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Recent volcanic activity of Unzen volcano

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Unzen volcano that made the volcanic activity, such as lava dome and pyroclastic flow in 1990-1995, the volcanic activity on the surface is followed by a calm situation. However, seismic activity just below Fugendake is gradually activated for the last few years, change has appeared in its activities.

After growth arrest of lava dome, it was state for a while less occurrence of volcanic earthquakes. However, since 2008 in 1km B. S. L. near the Fugen, a small earthquake with seismic magnitude -1 to 0 occurs in two to three times the frequency of the past. In recent years, the number of volcanic earthquakes magnitude from 0 to 1 increases.

Previously the temperature of the fumarole gas lava dome had been steadily reduced. However, the measurement in November 2014 fumarole temperature increases 5 to 10 degrees, the amount of gas fumarole is large.

In the leveling route of the west bank of Shimabara Peninsula, is progressing sedimentation during few years. Supply of magma from deep underground has stopped.

The results of the GPS observations Meteorological Research Institute has conducted, lava dome has continued to shrink, old mountain upper body directly under its also seen a contraction trend.

Given From the above, supply of magma from deep under the Chijiwa bay has stopped. Lava dome on the surface of Fugendake also is progressing steadily cooling. However, directly under the sea under the depth 1km Fugen is, volcanic earthquakes have increased by some volcanic activity. Fumarole temperature of the dome is slightly increased and amount of fumarole is so large, some activity in this depth 1km there is a possibility that effect.

Keywords: Unzen volcano, Volcanic earthquake, Leveling survey, fumarole gas temperature, lava dome