



## Observations and Simulations of Clouds, Aerosols, Precipitation, and Radiation over the Southern Ocean

Guest Editors:

**Dr. Yi Huang**

School of Earth Sciences,  
University of Melbourne,  
Melbourne, VIC 3010, Australia

**Prof. Adrian McDonald**

Gateway Antarctica/School of  
Physical & Chemical Sciences,  
University of Canterbury,  
Christchurch 8041, New Zealand

**Dr. Christina McCluskey**

National Center for Atmospheric  
Science, Boulder, Colorado, CO  
80305, USA

Deadline for manuscript  
submissions:

**closed (6 May 2020)**

### Message from the Guest Editors

Dear Colleagues,

The Southern Ocean is a critical component of Earth's climate system which has a significant influence on ocean circulation and anthropogenic carbon uptake.

This Special Issue aims to bring together high-quality observational (field and remote-sensing) and modeling studies of clouds, aerosols, precipitation, and radiation over the Southern Ocean to advance our understanding of these critical processes and their interactions. These studies' central aim is to improve the representation of these processes in models at multiple spatial and temporal scales and enhance the simulation of this region. Review papers and summaries of recent field campaigns are also welcome.

Dr. Yi Huang  
Prof. Adrian McDonald  
Dr. Christina McCluskey  
*Guest Editors*





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)