
Subject: Re: Referencing elements of array expressions

Posted by [velt](#) on Mon, 06 Feb 1995 16:18:24 GMT

[View Forum Message](#) <> [Reply to Message](#)

In article <3guag9\$hnqn@marsupial.jpl.nasa.gov>, "Evan F. Fishbein" <eff@tugh.jpl.nasa.gov> writes:

> A simple question -- Is it possible to reference elements
> of array expressions. For example, can the last two lines of
> the following code:

```
>  
> x=findgen(40)/10.0  
> y=cos(2.0!*pi*x)  
> i=where(abs(y) lt 1.0e-5)  
> i=i(0:1)+[-1,1]
```

```
>  
> be combined into one line by accessing the first  
> element of the expression "where(abs(y) lt 1.0e-5)"  
> without placing the vector result in a dummy array variable?
```

This is a simple trick-question, isn't it? The where finds no elements satisfying the condition, so the last statement will generate an error.

However, in general you can index expressions by surrounding it with parentheses and indexing that:

```
IDL> result = (expression) (elements)
```

For example, the last two lines above can be written:

```
IDL> i=( where(abs(y) lt 1.0E-5) ) (0:1) + [-1,1]
```

Robert Velthuisen (velt@rad.usf.edu),
Digital Medical Imaging Program of the
H. Lee Moffitt Cancer Center and Research Institute at the
University of South Florida, Tampa FL 33612.
