

P-wave velocity structure of the margin in the southeastern Tsushima Basin, Japan Sea using ocean bottom seismometers and airguns

Takeshi Sato[1], Toshinori Sato[2], Masanao Shinohara[3], Ryota Hino[4], Minoru Nishino[4], Toshihiko Kanazawa[5], Chiaki Igarashi[6]

[1] Sci. and Tech., Chiba Univ., [2] Chiba Univ., [3] ERI, Univ. Tokyo, [4] RCPEV, Tohoku Univ., [5] ERI, Tokyo Univ, [6] ORI Univ. of Tokyo

The Tsushima Basin is located in the southwestern Japan Sea. There is no seismic experiment using ocean bottom seismometers (OBSs) in the margin of the southeastern Tsushima Basin, so that the crustal structure in this area hasn't been revealed yet. It is important for study of the formation of the Japan Sea and Tsushima Basin to obtain a detailed seismic structure of this area. In 2000, we carried out a seismic refraction experiment using OBSs and airguns. Record sections of OBSs in the basin and the continental shelf area show the first arrival with apparent velocity of 5.6-5.8km/s and reflection waves from Moho (PmP). They are observed at offset distances of more than 20km and 50km in OBSs of the basin side and 50km and 60km in the continental shelf side, respectively.