## Subject: Frustrated by 2 Data Plotting problems Posted by almost\_like\_a\_metapho on Wed, 25 May 2011 19:57:33 GMT View Forum Message <> Reply to Message

I have 2 IDL plotting questions that have been giving me lots of frustrations. I just upgraded to 8.1 (Mac), so can use whatever is available.

I'm guessing these have both been done a zillion times, but I'm new here (sorry, hi), and am having a devil of a time.

First: trying to figure out how to plot data and color code by value.

I have x,y, and, z values in 3 columns (actually lons, lats, and intensities of a profile)

In my simple minded way I wanted to plot x vs y, and set the color of the dot to a value for z.

The only way I can think of doing this right now is to step through every row and oplot each pair x[i],y[i] with the color for that pair taken from z[i]. This makes for a long executing loop with large files.

I'm guessing I'm missing doing something with a mapping procedure (which I would be willing to learn), but is there any way to simply turn the color value of plotting into a vector the same size as x&y?

## Second:

I have many files I need to repeat processes with, generating data I want to overplot on multiple plots. So far, it looks like I have to make a choice: Load in one file and create my different plots for that file, or load in all files and extract the data from each file for one plot at a time, then going back again through all the files to create the next plot.

A more detailed version of the problem.

From any given Data (D1, D2, D3....D100) I extract parameters P1, P2, P3 that I want to plot.

As of now, I can loop through D1-D100 and overplot derived parameters for P1, but in order to get P2, I have to loop through again. I can't seem to plot P1, P2, and P3 from D1, then cycle through and overplot data from D2 onto the correct plots.

I hope that description makes sense. If not I can elaborate.

## Subject: Re: Frustrated by 2 Data Plotting problems Posted by David Fanning on Tue, 31 May 2011 14:52:33 GMT

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## Kenneth P. Bowman writes:

- > Actually, I think it proves \*my\* point. You plot all of the
- > data. You see that there is a lot of overlap. You decimate
- > the data and plot it again. If the results are qualitatively
- > the same, you can continue with the decimated data, but you
- > don't want to \*start\* by decimating the data. You might miss
- > something important (like outliers).

OK, I concede. Whatever point I was trying to make (I can't remember at the moment) I didn't do a very good job of making. Since this comes up every couple of months, I'm sure I'll have the opportunity to try again. Meantime, people can take as long as they like to draw dots on the plots, and they can draw as many as they like. Just don't complain to me when they take a long time, or I'm afraid you will set me off again. ;-)

Cheers,

David

David Fanning, Ph.D. Fanning Software Consulting, Inc. Covote's Guide to IDL Programming: http://www.idlcovote.com/ Sepore ma de ni thui. ("Perhaps thou speakest truth.")