Special Issue

Remote Sensing Techniques for Ocean Dynamics: State of the Art, Present and Future Applications

Message from the Guest Editors

This Special Issue aims to publish studies covering different uses of remote sensing by describing and understanding the dynamical causes and mechanisms of ocean variability on different spatial (from local to global) and temporal (hourly to multi-decadal) scales. We welcome studies relying on single- to multi-variable approaches, combining in situ and remotely sensed data, capitalizing on recent advances in data-driven algorithms, and aiming at identifying the critical processes that need to be deepened and included in climate models. Papers with an interdisciplinary character that combine physical oceanography with other fields, ranging from atmosphere to biogeochemistry, from fisheries to ecology, from hazards to forecasting, are highly encouraged. Articles may address, but are not limited to, the following topics:

- Radar altimetry
- Doppler remote sensing techniques
- Future satellite missions for monitoring ocean dynamics
- Coastal HF-radar applications
- Extraction of ocean dynamics information from independent observations
- Data-driven and/or multi-variate monitoring techniques
- Operational oceanography
- Ocean state and monitoring
- Oil spill/debris monitoring

Guest Editors

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Deadline for manuscript submissions

closed (30 April 2025)



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About the Journal

Message from the Editor-in-Chief

Remote Sensing is now a prominent international journal of repute in the world of remote sensing and spatial sciences, as a pioneer and pathfinder in open access format. It has highly accomplished global remote sensing scientists on the editorial board and a dedicated team of associate editors. The journal emphasizes quality and novelty and has a rigorous peerreview process. It is now one of the top remote sensing journals with a significant Impact Factor, and a goal to become the best journal in remote sensing in the coming years. I strongly recommend Remote Sensing for your best research publications for a fast dissemination of your research.

Editor-in-Chief

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