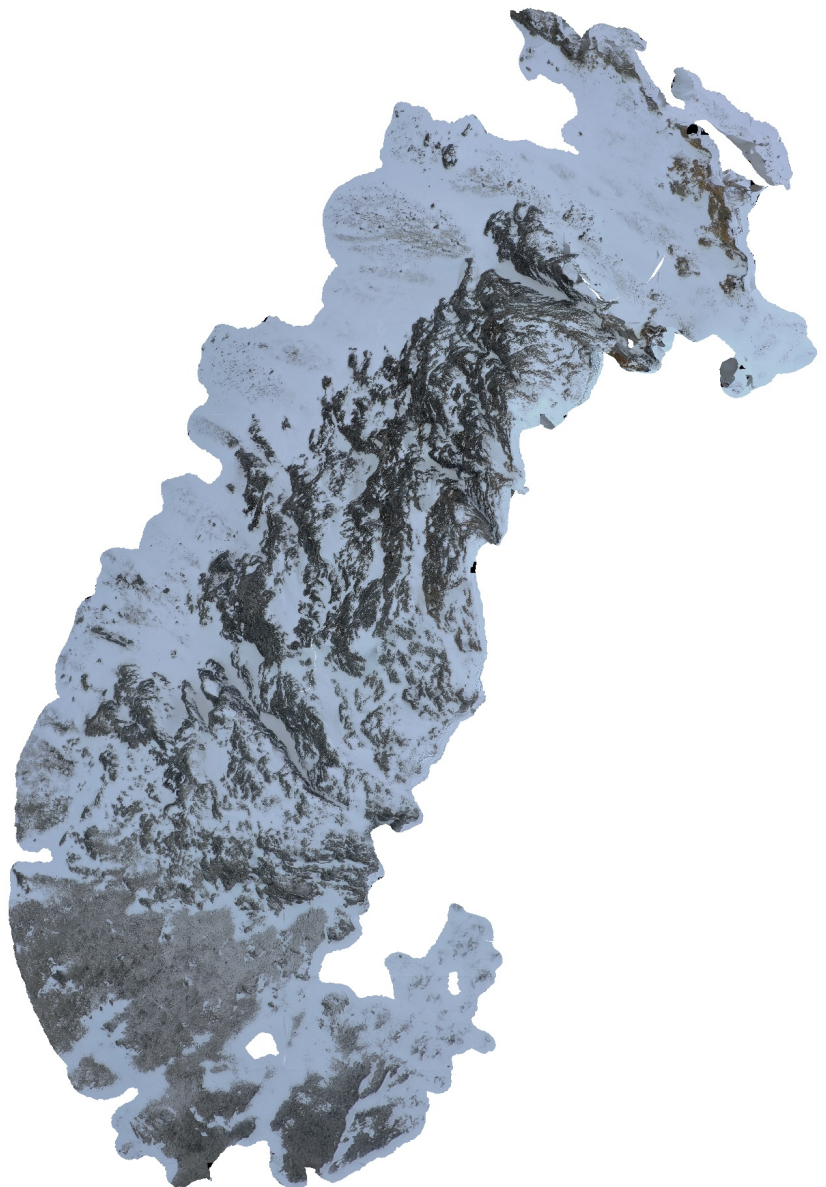


Ytterdalssata

Dense Cloud Confidence 20-255
Filter Component Size: 99%

02 March 2022



Survey Data

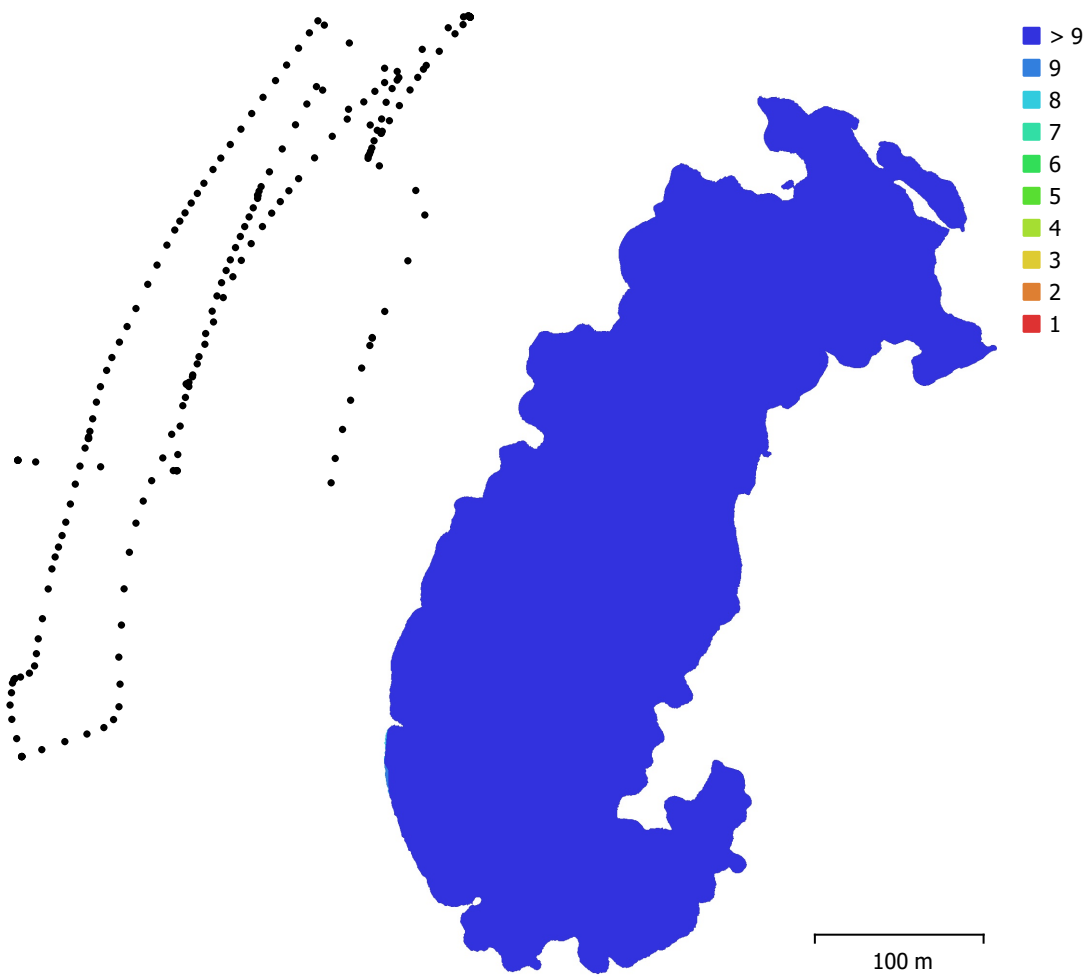


Fig. 1. Camera locations and image overlap.

Number of images:	196	Camera stations:	196
Flying altitude:	334 m	Tie points:	31,521
Ground resolution:	7.19 cm/pix	Projections:	336,713
Coverage area:	0.0838 km ²	Reprojection error:	0.546 pix

Camera Model	Resolution	Focal Length	Pixel Size	Precalibrated
Test_Pro (10.26mm)	5472 x 3648	10.26 mm	2.41 x 2.41 μ m	No

Table 1. Cameras.

Camera Calibration

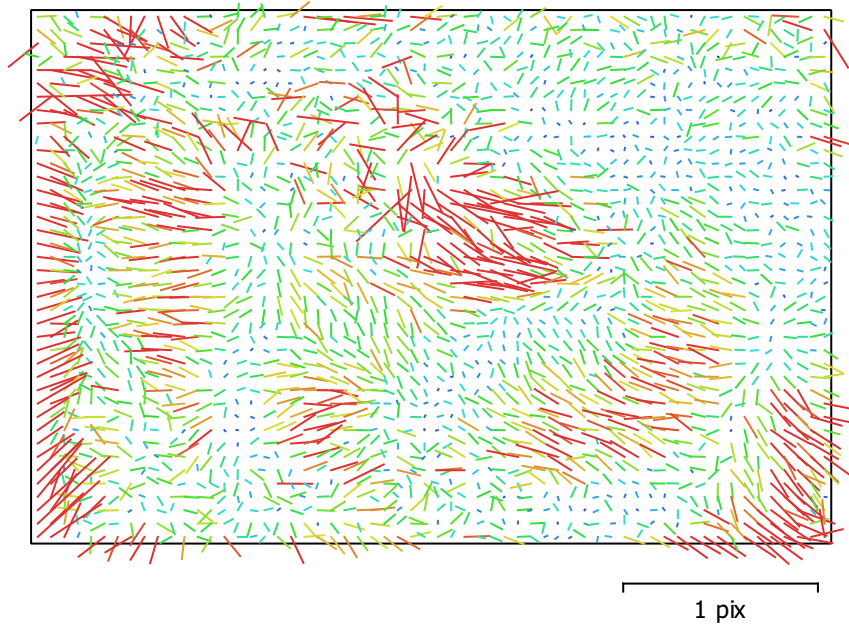


Fig. 2. Image residuals for Test_Pro (10.26mm).

Test_Pro (10.26mm)

196 images

Type	Resolution	Focal Length	Pixel Size
Frame	5472 x 3648	10.26 mm	2.41 x 2.41 μm

	Value	Error	F	Cx	Cy	B1	B2	K1	K2	K3	P1	P2
F	4350.18	0.066	1.00	-0.06	0.14	-0.53	0.09	-0.04	0.13	-0.11	-0.03	0.03
Cx	-7.03851	0.14		1.00	0.09	-0.02	0.33	-0.04	0.03	-0.04	0.96	0.08
Cy	-48.0269	0.098			1.00	-0.53	0.16	0.03	-0.01	-0.00	0.06	0.69
B1	-1.13457	0.057				1.00	-0.10	-0.07	0.04	-0.02	-0.07	-0.23
B2	-6.42608	0.046					1.00	0.02	-0.01	0.00	0.29	0.06
K1	0.00455399	3.9e-05						1.00	-0.94	0.87	-0.03	-0.11
K2	0.0389876	0.00015							1.00	-0.98	0.02	0.05
K3	-0.0429694	0.00018								1.00	-0.03	-0.06
P1	-0.000943836	9.9e-06									1.00	0.08
P2	-0.00392555	5.4e-06										1.00

Table 2. Calibration coefficients and correlation matrix.

Camera Locations

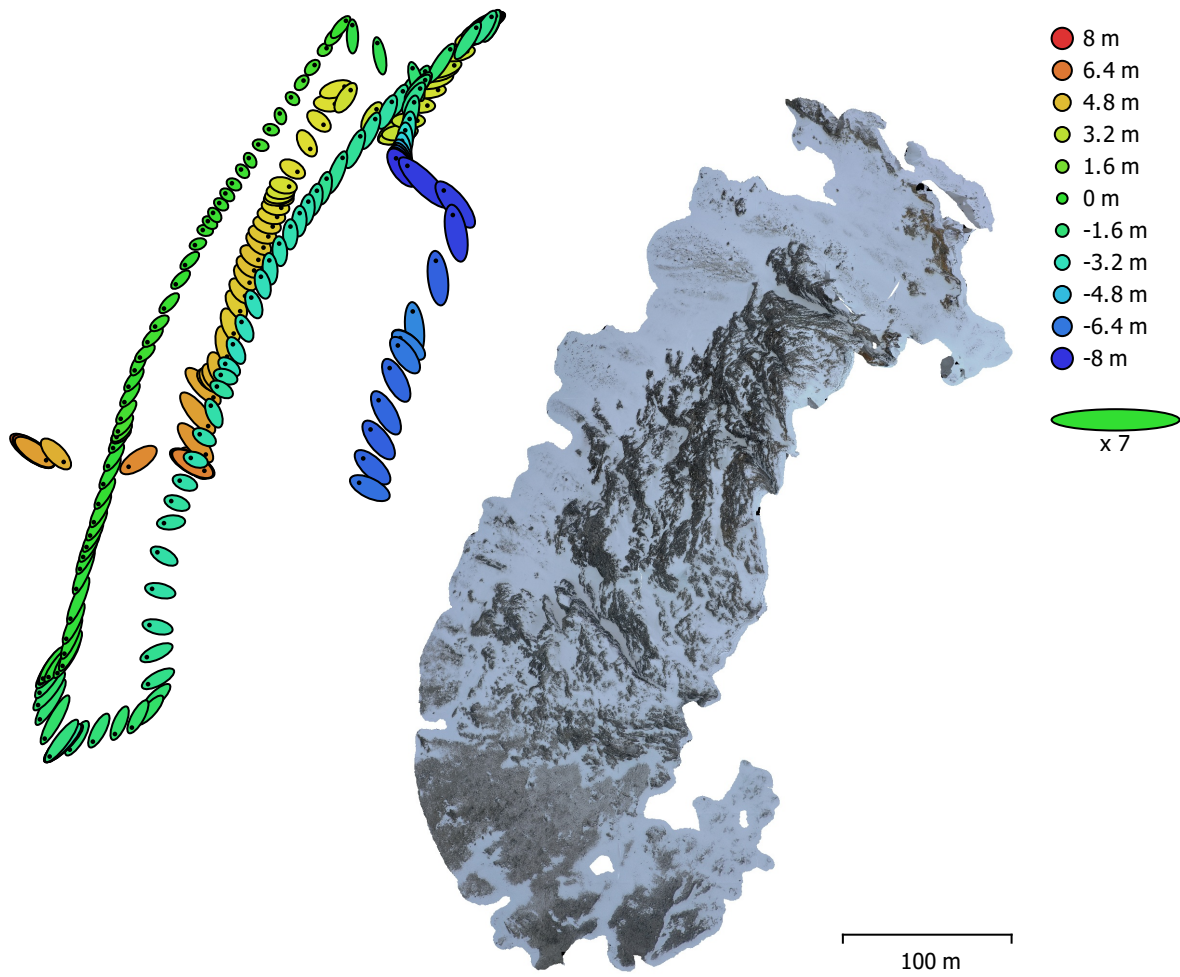


Fig. 3. Camera locations and error estimates.

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)
1.23034	1.49489	3.47905	1.93609	3.98149

Table 3. Average camera location error.
X - Longitude, Y - Latitude, Z - Altitude.

Digital Elevation Model

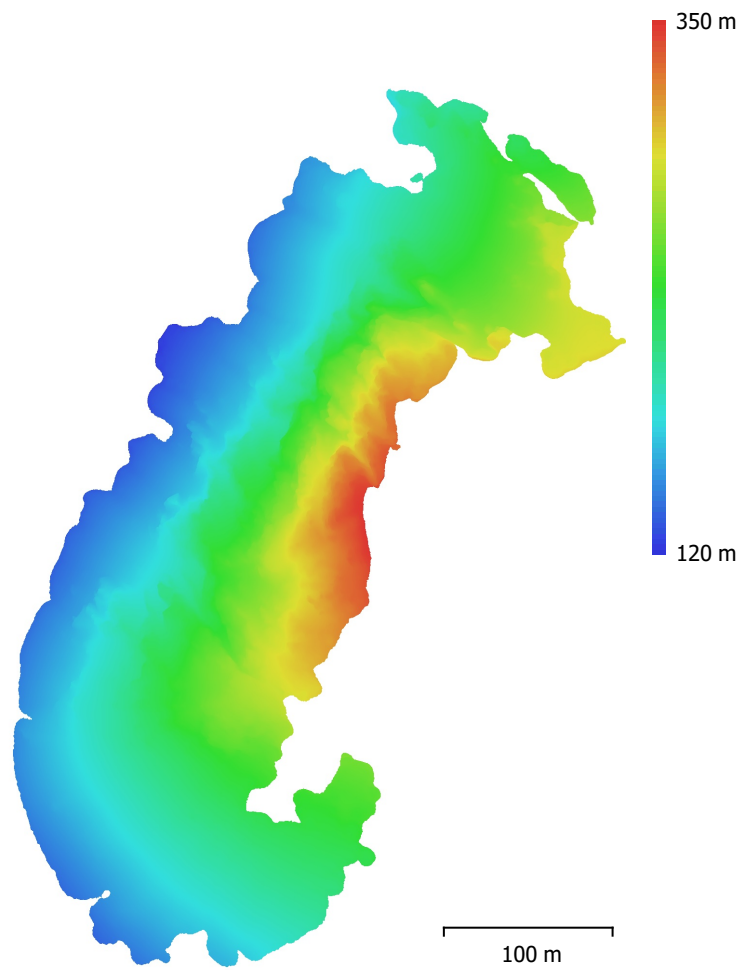


Fig. 4. Reconstructed digital elevation model.

Resolution: 14.4 cm/pix
Point density: 48.4 points/m²

Processing Parameters

General

Cameras	196
Aligned cameras	196
Coordinate system	WGS 84 (EPSG::4326)
Rotation angles	Yaw, Pitch, Roll

Point Cloud

Points	31,521 of 45,423
RMS reprojection error	0.221705 (0.545682 pix)
Max reprojection error	1.01197 (17.411 pix)
Mean key point size	2.29569 pix
Point colors	3 bands, uint8
Key points	No
Average tie point multiplicity	22.8

Alignment parameters

Accuracy	Highest
Generic preselection	Yes
Reference preselection	Source
Key point limit	40,000
Tie point limit	4,000
Exclude stationary tie points	Yes
Guided image matching	No
Adaptive camera model fitting	Yes
Matching time	2 minutes 45 seconds
Matching memory usage	457.47 MB
Alignment time	2 minutes 29 seconds
Alignment memory usage	170.78 MB

Optimization parameters

Parameters	f, cx, cy, k1-k3, p1, p2
Adaptive camera model fitting	Yes
Optimization time	3 seconds
Software version	1.7.3.12473
File size	16.68 MB

Depth Maps

Count	196
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Depth maps generation parameters

Quality	High
Filtering mode	Mild
Max neighbors	100
Processing time	20 minutes 19 seconds
Memory usage	10.22 GB
Software version	1.7.3.12473
File size	1.03 GB

Dense Point Cloud

Points	8,379,485
Point colors	3 bands, uint8

Depth maps generation parameters

Quality	High
Filtering mode	Mild
Max neighbors	100
Processing time	20 minutes 19 seconds

Memory usage	10.22 GB
Dense cloud generation parameters	
Processing time	58 minutes 35 seconds
Memory usage	16.01 GB
Software version	1.7.3.12473
File size	423.93 MB
Model	
Faces	937,193
Vertices	471,312
Vertex colors	3 bands, uint8
Texture	4,096 x 4,096 x 10, 4 bands, uint8
Depth maps generation parameters	
Quality	High
Filtering mode	Mild
Max neighbors	100
Processing time	20 minutes 19 seconds
Memory usage	10.22 GB
Reconstruction parameters	
Surface type	Arbitrary
Source data	Dense cloud
Interpolation	Enabled
Strict volumetric masks	No
Processing time	4 minutes 23 seconds
Memory usage	4.57 GB
Texturing parameters	
Mapping mode	Generic
Blending mode	Mosaic
Texture size	4,096
Enable hole filling	Yes
Enable ghosting filter	Yes
UV mapping time	3 minutes 34 seconds
UV mapping memory usage	3.52 GB
Blending time	1 minutes 48 seconds
Blending memory usage	4.97 GB
Software version	1.7.3.12473
File size	206.75 MB
Tiled Model	
Texture	3 bands, uint8
Depth maps generation parameters	
Quality	High
Filtering mode	Mild
Max neighbors	100
Processing time	20 minutes 19 seconds
Memory usage	10.22 GB
Reconstruction parameters	
Source data	Dense cloud
Tile size	128
Face count	Low
Enable ghosting filter	No
Processing time	3 hours 8 minutes
Memory usage	5.27 GB
Software version	1.7.3.12473
File size	1.85 GB
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