



Payload 1 Daily Flight Report



Date: 2026-08-06

Flight Campaign ID: P1C1

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

Aircraft: N537AR

Domain: 10 (Central Plains), 13 (Southern Rockies & Colorado Plateau)

Sites Flown: RMNP (Rocky Mountain National Park), NIWO (Niwot Ridge Mountain Research Station)

Days left in Domain: 10

Report Author: Mitch

Lidar Operators: Mitch

Flight Hours: 03:42

Spectrometer Operators: Matt

Hours until maintenance: 35.03

Pilots: Tim, Jonathan

GPS Instruments: AOP_KBDU, AOP_NIWO

Summary

Skies were absolutely clear of clouds for the majority of the day, however a heavy haze/smoke layer kept conditions in the non-green category. 8 lines were collected at RMNP and 17 at NIWO.

Concerns

None

Comments

- D10/13 aquatic sites (ARIK and WLOU) will only be attempted if conditions allow for a green collect.
- 125 TOIL Maintenance to be scheduled Wednesday-Friday of next week.

Daily Coverage

D10|RMNP

Line #	31	32	33	34	35	36	37	38
Lidar	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover								

Total number of lines flown: 8

Estimated Cloud Cover Key

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

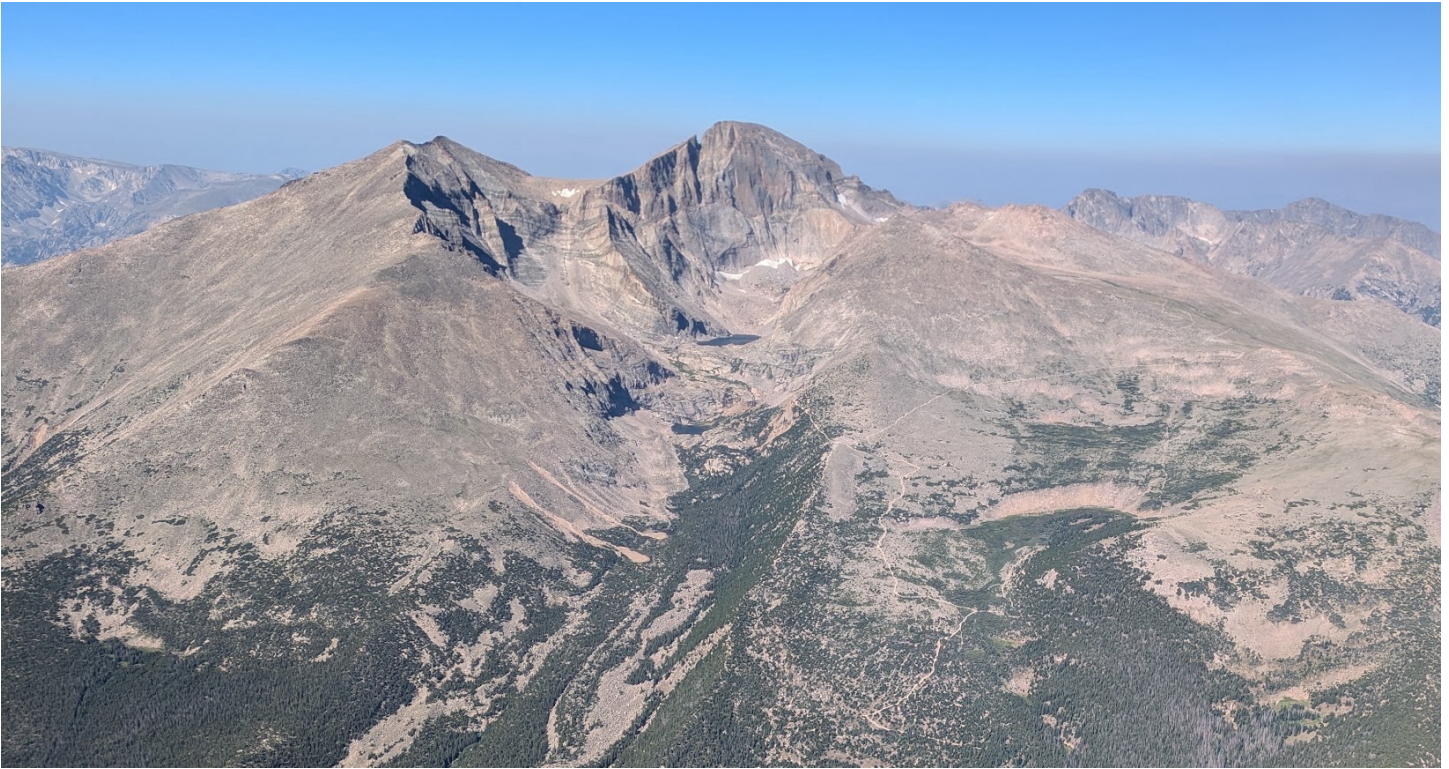
Solar Angle Less Than 40 degrees: (*)

D13|NIWO

Line #	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover																	

Total number of lines flown: 17

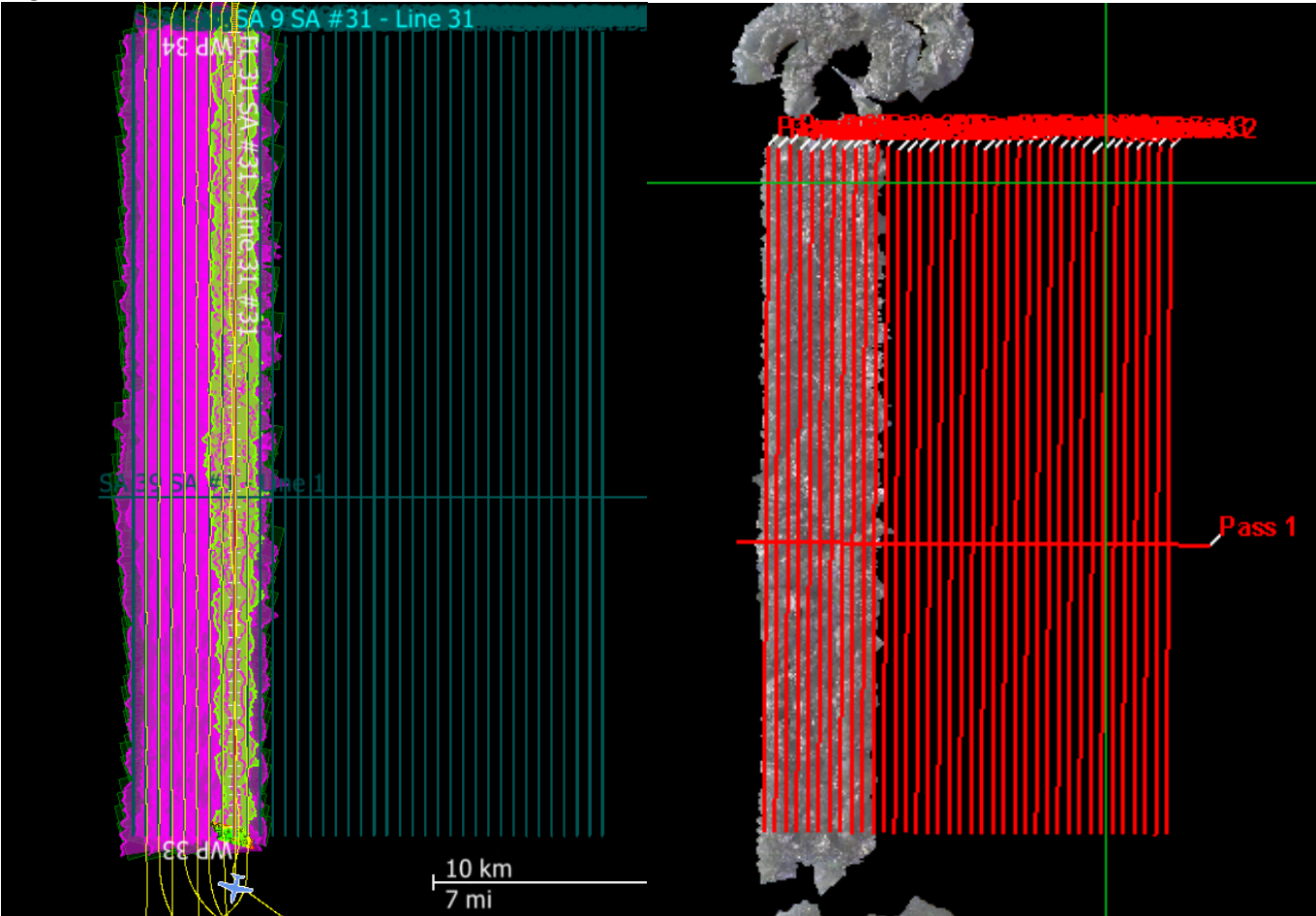
Pictures



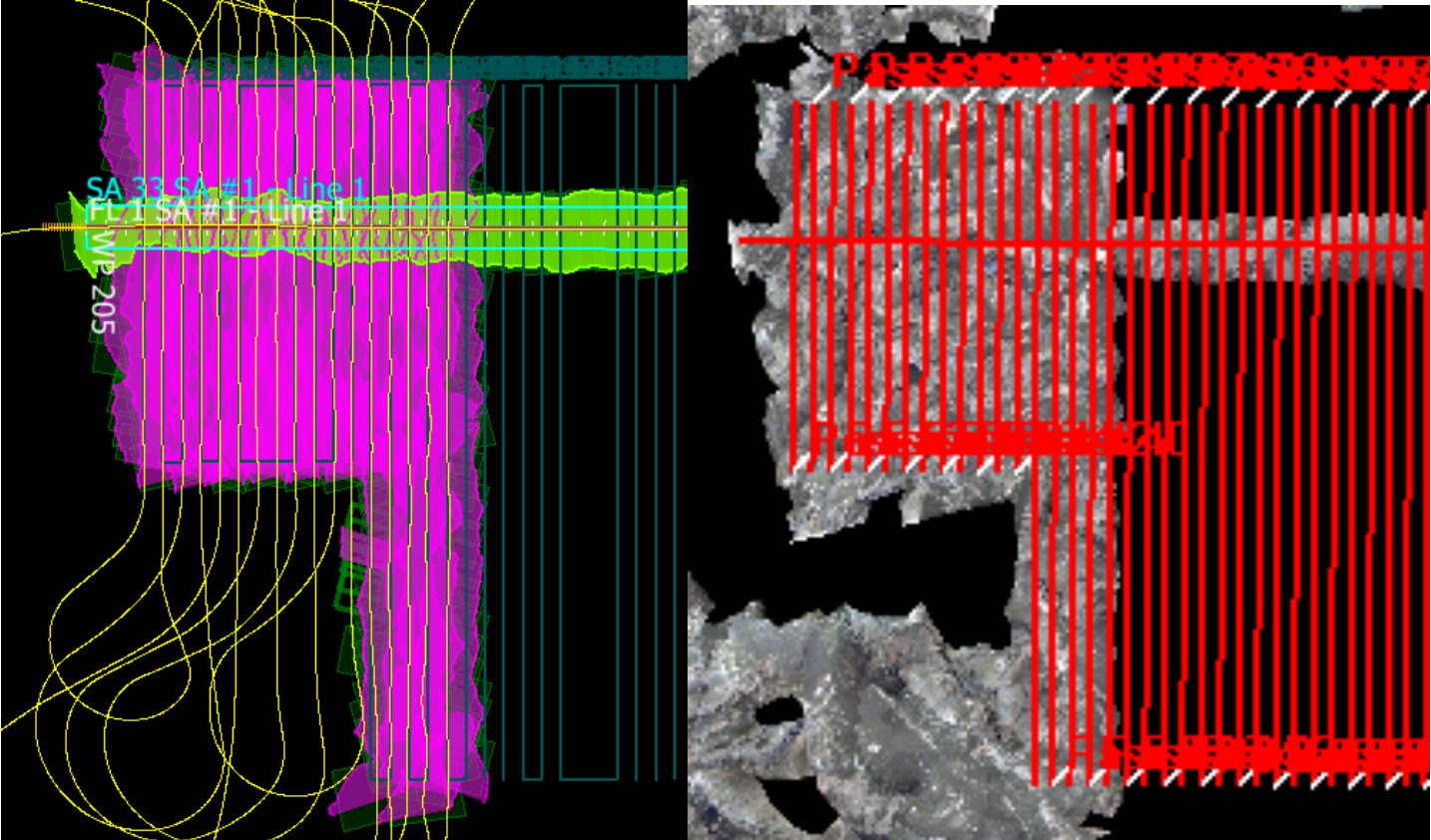
Above: Longs Peak taken during RMNP. **Below:** Indian Peaks Wilderness during NIWO. Normally a clear view of Winter Park in the background, but today you could barely make out the ski runs.



Flight Screenshots



Top left: RMNP lidar Top Right: RMNP NIS Bottom Left: NIWO lidar Bottom Right:NIWO NIS



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: 36% (12/33)

Green: 36% (12/33)

Yellow: 0% (0/33)

Red: 0% (0/33)

* Flown within 35deg solar angle

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: 0% (0/38)

Yellow: 87% (33/38)

Red: 13% (5/38)

* Flown within 35deg solar angle

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: 0% (0/25)

Green: 0% (0/25)

Yellow: 0% (0/25)

Red: 0% (0/25)

* Flown within 35deg solar angle

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: 61% (31/51)

Green: 27% (14/51)

Yellow: 33% (17/51)

Red: 0% (0/51)

* Flown within 35deg solar angle

D13|WLOU (West St. Louis Creek)

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

Green: 0% (0/13)

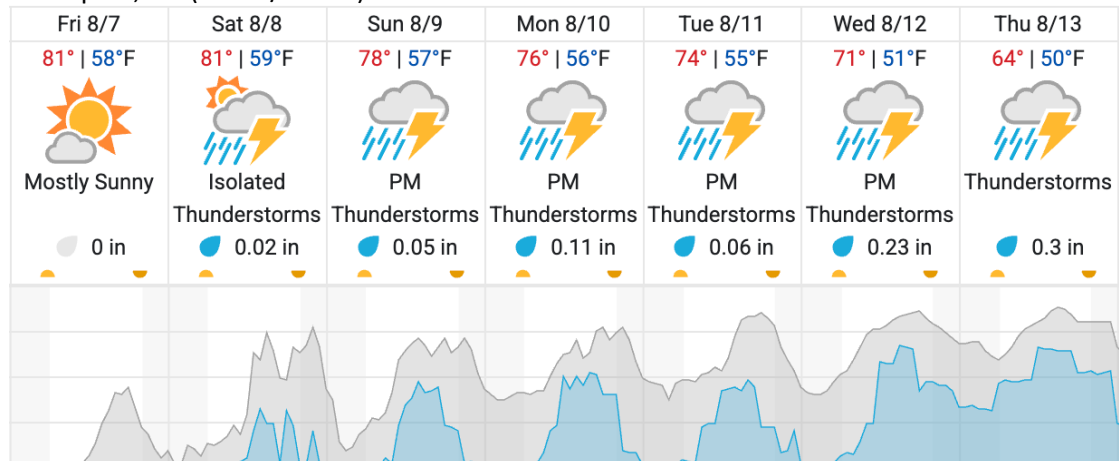
Yellow: 0% (0/13)

Red: 0% (0/13)

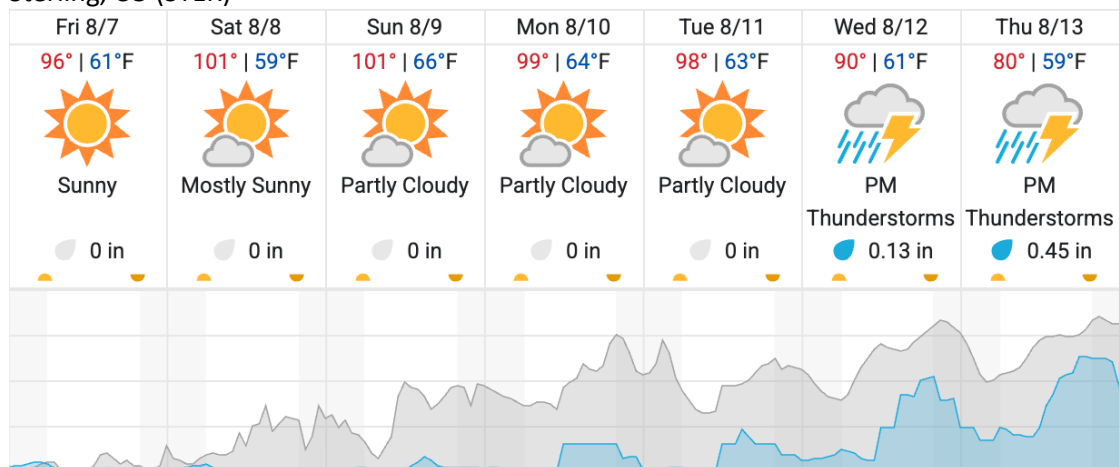
* Flown within 35deg solar angle

Weather Forecast

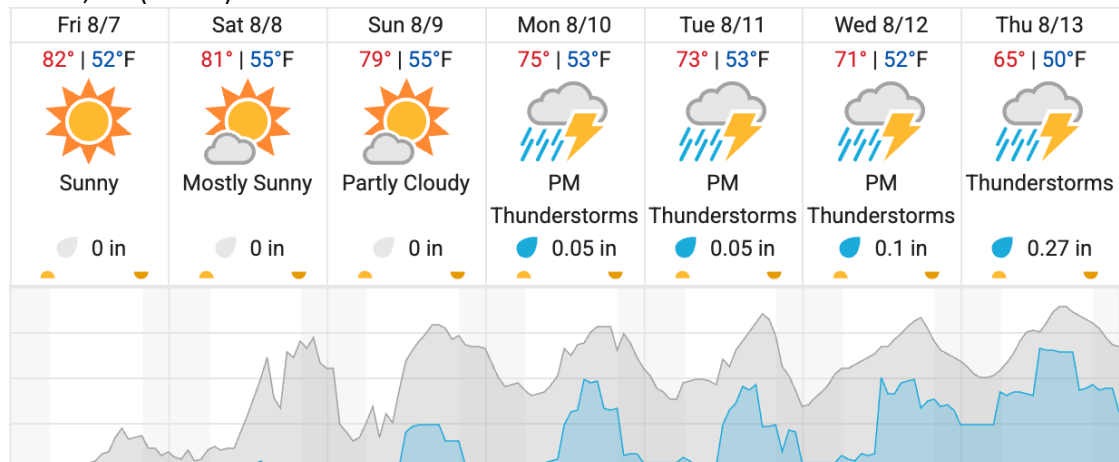
Allenspark, CO (NIWO/RMNP)



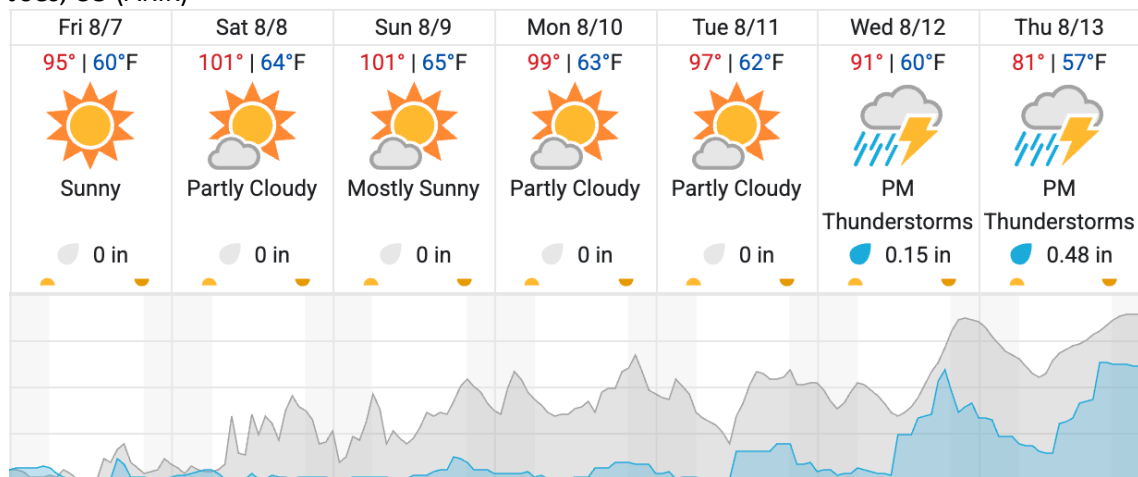
Sterling, CO (STER)



Fraser, CO (WLOU)



Joes, CO (ARIK)



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

Flight Collection Plan for August 7th 2026

Flyority 1

Site: Niwot Ridge Mountain Research Station (NIWO)

Flight Plan Name: D13_NIWO_C1_P1_v7_PRM.xml

Solar Angle Time: 09:50L/15:50UTC

Flyority 2

Site: Rocky Mountain National Park (RMNP)

Flight Plan Name: D10_RMNP_R2_P2_v6_PRM.xml

Solar Angle Time: 09:50L/15:50UTC

Flyority 3

Site: Sterling Agricultural Site (STER)

Flight Plan Name: D10_STER_R1_P1_v5_PRM.xml

Solar Angle Time: 09:10L/15:10UTC

Flyority 4 – Only to attempt if Green

Site: West St. Louis Creek (WLOU)

Flight Plan Name: D13_WLOU_A1_P1_v4_PRM.xml

Solar Angle Time: 09:50L/15:50UTC

Flyority 5 – Only to attempt if Green

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

Flight Plan Name: D10_ARIK_A1_P1_P2_v5_PRM.xml

Solar Angle Time: 09:30L/15:30UTC

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