GPStamper<sup>™</sup> automatically extracts the GPS coordinates and date from a geotagged JPEG image and then stamps it, along with subject description and author information, onto the image utilizing a lossless algorithm.

Various other metadata content, including an automatically generated location description, file name, GPS accuracy<sup>\*</sup>, image direction<sup>\*</sup> and elevation<sup>\*</sup>, can also be included in the stamp. Including time and the copyright symbol are additional options.

## **Quick Start**

Using Windows File Explorer (or any drag-and-drop compatible file browser), drag and drop a single geotagged JPG file *or* folder into GPStamper's File/Folder window. Alternatively, click the File menu to select a single JPG file *or* folder for stamping.

Enter optional subject description and author information, select from numerous appearance and content options (as noted above), then click the "Stamp Coordinates" (globe) or "Stamp AutoLocation" (GPS pin) button. The date is included by default.

The original file is preserved during stamping, and a copy will be stamped with "-gps" appended to the file name (e.g. IMG\_3277.JPG becomes IMG\_3277-gps.JPG). Stamped images are placed into a "GPStamper" folder created in the source image folder.

GPStamper writes metadata to the original file, and only supports English characters, as most textual information in Exif metadata is stored in ASCII format.

\*Existence is camera dependent. iPhone photo metadata fully exploits GPStamper's capabilities.

# **Stamping Options:**

**Coordinates** - Select from decimal degrees or degrees/minutes/seconds for GPS, or UTM coordinate notation.

**AutoLocation** - Automatically reverse geocode from GeoNames.org and stamp the closest city (population >1000), state/province/municipality, and country information. Including the country and coordinates is optional. Only JPG files are supported.

**AutoLocation - High Precision Locations (GPS + pin)** - Optionally available for single JPG files, and reverse geocoded from OpenStreetMap.org. Locations may include a point of interest name and/or street address, and may be edited prior to stamping.

*Lightroom® Reverse Geocode* - Sublocation, City, State/Province and Country information in the IPTC (XMP schema) tags. Select this option for Adobe® Lightroom® Map module reverse geocoded images.

*Video Frames* - Extract JPG still frames from MOV or MP4 (HEVC or AVC) video files, which can then be location stamped.

Video files should (ideally) be placed into their own folder prior to frame extraction and stamping. Frames can be stamped with coordinates, autolocation, elevation\*, date, time, file name, subject and author. All font options are available for use on video frames. (\*camera dependent)

A quad-frame photo is generated from four video frames spaced equidistant within the video clip, whereas a single-frame photo is generated from a single video frame located mid-point in the video clip. Quad-frames are UHD (maximum), and single-frames are 1x the original video resolution.

**Subject Description** - Enter a subject description in GPStamper to include in the stamp. A subject description entered into the Subject Description window will be globally assigned to all files in the selected folder.

A unique subject description for individual photos in a folder can be entered by ticking the Unique checkbox to the left of the Subject Description window prior to stamping. The opportunity to assign a description to each photo will be given during the stamping process. Press the Esc key or click the Close (X) button on the edit window to save descriptions. *Subject Description* - Subject Description is written to File Explorer's "Subject" field. If no description exists in the Subject Description window, and the Unique checkbox is not ticked, GPStamper uses the contents of File Explorer's "Subject" (should any exist) as the description during stamping.

Alternatively, populate File Explorer's "Subject" field in the Details pane, leaving the Unique checkbox unticked and the Subject Description window empty. The contents of that field will be used instead.

**Smart Clipboard** - Use GPStamper's Smart Clipboard to paste subject description content copied from any Windows document. The pasted description may be edited prior to being written and copied back to the clipboard. The Smart Clipboard minimizes typing, and eliminates typos in complex technical/legal descriptions.

**Author** - Append a copyright notice in GPStamper to any of the above location choices. Enter author information once and it remains set until changed. Author information can also be entered via File Explorer's "Authors" field in the Details pane.

## Tools:

**Read Geotag Coordinates** - Select a geotagged file or folder to view coordinate metadata only.

**Read All GeoMetadata** - Select a geotagged file or folder to view all geotag-related metadata, along with metadata entered by the user and generated by GPStamper.

**Geotag with Track Log** - Select a file or folder to geotag, then select a track log file and enter the time zone (referenced to UTC) in which the photos were taken. Adjust for Daylight Saving Time as needed. JPG, MOV, and MP4 files can be geotagged.

**AutoRotate Photos** - Select a file or folder and automatically rotate per the Exif orientation tag. Processes photos from all cameras/devices with an orientation sensor, and assures photos will be displayed correctly oriented.

#### View:

*View Locations in Google Earth* - Select a single geotagged file or folder to instantly locate images in Google Earth. Saving the generated KML file (in the source image folder) is optional. You can use the KML file to create a map in Google My Maps, or generate a KMZ file (with bundled photos) in Google Earth. Any pre-existing gpstamper.kml file will be overwritten when a new file is created.

Check "Allow access to local files and personal data" on Google Earth's "Tools > Options > General" tab if you wish to display thumbnails.

*View Locations in Google Maps or OpenStreetMap* - Select a single geotagged file to instantly locate in Google Maps or OpenStreetMap. GPStamper's clipboard may be used to paste location information copied from either Maps or OSM to the Subject Description window.

## **Troubleshooting:**

**Drag-and-drop failure** - GPStamper should *not* be installed or run as administrator! This issue is due to Windows Mandatory Integrity Control.

**Stamping failure** - Stamping will fail or be incomplete if the metadata selected for stamping is nonexistent or corrupt, or if the file is locked by another application.

*Slow progress* - Prior to stamping, JPG files must be transferred to the Windows device where GPStamper is installed.

**Application crash** - Vertically oriented images (typically from certain Nikon cameras) with non-standard image orientation [metadata] tags can terminate the stamping process. Using GPStamper's "AutoRotate Photos" tool prior to stamping may resolve this issue.

**AutoLocation failure** - An internet connection is required to retrieve location information, or the photos may not be geotagged.

*Missing/corrupt characters* - Unicode characters in the Latin-1 character set which include diacritics are not supported by GPStamper, and will have their diacritics removed. Only English characters are supported, as most textual information in Exif metadata is stored in ASCII format.

#### Metadata:

GPStamper writes metadata to the original file. Only English characters are supported, as most textual information in Exif metadata is stored in ASCII format.

- Location metadata selected for stamping is written to File:Comment
- Subject descriptions are written to Exif:XPSubject (File Explorer "Subject")
- Author information is written to Exif:XPAuthor and Exif:Artist (File Explorer "Authors")
- AutoLocations are written to XMP:Title and Exif:XPTitle (File Explorer "Title")
- Original file names are written to Exif:UserComment (File Explorer "Comments") during AutoLocation
- UTM coordinates are written to XMP:UTMCoordinates

## License

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