



Payload 3 Daily Flight Report

Date: 2024-08-03
Flight Campaign ID: P3C1
Airport, FBO ID, City: Boulder Municipal Airport (KBDU) - Boulder, CO
Aircraft: N821AR

Domain: 10 (Central Plains), 13 (Southern Rockies & Colorado Plateau), 15 (Great Basin)
Sites Flown: NIWO (Niwot Ridge Mountain Research Station)
Days left in Domain: 23

Report Author: Nick
Lidar Operators: Nick **Flight Hours:** 02:15
Spectrometer Operators: **Hours until maintenance:** 101.83
Pilots: Vince, Will **GPS Instruments:** AOP_KBDU, AOP_NIWO
Ground Crew: Matt, Elissa

Summary

With weather affecting the available sites, the crew focused on NIWO to recollect lines with poor data. The flight was conducted in cloudy conditions and focused on lidar collections. NIS and camera were also collected. The flight experienced fuel odor again and discovered fuel residue on the camera and lidar lenses. Residue was lighter today than previous flights but was a shorter flight.

Concerns

The fuel neck will be replaced on Monday in hopes it resolves the fuel leak issue.

Comments

None.

Daily Coverage

Estimated Cloud Cover Key

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

Solar Angle Less Than 40 degrees

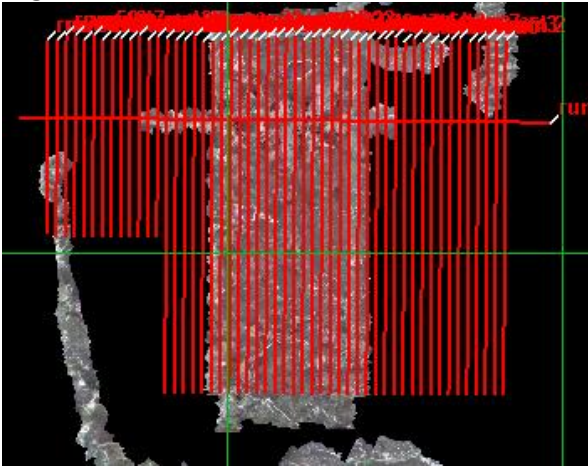
Line #

D13|NIWO

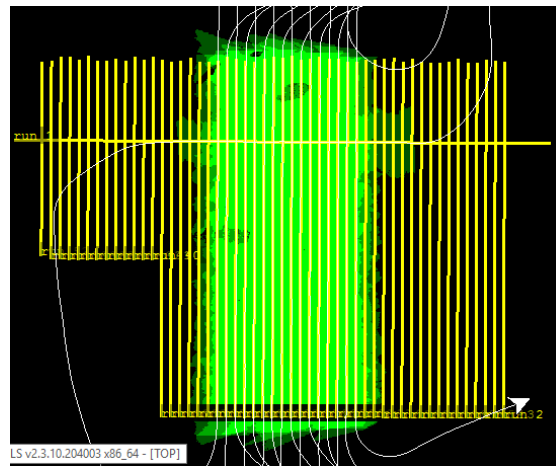
Line #	1	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover		Red	Yellow	Yellow	Yellow	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red

Total number of lines flown: 17

Flight Screenshots



NIS screenshot 2024080314



Lidar Screenshot 202400314

Pictures



NIWO tower under cloudy conditions.

Cumulative Domain Coverage

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: 0% (0/33)

Green: 0% (0/33)

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	40	

Flown: 97% (38/39)

Green: 97% (38/39)

Yellow: 0% (0/39)

Red: 0% (0/39)

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: 100% (25/25)
 Green: 100% (25/25)
 Yellow: 0% (0/25)
 Red: 0% (0/25)

D13 | NIWO (Niwot Ridge Mountain Research Station)

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	41
42	43	44	45	46	47	48	49	50	51	52									

Flown: 100% (51/51)
 Green: 100% (51/51)
 Yellow: 0% (0/51)
 Red: 0% (0/51)

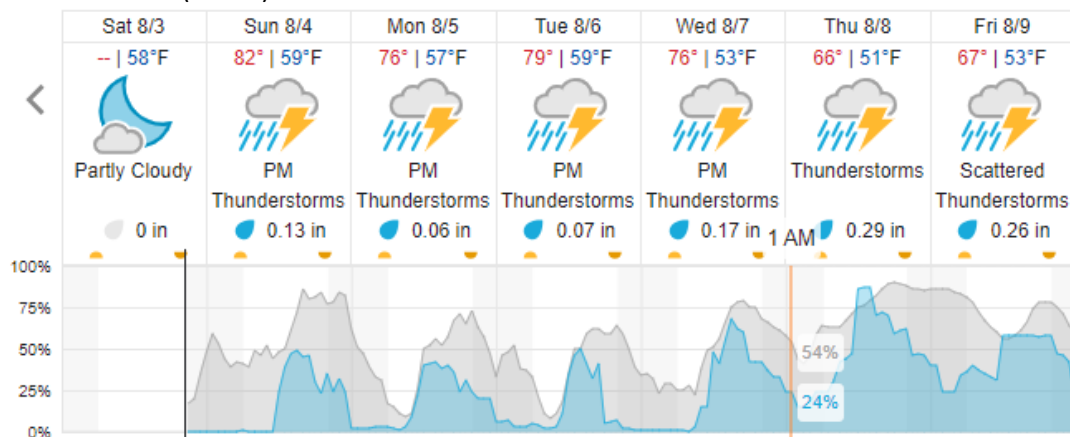
D13 | WLOU (West St. Louis Creek)

2	3	4	5	6	7	8	9	10	11	12	13	14
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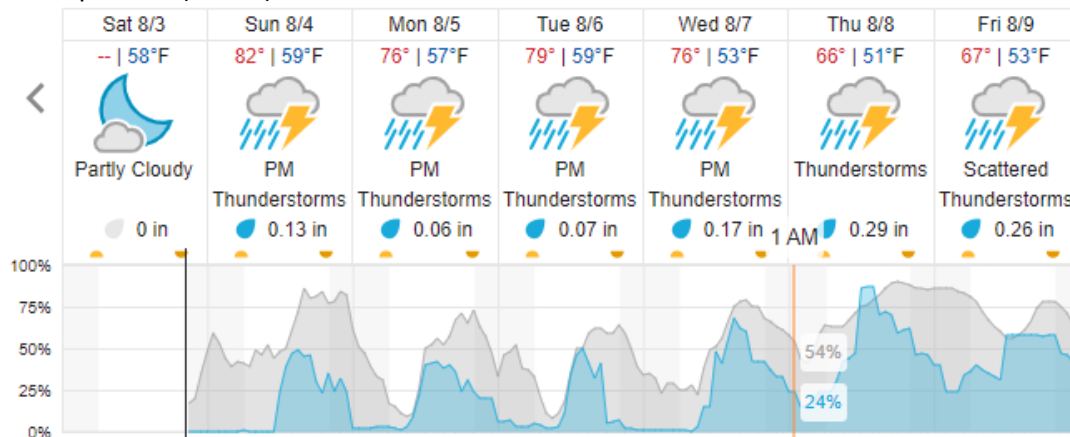
Flown: 92% (12/13)
 Green: 92% (12/13)
 Yellow: 0% (0/13)
 Red: 0% (0/13)

Weather Forecast

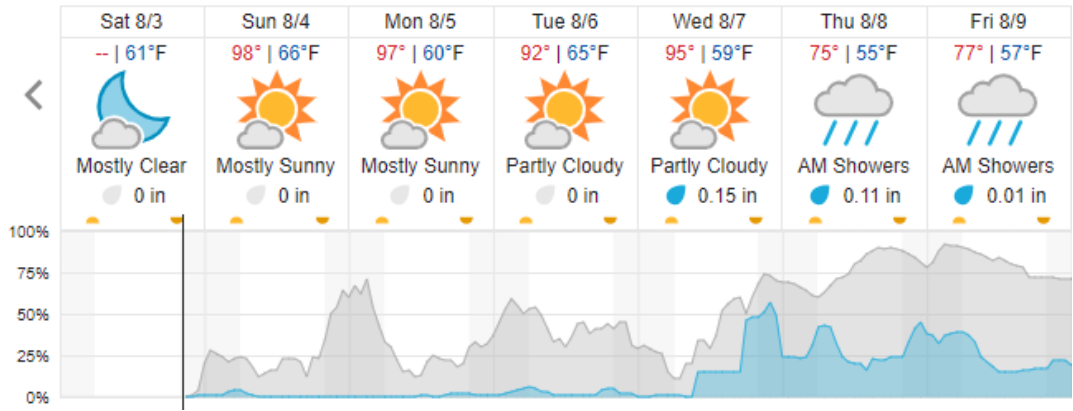
Nederland CO (NIWO)



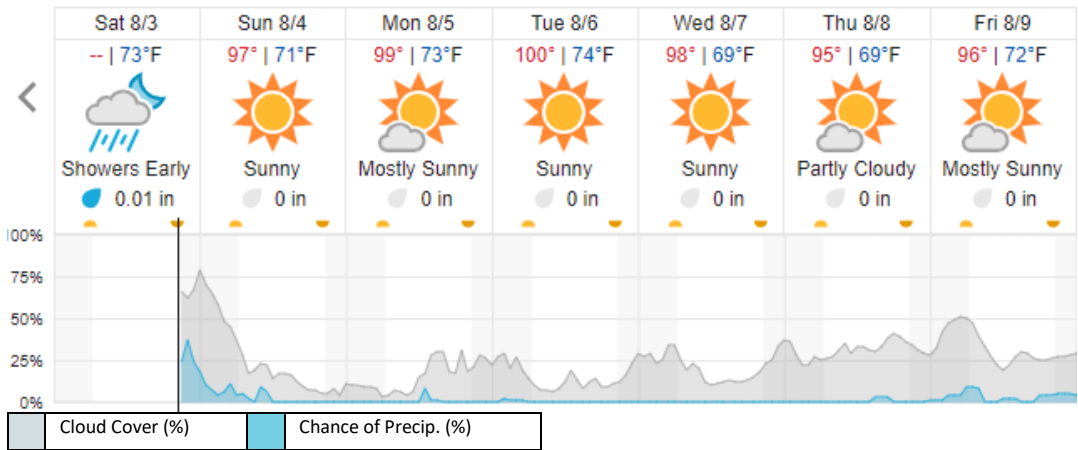
Allenspark CO (RMNP)



Joese CO (ARIK)



Ogden UT (CTWD)



source: wunderground.com

Flight Collection Plan for August 4th 2024

Flyority 1

Collection Area: Niwot Ridge Mountain Research Station

Flight Plan Name: D13_NIWO_C1_P1_v5_Q780

On-station Time: 1540 UTC / 0940 L

Flyority 2

Collection Area: Rocky Mountain National Park (RMNP)

Flight Plan Name: D10_RMNP_R2_P1_v4_Q780

On-station Time: 1540 UTC / 0940 L

Flyority 3

Collection Area: Arikaree River (ARIK) – Priority 1 & 2 Flight Box

Flight Plan Name: D10_ARIK_A1_P2_v3_Q780

On-station Time: 1520 UTC / 0920 L

Flyority 4

Collection Area: Northern Utah Priority 1 Flight Plan

Flight Plan Name: D15_CTWD_S1_P1_v1

On-station Time: 1520 UTC / 0920 L

Flyority 4

Collection Area: Northern Utah Priority 2 Flight Plan

Flight Plan Name: D15_CTWD_S1_P2_v1

On-station Time: 1520 UTC / 0920 L

Crew: Matt (Lidar), Elissa (NIS), Nick (Ground)