

GC31B-0452 Ten Years of Northern Eurasia Earth Science Partnership Initiative (NEESPI): Results and Future Plans

Back to: [Session: Environmental, Socioeconomic, ...](#)

Wednesday, December 17, 2014 08:00 AM - 12:20 PM
*Moscone West
Poster Hall*

During recent decades, Northern Eurasia was affected by unprecedented climate and environmental changes. Several droughts and heat waves alternated with hazardous extreme precipitation and flood events. Permafrost thaw, retreating Arctic sea ice, increasing areas of forest fire, and dramatic regional warming buffeted this region, tossing northern Eurasia from one extreme condition to the next. The region stores nearly half of the Earth's terrestrial carbon in permafrost, wetlands, and forested land, so ecosystem changes that release stored carbon could profoundly affect the world's climate. Furthermore, changes to climate and to hydrological and biogeochemical cycles are starting to affect daily life. For example, infrastructure is collapsing as permafrost thaws, severe winter storms increasingly bring businesses to a halt, and a growing water deficit is beginning to strain agricultural production and forestry. To pool resources and facilitate research, the Northern Eurasia Earth Science Partnership Initiative (NEESPI, <http://neespi.org>) was launched in 2004. With its multidisciplinary focus, the internationally funded NEESPI (more than 165 individual international projects during the past decade) has challenged participants to research climate-ecosystem interactions, societal impacts from extreme events in Northern Eurasia, and the feedbacks of these interactions and impacts to the global Earth system. Among the numerous Institutional and private sponsors from the United States, European Union, Russia, China, and Japan, the cornerstone support for the NEESPI studies was provided by the NASA Land Cover and Land Use Change Program and the Russian Academy of Sciences.

At this presentation we shall overview the environmental studies conducted by the NEESPI community, brief the audience about the main achievements of the NEESPI researchers, and lay down the plans for the future studies. At the side event of the Meeting, we are going to initiate preparation of the book which will synthesize major NEESPI achievements.

Authors

[Pavel Groisman](#)

UCAR at NOAA/NCDC

[Garik Gutman](#)

NASA Headquarters

[Sergey Gulev](#)

P.P. Shirshov Institute of Oceanology, RAS,

[Shamil Maksyutov](#)

NIES National Institute of Environmental Studies

View Related Events

[Session: Environmental, Socioeconomic, and Climatic Changes in Northern Eurasia and Their Feedbacks to the Global Earth System | Posters](#)

[Section/Focus Group: Global Environmental Change](#)

[Day: Wednesday, December 17, 2014](#)