



Pan-Eurasian Experiment

PEEX

Document: Summary and Concluding remarks of the 1st Pan-Eurasian Experiment (PEEX) Science Conference & The 5th PEEEX Meeting Helsinki, Finland 10-13 February 2015
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APPENDIX: <https://www.atm.helsinki.fi/peex/>

- 1- Agenda
 - 2- Participant list
 - 3- Conference Proceedings
 - 4- Press releases
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1. SCIENCE PLAN & THE CONTINUATION OF THE SCIENCE PROCESS

- Science Plan Proof available is <https://www.atm.helsinki.fi/peex/>. Editing of the proof is in process and the final version will be released in March 2015.
- Hard copies are available in spring/summer 2015 and the translations in Russia and in Chinese will be made in 2015.
- in addition to pees research projects the science process continues via PEEEX special issues
 - discussed EGU special issues (ACP etc.)
 - the PEEEX special issue will include papers on the topics such as
 - Overview of the relevant research needs for the arctic-boreal regions (PEEX Science program in detail) (RESEARCH AGENDA)
 - Modelling Platform (MODELLING)
 - Conceptual design of PEEEX observation network (manuscript) (INFRA)
 - PEEEX observation network (INFRA)
 - etc...
 - identification of PEEEX Special Issue Editors under discussion by the PEEEX Preparatory Committee

2. PEEEX ORGANIZATION

- PEEEX program the organization structure has been establish (see Science Plan); bodies are:
 - PEEEX Preparatory Phase Committee
 - PEEEX Offices:
 - Helsinki HQ - Program coordination (Univ.Helsinki and FMI)
 - Moscow offices (MSU and Aerocosmos)
 - PEEEX Beijing (RADI) and PEEEX Nanjing (Univ.Nanjing)
 - PEEEX Nations segments (in process)



- PEEEX Working Groups (in process)
- in order to ensure the fluent information flows (several e-mailing lists will be updated /established and peex website / intranet will be updated:
 - E-mailing lists
 - lists: PEEEX-all, PEEEX-Europe, PEEEX-Russia, PEEEX-China, PEEEX WGs: infra, modelling, society
 - PEEEX HQ members are part of all PEEEX-mailing list
 - PEEEX list administrator is Alla Borisova, Helsinki-HQ
 - updating PEEEX www & establishing Russian and China sites
 - PEEEX main www will be linked to PEEEX Russia-www (in process, Pavel Konstantinov MSU) and PEEEX-China-www (in process, Yubao Qiu RADI) coordinated in collaboration with PEEEX HQ and Russia and China offices/officers
 - PEEEX Russia and China will follow the new visual layout of the main site.

3. BUILDING THE PEEEX COMMUNITY - Becoming conferences, WS and PEEEX sessions

3.1 International Geographical Union (IGU) Regional Conference in Moscow, 17-21 August 2015

- <http://www.igu2015.ru/about-igu>
- SESSIONS: Pan-Eurasian Experiment (PEEX) – A Research Initiative Meeting The Grand Challenges Of The Changing Environment Of The Northern Pan-Eurasian Arctic-Boreal Areas
- Chair Persons: Markku Kulmala, Sergej Zilitinkevich, Tuukka Petäjä, Hanna K. Lappalainen, Natalia Chubarova

3.2 European Aerosol Conference (EAC) September 6-11, 2015, Milan Italy

- Abstract Submission Deadline February 27th, 2015
- PEEEX special session organized by Kostas Eleftheriadis elefther@ipta.demokritos.gr

3.3 3rd CRAICC – PEEEX Workshop: Climate Change for Arctic Seas and Shipping 9-10 March 2015 in Copenhagen, Denmark

- The topics of this workshop are:
 - estimating consequences of climate change for the Arctic region on seas and shipping and effects of ship emissions on the environment and climate
 - estimating frequency, spatio-temporal distribution and impact of extreme weather events on shipping traffic
 - improving satellite monitoring and modelling of ice formation and movement in areas of the Arctic shipping routes
 - developing approaches to environmental challenges due to possible increase in Arctic shipping
 - We invite all doing research in fields related to these topics to deliver a presentation at the workshop.
- Abstract deadline (short – max 250 words) February 20th 2015 (Annabelle Lund ase@dmi.dk).
- Registration deadline February 25th 2015

4. BUILT ON EXISTING – PEEEX-ACTIVITIES

4.1 Establishing the PEEEX observation network

- The aims of the PEEEX metadata base are



PRACTICAL AIMS

- (i) to add new stations, which are interested into take part of the PEEEX network
- (ii) to update/ complete / check the existing station information
 - specific actions here;
 - a. RAS stations (Nina Zaitzeva)
 - b. University hosted stations in Russia (Pavel Kostantinov MSU (Russia))
 - c. China Flux stations; Prof. Guirui YU & Leiming ZHANG, Inst. of Geographic Sciences and Natural Resources Research, CAS & Joni Kujansuu Univ.Helsinki

INFRA- PROGRAM AIMS

- i. To establish PEEEX observation network
 - a. to select stations providing pilot-approach based on Hari et al. Network concept
 - ii. To distribute PEEEX labeled data (long-term aim)
 - a. To establish metadatabase on multiscale observations
 - b. To facilitate links from metadata to real observations
 - i. access to PEEEX station data
 - ii. links to existing databases
- The stations metadata will be opened in spring 2015 via peex www. Each user will be provided own username and password
 - The first set of stations providing the PEEEX pilot will be determined in detail in spring 2015. The stations will be in minimum the exiting SMEAR / SMEAR typed stations (Jarviselja, Nanjing) and some other well-equipped stations such as Tiksi, Zotini, Tomsk.
 - The discussions how to find synegies and collaboration with the WMO/GAW network is in process.
 - Research Infrastructure Roadmap - Implementation Plan; Draft already in process (Petäjä, Lappalainen, Baklanov, de Leeuw, Zilitinkevich, Kulmala et al.)

4.2 Knowledge -transfer

Targeted for Education

- The first PEEEX courses has been announce in <https://www.atm.helsinki.fi/peex/index.php/education>
- New proposals on PEEEX labeled courses are welcomed to submit <https://www.atm.helsinki.fi/peex/index.php/submit-courses>
- Example of new actions, which could be applied to PEEEX themes / regions
Air Quality Education (China) WS in May 2015 in Beijin; contact person is Dr. Taina Ruuskanen, [taina.ruuskanen\(at\)helsinki.fi](mailto:taina.ruuskanen(at)helsinki.fi)

Targeted for the General Public & science communities

- PEEEX outreach material (flyer, poster, ppt) in process by the Helsinki HQ

4. NEW PEEEX ACTIVITIES - the 1st PEEEX labeled projects

- **PEEX PROPOSALS**
 - Marie-Curie-Gand Challenges PEEEX (ca 4 MEURO), CR M. Kulmala Univ.Helsinki; submitted in Jan 2015
 - Future Arctic – Scenarios & Assessments (FAAS) (cs 3,4 MEURO), CR M. Kulmala Univ. Helsinki; to be submitted in March 2015
 - Erasmus+ (ca 1 MEURO), CR S. Zilitinkevich; submitted in February 2015
- **ON-GOING PROJECTS**
 - PEEEX – CRAICC –series of workshops (NORDFORSK) (2.750.000 NOK; ca 320 000 EURO)



- FAAS WS (NORDFORSK) (12 000 EURO)
- ABBA (Academy of Finland, ca 500 EUR) supplemented by 5 Russian projects (RFBR, 45 000 RUB)
- AEROCOSMOS-ATM (FCoE) project (BILATERAL COLLABORATION)
 - *Development of methods for monitoring of the dynamics of natural and anthropogenic emissions of trace gases and aerosols in the atmosphere based on satellite data and modelling results*
 - Beautiful Beijing- project, University Of Helsinki (TEKES FI)
- CO-DESING Activities ; Helsinki HQ together with PEEC Offices in Russia and China continues promoting PEEC program to funding agencies in Europe, Russia and in China.

5. INTERNATIONAL COLLABORATION & PEEC IMPACT ON SOCIETY IN LONGER RUN

- During 2012-2014 PEEC program has established dialog, collaboration or been integrated part of the several large scale networks and programs: GEOSS, IEAS, IIASA, FUTURE EARTH, IGBP (iLEAPS), ARCTIC COUNCIL, SAON, WMO GAW, Int. Society of Digital Earth and *SILK ROAD*
- The work with the specific actions coordinated by the Helsinki-HQ will continue such as
 - providing PEEC labeled Pilot service for GEOSS
 - detailed specifications with PEEC observations network vs. WMO GAW
 - drafting PEEC RI/data policies vs. SAON vs. GEOSS vs. WMO GAW part of the PEEC observation network implementation plan
 - seeking collaborations activities in a frame of IEAS
 - deepen the PEEC agenda and role of P in a frame of SILK ROAD Economic belt –program
 - deepen the PEEC positions as a arctic-boreal node/hub in a frame of Future Earth