
Subject: Re: array index summations

Posted by [David Fanning](#) on Fri, 18 Dec 2009 18:35:13 GMT

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H. Evans writes:

- > The difference is that the histogramming functions count the number of
- > points in the bins, i.e. the number of points between x and $x+\text{width}$.
- > Whereas the CONGRID, GRIDDATA, REBIN functions interpolate the data
- > points to an X-Y grid.
- >
- > This function performs statistics on the contents of the Z vector,
- > i.e. what is the mean value of the data points in the range $x \rightarrow x+dx$,
- > not how many data points are in the range $X \rightarrow x+dx$, which the histogram
- > function provides. In other words, it finds the data points that are
- > in the bin, and then sums up the Z values in that bin.
- >
- > If the histogram function provided a weighting function to the
- > counting, then this could be used to sum the Z values in the bin.

I'm not following this closely, but I think the point is
that HIST_ND could tell you which voxels were in each
XY bin, and you could then perform your own statistics
or weighting function on those values, however you liked.

This would reduce the complexity of your code significantly.

Cheers,

David

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David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Sepore ma de ni thui. ("Perhaps thou speakest truth.")
