

## Payload 2 Daily Flight Report



Date: 2025-09-18

Flight Campaign ID: P2C1

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

Aircraft: N615AR

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

Sites Flown: N10D (), R10D (Boulder Airport Radiometric Calibration), V10C (Boulder City South)

Days left in Domain: 2

Report Author: Elissa

**Lidar Operators**: Elissa **Flight Hours**: 02:24

**Spectrometer Operators**: Cameron **Hours until maintenance**: 117.57 **Pilots**: Justin, Troy **GPS Instruments**: AOP\_KBDU

Adt'l Flight Crew: Brevin Ground Crew: Matt

#### **Summary**

Increasing cumulus clouds for the most part remained over the mountains today, enabling green data collection over Boulder airport, and limited red data collection of the Boulder City flight plan.

#### **Concerns**

Eye safety shutoff feature needs to be disabled in order to conduct calibration flight plans.

#### **Comments**

None.

#### **Daily Coverage**

Estimated Cloud Cover Key

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

Solar Angle Less Than 40 degrees: (\*)

### D10 | N10D

| Line #       | 1        | 2        | 3        | 4        | 5        | 6        | 21       | 22       |
|--------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Lidar        | <b>\</b> | <b>\</b> | <b>\</b> | <b>\</b> | <b>√</b> | <b>\</b> | <b>✓</b> | <b>✓</b> |
| Spectrometer | ✓        | ✓        | ✓        | <b>√</b> | ✓        | ✓        | ✓        | <b>√</b> |
| Camera       | <b>√</b> | ✓        | ✓        | ✓        | ✓        | <b>√</b> | ✓        | <b>√</b> |
| Cloud Cover  |          |          |          |          |          |          |          |          |

Total number of lines flown: 8

# D10|R10D

| Line #       | 1        | 2        | 3        | 4        | 5        |
|--------------|----------|----------|----------|----------|----------|
| Lidar        | <b>\</b> | <b>\</b> | <b>\</b> | <b>\</b> | <b>/</b> |
| Spectrometer | <b>√</b> | ✓        | <b>√</b> | <b>√</b> | <b>√</b> |
| Camera       | <b>√</b> | ✓        | ✓        | ✓        | <b>√</b> |
| Cloud Cover  |          |          |          |          |          |

Total number of lines flown: 5

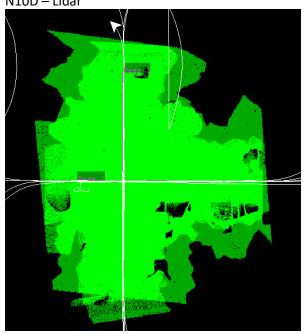
# D00|V10C

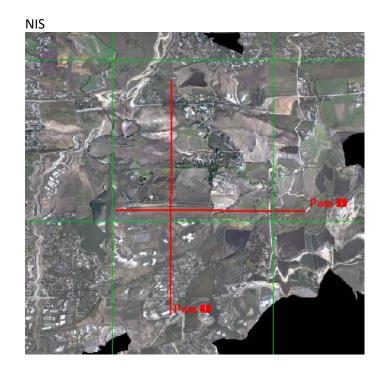
| Line #       | 1        | 2        | 3        | 4        | 20       | 21       |
|--------------|----------|----------|----------|----------|----------|----------|
| Lidar        | <b>\</b> | <b>\</b> | <b>\</b> | <b>\</b> | <b>✓</b> | <b>✓</b> |
| Spectrometer | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        |
| Camera       | <b>√</b> | ✓        | ✓        | ✓        | ✓        | ✓        |
| Cloud Cover  |          |          |          |          |          |          |

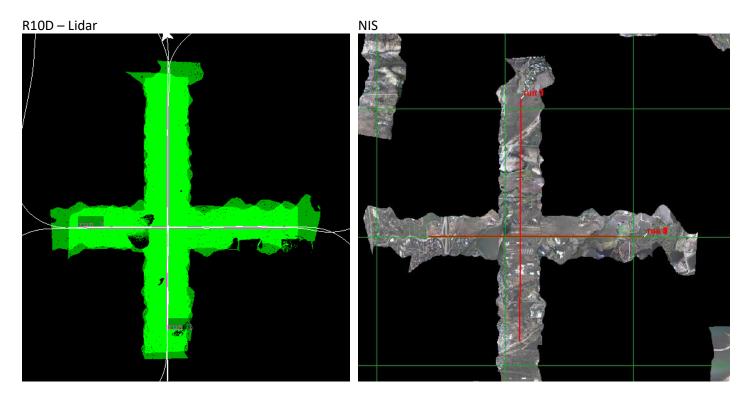
Total number of lines flown: 6

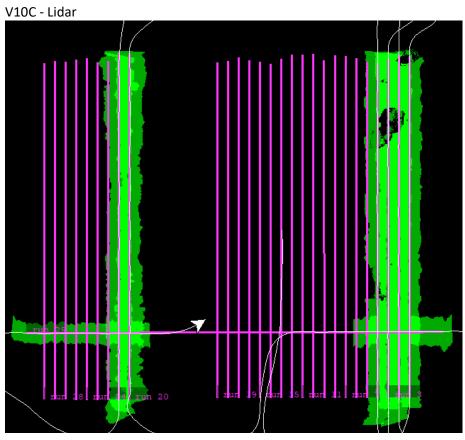
## Flight Screenshots











#### **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: 100% (20/20) Yellow: 0% (0/20) Red: 0% (0/20)

\* Flown within 35deg solar angle

#### D00 | R10C (Table Mountain Radiometric Calibration - Riegl)

1 2 3 4 5 Flown: 100% (5/5)

Green: 40% (2/5) Yellow: 60% (3/5) Red: 0% (0/5)

\* Flown within 35deg solar angle

#### D00 | V10C (Boulder City)

|    | 200 1200 (200100) 0.047 |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|----|-------------------------|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
| 1  | 2                       | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22                      |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |

Flown: 64% (14/22) Green: 36% (8/22) Yellow: 18% (4/22) Red: 9% (2/22)

\* Flown within 35deg solar angle

#### D10 | H10C (Lidar HQ)

## 1 2 3 4

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

\* Flown within 35deg solar angle

#### D10 | N10D (Nominal Runway)

| 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 |   |   |   |    |    |    |    |    |    |    |    |    |    |    |

Flown: 100% (26/26) Green: 31% (8/26) Yellow: 0% (0/26) Red: 69% (18/26)

\* Flown within 35deg solar angle

### D10 | R10D (Boulder Airport Radiometric Calibration)

# 1 2 3 4 5

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

\* Flown within 35deg solar angle

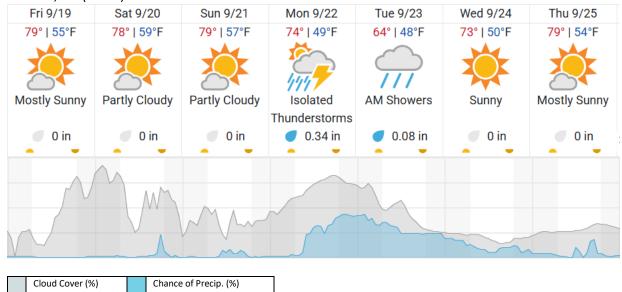
### D10 | W10C (Wiggle Timing Test)

1 2

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

#### **Weather Forecast**

## Boulder, CO (KBDU)



source: wunderground.com

## Flight Collection Plan for 19 September 2025

## Flyority 1

Collection Area: Table Mountain Radiometric Calibration Flight Plan Name: D10\_R10C\_Rad\_Cal\_TBMT\_v2\_VQ780

45° On-station Time: 1653 UTC / 1053 L

Additional Considerations: Ground should be dry.

#### Flyority 2

Collection Area: Black Forest

Flight Plan Name: D10\_BLKF\_Black\_Forest\_v6\_VQ780

40° On-station Time: 1620 UTC / 1020 L

Crew: Cameron (Lidar), Elissa (NIS), Nick (Ground)