Special Issue

Rainfall Infiltration Processes and Their Effects on Landslide Hazard

Message from the Guest Editors

Rainfall-induced landslides are among the most diffuse geohazards all over the world. However, the triggering of landslides is only indirectly linked to rainfall, as slope failure is determined by the increase of water pressure in the soil, which requires rainwater to penetrate and remain stored within the soil. The water balance of the slope is controlled not only by the hydraulic properties of the potentially unstable soil mass, but also by the hydraulic conditions at its boundaries. This Special Issue aims at collecting and presenting innovative research about rainfall-induced landslides, showing the importance of infiltration and drainage processes to correctly predict landslide hazard in various geomorphological contexts. Studies dealing with the effects of heterogeneity of soil properties, the role of vegetation, of superficial and buried topography, the assessment of initial conditions predisposing to slope failure, the influence of the presence of cracks and other macropores on rainwater infiltration, and the nonlinearity of infiltration and drainage processes would be very appreciated. Both experimental and modeling studies are welcome.

Guest Editors

Prof. Dr. Roberto Greco

Dr. Emilia Damiano

Dr. Giovanna Capparelli

Deadline for manuscript submissions

closed (15 December 2020)

Water

an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 6.0

mdpi.com/si/37719

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

mdpi.com/journal/water

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)

MDPI