





Quality Report

PIX4Dmatic v1.58.1

Camera	GenericFromExif_Apple_PIX4Dcatch.IPhone13.3_iOS_3.8_1920x1440
Average GSD	0.2 cm
Project CRS	JGD2011 / Japan Plane Rectangular CS VII + JGD2011 (vertical) height - EPSG:6675+6695 [GSIGEO2011]

Quality check

Matches	Median of 3535 matches per calibrated image	
Dataset	100% calibrated (647/647), 1 block	
Camera optimization	0.91% relative difference between initial and optimized internal camera parameters	
GCPs	3 GCPs, Mean RMS position error 2.584 cm / Sigma 1.960 The GCP position error is more than 2.5 times the average GSD.	
Checkpoints	0 Checkpoints	
MTPs	0 MTPs	
mITPs	0 mITPs	
ATPs	597240 ATPs	

Cameras



Internal camera parameters

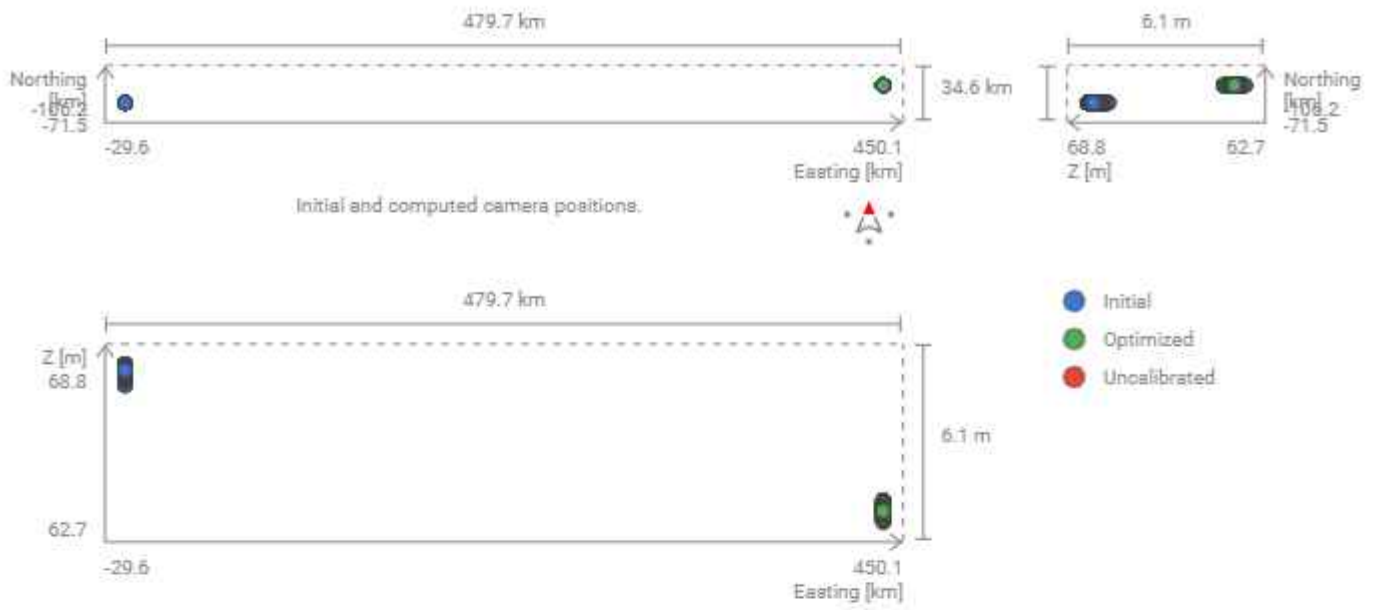
GenericFromExif_Apple_PIX4Dcatch.iPhone13.3_iOS_3.8_1920x1440. Sensor dimensions: 4.992 mm x 3.744 mm

	Focal length	Principal point x	Principal point y	R1	R2	R3	T1	T2
Initial	1461.5 px 3.8 mm	960.0 px 2.496 mm	720.0 px 1.872 mm	0.0000010	0.0000000	0.0000000	0.0000000	0.0000000
Optimized	1449.6 px 3.769 mm	938.6 px 2.44 mm	711.6 px 1.85 mm	0.1111856	-0.2127308	0.1004009	-0.0005886	-0.0003657

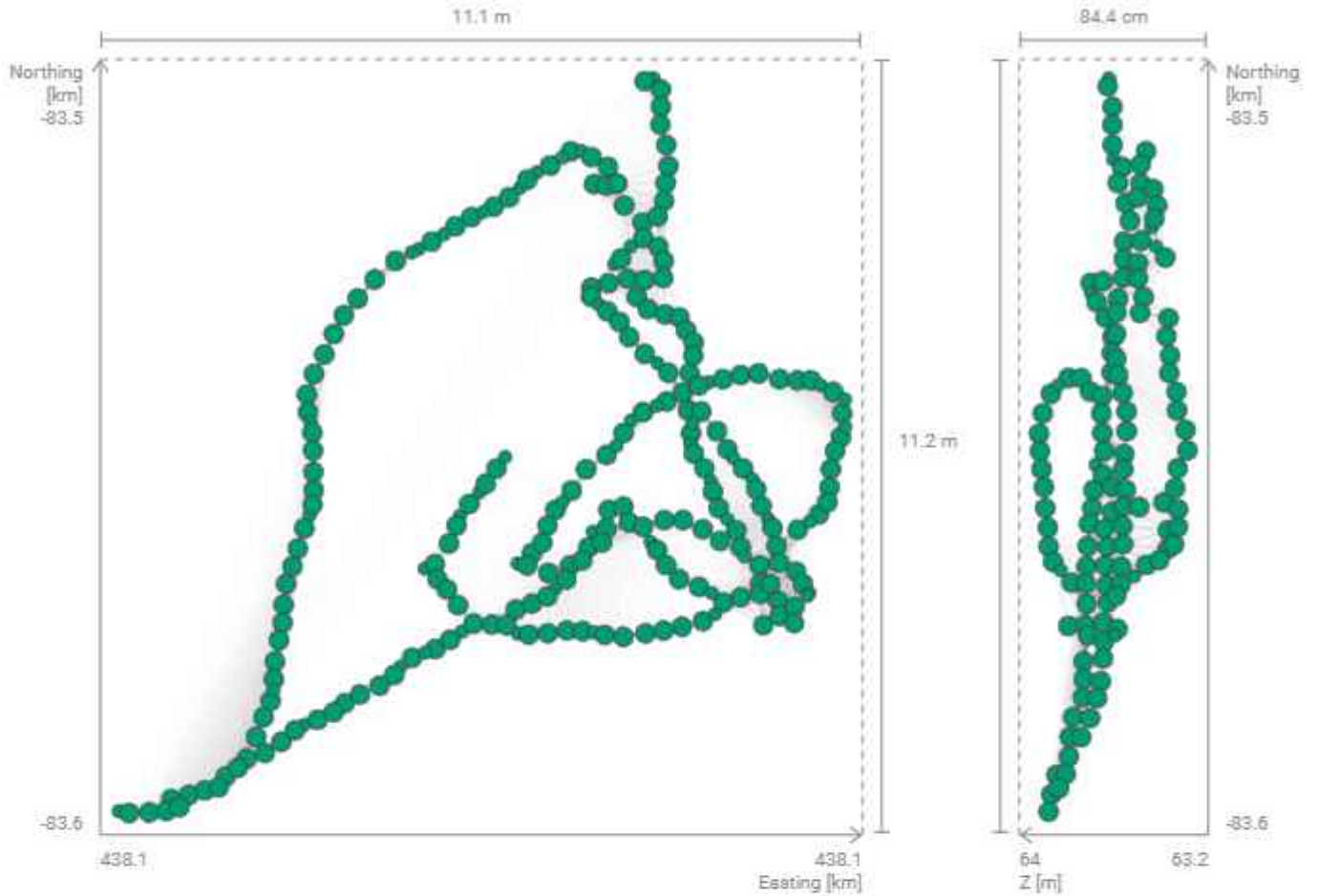
GenericFromExif_Apple_PIX4Dcatch.iPhone13.3_iOS_3.8_1920x1440. Sensor dimensions: 4.992 mm x 3.744 mm

	Focal length	Principal point x	Principal point y	R1	R2	R3	T1	T2
Initial	1462.1 px 3.802 mm	960.0 px 2.496 mm	720.0 px 1.872 mm	0.0000010	0.0000000	0.0000000	0.0000000	0.0000000
Optimized	1447.6 px 3.764 mm	940.1 px 2.444 mm	712.7 px 1.853 mm	0.1092964	-0.2069971	0.0945505	-0.0002602	-0.0009394

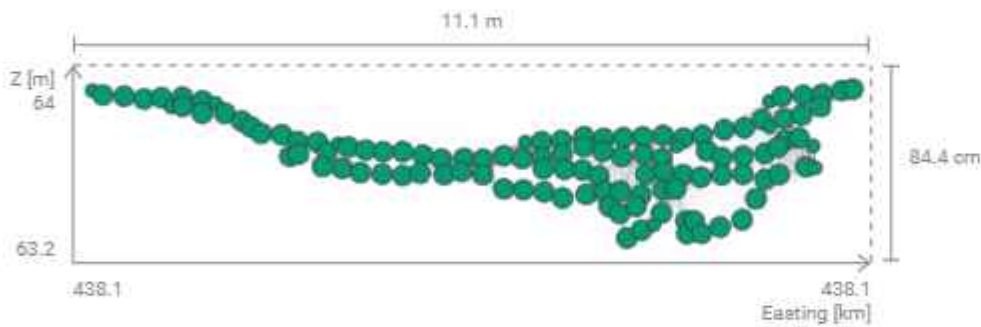
Camera positions



2D Keypoint Matches



Computed camera positions with links between matched cameras. The opacity of the links indicates the number of matched 2D keypoints between the cameras. Near-transparent links indicate weak links and require manual tie points or more cameras. The different colors identify the distinct calibration blocks. Multiple cameras may be grouped into a single point on the plot to improve visibility. Group of multiple cameras is indicated by a larger point on the plot.



Number of matches



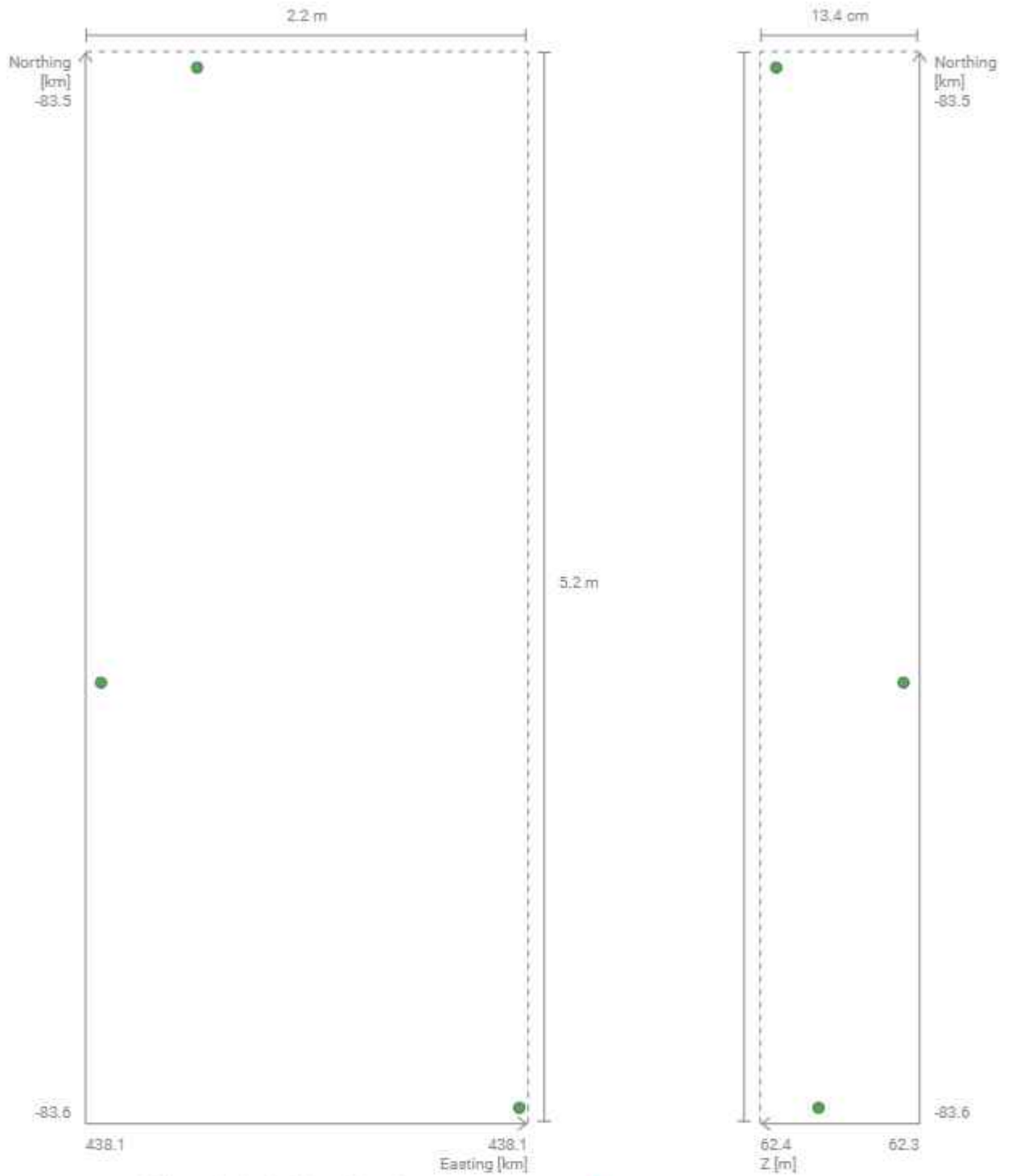
Tie points



Ground control points (GCPs)

Label	Position error			Reprojection error [px]	Accuracy		Verified/Marked
	X [m]	Y [m]	Z [m]		X/Y [m]	Z [m]	
1	0.049	0.061	0.022	8.8	0.020	0.020	73/74
2	0.002	0.008	0.008	51.9	0.020	0.020	38/38
3	-0.003	0.006	-0.003	5.5	0.020	0.020	43/43
Mean	0.016	0.025	0.009	18.5			
Median	-0.003	0.006	-0.003	5.8			
Min	-0.003	0.006	-0.003	0.6			
Max	0.049	0.061	0.022	167.6			
RMS	0.028	0.036	0.014	42.5			
Sigma	0.023	0.025	0.010	38.2			

Tie point positions



Initial or optimized position of tie points.



- Initial position
- Optimized position
- GCP

Hardware & Settings



System information

Hardware: CPU: Intel(R) Core(TM) i9-9900X CPU @ 3.50GHz, cpus=1, threads=20
 RAM: 127.68 GB
 GPU: NVIDIA Corporation NVIDIA GeForce RTX 3080 Ti/PCIe/SSE2 (Driver: 4.1.0 NVIDIA 536.23)
 Operating system: Windows 11

Coordinate reference systems

Image coordinate reference system	WGS 84 - EPSG:4326
Ground control point (GCP) coordinate reference system	JGD2011 / Japan Plane Rectangular CS VII + JGD2011 (vertical) height - EPSG:6675+6695 [GSIGEO2011]
Project coordinate reference system	JGD2011 / Japan Plane Rectangular CS VII + JGD2011 (vertical) height - EPSG:6675+6695 [GSIGEO2011]

Processing settings

Calibration Completed

Template: PIX4Dcatch

Pipeline: Trusted location and orientation

Image scale: 1/1

Internals confidence: Low

Max extracted keypoints: Automatic

Reoptimized: Yes

Use depth maps: Enabled

Use automatic ITPs: Disabled

28s