Subject: IDLgrPlot
Posted by Pavel Romashkin on Mon, 01 Nov 1999 08:00:00 GMT

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Hi,
I have a question.

I placed the X and Y vectors into IDLgrPlot. Vectors contain NANs. I set xrange and yrange of both axes to the min and max of the X and Y vectors, and displaying goes just fine. Then I retrieve the data using obj_instance -> getProperty, DATA=data, xrange=x_range, yrange=y_range. I noticed that min(data[0, *], /nan) equals 0 while x_range[0] does not, it sure is the same I set it when the plot was first made. Is this a feature or what? It looks like DATA keyword does can't return NANs. Am I missing a /nan keyword to something?

Thank you,
Pavel

Subject: Re: IDLgrPlot
Posted by davidf on Tue, 02 Nov 1999 08:00:00 GMT

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Pavel Romashkin (promashkin@cmdl.noaa.gov) writes:

> Try the following. I realized that I had no NANs in the X-vector, that's
> why I never saw the warning message you get. However, that warning
> message does not stop you from obtaining the right object, just annoys
> you. In the example below, you can generate the data with or without
> NANs in the X-vector. You get the plot regardless. And, as long as you
> have NANs in Y, you will have 0 in data[0,*].

I notice that NANs work correctly if they are part of the dependent data, and are set to zero if part of the independent data. While I guess you could make a case to RSI that this is a bug, I find it really sort of makes a little bit of sense to me, in the kind of way that I find hard to explain. I mean, really, shouldn't you *know* what the independent data is? Shouldn't it *always* be defined? How else would you plot anything? On the other hand, I find nothing strange about the dependent data having numbers that are occasionally unknown. It wouldn't be a real experiment otherwise.

Sorry, but I'm approaching senility. :-(

Cheers,

David
--
David Fanning, Ph.D.
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Coyote's Guide to IDL Programming: http://www.dfanning.com/
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: IDLgrPlot
Posted by davidf on Wed, 03 Nov 1999 08:00:00 GMT

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Martin.Schultz@dkrz.de (m218003@modell3.dkrz.de) writes:

> Let's put it this way: we wouldn't need something as powerful as IDL
> if it was always dependent y versus independent x.

No. I'll concede that point. :-)

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting
Phone: 970-221-0438 E-Mail: davidf@dfanning.com
Coyote's Guide to IDL Programming: http://www.dfanning.com/
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Subject: Re: IDLgrPlot
Posted by m218003 on Wed, 03 Nov 1999 08:00:00 GMT

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In article <MPG.12895ae76a6d2e0a989935@news.frii.com>,
davidf@dfanning.com (David Fanning) writes:
> Pavel Romashkin (promashkin@cmdl.noaa.gov) writes:
>
> I mean, really,
> shouldn't you *know* what the independent data is?
> Shouldn't it *always* be defined? How else would
> you plot anything? On the other hand, I find nothing
> strange about the dependent data having numbers that

> are occasionally unknown. It wouldn't be a real
> experiment otherwise.
>

... but you can wish to plot two dependent variables versus each other. Example: a time series of carbon monoxide and ozone was measured and you want to find out if the two correlate. It can become even worse: in the example of ozone sondes your independent axis is certainly the y axis (these things fly vertically!).

Let's put it this way: we wouldn't need something as powerful as IDL if it was always dependent y versus independent x.

Cheers,
Martin

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