Long Term Observation by Ocean Bottom Seismometer Array on Trans-PHS Profile

Hajime Shiobara[1], Hiroko Sugioka[2], Shinji Yoneshima[3], Masashi Mochizuki[4], Shuichi Kodaira[5], Ryota Hino[6], Masanao Shinohara[7], Toshihiko Kanazawa[8]


As a part of the Ocean Hemisphere network Project, we have started a long term ocean bottom seismic observation along the trans-Philippine Sea profile from Nov. 1999 until July 2000 to record body waves of far events occurred on the elongation of this profile, which has about 2800 km length, starts near the Amami Ohshima Is. and passes through the Saipan Is. We deployed 15 long term ocean bottom seismometers with a semi broad band sensor (WB203LP, PMD), and titanium hemispheres (D=50cm) are used as the housing for anti-corrosion and large buoyancy, those are necessary for long term observations more than 250 days. The data is recorded continuously on four 2.5 inch 6.5 GB HDDs. This data will increase the resolution of inhomogeneous mantle structure beneath the west Pacific.