Payload 2 Daily Flight Report

Date: 2025-05-14
Flight Campaign ID: P2C1
Airport, FBO ID, City: Boulder Municipal Airport (KBDU) - Boulder, CO
Aircraft: N615AR

Domain: 00 (Training & Calibration)
Sites Flown: R10C (Table Mountain Radiometric Calibration - Riegl)
Days left in Domain: 7

Report Author: Matt
Lidar Operators: Matt
Spectrometer Operators: Nick
Pilots: Vince, Mac
Flight Hours: 01:10
Hours until maintenance: 108.33
GPS Instruments: AOP_KBDU

Summary
The crew completed two iterations of the Table Mountain Radiometric Calibration flight before clouds moved in along the front range.

Comments
-The NIS Geopaint displayed the aircraft in its correct orientation.
-Alyssa completed her first training flight with AOP.

Concerns
None

Daily Coverage

Estimated Cloud Cover Key

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

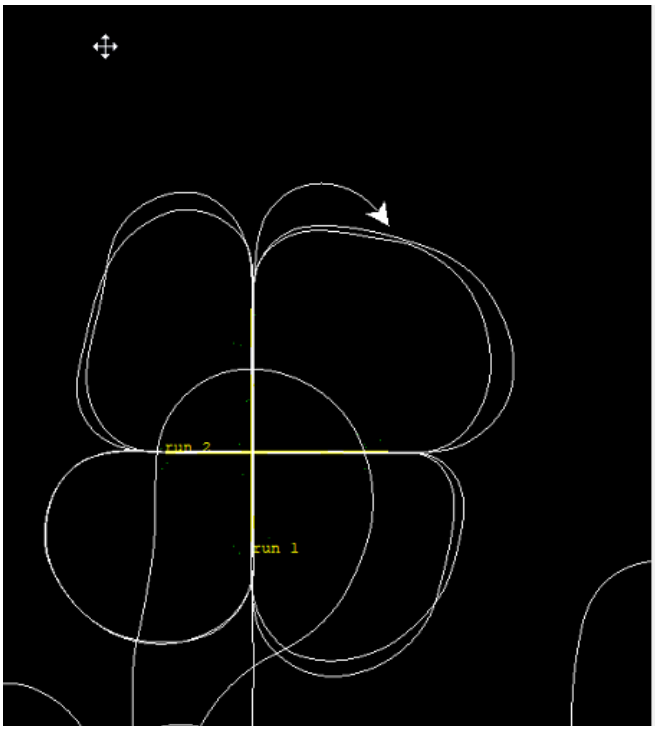
Solar Angle Less Than 40 degrees: (*)

D00|R10C

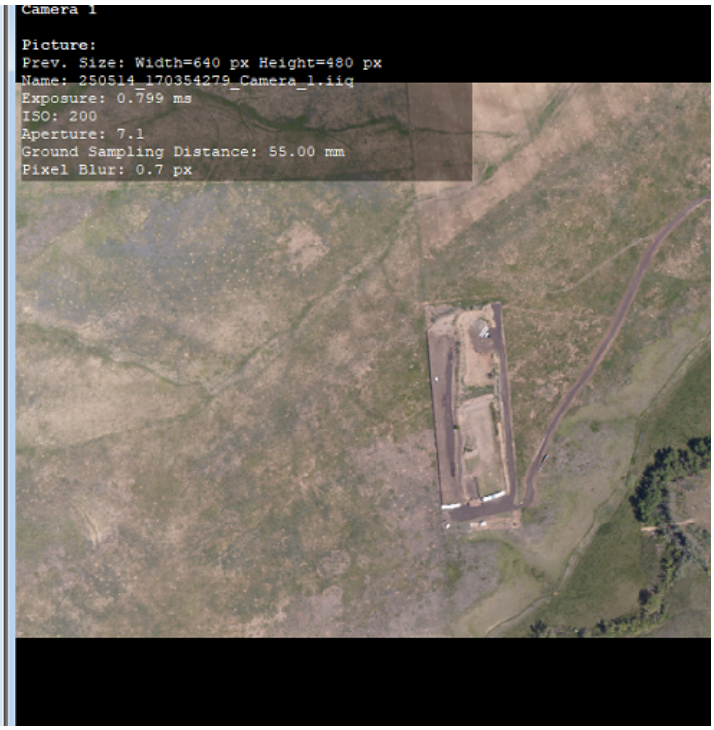
Line #	1	2	3	4	5
Lidar	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓
Cloud Cover					

Total number of lines flown: 5

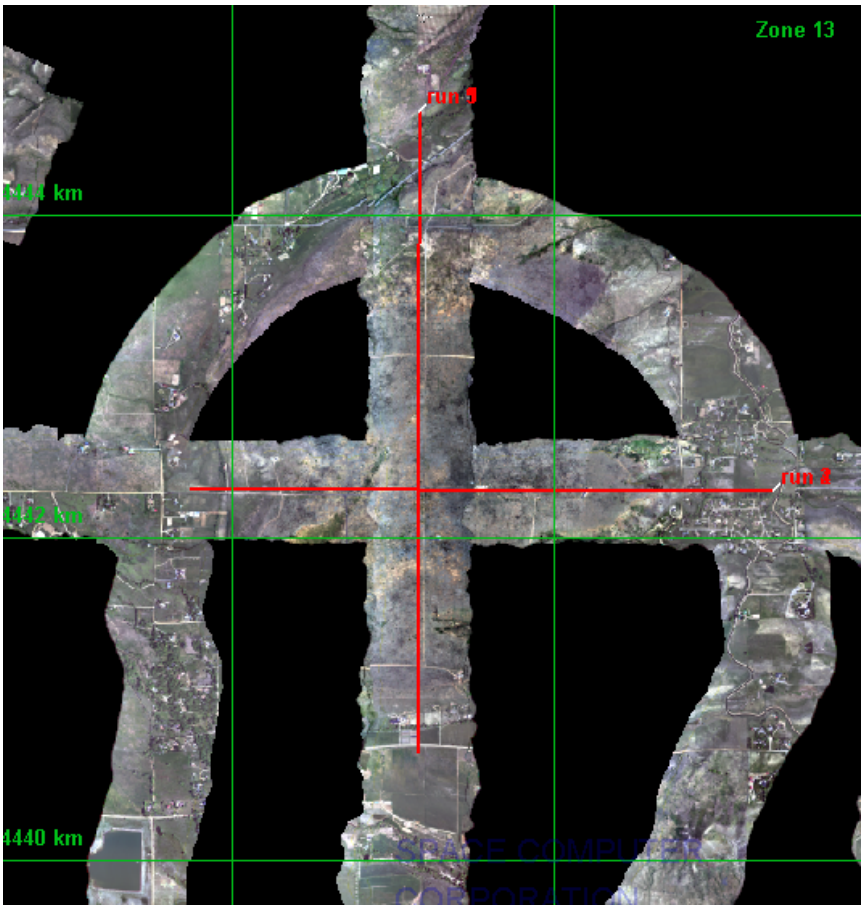
Flight Screenshots



Lidar



Camera



NIS

Pictures

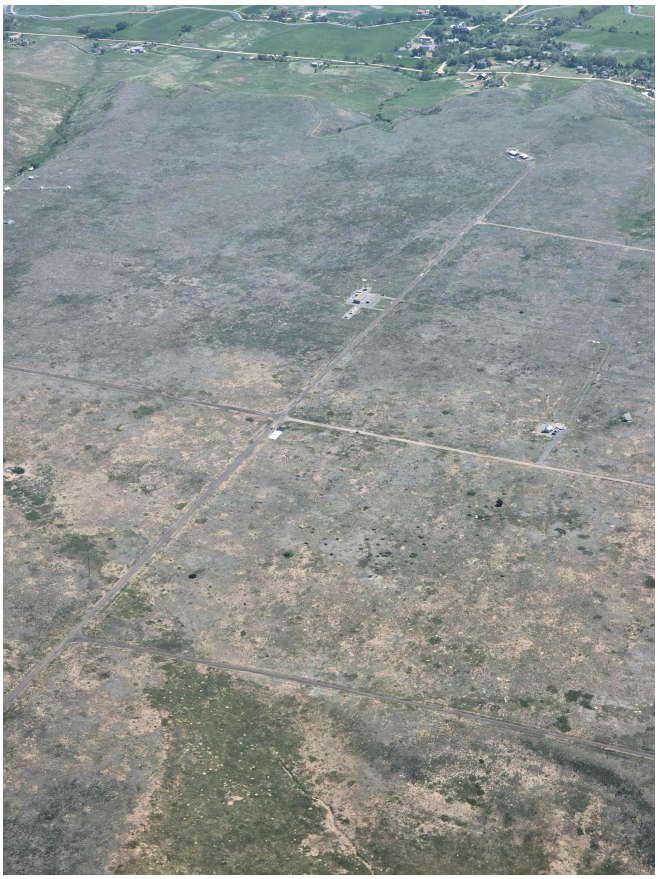


Table Mountain with Calibration tarps (SW corner of the center intersection)

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|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: 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															

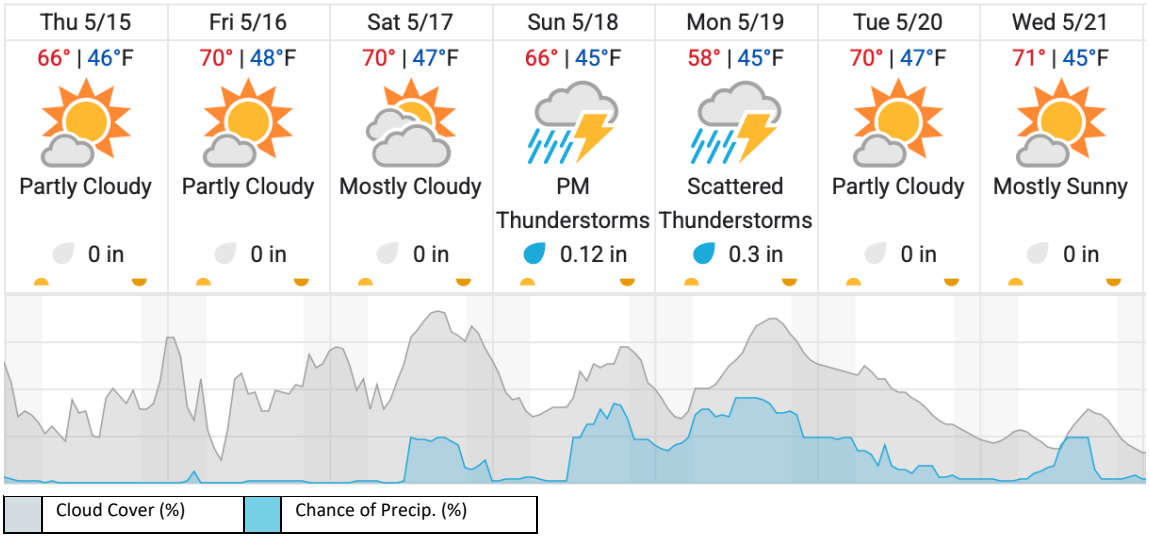
Flown: 0% (0/25)
Green: 0% (0/25)
Yellow: 0% (0/25)
Red: 0% (0/25)
* Flown within 35deg solar angle

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



source: wunderground.com

Flight Collection Plan for 14 May 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: NEON HQ Lidar Validation
Flight Plan Name: D10_H10C_HQ_val_v1_Q780
On-Station Time: Daylight – No solar angle restrictions.

Flyority 4
Collection Area: Black Forest
Flight Plan Name: D10_BLKF_Black_Forest_v6_VQ780
On-Station Time: Daylight – No solar angle restrictions.

Flyority 5
Collection Area: NIS Offset Flight
Flight Plan Name: D10_O10B_NIS_Offset_v2_Q780
35° On-station Time: 1540 UTC / 0940 L

Crew: Nick (Lidar), Matt (NIS), Alyssa (In-training)