

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 #:	27550	PRINCIPAL POINT OFFSET ppy [mm]:	0
DATE OF CALIBRATION:	15-May-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 [μ m]:	3.9		
GEODETIC DATUM:	NAD83 (CSRS)	MAX BASELINE LENGTH [Km]:	31 km	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 16.6.0 Build 618	Variance Components Image Points [μ m] (RMS):	0.75	Variance Components GPS positions [cm] (RMS):	5.17 cm		
BUNDLE BLOCK ADJUSTMENT PARAMETER ESTIMATES USED DURING ADJUSTMENT:	X0, Y0, Z0, omega, Phi, Kappa	Variance Components Image points x [μ m] (RMS):	0.63	Variance Components GPS positions X-EASTING [cm] (RMS):	3.09 cm		
IMAGE MEASUREMENT WEIGHTING [μ]/[PIXELS]:	3 μ m	Variance Components Image points y [μ m] (RMS):	0.59	Variance Components GPS positions Y-NORTHINGS [cm] (RMS):	3.39 cm		
GROUND CONTROL WEIGHTING in dN dE dZ [\pm m; \pm m; \pm m]:	0.10 / 0.10 / 0.10 meters	Variance Components Coordinates [μ m] (RMS):	0.86	Variance Components GPS positions Z-ELEVATION [cm] (RMS):	1.79 cm		
GPS POSITION WEIGHTING in dN dE dZ [\pm m; \pm m; \pm m]:	.1 / .1 / .1 meters	Variance Components Coordinates X-EASTING [cm] (RMS):	3.84cm				
# 3D GROUND CONTROL POINTS:	17 control / 31 check points	Variance Components Coordinates Y-NORTHING [cm] (RMS):	4.77 cm				
		Variance Components Coordinates Z-ELEVATION [cm] (RMS):	3.86 cm				

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 [\pm° ; \pm° ; \pm°]	.00078 / .00094 / .00047 degrees
Achieved positional Exterior Orientation Parameter Std.Dev in EAST/NORHT/ELEVATION [\pm m; \pm m; \pm m]	.01907 / .01846 / .01142 meters
Sigma Naught [μ m]:	0.71 μ m
Average Residuals of control points dE dN dZ [m;m;m] (RMS):	

Full software and residuals output to be submitted with this report