



Payload 1 Daily Flight Report



Date: 2026-08-08

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: STER (Sterling Agricultural Site)

Days left in Domain: 8

Report Author: Matt

Lidar Operators: Matt

Spectrometer Operators: Nick

Pilots: Tim, Jonathan

Flight Hours: 03:32

Hours until maintenance: 29.18

GPS Instruments: AOP_KBDU, AOP_STER

Summary

Overcast conditions, heavy smoke, and haze continued to blanket the Front Range and surrounding areas. With just over a week remaining and no green days forecasted, the crew decided to fly STER under red conditions. All 25 lines were successfully completed.

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|STER

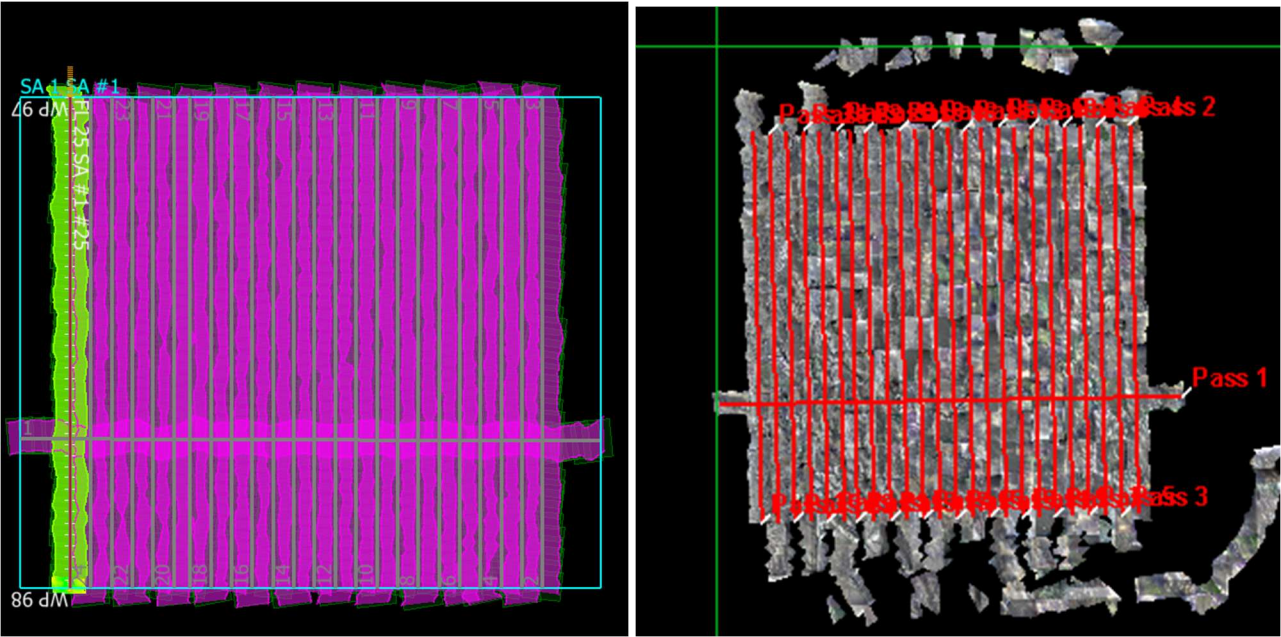
Line #	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover																				

Line #	22	23	24	25
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Lidar	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓
Camera	✓	✓	✓	✓
Cloud Cover				

Total number of lines flown: 24

Flight Screenshots



Pictures



STER flight box

STER Tower site

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: 100% (25/25)

Green: 0% (0/25)

Yellow: 0% (0/25)

Red: 100% (25/25)

* 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)

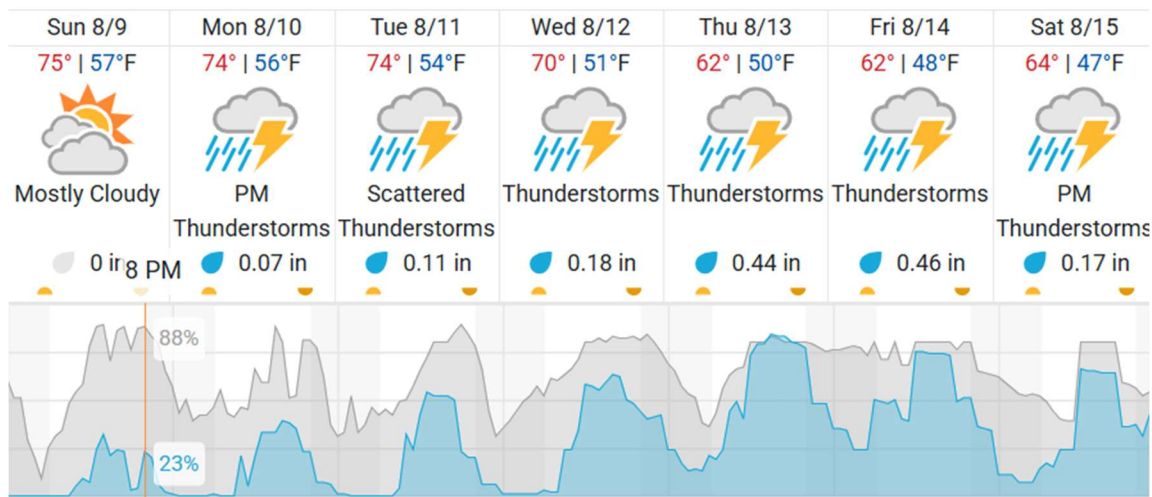
Yellow: 0% (0/13)

Red: 0% (0/13)

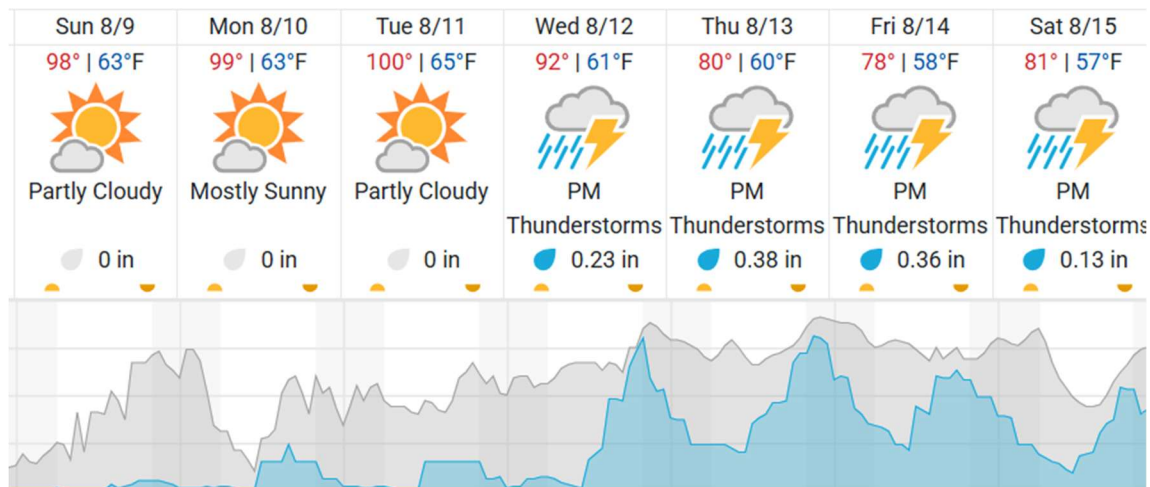
* Flown within 35deg solar angle

Weather Forecast

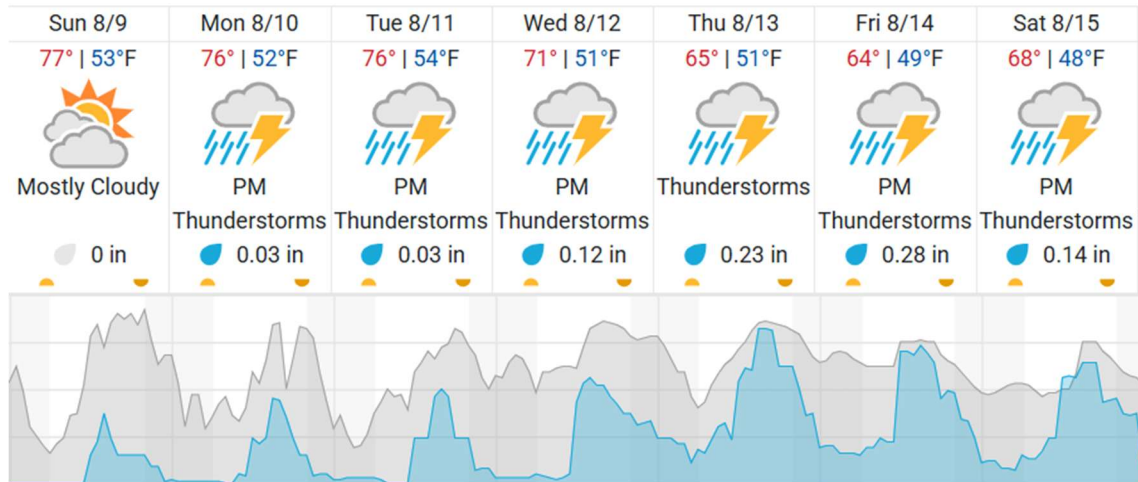
Allenspark, CO (NIWO/RMNP)



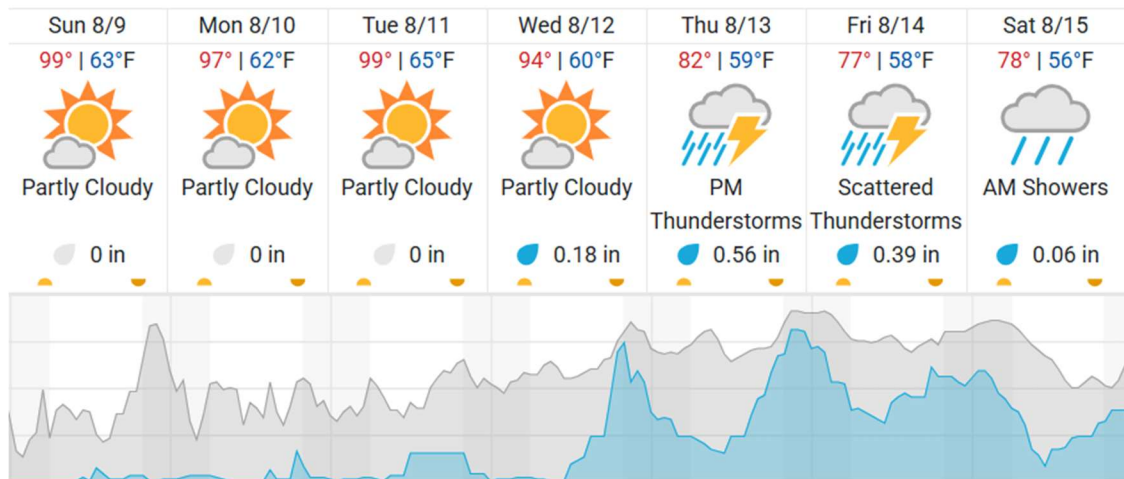
Sterling, CO (STER)



Fraser, CO (WLOU)



Joes, CO (ARIK)



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

source: wunderground.com

Flight Collection Plan for August 9th 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: Nick (Lidar), Matt (NIS)