

## Aspect build notes, v 2.0.0 with dealii 8.5.0.

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```
module load gcc/4.8.1 cmake/3.4.0 intel/15.0.2 openmpi/intel/1.6.4
cxxlibraries/boost/1.55.0-intel trilinos/12.6.1 nano python/2.7.8
extras/64_6.4
```

# Build P4est

```
cd p4est
```

```
sh ./p4est-setup.sh p4est-1.1.tar.gz ~/p4est
```

```
cd ../
```

# Build DEAL.II

```
git clone https://github.com/dealii/dealii.git
```

```
mkdir dealii-8.5.0/build
```

```
cd dealii-8.5.0/build
```

```
export TRILINOS_DIR=[where trilinos is build]/trilinos/
```

```
export CC=mpicc
```

```
export CXX=mpicxx
```

```
export FC=mpif90
```

```
export F77=mpif77
```

```
cmake -DDEAL_II_WITH_MPI=ON \
      -DCMAKE_INSTALL_PREFIX=~/dealii-8.5.0/build/ \
      -DTRILINOS_DIR= ${SCINET_TRILINOS_BASE} \
      -DP4EST_DIR=~/p4est/ \
      -DDEAL_II_WITH_P4EST=ON \
      -DDEAL_II_WITH_TRILINOS=ON \
      ..
```

```
make -j8 install
```

```
make -j8 test
```

```
cd ../../
```

# Build Aspect

```
git clone --recursive https://github.com/geodynamics/aspect.git
```

```
cd aspect
```

```
export DEAL_II_DIR=/~/dealii-8.5.0/build/
```

```
cmake -D CMAKE_C_COMPILER="icc" -D ASPECT_USE_FP_EXCEPTIONS=OFF .
```

```
make -j8
```

```
cd tests
```

```
make test
```