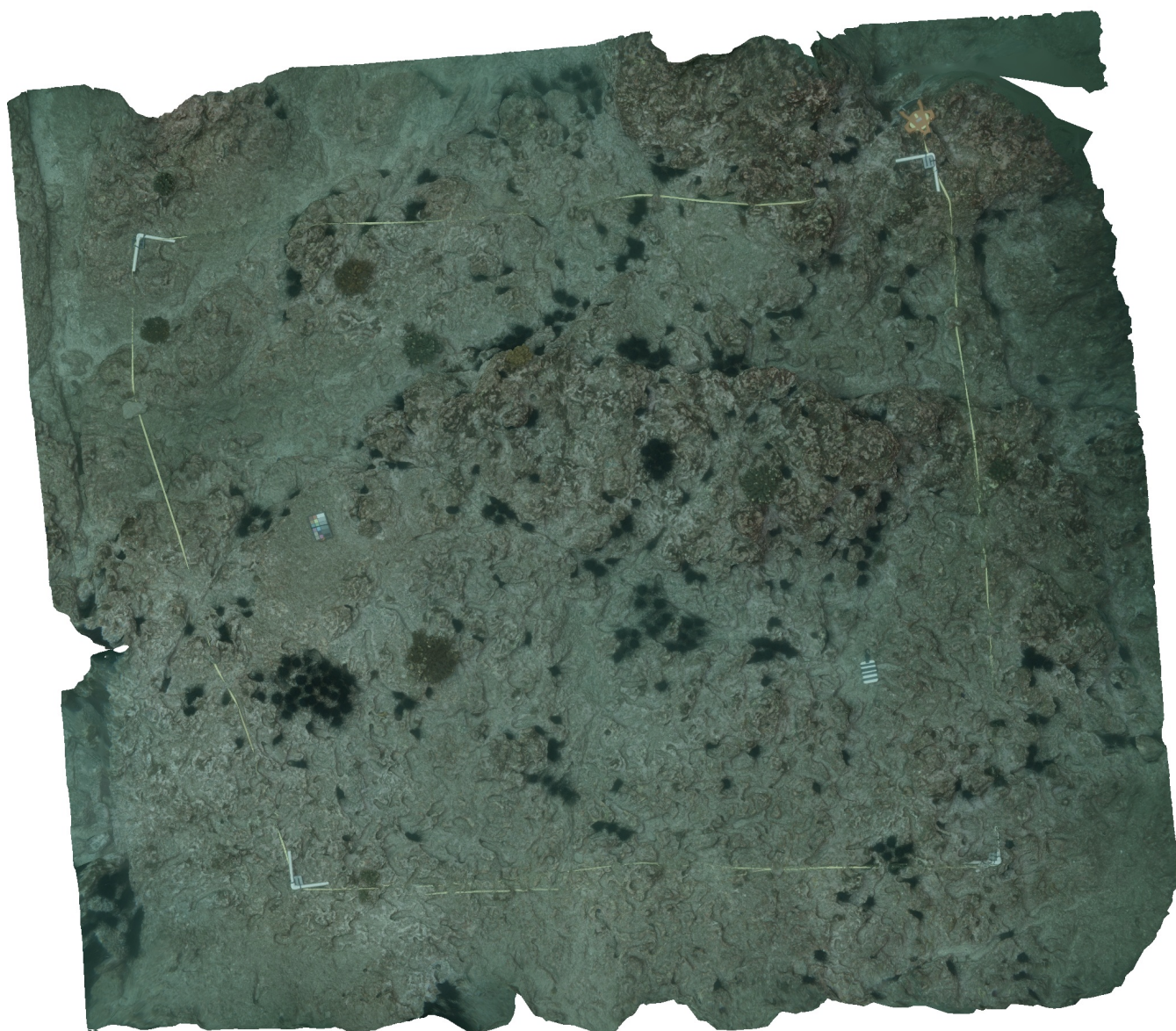


# Agisoft Metashape

Processing Report

04 May 2025



# Survey Data

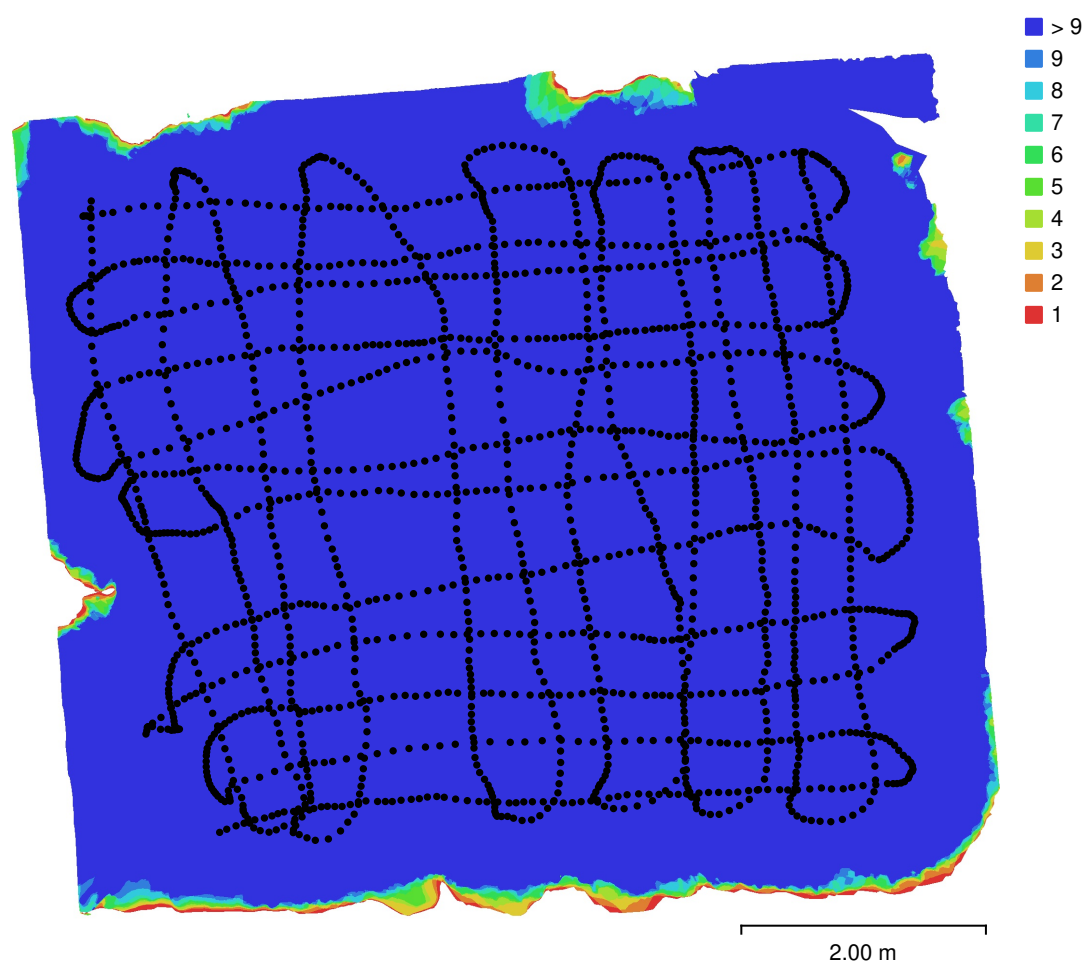


Fig. 1. Camera locations and image overlap.

Number of images:	1,981	Camera stations:	1,981
Flying altitude:	77.7 cm	Tie points:	397,037
Ground resolution:	0.245 mm/pix	Projections:	5,756,538
Coverage area:	49.7 m <sup>2</sup>	Reprojection error:	4.89 pix

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

Table 1. Cameras.

# Camera Calibration

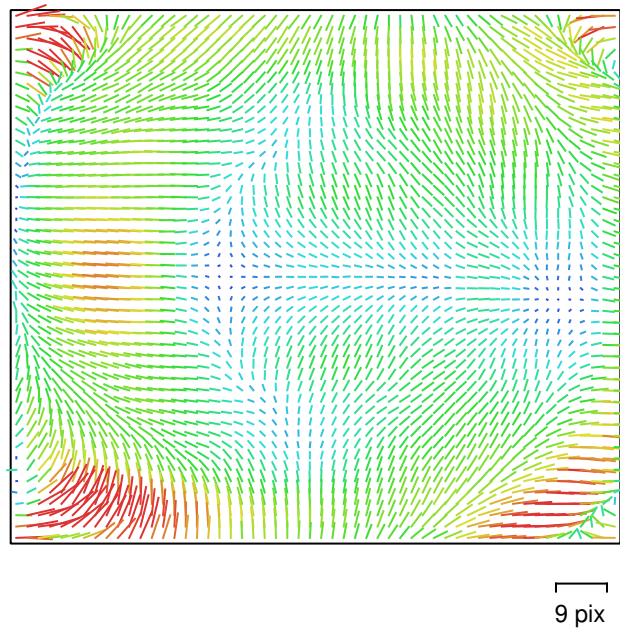


Fig. 2. Image residuals for unknown.

**unknown**

1981 images

Type

Resolution

Focal Length

Pixel Size

**Frame**

**5312 x 4648**

**unknown**

**unknown**

	Value	Error	F	Cx	Cy	K1	K2	K3	P1	P2
<b>F</b>	<b>3170.47</b>	0.12	1.00	0.31	0.48	-0.14	0.28	-0.02	-0.03	0.03
<b>Cx</b>	<b>-32.8853</b>	0.024		1.00	0.15	0.01	0.00	0.10	0.57	-0.02
<b>Cy</b>	<b>6.21076</b>	0.025			1.00	-0.04	0.09	0.01	0.00	0.52
<b>K1</b>	<b>-0.0981506</b>	3.7e-05				1.00	-0.92	0.89	0.08	0.11
<b>K2</b>	<b>0.103385</b>	7.6e-05					1.00	-0.95	-0.05	-0.00
<b>K3</b>	<b>-0.00102344</b>	4.9e-05						1.00	0.08	0.03
<b>P1</b>	<b>-0.00534184</b>	2.6e-06							1.00	0.07
<b>P2</b>	<b>-0.000625026</b>	2.6e-06								1.00

Table 2. Calibration coefficients and correlation matrix.

# Scale Bars

Label	Distance (m)	Error (m)
point 1_point 2	4.90592	-0.0940786
point 2_point 3	4.86915	-0.130849
point 3_point 4	4.66395	-0.336049
point 1_point 4	5.48593	0.485931
point 5_point 6	0.202632	0.00263206
point 7_point 8	0.130943	0.00094316
<b>Total</b>		<b>0.250013</b>

Table 3. Control scale bars.



# Digital Elevation Model

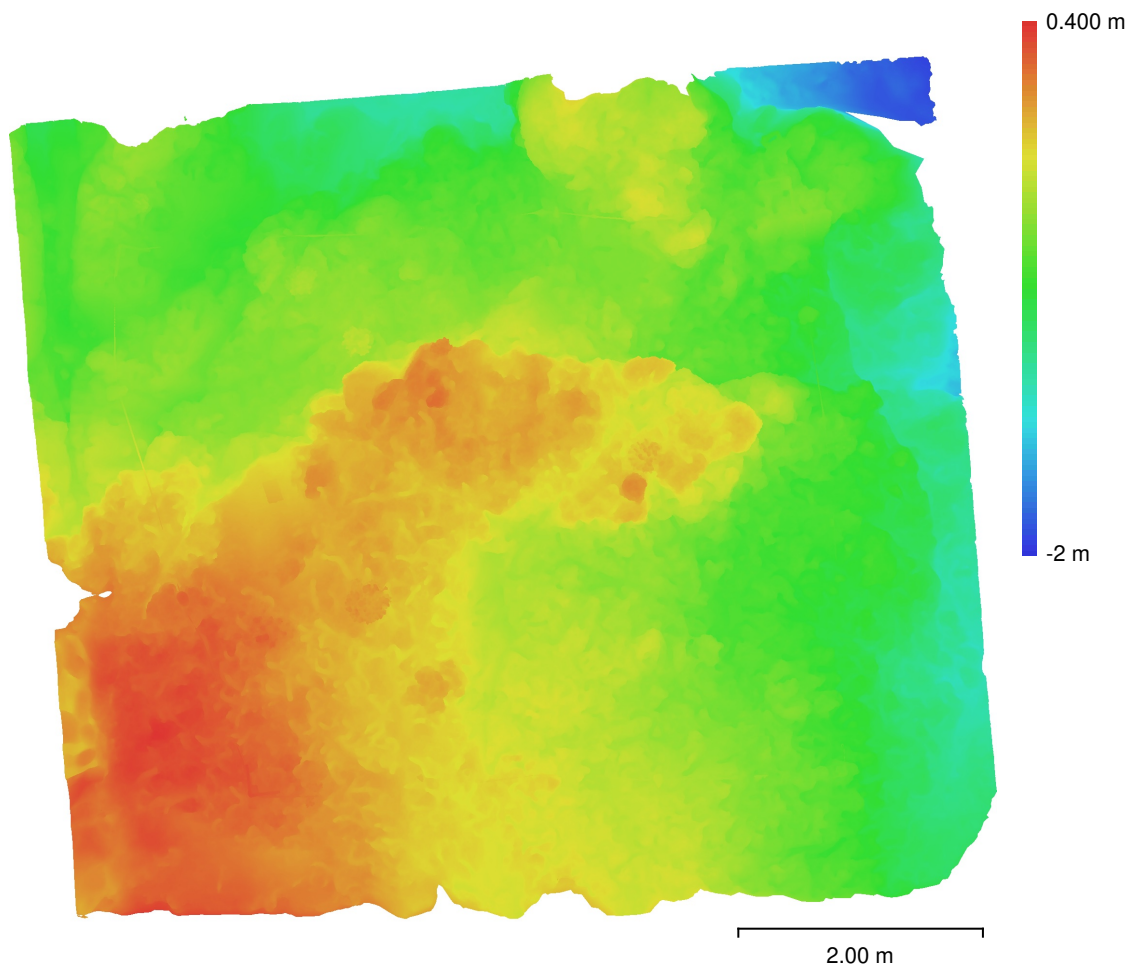


Fig. 3. Reconstructed digital elevation model.

Resolution: unknown  
Point density: unknown

# Processing Parameters

## General

Images	1981
Aligned images	1981
Markers	8
Scale bars	6
Coordinate system	Local Coordinates (m)
Rotation angles	Yaw, Pitch, Roll

## Tie Points

Points	397,037 of 649,344
RMS reprojection error	0.594159 (4.89161 pix)
Max reprojection error	1.81799 (149.035 pix)
Mean key point size	8.54634 pix
Point colors	3 bands, uint8
Key points	6.36 GB
Average tie point multiplicity	16.6921

## 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	34 minutes 52 seconds
Matching memory usage	4.86 GB
Alignment time	1 hours 27 minutes
Alignment memory usage	1.36 GB
Date created	2025:04:22 12:23:22
Software version	2.2.0.19890
File size	6.57 GB

## Depth Maps

Count	1981
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## Depth maps generation parameters

Quality	Medium
Filtering mode	Mild
Max neighbors	16
Processing time	42 minutes 51 seconds
Memory usage	2.18 GB
Date created	2025:04:22 14:50:21
Software version	2.2.0.19890
File size	5.19 GB

## Point Cloud

Points	95,971,963
Coordinate precision	0.248 mm

## Point attributes

Color	3 bands, uint8
Normal	
Confidence	1 - 95

<b>Point classes</b>	
Created (never classified)	95,971,963
<b>Depth maps generation parameters</b>	
Quality	Medium
Filtering mode	Mild
Max neighbors	16
Processing time	42 minutes 51 seconds
Memory usage	2.18 GB
<b>Point cloud generation parameters</b>	
Source data	Depth maps
Processing time	8 hours 23 minutes
Memory usage	7.02 GB
Date created	2025:04:22 23:14:35
Software version	2.2.0.19890
File size	1.34 GB
<b>Model</b>	
Faces	5,445,612
Vertices	2,725,757
Vertex colors	3 bands, uint8
Texture	8,192 x 8,192, 3 bands, uint8
<b>Depth maps generation parameters</b>	
Quality	Medium
Filtering mode	Mild
Max neighbors	16
Processing time	42 minutes 51 seconds
Memory usage	2.18 GB
<b>Reconstruction parameters</b>	
Surface type	Arbitrary
Source data	Depth maps
Interpolation	Enabled
Strict volumetric masks	No
Processing time	30 minutes 6 seconds
Memory usage	7.29 GB
<b>Texturing parameters</b>	
Mapping mode	Generic
Blending mode	Mosaic
Texture size	8,192
Page count	1
Enable hole filling	Yes
Enable ghosting filter	Yes
UV mapping time	3 minutes 42 seconds
UV mapping memory usage	1.87 GB
Blending time	14 minutes 26 seconds
Blending memory usage	3.90 GB
Blending GPU memory usage	2.43 GB
Date created	2025:04:29 15:40:44
Software version	2.2.0.19890
File size	330.39 MB
<b>DEM</b>	
Size	8,146 x 7,131
Resolution	0.990 mm/pix
Coordinate system	Local Coordinates (m)
<b>Reconstruction parameters</b>	
Source data	Point cloud
Interpolation	Enabled
Processing time	43 seconds

Memory usage	307.20 MB
Date created	2025:04:23 08:06:12
Software version	2.2.0.19890
File size	171.88 MB
<b>Orthomosaic</b>	
Size	16,135 x 14,125
Resolution	0.500 mm/pix
Coordinate system	Local Coordinates (m)
Colors	3 bands, uint8
Orthophotos	3.16 GB
<b>Reconstruction parameters</b>	
Blending mode	Mosaic
Surface	DEM
Enable hole filling	Yes
Enable ghosting filter	No
Processing time	23 minutes 55 seconds
Memory usage	1.16 GB
Date created	2025:04:23 08:33:41
Software version	2.2.0.19890
File size	3.33 GB
<b>System</b>	
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