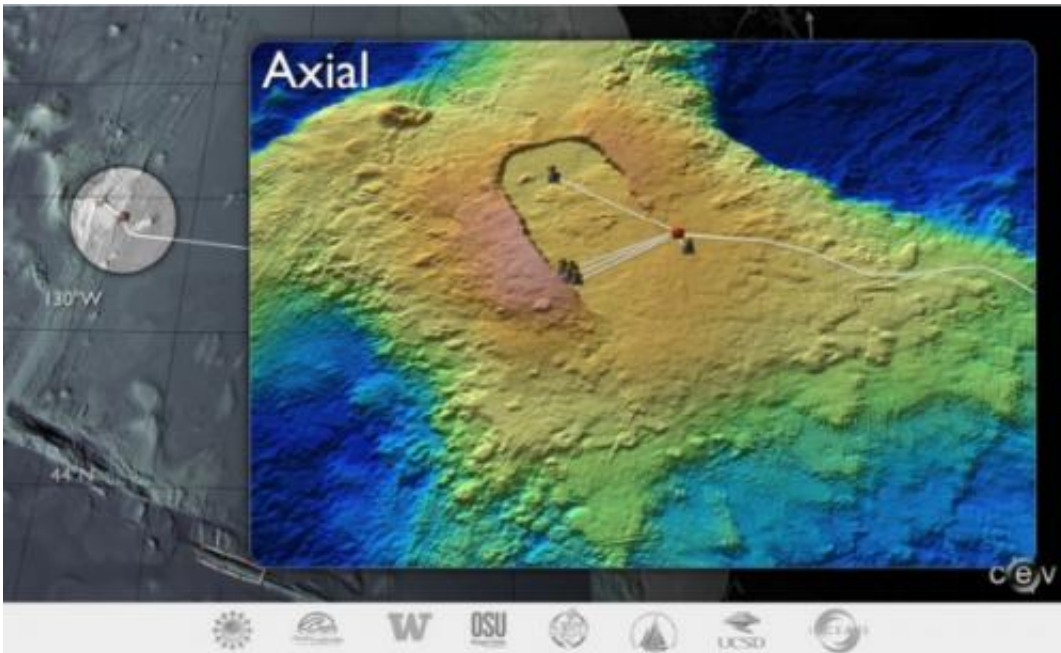


Live, from the bottom of the sea

August 26 2011



The Axial Seamount off the U.S. Pacific Coast is the focus of a project to deploy specialized instruments and retrieve data about the physical and chemical dynamics of the ocean floor in an active tectonic region.

Lamont-Doherty scientist Timothy Crone is at sea off the Northwest U.S. coast, dropping sensors into the deep ocean as part of a major initiative to better understand oceans, climate and plate tectonics. You can watch a live video feed from the robotic vehicle ROPOS and see it deploy instruments and take samples from 4500 feet down on the seafloor.

The next dive launches at 3 p.m. Eastern time.

They're operating in the ASHES hydrothermal field, within the volcano caldera by the Axial Seamount, an area dotted with odd-shaped vents that can be as high as 10 meters, where hot material shoots up from below the ocean floor. Crone, an assistant research professor at Lamont, built a special camera base station that will collect data about a hydrothermal vent, collected by a special array of sensors developed by the Biodesign Institute at Arizona State University.

Scientists with the Ocean Observatories Initiative, from the University of Washington, Woods Hole Oceanographic Institution, Oregon State University, Scripps Institution of Oceanography and other centers across the United States are deploying arrays of instruments to capture information about what's going on down deep in one of the most active areas of the earth's crust. They'll learn about ocean chemistry and currents; the interactions of ocean, atmosphere and climate; and the dynamics of how the earth's crust is formed and moves around.

More information: www.ldeo.columbia.edu/user/crone

Provided by Columbia University

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