

Agisoft Metashape Report

Processing Report
11 December 2021



Survey Data

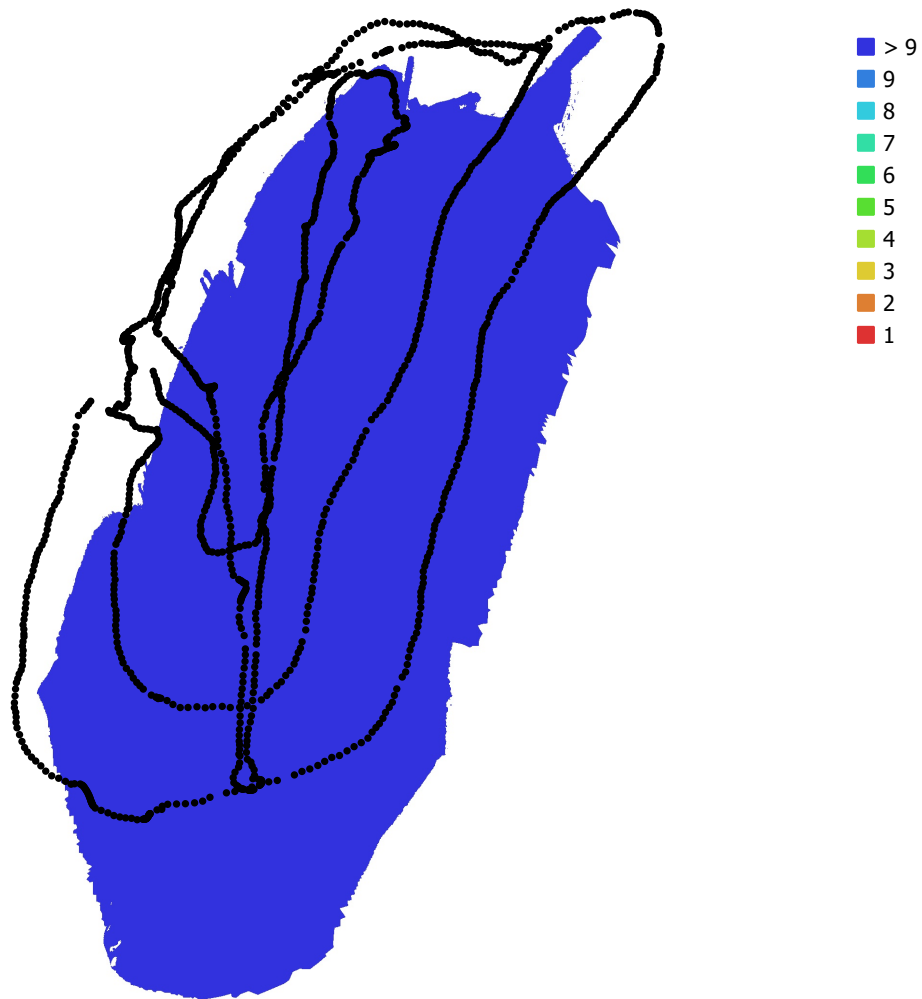


Fig. 1. Camera locations and image overlap.

Number of images: 1,506

Camera stations: 1,506

Tie points: 1,046,969

Projections: 2,894,153

Reprojection error: 1.4 pix

Camera Model	Resolution	Focal Length	Pixel Size	Precalibrated
Canon EOS 5D Mark IV, ...	6720 x 4480	16 mm	5.36 x 5.36 μm	No

Table 1. Cameras.

Camera Calibration

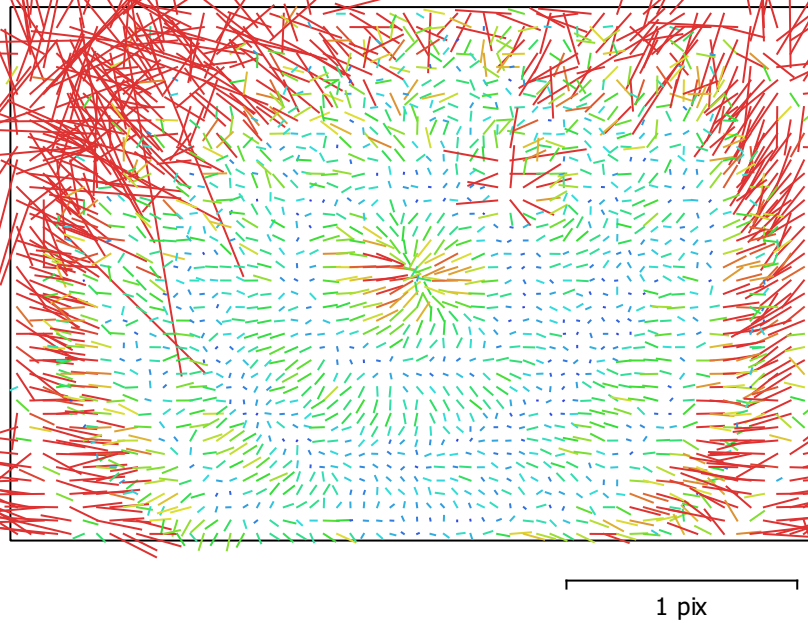


Fig. 2. Image residuals for Canon EOS 5D Mark IV, EF16-35mm f/2.8L II USM (16mm).

Canon EOS 5D Mark IV, EF16-35mm f/2.8L II USM (16mm)

1506 images

Type	Resolution	Focal Length	Pixel Size
Frame	6720 x 4480	16 mm	5.36 x 5.36 μm

	Value	Error	F	Cx	Cy	B1	K1	K2	K3	K4	P1	P2
F	3122.1	0.09	1.00	-0.06	0.16	-0.45	0.12	0.16	-0.17	0.17	-0.10	0.05
Cx	19.164	0.11		1.00	0.12	0.02	-0.03	0.01	-0.00	-0.00	0.86	0.12
Cy	-6.59097	0.15			1.00	-0.06	-0.08	0.17	-0.17	0.17	0.07	0.88
B1	1.86291	0.061				1.00	0.02	-0.01	0.01	-0.01	-0.02	0.09
K1	-0.0789855	3.6e-05					1.00	-0.88	0.80	-0.73	-0.06	-0.12
K2	0.0910943	8.7e-05						1.00	-0.98	0.94	0.00	0.17
K3	-0.0609634	9.1e-05							1.00	-0.99	0.00	-0.16
K4	0.0160206	3.3e-05								1.00	-0.01	0.15
P1	0.000521582	7.2e-06									1.00	0.08
P2	6.96868e-05	9.3e-06										1.00

Table 2. Calibration coefficients and correlation matrix.

Digital Elevation Model

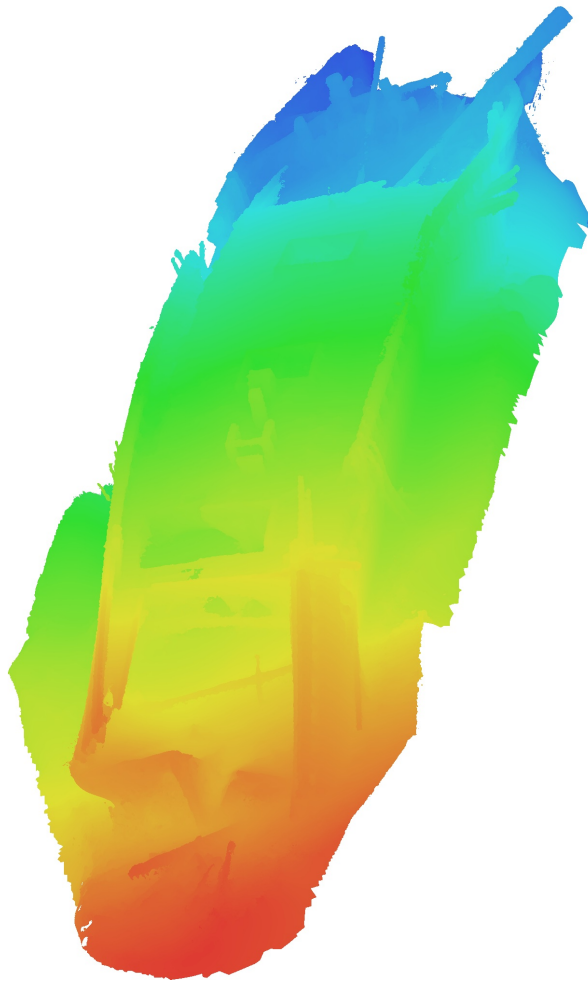


Fig. 3. Reconstructed digital elevation model.

Processing Parameters

General

Cameras	1506
Aligned cameras	1506

Point Cloud

Points	1,046,969 of 1,127,713
RMS reprojection error	0.121703 (1.40154 pix)
Max reprojection error	0.368358 (39.5678 pix)
Mean key point size	8.33197 pix
Point colors	3 bands, uint8
Key points	3.60 GB
Average tie point multiplicity	2.9374

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	24 minutes 52 seconds
Matching memory usage	316.73 MB
Alignment time	9 minutes 25 seconds
Alignment memory usage	864.56 MB
Date created	2020:09:16 01:53:52
Software version	1.6.3.10732
File size	90.60 MB

Depth Maps

Count	1506
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Depth maps generation parameters

Quality	Medium
Filtering mode	Aggressive
Processing time	32 minutes 27 seconds
Memory usage	630.25 MB
Date created	2020:09:16 02:35:59
Software version	1.6.3.10732
File size	2.00 GB

Dense Point Cloud

Points	94,322,266
Point colors	3 bands, uint8

Depth maps generation parameters

Quality	Medium
Filtering mode	Aggressive
Processing time	32 minutes 27 seconds
Memory usage	630.25 MB

Dense cloud generation parameters

Processing time	1 hours 31 minutes
Memory usage	16.25 GB
Date created	2020:09:16 04:07:15
Software version	1.6.3.10732
File size	2.44 GB

Model

Faces	7,999,999
Vertices	4,027,641
Vertex colors	3 bands, uint8
Texture	4,096 x 4,096, 4 bands, uint8

Depth maps generation parameters

Quality	Medium
Filtering mode	Aggressive
Processing time	32 minutes 27 seconds
Memory usage	630.25 MB

Reconstruction parameters

Surface type	Arbitrary
Source data	Dense cloud
Interpolation	Extrapolated
Strict volumetric masks	No
Processing time	34 minutes 40 seconds
Memory usage	50.22 GB

Texturing parameters

Mapping mode	Generic
Blending mode	Mosaic
Texture size	4,096
Enable hole filling	Yes
Enable ghosting filter	No
UV mapping time	8 minutes 50 seconds
Blending time	6 minutes 16 seconds
Date created	2020:09:30 04:11:58
Software version	1.6.3.10732
File size	371.49 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