



Payload 3 Daily Flight Report



Date: 2023-08-29

Flight Campaign ID: P3C1

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

Aircraft: N934MU

Domain: 00 (Training & Calibration)

Sites Flown: B10E (Riegl Boresight Calibration - 1600m, 1000m, 500m), R10D (Boulder Airport Radiometric Calibration)

Days left in Domain: 5

Report Author: Cameron

Lidar Operators: Cameron

Flight Hours: 02:14

Spectrometer Operators: Mike

Hours until maintenance: 69.90

Pilots: Justin, Will

GPS Instruments: AOP_KBDU, S-COSG

Ground Crew: Mitch

Summary

A near coincident collect was conducted with payload 3 and payload 1 of the Boulder Airport Radiometric Calibration in nominal cloud conditions! After completion, the crew proceeded to Greeley where the Riegl Boresight Calibration was also completed in nominal sky conditions.

Concerns

- NIS frame-grabber error occurred today likely caused by the FPIE fiber power box issue. This was resolved by resetting the power box.

Comments

- The team is considering de- installing early if all calibration flights are completed by Friday.

Daily Coverage

Estimated Cloud Cover Key

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

D00|R10D

Line #	1	2	3	4	5
Lidar	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓
Cloud Cover					

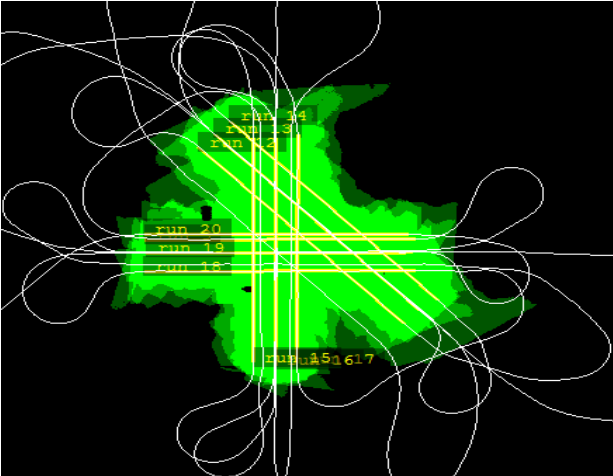
Total number of lines flown: 5

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																				

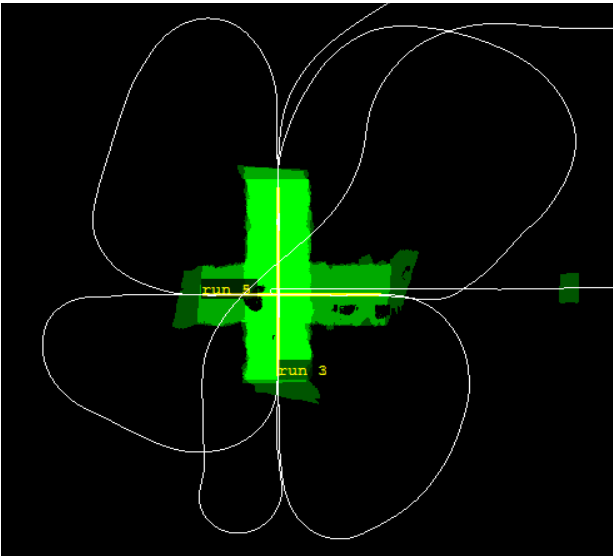
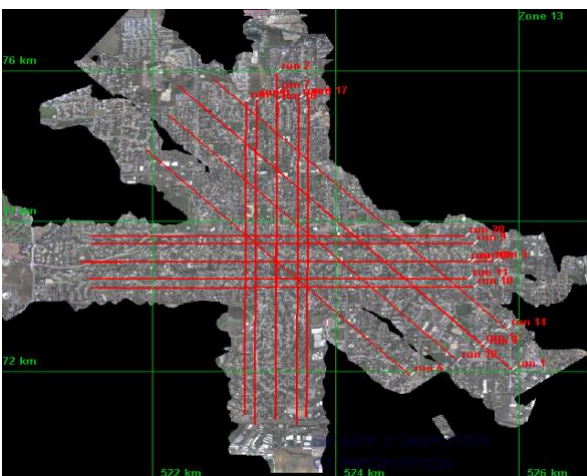
Total number of lines flown: 20

Flight Screenshots

Lidar B10E



NIS B10E



Pictures: Payload 1 passes in the distance during today’s calibration flights



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: 100% (20/20)
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|R10D (Boulder Airport Radiometric Calibration)

1	2	3	4	5
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Flown: 100% (5/5)
Green: 100% (5/5)
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: 100% (2/2)

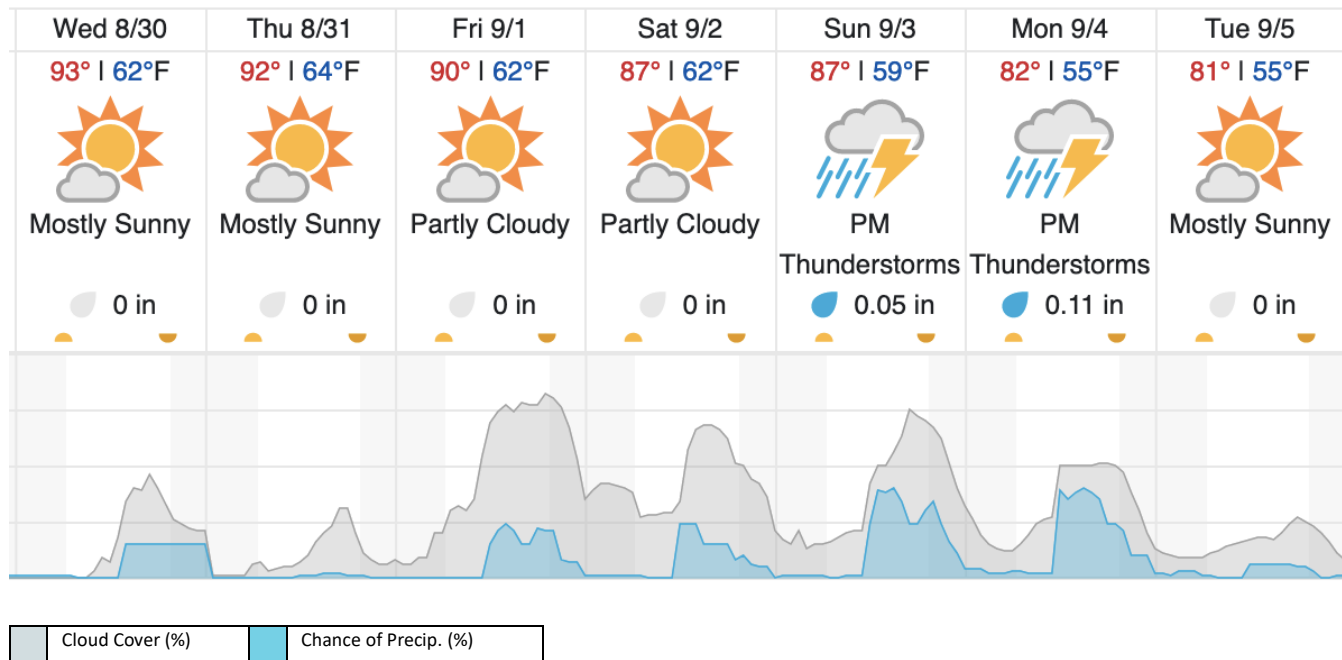
Green: 0% (0/2)

Yellow: 0% (0/2)

Red: 100% (2/2)

Weather Forecast

Boulder, CO



source: wunderground.com

Flight Collection Plan for 30 August 2023

Flyority 1

Collection Area: Rocky Mountain National Park (RMNP)

Flight Plan Name: D10_RMNP_R2_P1_v2_Q780

On-Station Time: 16:00 UTC / 10:00 L

Flyority 2

Collection Area: Nominal Runway Survey Flight Plan

Name: D10_N10F_Nominal_Rnwy_v11_PRM

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

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

Flight Crew

Mike (Lidar), NIS (NIS), Cam (Ground)