Subject: Re: Color Tables for Use with Chromatek Glasses
Posted by Martin Schultz on Thu, 04 Feb 1999 08:00:00 GMT
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Elaine Chapin wrote:
>
> 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 appearant depth. When I use Rainbow
> for example, the depth appears very quantized and
> not a nice continum. 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

Physiologists will probably hang me for this, but let me try to give you some hints:
IDLs colortables are apparently built mostly around the Hue-Saturation-Brightness
(or Hue-Saturation-Value) color models (see the online help for a little more information or consult your encyclopedia of choice). From the description that I scanned at the site you gave above, I figured that's what those glasses use, too. Going from red to blue via the intermediate rainbow colors is like changing the hue angle while keeping the other parameters constant.

Here is what you could try:

```
n = !d.n_colors    ; for 256 systems. True color may kill you here ...
hue = findgen(n)/float(n) * 270.   ; don't do complete circle or you'll
end up with red
sat = fltarr(n) + 1.
val = sat

tvlct,hue,sat,val,/HSV
```

If this doesn't satisfy you, you should try to apply a different function to your hue values (instead of linear increments as it is now).

Good luck,
Martin.

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