Special Issue

Southern Hemisphere Climate Dynamics

Message from the Guest Editors

The southern hemisphere has different climatic characteristics to the northern hemisphere. The greater abundance of water in the southern hemisphere implies, for example, a lower rate of warming. The Antarctic Ocean, on the other hand, absorbs and stores heat very efficiently in its waters. Comparatively speaking, these are factors that are believed to delay the effects of global warming in relation to the northern hemisphere. However, in recent decades, dramatic extreme events related to climate variability have affected different parts of the southern hemisphere. Currently, the Amazon Basin is facing the worst drought in recorded history in terms of rainfall and river levels, affecting millions of people's livelihoods. Australia is experiencing prolonged, extreme heat with increasing frequency and intensity. Forest fires are overwhelming continental areas of Oceania, Africa, and South America.

Submissions in, but not limited to, the following research areas are invited:

climate variability;
extreme events;
hydroclimate;
droughts and heatwaves;
risks, vulnerability, and impacts.

Guest Editors

Prof. Dr. Fabrício Daniel Dos Santos Silva

Prof. Dr. Jório Bezerra Cabral Júnior

Prof. Dr. Gabriela Müller

Deadline for manuscript submissions

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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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