

Dear Colleagues,

We are happy to announce that the 3rd International Surface Working Group (ISWG) will be held in Montreal, Canada, kindly hosted by Environment and Climate Change Canada (ECCC) with support of the Global Cryosphere Watch of the World Meteorological Organisation and European Space Agency.

The ISWG-3 draft home page can be found here:

<http://cimss.ssec.wisc.edu/iswg/meetings/2019> [1]

To register your contribution and interest please fill the form at:

<https://goo.gl/forms/hApLHMTJPX4wZ7lr2> [2]

We are accepting oral and poster presentations.

Focus of the Meeting:

- Use of EO-data for Cryosphere and Biosphere modelling applications: both IR/MW, active/passive remote sensing data relevant to study processes at the land-atmosphere interactions;

- Use of EO-data for Parameters optimisation: including land surface temperature, albedo, vegetation state, soil moisture, snow water equivalent, water-body extent, sea surface wind, salinity, canopy parameters, vegetation water content, sea-ice concentration, etc. and the resulting surface emissivity/reflectance spectra;

- Land Data Assimilation Systems (LDASs) : state of the operational land surface modelling and assimilation systems and recent developments; sensitivity studies of surface model parameters to remotely sensed data; outcomes of assimilating SMOS, SMAP, GPM observations and their combination with higher resolution sensors such as MODIS/VIIRS, Sentinel-3-OLCI;

- Radiative transfer and emissivity/reflectivity model development: VIS/IR/MW, all surface types, review of current parameterization for forward modelling surface boundary; description of available land emissivity databases/atlas (MW and IR); intercomparison/validation of physical models and retrieved emissivity (MW and IR, including land, ocean, and ice surfaces);

- Other relevant topics: model-data comparison efforts involving EO dataset and shared experiences from ongoing surface monitoring systems, use of multi-sensor/ multi-platform, multi-temporal approaches to maximize information over heterogeneous or rapidly changing surface types.

Expected Outcomes from the meeting include reviewing capabilities of existing technology and the capacity for their use in surface monitoring, data assimilation and modelling applications. Gather expert recommendations and guidance for surface observations.

The International Surface Working Group (ISWG) will:

- Update recommendations to further the coordination and exploitation of Earth Observation data of terrestrial surfaces and land-atmosphere interactions;
- Update recommendations consistently with the evolution of available satellite systems and how to fill potential gaps in future observations;
- Prepare for the 48th Coordinated Group for Meteorological Satellites (CGMS) to present the ISWG initiatives and its outcomes.

Previous ISWG contributions have been published in a Remote Sensing

(RS) Special Issue in 2018. Two other RS Special issues that covered relevant topics for ISWG are listed below:

http://www.mdpi.com/journal/remotesensing/special_issues/earthsurface_RS

[3]

https://www.mdpi.com/journal/remotesensing/special_issues/dataassimilation_rs

[4]

https://www.mdpi.com/journal/remotesensing/special_issues/evaporation_rs

[5]

For 2019 and ISWG-3 a Remote Sensing special issues of interest (open until November 2019) we wish to advertise as relevant for contributions is the following:

https://www.mdpi.com/journal/remotesensing/special_issues/LSM [6]

We look forward to meet many of you in Montreal on 15-17th of July 2019!

Kind regards,

Benjamin Ruston (NRL-Monterey)

Stéphane Bélair (ECCC)

Gianpaolo Balsamo (ECMWF)

ISWG-3 <http://cimss.ssec.wisc.edu/iswg/meetings/2019/> [7]

Links:

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[6] https://www.mdpi.com/journal/remotesensing/special_issues/LSM

[7] <http://cimss.ssec.wisc.edu/iswg/meetings/2019/>