
Subject: Re: IDL is not accurate enough!

Posted by [Kenneth P. Bowman](#) on Thu, 28 Aug 2008 20:50:47 GMT

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In article <MPG.232081d2b8625528989730@news.giganews.com>,
David Fanning <news@dfanning.com> wrote:

> noahh.schwartz@gmail.com writes:

>

>> I've been having problems with IDL accuracy. I'm trying to perform
>> calculations using the gamma function. The problem is that it grows
>> VERY fast! Performing this calculation in double (namely gamma(x)/
>> gamma(y) with x and y big) yields the result: NaN...
>> Would it be possible to use a program like 'Mathematica' (or any
>> other) and to plug it in my ILD program? Some kind of CALL_EXTERNAL
>> that is to say. If it is possible, how can I do it and what is the
>> best program to use?

>

> It seems *highly* unlikely to me that IDL's implementation
> of DOUBLE is any less accurate than any other program's
> implementation. In fact, this probably has something to
> do with the *computer* and not with the program. :-)

Mathematica can do arbitrary-precision arithmetic ... with hundreds of digits,
if necessary. Don't expect it to be fast, though, as it is all done
in software, not with the hardware floating-point unit with which we
normally do single- and double-precision arithmetic.

Ken
