Payload 3 Daily Flight Report

Date: 2022-04-12  
Flight Campaign ID: P3C1  
Airport, FBO ID, City: Boulder Municipal Airport (KBDU) - Boulder, CO  
Aircraft: N70AR

Domain: 00 (Training & Calibration)  
Sites Flown: None  
Days left in Domain: 13

Report Author: Abe  
Lidar Operators: Abe, Cameron, Elissa, John  
Spectrometer Operators: Matt, Mike, Mitch, Nick  
Flight Hours: 00:00  
Hours until maintenance: 123.90  
Pilots: Nick, Magnus  
Ground Crew: None

Summary
System cooling completed, and the payload is ready for calibration and training flights. The flight season kickoff breakfast was held at the hangar this morning. All AOP staff and invited guests enjoyed a lovely continental breakfast, some tours of the plane/payload, and some long awaited in-person introductions. The monthly AOP staff meeting was also held this morning at the hangar.

Concerns
None

Comments
-Pumping and cooling completed this morning.  
-Post install system checks completed this afternoon.

Pictures

AOP Flight Season Kickoff Breakfast. Photo By Cameron
AOP Monthly staff meeting. Photo by Cameron

Ian making some last-minute checks of the payload. Photo by Abe

**Cumulative Domain Coverage**

<table>
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<tr>
<th>Domain</th>
<th>Coverage</th>
<th>Flown (%)</th>
<th>Green (%)</th>
<th>Yellow (%)</th>
<th>Red (%)</th>
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<tbody>
<tr>
<td>D00</td>
<td>B10E (Riegl Boresight Calibration - 1600m, 1000m, 500m)</td>
<td>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20</td>
<td>0% (0/20)</td>
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<td>D00</td>
<td>H10C (NEON Headquarters Lidar Test - Riegl)</td>
<td>1 2 3 4</td>
<td>0% (0/4)</td>
<td>0% (0/4)</td>
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D00|N10D (Nominal Runway at KBDU - Riegl)

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Flown: 0% (0/28)
Green: 0% (0/28)
Yellow: 0% (0/28)
Red: 0% (0/28)

D00|O10B (NIS Offset - Riegl)

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Flown: 0% (0/2)
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Yellow: 0% (0/2)
Red: 0% (0/2)

D00|R10C (Table Mountain Radiometric Calibration - Riegl)

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Flown: 0% (0/5)
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D00|W10C (Wiggle Timing Test - Riegl)

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Flown: 0% (0/2)
Green: 0% (0/2)
Yellow: 0% (0/2)
Red: 0% (0/2)

Weather Forecast
Boulder, CO

Greeley, CO

source: wunderground.com
Flight Collection Plan for 13 April 2022

Flyority 1
Collection Area: Table Mountain Radiometric Calibration
Flight Plan Name: D10_R10C_Rad_Cal_TBMT_v1_Q780
45° On-station Time: 1640 UTC / 1040 L
40° On-station Time: 1610 UTC / 1010 L
Additional Considerations: Ground should be dry.

Flyority 2
Collection Area: Boresight Calibration – Greeley, CO
Flight Plan Name: D10_B10E_Boresight_1600m_Q780
30° On-station Time: 1510 UTC / 0910 L
Additional Considerations: No recent snowfall, clear roofs required.

Flyority 3
Collection Area: [Functional Checkout Flight] -- Nominal Runway Survey Flight Plan
Name: D10_N10D_Nominal_Rnwy_v8_Q780
On-Station Time: Daylight – No solar angle restrictions.
Additional Considerations: Runway should not be wet or snow covered.

Flyority 4
Collection Area: Wiggle Timing Test
Flight Plan Name: D10_W10C_Wiggle_Test_v5_Q780
On-station Time: Daylight – No solar angle restrictions.

Flyority 5
Collection Area: NEON HQ Lidar Validation
Flight Plan Name: D10_H10C_HQ_LIDAR_val_v1_Q780
On-station Time: Daylight – No solar angle restrictions.

Flyority 6
Collection Area: NIS Offset Flight
Flight Plan Name: D10_O10B_NIS_Offset_v2_Q780
35° On-station Time: 1540 UTC / 0940 L

Flight Crew:
13 April 2022
1st Flight
Lidar: Abe, NIS: Elissa, Trainer: Cameron

2nd Flight
Lidar: Matt, NIS: Mike, Trainer: Mitch