Subject: Re: Multiplying a cube by a vector
Posted by thompson on Thu, 09 Dec 1999 08:00:00 GMT
View Forum Message <> Reply to Message

Pierre Chanial <pchanial@cea.fr> writes:

> Hi !

> Has anybody written a function that multipies an array by a vector along
> a given dimension?
> For the last dimension, one can do for an array of dimension nx,ny,nz :

> vector_unit = replicate(1, nx*ny)
> newcube = vector ## vector_unit
> newcube = reform(cube,nx*ny, nz) * temporary(newcube)
> newcube = reform(newcube, nx,ny,nz, /overwrite)

> but for the other dimensions ?

> Cheers Pierre

Pierre:

I believe that the following will what you want. If CUBE has the dimensions (NX,NY,NZ), and VECTOR_Y has the dimensions (NY), then you can multiply the two with the command

```
NEWCUBE = REBIN( REFORM(VECTOR_Y, 1,NY,1), NX,NY,NZ)
```

(I believe that Stein Vidar Haugan first pointed this out.)

William Thompson