

The seismic activity patterns after small eruption at Miyakejima on December 2, 2004

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At Miyakejima, we observed four similar seismic activity patterns which finished with large BL earthquake after BH swarms during a few hours. We report some characteristics of these seismic activity patterns.

At Miyakejima, the seismic activity had been characterized by constant occurrence of BH earthquakes since summer season in 2002. But the number of volcanic earthquakes gradually reduced after small eruptions on December 2 in 2004. All swarms finished with a few large felt BL earthquakes with small air-shocks. We observed four similar seismic patterns so far. We observed no plume changes during the occurrence of swarms. In the case of December 2, 2004, the situation was different from other swarms. After a felt-BL earthquake with gray smoke at 16:45, seismic activity continued till December 3. We have no ground deformation (GPS) related to the seismic activity.

We argue over the seismic activities at Miyakejima since 2000. And we examine the differences among seismic activities in other volcanoes such as Mt. Asamayama and Mt. Sakurajima.