



Payload 1 Daily Flight Report



Date: 2026-07-31

Flight Campaign ID: P1C1

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

Aircraft: N537AR

Domain: 10 (Central Plains)

Sites Flown: RMNP (Rocky Mountain National Park)

Days left in Domain: 16

Report Author: Mike

Lidar Operators: Mike

Spectrometer Operators: Matt

Pilots: Rusty, Tim

Flight Hours: 02:13

Hours until maintenance: 41.73

GPS Instruments: AOP_KBDU, AOP_NIWO

Summary

Slightly improved conditions allowed for a flight this morning. Unfortunately, smoke was detectable from the ground, in-air, and in satellite imagery. As a result, lower priority lines at RMNP were collected in yellow and then red conditions when clouds formed.

Concerns

None

Comments

None

Daily Coverage

Estimated Cloud Cover Key

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

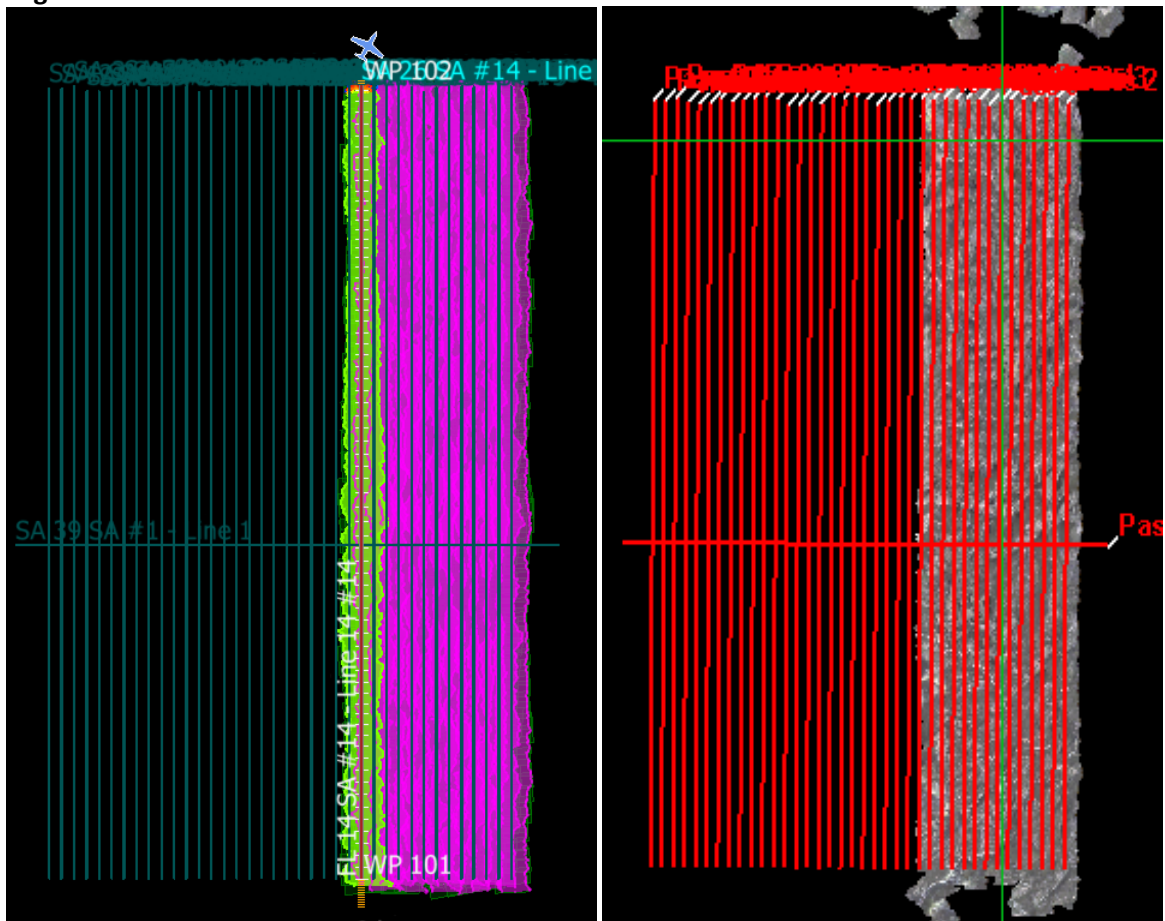
Solar Angle Less Than 40 degrees: (*)

D10|RMNP

Line #	2	3	4	5	6	7	8	9	10	11	12	13	14
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover													

Total number of lines flown: 13

Flight Screenshots



Pictures



Light smoke and clouds as we flew over RMNP today.

Cumulative Domain Coverage

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: 27% (14/51)

Green: 27% (14/51)

Yellow: 0% (0/51)

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
---	---	---	---	---	---	---	---	----	----	----	----	----

Flown: 0% (0/13)

Green: 0% (0/13)

Yellow: 0% (0/13)

Red: 0% (0/13)

* Flown within 35deg solar angle

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	40	

Flown: 33% (13/39)

Green: 0% (0/39)

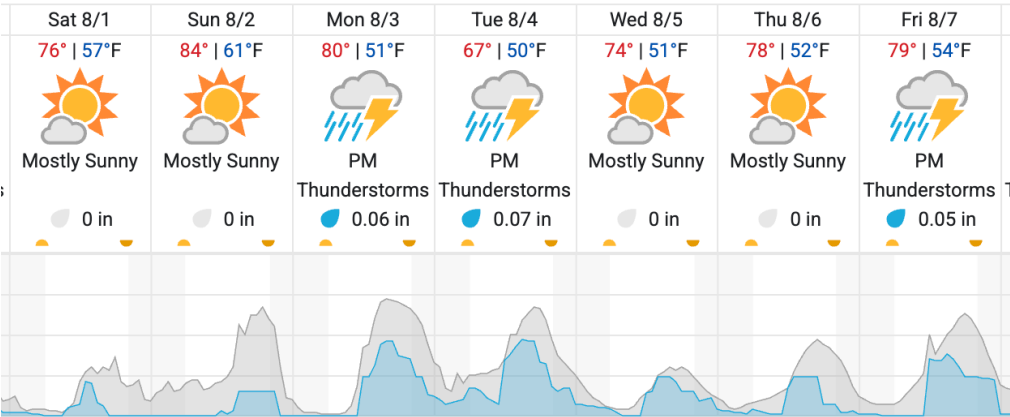
Yellow: 21% (8/39)

Red: 13% (5/39)

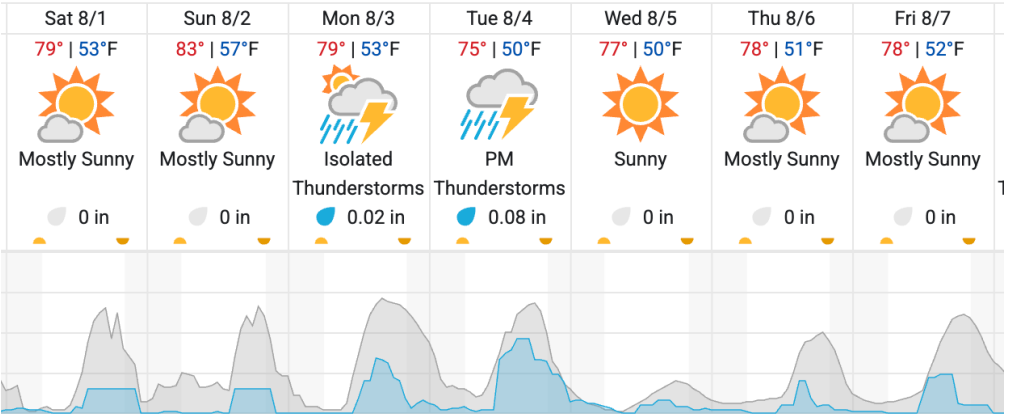
* Flown within 35deg solar angle

Weather Forecast

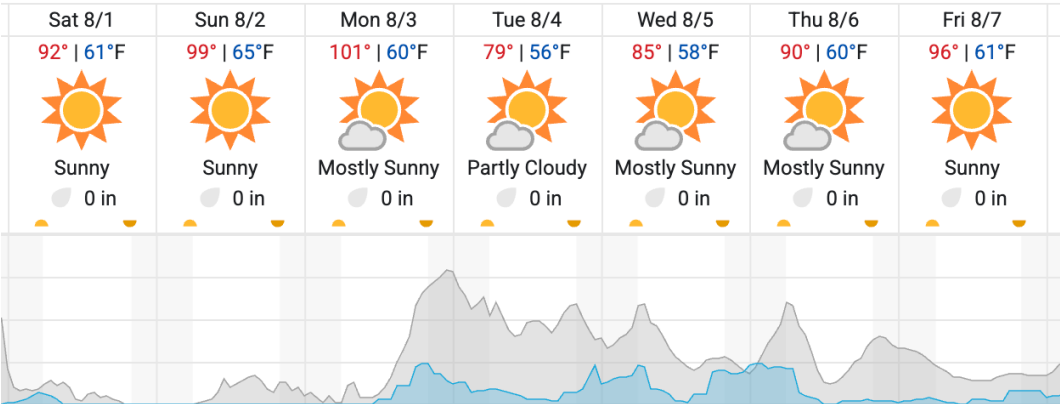
Allenspark, CO (NIWO/RMNP)



Fraser, CO (WLOU)



Joes, CO (ARIK)



Cloud Cover (%)	Chance of Precip. (%)
-----------------	-----------------------

source: wunderground.com

Flight Collection Plan for Aug 1, 2026

Flyority 1

Site: Niwot Ridge Mountain Research Station (NIWO)

Flight Plan Name: D13_NIWO_C1_P1_v7_PRM.xml

Solar Angle Time: 09:40L/15:40UTC

Flyority 2

Site: Rocky Mountain National Park (RMNP)

Flight Plan Name: D10_RMNP_R2_P2_v6_PRM.xml

Solar Angle Time: 09:40L/15:40UTC

Flyority 3

Site: West St. Louis Creek (WLOU)

Flight Plan Name: D13_WLOU_A1_P1_v4_PRM.xml

Solar Angle Time: 09:40L/15:40UTC

Flyority 4

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

Flight Plan Name: D10_ARIK_A1_P1_P2_v5_PRM.xml

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

Flyority 5

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

Flight Plan Name: D10_ARIK_A1_P1_P2_v5_PRM.xml

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

Crew: Matt (Lidar), Mike (NIS), None (Ground)