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Subject: Re: how to debug floating error

Posted by [user](#) on Wed, 10 Jul 2002 10:36:57 GMT

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well i don't know if this is going to help at all, but i had a quite similar problem when i started using idl few weeks ago. i operated alog() to a matrix which contained negative values. error message was:

```
% Program caused arithmetic error: Floating divide by 0
% Program caused arithmetic error: Floating illegal operand
```

but the operation still ran to the end. values that couldn't be calculated were replaced with string '-NaN' in the result matrix. now you can at least start tracing the problem :) just convert the image matrix to string and execute the command

```
print,where(string_matrix eq '      -NaN')
```

notice the white spaces :)

check your calculations  
and think what values are considered as 'bad data'. i hope this helps.

oh, the other possible string can be '-Inf'

-sauli

Julia wrote:

```
> Hi, there,
>
> I made a program to do the FFT analysis of an image. After the program
> terminated, there are some error information printed in the log window:
> "
> % Program caused arithmetic error: Floating underflow
> % Program caused arithmetic error: Floating overflow
> % Program caused arithmetic error: Floating illegal operand
> "
>
> The program can run till the end of it. And only these error informations
> are displayed. How can I know where these errors occure? How can I debug
> them out?
>
> Any suggestion will be appreciated,
>
> Julia
```

>  
>  
>

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Subject: Re: how to debug floating error  
Posted by [Kenneth P. Bowman](#) on Wed, 10 Jul 2002 12:16:05 GMT  
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In article <agggkc\$f13\$1@dipsy.missouri.edu>,  
"Julia" <julia65201@yahoo.com> wrote:

> % Program caused arithmetic error: Floating underflow  
> % Program caused arithmetic error: Floating overflow  
> % Program caused arithmetic error: Floating illegal operand  
> "  
>  
> The program can run till the end of it. And only these error informations  
> are displayed. How can I know where these errors occure? How can I debug  
> them out?

The first thing to do is to set

!EXCEPT = 2

See the chapter on controlling errors in the "Building IDL Applications"  
manual.

Regards, Ken

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