
Subject: A[X,Y,Z] -> A[Z,X,Y]

Posted by [greenwoodde](#) on Wed, 09 Aug 2000 07:00:00 GMT

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I'm trying to analyze data from a new experiment using an IDL code from a different experiment. The new experiment has data stored in an array of the form [X,Y,Z] while the code expects [Z,Y,X]. I can do something like (untested):

```
FOR i = 0, z-1 DO BEGIN
  FOR j = 0, y-1 DO BEGIN
    newarray[i, y, *] = oldarray[* , y, i]
  ENDFOR
ENDFOR
```

But I thought perhaps someone (probably several people) here could suggest a better (faster, more elegant, etc.) way?

Fyi, to give some size to the problem, X=1024, Y=39 and Z=3.

Thanks,
Dave

Dave Greenwood
Oak Ridge National Lab

Email: Greenwoodde@ORNL.GOV
%STD-W-DISCLAIMER, I only speak for myself

Subject: Re: A[X,Y,Z] -> A[Z,X,Y]

Posted by [greenwoodde](#) on Wed, 09 Aug 2000 07:00:00 GMT

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Paul van Delst <pvandelst@ncep.noaa.gov> wrote:

> "Liam E. Gumley" wrote:

>>

>> Dave Greenwood wrote:

>>>

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>>> a different experiment. The new experiment has data stored in an array
>>> of the form [X,Y,Z] while the code expects [Z,Y,X]. I can do something
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>>> suggest a better (faster, more elegant, etc.) way?
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>>> Fyi, to give some size to the problem, X=1024, Y=39 and Z=3.
>>
>> a = findgen(1024, 39, 3)
>> b = transpose(a, [2, 0, 1])
>> help, b
>> B          FLOAT    = Array[3, 1024, 39]
>
> Not to be to ZYX'y about it, but how about
>
> IDL> a = findgen(1024, 39, 3)
> IDL> help, transpose(a, [2, 1, 0])
> <Expression>  FLOAT    = Array[3, 39, 1024]

```

Thanks. I guess it's time to get a new reference manual. Mine only shows one argument for transpose ;-(

Dave

 Dave Greenwood Email: Greenwoodde@ORNL.GOV
 Oak Ridge National Lab %STD-W-DISCLAIMER, I only speak for myself

Subject: Re: A[X,Y,Z] -> A[Z,X,Y]
 Posted by [Paul van Delst](#) on Wed, 09 Aug 2000 07:00:00 GMT
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"Liam E. Gumley" wrote:

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Not to be to ZYX'y about it, but how about

```
IDL> a = findgen(1024, 39, 3)
IDL> help, transpose(a, [2, 1, 0])
<Expression>  FLOAT    = Array[3, 39, 1024]
```

--

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