



Payload 1 Daily Flight Report



Date: 2023-03-21

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)

Days left in Domain: 9

Report Author: Elissa

Lidar Operators: Elissa

Spectrometer Operators: Mitch

Pilots: Justin, Vince

Adt'l Flight Crew: Brendon

Flight Hours: 00:47

Hours until maintenance: 123.12

GPS Instruments: AOP_KBDU

Ground Crew: Matt, Cameron

Summary

Pumping and cooling finished today around 1pm. We were able to conduct an afternoon flight to complete two calibration flight plans, HQ Lidar Validation (H10D) and Wiggle Timing Test (W10D).

Concerns

None

Comments

- Elissa recertified on P1 Lidar
- Mitch recertified on P1 NIS

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		

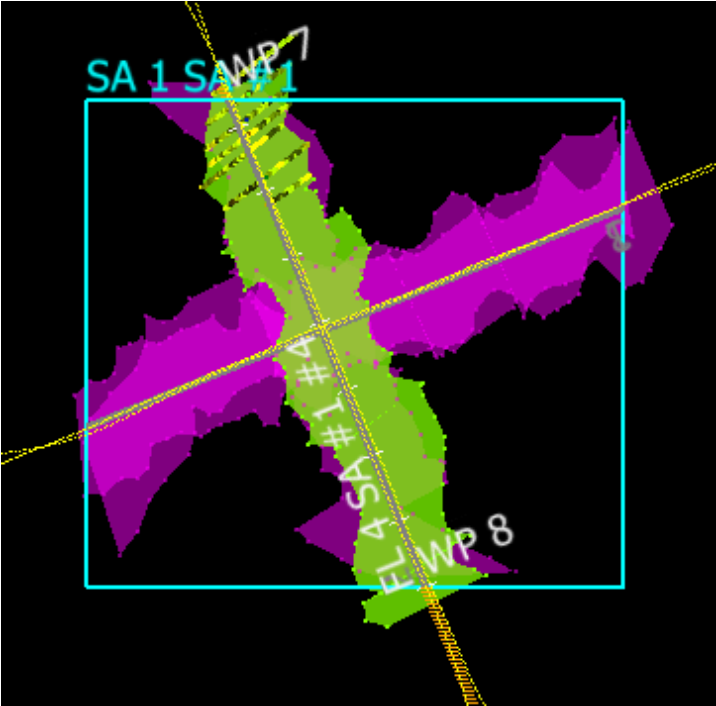
Total number of lines flown: 2

Flight Screenshots

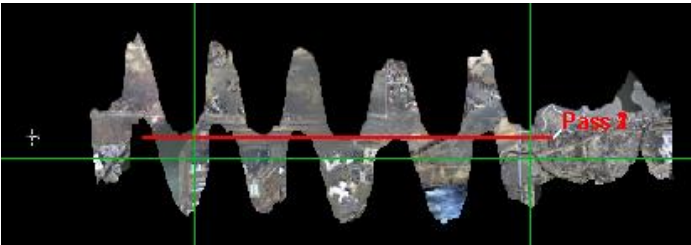
H10D_NIS



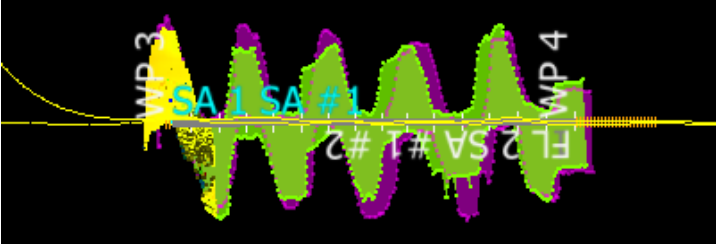
H10D_Lidar



W10D_NIS



W10D_Lidar



Cumulative Domain Coverage

D00|B10D_1000m (Greeley Boresight Geocalibration - 1000m - Riegl)

1	2	3	4	5	6	7	8
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Flown: 0% (0/8)
Green: 0% (0/8)
Yellow: 0% (0/8)
Red: 0% (0/8)

D00|B10D_1600m (Greeley Boresight Geocalibration - 1600m - Riegl)

1	2	3
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Flown: 0% (0/3)

Green: 0% (0/3)

Yellow: 0% (0/3)

Red: 0% (0/3)

D00|B10D_500m (Greeley Boresight Geocalibration - 600m - Riegl)

1	2	3	4	5	6	7	8	9
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Flown: 0% (0/9)

Green: 0% (0/9)

Yellow: 0% (0/9)

Red: 0% (0/9)

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: 0% (0/4)

Yellow: 0% (0/4)

Red: 100% (4/4)

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|O10C (NIS Offset - Galaxy)

1	2
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Flown: 0% (0/2)

Green: 0% (0/2)

Yellow: 0% (0/2)

Red: 0% (0/2)

D00|R10E (Table Mountain Radiometric Calibration - Galaxy)

1	2	3	4	5
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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
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Flown: 0% (0/5)

Green: 0% (0/5)

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)

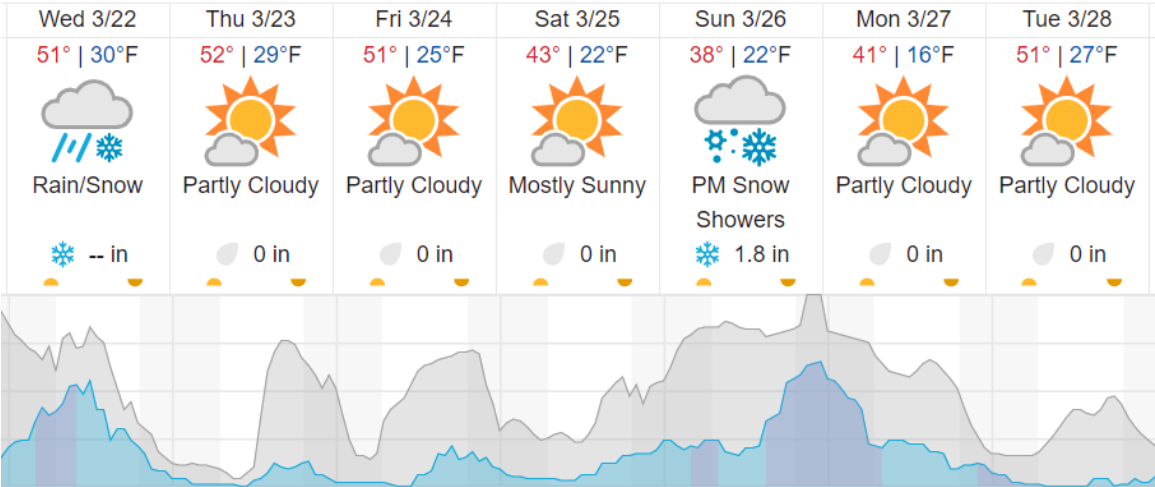
D00|W10D (Wiggle Timing Test - Galaxy)

1	2
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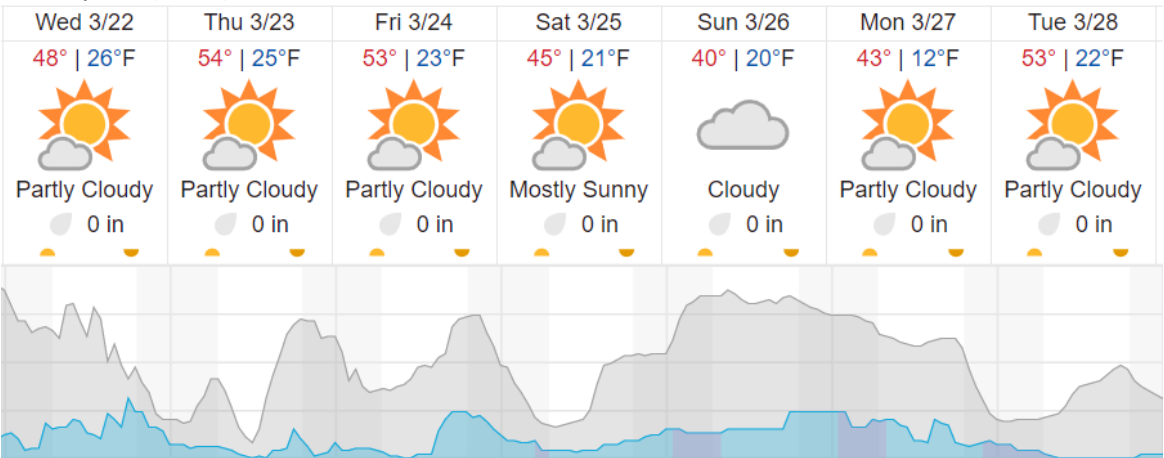
Flown: 100% (2/2)
Green: 0% (0/2)
Yellow: 0% (0/2)
Red: 100% (2/2)

Weather Forecast

Boulder, CO (KBDU)



Greeley, CO (B10D)



Cloud Cover (%)	Chance of Precip. (%)
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source: wunderground.com

Flight Collection Plan for 22 March 2023

Flyority 1

Collection Area: Table Mountain Radiometric Calibration

Flight Plan Name: D10_R10E_Radiometric_Cal_Table_Mtn_v1_PRM.xml

45° On-station Time: 1740 UTC / 1140 L

Additional Considerations: Ground should be dry.

Flyority 2

Collection Area: Boresight Calibration – Greeley, CO

Flight Plan Name: D10_B10F_Boresight_Geocal_v9_PRM.xml

30° On-station Time: 1550 UTC / 0950 L

Additional Considerations: No recent snowfall, clear roofs required.

Flyority 3

Collection Area: Nominal Runway Survey Flight Plan

Name: D10_N10F_Nominal_Rnwy_v11_PRM.xml

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

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

Flyority 4

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

Mitch (Lidar), Cam (NIS), Elissa (Ground)