GCOM-C/SGLI観測データから抽出される雪氷プロダクト概要と1年目の観測結果

Overview of the cryospheric variables derived from GCOM-C/SGLI observations: The first-year results

*堀 雅裕[1]、青木 輝夫[2,4]、Knut Stamnes[3]、Wei Li[3]、Nan Chen[3]、島田 利元[1]、谷川 朋範[4]、庭野 匡思[4]

*Masahiro Hori[1], Teruo Aoki[2,4], Knut Stamnes[3], Wei Li[3], Nan Chen[3], Rigen Shimada[1], Tomonori Tanikawa[4], Masashi Niwano[4]

1. 宇宙航空研究開発機構地球観測研究センター、2. 岡山大学、3. Stevens Institute of Technology、4. 気象研究所
1. Earth Observation Reseacrh Center, Japan Aerospace Exploration Agency, 2. Okayama University, 3. Stevens Institute of Technology, 4. Meteorological Research Institute

The "Global Change Observation Mission-Climate" (GCOM-C) is an Earth observing satellite of Japan Aerospace Exploration Agency (JAXA) for the global observation of the Earth environment. GCOM-C carries a multi-spectral optical radiometer named Second Generation Global Imager (SGLI), which has special features of wide spectral coverage from 380 nm to 12 μm, a high spatial resolution of 250 m, a field of view exceeding 1000 km, two-direction simultaneous observation, and polarization observation. The GCOM-C satellite was successfully launched from the Tanegashima Space Center in Japan on December 23, 2017 and SGLI started the Earth observations on January 1st, 2018. From the SGLI observations snow-related variables such as snow and ice cover extent, snow grain size, and snow surface temperature are being retrieved and the products of those variables have been released to the public from the JAXA's satellite data providing service "G-Portal" (https://gportal.jaxa.jp/gpr/index/index) since December 20th 2018. These snow physical variables are important for determining spectral albedo and radiation budget at the snow surface. In this presentation, the first-year results of SGLI snow observations are presented as well as the introduction of the SGLI products with the special attention to the thermal infrared observations at 250-m spatial resolution.

キーワード：GCOM-C、SGLI、積雪、積雪粒径、表面温度、リモートセンシング
Keywords: GCOM-C, SGLI, Snow Cover, Snow Grain Size, Surface Temperature, Remote Sensing