

Progress Report
Developing the Pacific Islands Ocean Observing System (PacIOOS)
Cooperative Agreement # NA11NOS0120039
Performance Period: December 1, 2011 through May 31, 2012

Submitted by
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1) Project Summary

The primary goal of the work proposed under this award is to continue the development of an operational ocean monitoring and forecasting system that provides integrated, customized, and timely products that enable an ocean-literate and well-informed public and policy makers in the Pacific Islands. PacIOOS has focused initial development on water quality sensing, ocean-state and forecasting, the provision of marine ecosystem information, prediction of coastal hazards, and the development of integrated data visualization capabilities to inform marine spatial planning, operations, commerce, and recreation. Through the effort proposed under this award, PacIOOS will enhance development of observing and product suites in each of the aforementioned focus areas and will continue to engage users, stakeholders, and system partners in the use, extension, education, and outreach of technical capacity, data visualization, and ocean information.

2) Progress and Accomplishments

All ongoing operations proposed under our FY11-FY12 descope continue as planned (glider missions, HF radar operation, real-time wave data, coastal cameras, high water level forecasts, water quality data and products, water level products, operational models (wave, wind, circulation), vessel traffic, and biological tagging/tracking). All data and products are available on the PacIOOS website (www.pacioos.org) which has registered over **64,000 visits and 163,000 pages viewed during the present reporting period.**

The status of three activities scheduled to be completed during the past performance period are detailed below.

HFR at Kaena Point—The installation of a HFR system at Kaena point has been largely completed, though the system has not yet been turned on and data is not yet streaming. The system was installed in February of 2012. Pending the final deliver of key computer hardware, the system will be operational in the fall of 2012.

Development of Pacific Basin Circulation Model—The development and deployment of an operational forecast model for upper ocean circulation for the Pacific Basin has been completed. The SCUD (surface currents using drifters) model provides a daily forecast of upper ocean velocity over the whole PacIOOS region. An example forecast can be seen at: <http://goo.gl/H4ceZ>

Water Quality system in American Samoa—A SBE 16v2+ has been purchased for deployment within the PacIOOS region. We are presently evaluating sites in American Samoa, and

elsewhere in the region to determine the best location to install the system. We have had persistent technical challenges that have prevented the ideal operation of our existing water quality system deployed in American Samoa, which has led to the aforementioned evaluation prior to an additional deployment of equipment in the Territory.

3) Scope of Work

Activities proposed as ongoing efforts, including data system development, model operation, observing system operation, and outreach/education will continue through the next performance period.

In addition, two Waverider Mark III buoys are scheduled to be deployed within the next 6-month performance period. These new assets, funded by NOAA's Coastal Storms Program, will be deployed off Ritidian (Guam) and Garapan (Saipan, CNMI) in the fall of 2012 bringing the total collection of operational PacIOOS wave buoys to 10.

4) Personnel and Organizational Structure

Ms. Heather Kerkerling has been hired as the Deputy Director of PacIOOS and will assume the position of Director (subject to PI, Director, and Governing Council approval) upon the resignation of Chris E. Ostrander, the current PacIOOS Director. The PacIOOS Director, Chris E. Ostrander, has indicated he will step down at the end of calendar year 2012.

5) Budget Analysis

Due to the five-month delay in the arrival of funds, we have not drawn down funds as much as would be expected by this point in time. Major equipment purchases will be made during the next reporting period. That, coupled with ongoing and upcoming salary commitments will utilize lower our unspent balance to the expected level.

The University of Hawaii Office of Research Services has submitted a financial report through grants online dated 4/20/2012.