



Precision Remote Sensing and Information Detection in Agriculture

Guest Editors:

Dr. Tongxi Hu

Institute for Sustainability Energy and Environment, University of Illinois, Urbana, IL 61801, USA

Prof. Dr. Kebiao Mao

Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences, Beijing 100081, China

Dr. Kaiguang Zhao

Ohio Agricultural Research and Development Center, School of Environment and Natural Resources, The Ohio State University, Wooster, OH 44691, USA

Deadline for manuscript submissions:

closed (10 May 2024)

Message from the Guest Editors

Agriculture is facing daunting challenges imposed by the increasing global population, natural resource scarcity, and climate change. Yet, there are unprecedented opportunities for the future, including the remarkable emergence of innovations in technological advances, such as precision remote sensing, which will help optimize agricultural management and thus improve agricultural sustainability.

Pivotal technologies for data collection, including airborne sensing, Unmanned Aerial Vehicles (UAV), real-time kinematics (RTK), and global positioning systems (GPS), are being used to monitor yields, weeds, chemical (herbicides, insecticides, and fertilizers) use etc. The collected data can influence farmer decisions with respect to seeding, fertilizer and chemical applications, irrigation scheduling, and other farm input use, which could lead to economic savings on farms and reduce the impact on the environment.

This Special Issue aims to cover a wide range of data collection approaches, such as UAVs (also known as drones), to monitor croplands and thus optimize management practices so that outcomes are robust and resource-efficient.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Les Copeland

Sydney Institute of Agriculture,
School of Life and Environmental
Sciences, The University of
Sydney, Sydney, NSW 2006,
Australia

Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, crossdisciplinary and scholarly open access journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. *Agriculture* is published in an open access format – research articles, reviews and other contents are released on the internet immediately after acceptance. The scientific community and the public have unlimited and free access to the content as soon as it is published.

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), PubAg, AGRIS, RePEc, and other databases.

Journal Rank: JCR - Q1 (Agronomy) / CiteScore - Q1 (Plant Science)

Contact Us

Agriculture Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/agriculture
agriculture@mdpi.com
X@AgricultureMdpi