

HDS027-13

Room:301A

Time:May 25 11:45-12:00

Result of boring, electrical resistivity and some surveys in the landslide area detected by SAR interferometry

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Using Synthetic Aperture Radar (SAR), Une et al. (2008) revealed 2007 Noto Hanto earthquake (M6.9)-induced landslide that slightly moved east. The landslide covers 1.5km by 700m and lies on anti-dipping gentle hilly slope, and cracks and small landslide were found on the edge of and inside the initial landslide area. In the area we performed boring survey, observed outcrop, and measured electric resistivity on the slope, pH and electric conductivity along a stream. Boring core and measurement result of electric resistivity and pH did not show existence of clear slip surface; however, measurement result of electric conductivity suggested the location of lower end of the landslide area. These results infer that landslide blocks without clear slip surface moved east together at subtle deformation. And result of this study inferred characteristics of earthquake-induced landslide in the study area.

Reference

Une H, Sato HP, Yurai H, Tobita M, 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, Vol.45, pp.125-131.

Keywords: earthquake, boring, electrical resistivity survey, electric conductivity, SAR