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Acoustic correction factor estimate for compensating vertical diel migration of small pelagics

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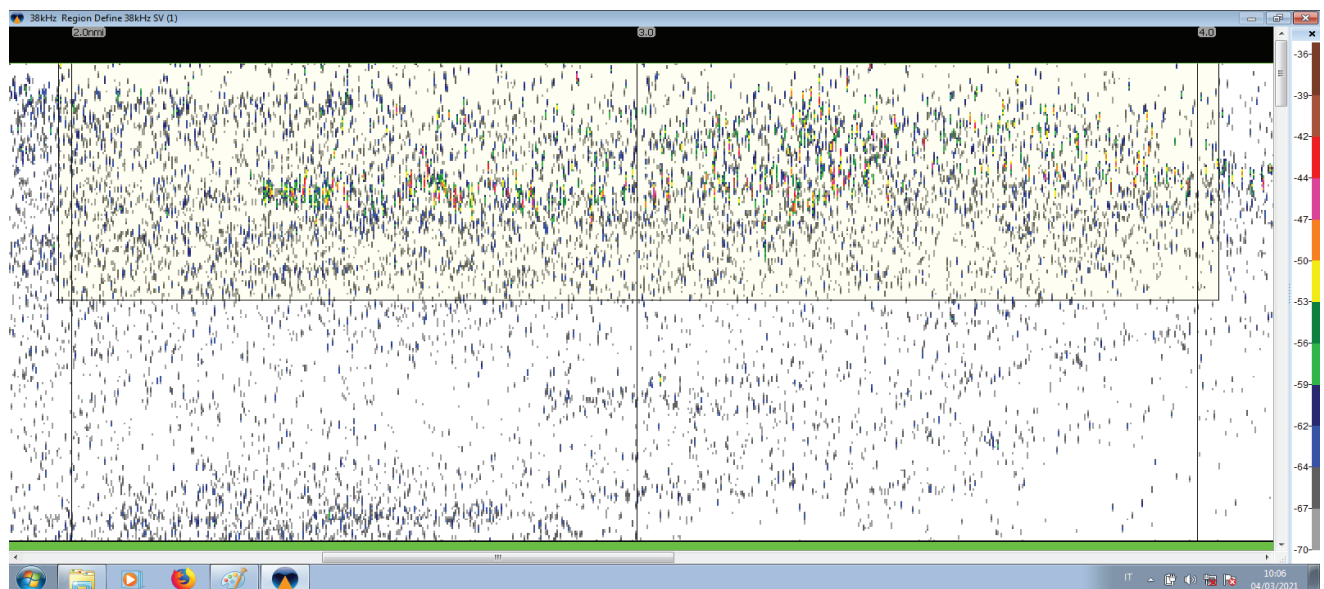
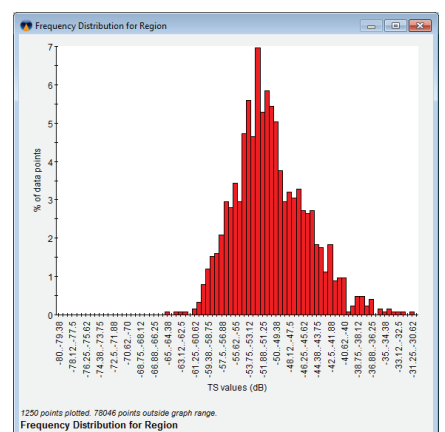
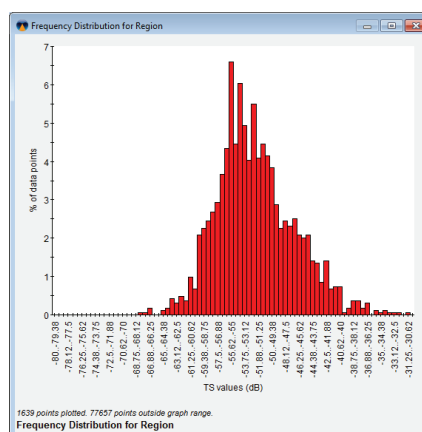
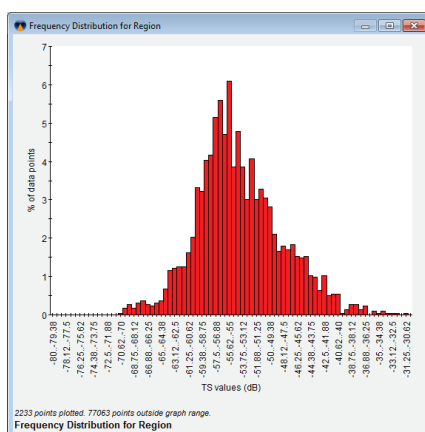
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Acoustic correction factor estimate for compensating the vertical diel migration of small pelagic species**Angelo BONANNO, Marco BARRA, Andrea De FELICE, Marianna GIANNOULAKI, Magdalena IGLESIAS, Iole LEONORI, Ana VENTERO, Salvatore ARONICA, Ilaria BIAGIOTTI, Vjekoslav TIČINA, Giovanni CANDUCI and Simona GENOVESE***Mediterranean Marine Science, 2021, 22/4, Special Issue*

Figure 1S. Scattered targets (fishes and plankton) in the upper part of the water column and frequency distribution of TS values by setting different Sv thresholds (from -60dB to -52dB). As it is possible to observe, the use of higher Sv thresholds gradually reduces the presence of smaller TS values, likely associated to smaller targets.

Sv_{Threshold} = -60 dBSv_{Threshold} = -58 dBSv_{Threshold} = -56 dB

$Sv_{\text{Threshold}} = -54 \text{ dB}$

$Sv_{\text{Threshold}} = -53 \text{ dB}$

$Sv_{\text{Threshold}} = -52 \text{ dB}$

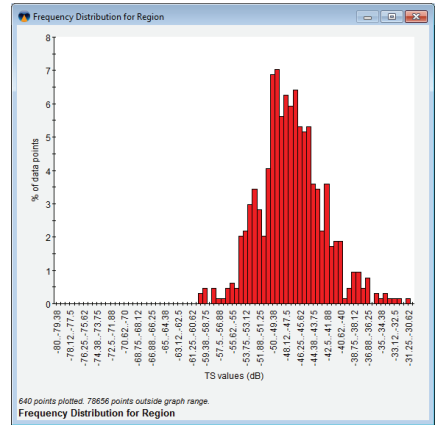
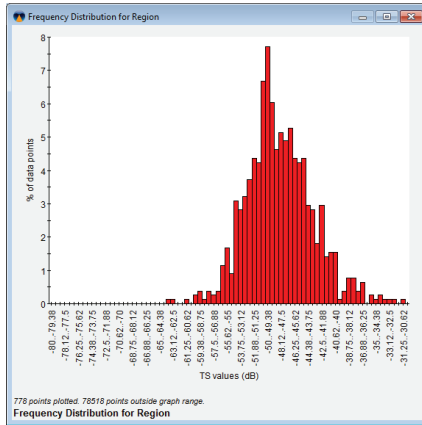
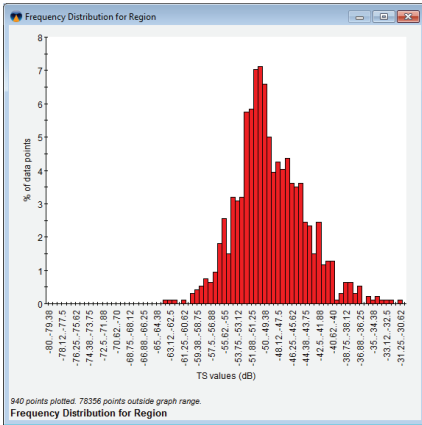
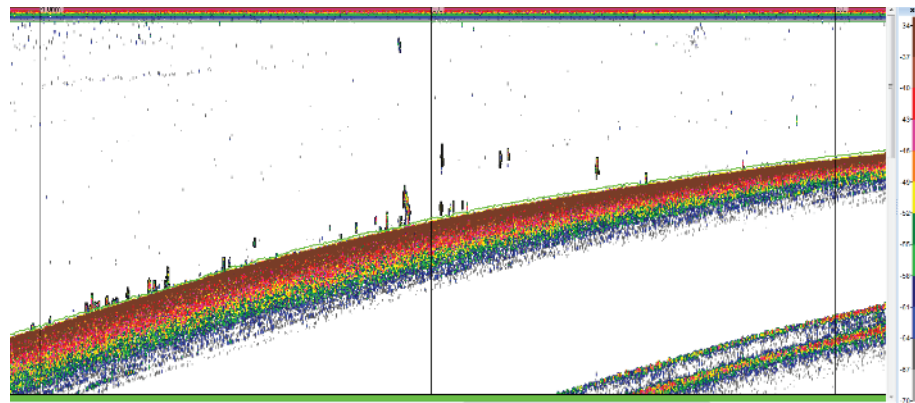


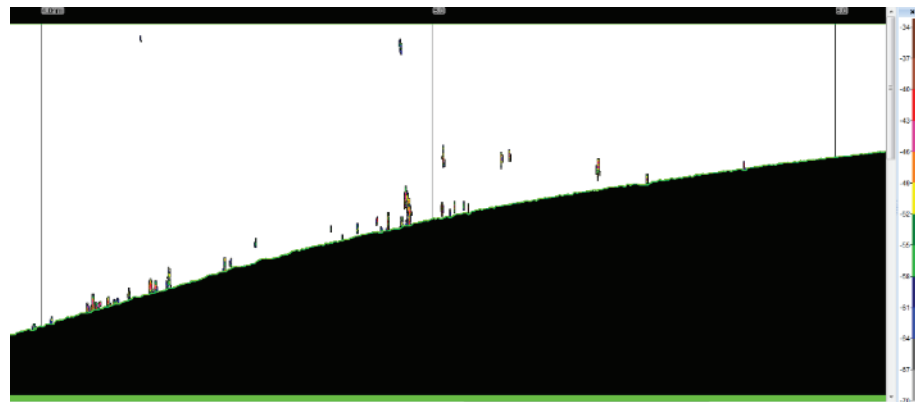
Figure 2S. Acoustic data collected along two transects in the Strait of Sicily.

Transect 38-39 Daytime echogram

$Sv_{\text{threshold}} = -70 \text{ dB}$



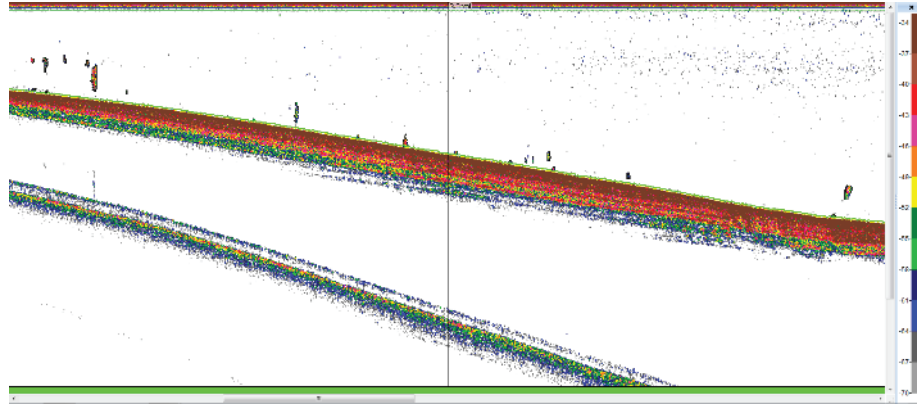
$Sv_{\text{threshold}} = -60 \text{ dB}$



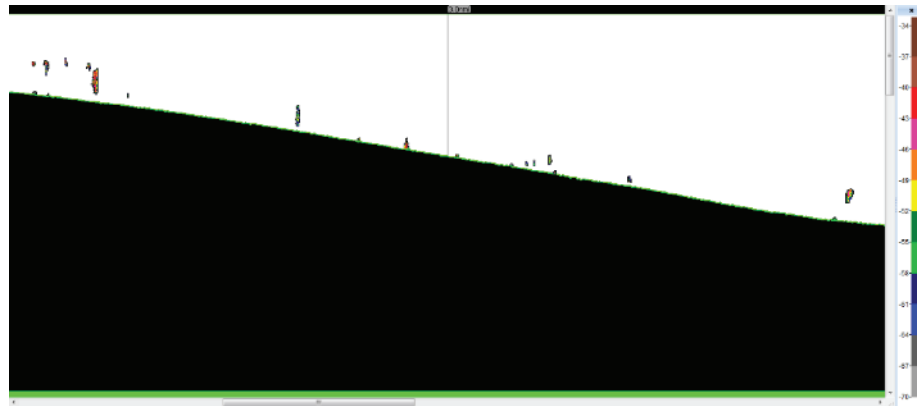
Transect 40-41

Daytime echogram

$Sv_{\text{threshold}} = -70\text{dB}$



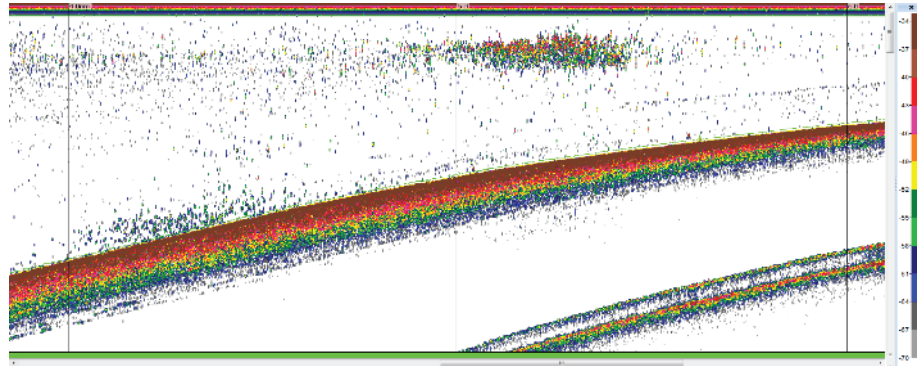
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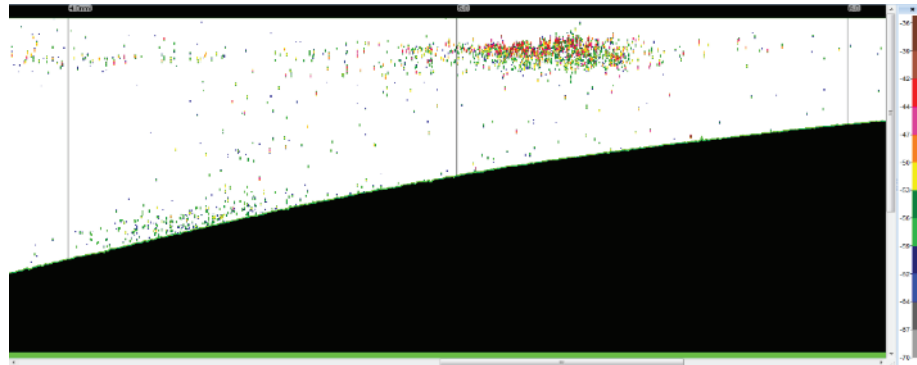
Transect 38-39

Nighttime echogram

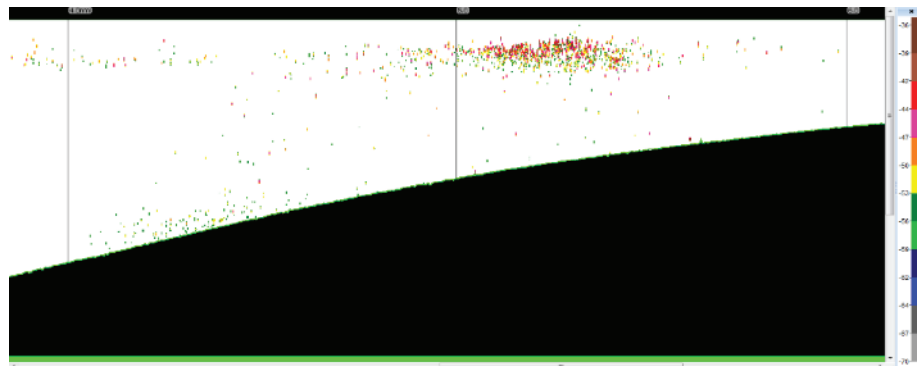
$Sv_{\text{threshold}} = -70\text{dB}$



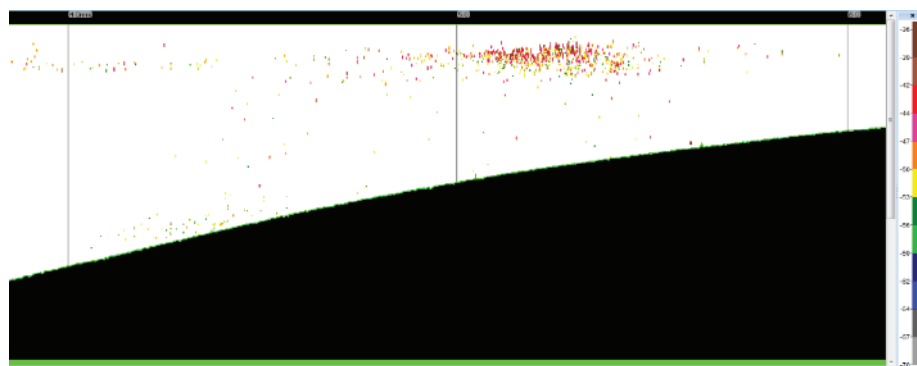
$Sv_{\text{threshold}} = -60\text{dB}$



$Sv_{\text{threshold}} = -56\text{dB}$



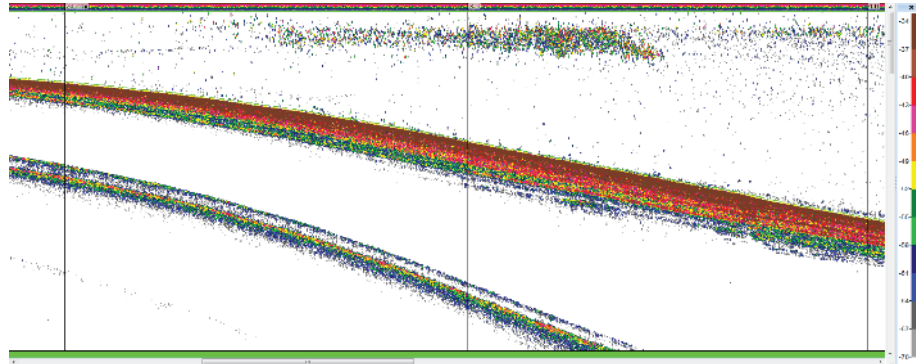
$Sv_{\text{threshold}} = -54\text{dB}$



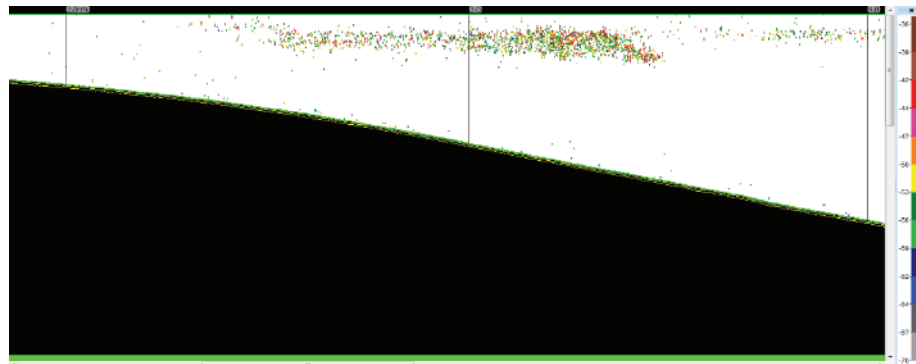
Transect 40-41

Nighttime echogram

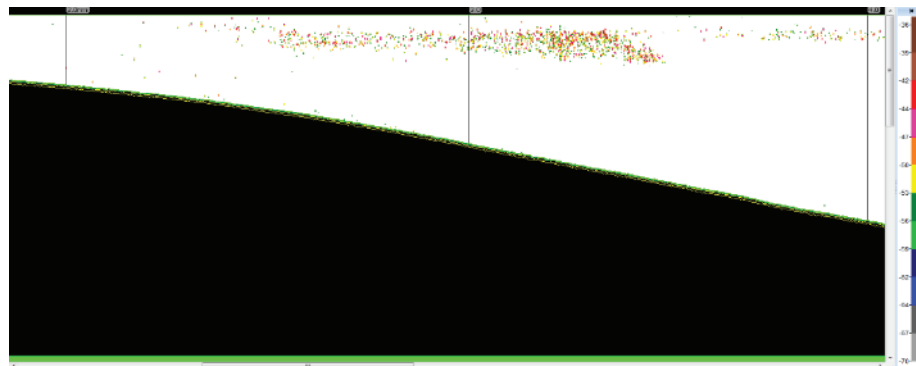
$Sv_{\text{threshold}} = -70\text{dB}$



$Sv_{\text{threshold}} = -60\text{dB}$



$Sv_{\text{threshold}} = -56\text{dB}$



$Sv_{\text{threshold}} = -54\text{dB}$

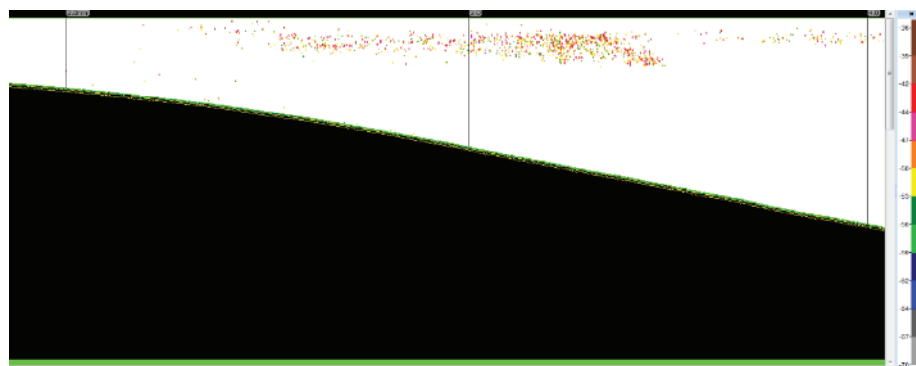
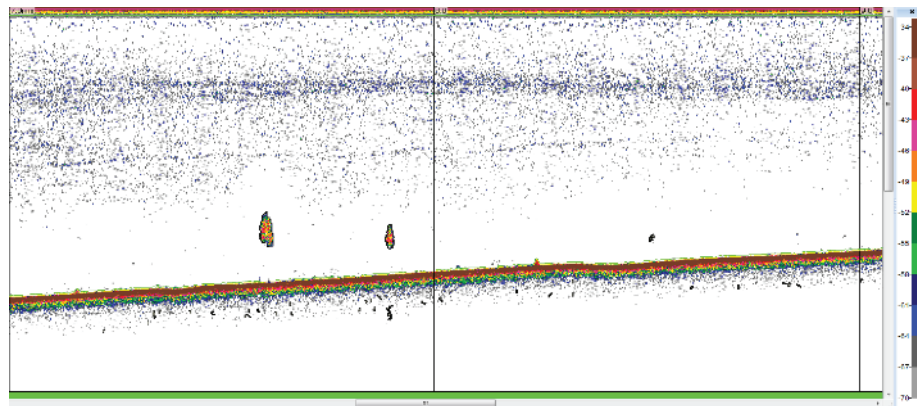


Figure 3S. Acoustic data collected along two transects in the Tyrrhenian Sea.

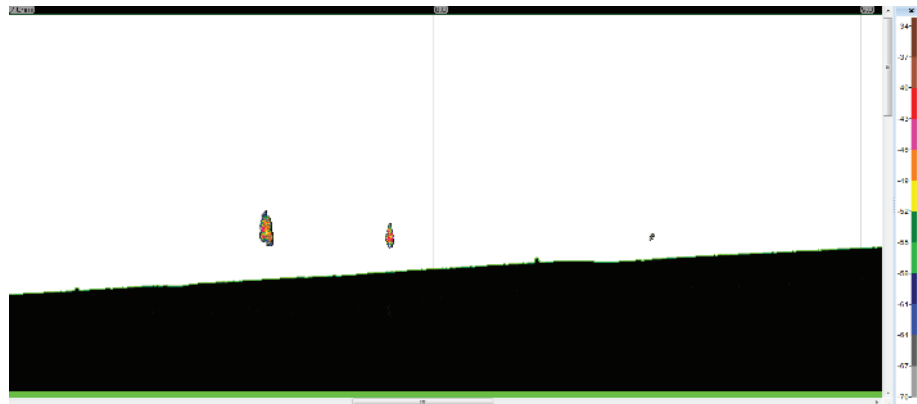
Transect 175-176

Daytime echogram

$Sv_{\text{threshold}} = -70\text{dB}$



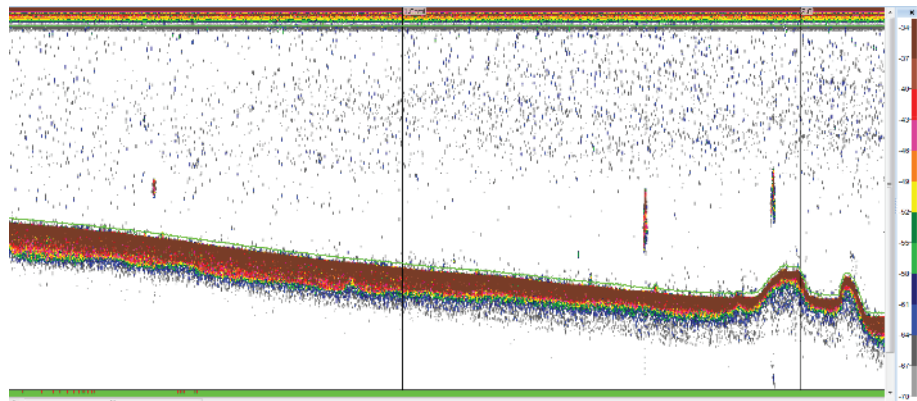
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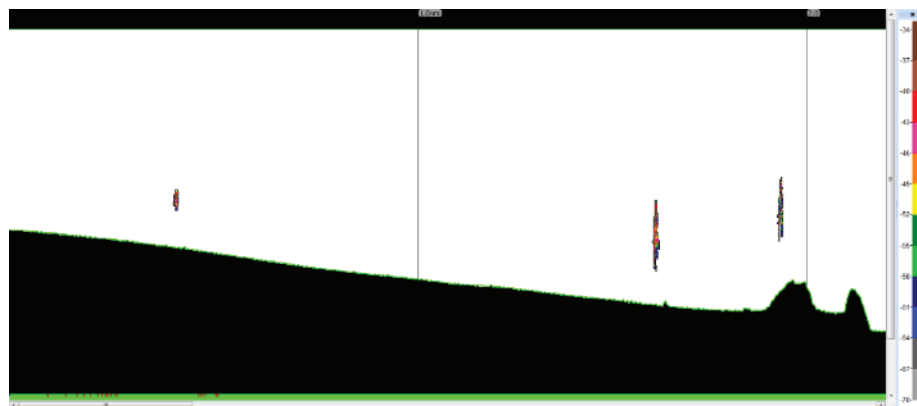
Transect 181-182

Daytime echogram

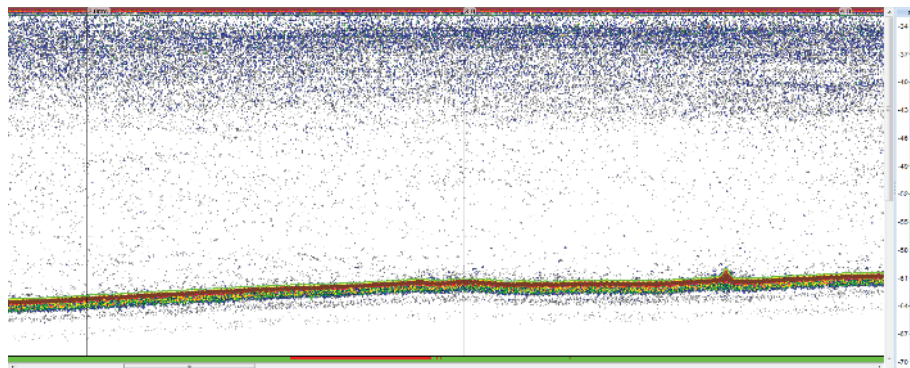
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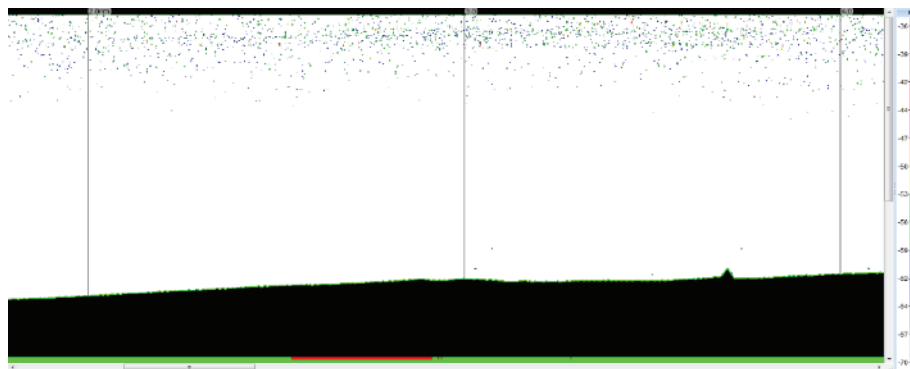
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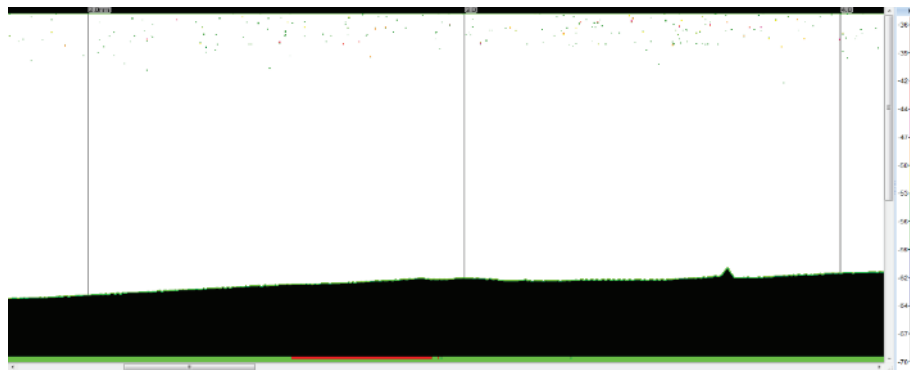
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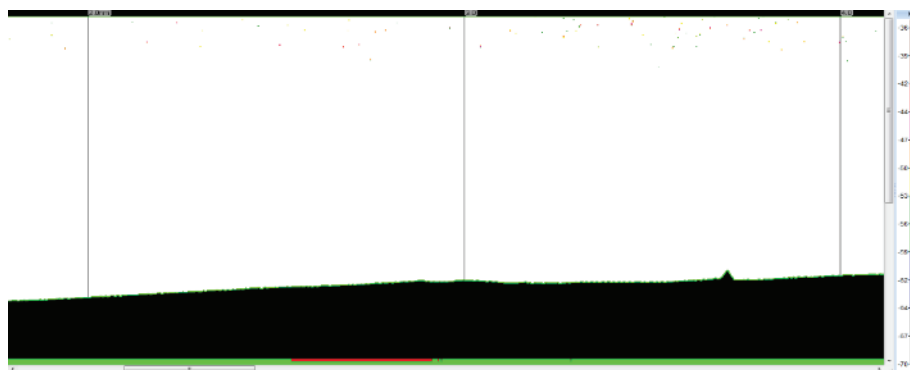
$Sv_{\text{threshold}} = -60\text{dB}$



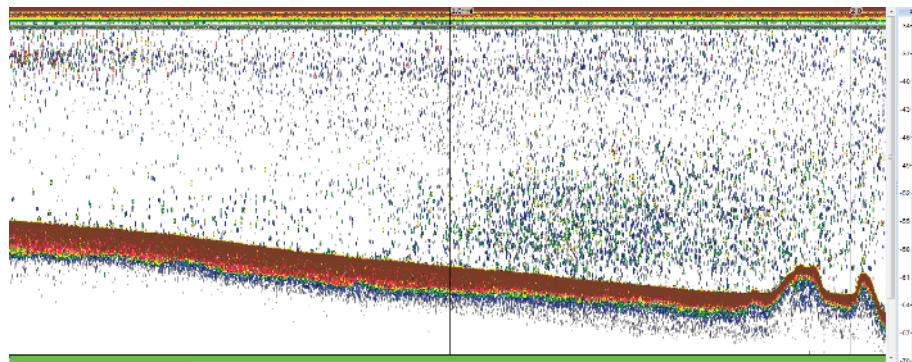
$Sv_{\text{threshold}} = -56\text{dB}$



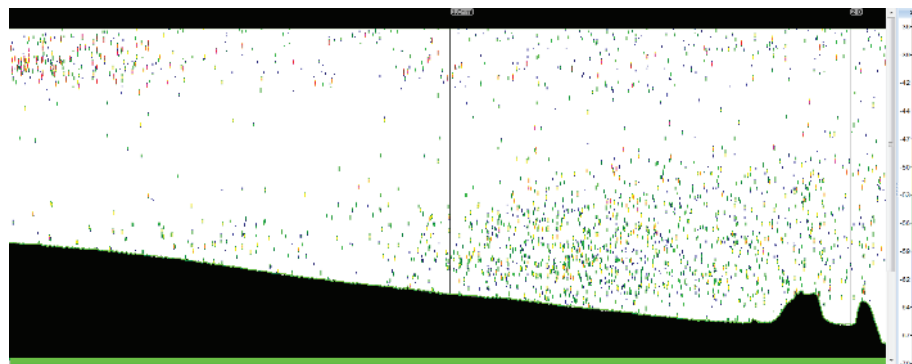
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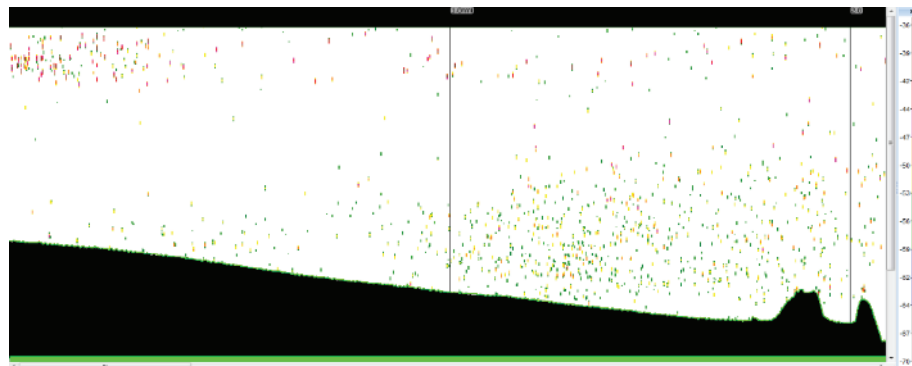
$Sv_{\text{threshold}} = -70\text{dB}$



$Sv_{\text{threshold}} = -60\text{dB}$



$Sv_{\text{threshold}} = -56\text{dB}$



$Sv_{\text{threshold}} = -54\text{dB}$

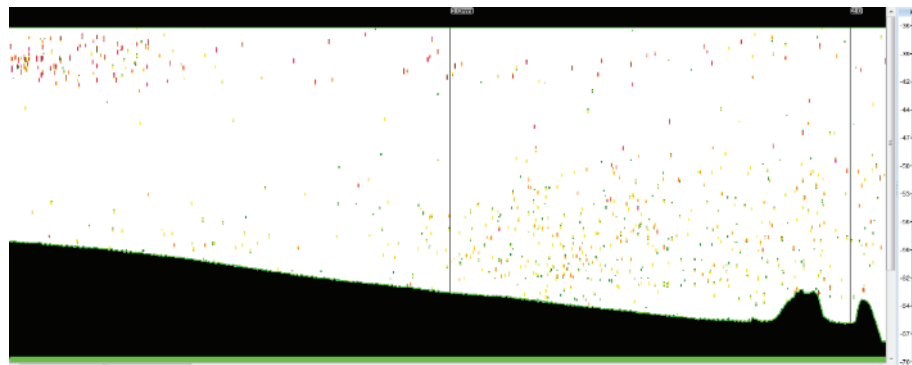
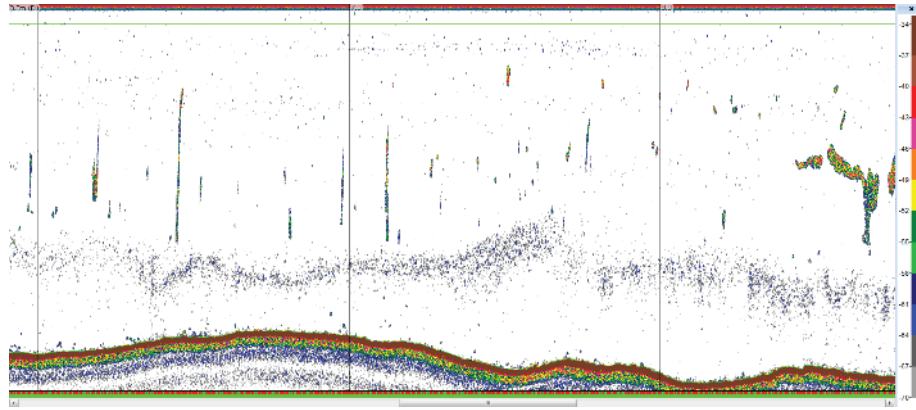


Figure 4S. Acoustic data collected in the Northern Spain area.

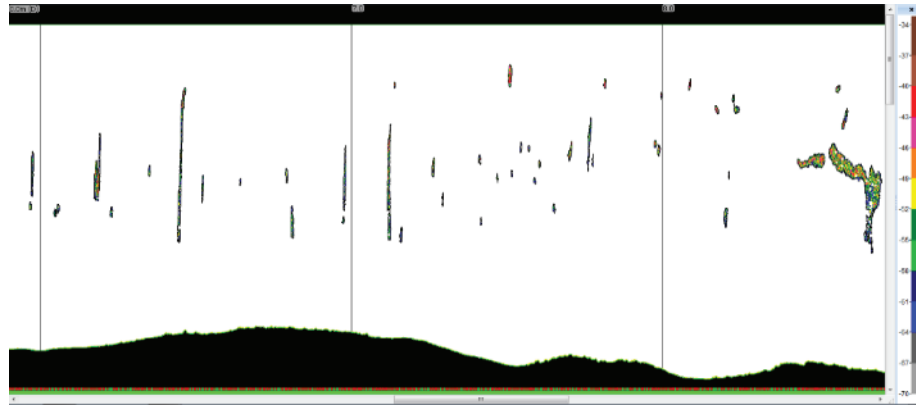
Transect N. 02

Daytime echogram

$Sv_{\text{threshold}} = -70\text{dB}$

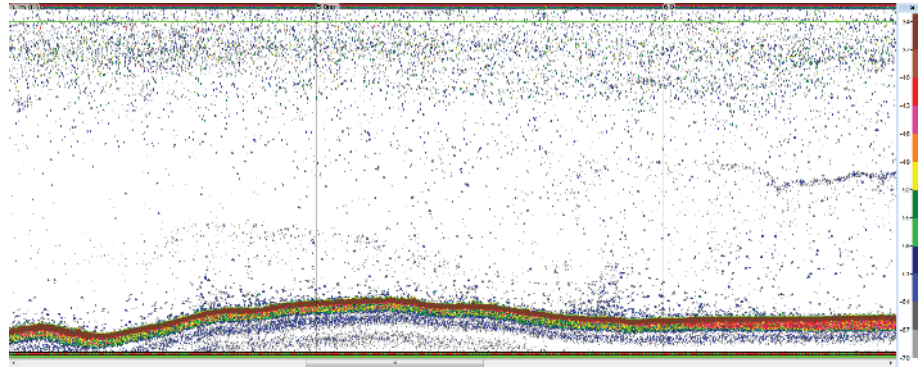


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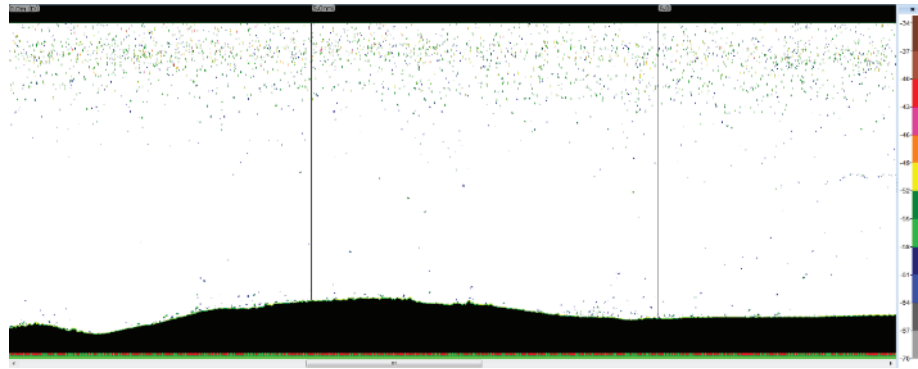


Transect N. 02 Nighttime echogram

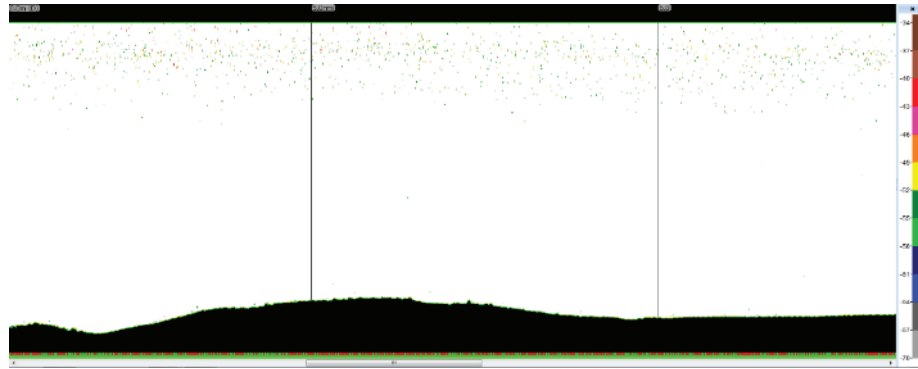
$Sv_{\text{threshold}} = -70\text{dB}$



$Sv_{\text{threshold}} = -60\text{dB}$



$Sv_{\text{threshold}} = -56\text{dB}$



$Sv_{\text{threshold}} = -54\text{dB}$

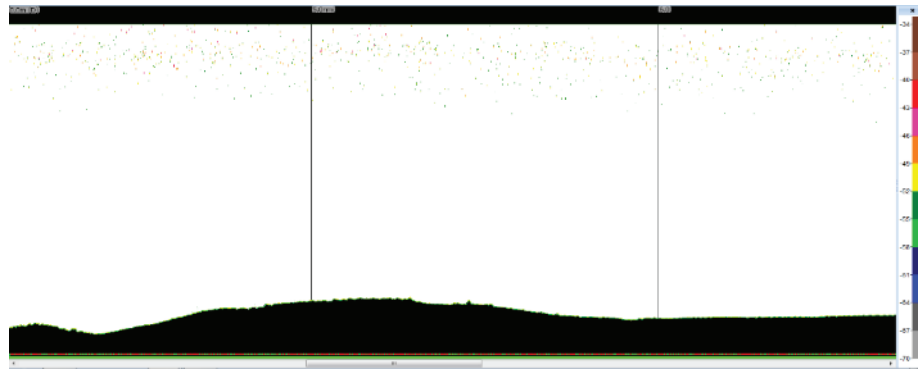
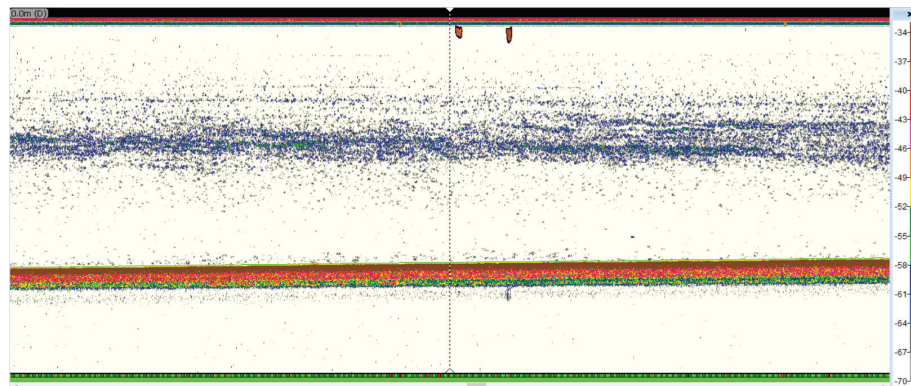


Figure 5S. Acoustic data collected along two transects in south-western Adriatic Sea.

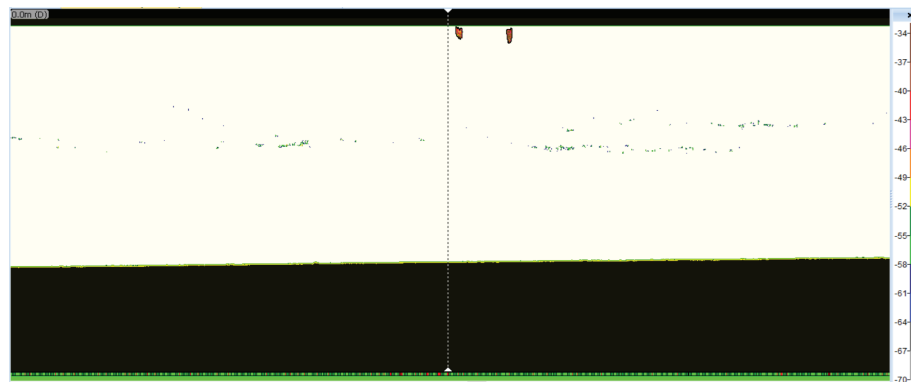
Barletta area

Daytime echogram

$Sv_{\text{threshold}} = -70\text{dB}$



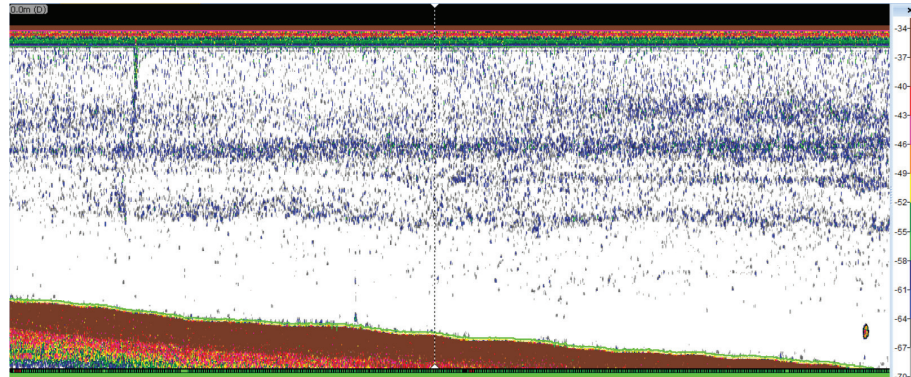
$Sv_{\text{threshold}} = -60\text{dB}$



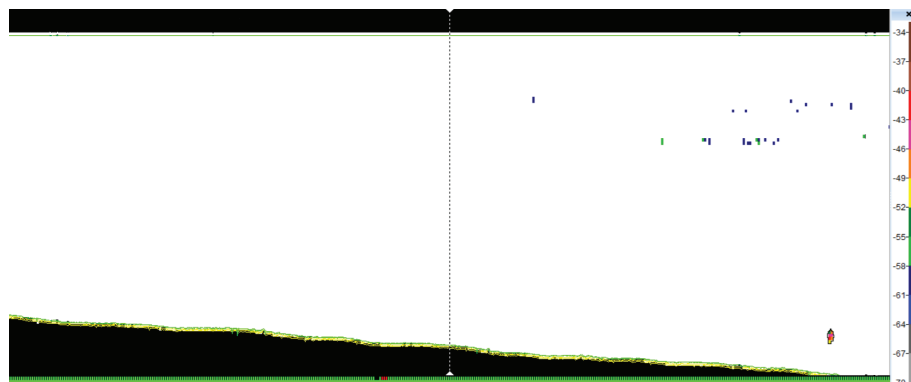
Vasto area

Daytime echogram

$Sv_{\text{threshold}} = -70\text{dB}$



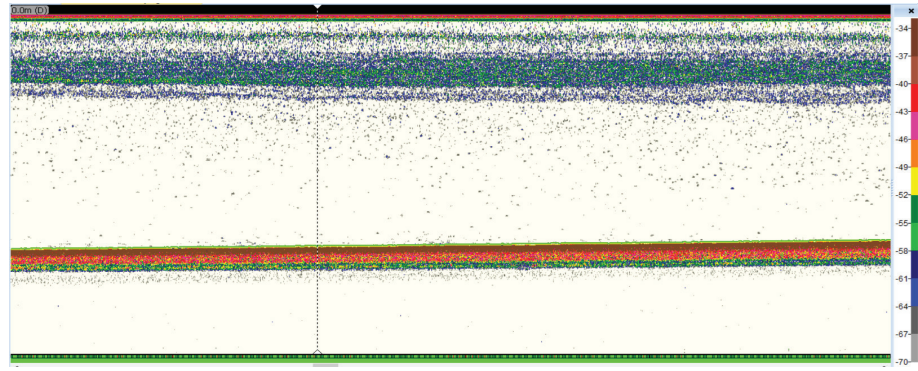
$Sv_{\text{threshold}} = -60\text{dB}$



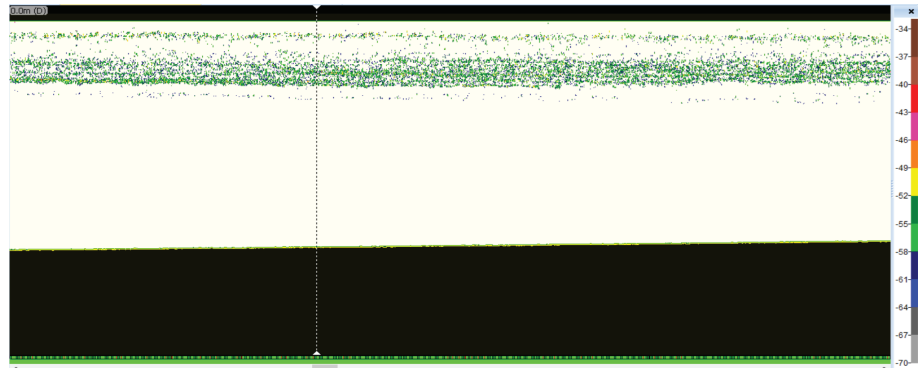
Barletta area

Nighttime echogram

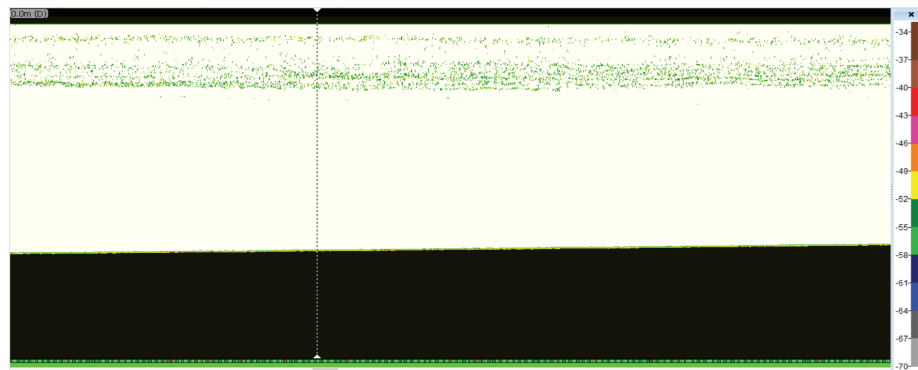
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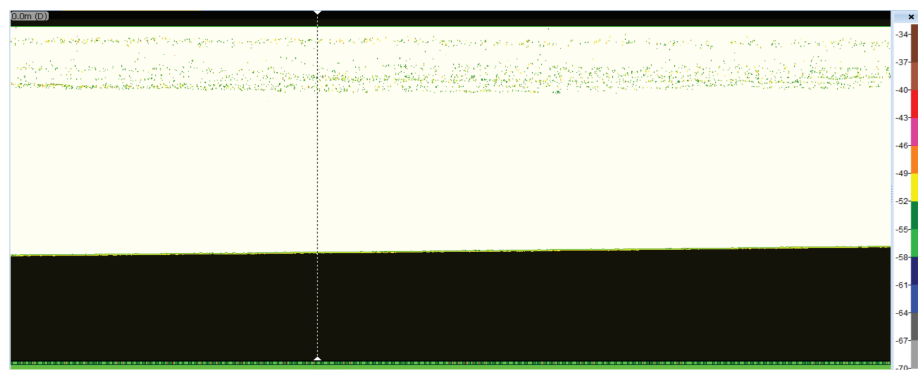
$Sv_{\text{threshold}} = -60\text{dB}$



$Sv_{\text{threshold}} = -56\text{dB}$



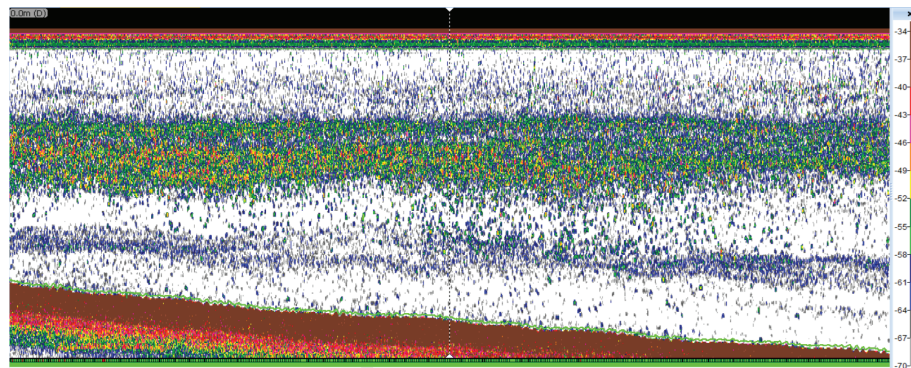
$Sv_{\text{threshold}} = -54\text{dB}$



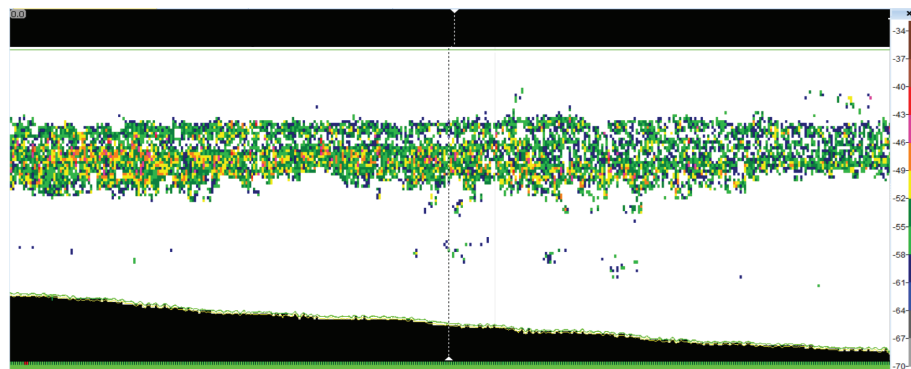
Vasto area

Nighttime echogram

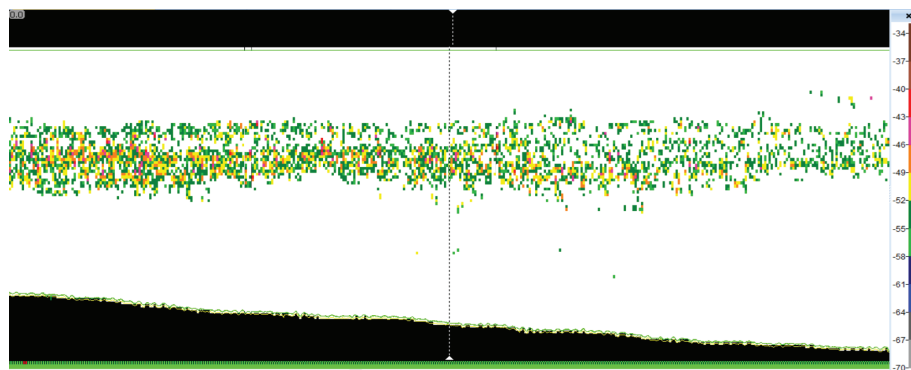
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$Sv_{\text{threshold}} = -60\text{dB}$



$Sv_{\text{threshold}} = -56\text{dB}$



$Sv_{\text{threshold}} = -54\text{dB}$

