

## Special Issue

# Cloud Formation, Evolution and Its Impact on Climate Change

### Message from the Guest Editor

Clouds are a ubiquitous feature on Earth, they are a key player in the global climatic balance. It is well known that their contribution to the planetary radiative balance is huge, and even small changes in the mean planetary cloud cover could either nullify or enhance the warming effect of greenhouse gases. This Special Issue of *Atmosphere* aims to serve as an aggregation point for studies that contribute to the advancement of cloud science, with a special focus on cloud life cycle and impacts on climate change. Potential topics include (but are not limited to) the following: - Satellite or observation studies of macrophysical and microphysical quantities of clouds. - Remote sensing of clouds from the ground. - Modeling studies, from cloud-resolving to global (GCM) models comprising formation, evolution, and climate effects of clouds. - Theoretical studies with respect formation, evolution, and climate impacts of clouds. Review papers that summarize recent developments and discuss implications for future research are particularly welcome.

### Guest Editor

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### Deadline for manuscript submissions

closed (31 August 2022)



## Atmosphere

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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!

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### Editor-in-Chief

Dr. Daniele Contini

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