Workshop on

"Parameterization of Lakes in Numerical Weather Prediction and Climate Modelling"

18-20 September 2008, St. Petersburg (Zelenogorsk), Russia

1st Circular

Background and aims

Lakes significantly affect the structure of the atmospheric boundary layer and therefore the surface fluxes of heat, water vapour and momentum. In numerical weather prediction (NWP) and climate models, the effect of lakes should be adequately parameterised. The problem becomes particularly pressing as the horizontal resolution of numerical models is refined. A large number of small-to-medium size lakes, that are indistinguishable sub-grid scale features in low-resolution models, become resolved grid-scale features in high-resolution models. Then, a physically sound and computationally efficient lake model (parameterisation scheme) is required to predict the lake surface temperature and its time-rate-of-change. An interest in the problem of lakes has led to the development of several lake parameterization schemes for use in NWP and climate models, ranging from the simplest one-layer schemes to very sophisticated three-dimensional schemes. These schemes have been applied in NWP, climate studies and related environmental problems with a varying degree of success, considerable experience has been accumulated, and numerous problems have been encountered.

The aim of the workshop is to join NWP and climate modellers dealing with the parameterisation of lakes in order to share their experience, to review the state of art, and to discuss challenging problems, strategy of further development, tasks and plans. Emphasis is given to
(i) lake parameterisation schemes for NWP and climate models,
(ii) external-parameter data sets,
(iii) data assimilation,
(iv) off-line applications of lake models (parameterisation schemes).

Workshop Format

The workshop will be a three-day event. It will start on September 18, 2008, in the morning, and will end on September 20, 2008, in the afternoon. Keynote lectures (50 minutes + 10 minutes for questions) on the above topics are planned in addition to the presentations of the workshop participants (15 minutes + 5 minutes for questions). An appreciable amount of time for discussions will be reserved. There will be no parallel sessions.

Participation and deadlines

To take part in the Workshop, please fill in the registration form and e-mail it to Ekaterina Kourzeneva (kourzeneva@rshu.ru) by April 18, 2008. There is no registration fee. In case you would like to make a presentation, please give a title in the registration form. A short abstract of your presentation is welcome. It should be submitted by May 14, 2008. Abstracts will be made available through the workshop web page (http://netfam.fmi.fi/Lake08).

Venue

The Workshop will be held at the hotel "Gelios" in Zelenogorsk, a small town located ca. 50 km north of St. Petersburg at the picturesque coast of the Gulf of Finland. A single room costs approximately EURO 90 a night, and a double bed room costs EURO 70 a night per person. These rates include breakfast, lunch and dinner at the hotel restaurant.

Organisers

Organising committee:
Ekaterina Kourzeneva, Russian State Hydrometeorological University (RSHU), St. Petersburg, Russia (kourzeneva@rshu.ru)
Dmitrii Mironov, German Weather Service (DWD), Offenbach am Main, Germany (dmitrii.mironov@dwd.de)
Laura Rontu, Finnish Meteorological Institute (FMI), Helsinki, Finland (laura.rontu@fmi.fi)
Arkady Terzhevik, Northern Water Problems Institute (NWPI), Petrozavodsk, Russia (ark@nwpi.krc.karelia.ru)

The local organiser in St. Petersburg is RSHU. Contact person: Ekaterina Kourzeneva.

Support

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