

April 5, 2018 Payload 3 Daily Flight Report



Date: 2018-04-05

Flight Campaign ID: 2018_P3C1

Airport, FBO ID, City: Boulder Municipal Airport (KBDU) - Boulder, CO

Domain: 00 Sites Flown: V10C Days left in Domain: 10

Report Author: Matt Devoe

Flight Crew: Abe Morrison, Matt Devoe, Robb Walker Flight Hours: 00:48

Ground/GPS: Mitch Haynes, Nick Marusich

Pilots: Mike Francis, Ross Rice

Additional Personnel:

GPS Instruments: 01 - FBO_KBDU

Summary

V10C training flight

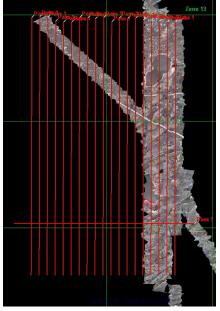
Concerns

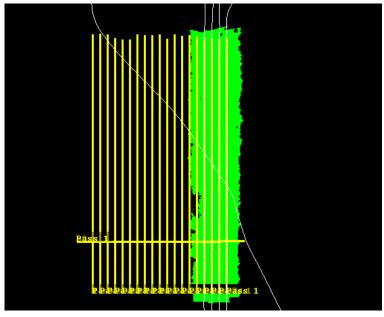
None

Comments

Riegl observation flight for Abe Morrison

Flight Screenshots





Hours until maintenance: 87.97

Pictures

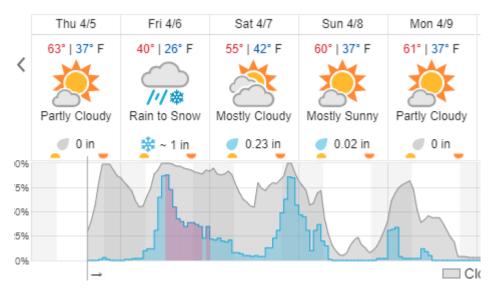
Daily Coverage

D00 V10C	Line	SpecG	SpecY	SpecR	NIS	Lidar	Camera	Cumulative
	1							NLC
	2							NLC
	3							NLC
	4							NLC
Completed:	(0/4)							0.00%

Cumulative Domain Coverage

None - Training flight

Weather Forecast



Flight Collection Plan for 6-8 April 2018

Continuing P3 Calibration and Training Flight - Weather Depending Flyority 1 Collection Area: Table Mountain Radiometric Calibration

Flight Plan Name: D10_R10C_Rad_Cal_TMBT_v1_Q780.rpp

Flyority 2 Collection Area: NIS Offset Flight

flights with no hearbeat timeout error.

Flight Plan Name: D10_O10B_NIS_Offset_v2_Q780.rpp Crew: TBD

On-Going Issues

Fault: Lidar	Ticket:	Open Date : 3/21/2018					
20180321 Error message on RiAcquire. LASER_HEARTBEAT_TIMEOUT_EXPIRED and corresponding visible							
gaps in swath. 20180322 Error occurred again, believed to be related to lost connection with scanner.							
20180323 Same error occured. 20180324 Error occurred on one line. 20180327							
LASER_HEARTBEAT_TIMEOUT_EXPIRED and corresponding visible gaps in swath error occurred when RDP							
lost connection twice. 20180331 VNC connections for RiAcquire and SnapSHOT were used today and error							
did NOT occur. 20180401 No laser heartbeat errors occurred in 4 hour flight while using VNCs. 20180405 five							

Fault: Lidar Ticket: Open Date: 3/21/2018

20180322 New Ethernet cable attached but same issues occurred. 2018032414 Several lost connections occurred for the Remote Desktop to both RiAcquire and Tracker snapSHOT, which effected the pilot display. Issue will continue to be monitored. 20180327 Tried tactic of unchecking production of MONSDW files to reduce network load, but RDP connection was lost twice during this flight.20180330 Per Lab Manager's suggestion, VNC's for RiAcquire and Tracker were tested during the transit, and no lag was observed.

20180331 VNC connections for RiAcquire and Snapshot used instead of RDP. 20180401 Used VNCs (with slight lag) and external displays, no lost connections occurred in 4 hour flight

Fault: QAQC Ticket: Open Date: 3/24/2018

SBET plots are failing to generate in QAQC. Extractions otherwise occurring properly.

Fault: Lidar Ticket: Open Date: 3/24/2018

Received several INS-GPS 1 errors on RiAcquire during flight that dont look familiar. Will investigate to see what these errors mean and why theyre being received. 20180401 No INS-GPS1 Errors occurred in 4 hour flight

Fault: Spectrometer | Ticket: | Open Date: 3/29/2018

20180329 Pressure loss on the NIS, possibly due to a bad seal. Ian Crocker cut the strap holding the getter in hopes of reducing vibration from the PIM. Flight crew will monitor during transit. PL3 vacuum pump will be shipped to D17 if needed. 20180330 No significant pressure loss occurred during the transit to D17. 20180331 NIS chamber pressure is continuing to rise, based on the trend crew is requesting pump to be shipped to D17 to be used if necessary. 20180404 Noticed chamber pressure was jumping around a lot before and during return transit from D17. Now suspect a sensor or connetion issue rather than a real vacuum pressure change. 20180405 Cracked oring found in getter plumbing. Replaced by Ian Crocker.

Fault: Database Ticket: Open Date: 4/2/2018

20180402 Database crash during flight. Sometimes to both operators simultaneously, but also to both NIS and Lidar operator individually. This has been a reoccuring issue, but is only being added now. 20180404 Database no longer crashes when minimizing and maximizing.

Resolved Issues (Today)

Fault: Flight Plans | Ticket: Open Date: 3/31/2018 | Close Date: 4/5/2018

20180331 KMLs for this flight had pass numbers that were ordered in reverse for SnapShot compared to RiAcquire and MarsRover and the flight plan summaries. Also the passes that SnapSHOT indicated showed up as in between passes shown on RiAcquire and MarsRover. 2018040117 Used 2017 kml for flight lines, still didn't match (expected). 20180405 Flight ops was using old version of flight plans.