
Subject: Re: (simple question) PLOT, YTICKS in /YLOG AXIS

Posted by [Jo Klein](#) on Fri, 28 Mar 2008 17:18:28 GMT

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You've run into the infamous minor-tick-labelling problem. As is so often the case, David's website has the solution:

<http://www.dfanning.com/graphics_tips/minorlog.html>

Cheers,

Jo

Subject: Re: (simple question) PLOT, YTICKS in /YLOG AXIS

Posted by [David Fanning](#) on Fri, 28 Mar 2008 17:46:47 GMT

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Jo Klein writes:

> You've run into the infamous minor-tick-labelling problem. As is so

> often the case, David's website has the solution:

> <http://www.dfanning.com/graphics_tips/minorlog.html>

Humm. I couldn't even understand that article. :-(

I've made a couple of small changes that I think makes it easier to understand.

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

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

Subject: Re: (simple question) PLOT, YTICKS in /YLOG AXIS

Posted by [natha](#) on Fri, 28 Mar 2008 17:55:05 GMT

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I use the LOGLEVELS function and I try to do my plot like the example.

I dont know how many YTIKCS I need to chose.

I didn't succed...

Any suggestions?

Thanks,

Bernat

Subject: Re: (simple question) PLOT, YTICKS in /YLOG AXIS

Posted by [David Fanning](#) on Fri, 28 Mar 2008 18:22:06 GMT

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bernat writes:

> I use the LOGLEVELS function and I try to do my plot like the
> example.
> I dont know how many YTIKCS I need to chose.
>
> I didn't succed...
>
> Any suggestions?

Read the updated article:

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

Cheers,

David

--

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Subject: Re: (simple question) PLOT, YTICKS in /YLOG AXIS

Posted by [natha](#) on Fri, 28 Mar 2008 19:18:17 GMT

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Hey David,
thank you for your article. I utilise the LOGLEVELS for put the yticks
and works good !

The only problem that I have is in some cases.
For example, if I want to representate a log axis with values
[0.2,0.55]. Then the loglevels returns 0.5 but if I do the plot with
YTICKS=1 and YICKV=LOGLEVELS(yrange) the following problem occurs:

% PLOT: Data coordinate system not established.

Do you know why ? What can I do to solve this problem ?

On Mar 28, 2:22 pm, David Fanning <n...@dfanning.com> wrote:

> bernat writes:

>> I use the LOGLEVELS function and I try to do my plot like the

>> example.

>> I dont know how many YTIKCS I need to chose.

>

>> I didn't succed...

>

>> Any suggestions?

>

> Read the updated article:

>

> http://www.dfanning.com/graphics_tips/minorlog.html

>

> Cheers,

>

> David

> --

> David Fanning, Ph.D.

> Fanning Software Consulting, Inc.

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Subject: Re: (simple question) PLOT, YTICKS in /YLOG AXIS

Posted by [David Fanning](#) on Fri, 28 Mar 2008 19:28:14 GMT

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bernat writes:

> The only problem that I have is in some cases.

> For example, if I want to representate a log axis with values

> [0.2,0.55]. Then the loglevels returns 0.5 but if I do the plot with

> YTICKS=1 and YICKV=LOGLEVELS(yrange) the following problem occurs:

>

> % PLOT: Data coordinate system not established.

>

> Do you know why ? What can I do to solve this problem ?

I don't seem to have that problem. This command works fine:

```
IDL> plot, indgen(11), Scale_vector(indgen(11), 0.1, 0.55), $  
      /ylog, ytickv=loglevels([0.2, 0.55]), yticks=1, ystyle=1
```

Do you have a specific command that doesn't work?

Cheers,

David

--

David Fanning, Ph.D.

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Subject: Re: (simple question) PLOT, YTICKS in /YLOG AXIS

Posted by [natha](#) on Fri, 28 Mar 2008 20:06:16 GMT

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Yeah,

Looks this example:

```
Plot, [10], [0.3], yr=[0.22,0.55], xr=[0,20], ystyle=1, /ylog,  
psym=2, yticks=1, ytickv=loglevels([0.22,0.55])
```

the result is:

```
% PLOT: Data coordinate system not established.
```

Cheers,

Bernat

On Mar 28, 3:28 pm, David Fanning <n...@dfanning.com> wrote:

> bernat writes:

>> The only problem that I have is in some cases.

>> For example, if I want to representate a log axis with values

>> [0.2,0.55]. Then the loglevels returns 0.5 but if I do the plot with

>> YTICKS=1 and YICKV=LOGLEVELS(yrange) the following problem occurs:

>

>> % PLOT: Data coordinate system not established.

>

>> Do you know why ? What can I do to solve this problem ?

>
> I don't seem to have that problem. This command works fine:
>
> IDL> plot, indgen(11), Scale_vector(indgen(11), 0.1, 0.55), \$
> /ylog, ytickv=loglevels([0.2, 0.55]), yticks=1, ystyle=1
>
> Do you have a specific command that doesn't work?
>
> Cheers,
>
> David
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
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> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: (simple question) PLOT, YTICKS in /YLOG AXIS
Posted by [David Fanning](#) on Fri, 28 Mar 2008 20:52:02 GMT
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bernat writes:

> Looks this example:
>
> Plot, [10], [0.3], yr=[0.22,0.55], xr=[0,20], ystyle=1, /ylog,
> psym=2, yticks=1, ytickv=loglevels([0.22,0.55])
>
> the result is:
>
> % PLOT: Data coordinate system not established.

This happens when there is a mismatch between the number of values returned by LOGLEVELS and the number you use for YTICKS. This is why I think you should look at the *REVISED* web page article and use the code you find there:

```
ticks = LOGLEVELS([0.22,0.55])
nticks = N_Elements(ticks)
Plot, data, /YLOG, YRANGE([0.22,0.55])YTICKS=nticks-1, $
  YTICKV=Reverse(ticks)
```

Cheers,

David

--

David Fanning, Ph.D.

Subject: Re: (simple question) PLOT, YTICKS in /YLOG AXIS
Posted by [Paul Van Delst\[1\]](#) on Fri, 28 Mar 2008 20:57:18 GMT
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David Fanning wrote:

> bernat writes:

>

>> Looks this example:

>>

>> Plot, [10], [0.3], yr=[0.22,0.55], xr=[0,20], ystyle=1, /ylog,
>> psym=2, yticks=1, ytickv=loglevels([0.22,0.55])

>>

>> the result is:

>>

>> % PLOT: Data coordinate system not established.

>

> This happens when there is a mismatch between the number
> of values returned by LOGLEVELS and the number you use
> for YTICKS. This is why I think you should look at the
> *REVISED* web page article and use the code you find there:

>

> ticks = LOGLEVELS([0.22,0.55])
> nticks = N_Elements(ticks)
> Plot, data, /YLOG, YRANGE([0.22,0.55])YTICKS=nticks-1, \$

Shouldn't that be

YRANGE == [0.22,0.55] *,* YTICKS=nticks-1

?

Or does IDL workbench accept user-defined syntax?

:o)

Man, the minute hand sure does move slow on a friday.....

cheers,

paulv

> YTICKV=Reverse(ticks)

>

> Cheers,
>
> David

Subject: Re: (simple question) PLOT, YTICKS in /YLOG AXIS
Posted by [David Fanning](#) on Fri, 28 Mar 2008 20:57:46 GMT
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David Fanning writes:

> This happens when there is a mismatch between the number
> of values returned by LOGLEVELS and the number you use
> for YTICKS. This is why I think you should look at the
> *REVISED* web page article and use the code you find there:
>
> ticks = LOGLEVELS([0.22,0.55])
> nticks = N_Elements(ticks)
> Plot, data, /YLOG, YRANGE([0.22,0.55])YTICKS=nticks-1, \$
> YTICKV=Reverse(ticks)

Oh, hell, I should never have reversed those damn axes!!
This will lead to another five questions. Sigh...

```
ticks = LOGLEVELS([0.22,0.55])  
nticks = N_Elements(ticks)  
Plot, data, /YLOG, YRANGE([0.22,0.55])YTICKS=nticks-1, $  
YTICKV=ticks
```

Cheers,

David

--

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Subject: Re: (simple question) PLOT, YTICKS in /YLOG AXIS
Posted by [David Fanning](#) on Fri, 28 Mar 2008 21:03:11 GMT
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Paul van Delst writes:

> Man, the minute hand sure does move slow on a friday.....

Boy, you've got that right... Where did Coyote go with the beer, for God's sake!!

Let me try this again:

```
ticks = LOGLEVELS([0.22,0.55])
nticks = N_Elements(ticks)
Plot, data, /YLOG, YRANGE=[0.22,0.55], YTICKS=nticks-1, $
  YTICKV=ticks
```

Sheesh!!

Cheers,

David

--

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

Subject: Re: (simple question) PLOT, YTICKS in /YLOG AXIS
Posted by [David Fanning](#) on Fri, 28 Mar 2008 21:06:19 GMT
[View Forum Message](#) <> [Reply to Message](#)

Paul van Delst writes:

> Man, the minute hand sure does move slow on a friday.....

This is what happens when you tell yourself you are
definitely going to get some work done, and then the
phone rings, the dog wants out, the program that used
to work perfectly crashes for some unknown reason, and...

I know it's five o'clock somewhere. Guess this will wait
for tomorrow.

Cheers,

David

--

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