

## Special Issue

# Smart and Precision Farming for Climate-Resilient Water and Land Management

### Message from the Guest Editors

Climate variability worsens drought, heat stress, desertification, and freshwater scarcity in global agriculture, requiring higher productivity, lower environmental impacts, and economic viability. Smart and precision farming—using sensing, geospatial tools, automation, variable-rate irrigation/fertigation, IoT, AI/ML models, and digital twins—enables real-time stress detection, risk forecasting, and actions to save water, protect soils, and sustain yields despite unpredictable rainfall, extremes, waterlogging, salinization, and rising evapotranspiration. This Special Issue invites research, reviews, methods, and cases on digital agriculture applications for sustainable water/soil management, low-carbon farming, and climate resilience at multiple scales, prioritizing studies that quantify benefits (water saved, yield maintained, emissions reduced), handle uncertainties (probabilistic forecasts, scenarios), and show real-world scaling and deployment.

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### Guest Editors

Dr. Dimitrios E. Tsesmelis

Prof. Dr. Pantelis E. Barouchas

Dr. Georgios Bourantas

Dr. Kleomenis Kalogeropoulos

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### Deadline for manuscript submissions

1 October 2026



## Earth

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## About the Journal

### Message from the Editor-in-Chief

*Earth* journal is a publishing platform to promote discoveries related to the Earth and its components (atmosphere, oceans, land, cryosphere, biosphere, and humans). The journal serves as a publishing venue that views Earth from a holistic perspective and disseminates scientific papers with emphases on multidisciplinary approaches to understand the complexities and interactions occurring on a variety of spatial and temporal scales. Rapid turnaround time and full open access offer the opportunity to make research results immediately available to scientific communities and the general public.

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### Editor-in-Chief

Prof. Dr. Charles Jones

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#### High Visibility:

indexed within ESCI (Web of Science), Scopus, GeoRef, AGRIS, and other databases.

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 21.3 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the second half of 2025).

#### Journal Rank:

JCR - Q2 (Geosciences, Multidisciplinary) / CiteScore - Q1 (Earth and Planetary Sciences (miscellaneous))