

Characterizing Mediterranean coastal upwelling and its evolution under climate change

Why? | Understand how Mediterranean coastal upwelling may change in a warmer climate and what this implies for marine ecosystems and coastal activities

What? | M2 internship (ocean, climate)

When? | From March 2027 (5-6 months)

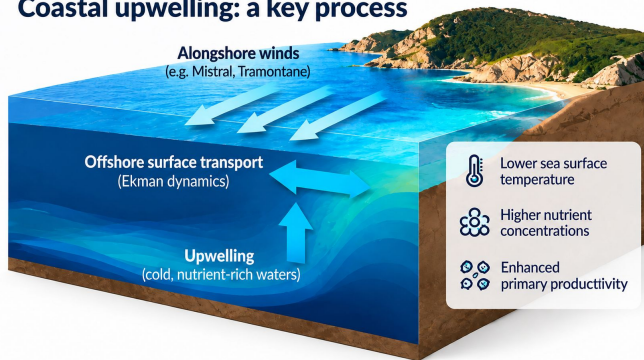
How? | Combine reanalysis, in-situ and satellite observations to identify and evaluate physical upwelling indicators, the assess their evolution with Med-CORDEX regional climate simulations

With whom? | [I. Parras-Berrocal](#) & [S. Somot](#)

Where? | CNRM, Climate group, Météopole, Toulouse

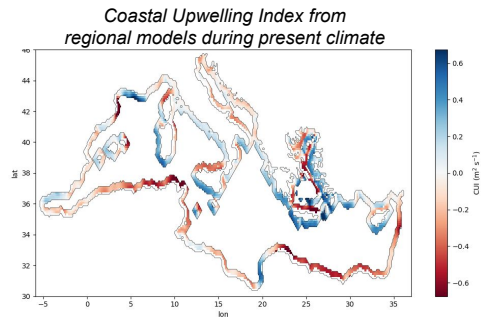
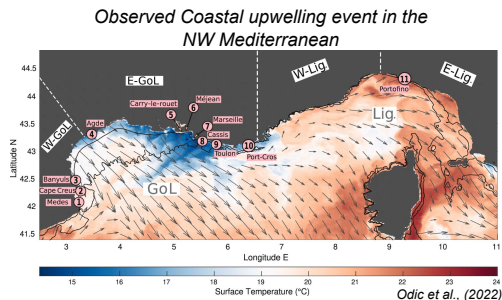
Desired skills? | Interest in oceanography and climate; Python programming; analytical skills; teamwork; initiative and curiosity.

Coastal upwelling: a key process



A wind-driven process that brings subsurface waters toward the coast

Its signature can be detected through temperature, wind-driven transport, currents and mixed layer properties



Where and when are Mediterranean coastal upwelling events? How well do models reproduce them? And how will they change with global warming?