Recent activity of Miyakejima Volcano(10)

Hirohito Naito[1]

[1] Volcanological Division, JMA

1. Introduction

Miyakejima volcano has been emitting a huge amount of volcanic gas (SO2) and small eruptions occurred 4 times in the end of 2004 after an interval of 2 years. The evacuation order has been removed but Miyakejima volcano is still active. 2. Eruption

Small eruptions with low frequency earthquakes, air shocks and a little ash fall near the coast occurred on Nov30, Dec2, Dec7-8, Dec9 in 2004.

3. Volcanic Gas Emission

The SO2 emission rate was over 70,000 ton/day in 2000 fall. After then it decreased gradually until 2002 summer. From 2002 fall to 2004 summer, it kept 3,000 - 10,000 ton/day and now it is 2,000 - 5,000 ton/day.

4. Temperature in the Crater

The maximum temperature in the summit crater was often over 450 degrees until the beginning of 2002 and reflected grow was sometimes observed from the foot. But it is dropping and the area of high temperature in the crater is reduced year by year.

5. Seismicity

The number of high frequency and low frequency earthquakes below the summit crater decreased by 2002 fall. In stead of them, the intermediate-low frequency earthquakes increased. When and after the small eruptions occurred in the end of 2004, the low frequency earthquakes increased again. They often occurred without eruptions. The number of intermediate-low frequency earthquakes decreased after the eruptions but sometimes increased in short time.

The amplitude of continuous volcanic tremor has been almost same for 2 years.

6. Crustal Deformation

The GPS observation shows that deflation of Miyakejima has been continued. But the deflation rate becomes lower.