

PEEX Collaboration - Online Workshop



Pan-Eurasian Experiment
PEEX

INAR
INSTITUTE FOR ATMOSPHERIC AND
EARTH SYSTEM RESEARCH



**Institute for Atmospheric and Earth System Research, University of Helsinki &
Institute of Mathematical Machines and Systems Problems, National Academy of Sciences
(UHEL-INAR & IMMSP-NAS)**

6 June 2024, 13:00-17:00 pm (all times are given in Helsinki=Kyiv time)

===== Agenda =====

13:00 – Welcome / Introduction of Participants

13:10 – Overview of PEEEX (Pan-Eurasian Experiment) Programme – Hanna K. Lappalainen, INAR

13:25 – Short break

IMMSP Presentations

moderated by Ivan Kovalets, IMMSP

13:30 – Review of atmospheric transport modeling in IMMSP – Ivan Kovalets

13:45 – Sea-level, temperature and salinity change in the Black Sea simulated for 2000-2100 – Volodymyr Maderich

14:00 – 3D modeling of heat transfer and water quality in shallow waters – Roman Bezhenar

14:15 – Lagrangian modelling of reactive contaminant transport in marine environment – Igor Brovchenko

14:30 – Short break

INAR Presentations

moderated by Alexander Mahura, INAR

14:40 – SMEAR (Station for Measuring Ecosystem–Atmosphere Relation) concept & measurements – Tuukka Petäjä

14:55 – Earth System and climate modeling – Risto Makkonen

15:10 – Seamless / online integrated regional/subregional/urban scales and -process modelling – Alexander Mahura

15:25 – Polar ocean research – Petteri Uotila

15:40 – Process-based fine scale modelling for meteorology-chemistry-aerosol system – Michael Boy

15:55 – Observing forest ecosystems: links climate change, biodiversity & human activities – Jaana Bäck

16:10 – Short break

16:20 –

Discussions

*moderated by Hanna Lappalainen, Alexander Mahura, INAR
& Ivan Kovalets, Roman Bezhenar, IMMSP*

Qn: Petteri U. to Volodymyr M. presentation - “Thanks, very interesting! Did you look at vertical stratification changes?” -> Answer: “Yes, SML thickness and seasonal pycnocline changed.”

+ additional question & answer (take from recording & add here)

Qn: Ivan K. to Tuukka P. presentation - "Are these observations from SMEAR stations included in reanalysis products regarding air pollution, such as those presented at Copernicus sites (CAMS product)?" -> Answer: “Thanks Ivan. SMEAR observation data can be found here: <https://www.atm.helsinki.fi/smeared/online-observations/>. We submit aerosol data to ebas (ACTRIS data center) on aerosol in-situ. We pilot near-real-time data delivery for aerosol size distribution data and volatile organic compounds in CAMS development projects. AOD is available through Aeronet. Greenhouse gas concentrations and fluxes through ICOS data center.

Qn: Ivan K. to Alexander M. - “Are emissions caused by war in Ukraine, taken in account by emission products, used by enviro hirlam?” -> Answer: “No, but it was the DARSU proposal task (updating emissions) for Academy of Finland Call (on collaboration with Ukraine). Not funded, but to be reconsidered for other suitable Call.”

UHEL-INAR suggestions:

- <https://www.aka.fi/en/research-funding/apply-for-funding/calls-for-applications/> - Research Council of Finland (RCF), looking for suitable Calls, research projects, fellowships
- <https://www.atm.helsinki.fi/peex/index.php/portfolio-items/mp-at-csc/> - High Performance Computing projects at IT Center for Science Computing (CSC, Finland; <https://www.csc.fi/>)
- Possibility of individual proposals for visiting/ doing research at SMEAR-II (Hyytiälä station, Finland; (<https://www.atm.helsinki.fi/SMEAR/index.php>))
- Welcome to online webinars arranged by UHEL-INAR & ACCC (Atmosphere and Climate Competence Center; <https://www.acccflagship.fi/>)
- <https://www.atm.helsinki.fi/peex/index.php/education/> - UHEL-INAR proposed educational courses/ trainings
- <https://www.atm.helsinki.fi/cluvex/> - CLUVEX (Climate University for Virtual Exchanges) - virtual exchanges for students
- Joint research proposals for Horizon Europe, RCF and FI-UA bilateral Calls; publications, presentations, etc.
- Joint co-supervision of PhD students + possibility short-term visits of UA MSc students to UHEL (how credits are handled/ converted/ accepted between FI & UA Unis)

IMMSP-NAS suggestions:

- IMMSP team is ready for collaboration within the PEEEX initiative in fields of atmospheric and marine modeling
- IMMSP is already (confirmed) the member of consortium for the COST Action for PEEEX collaboration (dl - 23 Oct 2024)
- UA students (young researchers) physical visits abroad : from UA to FI (special letters/ docs should be prepared)
- ECTS credits in UA (if issued by UHEL) - Volodymyr N., KAU will check this issue & inform (for other UA Univs there is a need to be checked/requested from these Univs admin)
- Electricity supply (now - problem in UA) - Alexander M. will clarify with CSC + Markku K about getting access for UA to CSC's HPC (account + Puhti) & <https://www.atm.helsinki.fi/peex/index.php/portfolio-items/mp-at-csc>
- To monitor RCF/AoF Calls for UA on research projects, collaboration, individual fellowships

16:00 – Wrap-up/ End of Workshop

List of Participants:

UHEL-INAR	IMMSP-NAS of Ukraine
Presenters: Hanna K. Lappalainen <hanna.k.lappalainen@helsinki.fi> Tuukka Petäjä <tuukka.petaja@helsinki.fi> Risto Makkonen <risto.makkonen@fmi.fi> Alexander Mahura <alexander.mahura@helsinki.fi> Petteri Uotila <petteri.uotila@helsinki.fi> Michael Boy <michael.boy@helsinki.fi> Jaana Bäck <jaana.back@helsinki.fi> +	Presenters: Ivan Kovalets <ivkov084@gmail.com> Igor Brovchenko <ibrovchenko@gmail.com> Roman Bezhenar <romanbezhenar@gmail.com> Volodymyr Maderych <vladmad@gmail.com> + Volodymyr Nochvai <nochvai@gmail.com> Roman Sinkevich Katherine Kovalets
Multi-Scale Modelling (MSM) group members Petri Clusius, Putian Zhou, Taiwo Ashu, Valery Ashu, Metin Baykara, Benjamin Foreback, Cui Zeqi, Andreas Rupp, Heikki Haario	

zoom Workplace Meeting hanna.k.lappalainen@helsinki.fi

Participants (11)

Find a participant

- Alexander Mahura (Host, me)
- hanna.k.lappalainen@helsinki.fi (Co-host)
- Igor Brovchenko
- Ivan Kovalets
- Katherine Kovalets
- Petteri Uotila
- Risto Makkonen
- Roman Bezhenar
- Tuukka Petäjä **Ask to unmute**
- VM
- Volodymyr Nachvai, NOSC-UA DIH

Invite Mute all

Audio Video Participants Chat React Pause/stop recording More End

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PAN-EURASIAN EXPERIMENT (PEEX) PROGRAM

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PEEX / GlobalSMEAR Secretary General
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Institute for Atmospheric and Earth System Research, University of Helsinki & Institute of Mathematical Machines and Systems Problems, National Academy of Sciences (UHEL-INAR & IMMSP-NAS)
6 June 2024

HELSINGIN YLIOPISTO HELSINKI UNIVERSITY OF TECHNOLOGY Institute for Atmospheric and Earth System Research

VM Alexander Mahura Volodymyr Nachvai, NOSC-UA DIH Petteri Uotila

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