CARICOOS and PR SeaGrant intend to develop the first biogeochemical and physical assessment for La Parguera barrier system in order to identify areas of vulnerability to dissolution.

### Assessing Chemistry and Hydrodynamics

#### Chemistry team

Underway measurements to characterize the chemical and optical properties of surface seawater. Students, volunteers and professors from UNH and UPRM participated during the 18 hr. long sampling at the bioluminescent Bay and seagrass sites.

#### Hydromdodynamics team

Getting ready to deploy a set of ADCPs and drifters to characterize the surface currents in the study area.

**Remarks**

- The CO₂ effect on seawater carbonate chemistry resulted in a decrease in pH and Ω_{AR}. If Ω_{AR} is less than 1 (some areas in the Bio Bay), the seawater is undersaturated and net dissolution will be favored.
- Inner areas are more sensitive to OA and dissolution: carbonate sediments, calcareous algae and inner shelf coral reefs.
- Depth and time averaged currents show mean flows directed westward, except at the Bio Bay where mean flows are directed inshore. For further info on the hydrodynamics at the site, please see Rodriguez-Abudo’s poster.