

# Agisoft PhotoScan

Processing Report  
05 November 2015



# Survey Data

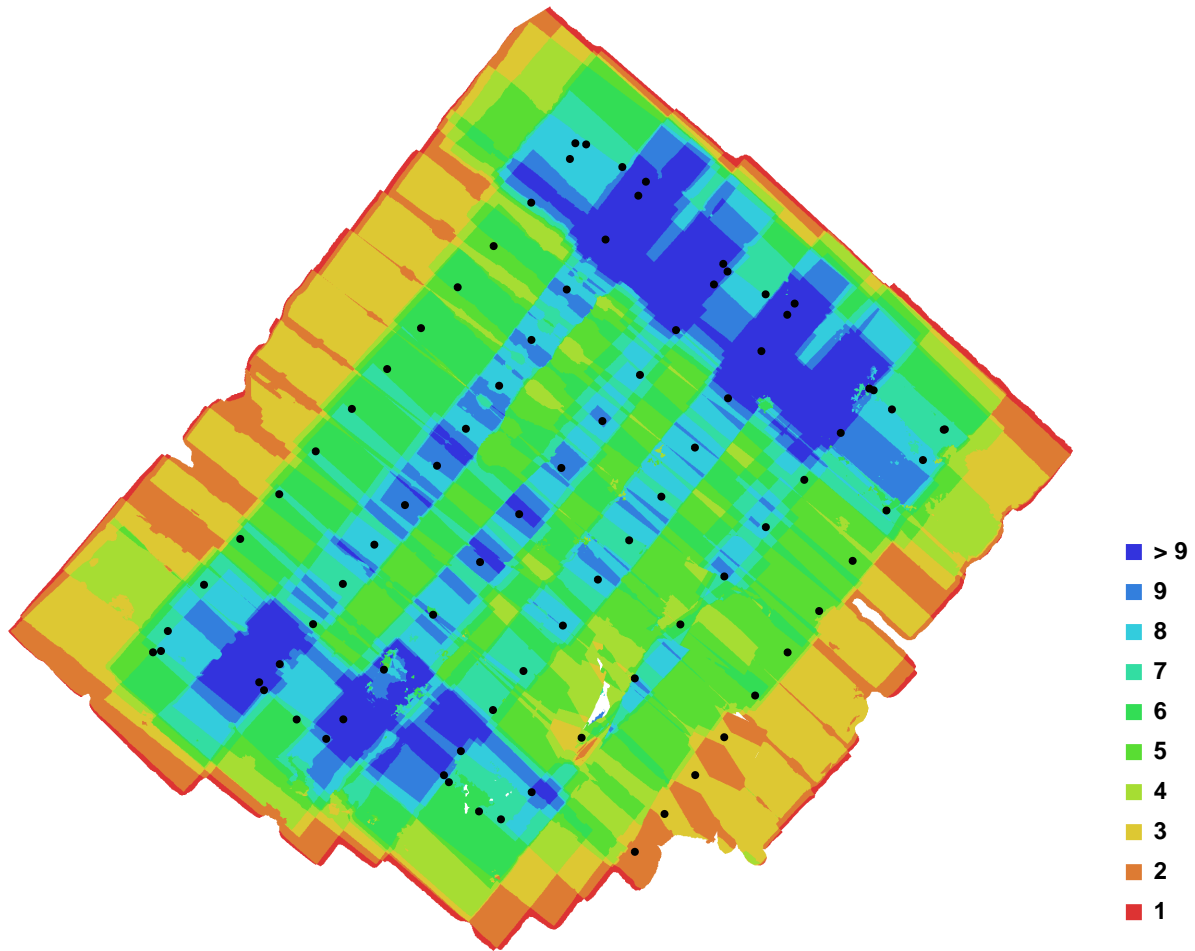


Fig. 1. Camera locations and image overlap.

Number of images:	195	Camera stations:	86
Flying altitude:	41.6804 m	Tie-points:	24377
Ground resolution:	0.00994094 m/pix	Projections:	69903
Coverage area:	0.0242935 sq km	Error:	1.36634 pix

Camera Model	Resolution	Focal Length	Pixel Size	Precalibrated
COOLPIX A (18.5 mm)	4928 x 3264	18.5 mm	4.83629 x 4.83629 um	No

Table. 1. Cameras.

# Camera Calibration

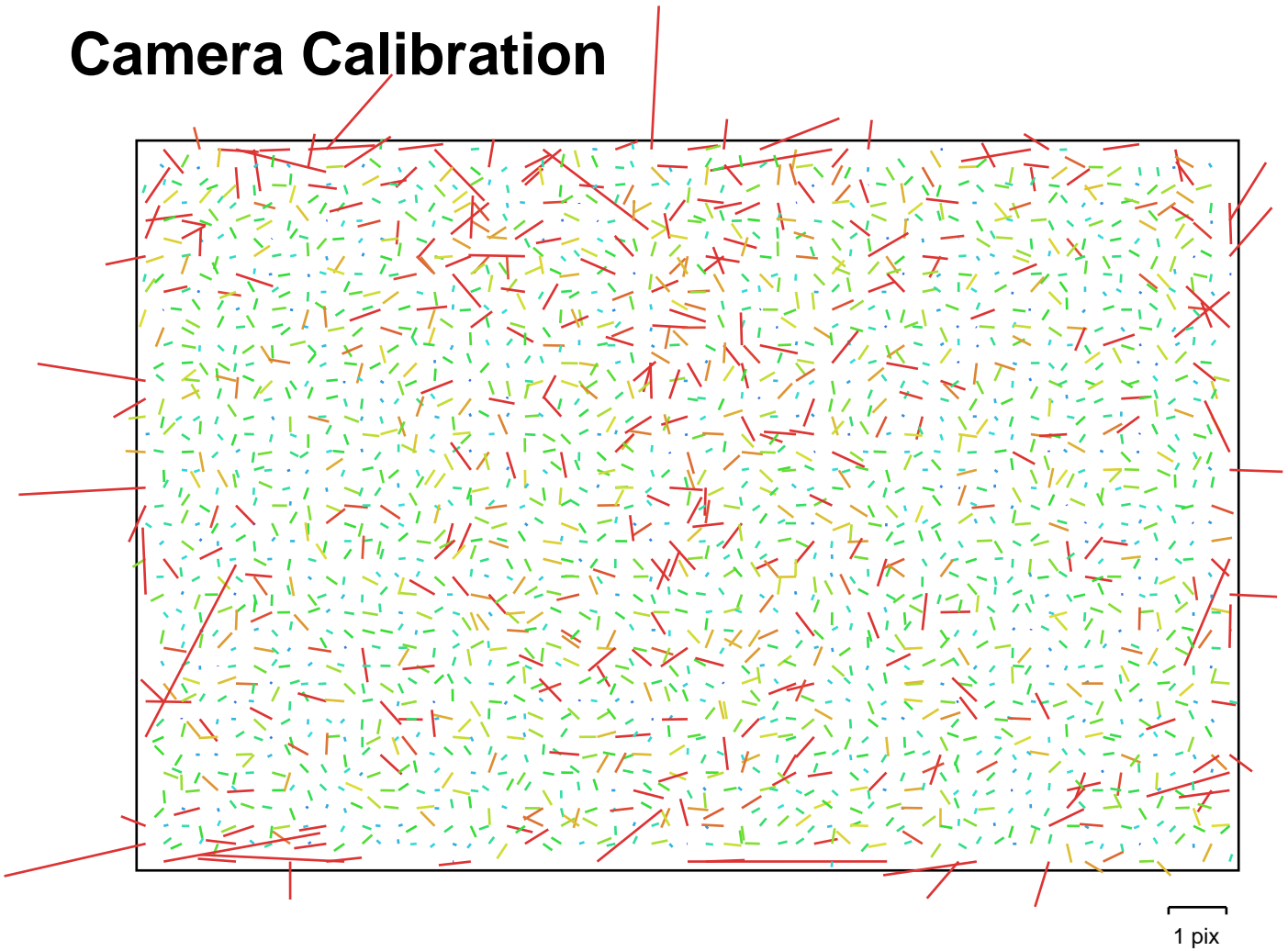


Fig. 2. Image residuals for COOLPIX A (18.5 mm).

## COOLPIX A (18.5 mm)

Type:	Frame	K1:	-0.0726644
Fx:	3824.67	K2:	0.0808378
Fy:	3826.01	K3:	-0.020972
Cx:	2471.36	K4:	0.00106341
Cy:	1644.23	P1:	-0.000561065
Skew:	0.153957	P2:	0.000426832

# Camera Locations

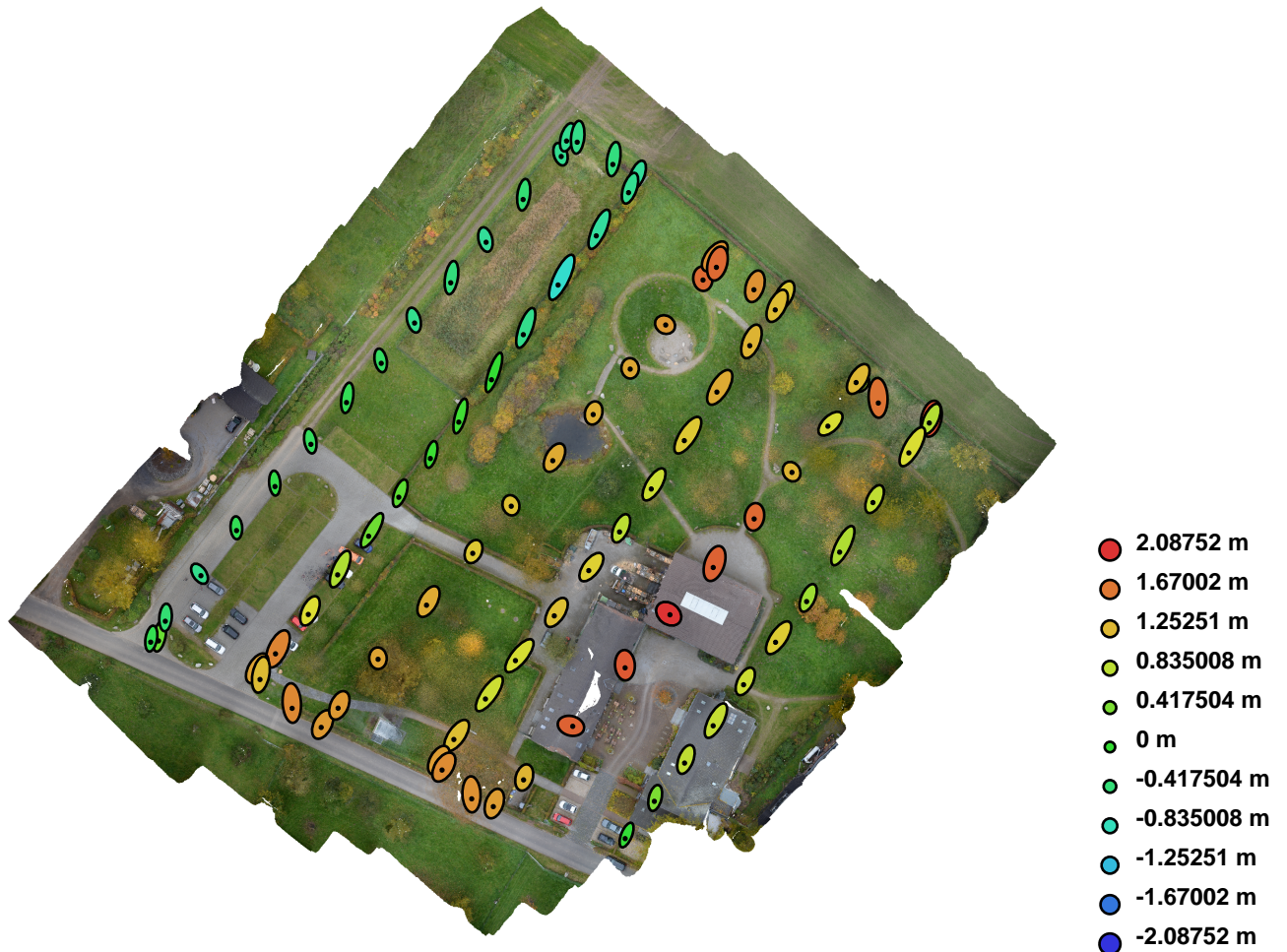


Fig. 3. Camera locations and error estimates.

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)	Total error (m)
0.781333	1.736366	1.108289	2.203123

Table. 2. Average camera location error.

# Ground Control Points



Fig. 4. GCP locations.

Label	X error (m)	Y error (m)	Z error (m)	Error (m)	Projections	Error (pix)
100	0.000088	-0.001086	0.000791	0.001346	3	0.137074
101	0.000540	0.000414	0.000011	0.000680	7	0.072570
102	-0.002248	-0.001252	-0.000389	0.002603	10	0.042347
103	0.003092	0.001016	0.000818	0.003356	5	0.044826
104	0.000685	0.001377	-0.000229	0.001555	7	0.032418
105	-0.002032	-0.000458	-0.000415	0.002124	2	0.003623
<b>Total</b>	<b>0.001803</b>	<b>0.001005</b>	<b>0.000528</b>	<b>0.002131</b>	<b>34</b>	<b>0.061500</b>

Table. 3. Control points.

# Digital Elevation Model

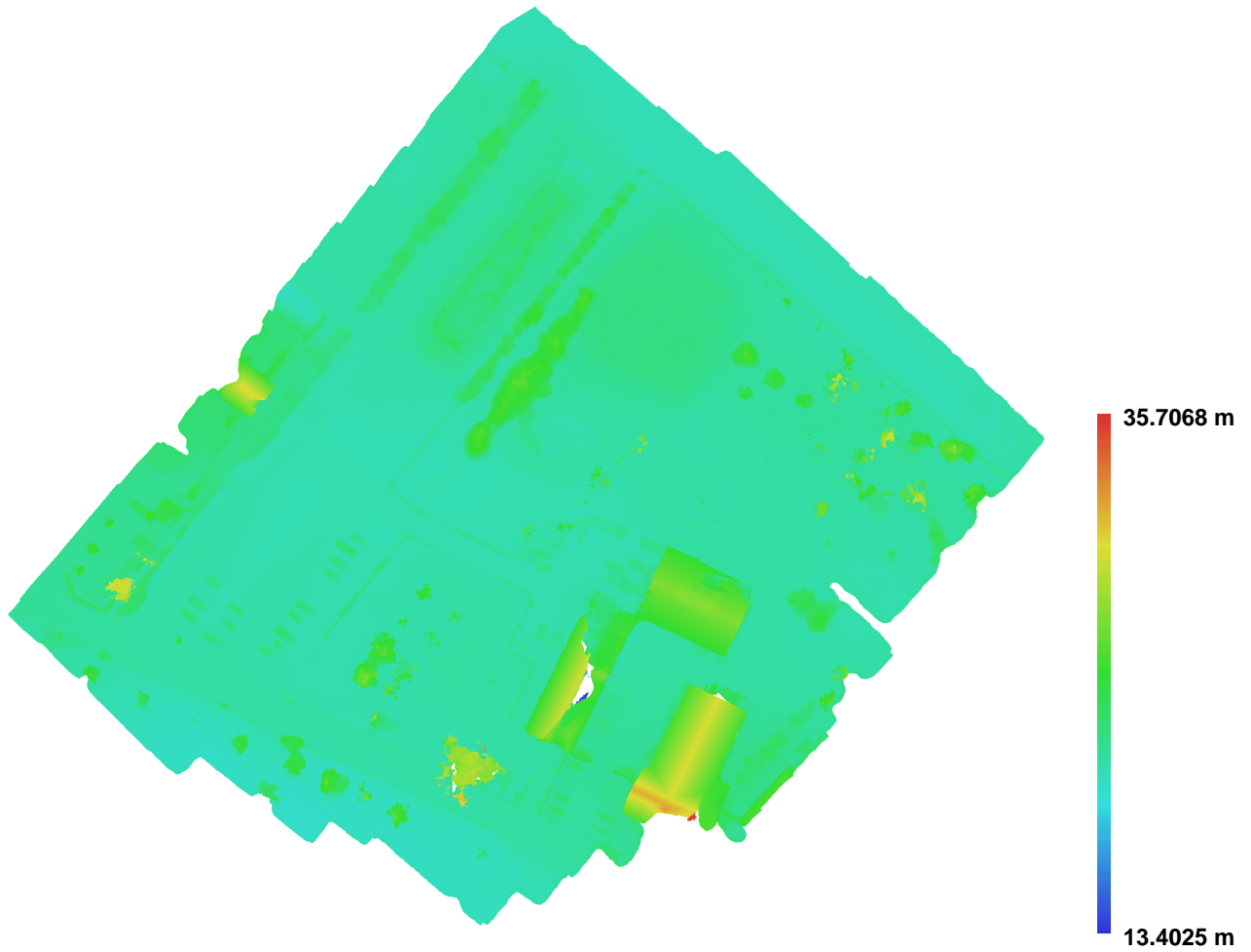


Fig. 5. Reconstructed digital elevation model.

Resolution: 0.0397638 m/pix  
Point density: 632.448 points per sq m