Special Issue

Snow Water Equivalent Retrieval Using Remote Sensing

Message from the Guest Editors

The snow water equivalent (SWE), a key metric related to water storage in snowpacks, greatly impacts agricultural production, hydropower generation, freshwater supply, and natural disaster management. In particular, microwave remote sensing is an essential tool for monitoring the seasonal SWE due to its independence from solar illumination, the penetrability of clouds, and sensitivity to dry snowpack. Also, the exploitation of more recent sensors such as LiDAR, Altimeter, and GNSS-R satellites enhances the ability of monitoring SWE on a global scale. However, significant biases and high uncertainty in SWE products pose significant challenges. The aim of this Special Issue is to explore advancements in remote sensing techniques for monitoring seasonal SWE, covering radar (SAR, PolSAR, InSAR, and Scatterometer), microwave radiometers, LiDAR, Altimeter, GNSS-R instruments, etc. This Special Issue invites innovative methodologies, theoretical models, experimental observations, techniques, and applications on monitoring and modeling SWE.

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Deadline for manuscript submissions

12 February 2026



an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 8.6



mdpi.com/si/227655

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Message from the Editorial Board

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 peerreview 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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