Payload 1 Daily Flight Report

Date: 2021-04-10
Flight Campaign ID: P1C2
Airport, FBO ID, City: Boulder Municipal Airport (KBDU) - Boulder, CO
Aircraft: N331AR

Domain: 00 (Training & Calibration)
Sites Flown: None
Days left in Domain: 19

Report Author: John Adler
Lidar Operators: Cameron Chapman
Spectrometer Operators: Nick Marusich
Pilots: Ashley Taylor, Scott Hayward
Adt’l Flight Crew: Ground Crew: John Adler

Flight Hours: 0.0
Hours until maintenance: 109.50
GPS Instruments: AOP_KBDU

Summary
No training flights were completed for today; the next scheduled mission(s) are for Monday the 12th.

Concerns
- None

Comments
- P1 will relocate to KBJC upon P3’s return to KBDU on Monday; actual schedule is TBD.

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|V10F

<table>
<thead>
<tr>
<th>Line #</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>29</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lidar</td>
<td>✓</td>
<td>✓</td>
<td>✓</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>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Camera</td>
<td>✓</td>
<td>✓</td>
<td>✓</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>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Total number of lines flown: 10

Flight Screenshots

n/a
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: 100% (20/20)
Green: 100% (20/20)
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|H10D (NEON Headquarters Lidar Validation - Galaxy)

1 2 3 4

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

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

D00|O10C (NIS Offset - Galaxy)

1 2

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

D00|R10E (Table Mountain Radiometric Calibration - Galaxy)

1 2 3 4 5

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

D00|V10F (Boulder City Nominal - 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

Flown: 38% (11/29)
Green: 14% (4/29)
Yellow: 0% (0/29)
Red: 24% (7/29)
D00|W10D (Wiggle Timing Test - Galaxy)

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

Weather Forecast

<table>
<thead>
<tr>
<th></th>
<th>Sun 4/11</th>
<th>Mon 4/12</th>
<th>Tue 4/13</th>
<th>Wed 4/14</th>
<th>Thu 4/15</th>
<th>Fri 4/16</th>
<th>Sat 4/17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloud</td>
<td>Mostly Sunny</td>
<td>Mostly Sunny</td>
<td>Snow to Rain</td>
<td>PM Showers</td>
<td>PM Showers</td>
<td>Snow to Rain</td>
<td>Snow to Rain</td>
</tr>
<tr>
<td>Cover (%)</td>
<td>60%</td>
<td>52%</td>
<td>44%</td>
<td>52%</td>
<td>54%</td>
<td>46%</td>
<td>48%</td>
</tr>
<tr>
<td>Precip. (%)</td>
<td>30°F</td>
<td>30°F</td>
<td>33°F</td>
<td>38°F</td>
<td>34°F</td>
<td>33°F</td>
<td>33°F</td>
</tr>
<tr>
<td>Chance of Precip. (%)</td>
<td>0 in</td>
<td>0 in</td>
<td>0.18 in</td>
<td>0 in</td>
<td>0 in</td>
<td>0 in</td>
<td>0 in</td>
</tr>
</tbody>
</table>

source: wunderground.com

Flight Collection Plan for April 12th 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, Elissa, John (Trainer)