Subject: Re: Non-linear axis
Posted by Martin Schultz on Tue, 24 Oct 2000 07:00:00 GMT
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Irene Dumkow wrote:
>
> 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 y1*y1. I tried something with
> reading in the tickvalues, calculating the new values and than using
> YTICKNAMES, but IDL still does the y-scale linearly. Any hints,
> pointers, etc would be more
> than welcome.
>
> Irene Dumkow

Funny coincidence. Just this morning I had someone in my office asking
a similar question. They wanted a log axis. All I know about this is
that you would need to interpolate your image somehow to bring it onto
a regular "grid". Something along the following lines could do the
trick. This is opnly a starting point, but hopefully it puts you on
the right track.

```
data=dist(7,7)
xnew = 10.^((findgen(7)>1.e-3))    ;; here, you would do sqrt instead
xnew = ((xnew-min(xnew))/(max(xnew)-min(xnew)))*7
id=interpolate(data,xnew,findgen(7),/grid)
contour,id,lev=findgen(10)*0.3,c_col=indgen(30)*2+3
```

Cheers,
Martin

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