
Subject: color plot in postscript

Posted by [matteo86bo](#) on Tue, 17 Mar 2009 13:48:58 GMT

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hi everyone!

It is possible to have a color plot in ps format?

```
set_plot, 'PS'
```

```
device,file='fig5.ps',/color,bits_per_pixel=8
```

```
loadct=13
```

```
plot, ....., linestyle=0,color='50'
```

this code doesn't work ... any suggestions?

Subject: Re: color plot in postscript

Posted by [David Fanning](#) on Thu, 19 Mar 2009 13:55:40 GMT

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matteo86bo writes:

```
> ah, thank you very much! this works!  
> anyway all the plot is colored... how can I color only the line and  
> not the axis?
```

```
Plot, data, Color=FSC_Color('navy'), /NoData
```

```
Oplot, data, Color=FSC_Color('red')
```

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

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Subject: Re: color plot in postscript

Posted by [Jeremy Bailin](#) on Fri, 20 Mar 2009 11:37:04 GMT

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On Mar 19, 9:55 am, David Fanning <n...@dfanning.com> wrote:

```
> matteo86bo writes:
```

```
>> ah, thank you very much! this works!
```

```
>> anyway all the plot is colored... how can I color only the line and
>> not the axis?
>
> Plot, data, Color=FSC_Color('navy'), /NoData
> Oplot, data, Color=FSC_Color('red')
>
> Cheers,
>
> David
>
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
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```

That's actually my single biggest pet peeve about the plot command. Surely there could be a keyword like "axiscolor" or something to separately specify the colour of the axes+labels from the color of the plotted data. Every time I do that two-command version I grumble.

"But Jeremy, why don't you just write your own wrapper that does that?"

Good question... I sense a new addition to JBIU coming. ;-)

-Jeremy.

Subject: Re: color plot in postscript
Posted by [David Fanning](#) on Fri, 20 Mar 2009 12:47:03 GMT
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Jeremy Bailin writes:

```
> That's actually my single biggest pet peeve about the plot command.
> Surely there could be a keyword like "axiscolor" or something to
> separately specify the colour of the axes+labels from the color of the
> plotted data. Every time I do that two-command version I grumble.
>
> "But Jeremy, why don't you just write your own wrapper that does
> that?"
>
> Good question... I sense a new addition to JBIU coming. ;-)
```

It is truly amazing with what we put up with sometimes.
But, writing the wrapper would irritate me even more.
Why am I supporting this stupid color index way of

specifying color when I don't use it anymore, ever,
unless under duress and because IDL forces me to?

When I write programs that use color, I want to use
names of colors, not some color index that means
nothing to me or to any of my users when they read
the code. I used to think I was trying to impose my
own person belief system on users when I made them
use a color name rather than a color index. But then
I thought, hell, just because I'm too old to care
about offending someone doesn't mean I'm not right
about it. ;-)

Cheers,

David

P.S. When you write this wrapper think long and
hard about whether this keyword is going to be
AXISCOLOR or AXESCOLOR, because no matter which
you choose, you are going to lose sleep over it. :-)

--

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Subject: Re: color plot in postscript

Posted by [David Fanning](#) on Fri, 20 Mar 2009 12:52:10 GMT

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David Fanning writes:

> P.S. When you write this wrapper think long and
> hard about whether this keyword is going to be
> AXISCOLOR or AXESCOLOR, because no matter which
> you choose, you are going to lose sleep over it. :-)

And, by the way, since you are going to the trouble,
could you PLEASE make the background color white by
default, so we don't have to turn upside down to
make a PostScript file? Thank you. ;-)

Cheers,

David

--

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Subject: Re: color plot in postscript
Posted by [David Klassen](#) on Fri, 20 Mar 2009 13:22:19 GMT
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On Mar 20, 8:47 am, David Fanning <n...@dfanning.com> wrote:

>
> It is truly amazing with what we put up with sometimes.
> But, writing the wrapper would irritate me even more.
> Why am I supporting this stupid color index way of
> specifying color when I don't use it anymore, ever,
> unless under duress and because IDL forces me to?

Well, to play devil's advocate here, using a color index is good
for doing multiple plots of differing colors.

```
plot, x, y[0,*], /nodata  
for i=1,7 do oplot x, y[i,*], color=i
```

Of course, I realize one could do
 clrvec=['Red','Blue','Green',...]
and then use
 for i=1,7 do oplot x, y[i,*], color=clrvec[i]
to get the same result.

Subject: Re: color plot in postscript
Posted by [David Fanning](#) on Fri, 20 Mar 2009 13:26:13 GMT
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Dave Klassen writes:

> Well, to play devil's advocate here, using a color index is good
> for doing multiple plots of differing colors.
> plot, x, y[0,*], /nodata
> for i=3D1,7 do oplot x, y[i,*], color=3Di
>
> Of course, I realize one could do
> clrvec=3D['Red','Blue','Green',...]
> and then use
> for i=3D1,7 do oplot x, y[i,*], color=3Dclrvec[i]
> to get the same result.

And I wouldn't be surprised to find some of the color tools I've built would allow you to do just that. :-)

Cheers,

David

--

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Subject: Re: color plot in postscript

Posted by [Vince Hradil](#) on Fri, 20 Mar 2009 13:58:24 GMT

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On Mar 20, 8:22 am, Dave Klassen <klas...@rowan.edu> wrote:

> On Mar 20, 8:47 am, David Fanning <n...@dfanning.com> wrote:

>

>

>

>> It is truly amazing with what we put up with sometimes.

>> But, writing the wrapper would irritate me even more.

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>> specifying color when I don't use it anymore, ever,

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>

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> and then use

> for i=1,7 do oplot x, y[i,*], color=clrvec[i]

> to get the same result.

I ran into this just last week. I wanted to use David's histoplot to have a "polyfilled" histogram, and I wanted the histogram to be shaded the same as the color image I was histogramming. <http://yfrog.com/0erc3191c5p> I tried to set the polycolor keyword to, say, lindgen(256), but alas it wanted names. I ended up writing it myself - but I did alter histoplot.pro to check if polycolor is a string type or not. If it is a string (or string array), I let it call fsc_color(), otherwise I use

the index.

Subject: Re: color plot in postscript
Posted by [David Fanning](#) on Fri, 20 Mar 2009 14:14:57 GMT
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Vince Hradil writes:

> I ran into this just last week. I wanted to use David's histoplot to
> have a "polyfilled" histogram, and I wanted the histogram to be shaded
> the same as the color image I was histogramming. <http://yfrog.com/0erc3191=c5p>
> I tried to set the polycolor keyword to, say, lindgen(256), but alas
> it wanted names. I ended up writing it myself - but I did alter
> histoplot.pro to check if polycolor is a string type or not. If it is
> a string (or string array), I let it call fsc_color(), otherwise I use
> the index.

Well, OK, here is an excellent counter-argument to my
general color philosophy. :-)

Over the weekend, though, I went to the trouble of
accommodating EVERYONE's way of specifying color
in my discrete color bar program. (Still haven't
seen that check, Vince!) That may be the last time
I try to do that. If you want to do it the old
way, as Vince proves, two lines of code and you
are back in business.

Although I am pretty sure Vince is not allowing for
the fact that you have to know what device you are
on, etc., if you are going to use indexed color
successfully everywhere. It is this last part that
creates nightmares for code developers. If I were
writing code only for my own use, life would be a
LOT simpler. :-)

Cheers,

David

--

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Subject: Re: color plot in postscript
Posted by [Vince Hradil](#) on Fri, 20 Mar 2009 14:59:54 GMT
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On Mar 20, 9:14 am, David Fanning <n...@dfanning.com> wrote:

- > Although I am pretty sure Vince is not allowing for
- > the fact that you have to know what device you are
- > on, etc., if you are going to use indexed color
- > successfully everywhere.

True -

- > It is this last part that
- > creates nightmares for code developers. If I were
- > writing code only for my own use, life would be a
- > LOT simpler. :-)

It is. ;^)

Subject: Re: color plot in postscript
Posted by [Jeremy Bailin](#) on Sat, 21 Mar 2009 14:00:41 GMT
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On Mar 20, 8:47 am, David Fanning <n...@dfanning.com> wrote:

- > Jeremy Bailin writes:
- >> That's actually my single biggest pet peeve about the plot command.
- >> Surely there could be a keyword like "axiscolor" or something to
- >> separately specify the colour of the axes+labels from the color of the
- >> plotted data. Every time I do that two-command version I grumble.
- >
- >> "But Jeremy, why don't you just write your own wrapper that does
- >> that?"
- >
- >> Good question... I sense a new addition to JBIU coming. ;-)
- >
- > It is truly amazing with what we put up with sometimes.
- > But, writing the wrapper would irritate me even more.
- > Why am I supporting this stupid color index way of
- > specifying color when I don't use it anymore, ever,
- > unless under duress and because IDL forces me to?
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- > When I write programs that use color, I want to use
- > *names* of colors, not some color index that means
- > nothing to me or to any of my users when they read
- > the code. I used to think I was trying to impose my
- > own person belief system on users when I made them

> use a color name rather than a color index. But then
> I thought, hell, just because I'm too old to care
> about offending someone doesn't mean I'm not right
> about it. ;-)
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> Cheers,
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> David
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> P.S. When you write this wrapper think long and
> hard about whether this keyword is going to be
> AXISCOLOR or AXESCOLOR, because no matter which
> you choose, you are going to lose sleep over it. :-)
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> David Fanning, Ph.D.
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Damn you... I looked at it and said "AXISCOLOR, of course". Then 5 minutes later I changed my mind, and I've been flipping back and forth since then. ;-)

-Jeremy.

Subject: Re: color plot in postscript
Posted by [Jean H.](#) on Sat, 21 Mar 2009 16:49:09 GMT
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> Damn you... I looked at it and said "AXISCOLOR, of course". Then 5
> minutes later I changed my mind, and I've been flipping back and forth
> since then. ;-)
>
> -Jeremy.

Xcolor and Ycolor (and Zcolor)? if the later is not specified, use the same color for both...

just adding another choice in the decision :-)
Jean

Subject: Re: color plot in postscript
Posted by [Jeremy Bailin](#) on Sun, 22 Mar 2009 13:03:10 GMT
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On Mar 21, 12:49 pm, "Jean H." <jghas...@DELTHIS.ucalgary.ANDTHIS.ca> wrote:

```
>> Damn you... I looked at it and said "AXISCOLOR, of course". Then 5
>> minutes later I changed my mind, and I've been flipping back and forth
>> since then. ;-)
>
>> -Jeremy.
>
> Xcolor and Ycolor (and Zcolor)? if the later is not specified, use the
> same color for both...
>
> just adding another choice in the decision :-)
> Jean
```

In principle, that's definitely the way to go ({X|Y|Z}AXISCOLOR, with a default of AXISCOLOR a la CHAR.SIZE) ... but I'm having trouble picturing a plot where having separate axis colours doesn't look horrible! :-)=

(yes, that's an invitation for everyone to post fantastic figures they've made that do this!)

-Jeremy.

Subject: Re: color plot in postscript
Posted by [David Fanning](#) on Sun, 22 Mar 2009 22:49:47 GMT
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Jeremy Bailin writes:

```
> In principle, that's definitely the way to go ({X|Y|Z}AXISCOLOR, with
> a default of AXISCOLOR a la CHAR.SIZE) ... but I'm having trouble
> picturing a plot where having separate axis colours doesn't look
> horrible! :-)
```

One of the problems with object graphics is that too many choices are available. See the Paradox of Choice by Barry Schwartz for the reasons why:

http://www.dfanning.com/reading/coyote_reading_2007.html

I'd be more than happy if the axes were one color and the data was another. :-)

Cheers,

David

--

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Subject: Re: color plot in postscript
Posted by [David Fanning](#) on Tue, 24 Mar 2009 13:19:35 GMT
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Vince Hradil writes:

> I ran into this just last week. I wanted to use David's histoplot to
> have a "polyfilled" histogram, and I wanted the histogram to be shaded
> the same as the color image I was histogramming. <http://yfrog.com/0erc3191=c5p>
> I tried to set the polycolor keyword to, say, lindgen(256), but alas
> it wanted names. I ended up writing it myself - but I did alter
> histoplot.pro to check if polycolor is a string type or not. If it is
> a string (or string array), I let it call fsc_color(), otherwise I use
> the index.

Yikes! I ran into this situation just yesterday myself, although I solved it in a slightly different way. I modified FSC_COLOR to know the "names" of the colors in the current color table. I gave them the names '0', '1', '2', ..., '255'. Thus, I could specify a range of colors like this:

Histoplot, ..., POLYCOLOR=SIIndgen(10)

Unfortunately, this only really works if I work with color decomposition on (my usual state). I haven't yet figured out how to do this in a completely device-independent way. (Although I just had another idea about it while writing this note.) Stay tuned, I guess. :-)

Cheers,

David

--

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Subject: Re: color plot in postscript
Posted by [David Fanning](#) on Tue, 24 Mar 2009 17:45:22 GMT
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David Fanning writes:

> Unfortunately, this only really works if I work with
> color decomposition on (my usual state). I haven't yet
> figured out how to do this in a completely device-independent
> way. (Although I just had another idea about it while writing
> this note.) Stay tuned, I guess. :-)

OK, FSC_Color has been modified so you can use the
color names '0', '1', '2', ..., '255' to refer to
colors in the current color table in effect when
FSC_Color is called. This makes it easy to use
FSC_Color with colors you load:

```
CTLoad, 25, /Brewer, NCOLORS=10, BOTTOM=1  
colors = StrTrim(Indgen(10)+1, 2)  
Histplot, ..., PolyColor=colors
```

You can find the latest program here:

http://www.dfanning.com/programs/fsc_color.pro

Cheers,

David

--

David Fanning, Ph.D.
Coyote's Guide to IDL Programming (www.dfanning.com)
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