
Subject: Re: Arithmetic error

Posted by [Ed Wright](#) on Thu, 31 Jan 2002 15:53:53 GMT

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in article a3b58p\$kb2i\$1@rook.le.ac.uk, Nigel Wade at nmw@ion.le.ac.uk wrote on 1/31/02 2:11 AM:

> Ed Wright wrote:

>

>>

>> To: IDL

>> From: Ed Wright, JPL

>>

>> I require assistance with an odd problem. My current projects involves

>> creating a dlm module of some 200+ routines from a library of 1500+

>> routines. Several of the IDL callable routines replicate intrinsic IDL

>> calls. While testing one such routine that calculates determinate of a 3X3

>> I encountered a problem. The numerical result between my determinant

>> function and determn matches to $10^{(-16)}$.

>>

>> Now the odd thing. Under certain circumstances the use of my determinant

>> function as an argument in another routine call causes an error:

>>

>> % Program caused arithmetic error: Floating illegal operand.

>>

>

> That error means somewhere in your code you have generated a NaN (Not a

> Number). The operations which generate NaNs include 0/0, Inf*0, sqrt(<0)

> Inf-Inf, Inf/Inf (there may be others...).

By code, should I take it to mean the external C code?

>

> Since you don't have a preceding 'Floating divide by zero', it's a fair bet

> your error doesn't involve Inf. So, all you have to do is look through your

> code to find where you might have a 0/0 or sqrt(<0). ;-)

Oh, is that all. No problem. 300k lines - let me at them.... Mr. Codebuster, that's me.

As always,
Ed Wright
