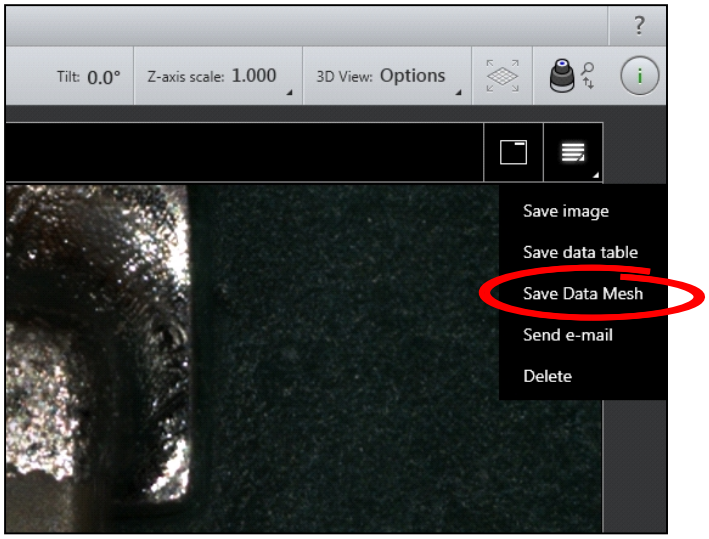
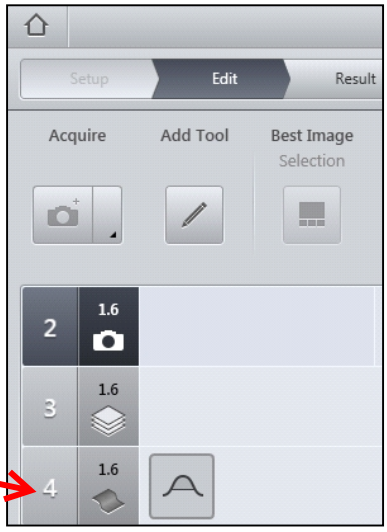
How to export 3D and texture data from Smartzoom 5?

Please contact torsten.rudolf@zeiss.com, TASC or Global Sales Support for further help!

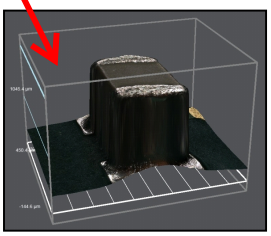
To export the height map select 'Save Data Mesh' at the top right (in the topo view):

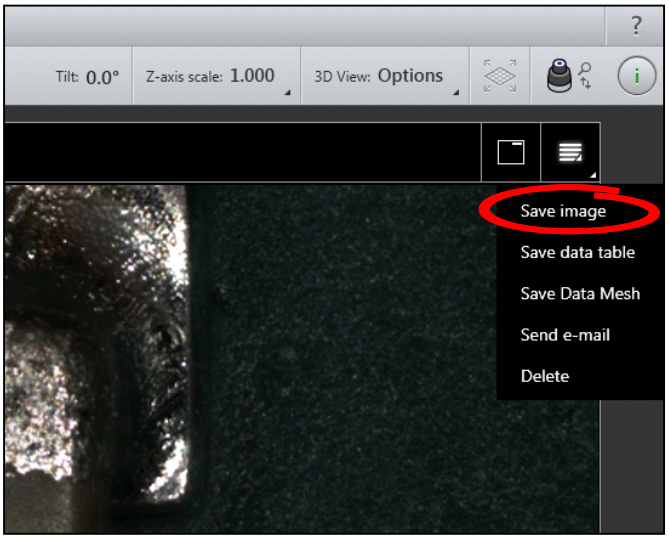


You need to be in the topo results view:

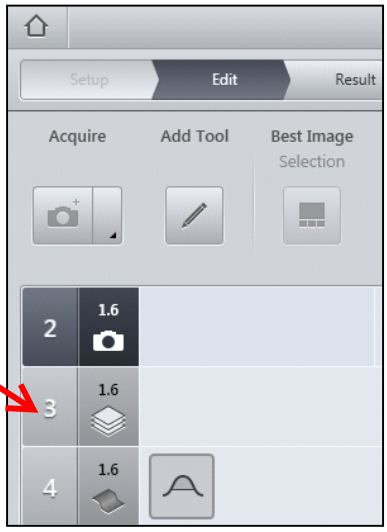


To export the texture, select 'Save image' at the top right of the GUI. Please note that the texture cannot be exported from the topo results (although the texture can be shown there, too)! In the latter case, only an image of the 3D view is saved.





You need to have a z stack or a created EDF image available to export the texture.



The user is prompted to select a folder and to chose file names to save the data.

For demonstration purposes only!

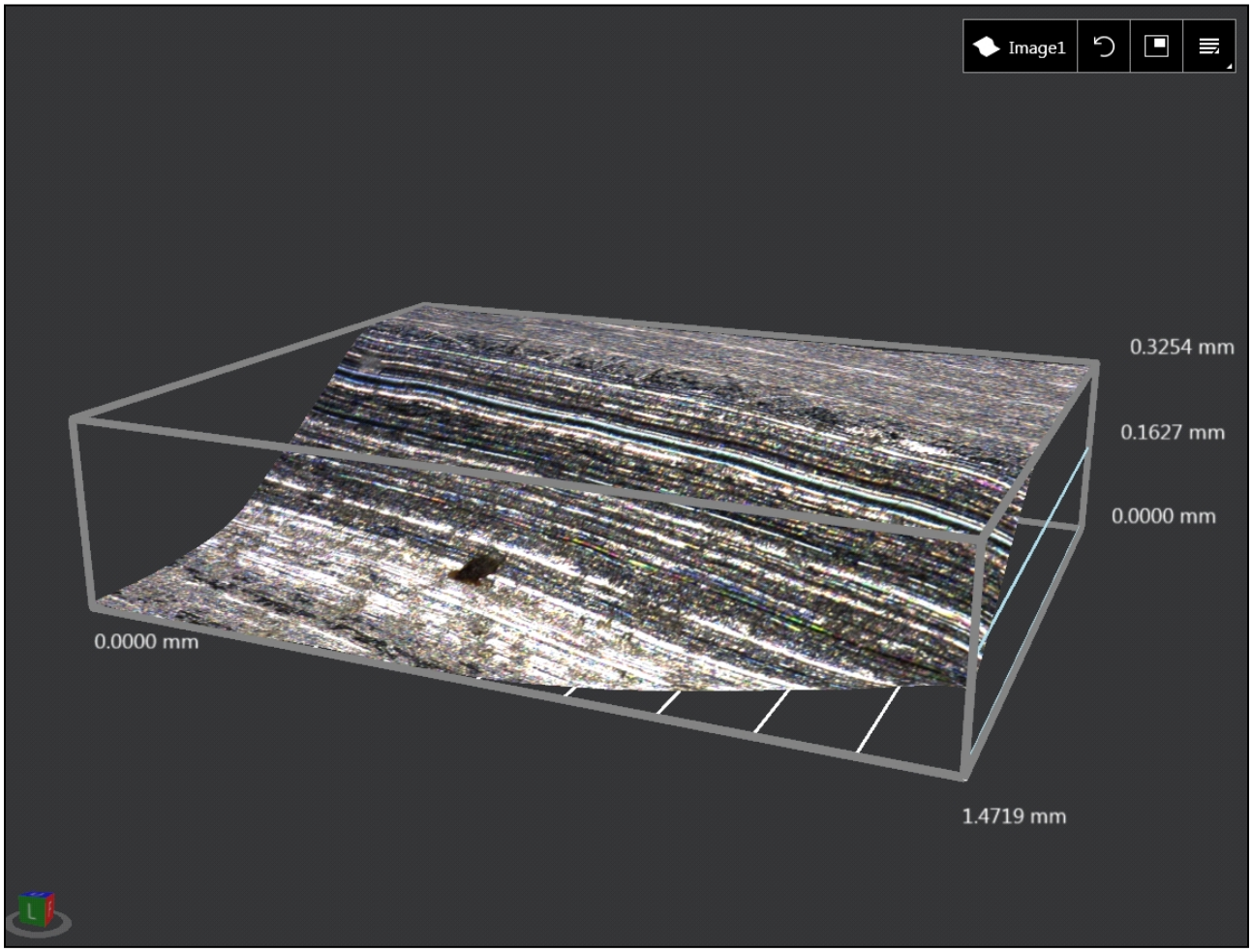
ConfoMap ST 7.3.7690

Pixel x, y and height (in mm)

For the height map an ASCII file of three columns is created giving coordinates for x, y, and z. The dimension is in mm!

0	0	88.16147
0	0.002	88.16147
0	0.003	88.16147
0	0.005	88.16147
0	0.006	88.16154
0	0.008	88.16154
0	0.009	88.16154
0	0.011	88.16154
0	0.012	88.16179
0	0.014	88.16179
0	0.015	88.16179
0	0.017	88.16179
0	0.018	88.16238

This is how the 3D view looks like in the Smartzoom software:

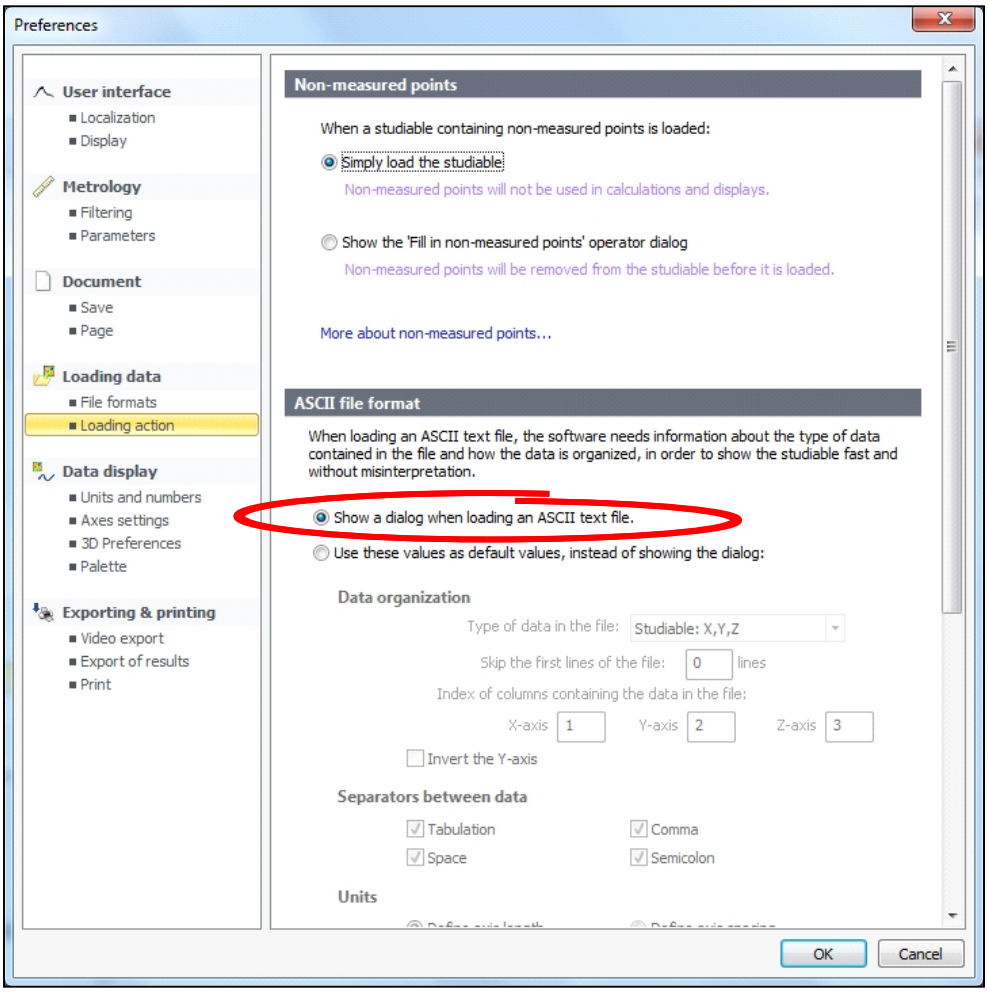


For demonstration purposes only!

How to import 3D and texture data from Smartzoom 5 to ConfoMap?

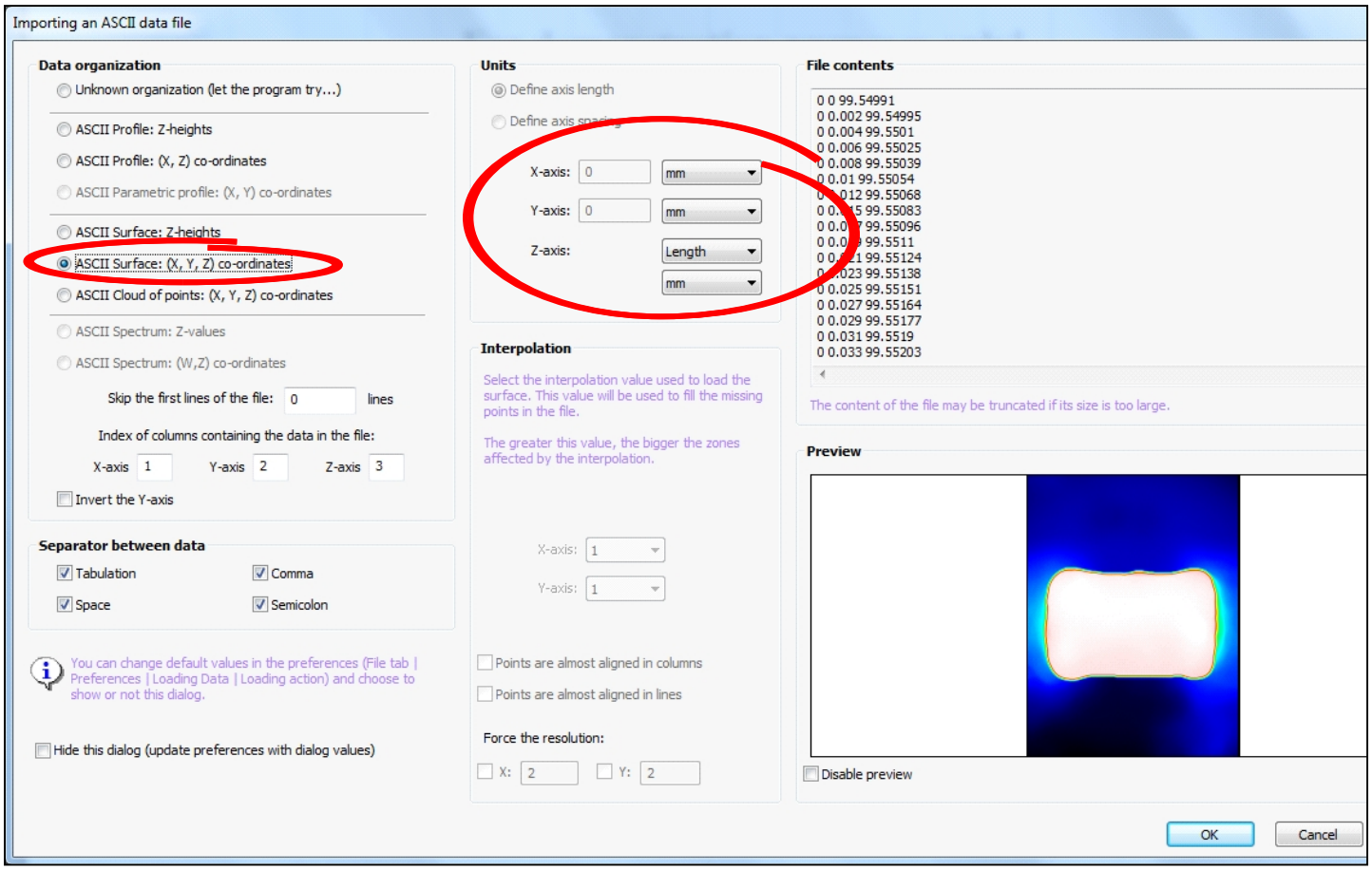
For older ConfoMap versions (like 6 and early 7), Smartzoom data could only be imported in the Premium version!
Today, at least since version 7.3, the ST version is sufficient to load ASCII data.
Coordinates that are exportet from Smartzoom use points as decimal separator. If Import to ConfoMap fails, please check the 'Separators between data' parameter in the import dialog (further below).

First, we have to activate the import settings dialog, it might be fallen to some default setting from the last data import. In ConfoMap go to File->Preferences (F7) and check 'Display a dialog when loading an ASCII text file':

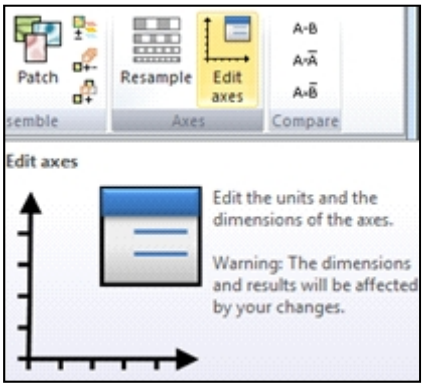


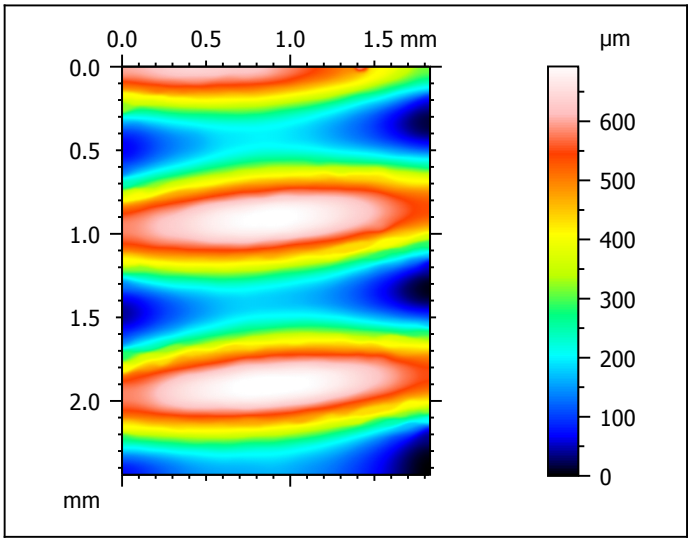
For demonstration purposes only!

Having done this, a dialog will open when an ASCII file is drag&dropped or 'Load a studiable' is chosen in the File menu. Choose 'x, y, z coordinates' as input format and set x, y and z units to mm. Change Separator settings if import fails (at present points are used as decimal separator).



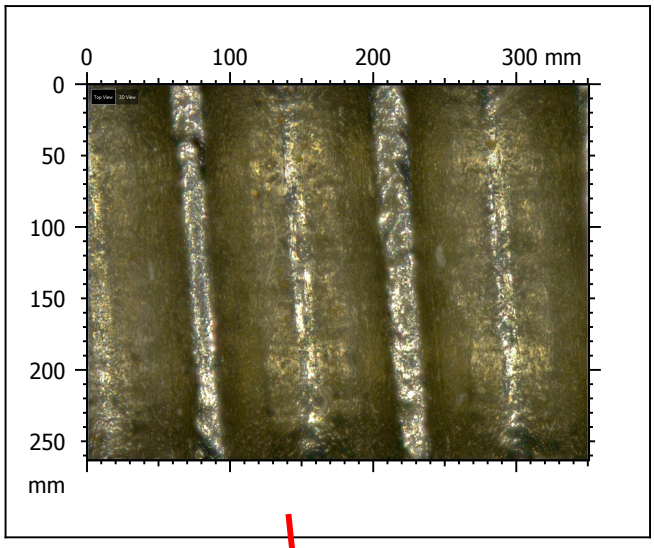
That will create a surface or topography in ConfoMap (see right). Go to 'Edit axes' and remember the x/y dimension of your height map, we will need it to scale the texture.

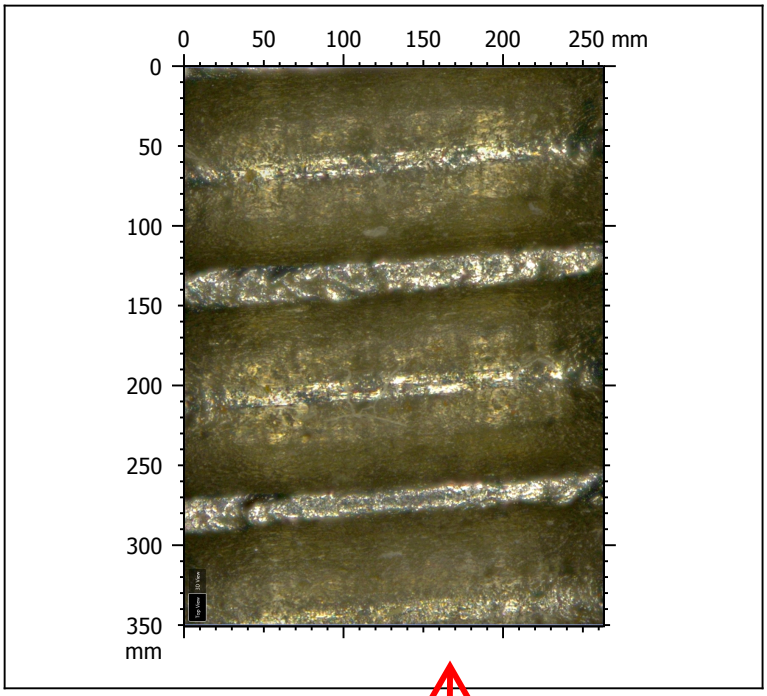


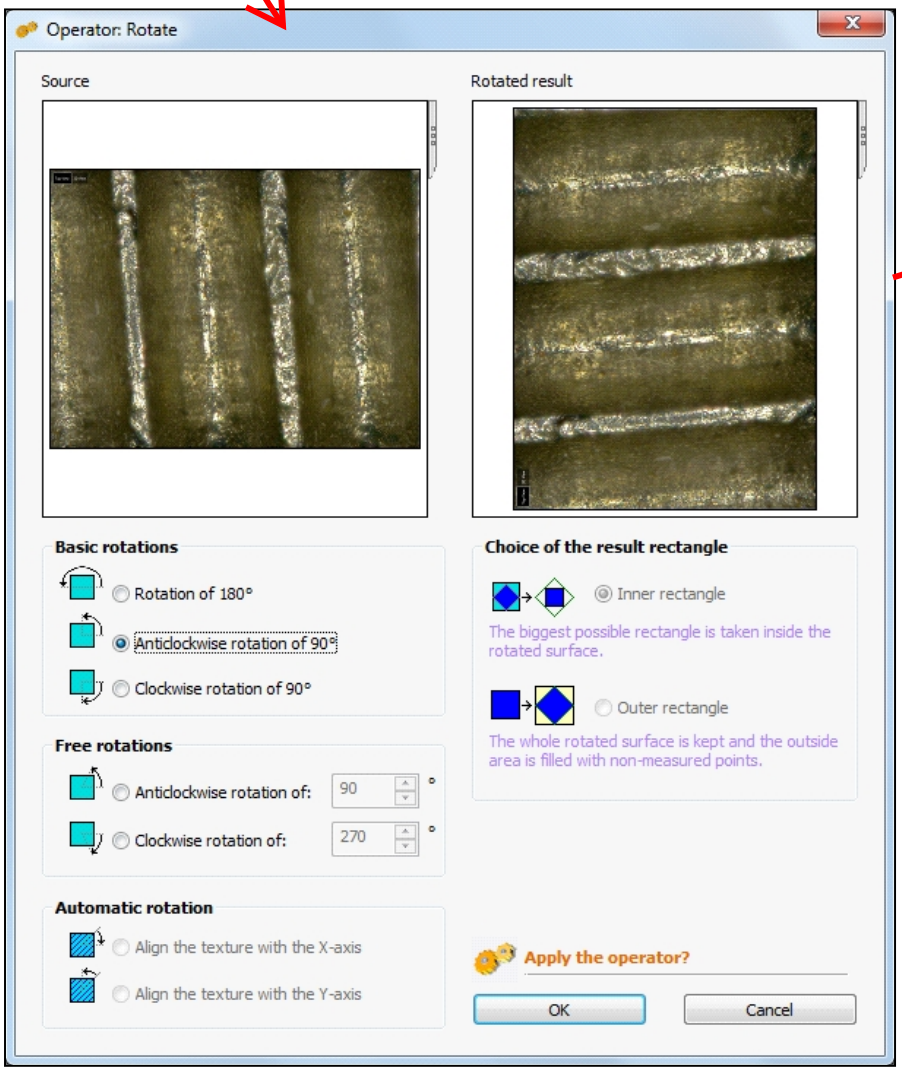


For demonstration purposes only!

Next, drag&drop the texture and rotate it by 90° anticlockwise ('Operators' menu):

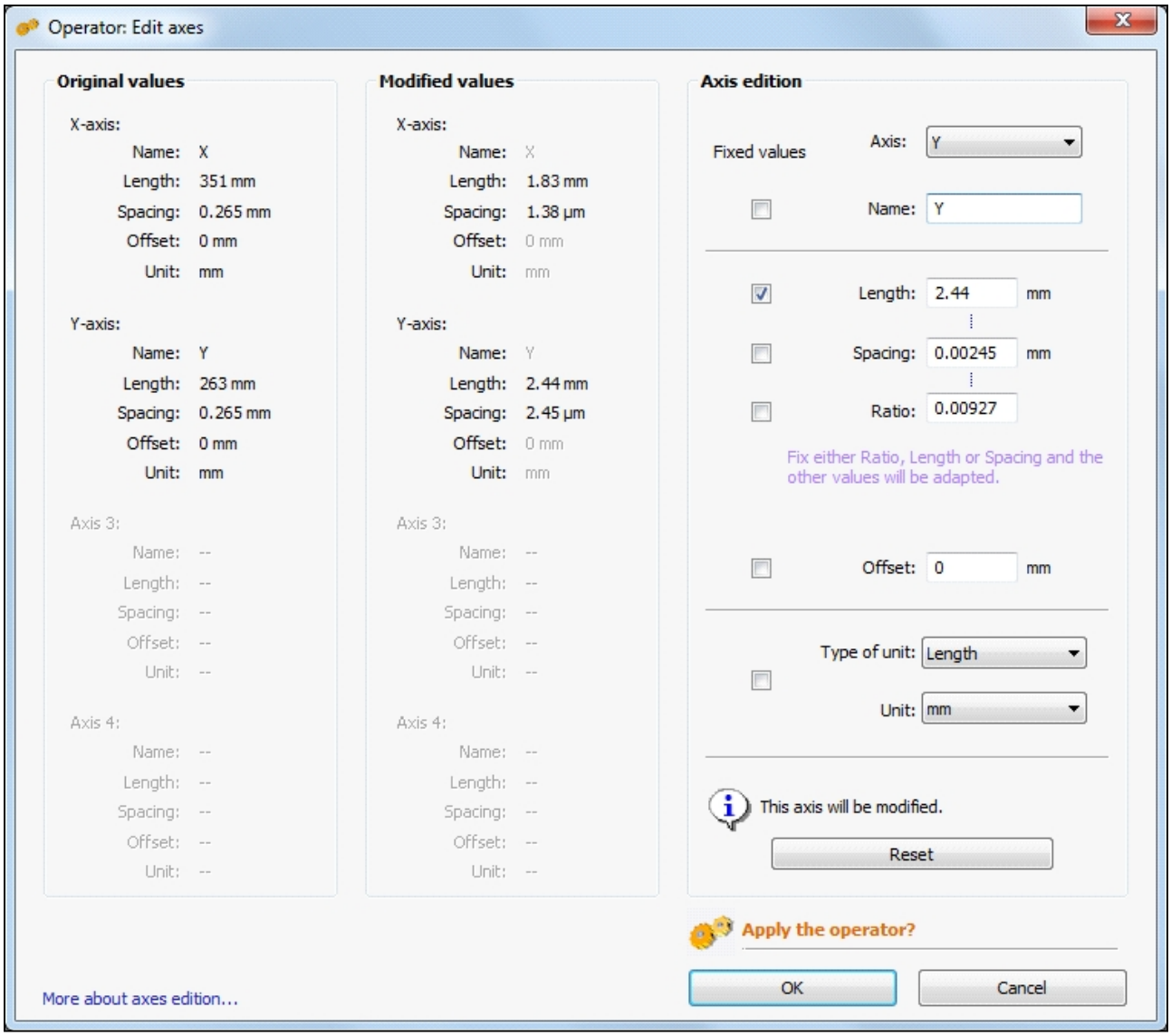


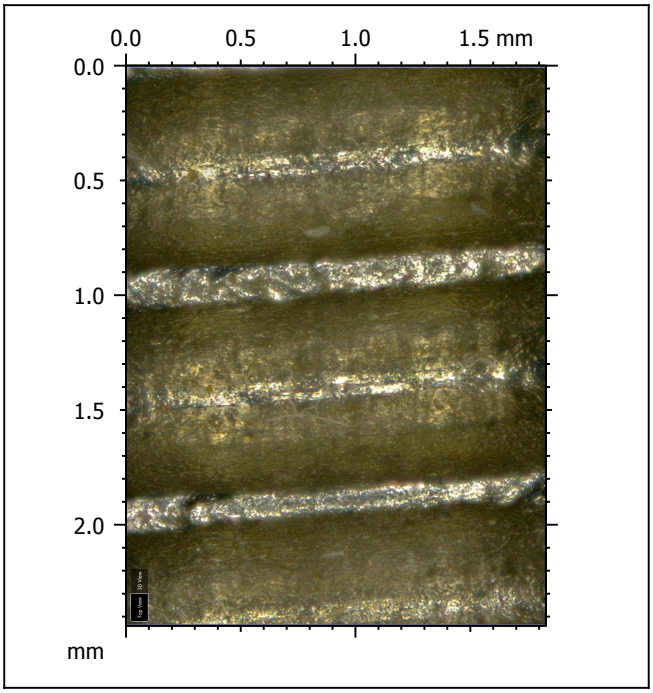




For demonstration purposes only!

Again, 'Edit axes' in the 'Operators' menu and transfer the x and y dimensions:





This gives a correctly scaled texture (see left). This is necessary for measurements within the texture only. For simple overlay of the texture in the 3D view, the correct scaling of the texture is not needed! Just choose the correct rendering source from the '3D view' menu, once the surface is displayed in 3D (activate the topography and click '3D view' from the 'Studies' menu).

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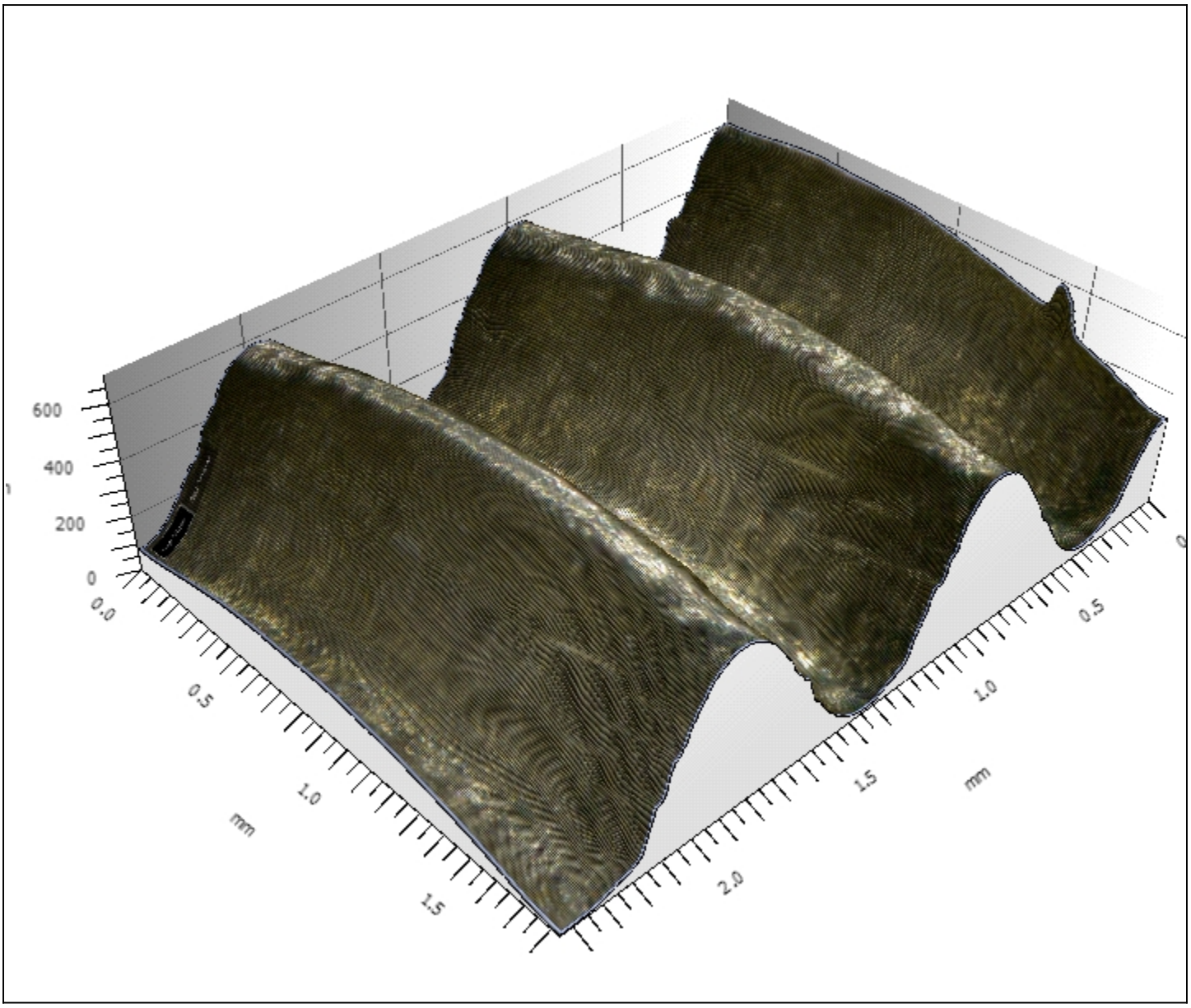
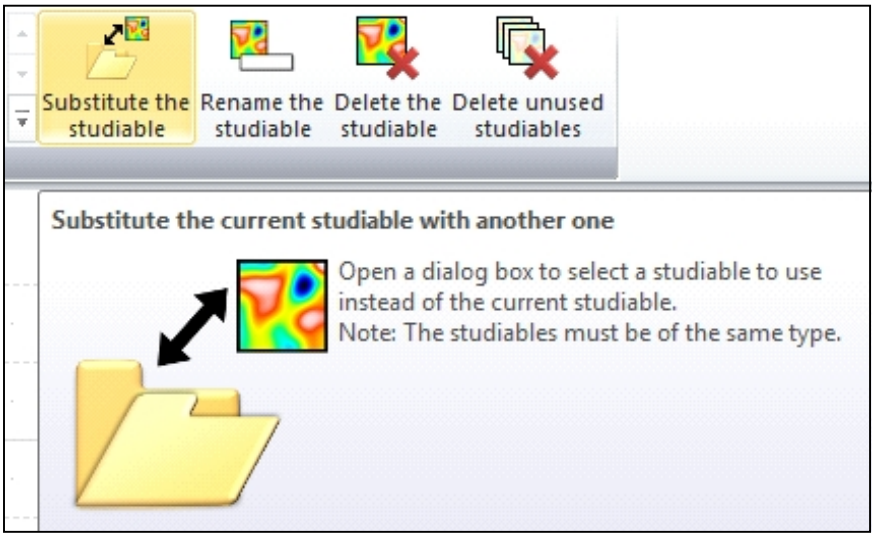


Use this ConfoMap report as a template, just replace the two studiables (surface and texture) and automatically see the updated 3D view...



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