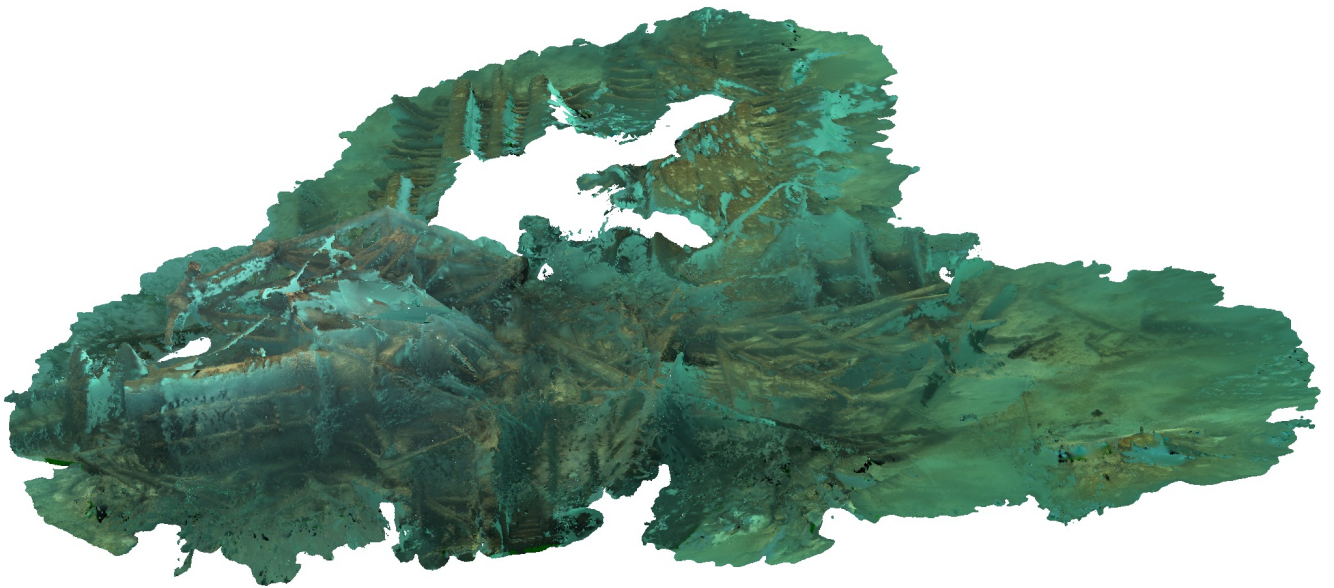


Agisoft Metashape Report

Processing Report

26 October 2021



Survey Data

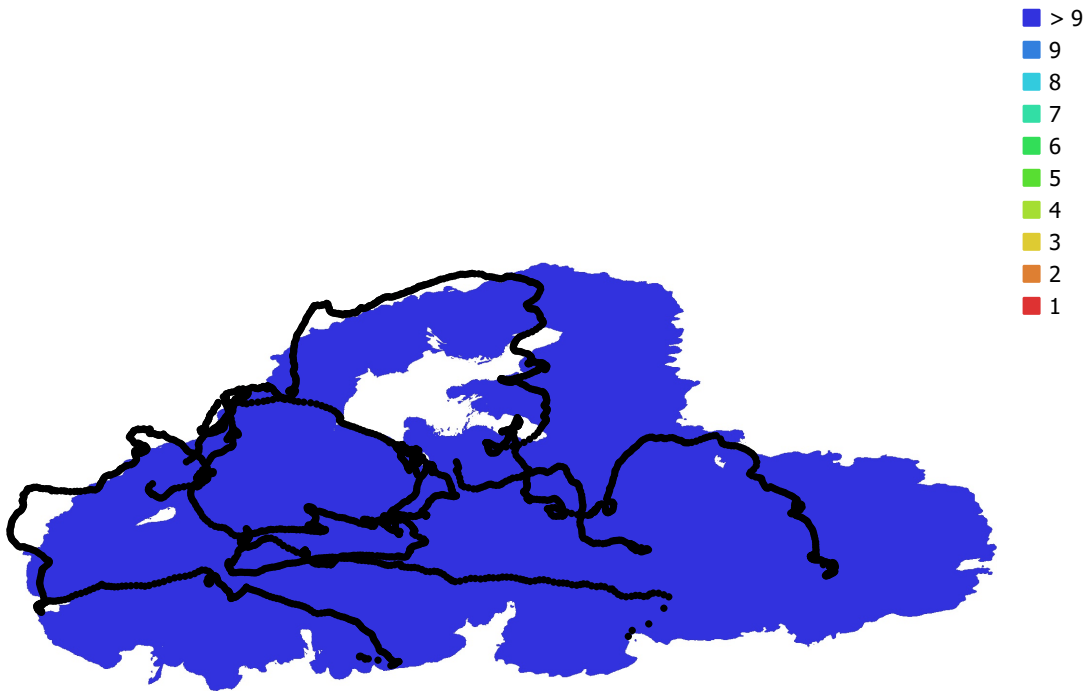


Fig. 1. Camera locations and image overlap.

Number of images: 2,895

Camera stations: 2,801

Tie points: 1,532,125

Projections: 5,898,708

Reprojection error: 1.84 pix

| Camera Model | Resolution | Focal Length | Pixel Size | Precalibrated |
|--------------|-------------|--------------|------------|---------------|
| unknown | 1920 x 1088 | unknown | unknown | No |

Table 1. Cameras.

Camera Calibration

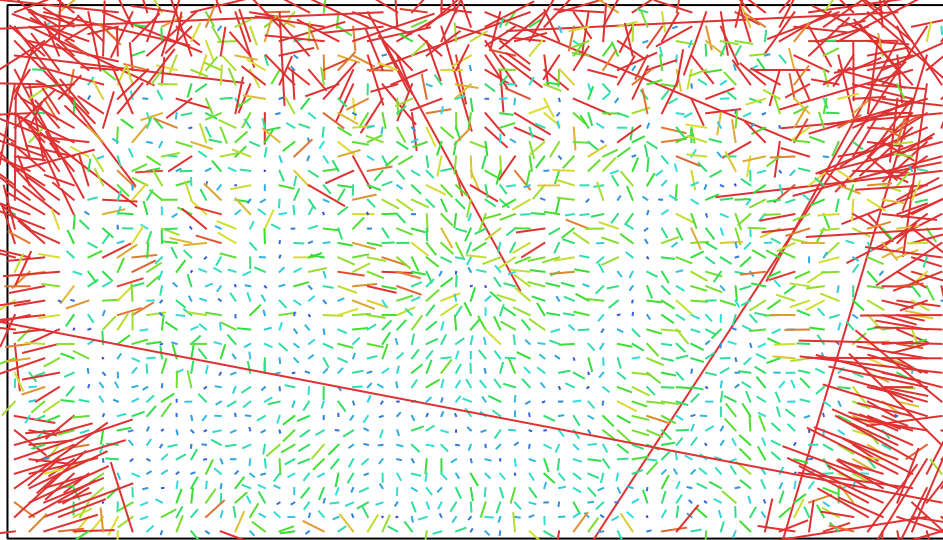


Fig. 2. Image residuals for unknown.

unknown

2895 images

| Type | Resolution | Focal Length | Pixel Size |
|--------------|--------------------|----------------|----------------|
| Frame | 1920 x 1088 | unknown | unknown |
| F: | 1183.56 | | |
| Cx: | -31.3087 | B1: | 3.40438 |
| Cy: | -25.3267 | B2: | -0.72349 |
| K1: | -0.223582 | P1: | 0.000492962 |
| K2: | 0.133835 | P2: | 0.000728832 |
| K3: | -0.0139059 | P3: | 0 |
| K4: | 0 | P4: | 0 |

Digital Elevation Model

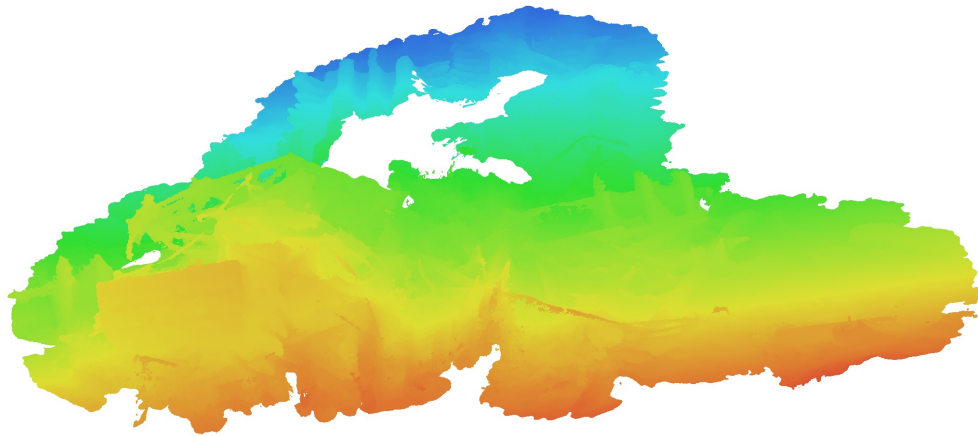


Fig. 3. Reconstructed digital elevation model.

Processing Parameters

General

| | |
|-----------------|------|
| Cameras | 2895 |
| Aligned cameras | 2801 |

Point Cloud

| | |
|--------------------------------|------------------------|
| Points | 1,532,125 of 1,616,823 |
| RMS reprojection error | 0.359506 (1.84112 pix) |
| Max reprojection error | 9.99996 (244.022 pix) |
| Mean key point size | 4.08758 pix |
| Point colors | 3 bands, uint8 |
| Key points | 3.30 GB |
| Average tie point multiplicity | 3.82673 |

Alignment parameters

| | |
|-------------------------------|-----------------------|
| Accuracy | High |
| Generic preselection | Yes |
| Reference preselection | No |
| Key point limit | 30,000 |
| Tie point limit | 4,000 |
| Filter points by mask | Yes |
| Mask tie points | No |
| Guided image matching | No |
| Adaptive camera model fitting | Yes |
| Matching time | 32 minutes 30 seconds |
| Matching memory usage | 477.31 MB |
| Alignment time | 20 minutes 12 seconds |
| Alignment memory usage | 357.83 MB |
| Software version | 1.6.2.10247 |
| File size | 158.14 MB |

Depth Maps

| | |
|-------|------|
| Count | 2796 |
|-------|------|

Depth maps generation parameters

| | |
|------------------|--------------------|
| Quality | High |
| Filtering mode | Aggressive |
| Processing time | 2 hours 36 minutes |
| Memory usage | 1.02 GB |
| Software version | 1.6.2.10247 |
| File size | 1.45 GB |

Dense Point Cloud

| | |
|--------------|----------------|
| Points | 51,498,908 |
| Point colors | 3 bands, uint8 |

Depth maps generation parameters

| | |
|-----------------|--------------------|
| Quality | High |
| Filtering mode | Aggressive |
| Processing time | 2 hours 36 minutes |
| Memory usage | 1.02 GB |

Dense cloud generation parameters

| | |
|------------------|-------------------|
| Processing time | 2 hours 2 minutes |
| Memory usage | 12.98 GB |
| Software version | 1.6.2.10247 |
| File size | 1.33 GB |

Model

| | |
|---|--|
| Faces | 5,994,674 |
| Vertices | 3,021,231 |
| Vertex colors | 3 bands, uint8 |
| Texture | 4,096 x 4,096, 4 bands, uint8 |
| Depth maps generation parameters | |
| Quality | High |
| Filtering mode | Aggressive |
| Processing time | 2 hours 36 minutes |
| Memory usage | 1.02 GB |
| Reconstruction parameters | |
| Surface type | Arbitrary |
| Source data | Dense cloud |
| Interpolation | Enabled |
| Strict volumetric masks | No |
| Processing time | 31 minutes 31 seconds |
| Memory usage | 27.31 GB |
| Texturing parameters | |
| Mapping mode | Generic |
| Blending mode | Mosaic |
| Texture size | 4,096 |
| Enable hole filling | Yes |
| Enable ghosting filter | No |
| UV mapping time | 8 minutes 53 seconds |
| Blending time | 7 minutes 1 seconds |
| Software version | 1.6.2.10247 |
| File size | 285.98 MB |
| System | |
| Software name | Agisoft Metashape Standard |
| Software version | 1.7.1 build 11797 |
| OS | Windows 64 bit |
| RAM | 31.92 GB |
| CPU | Intel(R) Core(TM) i9-9900K CPU @ 3.60GHz |
| GPU(s) | NVIDIA GeForce RTX 2060 SUPER |