



## Payload 2 Daily Flight Report



**Date:** 2025-04-27

**Flight Campaign ID:** P2C1

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

**Aircraft:** N615AR

**Domain:** 10 (Central Plains)

**Sites Flown:** R10D (Boulder Airport Radiometric Calibration)

**Days left in Domain:** 24

**Report Author:** John

**Lidar Operators:** John

**Spectrometer Operators:** Matt

**Pilots:** Vince, Mac

**Ground Crew:** Nick

**Flight Hours:** 01:41

**Hours until maintenance:** 121.05

**GPS Instruments:** AOP\_KBDU

### Summary

During today's mission, we were the second plane in a series of three NIS calibration flights over tarps set out at KBDU.

### Concerns

None.

### Comments

MS Access still not configured correctly. Lidar not showing swath patterns.

### Daily Coverage

Estimated Cloud Cover Key

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

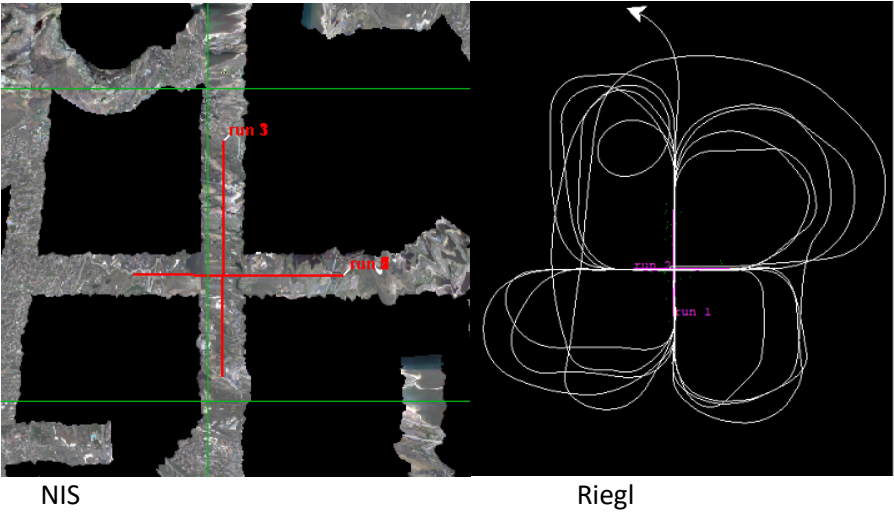
Solar Angle Less Than 40 degrees: (\*)

D10|R10D

Line #	1	2	3	4	5
Lidar	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓
Cloud Cover					

Total number of lines flown: 5 \* 3 times (15 total, the later lines were Yellow)

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: 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: 0% (0/4)  
Green: 0% (0/4)  
Yellow: 0% (0/4)  
Red: 0% (0/4)  
\* 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
---	---

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
---	---

Flown: 0% (0/2)

Green: 0% (0/2)

Yellow: 0% (0/2)

Red: 0% (0/2)

\* Flown within 35deg solar angle

### D10|ARIK (Arikaree River)

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	29	30	31	32	33	34	35							

Flown: 0% (0/33)

Green: 0% (0/33)

Yellow: 0% (0/33)

Red: 0% (0/33)

\* 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|RMNP (Rocky Mountain National Park)

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	29	30	31	32	33	34	35	36	37	38	39	40	

Flown: 0% (0/39)

Green: 0% (0/39)

Yellow: 0% (0/39)

Red: 0% (0/39)

\* Flown within 35deg solar angle

### D10|STER (Sterling Agricultural Site)

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															

Flown: 0% (0/25)

Green: 0% (0/25)

Yellow: 0% (0/25)

Red: 0% (0/25)

\* Flown within 35deg solar angle

### D10|V10C (Boulder City South)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22																		

Flown: 0% (0/22)

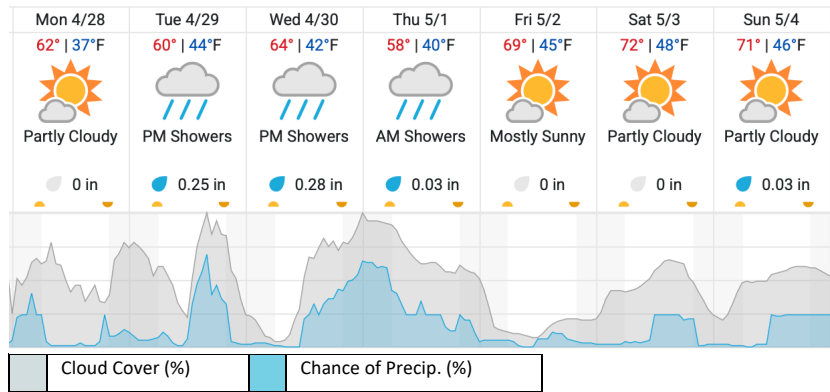
Green: 0% (0/22)

Yellow: 0% (0/22)

Red: 0% (0/22)

## Weather Forecast

Boulder, CO



source: wunderground.com

## Flight Collection Plan for April 2025

### Flyority 1

Collection Area: Table Mountain Radiometric Calibration

Flight Plan Name: D10\_R10C\_Rad\_Cal\_TBMT\_v1\_Q780

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° 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), John (NIS), Nick (Ground)