
Subject: Re: matrices with different size

Posted by [K. Bowman](#) on Thu, 13 Jan 2005 17:52:53 GMT

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In article <3374f20e.0501130821.41623a00@posting.google.com>, ikverveelmijdood@hotmail.com (V.S.) wrote:

> Hi,
> my problem is the following: I have a dataset with a strong sinusoidal
> component. However, its period and height are not constant. What I
> exactly want is to split-up the data in different parts, and put them
> into a matrix. Is this possible in IDL (and how?) to generate a
> matrix, filled with vectors that have a different length? I know that
> in Matlab "cell arrays" can be used.
> Best regards,
> Veerle

There are many options. You could:

1) use an array with one dimension equal to the size of the longest vector that you need. Initialize it with NaNs. This would probably be easiest to program but potentially inefficient of memory use.

2) use a 1-D array large enough to store all of the values plus a table of indices, like REVERSE_INDICES does for HISTOGRAM. A little harder to program but efficient of memory use.

3) use a dynamical data structure like a linked list (using pointers). I think someone has written a library for making linked lists.

4) possibly(?) use the sparse-array capabilities of the LAPACK routines.

Ken Bowman
