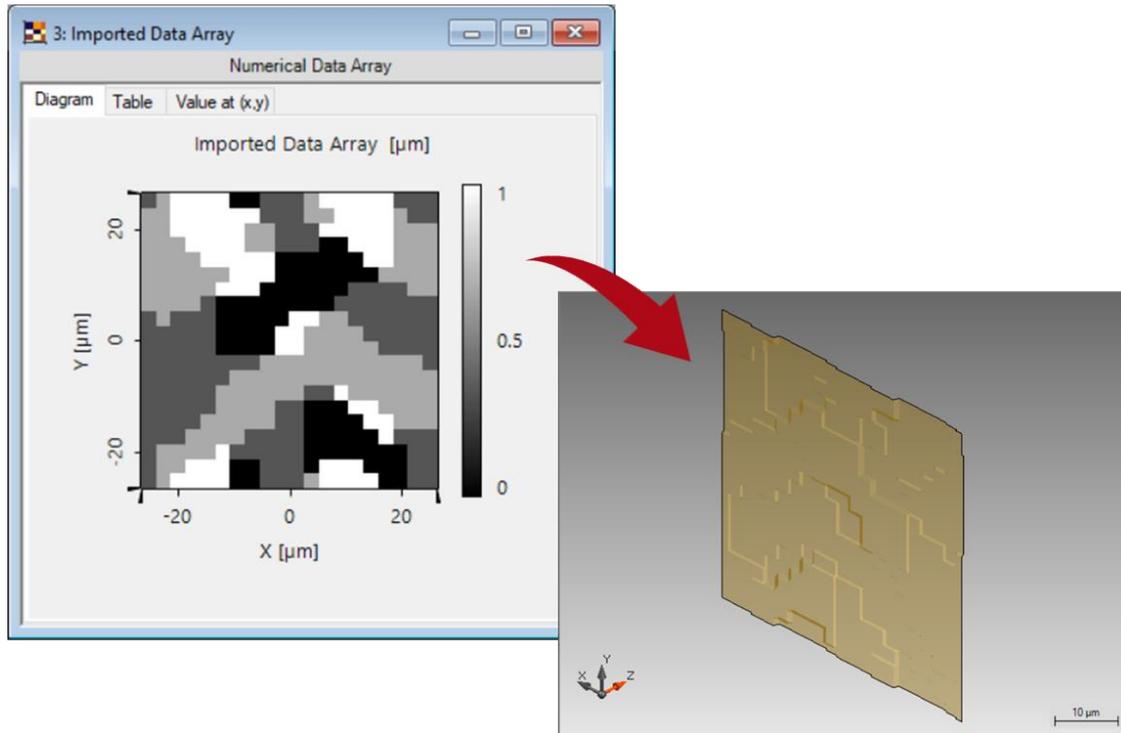


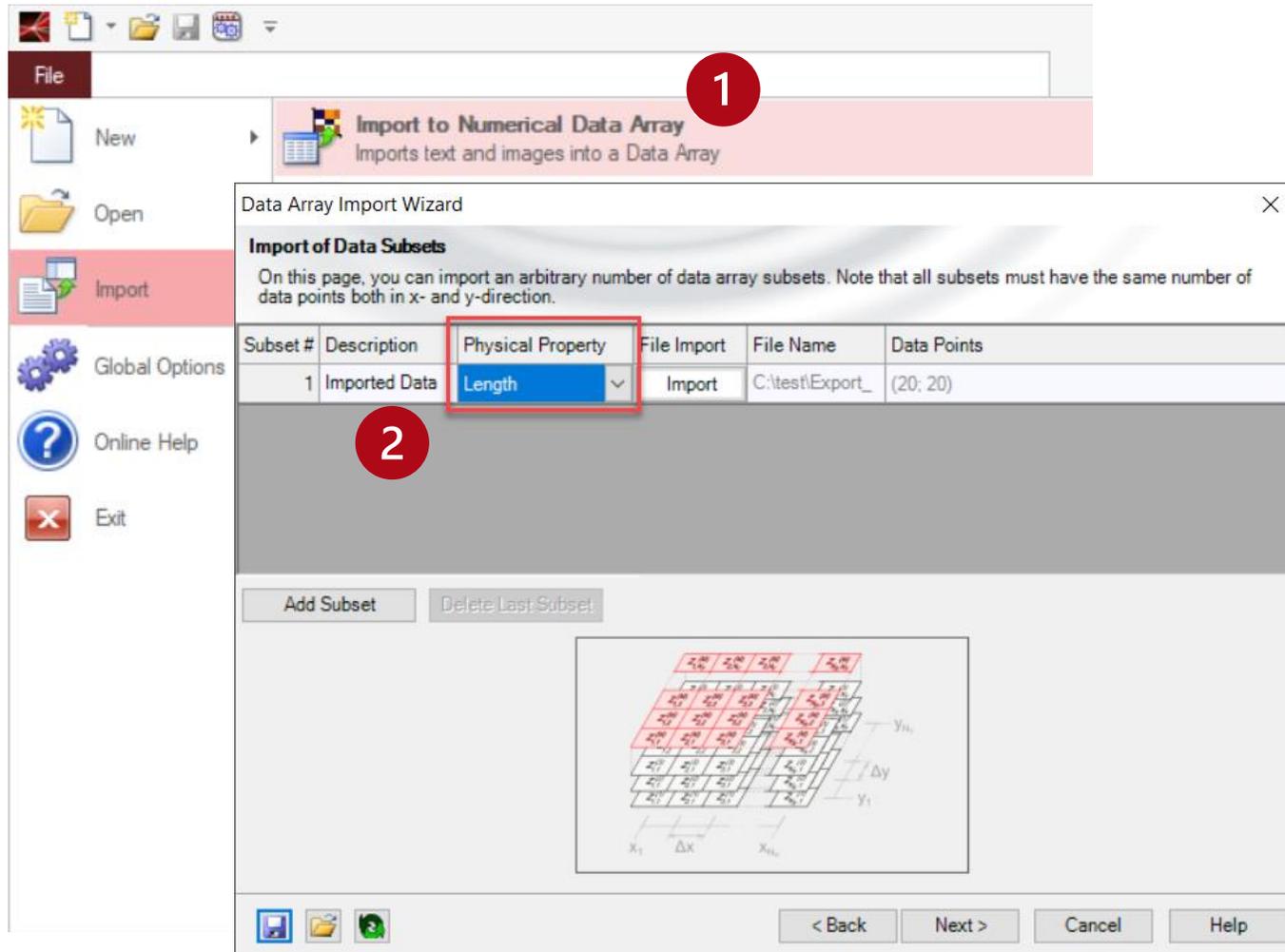
## **Import of Bitmap file containing Height Data of a Microstructure into VirtualLab Fusion**

# Abstract



The comparison of modeling results and measurement data is of importance for any design process of optical elements. Hence, it is necessary to be able to import measured height profiles, e.g. of a microstructure, into the modeling software in order to evaluate the performance of the real element. Thus, in this document we show, how height data can be imported by using a bitmap file.

# Instructions



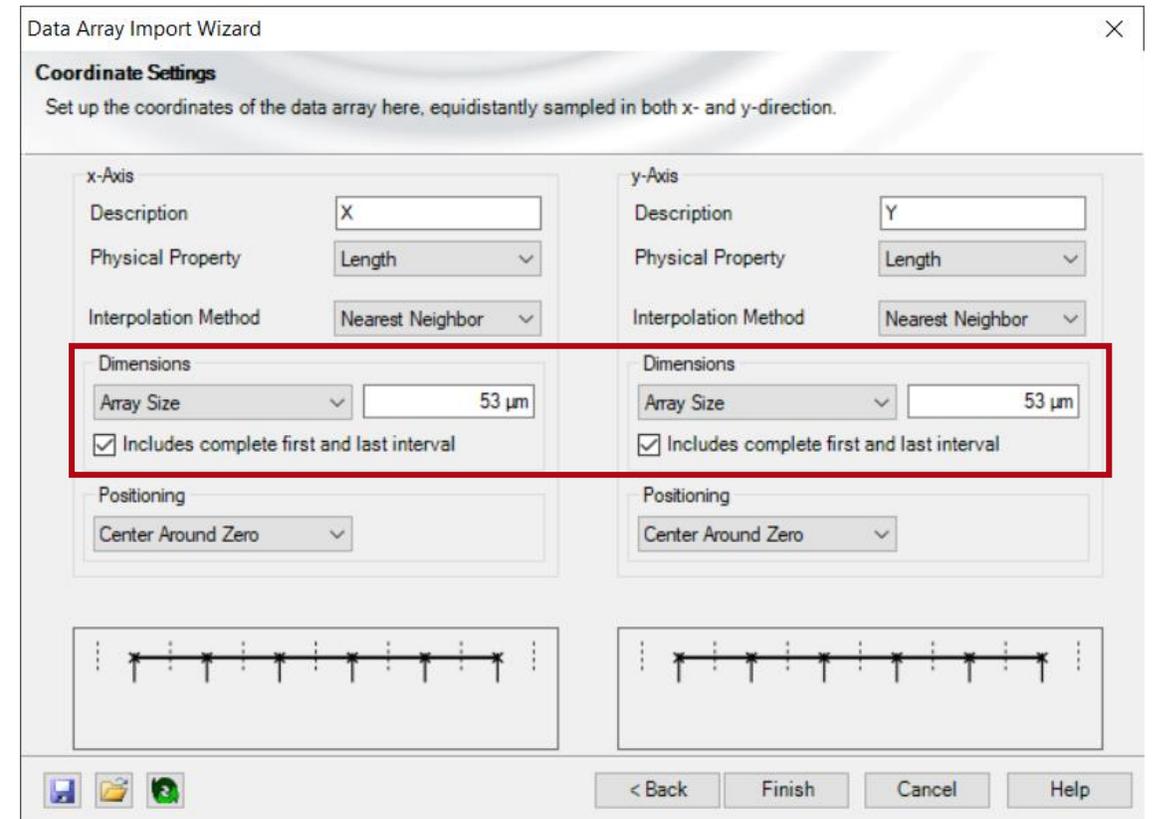
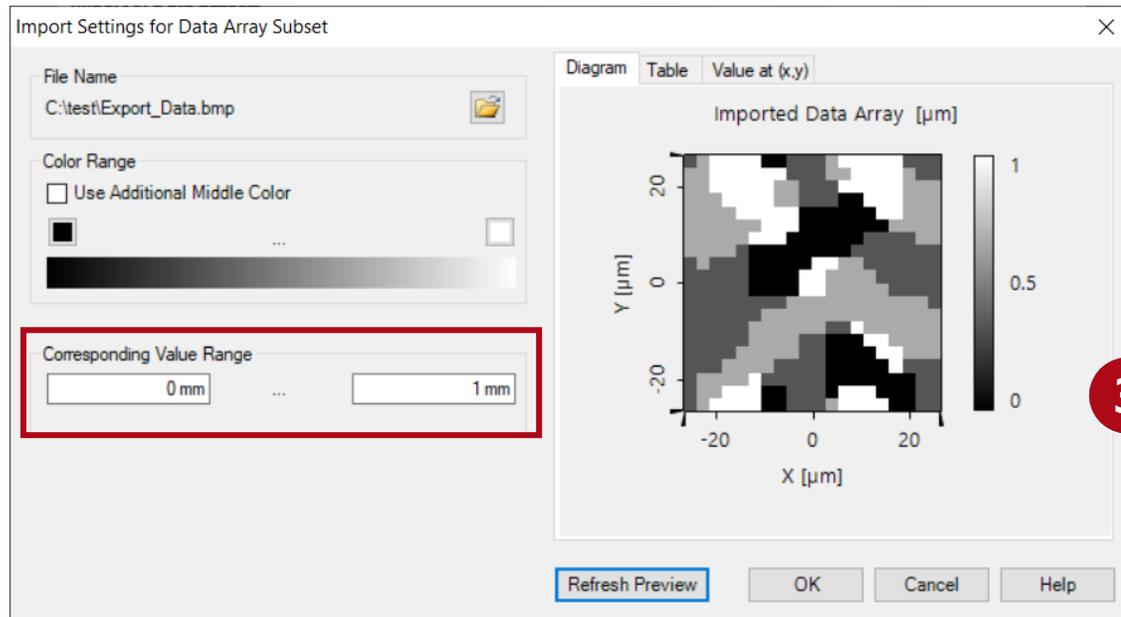
## Step 1

- Use the import function to import the bitmap file as numerical data array.

## Step 2

- Set the physical property of the data array

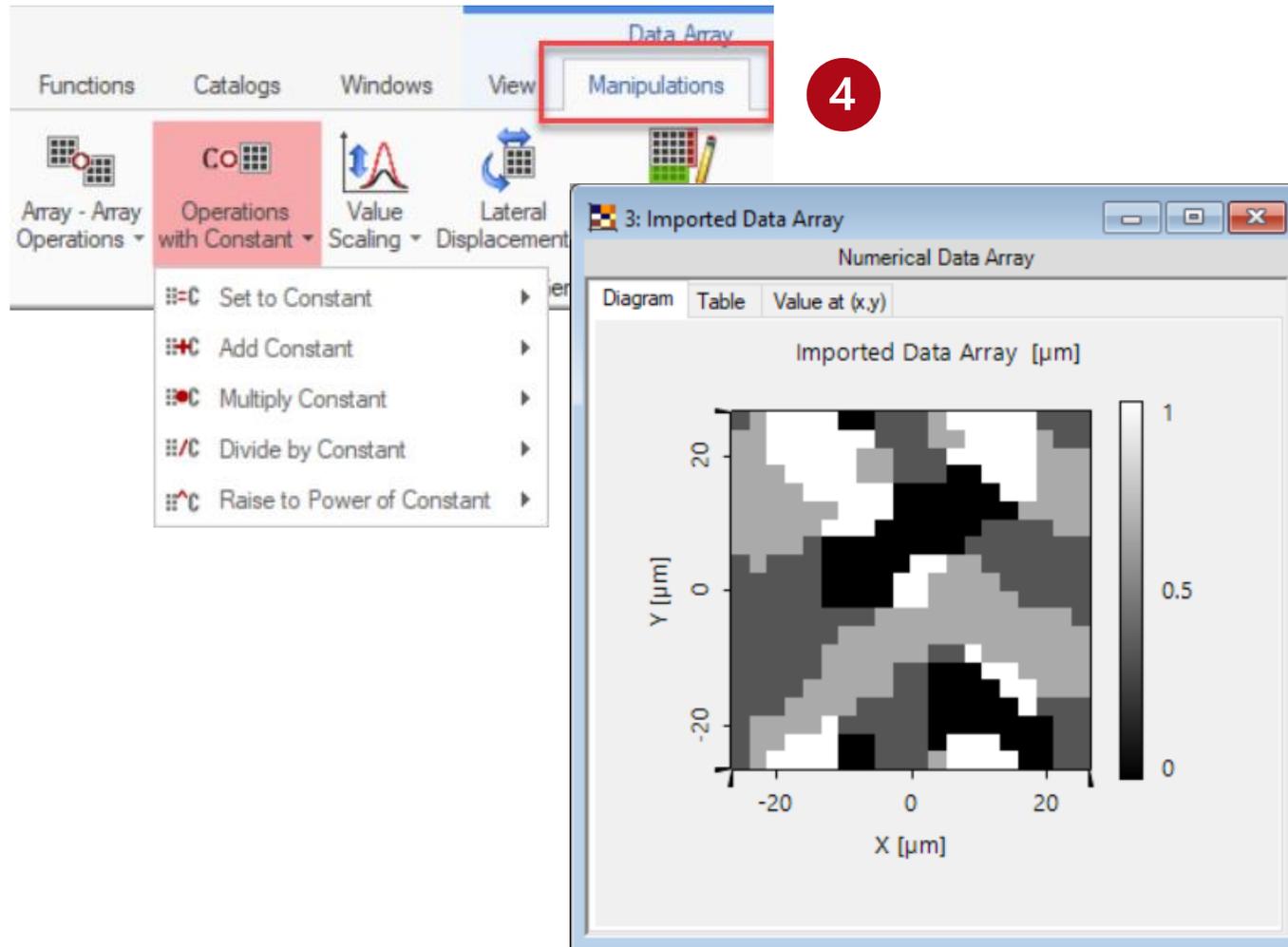
# Instructions



## Step 3

- Set proper import value for grey value and dimensions during import

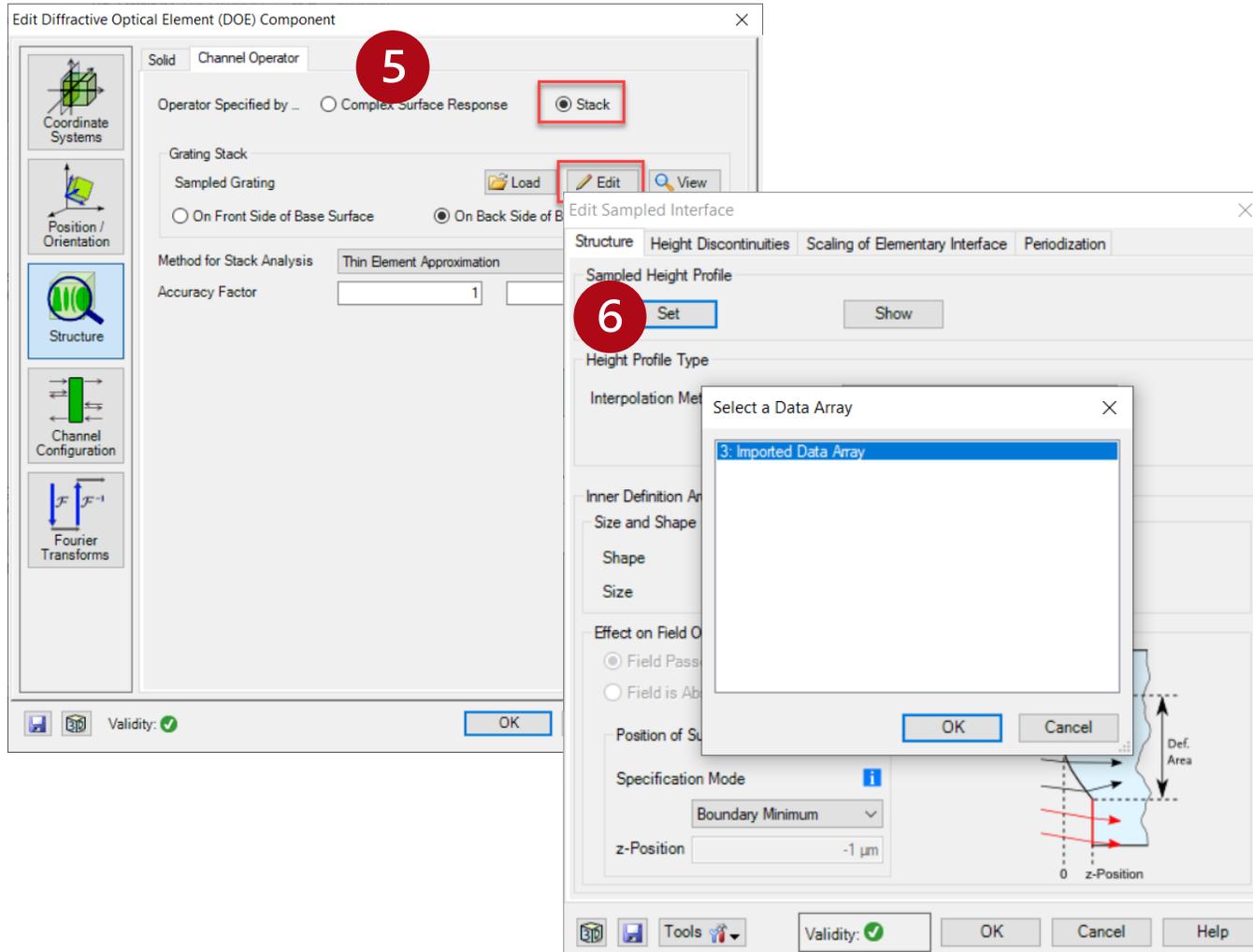
# Instructions



## Step 4

- Check the height value of the imported data array and adapt it via Manipulation menu (e.g. by applying a multiplication with constant).

# Instructions



## Step 5

- Use Microstructure or DOE component -> Channel Operator -> Stack

## Step 6

- Load the imported data array to the sampled interface

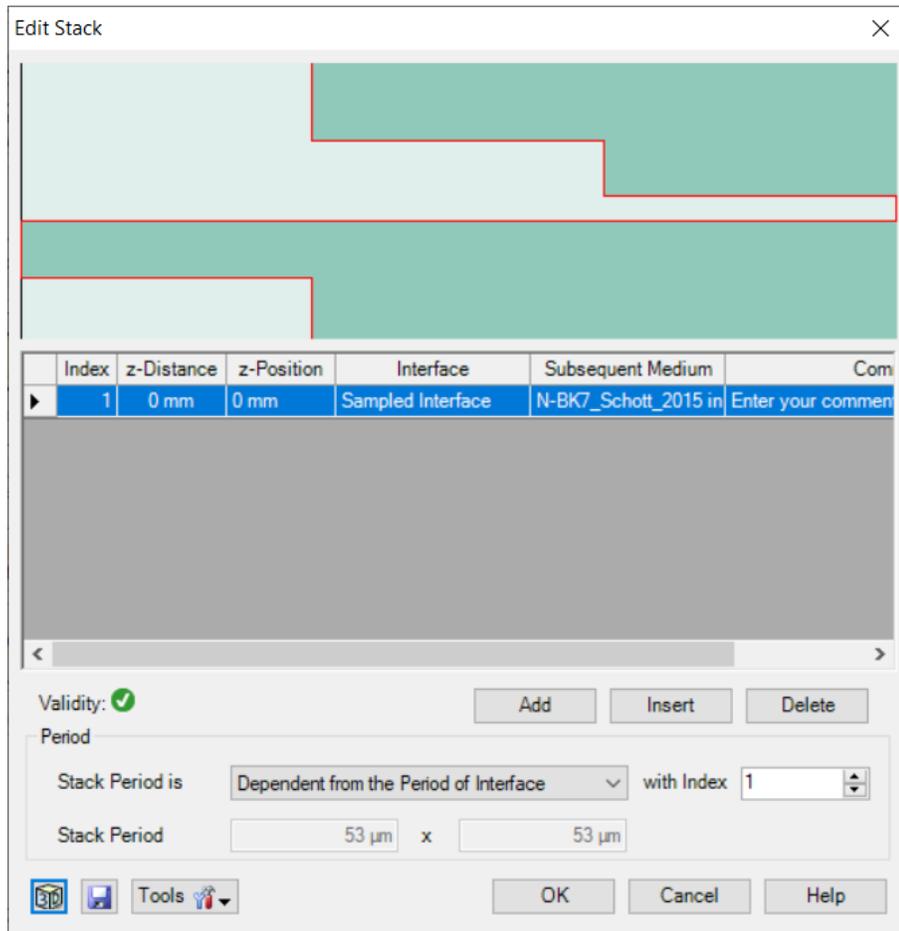
# Instructions

## Step 7

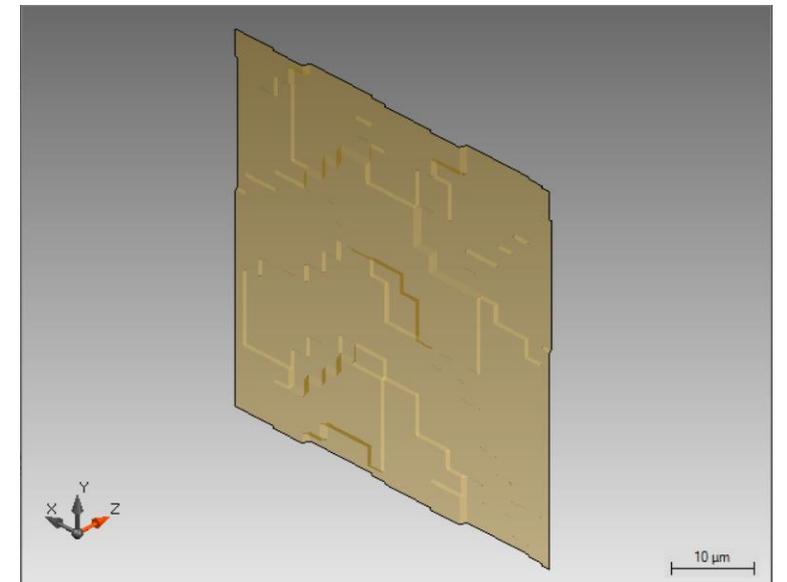
- Set extension of the stack to size of the DOE

## Step 8

- Increase the sampling factor for the TEA algorithm if needed



3D view of the imported DOE



# Document Information

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title	Import of Bitmap file containing Height Data of a Microstructure into VirtualLab Fusion
document code	SWF.0001
version	1.1
toolbox(es)	VirtualLab Fusion Basic
VL version used for simulations	2020.2 (Build 2.22)
category	Software Workflow Use Case
further reading	<a href="#"><u>Bitmap File Import into VirtualLab Fusion</u></a>