

Special Issue

Ocean Dynamic Processes and Climate Variability: Insights from Hydrographic Observations and Modeling

Message from the Guest Editors

Ocean dynamic processes, including ocean circulation, heat transport, and mixing, play a crucial role in regulating the Earth's climate system. They influence climate variability by redistributing energy globally, subsequently impacting circulation patterns and climate variability across various spatial and temporal scales. Such variability can influence regional patterns of temperature, precipitation, and other climate variables, which, in turn, affect weather patterns and climate events, potentially leading to significant local, economic, and social impacts. Studying the complex connections between ocean dynamic processes and climate variability is essential for advancing our understanding of the Earth's climate system and its future changes, predicting extreme events, and contributing to the improvement of global climate models. This Special Issue aims to address topics that focus on the connection between ocean dynamic processes and climate variability across different scales, utilizing hydrographic observations and models.

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About the Journal

Message from the Editor-in-Chief

The *Journal of Marine Science and Engineering* (JMSE, ISSN 2077-1312) is an international peer-reviewed open access journal which provides an advanced forum for studies related to marine science and engineering. The journal aims to provide scholarly research on a range of topics, including ocean engineering, chemical oceanography, physical oceanography, marine biology and marine geosciences. We invite you to publish in our journal sharing your important research findings with the global ocean community.

Editor-in-Chief

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