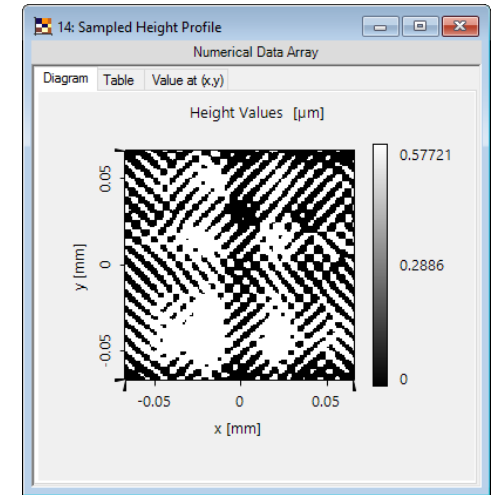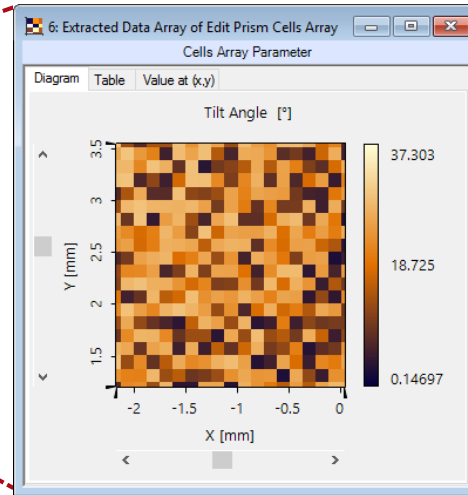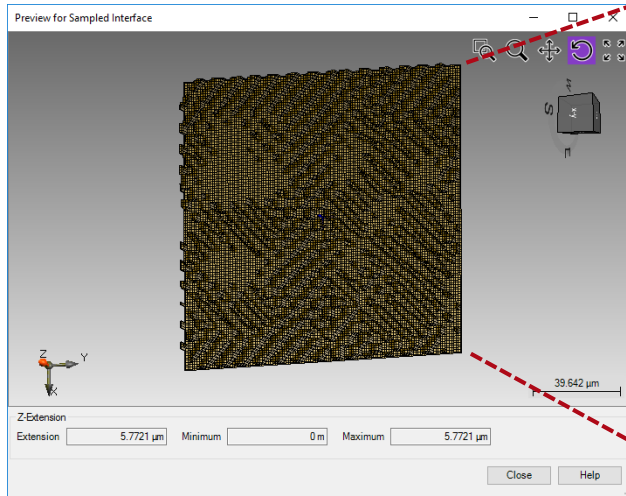Light Shaping > Diffractive Optics

Export of Fabrication Data

Task Illustration

Quantized

Array
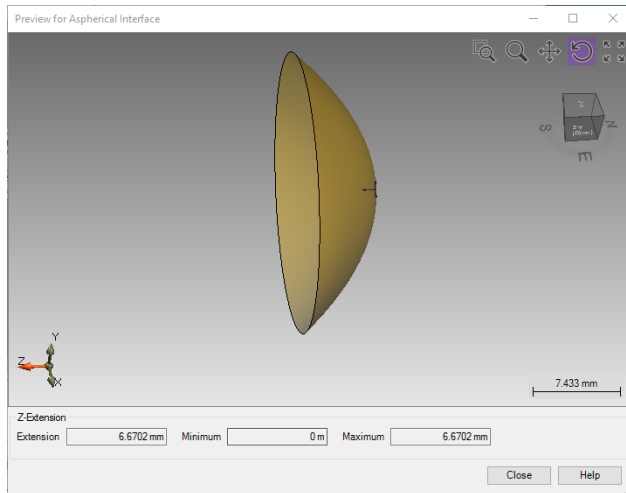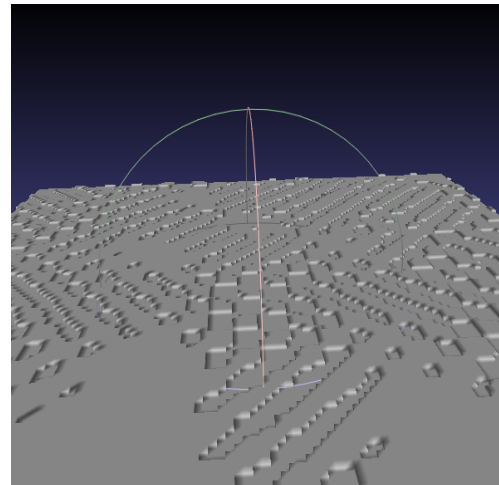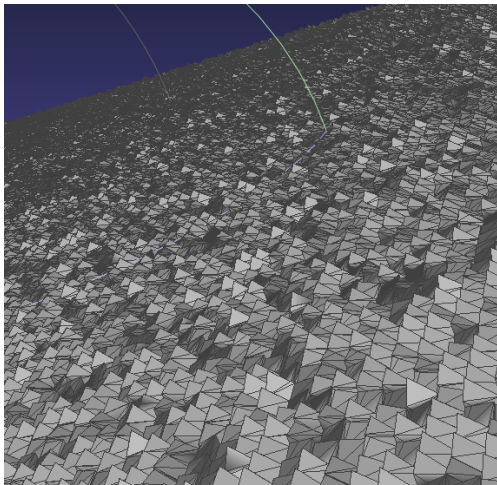
Smooth

flexible export of fabrication data:

- – smooth interfaces
- – quantized interfaces
- – mirror/prism/grating cell arrays
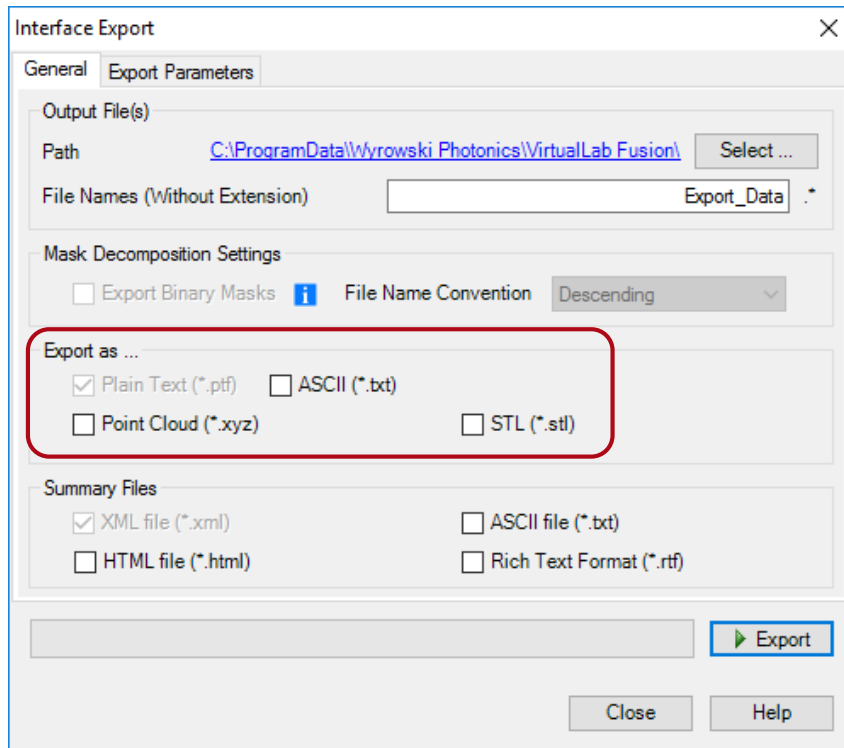
Highlights

- export of fabrication data for various surface shapes
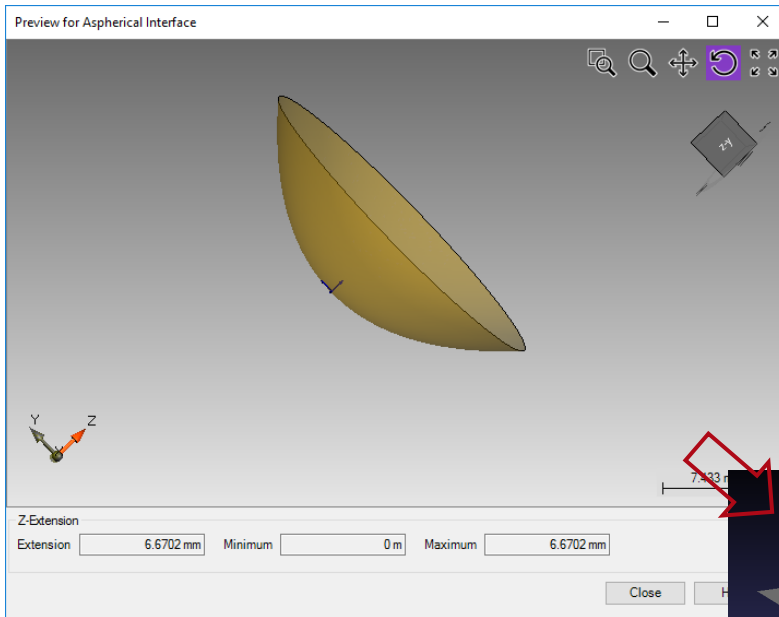- export of quantized interfaces like binary masks for lithographic fabrication techniques

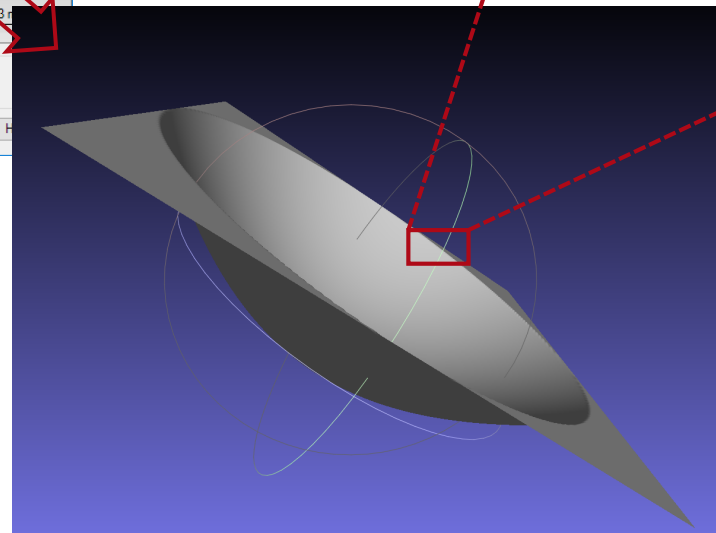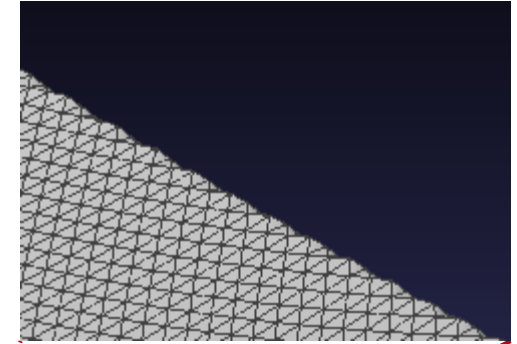# Fabrication Data for General Interfaces

supported file formats:

– plain text

– ASCII

– point cloud

– CAD formats (e.g. STL, IGES)

STL Export of Smooth Interface (e.g. Asphere)
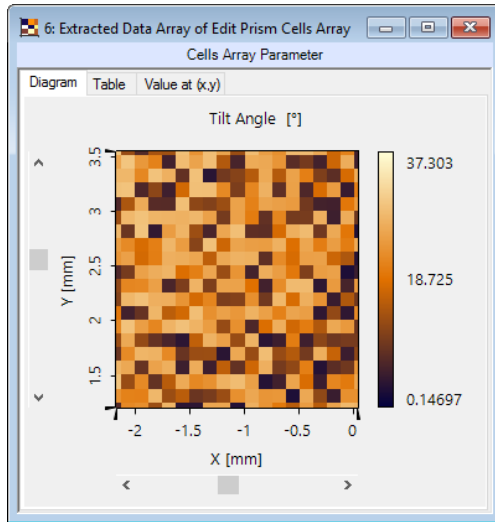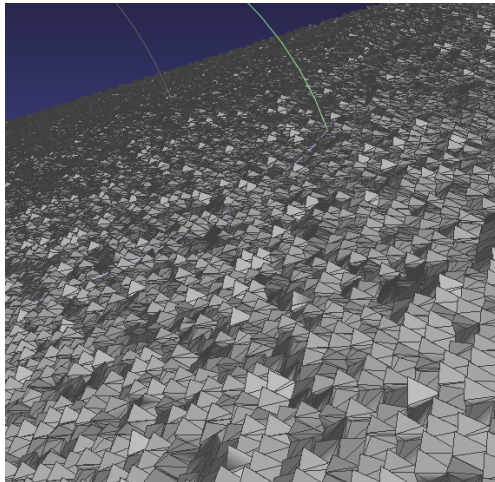

surface is described by triangles

STL file format are widely used for rapid prototyping, 3D printing and computer aided manufacturing.

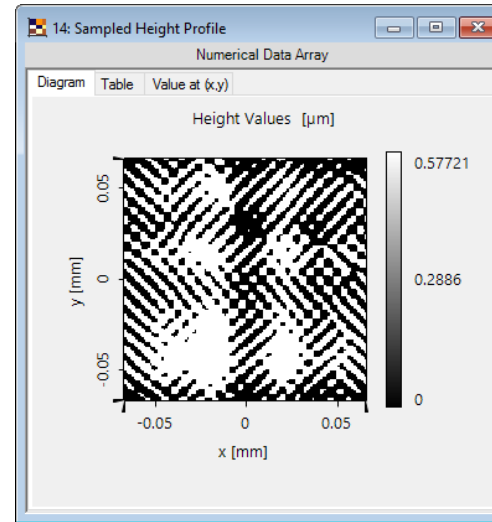STL Export of an aspherical lens*

* illustration by MeshLab 2016.12   www.LightTrans.com

STL Export of Sampled Height Profiles

sampled height profile of a prism cell array

sampled height profile of a binary beam shaper

STL of prism cell array*
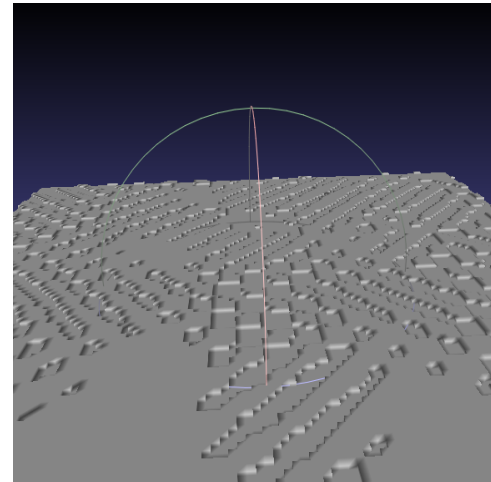
STL of a binary height profile*

* illustration by MeshLab 2016.12
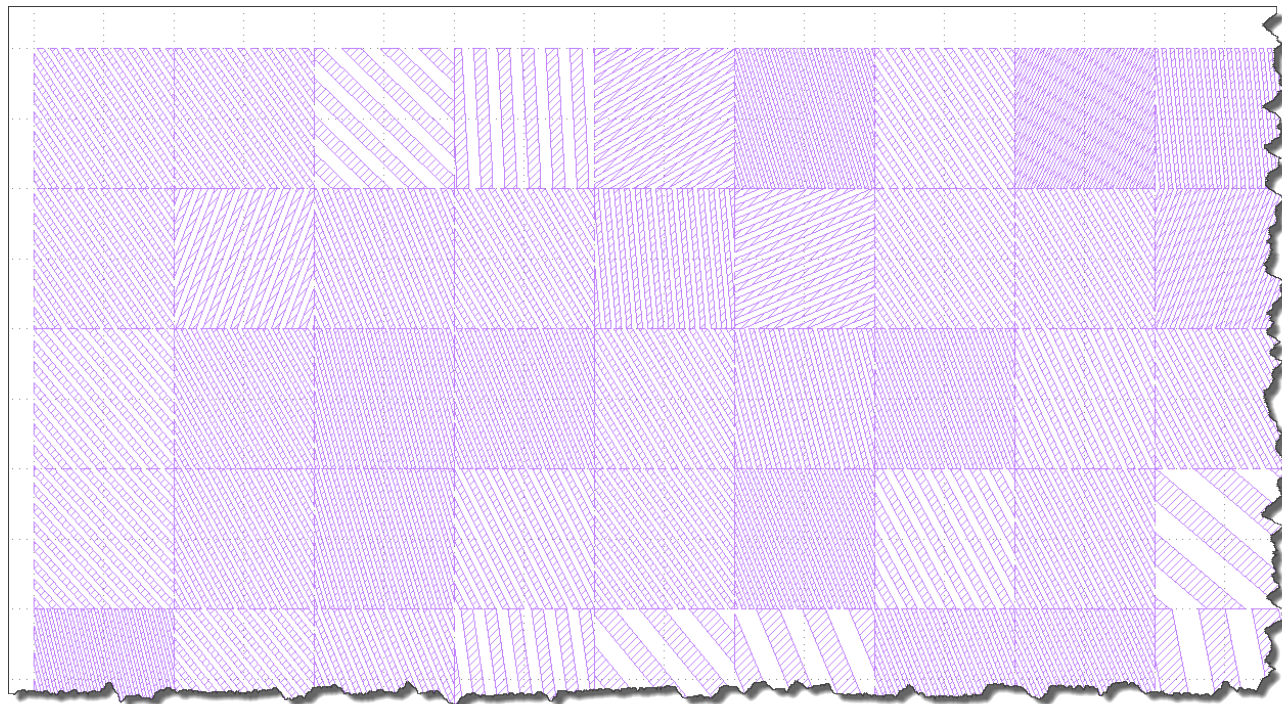
GDSII Export for Quantized Interfaces

In case of quantized interfaces data can be directly exported to GDSII file format.

This file format is mostly used e.g. in lithographic exposure techniques.

GDSII data visualization of an array of binary gratings

Document & Technical Info

code	DO.0004
version of document	1.0
title	Fabrication Export
category	Diffractive Optics (DO)
created by	Huiying Zhong
used VL version	7.0.0.29

Specifications of PC Used for Simulation	
Processor	i7-5600U (2 CPU cores)
RAM	12 GB
Operating System	Windows 10