
Subject: Re: Turning off math error checking for a code block

Posted by [Vapuser](#) on Thu, 17 Jan 2002 19:30:17 GMT

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k-bowman@null.com (Kenneth Bowman) writes:

> I have an array x that is likely to have missing values in it, indicated by NaN's. I would like to search the array for values less than x_min. Because of the NaN's, WHERE generates a floating point error, e.g.,

```
>
> IDL> print, x
>    0.00000      NaN    2.00000    3.00000
> IDL> print, where(x lt 2.0)
>      0
> % Program caused arithmetic error: Floating illegal operand
>
```

Hmmmm..... I don't get this result.

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```
IDL> y=[0,!values.f_nan,2,0.]
```

```
IDL> print,where( y LT 2,nx),nx
```

```
    0      3
    2
```

% Program caused arithmetic error: Floating illegal operand

```
IDL> !except=0
```

```
IDL> print,where( y LT 2,nx),nx
```

```
    0      3
    2
```

```
IDL> exit
```

The help says that for !except=1 (the default) it only reports the exception upon arriving at back at an interactive prompt. On my SGI, it still does the `where' and returns the correct answer, it just complains.

```
>
> As best I understand the interaction between !EXCEPT and CHECK_MATH,
> in order to suppress this error message, while still checking errors
> elsewhere in the code, I must do the following:
>
> error      = CHECK_MATH(/PRINT)      ;If any errors have occurred, print
```

```
> save_except = !EXCEPT          ;Save current exception flag
> !EXCEPT = 0                    ;Set exception flag to 0
> i = WHERE(x LT x_min, ni)        ;Find all x < x_min
> error = CHECK_MATH()             ;Clear accumulated error status
> !EXCEPT = save_except          ;Restore exception flag
>
> Am I making this harder than it needs to be?
>
```

You could use FINITE. But why bother? Your method saves you one iteration over the array.

whd

--

William Daffer: 818-354-0161: William.Daffer@jpl.nasa.gov
