

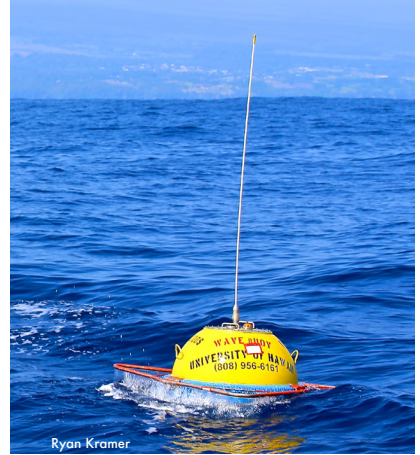
## Success Story

### Joining Forces to Secure a PacIOOS Wave Buoy for Majuro, Republic of the Marshall Islands

#### Key Ocean Observing Asset Missing

In January 2015, the PacIOOS wave buoy “Kalo” located off Majuro, Marshall Islands, was lost to the ocean for an unknown reason. Named by College of the Marshall Islands’ students after a bird that only flies near land, the wave buoy served as a crucial asset providing real-time information on ocean conditions for the low-lying atolls of the Marshall Islands, which are vulnerable to wave inundation, storm events, and flooding.

Local and national agencies, such as NOAA’s National Weather Service and the Government of the Republic of the Marshall Islands (RMI), rely on wave observation data to make well-informed decisions. In order to formulate marine forecasts, advisories, and warnings, and to keep community members and properties safe, accurate and timely data of wave height, period, direction, and sea surface temperature are vital. The Majuro wave buoy belongs to the PacIOOS network of wave buoys in the insular Pacific and the missing link is a huge gap for decision-makers and authorities throughout the region.



“As a low-lying nation, the RMI is dependent on the PacIOOS wave buoy, which is one of RMI’s most important observing tools to assess ocean conditions and to evaluate the need for high surf advisories and warnings.

Reggie White,

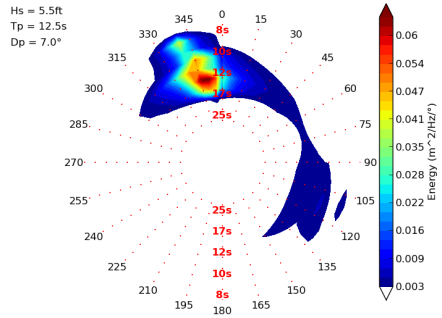
NOAA National Weather Service, RMI

#### Finding Solutions for a Pressing Need

The Executive Committee of PacIOOS’ Governing Council held its annual meeting on Majuro Atoll in March 2015. Executive Committee Members, PacIOOS staff, and leadership from the U.S. Integrated Ocean Observing System (IOOS) and the Integrated Ocean Observing System Association (IOOSA) joined the meeting. During several presentations and field trips, it became very clear that the Majuro wave buoy is an invaluable ocean observing asset that needed to be replaced as soon as possible. Learning about the immediate impacts on the ground and seeing the destructive forces of wave inundation to the low-lying land mass, PacIOOS and its partners discussed ideas to find a solution.

## Partners Identify Funding Support

Due to the overall cost of the wave buoy, local, national and international PacIOOS partners decided to join forces to purchase and deploy a new buoy for Majuro. The Marshallese Government contributed \$10K via the Climate and Oceans Support Program in the Pacific (COSPPac) of the Australian Government Bureau of Meteorology and a private donor provided an additional \$5K through the College of the Marshall Islands. The National Weather Service Pacific Islands Headquarters generously supported the replacement with \$30K, and the U.S. Integrated Ocean Observing System (IOOS) matched the raised amount with \$40K.



Wave buoy spectra visualize wave direction, wave height and wave period at a glance.

These partner contributions cover the replacement of the missing wave buoy off Majuro. PacIOOS will install and maintain the wave buoy and ensure all data are freely available online. Data are managed by the Coastal Data Information Program at Scripps Institution of Oceanography (CDIP), and data streaming is made possible through long-term partnerships with the U.S. Army Corps of Engineers and CDIP.

## Special Thanks to our Contributing Partners:



**IOOS**  
Integrated Ocean  
Observing System

“ We are incredibly thankful for the generous contributions from our partners. PacIOOS can now continue to serve important observation data to Marshall Islands’ decision-makers and communities. ”

Melissa Iwamoto, Deputy Director, PacIOOS

## Majuro Wave Buoy

[www.pacioos.org/wavebuoy/kalobuoy.php](http://www.pacioos.org/wavebuoy/kalobuoy.php)

## Network of PacIOOS Wave Buoys

[www.pacioos.org/wavebuoy/](http://www.pacioos.org/wavebuoy/)

Contact us for questions and feedback at [info@pacioos.org](mailto:info@pacioos.org), or visit us at [www.pacioos.org](http://www.pacioos.org).

The Pacific Islands Ocean Observing System (PacIOOS) provides easily accessible and reliable ocean observation and forecasting data to keep Pacific Island communities safe, support livelihoods and lifestyles, and sustain ocean resources. PacIOOS is based within the School of Ocean and Earth Science and Technology at the University of Hawai’i at Mānoa. It is one of 11 regional associations of the U.S. Integrated Ocean Observing System (IOOS®).

