Subject: Array slices

Posted by Richard Edgar on Thu, 02 Feb 2006 16:44:49 GMT

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## Greetings,

I'm having trouble with slices of 3D arrays in IDL, and I suspect that it's something I don't understand about the way IDL interprets things. My problem can be summed up as follows:

```
IDL> arr=DINDGEN(3,3,3)
IDL> help,arr
ARR DOUBLE = Array[3, 3, 3]
IDL> help,arr[*,*,1]
<Expression> DOUBLE = Array[3, 3]
IDL> help,arr[*,1,*]
<Expression> DOUBLE = Array[3, 1, 3]
IDL> help,arr[1,*,*]
<Expression> DOUBLE = Array[1, 3, 3]
```

## My questions are:

- a) Why don't all three slices return a [3,3] array?
- b) How do I eliminate the 'useless' dimension?

I typically have routines which want a 2D array, which I only get from the first of these. They (naturally) choke when given a 3D array, one of whose dimensions is unity.

Thanks in advance,

Richard

Subject: Re: Array slices

Posted by David Fanning on Thu, 02 Feb 2006 18:01:56 GMT

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## Richard Edgar writes:

- > For me, the most annoying thing is the inconsistency. If all gave a
- > {3,3,1} array (permute as necessary), then there'd be less of a problem.

Oh, please, don't get us started on this again!

Cheers,

David

--

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Covote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: Array slices

Posted by David Fanning on Thu, 02 Feb 2006 18:11:18 GMT

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## David Fanning writes:

> Richard Edgar writes:

>

- >> For me, the most annoying thing is the inconsistency. If all gave a
- >> {3,3,1} array (permute as necessary), then there'd be less of a problem.

>

> Oh, please, don't get us started on this again!

Craig,

Why don't you write the definitive article on this topic, giving all points of view, and I'll publish it and we will be done with it for all time. :-)

Cheers,

David

P.S. There are some topics I rather enjoy recycling. (I miss DEVICE, DECOMPOSED=0 very, very much.) But there are others that just seem too tedious to go into. This one \*definitely\* falls into that category for me. Although I do see the need for an explanation. I just can't write it myself without barfing. :-(

--

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Subject: Re: Array slices

Posted by Craig Markwardt on Sun, 05 Feb 2006 18:44:53 GMT

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David Fanning <a href="mailto:com">com</a> writes:

> David Fanning writes:

>> Richard Edgar writes: >>
>>> For me, the most annoying thing is the inconsistency. If all gave a
>>> {3,3,1} array (permute as necessary), then there'd be less of a problem.
>> Oh, please, don't get us started on this again!
> Craig,
> Why don't you write the definitive article on this topic, > giving all points of view, and I'll publish it and we will > be done with it for all time. :-)
> I just can't write it myself without barfing. :-(
Neither can I :-)
Craig
Craig B. Markwardt, Ph.D. EMAIL: craigmnet@REMOVEcow.physics.wisc.edu Astrophysics, IDL, Finance, Derivatives   Remove "net" for better response