

# SiD\_o2\_v03 with ILCSoft v02-00-01 (building and testing)

Download `lcgeo` from GitHub (delete any older installation of `lcgeo`, if the case)

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

Configure ILCSoft v02-00-01

`cd lcgeo`

`mkdir build`

`cd build`

`source /cvmfs/ilc.desy.de/sw/x86_64/gcc49_sl6/v02-00-01/init_ilcsoft.sh`

Then compile `lcgeo` with

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

`make -w -j4 install`

Setup `lcgeo`

`cd ..`

`source bin/thislcgeo.sh`

If you want, you can visualise the model with

`geoDisplay SiD/compact/SiD_o2_v03/SiD_o2_v03.xml`

and check volume overlaps with the TGeo command (while in ROOT):

`root [0] gGeoManager->CheckOverlaps(0.01);`

Run simulation with the `SiD_o2_v03` model, e.g.

`ddsim --compactFile SiD/compact/SiD_o2_v03/SiD_o2_v03.xml --runType batch --inputFile example/mcparticles.slcio --outputFile=testSiD_o2_v03.slcio --`

`numberOfEvents 100`

Check the output

`anajob testSiD_o2_v03.slcio`

`dumpevent testSiD_o2_v03.slcio 1`

To test reconstruction, first download this example XML



SiDReconstructio...03\_calib1ct2.xml

Edit it to use `testSiD_o2_v03.slcio` as input file, and point to the correct `PandoraSettings*`, gear XML etc., and then run

Marlin `SiDReconstruction_o2_v03_calib1.xml`

Check reconstructed file with

`anajob tracksSiD_o2_v03.slcio`

\*The gear and Pandora settings XMLs are attached below in case you do not have them already



gear\_pandora.tgz