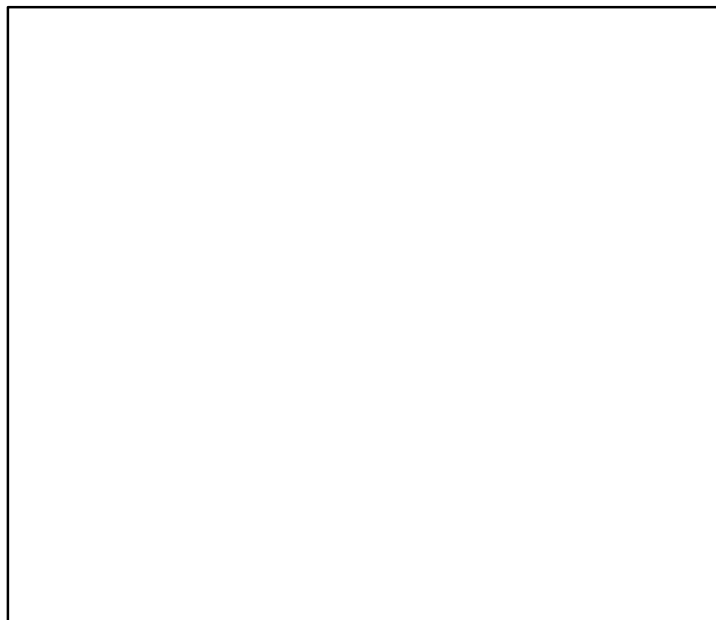
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2015	0.16
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	ERmgt-ratio	2015	0.16
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2015	0.23	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2015	6190		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2015	1.38		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data

Norway lobster Firth of Clyde and Sound of Jura (FU 13) [NEPHFU13]

TB\*



SSB\*



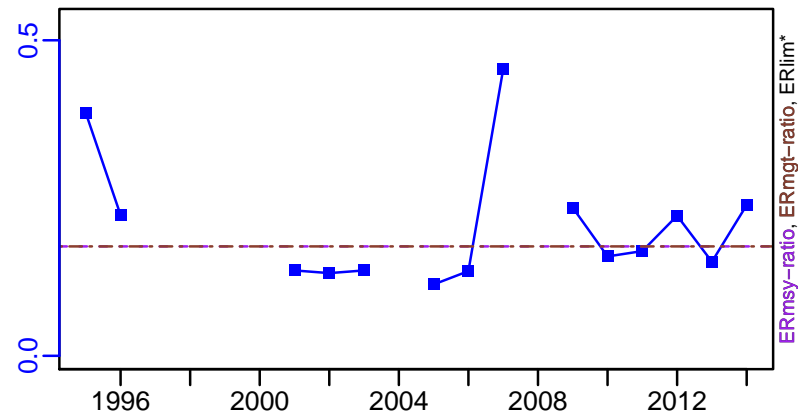
TN \*



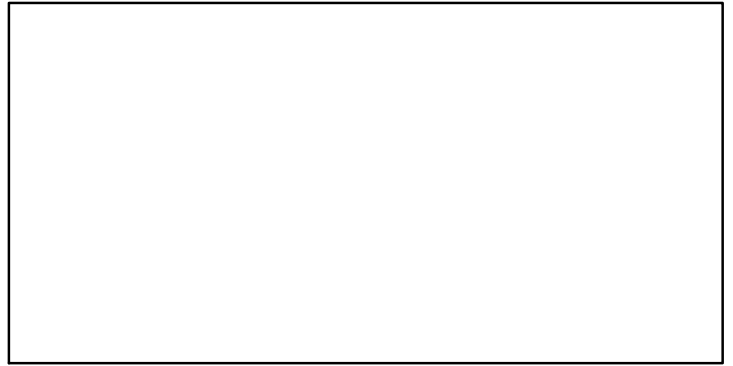
F\*



ER-ratio (1981–2015–ICESIMP2016)



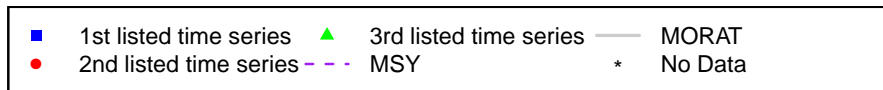
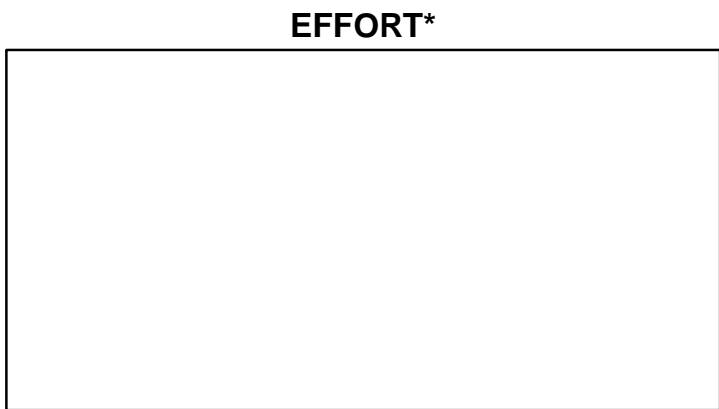
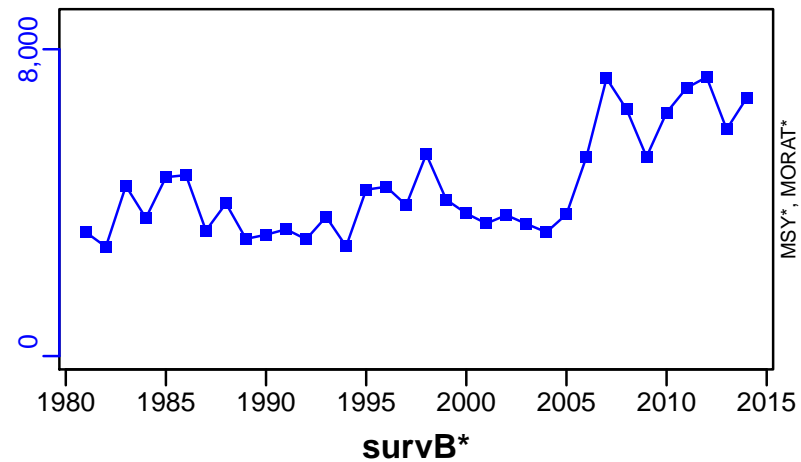
Recruits\*



# Norway lobster Firth of Clyde and Sound of Jura (FU 13) [NEPHFU13]

TL-MT, TC\*, RecC\* (1981-2015-ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



## Norway lobster Irish Sea East (FU 14) [NEPHFU14]

Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	WGCSE-NEPHFU14-2000-2015-ICESIMP2016
<b>Area</b>	Irish Sea East (FU 14)
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2015

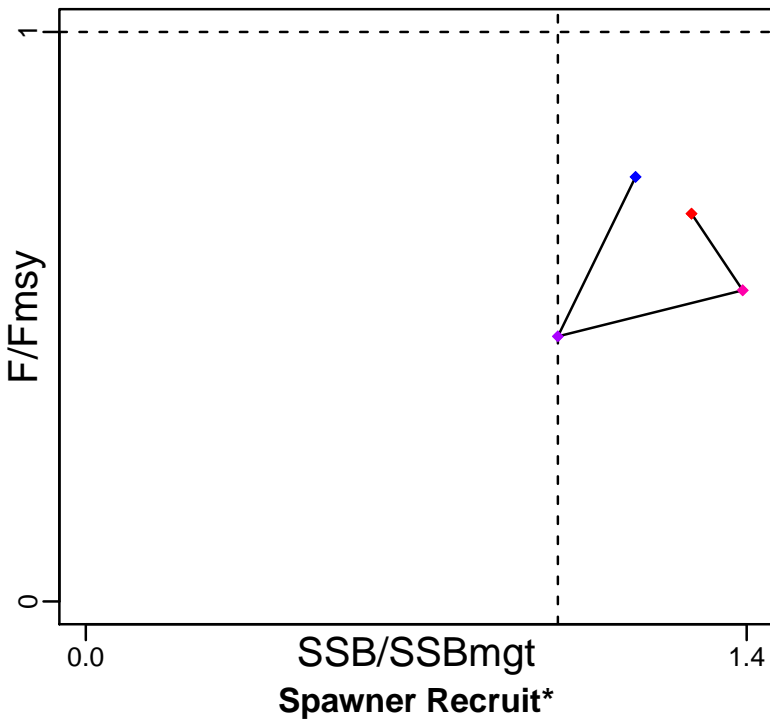
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2015	11
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2015	350
<b>Fmgt</b>	Fmgt-1/yr	2015	11
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2015	591	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	F-1/yr	2015	7.49	-	-
<b>ER</b>	ER-calc-ratio	2015	0.61	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2015	679		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2015	0.68		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2015	1.69		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	0.68		
<b>ER/ERmgt</b>	-	-	-		

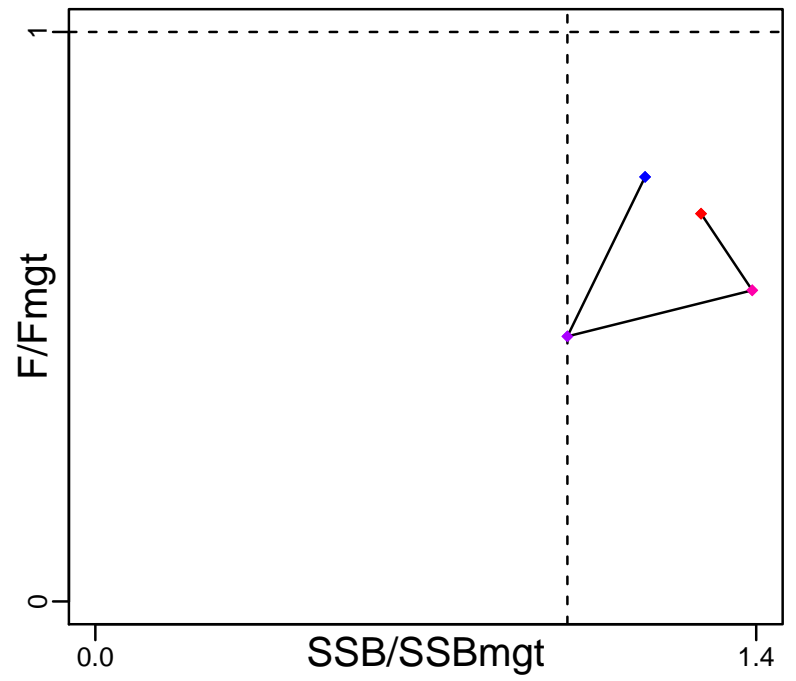


# Norway lobster Irish Sea East (FU 14) [NEPHFU14]

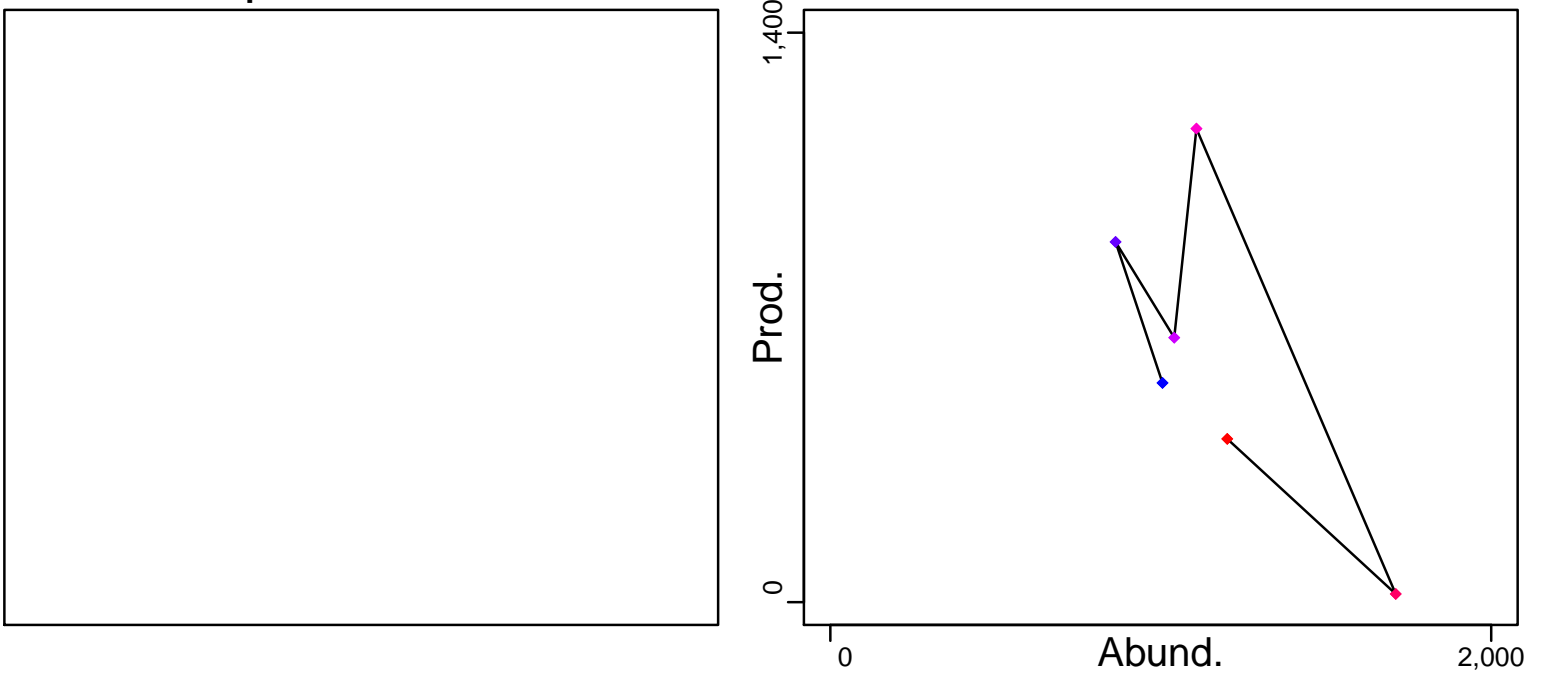
Kobe MSYpref (2000–2015–ICESIMP2016)



Kobe MGTpref (2000–2015–ICESIMP2016)



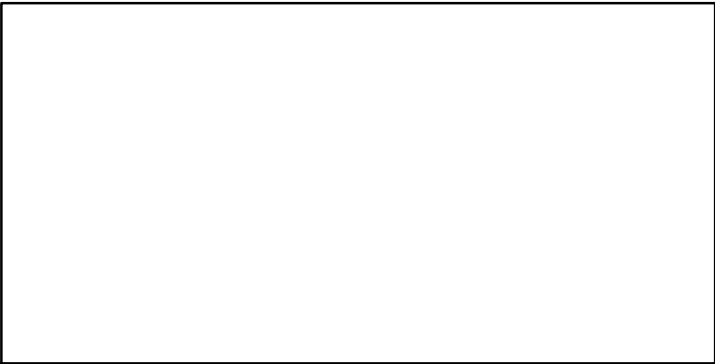
Production (2000–2015–ICESIMP2016)



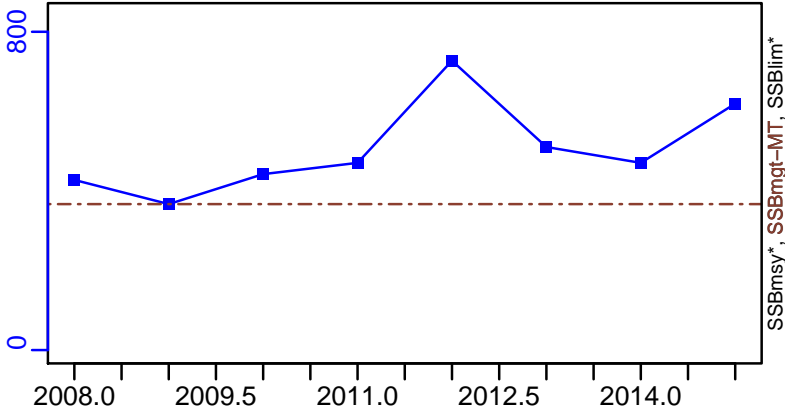
◆ Start Year ◆ End Year \* No Data

Norway lobster Irish Sea East (FU 14) [NEPHFU14]

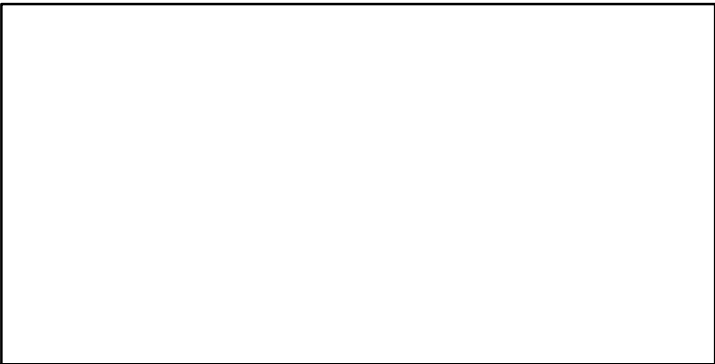
TB\*



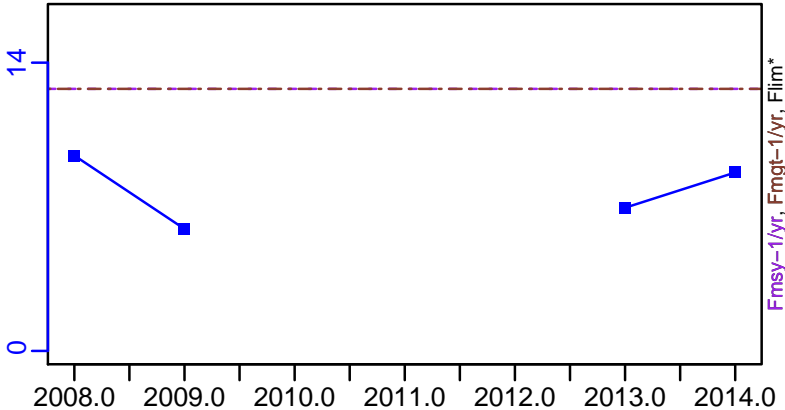
SSB-MT (2000–2015–ICESIMP2016)



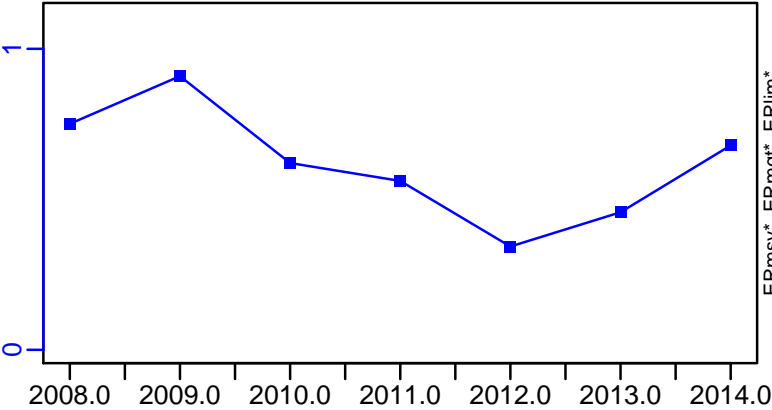
TN \*



F-1/yr (2000–2015–ICESIMP2016)



ER-calc-ratio (2000–2015–ICESIMP2016)

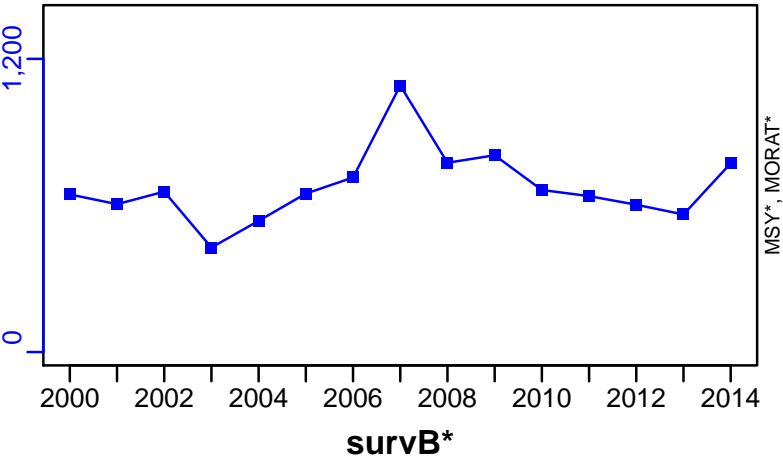


Recruits\*



Norway lobster Irish Sea East (FU 14) [NEPHFU14]

TL-MT, TC\*, RecC\* (2000–2015–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Norway lobster Irish Sea West (FU 15) [NEPHFU15]

Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	WGCSE-NEPHFU15-1960-2015-ICESIMP2016
<b>Area</b>	Irish Sea West (FU 15)
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2015	17.1
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2015	17.1
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2015	17.5	-	-
TC	-	-	-		
TL	TL-MT	2015	8610		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2015	1.02		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

TB\*



SSB\*



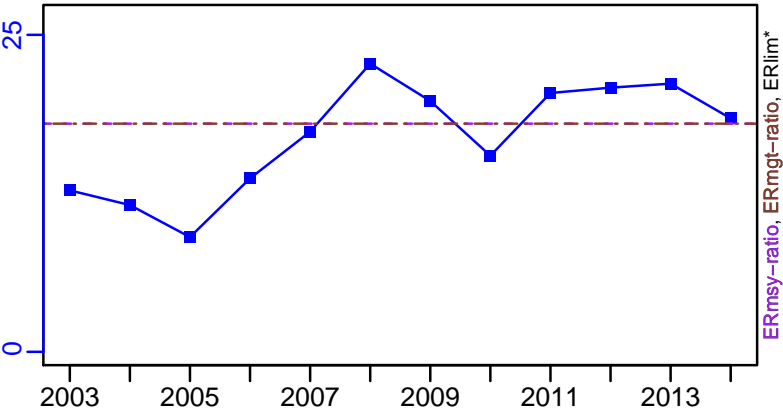
TN \*



F\*



ER-ratio (1960–2015–ICESIMP2016)



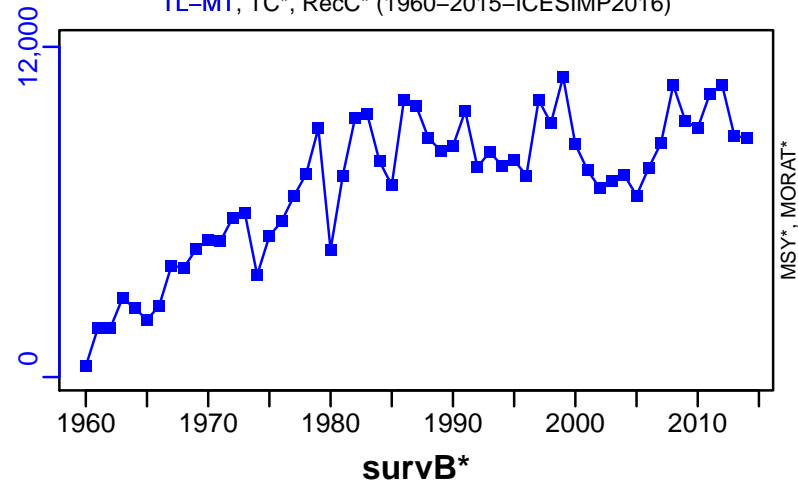
Recruits\*



# Norway lobster Irish Sea West (FU 15) [NEPHFU15]

TL-MT, TC\*, RecC\* (1960–2015–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



CPUE\*

EFFORT\*

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

## Norway lobster Porcupine Bank (FU 16) [NEPHFU16]

Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	WGCSE-NEPHFU16-1981-2015-ICESIMP2016
<b>Area</b>	Porcupine Bank (FU 16)
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2015

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	1190		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data

TB\*



SSB\*



TN \*



F\*



ER\*



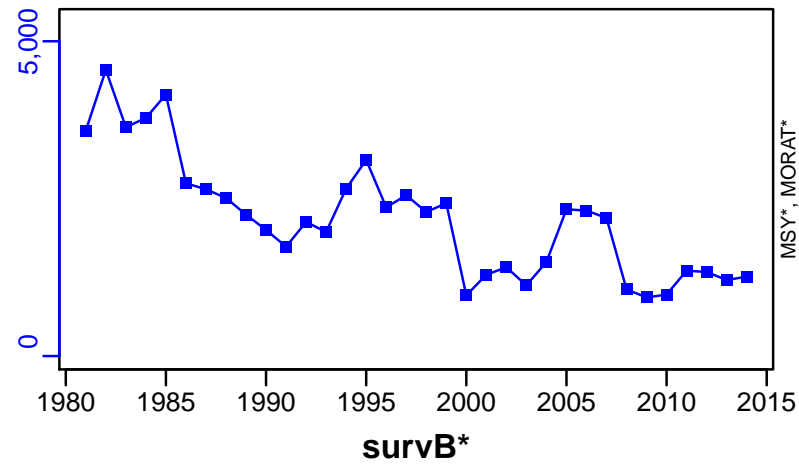
Recruits\*



# Norway lobster Porcupine Bank (FU 16) [NEPHFU16]

TL-MT, TC\*, RecC\* (1981-2015-ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Norway lobster Aran Grounds (FU 17) [NEPHFU17]

Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	WGCSE-NEPHFU17-1974-2015-ICESIMP2016
<b>Area</b>	Aran Grounds (FU 17)
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2015	12.5
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2015	12.5
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2015	9.83	-	-
TC	-	-	-		
TL	TL-MT	2015	766		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2015	0.79		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year    ◆ End Year    \* No Data

Norway lobster Aran Grounds (FU 17) [NEPHFU17]

TB\*



SSB\*



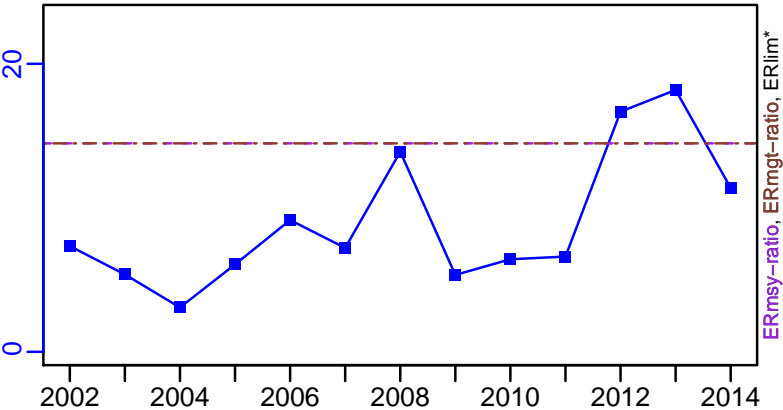
TN \*



F\*



ER-ratio (1974–2015–ICESIMP2016)

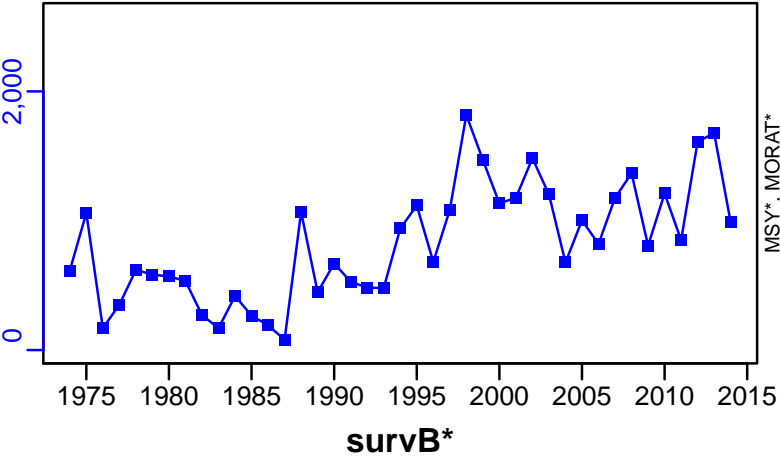


Recruits\*

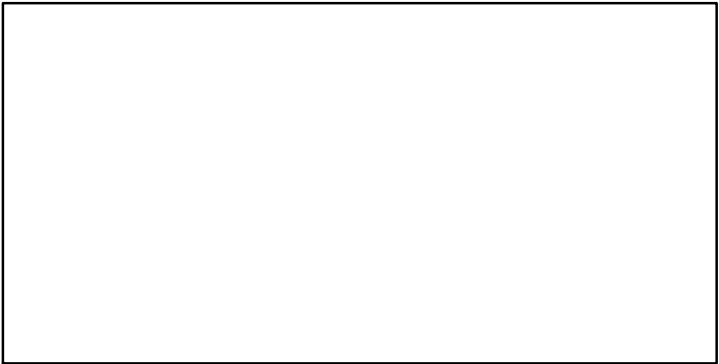


Norway lobster Aran Grounds (FU 17) [NEPHFU17]

TL-MT, TC\*, RecC\* (1974-2015-ICESIMP2016)



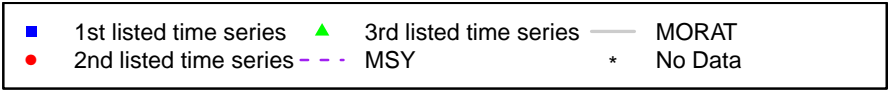
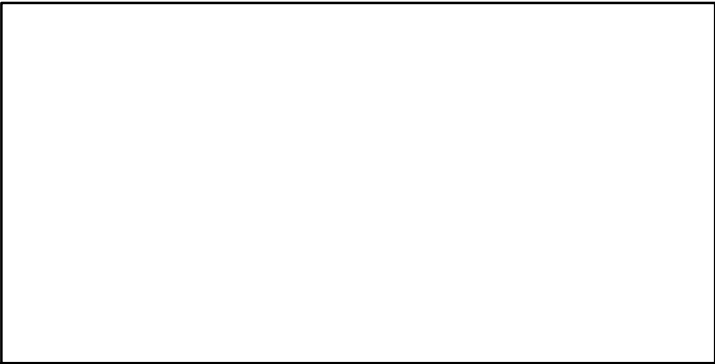
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Norway lobster South East and West of IRL (FU 19) [NEPHFU19]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGCSE-NEPHFU19-2006-2015-ICESIMP2016
Area	South East and West of IRL (FU 19)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2015

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	468		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



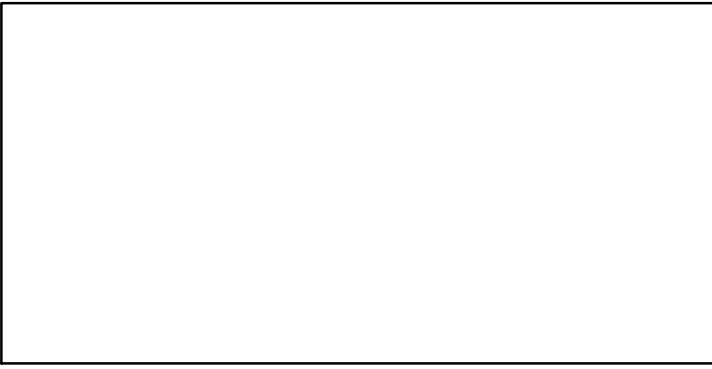
**Production\***



◆ Start Year ◆ End Year \* No Data

Norway lobster South East and West of IRL (FU 19) [NEPHFU19]

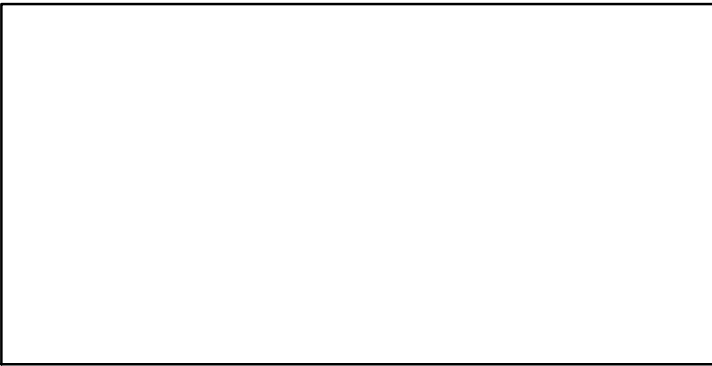
**TB\***



**SSB\***



**TN \***



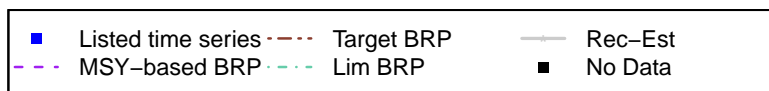
**F\***



**ER\***



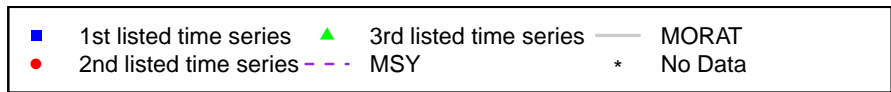
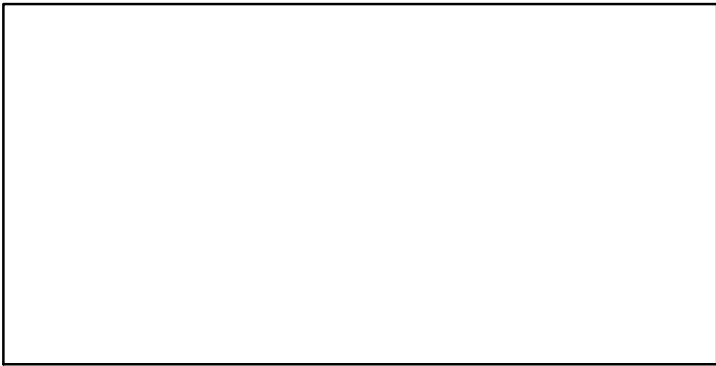
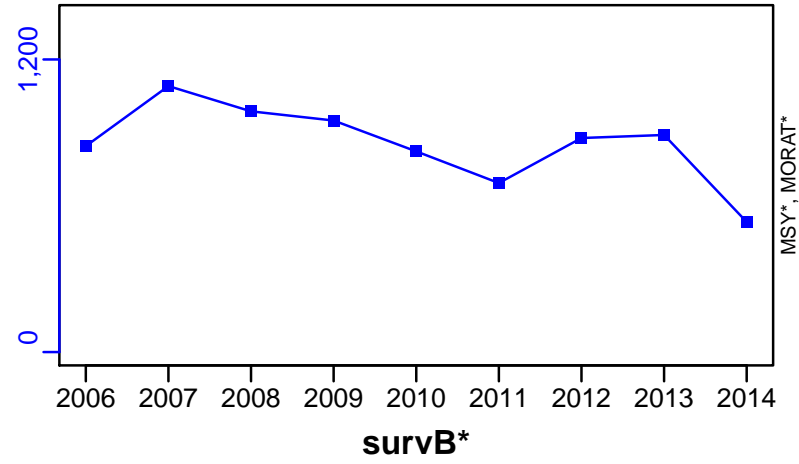
**Recruits\***



# Norway lobster South East and West of IRL (FU 19) [NEPHFU19]

TL-MT, TC\*, RecC\* (2006–2015–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



## Norway lobster Labadie, Jones and Cockburn (FU 20-21) [NEPHFU2021]

Metadata	
Scientific Name	Nephrops norvegicus
Current Assess ID	WGCSE-NEPHFU2021-1995-2015-ICESIMP2016
Area	Labadie, Jones and Cockburn (FU 20-21)
Management Authority	International Council for the Exploration of the Sea
Assessor	Working Group on Celtic Seas Ecosystems
Asmts in RAM	2015

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	1840		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***

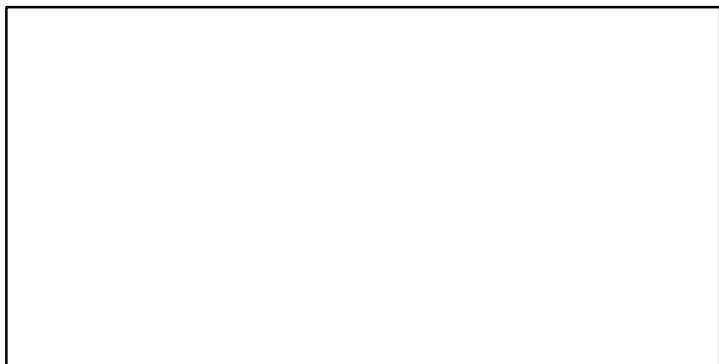


**Production\***

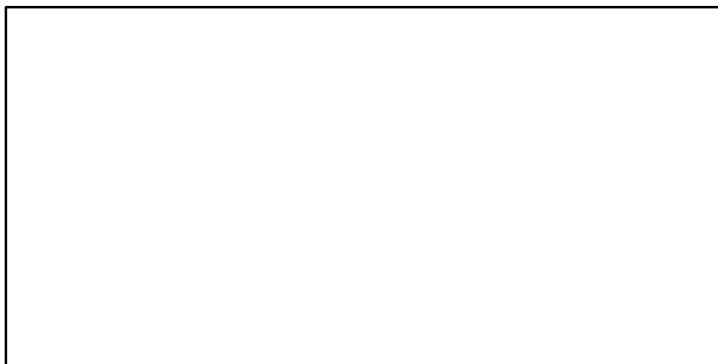


◆ Start Year ◆ End Year \* No Data

**TB\***



**SSB\***



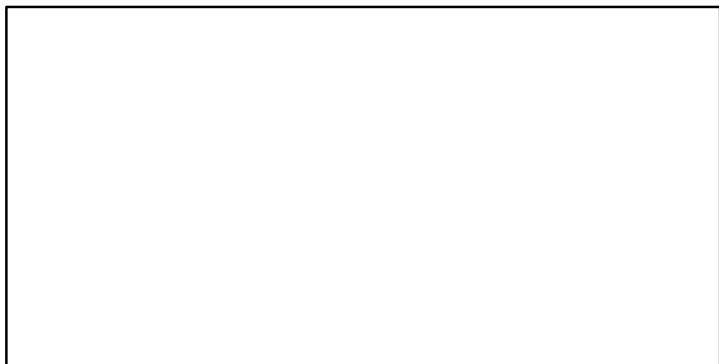
**TN \***



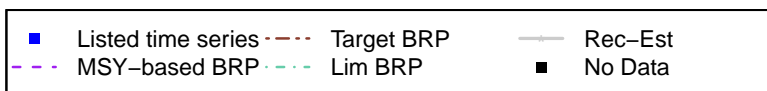
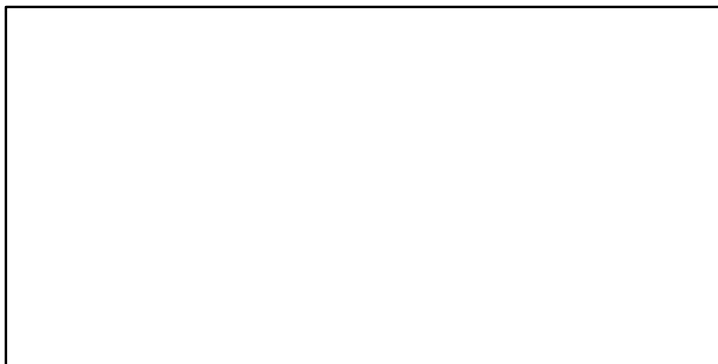
**F\***



**ER\***



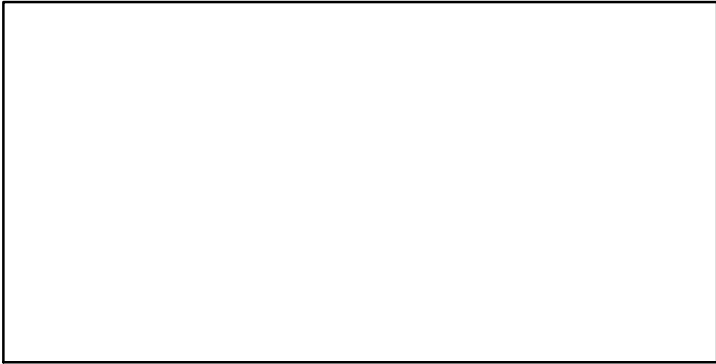
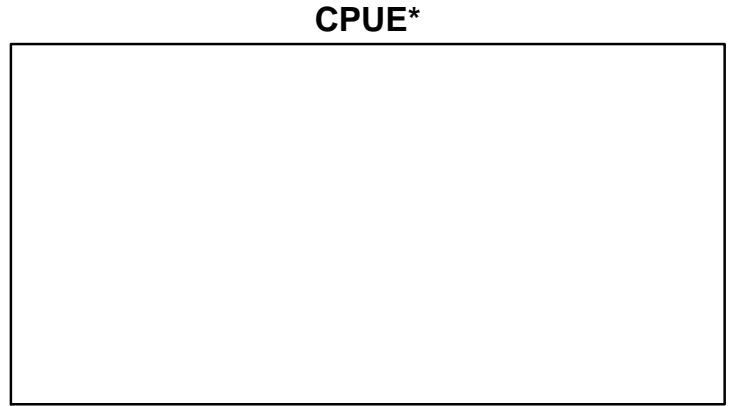
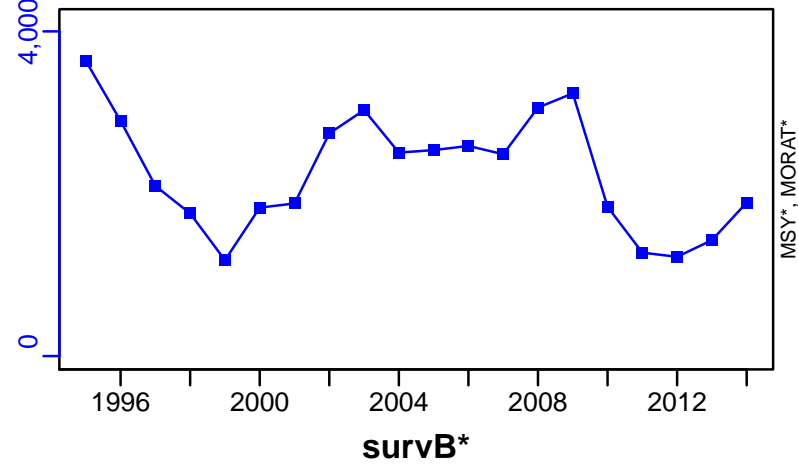
**Recruits\***



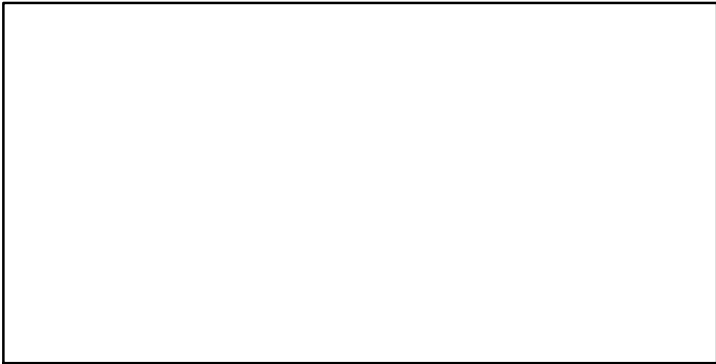
Norway lobster Labadie, Jones and Cockburn (FU 20–21) [NEPHFU2021]

TL–MT, TC\*, RecC\* (1995–2015–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Norway lobster Smalls (FU 22) [NEPHFU22]

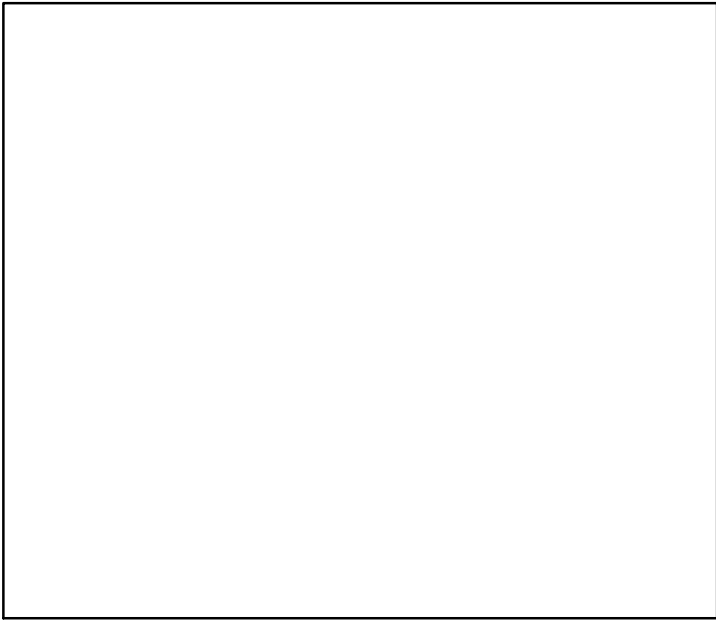
Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	WGCSE-NEPHFU22-1999-2015-ICESIMP2016
<b>Area</b>	Smalls (FU 22)
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	ERmsy-ratio	2015	10.9
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	ERmgt-ratio	2015	10.9
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	ER-ratio	2015	7.85	-	-
TC	-	-	-		
TL	TL-MT	2015	2610		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ER-ratio/ERmsy-ratio	2015	0.72		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



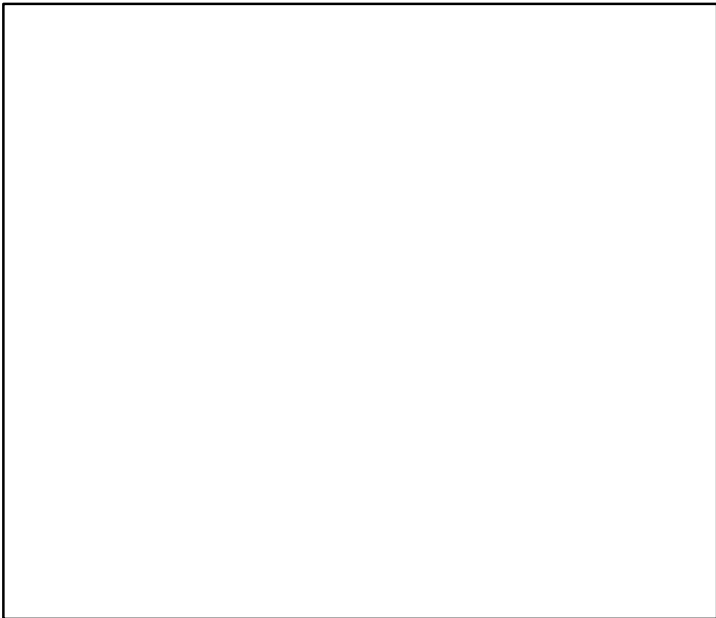
**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data

Norway lobster Smalls (FU 22) [NEPHFU22]

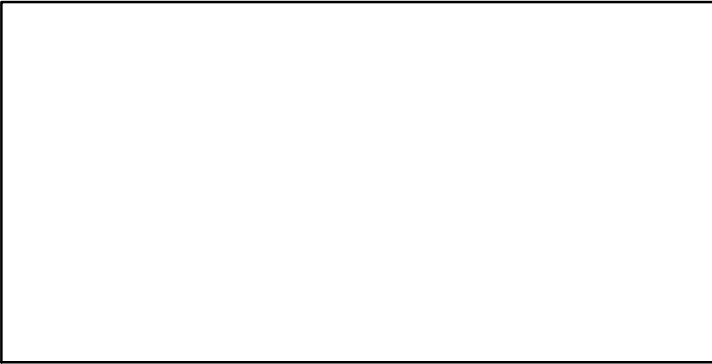
TB\*



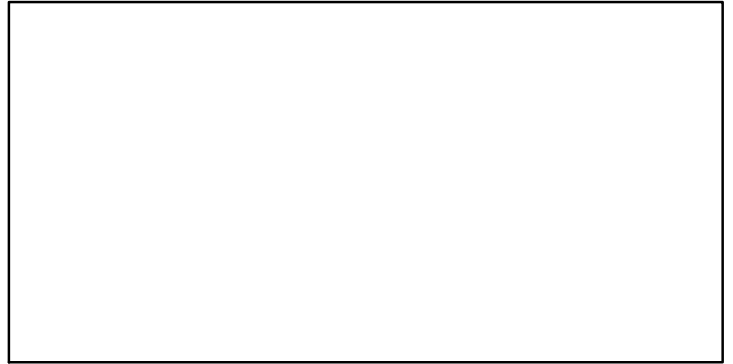
SSB\*



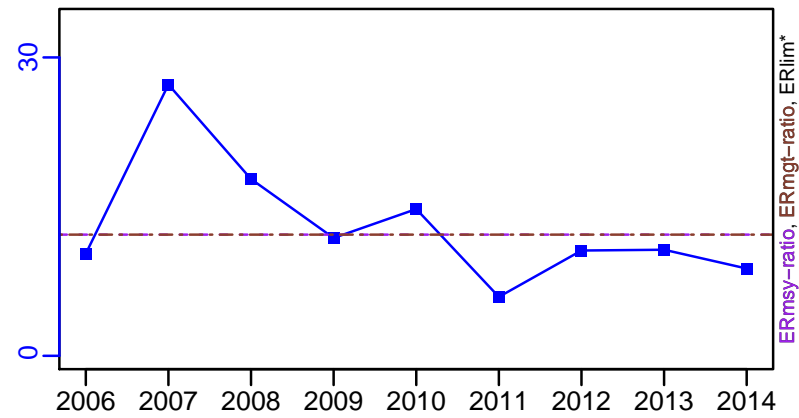
TN \*



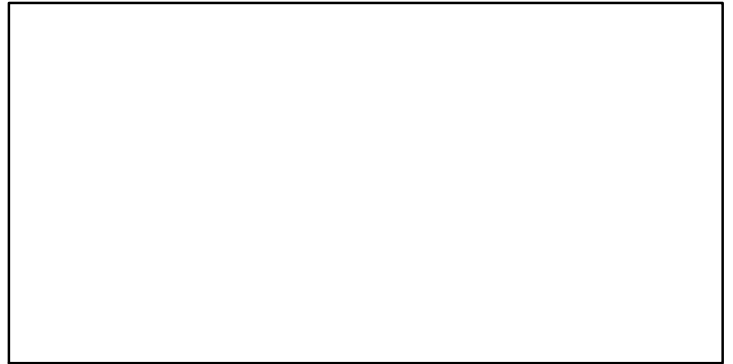
F\*



ER-ratio (1999–2015–ICESIMP2016)



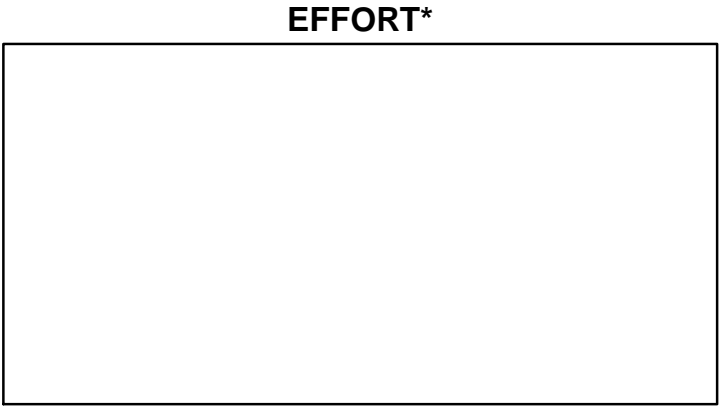
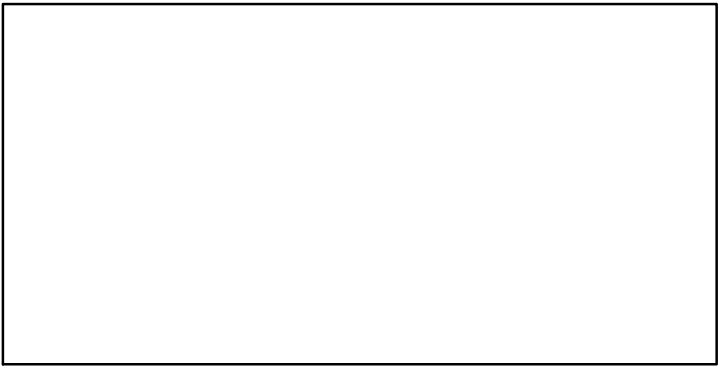
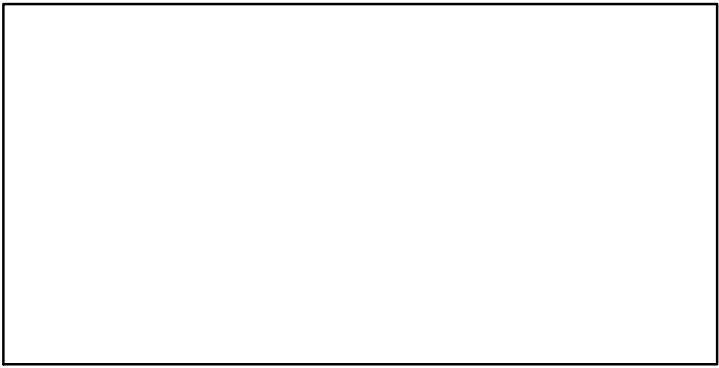
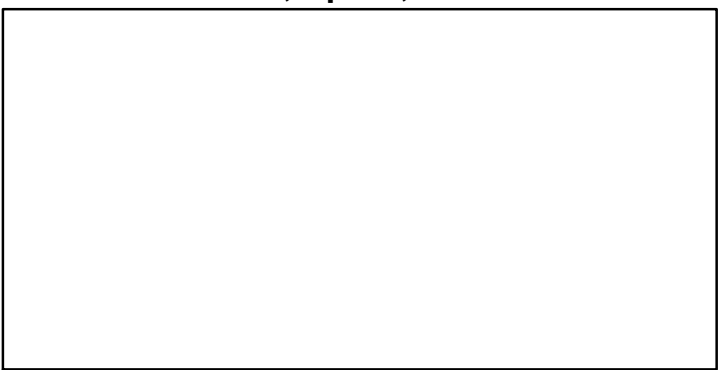
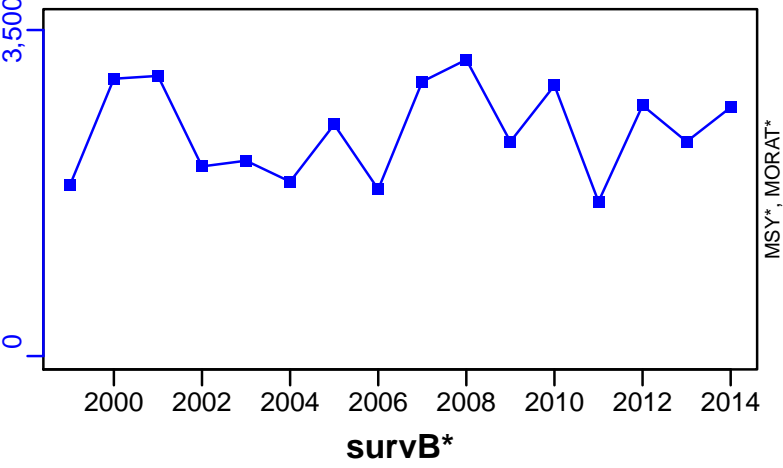
Recruits\*



# Norway lobster Smalls (FU 22) [NEPHFU22]

TL-MT, TC\*, RecC\* (1999–2015–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



## Norway lobster North Galicia (FU 25) [NEPHFU25]

Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	WGBIE-NEPHFU25-1975-2016-ICESIMP2016
<b>Area</b>	North Galicia (FU 25)
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
<b>Asmts in RAM</b>	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	14		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

TB\*



SSB\*



TN \*



F\*



ER\*



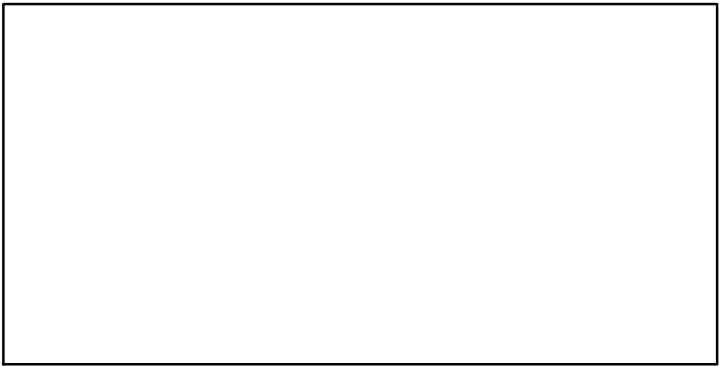
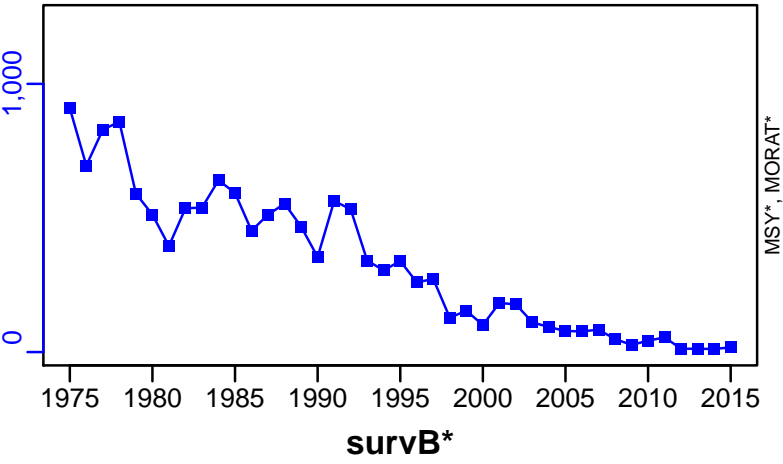
Recruits\*



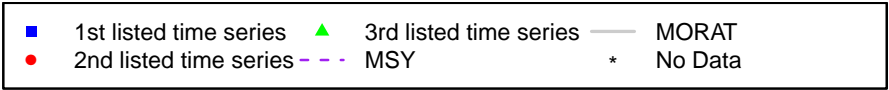
# Norway lobster North Galicia (FU 25) [NEPHFU25]

TL-MT, TC\*, RecC\* (1975–2016–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Norway lobster West Galicia and North Portugal (FU 26-27) [NEPHFU2627]

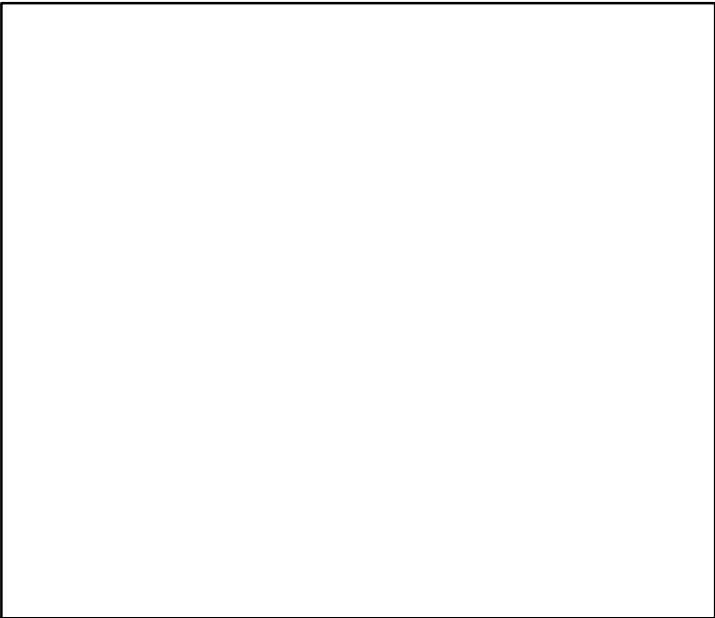
Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	WGBIE-NEPHFU2627-1975-2016-ICESIMP2016
<b>Area</b>	West Galicia and North Portugal (FU 26-27)
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
<b>Asmts in RAM</b>	2016

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

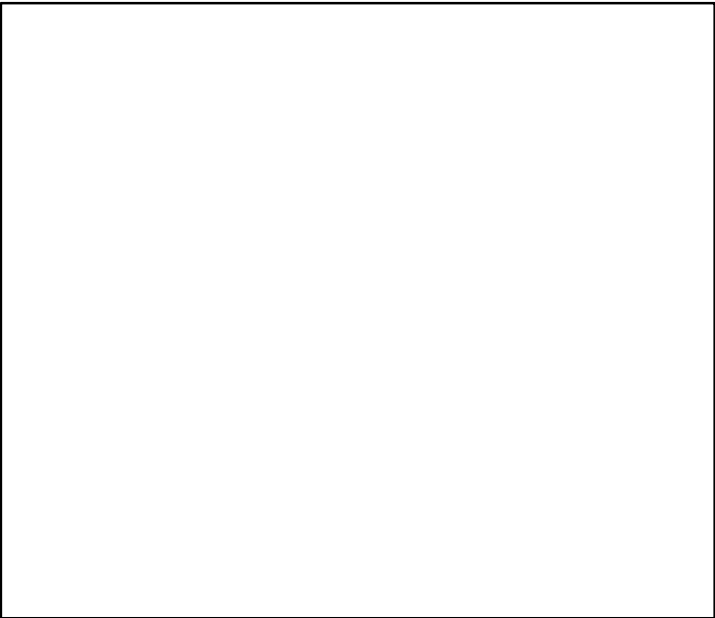
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	2		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



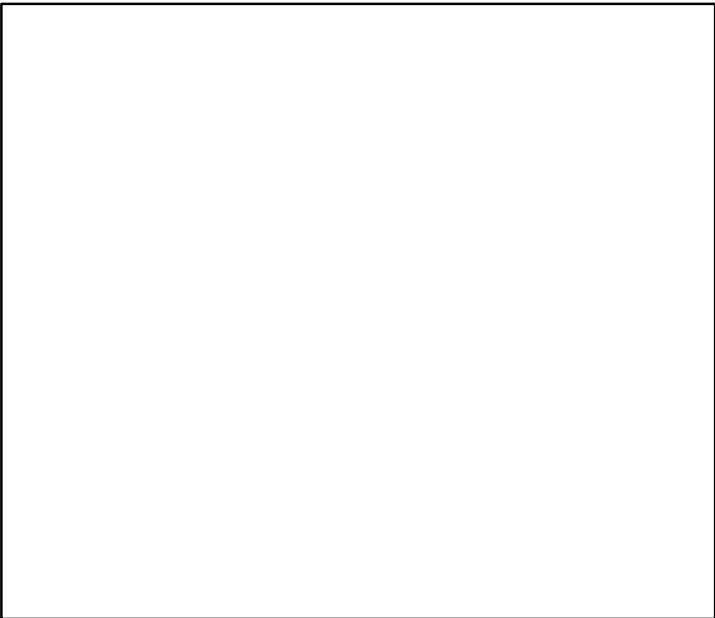
Kobe MSY\*



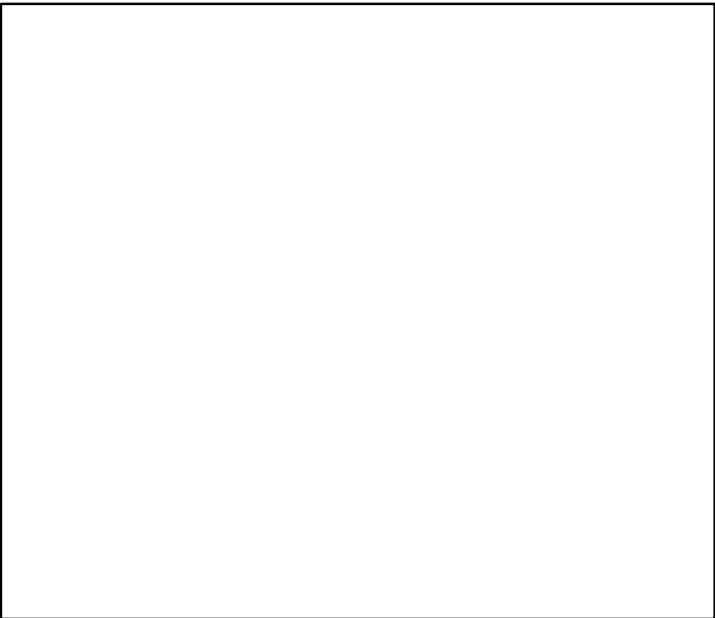
Kobe MGT\*



Spawner Recruit\*



Production\*

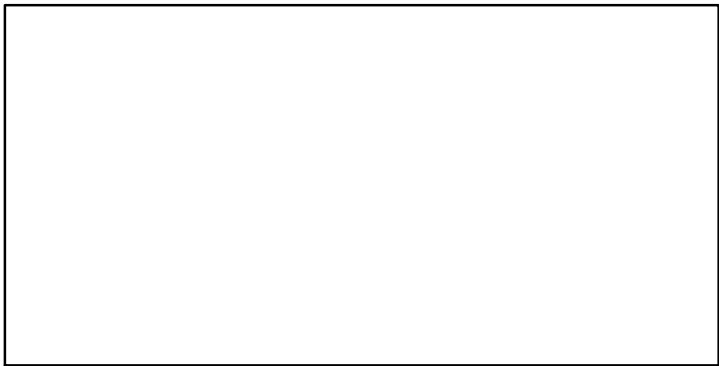


◆ Start Year   ◆ End Year   \* No Data

**TB\***



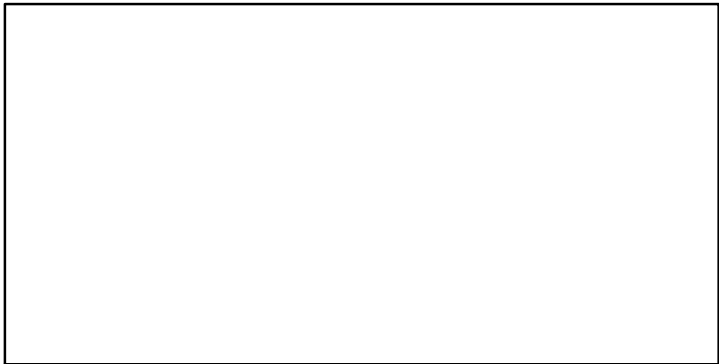
**SSB\***



**TN \***



**F\***



**ER\***

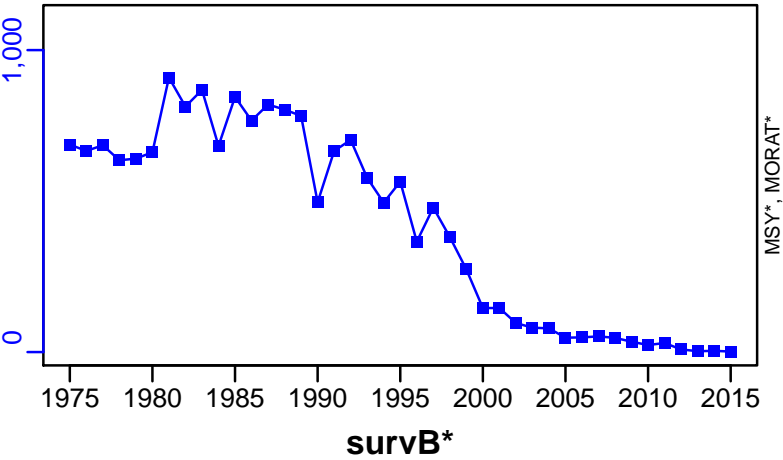


**Recruits\***



Norway lobster West Galicia and North Portugal (FU 26–27) [NEPHFU2627]

TL–MT, TC\*, RecC\* (1975–2016–ICESIMP2016)



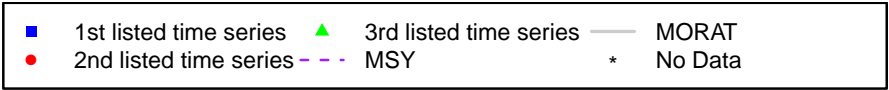
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*

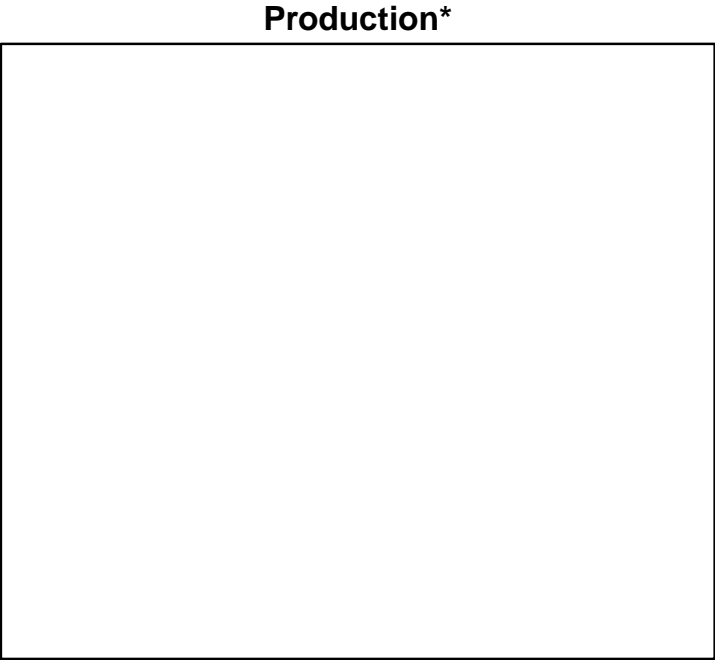
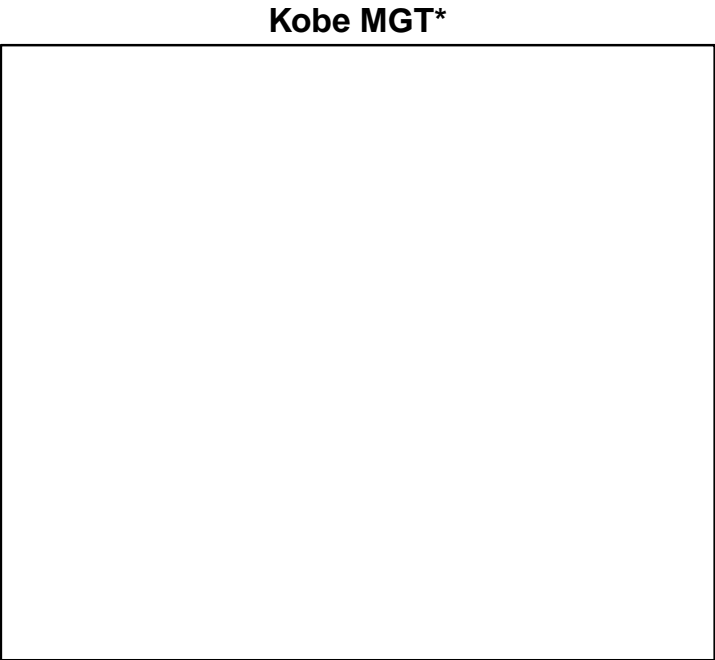
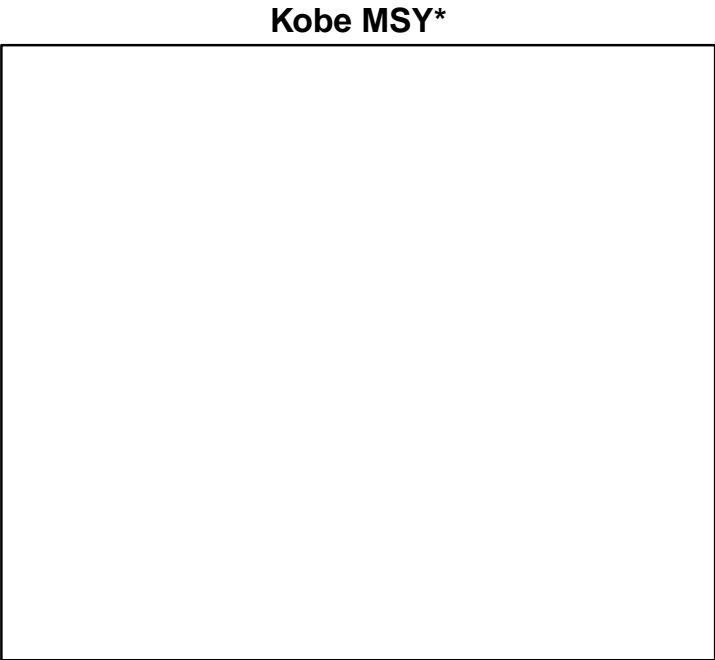


## Norway lobster South-West and South Portugal (FU 28-29) [NEPHFU2829]

Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	WGBIE-NEPHFU2829-1984-2016-ICESIMP2016
<b>Area</b>	South-West and South Portugal (FU 28-29)
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
<b>Asmts in RAM</b>	2016

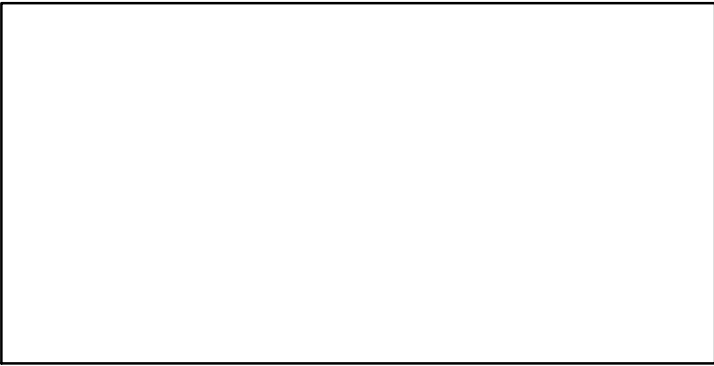
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	235		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

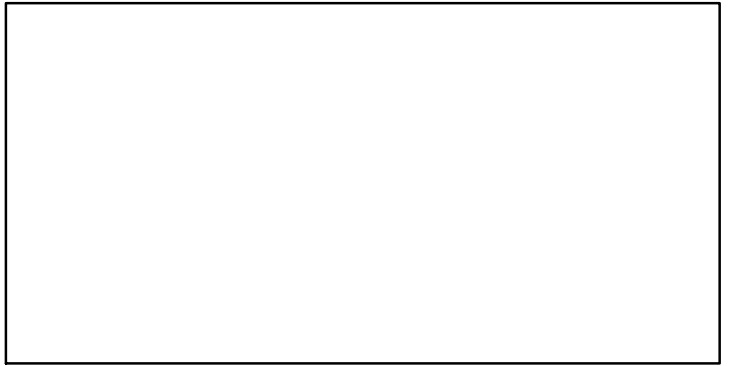


◆ Start Year    ◆ End Year    \* No Data

**TB\***



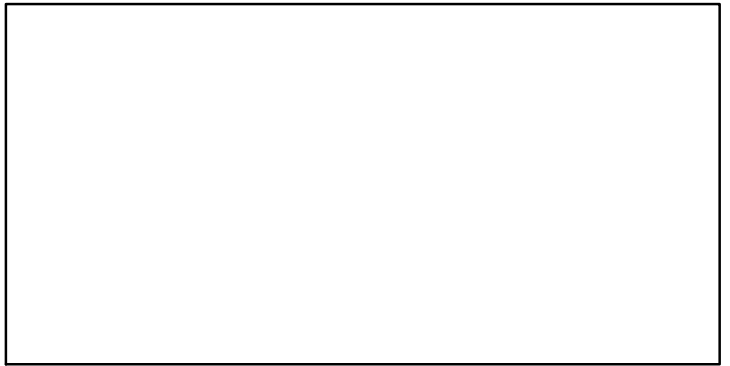
**SSB\***



**TN \***



**F\***



**ER\***

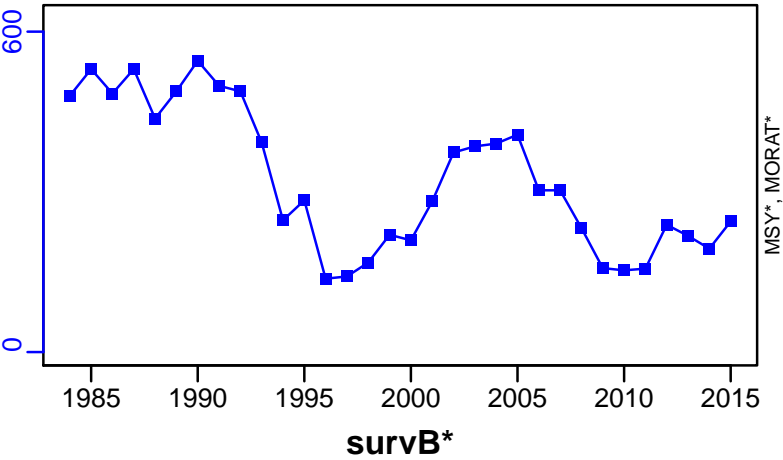


**Recruits\***



Norway lobster South-West and South Portugal (FU 28-29) [NEPHFU2829]

TL-MT, TC\*, RecC\* (1984-2016-ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Norway lobster Gulf of Cadiz (FU 30) [NEPHFU30]

Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	WGBIE-NEPHFU30-1994-2016-ICESIMP2016
<b>Area</b>	Gulf of Cadiz (FU 30)
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
<b>Asmts in RAM</b>	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	3350		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

TB\*



SSB\*



TN \*



F\*



ER\*



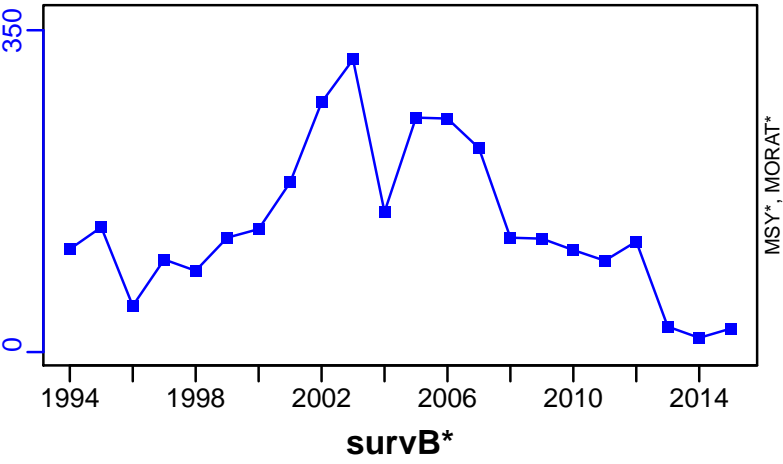
Recruits\*



# Norway lobster Gulf of Cadiz (FU 30) [NEPHFU30]

TL-MT, TC\*, RecC\* (1994–2016–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Norway lobster Cantabrian Sea (FU 31) [NEPHFU31]

Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	WGBIE-NEPHFU31-1983-2016-ICESIMP2016
<b>Area</b>	Cantabrian Sea (FU 31)
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
<b>Asmts in RAM</b>	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	25		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

TB\*



SSB\*



TN \*



F\*



ER\*



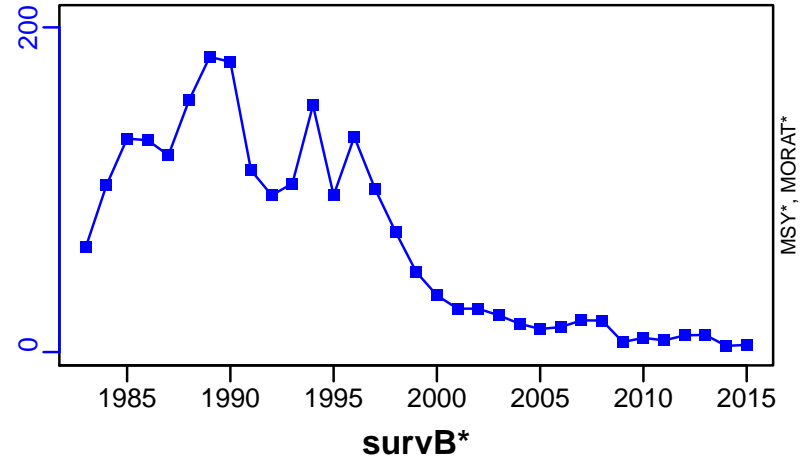
Recruits\*



# Norway lobster Cantabrian Sea (FU 31) [NEPHFU31]

TL-MT, TC\*, RecC\* (1983-2016-ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Norway lobster Norwegian Deeps (FU 32) [NEPHFU32]

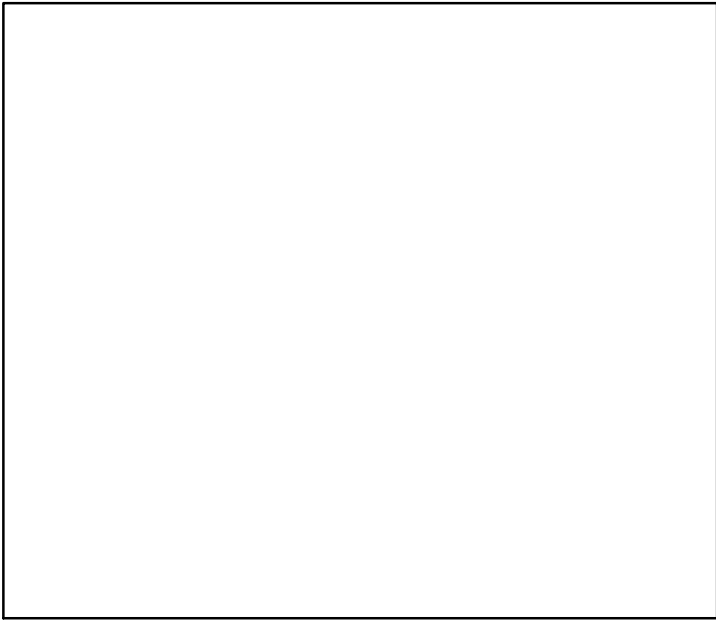
Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	WGNSSK-NEPHFU32-1987-2016-ICESIMP2016
<b>Area</b>	Norwegian Deeps (FU 32)
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
<b>Asmts in RAM</b>	2016

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

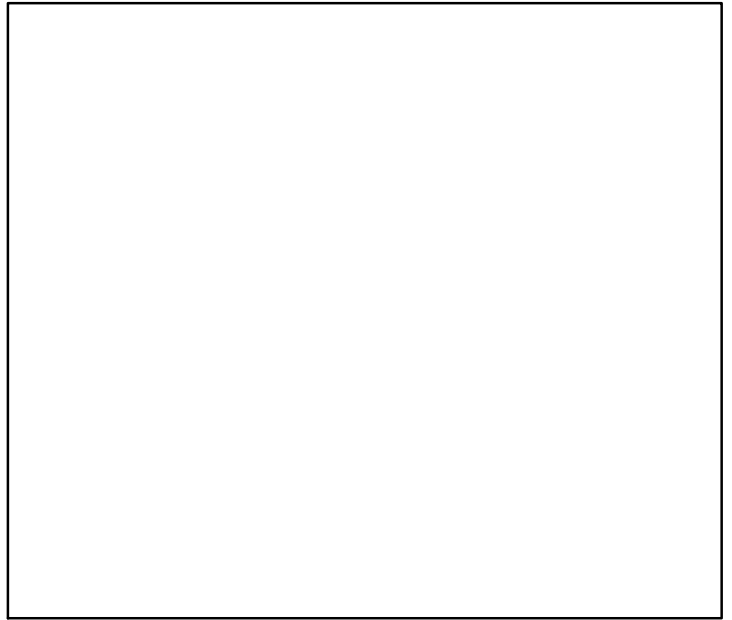
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	4		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



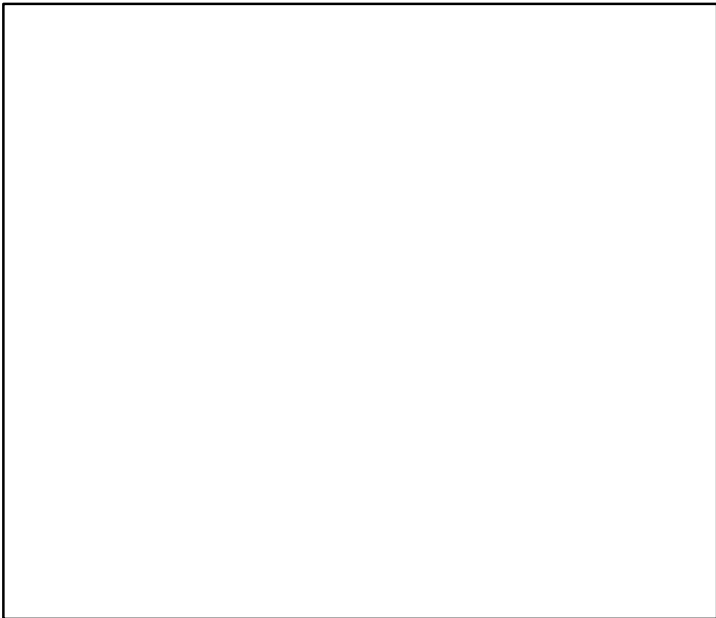
**Kobe MSY\***



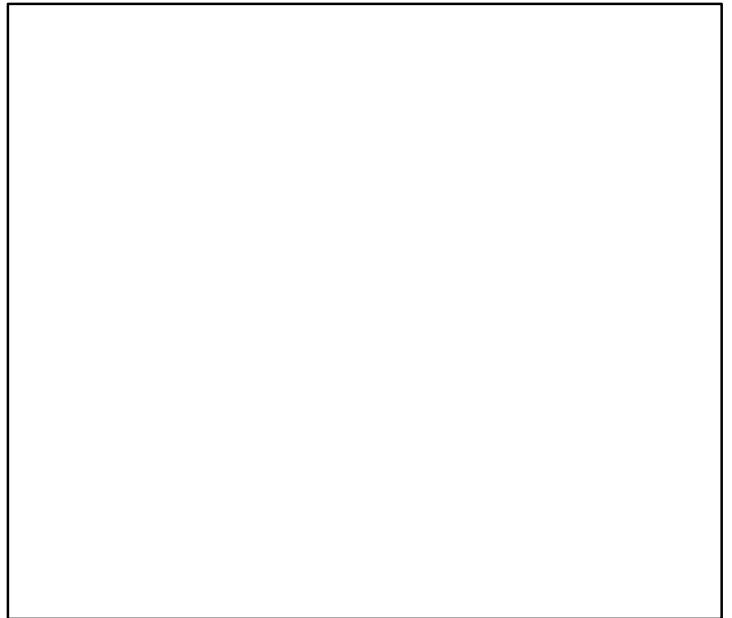
**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year ◆ End Year \* No Data

TB\*



SSB\*



TN \*



F\*



ER\*

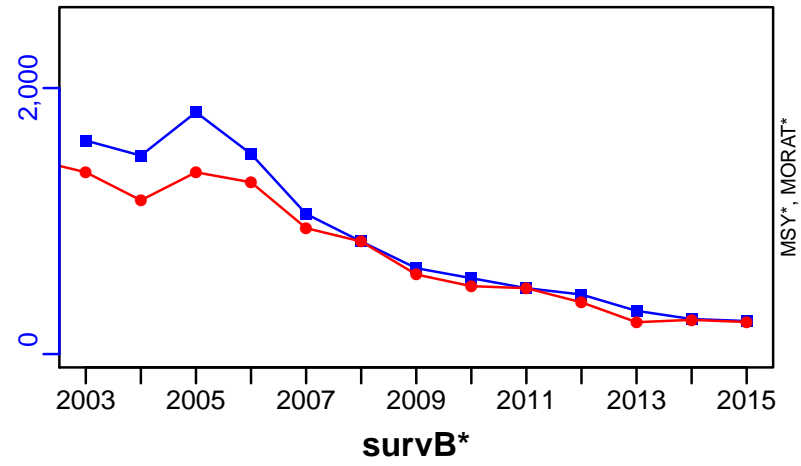


Recruits\*



# Norway lobster Norwegian Deeps (FU 32) [NEPHFU32]

TC-MT, TL-MT, RecC\* (1987–2016–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



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

## Norway lobster Off Horn Reef (FU 33) [NEPHFU33]

Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	WGNSSK-NEPHFU33-1993-2016-ICESIMP2016
<b>Area</b>	Off Horn Reef (FU 33)
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
<b>Asmts in RAM</b>	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	198		
TL	TL-MT	2016	192		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year    ◆ End Year    \* No Data

TB\*



SSB\*



TN \*



F\*



ER\*

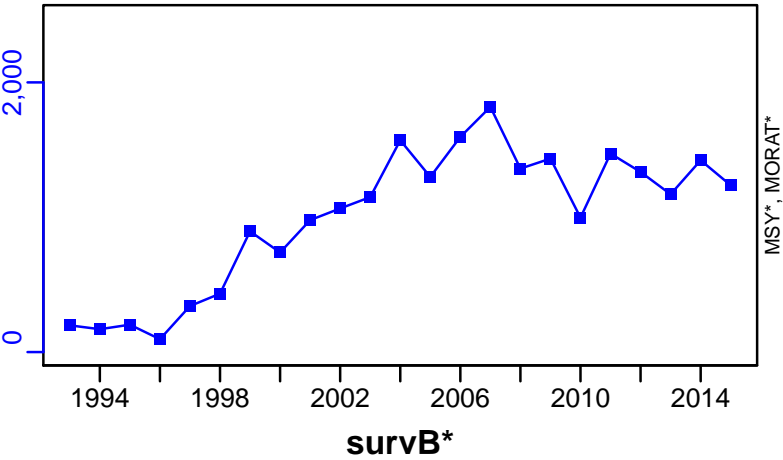


Recruits\*



Norway lobster Off Horn Reef (FU 33) [NEPHFU33]

TL-MT, TC\*, RecC\* (1993–2016–ICESIMP2016)



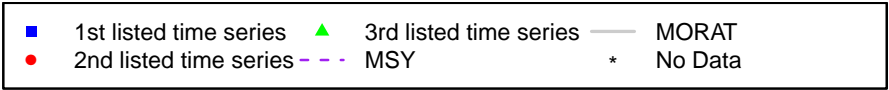
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Norway lobster Devil's Hole (FU 34) [NEPHFU34]

Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	WGNSSK-NEPHFU34-1986-2016-ICESIMP2016
<b>Area</b>	Devil's Hole (FU 34)
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
<b>Asmts in RAM</b>	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-	-	-
TL	TL-MT	2016	1000	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-



Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

TB\*



SSB\*



TN \*



F\*



ER\*



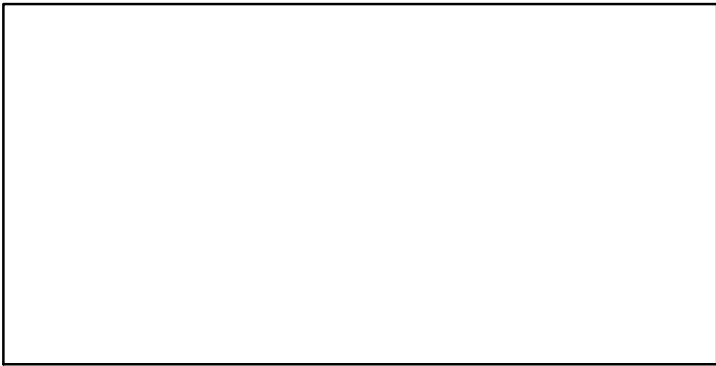
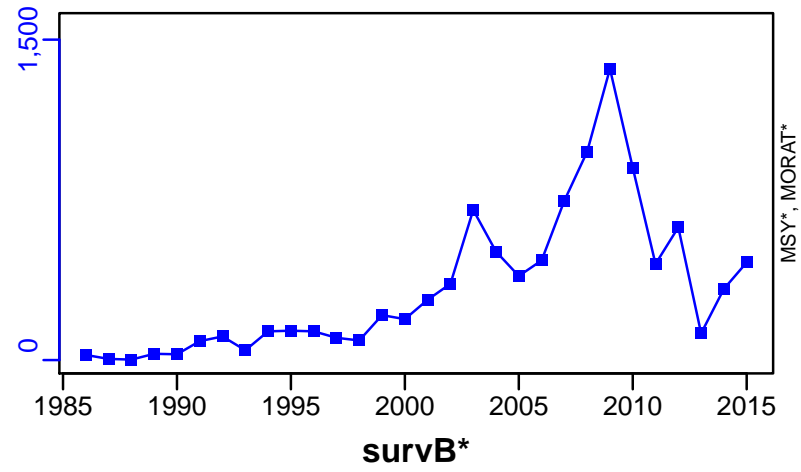
Recruits\*



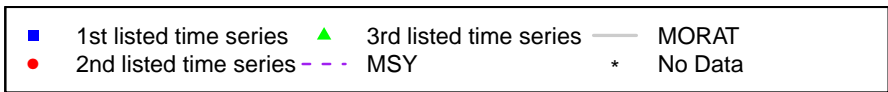
# Norway lobster Devil's Hole (FU 34) [NEPHFU34]

TL-MT, TC\*, RecC\* (1986–2016–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Norway lobster Skagerak Kattegat (FU 3-4) [NEPHFU3-4]

Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	WGNSSK-NEPHFU3-4-1960-2016-ICESIMP2016
<b>Area</b>	Skagerak Kattegat (FU 3-4)
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
<b>Asmts in RAM</b>	2016, 2015

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	439		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***

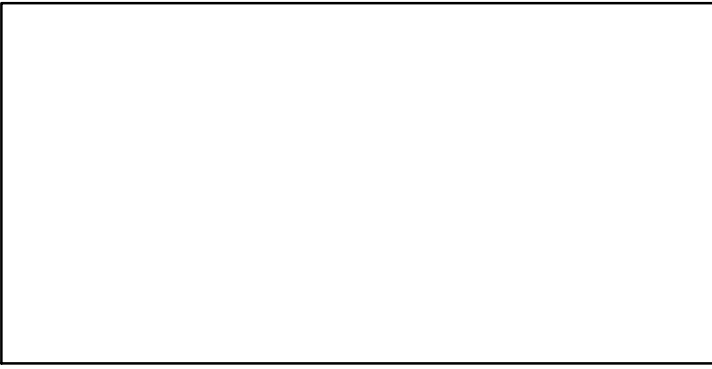


**Production\***



◆ Start Year ◆ End Year \* No Data

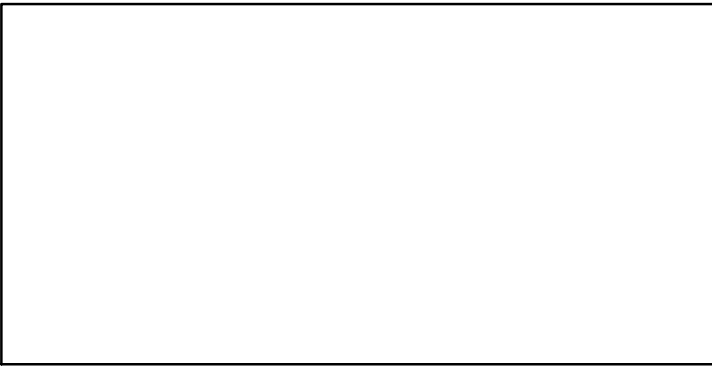
**TB\***



**SSB\***



**TN \***



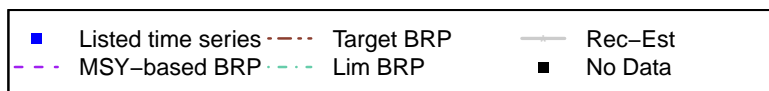
**F\***



**ER\***



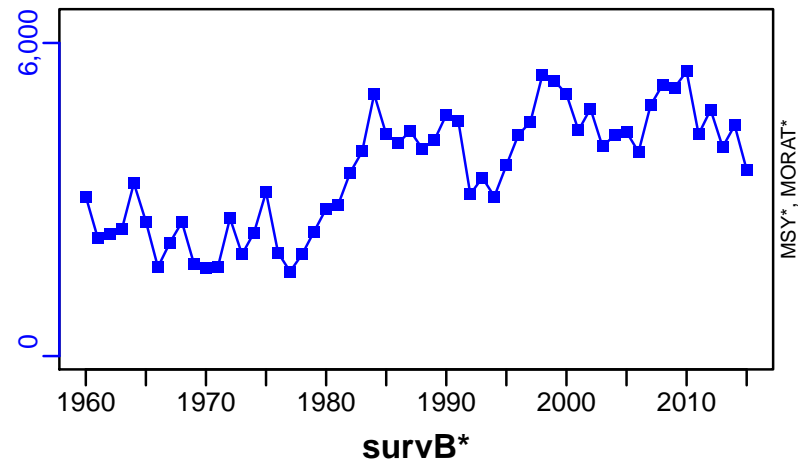
**Recruits\***



# Norway lobster Skagerak Kattegat (FU 3–4) [NEPHFU3–4]

TL–MT, TC\*, RecC\* (1960–2016–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Norway lobster Botney Cut - Silver Pit (FU 5) [NEPHFU5]

Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	WGNSSK-NEPHFU5-1991-2016-ICESIMP2016
<b>Area</b>	Botney Cut - Silver Pit(FU 5)
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
<b>Asmts in RAM</b>	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-	-	-
TL	TL-MT	2016	1520	-	-
TB/TBmsy	-	-	-	-	-
SSB/SSBmsy	-	-	-	-	-
F/Fmsy	-	-	-	-	-
ER/ERmsy	-	-	-	-	-
TB/TBmgt	-	-	-	-	-
SSB/SSBmgt	-	-	-	-	-
F/Fmgt	-	-	-	-	-
ER/ERmgt	-	-	-	-	-



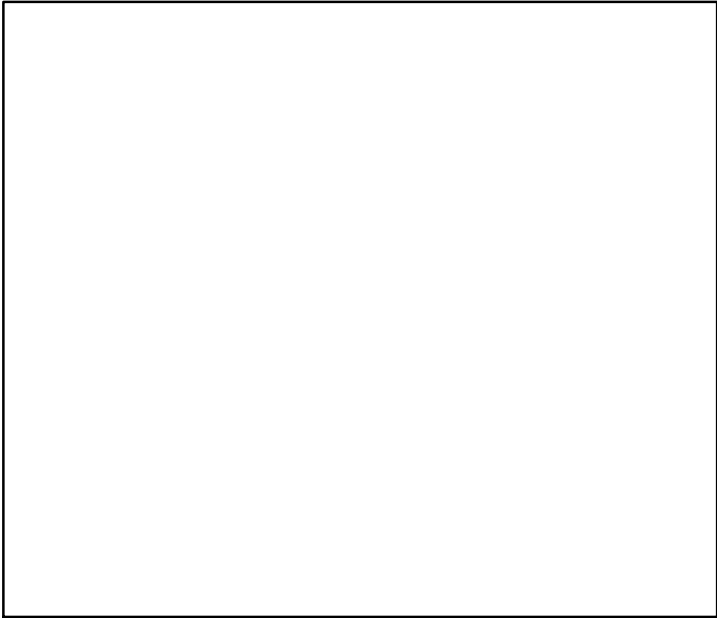
Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

TB\*



SSB\*



TN \*



F\*



ER\*

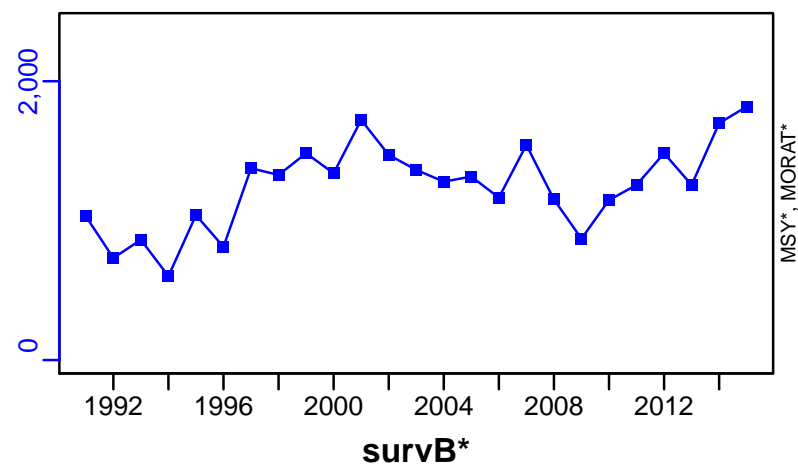


Recruits\*



# Norway lobster Botney Cut – Silver Pit (FU 5) [NEPHFU5]

TL–MT, TC\*, RecC\* (1991–2016–ICESIMP2016)



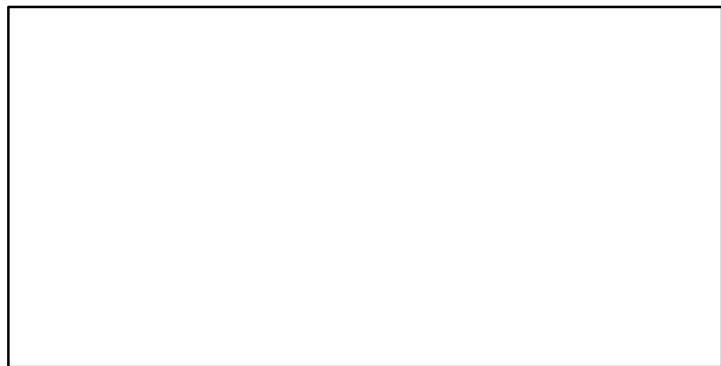
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



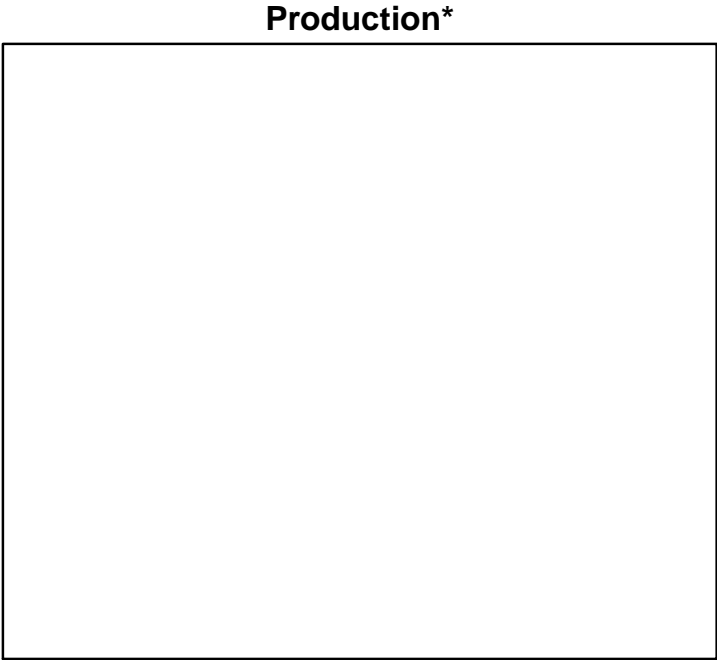
■ 1st listed time series    ▲ 3rd listed time series    — MORAT  
● 2nd listed time series    - - - MSY    \* No Data

## Norway lobster Farn Deep (FU 6) [NEPHFU6]

Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	WGNSSK-NEPHFU6-1981-2016-ICESIMP2016
<b>Area</b>	Farn Deep (FU 6)
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
<b>Asmts in RAM</b>	2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2016	0.08
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	ERmgt-ratio	2016	0.08
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2016	0.12	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2016	1370		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2016	1.44		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		



◆ Start Year   ◆ End Year   \* No Data

# Norway lobster Farn Deepes (FU 6) [NEPHFU6]

TB\*



SSB\*



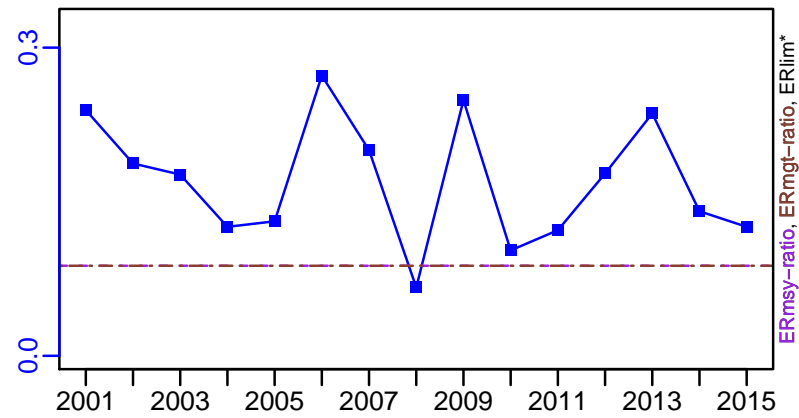
TN \*



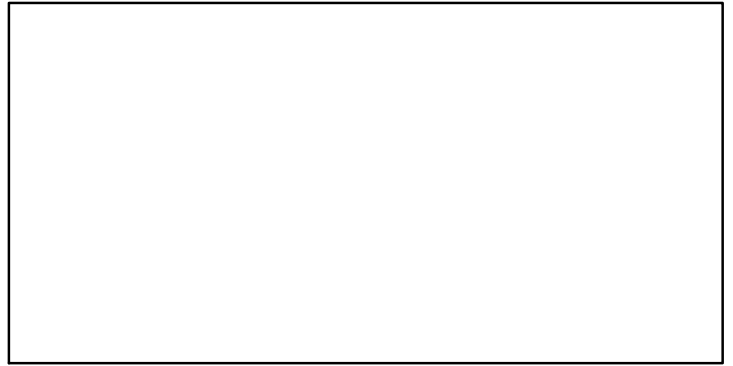
F\*



ER-ratio (1981–2016–ICESIMP2016)

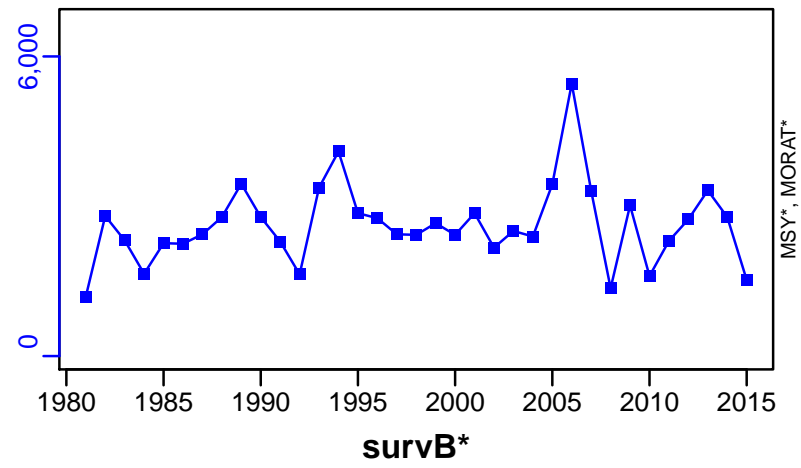


Recruits\*



# Norway lobster Farn Deepes (FU 6) [NEPHFU6]

TL-MT, TC\*, RecC\* (1981-2016-ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



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

## Norway lobster Fladen Ground (FU 7) [NEPHFU7]

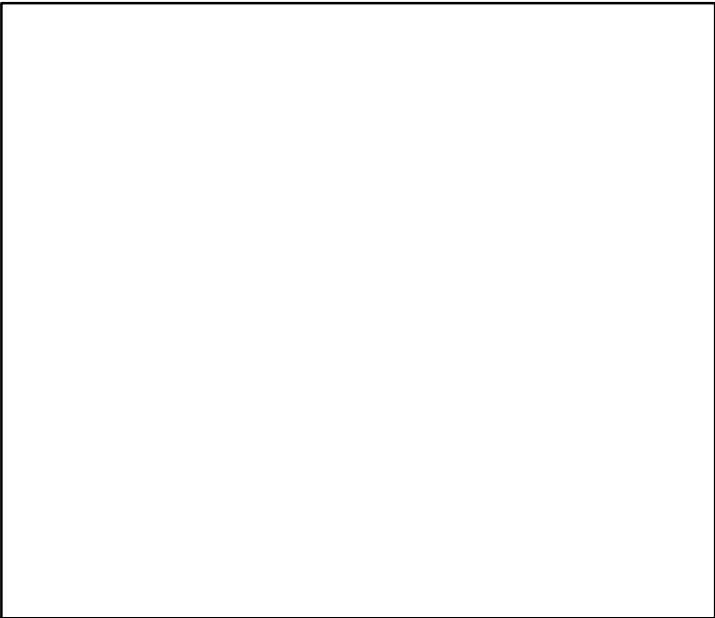
Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	WGNSSK-NEPHFU7-1992-2016-ICESIMP2016
<b>Area</b>	Fladen Ground (FU 7)
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
<b>Asmts in RAM</b>	2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2016	0.08
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	ERmgt-ratio	2016	0.08
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2016	0.02	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2016	1790		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2016	0.27		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		



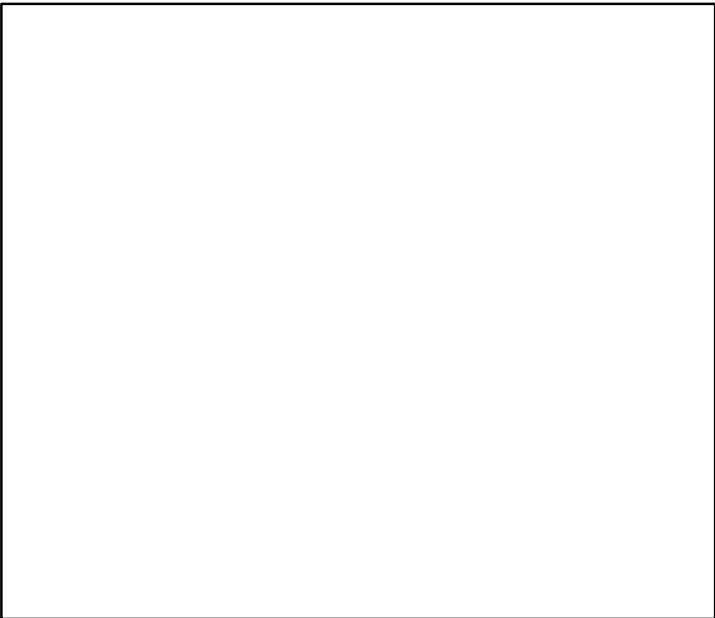
Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

# Norway lobster Fladen Ground (FU 7) [NEPHFU7]

TB\*



SSB\*



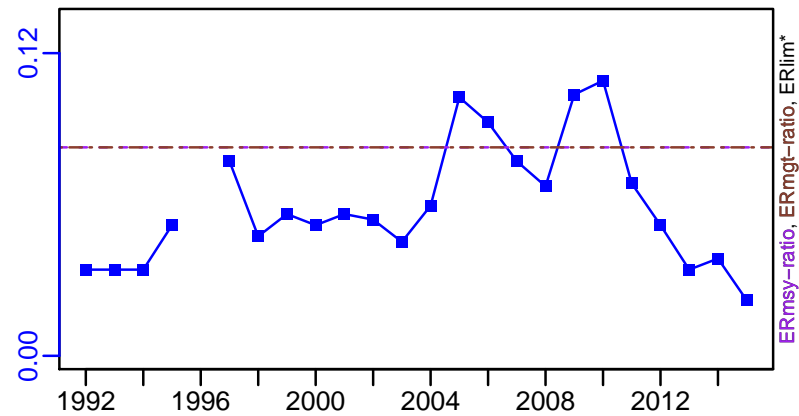
TN \*



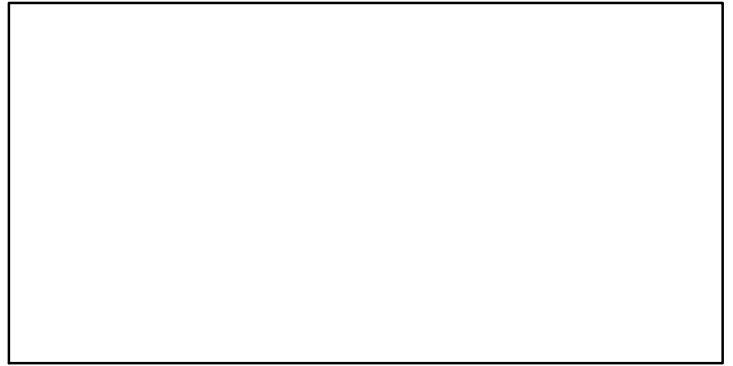
F\*



ER-ratio (1992–2016–ICESIMP2016)



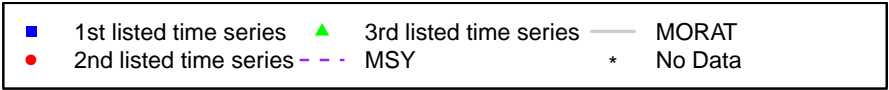
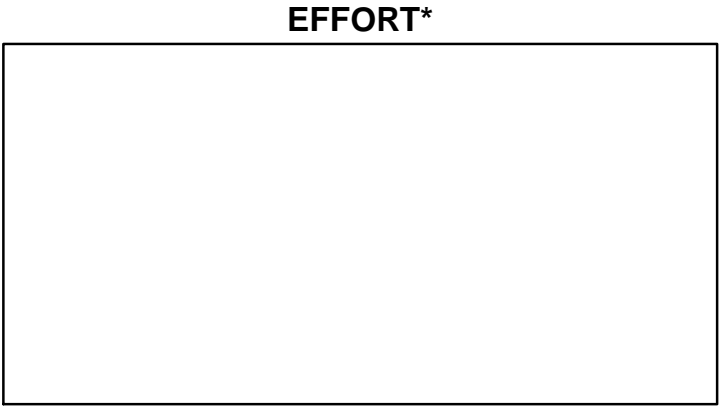
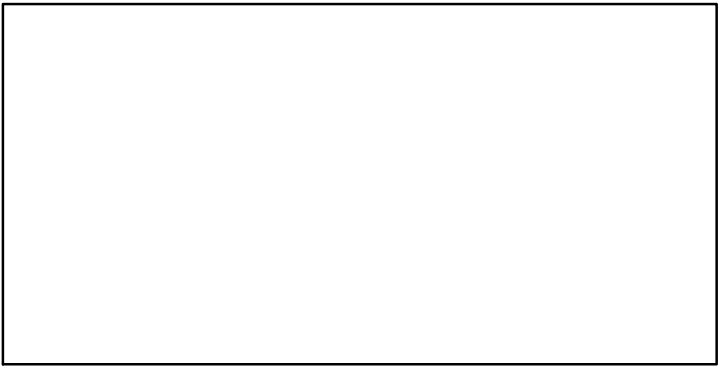
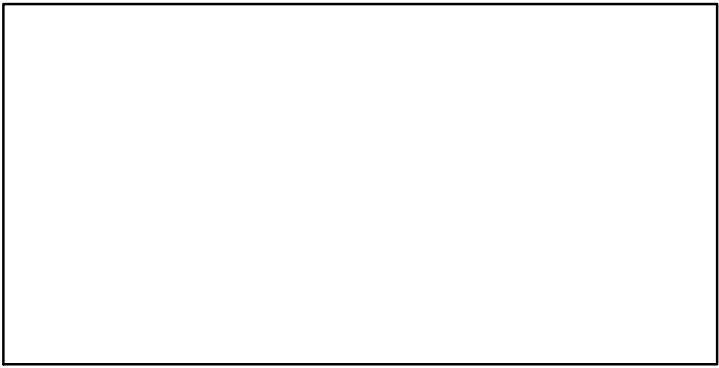
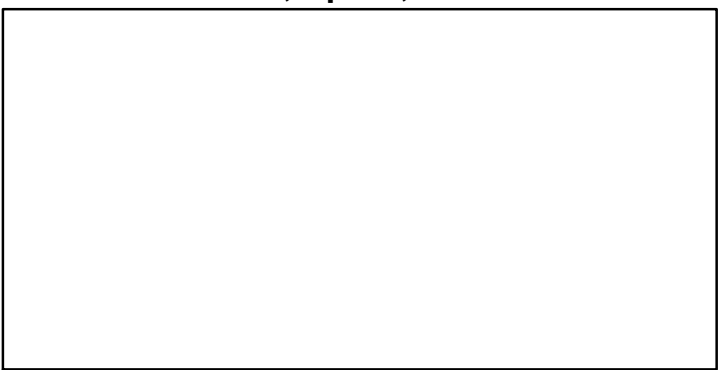
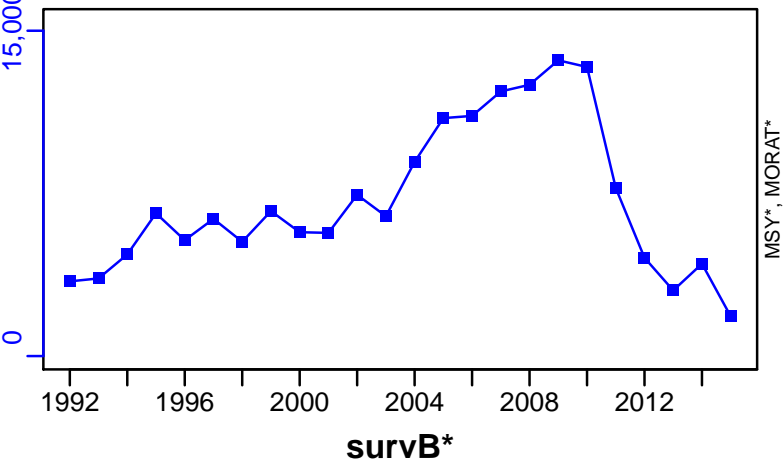
Recruits\*



# Norway lobster Fladen Ground (FU 7) [NEPHFU7]

TL-MT, TC\*, RecC\* (1992–2016–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



## Norway lobster Firth of Forth (FU 8) [NEPHFU8]

Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	WGNSSK-NEPHFU8-1993-2016-ICESIMP2016
<b>Area</b>	Firth of Forth (FU 8)
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
<b>Asmts in RAM</b>	2015, 2016

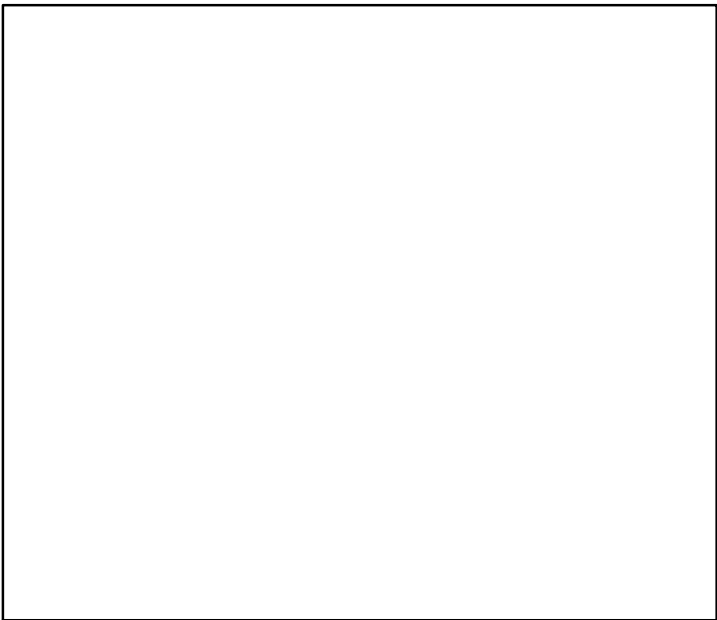
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2016	0.16
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	ERmgt-ratio	2016	0.16
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2016	0.17	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2016	1890		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2016	1.03		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

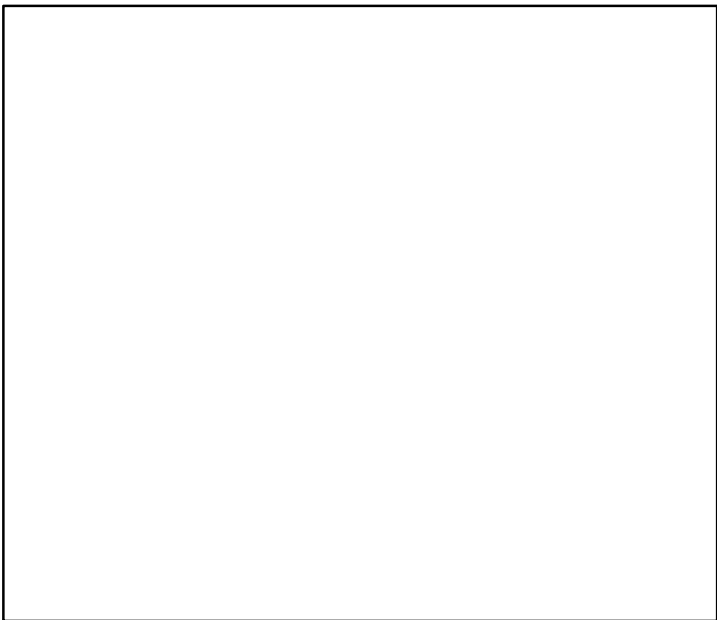
Kobe MSY\*



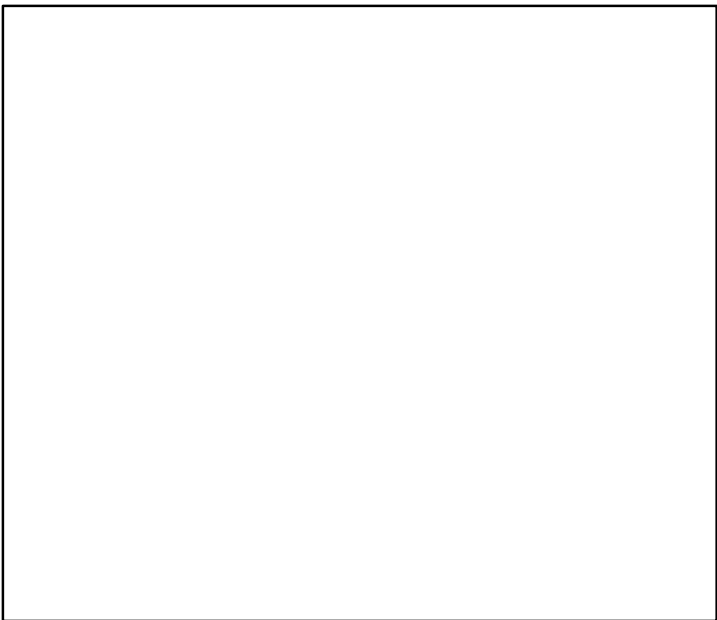
Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year ◆ End Year \* No Data

Norway lobster Firth of Forth (FU 8) [NEPHFU8]

TB\*



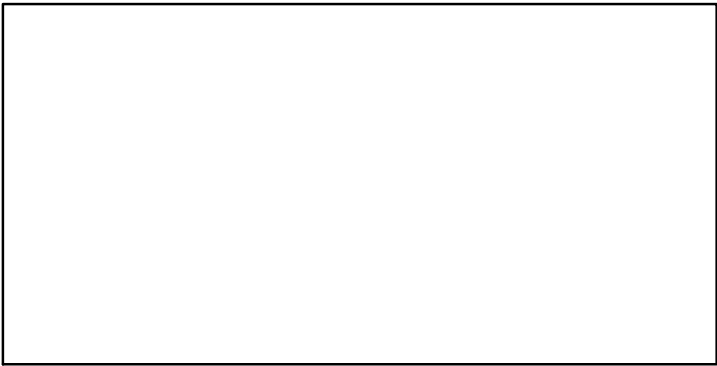
SSB\*



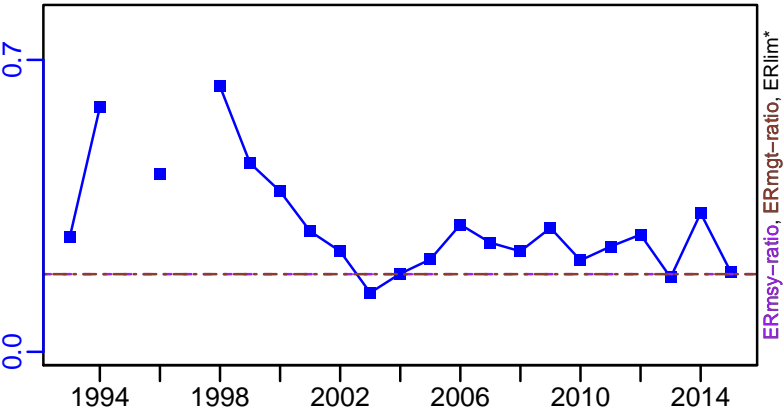
TN \*



F\*



ER-ratio (1993–2016–ICESIMP2016)

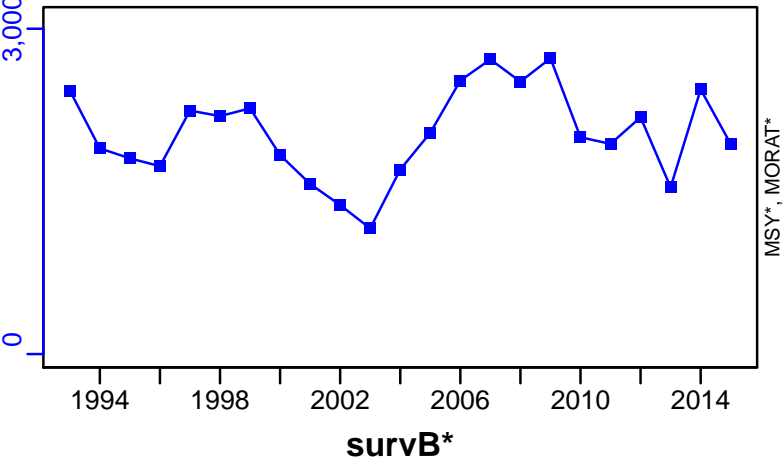


Recruits\*



Norway lobster Firth of Forth (FU 8) [NEPHFU8]

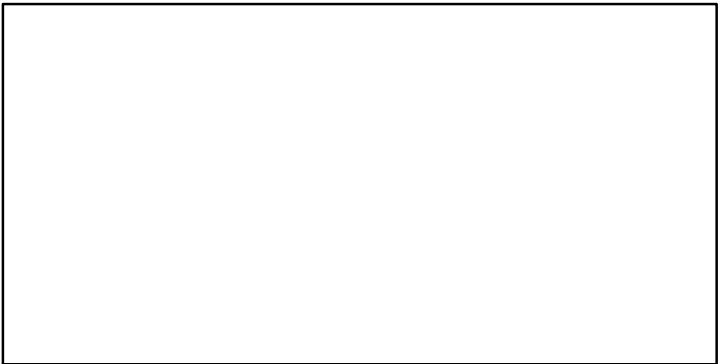
TL-MT, TC\*, RecC\* (1993-2016-ICESIMP2016)



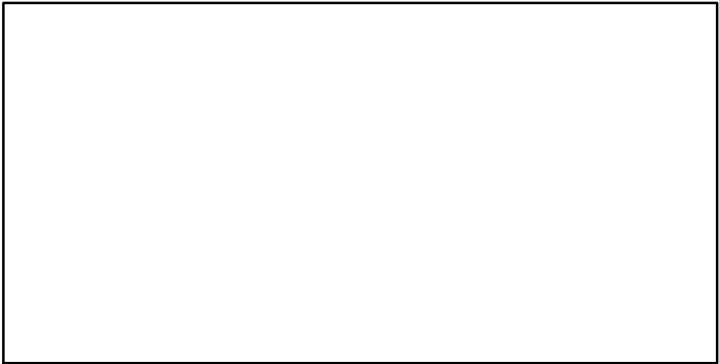
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Norway lobster Moray Firth (FU 9) [NEPHFU9]

Metadata	
<b>Scientific Name</b>	Nephrops norvegicus
<b>Current Assess ID</b>	WGNSSK-NEPHFU9-1993-2016-ICESIMP2016
<b>Area</b>	Moray Firth (FU 9)
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
<b>Asmts in RAM</b>	2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2016	0.12
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	ERmgt-ratio	2016	0.12
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	-	-	-	-	-
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2016	0.09	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2016	830		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2016	0.77		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		



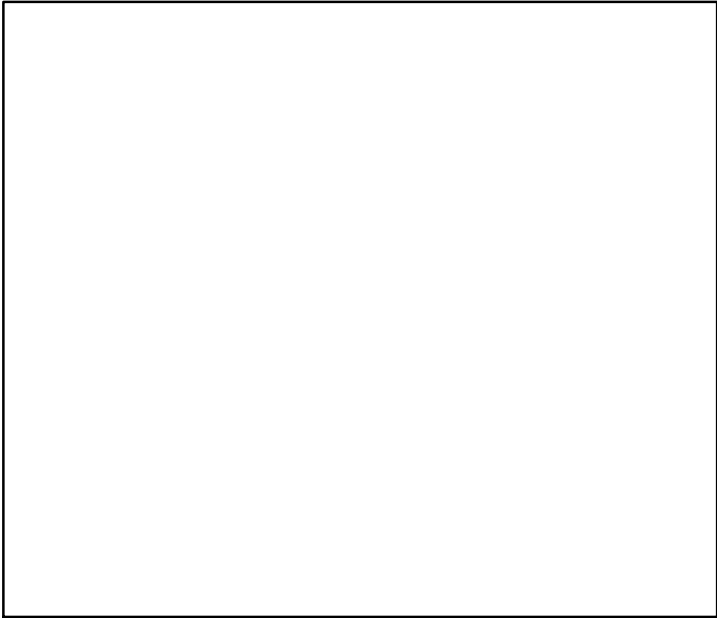
Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

# Norway lobster Moray Firth (FU 9) [NEPHFU9]

TB\*



SSB\*



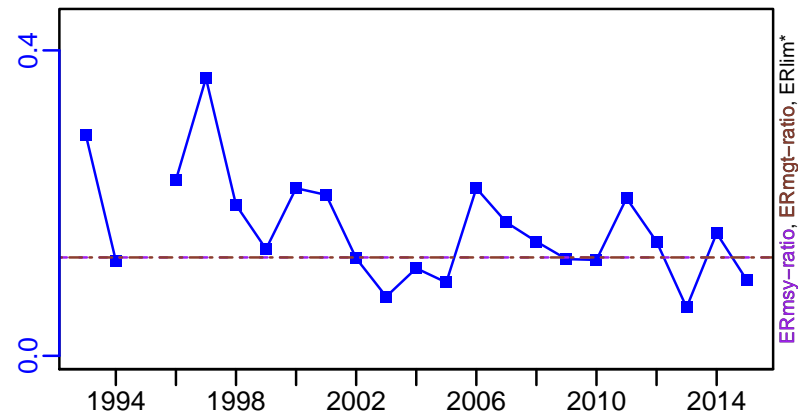
TN \*



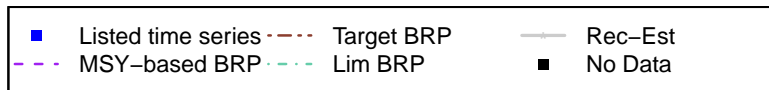
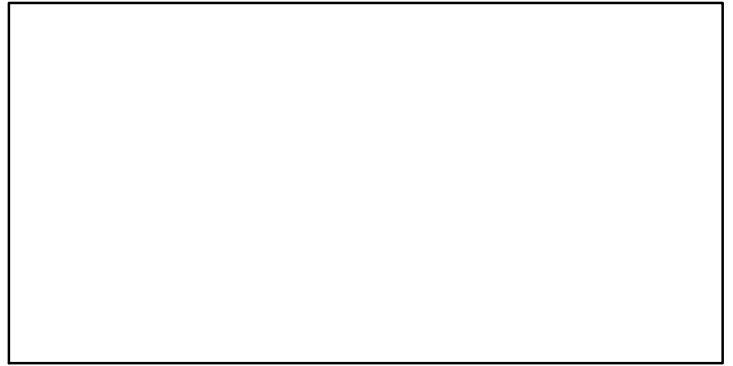
F\*



ER-ratio (1993–2016–ICESIMP2016)



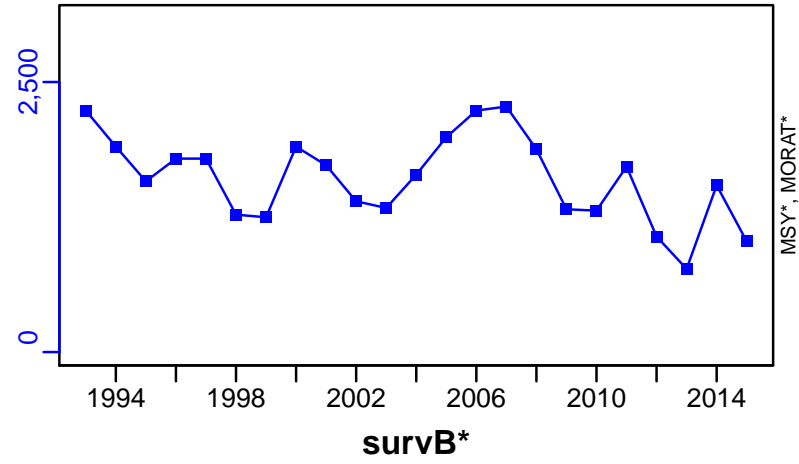
Recruits\*



# Norway lobster Moray Firth (FU 9) [NEPHFU9]

TL-MT, TC\*, RecC\* (1993–2016–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Norway pout IIIa and North Sea [NPOUTIIIa-IV]

Metadata	
<b>Scientific Name</b>	Trisopterus esmarkii
<b>Current Assess ID</b>	WGNSSK-NPOUTIIIa-IV-1983-2014-ICESIMP2016
<b>Area</b>	IIIa and North Sea
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
<b>Asmts in RAM</b>	2011, 2013, 2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2014	150,000
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	TBlim-MT	2011	$1 \times 10^5$
<b>SSBlim</b>	SSBlim-MT	2014	90,000
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

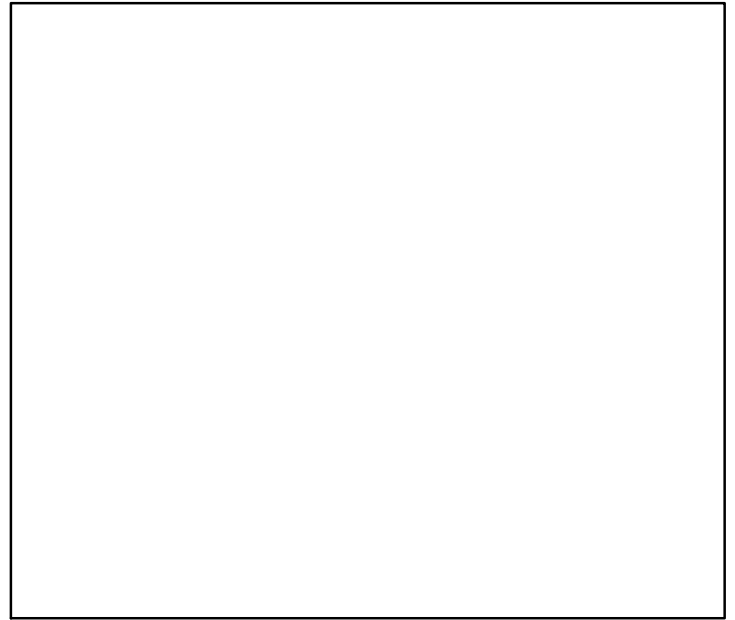
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2014	646,000	-	-
<b>SSB</b>	SSB-MT	2014	274,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2014	$2.5 \times 10^{10}$	-	0
<b>F</b>	F-1/yr	2014	0.41	-	1 to 2
<b>ER</b>	ER-calc-ratio	2014	0.13	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2014	82,100		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2014	1.83		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

Norway pout IIIa and North Sea [NPOUTIIIa-IV]

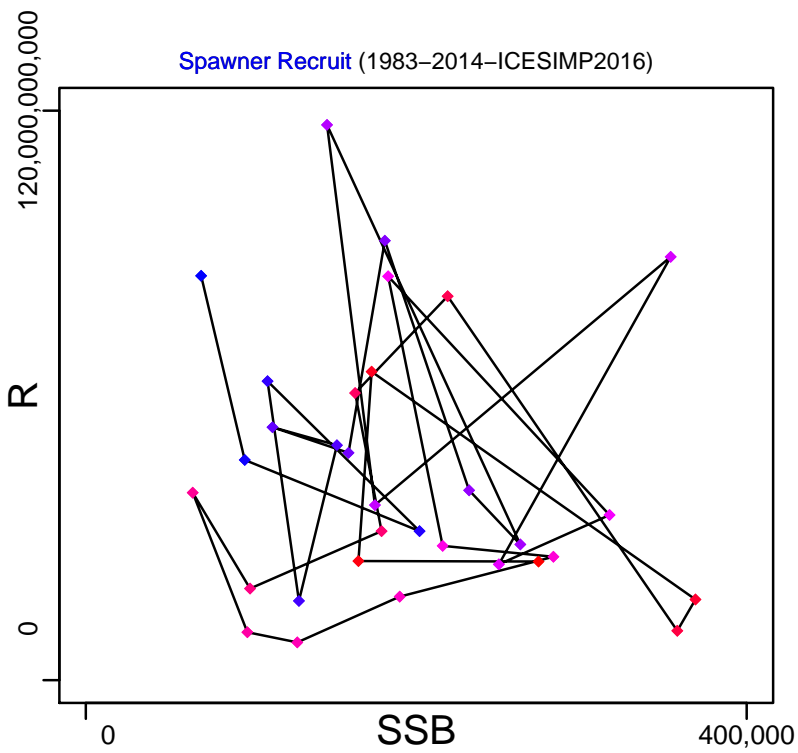
Kobe MSY\*



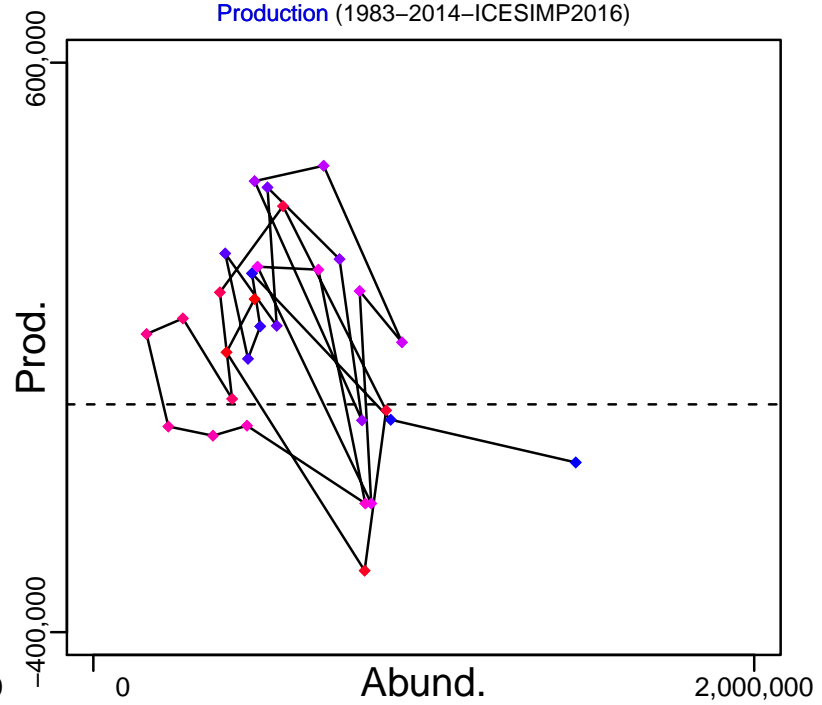
Kobe MGT\*



Spawner Recruit (1983–2014–ICESIMP2016)



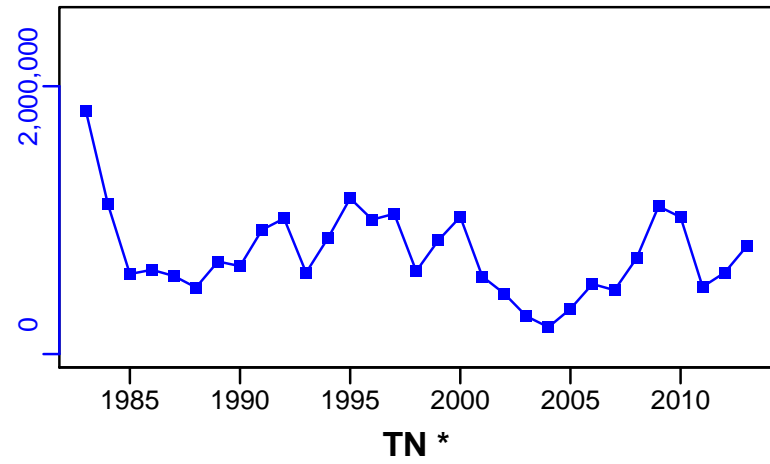
Production (1983–2014–ICESIMP2016)



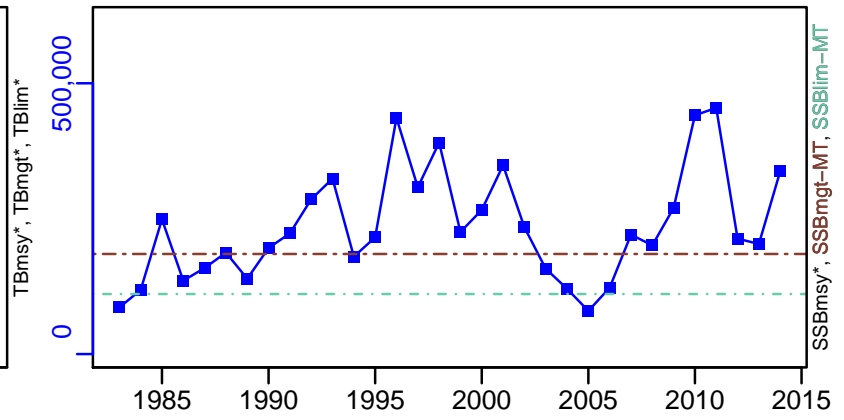
◆ Start Year ◆ End Year \* No Data

# Norway pout IIIa and North Sea [NPOUTIIIa-IV]

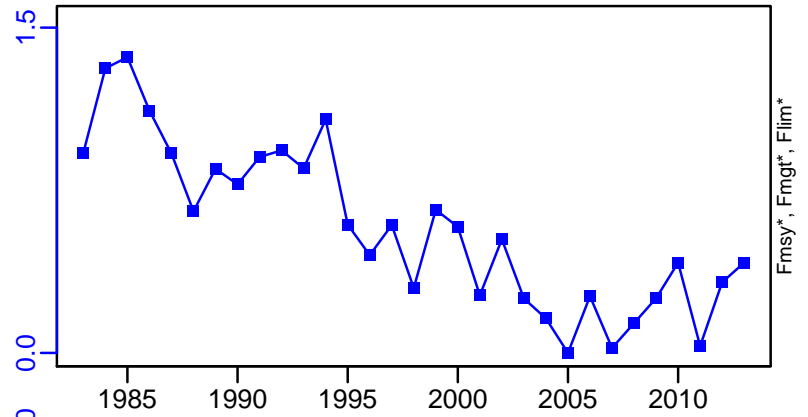
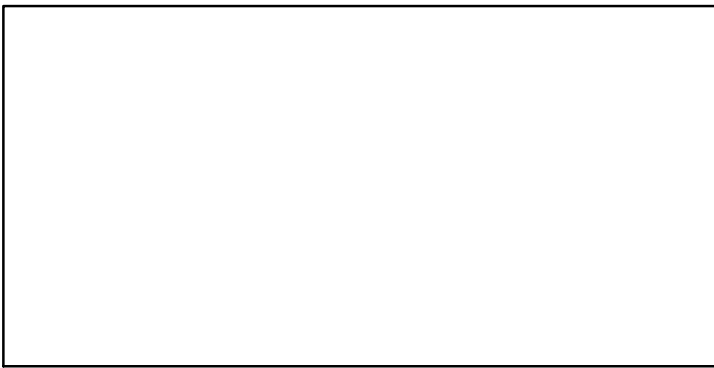
TB-MT (1983–2014–ICESIMP2016)



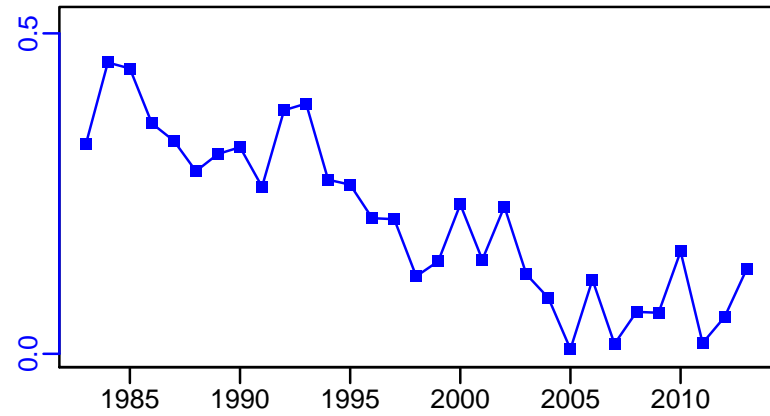
SSB-MT (1983–2014–ICESIMP2016)



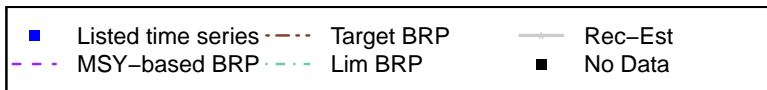
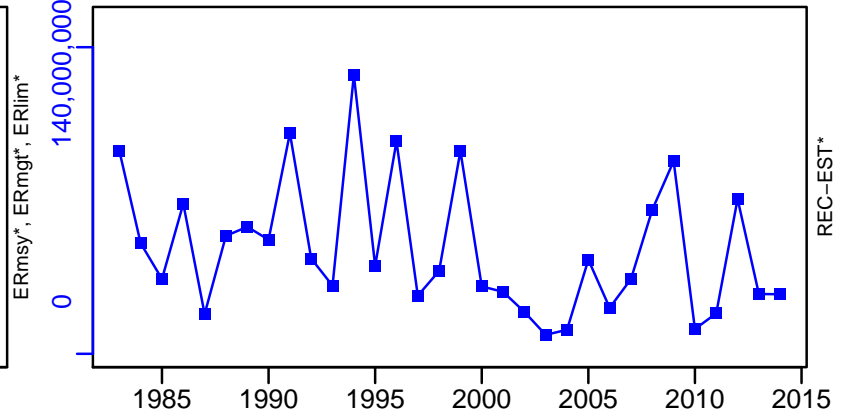
F-1/yr (1983–2014–ICESIMP2016)



ER-calc-ratio (1983–2014–ICESIMP2016)



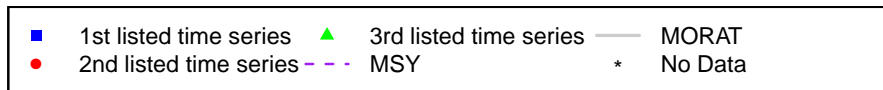
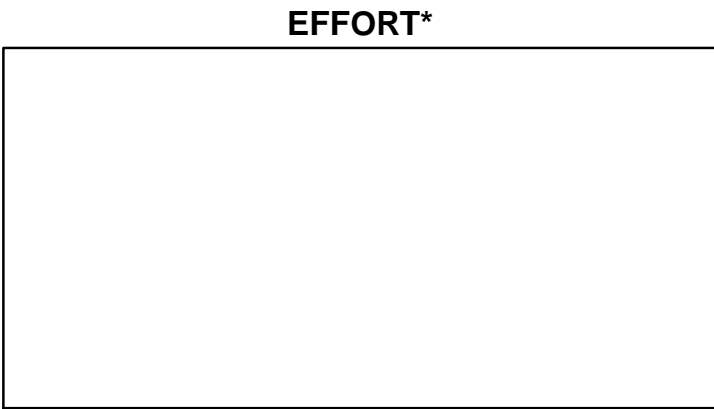
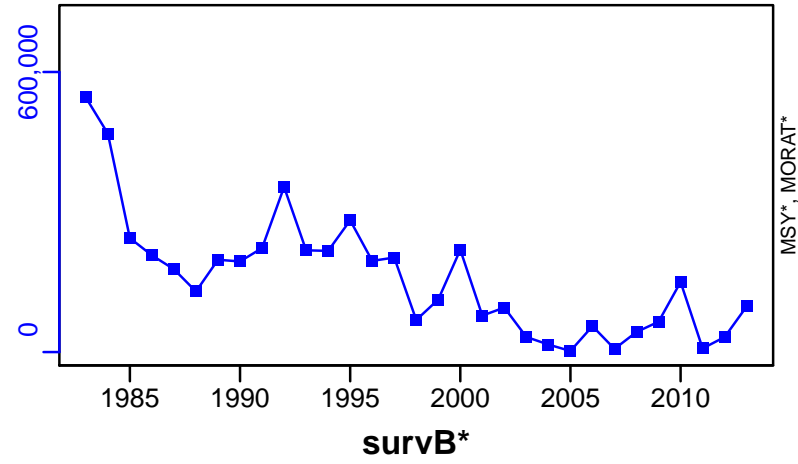
R-E00 (1983–2014–ICESIMP2016)



# Norway pout IIIa and North Sea [NPOUTIIIa-IV]

TL-MT, TC\*, RecC\* (1983-2014-ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



## Orange roughy Northeast Atlantic [OROUGHYNEATL]

Metadata	
<b>Scientific Name</b>	Hoplostethus atlanticus
<b>Current Assess ID</b>	WGDEEP-OROUGHYNEATL-1988-2016-ICESIMP2016
<b>Area</b>	Northeast Atlantic
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
<b>Asmts in RAM</b>	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	48		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year   ◆ End Year   \* No Data

Orange roughy Northeast Atlantic [OROUGHYNEATL]

TB\*



SSB\*



TN \*



F\*



ER\*

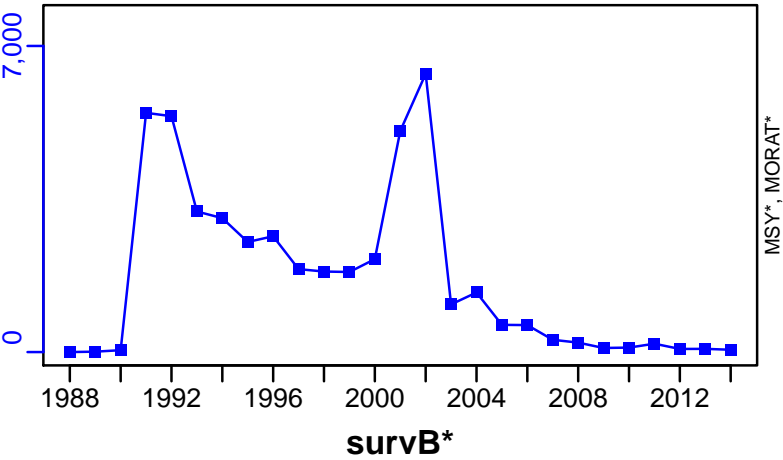


Recruits\*



Orange roughy Northeast Atlantic [OROUGHYNEATL]

TL-MT, TC\*, RecC\* (1988–2016–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Northern shrimp IIIa (west) and IVa (east) [PANDALIIIaW-IVaE]

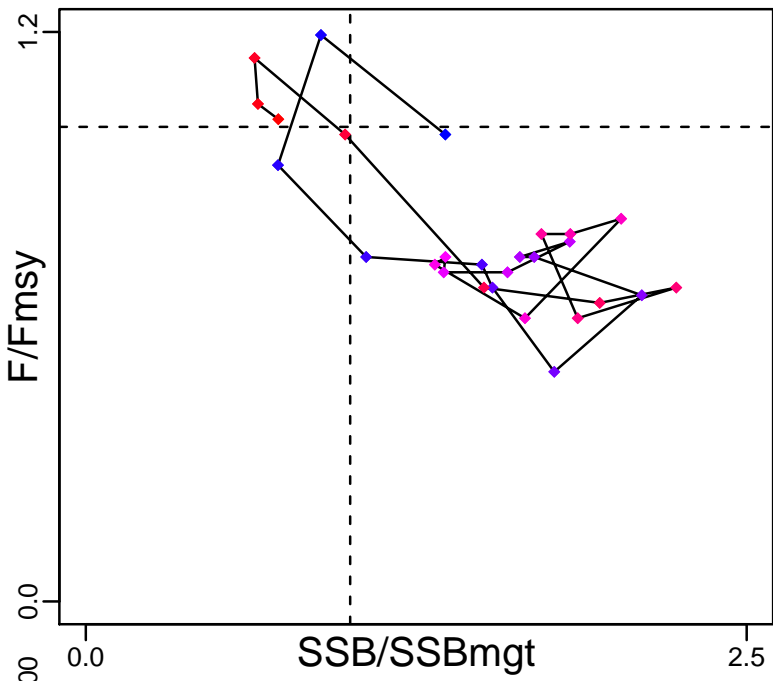
Metadata	
<b>Scientific Name</b>	Pandalus borealis
<b>Current Assess ID</b>	NIPAG-PANDALIIIaW-IVaE-1988-2015-ICESIMP2016
<b>Area</b>	IIIa (west) and IVa (east)
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Joint NAFO and ICES Pandalus Assessment Working Group
<b>Asmts in RAM</b>	2013, 2014, 2015

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2015	0.62
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2015	9900
<b>Fmgt</b>	Fmgt-1/yr	2015	0.62
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2015	6300
<b>Flim</b>	Flim-1/yr	2015	1
<b>ERlim</b>	-	-	-

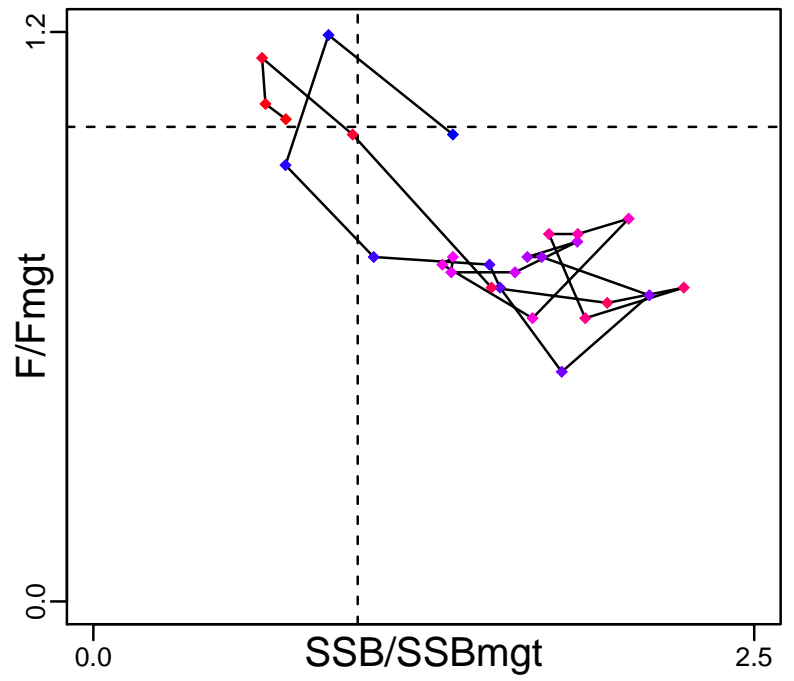
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	29,400	-	-
<b>SSB</b>	SSB-MT	2015	12,300	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2015	$8.59 \times 10^9$	-	0
<b>F</b>	F-1/yr	2015	0.63	-	1 to 3
<b>ER</b>	ER-calc-ratio	2015	0.41	-	-
<b>TC</b>	TC-MT	2015	12,100		
<b>TL</b>	TL-MT	2015	9950		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	SSBdivSSBmsy-dimensionless	2014	1.1		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2015	1.02		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2015	1.24		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	1.02		
<b>ER/ERmgt</b>	-	-	-		

# Northern shrimp IIIa (west) and IVa (east) [PANDALIIIaW-IVaE]

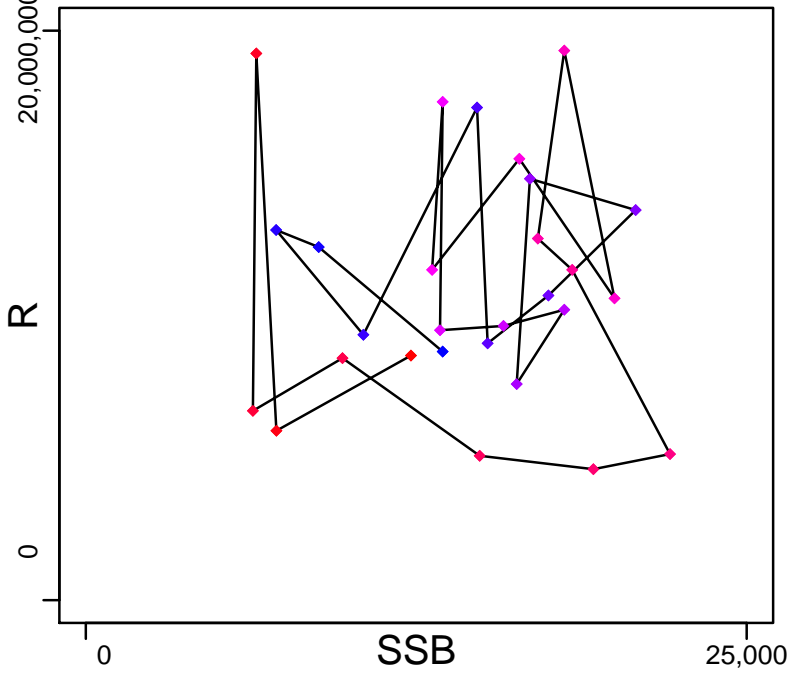
Kobe MSYpref (1988–2015–ICESIMP2016)



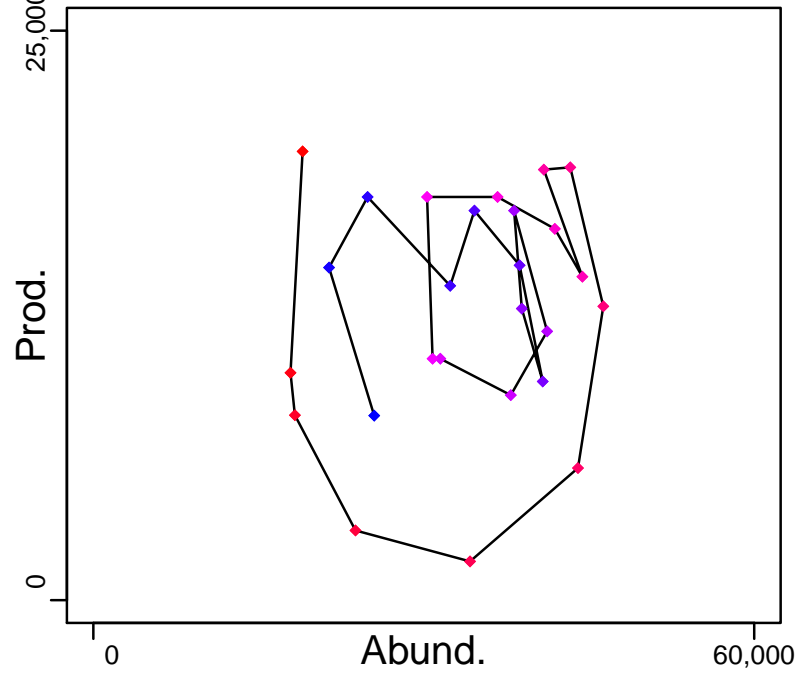
Kobe MGTpref (1988–2015–ICESIMP2016)



Spawner Recruit (1988–2015–ICESIMP2016)



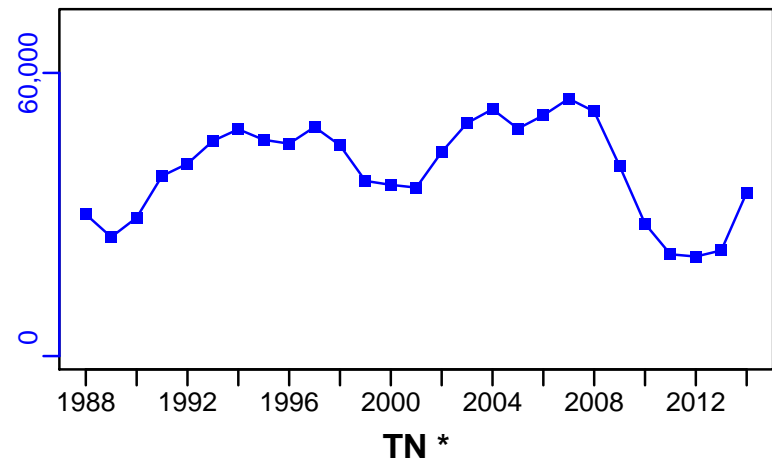
Production (1988–2015–ICESIMP2016)



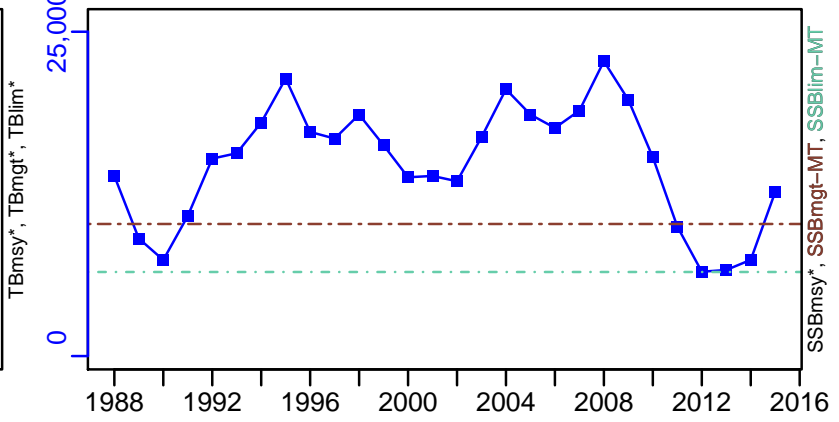
◆ Start Year ◆ End Year \* No Data

# Northern shrimp IIIa (west) and IVa (east) [PANDALIIIaW-IVaE]

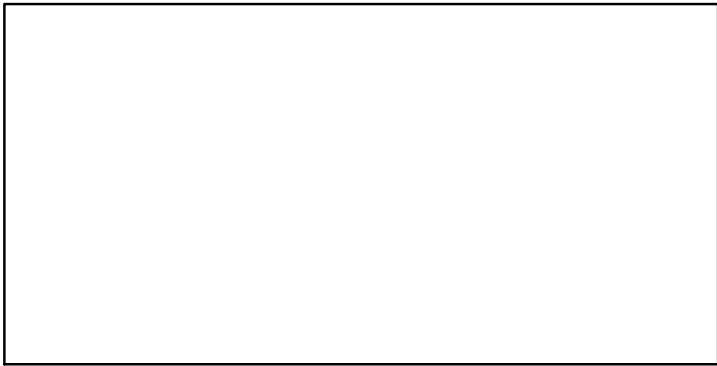
TB-MT (1988–2015–ICESIMP2016)



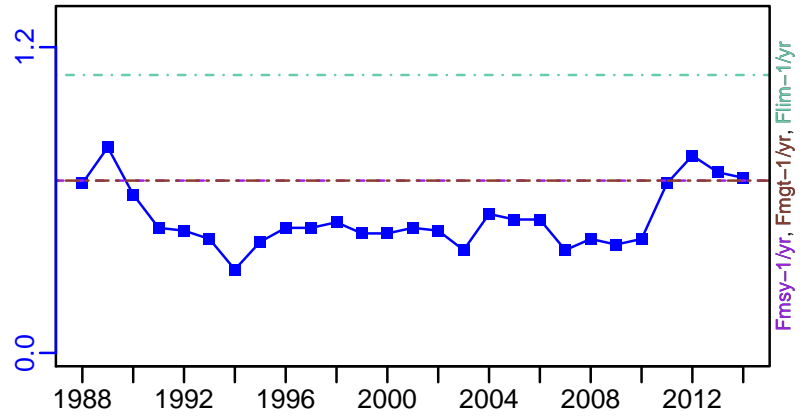
SSB-MT (1988–2015–ICESIMP2016)



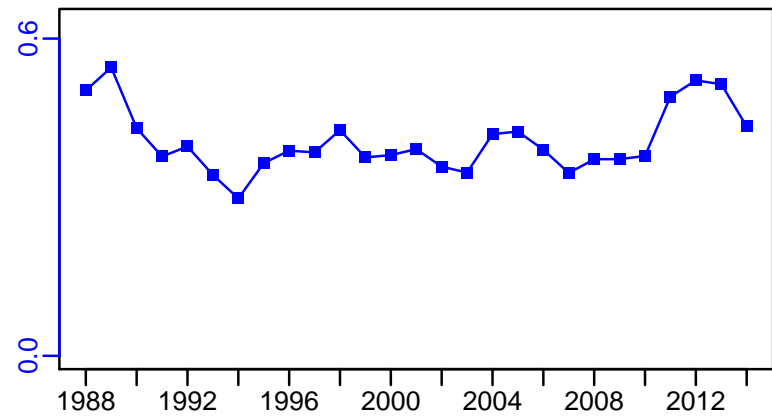
TN \*



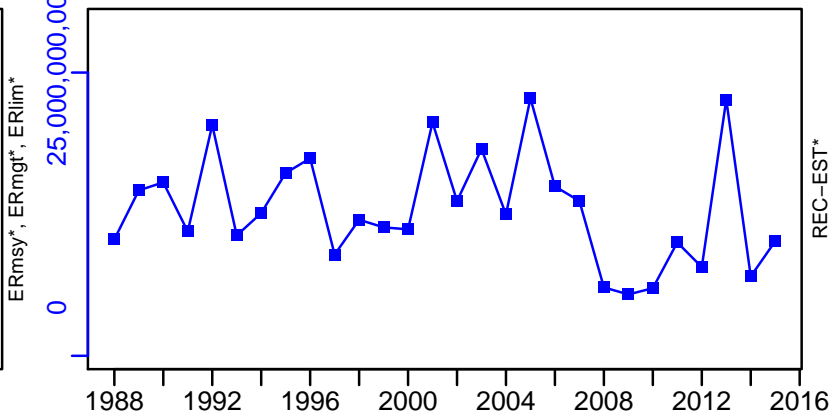
F-1/yr (1988–2015–ICESIMP2016)



ER-calc-ratio (1988–2015–ICESIMP2016)



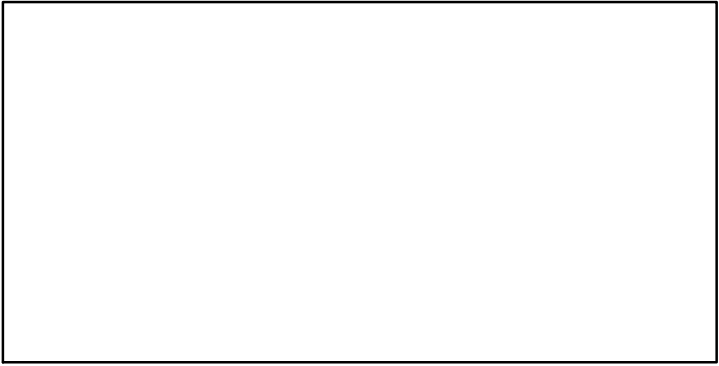
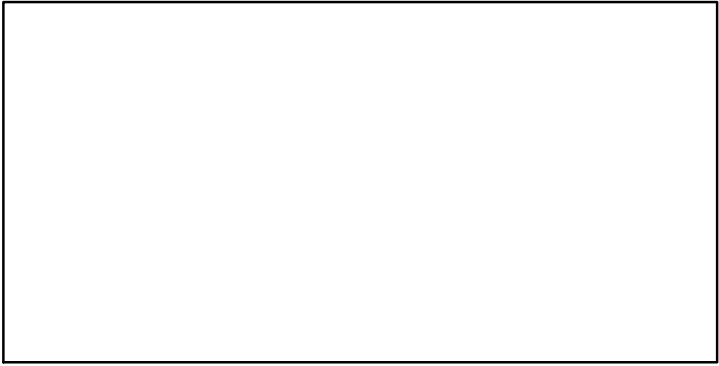
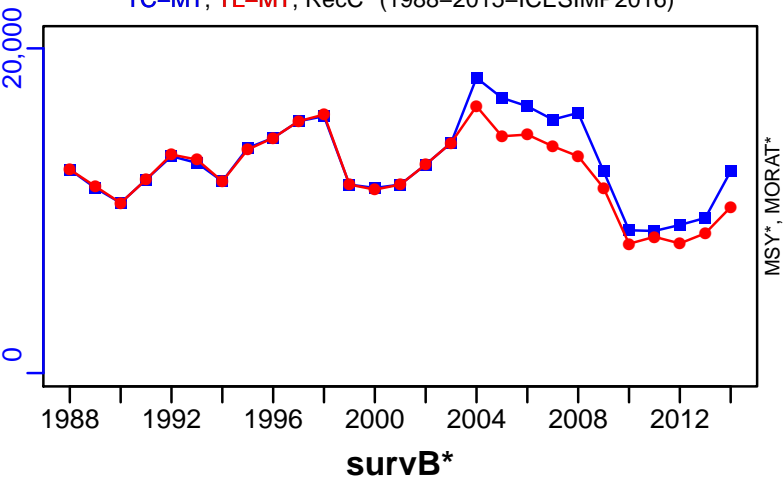
R-E00 (1988–2015–ICESIMP2016)



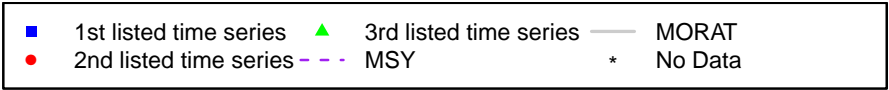
# Northern shrimp IIIa (west) and IVa (east) [PANDALIIIaW-IVaE]

TC-MT, TL-MT, RecC\* (1988-2015-ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Northern shrimp Northern North Sea [PANDALIVa]

Metadata	
<b>Scientific Name</b>	Pandalus borealis
<b>Current Assess ID</b>	NIPAG-PANDALIVa-1970-2015-ICESIMP2016
<b>Area</b>	Northern North Sea
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Joint NAFO and ICES Pandalus Assessment Working Group
<b>Asmts in RAM</b>	2015

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	0		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

TB\*



SSB\*



TN \*



F\*



ER\*

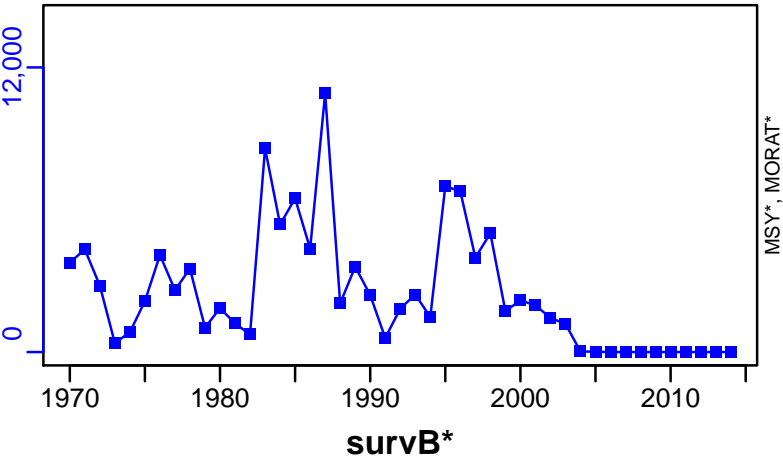


Recruits\*



Northern shrimp Northern North Sea [PANDALIVa]

TL-MT, TC\*, RecC\* (1970-2015-ICESIMP2016)



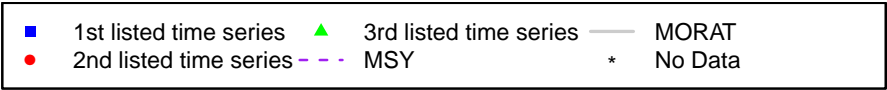
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## European Plaice Subdivisions 21-23 [PLAIC2123]

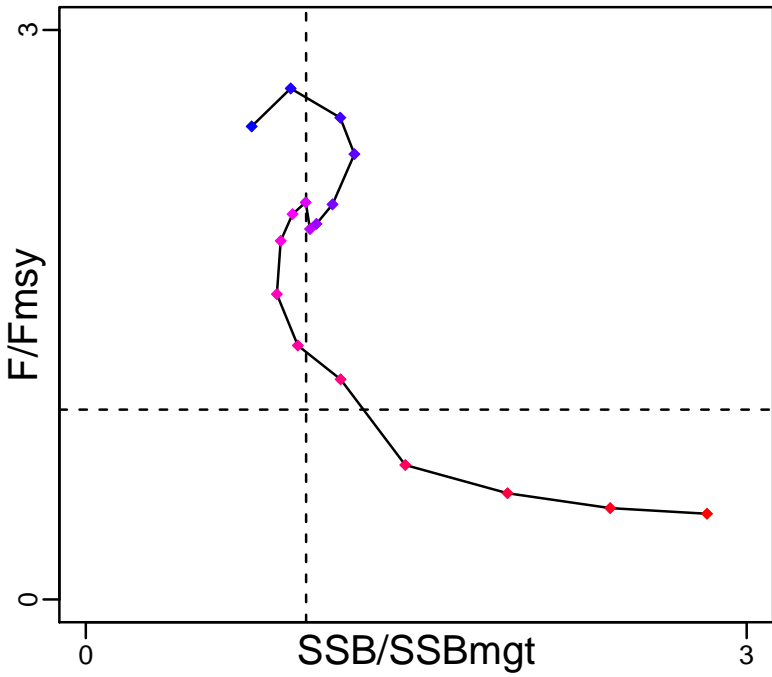
Metadata	
<b>Scientific Name</b>	Pleuronectes platessa
<b>Current Assess ID</b>	WGBFAS-PLAIC2123-1998-2016-ICESIMP2016
<b>Area</b>	Subdivisions 21-23
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Baltic Fisheries Assessment Working Group
<b>Asmts in RAM</b>	2014, 2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.37
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	5553
<b>Fmgt</b>	Fmgt-1/yr	2016	0.37
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	4077
<b>Flim</b>	Flim-1/yr	2016	1.01
<b>ERlim</b>	-	-	-

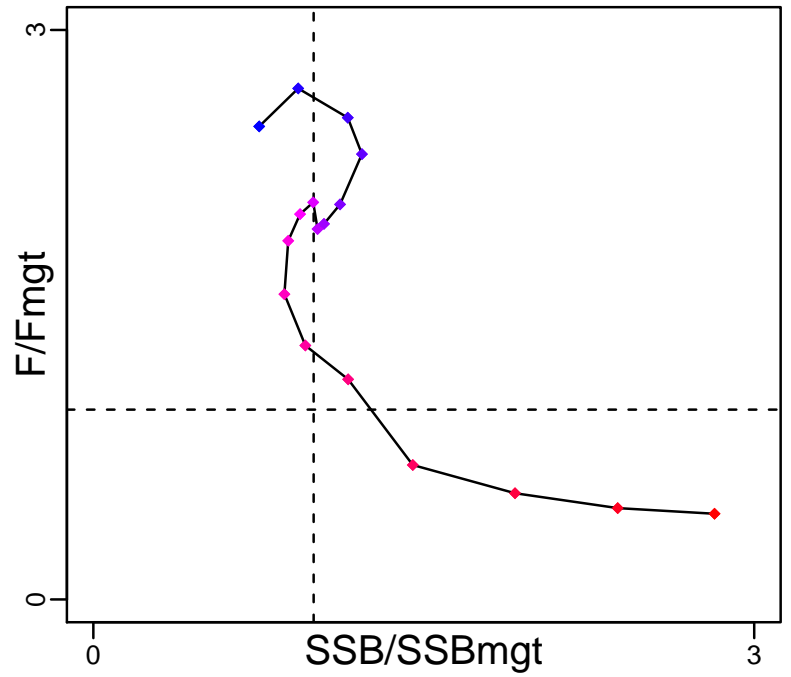
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	19,100	-	-
<b>SSB</b>	SSB-MT	2016	17,900	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$3.4 \times 10^7$	-	1
<b>F</b>	F-1/yr	2016	0.17	-	3 to 5
<b>ER</b>	ER-calc-ratio	2016	0.19	-	-
<b>TC</b>	TC-MT	2016	3710		
<b>TL</b>	TL-MT	2016	2690		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	0.45		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	3.22		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.45		
<b>ER/ERmgt</b>	-	-	-		

# European Plaice Subdivisions 21–23 [PLAIC2123]

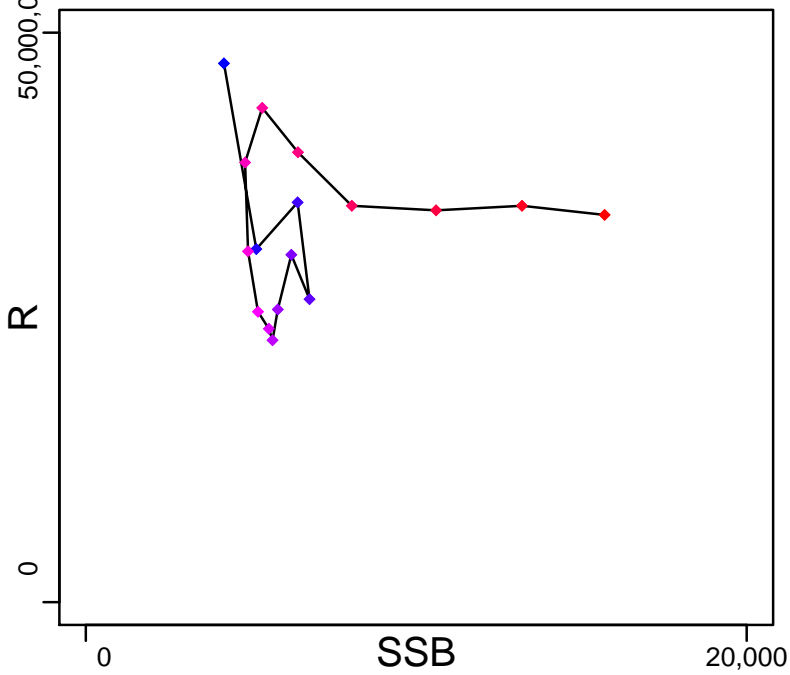
Kobe MSYpref (1998–2016–ICESIMP2016)



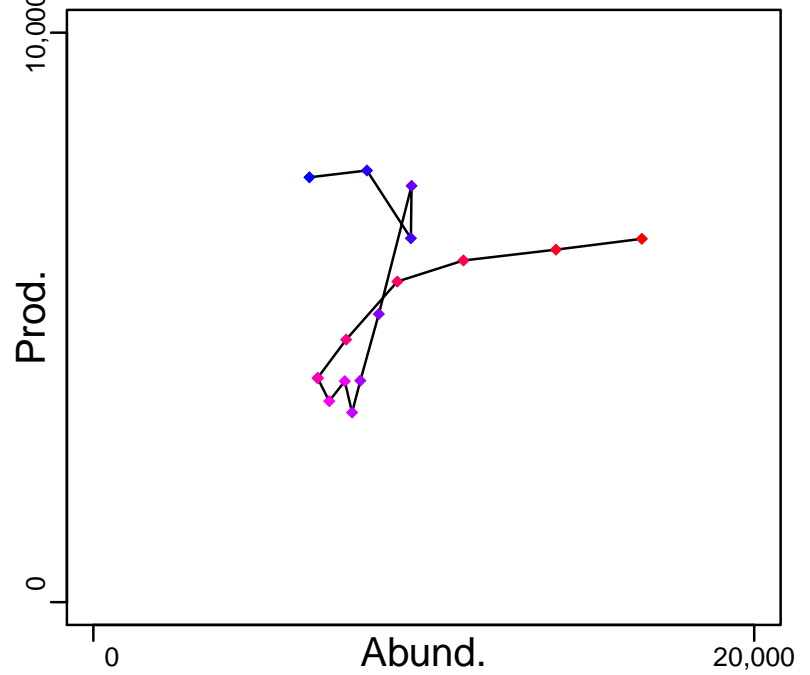
Kobe MGTpref (1998–2016–ICESIMP2016)



Spawner Recruit (1998–2016–ICESIMP2016)



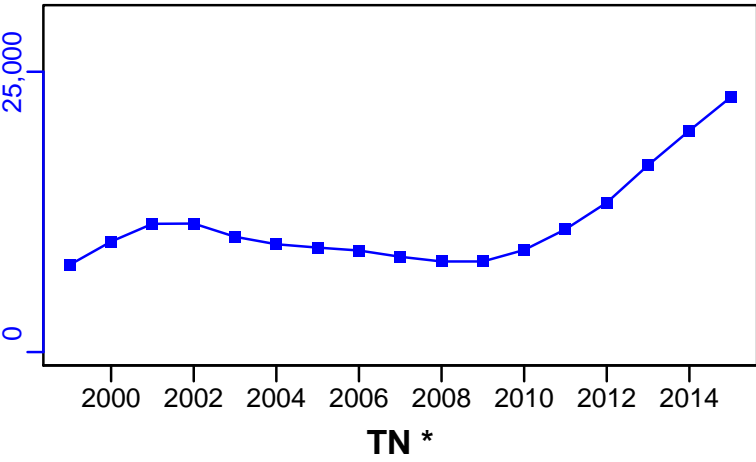
Production (1998–2016–ICESIMP2016)



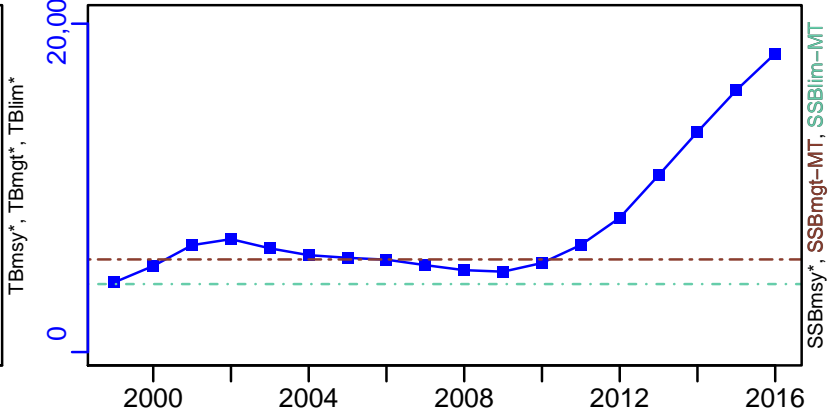
◆ Start Year ◆ End Year \* No Data

# European Plaice Subdivisions 21–23 [PLAIC2123]

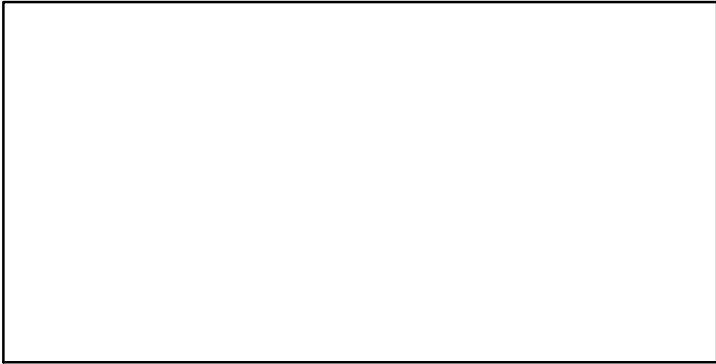
TB-MT (1998–2016–ICESIMP2016)



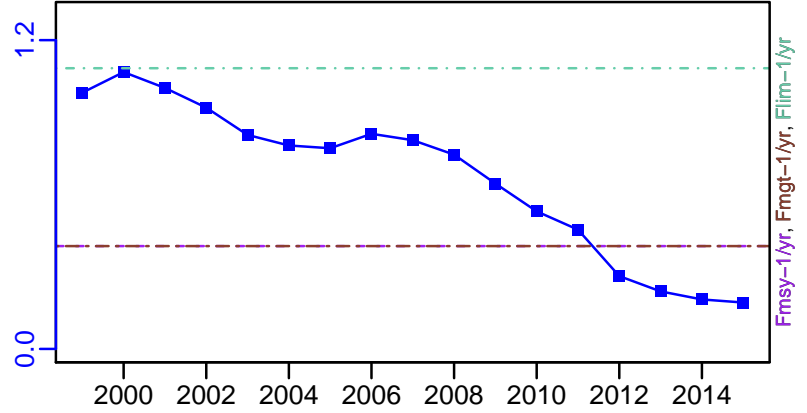
SSB-MT (1998–2016–ICESIMP2016)



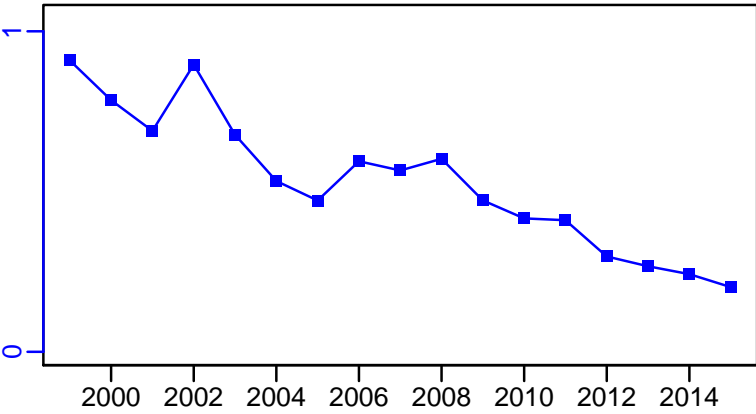
TN \*



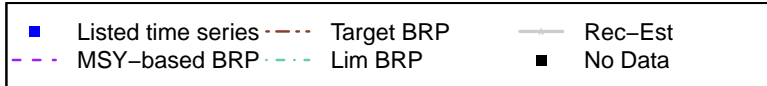
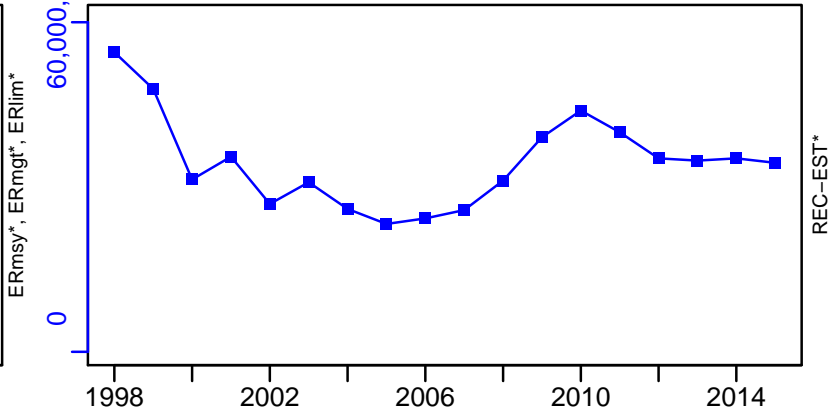
F-1/yr (1998–2016–ICESIMP2016)



ER-calc-ratio (1998–2016–ICESIMP2016)



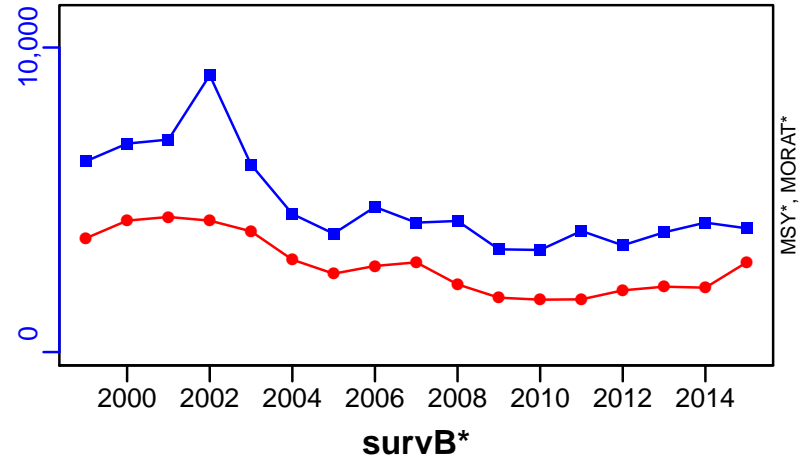
R-E00 (1998–2016–ICESIMP2016)



# European Plaice Subdivisions 21–23 [PLAIC2123]

TC–MT, TL–MT, RecC\* (1998–2016–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## European Plaice Subdivisions 24-32 [PLAIC2432]

Metadata	
<b>Scientific Name</b>	Pleuronectes platessa
<b>Current Assess ID</b>	WGBFAS-PLAIC2432-2001-2015-ICESIMP2016
<b>Area</b>	Subdivisions 24-32
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Baltic Fisheries Assessment Working Group
<b>Asmts in RAM</b>	2015

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-relative	2015	2	-	-
TN	-	-	-	-	-
R	R-relative	2015	2	-	1
F	F-relative	2015	0.88	-	2 to 5
ER	-	-	-	-	-
TC	TC-MT	2015	1010		
TL	TL-MT	2015	534		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



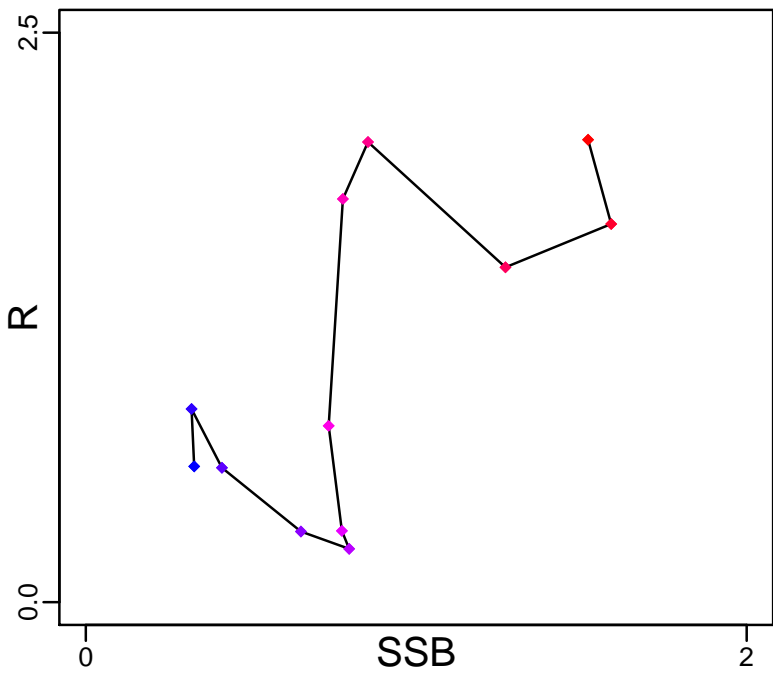
Kobe MSY\*



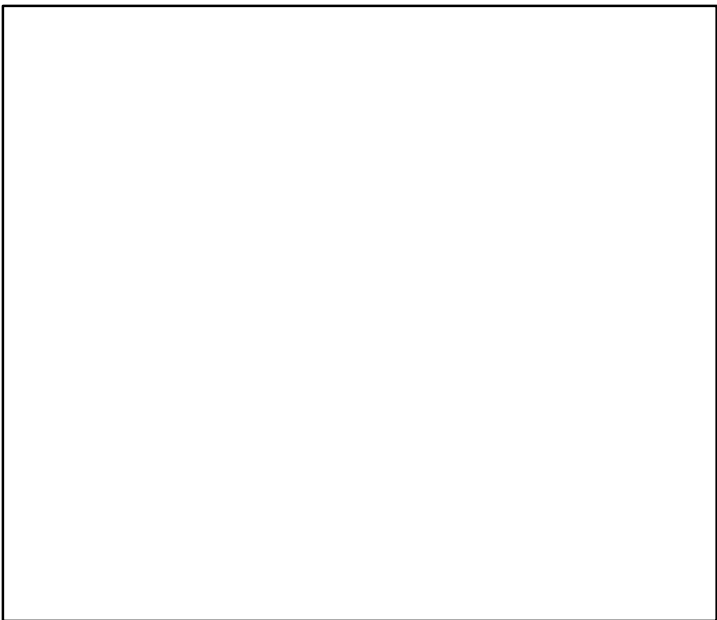
Kobe MGT\*



Spawner Recruit (2001–2015–ICESIMP2016)



Production\*



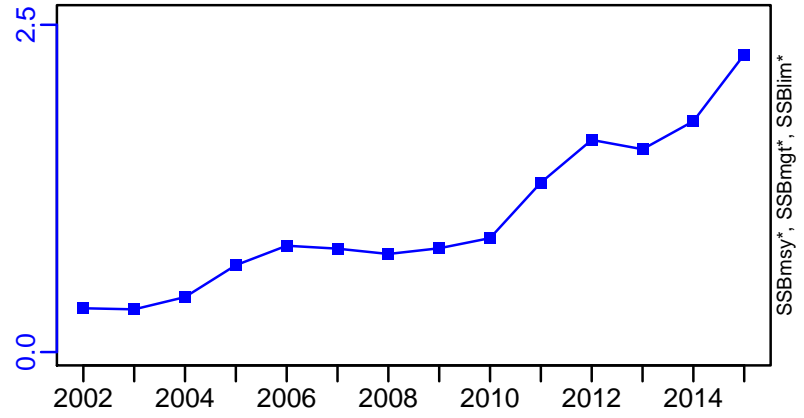
◆ Start Year ◆ End Year \* No Data

European Plaice Subdivisions 24–32 [PLAIC2432]

TB\*



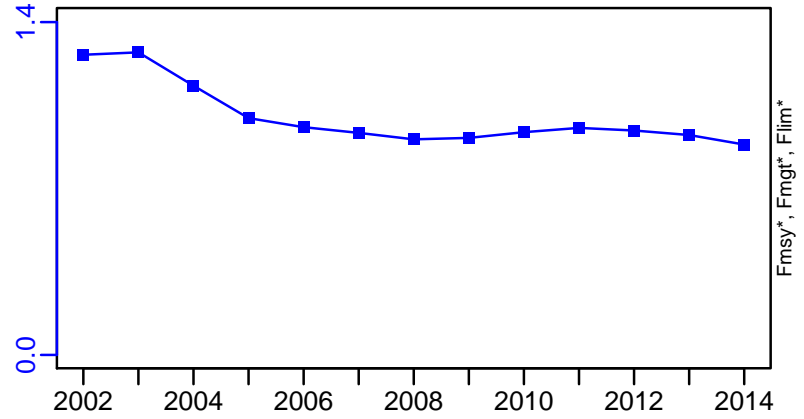
SSB-relative (2001–2015–ICESIMP2016)



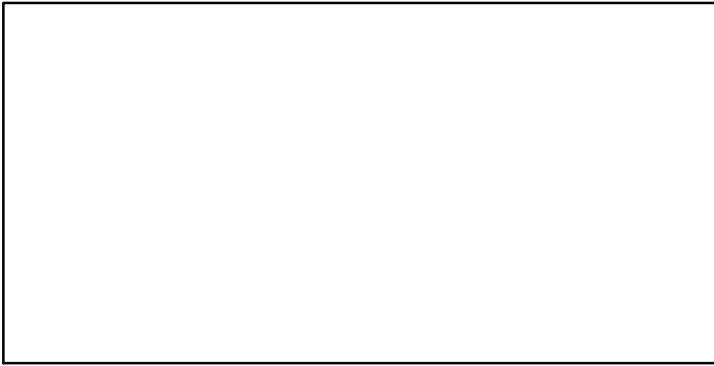
TN \*



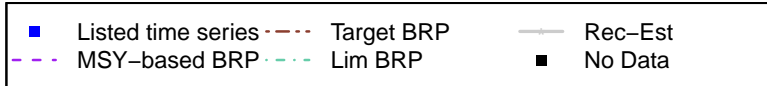
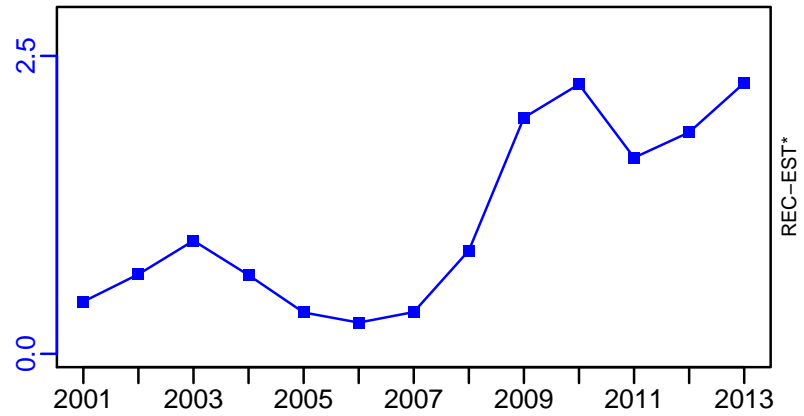
F-relative (2001–2015–ICESIMP2016)



ER\*



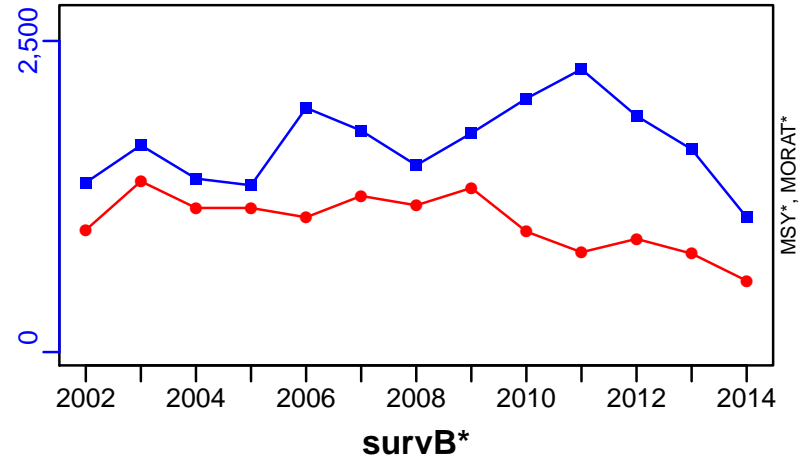
R-relative (2001–2015–ICESIMP2016)



# European Plaice Subdivisions 24–32 [PLAIC2432]

TC–MT, TL–MT, RecC\* (2001–2015–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## European Plaice ICES VIlId [PLAIC7d]

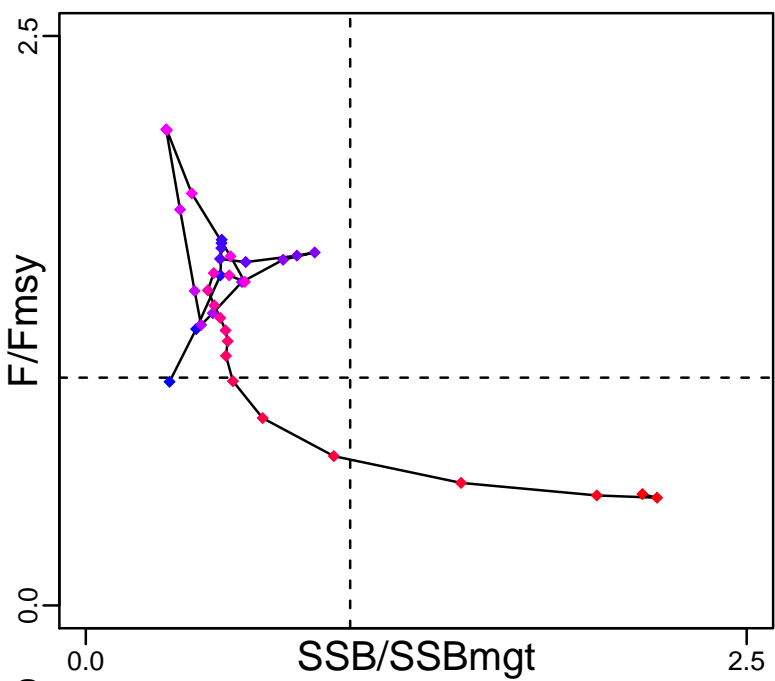
Metadata	
<b>Scientific Name</b>	Pleuronectes platessa
<b>Current Assess ID</b>	WGNSSK-PLAIC7d-1979-2016-ICESIMP2016
<b>Area</b>	Eastern English Channel
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
<b>Asmts in RAM</b>	2010, 2013, 2014, 2015, 2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.25
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	25,826
<b>Fmgt</b>	Fmgt-1/yr	2016	0.25
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2010	0.1
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	18,448
<b>Flim</b>	Flim-1/yr	2016	0.5
<b>ERlim</b>	-	-	-

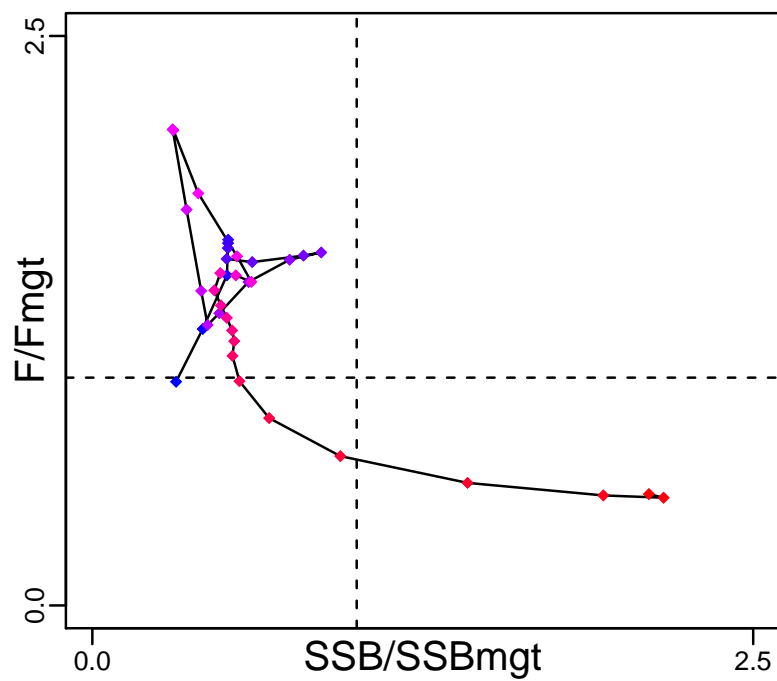
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2010	9230	-	1+
<b>SSB</b>	SSB-MT	2016	63,500	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$1.55 \times 10^8$	-	1
<b>F</b>	F-1/yr	2016	0.12	-	3 to 6
<b>ER</b>	ER-calc-ratio	2016	0.07	-	-
<b>TC</b>	TC-MT	2016	5790		
<b>TL</b>	TL-MT	2016	3250		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	0.49		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	2.46		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.49		
<b>ER/ERmgt</b>	-	-	-		

# European Plaice ICES VIId [PLAIC7d]

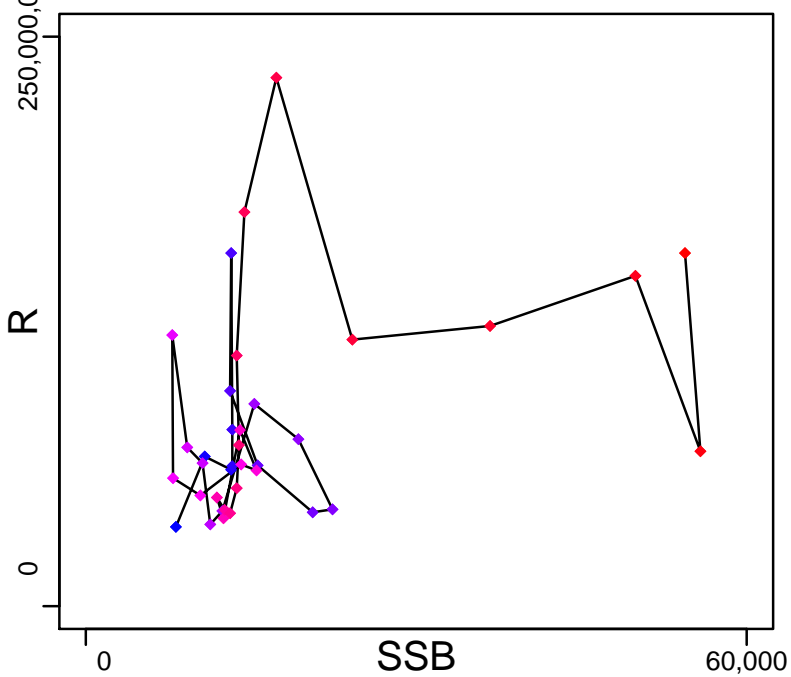
Kobe MSYpref (1979–2016–ICESIMP2016)



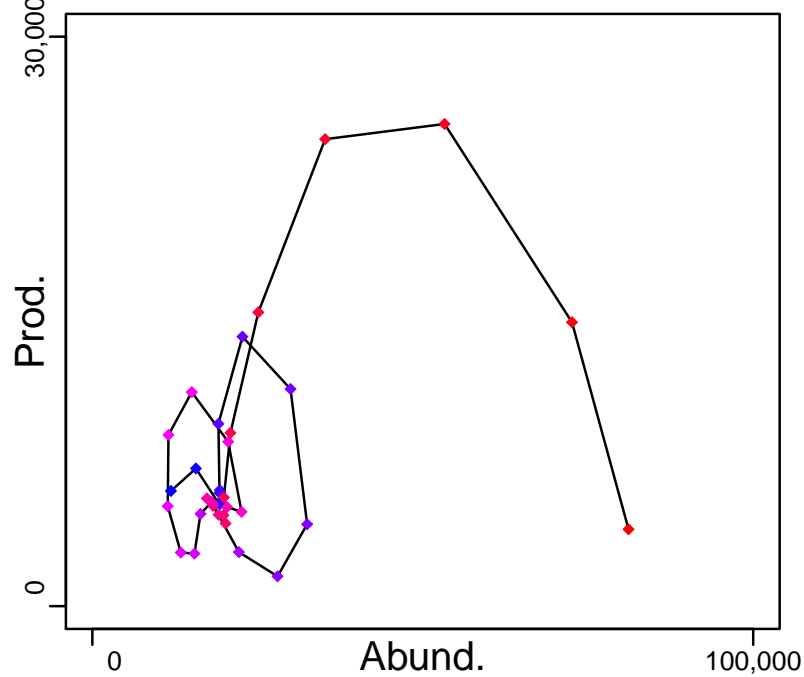
Kobe MGTpref (1979–2016–ICESIMP2016)



Spawner Recruit (1979–2016–ICESIMP2016)

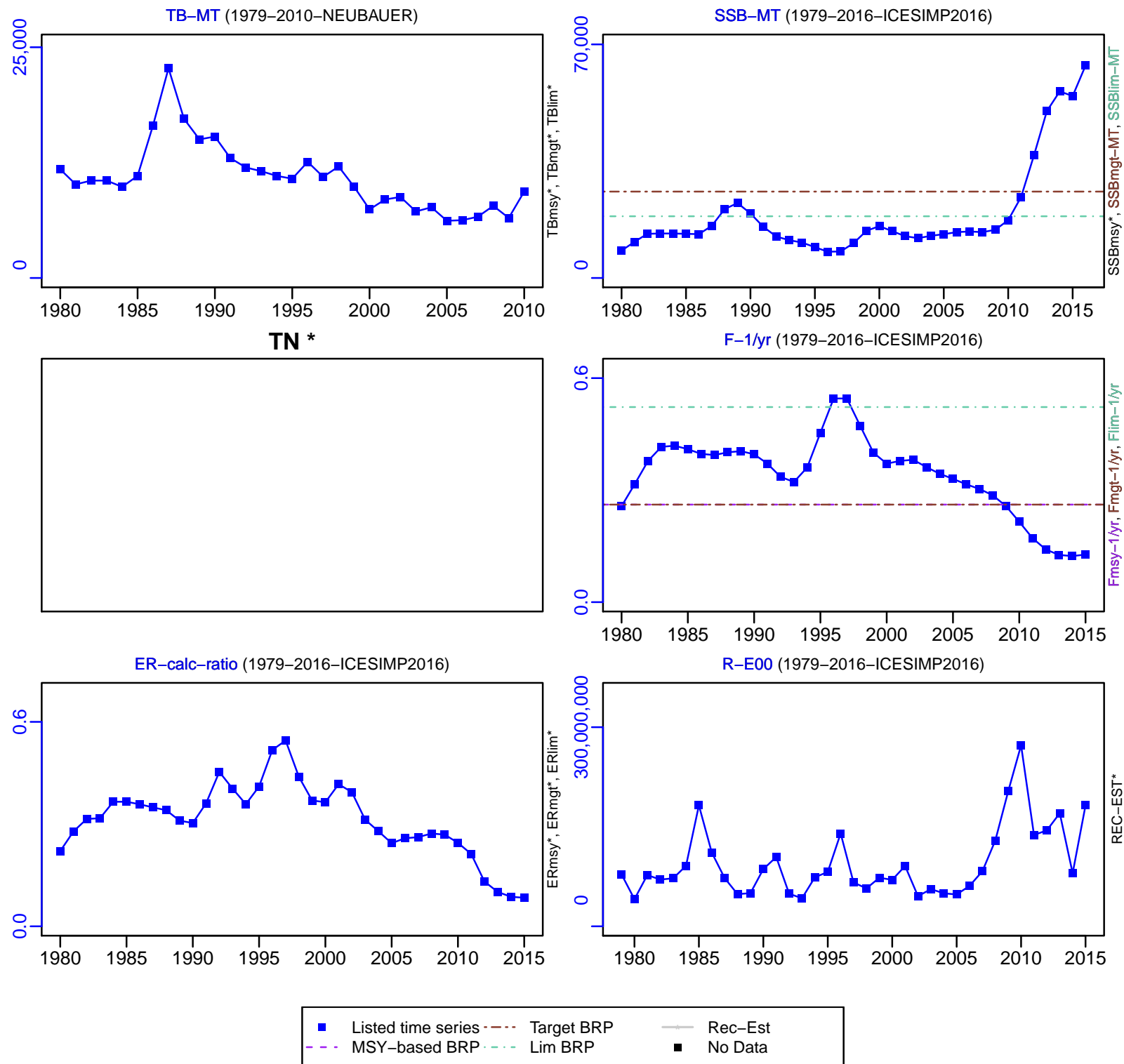


Production (1979–2016–ICESIMP2016)



◆ Start Year ◆ End Year \* No Data

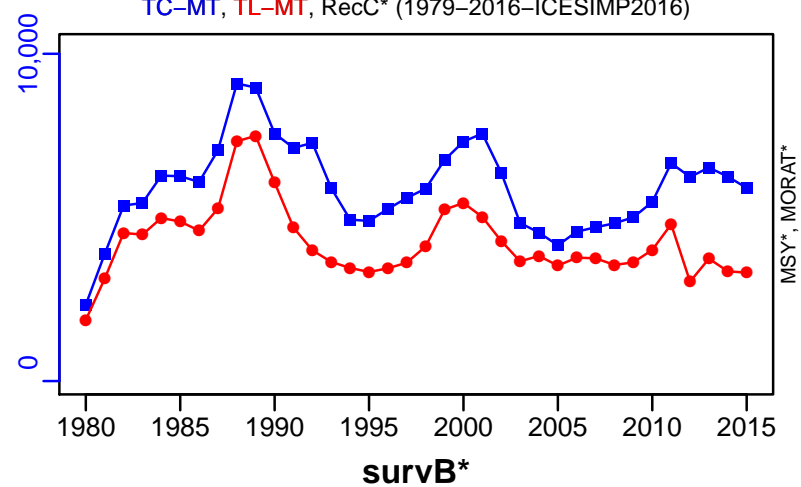
# European Plaice ICES VIId [PLAIC7d]



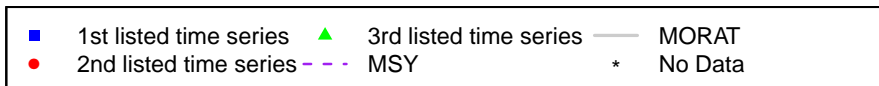
# European Plaice ICES VIId [PLAIC7d]

TC-MT, TL-MT, RecC\* (1979-2016-ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## European Plaice ICES VIlf-g [PLAICCELT]

Metadata	
<b>Scientific Name</b>	Pleuronectes platessa
<b>Current Assess ID</b>	WGCSE-PLAICCELT-1993-2016-ICESIMP2016
<b>Area</b>	Celtic Sea
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2014, 2016, 2010

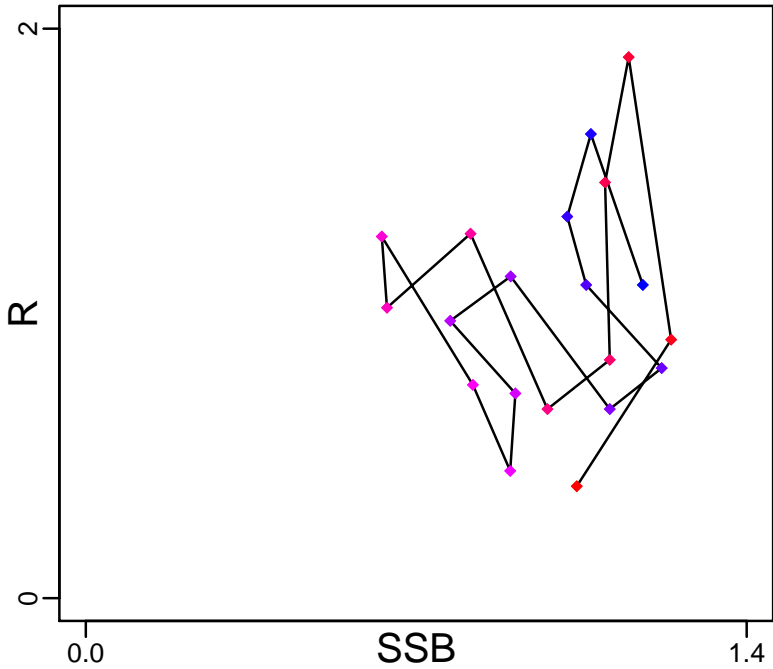
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2010	0.12
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-relative	2014	1	-	-
TN	-	-	-	-	-
R	R-relative	2014	0	-	1
F	F-relative	2014	1.29	-	3 to 6
ER	ER-ratio	2010	0.22	-	-
TC	TC-MT	2014	1670		
TL	TL-MT	2016	381		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

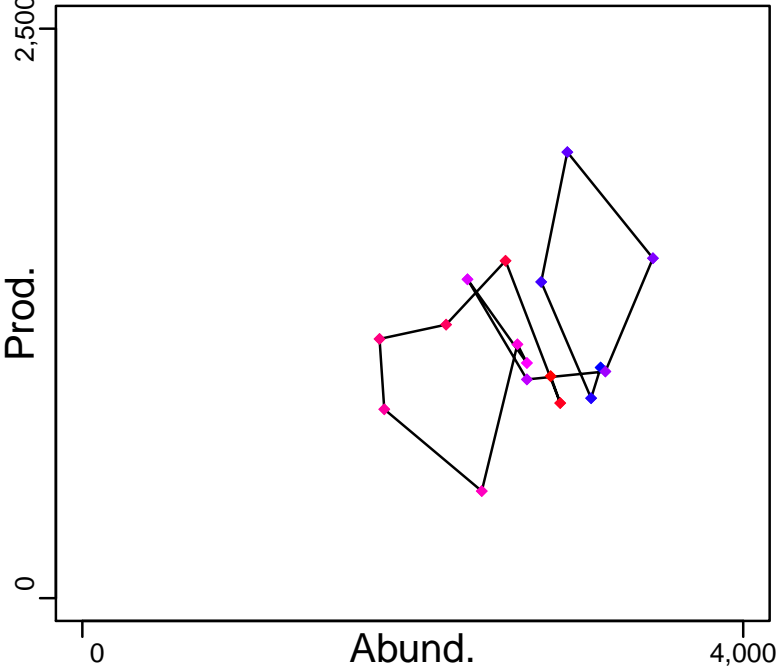




Spawner Recruit (1992–2014–ICESIMP2016)



Production (1992–2010–NEUBAUER)



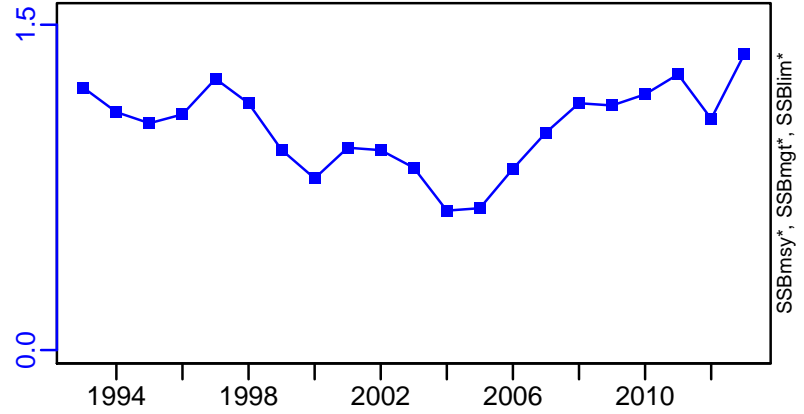
◆ Start Year ◆ End Year \* No Data

# European Plaice ICES VII-f-g [PLAICCELT]

TB\*



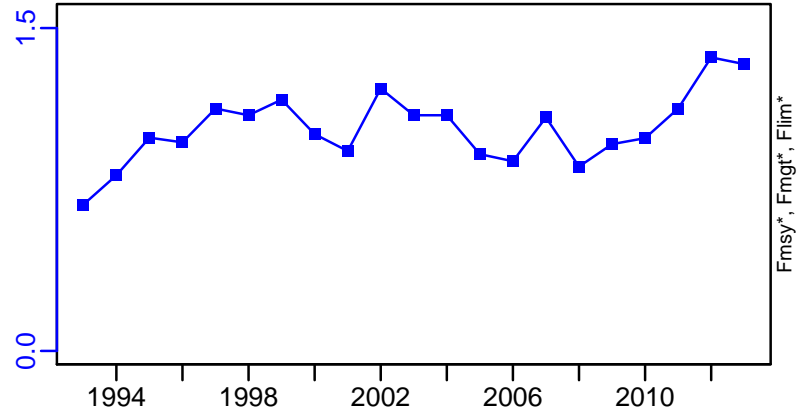
SSB-relative (1992-2014-ICESIMP2016)



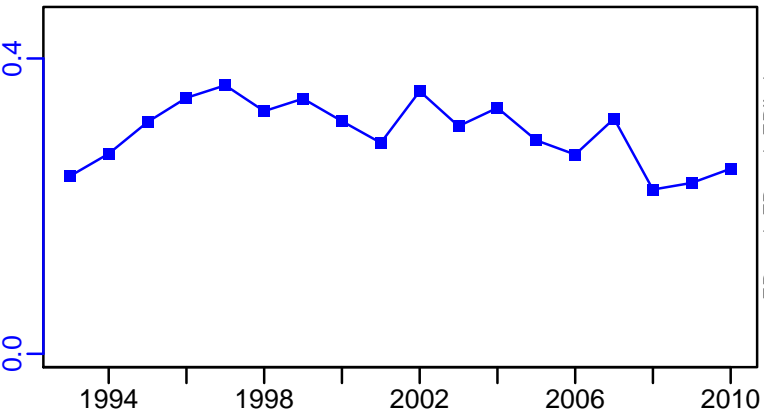
TN \*



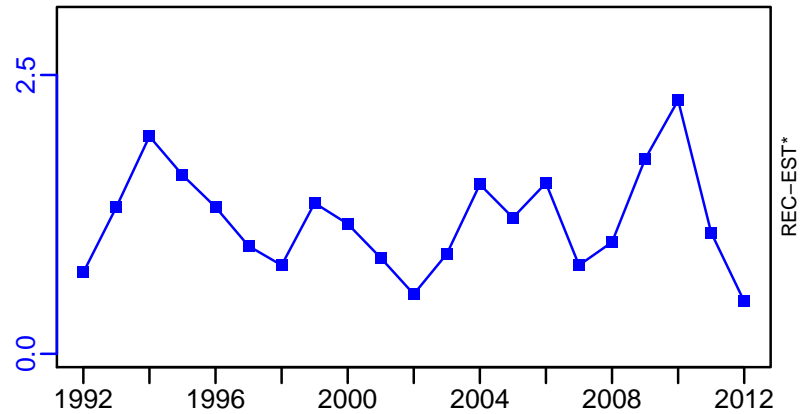
F-relative (1992-2014-ICESIMP2016)



ER-ratio (1992-2010-NEUBAUER)

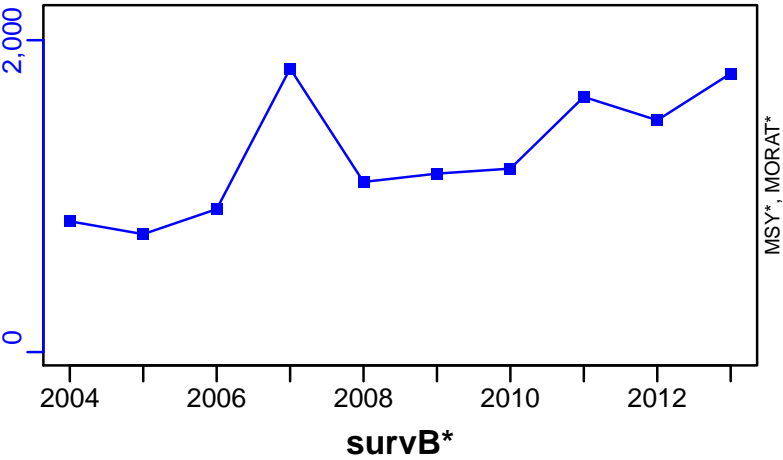


R-relative (1992-2014-ICESIMP2016)



European Plaice ICES VII-f-g [PLAICCELT]

TC-MT, TL\*, RecC\* (1992-2014-ICESIMP2016)



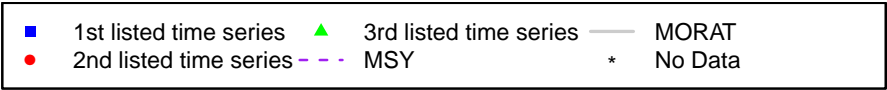
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## European Plaice ICES Vile [PLAICECHW]

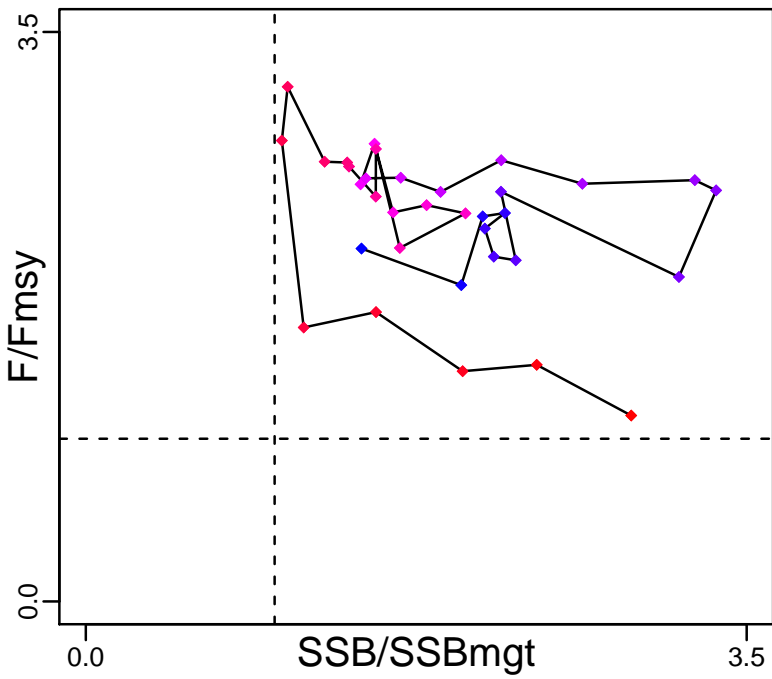
Metadata	
<b>Scientific Name</b>	Pleuronectes platessa
<b>Current Assess ID</b>	WGCSE-PLAICECHW-1978-2016-ICESIMP2016
<b>Area</b>	Western English Channel
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2015, 2016, 2013, 2014, 2010

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2014	0.24
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2014	1650
<b>Fmgt</b>	Fmgt-1/yr	2014	0.24
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2010	0.12
<b>TBlim</b>	TBlim-MT	2010	1300
<b>SSBlim</b>	SSBlim-relative	2015	1246
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

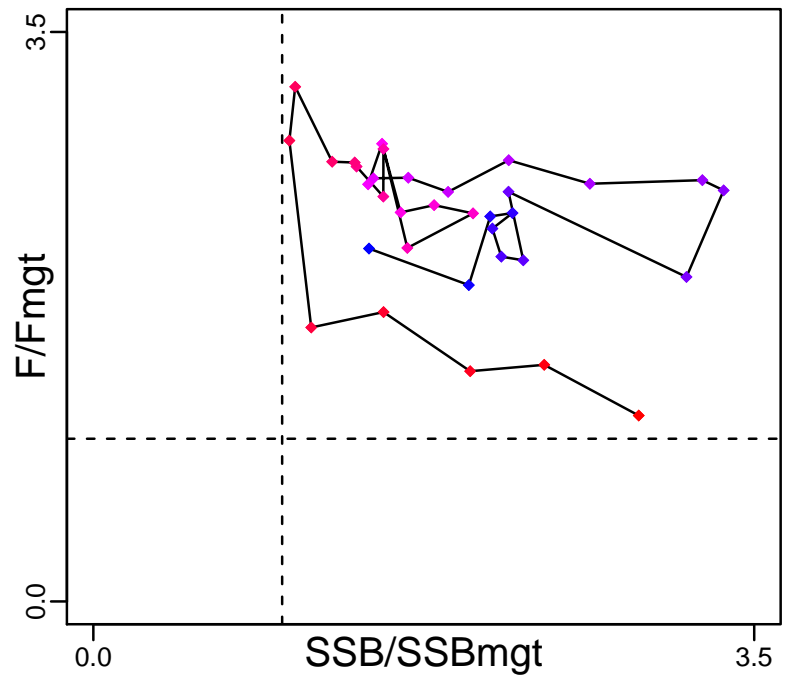
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2014	6730	-	-
<b>SSB</b>	SSB-relative	2016	2	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-relative	2016	1	-	2
<b>F</b>	F-relative	2016	0.35	-	3 to 6
<b>ER</b>	ER-calc-ratio	2014	0.23	-	-
<b>TC</b>	TC-MT	2016	2940		
<b>TL</b>	TL-MT	2016	1420		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2014	1.14		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2014	3.35		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2014	1.14		
<b>ER/ERmgt</b>	-	-	-		

# European Plaice ICES Vlle [PLAICECHW]

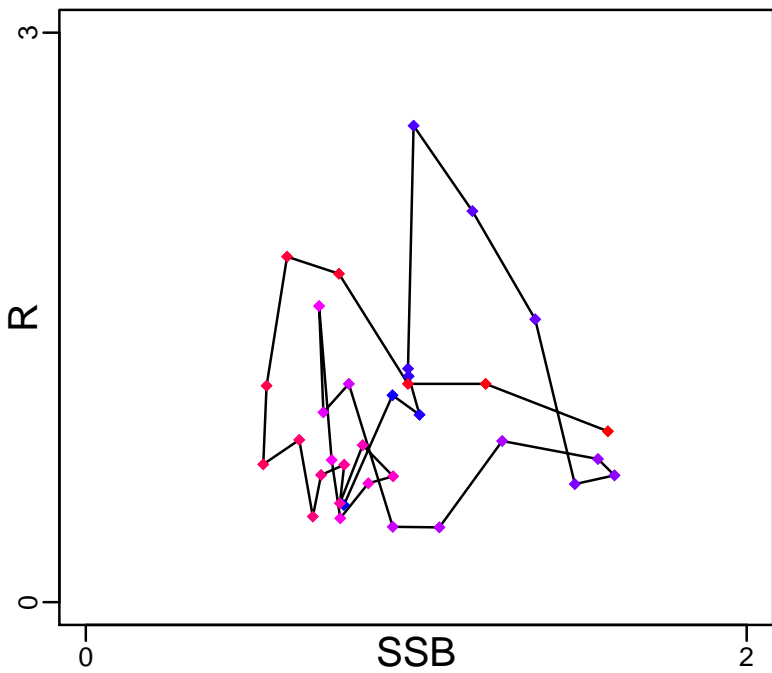
Kobe MSYpref (1979–2014–ICESIMP2016)



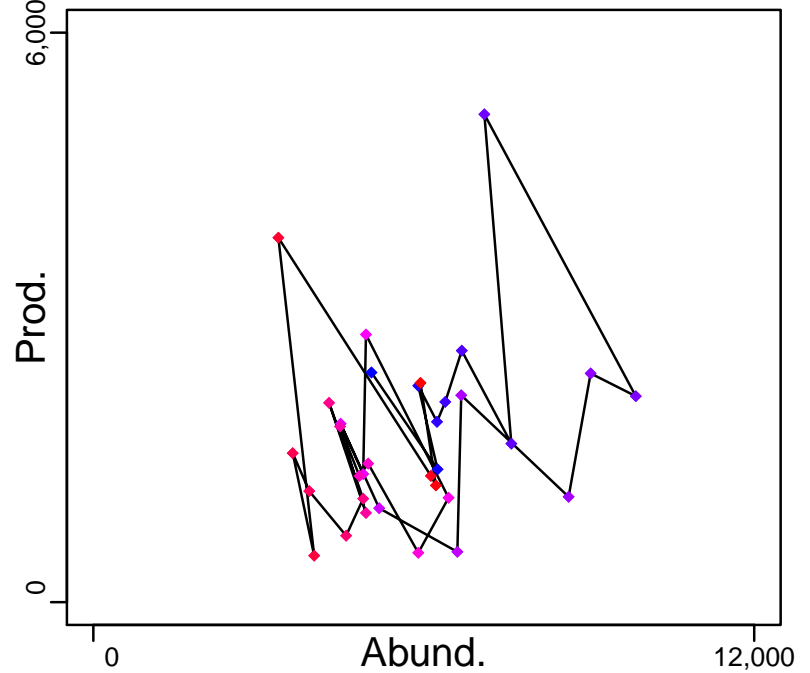
Kobe MGTpref (1979–2014–ICESIMP2016)



Spawner Recruit (1978–2016–ICESIMP2016)



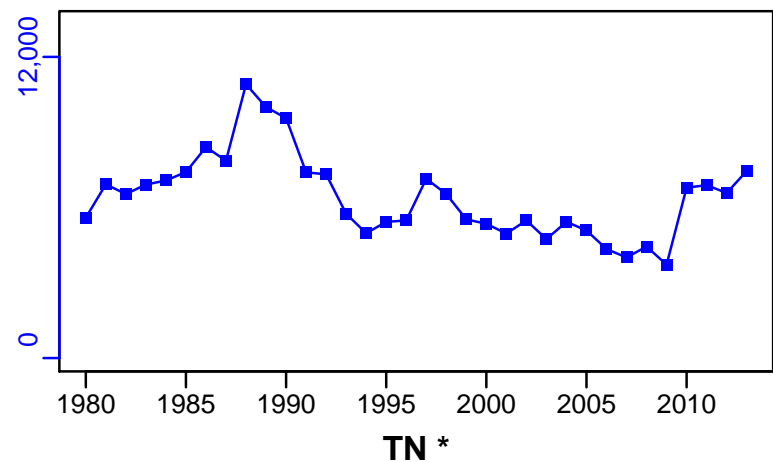
Production (1979–2014–ICESIMP2016)



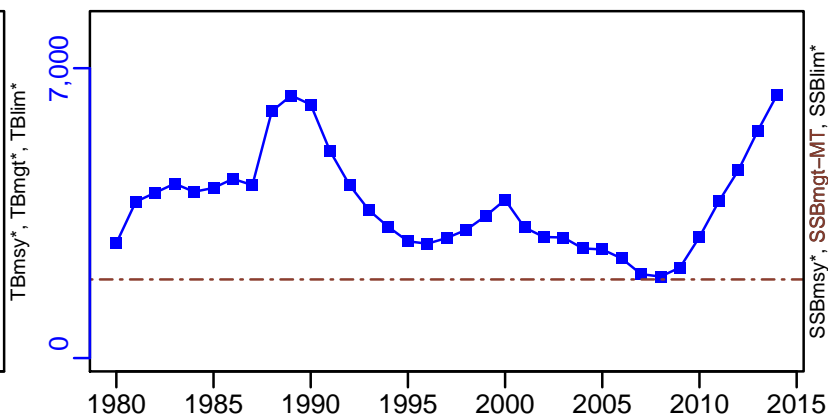
◆ Start Year ◆ End Year \* No Data

# European Plaice ICES Vile [PLAICECHW]

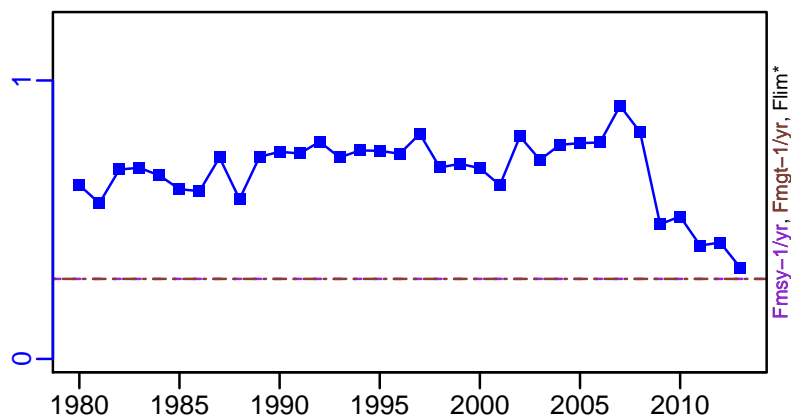
TB-MT (1979–2014–ICESIMP2016)



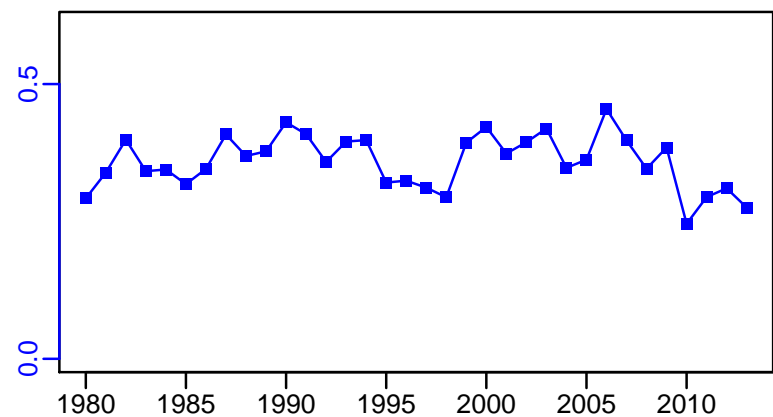
SSB-MT (1979–2014–ICESIMP2016)



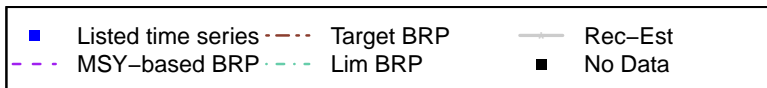
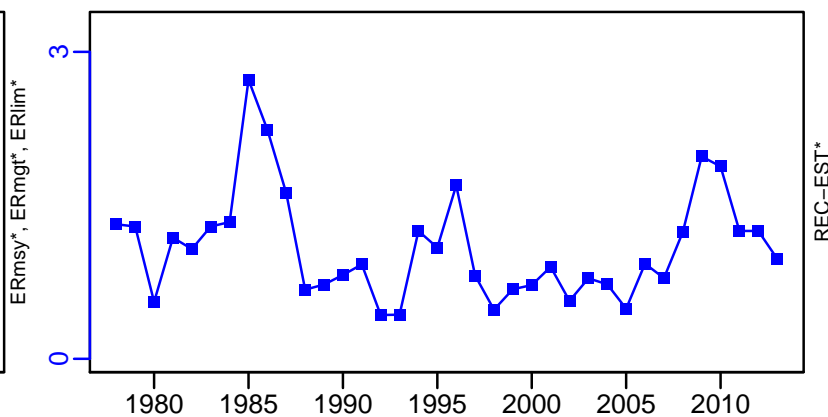
F-1/yr (1979–2014–ICESIMP2016)



ER-calc-ratio (1979–2014–ICESIMP2016)

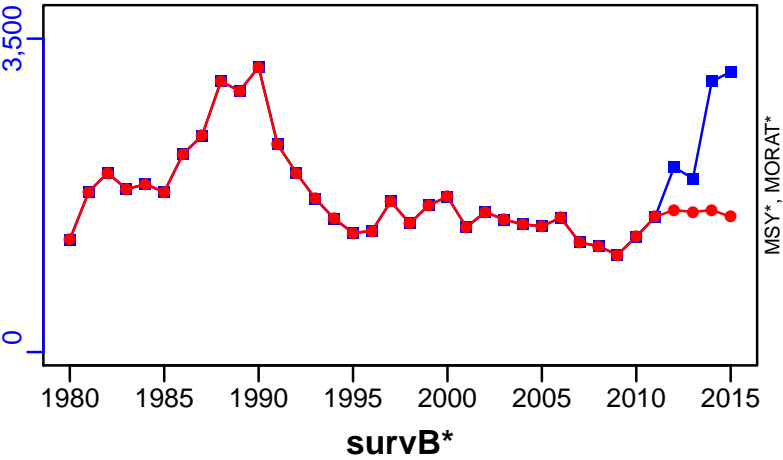


R-relative (1978–2016–ICESIMP2016)



European Plaice ICES Vlle [PLAICECHW]

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



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## European Plaice ICES IIIa [PLAICIIIa]

Metadata	
<b>Scientific Name</b>	Pleuronectes platessa
<b>Current Assess ID</b>	WGNSSK-PLAICIIIa-1976-2006-MINTO
<b>Area</b>	Kattegat and Skagerrak
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
<b>Asmts in RAM</b>	2006

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2006	0.1
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	-	-	-	-	-
<b>SSB</b>	SSB-MT	2006	19,400	-	2+
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2006	26,700,000	-	2
<b>F</b>	F-1/yr	2006	1.1	-	4 to 8
<b>ER</b>	ER-ratio	2006	0.21	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2006	9410		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

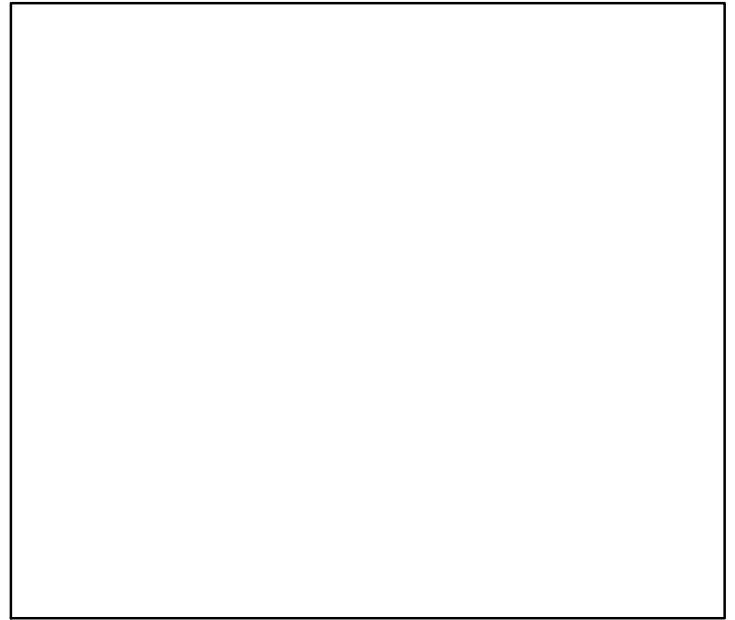


European Plaice ICES IIIa [PLAICIIIa]

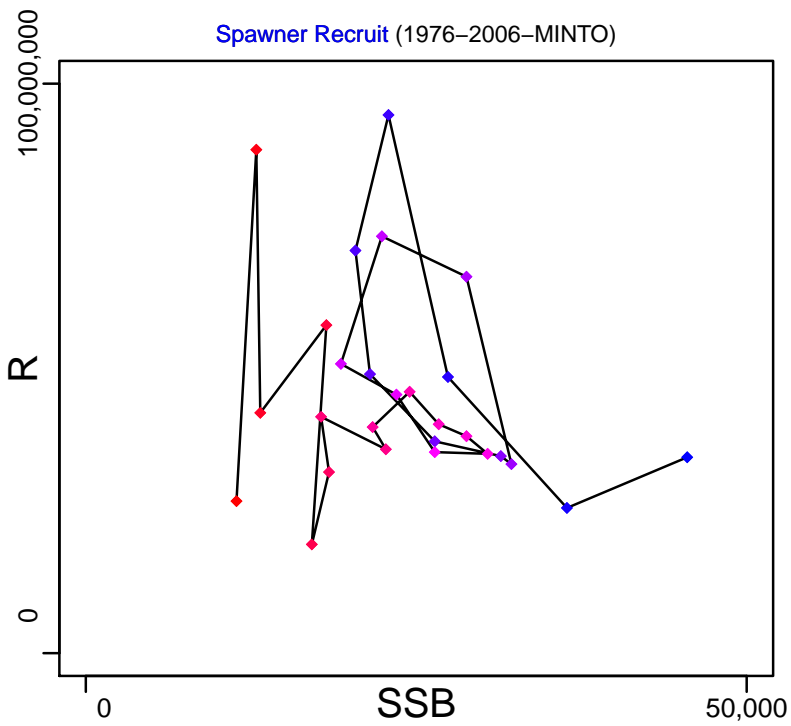
Kobe MSY\*



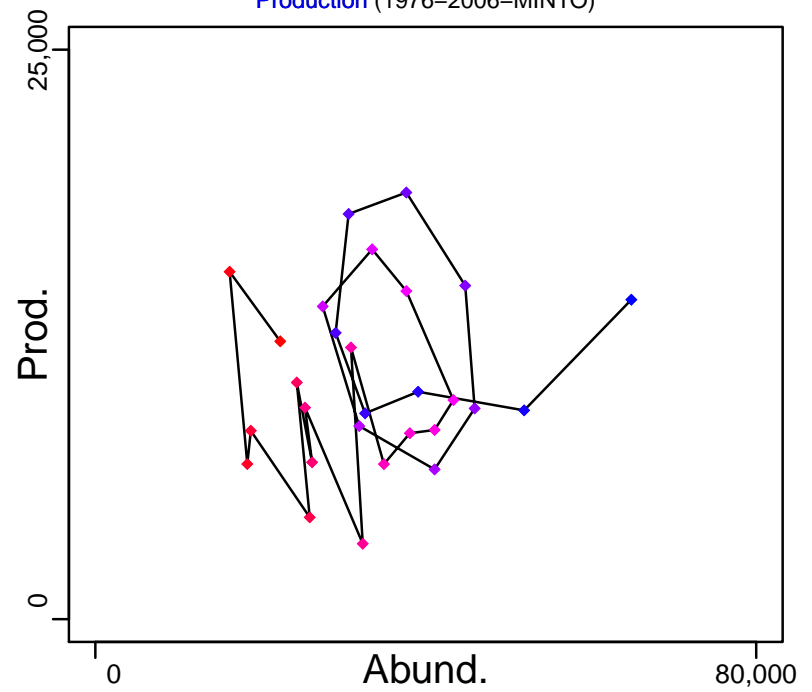
Kobe MGT\*



Spawner Recruit (1976–2006–MINTO)



Production (1976–2006–MINTO)



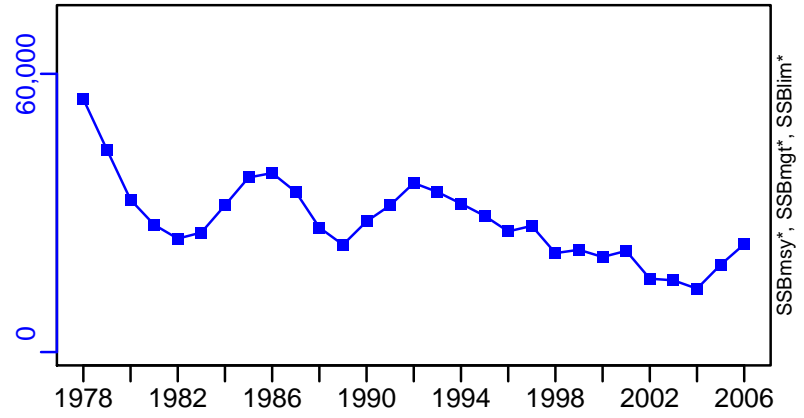
◆ Start Year ◆ End Year \* No Data

# European Plaice ICES IIIa [PLAICIIIa]

TB\*



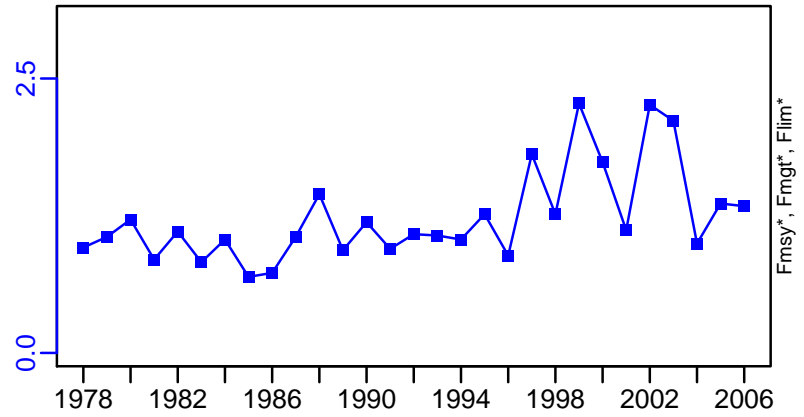
SSB-MT (1976–2006–MINTO)



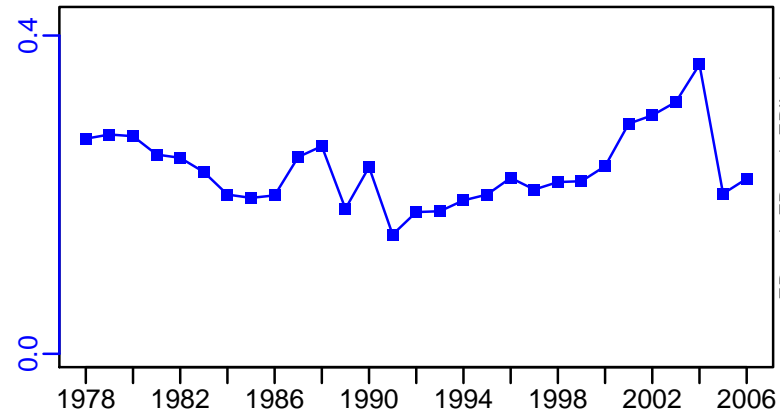
TN \*



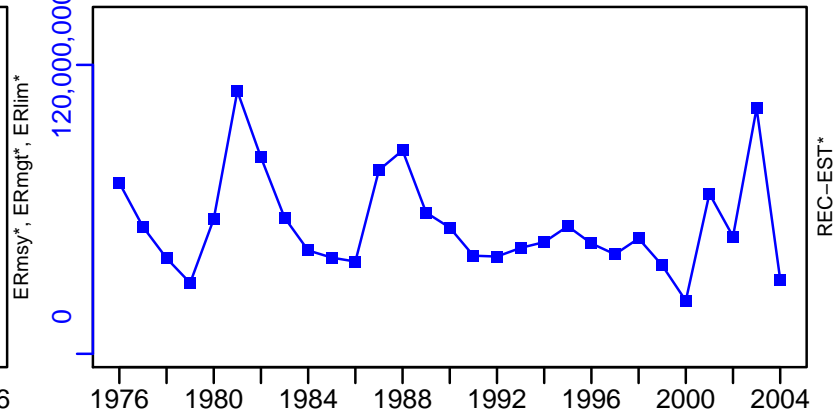
F-1/yr (1976–2006–MINTO)



ER-ratio (1976–2006–MINTO)



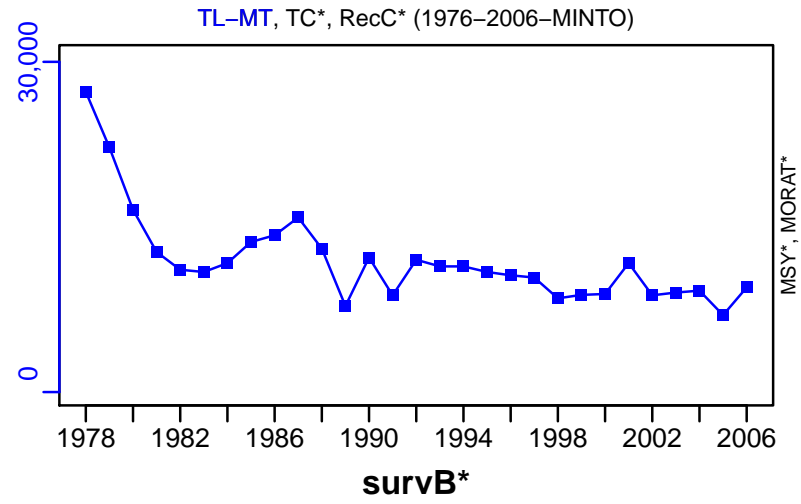
R-E00 (1976–2006–MINTO)



European Plaice ICES IIIa [PLAICIIIa]

TL-MT, TC\*, RecC\* (1976-2006-MINTO)

TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



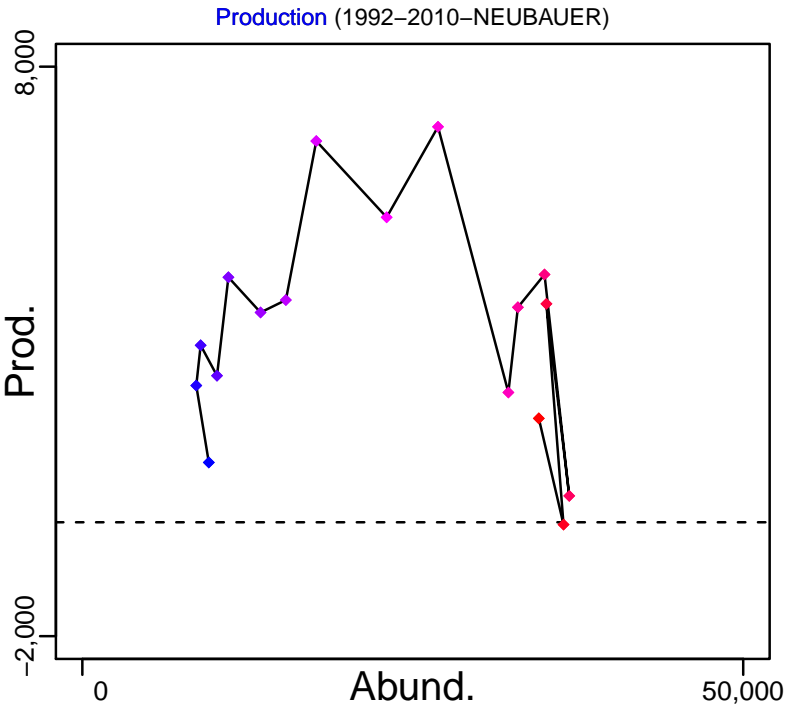
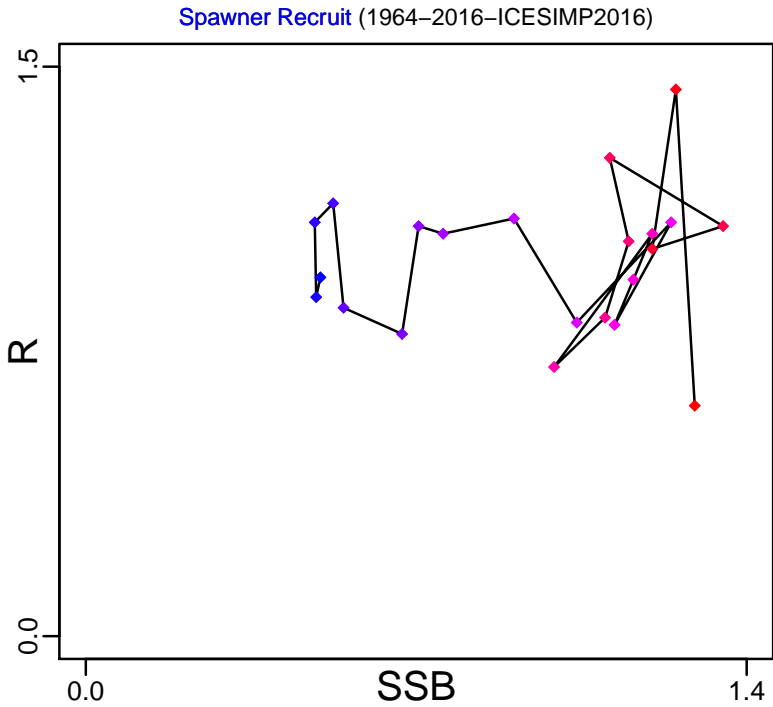
■ 1st listed time series    ▲ 3rd listed time series    — MORAT  
● 2nd listed time series    - - MSY    \* No Data

## European Plaice Irish Sea [PLAICIS]

Metadata	
<b>Scientific Name</b>	Pleuronectes platessa
<b>Current Assess ID</b>	WGCSE-PLAICIS-1964-2016-ICESIMP2016
<b>Area</b>	Irish Sea
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2015, 2016, 2014, 2010

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	M-1/yr	2010	0.12
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-relative	2016	2	-	-
TN	-	-	-	-	-
R	R-relative	2016	1	-	1
F	F-relative	2016	0.27	-	3 to 6
ER	ER-ratio	2010	0.05	-	-
TC	TC-MT	2016	1010		
TL	TL-MT	2016	439		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



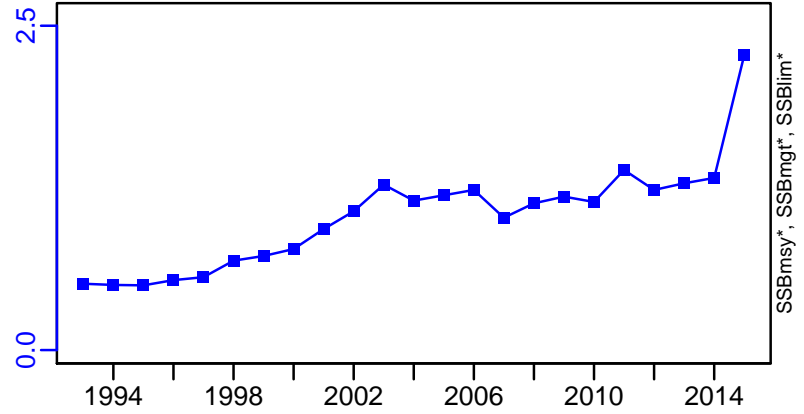
◆ Start Year ◆ End Year \* No Data

# European Plaice Irish Sea [PLAICIS]

TB\*



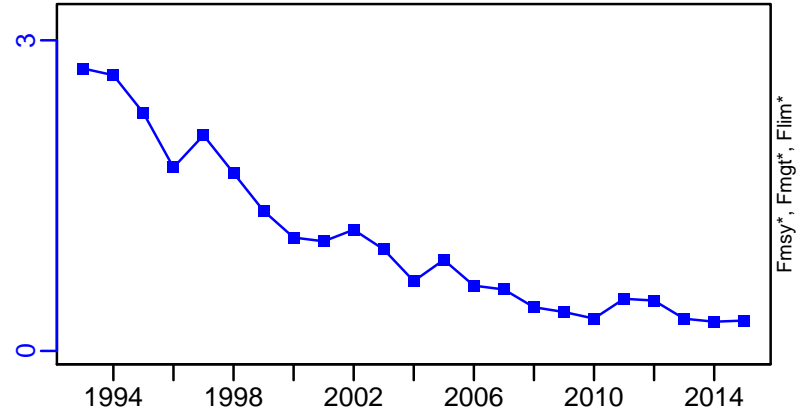
SSB-relative (1964–2016–ICESIMP2016)



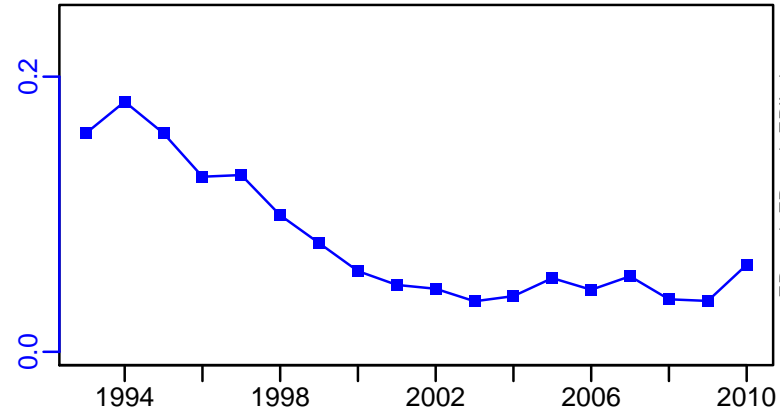
TN \*



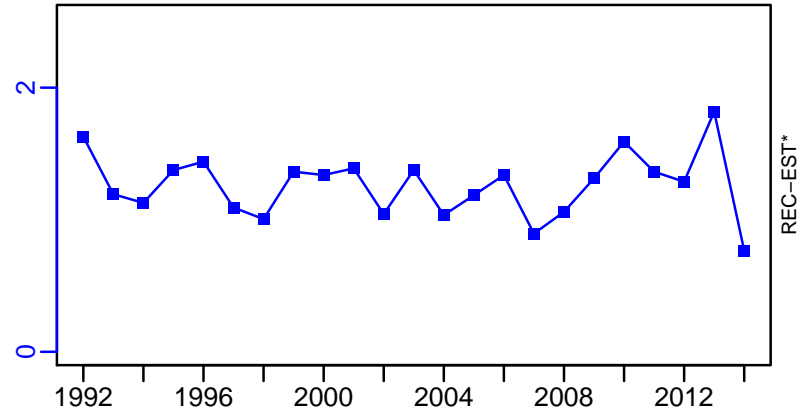
F-relative (1964–2016–ICESIMP2016)



ER-ratio (1992–2010–NEUBAUER)

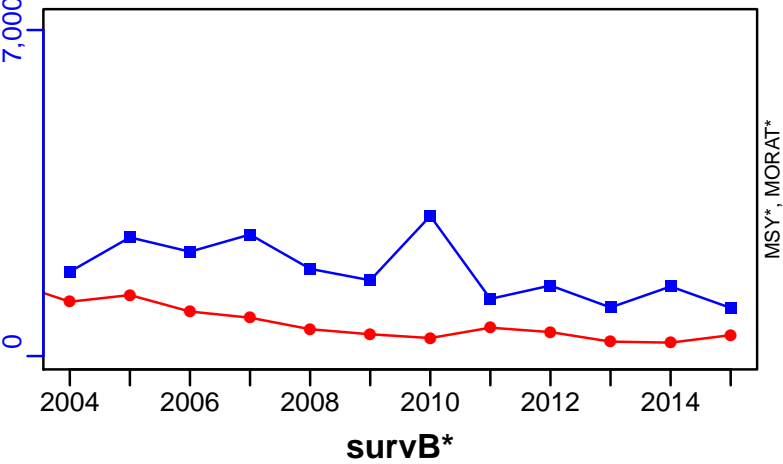


R-relative (1964–2016–ICESIMP2016)



European Plaice Irish Sea [PLAICIS]

TC-MT, TL-MT, RecC\* (1964–2016–ICESIMP2016)



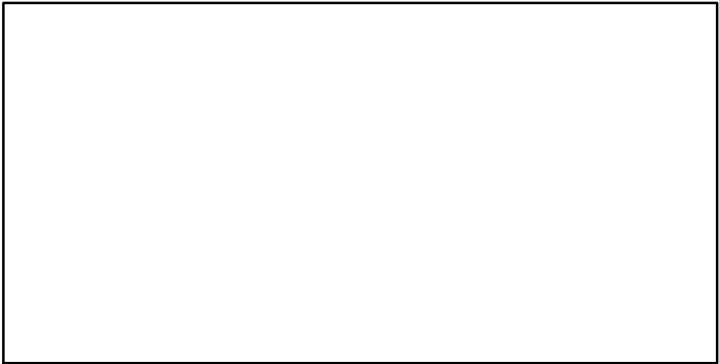
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## European Plaice North Sea [PLAICNS]

Metadata	
<b>Scientific Name</b>	Pleuronectes platessa
<b>Current Assess ID</b>	WGNSSK-PLAICNS-1956-2016-ICESIMP2016
<b>Area</b>	North Sea
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
<b>Asmts in RAM</b>	2010, 2013, 2014, 2015, 2016

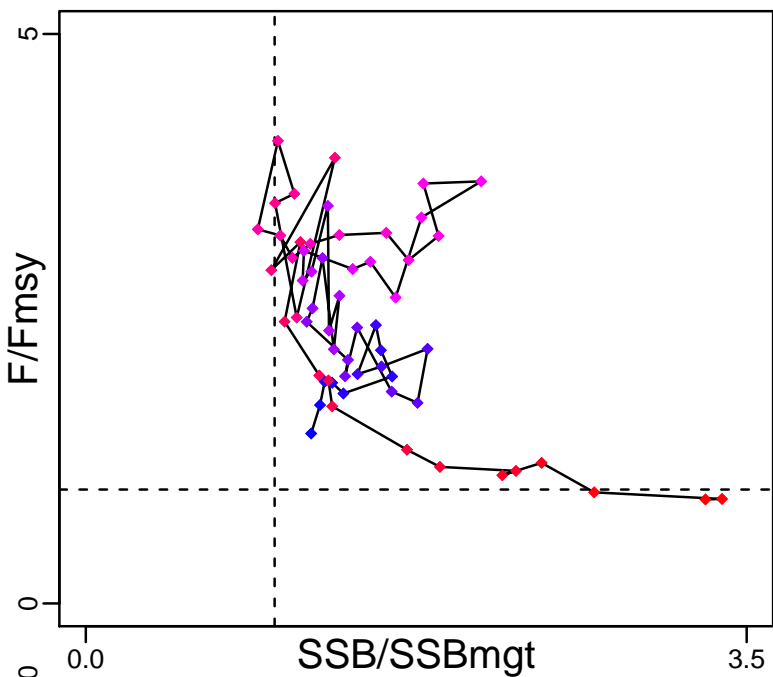
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.19
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	230,000
<b>Fmgt</b>	Fmgt-1/yr	2016	0.19
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2010	0.1
<b>TBlim</b>	TBlim-MT	2010	160,000
<b>SSBlim</b>	SSBlim-MT	2016	160,000
<b>Flim</b>	Flim-1/yr	2016	0.63
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2013	698,000	-	-
<b>SSB</b>	SSB-MT	2016	946,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$9.08 \times 10^8$	-	1
<b>F</b>	F-1/yr	2016	0.17	-	2 to 6
<b>ER</b>	ER-calc-ratio	2016	0.13	-	-
<b>TC</b>	TC-MT	2016	134,000		
<b>TL</b>	TL-MT	2016	85,400		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	0.91		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	4.11		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.91		
<b>ER/ERmgt</b>	-	-	-		

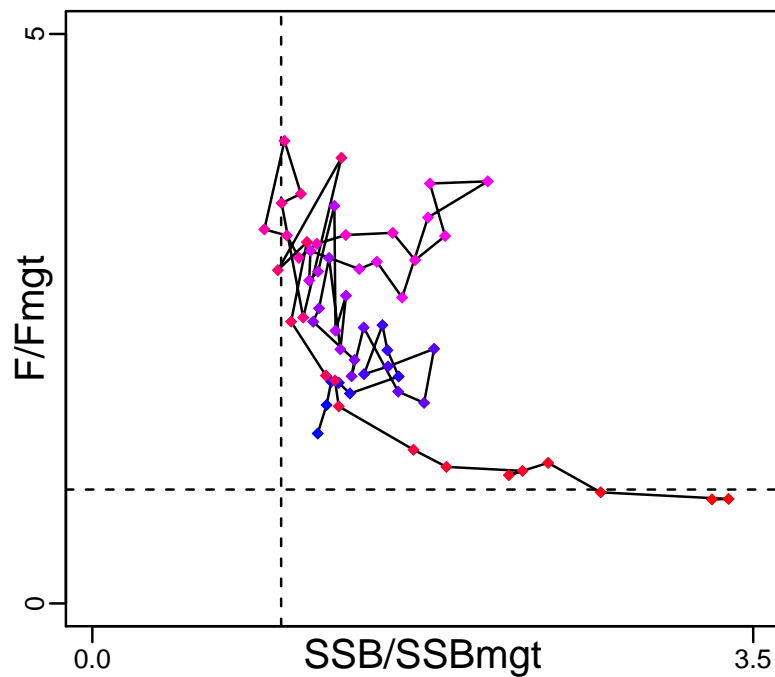


# European Plaice North Sea [PLAICNS]

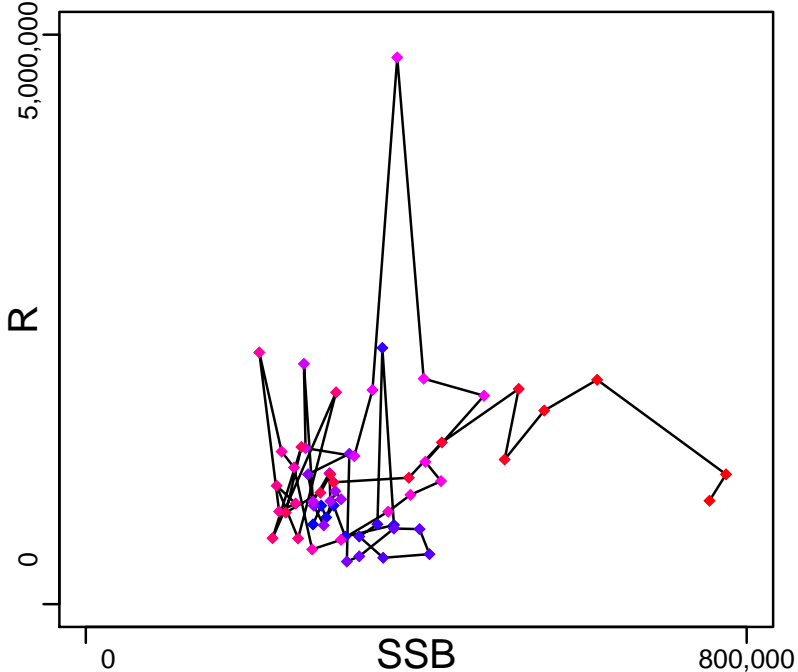
Kobe MSYpref (1956–2016–ICESIMP2016)



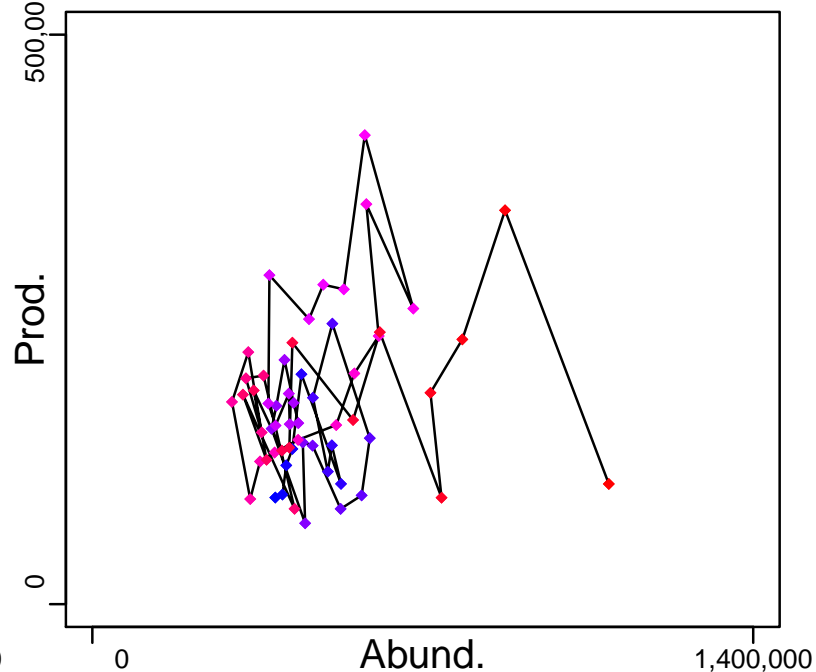
Kobe MGTpref (1956–2016–ICESIMP2016)



Spawner Recruit (1956–2016–ICESIMP2016)



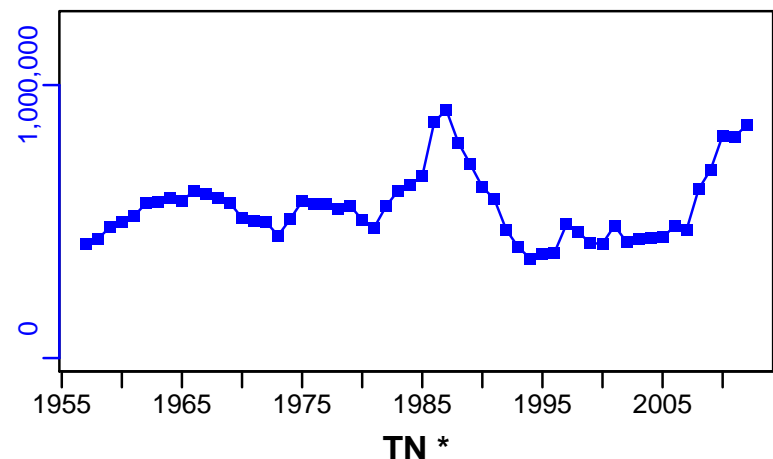
Production (1956–2016–ICESIMP2016)



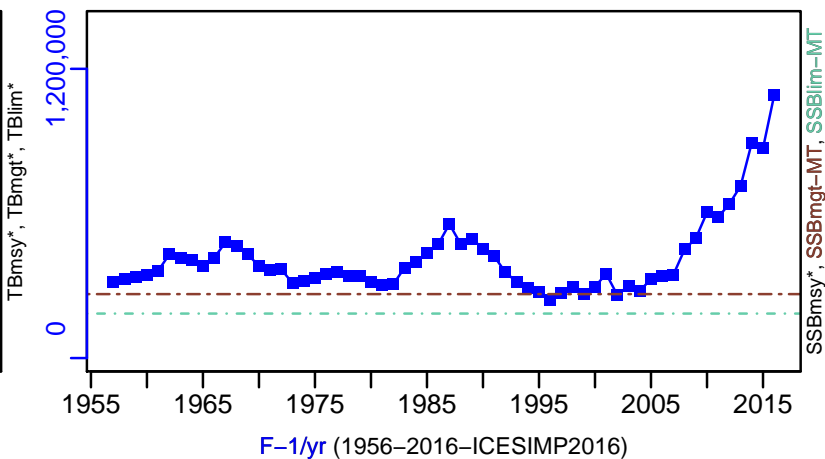
◆ Start Year ◆ End Year \* No Data

# European Plaice North Sea [PLAICNS]

TB-MT (1956–2013–ICESIMP2016)



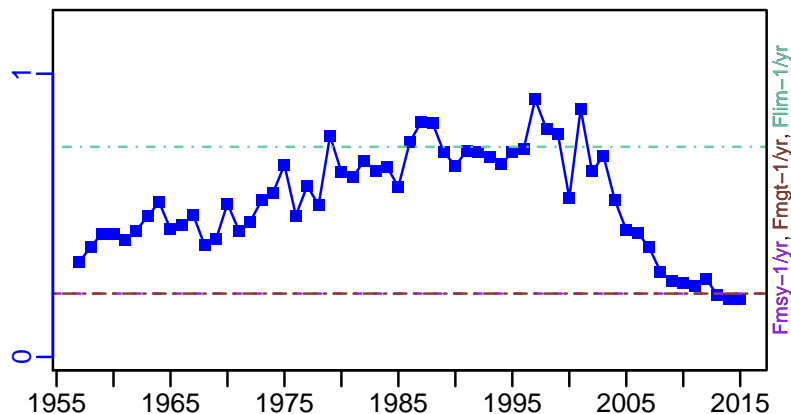
SSB-MT (1956–2016–ICESIMP2016)



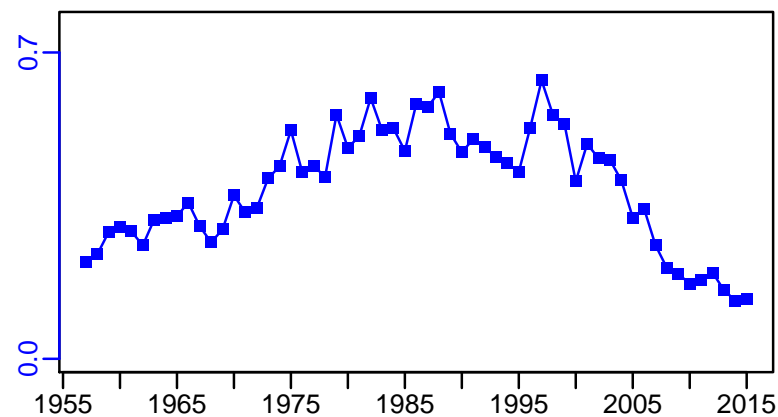
TN \*



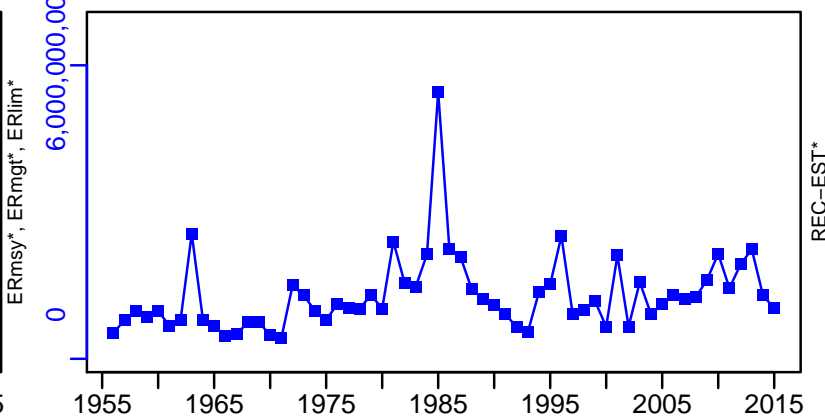
F-1/yr (1956–2016–ICESIMP2016)



ER-calc-ratio (1956–2016–ICESIMP2016)

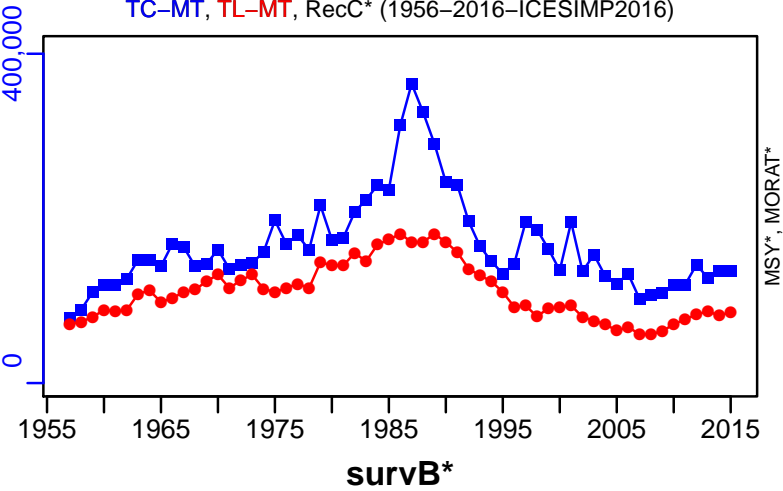


R-E00 (1956–2016–ICESIMP2016)



European Plaice North Sea [PLAICNS]

TC-MT, TL-MT, RecC\* (1956–2016–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## European Plaice VIIbc [PLAICVIIbc]

Metadata	
<b>Scientific Name</b>	Pleuronectes platessa
<b>Current Assess ID</b>	WGCSE-PLAICVIIbc-1996-2015-ICESIMP2016
<b>Area</b>	VIIbc
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2015

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	23		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

TB\*



SSB\*



TN \*



F\*



ER\*

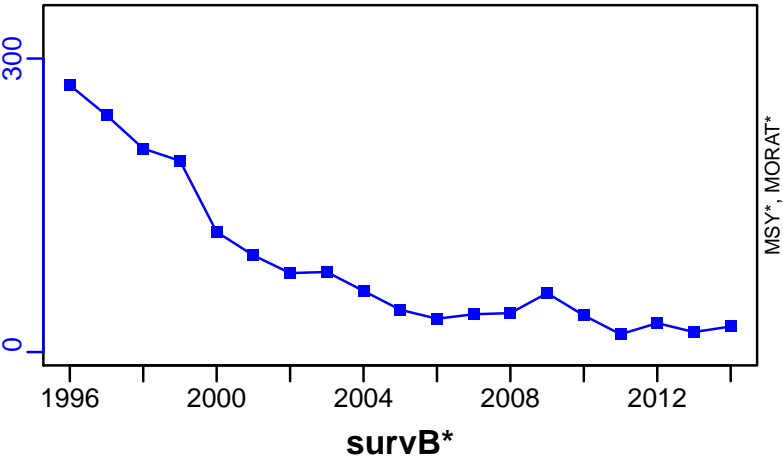


Recruits\*



European Plaice VIIbc [PLAICVIIbc]

TL-MT, TC\*, RecC\* (1996–2015–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



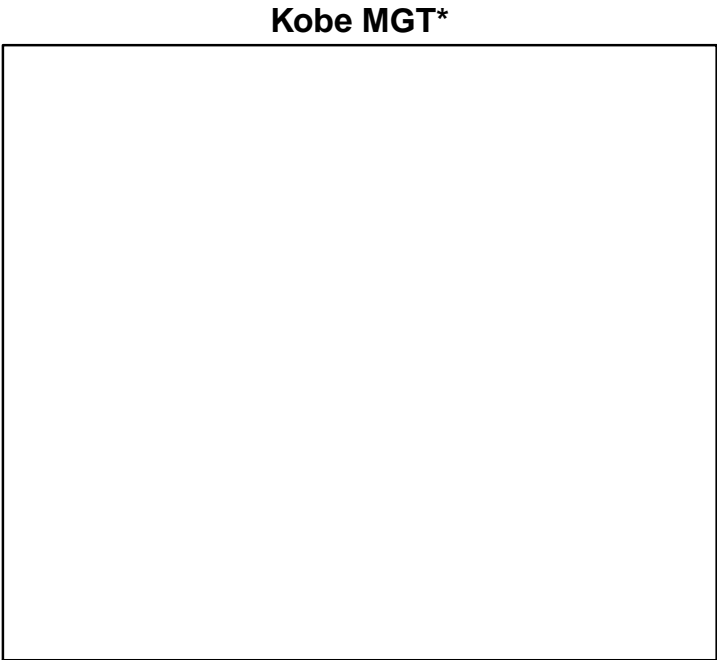
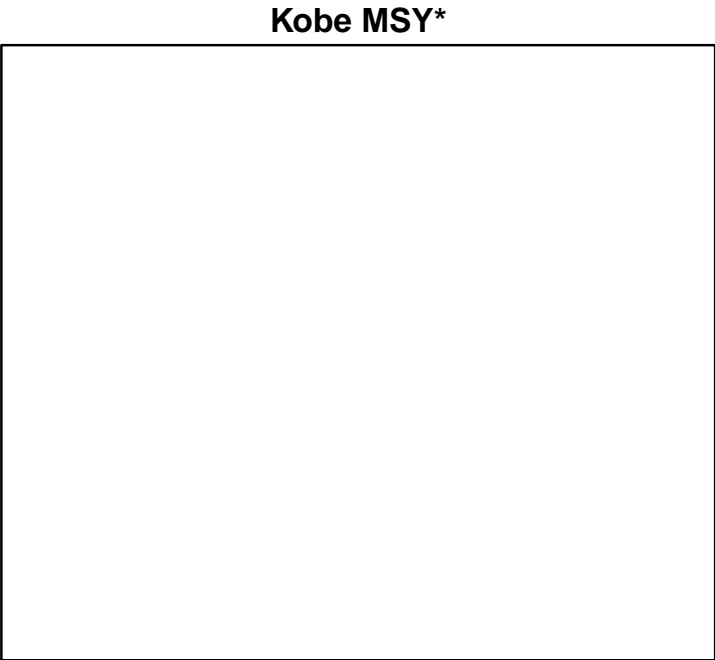
## European Plaice VIIh-k [PLAICVIIh-k]

Metadata	
<b>Scientific Name</b>	Pleuronectes platessa
<b>Current Assess ID</b>	WGCSE-PLAICVIIh-k-1989-2015-ICESIMP2016
<b>Area</b>	VIIh-k
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2014, 2015

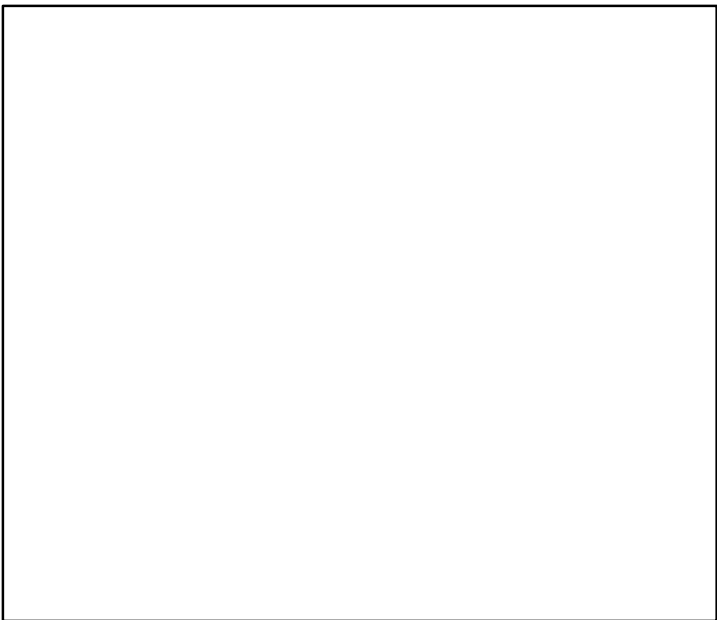
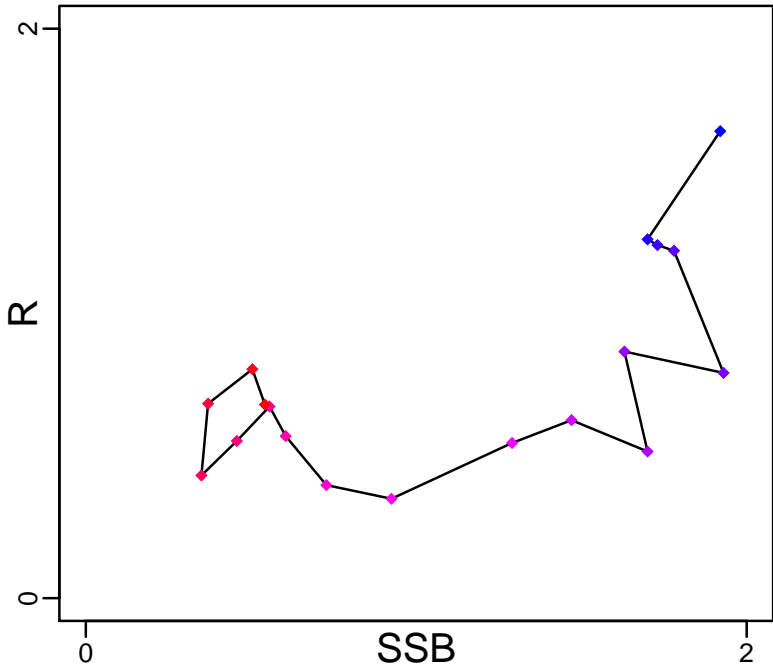
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-relative	2015	1	-	-
TN	-	-	-	-	-
R	R-relative	2015	1	-	4
F	F-relative	2015	1.06	-	4 to 6
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	148		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		





Spawner Recruit (1989–2015–ICESIMP2016)



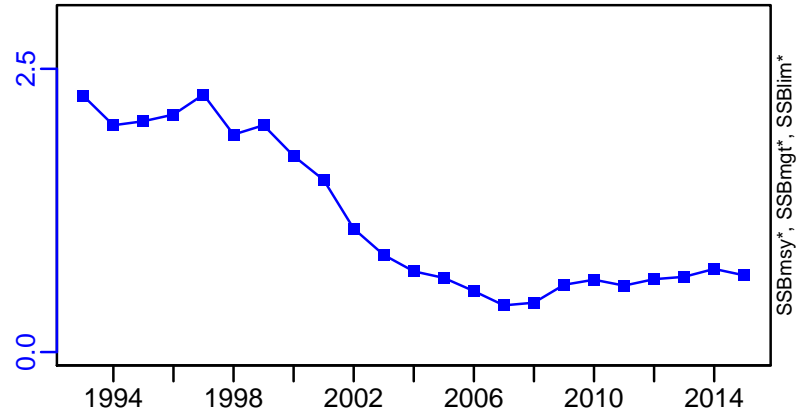
♦ Start Year ♦ End Year \* No Data

# European Plaice VIIh-k [PLAICVIIh-k]

TB\*



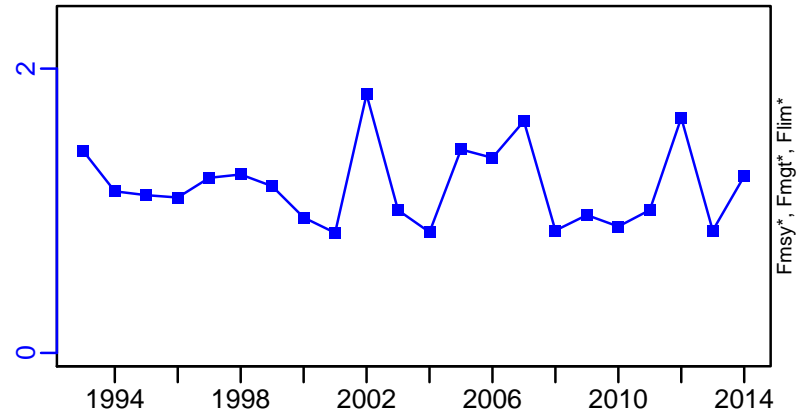
SSB-relative (1989-2015-ICESIMP2016)



TN \*



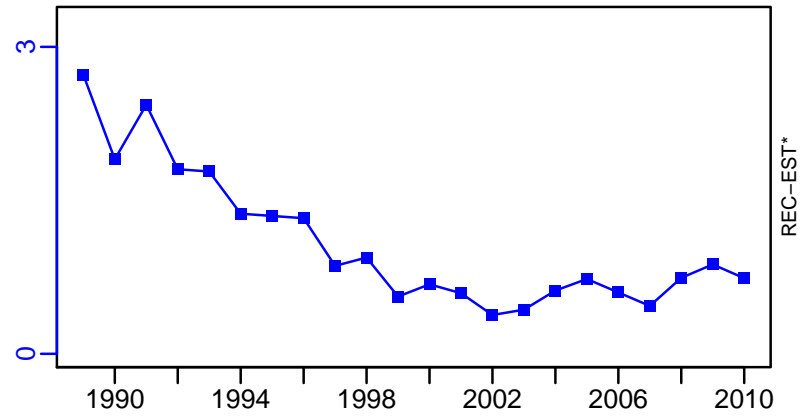
F-relative (1989-2015-ICESIMP2016)



ER\*



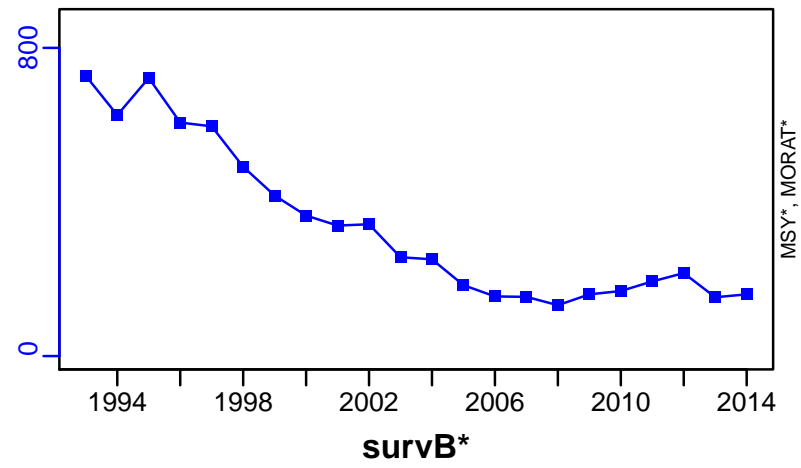
R-relative (1989-2015-ICESIMP2016)



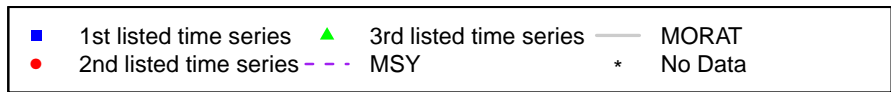
European Plaice VIIh-k [PLAICVIIh-k]

TL-MT, TC\*, RecC\* (1989–2015–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## European Plaice VIII and IXa [PLAICVIII-IXa]

Metadata	
<b>Scientific Name</b>	Pleuronectes platessa
<b>Current Assess ID</b>	WGBIE-PLAICVIII-IXa-1994-2015-ICESIMP2016
<b>Area</b>	VIII and IXa
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
<b>Asmts in RAM</b>	2015

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	220		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year   ◆ End Year   \* No Data

European Plaice VIII and IXa [PLAICVIII–IXa]

TB\*



SSB\*



TN \*



F\*



ER\*

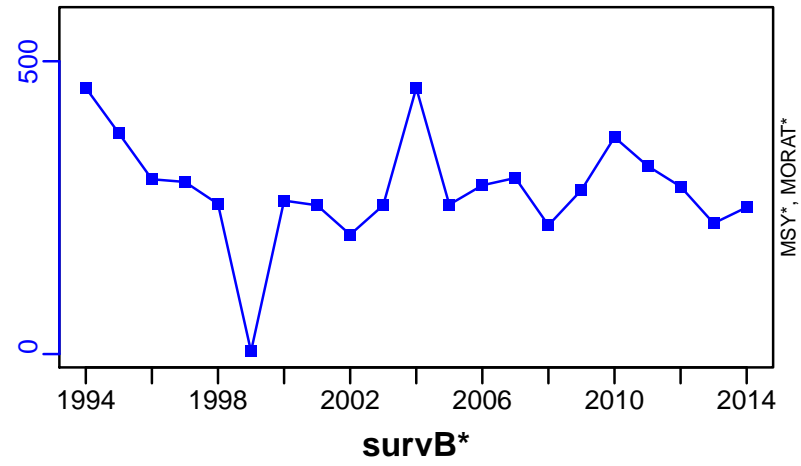


Recruits\*



European Plaice VIII and IXa [PLAICVIII–IXa]

TL–MT, TC\*, RecC\* (1994–2015–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



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

## Pollock ICES IIIa, VI and North Sea [POLLNS-VI-IIIa]

Metadata	
<b>Scientific Name</b>	Pollachius virens
<b>Current Assess ID</b>	WGNSSK-POLLNS-VI-IIIa-1964-2016-ICESIMP2016
<b>Area</b>	IIIa, VI and North Sea
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
<b>Asmts in RAM</b>	2012, 2013, 2014, 2015, 2016

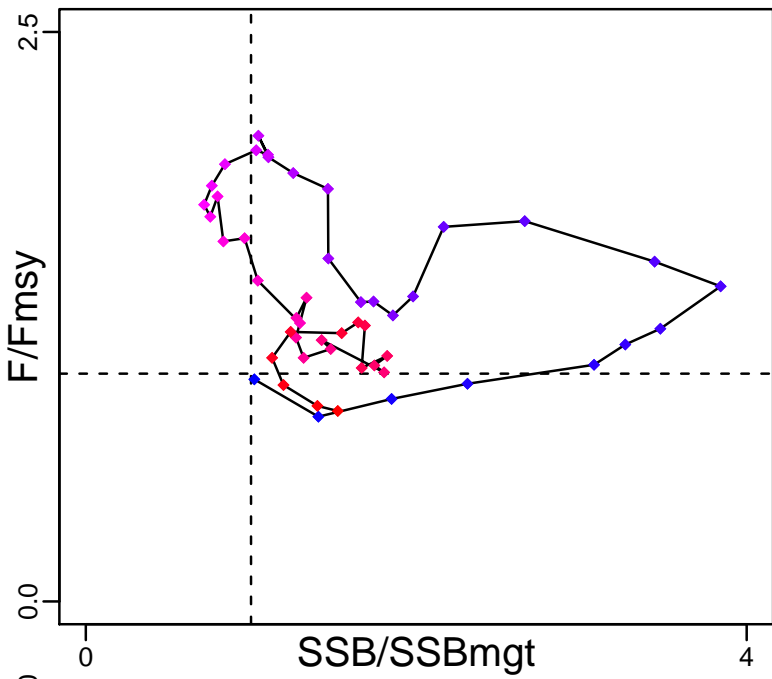
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.36
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	150,000
<b>Fmgt</b>	Fmgt-1/yr	2016	0.36
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2012	$2 \times 10^5$
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	107,000
<b>Flim</b>	Flim-1/yr	2016	0.56
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	417,000	-	-
<b>SSB</b>	SSB-MT	2016	240,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$1.02 \times 10^8$	-	3
<b>F</b>	F-1/yr	2016	0.3	-	4 to 7
<b>ER</b>	ER-calc-ratio	2016	0.2	-	-
<b>TC</b>	TC-MT	2016	83,300		
<b>TL</b>	TL-MT	2016	78,300		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	0.84		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	1.6		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.84		
<b>ER/ERmgt</b>	-	-	-		

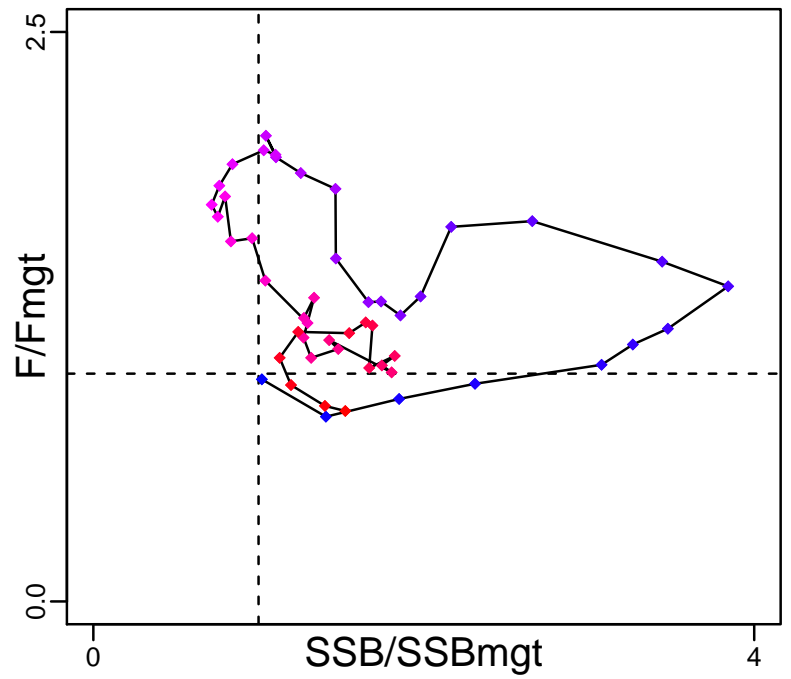


Pollock ICES IIIa, VI and North Sea [POLLNS-VI-IIIa]

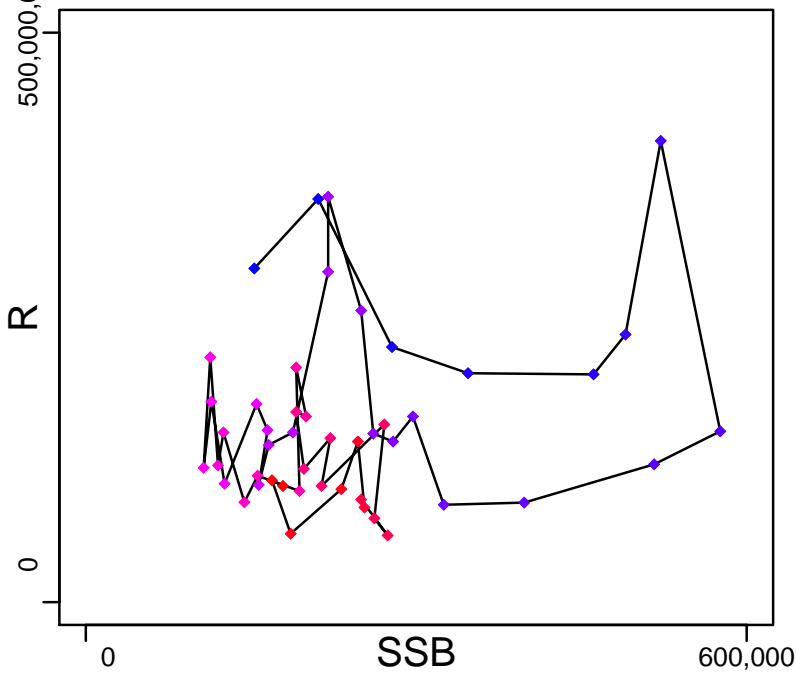
Kobe MSYpref (1964–2016–ICESIMP2016)



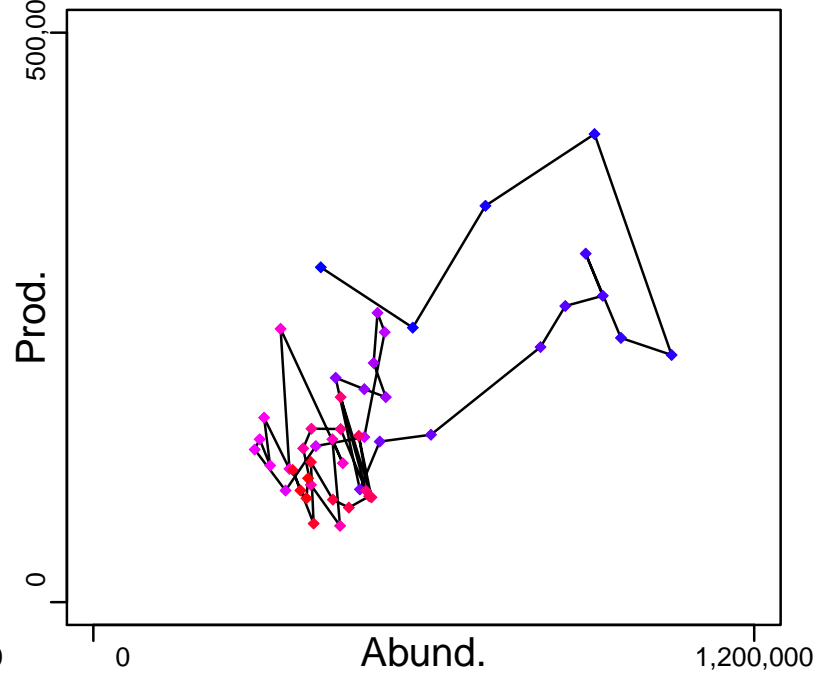
Kobe MGTpref (1964–2016–ICESIMP2016)



Spawner Recruit (1964–2016–ICESIMP2016)



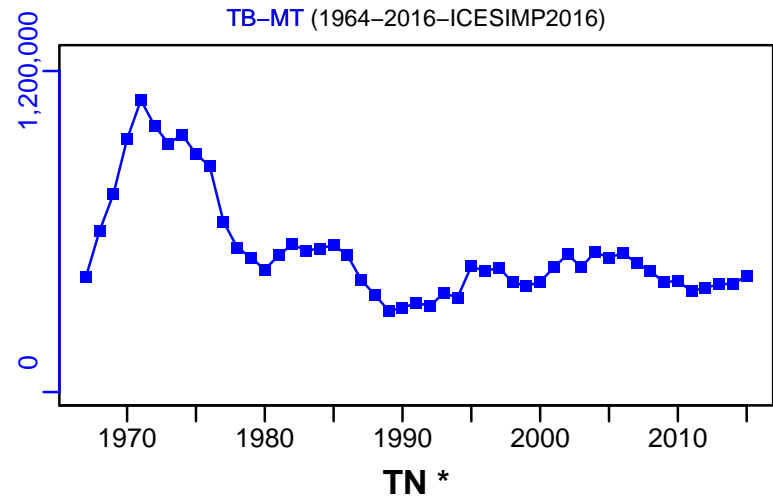
Production (1964–2016–ICESIMP2016)



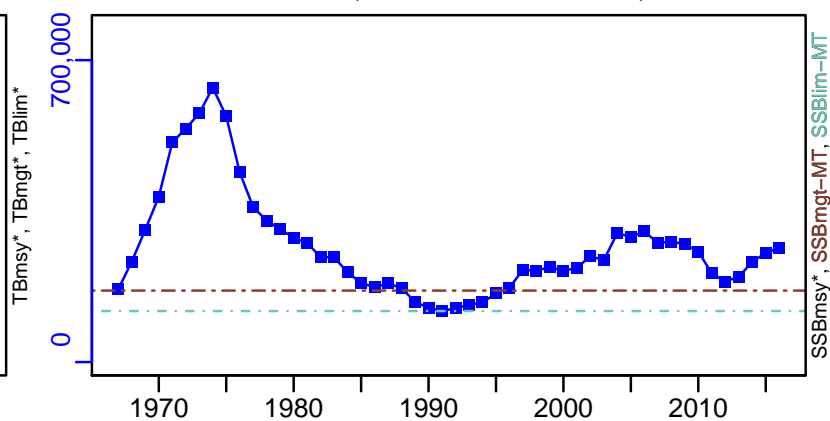
◆ Start Year ◆ End Year \* No Data

# Pollock ICES IIIa, VI and North Sea [POLLNS-VI-IIIa]

TB-MT (1964–2016–ICESIMP2016)



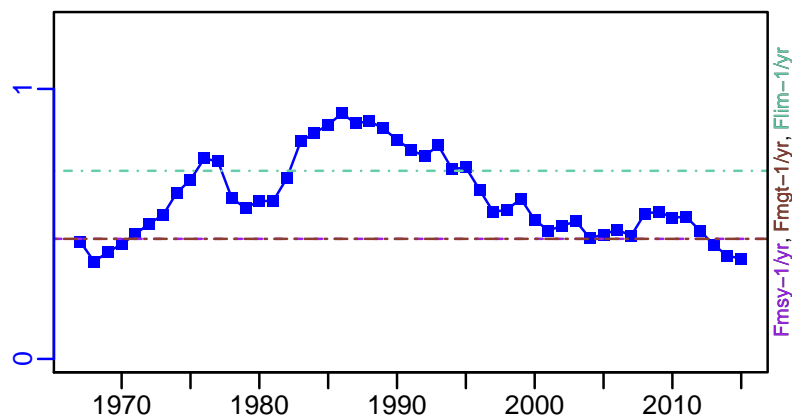
SSB-MT (1964–2016–ICESIMP2016)



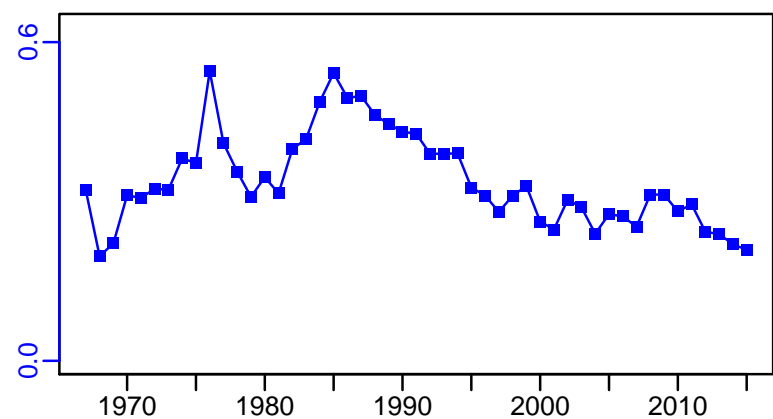
TN \*



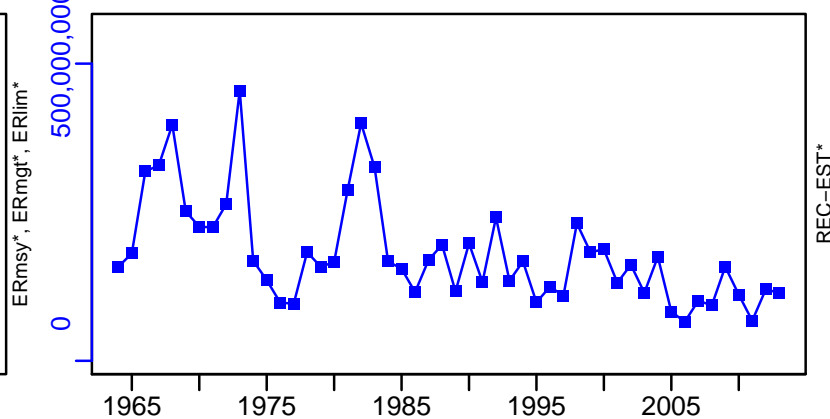
F-1/yr (1964–2016–ICESIMP2016)



ER-calc-ratio (1964–2016–ICESIMP2016)



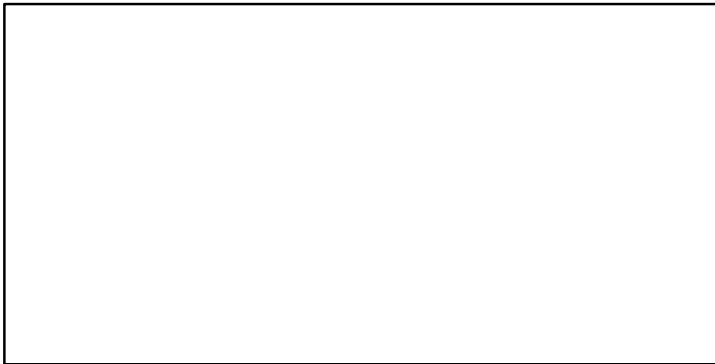
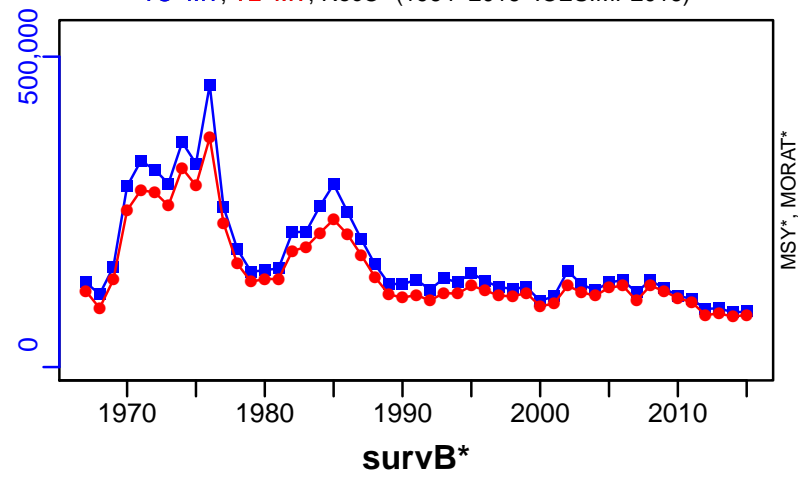
R-E00 (1964–2016–ICESIMP2016)



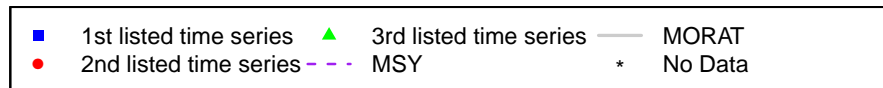
# Pollock ICES IIIa, VI and North Sea [POLLNS-VI-IIIa]

TC-MT, TL-MT, RecC\* (1964-2016-ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Red seabream IX [RBRMIX]

Metadata	
<b>Scientific Name</b>	Pagellus bogaraveo
<b>Current Assess ID</b>	WGDEEP-RBRMIX-1983-2016-ICESIMP2016
<b>Area</b>	IX
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
<b>Asmts in RAM</b>	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	295		
TL	TL-MT	2016	295		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

Red seabream IX [RBRMIX]

TB\*



SSB\*



TN \*



F\*



ER\*

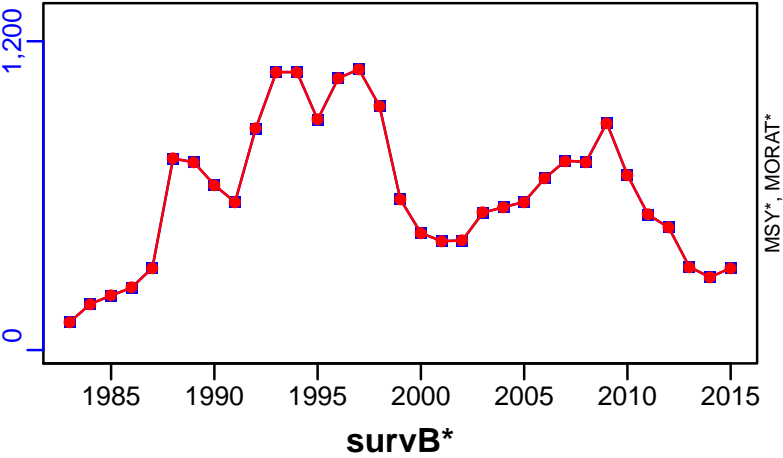


Recruits\*

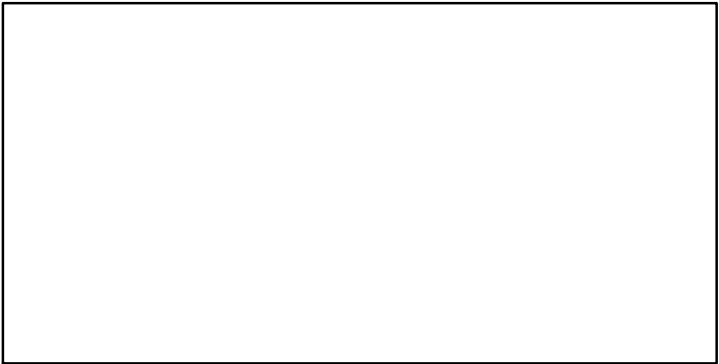


Red seabream IX [RBRMIX]

TC-MT, TL-MT, RecC\* (1983–2016–ICESIMP2016)



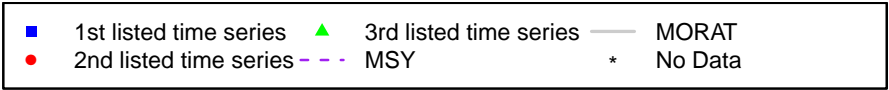
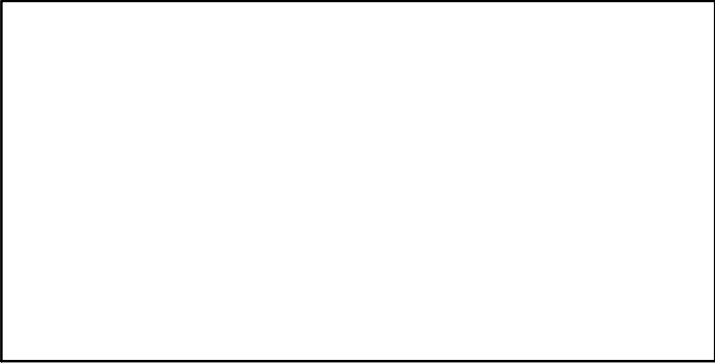
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Red seabream VI-VII-VIII [RBRMVI-VII-VIII]

Metadata	
<b>Scientific Name</b>	Pagellus bogaraveo
<b>Current Assess ID</b>	WGDEEP-RBRMVI-VII-VIII-1948-2016-ICESIMP2016
<b>Area</b>	VI-VII-VIII
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
<b>Asmts in RAM</b>	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	177		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



Red seabream VI–VII–VIII [RBRMVI–VII–VIII]

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year   ◆ End Year   \* No Data

Red seabream VI–VII–VIII [RBRMVI–VII–VIII]

**TB\***



**SSB\***



**TN \***



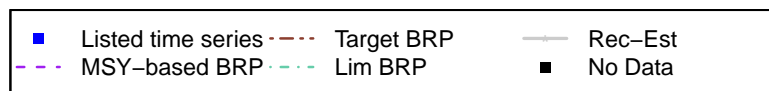
**F\***



**ER\***

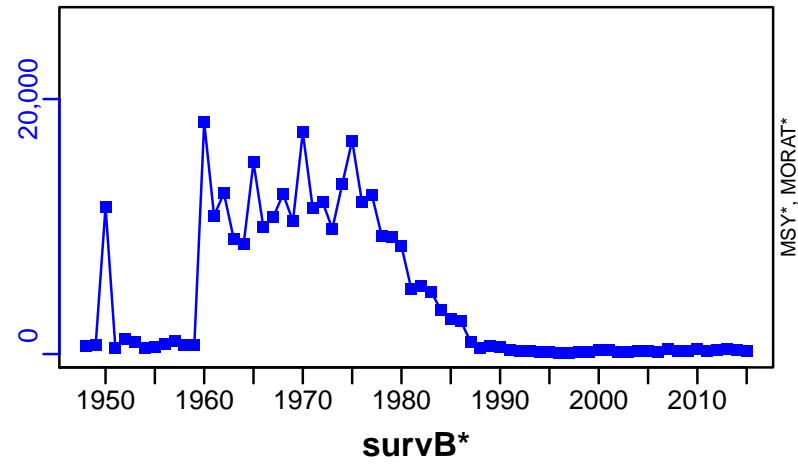


**Recruits\***



Red seabream VI–VII–VIII [RBRMVI–VII–VIII]

TL–MT, TC\*, RecC\* (1948–2016–ICESIMP2016)



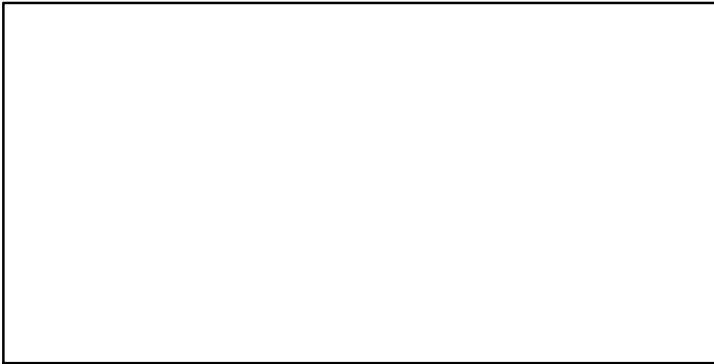
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



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

## Red seabream Azores Grounds [RBRMX]

Metadata	
<b>Scientific Name</b>	Pagellus bogaraveo
<b>Current Assess ID</b>	WGDEEP-RBRMX-1980-2016-ICESIMP2016
<b>Area</b>	Azores Grounds
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
<b>Asmts in RAM</b>	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	701		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

Red seabream Azores Grounds [RBRMX]

TB\*



SSB\*



TN \*



F\*



ER\*



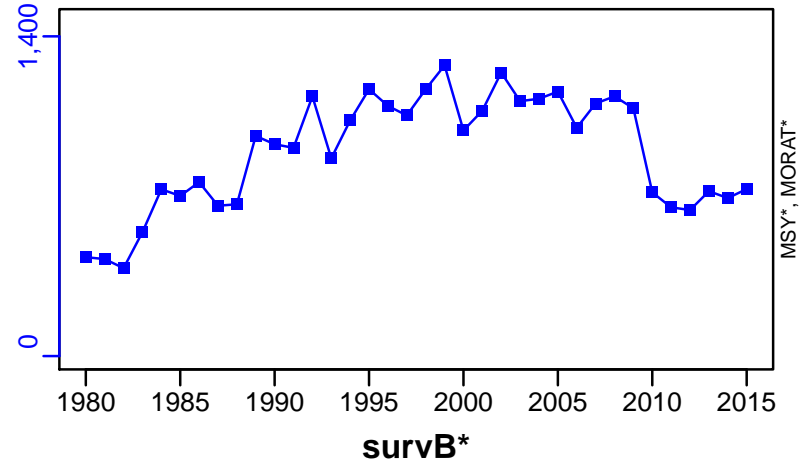
Recruits\*



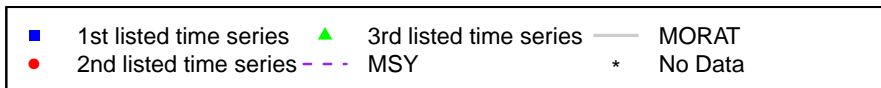
# Red seabream Azores Grounds [RBRMX]

TL-MT, TC\*, RecC\* (1980–2016–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



**Beaked Redfish Areas V-XII-XIV and NAFO Subareas 1-2  
[REDDEEPSH1-2-V-XII-XIV]**

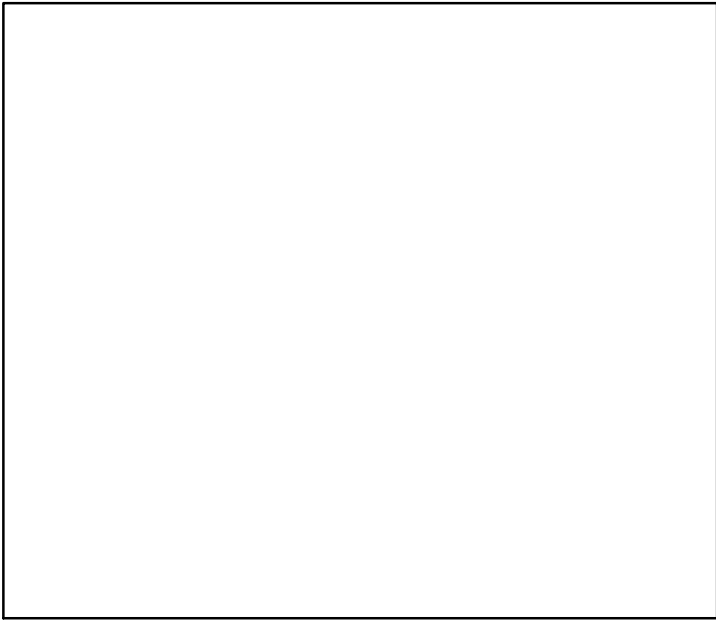
Metadata	
<b>Scientific Name</b>	Sebastes mentella
<b>Current Assess ID</b>	NWWG-REDDEEPSH1-2-V-XII-XIV-1982-2016-ICESIMP2016
<b>Area</b>	Areas V-XII-XIV and NAFO Subareas 1-2
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	North-Western Working Group
<b>Asmts in RAM</b>	2016

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

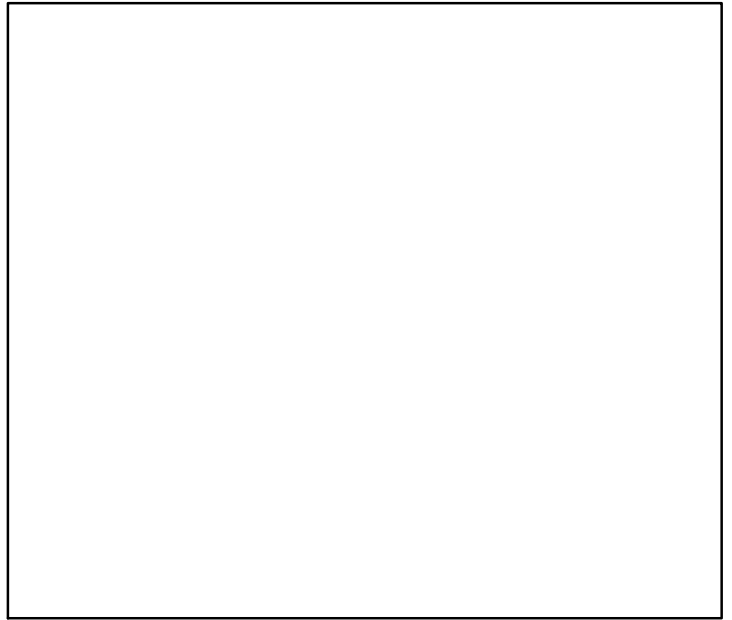
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	5600		
TL	TL-MT	2016	5600		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



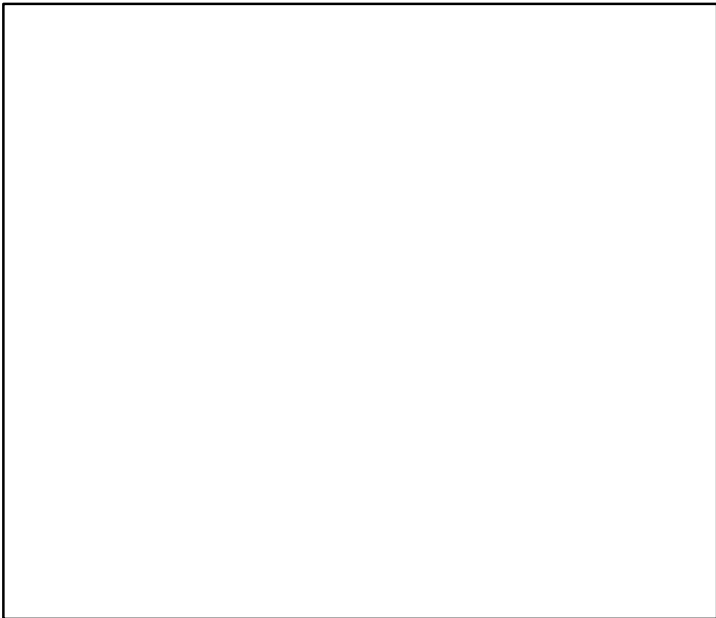
**Kobe MSY\***



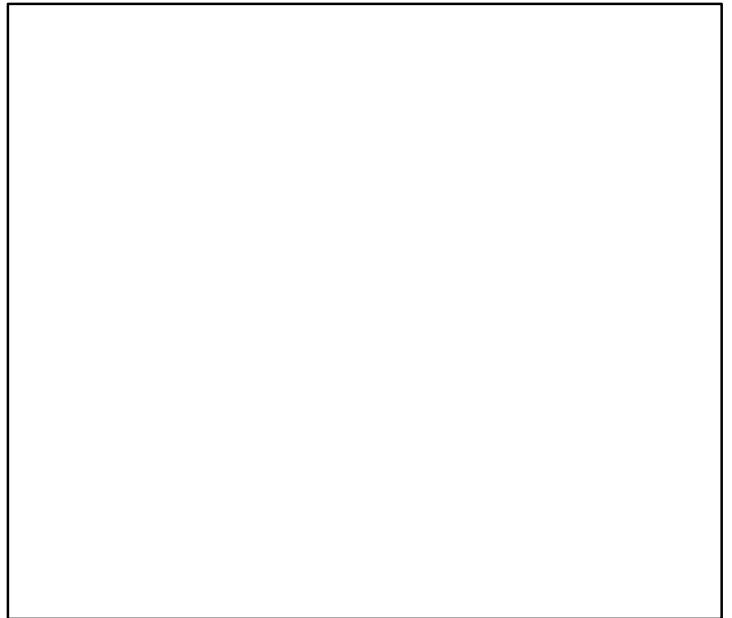
**Kobe MGT\***



**Spawner Recruit\***



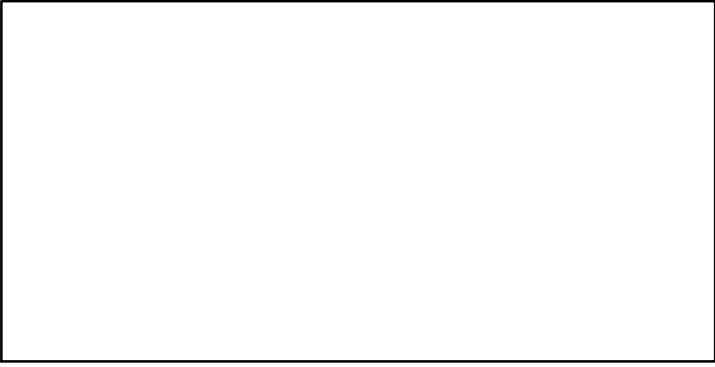
**Production\***



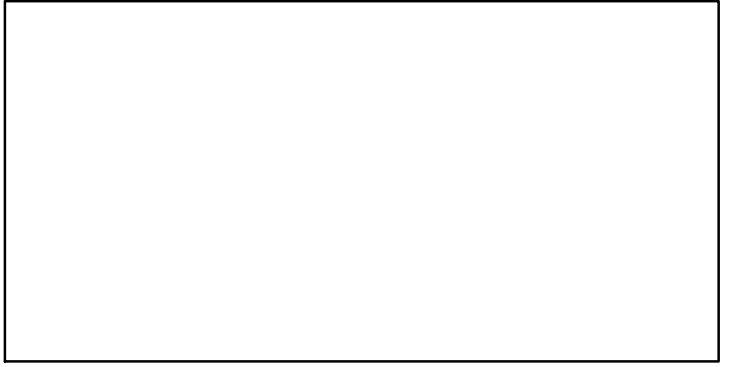
◆ Start Year ◆ End Year \* No Data

Beaked Redfish Areas V–XII–XIV and NAFO Subareas 1–2 [REDDEEPSH1–2–V–XII–XIV]

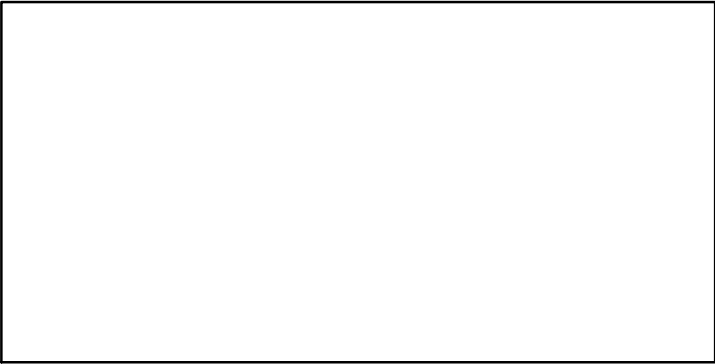
**TB\***



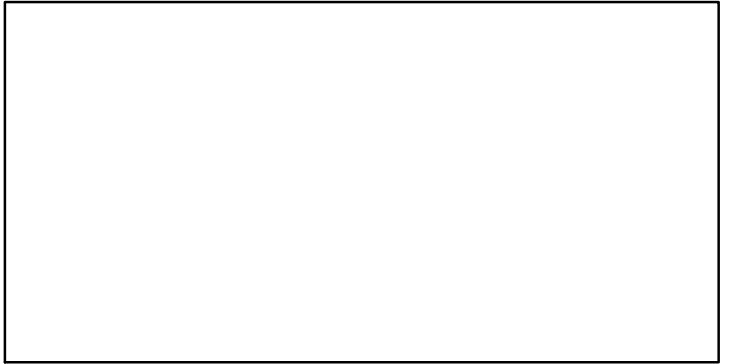
**SSB\***



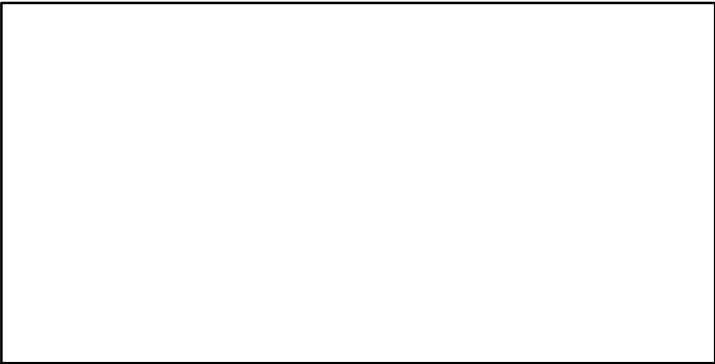
**TN \***



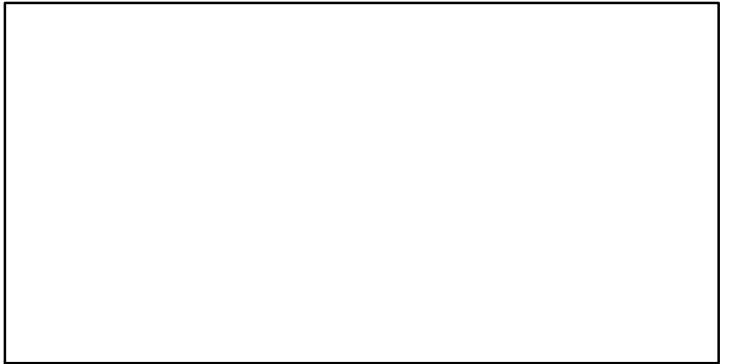
**F\***



**ER\***

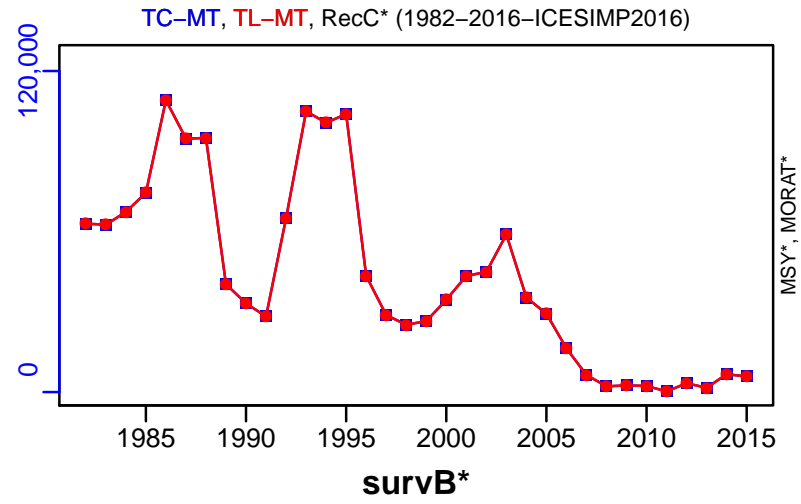


**Recruits\***



Beaked Redfish Areas V–XII–XIV and NAFO Subareas 1–2 [REDDEEPSH1–2–V–XII–XIV]

TC–MT, TL–MT, RecC\* (1982–2016–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



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

## Beaked Redfish Southeast Greenland [REDDEEPXIVb]

Metadata	
Scientific Name	Sebastes mentella
Current Assess ID	NWWG-REDDEEPXIVb-1974-2016-ICESIMP2016
Area	Southeast Greenland
Management Authority	International Council for the Exploration of the Sea
Assessor	North-Western Working Group
Asmts in RAM	2016

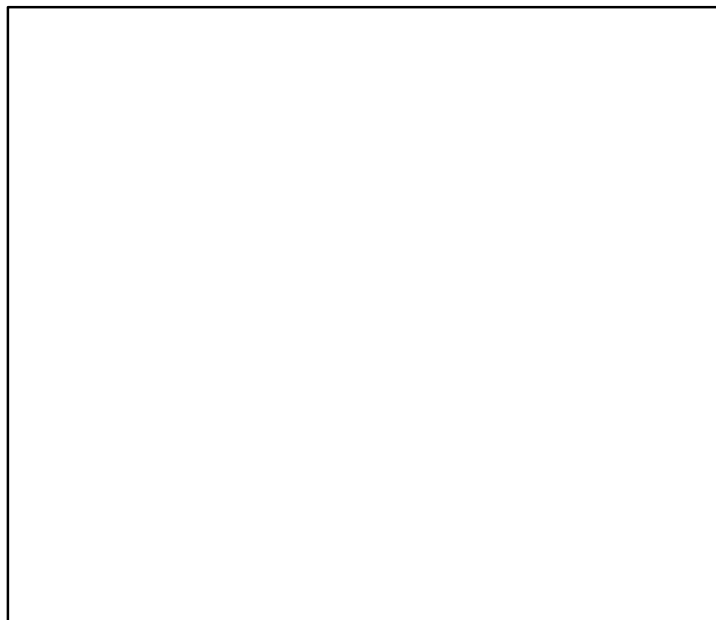
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	5980		
TL	TL-MT	2016	5980		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

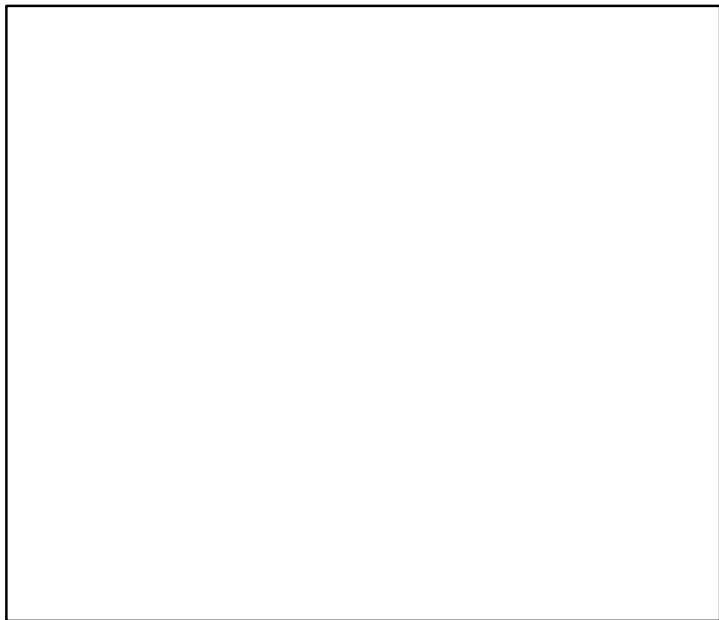
**Kobe MSY\***



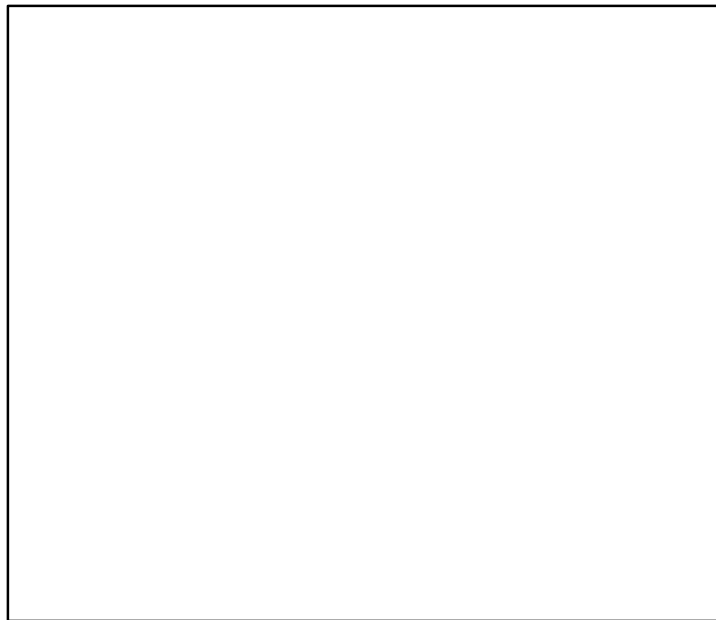
**Kobe MGT\***



**Spawner Recruit\***



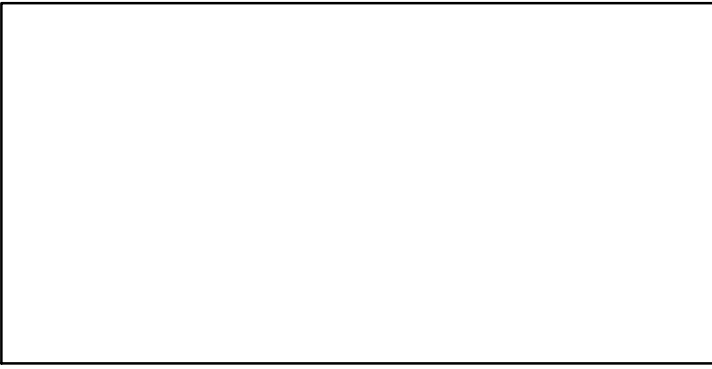
**Production\***



◆ Start Year ◆ End Year \* No Data

Beaked Redfish Southeast Greenland [REDDEEPXIVb]

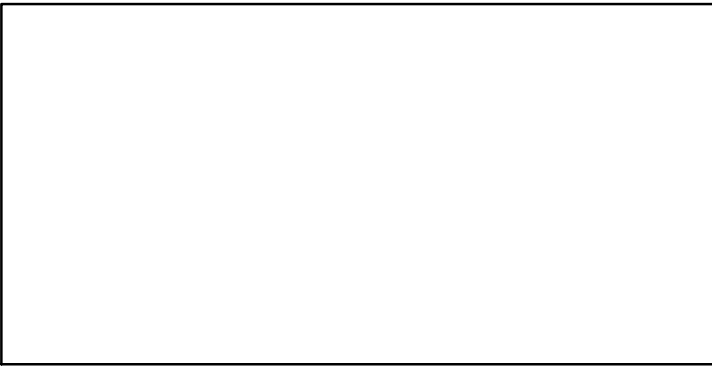
**TB\***



**SSB\***



**TN \***



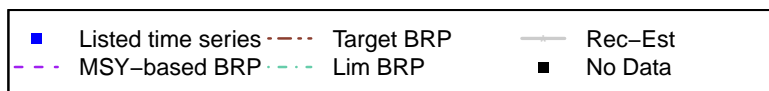
**F\***



**ER\***

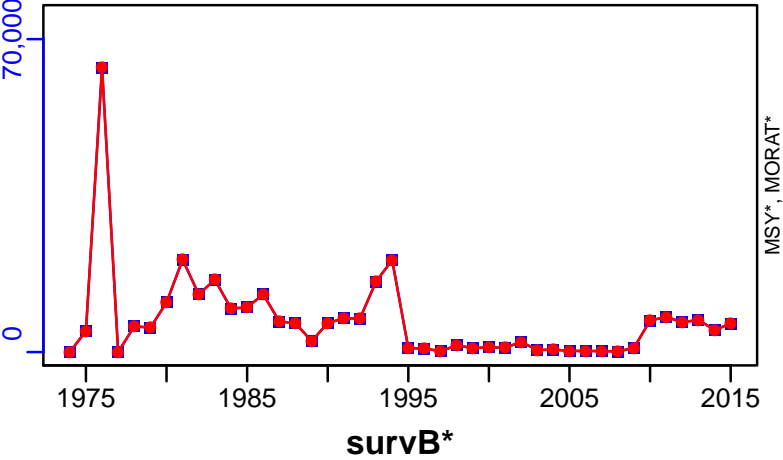


**Recruits\***



Beaked Redfish Southeast Greenland [REDDEEPXIVb]

TC-MT, TL-MT, RecC\* (1974–2016–ICESIMP2016)



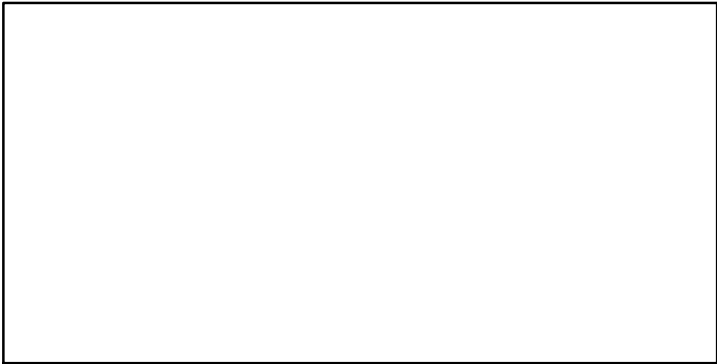
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Redfish species NAFO 1 [REDFISHSPP1]

Metadata	
<b>Scientific Name</b>	Sebastes spp
<b>Current Assess ID</b>	NAFO-SC-REDFISHSPP1-1965-2004-PREFONTAINE
<b>Area</b>	West Greenland
<b>Management Authority</b>	Northwest Atlantic Fisheries Organization
<b>Assessor</b>	NAFO Scientific Council
<b>Asmts in RAM</b>	2004

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2004	500		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

Redfish species NAFO 1 [REDFISHSPP1]

TB\*



SSB\*



TN \*



F\*



ER\*

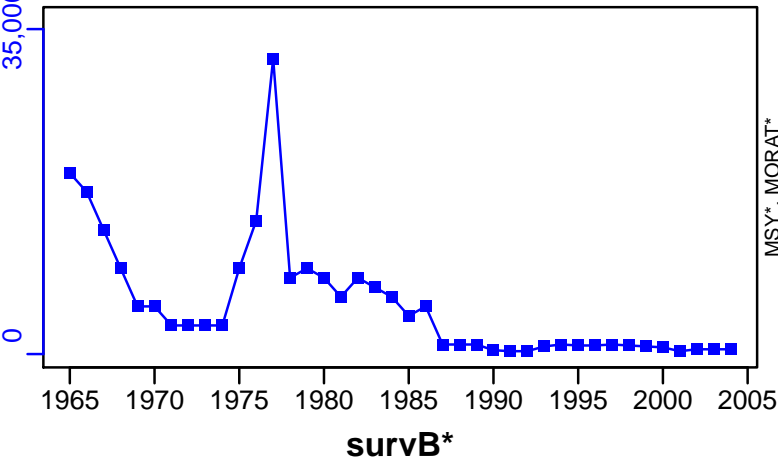


Recruits\*



Redfish species NAFO 1 [REDFISHSPP1]

TC-MT, TL\*, RecC\* (1965-2004-PREFONTAINE)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Roughhead grenadier Northeast Atlantic [RHGRENNEATL]

Metadata	
<b>Scientific Name</b>	Macrourus berglax
<b>Current Assess ID</b>	WGDEEP-RHGRENNEATL-1990-2015-ICESIMP2016
<b>Area</b>	Northeast Atlantic
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
<b>Asmts in RAM</b>	2015

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	654		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



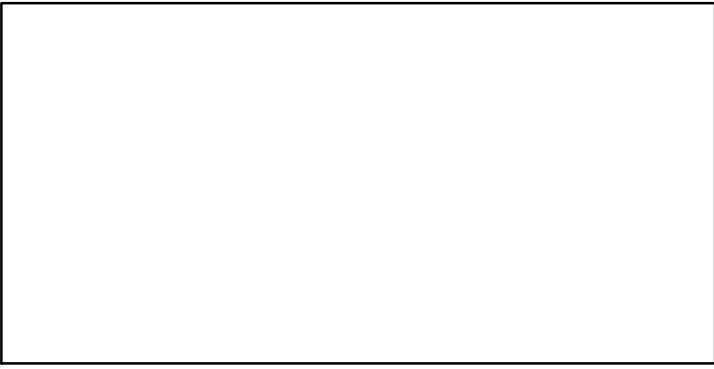
Production\*



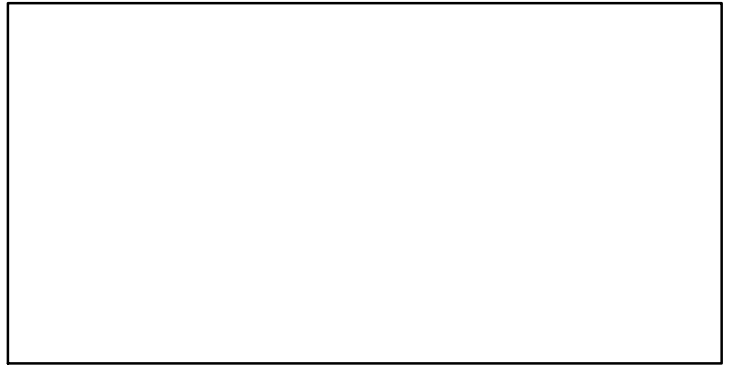
◆ Start Year   ◆ End Year   \* No Data

Roughhead grenadier Northeast Atlantic [RHGRENNEATL]

**TB\***



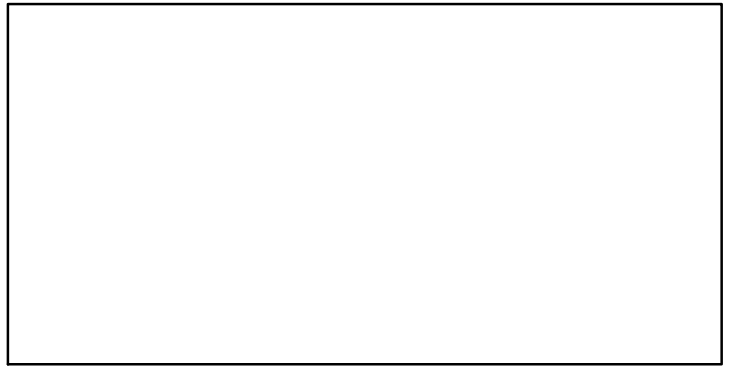
**SSB\***



**TN \***



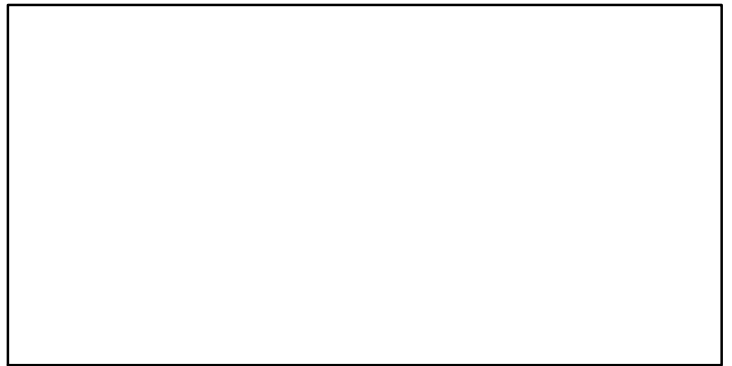
**F\***



**ER\***



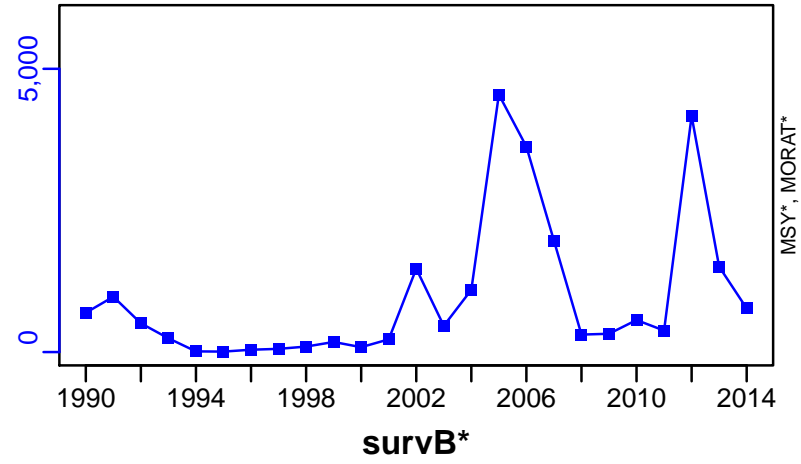
**Recruits\***



# Roughhead grenadier Northeast Atlantic [RHGRENNEATL]

TL-MT, TC\*, RecC\* (1990–2015–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Roundnose grenadier I-II-IV-Va2-VIII-IX-XIVab2 [RNGENI-II-IV-Va2-VIII-IX-XIVab2]

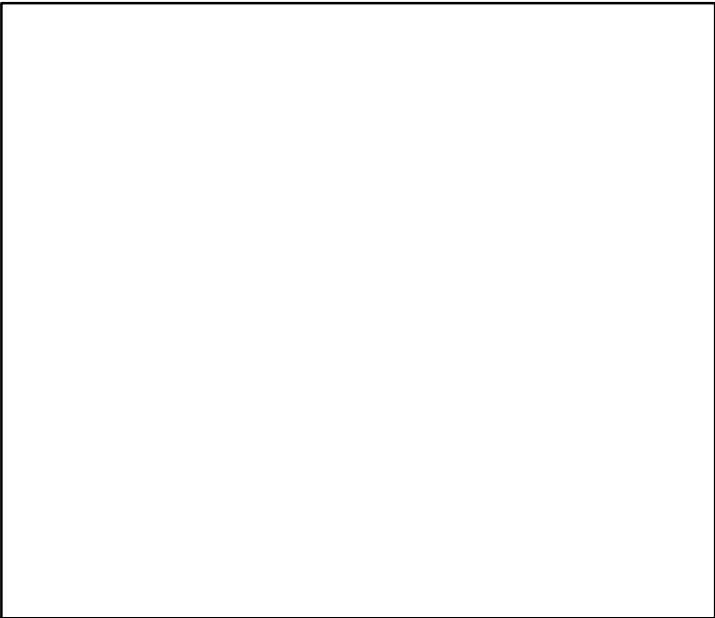
Metadata	
<b>Scientific Name</b>	Coryphaenoides rupestris
<b>Current Assess ID</b>	WGDEEP-RNGENI-II-IV-Va2-VIII-IX-XIVab2-1990-2015-ICESIMP2016
<b>Area</b>	I-II-IV-Va2-VIII-IX-XIVab2
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
<b>Asmts in RAM</b>	2015

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	51		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



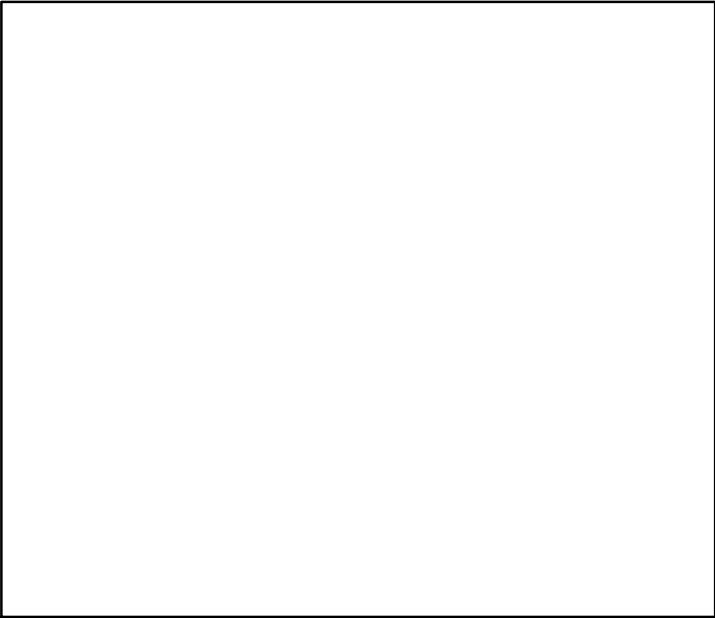
Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

TB\*



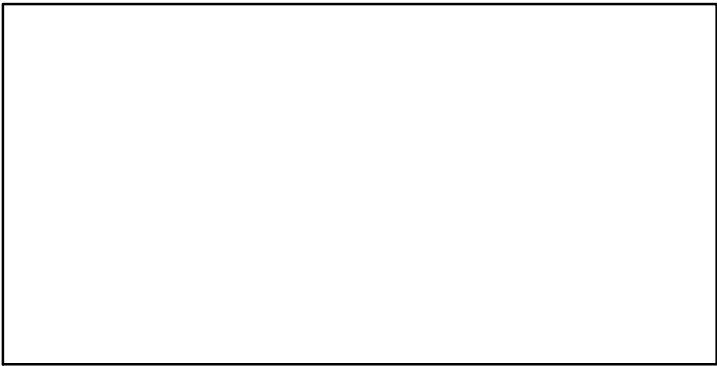
SSB\*



TN \*



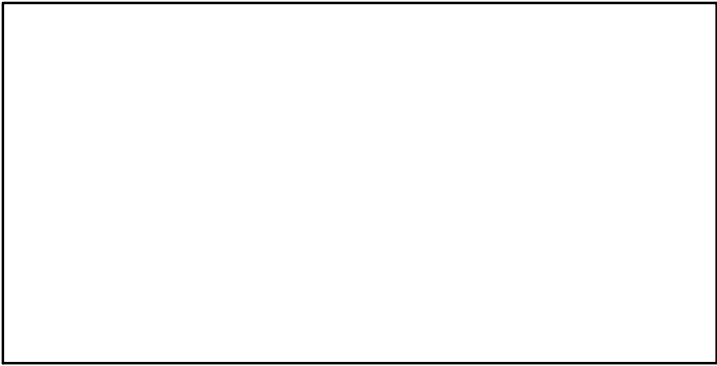
F\*



ER\*

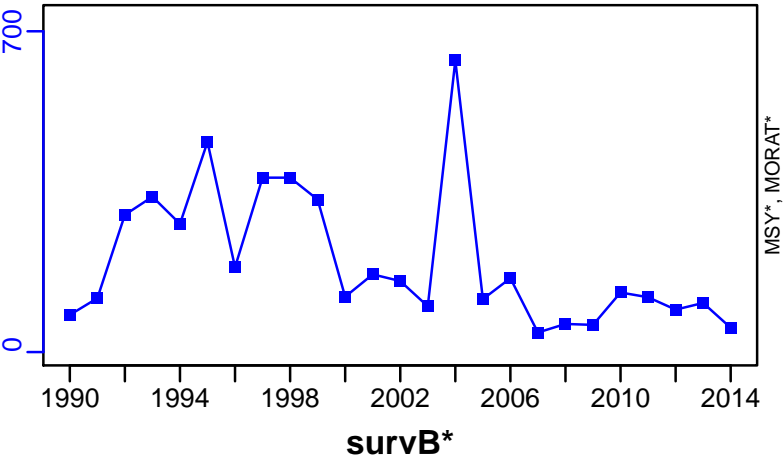


Recruits\*



Roundnose grenadier I-II-IV-Va2-VIII-IX-XIVab2 [RNGENI-II-IV-Va2-VIII-IX-XIVab2]

TL-MT, TC\*, RecC\* (1990-2015-ICESIMP2016)



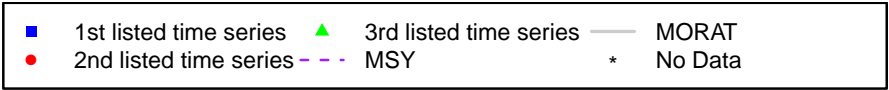
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Roundnose grenadier Mid-Atlantic Ridge [RNGENMATLR]

Metadata	
<b>Scientific Name</b>	Coryphaenoides rupestris
<b>Current Assess ID</b>	WGDEEP-RNGENMATLR-1980-2015-ICESIMP2016
<b>Area</b>	Mid-Atlantic Ridge (Xb, XIIc, Va1, XIIa1, XIVb1)
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
<b>Asmts in RAM</b>	2015

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	3480		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



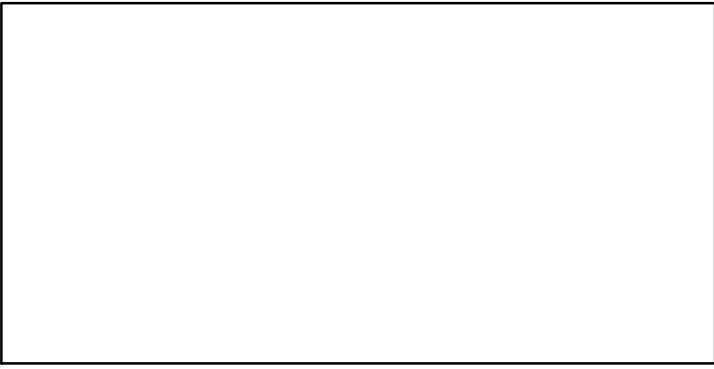
**Production\***



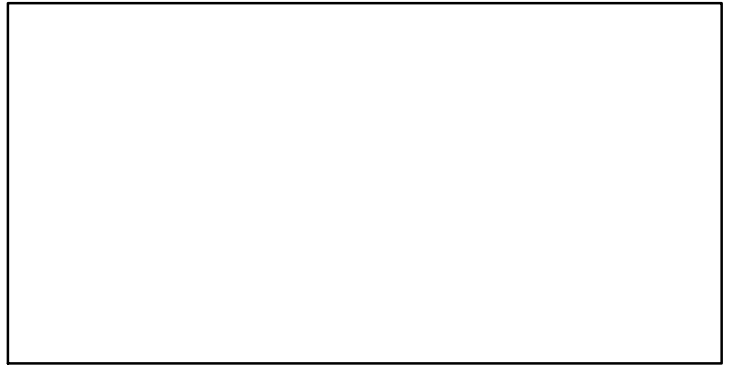
◆ Start Year   ◆ End Year   \* No Data

Roundnose grenadier Mid-Atlantic Ridge [RNGENMATLR]

**TB\***



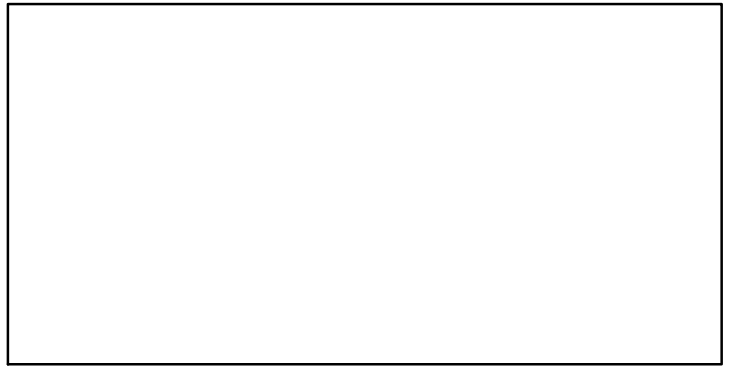
**SSB\***



**TN \***



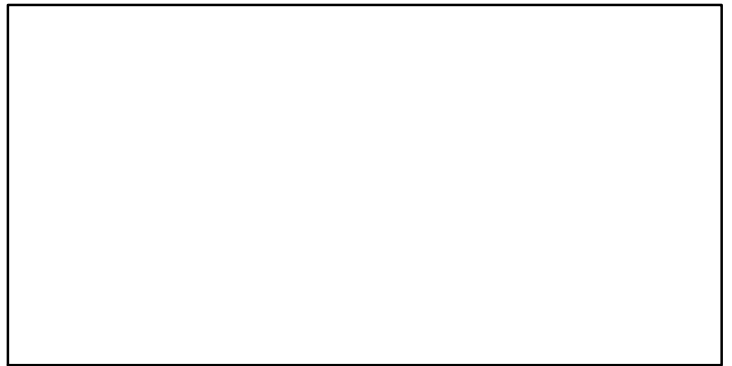
**F\***



**ER\***



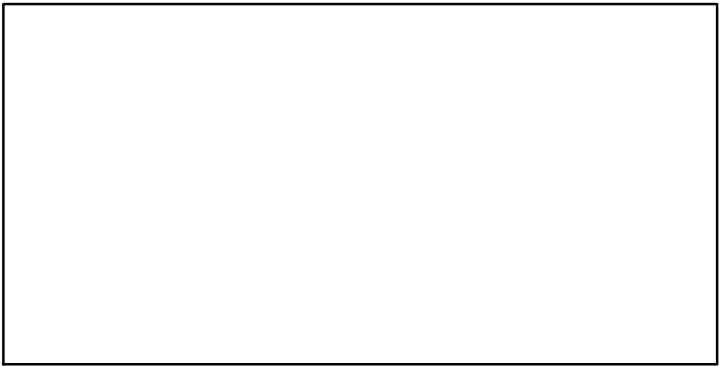
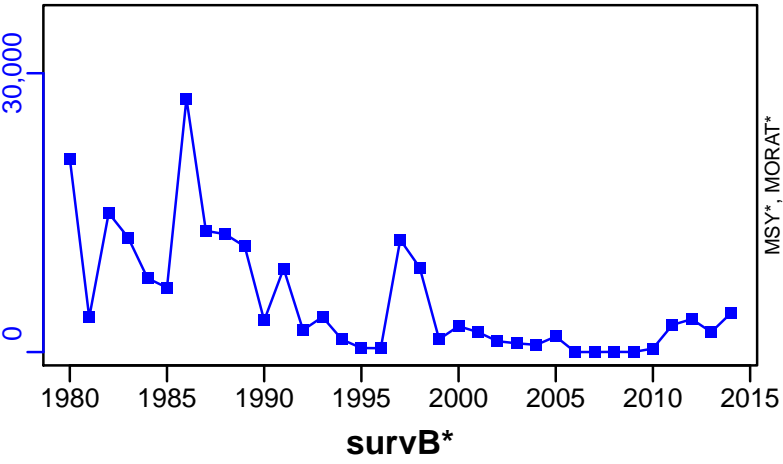
**Recruits\***



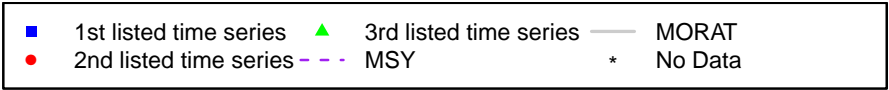
# Roundnose grenadier Mid-Atlantic Ridge [RNGENMATLR]

TL-MT, TC\*, RecC\* (1980-2015-ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Roundnose grenadier Vb-VI-VII-XIIb [RNGENVb-VI-VII-XIIb]

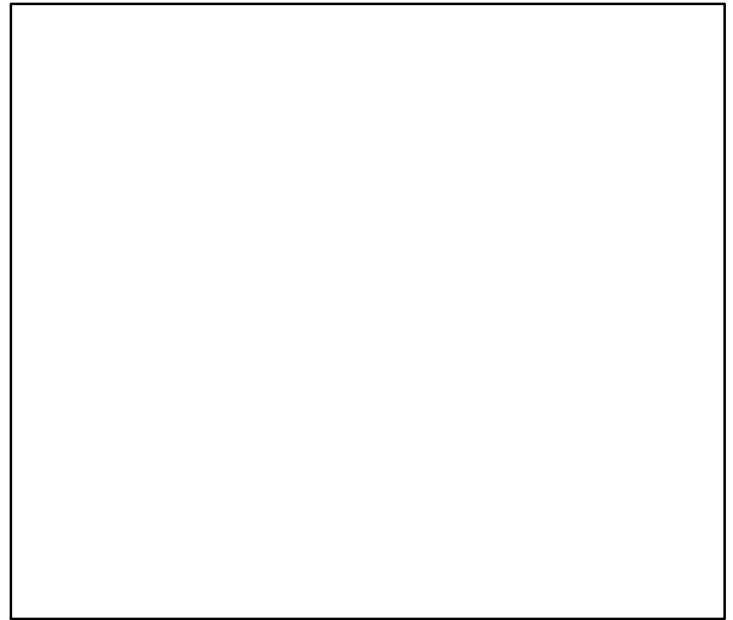
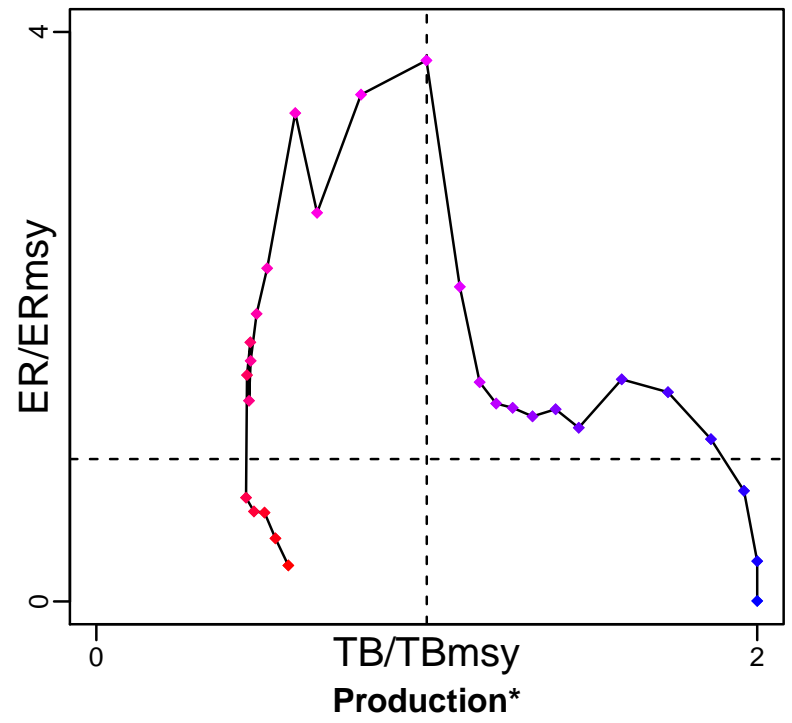
Metadata	
<b>Scientific Name</b>	Coryphaenoides rupestris
<b>Current Assess ID</b>	WGDEEP-RNGENVb-VI-VII-XIIb-1988-2016-ICESIMP2016
<b>Area</b>	Vb-VI-VII-XIIb
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
<b>Asmts in RAM</b>	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	1360		
TB/TBmsy	TBdivTBmsy-dimensionless	2016	0.58		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	ERdivERmsy-dimensionless	2016	0.25		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



Kobe MGTpref (1988–2016–ICESIMP2016)



441

**TB\***



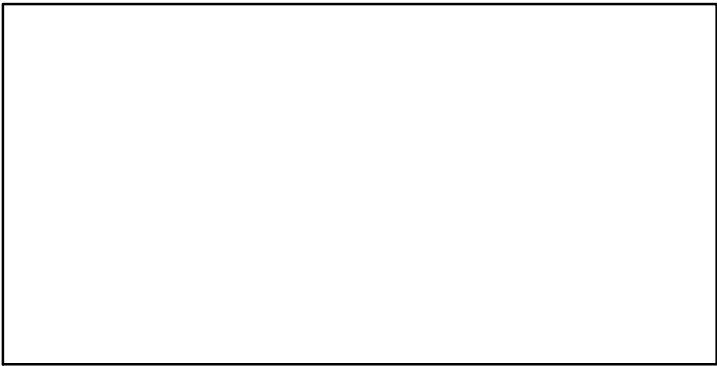
**SSB\***



**TN \***



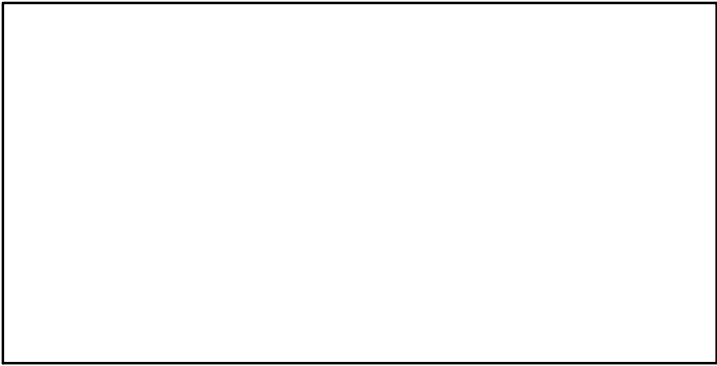
**F\***



**ER\***

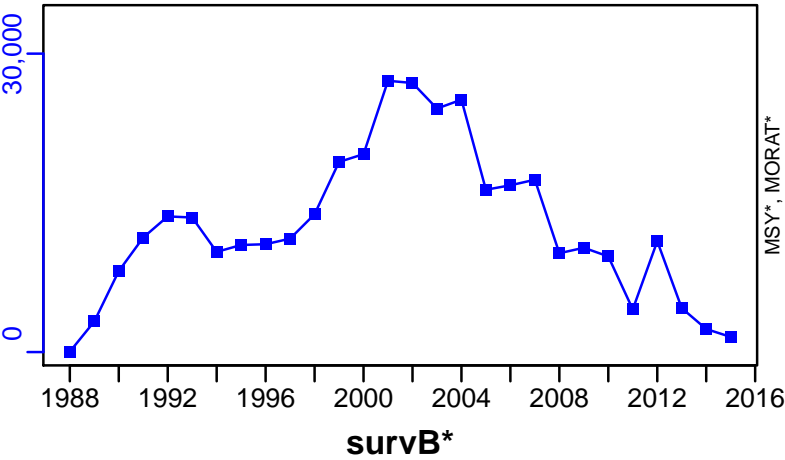


**Recruits\***



Roundnose grenadier Vb–VI–VII–XIlb [RNGENVb–VI–VII–XIlb]

TL–MT, TC\*, RecC\* (1988–2016–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Roundnose grenadier Kattegat and Skagerrak [RNGRENIIIa]

Metadata	
<b>Scientific Name</b>	Coryphaenoides rupestris
<b>Current Assess ID</b>	WGDEEP-RNGRENIIIa-1988-2016-ICESIMP2016
<b>Area</b>	Kattegat and Skagerrak
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources
<b>Asmts in RAM</b>	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2016	2		
TL	TL-MT	2016	1		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Roundnose grenadier Kattegat and Skagerrak [RNGRENIIIa]

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



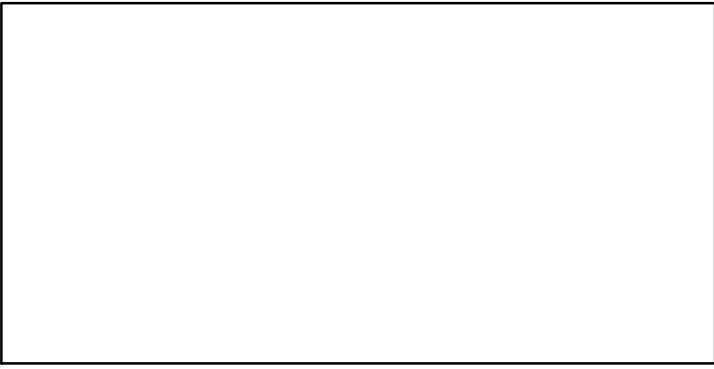
**Production\***



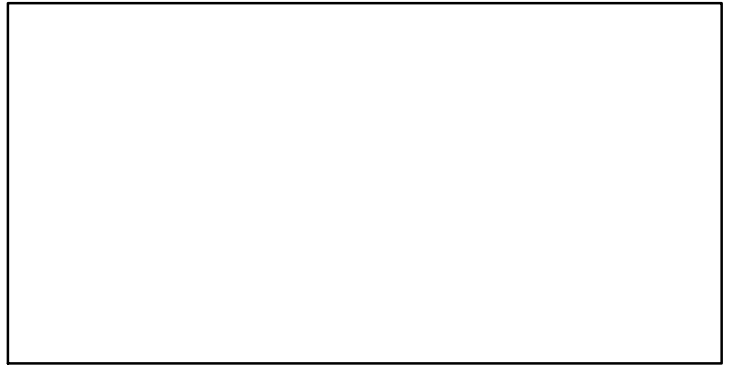
◆ Start Year   ◆ End Year   \* No Data

Roundnose grenadier Kattegat and Skagerrak [RNGRENIIIa]

**TB\***



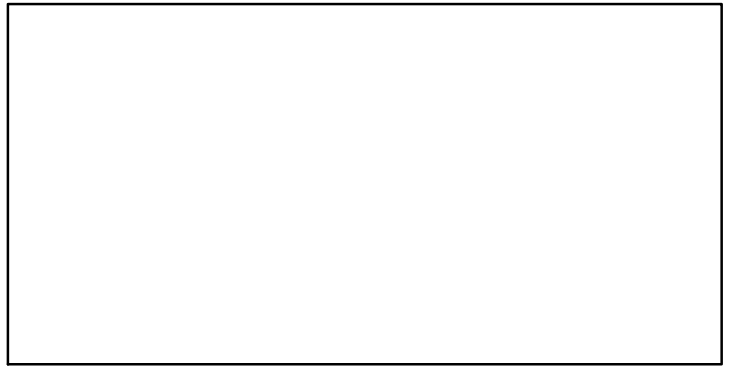
**SSB\***



**TN \***



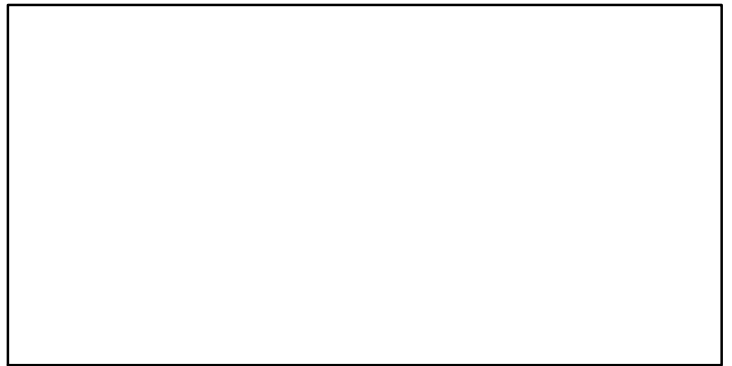
**F\***



**ER\***



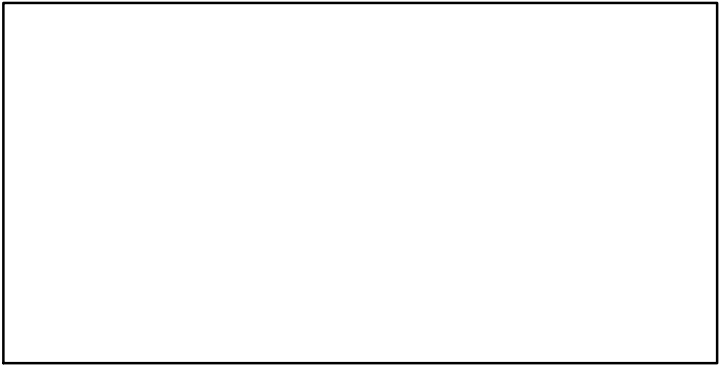
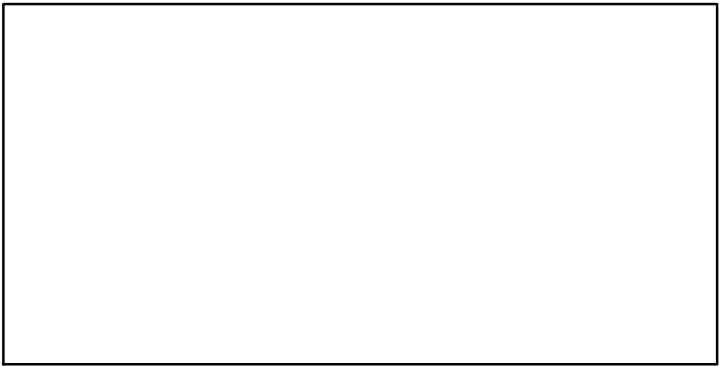
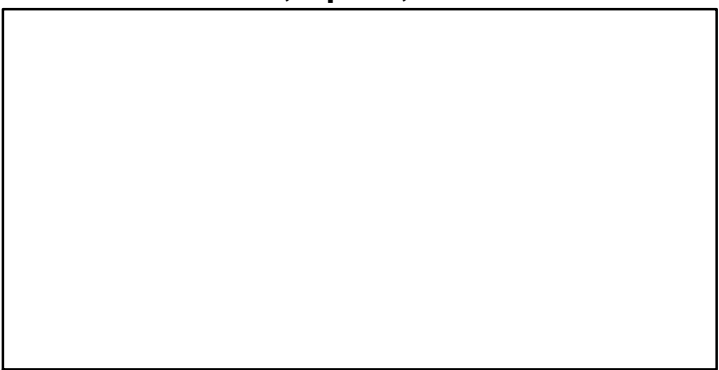
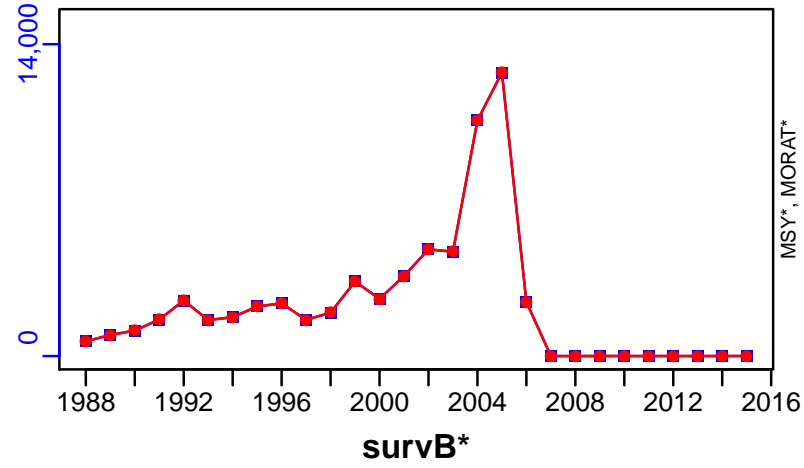
**Recruits\***



# Roundnose grenadier Kattegat and Skagerrak [RNGRENIIIa]

TC-MT, TL-MT, RecC\* (1988–2016–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



## European pilchard ICES VIIIc-IXa [SARDPVIIIc-IXa]

Metadata	
<b>Scientific Name</b>	Sardina pilchardus
<b>Current Assess ID</b>	WGHANSA-SARDPVIIIc-IXa-1978-2016-ICESIMP2016
<b>Area</b>	VIIIc-IXa
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Southern Horse Mackerel, Anchovy and Sardine
<b>Asmts in RAM</b>	2013, 2014, 2015, 2016, 2011

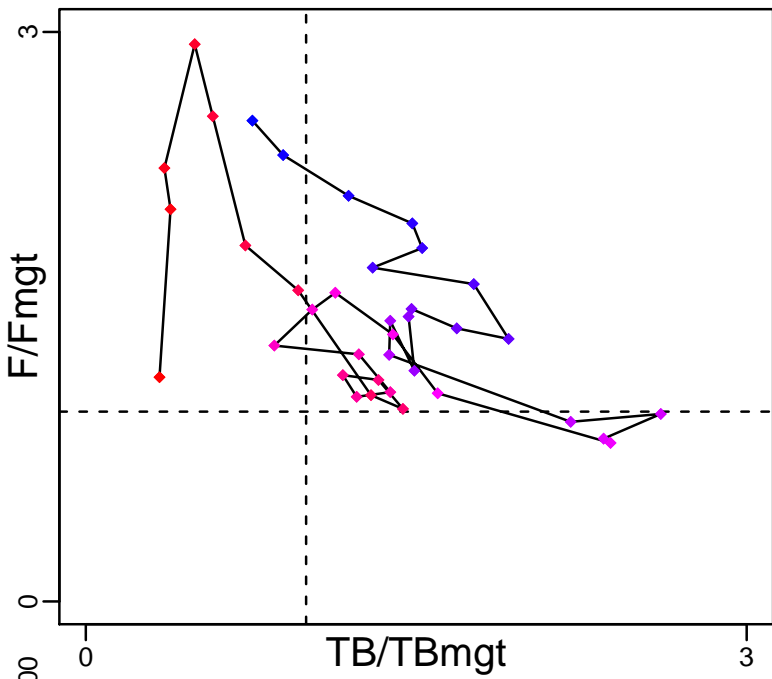
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	TBmgt-MT	2016	368,400
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	Fmgt-1/yr	2015	0.23
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2011	0.33
<b>TBlim</b>	TBlim-MT	2015	135,000
<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	199,000	-	-
<b>SSB</b>	SSB-MT	2011	174,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$4.01 \times 10^9$	-	0
<b>F</b>	F-1/yr	2016	0.14	-	2 to 5
<b>ER</b>	ER-calc-ratio	2016	0.12	-	-
<b>TC</b>	TC-MT	2016	21,000		
<b>TL</b>	TL-MT	2016	21,000		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	TB-MT/TBmgt-MT	2016	0.54		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	1.18		
<b>ER/ERmgt</b>	-	-	-		

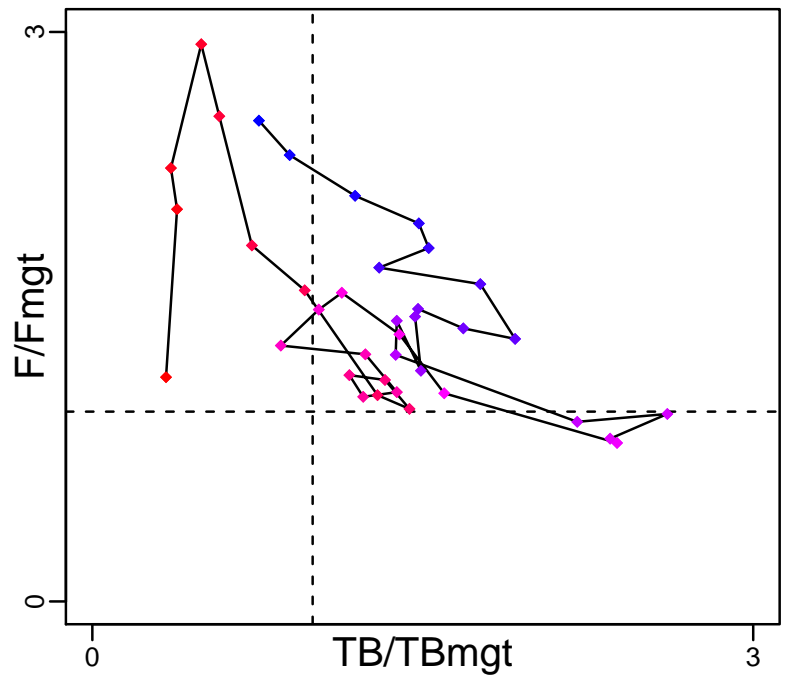


# European pilchard ICES VIIIc-IXa [SARDPVIIIc-IXa]

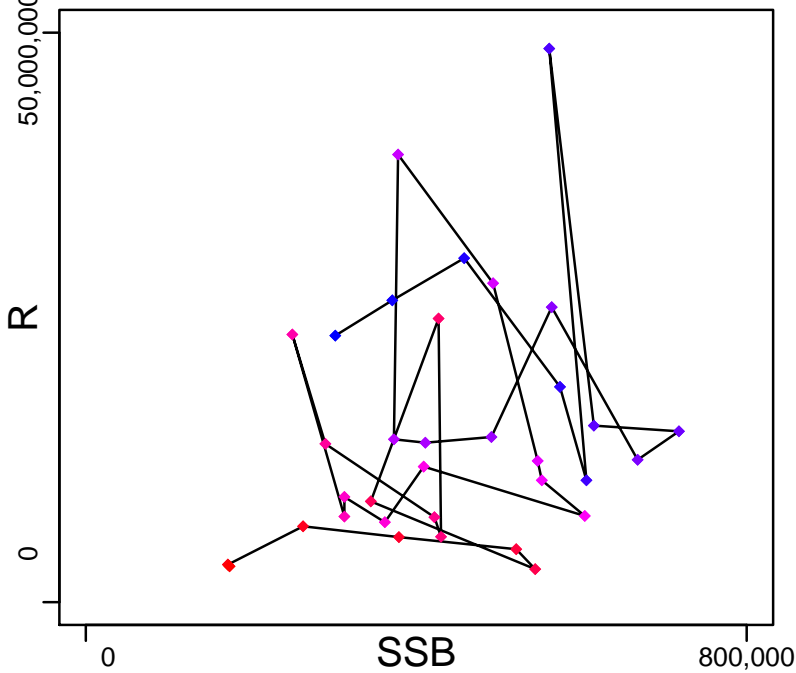
Kobe MSYpref (1978–2015–ICESIMP2016)



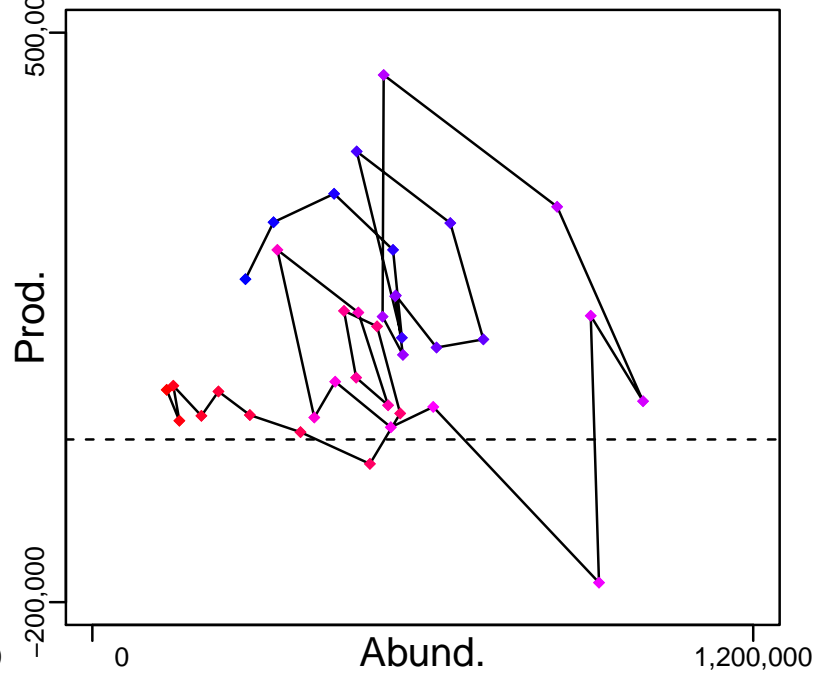
Kobe MGTpref (1978–2015–ICESIMP2016)



Spawner Recruit (1978–2011–NEUBAUER)



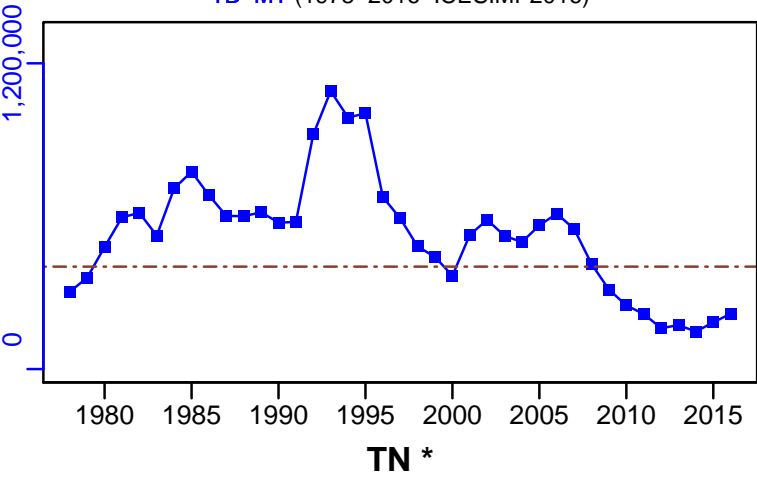
Production (1978–2016–ICESIMP2016)



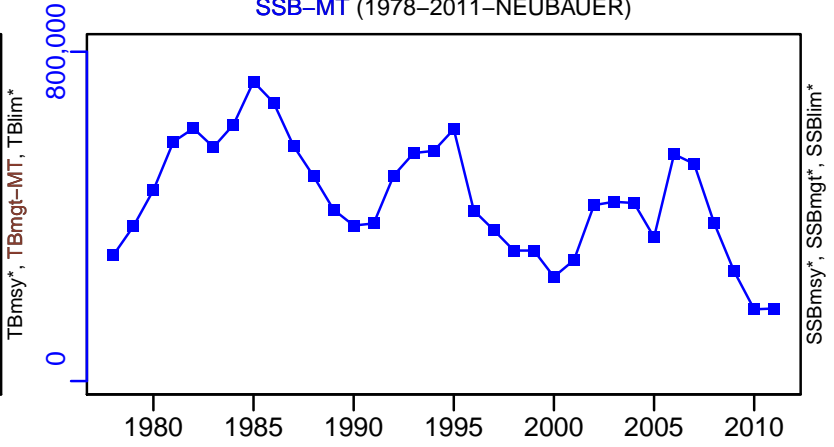
◆ Start Year ◆ End Year \* No Data

# European pilchard ICES VIIIc-IXa [SARDPVIIIc-IXa]

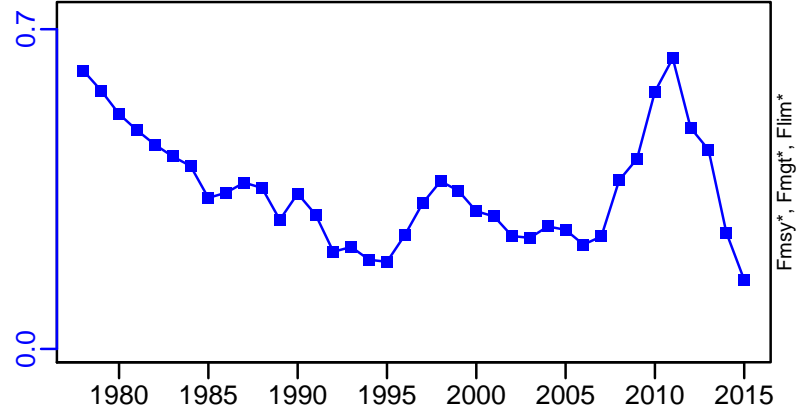
TB-MT (1978-2016-ICESIMP2016)



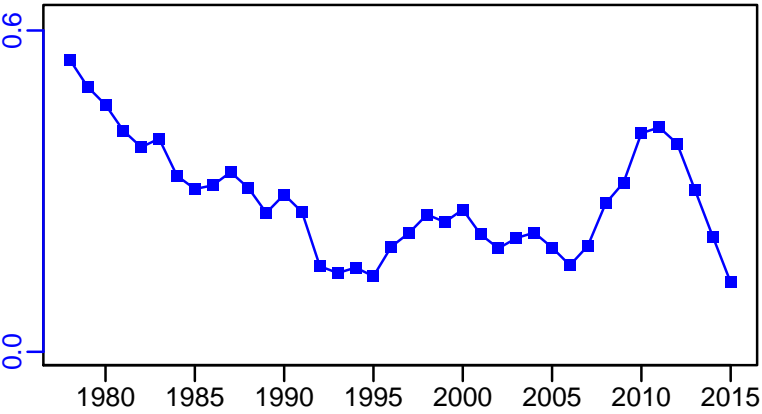
SSB-MT (1978-2011-NEUBAUER)



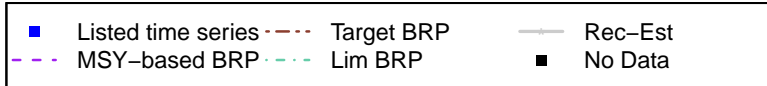
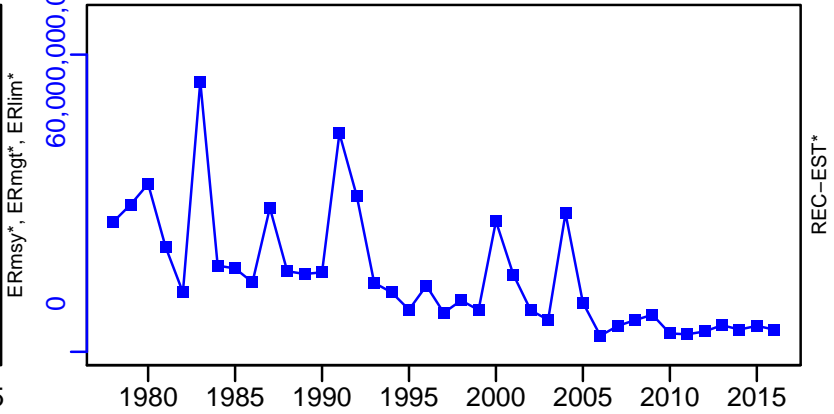
F-1/yr (1978-2016-ICESIMP2016)



ER-calc-ratio (1978-2016-ICESIMP2016)

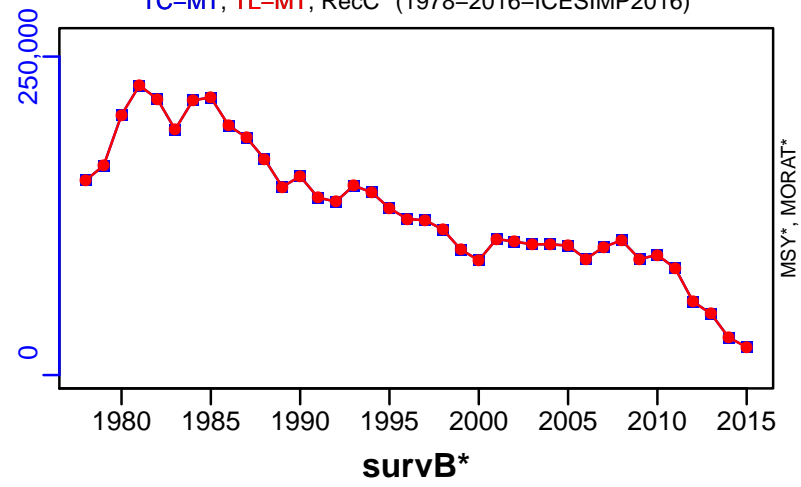


R-E00 (1978-2016-ICESIMP2016)



European pilchard ICES VIIIc–IXa [SARDPVIIIc–IXa]

TC–MT, TL–MT, RecC\* (1978–2016–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



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

## Sand eel SA 1 [SEELNSSA1]

Metadata	
<b>Scientific Name</b>	Ammodytes marinus
<b>Current Assess ID</b>	HAWG-SEELNSSA1-1983-2016-ICESIMP2016
<b>Area</b>	Sandeel Area 1
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Herring Assessment Working Group for the Area South of 62N
<b>Asmts in RAM</b>	2013, 2014, 2015, 2016, 2011

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2016	215,000
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	TBlim-MT	2011	160,000
SSBlim	SSBlim-MT	2016	160,000
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2015	351,000	-	-
SSB	SSB-MT	2016	238,000	-	-
TN	-	-	-	-	-
R	R-E00	2016	$1.95 \times 10^{11}$	-	0
F	F-1/yr	2016	0.38	-	1 to 2
ER	ER-calc-ratio	2016	0.32	-	-
TC	TC-MT	2016	162,000		
TL	TL-MT	2016	162,000		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2016	1.11		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

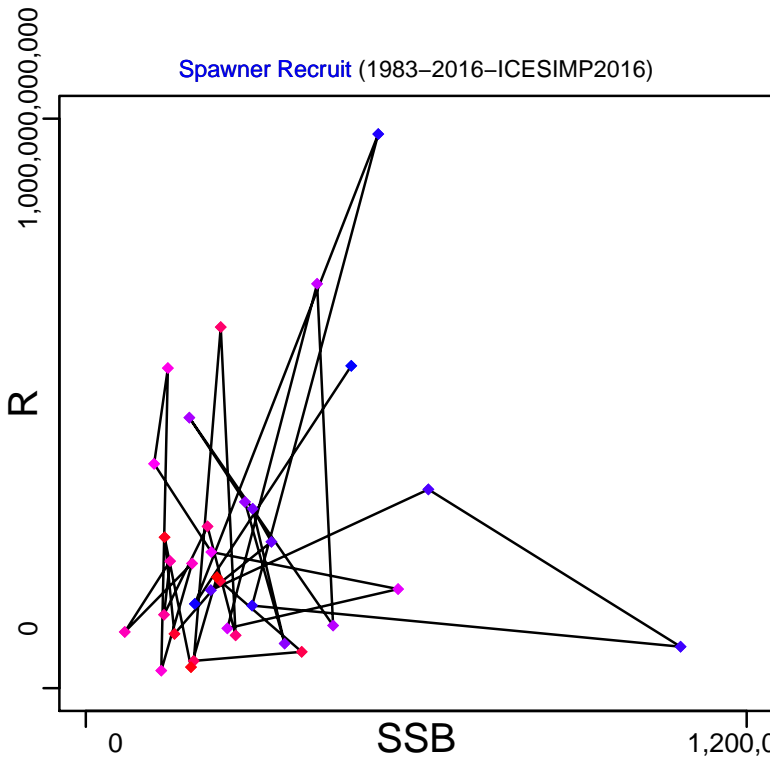
Kobe MSY\*



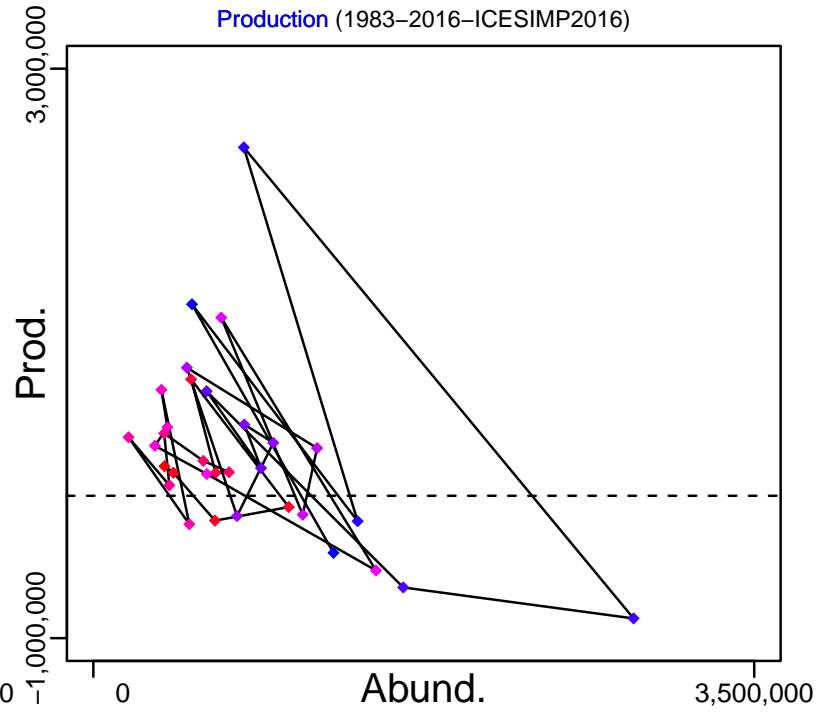
Kobe MGT\*



Spawner Recruit (1983–2016–ICESIMP2016)



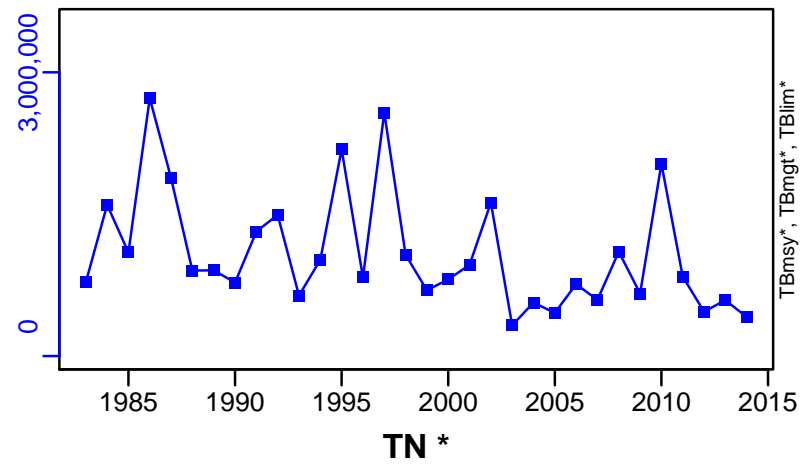
Production (1983–2016–ICESIMP2016)



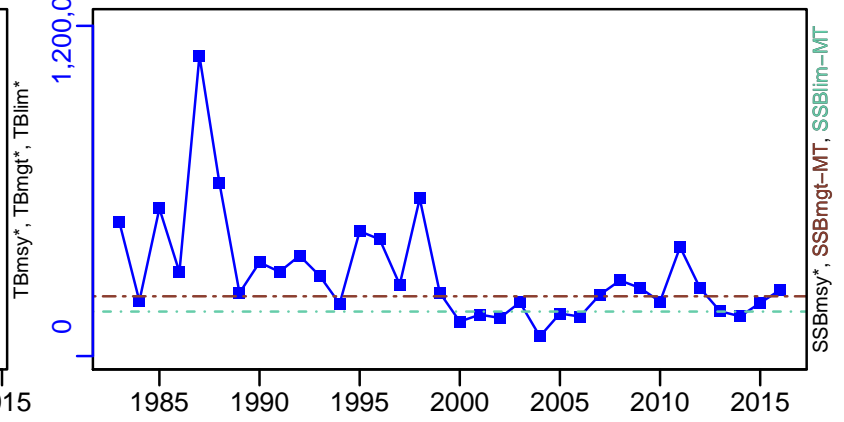
◆ Start Year ◆ End Year \* No Data

# Sand eel SA 1 [SEELNSSA1]

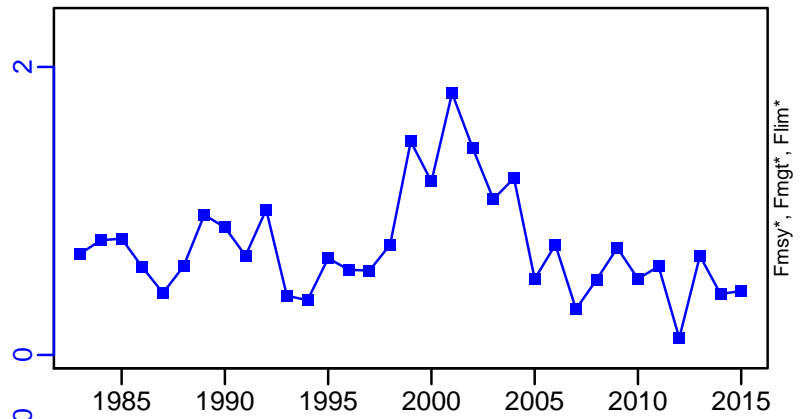
TB-MT (1983–2015–ICESIMP2016)



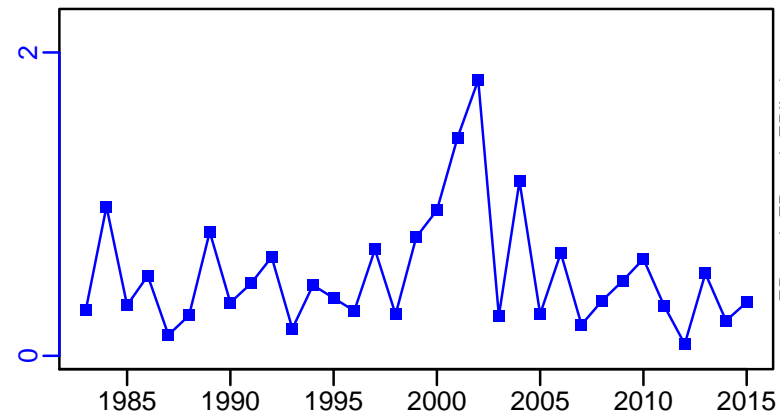
SSB-MT (1983–2016–ICESIMP2016)



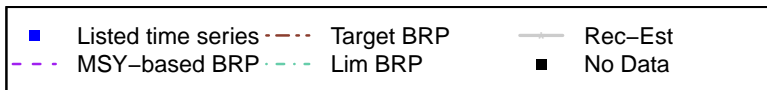
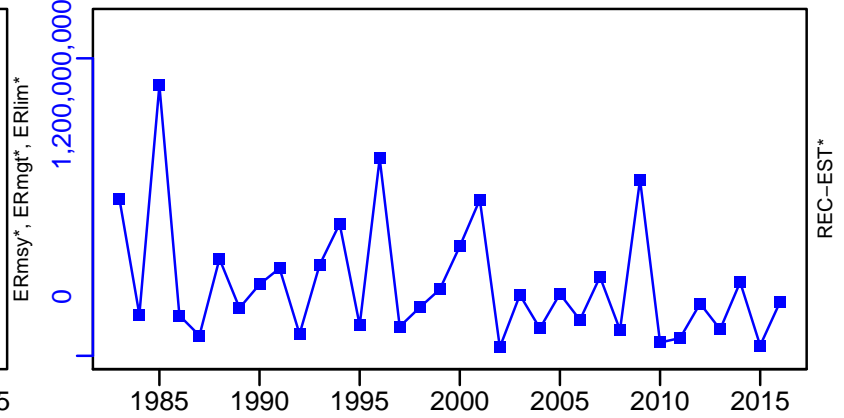
F-1/yr (1983–2016–ICESIMP2016)



ER-calc-ratio (1983–2016–ICESIMP2016)

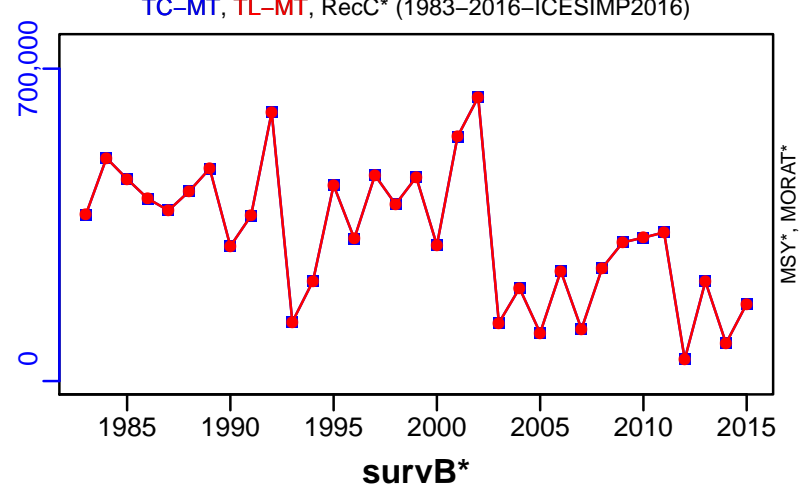


R-E00 (1983–2016–ICESIMP2016)



Sand eel SA 1 [SEELNSSA1]

TC-MT, TL-MT, RecC\* (1983–2016–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Sand eel SA 2 [SEELNSSA2]

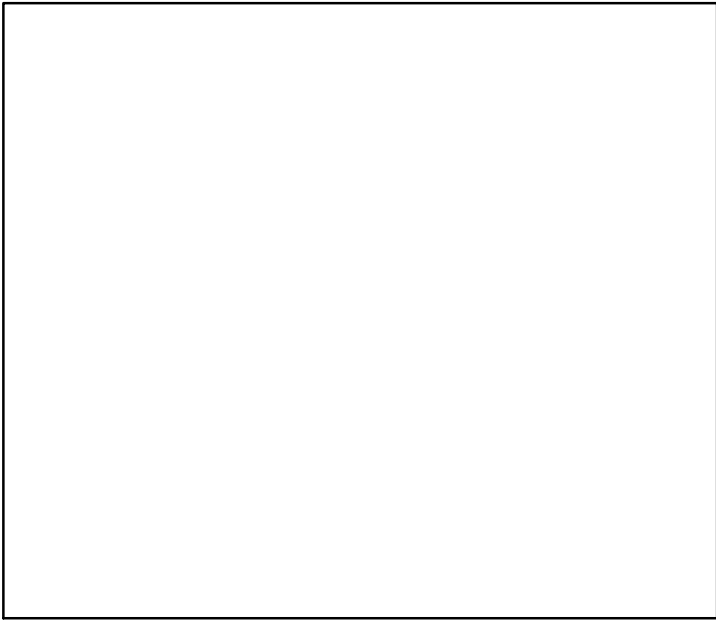
Metadata	
<b>Scientific Name</b>	Ammodytes marinus
<b>Current Assess ID</b>	HAWG-SEELNSSA2-1983-2016-ICESIMP2016
<b>Area</b>	Sandeel Area 2
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Herring Assessment Working Group for the Area South of 62N
<b>Asmts in RAM</b>	2013, 2014, 2015, 2016, 2011

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	$1 \times 10^5$
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	TBlim-MT	2011	70,000
<b>SSBlim</b>	SSBlim-MT	2016	70,000
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	174,000	-	-
<b>SSB</b>	SSB-MT	2016	76,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$3.92 \times 10^{10}$	-	0
<b>F</b>	F-1/yr	2016	0.18	-	1 to 2
<b>ER</b>	ER-calc-ratio	2016	0.09	-	-
<b>TC</b>	TC-MT	2016	21,000		
<b>TL</b>	TL-MT	2016	21,000		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	0.76		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		



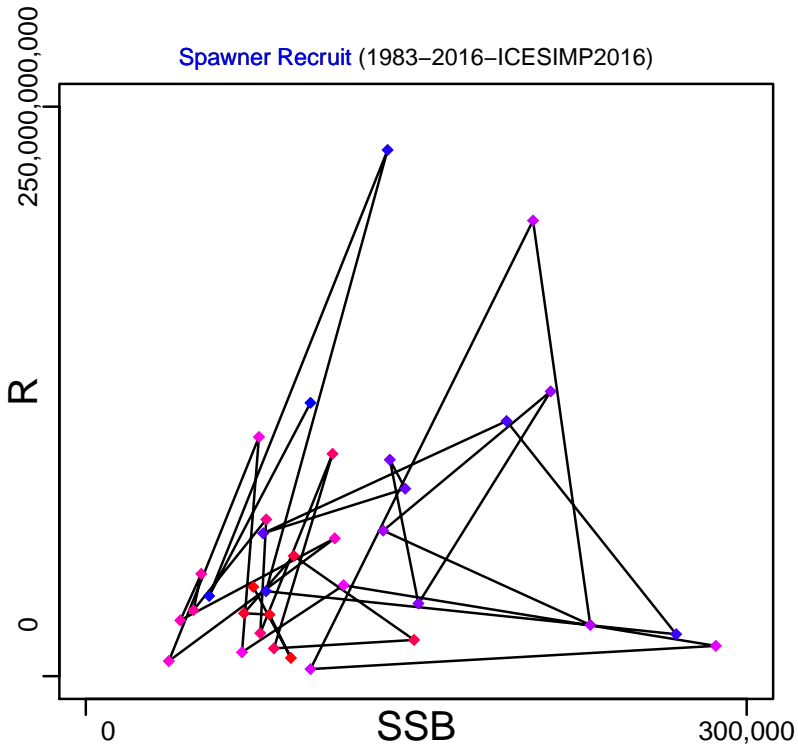
Kobe MSY\*



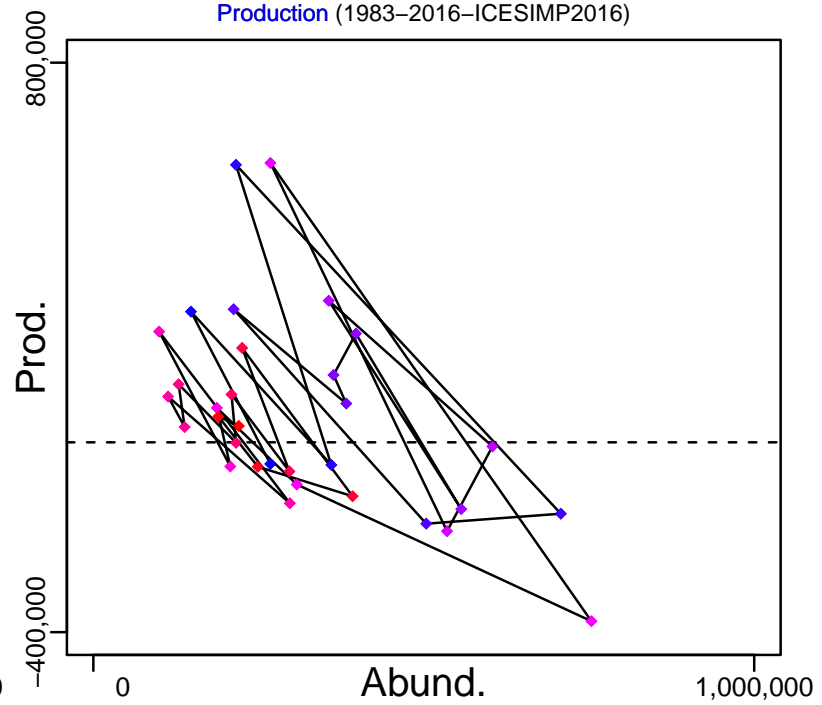
Kobe MGT\*



Spawner Recruit (1983–2016–ICESIMP2016)



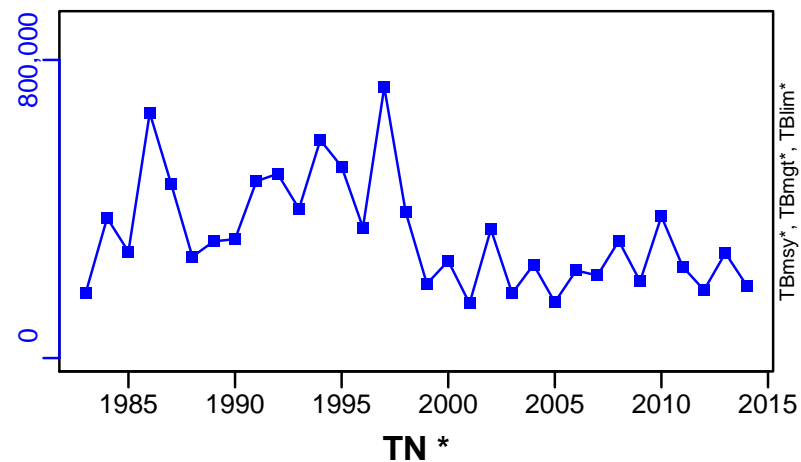
Production (1983–2016–ICESIMP2016)



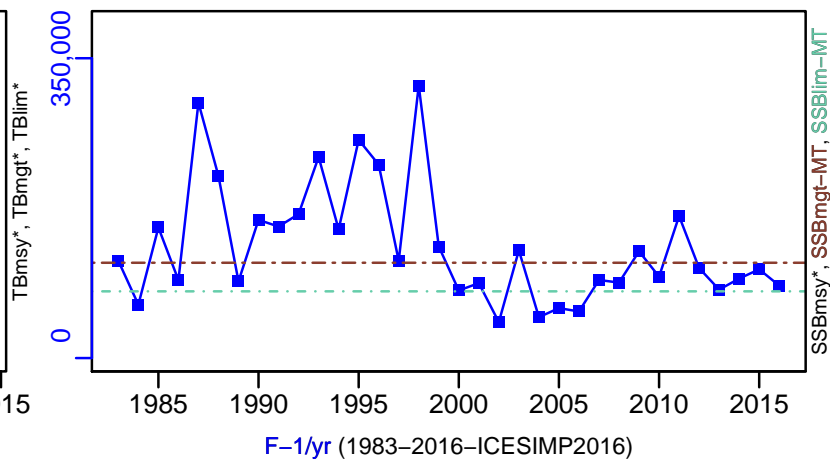
◆ Start Year ◆ End Year \* No Data

# Sand eel SA 2 [SEELNSSA2]

TB-MT (1983–2015–ICESIMP2016)



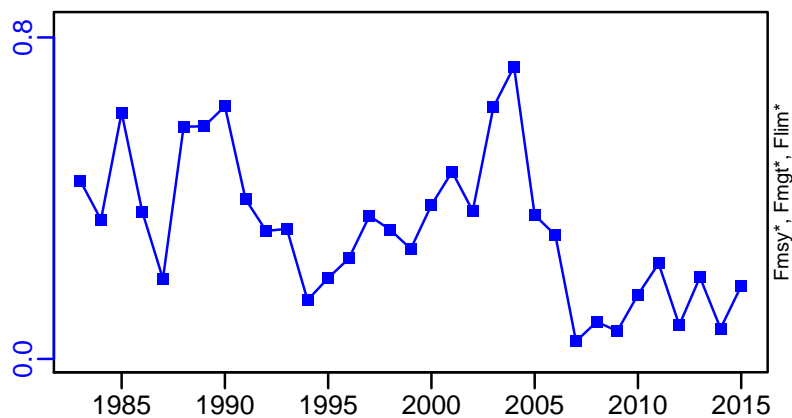
SSB-MT (1983–2016–ICESIMP2016)



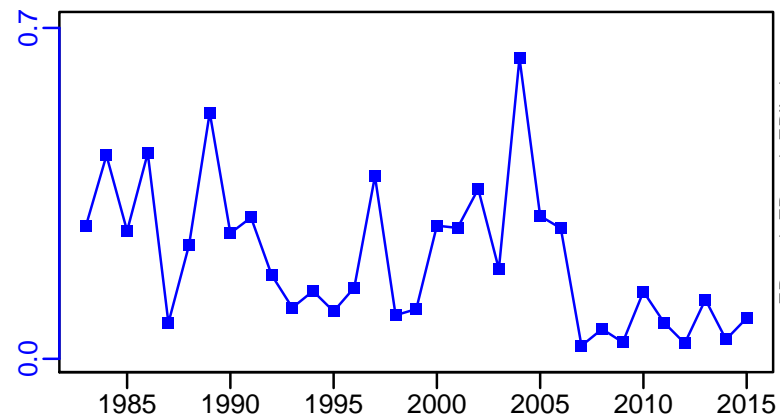
TN \*



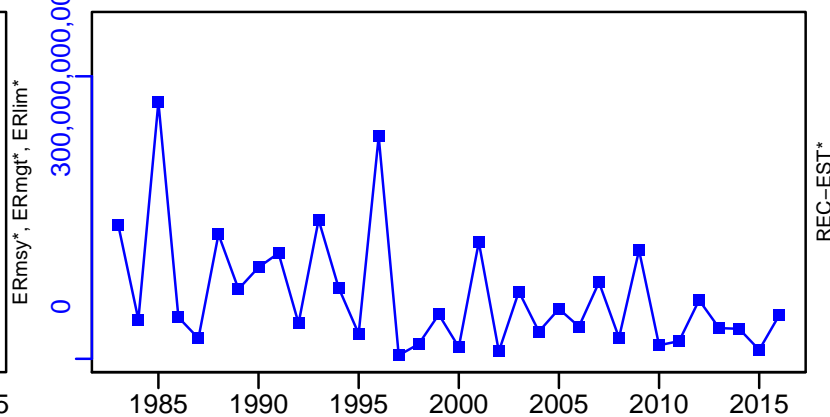
F-1/yr (1983–2016–ICESIMP2016)



ER-calc-ratio (1983–2016–ICESIMP2016)

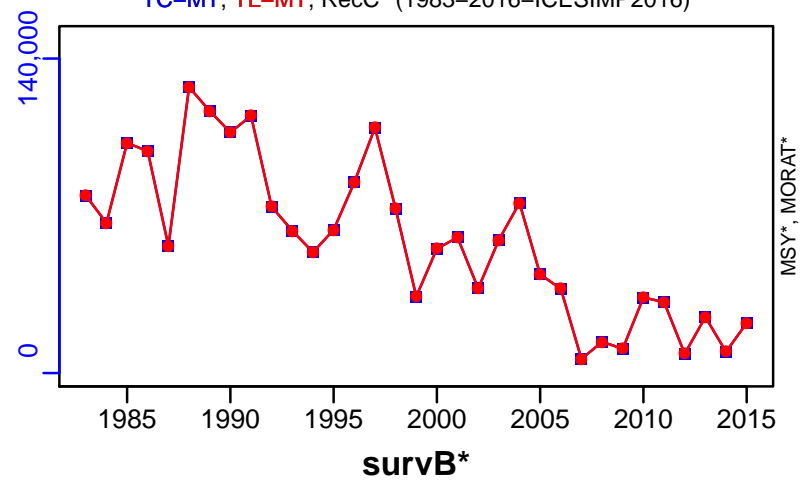


R-E00 (1983–2016–ICESIMP2016)



Sand eel SA 2 [SEELNSSA2]

TC-MT, TL-MT, RecC\* (1983–2016–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



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

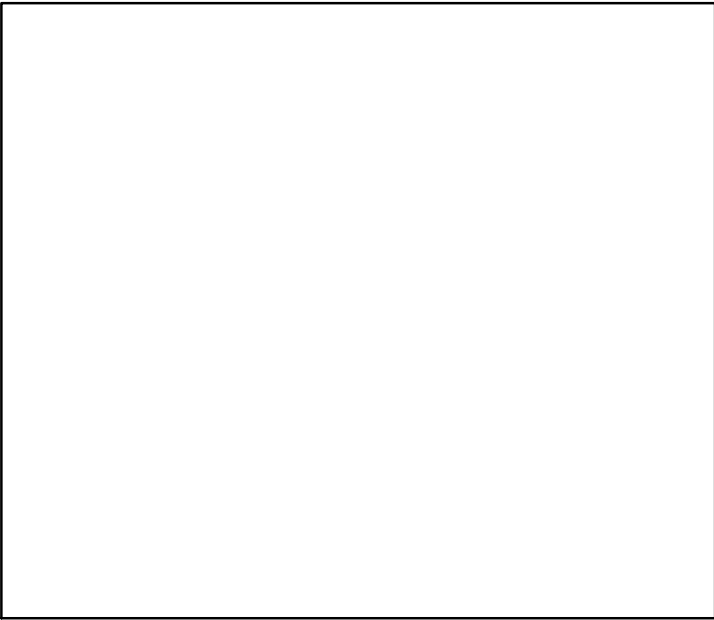
## Sand eel SA 3 [SEELNSSA3]

Metadata	
<b>Scientific Name</b>	Ammodytes marinus
<b>Current Assess ID</b>	HAWG-SEELNSSA3-1983-2016-ICESIMP2016
<b>Area</b>	Sandeel Area 3
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Herring Assessment Working Group for the Area South of 62N
<b>Asmts in RAM</b>	2013, 2014, 2015, 2016, 2011

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	SSBmgt-MT	2016	195,000
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	TBlim-MT	2011	$1 \times 10^5$
SSBlim	SSBlim-MT	2016	$1 \times 10^5$
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	TB-MT	2015	535,000	-	-
SSB	SSB-MT	2016	379,000	-	-
TN	-	-	-	-	-
R	R-E00	2016	$9.25 \times 10^{10}$	-	0
F	F-1/yr	2016	0.48	-	1 to 2
ER	ER-calc-ratio	2016	0.18	-	-
TC	TC-MT	2016	119,000		
TL	TL-MT	2016	119,000		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	SSB-MT/SSBmgt-MT	2016	1.94		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

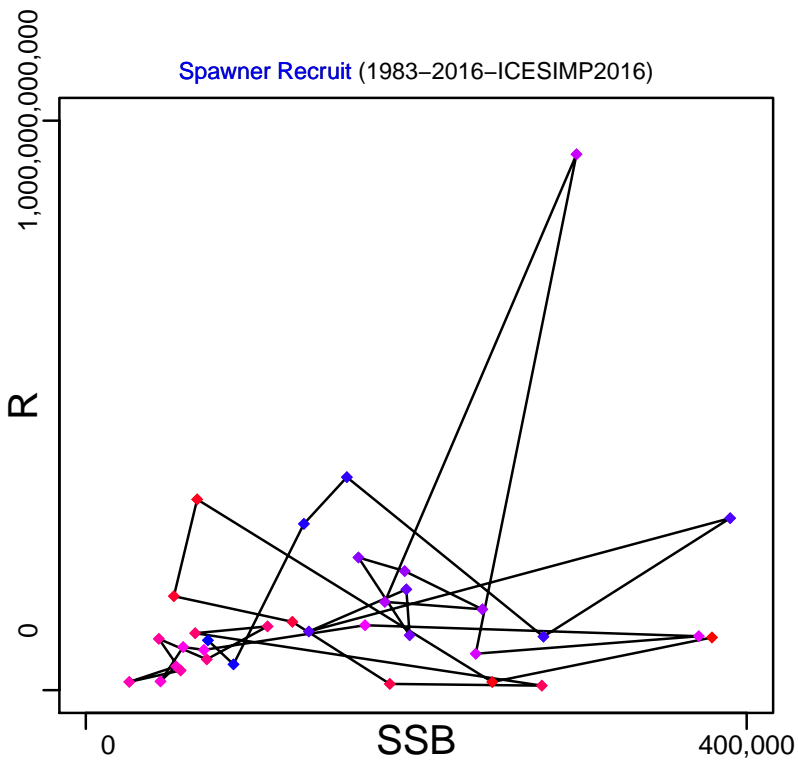
Kobe MSY\*



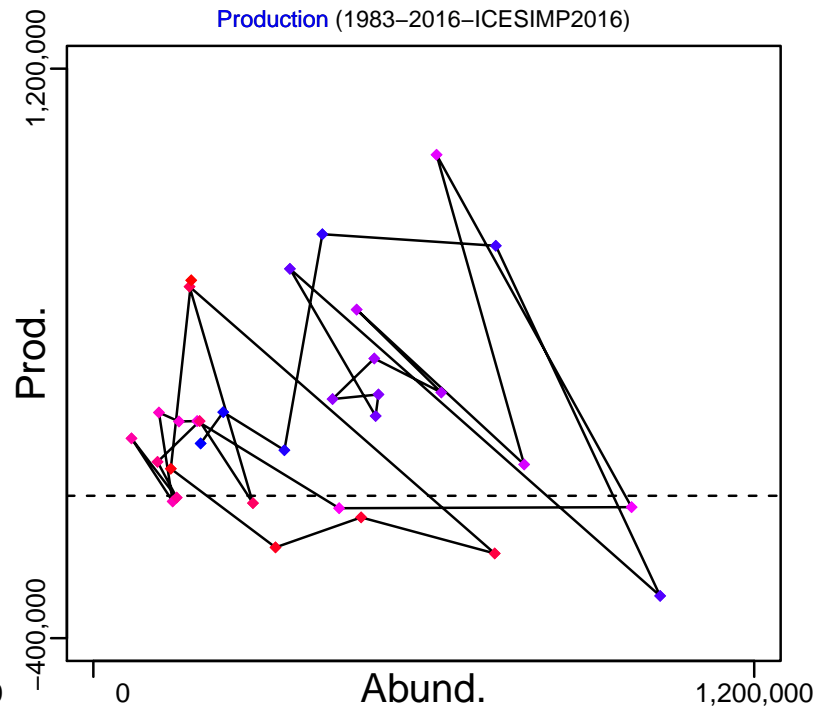
Kobe MGT\*



Spawner Recruit (1983–2016–ICESIMP2016)

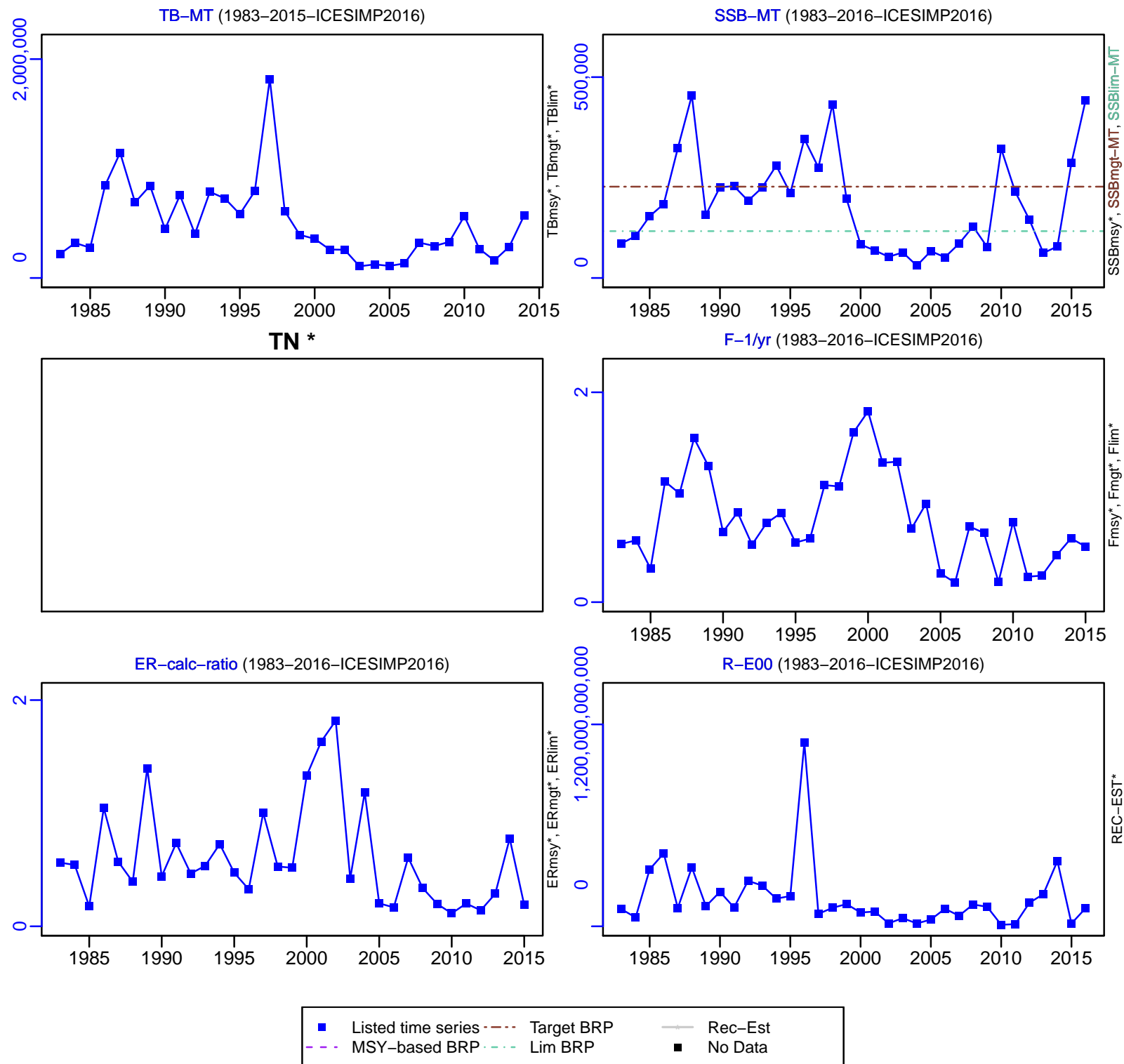


Production (1983–2016–ICESIMP2016)



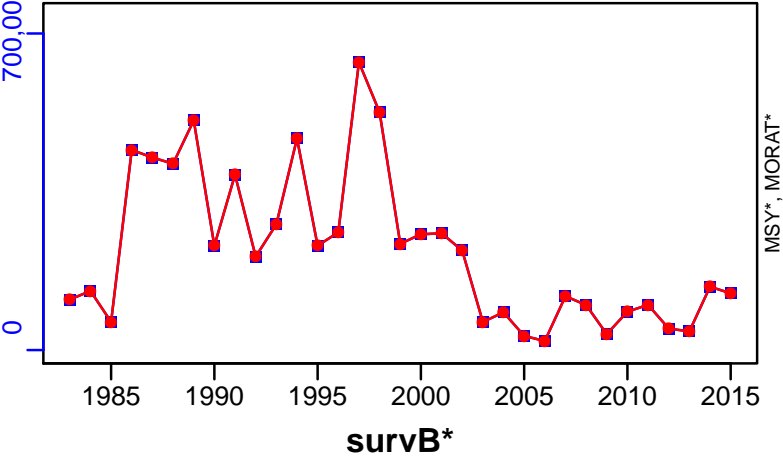
◆ Start Year ◆ End Year \* No Data

# Sand eel SA 3 [SEELNSSA3]

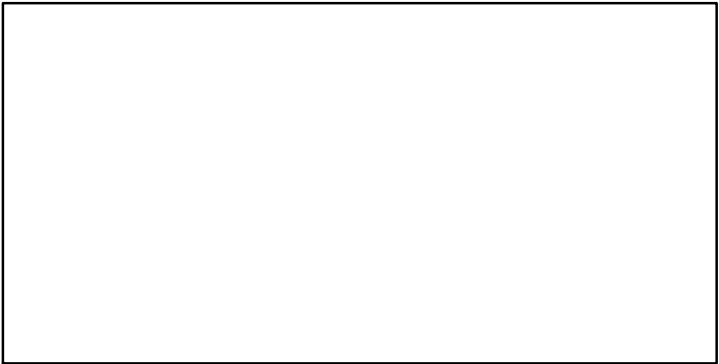


Sand eel SA 3 [SEELNSSA3]

TC-MT, TL-MT, RecC\* (1983–2016–ICESIMP2016)



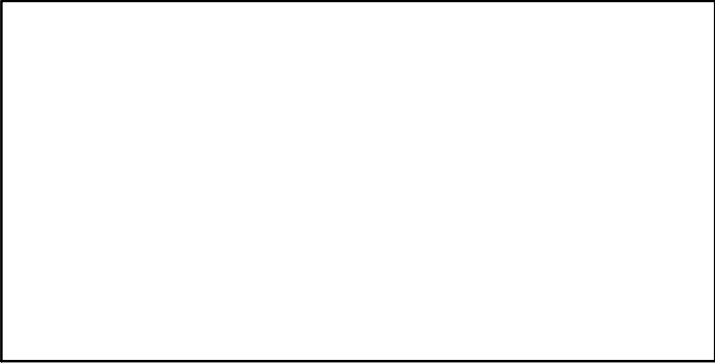
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



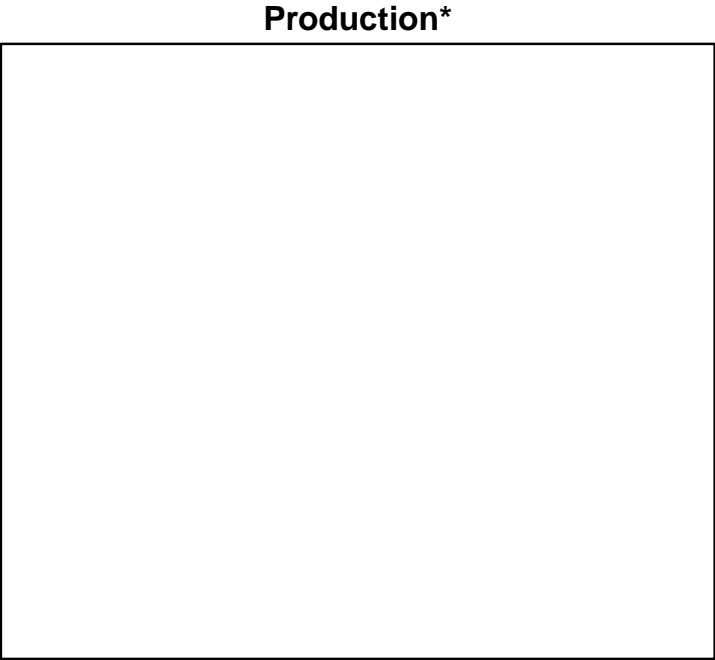
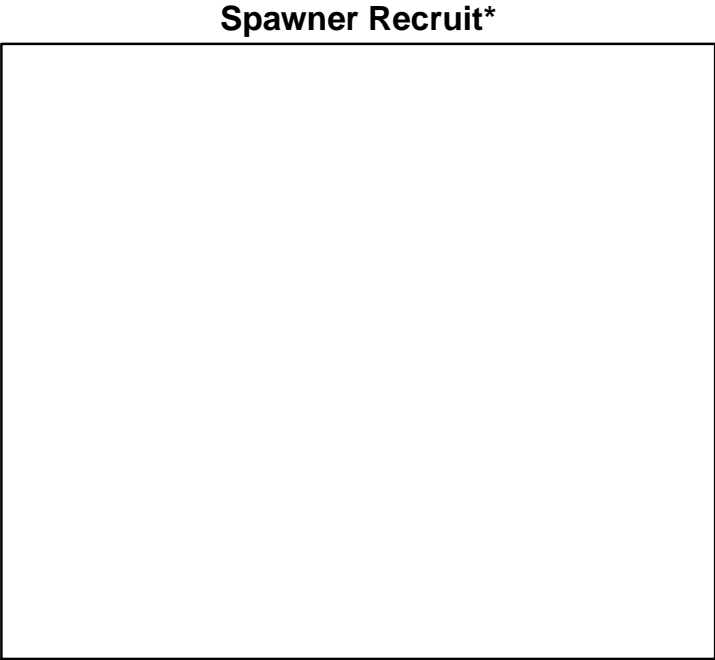
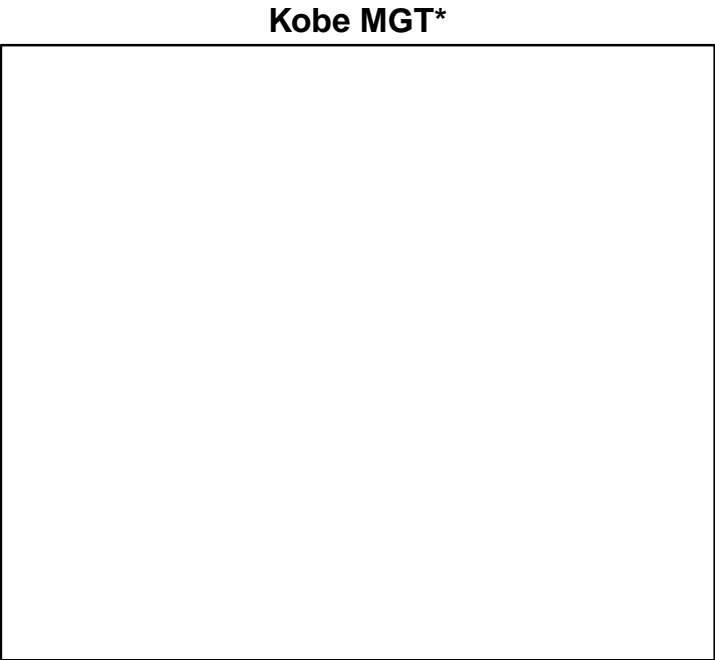
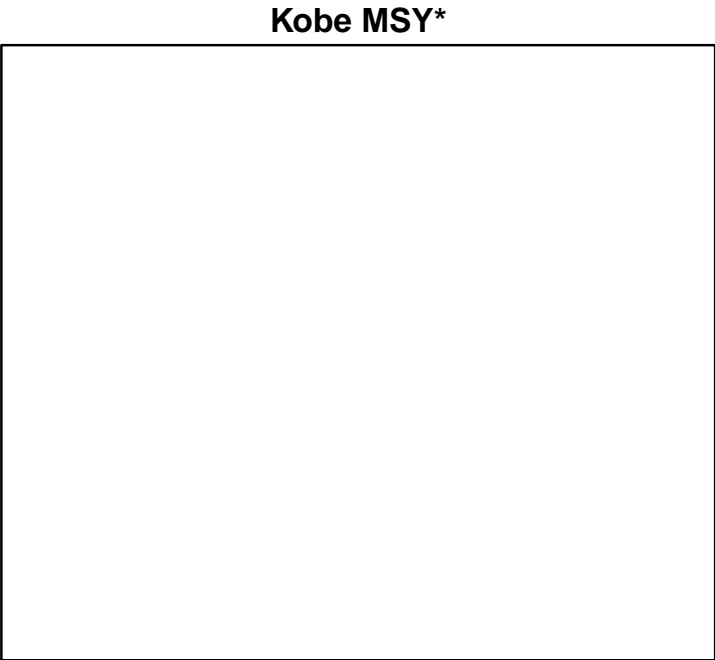
## Sand eel SA 5 [SEELNSSA5]

Metadata	
<b>Scientific Name</b>	Ammodytes marinus
<b>Current Assess ID</b>	HAWG-SEELNSSA5-1983-2015-ICESIMP2016
<b>Area</b>	Sandeel Area 5
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Herring Assessment Working Group for the Area South of 62N
<b>Asmts in RAM</b>	2015

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2015	0		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		





◆ Start Year   ◆ End Year   \* No Data

TB\*



SSB\*



TN \*



F\*



ER\*

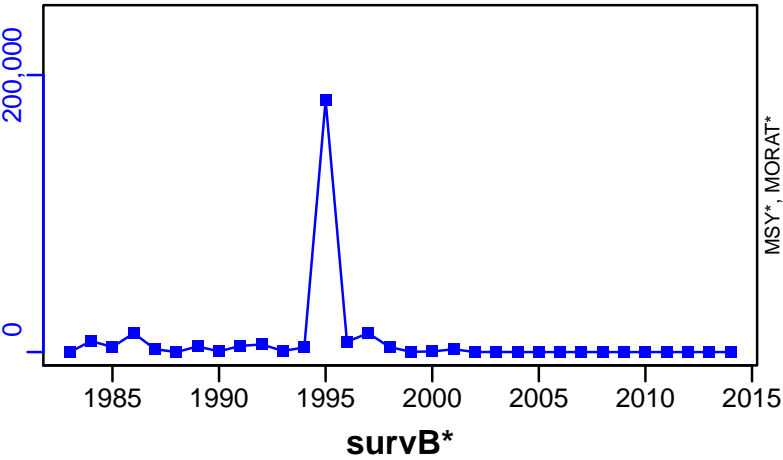


Recruits\*



Sand eel SA 5 [SEELNSSA5]

TC-MT, TL\*, RecC\* (1983-2015-ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*

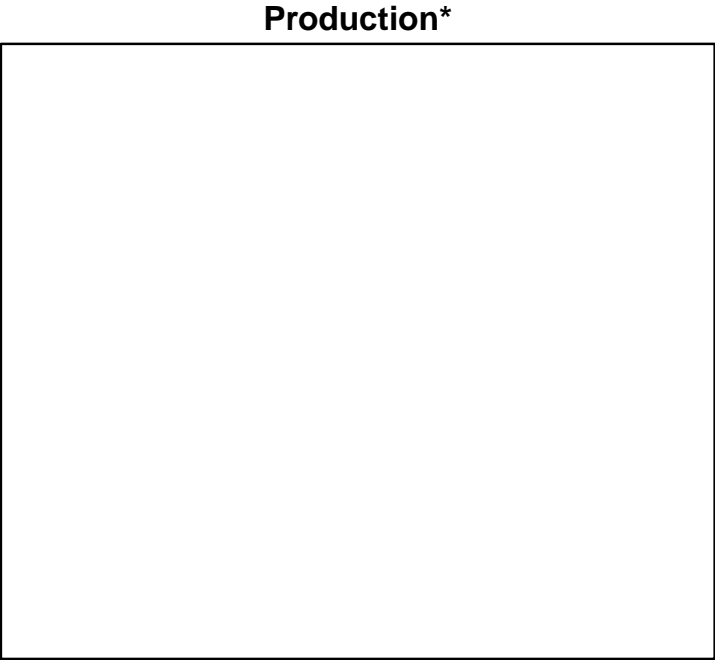
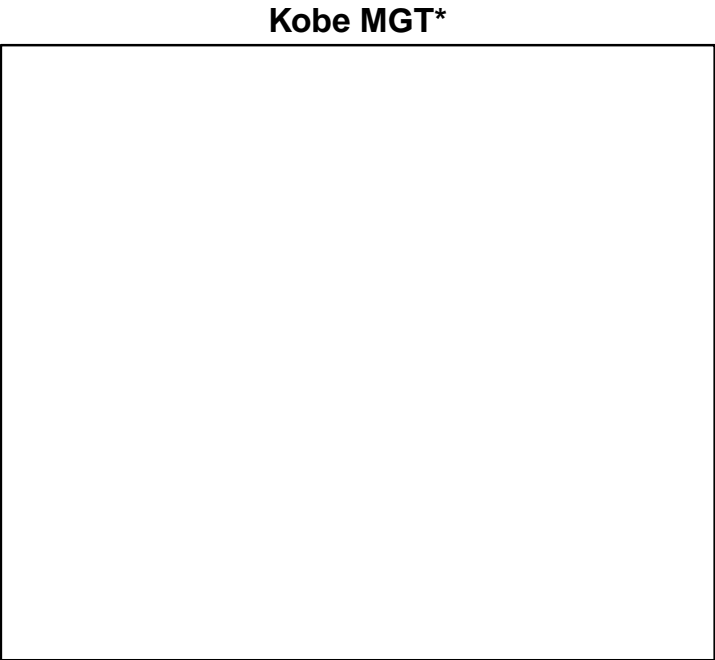
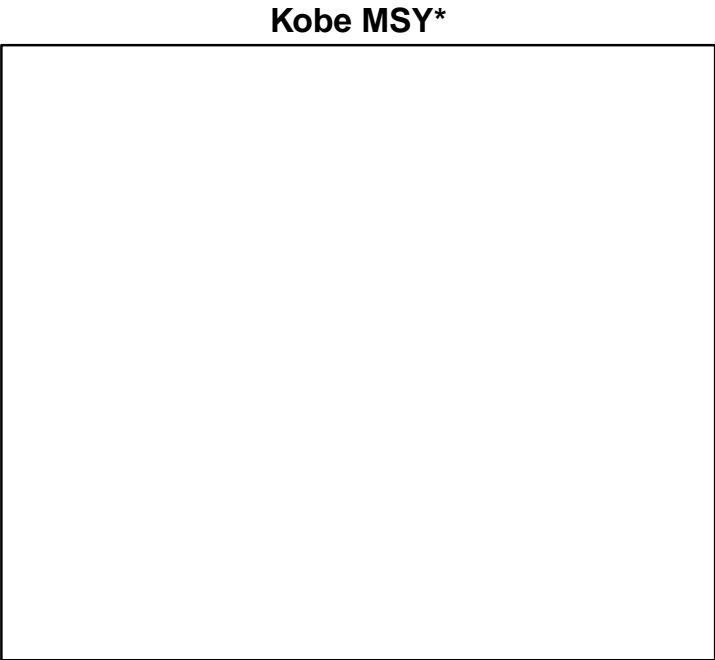


## Sand eel SA 6 [SEELNSSA6]

Metadata	
<b>Scientific Name</b>	Ammodytes marinus
<b>Current Assess ID</b>	HAWG-SEELNSSA6-1983-2015-ICESIMP2016
<b>Area</b>	Sandeel Area 6
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Herring Assessment Working Group for the Area South of 62N
<b>Asmts in RAM</b>	2015

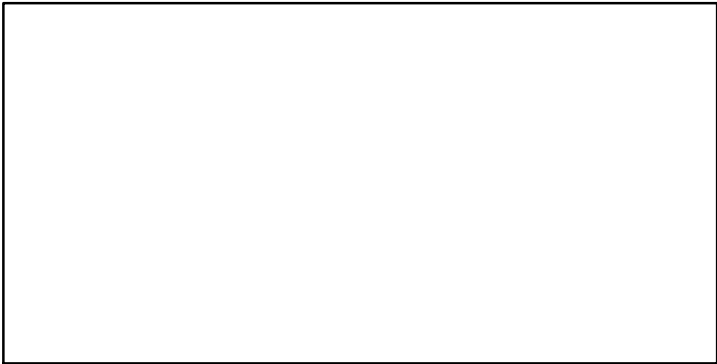
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2015	79		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

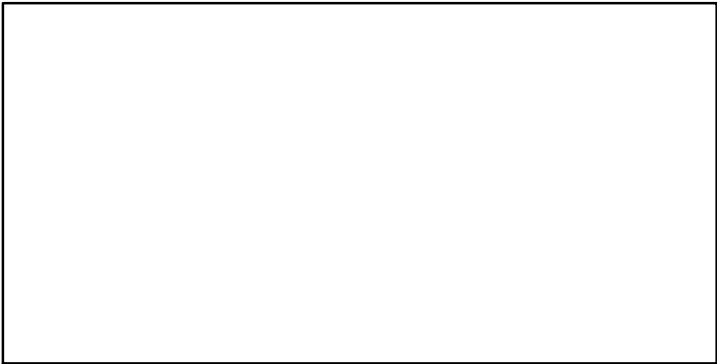


◆ Start Year   ◆ End Year   \* No Data

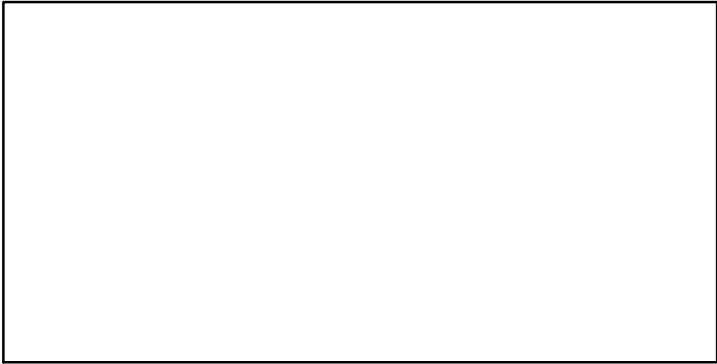
TB\*



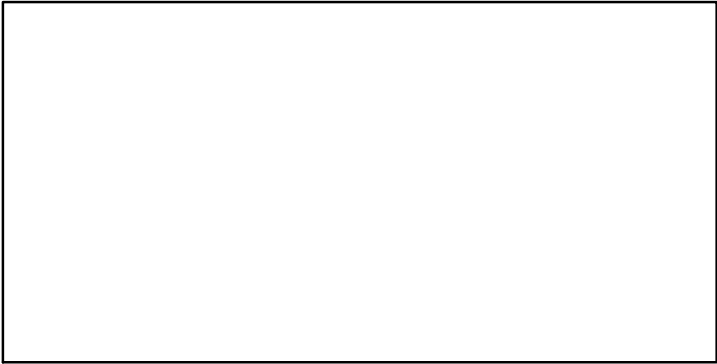
SSB\*



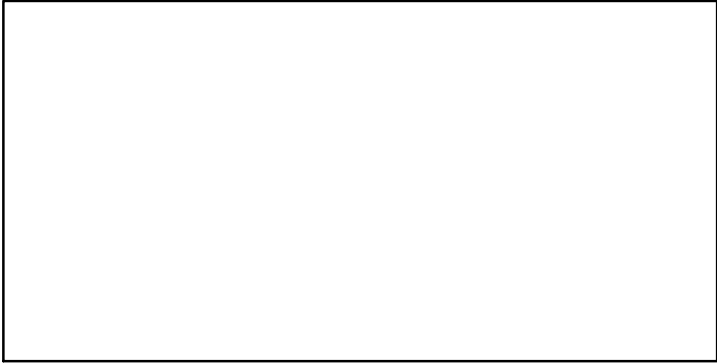
TN \*



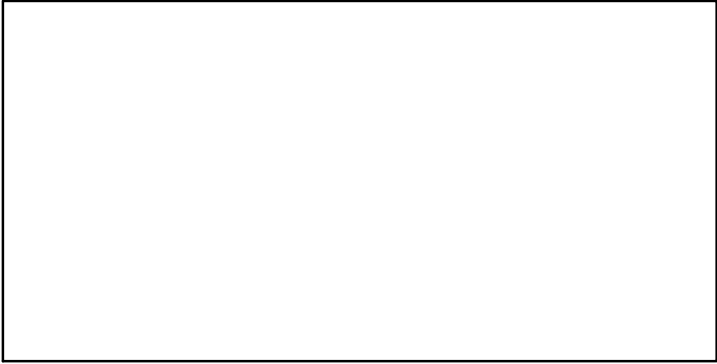
F\*



ER\*

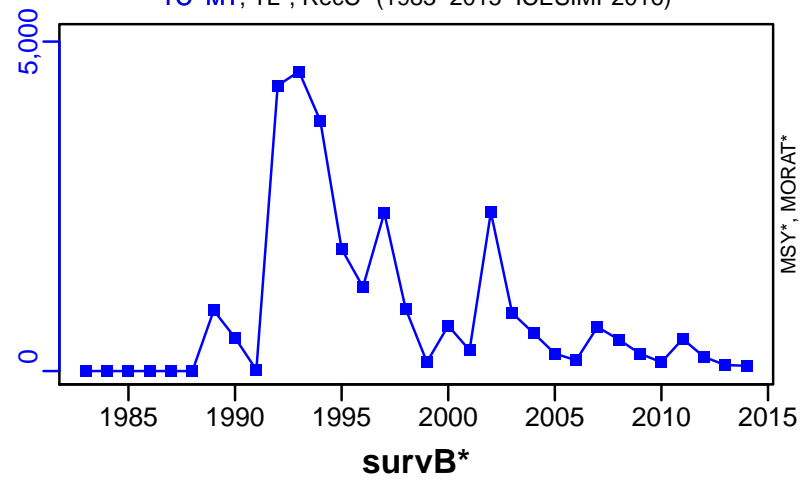


Recruits\*



Sand eel SA 6 [SEELNSSA6]

TC-MT, TL\*, RecC\* (1983–2015–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



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

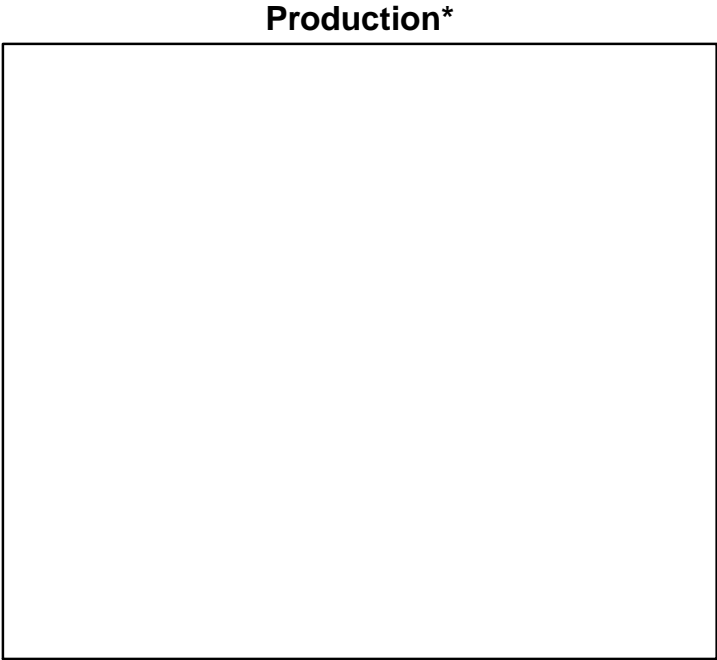
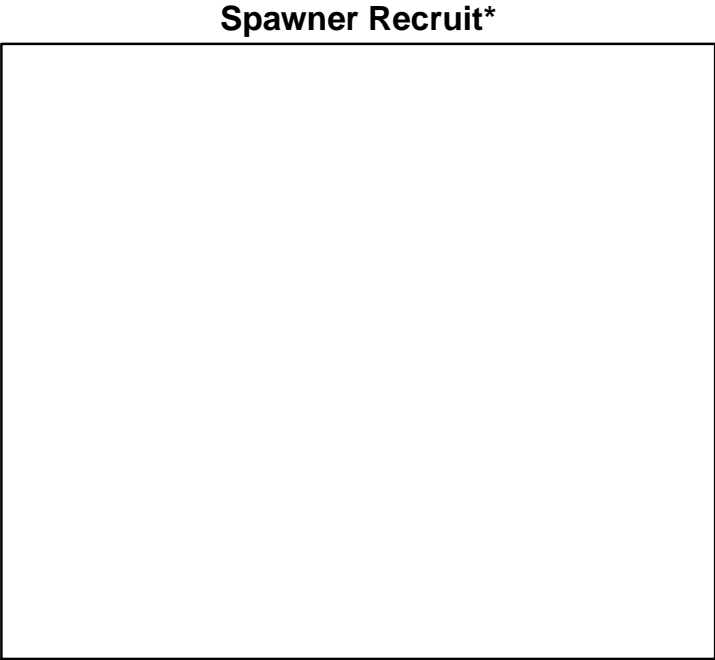
## Sand eel SA 7 [SEELNSSA7]

Metadata	
<b>Scientific Name</b>	Ammodytes marinus
<b>Current Assess ID</b>	HAWG-SEELNSSA7-1983-2015-ICESIMP2016
<b>Area</b>	Sandeel Area 7
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Herring Assessment Working Group for the Area South of 62N
<b>Asmts in RAM</b>	2015

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	TC-MT	2015	0		
TL	-	-	-		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		





◆ Start Year    ◆ End Year    \* No Data

TB\*



SSB\*



TN \*



F\*



ER\*

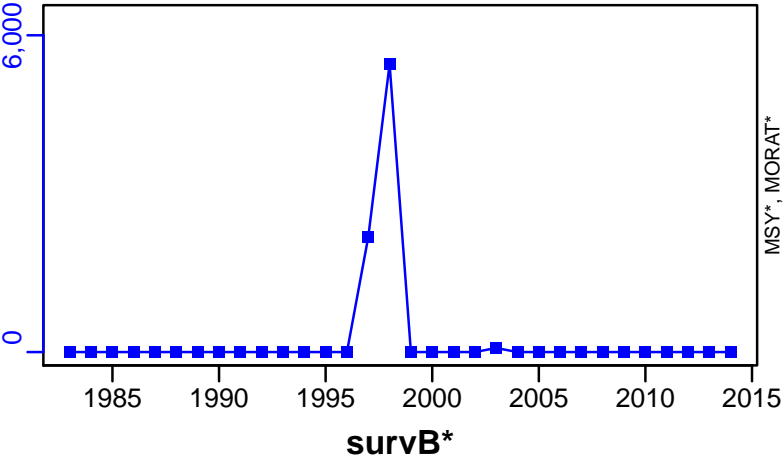


Recruits\*



Sand eel SA 7 [SEELNSSA7]

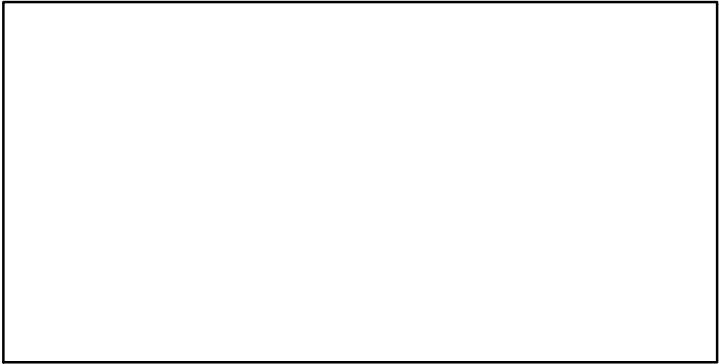
TC-MT, TL\*, RecC\* (1983-2015-ICESIMP2016)



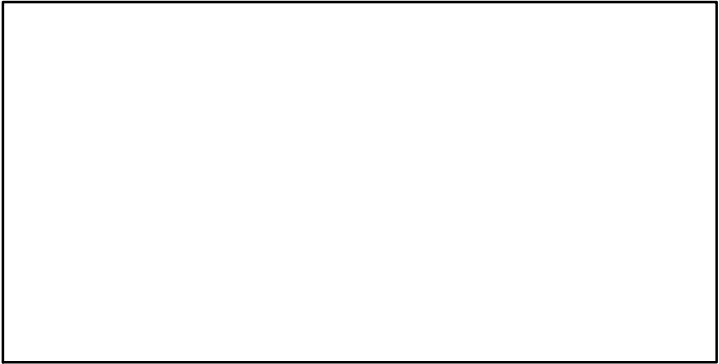
TAC\*, Cpair\*, Cadv\*



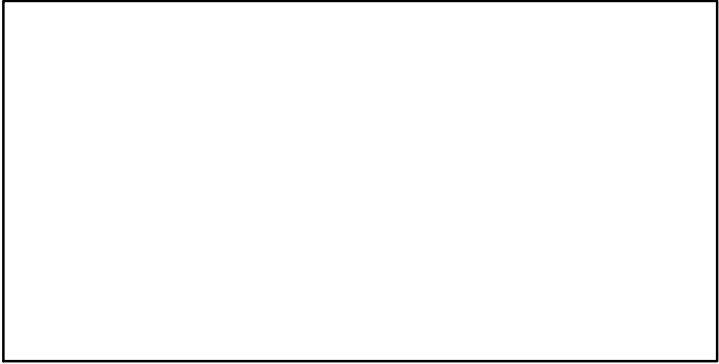
survB\*



CPUE\*



EFFORT\*



■

1st listed time series

●

2nd listed time series

▲

3rd listed time series

- -

MSY

—

MORAT

\*

No Data

## Common sole Celtic Sea [SOLECS]

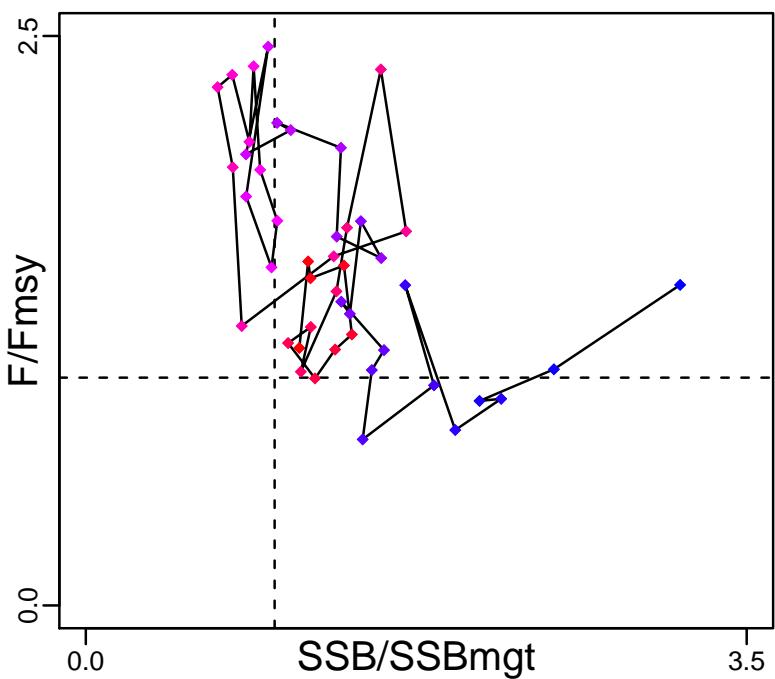
Metadata	
<b>Scientific Name</b>	Solea solea
<b>Current Assess ID</b>	WGCSE-SOLECS-1970-2016-ICESIMP2016
<b>Area</b>	Celtic Sea
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2013, 2014, 2015, 2016, 2011

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.27
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	2400
<b>Fmgt</b>	Fmgt-1/yr	2016	0.27
<b>ERMgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2011	0.1
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	1700
<b>Flim</b>	Flim-1/yr	2016	0.48
<b>ERlim</b>	-	-	-

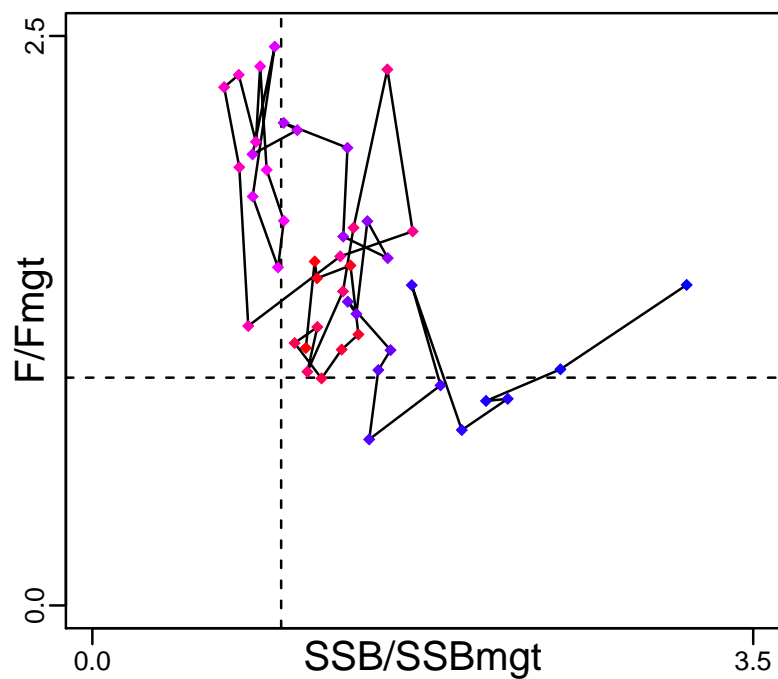
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	4130	-	-
<b>SSB</b>	SSB-MT	2016	2600	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	4,930,000	-	1
<b>F</b>	F-1/yr	2016	0.3	-	4 to 8
<b>ER</b>	ER-calc-ratio	2016	0.17	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2016	830		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	1.13		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	1.08		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	1.13		
<b>ER/ERMgt</b>	-	-	-		

# Common sole Celtic Sea [SOLECS]

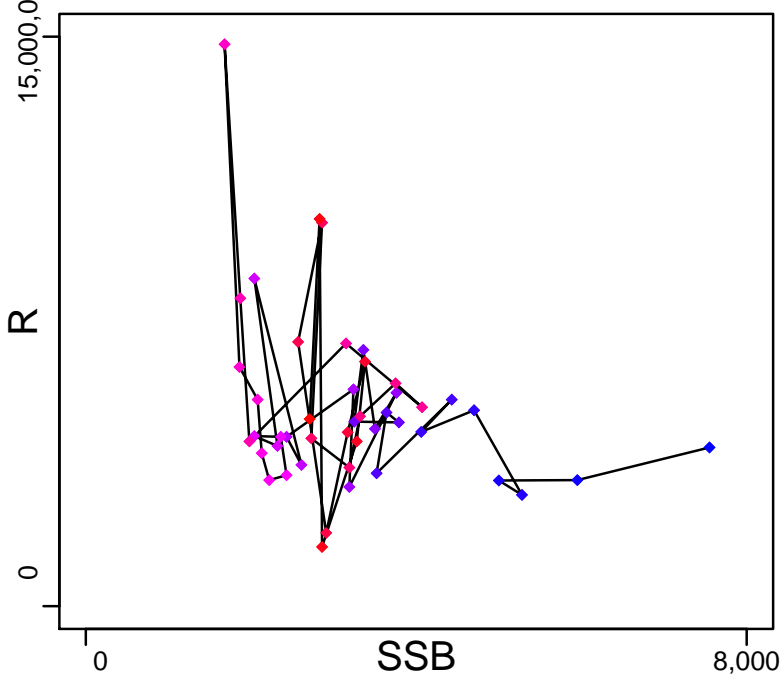
Kobe MSYpref (1970–2016–ICESIMP2016)



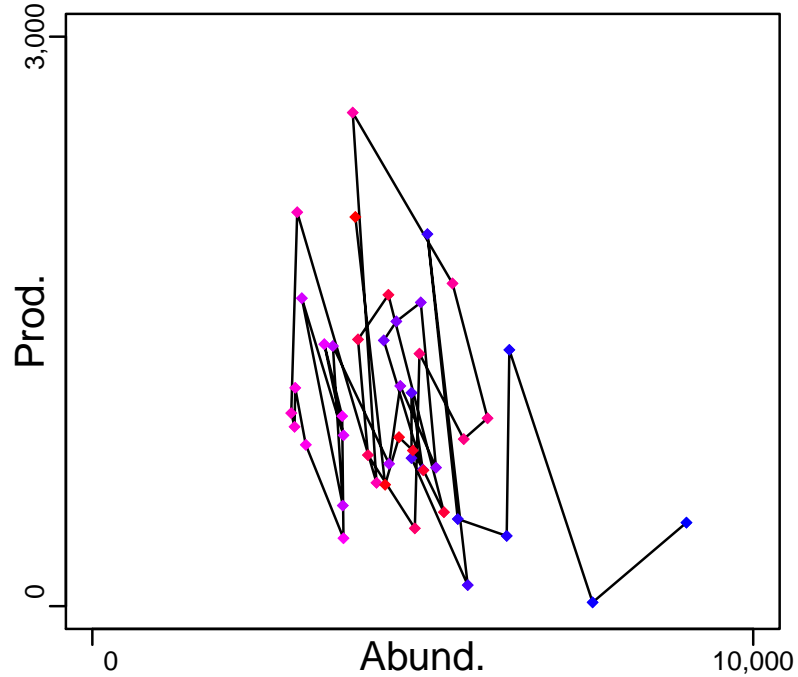
Kobe MGTpref (1970–2016–ICESIMP2016)



Spawner Recruit (1970–2016–ICESIMP2016)



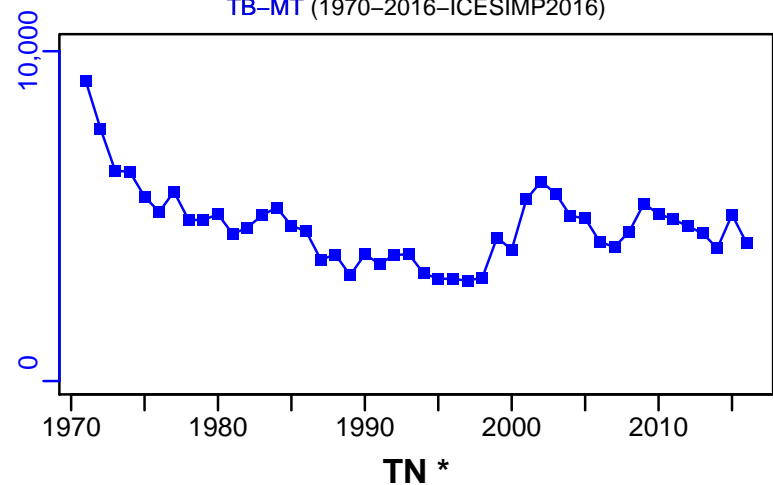
Production (1970–2016–ICESIMP2016)



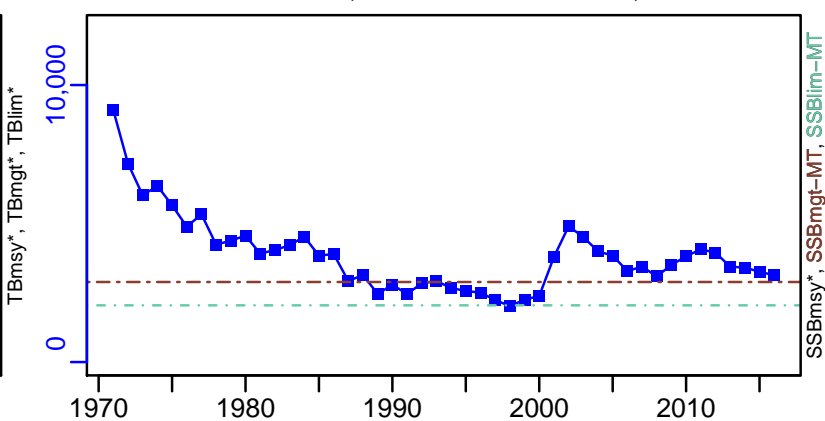
◆ Start Year ◆ End Year \* No Data

# Common sole Celtic Sea [SOLECS]

TB-MT (1970–2016–ICESIMP2016)



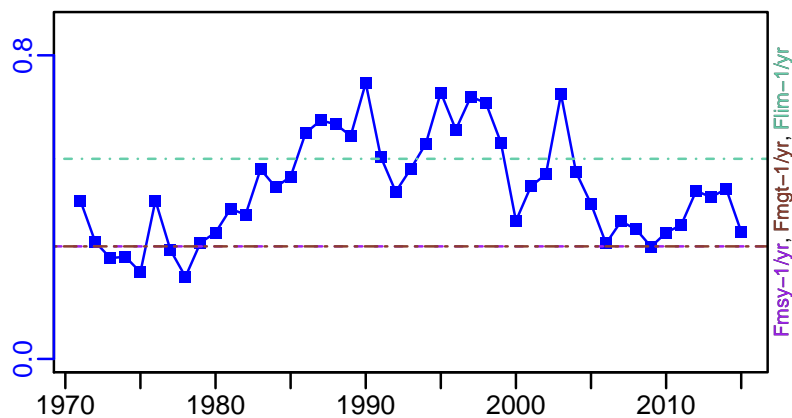
SSB-MT (1970–2016–ICESIMP2016)



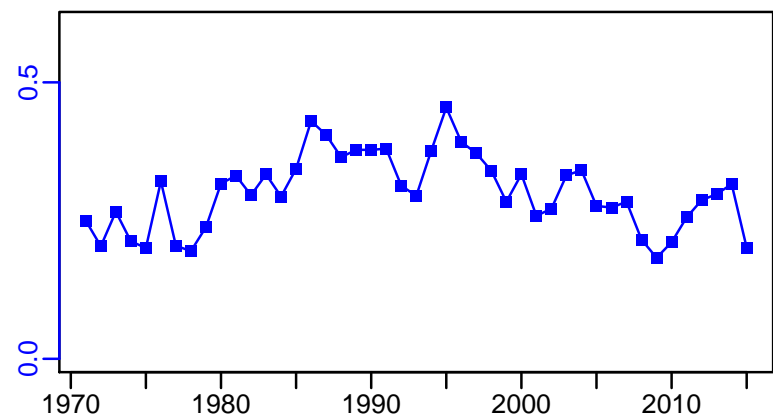
TN \*



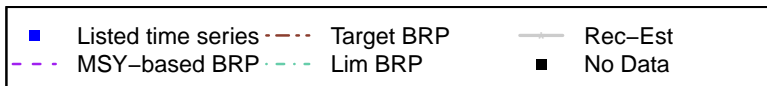
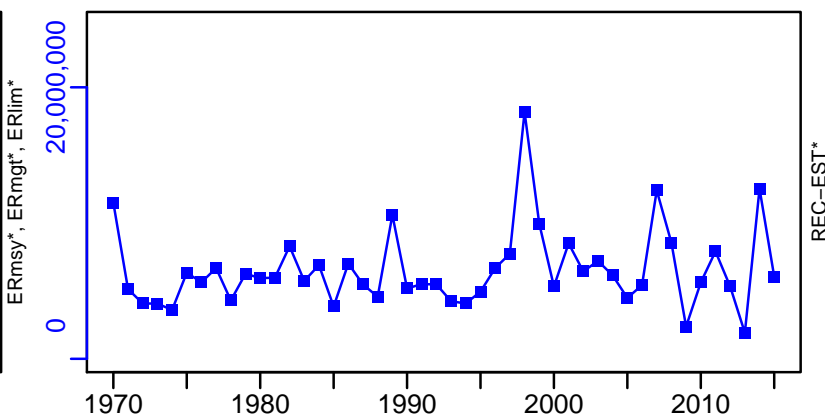
F-1/yr (1970–2016–ICESIMP2016)



ER-calc-ratio (1970–2016–ICESIMP2016)

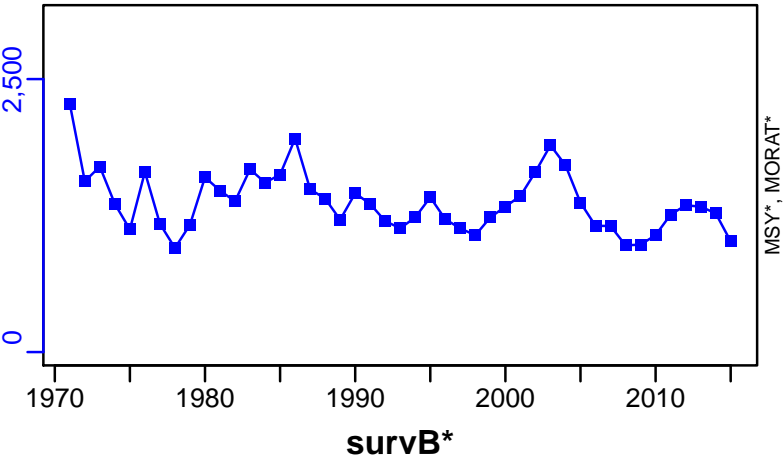


R-E00 (1970–2016–ICESIMP2016)



Common sole Celtic Sea [SOLECS]

TL-MT, TC\*, RecC\* (1970-2016-ICESIMP2016)



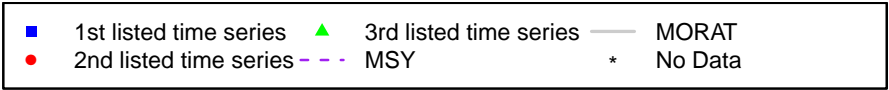
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Common sole 22-24-IIIa [SOLEIIIa-2224]

Metadata	
<b>Scientific Name</b>	Solea solea
<b>Current Assess ID</b>	WGBFAS-SOLEIIIa-2224-1983-2016-ICESIMP2016
<b>Area</b>	22-24-IIIa
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Baltic Fisheries Assessment Working Group
<b>Asmts in RAM</b>	2013, 2014, 2015, 2016, 2011

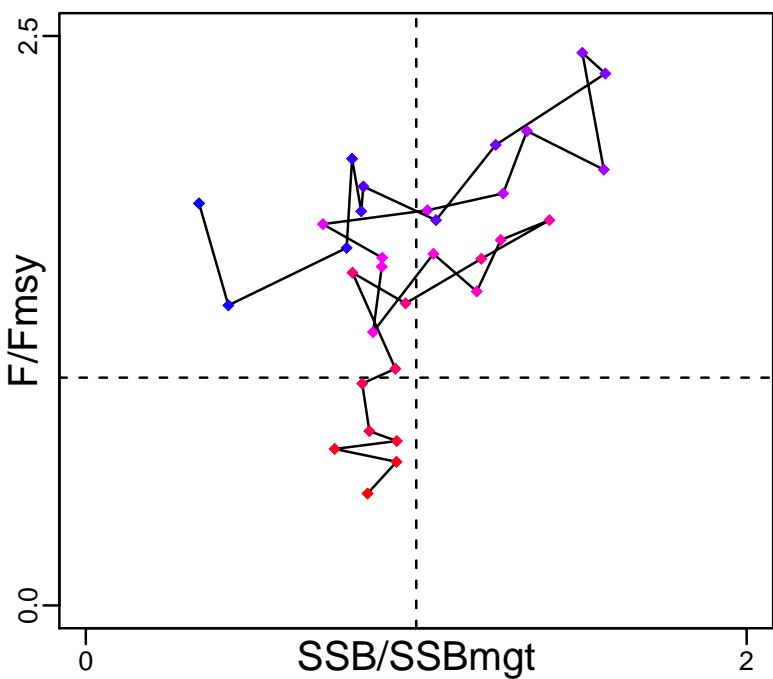
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.23
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	2600
<b>Fmgt</b>	Fmgt-1/yr	2016	0.23
<b>ERMgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2011	0.1
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	1850
<b>Flim</b>	Flim-1/yr	2016	0.32
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	2930	-	-
<b>SSB</b>	SSB-MT	2016	2450	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	1,920,000	-	1
<b>F</b>	F-1/yr	2016	0.11	-	4 to 8
<b>ER</b>	ER-calc-ratio	2016	0.08	-	-
<b>TC</b>	TC-MT	2011	538		
<b>TL</b>	TL-MT	2016	224		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	0.49		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	0.94		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.49		
<b>ER/ERMgt</b>	-	-	-		

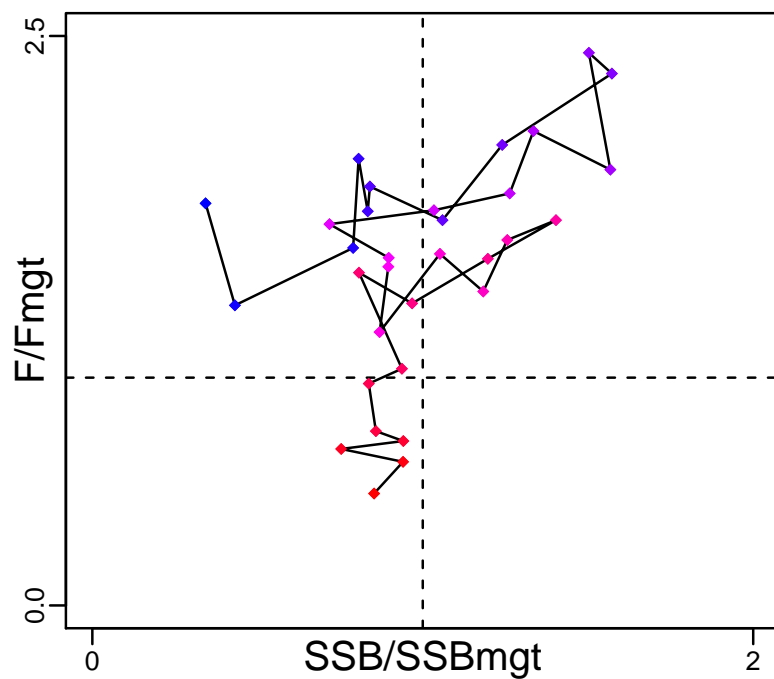


Common sole 22–24–IIIa [SOLEIIIa–2224]

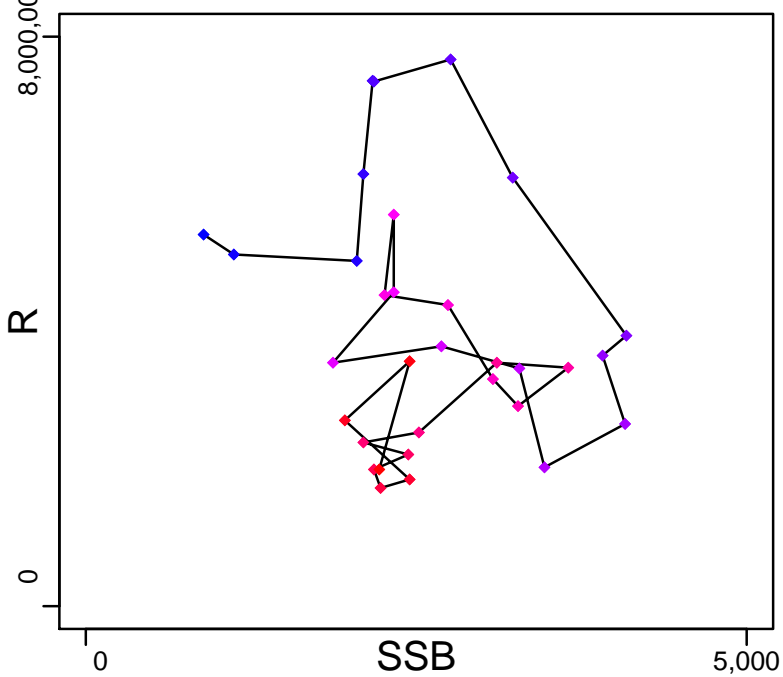
Kobe MSYpref (1983–2016–ICESIMP2016)



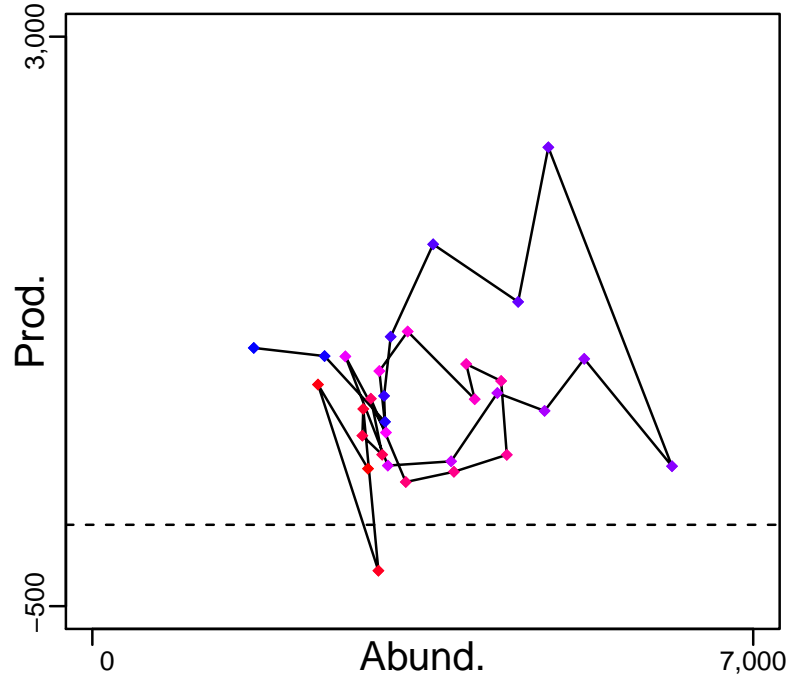
Kobe MGTpref (1983–2016–ICESIMP2016)



Spawner Recruit (1983–2016–ICESIMP2016)



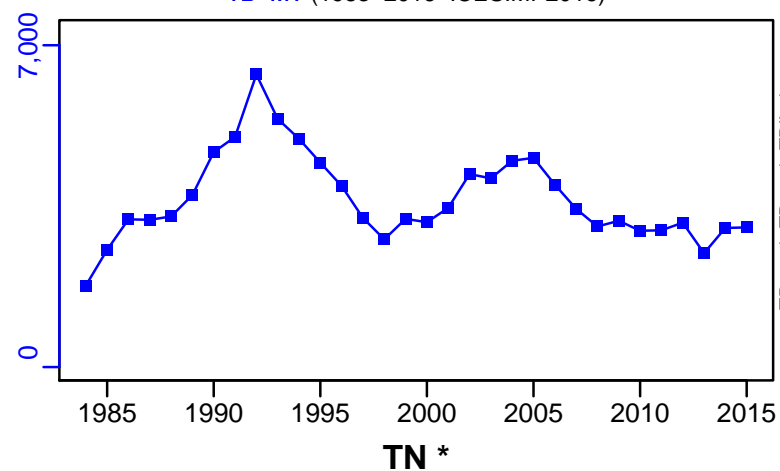
Production (1983–2016–ICESIMP2016)



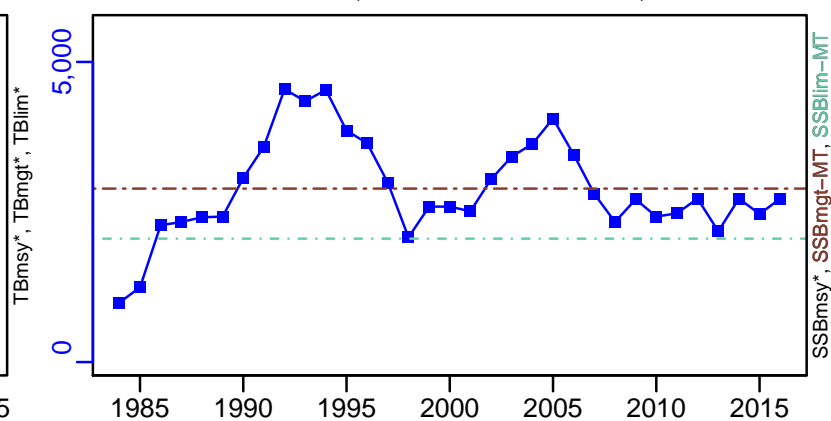
◆ Start Year ◆ End Year \* No Data

# Common sole 22-24-IIIa [SOLEIIIa-2224]

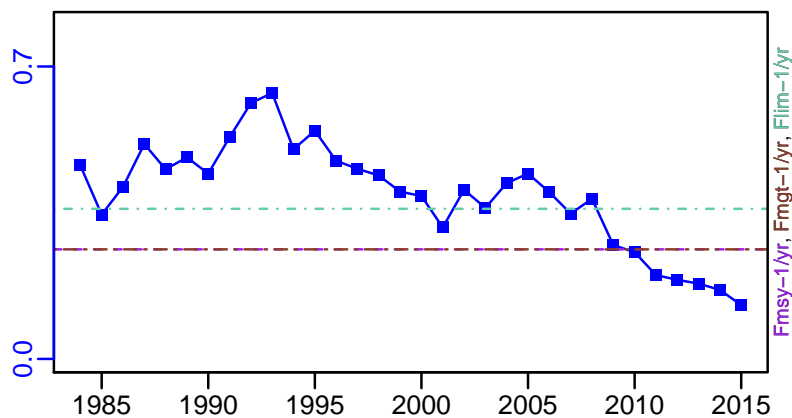
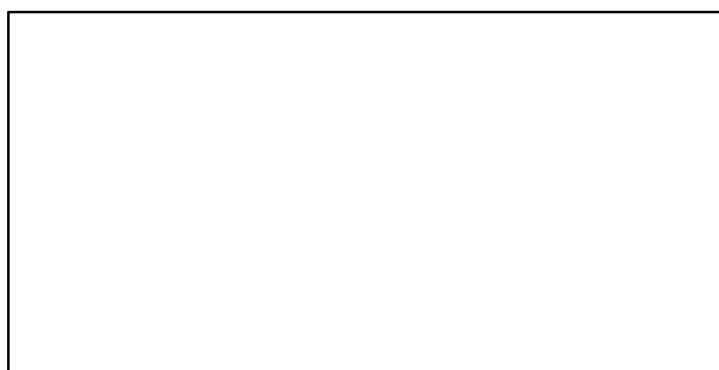
TB-MT (1983-2016-ICESIMP2016)



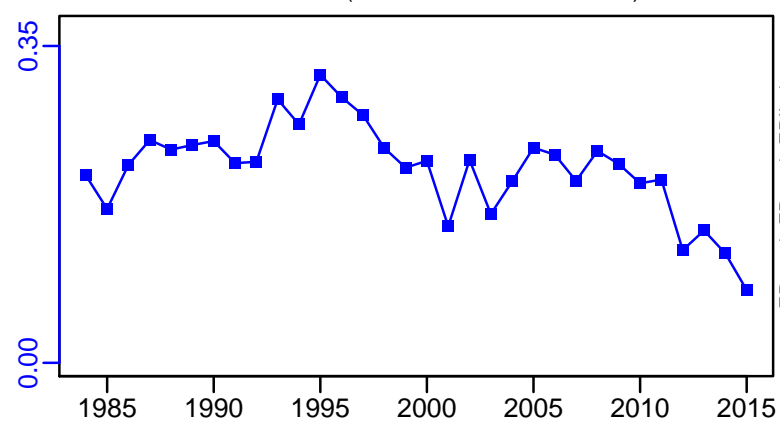
SSB-MT (1983-2016-ICESIMP2016)



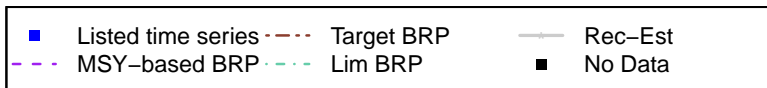
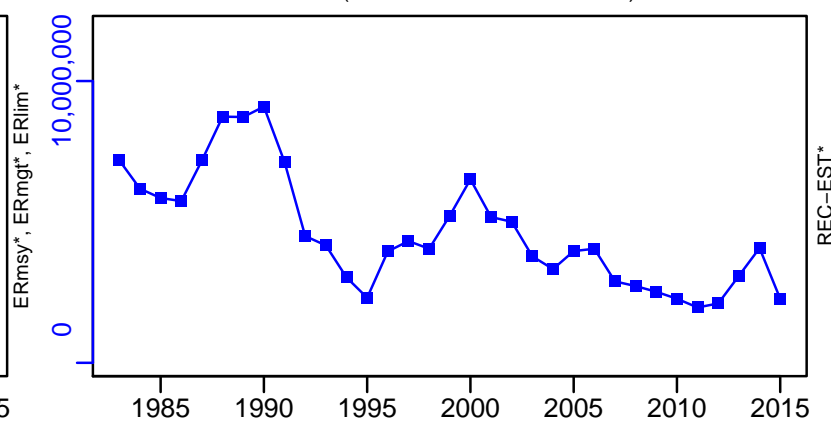
F-1/yr (1983-2016-ICESIMP2016)



ER-calc-ratio (1983-2016-ICESIMP2016)

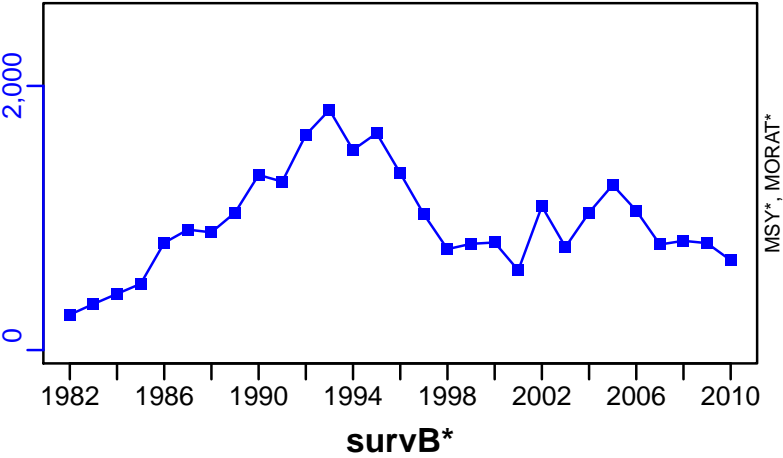


R-E00 (1983-2016-ICESIMP2016)



Common sole 22–24–IIIa [SOLEIIIa–2224]

TC–MT, TL\*, RecC\* (1982–2011–NEUBAUER)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Common sole Irish Sea [SOLEIS]

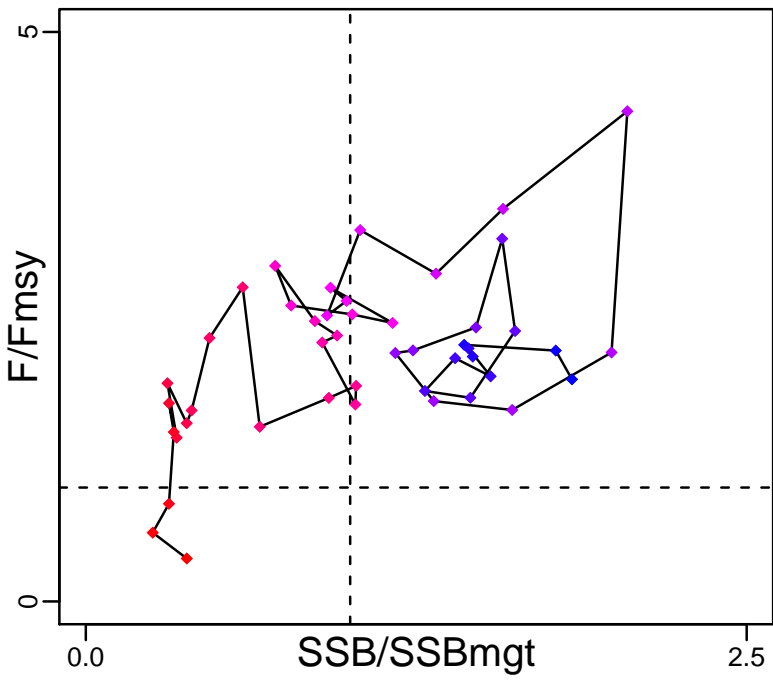
Metadata	
<b>Scientific Name</b>	Solea solea
<b>Current Assess ID</b>	WGCSE-SOLEIS-1968-2016-ICESIMP2016
<b>Area</b>	Irish Sea
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2013, 2014, 2015, 2016, 2011

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.2
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	3500
<b>Fmgt</b>	Fmgt-1/yr	2016	0.2
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2011	0.1
<b>TBlim</b>	TBlim-MT	2011	2200
<b>SSBlim</b>	SSBlim-MT	2016	2500
<b>Flim</b>	Flim-1/yr	2016	0.29
<b>ERlim</b>	-	-	-

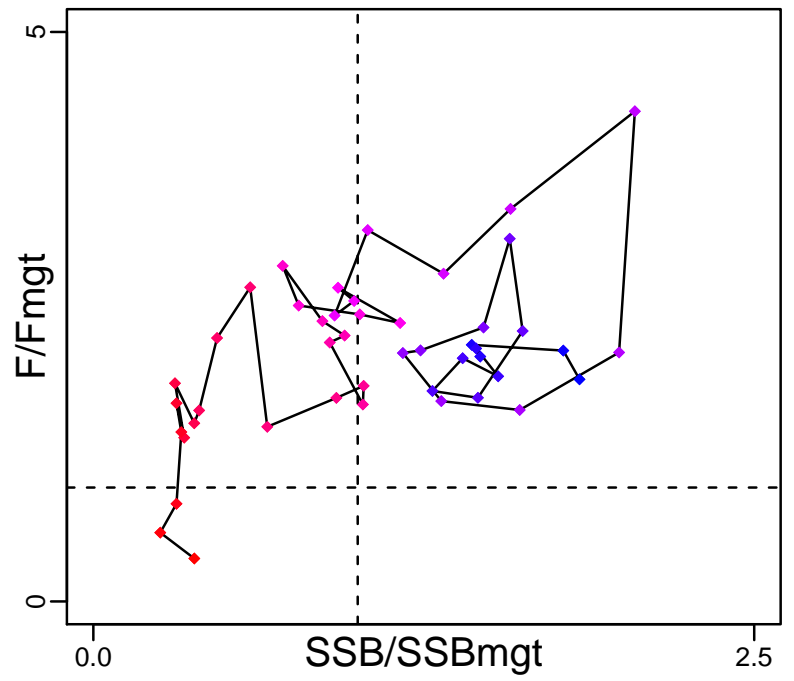
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	1660	-	-
<b>SSB</b>	SSB-MT	2016	1450	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	1,210,000	-	2
<b>F</b>	F-1/yr	2016	0.08	-	4 to 7
<b>ER</b>	ER-calc-ratio	2016	0.05	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2016	76		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	0.38		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	0.41		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.38		
<b>ER/ERmgt</b>	-	-	-		

# Common sole Irish Sea [SOLEIS]

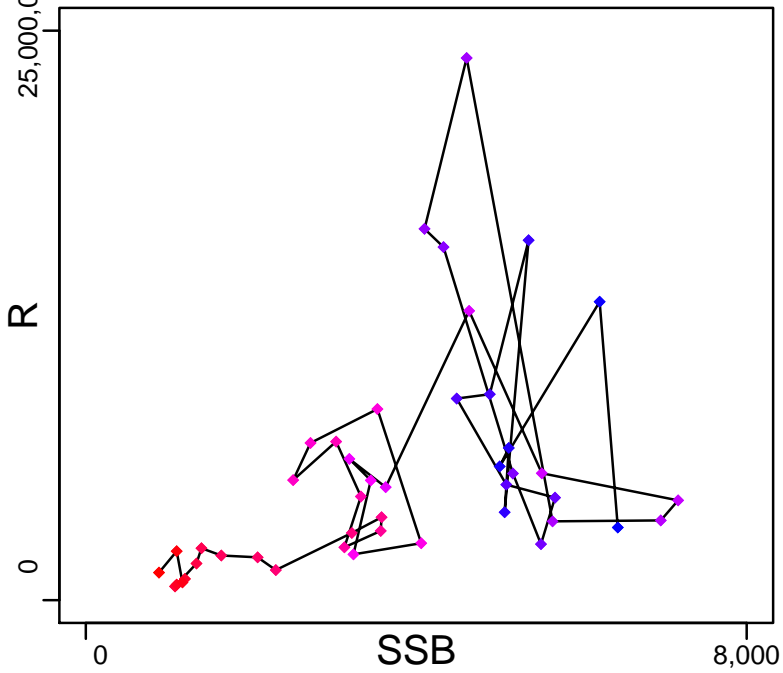
Kobe MSYpref (1968–2016–ICESIMP2016)



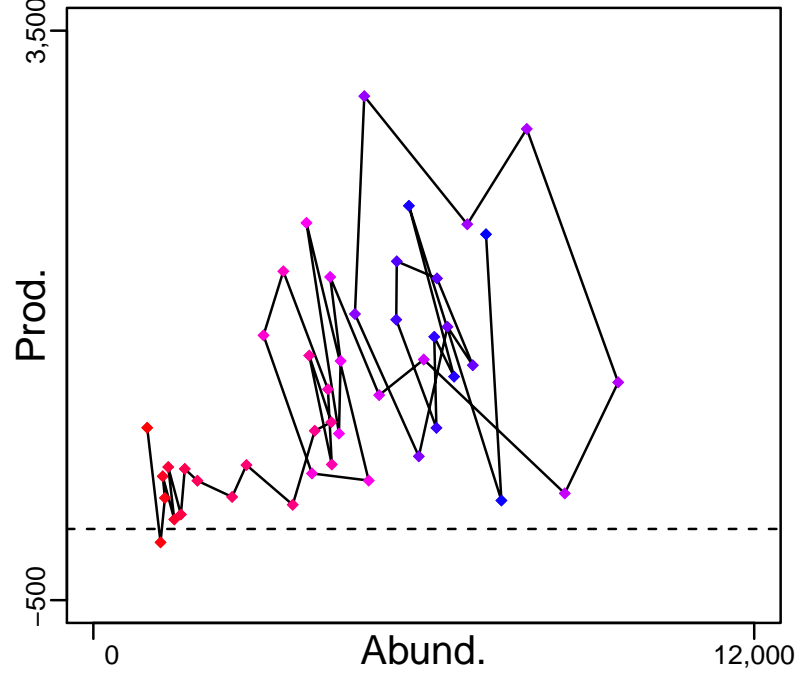
Kobe MGTpref (1968–2016–ICESIMP2016)



Spawner Recruit (1968–2016–ICESIMP2016)



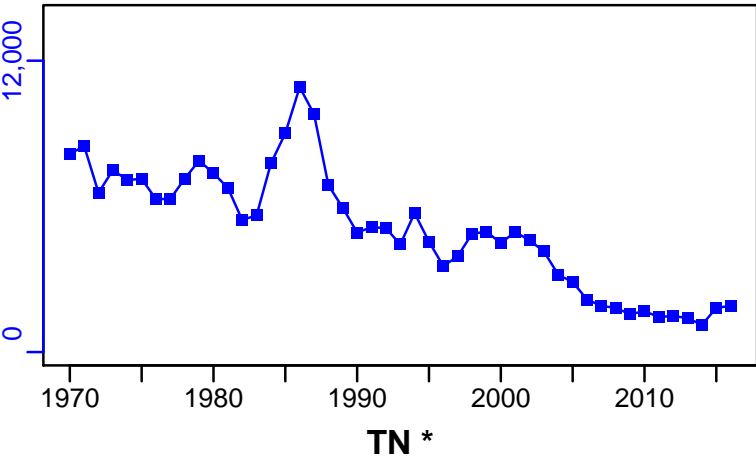
Production (1968–2016–ICESIMP2016)



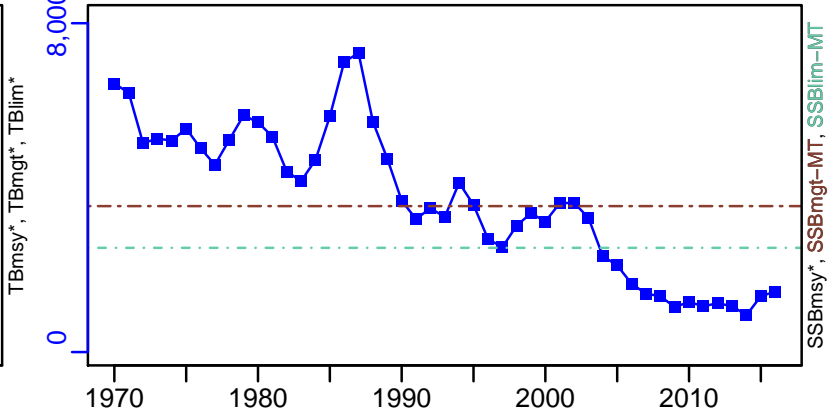
◆ Start Year ◆ End Year \* No Data

# Common sole Irish Sea [SOLEIS]

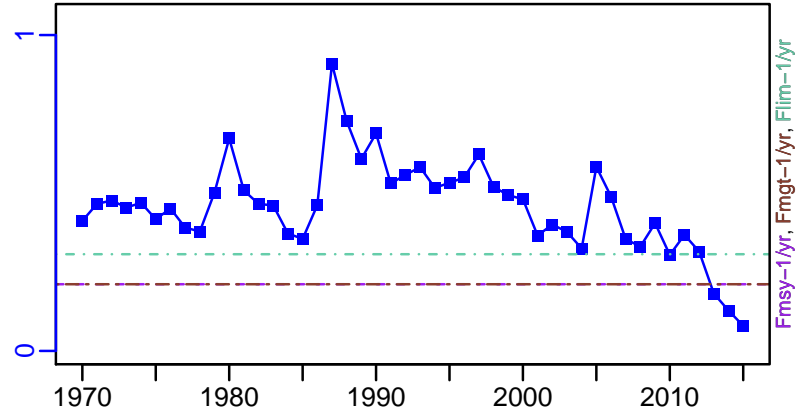
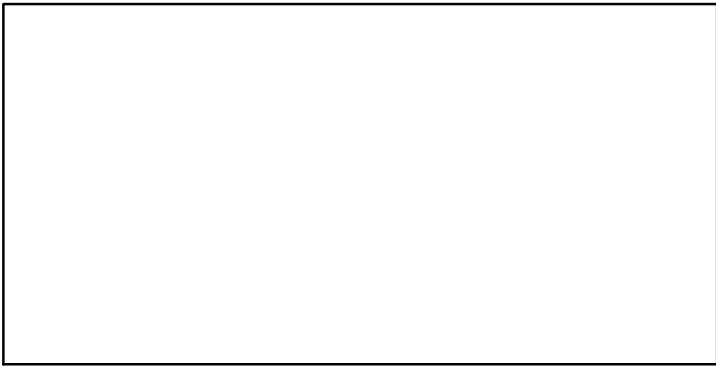
TB-MT (1968–2016–ICESIMP2016)



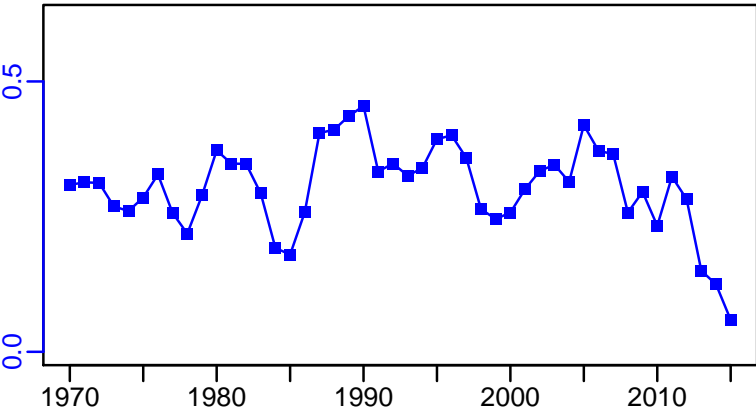
SSB-MT (1968–2016–ICESIMP2016)



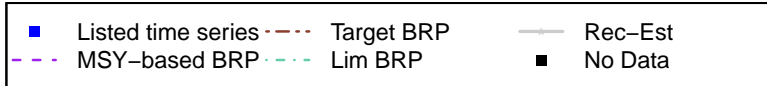
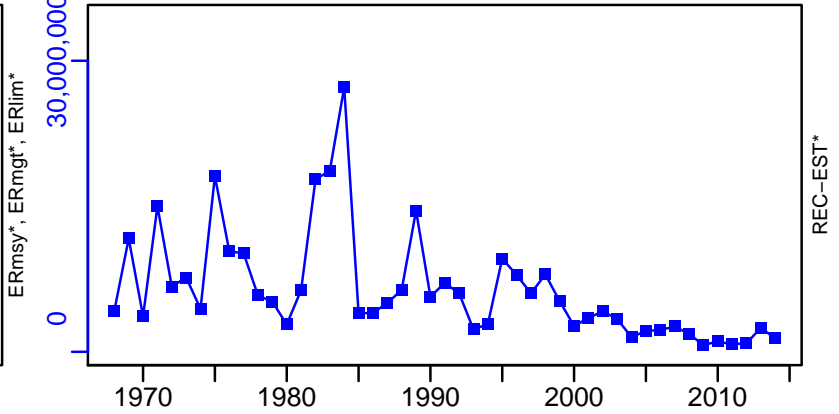
F-1/yr (1968–2016–ICESIMP2016)



ER-calc-ratio (1968–2016–ICESIMP2016)

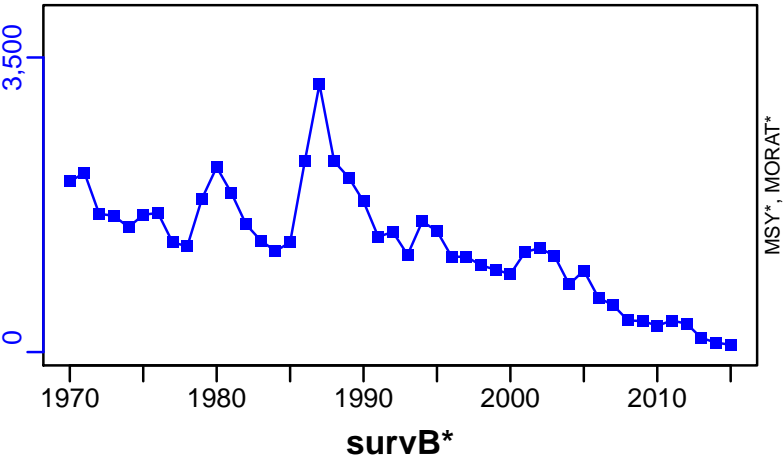


R-E00 (1968–2016–ICESIMP2016)



Common sole Irish Sea [SOLEIS]

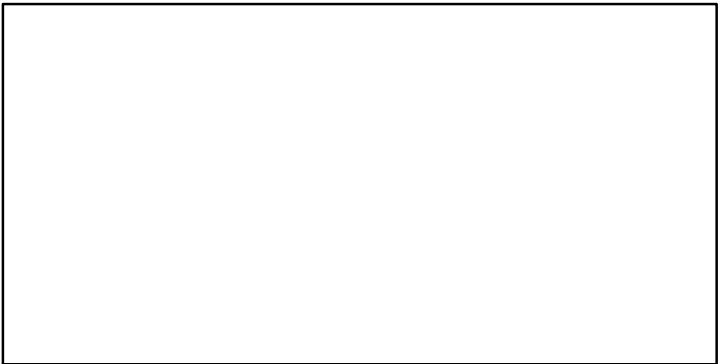
TL-MT, TC\*, RecC\* (1968–2016–ICESIMP2016)



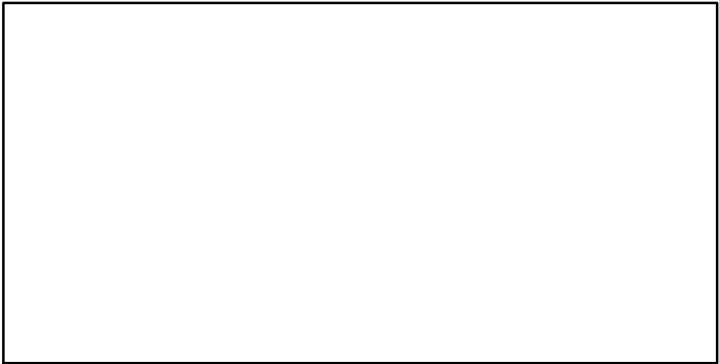
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Common sole North Sea [SOLENS]

Metadata	
<b>Scientific Name</b>	Solea solea
<b>Current Assess ID</b>	WGNSSK-SOLENS-1956-2016-ICESIMP2016
<b>Area</b>	North Sea
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
<b>Asmts in RAM</b>	2010, 2013, 2014, 2015, 2016

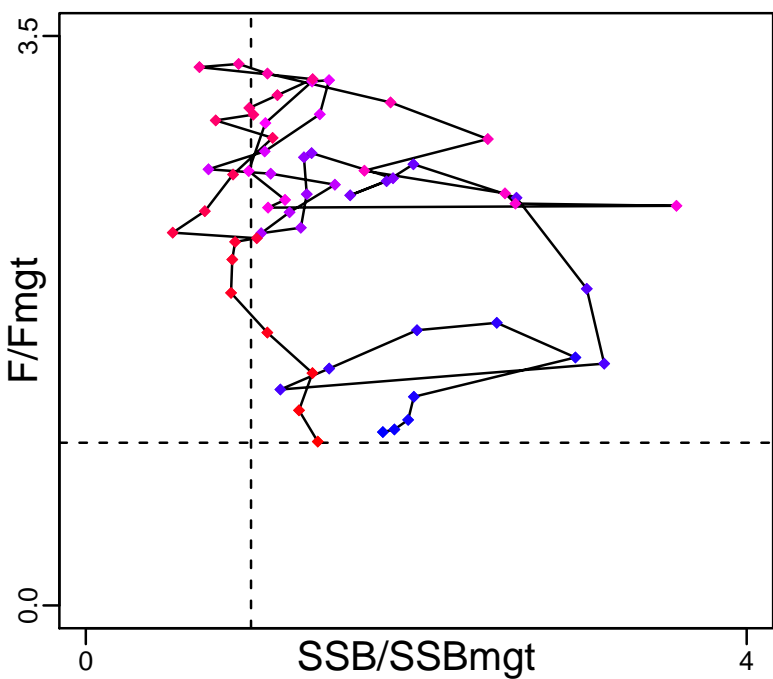
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2010	0.22
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	35,000
<b>Fmgt</b>	Fmgt-1/yr	2016	0.2
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2010	0.1
<b>TBlim</b>	TBlim-MT	2010	25,000
<b>SSBlim</b>	SSBlim-MT	2016	26,300
<b>Flim</b>	Flim-1/yr	2016	0.62
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2015	55,100	-	-
<b>SSB</b>	SSB-MT	2016	64,300	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	59,200,000	-	1
<b>F</b>	F-1/yr	2016	0.2	-	2 to 6
<b>ER</b>	ER-calc-ratio	2016	0.22	-	-
<b>TC</b>	TC-MT	2016	14,300		
<b>TL</b>	TL-MT	2016	12,600		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2010	1.55		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	1.84		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	1.01		
<b>ER/ERmgt</b>	-	-	-		

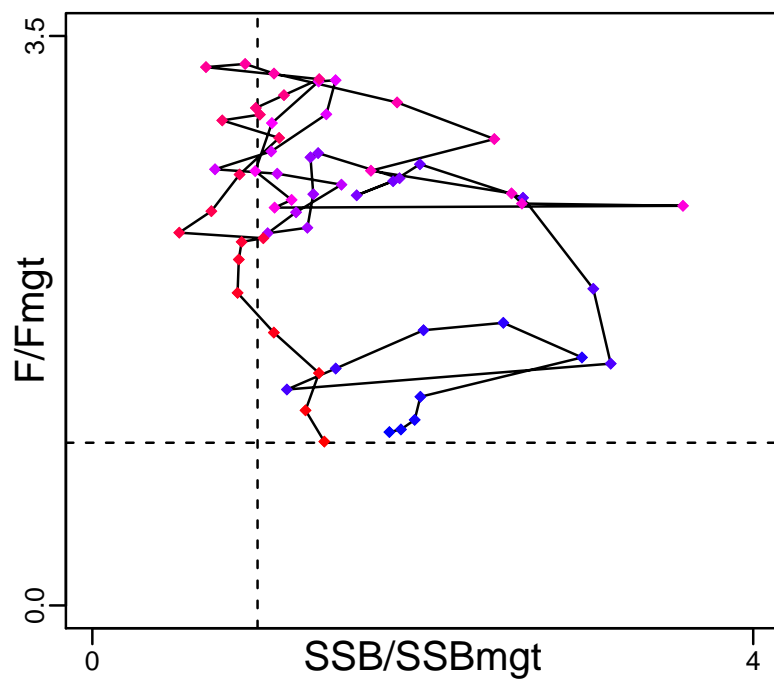


# Common sole North Sea [SOLENS]

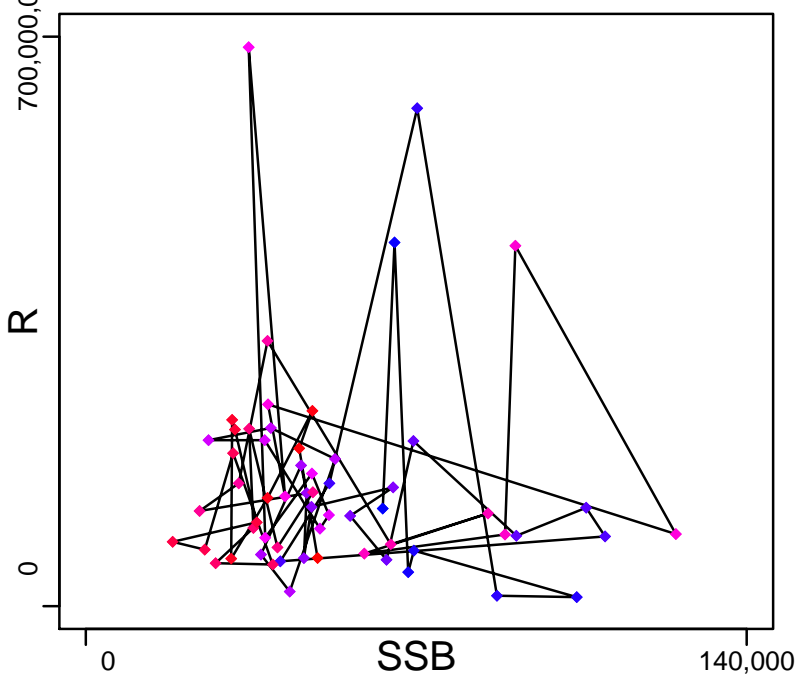
Kobe MSYpref (1956–2016–ICESIMP2016)



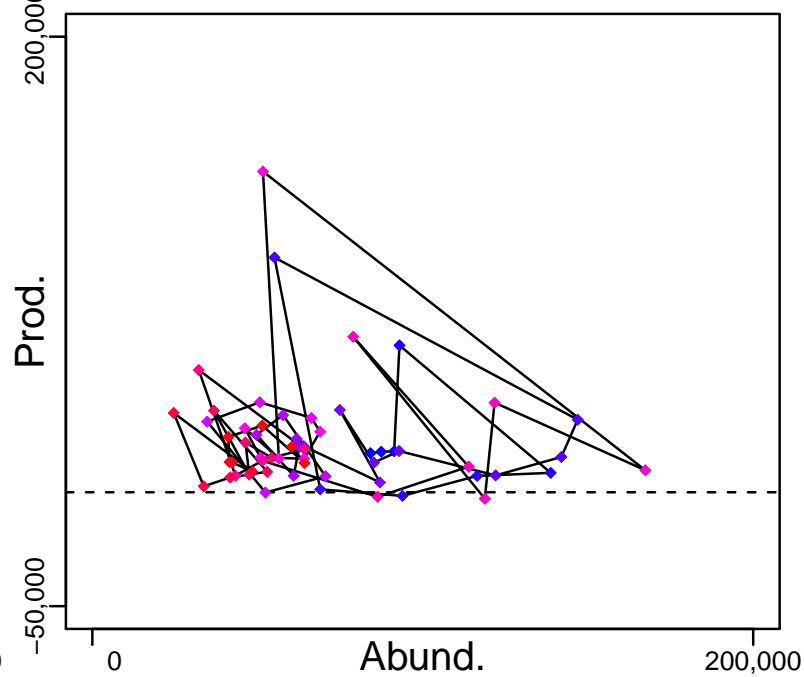
Kobe MGTpref (1956–2016–ICESIMP2016)



Spawner Recruit (1956–2016–ICESIMP2016)



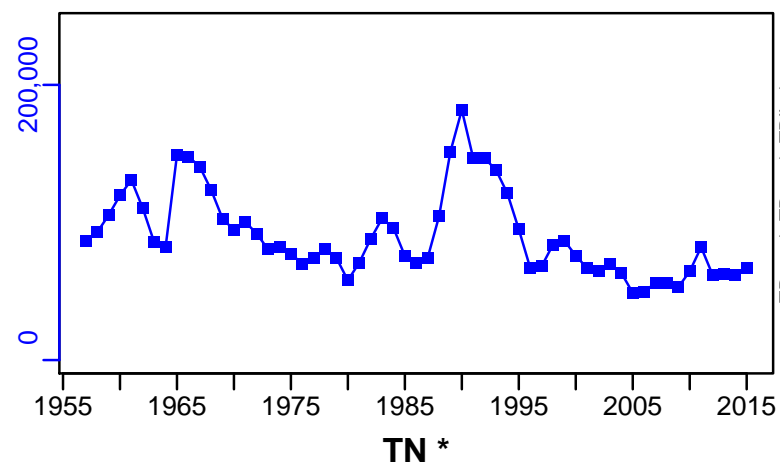
Production (1956–2016–ICESIMP2016)



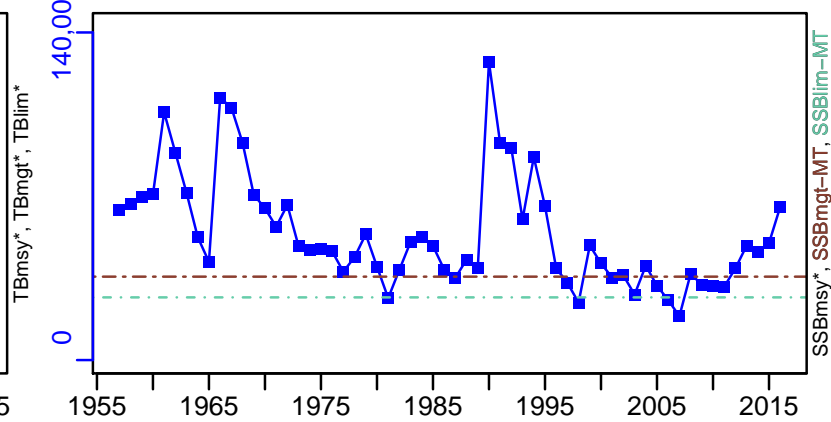
◆ Start Year ◆ End Year \* No Data

# Common sole North Sea [SOLENS]

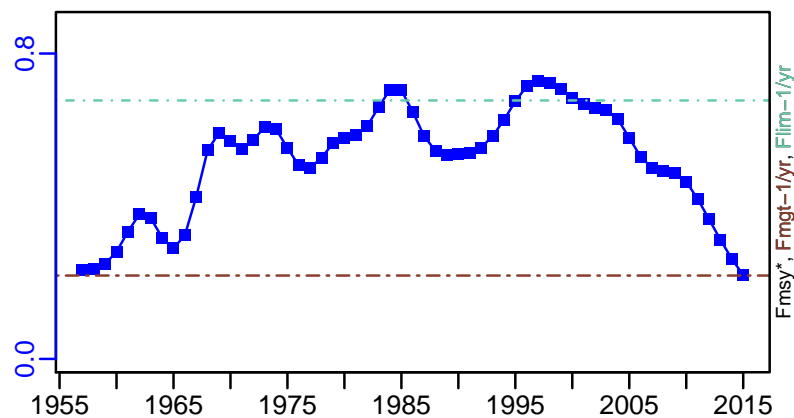
TB-MT (1956–2015–ICESIMP2016)



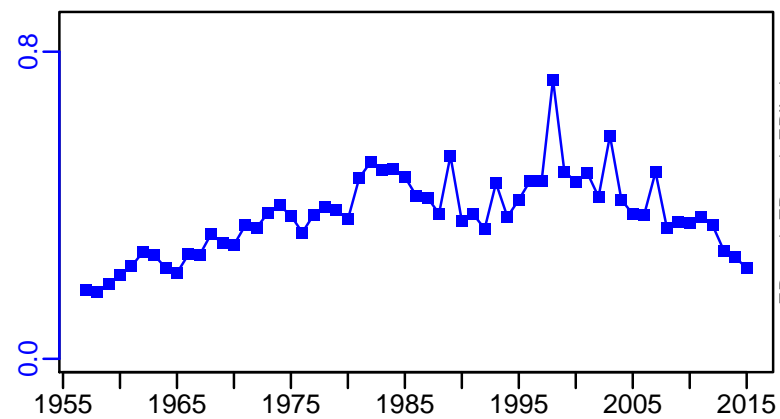
SSB-MT (1956–2016–ICESIMP2016)



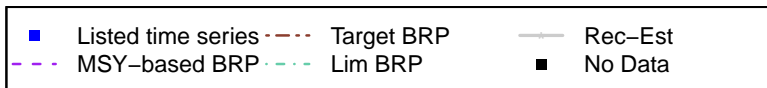
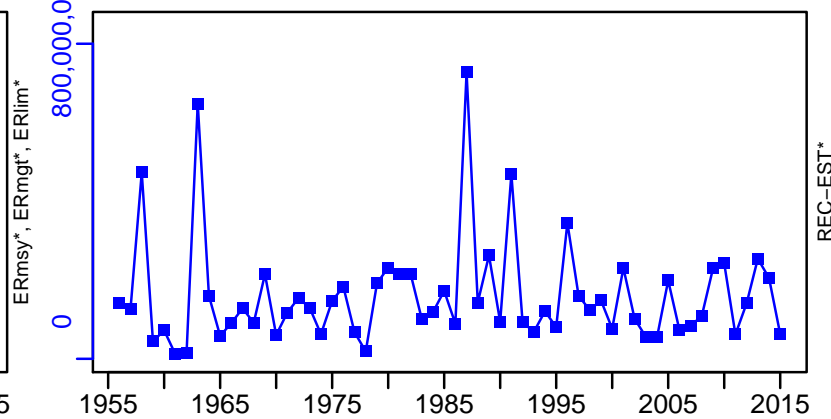
F-1/yr (1956–2016–ICESIMP2016)



ER-calc-ratio (1956–2016–ICESIMP2016)



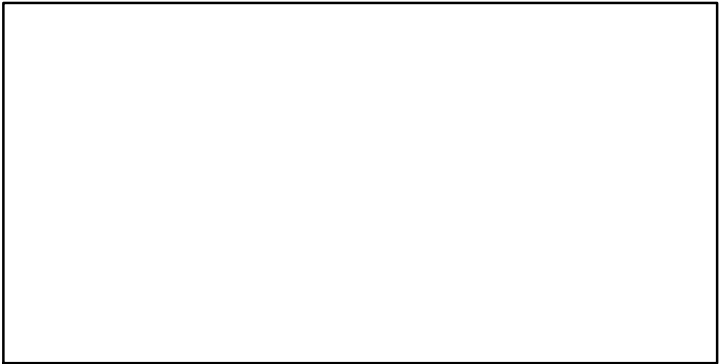
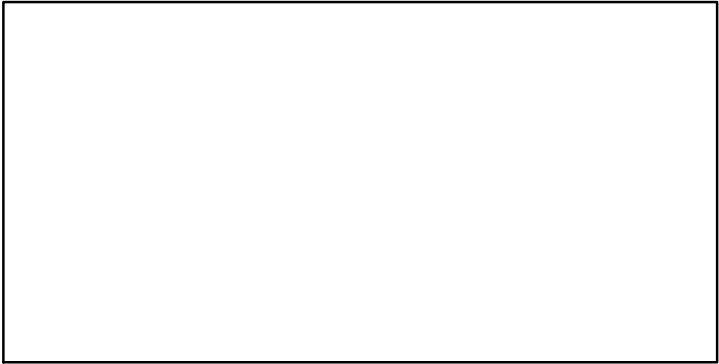
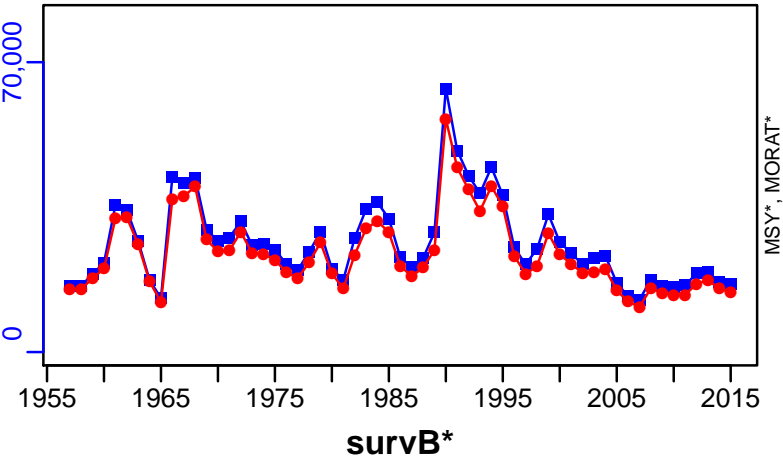
R-E00 (1956–2016–ICESIMP2016)



Common sole North Sea [SOLENS]

TC-MT, TL-MT, RecC\* (1956–2016–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



## Common sole VIIbc [SOLEVIIbc]

Metadata	
<b>Scientific Name</b>	Solea solea
<b>Current Assess ID</b>	WGCSE-SOLEVIIbc-1993-2015-ICESIMP2016
<b>Area</b>	VIIbc
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2015

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	27		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

TB\*



SSB\*



TN \*



F\*



ER\*

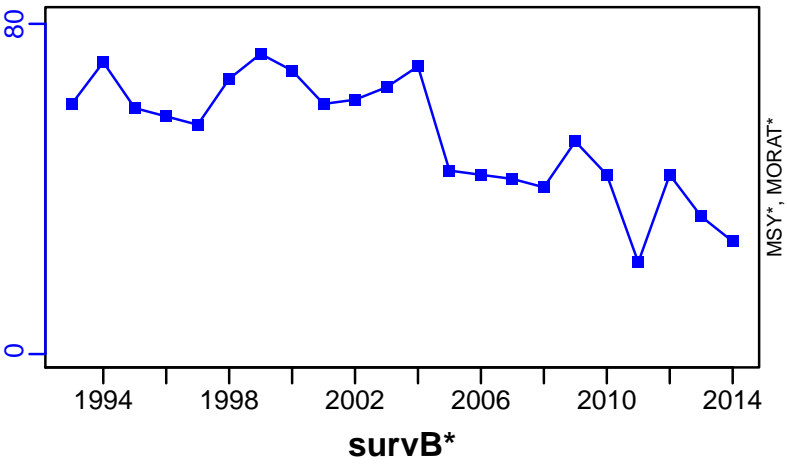


Recruits\*



Common sole VIIbc [SOLEVIIbc]

TL-MT, TC\*, RecC\* (1993–2015–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



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

## Common sole ICES VIId [SOLEVIId]

Metadata	
<b>Scientific Name</b>	Solea solea
<b>Current Assess ID</b>	WGNSSK-SOLEVIId-1981-2016-ICESIMP2016
<b>Area</b>	Eastern English Channel
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
<b>Asmts in RAM</b>	2011, 2013, 2014, 2015, 2016

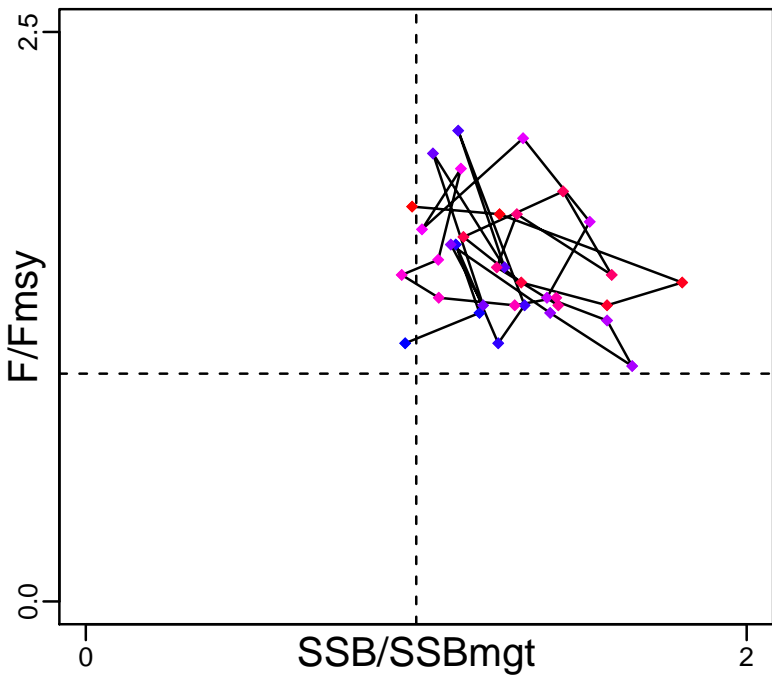
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.3
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	8000
<b>Fmgt</b>	Fmgt-1/yr	2016	0.3
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2011	0.1
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	Flim-1/yr	2016	0.55
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2014	14,700	-	-
<b>SSB</b>	SSB-MT	2016	7080	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	23,700,000	-	1
<b>F</b>	F-1/yr	2016	0.52	-	3 to 7
<b>ER</b>	ER-calc-ratio	2016	0.33	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2016	3440		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	1.73		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	0.89		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	1.73		
<b>ER/ERmgt</b>	-	-	-		

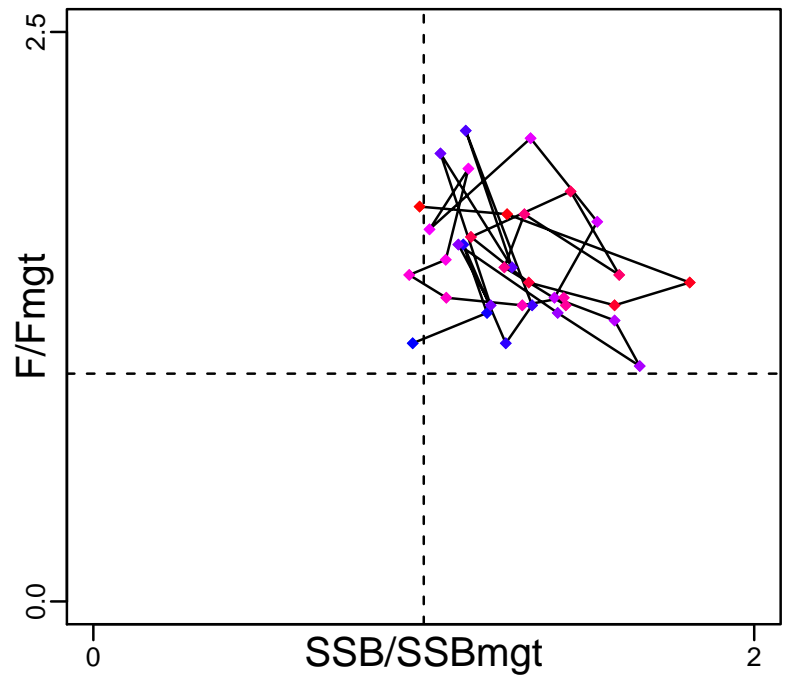


Common sole ICES VIld [SOLEVIld]

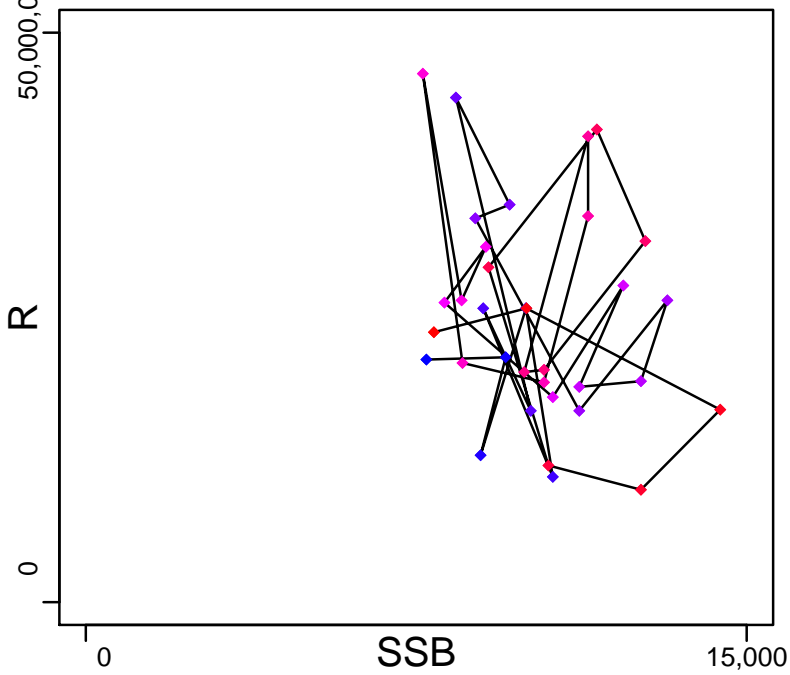
Kobe MSYpref (1981–2016–ICESIMP2016)



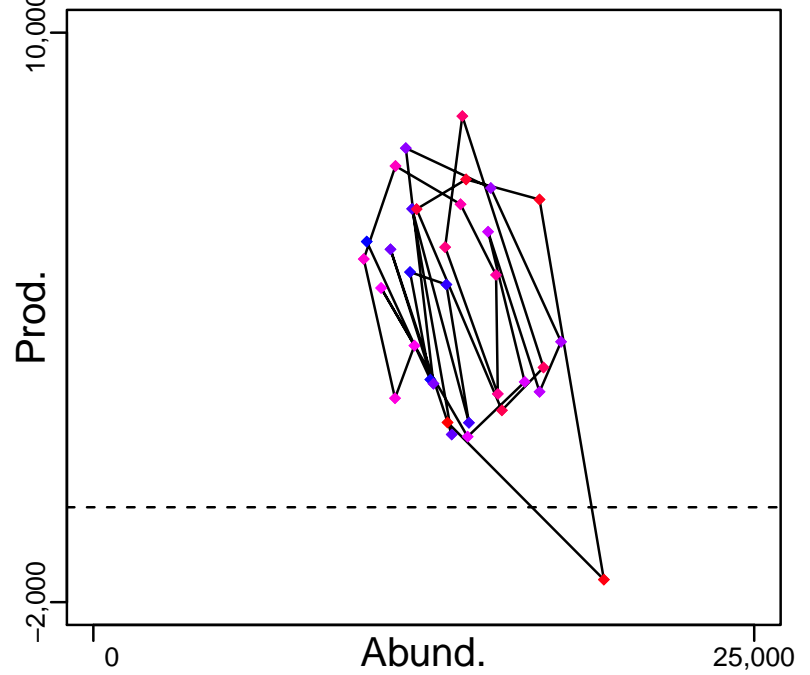
Kobe MGTpref (1981–2016–ICESIMP2016)



Spawner Recruit (1981–2016–ICESIMP2016)



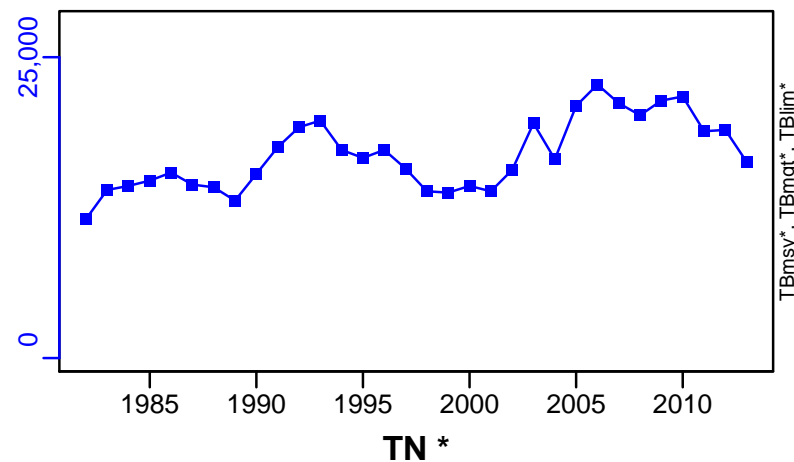
Production (1981–2016–ICESIMP2016)



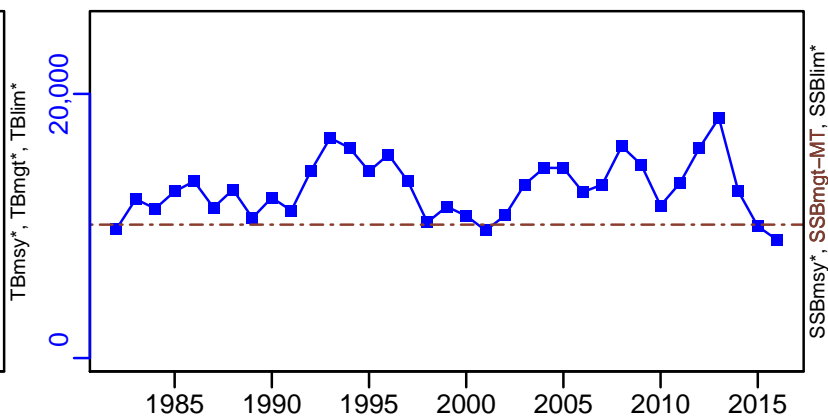
◆ Start Year ◆ End Year \* No Data

# Common sole ICES VIld [SOLEVIld]

TB-MT (1981–2014–ICESIMP2016)



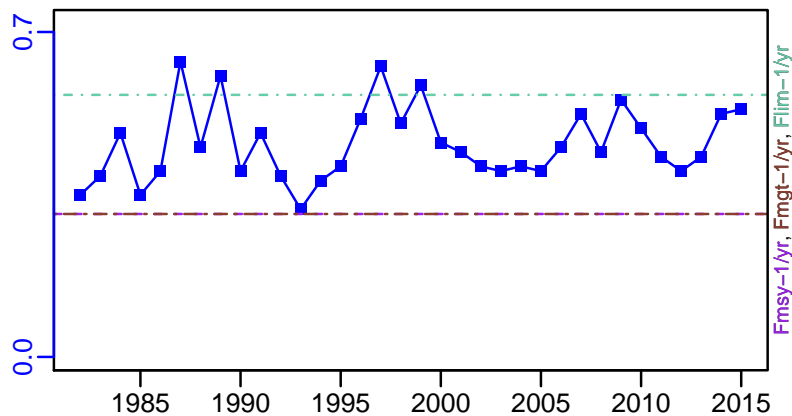
SSB-MT (1981–2016–ICESIMP2016)



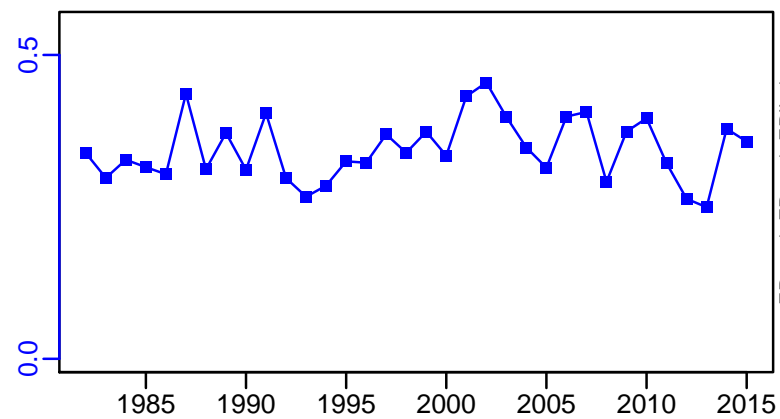
TN \*



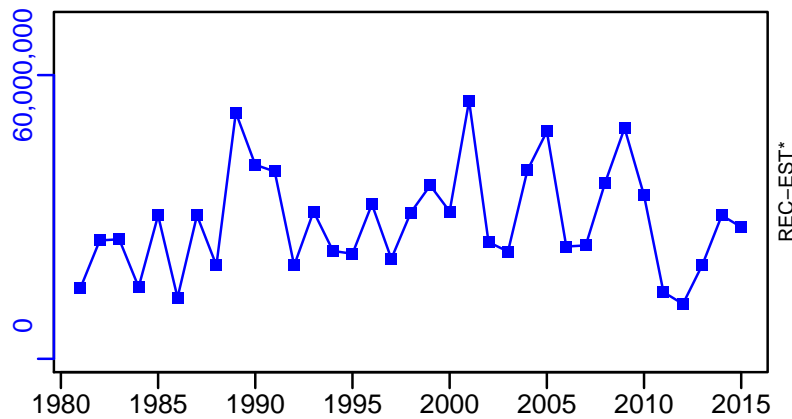
F-1/yr (1981–2016–ICESIMP2016)



ER-calc-ratio (1981–2016–ICESIMP2016)



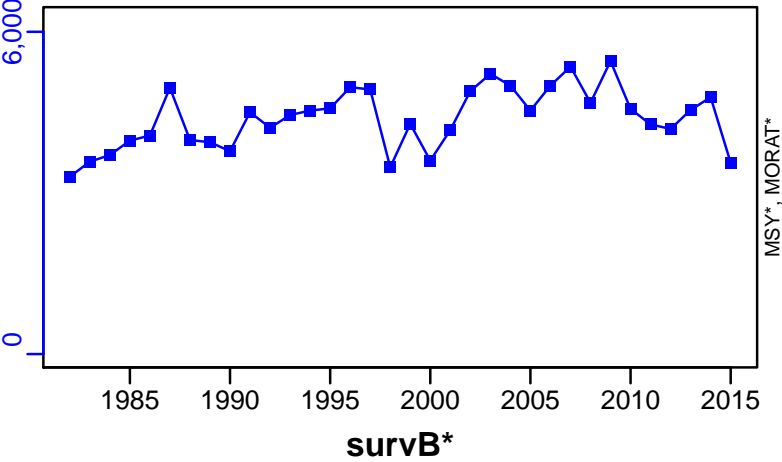
R-E00 (1981–2016–ICESIMP2016)



Common sole ICES VIId [SOLEVIId]

TL-MT, TC\*, RecC\* (1981-2016-ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



CPUE\*

EFFORT\*



## Common sole Western English Channel [SOLEVIle]

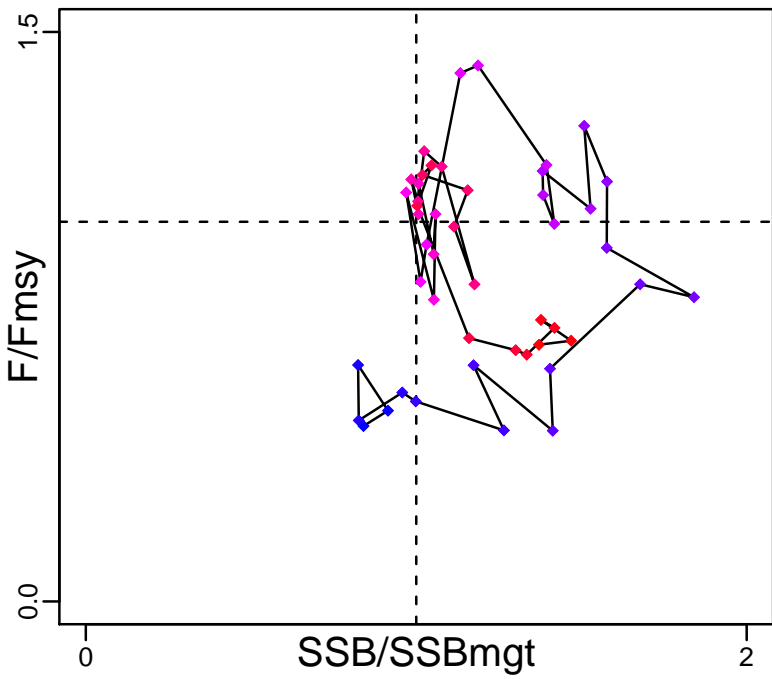
Metadata	
<b>Scientific Name</b>	Solea solea
<b>Current Assess ID</b>	WGCSE-SOLEVIle-1967-2016-ICESIMP2016
<b>Area</b>	Western English Channel
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2015, 2016, 2013, 2014, 2010

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.29
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	2900
<b>Fmgt</b>	Fmgt-1/yr	2016	0.29
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2010	0.1
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	2000
<b>Flim</b>	Flim-1/yr	2016	0.44
<b>ERlim</b>	-	-	-

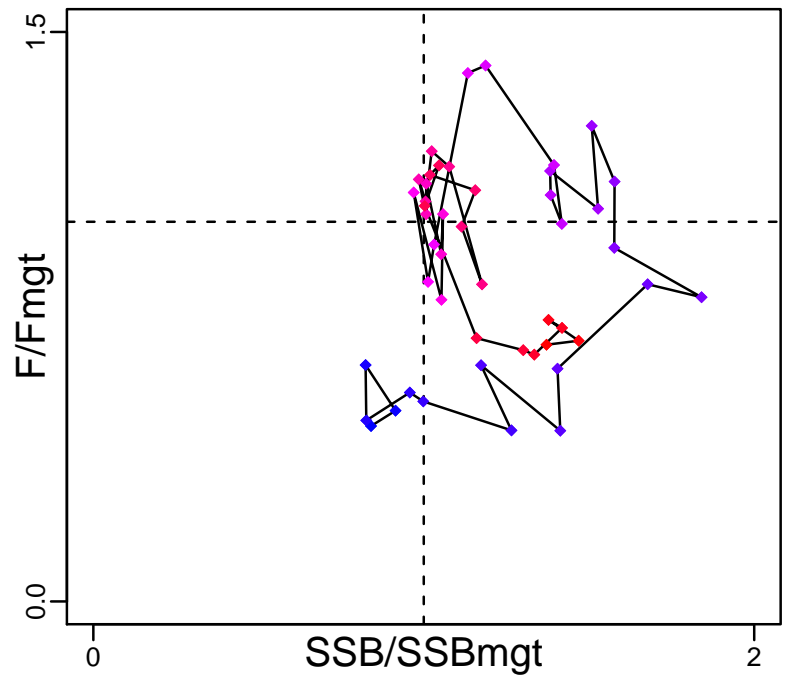
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	4920	-	-
<b>SSB</b>	SSB-MT	2016	4030	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	3,910,000	-	2
<b>F</b>	F-1/yr	2016	0.2	-	3 to 9
<b>ER</b>	ER-calc-ratio	2016	0.16	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2016	772		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	0.68		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	1.39		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.68		
<b>ER/ERmgt</b>	-	-	-		

# Common sole Western English Channel [SOLEVile]

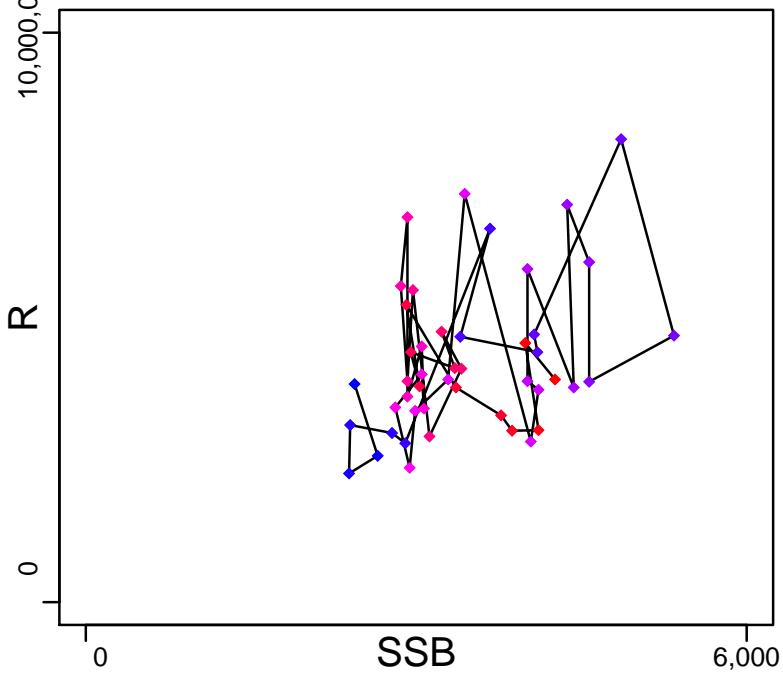
Kobe MSYpref (1967–2016–ICESIMP2016)



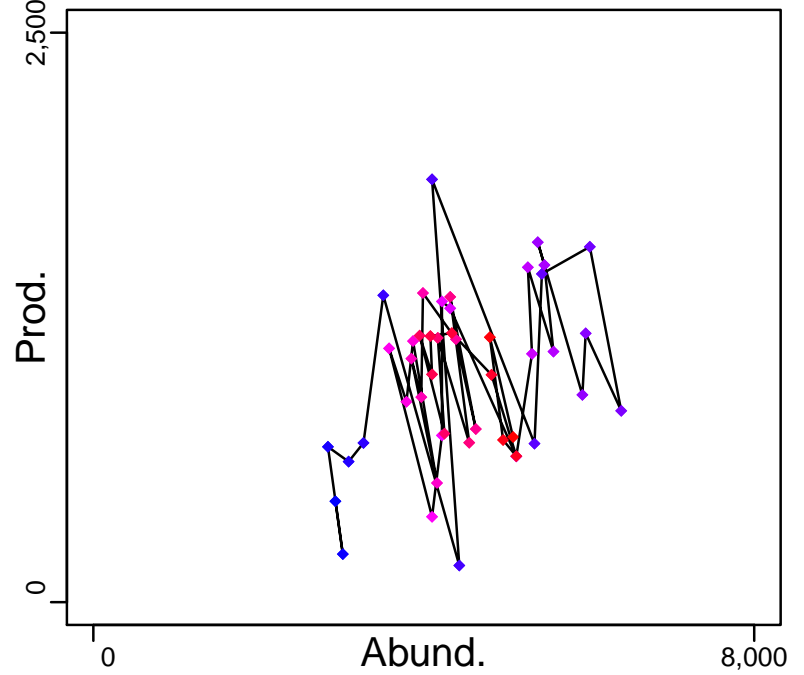
Kobe MGTpref (1967–2016–ICESIMP2016)



Spawner Recruit (1967–2016–ICESIMP2016)



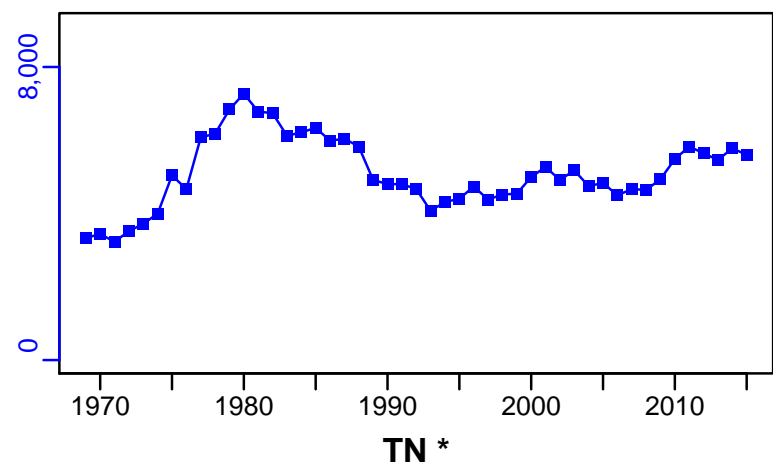
Production (1967–2016–ICESIMP2016)



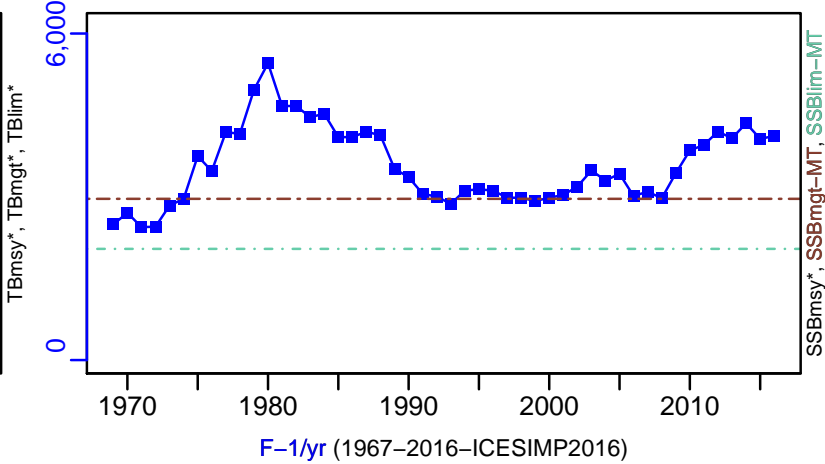
◆ Start Year ◆ End Year \* No Data

# Common sole Western English Channel [SOLEVile]

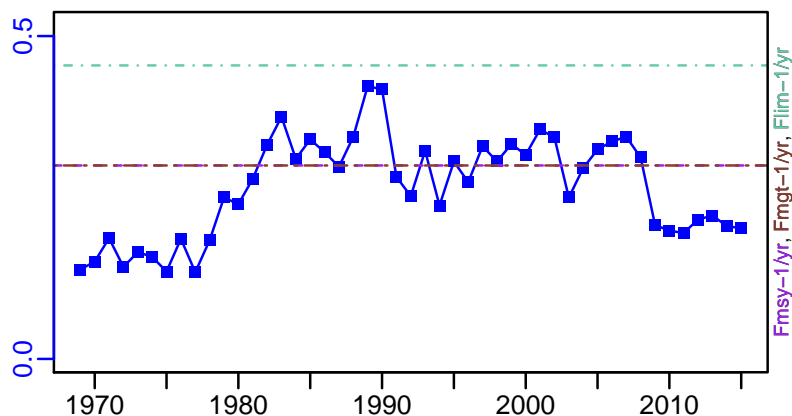
TB-MT (1967–2016–ICESIMP2016)



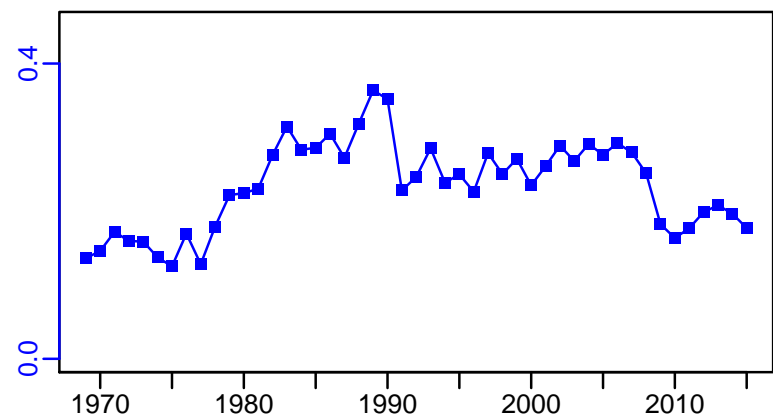
SSB-MT (1967–2016–ICESIMP2016)



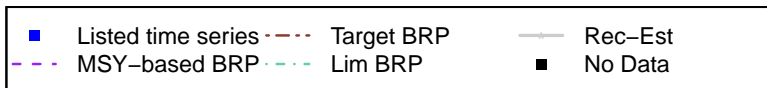
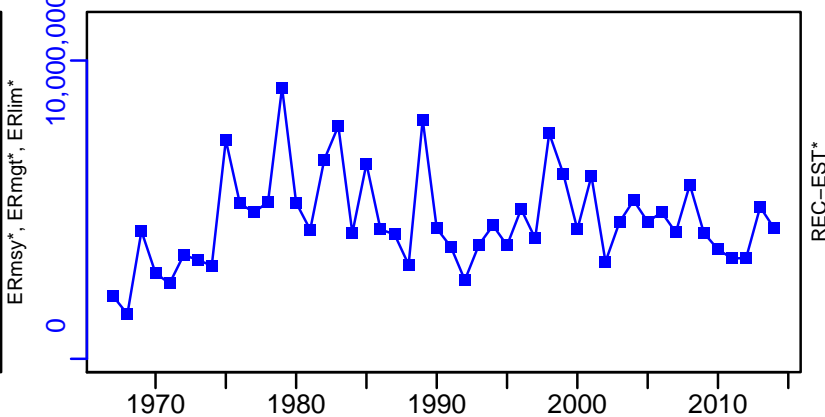
F-1/yr (1967–2016–ICESIMP2016)



ER-calc-ratio (1967–2016–ICESIMP2016)



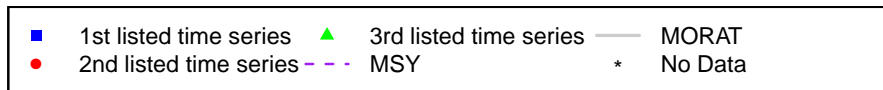
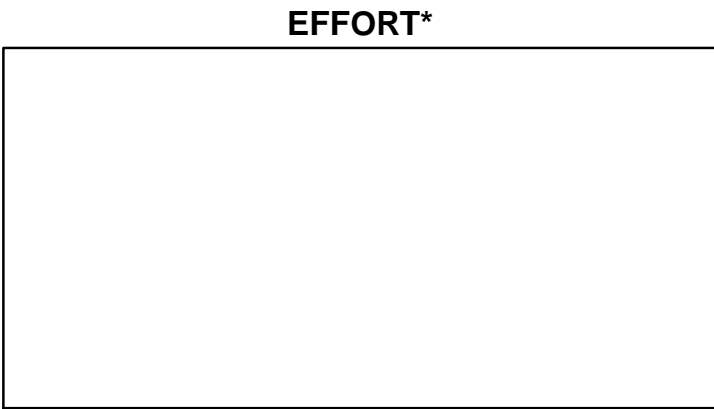
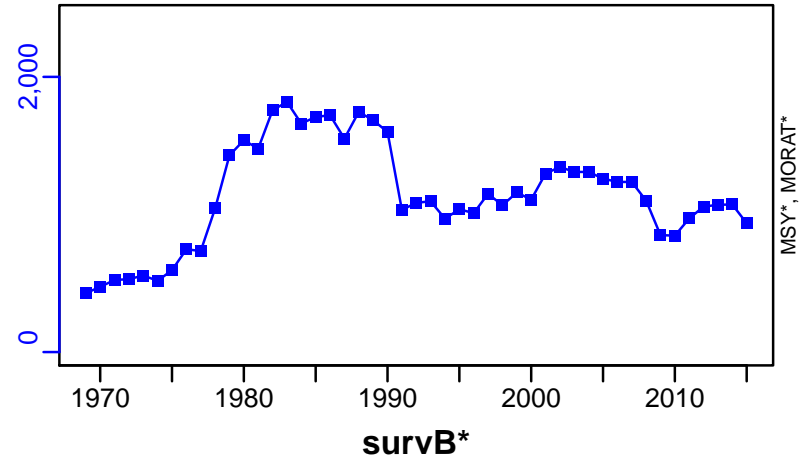
R-E00 (1967–2016–ICESIMP2016)



# Common sole Western English Channel [SOLEVile]

TL-MT, TC\*, RecC\* (1967–2016–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



## Common sole VIIh-k [SOLEVIIh-k]

Metadata	
<b>Scientific Name</b>	Solea solea
<b>Current Assess ID</b>	WGCSE-SOLEVIIh-k-1990-2016-ICESIMP2016
<b>Area</b>	VIIh-k
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2014, 2015, 2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-relative	2016	1	-	-
TN	-	-	-	-	-
R	R-relative	2016	2	-	3
F	F-relative	2016	0.49	-	3 to 6
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	244		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



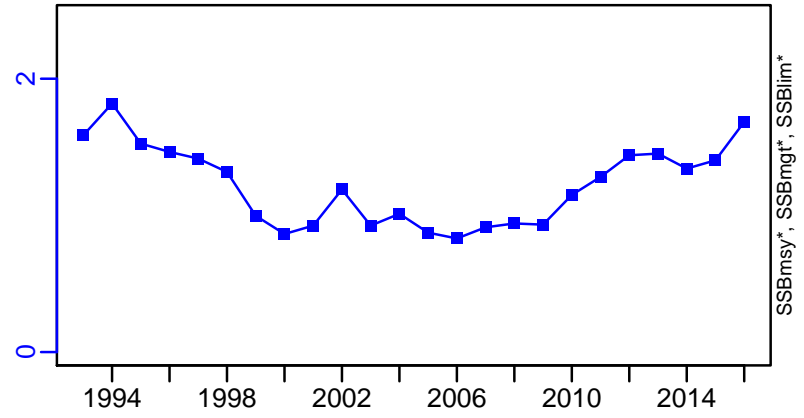


Common sole VIIh-k [SOLEVIIh-k]

TB\*



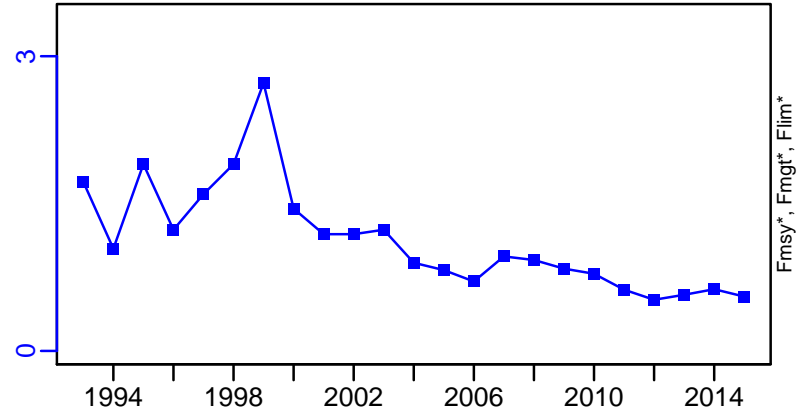
SSB-relative (1990-2016-ICESIMP2016)



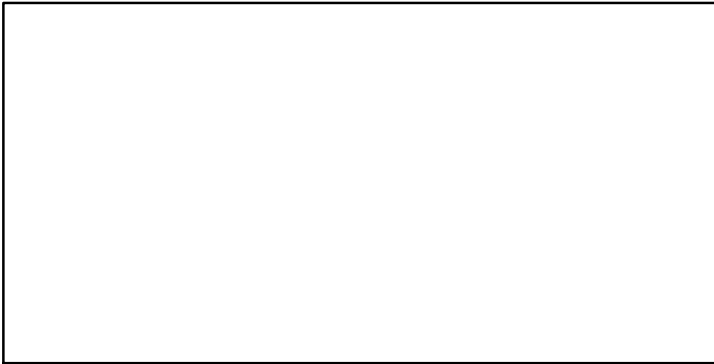
TN \*



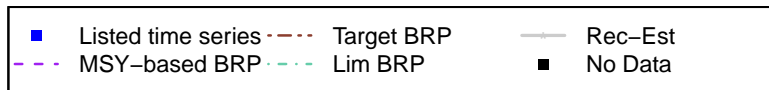
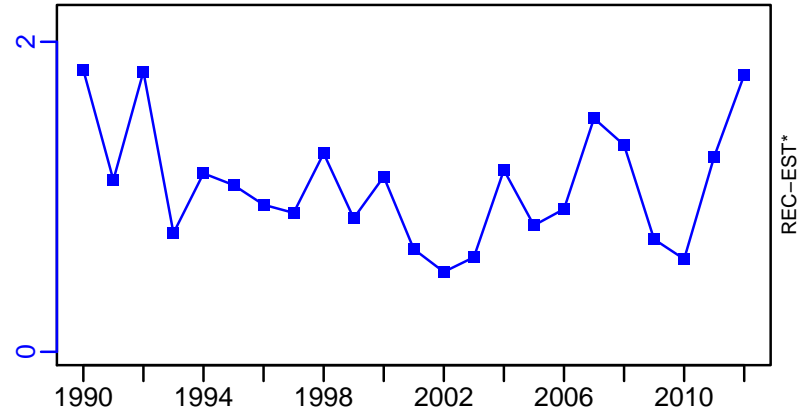
F-relative (1990-2016-ICESIMP2016)



ER\*



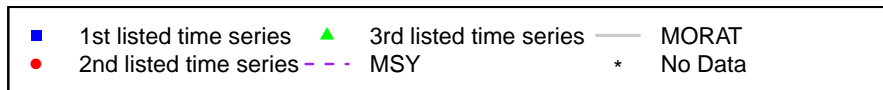
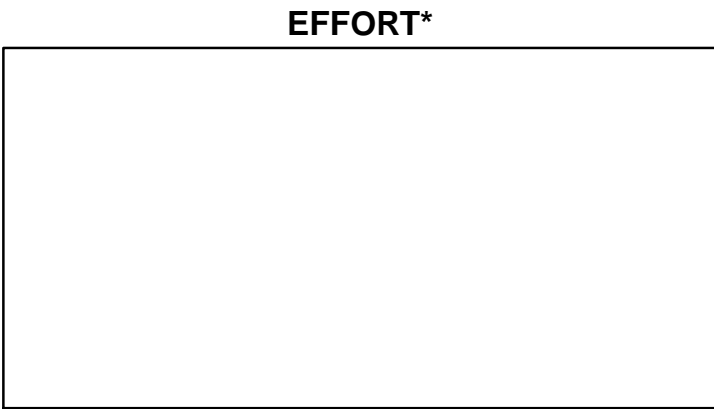
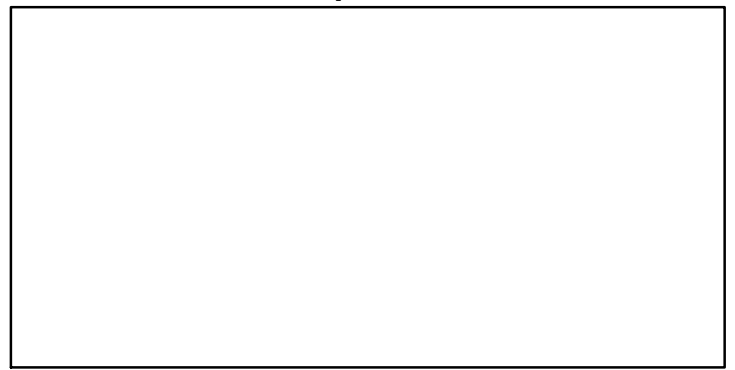
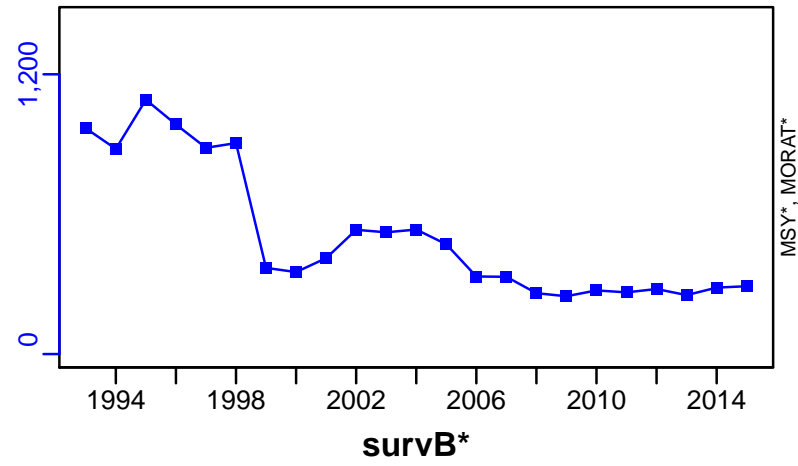
R-relative (1990-2016-ICESIMP2016)



# Common sole VIIh-k [SOLEVIIh-k]

TL-MT, TC\*, RecC\* (1990-2016-ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



## Common sole Villab [SOLEVillab]

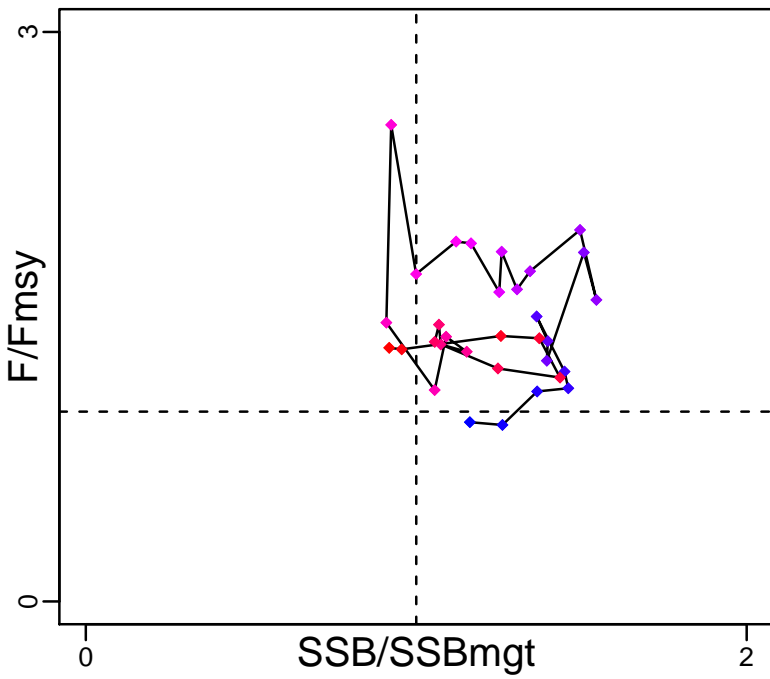
Metadata	
<b>Scientific Name</b>	Solea solea
<b>Current Assess ID</b>	WGBIE-SOLEVillab-1982-2016-ICESIMP2016
<b>Area</b>	Villab
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
<b>Asmts in RAM</b>	2016, 2014, 2015, 2011, 2013

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.33
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	10,600
<b>Fmgt</b>	Fmgt-1/yr	2016	0.33
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2011	0.1
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	7600
<b>Flim</b>	Flim-1/yr	2016	0.6
<b>ERlim</b>	-	-	-

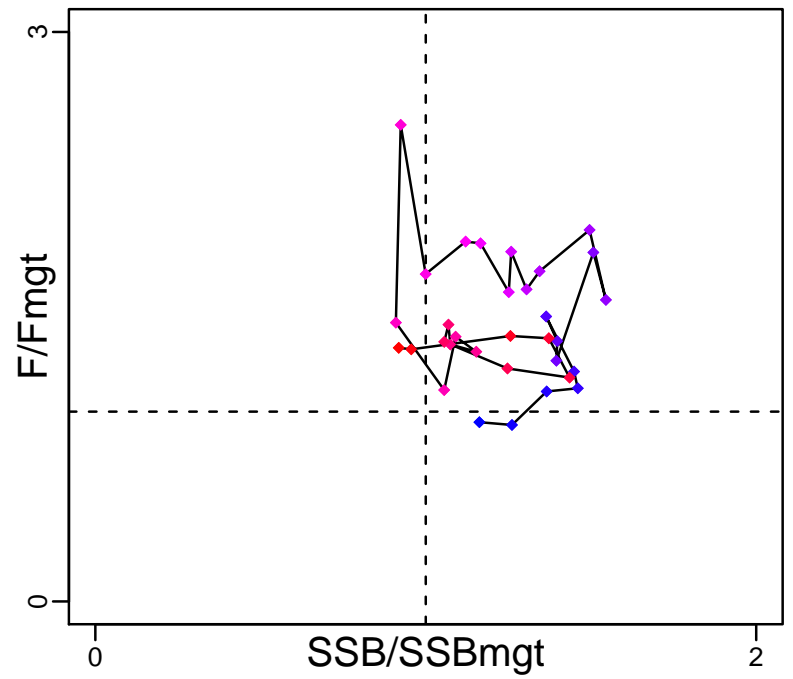
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	14,200	-	-
<b>SSB</b>	SSB-MT	2016	10,600	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	21,300,000	-	2
<b>F</b>	F-1/yr	2016	0.44	-	3 to 6
<b>ER</b>	ER-calc-ratio	2016	0.28	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2016	3640		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	1.34		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	1		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	1.34		
<b>ER/ERmgt</b>	-	-	-		

# Common sole Villab [SOLEVillab]

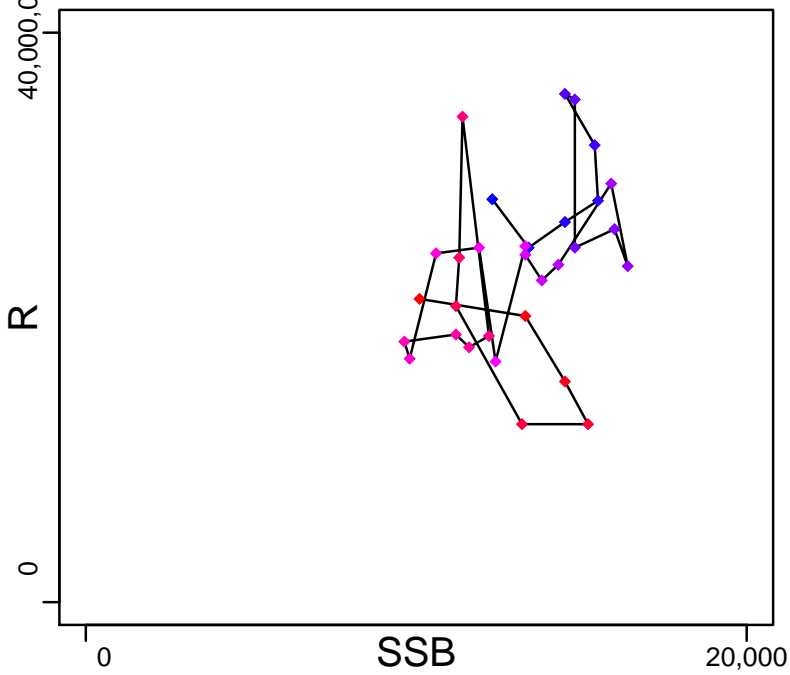
Kobe MSYpref (1982–2016–ICESIMP2016)



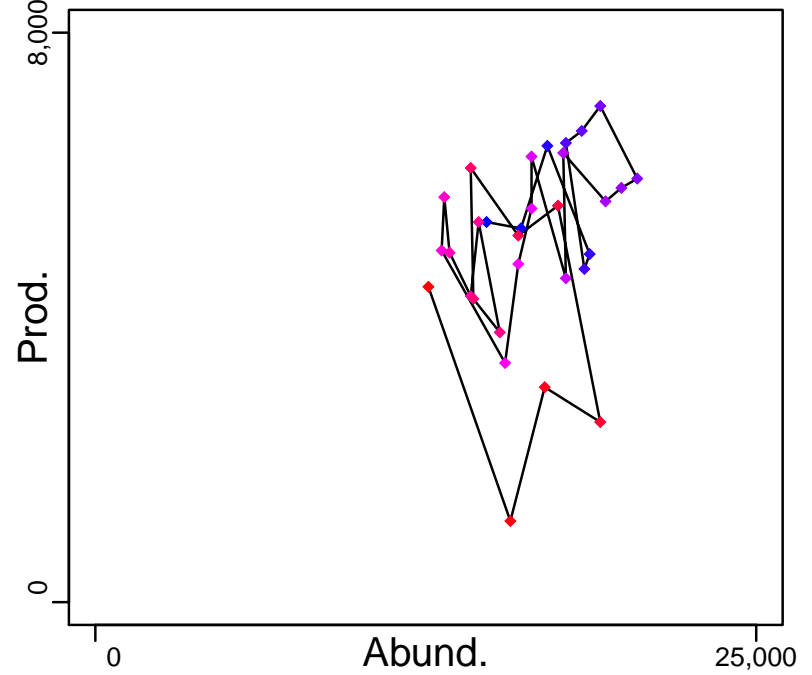
Kobe MGTpref (1982–2016–ICESIMP2016)



Spawner Recruit (1982–2016–ICESIMP2016)



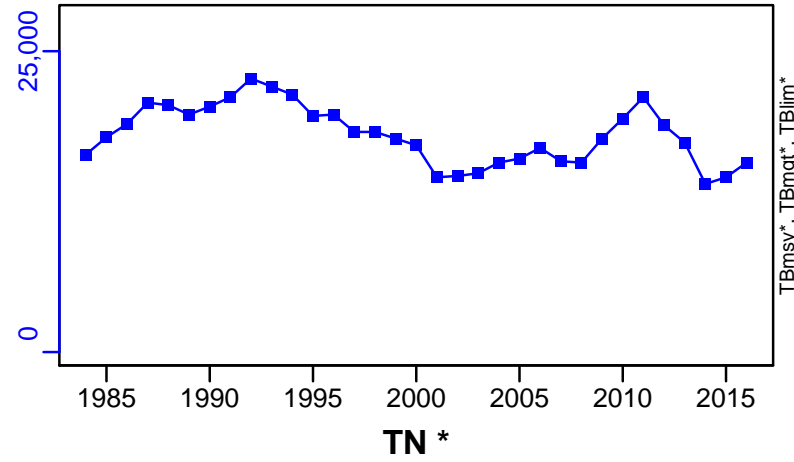
Production (1982–2016–ICESIMP2016)



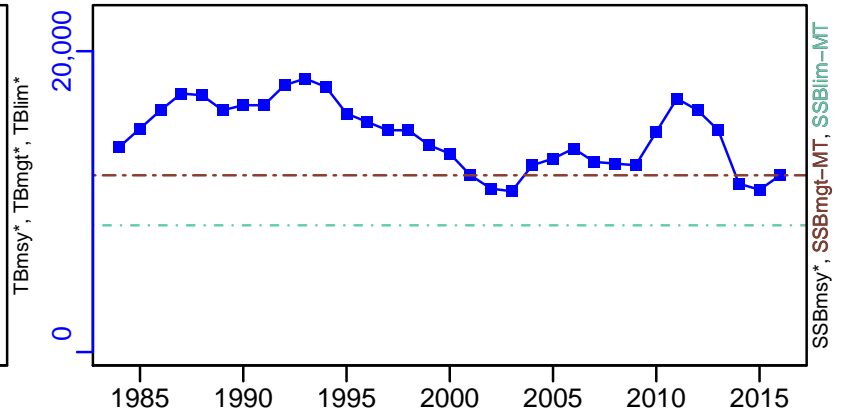
◆ Start Year ◆ End Year \* No Data

# Common sole Villab [SOLEVillab]

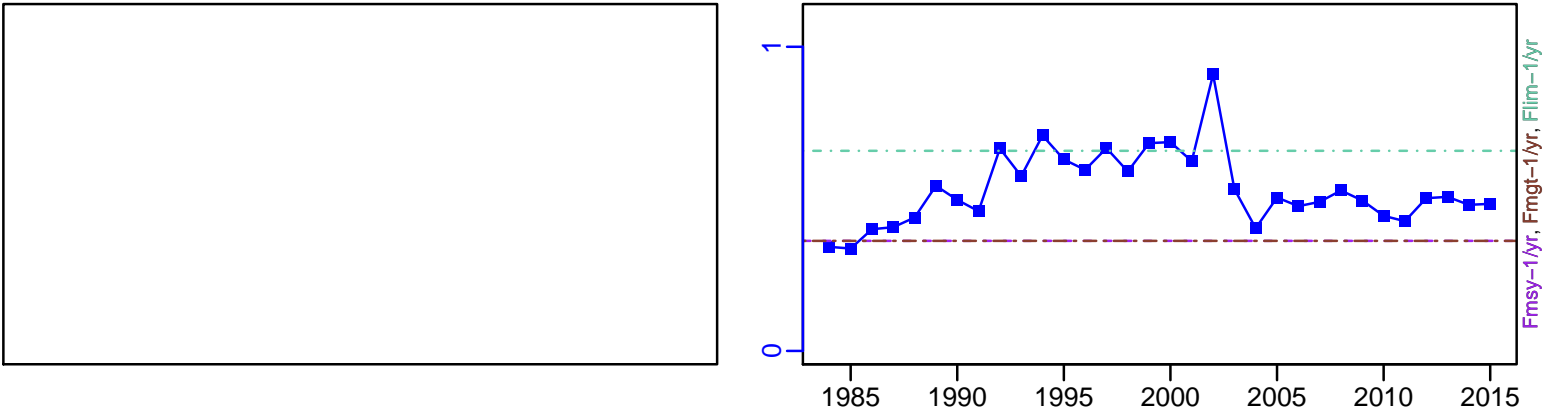
TB-MT (1982–2016–ICESIMP2016)



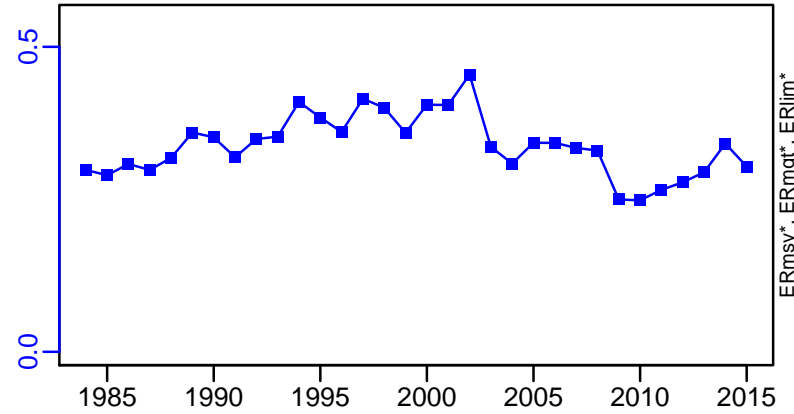
SSB-MT (1982–2016–ICESIMP2016)



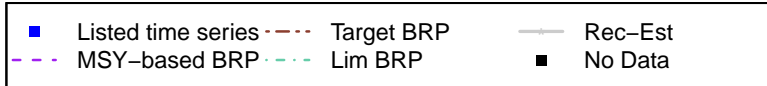
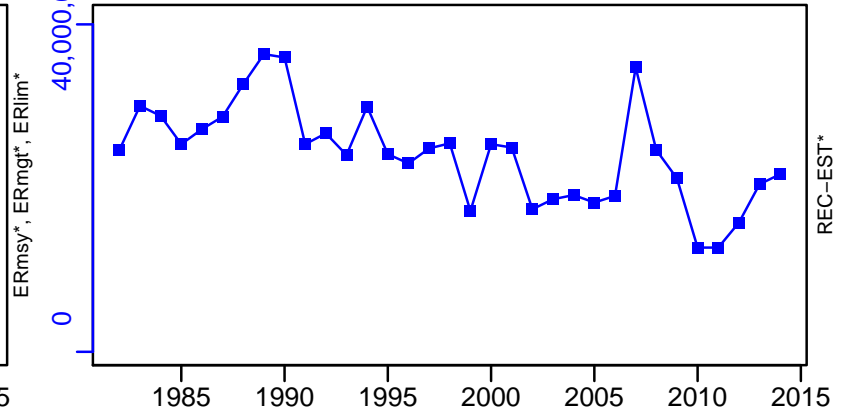
F-1/yr (1982–2016–ICESIMP2016)



ER-calc-ratio (1982–2016–ICESIMP2016)



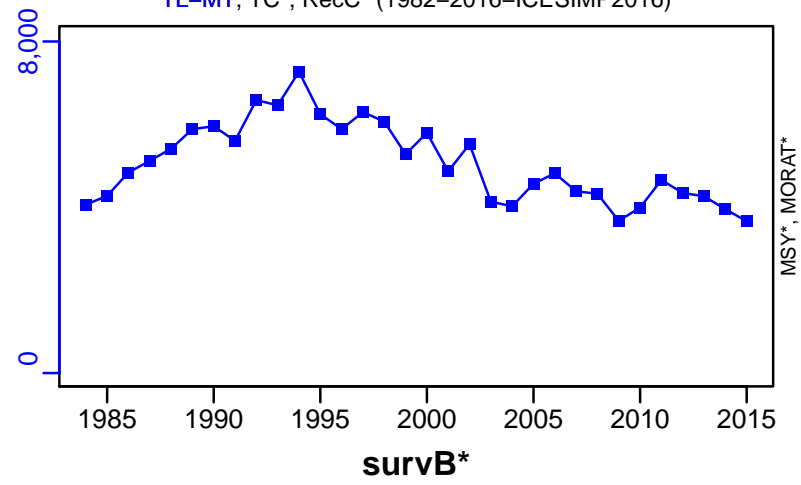
R-E00 (1982–2016–ICESIMP2016)



# Common sole Villab [SOLEVillab]

TL-MT, TC\*, RecC\* (1982-2016-ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Sprat ICES Baltic Areas 22-32 [SPRAT22-32]

Metadata	
<b>Scientific Name</b>	Sprattus sprattus
<b>Current Assess ID</b>	WGBFAS-SPRAT22-32-1973-2016-ICESIMP2016
<b>Area</b>	Baltic Areas 22-32
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Baltic Fisheries Assessment Working Group
<b>Asmts in RAM</b>	2011, 2013, 2014, 2015, 2016

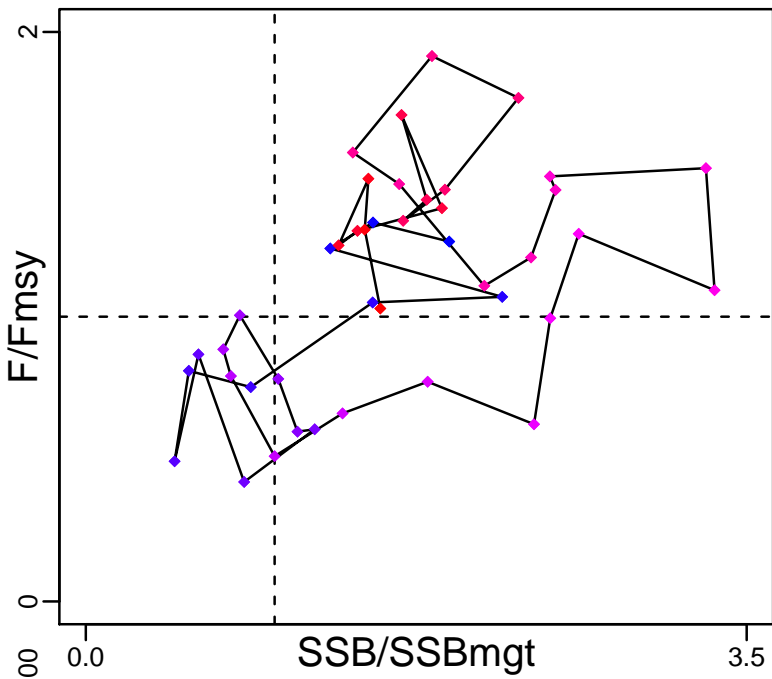
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.26
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	570,000
<b>Fmgt</b>	Fmgt-1/yr	2016	0.26
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	410,000
<b>Flim</b>	Flim-1/yr	2016	0.39
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	2,040,000	-	-
<b>SSB</b>	SSB-MT	2016	1,340,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$8.72 \times 10^{10}$	-	1
<b>F</b>	F-1/yr	2016	0.27	-	3 to 5
<b>ER</b>	ER-calc-ratio	2016	0.15	-	-
<b>TC</b>	TC-MT	2016	247,000		
<b>TL</b>	TL-MT	2015	244,000		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	1.03		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	2.36		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	1.03		
<b>ER/ERmgt</b>	-	-	-		

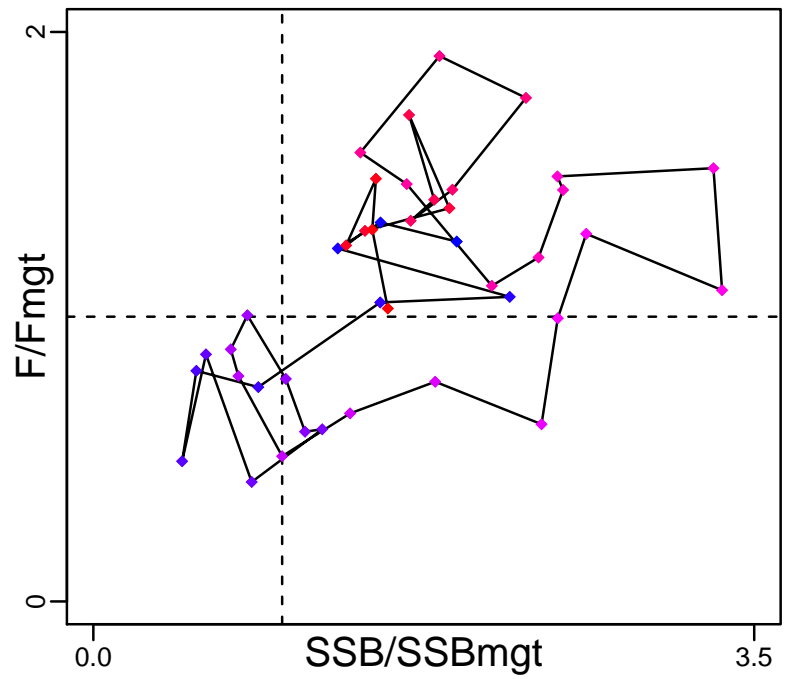


# Sprat ICES Baltic Areas 22–32 [SPRAT22–32]

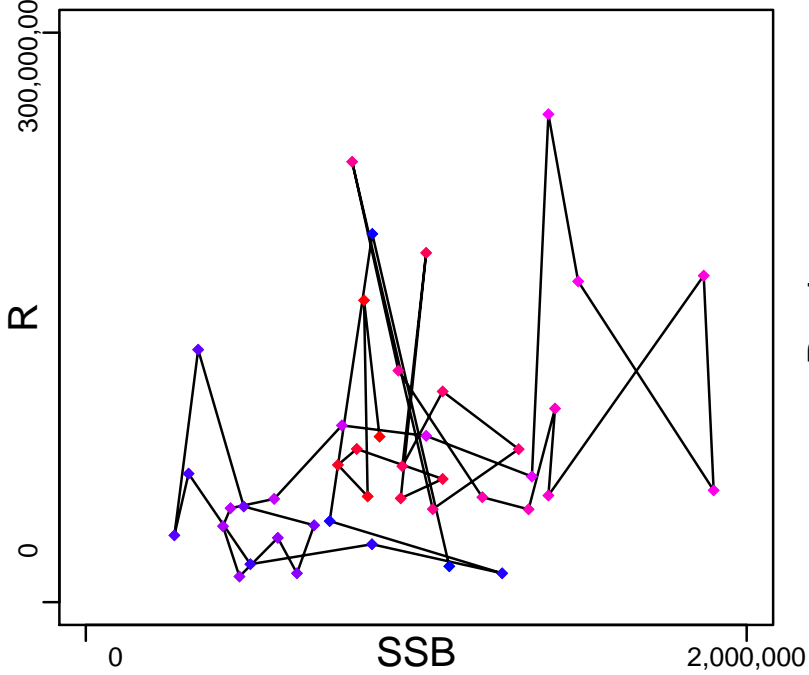
Kobe MSYpref (1973–2016–ICESIMP2016)



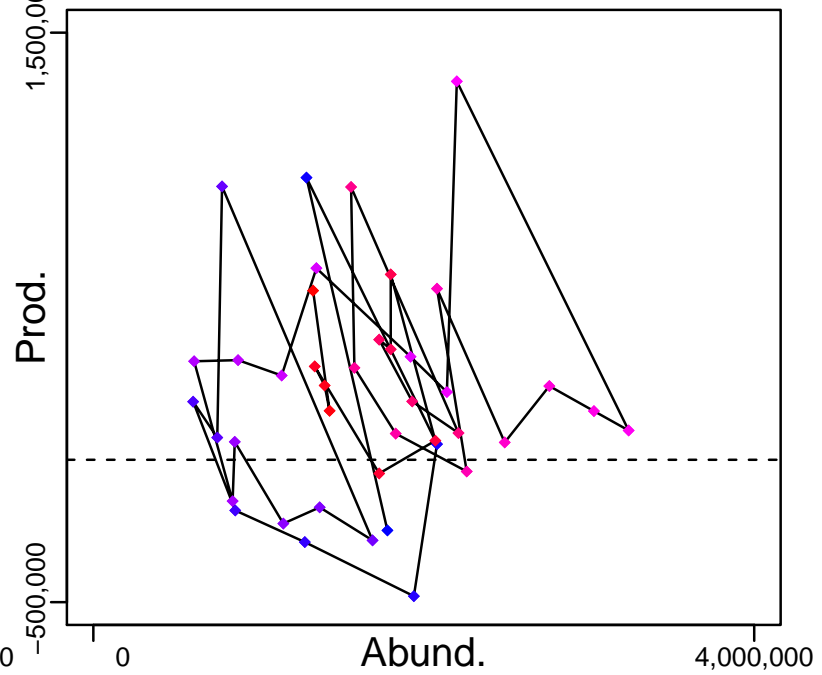
Kobe MGTpref (1973–2016–ICESIMP2016)



Spawner Recruit (1973–2016–ICESIMP2016)



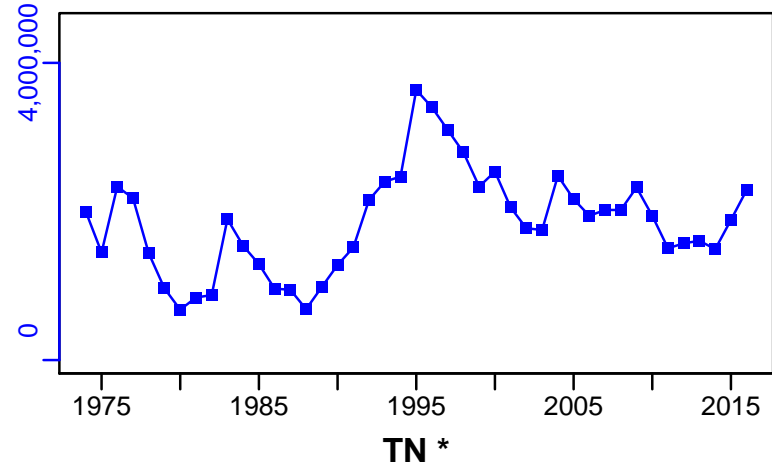
Production (1973–2016–ICESIMP2016)



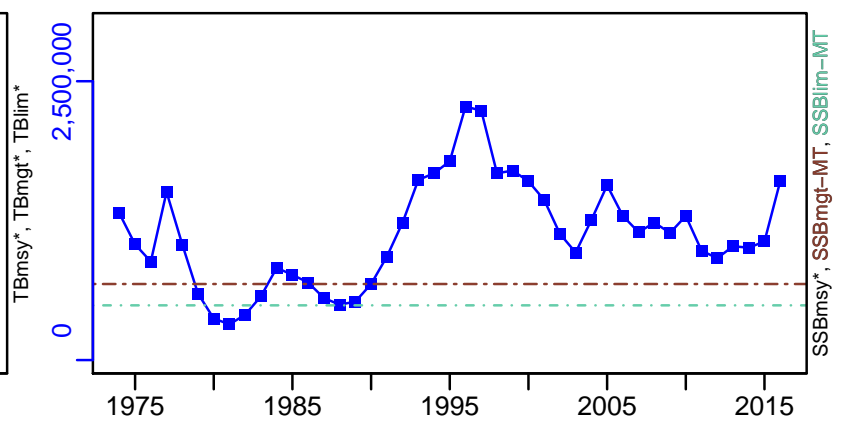
◆ Start Year ◆ End Year \* No Data

# Sprat ICES Baltic Areas 22–32 [SPRAT22–32]

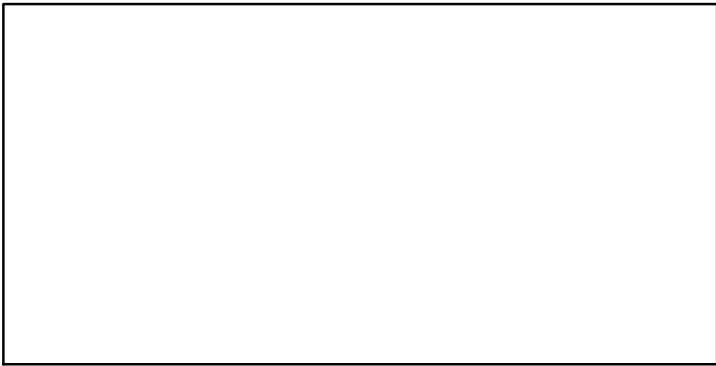
TB–MT (1973–2016–ICESIMP2016)



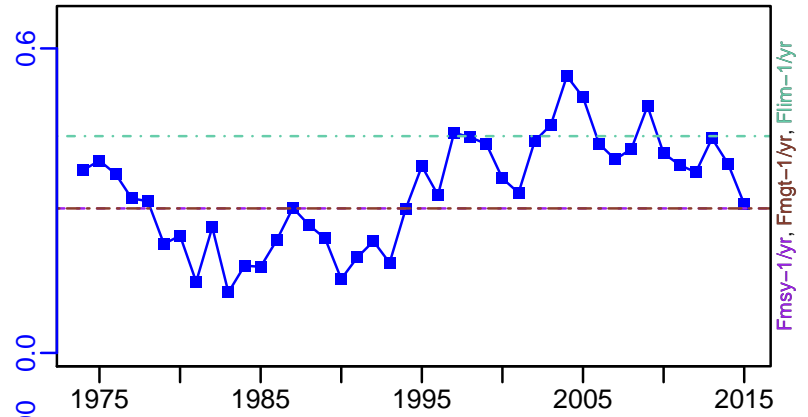
SSB–MT (1973–2016–ICESIMP2016)



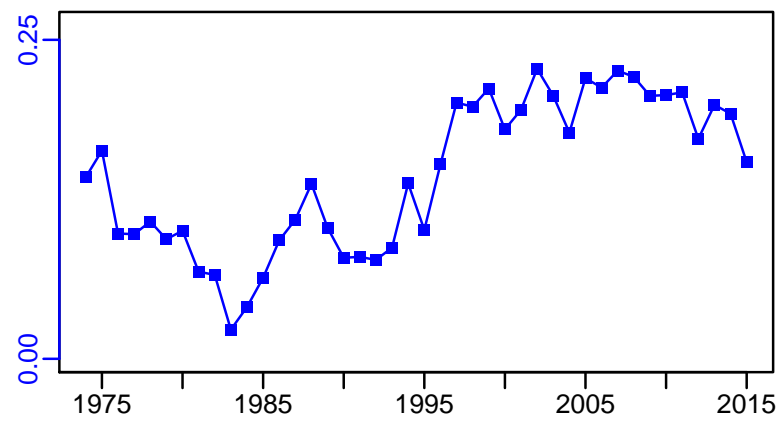
TN \*



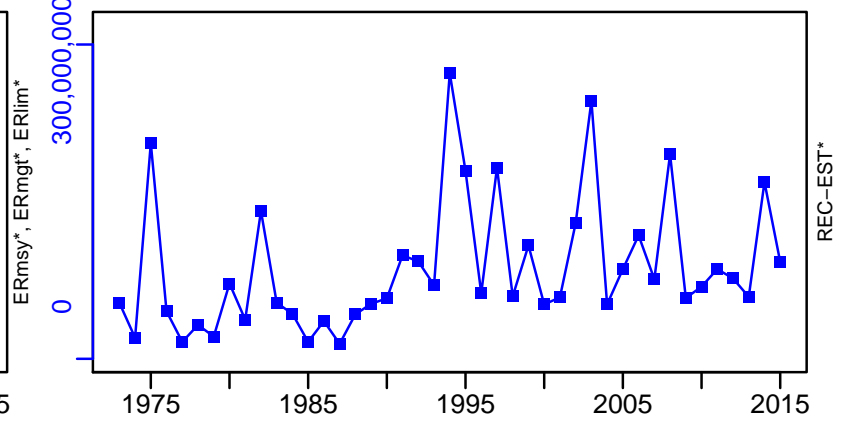
F–1/yr (1973–2016–ICESIMP2016)



ER–calc–ratio (1973–2016–ICESIMP2016)

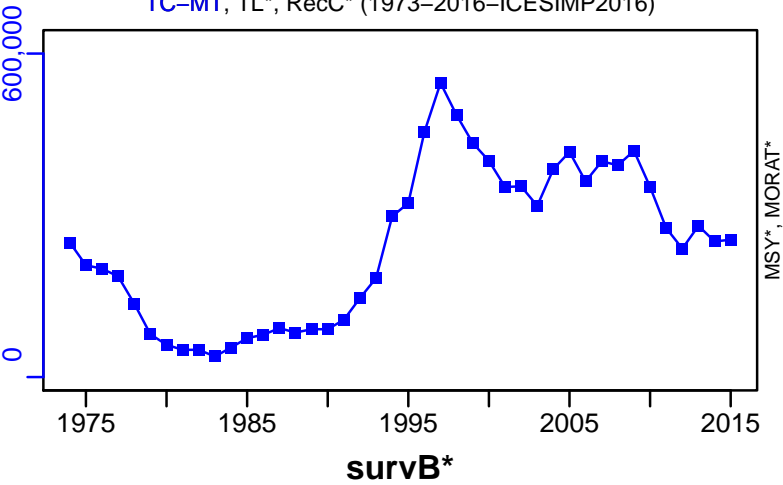


R–E00 (1973–2016–ICESIMP2016)



Sprat ICES Baltic Areas 22–32 [SPRAT22–32]

TC–MT, TL\*, RecC\* (1973–2016–ICESIMP2016)



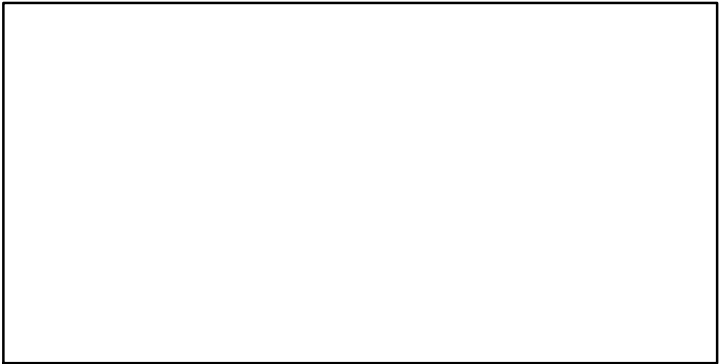
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Sprat Kattegat and Skagerrak [SPRATIIIa]

Metadata	
<b>Scientific Name</b>	Sprattus sprattus
<b>Current Assess ID</b>	HAWG-SPRATIIIa-1974-2016-ICESIMP2016
<b>Area</b>	Kattegat and Skagerrak
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Herring Assessment Working Group for the Area South of 62N
<b>Asmts in RAM</b>	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	13,300		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

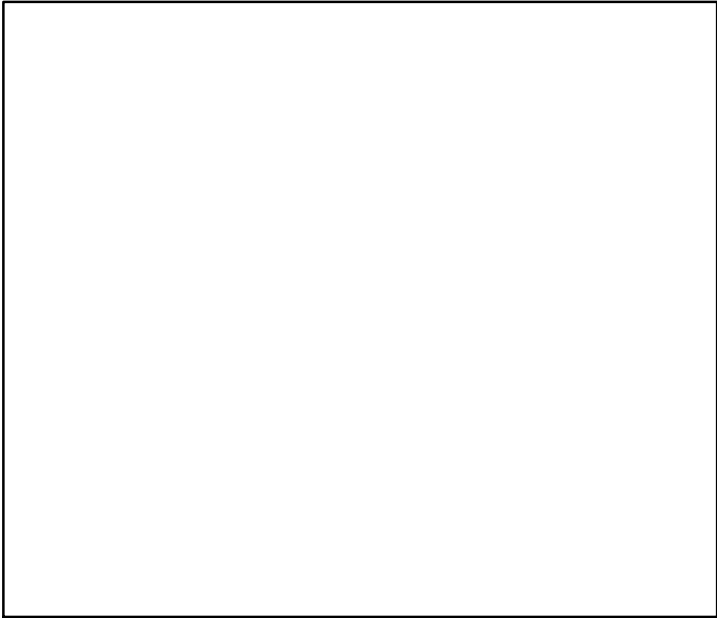
Kobe MSY\*



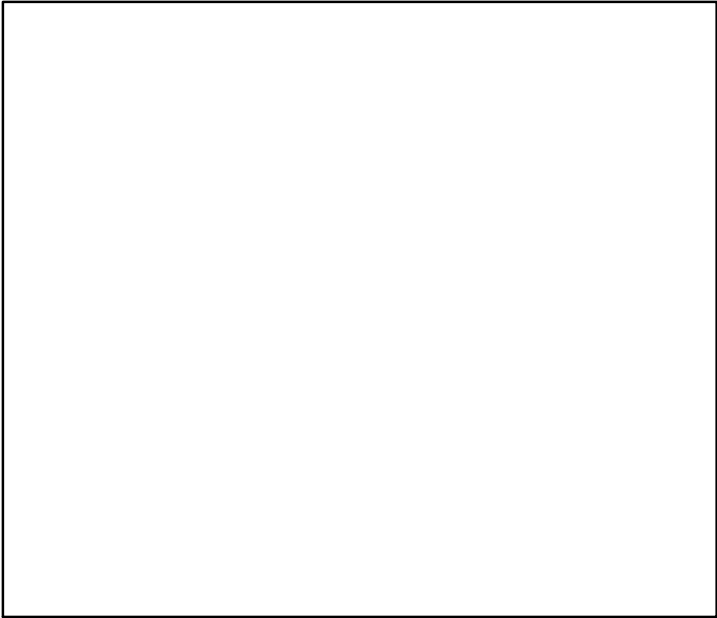
Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

Sprat Kattegat and Skagerrak [SPRATIIIa]

TB\*



SSB\*



TN \*



F\*



ER\*

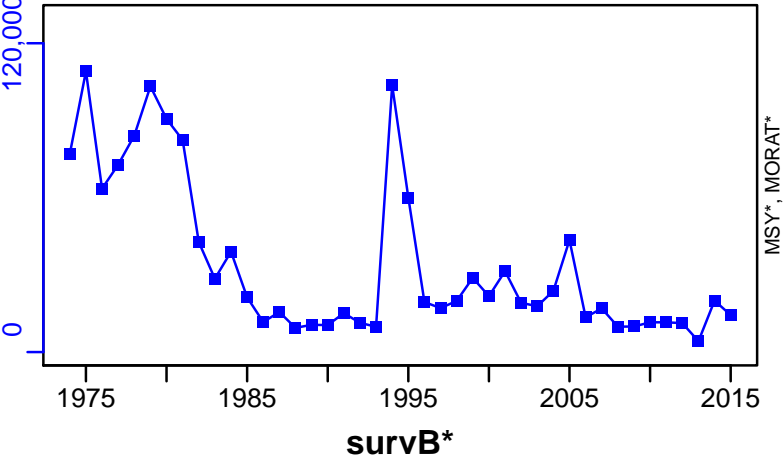


Recruits\*



Sprat Kattegat and Skagerrak [SPRATIIIa]

TL-MT, TC\*, RecC\* (1974–2016–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Sprat North Sea [SPRATNS]

Metadata	
<b>Scientific Name</b>	Sprattus sprattus
<b>Current Assess ID</b>	HAWG-SPRATNS-1974-2016-ICESIMP2016
<b>Area</b>	North Sea
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Herring Assessment Working Group for the Area South of 62N
<b>Asmts in RAM</b>	2013, 2014, 2015, 2016, 2007

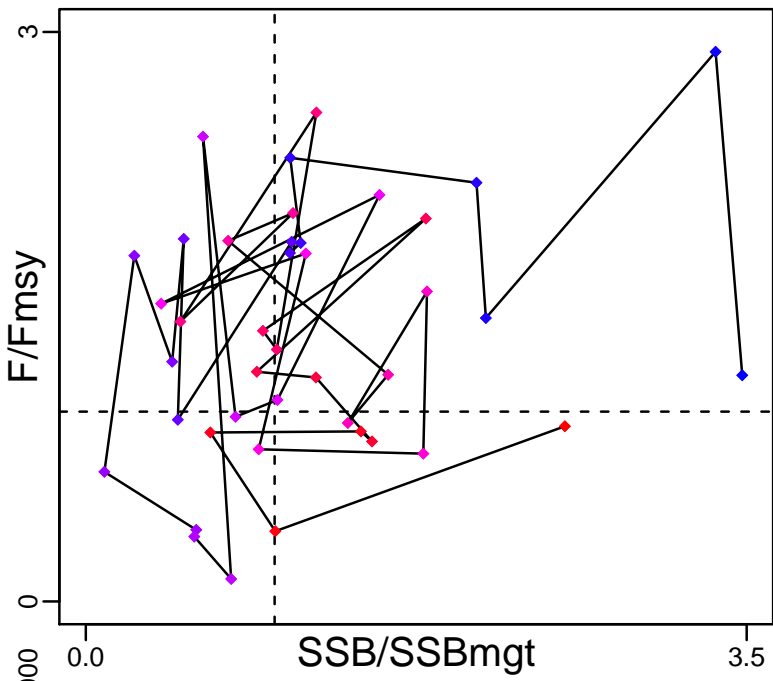
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2015	0.7
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	142,000
<b>Fmgt</b>	Fmgt-1/yr	2015	0.7
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	M-1/yr	2007	0.75
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	90,000
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	2,560,000	-	-
<b>SSB</b>	SSB-MT	2016	209,000	-	-
<b>TN</b>	TN-relative	2007	72,900	-	-
<b>R</b>	R-E00	2016	$1.53 \times 10^{11}$	-	0
<b>F</b>	F-1/yr	2016	1.27	-	1 to 2
<b>ER</b>	ER-calc-ratio	2016	0.11	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2016	290,000		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2015	0.92		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	1.47		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2015	0.92		
<b>ER/ERmgt</b>	-	-	-		

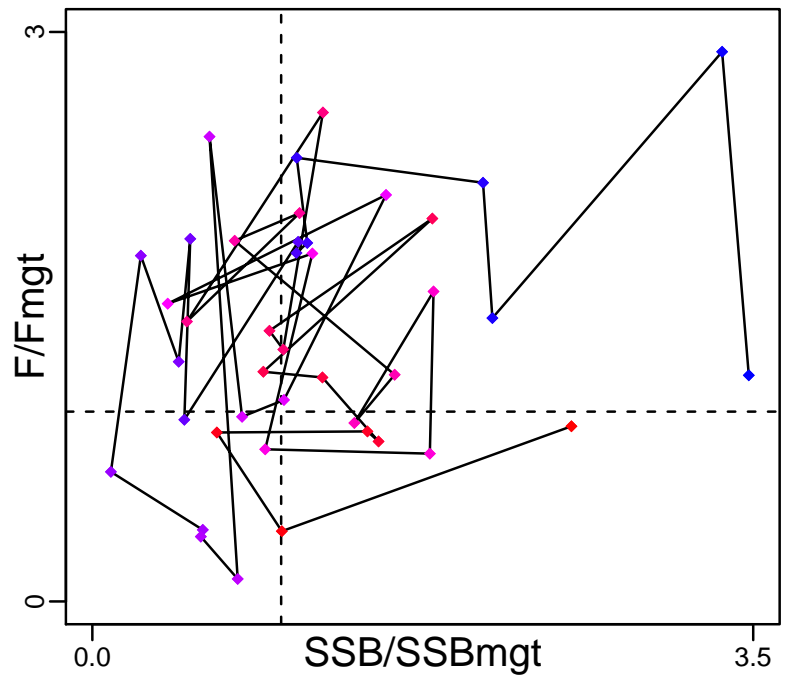


# Sprat North Sea [SPRATNS]

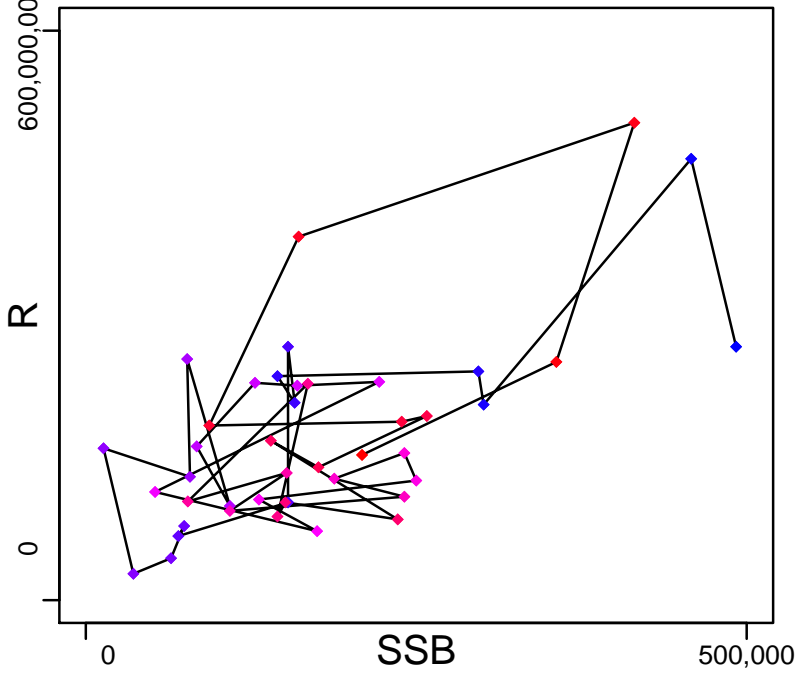
Kobe MSYpref (1974–2015–ICESIMP2016)



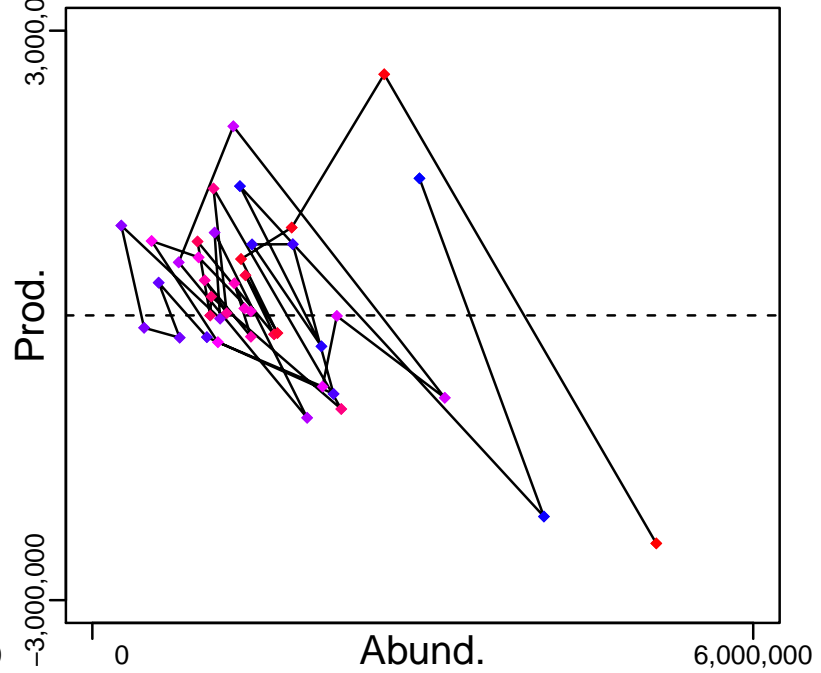
Kobe MGTpref (1974–2015–ICESIMP2016)



Spawner Recruit (1974–2016–ICESIMP2016)

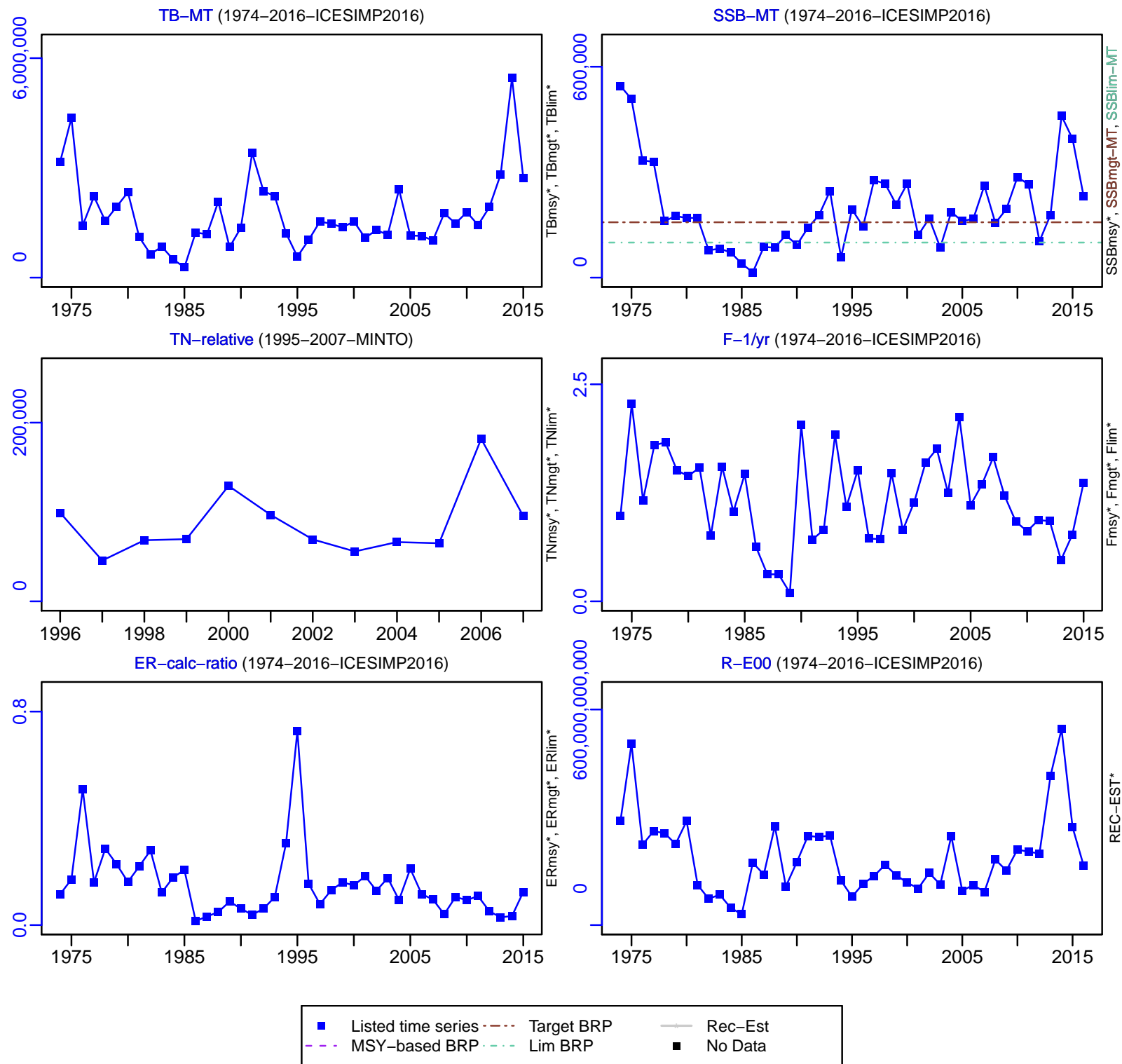


Production (1974–2016–ICESIMP2016)



◆ Start Year ◆ End Year \* No Data

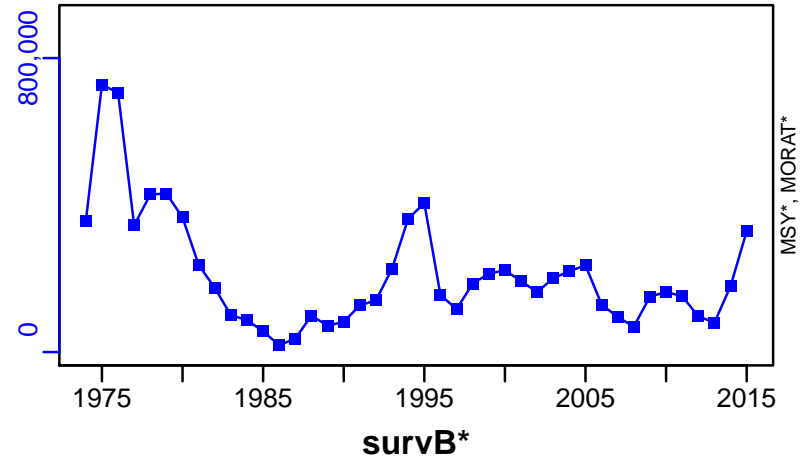
# Sprat North Sea [SPRATNS]



# Sprat North Sea [SPRATNS]

TL-MT, TC\*, RecC\* (1974–2016–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Sprat Vilde [SPRATVilde]

Metadata	
<b>Scientific Name</b>	Sprattus sprattus
<b>Current Assess ID</b>	HAWG-SPRATVilde-1985-2016-ICESIMP2016
<b>Area</b>	Vilde
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Herring Assessment Working Group for the Area South of 62N
<b>Asmts in RAM</b>	2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2015	4390		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

TB\*



SSB\*



TN \*



F\*



ER\*

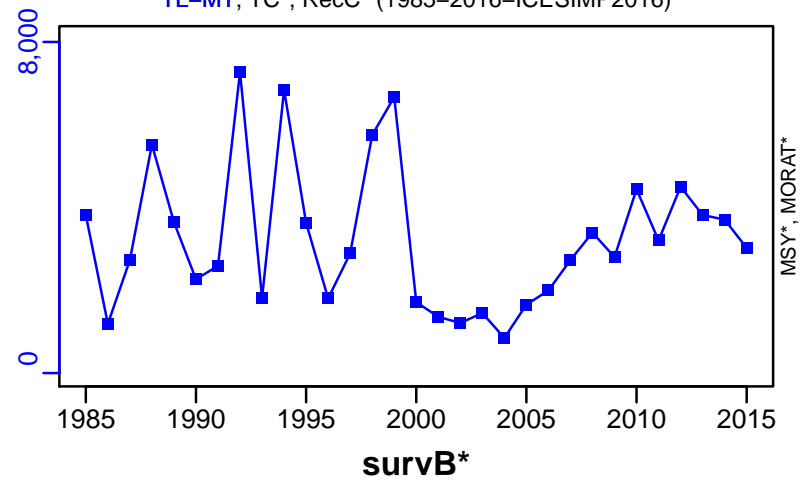


Recruits\*



Sprat Vilde [SPRATVilde]

TL-MT, TC\*, RecC\* (1985–2016–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



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

## Sprat VI and VIIabcfghijk [SPRATVI-VIIabcfghijk]

Metadata	
<b>Scientific Name</b>	Sprattus sprattus
<b>Current Assess ID</b>	HAWG-SPRATVI-VIIabcfghijk-1985-2015-ICESIMP2016
<b>Area</b>	VI and VIIabcfghijk
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Herring Assessment Working Group for the Area South of 62N
<b>Asmts in RAM</b>	2015

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	3000		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



Kobe MSY\*



Kobe MGT\*



Spawner Recruit\*



Production\*



◆ Start Year   ◆ End Year   \* No Data

TB\*



SSB\*



TN \*



F\*



ER\*

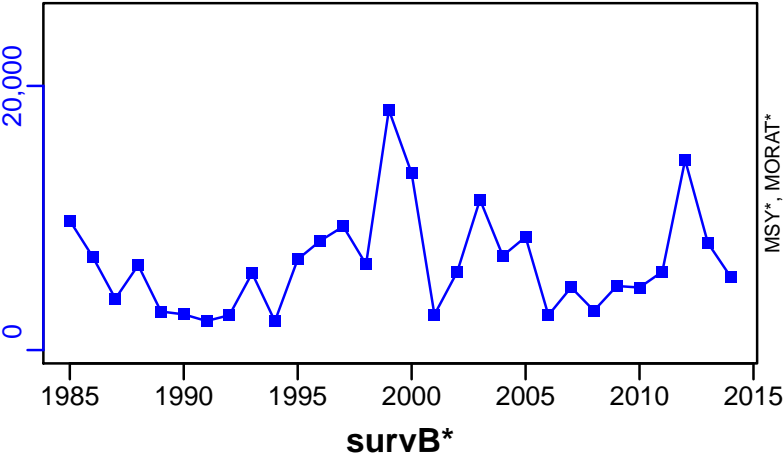


Recruits\*



Sprat VI and VIIabcfghijk [SPRATVI-VIIabcfghijk]

TL-MT, TC\*, RecC\* (1985-2015-ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Spurdog Northeast Atlantic [SPURDNEATL]

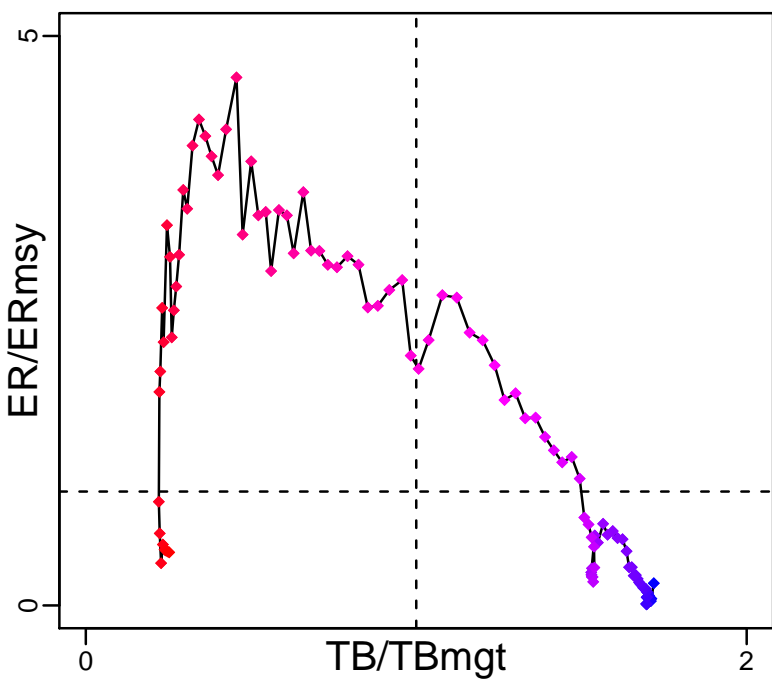
Metadata	
<b>Scientific Name</b>	Squalus acanthias
<b>Current Assess ID</b>	WGEF-SPURDNEATL-1905-2014-ICESIMP2016
<b>Area</b>	Northeast Atlantic
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Elasmobranch Fishes
<b>Asmts in RAM</b>	2014

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	-	-	-
<b>ERmsy</b>	ERmsy-ratio	2014	0.03
<b>TBmgt</b>	TBmgt-MT	2014	963,700
<b>SSBmgt</b>	-	-	-
<b>Fmgt</b>	-	-	-
<b>ERmgt</b>	ERmgt-ratio	2014	0.03
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	-	-	-
<b>Flim</b>	-	-	-
<b>ERlim</b>	-	-	-

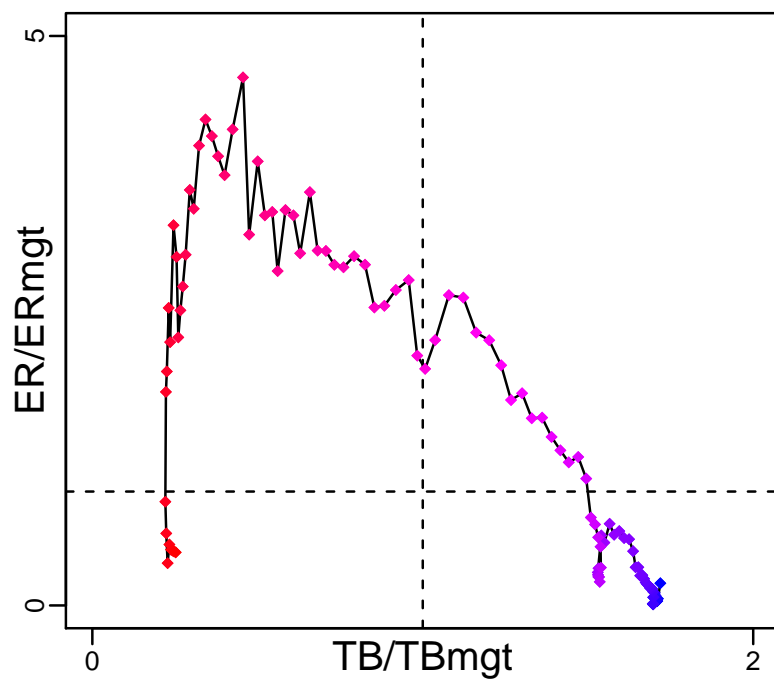
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2014	248,000	-	-
<b>SSB</b>	-	-	-	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2014	102,000	-	0
<b>F</b>	-	-	-	-	-
<b>ER</b>	ER-ratio	2014	0.01	-	-
<b>TC</b>	TC-MT	2014	2380		
<b>TL</b>	-	-	-		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	-	-	-		
<b>ER/ERmsy</b>	ER-ratio/ERmsy-ratio	2014	0.47		
<b>TB/TBmgt</b>	TB-MT/TBmgt-MT	2014	0.26		
<b>SSB/SSBmgt</b>	-	-	-		
<b>F/Fmgt</b>	-	-	-		
<b>ER/ERmgt</b>	-	-	-		

# Spurdog Northeast Atlantic [SPURDNEATL]

Kobe MSYpref (1905–2014–ICESIMP2016)



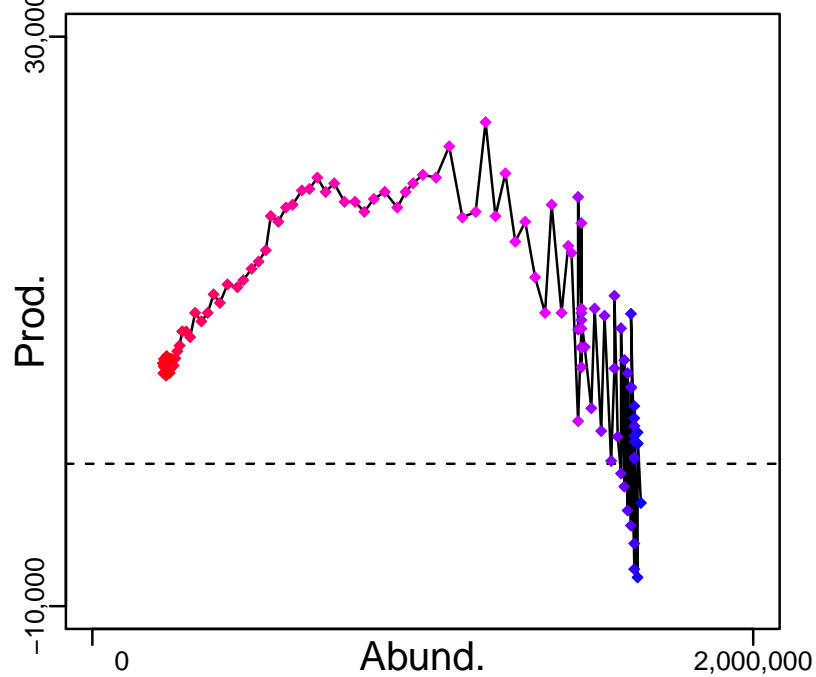
Kobe MGTpref (1905–2014–ICESIMP2016)



Spawner Recruit\*



Production (1905–2014–ICESIMP2016)

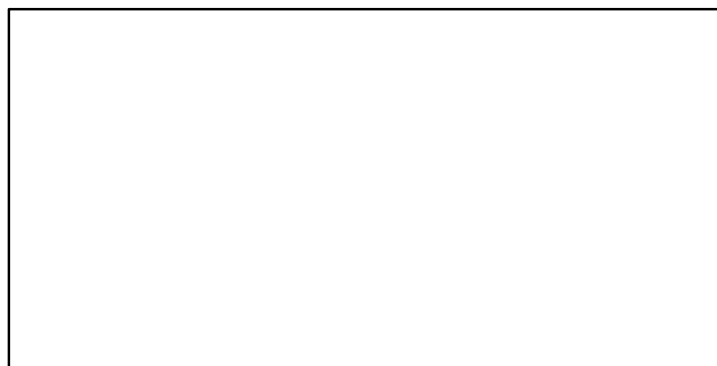
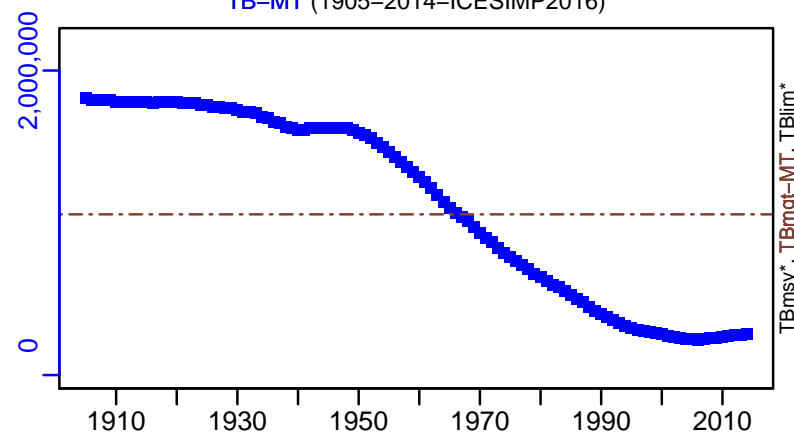


◆ Start Year ◆ End Year \* No Data

# Spurdog Northeast Atlantic [SPURDNEATL]

TB-MT (1905–2014–ICESIMP2016)

SSB\*



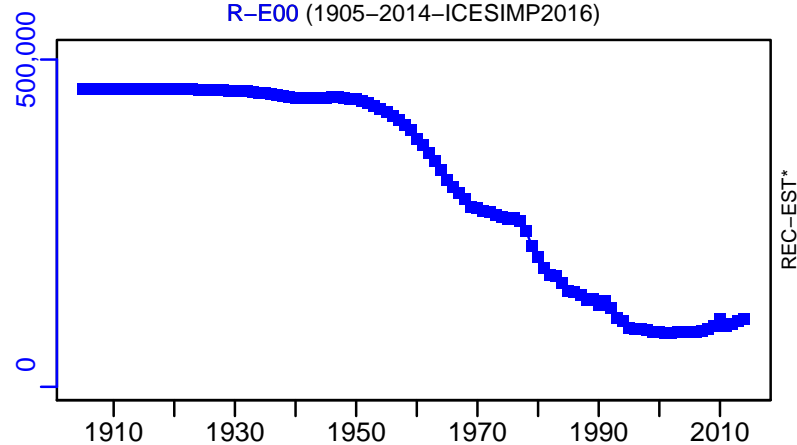
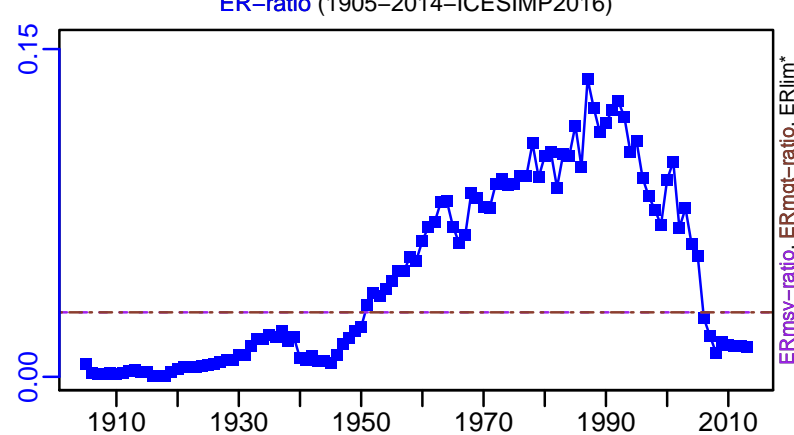
TN \*

F\*



ER-ratio (1905–2014–ICESIMP2016)

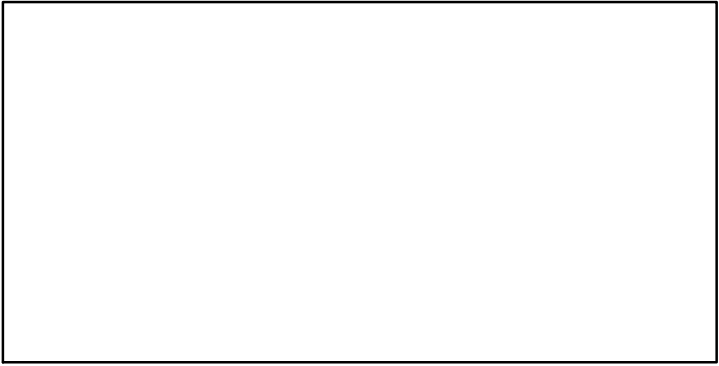
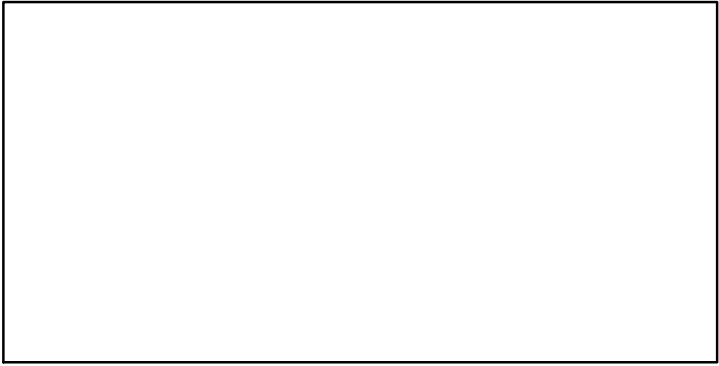
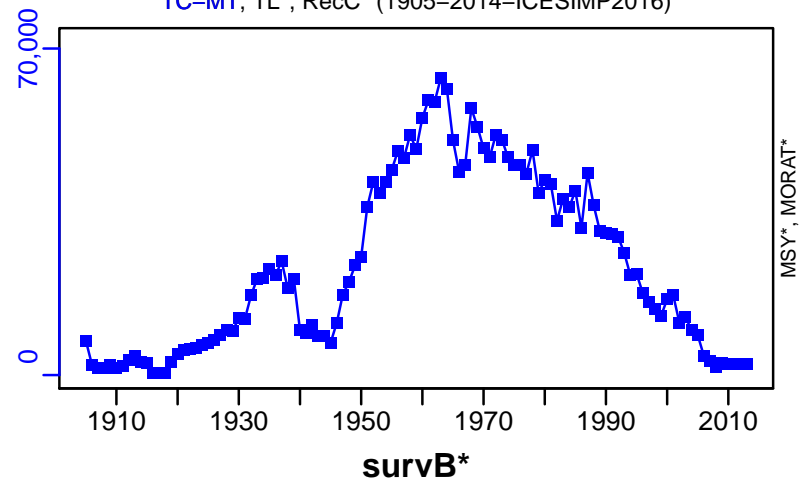
R-E00 (1905–2014–ICESIMP2016)



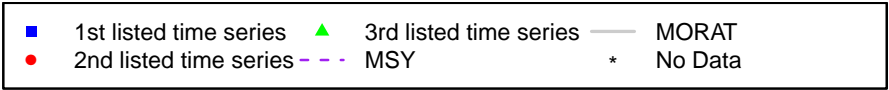
Spurdog Northeast Atlantic [SPURDNEATL]

TC-MT, TL\*, RecC\* (1905–2014–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Turbot Baltic Areas 22-32 [TUR2232]

Metadata	
<b>Scientific Name</b>	Scophthalmus maximus
<b>Current Assess ID</b>	WGBFAS-TUR2232-1965-2016-ICESIMP2016
<b>Area</b>	Baltic Areas 22-32
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Baltic Fisheries Assessment Working Group
<b>Asmts in RAM</b>	2016

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

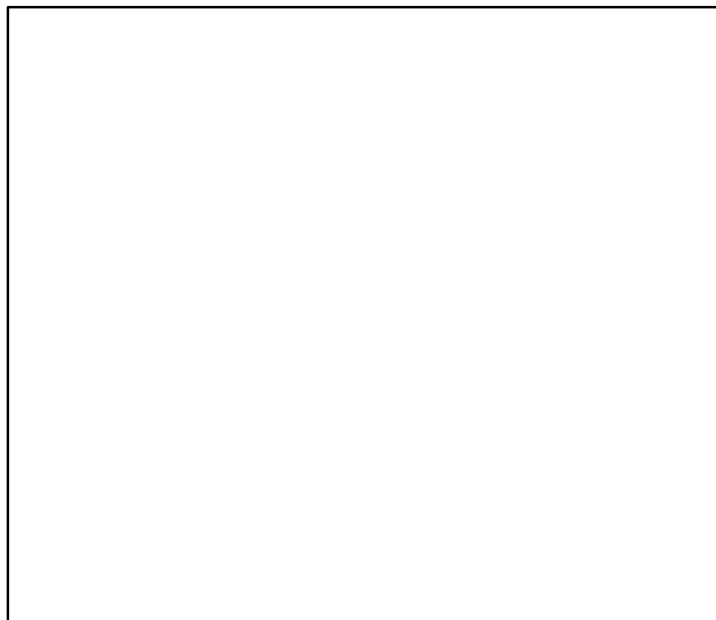
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	233		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		



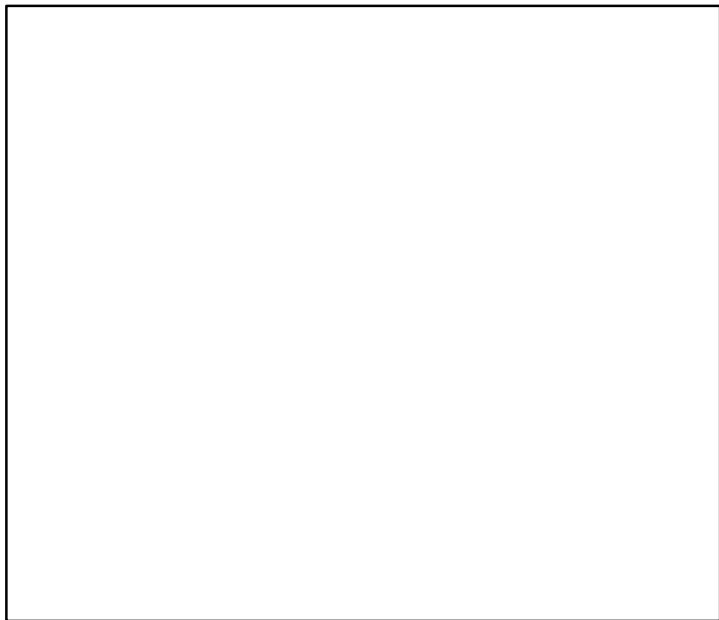
**Kobe MSY\***



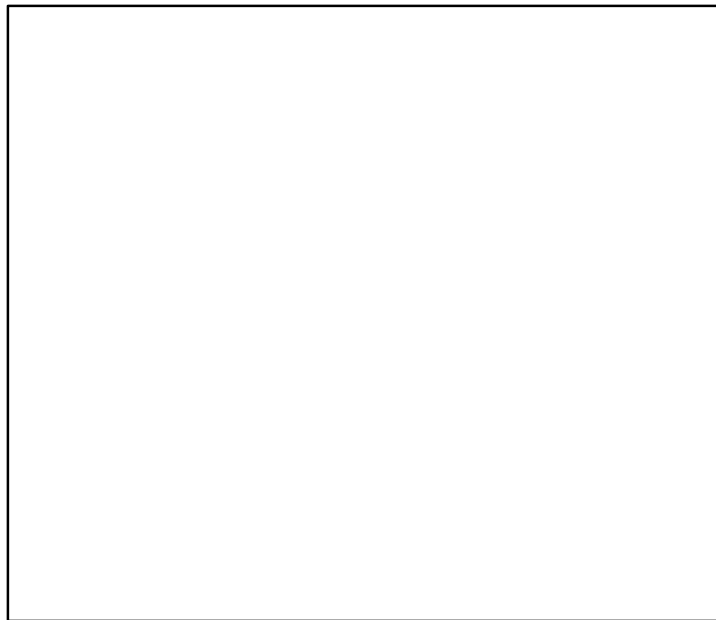
**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year   ◆ End Year   \* No Data

Turbot Baltic Areas 22–32 [TUR2232]

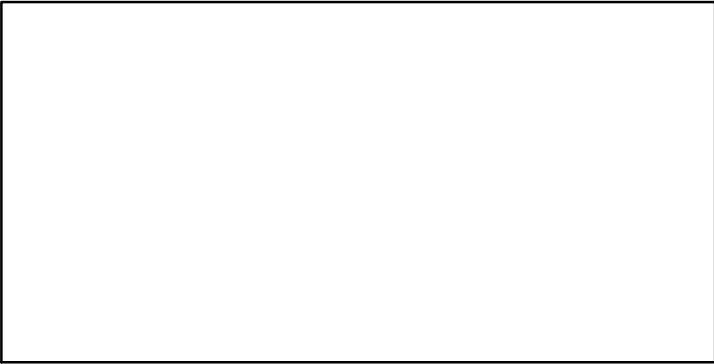
**TB\***



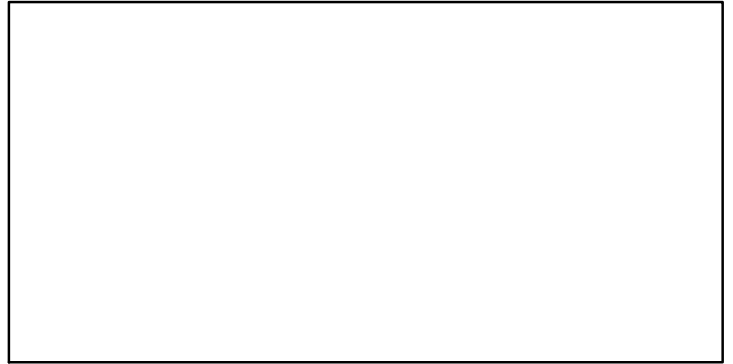
**SSB\***



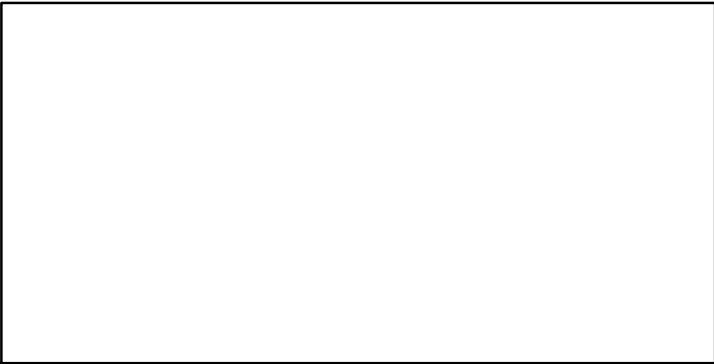
**TN \***



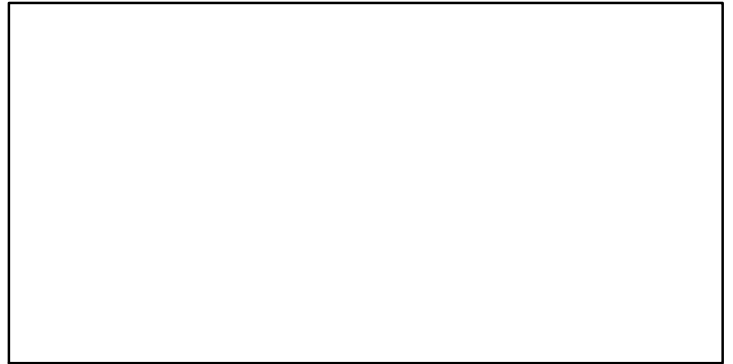
**F\***



**ER\***



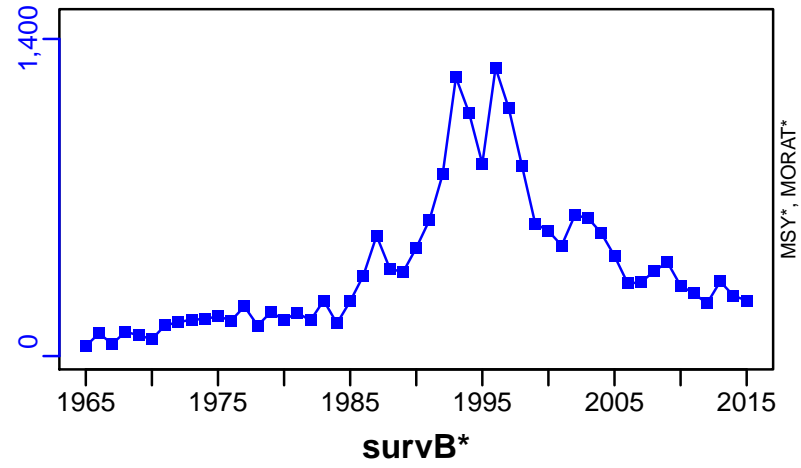
**Recruits\***



Turbot Baltic Areas 22–32 [TUR2232]

TL–MT, TC\*, RecC\* (1965–2016–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



CPUE\*

EFFORT\*

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

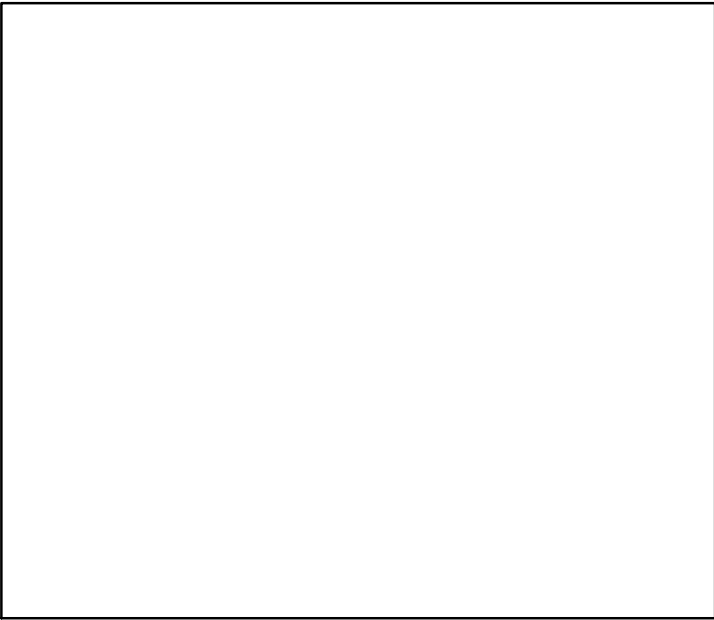
## Turbot North Sea [TURIV]

Metadata	
<b>Scientific Name</b>	Scophthalmus maximus
<b>Current Assess ID</b>	WGNSSK-TURIV-1974-2015-ICESIMP2016
<b>Area</b>	North Sea
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
<b>Asmts in RAM</b>	2013, 2014, 2015

Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	Fmgt-relative	2014	0.22
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	SSB-relative	2015	0	-	-
TN	-	-	-	-	-
R	R-relative	2015	1	-	1
F	F-relative	2015	1.59	-	2 to 6
ER	-	-	-	-	-
TC	TC-MT	2015	2830		
TL	TL-MT	2015	2830		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

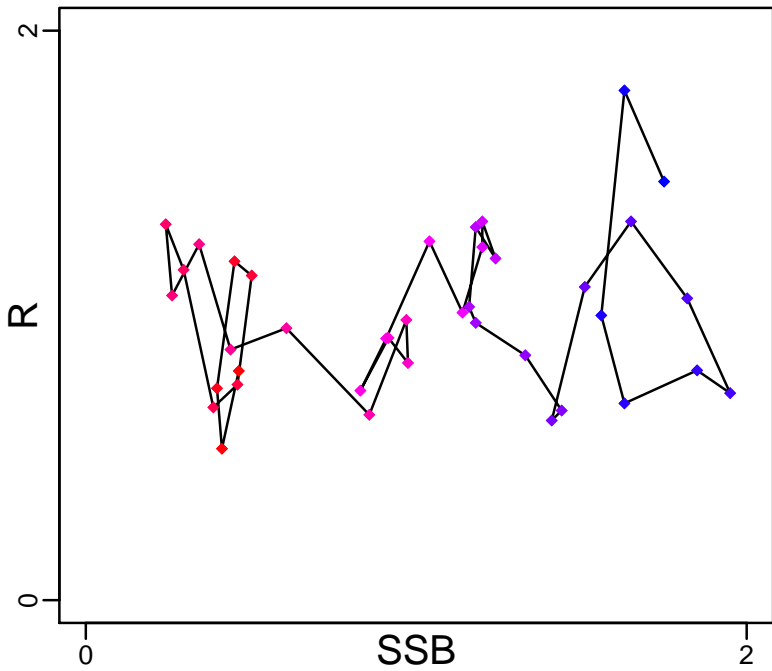
Kobe MSY\*



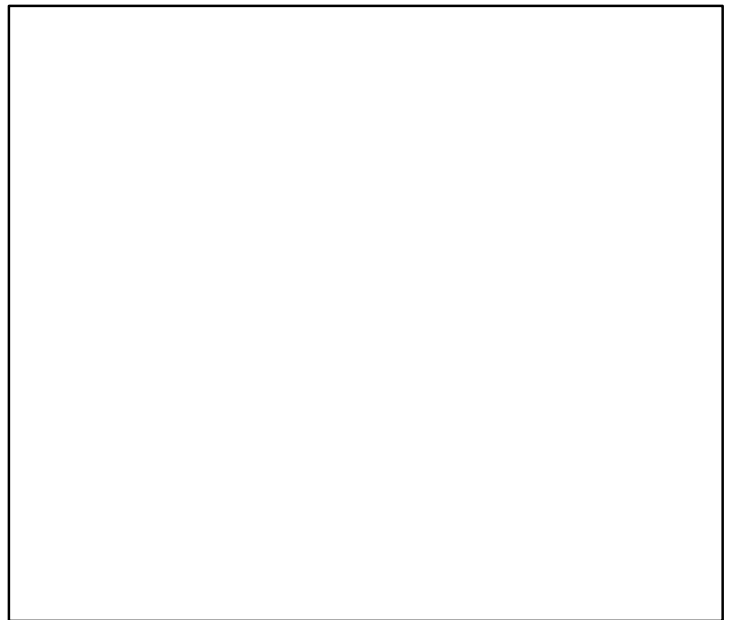
Kobe MGT\*



Spawner Recruit (1974–2015–ICESIMP2016)



Production\*



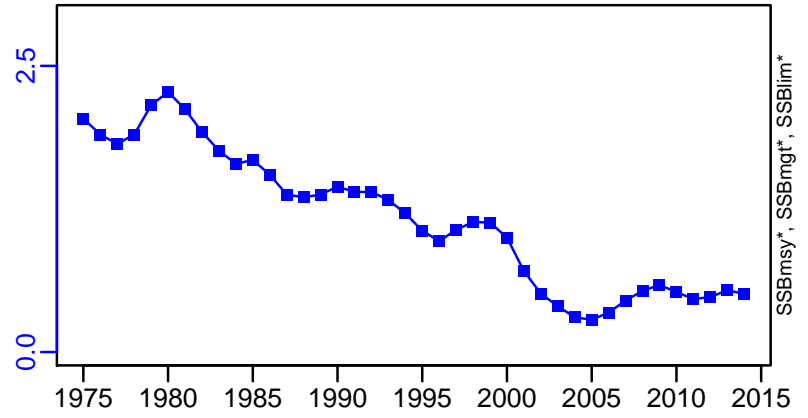
◆ Start Year ◆ End Year \* No Data

# Turbot North Sea [TURIV]

TB\*



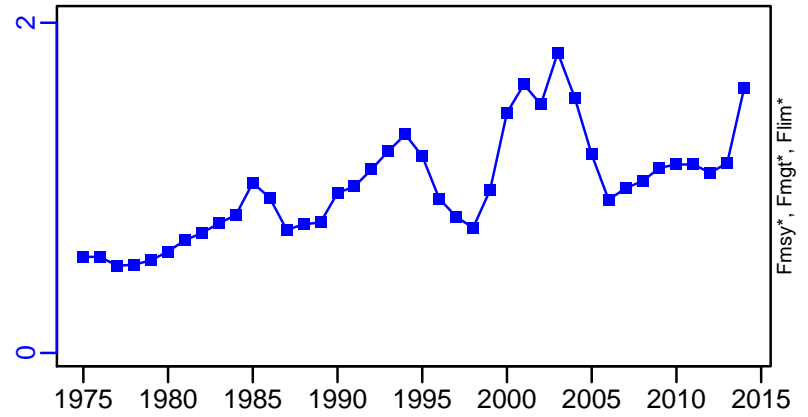
SSB-relative (1974–2015–ICESIMP2016)



TN \*



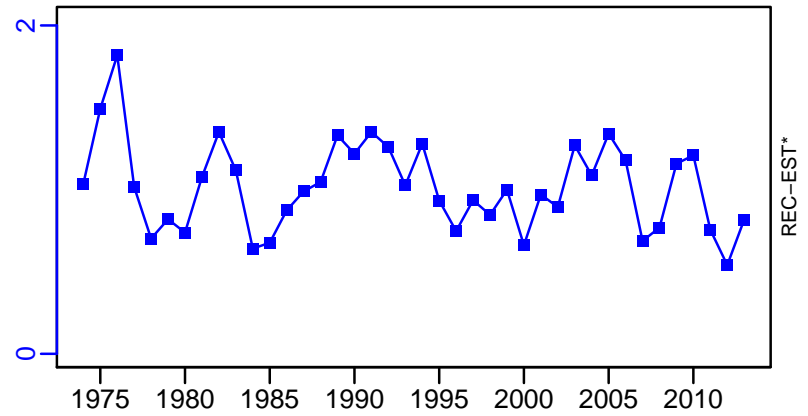
F-relative (1974–2015–ICESIMP2016)



ER\*

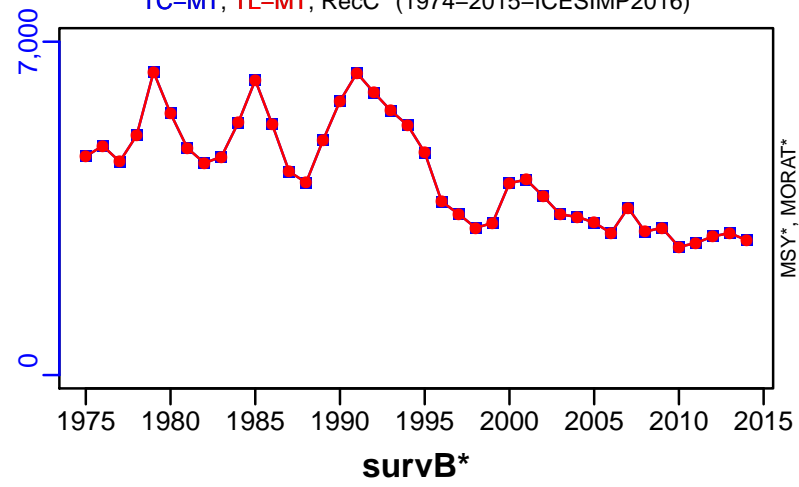


R-relative (1974–2015–ICESIMP2016)



Turbot North Sea [TURIV]

TC-MT, TL-MT, RecC\* (1974–2015–ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## White anglerfish VIIIc-IXa [WANGLVIIIc-IXa]

Metadata	
<b>Scientific Name</b>	Lophius piscatorius
<b>Current Assess ID</b>	WGBIE-WANGLVIIIc-IXa-1980-2016-ICESIMP2016
<b>Area</b>	VIIIc-IXa
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
<b>Asmts in RAM</b>	2014, 2015, 2016, 2013

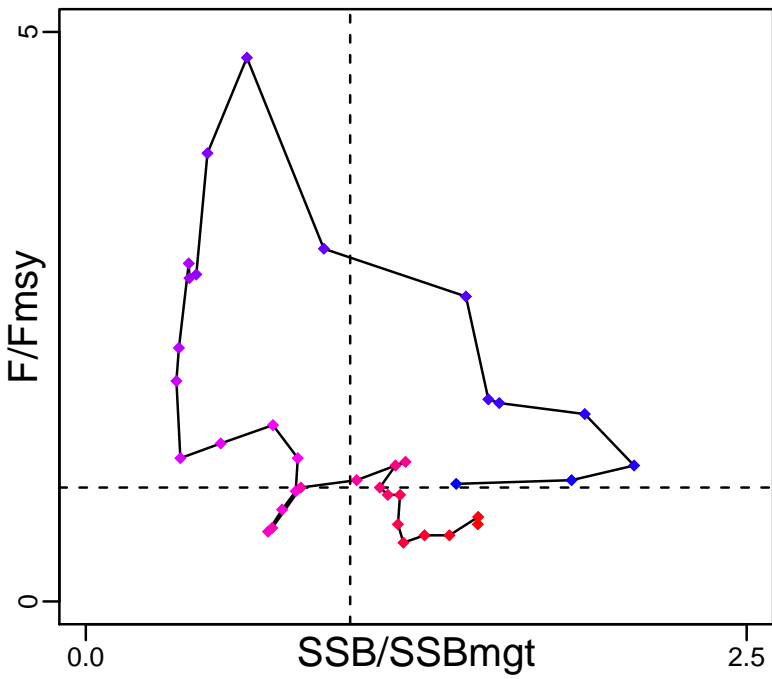
Reference Points			
Type	ID	Asmt Year	Value
TBmsy	-	-	-
SSBmsy	-	-	-
Fmsy	-	-	-
ERmsy	-	-	-
TBmgt	-	-	-
SSBmgt	-	-	-
Fmgt	-	-	-
ERmgt	-	-	-
TB0	-	-	-
SSB0	-	-	-
MSY	-	-	-
M	-	-	-
TBlim	-	-	-
SSBlim	-	-	-
Flim	-	-	-
ERlim	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	25,300		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

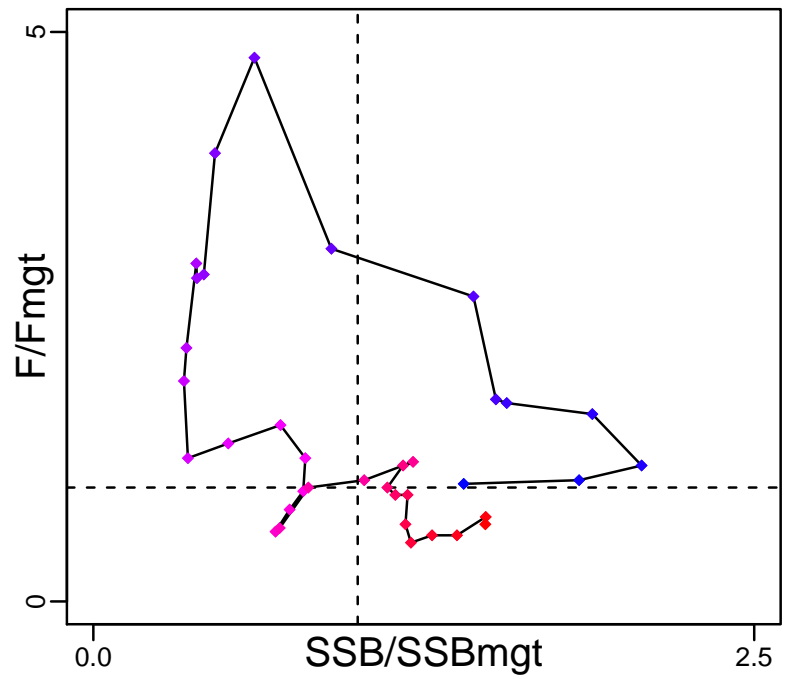


# White anglerfish VIIIc-IXa [WANGLVIIIc-IXa]

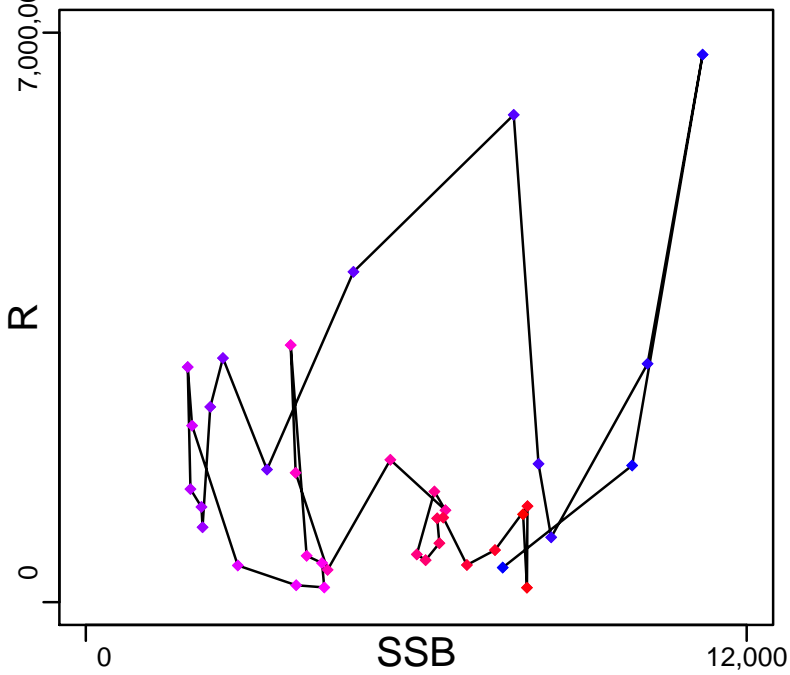
Kobe MSYpref (1980–2016–ICESIMP2016)



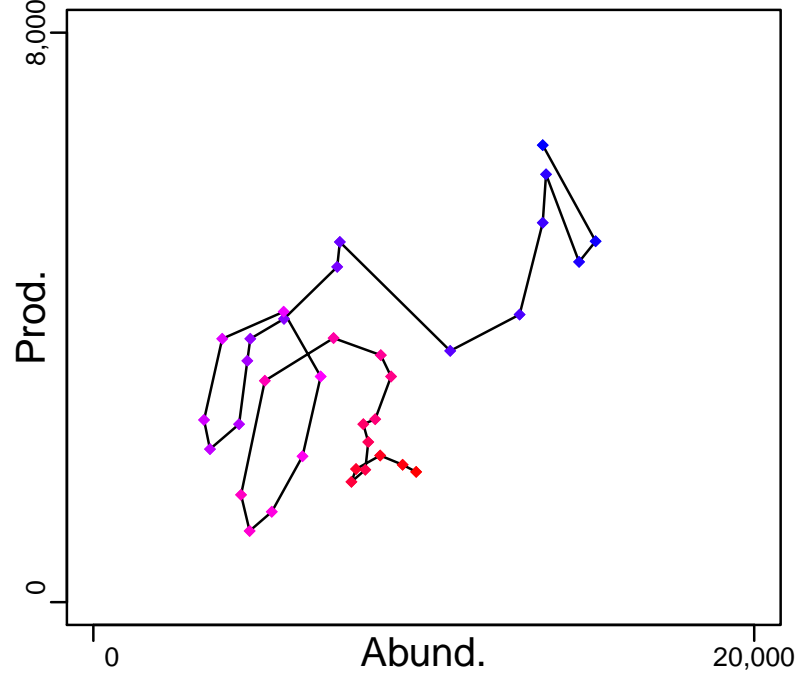
Kobe MGTpref (1980–2016–ICESIMP2016)



Spawner Recruit (1980–2016–ICESIMP2016)



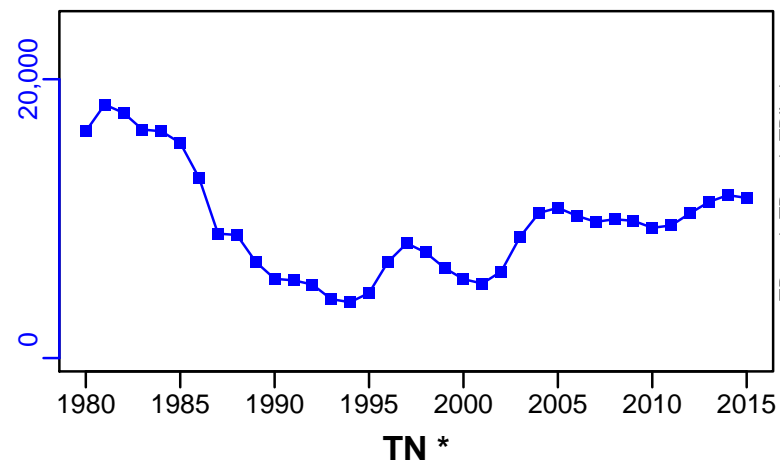
Production (1980–2016–ICESIMP2016)



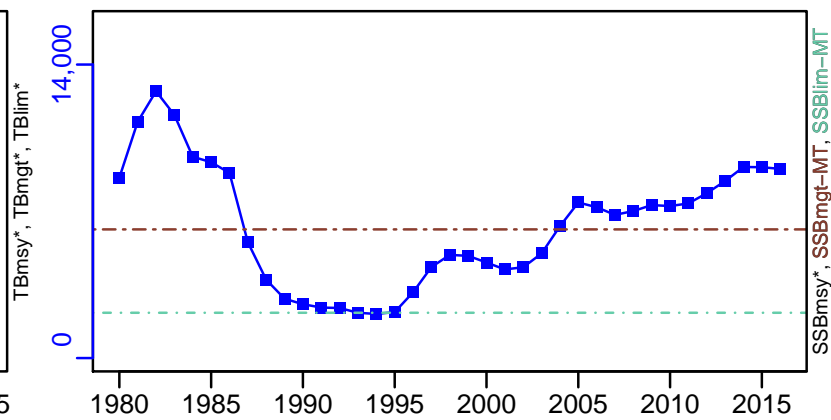
◆ Start Year ◆ End Year \* No Data

# White anglerfish VIIIc-IXa [WANGLVIIIc-IXa]

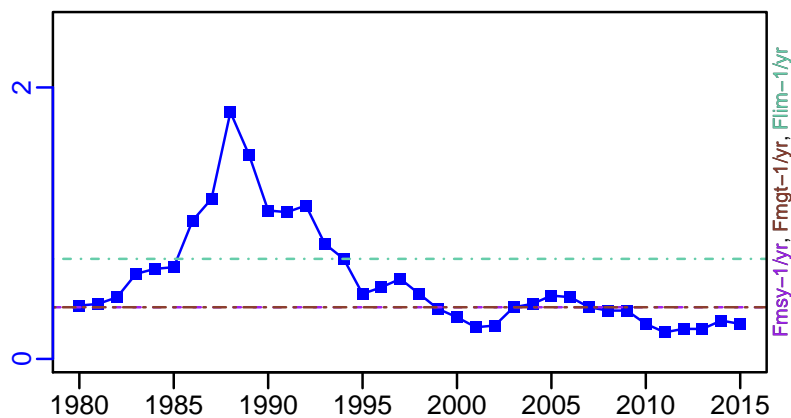
TB-MT (1980–2016–ICESIMP2016)



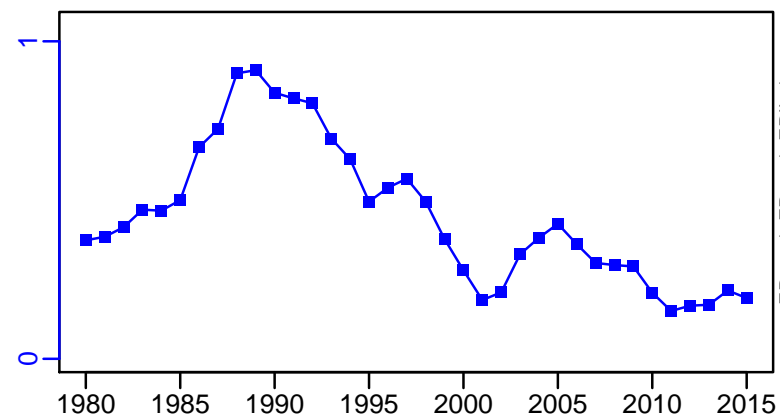
SSB-MT (1980–2016–ICESIMP2016)



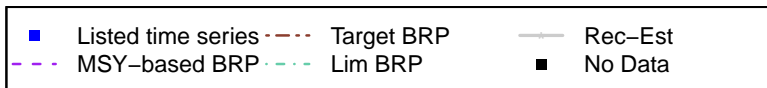
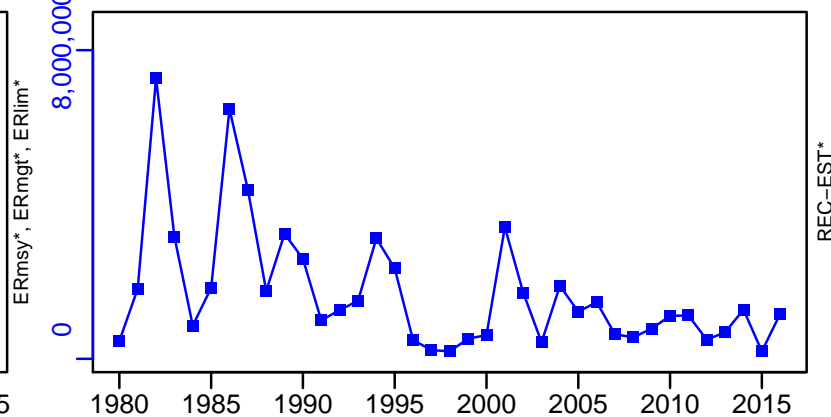
F-1/yr (1980–2016–ICESIMP2016)



ER-calc-ratio (1980–2016–ICESIMP2016)



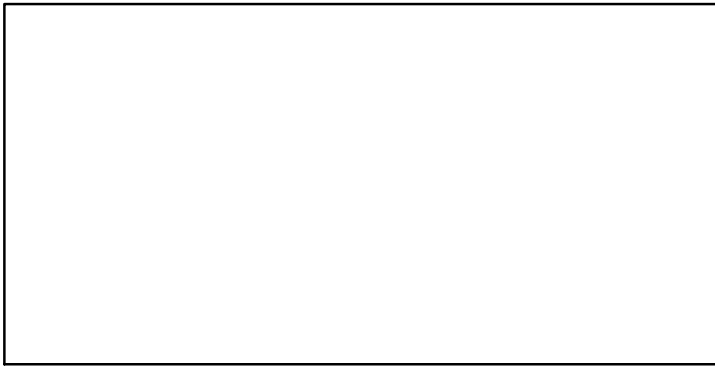
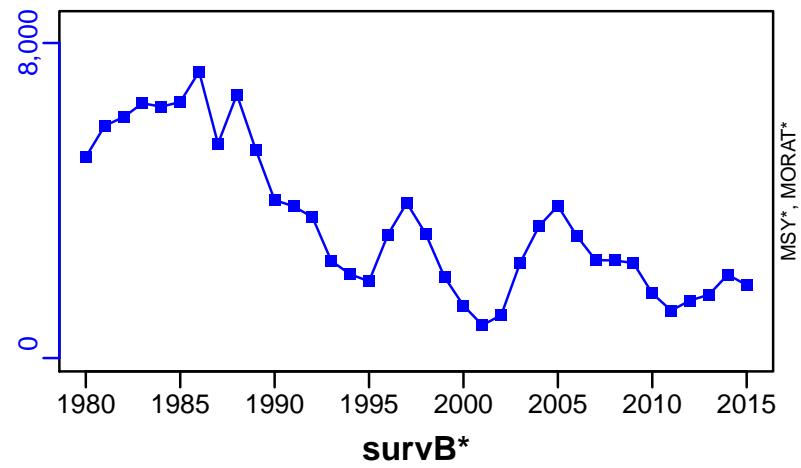
R-E00 (1980–2016–ICESIMP2016)



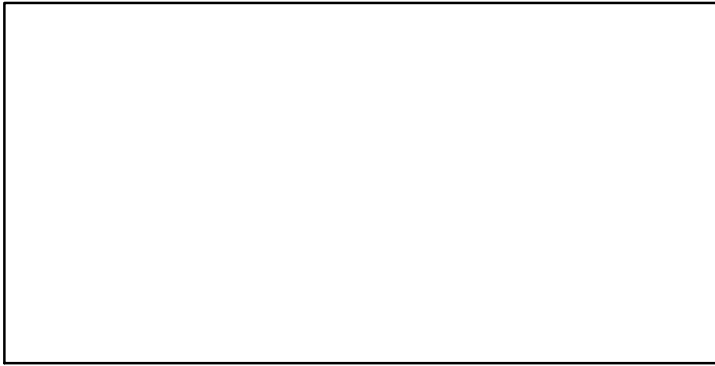
# White anglerfish VIIIc-IXa [WANGLVIIIc-IXa]

TL-MT, TC\*, RecC\* (1980-2016-ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*

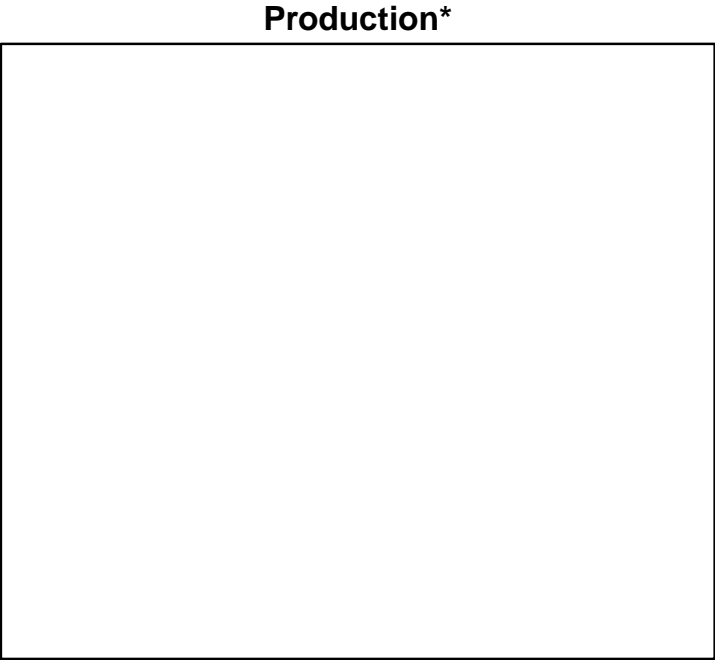
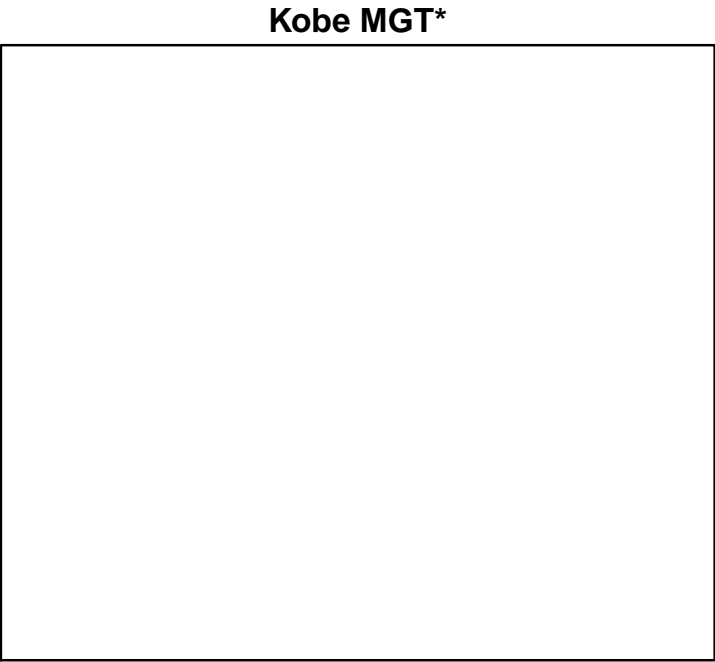


## White anglerfish VII and VIIIabd [WANGLVII-VIIIabd]

Metadata	
<b>Scientific Name</b>	Lophius piscatorius
<b>Current Assess ID</b>	WGBIE-WANGLVII-VIIIabd-1986-2016-ICESIMP2016
<b>Area</b>	VII and VIIIabd
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
<b>Asmts in RAM</b>	2016

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.31
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	5400
<b>Fmgt</b>	Fmgt-1/yr	2016	0.31
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	1900
<b>Flim</b>	Flim-1/yr	2016	0.6
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	9600	-	-
<b>SSB</b>	SSB-MT	2016	7940	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	1,080,000	-	0
<b>F</b>	F-1/yr	2016	0.21	-	-
<b>ER</b>	ER-calc-ratio	2016	0.18	-	-
<b>TC</b>	-	-	-		
<b>TL</b>	TL-MT	2016	1750		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	0.68		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	1.47		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.68		
<b>ER/ERmgt</b>	-	-	-		



◆ Start Year   ◆ End Year   \* No Data

White anglerfish VII and VIIIabd [WANGLVII–VIIIabd]

TB\*



SSB\*



TN \*



F\*



ER\*



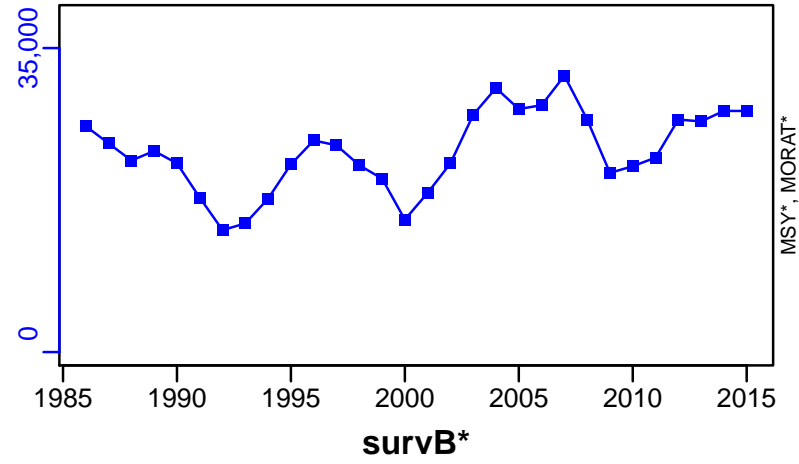
Recruits\*



# White anglerfish VII and VIIIabd [WANGLVII–VIIIabd]

TL–MT, TC\*, RecC\* (1986–2016–ICESIMP2016)

TAC\*, Cpair\*, Cadv\*



EFFORT\*



## Whiting NS-VIId [WHITNS-VIId]

Metadata	
<b>Scientific Name</b>	Merlangius merlangus
<b>Current Assess ID</b>	WGNSSK-WHITNS-VIId-1989-2016-ICESIMP2016
<b>Area</b>	IV and VIId
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
<b>Asmts in RAM</b>	2012, 2013, 2014, 2015, 2016

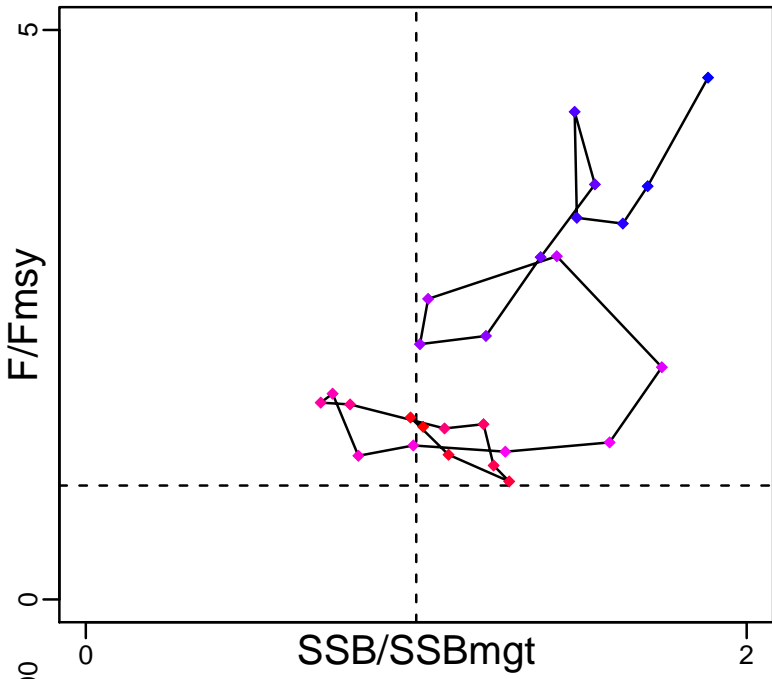
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.15
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	241,837
<b>Fmgt</b>	Fmgt-1/yr	2016	0.15
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	172,741
<b>Flim</b>	Flim-1/yr	2016	0.39
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	591,000	-	-
<b>SSB</b>	SSB-MT	2016	267,000	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$2.9 \times 10^9$	-	1
<b>F</b>	F-1/yr	2016	0.23	-	2 to 6
<b>ER</b>	ER-calc-ratio	2016	0.07	-	-
<b>TC</b>	TC-MT	2016	33,200		
<b>TL</b>	TL-MT	2016	17,700		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	1.52		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	1.1		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	1.52		
<b>ER/ERmgt</b>	-	-	-		

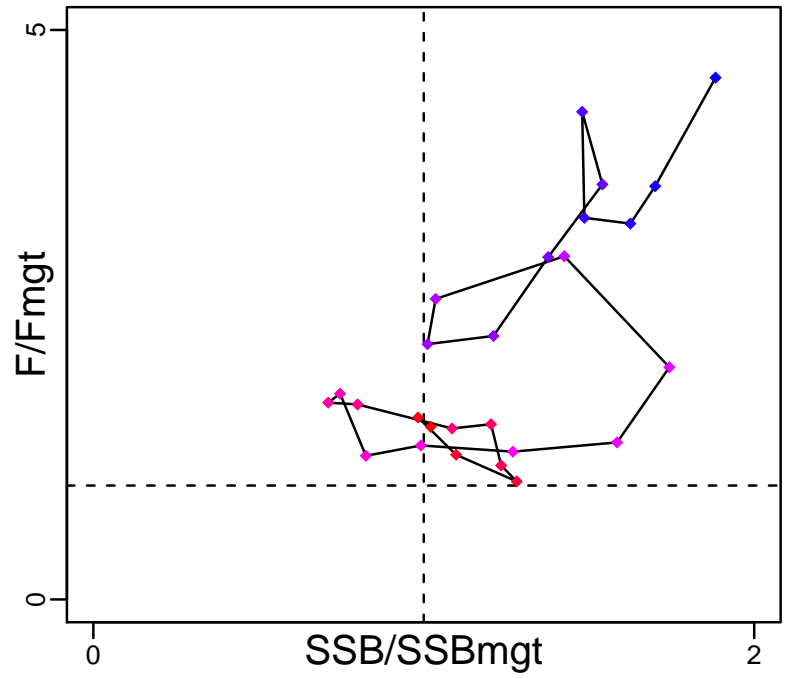


# Whiting NS-VIId [WHITNS-VIId]

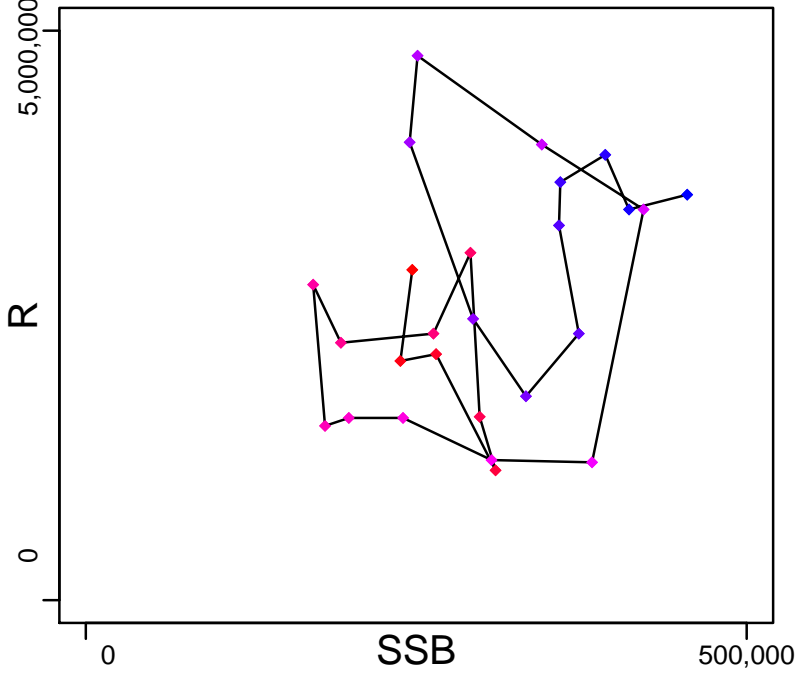
Kobe MSYpref (1989–2016–ICESIMP2016)



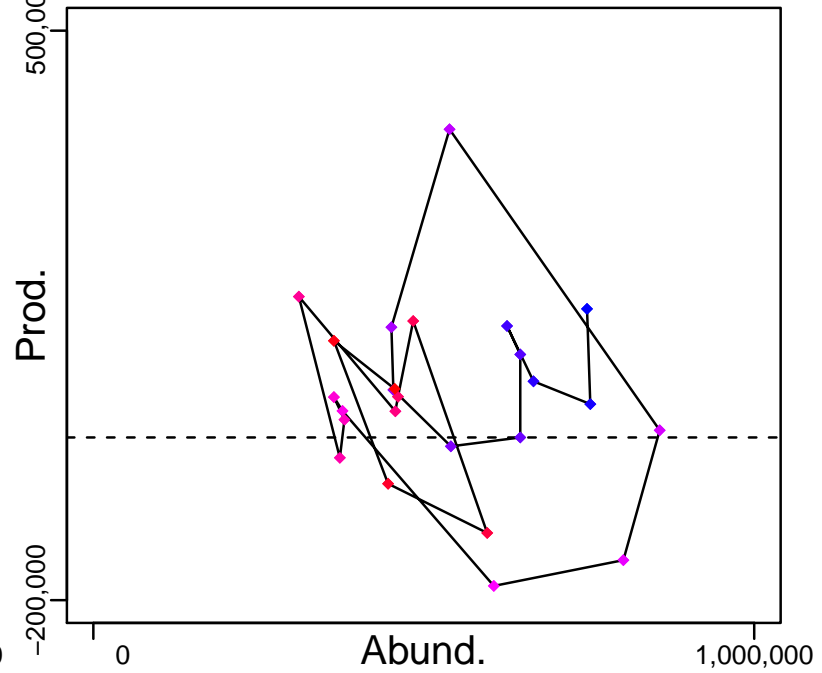
Kobe MGTpref (1989–2016–ICESIMP2016)



Spawner Recruit (1989–2016–ICESIMP2016)



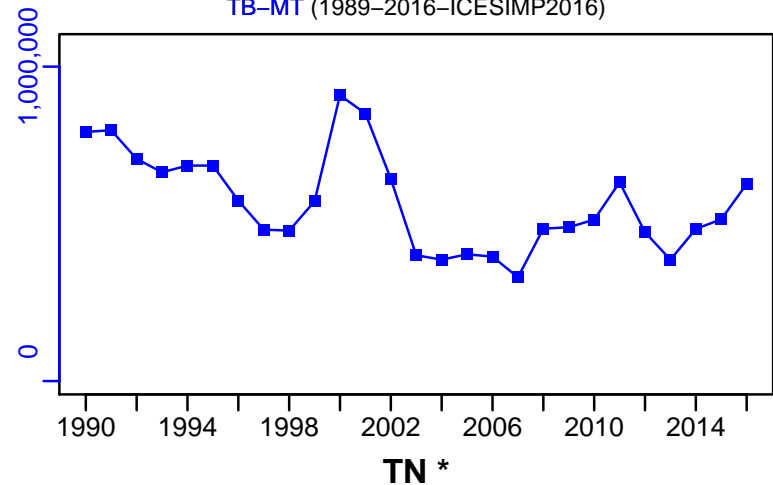
Production (1989–2016–ICESIMP2016)



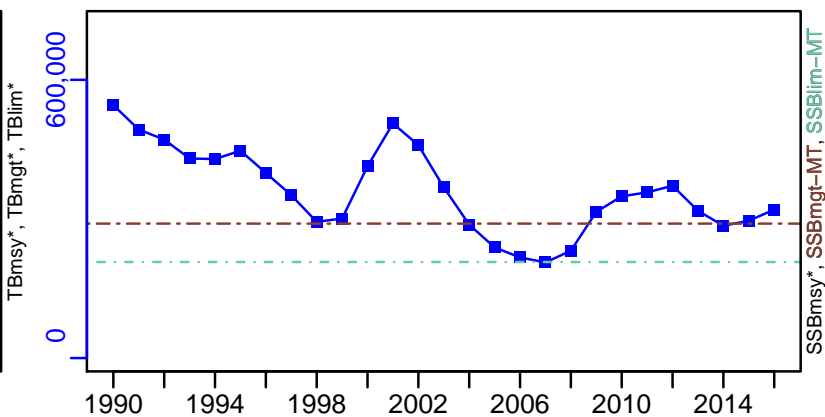
◆ Start Year ◆ End Year \* No Data

# Whiting NS-VIld [WHITNS-VIld]

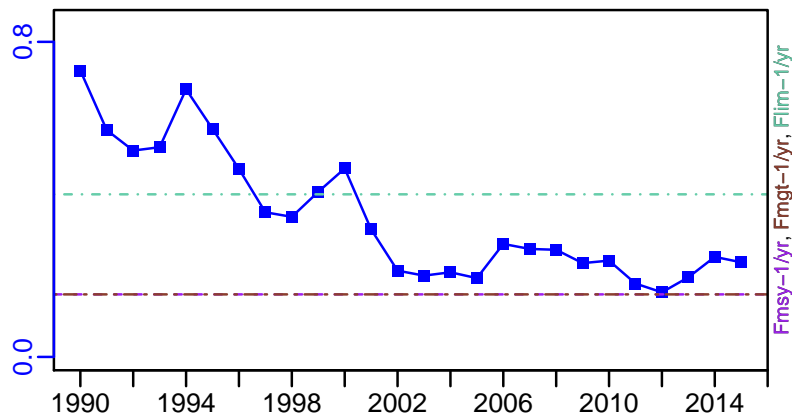
TB-MT (1989–2016–ICESIMP2016)



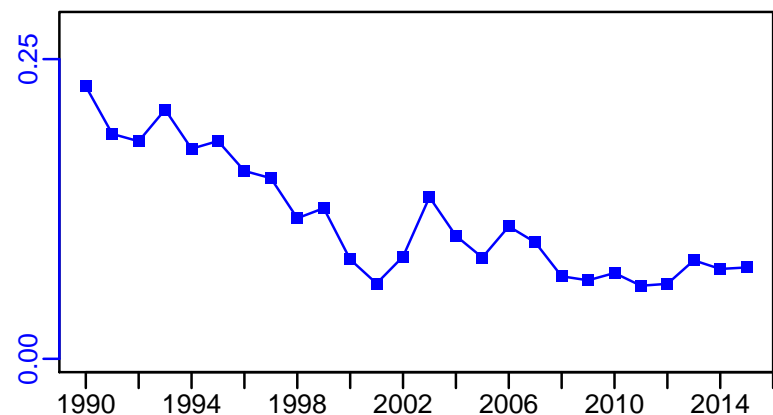
SSB-MT (1989–2016–ICESIMP2016)



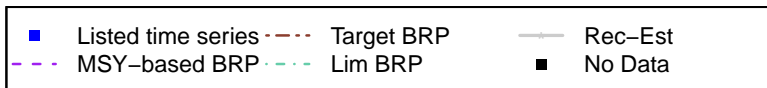
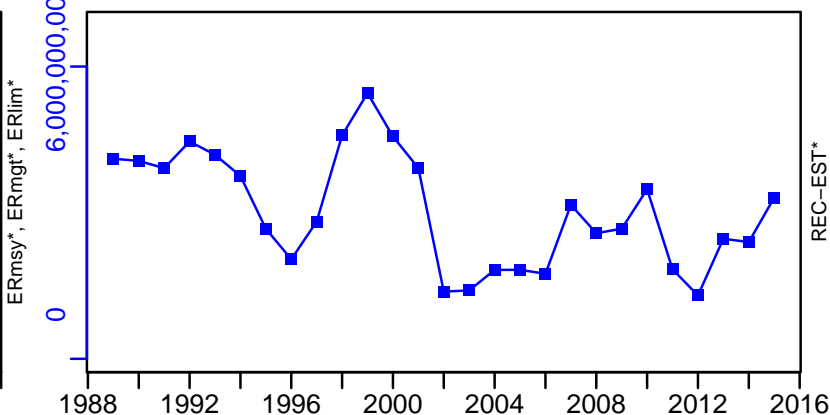
F-1/yr (1989–2016–ICESIMP2016)



ER-calc-ratio (1989–2016–ICESIMP2016)

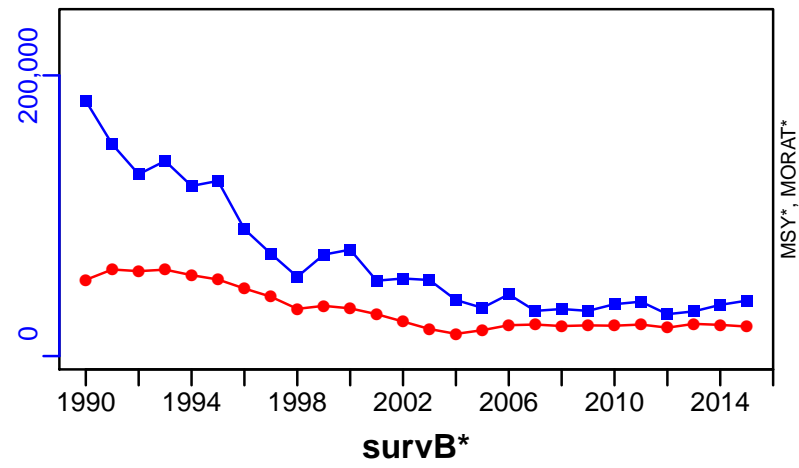


R-E00 (1989–2016–ICESIMP2016)



# Whiting NS-VIId [WHITNS-VIId]

TC-MT, TL-MT, RecC\* (1989-2016-ICESIMP2016)



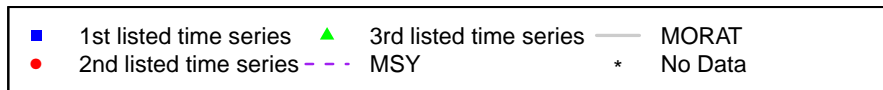
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Whiting ICES VIa [WHITVIa]

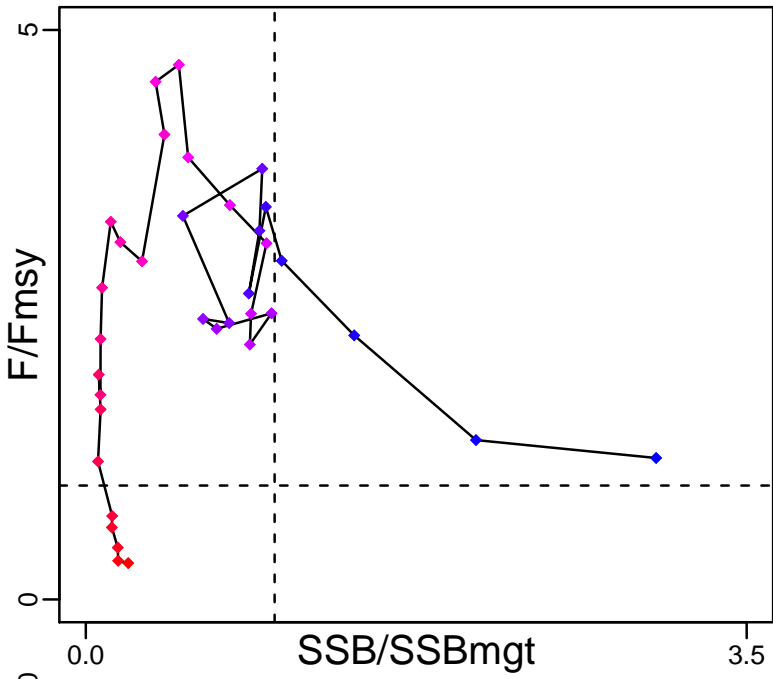
Metadata	
<b>Scientific Name</b>	Merlangius merlangus
<b>Current Assess ID</b>	WGCSE-WHITVIa-1980-2016-ICESIMP2016
<b>Area</b>	West of Scotland
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2013, 2014, 2015, 2016, 2012

Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.18
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	44,632
<b>Fmgt</b>	Fmgt-1/yr	2016	0.18
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	-	-	-
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	31,880
<b>Flim</b>	Flim-1/yr	2016	0.27
<b>ERlim</b>	-	-	-

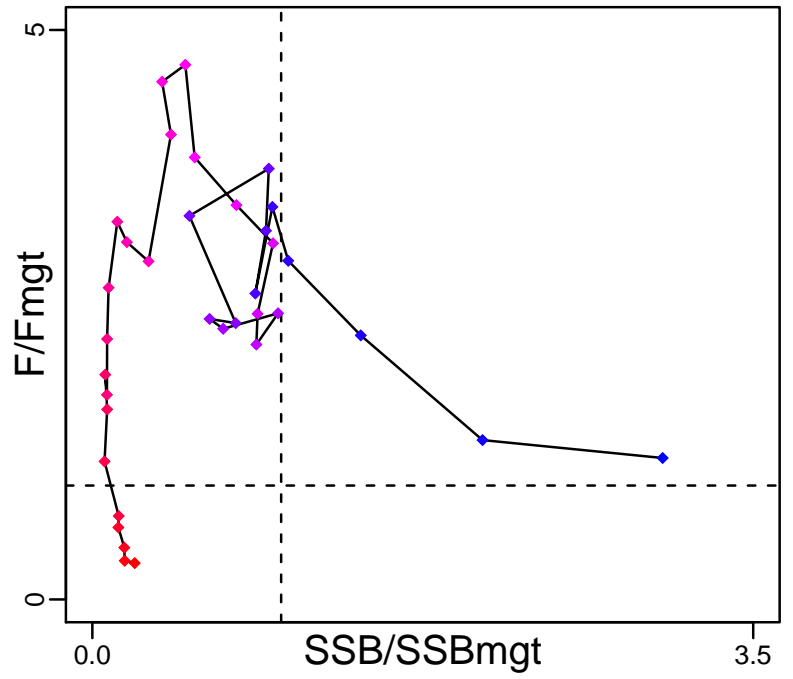
Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	21,100	-	-
<b>SSB</b>	SSB-MT	2016	16,200	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	87,900,000	-	1
<b>F</b>	F-1/yr	2016	0.06	-	2 to 4
<b>ER</b>	ER-calc-ratio	2016	0.06	-	-
<b>TC</b>	TC-MT	2016	1060		
<b>TL</b>	TL-MT	2016	227		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	0.32		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	0.36		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.32		
<b>ER/ERmgt</b>	-	-	-		

# Whiting ICES Via [WHITVla]

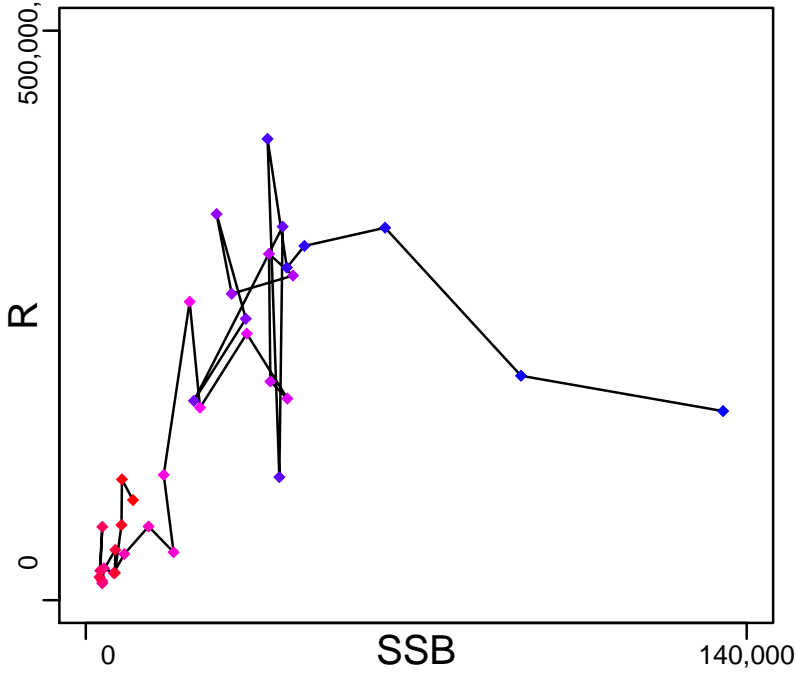
Kobe MSYpref (1980–2016–ICESIMP2016)



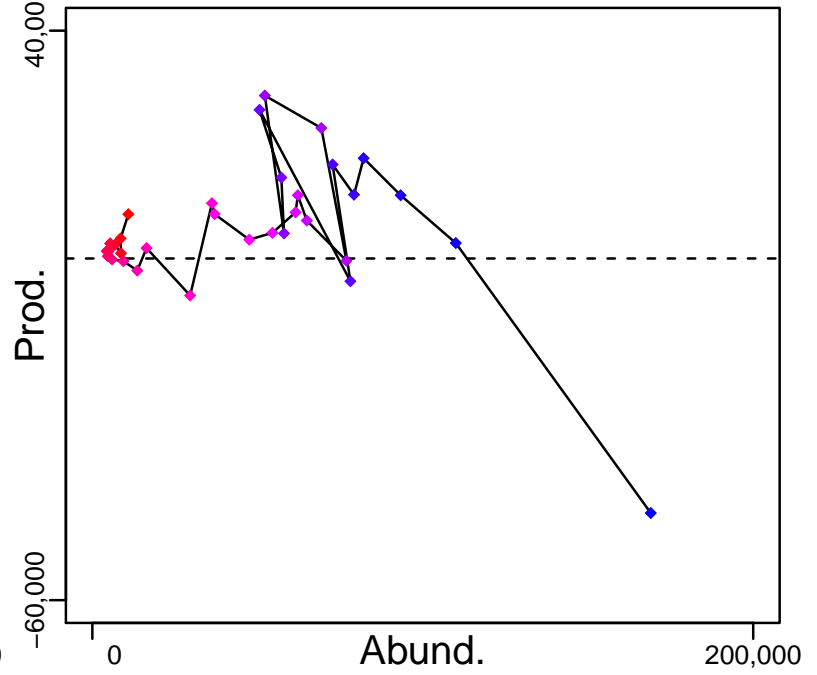
Kobe MGTpref (1980–2016–ICESIMP2016)



Spawner Recruit (1980–2016–ICESIMP2016)



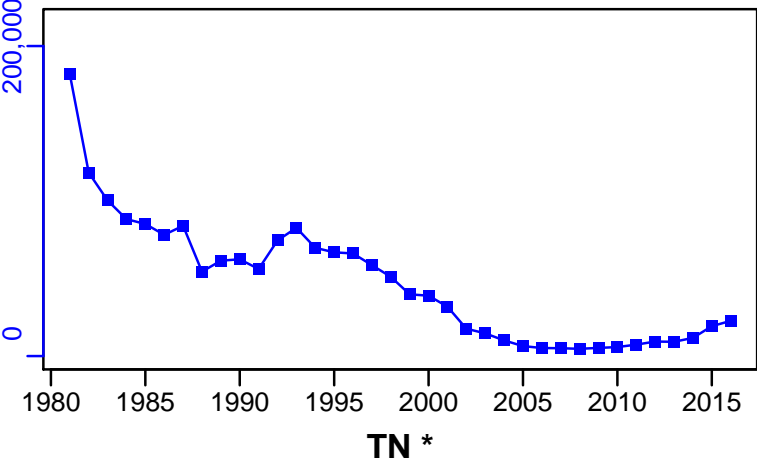
Production (1980–2016–ICESIMP2016)



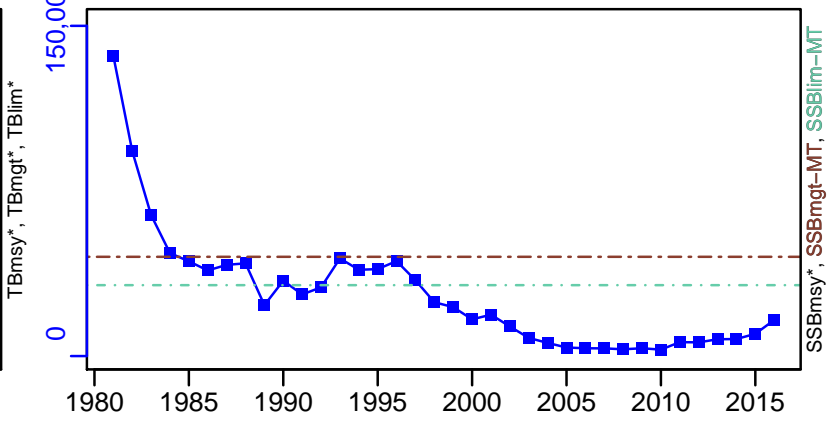
◆ Start Year ◆ End Year \* No Data

# Whiting ICES Via [WHITVla]

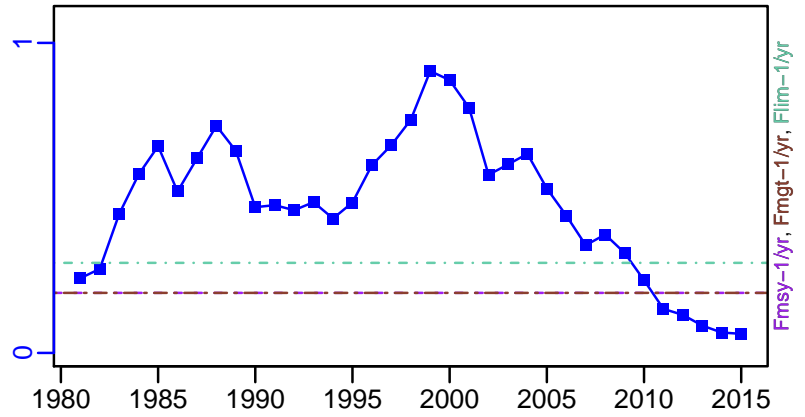
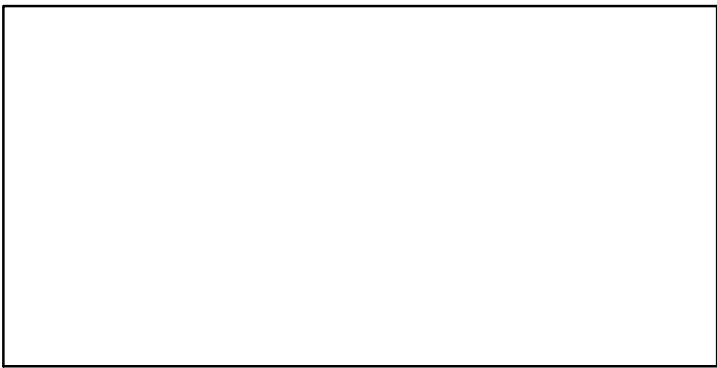
TB-MT (1980–2016–ICESIMP2016)



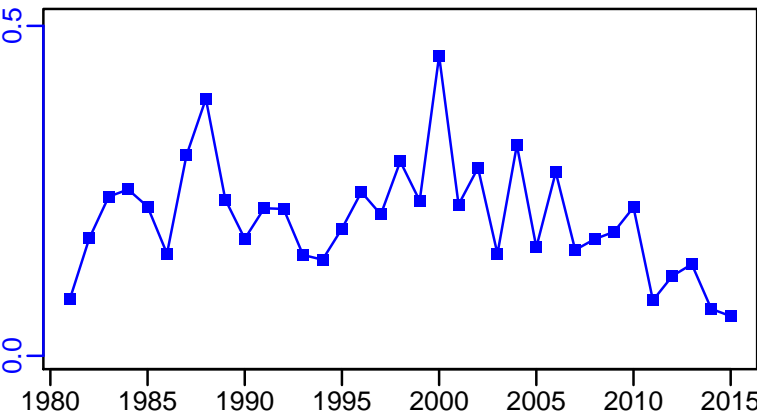
SSB-MT (1980–2016–ICESIMP2016)



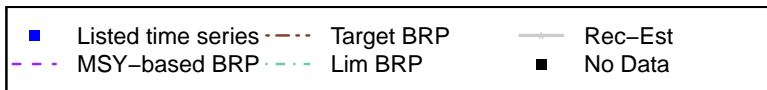
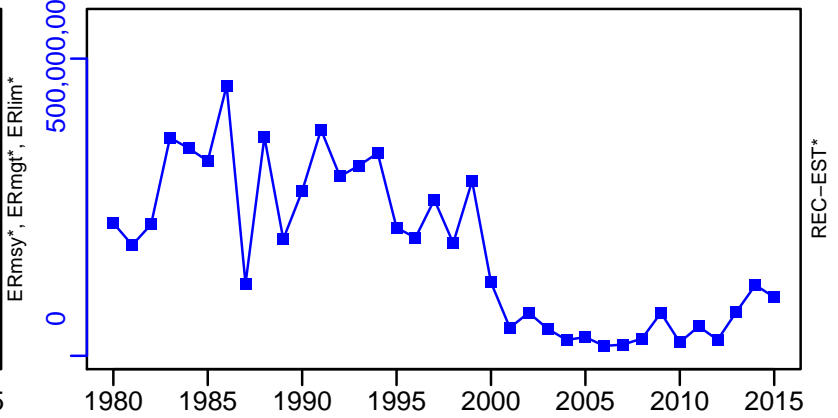
F-1/yr (1980–2016–ICESIMP2016)



ER-calc-ratio (1980–2016–ICESIMP2016)

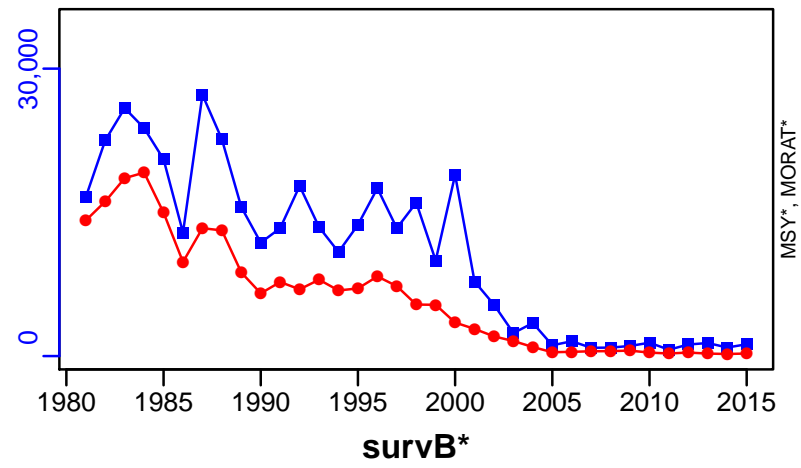


R-E00 (1980–2016–ICESIMP2016)



Whiting ICES Via [WHITVla]

TC-MT, TL-MT, RecC\* (1980-2016-ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



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

## Whiting ICES Vlle-k [WHITVllek]

Metadata	
<b>Scientific Name</b>	Merlangius merlangus
<b>Current Assess ID</b>	WGCSE-WHITVllek-1999-2016-ICESIMP2016
<b>Area</b>	Celtic Sea
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group on Celtic Seas Ecosystems
<b>Asmts in RAM</b>	2013, 2014, 2015, 2016, 2012

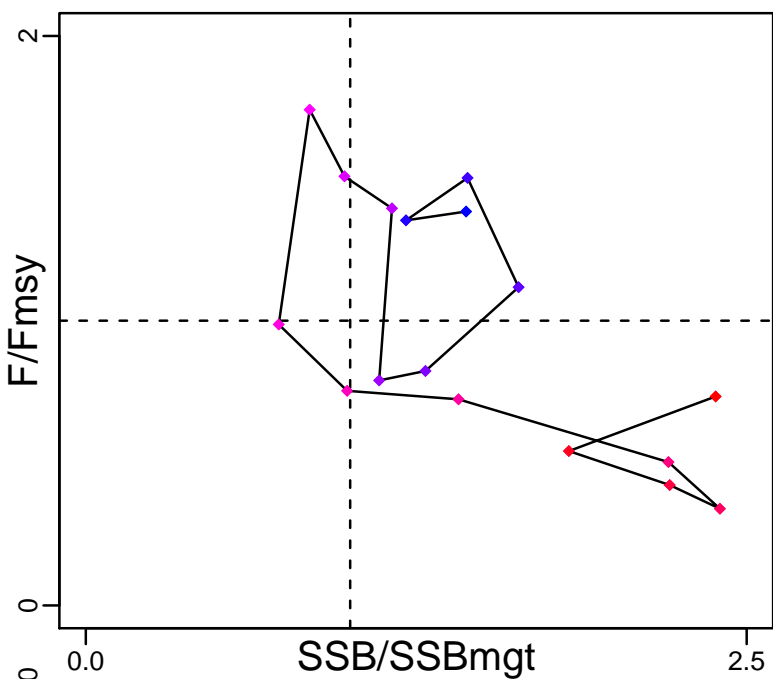
Reference Points			
Type	ID	Asmt Year	Value
<b>TBmsy</b>	-	-	-
<b>SSBmsy</b>	-	-	-
<b>Fmsy</b>	Fmsy-1/yr	2016	0.52
<b>ERmsy</b>	-	-	-
<b>TBmgt</b>	-	-	-
<b>SSBmgt</b>	SSBmgt-MT	2016	35,000
<b>Fmgt</b>	Fmgt-1/yr	2016	0.52
<b>ERmgt</b>	-	-	-
<b>TB0</b>	-	-	-
<b>SSB0</b>	-	-	-
<b>MSY</b>	MSY-MT	2012	21,000
<b>M</b>	-	-	-
<b>TBlim</b>	-	-	-
<b>SSBlim</b>	SSBlim-MT	2016	25,000
<b>Flim</b>	Flim-1/yr	2016	1.12
<b>ERlim</b>	-	-	-

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
<b>TB</b>	TB-MT	2016	95,300	-	-
<b>SSB</b>	SSB-MT	2016	63,900	-	-
<b>TN</b>	-	-	-	-	-
<b>R</b>	R-E00	2016	$9.81 \times 10^8$	-	0
<b>F</b>	F-1/yr	2016	0.38	-	2 to 5
<b>ER</b>	ER-calc-ratio	2016	0.2	-	-
<b>TC</b>	TC-MT	2016	19,300		
<b>TL</b>	TL-MT	2016	13,200		
<b>TB/TBmsy</b>	-	-	-		
<b>SSB/SSBmsy</b>	-	-	-		
<b>F/Fmsy</b>	F-1/yr/Fmsy-1/yr	2016	0.73		
<b>ER/ERmsy</b>	-	-	-		
<b>TB/TBmgt</b>	-	-	-		
<b>SSB/SSBmgt</b>	SSB-MT/SSBmgt-MT	2016	1.83		
<b>F/Fmgt</b>	F-1/yr/Fmgt-1/yr	2016	0.73		
<b>ER/ERmgt</b>	-	-	-		

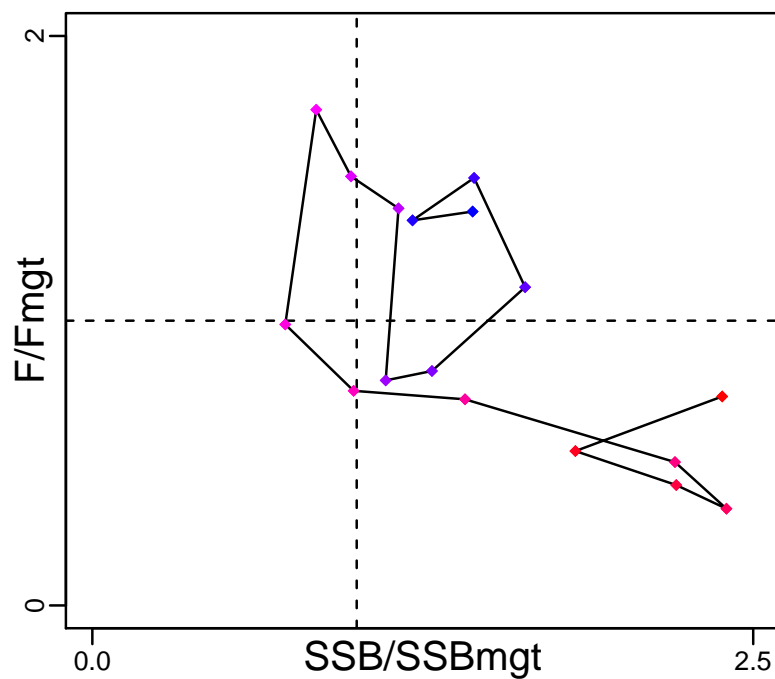


# Whiting ICES Vlle-k [WHITVllek]

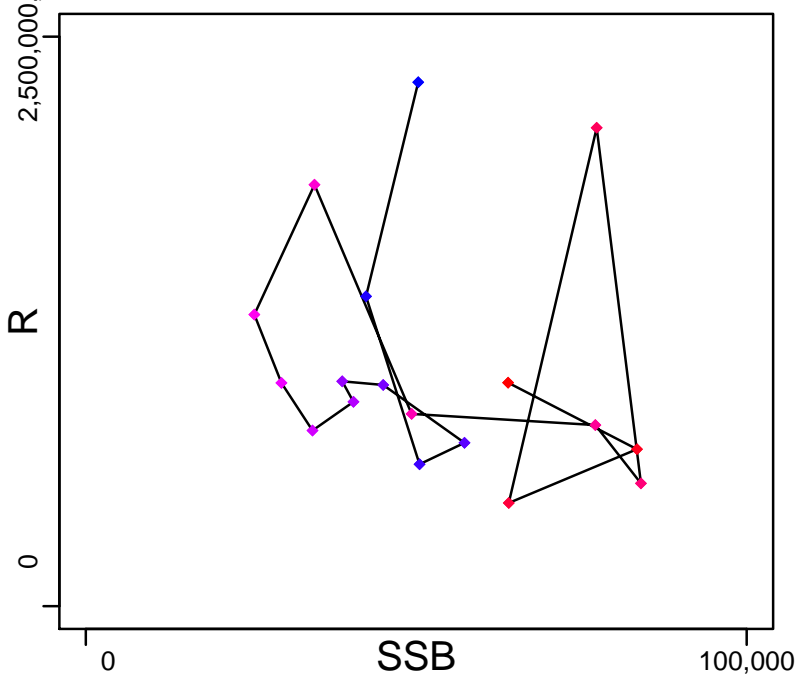
Kobe MSYpref (1999–2016–ICESIMP2016)



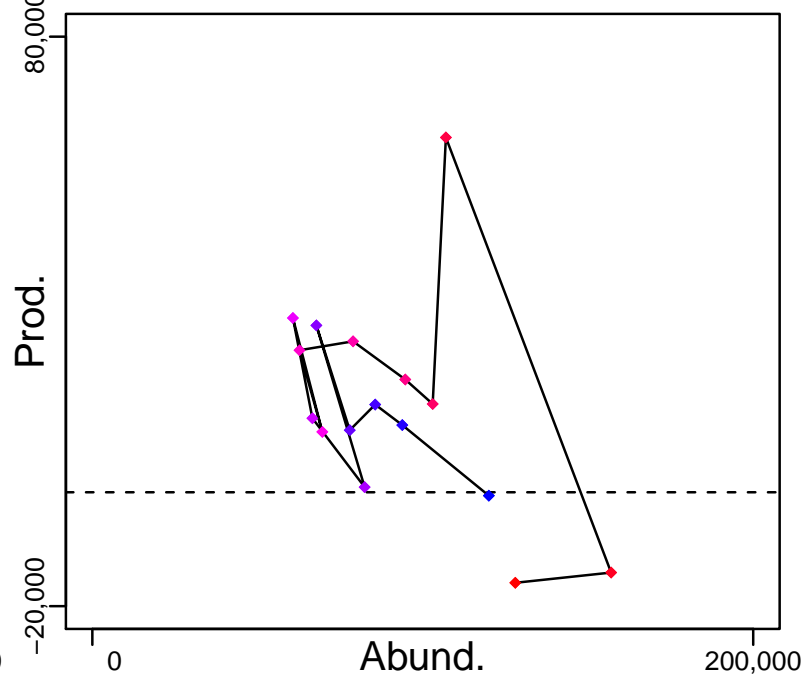
Kobe MGTpref (1999–2016–ICESIMP2016)



Spawner Recruit (1999–2016–ICESIMP2016)



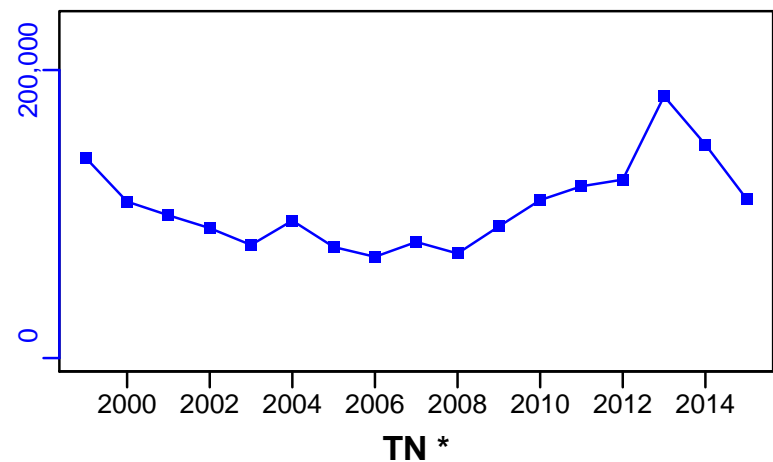
Production (1999–2016–ICESIMP2016)



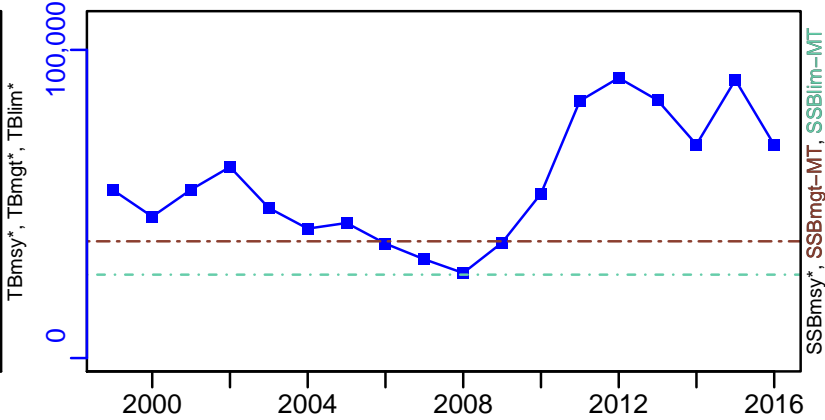
◆ Start Year ◆ End Year \* No Data

# Whiting ICES Vlle-k [WHITVllek]

TB-MT (1999–2016–ICESIMP2016)



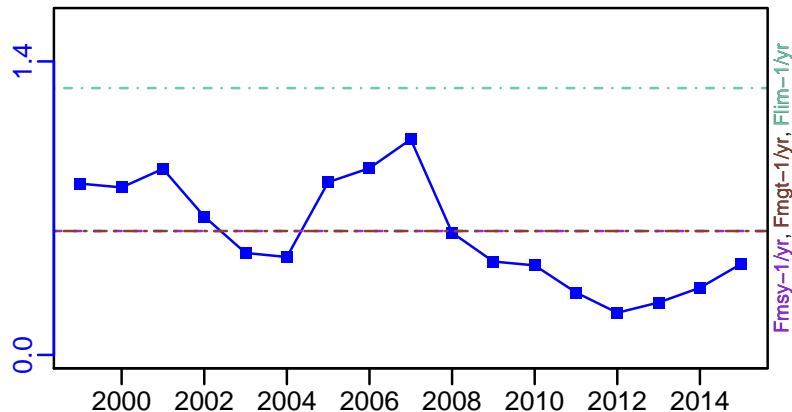
SSB-MT (1999–2016–ICESIMP2016)



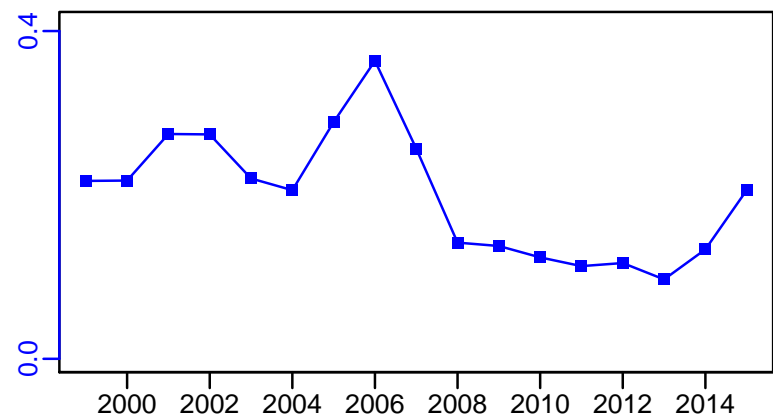
TN \*



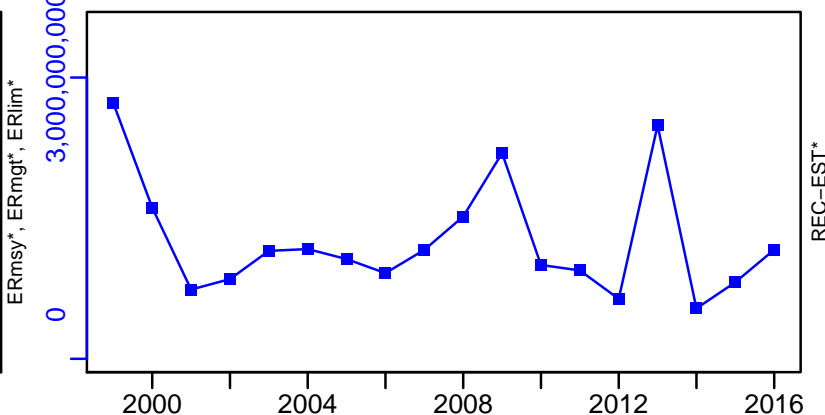
F-1/yr (1999–2016–ICESIMP2016)



ER-calc-ratio (1999–2016–ICESIMP2016)

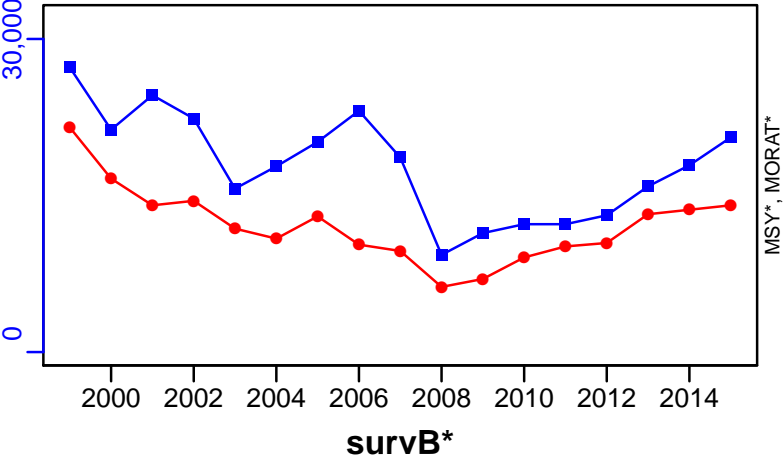


R-E00 (1999–2016–ICESIMP2016)

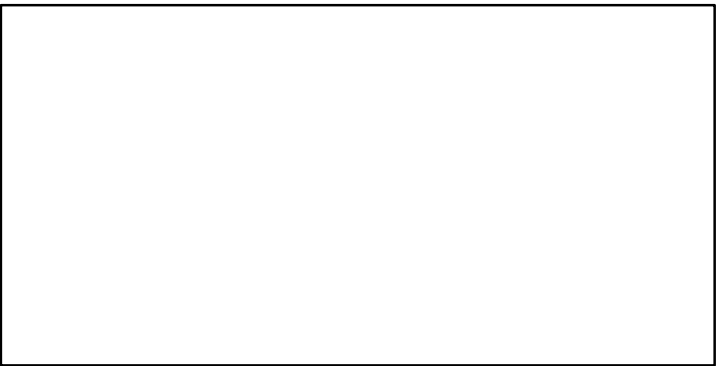


Whiting ICES Vlle-k [WHITVllek]

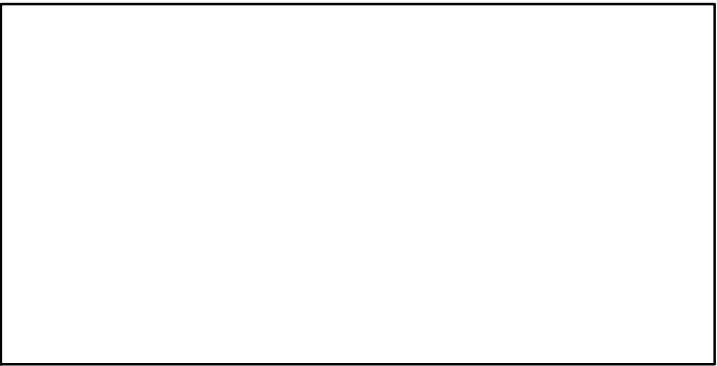
TC-MT, TL-MT, RecC\* (1999-2016-ICESIMP2016)



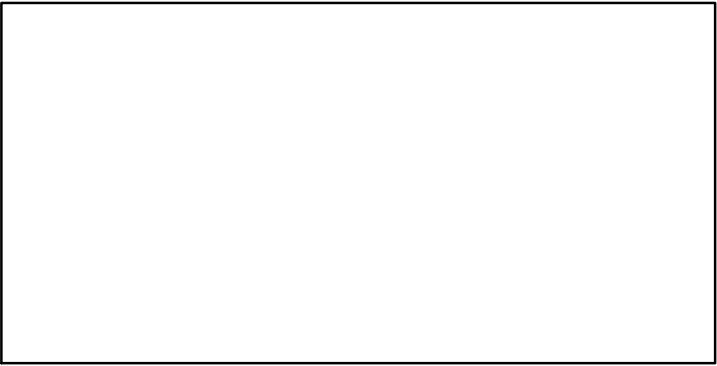
TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



## Whiting VIII and IXa [WHITVIII-IXa]

Metadata	
<b>Scientific Name</b>	Merlangius merlangus
<b>Current Assess ID</b>	WGBIE-WHITVIII-IXa-1994-2016-ICESIMP2016
<b>Area</b>	VIII and IXa
<b>Management Authority</b>	International Council for the Exploration of the Sea
<b>Assessor</b>	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
<b>Asmts in RAM</b>	2015, 2016

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

Time Series					
Type	ID	Asmt Year	Curr Value	Sex	Age
TB	-	-	-	-	-
SSB	-	-	-	-	-
TN	-	-	-	-	-
R	-	-	-	-	-
F	-	-	-	-	-
ER	-	-	-	-	-
TC	-	-	-		
TL	TL-MT	2016	2200		
TB/TBmsy	-	-	-		
SSB/SSBmsy	-	-	-		
F/Fmsy	-	-	-		
ER/ERmsy	-	-	-		
TB/TBmgt	-	-	-		
SSB/SSBmgt	-	-	-		
F/Fmgt	-	-	-		
ER/ERmgt	-	-	-		

**Kobe MSY\***



**Kobe MGT\***



**Spawner Recruit\***



**Production\***



◆ Start Year    ◆ End Year    \* No Data

Whiting VIII and IXa [WHITVIII-IXa]

**TB\***



**SSB\***



**TN \***



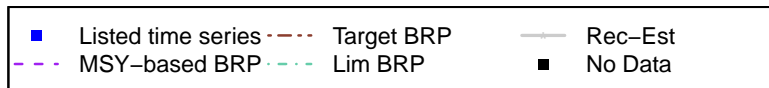
**F\***



**ER\***

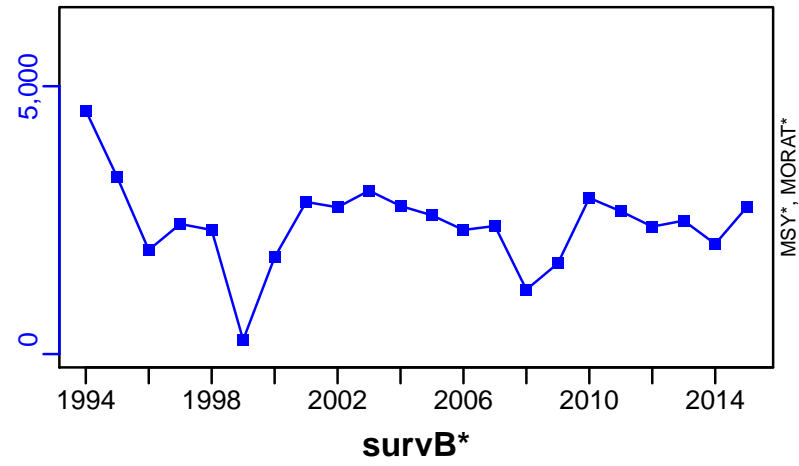


**Recruits\***



Whiting VIII and IXa [WHITVIII-IXa]

TL-MT, TC\*, RecC\* (1994-2016-ICESIMP2016)



TAC\*, Cpair\*, Cadv\*



CPUE\*



EFFORT\*



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