Date: 2023-04-17
Flight Campaign ID: P3C1
Airport, FBO ID, City: Boulder Municipal Airport (KBDU) - Boulder, CO
Aircraft: N934MU

Domain: 00 (Training & Calibration)
Sites Flown: O10B
Days left in Domain: 1

Report Author: Elissa
Lidar Operators: Elissa
Spectrometer Operators: Nick
Pilots: Paul, John
Ground Crew: Matt, Brendan

Flight Hours: 2.3
Hours until maintenance: 110.6

Summary
The NIS Offset calibration flight plan (O10B) was flown today in green-yellow conditions. The final flight of the plan’s 5 total flights could not be completed due to heavy glider traffic.

Concerns
None

Comments
- New pilot John arrived in Boulder today, replacing Jeff
- Andrew implemented a Riegl software update today after flights, which will be tested tomorrow on the remaining Nominal Runway flight lines (weather permitting)

Daily Coverage

<table>
<thead>
<tr>
<th>Estimated Cloud Cover Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green: 0-10%</td>
</tr>
</tbody>
</table>

D00|O10B

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

Total number of lines flown: 8
## Cumulative Domain Coverage

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

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>19</th>
<th>20</th>
</tr>
</thead>
</table>

- **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:** 0% (0/4)
- **Yellow:** 0% (0/4)
- **Red:** 100% (4/4)

### D00|N10D (Nominal Runway at KBDU - Riegl)

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<tr>
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<th>16</th>
<th>17</th>
<th>18</th>
<th>19</th>
<th>20</th>
</tr>
</thead>
</table>

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

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

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

- **Flown:** 0% (0/2)
- **Green:** 0% (0/2)
- **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|R10D (Boulder Airport Radiometric Calibration)

<table>
<thead>
<tr>
<th>1</th>
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<th>5</th>
</tr>
</thead>
</table>

- **Flown:** 100% (5/5)
- **Green:** 100% (5/5)
- **Yellow:** 0% (0/5)
- **Red:** 0% (0/5)

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

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

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

Boulder, CO

<table>
<thead>
<tr>
<th>Tue 4/18</th>
<th>Wed 4/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>74°</td>
<td>30°F</td>
</tr>
<tr>
<td>Partly Cloudy</td>
<td>Partly Cloudy</td>
</tr>
<tr>
<td>0 in</td>
<td>0.06 in</td>
</tr>
</tbody>
</table>

source: wunderground.com

Flight Collection Plan for April 16th, 2023

Flyority 1
Collection Area: Nominal Runway Survey Flight Plan (Lines 5-8, 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.

Crew: Nick (Lidar), Elissa (NIS), Matt (Ground)