Subject: color plot in postscript

Posted by matteo86bo on Tue, 17 Mar 2009 13:48:58 GMT

View Forum Message <> Reply to Message

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

View Forum Message <> Reply to Message

#### 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/

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

Subject: Re: color plot in postscript

Posted by Jeremy Bailin on Fri, 20 Mar 2009 11:37:04 GMT

View Forum Message <> Reply to Message

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.
> Coyote's Guide to IDL Programming:http://www.dfanning.com/
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")
```

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 View Forum Message <> Reply to Message

## 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 guestion... 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 tying 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. :-)

--

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: color plot in postscript
Posted by David Fanning on Fri, 20 Mar 2009 12:52:10 GMT
View Forum Message <> Reply to Message

## 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

--

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: color plot in postscript
Posted by David Klassen on Fri, 20 Mar 2009 13:22:19 GMT
View Forum Message <> Reply to Message

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
View Forum Message <> Reply to Message

#### 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

--

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: color plot in postscript
Posted by Vince Hradil on Fri, 20 Mar 2009 13:58:24 GMT
View Forum Message <> Reply to Message

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. >> 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.

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

Subject: Re: color plot in postscript
Posted by David Fanning on Fri, 20 Mar 2009 14:14:57 GMT
View Forum Message <> Reply to Message

#### 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=
- > c5r
- > 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

\_\_

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: color plot in postscript Posted by Vince Hradil on Fri, 20 Mar 2009 14:59:54 GMT

View Forum Message <> Reply to Message

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
View Forum Message <> Reply to Message

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?
- >
- > 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 tying 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. :-)

>

> -

- > 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.")

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

View Forum Message <> Reply to Message

- > 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

View Forum Message <> Reply to Message

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 CHARSIZE) ... 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
View Forum Message <> Reply to Message

Jeremy Bailin writes:

- > In principle, that's definitely the way to go ({X|Y|Z}AXISCOLOR, with
- > a default of AXISCOLOR a la CHARSIZE) ... 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

--

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: color plot in postscript
Posted by David Fanning on Tue, 24 Mar 2009 13:19:35 GMT
View Forum Message <> Reply to Message

### 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=SIndgen(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

--

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: color plot in postscript Posted by David Fanning on Tue, 24 Mar 2009 17:45:22 GMT

View Forum Message <> Reply to Message

# 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 used FSC\_Color with colors you load:

CTLoad, 25, /Brewer, NCOLORS=10, BOTTOM=1 colors = StrTrim(Indgen(10)+1, 2) Histoplot, ..., 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)
Sepore ma de ni thui. ("Perhaps thou speakest truth.")