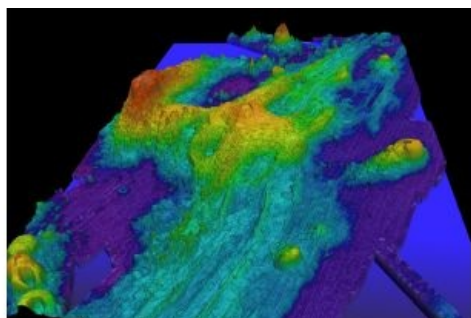


Drilling into Young Oceanic Crust for Subseafloor Observations at Axial Seamount



Axial Seamount is the most magmatically active submarine volcano in the northeast Pacific and has been the focus of interdisciplinary studies for more than three decades. The range of scientific interests includes volcanology, geophysical characterisation and monitoring, hydrothermal vent formation and geochemistry, quantification of heat and chemical fluxes, hydrogeology, and the diversity and evolution of microbiological and animal communities. A workshop is now being organised with the overall goal of developing a full IODP proposal for drilling and related experiments at Axial Seamount.

The workshop will bring together a multidisciplinary group of scientists and engineers across a broad spectrum of ocean sciences and engineering to discuss recent engineering advances and practical issues related to drilling into zero-age oceanic crust, and to identify

high priority science objectives and research opportunities that can only be achieved with ocean drilling at Axial Seamount.

The workshop is open to U.S. and international participants, and the deadline to apply is 30 June 2017. Applications are encouraged from individuals with experience in hard rock scientific drilling, hydrogeology, hydrothermal vents, geophysics, geochemistry, microbiology, seismology, volcanology, and cabled instrumentation to ensure the requisite background knowledge and leadership exists at the workshop. Travel funding is available from USSSP for a limited number of U.S. participants; funding for international participants will need to be provided by individual member countries.

Axial Seamount History and Significance

Axial Seamount erupted in January 1998, April 2011, and April 2015, thus the site presents a unique opportunity to study the interaction between volcanic, hydrothermal, and biological responses to magmatic and volcanic events. For these reasons, Axial Seamount was chosen as one of the key sites on the Ocean Observatories Initiative's cabled observatory network, the Cabled Array (CA). Now that the CA is fully operational with data streaming live to shore for two years from a diverse suite of cabled instruments, we want to explore how ocean drilling and related studies can complement seafloor-based investigations by gaining access to the subseafloor to expand our understanding of microbiological, geophysical, hydrologic, and geochemical processes at Axial Seamount.

<https://www.hydro-international.com/content/news/drilling-into-young-oceanic-crust-for-subseafloor-observations-at-axial-seamount>
