Subject: array referencing problem ...
Posted by Andreas Brunn on Tue, 08 Mar 2005 16:43:37 GMT
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dear listland
I have a problem referencing a three dimensional array with a two

dimensional array and copy this in each channel of the three dimensional.
But there must be a more elegant and memory saving method doing this, so i
tried the following and ran in an in my eyes a little bit strange behaviour:

ENVI> a=findgen(5,5,5)
ENVI> ma=where(a le 10)
ENVI> print, (a(*,*,1))(ma)
25.0000 26.0000 27.0000 28.0000 29.0000 30.0000 31.0000 32.0000 33.0000
34.0000 35.0000
thats what I hoped and expected as a result

but if I try the following:
ENVI> (a(*,*,1))(ma) = 2
% Expression must be named variable in this context: <FLOAT Array[5, 5]>.
% Execution halted at: $MAIN$

I only get that error message, where is my mistake ?

Is there a way applying this mask on each of the channels without copying
each channel in a two dimensional array ?

thanx a lot in advance

Andi

Subject: Re: array referencing problem ...
Posted by David Fanning on Wed, 09 Mar 2005 00:02:40 GMT
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Andreas Brunn writes:

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> dimensional array and copy this in each channel of the three dimensional.
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>
> I only get that error message, where is my mistake ?

Too many parentheses. :-)

Here is an article that might help:

http://www.dfanning.com/code_tips/tempvar.html

> Is there a way applying this mask on each of the channels without copying
> each channel in a two dimensional array ?

I would have a look at the Dimensional Juggling Tutorial:

http://www.dfanning.com/tips/rebin_magic.html

Cheers,

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

Subject: Re: array referencing problem ...
Posted by marc schellens[1] on Thu, 10 Mar 2005 07:01:50 GMT
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> Here is an article that might help:
>
> http://www.dfanning.com/code_tips/tempvar.html

While this article is still covers the point, its a little bit
outdated:
IDL now correctly complains about the expression.

IDL> p = ptr_new({a:1, b:2, s:{x:0,y:0, a:[256,256,48]} })
IDL> ((*p).s.a)[2] = ((*p).s.a)[2] * 4

```
% Expression must be named variable in this context: <INT
Array[3]>.
% Execution halted at: $MAIN$
```

But there is still another bug in IDL:

```
function ret,a
return,a
end

IDL> a=1
IDL> ++(ret(a[0]))
IDL> print,a
      1
```

But this only happens if used as a statement:

```
IDL> print,++(ret(a[0]))
% Expression must be named variable in this context: <INT      (
1)>.
% Execution halted at: $MAIN$
```

Ah, and did I mention that GDL
(http://gnudatalanguage.sourceforge.net/)
behaves correctly in all cases :-)

Cheers,
marc