

This is an example exif data section from a PNG file
 with notes on the different sections, divided by lines of '-'
 Also including the ASCII char (if possible/makes sense)

Address Starting at TIFF header	NEWLINE 0xex 0xif NEWLINE 0x 0x 0x 0x86 NEWLINE		This part here is only present in some file formats, e.g. PNGs but NOT in JPGs The size of EXIF data field in bytes Note that 86 is the *decimal* representation The missing numbers in the other 3 bytes are spaces (due to encoding) - So the following is 86 bytes (NOT including new lines which seem to have no syntactical meaning)
	0x45 0x78 0x69 0x66 0x00 0x00	E x i f	(Another) EXIF header
0x0000 0x0001 0x0002 0x0003 0x0004 0x0005 0x0006 0x0007	0x49 0x49 0x2a 0x00 0x08 0x00 0x00 0x00	I I * 	Start of TIFF header The two 'I's indicate little endian format With 'I' standing for Intel "MM" ("Motorola") would indicate big endian 0x002a is also part of the TIFF header 0x00000008 gives the offset to IFD0
0x0008 0x0009	0x01 0x00		Number of IFD(0) entries (2 bytes) Only 1 entry
0x000a 0x000b	0x0e 0x01		Tag: 0x010e indicates "ImageDescription"
0x000c 0x000d	0x02 0x00		Data format: 0x0002 indicates ASCII String (with 1 Byte/Component)
0x000e 0x000f 0x0010 0x0011	0x35 0x00 0x00 0x00		Number of components: 0x00000035 = 53 in decimal Total data length: 53 Components * 1 Byte/Component = 53 Bytes -> Longer than 4 Bytes -> Next 4 Bytes contain offset to actual Data (starting at TIFF header address)
0x0012 0x0013 0x0014 0x0015	0x1a 0x00 0x00 0x00		Offset to data Or data itself if Components * Byte/Component <= 4 Bytes
0x0016 0x0017 0x0018 0x0019	0x00 0x00 0x00 0x00		Link (=Offset) to next IFD (that is NOT a SubIFD!) - this 4 byte field follows after last IFD entry (SubIFD offsets are notated using special tags). If the link is 0x00000000 (like here) it means that this is the last IFD and no other linked IFD exists
0x001a 0x001b 0x001c 0x001d 0x001e 0x001f 0x0020 0x0021 0x0022 ... 0x0049 0x004a 0x004b 0x004c 0x004d 0x004e 0x004f	0x2d 0x77 0x20 0x32 NEWLINE 0x20 0x2d 0x68 0x20 0x31 ... 0x20 0x2d 0x63 0x20 0x31 0x00 0x00	- w SPACE 2 SPACE - h SPACE 1 SPACE - c SPACE 1	The actual ImageDescription data For some reason every 36th byte is a NEWLINE ? But that does not seem important to readers So they are not written by little-exif (more ImageDescription data here) End of ImageDescription String End of offset (?)