Subject: Re: array index summations
Posted by H. Evans on Fri, 18 Dec 2009 18:48:21 GMT
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On Dec 18, 7:35 pm, David Fanning <n...@dfanning.com> wrote:
> 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+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->x+dx,
>> not how many data points are in the range X->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.

Hi,

Finding the indices of the data points in a 2d bin is not the hard
part. What I'm trying to avoid is having a FOR loop that iterates over
the bins doing the statistics on the data points that are in a bin.

Ta.
Hugh