

Agisoft PhotoScan

Processing Report



Survey Data

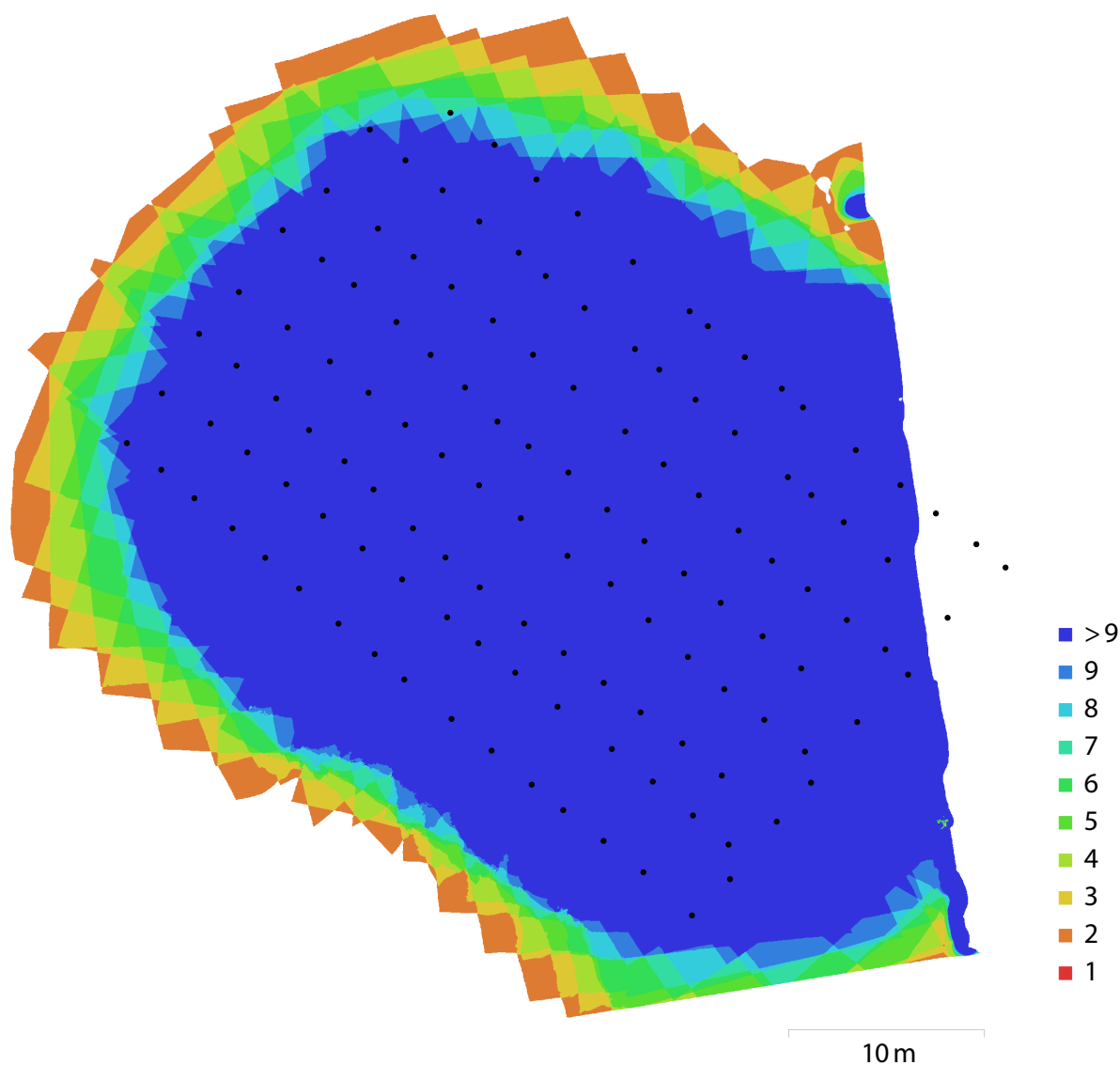


Fig. 1. Camera locations and image overlap.

Number of images:	127	Camera stations:	127
Flying altitude:	10 m	Tie points:	33,869
Ground resolution:	10 mm/pix	Projections:	377,415
Coverage area:	1.77e+03 sq m	Reprojection error:	1.56 pix

Camera Model	Resolution	Focal Length	Pixel Size	Precalibrated
FC330 (3.61 mm)	4000 x 3000	3.61 mm	1.56 x 1.56 um	No

Table 1. Cameras.

Camera Calibration

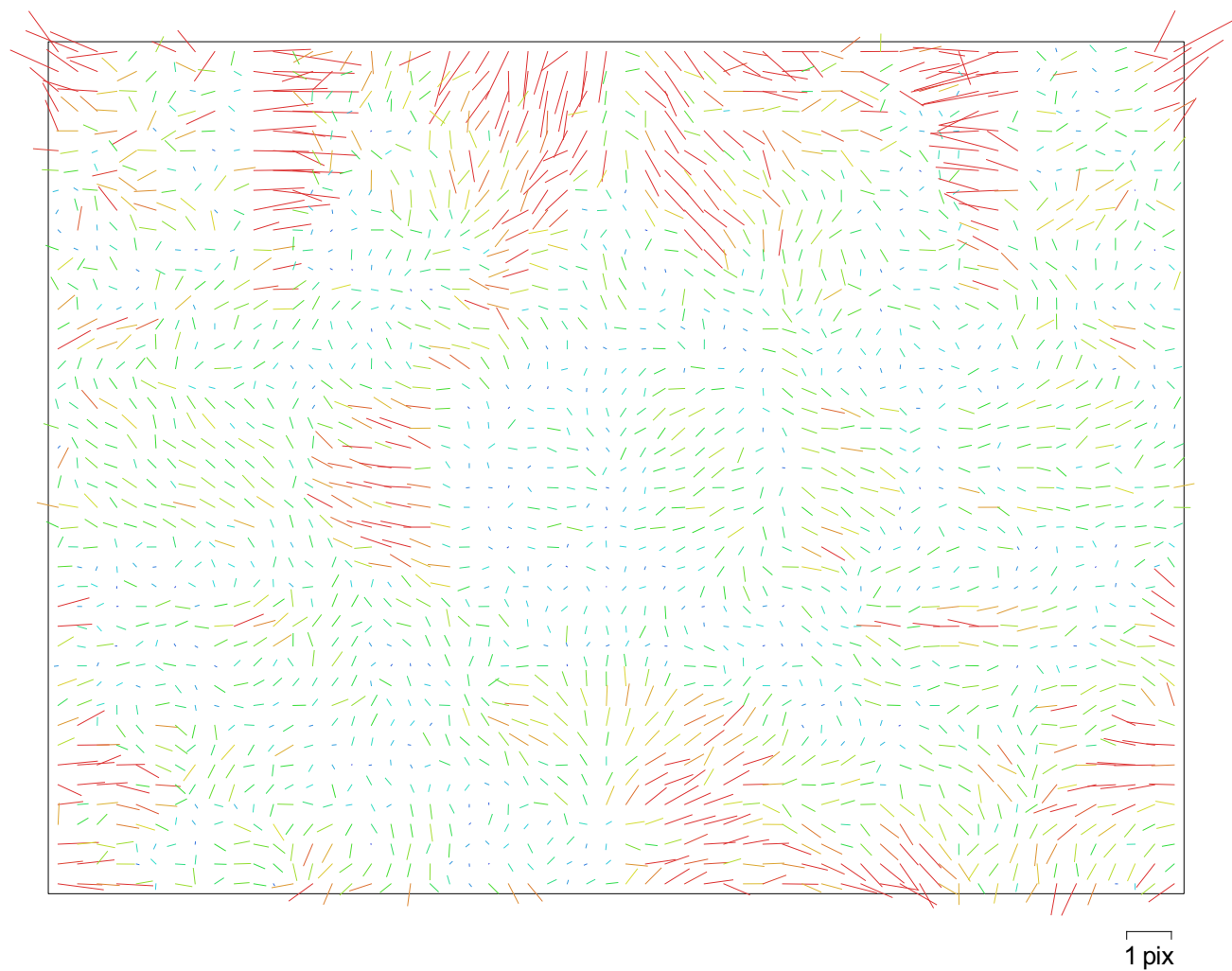


Fig. 2. Image residuals for FC330 (3.61 mm).

FC330 (3.61 mm)

Resolution	Focal Length	Pixel Size	Precalibrated
4000 x 3000	3.61 mm	1.56 x 1.56 um	No
Type:	Frame	Skew:	0
Fx:	2287.99	Cx:	1935.89
Fy:	2287.99	Cy:	1477.05
K1:	-0.00456035	P1:	-8.3604e-05
K2:	0.000492612	P2:	-2.57745e-05
K3:	-0.000287794	P3:	0
K4:	0	P4:	0

Camera Locations

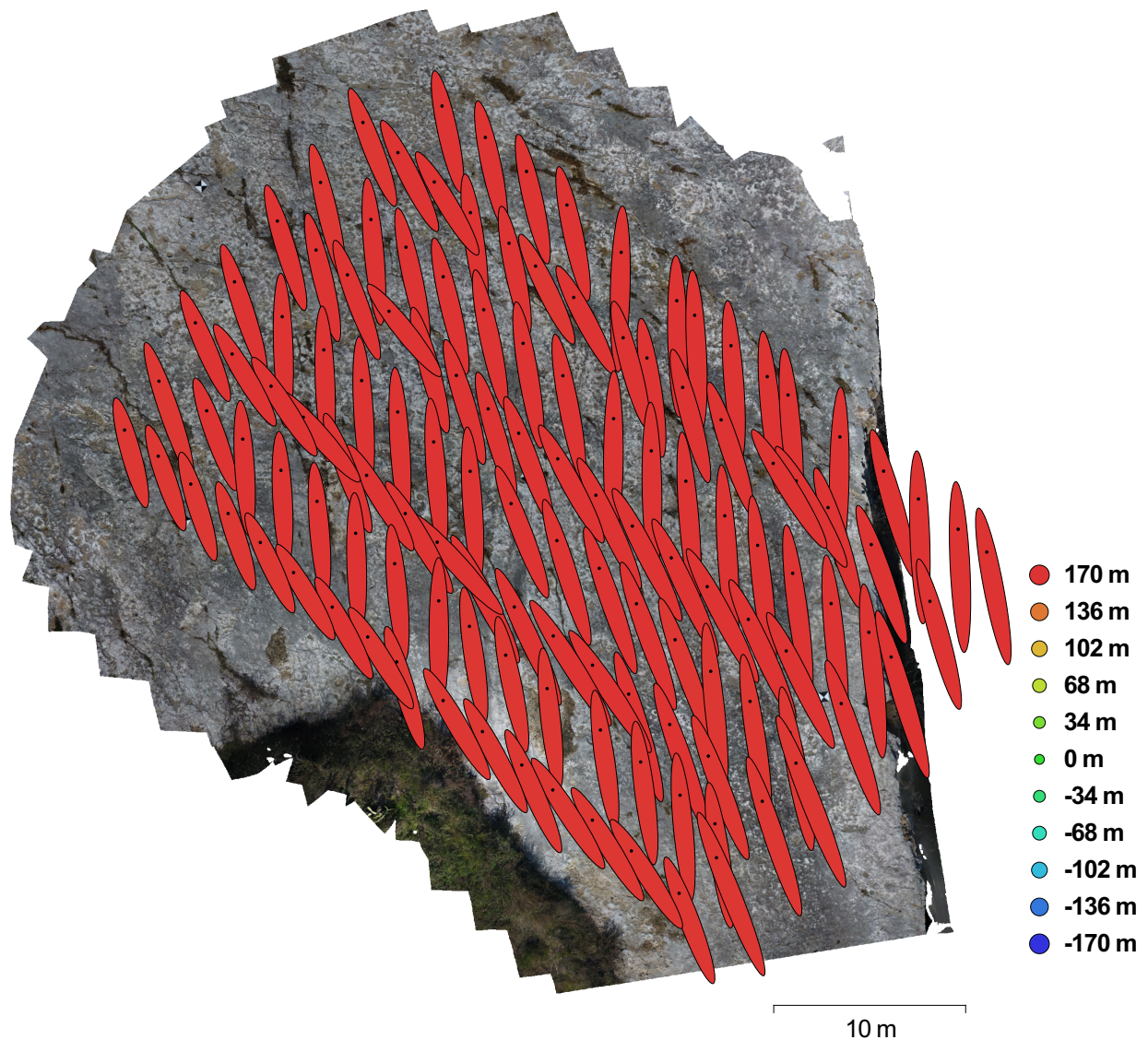


Fig. 3. Camera locations and error estimates.

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)	XY error (m)	Z error (m)	Total error (m)
0.991328	3.13202	3.28516	168.298	168.33

Table 2. Average camera location error.

Ground Control Points

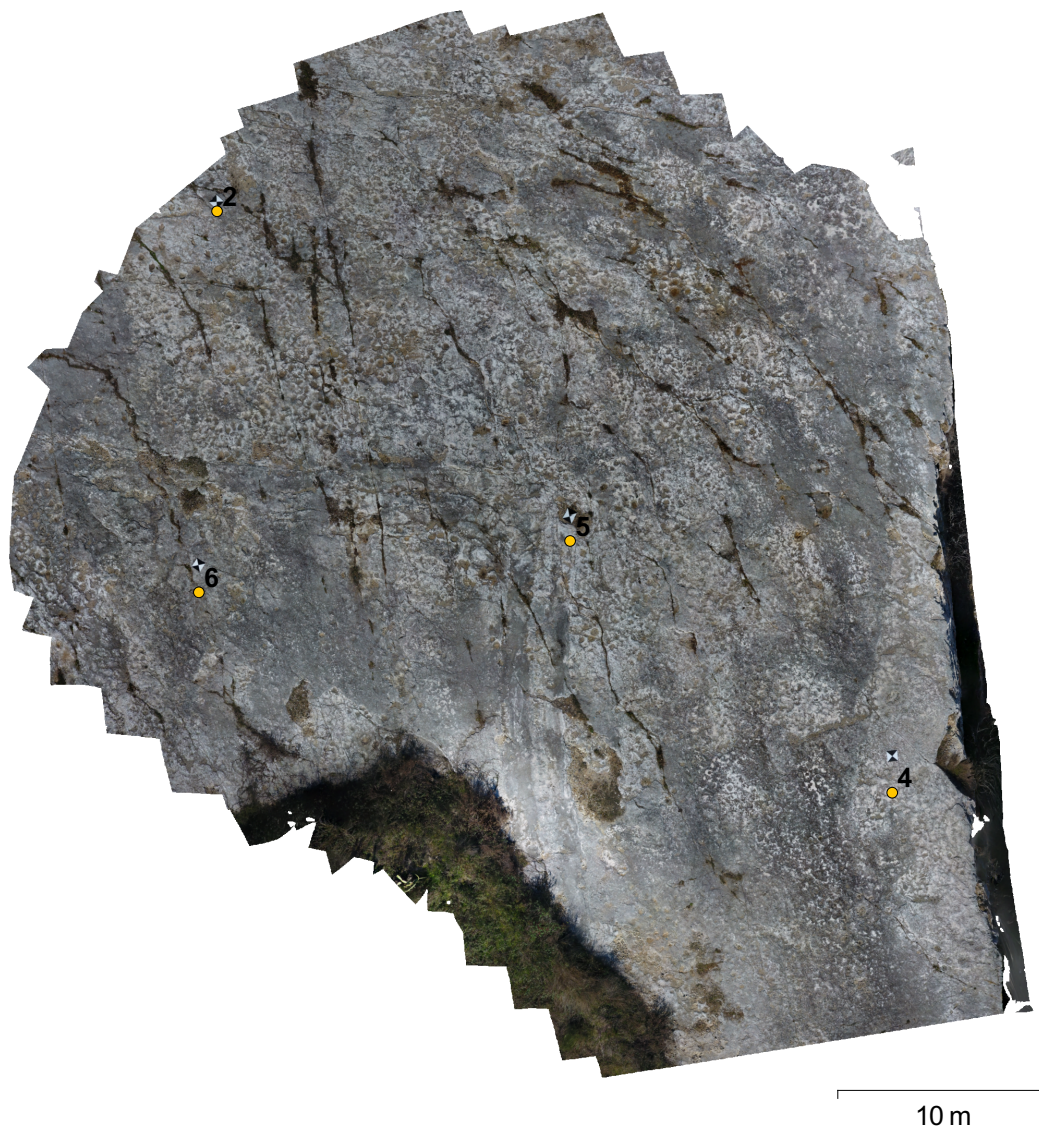


Fig. 4. GCP locations.

Label	XY error (m)	Z error (m)	Error (m)	Projections	Error (pix)
2	0.107885	0.0282494	0.111523	3	1.269
6	0.113367	0.0186043	0.114884	16	1.565
5	0.0457649	-0.0938057	0.104374	19	4.129
4	0.0697455	0.0421373	0.0814861	30	1.173
Total	0.0886711	0.0541277	0.103886		2.453

Table 3. Control points.

Digital Elevation Model

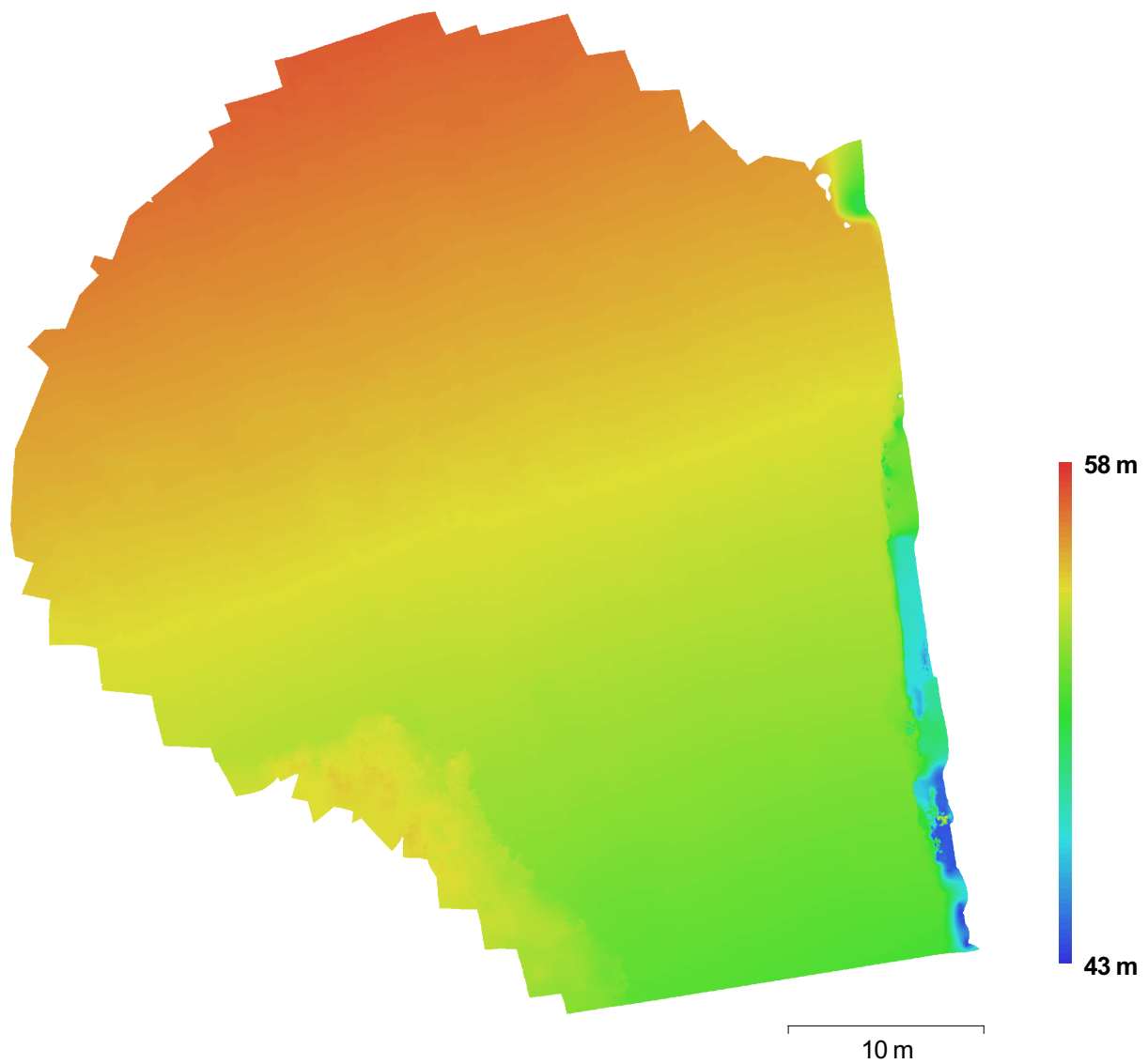


Fig. 5. Reconstructed digital elevation model.

Resolution: 9.15 mm/pix
Point density: 19774.0113 pt/sq m

Processing Parameters

General

Cameras	127
Aligned cameras	127
Markers	4
Coordinate system	WGS 84 (EPSG:4326)

Point Cloud

Points	33,869 of 43,437
RMS reprojection error	0.307642 (1.56494 pix)
Max reprojection error	0.93678 (57.6431 pix)
Mean key point size	5.20582 pix
Effective overlap	12.8491

Alignment parameters

Accuracy	Medium
Pair preselection	Generic
Key point limit	50,000
Tie point limit	4,000
Constrain features by mask	No
Matching time	8 minutes 17 seconds
Alignment time	28 seconds

Depth Maps

Count	127
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Reconstruction parameters

Quality	High
Filtering mode	Mild
Processing time	1 hours 47 minutes

Dense Point Cloud

Points	34,581,349
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Reconstruction parameters

Quality	High
Depth filtering	Mild
Processing time	14 minutes 43 seconds

Model

Faces	984,946
Vertices	494,273
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	34 seconds

Texturing parameters

Mapping mode	Orthophoto
Blending mode	Mosaic
Texture size	4,096 x 4,096
UV mapping time	10 seconds
Blending time	1 minutes 40 seconds

DEM

Size	6,089 x 6,453
Coordinate system	WGS 84 (EPSG:4326)

Orthomosaic

Size	10,760 x 11,207
Coordinate system	WGS 84 (EPSG:4326)
Channels	3, uint8

Blending mode

Mosaic