

[EE] Evening Poster | A (Atmospheric and Hydrospheric Sciences) | A-CC Cryospheric Sciences & Cold District Environment

[A-CC27]Remote Sensing of Snow

convener:Sheldon Dean Drobot (Harris Corporation)

Wed. May 23, 2018 5:15 PM - 6:30 PM Poster Hall (International Exhibition Hall7, Makuhari Messe)

Due to its high albedo and low thermal conductivity, snow cover plays a central role in the mass and energy exchange across land-atmosphere and ocean-ice-atmosphere interfaces. Improvements in remote sensing technologies are now enabling a variety of new and improved observation capabilities for snow, including formation in the atmosphere, snowfall rates, and snow water equivalent (SWE) measurements. In this session, we seek abstracts related to remote sensing of snow in all its forms. This includes use of existing sensors for snow measurements and concepts for new sensors. Applications for snow in the atmosphere, on land, and on ice are welcome.

[ACC27-P03]Very early results of snow observations with the use of GCOM-C/SGLI data

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The “Global Change Observation Mission-Climate” (GCOM-C) is a project of Japan Aerospace Exploration Agency (JAXA) for the global observation of the Earth environment. The GCOM-C is a part of the JAXA’s GCOM mission which consists of two satellite series, GCOM-C and GCOM-W (Water). GCOM-C carries a multi-spectral optical radiometer named Second Generation Global Imager (SGLI), which has special features of wide spectral coverage from 380nm to 12 μ m, a high spatial resolution of 250m, a field of view exceeding 1000km, 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. From the SGLI data snow-related variables such as snow and ice cover extent, snow grain size, and snow surface temperature are planned to be retrieved and released to the public around the end of 2018. These snow physical variables are important for determining spectral albedo and radiation budget at the snow surface. In this presentation, very early results of snow observations with the use of SGLI and the validation plan are introduced.