[S-CG67_2AM2] Ocean Floor Geoscience

Convener: *Kyoko Okino (Ocean Research Institute, University of Tokyo), Keiichi Tadokoro (Research Center for Seismology, Volcanology and Earthquake and Volcano Research Center, Nagoya University), Osamu Ishizuka (Institute of Geoscience, Geological Survey of Japan/AIST), Tomohiro Toki (Faculty of Science, University of the Ryukyus), Narumi Takahashi (Earthquake and Tsunami Research Project for Disaster Prevention, Japan Agency for Marine-Earth Science and Technology), Chair: Tomohiro Toki (Faculty of Science, University of the Ryukyus), Kyoko Okino (Ocean Research Institute, University of Tokyo)

Fri. May 2, 2014 11:00 AM - 12:45 PM 418 (4F)

Ocean Floor Geoscience session covers a broad range of research on seafloor such as mid-ocean ridge process, subduction dynamics, arc magmatism, hot spot and LIPs, crustal movement and structure etc. Every field of researches and every approaches are welcomed. The session aims to encourage discussion among scientists from different study fields and to integrate our understanding of ocean floor.

12:00 PM - 12:15 PM

[SCG67-P14_PG] General remarks of velocity structures of the Ogasawara Plateau, revealed by the Continental Shelf Survey of Japan

3-min talk in an oral session

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Keywords: velocity structure, Ogasawara Plateau, seismic experiment

Japan Coast Guard conducted seismic refraction surveys with OBSs and multi-channel seismic surveys over more than 10 survey lines on the Ogasawara Plateau which is located on the Pacific Plate, close to a plate boundary to the Philippine Sea Plate. Analysis of these seismic data in 2006-2007 revealed that 1) the Ogasawara Plateau collide and partly accreted with the Philippine Sea Plate, 2) crustal thickness of the Ogasawara Plateau is approximately 25 km, close to that of the Izu-Ogasawara Arc, and 3) low velocity structure in lower crust extends below flat seafloor to the south-east to the plateau. Recently, re-analyzing of the data by utilizing various later phases and MCS profiles revealed more detailed velocity structure of 1') plate boundary between the Pacific Plate and the Philippine Sea Plate, 2') under plating below the Ogasawara Plateau and 3') low velocity structure distributing around the plateau.