

Accepted Manuscript

Quantification of rock control in geomorphology

Andrew S. Goudie

PII: S0012-8252(16)30135-0
DOI: doi: [10.1016/j.earscirev.2016.06.012](https://doi.org/10.1016/j.earscirev.2016.06.012)
Reference: EARTH 2278

To appear in: *Earth Science Reviews*

Received date: 25 January 2016
Revised date: 16 June 2016
Accepted date: 17 June 2016



Please cite this article as: Goudie, Andrew S., Quantification of rock control in geomorphology, *Earth Science Reviews* (2016), doi: [10.1016/j.earscirev.2016.06.012](https://doi.org/10.1016/j.earscirev.2016.06.012)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

QUANTIFICATION OF ROCK CONTROL IN GEOMORPHOLOGY**By****Andrew S. Goudie,****School of Geography and the Environment,****University of Oxford,****South Parks Road, Oxford, OX1 3QWY, U.K.****Corresponding author. E mail: andrew.goudie@stx.ox.ac.uk****Abstract**

Rock control, the influence of rock properties on landform development, has for long been a relatively under-researched topic, but numerous techniques have been developed, especially by geotechnical engineers and stone conservationists that are now being applied to geomorphological issues by geomorphologists. These techniques range in scale from the quantification of major discontinuities through to analysis of micro-pores. Rock control studies that have taken place over the last few decades have contributed important insights into our understanding of such diverse phenomena as (1) river terraces, bedrock channel forms and gradients, pot-hole development, drainage density and gully (badland) development, (2) slope forms and failures, especially with respect to rock mass strength, (3) the form of glacial troughs and of subglacial erosional landforms, (4) weathering controls on rock durability and the association of weathering with porosity, (5) classic karst features including various types of karren, (6) sandstone landforms, (7) inselbergs and tors, and (8) cliffs and shore platforms.

Download English Version:

<https://daneshyari.com/en/article/6442864>

Download Persian Version:

<https://daneshyari.com/article/6442864>

[Daneshyari.com](https://daneshyari.com)