

Progress Report on the Satellite Analysis Group of the Coordinating Committee for Prediction of Volcanic Eruption

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Coordinating Committee for Prediction of Volcanic Eruption has established Satellite Analysis Group, to investigate by using the satellite data in volcanology. The first purpose of Satellite Analysis Group is to develop accurate methods for watch of the volcanic activity and tectonic activity by satellite data. Secondly, it is to grasp of the scale of eruption and to estimate the area of disaster by satellite data.

Satellite Analysis Group is participating in the disaster prevention experiment that used the observational data of the Advanced Land Observing Satellite(ALOS)'DAICHI' from March, 2007. And the group has been examining the volcanic activity evaluation approach by the satellite data.

The organization that participates in the disaster prevention experiment is as follows.

Japan Meteorological Agency (Meteorological Research Institute is included), Geographical Survey Institute, Japan Coast Guard, Hokkaido University, Tohoku University, The University of Tokyo, Nagoya University, Kyoto University, National Research Institute for Earth Science and Disaster Prevention, National Institute of Advanced Industrial Science and Technology, Public Works Research Institute, Iwate Prefecture, and Earth Observation Research Center. In this experiment, we received technical support by the offer of the satellite data and the training of the method for analyzing from Japan Aerospace Exploration Agency.

The crustal change that related to the volcanic activity was detected from interference SAR analysis that used the PALSAR data of ALOS in Unzendake, Ioto, Azumayama and Meakandake. The geographical features change in some measure crater and the fumarolic activity and the discolored areas of submarine volcano have been extracted by AVNIR-2 and PRISM that was optical sensor.

In this lecture, we reports on the result of the disaster prevention experiment of two years.