

## Seismicity at Suwanosejima Volcano in October 1998

# Kiyoshi Nishi [1], Masato Iguchi [2], Takeshi Tamekuri [3], Jun Oikawa [4], Fumio Masutani [5], Hiroaki Katoh [4], Hiroshi Yakiwara [6], Syuichiro Hirano [7], Hiroshi Shimizu [8], Hiromitsu Oshima [9], Minemori Sato [10]

[1] Sakurajima Volcano Res. Center, DPRI., Kyoto Univ, [2] SVO, [3] Earth and Planetary Sci., Kyoto Univ, [4] ERI, Univ. of Tokyo, [5] Earthquake Research Institute, Univ. of Tokyo, [6] Nansei-toko Obs. for Earthquakes and Volcanoes, Kagoshima Univ, [7] Nansei-Toko Obs. for Earthquakes and Volcanoes, Kagoshima Univ, [8] Shimabara Earthq. and Volcano Observatory, Kyushu Univ, [9] Earth and Planetary Sci., Hokkaido Univ, [10] Research Center for Prediction of Earthquakes and Volcanic Eruptions, Tohoku Univ

A temporal seismic observation was carried out at Suwanosejima volcano in October 1998 for 10 days.

Two sets of short period seismometers and five sets of broad band seismometers were installed in the region of SSW to SSE from the crater. The distances of the seismometers from the crater ranged from 0.4 to 4 km.

The activity of B type earthquake was very low. Volcanic tremor associated with fumarolic activity was observed. The spectrum of this tremor is characterized by many peaks between 1 to 6 Hz. During the observation period, earthquake swarm of A type earthquake occurred.

The hypocenters of earthquakes are located at the southern rim of U shaped caldera and focal depths are 1 to 3 km under the sea level. Volcanic activity increased gradually after this earthquake swarm.