



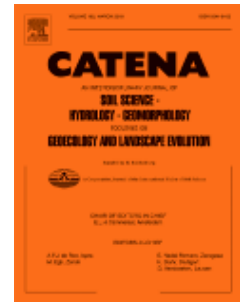
# CATENA

An Interdisciplinary Journal of Soil Science - Hydrology - Geomorphology focusing on  
Geocology and Landscape Evolution

## AUTHOR INFORMATION PACK

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### DESCRIPTION

*Catena* publishes papers describing original field and laboratory investigations and reviews on **geocology** and **landscape evolution** with emphasis on interdisciplinary aspects of **soil science**, **hydrology** and **geomorphology**. It aims to disseminate new knowledge and foster better understanding of the physical environment, of evolutionary sequences that have resulted in past and current landscapes, and of the natural processes that are likely to determine the fate of our terrestrial environment.

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### AUDIENCE

Soil Scientists, Hydrologists, Geomorphologists.

### IMPACT FACTOR

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## ABSTRACTING AND INDEXING

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SOIL ORGANIC CARBON sequestration; Soil Organic matter dynamics; Soil erosion, and degradation in agricultural soils.

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Remote Sensing; Imaging Spectrometry; Land degradation & hydrology; Soil erosion; Natural vegetation; Spatial statistics

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Badlands; Water erosion; Geomorphological hazard; Geomorphic markers; Geostatistics; Morpho-evolutionary models

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**E. Eckmeier**, RWTH Aachen University, Aachen, Germany  
Soil formation; Land-use change; Geoarchaeology; Paleosoils

**L. Gaspar**, University of Northern British Columbia, Prince George, British Columbia, Canada  
Soil erosion; Soil redistribution processes; Fallout radionuclides (Cs137, Pb210, Be7); Sediment tracing; Fingerprinting techniques; Source of fine sediments; Soil degradation

**J.B.J. Harrison**, New Mexico Institute of Mining and Technology, Socorro, New Mexico, USA  
Soils; Soil landscapes; Soil geomorphology; Geomorphic processes

**A.E. Hartemink**, University of Wisconsin at Madison, Madison, Wisconsin, USA  
Digital soil mapping; Tropical soils; Pedology; Soil fertility

**J. Hooke**, University of Liverpool, Liverpool, UK  
Geomorphology; Rivers; Coasts; Erosion: Coastal and fluvial management; Floods; Sediment

**C. Kabala**, Wrocław University of Environmental and Life Sciences, Wrocław, Poland  
Soil origin and transformation; Mountain soils; Soils of polar/subpolar regions; Soils of boreal regions; Soil contamination; Human impact on soils; Soil classification (including WRB and Soil Taxonomy)

**P.I.A. Kinnell**, University of Canberra, Canberra, Australian Capital Territory, Australia

**J. Latron**, IDAEA-CSIC, Barcelona, Spain  
Hydrological response of small catchments (0-10 km<sup>2</sup>): Hydrological monitoring; Rainfall-runoff relationships; Runoff generation processes; Modeling. Sediment dynamics in small catchments (0-10km<sup>2</sup>): Erosion, Sediment transport, Sediment budgets.

**T. Lei**, China Agricultural University, Beijing, China  
Hydrology; Instrumentation; Sediment measurement; Soil erosion; Soil physics

**A. Mirabella**  
Soil evolution and weathering processes; Clay minerals characteristics and transformation; Soil organic matter (humic and fulvic acids) characterization.

**T. Oguchi**, University of Tokyo, Kashiwa, Japan  
Hillslope and fluvial geomorphology, GIS

**Y. Onda**, University of Tsukuba, Tsukuba, Ibaraki, Japan

**Y.A. Pachepsky**, Hydrology and Remote Sensing Lab., Beltsville, Maryland, USA  
For geoderma: Artificial intelligence; Artificial neural networks; Regression tree; Genetic algorithm; Pedotransfer function; Soil hydraulic properties; Soil water flow; Solute transport; Spatial variability; Soil pore space; Soil structure, fate and transport of microorganisms; Crop simulation

**X. Peng**, Chinese Academy of Sciences (CAS), Nanjing, China  
Soil structure; Aggregation; Carbon sequestration; Soil hydrology; Soil shrinkage

**J. Poulenard**, Université Savoie Mont Blanc, Le Bourget du Lac, France  
Mountain soil and Volcanic soil; Sediments sources and Erosion; Paleopedology and paleoenvironments

**K. Pustovoytov**, Universität Hohenheim, Stuttgart, Germany  
Paleopedology; Geoarchaeology; Soil chronosequences; Pedogenic carbonate; Radiocarbon dating; Stable isotopes

**D.G. Rossiter**, Cornell University, Ithaca, New York, USA

Soil geography; Soil survey; Land suitability evaluation; Geostatistics applied to soil and related sciences; Urban soils; Caribbean and northern Latin America including Brazil, northeast and southeast USA, northeast Canada, central and north China, Philippines, Thailand, Indonesia, Cameroon, Mozambique, India

**G. Stoops**, Universiteit Gent, Gent, Belgium

Soil micromorphology; Soil mineralogy; Weathering and laterites.

**D. Torri**, C.N.R., Firenze, Italy

Soil erosion; Raindrop detachment; Raindrop transport; Runoff detachment; Runoff transport capacity; Rill erosion; Gully erosion; Rill and gully channel geometry; Soil erodibility; Soil shear strength; Soil cohesion; Soil surface roughness hydraulics friction; Vegetation-soil interaction; Vegetation effects on soil erosion; Biodiversity badlands

**C. Valentin**, IRD - Ambassade de France au Laos, Paris, France

Soil surface crust; Runoff production; Catchment hydrology; Soil erosion; Southeast Asia; West Africa: savannah and Sahelian zones

**B. van Wesemael**, Université Catholique de Louvain, Louvain-la-Neuve, Belgium

Vis NIR spectroscopy; Soil organic matter and digital soil mapping

**D.E. Walling**, University of Exeter, Penryn, Cornwall, UK

**R. Webster**, IACR-Rothamsted Experimental Station, Harpenden, UK

Soil science; Soil survey; Environmental science more generally; Geostatistics; Statistics more generally.

**X. Wei**, Chinese Academy of Sciences (CAS), Yangling, Shaanxi, China

Land use change; Organic carbon and nutrients turnover and transportation; Soil aggregates, biogeochemical cycles; Soil erosion; Soil fertility

**X. P. Yang**, Zhejiang University, Hangzhou, China

Geomorphology; Quaternary geology; Climate change; Desertification; Arid landscape; Desert

## GUIDE FOR AUTHORS

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### INTRODUCTION

CATENA publishes original contributions in the fields of:

**Geoecology**, the geoscientific-hydro-climatological subset of process-oriented studies of the present ecosystem

- the total environment of landscapes and sites
- the flux of energy and matter (water, solutes, suspended matter, bed load) with special regard to space-time variability
- the changes in the present ecosystem, including the earth's surface and

**Landscape Evolution**, the genesis of the present ecosystem, in particular the genesis of its structure concerning soils, sediment, relief, their spatial organization and analysis in terms of paleoprocesses;

- soils: surface, relief and fossil soils, their spatial organization pertaining to relief development
- sediment with relevance to landscape evolution, the paleohydrologic environment with respect to surface runoff, competence, and capacity for transport of bed material and suspended matter, infiltration, groundwater and channel flow
- the earth's surface, relief elements and their spatial-hierarchical organization in relation to soils and sediment
- the paleoclimatological properties of the sequence of paleoenvironments.

#### *Types of paper*

CATENA publishes multidisciplinary studies as well as monodisciplinary papers that are of interest to other disciplines and are of relevance to landscape studies.

1. Original research papers (Regular Papers)
2. Review articles
3. Technical Notes

Original research papers should report the results of original research. The material should not have been previously published elsewhere, except in a preliminary form.

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