Seismic activity near the north Ryukyu trench obtained from ocean bottom sesmographic data

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In 1995, microearthquake observation was conducted with the use of 13 ocean bottom seismographs (OBSs) near Tanega-shima during two months. The observation area is located about 100km landward of the Ryukyu Trench which is boundary of the Philippine Sea Plate and the East China Sea. The OBS data revealed hypocenters near Tanega-shima finely. Their depths determined by Japan Meteorological Agency (JMA) are below 30km, on the contrary, determined by this study are almost under 30km. This shows the hypocenters of JMA have systematic error of in this region due to heteorogeneious velocity structure. We infer shallow earthquakes are caused by strong inhomogeneous effected subduction of the Philippine Sea Plate.