Subject: Re: Array Concatenation?
Posted by lecacheux.alain on Fri, 29 Jun 2012 14:46:50 GMT
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On 29 juin, 13:02, rj...@le.ac.uk wrote:
> Hi
>
> I have two 4 dimensional arrays like so:
>
> Array[480, 241, 60, 124]
>
> The 4th dimension (124 elements) is time. I want to concatenate the 1st timestep for the second array to the first array, something like this:
>
> new=[array1, array2[*, *, *, 0]]
>
> But I can't get the syntax correct to do the concatenation on the 4th dimension.
>
> Any ideas what I'm doing wrong? I've tried various levels of []'s but can't get it working.
>
> Cheers
>
>

IDL concatenates arrays over the first dimension by using [array1, array2] construct.
To achieve concatenation in your case, you might transpose your arrays first, then transpose the result back, as follows:

new = transpose([transpose(array1), (transpose(array2))[0,*,*,*])

The second array must be transposed before you select last column elements to avoid implicit elimination by IDL of the last dimension in array2[*,*,*,0].

alain.

Subject: Re: Array Concatenation?
Posted by Heinz Stege on Fri, 29 Jun 2012 18:16:33 GMT
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On Fri, 29 Jun 2012 04:02:28 -0700 (PDT), rjp23@le.ac.uk wrote:

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David Fanning has written an article about this:
http://www.idlcoyote.com/tips/array_concatenation.html

HTH, Heinz

Subject: Re: Array Concatenation?
Posted by rjp23 on Wed, 11 Jul 2012 09:10:33 GMT
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On Friday, June 29, 2012 7:16:33 PM UTC+1, Heinz Stege wrote:
> On Fri, 29 Jun 2012 04:02:28 -0700 (PDT), rjp23@le.ac.uk wrote:
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>
> HTH, Heinz

Unfortunately I believe the caveat to that article applies here:

"One caveat: a bug in IDL (as I see it) limits the practical concatenation dimension to 3, even though up to 8 dimensions are supported (i.e. only two pairs of extra brackets are allowed per entry... sorry no [[[[[[[a]]]]]]] permitted). You'll need higher magic if you use 8 dimensional datasets anyway. "

I guess what I was really asking was what this "higher magic" was.
