2011-2016 PyLith Dev Plans

PyLith Development Plans

Software development plans for PyLith

Version 1.6 (by June training session)

OPTIMIZATION

- Multiple fields in a single Sieve section done
  At this point, only used for parameters of fault constitutive models.

GENERAL

- HDF5 output done
  Output into a single HDF5 file or an HDF5 file with raw binary files for the datasets. Datasets are written using MPI I/O if available in both cases. Add !.Xdmf metadata files associated with HDF5 files to permit reading of HDF5 files with ParaView and Visit.

Uniform global refinement done (98%)

IC

2-D plane strain versions of the 3-D generalized Maxwell viscoelastic rheology. done

mping via viscosity done
cal damping via a viscosity parameter that is independent of the bulk constitutive model. The viscosity is
the time integration.

E

ve section intermediate (0%)
onstitutive models
s related to fault implementation

use of memory cache.

on easy (0%)

in order to diagnose parameter settings.

tion of tractions from initial value

dels.

ermediate (50%)

e.

ng on desktop machines that have GPUs.

nction calculations than slip on a fault surface via cohesive cells. difficult