



17.01.22 – 21.01.2022

17.01.22 Arctic, Climate, Cities

9:30:-10:00 Registration, Small talks with participants

10:00 - 10:15 Welcome talk Sergey A. Dobrolyubov, Member of Russian Academy of Sciences, Dean of Faculty of Geography, MSU, Russia

10:15 - 11:00 Lecture: Arctic Climate Change Member of Russian Academy of Sciences, Vladimir Semenov, A.M. Obukhov IAP, Russia

11:00 - 11:20 Lecture: «Two hundred years of urban climate research: history and modern challenges» Gerard Mills, UCD, Ireland

11:20 - 12:00 Lecture: «Surface UHI research in Arctic» Igor Esau, University of Tromso, Norway

Lunch / Breakfast/ break 12:30 - 14:00

14:00 - 15:00 Self-introduction of Students and Instructors (3 min per each)

15:00 - 15:45 Online Presentation from Laboratory of Northern Lights "Space Weather out the door!" Jaroslav Sakharov, KSC, Russia

16:00 -17:00 Practice: Linux basics: bash commands and scripting. NetCDF files: NCO package Vladimir Platonov MSU Russia

18.01.22 Arctic, Climate, Modeling

10:00 - 10:10 Welcome remarks from Nature-based-solutions-climate-sensitive-urban-design-training-school, Dragan Milosevic, Serbia

10:15 - 11:00 Lecture: Earth system models hierarchy Alexey Eliseev, A.M. Obukhov IAP, Russia

11:00 - 12:00 Lecture: Urban Air quality: measuring and modeling Alexander Baklanov WMO, Switzerland

12:00 - 12:20 Lecture: Urban Climate research in Arctic Pavel Konstantinov MSU, Russia

Lunch / Breakfast/ break 12:30 - 14:00

14:00 -15:00 Practice: Introduction to Python. How to work with geo-data Pavel Shabanov IO RAS Russia + Alen Kospanov MSU Russia

15:00 -16:00 Practice: MATLAB elements and its applications in atmospheric data processing and visualization. Vladimir Platonov MSU Russia

16:00 -17:00 Practice: Arctic regional reanalyses and hindcasts. Reinterpolation of gridded datasets using MATLAB Irina Zheleznova MSU Russia

19.01.22 Arctic, Urban, Ecology

9:50 - 10:00 Welcome remarks from SUMMER SCHOOL ANTHROPOGENIC AND NATURAL SOIL LANDSCAPES IN EUROPEAN RUSSIA,
Anastasia Konstantinova, RUDN, RUSSIA

10:00 - 10:45 Lecture: Changing environment and infectious diseases in the Arctic Varvara Mironova MSU, Russia

10:45 - 11:15 Lecture: Creation of phenological network in Russia, Anton Iurmanov, RGO, Russia

11:15 - 12:00 Lecture: Microbiological urban researches + Urban Greening in the Murmansk region Maria Korneykova RUDN, Russia; Marina Slukovskaja KSC, Russia

11:45 - 12:30 Lecture: Modern view on Urban Ecology Viacheslav Vasenev, RUDN, Russia

Lunch / Breakfast/ break 12:30 - 14:00

14:00 -15:00 Practice: Introduction to QGIS. How to make a map Andrey Karpachevskiy MSU Russia

15:00 -16:00 Practice: Introduction to R. How to make a map 2 Timofey Samsonov MSU Russia

20.01.22 Arctic, Thermal Comfort, Cryology

9:00- 9:50 Lecture: Cryosphere and Risks Sergey Sokratov MSU, Russia

9:50 - 10:00 Welcome remarks from CITES School for young scientists , Yulia Gordova, Russia

10:00 - 10:30 Lecture: Drone Sounding in Polar boundary Layer Mikhail Varentsov MSU, Russia

10:30 - 11:00 Lecture: Severe convective events and long-term changes of convective activity in the Arctic and Northern Eurasia, Alexander Chernokulsky A.M.Obukhov IAP, Russia

11:00 - 12:00 Lecture: Intoduction to Thermal Comfort Studies, Andreas Matzarakis DWD Germany

Lunch / Breakfast/ break 12:30 - 14:00

14:00 -15:00 Practice: Introduction to Sky Helios. How to calculate 3D Thermal comfort
Marcel Gangwisch DWD Germany

15:00 -16:00 Practice: Decomposition of climatological time series: estimation of trend, seasonality and noise component. Yulia Mukhartova MSU Russia

16:00 -17:00 Practice: Spectral and wavelet analysis of time series. Yulia Mukhartova MSU Russia

21.01.22 Arctic, Social Sciences

9:50 - 10:00 Welcome remarks from...

10:00 - 10:45 Lecture: Development of the North 2.0: challenges of making a new theory
Alexander Pilyasov, Director of Institute of Regional Consulting, Russia

10:45 - 11:30 Lecture: Arctic as an Urbanized Territory Nadezhda Zamyatina, MSU,
Russia

11:30 - 12:15 Lecture: Living in the ruins of post-Soviet Arctic Maria Gunko, IGRAS,
Russia

Lunch / Breakfast/ break 12:30 - 14:00

14:00 - 15:00 Practice: How to run WRF Alexander Timazhev, A.M.Obukhov IAP, Russia

15:00 - 16:00 Practice: What to do if WRF is running Alen Kospanov, MSU, Russia

Closing Ceremony