Subject: Re: Variable stride in array indices
Posted by bowman on Tue, 18 May 1999 07:00:00 GMT
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In article <3732EFA0.1F6C49C0@ssec.wisc.edu>, Liam Gumley
<Liam.Gumley@ssec.wisc.edu> wrote:

> Or I can select the columns and rows at the same time:
>
> IDL> print,(a[x,*])[*,x]
> 0 2 4 6 8
> 20 22 24 26 28
> 40 42 44 46 48
> 60 62 64 66 68
> 80 82 84 86 88

I had a chance to look at my code to see if Liam's suggestion would work,
and I realized that it won't, because I need to use the variable stride on
the *left* side of the equal sign, i.e.

```
IDL> a = LINDGEN(6,6)
IDL> print, a
       0       1       2       3       4       5
       6       7       8       9      10      11
      12      13      14      15      16      17
      18      19      20      21      22      23
      24      25      26      27      28      29
      30      31      32      33      34      35
IDL> print, (a[*,2*LINDGEN(3)])[2*LINDGEN(3),*]
       0       2       4
      12      14      16
      24      26      28
```

works fine *extracting* data, but

```
IDL> (a[*,2*LINDGEN(3)])[2*LINDGEN(3),*] = -1
% Temporary variables are still checked out - cleaning up...
IDL> PRINT, A
       0       1       2       3       4       5
       6       7       8       9      10      11
      12      13      14      15      16      17
      18      19      20      21      22      23
      24      25      26      27      28      29
      30      31      32      33      34      35
```

fails.

So it is possible to extract values (gather) but not to insert values

(scatter) with a variable stride using this method.

I repeat my call for a simple stride syntax in IDL

a[0:5:2,0:5:2] = -1

Ken

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