
Subject: Re: Non-linear axis

Posted by [Irene Dumkow](#) on Thu, 26 Oct 2000 07:00:00 GMT

[View Forum Message](#) <> [Reply to Message](#)

Craig Markwardt wrote:

>
> However, I think what you **really** want to do, is have two completely
> independent axes on either side of the plot, and have IDL choose
> "pleasant" tickmarks for each. In that case, you probably want to
> tell PLOT not to make a righthand axis, and then draw one yourself.
>
> How about this example:
>
> `x = findgen(10)`
> `y = x*x`
> `plot, x, y, ystyle=8+1, xmargin=[10,10], ytitle='Main'`
> `axis, yaxis=1, yrange=[0,2], ystyle=1, ytitle='Alternate'`
>
> A little explanation might be in order.
> * YSTYLE=8+1 ensures that IDL draws only one axis, with an exact range;
> * XMARGIN tells IDL to leave more room on the right side for tick labels;
> * YAXIS=1 tells IDL to make an axis on the right side, ticks facing left;
> * YRANGE gives a new axis range;
> * YSTYLE=1 enforces that exact range;
>
> This will give you a set of evenly spaced, but completely independent,
> tick marks on the left and right sides of the plot.
>
> If you really want to make **unevenly** spaced ticks (non-linear as you
> say), then you would do that in the AXIS call, specifying your desired
> tick positions and labels. These you would have to calculate by
> yourself, as I showed in my previous example posting.
>
> Does this help?
>
> Craig
>

Thanks, it does help. I really want to have unevenly spaced ticks on the right side, but they are not independent from the left side, and that was part of my problem. Somebody from the newsgroup-shy people mailed me a sample routine which does what I want to do. The basic idea is determining what tickvalues I want to have, calculating what value that would correspond to on left-side axis, using these tickpositions with YTICKV and labeling the ticks via YTICKNAME.

Thanks for all the help!

Irene
