

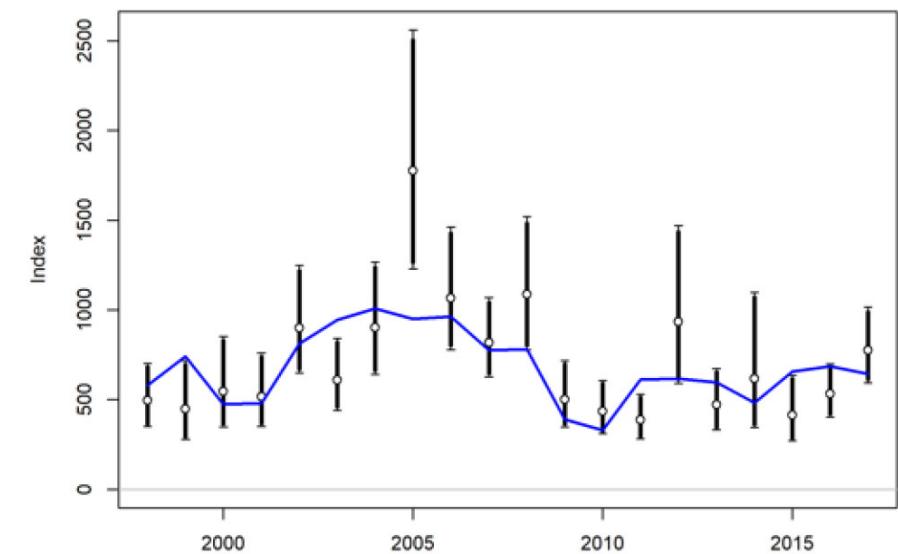
Stato delle risorse demersali dell'Adriatico e recenti tendenze

Scarella G.¹, Santojanni A.¹, Raicevich S.² & Giovanardi O.^{1, 2}

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2 ISPRA, Chioggia

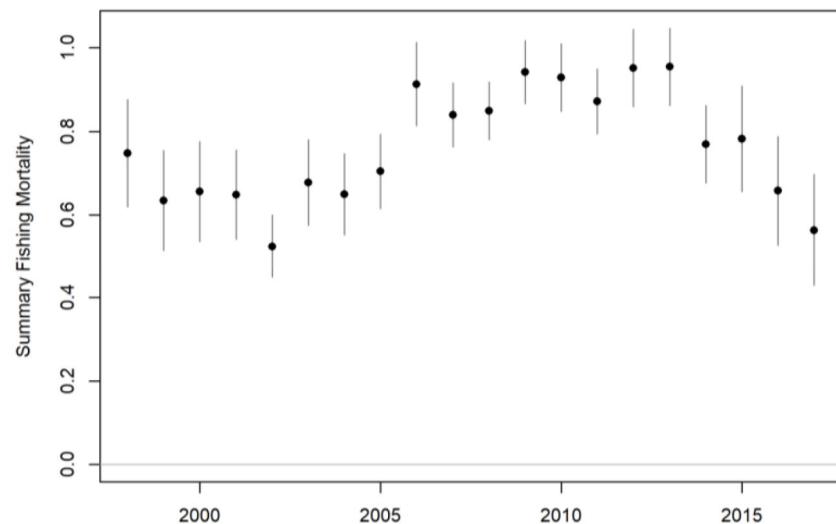
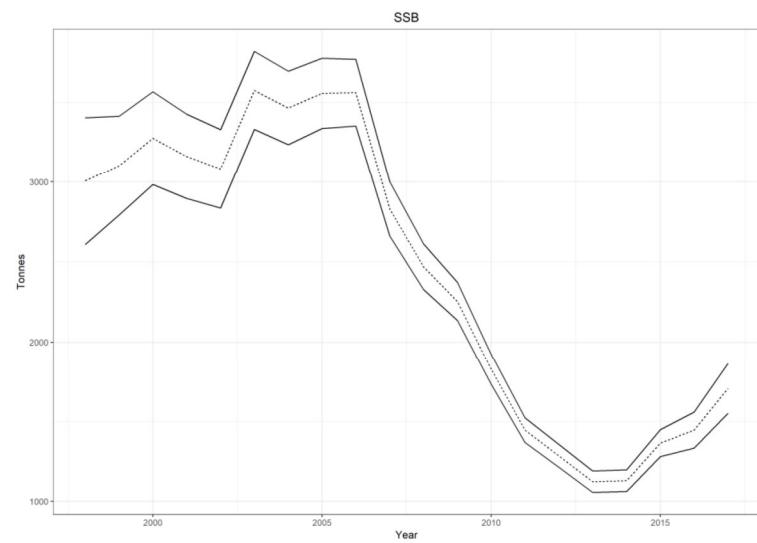
Merluccius merluccius GSA 17 – Carried out by GFCM WGSAD 2018/Benchmark 2019



$$F_{2017} = 0.562$$

$$F_{MSYproxy} = 0.167$$

$$F/F_{MSY} = 3.365$$



Mullus barbatus GSA 17-18 – presented during GFCM WGSAD 2018 – Carried out by STECF EWG 18-16

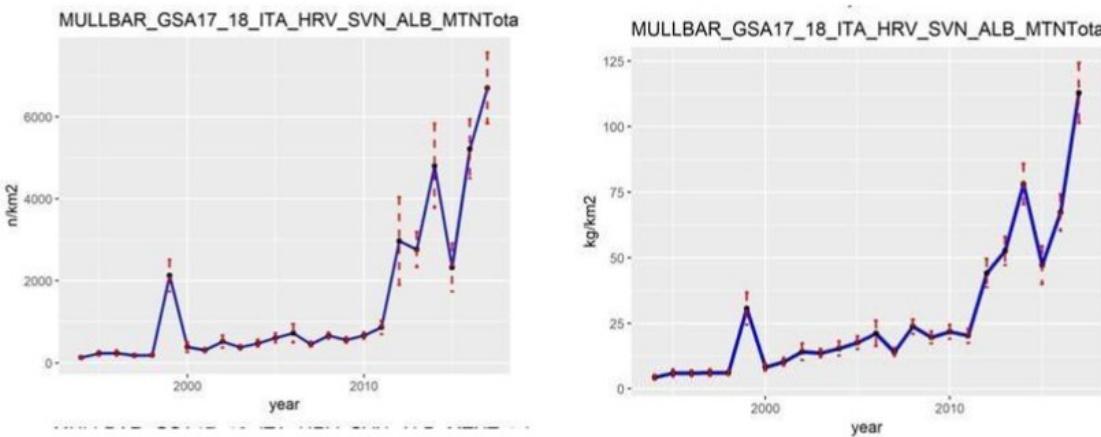


Figure Red mullet in GSAs 17 and 18. MEDITS abundance (n/km^2) and bior (kg/km^2) over 1994-2017.

$$F_{2017} = 0.48$$

$$F_{MSYproxy} = 0.41$$

$$F/F_{MSY} = 1.17$$

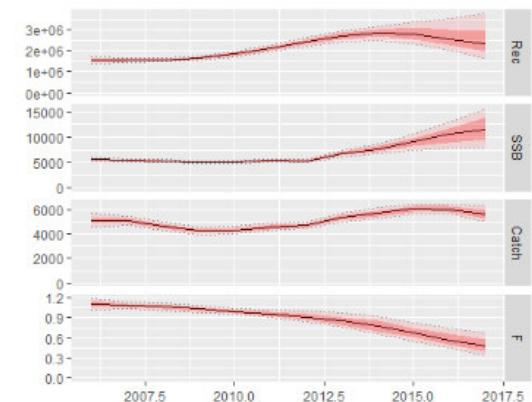
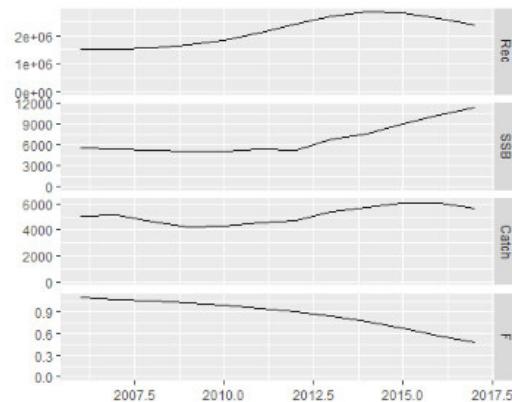


Figure Red mullet in GSAs 17 and 18. Summary of the results.

Nephrops norvegicus GSA 17-18 – presented during GFCM WGSAD 2018 – Carried out by STECF EWG 18-16

Italy GSA 17

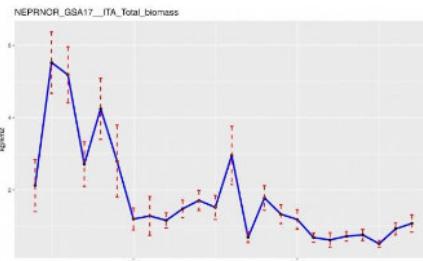
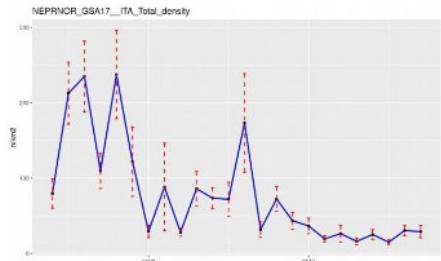


Figure Norway lobster in GSA 17 and 18. Abundance (left) and biomass (right) indices from the MEDITS survey in the Croatian sides of GSA 17 during 1994 – 2017.

Italy GSA 18

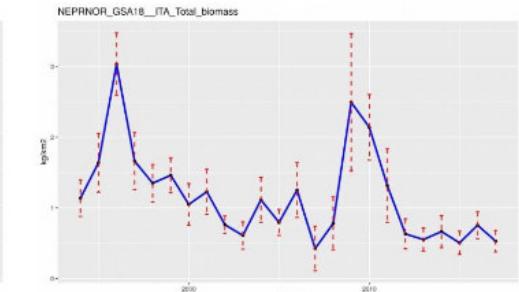
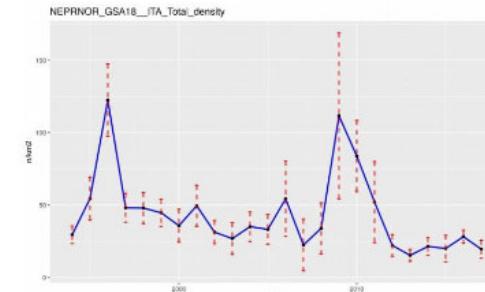


Figure Norway lobster in GSA 17 and 18. Abundance (left) and biomass (right) indices from the MEDITS survey in GSA 18 Italian side in the period 1994 – 2017.

Croatia GSA 17

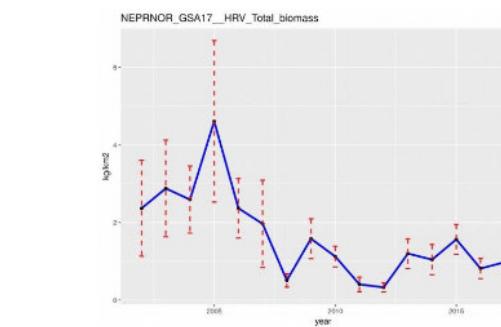
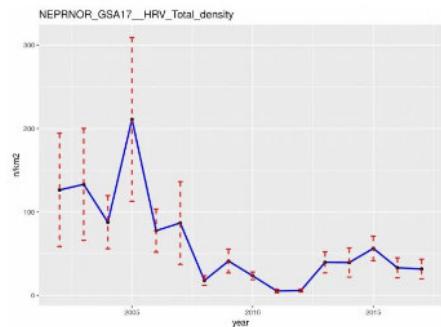


Figure Norway lobster in GSA 17 and 18. Abundance (left) and biomass (right) indices from the MEDITS survey in the Croatian sides of GSA 17 during 2002 – 2017.

Albania GSA 18

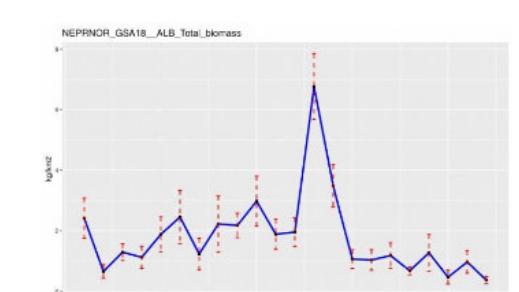
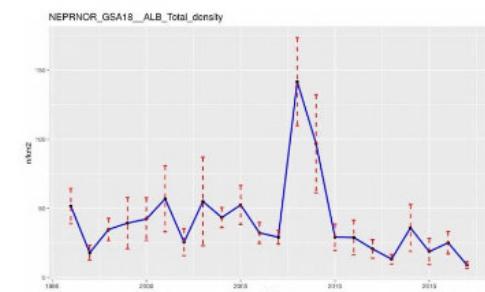
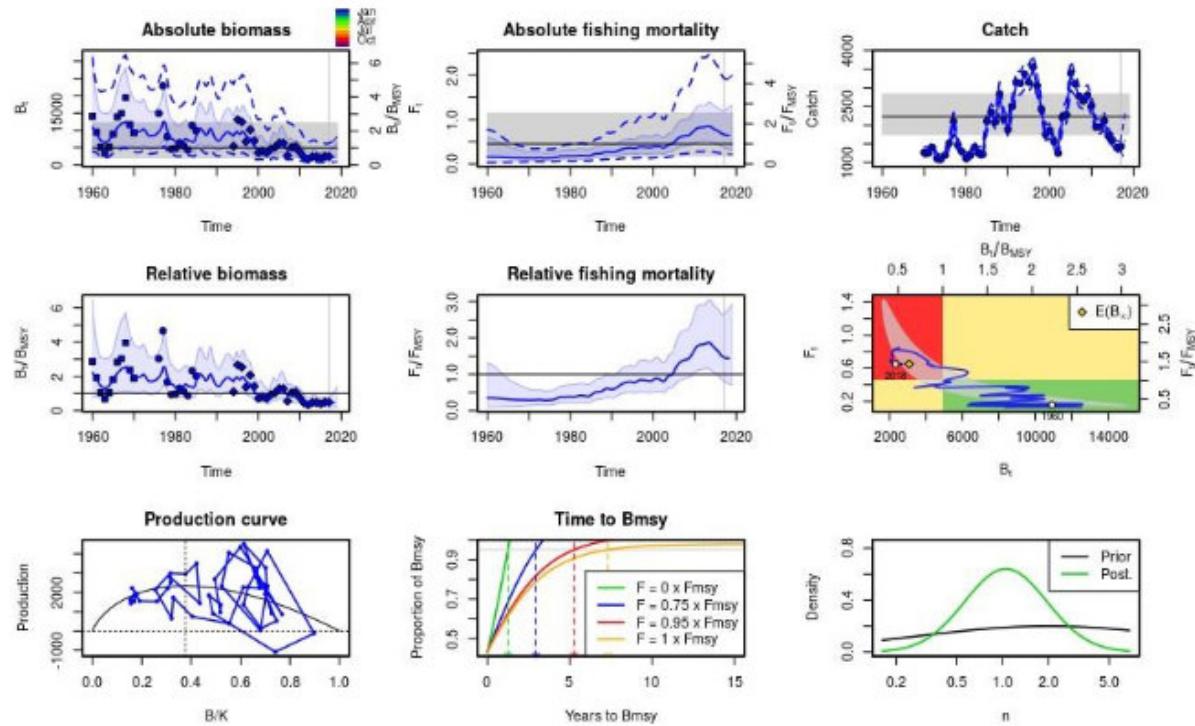


Figure Norway lobster in GSA 17 and 18. Abundance (left) and biomass (right) indices from the MEDITS survey in GSA 18 Albanian side in the period 1996 – 2017.

Nephrops norvegicus GSA 17-18 – presented during GFCM WGSAD 2018 – Carried out by STECF EWG 18-16



$$F/F_{MSY} = 1.46$$

$$B/B_{MSY} = 0.43$$

Assessment issue: connectivity among *Nephrops* stocks clearly shows that an assessment carried out combining the GSA 17 and 18 is not robust (Canu et al., in prep).

Parapenaeus longirostris GSA 17-18-19 – presented GFCM WGSAD 2018 – Carried out by STECF EWG 18-16

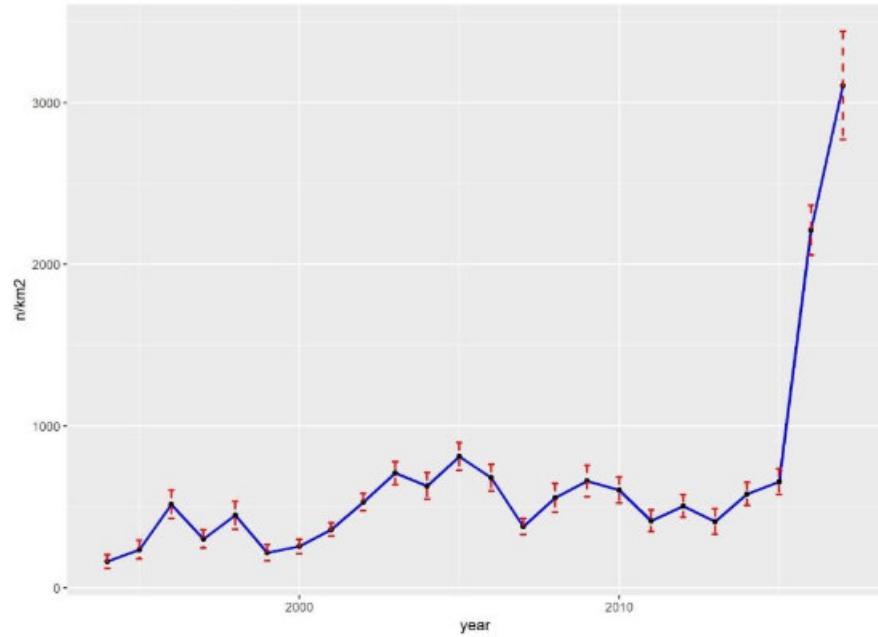
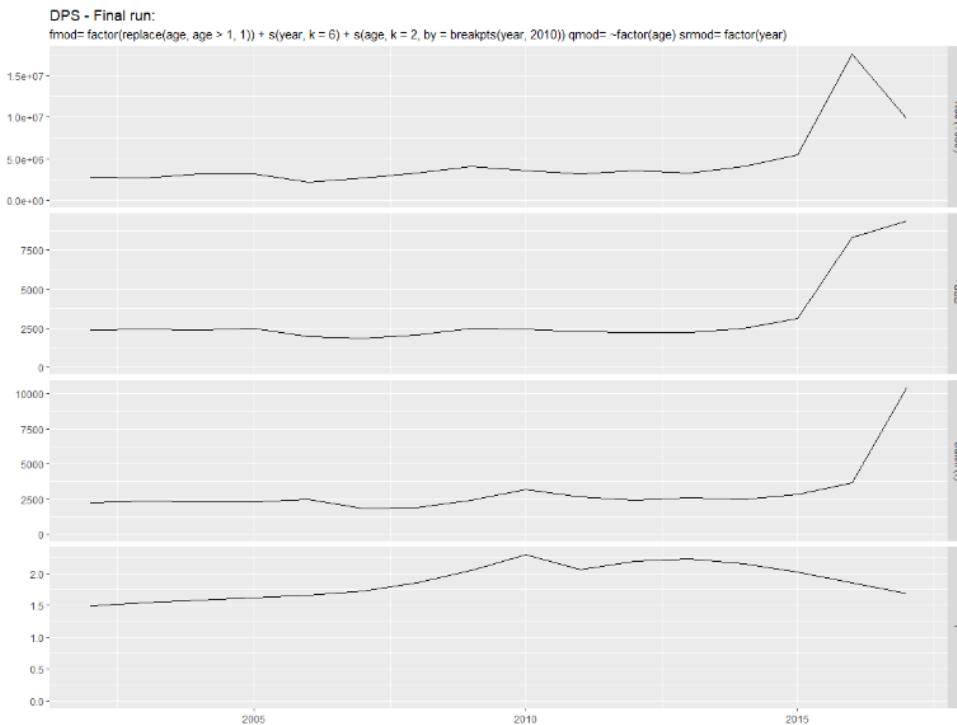


Figure Deep-water rose shrimp in GSA 17-19. Estimated abundance indices (N/km²).

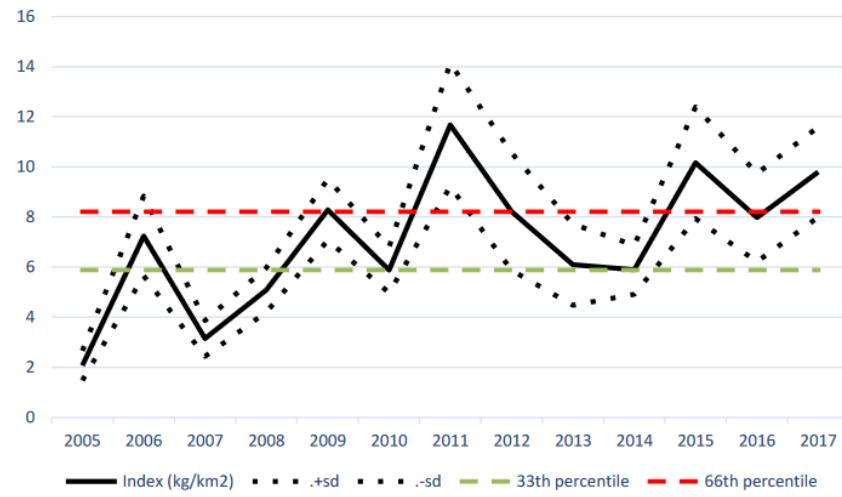
Parapenaeus longirostris GSA 17-18-19 – presented GFCM WGSAD 2018 – Carried out by STECF EWG 18-16

Assessment results (method a4a)



$$\begin{aligned}F_{2017} &= 1.85 \\F_{\text{MSYproxy}} &= 0.65 \\F/F_{\text{MSY}} &= 2.84\end{aligned}$$

Penaeus kerathurus GSA 17 – Carried out by GFCM WGSAD 2018



$$F/F_{MSY} = 2.12$$

$$B/B_{MSY} = 1.05$$

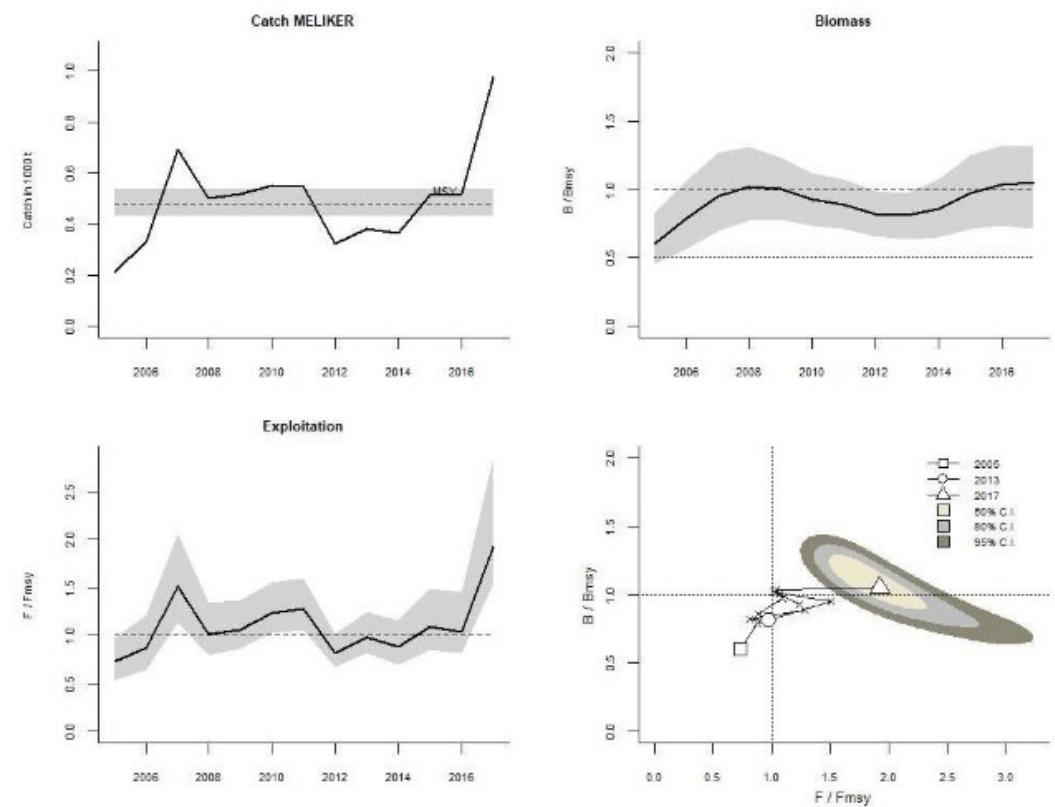
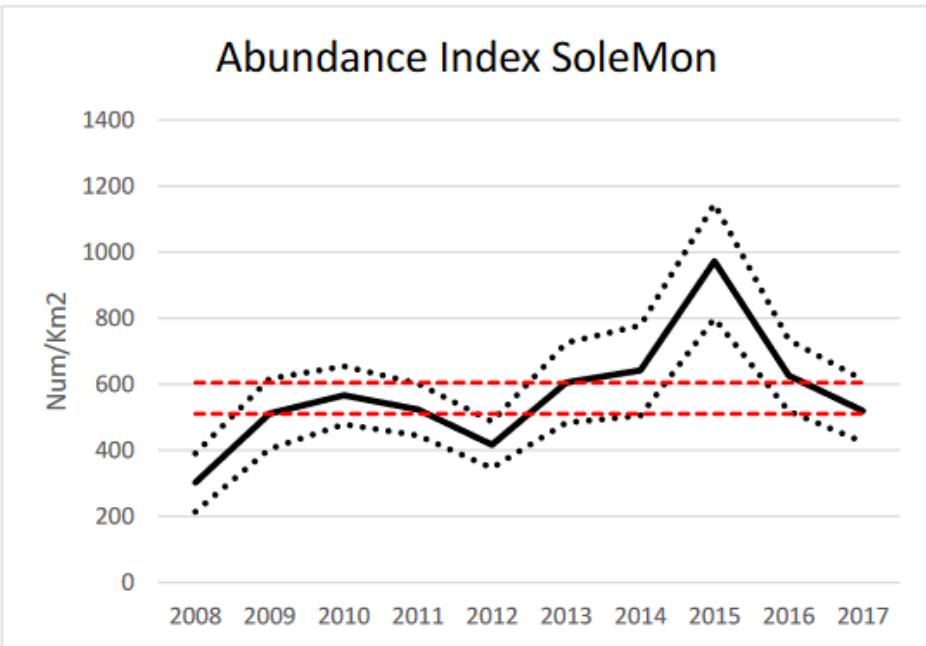


Figure 18 - Results of 2005-2017 C-MSY run

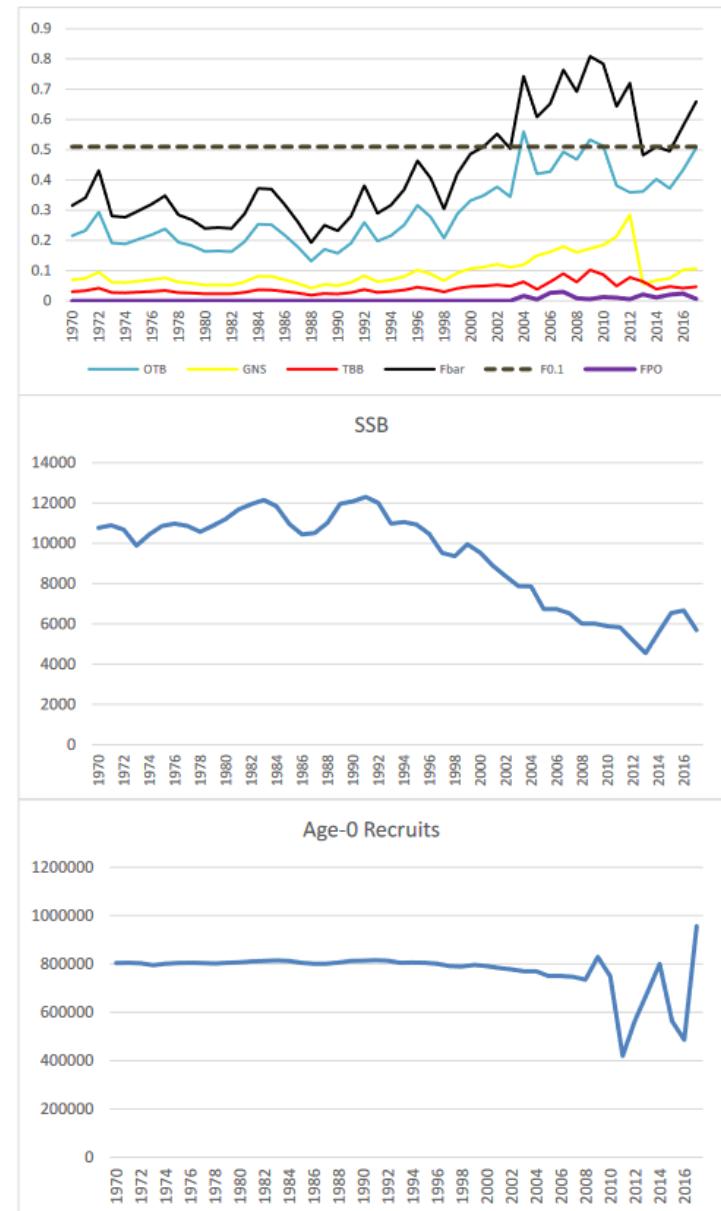
Squilla mantis GSA 17 – Carried out by GFCM WGSAD 2018

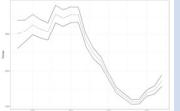
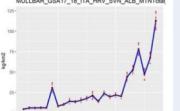
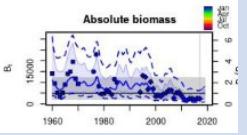
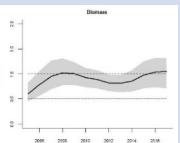


$$F_{2017} = 0.658$$

$$F_{MSYproxy} = 0.43$$

$$F/F_{MSY} = 1.53$$



Stock	F/Fmsy	Trend
<i>Merluccius merluccius</i>	3.37	
<i>Mullus barbatus</i>	1.17	
<i>Nephrops norvegicus</i>	1.46	
<i>Parapeneus longirostris</i>	2.84	
<i>Penaeus kerathurus</i>	2.11	
<i>Squilla mantis</i>	1.53	