

Special Issue

The Role of Urban Vegetation Management and Planning in Climate Change Adaptation Strategies

Message from the Guest Editors

Contemporary global climate change, which threatens the functioning and the equilibrium of ecosystems, societies and economies, makes it imperative to establish adaptation strategies in order to lessen the negative impacts on natural and human systems. Urban vegetation provides several ecosystem services improving human health and well-being in the cities. It acts as a climate regulator through evapotranspiration leading to a reduction of the air temperature and consequently of the Urban Heat Island phenomenon and contributes to the reduction of pollutants through the deposition and absorption. However, the planning and management of urban vegetation cannot ignore that climate change is exposing plants to a range of biotic and abiotic stresses that affects all stages of development and their ecological role. Main topics include: Urban vegetation responses to climate change; Effects of air temperature, air pollution and extreme weather events on urban vegetation and how this influences management and planning choices; Climate change adaptation strategies through vegetation assessed through a modelling approach and in situ observations and so on.

Guest Editors

Dr. Elisa Gatto

Dipartimento di Scienze e Tecnologie Biologiche ed Ambientali,
University of Salento, 73100 Lecce, Italy

Prof. Dr. Rohinton Emmanuel

BEAM Research Centre, Glasgow Caledonian University, Glasgow G4
OBA, UK

Deadline for manuscript submissions

closed (25 September 2021)



Atmosphere

an Open Access Journal
by MDPI

Impact Factor 2.3
CiteScore 4.9



mdpi.com/si/78856

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))