



Payload 3 Daily Flight Report

Date: 2025-04-16

Flight Campaign ID: P3C1

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

Aircraft: N821AR

Domain: 00 (Training & Calibration)

Sites Flown: B10E (Riegl Boresight Calibration - 1600m, 1000m, 500m)

Days left in Domain: 14

Report Author: Mitch

Lidar Operators: Mitch

Flight Hours: 01:53

Spectrometer Operators: John

Hours until maintenance: 118.73

Pilots: Jeff, Justin

GPS Instruments: AOP_KBDU, S-COGY

Ground Crew: Cameron, Elissa

Summary

The crew mobilized this morning to Greeley to complete the Boresight Calibration. Cloud cover gradually increased throughout the flight, however illumination remained consistent with no shadowing present in photos.

Concerns

Yesterday's flight has yet to have a successful extract on the hotel kit; expect downstream delays in extracting today's data as troubleshooting continues.

Comments

- The USB device used for POS backup WAS recognized by Tracker software today, however the Midas1 drive was not. A simple restart of the Snapshot Tracker software resolved the issue.
- A special Hg lamp collect was conducted by John and Mark following today's flight.

Daily Coverage

Estimated Cloud Cover Key

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

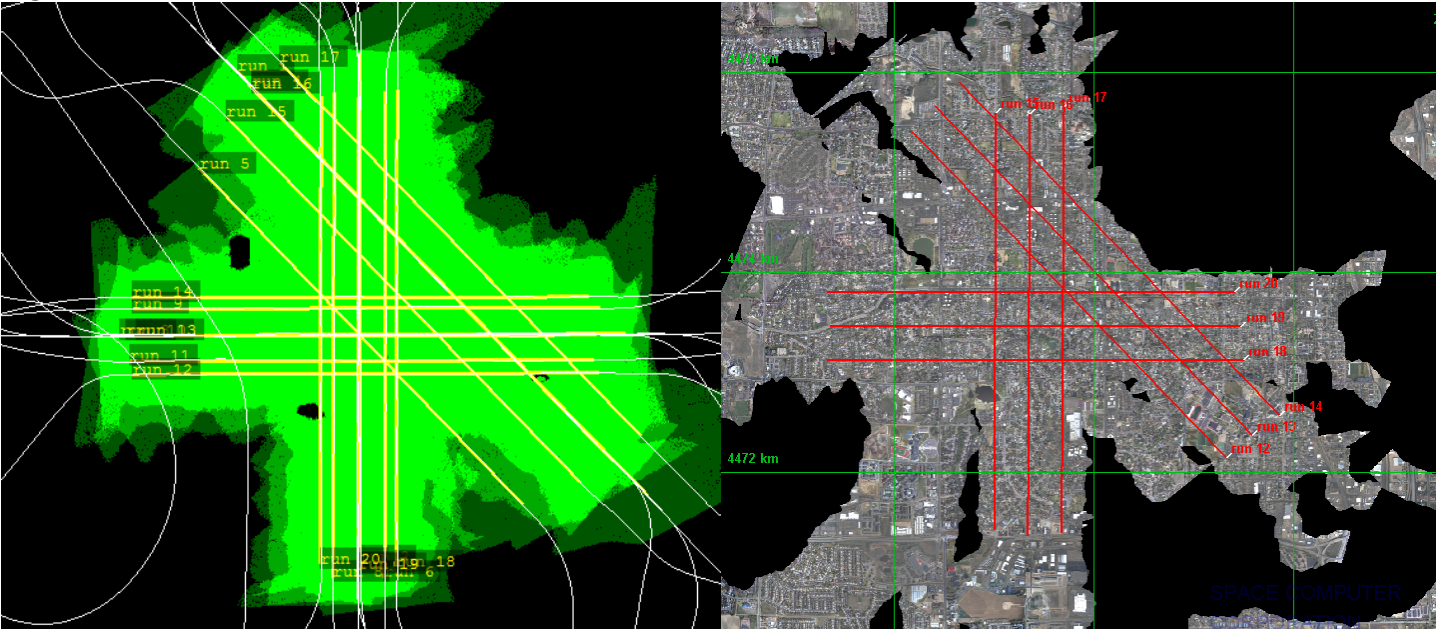
Solar Angle Less Than 40 degrees: (*)

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



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: 0% (0/20)
Yellow: 85% (17/20)
Red: 15% (3/20)
* Flown within 35deg solar angle

D00|H10C (NEON Headquarters Lidar Test - Riegl)

1	2	3	4
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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: 86% (24/28)
Green: 7% (2/28)
Yellow: 68% (19/28)
Red: 11% (3/28)
* 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|R10C (Table Mountain Radiometric Calibration - Riegl)

1	2	3	4	5
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Flown: 0% (0/5)
Green: 0% (0/5)
Yellow: 0% (0/5)
Red: 0% (0/5)
* Flown within 35deg solar angle

D00 | R10D (Boulder Airport Radiometric Calibration)

1	2	3	4	5
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Flown: 100% (5/5)
Green: 40% (2/5)
Yellow: 60% (3/5)
Red: 0% (0/5)
* Flown within 35deg solar angle

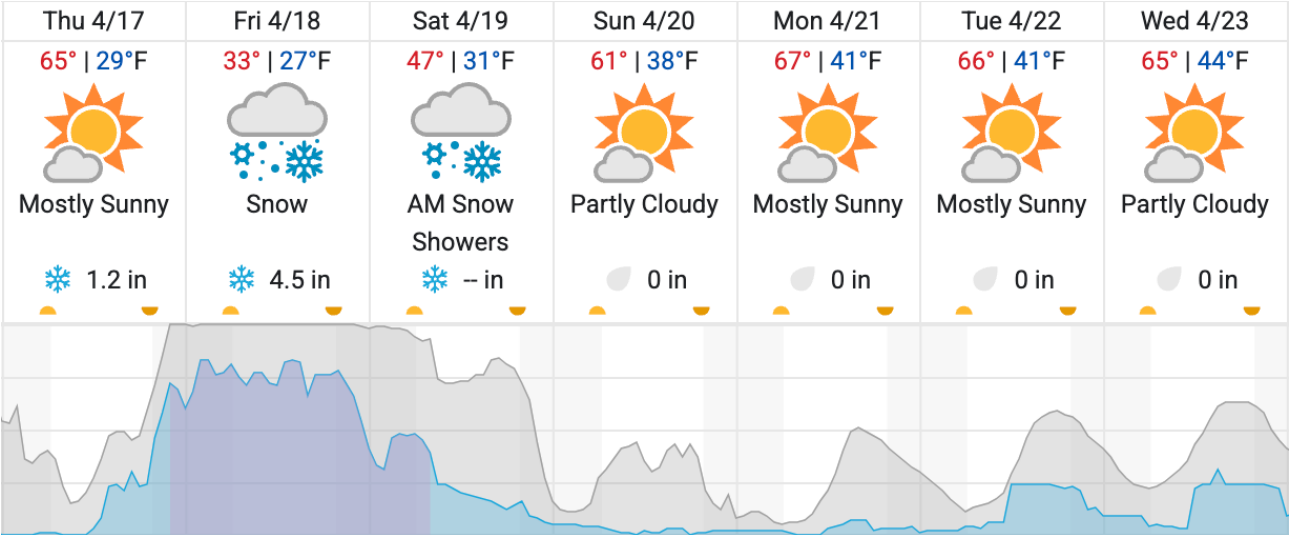
D00 | W10C (Wiggle Timing Test - Riegl)

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

Weather Forecast

Boulder, CO



Cloud Cover (%)	Chance of Precip. (%)
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source: wunderground.com

Flight Collection Plan for 16 April 2025

Flyority 1

Collection Area: Table Mountain Radiometric Calibration
Flight Plan Name: D10_R10C_Rad_Cal_TBMT_v1_Q780
45° On-station Time: 1640 UTC / 1040 L
Additional Considerations: Ground should be dry.

Flyority 2

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: Wiggle Timing Test

Flight Plan Name: D10_W10C_Wiggle_Test_v6_Q780

40° On-station Time: 1610 UTC / 1010 L

Additional Considerations: Runway should not be wet, or snow covered.

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: John (Lidar), Cam (NIS), Elissa (Ground), Mitch (Ground), Matt (Ground)