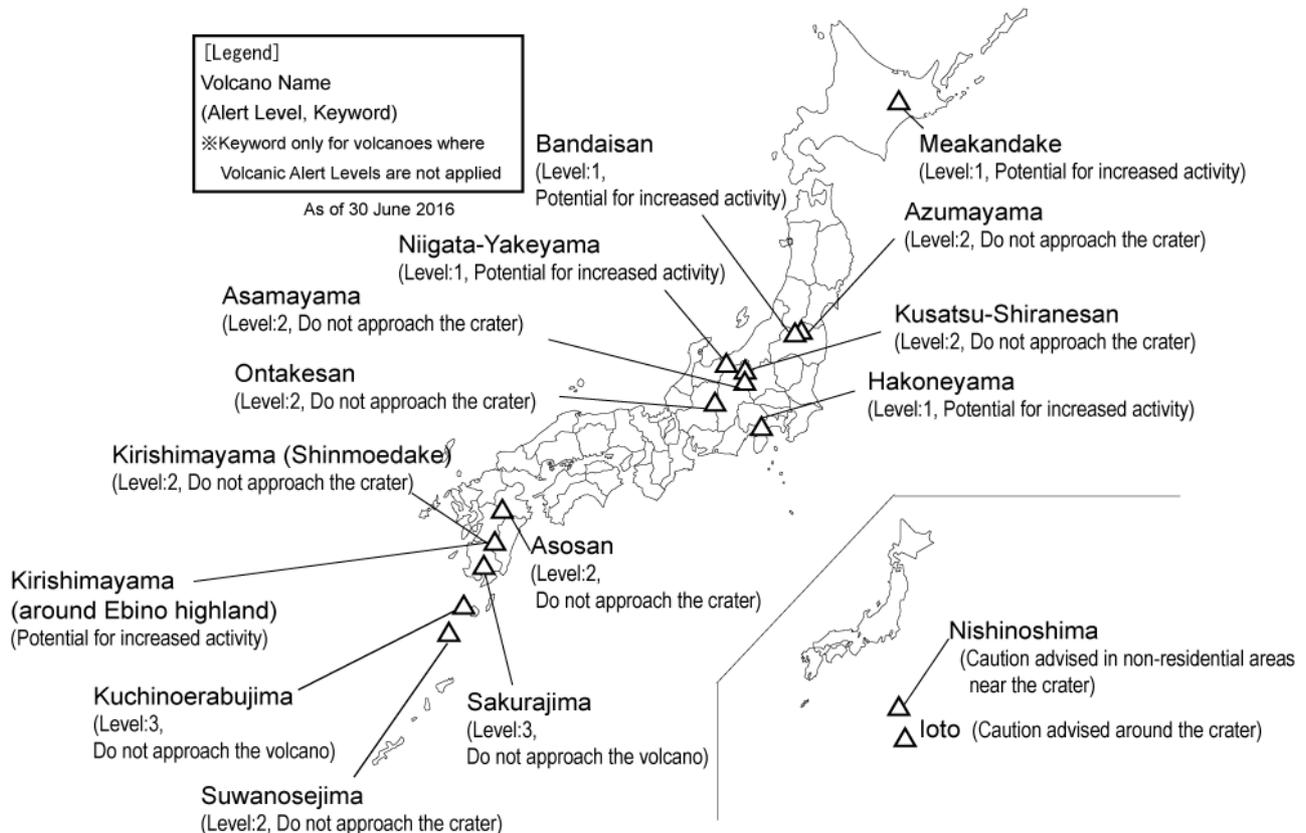


# Monthly Volcanic Activity Report (June 2016)

Japan Meteorological Agency



## Meakandake (Alert Level: 1)

A small-amplitude short-duration volcanic tremor occurred at around 10:59 on 21 June 2016. The situation regarding plumes associated before or after the volcanic tremor could not be seen due to the presence of clouds. However no volcanic earthquakes have been recorded, and low-frequency microphone records and ground deformation indicate no remarkable changes.

No remarkable changes were seen in volcanic activity and no signs of eruption were observed.

In recent years, increased volcanic seismicity, decreased geomagnetic total intensity indicating high hydrothermal activity in shallower parts and increased plume emission from the 96-1 crater were showed.

## Azumayama (Alert Level: 2)

Fumarolic activity in and around the Oana crater has remained at relatively high levels.

The potential for small eruptions around the Oana crater remains.

## Bandaisan (Alert Level: 1)

Volcanic seismicity temporarily increased on 10 June, when 53 volcanic earthquakes occurred. However no remarkable changes were seen in other volcanic activity and no signs of eruption were observed.

## Kusatsu-Shiranesan (Alert Level: 2)

Thermal activity remains on the northeastern side and the northern wall of the Yugama crater and on the north-to-northeastern slope of the Mizugama crater. According to the Tokyo Institute of Technology, compositions of gas in a fumarolic area to the north of the Yugama crater and the chemical composition of water in the crater have shown changes indicating ongoing increased volcanic activity, and the water temperature in the crater has

remained higher than normal.

### **Asamayama (Alert Level: 2)**

Weak volcanic glows visible only at night with a high-sensitivity camera were observed at the summit crater almost every day from 6 to 12 June 2016.

The number of imperceptible volcanic earthquakes in very shallow parts immediately under the summit crater has remained relatively high, and volcanic activity is now quite high as a result.

The potential for small eruptions affecting areas around the crater remains.

### **Niigata-Yakeyama (Alert Level: 1)**

Plume height from the fumarole on the eastern slope of summit has relatively high since summer 2015 and the volume of plume has shown an increasing trend since late December 2015. Continuous GNSS observation data has showed the extension of the baseline across Niigata-Yakeyama from January 2016.

After increasing on 1 May volcanic seismicity has declined since 2 May, but has remained at relatively higher level after 2015 than those observed before 2014.

### **Ontakesan (Alert Level: 2)**

No eruptions have been recorded since October 2014, indicating a declining trend in volcanic activity. The potential for small eruptions remains as plume activity from a line of craters and seismic activity have been ongoing.

### **Hakoneyama (Alert Level: 1)**

Fume heights have remained up to 400 m in the area around Owakudani.

Volcanic seismicity has remained at low levels. No remarkable changes have been seen in data of ground deformation.

However, fumarolic activity on some fumaroles around the Owakudani has remained at high levels.

### **Nishinoshima (Near-crater Warning)**

Eruptions with projectile ejections and lava flows occurred frequently from November 2013 onward, but no eruptions or lava flows have been observed since late November 2015. Ground surface temperature has remained low since December 2015. According to Japan Coast Guard, very little fumes except white fumes emissions on April and May 2016 from the crater were observed.

As clear volcanic activity has declined to low levels, the potential for eruptions is considered low. However, volcanic gases and plumes were occasionally observed and the potential for small eruptions cannot be eliminated.

### **Ioto (Near-crater Warning)**

Volcanic seismicity has remained at relatively high levels.

Continuous GNSS measurement showed repeated rising trend and static state. The rising trend has been larger in the northern area of the island since 2014.

### **Asosan (Alert Level: 2)**

No eruption has been recorded at the Nakadake No.1 crater since the very small eruption on 1 May.

Amplitudes of volcanic tremors remained relatively large from 3 June to 9 and after 24 June. Volcanic seismicity remained at low levels and the number of isolated volcanic tremors has remained generally at high levels.

Small eruptions were occasionally observed at the Nakadake No.1 crater. Accordingly, the potential for small eruptions affecting areas around the crater remains.

### **Kirishimayama (Shinmoedake) (Alert Level: 2)**

Volcanic earthquakes occasionally occurred around Shinmoedake.

According to continuous GNSS measurement data, ground deformation indicating deeper magma chamber inflation at several kilometers northwest of Shinmoedake stopped around January 2015. A slight extension had been observed along some baselines around Shinmoedake since May 2015, but it stopped in around October 2015.

Small eruptions may occur at the Shinmoedake crater affecting the area around the crater.

### **Kirishimayama (around Ebino Highland) (Potential for increased activity)**

Fumarolic activity around the Ebino highland has remained.

### **Sakurajima (Alert Level: 3)**

During this reporting period, one of four eruptions at the Showa crater observed were explosive and an eruption occurred at the Minamidake summit crater.

Volcanic activity has remained at high levels and data from ground deformation observation show that expansion of the Aira Caldera has continued. The data collected may indicate the potential for volcanic activity at even higher levels.

### **Kuchinoerabujima (Alert Level: 3) Alert level downgrade from 5 to 3 on 14 June**

No eruption has been observed after the very small eruption on 19 June 2015.

No volcanic glows were observed. Thermal infrared observation showed that the temperature around a fissure to the west of the Shindake crater remained low.

Volcanic seismicity near the Shindake crater remained at relatively lower levels than that of before the eruption on August 2014. No volcanic tremors were observed.

The tendency of slight baseline contraction across the Shindake crater seen since around January 2016 became even clearer in May 2016. The expanding trend of Shindake seen after an eruption in May 2015 turned to a trend of contraction.

Amounts of volcanic gas (SO<sub>2</sub>) emissions have been at 50 – 200 tons a day after January 2016, which was significantly lower than that before and after the eruption of May 2015.

Accordingly, considering that the potential for eruptions on the scale of the one that occurred on 29 May 2015 has been further low, JMA issued a Near-crater Warning at 18:00 on 14 June, lowered the Volcanic Alert Level from 3 (Do not approach the volcano) to 2 (Do not approach the crater) and canceled a Volcanic Warning (sea area).

Amounts of volcanic gas (SO<sub>2</sub>) emissions have remained at high levels before the eruption on August 2014, the potential for eruptions that may affect non-residential areas near the crater remains.

### **Suwanosejima (Alert Level: 2)**

Eruptions occurred occasionally at the Otake crater.

The potential for eruptions affecting areas around the crater remains.