Subject: Re: WHERE approaching Flatland
Posted by Haje Korth on Wed, 19 Feb 2003 12:50:35 GMT
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I always use the function WHERETOMULTI below. (Sorry about the line spacing)

Haje

;********** Beginning of wheretomulti.pro
****

PRO WhereToMulti, Array, Indices, Col, Row, Frame

;+

; NAME: wheretomulti.pro

;

; FUNCTION: Convert WHERE output to 2d or 3d indices

;

; USAGE: WhereToMulti, Array, Indices, Col, Row, Frame

;

; INPUT ARGUMENTS:

; Array: the array that was WHERE'd

; Indices: the indices returned by WHERE

;

; OUTPUT ARGUMENTS:

; Col: Indices to first dimension.

; Row: Indices to second dimension.

; Frame: Indices to third dimension. Returned only for 3-d array.

;

; OPTIONAL ARGUMENTS:

```
;
; KEYWORDS:
;
; REQUIRED MODULES:
;
; SIDE EFFECTS:
;
; ERROR HANDLING:
; If Array is not a vector or matrix, all return values are set to zero
; and a message is written to the screen.
;
; NOTES:
;
; HISTORY:
; 1998 Sept 15 J.L.Saba Developed based on code from David Fanning's
; web site.
;
;- End of
prologue  ------------------------------------------------------------ -


s = SIZE ( Array )


NCol = s[1]

Col = Indices MOD NCol


IF s[0] EQ 2 THEN BEGIN ; 2-d array
```

```
Row = Indices / NCol

ENDIF ELSE IF s[0] EQ 3 THEN BEGIN ; 3-d array

NRow = s(2)

Row = ( Indices / NCol ) MOD NRow

Frame = Indices / ( NRow * NCol )

ENDIF ELSE BEGIN ; neither 2d or 3d

Col = 0

Row = 0

Frame = 0

PRINT, 'WhereToMulti called with bad input. Array not a vector or matrix.'

HELP, Array

ENDELSE


RETURN

END


;*************************** End of wheretomulti.pro
***************************
```

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"Sean Raffuse" <sean@me.wustl.edu> wrote in message
news:b2u1d0$1nc$1@newsreader.wustl.edu...
> Hello,
>
> Is there are 2-d version of where?
>
> I would like to do this:
>
> bad = where(Array[*,*,0] GT Array[*,*,5])
>
> Array[bad,1:5] = Array[bad,0]
>
> I know that doesn't work, but after having spent some time with IDL, I'm
> allergic to loops.
>
> Thanks in advance,
>
> Sean
>
>
>