Subject: problem with writing a 2D image .tiff
Posted by aleks.franca@gmail.co on Wed, 18 Apr 2007 12:54:23 GMT
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Hy
My code reads a 2D tiff image and I create a colortable with 6 levels.
It works fine, and I can visualize the result image, but I'm having a
hard time trying to write the image to my computer.

```
;Code:
;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;
image = read_tiff('myImagePath\myImage.tiff'))

device, decompose = 0

colorLevels = [ [0  , 0  , 0  ], $
                [0  , 0  , 255], $
                [51 , 194, 255], $
                [182, 255, 143], $
                [255, 200, 0  ], $
                [255, 0  , 0  ]  ]

numOfLevel = CEIL(!D.TABLE_SIZE/6.)
level = INDGEN(!D.TABLE_SIZE)/numOfLevel

newRed = colorLevels[0, Nivel]
newGreen = colorLevels[1, Nivel]
newBlue = colorLevels[2, Nivel]

TVLCT, newRed, newGreen, newBlue

x = 900
y = 600

;;Visualize result image
image = CONGRID(image, x, y)

WINDOW, 0, xSize = x, ySize = y

TVSCL, image, /order

;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;
```

This first part works fine. The problem is below, when I try to write
the result image

```
;;;;;;;;
```

```
;;;;;;;;using write_tif
:::::::::
;;;;;;;;
;;_______TIF
newRed = reform(newRed)
newGreen = reform(newGreen)
newBlue = reform(newBlue)

Write_tiff, 'C:\IDL\tests\mytif.tif', image, $
   RED=newred,GREEN=newgreen,BLUE=newblue
:::::::::
;;;;;;;;
;;;;;;;;I've also tried using write_Jpeg
:::::::::
;;;;;;;;
;_______JPEG
array = bytarr(3,x,y)
array[0,*,*] = newred[image]
array[1,*,*] = newgreen[image]
array[2,*,*] = newblue[image]

Write_jpeg, 'C:\IDL\tests\myimage.jpg',array, TRUE = 1

 ::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::: ::::::::::::::::
 ;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;; ;;;;;;;;;;;;;;;;
```

Does anyone have any idea whats wrong? I'm sure its very easy problem
to treat, but I'm stuck on this problem for 1 week.

Thank you
Aleksander

Subject: Re: problem with writing a 2D image .tiff
Posted by David Fanning on Thu, 19 Apr 2007 02:08:30 GMT
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aleks.franca@gmail.com writes:

> I forgot to say that I can't visualize my image after I write it to
> disk using write_tiff or write_jpeg.
> Sorry.

Well, why not? You tried....what? It it looked like...what?

Cheers,

David
--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: problem with writing a 2D image .tiff
Posted by aleks.franca@gmail.co on Thu, 19 Apr 2007 19:52:31 GMT
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On 18 abr, 23:08, David Fanning <n...@dfanning.com> wrote:
> aleks.fra...@gmail.com writes:
>> I forgot to say that I can't visualize my image after I write it to
>> disk using write_tiff or write_jpeg.
>> Sorry.
>
> Well, why not? You tried....what? It it looked like...what?
>
> Cheers,
>
> David
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming:http://www.dfanning.com/
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

I have a geotif image. After a use Write_jpeg, ow Write_tiff, as
showed above, the image appears all black. That happens when I open it
with a Windows software. With Envi I can visualize my image, but
that's not interesting for me.

Subject: Re: problem with writing a 2D image .tiff
Posted by David Fanning on Thu, 19 Apr 2007 21:17:59 GMT
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aleks.franca@gmail.com writes:

> I have a geotif image. After a use Write_jpeg, ow Write_tiff, as
> showed above, the image appears all black. That happens when I open it
> with a Windows software. With Envi I can visualize my image, but
> that's not interesting for me.

Well, I don't know. It is hard to debug a secret process.

Have you tried writing your image with TVREAD? I've never known
that NOT to work.

http://www.dfanning.con/programs/tvread.pro

Cheers,

David
--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: problem with writing a 2D image .tiff
Posted by Jeff N. on Fri, 20 Apr 2007 15:09:41 GMT
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Try opening one of the tif or jpg files you created with your code in envi. Using the cursor location/value tool you can see the pixel values stored in the image. Are they what you expect? If they're all zero's, that's why your image is black. In your original code, what are you storing in the variable Nivel?

Subject: Re: problem with writing a 2D image .tiff
Posted by Jeff N. on Fri, 20 Apr 2007 15:26:23 GMT
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I used your code, changing the input file to the 'image.tif' file in the examples\data folder, and got decent tif and jpg files. I also changed the variable "Nivel" to "level" in your code. The tif and jpg files weren't exactly like what was displayed on screen - the color levels were different, but they at least were not black like what you were getting.

Jeff

Subject: Re: problem with writing a 2D image .tiff
Posted by aleks.franca@gmail.co on Thu, 03 May 2007 16:58:28 GMT
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On 20 abr, 12:26, "Jeff N." <jnett...@utk.edu> wrote:
> I used your code, changing the input file to the 'image.tif' file in
> the examples\data folder, and got decent tif and jpg files. I also
> changed the variable "Nivel" to "level" in your code. The tif and jpg
> files weren't exactly like what was displayed on screen - the color
> levels were different, but they at least were not black like what you
> were getting.

>
> Jeff

ok. I have the solution to my problem. I work with grayscale images
and they have only 6 diferent pixel values. From 0 to 6. I can
visualize the image because I created a 6-level-colortable to
visualize, but when I save it, I cannot see the image because the
pixel values are very low.
To save it the way I can actually see the image I have to use the
command:

image = bytscl(image)

Now I'm confused. Why did that work?

Thank you!

Subject: Re: problem with writing a 2D image .tiff
Posted by David Fanning on Thu, 03 May 2007 17:09:55 GMT
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aleks.franca@gmail.com writes:

> ok. I have the solution to my problem. I work with grayscale images
> and they have only 6 diferent pixel values. From 0 to 6. I can
> visualize the image because I created a 6-level-colortable to
> visualize, but when I save it, I cannot see the image because the
> pixel values are very low.
> To save it the way I can actually see the image I have to use the
> command:
>
> image = bytscl(image)
>
> Now I'm confused. Why did that work?

Because now your values are not 0-5, they are this:

```
IDL> Print, Bytscl(Indgen(6))
     0  51 102 153 204 255
```

And these values show up in the color table you are
using. But this is NOT what you want to do.

What you WANT to do, is load the six colors you are
using to display your image, and scale your image
into those six colors. Something like this:

```
LoadCT, 33, NCOLORS=6, BOTTOM=1
TV, BytScl(image, TOP=5) + 1B
```

In general, if you care about colors (and who doesn't!?),
then you should forget you ever heard about TVSCL. :-)

Cheers,

David
--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")
