

Detection of landslides using InSAR analysis all over Japan

*Masayuki Yamanaka¹, Kozin Wada¹, Hiroyuki Nkai¹, Yuji Miura¹, Takayuki Nakano¹

1. Geospatial Information Authority of Japan

In Interferometric SAR (InSAR), two observations are performed for the same site, using a SAR sensor onboard a satellite. The data obtained from both observations is transformed into an image through an interferometric processing to obtain phase differences. InSAR is Effective method for Monitoring of the landslide, because the SAR can observe the place where there is no ground observation equipment, and there are some reports about detection the landslide by InSAR. The Geospatial Information Authority of Japan (GSI) has approached to monitor ground surface deformation of earthquake, volcanic activity, subsidence and landslide all over Japan by InSAR analysis using ALOS-2 (Daichi-2) /PALSAR-2 data, and succeeded in detecting many phase variation of landslide.

In this presentation, we report the result of comparing between InSAR analysis and field survey.

Keywords: InSAR, landslide, ALOS-2