



Payload 1 Daily Flight Report



Date: 2026-08-07

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: NIWO (Niwot Ridge Mountain Research Station)

Days left in Domain: 9

Report Author: Matt

Lidar Operators: Matt

Spectrometer Operators: Mitch

Pilots: Jonathan, Tim

Ground Crew: Nick

Flight Hours: 02:19

Hours until maintenance: 32.72

GPS Instruments: AOP_KBDU, AOP_NIWO

Summary

Smoke and haze persisted throughout the Front Range, but the crew forged ahead, getting airborne and successfully completing the remaining 20 lines at the NIWO flight box.

Concerns

None

Comments

None

Daily Coverage

Estimated Cloud Cover Key

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

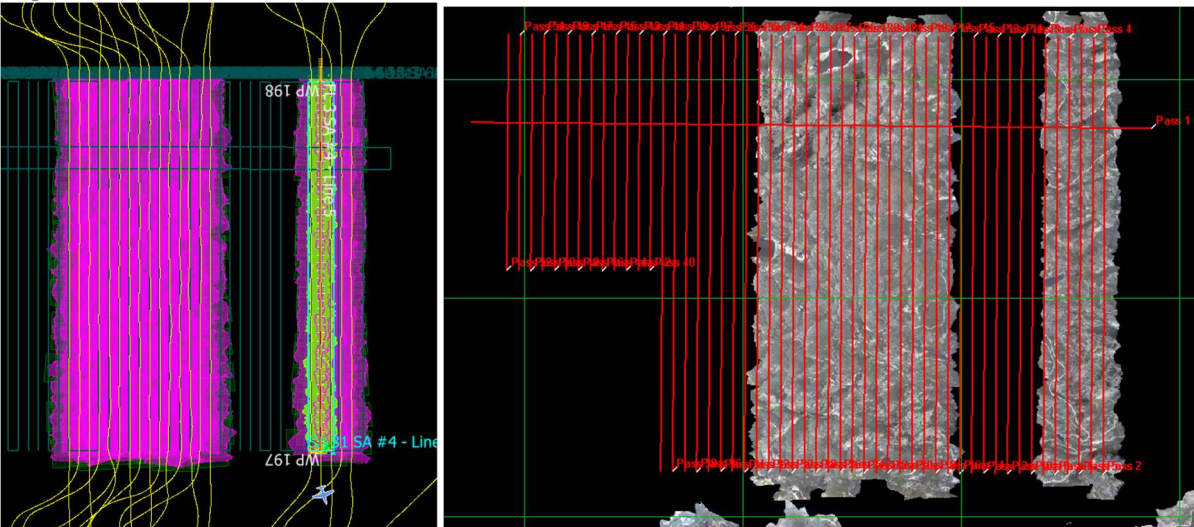
Solar Angle Less Than 40 degrees: (*)

D13|NIWO

Line #	2	3	4	5	6	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover																				

Total number of lines flown: 20

Flight Screenshots



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: 100% (51/51)
Green: 27% (14/51)
Yellow: 33% (17/51)
Red: 39% (20/51)
* Flown within 35deg solar angle

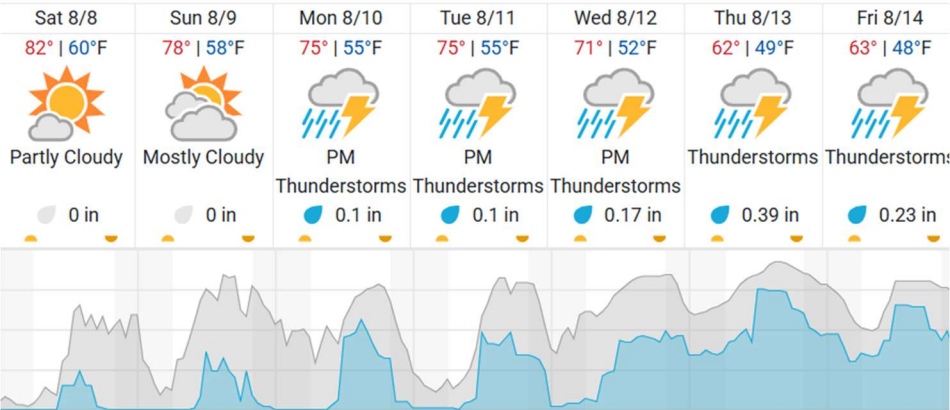
D13 | WLOU (West St. Louis Creek)

2	3	4	5	6	7	8	9	10	11	12	13	14
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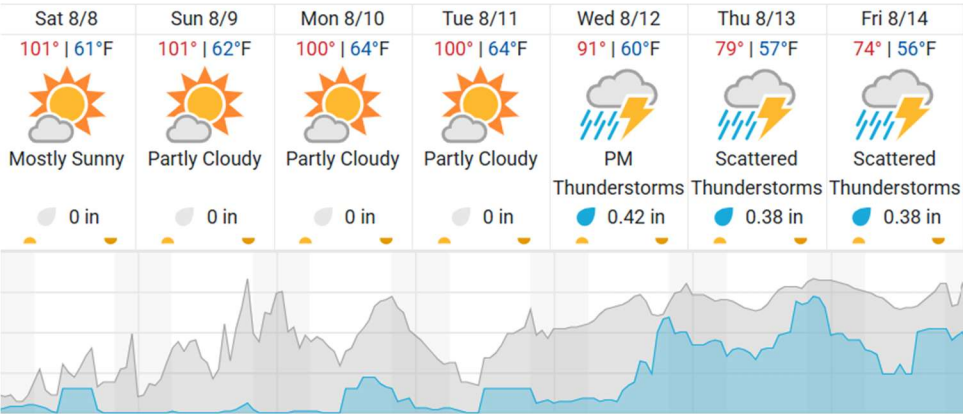
Flown: 0% (0/13)
Green: 0% (0/13)
Yellow: 0% (0/13)
Red: 0% (0/13)
* Flown within 35deg solar angle

Weather Forecast

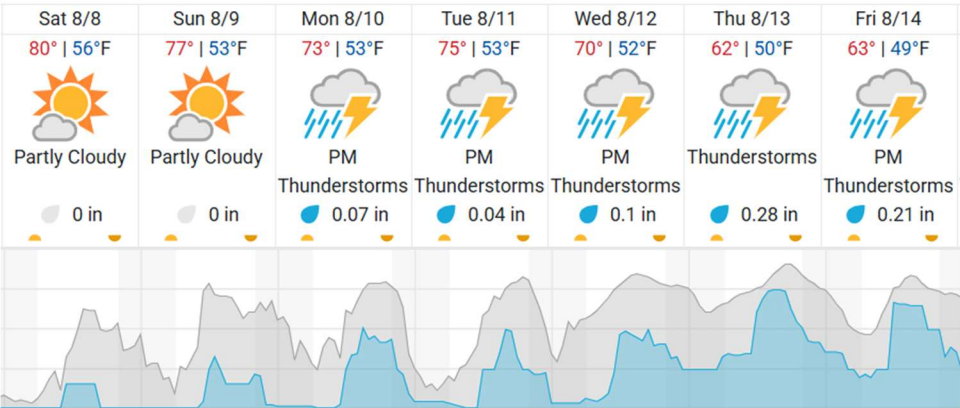
Allenspark, CO (NIWO/RMNP)



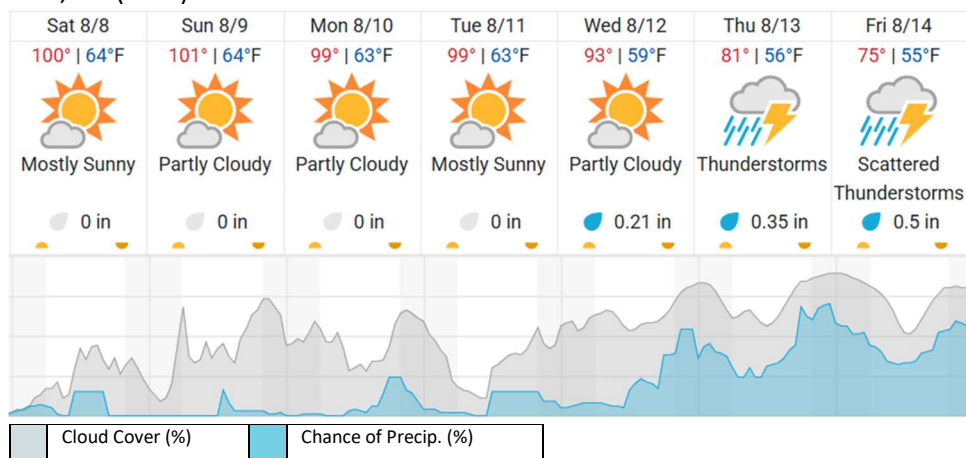
Sterling, CO (STER)



Fraser, CO (WLOU)



Joes, CO (ARIK)



source: wunderground.com

Flight Collection Plan for August 8th 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), Nick (NIS)