

## Special Issue

# Radar for Planetary Exploration

### Message from the Guest Editor

Radars have been used in the study of Solar System bodies since the first echoes from the Moon were recorded by ground-based antennas in 1946. Ground-based radars have imaged the surface of the Moon, Venus, and Mars and have been used to precisely measure the motion and produce images of asteroids. Space-borne radar experiments have probed the subsurface of the Moon and Mars, revealed the interior structure of a comet nucleus and measured the depth of methane seas on Titan. Quantitative analysis of radar data has allowed the identification of ice deposits in permanently shadowed craters of the Moon and the detection of liquid water on Mars. Planetary radars have spurred the development of novel technological solutions to perform in environments unlike the Earth and sired new data processing and analysis methods to estimate physical parameters that are not measured by Earth-orbiting radars. This issue aims at documenting recent developments in a field that has characteristics that set it apart from radars used in Earth observations, from the design to the building, operations, data processing, and analysis of both Earth-based and space-borne planetary radars.

---

### Guest Editor

Dr. Roberto Orosei

Istituto Nazionale di Astrofisica, Via Piero Gobetti 101, 40129 Bologna, Italy

---

### Deadline for manuscript submissions

closed (31 October 2023)



## Remote Sensing

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.1  
CiteScore 8.6



[mdpi.com/si/111947](https://mdpi.com/si/111947)

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

[mdpi.com/journal/  
remotesensing](https://mdpi.com/journal/remotesensing)





# Remote Sensing

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.1  
CiteScore 8.6



[mdpi.com/journal/  
remotesensing](https://mdpi.com/journal/remotesensing)



## About the Journal

### 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

---

### 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)