

```
(clue_test) C:\Users\helsens\software\3d_clustering\CLUEstering_test>pip install . -v
Using pip 24.2 from C:
\Users\helsens\AppData\Local\miniconda3\envs\clue_test\Lib\site-packages\pip
(python 3.12)
Processing c:\users\helsens\software\3d_clustering\clustering_test
  Running command pip subprocess to install build dependencies
  Using pip 24.2 from C:
\Users\helsens\AppData\Local\miniconda3\envs\clue_test\Lib\site-packages\pip
(python 3.12)
    Collecting setuptools>=42
      Obtaining dependency information for setuptools>=42 from https://
files.pythonhosted.org/packages/ff/ae/
f19306b5a221f6a436d8f2238d5b80925004093fa3edea59835b514d9057/
setuptools-75.1.0-py3-none-any.whl.metadata
        Using cached setuptools-75.1.0-py3-none-any.whl.metadata (6.9 kB)
    Collecting wheel
      Obtaining dependency information for wheel from https://files.pythonhosted.org/
packages/1b/
d1/9babe2ccaecff775992753d8686970b1e2755d21c8a63be73aba7a4e7d77/
wheel-0.44.0-py3-none-any.whl.metadata
        Using cached wheel-0.44.0-py3-none-any.whl.metadata (2.3 kB)
    Collecting pathlib
      Obtaining dependency information for pathlib from https://files.pythonhosted.org/
packages/78/
f9/690a8600b93c332de3ab4a344a4ac34f00c8f104917061f779db6a918ed6/
pathlib-1.0.1-py3-none-any.whl.metadata
        Using cached pathlib-1.0.1-py3-none-any.whl.metadata (5.1 kB)
    Using cached setuptools-75.1.0-py3-none-any.whl (1.2 MB)
    Using cached wheel-0.44.0-py3-none-any.whl (67 kB)
    Using cached pathlib-1.0.1-py3-none-any.whl (14 kB)
    Installing collected packages: pathlib, wheel, setuptools
    Creating C:\Users\helsens\AppData\Local\Temp\1\pip-build-env-
qjtdf0mw\overlay\Scripts
    Successfully installed pathlib-1.0.1 setuptools-75.1.0 wheel-0.44.0
    Installing build dependencies ... done
    Running command Getting requirements to build wheel
    -- Building for: Visual Studio 16 2019
    -- Selecting Windows SDK version 10.0.22621.0 to target Windows 10.0.20348.
    -- The CXX compiler identification is MSVC 19.29.30154.0
    -- Check for working CXX compiler: C:/Program Files (x86)/Microsoft Visual Studio/
2019/BuildTools/VC/Tools/MSVC/14.29.30133/bin/Hostx64/x64/cl.exe
    -- Check for working CXX compiler: C:/Program Files (x86)/Microsoft Visual Studio/
2019/BuildTools/VC/Tools/MSVC/14.29.30133/bin/Hostx64/x64/cl.exe - works
    -- Detecting CXX compiler ABI info
    -- Detecting CXX compiler ABI info - done
    -- Detecting CXX compile features
    -- Detecting CXX compile features - done
    -- pybind11 v2.12.0 dev1
    -- Found Python: C:/Users/helsens/AppData/Local/miniconda3/envs/clue_test/
python.exe (found suitable version "3.12.6", minimum required is "3.6") found
```

components: Interpreter Development

-- Performing Test HAS_MSVC_GL_LTCG

-- Performing Test HAS_MSVC_GL_LTCG - Success

-- Found Boost: C:/Users/helsens/AppData/Local/miniconda3/envs/clue_test/Library/lib/cmake/Boost-1.85.0/BoostConfig.cmake (found suitable version "1.85.0", minimum required is "1.75.0")

CMake Warning at CMakeLists.txt:101 (find_package):

By not providing "FindTBB.cmake" in CMAKE_MODULE_PATH this project has asked CMake to find a package configuration file provided by "TBB", but CMake did not find one.

Could not find a package configuration file provided by "TBB" with any of the following names:

TBBConfig.cmake

tbb-config.cmake

Add the installation prefix of "TBB" to CMAKE_PREFIX_PATH or set "TBB_DIR" to a directory containing one of the above files. If "TBB" provides a separate development package or SDK, be sure it has been installed.

-- Looking for a CUDA compiler

-- Looking for a CUDA compiler - NOTFOUND

-- Looking for a HIP compiler

-- Looking for a HIP compiler - NOTFOUND

-- Configuring done

-- Generating done

-- Build files have been written to: C:/Users/helsens/software/3d_clustering/CLUEstering_test/build

Microsoft (R) Build Engine version 16.11.2+f32259642 for .NET Framework

Copyright (C) Microsoft Corporation. All rights reserved.

Checking Build System

Building Custom Rule C:/Users/helsens/software/3d_clustering/CLUEstering_test/CMakeLists.txt

binding_cpu.cc

C:

\\Users\helsens\software\3d_clustering\CLUEstering_test\extern\alpaka\include\alpaka\core\ConcurrentExecPool.hpp(83,1): warning C4530: C++ exception handler used, but unwind semantics are not enabled. Specify /EHsc [C:

\\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vcxproj]

C:\Program Files (x86)\Microsoft Visual

Studio\2019\BuildTools\VC\Tools\MSVC\14.29.30133\include\type_traits(1534,98):

warning C4244: 'argument': conversion from 'unsigned __int64' to 'uint32_t', possible loss of data [C:

\\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vcxproj]

C:\Program Files (x86)\Microsoft Visual

```
Studio\2019\BuildTools\VC\Tools\MSVC\14.29.30133\include\tuple(973): message :
see reference to function template instantiation 'void std::invoke<const
TKernelFnObj&,alpaka::AccCpuSerial<alpaka_common::Dim1D,alpaka_common::ld
x>&,alpaka_serial_sync::TilesAlpaka<10>*,alpaka_serial_sync::PointsAlpaka<10>::P
ointsAlpakaView*,GaussianKernel,float,unsigned
__int64>(_Callable,_Ty1,alpaka_serial_sync::TilesAlpaka<10>
*&&,alpaka_serial_sync::PointsAlpaka<10>::PointsAlpakaView *&&,GaussianKernel
&&,float &&,unsigned __int64 &&) noexcept(false)' being compiled [C:
\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vc
xproj]
```

```
with
[
TKernelFnObj=alpaka_serial_sync::KernelCalculateLocalDensity,
_Callable=const alpaka_serial_sync::KernelCalculateLocalDensity &,
_Ty1=alpaka::AccCpuSerial<alpaka_common::Dim1D,alpaka_common::ldx> &
]
```

```
C:\Program Files (x86)\Microsoft Visual
Studio\2019\BuildTools\VC\Tools\MSVC\14.29.30133\include\tuple(980): message :
see reference to function template instantiation 'void std::_Apply_impl<const
TKernelFnObj&,_Ty,0,1,2,3,4,5>(_Callable,_Tuple
&&,std::integer_sequence<size_t,0,1,2,3,4,5>)' being compiled [C:
\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vc
xproj]
```

```
with
[
TKernelFnObj=alpaka_serial_sync::KernelCalculateLocalDensity,
_Ty=std::tuple<alpaka::AccCpuSerial<alpaka_common::Dim1D,alpaka_common::ldx
> &,alpaka_serial_sync::TilesAlpaka<10>
*,alpaka_serial_sync::PointsAlpaka<10>::PointsAlpakaView
*,GaussianKernel,float,unsigned __int64>,
_Callable=const alpaka_serial_sync::KernelCalculateLocalDensity &,
_Tuple=std::tuple<alpaka::AccCpuSerial<alpaka_common::Dim1D,alpaka_common::
ldx> &,alpaka_serial_sync::TilesAlpaka<10>
*,alpaka_serial_sync::PointsAlpaka<10>::PointsAlpakaView
*,GaussianKernel,float,unsigned __int64>
]
```

```
C:
\Users\helsens\software\3d_clustering\CLUEstering_test\extern\alpaka\include\alpak
a/kernel/TaskKernelCpuSerial.hpp(57): message : see reference to function template
instantiation 'void std::apply<const
TKernelFnObj&,std::tuple<alpaka::AccCpuSerial<alpaka_common::Dim1D,alpaka_c
ommon::ldx> &,alpaka_serial_sync::TilesAlpaka<10>
*,alpaka_serial_sync::PointsAlpaka<10>::PointsAlpakaView
*,GaussianKernel,float,unsigned __int64>>(_Callable,_Tuple &&)' being compiled [C:
\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vc
xproj]
```

```
with
```

```
[
  TKernelFnObj=alpaka_serial_sync::KernelCalculateLocalDensity,
  _Callable=const alpaka_serial_sync::KernelCalculateLocalDensity &,
  _Tuple=std::tuple<alpaka::AccCpuSerial<alpaka_common::Dim1D,alpaka_common::
Idx> &,alpaka_serial_sync::TilesAlpaka<10>
*,alpaka_serial_sync::PointsAlpaka<10>::PointsAlpakaView
*,GaussianKernel,float,unsigned __int64>
]
```

C:

```
\Users\helsens\software\3d_clustering\CLUEstering_test\extern\alpaka\include\alpak
a/kernel/TaskKernelCpuSerial.hpp(57): message : while compiling class template
member function 'void
alpaka::TaskKernelCpuSerial<TDim,TIdx,TKernelFnObj,alpaka_serial_sync::TilesAlp
aka<10> *&,alpaka_serial_sync::PointsAlpaka<10>::PointsAlpakaView *,const
KernelType &,float &,size_t &>::operator()(void) const' [C:
\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vc
xproj]
```

with

```
[
  TDim=alpaka_common::Dim1D,
  TIdx=alpaka_common::Idx,
  TKernelFnObj=alpaka_serial_sync::KernelCalculateLocalDensity,
  KernelType=GaussianKernel
]
```

C:

```
\Users\helsens\software\3d_clustering\CLUEstering_test\extern\alpaka\include\alpak
a/queue/QueueGenericThreadsBlocking.hpp(136): message : see reference to
function template instantiation 'void
alpaka::TaskKernelCpuSerial<TDim,TIdx,TKernelFnObj,alpaka_serial_sync::TilesAlp
aka<10> *&,alpaka_serial_sync::PointsAlpaka<10>::PointsAlpakaView *,const
KernelType &,float &,size_t &>::operator()(void) const' being compiled [C:
\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vc
xproj]
```

with

```
[
  TDim=alpaka_common::Dim1D,
  TIdx=alpaka_common::Idx,
  TKernelFnObj=alpaka_serial_sync::KernelCalculateLocalDensity,
  KernelType=GaussianKernel
]
```

C:

```
\Users\helsens\software\3d_clustering\CLUEstering_test\extern\alpaka\include\alpak
a/acc/AccCpuSerial.hpp(181): message : see reference to class template
instantiation
'alpaka::TaskKernelCpuSerial<TDim,TIdx,TKernelFnObj,alpaka_serial_sync::TilesAl
paka<10> *&,alpaka_serial_sync::PointsAlpaka<10>::PointsAlpakaView *,const
KernelType &,float &,size_t &>' being compiled [C:
\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vc
xproj]
```

```

with
[
  TDim=alpaka_common::Dim1D,
  TIdx=alpaka_common::Idx,
  TKernelFnObj=alpaka_serial_sync::KernelCalculateLocalDensity,
  KernelType=GaussianKernel
]
C:
\Users\helsens\software\3d_clustering\CLUEstering_test\extern\alpaka\include\alpaka\acc\AccCpuSerial.hpp(181): message : while compiling class template member function
'alpaka::TaskKernelCpuSerial<TDim,TIdx,TKernelFnObj,alpaka_serial_sync::TilesAlpaka<10> *&,alpaka_serial_sync::PointsAlpaka<10>::PointsAlpakaView *,const KernelType &,float &,size_t &>
alpaka::trait::CreateTaskKernel<TAcc,TWorkDiv,TKernelFnObj,alpaka_serial_sync::TilesAlpaka<10> *&,alpaka_serial_sync::PointsAlpaka<10>::PointsAlpakaView *,const KernelType &,float &,size_t &>::createTaskKernel(const TWorkDiv &,const TKernelFnObj &,alpaka_serial_sync::TilesAlpaka<10> *&,alpaka_serial_sync::PointsAlpaka<10>::PointsAlpakaView *&&,const KernelType &,float &,size_t &)' [C:
\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vcxproj]

```

```

with
[
  TDim=alpaka_common::Dim1D,
  TIdx=alpaka_common::Idx,
  TKernelFnObj=alpaka_serial_sync::KernelCalculateLocalDensity,
  KernelType=GaussianKernel,
  TAcc=alpaka_serial_sync::Acc1D,

  TWorkDiv=alpaka::WorkDivMembers<alpaka_common::Dim1D,alpaka_common::Idx>
]

```

```

C:
\Users\helsens\software\3d_clustering\CLUEstering_test\extern\alpaka\include\alpaka\kernel\Traits.hpp(222): message : see reference to class template instantiation
'alpaka::trait::CreateTaskKernel<TAcc,TWorkDiv,TKernelFnObj,alpaka_serial_sync::TilesAlpaka<10> *&,alpaka_serial_sync::PointsAlpaka<10>::PointsAlpakaView *,const KernelType &,float &,size_t &>' being compiled [C:
\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vcxproj]

```

```

with
[
  TAcc=alpaka_serial_sync::Acc1D,

  TWorkDiv=alpaka::WorkDivMembers<alpaka_common::Dim1D,alpaka_common::Idx>,
  TKernelFnObj=alpaka_serial_sync::KernelCalculateLocalDensity,
  KernelType=GaussianKernel
]

```

```
C:
\Users\helsens\software\3d_clustering\CLUEstering_test\CLUEstering\alpaka\CLUE\
CLUEAlgoAlpaka.h(198): message : see reference to function template instantiation
'alpaka::TaskKernelCpuSerial<TDim,TIdx,TKernelFnObj,alpaka_serial_sync::TilesAl
paka<10>*&,alpaka_serial_sync::PointsAlpaka<10>::PointsAlpakaView*,const
KernelType&,float&,size_t&>
alpaka::createTaskKernel<alpaka_serial_sync::Acc1D,alpaka::WorkDivMembers<TD
im,TIdx>,alpaka_serial_sync::KernelCalculateLocalDensity,alpaka_serial_sync::Tiles
Alpaka<10>*&,alpaka_serial_sync::PointsAlpaka<10>::PointsAlpakaView*,const
KernelType&,float&,size_t&>(const TWorkDiv&,&,const TKernelFnObj
&,alpaka_serial_sync::TilesAlpaka<10>
*&,alpaka_serial_sync::PointsAlpaka<10>::PointsAlpakaView*&&,const KernelType
&,float&,size_t&)' being compiled [C:
\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vc
xproj]
    with
    [
        TDim=alpaka_common::Dim1D,
        TIdx=alpaka_common::Idx,
        TKernelFnObj=alpaka_serial_sync::KernelCalculateLocalDensity,
        KernelType=GaussianKernel,
```

```
TWorkDiv=alpaka::WorkDivMembers<alpaka_common::Dim1D,alpaka_common::Idx
>
    ]
```

```
C:
\Users\helsens\software\3d_clustering\CLUEstering_test\CLUEstering\alpaka\Bindin
gModules\..\CLUE/Run.h(26): message : see reference to function template
instantiation
'std::vector<std::vector<int,std::allocator<int>>,std::allocator<std::vector<int,std::alloc
ator<int>>>>
alpaka_serial_sync::CLUEAlgoAlpaka<alpaka_serial_sync::Acc1D,10>::make_cluste
rs<Kernel>(Points<10>&,alpaka_serial_sync::PointsAlpaka<10>&,const
KernelType&,alpaka_serial_sync::Queue,size_t)' being compiled [C:
\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vc
xproj]
    with
    [
        Kernel=GaussianKernel,
        KernelType=GaussianKernel
    ]
```

```
C:
\Users\helsens\software\3d_clustering\CLUEstering_test\CLUEstering\alpaka\Bindin
gModules\..\CLUE/Run.h(26): message : see reference to function template
instantiation
'std::vector<std::vector<int,std::allocator<int>>,std::allocator<std::vector<int,std::alloc
ator<int>>>>
alpaka_serial_sync::CLUEAlgoAlpaka<alpaka_serial_sync::Acc1D,10>::make_cluste
rs<Kernel>(Points<10>&,alpaka_serial_sync::PointsAlpaka<10>&,const
KernelType&,alpaka_serial_sync::Queue,size_t)' being compiled [C:
```

```
\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vcxproj]
```

```
    with  
    [  
        Kernel=GaussianKernel,  
        KernelType=GaussianKernel  
    ]
```

C:

```
\Users\helsens\software\3d_clustering\CLUEstering_test\CLUEstering\alpaka\BindingModules\binding_cpu.cc(73): message : see reference to function template instantiation
```

```
'std::vector<std::vector<int,std::allocator<int>>,std::allocator<std::vector<int,std::allocator<int>>>> alpaka_serial_sync::run<10,Kernel>(float,float,float,int,const std::vector<std::vector<float,std::allocator<float>>,std::allocator<std::vector<float,std::allocator<float>>>> &,const std::vector<float,std::allocator<float>> &,const Kernel &,alpaka_serial_sync::Queue,size_t)' being compiled [C:
```

```
\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vcxproj]
```

```
    with  
    [  
        Kernel=GaussianKernel  
    ]
```

C:

```
\Users\helsens\software\3d_clustering\CLUEstering_test\CLUEstering\alpaka\BindingModules\binding_cpu.cc(120): message : see reference to function template instantiation
```

```
'std::vector<std::vector<int,std::allocator<int>>,std::allocator<std::vector<int,std::allocator<int>>>>>>> alpaka_serial_sync::mainRun<GaussianKernel>(float,float,float,int,const std::vector<std::vector<float,std::allocator<float>>,std::allocator<std::vector<float,std::allocator<float>>>> &,const std::vector<float,std::allocator<float>> &,const Kernel &,int,size_t,size_t)' being compiled [C:
```

```
\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vcxproj]
```

```
    with  
    [  
        Kernel=GaussianKernel  
    ]
```

C:\Program Files (x86)\Microsoft Visual

```
Studio\2019\BuildTools\VC\Tools\MSVC\14.29.30133\include\type_traits(1534,98): warning C4244: 'argument': conversion from 'double' to 'uint32_t', possible loss of data [C:
```

```
\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vcxproj]
```

C:\Program Files (x86)\Microsoft Visual

```
Studio\2019\BuildTools\VC\Tools\MSVC\14.29.30133\include\tuple(973): message : see reference to function template instantiation 'void std::invoke<const TKernelFnObj&,alpaka::AccCpuSerial<alpaka_common::Dim1D,alpaka_common::Idx>&,alpaka_serial_sync::TilesAlpaka<10>*,float,double>(_Callable,_Ty1,alpaka_serial_sync::TilesAlpaka<10> *&&,float &&,double &&) noexcept(false)' being compiled
```

```
[C:\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vcxproj]
```

```
with
```

```
[
```

```
TKernelFnObj=alpaka_serial_sync::KernelResetTiles,  
_Callable=const alpaka_serial_sync::KernelResetTiles &
```

```
_Ty1=alpaka::AccCpuSerial<alpaka_common::Dim1D,alpaka_common::Idx> &  
]
```

```
C:\Program Files (x86)\Microsoft Visual  
Studio\2019\BuildTools\VC\Tools\MSVC\14.29.30133\include\tuple(980): message :  
see reference to function template instantiation 'void std::_Apply_impl<const  
TKernelFnObj&,_Ty,0,1,2,3>(_Callable,_Tuple  
&&,std::integer_sequence<size_t,0,1,2,3>)' being compiled [C:  
\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vcxproj]
```

```
with
```

```
[
```

```
TKernelFnObj=alpaka_serial_sync::KernelResetTiles,
```

```
_Ty=std::tuple<alpaka::AccCpuSerial<alpaka_common::Dim1D,alpaka_common::Idx>  
&,alpaka_serial_sync::TilesAlpaka<10> *,float,double>,  
_Callable=const alpaka_serial_sync::KernelResetTiles &
```

```
_Tuple=std::tuple<alpaka::AccCpuSerial<alpaka_common::Dim1D,alpaka_common::  
Idx> &,alpaka_serial_sync::TilesAlpaka<10> *,float,double>  
]
```

```
C:
```

```
\Users\helsens\software\3d_clustering\CLUEstering_test\extern\alpaka\include\alpak  
a\kernel\TaskKernelCpuSerial.hpp(57): message : see reference to function template  
instantiation 'void std::apply<const  
TKernelFnObj&,std::tuple<alpaka::AccCpuSerial<alpaka_common::Dim1D,alpaka_c  
ommon::Idx> &,alpaka_serial_sync::TilesAlpaka<10>  
&,float,double>>(_Callable,_Tuple &&)' being compiled [C:  
\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vcxproj]
```

```
with
```

```
[
```

```
TKernelFnObj=alpaka_serial_sync::KernelResetTiles,  
_Callable=const alpaka_serial_sync::KernelResetTiles &
```

```
_Tuple=std::tuple<alpaka::AccCpuSerial<alpaka_common::Dim1D,alpaka_common::  
Idx> &,alpaka_serial_sync::TilesAlpaka<10> *,float,double>  
]
```

```
C:
```

```
\Users\helsens\software\3d_clustering\CLUEstering_test\extern\alpaka\include\alpak  
a\kernel\TaskKernelCpuSerial.hpp(57): message : while compiling class template  
member function 'void  
alpaka::TaskKernelCpuSerial<TDim,TIdx,TKernelFnObj,alpaka_serial_sync::TilesAlp
```


aka<10> *&,const float &,const double &>::operator()(void) const' [C:
\\Users\\helsens\\software\\3d_clustering\\CLUEsterring_test\\build\\CLUE_CPU_Serial.vc
xproj]

```
with  
[  
    TDim=alpaka_common::Dim1D,  
    TIdx=alpaka_common::Idx,  
    TKernelFnObj=alpaka_serial_sync::KernelResetTiles  
]
```

C:

\\Users\\helsens\\software\\3d_clustering\\CLUEsterring_test\\extern\\alpaka\\include\\alpak
a\\queue\\QueueGenericThreadsBlocking.hpp(136): message : see reference to
function template instantiation 'void
alpaka::TaskKernelCpuSerial<TDim,TIdx,TKernelFnObj,alpaka_serial_sync::TilesAlp
aka<10> *&,const float &,const double &>::operator()(void) const' being compiled
[C:

\\Users\\helsens\\software\\3d_clustering\\CLUEsterring_test\\build\\CLUE_CPU_Serial.vc
xproj]

```
with  
[  
    TDim=alpaka_common::Dim1D,  
    TIdx=alpaka_common::Idx,  
    TKernelFnObj=alpaka_serial_sync::KernelResetTiles  
]
```

C:

\\Users\\helsens\\software\\3d_clustering\\CLUEsterring_test\\extern\\alpaka\\include\\alpak
a\\acc\\AccCpuSerial.hpp(181): message : see reference to class template
instantiation

'alpaka::TaskKernelCpuSerial<TDim,TIdx,TKernelFnObj,alpaka_serial_sync::TilesAl
paka<10> *&,const float &,const double &>' being compiled [C:

\\Users\\helsens\\software\\3d_clustering\\CLUEsterring_test\\build\\CLUE_CPU_Serial.vc
xproj]

```
with  
[  
    TDim=alpaka_common::Dim1D,  
    TIdx=alpaka_common::Idx,  
    TKernelFnObj=alpaka_serial_sync::KernelResetTiles  
]
```

C:

\\Users\\helsens\\software\\3d_clustering\\CLUEsterring_test\\extern\\alpaka\\include\\alpak
a\\acc\\AccCpuSerial.hpp(181): message : while compiling class template member
function

'alpaka::TaskKernelCpuSerial<TDim,TIdx,TKernelFnObj,alpaka_serial_sync::TilesAl
paka<10> *&,const float &,const double &>

alpaka::trait::CreateTaskKernel<TAcc,TWorkDiv,TKernelFnObj,alpaka_serial_sync::T
ilesAlpaka<10> *&,const float &,const double &>::createTaskKernel(const TWorkDiv
&,const TKernelFnObj &,alpaka_serial_sync::TilesAlpaka<10> *&,const float &,const
double &)' [C:

\\Users\\helsens\\software\\3d_clustering\\CLUEsterring_test\\build\\CLUE_CPU_Serial.vc
xproj]

```
with
[
  TDim=alpaka_common::Dim1D,
  TIdx=alpaka_common::Idx,
  TKernelFnObj=alpaka_serial_sync::KernelResetTiles,
  TAcc=alpaka_serial_sync::Acc1D,

TWorkDiv=alpaka::WorkDivMembers<alpaka_common::Dim1D,alpaka_common::Idx
>
]
```

```
C:
\Users\helsens\software\3d_clustering\CLUEstering_test\extern\alpaka\include\alpaka\kernel\Traits.hpp(222): message : see reference to class template instantiation 'alpaka::trait::CreateTaskKernel<TAcc,TWorkDiv,TKernelFnObj,alpaka_serial_sync::TilesAlpaka<10> *&,const float &,const double &>' being compiled [C:\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vcxproj]
```

```
with
[
  TAcc=alpaka_serial_sync::Acc1D,

TWorkDiv=alpaka::WorkDivMembers<alpaka_common::Dim1D,alpaka_common::Idx
>,
  TKernelFnObj=alpaka_serial_sync::KernelResetTiles
]
```

```
C:
\Users\helsens\software\3d_clustering\CLUEstering_test\CLUEstering\alpaka\CLUE\CLUEAlgoAlpaka.h(152): message : see reference to function template instantiation 'alpaka::TaskKernelCpuSerial<TDim,TIdx,TKernelFnObj,alpaka_serial_sync::TilesAlpaka<10> *&,const float &,const double &> alpaka::createTaskKernel<alpaka_serial_sync::Acc1D,alpaka::WorkDivMembers<TDim,TIdx>,alpaka_serial_sync::KernelResetTiles,alpaka_serial_sync::TilesAlpaka<10> *&,const float&,const double&>(const TWorkDiv &,const TKernelFnObj &,alpaka_serial_sync::TilesAlpaka<10> *&,const float &,const double &)' being compiled [C:\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vcxproj]
```

```
with
[
  TDim=alpaka_common::Dim1D,
  TIdx=alpaka_common::Idx,
  TKernelFnObj=alpaka_serial_sync::KernelResetTiles,

TWorkDiv=alpaka::WorkDivMembers<alpaka_common::Dim1D,alpaka_common::Idx
>
]
```

```
C:
\Users\helsens\software\3d_clustering\CLUEstering_test\CLUEstering\alpaka\CLUE\CLUEAlgoAlpaka.h(127): message : while compiling class template member function 'void
```

```
alpaka_serial_sync::CLUEAlgoAlpaka<alpaka_serial_sync::Acc1D,10>::setup(const
Points<10> &,alpaka_serial_sync::PointsAlpaka<10>
&,alpaka_serial_sync::Queue,size_t)' [C:
\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vc
xproj]
```

C:

```
\Users\helsens\software\3d_clustering\CLUEstering_test\CLUEstering\alpaka\CLUE\
CLUEAlgoAlpaka.h(181): message : see reference to function template instantiation
'void
```

```
alpaka_serial_sync::CLUEAlgoAlpaka<alpaka_serial_sync::Acc1D,10>::setup(const
Points<10> &,alpaka_serial_sync::PointsAlpaka<10>
&,alpaka_serial_sync::Queue,size_t)' being compiled [C:
\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vc
xproj]
```

C:

```
\Users\helsens\software\3d_clustering\CLUEstering_test\CLUEstering\alpaka\CLUE\
CLUEAlgoAlpaka.h(110): message : while compiling class template member function
'void
```

```
alpaka_serial_sync::CLUEAlgoAlpaka<alpaka_serial_sync::Acc1D,10>::init_device(a
lpaka_serial_sync::Queue)' [C:
\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vc
xproj]
```

C:

```
\Users\helsens\software\3d_clustering\CLUEstering_test\CLUEstering\alpaka\CLUE\
CLUEAlgoAlpaka.h(33): message : see reference to function template instantiation
'void
```

```
alpaka_serial_sync::CLUEAlgoAlpaka<alpaka_serial_sync::Acc1D,10>::init_device(a
lpaka_serial_sync::Queue)' being compiled [C:
\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vc
xproj]
```

C:

```
\Users\helsens\software\3d_clustering\CLUEstering_test\CLUEstering\alpaka\Bindin
gModules\..\CLUE/Run.h(20): message : see reference to class template
instantiation 'alpaka_serial_sync::CLUEAlgoAlpaka<alpaka_serial_sync::Acc1D,10>'
being compiled [C:
```

```
\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vc
xproj]
```

```
C:\Program Files (x86)\Microsoft Visual
Studio\2019\BuildTools\VC\Tools\MSVC\14.29.30133\include\type_traits(1534,98):
warning C4244: 'argument': conversion from 'float' to 'uint32_t', possible loss of data
[C:
```

```
\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_CPU_Serial.vc
xproj]
```

```
Creating library C:/Users/helsens/software/3d_clustering/CLUEstering_test/
build/Release/CLUE_CPU_Serial.lib and object C:/Users/helsens/software/
3d_clustering/CLUEstering_test/build/Release/CLUE_CPU_Serial.exp
```

Generating code

Finished generating code

CLUE_CPU_Serial.vcxproj -> C:

```
\Users\helsens\software\3d_clustering\CLUEstering_test\build\Release\CLUE_CPU_
```

```
Serial.cp312-win_amd64.pyd
  Building Custom Rule C:/Users/helsens/software/3d_clustering/CLUEstering_test/
CMakeLists.txt
  binding_kernels.cc
C:
\Users\helsens\software\3d_clustering\CLUEstering_test\extern\alpaka\include\alpak
a\core\ConcurrentExecPool.hpp(83,1): warning C4530: C++ exception handler used,
but unwind semantics are not enabled. Specify /EHsc [C:
\Users\helsens\software\3d_clustering\CLUEstering_test\build\CLUE_Convolutional_
Kernels.vcxproj]
  Creating library C:/Users/helsens/software/3d_clustering/CLUEstering_test/
build/Release/CLUE_Convolutional_Kernels.lib and object C:/Users/helsens/
software/3d_clustering/CLUEstering_test/build/Release/
CLUE_Convolutional_Kernels.exp
  Generating code
  Finished generating code
  CLUE_Convolutional_Kernels.vcxproj -> C:
\Users\helsens\software\3d_clustering\CLUEstering_test\build\Release\CLUE_Conv
olutional_Kernels.cp312-win_amd64.pyd
  Building Custom Rule C:/Users/helsens/software/3d_clustering/CLUEstering_test/
CMakeLists.txt
  running egg_info
  creating CLUEstering.egg-info
  writing CLUEstering.egg-info\PKG-INFO
  C:\Users\helsens\AppData\Local\Temp\1\pip-build-env-qjtdf0mw\overlay\Lib\site-
packages\setuptools\core_metadata.py:161: SetuptoolsDeprecationWarning:
Invalid config.
!!
```

```
*****
newlines are not allowed in `summary` and will break in the future
*****
```

```
!!
  write_field('Summary', single_line(summary))
  writing dependency_links to CLUEstering.egg-info\dependency_links.txt
  writing requirements to CLUEstering.egg-info\requires.txt
  writing top-level names to CLUEstering.egg-info\top_level.txt
  writing manifest file 'CLUEstering.egg-info\SOURCES.txt'
  reading manifest file 'CLUEstering.egg-info\SOURCES.txt'
  reading manifest template 'MANIFEST.in'
  warning: no previously-included files found matching 'build*'
  adding license file 'LICENSE'
  writing manifest file 'CLUEstering.egg-info\SOURCES.txt'
  Getting requirements to build wheel ... done
  Running command Preparing metadata (pyproject.toml)
  -- Selecting Windows SDK version 10.0.22621.0 to target Windows 10.0.20348.
  -- pybind11 v2.12.0 dev1
CMake Warning at CMakeLists.txt:101 (find_package):
  By not providing "FindTBB.cmake" in CMAKE_MODULE_PATH this project has
```

asked CMake to find a package configuration file provided by "TBB", but CMake did not find one.

Could not find a package configuration file provided by "TBB" with any of the following names:

TBBConfig.cmake
tbb-config.cmake

Add the installation prefix of "TBB" to CMAKE_PREFIX_PATH or set "TBB_DIR" to a directory containing one of the above files. If "TBB" provides a separate development package or SDK, be sure it has been installed.

-- Configuring done
-- Generating done
-- Build files have been written to: C:/Users/helsens/software/3d_clustering/CLUEstering_test/build
Microsoft (R) Build Engine version 16.11.2+f32259642 for .NET Framework
Copyright (C) Microsoft Corporation. All rights reserved.

Checking Build System
Building Custom Rule C:/Users/helsens/software/3d_clustering/CLUEstering_test/CMakeLists.txt
CLUE_CPU_Serial.vcxproj -> C:
\Users\helsens\software\3d_clustering\CLUEstering_test\build\Release\CLUE_CPU_Serial.cp312-win_amd64.pyd
Building Custom Rule C:/Users/helsens/software/3d_clustering/CLUEstering_test/CMakeLists.txt
CLUE_Convolutional_Kernels.vcxproj -> C:
\Users\helsens\software\3d_clustering\CLUEstering_test\build\Release\CLUE_Convolutional_Kernels.cp312-win_amd64.pyd
Building Custom Rule C:/Users/helsens/software/3d_clustering/CLUEstering_test/CMakeLists.txt
running dist_info
creating C:\Users\helsens\AppData\Local\Temp\1\pip-modern-metadata-su05tn8m\CLUEstering.egg-info
writing C:\Users\helsens\AppData\Local\Temp\1\pip-modern-metadata-su05tn8m\CLUEstering.egg-info\PKG-INFO
C:\Users\helsens\AppData\Local\Temp\1\pip-build-env-qjtdf0mw\overlay\Lib\site-packages\setuptools\core_metadata.py:161: SetuptoolsDeprecationWarning:
Invalid config.
!!

```
*****  
newlines are not allowed in `summary` and will break in the future  
*****
```

!!
write_field('Summary', single_line(summary))

writing dependency_links to C:\Users\helsens\AppData\Local\Temp\1\pip-modern-metadata-su05tn8m\CLUEstering.egg-info\dependency_links.txt
writing requirements to C:\Users\helsens\AppData\Local\Temp\1\pip-modern-metadata-su05tn8m\CLUEstering.egg-info\requires.txt
writing top-level names to C:\Users\helsens\AppData\Local\Temp\1\pip-modern-metadata-su05tn8m\CLUEstering.egg-info\top_level.txt
writing manifest file 'C:\Users\helsens\AppData\Local\Temp\1\pip-modern-metadata-su05tn8m\CLUEstering.egg-info\SOURCES.txt'
reading manifest file 'C:\Users\helsens\AppData\Local\Temp\1\pip-modern-metadata-su05tn8m\CLUEstering.egg-info\SOURCES.txt'
reading manifest template 'MANIFEST.in'
warning: no previously-included files found matching 'build*'
adding license file 'LICENSE'
writing manifest file 'C:\Users\helsens\AppData\Local\Temp\1\pip-modern-metadata-su05tn8m\CLUEstering.egg-info\SOURCES.txt'
creating 'C:\Users\helsens\AppData\Local\Temp\1\pip-modern-metadata-su05tn8m\CLUEstering-2.2.7.dist-info'
Preparing metadata (pyproject.toml) ... done
Requirement already satisfied: scikit-learn in c:\users\helsens\appdata\local\miniconda3\envs\clue_test\lib\site-packages (from CLUEstering==2.2.7) (1.5.2)
Requirement already satisfied: numpy in c:\users\helsens\appdata\local\miniconda3\envs\clue_test\lib\site-packages (from CLUEstering==2.2.7) (2.0.1)
Requirement already satisfied: matplotlib in c:\users\helsens\appdata\local\miniconda3\envs\clue_test\lib\site-packages (from CLUEstering==2.2.7) (3.9.2)
Requirement already satisfied: pandas in c:\users\helsens\appdata\local\miniconda3\envs\clue_test\lib\site-packages (from CLUEstering==2.2.7) (2.2.3)
Requirement already satisfied: contourpy>=1.0.1 in c:\users\helsens\appdata\local\miniconda3\envs\clue_test\lib\site-packages (from matplotlib->CLUEstering==2.2.7) (1.3.0)
Requirement already satisfied: cycler>=0.10 in c:\users\helsens\appdata\local\miniconda3\envs\clue_test\lib\site-packages (from matplotlib->CLUEstering==2.2.7) (0.12.1)
Requirement already satisfied: fonttools>=4.22.0 in c:\users\helsens\appdata\local\miniconda3\envs\clue_test\lib\site-packages (from matplotlib->CLUEstering==2.2.7) (4.54.1)
Requirement already satisfied: kiwisolver>=1.3.1 in c:\users\helsens\appdata\local\miniconda3\envs\clue_test\lib\site-packages (from matplotlib->CLUEstering==2.2.7) (1.4.7)
Requirement already satisfied: packaging>=20.0 in c:\users\helsens\appdata\local\miniconda3\envs\clue_test\lib\site-packages (from matplotlib->CLUEstering==2.2.7) (24.1)
Requirement already satisfied: pillow>=8 in c:\users\helsens\appdata\local\miniconda3\envs\clue_test\lib\site-packages (from matplotlib->CLUEstering==2.2.7) (10.4.0)
Requirement already satisfied: pyparsing>=2.3.1 in c:\users\helsens\appdata\local\miniconda3\envs\clue_test\lib\site-packages (from

```
matplotlib->CLUEstering==2.2.7) (3.1.4)
Requirement already satisfied: python-dateutil>=2.7 in c:
\users\helsens\appdata\local\miniconda3\envs\clue_test\lib\site-packages (from
matplotlib->CLUEstering==2.2.7) (2.9.0.post0)
Requirement already satisfied: pytz>=2020.1 in c:
\users\helsens\appdata\local\miniconda3\envs\clue_test\lib\site-packages (from
pandas->CLUEstering==2.2.7) (2024.2)
Requirement already satisfied: tzdata>=2022.7 in c:
\users\helsens\appdata\local\miniconda3\envs\clue_test\lib\site-packages (from
pandas->CLUEstering==2.2.7) (2024.2)
Requirement already satisfied: scipy>=1.6.0 in c:
\users\helsens\appdata\local\miniconda3\envs\clue_test\lib\site-packages (from
scikit-learn->CLUEstering==2.2.7) (1.14.1)
Requirement already satisfied: joblib>=1.2.0 in c:
\users\helsens\appdata\local\miniconda3\envs\clue_test\lib\site-packages (from
scikit-learn->CLUEstering==2.2.7) (1.4.2)
Requirement already satisfied: threadpoolctl>=3.1.0 in c:
\users\helsens\appdata\local\miniconda3\envs\clue_test\lib\site-packages (from
scikit-learn->CLUEstering==2.2.7) (3.5.0)
Requirement already satisfied: six>=1.5 in c:
\users\helsens\appdata\local\miniconda3\envs\clue_test\lib\site-packages (from
python-dateutil>=2.7->matplotlib->CLUEstering==2.2.7) (1.16.0)
Building wheels for collected packages: CLUEstering
  Running command Building wheel for CLUEstering (pyproject.toml)
  -- Selecting Windows SDK version 10.0.22621.0 to target Windows 10.0.20348.
  -- pybind11 v2.12.0 dev1
CMake Warning at CMakeLists.txt:101 (find_package):
  By not providing "FindTBB.cmake" in CMAKE_MODULE_PATH this project has
  asked CMake to find a package configuration file provided by "TBB", but
  CMake did not find one.

  Could not find a package configuration file provided by "TBB" with any of
  the following names:

    TBBConfig.cmake
    tbb-config.cmake

  Add the installation prefix of "TBB" to CMAKE_PREFIX_PATH or set "TBB_DIR"
  to a directory containing one of the above files.  If "TBB" provides a
  separate development package or SDK, be sure it has been installed.

  -- Configuring done
  -- Generating done
  -- Build files have been written to: C:/Users/helsens/software/3d_clustering/
  CLUEstering_test/build
  Microsoft (R) Build Engine version 16.11.2+f32259642 for .NET Framework
  Copyright (C) Microsoft Corporation. All rights reserved.
```

Checking Build System

```
Building Custom Rule C:/Users/helsens/software/3d_clustering/CLUEstering_test/
CMakeLists.txt
CLUE_CPU_Serial.vcxproj -> C:
/Users/helsens/software/3d_clustering/CLUEstering_test/build/Release/CLUE_CPU_
Serial.cp312-win_amd64.pyd
Building Custom Rule C:/Users/helsens/software/3d_clustering/CLUEstering_test/
CMakeLists.txt
CLUE_Convolutional_Kernels.vcxproj -> C:
/Users/helsens/software/3d_clustering/CLUEstering_test/build/Release/CLUE_Conv
olutional_Kernels.cp312-win_amd64.pyd
Building Custom Rule C:/Users/helsens/software/3d_clustering/CLUEstering_test/
CMakeLists.txt
running bdist_wheel
running build
running build_py
creating build\lib\CLUEstering
copying CLUEstering\CLUEstering.py -> build\lib\CLUEstering
copying CLUEstering\__init__.py -> build\lib\CLUEstering
installing to build\bdist.win-amd64\wheel
running install
running install_lib
creating build\bdist.win-amd64\wheel
creating build\bdist.win-amd64\wheel\CLUEstering
copying build\lib\CLUEstering\CLUEstering.py -> build\bdist.win-amd64\wheel\
\CLUEstering
copying build\lib\CLUEstering\__init__.py -> build\bdist.win-amd64\wheel\
\CLUEstering
running install_egg_info
running egg_info
writing CLUEstering.egg-info\PKG-INFO
C:\Users\helsens\AppData\Local\Temp\1\pip-build-env-qjtdf0mw\overlay\Lib\site-
packages\setuptools\core_metadata.py:161: SetuptoolsDeprecationWarning:
Invalid config.
!!
```

```
*****
newlines are not allowed in `summary` and will break in the future
*****
```

```
!!
write_field('Summary', single_line(summary))
writing dependency_links to CLUEstering.egg-info\dependency_links.txt
writing requirements to CLUEstering.egg-info\requires.txt
writing top-level names to CLUEstering.egg-info\top_level.txt
reading manifest file 'CLUEstering.egg-info\SOURCES.txt'
reading manifest template 'MANIFEST.in'
warning: no previously-included files found matching 'build\*'
adding license file 'LICENSE'
writing manifest file 'CLUEstering.egg-info\SOURCES.txt'
Copying CLUEstering.egg-info to build\bdist.win-amd64\wheel\CLUEstering-2.2.7-
```



```
py3.12.egg-info
  running install_scripts
    creating build\bdist.win-amd64\wheel\CLUEstering-2.2.7.dist-info\WHEEL
    creating 'C:\Users\helsens\AppData\Local\Temp\1\pip-wheel-6bjz0oa5\tmp-
fvk1hcjv\CLUEstering-2.2.7-py3-none-any.whl' and adding 'build\bdist.win-
amd64\wheel' to it
    adding 'CLUEstering/CLUEstering.py'
    adding 'CLUEstering/__init__.py'
    adding 'CLUEstering-2.2.7.dist-info/LICENSE'
    adding 'CLUEstering-2.2.7.dist-info/METADATA'
    adding 'CLUEstering-2.2.7.dist-info/WHEEL'
    adding 'CLUEstering-2.2.7.dist-info/top_level.txt'
    adding 'CLUEstering-2.2.7.dist-info/RECORD'
    removing build\bdist.win-amd64\wheel
    Building wheel for CLUEstering (pyproject.toml) ... done
    Created wheel for CLUEstering: filename=CLUEstering-2.2.7-py3-none-any.whl
size=26300
sha256=6f5ab20fcb4f8a7cd3a242261575425bc0be46a5f451d3e1e881254b27b682c
5
    Stored in directory: C:\Users\helsens\AppData\Local\Temp\1\pip-ephem-wheel-
cache-
x6wl47mt\wheels\0e\35\56\99260fdd63a778ef7249aa71f66d5debe8c8833617dd9be
4b0
Successfully built CLUEstering
Installing collected packages: CLUEstering
  Attempting uninstall: CLUEstering
    Found existing installation: CLUEstering 2.2.7
    Uninstalling CLUEstering-2.2.7:
      Removing file or directory c:
\users\helsens\appdata\local\miniconda3\envs\clue_test\lib\site-
packages\cluestering-2.2.7.dist-info\
      Removing file or directory c:
\users\helsens\appdata\local\miniconda3\envs\clue_test\lib\site-
packages\cluestering\
    Successfully uninstalled CLUEstering-2.2.7
Successfully installed CLUEstering-2.2.7
```