Special Issue

Remote Sensing and Machine Learning Applications in Coastal Regions

Message from the Guest Editor

We invite researchers and practitioners to contribute to our upcoming Special Issue, *Remote Sensing and Machine Learning Applications in Coastal Regions*. This Issue will explore innovative applications of remote sensing technologies and machine learning methods to address challenges in coastal monitoring, environmental assessment, hazard prediction, and resource management. Authors are encouraged to submit papers on, but not limited to, the following topics:

- River, estuarine and coastal dynamics;
- Innovative applications of satellite, airborne, or landbased sensors in aquatic environments;
- Large-scale image velocimetry and other indirect approaches to achieve flow and wave information;
- Remote sensing applications for coastal erosion and protection;
- Methodologies for flood analysis and risk assessment;
- Informed decision support systems for natural hazards and emergency management;
- Studies of combined hazards under climate change;
- Numerical modelling using remote sensing data for model forcing, calibration, or validation.

Keywords: Remote Sensing, Machine Learning, Coastal Monitoring, Coastal Hazard Prediction, Habitat Mapping...

Guest Editor

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About the Journal

Message from the Editor-in-Chief

Humans have an enduring love of the sea, a love that is expressed most fervently in a narrow strip where the oceans meet the land: our planet's coasts. Today's coasts face a formidable plethora of anthropogenic pressures that can, if unfettered, hollow out the very fabric and ecological resilience that feed humanity's 'appetite' for coasts in addition to the critical ecosystem services that they provide. Conserving, restoring, and managing the foibles of rapacious coastal love are not trivial tasks: they require us to truly understand how coastal systems work. This is the chief motivation of this journal.

Topics: field observations, manipulative field or laboratory experiments, modeling, theoretical advances, etc. *Coasts* encourages diversity and critical thinking in all forms.

Editor-in-Chief

Prof. Dr. Francisco Taveira Pinto

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