

Payload 3 Daily Flight Report



Date: 2024-03-23

Flight Campaign ID: P3C1

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

Aircraft: N821AR

Domain: 00 (Training & Calibration)

Sites Flown: N10D (Nominal Runway at KBDU - Riegl)

Days left in Domain: 5

Report Author: Elissa

Lidar Operators: Elissa Flight Hours: 01:48

Spectrometer Operators: Mitch **Hours until maintenance**: 122.10 **Pilots**: Justin, Will **GPS Instruments**: AOP_KBDU

Ground Crew: Cameron, Matt

Summary

Crew completed the Nominal Runway flight plan over KBDU this morning. After working out a few remaining kinks from installation, systems functioned without issue.

Concerns

None

Comments

None

Daily Coverage

Estimated Cloud Cover Key

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

Solar Angle Less Than 40 degrees

Line#

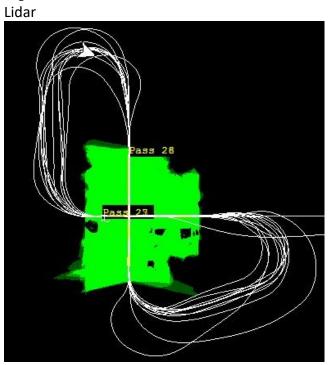
D00 | N10D

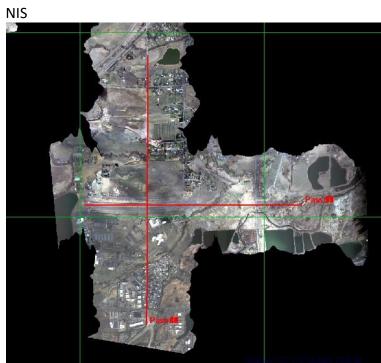
Line #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	\	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	√	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	\	✓	✓
Cloud Cover																				

Line #	21	22	23	24
Lidar	✓	✓	✓	✓
Spectrometer	√	✓	√	√
Camera	✓	✓	✓	✓
Cloud Cover				

Total number of lines flown: 24

Flight Screenshots





Pictures



Snow-capped peaks near Boulder during today's flight.

Cumulative Domain Coverage

D00 | B10E (Riegl Boresight Calibration - 1600m, 1000m, 500m)

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ļ	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

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
Flow	n: (ე% ((7/4)

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

D00 | N10D (Nominal Runway at KBDU - 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	26	27	28												

Flown: 86% (24/28) Green: 0% (0/28) Yellow: 0% (0/28) Red: 86% (24/28)

D00 | O10B (NIS Offset - Riegl)

1 2

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)

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

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	23	24	25	26	27	28	29			•		•						

Flown: 0% (0/29) Green: 0% (0/29) Yellow: 0% (0/29) Red: 0% (0/29)

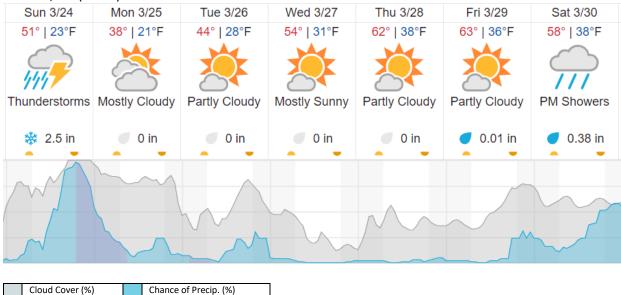
D00 | W10C (Wiggle Timing Test - Riegl)

1 2

Flown: 0% (0/2) Green: 0% (0/2) Yellow: 0% (0/2) Red: 0% (0/2)

Weather Forecast

Boulder, CO (KBDU)



source: wunderground.com

Flight Collection Plan for 24 March 2024

Flyority 1

Collection Area: Table Mountain Radiometric Calibration Flight Plan Name: D10_R10C_Rad_Cal_TBMT_v1_Q780

45° On-station Time: 1730 UTC / 1130 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: 1550 UTC / 0950 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: Wiggle Timing Test

Flight Plan Name: D10_W10C_Wiggle_Test_v6_Q780

 40° On-station Time: 1650 UTC / 1050 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: 1620 UTC / 1030 L

Flight Crew

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