



## Forests and Climate Interactions

Guest Editor:

**Dr. Álvaro Enríquez-de-Salamanca**

Facultad de Ciencias Biológicas,  
Universidad Complutense de  
Madrid (Complutense University  
of Madrid) / National University  
of Distance Education; Av.  
Séneca, 2, 28040 Madrid, Spain

Deadline for manuscript  
submissions:

**closed (2 June 2023)**

### Message from the Guest Editor

Climate is an important influencing factor in plant communities, whose existence is limited in extreme conditions. At the same time, forests have the capacity to modify the climate. Evapotranspiration favours the formation of fog and precipitation, which in turn favours forest longevity. Forests may also influence hydrological cycles and, incidentally, the climate. In addition, forests can sequester CO<sub>2</sub> from the atmosphere and fix it in tree tissue, reducing its atmospheric concentration. This process, which is critical to regulating the natural greenhouse effect, is altered by human action; deforestation destroys carbon sinks, increasing atmospheric CO<sub>2</sub> concentrations.

Thus, forest restoration can be encouraged as a climate change mitigation strategy. Climate change is altering regional climatic conditions. These changes have a direct impact on forests, which are forced to adapt to the new conditions or disappear. In this Special Issue of Atmosphere, we will address climate–forests interactions, considering both the effects of climate and climate change on forests and the capacity of forests to influence climate.





an Open Access Journal by MDPI

## 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

## 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!

## 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)*)

## Contact Us

---

Atmosphere Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/atmosphere](http://mdpi.com/journal/atmosphere)  
[atmosphere@mdpi.com](mailto:atmosphere@mdpi.com)  
[X@Atmosphere\\_MDPI](https://twitter.com/Atmosphere_MDPI)