Subject: Re: Logarithmic Color Scaling
Posted by JD Smith on Tue, 05 Dec 2006 21:21:47 GMT
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On Tue, 05 Dec 2006 13:20:11 -0700, David Fanning wrote:

> Braedley writes:
>
>> [quoted text muted]
>
> Well, I've been looking for the trivial solution for
> the past 48 hours straight. I'd be delighted to be
> pointed in the right direction. May I see your code?
>
> I do agree with you that it is trivial to
> label a color bar logarithmically. What I am finding
> difficult is making the colors associated with the
> color bar labels accurately reflect the values
> in the data, which seems to me to be pretty much the
> point of a color bar.
>
> With the exception of spectro_plot from the SolarSoft
> library, which I have still not had time to download,
> I have seen a lot of advice, but no working code. This
> leads me to believe maybe it's not as trivial as everyone
> (including me) thought it might be. :-)

I'm not sure what the big mystery is. Here's a simple code illustrating
my case 'a' (the "don't scale the colorbar indices" case):

```
loadct,0
d=dist(256) + 1.

;; Set the color where d=100 to red
 index100=round(alog10(100.)/(alog10(max(d))-alog10(min(d)))* 256)
tvlct,255,0,0,index100

tvscl,alog10(d),10,10
colorbar=rebin(indgen(256),256,60)
tv,colorbar,10,(yb=10+256+20)
 plot,[0],[0],/NODATA,/NOERASE,POSITION=[10,yb,256+10,yb+60], $
     /DEVICE,XRANGE=[min(d),max(d)],/XLOG,/XSTYLE,YSTYLE=4,XTICKL EN=.15, $
    COLOR=2*!D.TABLE_SIZE/3
```

JD