Payload 3 Daily Flight Report

Date: 2023-04-10
Flight Campaign ID: P3C1
Airport, FBO ID, City: Boulder Municipal Airport (KBDU) - Boulder, CO
Aircraft: N934MU

Domain: 00 (Training & Calibration)
Sites Flown: None
Days left in Domain: 8

Report Author: Mike
Lidar Operators: n/a
Spectrometer Operators: n/a
Pilots: Jeff, Paul
Ground Crew: Mike, John, Matt, Nick

Flight Hours: 0.0
Hours until maintenance: 119.33
GPS Instruments: n/a

Summary
Payload 3 continued to pump and cool throughout the day. It should be ready for flights tomorrow.

Concerns
None.

Comments
-A radiometric flight is planned for tomorrow at Table Mountain if the clear weather holds.
-AOP lab interfaced with Riegl about the over-current error and their support staff is investigating the issue with data files sent to them. They did indicate using a lower power setting such at 25% should not cause damage to the sensor, which means it could be used for a training flight and possibly the boresight with a flight plan adjustment. We are hoping to know more tomorrow.
-Either P1 or P3 will make an appearance at tomorrow’s Interagency Coordinating Committee For Airborne Geosciences Research and Applications (ICCAGRA) meeting at NCAR.

Daily Coverage
Estimated Cloud Cover Key

Green: 0-10%
Yellow: 11-50%
Red: >50%

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

|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|
Flown: 0% (0/20)
Green: 0% (0/20)
Yellow: 0% (0/20)
Red: 0% (0/20)
D00|H10C (NEON Headquarters Lidar Test - Riegl)

<table>
<thead>
<tr>
<th>1</th>
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<th>4</th>
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</thead>
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Flown: 100% (4/4)
Green: 0% (0/4)
Yellow: 0% (0/4)
Red: 100% (4/4)

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: 0% (0/28)
Green: 0% (0/28)
Yellow: 0% (0/28)
Red: 0% (0/28)

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|R10D (Boulder Airport Radiometric Calibration)

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Flown: 100% (5/5)
Green: 100% (5/5)
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
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
Flown: 14% (4/29)
Green: 0% (0/29)
Yellow: 0% (0/29)
Red: 14% (4/29)

D00|W10C (Wiggle Timing Test - Riegl)

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Flown: 100% (2/2)
Green: 0% (0/2)
Yellow: 0% (0/2)
Red: 100% (2/2)
Weather Forecast
Boulder, CO

<table>
<thead>
<tr>
<th>Day</th>
<th>High</th>
<th>Low</th>
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<tbody>
<tr>
<td>Tue 4/11</td>
<td>82° F</td>
<td>53° F</td>
</tr>
<tr>
<td>Wed 4/12</td>
<td>80° F</td>
<td>54° F</td>
</tr>
<tr>
<td>Thu 4/13</td>
<td>76° F</td>
<td>41° F</td>
</tr>
<tr>
<td>Fri 4/14</td>
<td>52° F</td>
<td>33° F</td>
</tr>
<tr>
<td>Sat 4/15</td>
<td>56° F</td>
<td>33° F</td>
</tr>
<tr>
<td>Sun 4/16</td>
<td>65° F</td>
<td>39° F</td>
</tr>
<tr>
<td>Mon 4/17</td>
<td>72° F</td>
<td>44° F</td>
</tr>
</tbody>
</table>

- Sunny 0 in
- Mostly Sunny 0 in
- Mostly Cloudy 0 in
- Rain 0.48 in
- Partly Cloudy 0 in
- Sunny 0 in
- Mostly Sunny 0 in

source: wunderground.com

Flight Collection Plan for April 11th, 2023

Flyority 1
Collection Area: Table Mountain Radiometric Calibration
Flight Plan Name: D10_R10C_Rad_Cal_TBMT_v1_Q780
45° On-station Time: 1600 UTC / 1040 L
Additional Considerations: Ground should be dry.

Flyority 2
Collection Area: Boresight Calibration – Greeley, CO
Flight Plan Name: D10_B10E_Boresight_1600m_Q780 (RiAcquire name: D10_B10E_Boresight_Apx_Q780)
30° On-station Time: 1510 UTC / 0910 L
Additional Considerations: No recent snowfall, clear roofs required.

Flyority 3
Collection Area: Nominal Runway Survey Flight Plan
Name: D10_N10D_Nominal_Rnwy_v8_Q780
On-Station Time: Daylight – No solar angle restrictions.
Additional Considerations: Runway should not be wet or snow covered.

Flyority 4
Collection Area: NIS Offset Flight
Flight Plan Name: D10_O10B_NIS_Offset_v2_Q780
35° On-station Time: 1600 UTC / 1010 L

Flight Crew
Mike (Lidar), John (NIS), Nick (Ground)