Subject: Re: Floating point error Posted by Craig Markwardt on Sat, 12 Apr 2003 20:20:50 GMT View Forum Message <> Reply to Message

Kenneth Bowman <k-bowman@null.tamu.edu> writes:

```
> I am trying to scatter a vector "data" into an array "array" using array
> subscripts. "data" contains some NaNs.
> This causes floating point exceptions, even though no "operation" is
> taking place.
> IDL> help, i, j, h, data, array
                      = Array[176779]
            LONG
> J
            LONG
                      = Array[176779]
> H
            LONG
                       = Array[176779]
> DATA
               FLOAT
                          = Array[176779]
> ARRAY
                FLOAT
                           = Array[720, 160, 24]
> IDL> array[i,j,h] = data
> % Program caused arithmetic error: Floating illegal operand
> IDL> q = data
                      ;Copy data
> IDL > q[*] = 0.0
                      ;Get rid of NaNs
> IDL> array[i,j,h] = q ;No problem
> If this is a feature, it is going to make using NaNs very difficult.
How about,
 wh = where(finite(data), ct)
 if ct GT 0 then array(i(wh), i(wh), h(wh)) = data(wh)
If you have repeats in your I,J,H data, and you want to sum over those
repeats, then you should use the dirty tricks that JD, I, et al. have
discussed in the past, primarily using the evil HISTOGRAM.
Craig
Craig B. Markwardt, Ph.D.
                               EMAIL: craigmnet@cow.physics.wisc.edu
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
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