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Monitoring Cold-Region Water Cycles Using Remote Sensing Big Data

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Deadline for manuscript submissions:
20 October 2024

Message from the Guest Editors

Water resources in cold regions, such as glaciers, snowpacks, frozen ground, lake/river ice, and discharge, have been jeopardized by the highly uncertain effects of climate change. Currently, the combination of machine learning and hydrological models is a promising direction for future water resource assessment in cold regions.

This Special Issue aims to publish research based on how remote sensing big data helps to monitor the water resources in cold regions. Articles may address, but are not limited, to the following topics:

- Remote sensing in monitoring cryosphere elements such as glaciers, snow, frozen ground, and lake/river ice. Machine learning techniques and data-driven methods are encouraged.
- The application of remote sensing in retrieving water cycle processes such as precipitation, evapotranspiration, discharge, and groundwater in cold regions.
- Methods fusing remote sensing data and hydrological models, such as parameter calibration, validation, and data assimilation.
- Evaluations of water resources and environmental effects in cold regions using remote sensing data or a combination with a hydrological model.

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Editor-in-Chief

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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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