

Special Issue

Forests and Climate Interactions

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 CO₂ 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 CO₂ 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.

Guest Editor

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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

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