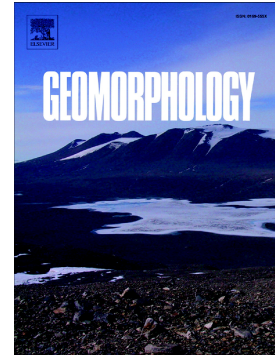


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# Improving landslide susceptibility mapping using morphometric features in the Mawat area, Kurdistan Region, NE Iraq: Comparison of different statistical models

Arsalan Ahmed Othman<sup>a,b,c,\*</sup>, Richard Gloaguen<sup>b,c</sup>, Louis Andreani<sup>c</sup>, Mehdi Rahnama<sup>b,c</sup>

<sup>a</sup>*Iraq Geological Survey, Mineral Investment Department, Sulaymaniyah Office, Sulaymaniyah, Iraq*

<sup>b</sup>*Remote Sensing Group, Institute of Geology, TU Bergakademie Freiberg, B.-von-Cotta-St. 2, D-09599 Freiberg, Germany*

<sup>c</sup>*Helmholtz-Zentrum Dresden Rossendorf, Helmholtz Institute Freiberg for Resource Technology, Exploration Division, Halsbrueckerstr. 34, D-09599 Freiberg, Germany*

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## Abstract

Susceptibility mapping provides information about vulnerable locations and thus helps to potentially decrease infrastructure damage due to mass wasting. During the past decades, expansion of settlements into areas prone to landslides in Iraq has highlighted the importance of accurate landslide susceptibility studies. The main goal of this research is to implement selected morphometric parameters to improve prediction of landslide susceptibility in the Zagros Mountain region. We used the Mawat area, in the Kurdistan Region (NE Iraq) to test the added value of morphometric indicators. Sixteen morphometric factors, mainly derived from a Digital Elevation Model (DEM), extracted using the stereo-ability of the Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) satellite, as well as geological and environmental

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