À propos

Where can I find more information?

- **GRASS** GIS Wiki:
https://grasswiki.osgeo.org/wiki
- **GRASS** GISmailing lists:
https://grass.osgeo.org/support
- Project website:

GRASS GIS

http://grass.osgeo.org

A free and open source philosophy

The Free and Open Source philosophy lets the user see the source code and structure of the program, which offers great transparency. Users can extend the program for their own needs. Immediate source code peer review increases the quality. With the help of the extension manager, new modules can be created without **GRASS** GIS package source code. .

Licence

GNU General Public License (Free Software Foundation)

An OSGeo project

GRASS GIS is a founding project of the Open Source Geospatial Foundation which has the aim to create high quality open source geospatial software. For further information visit the OSGeo homepage:

OSGeo
Your Open Source Compass

http://www.osgeo.org

GRASS GIS

Bringing advanced geospatial technologies to the world

What is **GRASS** GIS?

A mature mapping suite

GRASS GIS is a free and open source software for performing spatial analysis. It consists of more than 400 modules for processing vector (2D/3D), raster, voxel and temporal data (4D). Many interfaces to other programs in related domains like geostatistics, databases, map web services and even other GIS software exist. It is the oldest and largest free and open source GIS. It can serve as a desktop GIS as well as the backbone of a complete GIS infrastructure.

A long term endeavor

GRASS GIS was born more than 30 years ago... and the latest commit is probably just few hours old! Many people have contributed to improve the software. Its strength and success rely on an active development team and the feedback of a wide contributors community. Both combine their efforts to make **GRASS** GIS easier, more useful and powerful to everybody.

Where is GRASS GIS used?

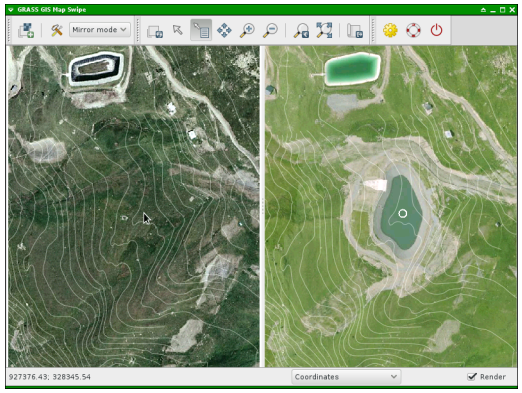
GRASS GIS is used in scientific applications, commercial settings and by public authorities all over the world. The software has shown strong potential for solving geospatial problems in numerous situations world-wide.

Technical datasheet

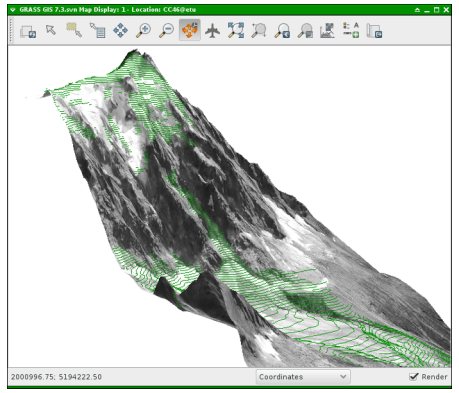
Design
- Modular commands
- Consists of more than 450 modules
- Add-ons repository for user modules
- Documentation and examples for each module

Programming languages
- ANSI C
- **GRASS** GIS-SWIG interface
- Python API, scripting library and GUI

Output
- Mapping modules (animation, cartography...)
- NVIZ for visualization of 2.5D and 3D data (creation of animations and flybys)
- VTK, POVray
- Web services

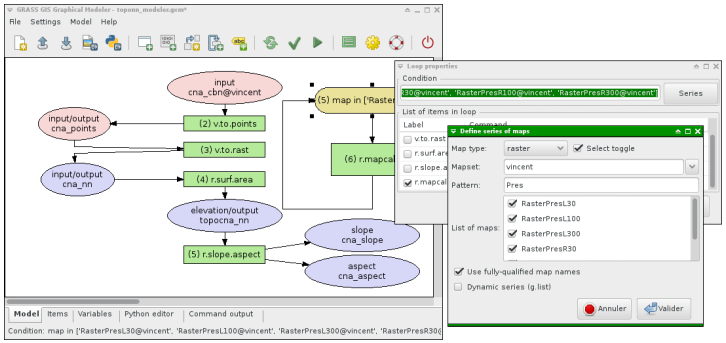


*wxGUI offers many powerful graphical tools. **Map Swipe** allows you to easily compare raster maps.*



*Combine, visualize and animate your 3D raster and vector data thanks to **nviz** visualization tool.*

Data management capabilities
Raster / Vector / Voxel data processing
- 2D / 3D Raster / Vector modeling
- Image manipulation
- Vector topologie
- Network analysis
- Geostatistics (Interface to R)
- Temporal datasets
- OGC web services interface



*Using the **Graphical Modeler**, a chain of processes can be wrapped into one process through an easy-to-use interface.*

Supported platforms
GRASS GIS runs on nearly all platforms. It supports GNU/Linux, Posix compliant Unix Systems, MS Windows and MacOS X.

Interoperability with other GIS-related software
- QGIS (general purpose GIS)
- R (language and environment for statistics)
- Gstat (geostatistics)
- UMN MapServer (webmapping)
- ZOO-Project, PyWPS (WPS)

Supported file formats

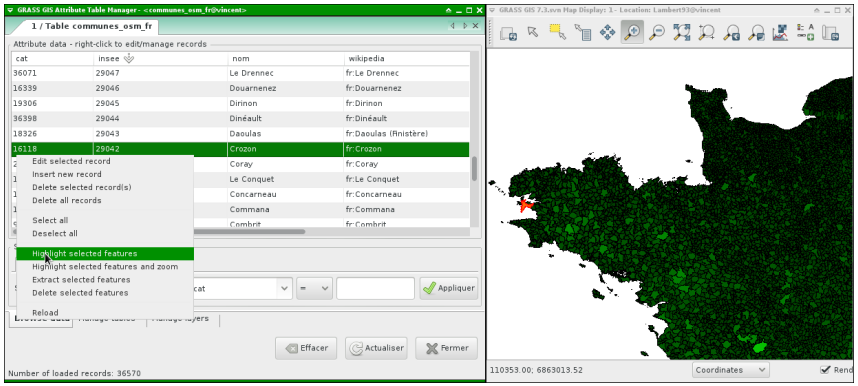
GRASS GIS supports nearly all common GIS file formats through the use of the GDAL/OGR library.

Vector file formats
ASCII, ARC/INFO ungenerate, ARC/INFO E00, ArcView SHAPE, BIL, DLG (U.S.), DXF, DXF3D, GMT, GPS-ASCII USGS-DEM, IDRISI, MOSS, MapInfo, MIF, PostGIS, TIGER, VRML, etc.

Raster file formats
ASCII, ARC/GRID, E00, GIF, GMT, TIF, PNG, Vis5D, SURFER (.grd), etc.

Image file formats
CEOS (SAR, SRTM, LANDSAT7 etc.), ERDAS LAN / IMG, HDF, LANDSAT TM/ MSS, NHAP aerial photos, SAR, SPOT, MODIS, etc.

Database support
SQLite, PostgreSQL / PostGIS, MySQL, ODBC, DBF



Easily view and manage your most complex datasets : huge geometries linked to main full-featured DBMSs are supported.