Application of Satellite Synthetic Aperture Radar Interferometry (InSAR) for Volcanic Crustal Deformations

Makoto Murakami [1], Satoshi Fujiwara [2], Mikio Tobita [3], Hiroyuki Nakagawa [4]

[1] Crustal Deformation Lab., The GSI, [2] GSI,Mizusawa, [3] Construction Coll., [4] Space Geodesy Lab., GSI

Although JERS-1 stopped operation in October 1998, it left us 6.5 year observational data available for studies of wide variety of crustal deformations. We are currently interested in applying InSAR technology for volcanic studies. As a first challenge we are now working on crustal deformation analysis of Izu-Oshima, Miyake-zima and Mt. Iwate using JERS-1 L-band SAR data. Depending on those experiences we discuss the potential and limitations of InSAR as applied for volcanic studies.