T-MEDNet observation network: a ground truth for ultra-high resolution satellite SST in the Mediterranean nearshore and coastal ocean

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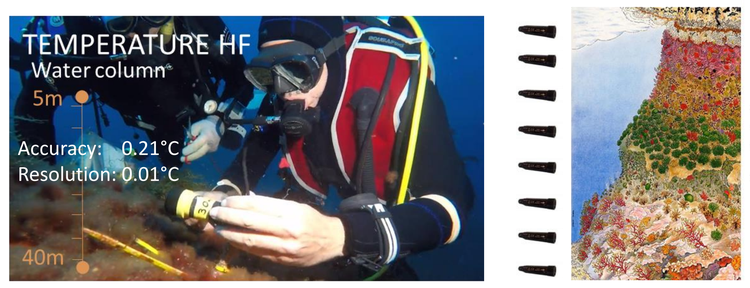
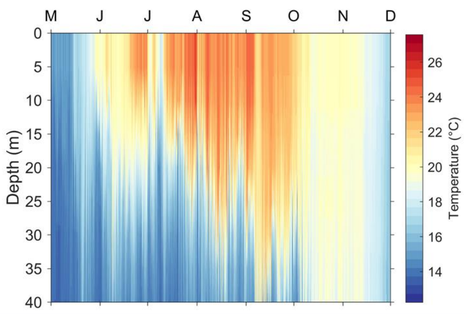
Build and maintain an operative and cost-effective climate change coastal observation network based on collaborative approaches

Fill knowledge gaps on coastal thermal regimes: long-term and high-frequency time series

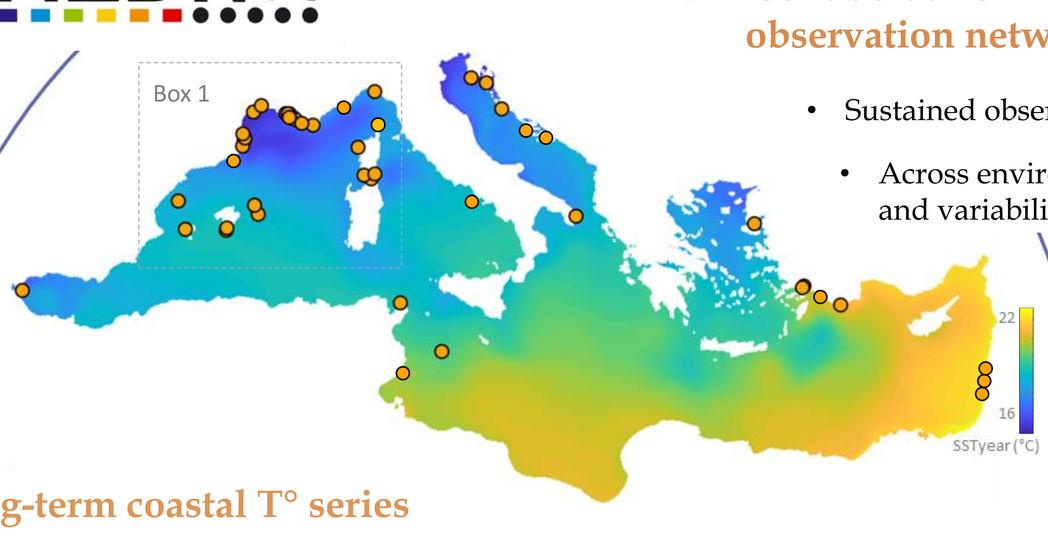
STANDARD PROTOCOLS – Essential Climate, Ocean and Ecosystem variables





Successful Coastal Climate Change Observation Network

T-MEDNet

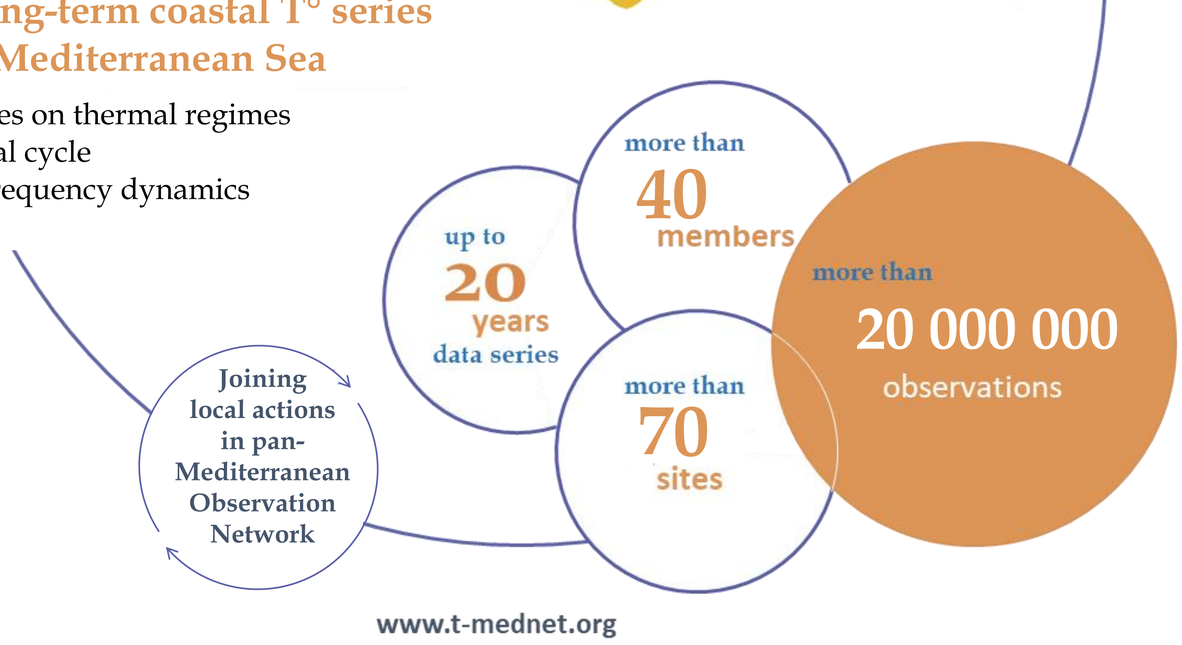


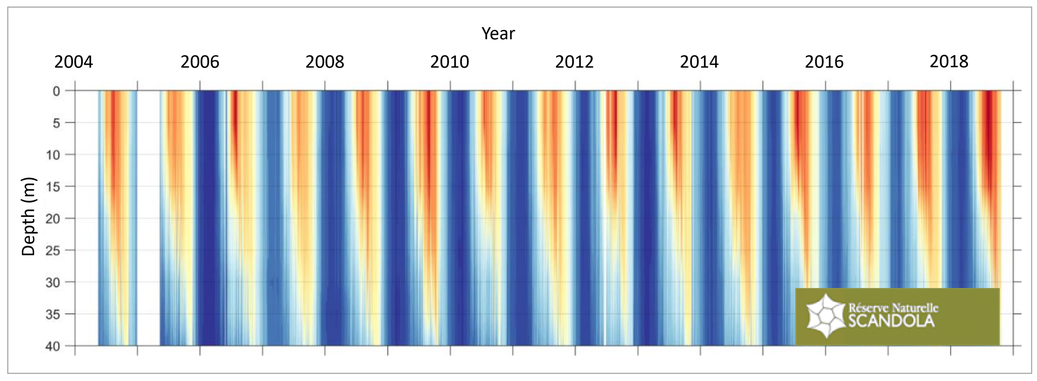
 # Collaborative observation network

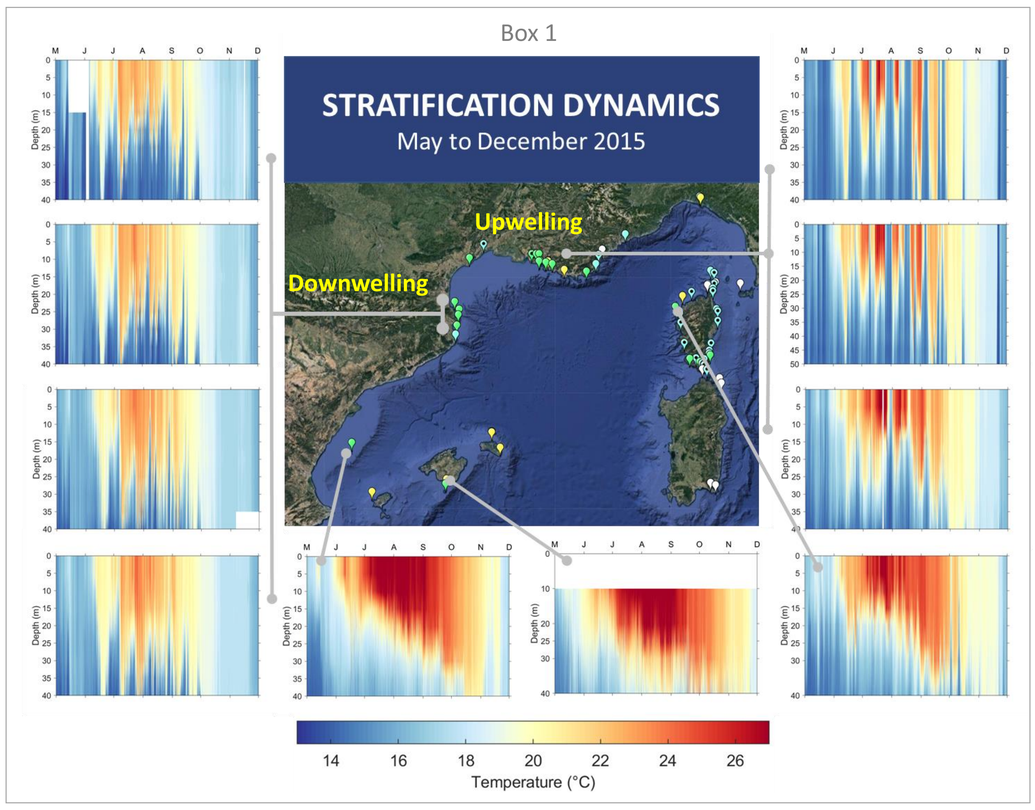
- Sustained observations
- Across environmental and variability gradients

 # Unique long-term coastal T° series around the Mediterranean Sea

- Baselines on thermal regimes
- Seasonal cycle
- High-frequency dynamics

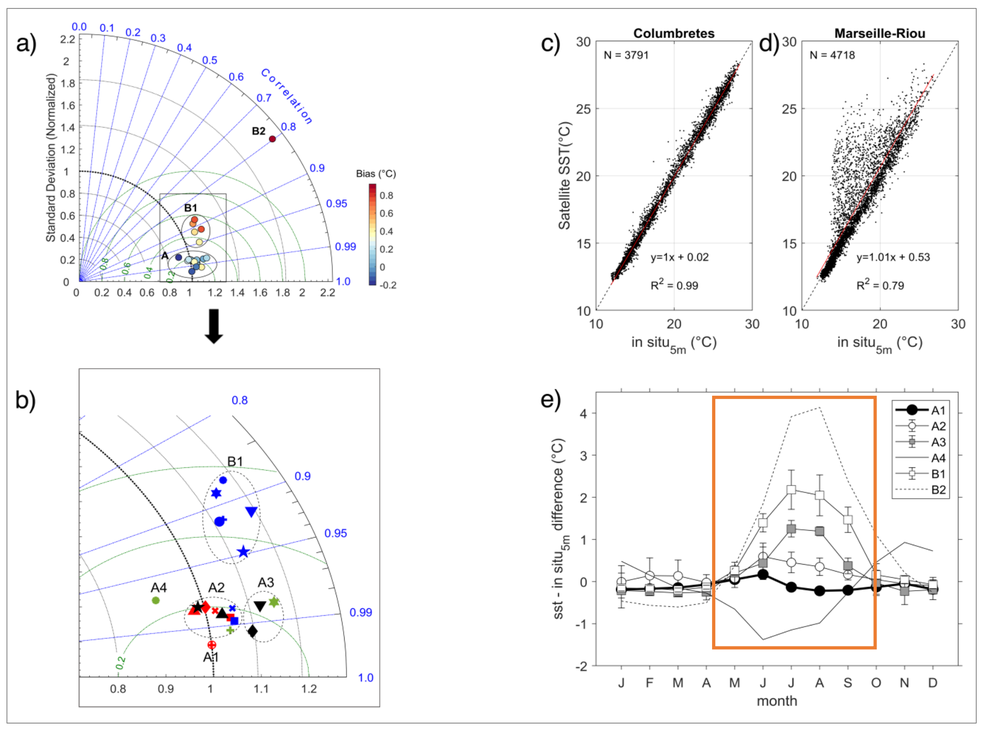






Ground truth for UHR SST?

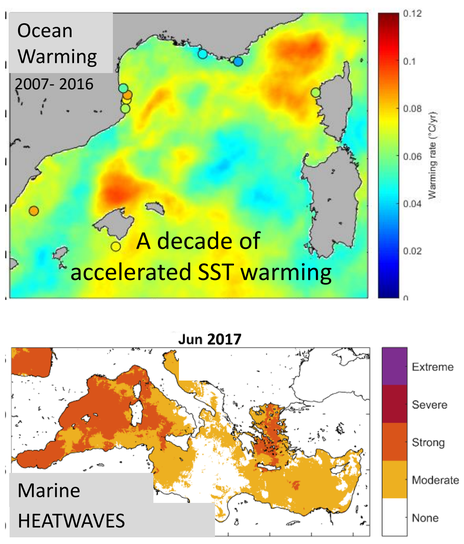
CAL/VAL for the highly dynamic nearshore areas: cost-effective design ?



Source: Bensoussan et al. (2019) Copernicus Ocean state report #3, using CMEMS L4REP at 4 km

ULTIMATE GOAL

Make the most of in-situ and UHR satellite SST for marine conservation and coastal management



Source: Joint analysis of CMEMS EO and T-MEDNet data series. **Copernicus OSR#3.**

Build relevant data sets for CAL/VAL at the appropriate granularity in the highly dynamic coastal and nearshore areas.

Joint analysis of satellite-in-situ data to enhance knowledge on coastal thermal regimes and heat stress while investigating surface to depth connections.

Explore the role of fine scale processes in the modulation of marine heatwaves and ecological impacts.

Informed science evidence-based conservation strategies to face climate change challenges in coastal area over broad ecological and socio-economics settings.

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