Date: 2022-04-20  
Flight Campaign ID: P1C1  
Airport, FBO ID, City: Boulder Municipal Airport (KBDU) - Boulder, CO  
Aircraft: N331AR

Domain: 00 (Training & Calibration)  
Sites Flown: R10E (Table Mountain Radiometric Calibration - Galaxy)  
Days left in Domain: 12

Report Author: Abe  
Lidar Operators: Abe  
Spectrometer Operators: John  
Pilots: Justin, Stephen  
Adt'l Flight Crew: Cameron  
Ground Crew: John

Flight Hours: 00:59  
Hours until maintenance: 121.23

Summary
The crew began the day watching the clouds for a potential Radiometric Calibration Flight opportunity. The clouds cooperated and cleared off enough for the flight to be conducted and finished. Very strong winds aloft during and after the radiometric flight dashed any hopes of more flights today.

Concerns
None

Comments
-Abe recertified on the Optec Lidar system.  
-John recertified on the NIS.

Daily Coverage

Estimated Cloud Cover Key

- **Green:** 0-10%  
- **Yellow:** 11-50%  
- **Red:** >50%

<table>
<thead>
<tr>
<th>D00</th>
<th>R10E</th>
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<tbody>
<tr>
<td>Line #</td>
<td>1</td>
</tr>
<tr>
<td>Lidar</td>
<td>✓</td>
</tr>
<tr>
<td>Spectrometer</td>
<td>✓</td>
</tr>
<tr>
<td>Camera</td>
<td>✓</td>
</tr>
<tr>
<td>Cloud Cover</td>
<td></td>
</tr>
</tbody>
</table>

Total number of lines flown: 5
**Flight Screenshots**

NIS

Lidar: Not collected due to laser restrictions at Table Mtn. Site.

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**Cumulative Domain Coverage**

**D00|B10F (Complete Greeley Boresight Geocalibration - 1500m, 1000m, 550m - Galaxy)**

| 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 | 21 |

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

**D00|D10C ()**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
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- Flown: 0% (0/2)
- Green: 0% (0/2)
- Yellow: 0% (0/2)
- Red: 0% (0/2)

**D00|H10D (NEON Headquarters Lidar Validation - Galaxy)**

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<th>3</th>
<th>4</th>
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- Flown: 100% (4/4)
- Green: 0% (0/4)
- Yellow: 100% (4/4)
- Red: 0% (0/4)

**D00|N10F (Nominal Runway at KBDU - 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 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 |

- Flown: 8% (3/37)
- Green: 0% (0/37)
- Yellow: 0% (0/37)
- Red: 8% (3/37)
D00|O10C (NIS Offset - Galaxy)

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

D00|R10E (Table Mountain Radiometric Calibration - Galaxy)

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

D00|W10D (Wiggle Timing Test - Galaxy)

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

Weather Forecast

Boulder, CO

Greeley, CO

source: wunderground.com
Flight Collection Plan for 21 April 2022

Flyority 1
Collection Area: Boresight Calibration – Greeley, CO
Flight Plan Name: D10_B10F_Boresight_Geocal_v9_PRM.xml
30° On-station Time: 1500 UTC / 0900 L
Additional Considerations: No recent snowfall, clear roofs required.

Flyority 2
Collection Area: Nominal Runway Survey Flight Plan
Name: D10_N10F_Nominal_Rnwy_v10_PRM.xml
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_O10C_NIS_Offset_v2_PRM.xml
35° On-station Time: 1530 UTC / 0930 L

Flight Crew:
1st Flight: Matt (Lidar), Mike (NIS), John (Trainer), Mitch (Ground)
2nd Flight: Mike (Lidar), Abe (NIS), John (Trainer), Elissa (Ground)