



*hydrology*



*Special Issue Reprint*

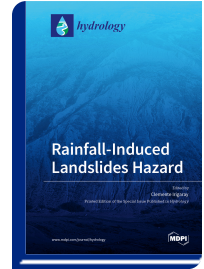
## **Rainfall-Induced Landslides Hazard**

[www.mdpi.com/books/reprint/4508](http://www.mdpi.com/books/reprint/4508)

Edited by  
Clemente Irigaray

ISBN 978-3-0365-2177-0 (Hardback)

ISBN 978-3-0365-2178-7 (PDF)



This book includes five articles and a technical note recently published in the Special Issue "Rainfall-Induced Landslides Hazard" from the journal Hydrology. Its main objective is to describe the latest developments and applications of the use of new numerical and analytical methods to improve our understanding of rainfall-induced landslide models and other aspects of landslide-hazard assessment.

In the first article, based on the estimation of rainfall thresholds and their return periods in a sector of southern Spain, a linear equation for the rainfall duration threshold and a power-law curve for the intensity-duration pair were determined. The second and fourth articles present two case studies in Italy on the assessment of landslide susceptibility. One of them uses the Weight of Evidence method and takes into account parameters such as geology, activity, land use, average annual precipitation and extreme precipitation events, and the other one compares Forward Conditional Analysis and Forward Logistic Regression methods. The next work aims to generate and compare the basic information on rainfall events triggering landslides in two areas with different climate and geological settings (southern Ecuador and southern Spain). In addition, this paper gives preliminary insights into the correlation between these rainfall events and major climate cycles affecting each of these study areas. The last article focuses on the estimation of evapotranspiration using remote sensing and the Surface Energy Balance Algorithm for Land in western Iran.

Finally, the technical note presents a procedure to determine and validate the probabilities for landslide occurrence by using different precipitation parameters (rainfall intensity, rainfall vent rainfall) in Bhutan.



Order Your Print Copy  
You can order print copies at  
[www.mdpi.com/books/reprint/4508](http://www.mdpi.com/books/reprint/4508)

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



### **Open Access**

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



### **Author Focus**

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



### **High Quality & Rapid Publication**

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



### **High Visibility**

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



### **Print on Demand and Multiple Formats**

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.