



## Application of Remote Sensing in Hydrogeology: Landslides, Land Subsidence and Uplift

Guest Editor:

**Dr. Francesca Ardizzone**

National Research Council of  
Italy, Research Institute of Geo-  
Hydrological Protection (CNR  
IRPI), Via della Madonna Alta 126,  
06128 Perugia, Italy

Deadline for manuscript  
submissions:

**closed (1 September 2021)**

### Message from the Guest Editor

Dear Colleagues,

Hydrogeology requires a multidisciplinary approach and interdisciplinary research aimed at investigating the interaction between water and geological systems. Rainfall precipitation, infiltration, and groundwater are some of the most important landslide triggering factors, increasing the pore water pressure and decreasing the shear strength of the soil. Groundwater deficits may trigger compaction of aquifers resulting in land subsidence. Uplift can also be related to the groundwater level changes following the interruption of water pumping, or climatic drivers.

Remote sensing for earth observation, including synthetic aperture radar (SAR), optical, multi/hyper-spectral, thermal imagery, aerial photography, and unmanned aerial vehicles (UAVs), are useful tools for investigating groundwater level change impacts at the local and global scales with different spatial and temporal resolution.

The goal of this Special Issue of Remote Sensing is to gather original research or case studies on the detection, characterization, and modelling of landslides, land subsidence, and uplift due to groundwater level changes.





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

*Remote Sensing* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/remotesensing](http://mdpi.com/journal/remotesensing)  
[remotesensing@mdpi.com](mailto:remotesensing@mdpi.com)  
[X@RemoteSens\\_MDPI](https://twitter.com/RemoteSens_MDPI)