
Subject: Re: % Loop limit expression too large for loop variable type.

Posted by [Craig Markwardt](#) on Mon, 30 Apr 2001 16:58:21 GMT

[View Forum Message](#) <> [Reply to Message](#)

"hua Guo" <gh75@usa.net> writes:

> Dear all,
> I got this error message when I tried to run a program:
>
> % Loop limit expression too large for loop variable type.
> <LONG (54695)>.
>
> What is wrong here? I am a beginner here. Thanks for any help.

The default type for integers in IDL is a "short" or 16-bit integer, which can only go from -32768 to 32767. The quick fix is to put an "L" at the end of your numeric constants to promote them to "long" 32-bit integers.

for i = 0L, NMAX-1 do begin ...

Note the "0L" instead of "0".

Craig

P.S. This is one of the secret banes of IDL programming. You have the freedom to use any IDL type at any time. The problem is that any IDL type can appear at any time...

--

Craig B. Markwardt, Ph.D. EMAIL: craigmnet@cow.physics.wisc.edu
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response

Subject: Re: % Loop limit expression too large for loop variable type.

Posted by [davidf](#) on Mon, 30 Apr 2001 17:00:41 GMT

[View Forum Message](#) <> [Reply to Message](#)

hua Guo (gh75@usa.net) writes:

> I got this error message when I tried to run a program:
>
> % Loop limit expression too large for loop variable type.
> <LONG (54695)>.
>
> What is wrong here? I am a beginner here.

Normally, any integer in IDL is a short (two byte) integer, including integers in loop expressions. You need your loop variables to be LONG (four byte) integers. You can set this up in one of two different ways.

The most common way is to force the loop expression to be a long integer:

```
FOR j=0L, n DO Whatever
```

The second is to make ALL integers in your program be long integers. You do this by putting a `COMPILE_OPT` statement in your program module:

```
PRO JUNK
  Compile_Opt defint32
```

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting
Phone: 970-221-0438 E-Mail: davidf@dfanning.com
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: % Loop limit expression too large for loop variable type.

Posted by [Paul van Delst](#) on Mon, 30 Apr 2001 17:41:39 GMT

[View Forum Message](#) <> [Reply to Message](#)

hua Guo wrote:

```
>
> Dear all,
> I got this error message when I tried to run a program:
>
> % Loop limit expression too large for loop variable type.
> <LONG ( 54695)>.
>
> What is wrong here? I am a beginner here. Thanks for any help.
>
> Hua
```

If you have

```
FOR i = 0, really_big_number - 1 DO BEGIN
```

change it to

```
FOR i = 0L, really_big_number - 1 DO BEGIN
```

```
--
```

```
Paul van Delst      A little learning is a dangerous thing;  
CIMSS @ NOAA/NCEP  Drink deep, or taste not the Pierian spring;  
Ph: (301)763-8000 x7274 There shallow draughts intoxicate the brain,  
Fax:(301)763-8545   And drinking largely sobers us again.  
paul.vandelst@noaa.gov      Alexander Pope.
```
