

Photo Metadata Fields

Field Name	Tag Name	Metadata Group	Definition	Possible Values (Values in data set are in bold)
Exif Tool Version Number	ExifToolVersion	ExifTool	Version of the exiftool application used to read the photo metadata.	9.03
File Name	FileName	File	Name of scanned photo file on physical volume. Name is composed of the NASA photo number and the file extension.	Format: Syy-nnnnn.tif , where yy is the year photo was taken and nnnnn is a 5 digit sequential integer
File Size	FileSize	File	The physical size on disk of the photo file.	Format: nnnnn MB , where nnnnn is a 4-5 digit integer
File Type	FileType	File	Standard format used to organize and store digital data.	TIFF
MIME Type	MIMETYPE	File	MIME types are a standard way of classifying file types on the Internet. A MIME type has two parts: a type and a subtype separated by a slash (/). Full list of allowed MIME types can be found at: http://www.iana.org/assignments/media-types/	image/tiff
Exif Byte Order	ExifByteOrder	File	The order of the bytes in the file, which depends on the CPU of the machine doing the	Big-endian (Motorola, MM)
				Little-endian (Intel, II)
Subfile Type	SubfileType	EXIF	A general indication of the kind of data contained in this subfile.	Full-resolution Image
				Reduced-resolution image
				Single page of multi-page image
				Single page of multi-page reduced-resolution image
				Transparency mask
				Transparency mask of reduced-resolution image
				Transparency mask of multi-page image
Transparency mask of reduced-resolution multi-page image				

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				Alternate reduced-resolution image
				invalid
				Reduced resolution
				Single page
				Transparency mask
				TIFF/IT final page
				TIFF-FX mixed raster content
Image Width	ImageWidth	EXIF	The number of columns in the image, i.e., the number of pixels per row.	Positive integer
Image Height	ImageLength	EXIF	The number of rows of pixels in the image.	Positive integer
Bits Per Sample	BitsPerSample	EXIF	Number of bits per component.	8
				16
				8 8 8
				16 16 16
Compression	Compression	EXIF	Compression scheme used on the image data.	Uncompressed
				CCITT 1D
				T4/Group 3 Fax
				T6/Group 4 Fax
				LZW
				JPEG (old-style)
				JPEG
				Adobe Deflate
				JBIG B&W
				JBIG Color
				JPEG
				Kodak 262
				Next
				Sony ARW Compressed
				Packed RAW

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				Samsung SRW Compressed
				CCIRLEW
				PackBits
				Thunderscan
				Kodak KDC Compressed
				IT8CTPAD
				IT8LW
				IT8MP
				IT8BL
				PixarFilm
				PixarLog
				Deflate
				DCS
				JBIG
				SGILog
				SGILog24
				JPEG 2000
				Nikon NEF Compressed
				JBIG2 TIFF FX
				Microsoft Document Imaging (MDI) Binary Level Codec
				Microsoft Document Imaging (MDI) Progressive Transform Codec
				Microsoft Document Imaging (MDI) Vector
				Kodak DCR Compressed
				Pentax PEF Compressed
Photometric Interpretation	PhotometricInterpretation	EXIF	The color space of the image data.	WhiteIsZero
				BlackIsZero
				RGB
				RGB Palette

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				Transparency Mask
				CMYK
				YCbCr
				CIELab
				ICCLab
				ITULab
				Color Filter Array
				Pixar LogL
				Pixar LogLuv
				Linear Raw
Orientation	Orientation	EXIF	The orientation of the image with respect to the rows and columns.	Horizontal (normal)
				Mirror horizontal
				Rotate 180
				Mirror vertical
				Mirror horizontal and rotate 270 CW
				Rotate 90 CW
				Mirror horizontal and rotate 90 CW
				Rotate 270 CW
Samples Per Pixel	SamplesPerPixel	EXIF	The number of components per pixel.	1
				3
Rows Per Strip	RowsPerStrip	EXIF	The number of rows per strip.	Positive integer
Strip Offsets	StripOffsets	EXIF	For each strip, the byte offset of that strip.	Positive integer
Strip Byte Counts	StripByteCounts	EXIF	For each strip, the number of bytes in the strip after compression.	Positive integer
X Resolution	XResolution	EXIF	The number of pixels per ResolutionUnit in the ImageWidth direction.	Positive integer
Y Resolution	YResolution	EXIF	The number of pixels per ResolutionUnit in the ImageLength direction.	Positive integer
Resolution Unit	ResolutionUnit	EXIF	The unit of measurement for XResolution and YResolution.	None
				inches
				cm

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Planar Configuration	PlanarConfiguration	EXIF	How the components of each pixel are stored.	Chunky Planar
Software	Software	EXIF	Name and version number of the software package(s) used to create the image.	Adobe Photoshop 7.0 Adobe Photoshop CS3 Windows Adobe Photoshop CS4 Windows Adobe Photoshop CS5 Windows
Create Date	DateTimeDigitized	EXIF	Date and time of image creation.	yyyy:mm:dd hh:mm:ss
Modify Date	DateTime	EXIF	Date and time of last image modification.	yyyy:mm:dd hh:mm:ss
Exif Version	ExifVersion	EXIF	The version of the supported Exif standard.	221
Color Space	ColorSpace	EXIF	The color space specifier. Normally sRGB is used to define the color space based on the PC monitor conditions and environment. If a color space other than sRGB is used, Uncalibrated is set.	sRGB Uncalibrated
ICC ProfileName	ICCProfileName	ICC_Profile		Hasselblad Gray ProPhoto RGB sRGB IEC61966-2.1
Profile CMM Type	ProfileCMMType	ICC_Profile	Used to identify the preferred CMM to be used. If used, it shall match a CMM type signature registered in the ICC registry.	ACMS ADBE APPL KCMS Lino MSFT

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Profile Version	ProfileVersion	ICC_Profile	Profile version number where the first 8 bits identify the major revision and the next 8 bits identify the minor revision and bug fix revision. The major and minor revision are set by the International Color Consortium and will match up with editions of this specification.	2.0.0 2.0.3 2.1.0 2.2.0
Profile Class	ProfileClass	ICC_Profile	The profile class signatures. There are three basic classes of device profiles, which are Input, Display and Output. In addition to the three basic device profile classes, four additional color processing profiles are defined.	Abstract Profile DeviceLink Profile Display Device Profile Nikon Input Device Profile (NON-STANDARD!) NamedColor Profile Output Device Profile Input Device Profile ColorSpace Conversion Profile
Color Space Data	ColorSpaceData	ICC_Profile	Contains the signature of the data color space expected on the A side (device side) of the profile transforms.	GRAY RGB
Profile Connection Space	ProfileConnectionSpace	ICC_Profile	Color space used to connect the source and destination profiles	Lab XYZ Luv YCbr Yxy RGB GRAY HSV HLS CMYK

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				CMY
				2CLR
				3CLR
				4CLR
				5CLR
				6CLR
				7CLR
				8CLR
				9CLR
				ACLR
				BCLR
				CCLR
				DCLR
				ECLR
				FCLR
Profile Date Time	ProfileDateTime	ICC_Profile	Date and time of profile creation.	yyyy:mm:dd hh:mm:ss
Profile File Signature	ProfileFileSignature	ICC_Profile	An alphanumerical 4-byte value, registered with the ICC. Shorter values are padded at the end with 20h bytes.	acsp
Primary Platform	PrimaryPlatform	ICC_Profile	Signature to indicate the primary platform/operating system framework for which the profile was created.	Apple Computer Inc.
				Microsoft Corporation
				Silicon Graphics Inc.
				Sun Microsystems Inc.
				Taligent Inc.
CMM Flags	CMMFlags	ICC_Profile	Contains flags to indicate various hints for the CMM such as distributed processing and caching options.	Embedded or Not Embedded
				Dependent or Independent

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Device Manufacturer	DeviceManufacturer	ICC_Profile	Used to identify a device manufacturer. If used the signature shall match the signature contained in the appropriate section of the ICC signature registry found at www.color.org .	IEC
				KODAK
				none
Device Mfg Desc	DeviceMfgDesc	ICC_Profile	This tag describes the structure containing invariant and localizable versions of the device manufacturer for display.	IEC http://www.iec.ch
				KODAK
Device Model	DeviceModel	ICC_Profile	Used to identify a device model. If used the signature shall match the signature contained in the appropriate section of the ICC signature registry found at www.color.org .	ROMM
				sRGB
Device Model Desc	DeviceModelDesc	ICC_Profile	This tag describes the structure containing invariant and localizable versions of the device model for display.	Hr500_ColNeg_V3_fh10.icm
				IEC 61966-2.1 Default RGB colour space - sRGB
				Kodak Professional HR500 Film Scanner
				Reference Output Medium Metric(ROMM)
Device Attributes	DeviceAttributes	ICC_Profile	Attributes unique to the particular device setup such as media type.	Reflective or Transparency
				Glossy or Matte
				Media polarity, positive or negative
				Colour media , black & white media
Rendering Intent	RenderingIntent	ICC_Profile	A particular gamut mapping style or method of converting colors in one gamut to colors in another gamut.	Perceptual
				Media-Relative Colorimetric
				Saturation
				ICC-Absolute Colorimetric

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Connection Space Illuminant	ConnectionSpaceIlluminant	ICC_Profile	illuminant with the spectral radiance distribution of CIE illuminant D50 and nCIEXYZ X = 0,964 2, nCIEXYZ Y = 1,0, nCIEXYZ Z = 0,824 9	Format: X Y Z , where X, Y, and Z are decimal numbers
Profile Creator	ProfileCreator	ICC_Profile	Identifies the creator of the profile. If used the signature shall match the signature contained in the appropriate section of the ICC signature registry found at www.color.org .	ADBE cFLX HP KOD1 KODA LOGO
Profile ID	ProfileID	ICC_Profile	This field is optional but should be used to record a checksum value which if used shall be generated using the MD5 fingerprinting method as defined in RFC 1321. If a profile ID has not been calculated the value of the field shall be set to zero.	0
Profile Copyright	ProfileCopyright	ICC_Profile	This tag contains the text copyright information for the profile.	Copyright (c) 1998 Hewlett-Packard Company Copyright (c) Eastman Kodak Company, 1999, all rights reserved. Copyright (c) Eastman Kodak Company, 2001, all rights reserved. Copyright (c) Eastman Kodak Company, 2002, all rights reserved. Copyright 1999 Adobe Systems Incorporated Copyright 2006 Hasselblad A/S Copyright by Hasselblad A/S, Denmark Copyright Hasselblad A/S Monaco Systems Inc.

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Profile Description	ProfileDescription	ICC_Profile	Structure containing invariant and localizable versions of the profile name for display.	@Transparency_iQsmart
				Flextight Input
				Flextight X5 & 949
				flextight x5 & 949.icc Gray
				Gray Gamma 2.2
				Hasselblad Gray
				HR500 E6 Film 032101b
				Hr500_ColNeg_V3_fh10.icm
				ProPhoto RGB
				sRGB IEC61966-2.1
Media WhitePoint	MediaWhitePoint	ICC_Profile	Reference color that is used as the basis for scaling of media relative transforms	Format: X Y Z , where X, Y, and Z are decimal numbers
Red Matrix Column	RedMatrixColumn	ICC_Profile	This tag contains the first column in the matrix, which is used in matrix/TRC transforms.	Format: X Y Z , where X, Y, and Z are decimal numbers
Green Matrix Column	GreenMatrixColumn	ICC_Profile	This tag contains the second column in the matrix, which is used in matrix/TRC transforms.	Format: X Y Z , where X, Y, and Z are decimal numbers
Blue Matrix Column	BlueMatrixColumn	ICC_Profile	This tag contains the third column in the matrix used in matrix/TRC transforms.	Format: X Y Z , where X, Y, and Z are decimal numbers
Gray Matrix Column	GrayMatrixColumn	ICC_Profile	This tag contains the grey tone reproduction curve. The tone reproduction curve provides the necessary information to convert between a single device channel and the PCSXYZ or PCSLAB encoding.	Format: X Y Z , where X, Y, and Z are decimal numbers