Special Issue

Pathways to Sustainable Cities: Urban Thermal Environments Under Climate Change

Message from the Guest Editors

This Special Issue seeks to advance knowledge on the mechanisms and impacts of urban thermal conditions, as well as innovative solutions for improving them. Topics of interest include, but are not limited to, the following: 1.Mechanisms and processes shaping the urban thermal environment and its variability; 2.Urban heat island (UHI) dynamics as part of broader urban climate processes;

- 3. Observation techniques, remote sensing, and monitoring of urban thermal environments;
- 4. Numerical modeling, simulation, and integrated assessment tools;
- 5.Green infrastructure, blue–green spaces, and nature-based solutions for cooling cities;
- 6.Urban design, building energy interactions, and planning strategies for heat mitigation;
- 7.Health impacts of urban heat exposure and thermal discomfort, with a focus on vulnerable populations;
- 8.Cross-disciplinary studies linking thermal environments, sustainability, energy use, and climate adaptation pathways.

We look forward to receiving your submissions.

Guest Editors

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Deadline for manuscript submissions

20 June 2026



an Open Access Journal by MDPI

Impact Factor 2.3 CiteScore 4.9



mdpi.com/si/255740

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About the Journal

Message from the Editor-in-Chief

Continued developments in instrumentation and modeling have driven atmospheric science to become increasingly more complex with a deeper understanding of concepts, mechanisms, and interactions. This is the field that innovation built and it has led to a better appreciation for the complexity with atmosphere. Human life is intertwined in this complexity as we strive to better understand our atmosphere. Climate change is constantly stretching the limits of our thinking and forcing new ideas and concepts to be played out. Welcome to the Anthropocene!

Editor-in-Chief

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