

# Building and testing Icgeo with ILCSoft v01-19-04 and SiD\_o3\_v02

Download [Icgeo](#) from GitHub (delete any older installation of Icgeo, if the case)

```
git clone https://github.com/iLCSoft/Icgeo.git
```

Configure ILCSoft v01-19-04 and compile Icgeo

```
cd Icgeo
```

```
mkdir build
```

```
cd build
```

```
source /cvmfs/ilc.desy.de/sw/x86_64_gcc49_sl6/v01-19-04/init_ilcsoft.sh
```

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

```
make -w -j4 install
```

```
Setup Icgeo
```

```
cd ..
```

```
source bin>thislcgeo.sh
```

Now, get these out of the way so that the v01-19-04 ddsim is used

```
rm -rf bin/ddsim lib/python/DDSim
```

which ddsim should display

```
/cvmfs/ilc.desy.de/sw/x86_64_gcc49_sl6/v01-19-04/Icgeo/v00-13-04/bin/ddsim
```

Create single particle slcio file

```
cd example/
```

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

```
python Icio_particle_gun.py
```

Run simulation with the SiD\_o3\_v02 model

```
ddsim --compactFile ./SiD/compact/SiD_o3_v02/SiD_o3_v02.xml --inputFiles mcparticles.slcio -N 10 --outputFile simple_Icio.slcio
```

or

```
ddsim --compactFile Icgeo/SiD/compact/SiD_o2_v03/SiD_o2_v03.xml --runType batch --enableGun --gun.distribution uniform --gun.particle e- --gun.energy 15*GeV --gun.thetaMax="1*mrad" --gun.thetaMin="40*mrad" --numberOfEvents 50 --outputFile myElectrons.slcio
```

Check the output

```
anajob simple_Icio.slcio
```

```
dumpevent simple_Icio.slcio 1
```