

Production of interpretation card to understand surface deformation detected by synthetic aperture radar interferograms

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The 2007 Noto earthquake (M-6.9) occurred off west- coast of Noto Peninsula, at the depth of ca.10 km. Using synthetic aperture rader (SAR) interferograms image, Une et al.(2008) found that surface deformation induced by the earthquake, and they overlaid the image on the landslide landform database published by National Research Institute for Earth Science and Disaster Prevention. However, only the image does not clearly show how to understand the characteristics of the deformation such as the direction of the surface movement. Therefore, we produced detailed landform (micro landform) map using airborne light detection and ranging (LiDAR) survey (by Hokuriku Electric Power Company) topographic map and aerial photograph, and we made SAR interferograms image interpretation card as the sample of the SAR interferograms image interpretation, where we can know the deformation was caused by re-activated landslide. In this study we show the cards as the result.

Reference

Une et al., 2008, Analysis of surface deformation induced by the Noto Hanto and the Chuetsu-oki Earthquakes in 2007 using synthetic aperture radar interferograms. *Journal of the Japan Landslide Society*, 45, 125-131. (in Japanese with English abstract)