



Remote Sensing of Wave Fields under Extreme Weather Conditions (in Tropical and Extra-Tropical Cyclones and Polar Lows)

Guest Editors:

Dr. Vladimir A. Dulov

Marine Hydrophysical Institute,
Russian Academy of Sciences, 2
Kapitanskaya, 299011
Sevastopol, Russia

Dr. Bertrand Chapron

French Research Institute for
Exploitation of the Sea
(IFREMER), 29280 Plouzané,
France

**Prof. Dr. Vladimir N.
Kudryavtsev**

Satellite Oceanography
Laboratory, Russian State
Hydrometeorological University,
195196 St. Petersburg, Russia

Deadline for manuscript
submissions:

closed (31 August 2023)

Message from the Guest Editors

Dear Colleagues,

Tropical cyclones (TCs) and Polar lows (PLs) pose potential threats to developing coastal activities and shipping in the Arctic, as well as impacting the growing ice-free Arctic areas. The TC-generated surface currents and waves have significant impacts on the ocean's upper layer, being the cause of baroclinic movements, vertical mixing, and thermocline erosion. The air–sea interaction processes and surface fluxes are also affected by intense wave breaking and spray under extreme weather conditions.

Any significant progress in the modeling of TC/PL dynamics and waves and relating the air–sea interaction process under TC/PL require extensive in situ and remote-sensing observations. The latter is the most effective way to provide data on atmospheric and ocean parameters in extreme conditions using and combining microwave and optical measurements from different instruments and platforms including satellites and aircraft.

This Special Issue invites high-quality and innovative scientific papers focusing on the remote sensing of surface waves, ocean surfaces, and air–sea interaction processes under TC/PL.





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, Grosspeteranlage 5
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)