



Payload 2 Daily Flight Report

**Date:** 2026-03-21  
**Flight Campaign ID:** P2C1  
**Airport, FBO ID, City:** Boulder Municipal Airport (KBDU) - Boulder, CO  
**Aircraft:** N821AR

**Domain:** 00 (Training & Calibration)  
**Sites Flown:** N10D  
**Days left in Domain:** 14

**Report Author:** Alyssa  
**Lidar Operators:** Alyssa                      **Flight Hours:** 01:29  
**Spectrometer Operators:** Mitch           **Hours until maintenance:** 119.65  
**Pilots:** Justin, Manning                      **GPS Instruments:** AOP\_KBDU  
**Ground Crew:** Mike, Elissa

**Summary**

Due to the high stratus layer, crew decided to fly Nominal Runway. Training flight for Mitch & Alyssa.

**Concerns**

Monopod & bipod temperature sensors in the NIS reading 505K, suspected to be erroneous. FPA and backplate still showing in-spec values. Mark & Brendan have been alerted and are looking into it.

**Comments**

Lidar disks drives were not what they should be when loaded (camera was the USB), POS data began being loaded onto camera disk. Disks were renamed during formatting steps, and it seemed to fix the issue. Checklist has been updated to include a check for this.

**Daily Coverage**

Estimated Cloud Cover Key

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

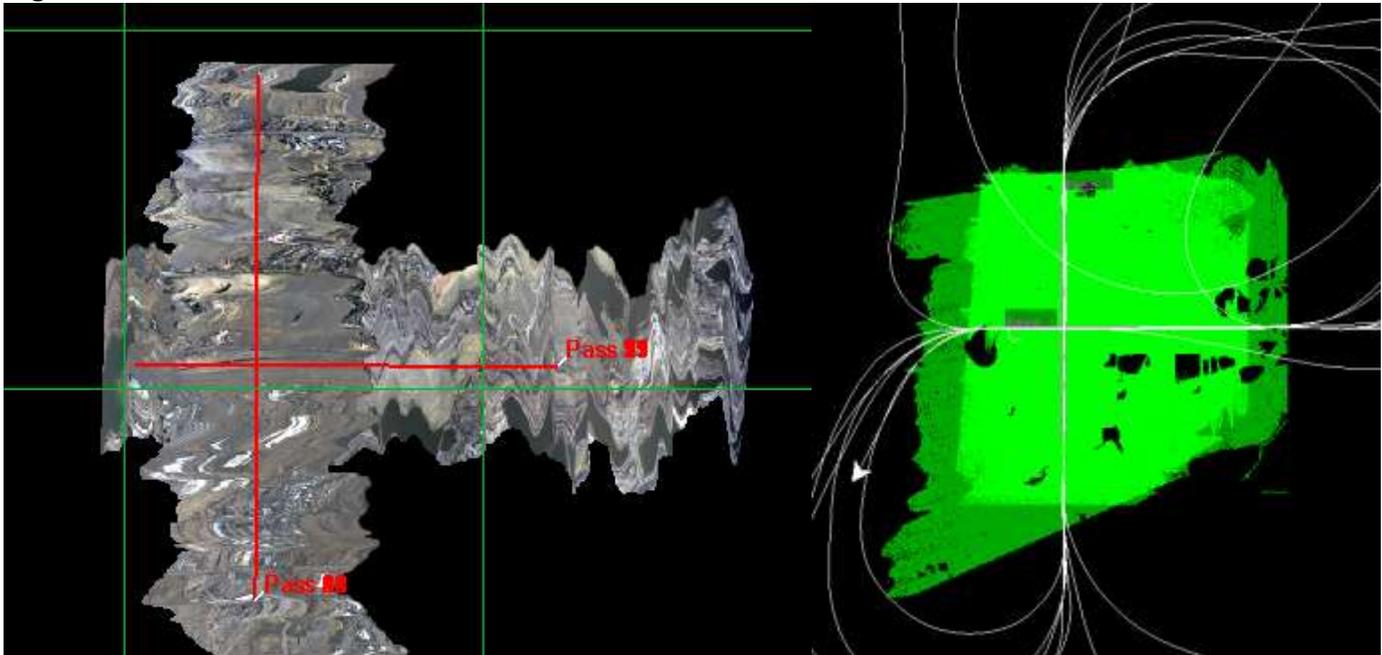
Solar Angle Less Than 40 degrees: (\*)

D10|N10D

Line #	1	2	3	4	5	6	7	8	9	10	11	21	22
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover													

Total number of lines flown: 13

## Flight Screenshots



NIS

Lidar

## Pictures



Issue with the temperature sensors in the NIS

## 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: 5% (1/20)

Green: 5% (1/20)

Yellow: 0% (0/20)

Red: 0% (0/20)

\* Flown within 35deg solar angle

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
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Flown: 0% (0/21)

Green: 0% (0/21)

Yellow: 0% (0/21)

Red: 0% (0/21)

\* Flown within 35deg solar angle

#### D00|O10B (NIS Offset - Riegl)

1	2
---	---

Flown: 0% (0/2)

Green: 0% (0/2)

Yellow: 0% (0/2)

Red: 0% (0/2)

\* Flown within 35deg solar angle

#### 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)

\* Flown within 35deg solar angle

#### 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
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Flown: 0% (0/22)

Green: 0% (0/22)

Yellow: 0% (0/22)

Red: 0% (0/22)

\* Flown within 35deg solar angle

#### D00|V10D (Boulder City West - 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
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Flown: 0% (0/25)

Green: 0% (0/25)

Yellow: 0% (0/25)

Red: 0% (0/25)

\* Flown within 35deg solar angle

#### D10|ARIK (Arikaree River)

3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
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23	24	25	26	27	28	29	30	31	32	33	34	35
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Flown: 0% (0/33)

Green: 0% (0/33)

Yellow: 0% (0/33)

Red: 0% (0/33)

\* Flown within 35deg solar angle

#### D10|H10C ()

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

### D10|N10D ()

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														

Flown: 50% (13/26)

Green: 0% (0/26)

Yellow: 38% (10/26)

Red: 12% (3/26)

\* Flown within 35deg solar angle

### D10|R10D (Boulder Airport Radiometric Calibration)

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

### D10|RMNP (Rocky Mountain National Park)

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	38	39	40	

Flown: 0% (0/39)

Green: 0% (0/39)

Yellow: 0% (0/39)

Red: 0% (0/39)

\* Flown within 35deg solar angle

### D10|STER (Sterling Agricultural Site)

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															

Flown: 0% (0/25)

Green: 0% (0/25)

Yellow: 0% (0/25)

Red: 0% (0/25)

\* Flown within 35deg solar angle

### D10|W10C ()

1	2
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Flown: 100% (2/2)

Green: 100% (2/2)

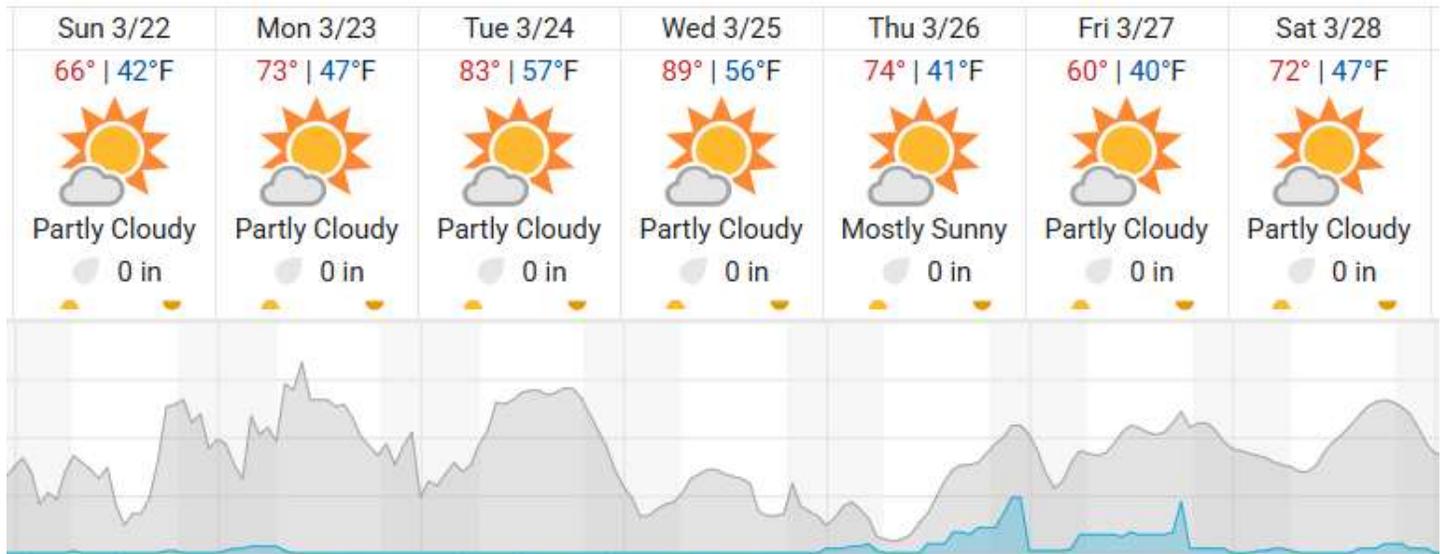
Yellow: 0% (0/2)

Red: 0% (0/2)

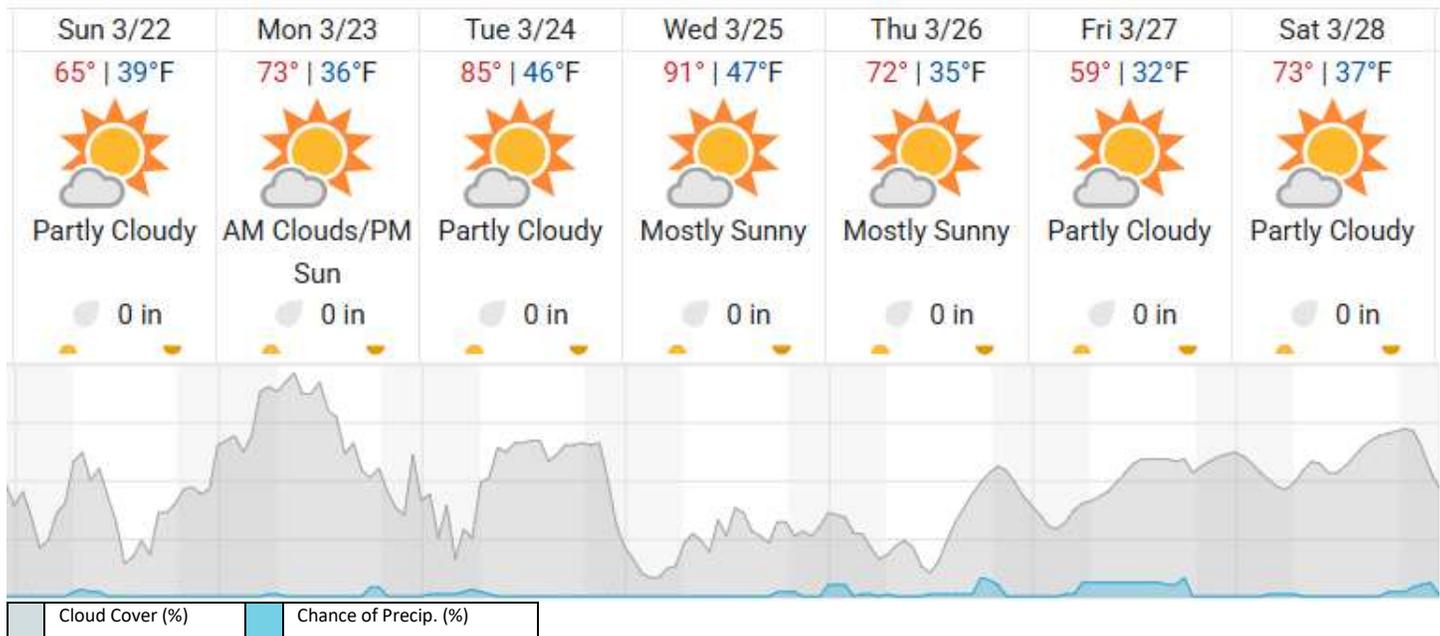
\* Flown within 35deg solar angle

## Weather Forecast

Boulder, CO (KBDU)



Greeley, CO (B10E)



source: wunderground.com

## Flight Collection Plan for March 2026

### Flyority 1

Collection Area: Boresight Calibration – Greeley, CO

Flight Plan Name: D10\_B10E\_Boresight\_1600m\_Q780 (RiAcquire name: D10\_B10E\_Boresight\_Apx\_VQ780)

30o On-station Time: 1600 UTC / 1000 L

Additional Considerations: No recent snowfall, clear roofs required.

### Flyority 2

Collection Area: Nominal Runway Survey Flight Plan (lines 12-20, 23-26)

Name: D10\_N10D\_Nominal\_Rnwy\_v13\_Q780

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

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

**Flyority 3**

Collection Area: NIS Offset Flight

Flight Plan Name: D10\_O10B\_NIS\_Offset\_v4\_Q780

35o On-station Time: 1630 UTC / 1030 L

**Flyority 4**

Collection Area: Boulder City Nominal Science Flight

Flight Plan Name: D10\_V10C\_East\_v13\_VQ780 (lines 1-22, 29)/D10\_V10C\_West\_v13\_VQ780 (lines 23-28, 29)

(RiAcquire file is D10\_V10C\_East\_West\_v13\_VQ780.rpp)

On-Station Time: 1700 UTC / 1100 L

**Crew:** Mitch (**Lidar**), Mike (**NIS**), Elissa, Alyssa (**Ground**)