

Special Issue

Agricultural Water Management—Coupling Hydrological and Crop Models

Message from the Guest Editors

In the context of global climate change, increasing water scarcity, and rising demands for food production, efficient agricultural water management has become a pressing global concern. There is a growing interest in coupling hydrological and crop models as an integrated strategy for better simulating the soil–plant–atmosphere continuum. By linking the strengths of both model types, re-researchers can improve predictions of crop performance under variable water availability, optimize irrigation strategies, and assess the impacts of climate variability on agricultural productivity.

In this Special Issue, original research articles and reviews are welcome. Research areas may include, but are not limited to, the following:

1. Coupling frameworks and technical approaches between hydrological models and crop models;
2. Coupled model calibration, validation, and uncertainty analysis;
3. Improving yield prediction accuracy and water management efficiency through data assimilation and remote sensing integration;
4. Applications of the models in water-saving irrigation and drought adaptation;
5. Scenario analysis under future climate and land-use change based on process-based models.

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Deadline for manuscript submissions

15 August 2026



Water

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0



mdpi.com/si/248715

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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.

Editor-in-Chief

Dr. Jean-Luc PROBST

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