Subject: some news from GDL 0.9 pre4 Posted by Alain on Wed, 25 Apr 2007 20:53:00 GMT

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Sorry if duplicated message (not very easy to post to usenet in 2007).

FYI, the current GDL CVS version http://gnudatalanguage.cvs.sourceforge.net/gnudatalanguage/g dl/ is able to compile and run the famous MPFIT library http://cow.physics.wisc.edu/~craigm/idl/mpfittut.html Numerical outputs are OK.

After some tests, on x86, GDL + FFTw for arrays of size 2L^N with N longer than 13 is faster than IDL 6.2 and 6.3;-)

Benchmarking for other operations is not too bad, but is significantly plateform and GCC version dependant (x86/x86_64, gcc, ...): compared to same IDL, one operation with last GDL can be from ~10 % to ~50% slower.

Save/Restore work well if CMSVLIB library present. Does not included all the options of the IDL ones, but OK for exchanging data.

Please report any trouble in Astron Lib., since the current tests run without troubles (few x86_64 problems have been solved).

Concerning the compilation of GDL from scratch, if some basic rules are enforced, all goes smoothly on recent Linux distros (let say less than one year!), including Debian (Sarge and Etch), Ubuntu, Mandriva and FC (all on x86 and x86_64). Most of mandatory libraries (readline, libmagick++, gsl, plplot, ...) are available as debian packets. Using relocation of libraries with --prefix, you don't need to be "root" to do it.

The compilation from scratch is a little more complex on Mac OS X (tgz GDL 0.9pre4 compiles on Mac OS X if plplot and headers OK) (Intel plateform included), mostly because :

0/ you must have a up-to-date system

 $1/\,\text{plplot}\,5.6.1$ doesn't compile well (5.5.3 does) on Mac OS X (see plplot discussion list)

2/ some X11 headers/path/links may be broken (symbolic links will solve)

A list of available intresic pro/functions in GDL 0.9pre4 is here: http://aramis.obspm.fr/~coulais/IDL_et_GDL/list_GDL0.9pre4.h tml It does not means that all the features of the IDL equivalent intresic pro/functions are available

(I hope to improve this information in next months).

Please report any bugs and crashes on this GDL CVS version. If so, please use up-to-date softwares, provide as small as possible examples!

(how to be up-to-date? See, for ex. the message at Date: 2007-04-22 07:15 on

http://sourceforge.net/tracker/index.php?func=detail&aid =1698693&group_id=97659&atid=618686)

If pro/func are missing for you, please indicate which ones (Besel functions (for integer orders only) just have been added after request) and prepare to be patient;-)

I would like to thanks the persons developping GDL because I am using it smoothly now.

Alain

PS: sorry for my english

PS: non exhaustive obvious missing functionnalities:

- -- colors in postscript
- -- titles in "plot" with math symbols (!8!E) ...