

## Special Issue

# The Impact of Climate Change on Water Resources

### Message from the Guest Editors

Climate change is leading to water scarcity in many regions due to a decline in heavy and erratic rainfall, flooding, prolonged droughts, changes in the water cycle, and other mechanisms that dependent on it. Groundwater is then the main resource in these regions; it is characterized by very low renewal rates and is extremely sensitive to climate change. The depletion of water resources has been the subject of several climatological, hydrological, and hydrogeological studies, which have shown that the status of the resource mainly depends on the internal architecture of aquifers, precipitation, and exploitation, which are mainly controlled by climate change. Therefore, it seems essential to understand the process and phenomena controlling the response of aquifer systems that are exposed to these global changes. The objective of this Special Issue is to contribute to analyzing the relevance of new technologies of data acquisition (hydrogeological data and remote sensing data), interpretation, and processing, in order to better elucidate the impact of climate change on water resources.

### Guest Editors

Dr. Mohamed Hamdi

CARTEL—Centre d'Applications et de Recherches en Télédétection, Département de Géomatique Appliquée, Université de Sherbrooke, Sherbrooke, QC J1K 2R1, Canada

Prof. Dr. Kalifa Goïta

CARTEL—Centre d'Applications et de Recherches en Télédétection, Département de Géomatique Appliquée, Université de Sherbrooke, Sherbrooke, QC J1K 2R1, Canada

### Deadline for manuscript submissions

closed (15 May 2024)



## Atmosphere

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.3  
CiteScore 4.9



[mdpi.com/si/167608](https://mdpi.com/si/167608)

*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))