Subject: IDL log scale issues

Posted by Phys_Gurl on Sun, 22 Sep 2013 18:51:04 GMT

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Hello All,

Quick issue:

When plotting with \xlog, \ylog why does IDL not listen to my xrange and yrange commands? It seems to want to use the x and y range of its choice...

Subject: Re: IDL log scale issues

Posted by David Fanning on Sun, 22 Sep 2013 19:08:02 GMT

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Phys Gurl writes:

- > When plotting with \xlog, \ylog why does IDL not listen to my xrange and yrange commands?
- > It seems to want to use the x and y range of its choice...

IDL *always* autoscales axes. You tell IDL to use exact axis scaling with [XYZ]Style keywords (e.g, XStyle=1).

Cheers,

David

--Dovi

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: http://www.idlcoyote.com/

Sepore ma de ni thue. ("Perhaps thou speakest truth.")

Subject: Re: IDL log scale issues

Posted by Phys_Gurl on Sun, 22 Sep 2013 19:43:49 GMT

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On Sunday, September 22, 2013 3:08:02 PM UTC-4, David Fanning wrote:

- > Phys_Gurl writes:
- >
- >> When plotting with \xlog, \ylog why does IDL not listen to my xrange and yrange commands?
- >> It seems to want to use the x and y range of its choice...

```
>
>
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  with [XYZ]Style keywords (e.g, XStyle=1).
>
>
 Cheers,
> David
>
>
  David Fanning, Ph.D.
  Fanning Software Consulting, Inc.
  Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
> Sepore ma de ni thue. ("Perhaps thou speakest truth.")
Now I am receiving
% PLOT: Warning: Infinite plot range.
Here is my code:
x and y are both arrays.
plot, x, y, psym = 7, /xlog, /ylog, XStyle = 1, YStyle = 1, xrange=[0,16], yrange = [10,10000], Title
= 'Run 1: Counts versus Time', XTitle = 'Time (minutes)', YTitle = 'Counts'
Thanks!
```

Subject: Re: IDL log scale issues
Posted by David Fanning on Sun, 22 Sep 2013 20:24:03 GMT
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foord14@bu.edu writes:

> x and y are both arrays.

- Now I am receiving% PLOT: Warning: Infinite plot range.Here is my code:
- > plot, x, y, psym = 7, /xlog, /ylog, XStyle = 1, YStyle = 1, xrange=[0,16], yrange = [10,10000], Title = 'Run 1: Counts versus Time', XTitle = 'Time (minutes)', YTitle = 'Counts'

Yes, the log of zero is infinity. It's a math thing. ;-)

Try going from 1 to 16 or 1e-6 to 16, something like that.

You are probably not going to care much for the labeling of log axes. Here is some reading you can do that might help.

http://www.idlcoyote.com/graphics_tips/minorlog.html

Cheers,

David

David Fanning, Ph.D.
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