

Crustal deformation at Miyake-jima volcano since September, 2000 inferred from GPS observation

Jun Oikawa[1], Observation Group of Miyake-jima Volcano (Working Group on GPS Measurement) Watanabe Hidefumi

[1] ERI, Univ. of Tokyo

At Miyake-jima volcano, crustal deformation and degassing is still observed. To observe crustal deformation, we have been operating the GPS observation network at the volcano. The distribution of vectors of ground displacements inferred from the analysis of the GPS data from August to December, 2000 reveals that the source of ground deformation, which is expected to be magma reservoir, was located beneath south-western flank of Miyake-jima volcano at a depth of 4km. Estimated volume change of magma reservoir is about 0.005 cubic kilometers for a month.