

Special Issue

Numerical Modelling of Atmospheres and Oceans

Message from the Guest Editor

With the advent of computer technology and numerical methods, considerable progress has been made in the development and applications of numerical atmospheric and ocean models in the recent years. Today, numerical models have widely been used in modelling and predictions of various phenomena in the atmospheres and oceans with a wide range of spatial and temporal scales. The subjects of this Special Issue include but are not limited to:

- Development and validations of new numerical methods;
- Numerical studies on main processes in atmospheres and oceans, particularly during extreme weather conditions;
- Coupling between atmospheric and ocean models;
- Predictions and predictability of climate models;
- New parameterizations for sub-grid scale processes in numerical models;
- Numerical studies on atmosphere–ocean interactions, and interactions of ocean waves and currents;
- Numerical investigations of environmental conditions over coastal and inland waters;
- Numerical studies of hydrodynamic instabilities and mixing.

We cordially invite you to submit top-quality papers to the Special Issue.

Guest Editor

Prof. Dr. Jinyu Sheng

Department of Oceanography, Dalhousie University, Halifax, NS B3H 4R2, Canada

Deadline for manuscript submissions

closed (1 January 2023)



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Editorial Office

MDPI, Grosspeteranlage 5

4052 Basel, Switzerland

Tel: +41 61 683 77 34

jmse@mdpi.com

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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

Prof. Dr. Charitha Pattiaratchi
School of Engineering, The UWA Oceans Institute, The University of
Western Australia, Perth, WA 6009, Australia

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provided to authors approximately 15.6 days after
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the first half of 2025).