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Remote Sensing of Surface Currents: Experiments, Theory, Numerical Simulation

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Message from the Guest Editors

The aim of this Special Issue is to describe and study the possibilities of remote sensing methods to characterize sea currents.

Today, there are many methods for measuring the characteristics of sea currents based on various physical principles. Remote methods, including satellite ones, appear to be the most promising due to their ability to observe large areas of water simultaneously. However, it should be noted that the development of technology to determine currents from remote data is still required.

- New experiments to determine various surface currents in the ocean, including in situ sub-satellite measurements;
- New satellite methods for measuring currents in the oceans, seas and inland waters;
- Studies on the redistribution of hydro- and biooptical properties of water, water constituents, surfactant films, algae, and ice under the action of sea currents;
- Doppler (coherent) radar, optical and acoustical methods for measuring sea currents;
- The application of machine learning and artificial intelligence to determine and forecast the dynamics of currents.





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Message from the Editor-in-Chief

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