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Subject: Re: Cannot allocate memory!

Posted by [Craig Markwardt](#) on Tue, 17 Jan 2006 10:28:38 GMT

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"Sheldon" <shejo284@gmail.com> writes:

- > Thanks David,
- >
- > IDL does have a very good manual.
- > I have a side question that I hope is short enough for you to answer.
- > When looking at the other solutions for averaging large 3D arrays, I
- > noticed something, namely that some syntax for depicting a 3D array
- > took the form: array[50,50,3] where the third dimension is placed at
- > the end and not the beginning: array[3,50,50].
- > Coming over from Python, this seems a bit strange. What is the
- > difference between these two?
- > Doesn't IDL interpret former as a 50 dimensional array of 50 col x 3
- > rows and the latter as a 3 dimensional array of 50 col x 50 rows?

It doesn't really matter whether you call an array index a row or a column. There is more discussion here:

[http://www.dfanning.com/misc\\_tips/colrow\\_major.html](http://www.dfanning.com/misc_tips/colrow_major.html)

I say it doesn't matter because most often, you must refer to the array indices explicitly, so you can define what you mean by a row and column yourself. The only time this is not true that I'm aware of is when doing matrix multiplication with the "#" and "##" operators. It's best just to verify which one is right for you.

For implementation efficiency, it may be important to know which array elements are adjacent. For an array, the elements ARRAY(\*,J,K) are contiguous in memory.

Craig

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