
Subject: Array index bug....

Posted by [steinhh](#) on Sun, 21 Feb 1999 08:00:00 GMT

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Try this:

```
data = transpose([[[dist(50)],[[dist(50)]]],[2,0,1])
help,data
; DATA      FLOAT    = Array[2, 50, 50]
```

```
tvsc1,data(0,*,*) ;; Shows the expected image...
```

But, imagine that you're writing a general program that must accept arrays with any number of dimensions, and extract data from the array in (n-1)-dimensional "slices" like the above. Short of having a CASE statement for every extraction of data from the array, the way to do this is e.g.:

```
tvsc1,data(0,*,*,*,*) ;; Shows the expected image in this case,
                        ;; works for up to 5 dimensions (though
                        ;; I don't know what TVSCL would say about
                        ;; that!)
```

Now, IDL **claims** to handle up to 8 dimensions, so one would think the best thing is to prepare your code for it, e.g.:

```
tvsc1,data(0,*,*,*,*,*,*,*)
```

The image is **not** what you expect! Clearly something breaks down with the eighth dimension.....

Another matter is, how do you create e.g., 4-dimensional data sets with the concatenation style? Lets see:

```
IDL> help,[1,2]
<Expression>  INT    = Array[2]
IDL> help,[[1],[2]]
<Expression>  INT    = Array[1, 2]
IDL> help,[[[1]],[[2]]]
<Expression>  INT    = Array[1, 1, 2]
IDL> help,[[[[1]]],[[2]]]
```

```
help,[[[[1]]],[[2]]]
      ^
```

% Only eight levels of variable concatenation are allowed.

Hmm. Very strange indeed, since I don't even have 8 opening (or closing) brackets in total, much less anything going to

what *I* would interpret as 8 levels of concatenation....

Regards,

Stein Vidar

Subject: Re: Array index bug....

Posted by [luthi](#) on Mon, 12 Jul 1999 07:00:00 GMT

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Gwyn

I tried your code with PV-Wave (6.1, Solaris 2.6) and anything looks ok, until
I use nine subscripts:

```
print,a(0,*,*,*,*,*,*,*)  
% Only 8 subscripts allowed.
```

(btw: Have you tried using parentheses instead of brackets for array indexing,
if this is still allowed in IDL. Probably this could work since both IDL and
PV-Wave once had the same code base... who knows!)

Cheers

Martin

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```
=====
```

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```
=====
```
