Special Issue

Advanced Technologies for Water Erosion Mapping and Environmental Change Detection

Message from the Guest Editor

Water erosion remains one of the most significant forms of land degradation worldwide, contributing to soil loss. reduced agricultural productivity, and sedimentation in river systems and reservoirs. This Special Issue aims to highlight the latest advances in mapping and monitoring water erosion using cutting-edge remote sensing and geospatial technologies. We invite contributions that demonstrate the application of unmanned aerial vehicles (UAVs), LiDAR, and high-resolution photogrammetry for the creation of digital elevation models (DEMs), which are critical for detecting erosion patterns and quantifying topographic change. Papers that integrate these technologies with GIS-based modelling, change detection analysis, and groundbased validation are especially encouraged. The Special Issue also welcomes studies focused on temporal erosion assessment, post-event landscape reconstruction (e.g., after floods or storms), and the monitoring of gully development, surface runoff, and landform evolution in both natural and agricultural landscapes.

Guest Editor

Dr. Ben Jarihani

- Earth and Environmental Science Department, College of Science and Engineering, James Cook University, Douglas, QLD, Australia
 Control of Control
- 2. School of Science, Technology and Engineering, University of the Sunshine Coast, Sippy Downs, QLD, Australia
- 3. Department of Hydrometeorology and Environmental Monitoring, Faculty of Hydrometeorology, National University of Uzbekistan, Tashkent, Uzbekistan

Deadline for manuscript submissions

25 December 2025



Water

an Open Access Journal by MDPI

Impact Factor 3.0 CiteScore 6.0



mdpi.com/si/242902

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

mdpi.com/journal/ water





Water

an Open Access Journal by MDPI

Impact Factor 3.0 CiteScore 6.0



About the Journal

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

Centre de Recherche sur la Biodiversité l'Environnement (CRBE) UMR CNRS/UPS/INPT/IRD, Centre National de la Recherche Scientifique (CNRS), University of Toulouse, Campus ENSAT, Auzeville Tolosane, Toulouse. France

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 (Aquatic Science)

