

From the Northern Eurasia Earth Science Partnership Initiative towards the Northern Eurasia Future Initiative

Dmitry A Streletskiy¹, *Pavel Ya Groisman²

1. George Washington University, 2. Hydrology Science and Services Corp

The Northern Eurasia Earth Science Partnership Initiative (**NEESPI**) –an interdisciplinary program of internationally-supported Earth systems and science research –has addressed large-scale and long-term manifestations of climate and environmental changes over Northern Eurasia and their impact on the Global Earth system since 2004. With 40 books and more than 1500 peer-reviewed journal publications to its credit, NEESPI’ s output can now be used to directly support decision-making for societal needs. Specifically, it was decided to shift gradually the foci of regional studies in Northern Eurasia towards applications with the following major Science Question: “What dynamic and interactive change(s) will affect societal well-being, activities, and health, and what might be the mitigation and adaptation strategies that could support sustainable development and decision-making activities in Northern Eurasia?” To answer this question requires a stronger socio-economic component in the ongoing and future regional studies focused on sustainable societal development under changing climatic and environmental conditions.

The NEESPI Research Team has reorganized itself into “Northern Eurasia Future Initiative” (**NEFI**) and developed a new Science Plan released in June 2016. The Plan underwent a 6-month-long public review and was finalized at the end of 2016. Its description was thereafter split between two review papers: Groisman et al. (2017) and Monier et al. (2017). The first paper describes the Plan rationale and a new set of topical questions. The second paper describes a major modeling approach that will be employed in addressing the “what to do” questions of the NEFI Research. In the current presentation, we outline the new NEFI research foci and present latest NEFI findings including international projects in the Eurasian Arctic, boreal zone, and the Dry Land Belt of Northern Eurasia.

References:

- Groisman, P.Y. et al. 2017: Northern Eurasia Future Initiative (NEFI): facing the challenges and pathways of global change in the twenty-first century. *Progress Earth and Planet Science*, 4, 41, doi:10.1186/s40645-017-0154-5
- Monier, E., et al: 2017: A Review of and Perspectives on Global Change Modeling for Northern Eurasia. *Enviro. Res Letters* 12, 8, doi:10.1088/1748-9326/aa7aae

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