

Lake Tanganyika Project: Zambia National Site Characterisation and Catchment Management Design Workshop



GLOBAL ENVIRONMENT FACILITY

GIS training module – Lesson 7

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Lake Tanganyika Regional Integrated Management Project

A United Nations Development Programme (UNDP) / Global Environmental Facility (GEF) project covering the Lake Tanganyika riparian countries, Burundi, the Democratic Republic of Congo, Tanzania and Zambia.

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LESSON 7 – Generating slope data

The Slope map for L. Tanganyika basin can created from the SRTM/ elevation layer.

Start a new project and add the elevation layer from the directory \data_spatial\laketan\ grid\srtm, the elevation layer is named elevation and it is a grid dataset.

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x: 28.6416 y: -2.9517	Scale 1 :3564517	laketan_elevation=1679	Row 170, Col 47		Data Design

To change the color of the elevation data double click on elevation layer to view the properties, select Legend

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You can edit the From and To values appropriately depending on the classes that you would wish to have.

On the color column, click on the first color icon to go to the color palette, you can choose the first color to yellow and click Ok.

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Change the last color icon to brown, then click on RAMP Ramp in the properties window and click OK

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The elevation layer is the n changed in color and appears as below

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Iaketan_elevation 600 - 1000 1000 - 1500 1500 - 2000 2000 - 2500 3000 - 3500 3500 - 4000 4000 - 4500 No Data			
x: 26.8441 y: -9.6850	Scale 1 :6096837	laketan_elevation - Outside grid	Data (Design /

Generating Slope Layers

Click on the MODELLING menu and then Terrain Modelling



In the resulting dialogue box, define the output filename say slope, you can save this on my_diva directory and select slope as the output option and click OK.

Elevati	on Grid	:\oloo\diva	a\laketan\data	_spatial\lake	etan/grid/srtm	\laketan_	elevation.grd
Ĩ	Dutput	E:\oloo\DI	VA\laketan\my	_diva\laket	an_slope.grd	-	
Dutput	Slope		-				
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If you had not set the elevation units, then you can do that by selecting the info option in the Properties window and set the units to meters before running the terrain modeling process.

Label laketan_elevation I Filename e:\oloo\diva\laketan\data_spatial\laketan\grid\srtm\laketan_elevation	əti
Filename e:\oloo\diva\laketan\data_spatial\laketan\grid\srtm\laketan_elev	ati
Legend Info History	
	1
Columns 1280 Min Value -151	
Rows 1696 Max Value 6000	
Data Type INT2S Units meters	
U V	
Min 28.428351 -9.817559	
Max 34.188351 -2.185559	
Cell size 0.0045 0.0045	
Projection GEOGBAPHIC	
Map units DEGREES	
Datum	
V OK	

You can change the symbols for the slope map appropriately

