Subject: Re: Axis issues, cgSurf and cgContour
Posted by sam.tushaus on Fri, 27 Feb 2015 19:09:45 GMT

On Friday, February 27, 2015 at 12:48:25 PM UTC-6, David Fanning wrote:
>
>
>> Hello! I've been attempting to plot contour data and data on a surface using cgContour and cgSurf, respectively. In both cases I've had issues with the axes. The general form of each command is as follows:
>>   cgContour, data, x, y
>>   cgSurf, data, x, y
>> Unfortunately, actually inserting something for x and y above hasn't been working out for me. In cgContour, I get a jumbled mess of contours that only vaguely resembles the actual data; in cgSurf, I get only a thin cylinder in the middle of the plot. Plotting without using x and y creates the proper plots, but requires forcing my axes, which can be tedious to program when handling large quantities of data and large numbers of plots (which I need to automate).
>>
>> Does anyone have experience with this issue? Any fixes? I've tried switching x and y, switching the dimensions of my x and y arrays, using vectors vs 2D arrays...but I've gotten nowhere so far.
>
> I have no idea what "forcing my axes" means, but if the commands work
> when you don't specify X and Y values, I presume this means when you do
> provide them you are doing so incorrectly. But, I really can't tell from
> the evidence you have presented.
>
> Cheers,
>
> David
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> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
> Sepore ma de ni thue. ("Perhaps thou speakest truth.")

Sorry - by forcing the axes, I mean that I need to suppress them and then specify axis labels. This can get pretty tedious since I want to automate the process, and I don't often have whole numbers to use on the axis. Here's what I want to plot using cgSurf:

data = elevation [25,320]
x = longitude [25,320]
y = latitude [25,320]

I've tried "cgSurf, data, x, y" and "cgSurf, data, y, x", as well as something to the effect of "cgSurf, data, x[1,*], y[1,*]"...but as I type that out, I'm realizing that I was thinking about it wrong. I needed to do "cgSurf, data, x[*,1], y[1,*]" to match dimensions.

However, I still have issues with cgContour. In that case, I've got:

data = reflectivity [1440,31]
x = time [1440]
y = height [1440,31] (or [31] if I just use one row of data)

I've tried everything I can think of to plot this, but I've had no luck.