Date: 2024-04-12
Flight Campaign ID: P3C1
Airport, FBO ID, City: Boulder Municipal Airport (KBDU) - Boulder, CO
Aircraft: N821AR

Domain: 00 (Training & Calibration)
Sites Flown: R10C (Table Mountain Radiometric Calibration - Riegl), V10C (Boulder City South)
Days left in Domain: 14

Report Author: Nick
Lidar Operators: Nick
Spectrometer Operators: Cameron
Pilots: Will, Justin
Ground Crew: Matt, Bridget, Brendan

Summary
Clear skies allowed us to complete the R10C Radiometric Calibration at Table Mountain and a lidar recertification flight.

Concerns
Connectivity issues persisted today with the lidar crystal computer.

Comments
Nick certified on P3 lidar.
Shout out to Brendan for assisting tarp deployment today.

Daily Coverage

Estimated Cloud Cover Key

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

Solar Angle Less Than 40 degrees

<table>
<thead>
<tr>
<th>Line #</th>
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<tbody>
<tr>
<td>D00</td>
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<thead>
<tr>
<th>Line #</th>
<th>1</th>
<th>2</th>
<th>3</th>
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</thead>
<tbody>
<tr>
<td>Lidar</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>
</tr>
<tr>
<td>Camera</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Cloud Cover</td>
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</tbody>
</table>
Lidar ✓ ✓ ✓ ✓ ✓
Spectrometer ✓ ✓ ✓ ✓ ✓
Camera ✓ ✓ ✓ ✓ ✓
Cloud Cover

Total number of lines flown: 4

Flight Screenshots

NIS screenshot, R10C Radiometric Cal

NIS screenshot, V10C

Lidar screenshot, V10C
Pictures

The Flat Irons, Boulder CO

A small brush fire north of Boulder Reservoir

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: 100% (4/4)
Red: 0% (0/4)

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 |
Flown: 86% (24/28)
Green: 0% (0/28)
Yellow: 0% (0/28)
Red: 86% (24/28)

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)

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

D00|R10D (Boulder Airport Radiometric Calibration)

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

D00|W10C (Wiggle Timing Test - Riegl)

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

Weather Forecast

Flight Collection Plan for 13 April 2024

Flyority 1

Collection Area: NIS Offset Flight
Flight Plan Name: D10_O10B_NIS_Offset_v2_Q780 35° On-station Time: 1620 UTC / 1030 L

Flight Crew

Cameron (Lidar), Matt (NIS), Mitch (Ground)