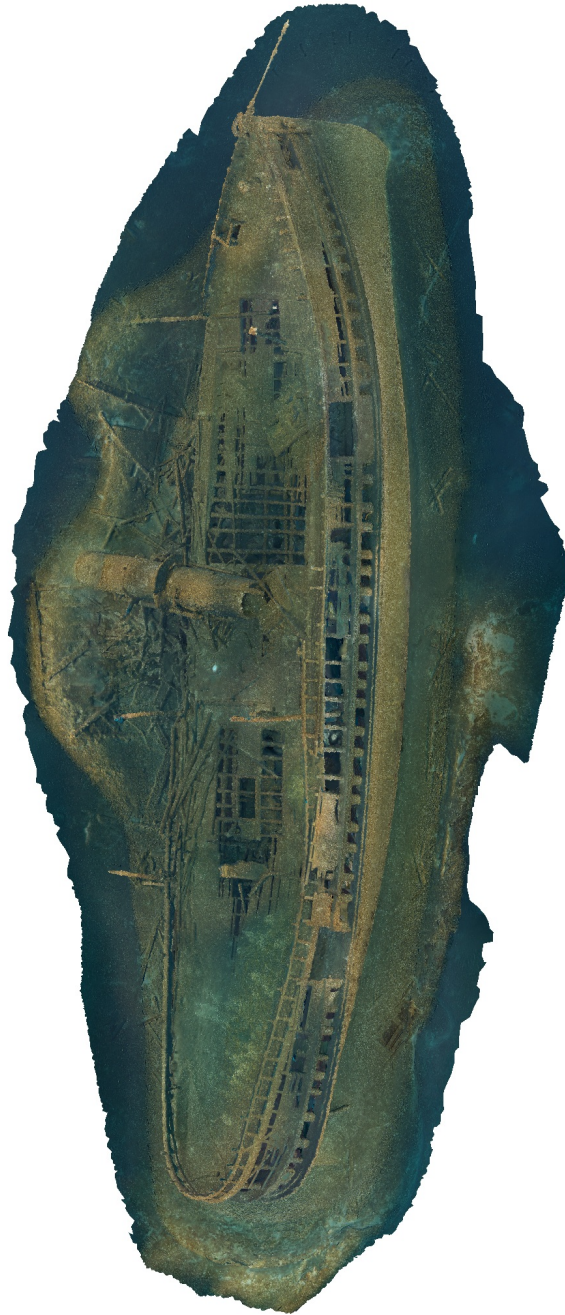


Agisoft Metashape

Processing Report
23 September 2022



Survey Data

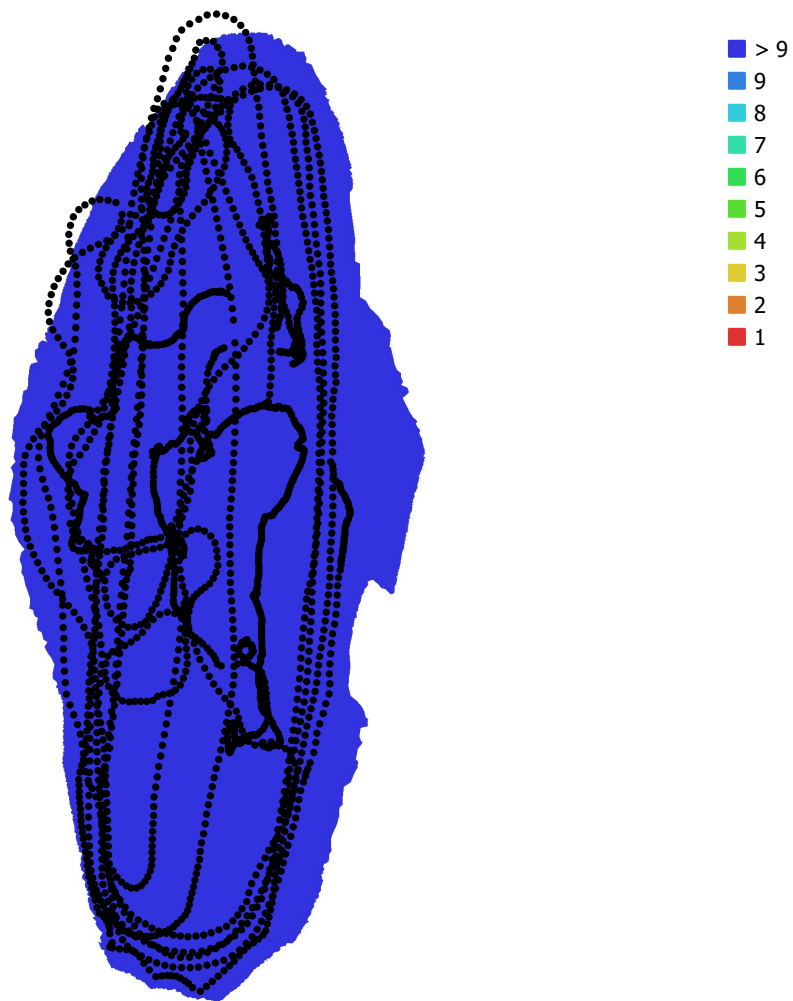


Fig. 1. Camera locations and image overlap.

Number of images: 2,751

Camera stations: 2,700

Tie points: 1,570,774

Projections: 4,926,446

Reprojection error: 0.82 pix

Camera Model	Resolution	Focal Length	Pixel Size	Precalibrated
Canon EOS 5D Mark IV, ...	6720 x 4480	15 mm	5.36 x 5.36 μm	No
unknown	1920 x 1080	unknown	unknown	No

Table 1. Cameras.

Camera Calibration

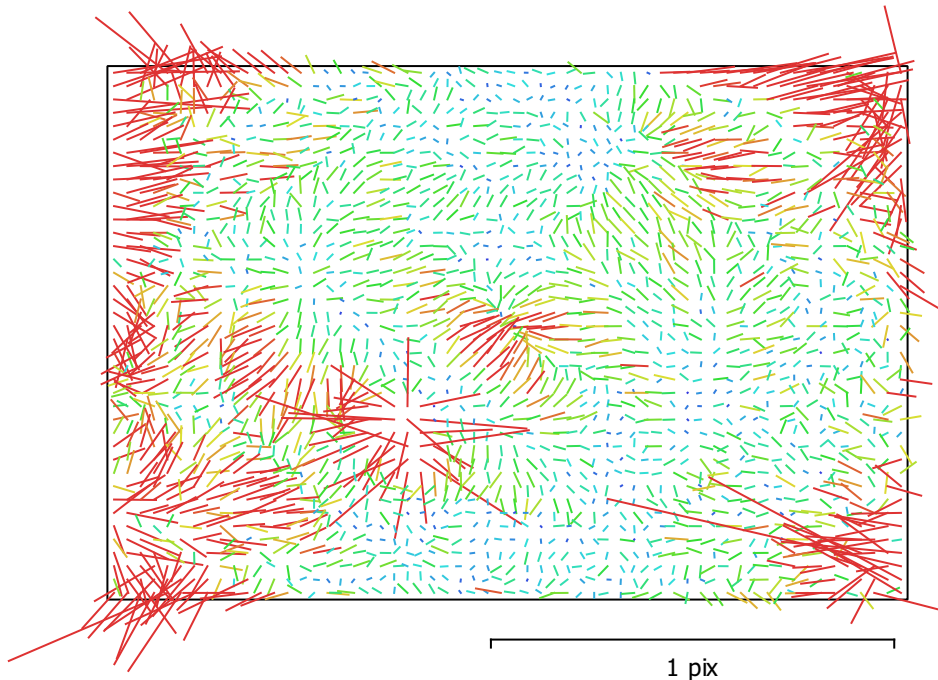


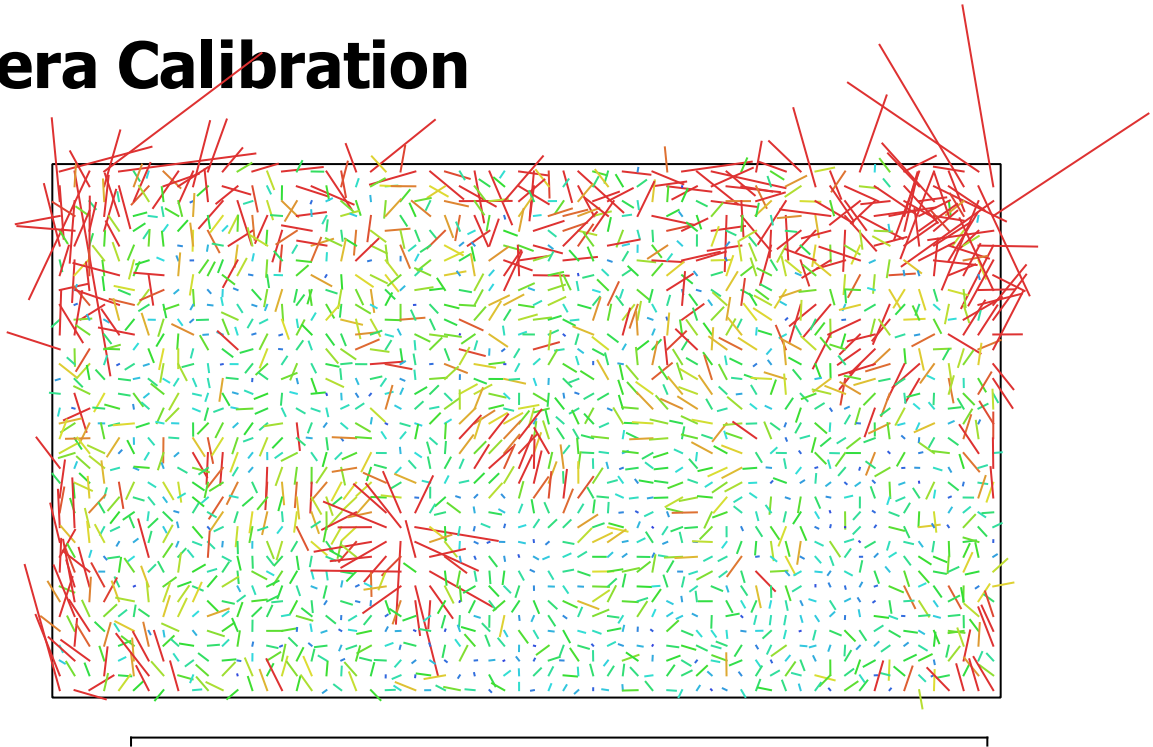
Fig. 2. Image residuals for Canon EOS 5D Mark IV, EF8-15mm f/4L FISHEYE USM (15mm).

Canon EOS 5D Mark IV, EF8-15mm f/4L FISHEYE USM (15mm)

1876 images

Type	Resolution	Focal Length	Pixel Size
Fisheye	6720 x 4480	15 mm	5.36 x 5.36 μm
F:	3088.49		
Cx:	-6.62741	B1:	0
Cy:	-19.8316	B2:	0
K1:	-0.046809	P1:	-0.000423756
K2:	0.00618969	P2:	-0.000108336
K3:	-0.00146961	P3:	0
K4:	0	P4:	0

Camera Calibration



1 pix
Fig. 3. Image residuals for unknown.

unknown

875 images

Type	Resolution	Focal Length	Pixel Size
Fisheye	1920 x 1080	unknown	unknown
F:	880.968		
Cx:	-3.82638	B1:	0
Cy:	-5.51286	B2:	0
K1:	-0.0476615	P1:	-0.000240326
K2:	0.00677197	P2:	0.000243571
K3:	-0.00167964	P3:	0
K4:	0	P4:	0

Digital Elevation Model

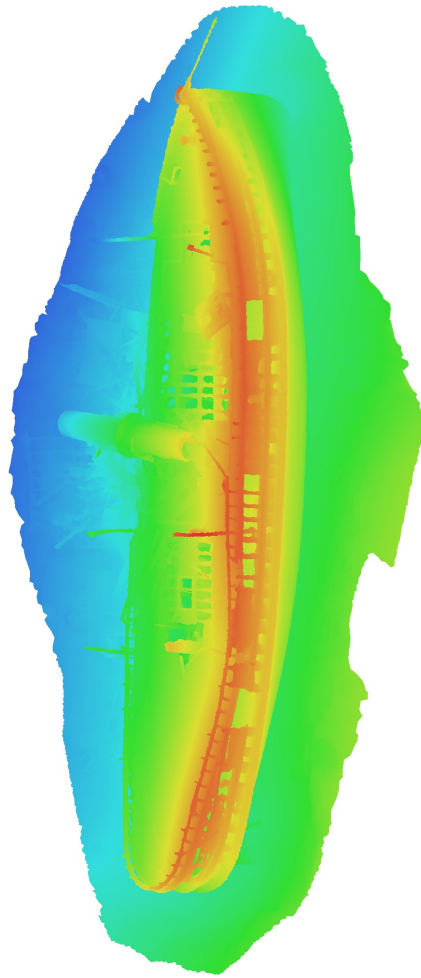


Fig. 4. Reconstructed digital elevation model.

Processing Parameters

General

Cameras	2751
Aligned cameras	2700
Coordinate system	Local Coordinates (m)
Rotation angles	Yaw, Pitch, Roll

Point Cloud

Points	1,570,774 of 1,905,681
RMS reprojection error	0.153137 (0.820307 pix)
Max reprojection error	0.568001 (46.7832 pix)
Mean key point size	4.00053 pix
Point colors	3 bands, uint8
Key points	6.77 GB
Average tie point multiplicity	3.52219

Alignment parameters

Accuracy	High
Generic preselection	Yes
Reference preselection	No
Key point limit	30,000
Key point limit per Mpx	1,000
Tie point limit	2,500
Exclude stationary tie points	Yes
Guided image matching	No
Adaptive camera model fitting	No
Matching time	13 seconds
Matching memory usage	30.34 MB
Alignment time	31 minutes 14 seconds
Alignment memory usage	1.09 GB
Date created	2022:07:12 20:11:30
Software version	1.8.0.13794
File size	169.85 MB

Depth Maps

Count	2659
Depth maps generation parameters	
Quality	Medium
Filtering mode	Moderate
Max neighbors	16
Processing time	48 minutes 32 seconds
Memory usage	2.10 GB
Date created	2022:07:12 23:47:34
Software version	1.8.0.13794
File size	4.81 GB

Dense Point Cloud

Points	260,054,980
Point colors	3 bands, uint8
Depth maps generation parameters	
Quality	Medium
Filtering mode	Moderate
Max neighbors	16
Processing time	48 minutes 32 seconds
Memory usage	2.10 GB

Dense cloud generation parameters

Processing time	8 hours 11 minutes
Memory usage	11.05 GB
Date created	2022:09:22 12:07:48
Software version	1.8.0.13794
File size	3.49 GB

Model

Faces	7,997,493
Vertices	3,999,591
Vertex colors	3 bands, uint8
Texture	8,192 x 8,192, 4 bands, uint8

Depth maps generation parameters

Quality	Medium
Filtering mode	Moderate
Max neighbors	16
Processing time	48 minutes 32 seconds
Memory usage	2.10 GB

Reconstruction parameters

Surface type	Arbitrary
Source data	Depth maps
Interpolation	Enabled
Strict volumetric masks	No
Processing time	25 minutes 35 seconds
Memory usage	11.36 GB

Texturing parameters

Mapping mode	Generic
Blending mode	Mosaic
Texture size	8,192
Enable hole filling	Yes
Enable ghosting filter	No
UV mapping time	2 minutes 26 seconds
UV mapping memory usage	2.99 GB
Blending time	9 minutes 27 seconds
Blending memory usage	3.96 GB
Blending GPU memory usage	2.43 GB
Date created	2022:07:13 00:12:31
Software version	1.8.0.13794
File size	448.30 MB

System

Software name	Agisoft Metashape Professional
Software version	1.8.0 build 13794
OS	Windows 64 bit
RAM	63.92 GB
CPU	Intel(R) Core(TM) i9-9900K CPU @ 3.60GHz
GPU(s)	NVIDIA GeForce RTX 2060 SUPER