



## Payload 3 Daily Flight Report



**Date:** 2022-04-16

**Flight Campaign ID:** P3C1

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

**Aircraft:** N70AR

**Domain:** 00 (Training & Calibration)

**Sites Flown:** B10E (Riegl Boresight Calibration - 1600m, 1000m, 500m)

**Days left in Domain:** 9

**Report Author:** Matt

**Lidar Operators:** Matt

**Spectrometer Operators:** Michael

**Pilots:** Nick , Magnus

**Adt'l Flight Crew:** Mitch

**Flight Hours:** 02:29

**Hours until maintenance:** 119.10

**GPS Instruments:** AOP\_KBDU, S-COGR

**Ground Crew:** Cameron , Elissa

### Summary

The crew completed the Riegl boresight calibration flight and additional training objectives.

### Comments

POS data successfully transferred to Midas SSD

### Daily Coverage

Estimated Cloud Cover Key

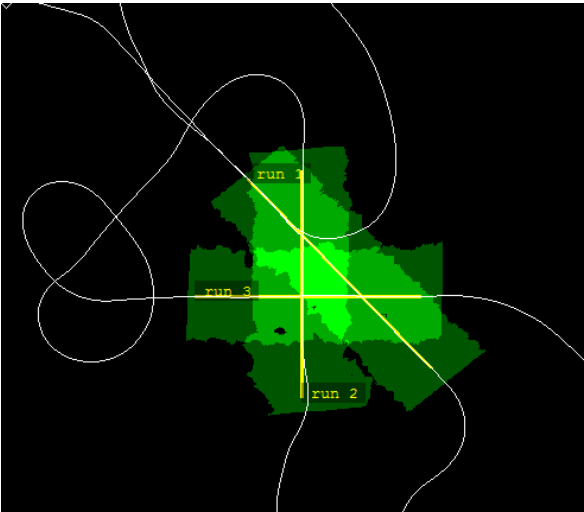
Green:	Yellow:	Red:
0-10%	11-50%	>50%

D00|B10E

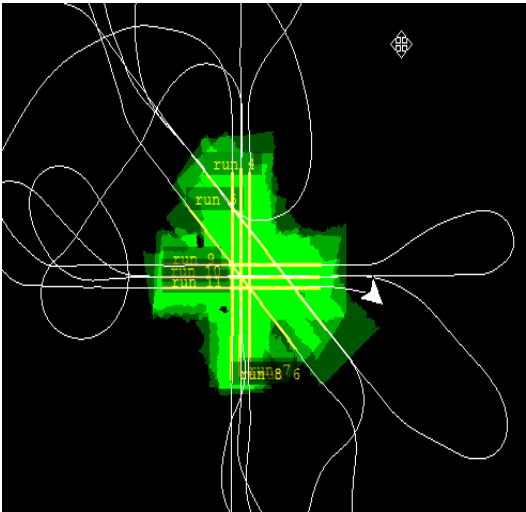
Line #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover																				

Total number of lines flown: 20

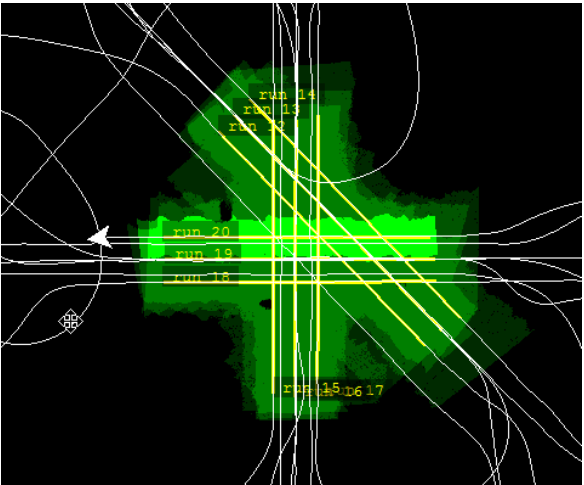
Flight Screenshots



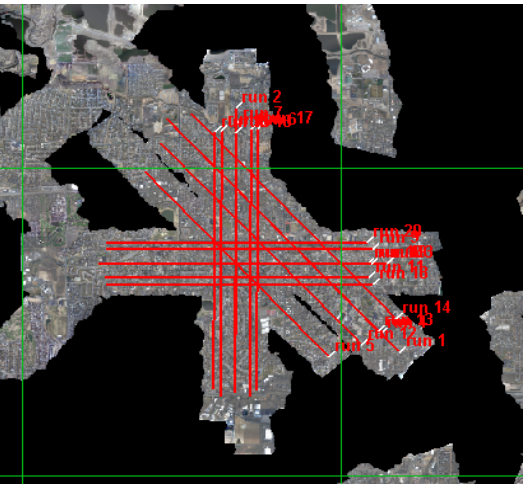
Riegl 1600m Boresight



Riegl 1000m Boresight



Riegl 500m Boresight



NIS Boresight

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

### 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: 86% (24/28)

Green: 0% (0/28)

Yellow: 11% (3/28)

Red: 75% (21/28)

### 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|W10C (Wiggle Timing Test - Riegl)

1	2
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Flown: 0% (0/2)

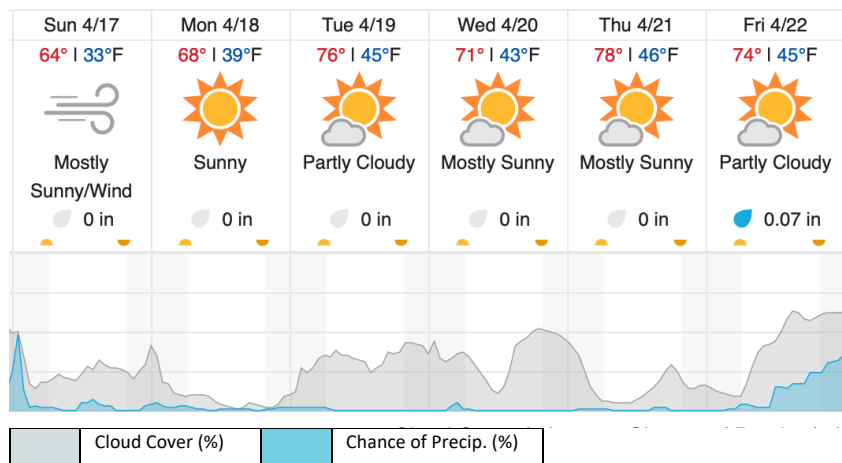
Green: 0% (0/2)

Yellow: 0% (0/2)

Red: 0% (0/2)

## Weather Forecast

### Boulder, CO



source: wunderground.com

## Flight Collection Plan for April 2022

### Flyority 1

Collection Area: Table Mountain Radiometric Calibration

Flight Plan Name: D10\_R10C\_Rad\_Cal\_TBMT\_v1\_Q780

45° On-station Time: 1640 UTC / 1040 L

40° On-station Time: 1610 UTC / 1010 L

Additional Considerations: Ground should be dry.

**Flyority 2**

Collection Area: Wiggle Timing Test

Flight Plan Name: D10\_W10C\_Wiggle\_Test\_v5\_Q780

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

**Flyority 4**

Collection Area: NEON HQ Lidar Validation

Flight Plan Name: D10\_H10C\_HQ\_LIDAR\_val\_v1\_Q780

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

**Flyority 5**

Collection Area: NIS Offset Flight

Flight Plan Name: D10\_O10B\_NIS\_Offset\_v2\_Q780

35° On-station Time: 1540 UTC / 0940 L

**Flight Crew:**

17 April 2022

TBD due to install of Payload 1