

Announcement and First Call for Papers

International Conference and Early Career Scientists School on Environmental Observations, Modeling and Information Systems ENVIROMIS-2012, 24 June - 2 July 2012, Irkutsk, Russia



The seventh in the series, the multidisciplinary Conference comprising elements of Early Career Scientists School will be devoted to the state-of-the-art and usage of modern environmental observation techniques, computational and information technologies for assessment, modeling and mitigation of Northern Eurasia environment variations under natural and anthropogenic pressures including those caused by the Global Climate Change. It is aimed at filling the gap between basic science achievements and their practical applications in this domain. Also it addresses a critically important issue – a generation gap occurring in Environmental Sciences. To mitigate its consequences and to facilitate professional skill growth for young scientists, a number of invited lectures devoted to the state-of-the-art in the environmental research will be presented by leading specialists, which will allow young participants to get first-hand information on hot topics in Earth System Sciences and attract them professionally to this very important research area.

The major focus of the Conference is on environment state and dynamics under Climate Change of Northern Eurasia, particularly Siberia. Being a region where climate variations are most pronounced and whose potential influences on the Earth System operation as a whole are of importance, this region has recently attracted the attention of a number of researchers and funding organizations. To meet these challenges, a few years ago the Northern Eurasia Earth Science Partnership Initiative (NEESPI) and its regional mega project Siberian Integrated Regional Study (SIRS) were formed. Nowadays NEESPI is an interdisciplinary program of internationally supported Earth systems science research that addresses large-scale and long-term manifestations of climate and environmental change in the region. NEESPI strives to understand how the land ecosystems and continental water dynamics in Northern Eurasia interact with and alter the climate system, the biosphere, the atmosphere, and the hydrosphere of the Earth. Its overarching Science Question is: How do we develop our predictive capability of terrestrial ecosystems dynamics over Northern Eurasia for the 21st century to support global projections as well as to enhance informed decision making and provide descriptions of numerous practical applications in the region? The Conference is being conducted with a close collaboration with Monsoon Asia Integrated Regional Study (MAIRS; <http://www.mairs-essp.org/>). Being different from other monsoon research projects (e.g., MAHASRI, http://mahasri.cr.chiba-u.ac.jp/index_e.html), MAIRS does not address the monsoon climate itself, but focus on human monsoon system interaction. It attempts to understand to what extent the human activities modulate the Asia monsoon climate and how the changed monsoon climate will impact further the social and economic development of Asia. MAIRS and NEESPI research objectives and study domain overlap in the Dry Asia midlatitudinal belt north of 40°N.

Being run as a set of consecutive targeted Workshops and thematic sessions devoted to different aspects of the theme, the Conference will facilitate interdisciplinary cooperation between young and prominent researchers thus giving a solid foundation of Earth System study on both regional

and global levels. It will bring together the scientific community at large with representatives of national and international scientific organizations, industries and other groups relevant to the Conference. Aimed at one of the Earth System Sciences research priorities, it shall engage the participants in in-depth and forward looking discussions about optimal ways to address scientific research topics and potential areas of cooperation. It should define future scientific priorities to this end as well as to identify research groups and projects which are in a position to become integrated.

The Conference will be organized by the Siberian Center for Environment Research and Training, Irkutsk Scientific Center and Institute for System Dynamics and Control Theory SB RAS, Institute of Monitoring of Climatic and Ecological Systems SB RAS, Institute of Computational Technologies SB RAS, Institute for Numerical Mathematics RAS and Russian National Committee for IGBP with support of WMO, APN, RFBR, START, MAIRS, and NEESPI.

The Conference is planned to be held in Irkutsk. One-day trip to Baikal Lake is planned to access practical activity of regional environmental bodies. Working language at the Conference is English.

Conference Chair Prof. **Evgeny Gordov** (Siberian Center for Environment Research and Training, Institute of Monitoring of Climatic and Ecological systems, Siberian Branch of RAS, Tomsk)

Organizing Committee:

Dr. **Ailikun** (MAIRS, Beijing, China)

RAS Corresponding member **Igor Bychkov** (Irkutsk Scientific Center and Institute for System Dynamics and Control Theory SB RAS)

Dr. **Pavel Groisman** (NEESPI, UCAR at NOAA National Climatic Data Center, USA)

Dr. Sci. **Alexander Gornov** (Institute for System Dynamics and Control Theory SB RAS, Irkutsk)

Dr. Sci. **Vladimir Krutikov** (Institute of Monitoring of Climatic and Ecological Systems, SB RAS, Tomsk),

RAS Corresponding member **Vasily Lykosov** (Institute for Numerical Mathematics RAS, Moscow)

Prof. **Viktor Plyusnin** (V.B. Sochava Institute of Geography SB RAS, Irkutsk)

Scientific Secretary of the Conference Dr. **Elena Genina** (Siberian Center for Environmental Research and Training, Institute of Monitoring of Climatic and Ecological systems SB RAS, Tomsk).

Secretary of the Conference Mrs. **Yulia Gordova** (Siberian Center for Environmental Research and Training, Institute of Monitoring of Climatic and Ecological systems, SB RAS, Tomsk).

Program Committee Co-Chairs: Professor **Evgeny Gordov** (Siberian Center for Environmental Research and Training, Tomsk), Dr. **Pavel Groisman** (NOAA, USA), RAS Corresponding Member **Igor Bychkov** (Irkutsk Scientific Center SB RAS) and RAS Corresponding Member **Vasily Lykosov** (Institute for Numerical Mathematics RAS)

Committee:

Prof. **V. Alexeev** (IARC, University of Alaska-Fairbanks, USA), Prof. **A. Baklanov** (DMI, Denmark), Dr. **G. Gutman** (NASA, USA), Prof. **M. Heimann** (MPI for Bio-geochemistry, Germany), Dr. **V. Kharuk** (Institute of Forest SB RAS, Krasnoyarsk), Dr. Sci. **V. A. Krutikov** (Institute of Monitoring of Climatic and Ecological Systems SB RAS, Tomsk), RAS

corresponding member **I. I. Mokhov** (Institute of Atmospheric Physics, Moscow), Prof. **V.V. Penenko** (Institute of Computational Mathematics and Mathematical Geophysics SB RAS, Novosibirsk), Prof. **Viktor Plyusnin** (V.B. Sochava Institute of Geography SB RAS, Irkutsk), Prof. **Ch. Schmullius** (Friedrich - Schiller-University, Germany), Prof. **A. Shvidenko** (IIASA, Luxemburg, Austria), RAS member **E.A. Vaganov** (Siberian Federal University and Institute of Forest SB RAS, Krasnoyarsk).

Workshops/Sessions planned

MAIRS/NEESPI/SIRS APN Workshop “**Climate Change induced extremes in Northern Asia**” Organizers Ailikun, Evgeny Gordov and Pavel Groisman

- 1. Ongoing Climate Changes over Northern Eurasia.** Organizers/ Pavel Groisman and Evgeny Gordov
- 2. Regional climate modeling.** Organizers Vasily Lykosov, Igor Mokhov, and Igor Shkolnik
- 3. Northern Eurasia climate and biosphere interrelations.** Organizers Martin Heimann and Vyacheslav Kharuk
- 4. Influence of Northern Eurasia terrestrial ecosystems on global biogeochemical cycles: past, present and future.** Organizers Anatoly Shvidenko and Quinlai Zhuang
- 5. Air pollution transport and climate change.** Organizers Mikhail Arshinov, Alexander Baklanov, and Vladimir Penenko
- 6. Observational and ICT infrastructure support of regional scale environmental studies.** Organizers Igor Bychkov and Michael Kabanov
- 7. Regional environment and biodiversity risks and socio-economic impact.** Organizers Natalia Lukina and Kirsten de Beurs
- 8. Open Meeting of Siberian Branch of the Russian National Committee for IGBP: SB RAS Environmental Integrated Projects.** Organizers Evgeny Gordov and Evgeny Vaganov

Tentative agenda (to be further refined):

- ENVIROMIS Conference thematic Sessions embedding Early Career Scientists Summer School lectures will be held on 24-27 June, 2012.
- Field trip (Baikal Lake Area) is planned on 28 June, 2012;
- APN/NEESPI Workshop will be held from 29 June to 2 July, 2012;

The Program Committee will invite key specialists in the research area to present invited lectures, describing the state of the art in the targeted areas (1 hour), and invited papers, describing recent important inputs into the research domain (30 min). Also a limited number of papers will be selected for oral presentation. Contributed papers will be presented mainly as short oral presentations, whose content should be described in detail by relevant posters. Those who would like to present an invited/oral paper, please, contact Prof. E.P. Gordov (gordov@scert.ru). After the Conference, the program Committee will select papers for publication in a Special Issue of a peer reviewed Journal.

Working language of the APN/NEESPI Workshop is English. During the thematic Conference Sessions simultaneous translation will be provided.

The event is organized under auspices of the Russian National Committee for IGBP and its Siberian Branch. The Power Point presentations of the lectures and presented papers will be published at the event site and at the NEESPI web site (<http://neespi.org>) on Internet and on a CD, which will be distributed among participants.

Potential authors, please pay attention that your Abstract should include:

1. Title
2. Authors (Principal author first)
3. Affiliation and Address for Each Author (Mailing address, telephone, fax, e-mail, Internet site)
4. Session chosen (Please note that near all contributed papers will be presented at Poster Sessions; only the papers, suggested by the Session Chairs, will be considered as candidates for oral presentation)
5. Four-page report text and 1 page short abstract.

Russian authors are kindly asked to submit a 1 page abstract in English and 4 pages of report text in Russian (or 4 pages report text in English and 1 page short abstract in Russian).

Texts will be used by Program Committee for initial selection of participants. Selected and reviewed reports of participants will be published in the event Proceedings.

Submission DEADLINE: 1 April 2012

Please send your abstract to Mrs. Yulia Gordova, Secretary of the Conference, Siberian Center for Environment Research and Training SB RAS, Akademicheskii ave. 10/3, Tomsk, 634055, Russia. E-mail: enviromis@scert.ru Phone: 7 (3822) 492187, Fax: 7 (3822) 492537.

For current information please see the Conference site <http://scert.ru/en/conferences/enviromis2012/> . To see materials of the previous ENVIROMIS Conferences, visit the site <http://scert.ru>.

To cover expenses on conference organization, all participants should pay a conference fee, which will include refreshments, Program and abstracts, and a boat trip.

CONFERENCE FEE FOR YOUNG SCIENTISTS WILL BE REDUCED!

Please forward this Call to anyone you think would be interested in receiving it.

Looking forward to meet you at our conference!