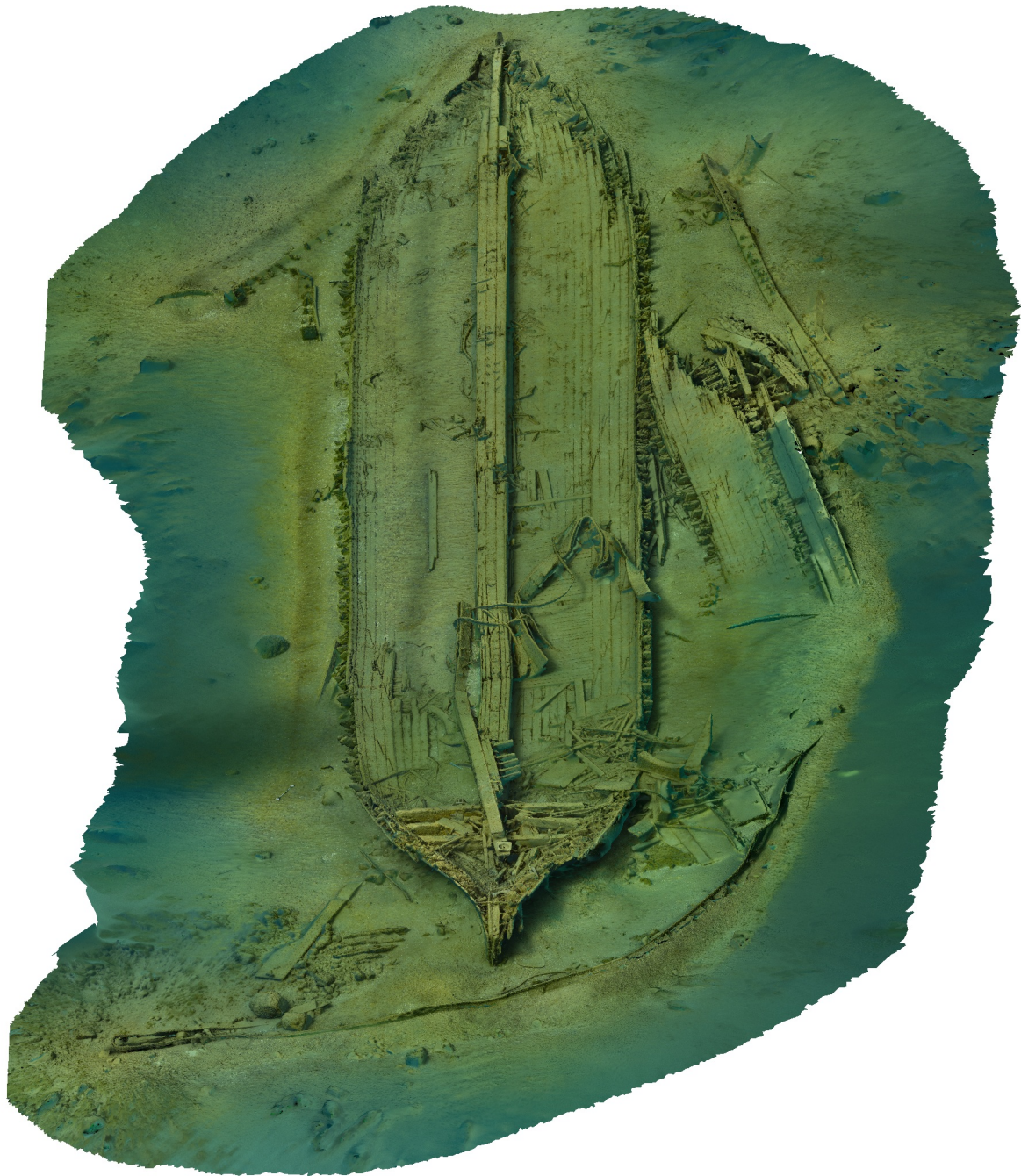


Agisoft Metashape Report

Processing Report
11 December 2021



Survey Data

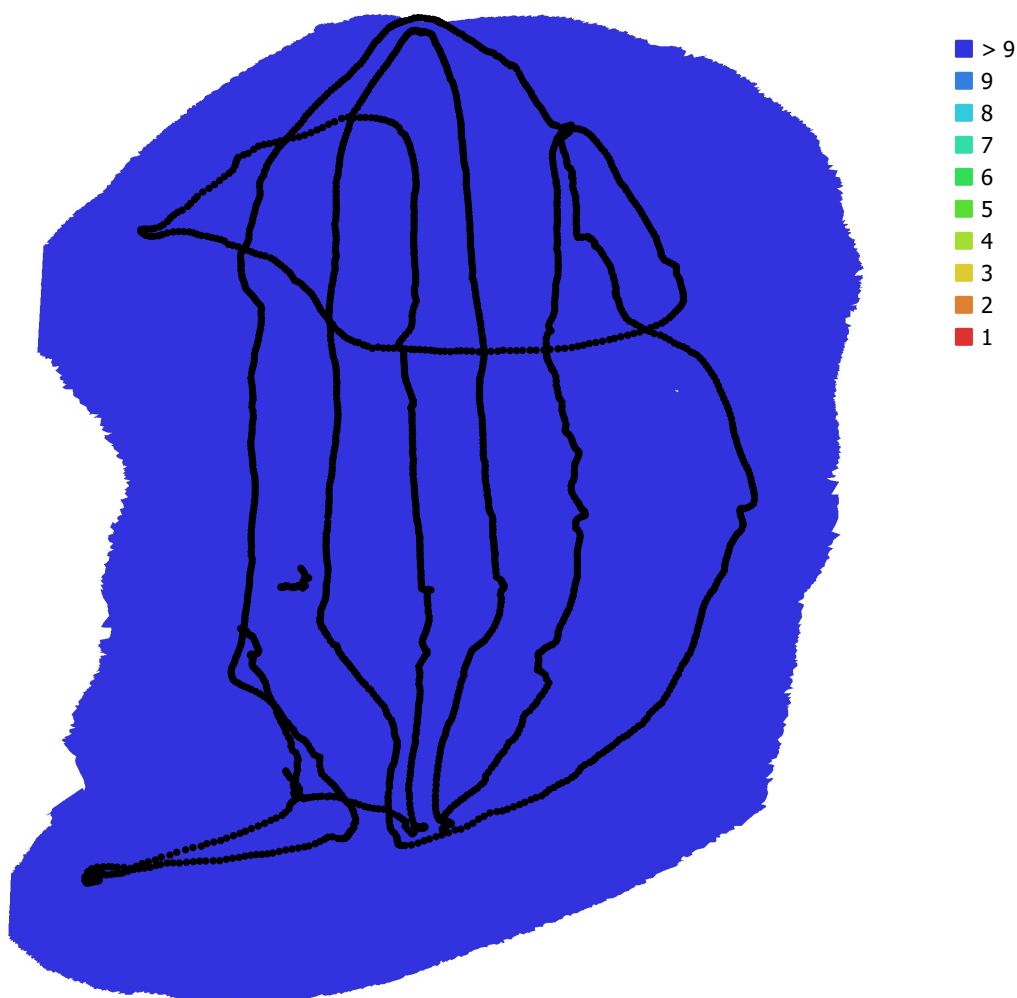


Fig. 1. Camera locations and image overlap.

Number of images: 2,283

Camera stations: 2,283

Tie points: 1,802,315

Projections: 7,628,894

Reprojection error: 0.758 pix

Camera Model	Resolution	Focal Length	Pixel Size	Precalibrated
Canon EOS 5D Mark IV, ...	6720 x 4480	15 mm	5.36 x 5.36 μm	No

Table 1. Cameras.

Camera Calibration

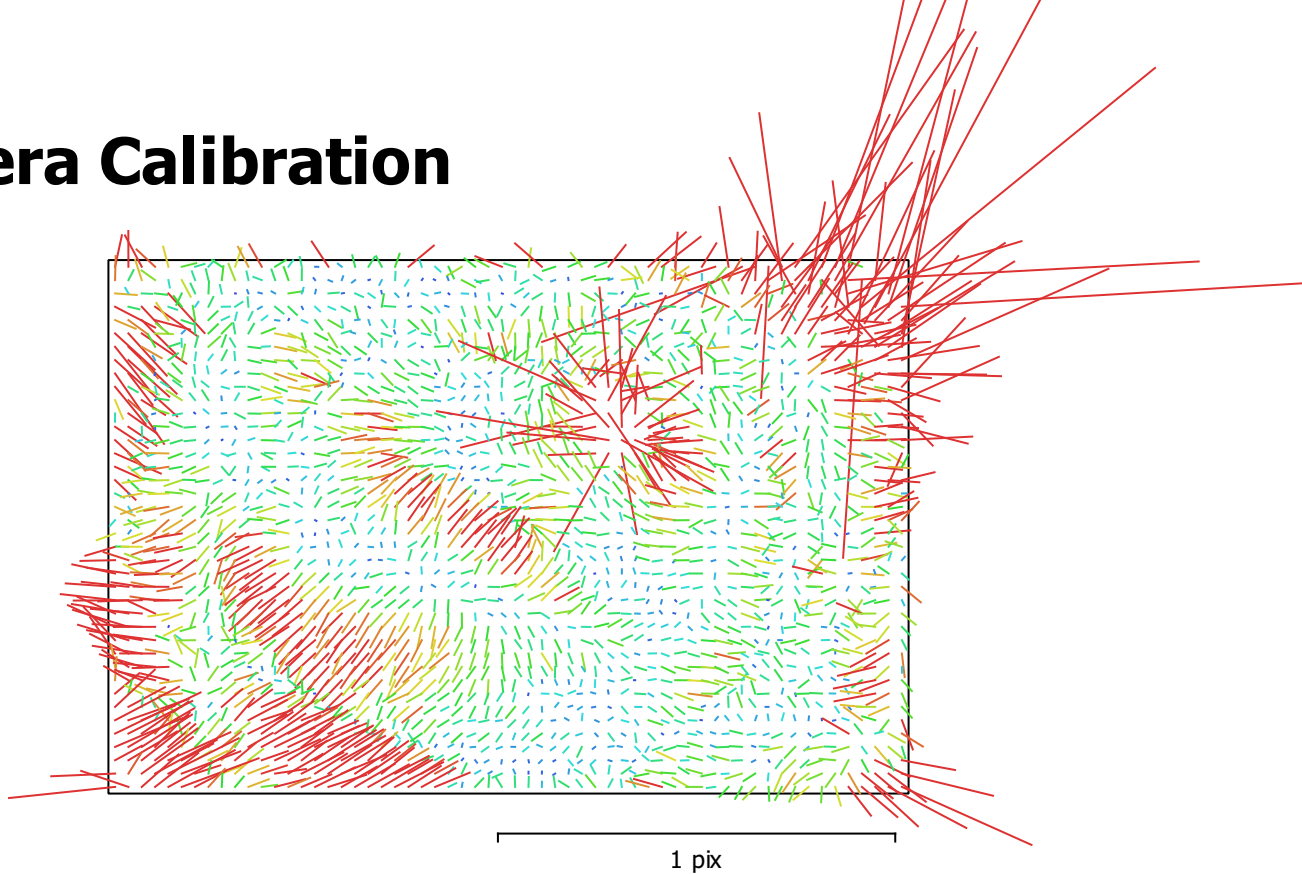


Fig. 2. Image residuals for Canon EOS 5D Mark IV, EF8-15mm f/4L FISHEYE USM (15mm).

Canon EOS 5D Mark IV, EF8-15mm f/4L FISHEYE USM (15mm)

2283 images

Type	Resolution	Focal Length	Pixel Size
Fisheye	6720 x 4480	15 mm	5.36 x 5.36 μm

	Value	Error	F	Cx	Cy	B1	B2	K1	K2	K3	K4	P1	P2
F	3086.67	0.0098	1.00	0.09	0.04	-0.41	-0.04	-0.48	0.31	-0.26	0.23	-0.02	-0.05
Cx	-10.0451	0.0095		1.00	-0.12	-0.00	0.25	0.02	-0.02	0.01	-0.00	-0.76	0.15
Cy	-14.8165	0.016			1.00	-0.32	-0.15	-0.14	0.11	-0.07	0.05	0.14	-0.71
B1	-0.50391	0.0062				1.00	0.16	0.12	-0.09	0.05	-0.03	-0.11	0.57
B2	0.181484	0.0058					1.00	-0.01	-0.01	0.00	-0.00	-0.54	0.27
K1	-0.0476406	6.7e-06						1.00	-0.95	0.88	-0.82	-0.01	0.07
K2	0.00775106	1.3e-05							1.00	-0.98	0.94	0.01	-0.10
K3	-0.00322341	1.1e-05								1.00	-0.99	0.00	0.06
K4	0.000544994	2.9e-06									1.00	-0.01	-0.05
P1	-0.000368748	5.7e-07										1.00	-0.26
P2	0.000227774	9.3e-07											1.00

Table 2. Calibration coefficients and correlation matrix.

Digital Elevation Model



Fig. 3. Reconstructed digital elevation model.

Processing Parameters

General

Cameras	2283
Aligned cameras	2283

Point Cloud

Points	1,802,315 of 2,005,111
RMS reprojection error	0.14197 (0.7581 pix)
Max reprojection error	0.431647 (43.3561 pix)
Mean key point size	4.4317 pix
Point colors	3 bands, uint8
Key points	5.45 GB
Average tie point multiplicity	4.78155

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	Yes
Matching time	57 minutes 7 seconds
Matching memory usage	1.35 GB
Alignment time	27 minutes 26 seconds
Alignment memory usage	1.31 GB
Date created	2020:07:15 15:09:36
Software version	1.6.3.10732
File size	230.20 MB

Depth Maps

Count	2283
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Depth maps generation parameters

Quality	Medium
Filtering mode	Aggressive
Processing time	3 hours 3 minutes
Memory usage	1.92 GB
Date created	2020:07:15 18:48:47
Software version	1.6.3.10732
File size	4.66 GB

Dense Point Cloud

Points	273,223,579
Point colors	3 bands, uint8

Depth maps generation parameters

Quality	Medium
Filtering mode	Aggressive
Processing time	3 hours 3 minutes
Memory usage	1.92 GB

Dense cloud generation parameters

Processing time	11 hours 18 minutes
Memory usage	16.03 GB
Date created	2020:07:16 06:07:35
Software version	1.6.3.10732
File size	5.71 GB

Model

Faces	8,000,000
Vertices	4,001,244
Vertex colors	3 bands, uint8
Texture	4,096 x 4,096 x 2, 4 bands, uint8

Depth maps generation parameters

Quality	Medium
Filtering mode	Aggressive
Processing time	3 hours 3 minutes
Memory usage	1.92 GB

Reconstruction parameters

Surface type	Arbitrary
Source data	Depth maps
Interpolation	Extrapolated
Strict volumetric masks	No
Processing time	1 hours 0 minutes
Memory usage	9.64 GB

Texturing parameters

Mapping mode	Generic
Blending mode	Mosaic
Texture size	4,096
Enable hole filling	Yes
Enable ghosting filter	No
UV mapping time	7 minutes 35 seconds
Blending time	9 minutes 16 seconds
Date created	2020:07:18 17:32:46
Software version	1.6.3.10732
File size	397.50 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