

Involvement/Participation in On-going & Completed Projects

1. **(2016-2017) – CRUCIAL:** Critical steps in understanding land surface – atmosphere interactions: from improved knowledge to socioeconomic solutions (*Nordic Research and Collaboration Project, NordForsk; PIs – Markku Kulmala, Hanna Lappalainen*) (*Roles: team leader, participant*)
2. **(2016-2020) – HIRLAM-C:** High Resolution Limited Area Model research and development (in cooperation with the ALADIN consortium and Meteo-France); <http://hirlam.org> (*Role: participant*)
3. **(2015-2018) – H2020 EU ESCAPE:** Energy-efficient Scalable Algorithms for Weather Prediction at Exascale (*Horizon-2020 Research and Innovation Action; PI - Peter Bauer*); <http://www.hpc-escape.eu> (*Role: participant*)
4. **(2015-2017) – EnviroAerosols on ECMWF:** Enviro-HIRLAM/HARMONIE model research and development for online integrated meteorology-chemistry/aerosols feedbacks and interactions in weather and atmospheric composition forecasting (*HPC Project; PI – Bent Sass*) (*Roles: co-PI, participant/ HPC user*)
5. **(2015-2016) – DMI-HARMONIE:** DMI – Hirlam Aladin Research on Meso-scale Operational NWP in Europe (*Research and development project; Role: participant*)
6. **(2014-2017) – FP7 MarcoPolo:** Monitoring and Assessment of Regional air quality in China using space Observations, Project Of Long-term sino-european co-Operation (*EU FP7 Collaborative Project; PI – Ronald van der A*); <http://www.marcopolo-panda.eu> (*Roles: team leader, WP5 “Air Quality Modelling and Forecasting” leader, participant*)
7. **(2014-2015) – CRAICC-PEEX:** CRyosphere-Atmosphere Interactions in a Changing Arctic Climate and Pan Eurasian Experiment (*Cooperation within Top-Level Research Initiative, NordForsk; PIs – Timo Vesala, Sergey Zilitinkevich*); <http://www.atm.helsinki.fi/peex> (*Roles: team leader, WP “PEEX Modelling Platform” co-leader, participant*)
8. **(2014-2016) – CarboNord:** Impact of black carbon on air quality and climate in Northern Europe and Arctic (*Nordic Research Project, NordForsk; PI – Mikhail Sofiev*) (*Roles: team leader, participant*)
9. **(2012-2014) – Enviro-Chemistry on ECMWF:** Enviro-HIRLAM / HARMONIE - Development and Test of an NWP Model System Accounting for Aerosol-Meteorology Interactions (*HPC Project; PI – Alexander Baklanov*) (*Roles: participant/HPC user*)
10. **(2011-2015) – COST Action ES1004: EuMetChem** - European framework for online integrated air quality and meteorology modelling (*PI – Alexander Baklanov*); <http://eumetchem.info> (*Roles: Danish Management Committee Member, participant*)
11. **(2011-2015) – HIRLAM-B:** High Resolution Limited Area Model research and development (in cooperation with the ALADIN consortium and Meteo-France); <http://hirlam.org> (*Roles: participant*)
12. **(2010-2014) – FP7 TRANSPHORM:** Transport related Air Pollution and Health impacts - Integrated Methodologies for Assessing Particulate Matter (*EU FP7 Integrated Project; PI – Ranjeet Sokhi*); <http://www.transphorm.eu> (*Roles: participant*)
13. **(2010-2012) – QualiMET:** Development of qualification framework in meteorology (*EC TEMPUS Project; PI – Sergey Zilitinkevich*); <http://www.qualimet.net> (*Roles: involved, Enviro-HIRLAM training*)
14. **(2010-2012) – MUSCATEN:** Towards Multi-Scale Modelling of the Atmospheric Environment (*NordForsk, PI - Rein Room*); <http://muscaten.ut.ee> (*Roles: participant + Enviro-HIRLAM training*)
15. **(2009-2011) – FP7 MACC:** Monitoring Atmospheric Composition and Climate (*Large-scale integrating project; PI - Adrian Simmons*); <http://www.gmes-atmosphere.eu> (*Roles: participant*)
16. **(2008-2011) – COST Action ES0603: EUPOL** - Assessment of production, release, distribution and health impact of allergenic pollen in Europe (*PIs - Mikhail Sofiev, Karl-Christian Bergmann*); <http://www.unifi.it/COSTEupol> (*Roles: participant*)
17. **(2008-2011) – fsRSF:** Fine-Scale Road Stretches Forecasting (*Research Project in cooperation with DRD; PIs – Torben S. Pedersen, Bent H. Sass*) (*Roles: participant*)
18. **(2008-2011) – FP7 MEGAPOLI:** Megacities: Emissions, urban, regional and Global Atmospheric POLLution and climate effects, and Integrated tools for assessment and mitigation (*EU FP7 Collaborative Project; PIs – Alexander Baklanov, Mark Lawrence, Spyros Pandis*); <http://megapoli.info> (*Roles: project manager, participant*)
19. **(2008-2010) –** Development of methodical bases and mobile equipment for monitoring of Xe and Kr radionuclides in the North-West region of Russia (*ISTC-2133 Research Project; PI – Yuri Dubasov*) (*Roles: involved*)
20. **(2008-2009) –** Atmospheric Trajectory and Chemical Transport Modelling for Elevated Ozone Events in Denmark (*DMI Pilot Study, PIs – Alexander Mahura, Allan Gross*)
21. **(2008-2010) –** Modelling of Anthropogenic Risks and Impacts for Environment and Climate of the North (*Research Project/Theme; PIs – Alexander Baklanov, Alexander Mahura*)
22. **(2007-2012) – CEEH:** Danish Centre for Energy, Environment and Health (*Research Project; PIs – Alexander Baklanov, Eigil Kaas*); <http://ceeh.dk> (*Roles: involved*)

- 23.(2007-2011) – **COST Action ES0602: ENCWF** - Towards a European Network on Chemical Weather Forecasting and Information Systems (PIs – Jaakko Kukkonen, Konstantinos Karatzas); <http://www.chemicalweather.eu> (Roles: involved)
- 24.(2007-2010) – **Combat-Meteo**: Development of competency-based two-level curricula in Meteorology (TEMPUS TACIS Joint EU Project; PI – Sergey Zilitinkevich); <http://www.combat-meteo.net> (Roles: involved, Enviro-HIRLAM training)
- 25.(2006-2008) – **RSF**: Road Segment/Stretch Forecasts (Research Project in cooperation with DRD, PIs – Torben S. Pedersen, Bent H. Sass) (Roles: participant)
- 26.(2005-2010) – **HIRLAM-A**: High Resolution Limited Area Model research and development; <http://hirlam.org> (Roles: participant)
- 27.(2005-2008) – **FP6 Enviro-RISKS**: Man-induced Environmental Risks: Monitoring, Management and Remediation of Man-made Changes in Siberia (EU FP6 INCO, PIs – Alexander Baklanov, Eugenie Gordov); <http://project.risks.scert.ru> (Roles: participant)
- 28.(2005-2009) – **NetFAM**: Nordic Network on Fine-scale Atmospheric Modelling (NordForsk, PI - Savijärvi Hannu); <http://netfam.fmi.fi> (Roles: participant + Enviro-HIRLAM training)
- 29.(2005) – Vej-Strækings-Vejr : Road-Stretch-Weather (DMI Pilot Study; PIs – Alexander Mahura, Claus Petersen)
- 30.(2005-2007) – Modelling of Atmospheric Transport and Deposition of Pollutants and Evaluation of Consequences for Arctic (INEP KSC RAS Research Project/Theme, PIs – Alexander Baklanov, Alexander Mahura)
- 31.(2005-2006) – **NKS-B/NordRisk**: Nuclear risk from atmospheric dispersion in Northern Europe (NKS Research Project; PI – Bent Lauritzen) (Roles: participant)
- 32.(2004-2009) – **COST Action 732**: Enhancing Mesoscale Meteorological Modelling Capabilities for Air Pollution and Dispersion Applications (PIs – Ranjeet Sokhi, Alexander Baklanov); <http://www.cost728.org> (Roles: participant)
- 33.(2003-2005) – Development of New Generation of Cloud and Precipitation Analyses for the Automatic Road Weather Model (Research Project in cooperation with DRD, PIs – Torben S.Pedersen, Bent H.Sass) (Roles: participant)
- 34.(2002-2003) – **SMELTER**: Assessment of Long-Range Transport and Deposition from Cu-Ni Smelters of Russian North (INEP-DMI Pilot Study; PIs – Alexander Mahura, Alexander Baklanov)
- 35.(2002-2003) – Evaluation of source-receptor relationship for atmospheric pollutants using trajectory modelling and probability fields analysis (INEP-DMI Pilot Study, PIs – Alexander Mahura, Alexander Baklanov)
- 36.(2002-2005) – **FP5 FUMAPEX**: Integrated Systems for Forecasting Urban Meteorology, Air Pollution and Population Exposure (EU FP5 Collaborative Project, PI – Alexander Baklanov); <http://fumapex.dmi.dk> (Roles: participant)
- 37.(2001-2002) – Assessment of Potential Risk of "Kursk" Nuclear Submarine Operation Phases (INEP-DMI Pilot Study; PIs – Alexander Mahura, Alexander Baklanov)
- 38.(2001-2002) – **FARECS-I, II**: Assessment of Impact of Russian Nuclear Fleet Operations on Russian Far Eastern Coastal Regions (IIASA-DMI-INEP-NCAR-DOE-UV; Radiation Safety of Biosphere – RAD Project; PIs – Frank Parker, Vladimir Novikov, Keith Compton) (Roles: participant)
- 39.(2000-2004) – Modelling of Anthropogenic Impact on the Arctic Environment (INEP KSC RAS Research Project/Theme; PIs – Alexander Baklanov, Sergey Morozov) (Roles: participant)
- 40.(2000-2003) – **AR-NARP**: Atmospheric Transport Pathways, Vulnerability and Possible Accidental Consequences from the Nuclear Risk Sites in the European Arctic (NARP Project; PI – Alexander Baklanov) (Roles: participant)
- 41.(1998-2000) – Assessment of Potential Risk of Environmental Radioactive Contamination in Northern Europe from Terrestrial Units in North-West Russia (INTAS Project; PI – Alexander Baklanov) (Roles: participant)
- 42.(1998-2000) – Identification of Sources and Long Term Trends for Pollutants Using Isentropic Trajectory Analysis (UW-NOAA-CMDL-JISAO Joint Project; PIs – Dan Jaffe, Joyce Harris) (Roles: participant)
- 43.(1997-1998) – Atmospheric Transport Pathways from the Kola Nuclear Reactors (UAF-INE-FOA-CERUM Joint Project; PIs – Robert Andres, Dan Jaffe, Alexander Baklanov) (Roles: participant)
- 44.(1997-1998) – Identification of Sources and Long Term Trends for Pollutants in the Arctic Using Clustered Trajectory Analysis (UAF-NOAA-CMDL-CIFAR Joint Project; PIs - Dan Jaffe, Joyce Harris) (Roles: participant)
- 45.(1997-2002) – Risk and Nuclear Waste: Nuclear Problems, Risk Perceptions and Societal Responses to Nuclear Waste in the Barents Region (PI - Ronny Bergman) (Roles: participant)
- 46.(1996-1997) – Atmospheric Transport Pathways from the Kola Nuclear Power Plant (UAF-ADEC-FOA-BECN-CMF-INEP Joint Project; PIs - Dan Jaffe, Alexander Baklanov, Robert Andres) (Roles: participant)
- 47.(1995-1997) – Atmospheric Transport Pathways to Alaska from Potential Radionuclide Sites in the Former Soviet Union (UAF-ADEC Project 96-01; PIs - Dan Jaffe, Robert Andres) (Roles: participant)
- 48.(1995-1996) – Impact of Asian Emissions on CO and O₃ Concentrations in the Northern Pacific Atmosphere (NOAA Climate and Global Change Program, Grant NA36GPO2; PIs - Dan Jaffe, John Merrill) (Roles: participant)
- 49.(1993-1996) – An Elaboration of Information System of Operational Forecast on the Radiation Hazards for the Kola Peninsula and North Kallott Countries (INEP KSC RAS Research Project/Theme; PIs – Gennady Kalabin, Alexander Baklanov) (Roles: participant)

- 50.(1992-1996) – Modeling of Possible Ecological Consequences from the Objects of Radiation Risk in the European Arctic (*INEP KSC RAS Research Project/Theme; PIs – Gennady Kalabin, Alexander Baklanov*) (Roles: participant)
- 51.(1992-1996) – Modeling of the Kola Nuclear Power Plant Impact on the Environment in Complex Physical-Geographical Conditions (*INEP KSC RAS Research Project/Theme; PIs – Gennady Kalabin, Alexander Baklanov*) (Roles: participant)
- 52.(1991-1994) – Soviet Arctic Haze - Study of Pollution in Alaska and USSR (*PIs – Dan Jaffe, Alexander Baklanov*) (Roles: participant)
- 53.(1991-1995) – “Ecological Learning Monitoring”; “Severonickel - Research Work”; “Khibiny - Ecological Tours with Research Aims”; “Radon”, “Window in the Internet” (*INEP-ECONORD-ECO-AS Joint Research-Educational Projects; PIs – Alexander Mahura, Alexander Baklanov*)
- 54.(1991-1995) – Evaluation of the Severonickel Plant Impact on the Environment (*INEP KSC RAS Research Project/Theme; PIs – Gennady Kalabin, Alexander Baklanov*) (Roles: participant)
- 55.(1990-1991) – Investigation of Nonstability Criterion of Atmosphere in Short-Term-Range Weather Forecast for Prediction of Convective Parameters (*LGMI/RSHU University Research Project; PI – Dmitriy Kadyrov*) (Roles: student)
- 56.(1988-1991) – “Atmospheric Dispersion Modelling for Potential Accident Consequence Assessments at Nuclear Power Plants”; “Meso-Scale Meteorological Modelling of Boundary Layer Processes” (*LGMI/RSHU University Research Projects/Themes; PI – Alexander Gavrilov*) (Roles: student)