



by observing we learn

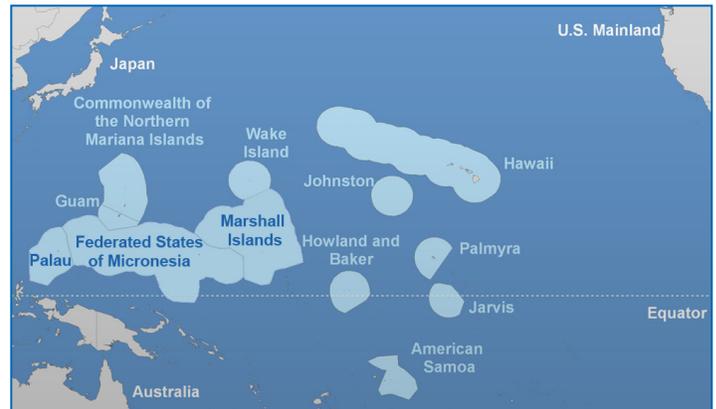
Protecting Lives and Livelihoods

The state of the ocean and beaches throughout the Pacific Islands Region affects our economies, our environment, and public health and safety. The Pacific Islands Ocean Observing System (PacIOOS) provides the scientific information decision-makers and ocean users need in a free, accessible, and useful manner in order to positively affect how we live, work, and play in our ocean home.

- **Coastal Hazards Resilience:** Promoting safety with beach condition forecasts and predictions of high water level and inundation events in coastal areas increases resiliency.
- **Maritime Safety and Security:** Serving reliable information of ocean and harbor conditions improves search-and-rescue operations and saves industry dollars.
- **Coastal Water Quality:** Ensuring public health and improving our understanding of ocean acidification with real-time observations of biological, chemical, and physical ocean conditions.
- **Ocean Planning and Management:** Providing user-friendly access to data from multiple sources for ocean management, climate change mitigation and adaptation, and supporting renewable energy development.



PacIOOS Data Explorer is a dynamic data visualization tool for resource managers, planners, policy makers, ocean users, harbor users, and the general public. This free, intuitive, and visually appealing tool on a Google Maps platform provides numerous overlays of real-time and near real-time data, model and satellite data, and more.



A network of offshore buoys measure variables related to ocean water quality, climate, and atmospheric conditions. This buoy off O'ahu, Hawai'i is a part of the global CO₂ monitoring array.

The Integrated Ocean Observing System (IOOS®) is a federal, regional, and private-sector partnership working to enhance our ability to collect, deliver, and use information.

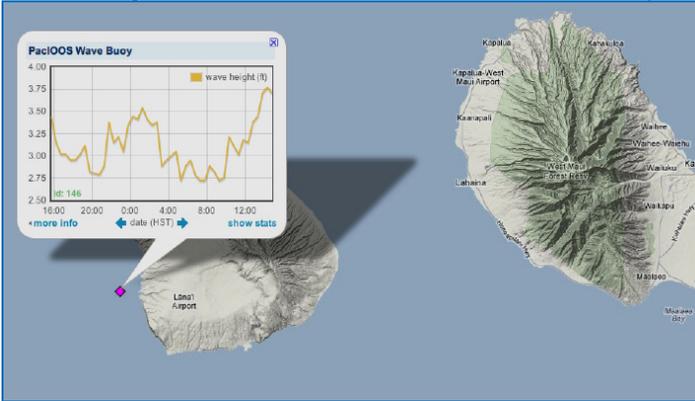
PacIOOS is one of eleven Regional Associations within the Integrated Ocean Observing System (IOOS®). The PacIOOS region covers a vast area and consists of the Pacific state, territories, and possessions as well as the three independent nations in free association with the U.S.



www.pacioos.org

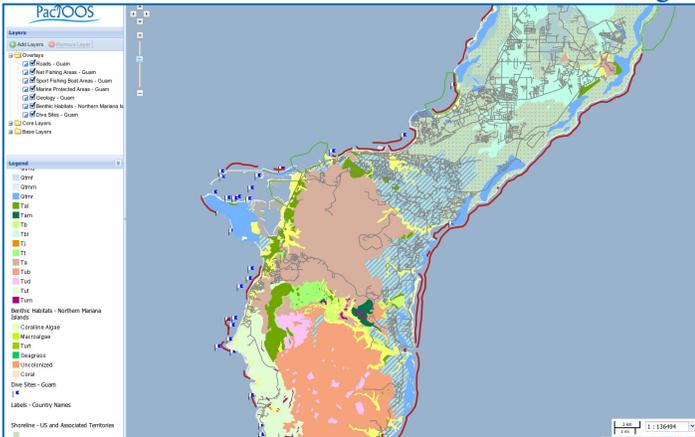
Some Popular Products on PacIOOS Website

Protecting Lives and Livelihoods with Wave Buoys



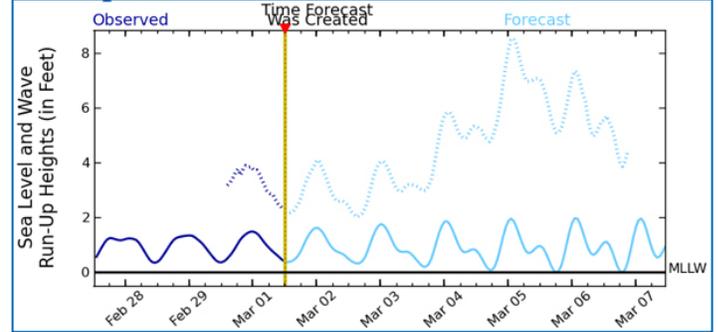
Real-time wave data is available on the PacIOOS Data Explorer. PacIOOS has wave buoys deployed off Lana'i, Waimea Bay, Kailua, Barbers Point, Hilo and Kahului, in Guam, and in the Marshall Islands. Many recreational ocean users (surfers, sailors, paddlers, etc.) rely on real-time data collected by these wave buoys.

PacIOOS GIS Catalog and Data Explorer Provides Free Access to Essential Data for Decision-Making



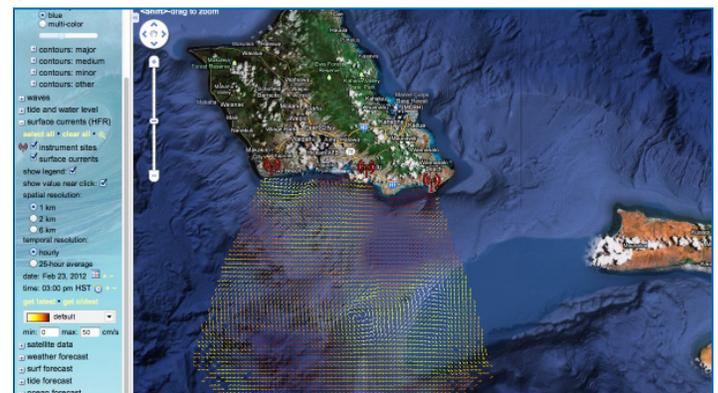
The PacIOOS GIS Catalog and Data Explorer is primarily for technical users with needs for data of the insular Pacific. It is a free, highly accessible, and flexible GIS-based mapper with an open source, searchable catalog viewer.

Increasing Resiliency with High Sea Level and Wave Run-Up Forecasts



PacIOOS offers numerous High Sea Level Forecasts across the region and two High Sea Level and Wave-Run Up Forecasts for O'ahu. Above is an example of potential high sea level (solid line) and wave run-up (dashed line) on the North Shore of O'ahu. If the run-up forecast exceeds 10 feet, it is likely that there will be periodic overtopping of roadways near Rockpiles. If forecast exceeds 8 feet, overtopping of lower roadways closer to the shore has been observed.

PacIOOS Reports Surface Currents on the South Shore of O'ahu in Near Real-Time



PacIOOS has three active High Frequency Radio (HFR) sites that enables ocean current tracking in near real-time, thus aiding search and rescue crews to map the probability path of people lost at sea.

PacIOOS is located at the University of Hawai'i at Mānoa, 1680 East-West Road, POST 105, Honolulu, Hawai'i 96822.

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