Subject: Re: The best way to bin data to a grid? (may not be an IDL-specific question)
Posted by David Fanning on Mon, 12 Dec 2011 02:29:55 GMT

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Jasdeep Anand writes:

> I have some satellite data I'd like to bin to a high-resolution 2D
> grid for plotting and/or other analytical purposes. Each data point
> that I have has a corresponding latitude and longitude of the centre
> of the original pixel that the data was originally recorded from. The
> grid I'm trying to assign this data to is of a much finer resolution
> than what the data was taken from, so several data points may be
> assigned to the same pixel, in which case I guess an average data
> value will need to be assigned instead. To further complicate matters,
> the data I want to bin is a global dataset of ~1500000 individual
> points, spread over a number of ASCII files.
>
> Are there any routines that can handle having input data this large?
> Ideally I'd like to incorporate the binning process into the same loop
> that extracts and reads the data from each file, but I think functions
> like GRIDDATA require having all the data points to be gridded
> available already when calling them. Also, are there any general
> "housekeeping" tips that anyone can tell me about handling such data?
> I'm still quite new to this, and would appreciate any pointers you all
> could give me!

If this were me, I wouldn't think about doing this in
IDL at all. I'd spend all my time trying to convince some
hapless graduate student that he would famous if he would
write a C program to do this. :-)

Cheers,

David

--
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Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")