
Subject: 16 bit Tiff image

Posted by [Stefano Scardigli](#) on Wed, 27 Feb 2008 18:51:17 GMT

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Hi all,

I'm new in using IDL and I'm using an old version too.
I have a strange problem in writing 16 bit TIFF files

this is the dump of my problem (I omitted the unuseful rows):

```
IDL Version 5.1 (OSF alpha). Research Systems, Inc.
```

```
IDL> img=read_tiff("V13A5.00.tif",/unsigned)
```

```
IDL> help,img
```

```
IMG      LONG      = Array[1000, 1000]
```

```
IDL> print,max(img)
```

```
65535
```

```
IDL> write_tiff,"prova.tiff",img
```

```
IDL> print,max(img)
```

```
255
```

```
IDL> img2=read_tiff("prova.tiff",/unsigned)
```

```
IDL> print,max(img2)
```

```
255
```

```
IDL> help,img
```

```
IMG      BYTE      = Array[1000, 1000]
```

```
IDL> help,img2
```

```
IMG2     BYTE      = Array[1000, 1000]
```

```
IDL>
```

as you can see the file prova.tiff is a 8 bit image and also the array img is changed from LONG to BYTE. I tried all the parameter of the write_tiff procedure, but nothing change

many thanks to who will help me

Stefano Scardigli

Subject: Re: 16 bit Tiff image

Posted by [Spon](#) on Fri, 29 Feb 2008 10:09:35 GMT

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On Feb 29, 7:34 am, Stefano Scardigli <s.scardi...@libero.it> wrote:

> what a mess =:-O

>

> I'm on IDL 5.1 and I'm working on a remote server via ssh.

>

> I haven't QUERY_TIFF

> I haven't SWAP_ENDIAN_INPLACE
>

I think TIFF_DUMP was QUERY_TIFF's unwieldy predecessor. Perhaps you have that, and can use the Offset information to open at least the image within the file with OPENR / FSTAT / READU, reform the input manually and use REVERSE instead of SWAP_ENDIAN?

I think all these features are likely to predate 5.0

Best of luck,
Chris

Subject: Re: 16 bit Tiff image
Posted by [Stefano Scardigli](#) on Sun, 02 Mar 2008 10:56:14 GMT
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Okay, it seems i have some problem with the original tiff:

```
IDL> tiff_dump,"Alexa555p81.h00.tif"
% Compiled module: TIFF_DUMP.
Tiff File: byte order=II, Version = 42
23 directory entries
*** NewSubfileType, tag = 254, Long, Count = 1
0
*** ImageWidth, tag = 256, Long, Count = 1
1978
*** ImageLength, tag = 257, Long, Count = 1
5761
*** BitsPerSample, tag = 258, Short, Count = 1
16
*** Compression, tag = 259, Short, Count = 1
1
*** PhotometricInterpretation, tag = 262, Short, Count = 1
1
*** ImageDescription, tag = 270, Ascii, Count = 555
% Subscript range values must be >= 0, < size: VAL.
% Error occurred at: TIFF_DUMP_FIELD 118 /afs/caspur.it/local/products/
vendor/idl/idl/lib/obsolete/tiff_dump.pro
% TIFF_DUMP 219 /afs/caspur.it/local/products/
vendor/idl/idl/lib/obsolete/tiff_dump.pro
% $MAIN$
% Execution halted at: TIFF_DUMP 219 /afs/caspur.it/local/
products/vendor/idl/idl/lib/obsolete/tiff_dump.pro
IDL>
```

//// but I can read it anyway ////

```

IDL> img=read_tiff("Alexa555p81.h00.tif",/unsigned)
IDL> help, img
IMG      LONG      = Array[1978, 5761]
IDL> print,max(img)
    65535
IDL>

IDL> write_tiff,"prova.tif",fix(img),/LONG
IDL> help,img
IMG      LONG      = Array[1978, 5761]
IDL> print,max(img)
    65535
IDL> tiff_dump,"prova.tif"
Tiff File: byte order=II, Version =    42
    14 directory entries
*** NewSubfileType, tag =    254, Long, Count =    1
    0
*** ImageWidth, tag =    256, Long, Count =    1
    1978
*** ImageLength, tag =    257, Long, Count =    1
    5761
*** BitsPerSample, tag =    258, Short, Count =    1
    32
*** Compression, tag =    259, Short, Count =    1
    1
*** PhotometricInterpretation, tag =    262, Short, Count =    1
    1
*** StripOffsets, tag =    273, Long, Count =    1
    8
*** Orientation, tag =    274, Short, Count =    1
    4
*** SamplesPerPixel, tag =    277, Short, Count =    1
    1
*** RowsPerStrip, tag =    278, Long, Count =    1
    5761
*** StripByteCounts, tag =    279, Long, Count =    1
    45581032
*** XResol, tag =    282, Rational, Count =    1
    100.000
*** Yresol, tag =    283, Rational, Count =    1
    100.000
*** PlanarConfiguration, tag =    284, Short, Count =    1
    1
IDL>

```

and the resulting file seems to have less problems but I can not understand the meaning of these tag and the result is the same with

different images.

```
IDL> img2=read_tiff("prova.tif",/UNSIGNED)
IDL> help, img2
IMG2      LONG      = Array[1978, 5761]
IDL> print,max(img2)
      255
IDL>
```

On Fri, 29 Feb 2008 02:09:35 -0800, Spon wrote:

```
> On Feb 29, 7:34 am, Stefano Scardigli <s.scardi...@libero.it> wrote:
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