

Christina Katsoura

Research Assistant | IACM-FORTH | ch.katsoura@iacm.forth.gr | Heraklion, Greece

EDUCATION

Master of Science in Integrated Coastal Zone Management, Department of Marine Sciences, University of the Aegean, Lesvos, Greece. 2026.

Thesis Title: Investigation of future changes in steric height in the Black Sea using climate projections

Master of Science in Applied Meteorology and Environmental Physics, Department of Physics, University of Patras, Patras, Greece. 2025.

Thesis Title: Operational evaluation of the dynamical downscaling of the BOLAM numerical weather prediction model

Bachelor of Science in Mathematics, Department of Mathematics, University of Patras, Patras, Greece. 2022.

Specialisation: Applied Mathematics

RESEARCH INTERESTS

Numerical weather prediction, atmospheric modelling, climate projections, atmosphere-ocean interactions, tropical cyclones, clouds and precipitation, urban micrometeorology, surface-atmosphere interactions, urban heat, scientific data analysis and high-performance computing.

DIGITAL SKILLS

Programming and Scientific Computing: Python, MATLAB, Fortran and SQL

Data Analysis: Statistical analysis, numerical modelling, model evaluation and large-dataset processing

Visualisation: Scientific plotting, Power BI and Tableau

Geospatial Analysis: QGIS, land-cover analysis and spatial data processing

Computing Environments: Linux, remote scientific computing, HPC environments and parallel processing

PROFESSIONAL EXPERIENCE

2026 - Present	Research Assistant in the Remote Sensing Lab of the Institute of Applied and Computational Mathematics, Foundation for Research and Technology - Hellas, Heraklion, Greece. Processing, quality control and analysis of meteorological observations from Heraklion's urban station network, with emphasis on data availability and extreme heat.
2021 - 2023	Academic Tutor, Aristeuein Academic Support Center, Volos, Greece. Provided tutoring in mathematics and science and developed personalised teaching plans.

RESEARCH EXPERIENCE

2023 - 2025 **MSc Research Project**, National Observatory of Athens, Athens, Greece.
Conducted research for my MSc thesis on the evaluation of the BOLAM numerical weather prediction model through comparison with observational and reanalysis datasets. Developed Python scripts for processing and analysing the datasets on remote Linux servers and HPC systems.

PROFESSIONAL DEVELOPMENT AND CERTIFICATIONS

Data Analyst Bootcamp | Workearly, 2025
SQL, Python (Pandas and NumPy), advanced Excel, Power BI, Tableau and machine learning fundamentals.

Certified Office Applications Specialist (400 hours) | Hellenic Public Employment Service (DYPA), 2023
Microsoft Office suite, with emphasis on advanced Excel functions for data processing.

Training Programme on Meteorological Phenomena (50 hours) | National and Kapodistrian University of Athens (KEDIVIM), 2022
Specialised training in meteorological phenomena and their physical interpretation.

Annual Programme in Intercultural Education (450 hours) | University of Macedonia (KEDIVIM), 2021
Diversity, inclusion and effective communication in multicultural environments.

CONFERENCE PRESENTATION

Poster Presentation: Katsoura, C., Dafis, S., Kyros, G., Bezes, A., Kioutsioukis, I., Lagouvardos, K., & Kotroni, V. (2024). *The Greek Atmospheric Reanalysis Database*. 18th PLINIUS Conference on Mediterranean Risks, Chania, Greece.

VOLUNTEER WORK

Greenpeace | 2023 - Present
Climate action and sustainability campaigns.

ARCHELON - The Sea Turtle Protection Society of Greece | 2016
Conservation activities for the protection of endangered sea turtles.

PRAKSIS NGO | 2016 - 2021
Mathematics support for refugee students and assistance with their integration into the Greek educational system.

Municipality of Patras - People's Tutoring Initiative | 2016
Mathematics tutoring for middle school students from low-income families.

LANGUAGES

Greek: Native language
English: Certificate of Proficiency in English (ECPE), University of Michigan, 2013