Japan Geoscience Union Meeting 2013
(May 19-24 2013 at Makuhari, Chiba, Japan)
©2013. Japan Geoscience Union. All Rights Reserved.

ACG39-02 Room:301A Time:May 19 16:30-16:45

Observation of atmosphere-ocean interactions by AMSR2 on GCOM-W1

Naoto Ebuchi[1*], HIHARA, Tsutomu[2], KONDA, Masanori[3], KOZAI, Katsutoshi[4], KUBOTA, Masahisa[2], OKURO, Atsushi[2], SHIBATA, Akira[5], TOMITA, Hiroyuki[6]

[1]Institute of Low Temperature Science, Hokkaido University, [2]School of Marine Science and Technology, Tokai University, [3]Graduate School of Science, Kyoto University, [4]Graduate School of Maritime Sciences, Kobe University, [5]Meteorological Research Institute, Japan Meteorological Agency, [6]Hydrospheric Atmospheric Research Center, Nagoya University

The GCOM-W mission aims to establish the global and long-term observation system to collect data, which are needed to understand mechanisms of climate and water cycle variations, and demonstrate its utilization. We plan to obtain continuous and calibrated data over a period of 15 years with three GCOM-W satellites. The first generation of the GCOM-W satellite, GCOM-W1, was launched in May 2012. The GCOM-W1 satellite carries a multi-frequency, multi-polarization microwave radiometer, AMSR2, which continues Aqua/AMSR-E observations of integrated water vapor, cloud liquid water, precipitation, sea surface temperature, sea surface wind speed, sea ice concentration, snow depth, and soil moisture. In this paper, we will report validation of the sea surface temperature and wind speed observed by AMSR2 on GCOM-W1. Also we will discuss utilizations of the data from AMSR2 for studies of air-sea interactions and possibility of application to practical purposes.

Keywords: Remote sensing, Air-sea interaction, Atomosphere-ocean interaction, Microwave radimometer, GCOM-W1, AMSR2