
Subject: Re: Why does IDL get this wrong?

Posted by [Michael Wallace](#) on Fri, 02 Jan 2004 19:11:20 GMT

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Bruce Bowler wrote:

> Kindly watch for linewraps...

>

> x=[0,0,0,0,44.8,75.7,64.1,70.4,73.9,74.2,68.1,48.9,44.0,35.7 ,27.6,12.3,7.3,0]

> y=[-85,-75,-65,-55,-45,-35,-25,-15,-5,5,15,25,35,45,55,65,75 ,85]

> title='title'

> label='line1!Cline2'

> plot, x, y, yrange = [-90, 90], /ystyle, /xstyle, ytickformat = "(a1)",

> title = title, xtitle = label, xrange = [0, 100], ticklen = -0.03

>

> If ticklen is +0.03, all is fine, but setting it negative (to get the

> ticks outside the box) and the second line of the xtitle is lost.

IDL positions the axis titles relative to the axis labels. The axis labels are positioned relative to the tick marks. When you draw the tick marks outside the box, this causes the labels to be placed lower than they would be if the ticks were drawn inside the box. This in turn causes the title to be placed lower. And the second line of your title is simply getting clipped off at the bottom of the image.

One thing you can try is playing around with the position keyword to the plot command (or !p.position if you want the same positioning on all plots). Essentially, you can set position such that there's more room around the boundary of your plot. With more room, the second line of your title will show up.

> related question (in that involves plots), is there a way to draw the box
> around the plot (the boss likes that) but **not** draw the tickmarks on the
> non-primary lines of the box?

You have to use two plot commands to achieve this effect.

Plot, FIndGen(10), TICKLEN = 0

Plot, FIndGen(10), XSTYLE = 8, YSTYLE = 8, /NOERASE, /NODATA

The first command will draw a plot without any tick marks whatsoever. The second command will draw only the primary axes ([XY]STYLE = 8) -- this time with tick marks. The NOERASE flag makes the second plot draw on top of the previous one instead of erasing it first. And viola! Your primary axes have ticks and the others don't.

Mike
