

Special Issue

Earth System Modeling, Data Assimilation, Artificial Intelligence, Deep Learning and Ocean Information Engineering

Message from the Guest Editors

In this Special Issue, we call for papers that deal with recent advances in modeling, data assimilation, and parameter estimation, as well as AIDL-associated research and development in geoscience research and applications, including advanced modeling, data assimilation, and deep neural network algorithms, data mining in the Earth system, as well as advanced topics such as data-based parameter optimization, AIDL-induced parameterization, etc. Potential topics include but are not limited to: Modeling, data assimilation, and parameter estimation; Bayes' theorem-based AIDL algorithms; Data-assimilation-induced AIDL algorithms; Model parameter estimation and AIDL; Advanced deep neural network algorithms; Climate downscaling and evaluation with neural networks; AIDL-induced climate and chemistry modeling and parameterization; Advanced AIDL algorithms induced from modeling mesoscale to sub-mesoscale physical processes; AIDL-driven cloud and microphysics expressions; Data-based parameter optimization applied to AIDL algorithms; Data mining in the Earth system (e.g., optimal translation of native Earth system observations into user-specific information).

Guest Editors

Prof. Dr. Shaoqing Zhang

Prof. Dr. Yuxin Zhao

Dr. Hao Zuo

Prof. Dr. Junyu Dong

Deadline for manuscript submissions

closed (1 October 2022)



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About the Journal

Message from the Editor-in-Chief

Journal of Marine Science and Engineering (JMSE, ISSN: 2077-1312) focuses on research in the fields of Ocean Engineering, Coastal Engineering, Physical Oceanography, Geological Oceanography, Marine Biology, and Marine Environmental Science. It publishes reviews, regular research papers, and short communications, as well as Special Issues on particular subjects. Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the maximum length of the papers.

Editor-in-Chief

Prof. Dr. Charitha Pattiaratchi

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Author Benefits

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indexed with Scopus, SCIE (Web of Science), Ei Compendex, GeoRef, Inspec, AGRIS, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Marine) / CiteScore - Q2 (Ocean Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.5 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the second half of 2025).