Experimental Observation by a Broadband Ocean Bottom Seismometer at the Sagami Bay

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An important key point for success of the Ocean Hemisphere network Project lies in deployment of mobile broadband seismic observatories on the sea floor of the western Pacific. In this presentation, we report an experimental observation by a broadband ocean bottom seismometer (OBS) at the Sagami Bay in 1998. It is composed of two titanium spheres, one for a sensor and another for a recorder. After it was free fallen from the sea surface, a submersible moved it to a final location. It is designed as a self pop-up type and safely recovered. We tested the acoustic link between the sea surface and the OBS. Due to mechanical trouble with the sensor leveling unit, we could not get seismic data. But, we experienced and developed a method of deployment of the OBS and the acoustic link.