



Remote Sensing of Winds and Windstress for Ocean State Forecasting and Modelling

Guest Editors:

Dr. Meer Mohammed Ali

Florida State University,
Tallahassee, United States

Prof. Dr. Mark Bourassa

Department of Earth, Ocean and
Atmospheric Science, Florida
State University, EOAS Building
1011 Academic Way, Tallahassee,
FL 32306, USA

Deadline for manuscript
submissions:

closed (30 August 2022)

Message from the Guest Editors

The two main sources of ocean energy are the incoming solar radiation and the winds. Wind stress, driving the ocean currents, is the most important force, particularly in the tropical and subtropical oceans. The availability of stress helps to improve the estimates of surface scalar fluxes (for example, sensible and latent heats, evaporation, and gas fluxes). Using stress directly avoids the uncertainty of how the sea state modifies stress determined from winds. Stress is also required in estimating the white cap fraction that affects the remote sensing of the ocean through an ocean color monitor. Furthermore, it also helps in evaluating the magnitude of wind-forced currents, upper ocean transport, and the wind roughness contribution to the surface signal for remotely sensed surface salinity. Stress can be described in terms of surface roughness relating to either scatterometer or altimeter observations, or in conventional monitoring, where it can be described in terms of near surface vertical wind shear modified by atmospheric stability.





an Open Access Journal by MDPI

Editor-in-Chief

Dr. Prasad S. Thenkabail

Senior Scientist (ST), U. S.
Geological Survey (USGS), USGS
Western Geographic Science
Center (WGSC), 2255, N. Gemini
Dr., Flagstaff, AZ 86001, USA

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 peer-review 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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Ei Compendex, PubAg, GeoRef, Astrophysics Data System, Inspec, dblp, and other databases.

Journal Rank: JCR - Q1 (*Geosciences, Multidisciplinary*) / CiteScore - Q1 (*General Earth and Planetary Sciences*)

Contact Us

Remote Sensing Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/remotesensing
remotesensing@mdpi.com
[X@RemoteSens_MDPI](https://twitter.com/RemoteSens_MDPI)