Generating World (.jpw) Files for XPDRAINAGE Demos – A Temporary Software Solution

Version Control

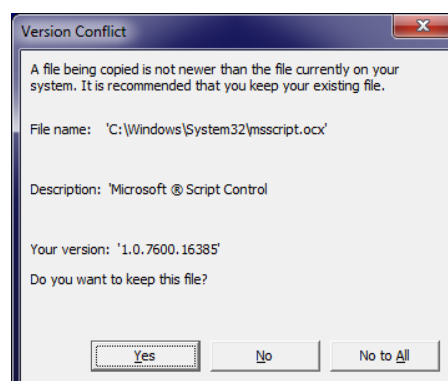| Version	Author	Date	Comment
0	Jo-fai Chow	13/11/2013	First draft

Introduction

This is a tutorial on generating background images (.jpg) and associated world files (.jpw).

Software Required

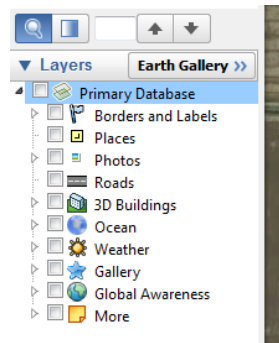| Software	Version (tested)	Source
Google Earth	7.1.2.2041	http://www.google.com/earth/
Elshayal Smart GIS Map Editor	4.35	https://groups.google.com/forum/#!topic/GlobalGIS/GXgTq0Wu7ls

Download and Install Software

1. Download (http://www.google.com/earth/) and Install Google Earth.
2. Download Elshayal Smart GIS Map Editor from this link (use VPN if necessary) - https://dl.dropboxusercontent.com/u/103222/Elshayal%20Smart%20GIS%20Map%20Editor_v4_35.zip
3. Unzip the file into a temporary folder and run "setup.exe" to install Elshayal Smart GIS Map Editor. If there is any version conflict during the process, click "Yes" to keep your existing files.
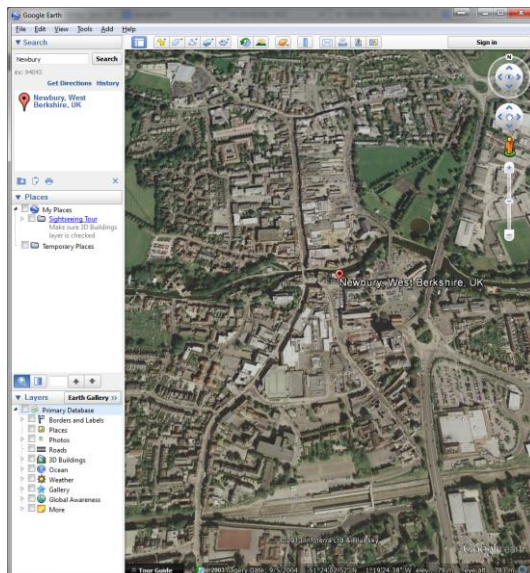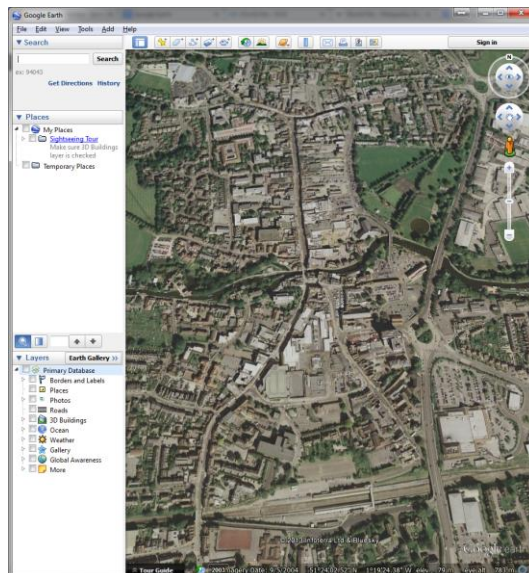
Key Procedures Part 1 – Google Earth

1. Run "Google Earth"
2. Disable all layers in the "Layers" list (bottom left corner).

3. Navigate to the site.
   a. Use the search function (e.g. "Newbury" in this example)
   b. Zoom in/out to find the best image size.
   c. Clear the label by clearing the search result (click the X under the search menu).

| With Label | Without Label |

4. Correct the map orientation (pointing north).
   a. View -> Show Navigation -> Always
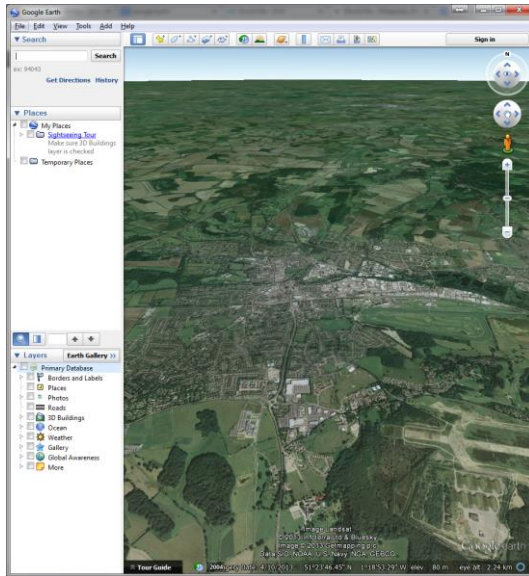   b. Double click on the "N" symbol and it will point upwards.

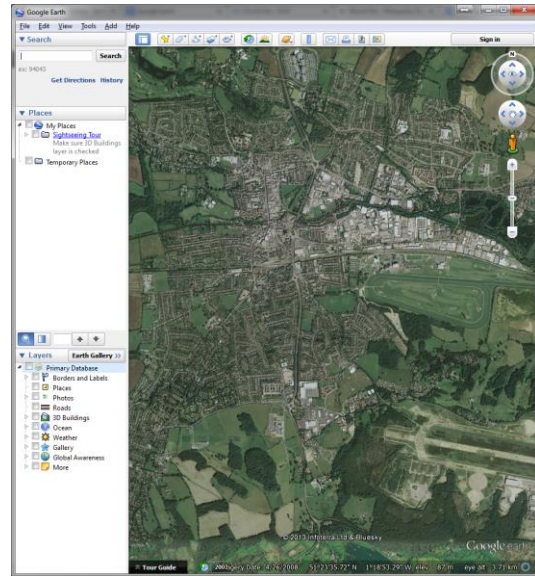| Incorrect | Correct |

5. Correct map viewing angle (tilt)
   a. Single click on the map itself.
   b. Hold shift and then press UP arrow a few times until the map is flat.

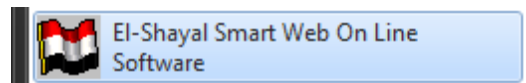Incorrect   Correct

6. Maximise Google Earth, repeat steps 3 to 5 above until you are happy with the image. Do not move the map from this point.
7. Save the background image. File -> Save -> Save Image. (e.g. "newbury_colour.jpg")
8. The output should look like this:

9. We're done with Google Earth at this point. Yet, DO NOT close Google Earth and DO NOT move the map. Just leave it running.

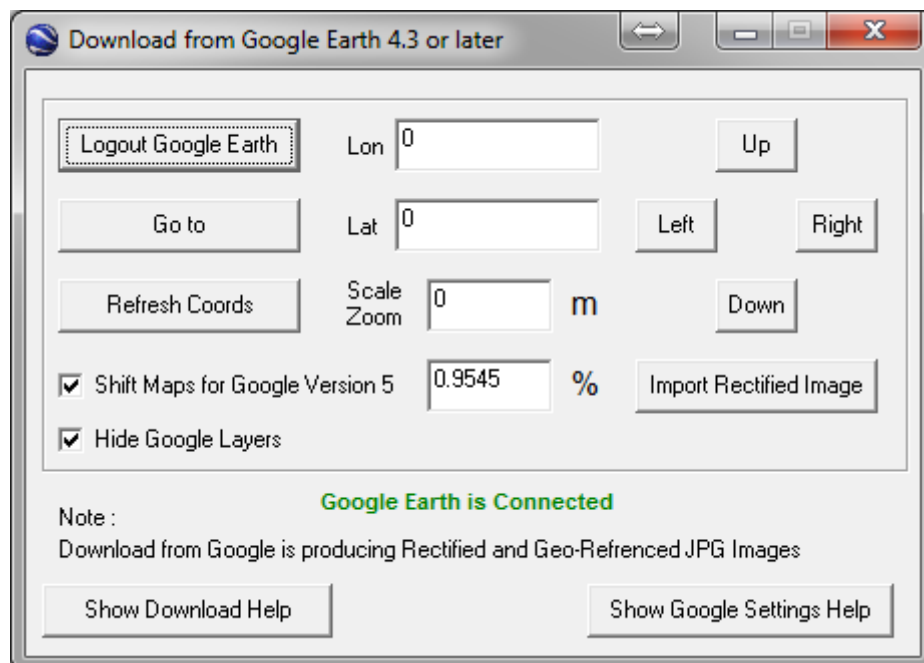# Key Procedures Part 2 – Elshayal Smart GIS Map Editor

1. Run "Elshayal Smart GIS Map Editor" (it's called "El-Shayal Smart Web On Line Software" in the program files menu).
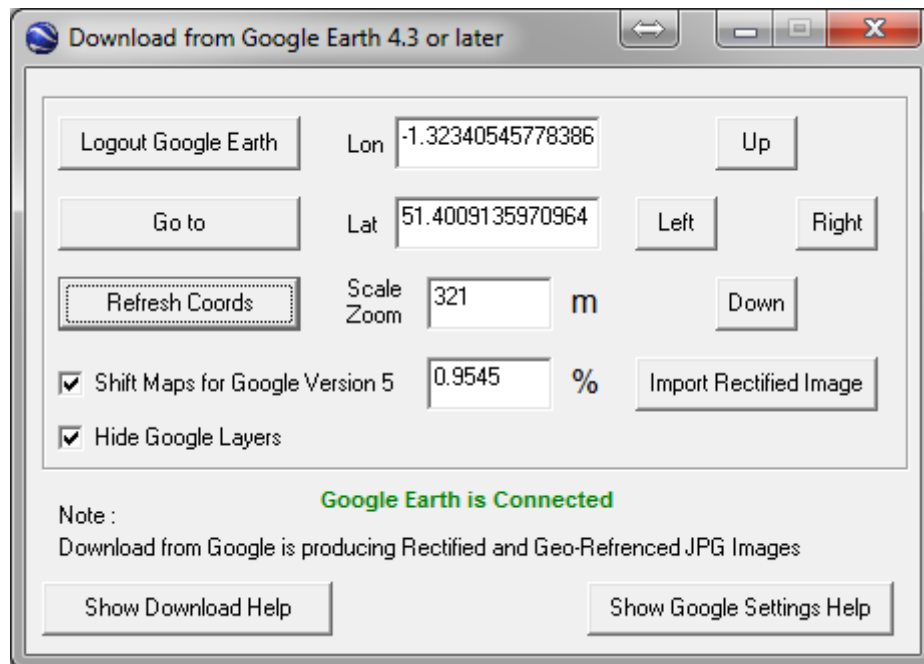

2. Tools -> Download from Google Earth (or just click on the Google Earth icon). The following window should appear.

3. Connect to Google Earth – Click "Login Google Earth". The message should change to "Google Earth is Connected".

4. Get information from Google Earth. Click on "Refresh Coords". It should automatically obtain the longitude, latitude and scale information from Google Earth like this:

5. Now click on "Import Rectified Image". Save the .jpg (e.g. "newbury_bw.jpg). This will generate the map image in black and white (.jpg), the world file (.jgw) and a few other GIS files (I ignore them in this example but you might want to use them for other purposes).

Final Outputs

All done! You can now import the background images (colour / BW) and the associated world file in XPDRAINAGE. (note: if you want to use the colour map image, rename the .jpw to match the filename of the colour image).

newbury_colour.jpg	The map image in colour – generated using Google Earth.
newbury.jpg	The map image in black and white – generated using Smart GIS Map Editor.
newbury.jgw	The world file generated using Smart GIS Map Editor.
newbury.dbf newbury.shp newbury.shx	Other GIS files generated using Smart GIS Map Editor.

In the newbury.jgw world file:

```
1  0.0000101027869
2  0
3  0
4  -0.0000062915661
5  -1.3320483919484
6  51.4039710504664
7
```