
Subject: Re: Coyote Color Program Updates
Posted by [ph le sager](#) on Sat, 17 May 2008 19:12:27 GMT
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On May 15, 11:24 am, David Fanning <n...@dfanning.com> wrote:

> Folks,
>
> I guess I was feeling ambitious, but I like those Brewer
> Colors so much, I decided to update all my color programs
> to support them. The following programs have been updated:
>
> http://www.dfanning.com/programs/fsc_color.pro
> <http://www.dfanning.com/programs/xcolors.pro>
> <http://www.dfanning.com/programs/pickcolor.pro>
> <http://www.dfanning.com/programs/pickcolorname.pro>
> <http://www.dfanning.com/programs/ctload.pro>
>
> To use Brewer Colors with with XCOLORS or CTLOAD,
> you must either download the brewer.tbl file from
> Mike Galloy's web page, or download the fsc_brewer.tbl
> file from mine. Mine contains only the 256-element color
> tables from Mike's nice file:
>
> http://www.dfanning.com/programs/fsc_brewer.tbl
>
> If you don't have a clue what I am talking about, here
> are some references:
>
> http://www.personal.psu.edu/cab38/ColorBrewer/ColorBrewer_intro.html
> <http://michaelgalloy.com/2007/10/30/colorbrewer.html>
>
> The brewer color table file must be installed in the
> \$IDL_DIR/resource/colors directory, or in the same
> directory containing the color program source code files.
> (More or less.) Other Coyote programs may also be required.
> You can download all the Coyote programs here:
>
> <http://www.dfanning.com/programs/coyoteprograms.zip>
>
> Or, if you never bothered to see how your IDL programming life
> could be significantly improved, you can read all about the
> programs in the Coyote Library here:
>
> <http://www.dfanning.com/documents/programs.html>
>
> 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.")

```

As I noted in a post on Mike blog (<http://michaelgalloy.com/2008/02/21/updated-brewer-color-tables.html>), there is an issue with the diverging color tables. You expect to have the "center" color (like white or yellow) from which the color scheme diverge at index 126-127, but :

"By plotting R,G and B vectors, I found that the diverging tables are centered on 117. First half is index 0-116 and second half is 117-233. They basically saturate after index 233.

So I just load the 256 colors and use only the first 233 colors."

I do not know if you fix it. But I have been using them (like you I like them a lot), and in my program (that uses xcolors!) I used a kludge along these lines:

```

xcolors, NColors=NColors, /Block, $
      File=CtFile, ColorInfo=ColorInfoData, _EXTRA=e
Name = ColorInfoData.Name
Table = ColorInfoData.Index

;-----
; Temporary hack for Brewer diverging tables: they are centered on
; color #117 instead of #125. (phs, 23/4/08)
if strPos(Name, '(Diverging)') ge 0 then begin

; Reload All colors and only keep the good ones
loadct, table, file=ctfile, /SILENT
tv!ct, r, g, b, /get
r = r[0:233]
g = g[0:233]
b = b[0:233]

ncolors = ncolors < 234

; compress to ncolors if needed Ncolors passed by user
if ( !s_NC_defined ) then begin
  R = Congrid( R, NColors, /Minus_One, /Interp, _EXTRA=e )
  G = Congrid( G, NColors, /Minus_One, /Interp, _EXTRA=e )
  B = Congrid( B, NColors, /Minus_One, /Interp, _EXTRA=e )
endif

```

```
endif  
;----- End Hack -----
```

This is particularly important with some values of ncolors.

Cheers, Philippe
