

Main theme	Sub - Theme	Code Number
Socio-economic	Geomorphology	25
Study Name	The Geomorphology of Course Clastic Surfaces in Arid Environments	
Author	Nicholas John Rosser	
Date of Study	2002	
Objectives	<p>This study explores the linkages between slope form and slope process in arid environments. In doing so, questions of the development of slopes in arid environments are examined. The age of many arid environment surfaces, combined with the sporadic nature of formative events, means that long-term surface and slope development remains an elusive question in geomorphology. The clast-mantled surface of the northeast Jordan Badia presents ideal environments. The northeast Badia also provides an opportunity to explore theories of slope development and the behaviour of earth surface systems.</p>	
Output and Recommendation	<p>It is possible to make recommendations for future work based upon the findings of this research; contemporary surface hydrology has been employed in this study as a surrogate variable for process action within this study. This study has been conducted principally in a relatively small area on the surfaces of one basalt type. In order to gain a more comprehensive understanding of the evolutionary link between slope form and ground surface configuration, suggested by Allison and Higgitt (1998), similar studies should be undertaken on additional basalt surfaces. During the research for this thesis several attempts were made to gain an understanding of the three-dimensional form of the surfaces, combining both the planimetric view of the surface with an assessment of the vertical extent of surface clasts. The model of surface modification and spatial organization can be developed further which would be of direct benefit to the understanding of surface geomorphology.</p>	
Development Aspects	<p>Many of the methods developed in this study can be applied to other geomorphological situations. This method of slope profile location combines a long established method of profile location with a new computer based profile extraction procedure. This thesis is part of ongoing research in arid zone geomorphology, the behaviour of earth surface systems and the specific context of the northeastern Jordanian Badia. The results raise questions which may help to define the future research direction in all of these areas.</p>	
Remarks	<p>This thesis is submitted in accordance with the regulations for the degree of Doctor of Philosophy in the University of Durham, Department of Geography, 2003</p> <p>https://etheses.durham.ac.uk/id/eprint/3745</p>	

