

Agisoft PhotoScan

Processing Report
04 December 2015



Survey Data

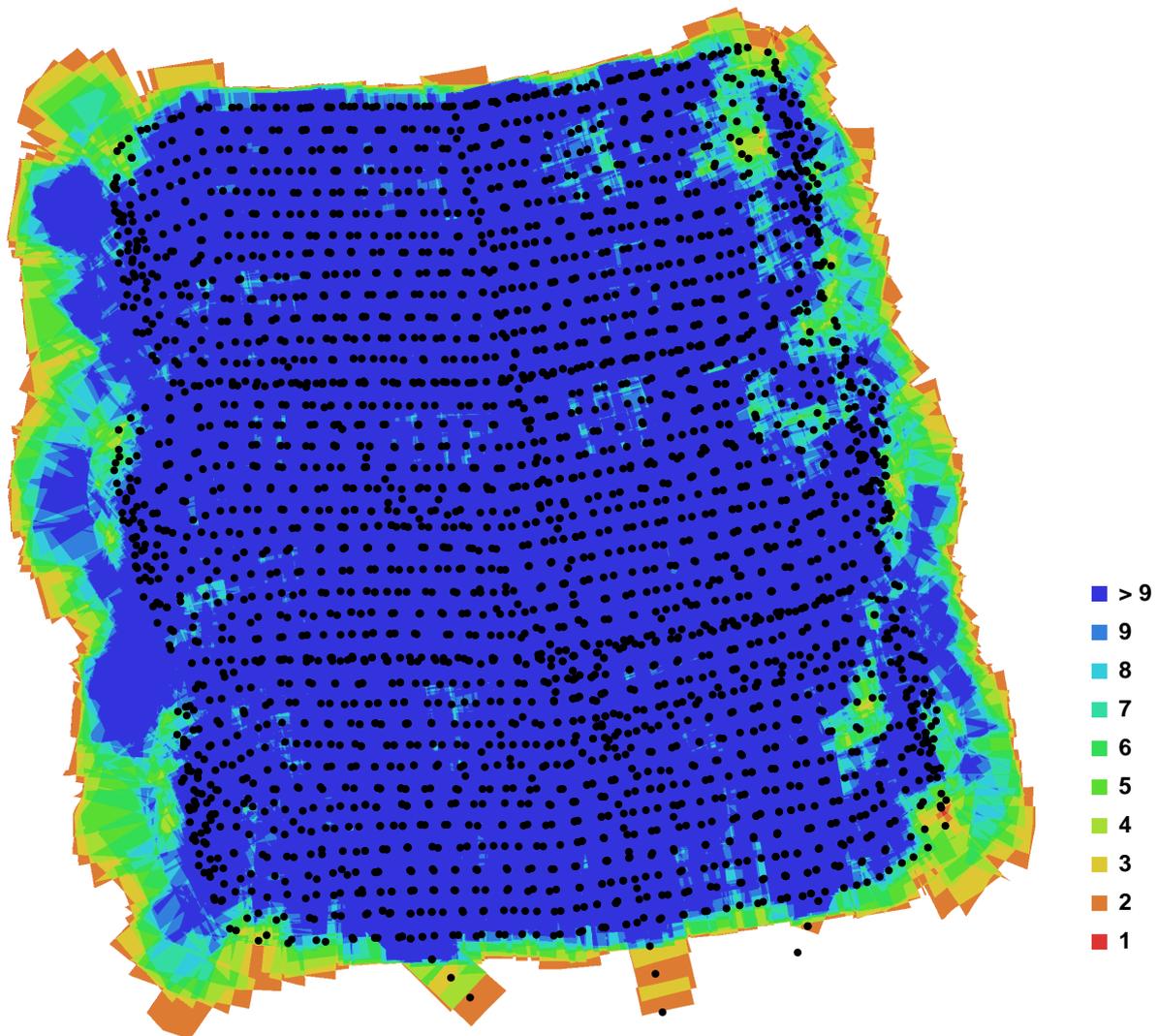


Fig. 1. Camera locations and image overlap.

Number of images:	3392	Camera stations:	3384
Flying altitude:	151.444 m	Tie-points:	14032304
Ground resolution:	0.0280622 m/pix	Projections:	72542897
Coverage area:	2.11075 sq km	Error:	0.449869 pix

Camera Model	Resolution	Focal Length	Pixel Size	Precalibrated
E-420 (25 mm)	3648 x 2736	25 mm	unknown	No
E-420 (25 mm)	3648 x 2736	25 mm	unknown	No
E-420 (25 mm)	3648 x 2736	25 mm	unknown	No
E-420 (25 mm)	3648 x 2736	25 mm	unknown	No

Table. 1. Cameras.

Camera Calibration

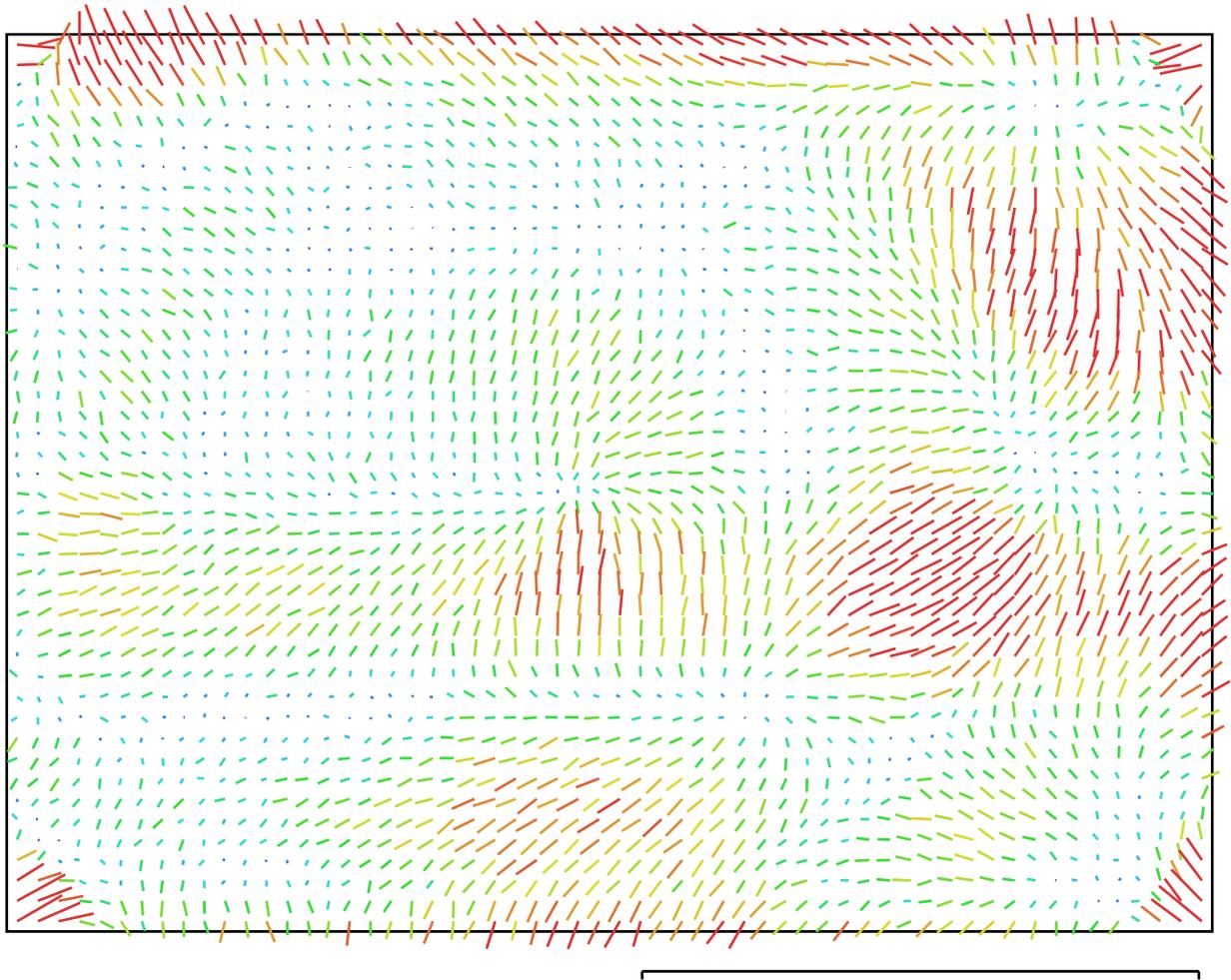


Fig. 2. Image residuals for E-420 (25 mm).

E-420 (25 mm)

Type:	Frame	K1:	-0.183835
Fx:	5288.3	K2:	0.250532
Fy:	5289.76	K3:	-0.478371
Cx:	1827.46	K4:	0
Cy:	1383.02	P1:	6.37385e-006
Skew:	3.26708	P2:	-1.37177e-005

Camera Calibration

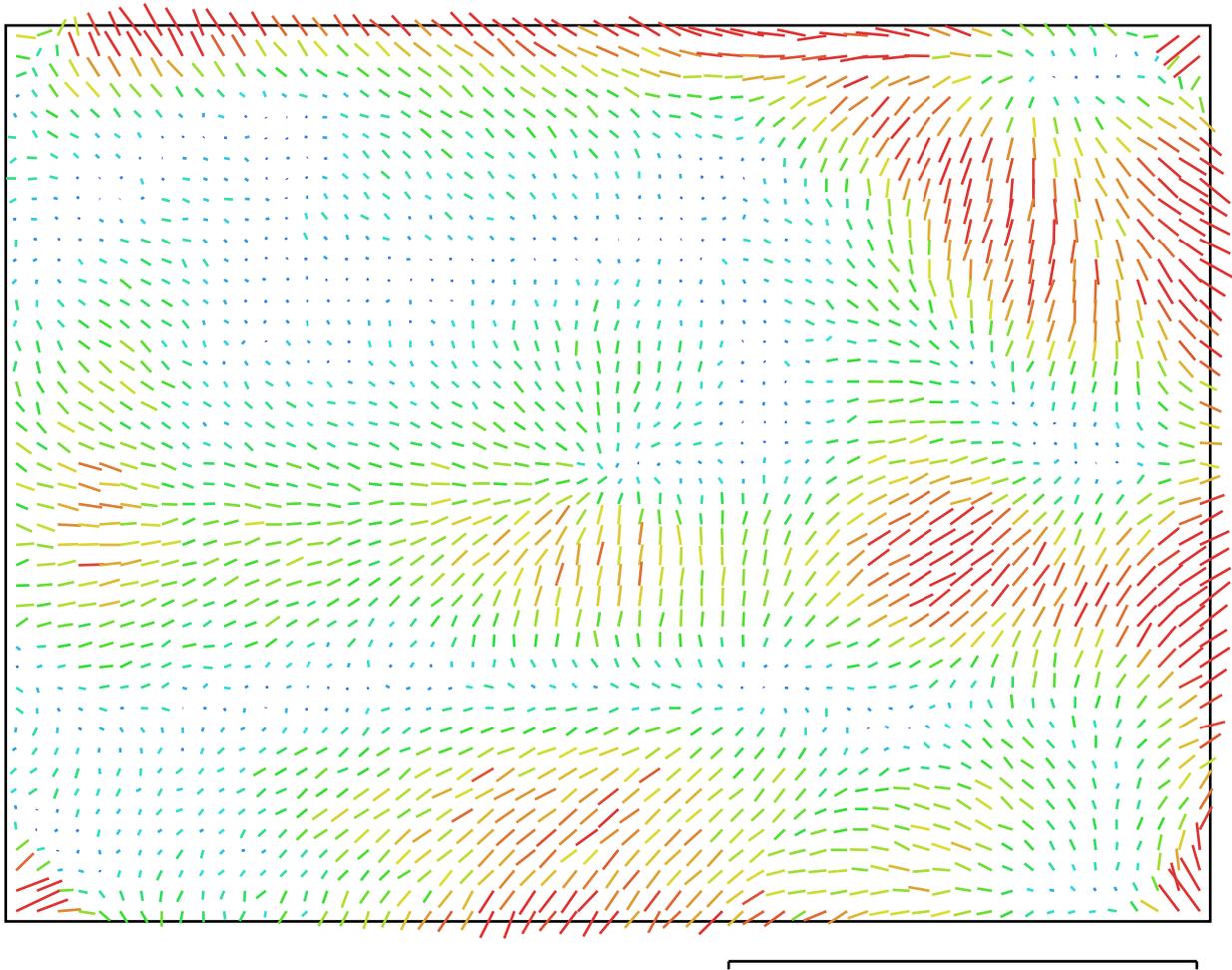


Fig. 3. Image residuals for E-420 (25 mm). ^{1 pix}

E-420 (25 mm)

Type:	Frame	K1:	-0.183681
Fx:	5295.74	K2:	0.245131
Fy:	5295.85	K3:	-0.457328
Cx:	1817.4	K4:	0
Cy:	1383.47	P1:	-2.15977e-005
Skew:	1.9582	P2:	7.36347e-005

Camera Calibration

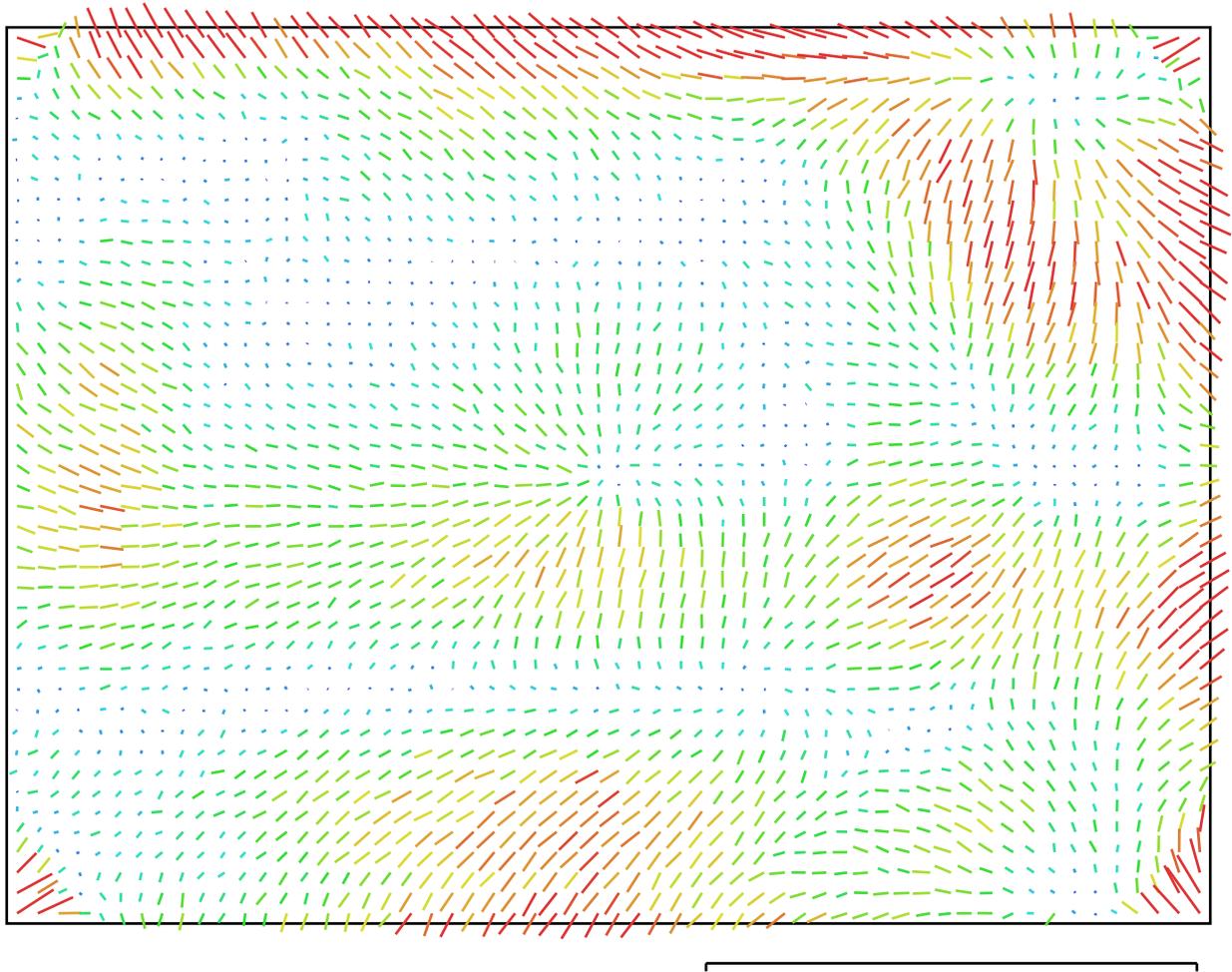


Fig. 4. Image residuals for E-420 (25 mm). 1 pix
(25 mm).

E-420 (25 mm)

Type:	Frame	K1:	-0.183279
Fx:	5291.13	K2:	0.246356
Fy:	5291.48	K3:	-0.465587
Cx:	1816.15	K4:	0
Cy:	1384.5	P1:	-5.00818e-005
Skew:	1.83959	P2:	0.000112885

Camera Calibration

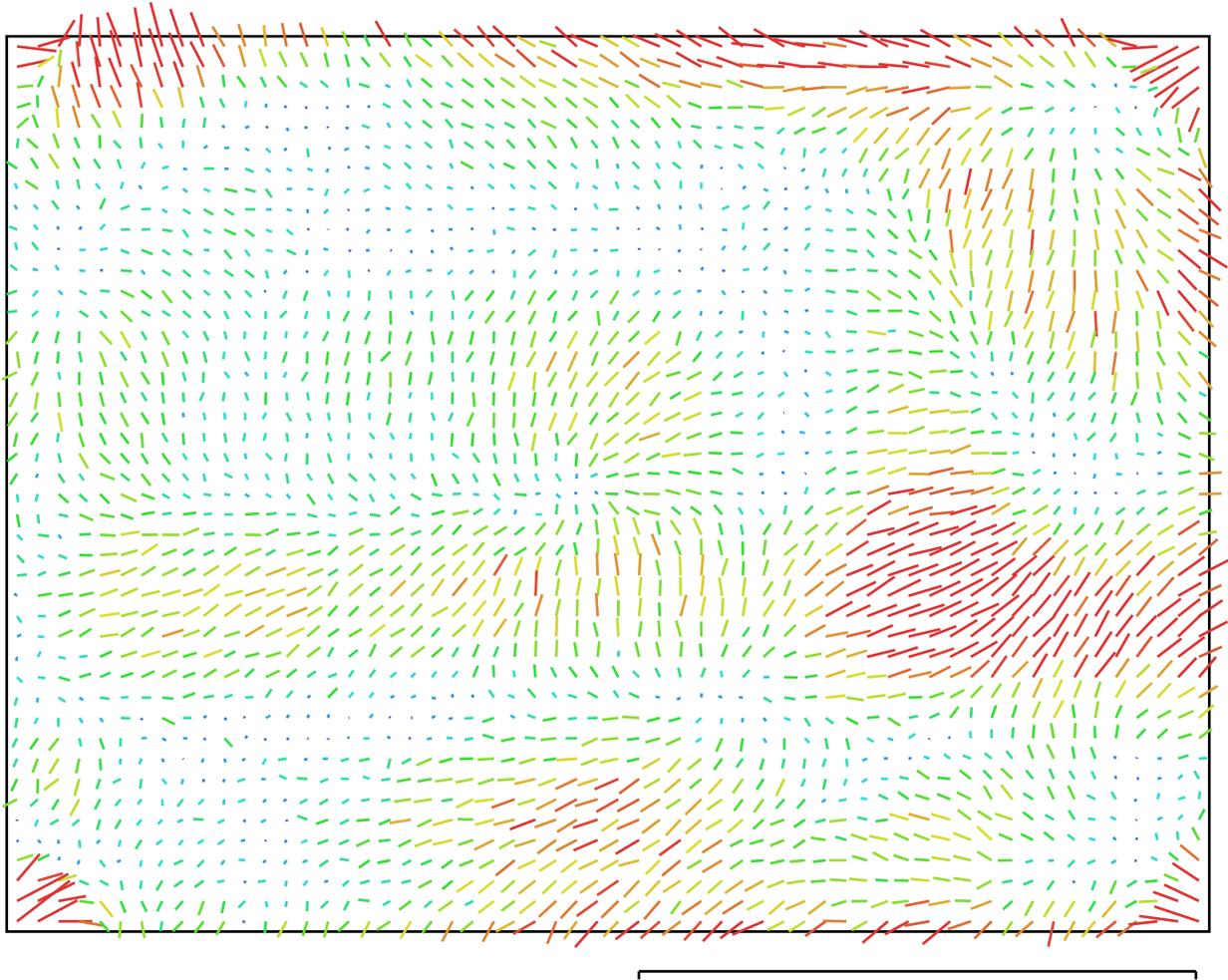


Fig. 5. Image residuals for E-420 (25 mm). 1 pix
(25 mm).

E-420 (25 mm)

Type:	Frame	K1:	-0.183977
Fx:	5284.68	K2:	0.252768
Fy:	5285.77	K3:	-0.484703
Cx:	1832.5	K4:	0
Cy:	1383.23	P1:	2.25658e-005
Skew:	4.01352	P2:	1.45626e-005

Ground Control Points

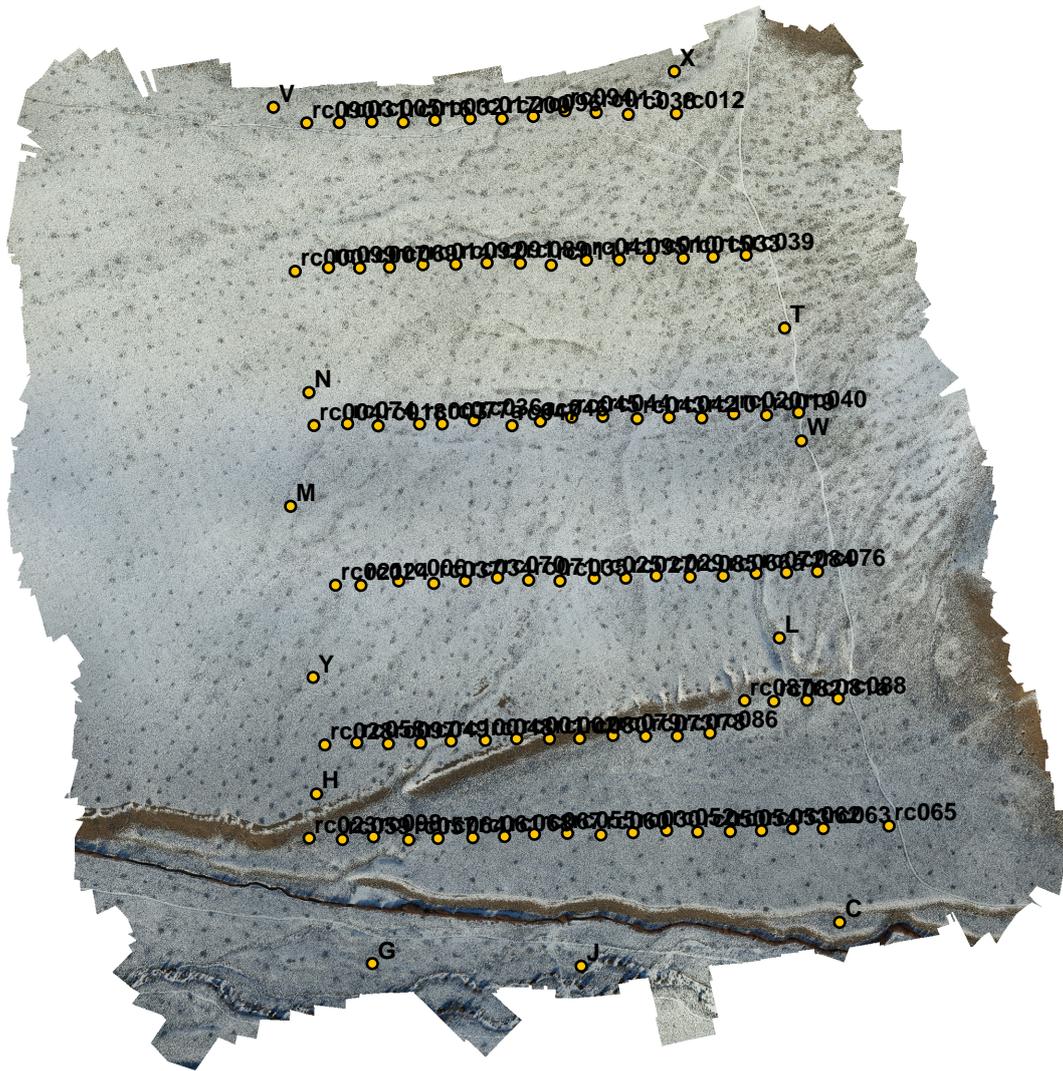


Fig. 6. GCP locations.

Label	X error (m)	Y error (m)	Z error (m)	Error (m)	Projections	Error (pix)
C	-0.011637	0.017969	0.010202	0.023714	17	0.221549
G	0.028020	-0.005288	-0.106029	0.109796	10	2.433843
H	0.048088	0.008052	-0.027330	0.055895	13	0.198837
J	-0.001664	-0.009220	0.003927	0.010159	9	0.126176
L	0.049990	0.023926	0.042444	0.069807	20	0.956664
M	-0.036409	0.043769	-0.037557	0.068205	17	0.700486
N	-0.023516	0.084000	-0.034666	0.093865	14	0.553698
T	-0.016418	-0.020961	-0.031349	0.041130	13	0.623242
V	-0.006450	-0.018595	-0.008866	0.021586	12	0.368853
W	0.079102	0.026496	-0.011870	0.084262	9	0.295830

Label	X error (m)	Y error (m)	Z error (m)	Error (m)	Projections	Error (pix)
X	-0.009923	-0.004833	-0.006716	0.012920	12	0.534397
Y	-0.052063	-0.006945	-0.013315	0.054185	11	0.192864
rc000	-0.076636	-0.089561	0.089565	0.148041	17	3.173089
rc001	-0.053698	0.087044	-0.014988	0.103367	10	0.184038
rc002	0.022951	0.108750	0.036527	0.116994	20	0.583572
rc003	0.137034	-0.090539	0.042502	0.169653	12	0.241619
rc004	0.083533	-0.036240	0.031756	0.096434	18	0.490385
rc005	-0.004765	0.042865	-0.057838	0.072148	16	0.267695
rc006	-0.028469	0.027943	0.002547	0.039972	30	0.846091
rc007	0.054630	-0.040319	-0.010793	0.068750	31	1.275590
rc010	-0.020018	0.013119	0.017844	0.029854	12	0.218246
rc011	-0.033139	0.072303	0.005049	0.079696	28	0.703188
rc012	-0.018750	-0.014988	-0.004571	0.024436	15	0.355522
rc013	0.074931	-0.084377	0.021334	0.114845	10	0.271858
rc014	-0.006982	-0.035084	-0.021707	0.041843	16	0.220741
rc015	0.085165	-0.032463	-0.040337	0.099670	15	1.129821
rc016	-0.006787	0.030251	-0.006382	0.031653	15	0.283893
rc017	0.094058	-0.007062	0.037284	0.101424	17	0.917033
rc018	-0.054276	0.031832	0.046793	0.078414	18	0.979734
rc019	0.027246	0.033756	-0.011075	0.044771	13	0.550126
rc020	-0.021577	-0.026681	0.032202	0.047058	15	0.571864
rc021	0.011701	-0.027989	0.047437	0.056308	19	0.652186
rc023	0.009239	-0.015372	0.021688	0.028143	12	0.438967
rc024	-0.009954	-0.088676	0.000516	0.089235	19	0.969487
rc025	0.001729	0.057342	-0.014463	0.059163	26	0.591918
rc027	-0.006730	0.000098	0.008488	0.010833	17	0.668101
rc028	0.021651	-0.024305	-0.012965	0.035038	13	0.674837
rc029	-0.013558	0.077036	0.017097	0.080067	15	0.564684
rc030	-0.073652	-0.090238	-0.030549	0.120419	29	0.499138
rc031	-0.060554	-0.076739	0.059588	0.114483	18	1.213885
rc032	-0.010498	0.025639	0.049216	0.056478	13	0.270842
rc033	-0.070154	-0.029887	-0.094257	0.121240	17	2.347272
rc034	-0.021093	0.000847	-0.015880	0.026416	21	0.310037

Label	X error (m)	Y error (m)	Z error (m)	Error (m)	Projections	Error (pix)
rc035	0.048637	-0.039593	-0.000323	0.062716	19	0.386911
rc036a	-0.057081	0.002501	0.034264	0.066622	12	0.202224
rc037	-0.033660	0.029764	0.002208	0.044986	19	0.722021
rc038	-0.072927	0.057888	-0.036243	0.099915	10	0.581373
rc039	0.050521	0.013500	0.017045	0.055002	14	0.668127
rc040	-0.016246	0.059301	0.073603	0.095906	7	0.471072
rc041	-0.035159	-0.049507	-0.035257	0.070215	20	0.850757
rc042	-0.024762	-0.022862	-0.017269	0.037869	15	0.284505
rc043	0.106424	-0.078298	-0.014821	0.132952	10	0.367420
rc044	-0.072233	-0.023235	-0.001629	0.075895	10	0.363987
rc045	0.023228	-0.068092	-0.010775	0.072748	16	0.582902
rc046	0.011814	-0.006163	-0.014784	0.019903	30	0.545419
rc047	-0.039717	0.069782	-0.001763	0.080313	20	0.219990
rc048	0.016135	-0.016586	0.022453	0.032243	11	0.358426
rc049	-0.051447	0.024516	0.013217	0.058502	16	0.435703
rc050	-0.041092	-0.082218	0.035262	0.098447	14	0.251286
rc052	0.096146	0.044284	-0.024920	0.108748	28	1.019954
rc053	0.046204	-0.088655	-0.063910	0.118655	11	1.875360
rc054	-0.027581	-0.081779	0.023797	0.089526	12	0.198950
rc055	0.033689	0.111907	0.002038	0.116885	22	0.606498
rc057	0.010181	-0.010136	0.038091	0.040710	20	0.633356
rc058	-0.000426	-0.064789	0.040472	0.076393	19	0.476765
rc059	0.000615	0.029485	0.019548	0.035382	11	0.317421
rc060	0.010711	-0.125687	0.003341	0.126187	20	0.585785
rc061	0.075689	-0.127621	-0.009705	0.148695	17	0.553550
rc062	-0.099850	0.012229	-0.046710	0.110911	15	2.098212
rc063	-0.007342	0.013452	0.013248	0.020258	15	1.267104
rc064	-0.009323	-0.004675	-0.020170	0.022707	26	0.440393
rc065	0.000623	0.026032	-0.007665	0.027144	12	0.244195
rc066a	-0.023420	-0.005153	0.050677	0.056064	19	0.841910
rc067	0.041523	0.150580	0.014499	0.156872	17	2.674171
rc068	-0.003922	0.003929	-0.016087	0.017018	16	0.253499
rc069	-0.010295	0.034590	-0.002650	0.036186	23	0.768941

Label	X error (m)	Y error (m)	Z error (m)	Error (m)	Projections	Error (pix)
rc070	-0.000771	0.063017	0.039382	0.074315	25	0.542559
rc071	-0.034216	0.072835	-0.006065	0.080700	20	0.496502
rc072	-0.092508	-0.196415	-0.138621	0.257589	23	0.804075
rc073	-0.066497	-0.001813	-0.003645	0.066622	34	0.420266
rc074	0.011702	-0.064736	0.006436	0.066099	24	0.350292
rc076	0.019052	0.037978	0.020659	0.047245	21	0.703216
rc077a	0.056053	-0.065583	-0.051340	0.100394	13	0.268622
rc078	-0.041870	0.039876	0.051971	0.077745	19	0.532375
rc079	0.095487	-0.107914	-0.037476	0.148888	43	0.853162
rc080	-0.021172	-0.020396	0.009856	0.031006	23	0.772527
rc081a	0.004801	0.039813	0.028001	0.048910	22	0.810774
rc082	0.030325	-0.006348	0.014034	0.034013	24	1.699363
rc084	0.015753	0.045886	0.028046	0.056038	24	0.816511
rc085	-0.063351	-0.003230	0.048668	0.079952	10	0.320777
rc086	-0.056481	0.078170	-0.042831	0.105523	16	0.398791
rc087	0.070026	0.063213	0.117757	0.150885	23	1.985612
rc088	-0.011870	0.035308	-0.010606	0.038730	14	0.358154
rc089	0.036159	0.052460	0.000905	0.063721	33	0.815162
rc090	0.045217	0.055324	-0.006576	0.071754	21	0.230525
rc091	0.105314	0.004683	-0.061393	0.121993	21	0.637935
rc092	-0.006360	0.023259	0.007394	0.025221	19	0.312218
rc094	0.088271	0.071411	0.015420	0.114582	15	0.359258
rc095	0.019733	-0.009371	0.017506	0.027994	10	0.258678
rc096	-0.020444	-0.049886	0.003273	0.054012	23	0.786762
rc097	-0.000815	0.021793	-0.037393	0.043288	23	0.613046
rc098	-0.058786	0.034996	-0.029175	0.074375	19	1.285959
rc099	0.011690	0.058797	-0.024788	0.064870	24	0.769967
rc100	-0.004769	-0.039678	-0.003158	0.040088	13	0.433693
rc101	-0.022581	0.005053	0.009801	0.025129	12	0.661297
rc200	-0.125538	0.036666	-0.019189	0.132183	26	0.476774
Total	0.049204	0.056816	0.036831	0.083700	1887	0.875614

Table. 2. Control points.

Digital Elevation Model

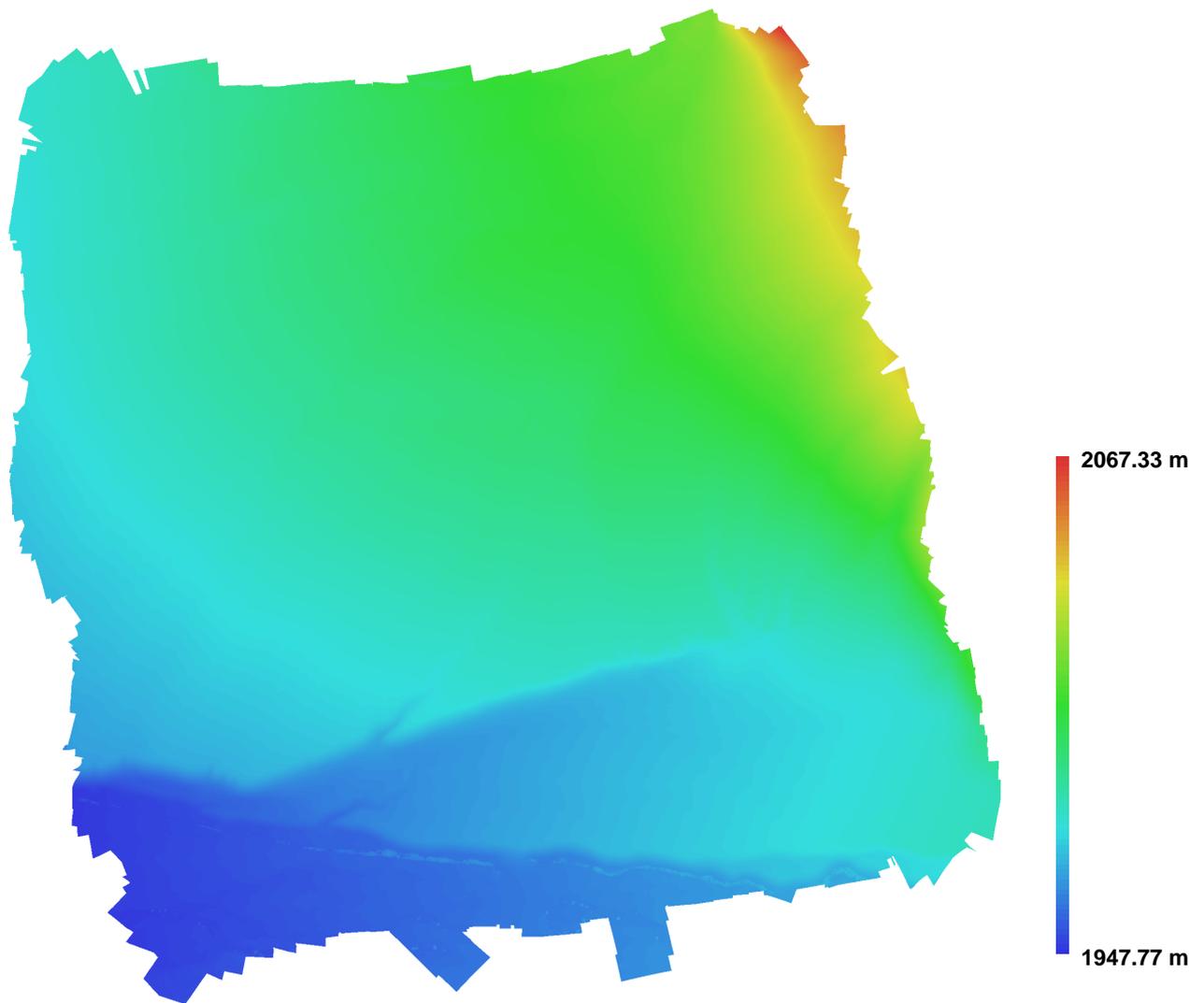


Fig. 7. Reconstructed digital elevation model.

Resolution: 0.112249 m/pix
Point density: 79.3666 points per sq m