



Survey Data

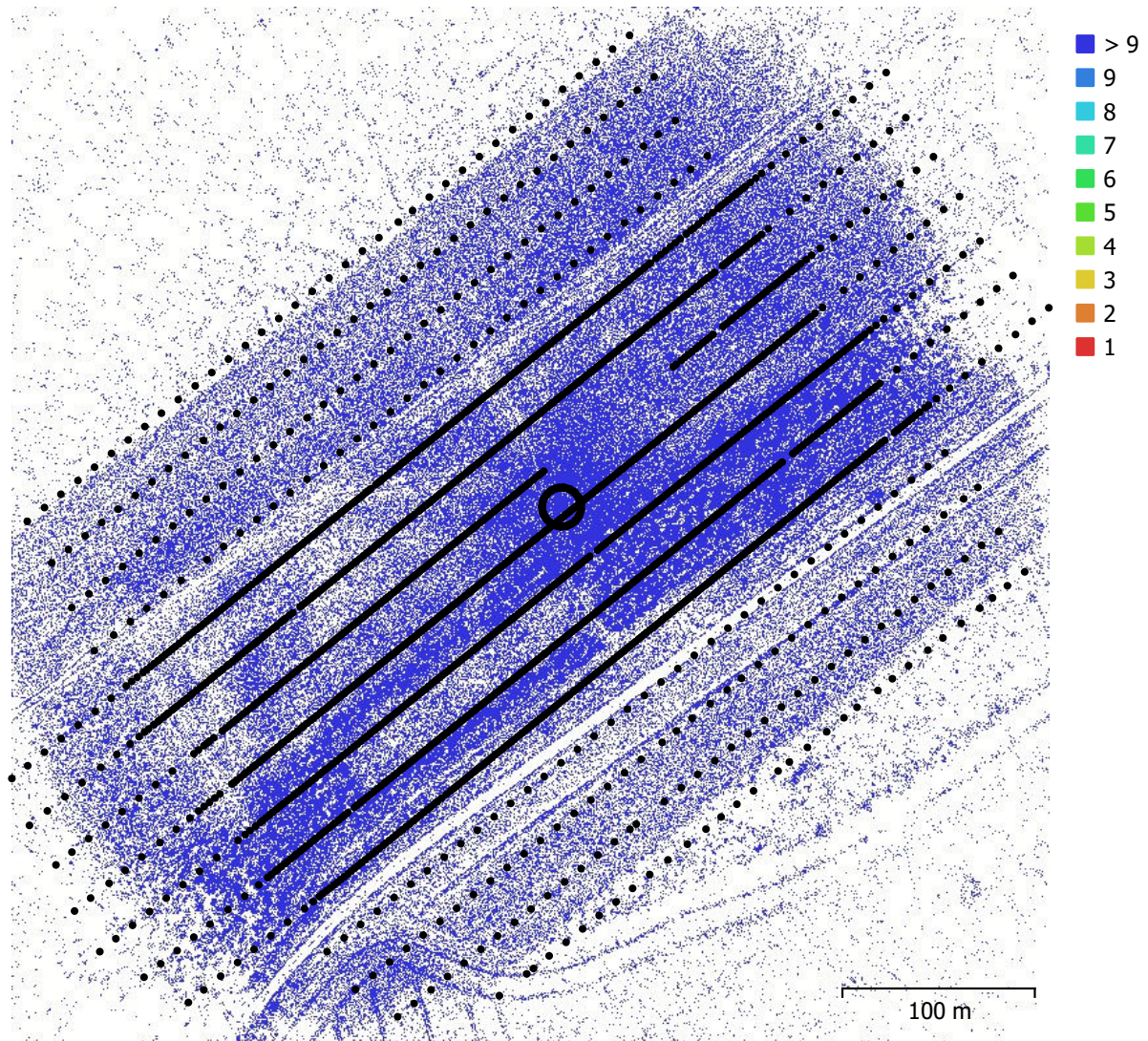


Fig. 1. Camera locations and image overlap.

Number of images:	2,029	Camera stations:	2,029
Flying altitude:	89.8 m	Tie points:	631,675
Ground resolution:	2.41 cm/pix	Projections:	5,896,929
Coverage area:	0.0991 km ²	Reprojection error:	0.989 pix

Camera Model	Resolution	Focal Length	Pixel Size	Precalibrated
M3M (12.29mm)	5280 x 3956	12.29 mm	3.36 x 3.36 μm	Yes

Table 1. Cameras.

Camera Calibration

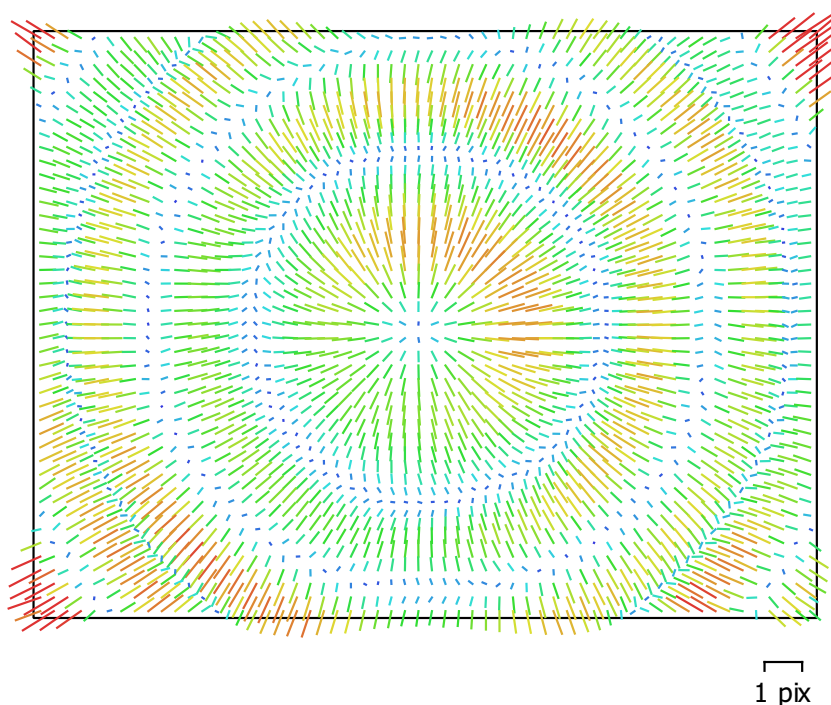


Fig. 2. Image residuals for M3M (12.29mm).

M3M (12.29mm)

2029 images, precalibrated

Type	Resolution	Focal Length	Pixel Size
Frame	5280 x 3956	12.29 mm	3.36 x 3.36 μm

	Value	Error	F	Cx	Cy	K1	K2	K3	P1	P2
F	3720.19	0.0085	1.00	0.00	-0.01	-0.38	0.34	-0.33	0.01	0.00
Cx	3.4133	0.0061		1.00	-0.06	0.02	-0.02	0.02	0.64	-0.02
Cy	-23.7703	0.0053			1.00	-0.00	0.00	-0.01	-0.04	0.45
K1	-0.111515	8.6e-06				1.00	-0.97	0.91	0.02	-0.02
K2	0.00521961	2.2e-05					1.00	-0.98	-0.02	0.01
K3	-0.0189057	1.7e-05						1.00	0.03	-0.02
P1	-0.00028034	3e-07							1.00	0.00
P2	-0.000158279	3e-07								1.00

Table 2. Calibration coefficients and correlation matrix.

Camera Locations

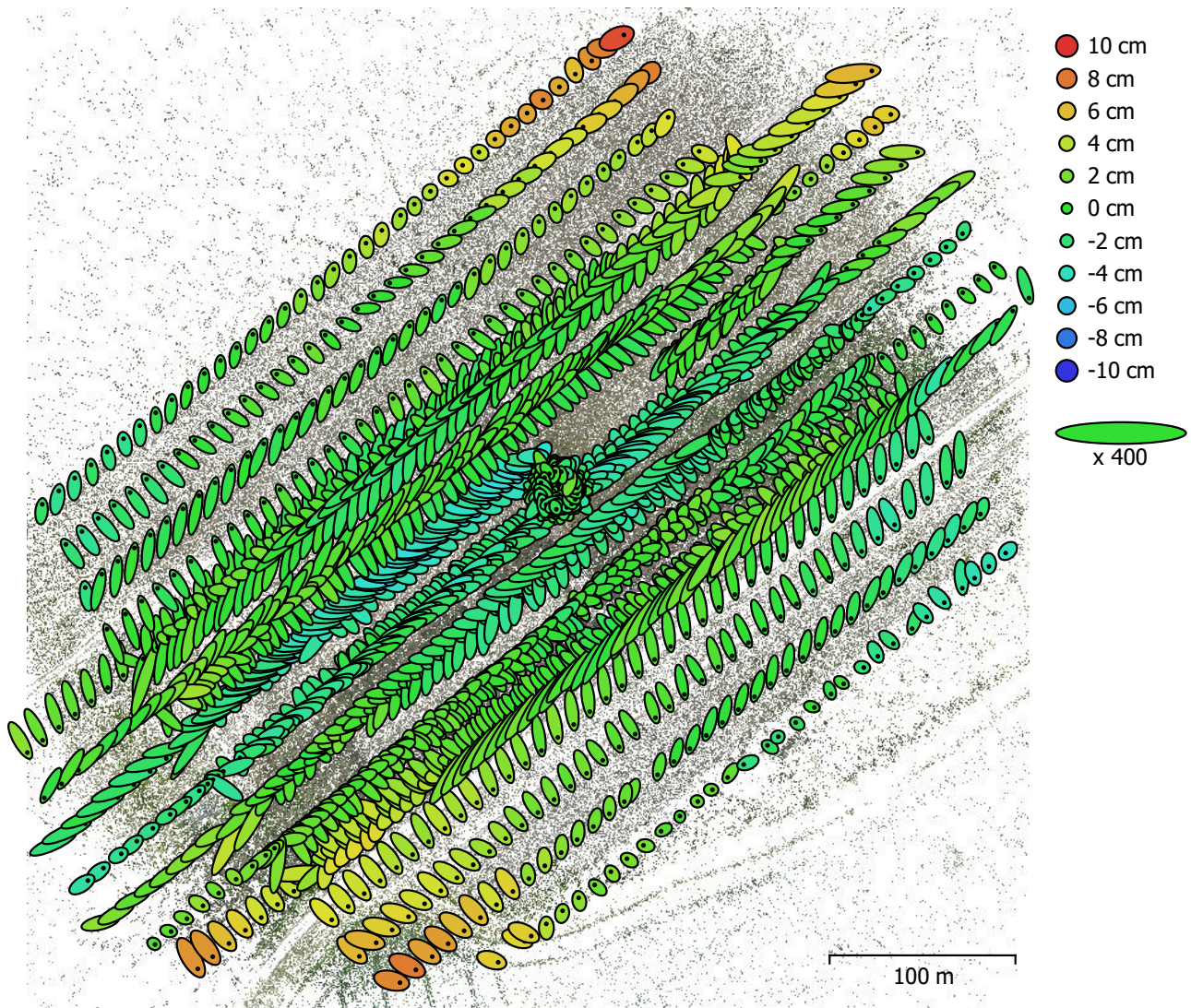


Fig. 3. Camera locations and error estimates.

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 (cm)	Y error (cm)	Z error (cm)	XY error (cm)	Total error (cm)
2.07421	2.17433	2.08166	3.00501	3.65559

Table 3. Average camera location error.

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

Digital Elevation Model

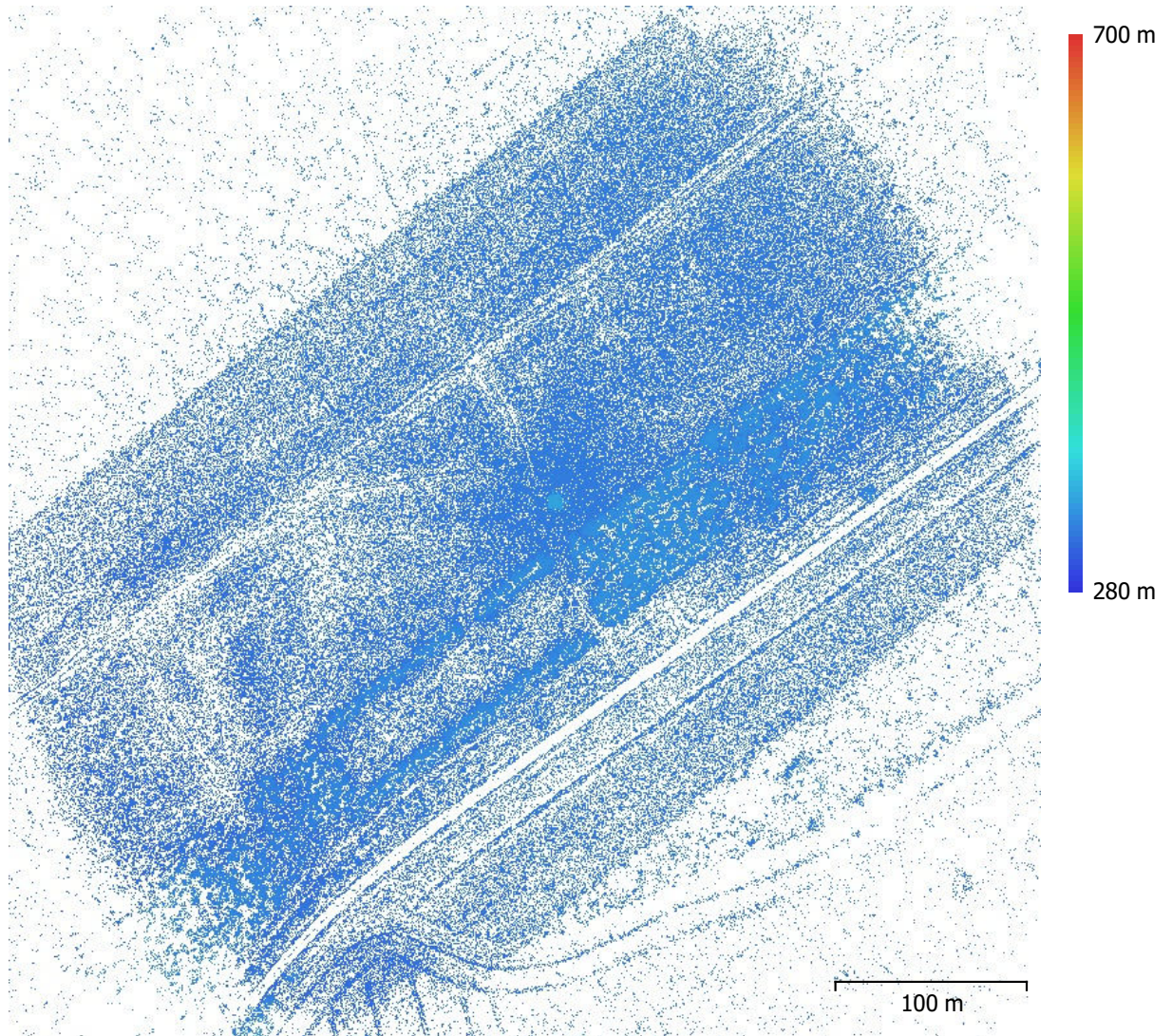


Fig. 4. Reconstructed digital elevation model.

Resolution: unknown

Point density: unknown

Processing Parameters

General

Cameras	2029
Aligned cameras	2029
Coordinate system	WGS 84 (EPSG::4326)
Rotation angles	Yaw, Pitch, Roll

Tie Points

Points	631,675 of 802,580
RMS reprojection error	0.278679 (0.989357 pix)
Max reprojection error	0.838411 (71.7987 pix)
Mean key point size	3.36741 pix
Point colors	3 bands, uint8
Key points	No
Average tie point multiplicity	11.1713

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	23 minutes 31 seconds
Matching memory usage	15.22 GB
Alignment time	52 minutes 40 seconds
Alignment memory usage	4.94 GB
Date created	2024:05:03 20:53:07
Software version	2.1.1.17570
File size	153.83 MB