



## April 6, 2018 Payload 3 Daily Flight Report



**Date:** 2018-04-06

**Flight Campaign ID:** 2018\_P3C1

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

**Domain:** 00

**Sites Flown:** None

**Days left in Domain:** 9

**Report Author:** Abe Morrison

**Flight Crew:**

**Flight Hours:** 00:00

**Ground/GPS:**

**Hours until maintenance:** 87.97

**Pilots:**

**Additional Personnel:**

**GPS Instruments:**

### Summary

No flights were conducted today due to weather, rain and snow persisted all day. No flights are expected until Monday.

### Concerns

None.

### Comments

--Disc set 2 was tested by mitch and found to be working so it will be added back into the flight disc rotation.

--The getter and associated plumbing on payload 3 was removed and replaced by the getter and plumbing from payload 1. The new getter was activated and the system was pumped down. The new setup will be monitored for pressure rise.

--Payload 2 and a partial payload 1 will be transferred from the lab to the PIF on Monday and the partial payload 1 will be installed on Tuesday in the 2<sup>nd</sup> aircraft.

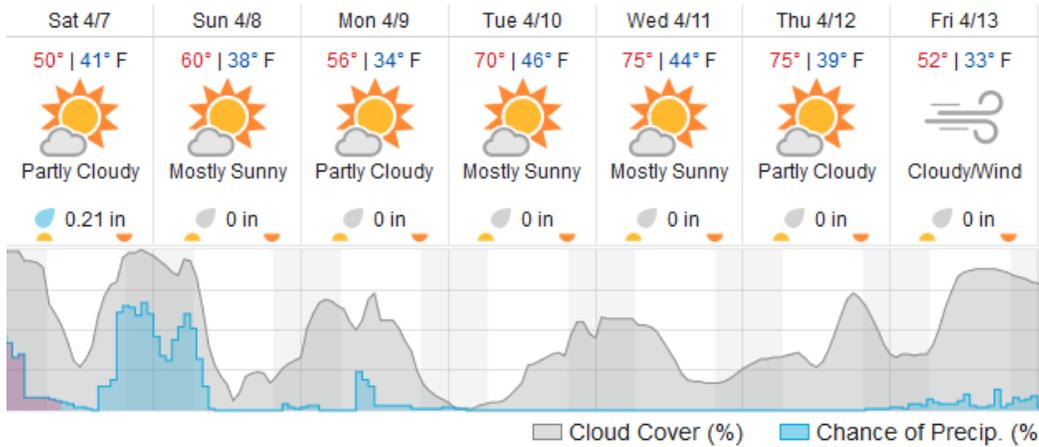
### Pictures



The geese at the NEON Hangar were also not happy with the weather!!!



## Weather Forecast



### Flight Collection Plan for 7-8 April 2018

No Flights Planned

### Flight Collection Plan for 6-8 April 2018

Continuing P3 Calibration and Training Flight - Weather Depending

Flyority 1

Collection Area: Table Mountain Radiometric Calibration

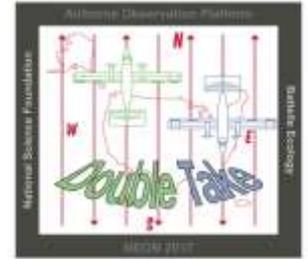
Flight Plan Name: D10\_R10C\_Rad\_Cal\_TMBT\_v1\_Q780.rpp

Flyority 2

Collection Area: NIS Offset Flight

Flight Plan Name: D10\_O10B\_NIS\_Offset\_v2\_Q780.rpp

Crew Lidar: Abe Morrison Trainer: Mitch Haynes NIS: TBD



### On-Going Issues

<b>Fault:</b> Lidar	<b>Open Date:</b> 3/21/2018
<p>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.</p>	
<b>Fault:</b> Lidar	<b>Open Date:</b> 3/21/2018
<p>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</p>	
<b>Fault:</b> QAQC	<b>Open Date:</b> 3/24/2018
<p>SBET plots are failing to generate in QAQC. Extractions otherwise occurring properly.</p>	
<b>Fault:</b> Lidar	<b>Open Date:</b> 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. 20180401 No INS-GPS1 Errors occurred in 4 hour flight</p>	
<b>Fault:</b> Spectrometer	<b>Open Date:</b> 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. 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.</p>	
<b>Fault:</b> Database	<b>Open Date:</b> 4/2/2018
<p>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.</p>	

### Resolved Issues (Today)

<b>Fault:</b> Flight Plans	<b>Open Date:</b> 3/31/2018	<b>Close Date:</b> 4/5/2018
<p>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.</p>		