

During 22-26 June 2015 the research training course (for PostDoc, PhD, MSc and advanced BSc level students) on online integrated numerical weather prediction – atmospheric chemical transport modelling with Enviro-HIRLAM (Environment High Resolution Limited Area Model) was organized and carried out at RSHU. This training is integral part of the Nordic–Russian Cooperation within Top-level Research Initiative “Joint CRAICC (Cryosphere-atmosphere interactions in a changing Arctic climate) - PEEEX (Pan Eurasian EXperiment; <https://www.atm.helsinki.fi/peex>) research and educational activity”, where DMI team is involved. It is performed to strengthen collaboration and build direct links between PEEEX Nordic and Russian key investigators and involved institutes; to make design enabling longer-term top-level research activities within PEEEX framework; and to establish student training and short-term exchange between institutes.



The event took place at Russian State Hydrometeorological University (RSHU). Drs. Alexander Mahura (DMI) and Suleiman Mostamandy (RSHU) carried out the training. In total 17 applicants successfully completed training (with certificates). Training was based on Young Scientist Summer Schools (YSSS, latest – Jul 2015; <http://aveirosommerschool2014.web.ua.pt>) experience with realization of small-scale research projects (SSRP) – in this case the Urban Exercise “Impact of Metropolitan Areas on Meteorology”. Training format included lecturing, modelling, visualization and data analysis, discussions, work under supervision and independently, synergy of results, students’ presentations. The course content included: lecturing on physiographic information: treatment of land-cover/use and urbanization of NWP models; introduction into exercise with background discussions; analysis of meteorological situations for selected dates; technical aspects of modelling and urban modules implementation; Enviro-HIRLAM model runs for selected dates/cases and different schemes of urbanization; visualization of model output/ results employing Metgraf/ Grads; analysis of urban area impact on meteorology (and chemistry); oral presentation of SSRP results (project defence). All necessary materials (lectures, workbook/booklet on SSRP, atlas with meteorological situations, etc.) were freely distributed among students. Training was done in dual English/Russian languages.

