



## Payload 2 Daily Flight Report



**Date:** 2025-05-19

**Flight Campaign ID:** P2C1

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

**Aircraft:** N615AR

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

**Sites Flown:** BLKF (Black Forest Waveform Range Test)

**Days left in Domain:** 2

**Report Author:** Cameron

**Lidar Operators:** Cameron

**Flight Hours:** 01:21

**Spectrometer Operators:** Alyssa

**Hours until maintenance:** 104.73

**Pilots:** Vince, Tim

**GPS Instruments:** AOP\_KBDU

**Adt'l Flight Crew:** Matt

**Ground Crew:** Nick

### Summary

Today's training flight at the Black Forest site was curtailed due to a low cloud deck and snow in the vicinity. Despite these conditions, we managed to collect one line of data at the intended flight altitude before the pilots were required to descend significantly below a suitable collection altitude.

### Concerns

- Addressing a potential space constraint with the D11 FBO. John is working with them to ensure hangar requirements are met.

### Comments

- None

### Daily Coverage

Estimated Cloud Cover Key

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

Solar Angle Less Than 40 degrees: (\*)

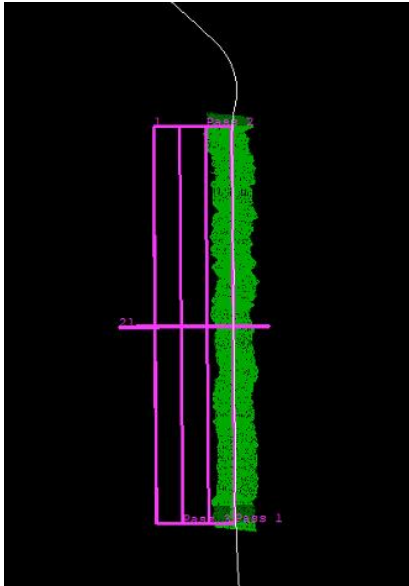
D00|BLKF

Line #	1
Lidar	✓
Spectrometer	✓
Camera	✓
Cloud Cover	

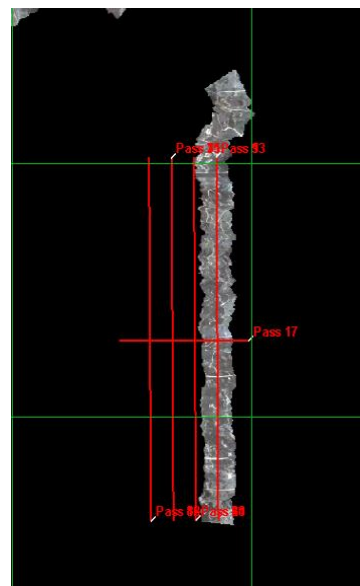
Total number of lines flown: 1

## Flight Screenshots

Lidar Swath



NIS GeoPaint



## Pictures

Captured on today's training mission SW of Castle Rock



## 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|BLKF (Black Forest Waveform Range Test - Galaxy)

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

Flown: 5% (1/21)

Green: 0% (0/21)

Yellow: 0% (0/21)

Red: 5% (1/21)

\* 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: 93% (26/28)

Green: 0% (0/28)

Yellow: 0% (0/28)

Red: 93% (26/28)

\* 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: 100% (5/5)

Green: 40% (2/5)

Yellow: 60% (3/5)

Red: 0% (0/5)

\* Flown within 35deg solar angle

D00|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

### 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

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

1	2
---	---

Flown: 100% (2/2)

Green: 50% (1/2)

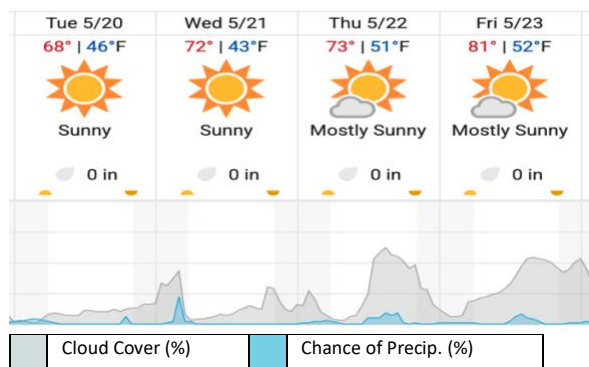
Yellow: 50% (1/2)

Red: 0% (0/2)

\* Flown within 35deg solar angle

## Weather Forecast

### Boulder CO



source: wunderground.com

## Flight Collection Plan for 20 May 2025

### Flyority 1

Collection Area: Black Forest

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

On-Station Time: 1520 UTC / 0920 L

### Flyority 2

Collection Area: Boulder City Nominal Science Flight

Flight Plan Name: D10\_V10C\_East/West\_v13\_VQ780

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

Crew: Cam (Lidar), Alyssa (NIS), Matt (Instructor), Nick (Ground)