

## What is the best improvement of PALSAR-2/ScanSAR products to the future success of JJ-FAST or other projects using ScanSAR mosaic?

\*Masanobu Shimada<sup>1</sup>, Manabu Watanabe<sup>1</sup>, Chrischan Koyama<sup>1</sup>

1. Tokyo Denki University, School of science and engineering

PALSAR-2/ScanSAR time series images are being used on the early warning system (JJ-FAST). ScanSAR image has the high geometric accuracy of less than 10 m and the observation is performed every 42 days for the same region repeatedly. The ortho-rectified and slope corrected images are differentiated as a way that it differs more than 3 dB then deforestation flag is ON otherwise the flag is OFF. Currently, the SPECAN algorithm was selected for the imaging and the 50m resolution image was produced. For the improvement of the accuracy, the resolution improvement was required. This research performed how the other algorithm, i.e., the full aperture algorithm, improves the resolution, how the deforestation detection sensitivity was improved. This paper describes the typical difference of the sensitivity and resolution for the SPECAN and full aperture SAR processings.

Keywords: PALSAR-2, Specan, Full Aperture SAR