Implementation of the Finite Volume Coastal Ocean Model (FVCOM) for the Parguera Ocean Acidification Testbed

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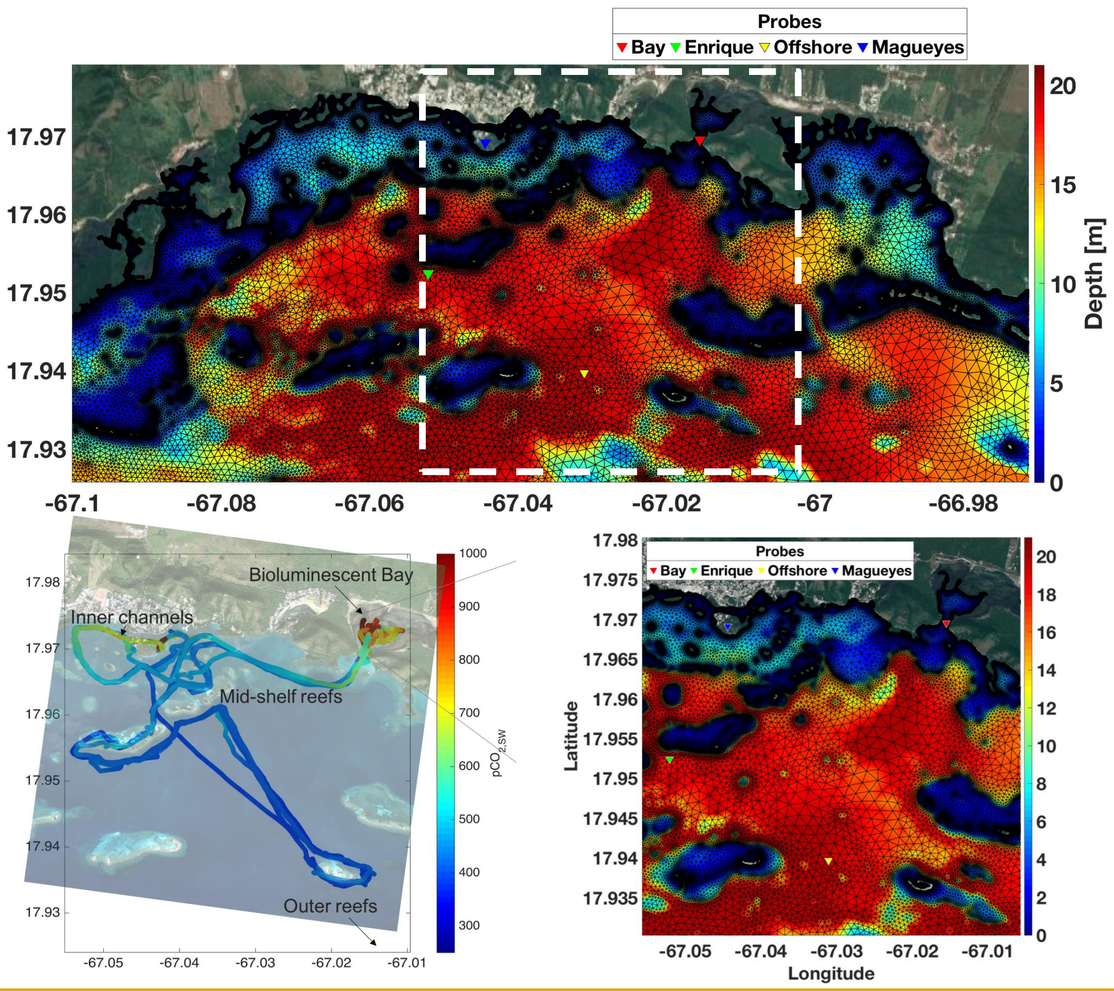


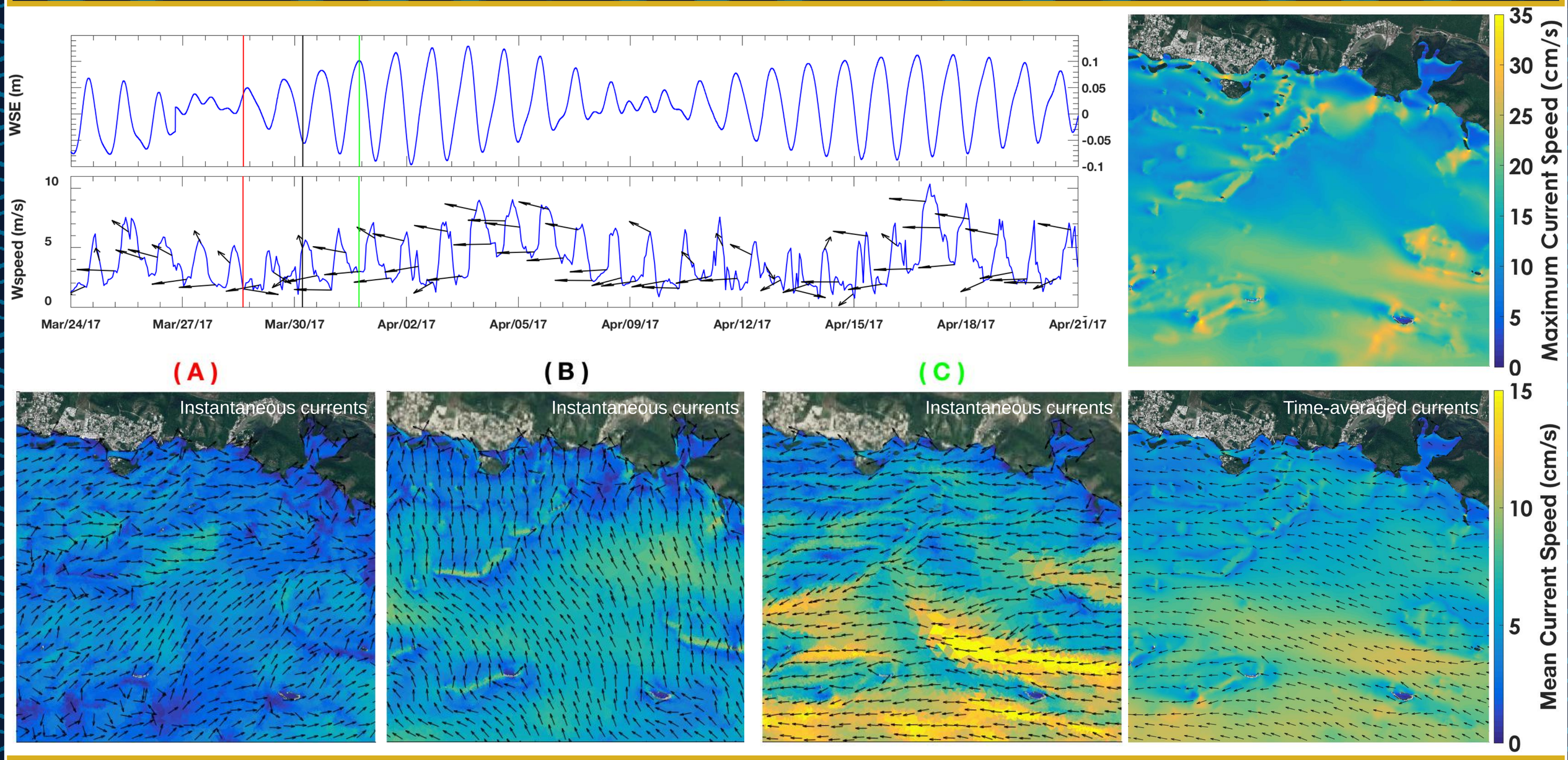
Background

A 3D unstructured hydrodynamic model is being implemented on La Parguera, Lajas. A region with complex bathymetry, islands, mangroves, and reefs that affect ocean dynamics, hence, a grid resolution of 5m – 500m was chosen. Latest updates to the model set-up include:

- Variable Bottom Roughness
- Baroclinic structure
- Heating & cooling

This tool has been developed in order to understand the transport of low pH water (acidic) originating from local mangroves throughout the La Parguera Ocean Acidification Testbed.

Surface Mapping



Model Validation