Central and Northern California Ocean Observing System

CeNCOOS is a collaborative that enables sustained and coordinated measurements, model nowcasts and forecasts, and integrated products to inform decisions about our regional ocean.

Ocean Data Types:

- Biological: chlorophyll, algal blooms, marine mammal and shark tracking, biodiversity
- Chemical: pH, CO_2, dissolved oxygen
- Physical: surface currents, wind speed and direction, wave height and period, air temperature, water temperature, salinity, air pressure, water level, turbidity, tides, bathymetry.

CeNCOOS spans the coast of California from the Oregon border to Point Conception, including San Francisco Bay.

Relevant Tools:

- Real Time Portal and data download: http://data.cencoos.org/

  Our map and catalog based portal allows users to explore, visualize, and download real-time observations, historical records, and model outputs. Ocean temperatures and the saturation state (an aspect of ocean acidification monitoring) 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.

- Educational Resources, http://www.cencoos.org/learn

  The Learn section of the CeNCOOS website has resources, data products, and videos targeted at students, teachers, and other user groups

CeNCOOS researchers and staff giving Monterey Bay community members a tour of the region's high frequency radar network and other observing platforms

CeNCOOS hosts outreach events and provides presentations to citizens and students. Staff will work with you to use ocean data for formal and informal education. Contact us for more information.

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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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