



**CALL FOR PAPERS**  
**IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing**

**Special Issue on**  
**“Digital Innovations in Agriculture Research and Applications”**

The IEEE 2019 8<sup>th</sup> International Conference on Agro-Geoinformatics (Agro-Geoinformatics 2019) has been successfully held in Istanbul, Turkey, on July 16-19, 2019. Agro-Geoinformatics is a major scientific and technical event in agriculture remote sensing and informatics. This special issue follows Agro-geoinformatics 2019, but submission is not restricted to the contributors and attendees of the conference.

Agriculture is the foundation for human civilization. Timely and accurate information on agriculture and related resources, environment, and society is key to agricultural decision-making and policy formulation. In recent decades, digital revolution has greatly enhanced our capabilities to collect and analyze data and is moving agricultural research and applications to a new high level. This special issue will provide a venue for publishing papers related to digital innovations in agricultural research and applications. Papers for the special issue should address innovations in using agro-geoinformation in agricultural research and applications and include sound implementation and validation procedures. Suggested research and application topics of interest include (but not limited to):

- Agricultural ecosystem monitoring, assessment, conservation, and service sustainability under climate change;
- Cropland evapotranspiration, soil moisture, drought monitoring and assessment and irrigation planning;
- Agricultural disaster monitoring, assessment, mitigation and emergency response;
- Agricultural product tracking and food security
- Crop, forest, and grass land inventory and land-cover/land-use change monitoring;
- Remote sensing monitoring and modeling on agricultural greenhouse gases
- Invasive species monitoring, tracking and assessment
- Crop disease/pests, invasive species detection and tracking;
- Land management practices (crop residual, tillage, cover crop) monitoring and tracking;
- Soil health, fertilizer/pesticides/fungicide application monitoring and assessment, soil nutrient runoff mapping;
- Agro-cyberinfrastructure, geospatial sensor web and integration of RS/GIS/GPS (3S) in agriculture management;
- Cloud computing, big data analytics and innovations with AI technologies in agriculture related applications;
- Emerging citizen science, GIS for field validation/ground truthing and their contributions to smart agriculture.

**Schedule**

September 1, 2019: Submission system opening  
February 28, 2020: Submission system closing  
2020: Publication date

**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 using the Manuscript Central interface (<http://mc.manuscriptcentral.com/jstars>) and select the “Digital Innovations in Agriculture Research and Applications” special issue manuscript type. Please consult <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7416303> for guidelines and information on paper submission. All submissions must be formatted using the IEEE standard format (double column, single-spaced). For the template, please see [http://www.ieee.org/publications\\_standards/publications/authors/author\\_templates.html](http://www.ieee.org/publications_standards/publications/authors/author_templates.html). As of Jan. 1, 2020, J-STARS will become a fully open-access journal charging a flat publication fee \$1250 per paper.

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