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 0 – INSTALL DIVA-GIS

Lesson overview

In this lesson you will install and prepare DIVA-GIS, a freeware Geographical Information System (GIS), developed by CIP (International Potato Center, Peru).

Install DIVA GIS

DIVA-GIS is a free software, produced by the International Potao Centre (CIP), a member of the Consultative Group for International Agricultural Research (CGIAR) system. The conditions of use and distribution are given at the end of this lesson.

DIVA GIS is included on the project CD (versions, 5.2, 5.2_xp, 5.4 and 7.2.1). The program can also be downloaded from www.diva-gis.org.
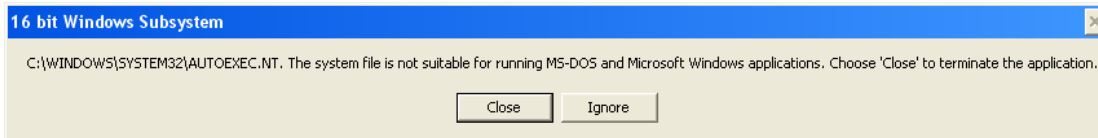
DIVA GIS version comes in several alternatives – which version to use depends on your computers configuration. The most sable version is 5.4. To install this version you must first install version 5.2 and the copy the file diva.exe file for version 5.4 and overwrite the diva.exe file that was insalled with version 5.2. If you have windows 7, you might need to install version 7.2. But this version in less stable than 5.4.

Installation of DIVA-GIS

The different versions of DIVA-GIS can be found in the following directories:

Version	Directory
diva_52	\Software\diva_52
diva_52xp	\Software\diva_52xp
diva_54	\Software\diva_54
diva721	\Software\diva721

Double click the file called SETUP.EXE and follow the installation instructions. This training module assumes that the program is installed under the default directory C:\Program Files\DIVA-GIS. If you get an error message during the installation as shown below, click Close and try the xp version.
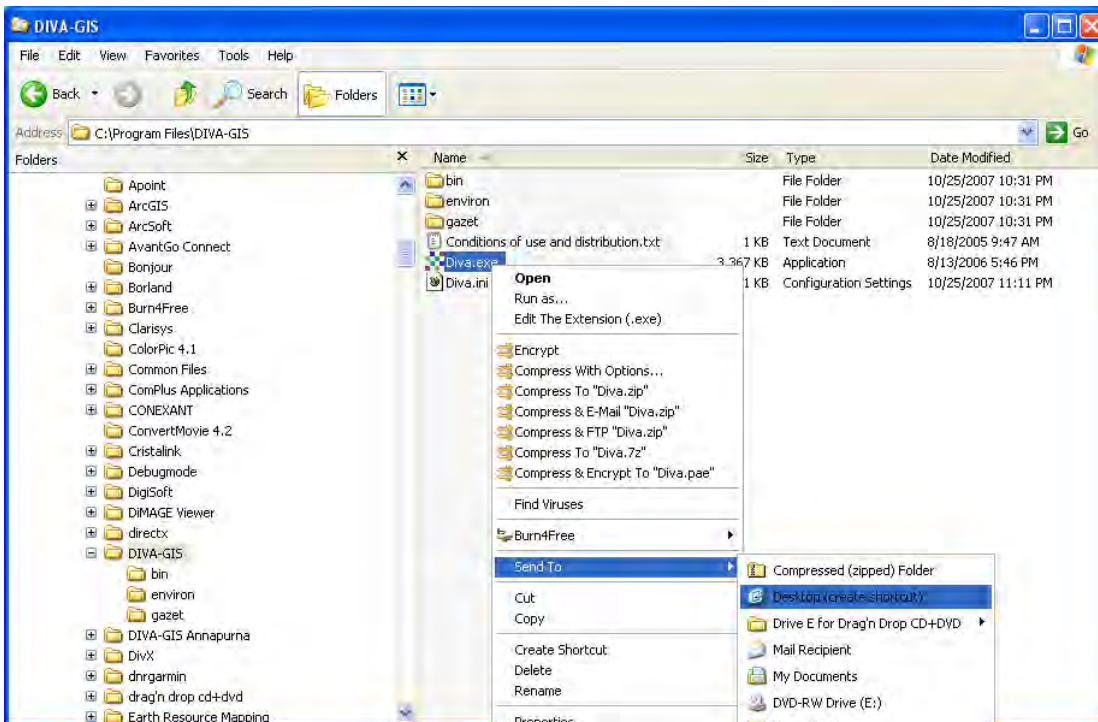

Installation of DIVA-GIS 7.2.1xp

Double click the file called setup.exe in the software directory and follow the installation instructions. This training module assumes that the program is installed under the default directory C:\Program Files\DIVA-GIS.

Start DIVA-GIS

Start DIVA-GIS by double clicking the DIVA-GIS icon on the desktop (if there is one – depends on your installation). If you do not have an icon on your desktop use Windows Explorer, navigate to the program folder for DIVA-GIS (C:\Program Files\DIVA-GIS), point the cursor to the file diva.exe, click on the right mouse button and select Desktop (create shortcut) as shown below. You should now have the DIVA-GIS program icon, on your desktop.
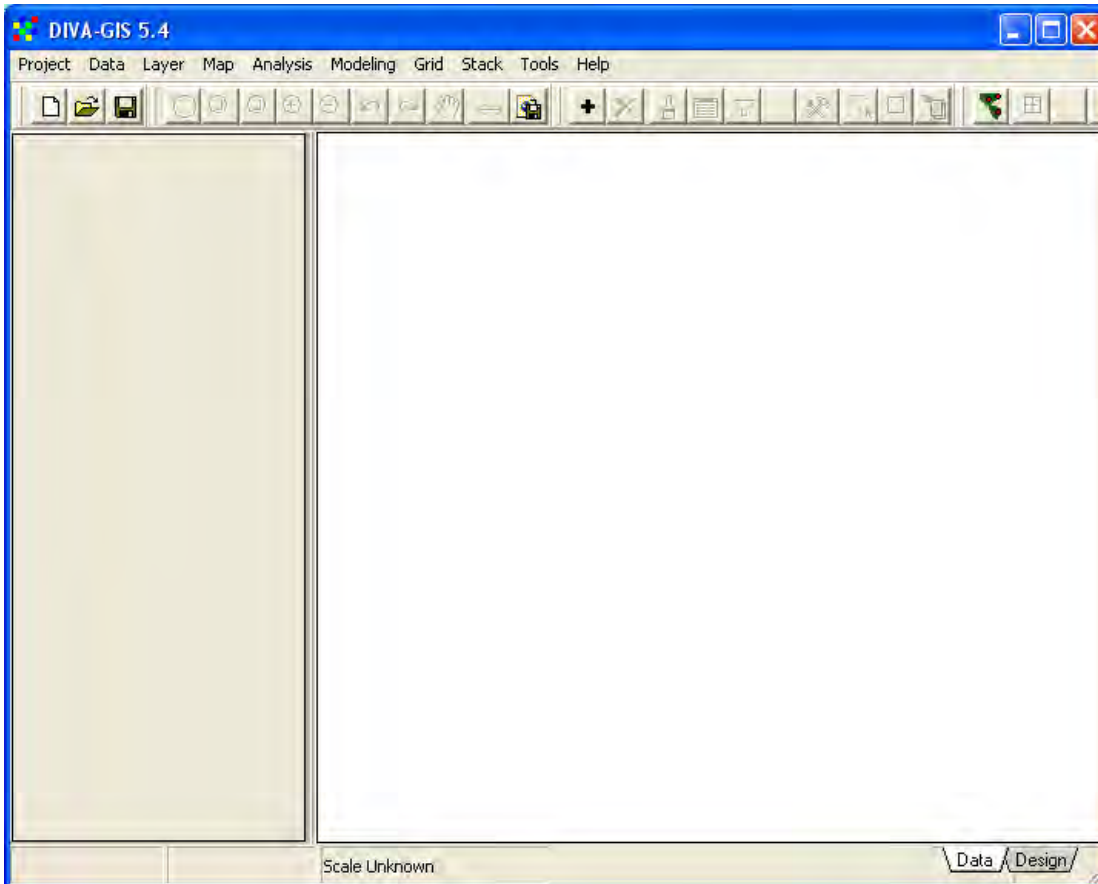

The first time you start DIVA-GIS the program interface should look like below, albeit the order and number of tool buttons may vary dependent on which version and installation you used.

DIVA-GIS interface

DIVA will start with an empty project (you will soon learn about projects), and show an empty display. The interface of DIVA-GIS is very similar to many of the high-end commercial GIS packages. If you learn DIVA-GIS it will be very easy to learn another GIS program. The top row is the menu with its drop down menus. Thereafter follows the tools, divided in toolbars, with most tools grayed out – you must put some data in the display before they become active. The main area is divided into the Data View, and to the left of it is the Legend. Below the map display you see some basic information (scale and later cursor position). The two tabs in the lower right you can use for toggling between the Data View and the Design View. Most of the work is done in the Data View, while the Design View is used for creating the final map layout before publication.
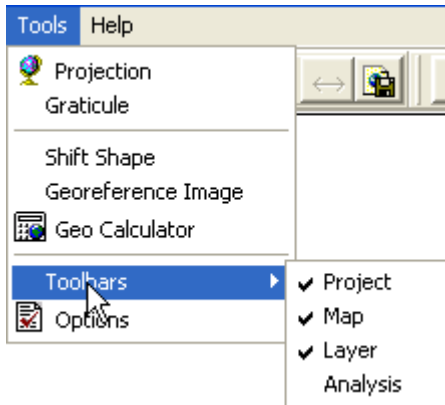

Copy the GIS data layers to your local harddrive

The GIS data layers included on the project CD are all available under the folder \data_spatial. You can work with the layers on the CD, but it will be slower than if you copy them to your local hard drive. And, more importantly, in order to add or change the data, you must put it on a local drive (or on a network or usb-drive, but not on the CD – it is not writeable). The best is to copy the folder \data_spatial and all its sub-folders to the local drive called C. But you can put it on any local drive, network server or even on a portable disk or a USB-drive. In this training module the data was put on local drive called D.
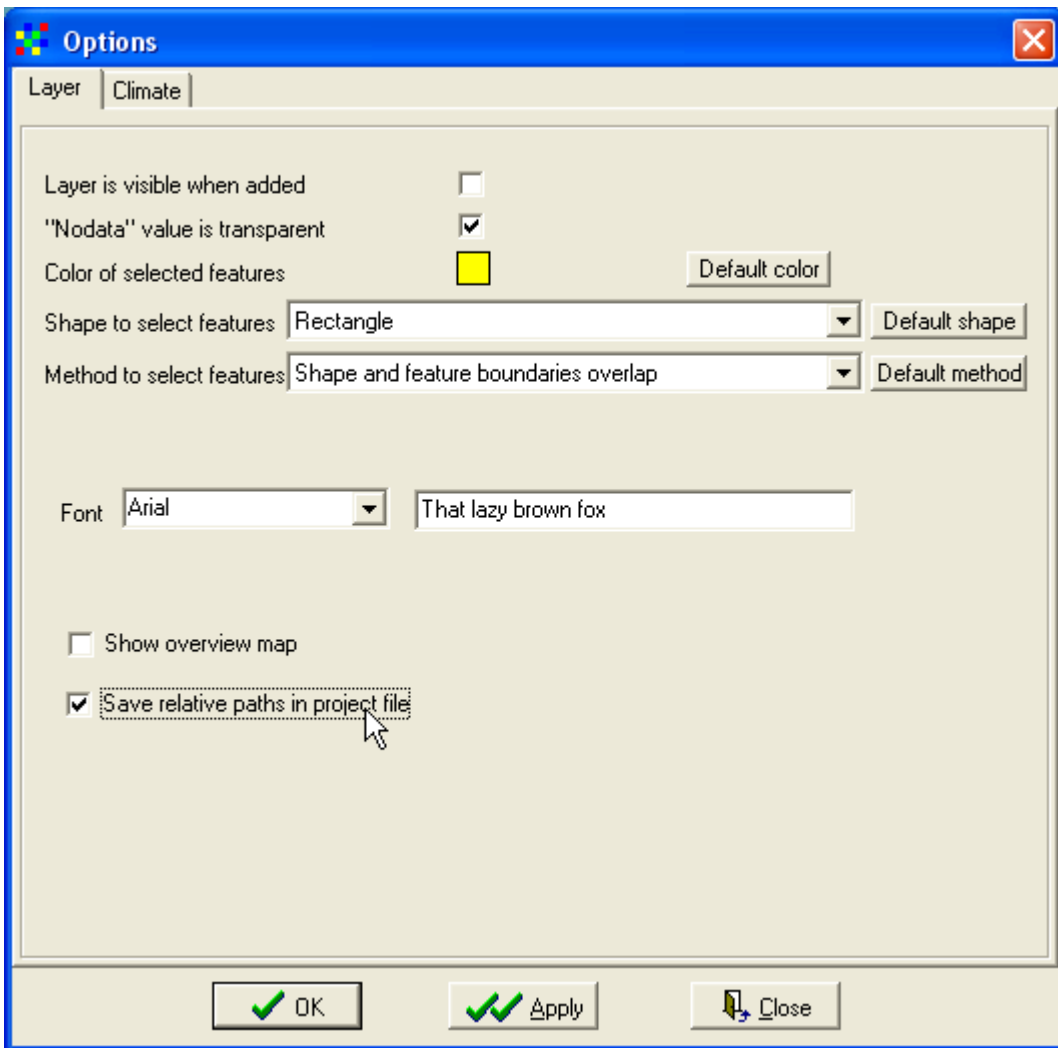
DIVA-GIS options

When you have decided where to keep your dataset, you should set some of the options for DIVA-GIS. First you can set which tools you want to include, go via the menu: Tools – Toolbars (shown in

te figure below), and you get the option of removing some of the tools. Most of the tools are needed for this and the following lessons, but Analysis is not used, and hence removed in the example below. Even if you remove a toolbar, the tools can still be accessed from the menus. Dependent on which Toolbars you include, the tools will have a different order in the Toolbar of the DIVA-GIS project window. Hence in the following lesson, you might see that tools do not sit at the same place on your version of DIVA-GIS compared to this document. This depends on if you removed a Toolbar, in which order you removed the Toolbars, and when you saved your project.
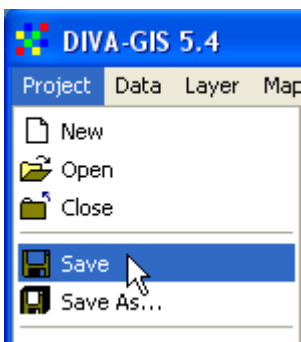

Then you should change the options of DIVA-GIS via the menu: Tools – Options. The Options window will popup. The first time you open the Options window you will get to the Climate tab. To use climate data with DIVA-GIS, please refer to the DIVA-GIS manual and the climate data that comes with DIVA-GIS. Both the manual and some low resolution default data are included on the project CD (see section DIVA-GIS resources towards the end of this lesson). For now just ignore the Climate tab, and click the Layer tab. Here you get various options that you will soon understand, what is important now is to choose the last option Save relative path in project file. If you select this option (the checkbox is checked) then you can copy your dataset from one drive or folder to another and the project will still work. This is often the preferred option. If, however, you choose to work with the data on a CD, then you should uncheck this option.
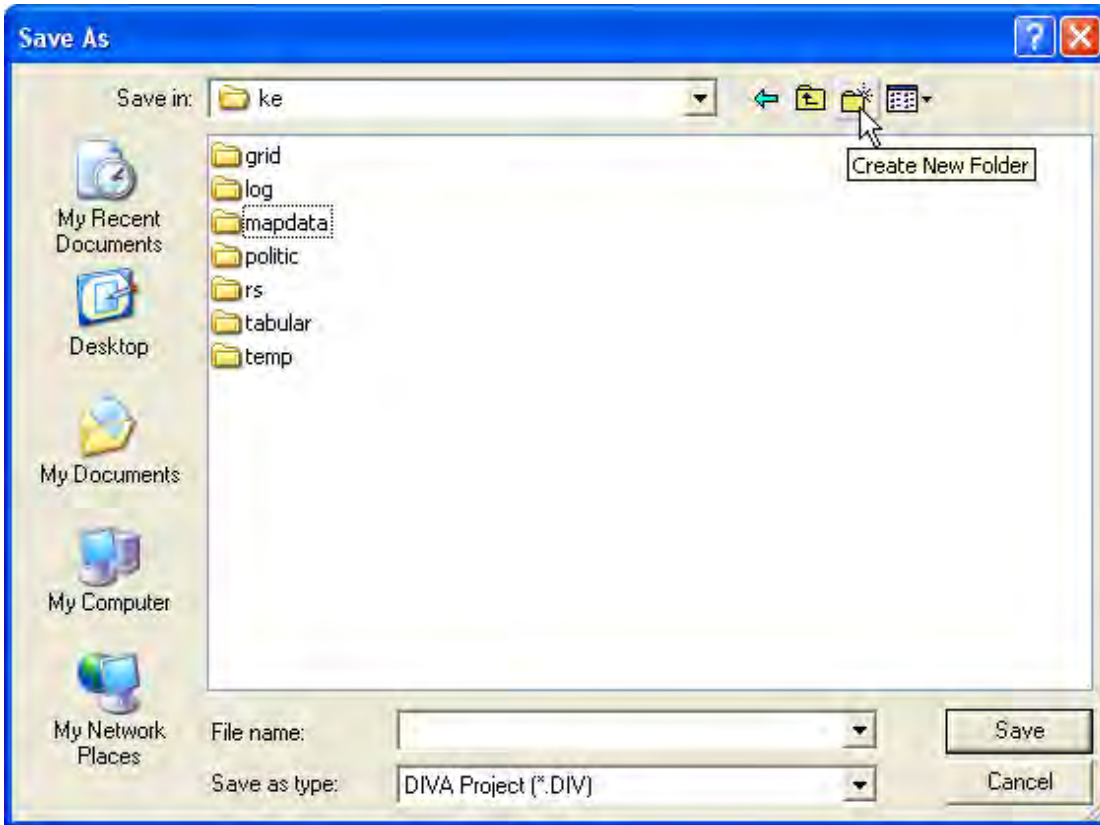
When you have set the default options, click the Apply button, , and then the Close button, . Or click the OK button, to apply and close with one click.

Save DIVA-GIS project

Now that we have set the properties and prepared DIVA-GIS it is time to save the project (a project consist of the DIVA-GIS settings you did, added maps, and map compositions like symbolization and labeling). Save your project by clicking the Save Project tool, , or via the menu: Project – Save.

In the Save As window that pops up, it is suggested that you navigate to the folder data_spatial/sahel and create a new folder (as shown below) called "my diva" or "my_diva" (the latter alternative have advantages), and then save your project in this new folder. In the following lessons it will be assumed that your projects are called lesson1, lesson2 etc. As your project does not contain any data yet, you can call it e.g. lesson0, or template0.

When you save your project the name you gave it will appear at the top of the DIVA-GIS project window. When you are working with a project remember to save your project now and then while working, in case of power cuts, or the computer gets stuck etc. Some of the more advanced modules of DIVA-GIS are not completely stable, and then DIVA-GIS stops working, and you will loose unsaved work in the project.

DIVA-GIS resources

The project CD contains the following DIVA resources from www.diva-gis.org

Resource	Folder\file
DIVA 5.2 installation	\software\diva-gis\diva_52\SETUP.EXE
DIVA 5.2xp installation	\software\diva-gis\diva_52xp\SETUP.EXE
Manual	\software\diva-gis\manual\DIVA-GIS5_manual.pdf
Tutorial	\software\diva-gis\tutorial\DIVA-5_Tutorial.pdf
Tutorial data	\software\diva-gis\tutorial\tutor_v5.zip
Current climate	\software\diva-gis\climate\diva_worldclim_10m.zip
Future climate	\software\diva-gis\climate\diva_wc_ccm3_10m.zip

The current and future climate data included on the project CD are in 10 minutes resolution; more high resolution data is available on the [DIVA climate data web-page](). The climate can be used by installing it in a predefined climate directory in the DIVA program folder (see the [DIVA manual]()).

DIVA-GIS - Conditions of use and distribution

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