

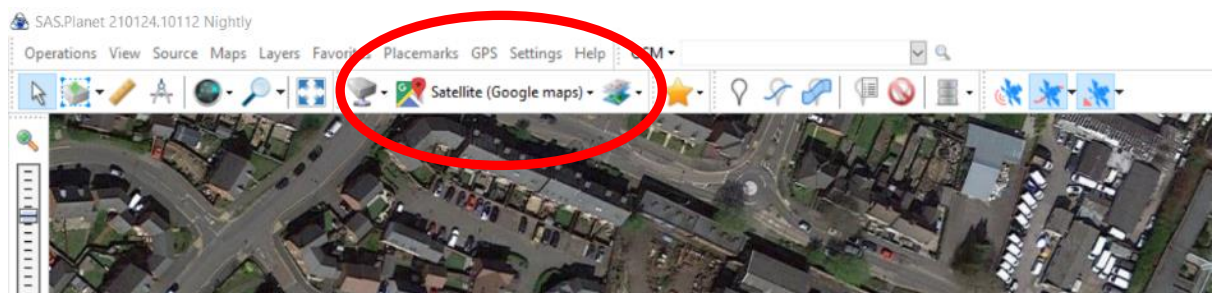
Creating Georeferenced Aerial Photos for OOM

Download and Install SASPlanet.

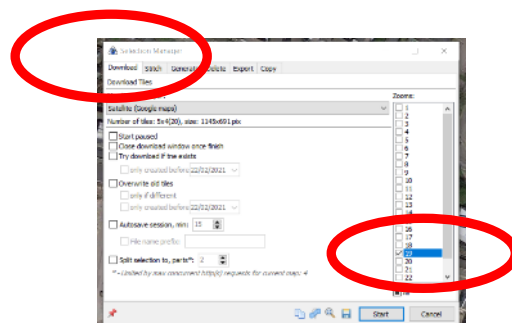
1. SASPlanet can be downloaded from: <http://www.sasgis.org/programs/sasplanet/nightly.php>
2. Extract the contents of the zip archive to somewhere suitable on your computer. Create a folder under C:\ for example called 'SASPlanet'. Extract the files to this folder preserving the folder structure
3. Add the map patch from <https://gisenglish.geojamal.com/2020/09/fix-sas-planet-unable-to-load-maps.html>

Creating an Image

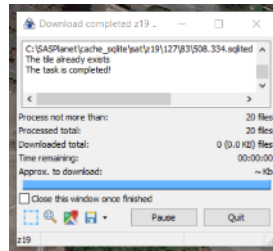
1. Start the program SASplanet from the folder you stored it in earlier.
2. Choose either Google or Bing satellite as the source from the top toolbar.



3. Zoom into until the area you require is on the screen.
4. Type Alt-R to start creating a rectangular selection of the area you need (or Operations -> Selection Manager -> Rectangular Selection from the top menu bar)
5. Left click at the top left of the area you require to start area selection (this will anchor the top left of your rectangle).
6. Drag the mouse with the bottom right of the rectangle to select the area you require. Left click to complete selection.
7. Selection Manager will now appear. The 'Download' tab will be selected. In the 'Zooms' box choose 19.



- Click 'Start' to download the necessary images. When it finishes click 'Quit'.

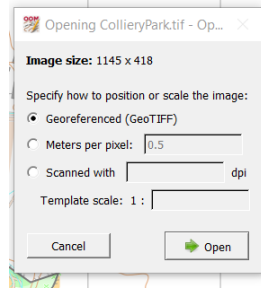


- Type Ctrl-B to reopen the Selection Manager (or Operations -> Selection Manager -> Last Selection from the top menu bar).
- Select "Stitch" tab and choose
 - Output Format: GeoTIFF
 - Zoom: 19
 - Geographic: (Latitude/Longitude) /WGS84 /EPSG:4326
 - Compression: None
 - Click on the '...' button to the right of the 'Save to' box and navigate to the folder where you want the file to end up and give it a suitable name.
- Click on 'Start'. Wait for the progress box to disappear.

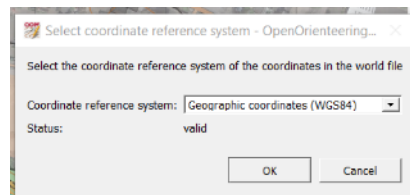
Output from SASPlanet is in format WGS 84.

Adding a photo to an existing georeferenced OOM map

1. Start OOM as normal
2. Open your map.
3. Open the Template Setup window (from 'Template' in top toolbar).
4. Open a new template ('Template' -> 'Open Template' from top toolbar) and select the TIF file you created earlier.
5. In the subsequent dialog box select the default 'Georeferenced' option.



6. The 'Select coordinate Reference System' dialog will open. From the 'Coordinate Reference System' select 'Geographic coordinates (WGS84)'.



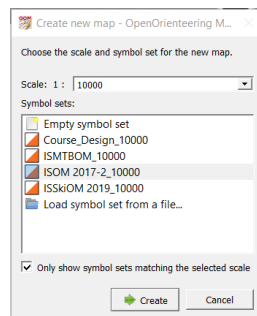
7. The photo will now open as a new template.

Creating a new OOM map using the georeferenced photo.

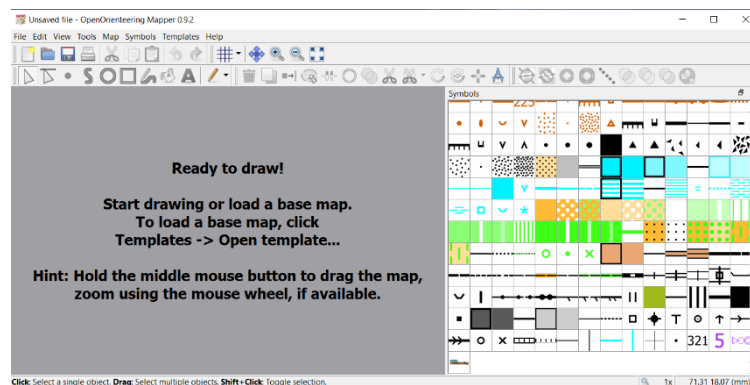
Start your OOM application. From the opening screen select 'Create a new map'.



This dialog box will now open.



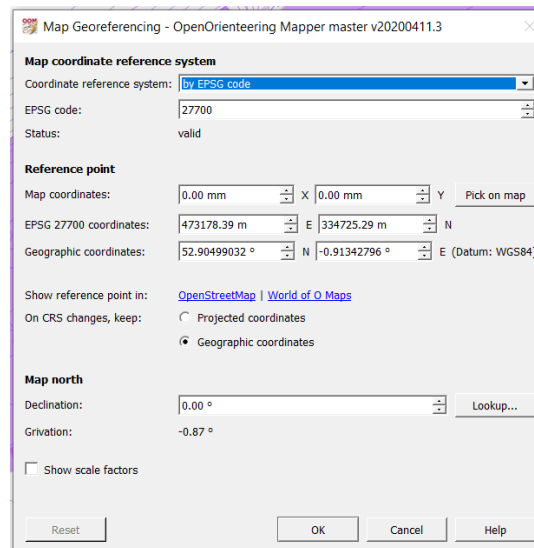
Choose the map scale you wish to use and the symbol sets available for that scale will be displayed. In this example we are setting out to draw a map at 1:10,000 using the ISOM2017-2 symbol set. The symbol sets have been drawn in conjunction with the IOF map specification so the symbols and colours are correct. Select 'Create' to open your new map.



Here you can see the symbol set and some hints to get going. The next step is to use either a LiDAR contour SHP file extract or an export from OpenStreet map as the base.

Click on 'Templates' and select 'Open Template'. Select a .SHP LiDAR contour file or an OpenStreetMap .OSM that you created earlier.

OOM recognises that this is the first base map and uses it to derive the georeferencing. This screen will open:



Ensure the 'Coordinate Reference System' and the 'EPSG code' are as shown above

Move onto the *Map North* settings. In the Declination field the angle between true north and magnetic north at the position of the map has to be entered to make magnetic north be at the top. Your map should be orientated to magnetic north, not grid north. Click the 'Lookup' button. This uses the current georeferenced coordinates to find out the magnetic deviation from grid. This opens a page in your web browser. Copy the value displayed into the 'Declination box'.

Declination positive values are east of true north and negative values are west of true north.

Click 'OK'.

Now add the georeferenced photo as described above starting at step 3.

You are ready to start drawing your georeferenced map.

Simon Starkey
February 2021