Students: Teaching/ Co-advising/ Consulting (topics of ...)

- 1. **2025+ Gulnar Orakova (PhD)** Al-Farabi Kazakh National University (Almaty, Kazakhstan): "Synoptic-statistical assessment of air temperature extremes in the cold half of the year in the territory of Kazakhstan under changing climate conditions" (topics of atmospheric sciences, meteorology/climate related studies for Kazakhstan, ECMWF data visualization/analysis in Python)
- 2. **(2024)** <u>CLUVEX</u> <u>1st Virtual Exchange Week for students</u>. Training/moderating groups of students on the ERA-5 Past Climate Explore web-based tool for climate related data visualization, analysis and interpretation & Climate Horizon exercise (14-18 Oct 2024, online, Helsinki, Finland)
- 3. **(2024)** <u>CLUVEX Trainings for moderators</u>. Training moderators about guidebooks on virtual exchanges, climate literacy and code of conduct, web-based tool for climate related data visualization, analysis and interpretation (5 online trainings during May Sep 2024, Helsinki, Finland)
- 4. **(2023)** <u>URSA MAJOR</u> **Hybrid Young Scientist School (YSS)** on "Socio-environmental interactions in sustainable smart cities". *Lecturing/Teaching/Training on seamless urban scale Enviro-HIRLAM modelling, exercises (small-scale research projects) and data analysis (31 Oct 24 Nov 2023, Tromso, Norway)*
- 5. **2023+ Gulnur Musralinova (PhD)** Al-Farabi Kazakh National University (Almaty, Kazakhstan): "Assessment of the current state of atmospheric air in Western Kazakhstan in the context of sustainable development" (topics of atmospheric sciences, Enviro-HIRLAM modeling on regional scale for application in meteorology and air quality studies for Kazakhstan, ground based meteo. and air quality observ., satellite data, visualization and analysis in Python)
- 6. **2021-2023 Shatha Al-Sadi (MSc)** University of Jordan (Amman, Jordan): "Model simulation for the exposure and dose assessment of nuclear radioactivity emitted during hypothetical nuclear power plant normal operation in Jordan" (topics of atmospheric sciences, pollution, radiation impact, METEO+TRANS meso-scale meteorological modelling and environmental pollution (with focus on radionuclides) and assessment)
- 7. **2021-2025 Benjamin Foreback (PhD)** University of Helsinki, Faculty of Science (Helsinki, Finland): (topics of atmospheric sciences, downscaling Enviro-HIRLAM model from regional-subregional-to-urban scales for application in air quality studies for China, meteorology for FLEXPART modelling)
- 8. **(2021)** <u>MEGAPOLIS-2021</u> Online Young Scientist School (YSS) on "Multi-Scales and -Processes Integrated Modelling, Observations and Assessment for Environmental Applications". *Organizing & Lecturing/Teaching/Training on seamless Enviro-HIRLAM modelling, exercises (small-scale research projects) and data analysis (15 Nov 3 Dec 2021)*
- 9. **(2021)** <u>ClimEd</u> Online <u>Training</u> on "Digital tools and datasets for climate change education". *Organizing & Lecturing/Teaching/Training on climate related data analysis, exercises (small-scale research projects) (26 Oct 12 Nov 2021)*
- 10. **2021-2022 Salma Khusein (BSc)** Russian State Hydrometeorological University (St. Petersburg, Russia): (*topics of atmospheric sciences, Enviro-HIRLAM regional-urban scale modelling, aerosols, emissions, statistical data analysis, links meteorology/ aerosols/ covid cases*)
- 11. **(2021) HackTheArctic**. <u>Hackathon event</u> including collaboration platform, Arctic data and analysis, virtual research environments, guidance/ mentoring from scientists; Challenges Map the Arctic data, Science for policy-making, Services for citizens, Focus on Svalbard, Arctic Haze; *(12-14 Mar 2021) mentoring on iCUPE Arctic datasets*.
- 12. **2020-2022 Aleksandr Losev (PhD)** Polar Geophysical Institute, Kola Science Center (Apatity, Russia): (*topics of atmospheric sciences, Enviro-HIRLAM subregional-to-urban scale modelling, dust pollution, statistical data analysis*)
- 13. **(2020-2021) MODEST PhD courses development**. <u>Strand-A</u> (Research), <u>Strand-B</u> (Teaching and Learning), <u>Strand-C</u> (Communication and Cooperation). Co-organizing & moderating virtual events/ workshops; contributing to development of courses for Strand-A (Research).
- 14. **2020-2023 Larysa Pysarenko (PhD)** Ukrainian Hydrometeorological Institute / Taras Shevchenko National University of Kyev (Kyev, Ukraine): (topics of Enviro-HIRLAM regional and urban scale modelling, land-cover changes, emissions, effects on regional meteorology and climatology)
- 15. **(2020-2021-2022) Online (zoom) Enviro-HIRLAM Research Trainings.** Organizing & Teaching/ training/ practicing on Enviro-HIRLAM modelling system setup, testing, etc. for young researchers from the RSHU, SPBU, KSC, UHMI, MSU, UHEL involved into the <u>PEEX-MP-Europa3</u> & <u>Enviro-PEEX(Plus) on ECMWF</u> HPC projects
- 16. **2020-2021 Nikita Mikhailenko (BSc)** Russian State Hydrometeorological University (St. Petersburg, Russia): "Study of the atmospheric boundary layer regimes over land and water surfaces with online integrated meteorology-aerosols interactions Enviro-HIRLAM model" (topics of atmospheric sciences, boundary layer meteorology, Enviro-HIRLAM regional and urban scale modelling, aerosols, emissions, statistical data analysis, aerosols effects on meteorology)
- 17. **(2020+) covid19 postponed** Research Training Intensive Course on "Multi-scales and -processes modelling and assessment for environmental applications". (FIRST+ PEEX-AC, 20-25 Apr 2020, St. Petersburg, Russia). Co-organizing; Lecturing & teaching Enviro-HIRLAM exercises (Small-scale research projects)
- 18. **(2019)** Research Training Course on "Seamless/ online integrated meteorology-chemistry-aerosols multi-scale and -processes modelling". Organizing & Teaching/training on Enviro-HIRLAM/ HARMONIE model and data analysis (AoF

- ClimEco, 24-29 Jun 2019, Tyumen, Russia). Lecturing and teaching Enviro-HIRLAM exercises (Small-scale research projects)
- 19. **(2019)** Enviro-HIRLAM/ HARMONIE Research Training. Organizing & Teaching/training on Enviro-HIRLAM/ HARMONIE modelling and data analysis (Enviro-PEEX on ECMWF, 2-28 Apr 2019, Helsinki, Finland) for researchers of the Russian State Hydrometeorological University (RSHU, St. Petersburg, Russia)
- 20. **(2018)** Enviro-HIRLAM/ HARMONIE Research Training. Organizing & Teaching/training on Enviro-HIRLAM/ HARMONIE modelling and data analysis (20-24 Aug 2018, Helsinki, Finland) for researchers of the Ukrainian Hydrometeorological Institute (UHMI, Kyiv, Ukraine)
- 21. **2018-2019 Marwan M. Al-Kloub (PhD)** University of Jordan, School of Science, Department of Physics (Amman, Jordan): (topics of atmospheric sciences, pollution, radiation impact, METEO+TRANS meso-scale meteorological modelling and environmental pollution (with focus on radionuclides) and assessment)
- 22. **(2018) Enviro-HIRLAM/ HARMONIE Research Training.** Organizing & Teaching/training on Enviro-HIRLAM/ HARMONIE modelling and data analysis (Erasmus+ ECOIMPACT, 18 Feb 4 Mar 2018, Helsinki, Finland) for researchers of the Taras Shevchenko National University of Kyev (TSNUK, Kyev, Ukraine)
- 23. **2017-2018 Benjamin Foreback (MSc)** University of Helsinki, Department of Physics, Faculty of Science (Helsinki, Finland): "Integration and testing of improved aerosol chemistry and physics algorithms in the SILAM model simulations" (topics of atmospheric sciences, Enviro-HIRLAM modelling, meteorology for atmospheric chemical transport modelling)
- 24. **(2017) Enviro-HIRLAM/ HARMONIE Research Training.** Organizing & Teaching/training on Enviro-HIRLAM/ HARMONIE modelling and data analysis (Nordic PEEX-CRUCIAL, 4-15 Dec 2017 Helsinki, Finland) for researchers of the Russian State Hydrometeorological University (RSHU, St. Petersburg, Russia)
- 25. **2017-2019 Georgii Nerobelov (MSc)** Russian State Hydrometeorological University (St. Petersburg, Russia): "Regional-urban scales modeling of aerosols feedbacks: with focus on St. Petersburg, Moscow and Helsinki metropolitan areas" (topics of atmospheric sciences, boundary layer meteorology, HARMONIE and Enviro-HIRLAM regional and urban scale modelling, aerosols, emissions, statistical data analysis, aerosols effects on meteorology)
- 26. **2017-2019 Margarita Sedeeva (MSc)** Russian State Hydrometeorological University (St. Petersburg, Russia): "Processes, modeling and evaluation of aerosol impact on regional scale" (topics of atmospheric sciences, regional scale modeling, Enviro-HIRLAM, continuous emissions and accidental releases, integration modeling results with GIStechnology, transboundary atmospheric transport of pollution, statistical data analysis, assessment on environment and population)
- 27. **(2017) YSSS on "Energy-efficient Scalable Algorithms for Weather Prediction at Exascales"**. *Co-organizing (Horizon-2020 ESCAPE project, 7-12 Aug 2017, Copenhagen, Denmark)*.
- 28. **(2017)** Research Training Course on "Online integrated meteorology-chemistry-aerosols modelling". Organizing & Teaching/training on Enviro-HIRLAM/ HARMONIE model and data analysis (Nordic PEEX-CRUCIAL, 26 Jun 1 Jul 2017, St. Petersburg, Russia). Lecturing on on-line integrated/ seamless meteorology-chemistry-aerosols urban scale modelling, high resolution physiography and land-use/cover data, urbanization of models; Teaching Enviro-HIRLAM/ HARMONIE Urban Exercise (Small-scale research project) Effects of Metropolitan Areas vs. Meteorology/ Chemistry/ Aerosols
- 29. **2016-2017 Anne Helene Koch Borrits (MSc)** University of Copenhagen (Copenhagen, Denmark): "Applicability of thermal mapping data, road finger-prints, physio-geographical and local conditions for road stretch forecasting" (topics of atmospheric sciences, road weather modelling, thermal mapping data, fine-scale road stretch forecasting, high resolution physiographical data, land-use/cover, micro-scale meteorology, statistical data analysis)
- 30. **2015-2017 Margarita Sedeeva (BSc)** Russian State Hydrometeorological University (St. Petersburg, Russia): "Regional modeling and GIS evaluation of environmental pollution from sources in the Arctic regions" (topics of atmospheric sciences, boundary layer meteorology, Enviro-HIRLAM regional scale modelling, emissions, GIS integration and analysis, air pollution, statistical data analysis)
- 31. **2015-2017 Georgii Nerobelov (BSc)** Russian State Hydrometeorological University (St. Petersburg, Russia): "Modeling of aerosols impact on regional-urban scales" (topics of atmospheric sciences, boundary layer meteorology, Enviro-HIRLAM regional and urban scale modelling, aerosols, emissions, air pollution, statistical data analysis)
- 32. **2015-2016 Nellie Edvardsson (BSc)** University of Lund (Lund, Sweden): "Aerosols influence on HARMONIE operational forecasts" (*topics of atmospheric sciences, NWP modelling, statistical data analysis*)
- 33. **2015-2017 Alexander Suhodsky (PhD)** Russian State Hydrometeorological University (St. Petersburg, Russia): "Impact of St. Petersburg urbanization on weather and air pollution forecasting using online integrated high resolution modelling" (topics of boundary layer meteorology, Enviro-HIRLAM urban scale modelling, air pollution, statistical data analysis)
- 34. **(2015)** Enviro-HIRLAM Research Training Week. Organizing & Teaching/training on Enviro-HIRLAM model urbanization and data analysis (Nordic CRAICC-PEEX, 22-26 Jun 2015, St. Petersburg, Russia). Lecturing on NWP modelling, physiography data, land-use/cover, urbanization of NWP models; Teaching Enviro-HIRLAM Urban Exercise

- (Small-scale research project) Influence of Metropolitan Areas on Meteorology and Chemistry
- 35. **2014-2018 Kairat Bostanbekov (PhD)** International IT University (Almaty, Kazakhstan): "Development of geoinformation system for the storage, processing and reporting data of ecological research" (*topics of atmospheric sciences, Enviro-HIRLAM regional modelling, dispersion modelling, statistical data analysis, GIS integration, risk assessment*)
- 36. **2014-2015 Aleksander Andrzej Stysiak (MSc)** University of Copenhagen (Copenhagen, Denmark): "Impact of regional afforestation on metropolitan climatic conditions: case study of Copenhagen" (*topics of atmospheric sciences, Enviro-HIRLAM urban/ high resolution modelling, statistical data analysis*)
- 37. (2014) YSSS-2014: International Young Scientists Summer School on "Online Integrated Modelling of Meteorological and Chemical Transport Processes" (6-11 July 2014, University of Aveiro, Aveiro, Portugal; http://aveirosummerschool2014.web.ua.pt). Lecturing on physiography data, land-use/cover, urbanization of NWP models & Teaching (with assistant: Julia Palamarchuk, Ukraine) Enviro-HIRLAM Urban Exercise (Small-scale research project) The Influence of Metropolitan Areas on Meteorology and Chemistry
- 38. **2013-2016 Elena Mukhamedzhanova (BSc)** Russian State Hydrometeorological University (St. Petersburg, Russia): "Climatology of atmospheric boundary layer height variability" (*topics of boundary layer processes, climatology, statistical data analysis, meso-scale modelling*)
- 39. **2013 Nicolas Gilet (MSc)** Institut National des Sciences Appliquées (Toulouse, France): "Analysis and improvement of statistical error in forecasted air temperature" (*topics of atmospheric sciences, NWP modelling, statistical data analysis*)
- 40. **2012–2015 Alexander Kurganskiy (PhD)** Russian State Hydrometeorological University (St. Petersburg, Russia)/ University of Copenhagen (Denmark): (topics of atmospheric sciences, pollen emissions module, statistical data analysis, GIS integration, Enviro-HIRLAM modelling for pollen)
- 41. (2011) YSSS-2011: International Young Scientists Summer School on "Online Integrated Modelling of Meteorological and Chemical Transport Processes" (3-9 Jul 2011, Odessa State Environmental University, Odessa, Ukraine; http://www.ysss.osenu.org.ua). Lecturing on physiography data, land-use/cover, urbanization of NWP models & Teaching (with assistants: Adomas Mazeikis, Lithuania & Iratxe Gonzalez-Aparicio, Spain) Enviro-HIRLAM Urban Exercise (Small-scale research project) The Influence of Metropolitan Areas on Meteorology
- 42. (**2011**) **Enviro-HIRLAM Research Training Week**. Co-organizing & Teaching/training on Enviro-HIRLAM model urbanization and data analysis (Nordic MUSCATEN, 21-25 Mar 2011, Copenhagen, Denmark)
- 43. **2010-2012 Iratxe Gonzalez-Aparicio (PhD)** University of Basque Country / Technalia (Bilbao, Spain): "Air quality and meteorological modelling of urban areas in the context of climate change" (*topics of atmospheric sciences, urbanization of NWP model, land-use/cover, statistical data analysis, dispersion modelling, GIS integration, risk assessment, Enviro-HIRLAM urban-scale modelling; +teaching YSSS (2011) Enviro-HIRLAM exercises/small-scale research projects)*
- 44. (2010) Enviro-HIRLAM Research Training Week. Co-organizing & Teaching/training on Enviro-HIRLAM model urbanization and data analysis (Nordic MUSCATEN, 25-29 Oct 2010, Copenhagen, Denmark)
- 45. (**2010**) **Enviro-HIRLAM Research Training Week**. Co-organizing & Teaching/training on Enviro-HIRLAM model urbanization and data analysis (Nordic MUSCATEN, 7-12 Jun 2010, Copenhagen, Denmark)
- 46. **2009-2014 Fidel Pankratov (PhD)** Moscow State University / NPO Taifun (Moscow, Russia): "Dynamics of atmospheric mercury in Russian Arctic based on results of long-term monitoring" (*topics of atmospheric sciences, trajectory and dispersion modelling, atmospheric chemistry, statistical data analysis*)
- 47. **2009-2014 Julia Palamarchuk (PhD)** Odessa State Environmental University (Odessa, Ukraine): (*topics of urbanization of NWP model, statistical data analysis, Enviro-HIRLAM model training weeks; +teaching YSSS (2011, 2014) Enviro-HIRLAM exercises/small-scale research projects)*
- 48. (2009) Enviro-HIRLAM Research Training Week. Co-organizing & Teaching/training on Enviro-HIRLAM model urbanization and data analysis (Nordic NetFAM, 19-23 Oct 2009, Copenhagen, Denmark)
- 49. (2009) Enviro-HIRLAM Research Training Week. Co-organizing & Teaching/training on Enviro-HIRLAM model urbanization and data analysis (Nordic NetFAM, 27 Apr 1 May 2009, Copenhagen, Denmark)
- 50. (2009) Enviro-HIRLAM Practical Course. Co-organizing & Teaching/training on Enviro-HIRLAM model urbanization and data analysis (Nordic NetFAM, 26-30 Jan 2009, Copenhagen, Denmark)
- 51. **2008-2010 Irina Petrova (BSc)** Russian State Hydrometeorological University (St. Petersburg, Russia) / Radium Institute (St. Petersburg, Russia) / University Hamburg (Germany) "Identification of noble gases sources using atmospheric trajectory modelling" (topics of atmospheric sciences, radioactivity, trajectory and dispersion modelling, cluster analysis, Enviro-HIRLAM model training weeks)
- 52. 2008-2014 Roman Nuterman (PhD) University of Copenhagen (Denmark) / Tomsk State University (Russia): (topics of atmospheric sciences, urbanization of NWP model, statistical data analysis, Enviro-HIRLAM urban-scale modelling, Enviro-HIRLAM model training weeks; +teaching YSSS (2011, 2014) Enviro-HIRLAM exercises/small-scale research projects)

- 53. **2008-2012 Adomas Mazeikis (PhD)** Vilnius University (Lithuania) / Lithuanian National Weather Service (Denmark): (topics of urbanization of NWP model, statistical data analysis, Enviro-HIRLAM urban-scale modelling; +Enviro-HIRLAM model training weeks; +teaching YSSS (2011) Enviro-HIRLAM exercises/small-scale research projects)
- 54. **2008-2010 Yulia Gavrilova (MSc)** Russian State Hydrometeorological University (St. Petersburg, Russia): "Modelling study of urban areas impact on aspects of regional weather" (topics of boundary layer meteorology, NWP model urbanization, statistical data analysis, Enviro-HIRLAM urban-scale modelling; +Enviro-HIRLAM model training weeks)
- 55. (2008) YSSS-2008: International Young Scientists Summer School on "Online Integrated Modelling of Meteorological and Chemical Transport Processes" (7-15 Jul 2008, Russian State Hydrometeorological University, Zelenogorsk, Russia; http://netfam.fmi.fi/YSSS08). Lecturing on physiography data, land-use/cover, urbanization of NWP models & Teaching Enviro-HIRLAM Urban Exercise (Small-scale research project) The Influence of Metropolitan Areas on Meteorology.
- 56. **2008, 2009, 2010, 2011 Enviro-HIRLAM Research Training Weeks** (at DMI, Copenhagen, Denmark) for University students through Nordic NetFAM (http://netfam.fmi.fi) and MUSCATEN (http://muscaten.ut.ee) networks & the TEMPUS QualiMet and Combat-Meteo projects support: (lecturing.on.physiography.org/ data, land-use/cover, urbanization of models; and practicalities on model setup/run, initial and boundary conditions, urbanization of meteorological model, visualization with Metgraf, statistical data analysis, validation, verification and interpretation">https://ecutering.org/
- 57. (2008) Enviro-HIRLAM Introductory Course. Co-organizing & Teaching/training on Enviro-HIRLAM model urbanization and data analysis (Nordic NetFAM, 7-10 Apr 2008, Copenhagen, Denmark)
- 58. **2006-2008** Larissa Balakay (PhD) KazGeoCosmos & Institute of Mathematics KazNAS (Almaty, Kazakhstan): "Application of methods of geoinformational modelling for tasks of pollution of environment" (topics of dispersion modelling, statistical data analysis, GIS integration, risk assessment)
- 59. **2006-2007 Ilia Ovdoshenkov (BSc)** Novgorod State University (Great Novgorod, Russia): "Weather and climate of Kola Peninsula" (*topics of atmospheric sciences, climatology, time-series analysis, statistical data analysis*)
- 60. **2005-2008 Alexander Tridvornov (PhD)** Institute of Numerical Modelling SB RAS (Krasnoyarsk, Russia): "Evaluation of technogenic and complex risks from territorial-industrial sources (on example of the Krasnoyarsk Kray)" (topics of atmospheric sciences, dispersion modelling, radioactivity, statistical data analysis, GIS integration, risk assessment)
- 61. **2002-2010 Anton Svetlov (BSc, PhD)** Petrozavodsk State University / Kola Science Center RAS (Apatity, Russia): "Evaluation of aerotechnogenic pollution of Imandra lake by sulphates and heavy metals in time and space"; "Evaluation of aerotechnogenic risk for environment of Northern Fennoscandia" (topics of atmospheric sciences, dispersion modelling, air pollution, atmospheric chemistry, statistical data analysis, GIS integration, risk assessment)
- 62. **2000-2008 Alexander Kuchin (PhD)** Kola Science Center RAS / Kola NPP (Apatity, Russia): "Peculiarities of automatic forecasting of radiation situation in regions of nuclear power plants" (topics of atmospheric sciences, statistical data analysis, dispersion modelling, radioactivity, risk assessment)
- 63. **1992-1995 ECO-AS** (at **ECONORD Center**) **Society students** from city's High Schools interested in doing research in collaboration with scientists from research institutions of the Kola Science Center RAS (Apatity, Russia): science-education oriented activities and projects on Kola Peninsula (Murmansk region) and Nordic countries (*leading society and projects, teaching/lectures, practice/research on air pollution and meteorology measurements and modeling)*