Payload 3 Daily Flight Report

Date: 2023-08-30
Flight Campaign ID: P3C1
Airport, FBO ID, City: Boulder Municipal Airport (KBDU) - Boulder, CO
Aircraft: N934MU

Domain: 00 (Calibration), 10 (Central Plains)
Sites Flown: N10D (Nominal Runway at KBDU - Riegl), RMNP (Rocky Mountain National Park)
Days left in Domain: 1

Report Author: Mike
Lidar Operators: Mike   **Flight Hours**: 02:41
Spectrometer Operators: Mitch   **Hours until maintenance**: 67.22
Pilots: Justin, Will   **GPS Instruments**: AOP_KBDU, AOP_NIWO
Ground Crew: Cameron

Summary
A combination science/calibration flight was performed today. A few straggler lines were collected at RMNP in green and yellow conditions and the nominal runway calibration flight was completed.

Concerns
None

Comments
-All post-season calibration flights have now been completed for P3.
-Crew will monitor tomorrow's weather for one last chance at greening up RMNP.
-De-install of payloads has been moved to Friday (9/1) due to successful calibration flights.

Daily Coverage

Estimated Cloud Cover Key

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

D10|RMNP

Line #	1	27	28	29	30
Lidar	✓	✓	✓	✓	✓
Spectrometer		✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓
Cloud Cover					

Total number of lines flown: 5

D00|N10D

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																				

Line #	21	22	23	24
Lidar	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓
Camera	✓	✓	✓	✓
Cloud Cover				

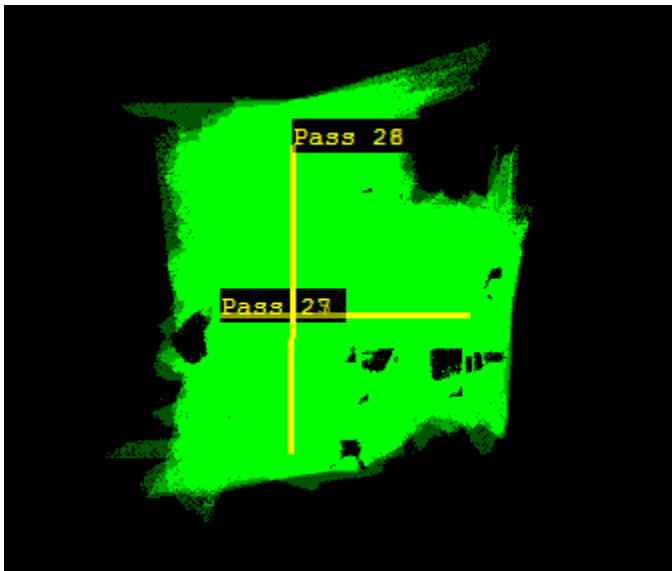Total number of lines flown: 24

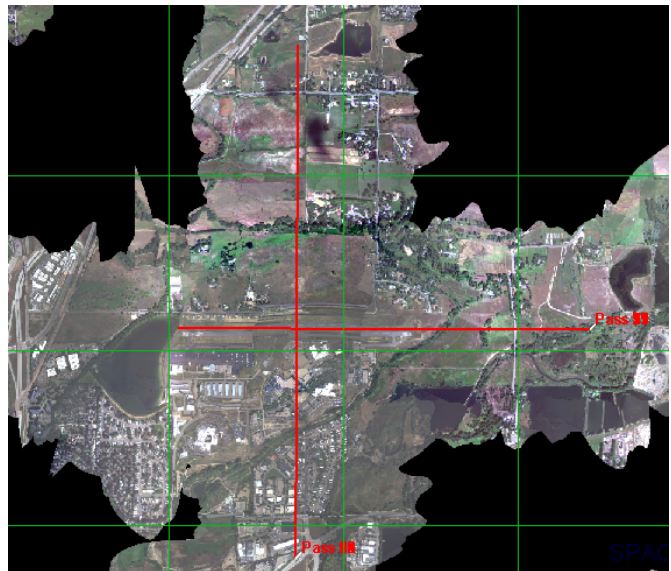**Flight Screenshots**
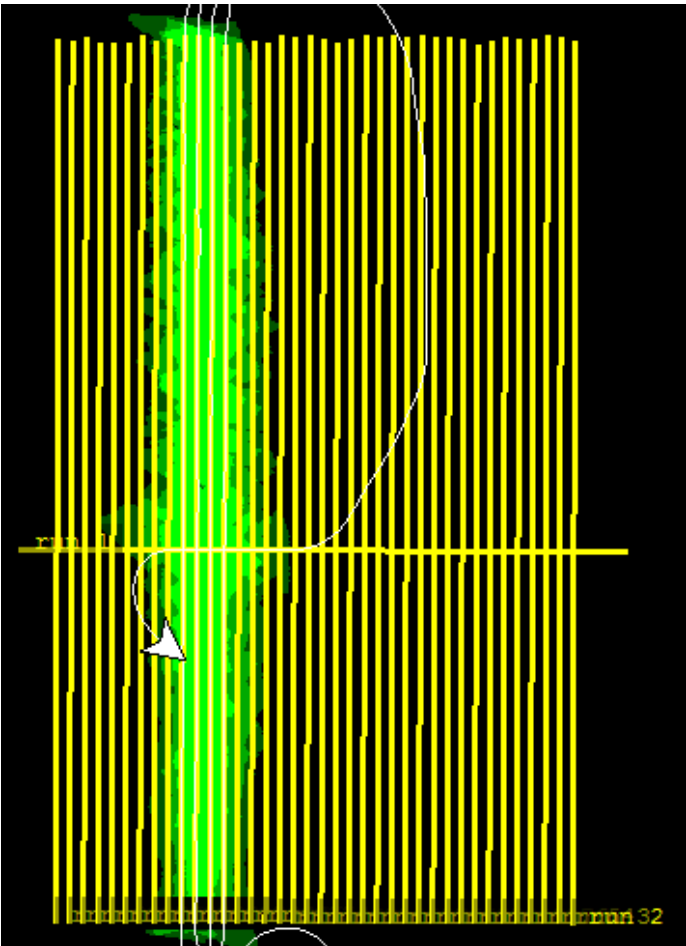
RMNP lidar
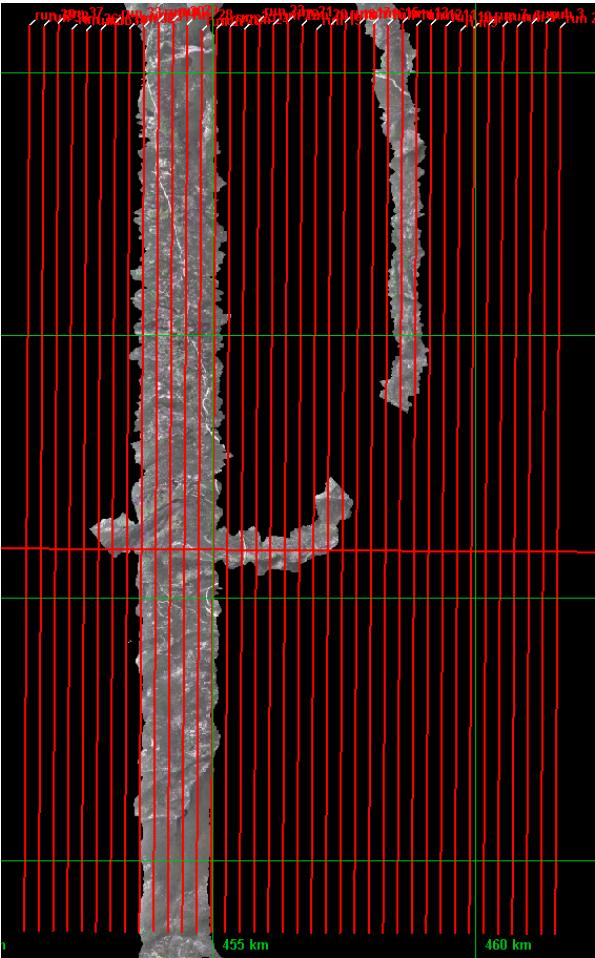
RMNP NIS

N10D lidar

N10D NIS

Pictures

Looking southwest at the Indian Peaks.

A quick view of P1 N331AR is it heads in after completing its final mission of the season.

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: 100% (20/20)
Yellow: 0% (0/20)
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: 50% (14/28)
Yellow: 36% (10/28)
Red: 0% (0/28)

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|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)

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: 0% (0/29)
Green: 0% (0/29)
Yellow: 0% (0/29)
Red: 0% (0/29)

D00|W10C (Wiggle Timing Test - Riegl)

1	2

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

D10|ARIK (Arikaree River)

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							

Flown: 100% (33/33)
Green: 100% (33/33)
Yellow: 0% (0/33)
Red: 0% (0/33)

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		

Flown: 100% (38/38)
Green: 74% (28/38)
Yellow: 24% (9/38)
Red: 3% (1/38)

Weather Forecast
Allenspark, CO

Thu 8/31
77° I 56°F
Sunny
0 in
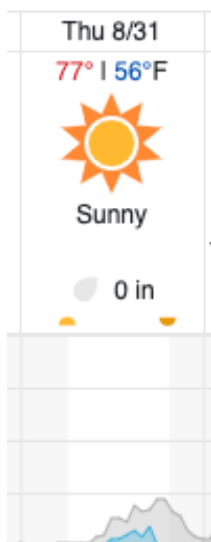
	Cloud Cover (%)		Chance of Precip. (%)

source: wunderground.com

Flight Collection Plan for 31 August 2023

Flyority 1
Collection Area: Rocky Mountain National Park (RMNP)
Flight Plan Name: D10_RMNP_R2_P1_v2_Q780
On-Station Time: 16:00 UTC / 10:00 L

Crew: Mitch (Lidar), Ham (NIS), Mike (Ground)