

## Crustal deformation analysis using SAR interferometry on the 2007 Noto Hanto earthquake

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We perform SAR interferometric analysis on the Noto Hanto earthquake that occurred on 25 March 2007, using the data acquired by the PALSAR radar onboard the Japanese ALOS satellite and by the ASAR radar onboard the European ENVISAT satellite. Since the GEONET GPS station locations are sparse, and since the campaign GPS observation of four universities (Kyoto, Hokkaido, Toyama and Kanazawa) started after the earthquake, we cannot constrain the details of the source model using GPS data.

SAR interferometry requires two images acquired at an identical observation mode. As of this moment of writing, we still do not have images that can form a pair for SAR interferometry. The following data acquisitions, however, are scheduled or requested. Therefore, we will most probably be able to form interferograms that map the coseismic ground displacements in detail and to well constrain the fault slip distribution. ALSO/PALSAR: 10 April (off-nadir angle 41.5 degrees, ascending orbit), 23 April (21.5 degrees, ascending orbit), 10 May (34.3 degrees, descending orbit). ENVISAT/ASAR: 8 April (23 degrees, descending orbit), 27 April (23 degrees, descending orbit).

This presentation will report the coseismic ground surface displacements of the Noto Hanto earthquake revealed by SAR interferometry and preliminary fault slip models estimated from these data.