Cal Poly Researchers Working on South Pacific Currents and Islands

SAN LUIS OBISPO – Researchers from Cal Poly’s Center for Coastal Marine Science will spend most of March in the Western Equatorial Pacific studying ocean currents and how they interact with coral reef islands as part of a $370,000 grant from the Office of Naval Research.

Marine Biology Professor Mark Moline and Senior Research Scientist Ian Robbins will use remotely operated mini-submarines and place sensor equipment on the ocean floor off Palau, an island republic near the Philippines. The equipment will gather data on what happens when ocean currents meet and flow around coral reefs.

Palau's islands, reefs and atolls are bounded by deep ocean trenches on both sides of the nation. When Pacific currents move through the area, they rebound in ways not yet completely understood.

“There’s a lot of complex mixing of the currents, and the acoustic field is hard to characterize,” Moline said. The underwater current mixing affects sonar capabilities, one of the reasons the Navy is interested in the research.

It's the second trip to Palau for the Cal Poly marine scientists. They were in Palau in 2009 conducting similar research on the island chain’s fringing coral reefs and working with the non-profit Coral Reef Research Foundation. They will return in 2012 to pick up the sensors and begin analyzing the data.
Moline, Robbins and the Cal Poly remote submarines, technically known as autonomous underwater vehicles, spent more than six weeks in Antarctica recently, collecting data on ocean temperatures and how global warming is affecting penguin feeding grounds.

Robbins posted updates and photos from the research trip on the Cal Poly Remote Adventures Blog at http://calpolymarine.blogspot.com. Watch the blog for continued research updates and photos from Palau after March 9.

Moline will be back on campus teaching Spring Quarter, which begins March 28.

About Cal Poly’s Center for Coastal Marine Science:

The Cal Poly Center for Coastal Marine Science is part of the College of Science and Mathematics. It exists to promote and facilitate basic and applied interdisciplinary studies of coastal marine systems, address environmental concerns and foster hands-on student learning through discovery and outreach. Find out more about the center at: http://www.marine.calpoly.edu/.

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