Eurasian Experiment (PEEX) Program (Email from Hanna K. Lappalainen 28 March 2017)

Eurasian Experiment (PEEX) Program coordinated by University of Helsinki (FI) together with Finnish Meteorological Institute (FI), Moscow State University (RU), AEROCOSMOS (RU) and RADI (CN).will provide an overview of the land-atmosphere observation activities in the Russian Arctic - boreal regions. PEEX will make extensive metadata analysis of the existing Russian ecosystem, atmospheric composition, cryosphere observations. The metadata analysis is a continuation for the already done preliminary analysis of the Russian observation activities, which covers   measurement information of ca 150 Russian stations; most of them being the Russian Academy of Sciences stations.

Based on the metadata analysis we are able to made a conceptual design of the future PEEX observation network built on the exiting Russian research infrastructure. The conceptual design of the future PEEX network include (i) the selection of the stations having optimal spatial and measurement coverage and (ii) the categorization of the stations based on their existing measurements (basic stations/ advanced stations/ supersites).  Metadata analysis enables us to start  and facilitate the procedure towards common and standardized data formats of the selected stations. The becoming PEEX in situ network data products will built on the SMEAR (Stations Measuring Ecosystem Atmospheric Relations) concept. The already exiting SMEAR data system includes data products in line with the European ACTRIS - ICOS - ANAEE RIs.  The most important data platform is the flagship station SMEAR-II station (University of Helsinki) in Hyytiälä. The SMEAR data is stored by the CSC - IT Center for Science also having a data delivery platform, SMART-SMEAR (<http://avaa.tdata.fi/web/smart>). Via PEEX activity we coordinate the process towards common data formats between EU-BG-INTAROS-project data systems - SMEAR data system – SAON data system, GEOSS data system Future PEEX networks data system in Russia