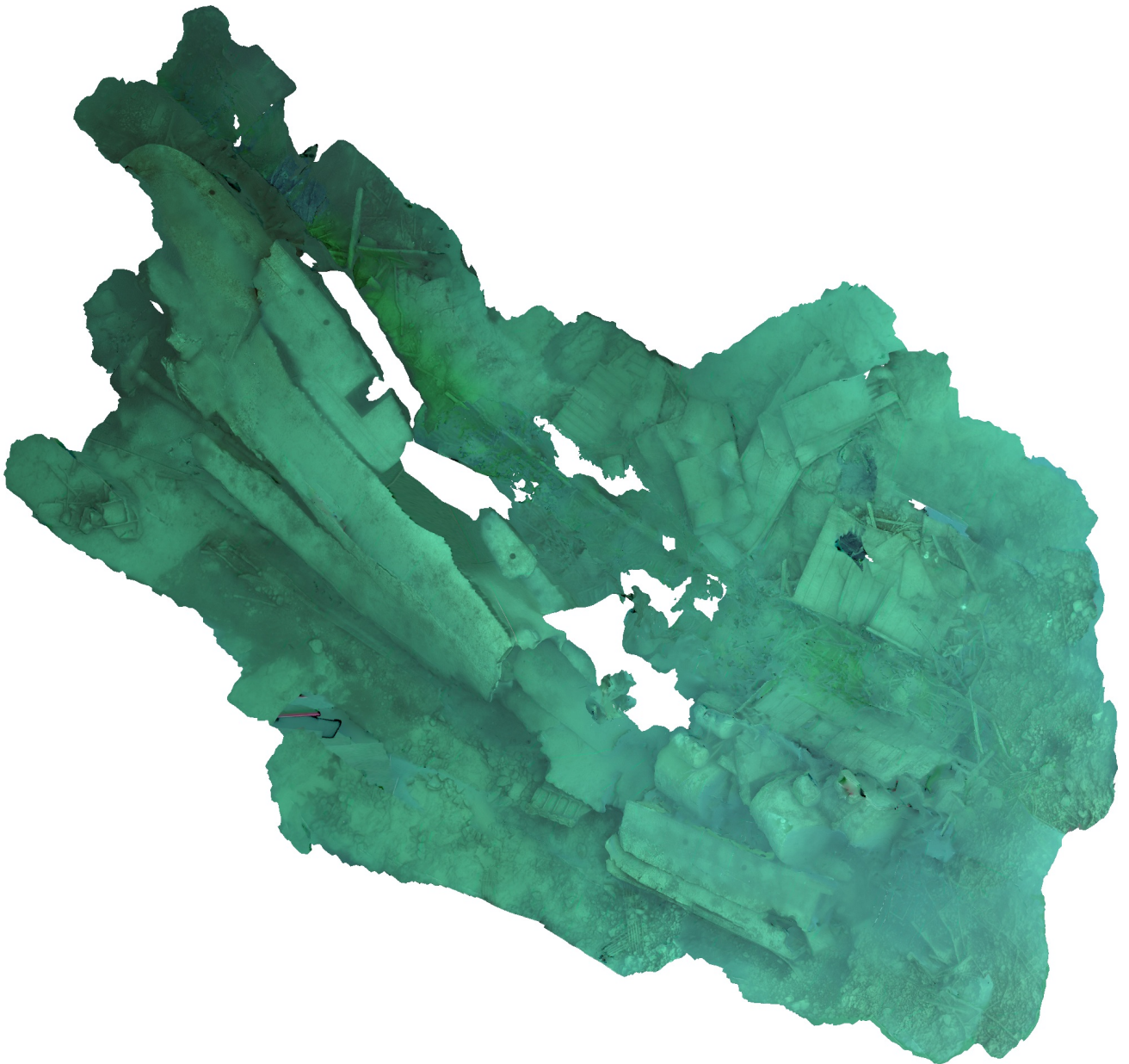


# Agisoft Metashape

Processing Report

15 April 2021



# Survey Data

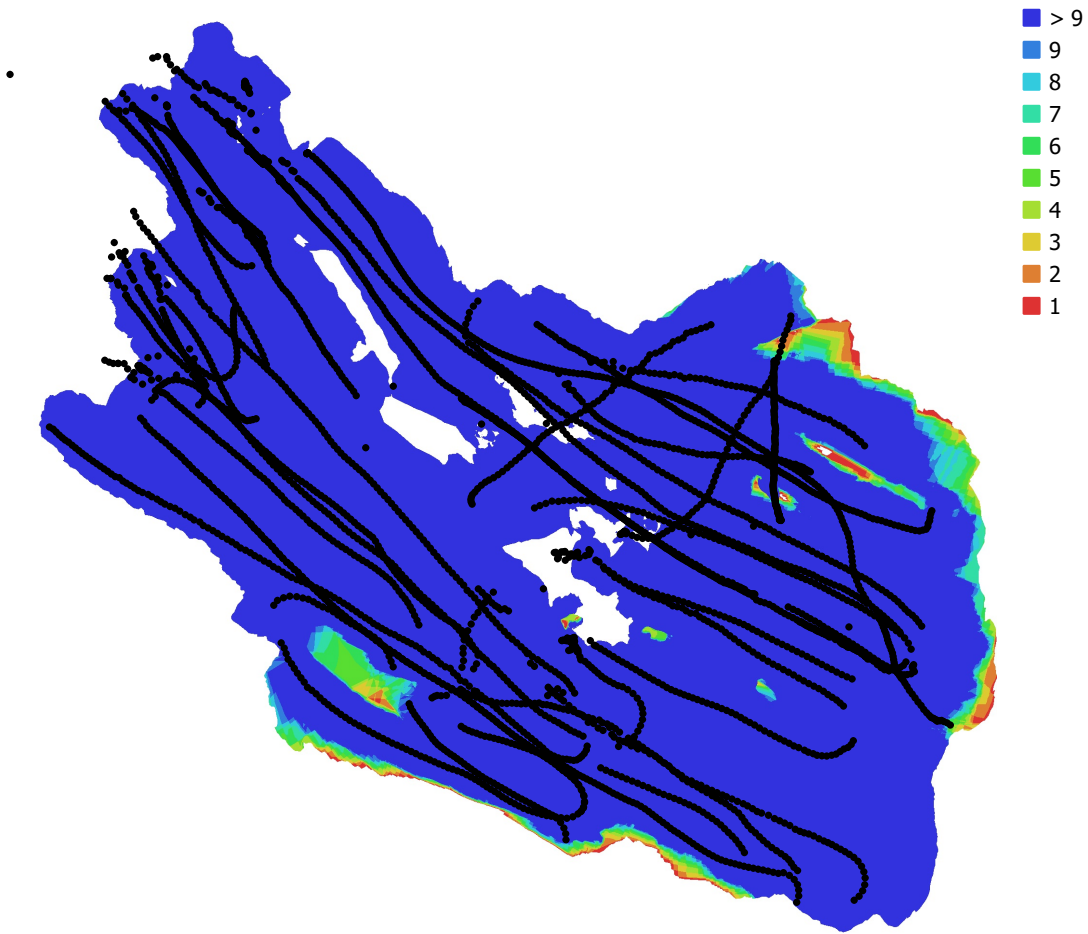


Fig. 1. Camera locations and image overlap.

Number of images: 5,682

Camera stations: 3,826

Tie points: 838,975

Projections: 2,406,263

Reprojection error: 4.75 pix

Camera Model	Resolution	Focal Length	Pixel Size	Precalibrated
unknown	1473 x 1080	unknown	unknown	No
unknown	1473 x 1080	unknown	unknown	No

Table 1. Cameras.

# Camera Calibration

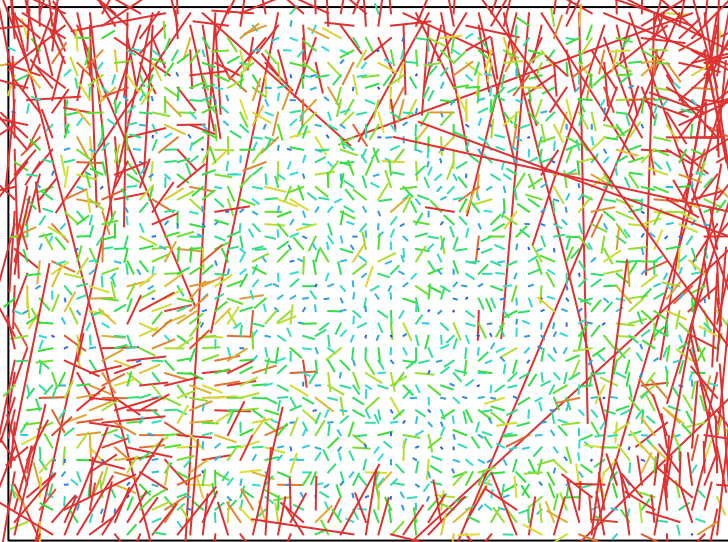


Fig. 2. Image residuals for unknown.

**unknown**  
5191 images

Type  
**Frame**

Resolution  
**1473 x 1080**

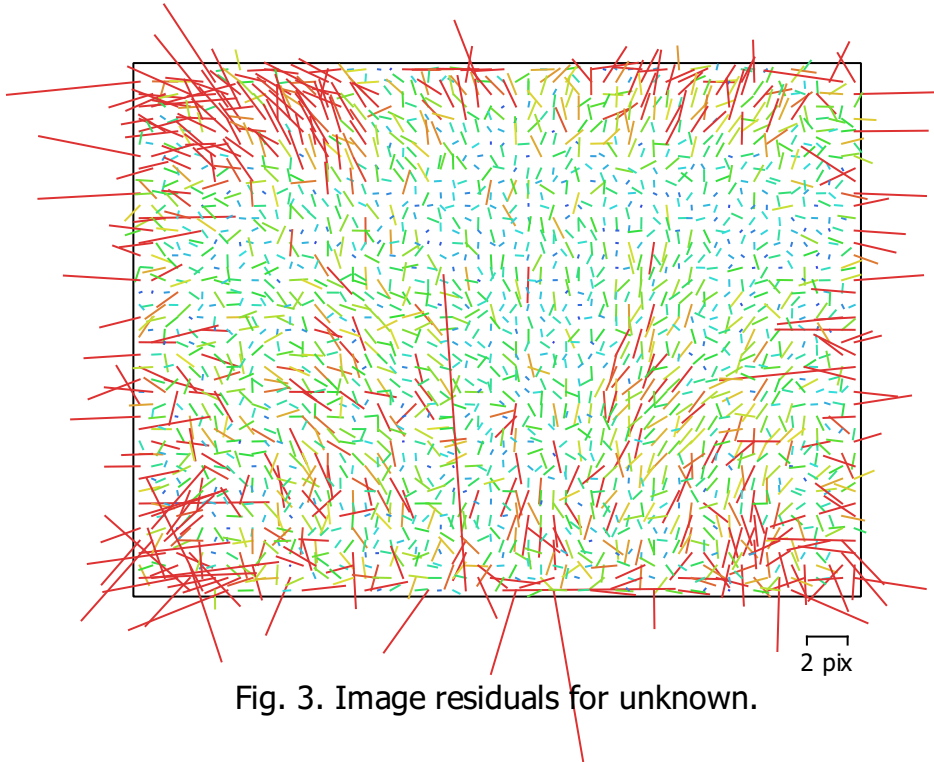
Focal Length  
**unknown**

Pixel Size  
**unknown**

	Value	Error	F	Cx	Cy	K1	K2	K3	P1	P2
<b>F</b>	<b>1521.99</b>	0.6	1.00	-0.31	-0.20	0.02	0.10	-0.04	-0.14	0.00
<b>Cx</b>	<b>-39.6966</b>	0.29		1.00	0.11	-0.01	-0.04	0.04	0.83	0.10
<b>Cy</b>	<b>38.2693</b>	0.2			1.00	-0.04	0.01	-0.02	0.07	0.56
<b>K1</b>	<b>-0.16131</b>	0.00085				1.00	-0.94	0.88	-0.02	-0.01
<b>K2</b>	<b>0.229993</b>	0.0063					1.00	-0.98	-0.04	-0.00
<b>K3</b>	<b>0.0595267</b>	0.014						1.00	0.04	0.00
<b>P1</b>	<b>0.00308541</b>	4.8e-05							1.00	0.10
<b>P2</b>	<b>0.00667838</b>	3.1e-05								1.00

Table 2. Calibration coefficients and correlation matrix.

# Camera Calibration



**unknown**  
491 images

Type  
**Frame**

Resolution  
**1473 x 1080**

Focal Length  
**unknown**

Pixel Size  
**unknown**

	Value	Error	F	P1	P2
<b>F</b>	<b>2597.22</b>	8.3	1.00	0.02	-0.13
<b>P1</b>	<b>0.000489256</b>	0.00058		1.00	-0.02
<b>P2</b>	<b>-0.0261618</b>	0.00048			1.00

Table 3. Calibration coefficients and correlation matrix.

# Digital Elevation Model

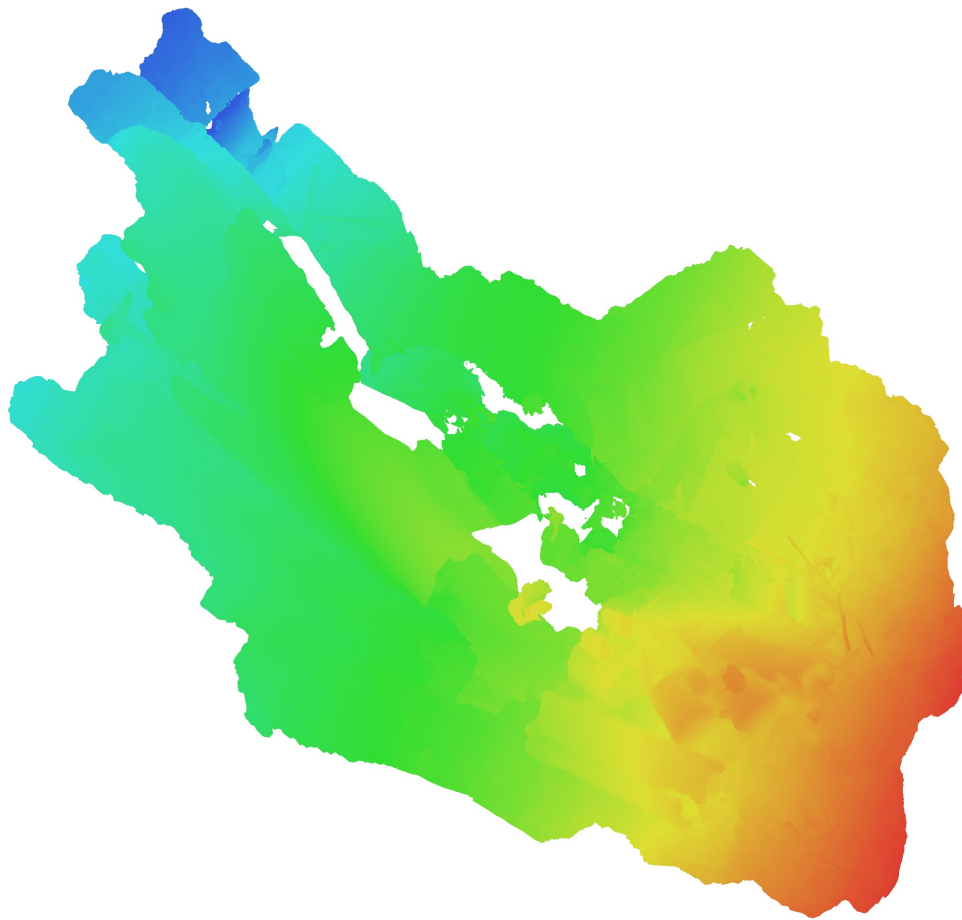


Fig. 4. Reconstructed digital elevation model.

# Processing Parameters

## General

Cameras	5682
Aligned cameras	3826

## Point Cloud

Points	838,975 of 1,430,701
RMS reprojection error	0.594374 (4.74712 pix)
Max reprojection error	10.0013 (382.18 pix)
Mean key point size	6.62207 pix
Point colors	3 bands, uint8
Key points	No
Average tie point multiplicity	2.92113

## Alignment parameters

Accuracy	High
Generic preselection	Yes
Reference preselection	No
Key point limit	30,000
Tie point limit	4,000
Filter points by mask	Yes
Mask tie points	No
Guided image matching	No
Matching time	1 hours 59 minutes
Matching memory usage	479.07 MB
Software version	1.6.2.10247
File size	87.80 MB

## Depth Maps

Count	3552
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## Depth maps generation parameters

Quality	High
Filtering mode	Mild
Processing time	57 minutes 23 seconds
Memory usage	384.93 MB
Software version	1.6.2.10247
File size	2.21 GB

## Dense Point Cloud

Points	139,546,071
Point colors	3 bands, uint8

## Depth maps generation parameters

Quality	High
Filtering mode	Aggressive
Processing time	54 minutes 2 seconds
Memory usage	472.59 MB

## Dense cloud generation parameters

Processing time	1 hours 25 minutes
Memory usage	5.46 GB
Software version	1.6.2.10247
File size	1.78 GB

## Model

Faces	5,000,000
Vertices	2,501,537
Vertex colors	3 bands, uint8

Texture	4,096 x 4,096, 4 bands, uint8
<b>Depth maps generation parameters</b>	
Quality	High
Filtering mode	Mild
Processing time	57 minutes 23 seconds
Memory usage	384.93 MB
<b>Reconstruction parameters</b>	
Surface type	Arbitrary
Source data	Depth maps
Interpolation	Enabled
Strict volumetric masks	No
Processing time	3 hours 22 minutes
Memory usage	9.96 GB
<b>Texturing parameters</b>	
Mapping mode	Generic
Blending mode	Mosaic
Texture size	4,096
Enable hole filling	Yes
Enable ghosting filter	No
UV mapping time	5 minutes 27 seconds
Blending time	5 minutes 15 seconds
Software version	1.6.2.10247
File size	230.58 MB
<b>System</b>	
Software name	Agisoft Metashape Standard
Software version	1.7.1 build 11797
OS	Windows 64 bit
RAM	63.92 GB
CPU	Intel(R) Core(TM) i9-9900K CPU @ 3.60GHz
GPU(s)	GeForce RTX 2060 SUPER