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Subject: Re: unwanted color bands in image display  
Posted by [David Fanning](#) on Fri, 28 Jun 2002 20:34:43 GMT  
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Asti Bhatt (astib@cc.usu.edu) writes:

> When I try to display image with TV or TVSCL, or for that matter,  
> store as a PS and then view it, it always shows annoying color bands  
> or lines in the image. These bands are generally red or blue,  
> depending on the monitor properties I guess. I tried to use, device,  
> decomposed=0, but that doesn't make any difference. I am quite  
> frustrated with this thing, and hence I like to use LIVE TOOLS instead  
> of TV things, but they have limited capabilities. Any suggestions for  
> removing these color bands ?

I'm going to go way out on the limb and guess operator error. The TV command is pretty well tested in IDL. I doubt it is putting red and blue bands in your image. :-)

Tell us a bit more about your image. Is it byte data? 8-bit or 24-bit? Did you scale the data yourself? How did you do it? How did you configure your device before you displayed the data? Did you load a color table just before you displayed the data? Are you sure red and blue are not part of your color table? How did you determine this? Etc.

Have you tried something like TVIMAGE or IMDISP to display your image? Sometimes getting everything set up just right can be a bit of a pain.

Cheers,

David

--

David W. Fanning, Ph.D.  
Fanning Software Consulting, Inc.  
Phone: 970-221-0438, E-mail: [david@dfanning.com](mailto:david@dfanning.com)  
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>  
Toll-Free IDL Book Orders: 1-888-461-0155

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Subject: Re: unwanted color bands in image display  
Posted by [Liam E. Gumley](#) on Fri, 28 Jun 2002 21:07:21 GMT  
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Asti Bhatt wrote:

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> frustrated with this thing, and hence I like to use LIVE TOOLS instead  
> of TV things, but they have limited capabilities. Any suggestions for  
> removing these color bands ?

Are you running IDL 5.5 on Linux, Solaris X86 or Tru64 UNIX with a  
24-bit TrueColor OR 24-bit DirectColor visual class? If so, read this:

[http://www.rsinc.com/services/output.cfm?tip\\_id=3257](http://www.rsinc.com/services/output.cfm?tip_id=3257)

Cheers,  
Liam.  
Practical IDL Programming  
<http://www.gumley.com/>

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Subject: Re: unwanted color bands in image display  
Posted by [Craig Markwardt](#) on Fri, 28 Jun 2002 21:09:50 GMT  
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David Fanning <david@dfanning.com> writes:

> Asti Bhatt (astib@cc.usu.edu) writes:  
>  
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>> removing these color bands ?  
...  
> Have you tried something like TVIMAGE or IMDISP to display  
> your image? Sometimes getting everything set up just right  
> can be a bit of a pain.

Man, has my own dear PLOTIMAGE dropped off the radar screen? (sniff)

Getting to Asti's question, I remember that there was a bug in one  
recent version of IDL's Linux graphics libraries which caused annoying  
banding. If that is the case, then there should be a patch  
downloadable from the RSI page that fixes the problem.

Craig

<http://cow.physics.wisc.edu/~craigm/idl/idl.html> (under Graphics)

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Craig B. Markwardt, Ph.D.      EMAIL:    craigmnet@cow.physics.wisc.edu  
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response  
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Subject: Re: unwanted color bands in image display  
Posted by [David Fanning](#) on Fri, 28 Jun 2002 21:37:36 GMT  
[View Forum Message](#) <> [Reply to Message](#)

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Craig Markwardt (craigmnet@cow.physics.wisc.edu) writes:

> Man, has my own dear PLOTIMAGE dropped off the radar screen? (sniff)

That "PLOT" part of the name has the wrong connotations for me and gets stored in another part of my brain. Have you thought about renaming this CM\_IMAGE?

Cheers,

David

--

David W. Fanning, Ph.D.  
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Subject: Re: unwanted color bands in image display  
Posted by [Craig Markwardt](#) on Fri, 28 Jun 2002 21:52:51 GMT  
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David Fanning <[david@dfanning.com](mailto:david@dfanning.com)> writes:

> Craig Markwardt (craigmnet@cow.physics.wisc.edu) writes:

>

>> Man, has my own dear PLOTIMAGE dropped off the radar screen? (sniff)

>

> That "PLOT" part of the name has the wrong connotations for

> me and gets stored in another part of my brain. Have you  
> thought about renaming this CM\_IMAGE?

Hmm, but that's the point, it works like any other plotting command. [  
for setting things like X and Y axes, etc. ]

How about, just for JD, CM\_PLOTIMAGE? :-)

Craig

--

-----  
Craig B. Markwardt, Ph.D.      EMAIL:    craigmnet@cow.physics.wisc.edu  
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response  
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Subject: Re: unwanted color bands in image display  
Posted by [astib](#) on Wed, 03 Jul 2002 17:57:13 GMT  
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Hi,

Thanks for the replies. I have faced this problem both on Linux/Unix  
Sun machines and Macintosh. Thanks Liam for suggesting patch for  
Linux.

In the code color table is loaded after "SET\_PLOT". This is the data  
converted to ASCII format from binary files and then plotted in  
different plots. But this problem is only in TV,TVSCL and viewing PS  
files made with the code. The lines/bands colors are not constant,  
although red is prominent. The graphics part of the code is -

CASE outtype(plotype-1) OF

```
'BWPS' : BEGIN
  SET_PLOT,'PS'
  fileN = 'psfile'
  fn = 'B&WVec'+fileN+'.ps'
  DEVICE, /COLOR, BITS=8, filename=fn, /landscape, YOFFSET=26.5, $
    YSIZE=19.0, XSIZE=24.0, /HELVETICA, /BOLD, bits_per_pixel =
8
  END
```

```
'COLRPS' : BEGIN
```

```
  SET_PLOT,'PS'
  fn = ''
  read,fn,prompt='Enter name of output file:'
  device, /portrait,/color,bits=8,xoffset=2.,yoffset=2.,
```

```
$
  xsize=17.,ysize=25.,file=fn
END

'SCR' : BEGIN
  PRINT, ' Screen plot'
  SET_PLOT,'MAC'
  LOADCT,25 ; 25=MAC, 2=G R BI Wh
  WINDOW, colors=16, Title='IDI Winds', xsize=760, ysize=520
  TVLCT, [0,255,0,0], [0,0,255,0], [0,0,0,255]
END
```

Again, this is somebody else's code. But I have noticed this behaviour earlier also. I was using an IDL program called SIS\_Browser. There I encountered this thing for first time, and I thought they are part of the data ! Then I used TV procedures in my code and got similar red bands, so I gave up and used LIVE TOOLS instead. I think it has to do with which color table I load, because bands change color sometimes if I change color table. Any suggestions ?

Thanks a lot,  
Asti

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Subject: Re: unwanted color bands in image display  
Posted by [David Fanning](#) on Wed, 03 Jul 2002 18:21:32 GMT  
[View Forum Message](#) <> [Reply to Message](#)

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Asti Bhatt (astib@cc.usu.edu) writes:

> Again, this is somebody else's code. But I have noticed this  
> behaviour earlier also. I was using an IDL program called SIS\_Browser.  
> There I encountered this thing for first time, and I thought they are  
> part of the data ! Then I used TV procedures in my code and got  
> similar red bands, so I gave up and used LIVE TOOLS instead. I think  
> it has to do with which color table I load, because bands change color  
> sometimes if I change color table. Any suggestions ?

I'm going to split and double my bet. Hit me!

Cheers,

David

--  
David W. Fanning, Ph.D.  
Fanning Software Consulting, Inc.  
Phone: 970-221-0438, E-mail: [david@dfanning.com](mailto:david@dfanning.com)

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Subject: Re: unwanted color bands in image display  
Posted by [JD Smith](#) on Mon, 22 Jul 2002 18:59:37 GMT  
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On Fri, 28 Jun 2002 14:52:51 -0700, Craig Markwardt wrote:

```
> David Fanning <david@dfanning.com> writes:
>
>> Craig Markwardt (craigmnet@cow.physics.wisc.edu) writes:
>>
>>> Man, has my own dear PLOTIMAGE dropped off the radar screen? (sniff)
>>
>> That "PLOT" part of the name has the wrong connotations for me and gets
>> stored in another part of my brain. Have you thought about renaming
>> this CM_IMAGE?
>
> Hmm, but that's the point, it works like any other plotting command. [
> for setting things like X and Y axes, etc. ]
>
> How about, just for JD, CM_PLOTIMAGE? :-)
>
```

How about:

```
THIS_IS_CRAIG_MARKWARDTS_SPECIAL_PLOT_IMAGE_TOOL_AND_DONT_YO
U_THINK_ANYTHING_DIFFERENT
```

I'm sure you could defend this in the name of not polluting the name  
space ;)

JD

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