



## Payload 2 Daily Flight Report

**Date:** 2025-09-15

**Flight Campaign ID:** P2C1

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

**Aircraft:** N615AR

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

**Sites Flown:** B10E (Riegl Bore sight Calibration - 1600m, 1000m, 500m), R10D (Boulder Airport Radiometric Calibration)

**Days left in Domain:** 3

**Report Author:** Cameron

**Lidar Operators:** Cameron

**Flight Hours:** 02:09

**Spectrometer Operators:** Elissa

**Hours until maintenance:** 121.17

**Pilots:** Justin, Jacob

**GPS Instruments:** AOP\_KBDU, S-COGY

### Summary

The crew took advantage of optimal atmospheric conditions and completed the Radiometric Calibration and the Bore sight Calibration flight plans.

### Concerns

- Drive letter swap with Camera and Riegl disk was resolved on the Hotel Kit by changing the disk names.

### Comments

- The ITRES Savi has arrived. Plans are being made for installation into P2.

### 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

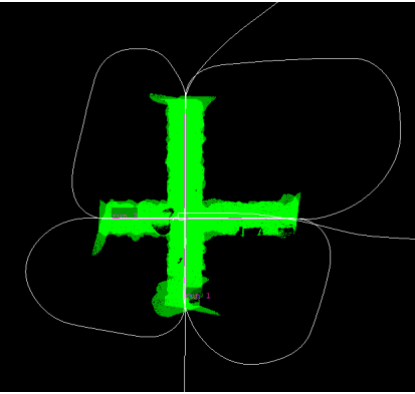
#### D00|B10E

Line #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover																				

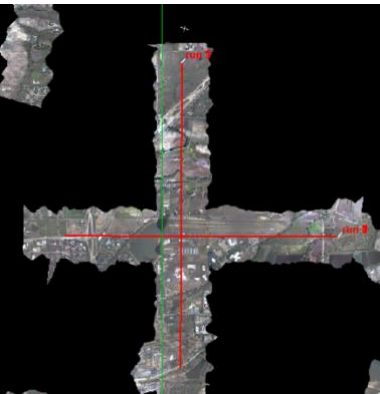
Total number of lines flown: 20

Flight Screenshots

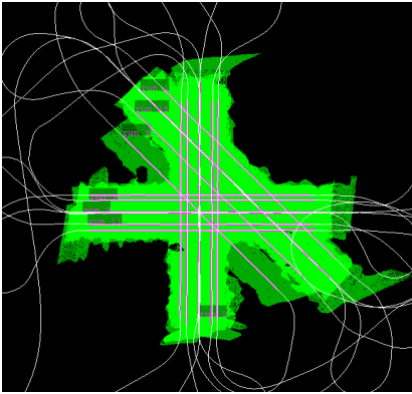
Lidar R10D



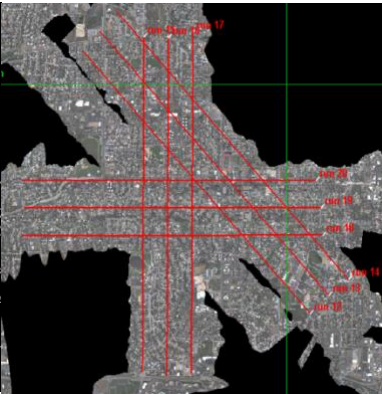
NIS R10D



Lidar B10E



NIS B10E



Pictures: Below flying over Greeley during the Boresight Calibration flight this morning



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: 100% (20/20)

Green: 100% (20/20)

Yellow: 0% (0/20)

Red: 0% (0/20)

\* 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|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: 41% (9/22)

Green: 36% (8/22)

Yellow: 5% (1/22)

Red: 0% (0/22)

\* Flown within 35deg solar angle

### D00|V10D (Boulder City West - 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															

Flown: 0% (0/25)

Green: 0% (0/25)

Yellow: 0% (0/25)

Red: 0% (0/25)

\* Flown within 35deg solar angle

### D10|H10C ()

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

### D10|N10D ()

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: 0% (0/26)

Yellow: 0% (0/26)

Red: 100% (26/26)

\* Flown within 35deg solar angle

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

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

Green: 100% (5/5)

Yellow: 0% (0/5)

Red: 0% (0/5)

\* Flown within 35deg solar angle

### D10|W10C ()

1	2
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Flown: 100% (2/2)

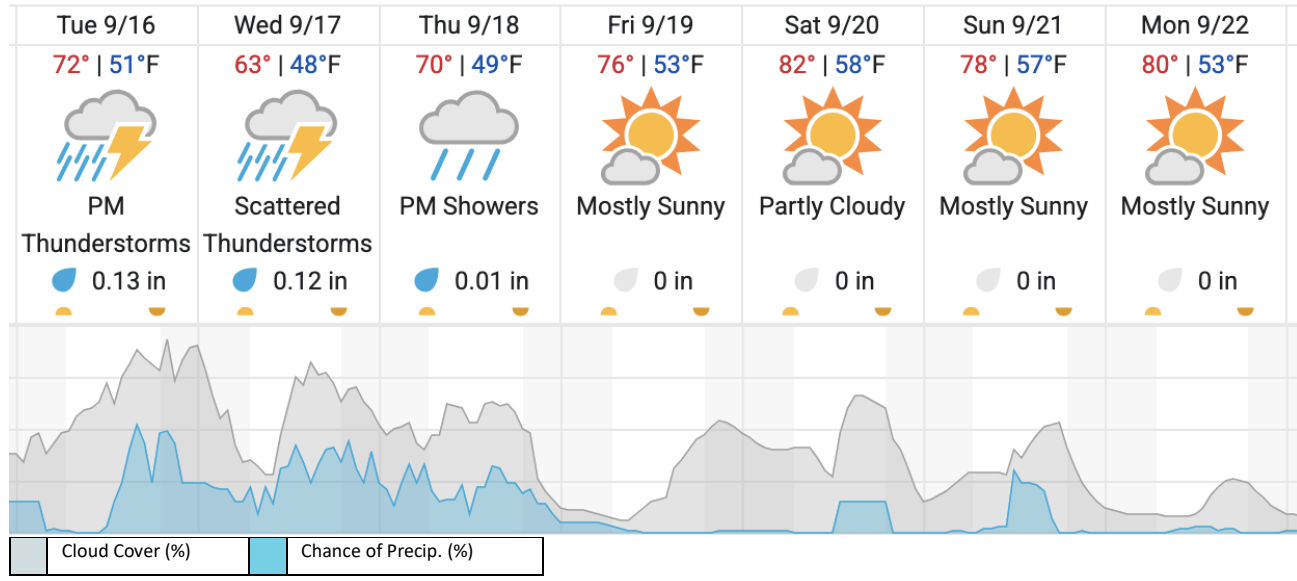
Green: 50% (1/2)

Yellow: 50% (1/2)

Red: 0% (0/2)

\* Flown within 35deg solar angle

## Weather Forecast Boulder, CO



source: wunderground.com

## Flight Collection Plan for September 16, 2025

### Flyority 1

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: 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 3

Collection Area: Black Forest  
 Flight Plan Name: D10\_BLKF\_Black\_Forest\_v6\_VQ780\_ftlines  
 40° On-station Time: 1620 UTC / 1020 L

### Flyority 4

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: Elissa, NIS: Nick