

Detection of the Ioh-jima deformation using the Pi-SAR (L)

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ALOS APLSAR has been operated since the initial calibration phase of the 2007, May, and the data analysis revealed the surface deformation at the several area, represented by Ioh-tou island. The deformation pattern and its time series were clarified over the 2006 and 2007. The resolution of the PALSAR was limited by its signal bandwidth and meets the difficulty of detection of the minute deformation. On this problem, the Pi-SAR L band SAR was modified in such a way that the yaw angle was controlled to be perpendicular to the ground track, and the second flight course can be controlled to be within 5 meter difference to the original flight pass. Using Pi-SAR, we have observed the Ioh-tou island twice in June/E and August/Mid of 2007. This report describes the deformation detection revealed by the Pi-SAR differential interferometry over the Ioh-tou island and Ohshima island.