# Special Issue

# Applications of Remote Sensing in Hydrology and Ecology: Observations, Methods, and Innovations

## Message from the Guest Editors

"Recent advances in remote sensing technologies (e.g., SAR, GNSS, altimetry, optical and hyperspectral sensing) now allow for accurate and consistent observations of variables such as precipitation, evapotranspiration, groundwater storage, and vegetation dynamics. These observations are vital for understanding the terrestrial water cycle or ecosystem responses to climatic variability and anthropogenic disturbance, especially in data-limited regions, supporting water management and ecological resilience assessments. This Special Issue mainly focuses on the diverse applications of remote sensing in hydrological and ecological science, encouraging contributions that leverage state-of-the-art satellite platforms (e.g., GRACE/GRACE-FO, SWOT, ICESat-2, Sentinel-1/2/3, Landsat, Gaofen, etc.) and innovative methodologies (e.g., data assimilation, machine learning). It seeks to highlight novel techniques that integrate multi-source observations with hydrological models or that advance our understanding of hydrological and ecological processes across scales."

## Guest Editors

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## Deadline for manuscript submissions

30 June 2026

Remote Sensing

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 8.6

mdpi.com/si/250145

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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.

### Editor-in-Chief

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