



International Workshop on the Northern Eurasia High Mountain Ecosystems



Bishkek, Kyrgyzstan
September 8 - 15, 2009

SECOND CIRCULAR

WORKSHOP ON THE NORTHERN EURASIA HIGH MOUNTAIN ECOSYSTEMS

will be held in Bishkek, Kyrgyzstan, during 8-15 September (Tuesday to Tuesday) in 2009. Registration will take place on Monday, 7th of September for the Young Scientists School participants and on Wednesday, 9th of September for the International Workshop.

PURPOSES OF THE WORKSHOP

Northern Eurasia Earth Science Partnership Initiative (NEESPI) together with the Central Asia Institute for Applied Geosciences (CAIAG), German Research Centre for Geosciences (GFZ), the University of Idaho, (UI), Institute of Geography of the Russian Academy of Sciences (IG RAS), and Voeikov Main Geophysical Observatory of Roshydromet will hold a seven-day-long scientific and educational workshop on the Northern Eurasia Mountain Ecosystems and Regional High Elevation NEESPI projects. The Workshop will be held in Bishkek, Kyrgyzstan at the Institute for Applied Geosciences (CAIAG). This Workshop will (1) provide a venue for researchers to discuss their research in the region, (2) improve coordination of ongoing studies, including those conducted within the Monsoon Asia Integrated Regional Study (MAIRS), and (3) promote future research development in high elevation mountain regions of the NEESPI domain.

THEME

The mountainous regions of northern Eurasia have a common cultural and economic character, and share similar natural habitats. The main natural features include high elevated ridges, alpine meadows and forest, foothill shrubs and steppes, vast deserts, rivers originating in high mountains, and a range of lakes fed by these rivers. The mountains are especially important since they are rich in water and hydroelectric potential. Conditioned by mountain relief, atmospheric activity and precipitation, the relationship between the mountains and the surrounding plains provides the most important link for the moisture exchange mechanism over the large land masses. The mountain's river basins are highly vulnerable to the changes in energy and mass fluxes at the land surface and to the near-surface physical conditions (e.g., snow cover extent, glacier mass balance and thermal state of glaciers, freshwater, and so on). Current and future expected retreat of seasonal snow cover and glaciers and the changes in precipitation partitioned among land surface storage significantly affect river runoff, permafrost state, and ground water reservoirs. Mountain ecosystems support the unique multitude of plants and animals. Forests and shrubs play a crucial role in stabilizing the land.

However, the majority of mountain regions are characterized by complex social and economic problems ensuing from extensive resource consumption; natural responses to climate change; growing anthropogenic pressure; inappropriate location of hydropower and industrial facilities; and inefficiencies of agricultural and industrial production practices. Human activity has been identified as contributing to land degradation via poorly constructed and maintained irrigation systems, especially distribution canals on steep, unstable slopes; poor soil and water management for crop production; salinisation of irrigated lands; poor pasture management, in particular the overgrazing of pastures; and over reliance on fuel-wood, shrubs, dung, and peat to meet household energy needs. Among the potentially harmful feedback effects of natural and anthropogenic land changes are: extended desertification, increased wind erosion, atmospheric contamination and dust loading (which also accelerate snow and glacier melt), reduction in yield, contamination of surface and ground waters due to extensive use of agricultural chemicals, and increasing human mortality rates. To formulate integral and effective mitigation approaches the root causes of negative environmental changes have to be properly evaluated and projected.

Since 2004 about 30 projects have been funded through and/or joined the NEESP Initiative (<http://neespi.org/science/>) to study mountainous regions of the Northern Eurasia, including Khibiny, Alps, Carpathians, Caucasus, Ural, eastern and central Siberia, Altai-Sayan, Tien Shan, and Pamir. The ongoing projects study potential consequences of climate variability and global change on very sensitive mountainous ecosystems, water resources, and land degradation in Northern Eurasia. Most projects are also intended to provide a comprehensive and objective environmental management setting for sustainable development in mountainous regions. Interest in High Elevation Areas research within the MAIRS community is also high and one of four major MAIRS research themes is "Multiple stresses on ecosystems and biophysical resources in high Mountain Zones". The Coordinated Energy

and Water Cycle Observation Project (CEOP) has also a component of the High Elevation (HE) regional focus in Eurasia to study physical and dynamic processes in high elevation areas, contributing to global climate and water cycle studies by providing rare but crucial information from high elevations.

TOPICS

The suggested topics of the Workshop include:

- (1) Dynamics and feedbacks of changes in climate and low-troposphere moisture transfer and surface water resources redistribution between natural stores of waters (seasonal snow cover, glaciers, permafrost, lakes, rivers and aquifers).
- (2) Changes in mountain ecosystems affecting downstream areas (de-glaciation, biodiversity, forests and shrubs, land degradation, land use and hazards, water quality, and socio-economical consequences).
- (3) State-of-the-art methods of field research, remote sensing, and modeling and their application to assist in meeting the NEESPI (HE) research scientific objectives.
- (4) Long-term data accessibility and analysis for the NEESPI mountainous area (data control, data calibration, validation, and modeling).

SESSIONS AND POSTERS

- (1) The International Young Scientists School on Environmental Studies at High Elevations will be held on **8-9 September 2009** in Russian.
- (2) A Regional NEESPI Science Team Research Workshop to discuss existing projects and development of new research within mountain regions of the NEESPI domain will be held on **9-11 September 2009** in English.
- (3) An International Workshop devoted to Climatic, Environmental, Land Cover-Land Use Change Studies at High Elevations will be held **12-13 September 2009** in English.

Oral and poster sessions will be planned, along with breakout group discussion sessions. The topics of discussions or objectives will have one keynote speaker who will illuminate the problem and present an overview of relevant research that has been done and possible approaches to new proposed research and solutions. Presenters at the International Workshop will be invited from the worldwide scientific community involved in High Elevation Areas research.

ABSTRACTS

- **SUBMISSION OF ABSTRACTS.** Participants who want to contribute to the Workshop should submit an abstract of their proposed presentation. This abstract must contain sufficient detail for its scientific merit and relevance to the Workshop theme to be judged by the Editorial Board. A website will be available from 5 May 2009 where authors can upload their abstract and all the relevant contact information. The abstract itself should not exceed 350 words. References and illustrations should not be included. **Last date for receipt of abstracts: 5th June 2009**
- **SELECTION OF ABSTRACTS.** Each abstract will be assessed on its scientific quality and relevance to the Workshop theme. Authors whose abstracts are accepted will be invited to make either an oral or poster presentation at the Workshop. First or corresponding authors will be advised by 20 June 2009 of the acceptance or otherwise; other authors will not be informed separately. Authors who have not received notification by that date should contact Cholpon Akulueva (ch.akulueva@caiag.kg) in Bishkek in case their abstract was not received. The abstracts will be compiled into a paper or CD format, and may be published on the Internet.
- **DISTRIBUTION OF ABSTRACTS.** A set of the accepted abstracts will be provided to participants upon registration on 9 September 2009.

THEMATIC PUBLICATION

The Workshop Steering and Editorial Committee is planning to publish the Workshop Proceedings or Special in one of peer-reviewed journals. Submissions are open to anyone. All papers will be refereed and edited according to the regular Journal standards before being accepted for publication. Those submitting abstracts to the Workshop will be asked to indicate whether they intend to submit a paper for publication, so that reviewers may be sought in advance. Papers submitted for consideration in the Journal cannot be submitted to another publication as well. The deadline for submitting papers will be approximately 1 month after the Workshop and communicated to the contributing authors individually.

EXCURSIONS AND SOCIAL PROGRAM

Field study trip to Ala Archa experimental glacio-hydrological basin will be organized on 11 September (Friday afternoon). The Ala Archa glacio-hydrological basin located 40 km southward from Bishkek (http://en.wikipedia.org/wiki/Ala_Archa_National_Park).

An ICEBREAKER reception hosted by the Central Asian Institute for Applied Geosciences will be held on September 9 (Wednesday evening).

BANQUET to be held at the Hotel Ak Keme or some other restaurant in Bishkek, on Thursday evening, 10 September at a cost of US\$25 per person.

For evening meals, there are several options that are left to the individual participants to explore. In particular, two other buffet dinners will be provided at a price of US\$15 per person. To attend the banquet and have the buffet dinners for the remainder of the week, mark both boxes on the Registration and Accommodation Request Form and make the payment at the Workshop front desk upon arrival. Of course, you can buy as many (or few) buffet tickets as you would like.

POST WORKSHOP STUDY TOUR: The separate workshop study tour (*surcharge*) has been arranged to Issik Kul Lake (http://en.wikipedia.org/wiki/Issyk_Kul) located 175 km eastward from Bishkek. Please indicate whether you will participate in this tour before 15 July.

VENUE

The Workshop will be held at the Central Asian Institute for Applied Geosciences (<http://www.caiag.kg/?L=2>), Bishkek, Kyrgyzstan. Depending on number of participants, the workshop plenary sessions on 10 September can be moved to the Kyrgyz-Slavonic University (<http://www.krsu.edu.kg/#>) in Bishkek downtown. Transportation from hotel Ak Keme to Kyrgyz-Slavonic University and CAIAG will be arranged by the Organizers.

WORKSHOP STEERING AND EDITORIAL COMMITTEE

Pavel Groisman, Vladimir Aizen, Bolot Moldobekov, Helmut Echtler, Hans-Ulrich Wetzel, Gregory Greenwood, Vladimir Kattsov, Jumpei Kubota, Gregory Leptoukh, Liu Shiyin, Gianni Tartari, Kenichi Ueno, Sergey Marchenko, Gennady Nosenko, Igor Severskiy, Maria Shahgedanova, Christiane Schmullius, Shuhei Takahashi

LOCAL ARRANGEMENTS COMMITTEE

Bolot Moldobekov, Helmut Echtler, Cholpon Akulueva

INFORMATION ABOUT THE WORKSHOP MAY BE OBTAINED FROM

NEESPI Web: <http://neespi.org/>

University of Idaho website: <http://www.sci.uidaho.edu/cae/meetings/index.html>

Pavel Groisman (Pasha.Groisman@noaa.gov), NOAA National Climatic Data Center, North Carolina, USA

Vladimir Aizen (aizen@uidaho.edu), University of Idaho, USA.; and

Cholpon Akulueva (ch.akulueva@caiag.kg), Central Asia Institute for Applied Geosciences (CAIAG), 73/2 Timur Frunze Street, Bishkek 720027, Kyrgyz Republic

Tel: +996 312 555454, Fax. +996 312 555222

PARTICIPATION

This circular includes instructions for registration and for arranging accommodation. A registration form (available also at: <http://www.sci.uidaho.edu/cae/meetings/index.html>) is also included as an appendix to this Circular. The registration and accompanying payment are due on arrival. The participant's registration fee includes organization costs, a set of abstracts, coffee breaks, lunch, and transportation from and to airport upon arrivals and departures.

REGISTRATION FEES

	US\$
Participant	250
Student	150
Accompanying person	150
Workshop study tour:	

Please confirm before 15 July. Confirmation should be done by e-mail or fax to the local Organizing Committee in Bishkek and copy to Vladimir Aizen (see page 9 of this Circular).

Organizers are exploring sponsorship options for early career scientists and participants from the Commonwealth of Independent States to offset the registration costs.

ACCOMMODATION INFORMATION

The Workshop Organizers highly recommended that all arriving participants stay in the Ak Keme hotel (<http://www.advantour.com/kyrgyzstan/hotels/bishkek/ak-keme/index.htm>). We will book a block of one and two bedrooms at discount rate for the Workshop participants. The organization committee will also give a list of hotels in Bishkek by request if someone would like to stay in different Bishkek area. However, we do not guarantee the transportation service from different hotels to the Workshop venue.

For further information on the workshop logistics, flight schedule between Bishkek and other major airports, transportation on arrival, during the workshop, and departure, food special requirements and other relevant questions, please contact Cholpon Akulueva (ch.akulueva@caiaa.kg). Tel: +996 312 555454, Fax: +996 312 555222

VISA

If you need a visa for coming to Kyrgyzstan, please provide high resolution scanned copy of your passport via e-mail (ch.akulueva@caiaa.kg) before 15 July. If you have problems getting a visa, please contact the Workshop secretariat. Information about visa application can be found at <http://www.advantour.com/kyrgyzstan/visa.htm>

WORKSHOP WEBSITE

Additional information and announcements will be posted on the Workshop website <http://neespi.org/science/> and <http://www.sci.uidaho.edu/cae/meetings/index.html>.

If you do not have access to the internet, please ask for information through Workshop secretariat directly (see above).

IMPORTANT DATES

Submission of abstract:	5 June	Notification of abstract acceptance to authors:	20 June
Fin. support request by:	30 June	Pre-registration deadline:	15 July
Accommodation by:	15 July	Submission of Passport Copy for visa by:	15 July
Post workshop study tour confirmation:	15 July		
Preliminary Program on the Workshop web site:			5 August
Submission of paper:			~20 October

POSSIBLE FUNDING

A limited financial support for participants from developing countries and countries with economy in transition is being explored. Please contact directly on this matter: Vladimir Aizen (aizen@uidaho.edu) and Hans-Ulrich Wetzel (wetz@gfz-potsdam.de) by 30 June.

The Workshop funds for an organization will primarily support key presenters, and early career

scientists. The rest of participants will cover their participation (travel and other related to the Workshop expenses) from their funded projects. The Workshop will present an ideal situation to establish new contacts between colleagues from Central Asia, Europe, Japan, China, Russian Federation, and US in order to develop mutual research projects.

HOW TO REACH BISHKEK

There are flights to Manas International Airport located 35 km northward from Bishkek (http://www.centralasiatravel.com/bishkek_flights.html) :

- Beijing – Bishkek by Kyrgyzstan Airlines
- Dehli – Bishkek by Kyrgyzstan Airlines
- Frankfurt – Bishkek by Kyrgyzstan Airlines
- Hannover – Bishkek by Kyrgyzstan Airlines
- Istanbul – Bishkek by Turkish Airlines and Itek Air
- Karachi – Bishkek by Kyrgyzstan Airlines
- Krasnoyarsk – Bishkek by KrasAir
- London - Bishkek by British Airways
- Moscow – Bishkek by Aeroflot
- Novosibirsk – Bishkek by Kyrgyzstan Airlines
- Stuttgart – Bishkek by Kyrgyzstan Airlines
- Tashkent – Bishkek by Uzbekistan Airways
- Urumqi – Bishkek by Xinjiang Airlines

We recommend you to fly by Turkish Airlines or Itek Air because their flights are scheduled to arrive early morning five times a week. British Airways is quite an expensive flight. Aeroflot is also comfortable to fly Bishkek because there are everyday flights from Moscow. The Workshop participants may also fly to Almaty and transfer to Bishkek by bus the next day after arrival because most international flights to Almaty arrive either in late evening or night. You may discuss all these options with the local organizers in Bishkek.

Appendix 1

Registration and Accommodation Request Form

Please fill out this registration form and other relevant information requested above and send to ch.akulueva@caiaig.kg and copy to aizen@uidaho.edu by July 15, 2009.

Please make copies of the registration form if you require an invitation for an accompanying person.

Given name:		Surname:	
Affiliation:			
Address:			
Country:			
Nationality:			
VISA for coming to Kyrgyzstan	<input type="checkbox"/> Needed	<input type="checkbox"/> Not needed	
Transition VISA through Kazakhstan	<input type="checkbox"/> Needed	<input type="checkbox"/> Not needed	
E-mail:			
Phone/Fax:			
Presentation	<input type="checkbox"/> Oral	<input type="checkbox"/> Poster	
Specific topic			
Attend Banquet	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Need buffet dinner	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Attend Excursion	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Workshop study tour to Issik Kul Lake	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

PLEASE SPECIFY THE DATES OF CHECK IN AND OUT IF YOU WANT TO BOOK A ROOM

Date of check in	Date of check out	Any other date if any	Number of people

PLEASE CHECK WHAT TYPE OF ROOM WILL YOU BOOK?

Hotel	Type of Room	Cost per day, US\$
Ak Keme		

Special requests:

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Please submit your abstract online through the University of Idaho website: This is STRONGLY recommended (<http://www.sci.uidaho.edu/cae/meetings/index.html>). If you have a limited access to the internet you can use the below form. Please complete this form for each presentation, and send it by **5 June 2009** to: aizen@uidaho.edu and copy to Pasha.Groisman@noaa.gov

<input type="checkbox"/> Oral presentation	<input type="checkbox"/> Poster presentation	<input type="checkbox"/> Either
Scientific topic		
Title of presentation		
Author and their affiliations		
Abstract (350 words)		

POST WORKSHOP STUDY TOUR

Two-day tour to Issik Kul Lake (<http://www.royalbeach.kg/service.htm>)

Date	Days	Type of room	Cost per day, US\$
13/14 Sept.	1 st		
14/15 Sept.	2nd		

Notes:

- Price: from US\$40-47 for room with one bed to US\$80-90 for room with two beds, and US\$115-140 for two rooms with two or three beds.
These prices are without 5% discount for the Workshop participants. **Prices include breakfast, lunch and dinner.**
- For those participants who will fly home via Almay or should return to Almaty to attend another meeting, the Workshop organizing committee will arrange bus service from Issik Kul Lake to Almaty on 15 September.
- Please note that all payments confirmation should be made by e-mail to: aizen@uidaho.edu and copy to: ch.akulueva@caiag.kg, or by fax with attn to: Cholpon Akueva +996 (312) 555222. However, the actual payment should be made upon the first day arrival by cash in US\$.