

# Building and testing GitHub lcgeo with ILCSoft v01-19-02

Download `lcgeo` from GitHub

`git clone` <https://github.com/ILCSoft/lcgeo.git>

Configure ILCSoft v01-19-02 and compile `lcgeo`

`cd lcgeo`

`mkdir build`

`cd build`

`source /cvmfs/ilc.desy.de/sw/x86_64_gcc49_sl6/v01-19-02/init_ilcsoft.sh`

`cmake -DCMAKE_CXX_COMPILER=`which g++` -DCMAKE_C_COMPILER=`which gcc` -C $ILCSOFT/ILCSoft.cmake -`

`DBoost_NO_BOOST_CMAKE=ON ..`

`make -w -j4 install`

Setup `lcgeo`

`cd ..`

`source bin/thislcgeo.sh`

Visualise with

`geoDisplay SiD/compact/SiD_o2_v02/SiD_o2_v02.xml`

Create single particle slcio file

`cd example/`

`export PYTHONPATH=${LCIO}/src/python:${ROOTSYS}/lib:$PYTHONPATH`

`python lcio_particle_gun.py`

Run simulation with the `SiD_o2_v02` model

`ddsim --compactFile ../SiD/compact/SiD_o2_v02/SiD_o2_v02.xml --inputFiles mcparticles.slcio -N 100 --outputFile SiD_o2_v02_mcparticles.slcio`

Check the output

`anajob simple_lcio.slcio`

`dumpevent simple_lcio.slcio 1`

Reco

`Marlin testSiDReconstruction_o2_v02.xml`