**Payload 3 Daily Flight Report**

**Date:** 2022-04-19  
**Flight Campaign ID:** P3C1  
**Airport, FBO ID, City:** Boulder Municipal Airport (KBDU) - Boulder, CO  
**Aircraft:** N70AR

**Domain:** 00 (Training & Calibration)  
**Sites Flown:** V10C (Boulder City South)  
**Days left in Domain:** 6

**Report Author:** Michael  
**Lidar Operators:** Michael, John  
**Spectrometer Operators:** Nick, Michael  
**Pilots:** Nick, Magnus  
**Adt'l Flight Crew:** John, Elissa  
**Flight Hours:** 00:54, 00:42  
**Hours until maintenance:** 113.95  
**GPS Instruments:** AOP_KBDU  
**Ground Crew:** Nick, Abe

**Summary**
Two training flights were completed today over the South Boulder training area.

**Concerns**
None

**Comments**
- Mike was certified on the Riegl
- John was certified on the Riegl
- Nick was certified on NIS
- Nick remains to be certified on Riegl.
- V10C flight plan file gave the crew a little trouble, but Ian and John are implementing a fix.

**Daily Coverage**

**Estimated Cloud Cover Key**

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

**D00|V10C**

<table>
<thead>
<tr>
<th>Line #</th>
<th>1</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lidar</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Spectrometer</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Camera</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Cloud Cover</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total number of lines flown: 4 x 2
Flight Screenshots

NIS Flight 1

Lidar Flight 2

Pictures

NCAR building in the center with the fire scar to the left.
## 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: 100% (20/20)
Green: 0% (0/20)
Yellow: 0% (0/20)
Red: 100% (20/20)

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

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
</table>

Flown: 100% (4/4)
Green: 100% (4/4)
Yellow: 0% (0/4)
Red: 0% (0/4)

### 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: 0% (0/28)
Yellow: 11% (3/28)
Red: 75% (21/28)

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

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
</tr>
</thead>
</table>

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

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

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

Flown: 100% (5/5)
Green: 100% (5/5)
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: 14% (4/29)
Green: 0% (0/29)
Yellow: 14% (4/29)
Red: 0% (0/29)

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

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
</tr>
</thead>
</table>

Flown: 100% (2/2)
Green: 100% (2/2)
Yellow: 0% (0/2)
Red: 0% (0/2)
**Weather Forecast**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Temp</td>
<td>70°F</td>
<td>43°F</td>
<td>76°F</td>
<td>47°F</td>
<td>79°F</td>
<td>43°F</td>
<td>57°F</td>
</tr>
<tr>
<td>Clouds</td>
<td>Sunny</td>
<td>0 in</td>
<td>Sunny</td>
<td>0 in</td>
<td>Partly Cloudy</td>
<td>0.07 in</td>
<td>PM Showers</td>
</tr>
</tbody>
</table>

*source: wunderground.com*

**Flight Collection Plan for April 20 2022**

- **Collection Area:** Boulder City Nominal
- **Flight Plan Name:** D10_V10C_East_v7_Q780/D10_V10C_West_v7_Q780
- **On-station Time:** Daylight – No solar angle restrictions

**Flight Crew:** Nick (LiDAR), Elissa (NIS), Mitch (Trainer), Matt (Ground)