



## ARISTOTLE UNIVERSITY OF THESSALONIKI PRESS OFFICE

### **ANNOUNCEMENT**

# UpClim: Presentation of the School of Geology's Climate and Climate Change Research at a Special Event

Thessaloniki, 10/12/2025

"Research and Research Infrastructures for the Study of Climate and Climate Change" is the theme of the event organized by the Laboratory of Meteorology and Climatology of the School of Geology of the Aristotle University, on Friday 12 December 2025 at 12:00 p.m., at the "V. Kyriazopoulos" Amphitheatre of the Meteorological Observatory.

The event is held on the occasion of the completion of the research project UpClim, implemented under the National Recovery and Resilience Plan "Greece 2.0" (implementing body: HFRI).

#### **Program**

12:00 Greetings

12:15 Eleni Katragkou, Professor, School of Geology

"The state-of-the-art climate research and the contribution of research infrastructures"

12:45 Zina Mitraka, Principal Researcher, FORTH

"Satellite Technology and Earth Observation Data for Sustainable Cities: Innovations in Mitigation and Adaptation to Climate Change"

1:15 Break

1:45 Vasileios Pavlidis, Postdoctoral Researcher

"Presentation of UpClim project results"

14:15 End of event

The event will be addressed by the Deputy Minister of Development Stavros Kalafatis, the Deputy Regional Governor for Infrastructure and Networks of the Region of

Central Macedonia Paris Billias, and the Advisor to the Mayor of Thessaloniki Chrysostomos Kalogirou.

### **UpClim:** A project for reliable climate information

UpClim aims to upgrade the climate model used at the Aristotle University, with the goal of producing more reliable regional climate simulations. The model improvements are based on the international protocols of the World Climate Research Program, with particular emphasis on the study of the urban environment, using remote sensing data to enhance the simulation of urban climate.

The project is coordinated by the Division of Meteorology and Climatology of the School of Geology at the Aristotle University, with the Foundation for Research and Technology – Hellas (FORTH) participating as a collaborating institution through the Remote Sensing Laboratory of the Institute of Applied and Computational Mathematics. The scientific lead is Professor Eleni Katragkou of the School of Geology, Vice-President of the Center for Interdisciplinary Research and Innovation (KEDEK).

The upgraded model will participate in the simulations of the international CORDEX network, contributing to the development of climate data used in the reports of the Intergovernmental Panel on Climate Change (IPCC).

The data will be open, in accordance with FAIR principles, and will be provided through reputable European platforms, such as the Copernicus Climate Change Service, offering society and decision-makers reliable scientific tools for designing strategies for adaptation to and mitigation of climate change.

More information: <a href="https://upclim.geo.auth.gr/">https://upclim.geo.auth.gr/</a>

Image 1: Depiction of the city of Paris (land use) using remote sensing data. Image 2: Climate temperature map of Europe with 12 km spatial resolution, generated WRF simulations of the upgraded climate Image 3: Improvement of the representation of the urban heat island effect during nighttime, in WRF climate simulations. The temperature differences refer to two climate simulations, one of which uses remote sensing data to enhance the representation of the urban environment. The wider Paris area is depicted in simulations with  $2 \times 2$  km spatial resolution.

We kindly request that this event be published, broadcast, and covered by the media.