

Payload 3 Daily Flight Report



Date: 2023-04-13

Flight Campaign ID: P3C1

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

Aircraft: N934MU

Domain: 00 (Training & Calibration)

Sites Flown: B10E (Greeley Boresight - Riegl)

Days left in Domain: 5

Report Author: Nick

Lidar Operators: Nick Flight Hours: 02:40

Spectrometer Operators: Matt Hours until maintenance: 112.9

Pilots: Paul, Jeff GPS Instruments: AOP_KBDU, S-COGY

Ground Crew: John, Mike

Summary

The Greeley Boresight flight was flown using updated lidar settings. The lidar over-current issue was not observed. Riegl indicated a solution will be released soon. The incoming weather front will most likely result in a few days to review calibration data.

Concerns

None

Comments

None

Daily Coverage

Estimated Cloud Cover Key

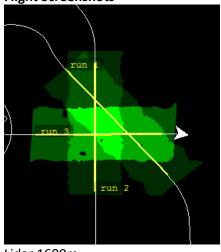
Green:	Yellow:	Red:
0-10%	11-50%	>50%

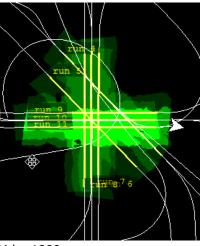
D00|B10E

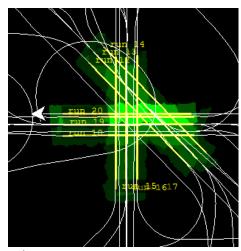
Line #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Lidar	✓	✓	✓	✓	✓	✓	√	\	√	✓	✓	✓	✓	√	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	√	\	√	✓	✓	✓	✓	√	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	√	\	√	✓	✓	✓	✓	√	✓	✓	✓	✓	✓	✓
Cloud Cover																				

Total number of lines flown: 20

Flight Screenshots



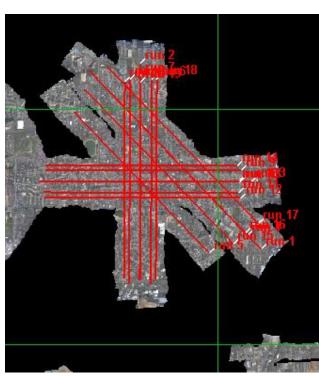




Lidar 1600m

Lidar 1000m

Lidar 500m



NIS

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: 0% (0/20) Red: 100% (20/20)

D00 | H10C (NEON Headquarters Lidar Test - Riegl)

1 2 3 4

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: 64% (18/28) Green: 29% (8/28) Yellow: 4% (1/28) Red: 32% (9/28)

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

Flown: 100% (5/5) Green: 100% (5/5) Yellow: 0% (0/5) Red: 0% (0/5)

D00 | R10D (Boulder Airport Radiometric Calibration)

1 2 3 4 5

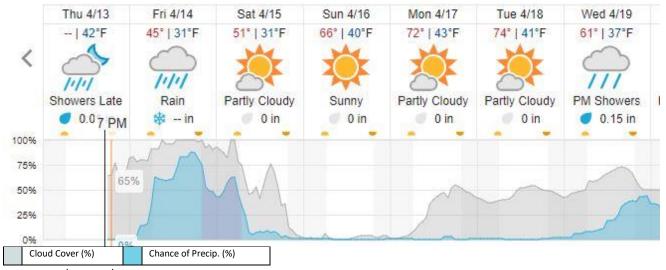
Flown: 100% (5/5) Green: 100% (5/5) Yellow: 0% (0/5) Red: 0% (0/5)

D00 | W10C (Wiggle Timing Test - Riegl)

1 2

Flown: 100% (2/2) Green: 0% (0/2) Yellow: 0% (0/2) Red: 100% (2/2)

Weather Forecast Boulder, CO



source: wunderground.com

Flight Collection Plan for April 14th, 2023

Flyority 1

Collection Area: Nominal Runway Survey Flight Plan (Lines 1-8, 11-12, 25-28)

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 2

Collection Area: NIS Offset Flight

Flight Plan Name: D10_O10B_NIS_Offset_v2_Q780

35° On-station Time: 1540 UTC / 0940L

Crew: Nick (lidar), John (NIS), Matt (Ground)