

Payload 2 Daily Flight Report



Date: 2025-09-17

Flight Campaign ID: P2C1

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

Aircraft: N615AR

Domain: 00 (Training & Calibration)

Sites Flown: N10D ()
Days left in Domain: 3

Report Author: Cameron

Lidar Operators: Cameron Flight Hours: 01:12

Spectrometer Operators: Elissa **Hours until maintenance**: 121.17 **Pilots**: Justin, Troy **GPS Instruments**: AOP_KBDU

Adt'l Flight Crew: Brevin Ground Crew: Nick

Summary

Clear morning skies quickly deteriorated leaving marginal weather and 10,000' cloud ceilings. It was decided that lower elevation Nominal Runway lines should be collected. 14 lines were collected in 'Red" atmospheric conditions.

Concerns

- Erroneous Eye safety issues on 2 lines were noted during today's flight.

Comments

- A member from the ITRES crew flew on today's mission operating their instrument.
- Conducted a tour with members from the Boulder NOAA Corps this evening.

Daily Coverage

Estimated Cloud Cover Key

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

Solar Angle Less Than 40 degrees: (*)

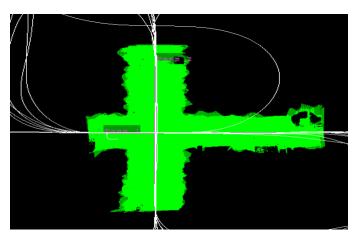
D10|N10D

Line #	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Lidar	\	√	\	✓	✓	✓	\	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	√	✓	✓	✓	✓	✓	✓	✓
Camera	√	✓	√	✓	✓	✓	√	✓	✓	✓	✓	✓	✓	✓
Cloud Cover														

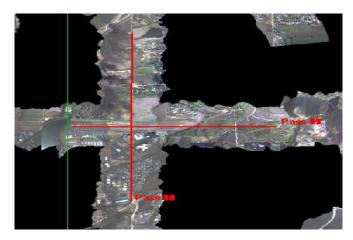
Total number of lines flown: 14

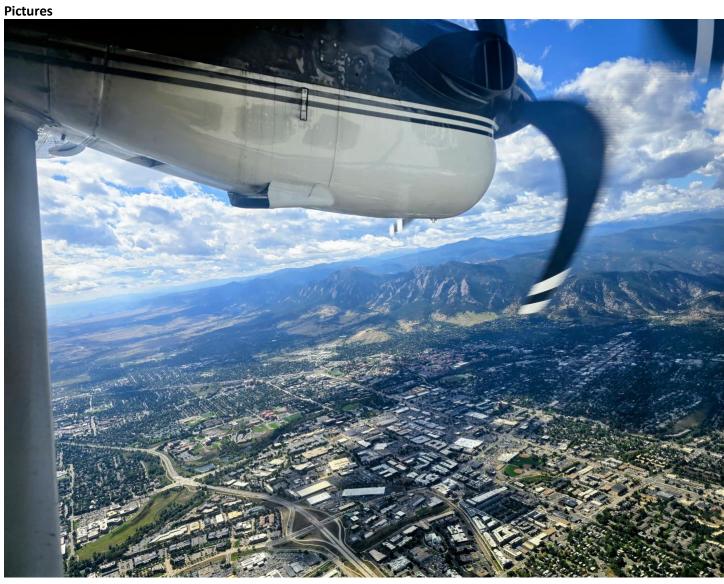
Flight Screenshots

Lidar



NIS







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 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)

		, <u> </u>)·/											
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

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

* Flown within 35deg solar angle

D10|N10D()

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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 Flown: 100% (5/5)

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

* Flown within 35deg solar angle

D10|W10C()

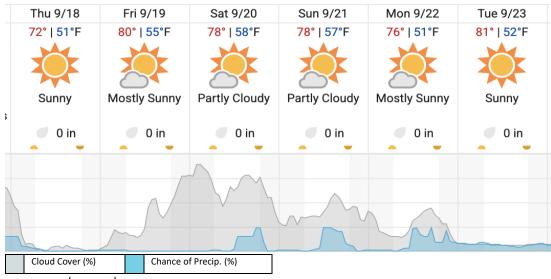
1 2

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 (KBDU)



source: wunderground.com

Flight Collection Plan for 18 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: 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

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

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