Subject: Re: Reversing a multi-dimensional array Posted by Craig Markwardt on Fri, 04 Jul 2003 00:06:16 GMT

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"Andy Loughe (remove OMITs)" <Andrew.LougheOMIT@noaaOMIT.govOMIT> writes:

> Hello,

>

- > I have a 4-dimensional array, but it could someday grow to become
- > 6 or 7 dimensions. What I would like to do is reverse the entire
- > array, so that if it is now: a(i,j,k,l) it becomes a(l,k,j,i).

> What is the most efficient method for accomplishing this in IDL?

Greetings--

I think you don't actually want to reverse the array, but rather change the order of the dimensions. This is exactly what TRANSPOSE will do for you with its mysterious optional permutation vector parameter. Explaining it is much harder than showing how you would use it:

aprime = transpose(a, [3,2,1,0])

(which is actually the default). Unfortunately this is a case where RSI used 0-based dimension numbering instead of 1-based (as is used in TOTAL, MIN etc).

Craig

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