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Subject: Re: Problem with plot: "Program caused arithmetic error: Floating underflow"

Posted by [Nigel Wade](#) on Fri, 15 Oct 2004 16:35:48 GMT

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Mark Hadfield wrote:

> sandrokan wrote:

>>

>> IDL> z=[uintarr(1789),115+uintarr(46762-1789),uintarr(300)]

>> IDL> plot, z

>> IDL> plot, z, z

>> % Program caused arithmetic error: Floating underflow

>

> Nope, I don't see it (IDL 6.0 & 6.1 on Windows 2000). Do you get

> anything like this when you represent the same numeric values with other

> data types?

>

> Perhaps its a bug in IDL's handling of UINT values. I note that you are

> using 5.2. Unsigned integers were introduced in that version; perhaps

> they hadn't ironed out all the wrinkles.

>

> Does this error actually matter to you? I.e. does your program misbehave

> in any other way? Floating underflows are often benign.

>

I've just performed a history check.

IDL | underflow "feature"

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5.1.1 | yes (no UINT, but does appear for FLTARR)

5.2 | yes

5.3 | yes

5.4 | dunno, don't have 5.4

5.5 | no

5.6 | no

So, the "feature" seems to have been removed sometime after 5.3

It's the same with FLTARR and DBLARR, which sort of indicates it's not UINT at fault, and the fact that it appears in 5.1.1 (the earliest version I have) when there was no UINT makes it pretty certain.

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Nigel Wade, System Administrator, Space Plasma Physics Group,  
University of Leicester, Leicester, LE1 7RH, UK

E-mail : [nmw@ion.le.ac.uk](mailto:nmw@ion.le.ac.uk)

Phone : +44 (0)116 2523548, Fax : +44 (0)116 2523555

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