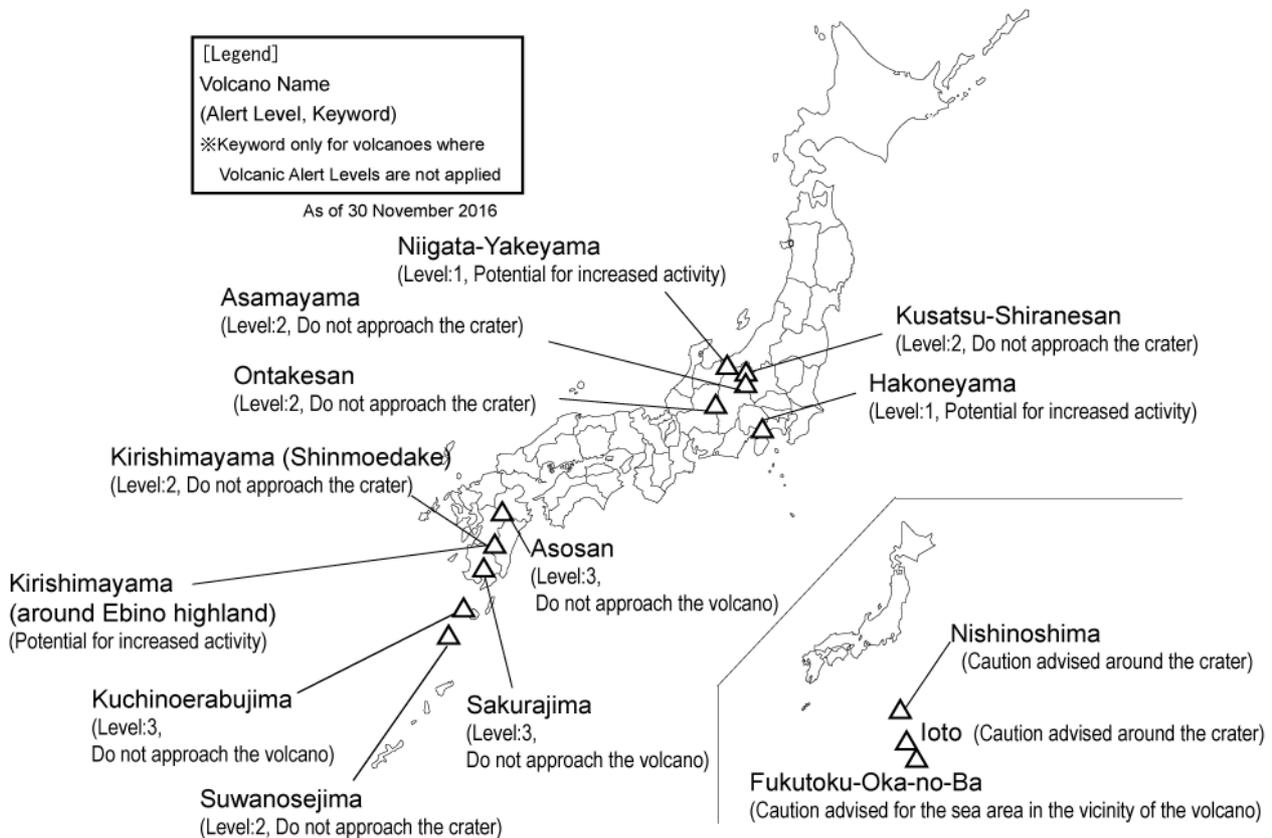


Monthly Volcanic Activity Report (November 2016)

Japan Meteorological Agency



Kusatsu-Shiranesan (Alert Level: 2)

Thermal activity on the northeastern side and the northern wall of the Yugama crater and on the north-to-northeastern slope of the Mizugama crater, and fumarolic activity on the fumarolic area around the northern part of Yugama remain high. 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.

Volcanic activity was relatively high from March 2014. Observations of volcanic seismicity, ground deformation and geomagnetic total intensity have shown data indicating decline of volcanic activity since 2015. Compositions of gas and water in the Yugama crater continue to indicate increasing volcanic activity.

Asamayama (Alert Level: 2)

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. Volcanic ash fall associated with very small eruptions were revealed on May and July.

Continuous GNSS observation data has showed the extension of the baseline across Niigata-Yakeyama from January 2016. However it stopped around early July.

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

Ontakesan (Alert Level: 2)

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

Hakoneyama (Alert Level: 1)

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)

Although volcanic activity is declining, thermal areas near the crater have been observed. The potential for small eruptions caused by sea water flowing into the volcanic vent cannot be eliminated.

Ioto (Near-crater Warning)

Volcanic seismicity has remained at relatively low levels except for a temporary increase from 3 to 4 November.

Continuous GNSS measurement showed repeated rising trend and static state. Data from ground deformation observation indicated inflation under the southern side of the island beginning on 3 November, but the change was small from 6 November onward.

Fukutoku-Oka-no-Ba (Near-sea-area Warning)

According to observations conducted by Hydrographic and Oceanographic Department/HOD, 3rd Regional Coast Guard Headquarters, the Japan Maritime Self Defense Force (JMSDF) and JMA so far, discoloration or other anomalies have frequently been identified in the water surrounding Fukutoku-Oka-no-Ba in recent years. These are considered to stem from volcanic activity.

Asosan (Alert Level: 3)

No eruption has been recorded since the eruption on 8 October 2016.

Amounts of volcanic gas (SO₂) emissions have remained high at 2,100 – 3,300 tons a day. Volcanic glows visible only at night after 12 November with a high-sensitivity camera was occasionally observed at the crater. This was the first volcanic glow since 26 April 2015. Field surveys conducted on 16 November by the Graduate School of Science at Kyoto University revealed a green lake in the Nakadake No.1 crater and red-hot areas on a part of the southern wall of the crater.

Amplitude of volcanic tremors has generally remained small. The number of isolated tremors remained at low levels and volcanic seismicity remained at relatively high levels.

The results of continuous GNSS measurement showed slight baseline extension indicating expansion of the volcano from around July 2016 onward, slowing from mid-October onward.

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) (Alert Level: 1)

The area of thermal anomalies with fumarolic activity near the Ioyama crater was observed, but no remarkable

changes in fumarole temperature or volume were observed.

Sakurajima (Alert Level: 3)

No very small eruptions were observed at the Sakurajima. Volcanic seismicity remained at low levels and no volcanic tremors have been recorded. Amounts of volcanic gas (SO₂) emissions have been low.

Volcanic activity at the Showa crater and the Minamidake summit crater has declined to low levels since August 2016. However, data from continuous GNSS measurement show that magma chamber inflation under the Aira Caldera is ongoing. The data collected may indicate the potential for further volcanic activity at high levels. The rate of the inflation trend has been increasing since around January 2015.

Kuchinoerabujima (Alert Level: 3)

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

A total of 101 volcanic earthquakes occurred in November, which was relatively higher than that in October, with 69 seismic events recorded.

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

Amounts of volcanic gas (SO₂) emissions have been at 60 – 200 tons a day.

The potential for eruptions on the scale of the one that occurred on 29 May 2015 is low, but the potential for eruptions remains as amounts of volcanic gas (SO₂) emissions have been at relatively higher levels than that of before the eruption on August 2014.

Suwanosejima (Alert Level: 2)

Volcanic activity has remained at high levels with eleven explosive eruptions occurred at the Otake crater.

The potential for eruptions affecting areas around the crater remains.