




Quality Report

PIX4Dmatic v1.54.1

Camera	senseFly_S.O.D.A._10.6_5472x3648
Average GSD	0.9 cm
Project CRS	WGS 84 / UTM zone 18N - EPSG:32618

Quality check

Matches	Median of 3953 matches per calibrated image	
Dataset	100% calibrated (309/309)	
Camera optimization	2.05% relative difference between initial and optimized internal camera parameters	
ATPs	353655 ATPs	

Cameras



Internal camera parameters

senseFly_S.O.D.A._10.6_5472x3648. Sensor dimensions: 13.133 mm x 8.755 mm

	Focal length	Principal point x	Principal point y	R1	R2	R3	T1	T2
Initial	4430.4 px 10.633 mm	2725.0 px 6.54 mm	1811.7 px 4.348 mm	0.0330000	-0.2090000	0.3150000	0.0000000	0.0000000
Optimized	4522.0 px 10.853 mm	2745.7 px 6.59 mm	1823.2 px 4.376 mm	0.0310706	-0.2291860	0.3559549	0.0010285	0.0029574
Uncertainties (Sigma)	63.3 px 0.152 mm	0.2 px 0.001 mm	0.3 px 0.001 mm	0.0000002	0.0000058	0.0000201	0.0000000	0.0000000

senseFly_S.O.D.A._10.6_5472x3648. Sensor dimensions: 13.133 mm x 8.755 mm

	Focal length	Principal point x	Principal point y	R1	R2	R3	T1	T2
Initial	4430.4 px 10.633 mm	2725.0 px 6.54 mm	1811.7 px 4.348 mm	0.0330000	-0.2090000	0.3150000	0.0000000	0.0000000
Optimized	4524.0 px 10.858 mm	2728.9 px 6.549 mm	1823.4 px 4.376 mm	0.0379408	-0.2420470	0.3761084	-0.0001667	0.0015596
Uncertainties (Sigma)	63.0 px 0.151 mm	0.4 px 0.001 mm	0.1 px 0 mm	0.0000002	0.0000068	0.0000228	0.0000000	0.0000000

senseFly_S.O.D.A._10.6_5472x3648. Sensor dimensions: 13.133 mm x 8.755 mm

	Focal length	Principal point x	Principal point y	R1	R2	R3	T1	T2
Initial	4430.4 px 10.633 mm	2725.0 px 6.54 mm	1811.7 px 4.348 mm	0.0330000	-0.2090000	0.3150000	0.0000000	0.0000000
Optimized	4524.6 px 10.859 mm	2713.1 px 6.511 mm	1827.9 px 4.387 mm	0.0321940	-0.2250271	0.3440859	0.0009044	0.0015968
Uncertainties (Sigma)	62.9 px 0.151 mm	0.6 px 0.001 mm	0.2 px 0 mm	0.0000002	0.0000060	0.0000192	0.0000000	0.0000000

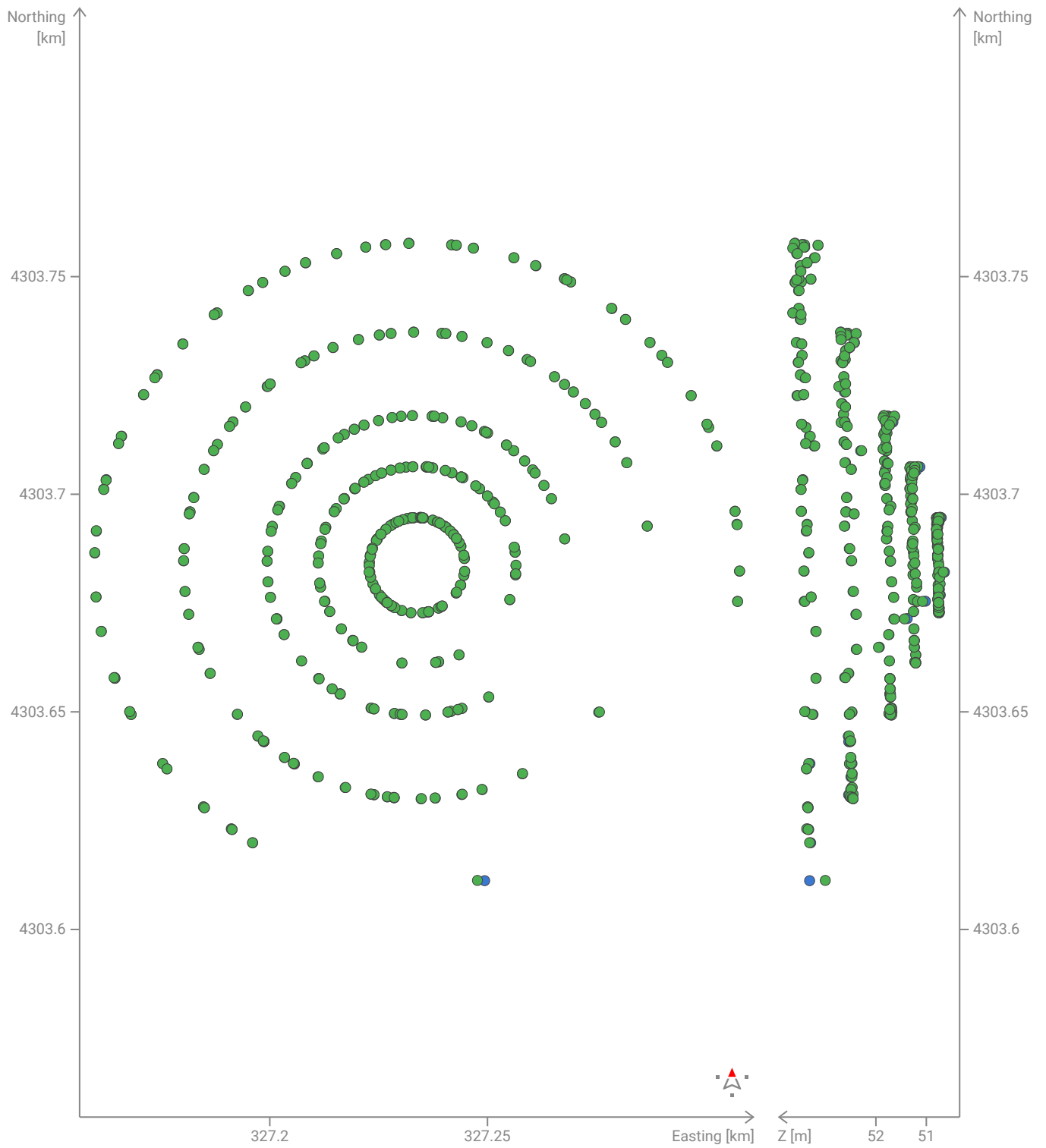
senseFly_S.O.D.A._10.6_5472x3648. Sensor dimensions: 13.133 mm x 8.755 mm

	Focal length	Principal point x	Principal point y	R1	R2	R3	T1	T2
Initial	4430.4 px 10.633 mm	2725.0 px 6.54 mm	1811.7 px 4.348 mm	0.0330000	-0.2090000	0.3150000	0.0000000	0.0000000
Optimized	4528.0 px 10.867 mm	2729.7 px 6.551 mm	1816.8 px 4.36 mm	0.0319266	-0.2198207	0.3409555	-0.0004827	0.0037144
Uncertainties (Sigma)	63.3 px 0.152 mm	1.2 px 0.003 mm	0.3 px 0.001 mm	0.0000003	0.0000068	0.0000208	0.0000000	0.0000000

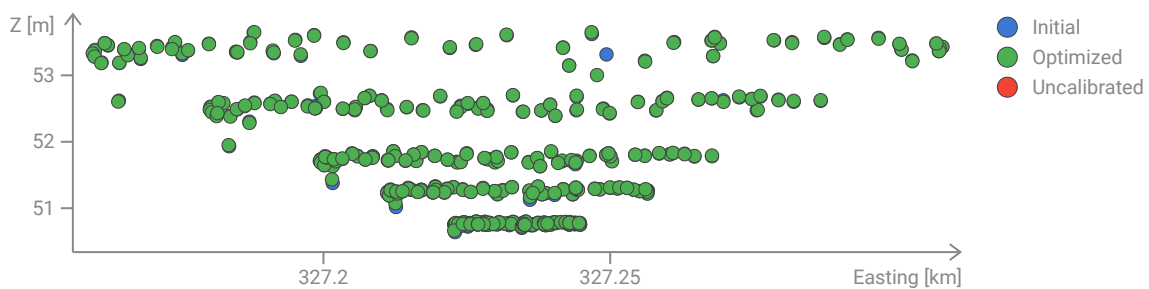
senseFly_S.O.D.A._10.6_5472x3648. Sensor dimensions: 13.133 mm x 8.755 mm

	Focal length	Principal point x	Principal point y	R1	R2	R3	T1	T2
Initial	4430.4 px 10.633 mm	2725.0 px 6.54 mm	1811.7 px 4.348 mm	0.0330000	-0.2090000	0.3150000	0.0000000	0.0000000
Optimized	4507.5 px 10.818 mm	2705.8 px 6.494 mm	1825.5 px 4.381 mm	0.0346700	-0.2197272	0.3306404	0.0001095	0.0001660
Uncertainties (Sigma)	63.9 px 0.153 mm	2.7 px 0.007 mm	0.4 px 0.001 mm	0.0000004	0.0000099	0.0000269	0.0000000	0.0000000

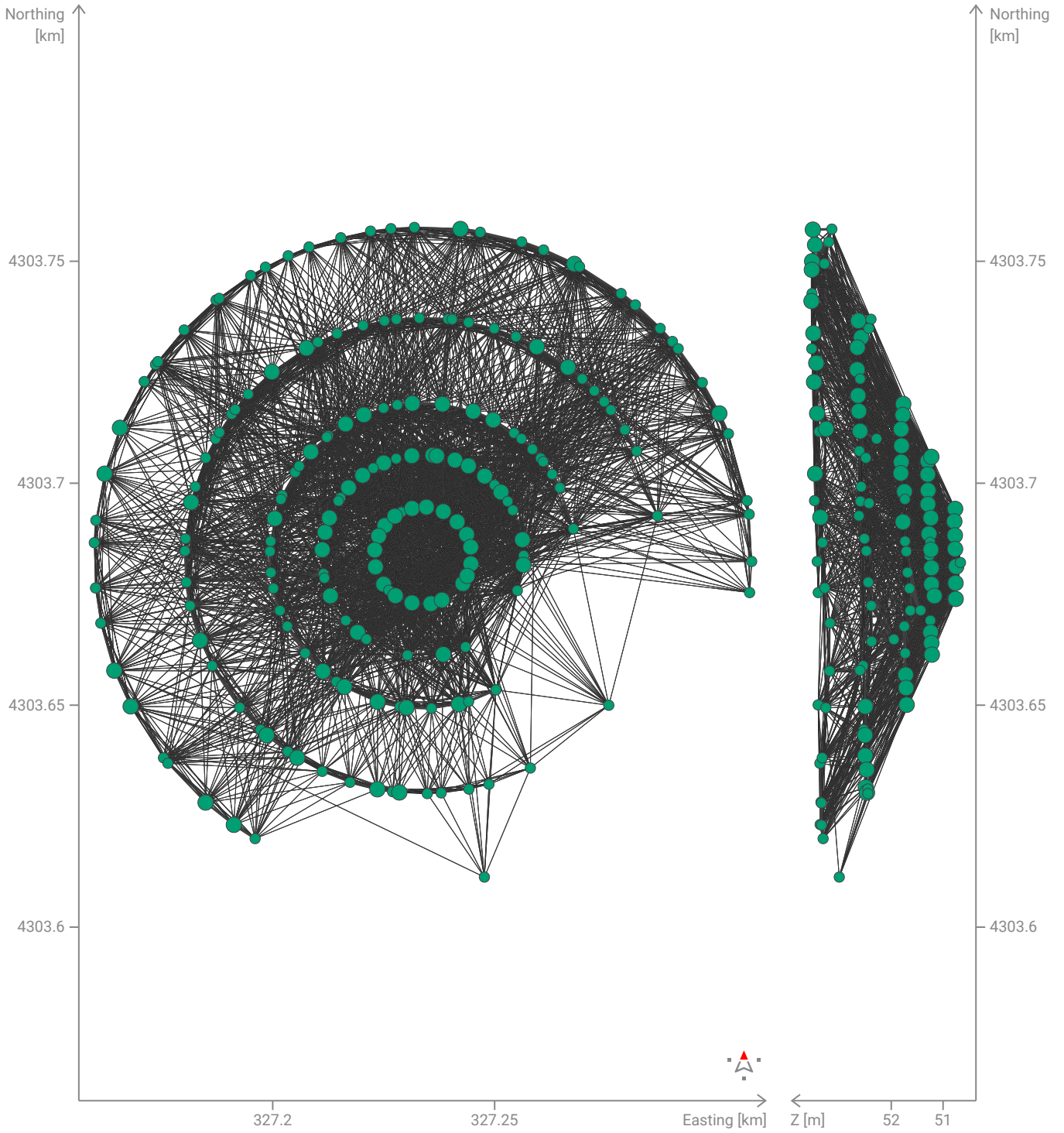
Camera positions



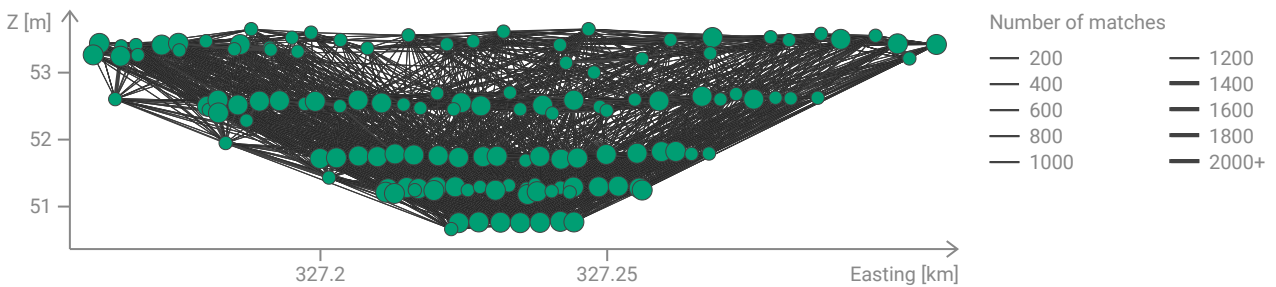
Initial and computed camera positions.



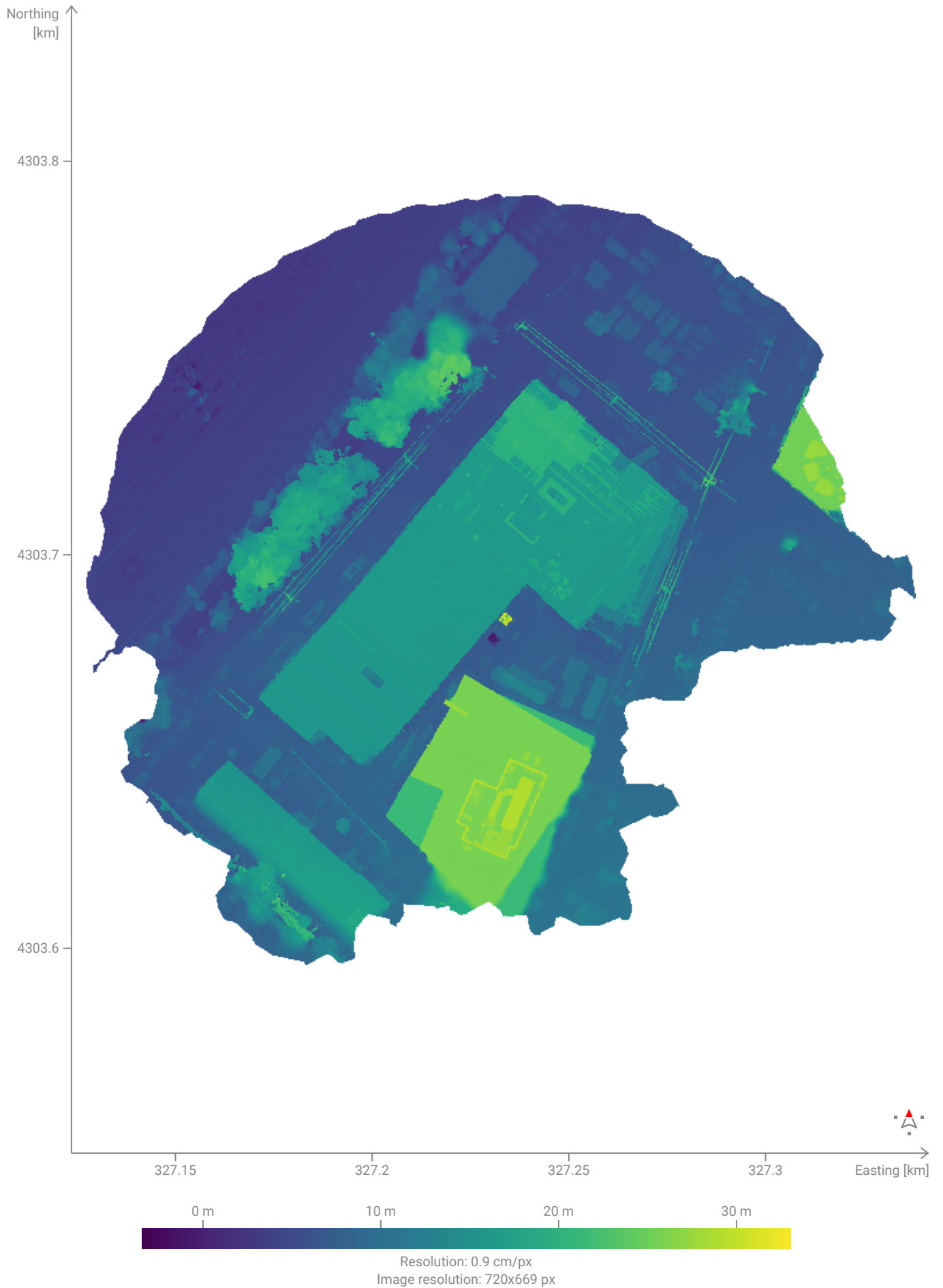
Matches



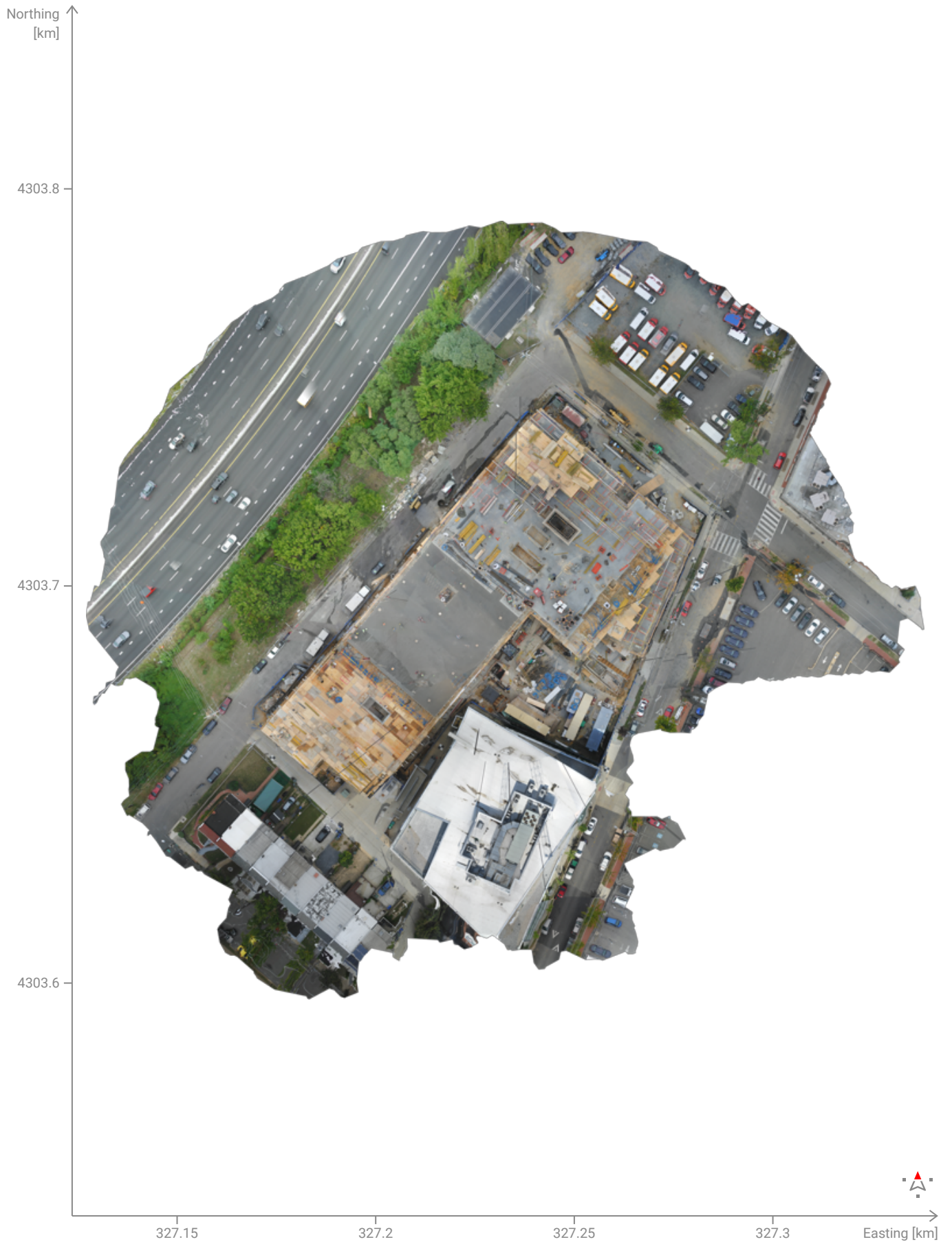
Computed camera positions with links between matched cameras. The thickness of the links indicates the number of matched 2D keypoints between the cameras. Thin links indicate weak links and require manual tie points or more cameras. The different colors and shapes identify the distinct calibration blocks. Larger points indicate clusters of cameras.



DSM



Orthomosaic



Resolution: 0.9 cm/px
Image resolution: 720x669 px

Hardware & Settings



System information

Hardware: CPU: Intel(R) Xeon(R) Gold 6248R CPU @ 3.00GHz, cpus=2, threads=8
 RAM: 64 GB
 GPU: NVIDIA Corporation NVIDIA A40-6Q/PCI/SSE2 (Driver: 4.1.0 NVIDIA 529.11)
 Operating system: Windows 11

Coordinate reference systems

Image coordinate reference system	WGS 84 - EPSG:4326
Project coordinate reference system	WGS 84 / UTM zone 18N - EPSG:32618

Processing settings

Calibration Completed	Dense point cloud Completed	DSM Completed	Orthomosaic Completed
Template: Large scale and corridor Pipeline: Scalable standard Image scale: 1/2 Internals confidence: Low Max extracted keypoints: Automatic Reoptimized: No Use automatic ITPs: Disabled	Algorithm: Hardware accelerated Image scale: 1/2 Density: Optimal Min number of matches: 3 Multiscale: Enabled Noise filter: Disabled Sky filter: Disabled	Input point cloud: Dense Interpolation: Enabled Resolution: 0.9 cm/px Surface smoothing: 12 px	Resolution: 0.9 cm/px Algorithm: Hardware accelerated Oblique: Disabled Deghosting: Disabled
8m 56s	25m 24s	4m 48s	1m 37s