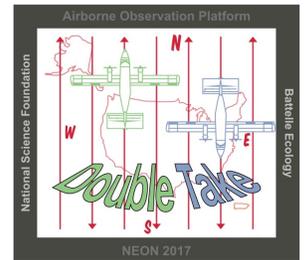




April 3, 2018 Payload 3 Daily Flight Report



Date: 04-03-18

Flight Campaign ID: 2018_P3C1

Airport, FBO ID, City: Fresno Yosemite International Airport (KFAT) – Fresno, CA

Domain: 17

Sites Flown: SJER

Days left in Domain: 0

Report Author: Robb Walker

Flight Crew: Cameron Chapman, Robb Walker

Ground/GPS Crew: Mitch Haynes, Mike Wussow

Pilots: Mike Francis, Ross Rice

Additional Personnel: None

GPS Instruments: 02 – FBO_KFAT, U-P725

Flight Hours: 01:44

Hours until aircraft maintenance: 94.95

Summary

Clear skies over San Joaquin Valley. Collection has been completed under green collect conditions in San Joaquin Experimental Range. One training flight was conducted today. Crew will demobilize Wednesday and reposition aircraft to KBDU.

Concerns

Horizontal banding in camera images during collection. In-air system reboot resolved issue, will continue to monitor.

Comments

- Robb Walker has completed lidar operator training and was certified on Payload 3.
- Michael Wussow performed drone flights in domain.
- Chamber pressure continues to slowly rise. Will continue to monitor in transit.
- 02_FBO_KFAT was removed for transit back to KBDU.

Cumulative Domain Coverage

SJER

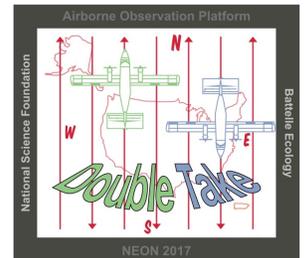
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30										

Flown: 100% (30/30)

Green: 100% (30/30)

Yellow: 0% (0/30)

Red: 0% (0/30)

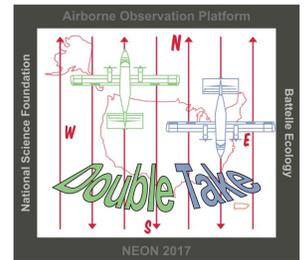


On-Going Issues

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 occurred. 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		
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: Database	Ticket:	Open Date: 3/24/2018
Flight lines from Lidar logs not being placed in PDF logs, only CSV.		
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 todays 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.		
Fault: Flight Plans	Ticket:	Open Date: 4/1/2018
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),		
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 reoccurring issue, but is only being added now.		
Fault: Telemetry	Ticket:	Open Date: 3/24/2018
No Environmental Pressure and Humidity Readings being received, even after reset.		

Issues Resolved

None

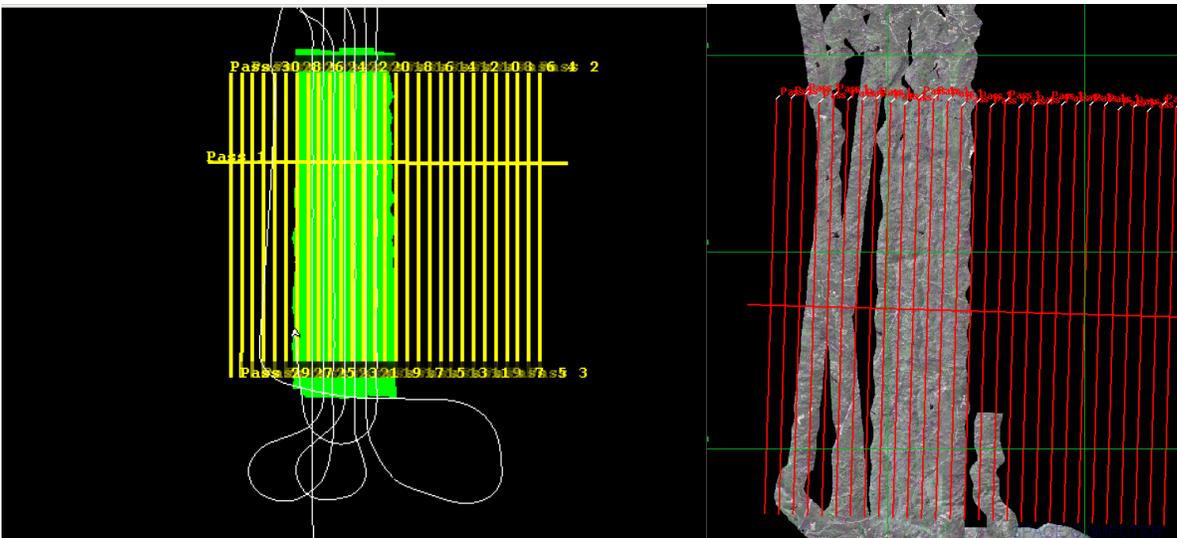


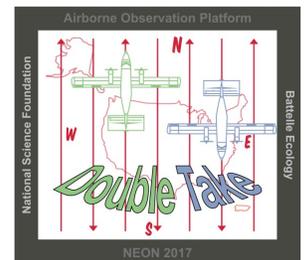
Pictures - San Joaquin Experimental Range



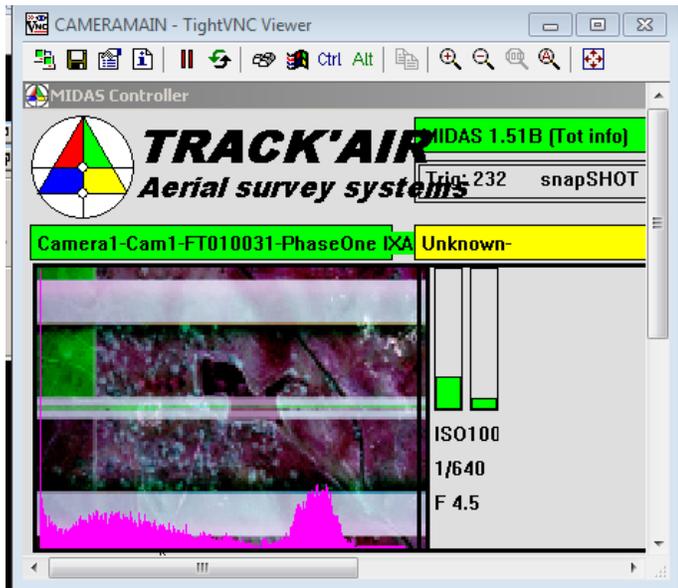
Sierra Nevada Range under hazy skies

Screenshots





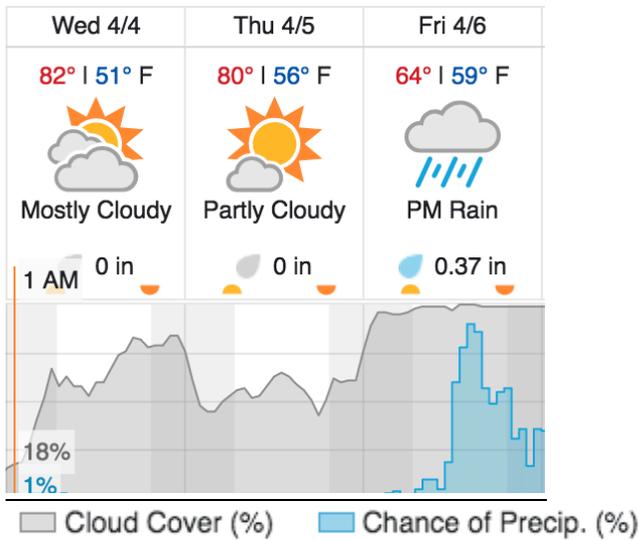
Screenshots (cont.)



Banding observed in images during collection

Weather Forecast

Fresno, CA



Flight Collection Plan for 02 April 2018

Aircraft repositioning to KBDU tomorrow

Crew: Robb Walker, Mitch Haynes

