Payload 3 Daily Flight Report

Date: 2021-03-22
Flight Campaign ID: P3C1
Airport, FBO ID, City: Boulder Municipal Airport (KBDU) - Boulder, CO
Aircraft: N615AR

Domain: 00 (Training & Calibration)
Sites Flown: None
Days left in Domain: 7

Report Author: Michael Wussow
Lidar Operators: Michael Wussow
Spectrometer Operators: Ivana Vu
Pilots: Justin Eddington, Micah Hoogeveen
Ground Crew: Matt Devoe

Flight Hours: 00:00
Hours until maintenance: 116.53

Summary
As expected snow and low clouds lingered throughout the day and no flights were attempted. The payload hand-off was completed today and Blue team has taken over flight operations for the rest of the week and weekend to maximize opportunities for certification flights during the challenging weather expected this week.

Concerns
None

Comments
- Blue Team consists of John Adler, Ivana Vu, Robb Walker, Matt DeVoe, and Mike Wussow

- Ian performed troubleshooting today with Ivana and Mike regarding the booting error repeatedly experienced on the RiAcquire computer during the first boot of the day. Action was taken to switch thermistors in the lidar BSE to a lower resistance rated unit in hopes that this will resolve the issue. After sitting for three hours the Midas box was turned on and the RiAcquire computer booted normally this afternoon. Booting will occur tomorrow morning as well to test this potential fix.

- A camera cable that was found to be loose at the Midas box was re-seated and could be the cause of previous camera connection issues.

Daily Coverage

Estimated Cloud Cover Key

<table>
<thead>
<tr>
<th>Green: 0-10%</th>
<th>Yellow: 11-50%</th>
<th>Red: &gt;50%</th>
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Cumulative Domain Coverage

D00|B10E (Riegl Boresight Calibration - 1600m, 1000m, 500m)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
Flown: 0% (0/20)
Green: 0% (0/20)
Yellow: 0% (0/20)
Red: 0% (0/20)

D00|H10C (NEON Headquarters Lidar Test - Riegl)
1 2 3 4
Flown: 100% (4/4)
Green: 0% (0/4)
Yellow: 0% (0/4)
Red: 100% (4/4)

D00|N10D (Nominal Runway at KBDU - Riegl)
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
Flown: 86% (24/28)
Green: 46% (13/28)
Yellow: 0% (0/28)
Red: 39% (11/28)

D00|O10B (NIS Offset - Riegl)
1 2
Flown: 0% (0/2)
Green: 0% (0/2)
Yellow: 0% (0/2)
Red: 0% (0/2)

D00|R10C (Table Mountain Radiometric Calibration - Riegl)
1 2 3 4 5
Flown: 0% (0/5)
Green: 0% (0/5)
Yellow: 0% (0/5)
Red: 0% (0/5)

D00|V10C (Boulder City South)
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
Flown: 10% (3/29)
Green: 0% (0/29)
Yellow: 0% (0/29)
Red: 10% (3/29)

D00|W10C (Wiggle Timing Test - Riegl)
1 2
Flown: 100% (2/2)
Green: 100% (2/2)
Yellow: 0% (0/2)
Red: 0% (0/2)
Flight Collection Plan for March 23 2021

Flyority 1
Collection Area: Table Mountain Radiometric Calibration – Boulder Airport
Flight Plan Name: D10_R10C_Rad_Cal_TBMT_v1_Q780
On-station Time: 1700 UTC / 1100 L
Additional Considerations: Ground should be dry.

Flyority 2
Collection Area: Boresight Calibration – Greeley, CO
Flight Plan Name: D10_B10E_Boresight_1600m_Q780
On-station Time: 1600 UTC / 1000 L
Additional Considerations: No recent snowfall, clear roofs required.

Flyority 3
Collection Area: NIS Offset Flight
Flight Plan Name: D10_O10B_NIS_Offset_v2_Q780
On-station Time: 1630 UTC / 1030 L

Flight Crew: Ivana, Matt, Robb, Mike