water

an Open Access Journal by MDPI

IMPACT FACTOR 3.0

CITESCORE 5.8

Application of Remote Sensing Technology in Irrigated Agriculture

Guest Editor:

Dr. Peter Waller
College of Agriculture & Life Sciences / College of Engineering, Biosystems Engineering, The University of Arizona, Tucson, AZ, USA

Deadline for manuscript submissions:
closed (20 December 2023)

Message from the Guest Editor

Dear Colleagues,

Remote sensing in irrigated agriculture from satellites and drones is becoming a useful tool in managing and optimizing irrigation systems. Thermal sensors detect plant stress and enable the calculation of the daily energy balance and crop evapotranspiration (ET). OpenET is a satellite-based system to calculate ET based on an ensemble of energy balance models. It provides ET data to the western United States. Validation experiments compare OpenET with fluxtower-measured ET. Visible and NIR sensors detect plant canopy cover, the normalized difference vegetation index (NDVI), and the crop coefficient. Other parameters, such as expected yield, can be inferred. Remote sensing data is combined with models to manage water application and water productivity. This Special Issue requests papers that validate ET remote sensing platforms such as OpenET, utilize remote sensing to estimate plant status and the crop coefficient, and utilize remote sensing data in evapotranspiration and crop growth models to manage irrigation application.

Dr. Peter Waller
Guest Editor

water

IMPACT FACTOR 3.0

CITESCORE 5.8

an Open Access Journal by MDPI

Editor-in-Chief

Dr. Jean-Luc PROBST
Laboratory of Functional Ecology and Environment, Centre National de la Recherche Scientifique (CNRS), University of Toulouse, Campus ENSAT, Auzeville Tolosane, France

Message from the Editor-in-Chief

In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

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, GEOBASE, GeoRef, PubAg, AGRIS, CAPlus / SciFinder, Inspec, and other databases.
Journal Rank: JCR - Q2 (*Water Resources*) / CiteScore - Q1 (Water Science and Technology)

Contact Us

Water Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/water
water@mdpi.com
𝕏@Water_MDPI