

# 2017 American Samoa Expedition: Suesuega o le Moana o Amerika Samoa

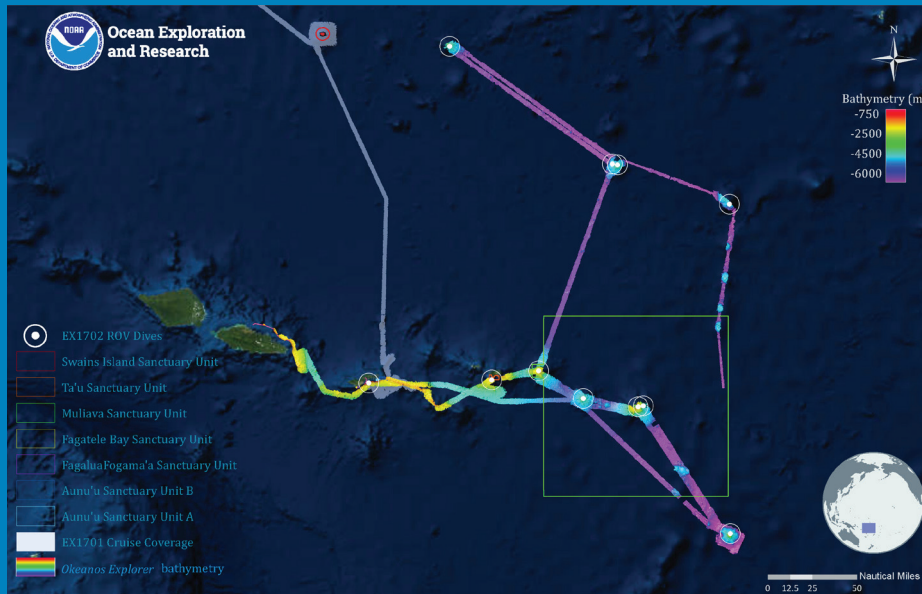
NOAA Ship *Okeanos Explorer*, February 16 – March 2, 2017

<http://oceanexplorer.noaa.gov/okeanos/explorations/ex1702/welcome.html>

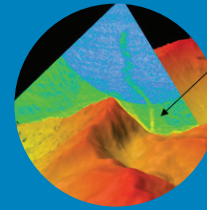


Ocean Exploration  
and Research

This expedition is part of a three-year Campaign to Address the Pacific monument Science, Technology, and Ocean **NEeds (CAPSTONE)**, an initiative to collect deepwater baseline information to support science and management decisions in and around U.S. marine protected areas (MPAs) in the central and western Pacific.



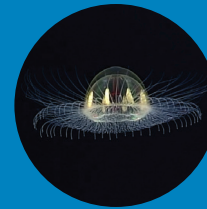
Vicinity of American Samoa Expedition Overview Map



Conducted a mapping survey of Vailulu'u seamount revealing that the volcanic cone in the crater of Vailulu'u had grown extensively since it was last mapped in 2012. Multibeam and single beam data revealed a plume in the water column, and the plume appears to rise from the northern portion of Vailulu'u crater. The plume is likely to be composed of gas bubbles emanating from the volcano.



Identified distinct communities on seamounts that appear to be structured by environmental factors that vary with depth. These communities will be compared to the communities that are known from areas like Hawai'i and New Zealand, in addition to those that will be observed in subsequent expeditions in the central Pacific, to establish connection patterns and identify factors that define biogeographical provinces.



Web content received over 33,000 views and live video feeds received over 6.2 million views through YouTube and Facebook, via pages such as IFL Science, The Dodo, and The Weather Channel.



~12,000 square kilometers of seafloor mapped



11 remotely operated vehicle dives at a depth range of 250 - ~3,930 meters



101 biological & 30 geological samples collected



~30 undescribed species observed



48 participating scientists, students, & managers



news & media coverage by 45+ outlets