

PREBIOSWOT cruise

SPASSO Images Analysis

05/05/2018 08:28 UTC

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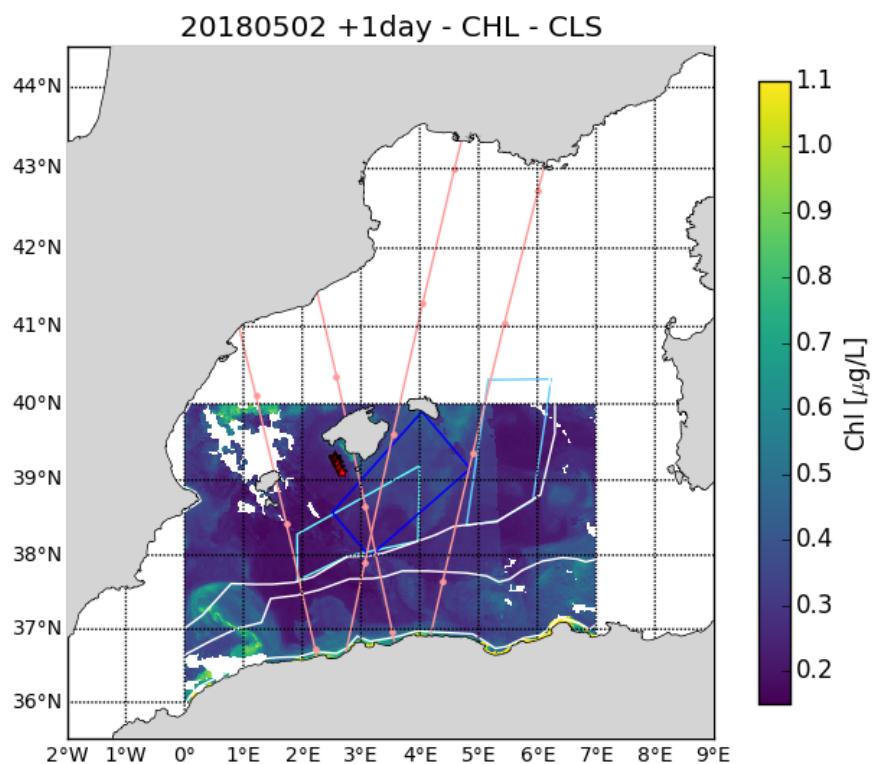
Executive Summary

The 5-7 May box corresponds to the pale blue box. It contains a lot of interesting and complex FSLE structures, especially in the 5.2-5.8°E - 39-39.5°N zone.

The anticyclonic eddy structure, located at the southern part of this 5-7 May box (about 5.5°E - 38.4°N), mentioned yesterday, is still there. It is clearly detected in all dynamic figures and could be crossed by the BB at the end of its eastward route at constant latitude.

Globally the area has warmed up and the Chl activity increased slightly.

Note the MIO glider progressing southeastward.

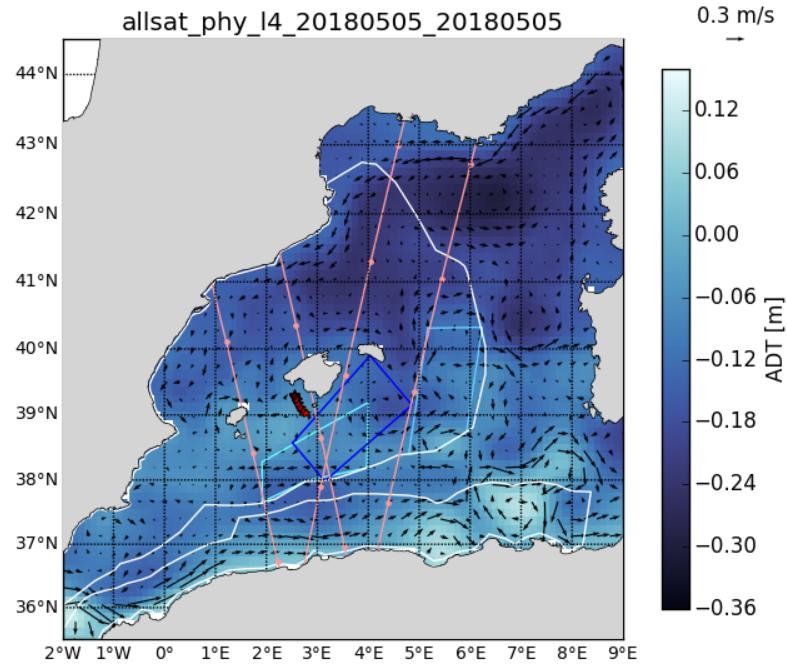


1 Ongoing operations and upcoming stations

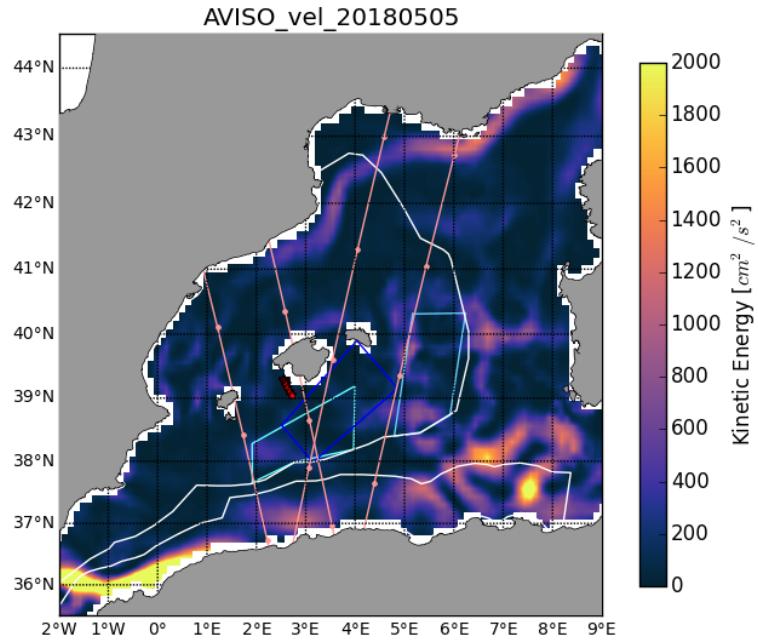
The 5-7 May region of study corresponds to the pale blue box.

2 Daily figures analysis

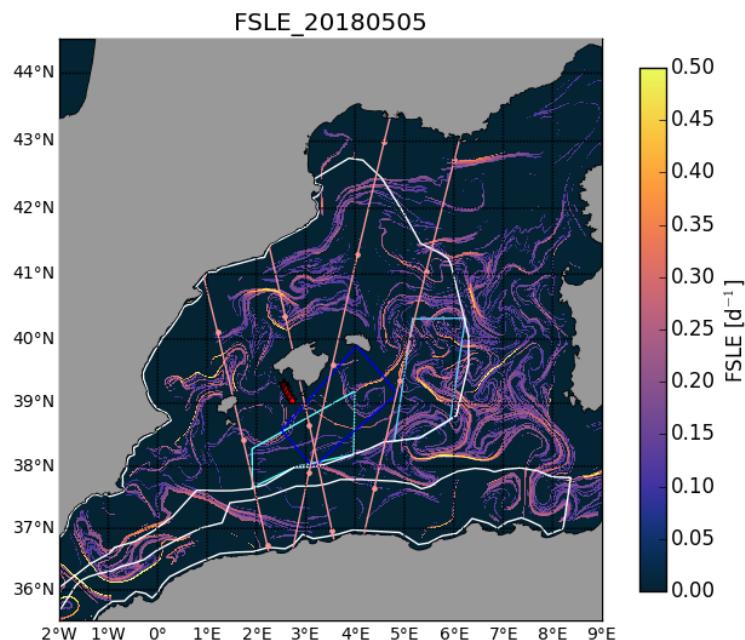
2.1 Altimetry, derived currents and Lagrangian analysis



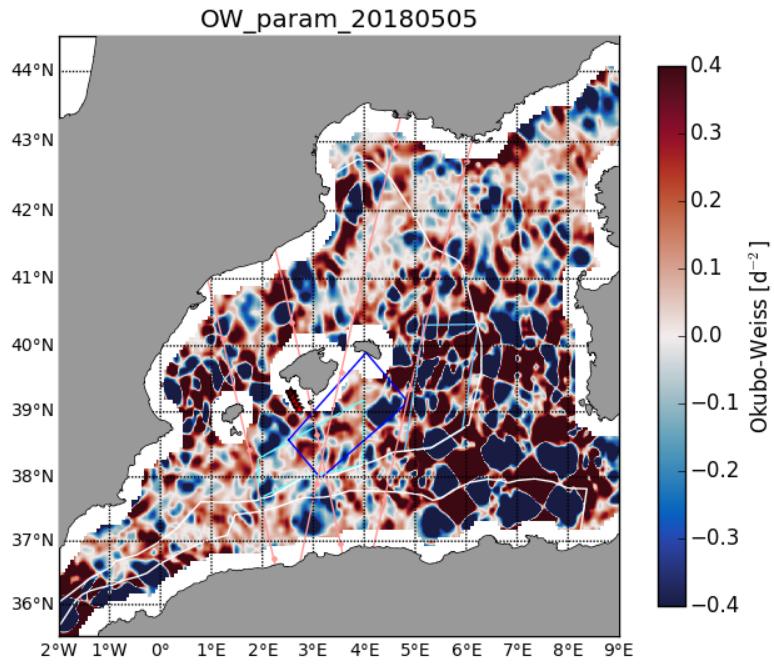
The currents are relatively weak, apart around the anticyclonic structure located at the southern part of the 5-7 May box (about 5.5°E - 38.4°N).



The anticyclonic eddy corresponds to a region with higher energy.

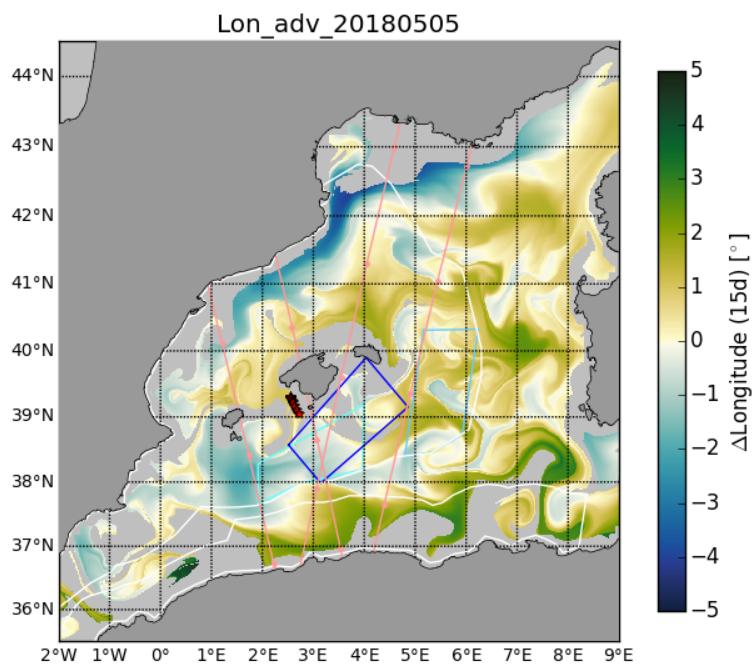
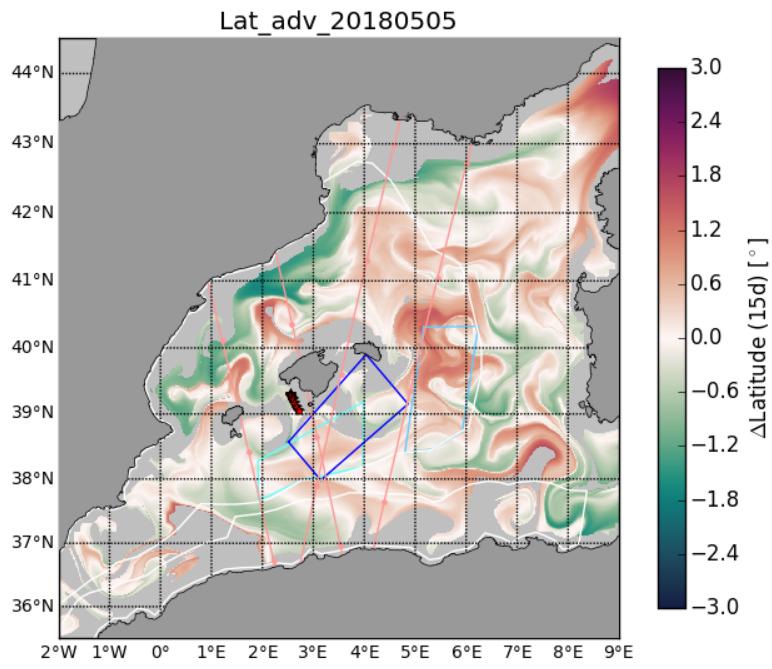


This anticyclonic eddy structure is clearly detected in the FSLE figure and could be crossed by the BB at the end of its eastward route at constant latitude. The 5-7 May zone contains a lot of interesting and complex FSLE structures, especially in the 5.2-5.8°E - 39-39.5°N zone.



The anticyclonic eddy structure at the southern part of the 5-7 May box (about 5.5°E - 38.4°N) is also clearly detected in the OW figure.

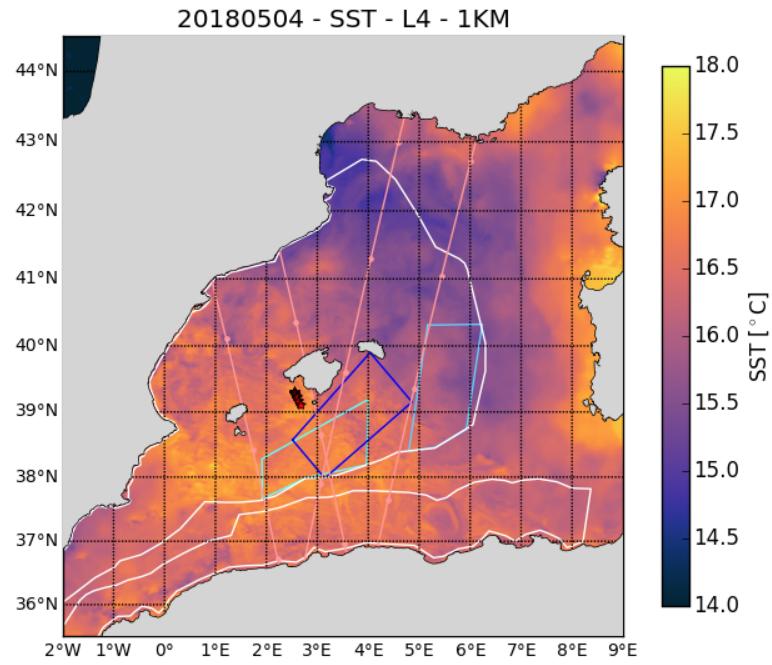
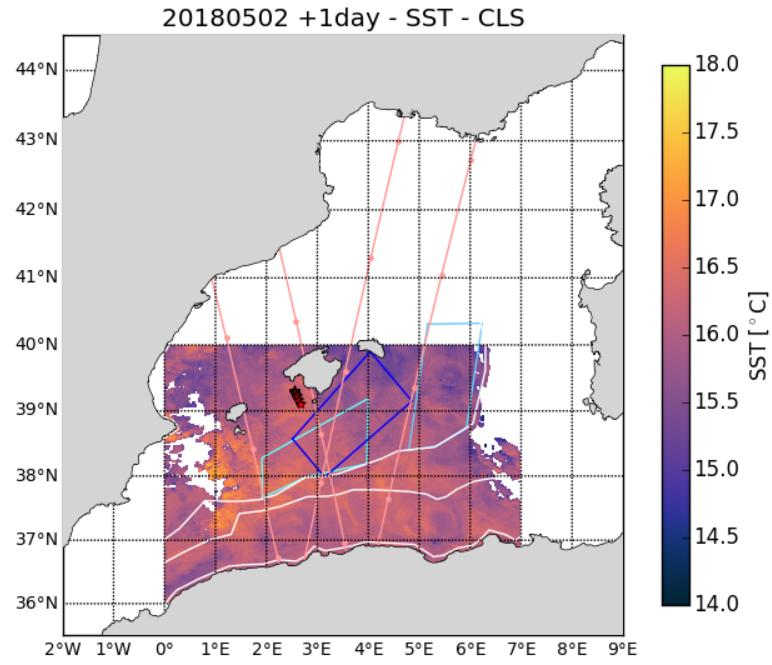
For the Garcia Del Cid: the distorted mesoscale structure mentioned in the last bulletins (located southeast of Ibiza and southwest of Majorqua) is still at the same spot.



The Lat_adv and Lon_adv images agree with the FSLE structures.

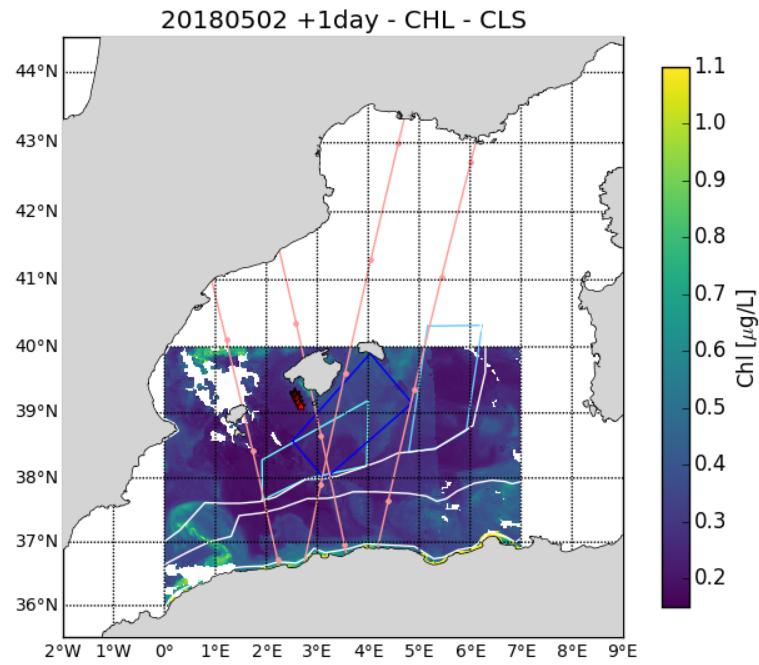
In the 5-7 May box, the waters originate roughly from the south-west, with a more complex pattern (and hence origins) in the anticyclonic eddy.

2.2 SST analysis

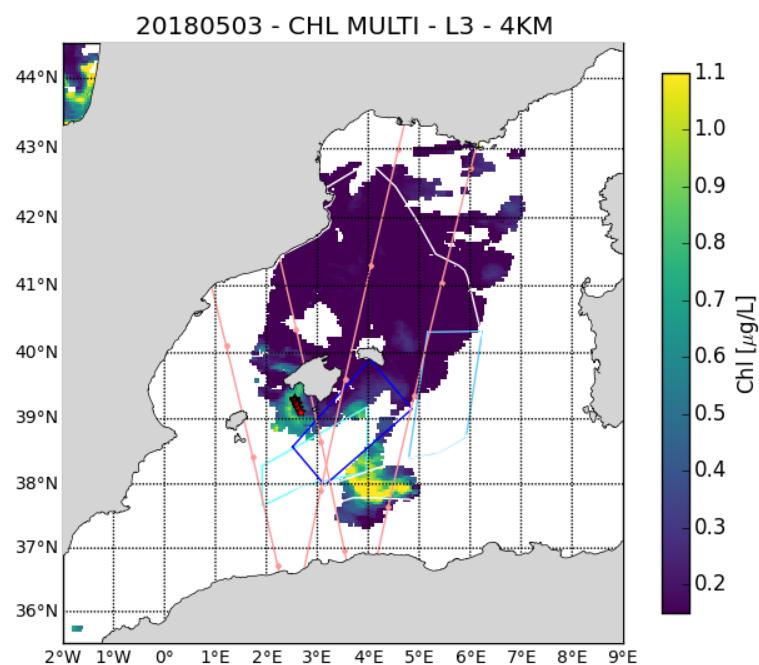


Globally the area has warmed up. The coldest area is the north-eastern part of the 5-7 May box.

2.3 Chlorophyll analysis



Globally the Chl activity has increased slightly.



Note that the CNR_L3_CHL_MedOC4AD4_MULTI_1KMMED (usually second figure in our bulletin) is cloud-covered and not shown.

Acknowledgements

The altimetry data are the AVISO Mediterranean regional product:

<http://www.aviso.altimetry.fr/index.php?id=1275>.

The derived currents are processed by SPASSO to derive Eulerian and Lagrangian diagnostics of ocean circulation: OkuboWeiss parameter, particle retention time and advection, Lagrangian Coherent Structures. CLS provided the SST and surface CHL concentration composite products. Sea surface temperature (level 3 and 4, 1 km resolution) and chlorophyll concentration (level 3, 1km resolution, MODIS Aqua and NPPVIIRS sensors combined (after May 27, 2017) into a new product called MULTI) have been provided by CMEMS Copernicus Marine Environment Monitoring Service (<http://marine.copernicus.eu>). Another SST product (level 4, composite, 1 km resolution) is provided by the Jet Propulsion Laboratory (JPL), Pasadena, CA.

PREBIOSWOT project webpages

(à définir)

SPASSO PREBIOSWOT webpages

<http://www.mio.univ-amu.fr/SPASSO/PREBIOSWOT/>