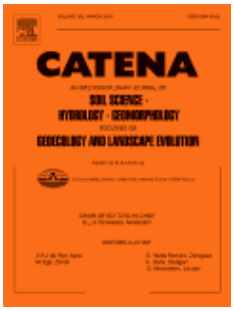
CATENA

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

AUTHOR INFORMATION PACK

TABLE OF CONTENTS



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DESCRIPTION

Catena publishes papers describing original field and laboratory investigations and reviews on **geoecology** 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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Soil Scientists, Hydrologists, Geomorphologists.

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Soil origin and transformation; Mountain soils; Soils of polar/subpolar regions; Soils of boreal regions; Soil contamination; Human iimpact 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 km2): Hydrological monitoring; Rainfall-runoff relationships; Runoff generation processes; Modeling. Sediment dynamics in small catchments (0-10km2): 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

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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 scieces; 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 Caholique 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

INTRODUCTION

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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.

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3. Technical Notes

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