Subject: Re: color by variable interpolate?
Posted by David Fanning on Tue, 12 Sep 2006 13:53:30 GMT

Jon writes:

> I have been trying to wrap my mind around how to make this work, but
> have not figured it out and hoped that someone could give me a little
> help.
>
> I'm trying to color some data by temperature...
>
> x   y   t
> 5   8   -2.5
> 6   6   -1.3
> 2   4   -5.3
> 10   6   -3.5
>
> I'm using the rainbow color table and want the warmest value -1.3 to
> correspond to the color 255 (red) and the coldest value -5.3 to
> correspond to the color 12 (dark purple)

Humm. Your way is...odd. :-)

I think I would do it like this:

```
LoadCT, 33 ; Rainbow color table

; Scale temp from 12 to 255.
color = BytScl(T, Top=255-12) + 12B

; Sort temp from cold to hot
sortIndex = Sort(T)
x = x[sortIndex]
y = y[sortIndex]
T = T[sortIndex]
PLOT, x, y, /NoData
PLOTS, x, y, PSym=sym(3), Color=T
```

> I'm not even sure if this is the best way to do
> this (a for loop).

Probably not. :-)

It might be easier to just learn how to construct a color
table that goes from red to purple in as many steps as
you want. Here is an article that describes the process:

http://www.dfanning.com/color_tips/create_colortable.html

Cheers,

David
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David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")