
Subject: Color Tables for Use with Chromatek Glasses

Posted by [ec](#) on Thu, 04 Feb 1999 08:00:00 GMT

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Does anyone have any experience with color tables for use with Chromatek glasses? The glasses make an image appear 3-D by making the blue appear further away and the red closer. The trouble is that the standard IDL color tables don't appear to scale linearly with apparent depth. When I use Rainbow for example, the depth appears very quantized and not a nice continuum. I tried building a color table of my own for this with limited success.

Any advice or comments would be appreciated. If you haven't played around with this I recommend that you check out Chromatek's WWW site at <http://www.chromatek.com>

Elaine.Chapin@jpl.nasa.gov

Subject: Re: Color tables

Posted by [davidf](#) on Mon, 22 Nov 1999 08:00:00 GMT

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Karsten Thiel (thiel@ph4.physik.uni-goettingen.de) writes:

> I'm facing a problem concerning the color tables. I would like to
> display a large array with some negativ
> values. Till now I'm doing this with TVSCL, but the information where
> the values are negativ is very important for me. So how are the
> pre-defined color tables defined? Which table is the best for my
> problem?

Well, Karsten, I hate to tell you, but NONE of the color tables are best for your problem. And, in fact, if colors *are* important to you (and they must be or you wouldn't be writing) then you had better ditch TVSCL too. :-)

Let me give you an example. Suppose you have data in a variable named "array". And suppose you would like to see the positive values of the data in the Red Temperature color table. But you would like to see the negative values of your data in a yellow color.

Then you could do something like this. Let's suppose you have 200 colors to use. Let's use 199 of them

for the Red Temperature color scale:

```
LoadCT, 3, NColors=199
```

Let's make the 200th color yellow:

```
TVLCT, 255, 255, 0, 199
```

Now, lets scale the data so that the positive values lie in the data range 0 to 198. In other words, they will be displayed in the Red Temperature colors:

```
scaledData = BytScl(array, Min=0, Top=198)
```

Let's find out where our negative values are:

```
negvalues = Where( array LT 0, count)
```

Make the negative values yellow:

```
IF count GT 0 THEN scaledData[negvalues] = 199B
```

Now, have a look! :-)

```
TV, scaledData
```

It is always better to have some *plan* for using colors than to just take whatever IDL seems to offer.

Cheers,

David

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