Subject: Re: Figuring out axis range?
Posted by David Fanning on Wed, 12 Dec 2001 14:34:03 GMT
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Bruce Bowler (bbowler@bigelow.org) writes:

> I have some data that I'm trying to plot where the xaxis data range is (from min and max) [0,3.19377] and the yaxis range is [-85,85]. The y axis values are fixed, the x
> axis values change depending on the data set. Sometimes, the plot that results from plot,x,y,yrange=[-90,90],/ystyle has an x axis that starts at 0, sometimes it starts at -
> 1 (in the particular case shown here, the range plotted is [-1,5]). I'd like to force the xaxis to start at 0 (the minimum is *never* negative) and have a "nice" upper bound
> (so /xstyle doesn't work). Is there an option I'm missing? Is there a routine that will return a "nice" number (like 4, not 3.19377, or 250 if 248.9 is input), is the algorithm
> that IDL uses to determine plot ranges documented anywhere?

For a "nice number" axis range that always starts at 0,
I'd try setting XRANGE=[0,Max(data)], with XSTYLE=0.
The algorithm IDL uses is not documented anywhere I know
about, but a "pretty axis" is more-or-less IDL's thing,
and always when you least expect it. :-)

Cheers,

David

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Subject: Re: Figuring out axis range?
Posted by bowler on Wed, 12 Dec 2001 15:21:04 GMT
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David Fanning <david@dfanning.com> writes:
> Bruce Bowler (bbowler@bigelow.org) writes:
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> about, but a "pretty axis" is more-or-less IDL's thing,
> and always when you least expect it. :-)

Tried that, same result, but I found a routine called nicenumber :-) at in the JHU-APL archive. That, in conjunction with /xstyle comes very close to what I'm looking for.

Bruce
