

General remarks of velocity structures of the Ogasawara Plateau, revealed by the Continental Shelf Survey of Japan

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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.

Keywords: velocity structure, Ogasawara Plateau, seismic experiment