Lithomop

LithoMop

LithoMop Software Page

LithoMop is a finite element code for the solution of the visco-elastic/plastic deformation that was designed for lithospheric modeling problems.

(Image(images.png) failed - File not found) LithoMop is obsolete and has been replaced by PyLith.

LithoMop System Requirements

Lithomop3d should work on any UN*X system. It requires the following language tools:

- A Fortran compiler. Both older Fortran-77 and modern Fortran-9x compilers will work.
- A C compiler.
- A C++ compiler.
- Python 2.3 or later

If you are using a modern UN*X system, there is a good chance that all of the above tools are already installed.

In addition, Lithomop3d v0.7.2 requires the following software packages:

- (Optional) An MPI library. Lithomop3d itself is a serial code which does not use MPI. However, both PETSc and Pythia (detailed below) require MPI by default. A popular choice is MPICH.

is recommended by the PETSc installation instructions; in fact, PETSc's configure.py can atically download and install MPICH for you ('–download-mpich=yes').

decide to skip installing MPI, you will have to specially configure both PETSc and Pythia not to use MPI.

PETSc version 2.3, available from the MCS web site at Argonne National Laboratory.

ot to install MPI, give PETSc's configure.py the '–with-mpi=0' option. See the PETSc installation details.

version 0.8. The easiest way to install Pythia is to download the GNU-style pythia-0.8.tar.gz source ge from the CIG web site under 'Software ? Software Packages ? Pythia'

stall MPI, give Pythia's configure the '–without-mpi' option. General information about Pythia can be
ect page.

both PETSc and Pythia are generally not backwards-compatible with prior versions. Therefore, you must
d Pythia v0.8 specifically; future versions of PETSc and Pythia would not be expected to work with