

Detection of the volcano-magnetic change using the repeated aeromagnetic data.

Mitsuru Utsugi[1]

[1] Kyoto Univ.

The repeated aeromagnetic survey is one of the promising techniques to inspecting the temporary geomagnetic change caused by shallow crustal activities, such as volcanic eruption.

To detect such a small geomagnetic change, we have to extract high accuracy 3D distribution of the geomagnetic field from the aeromagnetic data which is a spatially limited set of observation

data. However, there is a difficulty in the evaluation of the magnetic field distribution because of short wavelength geomagnetic anomaly.

In this study, we will present new idea to estimate the geomagnetic distribution and extract the temporary field change using repeated aeromagnetic data.