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Subject: Re: Help setting up an array

Posted by [Peter Thorne](#) on Wed, 28 Mar 2001 21:54:01 GMT

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Thanks to everyone who has replied. At nearly 11pm I'm not sure whether its exactly what I'm looking for, I shall investigate further tomorrow. It seems like as suggested I have been looking at it for too long so have tried to explain it in far too much difficulty, sorry. So, I'll give a hopefully better example:

3-D (to keep everyone happy, theoretically could be expected to be 2 to 5 dimensional)

Locations array (points within a 3-D ellipsoid)

```
x y z (coordinates)
(1.5,3.4,2.0) point 0
(3.,-0.5,6.3) point 1
(1.3,2,-4.5) point 2
(-0.1,1.7,0.1) point 3
.
.
.
.
(3.1,9.2,-1.4) point npoint
```

npoint is of order (10,000)

From this I wish to create a say 50x50x50 grid which covers all plausible values (found by min and max in each column of the locations array).

Then I need to rebin each of these points into the 3-D grid-space, so each grid-box has a value which is the number of these original points which fall within that grid-box. Other considerations are peripheral, the problem arises in this transformation from the locations array to a finite difference grid in which the values can be rebinned and how they are rebinned.

This may have been covered already, but as my IDL license is at work and not home I can't check :(

Thanks again for all the pointers and comments

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