

Payload 1 Daily Flight Report



Date: 2023-04-06

Flight Campaign ID: P1C1

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

Aircraft: N331AR

Domain: 00 (Training & Calibration)

Sites Flown: Transit, R10F (Boulder Airport Radiometric Calibration - Galaxy)

Days left in Domain: 8

Report Author: Cameron

Lidar Operators: Nick Flight Hours: 02:22, 00:40

Spectrometer Operators: Cameron **Hours until maintenance**: 97.70 **Pilots**: Jeff, Will **GPS Instruments**: AOP_KBDU

Ground Crew: Mike

Summary

Payload 1 completed the transit from D17 this morning. The flight crew was greeted with clear skies in Boulder. We completed the Radiometric Calibration flight in "Green" sky conditions.

Concerns

- None

Comments

- Nick completed P1 Lidar Recertification

Daily Coverage

Estimated Cloud Cover Key

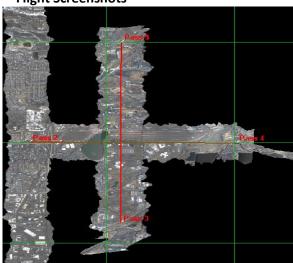
| Green: | Yellow: | Red: | | | | | | | | | | |
|--------|---------|------|--|--|--|--|--|--|--|--|--|--|
| 0-10% | 11-50% | >50% | | | | | | | | | | |

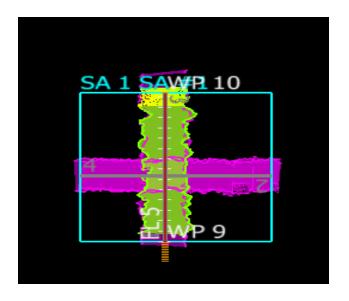
D00|R10F

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

Total number of lines flown: 5

Flight Screenshots





Pictures



Above: The traps used for the radiometric calibration were deployed at KBDU and can be seen on the tarmac Below: A beautiful view of the front range.



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: 0% (0/20) Yellow: 75% (15/20) Red: 25% (5/20)

D00 | H10D (NEON Headquarters Lidar Validation - Galaxy)

1 | 2 | 3 | 4 Flown: 100% (4/4) Green: 0% (0/4)

Green: 0% (0/4) Yellow: 0% (0/4) Red: 100% (4/4)

D00|N10F (Nominal Runway at KBDU - Galaxy)

| Boo 11201 (110111111a) Railway at RBBO | | | | | | | | | Gaia | ` ' / / | | | | | | | | | | |
|--|----|----|----|----|----|----|----|----|------|---------|----|----|----|----|----|----|----|----|----|----|
| | 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: 100% (37/37) Green: 14% (5/37) Yellow: 86% (32/37) Red: 0% (0/37)

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)

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

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)

D00 | V10F ()

| 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 | | | | | | | | | | | |

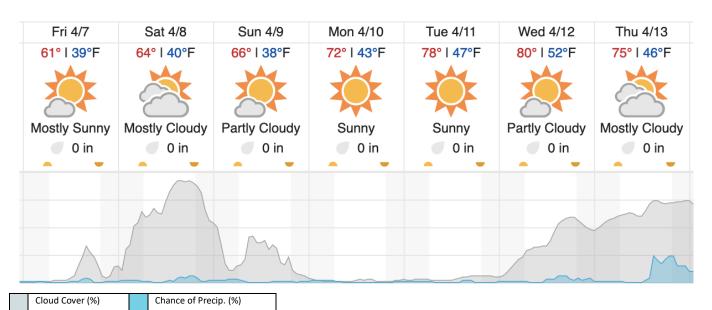
Flown: 14% (4/29) Green: 0% (0/29) Yellow: 14% (4/29) Red: 0% (0/29)

D00 | W10D (Wiggle Timing Test - Galaxy)

1 2

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

Weather Forecast



source: wunderground.com

Flight Collection Plan for 7 April 2023

Flyority 1

Collection Area: NIS Offset Flight

Flight Plan Name: D10_O10C_NIS_Offset_v2_PRM.xml

35° On-station Time: 1620 UTC / 1030 L

Flight Crew

Mike (Lidar), Mitch (NIS), Abe (Ground)