Special Issue

Recent Advances in Agrometeorological Techniques and Their Applications

Message from the Guest Editors

This Special Issue of *Atmosphere* aims to bring together innovative research that explores new approaches, methodologies, and applications relating to agrometeorology in order to address global challenges such as climate change, extreme events, food security, and the optimization of agricultural resources. We welcome studies on the following topics:

- Short- and long-term agrometeorological modeling and forecasting;
- Impacts of climate change on agriculture and adaptation strategies;
- The use of remote sensing and machine learning in agrometeorological analysis;
- Influence of meteorological factors on crop growth and development;
- Techniques for mitigating abiotic stresses in agricultural systems;
- Applications of agrometeorology in precision agriculture and sustainable management.

We invite researchers to submit original articles, reviews, and case studies that contribute to the advancement of agrometeorological knowledge and practice, providing valuable insights for academia, the agricultural sector, and policy makers.

Guest Editors

Prof. Dr. Márcio Mesquita

Prof. Dr. Marcos Vinícius Da Silva

Dr. Ioannis Charalampopoulos

Deadline for manuscript submissions

15 December 2025

Atmosphere

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))