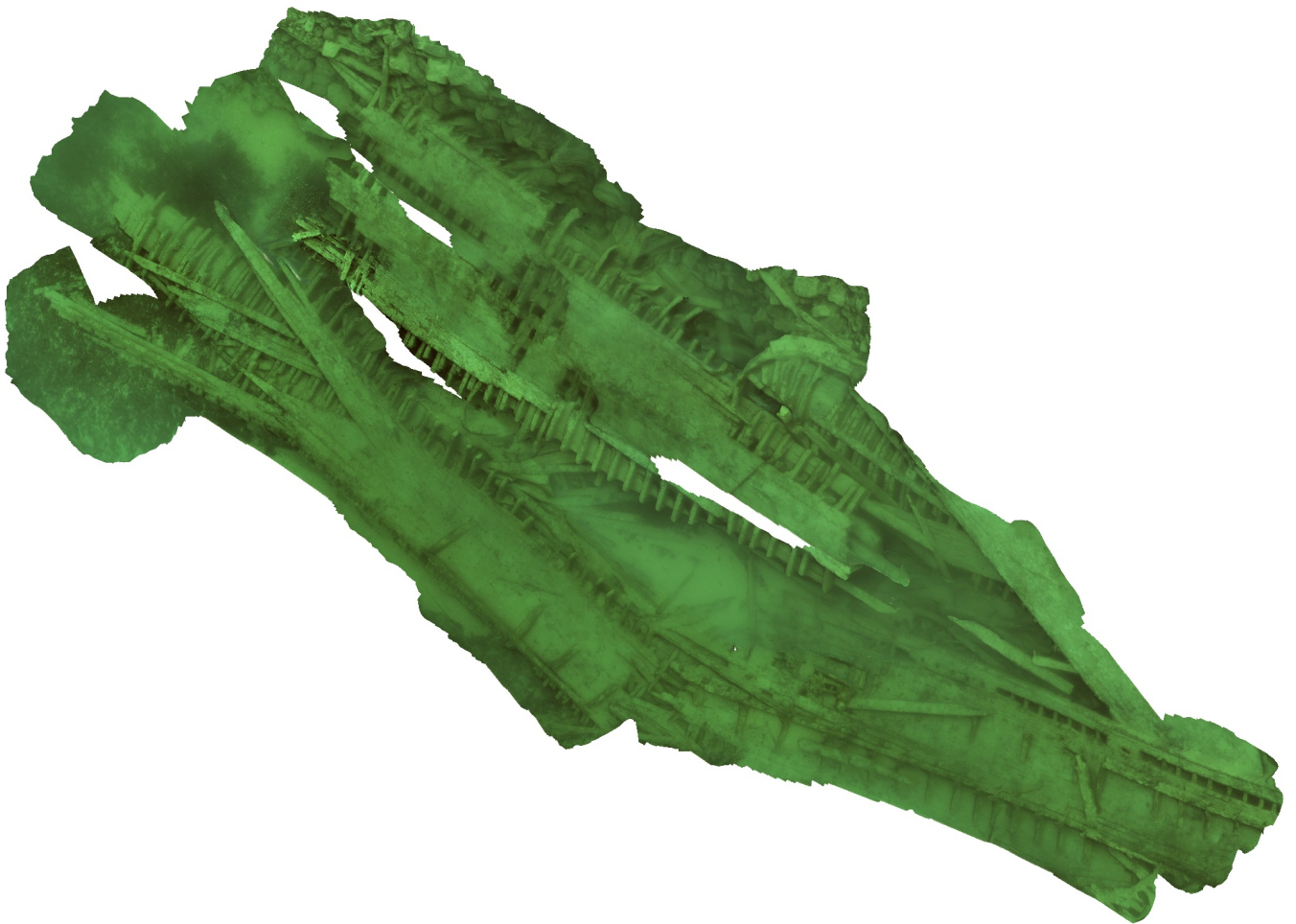


Agisoft Metashape

Processing Report

15 April 2021



Survey Data

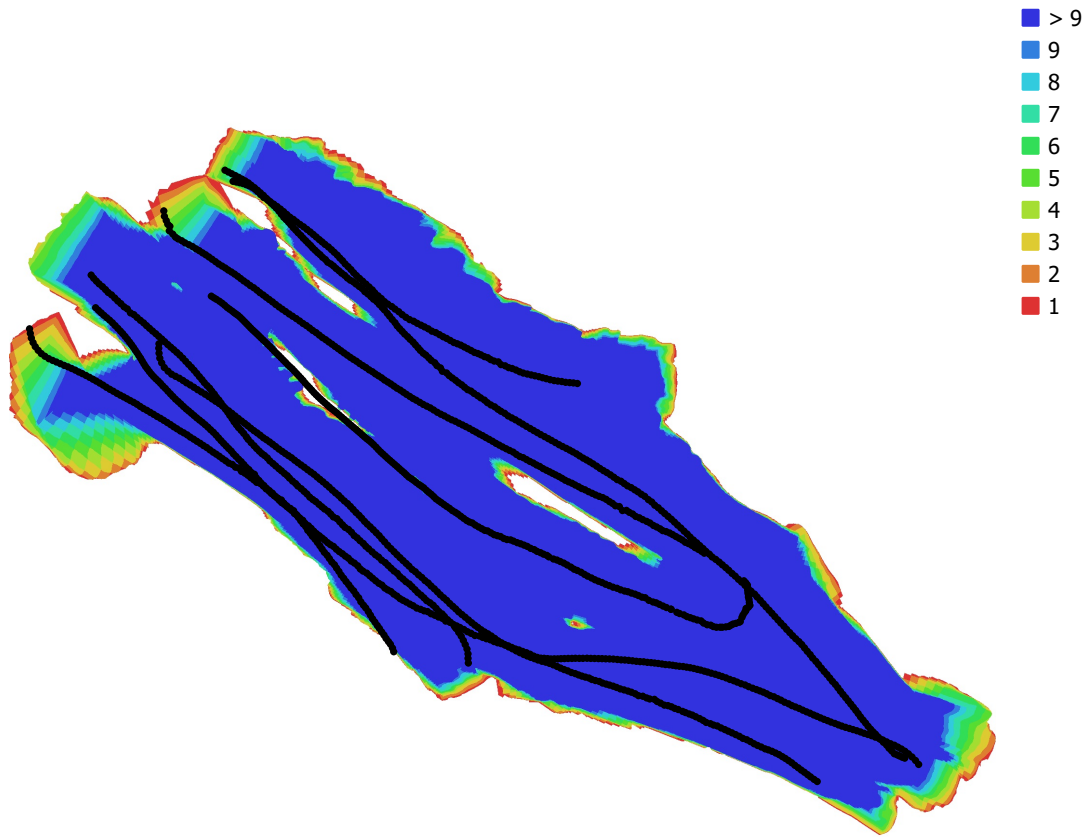


Fig. 1. Camera locations and image overlap.

Number of images: 1,582

Camera stations: 1,436

Tie points: 290,524

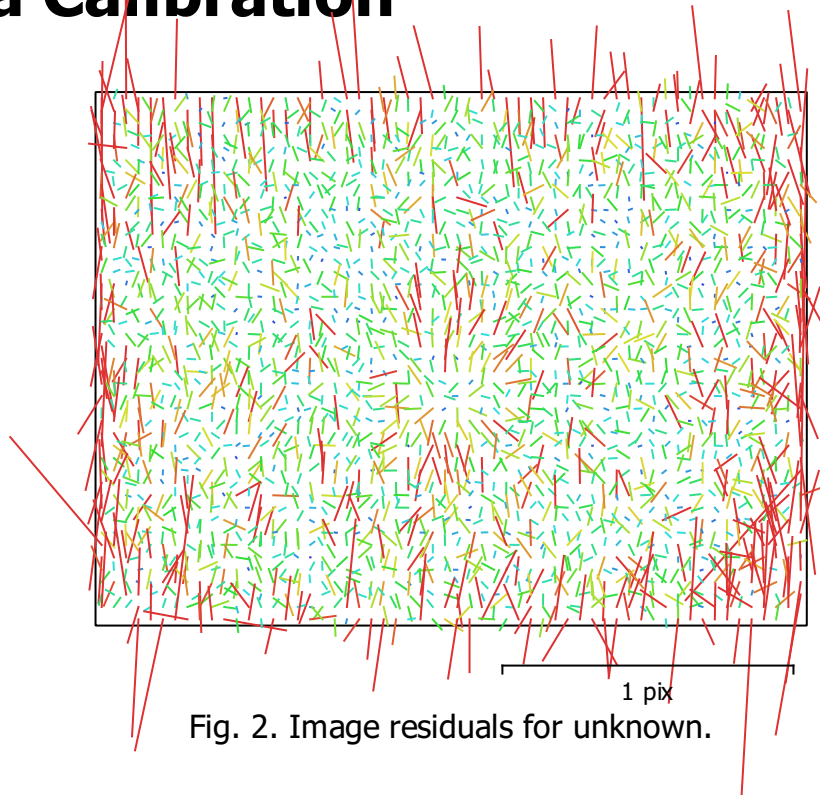
Projections: 879,004

Reprojection error: 1.47 pix

Camera Model	Resolution	Focal Length	Pixel Size	Precalibrated
unknown	1440 x 1080	unknown	unknown	No

Table 1. Cameras.

Camera Calibration



unknown
1529 images

Type	Resolution	Focal Length	Pixel Size
Frame	1440 x 1080	unknown	unknown

	Value	Error	F	Cx	Cy	B1	K1	K2	P1	P2
F	1533.64	0.86	1.00	-0.60	0.18	-0.31	-0.02	0.41	0.05	0.22
Cx	-41.6224	0.36		1.00	-0.10	0.11	-0.05	-0.13	0.36	-0.09
Cy	39.2117	0.25			1.00	-0.13	0.06	-0.07	0.07	0.11
B1	-10.573	0.17				1.00	0.13	-0.06	-0.22	0.03
K1	-0.167134	0.00037					1.00	-0.66	-0.46	0.17
K2	0.260257	0.001						1.00	0.08	0.10
P1	0.00302838	7.6e-05							1.00	-0.12
P2	0.00715129	3.1e-05								1.00

Table 2. Calibration coefficients and correlation matrix.

Digital Elevation Model

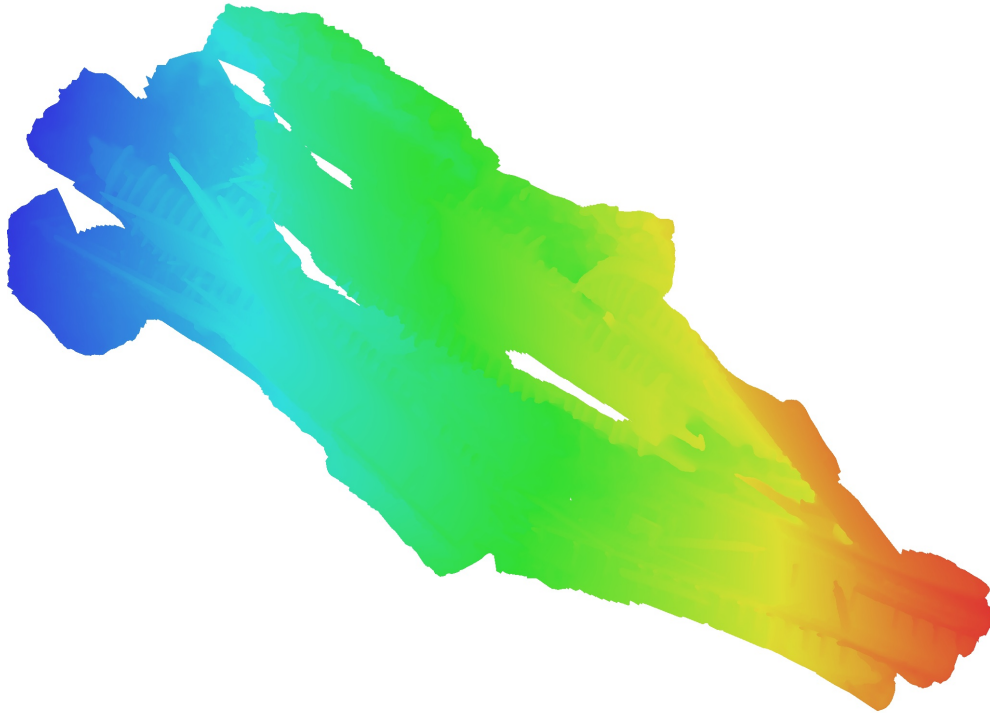


Fig. 3. Reconstructed digital elevation model.

Processing Parameters

General

Cameras	1529
Aligned cameras	1436

Point Cloud

Points	290,524 of 351,062
RMS reprojection error	0.215158 (1.47271 pix)
Max reprojection error	0.647639 (25.3382 pix)
Mean key point size	7.15304 pix
Point colors	3 bands, uint8
Key points	No
Average tie point multiplicity	3.14223

Alignment parameters

Accuracy	Highest
Generic preselection	Yes
Key point limit	30,000
Tie point limit	4,000
Adaptive camera model fitting	Yes
Matching time	34 minutes 34 seconds
Alignment time	7 minutes 47 seconds
Software version	1.5.5.9097
File size	24.68 MB

Depth Maps

Count	1432
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Depth maps generation parameters

Quality	High
Filtering mode	Aggressive
Processing time	18 minutes 14 seconds
Memory usage	337.23 MB
Software version	1.6.1.10009
File size	767.79 MB

Dense Point Cloud

Points	48,244,096
Point colors	3 bands, uint8

Depth maps generation parameters

Quality	High
Filtering mode	Aggressive
Processing time	18 minutes 14 seconds
Memory usage	337.23 MB

Dense cloud generation parameters

Processing time	42 minutes 18 seconds
Memory usage	4.79 GB
Software version	1.6.1.10009
File size	630.51 MB

Model

Faces	3,681,645
Vertices	1,841,237
Vertex colors	3 bands, uint8
Texture	4,096 x 4,096 x 3, 4 bands, uint8

Depth maps generation parameters

Quality	High
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Filtering mode	Mild
Processing time	19 minutes 26 seconds
Memory usage	1.27 GB
Reconstruction parameters	
Surface type	Arbitrary
Source data	Depth maps
Interpolation	Enabled
Strict volumetric masks	No
Processing time	22 minutes 7 seconds
Memory usage	12.90 GB
Texturing parameters	
Mapping mode	Generic
Blending mode	Mosaic
Texture size	4,096
Enable hole filling	Yes
Enable ghosting filter	No
UV mapping time	2 minutes 42 seconds
Blending time	1 minutes 5 seconds
Software version	1.6.1.10009
File size	209.32 MB
Orthomosaic	
Size	19,619 x 14,168
Coordinate system	Local Coordinates (m)
Colors	3 bands, uint8
Reconstruction parameters	
Blending mode	Mosaic
Surface	Mesh
Enable hole filling	Yes
Processing time	4 minutes 3 seconds
Software version	1.5.5.9097
File size	1.58 GB
System	
Software name	Agisoft Metashape Standard
Software version	1.7.1 build 11797
OS	Windows 64 bit
RAM	63.92 GB
CPU	Intel(R) Core(TM) i9-9900K CPU @ 3.60GHz
GPU(s)	GeForce RTX 2060 SUPER