
[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-P01]Enhancing Disaster Risk Reduction Capabilities with Multifrequency, Multi-polarization, Very high- Resolution SAR Information

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Keywords:SAR, snow, Remote Sensing

The potential for wideband active/passive microwave satellite data could open a new era in water resources management as microwave signatures see through clouds (i.e., all-weather) and operate diurnally. Harris Corporation has led the development of a new instrument that provides co-aligned radiometric data at X-, K-, and Ka- bands and SAR data at X- and two Ku- bands for operational mapping of snow water equivalent. In this presentation, we will outline the current concept and provide experimental results from airborne field trials in 2018.