

Special Issue

Remote Sensing for Quantifying Spatial and Temporal Variability of Snow and Snow Processes

Message from the Guest Editors

Snow represents a seasonal storage from where water is rapidly released during the melting period, and it has a large influence on surface energy and moisture fluxes: the spatial and temporal behavior of snow coverage can heavily influence floods, agriculture, hydropower and climate. The accurate characterization of snow is therefore a need for environmental, scientific and economic purposes. In this respect, the possibility of observing snow from space with high spatial and temporal resolution is undoubtedly appealing. Snow cover area (SCA) monitoring using optical and microwave sensors has been reported for decades, and microwave sensors (both active and passive) were also demonstrated able to provide information on other snow parameter as Snow Depth (SD) and its Water Equivalent (SWE). This Special Issue aims at exploring the current potentialities of active and passive microwave joint with optical remote sensing in order to quantify, how much the hydrological cycle and climate change are influenced by snow.

Guest Editors

Dr. Simone Pettinato

IFAC-CNR, Via Madonna del Piano 10, 50019 Firenze, Italy

Dr. Emanuele Santi

IFAC-CNR, Via Madonna del Piano 10, 50019 Firenze, Italy

Deadline for manuscript submissions

closed (29 February 2020)



Remote Sensing

an Open Access Journal
by MDPI

Impact Factor 4.2
CiteScore 8.3



mdpi.com/si/27153

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

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





Remote Sensing

an Open Access Journal
by MDPI

Impact Factor 4.2
CiteScore 8.3



[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)