Subject: Re: Shading plotting symbols
Posted by David Fanning on Sun, 08 Jan 2012 16:05:32 GMT
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Jack Frost writes:

> I was wondering if it was possible to shade plotting symbols different
> colors? For example, say I have a latitude-longitude plot of the
> Earth, with x symbols showing the locations where some measurements
> were taken. Is it possible to shade these symbols to show the value of
> the measurement, i.e measurements with values between 1-2 are blue,
> 2-3 are green, 3-4 are red etc?
>
> At the moment I am just creating a plot of measurement locations from
> the 1d lat/lon arrays as such:
>
> plot, lon, lat, psym=1, $
> xrange=[0,360], yrange=[-90,90], $
> xtitle='Longitude', ytitle='Latitude', $
> xticks=4, xtickname=['0','90','180','270','360'], $
> yticks=6, ytickname=['-90','-60','-30','EQ','30','60','90'], $
> title='Locations of retrievals'
> filename='ice_locations.png'
> write_png,filename,tvrd()

Yes, of course. Here is an example of how you can
color plot values:

http://www.idlcoyote.com/graphics_tips/coloredline.html

Cheers,

David

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

Subject: Re: Shading plotting symbols
Posted by Russell[1] on Sun, 08 Jan 2012 16:24:06 GMT
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This is pretty straight-forward, and David's cg* library will do the
trick. But just in case, you prefer to roll your own (even when

stable alternatives exist), here's what I would do:

```
lo=[1,2,3,4,5] ;the lower-bounds of your color segments
hi=[2,3,4,5,6] ;the upper-bounds of your color segments
psym=2

;the colors
colors=findgen(n_elements(lo))/(n_elements(lo)-1)*200+55

xr=[0,360]  ;lon range
yr=[-90,90] ;lat range
plot,[0],[0],/nodata,xr=xr,yr=yr,xst=5,yst=5 ;just define the conv
between data/device/normal coord


loadct,13,/silent ;load the color table of your choice, 13 is a
rainbow...
for i=0,n_elements(lo)-1 do begin ;for every color segment do
something:
   ; find the good data to plot,  you should change this logic as
necessary
   g=where(val gt lo(i) and val le hi(i),n)
   if n gt 0 then oplot,lon(g),lat(g),color=color(i),psym=psym
endfor
loadct,0,/silent ;switch back to B&W

plot,[0],[0],/nodata,xr=xr,yr=yr,xst=1,yst=1 ;overplot the axes
```

On Jan 8, 9:56 am, Jack Frost <jf22...@gmail.com> wrote:

```
>  Hi all.
>
>  I was wondering if it was possible to shade plotting symbols different
>  colors? For example, say I have a latitude-longitude plot of the
>  Earth, with x symbols showing the locations where some measurements
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>        xticks=4, xtickname=['0','90','180','270','360'], $
>        yticks=6, ytickname=['-90','-60','-30','EQ','30','60','90'], $
>        title='Locations of retrievals'
```

> filename='ice_locations.png'
> write_png,filename,tvrd()
>
> Many thanks,
>
> Jack

Subject: Re: Shading plotting symbols
Posted by Jack Frost on Sun, 08 Jan 2012 19:21:47 GMT
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On Jan 8, 4:24 pm, Russell <rryan....@gmail.com> wrote:
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>
> xr=[0,360] ;lon range
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> plot,[0],[0],/nodata,xr=xr,yr=yr,xst=5,yst=5 ;just define the conv
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> loadct,13,/silent ;load the color table of your choice, 13 is a
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> endfor
> loadct,0,/silent ;switch back to B&W
>
> plot,[0],[0],/nodata,xr=xr,yr=yr,xst=1,yst=1 ;overplot the axes
>
> On Jan 8, 9:56 am, Jack Frost <jf22...@gmail.com> wrote:
>
>
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>
>
>

>
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>> title='Locations of retrievals'
>> filename='ice_locations.png'
>> write_png,filename,tvrd()
>
>> Many thanks,
>
>> Jack

Brilliant, thanks guys!

I'm using Russell's method at the moment, as I'm on my home computer which has GDL and I keep getting errors when trying to find GDLs color tables with cgloadct. However, when I'm back at uni tomorrow I'll give David's method a whirl.

The more I use IDL, the more I realize I know nothing about IDL! :)