

Geotagging with PhotoLinker for Mac

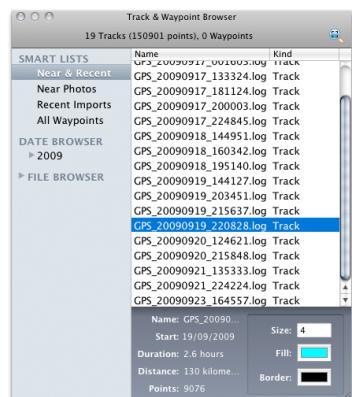
**How to use the PhotoLinker for Mac program to
geotag your photos**

The Map module in Lightroom 4 has most the controls you need for editing and managing GPS data. It is possible to import a GPS tracklog via the Toolbar and adjust for any time shifts that occur between the camera set time and current time, but this isn't always so easy to calculate.

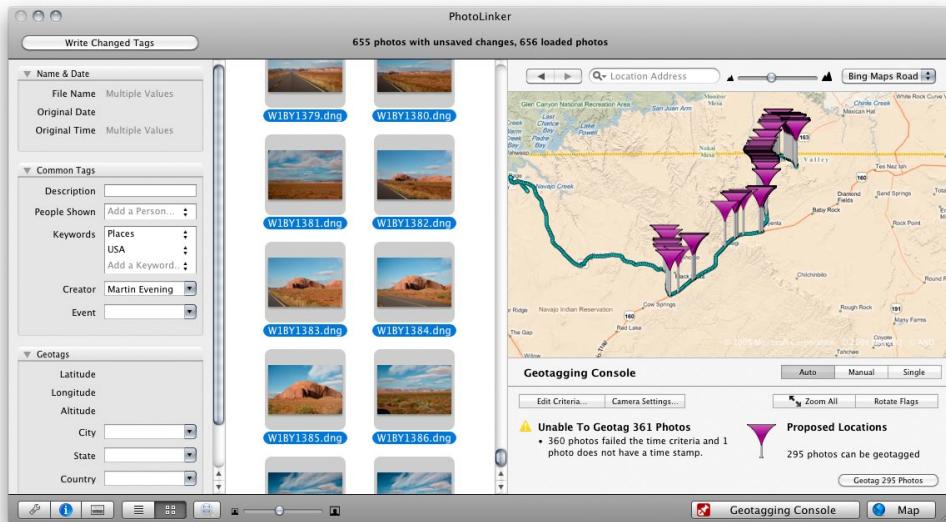
For the most part I think Lightroom users will be able to work around such limitations and the merging of GPS data and shot files will become easier once you are disciplined in the maintaining of accurate time settings on your cameras. Prior to the introduction of the Map module I was reliant on third party programs to embed the GPS metadata. Basically what follows is mostly redundant now, but Macintosh users might find the advanced controls found in the Photolinker are still worth exploring as an alternative way to geotag their images.

Geotagging with Photolinker for Mac

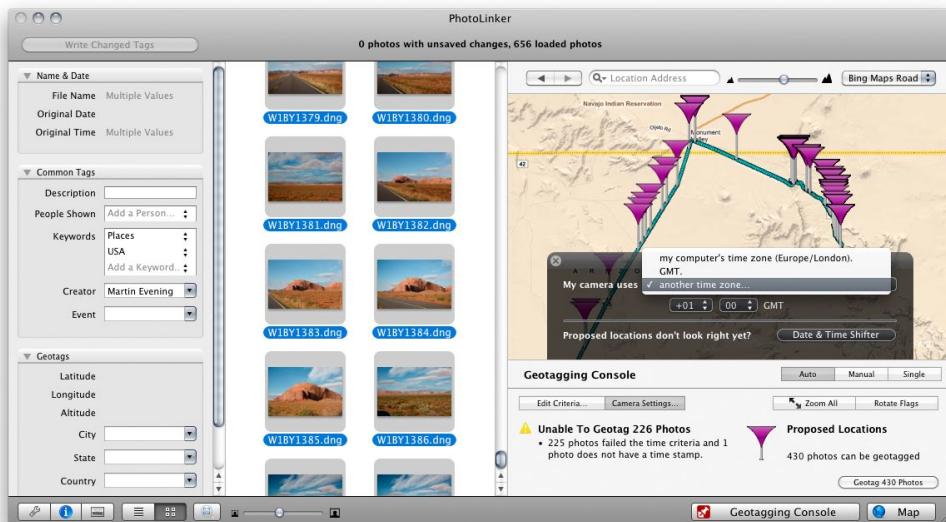
In previous and recent editions of the Adobe Photoshop Lightroom book I showed Mac users how to use Houdah Geo to link GPS data to your image files. Since then I have discovered an even better program to work with, called PhotoLinker (www.earlyinnovations.com). One of the reasons why I prefer working with this program now is because it shares the same versatility as Geosetter (for PC), allowing you to import track logs and view all the waypoints in a map view window. It can also help you resolve problems to do with time shift differences between the tracklog data recorded to UTC time and the time the camera clock was set to. As you can see in the following example, PhotoLinker provides a really useful preview which includes triangle markers that show the estimated position of each loaded image relative to a point on the map. Where necessary, you can quickly compensate for the date/time recorded in the capture files in order to get the marker points to accurately match the point from which the photos were taken. It is also able to link the recorded GPS data with the place name data, which is automatically entered into the IPTC data fields.



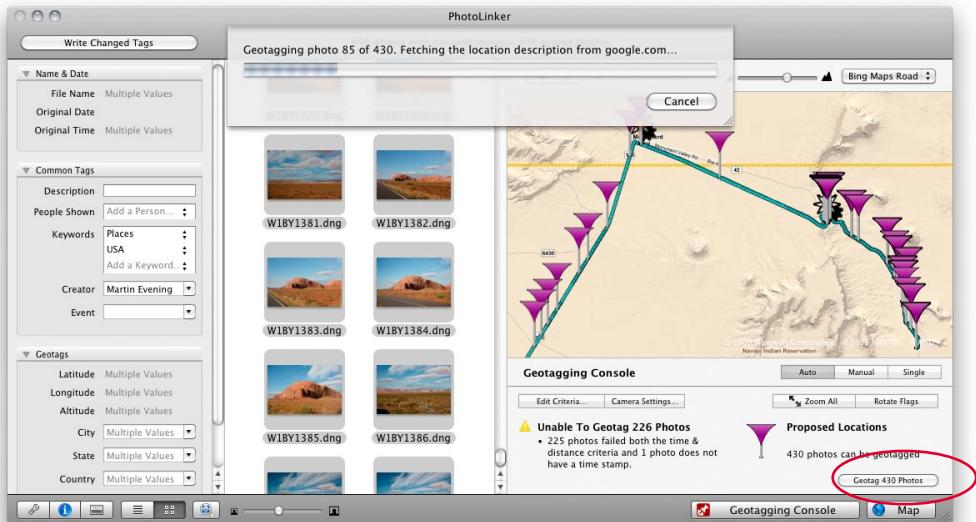
1. In this first step I wanted to merge the data from a GPS tracklog with a folder of photographs that were shot at Monument Valley in Arizona. It was important first to check that all the metadata entries in the Metadata panel were up-to-date and that these were manually saved to the XMP space by using to force save the metadata to the files.



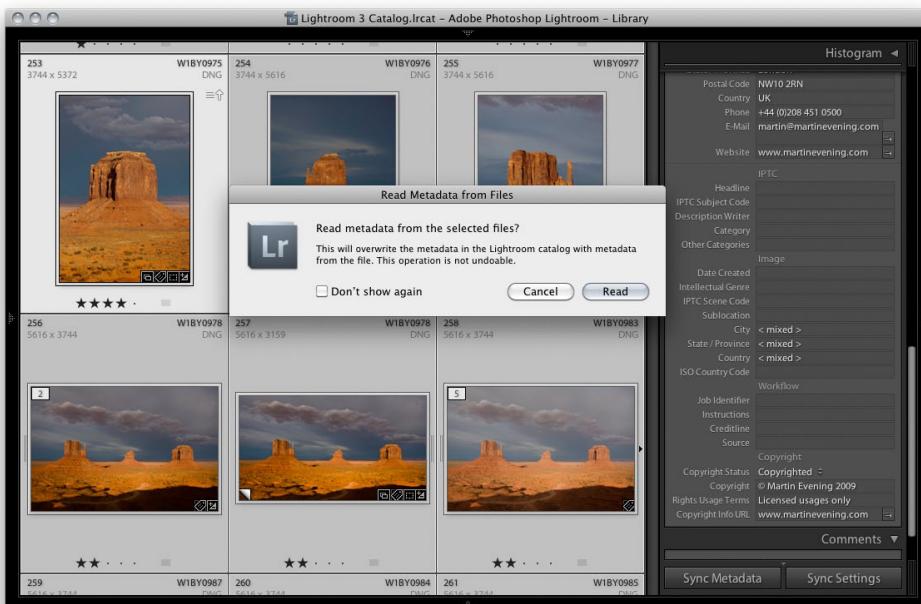
- 2.** I opened the PhotoLinker program and to begin with, dragged the folder of track log GPS files from my trip to anywhere in the main menu. This loaded the GPS log files into the program. I then located the folder that contained the original raw files and dragged this too to the main window. Here you can see that the GPS data begin to link up. The triangles seen here show the location for each of the selected images. It's kind of looking right, but not 100% correct.



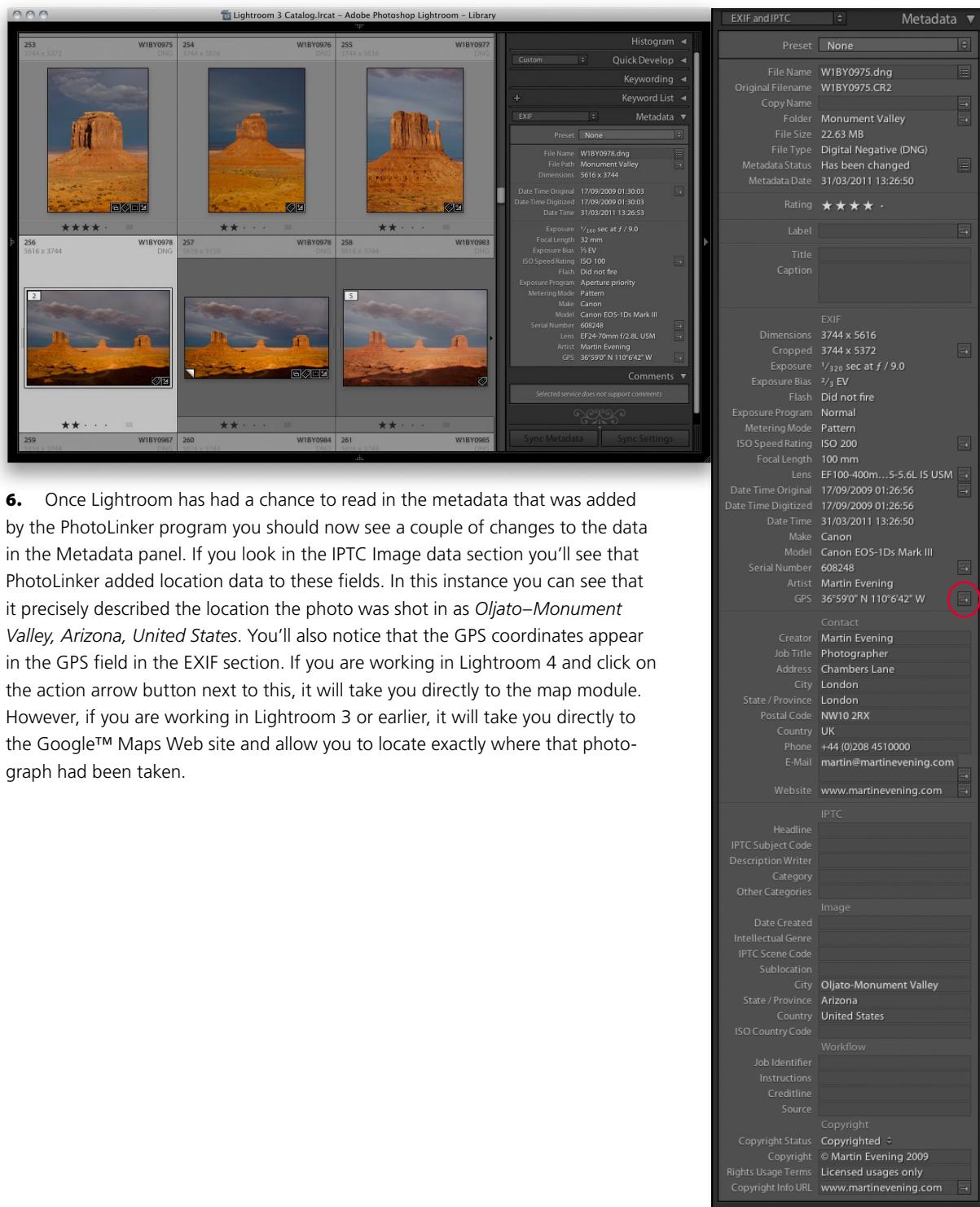
- 3.** Here, I knew I needed to adjust the date time as recorded by the camera's internal clock. I clicked on the Camera Settings... button to open the panel shown here and adjusted the clock time by +1 hours. I could tell from looking at the arrows that the GPS data and image files were now both in sync.



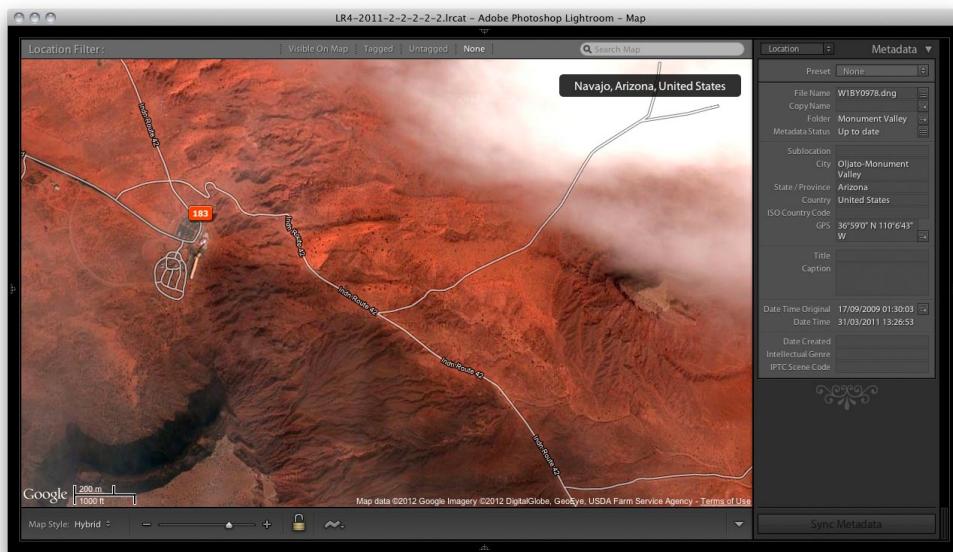
4. I then clicked on the “Geotag All Photos” button to geotag all the images currently selected in the image file view section. Depending on the performance of the GPS unit that was used and whether it was switched on all the time, it is possible that some photos can’t be geotagged. But those that can will be. Next, I used **⌘S** to save the geotag data to the selected files’ XMP space.



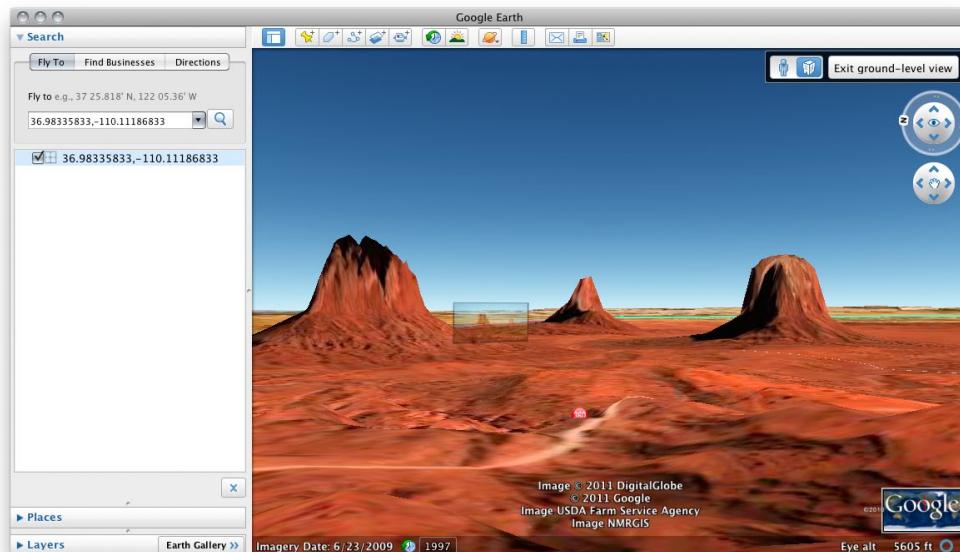
5. Back in Lightroom, I selected all the images in the Monument Valley folder and chose Metadata ⇒ Read from Metadata from Files. I clicked on the “Read” button shown here to confirm this was what I wanted to do.



6. Once Lightroom has had a chance to read in the metadata that was added by the PhotoLinker program you should now see a couple of changes to the data in the Metadata panel. If you look in the IPTC Image data section you'll see that PhotoLinker added location data to these fields. In this instance you can see that it precisely described the location the photo was shot in as *Oljato–Monument Valley, Arizona, United States*. You'll also notice that the GPS coordinates appear in the GPS field in the EXIF section. If you are working in Lightroom 4 and click on the action arrow button next to this, it will take you directly to the map module. However, if you are working in Lightroom 3 or earlier, it will take you directly to the Google™ Maps Web site and allow you to locate exactly where that photograph had been taken.



7. I have shown here the Lightroom 4 outcome, where clicking on the action arrow in Step 6 takes you to the Map module. This shows the exact location the photograph shown in Step 6 was taken from.



8. I then made an Edit ⇒ copy of the GPS coordinates that appeared in the GPS field in the Metadata panel and used Edit ⇒ Paste to paste these into the search window in the Google Earth™ program. Here, I tilted the preview to show a ground-level view. The Google Earth view shown here matches almost exactly the view in the original photograph.