
Subject: Re: Non-linear axis

Posted by [Craig Markwardt](#) on Tue, 24 Oct 2000 07:00:00 GMT

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Irene Dumkow <irene.dumkow@uni-essen.de> writes:

> I am trying to add axis to an image. This part works (using a contour
> plot
> for the axis and matching the image size and plot window). My problem
> is that I would like to have one of the y-axis with a non-linear
> scaling,
> in this particular case it is basically $y_1 \cdot y_1$. I tried something with
> reading in the tickvalues, calculating the new values and then using
> YTICKNAMES, but IDL still does the y-scale linearly. Any hints,
> pointers, etc would be more
> than welcome.

Pay no attention to Martin. :-) There is no need to resample your data. Use the YTICKV and YTICKS keywords instead. The first gives the positions of the ticks, and the second gives the number of ticks (plus one?). For some reason you need both keywords. If you need to label the ticks with non-default values then use YTICKNAMES as well.

Here's an example with a parabola:

```
IDL> x = findgen(10)
IDL> y = x*x
IDL> plot, x, y, ytickv=[0,1,4,9,16,25,36,49,64,81,100], yticks=10
```

Normally YTICKS must be at least `n_elements(YTICKV)`.

Craig

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