

# GPS Tags

These GPS tags are part of the EXIF standard, and are stored in a separate IFD within the EXIF information.

ExifTool is very flexible about the input format when writing lat/long coordinates, and will accept from 1 to 3 floating point numbers (for decimal degrees, degrees and minutes, or degrees, minutes and seconds) separated by just about anything, and will format them properly according to the EXIF specification.

Some GPS tags have values which are fixed-length strings. For these, the indicated string lengths include a null terminator which is added automatically by ExifTool. Remember that the descriptive values are used when writing (ie. 'Above Sea Level', not '0') unless the print conversion is disabled (with '-n' on the command line, or the PrintConv option in the API).

When adding GPS information to an image, it is important to set all of the following tags: GPSTatitude, GPSTatitudeRef, GPSLongitude, GPSLongitudeRef, GPSAltitude and GPSAltitudeRef. ExifTool will write the required GPSVersionID tag automatically if new a GPS IFD is added to an image.

Tag ID	Tag Name	Writable	Values / Notes
0x0000	GPSTVersionID	int8u[4]	
0x0001	GPSTLatitudeRef	string[2]	'N' = North 'S' = South
0x0002	GPSTLatitude	rational64u[3]	
0x0003	GPSTLongitudeRef	string[2]	'E' = East 'W' = West
0x0004	GPSTLongitude	rational64u[3]	
0x0005	GPSTAltitudeRef	int8u	0 = Above Sea Level 1 = Below Sea Level
0x0006	GPSTAltitude	rational64u	
0x0007	GPSTTimeStamp	rational64u[3]	
0x0008	GPSSatellites	string	
0x0009	GPSStatus	string[2]	'A' = Measurement In Progress 'V' = Measurement Interoperability
0x000a	GPSTMeasureMode	string[2]	2 = 2-Dimensional Measurement 3 = 3-Dimensional Measurement
0x000b	GPSTDOP	rational64u	
0x000c	GPSTSpeedRef	string[2]	'K' = km/h 'M' = mph 'N' = knots
0x000d	GPSTSpeed	rational64u	
0x000e	GPSTTrackRef	string[2]	'M' = Magnetic North 'T' = True North
0x000f	GPSTTrack	rational64u	
0x0010	GPSTImgDirectionRef	string[2]	'M' = Magnetic North 'T' = True North
0x0011	GPSTImgDirection	rational64u	
0x0012	GPSTMapDatum	string	
0x0013	GPSTDestLatitudeRef	string[2]	'N' = North 'S' = South
0x0014	GPSTDestLatitude	rational64u[3]	
0x0015	GPSTDestLongitudeRef	string[2]	'E' = East 'W' = West
0x0016	GPSTDestLongitude	rational64u[3]	
0x0017	GPSTDestBearingRef	string[2]	'M' = Magnetic North 'T' = True North
0x0018	GPSTDestBearing	rational64u	
0x0019	GPSTDestDistanceRef	string[2]	'K' = Kilometers 'M' = Miles 'N' = Nautical Miles
0x001a	GPSTDestDistance	rational64u	
0x001b	GPSTProcessingMethod	undef	
0x001c	GPSTAreaInformation	undef	
0x001d	GPSTDateStamp	string[11]	(YYYY:MM:DD)
0x001e	GPSTDifferential	int16u	0 = No Correction 1 = Differential Corrected

(This document generated automatically by Image::ExifTool::BuildTagLookup)  
*Last revised Nov 23, 2006*

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<-- ExifTool Tag Names
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