Construct a fault model of the 2007 Noto Hanto Earthquake using InSAR and GPS Data

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On March 25, 2007, an earthquake occurred off Noto Peninsula. This earthquake is called The Noto Hanto Earthquake in 2007. In this study, we construct a fault model of the Noto Hanto earthquake with the data such as GPS, InSAR. ALOS (Daichi), launched in February 2006, has L-band SAR (PALSAR) and the sensor has many advantages to analyze the crustal deformation. We used one pair of PALSAR data captured at February 23 and April 10, 2007 (interval 46days) ,and processed using the Gamma Software.

The interferometry image has too many pixels to construct a fault model. And the coseismic crustal deformation pattern is localized at source area. So we divided the interferometry image into several block areas according to deformation changes.

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We used GPS data observed by GEONET (GPS. Earth Observation Network), which has been operated by the Geographical Survey Institute (GSI), Japan.