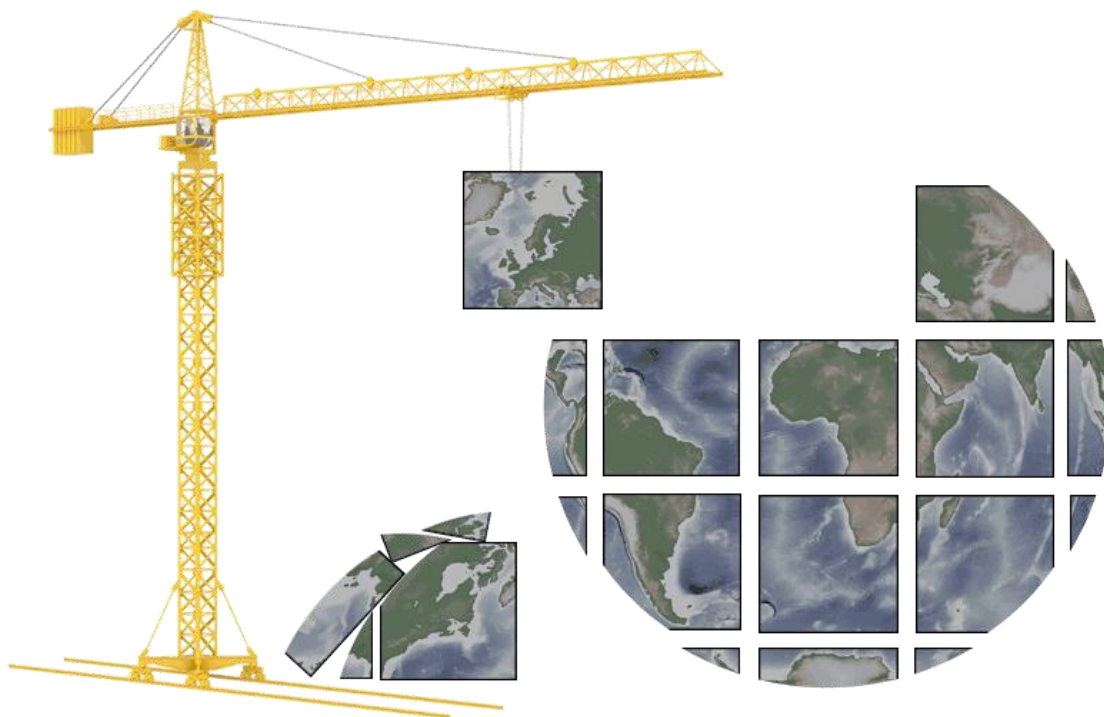


Getting started with Modelgeo

Tutorial for new users



ModelGeo earth model construction software

<http://www.modelgeo.no>

Contents

- 1 About 3
- 2 Training resources..... 3
 - 2.1 Documentation 3
 - 2.2 Scripting..... 3
 - 2.3 Training data..... 3
- 3 Three steps for getting started 4
- 4 Troubleshooting..... 4

1 About

The Modelgeo program is the property of ModelGeo AS, Oslo Norway. Any use of the software, be it free academic or commercial, requires a license. All work with the software which is presented or published, under commercial or free academic license, should acknowledge ModelGeo AS.

The Installation Guide that comes with the software download explains how to install and get a license. This tutorial helps take the next steps, after that has been done.

Four downloads are available from www.modelgeo.com/download. The free academic version of the software, the MGO_demo and MGO_demo2 projects, and this tutorial. Download and install the software, request and install the license, download the demo data, then use this tutorial to get started.

2 Training resources

2.1 Documentation

The Modelgeo program comes with several types of documentation. A good place to start is with the MGO Base Module user guide. To find it Select ModelGeo Toolbox -> Help. This should open an MGO Reference Manual page in a web browser.

All of the documentation can be accessed from here. To find the MGO Base module user guide:

1. Click MGO modules
2. Click Base module (base)
3. Click Base Module user guide (bottom, under links)

Also read the general user guide (User Guide). It can be accessed in two ways, from the MGO Reference manual top page, and from Help -> User Guide in the Modelgeo program menu.

2.2 Scripting

Modelgeo is a general-purpose mathematics program, with TCL (with command extensions) as a powerful internal command language. We recommend to use a free self-study program called *TCL Tutor* to learn about TCL. It is easy to find with an internet search.

The TCL commands manual on the internet is linked under Help in the Modelgeo program.

The command extensions, grouped into three classes called Shell commands, Qtcl commands (to code menus) and Project commands (to interact with Modelgeo projects) are documented in the general reference manual. It can be accessed in two ways, from the MGO Reference manual top page, and from Help -> Reference Manual in the Modelgeo program menu

Users can make their own TCL scripts, see Help -> Examples and Help -> Qtcl Examples for examples without and with menus. Users can also make Script type command objects (in the Toolbox in Modelgeo). The general user guide and reference manual also have script examples.

2.3 Training data

A demo project called MGO_demo, which is used in the user guides, is available for download from www.modelgeo.com/download together with an additional project, MGO_demo2, which contains a small seismic 3D cube. Part 2 is kept separate due to the large file size.

3 Three steps for getting started

1. Install Modelgeo, request and install a license as explained in the Installation Guide which comes with the software.
2. Download the MGO_demo project
3. Open the MGO Base Module user guide, and read from the top. This user guide starts by explaining how to open the MGO_demo project, and shows step by step how to use the software.

4 Troubleshooting

ModelGeo AS gives no warranty for the software. Here are some issues that users may experience.

- (1) License files are keyed to the user's computer, user name or both. A license file may therefore not work on a different computer, or for a different user name. Users who are entitled to licenses, free or commercial, should request new license files to resolve this (see the Installation Guide).
- (2) Some calculations may take a long time to run. This is especially the case with specialist ModelGeo Toolbox applications. Long "overnight processing jobs" should be run with Power Options in Windows set to *performance*, and with sleep and hibernation set to *never when on AC power*. Otherwise the computer will sleep or hibernate when the user stops using the terminal, and Modelgeo will be paused. We also recommend pausing Windows Update, to prevent the computer from doing an automatic restart (and terminating Modelgeo) during the night.
- (3) Modelgeo uses the general Windows clipboard for some copy-paste operations. This can make copy-paste in other programs slow while Modelgeo runs a big calculation and does not respond. If this happens, wait until Modelgeo has finished, then copy-paste should be back to normal.
- (4) There are some know issues with the (freeware) libraries that are used to build the software, which in rare cases can cause the program to crash. For that reason, make sure to save your Modelgeo projects frequently, so that no data are lost. These have to do with the environment that the software runs in, and may not be repeatable.
- (5) A crash may also cause resource files with Shared and/or Schema commands to become empty. For that reason, users should keep a copy of their resource files, so that they can be restored. They are located in each user's `C:\Users\<username>\AppData\Roaming\Modelgeo` folder.
- (6) Bugs may also occur due to limitations in the code, often related to datasets which are different than what the programmers have anticipated. Repeatable bugs should be reported to ModelGeo AS by email to modelgeo@outlook.com, with an explanation that allows us to reproduce the error.

The resource files which are distributed with the Modelgeo software, in folder Userfiles, contain an "MGO customization": They are not the software default.

- To reject this customization and restore the software default, delete the resource files (not the licenses or userfiles), then a default set will be generated the next time Modelgeo starts.
- To restore the MGO customization, reinstall the Userfiles that came with the software.
- To restore the user's own customization, reinstall the copy the user has made of his own resource files.

NB: Restoring resource files must be done when Modelgeo is not running.