
Subject: plot label help

Posted by [rickeym](#) on Wed, 08 Oct 1997 07:00:00 GMT

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I'm using IDL to plot a curve on a log-log scale. I want the y axis labels to be in powers of 10 (i.e. 10^0 , 10^1 , 10^2 , ect). Some times the yxis is labeild the way i want, other times the axis reads 1.0, 10.0, 10.0, ect. Is there a way to always have the y axis labels the way i need. Thanks for any help!

Rick McDaniel

rickeym@hubcap.clemson.edu

Subject: Re: plot label

Posted by [Paul Van Delst\[1\]](#) on Tue, 04 Apr 2006 17:03:22 GMT

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Steve.Morris@libero.it wrote:

> Hi guys!!

> I would like to make some plots, but only with certain number shown in

> the x and y axis. Is there any clever command to do that in IDL ??

Clever? No.

> For example write only 3000, 3500, 4000, 4500 rather then

> 3100,3200,3300 etc

> Or, example, to write 3000 in bigger size, 3500 in smaller, 4000 in

> bigger on so on ...

Dunno about the latter, but the former should be able to be done with judicious use of the [xy]ticks and [xy]tickv keywords to plot.

For the latter, you'd probably have to use xyouts (yuk). But maybe you can also do it with [xy]tickv, but including formatting commands as part of the tick labels? E.g. !U ? It'll superscript the number but also make it smaller.

I'm sure it can be done in OG, but it'll probably take a week to write the code to do it. :o)

paulv

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Paul van Delst

CIMSS @ NOAA/NCEP/EMC

Subject: Re: plot label

Steve.Morris@libero.it wrote:

```
> Hi guys!!
> I would like to make some plots, but only with certain number shown in
> the x and y axis. Is there any clever command to do that in IDL ??
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> For example write only 3000, 3500, 4000, 4500 rather than
> 3100,3200,3300 etc ....
> Or, example, to write 3000 in bigger size, 3500 in smaller, 4000 in
> bigger on so on ...
>
> Thanks!
> S.
```

Try using a combination of `xticks`, `xtickv` and `xtickname` as in the following example:

```
;;Program to demonstrate placing axis tick marks at specified values.
;;Plot a straight line from 0 to 1 with x-ticks at the following
locations:
values = [0, .3, .6, .9, 1.0]
n_int = 4                ;number of x intervals (not x values)

;;labels are what is actually printed at each tick mark
;;The '!d' and '!n' modifiers are positioning commands (in the IDL help
index, see
;;'positioning: commands'. The second and forth labels will be lowered.

labels = ['0', '!b0.3', '!n0.6', '!b0.9', '!n1.0']

plot, [0, 1], [0, 1], $
    xticks = n_elements(labels)-1, $ ;number of tick intervals
    xtickv = values, $              ;x-value of each tick mark
    xtickname = labels              ;text printed at each tick mark

end
```
