



Call for Participation in IODP Exp 338:

NanTroSEIZE Stage 3 Plate Boundary Deep Riser – 2

CDEX/JAMSTEC

12 October 2011

CDEX currently plans to implement IODP Expedition 338: Plate Boundary Deep Riser – 2, beginning 19 September 2012. The expedition goal is to deepen Hole C0002F to ~3600 meters below the sea floor (mbsf). This riser hole, intended to access the plate boundary faults at an ultimate depth of 7000 meters, was already drilled and cased to 856 mbsf during IODP Expedition 326.

IODP NanTroSEIZE Complex Drilling Project

A Complex Drilling Project (CDP) such as the Nankai Trough Seismogenic Zone Experiment (NanTroSEIZE) Project comprises multiple expeditions over a several-year period. Expedition 338 will be the seventh NanTroSEIZE drilling expedition. The expedition will follow normal IODP rules for designation of co-chief scientists, scientific staffing, and IODP Sample, Data and Obligations Policy that defines data moratorium, data access and publication responsibilities.

Scientific Objectives of the expedition

The Expedition 338 objective is to sample the deep interior of the accretionary complex in the midslope region beneath the Kumano forearc basin; using both core samples and drill cuttings, to perform downhole stress orientation/magnitude, pore pressure, permeability, and collect an extensive suite of LWD and wireline logs to characterize the formation, including a planned zero-offset vertical seismic profile. This is a major part of the long-term effort to drill a deep riser hole into the plate boundary fault system. For further details about the science plan, please read the Expedition 338 fact sheet (<http://www.iodp.org/expeditions/>).

Operation Plan

Operations planned for this expedition include:

- Riser drilling, with continuous cuttings and mud gas analysis beginning from the already-completed depth of 856 mbsf to the planned Total Depth (TD) for Exp. 338, currently ~3600 mbsf,
- Coring of several hundred meters at intervals deep within the inner wedge accretionary complex,
- LWD and wireline logging, accompanied by downhole stress, pore pressure and permeability tests,
- A zero-offset vertical seismic profile (Z-VSP).
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Expedition Schedule

Current plans have the expedition beginning on 19 September 2012, and finishing on 31 January 2013. This would allow approximately 127 days of offshore operations (plus transit to and from port as well as port call). The initial Science Party group (see “Science Party” below) will board *Chikyuu* from dockside at the Port of Shingu, and the final group will disembark on 31 January at the same port. This schedule is subject to change. Updates and



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<http://www.jamstec.go.jp/chikyuu/>



the latest information can be found on the CDEX website (<http://www.jamstec.go.jp/Chikyuu/eng/>).

Science party

Because of the long duration of this expedition, the full Science Party will comprise several teams organized to participate for up to eight weeks each in a staggered schedule, as will Co-Chiefs and Expedition Project Managers (EPMs). Goals include conducting core and drill-cuttings analyses, wireline and LWD logging, and a vertical seismic profile. Mud-gas logging will be conducted by using a newly installed gas monitoring system. Specialties that will be required for the shipboard science party include sedimentology, structural geology, organic and inorganic geochemistry (including mud gas monitoring), microbiology, physical properties, micropaleontology, paleomagnetism, well logging analysis, and core-log-seismic integration specialists.

Nobu Eguchi
CDEX Expedition Manager

Table 1. *D/V Chikyuu* Schedule for Exp. 338

Exp. #	Exp. Name	Schedule	Duration (on site)	Co-chief Scientists	EPM
338	NanTroSEIZE Stage 3; Plate Boundary Deep Riser -2	19 September 2012 – 31 January 2013	127 days	Brandon Dugan Kyu Kanagawa Greg Moore Michi Strasser	Sean Toczko TBD

Above schedule is subject to change.

The schedule includes transit and portcall, actual operation on site is appeared in duration column.