http://cimss.ssec.wisc.edu/itwg/groups/rtwg/meetings/sfcem/

1st Workshop on Remote Sensing and Modeling of Surface Properties 20-22 June 2006, Paris, France

Observatoire de Paris 61, avenue de l'Observatoire 75014 Paris, France

Call for contributions

Background

The Radiative Transfer and Surface Property Modeling Group at the 14th International TOVS meeting called for a focus on surface properties. The group set actions to enlighten the community on the methods and state of the problem in this area. One of the immediate tasks was to conduct a survey of operational weather centers and ascertain what surface sensitive channels are being assimilated. It quickly became clear that different approaches were pursued by different teams, ranging from avoiding of surface-sensitive channels to full modeling of surface emissivity/reflectivity in assimilation schemes. It was felt that gathering teams together would help advance and spread knowledge in this area. The potential benefits were thought to include a better understanding of how to model and remote sense surface properties in all spectral domains and ultimately be able to assimilate readily available surface-sensitive and window channels and eventually improve forecast skills.

Subject of the workshop

The 1st workshop dedicated to the remote sensing and modeling of surface properties (radiometric and geophysical), as well as to the impact of assimilating surface-sensitive measurements, will be held in Paris Observatory, France from June 20th to June 22nd 2006. Both microwave and infrared spectra are targeted by this workshop. In addition, all surface types are of interest including ocean, land, snow and ice. A non-exhaustive list of more detailed topics is included below. This focused meeting will have no parallel sessions and only oral sessions, with plenty of time for the presentations, questions, and discussions. Scientists involved in this area are cordially invited to submit a one-page abstract in English via e-mail, to be included in the final program of this workshop. 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 optionally phone and fax numbers. The abstracts should be sent to any of the email addresses listed below, no later than March 3rd, 2006. There will be a 50 Euro registration fee, payable in cash the first day of the conference to cover lunch, coffee breaks, and incidentals.

Registration

Registration may be done on-line via: http://cimss.ssec.wisc.edu/itwg/groups/rtwg/meetings/sfcem/register.php

Meeting topics

The following non-exhaustive list of scientific topics is suggested:

- * Description of methodologies to assimilate surface-sensitive radiances in NWP centers (both in operational and research modes), including cloud screening approaches and surface temperature handling.
- # Description of emissivity/reflectivity models (both MW and IR, over land, ocean, snow and ice), used or usable in NWP frameworks.
- # Description of available land emissivity databases/atlases (MW and IR). Description of the parameterization of angle and frequency dependences.
- # Intercomparison/validation of physical models and directly retrieved emissivities (including land, ocean, and ice surfaces).
- * Synergistic use of physical models and retrieval-based emissivities (for the parameterization of the angle/frequency dependence for instance).
- * Document data assimilation impact studies performed using surface-sensitive radiances (IR and MW).
- Review the output fields available from operational land surface modeling systems, and target fields necessary for forward modeling of infrared and microwave emissivities. Discuss aggregation of global soil and vegetation databases for use in emissivity modeling.
- * Retrieval of land surface temperatures from infrared and/or microwave observations and the impact of the emissivity assumptions on these estimates.
- ★ Other relevant topics

Scientific and Organizing committee

(Please use the online registration or send your abstract to any of the following electronic addresses before March 3rd 2006):

Catherine Prigent, Observatoire de Paris, France, (co-chair): catherine.prigent@obspm.fr Fuzhong Weng, NOAA/NESDIS, USA, (co-chair): Fuzhong.Weng@noaa.gov

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