

STT072-P01

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## Terrain Changes around the Amundsen Bay, Antarctica

Makoto Omura<sup>1\*</sup>, Katsuaki Koike<sup>2</sup>, Tsutomu Yamanokuchi<sup>3</sup>, Koichiro Doi<sup>4</sup>, Kazuo Shibuya<sup>4</sup>, Kazuki Nakamura<sup>5</sup>, Akira Wada<sup>6</sup>

<sup>1</sup>Kochi Women's University, <sup>2</sup>Kumamoto University, <sup>3</sup>RESTEC, <sup>4</sup>NIPR, <sup>5</sup>AIST, <sup>6</sup>Nippon GPS Solutions Corporation

Spaceborne SAR (Synthetic Aperture Radar) sensors are useful to monitor the changes on the Antarctic ice sheet and glaciers. We study terrain changes around the Amundsen Bay, Enderby Land, Antarctica for the period of about 15 years from 1990's. NIPR (National Institute of Polar Research) has archives of SAR data from JERS-1, ERS-1/2. They enable us to carry out comparisons of SAR images obtained in 1990's and those acquired by ALOS/PALSAR in the recent years. The comparisons will clarify the surface changes occurred in about a decade. The preliminary analysis shows possible changes in terrain or deformation pattern on the slope along the right bank of a small glacier around the Bay. This study was carried out as a joint scientific research program (2008-2011) of the National Institute of Polar Research, Tokyo, Japan and the joint scientific research between the Faculty of Human Life and Environmental Science, Kochi Women's University and the Geodetic Information System Division, Nippon GPS Solutions Corporation.

Keywords: Antarctica, SAR, Amundsen Bay