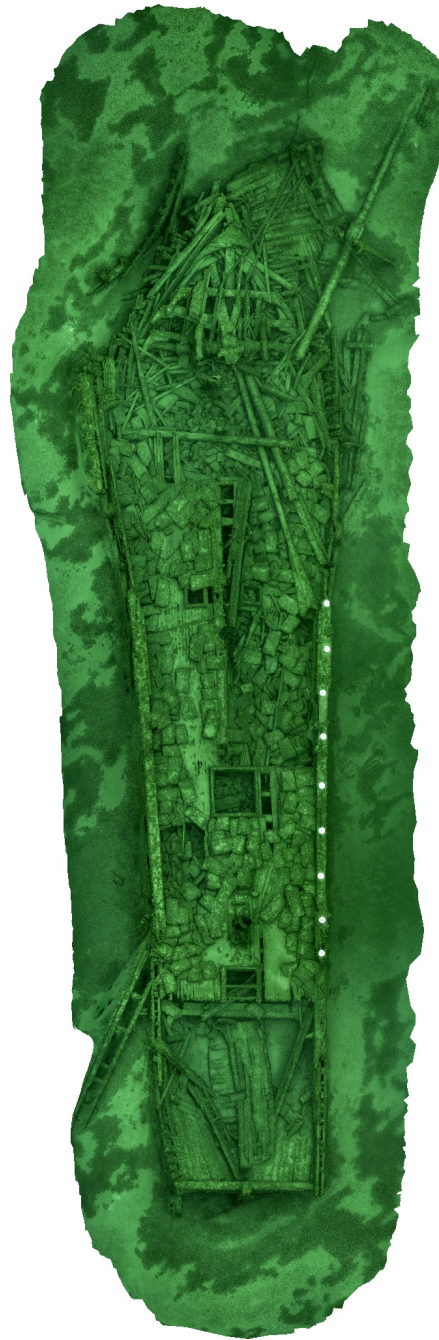


Agisoft Metashape Report

Processing Report
03 December 2021



Survey Data

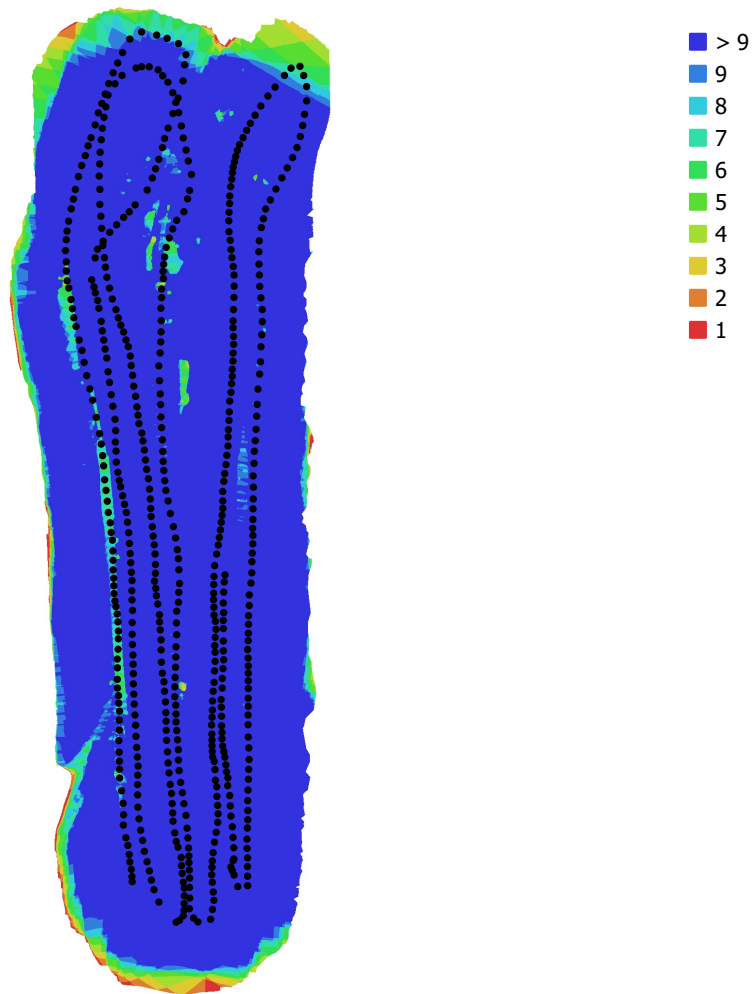


Fig. 1. Camera locations and image overlap.

Number of images: 569

Camera stations: 569

Tie points: 565,217

Projections: 1,533,894

Reprojection error: 1.56 pix

Camera Model	Resolution	Focal Length	Pixel Size	Precalibrated
Canon PowerShot G7 X, ...	5472 x 3648	8.8 mm	2.41 x 2.41 μm	No

Table 1. Cameras.

Camera Calibration

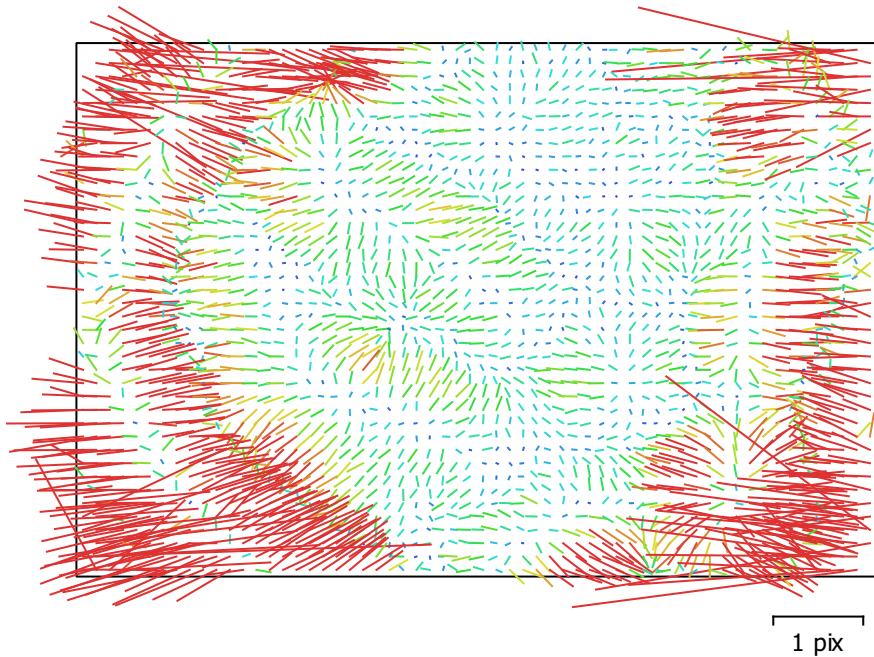


Fig. 2. Image residuals for Canon PowerShot G7 X, 8.8-36.8 mm (8.8mm).

Canon PowerShot G7 X, 8.8-36.8 mm (8.8mm)

569 images

Type	Resolution	Focal Length	Pixel Size
Frame	5472 x 3648	8.8 mm	2.41 x 2.41 μm

	Value	Error	F	Cx	Cy	K1	K2	K3	P1	P2
F	3205.18	0.23	1.00	0.48	-0.83	-0.01	0.16	-0.15	0.11	-0.25
Cx	-1.54707	0.056		1.00	-0.43	0.01	0.06	-0.05	0.55	-0.13
Cy	-54.1092	0.077			1.00	-0.02	-0.09	0.09	-0.08	0.43
K1	-0.100249	5e-05				1.00	-0.86	0.78	0.17	-0.31
K2	0.0495385	0.0001					1.00	-0.98	-0.01	-0.01
K3	-0.0163307	6.8e-05						1.00	-0.00	0.04
P1	-6.55884e-05	3.5e-06							1.00	-0.29
P2	-0.00513492	4.8e-06								1.00

Table 2. Calibration coefficients and correlation matrix.

Digital Elevation Model

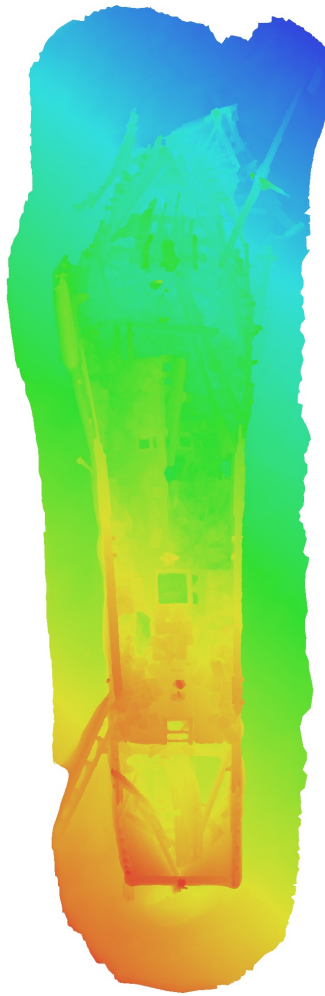


Fig. 3. Reconstructed digital elevation model.

Processing Parameters

General

Cameras	569
Aligned cameras	569

Point Cloud

Points	565,217 of 593,855
RMS reprojection error	0.154649 (1.56348 pix)
Max reprojection error	0.465796 (37.6684 pix)
Mean key point size	9.33907 pix
Point colors	3 bands, uint8
Key points	1.36 GB
Average tie point multiplicity	2.83336

Alignment parameters

Accuracy	High
Generic preselection	Yes
Reference preselection	No
Key point limit	30,000
Tie point limit	4,000
Guided image matching	No
Adaptive camera model fitting	No
Matching time	6 minutes 15 seconds
Matching memory usage	287.17 MB
Alignment time	1 minutes 54 seconds
Alignment memory usage	191.21 MB
Date created	2020:04:24 18:45:22
Software version	1.6.2.10247
File size	46.82 MB

Depth Maps

Count	568
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Depth maps generation parameters

Quality	High
Filtering mode	Mild
Processing time	52 minutes 48 seconds
Memory usage	1.55 GB
Date created	2020:04:25 01:47:58
Software version	1.6.2.10247
File size	3.17 GB

Dense Point Cloud

Points	80,533,684
Point colors	3 bands, uint8

Depth maps generation parameters

Quality	Medium
Filtering mode	Aggressive
Processing time	15 minutes 52 seconds
Memory usage	633.85 MB

Dense cloud generation parameters

Processing time	27 minutes 37 seconds
Memory usage	5.97 GB
Date created	2020:04:24 19:34:15
Software version	1.6.2.10247
File size	1.03 GB

Model

Faces	8,000,000
Vertices	4,000,544
Vertex colors	3 bands, uint8
Texture	4,096 x 4,096 x 2, 4 bands, uint8

Depth maps generation parameters

Quality	High
Filtering mode	Mild
Processing time	52 minutes 48 seconds
Memory usage	1.55 GB

Reconstruction parameters

Surface type	Arbitrary
Source data	Depth maps
Interpolation	Extrapolated
Strict volumetric masks	No
Processing time	1 hours 51 minutes
Memory usage	7.74 GB

Texturing parameters

Mapping mode	Generic
Blending mode	Mosaic
Texture size	4,096
Enable hole filling	Yes
Enable ghosting filter	No
UV mapping time	3 minutes 36 seconds
Blending time	1 minutes 29 seconds
Date created	2020:04:25 03:38:00
Software version	1.6.2.10247
File size	378.05 MB

System

Software name	Agisoft Metashape Standard
Software version	1.7.5 build 13229
OS	Windows 64 bit
RAM	63.92 GB
CPU	Intel(R) Core(TM) i9-9900K CPU @ 3.60GHz
GPU(s)	NVIDIA GeForce RTX 2060 SUPER