



Payload 3 Daily Flight Report



Date: 2024-07-28

Flight Campaign ID: P3C1

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

Aircraft: N821AR

Domain: 13 (Southern Rockies & Colorado Plateau), 10 (Central Plains), 15 (Great Basin)

Sites Flown: NIWO (Niwot Ridge Mountain Research Station)

Days left in Domain: 30

Report Author: Nick

Lidar Operators: Nick

Spectrometer Operators: Cameron

Pilots: Vince, Manning

Ground Crew: Matt

Flight Hours: 00:43

Hours until maintenance: 118.08

GPS Instruments: AOP_KBDU, AOP_NIWO

Summary

The crew took to the skies today only to be met with building clouds over the Front Range. Two lines were collected at NIWO before clouds built up to less than green sky conditions.

Concerns

The NIS3 chiller has been identified as the cause of increased chiller temperatures and is to be replaced at next available down day. A spare chiller is connected when the payload is secured for the day.

Comments

Cam rotates out today. Thanks for all the great work!

Daily Coverage

Estimated Cloud Cover Key

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

Solar Angle Less Than 40 degrees

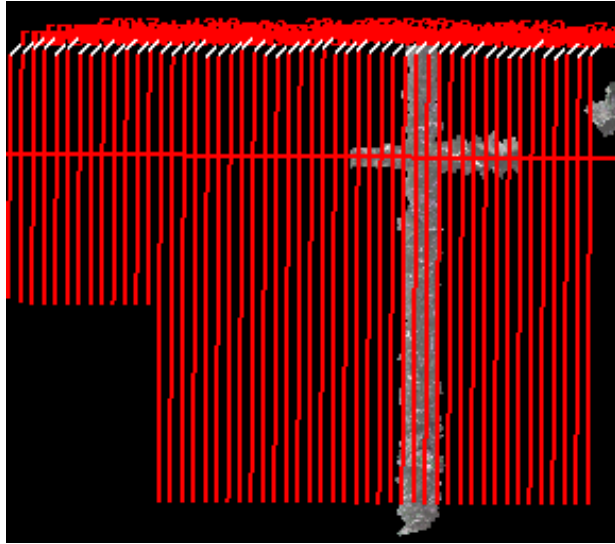
Line #

D13|NIWO

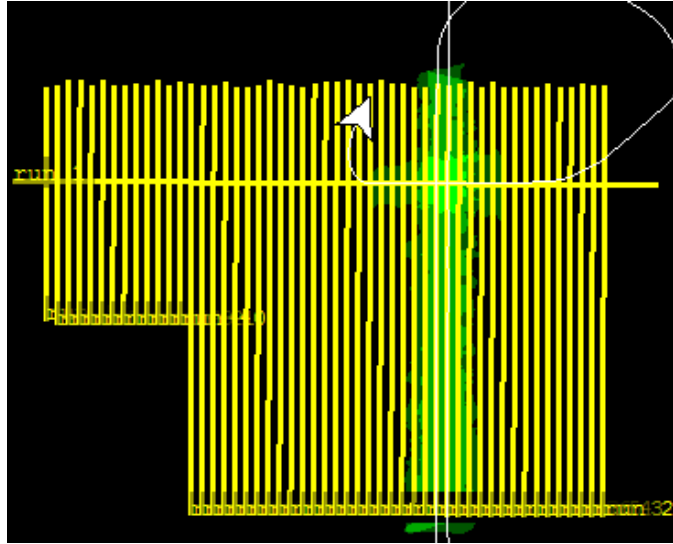
Line #	16	17
Lidar	✓	✓
Spectrometer	✓	✓
Camera	✓	✓
Cloud Cover	Green	Green

Total number of lines flown: 2

Flight Screenshots



NIS screenshot 2024072814



Lidar screenshot 2024072814

Pictures

None.

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: 8% (4/51)

Green: 4% (2/51)

Yellow: 0% (0/51)

Red: 4% (2/51)

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 | 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)

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)

D15 | CTWD_P1 (RSS)

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)

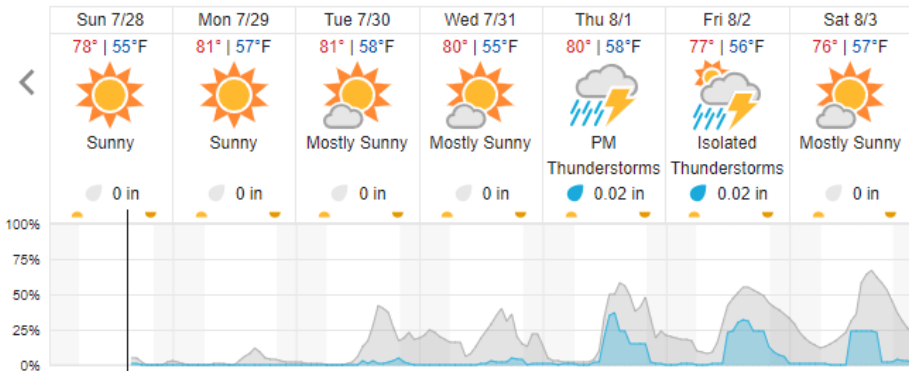
D15 | CTWD_P2 (RSS)

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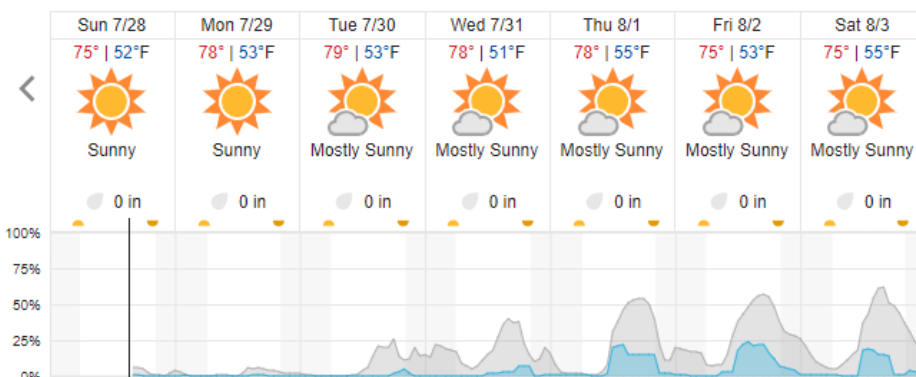
Flown: 0% (0/7)
 Green: 0% (0/7)
 Yellow: 0% (0/7)
 Red: 0% (0/7)

Weather Forecast

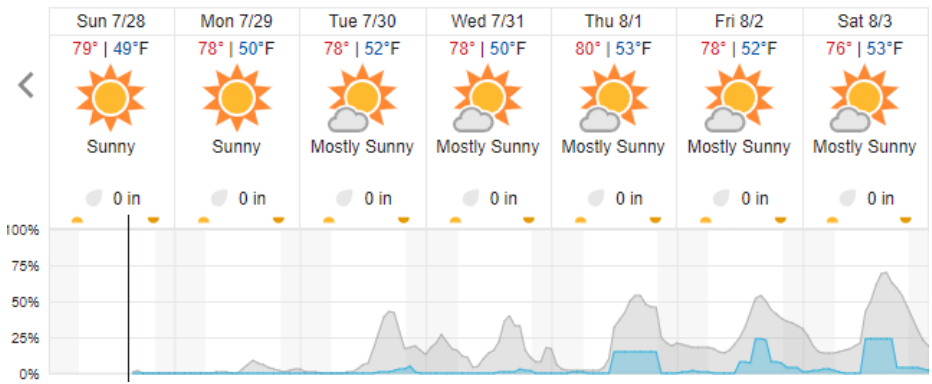
Nederland, CO (NIWO)



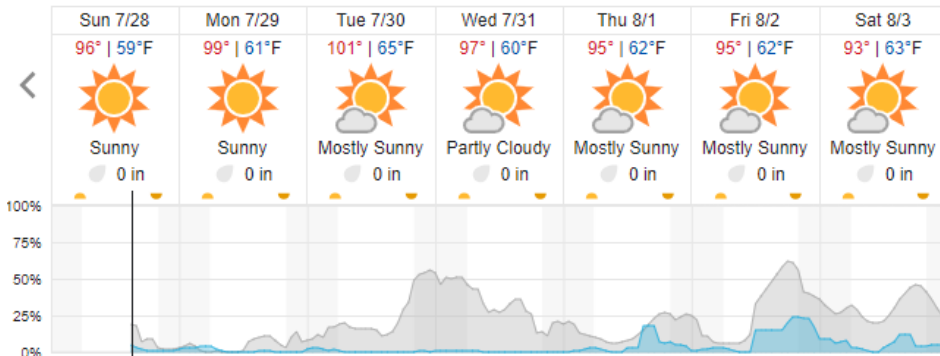
Allenspark, CO (RMNP)



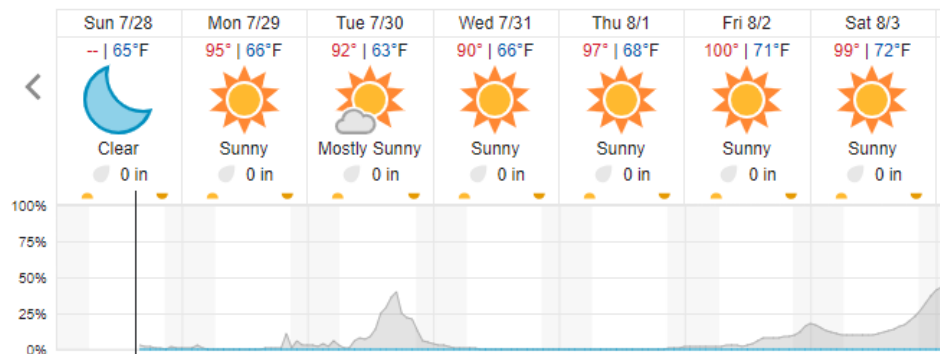
Fraser, CO (WLOU)



Joes, CO (ARIK)



Ogden, UT (CTWD)



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

Flight Collection Plan for July 29, 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 1 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

Crew: Matt (Lidar), Nick (NIS)