



Payload 1 Daily Flight Report



**Date:** 2026-05-02  
**Flight Campaign ID:** P1C1  
**Airport, FBO ID, City:** Boulder Municipal Airport (KBDU) - Boulder, CO  
**Aircraft:** N537AR

**Domain:** 00 (Training & Calibration)  
**Sites Flown:** R10F (Boulder Airport Radiometric Calibration), W10D (Wiggle Timing Test), H10D (HQ Lidar Validation), B10F (Complete Greeley Boresight Geocalibration)  
**Days left in Domain:** 9

**Report Author:** Elissa  
**Lidar Operators:** Elissa/Matt      **Flight Hours:** 01:46  
**Spectrometer Operators:** Matt/Mike      **Hours until maintenance:** 120.90  
**Pilots:** Manning, Rusty      **GPS Instruments:** AOP\_KBDU, S-COZY  
**Ground Crew:** Nick

**Summary**

Skies stayed clear throughout the solar window, allowing for the completion of two Rad Cal collections (40 and 45 degree solar elevation), the Wiggle Timing Test, and Lidar Validation. This was followed by a crew rotation and completion of the Greeley Boresight geocalibration.

**Concerns**

None.

**Comments**

Galaxy certifications completed:

- Elissa
- Matt

**Daily Coverage**

Estimated Cloud Cover Key

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

Solar Angle Less Than 40 degrees: (\*)

D00 | R10F

| Line #       | 1 | 2 | 3 | 4 | 5 |
|--------------|---|---|---|---|---|
| Lidar        | ✓ | ✓ | ✓ | ✓ | ✓ |
| Spectrometer | ✓ | ✓ | ✓ | ✓ | ✓ |
| Camera       | ✓ | ✓ | ✓ | ✓ | ✓ |
| Cloud Cover  |   |   |   |   |   |

Total number of lines flown: 10

D00 | W10D

|              |   |   |
|--------------|---|---|
| Line #       | 1 | 2 |
| Lidar        | ✓ | ✓ |
| Spectrometer | ✓ | ✓ |
| Camera       | ✓ | ✓ |
| Cloud Cover  |   |   |

Total number of lines flown: 2

D00 | H10D

|              |   |   |   |   |
|--------------|---|---|---|---|
| Line #       | 1 | 2 | 3 | 4 |
| Lidar        | ✓ | ✓ | ✓ | ✓ |
| Spectrometer | ✓ | ✓ | ✓ | ✓ |
| Camera       | ✓ | ✓ | ✓ | ✓ |
| Cloud Cover  |   |   |   |   |

Total number of lines flown: 4

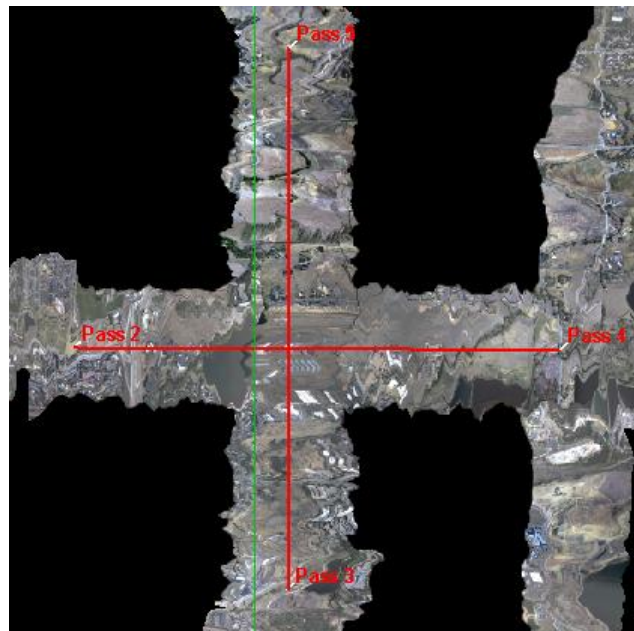
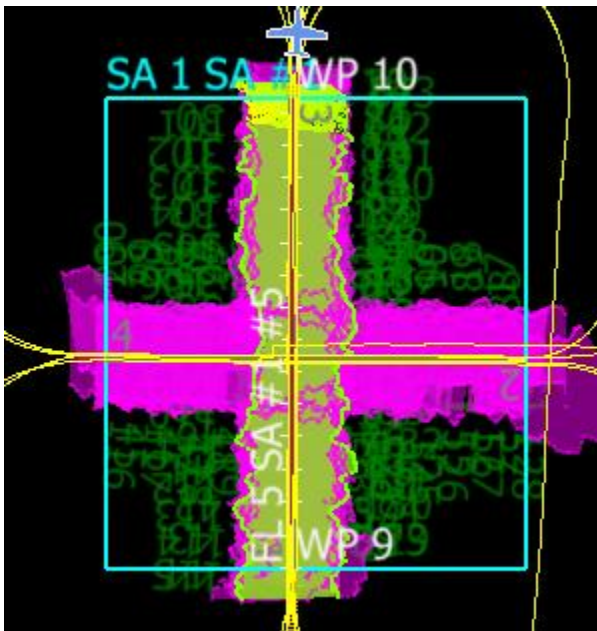
D00|B10F

|              |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |
|--------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|---|
| 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  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |   |

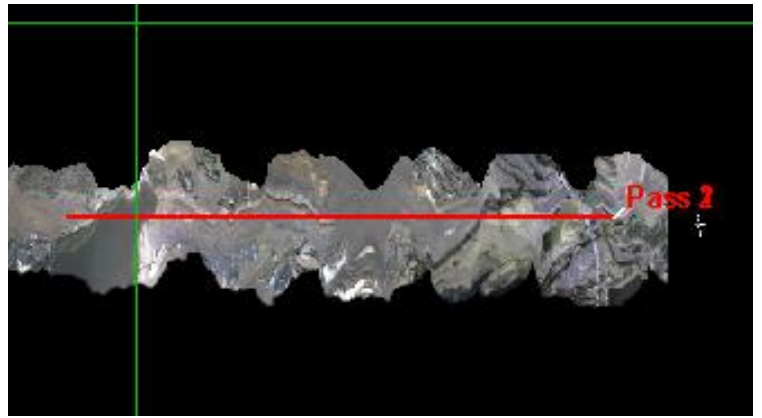
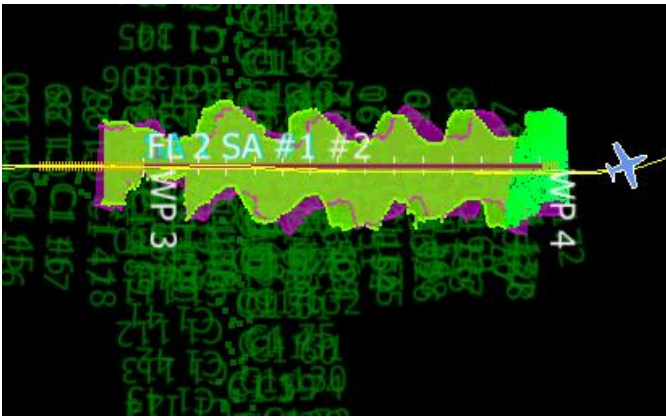
Total number of lines flown: 20

Flight Screenshots

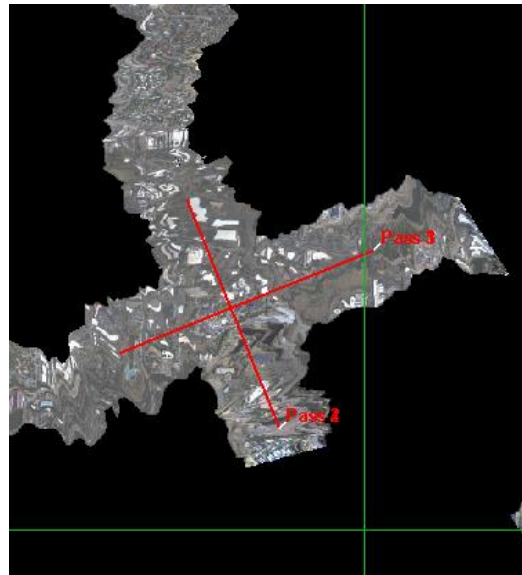
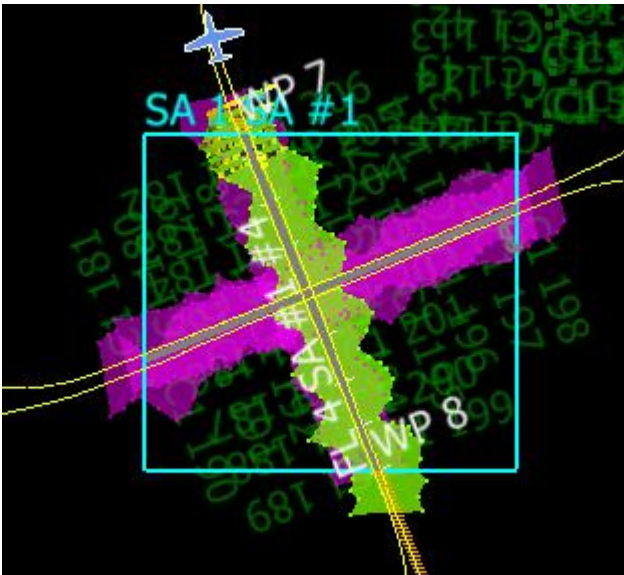
R10F



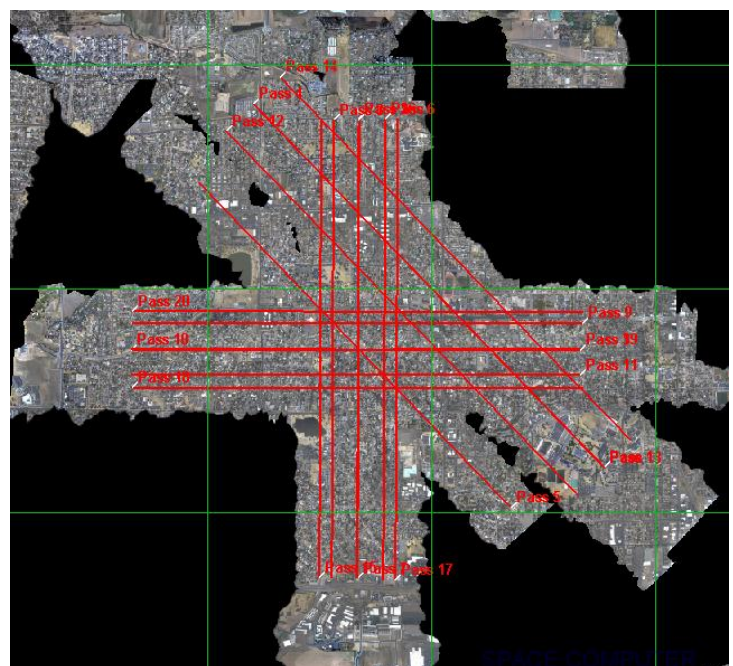
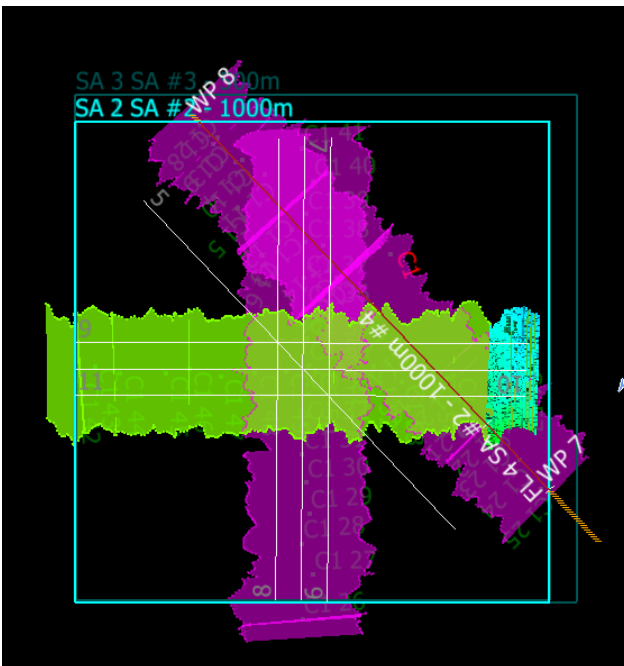
W10D



H10D



B10E



## 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)

\* Flown within 35deg solar angle

### 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)

\* Flown within 35deg solar angle

### 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 | 36 | 37 |    |    |    |  |

Flown: 0% (0/37)

Green: 0% (0/37)

Yellow: 0% (0/37)

Red: 0% (0/37)

\* Flown within 35deg solar angle

### D00|R10F (Boulder Airport Radiometric Calibration - Galaxy)

|   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

Flown: 100% (5/5)

Green: 100% (5/5)

Yellow: 0% (0/5)

Red: 0% (0/5)

\* Flown within 35deg solar angle

### 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)

\* Flown within 35deg solar angle

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

|   |   |
|---|---|
| 1 | 2 |
|---|---|

Flown: 100% (2/2)

Green: 100% (2/2)

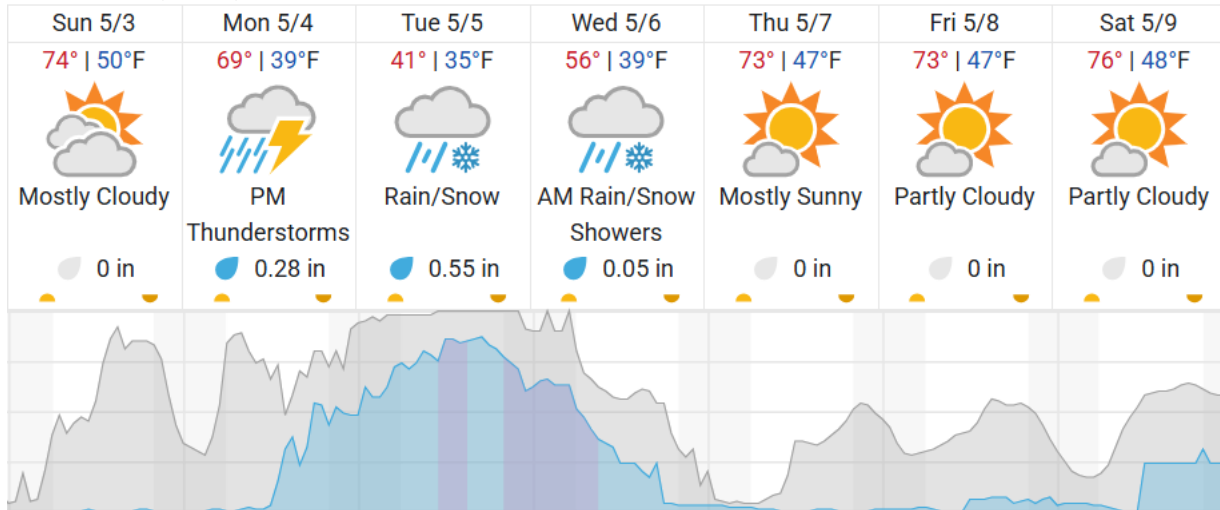
Yellow: 0% (0/2)

Red: 0% (0/2)

\* Flown within 35deg solar angle

## Weather Forecast

Boulder, CO (KBDU)



|                 |                       |
|-----------------|-----------------------|
| Cloud Cover (%) | Chance of Precip. (%) |
|-----------------|-----------------------|

source: wunderground.com

## Flight Collection Plan for 3 May 2026

### Flyority 1

Collection Area: Nominal Runway Survey Flight Plan

Name: D10\_N10F\_Nominal\_Rnwy\_v12\_PRM

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

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

### Flyority 2

Collection Area: Boulder City Nominal Science Flight

Flight Plan Name: D10\_V10F\_Boulder\_City\_v11\_PRM

On-Station Time: 1540 UTC / 0940 L

**Crew 1:** Mike (Lidar), Nick (NIS), Matt (Ground)

**Crew 2:** Elissa (Lidar), Matt (NIS), Mike (Ground)