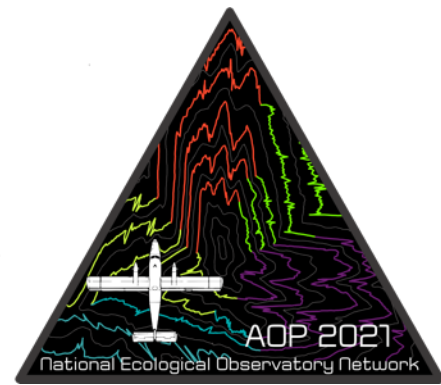




## Payload 3 Daily Flight Report



**Date:** 2021-03-28

**Flight Campaign ID:** P3C1

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

**Aircraft:** N615AR

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

**Sites Flown:** None

**Days left in Domain:** 1

**Report Author:** Michael Wussow

**Lidar Operators:** Michael Wussow

**Spectrometer Operators:** John Adler

**Pilots:** Justin Eddington, Stephen Brawders

**Ground Crew:** Matt Devoe, Robb Walker

**Flight Hours:** 00:00

**Hours until maintenance:** 110.80

**GPS Instruments:** AOP\_KBDU, U-CHLL

### Summary

Unfortunately, clear skies did not materialize today, and conditions were insufficient to attempt the Radiometric Calibration flight or the NIS-Offset flight. Crew pulled out the aircraft this morning in case data from yesterday's Greeley Boresight flight was found to be corrupted. After coordination and efforts with the Science Team, the data was able to be properly extracted and looked intact. A second Greeley Boresight was determined to be unnecessary.

The forecast is positive for sunny skies tomorrow although winds are forecast to be high. If there are clear skies, a Radiometric Cal flight will be performed prior to departure to D17. The crew desires to depart Boulder before inclement weather moves in late afternoon Monday through Tuesday.

### Concerns

- There was trouble extracting the Greeley Boresight data from yesterday initially, and the root cause is still undetermined. The suspected culprits are the Lab 3 disk set firmware/read issues, an extraction error-check code issue, and/or a midas box copy/write issue. The crew will not use this disk set again and will watch for similar errors. Bridget found and corrected the extraction error-code check issue, which helped execute a full data extraction.

### Comments

- All issues have been detailed the in crew-hand off document and pasdown log items will be entered as necessary. A handoff brief will occur tomorrow morning.

### Daily Coverage

Estimated Cloud Cover Key

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

## Flight Screenshots

None

## Pictures

None

## Cumulative Domain Coverage

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

|   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
| 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: 100% (20/20)

Red: 0% (0/20)

D00|H10C (NEON Headquarters Lidar Test - Riegl)

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

Flown: 100% (4/4)

Green: 0% (0/4)

Yellow: 0% (0/4)

Red: 100% (4/4)

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: 46% (13/28)

Yellow: 0% (0/28)

Red: 39% (11/28)

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

Flown: 0% (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: 31% (9/29)

Green: 0% (0/29)

Yellow: 0% (0/29)

Red: 31% (9/29)

D00|W10C (Wiggle Timing Test - Riegl)

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

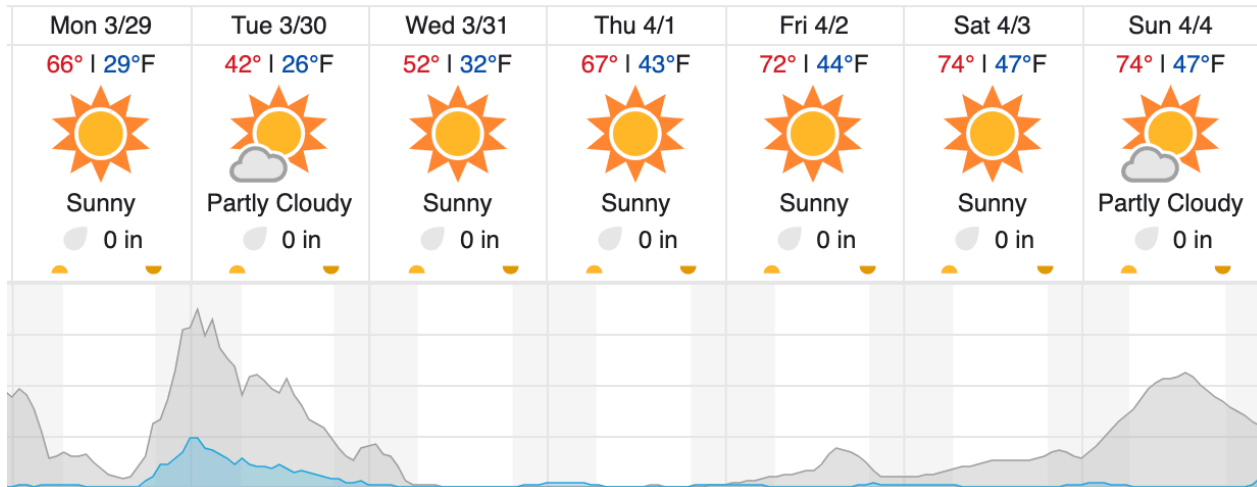
Flown: 100% (2/2)

Green: 100% (2/2)

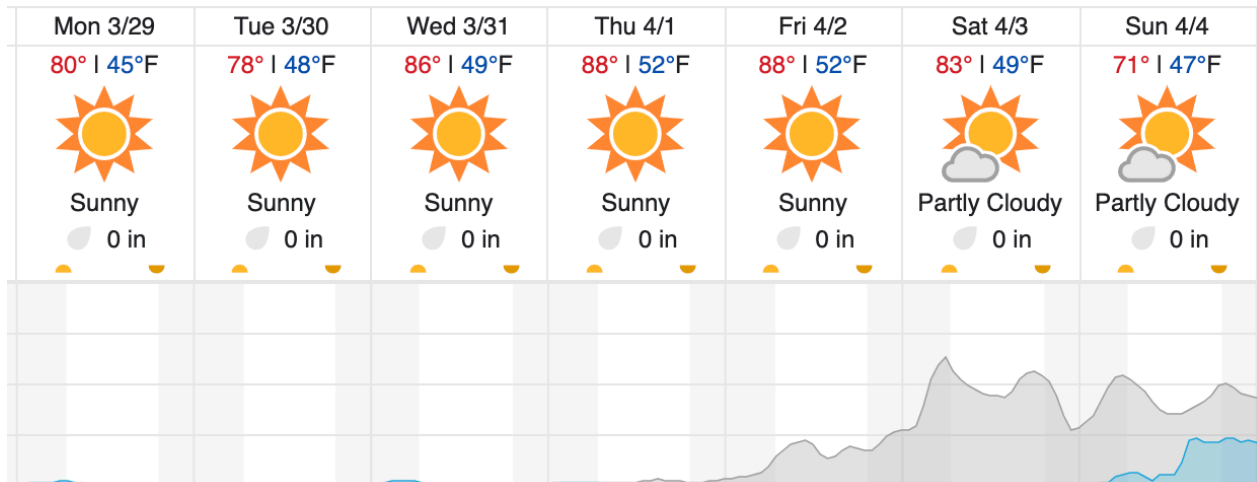
Yellow: 0% (0/2)

Red: 0% (0/2)

**Weather Forecast**  
**Boulder, CO**



**Fresno, CA**



source: wunderground.com

**Flight Collection Plan for March 28th, 2021**

Flyority 1

Collection Area: Table Mountain Radiometric Calibration – Boulder Airport

Flight Plan Name: D10\_R10C\_Rad\_Cal\_TBMT\_v1\_Q780

On-station Time: 1700 UTC / 1100 L

Additional Considerations: Ground should be dry.

Flyority 2

Collection Area: NIS Offset Flight

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

On-station Time: 1630 UTC / 1030 L

Calibration Flight Crew: Mike, John, Robb, Matt, Bridget

Transit Crew: Ivana, Mitch, Matt (Ground)