
Subject: Tiff images with "short" Palette?

Posted by [Matt\[2\]](#) on Tue, 07 Dec 2010 19:50:05 GMT

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So I'm really creating these great geotiffs in IDL, but I'm having problems with the palettes that are attached.

I think I've boiled my problem down to the way I'm making my tif files. For the sake of argument, I am creating the tif with a 2 element color palette, but IDL appears to be creating a 255 color palette in the background and storing a bunch of information that I don't want. Here's some sample code of exactly what I'm doing.

Does anyone know of a way to get around this problem?

```
pro geotiff_problem
  compile_opt idl2, logical_predicate

  device, decomposed = 0
  ;; Load a rainbow.
  loadct, 34

  ;; Set 0 and 1 to black and white
  red = [ 0, 255 ]
  green = [ 0, 255 ]
  blue = [ 0, 255 ]
  tvlct, red, green, blue

  file = FILEPATH( SUBDIR = [ 'examples', 'data' ], 'worldelv.dat' )
  data = BYTARR( 360, 360 )
  OPENR, lun, file, /GET_LUN
  READU, lun, data
  FREE_LUN, lun

  ;; create a mask of 0/1 of rough outlines of coasts.
  mask = (data gt 126)

  ;; Write a tif with 2 colors.
  write_tiff, 'sample.tif', mask, red = red, $
    green = green, blue = blue
  ;; Read a tif of 255 colors
  tif = read_tiff( 'sample.tif', red_out, blue_out, green_out )
  help, red_out

end
```

Subject: Re: Tiff images with "short" Palette?
Posted by [Matt\[2\]](#) on Wed, 08 Dec 2010 15:03:37 GMT
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> From a *quick* read of <http://partners.adobe.com/public/developer/en/tiff/TIFF6.pdf>, it would appear that it's more a limitation of IDL, and
> depending on which section of the spec you read it might be partially a
> limitation of the spec, which at one point defines the size of the color
> table as $3 \cdot 2^{\text{BitsPerSample}}$ (seems to say you can have whatever size table
> you'd like), but in another section (specifically talking about grey scale
> images) says that BitsPerSample can either be 4 or 8 and somewhere says
> that the default for BitsPerSample is 1 (which is neither 4 nor 8 :-)

You found the same parts of the spec that I did.

> At this point, I'd point the "flying fickle finger of fault" mostly in the
> direction of IDL.

And came to the same conclusion that I did also. I put in a support request. Let's see what happens.

Thanks everyone.

Matt
