Payload 3 Daily Flight Report

Date: 2023-04-12
Flight Campaign ID: P3C1
Airport, FBO ID, City: Boulder Municipal Airport (KBDU) - Boulder, CO
Aircraft: N934MU

Domain: 00 (Training & Calibration)
Sites Flown: N10D (Nominal Runway at KBDU - Riegl)
Days left in Domain: 6

Report Author: Mike
Lidar Operators: Mike
Spectrometer Operators: Matt
Pilots: Paul, Jeff
Ground Crew: John

Flight Hours: 01:54
Hours until maintenance: 115.58
GPS Instruments: AOP_KBDU

Summary
An abbreviated Nominal Runway calibration flight was flown today in bumpy conditions. With the lidar over-current issue still under investigation, only lines that were 25% power or less were flown per Riegl’s recommendation. This accounted for 14 of 28 of the total flight plan lines.

Concerns
None

Comments
None

Daily Coverage

Estimated Cloud Cover Key

<table>
<thead>
<tr>
<th></th>
<th>Green: 0-10%</th>
<th>Yellow: 11-50%</th>
<th>Red: &gt;50%</th>
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D00|N10D

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Total number of lines flown: 14
Flight Screenshots

Cumulative Domain Coverage

**D00|B10E (Riegl Boresight Calibration - 1600m, 1000m, 500m)**

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Flown: 0% (0/20)
Green: 0% (0/20)
Yellow: 0% (0/20)
Red: 0% (0/20)

**D00|H10C (NEON Headquarters Lidar Test - Riegl)**

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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: 64% (18/28)
Green: 29% (8/28)
Yellow: 4% (1/28)
Red: 32% (9/28)

**D00|O10B (NIS Offset - Riegl)**

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Green: 0% (0/2)
Yellow: 0% (0/2)
Red: 0% (0/2)
D00|R10C (Table Mountain Radiometric Calibration - Riegl)

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D00|R10D (Boulder Airport Radiometric Calibration)

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D00|V10C (Boulder City South)

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Flown: 21% (6/29)
Green: 10% (3/29)
Yellow: 0% (0/29)
Red: 10% (3/29)

D00|W10C (Wiggle Timing Test - Riegl)

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Green: 0% (0/2)
Yellow: 0% (0/2)
Red: 100% (2/2)

Weather Forecast
Boulder, CO

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<td>75°</td>
<td>42°F</td>
<td>46°</td>
<td>32°F</td>
<td>51°</td>
<td>32°F</td>
<td>66°</td>
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Mostly Cloudy | Rain | Partly Cloudy | Sunny | Partly Cloudy | Partly Cloudy | PM Showers
0 in | -- in | 0 in | 0 in | 0 in | 0 in | 0.07 in
Flight Collection Plan for April 13th, 2023

**Flyority 1**
Collection Area: Boresight Calibration – Greeley, CO  
Flight Plan Name: D10_B10E_Boresight_1600m_Q780 (RiAcquire name: D10_B10E_Boresight_Apx_Q780)  
30° On-station Time: 1510 UTC / 0910 L  
Additional Considerations: No recent snowfall, clear roofs required.

**Flyority 2**
Collection Area: Nominal Runway Survey Flight Plan (Lines 1-8, 11-12, 25-28)  
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 3**
Collection Area: NIS Offset Flight  
Flight Plan Name: D10_O10B_NIS_Offset_v2_Q780  
35° On-station Time: 1540 UTC / 0940L  
Crew: Nick (lidar), Matt (NIS), Mike/John (Ground)