

Payload 3 Daily Flight Report



Date: 2024-07-29

Flight Campaign ID: P3C1

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

Aircraft: N821AR

Domain: 13 (Southern Rockies & Colorado Plateau)

Sites Flown: NIWO (Niwot Ridge Mountain Research Station)

Days left in Domain: 29

Report Author: Matt

Lidar Operators: Matt Flight Hours: 03:54

Spectrometer Operators: Nick Hours until maintenance: 114.18

Pilots: Vince, Manning GPS Instruments: AOP_KBDU, AOP_NIWO

Summary

Clear skies allowed us to get airborne and complete 35 lines in green conditions at the Niwot Ridge Mountain Research Site.

Concerns

The crew observed the Alexander Mountain Fire to the NW of the RMNP collection area. We'll continue to monitor for any impacts to flight operations.

Daily Coverage

Estimated Cloud Cover Kev

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

Solar Angle Less Than 40 degrees

Line#

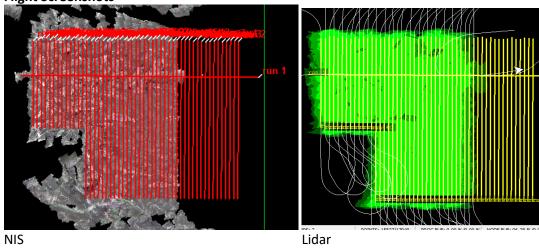
D13|NIWO

Line #	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
Lidar	√	✓	✓	✓	\	✓	✓	✓	✓	✓	\	✓	✓	✓	✓	✓	✓	✓	\	✓
Spectrometer	√	✓	√	✓																
Camera	√	√	✓	√	✓	✓	√	√	✓	√	✓	✓	√	√	✓	√	√	✓	✓	✓
Cloud Cover																				

Line #	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	\
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	√	√	✓	√	✓										
Cloud Cover															

Total number of lines flown: 35

Flight Screenshots



Pictures





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: 76% (39/51) Green: 73% (37/51) Yellow: 0% (0/51) Red: 4% (2/51)

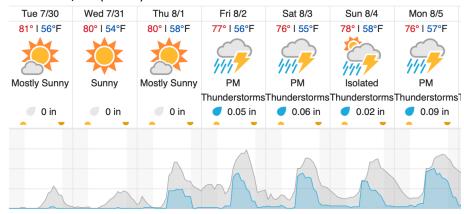
D13 | WLOU (West St. Louis Creek)

2	3	4	5	6	7	8	9	10	11	12	13	14

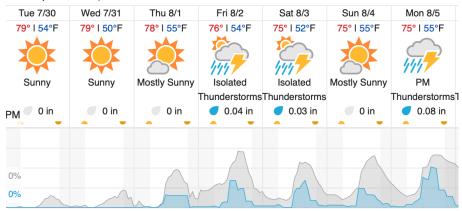
Flown: 0% (0/13) Green: 0% (0/13) Yellow: 0% (0/13) Red: 0% (0/13)

Weather Forecast

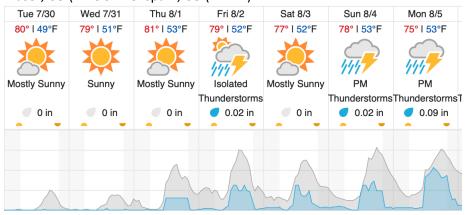
Nederland, CO (NIWO)



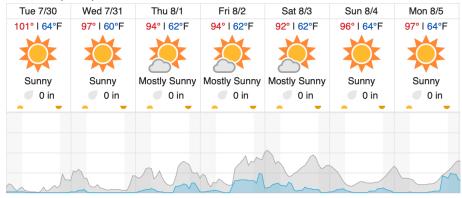
Allenspark, CO (RMNP



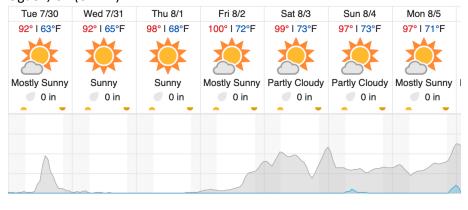
Fraser, CO (WLOU Allenspark, CO (RMNP)



Joes, CO (ARIK)



Ogden, UT (CTWD)



source: wunderground.com

Cloud Cover (%)

Flight Collection Plan for July 30, 2024

Flyority 1

Collection Area: Niwot Ridge Mountain Research Station

Chance of Precip. (%)

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: Nick (Lidar), Matt (NIS)