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Subject: White and black colours appearing when selecting colour table

Posted by [liam.steele](#) on Wed, 23 Sep 2015 15:38:23 GMT

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I am wanting to draw a certain number of contours, each with a different colour ranging from blue to red. However, when I select the colour table and set the number of colours, I get a random white and black line appearing.

I've included a simple example below, and the resulting image I get can be found here:

<http://s7.postimg.org/bm8svkbnv/idl.png>

I know there is obviously something simple I'm forgetting to do, but I just can't think what it is!

---

```
window, 0, retain=2
```

```
device, decomposed=0
```

```
cgloadct, 25, /brewer, /reverse, ncolors=100
```

```
ccol = bindgen(100)
```

```
plot, [0,1], [0,100], /nodata, $
```

```
    background=cgcolor('white'), color=cgcolor('black')
```

```
for i = 0, 99 do oplot, [0,1], [i,i], color=ccol[i], thick=12
```

```
end
```

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Subject: Re: White and black colours appearing when selecting colour table

Posted by [David Fanning](#) on Wed, 23 Sep 2015 19:57:39 GMT

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liam.steele@gmx.co.uk writes:

> I am wanting to draw a certain number of contours, each with a different colour ranging from blue to red. However, when I select the colour table and set the number of colours, I get a random white and black line appearing.

>

> I've included a simple example below, and the resulting image I get can be found here:

<http://s7.postimg.org/bm8svkbnv/idl.png>

>

> I know there is obviously something simple I'm forgetting to do, but I just can't think what it is!

If you really *\*have\** to use indexed color (and there has been no reason to since, I don't know, the turn of the century, probably), then you are going to have to load your color table before you try to do anything that uses those colors.

You would find life SO much easier if you turned color decomposition on and just used Coyote Library routines to do your plotting. Everything will just *\*work\** then, without you having to spend any time thinking about it. :-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

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

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Subject: Re: White and black colours appearing when selecting colour table  
Posted by [liam.steele](#) on Thu, 24 Sep 2015 09:24:10 GMT

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On Wednesday, 23 September 2015 20:57:41 UTC+1, David Fanning wrote:

> liam.steele@gmx.co.uk writes:

>

>> I am wanting to draw a certain number of contours, each with a different colour ranging from blue to red. However, when I select the colour table and set the number of colours, I get a random white and black line appearing.

>>

>> I've included a simple example below, and the resulting image I get can be found here:

<http://s7.postimg.org/bm8svkbnv/idl.png>

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>> I know there is obviously something simple I'm forgetting to do, but I just can't think what it is!

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> that uses those colors.

>

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> and just used Coyote Library routines to do your plotting. Everything  
> will just *\*work\** then, without you having to spend any time thinking  
> about it. :-)

>

> Cheers,

>

> David

> --

> David Fanning, Ph.D.

> Fanning Software Consulting, Inc.

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

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

Thanks David.

I have always plotted this way though, and have never noticed a problem before.

In the example I provided, ccol[60] shows as white, and ccol[82] shows as black. So if I choose to use only 59 colours there is no problem, but any more and the white and then black lines show up.

I'm just stumped as to why it won't work. It has device,decomposed=0, has loaded a set number of colours, and has given them an index. Maybe I should just ignore it and do something else, but it's bugging me!

---

Subject: Re: White and black colours appearing when selecting colour table  
Posted by [David Fanning](#) on Thu, 24 Sep 2015 12:12:54 GMT

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Liam writes:

> I have always plotted this way though, and have never noticed a problem before.  
>  
> In the example I provided, ccol[60] shows as white, and ccol[82] shows as black. So if I choose to use only 59 colours there is no problem, but any more and the white and then black lines show up.  
>  
> I'm just stumped as to why it won't work. It has device,decomposed=0, has loaded a set number of colours, and has given them an index. Maybe I should just ignore it and do something else, but it's bugging me!

Those colors are loaded in the color table at the time you call cgColorbar. Simply load your color table before you make that call. When you use indexed colors, you can't guarantee your colors are correct, that the color table hasn't been corrupted, unless you load the colors immediately before you use them.

Here is an article that might be related:

[http://idlcoyote.com/color\\_tips/lineinct.html](http://idlcoyote.com/color_tips/lineinct.html)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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Subject: Re: White and black colours appearing when selecting colour table  
Posted by [liam.steele](#) on Thu, 24 Sep 2015 12:41:55 GMT

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On Thursday, 24 September 2015 13:12:58 UTC+1, David Fanning wrote:

> Liam writes:

>

>> I have always plotted this way though, and have never noticed a problem before.

>>

>> In the example I provided, ccol[60] shows as white, and ccol[82] shows as black. So if I choose to use only 59 colours there is no problem, but any more and the white and then black lines show up.

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>

> Cheers,

>

> David

> --

> David Fanning, Ph.D.

> Fanning Software Consulting, Inc.

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

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

Aha! Yes, it must have been setting background=cgcolor('white') and color=cgcolor('black') that corrupted the colour table. Putting cgloadct after the call to cgplot has fixed it. Doh!

Thanks for the help. :)

---

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Subject: Re: White and black colours appearing when selecting colour table  
Posted by [David Fanning](#) on Thu, 24 Sep 2015 12:46:35 GMT

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liam.steele@gmx.co.uk writes:

> Aha! Yes, it must have been setting background=cgcolor('white') and color=cgcolor('black') that corrupted the colour table. Putting cgloadct after the call to cgplot has fixed it. Doh!

Yes, you are getting into trouble because you are only half committed to Coyote Graphics. Commit fully to decomposed color and to Coyote Graphics and your color problems will disappear back into the 20th century where they belong. :-)

Cheers,

David

--

David Fanning, Ph.D.

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Subject: Re: White and black colours appearing when selecting colour table  
Posted by [David Fanning](#) on Thu, 24 Sep 2015 12:55:55 GMT

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David Fanning writes:

> Yes, you are getting into trouble because you are only half committed to  
> Coyote Graphics. Commit fully to decomposed color and to Coyote Graphics  
> and your color problems will disappear back into the 20th century where  
> they belong. :-)

Truthfully, you don't really have to commit to decomposed color, although it seems crazy to me not to. Coyote Graphics routines do all their work in decomposed color, if they can, and they are smart enough to tolerate indexed color if they have to work with users who learned to program at their grandfather's knee. ;-)

Cheers,

David

--

David Fanning, Ph.D.

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