Wave forms and noise spectrum obtained by the cable OBS on the Izu-Bonin Trench slope

Junzo Kasahara [1], Toshinori Sato [2]

[1] Earthq. Res. Inst., Univ.Tokyo, [2] ERI, Univ. Tokyo

In 1997, a cable ocean bottom seismometer system (IZU) was installed at 2,800m deep of the forearc slope of the Izu-Bonin Trench. The system has 3-component accelerometer set and single hydrophone. Several characteristic wave forms and noise spectrum are shown. Earthquakes near Torishima and Niijima show large amplitude surface waves. Noise spectrum for four sensors show 3 second-peak and the lowest noise level at 10-20 seconds. Noise waveforms of hydrophone and vertical accelerometer show good resemblance. S-wave polarize anisotropy was observed for a few earthquakes.