

Camera Calibration Reporting

CAMERA CALIBRATION PARAMETERS

PROJECT #:	Boresite Calibration Flight	GEOID MODEL:	CVGD 2013 (NAD83)	CAMERA NAME:	DMC III	PRINCIPAL POINT OFFSET ppx [mm]:	0
COMPANY NAME:	Peregrine Aerial Survey	IMU TYPE:	LCI-100C	CAMERA SERIAL #:	27542	PRINCIPAL POINT OFFSET ppy [mm]:	0
DATE OF CALIBRATION:	19-Mar-24	IMU orientation [ENU/NED]:	DD	# PIXEL (WIDTH)	14592		
CALIBRATION LOCATION:	Abbotsford, BC	BASE/ROVER GPS TYPE:	CORS	# PIXEL (LENGTH)	25728		
NAME OF PERSON PERFORMING CALIBRATION:	Paul Gagnon	GPS SOLUTION :	Differential / Multipass	PIXEL SIZE [µm]:	3.9		
GEODETTIC DATUM:	NAD83 (CSRS)	MAX BASELINE LENGTH [Km]:	32	A-Priory FOCAL LENGTH "f" [mm]:	92		
VERTICAL DATUM:	CVGD 2013 (NAD83)	A-Priory Spatial boresight offsets dX dY dZ [m;m;m]:	.087, 0.00, .182	#CHANNELS [R/G/B/iR/nIR]	R/G/B/NIR/Pan		
PROJECTION:	UTM 10N	A-Priory Angular boresight offsets dR dP dH [°]:	0, 0, 0	BIT DEPTH [bit]:	14		

BUNDLE BLOCK ADJUSTMENT (BBA)

SOFTWARE NAME AND VERSION:	ImageStation Automatic Orientations 16.8.0 Build 215	Variance Components Image Points [µm] (RMS):	0.73	Variance Components GPS positions [cm] (RMS):	2.35
BUNDLE BLOCK ADJUSTMENT PARAMETER ESTIMATES USED DURING ADJUSTMENT:	X0, Y0, Z0, omega, Phi, Kappa	Variance Components Image points x [µm] (RMS):	0.68	Variance Components GPS positions X-EASTING [cm] (RMS):	1.51
IMAGE MEASUREMENT WEIGHTING [µ]/[PIXELS]:	3 um	Variance Components Image points y [µm] (RMS):	0.52	Variance Components GPS positions Y- NORTHINGS [cm] (RMS):	1.23
GROUND CONTROL WEIGHTING in dN dE dZ [±m;±m;±m]:	0.10 / 0.10 / 0.10 meters	Variance Components Coordinates [cm] (RMS):	3.92	Variance Components GPS positions Z- ELEVATION [cm] (RMS):	1.31
GPS POSITION WEIGHTING in dN dE dZ [±m;±m;±m]:	0.10 / 0.10 / 0.10 meters	Variance Components Coordinates X-EASTING [cm] (RMS):	2.04		
# 3D GROUND CONTROL POINTS:	13 control / 41 check	Variance Components Coordinates Y-NORTHING [cm] (RMS):	1.96		
		Variance Components Coordinates Z-ELEVATION [cm] (RMS):	2.72		

BBA RESULTS

A-Priory FOCAL LENGTH [mm]:	92 mm
A-Posteriori FOCAL LENGTH [mm]:	92 mm
A-Priory PRINCIPAL POINT OFFSET ppx [mm]:	0 mm
A-Posteriori PRINCIPAL POINT OFFSET ppx [mm]:	0 mm
A-Priory PRINCIPAL POINT OFFSET ppy [mm]:	0 mm
A-Posteriori PRINCIPAL POINT OFFSET ppy [mm]:	0 mm
Achieved angular Exterior Orientation Parameter Std.Dev Om/Phi/Kappa [±°;±°;±°]	0.00128 / 0.00133 / 0.00057
Achieved positional Exterior Orientation Parameter Std.Dev in EAST/NORHT/ELEVATION [±m;±m;±m]	0.02936 / 0.02746 / 0.01947
Sigma Naught [µm]:	0.72593
Average Residuals of control points dE dN dZ [m;m;m] (RMS):	0.01239 / 0.012936 / 0.03029

Full software and residuals output to be submitted with this report