Date: 2021-03-28  
Flight Campaign ID: P3C1  
Airport, FBO ID, City: Boulder Municipal Airport (KBDU) - Boulder, CO  
Aircraft: N615AR  

Domain: 00 (Training & Calibration)  
Sites Flown: None  
Days left in Domain: 1  

Report Author: Michael Wussow  
Lidar Operators: Michael Wussow  
Spectrometer Operators: John Adler  
Pilots: Justin Eddington, Stephen Brawders  
Ground Crew: Matt Devoe, Robb Walker  
Flight Hours: 00:00  
Hours until maintenance: 110.80  
GPS Instruments: AOP_KBDU, U-CHLL  

Summary
Unfortunately, clear skies did not materialize today, and conditions were insufficient to attempt the Radiometric Calibration flight or the NIS-Offset flight. Crew pulled out the aircraft this morning in case data from yesterday’s Greeley Boresight flight was found to be corrupted. After coordination and efforts with the Science Team, the data was able to be properly extracted and looked intact. A second Greeley Boresight was determined to be unnecessary. The forecast is positive for sunny skies tomorrow although winds are forecast to be high. If there are clear skies, a Radiometric Cal flight will be performed prior to departure to D17. The crew desires to depart Boulder before inclement weather moves in late afternoon Monday through Tuesday.

Concerns
- There was trouble extracting the Greeley Boresight data from yesterday initially, and the root cause is still undetermined. The suspected culprits are the Lab 3 disk set firmware/read issues, an extraction error-check code issue, and/or a midas box copy/write issue. The crew will not use this disk set again and will watch for similar errors. Bridget found and corrected the extraction error-code check issue, which helped execute a full data extraction.

Comments
- All issues have been detailed in the in crew-hand off document and passdown log items will be entered as necessary. A handoff brief will occur tomorrow morning.

Daily Coverage

<table>
<thead>
<tr>
<th>Estimated Cloud Cover Key</th>
<th>Green: 0-10%</th>
<th>Yellow: 11-50%</th>
<th>Red: &gt;50%</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>
Flight Screenshots
None

Pictures
None

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

D00|H10C (NEON Headquarters Lidar Test - Riegl)

| 1 | 2 | 3 | 4 |
---|---|---|---|
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 |
Flown: 86% (24/28)
Green: 46% (13/28)
Yellow: 0% (0/28)
Red: 39% (11/28)

D00|O10B (NIS Offset - Riegl)

| 1 | 2 |
---|---|
Flown: 0% (0/2)
Green: 0% (0/2)
Yellow: 0% (0/2)
Red: 0% (0/2)

D00|R10C (Table Mountain Radiometric Calibration - Riegl)

| 1 | 2 | 3 | 4 | 5 |
---|---|---|---|---|
Flown: 0% (0/5)
Green: 0% (0/5)
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 |
Flown: 31% (9/29)
Green: 0% (0/29)
Yellow: 0% (0/29)
Red: 31% (9/29)

D00|W10C (Wiggle Timing Test - Riegl)

| 1 | 2 |
---|---|
Flown: 100% (2/2)
Green: 100% (2/2)
Yellow: 0% (0/2)
Red: 0% (0/2)
Weather Forecast
Boulder, CO

<table>
<thead>
<tr>
<th>Mon 3/29</th>
<th>Tue 3/30</th>
<th>Wed 3/31</th>
<th>Thu 4/1</th>
<th>Fri 4/2</th>
<th>Sat 4/3</th>
<th>Sun 4/4</th>
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</thead>
<tbody>
<tr>
<td>66°F</td>
<td>42°F</td>
<td>52°F</td>
<td>67°F</td>
<td>72°F</td>
<td>74°F</td>
<td>74°F</td>
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<tr>
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<td>Partly Cloudy</td>
<td>Sunny</td>
<td>Sunny</td>
<td>Sunny</td>
<td>Sunny</td>
<td>Partly Cloudy</td>
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</table>

source: wunderground.com

Fresno, CA

<table>
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<tr>
<th>Mon 3/29</th>
<th>Tue 3/30</th>
<th>Wed 3/31</th>
<th>Thu 4/1</th>
<th>Fri 4/2</th>
<th>Sat 4/3</th>
<th>Sun 4/4</th>
</tr>
</thead>
<tbody>
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<td>88°F</td>
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Flight Collection Plan for March 28th, 2021
Flyority 1
Collection Area: Table Mountain Radiometric Calibration – Boulder Airport
Flight Plan Name: D10_R10C_Rad_Cal_TBMT_v1_Q780
On-station Time: 1700 UTC / 1100 L
Additional Considerations: Ground should be dry.

Flyority 2
Collection Area: NIS Offset Flight
Flight Plan Name: D10_O10B_NIS_Offset_v2_Q780
On-station Time: 1630 UTC / 1030 L
Calibration Flight Crew: Mike, John, Robb, Matt, Bridget
Transit Crew: Ivana, Mitch, Matt (Ground)