
Subject: Re: a plea for more reliable mathematical routines
Posted by [Liam Gumley](#) on Sat, 11 Sep 1999 07:00:00 GMT
[View Forum Message](#) <> [Reply to Message](#)

Richard G. French <rfrench@wellesley.edu> wrote in message
news:37D82EA9.BA62A369@wellesley.edu...

> I have the same uneasiness about the implementation of mathematics
> routines in IDL, having
> found some simple errors in things like CURVEFIT over the past few
> years. If RSI wants
> to make inroads into the serious scientific computing arena, they will
> have to hire some
> mathematicians who will take the time and care to make sure that the
> mathematical functions
> really are properly handled. Otherwise, folks will head off to MATLAB or
> Fortran (gasp!) or
> other languages where you can count on getting a Bessel function when
> you call a Bessel
> function, or get a random number when you want one.

I believe there is a market for either an add-on Mathematical Toolbox, or preferably built-in access to a selection of routines from a well-respected mathematical library like BLAS, LAPACK, CMLIB, NAG etc. For example, NAG developed an add-on library for Matlab:

<http://www.nag.co.uk/nagware/NN.html>

I think many people would be more than willing to either upgrade their IDL version, or buy an add-on toolbox, if it gave them access to a set of high-quality numerical routines. A user survey would no doubt tell RSI very quickly which routines people would like to see (Bessel functions and random numbers have been mentioned).

Cheers,
Liam.

<http://cimss.ssec.wisc.edu/~gumley/>
