Subject: Re: Array multiplication: implicit loop query
Posted by billb on Fri, 10 Aug 2001 12:53:25 GMT
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george@apg.ph.ucl.ac.uk (george Millward) wrote in message news:<d90c0773.0108100256.6398a693@posting.google.com>...
> Hi there
>
> I was just calculating the following equation:
>
> DEN_H = MMR_H * Pres * RMT / (atomic_mass_H * Gas_constant * TN)
>
> These numbers are 3D arrays, 1D arrays and constants, i.e.,
>
> MMR_H = fltarr(30,91,40)
> Pres = fltarr(30)
> RMT = fltarr(30,91,40)
> atomic_mass_H = constant
> Gas_constant = constant
> TN =fltarr(30,91,40)
>
> The result of this is DEN_H (previously undefined) which ends up being
> fltarr(30) - i.e., 1 dimensional.
> To my mind DEN_H should be 3D (30,91,40) - shouldn't it ? Doesn't IDL
> understand that I am implicity doing a full 3D calculation here ?

No.

> It
> would seem that, to get this to work I need to make
> Pres=fltarr(30,91,40).

Yes.

```
IDL> a = indgen(20,20)
IDL> b = indgen(20)
IDL> c = b * a
IDL> help, c
C               INT       = Array[20]
```

I believe you need to REPLICATE 'Pres' as needed.

-Bill B.