Press Releases

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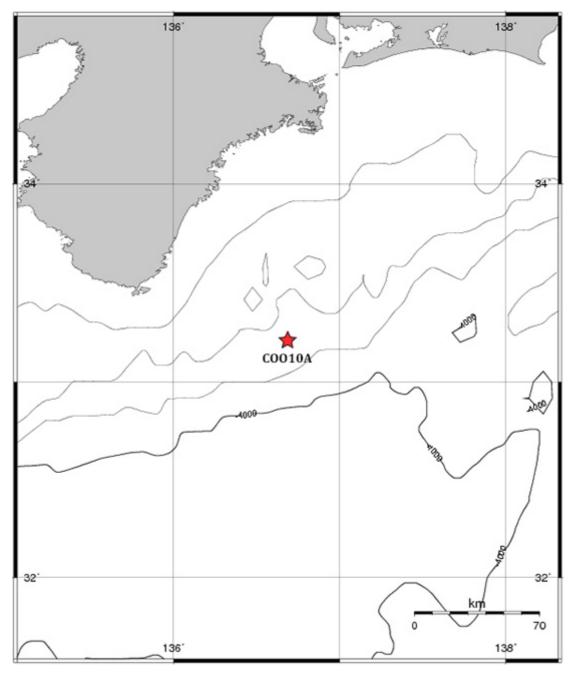
Chikyu International Ocean Discovery Program (IODP) Expedition 365: NanTroSEIZE Shallow Megasplay LTBMS

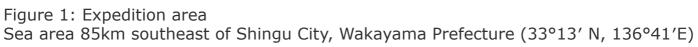
The IODP (International Ocean Discovery Program)^{*1} Scientific Expedition 365, "NanTroSEIZE Shallow Megasplay LTBMS" will be starting with the deep sea drilling vessel, *Chikyu* at the Japan Agency for Marine-Earth Science and Technology (JAMSTEC: Asahiko Taira, President) from March 26 to April 27 in 2016 at Kumanonada, off Kii Peninsula (<u>figure 1</u>).

The NanTroSEIZE, Nankai Trough Seismogenic Zone Experiment is a complex ocean drilling project that will be conducted over several years with multiple expedition teams of scientists from all around the world. It attempts to drill, sample, and instrument the earthquake-causing, or seismogenic portion of Earth's crust, where violent, large-scale earthquakes have occurred repeatedly throughout history.

The IODP Exp 365, led by Co-chief Scientists Drs. Achim Kopf (MARUM, University of Bremen, Germany) and Demian Saffer (Pennsylvania State University, USA), will revisit Site C0010 first drilled and cased during IODP Exp 332. There the expedition will recover the temporary GeniusPlug observatory and replace it with a permanent long-term borehole monitoring system (LTBMS) observatory in the extended borehole. The LTBMS will then be later connected to the DONET undersea network to provide real-time data from the borehole. This will also complement the LTBMS installed at Site C0002.

*1 The International Ocean Discovery Program (IODP) is a multinational cooperative project started from October 2013. The scientific drilling vessel D/V *Chikyu* operated by Japan and the *JOIDES* Resolution by the U.S, and the option to charter mission-specific platforms by Europe are utilized for expeditions. It aims to shed light on global environmental changes, the earth's mantle and crust dynamics and tectonics, and the biosphere beneath the seafloor.





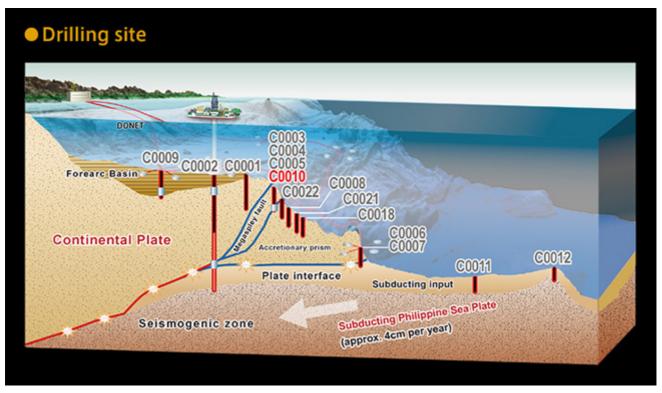


Figure 2: Drilling sites

The Sites from C0001 to C0012 have already drilled in this project. In this expedition, the Site C0010 will be drilled with deployment of a permanent long-term borehole monitoring system (LTBMS).

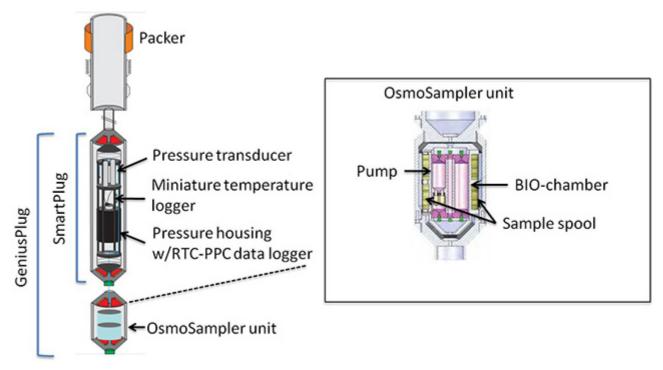


Figure 3: SmartPlug and GeniusPlug

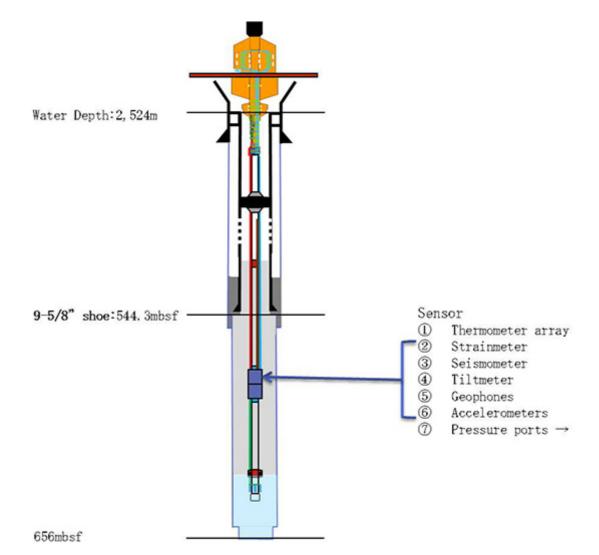


Figure 4: Long-term borehole monitoring system (LTBMS)

