Explaining the variables required to run the code for Figure 5

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1 Introduction

Along this text, the reader can find an illustrative version of each file required to run the code 'Figure5.py' properly. The reason why there are only illustrations rather than the files themselves is the impossibility of uploading files larger than 25 MB on GitHub. The data elevation used here is freely available in 'opentopography.org'.

All files used here are from the Marsyandi river watershed, Himalaya.

1.1 Elevation file

The elevation file used in our work has a *dbf file extension (Table 1). It was a SRTM DEM with 90 m of spatial resolution that was later convert to *dbf in ArcGIS 10 environment.The data used in the code is structured as follows:

Table 1: Example of an elevation file used. grid_code represents elevation, x and y are north and east axis in UTM coordinates.

grid_code	x	y
6290	225453	3200248
6238	225363	3200158
6266	225453	3200158
6237	225543	3200158

1.2 Flow accumulation file

The flow accumulation file used in our work has a *dbf file extension (Table 2). It was extracted from the same SRTM DEM in ArcGIS 10 environment. The data used in the code is structured as follows:

Table 2: Example of a flow accumulation file used. grid_code represents flow accumulation, x and y are north and east axis in UTM coordinates.

grid_code	x	y
0	225453	3200248
0	225363	3200158
0	225453	3200158
0	225543	3200158

1.3 Lithology file

The lithology file used in our work has a *dbf file extension (Table 3). It was extracted from the same SRTM DEM in ArcGIS 10 environment. The data used in the code is structured as follows:

Table 3: Example of a lithology file used. grid_code represents elevation, x and y are north and east axis in UTM coordinates, and RASTERVALU is the code assigned to each lithology (as there are 5 lithologies, the numbers range from 1 to 5).

grid_code	x	y	RASTERVALU
6290	225453	3200248	1
6238	225363	3200158	1
6266	225453	3200158	1
6237	225543	3200158	1

1.4 Flow length file

The flow length file used in our work has a *dbf file extension (Table 5). It was extracted from the same SRTM DEM in ArcGIS 10 environment. The data used in the code is structured as follows:

Table 4: Example of a flow length file used. grid_code represents flow length, x and y are north and east axis in UTM coordinates.

grid_code	x	y
0	225453	3200248
0	225363	3200158
0	225453	3200158
0	225543	3200158

2 Reference

C. Lavarini, M. Attal, C. A. da Costa Filho and L. Kirstein, 2018, Does pebble abrasion influence detrital age population statistics? A numerical investigation

of natural datasets, Journal of Geophysical Research: Earth Surface, submitted.