



Ongoing climatic changes in Northern Eurasia: Why they force us to be expedient in our research

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There are two primary reasons for the necessity to be expedient in Northern Eurasian climatic and environmental change research. First, the changes in this part of the globe are already among the largest over the globe and are accelerating. Secondly, we are facing a non-linearity in environmental and climatic changes in Northern Eurasia right now due to dramatic retreat of the Arctic sea ice and feedbacks to the global carbon budget and climate due to near-continental changes in seasonal snow cover characteristics, changes in the fresh water inflow into the Arctic Ocean, permafrost thaw, wetland transformation, land cover changes and ecosystems shift. Presentation will illustrate these two statements supporting and/or substantiating them with a focus on climatic and environment changes that have already been observed and extreme events (previously unobserved and/or rarely observed) that have occurred more frequently in the past few decades. An overview of research efforts conducted in the framework of the Northern Eurasia Earth Science Partnership Initiative (NEESPI) will conclude the presentation.