



### Payload 3 Daily Flight Report

**Date:** 2025-04-23

**Flight Campaign ID:** P3C1

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

**Aircraft:** N821AR

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

**Sites Flown:** V10C (Boulder City South)

**Days left in Domain:** 7

**Report Author:** Nick

**Lidar Operators:** Nick

**Flight Hours:** 00:41

**Spectrometer Operators:** Mitch

**Hours until maintenance:** 115.3

**Pilots:** Justin, Jeff

**GPS Instruments:** AOP\_KBDU

**Ground Crew:** Cam

#### **Summary**

The crew completed 4 training lines of the Boulder City South flight plan. Data will not be processed.

#### **Concerns**

The DCC crashed several times during the flight and will be replaced during downtime today.

The generators were adjusted while the TOIL technician was in for P2 installation. A short test flight was conducted to verify generator functions under payload load.

ASO training for P3 concluded with this flight. RadCal calibration flight is desired to be repeated in better weather conditions before departing to D03 on May 1<sup>st</sup>.

#### **Comments**

- Nick completed Lidar recertification

#### **Daily Coverage**

Estimated Cloud Cover Key

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

Solar Angle Less Than 40 degrees: (\*)

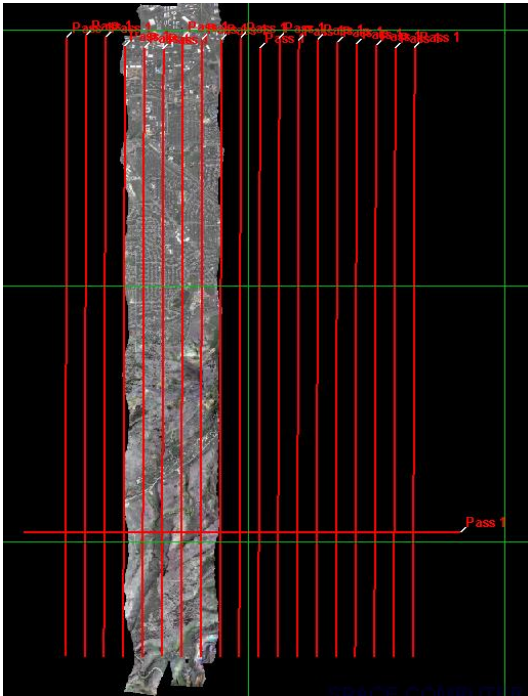
D00|V10C

Line #	12	13	14	15
Lidar	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓
Camera	✓	✓	✓	✓
Cloud Cover				

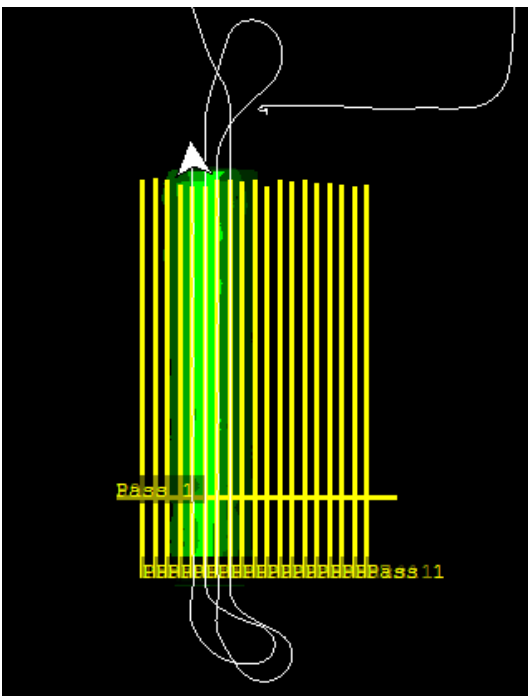
Total number of lines flown: 4

Flight Screenshots

NIS GeoPaint



Lidar Swath



Pictures

None

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: 85% (17/20)  
Red: 15% (3/20)  
\* Flown within 35deg solar angle

D00|H10C (NEON Headquarters Lidar Test - Riegl)

1	2	3	4
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Flown: 100% (4/4)  
Green: 0% (0/4)  
Yellow: 100% (4/4)  
Red: 0% (0/4)  
\* Flown within 35deg solar angle

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: 7% (2/28)  
Yellow: 68% (19/28)  
Red: 11% (3/28)  
\* Flown within 35deg solar angle

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)  
\* Flown within 35deg solar angle

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)  
\* Flown within 35deg solar angle

D00|R10D (Boulder Airport Radiometric Calibration)

1	2	3	4	5
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Flown: 100% (5/5)  
Green: 40% (2/5)  
Yellow: 60% (3/5)  
Red: 0% (0/5)  
\* Flown within 35deg solar angle

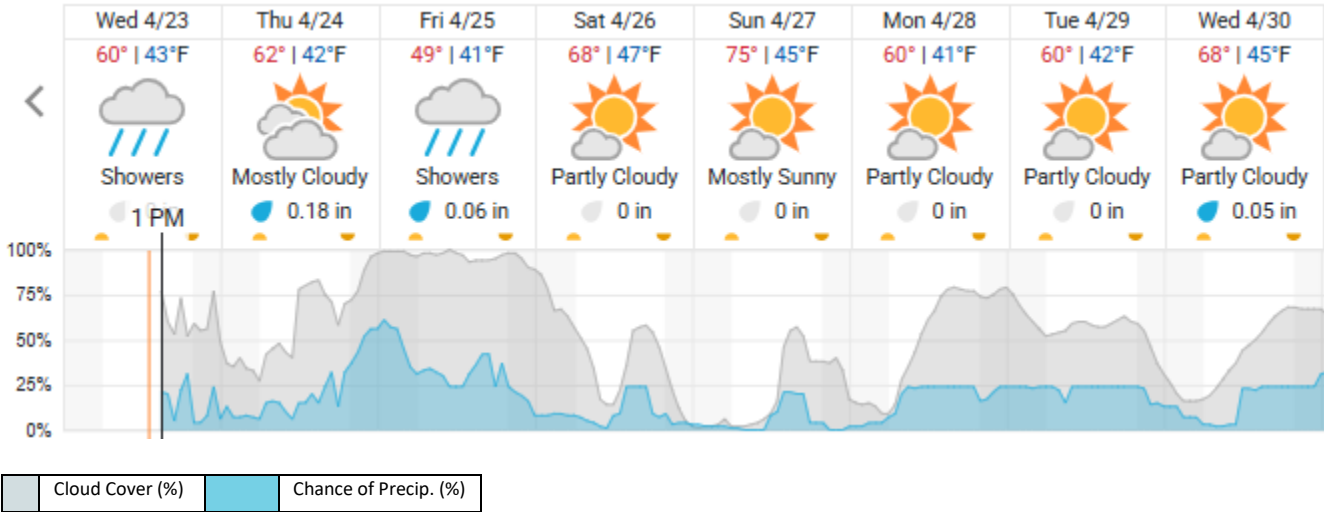
D00|W10C (Wiggle Timing Test - Riegl)

1	2
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Flown: 100% (2/2)  
Green: 0% (0/2)  
Yellow: 100% (2/2)  
Red: 0% (0/2)  
\* Flown within 35deg solar angle

Weather Forecast

Boulder, CO



source: wunderground.com

## **Flight Collection Plan for April 24, 2025**

### **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

Additional Considerations: Ground should be dry.

### **Flyority 2**

Collection Area: NIS Offset Flight

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

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

**Crew:** Cam (Lidar), Mike (NIS), Nick (Ground)