Date: 2022-08-30
Flight Campaign ID: P3C1
Airport, FBO ID, City: Boulder Municipal Airport (KBDU) - Boulder, CO
Aircraft: N70AR

Domain: 10 (Training & Calibration)
Sites Flown: R10D
Days left in Domain: N/A

Report Author: Matt
Lidar Operators: Matt
Spectrometer Operators: John
Pilots: Justin, Brent

Flight Hours: 00:43
Hours until maintenance: 50.40
GPS Instruments: AOP_KBDU

Summary
The crew completed the Radiometric calibration flight over KBDU.

Concerns
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>
</tr>
</thead>
</table>

D00|R10D

<table>
<thead>
<tr>
<th>Line #</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lidar</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Spectrometer</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Camera</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Cloud Cover</td>
<td></td>
<td></td>
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</tbody>
</table>

Total number of lines flown: 5
Flight Screenshots

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|BLKF (Black Forest Waveform Range Test - Galaxy)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |

Flown: 0% (0/21)
Green: 0% (0/21)
Yellow: 0% (0/21)
Red: 0% (0/21)

D00|H10C (NEON Headquarters Lidar Test - Riegl)

| 1 | 2 | 3 | 4 |

Flown: 0% (0/4)
Green: 0% (0/4)
Yellow: 0% (0/4)
Red: 0% (0/4)

D00|KBDU (KBDU Roll Compensation Test)

| 1 | 2 |

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

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 |

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

**D00|R10C (Table Mountain Radiometric Calibration - Riegl)**

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<tr>
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*Flown: 0% (0/5)*  
*Green: 0% (0/5)*  
*Yellow: 0% (0/5)*  
*Red: 0% (0/5)*

**D00|R10D (Cheesehead)**

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<th>5</th>
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<th>14</th>
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<th>17</th>
<th>18</th>
<th>19</th>
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*Flown: 0% (0/25)*  
*Green: 0% (0/25)*  
*Yellow: 0% (0/25)*  
*Red: 0% (0/25)*

**D00|V10F (Boulder City Nominal - Galaxy)**

|   | 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: 0% (0/29)*  
*Green: 0% (0/29)*  
*Yellow: 0% (0/29)*  
*Red: 0% (0/29)*

**D00|W10C (Wiggle Timing Test - Riegl)**

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</thead>
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*Flown: 0% (0/2)*  
*Green: 0% (0/2)*  
*Yellow: 0% (0/2)*  
*Red: 0% (0/2)*
Weather Forecast

Boulder, CO

<table>
<thead>
<tr>
<th></th>
<th>Wed 8/31</th>
<th>Thu 9/1</th>
<th>Fri 9/2</th>
<th>Sat 9/3</th>
<th>Sun 9/4</th>
<th>Mon 9/5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temp</td>
<td>90°F</td>
<td>92°F</td>
<td>91°F</td>
<td>90°F</td>
<td>93°F</td>
<td>91°F</td>
</tr>
<tr>
<td>Cond</td>
<td>Mostly Sunny</td>
<td>Mostly Sunny</td>
<td>Mostly Sunny</td>
<td>Sunny</td>
<td>Sunny</td>
<td>Sunny</td>
</tr>
<tr>
<td>Preci</td>
<td>0 in</td>
<td>0 in</td>
<td>0 in</td>
<td>0 in</td>
<td>0 in</td>
<td>0 in</td>
</tr>
</tbody>
</table>

Greeley, CO

<table>
<thead>
<tr>
<th></th>
<th>Wed 8/31</th>
<th>Thu 9/1</th>
<th>Fri 9/2</th>
<th>Sat 9/3</th>
<th>Sun 9/4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temp</td>
<td>93°F</td>
<td>95°F</td>
<td>94°F</td>
<td>92°F</td>
<td>96°F</td>
</tr>
<tr>
<td>Cond</td>
<td>Partly Cloudy</td>
<td>Mostly Sunny</td>
<td>Mostly Sunny</td>
<td>Sunny</td>
<td>Sunny</td>
</tr>
<tr>
<td>Preci</td>
<td>0 in</td>
<td>0 in</td>
<td>0 in</td>
<td>0 in</td>
<td>0 in</td>
</tr>
</tbody>
</table>

source: wunderground.com

Flight Collection Plan for August 31 2022

Flyority 1
Collection Area: Boresight Calibration – Greeley, CO
Flight Plan Name: D10_B10E_Boresight_1600m_Q780

Flyority 2
Collection Area: [Functional Checkout Flight] -- Nominal Runway Survey Flight Plan
Name: D10_N10D_Nominal_Rnwy_v8_Q780

Flyority 4
Collection Area: Wiggle Timing Test
Flight Plan Name: D10_W10C_Wiggle_Test_v5_Q780

Flyority 5
Collection Area: NEON HQ Lidar Validation
Flight Plan Name: D10_H10C_HQ_LIDAR_val_v1_Q780
Flyority 6
Collection Area: NIS Offset Flight
Flight Plan Name: D10_O10B_NIS_Offset_v2_Q780

Crew - John (Lidar), Nick (NIS), Matt (Ground)