






# Surface Histogram

## Purpose

This tool computes the height statistical histogram of the user defined region, which can be a reference for segmentation.

## Inputs

Inputs
▼

Surface Input	Replay/Sur...	▼	
Anchor X		▼	
Anchor Y		▼	
Anchor Z		▼	
Anchor Z Angle		▼	

Name	Description
Surface Input	The surface data (uniform) that the tool will apply measurements to.
Anchor X Anchor Y Anchor Z Anchor Z Angle	Let you choose the X, Y, Z, or Z Angle measurement of another tool to use as a positional and rotational anchor for this tool.

## Parameters

Parameters

Regions

Enable

☒

Mask Mode

Include ...

Number of Regi...

1

Region Type 1

Rectangle

Region 1

Number of Bins

256

Peak Percentile

0.500

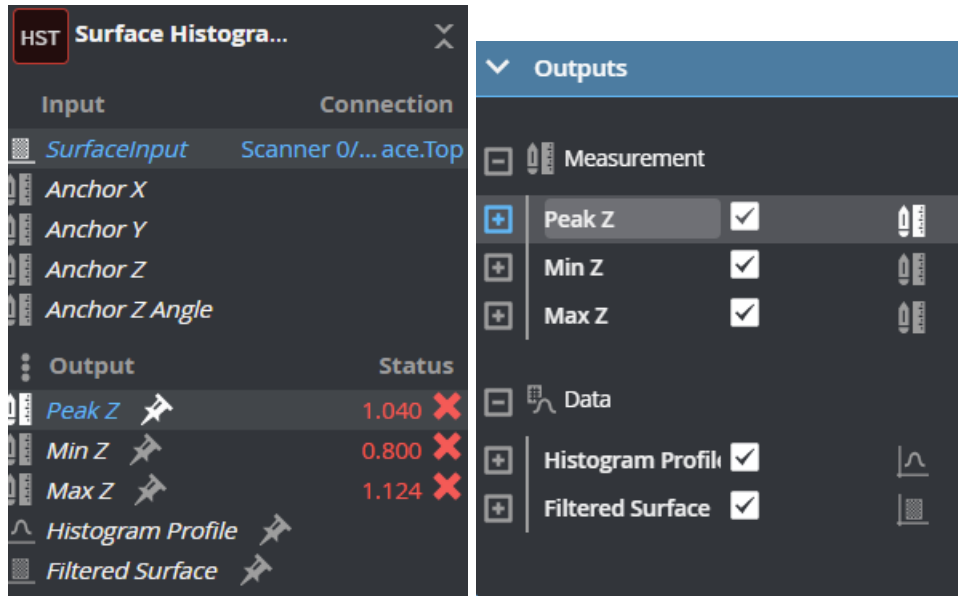
%

External ID

SurfaceHistog

Name	Description
Region Enable	If not chosen, all points will be used to compute the histogram. Otherwise, only points in the specific region will be involved.
Region Type	This is supported by the flexible region strategy, which includes Circle, Ellipse, Polygon and Rectangle region types.
Region & corresponding parameters	When the Region Type is set to a certain type, the parameter list of the corresponding type is displayed and can be set. See Flexible Region docs for specific type parameter explanations.
Number of Bins	The number of the histogram bins, default to 256.
Peak Percentile	A threshold using a percentage of histogram peak value. Points inside bins on the rightmost and leftmost side of the histogram, whose counts are below this threshold will be considered as noise.

## Outputs



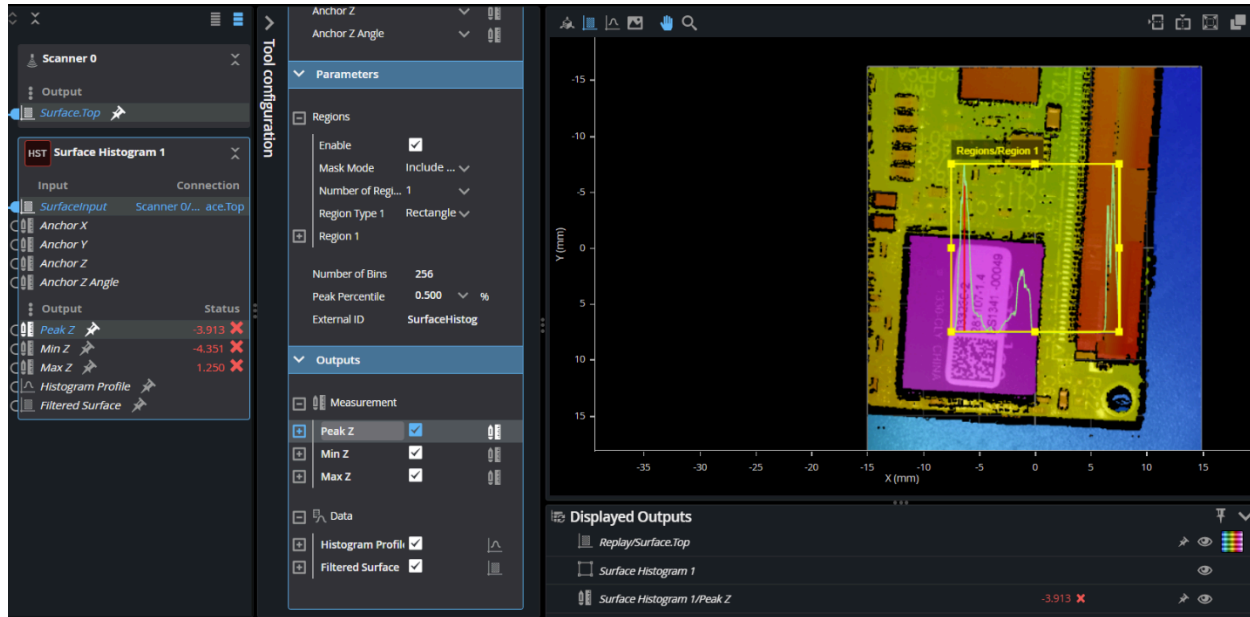
Type	Name	Description
Measurement	Peak Z	Determines the corresponding height value of the histogram bin with the maximum count.
Measurement	Min Z	Determines the corresponding height value of the histogram bin with the index of Start Index.
Measurement	Max Z	Determines the corresponding height value of the histogram bin with the index of End Index.

## Major Revisions

Gocator Classic to GoPxl

•

## Application Examples



## Algorithm Details

Include or link reports explaining the methodology used by the tool.