

# Payload 2 Daily Flight Report



Date: 2025-05-08

Flight Campaign ID: P2C1

Airport, FBO ID, City: Boulder Municipal Airport (KBDU) - Boulder, CO

Aircraft: N615AR

**Domain**: 00 (Training & Calibration)

Sites Flown: B10E (Riegl Boresight Calibration - 1600m, 1000m, 500m)

Days left in Domain: 13

Report Author: Matt

**Lidar Operators**: Matt Flight Hours: 01:10

Spectrometer Operators: Nick Hours until maintenance: 115.87

Pilots: Vince, Mac GPS Instruments: AOP KBDU, S-COGY

### **Summary**

With clear skies in the area, the crew got airborne and proceeded to Greeley for the Boresight calibration plan. During the first 3 lines, cumulous clouds were observed building below our planned altitudes, so the crew make the determination to Return to Base.

#### **Concerns**

During lines 1-3, the camera thumbnail was not advancing, and the camera was not recording pictures although the messages coming through in RiAquire displayed they were. We think this is due to the camera integration settings and have developed a wiggle flight plan to test for tomorrow.

#### **Comments**

The data will not be processed

### **Daily Coverage**

**Estimated Cloud Cover Key** 

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

Solar Angle Less Than 40 degrees: (\*)

# D00|B10E

| Line #       | 1        | 2        | 3        |
|--------------|----------|----------|----------|
| Lidar        | <b>√</b> | <b>\</b> | <b>/</b> |
| Spectrometer | ✓        | <b>√</b> |          |
| Camera       | ✓        | <b>√</b> | <b>√</b> |
| Cloud Cover  |          |          |          |

Total number of lines flown: 3

# **Flight Screenshots**

None

#### **Pictures**

None

# **Cumulative Domain Coverage**

D00 B10E (Riegl Boresight Calibration - 1600m, 1000m, 500m)

| - 4 |   |   |   | ١ |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|-----|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
|     | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |

Flown: 10% (2/20) Green: 10% (2/20) Yellow: 0% (0/20) Red: 0% (0/20)

# D00 | H10C (NEON Headquarters Lidar Test - Riegl)

1 2 3 4 Flown: 0% (0/4) Green: 0% (0/4) Yellow: 0% (0/4) 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 | 25 | 26 | 27 | 28 |   |    |    |    |    |    |    |    |    |    |    |    |

Flown: 29% (8/28) Green: 0% (0/28) Yellow: 0% (0/28) Red: 29% (8/28)

### 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)

<sup>\*</sup> Flown within 35deg solar angle



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

\* Flown within 35deg solar angle

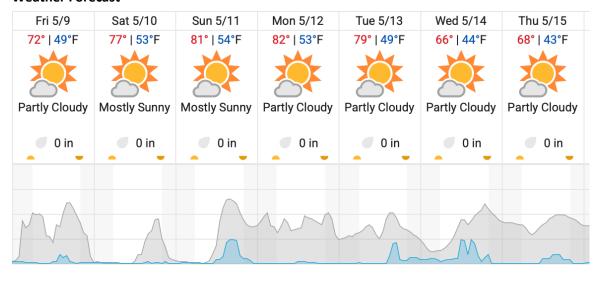
# D00 | W10C (Wiggle Timing Test - Riegl)

1 2

Flown: 100% (2/2) Green: 50% (1/2) Yellow: 50% (1/2) Red: 0% (0/2)

\* Flown within 35deg solar angle

#### **Weather Forecast**



source: wunderground.com

Cloud Cover (%)

### Flight Collection Plan for 9 May 2025

#### Flyority 1

Collection Area: Table Mountain Radiometric Calibration Flight Plan Name: D10\_R10C\_Rad\_Cal\_TBMT\_v1\_Q780

Chance of Precip. (%)

45° On-station Time: 1620 UTC / 1020 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: 1450 UTC / 0850 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: NEON HQ Lidar Validation
Flight Plan Name: D10\_H10C\_HQ\_val\_v1\_Q780

On-Station Time: Daylight – No solar angle restrictions.

# Flyority 5

Collection Area: Wiggle Timing Test

Flight Plan Name: D10\_W10C\_Wiggle\_Test\_v6\_Q780

 $40^{\circ}$  On-station Time: 1550 UTC / 0950 L

Additional Considerations: Runway should not be wet, or snow covered.

Flyority 6

Collection Area: NIS Offset Flight

Flight Plan Name: D10\_O10B\_NIS\_Offset\_v2\_Q780

35° On-station Time: 1540 UTC / 0940 L

Crew: Matt (Lidar), Nick (NIS)