

Agisoft Metashape

Processing Report
20 February 2026



Survey Data



Fig. 1. Camera locations and image overlap.

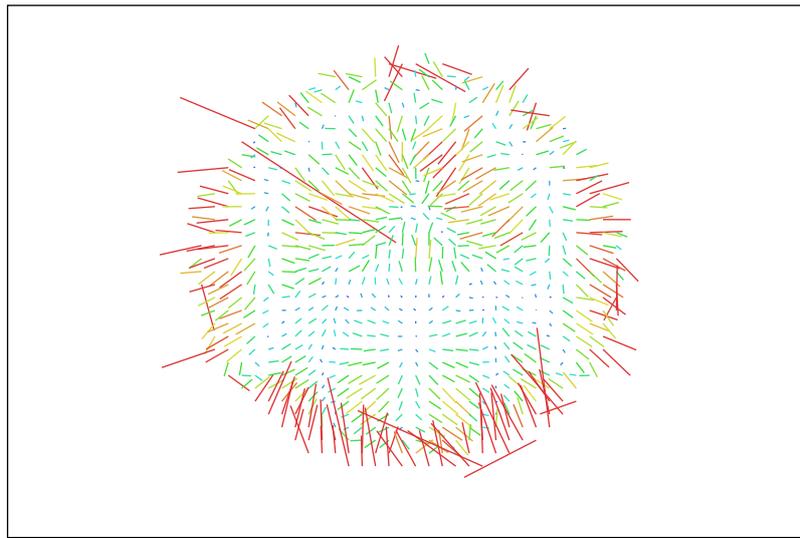
Number of images:	1,764	Camera stations:	1,764
Flying altitude:	50.2 cm	Tie points:	834,755
Ground resolution:	0.779 mm/pix	Projections:	2,447,655
Coverage area:	20.7 m ²	Reprojection error:	0.525 pix

Camera Model	Resolution	Focal Length	Pixel Size	Precalibrated
40	8660 x 5784	6 mm	4.17 x 4.17 um	No
41	8660 x 5784	6 mm	4.17 x 4.17 um	No
42	8660 x 5784	6 mm	4.17 x 4.17 um	No
43	8660 x 5784	6 mm	4.17 x 4.17 um	No
44	8660 x 5784	6 mm	4.17 x 4.17 um	No

Camera Model	Resolution	Focal Length	Pixel Size	Precalibrated
45	8660 x 5784	6 mm	4.17 x 4.17 um	No
46	8660 x 5784	6 mm	4.17 x 4.17 um	No
47	8660 x 5784	6 mm	4.17 x 4.17 um	No
48	8660 x 5784	6 mm	4.17 x 4.17 um	No
49	8660 x 5784	6 mm	4.17 x 4.17 um	No
50	8660 x 5784	6 mm	4.17 x 4.17 um	No
51	8660 x 5784	6 mm	4.17 x 4.17 um	No
52	8660 x 5784	6 mm	4.17 x 4.17 um	No
53	8660 x 5784	6 mm	4.17 x 4.17 um	No

Table 1. Cameras.

Camera Calibration



1 pix

Fig. 2. Image residuals for 40.

40

126 images

Type

Resolution

Focal Length

Pixel Size

Fisheye

8660 x 5784

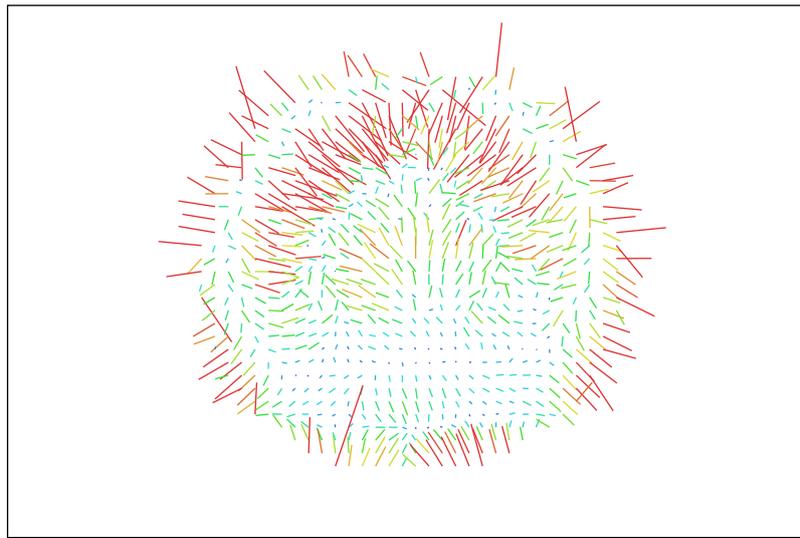
6 mm

4.17 x 4.17 um

	Value	Error	F	Cx	Cy	K1	K2	K3	P1	P2
F	1443.43	0.015	1.00	-0.02	-0.09	-0.83	0.74	-0.68	0.02	0.20
Cx	15.2466	0.016		1.00	-0.01	0.01	-0.01	0.01	-0.54	-0.00
Cy	-21.7278	0.026			1.00	-0.02	0.02	-0.01	-0.00	-0.78
K1	-0.00874209	2.6e-05				1.00	-0.98	0.93	-0.01	0.03
K2	0.00396887	2.1e-05					1.00	-0.99	0.01	-0.06
K3	-0.00201318	5.1e-06						1.00	-0.01	0.07
P1	0.00025188	9.2e-07							1.00	0.01
P2	0.000692367	1.9e-06								1.00

Table 2. Calibration coefficients and correlation matrix.

Camera Calibration



1 pix

Fig. 3. Image residuals for 41.

41

126 images

Type

Resolution

Focal Length

Pixel Size

Fisheye

8660 x 5784

6 mm

4.17 x 4.17 um

	Value	Error	F	Cx	Cy	K1	K2	K3	P1	P2
F	1443.28	0.015	1.00	-0.02	0.01	-0.87	0.80	-0.74	0.02	0.14
Cx	6.32065	0.016		1.00	0.00	0.01	-0.01	0.01	-0.63	-0.01
Cy	-37.7854	0.025			1.00	0.03	-0.04	0.03	-0.01	-0.78
K1	-0.0073492	2.3e-05				1.00	-0.98	0.94	-0.01	-0.03
K2	0.00247076	1.6e-05					1.00	-0.99	0.01	0.01
K3	-0.00159713	3.7e-06						1.00	-0.01	-0.02
P1	0.000208946	7.8e-07							1.00	0.02
P2	0.000644219	1.7e-06								1.00

Table 3. Calibration coefficients and correlation matrix.

Camera Calibration

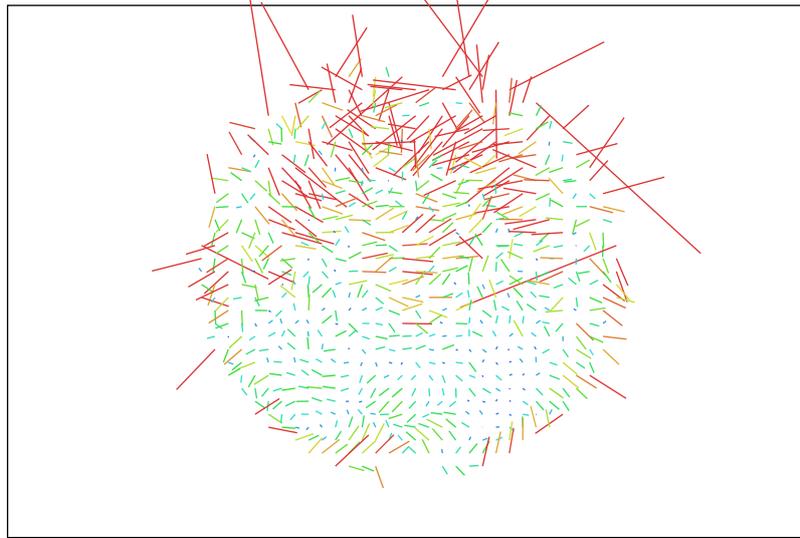


Fig. 4. Image residuals for 42.

42

126 images

Type

Resolution

Focal Length

Pixel Size

Fisheye

8660 x 5784

6 mm

4.17 x 4.17 um

	Value	Error	F	Cx	Cy	K1	K2	K3	P1	P2
F	1437.41	0.016	1.00	-0.02	0.02	-0.88	0.81	-0.76	0.02	0.12
Cx	3.96452	0.016		1.00	0.01	0.01	-0.01	0.01	-0.66	-0.01
Cy	-11.4096	0.025			1.00	0.03	-0.03	0.02	-0.01	-0.81
K1	-0.00661682	2.3e-05				1.00	-0.98	0.94	-0.01	-0.04
K2	0.00183845	1.7e-05					1.00	-0.99	0.01	0.01
K3	-0.00151119	3.8e-06						1.00	-0.01	-0.01
P1	-0.000152478	7.8e-07							1.00	0.02
P2	6.51761e-05	1.6e-06								1.00

Table 4. Calibration coefficients and correlation matrix.

Camera Calibration

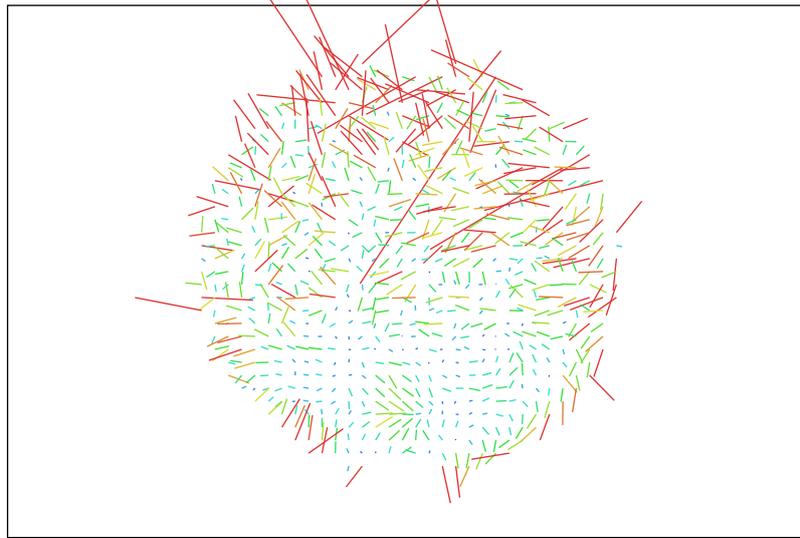


Fig. 5. Image residuals for 43.

43

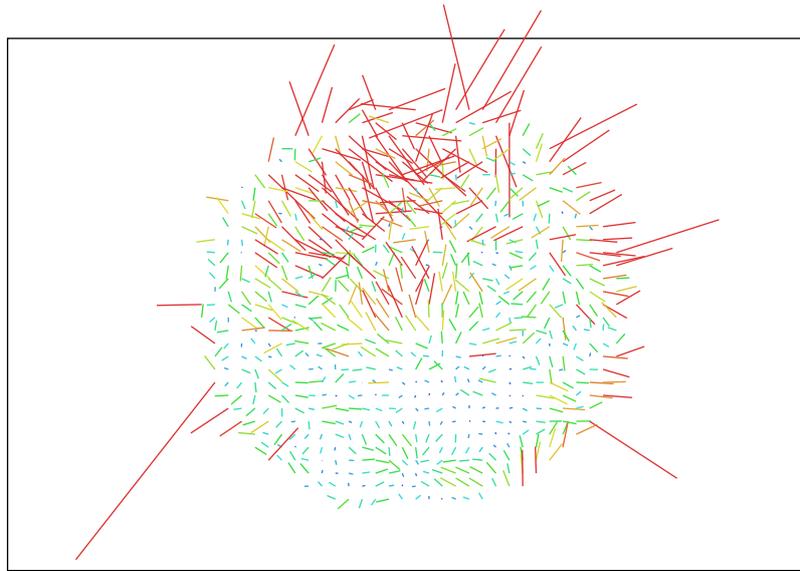
126 images

Type	Resolution	Focal Length	Pixel Size
Fisheye	8660 x 5784	6 mm	4.17 x 4.17 um

	Value	Error	F	Cx	Cy	K1	K2	K3	P1	P2
F	1450.76	0.016	1.00	-0.01	0.03	-0.89	0.81	-0.76	0.01	0.09
Cx	-4.12051	0.015		1.00	0.00	0.00	-0.00	0.00	-0.68	-0.01
Cy	-55.1943	0.026			1.00	0.02	-0.02	0.01	-0.01	-0.83
K1	-0.00639148	2.4e-05				1.00	-0.98	0.94	0.00	-0.03
K2	0.00142193	1.7e-05					1.00	-0.99	-0.00	-0.00
K3	-0.00142917	3.8e-06						1.00	0.00	0.00
P1	0.000242927	7.8e-07							1.00	0.02
P2	-0.000136192	1.6e-06								1.00

Table 5. Calibration coefficients and correlation matrix.

Camera Calibration



1 pix

Fig. 6. Image residuals for 44.

44

126 images

Type

Resolution

Focal Length

Pixel Size

Fisheye

8660 x 5784

6 mm

4.17 x 4.17 um

	Value	Error	F	Cx	Cy	K1	K2	K3	P1	P2
F	1444.91	0.017	1.00	-0.02	0.06	-0.90	0.82	-0.77	0.03	0.05
Cx	31.0385	0.015		1.00	0.00	0.00	-0.00	0.00	-0.68	-0.00
Cy	6.17956	0.026			1.00	0.00	-0.00	-0.00	-0.00	-0.83
K1	-0.00600247	2.6e-05				1.00	-0.98	0.94	-0.01	-0.01
K2	0.00124124	1.8e-05					1.00	-0.99	0.01	-0.02
K3	-0.00136722	4.1e-06						1.00	-0.01	0.02
P1	0.000213772	8.1e-07							1.00	0.01
P2	0.000589139	1.7e-06								1.00

Table 6. Calibration coefficients and correlation matrix.

Camera Calibration

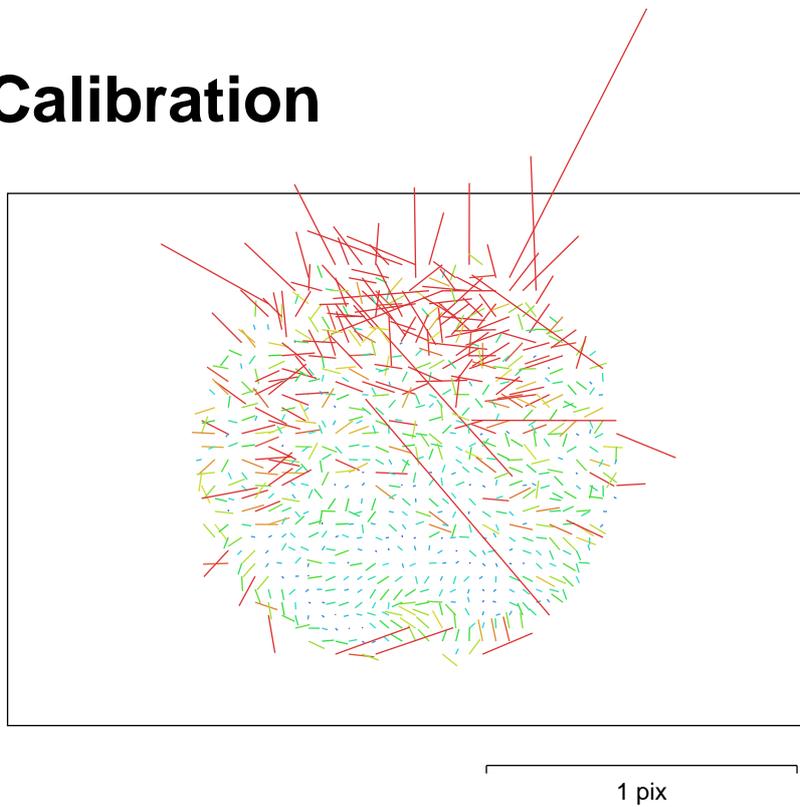


Fig. 7. Image residuals for 45.

45

126 images

Type

Resolution

Focal Length

Pixel Size

Fisheye

8660 x 5784

6 mm

4.17 x 4.17 um

	Value	Error	F	Cx	Cy	K1	K2	K3	P1	P2
F	1450.73	0.018	1.00	-0.02	0.06	-0.89	0.82	-0.76	0.02	0.04
Cx	4.28964	0.015		1.00	0.01	0.00	-0.00	0.01	-0.70	-0.01
Cy	-37.2542	0.027			1.00	-0.01	0.01	-0.01	-0.01	-0.85
K1	-0.00569306	2.6e-05				1.00	-0.98	0.94	0.00	-0.01
K2	0.000864572	1.9e-05					1.00	-0.99	-0.00	-0.02
K3	-0.00131302	4.2e-06						1.00	0.00	0.03
P1	-0.000122304	8.4e-07							1.00	0.01
P2	-3.03103e-05	1.7e-06								1.00

Table 7. Calibration coefficients and correlation matrix.

Camera Calibration

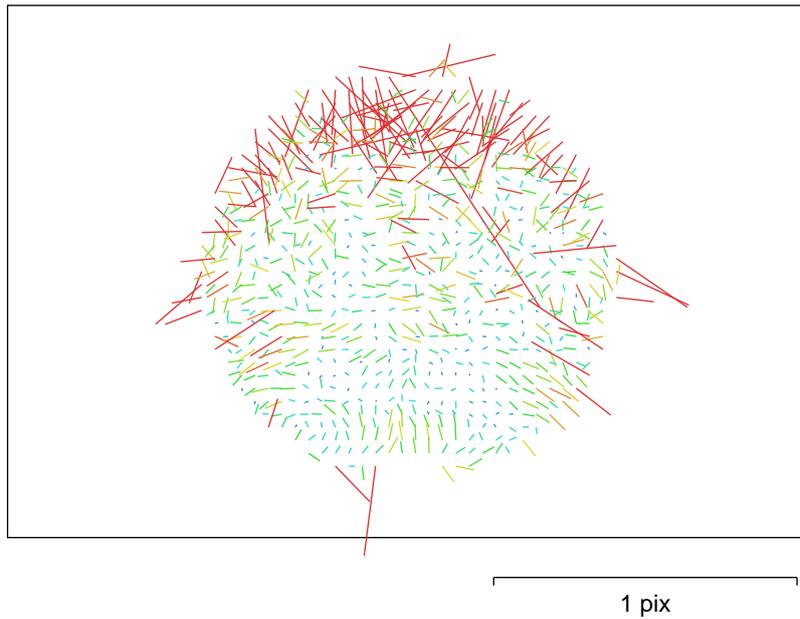


Fig. 8. Image residuals for 46.

46

126 images

Type	Resolution	Focal Length	Pixel Size
Fisheye	8660 x 5784	6 mm	4.17 x 4.17 um

	Value	Error	F	Cx	Cy	K1	K2	K3	P1	P2
F	1438.77	0.017	1.00	-0.02	0.08	-0.89	0.81	-0.75	0.02	0.02
Cx	-10.9292	0.015		1.00	0.01	0.01	-0.01	0.01	-0.70	-0.01
Cy	-13.8727	0.027			1.00	-0.01	0.01	-0.01	-0.01	-0.86
K1	-0.00590306	2.6e-05				1.00	-0.98	0.94	0.00	-0.00
K2	0.000878088	1.9e-05					1.00	-0.99	-0.01	-0.03
K3	-0.00131565	4.3e-06						1.00	0.01	0.04
P1	-0.000154087	8.6e-07							1.00	0.01
P2	0.000113889	1.7e-06								1.00

Table 8. Calibration coefficients and correlation matrix.

Camera Calibration

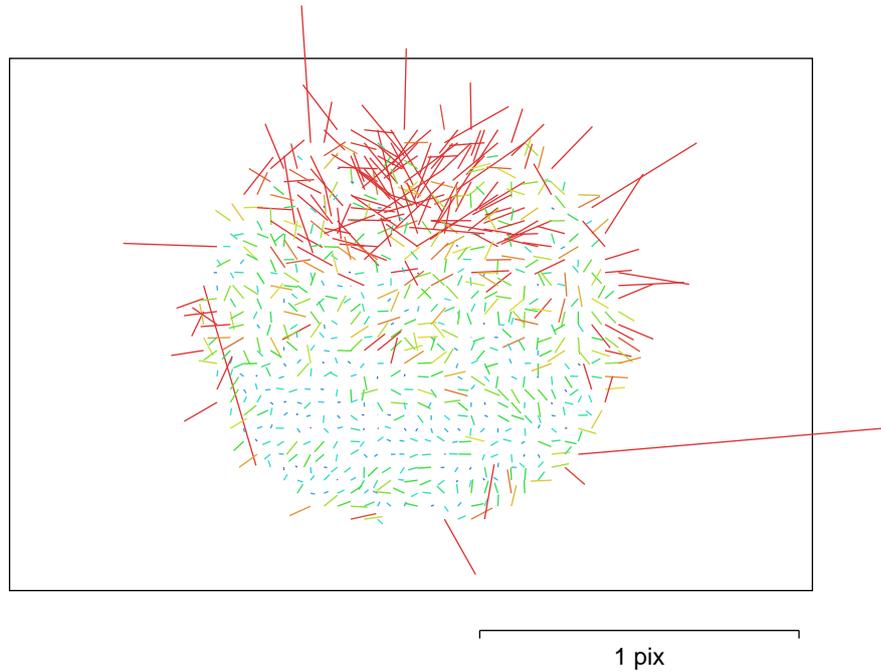


Fig. 9. Image residuals for 47.

47

126 images

Type	Resolution	Focal Length	Pixel Size
Fisheye	8660 x 5784	6 mm	4.17 x 4.17 um

	Value	Error	F	Cx	Cy	K1	K2	K3	P1	P2
F	1450.71	0.018	1.00	-0.01	0.09	-0.89	0.81	-0.75	0.01	0.01
Cx	19.1664	0.015		1.00	0.02	0.01	-0.01	0.01	-0.70	-0.01
Cy	-39.0532	0.028			1.00	-0.01	0.01	-0.01	-0.02	-0.85
K1	-0.00474506	2.7e-05				1.00	-0.98	0.94	0.01	-0.01
K2	0.000271005	2e-05					1.00	-0.99	-0.01	-0.02
K3	-0.001209	4.5e-06						1.00	0.01	0.03
P1	-0.000154904	8.8e-07							1.00	0.01
P2	0.000179886	1.8e-06								1.00

Table 9. Calibration coefficients and correlation matrix.

Camera Calibration

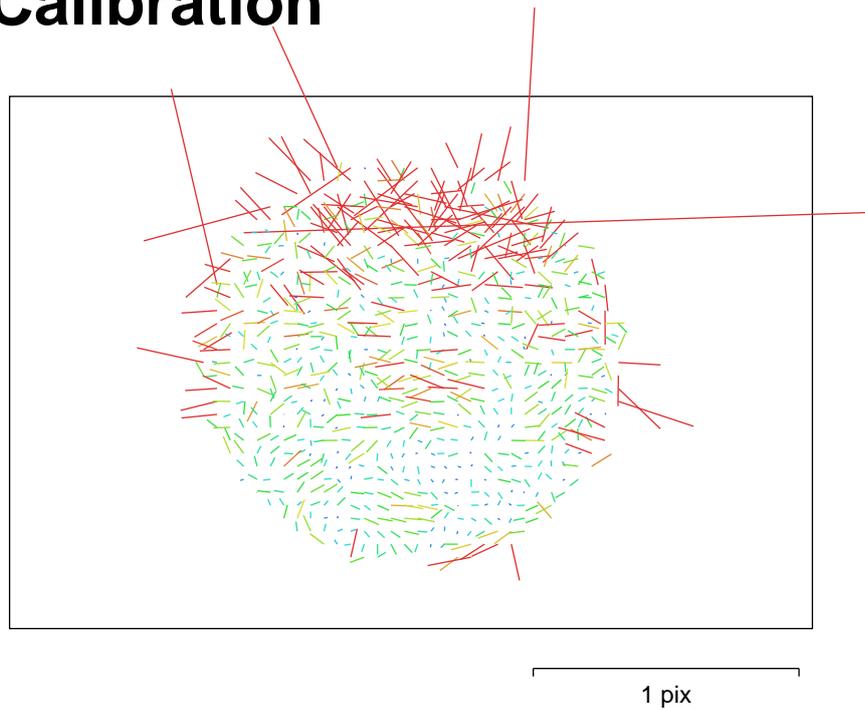


Fig. 10. Image residuals for 48.

48

126 images

Type

Resolution

Focal Length

Pixel Size

Fisheye

8660 x 5784

6 mm

4.17 x 4.17 um

	Value	Error	F	Cx	Cy	K1	K2	K3	P1	P2
F	1438.88	0.021	1.00	-0.02	0.07	-0.89	0.81	-0.75	0.02	0.02
Cx	16.1073	0.016		1.00	0.02	0.01	-0.01	0.01	-0.71	-0.02
Cy	-38.3624	0.029			1.00	-0.00	0.00	-0.00	-0.02	-0.84
K1	-0.00522256	3.1e-05				1.00	-0.98	0.94	-0.00	-0.02
K2	0.00068971	2.3e-05					1.00	-0.99	-0.00	-0.01
K3	-0.00127515	5.1e-06						1.00	0.00	0.02
P1	0.00034685	9.9e-07							1.00	0.02
P2	-6.6905e-05	1.9e-06								1.00

Table 10. Calibration coefficients and correlation matrix.

Camera Calibration

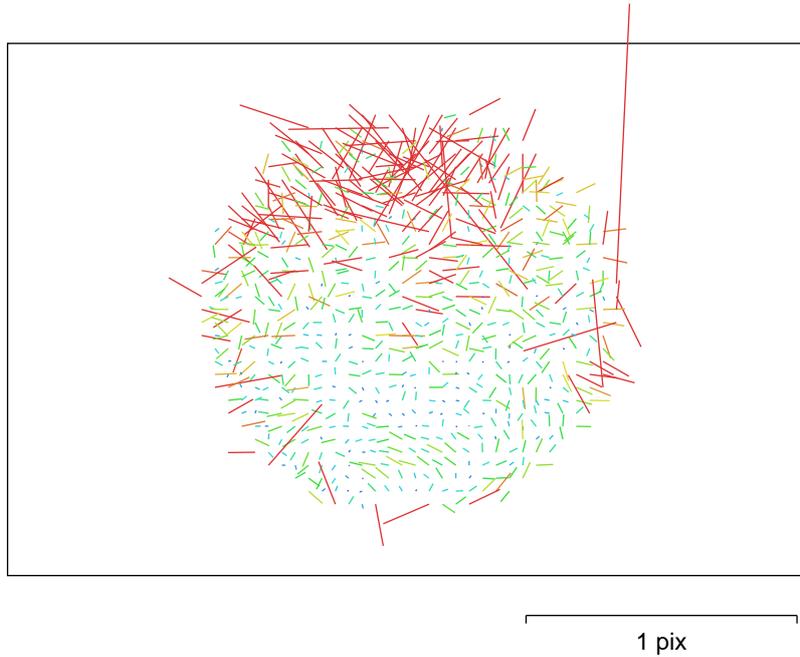


Fig. 11. Image residuals for 49.

49

126 images

Type	Resolution	Focal Length	Pixel Size
Fisheye	8660 x 5784	6 mm	4.17 x 4.17 um

	Value	Error	F	Cx	Cy	K1	K2	K3	P1	P2
F	1436.93	0.02	1.00	-0.02	0.08	-0.89	0.81	-0.75	0.02	0.02
Cx	-10.7193	0.017		1.00	0.02	0.01	-0.01	0.00	-0.72	-0.01
Cy	-17.779	0.03			1.00	0.00	-0.00	0.00	-0.02	-0.85
K1	-0.00554532	3.1e-05				1.00	-0.98	0.94	0.00	-0.04
K2	0.00075402	2.2e-05					1.00	-0.99	-0.01	-0.00
K3	-0.00128828	5e-06						1.00	0.01	0.01
P1	-0.000108175	1e-06							1.00	0.02
P2	0.000131012	1.9e-06								1.00

Table 11. Calibration coefficients and correlation matrix.

Camera Calibration

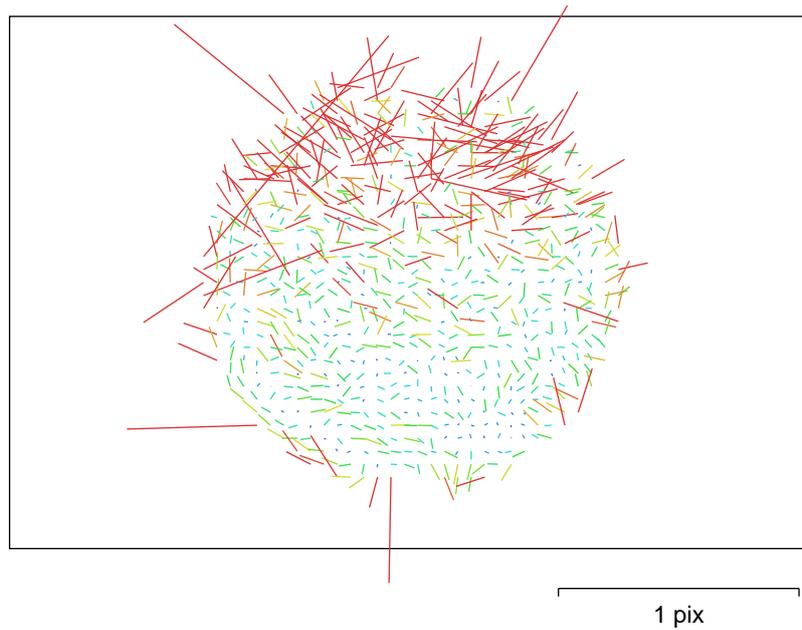


Fig. 12. Image residuals for 50.

50

126 images

Type

Resolution

Focal Length

Pixel Size

Fisheye

8660 x 5784

6 mm

4.17 x 4.17 um

	Value	Error	F	Cx	Cy	K1	K2	K3	P1	P2
F	1445.23	0.024	1.00	-0.02	0.06	-0.89	0.81	-0.75	0.02	0.04
Cx	13.4479	0.019		1.00	0.01	0.01	-0.01	0.00	-0.72	-0.02
Cy	-24.186	0.032			1.00	0.02	-0.02	0.01	-0.01	-0.83
K1	-0.00632591	3.6e-05				1.00	-0.98	0.94	0.00	-0.06
K2	0.000990516	2.6e-05					1.00	-0.99	-0.01	0.02
K3	-0.00133557	5.9e-06						1.00	0.01	-0.00
P1	0.000256923	1.1e-06							1.00	0.02
P2	0.0001641	2.1e-06								1.00

Table 12. Calibration coefficients and correlation matrix.

Camera Calibration

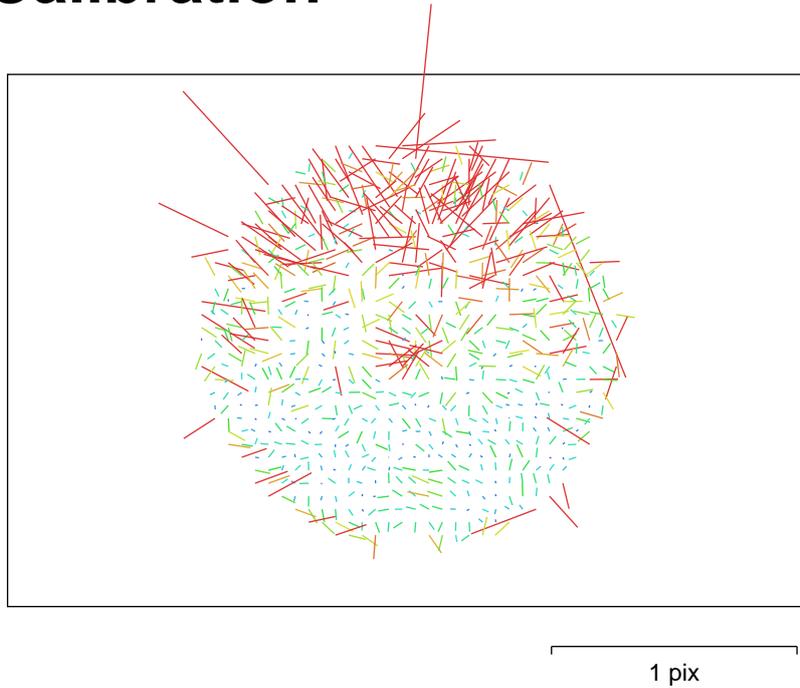


Fig. 13. Image residuals for 51.

51

126 images

Type

Resolution

Focal Length

Pixel Size

Fisheye

8660 x 5784

6 mm

4.17 x 4.17 um

	Value	Error	F	Cx	Cy	K1	K2	K3	P1	P2
F	1441.67	0.022	1.00	-0.01	0.07	-0.89	0.81	-0.74	0.01	0.04
Cx	2.80647	0.018		1.00	0.01	0.01	-0.00	0.00	-0.73	-0.02
Cy	-2.78959	0.033			1.00	0.01	-0.01	0.01	-0.01	-0.83
K1	-0.00531266	3.4e-05				1.00	-0.98	0.94	0.01	-0.07
K2	0.000650829	2.5e-05					1.00	-0.99	-0.01	0.02
K3	-0.00129447	5.6e-06						1.00	0.01	-0.00
P1	-0.000106494	1.1e-06							1.00	0.01
P2	-0.000392476	2.1e-06								1.00

Table 13. Calibration coefficients and correlation matrix.

Camera Calibration

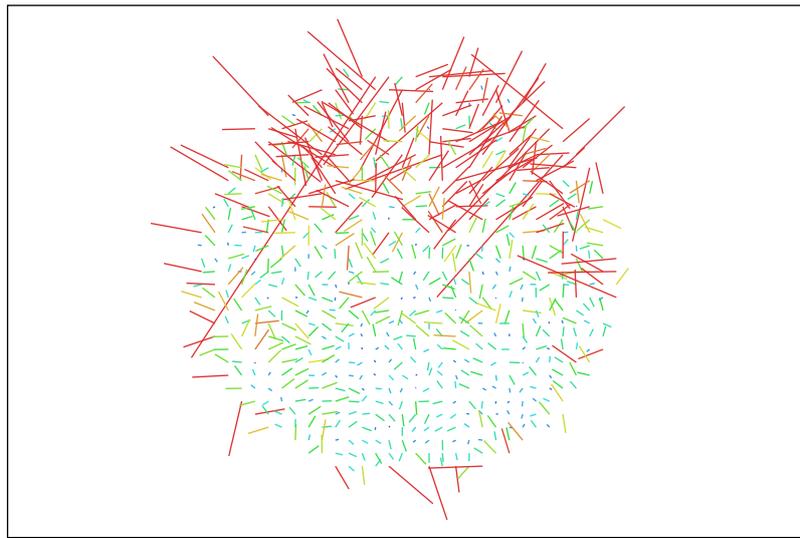


Fig. 14. Image residuals for 52.

52

126 images

Type

Resolution

Focal Length

Pixel Size

Fisheye

8660 x 5784

6 mm

4.17 x 4.17 um

	Value	Error	F	Cx	Cy	K1	K2	K3	P1	P2
F	1442.81	0.025	1.00	-0.00	0.04	-0.90	0.81	-0.75	-0.01	0.06
Cx	-9.85893	0.02		1.00	0.01	-0.00	0.01	-0.01	-0.72	-0.01
Cy	-11.3128	0.034			1.00	0.03	-0.02	0.02	-0.01	-0.81
K1	-0.00525044	3.8e-05				1.00	-0.98	0.94	0.02	-0.09
K2	0.000426262	2.7e-05					1.00	-0.99	-0.02	0.03
K3	-0.00120709	6.2e-06						1.00	0.03	-0.01
P1	0.000101998	1.2e-06							1.00	0.01
P2	-0.000205675	2.3e-06								1.00

Table 14. Calibration coefficients and correlation matrix.

Camera Calibration

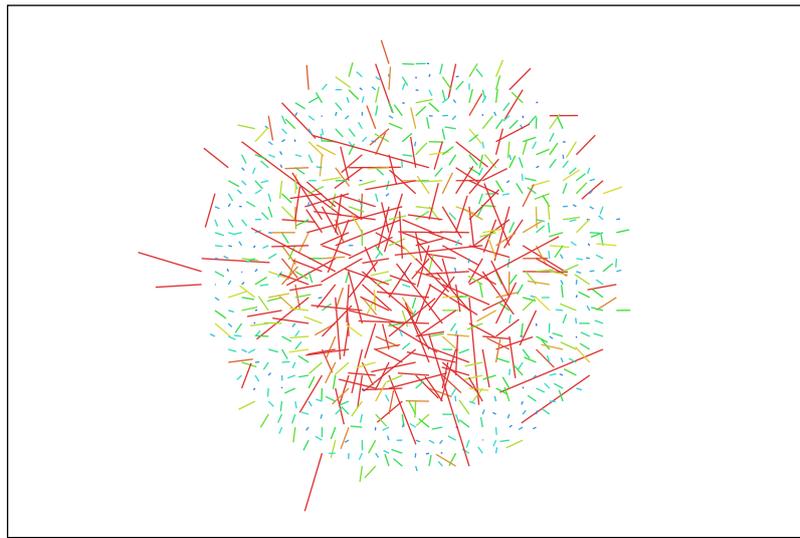


Fig. 15. Image residuals for 53.

53

126 images

Type	Resolution	Focal Length	Pixel Size
Fisheye	8660 x 5784	6 mm	4.17 x 4.17 um

	Value	Error	F	Cx	Cy	K1	K2	K3	P1	P2
F	1428.78	0.13	1.00	-0.02	-0.04	-0.90	0.79	-0.71	0.02	0.06
Cx	25.9855	0.023		1.00	-0.00	0.01	-0.01	0.01	-0.80	0.00
Cy	-49.9967	0.024			1.00	0.09	-0.11	0.12	0.01	-0.79
K1	0.00387529	0.00017				1.00	-0.97	0.93	-0.01	-0.14
K2	-0.00253372	0.00011					1.00	-0.99	0.00	0.18
K3	-0.000997387	2.4e-05						1.00	-0.00	-0.22
P1	-0.00022531	2.6e-06							1.00	-0.02
P2	-0.000237337	2.8e-06								1.00

Table 15. Calibration coefficients and correlation matrix.

Scale Bars

Label	Distance (m)	Error (m)
002a. 4-5	0.242298	-0.0077023
002b. 5-6	0.258366	0.00846581
005a. 12-13	0.249558	-0.000422294
005b. 13-14	0.249484	-0.000406105
008a. 20-21	0.250586	0.000556364
008b. 21-22	0.249388	-0.000491673
Total		0.00468846

Table 16. Control scale bars.

Digital Elevation Model

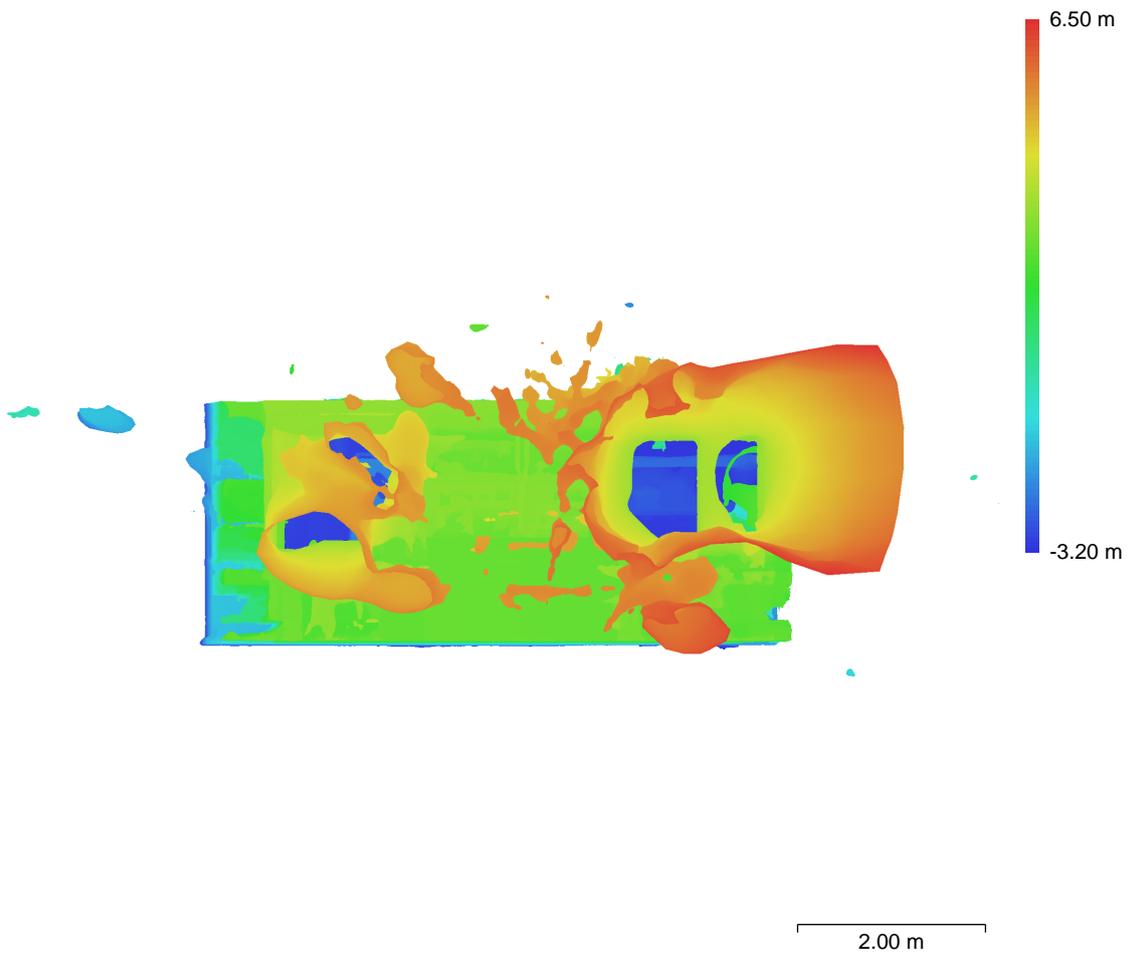


Fig. 16. Reconstructed digital elevation model.

Resolution: 5.66 mm/pix
Point density: 3.12 points/cm²

Processing Parameters

General

Images	1764
Aligned images	1764
Markers	12
Scale bars	6
Coordinate system	Local Coordinates (m)
Rotation angles	Yaw, Pitch, Roll

Tie Points

Points	834,755 of 2,752,117
RMS reprojection error	0.265019 (0.525208 pix)
Max reprojection error	0.998942 (11.0935 pix)
Mean key point size	1.88715 pix
Point colors	3 bands, uint8
Key points	8.36 GB
Average tie point multiplicity	3.58542

Alignment parameters

Accuracy	Highest
Generic preselection	Yes
Reference preselection	Estimated
Key point limit	60,000
Key point limit per Mpx	1,000
Tie point limit	0
Exclude stationary tie points	Yes
Guided image matching	No
Adaptive camera model fitting	No
Matching time	13 minutes 22 seconds
Matching memory usage	22.41 GB
Alignment time	2 minutes 55 seconds
Alignment memory usage	16.76 GB

Optimization parameters

Parameters	f, cx, cy, k1-k3, p1, p2
Adaptive camera model fitting	No
Exclude corners	No
Optimization time	3 seconds
Date created	2026:01:31 08:03:14
Software version	2.2.2.21287
File size	8.57 GB

Depth Maps

Count	1763
-------	------

Depth maps generation parameters

Quality	Medium
Filtering mode	Mild
Max neighbors	16
Processing time	18 minutes 25 seconds
Memory usage	4.54 GB
Date created	2026:02:20 11:33:54
Software version	2.2.2.21287
File size	2.70 GB

Point Cloud

Points	45,941,988
Coordinate precision	0.779 mm

Point attributes	
Color	3 bands, uint8
Normal	
Point classes	
Created (never classified)	45,941,988
Depth maps generation parameters	
Quality	Medium
Filtering mode	Mild
Max neighbors	16
Processing time	18 minutes 25 seconds
Memory usage	4.54 GB
Point cloud generation parameters	
Source data	Depth maps
Processing time	2 hours 41 minutes
Memory usage	59.65 GB
Date created	2026:02:20 14:15:20
Software version	2.2.2.21287
File size	615.63 MB
Model	
Faces	1,996,573
Vertices	999,125
Vertex colors	3 bands, uint8
Texture	16,384 x 16,384, 3 bands, uint8
Depth maps generation parameters	
Quality	Medium
Filtering mode	Mild
Max neighbors	16
Processing time	18 minutes 25 seconds
Memory usage	4.54 GB
Reconstruction parameters	
Surface type	Arbitrary
Source data	Depth maps
Interpolation	Enabled
Strict volumetric masks	No
Processing time	5 minutes 7 seconds
Memory usage	7.10 GB
Texturing parameters	
Mapping mode	Generic
Blending mode	Mosaic
Texture size	16,384
Page count	1
Enable hole filling	Yes
Enable ghosting filter	Yes
UV mapping time	4 minutes 46 seconds
UV mapping memory usage	1.06 GB
Blending time	5 minutes 24 seconds
Blending memory usage	9.63 GB
Blending GPU memory usage	7.59 GB
Date created	2026:02:20 14:20:26
Software version	2.2.2.21287
File size	333.04 MB
System	
Software name	Agisoft Metashape Professional
Software version	2.2.2 build 21287
OS	Windows 64 bit
RAM	255.52 GB

CPU
GPU(s)

AMD Ryzen Threadripper PRO 7975WX 32-Cores
NVIDIA GeForce RTX 5090
NVIDIA GeForce RTX 5090