

# Converting to LCDD or HepRep using GeomConverter

## Overview

The [SLIC simulator package](#) uses a low-level XML data format while the reconstruction uses a smaller, more targeted format called the "compact description". Using a compact geometry in the simulator requires converting it to LCDD first.

## Command Syntax

The full syntax for running GeomConverter is

```
GeomConverter [-o format] [<infile> [<outfile>]]
```

If no output file is specified the GUI will be displayed. If no format is given the format will be guessed based on the output file.

## Running the Converter

1. After building GeomConverter, run this command to convert a compact detector file to LCDD.

```
java -jar ./target/bin/GeomConverter-VERSION-bin.jar -o lcdd compact.xml det.lcdd
```

where VERSION corresponds to the build version, e.g. 1.11-SNAPSHOT



### Windows Users

Windows users need to run **GeomConverter.bat** from the Windows command prompt instead of the **GeomConverter** script.

## Running in SLIC

The output LCDD file *det.lcdd* can be used as input to SLIC, which might look like this.

```
slic -g det.lcdd -z -n
```