



Payload 1 Daily Flight Report



Date: 2024-09-12
Flight Campaign ID: P1C1
Airport, FBO ID, City: Boulder Municipal Airport (KBDU) - Boulder, CO
Aircraft: N615AR

Domain:
Sites Flown: B10F (Complete Greeley Boresight Geocalibration - 1500m, 1000m, 550m - Galaxy)
Days left in Domain: 0

Report Author: Matt
Lidar Operators: Matt Flight Hours: 01:49
Spectrometer Operators: Nick Hours until maintenance: 28.77
Pilots: Will, Justin GPS Instruments: AOP_KBDU, S-COWI

Summary
The crew took advantage of relatively clear conditions over Greeley, CO to complete the Boresight Cal. flight.

Tomorrows forecast looks favorable for a Radiometric Cal. Flight over Table Mountain.

Concerns
None.

Comments
None.

Daily Coverage

Estimated Cloud Cover Key

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

Solar Angle Less Than 40 degrees

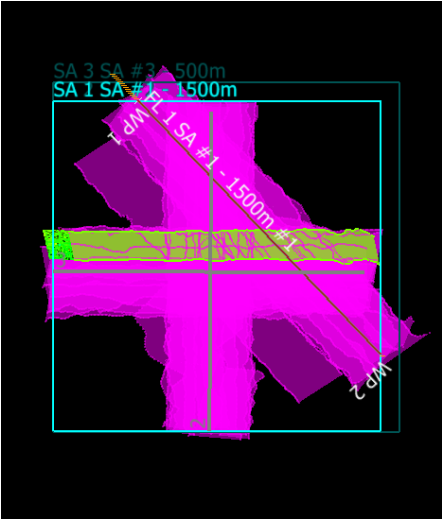
Line #

D00|B10F

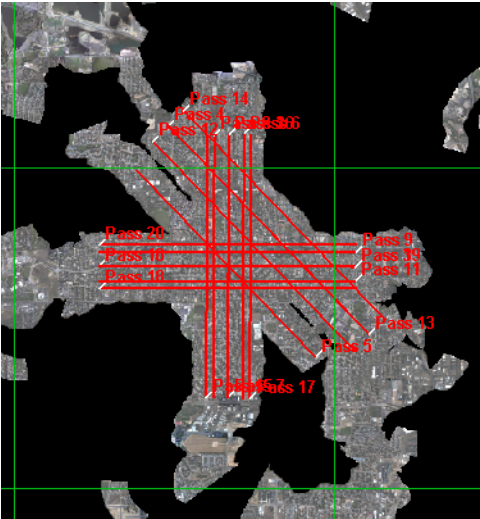
Line #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover																				

Total number of lines flown: 20

Flight Screenshots



LIDAR



NIS

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: 100% (20/20)

Green: 10% (2/20)

Yellow: 90% (18/20)

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: 100% (4/4)

Red: 0% (0/4)

D00|N10F (Nominal Runway at KB DU - 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: 100% (37/37)

Green: 0% (0/37)

Yellow: 100% (37/37)

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: 100% (5/5)

Green: 100% (5/5)

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: 80% (4/5)
Green: 80% (4/5)
Yellow: 0% (0/5)
Red: 0% (0/5)

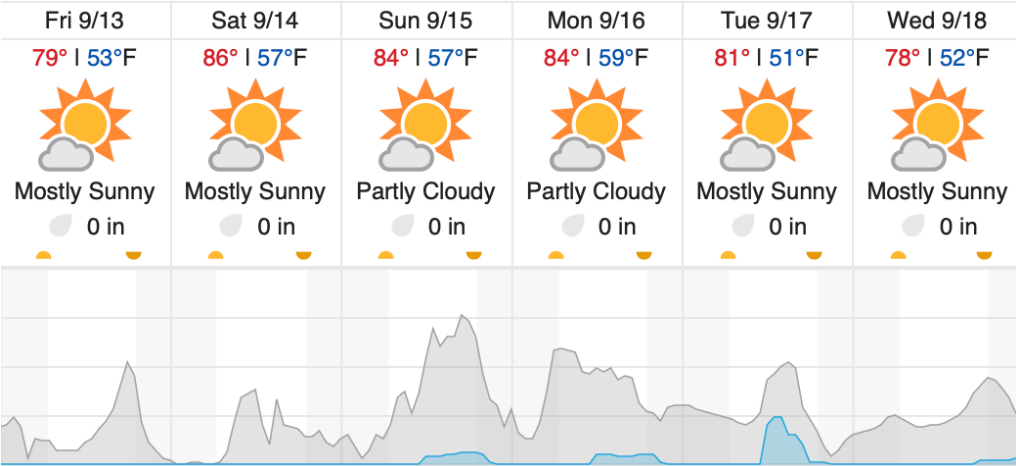
D00|W10D (Wiggle Timing Test - Galaxy)

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

Weather Forecast

KBDU



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

Flight Collection Plan for 13 September 2024

Flyority 1

Collection Area: Table Mountain Radiometric Calibration
Flight Plan Name: D10_R10E_Radiometric_Cal_Table_Mtn_v_PRM
40° On-station Time: 1630 UTC / 1030 L | 45° On-station Time: 1700 UTC / 1100 L
Additional Considerations: Ground should be dry.

Flyority 2

Collection Area: Nominal Runway Survey
Flight Plan Name: D10_N10D_Nominal_Rnwy_v8_Q780
40° On-station Time: 1620 UTC / 1030 L

Flyority 3

Collection Area: NEON HQ Lidar Validation
Flight Plan Name: D10_H10D_HQ_LIDAR_Validation_v2_PRM
On-Station Time: Daylight – No solar angle restrictions.

Flyority 4

Collection Area: Wiggle Timing Test

Flight Plan Name: D10_W10D_Wiggle_Test_v7_PRM

40° On-station Time: 1630 UTC / 1030 L

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

Flyority 5

Collection Area: NIS Offset Flight

Flight Plan Name: D10_O10C_NIS_Offset_v3_PRM

35° On-station Time: 1600 UTC / 1000 L

Flight Crew

Nick (Lidar), Matt (NIS)