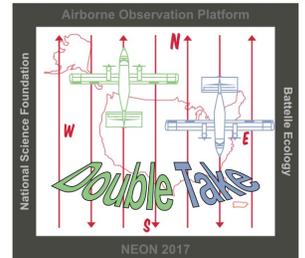




April 10, 2018 Payload 3 Daily Flight Report



Date: 2018-04-10

Flight Campaign ID: 2018_P3C1

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

Domain: 10

Sites Flown: V10C - Boulder City South

Days left in Domain: 5

Report Author: Ivana Vu

Flight Crew: Ivana Vu, Matt Devoe, Abe Morrison

Ground/GPS: Nick Marusich

Pilots: Mike Francis, Paul Muth

Additional Personnel: None

GPS Instruments: 01 - FBO_KBDU

Flight Hours: 01:07, 00:51

Hours until maintenance: 86.00

Summary

Cloudy conditions prevented any attempts of the Radiometric or NIS Offset calibration flights, so two training flights were conducted instead. Only data from the 2nd flight will be extracted.

Concerns

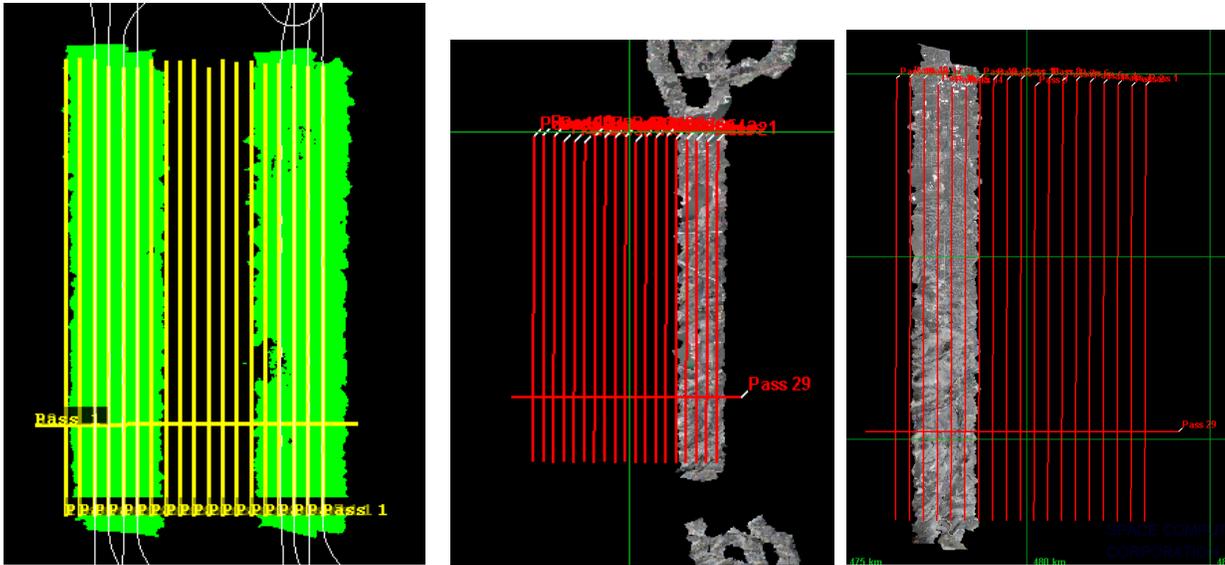
None

Comments

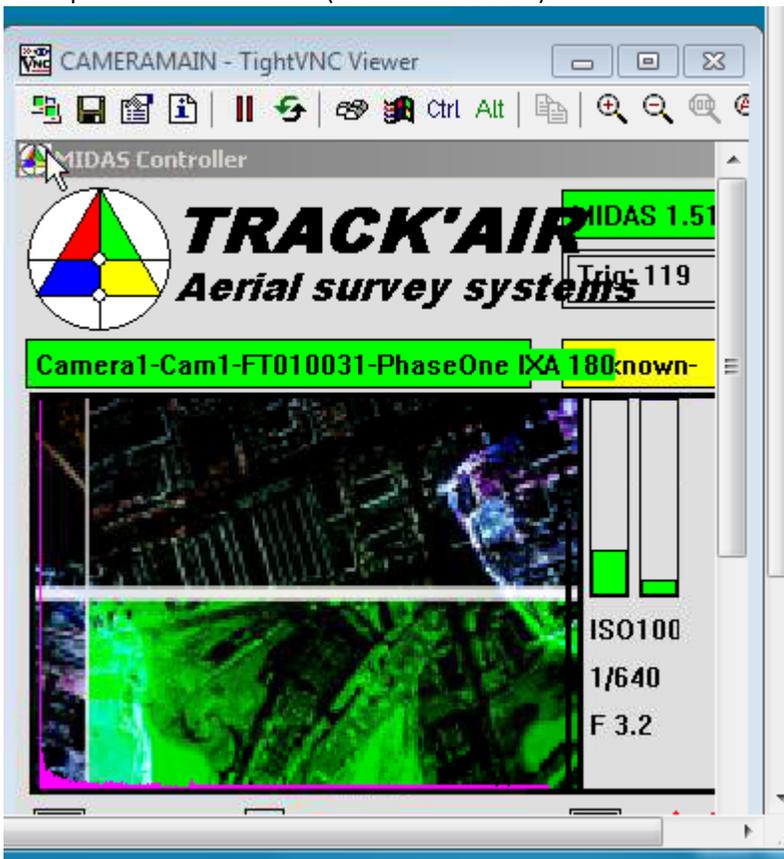
- Abe and Ivana completed their 2nd Riegl training flights

- Today is Nathan Leisso's last day at NEON – many thanks for all of your contributions at AOP, Nathan, we will definitely miss you!

Flight Screenshots



Corrupt camera thumbnail (see "New Issues")



Pictures

AOP Team Photo

(Photo Credit: Collin Williams)



Daily Coverage

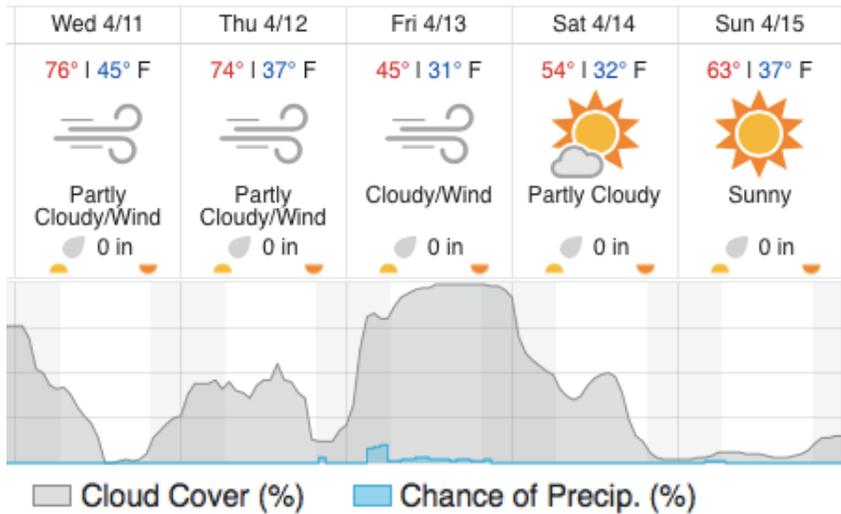
D00 V10C	Line	SpecG	SpecY	SpecR	NIS	Lidar	Camera	Cumulative
	1				✓	✓	✓	NLC
	2				✓	✓	✓	NLC
	3				✓	✓	✓	NLC
	4				✓	✓	✓	NLC
Completed:	(0/4)							0.00%

D00 V10C	Line	SpecG	SpecY	SpecR	NIS	Lidar	Camera	Cumulative
	14				✓	✓	✓	NLC
	15				✓	✓	✓	NLC
	16				✓	✓	✓	NLC
	17				✓	✓	✓	NLC
Completed:	(0/4)							0.00%

Cumulative Domain Coverage

N/A (Calibration Flights)

Weather Forecast



Flight Collection Plan for 11 April 2018

Continue P3 Calibration and Training Flights:

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

Flight Plan Name: D10_O10B_NIS_Offset_v2_Q780.rpp

New Issues

Fault: Camera	Open Date: 4/10/2018
Camera thumbnails on SnapSHOT appear corrupted.	
Fault: Database	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 re-occurring issue, but is only being added now.	
20180404 Database no longer crashes when minimizing and maximizing.	
20180410 Database experienced same network connection issues and crashed several times during both flights. Lidar Crystal Computer VNC was open on the DCC for training purposes.	

On-Going Issues

Fault: Lidar	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: Lidar	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 occurred. 20180324 Error occurred on one line.	

<p>20180327 LASER_HEARTBEAT_TIMEOUT_EXPIRED and corresponding visible gaps in swath error occurred when RDP lost connection twice.</p> <p>20180331 VNC connections for RiAcquire and SnapSHOT were used today and error did NOT occur.</p> <p>20180401 No laser heartbeat errors occurred in 4 hour flight while using VNCs. 20180405 five flights with no heartbeat timeout error.</p>	
Fault: QAQC	Open Date: 3/24/2018
SBET plots are failing to generate in QAQC. Extractions otherwise occurring properly.	
Fault: Lidar	Open Date: 3/24/2018
<p>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.</p> <p>20180401 No INS-GPS1 Errors occurred in 4 hour flight</p>	
Fault: Spectrometer	Open Date: 3/29/2018
<p>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.</p> <p>0180330 No significant pressure loss occurred during the transit to D17.</p> <p>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.</p> <p>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.</p> <p>20180405 Cracked oring found in getter plumbing. Replaced by Ian Crocker.</p>	