Subject: Problem with array concatenation
Posted by Paul van Delst on Tue, 25 Mar 1997 08:00:00 GMT
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Hello,

I'm using IDL4.0.1 and I'm having a problem with array concatenation that defies any explanation on my part. Here goes....

I'm using the following to code to read in binary data (in a weird format) :

LOOP over n_panels....

```
  rad = fltarr( panel_header.n_pts, /nozero )
  tau = fltarr( panel_header.n_pts, /nozero )

  readu, lbl_file_lun, rad
  readu, lbl_file_lun, tau

  tmp = [ [ temporary( rad ) ], [ temporary( tau ) ] ]
  if n_panels eq 0 then begin
    lbl_spc = temporary( tmp )
  endif else begin
    lbl_spc = [ temporary( lbl_spc ), temporary( tmp ) ]
  endelse
```

What I want to end up with, in array lbl_spc, is data in the form [N, 2] where a total of N points was read in and lbl_spc(*,0) references all the "rad" data read in and lbl_spc(*,1) references all the "tau" data read in. Typically, panel_header.n_pts is LE 2400 but the total number of data points read in after looping a bzillion times can be > 5e+06.

Anyway, for the data I'm reading, when I exit my procedure I can get the following:

```
IDL> help, lbl_spc
LBL_SPC         FLOAT     = Array(4152834, 2)
```

which is fine and dandy....right? Well why does this happen:

```
IDL> help, lbl_spc(*,0)
help, lbl_spc(*,0)
              ^
% Syntax error.
```

And...even more bizarre, I get this:

IDL> help, lbl_spc(0,0)
<Expression>   STRING   = ''

What gives? My float array suddenly is composed of STRINGS??? The same occurs when I use help on any SINGLE element of the array. Any more than one element returns a syntax error.

I can retrieve the data if I assign the array to another variable name and then everything behaves as it should. Is the method of 2-dimensional array concatenation that I'm using a brain-dead way of doing it? BTW, it doesn't matter whether I concatenate it as [N,2] or[2,N].

Any help/info/comments/suggestions appreciated.

thanks,

Paul van Delst
