Pan-Eurasian Experiment





PEEX Headquarters
Helsinki, INAR at University of Helsinki
PEEX Regional Offices
Moscow, AEROCOSMOS and
Moscow Sate University
Beijing, Institute of Digital Earth
and Remote Sensing-RADI
Nanjing, University of Nanjing







OVERVIEW

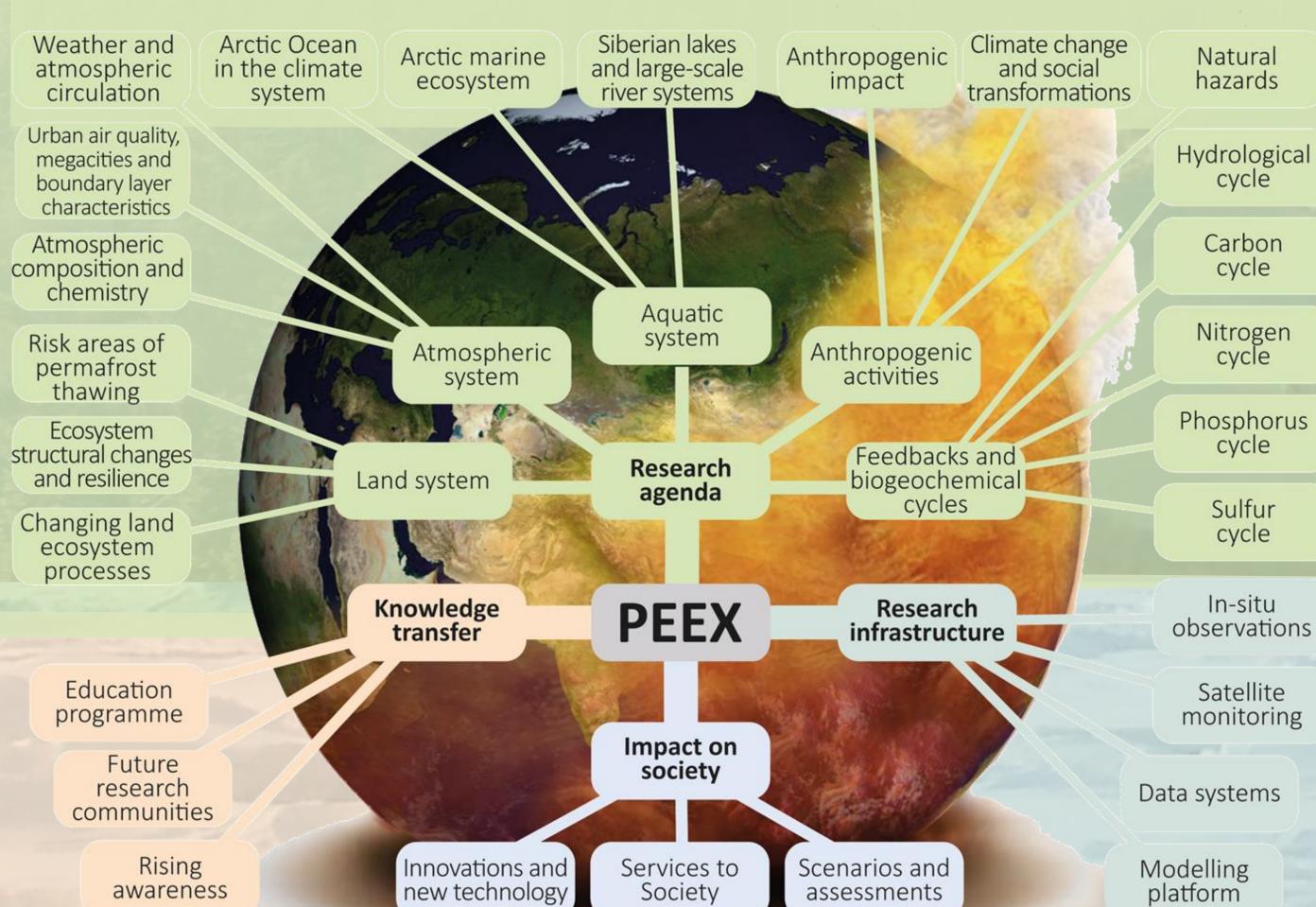
BOTTOM-UP INITIATIVE ON THE ROLE OF ARCTIC AND BOREAL REGIONS IN THE CONTEXT OF GLOBAL CHANGE

PEEX is a multidisciplinary climate change, air quality, environment and research infrastructure program focused on the Northern Eurasian particularly arctic and boreal regions.

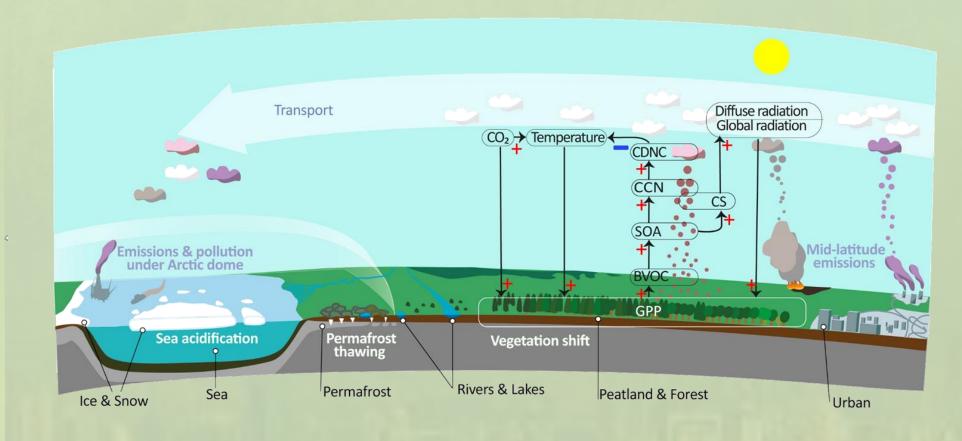
Research community from 20 different countries, network of 4000 researchers.

42 research institutions from Russia and China had signed a Collaboration Agreement since 2012

Boreal forest zone Continuous permafrost Discontinuous permafrost



RESEARCH DOMAIN



Over the Eurasian region, from Arctic to
Boreal and Temperate zones. Key processes
that drive the research focuses and the
variety of site types under study.
As an example, the COBACC loop is
superposed on the elements of the
landscape, evidencing the width of the scale
coverage required for its observation.

PEEX INFRASTRUCTURE to establish

PEEX OBSERVATION SYSTEM

PEEX MODELLING PLATFORM

PEEX DATA STORAGE & DELIVERY SYSTEM

PEEX KNOWLEDGE TRANSFER

TO EDUCATE THE NEXT GENERATION
OF SCIENTISTS
OFFER CAPACITY BUILDING FOR
EXPERTS AT INTERNATIONAL COURSES



PEEX SERVICES

DATA AND RI ACCESS POLICY SUPPORT
RESEARCH SERVICES EDUCATION
INNOVATION DECISION SUPPORT

Observational platforms

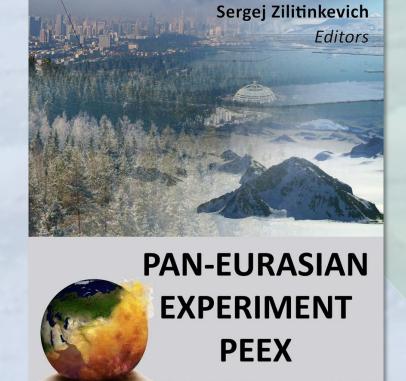
Atmosphere Hydrosphere Cryosphere Biosphere Pedosphere Anthroposph

PEEX Services

Modelling platforms

Highly distributed Highly integrated

Ground-based CURRENT STATE Remote-Sensing Multi-scale Models



Hanna K. Lappalainen

SCIENCE PLAN
SCIENCE BLAN

BEEX

EXPERIMENT

WORKING GROUPS

BaSeNet: Sergey Chalov, Moscow State University

Satellites: Gerrit de Leeuw, FMI, and Valery Bondur, AEROCOSMOS

Modelling: Alexander Baklanov and Alexander Mahura, DMI

Marine observations: Timo Vihma, FMI, and Petteri Uotila, INAR-Univ. Helsinki

In situ observations: Tuukka Petäjä, INAR-Univ. Helsinki, and Hanna Lappalainen, INAR-Univ. Helsinki/FMI Socio-economics – Integration: Veli-Pekka Tynkkynen, Aleksanteri Institute-Univ. Helsinki

Anatoly Shvidenko, IIASA, and Sirkku Juhola, Univ. Helsinki

Research Projects and Infrastructures

International collaboration



Prof. Pavel Kabat, IIASA, NL

STEERING COMMITTEE

Prof. Markku Kulmala, Univ. Helsinki, Fl

Prof. Valeriy Bondur, AEROCOSMOS, RU

Prof. Huadong Guo, RADI, CAS, Beijing, CN

Prof. Alexander Baklanov, WMO, CH

Prof. Hans-Christen Hansson, iLEAPS, SE

Prof. Vladimir Kotlyakov, Inst. of Geography, RU

Prof. Nikoly Kasimov, Moscow State University, RU

Prof. Gennady Matvienko, Inst. of Atmospheric Optics SB, RAS, RU

Prof. Li Chongyin, Inst. Atmospheric physics, CAS, Beijing, CN

Prof. Sergej Zilitinkevich, FMI, FI

Director Yrjö Viisanen, FMI, FI



















