Subject: Re: Large File Plotting

Posted by davidf on Thu, 28 Sep 2000 07:00:00 GMT

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

- >> What is needed is
- >> something that can detect file size and
- >> only display to the pixel resolution of the
- >> screen.

>

- > I think this is exactly what you need. At 1024 x 768, a monitor is
- > capable of producing not better than 85 points per inch. Resample your
- > large array to the desired resolution and plot it. PLOT will do this
- > anyway (on a visual level), but a lot less efficiently.

>

- > If the axis you plot against is 5" long, then the maximum number of
- > points you'll be able to see is < 500. Use CONGRID for plotting:

>

> plot, congrid(a, 500)

>

> works very fast.

Another suggestion along this line is to use the NSUM keyword on the PLOT command. This indicates how many adjacent points IDL is to average in order to reduce the number of plotted points.

If you are in to widget programming, I think you should also be able to write something along the lines of ZPLOT on my web page that allows you to "zoom" into your data at different "resolutions". Some combination of resampling the actual data points and restricting the independent data range should work. I don't think this would be too hard to write.

Cheers.

David

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David Fanning, Ph.D.

Fanning Software Consulting

Phone: 970-221-0438 E-Mail: davidf@dfanning.com

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