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AREAS OF INTEREST

- Polar lows dynamics
- Mesoscale meteorology
- Atmospheric energetics
- Atmospheric boundary layers
- Extraterrestrial meteorology

Education

- 2014–Present PhD in Meteorology
Thesis title: **Dynamics and Predictability of Polar Lows**
School of Environmental Sciences
University of East Anglia
Supervisor: [Ian A. Renfrew](#)
- 2009–2014 Specialist Diploma in Meteorology
With Honours
Thesis title: **Idealised numerical modelling of polar mesocyclone dynamics**
Faculty of Geography
Lomonosov Moscow State University
Supervisor: [Victor Stepanenko](#)

Internships

- Oct 2013 *University of Bergen*
Geophysical Institute
Bergen, Norway
Supervisor: [Thomas Spengler](#)
- Jul 2012 *A.M. Obukhov Institute of Atmospheric Physics*
Laboratory of Climate Theory
Moscow, Russia
Supervisor: [Alexey Eliseev](#)

Fieldwork Experience

- Aug 2012 **Field practice in meteorology**
Attempt to understanding of prevailing mesoscale processes through wind characteristic measurements and lake hydrothermodynamical modelling
Kronotsky National Reservation, Kamchatka pen., Russia
- Jan–Feb 2012 **Field practice in meteorology**
Measurements of the convective boundary layer over the polynya
White Sea Biological Station, Karel Republic, Russia
- Jun–Jul 2011 **Field practice in meteorology**
Basic field techniques in atmospheric sciences (profiling of atmosphere, study of atmospheric stratification and radiative measurements)
Khibiny mountains, Murmansk region, Russia
- Jan–Feb 2011 **Field practice in meteorology**
Micrometeorological measurements, ice-breeze modelling
White Sea Biological Station, Karel Republic, Russia
- Jun–Jul 2010 **Field practice in geographical studies**
Basic training in meteorology, hydrology, geomorphology, soil science, biogeography, topography
Kaluga region, Russia

Teaching Experience

- 2015–Present **Teaching assistance**
University of East Anglia
Courses:
- Meteorology
 - Modelling Environmental Processes
 - Dynamical Meteorology
 - Numerical Skills for Scientists
 - Physical and Chemical Processes in Earth's System

Publications

PEER-REVIEWED

1. Eliseev AV, Sergeev DE. 2014. Impact of Subgrid Scale Vegetation Heterogeneity on the Simulation of Carbon Cycle Characteristics. *Izvestiya, Atmospheric and Oceanic Physics*, 50(3): 259–270

PROCEEDINGS

1. Sergeev DE, Stepanenko VM. 2013. Numerical modelling of polar mesocyclones generation mechanisms. *International Conference "Turbulence, atmosphere and climate dynamics" dedicated to A.M. Obukhov, Selected papers*: 168–170
2. Sergeev DE, Zamyatina MY, Stepanenko VM. 2013. Thermal regime features of Kronotsky lake (in Russian). *Kronotsky State Natural Biosphere Reserve Proceedings*, 3: 29–41

3. Sergeev DE, Stepanenko VM. 2012. Parameterization of mesoscale sensible heat and methane fluxes in the region of Western Siberia. *International Conference and Early Career Scientists School on Environmental Observations, modelling and Information Systems (ENVIROMIS-2012)*, **Selected papers:** 67–69

Conferences and Workshops

ORAL PRESENTATIONS

- Apr 2016 **Structure of the shear-line polar low south of Svalbard**
13th European Polar Lows Working Group (EPLWG) Workshop
 Paris, France

POSTER PRESENTATIONS

- Jul 2015 **Structure and dynamics of a shear-line polar low during a cold-air outbreak over the Norwegian Sea**
Royal Meteorological Society Student Conference
 Birmingham, UK
- Mar 2015 **Structure and dynamics of a shear-line polar low during a cold-air outbreak over the Norwegian Sea**
Dynamics of Atmosphere-Ice-Ocean Interactions in the High Latitudes workshop
 Rosendal, Norway
- May 2014 **Numerical modelling of polar mesocyclones dynamics diagnosed by the energy budget**
European Geosciences Union (EGU) General Assembly
 Vienna, Austria
- Apr 2013 **Impact of subgrid-scale vegetation heterogeneity on results of climate model simulation of carbon cycle**
European Geosciences Union (EGU) General Assembly
 Vienna, Austria
- Apr 2013 **Numerical modelling of polar mesocyclones generation mechanisms**
European Geosciences Union (EGU) General Assembly
 Vienna, Austria

Awards and Scholarships

- 2015 **Travel Award**
 Dynamics of Atmosphere-Ice-Ocean Interactions in the High Latitudes workshop
- 2014–2018 **Lord Zuckerman scholarship**
 School of Environmental Sciences, University of East Anglia
- 2014 **Young Scientist's Travel Award (YSTA)**
 European Geosciences Union (EGU) General Assembly
- 2014 **Russian Academy of Sciences Young Scientist Medal**
 In the area of oceanology, atmospheric physics and geography

Grants

- 2014–2016 **Characteristics of the mesoscale atmospheric circulations in the Arctic and their influence on the atmosphere-ocean energy exchange**
 Russian Foundation for Basic Research (RFBR) Grant
- 2013–2015 **Multiscale modelling of turbulent atmospheric flow above sea surface with inhomogeneous ice cover**
 Russian Foundation for Basic Research (RFBR) Grant
- 2013–2015

Developing and verification of the mesoscale sensible heat and tracers fluxes over hydrologically inhomogeneous surface
Grant of the President of Russian Federation

Membership in Professional Associations

2014–Present Royal Meteorological Society (RMetS)

Other Professional Experience

2015–Present [Python group coordinator](#)
Managing an unofficial group of Python language users
University of East Anglia, UK

Mar 2015 **Rapporteur**
Dynamics of Atmosphere-Ice-Ocean Interactions in the High-Latitudes workshop
Rosendal, Norway

Jun–Jul 2014 **Professional translator**
Translation of documentation of meteorological equipment (En-Ru)
Retail and Consumer Merchandise “Meteomaster” (Moscow, Russia)

Aug–Sep 2013 **Weather Forecaster**
Forecast and Briefing Service
Main Aviation Meteorological Centre, Vnukovo Airport (Moscow, Russia)

Outreach

2015–Present **Contributor to SciSnack blogging platform**

- [Polar Lows: What Fuels Arctic Hurricanes?](#)
- [Disastrous Disaster Movies](#)
- [Worldwide Weird Weather Words](#)

Computer Skills

Operating systems	Linux , Unix, Windows
Computer Languages	Python , Fortran
Data analysis and visualizing	Python , MATLAB, NCL, Paraview
Parallel programming	MPI, OpenMP
Version control systems	Git, Subversion
Document preparation	LaTeX, Markdown
Web development	HTML, CSS

Languages

Russian	Native speaker
English	Fluent
French	Basic