



## Payload 2 Daily Flight Report

**Date:** 2025-09-13

**Flight Campaign ID:** P2C1

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

**Aircraft:** N615AR

**Domain:** 10 (Central Plains) / Calibration Flights

**Sites Flown:** W10C (Wiggle Timing Test – Riegl), H10C (NEON Headquarters Lidar Test - Riegl)

**Days left in Domain:** 5

**Report Author:** Mike

**Lidar Operators:** Mike

**Spectrometer Operators:** John

**Pilots:** Justin, Jacob

**Ground Crew:** Cameron

**Flight Hours:** 00:37

**Hours until maintenance:** 123.32

**GPS Instruments:** AOP\_KBDU

### Summary

The spectrometer reached nominal operating specs during late morning. A short calibration flight was squeezed in before poor weather moved in. The Lidar HQ validation and Wiggle timing flight plans were flown.

### Concerns

The ITRES system was not delivered by FedEx yesterday and the team was not successful in retrieving the system from the FedEx warehouse. This pushes install of that system back until at least Monday.

### Comments

None

### Daily Coverage

Estimated Cloud Cover Key

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

Solar Angle Less Than 40 degrees: (\*)

D10|W10C

Line #	1	2
Lidar	✓	✓
Spectrometer	✓	✓
Camera	✓	✓
Cloud Cover		

Total number of lines flown: 2

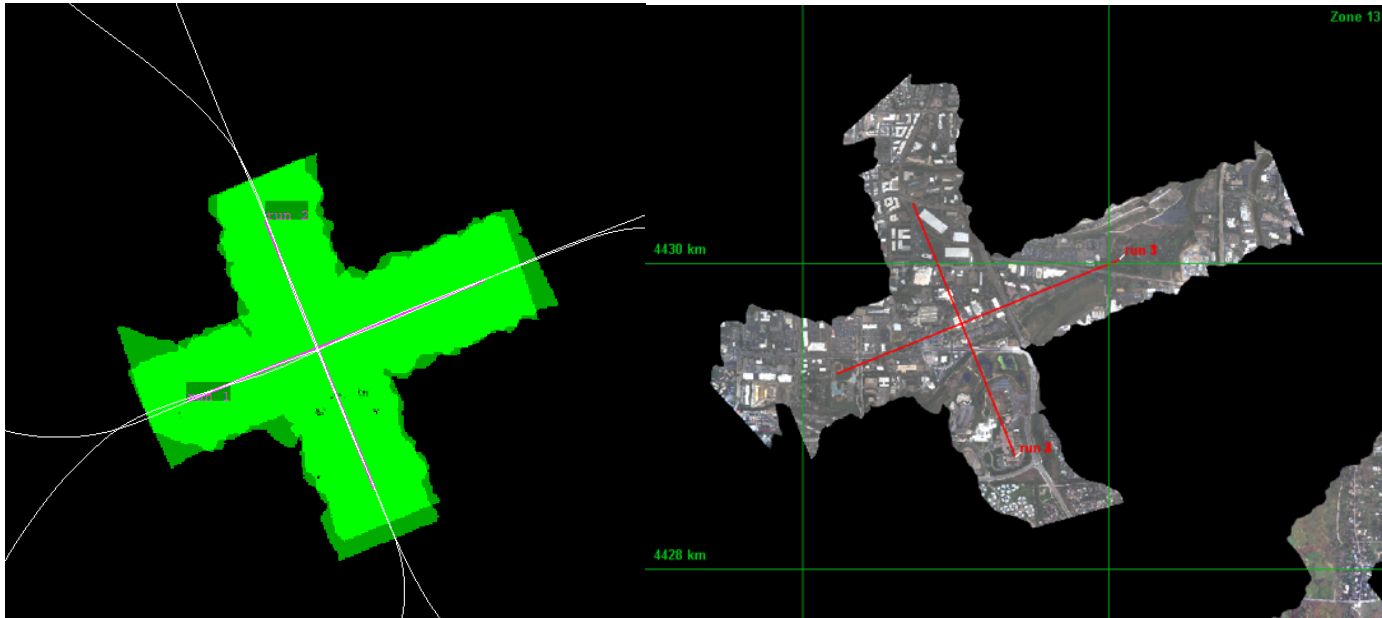
D10|H10C

Line #	1	2	3	4
Lidar	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓
Camera	✓	✓	✓	✓
Cloud Cover				

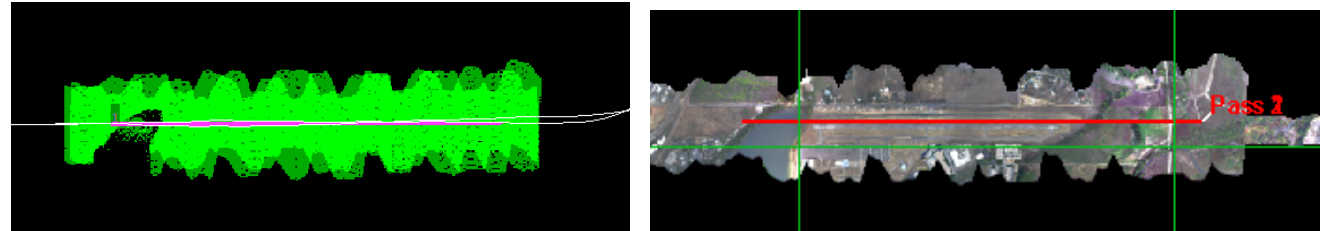
Total number of lines flown: 4

Flight Screenshots

HQ Lidar Validation (lidar-left, NIS-right)



Wiggle timing test (lidar-left, NIS-right)



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
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Flown: 0% (0/20)

Green: 0% (0/20)

Yellow: 0% (0/20)

Red: 0% (0/20)

\* Flown within 35deg solar angle

#### 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)

\* Flown within 35deg solar angle

#### 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)

\* Flown within 35deg solar angle

#### D00|O10B (NIS Offset - Riegl)

1	2
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Flown: 0% (0/2)

Green: 0% (0/2)

Yellow: 0% (0/2)

Red: 0% (0/2)

\* Flown within 35deg solar angle

#### 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)

\* Flown within 35deg solar angle

#### D00|W10C (Wiggle Timing Test - Riegl)

1	2
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Flown: 100% (2/2)

Green: 0% (0/2)

Yellow: 0% (0/2)

Red: 100% (0/2)

\* Flown within 35deg solar angle

#### D10|H10C (NEON Headquarters Lidar Test - Riegl)

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

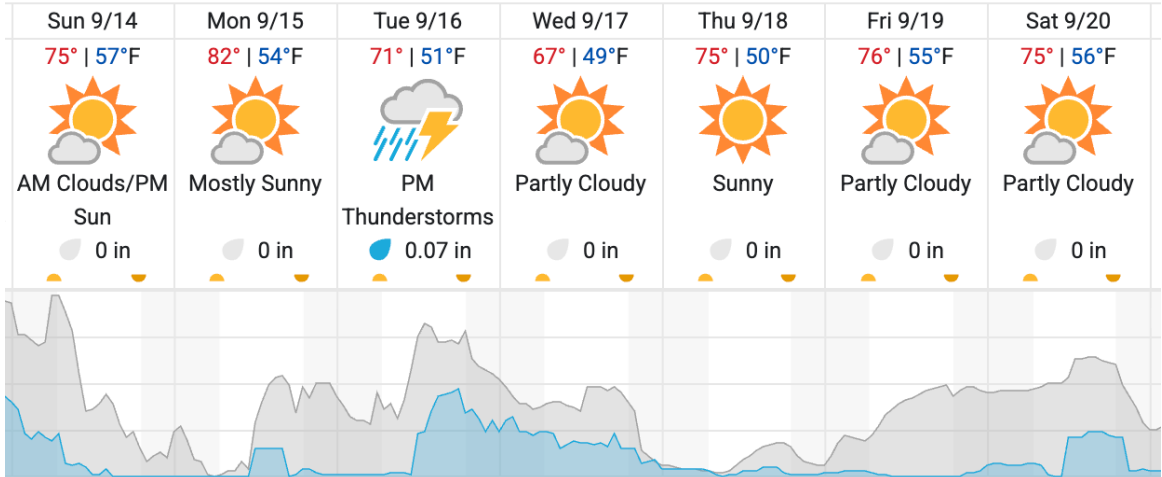
Green: 0% (0/4)

Yellow: 0% (0/4)

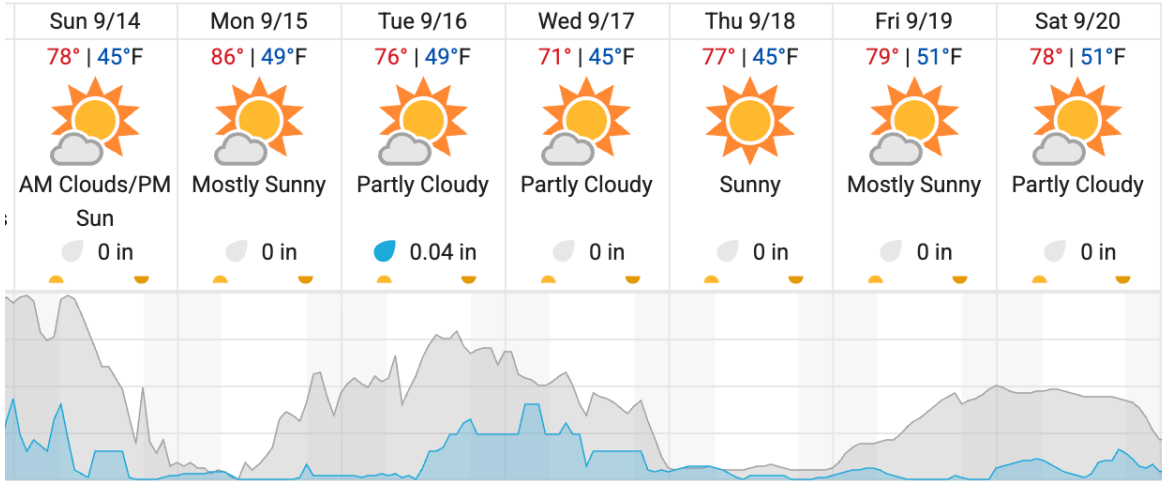
Red: 100% (4/4)

\* Flown within 35deg solar angle

Weather Forecast  
Boulder, CO



Greeley, CO



Cloud Cover (%)

Chance of Precip. (%)

source: wunderground.com

Flight Collection Plan for September 14 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.

Collection Area: Boulder Airport Radiometric Calibration  
Flight Plan Name: D10\_R10D\_Rad\_Cal\_KBDU\_v2\_VQ780  
45° On-station Time: 1653 UTC / 1053 L  
Additional Considerations: Ground should be dry.

**Flyority 2**

Collection Area: Boresight Calibration – Greeley, CO

Flight Plan Name: D10\_B10E\_Boresight\_VQ780 (RiAcquire name: D10\_B10E\_Boresight\_Apx\_VQ780)

30° On-station Time: 1520 UTC / 0920 L

Additional Considerations: No recent snowfall, clear roofs required.

**Flyority 3**

Collection Area: Nominal Runway Survey Flight Plan

Name: D10\_N10D\_Nominal\_Rnwy\_v13\_VQ780

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

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

**Flyority 4**

Collection Area: Black Forest

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

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

**Flyority 5**

Collection Area: Boulder City Nominal Science Flight

Flight Plan Name: D10\_V10C\_East\_v7B\_Q780\_ftlines

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

**Crew:** Lidar: John, NIS: Cam, Ground: Mike