
Subject: Re: Turning off math error checking for a code block
Posted by [bowman](#) on Fri, 18 Jan 2002 23:30:43 GMT
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Well, it makes more sense if both blocks of code do the same work. ;-)

Turning off error checking is still faster, though.

Turn off error checking, t = 0.45098495
Do WHERE twice, t = 2.5393230

Ken

PRO TEST_FINITE

```
n      = 1024L*1024L
nmiss  = 100L*1024L
x      = RANDOMN(seed, n)          ;Create 10^ random numbers
miss   = LONG(n*RANDOMU(seed, nmiss)) ;Generate 10^5 random indices
x[miss] = !VALUES.F_NAN           ;Set random indices to missing
x_min  = 0.0
```

```
t      = SYSTIME(/SECONDS)
error  = CHECK_MATH(/PRINT)
save_except = !EXCEPT
!EXCEPT = 0
i      = WHERE(x LT x_min, ni)
IF (ni GT 0) THEN x[i] = !VALUES.F_NAN
error  = CHECK_MATH()
!EXCEPT = save_except
PRINT, 'Turn off error checking, t = ', SYSTIME(/SECONDS) - t
```

```
t = SYSTIME(/SECONDS)
i = WHERE(FINITE(x), ni)
IF (ni GT 0) THEN BEGIN
  y = x[i]
  j = WHERE(y LT x_min, nj)
  IF (nj GT 0) THEN BEGIN
    y[j] = !VALUES.F_NAN
    x[i] = y
  ENDIF
ENDIF
PRINT, 'Do WHERE twice, t = ', SYSTIME(/SECONDS) - t
```

END
