Subject: Re: 9 dimensions arrays
Posted by David Fanning on Tue, 07 Dec 2004 01:35:25 GMT
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Francois writes:

> How to create nine dimensions (9D) arrays ?
>
> The command make_array takes only 8 dimensions...
> It seems the same for intarr, fltarr, etc.

That's right. Eight is the limit in IDL.

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: 9 dimensions arrays
Posted by Mark Hadfield on Tue, 07 Dec 2004 03:45:11 GMT
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David Fanning wrote:
> Francois writes:
>
>
>> How to create nine dimensions (9D) arrays ?
>>
>> The command make_array takes only 8 dimensions...
>> It seems the same for intarr, fltarr, etc.
>
>
> That's right. Eight is the limit in IDL.

And I am proud to report that I once wrote some code in which it would have been desirable to create arrays with 9 or 10 dimensions. I had to work around the limit by merging a few of them.

--
Mark Hadfield "Ka puwaha te tai nei, Hoea tatou"
m.hadfield@niwa.co.nz
National Institute for Water and Atmospheric Research (NIWA)

Subject: Re: 9 dimensions arrays
Posted by David Fanning on Tue, 07 Dec 2004 03:51:39 GMT
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Mark Hadfield writes:

> And I am proud to report that I once wrote some code in which it would
> have been desirable to create arrays with 9 or 10 dimensions. I had to
> work around the limit by merging a few of them.

I *thought* about a 4D array once, but decided against it after
reading the Array Concatenation Tutorial again. :-(

Cheers,

David

--
David Fanning, Ph.D.
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Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: 9 dimensions arrays
Posted by Kenneth P. Bowman on Tue, 07 Dec 2004 05:09:12 GMT
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In article <MPG.1c1eb6cc10c06fca98989b@news.frii.com>,
David Fanning <davidf@dfanning.com> wrote:

> Francois writes:
>
>> How to create nine dimensions (9D) arrays ?
>>
>> The command make_array takes only 8 dimensions...
>> It seems the same for intarr, fltarr, etc.
>
> That's right. Eight is the limit in IDL.

Well, you could make your own n-dimensional arrays by using
one-dimensional arrays and writing your own subscripting function, e.g.,

dims = [n1, n2, n3, n4, n5, n6, n7, n8, n9]
x = FLTARR(PRODUCT(dims))
x[MY_INDEX(i1, i2, i3, i4, i5, i6, i7, i8, i9, DIMS = dims)] = ...

The MY_INDEX function would convert from subscripts to 1-D array index
(what IDL does for normal subscripts internally).

Of course, it wouldn't be particularly fast. ;-)

Ken Bowman
