

Interpretation of SAR interferograms on the ground deformation associated with the Northern Nagano Prefecture earthquake in 2014

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Detailed ground deformation associated with the Northern Nagano Prefecture earthquake in 2014 was well recorded in the interferograms of ALOS-2 "Daichi-2" SAR. We focused on the local interferometric patterns considered to be the reflection of local characteristics of surface displacement, and interpreted them to identify the subsurface structure and motion of rupture of the earthquake fault, with references to the results of ground-penetrating radar profiling and trench excavation survey.

Keywords: SAR interferogram, Northern Nagano Prefecture earthquake in 2014, subsurface rupture structure