

## Special Issue

# Toward Better Understanding and Prediction of Monsoon Onset and Withdrawal for Agricultural Sectors

### Message from the Guest Editors

Rainfed agricultural systems over monsoon regions strongly depend on rainfall during the monsoon season, but also on the onset and withdrawal timing. The complexity of monsoon systems and the interannual variability of the onset and withdrawal dates hinder the development of reliable services in terms of operational monsoon timing monitoring and forecasting.

Consequently, it is still difficult for farming communities to have information for decision-making. This Special Issue aims to provide advances in the understanding of monsoon systems and their characteristics as well as the improvement of forecasting methodologies in the context of agricultural applications. Some potential topics include, but are not limited to, the following:

- Methods to detect or define monsoon onset/withdrawal dates at multiple scales
- New findings on monsoon characteristics from historical data analysis and implication for agriculture
- Methodologies for forecasting monsoon onset/withdrawal dates
- Agricultural and/or economic impacts of interannual variability in monsoon features
- Adaptation strategies in the agricultural sector to cope with interannual variability of monsoon onset/withdrawal dates

---

### Guest Editors

Dr. Eunjin Han

International Research Institute for Climate and Society, Columbia University, NY 10027, USA

Dr. Carlo Montes

International Maize and Wheat Improvement Center (CIMMYT), Carretera México-Veracruz km 45, El Batán, Texcoco 56237, México

---

### Deadline for manuscript submissions

closed (1 March 2022)



## Atmosphere

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.3  
CiteScore 4.9



[mdpi.com/si/80338](https://mdpi.com/si/80338)

*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))