

Maria Chara Karypidou

Department of Meteorology and Climatology
School of Geology
Aristotle University of Thessaloniki
54124 Thessaloniki, Greece
Tel: +30 2310 99 8578

August 24, 2020

karypidou@geo.auth.gr
<https://www.geographical-affairs.com>

Education

- **BSc in Geography** Mytilini
University of the Aegean, Department of Geography 2011 - 2015
 - Undergraduate Dissertation Title: "Geostatistical analysis of the distribution of temperature for Greece, for the period 1971-2000. Study and construction of maps."
 - Supervisor: Professor Dr. Phaedon Kyriakidis
- **MSc in "Meteorology, Climatology and Atmospheric Environment"** Thessaloniki
Aristotle University of Thessaloniki, Department of Geology 2015 - 2017
 - Dissertation Title: "Impact of climate variability on mosquito occurrence and malaria transmission in Greece."
 - Supervisor: Assistant Professor Dr. Eleni Katragkou
- **PhD Candidate in Climatology** Thessaloniki
Aristotle University of Thessaloniki, Department of Geology 2018 - present
 - Dissertation Title: "Assessment of precipitation errors and uncertainty in climate simulations over Africa: investigation of physical processes."
 - Supervisor: Associate Professor Dr. Eleni Katragkou

Foreign Languages

- English (Certificate of Proficiency in English, The University of Michigan)
- German (Goethe-Zertificate B1, Goethe Institut)

Computer/ Software Knowledge

- Windows, Linux (Kubuntu, Ubuntu) Microsoft Office, LibreOffice, LaTeX
- R, Python
- CDO (Climate Data Operators)
- Weather Research and Forecasting (WRF) Model
- ArcGIS, Quantum GIS, GRASS GIS, DIVA-GIS

Research Interests

- Regional scale atmospheric circulation over southern Africa
- Southern Africa rainfall climatology
- Regional climate modelling
- Geostatistics

Work Experience

- ERASMUS-Placement at the TAMSAT Research Group, University of Reading, Department of Meteorology, UK. Erasmus Placement Program (01/07/2014-30/09/2014) Supervisor: Dr. Elena Tarnavsky
Project Title: Defining Zones of Homogeneous Precipitation over Africa for the Calibration of the TAMSAT Rainfall Algorithm.
- DAAD, The Mediterranean Hot-Spot: Challenges and Responses in a Changing Environment, 2017-2019.
- EC, H2020, Enhancing Food Security in AFRICan AgriCULTUral Systems with the Support of REmote Sensing (AfriCultures), 2017-2021.
- State Scholarships Foundation, Enhancing the exchanges and scientific cooperation between Greece and Germany: Study of the land use change impact on Europe's climate exploiting regional climatic simulations, (IKYDA) 2018-2019.
- GSRT, General Secretariat for Research and Technology: Greece Germany bilateral cooperation, Establishment of an Early Warning System for Mosquito-borne Diseases and implementation of new vector control tools in the urban environment (EWSMD), 2018-2020.

Summer Schools and Workshops

- Participation in the TAMSAT Development Workshop (18/08/2014 - 04/09/2014), University of Reading, Department of Meteorology, UK.
- Participation in the Autumn School 2016: Use of satellite data in nowcasting high impact weather, 12 - 16 September 2016, Thessaloniki, Neoi - Epivates, Greece. The workshop was a collaboration between the Aristotle University of Thessaloniki and EUMETSAT.
- Participation in the Workshop: "Mathematical Models of Climate Variability, Environmental Change and Infectious Diseases", 8 - 19 May 2017, The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy.
- WCRP Grand Challenge on Clouds, Circulation and Climate Sensitivity: 2nd Meeting on Monsoons and Tropical Rain Belts, 2 - 5 July 2018, The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy.

- Participation in the: 2nd ICTP Summer School on Theory, Mechanisms and Hierarchical Modelling of Climate Dynamics: Convective Organization and Climate Sensitivity, 1 - 12 July 2019, The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy.

Presentations in Conferences/ Workshops/ Meetings

1. **Karypidou M. C.**, Mamara A., Anadranistakis M., Kyriakidis P., Spatial distribution of mean monthly temperature for Greece, using deterministic and geostatistical spatial interpolation methods, RMets Student Conference 2015, 1-3 July, University of Birmingham, UK.
2. **Karypidou M.**, Katragkou E., Mazaris A., Mourelatos S., Gewehr S., Kalaitzopoulou S, Tompkins A., Impact of climate variability on mosquito activity over Greece and linkages to malaria incidence, Impact of Environmental Changes on Infectious Diseases 2017, 17-19 May, Trieste, Italy.
3. **Karypidou M. C.**, Katragkou E., Mazaris A., Mourelatos S., Gewehr S., Tompkins A. M., "Linkages between bioclimatic and environmental conditions and the distribution of the An. sacharovi mosquito over Greece", Joint Thematic Workshop between Justus Liebig University and the Aristotle University of Thessaloniki, 12th of October 2017, Thessaloniki, Greece.
4. **Karypidou M. C.**, Katragkou E., Mazaris A., Mourelatos S., Gewehr S., Tompkins A. M., Impacts of regional climate on mosquitoes and mosquito-borne diseases, Climatology, Climate Dynamics and Climate Change group, Department of Geography, Justus Liebig University hosted by Prof. Juerg Luterbacher, 6th of December 2017, Germany.
5. **Karypidou M. C.**, Katragkou E., Building data value chains: from climate data production to impacts. The example of climate-sensitive vector-borne diseases, MedCLIVAR 2018, 17 - 21 September, Belgrade, Serbia.
6. **Karypidou M. C.**, Katragkou E., Almpnidou V., Mazaris A., Mourelatos S., Gewehr S., Climate-induced changes on the spatial distribution of Anopheles sacharovi: An investigation for current and future climate under RCP8.5 over Greece, COMECAP 2018, 15 - 17 October, Alexandroupolis, Greece.
7. **Karypidou M. C.**, Katragkou E., From ECMWF ERA-Interim to ERA5 global reanalysis: precipitation and temperature over Africa, COMECAP 2018, 15 - 17 October, Alexandroupolis, Greece.
8. Alexandridis T., Laneve G., Katragkou E., Cherif I., Ovakoglou G., Kasampalis D., **Karypidou M. C.**, Kartsios S., Pytharoulis I., Moshou D., Garca S. H., Nikulin G., Suarez Beltran J., Enhancing food security through the Africultures project: Design of crops, water and drought services, IGARSS 2019, 28 July - 2 August, Yokohama, Japan.
9. **Karypidou M. C.**, Katragkou E., Kartsios S., Papa A., Tsioka A., Kalaitzopoulou S., Gewehr S., Mourelatos S., An early-warning system of West Nile Virus risk in northern Greece, ESCAIDE 2019, 27 - 29 November Stockholm, Sweden.
*Travel grant awarded by the ESCAIDE Funding Initiative for young researchers
10. **Karypidou M. C.**, Katragkou E., Precipitation biases over southern Africa: examining the role of the Angola Low, EGU 2020, 1 - 5 May (online attendance).
11. Katragkou E., **Karypidou M. C.**, Kartsios S., Gewehr S., Mourelatos S., Building a climate service to support an arly Warning System for the West Nile Virus disease in Greece, EGU 2020, 1 - 5 May (online attendance).

Publications in Peer-Reviewed Journals

1. Domakinis, C., Mouratidis, A., Voudouris, K., Astaras, T., **Karypidou, M. C.** (2020): Flood susceptibility mapping in Erythrotamos river basin with the aid of Remote Sensing and GIS. *AUC Geographica* 55(2), <https://doi.org/10.14712/23361980.2020.11> (Accepted)
2. Alexandridis, T., Ovakoglou G., Cherif Ines., Gmez Gimnez M., Laneve G., Kasampalis D., Moshou D., Kartsios S., **Karypidou M. C.**, Katragkou E., Herrera Garca S., Kganyago M., Mashiya N., Pattnayak K., Challinor A., Pritchard R., Brockington D., Kagoyire C., Suarez Beltran J., (2020): Designing AfriCultuReS services to support food security in Africa. *Trans. in GIS*, <https://doi.org/10.1111/tgis.12684> (Accepted)

Scholarships/Awards

- Erasmus Placement, 7-9/2014, Department of Meteorology, University of Reading, UK.
- Erasmus+ Placement, 2-12/2020, NORCE Norwegian Research Centre - the Bjerknes Centre for Climate Research, Norway.
- Hellenic Foundation for Research and Innovation, Scholarship for PhD research (2019-2022).