

Agisoft Metashape

Processing Report

27 June 2024



Survey Data

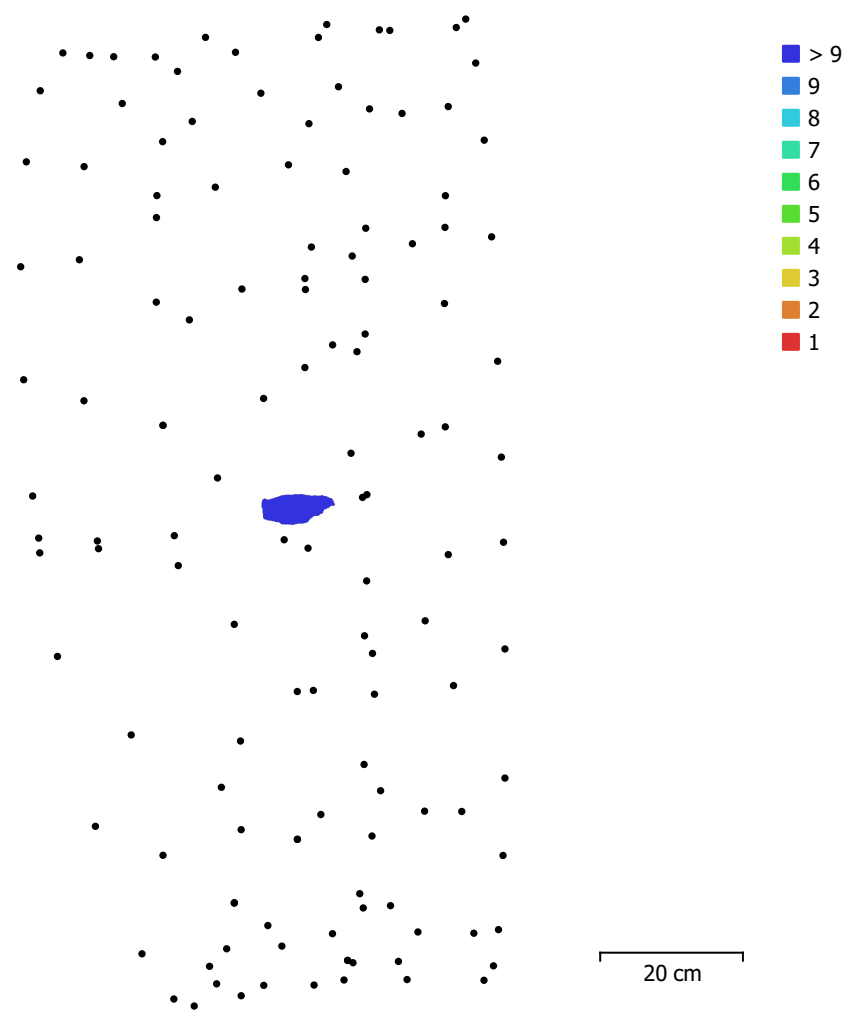


Fig. 1. Camera locations and image overlap.

Number of images:	131	Camera stations:	131
Flying altitude:	66.7 cm	Tie points:	311,676
Ground resolution:	0.0421 mm/pix	Projections:	874,062
Coverage area:	32.3 cm ²	Reprojection error:	0.899 pix

Camera Model	Resolution	Focal Length	Pixel Size	Precalibrated
DMC-G7 (60mm)	4592 x 2584	60 mm	3.79 x 3.79 μm	No
DMC-G7 (60mm)	4592 x 2584	60 mm	3.79 x 3.79 μm	No

Table 1. Cameras.

Camera Calibration

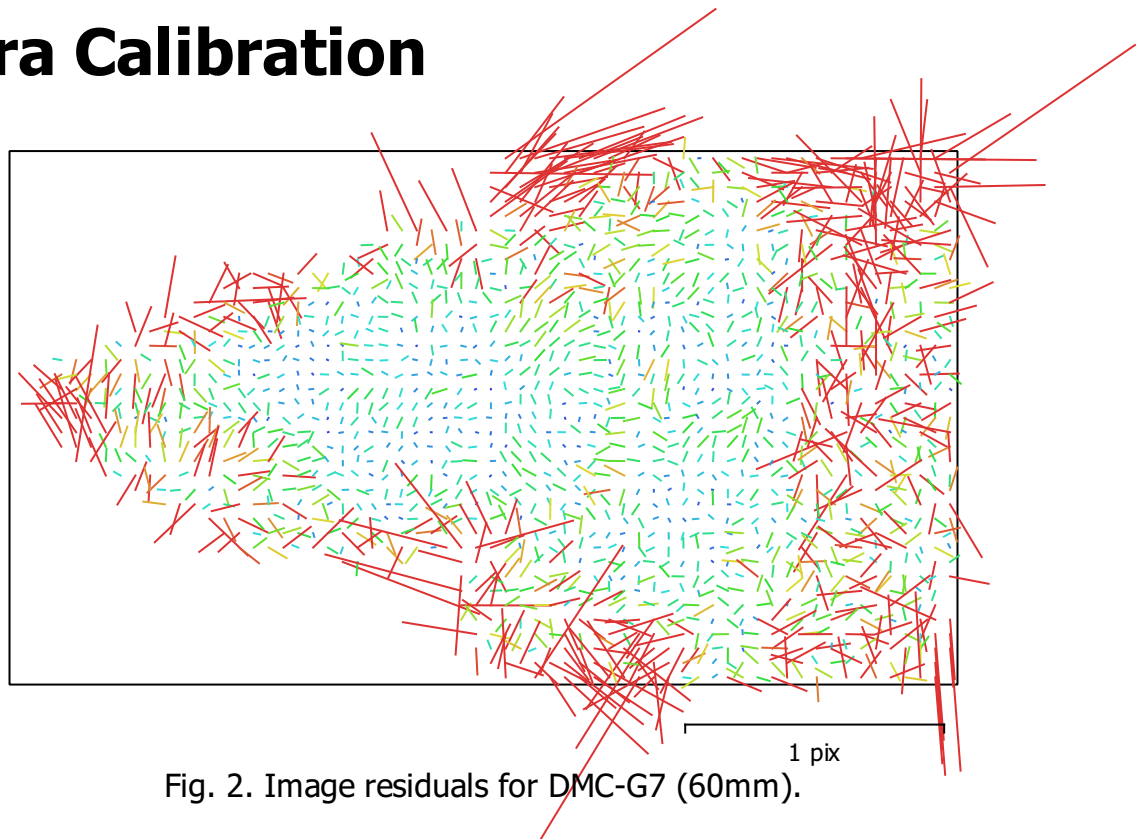


Fig. 2. Image residuals for DMC-G7 (60mm).

DMC-G7 (60mm)

61 images

Type	Resolution	Focal Length	Pixel Size
Frame	4592 x 2584	60 mm	3.79 x 3.79 μm

	Value	Error	K1	P1	P2
F	15831.7				
K1	0.103812	0.00071	1.00	0.34	0.23
P1	0.00342907	6.1e-05		1.00	0.07
P2	-0.00406139	5.1e-05			1.00

Table 2. Calibration coefficients and correlation matrix.

Camera Calibration

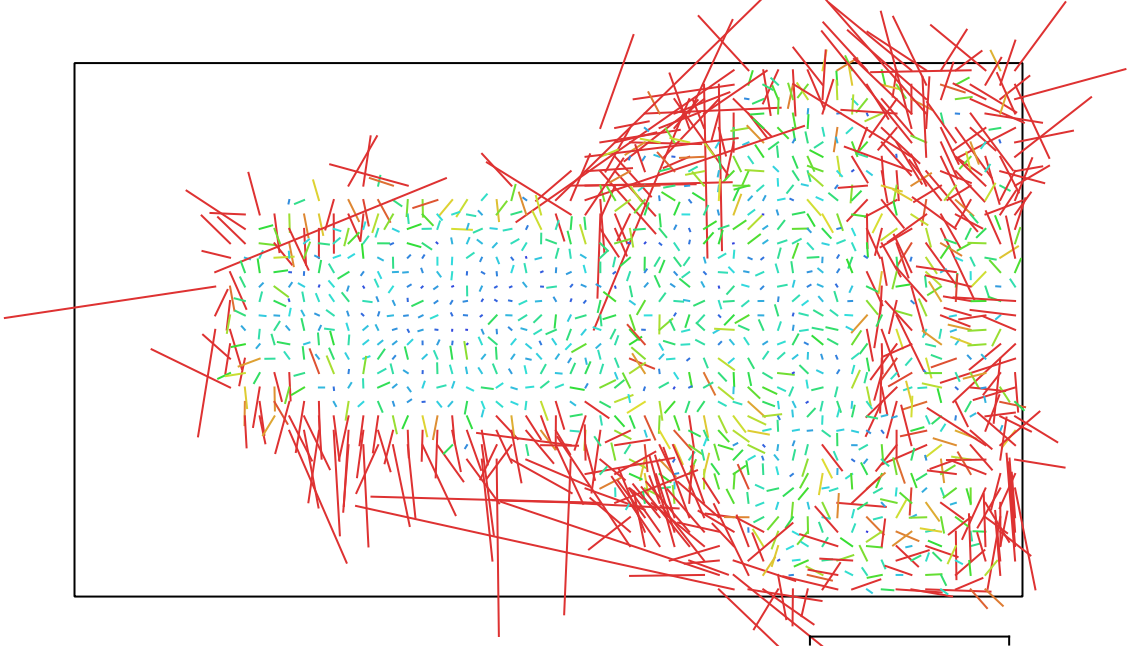


Fig. 3. Image residuals for DMC-G7 (60mm).

DMC-G7 (60mm)

70 images

Type	Resolution	Focal Length	Pixel Size
Frame	4592 x 2584	60 mm	3.79 x 3.79 μm

	Value	Error	P1	P2
F	15831.7			
P1	0.0163439	0.00024	1.00	0.03
P2	-0.00281553	0.0001		1.00

Table 3. Calibration coefficients and correlation matrix.

Scale Bars

Label	Distance (m)	Error (m)
target 19_target 20	0.05	-3.92873e-12
Total		3.92873e-12

Table 4. Control scale bars.

Digital Elevation Model

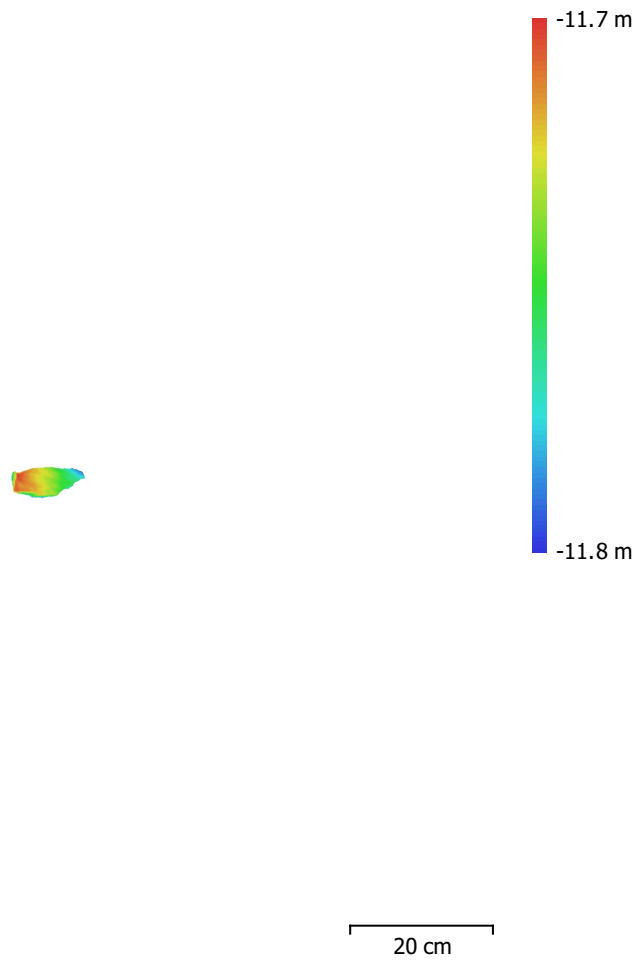


Fig. 4. Reconstructed digital elevation model.

Resolution: 0.506 mm/pix
Point density: 3.91 points/mm²

Processing Parameters

General

Cameras	131
Aligned cameras	131
Markers	4
Scale bars	1

Tie Points

Points	311,676 of 361,354
RMS reprojection error	0.245861 (0.899128 pix)
Max reprojection error	0.874848 (59.5612 pix)
Mean key point size	3.17674 pix
Point colors	3 bands, uint8
Key points	No
Average tie point multiplicity	3.03451
File size	24.92 MB

Model

Faces	50,000
Vertices	25,002
Vertex colors	3 bands, uint8
Texture	8,192 x 8,192, 4 bands, uint8

Depth maps generation parameters

Quality	Ultra High
Filtering mode	Mild
Max neighbors	16
Processing time	6 minutes 37 seconds
Memory usage	5.13 GB

Reconstruction parameters

Surface type	Arbitrary
Source data	Depth maps
Interpolation	Enabled
Strict volumetric masks	No
Processing time	1 minutes 44 seconds
Memory usage	8.12 GB

Texturing parameters

Mapping mode	Generic
Blending mode	Mosaic
Texture size	8,192
Enable hole filling	Yes
Enable ghosting filter	Yes
UV mapping time	3 seconds
UV mapping memory usage	100.71 MB
Blending time	44 seconds
Blending memory usage	2.86 GB
Blending GPU memory usage	1.87 GB
Date created	2024:06:14 16:14:45
Software version	1.8.4.14671
File size	38.20 MB

System

Software name	Agisoft Metashape Standard
Software version	2.1.1 build 17821
OS	Windows 64 bit

RAM
CPU
GPU(s)

15.70 GB
Intel(R) Core(TM) i9-9980HK CPU @ 2.40GHz
Quadro T2000