



Remote Sensing Data Assimilation in Hydrology: Towards an Improved Understanding of the Global Water Cycle and Human Impacts

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Message from the Guest Editors

Dear Colleagues,

In the last decades, the hydrological science research has enabled significant advances in the understanding of water storage and fluxes over the continents using remote sensing data. The data from these missions are important not only for improving our understanding of the hydrological processes, but also for enhancing representation of extremes such as droughts and floods.

As a result of its global coverage at reasonable temporal resolution, hydrologists have been exploring ways to use multi-sensor satellite data to improve computational models, eg., data assimilation and optimization techniques.

The aim of this special issue is to gather a collection of latest developments and innovative applications of remote sensing data assimilation and integration into hydrological models. We invite contributions using the ample range of remotely sensed information through data assimilation, optimization and other innovative merging techniques to improve the numerical representation of hydrological processes, impacts of human activities on the water cycle and extreme hydrological event (e.g., droughts and floods) monitoring and forecast.

Special Issue



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Message from the Editor-in-Chief

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