
Subject: Re: Locate an underflow

Posted by [thompson](#) on Wed, 23 May 2001 21:01:19 GMT

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Paul van Delst <paul.vandelst@noaa.gov> writes:

> ... If, on running said code, I get a crapload of underflow errors, it's an
> indication that that either a) the code hasn't been tested very well or b) the
> programmer didn't really think about the problem enough ...

I disagree. It's exceedingly easy to get underflow errors, and extremely difficult to program around them. For example, a simple Gaussian

$$Y = A * \exp(-((X - X_0) / \text{Sig})^2)$$

is almost guaranteed to generate underflow errors. At some point this is going to be indistinguishable from zero. You'd have to jump through hoops to avoid getting the completely useless underfloat messages.

William Thompson
