



Payload 3 Daily Flight Report



**Date:** 2024-07-18  
**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:** STER (Sterling Agricultural Site)  
**Days left in Domain:** 40

**Report Author:** Cameron  
**Lidar Operators:** Cameron      **Flight Hours:** 03:40  
**Spectrometer Operators:** Matt      **Hours until maintenance:** 121.33  
**Pilots:** Justin, Jacob      **GPS Instruments:** AOP\_KBDU, AOP\_STER  
**Ground Crew:** Nick

**Summary**

With early morning clouds over the Southern Rockies & Colorado Plateau, we focused our attention to the central plains'. Given the weather, Sterling was the only viable option for data collection. We were able to complete the entire flight box in "green" sky conditions.

**Concerns**

- Nothing new to report

**Comments**

- None

**Daily Coverage**

Estimated Cloud Cover Key

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

**D10|STER**

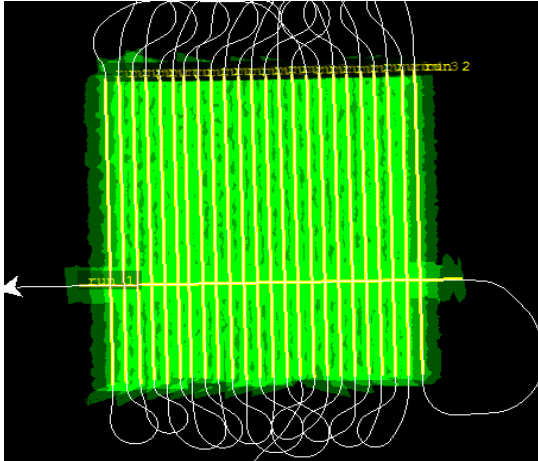
Line #	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover																				

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

Total number of lines flown: 24

## Flight Screenshots

Lidar Swath



Cumulative Domain Coverage

NIS Geo Paint



### 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: 0% (0/39)

Green: 0% (0/39)

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: 0% (0/51)

Green: 0% (0/51)

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: 0% (0/13)

Green: 0% (0/13)

Yellow: 0% (0/13)

Red: 0% (0/13)

D15|CTWD\_P1 (Cottonwood Assignable Asset – Northern Utah)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
21	22																			

Flown: 0% (0/22)  
 Green: 0% (0/22)  
 Yellow: 0% (0/22)  
 Red: 0% (0/22)

D15|CTWD\_P2 (Cottonwood Assignable Asset – Northern Utah)

23	24	25	26	27	28	29
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Flown: 0% (0/7)  
 Green: 0% (0/7)  
 Yellow: 0% (0/7)  
 Red: 0% (0/7)

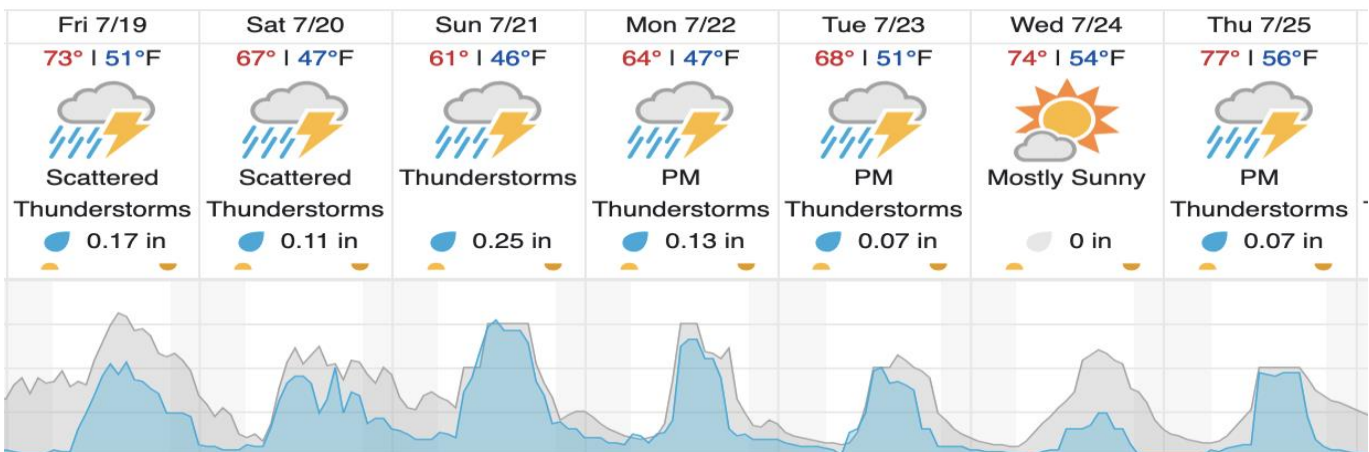
D15|CTWD\_P3 (Cottonwood Assignable Asset – Northern Utah)

30	31	32	33	34	35	36	37	38	39	40	41	42
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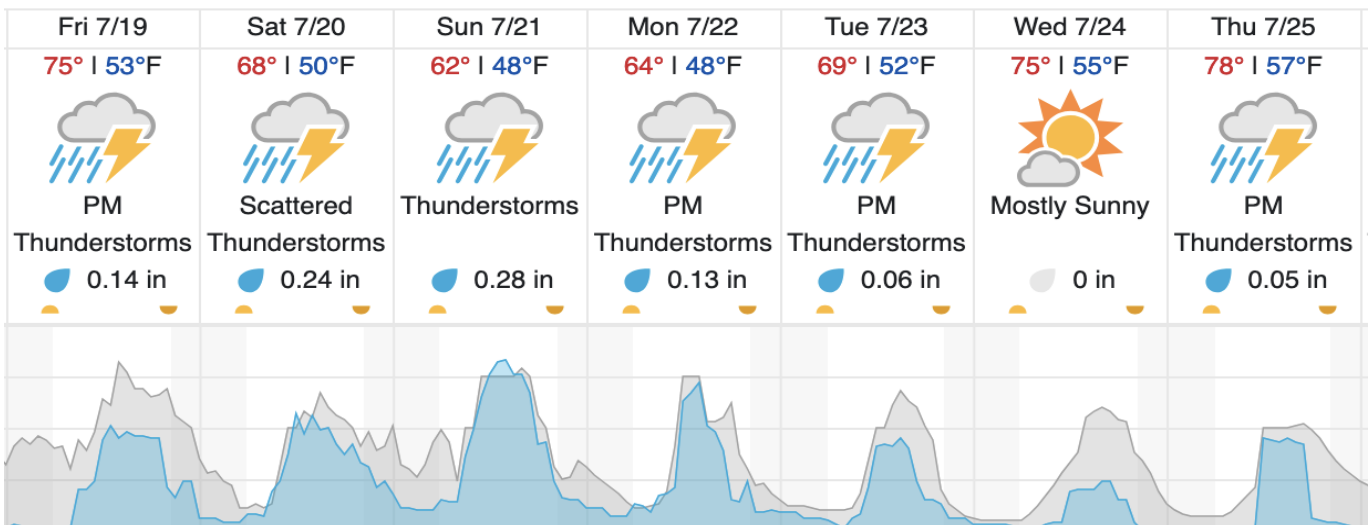
Flown: 0% (0/13)  
 Green: 0% (0/13)  
 Yellow: 0% (0/13)  
 Red: 0% (0/13)

**Weather Forecast**

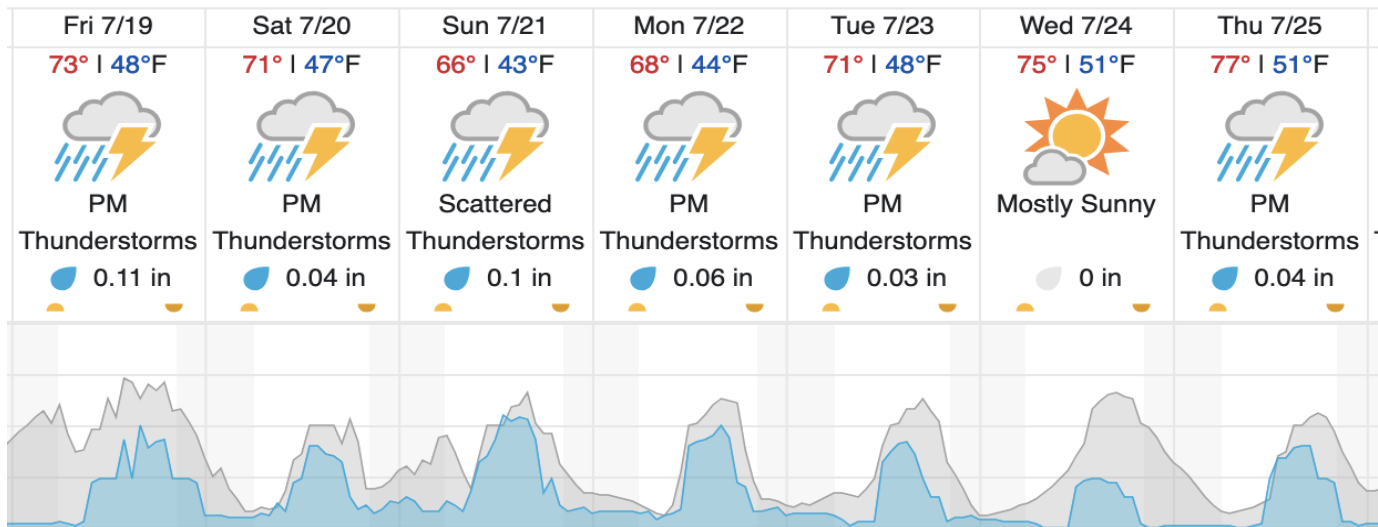
Allenspark, CO (RMNP)



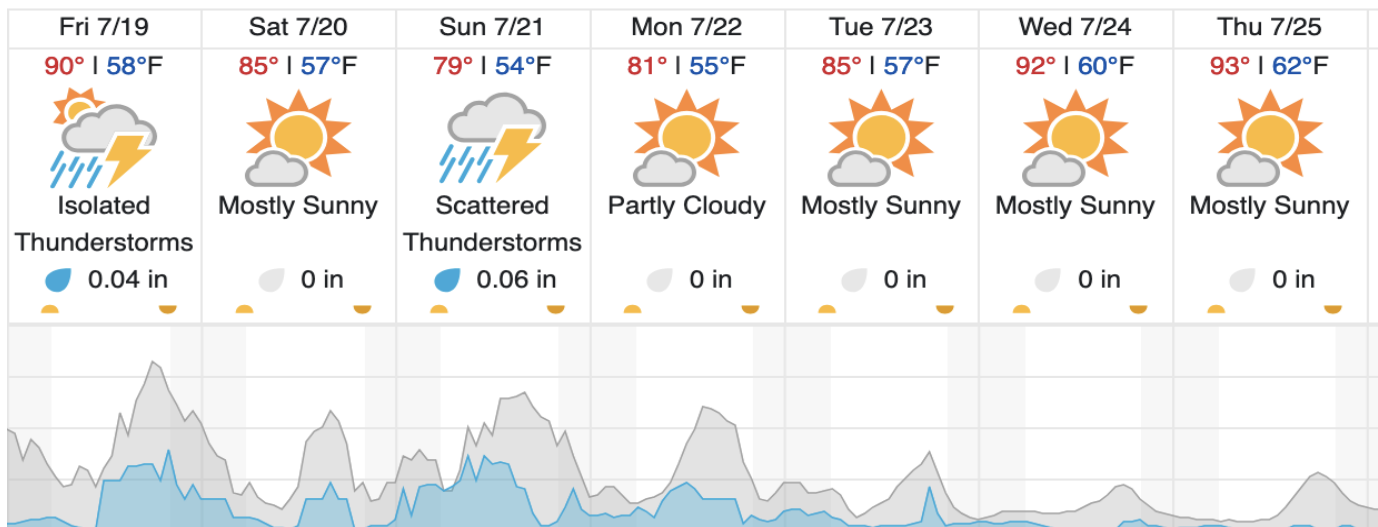
Nederland, CO (NIWO)



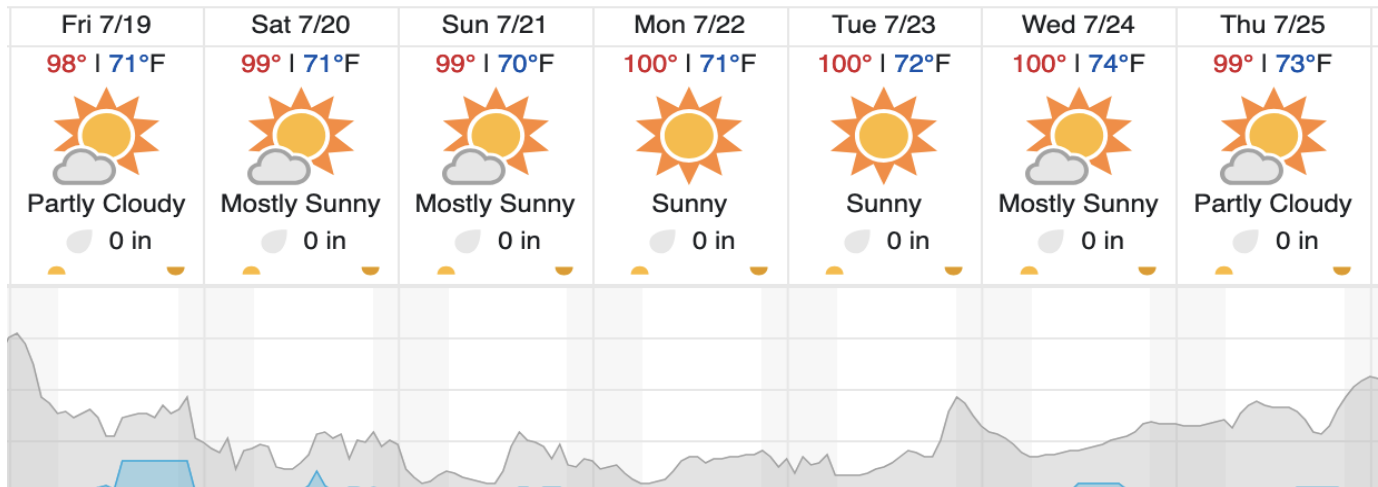
Fraser, CO (WLOU)



Joes, CO (ARIK)



Ogden, UT (CTWD)



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

## **Flight Collection Plan for July 19, 2024**

### **Flyority 1**

Collection Area: Niwot Ridge Mountain Research Station

Flight Plan Name: D13\_NIWO\_C1\_P1\_v5\_Q780

On-station Time: 1530 UTC / 0930 L

### **Flyority 2**

Collection Area: Rocky Mountain National Park (RMNP)

Flight Plan Name: D10\_RMNP\_R2\_P1\_v4\_Q780

On-station Time: 1530 UTC / 0930 L

### **Flyority 3**

Collection Area: West St. Louis Creek (WLOU)

Flight Plan Name: D13\_WLOU\_A1\_P1\_v2\_Q780

On-station Time: 1540 UTC / 0940 L

### **Flyority 4**

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 5**

Collection Area: Northern Utah Priority 2 Flight Plan

Flight Plan Name: D15\_CTWD\_S1\_P1\_v1

On-station Time: 1520 UTC / 0920 L

### **Flyority 6**

Collection Area: Northern Utah Priority 2 Flight Plan

Flight Plan Name: D15\_CTWD\_S1\_P2\_v1

On-station Time: 1520 UTC / 0920 L

### **Flyority 7**

Collection Area: Northern Utah Priority 2 Flight Plan

Flight Plan Name: D15\_CTWD\_S1\_P3\_v1

On-station Time: 1520 UTC / 0920 L

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