## **2016 Deepwater Exploration of the Marianas**

NOAA Ship Okeanos Explorer, April 20 – July 10, 2016 https://oceanexplorer.noaa.gov/okeanos/explorations/ex1605/welcome.html





**Expedition Operating Area:** Marianas Trench Marine National Monument and Commonwealth of the Northern Mariana Islands

This expedition is part of the 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 in the central and western Pacific. Highlights include:



Discovered and documented three new hydrothermal vent sites at Eifuku and Chamorro Seamounts, and a new active high-temperature "black smoker" vent field composed of multiple chimneys (one over 30 meters tall!) on the Mariana Back-Arc spreading center.

Conducted the first effort to discover and document deep-sea coral and sponge communities in the deep waters of the Marianas. Documented 10 "high-density" communities and a rare "high-density" community of basket stars and crinoids.



Shared live video feeds of the expedition with the public worldwide via the Internet, with the live video receiving a record-breaking 3.1 million views!



80,500 square kilometers of seafloor mapped



news & media coverage by 110+ outlets



41 remotely operated vehicle dives at a depth range of 240 - 6,000 meters



160 biological & 73 geological samples collected



80 - 100 undescribed species observed or collected



100 participating scientists, students, & managers