

Special Issue

The Dynamics and Impacts of Ocean-Atmosphere Coupling on Regional and Global Climate

Message from the Guest Editors

The ocean and atmosphere, as critical components of the Earth's system, interact across various spatial and temporal scales, regulating the global energy balance and water cycle and influencing climate changes.

Understanding these interactions is essential for predicting climate variability and has become a cutting-edge field in oceanography and atmospheric science. This Special Issue aims to enhance our understanding of ocean-atmosphere coupling and address unresolved scientific challenges. We welcome original research articles and reviews. Topics of interest include, but are not limited to, the following:

- The roles of air-sea interactions at different scales in the global energy and water cycle processes;
- Changes in the ocean, atmosphere, and coupled systems in the context of global warming;
- Air-sea interactions during extreme weather events, such as typhoons/hurricanes;
- The relationship between ocean-atmosphere coupling processes in key oceanic regions and global climate change

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About the Journal

Message from the Editor-in-Chief

Climate (ISSN 2225-1154) was established in 2013 to provide an open-access outlet for innovative research, review articles, new direction papers, and short communications relevant to all disciplines related to climate at all scales. The journal encourages papers ranging from climate change detection and attribution and Earth system modeling to ecosystem, hydrologic, and socioeconomic impacts and climate mitigation and adaptation measures. The influence of *Climate* is strong and growing (IF 3.2 in 2024, CiteScore 5.7 in 2024).

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 20.8 days after submission; acceptance to publication is undertaken in 3.8 days (median values for papers published in this journal in the second half of 2025).