Special Issue

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

Message from the Guest Editors

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.

Guest Editors

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Dr. Bertrand Chapron

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Deadline for manuscript submissions

closed (31 August 2023)

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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.

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