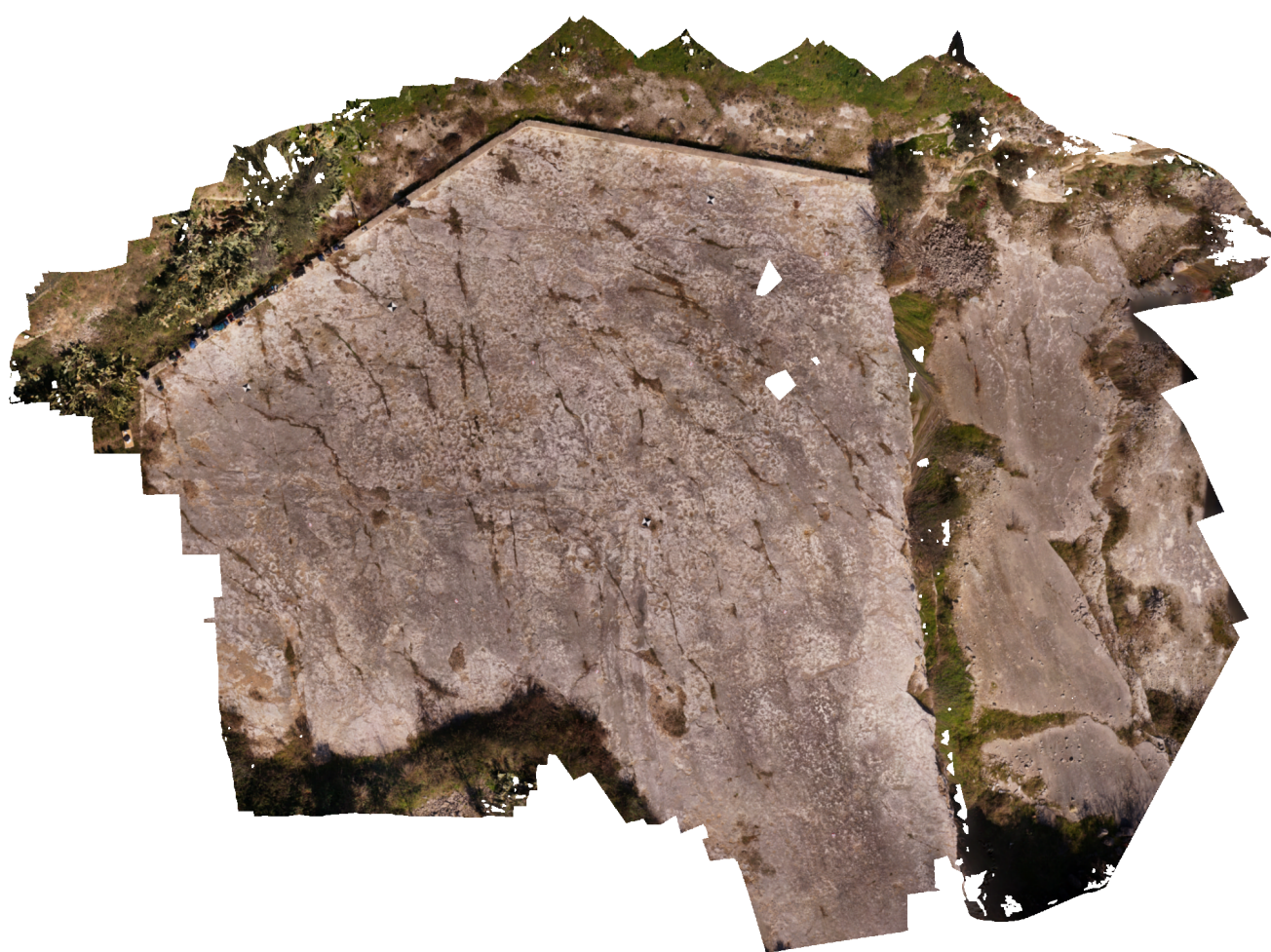


Agisoft PhotoScan

Processing Report



Survey Data

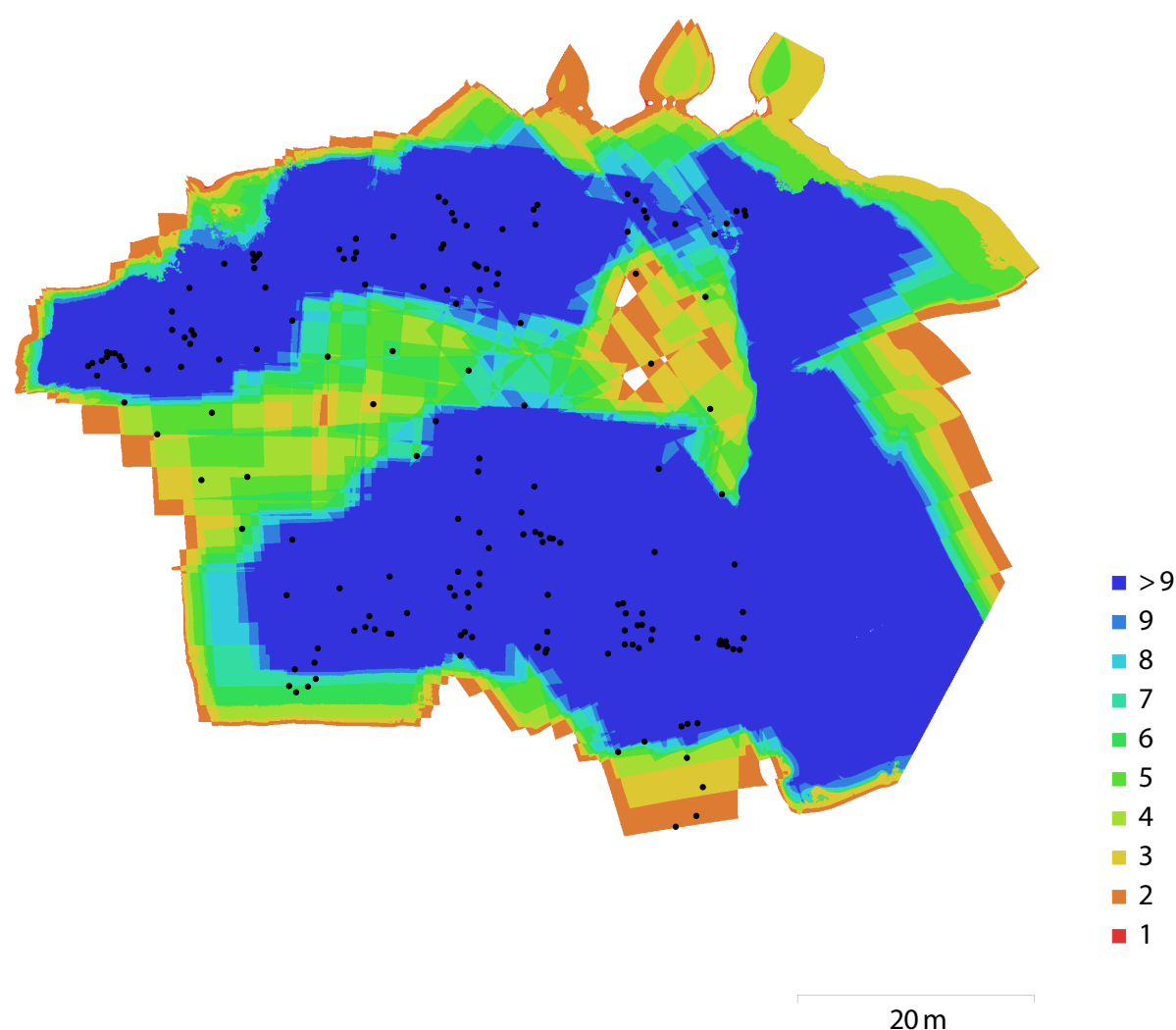


Fig. 1. Camera locations and image overlap.

Number of images:	172	Camera stations:	172
Flying altitude:	15 m	Tie points:	101,230
Ground resolution:	5 mm/pix	Projections:	699,215
Coverage area:	3.79e+03 sq m	Reprojection error:	0.501 pix

Camera Model	Resolution	Focal Length	Pixel Size	Precalibrated
NEX-5R (18 mm)	4912 x 3264	18 mm	4.89 x 4.89 um	No
NEX-5R (18 mm)	4912 x 3264	18 mm	4.89 x 4.89 um	No

Table 1. Cameras.

Camera Calibration

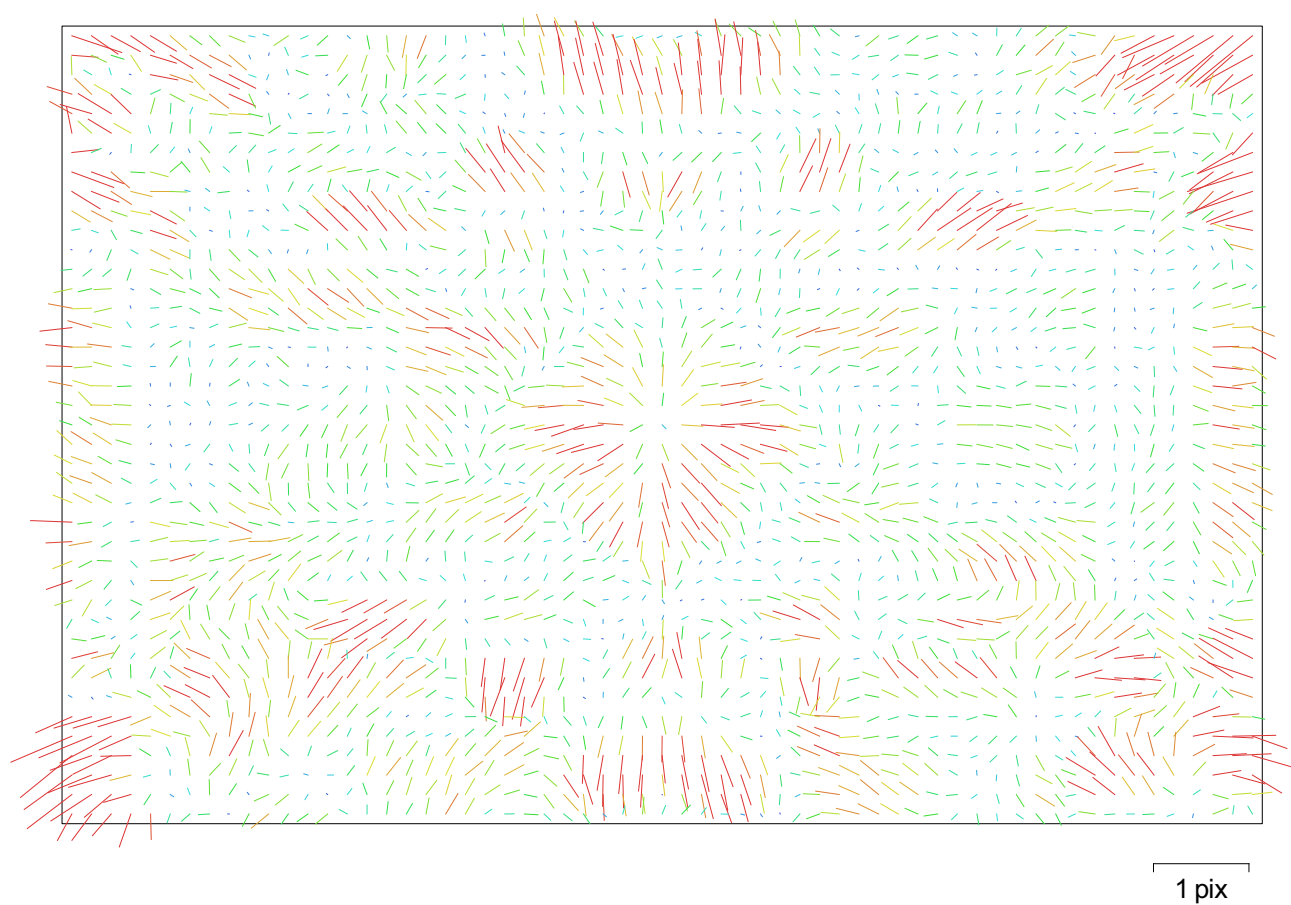


Fig. 2. Image residuals for NEX-5R (18 mm).

NEX-5R (18 mm)

Resolution	Focal Length	Pixel Size	Precalibrated
4912 x 3264	18 mm	4.89 x 4.89 um	No
Type:	Frame	Skew:	3.99689
Fx:	3899.1	Cx:	2457.38
Fy:	3904.83	Cy:	1634.31
K1:	-0.0866639	P1:	-0.00208719
K2:	0.35999	P2:	-0.00271837
K3:	-0.798414	P3:	0
K4:	0.565909	P4:	0

Camera Calibration

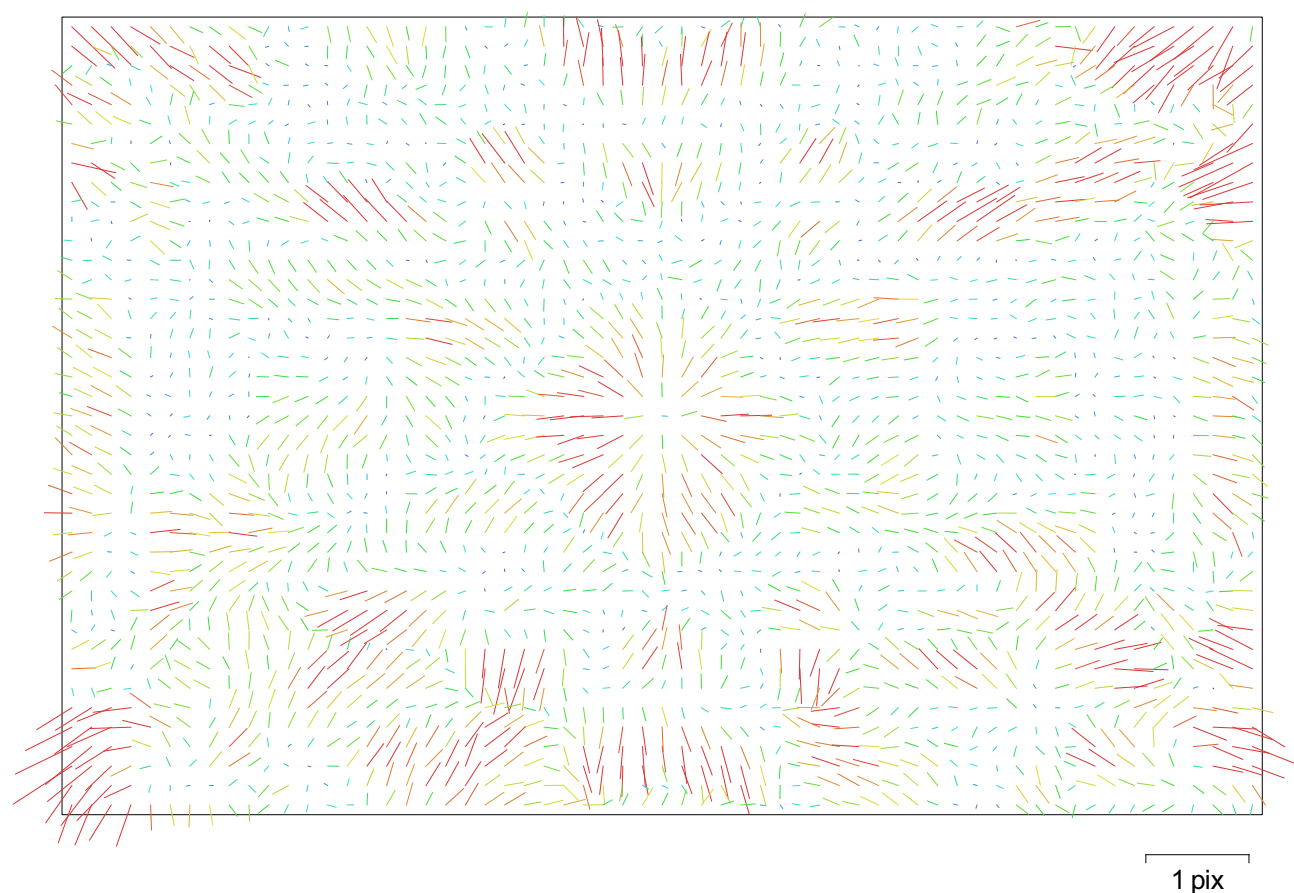


Fig. 3. Image residuals for NEX-5R (18 mm).

NEX-5R (18 mm)

Resolution	Focal Length	Pixel Size	Precalibrated
4912 x 3264	18 mm	4.89 x 4.89 um	No
Type:	Frame	Skew:	4.77242
Fx:	3807.42	Cx:	2450.82
Fy:	3810.33	Cy:	1647.96
K1:	-0.0866494	P1:	-0.000561866
K2:	0.327164	P2:	-0.00310954
K3:	-0.690473	P3:	0
K4:	0.466641	P4:	0

Ground Control Points



Fig. 4. GCP locations.

Label	XY error (m)	Z error (m)	Error (m)	Projections	Error (pix)
GS0013	0.0460556	-0.0170839	0.0491221	6	0.407
GS0014	0.0408217	0.00230778	0.0408869	5	0.488
GS0015	0.0288138	0.0137213	0.0319141	19	0.494
GS0015	0.000802094	-0.00250258	0.00262797	2	0.163
GS0016	0.0430273	-0.0087051	0.0438991	12	0.449
GS0016	0.0136022	-0.0030663	0.0139436	7	0.289
GS0017	0.0252468	0.00340385	0.0254753	8	0.591
GS0018	0.00380045	-0.0225369	0.022855	22	0.369
GS0019	0.00901746	0.0329419	0.0341538	17	0.498

Label	XY error (m)	Z error (m)	Error (m)	Projections	Error (pix)
GS0019	0.0146709	-0.0168689	0.0223561	8	0.501
GS0020	0.00563163	-0.00266658	0.00623104	4	0.650
GS0021	0.0227408	0.0030692	0.022947	6	0.501
GS0022	0.0314423	0.00170198	0.0314883	9	0.626
GS0023	0.0393013	-0.0123359	0.0411919	16	0.468
GS0024	0.0160666	0.037798	0.041071	6	0.548
GS0025	0.0464691	-0.00952428	0.0474351	8	0.565
Total	0.0286168	0.016119	0.0328442		0.485

Table 2. Control points.

Label	XY error (m)	Z error (m)	Error (m)	Projections	Error (pix)
GS0012	0.0814574	-0.0583842	0.10022	16	0.593
GS0018	0.0491004	-0.075616	0.0901589	7	0.554
GS0020	0.0289331	0.0498305	0.0576212	2	0.362
GS0022	0.0804181	-0.034079	0.087341	7	0.613
Total	0.0639343	0.0565043	0.0853248		0.578

Table 3. Check points.

Digital Elevation Model

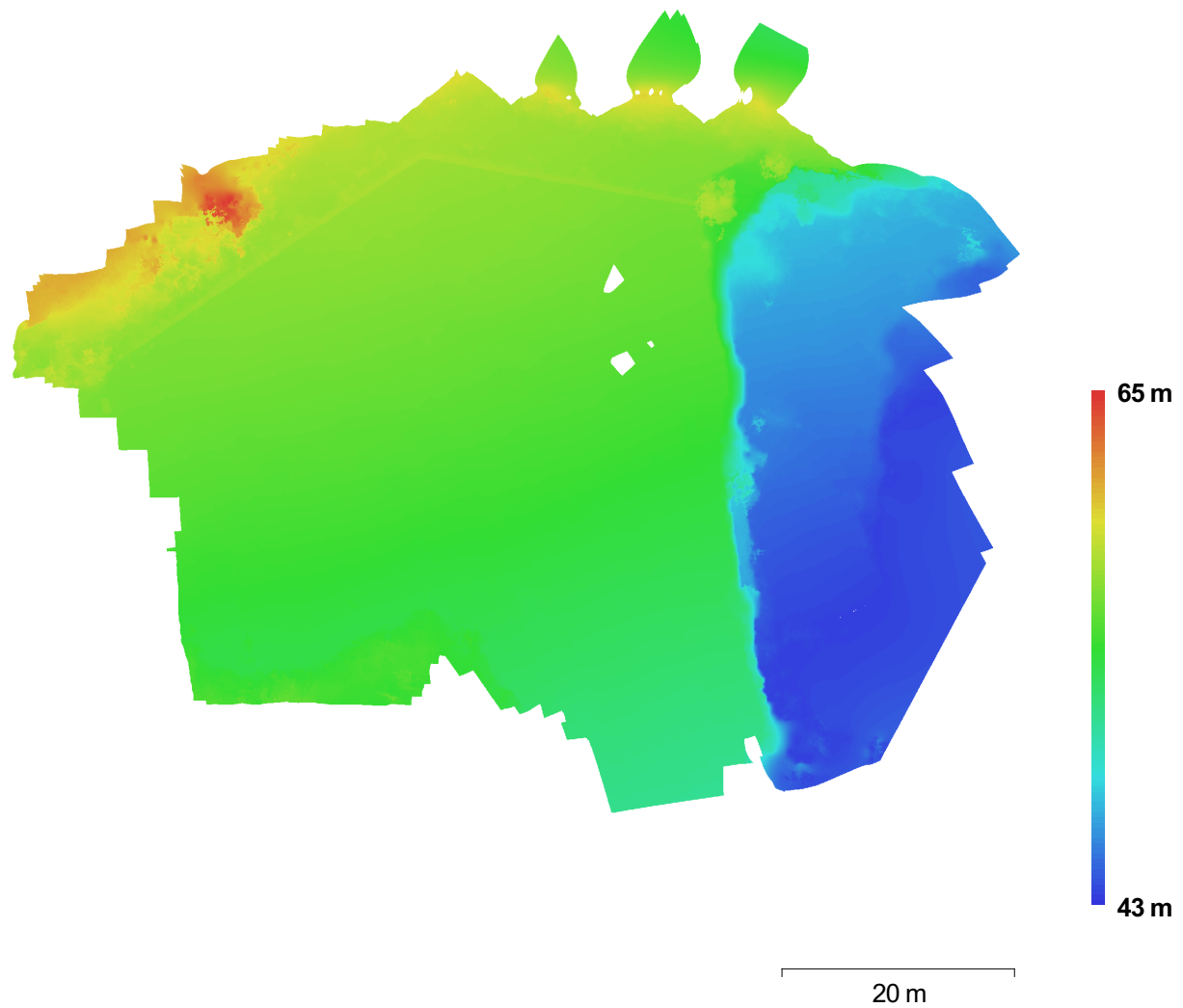


Fig. 5. Reconstructed digital elevation model.

Resolution: 7.5 mm/pix
Point density: 28092.78351 pt/sq m

Processing Parameters

General

Cameras	172
Aligned cameras	172
Markers	20
Coordinate system	WGS 84 / UTMzone 33N (EPSG::32633)

Point Cloud

Points	101,230 of 112,494
RMS reprojection error	0.188738 (0.500964 pix)
Max reprojection error	0.584237 (17.9721 pix)
Mean key point size	2.57482 pix
Effective overlap	7.36478

Depth Maps

Count	172
Reconstruction parameters	
Quality	High
Filtering mode	Mild
Processing time	5 hours 38 minutes

Dense Point Cloud

Points	109,764,819
Reconstruction parameters	
Quality	High
Depth filtering	Mild
Processing time	1 hours 43 minutes

Model

Faces	974,588
Vertices	491,003
Texture	4,096 x 4,096, uint8
Reconstruction parameters	
Surface type	Height field
Source data	Dense
Interpolation	Enabled
Quality	High
Depth filtering	Mild
Face count	1,000,000
Processing time	1 minutes 19 seconds
Texturing parameters	
Mapping mode	Orthophoto
Blending mode	Mosaic
Texture size	4,096 x 4,096
UV mapping time	13 seconds
Blending time	1 minutes 46 seconds

DEM

Size	23101x21897 pix
Coordinate system	WGS 84 / UTMzone 33N (EPSG::32633)

Orthomosaic

Size	17,687 x 12,751
Coordinate system	WGS 84 / UTMzone 33N (EPSG::32633)
Channels	3, uint8
Blending mode	Mosaic