

Agisoft Metashape

Processing Report

25 June 2025



Survey Data

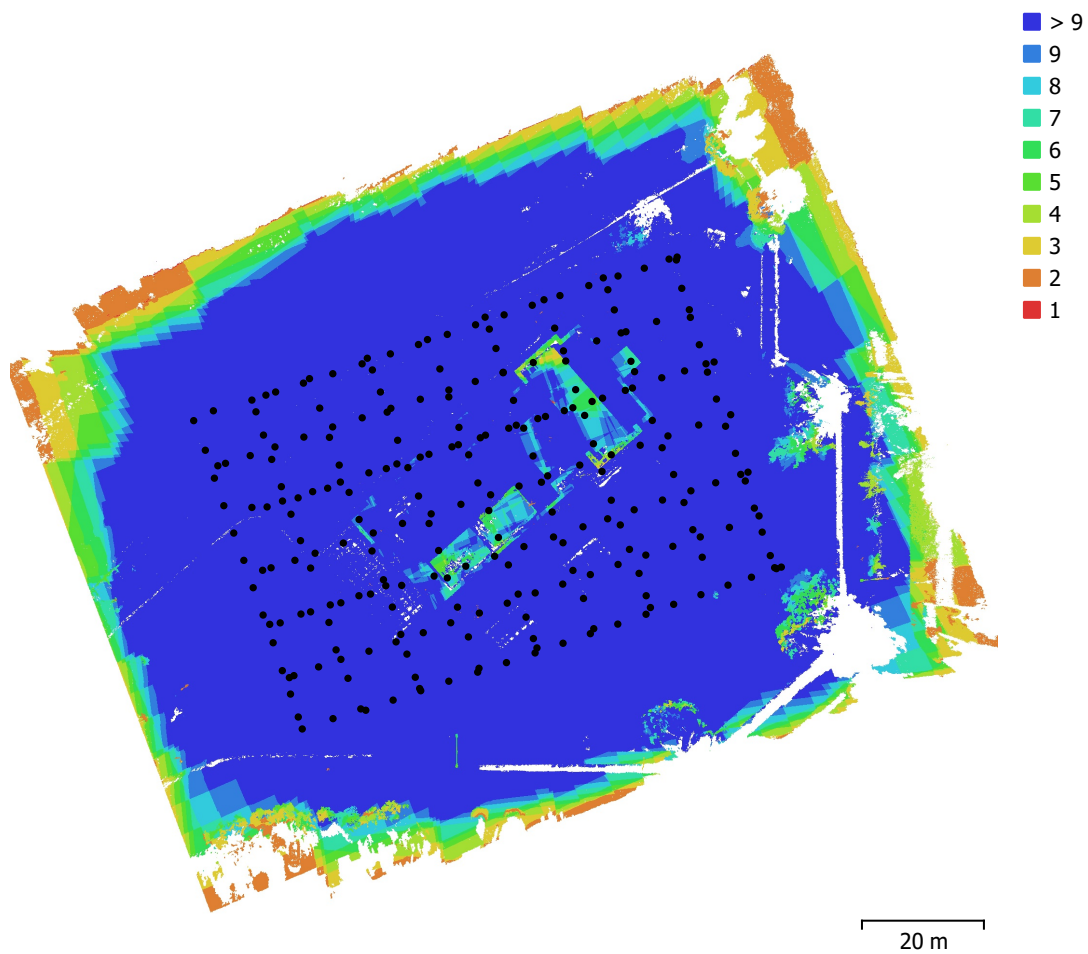


Fig. 1. Camera locations and image overlap.

Number of images:	259	Camera stations:	259
Flying altitude:	27.6 m	Tie points:	167,371
Ground resolution:	6.83 mm/pix	Projections:	1,001,332
Coverage area:	0.0134 km ²	Reprojection error:	0.653 pix

Camera Model	Resolution	Focal Length	Pixel Size	Precalibrated
FC6310 (8.8mm)	5472 x 3648	8.8 mm	2.41 x 2.41 μ m	No

Table 1. Cameras.

Camera Calibration

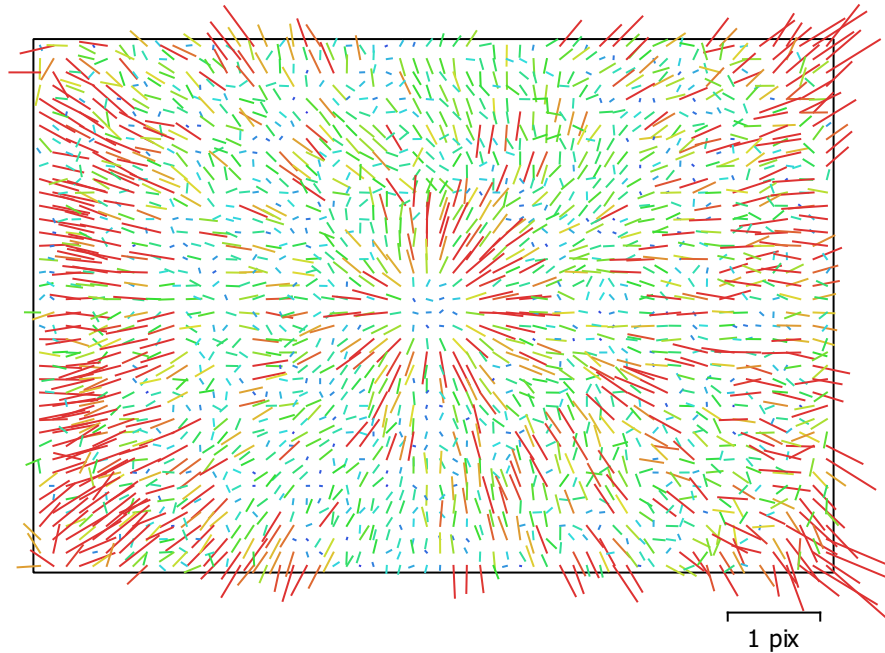


Fig. 2. Image residuals for FC6310 (8.8mm).

FC6310 (8.8mm)

259 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	3675.4	0.046	1.00	0.03	-0.87	0.04	0.12	-0.10	-0.01	-0.61
Cx	-21.0518	0.017		1.00	-0.02	-0.01	0.01	-0.01	0.90	0.03
Cy	27.9343	0.031			1.00	-0.22	0.03	-0.03	0.02	0.82
K1	0.00727557	2.4e-05				1.00	-0.95	0.89	-0.02	-0.25
K2	-0.0150977	7e-05					1.00	-0.98	0.01	0.05
K3	0.0139333	6.3e-05						1.00	-0.01	-0.06
P1	-0.00248614	1.7e-06							1.00	0.04
P2	0.0010725	2.3e-06								1.00

Table 2. Calibration coefficients and correlation matrix.

Camera Locations

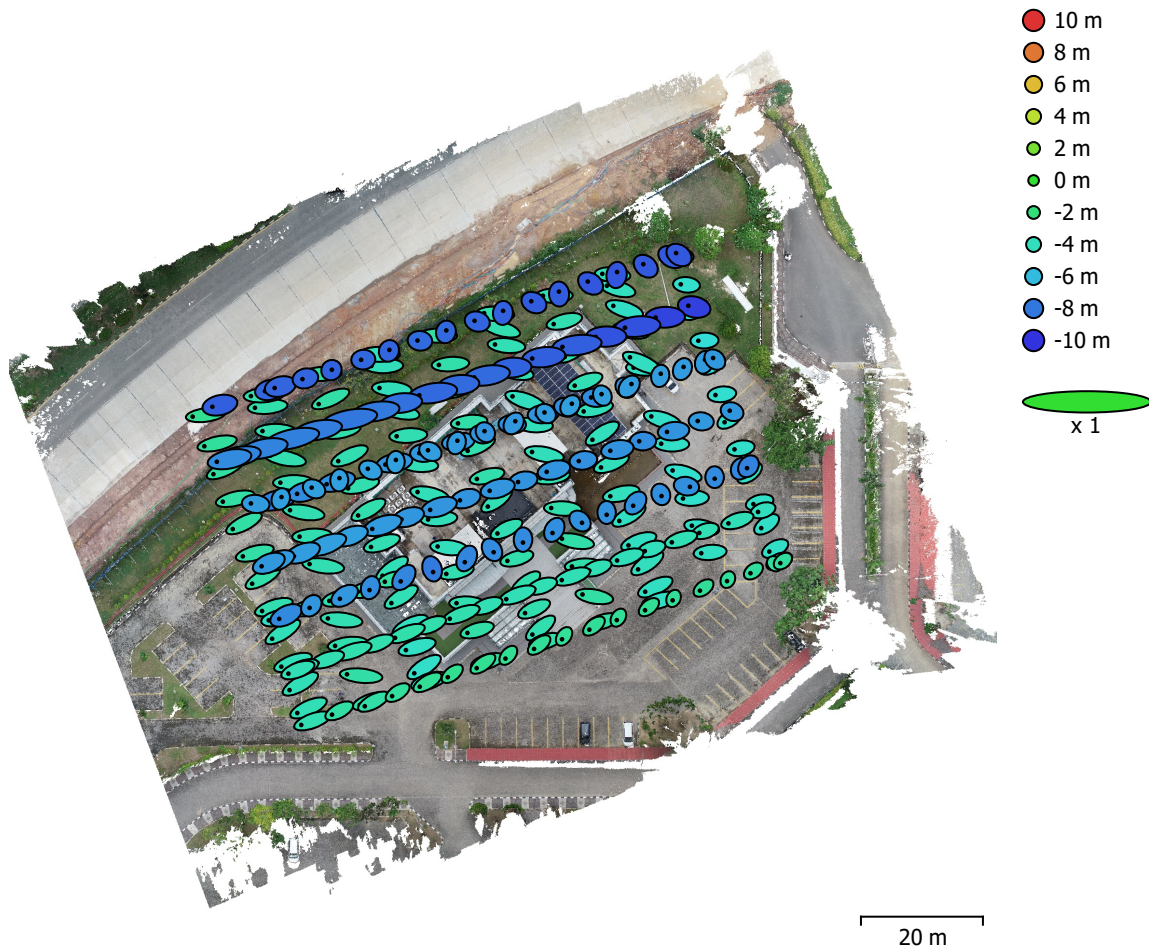


Fig. 3. Camera locations and error estimates.

Z error is represented by ellipse color. X,Y errors are represented by ellipse shape.
Estimated camera locations are marked with a black dot.

X error (m)	Y error (m)	Z error (m)	XY error (m)	Total error (m)
2.91887	0.954363	5.62547	3.07093	6.4091

Table 3. Average camera location error.
X - Longitude, Y - Latitude, Z - Altitude.

Ground Control Points

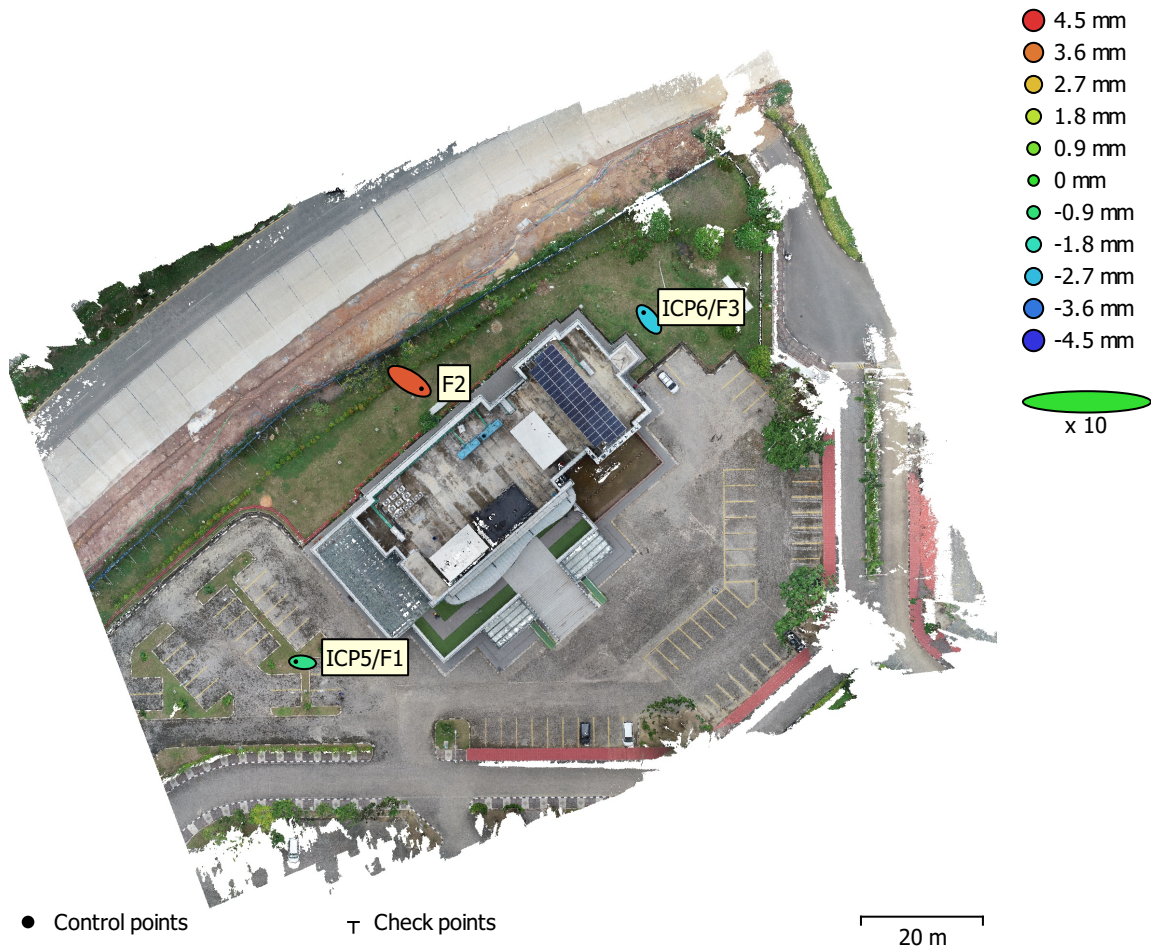


Fig. 4. GCP locations and error estimates.

Z error is represented by ellipse color. X,Y errors are represented by ellipse shape.

Estimated GCP locations are marked with a dot or crossing.

Count	X error (cm)	Y error (cm)	Z error (cm)	XY error (cm)	Total (cm)
3	28.0228	19.2229	0.281358	33.9823	33.9835

Table 4. Control points RMSE.

X - Longitude, Y - Latitude, Z - Altitude.

Label	X error (cm)	Y error (cm)	Z error (cm)	Total (cm)	Image (pix)
ICP5/F1	-22.0783	2.18077	-0.115698	22.186	2.189 (32)
F2	39.5454	-24.5562	0.401133	46.5511	1.229 (33)
ICP6/F3	-17.4509	22.3786	-0.251384	28.3796	1.749 (21)
Total	28.0228	19.2229	0.281358	33.9835	1.764

Table 5. Control points.
X - Longitude, Y - Latitude, Z - Altitude.

Digital Elevation Model

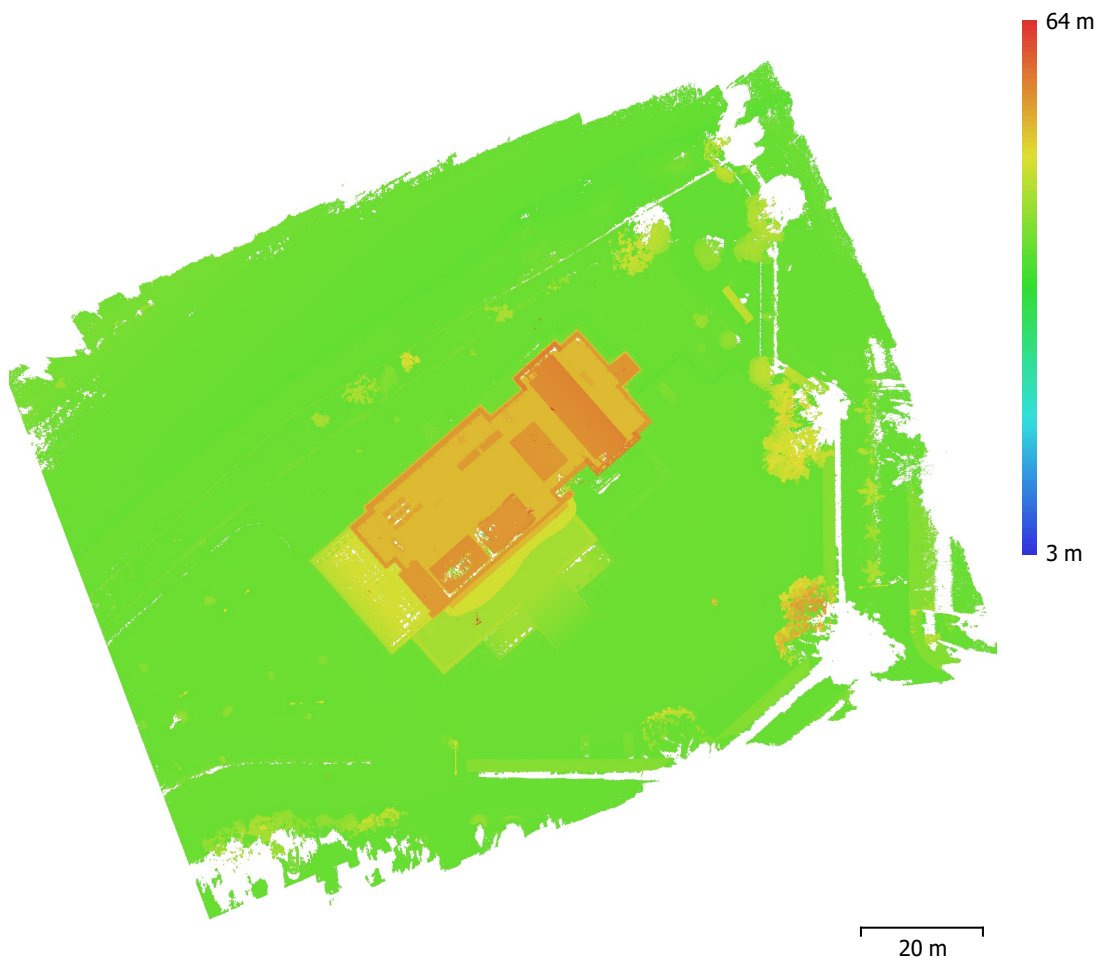


Fig. 5. Reconstructed digital elevation model.

Resolution: unknown
Point density: unknown

Processing Parameters

General

Cameras	259
Aligned cameras	259
Markers	3
Coordinate system	WGS 84 (EPSG::4326)
Rotation angles	Yaw, Pitch, Roll

Point Cloud

Points	167,371 of 186,024
RMS reprojection error	0.190742 (0.652992 pix)
Max reprojection error	0.705817 (35.5384 pix)
Mean key point size	3.26532 pix
Point colors	3 bands, uint8
Key points	No
Average tie point multiplicity	6.24934

Alignment parameters

Accuracy	High
Generic preselection	Yes
Reference preselection	Source
Key point limit	40,000
Key point limit per Mpx	1,000
Tie point limit	4,000
Exclude stationary tie points	Yes
Guided image matching	No
Adaptive camera model fitting	No
Matching time	1 hours 18 minutes
Matching memory usage	1.88 GB
Alignment time	8 minutes 59 seconds
Alignment memory usage	190.90 MB

Optimization parameters

Parameters	f, cx, cy, k1-k3, p1, p2
Adaptive camera model fitting	No
Optimization time	35 seconds
Date created	2025:06:18 18:59:00
Software version	1.7.6.13524
File size	22.14 MB

Depth Maps

Count	259
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Depth maps generation parameters

Quality	Medium
Filtering mode	Mild
Max neighbors	40
Processing time	3 hours 45 minutes
Memory usage	2.88 GB
Date created	2025:06:20 22:25:54
Software version	1.7.6.13524
File size	477.80 MB

Dense Point Cloud

Points	27,086,699
Point colors	3 bands, uint8

Depth maps generation parameters

Quality	Medium
Filtering mode	Mild
Max neighbors	40
Processing time	3 hours 45 minutes
Memory usage	2.88 GB

Dense cloud generation parameters

Processing time	1 hours 30 minutes
Memory usage	5.11 GB
Date created	2025:06:20 23:56:01
Software version	1.7.6.13524
File size	354.55 MB

System

Software name	Agisoft Metashape Professional
Software version	1.7.6 build 13524
OS	Windows 64 bit
RAM	14.96 GB
CPU	AMD A6-7310 APU with AMD Radeon R4 Graphics
GPU(s)	AMD Radeon(TM) R4 Graphics (Mullins)