



## Bringing Chikyu to your front door

Nobu Eguchi and Cdex Outreach team  
JAMSTEC, CDEX, Japan (neguchi@jamstec.go.jp)

The Center for Deep Earth Exploration (CDEX) has an outreach team that promotes DV Chikyu activities, in booth exhibitions at scientific conferences, lectures at schools, producing expedition videos, collaboration with scientific museums, and other general outreach activities to the public. At this EGU session, I would like to focus on two of our main outreach activities in last few years, and also touch on a plan for future.

Several DV Chikyu IODP Expeditions videos have been made in the past, however they are all in Japanese, and by now, well known in the international community. In 2016, we contracted ScienceMedia, a Dutch media company, to create DV Chikyu IODP Expedition promotion videos for Exp. 365 (NanTroSEIZE Shallow Megaspall Long-Term Borehole Monitoring System) and Exp. 370 (T-Limit of the Deep Biosphere off Muroto). For Exp. 365, the video team embedded with the science party for the entire expedition, producing five video episodes. For Exp. 370, the team stayed onboard for two weeks, and visited the shore-based science team and labs, creating two promotional videos. The response to these videos by the international community and public has been fantastic, as they've made the challenging science and scientists working aboard DV Chikyu for IODP more accessible and understandable than before. We plan to continue this video campaign for IODP Exp. 358 (NanTroSEIZE Deep Riser Drilling: Nankai Seismogenic/Slow Slip Megathrust), the final stage of the NanTroSEIZE complex drilling project, which aims to drill 5,200 meters below the sea floor to log and sample the Nankai megathrust/Plate boundary.

In 2017, JAMSTEC, in partnership with the National Museum of Nature and Science in Tokyo presented a large scale scientific exhibition "Deep Ocean 2017" that covered all research of the deep ocean, from marine biology to natural resources. CDEX prepared exhibits demonstrating DV Chikyu's deep sea operation capabilities, mainly based on our experience from IODP Exp. 343 (Japan Trench Fast Drilling Project: JFAST). This was CDEX's first large-scale public exhibition showing DV Chikyu's activities. In addition to several panel exhibits explaining the project, CDEX exhibited real core of the fault zone, actual drill pipes, drill/core bits, and temperature loggers, and a mock-up of the driller's house. CDEX also displayed a scale model of what operating in 7,000 m water depth to a plate boundary fault looks like. The exhibition ran for 79 days and was a great success with 617,062 total visitors (average of 7,811 people/day).

During IODP Exp. 380 (NanTroSEIZE Frontal Thrust Long-Term Borehole Monitoring System), CDEX will simultaneously conduct the Core-Log-Seismic Integration at Sea Program. CDEX opened a call to study the role of the Nankai Frontal Prism in past tsunamigenic earthquakes and slow slip using previously collected LWD data and cores with 3D seismic data onboard with 6 lecturers. CDEX and the Program organizers selected 14 of 18 applicants from ECORD, US, and Japan. This is a new page in CDEX's educational efforts, and we look forward to a successful program and expedition.