Satellite Geophysics - Software installation

Matlab

If you do not already have Matlab on your computer, you can download it and install from the **software library** at www.kunet.dk.

Alternatively you can use it directly from the KU-servers. Use a terminal (either via cygwin on Windows or from a terminal on Linux and Mac).

Log in with graphics (-X) and compression (-C) to speed it up and then run matlab.

> ssh -CX username@gfy.ku.dk

> matlab

Optionally: Install OCTAVE. (light-weight free Matlab clone)

Download and install from http://www.gnu.org/software/octave/download.html.

GRAVSOFT

The GRAVSOFT software suite has a GUI interface made in Python and therefore it is required that your PC has Python installed. Under Linux this is normally installed by default, but for Windows users the package must be downloaded and installed.

If you do not already have python we recommend the Anaconda python package, which includes everything you need https://store.continuum.io/cshop/anaconda/

Download the GRAVSOFT package from the FTP server:

ftp://ftp.gfy.ku.dk/People/cct/kvh/pyGravsoft-297.zip

Manual for GRAVSOFT is at http://cct.gfy.ku.dk/publ_cct/cct1936.pdf.

The path must be changed to include the GRAVSOFT programs:

For windows users:

See description in appendix 2 in http://cct.gfy.ku.dk/publ_cct/cct1932.pdf.

GOCE User Tools

Obtain software and data from http://earth.esa.int/gut. On the right side of the page your can download the GUT software. Note that you must register before downloading the software and the data files.

Enter the required information and proceed.

Download the appropriate binary and both the a priori data files and the tutorial and data files. Follow the steps in the GUT installation Guide (also on the website)

NOTE: the default directory of the GUT files are called GUT- 2.1 and this must be entered instead of only GUT

NetCDF files

A lot of files are using the so called NetCDF format, which means that you must have some software that can read data from this format.

We are recommending that you use either Python (Python-NetCDF4 module) or Matlab. If you are used to some other software that reads NetCDF format (e.g. NCL or CDO) you can use that instead.

Climate Data Operators (CDO)

This program can be used to manipulate and analyse Climate and NWP model Data.

Download and install from https://code.zmaw.de/projects/cdo.

If you are using Linux it is very likely in the repository and can be installed directly.