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

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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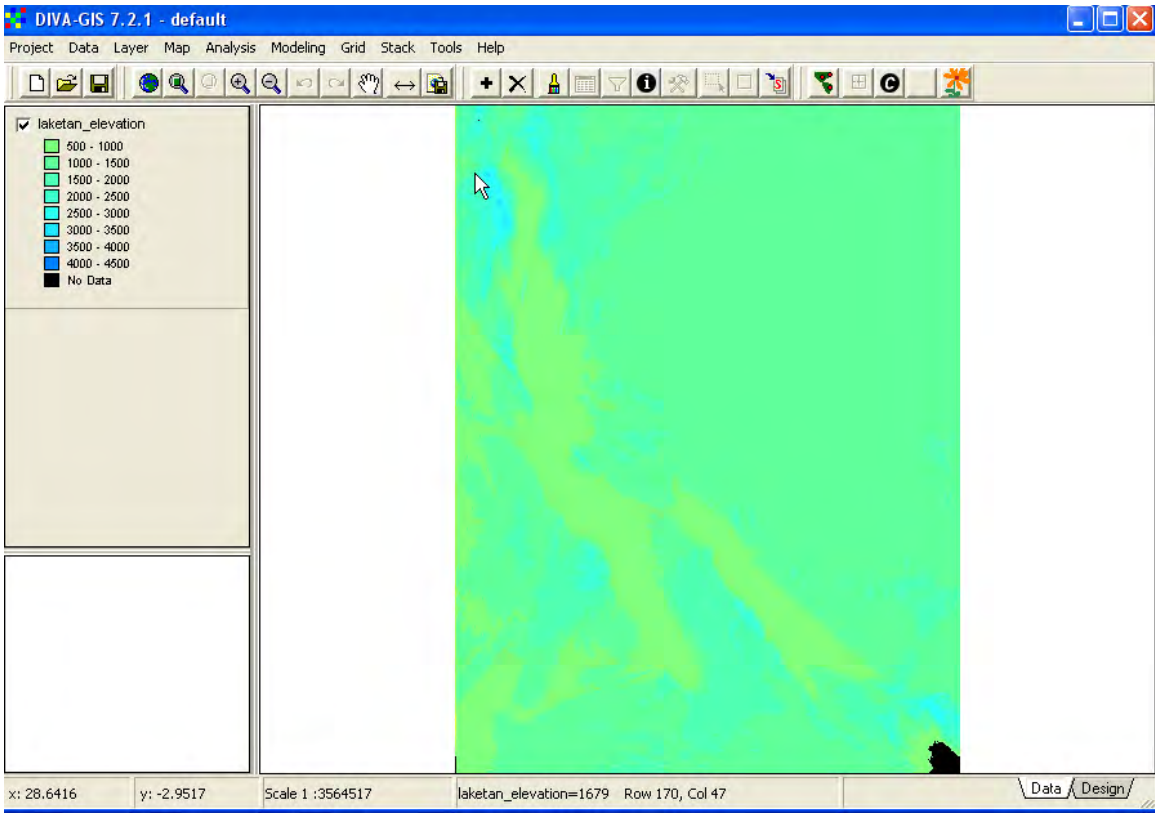
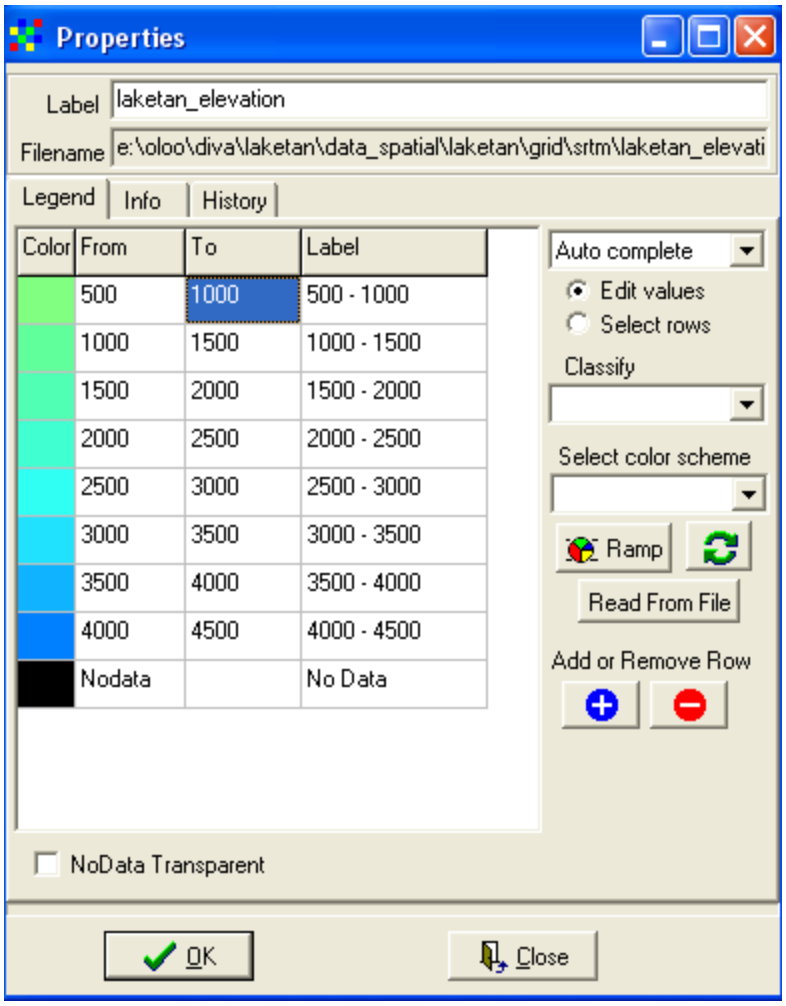
LESSON 7 – Generating slope data

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

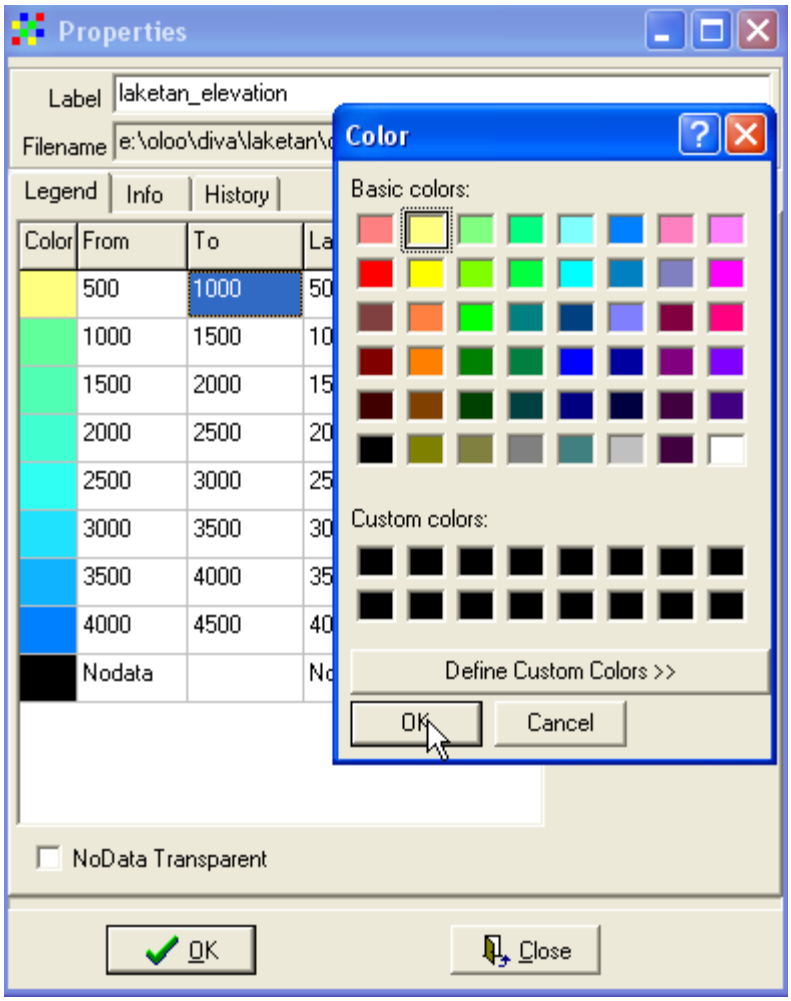
Start a new project and add the elevation layer from the directory \data_spatial\laketan\ grid\srtm, the elevation layer is named elevation and it is a grid dataset.



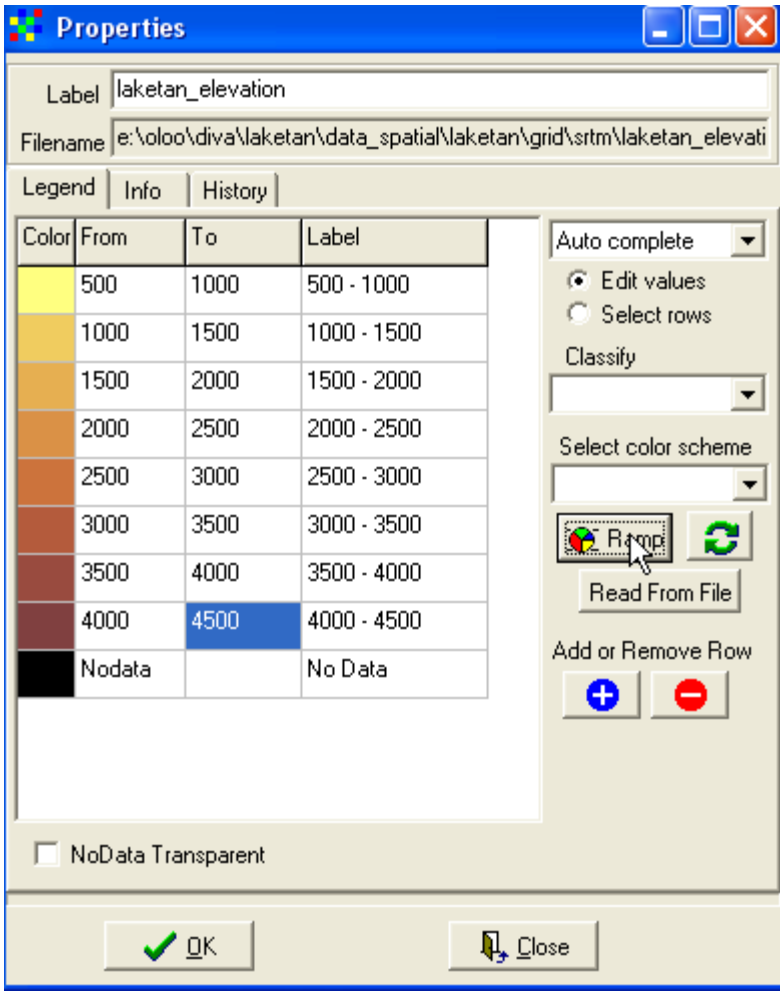
To change the color of the elevation data double click on elevation layer to view the properties, select Legend



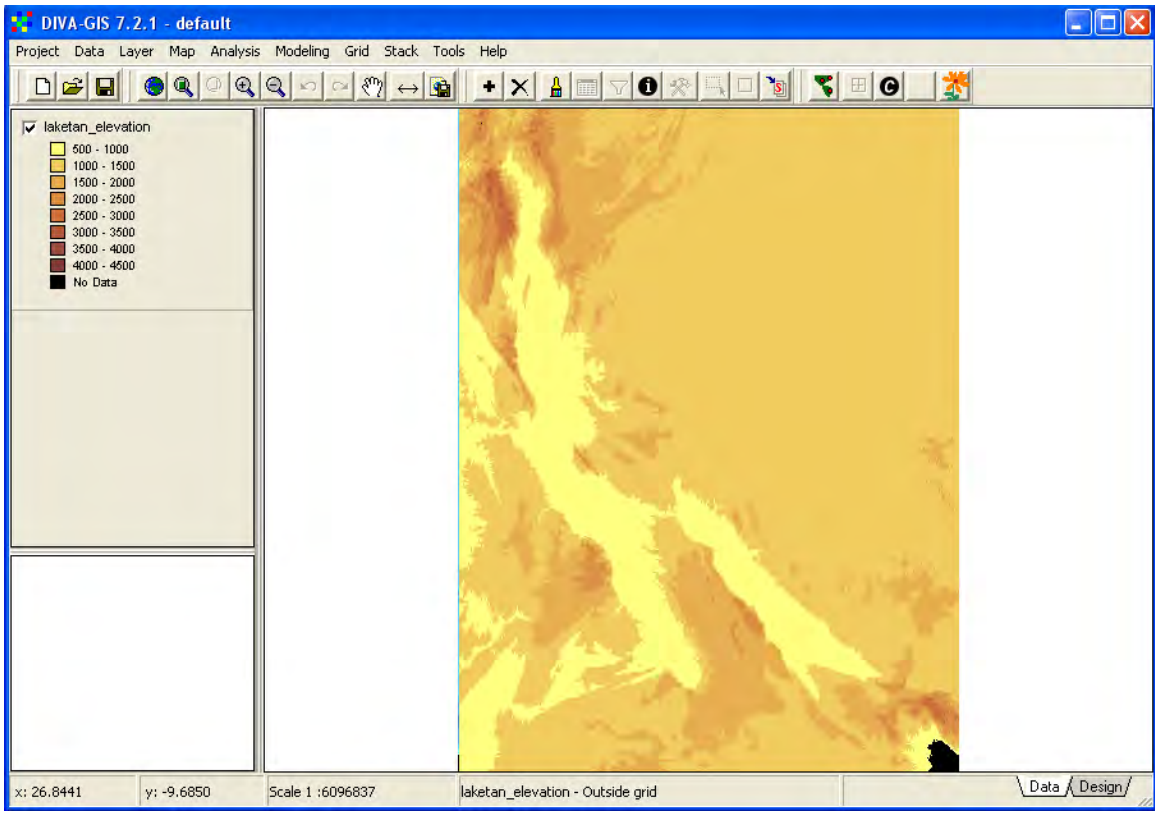
You can edit the From and To values appropriately depending on the classes that you would wish to have.
On the color column, click on the first color icon to go to the color palette, you can choose the first color to yellow and click Ok.



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

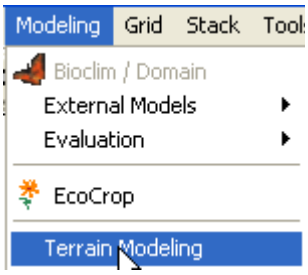


The elevation layer is the n changed in color and appears as below

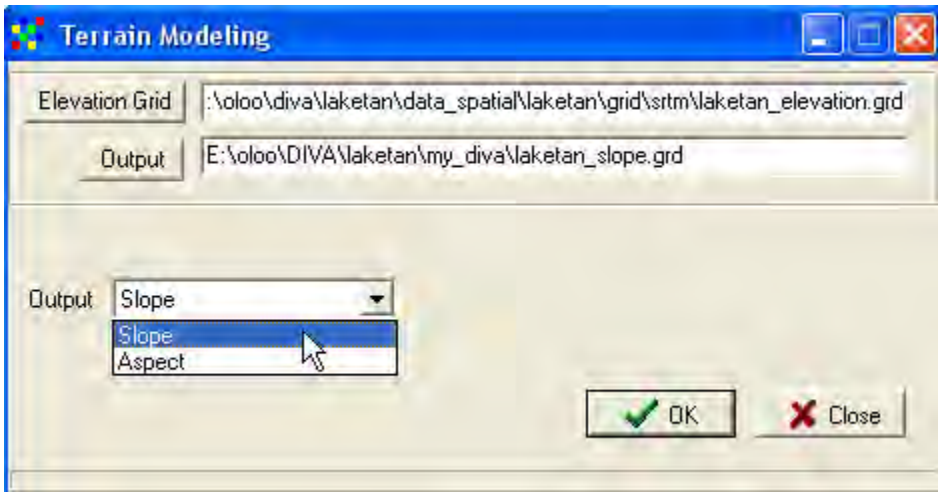


Generating Slope Layers

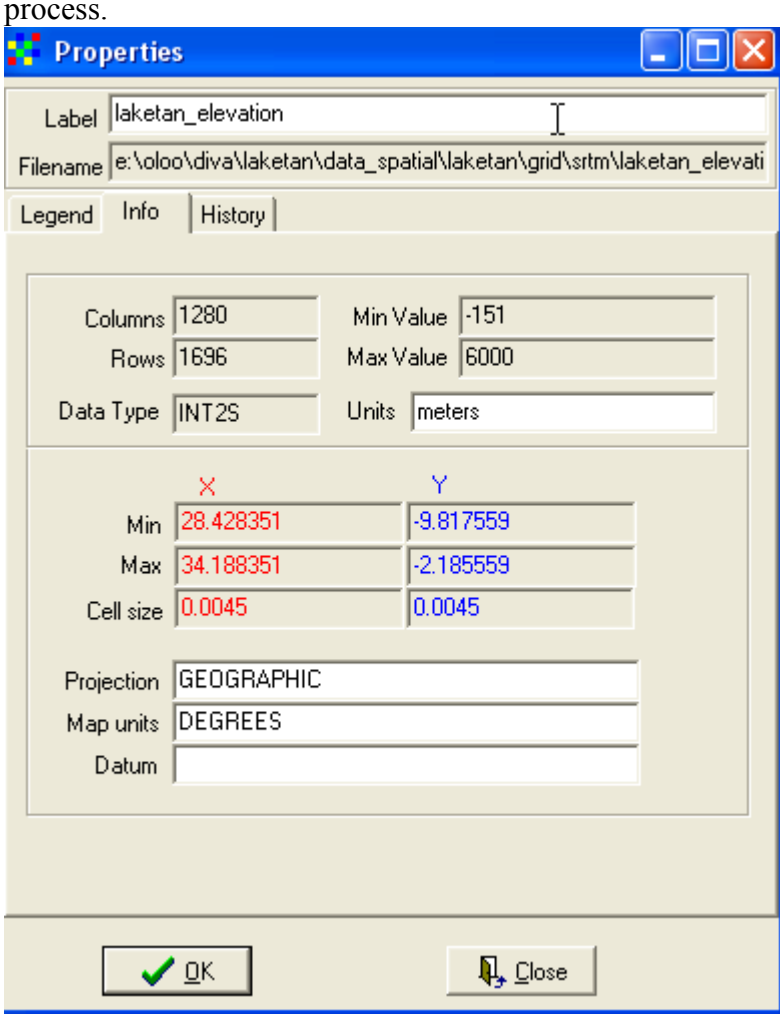
Click on the MODELLING menu and then Terrain Modelling



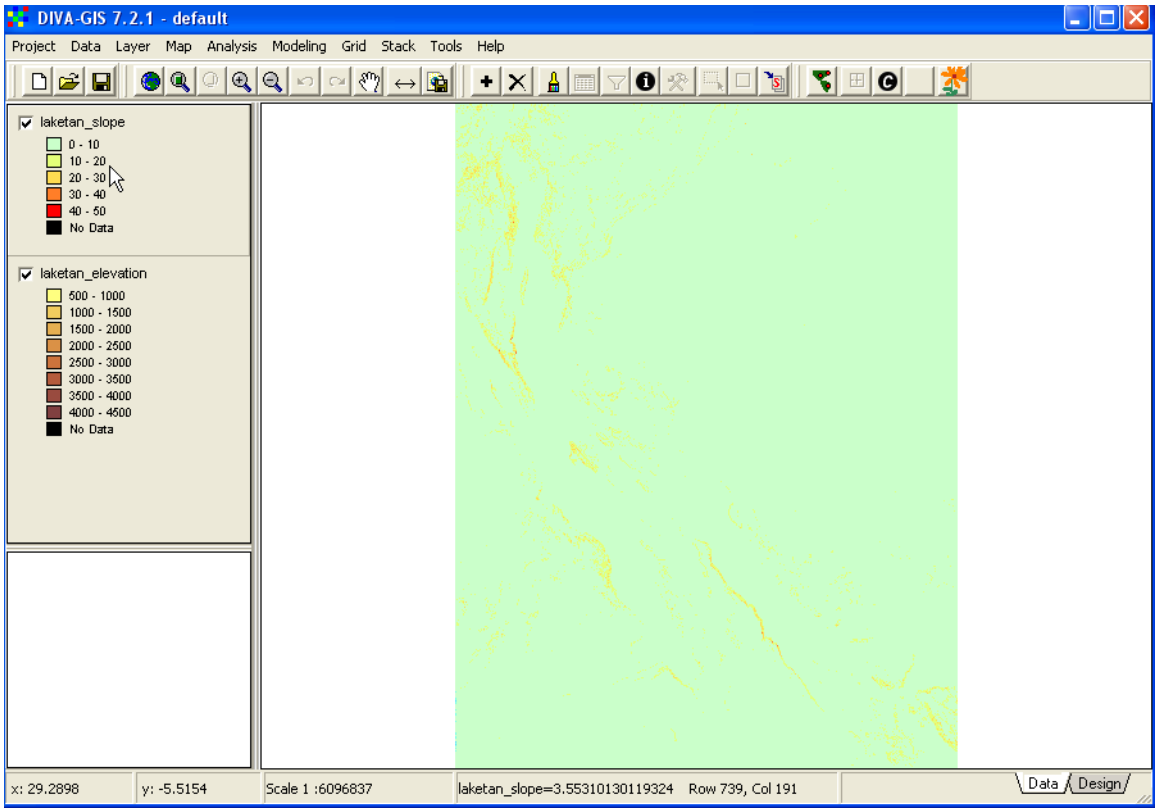
In the resulting dialogue box, define the output filename say slope, you can save this on my_diva directory and select slope as the output option and click OK.



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.



You can change the symbols for the slope map appropriately


DIVA-GIS 7.2.1 - default
Project Data Layer Map Analysis Modeling Grid Stack Tools Help
laketan_slope
0 - 10
10 - 20
20 - 30
30 - 40
40 - 50
No Data
laketan_elevation
500 - 1000
1000 - 1500
1500 - 2000
2000 - 2500
2500 - 3000
3000 - 3500
3500 - 4000
4000 - 4500
No Data
x: 29.2898
y: -5.5154
Scale 1 :6096837
laketan_slope=3.55310130119324 Row 739, Col 191
Data
Design