Ioannis Charalampopoulos

Curriculum Vitae

Personal Details

Nationality: Greek Skype Name: i.charalampopoulos

E-mail: <u>icharalamp@aua.gr</u>, Researchgate Profile: <u>http://goo.gl/SrYnat</u>

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Higher Education

2009 PhD in Bioclimatology, Agricultural University of Athens, Greece.

2015 MSc in Behaviour and Environment, Democtitus University of Thrace, Greece.

- **2012 MSc** in Environmental Physics Meteorology, National and Kapodistrian University of Athens, Greece.
- **2006 MSc** in Geological and Atmospheric Environment for Infrastructure Planning, Agricultural University of Athens, Greece.

2002 MEng in Natural Resources Development and Arg. Engineering, Agricultural University of Athens, Greece.

Professional Experience

Academic - Working Experience

<u>June 2014 – Current. Laboratory Teaching Staff (permanent), Lab. of General and Agricultural Meteorology, Agricultural University of Athens, Greece:</u>

- Teaching on the following topics at Undergraduate and Postgraduate level:
 - -Agrometeorology.
 - -Bioclimatology.
 - -Micrometeorology.
 - -Urban Ecology and Bioclimatology (faculty of Floriculture and Landscape Architecture).
 - -General and Agricultural Meteorology.

October 2019- Current: Agricultural University of Athens:

 Teaching the undergraduate lesson "Management, analysis and visualisation of environmental data with R".

Oct 2017 - Current. Lecturer Hellenic (Greek) Open University:

- Teaching on the following topics in MSc:
 - -Bioclimatic Design.

<u>Jan 2003 – May 2014. Researcher - Tutor, Lab. of General and Agricultural Meteorology, Agricultural University of Athens, Greece:</u>

- Teaching on the following topics:
 - -Agrometeorology.
 - -Urban Ecology and Bioclimatology (faculty of Floriculture and Landscape Architecture).
 - -Bioclimatology.
 - -General and Agricultural Meteorology.

<u>Jan 2011 – Dec 2012. Seconded to the Hellenic Mapping and Cadastral Organization - Ministry of Environment, Energy and Climatic Change.</u>

- Employee in the Geoinformatics direction.
- Representative to the Greek Prime Minister's Office for the "Geodatabase for Athens Municipality" project. This project aims to collect and organize all spatial information concerning state properties and exceptional points of interest i.e abandoned properties, illegally occupied buildings and the like.
- Member of the team for the selection of the eligible areas for the installation of solar panels in Greece using GIS software. Project 'Helios'.

<u>Jan 2011 - current. Teacher - Trainer, Institute of National Centre for Public</u> Administration and Local Government.

- Teaching in the 'Remote Sensing, photointerpretation and geospatial data applications in public administration' training courses.
- Teaching in the 'Urban and SubUrban green' training courses.

Oct 2007 - May 2008. Part-time Lecturer, Technological Educational Institute of Kalamata, Greece.

- Lecturer in Agrometeorology.
- Responsible for the Agrometeorology laboratories.

Book/ Academic Notes Author

Book

General and Specific Topics of Bioclimatology, Applications-Exercises (in Greek), Ziti Publications (2012).

Book Chapters

Perspectives on Atmospheric Sciences, Springer 2016,

- A Preliminary Study on the Effect of Rainfall Events on Human Thermal Comfort Under Hot Weather Conditions.
- Assessment of the Thermal Comfort Conditions in a University Campus Using a 3D Microscale Climate Model, Utilizing Mobile Measurements.

Academic Notes

Practical guide for R and RStudio (in Greek). Athens. 2019 Version 1.1. DOI: 10.5281/zenodo.4059198.

Technical Books Editor (Greek edition)

- EcoHouse S.Roaf, M.Fuentes and St. Thomas, Elsevier Academic Press 2007.
- Planting green roofs and living walls N. Dunnet and N. Kingsbury, Timber Press 2008.
- The green studio handbook. Environmental strategies for schematic design A. Kwok and W. Grondzik. Elsevier Academic Press 2007.

Significant Achievements

- Representative of the Hellenic Mapping and Cadastral Organization to the European Environment Information and Observation Network (EIONET),2010-2012.
- Representative of the Hellenic Mapping and Cadastral Organization to the European Earth monitoring programme GMES (Global Monitoring for Environment and Security), renamed to Copernicus, 2010-2012.
- Member of the National Committee for the Administration of Natural Protected Areas, 2012-2013.

Academic Merit

• Scholarship in Atmospheric Sciences, Meteorology - (2002 to 2006). State Scholarship Foundation (exams).

Certifications

- Certified Trainer (by the National Centre for Public Administration).
- Certified Trainer for by-distance learning (by the National Centre for Public Administration).

Editor in Academic Journal

Atmosphere MDPI

Reviewer in academic journals

Advances in meteorology
Atmosphere
Building and Environment
Building Simulation
Energies

HINDAWI
MDPI
Elsevier
Springer
MDPI

Hydrological Sciences Journal Taylor & Francis

International journal of Biometeorology Springer
International Journal of Environmental Research and Public Health MDPI

International Journal of Occupational and Environmental Health

Taylor & Francis

Taylor & Francis

Taylor & Francis

Landscape and Urban Planning
Processes
MDPI
Remote Sensing
MDPI
Sustainability
MDPI
Sustainable Cities and Society
Energies
Elsevier
MDPI

Theoretical and Applied Climatology Springer

Tools

GIS Software ArcGIS, Quantum GIS
Remote Sensing Software Erdas Imagine 10, Envi 4.7
Hybrid Software Surfer 10, ILWIS, IDRISI

Bioclimatic Software EnviMet, TownScope II, RayMan Pro

Simulation Software TRNSYS

Programming Language R, MatLab, Delphi, VBA, Python

Academic Papers (Journals and international conferences)

1. Soulis, K., Dosiadis, E., Nikitakis, E., Charalampopoulos, I., Kairis, O., Katsogiannou, A., Palli Gravani, S. and Kalivas, D., 2025. Assessing AgERA5 and MERRA-2 Global Climate Datasets for Small-Scale Agricultural Applications. Atmosphere, 16(3), p.263.

https://doi.org/10.3390/atmos16030263

- 2. Charalampopoulos, I., Vlami, V., Kokkoris, I.P., Droulia, F., Doxiadis, T., Kitsara, G., Zogaris, S. and Lazoglou, M., 2025. A High-Resolution Analysis of the de Martonne and Emberger Indices Under Different Climate Change Scenarios: Implications on the Natural and Agricultural Landscape of Northeastern Greece. Land, 14(3), p.494. https://doi.org/10.3390/land14030494
- 3. Zotos, A., Kokkoris, I. P., **Charalampopoulos, I.,** Bekri, E. S., & Dimopoulos, P. (2024). Wetlands in Crisis: The Silent Desertification Threat on the Greek Wetlands. Land, 13(10), 1567. https://doi.org/10.3390/land13101567
- 4. **Charalampopoulos, I.,** Polychroni, I., Droulia, F., Nastos, P.T., 2024. The Spatiotemporal Evolution of the Growing Degree Days Agroclimatic Index for Viticulture over the Northern Mediterranean Basin. Atmosphere 15, 485. https://doi.org/10.3390/atmos15040485
- 5. **Charalampopoulos, I.,** Droulia, F., 2024. A Pathway towards Climate Services for the Agricultural Sector. Climate 12, 18. https://doi.org/10.3390/cli12020018
- 6. **Charalampopoulos, I.,** Droulia, F., Evans, J., 2023. The Bioclimatic Change of the Agricultural and Natural Areas of the Adriatic Coastal Countries. Sustainability 15, 4867. https://doi.org/10.3390/su15064867
- 7. **Charalampopoulos, I.,** Droulia, F., Tsiros, I.X., 2023. Projecting Bioclimatic Change over the South-Eastern European Agricultural and Natural Areas via Ultrahigh-Resolution Analysis of the de Martonne Index. Atmosphere 14, 858. https://doi.org/10.3390/atmos1405085
- 8. **Charalampopoulos, I.,** Droulia, F., Kokkoris, I.P., Dimopoulos, P., 2023. Future Bioclimatic Change of Agricultural and Natural Areas in Central Europe: An Ultra-High Resolution Analysis of the De Martonne Index. Water 15, 2563. https://doi.org/10.3390/w15142563
- 9. **Charalampopoulos, I.,** Matzarakis, A. Thoughts about the Thermal Environment and the Development of Human Civilisation. Atmosphere 2022, 13, 1925. https://doi.org/10.3390/atmos13111925
- 10. **Charalampopoulos, I.,** Droulia, F., 2022. Frost Conditions Due to Climate Change in South-Eastern Europe via a High-Spatiotemporal-Resolution Dataset. Atmosphere 13, 1407. https://doi.org/10.3390/atmos13091407
- 11. Droulia, F., **Charalampopoulos, I.**, 2022. A Review on the Observed Climate Change in Europe and Its Impacts on Viticulture. Atmosphere 13, 837. https://doi.org/10.3390/atmos13050837
- 12. Nouri, A.S., **Charalampopoulos, I.**, Matzarakis, A., 2022. The application of the Physiologically Equivalent Temperature to determine impacts of

- locally defined extreme heat events within vulnerable dwellings during the 2020 summer in Ankara: Abstract. Sustainable Cities and Society 103833. https://doi.org/10.1016/j.scs.2022.103833
- 13. Santos Nouri, A., Çalışkan, O., **Charalampopoulos, I.,** Cheval, S., Matzarakis, A., 2021. Defining local extreme heat thresholds and Indoor Cooling Degree Necessity for vulnerable residential dwellings during the 2020 summer in Ankara Part I: Air temperature. Solar Energy. https://doi.org/10.1016/j.solener.2021.10.059
- 14. Alexandris, S., Psomiadis Em., Proutsos, N., Philippopoulos, P., **Charalampopoulos, I.**, Paraskevopoulos, A. (2021) 'Integrating Drone Technology into an Innovative Agrometeorological Methodology for the Precise and Real-Time Estimation of Crop Water Requirements', Hydrology, 8(3), p. 131. doi:10.3390/hydrology8030131.
- 15. **Charalampopoulos**, **I.** (2021) 'Agrometeorological Conditions and Agroclimatic Trends for the Maize and Wheat Crops in the Balkan Region', Atmosphere, 12(6), p. 671. doi:10.3390/atmos12060671.
- 16. Droulia, F., **Charalampopoulos, I.,** 2021. Future Climate Change Impacts on European Viticulture: A Review on Recent Scientific Advances. Atmosphere 12, 495. https://doi.org/10.3390/atmos12040495
- 17. **Charalampopoulos, I.,** Polychroni, I., Psomiadis, E., Nastos, P., 2021. Spatiotemporal Estimation of the Olive and Vine Cultivations' Growing Degree Days in the Balkans Region. Atmosphere 12, 148. https://doi.org/10.3390/atmos12020148
- 18. **Charalampopoulos, I.**, Droulia, F., 2021. The Agro-Meteorological Caused Famines as an Evolutionary Factor in the Formation of Civilisation and History: Representative Cases in Europe. Climate 9, 5. https://doi.org/10.3390/cli9010005
- 19. Psomiadis, E., Charizopoulos, N., Efthimiou, N., Soulis, K.X., **Charalampopoulos, I.,** 2020. Earth Observation and GIS-Based Analysis for Landslide Susceptibility and Risk Assessment. ISPRS International Journal of Geo-Information 9, 552. DOI: 10.3390/ijgi9090552
- 20. Psomiadis, E., Papazachariou, A., Soulis, K.X., Alexiou, D.-S., **Charalampopoulos, I.**, 2020. Landslide Mapping and Susceptibility Assessment Using Geospatial Analysis and Earth Observation Data. Land 9, 133. DOI: 10.3390/land9050133
- 21. **Charalampopoulos, I.,** 2020. The R Language as a Tool for Biometeorological Research. Atmosphere 11, 682. DOI: 10.3390/atmos11070682

- 22. **Charalampopoulos I**, Santos Nouri A 2019 Investigating the Behaviour of Human Thermal Indices under Divergent Atmospheric Conditions: A Sensitivity Analysis Approach. Atmosphere 10(10): 580, DOI: 10.3390/atmos10100580
- 23. **Charalampopoulos I,** 2019 A comparative sensitivity analysis of human thermal comfort indices with generalized additive models. Theoretical and Applied Climatology, DOI: 10.1007/s00704-019-02900-1
- 24. Santos Nouri, A., **Charalampopoulos, I**. and Matzarakis, A., 2018. Beyond Singular Climatic Variables—Identifying the Dynamics of Wholesome Thermo-Physiological Factors for Existing/Future Human Thermal Comfort during Hot Dry Mediterranean Summers. *International journal of environmental research and public health*, 15(11), p.2362. DOI: 10.3390/ijerph15112362
- 25. **Charalampopoulos I.**, Droulia F., Tseliou Ar., Tsiros I. 2017. An evaluation of seasonal patterns of thermal conditions inside a vegetated courtyard area of a Mediterranean city (Athens). 33rd Passive Low Energy Architecture (PLEA) conference, 2-5th July 2017, Edinburg
- 26. Nastos P., Vassilakis Em., Nastos P.M., **Charalampopoulos I.**, Matzarakis A. 2016. Assessment of continuous sky view factor based on ultra-high resolution natural color images acquired by remotely piloted airborne systems for applications in an urban area of Athens. *International Journal of Remote Sensing* 2017: 38(20):5814-5829. DOI: 0.1080/01431161.2017.1346845
- 27. **Charalampopoulos I.,** Nastos P., Didaskalou E. 2017. Human Thermal Conditions and North Europeans' Web Searching Behavior (Google Trends) on Mediterranean Touristic Destinations. *Urban Science*. 1 (1). DOI:10.3390/urbansci1010008.
- 28. **Charalampopoulos I,** Tsiros I, Chronopoulou-Sereli A, Matzarakis A. A methodology for the evaluation of the human-bioclimatic performance of open spaces. *Theor Appl Climatol.* 2016:1-10. DOI: 10.1007/s00704-016-1742-9
- 29. **Charalampopoulos I.**, Tsiros I., Chronopoulou-Sereli Aik., Matzarakis A. 2015. The utilization of first derivatives and violinplots of meteorological parameters for the evaluation of thermal behavior of small urban sites. 9th International Conference on Urban Climate, Toulouse, France; 06/2015
- 30. **Charalampopoulos, I.,** Tsiros, I., Chronopoulou-Sereli, A., Matzarakis, A. A note on the evolution of the daily pattern of thermal comfort-related micrometeorological parameters in small urban sites in Athens. *International Journal of Biometeorology*. 2014:1-14. DOI: 10.1007/s00484-014-0934-1

- 31. Rigopoulou, D., **Charalampopoulos, I.**, Tseliou A., and Tsiros, I. Microclimatic and bioclimatic conditions in two urban open spaces in Athens with different configuration during the summer of 2012. 12th International Conference of Meteorology, Climatology and Physics of the Atmosphere, Heraklion 28-31 May 2014: Vol. 3: pp 112-121.
- 32. **Charalampopoulos, I.,** Tsiros, I., Chronopoulou-Sereli, A., Matzarakis, A. Analysis of thermal bioclimate in various urban configurations in Athens, Greece. *Urban Ecosystems*. 2013:1-17. DOI: 10.1007/s11252-012-0252-5
- 33. **Charalampopoulos I.,** Tsiros I.X., Chronopoulou-Sereli A. and Matzarakis A. A numerical model-based method for estimating wind speed regime in outdoor and semi-outdoor sites in the urban environment. 13th International Conference on Environmental Science and Technology Athens, Greece, 5-7 September 2013.
- 34. Riga, M., Kamoutsis, A., **Charalampopoulos, I.,** Chronopoulou-Sereli, A., Matsoukis, A., 2010. Investigation of human thermal sensation in relation to environmental shaping and orientation in Agricultural University of Athens. Proceedings of 10th International conference of Meteorology-Climatology and Atmospheric physics. Patras, 25-28 May, Patras, Greece, University of Patras, Greece: 353-360.
- 35. Matsoukis, A., Kamoutsis, A., **Charalampopoulos, I.,** Panagioyou, I., Chronopoulou-Sereli, A. 2007. Evaluation of biometeorological conditions of mountain communities and urban center in Greece. 1st International Conference on Environmental Management, Engineering, Planning and Economics. Skiathos, Greece.
- 36. Kontova, S., **Charalampopoulos, I.,** Chronopoulou-Sereli, A. 2006. Investigation of Humidex bioclimatic index spatial pattern using geostatistical methods and G.I.S. The case study of an urban green area in Nea Smyrni, Athens, Greece. International Conference on Sustainable Management and Development of Mountainous and Island Areas. Naxos, Greece.
- 37. **Charalampopoulos, I.,** Kamoutsis, A., Panagiotou, I., Chronopoulou-Sereli A. 2006. Investigation of bioclimatic performance in specific mountain areas in Greece and evaluation for decision making in tourism development. 6th Annual Meeting of the European Meteorological Society & 6th European Conference on Applied Climatology. Ljubljana, Slovenia.
- 38. Kiokakis, L., **Charalampopoulos, I.,** Kanavou, A., Chronopoulou Sereli, A., 2006. The influence of the sea and of several land uses on the topoclimate of Glyfada municipality, Athens, Greece. 6th International Conference on Urban Climate, Göteborg, Sweden.

- 39. **Charalampopoulos, I.,** Kiokakis, L., Chronopoulou Sereli, A., Kanavou, N., 2006. Bioclimatic performance of several sites which differ on their green coverage in Athens, Greece. 6th International Conference on Urban Climate, Göteborg, Sweden.
- 40. Kannavou, A., **Charalampopoulos, I.,** Chronopoulou Sereli, Aik., and Sarlis, G., 2006: Thermometric conditions and flowering phenology of native plant species in metalliferous soils of the Lavreotiki peninsula. 8th Panhellenic (international) conference of meteorology, climatology and atmospheric physics. Athens, Greece.
- 41. Kiokakis, L., **Charalampopoulos, I.,** Kannavou, A., Serraos, K., Chronopoulou Sereli, Aik., 2006: Thermo hydrometrical conditions of coastal region of Glyfada municipality, Attica as they are developed by the local land uses. 8th Panhellenic (international) conference of meteorology, climatology and atmospheric physics. Athens, Greece.
- 42. **Charalampopoulos, I.,** and Chronopoulou Sereli, Aik., 2006: The influence of terrain configuration on the biometeorological index Predicted Mean Vote (PMV). 8th Panhellenic (international) conference of meteorology, climatology and atmospheric physics. Athens, Greece.
- 43. Spithouraki, V., **Charalampopoulos, I.,** and Chronopoulou Sereli, Aik., 2006: thermohygrometric behavior of a building site. The case study of 'Concert Hall of Athens', Greece. 8th Panhellenic (international) conference of meteorology, climatology and atmospheric physics. Athens, Greece.
- 44. **Charalampopoulos, I.,** Chronopoulou Sereli, A., 2005. The influence of urban green areas on Discomfort and Relative Strain Index spatial pattern. The case of 'Elaionas' region in Athens, Greece. Annalen der Meteorologie: vol 41.
- 45. **Charalampopoulos, I.,** and Chronopoulou Sereli, Aik., 2005: Mapping the urban green area influence on the local climate under windless and light wind conditions. The case of western part of Athens, Greece. Acta Climatologica Et Chorologica. Vol 38-39.
- 46. Chronopoulou Sereli, Aik., **Charalampopoulos, I.,** and Tsiros, I., 2004: The role of urban park configuration in their bioclimatic behaviour. 7th Panhellenic (international) conference of meteorology, climatology and atmospheric physics. Nicosia, Cyprus.
- 47. Chronopoulou Sereli, Aik., Tsiros, I., and **Charalampopoulos, I.,** 2004: Urban green areas and thermic pollution. The case of 'Elaionas' region in Athens, Greece. 7th Panhellenic (international) conference of meteorology, climatology and atmospheric physics. Nicosia, Cyprus.

Professional Memberships

- -European Geosciences Union -European Meteorological Society -Greek Meteorological Society
- -Geotechincal Chamber of Greece

Languages

Greek, English (Proficiency Level –C2)