Subject: Re: The best way to bin data to a grid? (may not be an IDL-specific question)
Posted by Jasdeep Anand on Mon, 12 Dec 2011 09:51:57 GMT
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On Dec 12, 2:29 am, David Fanning <n...@dfanning.com> wrote:
> 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
>
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming:http://www.idlcoyote.com/
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")- Hide quoted text -
>
> - Show quoted text -

David,

Considering that I am a hapless grad student, would fame and fortune
really await me if I can crack this? ;)

In all seriousness though, would routines like GRIDDATA, TRIGRID, etc break down for such a large input? How do people in general handle analysing such large datasets? Again, I'd be grateful for any advice you all could give me.

Thanks again,

Jasdeep.
