

Special Issue

Island Effects on Weather and Climate

Message from the Guest Editor

An isolated island disrupts the prevailing airflow, forcing ascending currents that initiate clouds over the windward slopes. An isolated island also acts as a barrier to the approaching airflow and as a heat source (sink) during the day (night). Island-induced airflow, weather, and microscale climates are complex, especially in the presence of terrain. In this Special Issue, we would like to cover all aspects of island terrain effects on airflow, weather, and climate. Due to complications associated with different terrain heights, shapes, and sizes, heavy rainfall, high winds, extreme weather events, droughts, and island wildland fires are frequently localized in nature, with large spatial variations, and are a significant challenge for research and operations. Manuscripts on, but not limited to, improving our understanding of island-scale weather and climate characteristics, the island flow response under different large-scale and climate settings, and island effects on weather systems and extreme events are solicited.

Guest Editor

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Deadline for manuscript submissions

closed (15 October 2024)



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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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