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Subject: Re: cyclic colour tables?

Posted by [David Fanning](#) on Mon, 23 Sep 2002 15:13:52 GMT

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M (mrmanish@bigfoot.com) writes:

> I have a contour map (of solar radiation, longitude-latitude type) and i've  
> set up the routine to give a nice colour contour plot... I just wanted to  
> know if it is possible to pick out small variations using a colour table -  
> the maximum (solar radiation) value is around 50, but i would like to  
> highlight areas where the variation is only around 2 % or less maybe....  
>  
> Is there a way to cycle colour tables, so that fine structure in the contour  
> plot can be seen?

If you are using a 24-bit graphics card you can pretty much  
do whatever you like with colors. The NOERASE keyword might  
also come in handy. :-)

Cheers,

David

--

David W. Fanning, Ph.D.

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

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

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Subject: Re: cyclic colour tables?

Posted by [Manish](#) on Mon, 23 Sep 2002 15:49:12 GMT

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Cheers David,

This may be a bit of a daft question, but how do i get around the limit of  
60 elements in the LEVELS keyword for contour? I assume if i could set this  
high enough (ie a lot greater than 60) then i would have the resolution i  
need and the colours would cycle automatically (through C\_COLORS right?),  
but it won't let me go above 60... :-)

I fear i am but a blind minnow in the ocean that is IDL, and your help is  
very much appreciated!

Cheers,

Manish

--

"David Fanning" <david@dfanning.com> wrote in message  
news:MPG.17f8dd98b727081a9899ba@news.frii.com...

> M (mrmanish@bigfoot.com) writes:

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>

> David

>

> --

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Subject: Re: cyclic colour tables?

Posted by [David Fanning](#) on Mon, 23 Sep 2002 16:02:54 GMT

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M (mrmanish@bigfoot.com) writes:

> This may be a bit of a daft question, but how do i get around the limit of  
> 60 elements in the LEVELS keyword for contour? I assume if i could set this  
> high enough (ie a lot greater than 60) then i would have the resolution i  
> need and the colours would cycle automatically (through C\_COLORS right?),  
> but it won't let me go above 60... :-(

Well, now. That's where that NOERASE keyword might be  
\*very\* useful! :-)

I'd draw the contours in groups of 60 or so, taking  
care not to erase the display between calls to the  
Contour command.

> I fear i am but a blind minnow in the ocean that is IDL, and your help is  
> very much appreciated!

We are \*all\* minnows, more or less.

Cheers,

David

--

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Subject: Re: cyclic colour tables?

Posted by [James Kuyper](#) on Mon, 23 Sep 2002 16:23:00 GMT

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M wrote:

>  
> Cheers David,  
> This may be a bit of a daft question, but how do i get around the limit of  
> 60 elements in the LEVELS keyword for contour? I assume if i could set this  
> high enough (ie a lot greater than 60) then i would have the resolution i  
> need and the colours would cycle automatically (through C\_COLORS right?),  
> but it won't let me go above 60... :-(

Are you sure that contours are the right approach? Much more than 60  
different contours is going to be very hard to follow by eye. If you  
want to use that many different discrete levels, you might be better off  
converting your raw data into discrete integer levels:

```
discrete_date = FIX( (continuos_data+offset)/bin_size )
```

and just displaying it directly, rather than trying to draw the lines  
seperating the levels. If your array is too small to make decent 'tv'  
output, you might want to rebin it (before discretizing it, not after).

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