



April 9, 2018 Payload 3 Daily Flight Report



Date: 2018-04-09

Flight Campaign ID: 2018_P3C1

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

Domain: 00

Sites Flown: None

Days left in Domain: 6

Report Author: Abe Morrison

Flight Crew: Abe Morrison, Mitch Haynes

Ground/GPS: Robb Walker

Pilots: Mike Francis, Paul Muth

Additional Personnel:

GPS Instruments:

Flight Hours: 00:00

Hours until maintenance: 87.97

Summary

A flight was contemplated today but the crew couldn't get off the ground before the clouds moved back in and the rain started.

Concerns

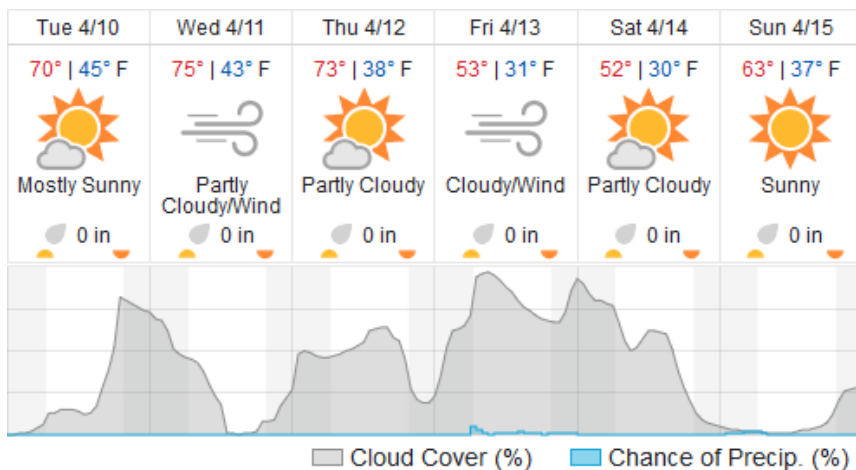
None

Comments

--Continuing to monitor the NIS pressure issue.



Weather Forecast



Flight Collection Plan for 10-11 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

Flight Plan Name: D10_O10B_NIS_Offset_v2_Q780.rpp

Crew Lidar: Abe Morrison Trainer: Matt DeVoe NIS: Ivana Vu



On-Going Issues

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. 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 flights with no heartbeat timeout error.	
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: 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
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	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	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. 20180404 Database no longer crashes when minimizing and maximizing.	

Resolved Issues (Today)

Fault: Flight Plans	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.		