

Spatial distribution of sedimentary structure in the Izu-Ogasawara forearc area by seismic reflection data

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Multi-channel seismic (MCS) reflection experiments were carried out to investigate crustal structures of oceanic island arc and a process of crustal growth in the Izu-Ogasawara island arc by Japan Agency for Marine-Earth Science and Technology (JAMSTEC). Our experiments have two characteristics: one can obtain depth section applied multiple suppression processing by using a 204-channel hydrophone streamer cable and a large volume airgun array with a total capacity of 12,000 cubic inches, the other can relatively compare about the sequence of reflector and the property of wave amplitude, because data acquisitions are the same specification in our survey. In particular, the forearc area can be interpreted spatial distribution of sedimentary structure by comparison with results of ODP Leg 125 and Leg 126.

We report spatial distribution of sedimentary structure in the Izu-Ogasawara forearc area by seismic data processing and data interpretation.