



Payload 3 Daily Flight Report



Date: 2023-04-03

Flight Campaign ID: P3C1

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

Aircraft: N934MU

Domain: 00 (Training & Calibration)

Sites Flown: H10C (NEON Headquarters Lidar Test - Riegl), W10C (Wiggle Timing Test - Riegl)

Days left in Domain: 15

Report Author: Cameron

Lidar Operators: Cameron

Flight Hours: 01:10

Spectrometer Operators: Mike

Hours until maintenance: 122.73

Pilots: Cullen, Jeff

GPS Instruments: AOP_KBDU

Ground Crew: Matt

Summary

The flight crew dusted the cobwebs off payload 3 for its first flight of the season. The clouds were too low to conduct our Functional check flight (nominal runway), so we completed the HQ Lidar flight and the Wiggle timing test in red sky conditions. We also used this flight to refamiliarize our pilots to NEON survey flights.

Concerns

- The ION pump had an error message "Short" on the display this morning. The AOP lab removed the pump for testing. The pump & cables tested good in the lab, so it was reinstalled after the flight. We will continue to monitor.

Comments

- None

Daily Coverage

Estimated Cloud Cover Key

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

D00|W10C

Line #	1	2
Lidar	✓	✓
Spectrometer	✓	✓
Camera	✓	✓
Cloud Cover		

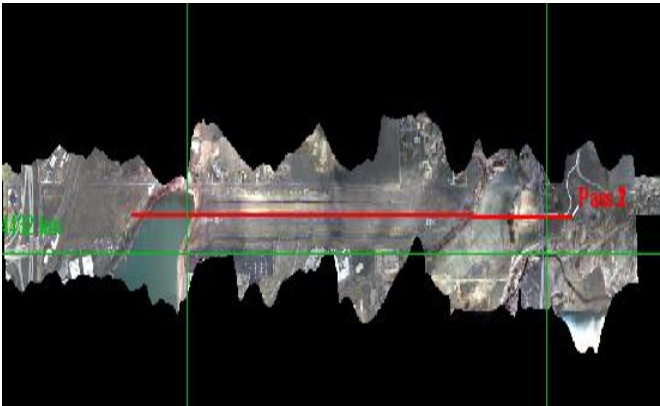
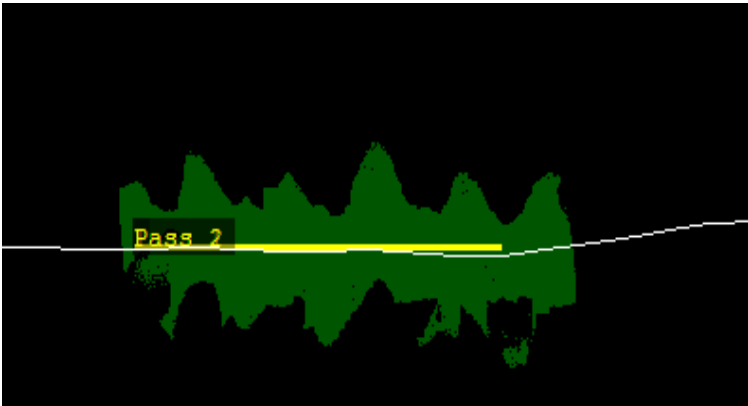
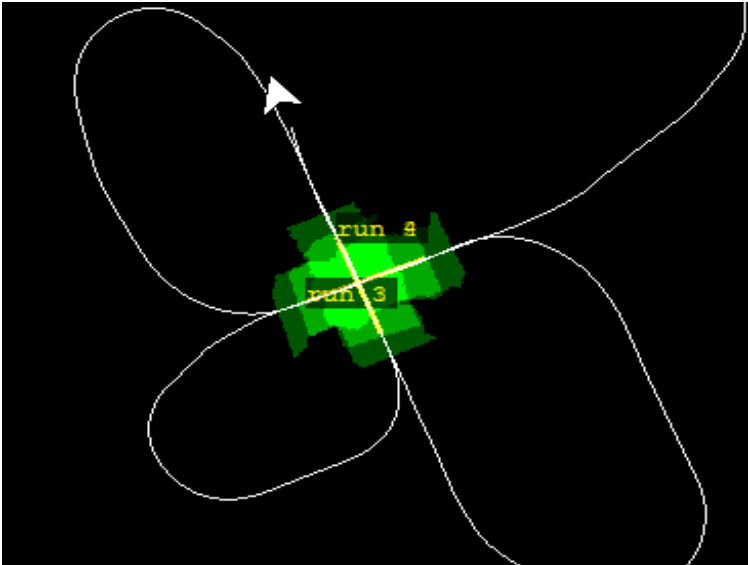
Total number of lines flown: 2

D00|H10C

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

Total number of lines flown: 4

Flight Screenshots



Pictures: None

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)

D00|H10C (NEON Headquarters Lidar Test - Riegl)

1	2	3	4
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Flown: 100% (4/4)

Green: 0% (0/4)

Yellow: 0% (0/4)

Red: 100% (4/4)

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)

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)

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)

D00|R10D (Boulder Airport Radiometric Calibration)

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)

D00|W10C (Wiggle Timing Test - Riegl)

1	2
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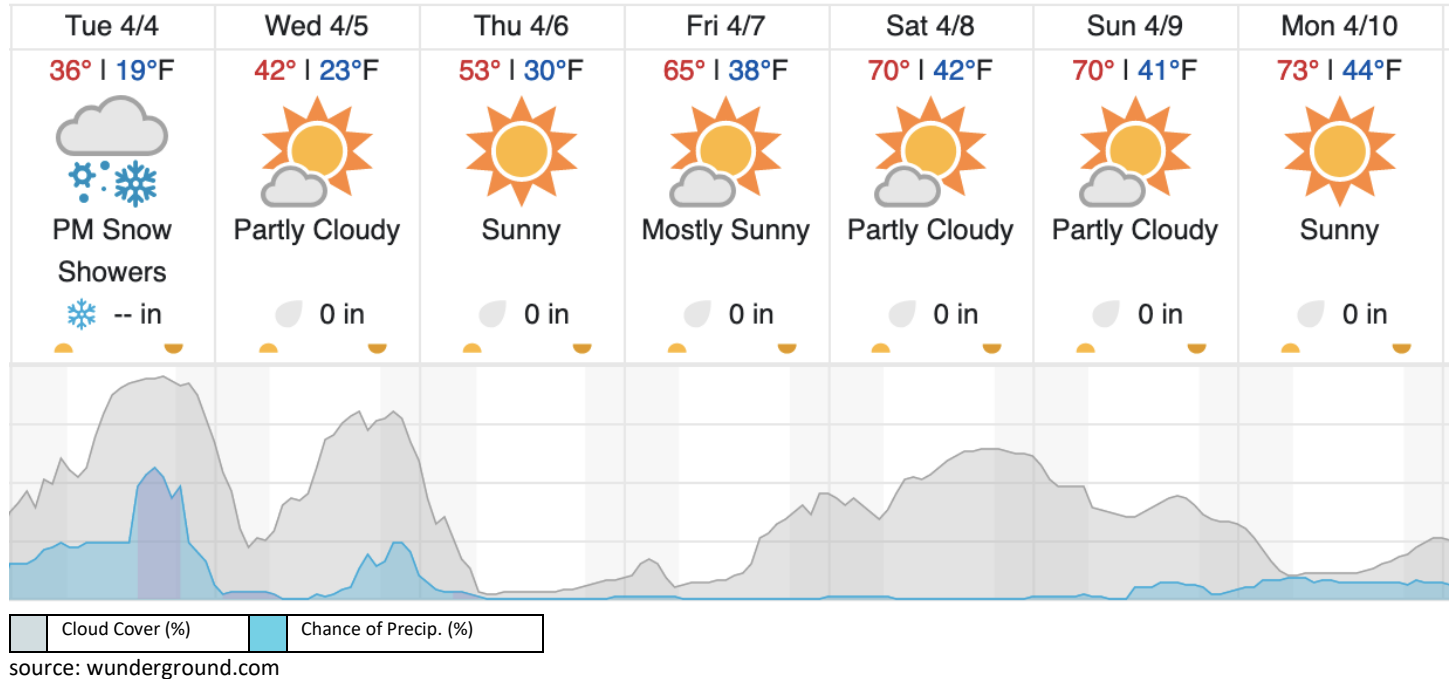
Flown: 100% (2/2)

Green: 0% (0/2)

Yellow: 0% (0/2)

Red: 100% (2/2)

Weather Forecast Boulder, CO



Flight Collection Plan for April 4, 2023

Flyority 1

Collection Area: Table Mountain Radiometric Calibration

Flight Plan Name: D10_R10C_Rad_Cal_TBMT_v1_Q780

45° On-station Time: 1700 UTC / 1100 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: 1530 UTC / 0930 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: NIS Offset Flight

Flight Plan Name: D10_O10B_NIS_Offset_v2_Q780

35° On-station Time: 1620 UTC / 1030 L

Flight Crew

Mike (Lidar), Matt (NIS), John (Ground)