Subject: The best way to bin data to a grid? (may not be an IDL-specific question) Posted by Jasdeep Anand on Sun, 11 Dec 2011 23:19:06 GMT

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Hi all,

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!