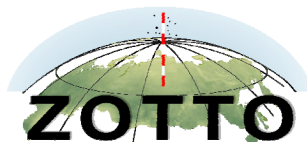




Max Planck Institute
for Biogeochemistry



10th anniversary (2003-2013)



International ZOTTO workshop on

**THE RESPONSE OF NORTHERN EURASIAN ECOSYSTEMS
TO GLOBAL CLIMATE CHANGE:
FROM OBSERVATIONS TO FORECASTING**

**Krasnoyarsk, Russia
16-22 September 2013**

1st Circular

Northern Eurasia, one of the so-called ‘hot-spot’ areas, exerts particularly important climatic controls because of its potential for large carbon storage or loss in a changing environment. What will happen with the carbon stored in forests and soils, as well as in wetlands and underlying permafrost in the boreal and arctic zone of Eurasia under warming conditions? Increased carbon storage due to a prolonged vegetation period will likely be counterbalanced by enhanced microbial activity that accelerates the release of carbon through respiration. Changes in precipitation amount and distribution patterns are likewise important – also because they impact frequency and distribution of forest fires and insect outbreaks. Direct anthropogenic impacts are at present still relatively small in the region, but industrial development and changes in land use and management may become increasingly important. Many questions regarding the above processes and their interactions remain unanswered.

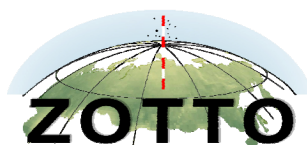
As part of a global cooperative effort to provide this knowledge, in the framework of the ISTC partner project “Biogeochemical Responses to Rapid Climate Changes in Eurasia”, the Zotino Tall Tower Observatory (ZOTTO; www.zottoproject.org) has been established in central Siberia. ZOTTO is intended to serve the scientific community as one of the world’s major continental research platforms for at least 30 years. It will document and help quantify the anticipated changes in biogeochemical cycles in this important region of the globe. Long-term, high-quality measurements of biogeochemical trace gases, such as the greenhouse gases carbon dioxide (CO₂) and methane (CH₄), help understanding how climate change and changes in land use modify their emissions and how this feeds back on the global earth system. Further measurement systems at ZOTTO monitor CO₂ and CH₄ fluxes, aerosols, carbon monoxide, ozone and NO_x, as well as the local meteorology. The tower measurements are complemented by a series of comprehensive ecosystem mapping and forest inventorying surveys in the region and a regional high-resolution forest fire monitoring program based on remote sensing data.

WHO IS THIS WORKSHOP FOR?

The workshop will bring together researchers from all over the world to mark the prospects and needs for action regarding various aspects of boreal and arctic regions in a changing world. Contributions dealing both with research related to ZOTTO and to any other boreal/arctic region are welcome. ZOTTO has a large synergetic potential in the context of forthcoming research projects in the boreal and arctic Eurasia. The workshop is intended to help foster collaboration and networking in order to increase the scientific output of ongoing projects and prepare the way for future projects in the boreal/arctic region. We look forward to welcoming you in Krasnoyarsk and ZOTTO.



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SCIENTIFIC TOPICS

- Ongoing climate change over Northern Eurasia
- Terrestrial ecosystems of Northern Eurasia and global biogeochemical cycles
- Impact of a changing climate on boreal forest dynamics: forest successions, fires, deforestation and others
- Environmental observations and modeling
- Mitigation of greenhouse gas emissions

ORGANIZATION

- V.N. Sukachev Institute of Forest, Krasnoyarsk, Russia (SIF SB RAS)
- Max Planck Institute for Biogeochemistry, Jena, Germany (MPI-BGC)
- International Science and Technology Center, Moscow, Russia (ISTC)
- Max Planck Institute for Chemistry, Mainz, Germany (MPI-C)
- Leibniz Institute for Tropospheric Research, Leipzig, Germany (IFT)
- A.M. Obukhov Institute for Atmospheric Physics, Moscow, Russia (IAP)
- St. Petersburg State University, St. Petersburg, Russia (SPbSU)
- Siberian Federal University, Krasnoyarsk, Russia (SFU)

VENUE

Krasnoyarsk and ZOTTO (Russia)

KEY DATES

February 2013	Call for registration and abstracts
30 April 2013	Deadline for Registration
31 May 2013	Deadline for Submission of Abstracts
16-18 September 2013	Workshop (Krasnoyarsk)
19-22 September 2013	Excursion to ZOTTO

REGISTRATION, ACCOMODATION and FEES

To be announced

WEB PAGE



www.zottoproject.org

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