

Special Issue

Multidisciplinary Research and Data Science for Advancing Air Quality and Environmental Health

Message from the Guest Editors

This Special Issue seeks contributions that address the complexities of air pollution and its impact on public health. We encourage submissions from diverse fields, including environmental science, public health, and data science, with a focus on the following topics:

- Air quality modelling: Investigating the chemical and physical processes of pollutants and simulating the behavior and interaction of air pollutants at various spatial scales.
- Health impact assessments: Evaluating the direct and indirect health effects of air pollution on vulnerable populations, including the impacts of particulate matter (PM_{2.5}, PM₁₀), nitrogen oxides (NO_x), and ozone (O₃).
- Exposure and risk assessments: Utilizing advanced data analytics, remote sensing, and machine learning to assess population exposure to pollution and develop risk models that inform public health strategies.
- Policy and intervention studies: Quantifying the effectiveness of air quality policies and interventions, including Clean Air Zones and urban traffic management, and examining the co-benefits of broader environmental strategies like Net Zero initiatives.

Guest Editors

Dr. Yuqing Dai

School of Geography Earth and Environmental Sciences, University of Birmingham, Birmingham B15 2TT, UK

Dr. Joe Acton

School of Geography Earth and Environmental Sciences, University of Birmingham, Birmingham B15 2TT, UK

Deadline for manuscript submissions

closed (15 June 2025)



Atmosphere

an Open Access Journal
by MDPI

Impact Factor 2.3
CiteScore 4.9



mdpi.com/si/217557

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))