Postseismic deformation extracted by InSAR, after the 2014 Northern Nagano Prefecture Earthquake

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1. PASCO CORPORATION

The 2014 Northern Nagano Prefecture Earthquake (Mj 6.7) occurred in November 22, 2014. The crustal deformation emerged in 30km*30km area by the InSAR analysis data after the earthquake (GSI, 2015). And, the surface ruptures occurred 9 kilometers from Shiojima Hakuba village to Higashisano along the Kamishiro fault (Okada et al., 2015). The relation between the appearance position of surface ruptures and the discontinuities of interference phase on the InSAR imagery was studied (Nakano, 2015). We created InSAR phase image from ALOS-2 data after the 2014 Northern Nagano Prefecture Earthquake. The data is pair of 28 November 2014 and 26 June 2015. As a result of the analysis, the east side of surface rupture moved to the west or went to up. The amount of deformation is 3-4cm in the direction approaching a satellite.

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