Kseniia Safonova

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Education

The University of Rostock now
PhD Student
Planned thesis: Development of Baltic Sea marine heatwaves in the past and future

Russian State Hydrometeorological University Sep 2017 – Jul 2019
MA in Oceanography
Thesis: The North Atlantic sea ice concentration variability

Russian State Hydrometeorological University Sep 2013 – Jul 2017
BA in Applied oceanography
Thesis: Sea ice concentration change in the Barents Sea within modern climate change

Yekaterinburg Power Engineering training college Sep 2008 – Jul 2012
Environmental technician

Research experience

Doctoral researcher January 2025 – now
The Department of Physical Oceanography and Instrumentation of The Leibniz Institute for Baltic Sea Research
Supervisor: Prof. Dr. Markus Meier
The research of marine heatwaves in the Baltic Sea.

Research assistant April 2024 – December 2024
The Department of Physical Oceanography and Instrumentation of The Leibniz Institute for Baltic Sea Research
Supervisor: Prof. Dr. Markus Meier
The research study of marine heatwaves in the Baltic Sea on climate projections data.

Research assistant July 2022 – Dec 2023
The Department of Physical Oceanography and Instrumentation of The Leibniz Institute for Baltic Sea Research
Supervisor: Prof. Dr. Markus Meier
The research study of marine heatwaves in the Baltic Sea on long-term data sets.

Research assistant Dec 2020 – June 2021 (as a guest until June 2022)
The Department ofPhysical Oceanography and Instrumentation of The Leibniz Institute for Baltic Sea Research
Supervisor: Prof. Dr. Markus Meier
Comparing the historical sea level observations and hindcast simulation, observations and future sea level rise under different RCPs, visualization of results.

Research engineer Sep 2020 – Dec 2021
Plastic Pollution Research Laboratory of Russian State Hydrometerological University

Supervisor: Dr. Tatiana Eremina
Validation of the biogeochemical benthos coupled GOTM/ERSEM model output in the Gulf of Finland region, visualization of results, taking part in report preparation.

Student researcher Mar 2015 – Mar 2016
Satellite Oceanography Laboratory of Russian State Hydrometerological University
Supervisor: Dr. Aleksey Zimin
Visual detection of eddies on satellite images of Barents and Kara sea, measurements of eddies parameters, statistical calculations, presentation of results on "Modern Problems of Remote Sensing of the Earth from Space" conference (Space Research Institute, Moscow).

Internships, schools, additional education

ICTP-CLIVAR Summer School on Marine Heatwaves 2023
Global Phenomena with Regional Impacts
ICTP, Trieste, Italy
Multi-Scales and -Processes Integrated Modelling, Observations and Assessment 2021
for Environmental Applications — Online Young Scientist School MEGAPOLIS 2021
Lomonosov Moscow State University, Helsinki University
5th International Summer School on Climate of Baltic Sea Region 2019
Baltic Earth at Askö Laboratory of Stockholm University, Sweden
The Winter Limnology school and workshop 2019
Lammi Biological Station, University of Helsinki
Summer internship 2018
Department of improving the Ice Information System,
Arctic and Antarctic Research Institute, Saint Petersburg
International course The Baltic Sea environment 2013
Russian State Hydrometeorological University and
Baltic University, Saint Petersburg

List of publications

Summer heatwaves on the Baltic Sea seabed contribute to oxygen deficiency in shallow areas
Kseniia Safonova, H. E. Markus Meier, Matthias Gröger
Commun Earth Environ 5, 106 (2024). https://doi.org/10.1038/s43247-024-01268-z

Oceanographic regional climate projections for the Baltic Sea until 2100
H. E. Markus Meier, Christian Dieterich,, Matthias Gröger, Cyril Dutheil, Florian Börgel, *Kseniia Safonova*, Ole B. Christensen, and Erik Kjellström
Earth Syst. Dynam., 13, 159–199, 2022. https://doi.org/10.5194/esd-13-159-2022