
ALSEAMAR

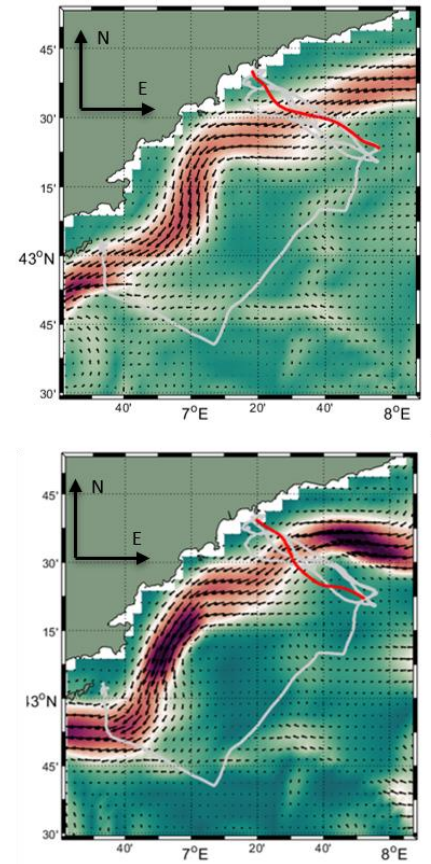
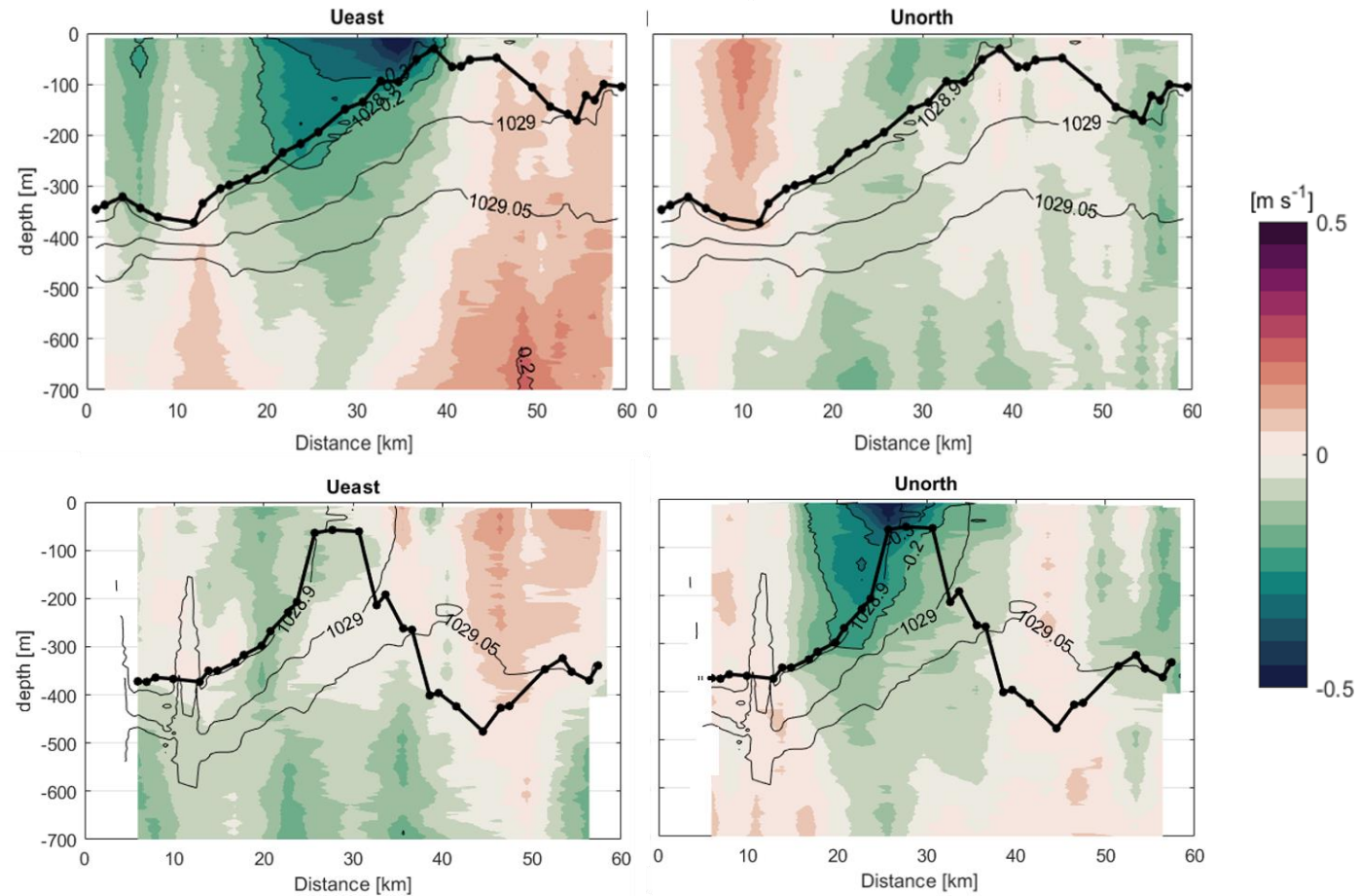
ALCEN

Nouvelles capacités de calcul embarquées du SeaExplorer :
l'exemple de l'indice de rétrodiffusion LADCP (BI) et des courants en temps
quasi réel (NRT).

F. Margirier et al.

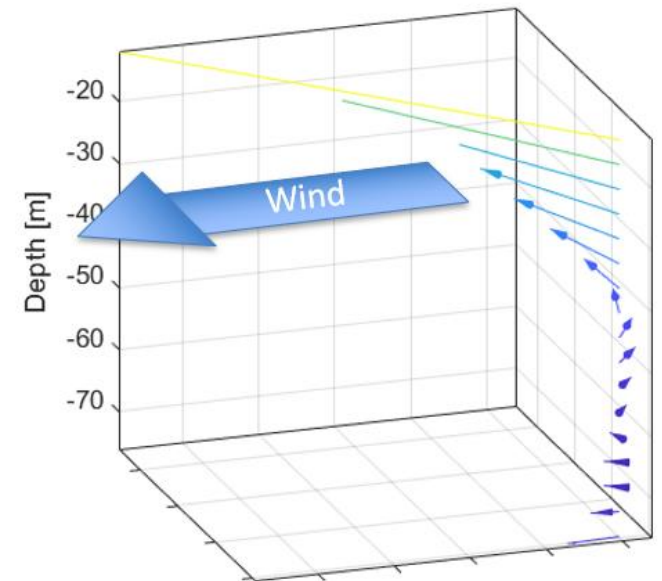
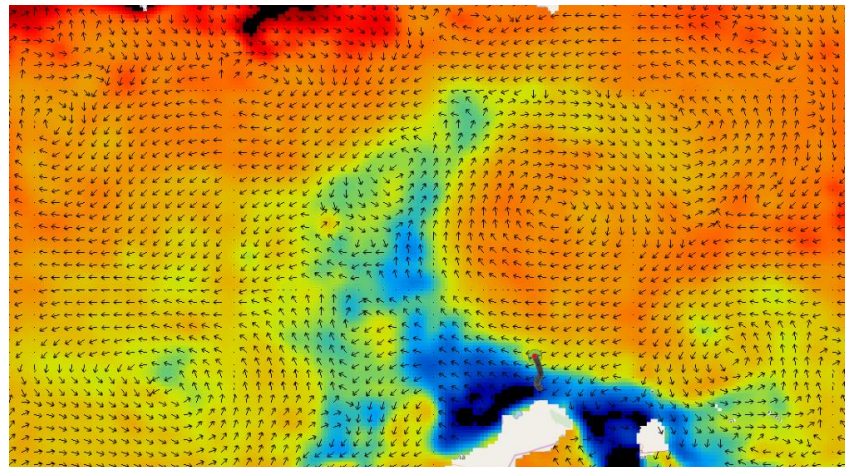
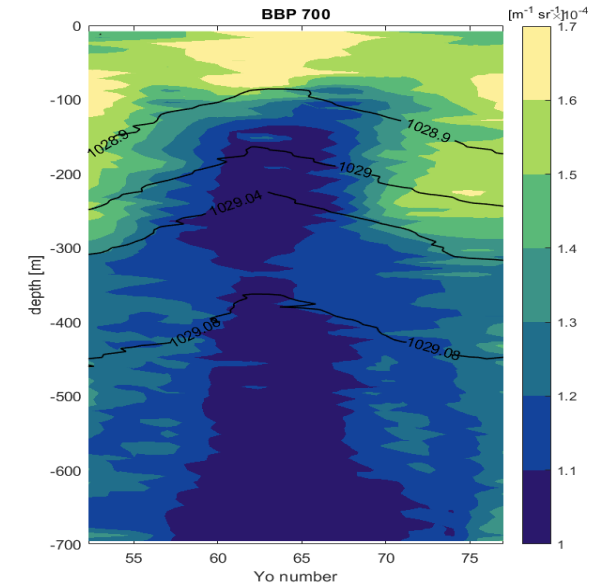
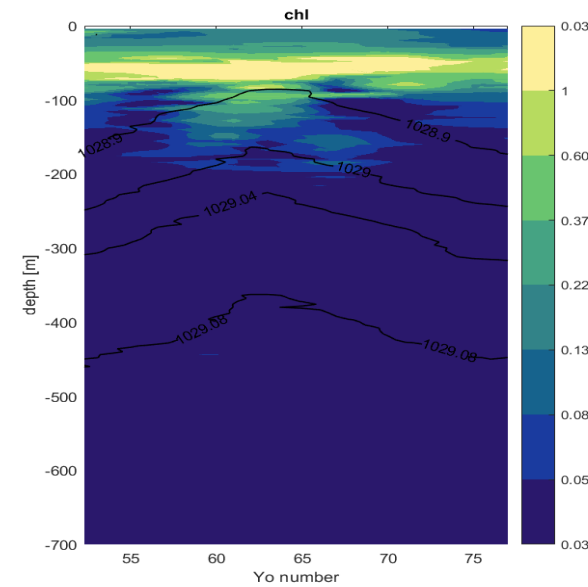
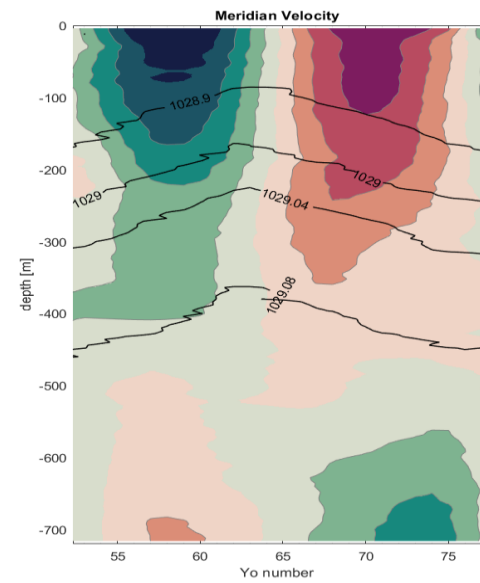


Je ne résiste pas





Je ne résiste pas



ALSEAMAR

ALCEN

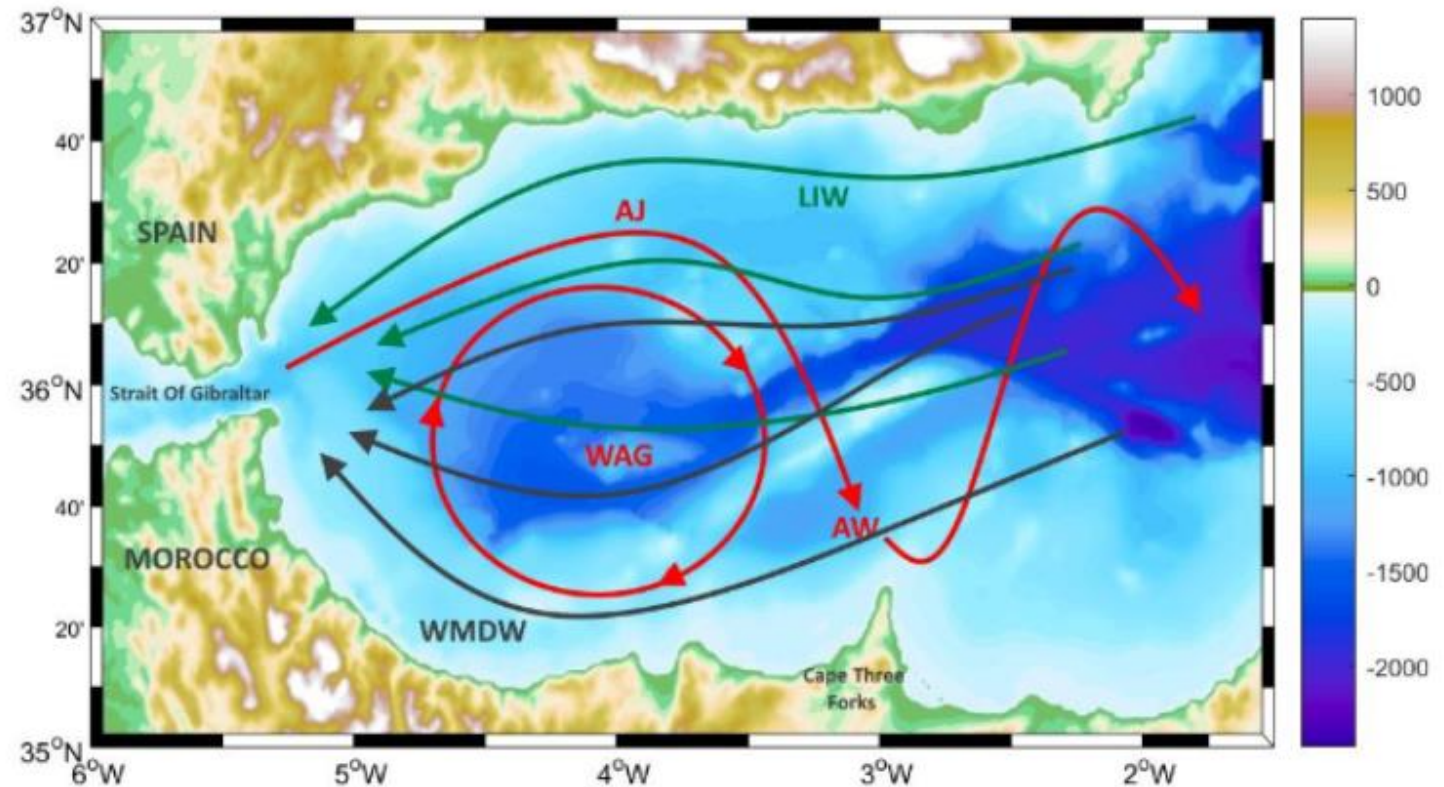
Travaux réalisés dans le cadre d'ODYSSSEA et d'ILIAD

F. Margirier, L. Beguery, o. de Fommervault, N. Kokkos, A. Papadopoulou, K. Zachopoulos, M. Zoidou, G. Sylaios, H. Nibani, K. Hilmi, A. Damghi, Z. Amhaouauch, A. Belattmania, A. El Arrim, A. Ayouche, G. Charria, B. El Mourni ...



Alboran Sea (Nibani 2021, Belattmania 2023)

- Western Alboran Gyre
- 2 deployments, 30 and 40 days at sea
- GPCTD – LEITAT microplastics



Alboran Sea (Nibani 2021, Belattmania 2023)

- Glider went from the core out and back
- No microplastics result...

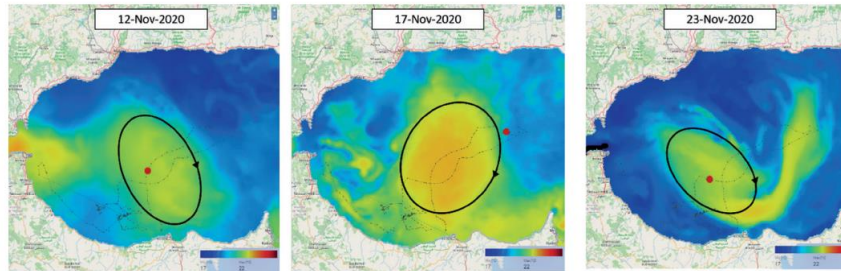


Fig. 2. Map of the SST (data downloaded on <https://marine.copernicus.eu/>) and glider trajectory. The position of the glider on the date of the map is indicated by the red dot.

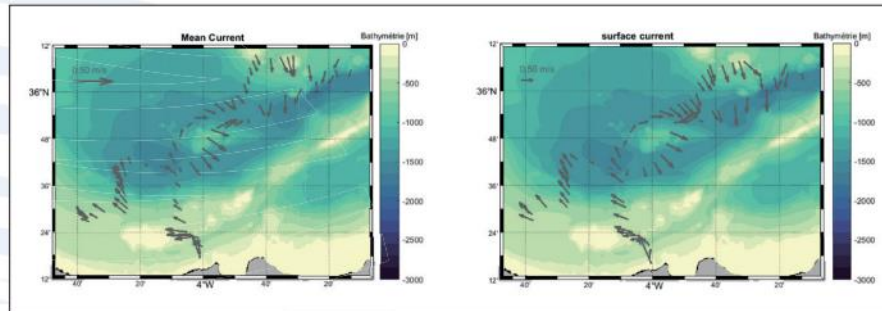


Fig. 2. Map of (left) average current from dead-reckoned track and (right) surface current estimated from GPS position. The color bar indicates bathymetry (EMODnet).

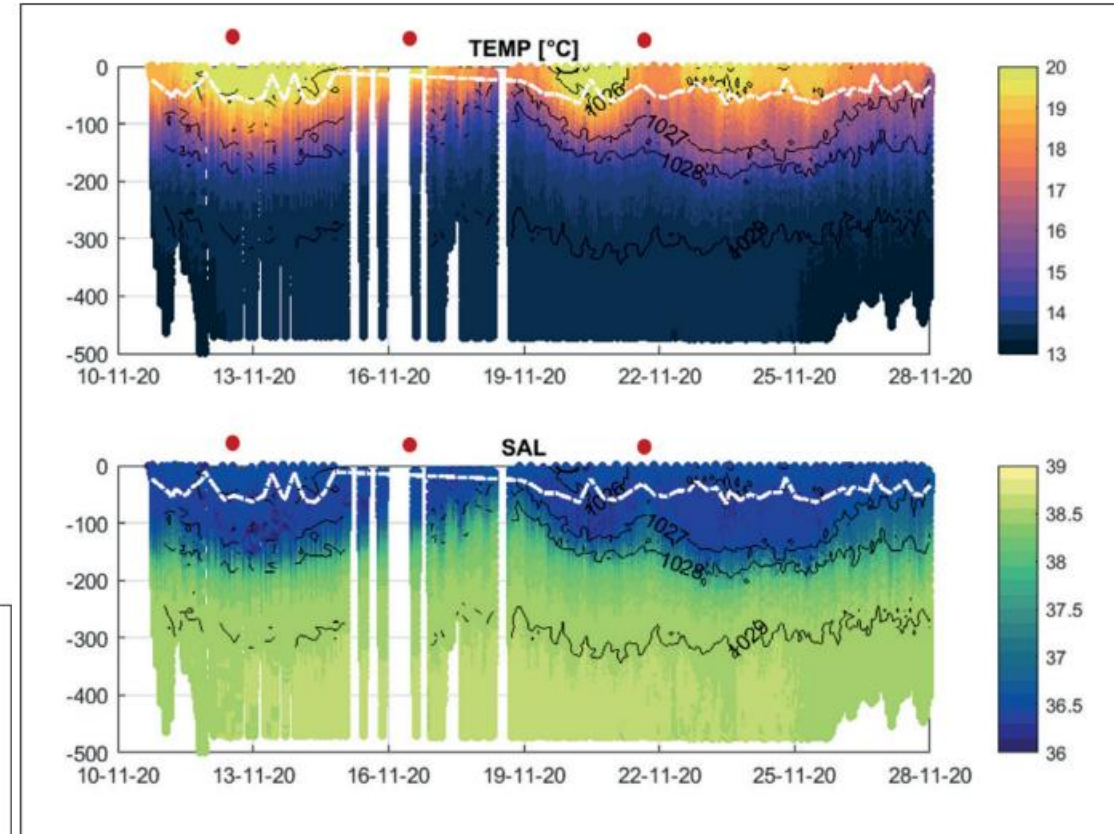


Fig. 3. Temperature and salinity data acquired during the first part of the mission. The black lines are the isopycnal levels and the white dashed line is the depth of the mixed layer (density criterion of 0.003 kg.m^3). The red dots are related to the same profile as in Figure 2.

Alboran Sea (Nibani 2021, Belattmania 2023)

- Automatic Water Mass detection and classification

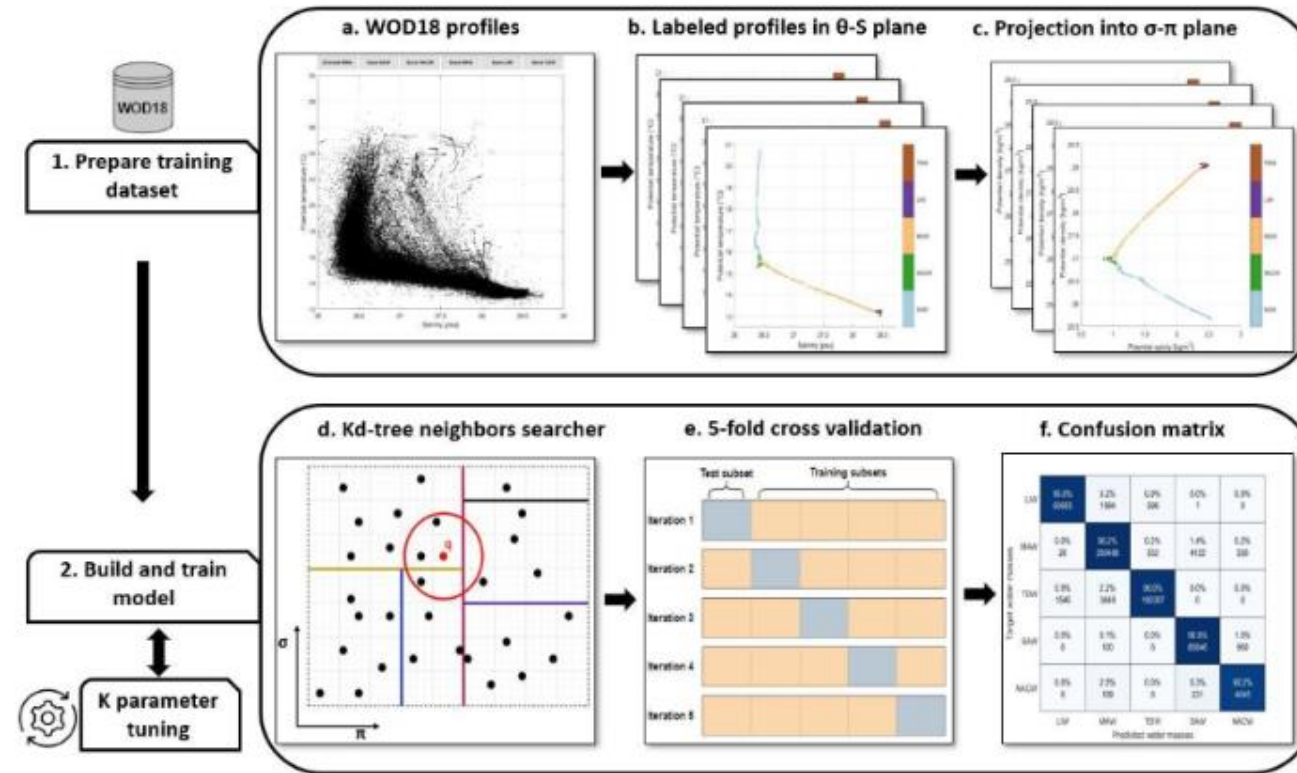


Figure 3: Flowchart of the proposed K nearest neighbors classification of water masses.

Alboran Sea (Nibani 2021, Belattmania 2023)

- Automatic Water Mass detection and classification

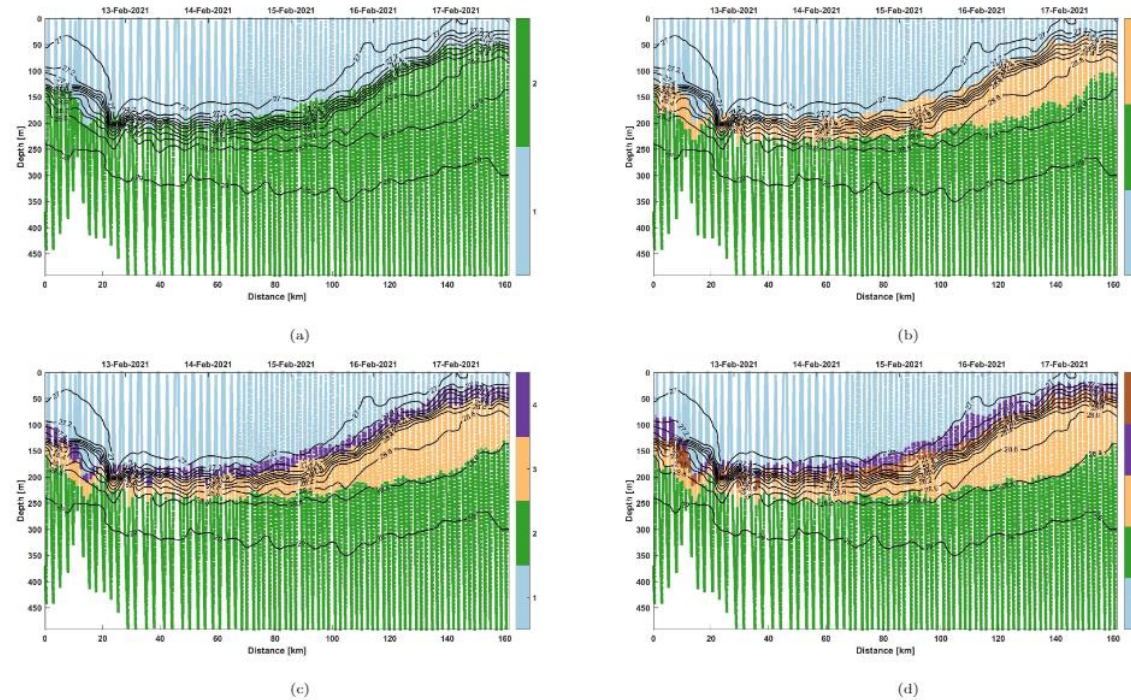


Figure 19: Classification of water masses in the first transect (Figure 15c) provided by the k-means clustering. The number of clusters used in: (a) $k = 2$, (b) $k = 3$, (c) $k = 4$ and (d) $k = 5$.

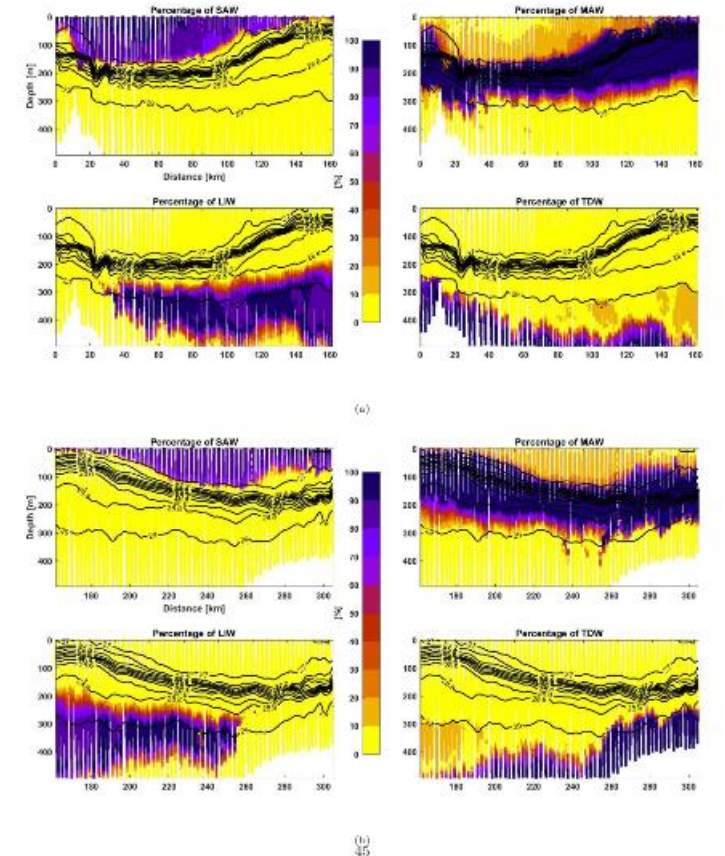


Figure 8: Percentage of the AWs and MWs along the first (a) and second (b) transects using $(\theta - S)$ diagram. The sum of the four contributions leads to 100% in the Atlantic and Mediterranean layers.

Athos Basin and Thracian Sea (Kokkos 2023)

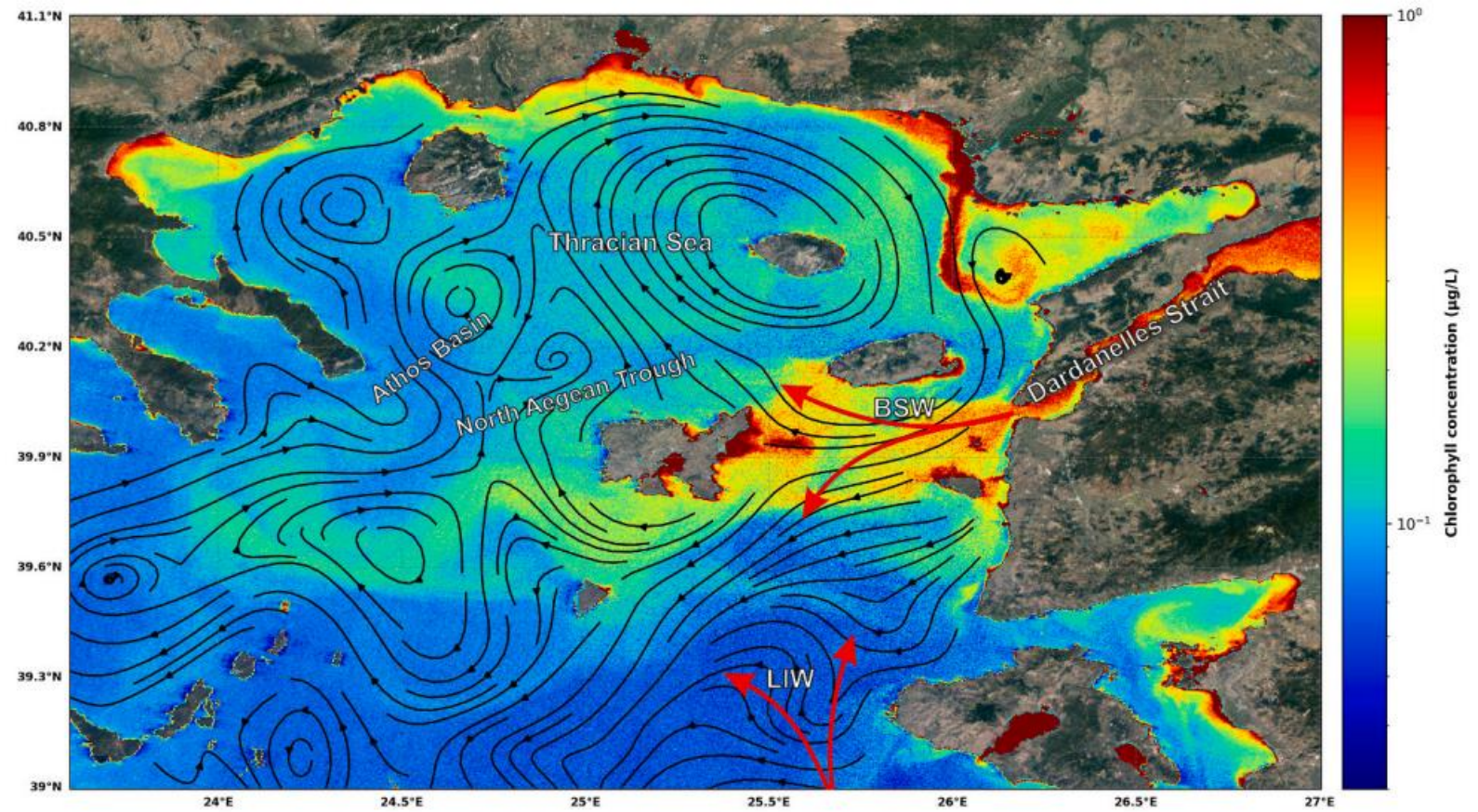


Fig. 1. The North Aegean Sea, the typical summer chlorophyll-a concentration distribution and the surface hydrographic features.

Athos Basin and Thracian Sea (Kokkos 2023)

- SEA037
- GPCTD-DO, FLBB CD
- Very saline region

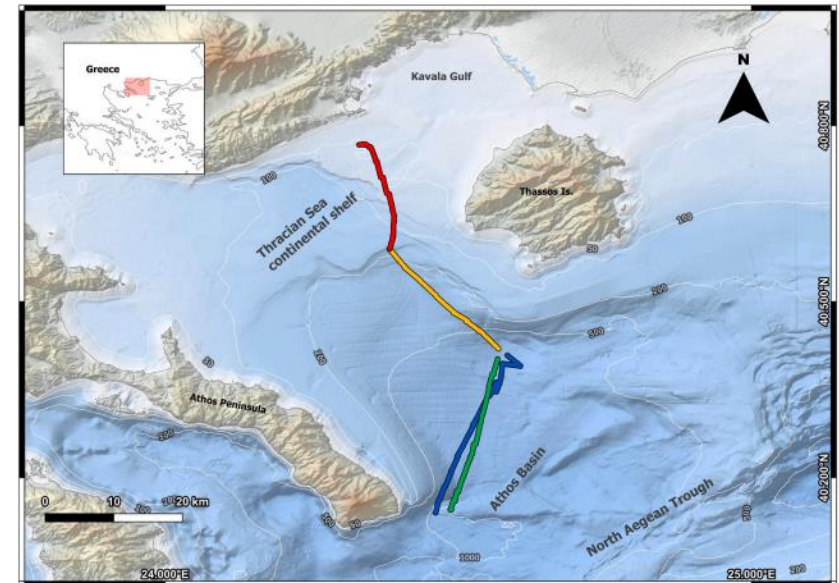
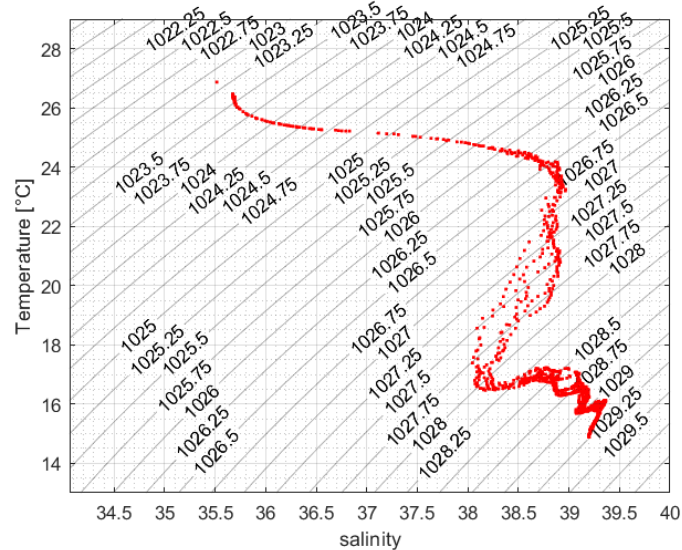
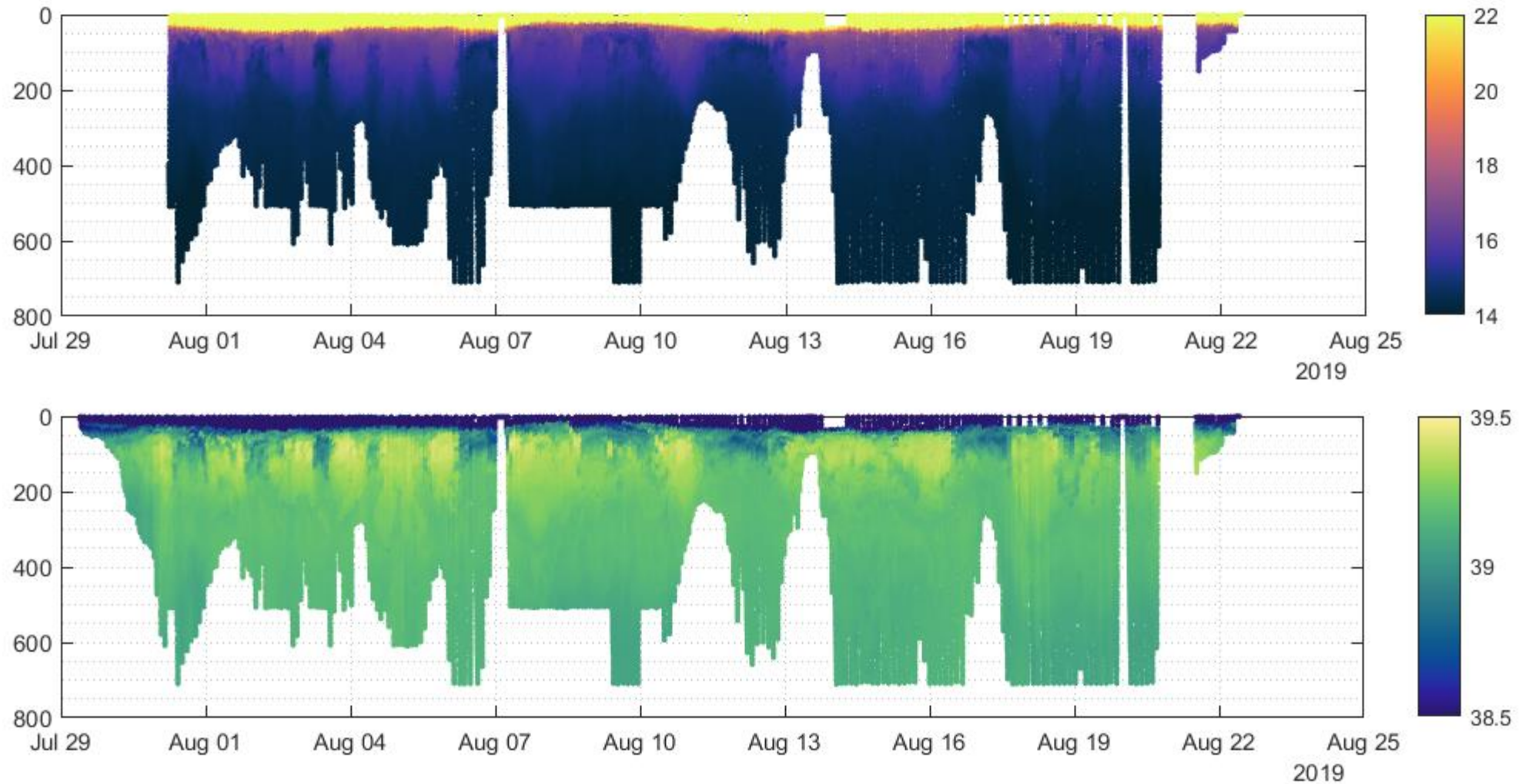


Fig. 2. Bathymetric map of Athos Basin and Thracian Sea continental shelf (North Aegean Sea). Lines denote the glider tracks (red and orange legs: western Thracian continental shelf glider tracks; blue and green: Athos basin glider tracks).

Athos Basin and Thracian Sea (Kokkos 2023)



Athos Basin and Thracian Sea (Kokkos 2023)

- DCM properties and scalings, dominated by picoplankton in theory
- Deeper DCM -> also thicker, more symmetric

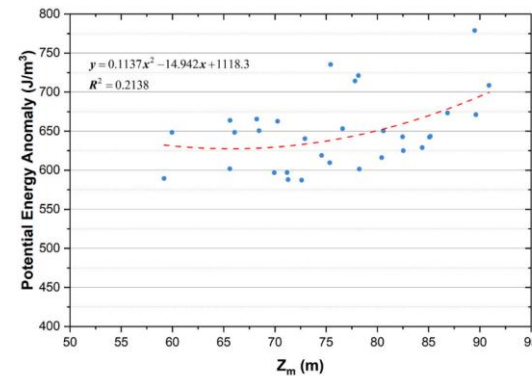
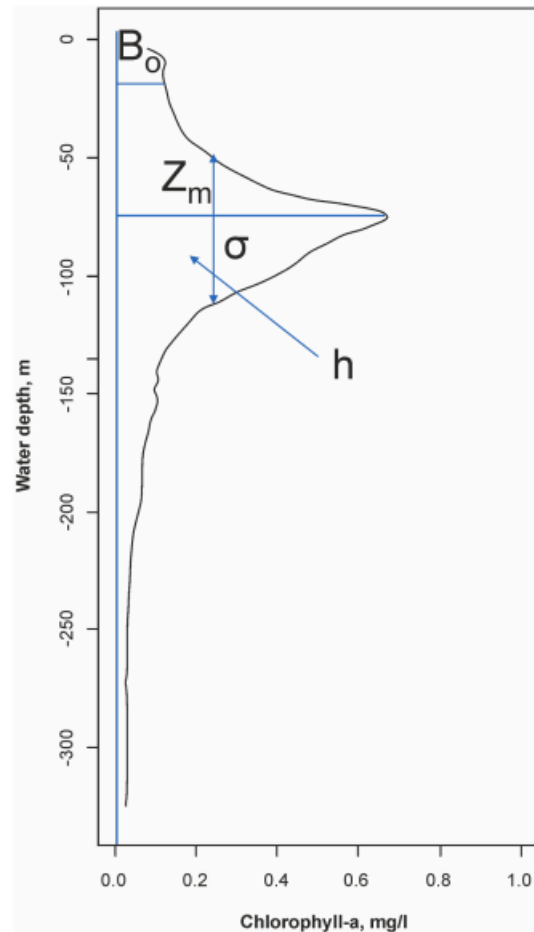


Fig. 14. Non-linear relationship between water column stratification, expressed by the potential energy anomaly (PEA) and the mean DCM depth, as observed in the Athos Basin and the Thracian Sea.

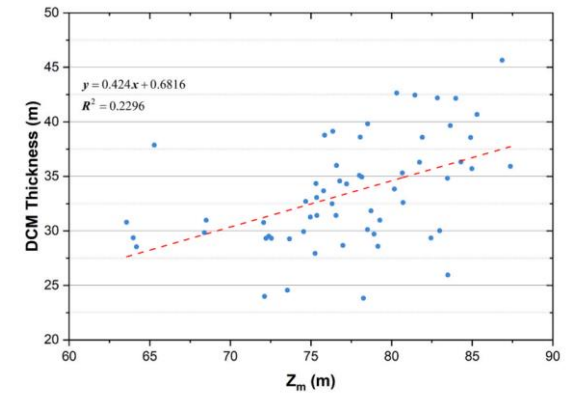


Fig. 15. Linear relationship between the mean DCM depth and the DCM thickness, as observed in the Athos Basin and the Thracian Sea.

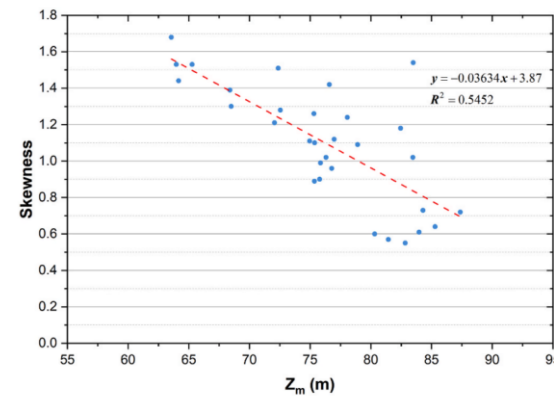


Fig. 17. Linear relationship between the mean DCM depth and the skewness of the Gaussian-fitted distribution on the Chl-a pigment concentration, as observed in the Athos Basin and the Thracian Sea.

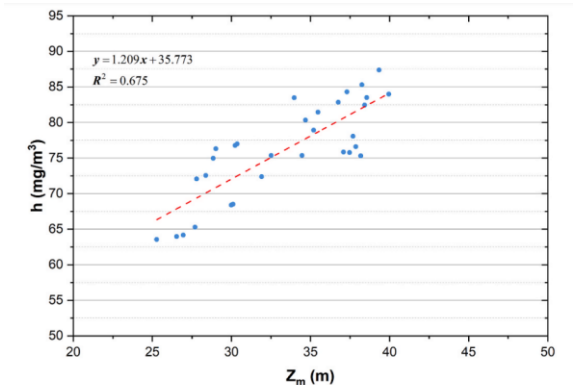


Fig. 16. Linear relationship between the mean DCM depth and the integrated Chl-a pigment concentration, as observed in the Athos Basin and the Thracian Sea.

Athos Basin and Thracian Sea ILIAD – en cours

- SEA087 LEGATO-AROD-FLBB-CD-ADCP-UVP6 (picoplancton ?)
- Données partagées en RT

SEA087_M047



BACK TO MAP

Glider Status
Disconnected

Mission start date
16/11/2023

Mission end date
Ongoing

Mission duration
21.5 Days

Distance traveled [km]
409.54 km

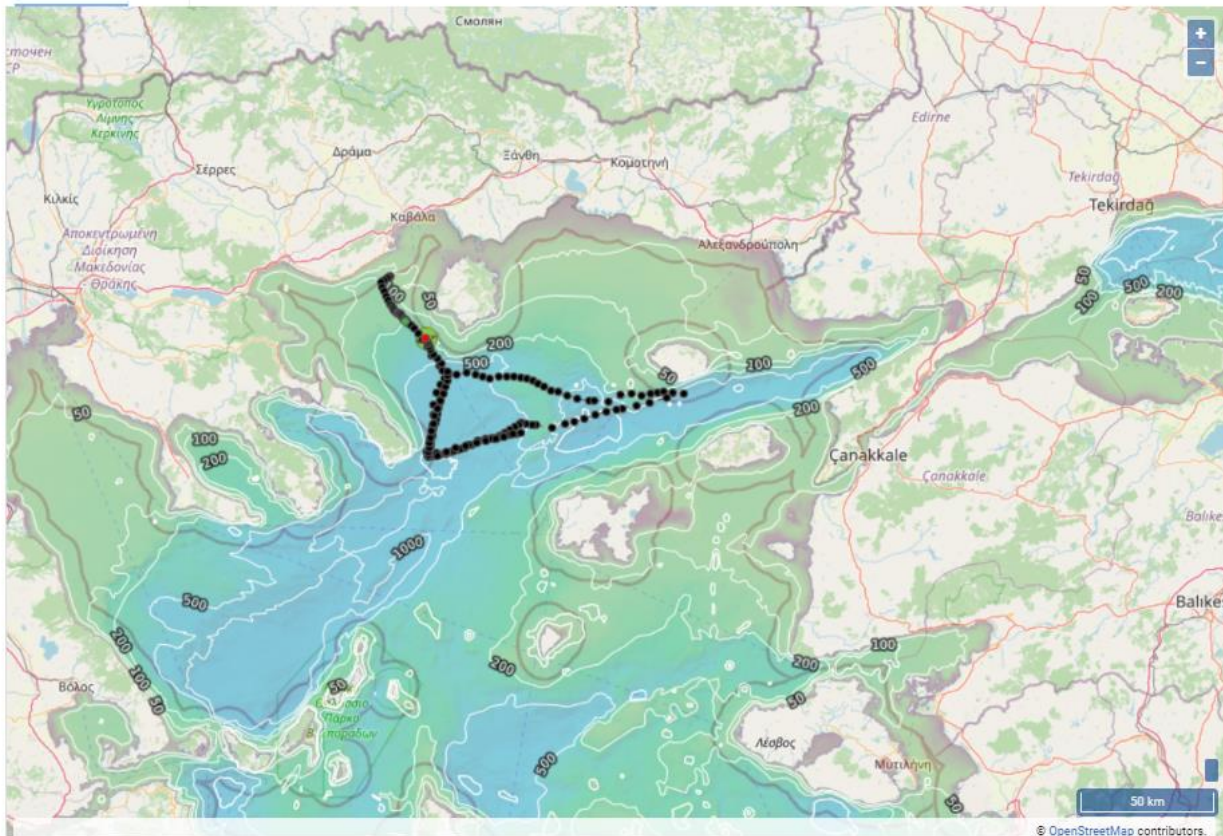
Last Connection
07/12/2023 21:55

Last Cycle
348

Last Position
Lat 40.5267 Lng 24.4691

Last Battery Level [V]
24.6

MAP



MAIN SCIENCE PLOTS

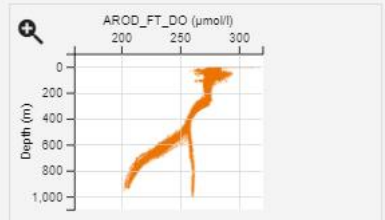
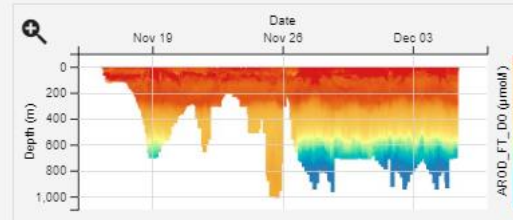
LAST 12 HOURS

LAST 24 HOURS

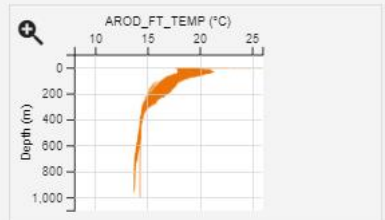
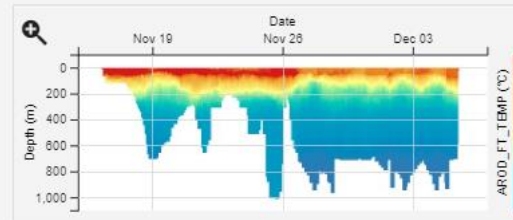
ALL DATA



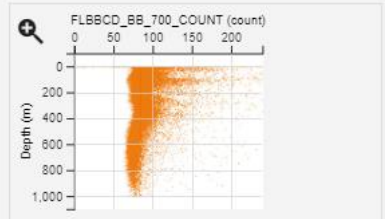
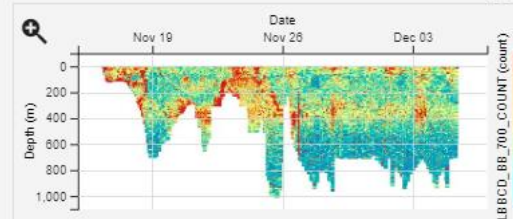
AROD_FT_DO



AROD_FT_TEMP



FLBB-CD_BB_700_COUNT



Athos Basin and Thracian Sea ILIAD – en cours

- SEA087 LEGATO-AROD-FLBB-CD-ADCP-UV6 (picoplancton ?)
- Données partagées en RT

SEA087_M047 ×



BACK TO MAP

Glider Status
Disconnected

Mission start date
16/11/2023

Mission end date
Ongoing

Mission duration
21.6 Days

Distance traveled [km]
409.96 km

Last Connection
08/12/2023 00:05

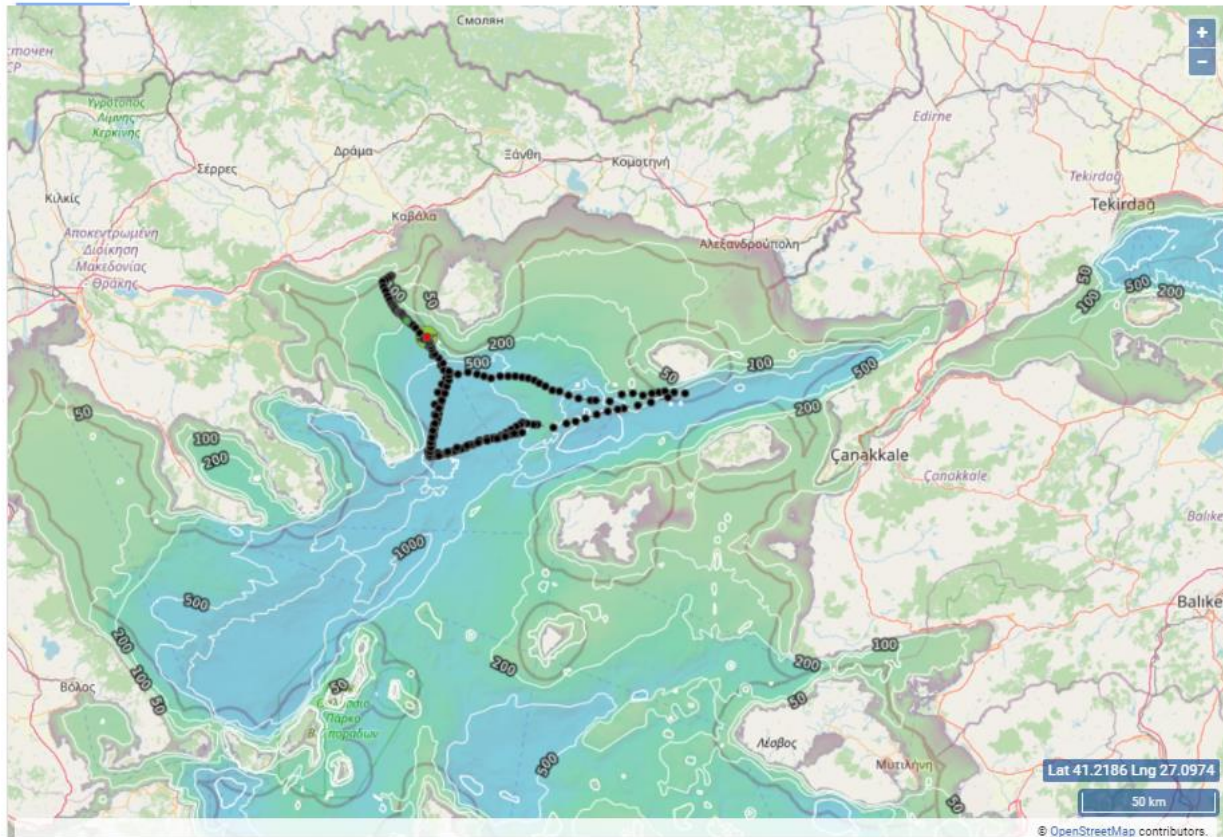
Last Cycle
351

Last Position
Lat 40.5298 Lng 24.4666

Last Battery Level [V]
24.6



MAP ×



MAIN SCIENCE PLOTS ×



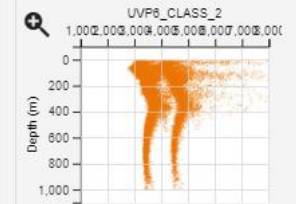
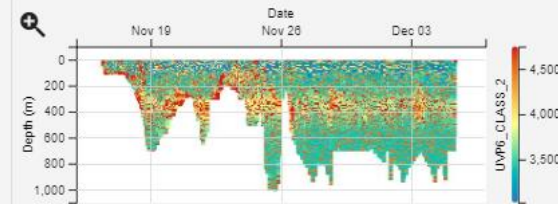
LAST 12 HOURS

LAST 24 HOURS

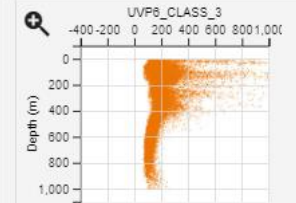
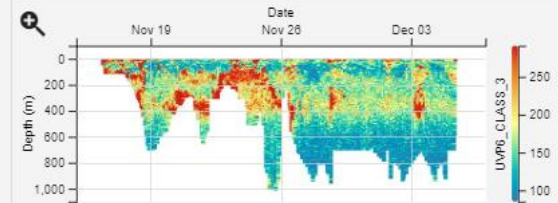
ALL DATA



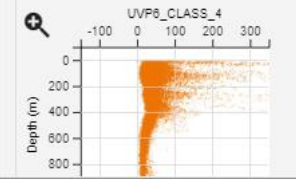
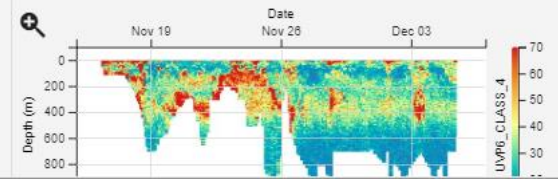
UVP6_CLASS_2



UVP6_CLASS_3



UVP6_CLASS_4



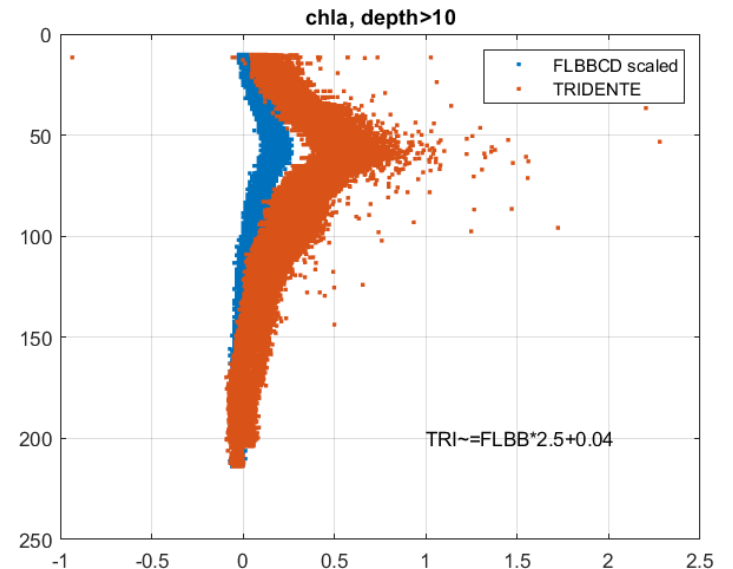
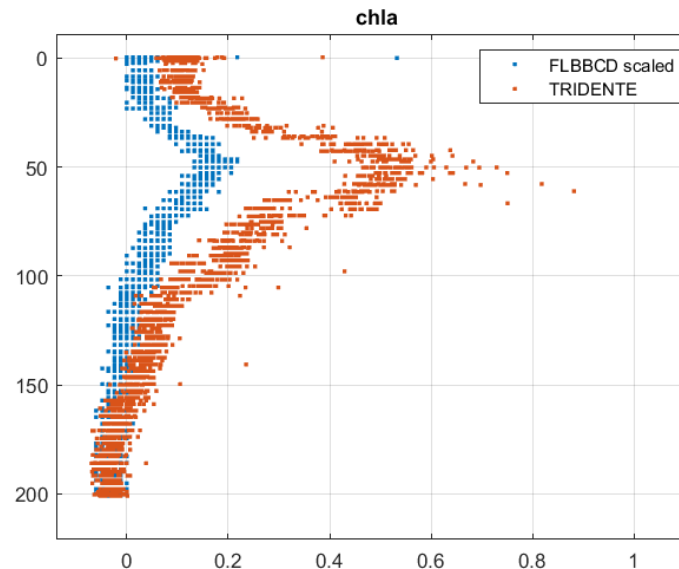
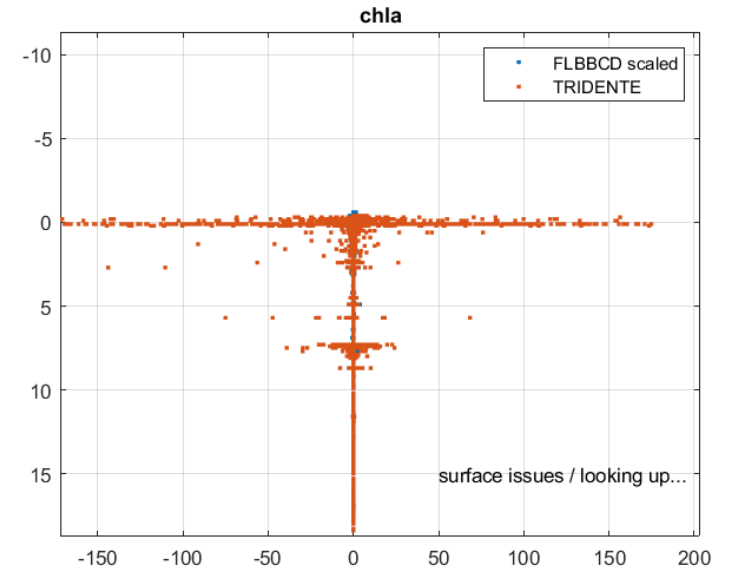
ILIAD – missions à venir

- SEA087
- Mer Noire – Payload anoxie (CTD,DO,FLBB CD,SUNA), H2S embarqué avec le SUNA
- Mer d'Alboran – Payload endurance (CTD,DO,TRIDENTE) – pas de CCU



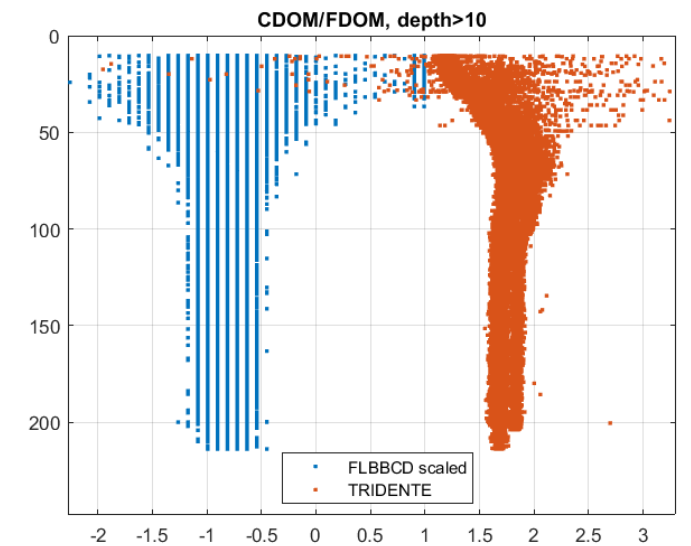
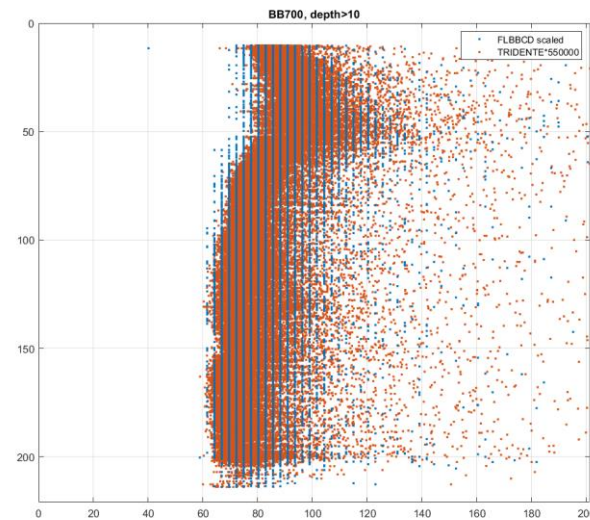
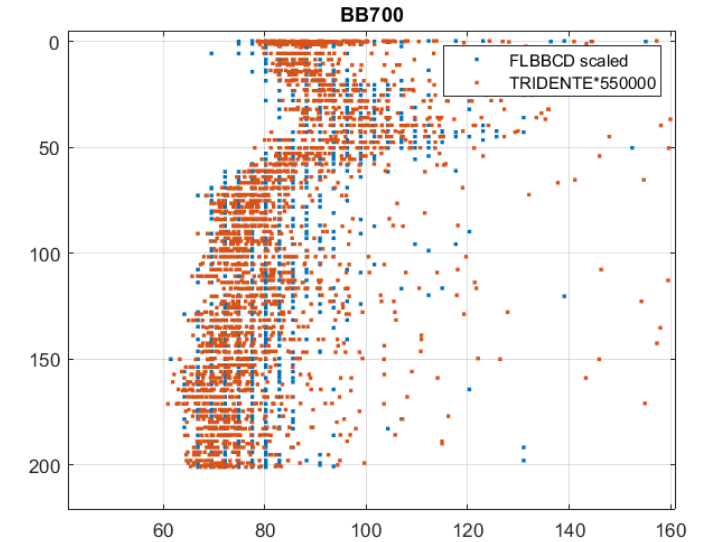
ILIAD – missions à venir – FLBBBCD – TRIDENTE

- Problèmes en surface
- Quid de la valeur absolue ?



ILIAD – missions à venir – FLBBBCD - TRIDENTE

- BB700 – facteur 550000
- FDOM/CDOM
- Besoin de tests, Best Practices, SOPs...



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Merci !

