



## April 15, 2018 Payload 3 Daily Flight Report



**Date:** 2018-04-15

**Flight Campaign ID:** 2018\_P3C1

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

**Domain:** 00

**Sites Flown:** R10C (Table Mountain Radiometric Calibration - Riegl)

**Days left in Domain:** 0

**Report Author:** Robb Walker

**Flight Crew:** Robb Walker, Abe Morrison

**Ground/GPS:** Mitch Haynes

**Pilots:** Mike Francis, Paul Muth

**Additional Personnel:** John Adler and Tristan Goulden

**GPS Instruments:** 01 - FBO\_KBDU

**Flight Hours:** 00:47

**Hours until maintenance:** 84.45

### Summary

Table Mountain Radiometric Calibration flight was attempted today. Conditions were marginal at takeoff with cloud cover clear of the sun. By the time we arrived on station Some cumulus and cirrus clouds began to obscure sun again. Tristan confirmed flying it anyway since we were already up.

### Concerns

None

### Comments

- Preparation and packing of aircraft for departure to Domain 11.
- John Adler and Tristan Goulden assisted today with set-up of calibration tarps.
- Spectrometer chamber pressure continues to rise.

### Flight Screenshots



**Pictures**



Cloud Cover over Table Mountain

**Daily Coverage**

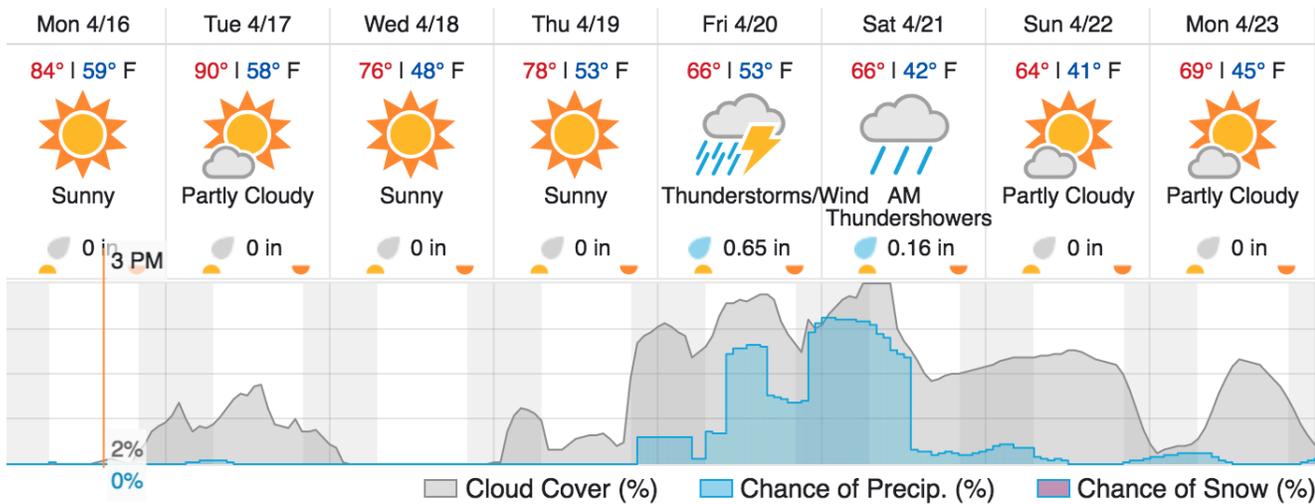
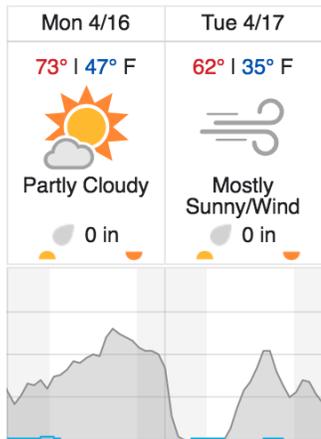
D00 R10C	Line	SpecG	SpecY	SpecR	NIS	Lidar	Camera	Cumulative
	1				✓	✓	✓	NLC
	2				✓	✓	✓	NLC
	3				✓	✓	✓	NLC
	4				✓	✓	✓	NLC
	5				✓	✓	✓	NLC
Flown:	5							

**Cumulative Domain Coverage**

N/A (Calibration Flights)

## Weather Forecast

Boulder, CO



Wichita Falls, TX

## Flight Collection Plan for 16 April 2018

Transit from KBDU to D11 (Wichita Falls, TX)

Crew: Mitch Haynes

## On-Going Issues

<b>Fault:</b> Lidar	<b>Open Date:</b> 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	
<b>Fault:</b> Lidar	<b>Open Date:</b> 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>	
<b>Fault:</b> QAQC	<b>Open Date:</b> 3/24/2018
SBET plots are failing to generate in QAQC. Extractions otherwise occurring properly.	
<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.</p> <p>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.</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>	
<b>Fault:</b> Camera	<b>Open Date:</b> 4/10/2018
Camera thumbnails on SnapSHOT appear corrupted.	