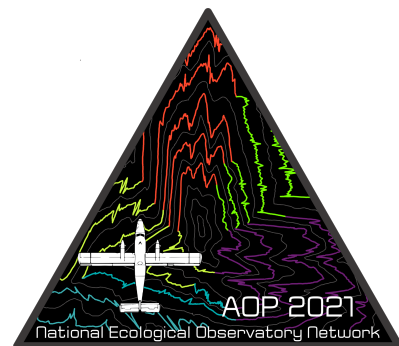




## Payload 1 Daily Flight Report



**Date:** 2021-04-02

**Flight Campaign ID:** P1C2

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

**Aircraft:** N331AR

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

**Sites Flown:** Boulder City

**Days left in Domain:** 26

**Report Author:** John Adler

**Lidar Operators:** John Adler / Abe Morrison

**Spectrometer Operators:** Abe Morrison / none

**Pilots:** Ashley Taylor, Scott Hayward

**Ground Crew:** John Adler, Robb Walker, Mike Wussow

**Flight Hours:** 01:03 / 01:04

**Hours until maintenance:** 0.00

**GPS Instruments:** AOP Hangar

### Summary

The initial training flights were completed for the new lidar system (Galaxy) for both John and Abe. The Galaxy checked out fine in all modes so far, and the digitizer was operating properly. There was an initial problem extracting the data into HK1, but Christian was able to fix the error(s). We have two new Twin Otter pilots (to NEON), who also were getting trained on flying the NEON flight line profiles.

### Concerns

The database was crashing for the second flight when the "ReCalc" button was utilized. We will check into this error tomorrow.

### Comments

Tomorrow we will attempt calibration flight(s), weather permitting.

### Cumulative Domain Coverage

D00|B10F (Complete Greeley Boresight Geocalibration - 1500m, 1000m, 550m - Galaxy)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----

Flown: 0% (0/20)

Green: 0% (0/20)

Yellow: 0% (0/20)

Red: 0% (0/20)

D00|BLKF (Black Forest Waveform Range Test - Galaxy)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----

21

Flown: 0% (0/21)

Green: 0% (0/21)

Yellow: 0% (0/21)

Red: 0% (0/21)

D00|H10D (NEON Headquarters Lidar Validation - Galaxy)

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|N10F (Nominal Runway at KBDU - Galaxy)

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	30	31	32	33	34	35					

Flown: 0% (0/35)

Green: 0% (0/35)

Yellow: 0% (0/35)

Red: 0% (0/35)

D00|O10C (NIS Offset - Galaxy)

1	2
---	---

Flown: 0% (0/2)

Green: 0% (0/2)

Yellow: 0% (0/2)

Red: 0% (0/2)

D00|R10E (Table Mountain Radiometric Calibration - Galaxy)

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|V10F (Boulder City Nominal - Galaxy)

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|W10D (Wiggle Timing Test - Galaxy)

1	2
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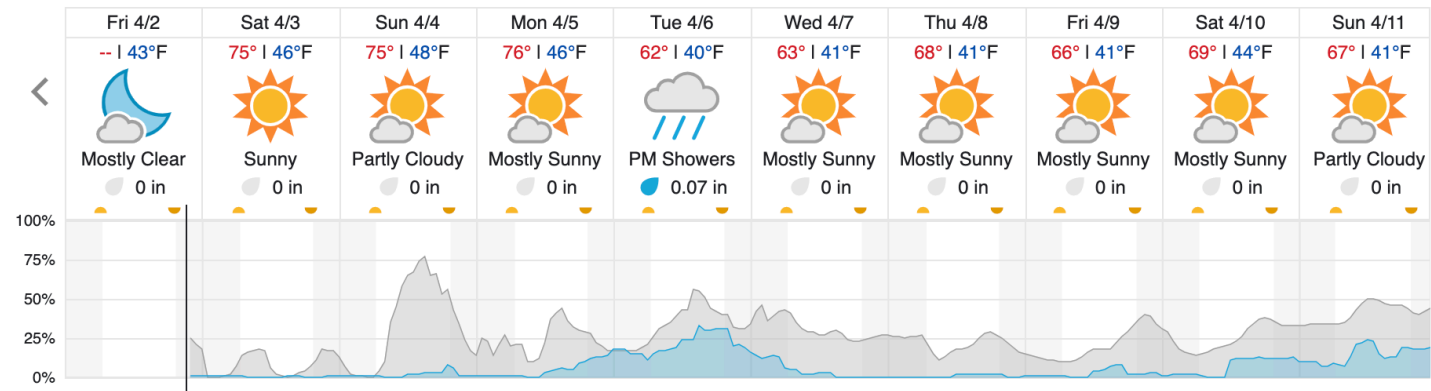
Flown: 0% (0/2)

Green: 0% (0/2)

Yellow: 0% (0/2)

Red: 0% (0/2)

Weather Forecast  
Boulder, CO



	Cloud Cover (%)	Chance of Precip. (%)
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source: wunderground.com

## Flight Collection Plan for 3 April 2021

### Flyority 1

Collection Area: [Functional Checkout Flight] -- Nominal Runway Survey Flight Plan

Name: D10\_N10F\_Nominal\_Rnwy\_v9\_PRM.xml

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

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

### Flyority 2

Collection Area: Wiggle Timing Test

Name: D10\_W10D\_Wiggle\_Test\_v5\_PRM.xml

On-Station Time: 1630 UTC / 1030 L

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

### Flyority 3

Collection Area: Table Mountain Radiometric Calibration

Flight Plan Name: D10\_R10E\_Radiometric\_Cal\_Table\_Mtn\_v1\_PRM.xml

On-station Time: 1710 UTC / 1110 L

Additional Considerations: Ground should be dry.

### Flyority 4

Collection Area: Boresight Calibration – Greeley, CO

Flight Plan Name: D10\_B10F\_Boresight\_Geocal\_v8\_PRM.xml

On-station Time: 1530 UTC / 0930 L

Additional Considerations: No recent snowfall, clear roofs required.

### Flyority 5

Collection Area: Black Forest Waveform Range Test Flight

Flight Plan Name: D10\_B10F\_Black\_Forest\_v3\_PRM.xml

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

Additional Considerations: Snow on ground / trees okay.

### Flyority 6

Collection Area: NEON HQ Lidar Validation

Flight Plan Name: D10\_H10D\_HQ\_LIDAR\_validation\_v1\_PRM.xml

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

Additional Considerations: Snow on ground okay.

### Flyority 7

Collection Area: NIS Offset Flight

Flight Plan Name: D10\_O10C\_NIS\_Offset\_v2\_PRM.xml

On-station Time: 1600 UTC / 1000 L

Flight Crew: Matt, Abe, Robb

Ground: Bridget, John