Agisoft Metashape

Processing Report

26 June 2024

Survey Data

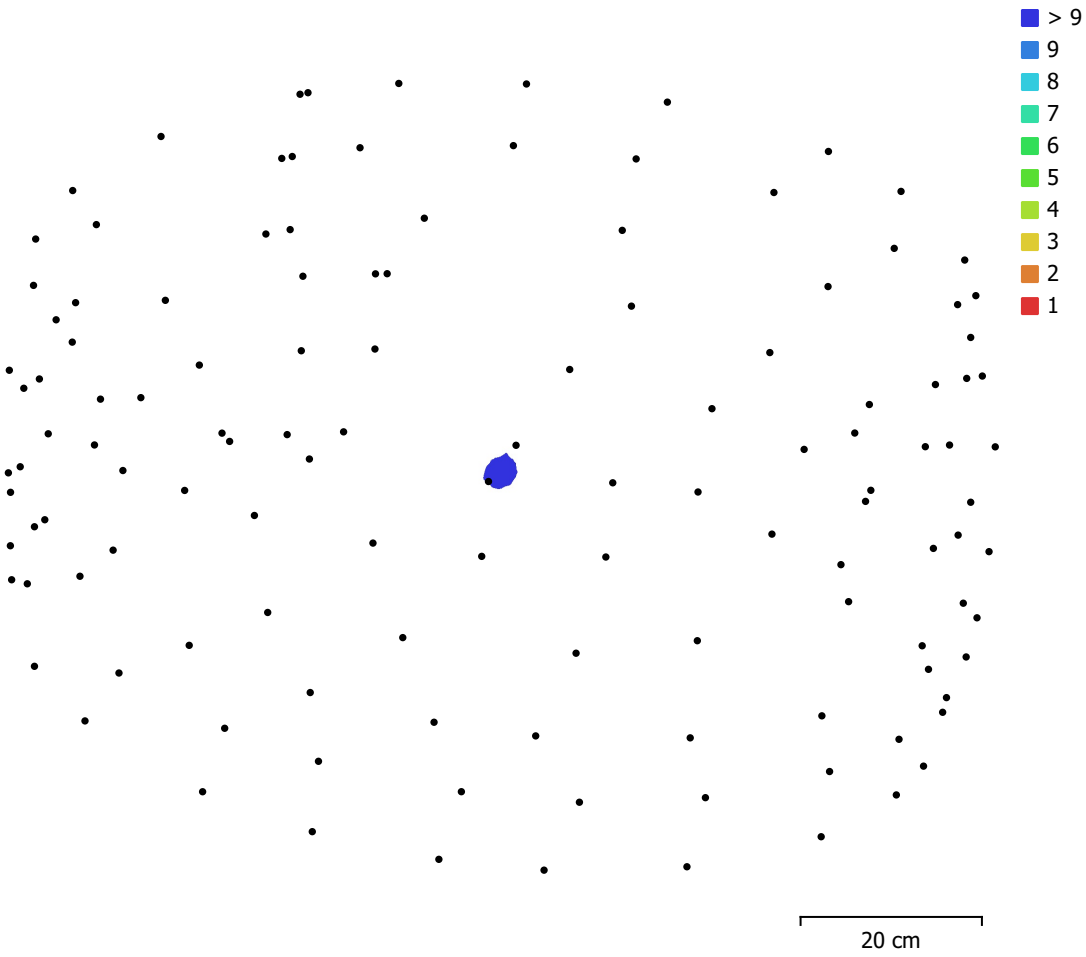

Fig. 1. Camera locations and image overlap.

Number of images:	128	Camera stations:	127
Flying altitude:	53.5 cm	Tie points:	207,718
Ground resolution:	0.0347 mm/pix	Projections:	470,723
Coverage area:	10.2 cm²	Reprojection error:	0.308 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

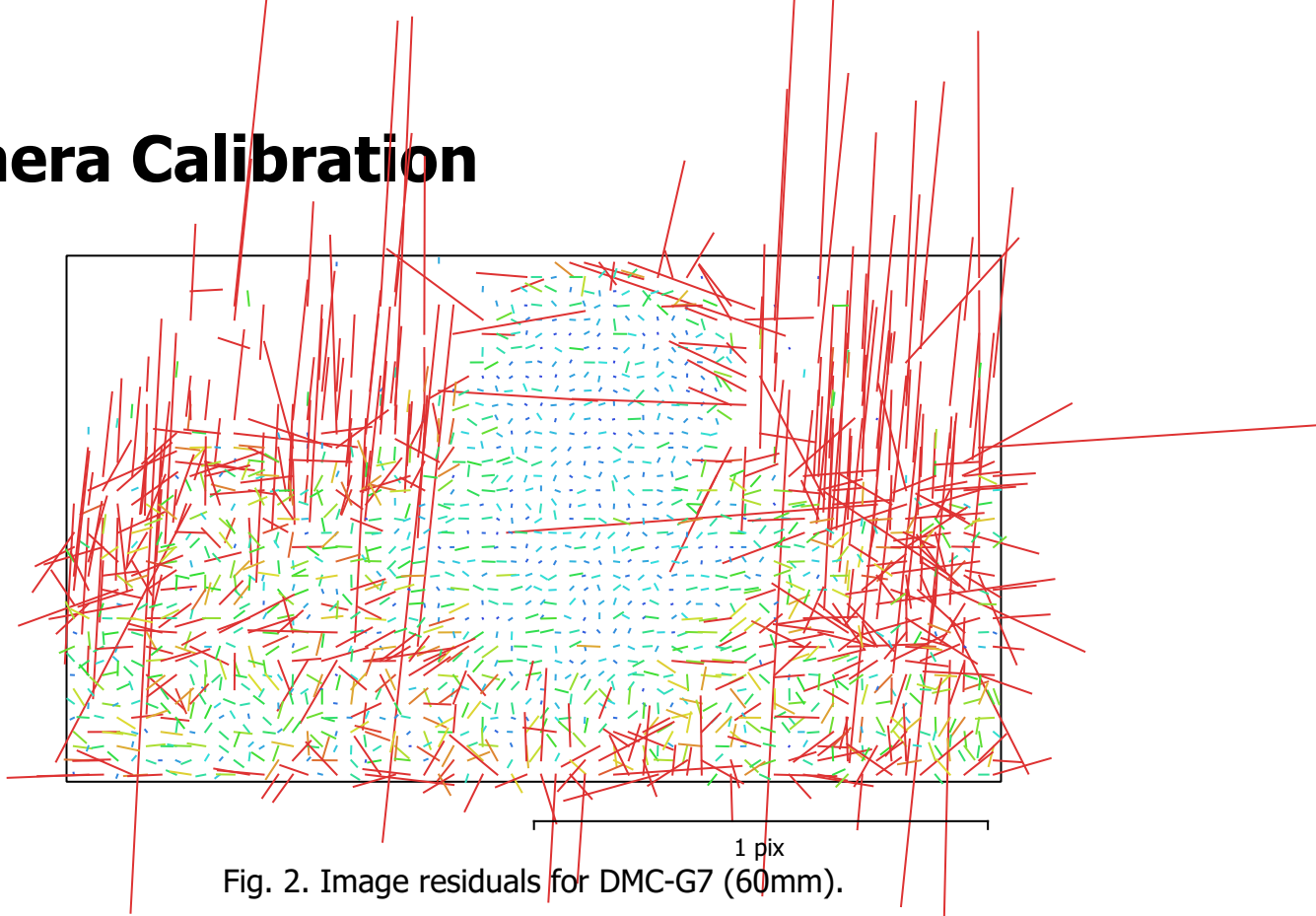

Fig. 2. Image residuals for DMC-G7 (60mm).

DMC-G7 (60mm)

68 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	**0.112761**	0.0018	1.00	0.06	-0.06
P1	**0.00556648**	0.00014		1.00	0.03
P2	**-0.00388661**	0.00014			1.00

Table 2. Calibration coefficients and correlation matrix.

Camera Calibration

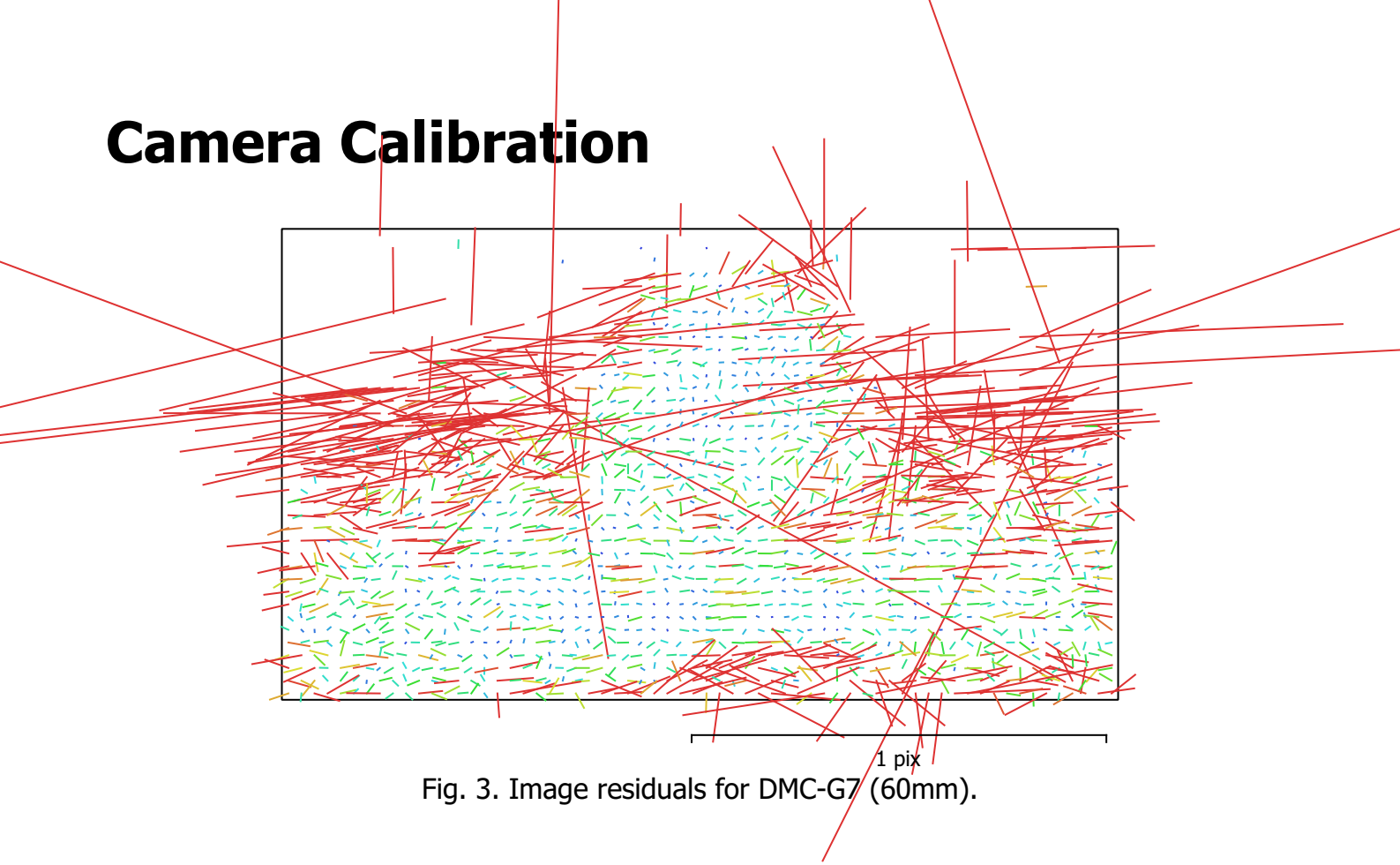

Fig. 3. Image residuals for DMC-G7 (60mm).

DMC-G7 (60mm)

60 images

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

	Value	Error	K1	K2	P1	P2
F	**15831.7**					
K1	**0.133322**	0.0015	1.00	-0.92	0.11	-0.26
K2	**-2.31103**	0.044		1.00	0.02	0.08
P1	**0.00182443**	0.00013			1.00	0.18
P2	**-0.00554395**	0.00011				1.00

Table 3. Calibration coefficients and correlation matrix.

Scale Bars

Label	Distance (m)	Error (m)
target 19_target 20	0.05	1.42594e-14
Total		**1.42594e-14**

Table 4. Control scale bars.

Digital Elevation Model

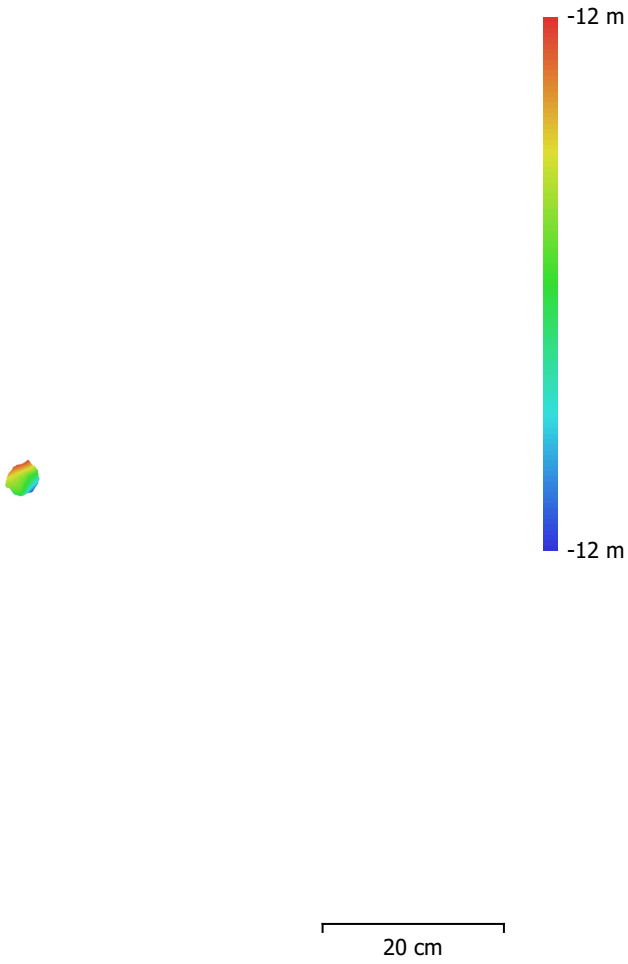

Fig. 4. Reconstructed digital elevation model.

Resolution:	0.0694 mm/pix
Point density:	208 points/mm²

Processing Parameters

General	
Cameras	128
Aligned cameras	127
Markers	4
Scale bars	1
Coordinate system	Local Coordinates (m)
Rotation angles	Yaw, Pitch, Roll
Point Cloud	
Points	207,718 of 481,916
RMS reprojection error	0.116051 (0.307691 pix)
Max reprojection error	0.250441 (7.01833 pix)
Mean key point size	2.19814 pix
Point colors	3 bands, uint8
Key points	No
Average tie point multiplicity	2.38771
File size	23.71 MB
Depth Maps	
Count	126
Depth maps generation parameters	
Quality	High
Filtering mode	Moderate
Max neighbors	16
Processing time	1 minutes 24 seconds
Memory usage	1.32 GB
Date created	2024:06:26 10:37:55
Software version	1.8.4.14671
File size	29.36 MB
Dense Point Cloud	
Points	776,416
Point colors	3 bands, uint8
Depth maps generation parameters	
Quality	High
Filtering mode	Moderate
Max neighbors	16
Processing time	1 minutes 24 seconds
Memory usage	1.32 GB
Dense cloud generation parameters	
Processing time	1 minutes 54 seconds
Memory usage	4.08 GB
Points classification parameters	
Confidence	0
Classification time	2 seconds
Classification memory usage	228.45 MB
Date created	2024:06:26 10:39:50
Software version	1.8.4.14671
File size	10.90 MB
Model	
Faces	90,470
Vertices	45,237
Vertex colors	3 bands, uint8

Texture	16,000 x 16,000 x 2, 4 bands, uint8
Depth maps generation parameters	
Quality	High
Filtering mode	Moderate
Max neighbors	16
Processing time	1 minutes 24 seconds
Memory usage	1.32 GB
Reconstruction parameters	
Surface type	Arbitrary
Source data	Dense cloud
Interpolation	Enabled
Strict volumetric masks	No
Processing time	14 seconds
Memory usage	583.22 MB
Texturing parameters	
Mapping mode	Generic
Blending mode	Mosaic
Texture size	16,000
Enable hole filling	Yes
Enable ghosting filter	Yes
UV mapping time	31 seconds
UV mapping memory usage	722.10 MB
Blending time	1 minutes 20 seconds
Blending memory usage	12.93 GB
Blending GPU memory usage	11.89 GB
Date created	2024:06:26 10:50:36
Software version	1.8.4.14671
File size	134.63 MB
System	
Software name	Agisoft Metashape Professional
Software version	1.8.4 build 14671
OS	Windows 64 bit
RAM	127.71 GB
CPU	Intel(R) Core(TM) i9-10940X CPU @ 3.30GHz
GPU(s)	Quadro RTX 5000