Date: 2021-04-03
Flight Campaign ID: P1C2
Airport, FBO ID, City: Boulder Municipal Airport (KBDU) - Boulder, CO
Aircraft: N331AR

Domain: 00 (Training & Calibration)
Sites Flown: W10D (Wiggle Timing Test - Galaxy), H10D (NEON Headquarters Lidar Validation - Galaxy), R10E (Table Mountain Radiometric Calibration - Galaxy), B10F (Complete Greeley Boresight Geocalibration - 1500m, 1000m, 550m - Galaxy)
Days left in Domain: 26

Report Author: Robb Walker
Lidar Operators: Abe Morrison
Flight Hours: 02:11, 02:22
Spectrometer Operators: Robb Walker, Matt Devoe
Hours until maintenance: 116.85
Pilots: Ashley Taylor, Scott Hayward
GPS Instruments: AOP_KBDU, U-CHLL
Ground Crew: Robb Walker, John Adler, Bridget Hass

Summary
Clouds lingered in the morning but gave way to clear skies by noon and even better into the afternoon. This allowed crew to have a record day of calibration flights in a single day.

Concerns
None

Comments
- Two cycles of Table Mountain Radiometric were completed.
- Abe Morrison has completed Galaxy Lidar certification.

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|H10D |
| Line # | 1 | 2 | 3 | 4 |
| Lidar | ✓ | ✓ | ✓ | ✓ |
| Spectrometer | ✓ | ✓ | ✓ | ✓ |
| Camera | ✓ | ✓ | ✓ | ✓ |
| Cloud Cover | | | | |

Total number of lines flown: 4
<table>
<thead>
<tr>
<th>Line #</th>
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Total number of lines flown: 20

Flight Screenshots

H10D (Lidar)  H10D (NIS)
Cumulative Domain Coverage

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

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

D00|BLKF (Black Forest Waveform Range Test - Galaxy)

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Yellow: 0% (0/21)
Red: 0% (0/21)

D00|H10D (NEON Headquarters Lidar Validation - Galaxy)

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Flown: 100% (4/4)
Green: 100% (4/4)
Yellow: 0% (0/4)
Red: 0% (0/4)
D00|N10F (Nominal Runway at KBDU - Galaxy)

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Flown: 0% (0/35)
Green: 0% (0/35)
Yellow: 0% (0/35)
Red: 0% (0/35)

D00|O10C (NIS Offset - Galaxy)

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

D00|R10E (Table Mountain Radiometric Calibration - Galaxy)

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

D00|V10F (Boulder City Nominal - Galaxy)

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

D00|W10D (Wiggle Timing Test - Galaxy)

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

**Weather Forecast**

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<th>Sun 4/4</th>
<th>Mon 4/5</th>
<th>Tue 4/6</th>
<th>Wed 4/7</th>
<th>Thu 4/8</th>
<th>Fri 4/9</th>
<th>Sat 4/10</th>
</tr>
</thead>
<tbody>
<tr>
<td>75°</td>
<td>48°F</td>
<td>76°</td>
<td>45°F</td>
<td>63°</td>
<td>38°F</td>
<td>63°</td>
</tr>
</tbody>
</table>

- Mostly Cloudy
- Mostly Sunny
- PM Thunderstorms
- Partly Cloudy
- Mostly Sunny
- Partly Cloudy
- Partly Cloudy

source: wunderground.com
Flight Collection Plan for 4 April 2021
No Flights planned

Flight Collection Plan for 5 April 2021
Resume training and remaining calibration flights.

Flyority 1
Collection Area: [Functional Checkout Flight] -- Nominal Runway Survey Flight Plan
Name: D10_N10F_Nominal_Rnwy_v9_PRM.xml
On-Station Time: Daylight – No solar angle restrictions.
Additional Considerations: Runway should not be wet or snow covered.

Flyority 2
Collection Area: Black Forest Waveform Range Test Flight
Flight Plan Name: D10_BLKF_Black_Forest_v3_PRM.xml
On-station Time: Daylight – No solar angle restrictions.
Additional Considerations: Snow on ground / trees okay.

Flyority 3
Collection Area: NIS Offset Flight
Flight Plan Name: D10_O10C_NIS_Offset_v2_PRM.xml
On-station Time: 1600 UTC / 1000 L

Crew: Matt, Abe, Robb, Mike, John