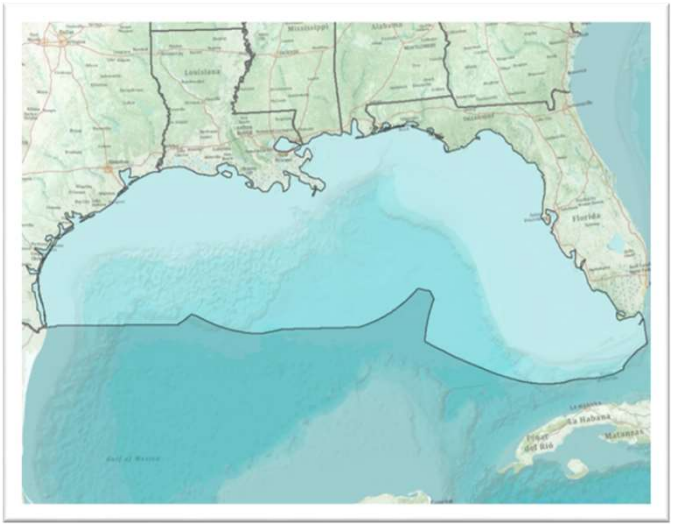
Gulf of Mexico Coastal Ocean Observing System Regional Association

Gulf of Mexico coastal and ocean information on demand that benefits people, ecosystems and the economy.

Ocean Data Types:

- Biological- chlorophyll, invasive species, HABs
- Chemical- pH, CO_2, dissolved oxygen, water quality
- Physical- wind speed & direction, wave height & period, air & water temperature, salinity, barometric pressure, water level, current speed & direction at the surface and at depth



The GCOOS-RA spans the U.S. Gulf of Mexico, from Texas to Florida.

Relevant Tools:

- GCOOS Data Portal, http://data.gcoos.org/

  Description: Interactive maps that display data when stations are selected. Timely information about the environment of the U.S. portion of the Gulf of Mexico and its estuaries is provided.

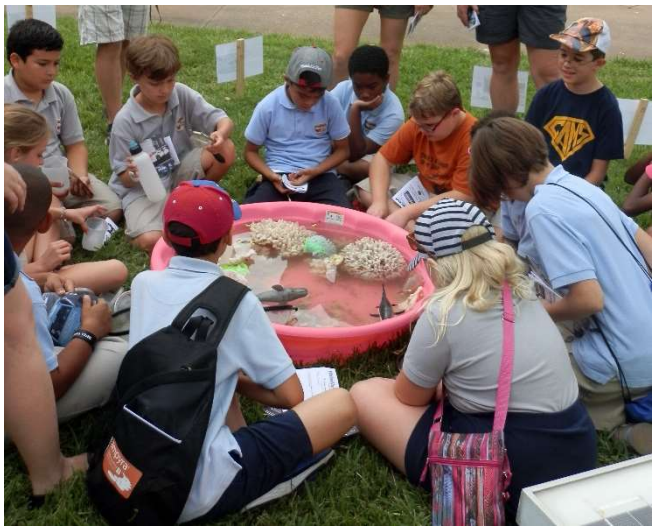
- GCOOS Products, http://gcoos.org/products/

  Description: Data and tools developed from integrated real-time observations and historical records. Examples include glider missions, model forecasts, water quality, weather, harmful algal blooms and citizen science resources.

- Educational Resources, http://gcoos.org/

Select either Public or Educators from the GCOOS home page to access web pages for:

- Recreational Boaters
- Beachgoers
- Lesson Plans



Students explore how IOOS is building biological capacity through programs like the Marine Biodiversity Observation Network. Photo: Chris Simoniello

Regional Example:

The GCOOS Outreach and Education Council leverages regional expertise from the Sea Grant network, National Estuarine Research Reserve System, Gulf of Mexico Alliance, NASA, NOAA, academia, NGOs and industry. Collaborations have included creation of a Gulf-wide Citizen Science portal, professional development workshops for educators, kiosks for informal learning centers, public safety products, hosting science festivals and K to gray education programs.

https://www.facebook.com/GCOOS

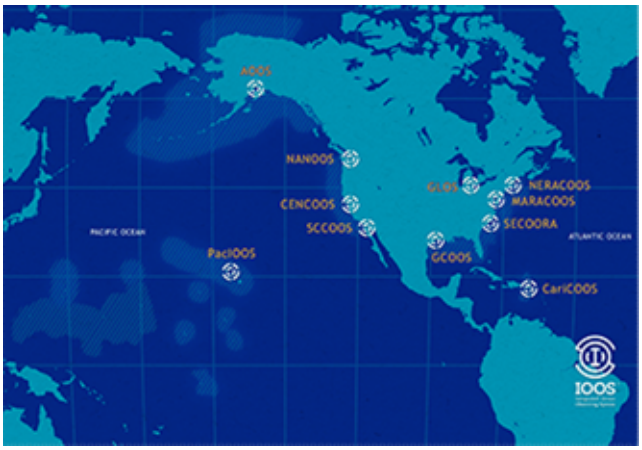
AMBASSADOR™ WRN WEATHER-READY NATION

U.S. Integrated Ocean Observing System (IOOS®)

Our Eyes on the Ocean, Coasts, and Great Lakes

Ocean Data Types:

- Biological- chlorophyll
- Chemical- pH, CO_2, dissolved oxygen
- Physical- wind speed and direction, ocean currents, wave height and period, air temperature, water temperature, salinity, air pressure, and water level.
- Biodiversity – Species presence/absence/abundance: phytoplankton, zooplankton, fish, coral, marine mammal, sea turtles, and more.



U.S. IOOS is the national integrated ocean observing system, working with Regional Associations across the U.S., Caribbean, and Pacific.

Relevant Tools:

- Data Catalog: http://data.ioos.us/

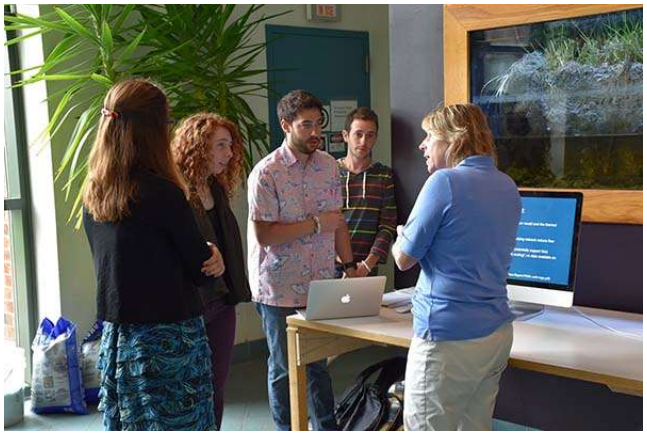
  Data portals integrate real-time observations with historical records, revealing climate variability and long-term trends. Ocean temperatures, sea level, and the saturation state (ocean acidification) are among the many climate variables that can be accessed through coastal ocean data portals. Using real-time observations, teachers can link their curricula and lesson plans to events in the news.

- Data Tools: http://www.ioos.us/

  Access the IOOS Data Catalog and data tools, such as the Data Assemble Centers (DACs), the Environmental Sensor Map, the Coastal and Ocean Modeling Testbed, and much more.

- Educational Resources: https://ioos.noaa.gov/community/education/

  Description: Access to ways to use real data in the classroom, lesson plans, and links to regional resources.



U.S. IOOS Director Zdenka Willis talks to ocean observing students about their presentations while visiting Rutgers University.

Description:

IOOS is our eyes on the ocean, coasts, and Great Lakes. We are an integrated network of people and technology gathering observing data and developing tracking and predictive tools to benefit the economy, the environment, and public safety at home, across the nation, and around the globe.

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