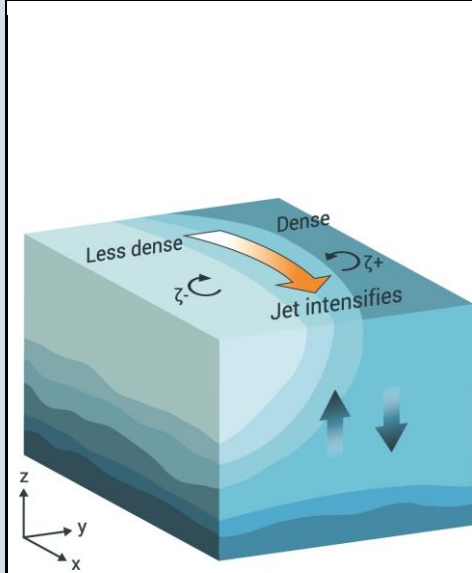


Project

MedSUB: Understanding mesoscale and submesoscale ocean interactions to improve Mediterranean CMEMS products

Objective



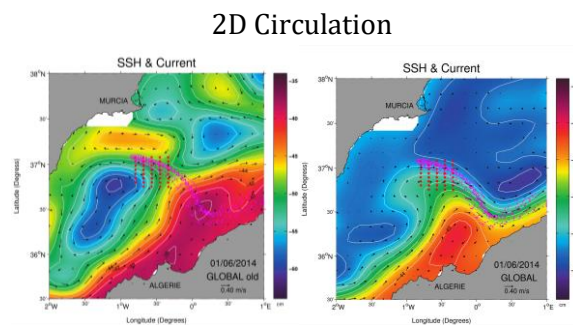
Enhance our knowledge of 2D and 3D mesoscale/submesoscale processes and their interactions at different scales combining in-situ and satellite data in synergy with numerical models. *The final objective is to contribute to the improvement of CMEMS forecast modelling products.* MedSUB address specific scientific questions:

- What are the physical mechanisms that govern the horizontal and vertical motion associated with meso- and submesoscale processes?
- How do meso and submesoscale processes interact at oceanic fronts?

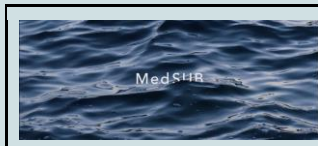
Associated with these scientific questions, MedSUB also aims to provide tools (eddy tracking and compositing codes) to bring a new way to assess the mesoscale content of the CMEMS modelling products.

Achievements

Sea Surface Height (SSH) and velocity field: (left) CMEMS global product (version until October 2016). (Right) new CMEMS global product. Magenta dots correspond to drifters' positions from 25 May to 1 June 2014. New product forecasts significantly better the intense oceanic front due to improvements in assimilation of the mean dynamic topography.



Outreach



MeSUB micro-documentary at <https://vimeo.com/232953834>.