

# Comite\_R4\_WB\_20230522\_RGB61 - Quality Report

PIX4Dmatic 1.46.0

<b>Cameras</b>	Generic SONY_ILCE7RM4A_FE24mmF2.8G_24.0_9504x6336WINGTRA RGB61_FE24mmF2.8G_24.0_9504x6336
<b>Average GSD</b>	0.068 ftUS
<b>Project CRS</b>	NAD83(2011) / Louisiana South (ftUS) + NAVD88 height (ftUS) - EPSG:6479+6360 [GEOID12B]

## Quality check

<b>Matches</b>	Median of 16172 matches per calibrated image	✓
<b>Dataset</b>	99.4% calibrated (1278/1286)	✓
<b>Camera optimization</b>	1.8% relative difference between initial and optimized internal camera parameters	✓
<b>GCPs</b>	0 GCP(s)	⚠
<b>Checkpoints</b>	10 Checkpoint(s), Mean RMS position error 0.050 ftUS / Sigma 0.047	✓
<b>MTPs</b>	0 MTP(s)	

## Camera Positions

### Internal Camera Parameters

Generic\_SONY\_ILCE7RM4A\_FE24mmF2.8G\_24.0\_9504x6336. Sensor Dimensions: 35.000 [mm] x 23.333 [mm]

	Focal length	Principal point x	Principal point y	R1	R2	R3	T1	T2
Initial	6517.029 px 24.000 mm	4752.000 px 17.500 mm	3168.000 px 11.667 mm	0.000	0.000	0.000	0.000	0.000
Optimized	6286.967 px 23.153 mm	4791.412 px 17.645 mm	3150.451 px 11.602 mm	-0.027	0.032	-0.005	0.000	0.001
Uncertainties (Sigma)	0.028 px 0.000 mm	0.006 px 0.000 mm	0.003 px 0.000 mm	0.000	0.000	0.000	0.000	0.000

WINGTRA\_RGB61\_FE24mmF2.8G\_24.0\_9504x6336. Sensor Dimensions: 35.000 [mm] x 23.333 [mm]

	Focal length	Principal point x	Principal point y	R1	R2	R3	T1	T2
Initial	6285.630 px 23.148 mm	4736.290 px 17.442 mm	3145.980 px 11.586 mm	-0.024	0.025	0.000	0.001	-0.001
Optimized	6287.612 px 23.155 mm	4791.929 px 17.647 mm	3150.551 px 11.602 mm	-0.027	0.032	-0.005	0.000	0.001
Uncertainties (Sigma)	0.024 px 0.000 mm	0.003 px 0.000 mm	0.001 px 0.000 mm	0.000	0.000	0.000	0.000	0.000

## Tie points

### 1. Checkpoints (CPs)

Label	Position error			Reprojection error [px]	Accuracy		Verified/Marked
	X [ftUS]	Y [ftUS]	Z [ftUS]		X/Y [ftUS]	Z [ftUS]	
1000	-0.012	0.015	0.157	1.2	0.066	0.066	18/18
1001	-0.023	-0.003	0.026	1.6	0.066	0.066	17/17
1002	0.033	-0.038	0.062	1.2	0.066	0.066	18/18
1003	0.051	0.057	0.072	1.3	0.066	0.066	20/20
1004	-0.014	0.042	-0.093	1.7	0.066	0.066	19/19
1005	-0.035	0.033	-0.003	1.3	0.066	0.066	20/20
1006	-0.052	0.002	-0.067	1.3	0.066	0.066	20/20
1007	-0.058	0.004	-0.074	1.2	0.066	0.066	18/18
1008	-0.088	0.052	0.006	1.2	0.066	0.066	18/18
1009	0.021	0.018	-0.028	1.3	0.066	0.066	17/17
<b>Mean</b>	-0.018	0.018	0.006	1.3			
<b>Min</b>	-0.088	-0.038	-0.093	0.2			
<b>Max</b>	0.051	0.057	0.157	4.8			
<b>RMS</b>	0.045	0.033	0.073	1.5			
<b>Sigma</b>	0.041	0.027	0.073	0.6			

## Hardware & settings

### System information

Hardware: CPU: 13th Gen Intel(R) Core(TM) i9-13900KF, cpus=1, threads=32

RAM: 127.84 GB

GPU: NVIDIA Corporation NVIDIA GeForce RTX 4080/PCIe/SSE2

Operating system: Windows 11

### Coordinate reference systems

Image coordinate reference system(s): NAD83(2011) - EPSG:6318

Ground control point (GCP) coordinate reference system: NAD83(2011) / Louisiana South (ftUS) + NAVD88 height (ftUS) - EPSG:6479+6360 [GEOID12B]

Project coordinate reference system: NAD83(2011) / Louisiana South (ftUS) + NAVD88 height (ftUS) - EPSG:6479+6360 [GEOID12B]

### Processing settings

Calibration	Completed	Densification	Completed	DSM	Completed	Orthomosaic	Completed
Pipeline: Trusted location and orientation Template: Large scale and corridor Internals confidence: Low Image scale: 1/2 Max extracted keypoints: Automatic Reoptimized: Yes Use automatic ITPs: Disabled		Noise filter: Disabled Image scale: 1/2 Min number of matches: 6 Multiscale: Enabled Density: Optimal Sky filter: Disabled		Input point cloud: Dense Interpolation: Enabled Surface smoothing: 12 Resolution: 0.068 ftUS/px		Algorithm: Hardware accelerated Oblique: Disabled Deghosting: Disabled Resolution: 0.068 ftUS/px	
2m 3s		43m 47s		24m 46s		8m 51s	