

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:	21-Aug-18	IMU orientation [ENU/NED]:	DD	# PIXEL (WIDTH)	14592		
CALIBRATION LOCATION:	Abbotsford, BC	BASE/ROVER GPS TYPE:	Trimble NETRS	# PIXEL (LENGTH)	25728		
NAME OF PERSON PERFORMING CALIBRATION:	Paul Gagnon	GPS SOLUTION :	Differential / Multipass	PIXEL SIZE [μm]:	3.9		
GEODETIC DATUM:	NAD83 (CSRS) epoch 2006	MAX BASELINE LENGTH [km]:	27 km	A-Priory FOCAL LENGTH "F" [mm]:	92		
VERTICAL DATUM:	CVGD 2013 (NAD83)	A-Priory Spatial boresight offsets dX dY dZ [m;m;m]:	.016, .002, -.387	#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 2016	Variance Components Image Points [μm] (RMS):	0.9	Variance Components GPS positions [mm] (RMS):	3.9 cm	
BUNDLE BLOCK ADJUSTMENT PARAMETER ESTIMATES USED DURING ADJUSTMENT:	X0, Y0, Z0, omega, Phi, Kappa	Variance Components Image points x [μm] (RMS):	0.9	Variance Components GPS positions X-EASTING [mm] (RMS):	2.3 cm	
IMAGE MEASUREMENT WEIGHTING [μ]/[PIXELS]:	3 um	Variance Components Image points y [μm] (RMS):	0.7	Variance Components GPS positions Y- NORTHINGS [mm] (RMS):	3.2 cm	
GROUND CONTROL WEIGHTING in dN dE dZ [±m;±m;±m]:	.1 / .1 / .1 meters	Variance Components Coordinates [μm] (RMS):	1.9 cm	Variance Components GPS positions Z- ELEVATION [mm] (RMS):	1.8 cm	
GPS POSITION WEIGHTING in dN dE dZ [±m;±m;±m]:	.5 / .5 / .5 meters	Variance Components Coordinates X-EASTING [mm] (RMS):	1.4 cm			
# 3D GROUND CONTROL POINTS:	17 control / 293 check points	Variance Components Coordinates Y-NORTHING [mm] (RMS):	2.3 cm			
		Variance Components Coordinates Z-ELEVATION [mm] (RMS):	3.2 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 [±°;±°;±°]	.001 / .001 / .004 deg
Achieved positional Exterior Orientation Parameter Std.Dev in EAST/NORHT/ELEVATION [±m;±m;±m]	.012 / .012 / .027 meters
Sigma Naught [μm]:	0.9 um
Average Residuals of control points dE dN dZ [m;m;m] (RMS):	.020 / .018 / .013 meters

Full software and residuals output to be submitted with this report