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Subject: Re: multiple Y-axis for 2D plots

Posted by [davidf](#) on Tue, 08 Jun 1999 07:00:00 GMT

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Andrew (noymer@mozart.ceped.ined.fr) writes:

> I have data like this: a year vector (for the X-axis) and two  
> data vectors (for the Y values of two curves). Now, the two data  
> vectors are to be displayed on the same graph, but they have radically  
> different Y-scales. Rather than multiply the smaller by, say 100, I  
> would like to display them each on their own axis. By this, I mean  
> just like the lower left panel of figure 10-12 in the "Using IDL"  
> manual (p.200 in my version), except imagine the first curve being the  
> distribution of temperature (as drawn), and the RH Y-axis not being  
> Celsius, but being mmHg, and then imagine a second curve, giving the  
> distribution of atmospheric pressure for the same locale. The LH  
> Y-axis is for temp; the RH Y-axis is for pressure.  
>  
> From the documentation for axis (etc), it was unclear (at least to me)  
> if this was possible, and all my experiments failed.

From that wonderful IDL Programming Techniques book, written  
by ol' whatshisname: :-)

```
data = Loaddata(1)
Plot, data, YStyle=8, YTitle='Solid Line', $
Position=[0.15, 0.15, 0.85, 0.95]
newdata = data * 5
Axis, YAxis=1, YRange=[Min(newdata), Max(newdata)], /Save, $
YTitle='Dashed Line'
OPlot, newdata, LineStyle=2
```

You can download the LoadData program from my web page  
or just make up your own data. The trick is that SAVE  
keyword on the AXIS command.

Cheers,

David

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