

## Approach for monitoring ground deformation around the active volcanoes in Japan by InSAR time series analysis

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In previous studies, we have reported the analysis results about domestic active volcanic areas using D-InSAR of ALOS since 2007. In recent years, InSAR time series analysis technique has been developed. Therefore various studies have been reported for monitoring ground deformation using InSAR time series analysis. In this study, we have applied this procedure to the analysis of the data of ALOS/PALSAR for monitoring ground deformation of the active volcanoes in Japan.

As a result, we can detect ground deformations associated with volcanic activities of Tokachidake, Azumayama, Izu-Oshima, Miyakejima, Satsuma-Iojima and others. These obtained ground deformations by InSAR time series analysis were basically consistent with the results of GPS.

Keywords: InSAR time series analysis, ground deformation, ALOS/PALSAR, active volcano