
Subject: Re: Referencing elements of array expressions

Posted by [steinhh](#) on Mon, 06 Feb 1995 02:10:18 GMT

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In article <3guag9\$nqn@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?
|>

Yes, it's possible:

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

and in general, you can reference elements of arrays in expressions by adding parentheses around the array expression, and then the index in another pair of parentheses:

```
sub_array = (my_arrayfunc(0.5))(0:5)
```

I wouldn't recommend it in your example, though, because WHERE might return a scalar long if no elements match the test, but I often use it with e.g. N_DIMENSIONS = (SIZE(a))(0)

Stein Vidar
