

# Payload 3 Daily Flight Report



Date: 2022-04-17

Flight Campaign ID: P3C1

Airport, FBO ID, City: Boulder Municipal Airport (KBDU) - Boulder, CO, Rocky Mountain Metropolitan Airport (KBJC) -

Broomfield, CO Aircraft: N70AR

**Domain**: 00 (Training & Calibration) **Sites Flown**: Transit (KBDU -> KBJC)

Days left in Domain: 8

Report Author: Mitch

**Lidar Operators**: Elissa Flight Hours: 00:13

Spectrometer Operators: Hours until maintenance: 118.88

Pilots: Nick, Magnus GPS Instruments: AOP\_KBDU

Adt'l Flight Crew: Mitch Ground Crew: Cameron, Abe

#### Summary

Interesting day for the payload 3 crew; with the second Otter arriving in Boulder this morning and planned installation of payload 1 into N331AR, the team had anticipated moving N70AR outside and parking on the tarmac, receiving power from the newly installed electrical flight line. However issues arose questioning the reliability of the electrical flight line to provide power overnight. After debating several options, it was decided to relocate to KBJC for the night in order to guarantee the system stays in survey state for tomorrow, which forecasts as a potential radiometric calibration day.

#### **Concerns**

Electrical contractor will be out to the hangar in the morning to troubleshoot.

#### Comments

The team debated conducting a calibration flight and/or recertification flight as part of the relocation to KBJC, however high winds forced us to abandon that prospect.

Pictures: It was a short but turbulent flight over to KBJC. Photo one of few taken by Mitch.



## **Cumulative Domain Coverage**

D00 | B10E (Riegl Boresight Calibration - 1600m, 1000m, 500m)

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

#### D00 | H10C (NEON Headquarters Lidar Test - Riegl)

1 2 3 4 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

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
Flow	n: (	)% (0	)/5)	

Green: 0% (0/5) 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)

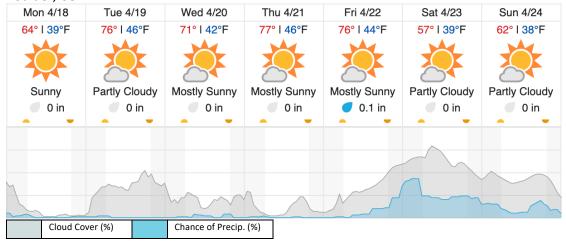
# D00 | W10C (Wiggle Timing Test - Riegl)

1 2

Flown: 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 18 April 2022

# Flyority 1

Collection Area: Table Mountain Radiometric Calibration Flight Plan Name: D10\_R10C\_Rad\_Cal\_TBMT\_v1\_Q780

 $45^{\circ}$  On-station Time: 1640 UTC / 1040 L  $40^{\circ}$  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 3

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 4

Collection Area: NIS Offset Flight

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

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

Flight Crew: Elissa (Lidar), Mitch (NIS), Cam (Trainer), Mike (Ground)