
Subject: Re: Some questions about "axis"

Posted by [David Fanning](#) on Thu, 11 Sep 2008 13:24:05 GMT

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ICBM0926 writes:

> I am now currently using "TVSCL" to plot colored contour pictures. In
> my program, I've used "plot"+ "TVScI"+ "axis" to complete the entire
> colored contour. Especially I've used two "axis" procedure to make the
> axis labels and axis ticks stand outside the colored contour. The
> following address contains a completed plot.
>
> <http://picasaweb.google.com/ICBM0926/oQPOXH?authkey=l5370hFdWig#5244685059173580738>
>
> In the picture one can find that the ticks are too close to the
> labels, they almost stick together. I've tried to adjust the
> "ticklen". However, I can't shorten them any more or the ticks are
> almost invisible. I need some ways to move tick labels outward. Is
> there any way to solve this issue? Partial code are attached below.

I always think of Kermit the frog in these kinds of situations, singing "It's not easy to be green.", although I always substitute "anal" for "green". The good folks at ITTVIS, as nice as they are, have never been known for having a refined aesthetic sense about how things look.

The spacing of axis labels has driven me crazy more than once, and was one of the reasons I thought seriously about giving up object graphics early on, since the Y axis labels were *NEVER* spaced properly. (A fact, I was convinced, even a non-anal person could see clearly.)

But, I have to say, things have gotten better over the years, and in the process of doing a bit of research this morning, I have to admit I don't really have too many complaints about how axis labels are spaced in my IDL 7 installation. Both on the screen and in a PostScript file, I think ITTVIS is calculating things correctly.

Still, there are times when it would be helpful to move things a little bit. Here is an example program that shows how I would move the YAXIS values a bit further to the right. I've probably overdone it a bit, but I wanted you to see the effect without squinting. The "normal" plot is on the left, and the manipulated plot is on the right.

Cheers,

David

```
.*****
,
window, xsize=800, ysize=400
data = Findgen(101)

; Normal plot.
PLOT, data, YSTYLE=8, position=[0.1, 0.1, 0.4, 0.9]
AXIS, YAXIS=1, /SAVE, YTICKLEN=-0.075, YRANGE=[-300, 0]

; Manipulated plot.
PLOT, data, YSTYLE=8, position=[0.55, 0.1, 0.85, 0.9], /NoErase
AXIS, YAXIS=1, /SAVE, YTICKLEN=-0.075, YTICK_GET=ticks, $
    YTICKFORMAT='(A1)', YRANGE=[-300,0]
c = Convert_Coord(Findgen(N_Elements(ticks)), ticks, $
    /DATA, /TO_NORMAL)
nticks = c[1,*]
FOR j=0,N_Elements(nticks)-1 DO XYOUTS, 0.89, nticks[j]-0.01, $
    /NORMAL, String(ticks[j], Format='(I0)'), Alignment=0.0

END
```

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

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