Subject: Re: array index summations
Posted by H. Evans on Fri, 18 Dec 2009 18:28:51 GMT
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On Dec 18, 6:00 pm, Gianguido Cianci <gianguido.cia...@gmail.com>
wrote:
> On Dec 18, 5:07 am, "H. Evans" <bloggs...@googlemail.com> wrote:
>
>> I have a time-series data set, effectively a 3-vector (x,y,z), where
>> the Z values are to be binned into a 2D array along X/Y.
>
> Isn't this what hist_nd.pro was invented for? or for that matter, the
> inbuilt hist_2d? or am I missing something?
>
> Gianguido

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.

Ta,
Hugh