Date: 2022-04-16
Flight Campaign ID: P3C1
Airport, FBO ID, City: Boulder Municipal Airport (KBDU) - Boulder, CO
Aircraft: N70AR

Domain: 00 (Training & Calibration)
Sites Flown: B10E (Riegl Boresight Calibration - 1600m, 1000m, 500m)
Days left in Domain: 9

Report Author: Matt
Lidar Operators: Matt
Flight Hours: 02:29
Spectrometer Operators: Michael
Hours until maintenance: 119.10
Pilots: Nick, Magnus
GPS Instruments: AOP_KBDU, S-COGR
Adt'l Flight Crew: Mitch
Ground Crew: Cameron, Elissa

Summary
The crew completed the Riegl boresight calibration flight and additional training objectives.

Comments
POS data successfully transferred to Midas SSD

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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</table>

D00|B10E

<table>
<thead>
<tr>
<th>Line #</th>
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<tbody>
<tr>
<td>Lidar</td>
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<td>Spectrometer</td>
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<tr>
<td>Cloud Cover</td>
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Total number of lines flown: 20
Flight Screenshots

Riegl 1600m Boresight

Riegl 1000m Boresight

Riegl 500m Boresight

NIS Boresight

Cumulative Domain Coverage

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

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

D00|H10C (NEON Headquarters Lidar Test - Riegl)

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

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

D00|R10C (Table Mountain Radiometric Calibration - Riegl)

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

D00|W10C (Wiggle Timing Test - Riegl)

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

Weather Forecast

Boulder, CO

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<tbody>
<tr>
<td>Temp</td>
<td>64°F</td>
<td>68°F</td>
<td>76°F</td>
<td>71°F</td>
<td>78°F</td>
<td>74°F</td>
</tr>
<tr>
<td>Weather</td>
<td>Mostly Sunny/Wind</td>
<td>Sunny</td>
<td>Partly Cloudy</td>
<td>Mostly Sunny</td>
<td>Mostly Sunny</td>
<td>Partly Cloudy</td>
</tr>
<tr>
<td>Precip</td>
<td>0 in</td>
<td>0 in</td>
<td>0 in</td>
<td>0 in</td>
<td>0 in</td>
<td>0.07 in</td>
</tr>
<tr>
<td>Cloud Cover (%)</td>
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<td>Chance of Precip. (%)</td>
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</tbody>
</table>

source: wunderground.com

Flight Collection Plan for April 2022

Flyority 1
Collection Area: Table Mountain Radiometric Calibration
Flight Plan Name: D10_R10C_Rad_Cal_TBMT_v1_Q780
45° On-station Time: 1640 UTC / 1040 L
40° On-station Time: 1610 UTC / 1010 L
Additional Considerations: Ground should be dry.
Flyority 2
Collection Area: Wiggle Timing Test
Flight Plan Name: D10_W10C_Wiggle_Test_v5_Q780
On-station Time: Daylight – No solar angle restrictions.

Flyority 4
Collection Area: NEON HQ Lidar Validation
Flight Plan Name: D10_H10C_HQ_LIDAR_val_v1_Q780
On-station Time: Daylight – No solar angle restrictions.

Flyority 5
Collection Area: NIS Offset Flight
Flight Plan Name: D10_O10B_NIS_Offset_v2_Q780
35° On-station Time: 1540 UTC / 0940 L

Flight Crew:
17 April 2022

TBD due to install of Payload 1