
Subject: Re: HELP - Changing color map in Mac IDL
Posted by [davidf](#) on Tue, 23 May 2000 07:00:00 GMT
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Liam E.Gumley (Liam.Gumley@ssec.wisc.edu) writes:

```
> However consider the following wrappers for TVSCL and XLOADCT in IDL
> 5.3:
>
> PRO TVSCL24, IMAGE, DATA=DATA
> if (n_elements(image) gt 0) then begin
>   tvscl, image
>   return
> endif
> if (n_elements(data) gt 0) then begin
>   tvscl, data
>   return
> endif
>
> END
>
> PRO XLOADCT24, IMAGE
>
> END
>
> These wrappers will update the image whenever the color table is
> changed, e.g.
>
> image = dist(256)
> tvscl24, image
> xloadct24, image
```

As long as Liam brings it up, here is another plug for my XCOLORS program, a program I like better than XLOADCT for a number of reasons. Don't try this at home with XLOADCT because it won't work. Ten bonus points to the person who has been reading this newsgroup for less than a year who can tell me why. :-)

Be sure you do this on a 16-bit or 24-bit display. Create a small image display program. Something like this:

```
PRO DisplayIt, Image=image, Wid=wid
IF N_Elements(wid) NE 0 THEN WSet, wid
IF N_Elements(image) NE 0 THEN TVImage, image
END
```

Next, type these commands:

```
image = Dist(256)
```

```
Window, 0
```

```
LoadCT, 5
```

```
TVImage, image
```

```
XColors, Title='Window 0 Colors', Wid=0, Image=image, $
```

```
NotifyPro='DisplayIt', XOffset=50
```

```
Window, 1
```

```
LoadCT, 3
```

```
TVImage, image
```

```
XColors, Title='Window 1 Colors', Wid=1, Image=image, $
```

```
NotifyPro='DisplayIt', XOffset=250
```

Now you have two windows on the display and you can change the colors independently in each one and the colors are updated automatically. There is no limit to how many windows and how many color table tools you can have open at once. (Well, no *practical* limit.)

In addition to XColors, you will need my TVImage program because, well..., because I always use TVImage instead of TV. Doesn't make sense not to. :-)

<http://www.dfanning.com/programs/xcolors.pro>

<http://www.dfanning.com/programs/tvimage.pro>

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting

Phone: 970-221-0438 E-Mail: davidf@dfanning.com

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

Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: HELP - Changing color map in Mac IDL
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Mark Elliott wrote:

```
> I am running IDL 5.3 on a G4 Mac. I'm using 8-bit pseudo-color.  
> When I change the LUT (like with loadct) the images in the graphics  
> windows do not change their appearance unless I redraw them. This  
> makes routines like xloadct practically useless for optimizing the
```

> color map levels.

Assuming you are actually running in 8-bit mode (is your desktop set to 256 colors?), then you are seeing a 'feature' of the IDL direct graphics system. There is no IDL preference which affects this behavior.

However consider the following wrappers for TVSCL and XLOADCT in IDL 5.3:

```
PRO TVSCL24, IMAGE, DATA=DATA
if (n_elements(image) gt 0) then begin
  tvscl, image
  return
endif
if (n_elements(data) gt 0) then begin
  tvscl, data
  return
endif
message, 'No image argument was specified'
END
```

```
PRO XLOADCT24, IMAGE
xloadct, updatecallback='tvsc24', updatecbdata=image
END
```

These wrappers will update the image whenever the color table is changed, e.g.

```
image = dist(256)
tvscl24, image
xloadct24, image
```

Cheers,
Liam.
<http://cimss.ssec.wisc.edu/~gumley>

Subject: Re: HELP - Changing color map in Mac IDL
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Mark Elliott (mark@mail.mmrrcc.upenn.edu) writes:

> I am running IDL 5.3 on a G4 Mac. I'm using 8-bit pseudo-color.
> When I change the LUT (like with loadct) the images in the graphics
> windows do not change their appearance unless I redraw them. This
> makes routines like xloadct practically useless for optimizing the
> color map levels.

>
> Is there a preference of some sort that will fix this?

What makes you think you are using 8-bit pseudo-color?

I would be willing to bet quite a lot of money your graphics card doesn't think you are using 8-bit pseudo-color. In fact, I'm convinced your graphics card thinks you are using "thousands" or "millions" of colors. :-) Use your Monitor Control Panel to select 256 color mode (or whatever it's called there). Then re-start IDL.

Or, you could use a program like XWindow on my web page to display your image and use the color changing tool from that program. Those colors will update your image even on a 16-bit or 24-bit display:

XWindow, 'TV', image, /XColors

Cheers,

David

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David Fanning, Ph.D.

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