Agisoft Metashape

Processing Report
24 November 2025

# Survey Data
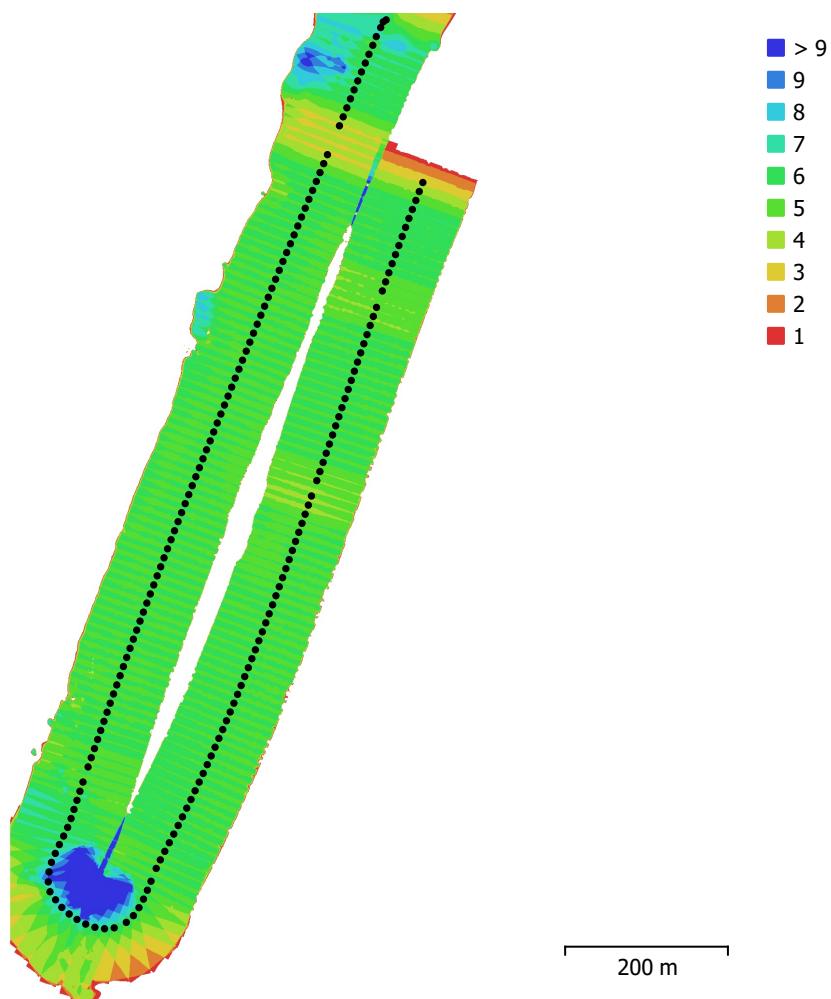
Fig. 1. Camera locations and image overlap.

Number of images:	186	Camera stations:	186
Flying altitude:	117 m	Tie points:	202,059
Ground resolution:	4.96 cm/pix	Projections:	643,299
Coverage area:	0.281 km²	Reprojection error:	2.58 pix

Camera Model	Resolution	Focal Length	Pixel Size	Precalibrated
FC8282 (6.72mm)	4032 x 2268	6.72 mm	2.62 x 2.62 µm	No

Table 1. Cameras.

Camera Calibration

1 pix
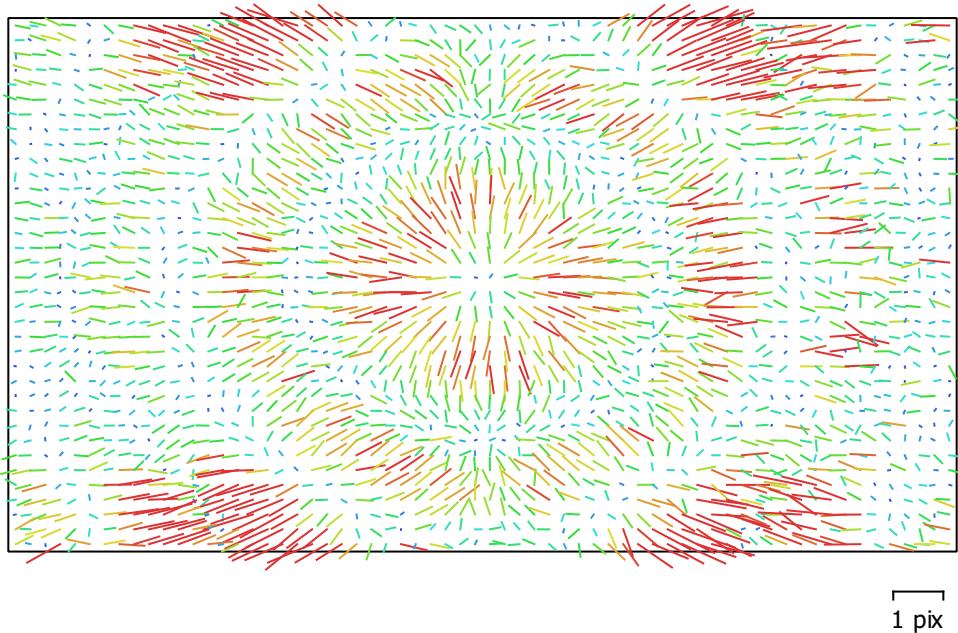
Fig. 2. Image residuals for FC8282 (6.72mm).

FC8282 (6.72mm)

186 images

Type	Resolution	Focal Length	Pixel Size
Frame	**4032 x 2268**	**6.72 mm**	**2.62 x 2.62 µm**

	Value	Error	F	Cx	Cy	K1	K2	K3	P1	P2
F	**3056.69**	31	1.00	0.00	0.17	1.00	-1.00	1.00	0.37	0.10
Cx	**33.6759**	0.61		1.00	0.02	-0.00	0.01	-0.01	0.30	0.04
Cy	**-18.7884**	0.44			1.00	0.17	-0.17	0.17	0.01	0.33
K1	**0.113638**	0.0023				1.00	-1.00	1.00	0.37	0.10
K2	**-0.194432**	0.008					1.00	-1.00	-0.37	-0.10
K3	**0.131973**	0.0081						1.00	0.36	0.10
P1	**0.00102281**	2.8e-05							1.00	0.07
P2	**-5.10398e-05**	3.6e-05								1.00

Table 2. Calibration coefficients and correlation matrix.

Camera Locations
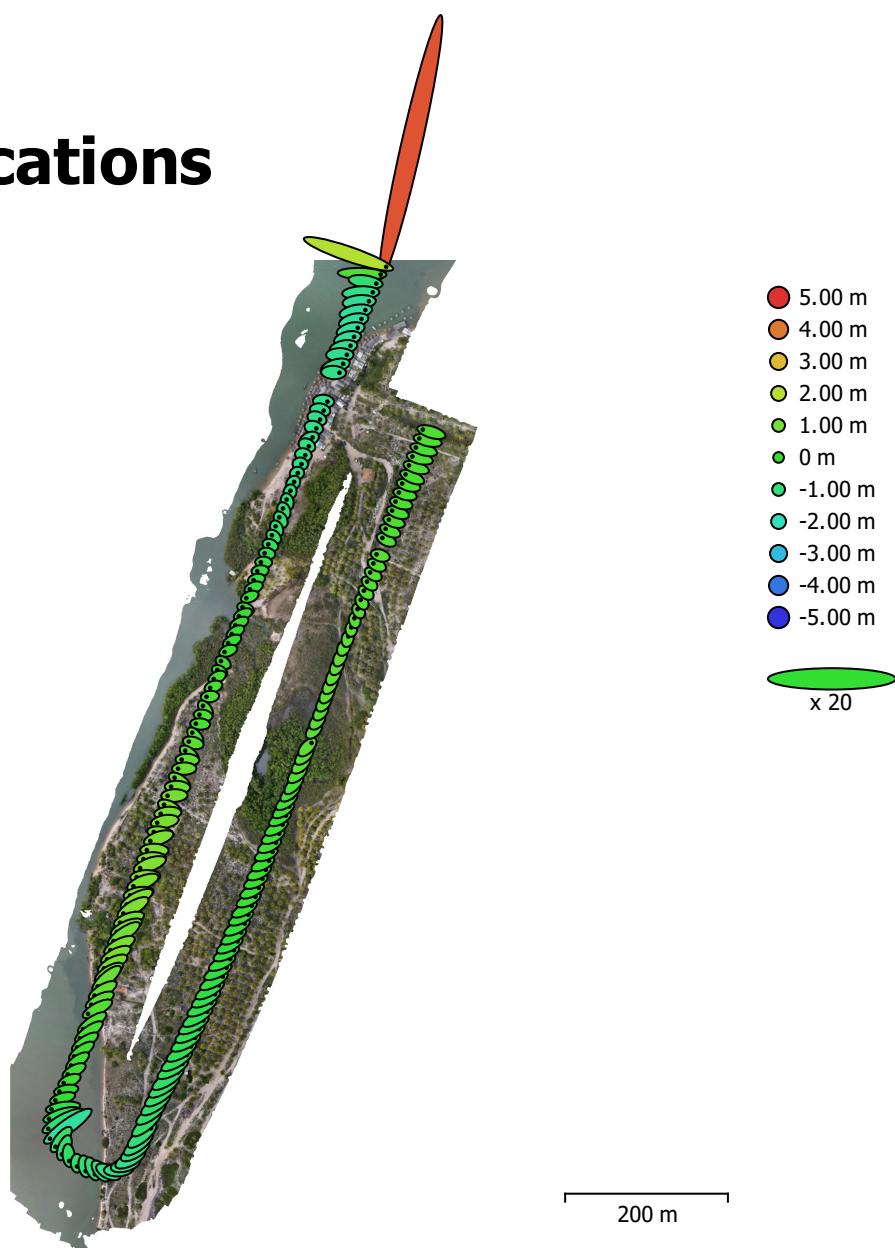
Fig. 3. Camera locations and error estimates.
Z error is represented by ellipse color. X,Y errors are represented by ellipse shape.
Estimated camera locations are marked with a black dot.

X error (m)	Y error (m)	Z error (m)	XY error (m)	Total error (m)
0.933964	1.18983	0.823678	1.51261	1.72234

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

Digital Elevation Model
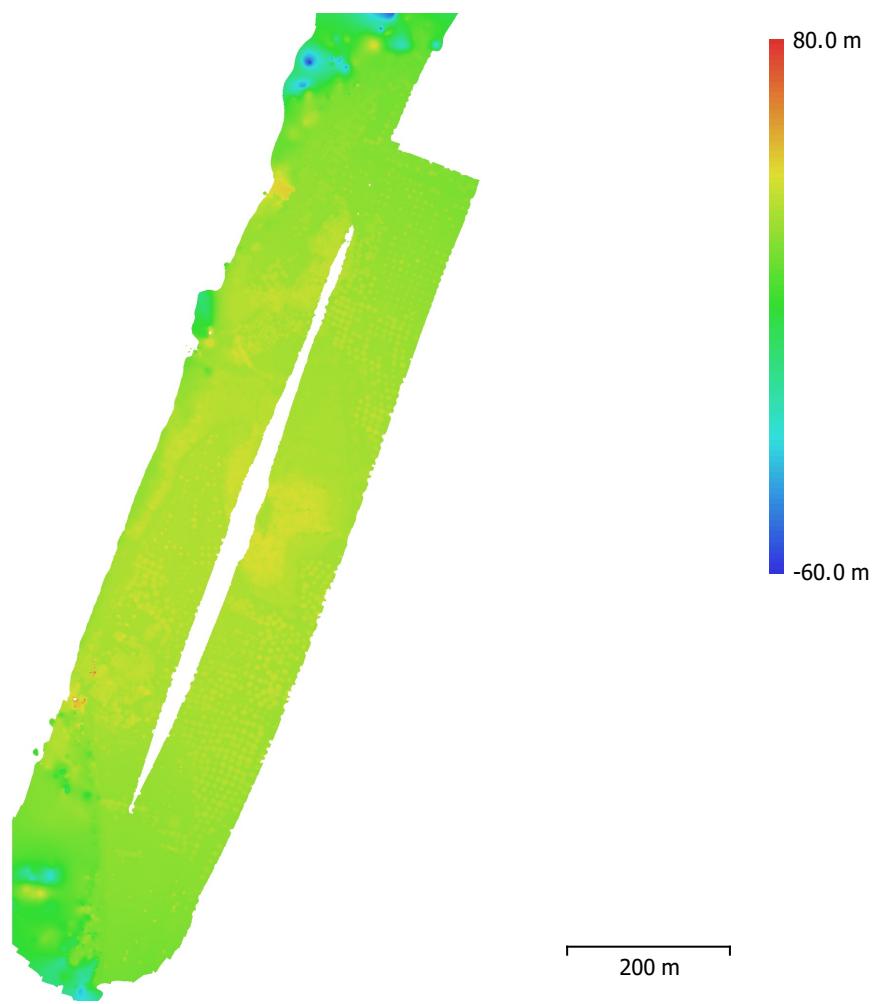
Fig. 4. Reconstructed digital elevation model.

Resolution:	7.27 cm/pix
Point density:	189 points/m²

Processing Parameters

General

Images	186
Aligned images	186
Coordinate system	WGS 84 (EPSG::4326)
Rotation angles	Yaw, Pitch, Roll

Tie Points

Points	202,059 of 204,995
RMS reprojection error	0.323969 (2.58395 pix)
Max reprojection error	6.29627 (131.126 pix)
Mean key point size	7.57401 pix
Point colors	3 bands, uint8
Key points	No
Average tie point multiplicity	3.18557

Alignment parameters

Accuracy	Medium
Generic preselection	Yes
Reference preselection	Sequential
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	Yes
Adaptive camera model fitting	No
Matching time	1 minutes 6 seconds
Matching memory usage	219.26 MB
Alignment time	1 seconds
Alignment memory usage	43.16 MB
Date created	2025:11:23 13:44:27
Software version	2.2.1.20149
File size	15.20 MB

Depth Maps

Count	206

Depth maps generation parameters

Quality	High
Filtering mode	Mild
Max neighbors	16
Processing time	6 minutes 4 seconds
Memory usage	1.74 GB
Date created	2025:11:23 13:26:10
Software version	2.2.1.20149
File size	571.10 MB

Point Cloud

Points	40,237,953
Coordinate precision	2.48 cm

Point attributes

Color	3 bands, uint8
Normal	

Point classes

Created (never classified)	40,237,953

Depth maps generation parameters

Quality	High
Filtering mode	Mild
Max neighbors	16
Processing time	6 minutes 4 seconds
Memory usage	1.74 GB

Point cloud generation parameters

Source data	Depth maps
Processing time	6 minutes 48 seconds
Memory usage	2.85 GB
Date created	2025:11:23 13:59:16
Software version	2.2.1.20149
File size	537.03 MB

DEM

Size	8,033 x 16,689
Resolution	7.27 cm/pix
Coordinate system	WGS 84 (EPSG::4326)

Reconstruction parameters

Source data	Point cloud
Interpolation	Enabled
Processing time	41 seconds
Memory usage	306.36 MB
Date created	2025:11:23 13:34:49
Software version	2.2.1.20149
File size	293.46 MB

Orthomosaic

Size	16,066 x 33,378
Resolution	3.63 cm/pix
Coordinate system	WGS 84 (EPSG::4326)
Colors	3 bands, uint8
Orthophotos	726.27 MB

Reconstruction parameters

Blending mode	Mosaic
Surface	DEM
Enable hole filling	Yes
Enable ghosting filter	No
Processing time	3 minutes 6 seconds
Memory usage	1.71 GB
Date created	2025:11:23 13:36:33
Software version	2.2.1.20149
File size	1.00 GB

System

Software name	Agisoft Metashape Professional
Software version	2.2.1 build 20149
OS	Windows 64 bit
RAM	63.46 GB
CPU	Intel(R) Core(TM) Ultra 9 185H
GPU(s)	NVIDIA RTX 2000 Ada Generation Laptop GPU