

# GLAUCO

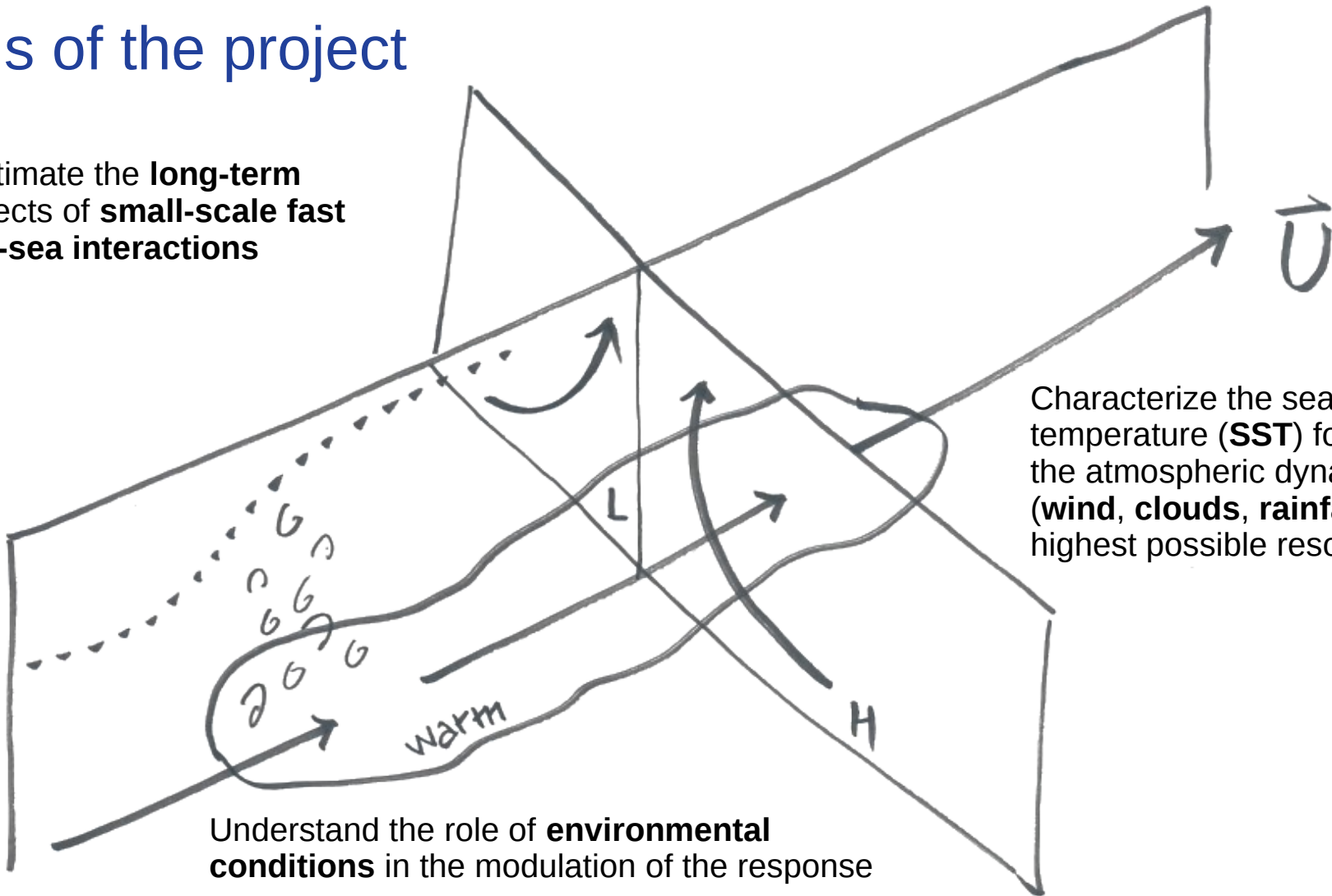
Global and Local Atmospheric response  
to the Underlying Coupled Ocean



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# Goals of the project

Estimate the **long-term** effects of **small-scale fast air-sea interactions**



Characterize the sea surface temperature (**SST**) forcing on the atmospheric dynamics (**wind, clouds, rainfall**) at the highest possible resolution

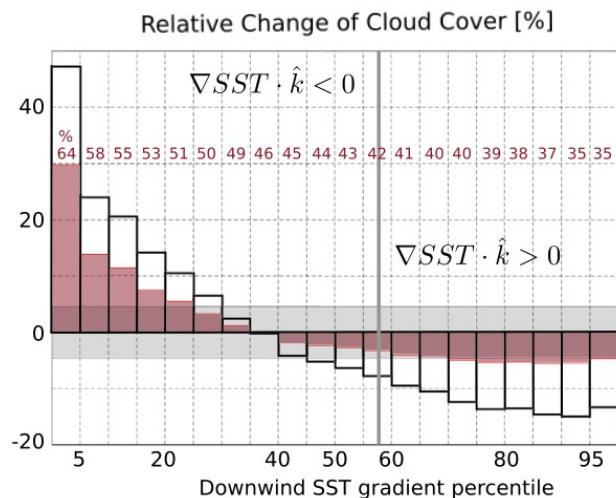
Understand the role of **environmental conditions** in the modulation of the response

# SST-wind

High-resolution **satellite data**, such as **daily L4** (analysis) **ESA CCI** (Climate Change Initiative) **SST** data at  $0.05^\circ$  and **L2** (instantaneous) **Metop-A ASCAT** wind field swaths at 12.5 km.

The wind response is found to be related to the SST spatial structure.

We will also consider: clouds, rainfall, sea state, salinity.



Fall season, daily ERA5 data, Med Sea [Desbiolles et al. GRL, 2021].

