Special Issue

Remote Sensing in Hydrological Modelling

Message from the Guest Editors

The objective of this Special Issue is to describe state-of-the-art applications of satellite remote sensing in hydrological modelling. Contributions presenting the use of new algorithms and/or new EO data to assess land surface variables impacting the energy and water cycles at regional or global scales are expected. The research presented might focus on:

- Innovative methods and observations to map land use and catchment characteristics and to characterize atmospheric forcing, especially rainfall and snowfall and their spatial and temporal variability.
- Innovative methods and observations to retrieve or monitor hydrological variables or parameters such as soil moisture, snowpack, evapotranspiration, interception, etc.
- New approaches to assess observations and model uncertainties.
- New approaches and metrics to evaluate hydrological models.
- Advanced methods to upscale/downscale hydrological variables.
- Innovative techniques to assimilate EO products in hydrological models.
- Advanced applications in irrigation hydrology and water management, including hydrological monitoring and forecasting.
- Review papers on potential and limitations of various EO products.

Guest Editors

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Deadline for manuscript submissions

closed (31 December 2018)

Hydrology

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 5.9

mdpi.com/si/13433

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About the Journal

Message from the Editor-in-Chief

Hydrology is the study of the waters of the Earth. *Hydrology* has close ties with hydraulics, hydrogeology and the multiple sciences that study the atmosphere, the land surface, the soil and the subsoil, and ranges from complex problems of risk, forecasting and optimization of water resources to interactions with ecological, urban, social and economic systems.
The purpose of *Hydrology* is then to provide a journal where research results and real-world problems can be presented and discussed in order to bridge the traditional gaps between the academic world and the professionals and decision makers. Therefore, *Hydrology*, invites authors to submit their original theoretical, field, experimental, and numerical studies on hydrology with strong emphasis on multidisciplinary approaches and interdisciplinary topics, which cross the typical boundaries of our science.

Editor-in-Chief

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