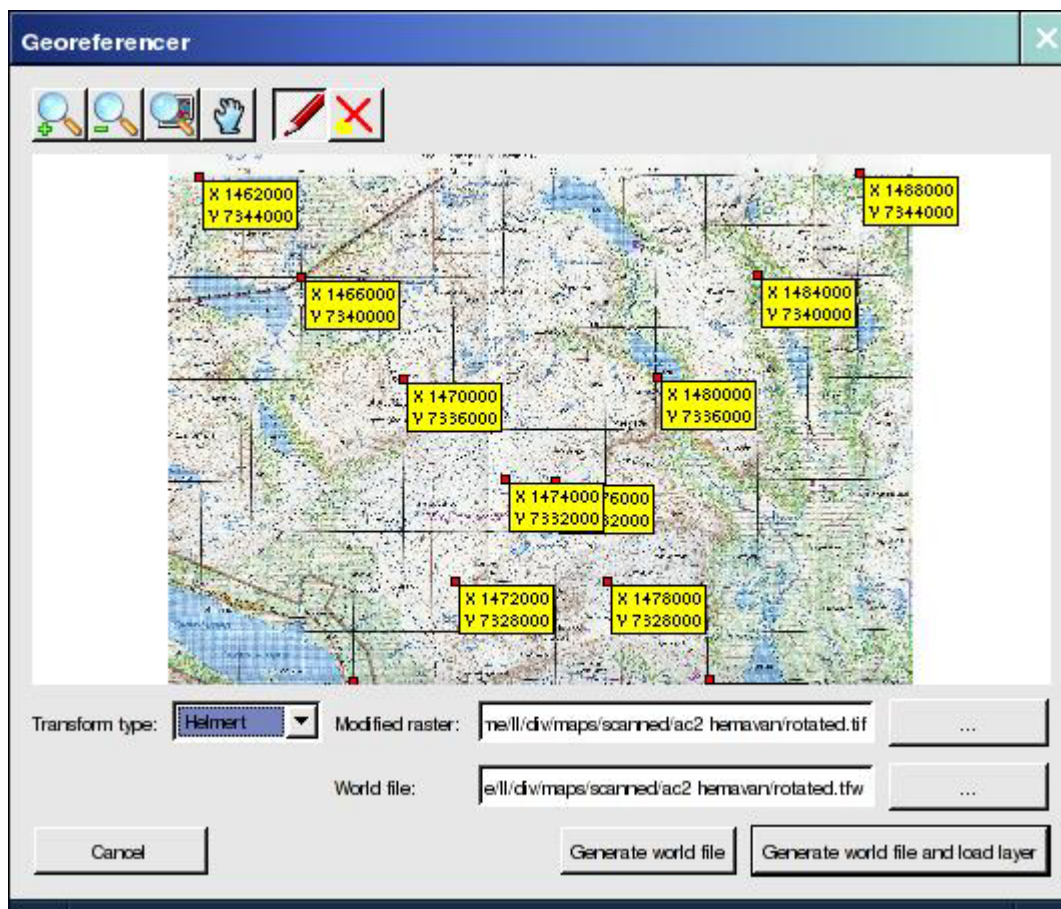


Georeferencing with Quantum GIS

Raster Georeferencing plugin

The QGIS Georeferencing plugin, which is available in the "plugins" module in the CVS repository, is a tool that can generate world files for raster files. World files are small text files that contain the world coordinates for the upper left corner of the raster, and the size in world coordinate units of every raster pixel. *Update: This plugin is included in the 0.7.0 release.*

This plugin can for example be used to add world files to scanned paper maps, so you can use them in a project with other datasets covering the same area. To figure out the coordinates for the raster's upper left corner and the size of the pixels, the plugin needs to know the world coordinates for some points in the raster. You supply these coordinates by clicking on points in the raster and entering their coordinates in a popup window. The more coordinates you give, the better the generated world file should fit the "real" coordinates. When you think that you have entered enough coordinates you tell the plugin to generate the world file. The plugin will then try to fit a certain transform to your given coordinates. You can choose between two types of transform, "Linear" and "Helmert".



f you choose the "Linear" transform type (which isn't really linear in the mathematical sense but it is a combination of two separate line functions in the X and Y coordinates) the plugin will assume that the raster only needs to be scaled and translated to fit the map, and it will simply generate a world file for the original raster file. If you on the other hand choose the "Helmert" transform the plugin will assume that the raster also needs to be rotated to fit the map (this is useful if you have scanned a paper map and couldn't get it to line up perfectly in the scanner). A new raster file will be generated, which is a rotated copy of the old raster, and a world file will be generated for this new raster file instead. If you choose the "Helmert" transform you will also get to choose the resampling method for the rotation - "Cubic" or "Bilinear" is best for RGB rasters, but "Nearest neighbour" should be used for rasters that use an indexed colormap.

This plugin does not work with QGIS 0.6 - you will need the latest development version from CVS to use it (it has been tested with the CVS version from february 15). If you want to build it you will need the GNU Scientific Library (GSL). When QGIS 0.7 is released a source code distribution for this plugin will be made available.