

Call for contributions to the 4th Workshop on Remote Sensing and Modelling of Surface Properties

**14-16 March 2016
Maison Jean Kuntzmann
Saint Martin d'Hères, France**

After three successful workshops in 2006, 2009, and 2011 we are pleased to announce the upcoming 4th edition of “Remote Sensing and Modelling of Surface Properties (RSMSP)” workshop which will be held in Grenoble, France with the support of CNES, CNRM-GAME/Centre d'Etudes de la Neige, PNTS, and OSUG.

Following the recommendation of the International TOVS working group, this workshop focuses on the identification of scientific challenges facing surface modeling over land, ocean and snow and ice surfaces; as well as, ways to improve the techniques for the use of remote sensing observations in Numerical Weather Prediction (NWP). As in previous RSMSP workshops, a special issue is expected to be published in a peer-review journal, highlighting the contributions that will be presented in the workshop.

Important Dates:

Deadline for Abstracts: 21 December 2015

Draft Program: 20 January 2016

Final Program: 19 February 2016

RSMSP workshop: 14-16 March 2016

Subject of the workshop:

This workshop seeks to bring together scientists working in the fields of remote sensing, modeling of the surface and its radiative properties, and satellite data assimilation. Microwave, infrared, and visible applications will be considered, both in passive and active modes. Topics will include studies of the surface emissivity and temperature of land surfaces, sea ice, open water, snow... A significant part of the workshop will be dedicated to the exploitation of microwave, and infrared observations in NWP with particular emphasis on impact studies with the assimilation of surface sensitive observations. The workshop will also offer an opportunity for assessments of recent results obtained from SENTINEL-1, SARAL-ALTIKA, SMOS, GPM, and SMAP. A non-exhaustive list of the workshop topics is included below.

Scientists interested in these fields are invited to send their contributions in the shape of a one-page summary via e-mail to all email addresses listed below. The abstract should include a description of the proposed contribution, the name(s) of the author(s) and affiliation(s), mailing and electronic addresses and should be sent no later than December 21st, 2015.

Registration:

Registration may be done on-line, before December 1st 2015, via:

<http://cimss.ssec.wisc.edu/itwg/groups/rtwg/meetings/sfcem/2016/register>

There will be no registration fee.

Funding:

There are some funding opportunities for young researchers to help them attend the workshop (Ph.D. students or young postdocs). Priority for funding will be given to researchers working in the fields of remote sensing and/or surface modeling.

Candidates must fill the application form available from the workshop website. The applications must be accompanied by a detailed CV and a letter of support from a supervisor or from a suitable referee and should be sent to the Organizing Committee before December 01, 2015.

Meeting topics:

In what follows, a non-exhaustive list of scientific topics is given:

- **Assimilation of surface sensitive observations:** IR/MW, active/passive remote sensing, methods for handling the surface emissivity and spectral temperature; quality control issues and methodology; atmospheric variable sensitivity studies; and observation/background error specification.
- **Land surface assimilation schemes:** State of the operational land surface modelling systems and recent developments; sensitivity studies of surface model parameters to remotely sensed data; outcomes of SMOS, GPM, SMAP missions; calibration issues, variable transforms or PDF matching techniques
- **Radiative transfer developments and emissivity/reflectivity models:** VIS/IR/MW, all surface types, review of current available parameterization for forward modelling the surface boundary for remotely sensed data; description of available land emissivity databases/atlasses (MW and IR); intercomparison/validation of physical models and retrieved emissivities (MW and IR, including land, ocean, and ice surfaces).
- **Retrievals of surface parameters:** sea surface wind, salinity, soil moisture, canopy parameters, vegetation water content, sea-ice concentration, snow water equivalent, etc. and the resulting surface emissivity/reflectance spectra.
- **Other relevant topics**

Scientific and Organizing committee:

Boukabara Sid-Ahmed	NOAA	USA	Sid.Boukabara@noaa.gov
Karbou Fatima	Météo-France	France	fatima.karbou@meteo.fr
Prigent Catherine	CNRS	France	Catherine.Prigent@obspm.fr
Ruston Benjamin	NRL	USA	Ben.Ruston@nrlmry.navy.mil
Weng Fuzhong	NOAA/NESDIS	USA	Fuzhong.Weng@noaa.gov

Local Organizing committee:

Gay Michel	GipsaLab	France	michel.gay@gipsa-lab.grenoble-inp.fr
Karbou Fatima	Météo-France	France	fatima.karbou@meteo.fr
Pellarin Thierry	LTHE	France	thierry.pellarin@ujf-grenoble.fr
Walpersdorf Andrea	IS TERRE	France	andrea.walpersdorf@ujf-grenoble.fr