

## Getting Started (compiling):

The first step is to choose your scripting language and compile/configure the code. **You will need to have the following installed:**

- a C++ compiler (g++, clang++, msvc, etc) + cmake.
- either: MATLAB, or Python3 (numpy, scipy, pathlib) + Paraview.

MATLAB (in cmd window):

```
cd jigsaw-geo-tutorial-master  
cd jigsaw-matlab
```

compile;

(will run cmake script, etc)

Python (in system shell):

```
cd jigsaw-geo-tutorial-master  
cd jigsaw-python
```

```
(sudo if needed...)  
python3 setup.py build_external  
python3 setup.py install
```

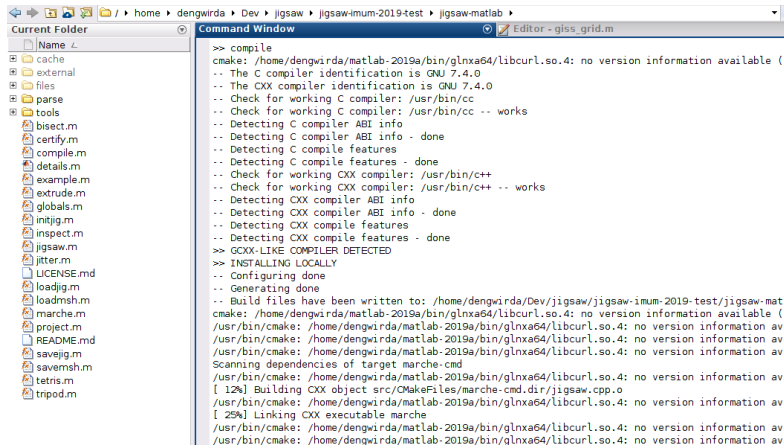
(will run cmake script, etc)

If you have a different version of JIGSAW already installed, **please install from [github.com/dengwirda/jigsaw-geo-tutorial](https://github.com/dengwirda/jigsaw-geo-tutorial) nonetheless** — this is a new (beta) release that contains updated functionality!



## Getting Started (compiling):

In MATLAB, the installation should run via `cmake`, creating a set of executables in `../jigsaw-matlab/external/jigsaw/bin`:



```
>> compile
cmake: /home/dengwirda/matlab-2019a/bin/glnxa64/libcurl.so.4: no version information available (
-- The C compiler identification is GNU 7.4.0
-- The CXX compiler identification is GNU 7.4.0
-- Check for working C compiler: /usr/bin/cc
-- Check for working C compiler: /usr/bin/cc -- works
-- Detecting C compiler ABI info
-- Detecting C compiler ABI info - done
-- Detecting C compile features
-- Detecting C compile features - done
-- Check for working CXX compiler: /usr/bin/c++
-- Check for working CXX compiler: /usr/bin/c++ -- works
-- Detecting CXX compiler ABI info
-- Detecting CXX compiler ABI info - done
-- Detecting CXX compile features
-- Detecting CXX compile features - done
>> GCCX-LIKE COMPILER DETECTED
>> INSTALLING LOCALLY
-- Configuring done
-- Generating done
-- Build files have been written to: /home/dengwirda/Dev/jigsaw/jigsaw-imum-2019-test/jigsaw-matlab
cmake: /home/dengwirda/matlab-2019a/bin/glnxa64/libcurl.so.4: no version information available (
/usr/bin/cmake: /home/dengwirda/matlab-2019a/bin/glnxa64/libcurl.so.4: no version information av
/usr/bin/cmake: /home/dengwirda/matlab-2019a/bin/glnxa64/libcurl.so.4: no version information av
/usr/bin/cmake: /home/dengwirda/matlab-2019a/bin/glnxa64/libcurl.so.4: no version information av
Scanning dependencies of target marche-cmd
/usr/bin/cmake: /home/dengwirda/matlab-2019a/bin/glnxa64/libcurl.so.4: no version information av
[ 12%] Building CXX object src/CMakeFiles/marche-cmd.dir/jigsaw.cpp.o
/usr/bin/cmake: /home/dengwirda/matlab-2019a/bin/glnxa64/libcurl.so.4: no version information av
[ 25%] Linking CXX executable marche
/usr/bin/cmake: /home/dengwirda/matlab-2019a/bin/glnxa64/libcurl.so.4: no version information av
/usr/bin/cmake: /home/dengwirda/matlab-2019a/bin/glnxa64/libcurl.so.4: no version information av
```



## Getting Started (compiling):

In Python, the installation should run via cmake, creating a set of executables in `../jigsaw-python/jigsawpy/bin-`:

```
dengwirda@dengwirda:~/Dev/jigsaw/jigsaw-imun-2019-test/jigsaw-python$ python3 setup.py build_ext
running build_ext
cmake config.
-- The C compiler identification is GNU 7.4.0
-- The CXX compiler identification is GNU 7.4.0
-- Check for working C compiler: /usr/bin/cc
-- Check for working C compiler: /usr/bin/cc -- works
-- Detecting C compiler ABI info
-- Detecting C compiler ABI info - done
-- Detecting C compile features
-- Detecting C compile features - done
-- Check for working CXX compiler: /usr/bin/c++
-- Check for working CXX compiler: /usr/bin/c++ -- works
-- Detecting CXX compiler ABI info
-- Detecting CXX compiler ABI info - done
-- Detecting CXX compile features
-- Detecting CXX compile features - done
>> GCXX-LIKE COMPILER DETECTED
>> INSTALLING LOCALLY
-- Configuring done
-- Generating done
-- Build files have been written to: /home/dengwirda/Dev/jigsaw/jigsaw-imun-2019-test/jigsaw-python/external/jigsaw/tmp
cmake compile
Scanning dependencies of target tripod-cmd
[ 12%] Building CXX object src/CMakeFiles/tripod-cmd.dir/jigsaw.cpp.o
[ 25%] Linking CXX executable tripod
[ 25%] Built target tripod-cmd
Scanning dependencies of target jigsaw-lib
[ 37%] Building CXX object src/CMakeFiles/jigsaw-lib.dir/jigsaw.cpp.o
[ 50%] Linking CXX shared library libjigsaw.so
[ 50%] Built target jigsaw-lib
Scanning dependencies of target jigsaw-cmd
```

jigsawpy is then installed as a 'normal' Python package.

