
Subject: Re: Odd axis labelling error

Posted by [Heinz Stege](#) on Thu, 27 Aug 2009 12:54:19 GMT

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On Thu, 27 Aug 2009 05:16:05 -0700 (PDT), Jimmy wrote:

> Hi,
>
> I'm trying to create a plot with a log y-axis from 10e-4 to 10e3. I'm
> using the follow:
>
> plot_io, variable1, variable2, xr = [1,8], yr =[10e-4,10e3], xstyle =
> 1, ystyle = 1
>
> (with titles and background colour stuff too).
>
> This plots the x axis fine, BUT- the y-axis is plotted from 10e-3 to
> 10e4. Anyone know why this might be, and how I can fix it?
>
> Thanks!

Good joke!

$10e-4 = 10 \cdot 1e-4 = 1e-3 = 10^{(-3)}$

That is, what I see on the plot.

Heinz

Subject: Re: Odd axis labelling error

Posted by [David Fanning](#) on Thu, 27 Aug 2009 13:18:16 GMT

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Jimmy writes:

> I'm trying to create a plot with a log y-axis from 10e-4 to 10e3. I'm
> using the follow:
>
> plot_io, variable1, variable2, xr = [1,8], yr =[10e-4,10e3], xstyle =
> 1, ystyle = 1
>
> (with titles and background colour stuff too).
>
> This plots the x axis fine, BUT- the y-axis is plotted from 10e-3 to
> 10e4. Anyone know why this might be, and how I can fix it?

I think this is the ol' Sky is Falling thing in another guise:

http://www.dfanning.com/math_tips/sky_is_falling.html

This works:

```
plot_io, v1, v2, x =[1,8], yr=[10d-4,10d3], xstyle=1, ystyle=1
```

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Seppure ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: Odd axis labelling error

Posted by [Jean H.](#) on Thu, 27 Aug 2009 14:02:05 GMT

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Jimmy wrote:

> Hi,

>

> I'm trying to create a plot with a log y-axis from 10e-4 to 10e3. I'm

> using the follow:

>

> plot_io, variable1, variable2, xr = [1,8], yr =[10e-4,10e3], xstyle =

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>

> (with titles and background colour stuff too).

>

> This plots the x axis fine, BUT- the y-axis is plotted from 10e-3 to

> 10e4. Anyone know why this might be, and how I can fix it?

>

> Thanks!

Hi,

could it be that you are confusing 10e3 and 10^3 ?

A simple test using the same range as you do labels as 10^-3 to 10^4,
which is the same as 10e-4 and 10e3.

In IDL, aEb = a (float) * 10^b

Jean
