Date: 2021-04-07
Flight Campaign ID: P1C2
Airport, FBO ID, City: Boulder Municipal Airport (KBDU) - Boulder, CO
Aircraft: N331AR

Domain: 00 (Training & Calibration)
Sites Flown: N10F (Nominal Runway at KBDU - Galaxy), V10F (Boulder City Nominal Training Flight)

Days left in Domain: 22

Report Author: Robb Walker
Lidar Operators: Robb Walker
Spectrometer Operators: Michael Wussow
Pilots: Ashley Taylor, Scott Hayward
Adt’l Flight Crew: John Adler

Flight Hours: 00:55, 00:46
Hours until maintenance: 111.08
GPS Instruments: AOP_KBDU
Ground Crew: Matt Devoe, Abe Morrison

Summary
Clouds parted this morning allowing crew to get back in the air and complete training flights, but high forecast winds aloft and crosswinds at KBDU prevented Nominal Runway from being completed.

Concerns
None

Comments
• Team B will take over calibration and training flights Thursday. Crew handoff in the morning.
• Calibration flights completed are being re-extracted as Hale and Andrew work through some last hotel kit code issues.
• Flight crew pleased with pilot display mounting modifications and especially increase in brightness. Thanks Abe/Matt!
• Robb Walker certified on Galaxy Lidar system.

Daily Coverage
Estimated Cloud Cover Key

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

D00|N10F

<table>
<thead>
<tr>
<th>Line #</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lidar</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Spectrometer</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Camera</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Cloud Cover</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
<td>❌</td>
</tr>
</tbody>
</table>

Total number of lines flown: 6
Flight Screenshots

V10F (Lidar)  V10F (NIS)

N10F (Lidar)  N10F (NIS)
Cumulative Domain Coverage

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

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

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

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

D00|H10D (NEON Headquarters Lidar Validation - Galaxy)

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

D00|N10F (Nominal Runway at KBDU - Galaxy)

Flown: 43% (15/35)
Green: 0% (0/35)
Yellow: 0% (0/35)
Red: 43% (15/35)

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

D00|V10F (Boulder City Nominal - Galaxy)

Flown: 34% (10/29)
Green: 14% (4/29)
Yellow: 0% (0/29)
Red: 21% (6/29)
D00|W10D (Wiggle Timing Test - Galaxy)

1 | 2

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

Weather Forecast

<table>
<thead>
<tr>
<th>Thu 4/8</th>
<th>Fri 4/9</th>
<th>Sat 4/10</th>
<th>Sun 4/11</th>
<th>Mon 4/12</th>
<th>Tue 4/13</th>
<th>Wed 4/14</th>
</tr>
</thead>
<tbody>
<tr>
<td>67°</td>
<td>40°F</td>
<td>53°</td>
<td>35°F</td>
<td>67°</td>
<td>42°F</td>
<td>56°</td>
</tr>
</tbody>
</table>

Sunny | Partly Cloudy | Sunny | Mostly Sunny | Mostly Sunny | Snow to Rain | Snow to Rain |

Cloud Cover (%) | Chance of Precip. (%)

source: wunderground.com

Flight Collection Plan for 8 April 2021

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: Nick, Cam, Elissa, Matt,