

GeoEasy^{OS} 3.0

The development of the GeoEasy program started in 1997. Twenty years later in 2017 it has became free software under GPL license, freely available for everybody. The ComEasy module of the project was released under open source license from the beginnings (see <https://github.com/zsiki/ComEasy>).

The core development of GeoEasy is made on Linux operating system, using Tcl/Tk script language, thanks to the Tcl/Tk ports to several operating system the program can be used on Linux, on Windows XP/Vista/7/8/10 (32 and 64 bit version), on Android tablets and on OSX machines. Intensive tests of the code were made on Linux and Windows only. GeoEasy has nephew project called SurveyingCalculation. It is a QGIS plug-in, some parts of GeoEasy rewritten to Python. This plug-in available from the official QGIS plug-in repository (<https://plugins.qgis.org/plugins/SurveyingCalculation/>) and a GitHub repo (<https://github.com/zsiki/ls>).



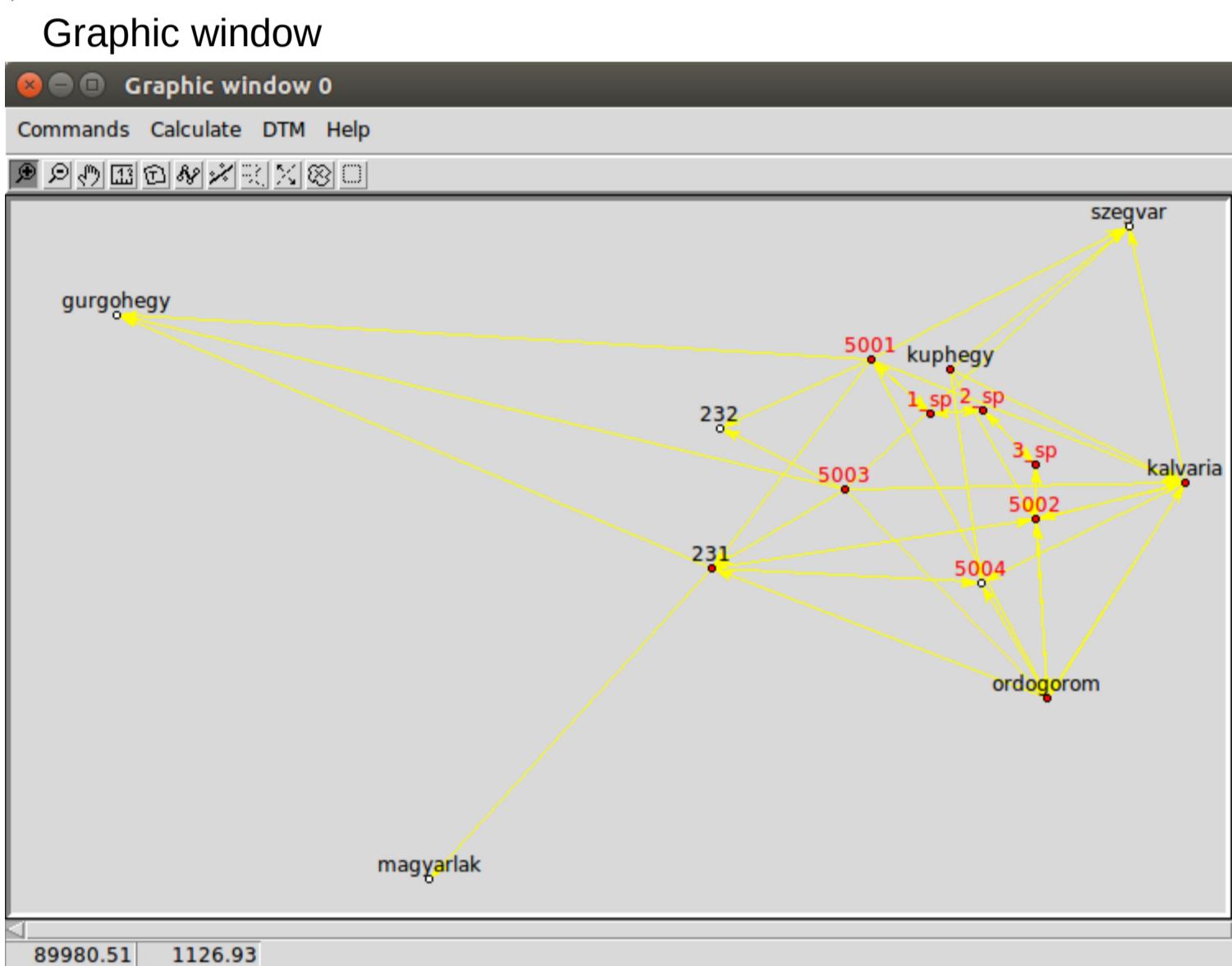
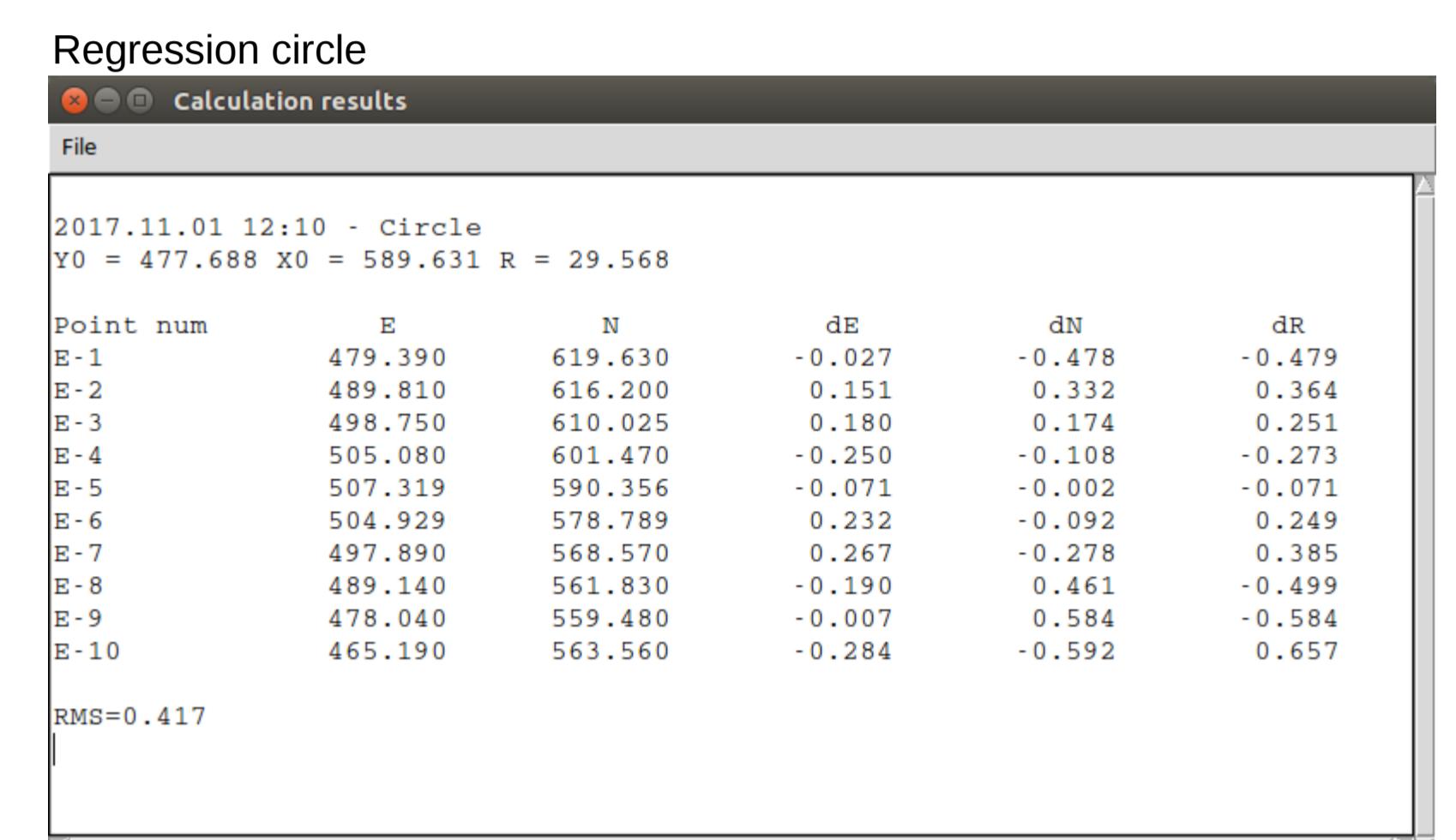
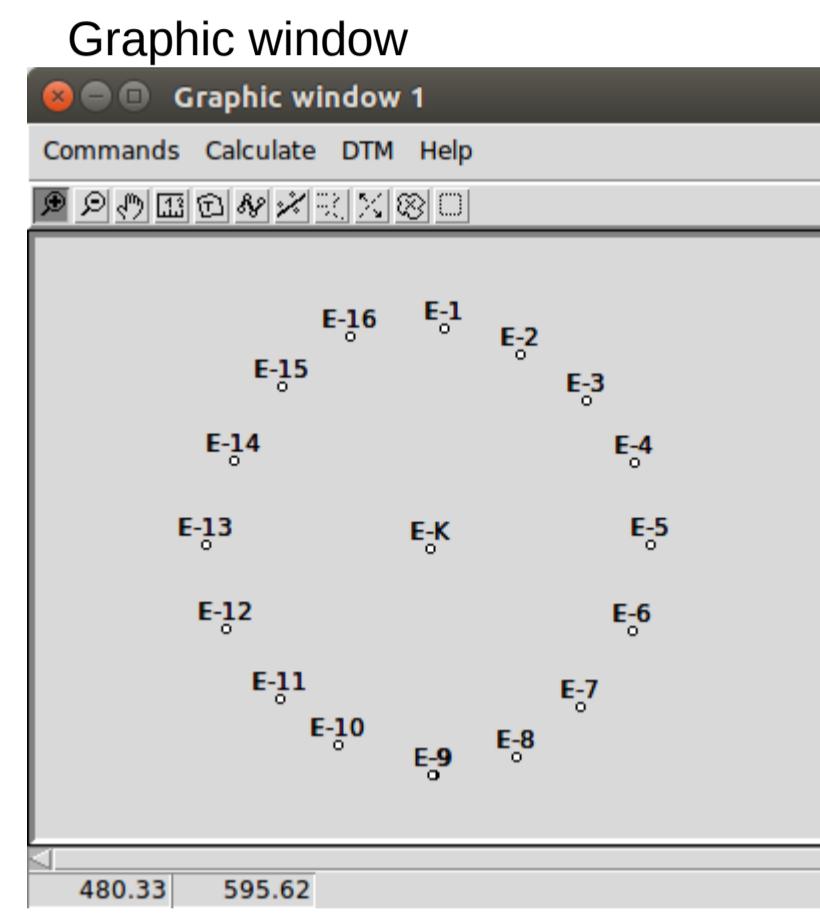
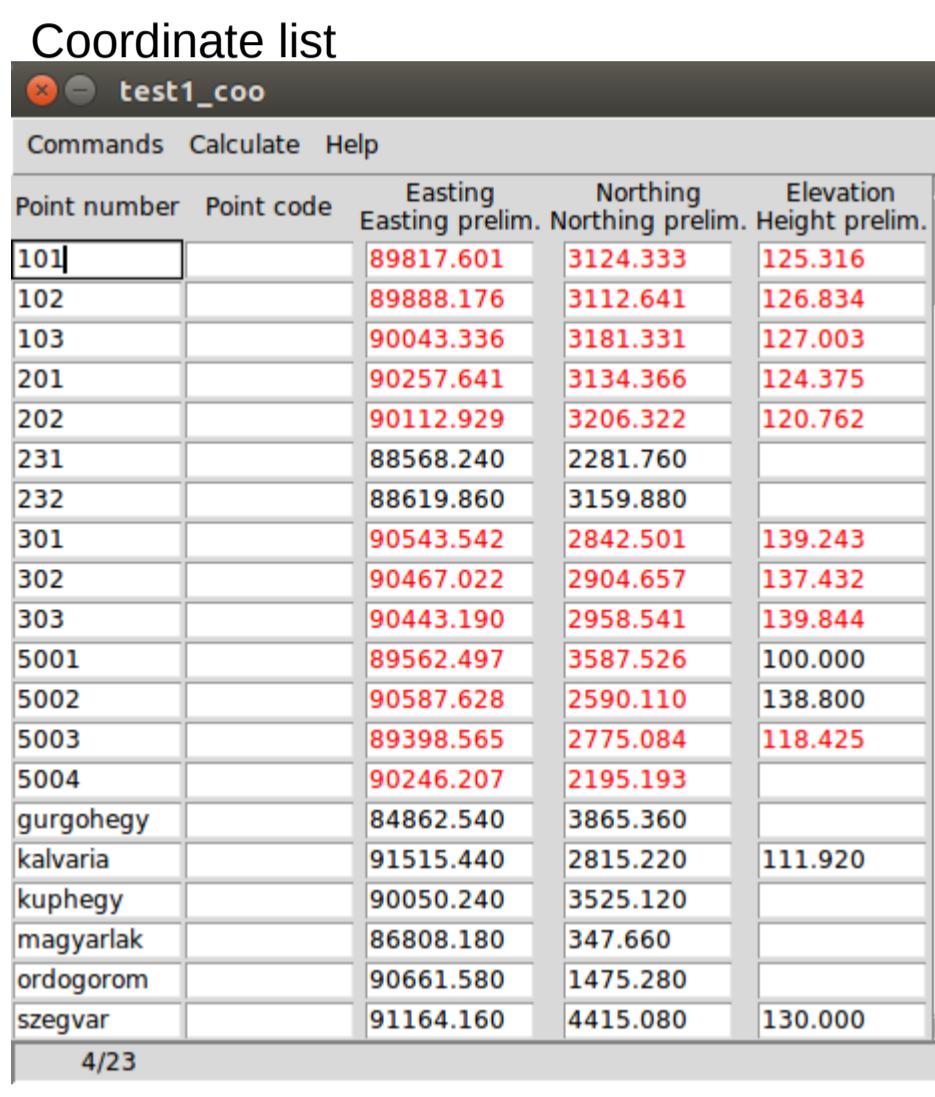
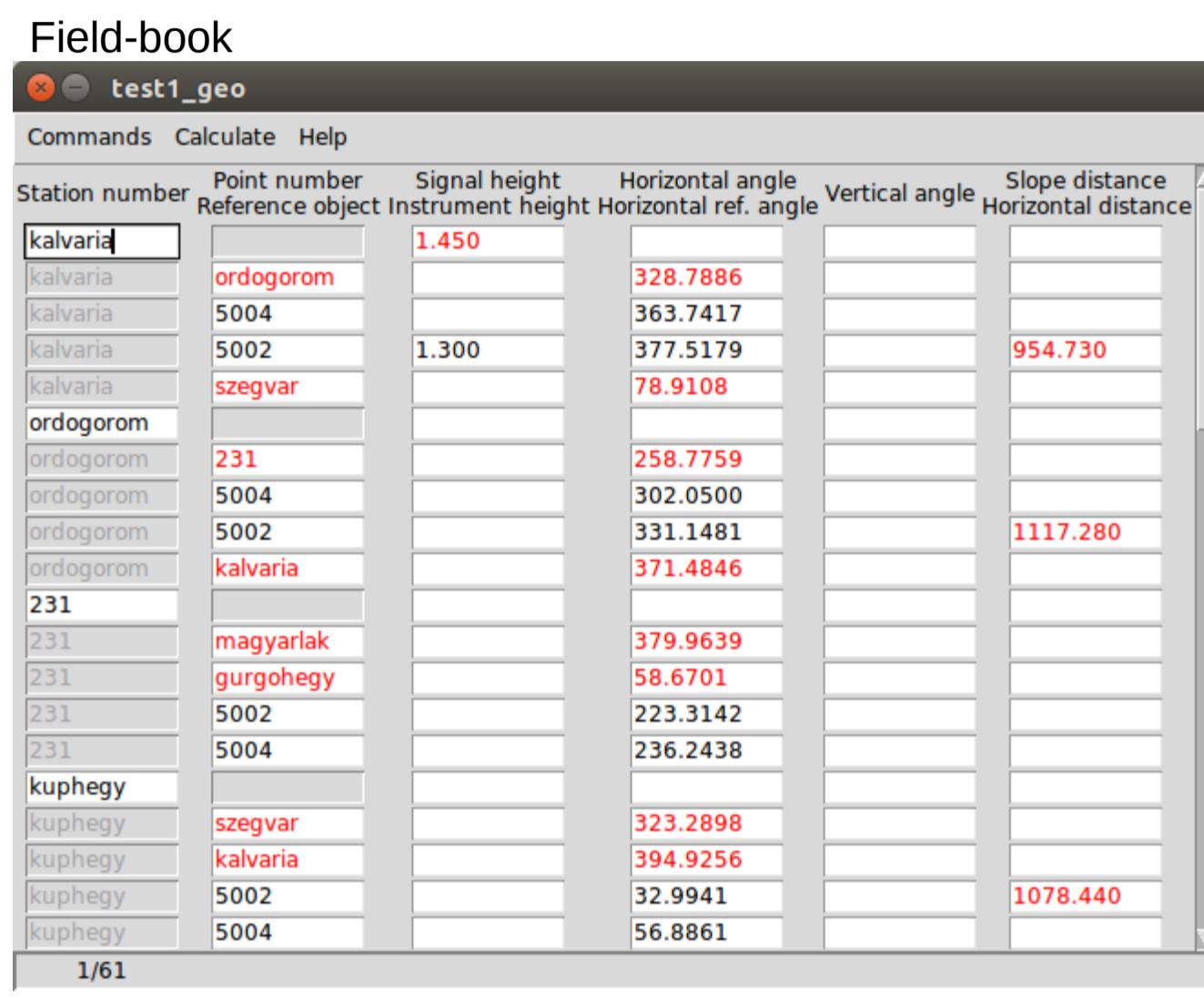
Download the binary release

Windows: http://digikom.hu/english/geo_easy_e.html or

<http://www.agt.bme.hu/siki/Gizi3Setup.exe>

Linux: http://digikom.hu/english/geo_easy_e.html or

<http://www.agt.bme.hu/siki/Gizi3Linux.tgz>

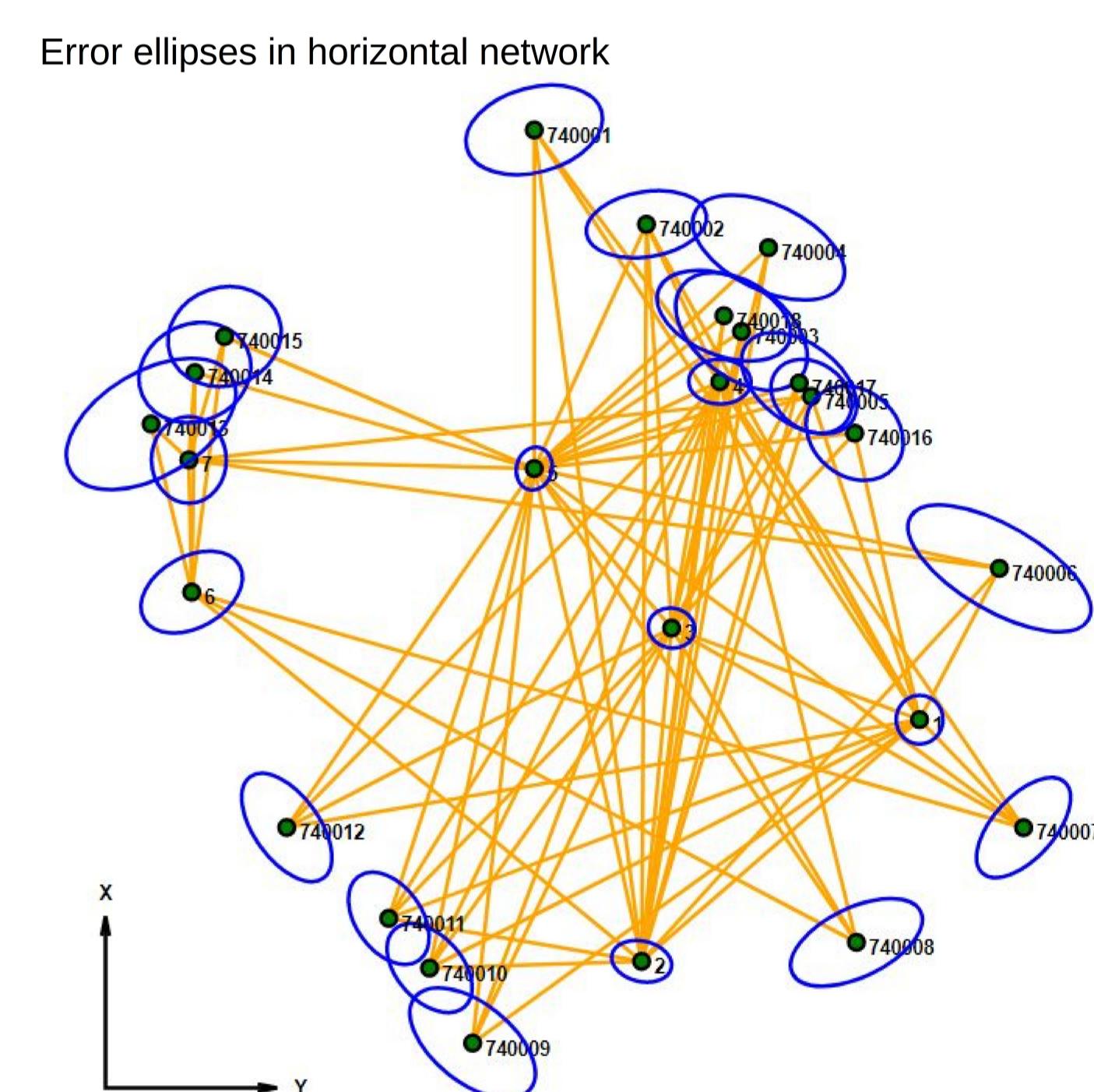
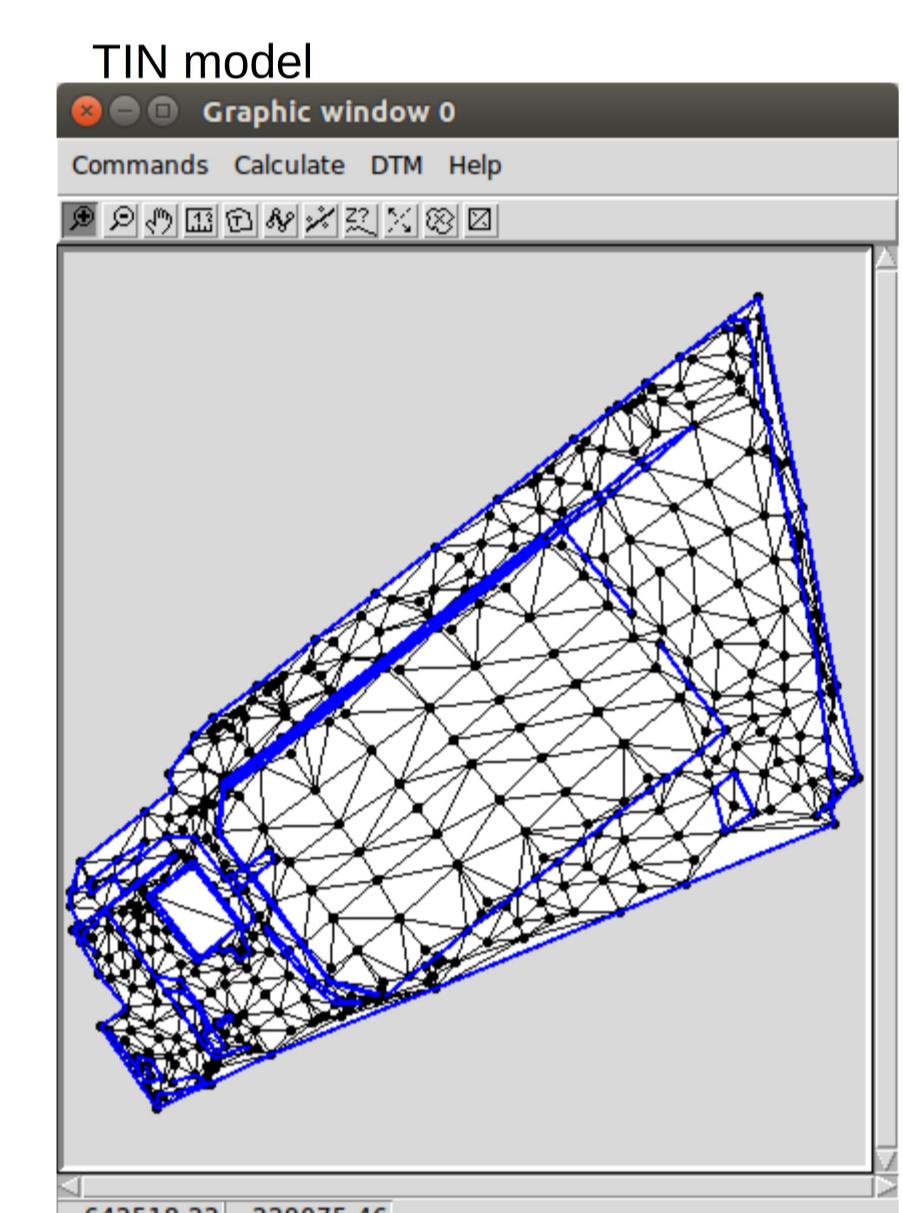


Surveying calculations
Edit field-books
Intersection, resection, orientation, ...
Traversing, trigonometric line
Coordinate transformations
Coordinate list and field-book import (several formats)
DXF export

Regression calculation
Solving engineering surveying tasks
Regression lines, plan, circle, sphere, 3D line

Network adjustment
1D/2D/3D geodetic network
Normality check
Data snooping
Network sketch with error ellipses

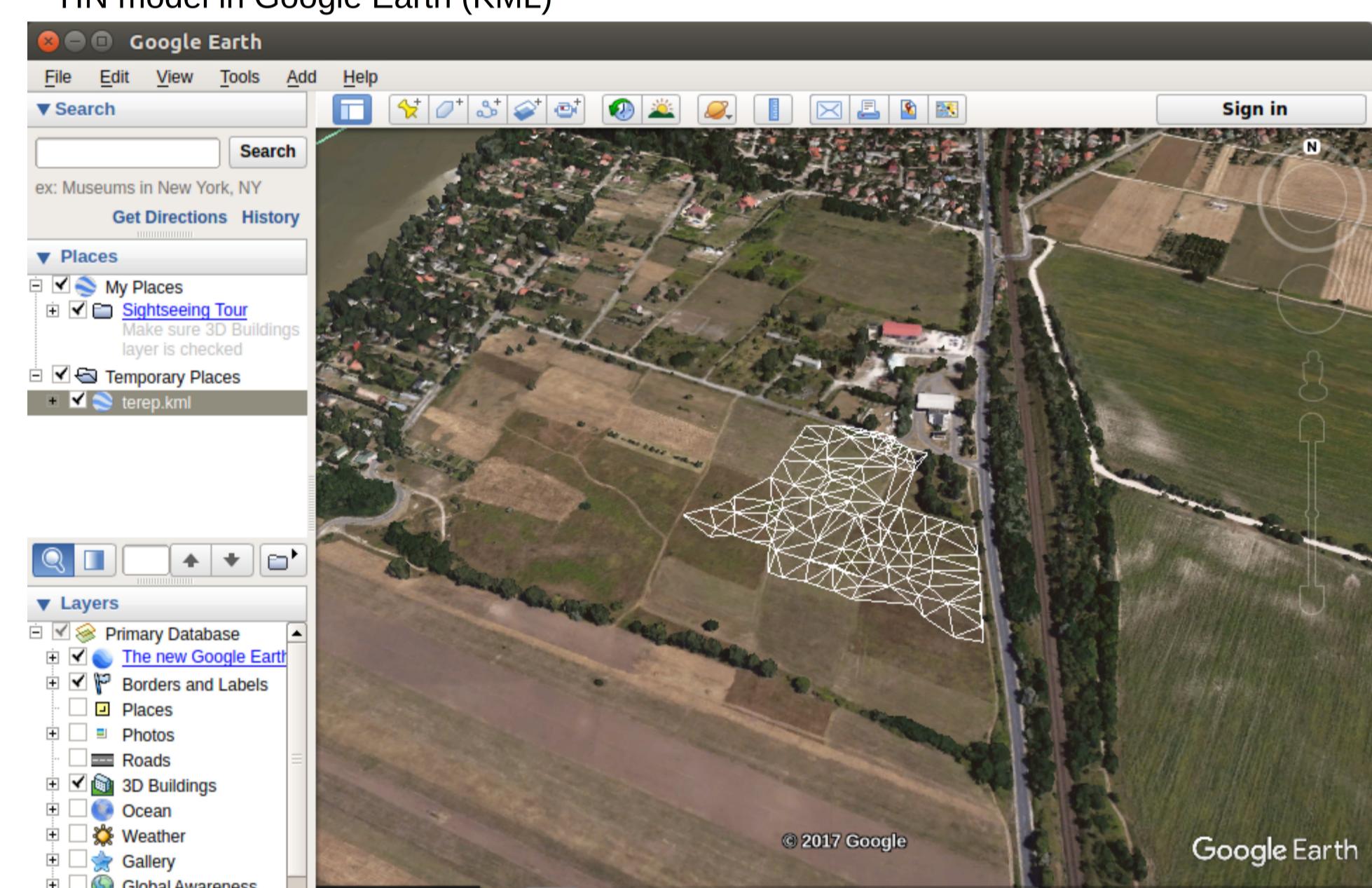
Digital Terrain Models
DXF import
TIN models
Break lines
Contour lines
Volume calculation
Cross sections
VRML, KML, DXF, ASCII GRID export
Update, regenerate



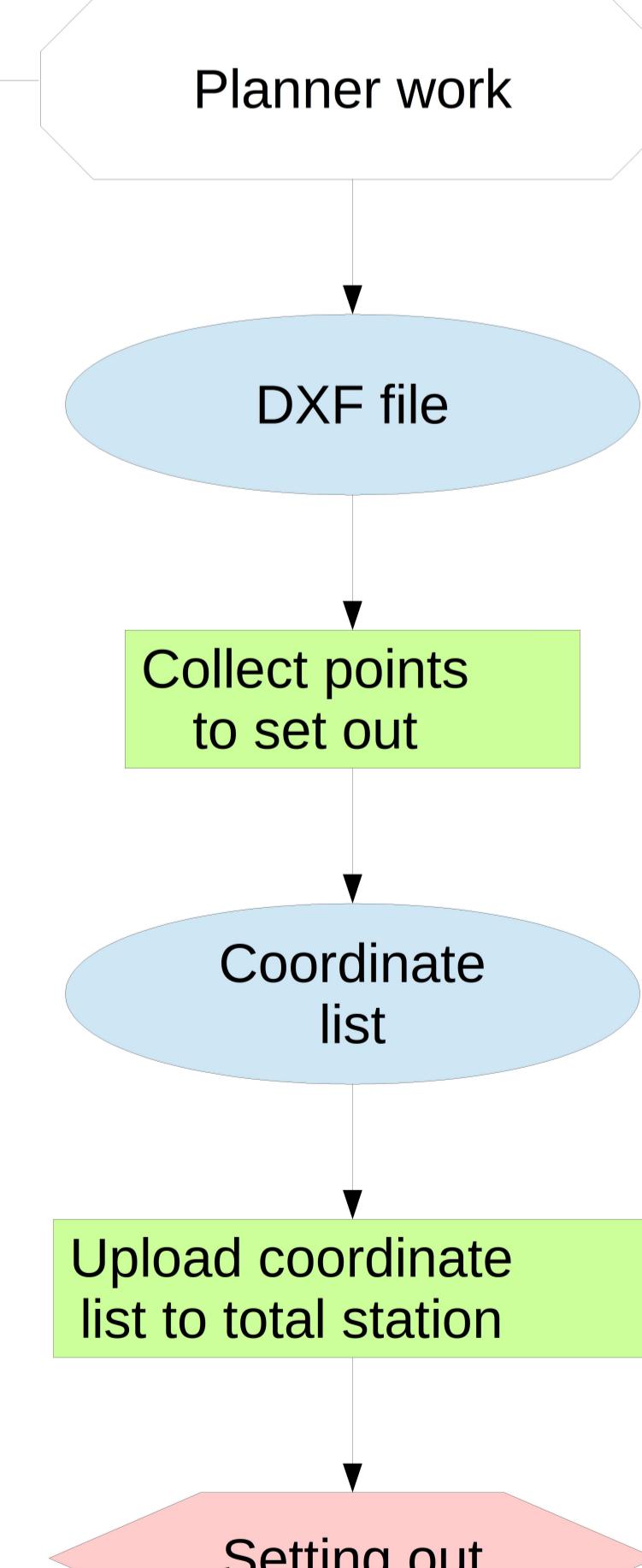
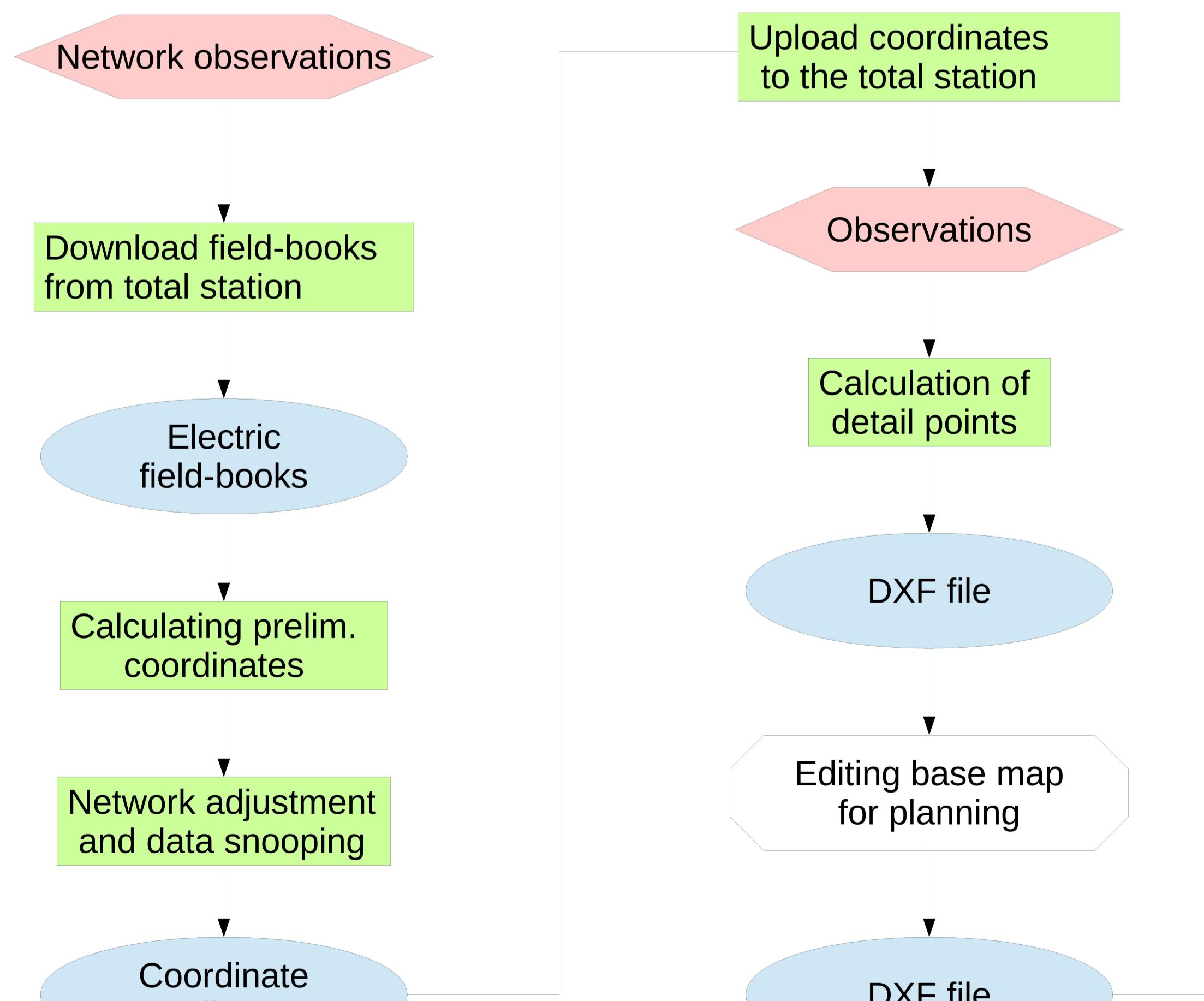
Adjustment results

Adjusted coordinates						
i	point	approximate value	correction	adjusted value	std.dev	conf.i.
1	X *	735.53500	-0.00002	735.53498	0.4	0.7
17	Y *	598.88300	0.00013	598.88313	0.3	0.7
18						
2	X *	673.49900	-0.00001	673.49899	0.3	0.6
23	Y *	527.57600	-0.00087	527.57513	0.4	0.8
24						
3	X *	759.06300	-0.00002	759.06298	0.3	0.6
1	Y *	535.25100	-0.00007	535.25093	0.3	0.6
2						
36	X *	822.31000	0.00005	822.31005	0.3	0.7
37	Y *	547.62300	-0.00015	547.62285	0.4	0.9

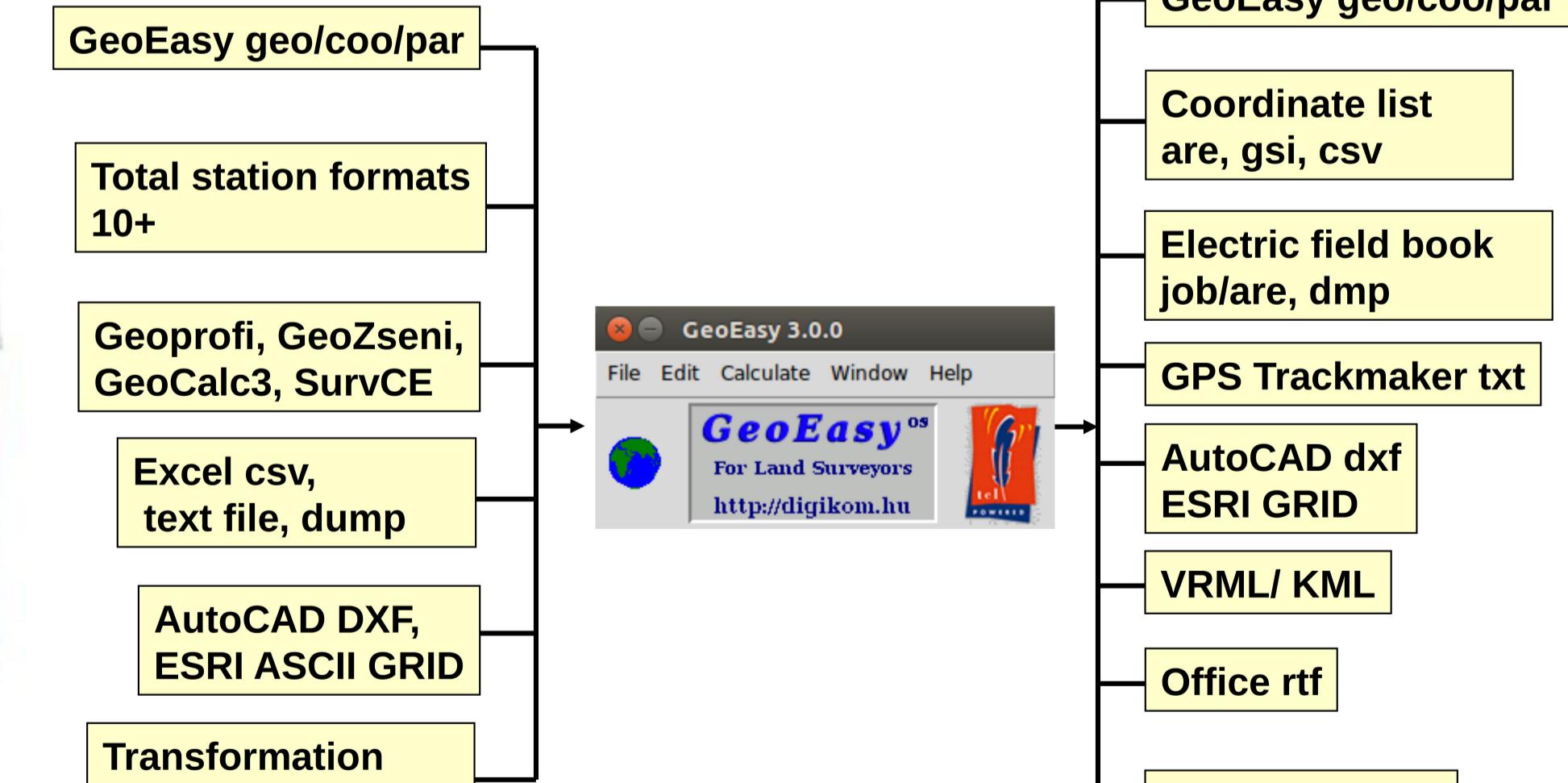
TIN model



Typical work flow



Connections to other programs



OS software used

Tcl/Tk (<https://www.tcl.tk/>)
GNU Gama (<https://www.gnu.org/software/gama/>)
Triangle (<https://github.com/MrPhil/Triangle>)
NSIS (http://nsis.sourceforge.net/Main_Page)
Freewrap (<http://freewrap.sourceforge.net/>)



Let us develope GeoEasy together!

Source code available on GitHub (<https://github.com/zsiki/GeoEasy>)

Report the errors you found in issue tracker (<https://github.com/zsiki/GeoEasy/issues>)

Extend and correct the documentation (<https://github.com/zsiki/GeoEasy/doc>)

Help other users (<https://github.com/zsiki/GeoEasy/wiki>)

