GEO Tagging
In IDIMAGER
With GPS Data Entry

Table of Contents

1 GEO Tagging in General

Geo Tagging is the storing of GPS information within the corresponding EXIF Tags or XMP Tags of an image. By storing this information, the owner of the photo is able to find where the photo was taken and display it on a map.

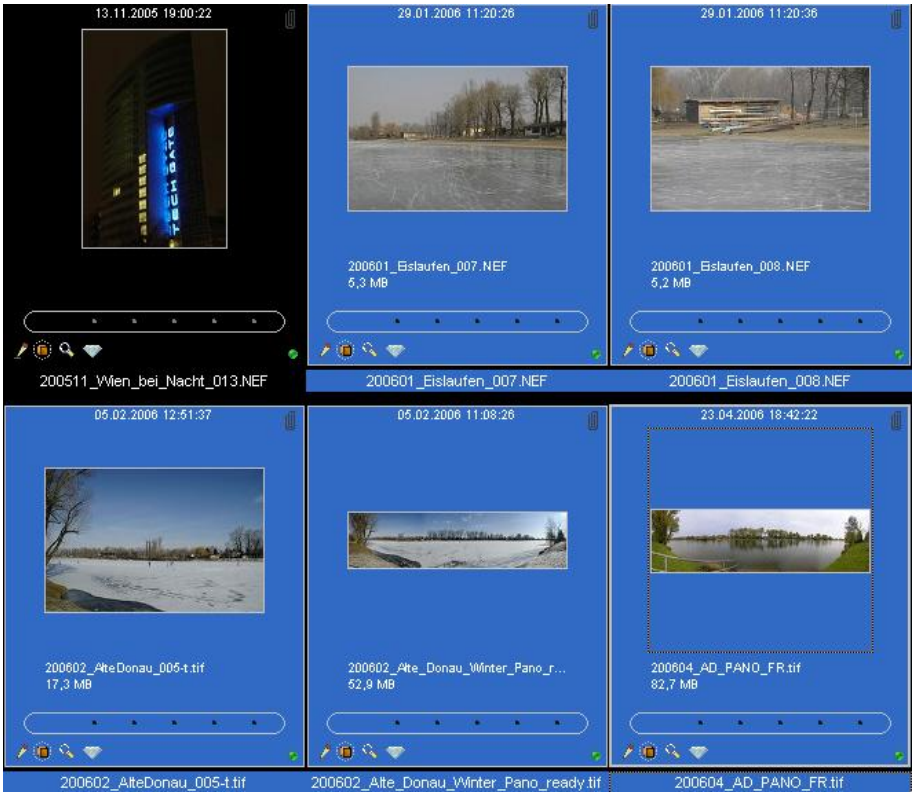
In IDI GEO tagging is provided by the "GPS Data Entry" script. The current version of this script, 3.0, was written by Lou Salkind, and was based on earlier versions by Rainer Ziller and Hert van Zwietering.

2 Start GPS Data Entry 3.0

Using GPS Data Entry, it is possible to assign GPS data to photos either by reading a GPX file which contains latitude and longitude trackpoints, or by navigating to a specific location on a map using MS Virtual Earth.

2.1 Select Photos

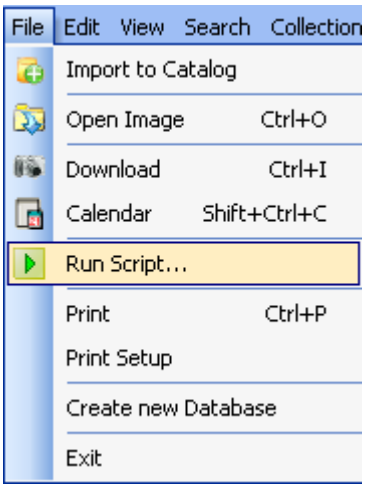
First of all you have to select the picture(s) you want to assign GPS data to, as in the following screenshot:



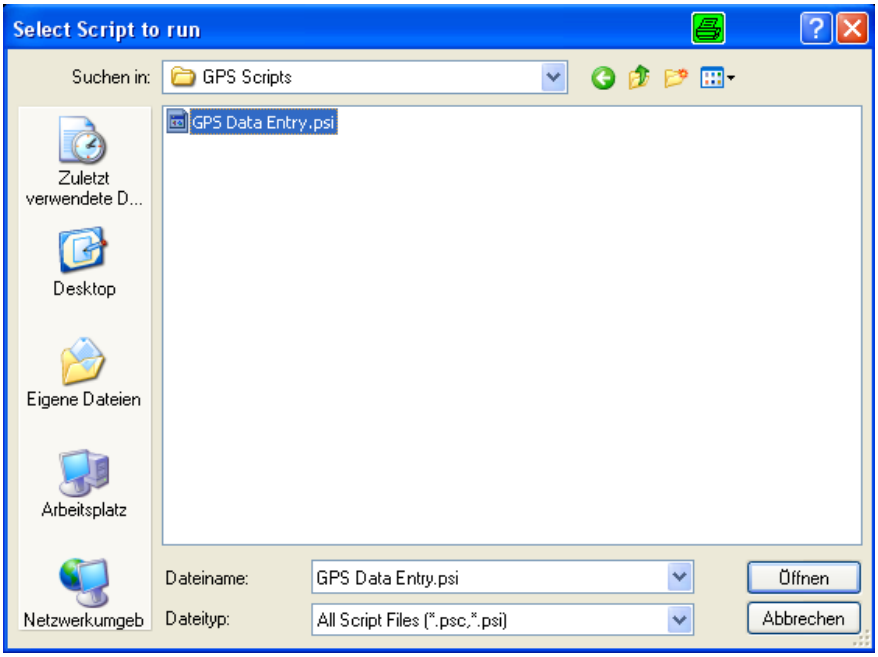
2.2 Start Script

Next, you should start the script. This can be done in several ways:

2.2.1 Starting via Menu:

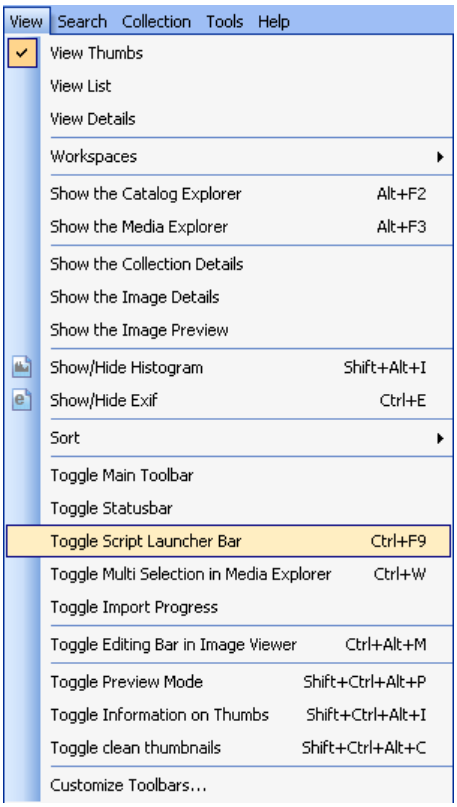


In the folder "GPS scripts":



2.2.2 Script Menu Bar

For this possibility, open the Script Menu bar via the ”View” menu or by typing Ctrl+F9:



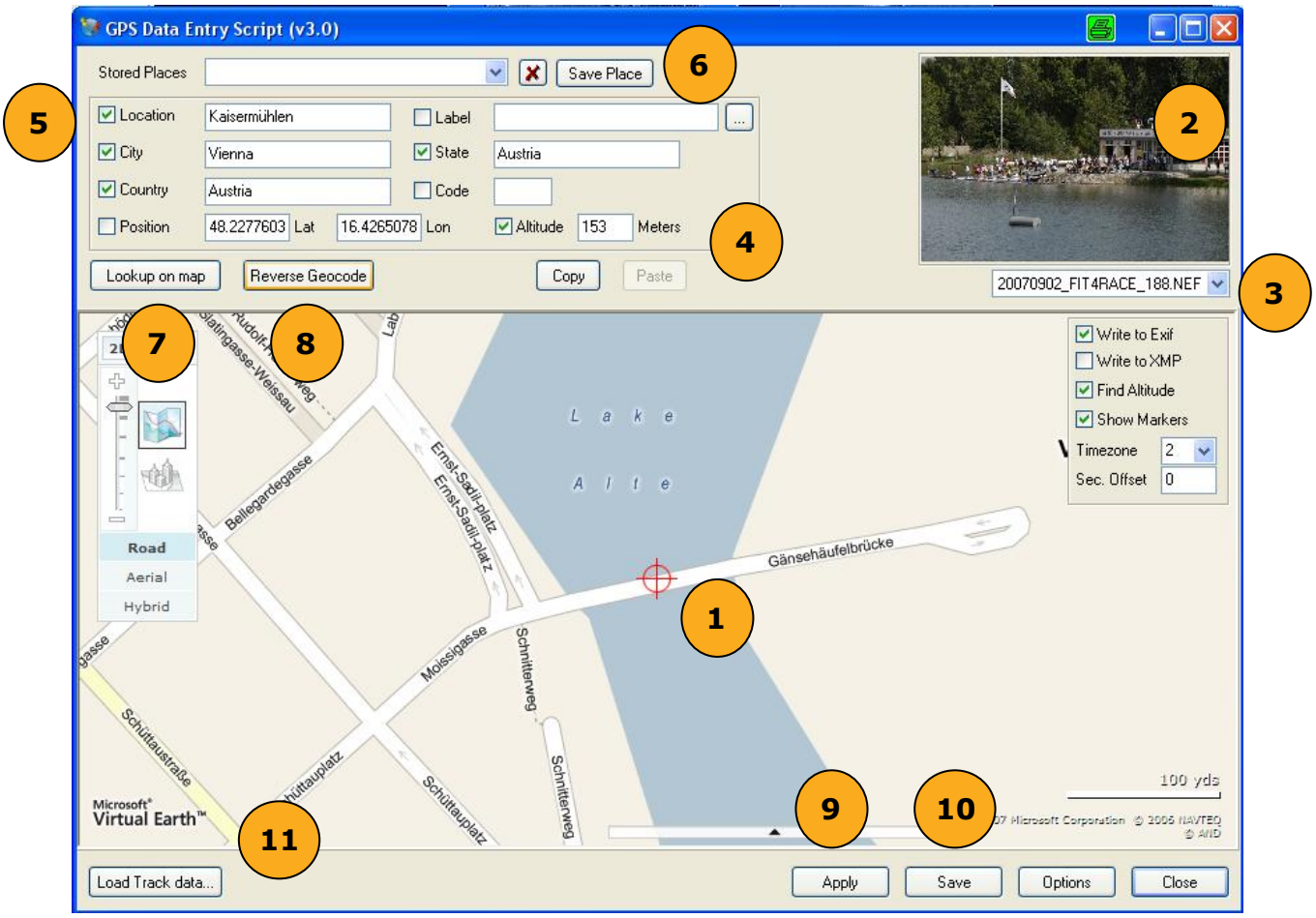
And then in the script menu bar click the Globe Icon

2.2.3 Context Menu

Via the context menu you can select Run Scripts on Selected Images…>GPS Scripts…>GPS Data Entry to start the script with selected photo(s).

3 Assigning GPS data manually

After starting the script you will see the following window:



The major functions / possibilities are:

- ✓ **1 … crosshairs**
  the location of the latitude/longitude coordinates in the Position boxes (see #4), and also the values that are used when you apply them to the photo (see #9).
- ✓ **2 … preview**
  of the currently active photo and below in the drop down box the filename.
- ✓ **3 … photo selector**
  a drop down box showing all file names with the possibility to directly select one and the arrow buttons to switch to the next / previous photo.
- ✓ **4 … coordinates**
  display of the coordinates in fractional degrees and the altitude in meters. The coordinates can be entered manually or by left dragging the crosshairs to a new location on the map. Similarly, the altitude can be manually entered or automatically retrieved by the script forthe current position if the option "Find Altitude" is selected.
- ✓ **5 … Location, City, Country**
  Reversing from crosshairs
  these are the location fields corresponding to he currently selected position. The script will fill in these values automatically when you click on the "Reverse Geocode" button.
  Entering Location
  If you enter a certain location in these fields and use the button "Lookup on map" the

crosshair moves immediately to the entered location and the corresponding coordinates are shown. You can also achieve the same effect by typing the location string into the Stored Places field and hitting ENTER.

- ✓ **6 … Save Place**
  this feature offers the opportunity to save frequently used places such as your home address, the place of your photo studio, etc. and to subsequently retrieve them just by selecting an item from the pulldown menu. You can also type a few characters of the place name and the script will autocomplete the name for you. To delete a stored place, select the place and then click on the X button next to the entry box. **7 … Lookup on Map**
  as outlined under point 5, click on this button on a to display the current location on the map.
- ✓ **8 … Reverse Geocode**
  does exactly the opposite of 7, because it retrieves the position data – 5 – of the point currently underneath the crosshairs on the map.
- ✓ **9 … Apply (Shift-Apply)**
  assigns the current coordinates (and any other checked location fields) to the currently displayed photo, while Shift-Apply will assign this information to all photos you selected. Note that Apply or Shift-Apply assigns this information, but it does not write it to the image file(s) until you use the Save command.
- ✓ **10 .. Save (Shift-Save)**
  Assigns the checked data to the currently displayed image and then stores this information in the database and image, depending on the IDI sync and catalog settings. The XMP option stores information to the XMP record, while the EXIF option stores information to the EXIF record. It is generally recommended to always store to the XMP record, and optionally (for maximum interoperability) you can store to the EXIF record as well. Use Shift-Save to save all images where data has been previously assigned through the Apply command.
- ✓ **11 .. "Load Track Data"**
  loads a GPX file (details under point 4).

4 GEO tagging using a GPX File

4.1 Preparation

As described in Point 2.1 and 2.2

4.2 Load GPX File

After starting the script we get the same window as by manual assignment but this time we load some track data from an existing GPX File and we will se an additional button and the track as stored in the GPX file.

The only thing which changes to point 3 is that a new button appears being used to assign GPS data used from the GPX – Track File.

GPS coordinates are assigned to photos based on their EXIF time stamp and the corresponding waypoint in your track file.

Therefore we have to focus on the following functions

- ✓ **12 .. Time Settings**

  In this field you have to set the correct time zone as per the time settings of your camera. GPS devices usually always use GMT being synchronised via UTC. Therefore take care of the time settings of your camera.

  Further you can set a time offset in case you know exactly how much the time of your camera is drifting from UTC time plus time zone

- ✓ **13 .. Add GPS from GPX Track**

  pressing this button the script identifies based on the time stamp of your photos and the timestamp of the waypoints in your track file the correct position where the photo was taken and assigns the GPS data accordingly.