1 Prerequisites

The following libraries are necessary for using of extrEMe:

- .NET or mono subsystem
- *shared* build of FFTW3 (http://www.fftw.org/download.html)
- *shared* build of OpenBlas (https://github.com/xianyi/OpenBLAS) (recommended) or IntelMKL

For using parallel (MPI) version you need the installed mpi subsystem.

2 Installation

2.1 For Linux with mono

1. Set BLAS library into `Native/make.inc`:
   - For using OpenBlas set `BLASTYPE=OpenBlas` and correct path into `BLAS_INC, BLAS_LIB`;
   - For using MKL set `BLASTYPE=MKL`;
2. Set your favorite C compiler (if you want) by the corresponding modification of Native/make.inc
3. Build the extrEMe :
   - For serial version run `make` from installation directory
   - For parallel version run `make MPI_VERSION=<MPI_TYPE>` from installation directory, where `<MPI_TYPE>` is one of (OpenMPI,MPICH, MSMPI) depends on your MPI-subsystem.

3 Using

- Example of input format: EndUser/ExtremeMt/Examples/COMMEMI3D2
- Command to run: mono PATH-TO-EXTEREME PATH-TO-.xproj
- For example run from EndUser/ExtremeMt/Examples/COMMEMI3D2 as mono -O=all ../../bin/x64/Release/ExtremeMt.exe forward.xproj (serial version)
- For example run from EndUser/ExtremeMt/Examples/COMMEMI3D2 as mpirun -n 4 mono -O=all ../../bin/x64/Release/ExtremeMt.exe forward.xproj (mpi version on 4 processes)
- The paths for FFTW and OpenBlas/MKL libraries must be in $LD_LIBRARY_PATH