

InSAR-image observation of landslide surface deformation triggered by the 2011 off the Pacific coast of Tohoku Earthquake

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SAR (synthetic aperture radar) is the measurement technology of ground surface condition by transmitted and received micro wave between a satellite or airplane antenna and the ground. The Web page of Geospatial Information Authority of Japan has already published images of SAR interferometry using ALOS/PALSAR data that reflects crustal deformation by the 2011 off the Pacific coast of Tohoku Earthquake (M9.0). This image also shows local surface deformation apart from the crustal deformation, and we will report the possibility that this local deformation detects landslide surface deformation triggered by the earthquake, for example, at the locations in SW area of Kurihara city, Iwate Prefecture and Tsuchiyu Hot Spring in Fukushima Prefecture as shown in Murakami et al.(2011).

Reference

Murakami M, Okuyama S, Furuya M, Abe T, 2011, Analysis on ground deformation analysis triggered by the 2011 off the Pacific coast of Tohoku Earthquake using ALOS/PALSAR, Proceedings of the Volcanological Society of Japan 2011 Fall Meeting, p.55.

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