

## Payload 1 Daily Flight Report



Date: 2021-04-07

Flight Campaign ID: P1C2

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

Aircraft: N331AR

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

Sites Flown: N10F (Nominal Runway at KBDU - Galaxy), V10F (Boulder City Nominal Training Flight)

Days left in Domain: 22

Report Author: Robb Walker

**Lidar Operators**: Robb Walker **Flight Hours**: 00:55, 00:46

**Spectrometer Operators**: Michael Wussow **Hours until maintenance**: 111.08 **Pilots**: Ashley Taylor, Scott Hayward **GPS Instruments**: AOP\_KBDU

Adt'l Flight Crew: John Adler Ground Crew: Matt Devoe, Abe Morrison

#### **Summary**

Clouds parted this morning allowing crew to get back in the air and complete training flights, but high forecast winds aloft and crosswinds at KBDU prevented Nominal Runway from being completed.

#### Concerns

None

## Comments

- Team B will take over calibration and training flights Thursday. Crew handoff in the morning.
- Calibration flights completed are being re-extracted as Hale and Andrew work through some last hotel kit code issues.
- Flight crew pleased with pilot display mounting modifications and especially increase in brightness. Thanks Abe/Matt!
- Robb Walker certified on Galaxy Lidar system.

#### **Daily Coverage**

**Estimated Cloud Cover Key** 

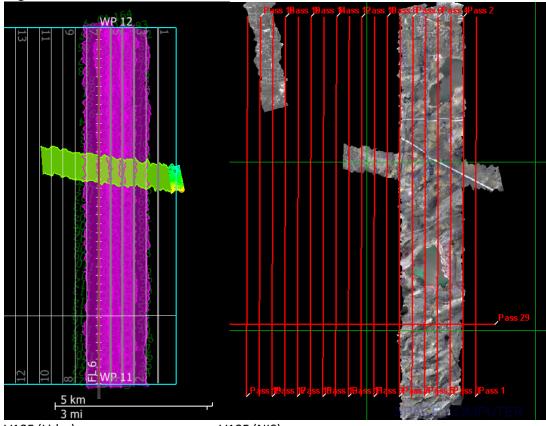
Green:	Yellow:	Red:
0-10%	11-50%	>50%

## D00|N10F

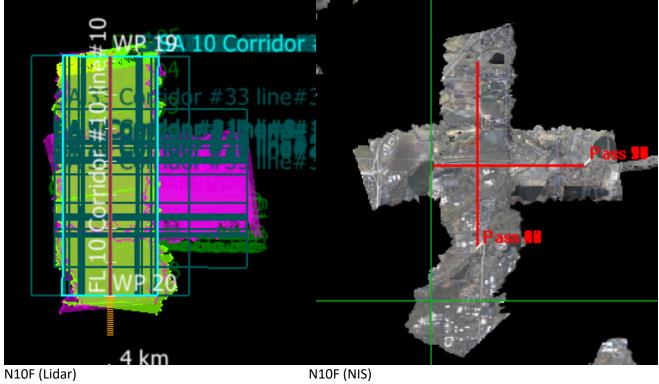
Line #	5	6	7	8	9	10
Lidar	✓	✓	✓	✓	✓	✓
Spectrometer	✓	<b>√</b>	<b>√</b>	<b>√</b>	✓	<b>√</b>
Camera	✓	✓	✓	✓	✓	<b>√</b>
Cloud Cover						

Total number of lines flown: 6

**Flight Screenshots** 



V10F (Lidar) V10F (NIS)



### **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: 100% (20/20) Green: 100% (20/20) 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	- 2	200   BEIN (Black Forest Waverollin Hange Fest Galaky)																			
		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

Flown: 100% (4/4) Green: 100% (4/4) 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: 43% (15/35) Green: 0% (0/35) Yellow: 0% (0/35) Red: 43% (15/35)

### 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

Flown: 100% (5/5) Green: 100% (5/5) Yellow: 0% (0/5) Red: 0% (0/5)

#### D00 V10F (Boulder City Nominal - Galaxy)

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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											

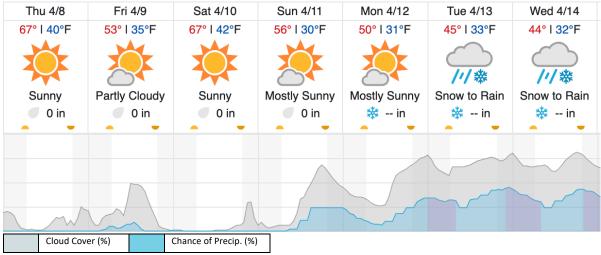
Flown: 34% (10/29) Green: 14% (4/29) Yellow: 0% (0/29) Red: 21% (6/29)

### D00 | W10D (Wiggle Timing Test - Galaxy)

1 2

Flown: 100% (2/2) Green: 100% (2/2) Yellow: 0% (0/2) Red: 0% (0/2)

#### **Weather Forecast**



source: wunderground.com

# Flight Collection Plan for 8 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: Black Forest Waveform Range Test Flight Flight Plan Name: D10\_BLKF\_Black\_Forest\_v3\_PRM.xml On-station Time: Daylight – No solar angle restrictions. Additional Considerations: Snow on ground / trees okay.

Flyority 3

Collection Area: NIS Offset Flight

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

On-station Time: 1600 UTC / 1000 L

Crew: Nick, Cam, Elissa, Matt,