



CALL FOR PAPERS

IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing

Special Issue on “Recent Advances in Remote Sensing for Agriculture”

Remote Sensing (RS) technologies are powerful tools for agricultural monitoring and management. In recent years, RS data from satellite, airborne and UAVs sensors are becoming more and more abundant, possessing higher spatiotemporal resolution and richer spectral bands. Meanwhile, the development of cloud-based platforms (e.g. Google Earth Engine) has provided integrated interfaces for RS data and resource-saving methods to deploy analytical algorithms. Methods of RS also continue to advance thanks to the cross-disciplinary collaboration, for example, applying machine learning and deep learning approaches to solve domain problems in agriculture. These emerging data, tools and methods have enabled extensive applications of RS for agriculture, ranging from anomaly and disasters detection for early warning and risk mitigation, to early- and in-season monitoring to guide field specific precision management, and to understand and evaluate the impacts of climate change, land use land cover change and human intervention on agriculture. This special issue aims to will provide a venue for communicating recent research advances in RS for agriculture and to stimulate a new body of research in this topic. We welcome submissions related to the innovation of all aspects of RS for agriculture.

The broad topics include (but are not limited to):

- Cloud-based platforms (e.g. Google Earth Engine) for agricultural monitoring
- Multi-source remote sensing data fusion for generating analytical-ready datasets
- Crop classification and agricultural practices detection (e.g., cover cropping, tillage, and irrigation).
- Crop yield prediction and near-real time forecast using new sensors and algorithms
- Crop pest and disease monitoring and early warning
- Cropland protection and monitoring of violations
- Fusion of crop models with remote sensing for agricultural management
- Monitoring greenhouse gases (GHGs) emission from agriculture.

Schedule

December 1, 2021, Submission system opening

June 30, 2022, Submission system closing

Format

All submissions will be peer reviewed according to the IEEE Geoscience and Remote Sensing Society guidelines. Submitted articles should not have been published or be under review elsewhere. Submit your manuscript on <http://mc.manuscriptcentral.com/jstars>, using the Manuscript Central interface and select the “**Recent Advances in Remote Sensing for Agriculture**” special issue manuscript type. Prospective authors should consult the site <https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9082768> for guidelines and information on paper submission. All submissions must be formatted using the IEEE standard format (double column, single spaced). Please visit http://www.ieee.org/publications_standards/publications/authors/author_templates.html to download a template for transactions. Please note that as of Jan. 1, 2020, IEEE J-STARS has become a fully open-access journal charging a flat publication fee \$1,250 per paper.

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