Special Issue

Evapotranspiration Model Based on Remote Sensing and Ground Station Observation Data and Its Application in Agriculture

Message from the Guest Editors

Evapotranspiration (ET) is a critical component of the water cycle and plays a vital role in water resource management and crop growth in agricultural ecosystems. However, due to the complexity of factors influencing the process, including soil properties, weather conditions, vegetation growth, and irrigation practices, there are still challenges in accurately modeling ET. This Special Issue aims to advance the understanding of the complex factors influencing the ET process and provide valuable insights into crop water use and irrigation management in agricultural production. The contributions may include (but are not limited to) the following topics:

- New methods and algorithms for estimating ET using remote sensing data;
- Advances in ground-based ET measurement techniques and data assimilation;
- Applications of ET modeling in precision irrigation management, drought monitoring, and water resource management;
- Evaluation of the accuracy and uncertainty of ET models and data products;
- Use of ET modeling for predicting crop yield and growth under different environmental and management conditions.

Guest Editors

Prof. Dr. Liang Sun
Dr. Yun Yang
Dr. Sibo Duan

Deadline for manuscript submissions

closed (20 February 2026)

Remote Sensing

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 8.6

mdpi.com/si/167920

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

mdpi.com/journal/remotesensing

Remote Sensing

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 8.6

mdpi.com/journal/remotesensing

About the Journal

Message from the Editorial Board

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.

Editors-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

Prof. Dr. Dongdong Wang
Institute of Remote Sensing and Geographic Information Systems, Peking University, Beijing, China

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)

MDPI