Izu-Oshima [Alert Level : 1]

Seismicity in the shallow parts in and around Izu-Oshima has been higher than before since July 2010. Landwide inflation has been detected since late May according to the observation by GPS and strainmeter after the cease of deflation from fall 2009. GPS network of GSI (Geospatial Information Authority of Japan) and tiltmeter network of NIED (National Research Institute for Earth Science and Disaster Prevention) also showed the volcano inflation since May 2010. High seismicity synchronized with volcano inflation was seen in 2004 and 2007 also. They are considered to be due to magma intrusion to the deeper part of the volcano, but not to lead to an eruption imminently.

No remarkable change in surface phenomenon was observed.

Miyakejima [Alert Level : 2]

Gas-and-steam plumes rose to a height of 100-400m above the crater rim. The sulfur-dioxide flux varied from 500 to 1,600 t/d in October 2010 (cf. 1,100-1,600 t/d; August 2010). According to the report from Miyakemura village, high SO2 concentration was sometimes recorded in some inhabited flank areas. Seismicity persisted at low level since early September 2010.

There was no geomagnetic change reflecting inner heat state beneath Miyakejima.

GPS observation shows continuous deflation of the volcano originated from the shallow source.

Ioto [Near-crater Warning]

According to the observation by NIED, seismicity stayed at low level.

According to the GPS observation by GSI, landwide upheaval resumed on May 2010 that was first observed from August 2006 and ceased around October 2009. The extension of the baseline in NS direction is still
continuing, with a temporal acceleration from late September to early October accompanied by eastward deformation in the central part of the island

Fukutoku-Oka-no-Ba [Near-sea-area Warning]
Based on the information from the Japan Coast Guard, discolored area had been confirmed above the sea surface near the volcano.

Kirishimayama (Shinmoedake) [Alert Level : 2]
Seismic activity at Shinmoedake was relatively high during October. Gas-and-steam plumes rose to a height of 100m above the crater rim. GPS observation revealed no signs of crustal deformation caused by volcanic activity.

Sakurajima [Alert Level : 2→3]
No eruption activity was confirmed from 16 September to 6 October at Showa-crater; however explosive eruptions were above background level during 7-20 October. In October, eruptions occurred 14 times (cf. 47; September 2010), of which 13 times(cf. 38; September 2010) were explosive eruptions.
At the explosive eruption occurred at 2139(JST) on 13 October, volcanic projectile reached to about 1300m from the Showa-crater. Considering the occurrence possibility of the similar magnitude eruptions, JMA issued Near-crater Warming at 2235(JST) on 13 October, and raised the Alert level from 2 to 3.
There was no eruption at Minamidake summit crater.
Volcanic earthquakes activity remained at relatively low level, but volcanic tremor increased in late October.
The sulfur-dioxide flux elevated with an average of 1200-2100 t/d on October 2010(cf. 1000-1800 t/d; September 2010).
According to GPS measurement, the dilatation of the Sakurajima island turned into contraction or static state in about June. According to GPS measurement by the GSI, extension of the baselines that traverse Aira-Caldera ( at closed-off section of Kagoshima bay) decelerated in about July.

Satsuma-ajojima [Alert Level : 2]
White-plume activity at summit crater remained above background level through this term.
Seismicity stayed low, but occasionally increased on 28, 30 and 31 October.

Suwanosejima [Alert Level : 2]
Mainly inferred from seismic records, ash explosions occurred intermittently through this term. 24 explosive eruptions (cf. 16; September) occurred in October. Volcanic earthquakes and tremors remained at high level.