Arctic YOPP Science Workshop 2019 – Abstract Submission

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Abstract Submission Complete

Thanks for your abstract submission to attend the YOPP Arctic Science Workshop 2019. Your abstract is being forwarded to the workshop organizers. Notification of acceptance will be on 28 September 2018. In the meantime, if you have any other question, please send an email to office@polarprediction.net. Thank you very much, The Workshop Organizers

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I would like to give:	a poster presentation.
Title:	Linking PEEX with Russian Arctic observations and datasets
Please provide max. 3 keywords for your abstract	PEEX, INTAROS, iCUPE
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Abstract (max. 3000 characters):	Pan-Eurasian EXperiment (PEEX; www.atm.helsinki.fi/peex) initiative is an international, multi-disciplinary, multi-scale programme focused on solving interlinked global challenges influencing societies in regions of the Northern Eurasia, including Russia and China. In particular, PEEX is aimed to establish in-situ observation network covering environments from the Arctic coastal regions, tundra to boreal forests, from pristine to urban megacities. It is based on existing stations activities and establishing new stations towards a comprehensive observation network. Overview of measurement capacity of exiting stations was one of the first steps. Although more than 200 stations are presented in PEEX domain, only about 60 Russian stations have metadata information available (peexdata.atm.helsinki.fi - under request). The metadata enables to categorize stations in a systematic manner and to connect them to international observation networks as well as to standardize data formats following guidelines of WMO, GAW, etc. PEEX provides e-catalogue (as living document) introducing measurements and contact information of the Russian stations. The catalogue aim is to promote PEEX research collaboration and stations as partners of collaboration network and to give wider visibility to the stations activities. As INTAROS contribution, the updated metadata were obtained from 11 stations located within the Russian Arctic. Metadata include basic information on measurement sites, description physico-geographical conditions, instrumentation and infrastructure peculiarities; details on atmosphere and ecosystem (including soils–forest–lakes–urban–peatland–tundra) observations. Measurements at these sites represent more local conditions of immediate surrounding environment and datasets are available under request. As a "show case" of the PEEX Observational System capabilities, detailed analysis (including inter-annual, month-to-month and diurnal cycle variabilities of meteorological and ecosystem parameters) for selected Russian station (Marre-Sale) is presented. Obtained results underline climatic and environmental changes observed in the Russian Arctic. As iCUPE contribution, datasets as products for researchers, decision- and policy makers, stakeholders and end-users will be produced and publicly available for different applications. Focusing on the Arctic region territories, the planned datasets will include novel data on anthropogenic contaminants in snow and ice cores and organic contaminants in the air-snow-water; concentrations of different chemical species and aerosols as well as their characteristics including vertical profiles; various atmosphere-hydrosphere-cryosphere-etc. related parameters in the Arctic based on ground-airborne-satellite-etc. platforms; near-real time parameters of the Arctic Research Infrastructures; others. Some datasets will focus on selected areas in northern latitudes, others - on geographical locations (measurement sites). The planned datasets are promoted through so-called “teasers” (www.atm.helsinki.fi/icupe/index.php/submitted-datasets). These also include those from the iCUPE collaborators for the Russian Arctic: atmospheric mercury measurements at Amderma station; elemental and organic carbon over the northwestern coast of the Kandalaksha Bay of the White Sea; micro-climatic features and Urban Heat Island Intensity in cities of Arctic region; and others.