
Subject: Re: xyz triplet array to a "flat" 2D array?

Posted by [Craig Markwardt](#) on Fri, 21 Jan 2000 08:00:00 GMT

[View Forum Message](#) <> [Reply to Message](#)

"Todd Bowers" <tbowers@nrlssc.navy.mil> writes:

> Does anybody have a quickie that'll convert data in xyz triplets
> to "flat" format? e.g.

>

> x y z to 89.5 89.6 89.7 89.8

> 89.7 20.1 00.1 20.1 00.1

> 89.6 20.3 00.2 20.2 00.3

> 89.8 20.2 00.3 20.3 00.4 00.2

> 89.5 20.3 00.4

>

> with x running across the top and y down the first column, blanks
> are NaN's or whatever. Like it's been interpolated, but without
> the interpolation ;).

How about:

$dx = (x1 - x0) / nx$

$dy = (y1 - y0) / ny$

$flat = \text{fltarr}(nx, ny)$

$flat((x - x0) / dx, (y - y0) / dy) = z$

where [x0,x1] and [y0,y1] are the X and Y ranges of the data. Error checking, and one-off questions are left as an exercise for the reader. Creative uses of HISTOGRAM and REVERSE_INDICES can also be used, if you are interested in extra credit.

Good luck,

Craig

--

Craig B. Markwardt, Ph.D. EMAIL: craigmnet@cow.physics.wisc.edu
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
