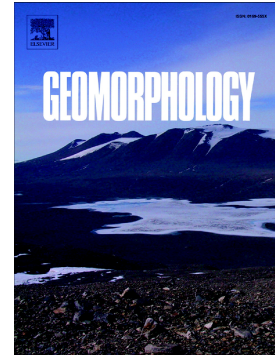


Accepted Manuscript

Measuring geomorphological diversity on coastal environments:
A new approach to geodiversity

Nicolás Ferrer-Valero



PII: S0169-555X(18)30244-7
DOI: doi:[10.1016/j.geomorph.2018.06.013](https://doi.org/10.1016/j.geomorph.2018.06.013)
Reference: GEOMOR 6428
To appear in: *Geomorphology*
Received date: 23 March 2018
Revised date: 14 June 2018
Accepted date: 20 June 2018

Please cite this article as: Nicolás Ferrer-Valero , Measuring geomorphological diversity on coastal environments: A new approach to geodiversity. Geomor (2018), doi:[10.1016/j.geomorph.2018.06.013](https://doi.org/10.1016/j.geomorph.2018.06.013)

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.

Measuring geomorphological diversity on coastal environments: a new approach to geodiversity

Nicolás Ferrer-Valero¹

¹Grupo de Geografía Física y Medioambiente, Instituto de Oceanografía y Cambio Global, IOCAG, Universidad de Las Palmas de Gran Canaria, ULPGC, Parque Científico-Tecnológico de Taliarte, Calle Miramar, 121, 35214 Telde, Las Palmas, Spain.

ABSTRACT

Geodiversity can be defined as the spatial variability of geo-elements. Its emergence as a research field is relatively recent, with a wide range of approaches and methods of evaluation and quantification already in use. The work described in this paper was carried out from a novel perspective. Firstly, the emphasis is specifically centred on geomorphological diversity. Secondly, mathematical ecology calculations are applied which tackle the problem on the basis of a larger number of diversity parameters. In addition, whereas most authors have focussed on mountainous and/or continental areas, for the first time a study of this type is applied to coastal landscapes. The analysis covers the full 459 km of volcanic coastline of the islands of Gran Canaria and La Palma (Canary Islands). These two oceanic islands were chosen for purposes of diversity comparison given their differing stages of geomorphic development. In accordance with an *ad hoc* geomorphological taxonomy, as developed in this study, 14 geomorphic groups and 42 subgroups were identified and quantified according to their presence [1] or absence [0] along the coastline. A cartographic-analytical method (coastline data-storing or CDS), based on the

Download English Version:

<https://daneshyari.com/en/article/8907943>

Download Persian Version:

<https://daneshyari.com/article/8907943>

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