
Subject: Re: Why does color change to b/w when using PNG?

Posted by [andrew.cool](#) on Wed, 17 Mar 2004 03:01:29 GMT

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bleau@UMTOF.UMD.EDU (Lawrence Bleau) wrote in message

news:<c380s1\$3hb\$1@grapevine.wam.umd.edu>...

> I'm running IDL 5.4 on OpenVMS 7.1-2 and am trying to do some plots.

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> Previously, we were using the ps device (SET_PLOT,'PS') and generating

> PostScript files for each plot. We now want to generate PNG files as well.

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> So, what's different between these two plot types (PS vs. PNG) that would

> cause the same code to produce different results? TIA.

>

> Lawrence Bleau

> University of Maryland

> Physics Dept., Space Physics Group

> 301-405-6223

> bleau@umtof.umd.edu

Wouldn't WRITE_PNG do the job for you?? Along with the R,G,B parameters.

Andrew Cool

DSTO, Adelaide, South Australia

Subject: Re: Why does color change to b/w when using PNG?

Posted by [bleau](#) on Wed, 17 Mar 2004 17:56:06 GMT

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In article <c6d70400.0403161901.71f0d9b8@posting.google.com>,

andrew.cool@dsto.defence.gov.au (Andrew Cool) writes:

[snip]

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>> cause the same code to produce different results? TIA.

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> Wouldn't WRITE_PNG do the job for you?? Along with the R,G,B parameters.

I already use WRITE_PNG, after I call TVRD(). I just don't pass WRITE_PNG the R,G,B parameters, and use the ones in the color table instead.

Do you know of a reason using TVLCT would not work for PNG files, and that one might be required to call WRITE_PNG with R,G,B explicitly?

I will, however, try this and get back to you.

Lawrence Bleau
University of Maryland
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bleau@umtof.umd.edu

Subject: Re: Why does color change to b/w when using PNG?

Posted by [bleau](#) on Wed, 17 Mar 2004 19:51:07 GMT

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In article <c6d70400.0403161901.71f0d9b8@posting.google.com>, andrew.cool@dsto.defence.gov.au (Andrew Cool) writes:

> bleau@UMTOF.UMD.EDU (Lawrence Bleau) wrote in message news:<c380s1\$3hb\$1@grapevine.wam.umd.edu>...

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> Wouldn't WRITE_PNG do the job for you?? Along with the R,G,B parameters.

Thanks for the tip, Andrew. I specified the r,g,b arguments and it wrote out the color table as well as the image. Now I have a color image. That's the good news. Now for the bad.

The plot looks absolutely horrible! This is by comparison with the PS plot made earlier. Something is seriously wrong here. To see what I mean, take a look at

http://uleis.umd.edu/~bleau/ULEIS_2004_001_2004_005.PNG;4

It should look something like

http://uleis.umd.edu/docs/desai/GIFS/ULEIS_2004_001_2004_005.GIF

In the PNG plot, the y-axis is way too short, the y-axis label runs the wrong direction, the labelling near the top is scrunched together, and not all of the data gets plotted (bottom plot missing).

Something is seriously different when using PNG vs. PS but using the exact same plotting commands. Has anyone had experience with PNG?

As another test, I decided to write out a JPEG format as well. I just added a call to WRITE_JPEG; see
http://uleis.umd.edu/~bleau/ULEIS_2004_001_2004_005.JPG;1
This one, however, is completely black! It's like all color table entries are 0s. The call to TVLCT is still there.

Could it be that TVLCT fails miserably with JPEG and PNG images, even though it works with PS and GIF? If I can get the color table working with the JPEG image I can then troubleshoot problems with the Z device vs. problems with PNG per se.

So, I have two problems: major problem is poor plotting with PNG, minor problem is how to get colors on a JPEG image (why TVLCT fails). TIA.

Lawrence Bleau
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Subject: Re: Why does color change to b/w when using PNG?
Posted by [Paul Van Delst\[1\]](#) on Wed, 17 Mar 2004 20:15:05 GMT
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Lawrence Bleau wrote:

```
> In article <c6d70400.0403161901.71f0d9b8@posting.google.com>,
andrew.cool@dsto.defence.gov.au (Andrew Cool) writes:
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Hello,

This probably won't solve your problem since you're running on an OpenVMS system, but I have **never** found any way to make anything but PS output in IDL look good. To get around this, I always create PS files and then, using the ImageMagick utilities that come bundled with Red Hat linux, simply convert it to a gif file,

```
convert idl.ps idl.gif
```

The gif output is way better than direct png/gif/jpeg writes. And you don't have to output gifs. Convert supports a crapload of file types.

I don't have plots anywhere near as fancy as yours, but you can see some examples at:

http://airs3.ssec.wisc.edu/~paulv/Fortran90/Emissivity/Sensor_Emissivity_Model/

Depending on what I'm doing, I either create the gif's by hand or invoke "convert" via SPAWN in my IDL code.

On a whim, I went to the imagemagick site, <http://www.imagemagick.org>, and clicking on "downloads" I saw a link to installation instructions for VMS:

<http://www.imagemagick.org/www/Install-vms.html>

paulv

p.s. This won't work if you want to do the surface overlay thingo detailed at http://www.sljus.lu.se/stm/IDL/Surf_Tips/ though.