

Pan-Eurasian Experiment (PEEX) Program

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The Pan-Eurasian Experiment (PEEX) program was initiated as a bottom-up approach by the researchers coming from Finland and Russia in October 2012. The PEEX China kick off meeting was held in November 2013. During its five years in operation, the program has established a governance structure and delivered a science plan for the Northern Eurasian region.

The main scientific mission of the PEEX program is to understand large-scale feedbacks and interactions between the land-atmosphere-ocean continuum in the changing climate of northern high latitude and in China (Kulmala et al. 2016, Lappalainen et al. 2016). The PEEX Science Plan (Lappalainen et al. 2015) addresses the scientific aims and large-scale research questions of the program. The focal points in the PEEX research are e.g. on the net effects of various feedback mechanisms connecting the biosphere, atmosphere and human activities. These feedbacks can either hinder or speed up the climate change.

PEEX has also introduced a concept design for a seamless modelling platform and ground-based *in situ* observation systems for detecting land-atmosphere and ocean-atmosphere interactions. Today, PEEX has an extensive researcher's network representing research communities coming from the Nordic countries, Russia and China. PEEX is currently carrying out its research activities on a project basis and promoting the SMEAR (Stations Measuring the Earth Surface Atmosphere Interactions) concept in Russia and China. PEEX has just released its Silk Road agenda together with the DBAR Initiative Lappalainen et al. 2018). The near-future challenge is to achieve a successful integration of the methodological approaches of the socio-economic research to environmental sciences and to release the 1st scientific overview of the PEEX region.