Surface Distortion Resample

Purpose

The Surface Distortion Resample tool is mainly used to correct the rotational movement distortion with the assistance of checkerboard patterns. It combines "Distortion Correction" and "Resampling" into one tool. The correction is performed in 2D.

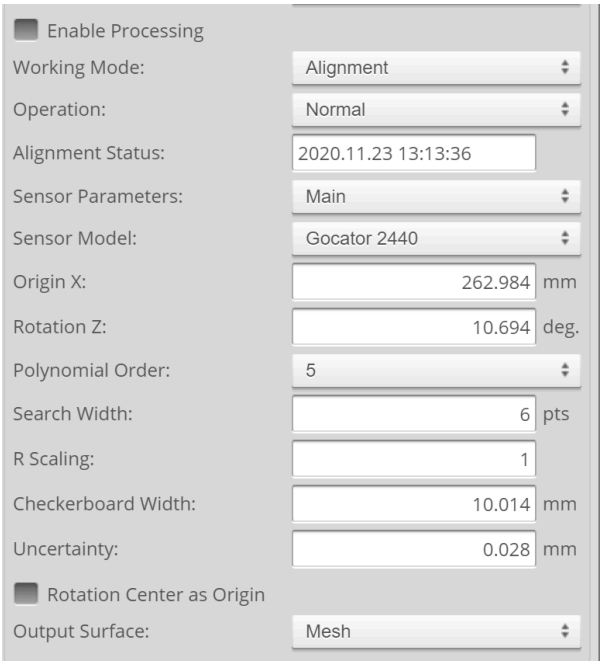
Inputs

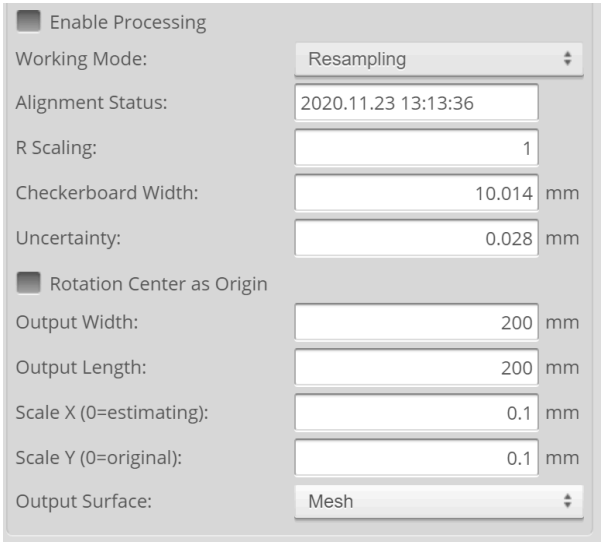


Name	Description
Stream and Source	The surface data that the tool will apply calculation and correction to.

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Parameters

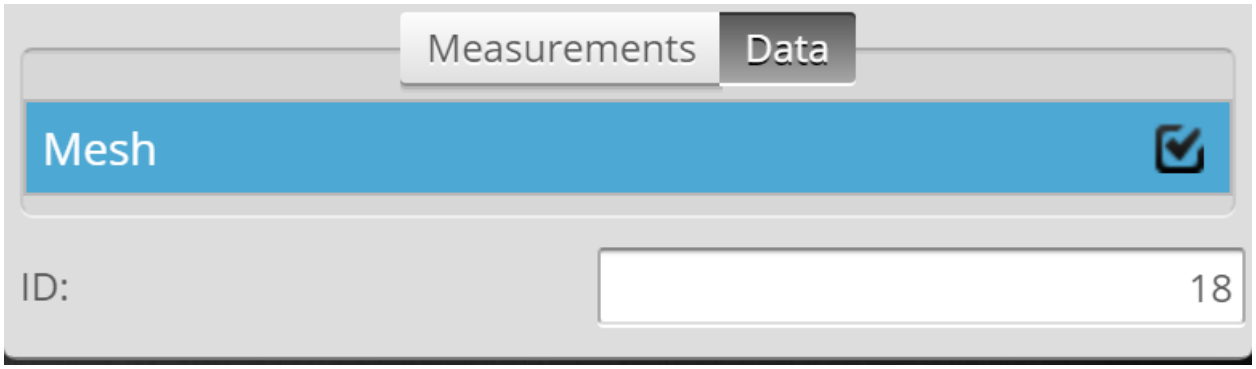




Name	Description
Enable Processing	When enabled, start the alignment calibration or resample process.
Working Mode	Options are Alignment and Resampling, usually Alignment is performed before applying Resampling.
Configuration File	File operations shown in Alignment mode, including • Normal • Load • Save • Delete • Refresh
Sensor Configuration	Collapse param for sensor information shown in Alignment mode, including • Sensor Model • Origin X

	• Angle Z
Polynomial Order	Order of polynomial fitting, only shows in Alignment mode.
Search Width	Search range in pixel when detecting corners, should be at least 1 and never more than 1/5 of the scan line number per square. Only shows in Alignment mode.
R Scaling	Scale in rotation.
Checkerboard Width	Size of the checkerboard square in mm.
Uncertainty	Indicate the quality of the calibration.
Rotation Center as Origin	If checked, use the rotation center as the origin of output data.
Output Surface	Format of output surface, including • Heightmap • Point Cloud • Mesh Note: not support Mesh on sensor due to memory limitation.

Outputs

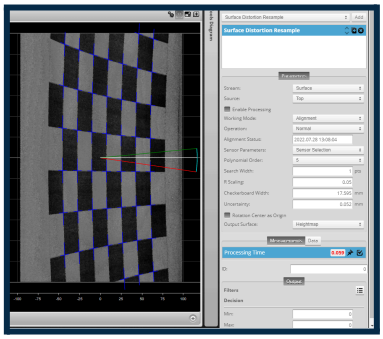


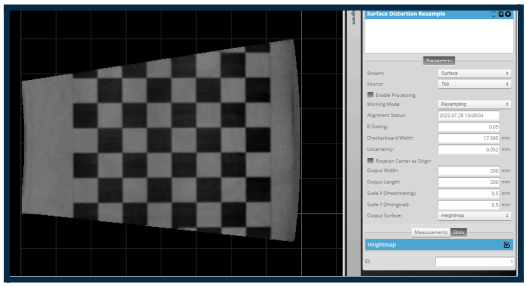
Type	Name	Description

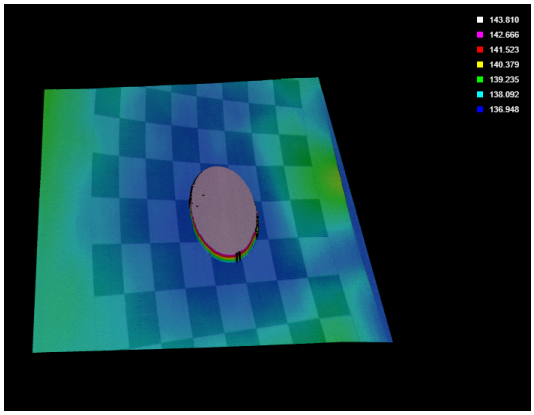
Surface	Heightmap Point Cloud Mesh	The corrected surface.

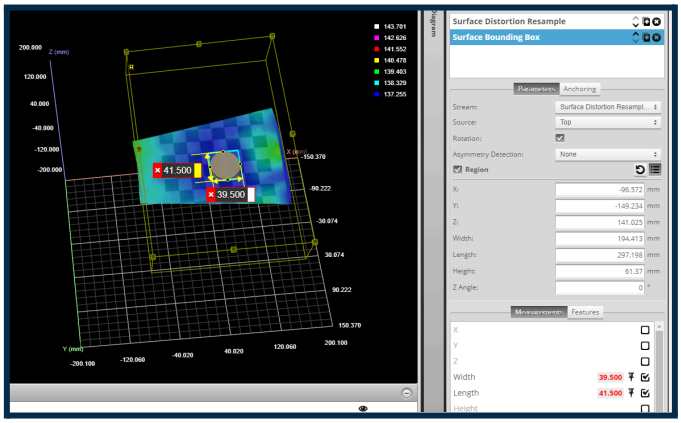
Application Examples





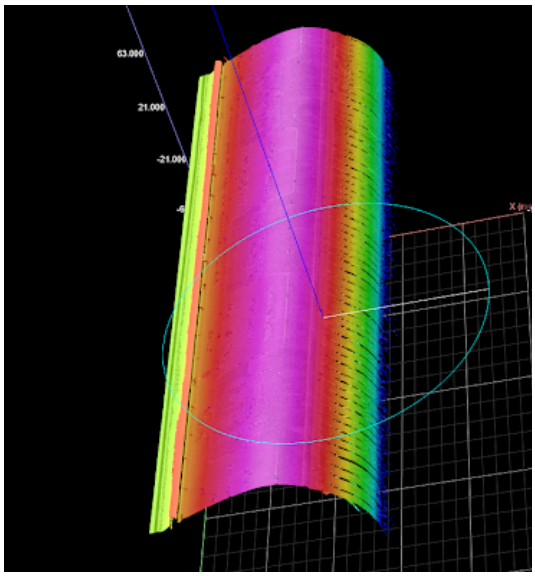


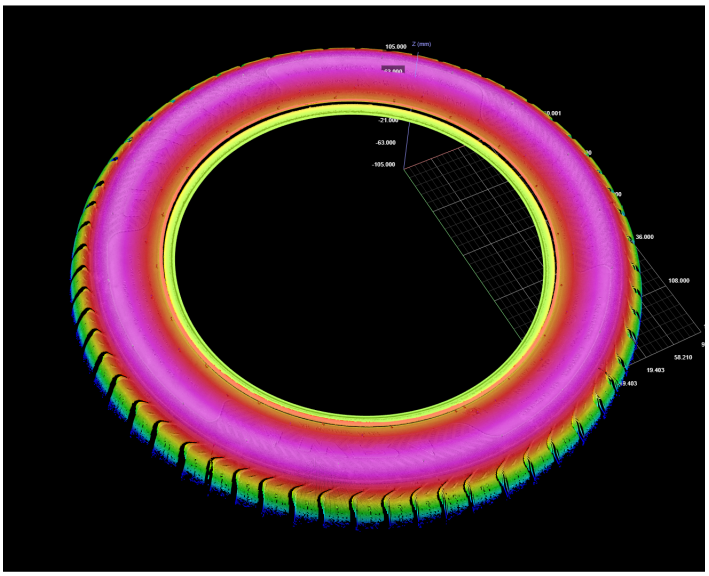




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