## Seismic activity at Suiyo Seamount, Izu-Ogasawara (Bonin) Arc, in 2003

# Yuichi Nishimura[1]; Azusa Nishizawa[2]; Mariko Sato[3]; Masaya Suzuki[4]

[1] Inst. Seismology and Volcanology, Hokkaido Univ.; [2] Hydrogr. & Oceanogr. Dep., JCG; [3] Hydrographic Dept.; [4] Clover tech Inc.

Suiyo Seamount is an active submarine volcano at Izu-Ogasawara (Bonin) Arc. Six ocean bottom seismographs (OBSs) were deployed in and around the summit crater region of Suiyo Seamount in order to investigate local seismic activity beneath the volcano. During about five days from Dec. 5 to Dec. 9, 2003, we observed 72 small earthquakes. The seismic activity was characterized by burst of the events. A remarkable burst was observed in Dec. 6: 34 events occurred in 70 minutes. Hypocenters were determined by referring the shallow velocity structure obtained by the 2001 Airgun-OBS experiment. Preliminary result shows that the most events are characterized by S-P times of 0.7 sec. at the summit stations and located at depths of around 5 km beneath Suiyo Seamount. Typical volcanic tremor or low-frequency earthquake were not registerd during the observation period.