

SECOORA: Supporting Resilient Ecosystems, Communities and Economies

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*UNCW's Coastal Ocean Research
and Monitoring Program*

Objective and Approach

Objective

Providing observations in NC and SC that support the IOOS/SECOORA focus areas of:

- Marine Observations
- Coastal Hazards
- Water Quality and Living Marine Resources

Support student outreach and engagement in areas of ocean observing and marine technology

Approach

- Maintain 9 real-time and 1 non real-time moorings in NC and SC
- Continue to lead QARTOD implementation and share information with Axiom
- Provide data to support existing applications (e.g. USACE WIS, NWS forecasts, How's the Beach?, Marine Weather Portal)
- Enhance observational capacity in the SECOORA footprint
- Mentor high school and undergraduate student interns, support undergraduate and graduate student research

Example Accomplishments

Observational Enhancements:

- Add 4 acoustic receivers to Onslow Bay moorings to support FACT research
- UNCW and SkIO MOU to support the SECOORA glider observatory

Data Management Enhancements:

- Interactive, daily QARTOD round-up allows project team to review and edit QARTOD rollup flag. Provides greater QC accuracy and quickly alerts staff to sensor malfunctions.



































































CORMP Data Quality Dashboard

Date Range

2018-05-09 - 2018-05-09

Sensor

FRP2 wind gust

Platform	Parameter	Time (EDT)	Value (knots)	Test 1 (Timing)	Test 2 (Syntax)	Test 3 (Location)	Test 4 (Range)	Test 5 (Climatology)	Test 6 (Spike)	Test 7 (Change Rate)	Test 8 (Flat Line)	CORMP Rollup
FRP2	wind gust	2018-05-09 19:08:00	14.68	 	 	  	  	 	 	 	 	   
FRP2	wind gust	2018-05-09 18:08:00	12.39	 	 	  	  	 	 	 	 	   
FRP2	wind gust	2018-05-09 17:08:00	10.73	 	 	  	  	 	 	 	 	   



































































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Broader Impacts

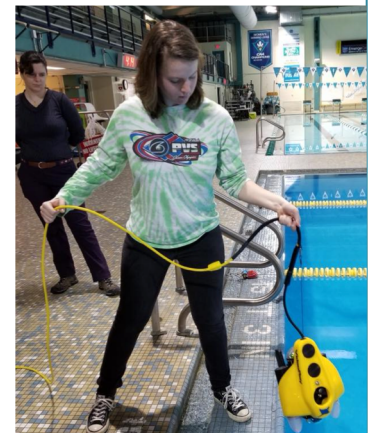
NOAA NWS: (DATE)

"NWS Wilmington WFO marine statement: .MARINE... NEAR TERM /THROUGH TONIGHT/... As of 1000 AM Saturday...An NDBC buoy data outage is limiting our ability to diagnose conditions across the coastal waters currently, however data from the UNCW CORMP array shows while seas have built over the past few hours, it's perhaps not quite as quickly as forecast."



Student Engagement:

- Interns: 2 UNCW undergraduate and 3 high school students from the New Hanover County Schools' Marine Science Academy
- 11 undergraduate research projects & 2 M.S. theses.
- "Underwater Technologies" course: 8 BS Oceanography & 10 MS Marine Science students (Spring 2018).



Email lynnl@uncw.edu for questions