



an Open Access Journal by MDPI

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

Guest Editors:

Dr. Augusto Getirana

1. Hydrological Sciences Laboratory, NASA Goddard Space Flight Center, Greenbelt, MD 20771, USA 2. Science Applications International Corporation, Greenbelt, MD 20771, USA

Dr. Sujay Kumar

Hydrological Sciences Laboratory, NASA Goddard Space Flight Center, Greenbelt, MD, USA

Dr. Benjamin Zaitchik

Department of Earth and Planetary Sciences, Johns Hopkins University, 3400 North, Charles Street, 301 Olin Hall, Baltimore, MD 21218, USA

Deadline for manuscript submissions:

closed (31 January 2022)



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.









an Open Access Journal by MDPI

Editor-in-Chief

Dr. Prasad S. Thenkabail

Senior Scientist (ST), U. S. Geological Survey (USGS), USGS Western Geographic Science Center (WGSC), 2255, N. Gemini Dr., Flagstaff, AZ 86001, USA

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Ei Compendex, PubAg, GeoRef, Astrophysics Data System, Inspec, dblp, and other databases.

Journal Rank: JCR - Q1 (Geosciences, Multidisciplinary) / CiteScore - Q1 (General Earth and Planetary Sciences)

Contact Us