Subject: Re: Quadruple Precision?

Posted by chris on Wed, 18 Jan 1995 21:54:09 GMT

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I wrote:

Quadruple precision?

The answer is: Nope.

IDL does not support quadruple precision. The data type supported by IDL are listed in Chapter 1 of the IDL User's Guide. The highest precision floating point numbers in IDL are double precision.

I noticed that you are not listed in our database of IDL users. We do ask that IDL users who call or write for technical assistance be registered for IDL Technical Support. In order to receive further assistance from the technical support group please write to Donna, donna@rsinc.com for details on purchasing this service.

Sincerely,

Hilary

+-----+
| support@rsinc.com | IDL and ENVI |
| 303-786-9930 x320 | Technical Support
+-----+

Yes is was for a non graphical application. I need to know Julian Date (which ranges around 2e6) to about 12 decimal places, so a total of ~18 sig figs, for purposes of comparison w/ a Fortran program. I can get around the problem by using modified julian dates or separating JD into an integer and a fraction, but I was looking for an easier way.

-chris

Subject: Re: Quadruple Precision?

Posted by sterner on Thu, 19 Jan 1995 13:40:00 GMT

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chris@mercury.sfsu.edu (Christopher McCarthy) writes:

- > Is quadruple precision possible in IDL? EG. what I believe would be:
- > real \*16 in FORTRAN.

- > On my machine (Sparc 1) double precision seems to be good to ~16 digits.
- > (IDL's !dpi differed from Mathmatica's pi (to 30 placed) in the 16th digit.
- > No I haven't bothered to look up the real pi to check mathmatica!)
- > Any thoughts? Thanks.

Let me point you to the Pi Page:

http://www.ccsf.caltech.edu/~roy/pi.html

Here is a small extract from the 50,000 digit subpage:

 $3. \\ 141592653589793238462643383279502884197169399375105820974944592307816406286208998628034825342117067982148086513282306647093844609550582231725359408128481117450284102701938521105559644622948954930381964428810975665933446128475648233786783165271201909145648566923460348610454326648213393607260249141273724587006606315588174881520920962829254091715364367892590360011330530548820466521384146951941511609433057270365759591953092186117381932611793105118548074462379962749567351885752724891227938183011949129833673362440656643086021394946395224737190702179860943702770539217176293176752384674818467669405132$ 

There is also a link to a 1,250,000 digit page if 50,000 are not enough.

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The Johns Hopkins University North latitude 39.16 degrees.
Applied Physics Laboratory West longitude 76.90 degrees.

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WWW Home page: ftp://fermi.jhuapl.edu/www/s1r/people/res/res.html