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
Spectrometer Operators: Mike
Pilots: Justin, Will
Ground Crew: Mitch

Flight Hours: 02:14
Hours until maintenance: 69.90
GPS Instruments: AOP_KBDU, S-COSG

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

D00|R10D

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Total number of lines flown: 5
D00|B10E

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Total number of lines flown: 20

**Flight Screenshots**

Lidar B10E

![Lidar B10E](image1)

NIS B10E

![NIS B10E](image2)
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 |

Flown: 100% (20/20)
Green: 100% (20/20)
Yellow: 0% (0/20)
Red: 0% (0/20)

D00|H10C (NEON Headquarters Lidar Test - Riegl)

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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)

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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)
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)