## Subject: Re: N ELEMENTS and WHERE: Scalar or Array? Posted by steinhh on Mon, 01 Feb 1999 08:00:00 GMT

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In article <36b57934.0@news.nwl.ac.uk> wmc@bas.ac.uk writes: [...] > But since this has come up, & its one of my pet peeves: why cannot where > return a null array to indicate no-elements-match. And then array[null] would

> > array[where(wurble)]='stoat' > instead of the ugly > i=where(wurble,count)

if (count gt 0) then array[i]='stoat' >

> I use Perl a lot, and the contrast is very striking there: perl handles null

> values guite happily and it simplifies a lot of things.

> match to nothing. This would allow one to say

I agree, it would be a nice feature... However, I have problems seeing how to implement this, without altering e.g. the way IDL allows you to index arrays with an array that is out of bounds.. (try help,(findgen(10))(findgen(20)-5))

Maybe using (float/double) NaN values? Hmm. That could work! Let's see.

```
array[NaN] = 5
                   ; Would be allowed, but does nothing
array[NaN,0] = 5; Assigns 5 to element 0 only.
data = array[NaN]
                     ; data is set to NaN!
data = array[ [NaN,0] ]; Data is set to array[0]
```

The only problem I can see is that the indices will sometimes have to be converted to floats/doubles in order to store the NaN values, thus some overhead will occur...

> While I'm here: would RSI please put a decent regexp package into IDL?

Take a look at http://www.uio.no/~steinhh/IDL/additions.html for an example of how to add it using dynamically loadable modules.

It requires a Unix flavor with regex.h, or alternatively the POSIX compliant inteface for the GNU regular expression library (not tested, though) - see http://sunland.gsfc.nasa.gov/info/regex/Top.html, especially the section "Programming with Regex".

## Regards,

## Stein Vidar