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For more information, please see our online manual: <https://www.acute3d.com/QualityReportManual/en/v2.0/index.html> 

## Project Summary

Project:	Crkva Bolc
Number of photos:	804
Ground coverage:	24541.12 square meters
Average ground resolution:	2.79067 mm/pixel
Scale:	1 : 8
Camera model(s):	DJI FC6310S
Processing date:	12/19/2021 7:50 PM
Processing time:	58min 52s

## Quality Overview

Dataset:	403 of 804 photos calibrated (50%)
Keypoints:	Median of 26432 keypoints per image
Tie points:	145734 points, with a median of 2981 points per photo.
Reprojection error (RMS):	0.58 pixels
Positioning / scaling:	Georeferenced using photo metadata, not using control point

## Camera Calibration

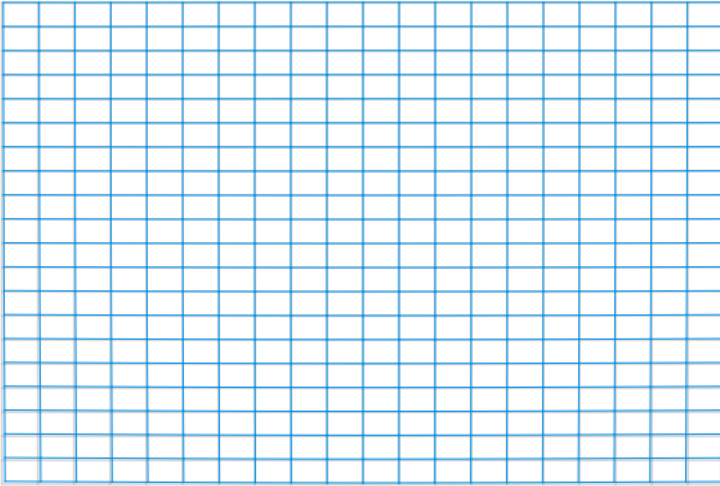
## DJI FC6310S 8.8mm 5472x3648

Name:	DJI FC6310S
Model type:	Perspective
Image dimensions:	5472x3648 pixels
Sensor size:	13.2 mm
Number of photos:	804

## Calibration Results

	Focal Length [mm]	Focal Length Equivalent 35 mm [mm]	Principal Point X [pixels]	Principal Point Y [pixels]	K1	K2	K3	P1	P2
Previous Values	8.8	24							
Optimized Values	8.9126	24.3071	2745.46	1793.15	-0.0125729	0.00374455	0.0059569	0.000390507	-0.00268872
Difference Previous / Optimized	0.1126	0.3071							

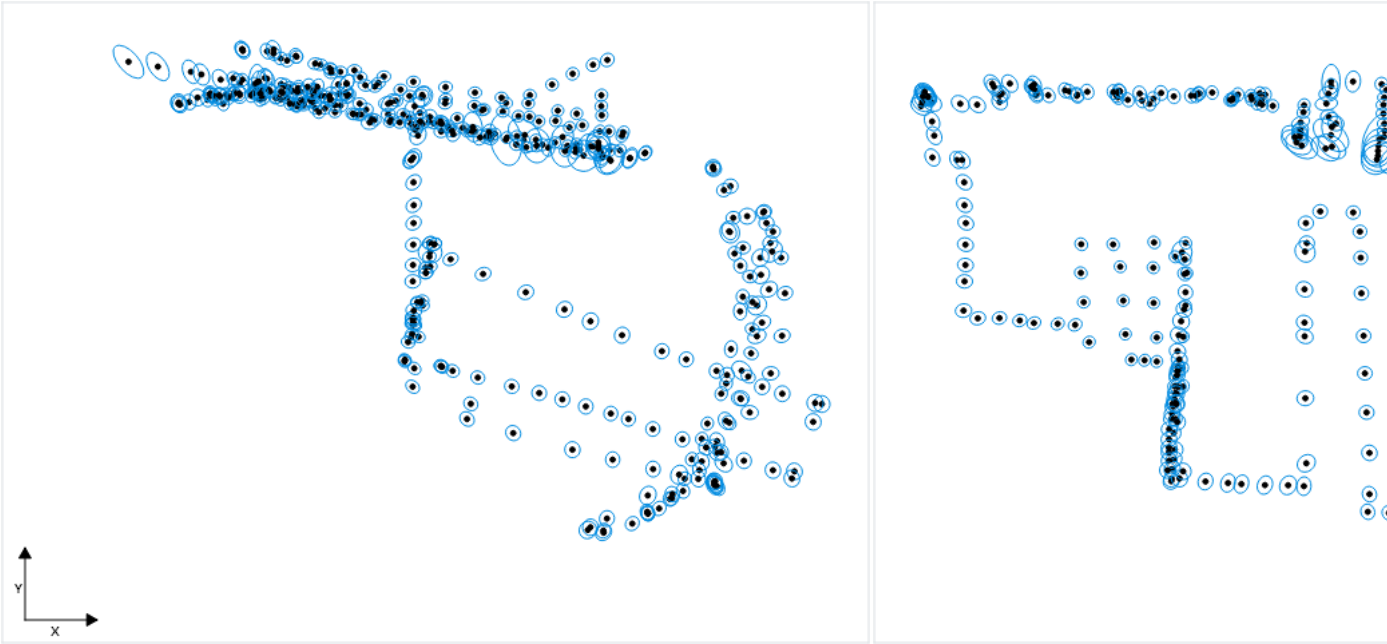
## Distortion Grid

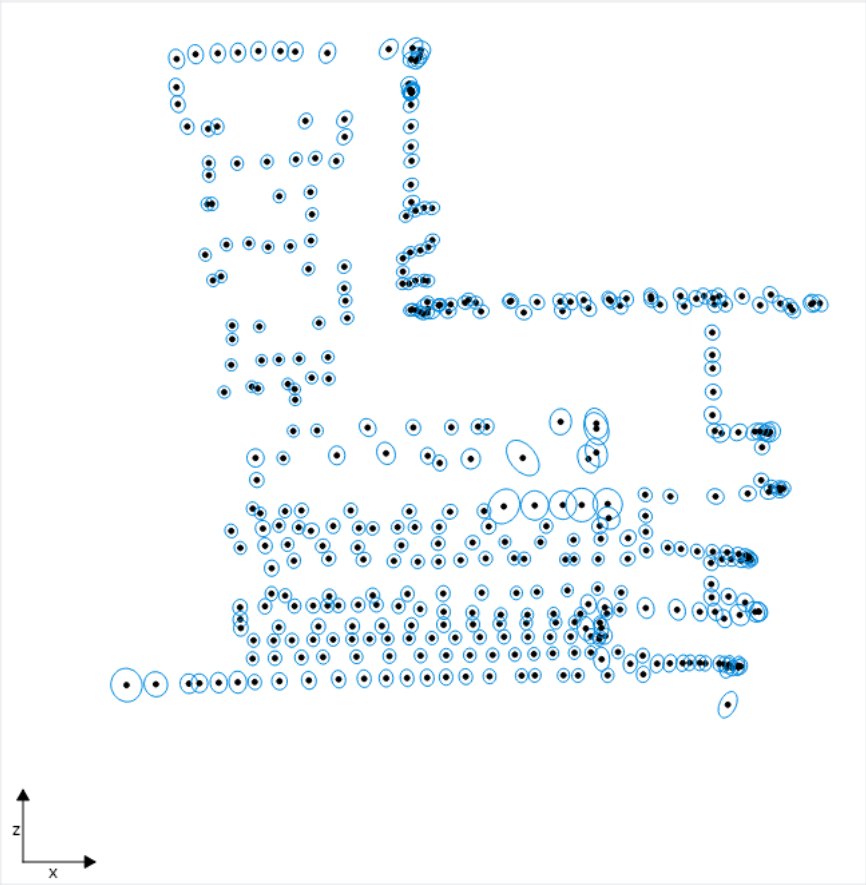


Camera Lens Distortion: Gray lines represent the zero distortion grid, and blue lines represent the real camera values.

Photo Positions

Photo Position Uncertainties



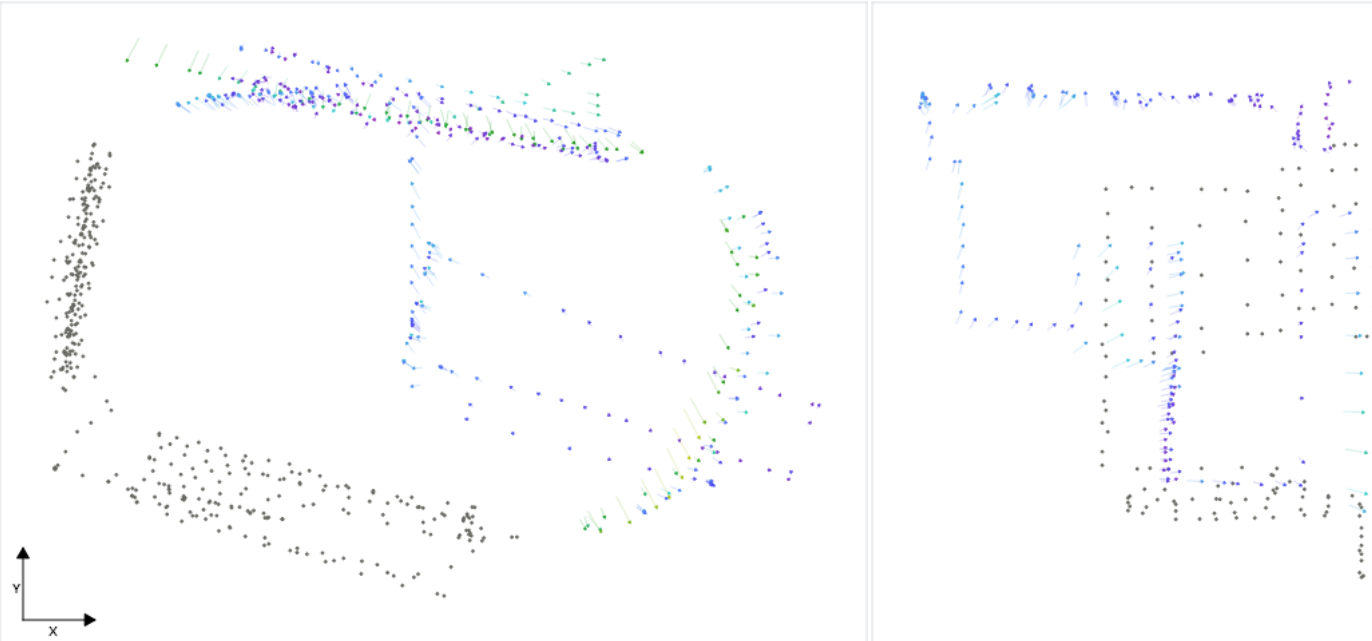


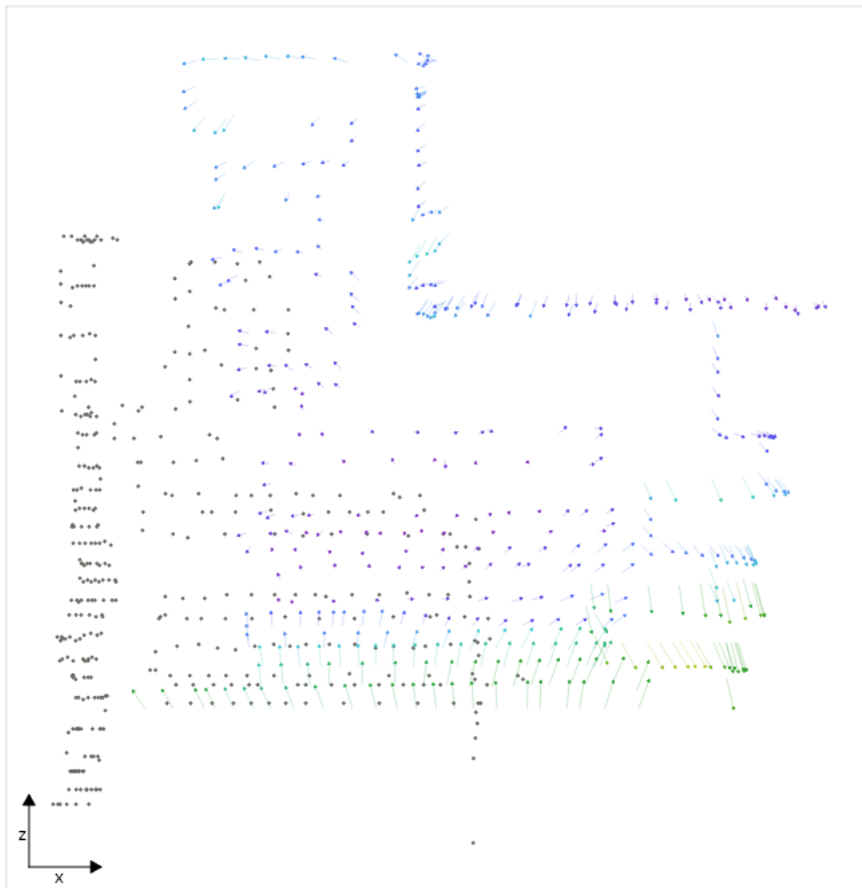
**Position Uncertainties:** Top view (XY plane), side view (ZY plane) and front view (XZ plane) of computed photo positions (black dots). Blue ellipses indicate the position uncertainty, scaled for readability. The minimum and maximum values, as well as the average value, can be found in the table below.

Position Uncertainties			
	X [meters]	Y [meters]	Z [meters]
Minimum	0.00008	0.00005	0.00010
Mean	0.00026	0.00026	0.00031
Maximum	0.00128	0.00231	0.00142

For more information on individual photos, please refer to the [Photos Report](#).

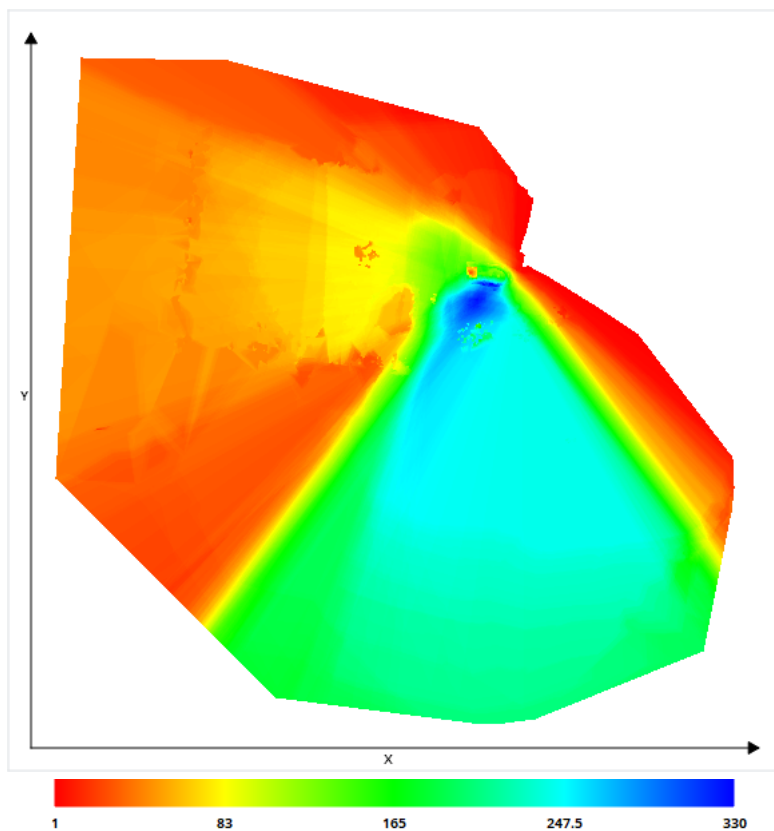
Distance to Input Positions





**Position Distance to Metadata:** Top view (XY plane), side view (ZY plane) and front view (XZ plane), with arrows indicating the offset between the metadata positions and the computed photo positions; all arrows start from the metadata positions and point toward the computed positions. Gray points • indicate uncalibrated photos that have metadata. Pink points • indicate calibrated photos that have no metadata. The values are in meters, with a minimum distance of **0.06578 meters** and a maximum of **2.34211 meters**. The median position distance equals **0.79435 meters**.

## Scene Coverage



Number of photos seeing the scene: Top view (XY plane) display of the scene, with colors indicating the *number of photos* that potentially see each area.

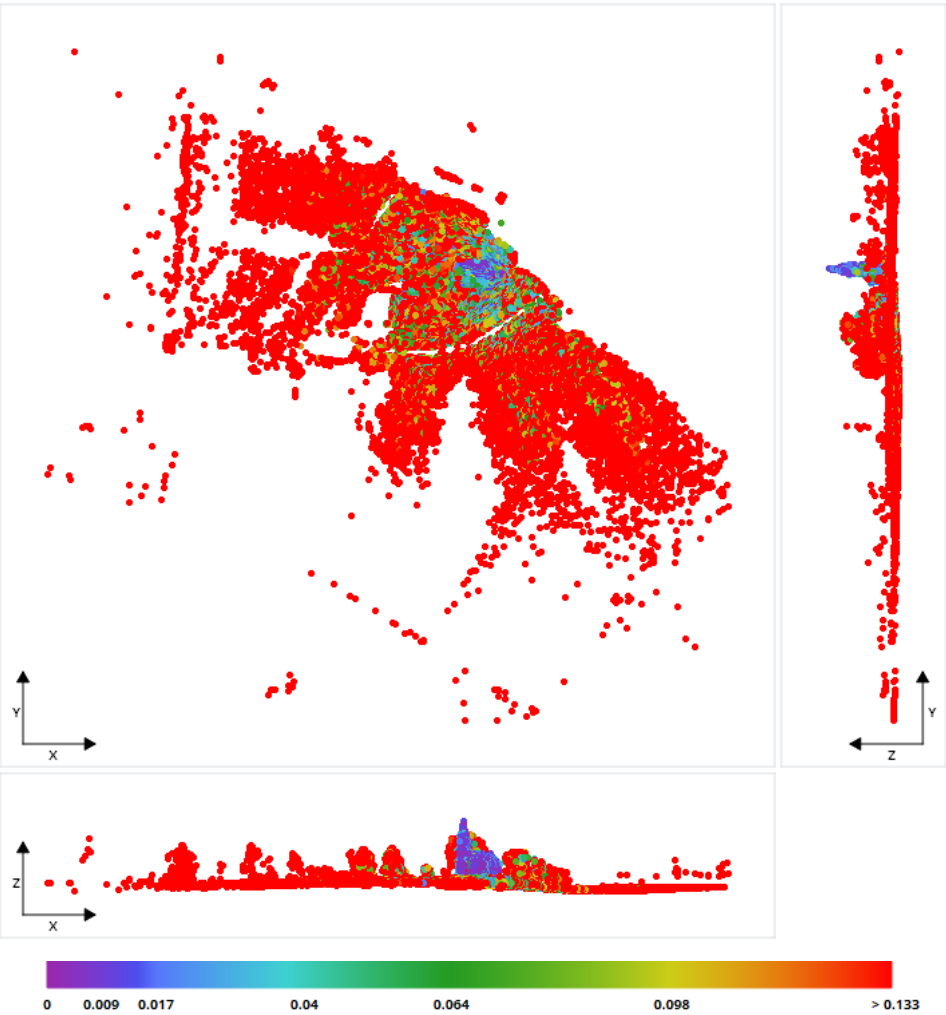
Photo Matching

Quality Measures on Tie Points

Generated Tie Points					
Number of Points	Median Number of Photos per Point	Median Number of Points per Photo	Median Reprojection Error [pixels]	RMS of Reprojection Error [pixels]	RMS of Distances to Rays [meters]
145734	5	2981	0.4	0.58	0.04746

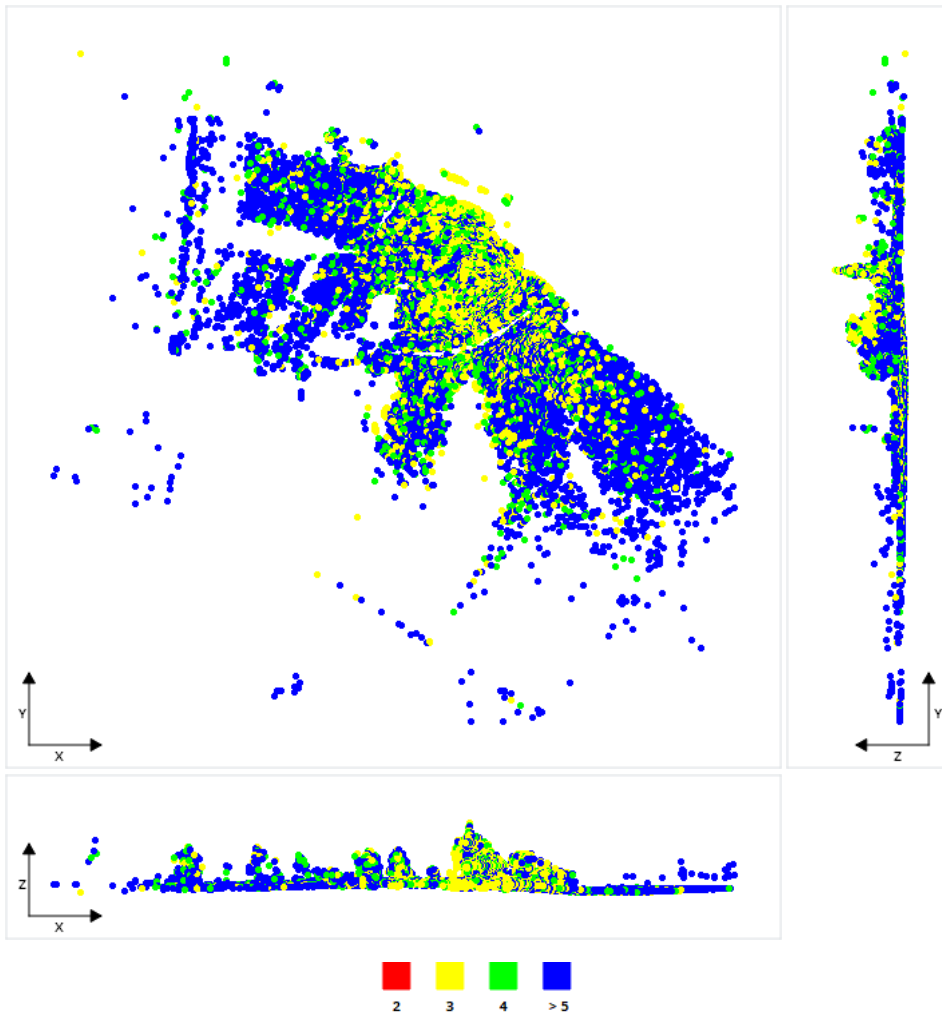
For more information on individual photos, please refer to the [Photos Report](#).

Tie Point Position Uncertainties



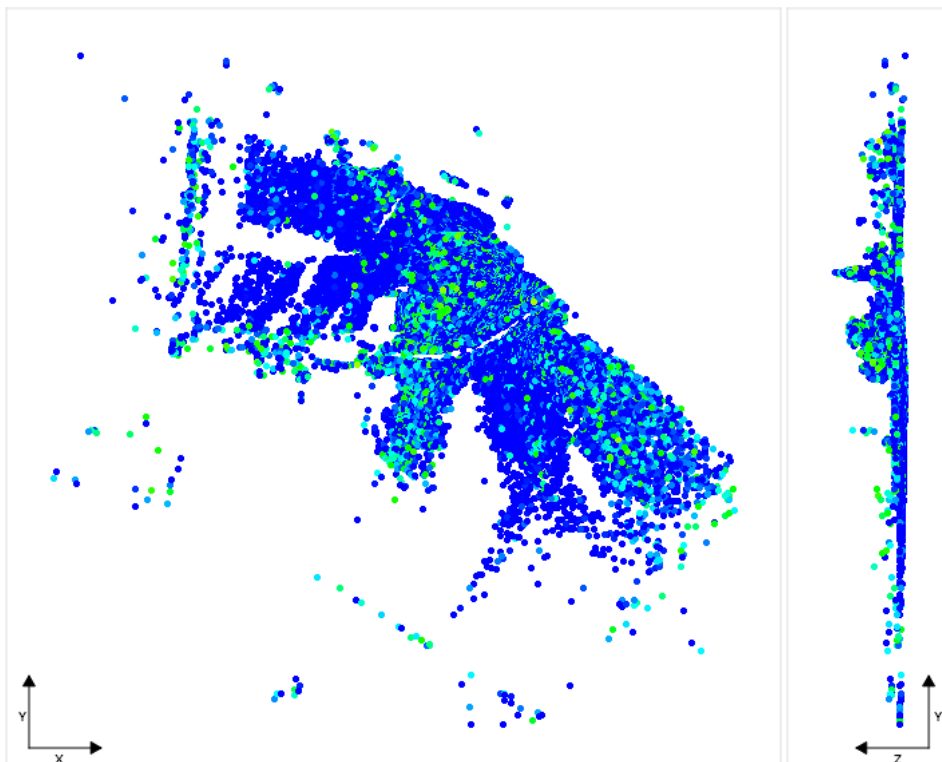
**Position Uncertainties:** Top view (XY plane), side view (ZY plane) and front view (XZ plane) displays of all tie points, with colors representing uncertainty in the individual point position. The values are in meters, with a minimum uncertainty of 0.00047 meters and a maximum of 1.94582 meters. The median position uncertainty equals 0.01723 meters.

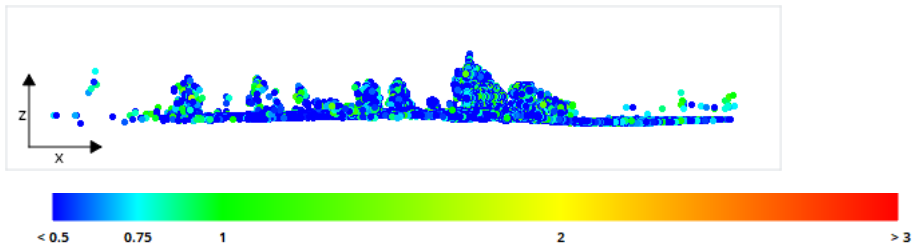
Number of Photos Observing the Tie Points



**Number of Observations per Tie Point:** Top view (XY plane), side view (ZY plane) and front view (XZ plane) displays of all tie points, with colors representing the number of photos that have been used to define each point. The minimum number of photos per tie point is **3** and the maximum is **72**. The average number of photos observing a tie point is **8**.

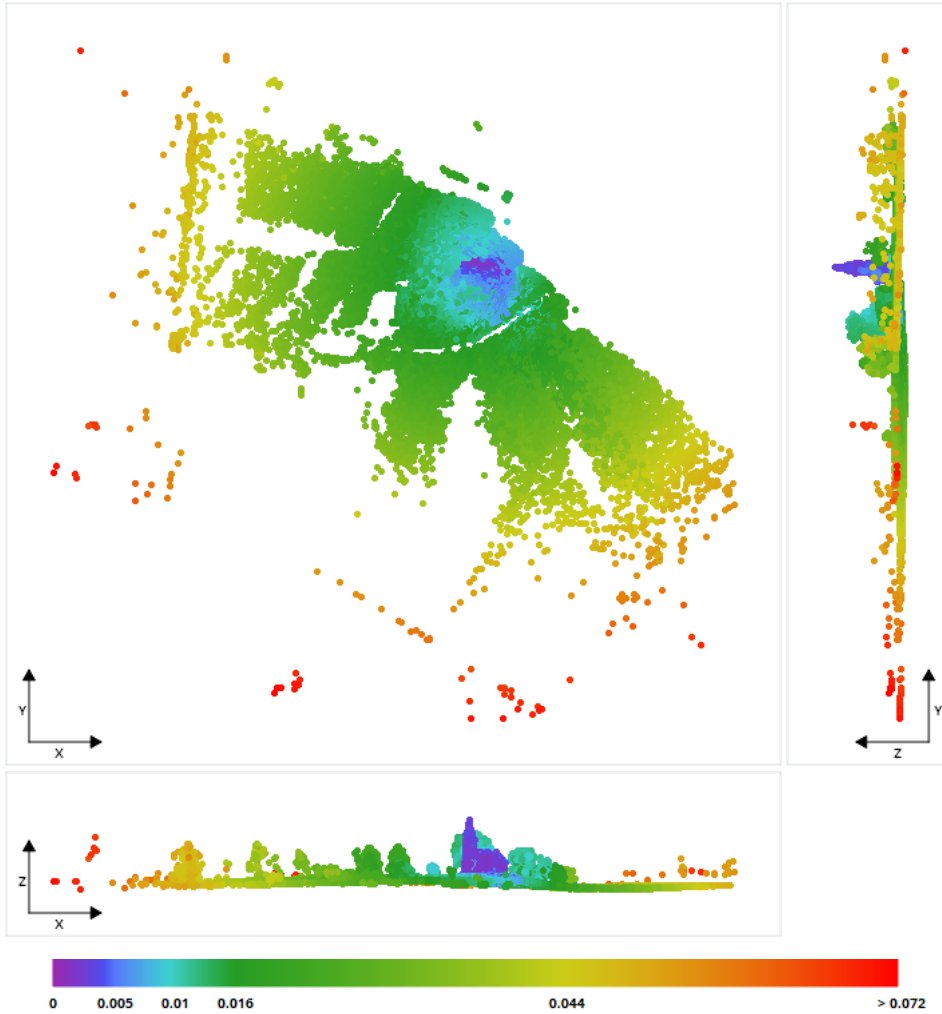
#### Reprojection Error





**Reprojection Errors per Tie Point:** Top view (XY plane), side view (ZY plane) and front view (XZ plane) displays of all tie points, with colors representing the reprojection error in pixels. The minimum reprojection error is 0.00 pixels and the maximum is 1.84 pixels. The average reprojection error is 0.52 pixels.

#### Tie Point Resolution



**Resolution:** Top view (XY plane), side view (ZY plane) and front view (XZ plane) displays of all tie points, with colors representing resolution in the individual point position. The values are in meters/pixel, with a minimum resolution of 0.00118 meters/pixel and a maximum of 0.0723 meters/pixel. The median resolution equals 0.00528 meters/pixel.

#### Surveys

No survey points available.