

# Crustal Deformation Inferred from the SAR Interferometry in and around Mt. Kuju and Aso

# Shigeki Kobayashi[1]

[1] Kyushu Tokai Univ.

Surface deformations in and around Mt. Kuju and Mt. Aso were investigated by SAR interferometry (InSAR) using JERS-1 data acquired from 1992 to 1998. Two visible circular fringes were extracted at the north-eastern flank of Mt. Hosho and an another point westerly far from Mt. Hosho in 5km. The former was associated with the Oct. 1995 eruption at Mt. Hosho and the latter was with the geothermal activity near Hachobaru. Extension movements of the line-of-sight displacement were observed by InSAR in both cases. At Mt. Hosho, the amount of line-of-sight displacement was nearly 18cm during Apr. 1996 to Sep. 1998. Such movement suggested inflation that was likely occurred by over effusion from the upper part of the geothermal system. Furthermore, a slight westward migration of its center of inflation can be seen on interferograms.