# **Special Issue**

## Urbanization and Its Climate Impact

### Message from the Guest Editors

As the modeling resolution becomes finer, additional physical processes such as subtle hydrological processes and urban parameterizations become increasingly important. As urbanization is the most drastic result of human activities, its related parameterization processes present both problems and solutions when it comes to improving fine forecast and early warning in regional and global scales. This Special Issue encompasses urban thermal environment research, the impact of urban on extreme events (rainstorms, heatwaves, typhoons), and urban pollution and its control. The issue also invites papers on urban simulation and evaluation, such as capturing urban signals in the global model, the urban boundary layer scheme, and the urban canopy model. The topics of interest for the Special Issue include but are not limited to:

- Urban thermal environment research;
- Urban simulation development and evaluation;
- Urban pollution and its control;
- Urban mitigation and adaptation strategies to climate change;
- Impact of urbanization on extreme weather;
- Regional and remote climate impacts of urbanization.

### **Guest Editors**

Prof. Dr. Miao Yu

Institute of Urban Meteorology, Chinese Academy of Meteorological Sciences, Beijing 100081, China

#### Dr. Yong Wang

Department of Earth System Science, Tsinghua University, Beijing 100084, China

### Deadline for manuscript submissions

closed (20 February 2022)



an Open Access Journal by MDPI

Impact Factor 2.3 CiteScore 4.9



mdpi.com/si/96196

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

#### mdpi.com/journal/

atmosphere





an Open Access Journal by MDPI

Impact Factor 2.3 CiteScore 4.9



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))