



Payload 1 Daily Flight Report



Date: 2022-11-20

Flight Campaign ID: P1C1

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

Aircraft: N331AR

Domain: 00 (Training & Calibration)

Sites Flown: W10D (Wiggle Timing Test - Galaxy), H10D (NEON Headquarters Lidar Validation - Galaxy), R10F (Boulder Airport Radiometric Calibration - Galaxy)

Days left in Domain: 6

Report Author: Cameron

Lidar Operators: Cameron

Flight Hours: 01:15

Spectrometer Operators: Nick

Hours until maintenance: 41.53

Pilots: Justin, Vince

GPS Instruments: AOP_KBDU

Ground Crew: Mike

Summary

The crew took advantage of clear skies in the Boulder area and completed three (3) calibration flights in green sky conditions.

Concerns

- None

Comments

- Crew used the unmarked digitizer disks as directed by lab.

Daily Coverage

Estimated Cloud Cover Key

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

D00|H10D

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

Total number of lines flown: 4

D00|W10D

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

Total number of lines flown: 2

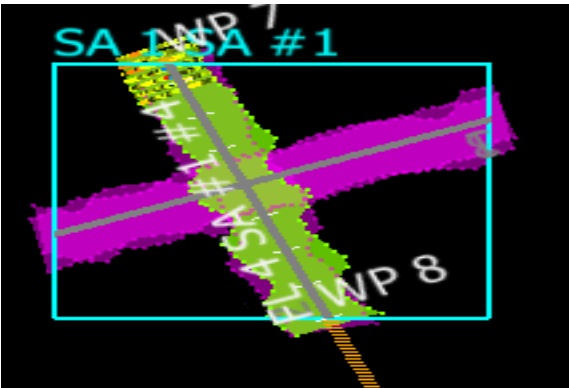
D00|R10F

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

Total number of lines flown: 5

Flight Screenshots

H10D



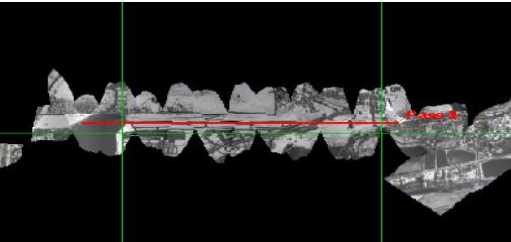
H10D



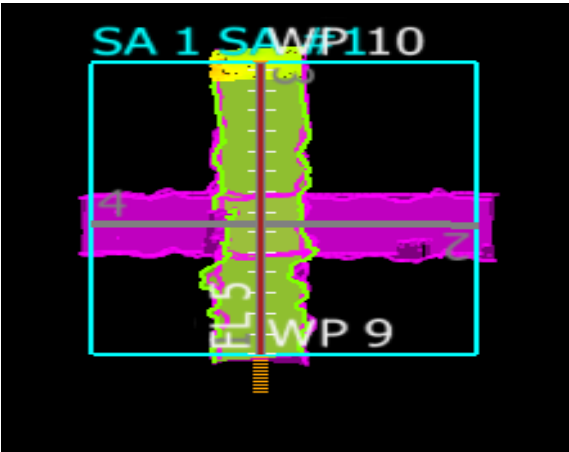
W10D



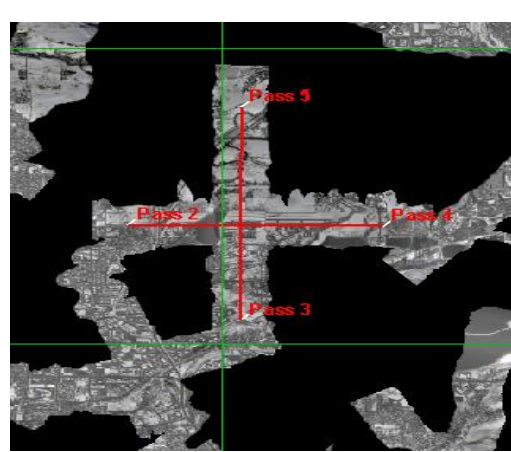
W10D



R10F

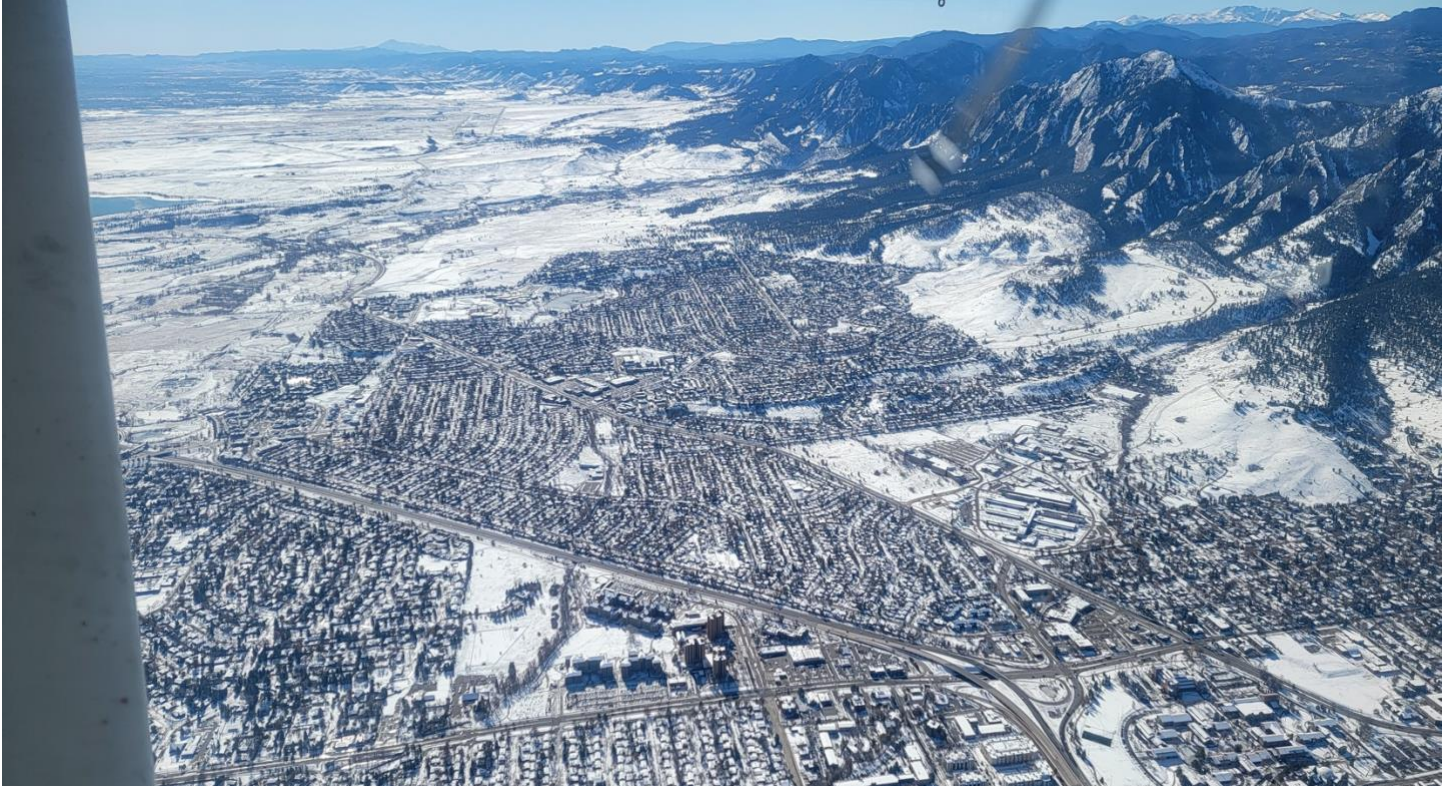


R10F



Pictures

Photo by Cam



Top: A beautiful snow cover Boulder this morning! Bottom: The calibration tarps deployed on the ramp at the PIF.



Photo by Nick

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
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Flown: 0% (0/20)

Green: 0% (0/20)

Yellow: 0% (0/20)

Red: 0% (0/20)

D00|H10D (NEON Headquarters Lidar Validation - Galaxy)

1	2	3	4
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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	36	37			

Flown: 0% (0/37)

Green: 0% (0/37)

Yellow: 0% (0/37)

Red: 0% (0/37)

D00|R10F (Boulder Airport Radiometric Calibration - Galaxy)

1	2	3	4	5
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Flown: 100% (5/5)

Green: 100% (5/5)

Yellow: 0% (0/5)

Red: 0% (0/5)

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)

D00|W10D (Wiggle Timing Test - Galaxy)

1	2
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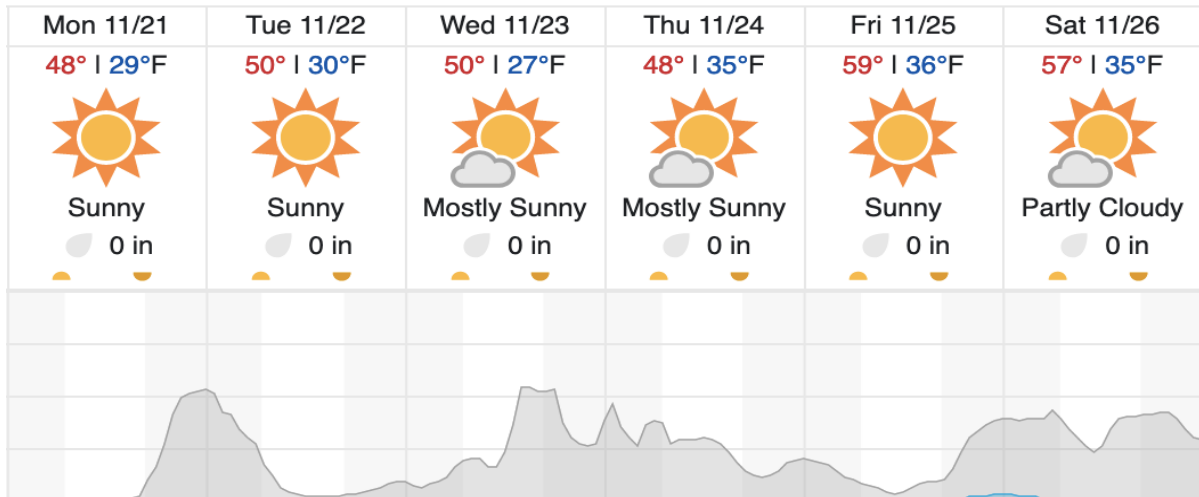
Flown: 100% (2/2)

Green: 100% (2/2)

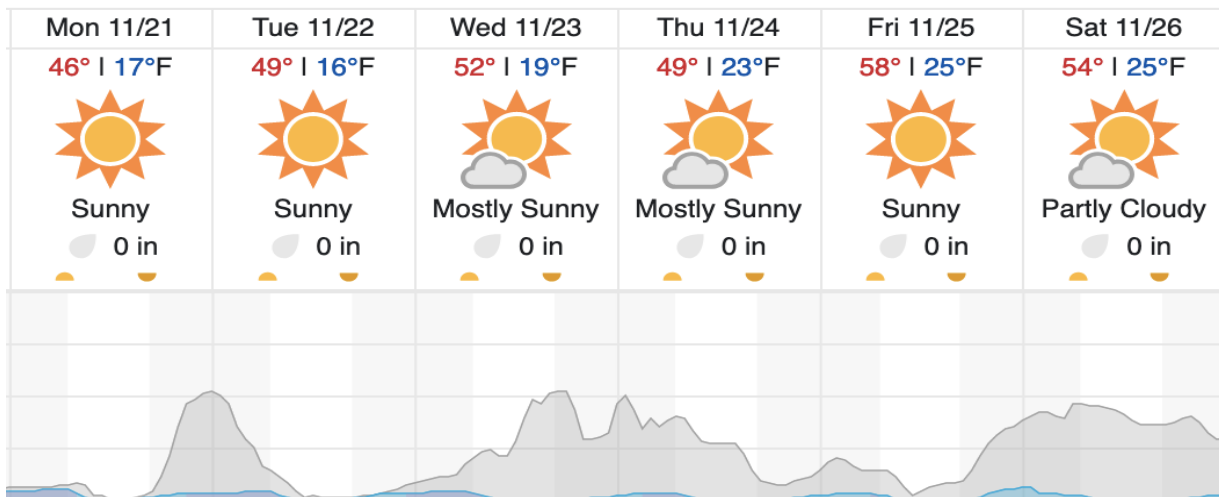
Yellow: 0% (0/2)

Red: 0% (0/2)

Weather Forecast Boulder, CO



Greeley, CO



source: wunderground.com

Flight Collection Plan for 21 November 2022

Flyority 1

Collection Area: [Functional Checkout Flight] -- Nominal Runway Survey

Flight Plan Name: D10_N10F_Nominal_Rnwy_v10_PRM.xml

On-station Time: N/A

Flyority 2

Collection Area: Boresight Calibration – Greeley, CO

Flight Plan Name: D10_B10F_Boresight_Geocal_v9_PRM.xml

On-station Time: 1700 UTC / 1100 L (25 degrees solar elevation)

Flyority 6

Collection Area: Boulder City Nominal Science Flight

Flight Plan Name: D10_V10F_Boulder_City_v8_PRM.xml

On-station Time: 1700 UTC / 1100 L (25 degrees solar elevation)

Crew: Mike (Lidar) Cam (NIS) Mitch (Ground)