

Special Issue

Monitoring and Early Warning for Heavy Precipitation, Flash Floods and Waterlogging Disasters Using Remote Sensing

Message from the Guest Editors

Remote sensing techniques such as radar and satellite have become powerful tools for monitoring natural hazards such as flash floods and waterlogging induced by heavy rainstorms. Advanced remote sensing-based products such as QPE and QPF are extremely helpful for short-term weather and hydrological forecasting. Also, dual-polarization or dual-frequency radar data and satellite data are used to assess water mixing ratios and winds, and to improve the capability of convection-permitting numerical weather prediction (NWP) models to forecast severe storms at scales varying from a few hundred meters to kilometers. Associated surface in situ observation equipment, such as rain gauges, runoff gauges, and distrometers, is also required for calibrating the observational variables and products of radars and satellites. Although such remote sensing equipment has been widely used in weather and hydrological monitoring and forecasting, several valid challenges remain:

- Developing radar and satellite signal processing methods;
- Assessing observational quality for newly developed radars and satellites;
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Guest Editors

Dr. Youcun Qi

Dr. Zhe Zhang

Dr. Zhanfeng Zhao

Dr. Donghuan Li

Dr. Bong-Chul Seo

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Remote Sensing
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
remotesensing@mdpi.com

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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

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

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