Høgsnyta

Reconstruction uncertainty: 50
Projection accuracy: 10
Reprojection error: 0,3
Filter Component Size: 99%
Decimated at 5000000 faces

28 February 2022

Survey Data

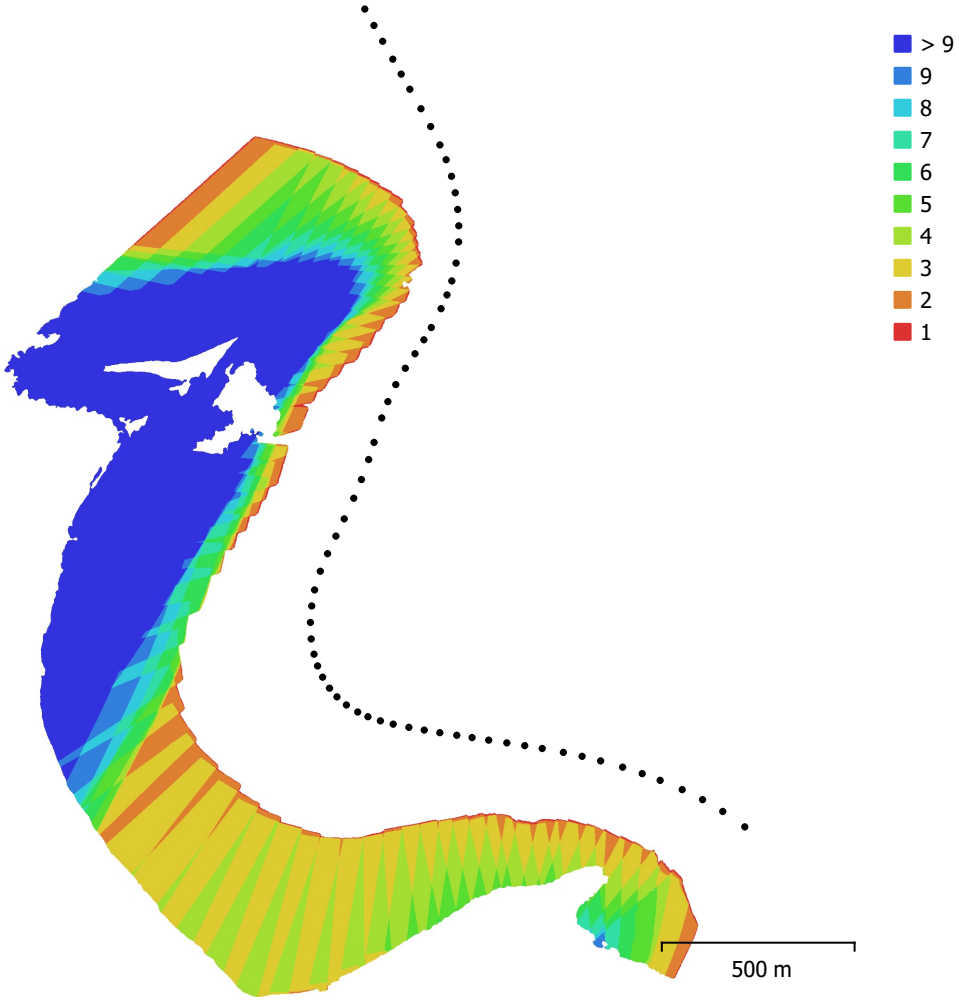

Fig. 1. Camera locations and image overlap.

Number of images:	67	Camera stations:	67
Flying altitude:	370 m	Tie points:	176,191
Ground resolution:	3.68 cm/pix	Projections:	480,545
Coverage area:	1.31 km²	Reprojection error:	0.203 pix

Camera Model	Resolution	Focal Length	Pixel Size	Precalibrated
NIKON D800 (50mm)	4924 x 7374	50 mm	4.88 x 4.88 µm	No

Table 1. Cameras.

Camera Calibration

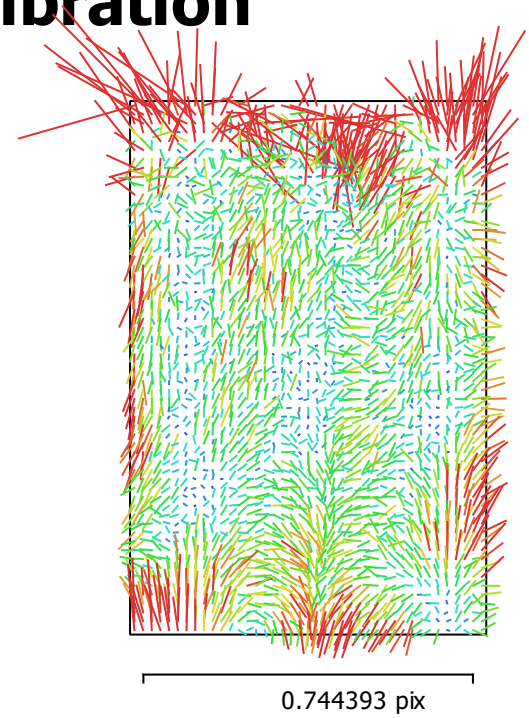

Fig. 2. Image residuals for NIKON D800 (50mm).

NIKON D800 (50mm)

67 images

Type	Resolution	Focal Length	Pixel Size
Frame	**4924 x 7374**	**50 mm**	**4.88 x 4.88 µm**

	Value	Error	F	B1	K1	K2	K3	P1	P2
F	**10632.8**	0.83	1.00	-0.88	-0.02	0.07	-0.03	-0.15	-0.17
B1	**-57.547**	0.7		1.00	0.01	-0.05	0.02	0.05	0.25
K1	**-0.111415**	6.3e-05			1.00	-0.91	0.85	0.12	0.03
K2	**0.0921913**	0.00079				1.00	-0.98	-0.04	-0.06
K3	**0.148766**	0.0031					1.00	0.02	0.04
P1	**0.000232344**	9.4e-06						1.00	0.02
P2	**0.000419542**	7.7e-06							1.00

Table 2. Calibration coefficients and correlation matrix.

Camera Locations

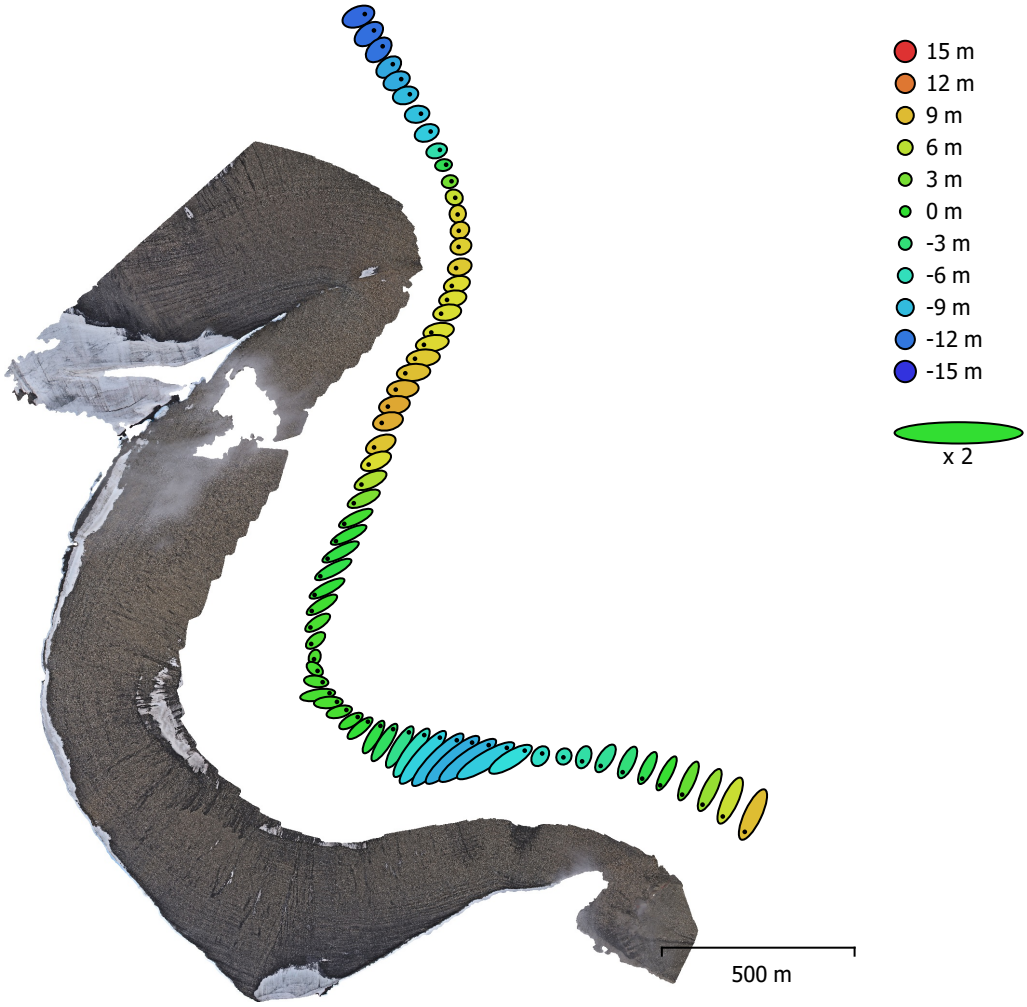

Fig. 3. Camera locations and error estimates.
Z error is represented by ellipse color. X,Y errors are represented by ellipse shape.
Estimated camera locations are marked with a black dot.

X error (m)	Y error (m)	Z error (m)	XY error (m)	Total error (m)
22.8385	20.6012	6.58662	30.7572	31.4546

Table 3. Average camera location error.
X - Easting, Y - Northing, Z - Altitude.

Digital Elevation Model

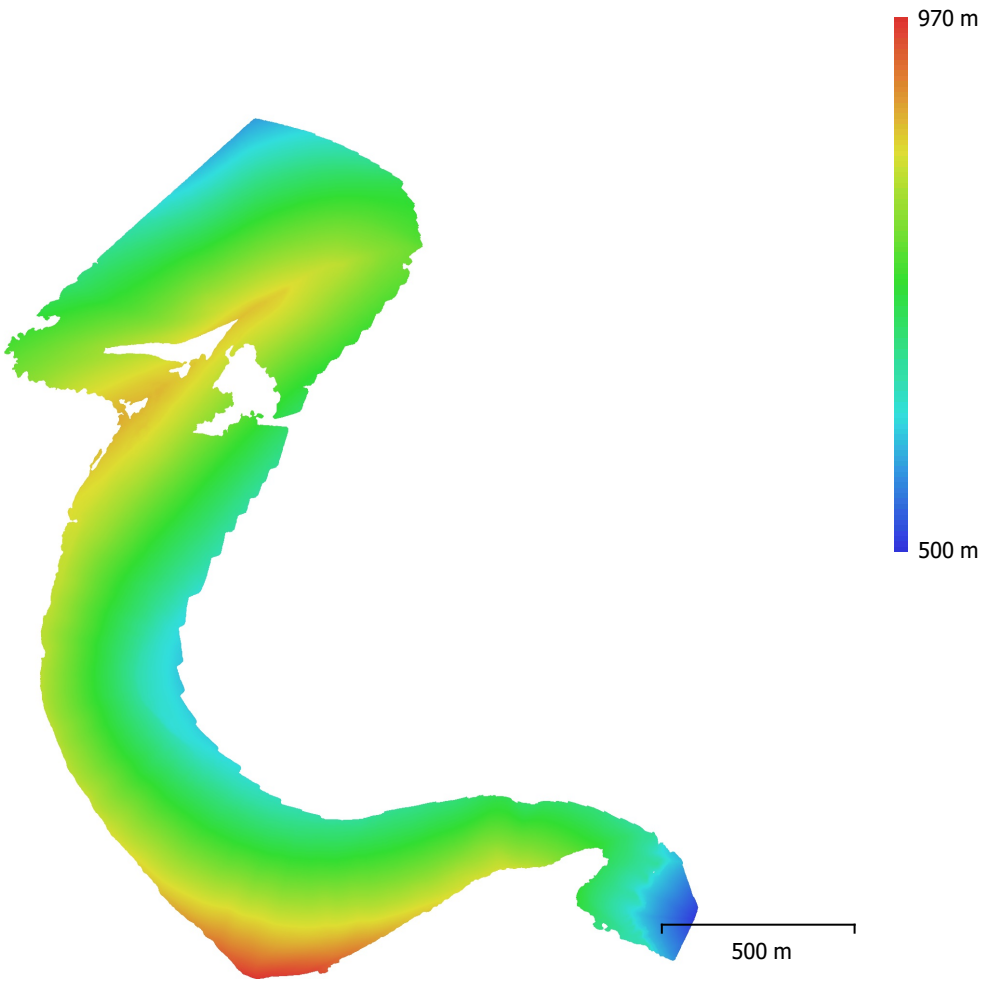

Fig. 4. Reconstructed digital elevation model.

Resolution:	14.7 cm/pix
Point density:	46.2 points/m²

Processing Parameters

General	
Cameras	67
Aligned cameras	67
Coordinate system	WGS 84 / UTM zone 33N (EPSG::32633)
Rotation angles	Yaw, Pitch, Roll
Point Cloud	
Points	176,191 of 189,267
RMS reprojection error	0.0869868 (0.202685 pix)
Max reprojection error	0.299895 (2.75339 pix)
Mean key point size	2.31278 pix
Point colors	3 bands, uint8
Key points	No
Average tie point multiplicity	2.75287
Alignment parameters	
Accuracy	High
Generic preselection	Yes
Reference preselection	Source
Key point limit	80,000
Tie point limit	8,000
Guided image matching	No
Adaptive camera model fitting	Yes
Matching time	1 minutes 3 seconds
Matching memory usage	2.04 GB
Alignment time	1 minutes 22 seconds
Alignment memory usage	142.96 MB
Optimization parameters	
Parameters	f, b1, k1-k3, p1, p2
Adaptive camera model fitting	No
Optimization time	0 seconds
Software version	1.6.4.10928
File size	12.58 MB
Depth Maps	
Count	67
Depth maps generation parameters	
Quality	Medium
Filtering mode	Mild
Processing time	1 minutes 9 seconds
Memory usage	1.00 GB
Software version	1.7.2.12040
File size	179.03 MB
Dense Point Cloud	
Points	65,420,585
Point colors	3 bands, uint8
Depth maps generation parameters	
Quality	Medium
Filtering mode	Mild
Processing time	1 minutes 9 seconds
Memory usage	1.00 GB
Dense cloud generation parameters	
Processing time	4 minutes 38 seconds

Memory usage	4.92 GB
Software version	1.7.2.12040
File size	1.15 GB
Model	
Faces	4,216,957
Vertices	2,120,305
Vertex colors	3 bands, uint8
Texture	4,096 x 4,096 x 10, 4 bands, uint8
Depth maps generation parameters	
Quality	Medium
Filtering mode	Mild
Processing time	1 minutes 9 seconds
Memory usage	1.00 GB
Reconstruction parameters	
Surface type	Arbitrary
Source data	Dense cloud
Interpolation	Enabled
Strict volumetric masks	No
Processing time	31 minutes 48 seconds
Memory usage	36.46 GB
Texturing parameters	
Mapping mode	Generic
Blending mode	Mosaic
Texture size	4,096
Enable hole filling	Yes
Enable ghosting filter	Yes
UV mapping time	4 minutes 49 seconds
UV mapping memory usage	3.19 GB
Blending time	1 minutes 0 seconds
Blending memory usage	6.51 GB
Software version	1.7.2.12040
File size	428.41 MB
System	
Software name	Agisoft Metashape Professional
Software version	1.7.2 build 12040
OS	Windows 64 bit
RAM	127.78 GB
CPU	Intel(R) Core(TM) i9-10900 CPU @ 2.80GHz
GPU(s)	NVIDIA GeForce RTX 2080 SUPER