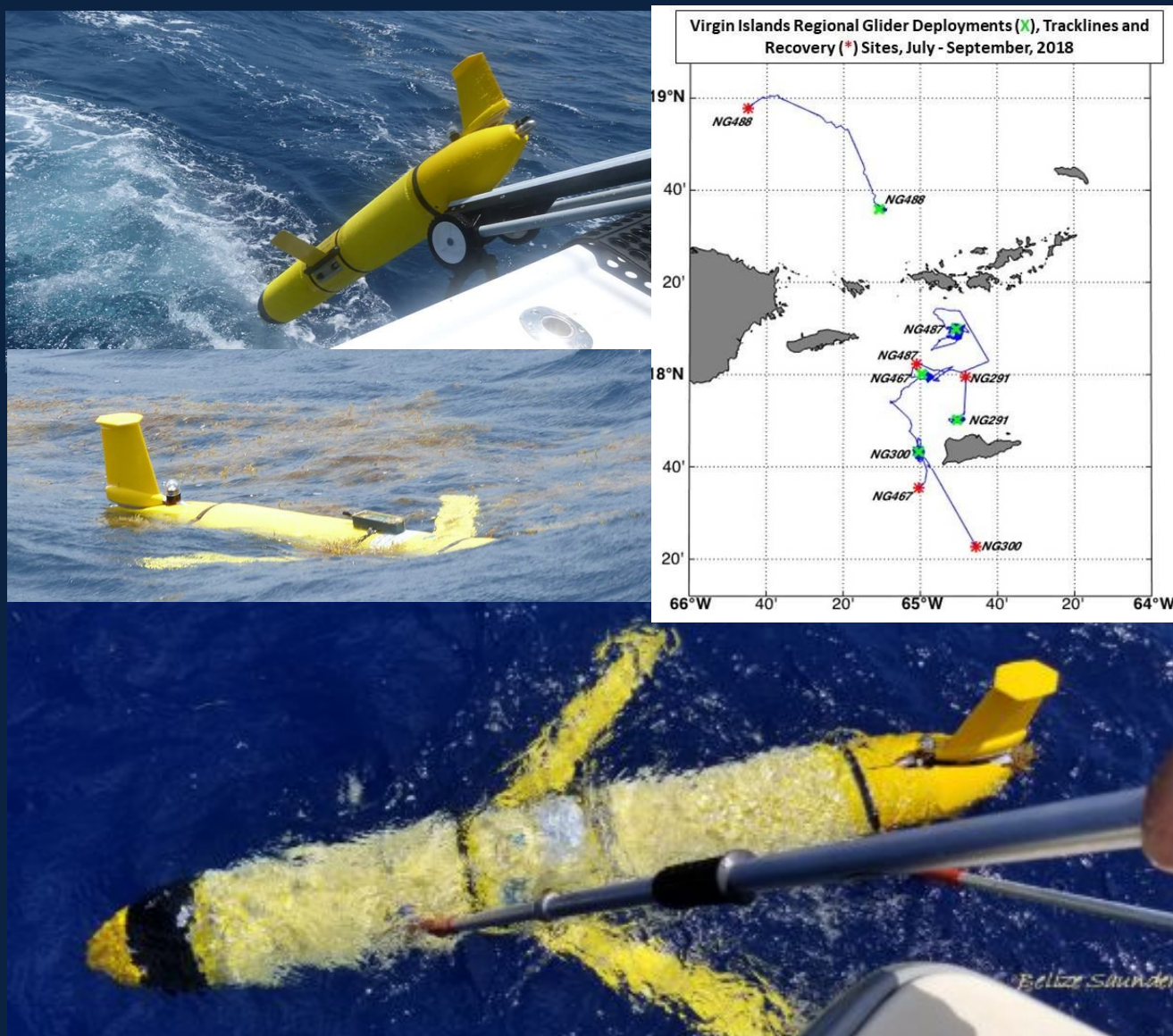


# Milestones & Program Service, 2018-2019

## Observations

**Hurricane Sentinel glider fleet deployed during 2018 hurricane season:** Partnering with Rutgers University, NOAA-AOML, CARICOOS, US Navy and other US Government agencies to deploy AUV glider fleet evaluating pre-storm thermal structure & sea state in and near the VI Basin as a means of understanding regional cyclogenesis, improving hurricane path & strength forecasts. Specifically, accomplished deployment and recovery of 5 gliders, returning them safely to the US Navy and establishing protocols for similar projects.



**Buoy Service:** CARICOOS Data Buoy NDBC # 41052 "St. John Buoy" recovered for upgrades and re-started in late 2018. Efforts continue to replace the badly damaged "St. Thomas Buoy".



**March, 2019. COMPLETED - marine benthic study**



Left, site of proposed wave buoy, north side of St. Thomas, VI

**April, 2019**



**St. Thomas weather station re-installed** by WeatherFlow scientist Sheldon Baker, assisted by OCOVI student associates Kaleb Liburd, Adian Brewer & Matt Mullins. Sheldon also serviced the station on St. Croix. His work and that of our student associates allows recovery and improvement on capability for high quality meteorological observations in the USVI.

## Education & Outreach

**Hands-On ROV Program:** A student team from the Environmental Rangers program at Camp Umoja worked with mentor Karl Callwood to construct an Open ROV. Sea trials were assisted by OCOVI associates including Chief Science Officer Doug Wilson. The ROV was then used by other students in the program to conduct research. Older students and interns worked with Dr. Marc Boumedine of the University of the Virgin Islands to build SeaPerch ROV's. Younger students learned about topics such as buoyancy and test-piloted the units. Outreach continues to student groups interested in starting or expanding ROV programs.



**ASLO 2019 Aquatic Sciences Meeting:** Three VI high school students involved in OCOVI outreach programs attended the conference and presented research projects at the Student & Teacher Education Fair.



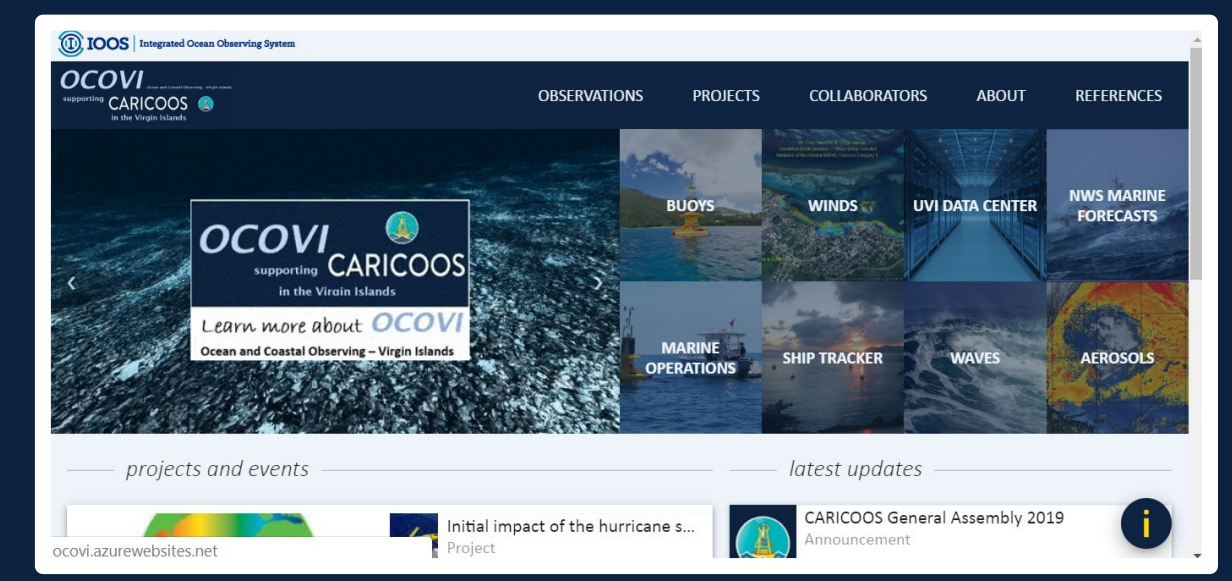
**VI Children's Museum - Pressure Experiment Collaboration:** After visitors to the VI Children's Museum decorated styrofoam cups, they were taken by researcher Vanessa Wright McKague from the University of the Virgin Islands onto the research vessel *Nancy Foster*, attached to an instrument package called a rosette and sent down to a depth of 2250 meters. The next set of cups has just been decorated and will be taken for their voyage next month!



**April, 2019. CARICOOS table at the St. Thomas SEA Grant annual Reef Fest.** Hands-on discovery exhibits appealed to all ages.



## Stakeholder Service



**Digital Presence:** Through its web site (OCOVI.org) and Facebook page, OCOVI links visitors to the CARICOOS web site and data, informs the public about its meetings and presentations, and provides oceanography-linked information of general interest.

**Presentations & Meetings:** By hosting public presentations and meetings, OCOVI provides an access point for Virgin Islanders to be informed of activities and provide their input.



OCOVI Annual Meeting, December, 2018



Above, students who travelled to ASLO give their research presentations to Board Members and meeting attendees at OCOVI's Public Input Meeting, March 2, 2019.

**Community Cooperation:** Providing a two-way pathway between CARICOOS and Virgin Islands residents (and non-resident stakeholders), raising awareness of CARICOOS activities and products plus communicating local feedback and input to CARICOOS.



**Serving New Stakeholders – Regatta Sailors**  
Carlos Aguilar Match Race, December, 2018  
OCOVI conducted trial deployments of new portable WeatherFlow® "Smart Weather Sky/Air" prototype instruments that provided real-time *in situ* observations of wind speed and direction, approaching lightning and other useful factors to supplement data from established CARICOOS meteorological stations at Rupert Rock (lies along the course), and at Buck Island (farther afield). Before each race, racers and race officials could use this focused network to obtain real-time broad assessments of conditions that could impact the daily events. A Smart Weather system was donated to the St. Thomas Yacht Club and real-time meteorological data from that location are now available to the public and archived.

For more information see:  
<https://weatherflow.com/smart-home-weather-stations/>  
Data can be accessed at:  
<http://beentheresailedthat.com/ocovi/ocovi.html>