



Payload 3 Daily Flight Report

Date: 2025-04-14

Flight Campaign ID: P3C1

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

Aircraft: N821AR

Domain: 00 (Training & Calibration)

Sites Flown: None

Days left in Domain: 16

Report Author: John

Lidar Operators: John

Flight Hours: 00:00

Spectrometer Operators: Elissa

Hours until maintenance: 0.00

Pilots: Jeff, Justin

Ground Crew: Mitch, Matt

Summary

No flights today due to NEON NIS instrument issues and poor weather in the morning. AOP lab troubleshooting fixed all outstanding problems; the payload is ready for the flight season. Tour for the NEON Domain managers conducted in the afternoon.

Concerns

The NIS heater components did not come on as expected after the focal plane reached operational temperatures; troubleshooting found the AC power cable to be at fault. The cable was replaced and the NIS is now thermally stable. Additionally, the getter power supply is currently working without arching, so the Payload is now ready for calibration flights.

Comments

None.

Daily Coverage

Estimated Cloud Cover Key

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

Solar Angle Less Than 40 degrees: (*)

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: 0% (0/20)

Green: 0% (0/20)

Yellow: 0% (0/20)

Red: 0% (0/20)

* Flown within 35deg solar angle

D00|H10C (NEON Headquarters Lidar Test - Riegl)

1	2	3	4
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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: 0% (0/28)
Green: 0% (0/28)
Yellow: 0% (0/28)
Red: 0% (0/28)
* 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

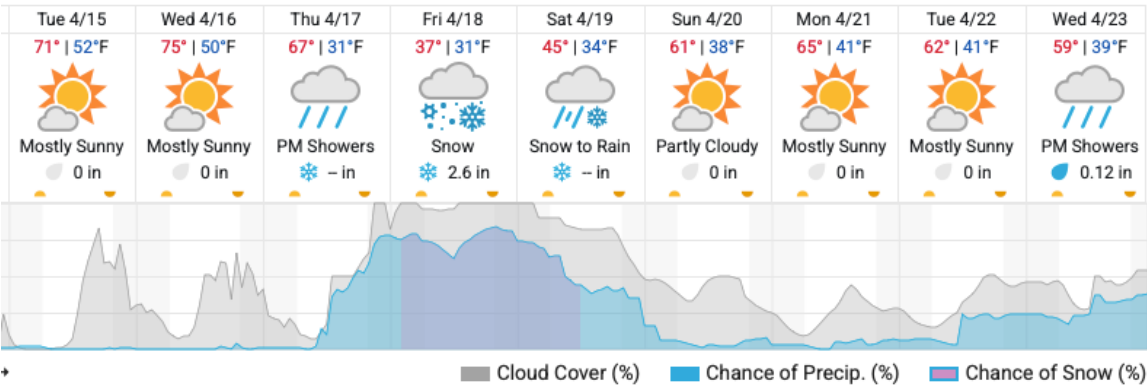
D00|W10C (Wiggle Timing Test - Riegl)

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 (KBDU)



Flight Collection Plan for 15 April 2025

Flyority 1

Collection Area: Table Mountain Radiometric Calibration

Flight Plan Name: D10_R10C_Rad_Cal_TBMT_v1_Q780

45o On-station Time: 1640 UTC / 1040 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)

30o On-station Time: 1510 UTC / 0910 L

Additional Considerations: No recent snowfall, clear roofs required.

Flyority 3

Collection Area: Nominal Runway Survey Flight Plan

Name: D10_N10D_Nominal_Rnwy_v8_Q780

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

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

Flyority 4

Collection Area: NEON HQ Lidar Validation

Flight Plan Name: D10_H10C_HQ_val_v1_Q780

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

Flyority 5

Collection Area: Wiggle Timing Test

Flight Plan Name: D10_W10C_Wiggle_Test_v6_Q780

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

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

Flyority 6

Collection Area: NIS Offset Flight

Flight Plan Name: D10_O10B_NIS_Offset_v2_Q780

35o On-station Time: 1540 UTC / 0940 L

Crew: Elissa (lidar), Mitch (NIS), Matt (ground), John (ground)