Date: 2021-03-27  
Flight Campaign ID: P3C1  
Airport, FBO ID, City: Boulder Municipal Airport (KBDU) - Boulder, CO  
Aircraft: N615AR  

Domain: 00 (Training & Calibration)  
Sites Flown: B10E (Riegl Boresight Calibration - 1600m, 1000m, 500m)  
Days left in Domain: 2  

Report Author: Matt Devoe  
Lidar Operators: Matt Devoe  
Spectrometer Operators: Robb Walker  
Pilots: Justin Eddington, Micah Hoogeveen  
Adt’l Flight Crew: John Adler  
Flight Hours: 02:07  
Hours until maintenance: 110.80  
GPS Instruments: AOP_KBDU, U-CHLL  
Ground Crew: Michael Wussow  

Summary  
GeoCal boresight was completed today under yellow conditions. Cumulus clouds in the area with minimal shadows observed in the target area.  

Concerns  
Thumbnail and histogram were observed during test firing but not during collections.  

Comments  
Radiometric and NIS offset Cal. flights remaining.  

Daily Coverage  

Estimated Cloud Cover Key  

<table>
<thead>
<tr>
<th>Green: 0-10%</th>
<th>Yellow: 11-50%</th>
<th>Red: &gt;50%</th>
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D00|B10E  

| Line # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|--------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|
| Lidar  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| Spectrometer | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| Camera | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |

Cloud Cover: Green  

Total number of lines flown: 20
Flight Screenshots

Cumulative Domain Coverage

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

- Flown: 100% (20/20)
- Green: 0% (0/20)
- Yellow: 100% (20/20)
- Red: 0% (0/20)

D00|H10C (NEON Headquarters Lidar Test - Riegl)

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

D00|N10D (Nominal Runway at KBDU - Riegl)

- Flown: 86% (24/28)
- Green: 46% (13/28)
- Yellow: 0% (0/28)
- Red: 39% (11/28)

D00|O10B (NIS Offset - Riegl)

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

| 1 | 2 | 3 | 4 | 5 |

Flown: 0% (0/5)
Green: 0% (0/5)
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 |

Flown: 31% (9/29)
Green: 0% (0/29)
Yellow: 0% (0/29)
Red: 31% (9/29)

D00/W10C (Wiggle Timing Test - Riegl)

| 1 | 2 |

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

Weather Forecast

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</thead>
<tbody>
<tr>
<td>64°/42°F</td>
<td>66°/28°F</td>
<td>41°/26°F</td>
<td>53°/31°F</td>
<td>67°/42°F</td>
<td>72°/43°F</td>
<td>71°/44°F</td>
<td>73°/45°F</td>
</tr>
</tbody>
</table>

Source: wunderground.com

Flight Collection Plan for March 28th, 2021

Flyority 1
Collection Area: Table Mountain Radiometric Calibration – Boulder Airport
Flight Plan Name: D10_R10C_Rad_Cal_TBMT_v1_Q780
On-station Time: 1700 UTC / 1100 L
Additional Considerations: Ground should be dry.

Flyority 2
Collection Area: NIS Offset Flight
Flight Plan Name: D10_O10B_NIS_Offset_v2_Q780
On-station Time: 1630 UTC / 1030 L
Flight Crew: Mike, John, Robb, Matt, Bridgett