

Recent Seismicity of Miyakejima Volcano

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The seismicity of Miyakejima volcano was very active during the eruption from June through August 2000, but small earthquakes have been still occurring. The epicenters locate in and around the summit and in the north-west area of the island and the depths are about several km, although hypocenters were not determined precisely. Volcanic tremor associated with the gas emission has been observed continuously but the amplitude is small. The tremor level became cyclically high and low about every 20-30 minutes in November. Since December, rather large amplitude tremors have been observed. And small low frequency earthquakes have been also observed.

The seismicity of Miyakejima volcano was very active during the eruption from June through August 2000, accompanied by remarkable crustal deformation in the island. Since September, according as the eruptive activity became weak, the seismicity became inactive clearly in and around Miyakejima island. Since the middle of September, no earthquakes above JMA seismic intensity 1 and over seismic magnitude 3.0 have occurred until February 2001. However, small earthquakes have been still occurring about 10 times a day. The epicenters locate in and around the summit and in the north-west area of the island and the depths are about several km, although hypocenters were not determined precisely because of poor observation condition.

Volcanic tremor associated with the gas emission has been observed continuously but the amplitude is small. The tremor level became cyclically high and low about every 20-30 minutes in November. Since December, rather large amplitude tremors have been observed. Some of them were accompanied with small infrasonic waves and the amplitude ratios at the station near the crater were larger than those of the continuous tremors and are considered as collapses in the summit crater. Small low frequency earthquakes have been also observed. These mechanism is not clarified yet.