**Building with Visual Studio/Intel Fortran**

DLL creation:

Release (Win32) build for a DLL (this also creates the .lib).

There are 16 .f90 files to be added to the build:

behaviour.f90, chemokine.f90, FEmapper.f90, fmotion.f90, global.f90, m\_unista.f90, Mesh\_Generate.f90, nbr.f90, nleq1.f90, pack.f90, par\_zig\_mod.f90, real\_kind.f90, sparse.f90, sparsekit.f90, tropho3D.f90, Winsock\_c.f90

The three .c files must be compiled separately with MSVC (e.g. cl/c client.c) ,then the 3 .obj files are added to the build.

Project > Properties >

Fortran > Preprocessor > Preprocess Source File: Yes (/fpp)

Fortran > Libraries: Multithread DLL (/libs:dll /threads)

Fortran > Command Line > Additional Options: *add* /Qopenmp /heap-arrays

Linker > Input > Additional dependencies *add 3 libraries*: ws2\_32.lib superLU\_MT.lib libblas.lib

Linker > Input > Ignore Specific Library *add* libcmt

After building I copy tropho3D-abm.dll and tropho3D-abm.lib to a directory in the path. I create and use C:\bin. This can be done automatically:

Build Events > Post-Build Event *add two lines*:

copy release\tropho3D-abm.dll C:\bin

copy release\tropho3D-abm.lib C:\bin

Main program creation:

Release (Win32) build for an executable.

Single file: tropho3D\_main.f90

Project > Properties >

General > Additional Include Directories: *add* release

Libraries > Run-time Library: multithreaded

Linker > Input > Additional Dependencies: *add* C:\bin\tropho3D-abm.lib

**Building with Code::Blocks/Cygwin gfortran**

Use tropho3D-abm.cbp