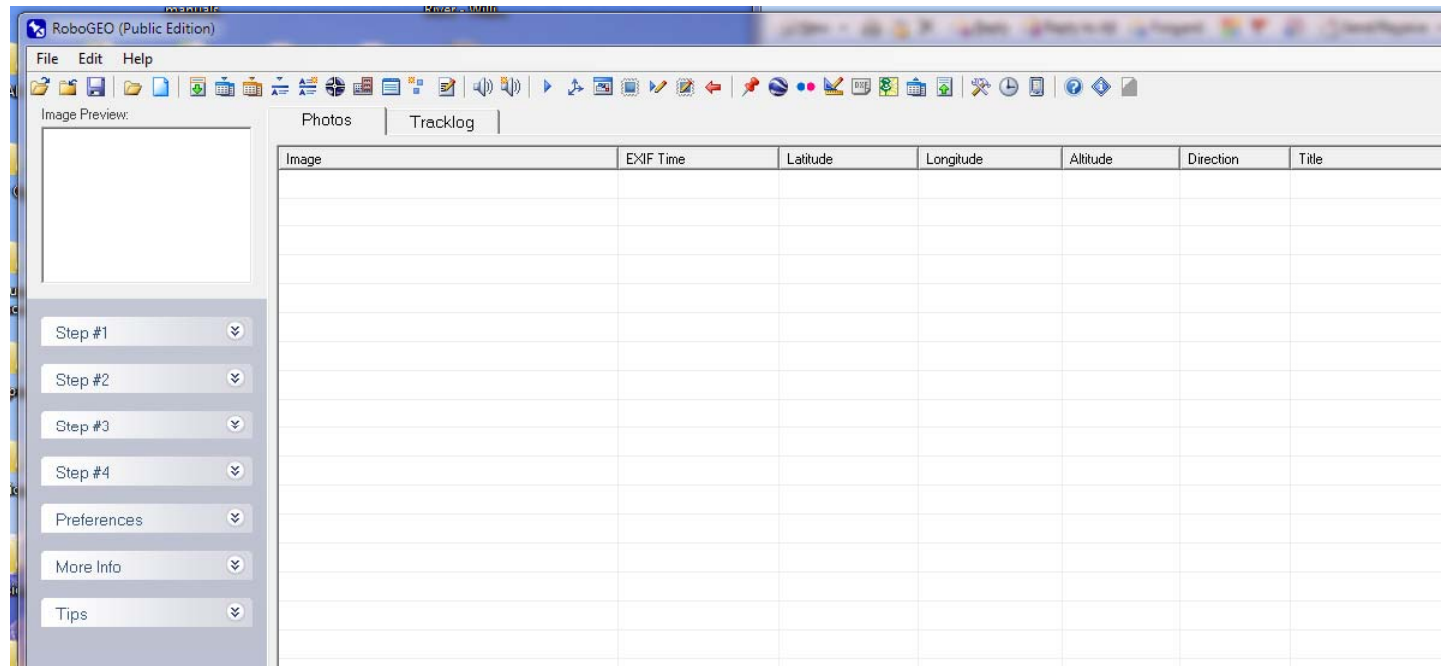# RoboGEO

How to geotag images for CAP using RoboGEO

Initial RoboGEO Screen

- The startup screen

Load Images

- Click on Step 2 and select either an entire folder or specific images
- Click on an image row in the grid to see a thumbnail image
- Data shown below is the result of having the GPS sensor attached to the camera – GPS was not locked on for the first image

To View Metadata

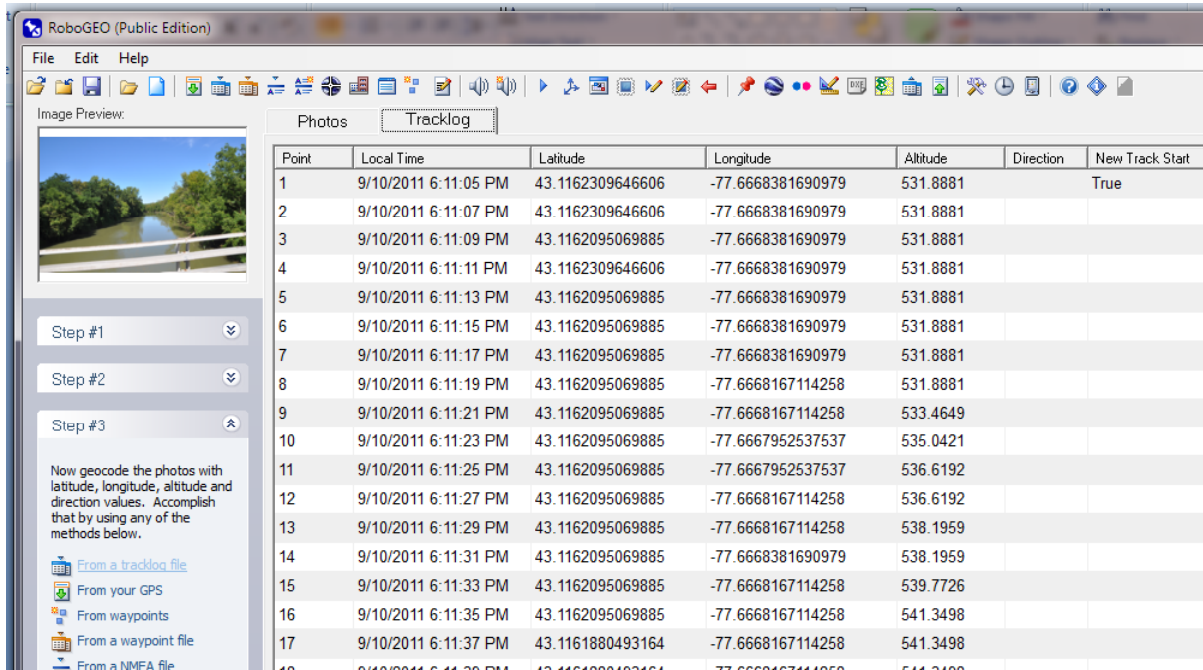- To view the image metadata, right click a file name and select View Metadata. The original data or what will be written if processing is done can be selected.
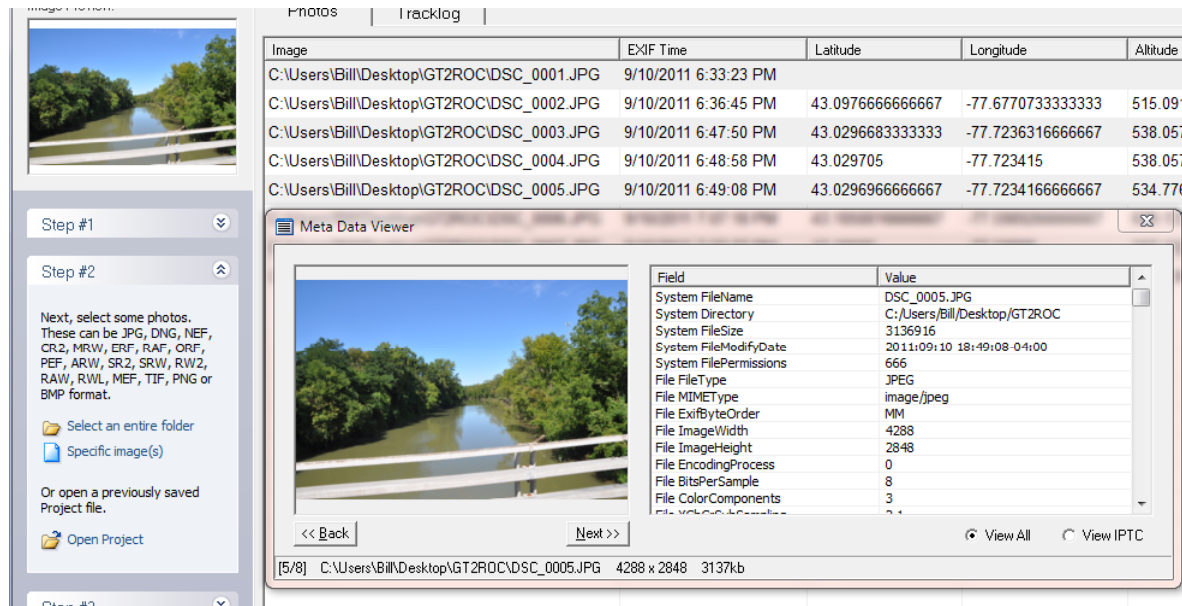
Load Track Data

- Click on Step 3 to load the track data from a GPS or file
- Click the Tracklog tab to see the data

Track Log supplies Direction of Photo

- Note that the direction is now shown on the Photos tab and the first image now has lat/long from the track log

- Direction of travel over the ground is derived from the track log and the camera offset is added to this value

- Type the title desired to appear on the top of the image
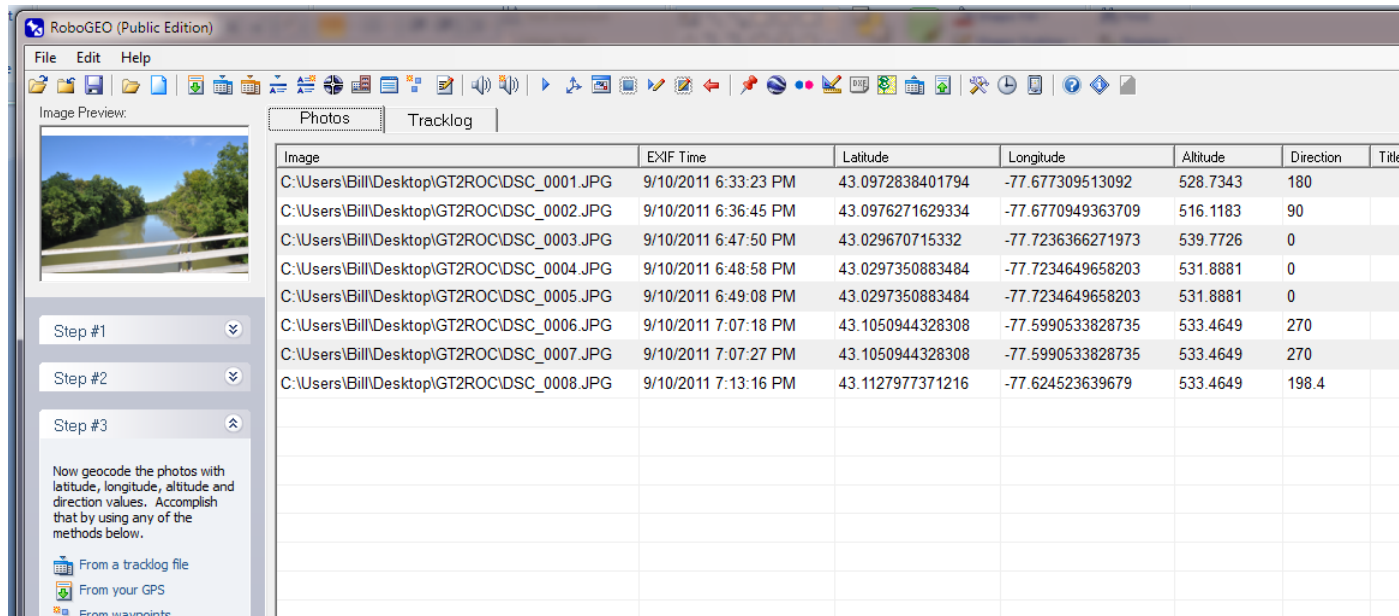
Process the images

- Click on Step 4 to rewrite the meta data and stamp the images, click **Do Both of the above**
- Place processed images in a second folder so original images are retained
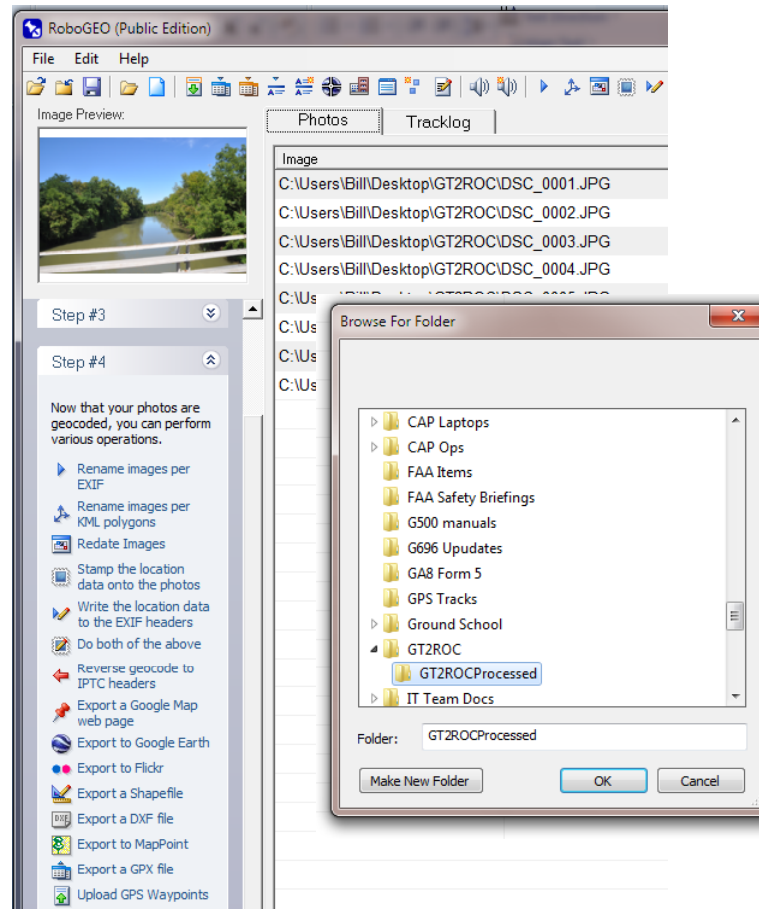
Checking North Direction

- After selecting the folder for the processed images you will be asked if you want to specify the north arrow – say yes

- The next window will allow reviewing all images with the north arrow direction shown

- To adjust north arrow click on image where north really is
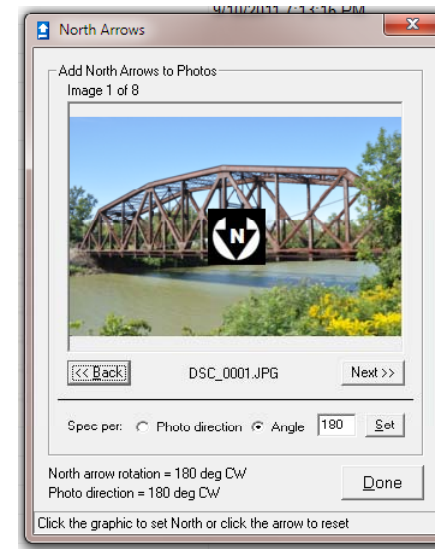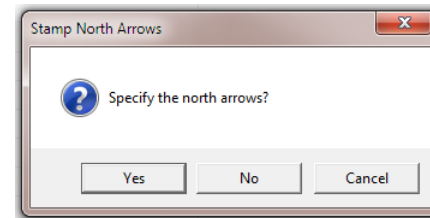
Fully Processed Image

- CAP logo and title across the top
- Date, time, lat, lon, dir, alt, N arrow across the bottom

RoboGEO Steps

RoboGeo Specific Steps¶

Create a folder on computer desktop with a name that is meaningful to others (eg MtMorrisDam)¶

Within this folder create a second folder with the same name followed by "Processed" (eg MtMorrisDamProcessed)¶

Copy the images from the camera to the base folder (eg MtMorrisDam). A USB cable can be used or remove the SD card from the camera and insert into the computer to copy them to the folder above.¶

Attach the eTrex to the computer via the serial cable (port on right rear of Dell laptops)¶

Open RoboGeo¶

Go to step 2 and open all images in the folder or selected images¶

Go to step 3 and import the track log from the GPS¶

In RoboGeo go to File, Export, Export GPX file and save it to the main folder above (eg MtMorrisDam)¶

If all photo names remain in black lettering the geo tagging is complete. File names in red are not complete most likely due to time mismatch between image time and a close track point.¶

The Direction in the grid will be the result of the track segment direction plus the camera offset (**270 degrees is our default but may have been changed by others**).¶

To change the camera direction relative to the track (which is the GPS track over the ground) click on File, Preferences, expand TrackLogs and click on PhotoDirFromTrackLogOffset. Change the value to the proper value and click Save Value. **Note this will be the value for all processing until it is changed again.**Fill in the "Title" for each image on the Photos grid. These can be copied and pasted using Ctrl+v and Ctrl+c or using the mouse click to copy and paste.¶

Go to step 4 and select "Do both of the above" to write the meta data and label/stamp the images.¶

This will prompt for a folder and choose the sub folder (eg MtMorrisDamProcessed).¶

A window will open asking if you want to include the north arrow. If all images have a direction a message will tell you this. You can continue or review all images. If an arrow is not correct you can click on the image and the arrow will point to where you clicked.¶

At this point you should have original images in the base of the new folder plus the track log and the processed images in the one with "Processed" on the end of the folder name.¶

To reset the RoboGeo configuration to our common values: Open RoboGeo then click on File and then Preferences. Click on File at the top of the preferences window and click reset. This will reset all to the RoboGeo defaults. Click on File again and then Open and then Local File. Select the RoboGeoConfigCAP.rcf file which is kept in the desktop folder called RoboGeo Manuals.¶