Subject: Re: plot (x,y,z) triplets as a surface?
Posted by Mark Hadfield on Thu, 04 Nov 1999 08:00:00 GMT
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David Fanning <davidf@dfanning.com> wrote in message news:MPG.128a0f352e8e5f8e989937@news.frii.com...
> Andrew (noymer@my-deja.com) writes:
>
>> ...The x,y values ARE evenly
>> spaced but I would STILL like to output the data as triplets. Call
>> me stubborn.
>>
>> Is there any way to read (x,y,z) triplets into IDL and make a
>> surface? Sorry if this is a terrible newbie question.
>
> I've been meaning to write an article about gridding
> data for a SURFACE plot for about 5 years now. This
> question finally pushed me over the edge. You can find
> it here:
>
> http://www.dfanning.com/tips/grid_surface.html

David--That's a very useful article, but Andrew's original post said that the data ARE evenly spaced.

Andrew--As I understand it you want to read in a series of (x,y,z) triplets which actually represent vertices in a m x n rectangular array, i.e. something like this (for m=2, n=3)

0 0 [Z value]
0 1 [Z value]
0 2 [Z value]
1 0 [Z value]
1 1 [Z value]
1 2 [Z value]

and you want to reorganise the data into an X vector (dimensioned [m]), a Y vector (dimensioned [n]) and a Z array (dimensioned [m,n]) and generate a surface plot. Can you confirm that this is the problem you are trying to solve, and indicate which part you are having difficulty with. Is it reading the data from the file or recovering X, Y and Z? Do you know m and n in advance? Can you control the order in which the data are written into the file?

Cheers...

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