Subject: Labeling logarithmic axes
Posted by laura.hike on Fri, 19 Feb 2016 01:16:05 GMT
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Hi,

I can't find anything recent about this problem, so....

I am making a line plot and would like to use a logarithmic y-axis. So far so good. I use

pavgsw = plot(merraaswhr,merrap,color='red',thick=2,name='MERRA2',yra nge = [1000,100],ylog=1)

I get a nice plot with a log axis BUT only the 1000 and 100 tick marks are labeled. I would like to label 500 and 200 as well. Doug Fanning has a nice discussion of this at http://www.idlcoyote.com/graphics_tips/minorlog.html, however, the information seems to be outdated (or at least the keywords aren't recognized under the new graphics system). I tried a variety of options based on his method, like defining

axislabels = ['1000', '','','','500','','','200','100']

then adding

pavgsw.ytickname = axislabels with or without pavgsw.ymajor = 9

(or doing the same with key words in the original plot statement).

The problem is that as soon as I add the ytickname option, the tick marks go back to linear spacing. Does anyone know how to fix this? I should point out that the plotted lines are not affected by the changes to the axis, only the axis markings are.

Thanks much,

Laura H.

Subject: Re: Labeling logarithmic axes
Posted by Phillip Bitzer on Sat, 27 Feb 2016 19:50:50 GMT
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On Thursday, February 18, 2016 at 7:16:10 PM UTC-6, Laura H. wrote:
> The problem is that as soon as I add the ytickname option, the tick marks go back to linear spacing. Does anyone know how to fix this? I should point out that the plotted lines are not affected by the changes to the axis, only the axis markings are.
>
> Thanks much,
>
> Laura H.

Hi Laura-

You're going to want to suppress the minor ticks for this:

```
p=plot(/test, /ylog, yrange=[1000, 100])
ticks = [1000, 500, 200, 100]
p.ytickvalues = ticks
p.yminor=0
```

For kicks and giggles:

```
ticks2 = REVERSE((FINDGEN(10)+1)*100)
p.ytickvalues = ticks2
```

Subject: Re: Labeling logarithmic axes
Posted by laura.hike on Wed, 02 Mar 2016 20:18:16 GMT
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Thanks!

On Saturday, February 27, 2016 at 2:50:53 PM UTC-5, Phillip Bitzer wrote:
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Subject: Re: Labeling logarithmic axes

Phil,

I still can't get this to work. When I add your commands after making the plot, it reverses the orientation of the y-axis (i.e., was 1000 to 100, reverses to 100 to 1000). If I force the orientation with a new yrange command, it flips, but the locations of the tick marks are incorrect: 100 is closer to 200 than 900 is to 1000. I don't understand this.

Laura

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