
Subject: Re: Why isn't this working ? axis problem (probably very simple)

Posted by [David Fanning](#) on Tue, 20 Nov 2001 15:37:39 GMT

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Henk (henk@mailandnews.com) writes:

```
> I want to plot data on a graph with as left y-axis the pressure
> (logarithmic) and to the right the altitude (not log).
> I'm trying to do this this way :
>
> plot, o_arr, 10^(alt_arr),
> xrange=[xmin,xmax], yrange=[1013,1], /ylog, color=1, ystyle=9, ytitle='Pressure'
>
> and
>
> axis, yaxis=1, ystyle=1, ytitle = 'Altitude', color=1, yrange=[0,40]
>
> but it gives a warning about an infinite range !
> Why is this ? I don't understand. It must have something to do with
> the log plot, I guess, but even with a 'ylog=0' as parameter to 'axis'
> it won't work.
>
> Could someone help me out ?
```

This is a really common problem. I should write an article about it. :-)

The problem is that log axes are "sticky", unlike almost everything else in IDL. Once you do something with logs, IDL appears to remember it forever. (Probably holding it against you, for all I know.)

What you have to do is "unstick" the log axis before you make your AXIS call. You need something like this:

```
plot, o_arr, 10^(alt_arr), ylog, ystyle=9, ytitle='Pressure'
!Y.Type=0
axis, yaxis=1, ystyle=1, ytitle = 'Altitude', color=1, yrange=[0,40]
```

Cheers,

David

--

David W. Fanning, Ph.D.

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

Subject: Re: Why isn't this working ? axis problem (probably very simple)

Posted by [David Fanning](#) on Tue, 20 Nov 2001 15:42:19 GMT

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David Fanning (david@dfanning.com) writes:

```
> What you have to do is "unstick" the log axis before
> you make your AXIS call. You need something like this:
>
> plot, o_arr, 10^(alt_arr), ylog, ystyle=9, ytitle='Pressure'
> !Y.Type=0
> axis, yaxis=1, ystyle=1, ytitle = 'Altitude', color=1, yrange=[0,40]
```

Oh, be sure to add a SAVE to the AXIS command,
so you can draw something on it! :-)

Cheers,

David

--

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

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Subject: Re: Why isn't this working ? axis problem (probably very simple)

Posted by [Henk](#) on Tue, 20 Nov 2001 16:00:03 GMT

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Thanks a lot for your ultra-fast answer !
It works !

Henk

David Fanning wrote:

```
> David Fanning (david@dfanning.com) writes:
>
>
>> What you have to do is "unstick" the log axis before
>> you make your AXIS call. You need something like this:
```

```
>>
>> plot, o_arr, 10^(alt_arr), ylog,, ystyle=9, ytitle='Pressure'
>> !Y.Type=0
>> axis, yaxis=1, ystyle=1, ytitle = 'Altitude', color=1, yrange=[0,40]
>>
>
> Oh, be sure to add a SAVE to the AXIS command,
> so you can draw something on it! :-)
>
> Cheers,
>
> David
>
>
```
