Agisoft Metashape

Processing Report 29 April 2025



Survey Data

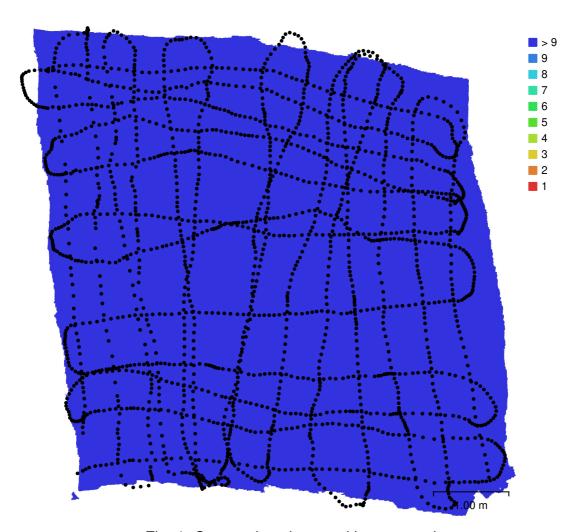


Fig. 1. Camera locations and image overlap.

Number of images: 2,189 2,189 Camera stations: Flying altitude: 72.2 cm Tie points: 716,544 Ground resolution: 0.230 mm/pix Projections: 5,958,646 Coverage area: Reprojection error: 4.11 pix 34.3 m²

Camera Model	Resolution	Focal Length	Pixel Size	Precalibrated
unknown	5312 x 4648	unknown	unknown	No

Table 1. Cameras.

Camera Calibration

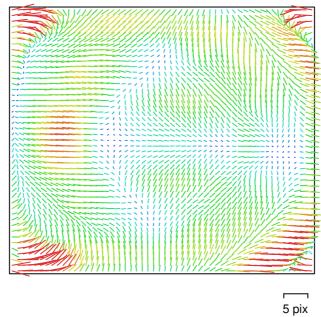


Fig. 2. Image residuals for unknown.

unknown

2189 images

Frame	5312 x 4648	unknown	unknown
Type	Resolution	Focal Length	Pixel Size

	Value	Error	F	Сх	Су	K1	K2	КЗ	P1	P2
F	3135.18	0.094	1.00	-0.26	0.49	-0.12	0.31	-0.12	-0.16	0.11
Сх	-28.8054	0.022		1.00	-0.13	0.04	-0.09	0.08	0.71	-0.03
Су	-2.328	0.023			1.00	-0.00	0.10	-0.02	-0.06	0.64
K1	-0.104265	3.3e-05				1.00	-0.91	0.88	-0.05	0.09
K2	0.105961	6.9e-05					1.00	-0.96	-0.06	0.03
КЗ	-0.00771565	4.3e-05						1.00	0.04	0.00
P1	-0.00515327	2.4e-06							1.00	-0.09
P2	-0.00096305	2.5e-06								1.00

Table 2. Calibration coefficients and correlation matrix.

Scale Bars

Label	Distance (m)	Error (m)
point 1_point 2	5.22455	0.22455
point 2_point 3	4.89235	-0.107652
point 3_point 4	4.78453	-0.215466
point 1_point 4	5.07585	0.0758484
point 5_point 6	0.199907	-9.25973e-05
point 7_point 8	0.12634	-0.00366022
Total		0.137964

Table 3. Control scale bars.

Digital Elevation Model

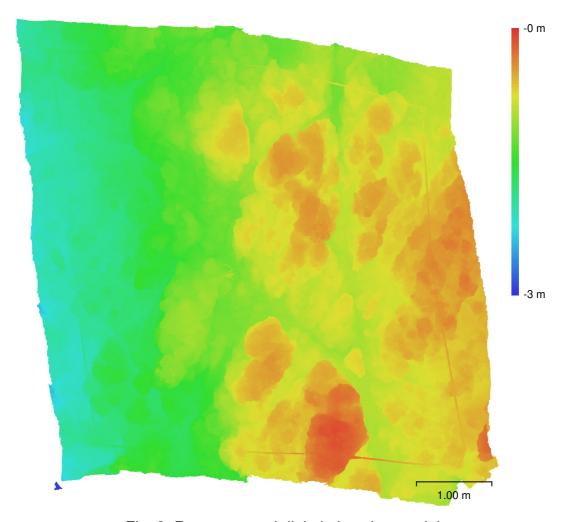


Fig. 3. Reconstructed digital elevation model.

Resolution: unknown Point density: unknown

Processing Parameters

General					
Images	2189				
Aligned images	2189				
Markers	8				
Scale bars	6				
Coordinate system	Local Coordinates (m)				
Rotation angles	Yaw, Pitch, Roll				
Tie Points					
Points	716,544 of 1,007,231				
RMS reprojection error	0.483321 (4.11372 pix)				
Max reprojection error	1.47233 (107.646 pix)				
Mean key point size	8.45693 pix				
Point colors	3 bands, uint8				
Key points	No				
Average tie point multiplicity	10.0065				
Alignment parameters					
Accuracy	Medium				
Generic preselection	Yes				
Reference preselection	No				
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	40 minutes 2 seconds				
Matching memory usage	3.18 GB				
Alignment time	57 minutes 31 seconds				
Alignment memory usage	1.64 GB				
Date created	2025:04:09 10:02:20				
Software version 2.2.0.19890					
File size	173.36 MB				
Depth Maps					
Count	2189				
Depth maps generation parameters					
Quality	Medium				
Filtering mode	Mild				
Max neighbors	16				
Processing time	45 minutes 41 seconds				
Memory usage	2.14 GB				
Date created	2025:04:09 11:48:41				
Software version	2.2.0.19890				
File size	5.70 GB				
Point Cloud					
Points	107,250,477				
Coordinate precision	0.241 mm				
Point attributes					
Color	3 bands, uint8				
Normal					
Confidence	1 - 102				

Point classes

Created (never classified) 107,250,477

Depth maps generation parameters

QualityMediumFiltering modeMildMax neighbors16

Processing time 45 minutes 41 seconds

Memory usage 2.14 GB

Point cloud generation parameters

Source data Depth maps
Processing time 8 hours 22 minutes

Memory usage 17.85 GB

Date created 2025:04:09 20:12:11

Software version 2.2.0.19890 File size 1.79 GB

Model

 Faces
 18,051,392

 Vertices
 9,092,349

 Vertex colors
 3 bands, uint8

Depth maps generation parameters

QualityMediumFiltering modeMildMax neighbors16

Processing time 45 minutes 41 seconds

Memory usage 2.14 GB

Point cloud generation parameters

Source data Depth maps
Processing time 8 hours 22 minutes

Memory usage 17.85 GB

Reconstruction parameters

Surface type Arbitrary
Source data Point cloud
Interpolation Enabled
Strict volumetric masks No

Processing time 1 hours 0 minutes

Memory usage 14.03 GB

Date created 2025:04:12 12:07:14 Software version 2.2.0.19890

File size 388.55 MB

DEM

 Size
 7,018 x 7,136

 Resolution
 0.966 mm/pix

Coordinate system Local Coordinates (m)

Reconstruction parameters

Source data Point cloud Interpolation Enabled

Processing time 1 minutes 24 seconds

Memory usage 324.55 MB

Date created 2025:04:23 10:17:27

Software version 2.2.0.19890 File size 164.65 MB

Orthomosaic

 Size
 13,558 x 13,786

 Resolution
 0.500 mm/pix

Coordinate system Local Coordinates (m)

Colors 3 bands, uint8

Orthophotos 2.90 GB

Reconstruction parameters

Blending mode Mosaic
Surface DEM
Enable hole filling Yes
Enable ghosting filter No

Processing time 41 minutes 33 seconds

Memory usage 1.41 GB

Date created 2025:04:23 10:52:05

Software version 2.2.0.19890 File size 3.05 GB

System

Software name Agisoft Metashape Professional

Software version 2.2.0 build 19890 OS Linux 64 bit RAM 251.28 GB

CPU Intel(R) Xeon(R) W-2223 CPU @ 3.60GHz

GPU(s) NVIDIA RTX A5000