



Ocean Digital Twins

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Message from the Guest Editors

Ocean Digital Twins (ODT) are digital representations of the real-world ocean, achieved through multi-variable and multi-dimensional descriptions of properties of the physical ocean environment. ODT integrate data can describe the entire marine environment, such as water physical properties, low atmospheric and biochemical processes, biodiversity data, sediment transport, interaction with human-made structures, citizen science observations, etc., as well as socio-economic data, such as demographics, economic activities, impacts of pollution, etc. Therefore, ODT is an inherently multi-disciplinary area covering fundamental research to real-life applications.

This issue aims at compiling the first experience from the development and application of ODT. Original research and review papers and technical reports are welcome in the following areas:

- Recent developments in ODT;
- Systems and models that have the potential to be used in ODT;
- Methods of integrating different data and models, making data interoperable across platforms;
- The infrastructure needed for ODT;
- Progress in utilizing available data and platforms, such as EMODnet and Copernicus;
- ODT Case studies





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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.

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