

Heterogeneity structure in Nankai trough, off Shikoku, using airguns and OBSs with high density profile deployment(2)

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In summer of 1997 seismic refraction survey has been carried out at continental slope in Nankai trough, off Shikoku, using controlled sources and Ocean Bottom Seismometers (OBSs) with high density profile deployment. The purpose of this experiment is to investigate heterogeneity of crustal structure in the vicinity of plate boundary. We obtained detailed two-dimensional velocity structure models under a total of six profiles. From obtained structures, three-dimensional heterogeneity was estimated. As a result of this study, crustal structure has heterogeneity. We suggest that thickness of 5.2km/s layer correlates with thickness of 3.5km/s layer, depth of plate boundary and topography ocean floor.