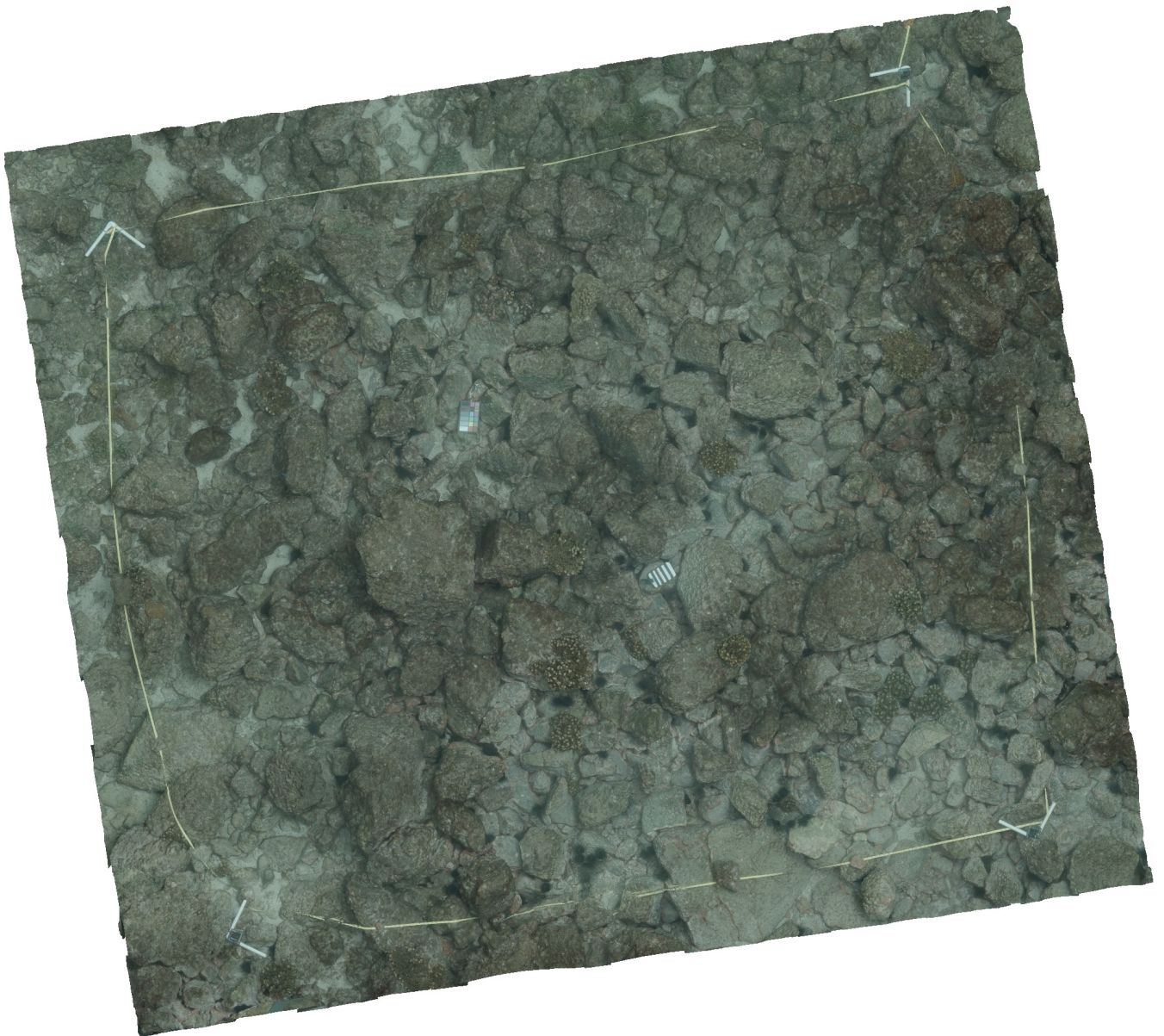


# Agisoft Metashape

Processing Report

29 April 2025



# Survey Data

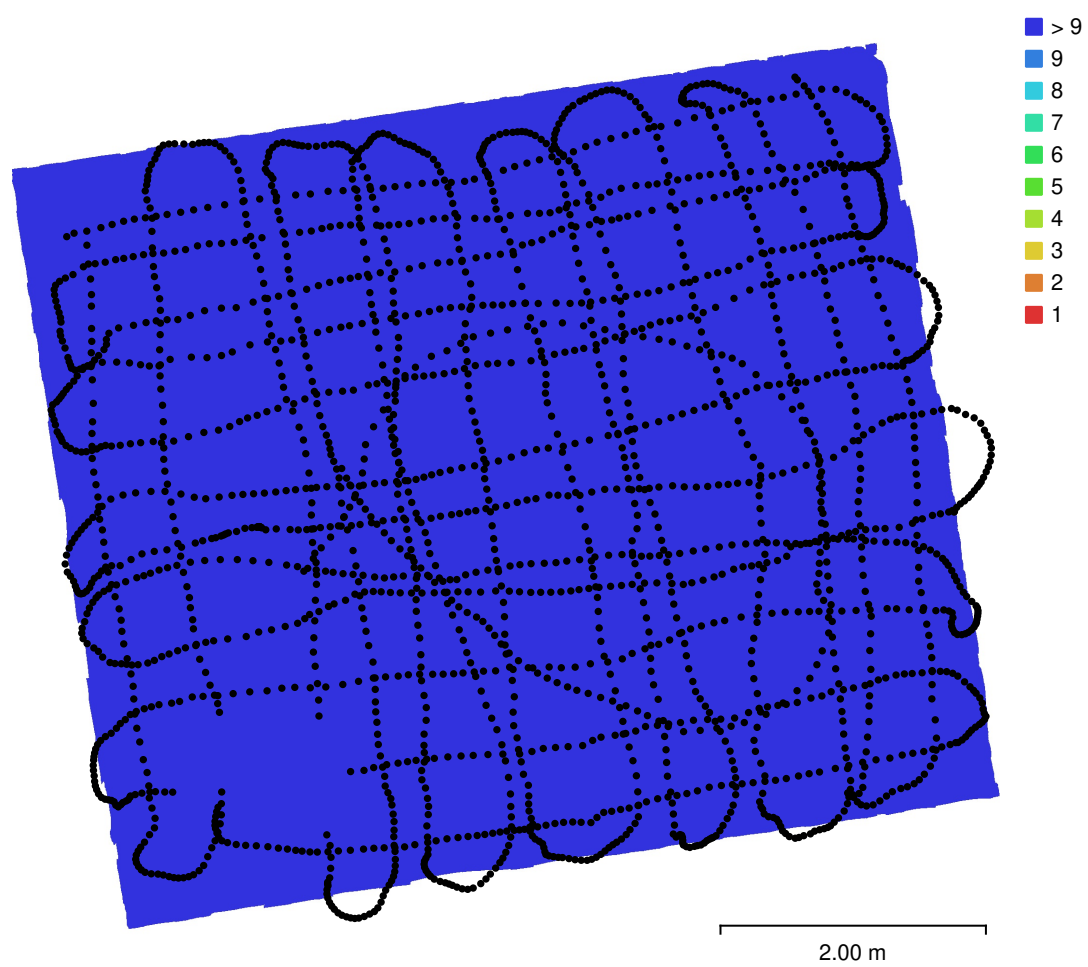


Fig. 1. Camera locations and image overlap.

Number of images:	2,380	Camera stations:	2,319
Flying altitude:	80.6 cm	Tie points:	558,552
Ground resolution:	0.257 mm/pix	Projections:	6,696,299
Coverage area:	38.2 m <sup>2</sup>	Reprojection error:	4.63 pix

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

Table 1. Cameras.

# Camera Calibration

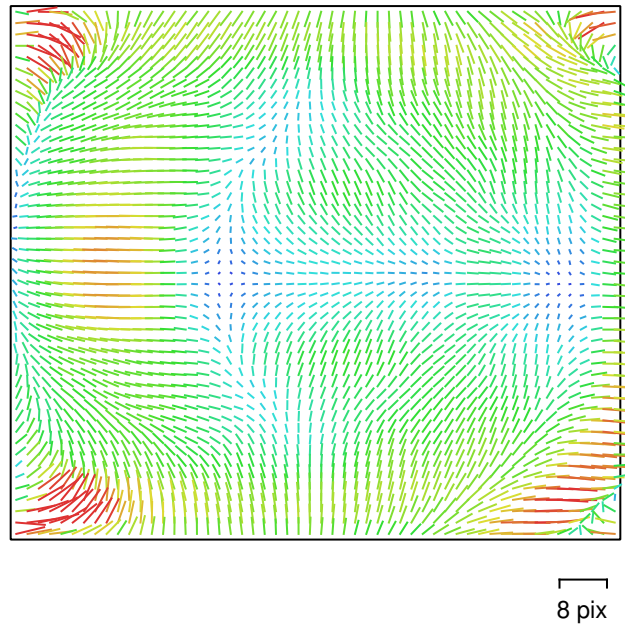


Fig. 2. Image residuals for unknown.

**unknown**

2380 images

Type	Resolution	Focal Length	Pixel Size
<b>Frame</b>	<b>5312 x 4648</b>	<b>unknown</b>	<b>unknown</b>

	Value	Error	F	Cx	Cy	K1	K2	K3	P1	P2
<b>F</b>	<b>3141.1</b>	0.066	1.00	0.17	-0.03	-0.18	0.27	-0.11	-0.01	-0.04
<b>Cx</b>	<b>-29.8504</b>	0.02		1.00	-0.01	0.05	-0.05	0.11	0.72	-0.00
<b>Cy</b>	<b>-5.82328</b>	0.019			1.00	-0.00	-0.01	0.00	-0.00	0.73
<b>K1</b>	<b>-0.0966465</b>	3.3e-05				1.00	-0.95	0.90	0.05	-0.00
<b>K2</b>	<b>0.0976963</b>	6.8e-05					1.00	-0.97	-0.05	-0.01
<b>K3</b>	<b>-0.000125248</b>	4.4e-05						1.00	0.07	-0.00
<b>P1</b>	<b>-0.0049545</b>	2.3e-06							1.00	0.01
<b>P2</b>	<b>-0.00040512</b>	2.2e-06								1.00

Table 2. Calibration coefficients and correlation matrix.

# Scale Bars

Label	Distance (m)	Error (m)
point 2_point 3	4.86641	-0.133588
point 3_point 4	5.22278	0.222777
point 4_point 5	4.53187	-0.468133
point 2_point 5	5.30173	0.301728
point 9_point 10	0.204486	0.00448563
point 6_point 11	0.173276	0.0432758
<b>Total</b>		<b>0.251514</b>

Table 3. Control scale bars.

# Digital Elevation Model

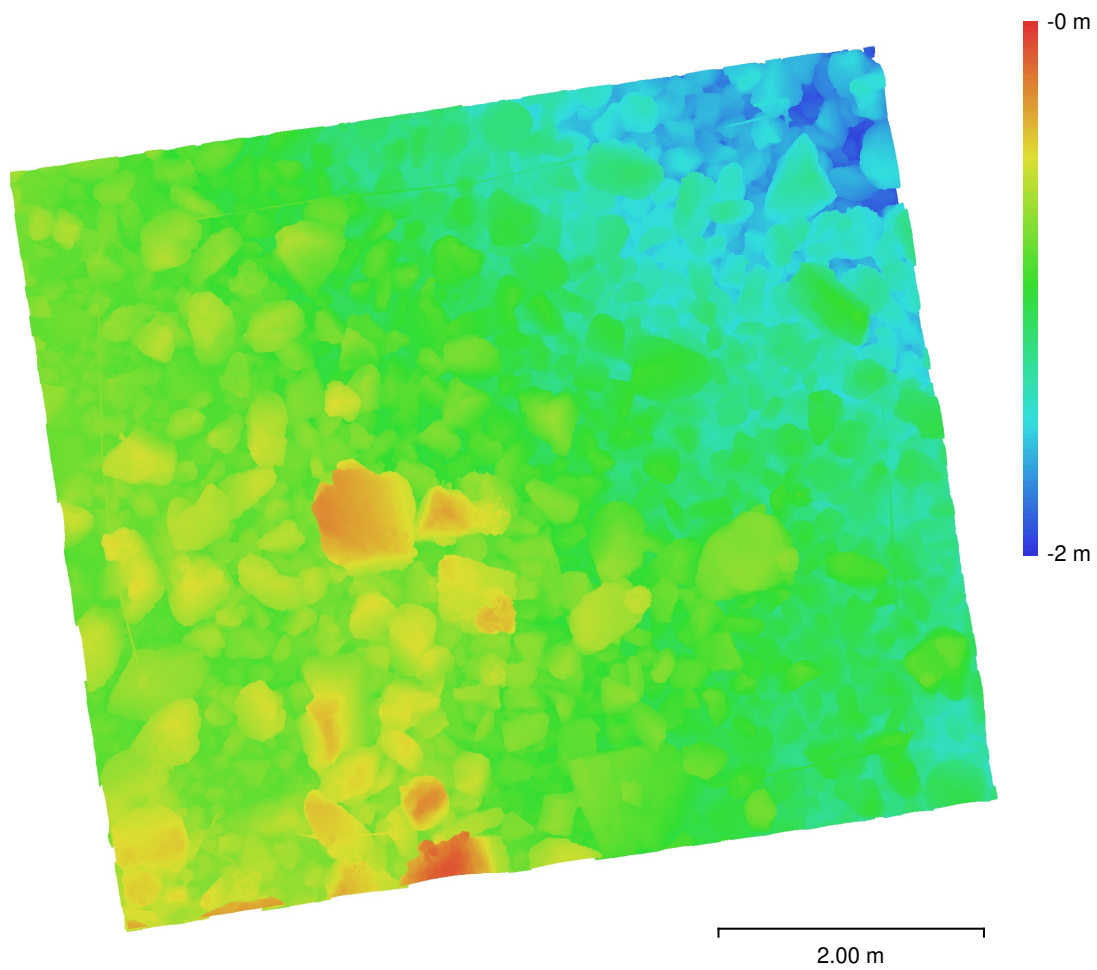


Fig. 3. Reconstructed digital elevation model.

Resolution: unknown

Point density: unknown



# Processing Parameters

## General

Images	2380
Aligned images	2319
Markers	8
Scale bars	6
Coordinate system	Local Coordinates (m)
Rotation angles	Yaw, Pitch, Roll

## Tie Points

Points	558,552 of 873,896
RMS reprojection error	0.602612 (4.62795 pix)
Max reprojection error	1.82854 (132.149 pix)
Mean key point size	7.91543 pix
Point colors	3 bands, uint8
Key points	7.64 GB
Average tie point multiplicity	13.5303

## 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 52 seconds
Matching memory usage	2.90 GB
Alignment time	1 hours 31 minutes
Alignment memory usage	2.22 GB
Date created	2025:04:20 14:57:36
Software version	2.2.0.19890
File size	7.88 GB

## Depth Maps

Count	2319
-------	------

## Depth maps generation parameters

Quality	Medium
Filtering mode	Mild
Max neighbors	16
Processing time	50 minutes 55 seconds
Memory usage	1.95 GB
Date created	2025:04:21 09:15:58
Software version	2.2.0.19890
File size	6.06 GB

## Point Cloud

Points	108,471,004
Coordinate precision	0.261 mm

## Point attributes

Color	3 bands, uint8
Normal	
Confidence	1 - 90

<b>Point classes</b>	
Created (never classified)	108,471,004
<b>Depth maps generation parameters</b>	
Quality	Medium
Filtering mode	Mild
Max neighbors	16
Processing time	50 minutes 55 seconds
Memory usage	1.95 GB
<b>Point cloud generation parameters</b>	
Source data	Depth maps
Processing time	9 hours 12 minutes
Memory usage	14.87 GB
Date created	2025:04:21 18:29:12
Software version	2.2.0.19890
File size	1.52 GB
<b>Model</b>	
Faces	5,396,474
Vertices	2,707,251
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	50 minutes 55 seconds
Memory usage	1.95 GB
<b>Reconstruction parameters</b>	
Surface type	Arbitrary
Source data	Depth maps
Interpolation	Enabled
Strict volumetric masks	No
Processing time	42 minutes 34 seconds
Memory usage	10.14 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	4 minutes 49 seconds
UV mapping memory usage	1.87 GB
Blending time	28 minutes 46 seconds
Blending memory usage	5.98 GB
Blending GPU memory usage	2.43 GB
Date created	2025:04:29 13:16:45
Software version	2.2.0.19890
File size	328.94 MB
<b>DEM</b>	
Size	7,137 x 6,399
Resolution	1.04 mm/pix
Coordinate system	Local Coordinates (m)
<b>Reconstruction parameters</b>	
Source data	Point cloud
Interpolation	Enabled
Processing time	37 seconds

Memory usage	307.27 MB
Date created	2025:04:22 08:04:14
Software version	2.2.0.19890
File size	118.68 MB
<b>Orthomosaic</b>	
Size	14,874 x 13,336
Resolution	0.500 mm/pix
Coordinate system	Local Coordinates (m)
Colors	3 bands, uint8
Orthophotos	3.80 GB
<b>Reconstruction parameters</b>	
Blending mode	Mosaic
Surface	DEM
Enable hole filling	Yes
Enable ghosting filter	No
Processing time	30 minutes 51 seconds
Memory usage	2.13 GB
Date created	2025:04:22 08:30:41
Software version	2.2.0.19890
File size	3.95 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