
Subject: using WHERE to search for multiple values
Posted by [dmartin](#) on Thu, 25 Apr 2002 22:13:19 GMT
[View Forum Message](#) <> [Reply to Message](#)

I'm trying to do something like the following:

```
w=where(im eq val)
```

with im a byte array (say, 640x480)
and val an array (say, 10 to 40 long)

I want to find where im is equal to any of the values in val. But, val is not always the same size.

Is there a way to do this using one WHERE call? There seems to be a giant time difference between:

```
for i=0,(size(val))[1]-1 do begin  
  w=where(im eq val(i))  
  ...  
endfor
```

and

```
w=where(im eq val(0) or val(1) or val(2) or ...)
```

(but I can't do the above since val has different sizes from call to call)

Sorry for the run-on nature of this post.

Thanks,
Doug

Subject: Re: using WHERE to search for multiple values
Posted by [R.Bauer](#) on Mon, 29 Apr 2002 15:13:43 GMT
[View Forum Message](#) <> [Reply to Message](#)

Doug Martin wrote:

```
>  
> I'm trying to do something like the following:  
>  
> w=where(im eq val)  
>  
> with im a byte array (say, 640x480)  
> and val an array (say, 10 to 40 long)
```

```

>
> I want to find where im is equal to _any_ of the values in val. But,
> val is not always the same size.
>
> Is there a way to do this using one WHERE call? There seems to be a
> giant time difference between:
>
> for i=0,(size(val))[1]-1 do begin
>   w=where(im eq val(i))
>   ...
> endfor
>
> and
>
> w=where(im eq val(0) or val(1) or val(2) or ...)
>
> (but I can't do the above since val has different sizes from call to
> call)
>
> Sorry for the run-on nature of this post.
>
> Thanks,
> Doug

```

If you like to have something like this

```

; idx=which_indices([10,2,3,20,4,12],[10,20,30])
; print,idx
; 0      3

```

http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_source/idl_html/dbase/download/which_indices.tar.gz

or you would like to have something like

```

PURPOSE:
; This function applies different boolean operators to two vectors.
; It's a wrapper for the functions a_and_b, a_or_b, a_xor_b, a_not_b
;
; CATEGORY:
; MATH
;
; CALLING SEQUENCE:
; Result = VekLogik(vec1, vec2)

```

http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_source/idl_html/dbase/download/veklogik.tar.gz

For further routines have a look at

http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_lib_intro.html

regards

Reimar

--

Reimar Bauer

Institut fuer Stratosphaerische Chemie (ICG-I)

Forschungszentrum Juelich

email: R.Bauer@fz-juelich.de

a IDL library at ForschungsZentrum Juelich
http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_lib_intro.html

=====