

## Special Issue

# Atmospheric Boundary Layer Observation and Meteorology

### Message from the Guest Editor

The atmospheric boundary layer (ABL) constitutes the part of the atmosphere that interacts with the underlying surface. Observing the key parameters of the ABL and studying the processes that determine the state of the ABL have therefore been important parts of atmospheric research. This Special Issue invites contributions on (novel) observational techniques for sensing the state of the ABL, as well as the processes that determine the state of the ABL. Contributions may include new developments in the following areas:

- Observing state variables and fluxes of the surface and subsurface;
- Observing the exchange (turbulent fluxes) between the surface and the ABL;
- Observing profiles of thermodynamical variables, wind velocity, and turbulence characteristics up to the air layers above the ABL;
- Observing low-level clouds (stratocumulus and shallow- and mid-level cumulus);
- Observational arrays of relevant measurement equipment to determine the impact of spatial (lateral) variability on the state of the ABL.

### Guest Editor

Dr. Reinder Ronda

R&D Observations and Data technology (RDWD) Department, Royal Netherlands Meteorological Institute (KNMI), 3731 GA De Bilt, The Netherlands

### Deadline for manuscript submissions

closed (16 December 2024)



## Atmosphere

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.3  
CiteScore 4.9



[mdpi.com/si/186552](https://mdpi.com/si/186552)

*Atmosphere*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[atmosphere@mdpi.com](mailto: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))