
Subject: Re: binning a point clouds in the xy plane
Posted by [David Fanning](#) on Thu, 19 Dec 2013 22:13:11 GMT
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Nafiseh Masoumzadeh writes:

> I have three vectors, x, y, z having same size which I want to bin x and y and have average value of z corresponding to bin. and then get resample data in point clouds as an output.
>
> rebin or reform are supposed to do it, but I couldn't find how, however I've studied http://www.idlcoyote.com/tips/rebin_magic.html. The example in this link for me it is more like to mask your data but I want to have an average of one of my vector z in bin x-y plane

I would use HIST_ND with the REVERSE_INDICES keyword to bin the data in X and Y. Then, I would loop through each bin and with the output from REVERSE_INDICES find the Z values falling in each bin and average those.

You can find HIST_ND in the Public directory of the Coyote Library, and you might find cgReverseIndices handy for returning the indices of the Z values in each bin:

<http://www.idlcoyote.com/idldoc/cg/cgreverseindices.html>

Cheers,

David

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Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>
Sepore ma de ni thue. ("Perhaps thou speakest truth.")
