Mastodon-2D
Deployment in Mediterranean Sea During Upcast field Experiment

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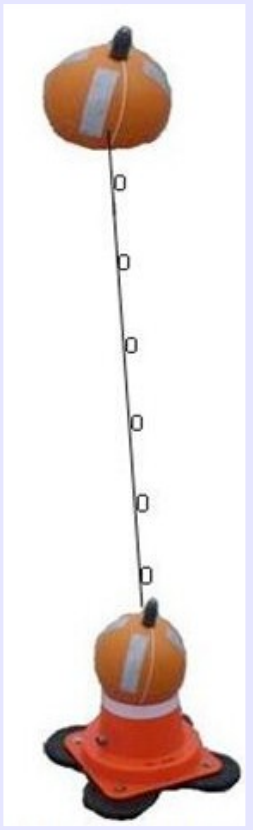


Original development of a "low cost" temperature profiler

- Dimensions on the ground : 40cm X 40cm X 40cm
- Line high : 120 -200 metres
- Line : 3mm thickness, equipped with 10 T and P sensors
- unitary cost ~1500 euros

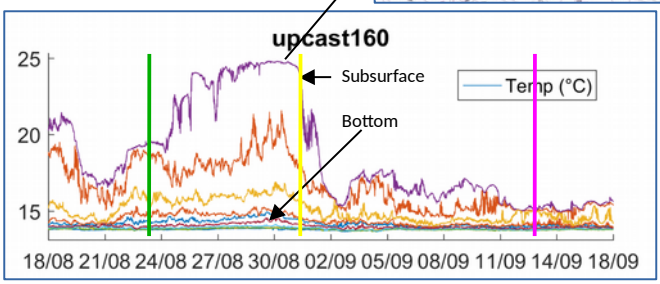
UPCAST: Upwelling and meso-scale processes of the Cassidaigne and Toulon areas

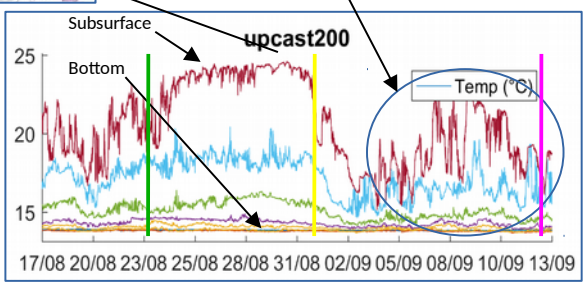
Objectives

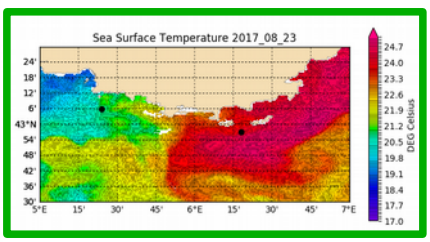
- Assess MASTODON-2D deployment at depths > 100m: 1 month during UPCAST (August-September 2017) during an upwelling period => 4 lines deployed and recovered (bottom depths 130-210m, buoys 5-10m under the surface)
- Investigate the water column response to upwelling and interaction with meso-scales processes in two contrasted areas, Toulon and Cassidaigne, using the MASTODON-2D mooring lines developed in the framework of JERICO-NEXT
- Understand the upwelling dynamics and its relaxation in the the water column

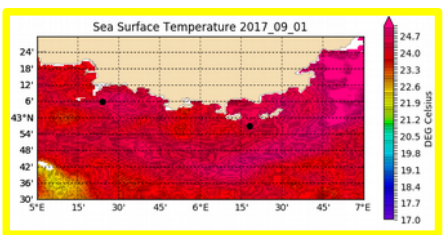
A N - NW wind event occurs on 31 august 2017 and generates a strong upwelling,leading to a decrease of the subsurface temperature

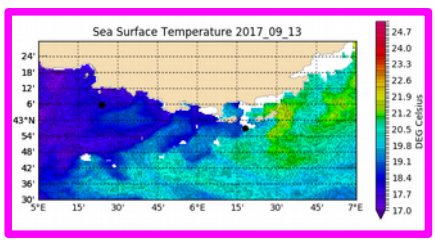
After the wind event the sub-mesoscale processes participate to the thermocline reconstruction at A. The sub-surface temperature oscillates during the upwelling relaxation











Mongoos workshop and General Assembly
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