C-SWOT2023 / WEMSWOT

Two combined campaigns dedicated to the mesoscale dynamics under SWOT swaths in the Mediterranean Sea





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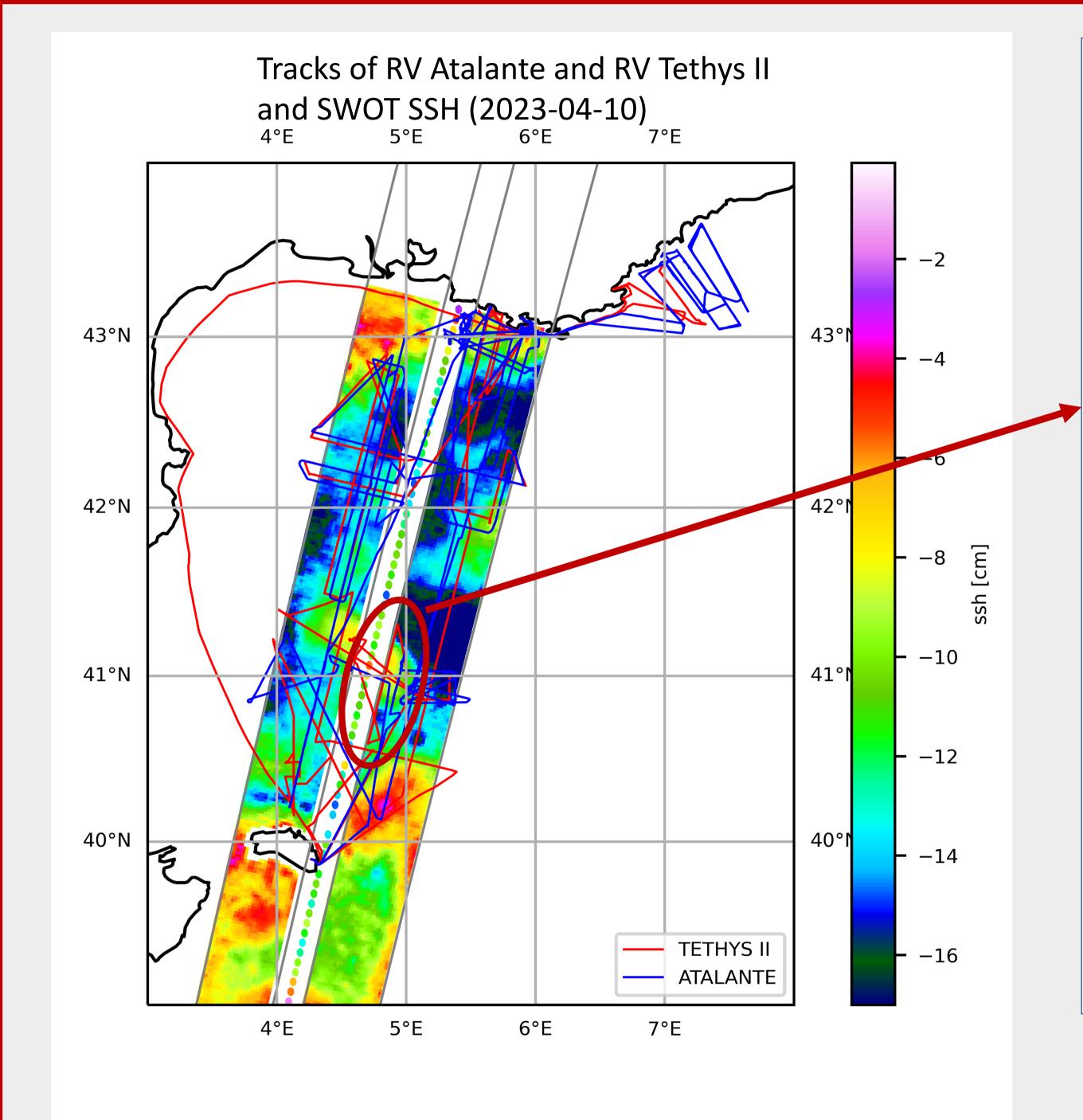
Introduction

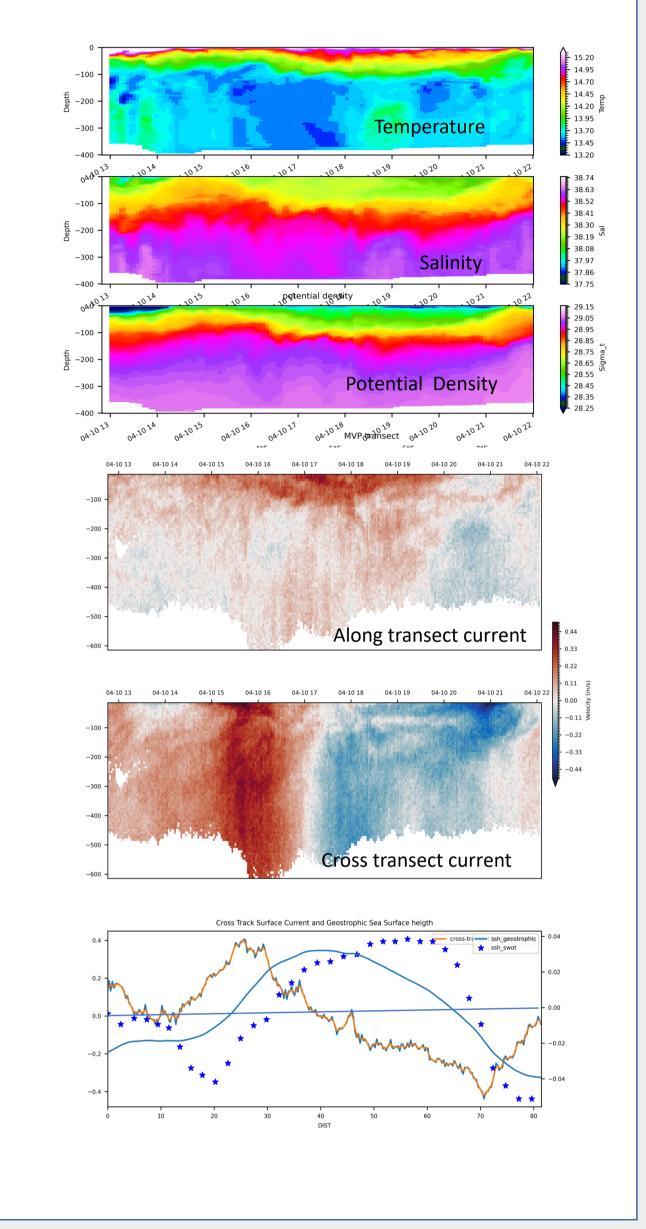
At the end of March and beginning of April, two intensive campaigns were carried out under the SWOT swaths during the fast sampling period. The daily revisit of the satellite was an opportunity to study the fine scales in the north-western Mediterranean and to take part in the calibration-validation of SWOT.

Data processing is in progress.



A Two Ships Strategy



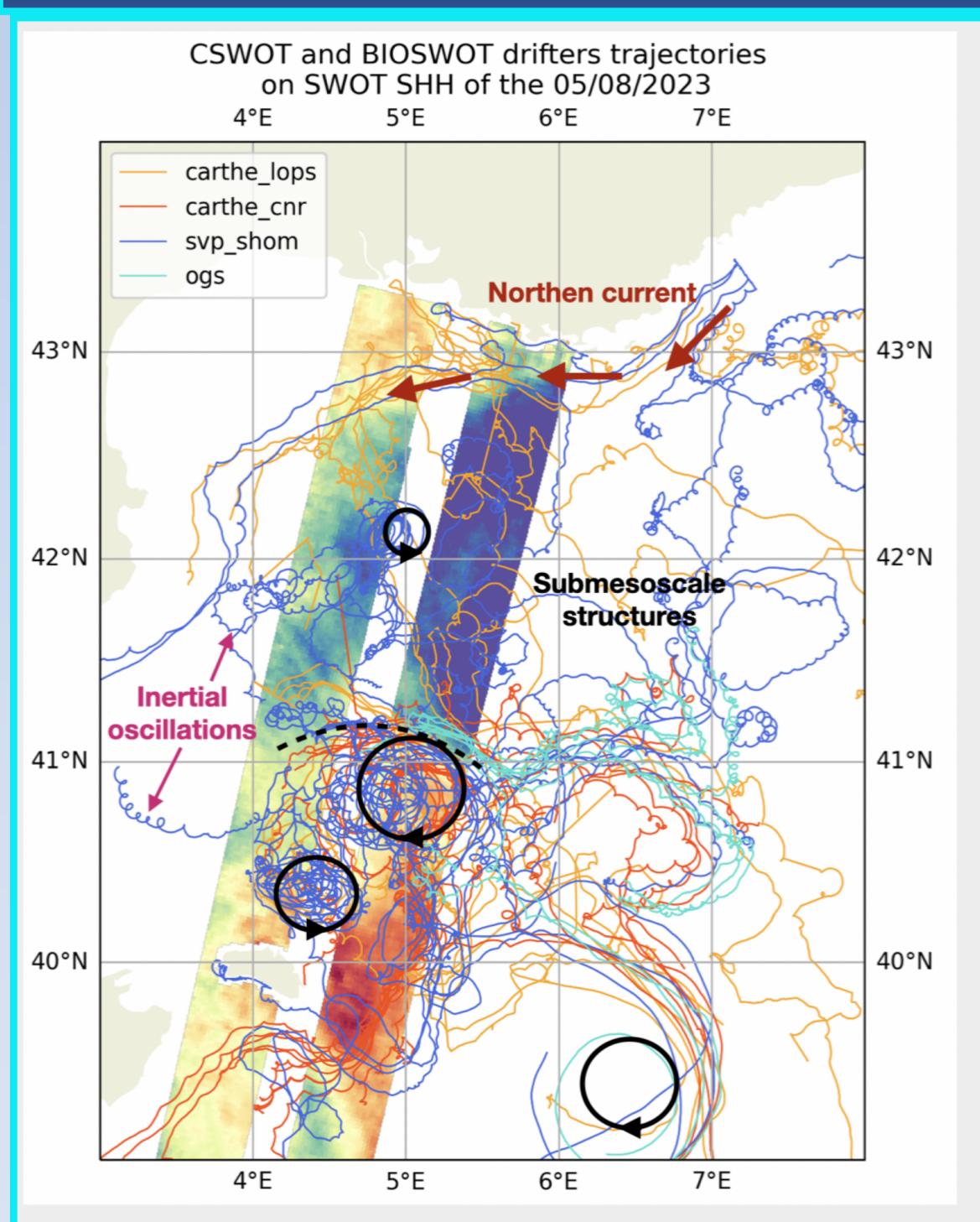


Along swath transect across an anticyclonic structure

Objectives:

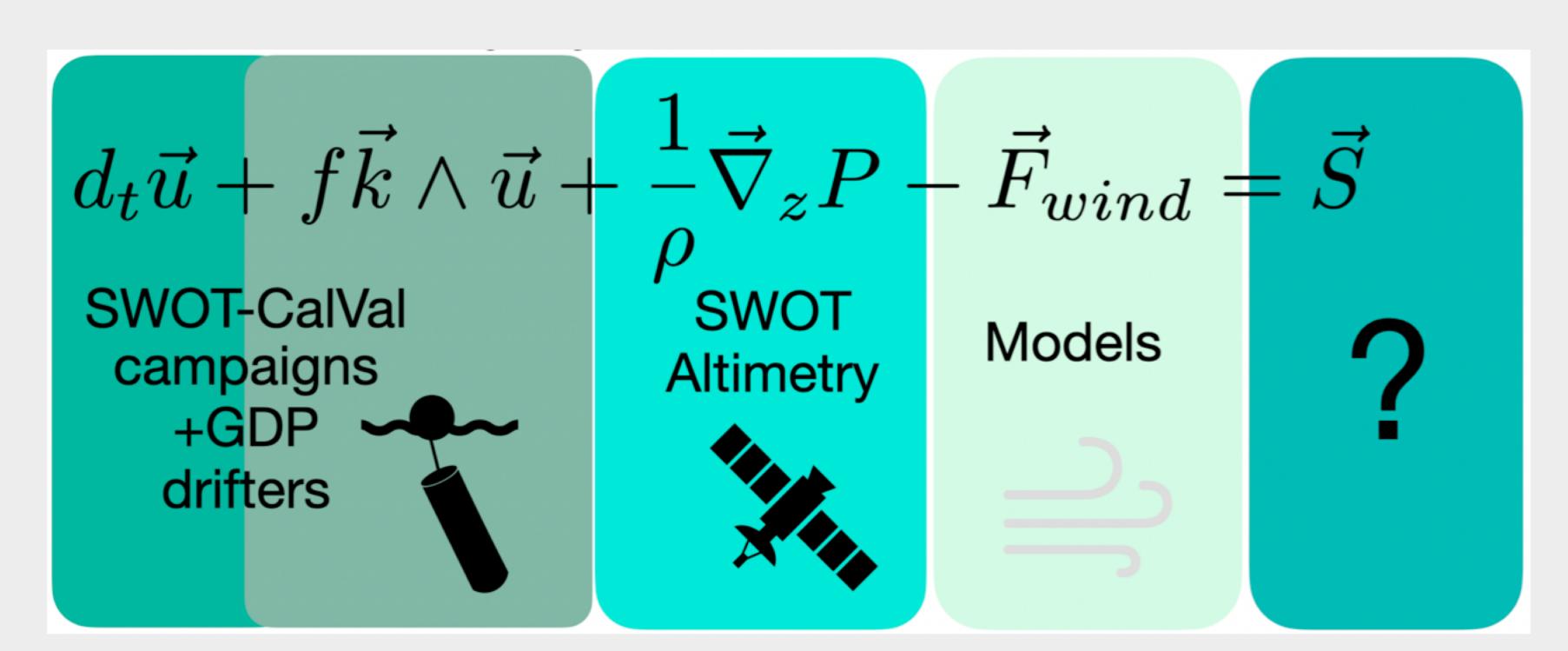
- Explore the variability of the northcurrent at the western entrance of the Gulf of Lion
- Revisit the sub-mesoscale processes in the North Balearic Front and in the (post)convective area
- Participate to the calibration / validation of SWOT
- Sea state measurements
- Compare altimetry derived from altimetry to observed ones (vmadcp and or thermal wind)
- Increase the synopticity of observations in particular structure

Estimating submesoscale surface dynamic from the synergy of SWOT altimetry and drifters lagrangian trajectories



Objectives :

- Reconstruct the surface momentum conservation including ageostrophic terms at global scale from drifters trajectories, both classical and SWOT altimetry, and wind products
- estimate SWOT SSH quality using drifters trajectories
- Work on the smoothing and filtering of drifters trajectories



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