

Vertical movement at the southwestern slope of Mt. Hokkaido-Komagatake after the eruption in 2000.

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Hokkaido-Komagatake has no remarkable surface activity after its small eruptions in 1996, 1998 and 2000. In view of the recent wide range ground deformation and the interval between past large eruptions, it is thought that a large next eruption approaches steadily though it becomes 80 years from the large eruption in 1929.

After Hokkaido University set up the level route in the Hokkaido-Komagatake southwest mountain climbing road in 1985, the leveling survey has been repeated. A clear change was not seen before the eruptions of 1998 and 2000, though the mountain expansion was observed as an eruption sign for several years before the 1996 eruption.

A leveling survey through Hokkaido-Komagatake southwest mountain climbing road was carried out in July, 2008. It also made in September, 2006.

The abnormal change due to the 2003 Tokachi-oki earthquake was observed at the benchmarks on the alluvial plain around the volcano. But, there were no abnormal change at the bench marks on the mountain slope.

Gradual small subsidence continued at the bench marks in the vicinity of 'Roku-Goume' of the mountain climbing road, which was the nearest ones to the summit crater in the leveling route. At the other bench marks of the mountain climbing road, slight uplifts are detected. However, the amount is about 1mm or less, the same size as the measurement accuracy. Even if it is the maximum, it amounts to 1/4 or less of the change observed before the 1996 eruption.

We think about the possibility of the eruption in the future by considering the change after 2000 comparing with the former change, which was observed from 1985 to 1995 before the 1996 eruption. The results of the leveling surveys indicates no change due to the shallow pressure source like as the 1996 eruption source. This is also obvious from the results of the length measurements of the baselines, which were set up around the summit crater of the volcano in 1984 by Hokkaido University (after 2000, JMA has measured it).

On the other hand, from the results of the leveling surveys on the lower mountain slope, it is inferred that the magma accumulation in the deep pressure source is continuing steadily. This is also presumed from the results of the wide range deformation observations using the data of GEONET and others.

Therefore, the possibility of the eruption in near future is low. But in a mid/long term, the volcano is steadily progressing the preparation for the next eruption, and we should repeat the leveling every two or three years.

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