

Special Issue

Urban Impact on the Low Atmosphere Processes

Message from the Guest Editors

Buildings and other urban structures, together with urban activities, may have a noticeable impact on meteorological variables. Although the urban heat island is a known effect, urban impact is also observed in other meteorological variables. This Special Issue has several objectives. The first one is to establish the contrast between meteorological variables measured or modelled in the city and outside it. The second objective is to plan strategies to counteract negative effects of urban meteorological islands. Additionally, meteorological processes, which are observed in cities, such as air recirculation around them or atmospheric stability, could be included in this Special Issue.

Moreover, air trajectory analyses where the origin or end is a city may be introduced to investigate transport processes from a city or on a city. Source data may be varied. New methods for managing this information are encouraged to improve insights about urban islands. Finally, the impact on people's health of cities' meteorology and the relationship between urban meteorology islands and urban pollution islands are further subjects covered by this Special Issue.

Guest Editors

Dr. Isidro A. Pérez

Department of Applied Physics, Universidad de Valladolid, 47011 Valladolid, Spain

Dr. María Ángeles García Pérez

Department of Applied Physics, Universidad de Valladolid, 47011 Valladolid, Spain

Deadline for manuscript submissions

closed (31 July 2025)



Atmosphere

an Open Access Journal
by MDPI

Impact Factor 2.3
CiteScore 4.9



mdpi.com/si/208562

Atmosphere
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
atmosphere@mdpi.com

[mdpi.com/journal/
atmosphere](https://mdpi.com/journal/atmosphere)





Atmosphere

an Open Access Journal
by MDPI

Impact Factor 2.3
CiteScore 4.9



[mdpi.com/journal/
atmosphere](https://mdpi.com/journal/atmosphere)



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

Dr. Daniele Contini

Institute of Atmospheric Sciences and Climate (ISAC), National Research Council (CNR), Str. Prv. Lecce-Monteroni km 1.2, 73100 Lecce, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, GeoRef, Inspec, CAPlus / SciFinder, Astrophysics Data System, and other databases.

Journal Rank:

CiteScore - Q2 (Environmental Science (miscellaneous))