



## Remote Sensing of the Atmospheric Boundary Layer

Guest Editors:

**Prof. Dr. Joachim Reuder**

Geophysical Institute & Bergen  
Offshore Wind Centre, University  
of Bergen, N-5007 Bergen,  
Norway

**Prof. Phillip Chilson**

School of Meteorology &  
Atmospheric Radar Research  
Center, University of Oklahoma  
120 David L. Boren Blvd, Norman,  
OK 73072-7307, USA

Deadline for manuscript  
submissions:

**closed (31 October 2020)**

### Message from the Guest Editors

Dear Colleagues,

Active and passive remote sensing methods have a long history of being used to better understand and characterize the structure and dynamics of the atmospheric boundary layer (ABL). The spatial scales observed span from meso- and sub-meso-scale phenomena (fronts and severe storms and precipitation) over local scale effects (wind turbine wakes and urban and orographic forcings) down to the characterization of small scale atmospheric turbulence. We aim to compile a Special Issue that highlights the latest development in active and passive remote sensing technology applied to ABL studies. Potential topics we can foresee are:

- ABL wind profiling by sodar, Lidar and radar
- 3D wind field evaluation by scanning Lidar and radar
- Characterization of BL clouds and precipitation by radar
- ABL scintillometry
- Temperature and humidity profiling by passive microwave radiometry and spectroscopy
- Acoustic tomography
- Validation and field campaigns



[mdpi.com/si/11951](https://mdpi.com/si/11951)

Prof. Joachim Reuder

Prof. Phillip Chilson

*Guest Editors*

# Special Issue



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, Grosspeteranlage 5  
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)