
Subject: Re: Fanning's LogScl routine + Colorbar??

Posted by [pgrigis](#) on Fri, 23 Jul 2010 17:46:26 GMT

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On Jul 23, 1:23 pm, Joe Daal <joe.d...@gmail.com> wrote:

> Hi,

>

> I am using the logscl to enhance the contrast of an image, something
> like:

>

> loadct,39

> image = alog10(lin_image)

> imdisp, logscl(image, min=min(image), max=max(image), Exponent=8,

> Mean=0.65)

>

> where image values vary from -1.34 to +2.05, with zeroes included.

> The image looks nice for what I want, but how do I reflect a correct

> colorbar, either for real values or the scaled ones? What is

> logarithmic, the ticks or the colors?

Hi,

I would argue for both.

Example using

http://hea-www.cfa.harvard.edu/~pgrigis/idl_stuff/pg_plotimage.pro

below will show different color bars.

```
;create color bar array
```

```
x=findgen(1000)
```

```
y=findgen(256)
```

```
z=rebin(x,1000,256)
```

```
;case 1: log axis and log colors - that's what you want
```

```
pg_plotimage,alog(z),x,y,xrange=[1,1000],/xlog,/ylog,yrange=[1,255],/  
xsty,/yst
```

```
;case 2: linear axis and log colors
```

```
;this is a "correct" but undesirable representation: the beholder of  
the plot will
```

```
;not be able to make out the colors for low values of the x axis
```

```
pg_plotimage,alog(z),x,y,xrange=[1,1000],/ylog,yrange=[1,255 ],/xsty,/yst
```

```
;case 3: linear axis and linear colors - this is what happens if you  
do not log scale the image
```

```
pg_plotimage,z,x,y,xrange=[1,1000],/ylog,yrange=[1,255],/xsty,/yst
```

```
;case 4: log axis and linear colors - this is what happens if you do  
not log scale the image  
;but is shown in a not particularly useful representation  
pg_plotimage,z,x,y,xrange=[1,1000],/ylog,yrange=[1,255],/xst y,/yst,  
xlog
```

Ciao,
Paolo
>
> Thanks,
> Joe
