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Subject: Re: IDL 8, log plots and titles

Posted by [pgrigis](#) on Tue, 26 Oct 2010 20:33:32 GMT

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On Oct 26, 3:03 pm, b\_gom <b\_...@hotmail.com> wrote:

> Am I missing something, or is IDL 8 fumbling logarithmic y axes and  
> plot titles when using the new plot function?  
>  
> When plotting log plots, the plot title seems to vanish, and also IDL  
> does not seem to be able to calculate the y range properly. In the  
> sample code below, compare the direct graphics output (which handles  
> the range and title correctly automatically) to the new plot function  
> output which doesn't seem to be able to figure out what I want:  
>  
> -----  
> x=findgen(100)/100\*3!\*pi  
> y=sin(x)  
>  
> ;This is what I expect; yaxis handles infinite log range and title  
> appears correctly  
> plot,x,y,/ylog,title='Direct Graphics Yrange and Title'

"correctly"? I think the automatic choice of yrange for a logarithmic plot is a matter of personal preference - but certainly for any serious

work you want to set the yrange explicitly yourself. But even when I am too lazy to do so, I would prefer this behavior as default:

```
title='pretty plot'
```

```
;pardon the kilometeric one-liner  
;wrapped to survive google groups posting  
plot,x,y,/ylog, $  
yrange=total(y GT 0) GT 0 ? $  
[min(y[where(y GT 0)]),max(y)] : $  
[(machar()).xmin,(machar()).xmax],$  
title=total(y LT 0) GT 0 ? $  
'NEGATIVE VALUES NOT PLOTTED '+$  
title:title
```

Ciao,  
Paolo

>

```
> ;Now for the plot function output:
> ;title works for linear y axes
> p1=plot(x,y,yrange=[0.1,1],title='Linear Y Axis
> Works',window_title='Linear Y Axis Works')
> ;title gone for log plots
> p2=plot(x,y,/ylog,yrange=[0.1,1],title='Title Error Log Y
> Axis',window_title='Title Error Log Y Axis')
> ;if you set the yrange, the title appears, but in the wrong place
> p3=plot(x,(y+2)*10,/ylog,yrange=[1,100],title='Title Error Log Y
> Axis',window_title='Title Error Log Y Axis')
> ;if you don't set the yrange, the title is gone
> p4=plot(x,(y+2)*10,/ylog,title='Title Error Log Y
> Axis',window_title='Title Error Log Y Axis')
> -----
>
> Any ideas?
```

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