

# Payload 3 Daily Flight Report



Date: 2023-08-09 Flight Campaign ID: P3C1 Airport, FBO ID, City: Boulder Municipal Airport (KBDU) - Boulder, CO Aircraft: N934MU

Domain: 10 (Central Plains), 13 (Southern Rockies & Colorado Plateau) Sites Flown: RMNP (Rocky Mountain National Park) Days left in Domain: 0

Report Author: Nick Lidar Operators: Nick Spectrometer Operators: Matt Hours until maintenance: 90.77 Pilots: Justin, Jon Ground Crew: Mitch

Flight Hours: 01:10 GPS Instruments: AOP\_KBDU, AOP\_NIWO

### Summary

Payload 3 was greeted with mostly clear skies. The crew surveyed NIWO before shifting to RMNP for clouds. 4 lines were flown at RMNP before clouds built, casting shadows in the collection area. NIWO was reassessed on the transit back and deemed to be still outside green sky conditions. Skies were evaluated later in the day but remained outside green conditions.

#### Concerns

None.

#### Comments

GPS-02 is deployed for ARIK. Connectivity is sparse and daily uploads are not occurring. GPS is receiving and recording normally.

# **Daily Coverage**

**Estimated Cloud Cover Key** 

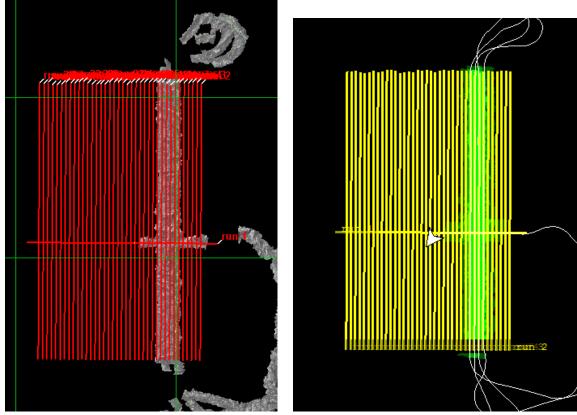
Green:	Yellow:	Red:
0-10%	11-50%	>50%

# D10|RMNP

Line #	1	8	9	10	11
Lidar	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Spectrometer		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Camera	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Cloud Cover					

Total number of lines flown: 5

# Flight Screenshots



Pictures



Clouds over NIWO. Photo courtesy of Matt.

#### **Cumulative Domain Coverage**

D10 | ARIK (Arikaree River)

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	26	27	28	29	30	31	32	33	34	35					

Flown: 0% (0/35) Green: 0% (0/35) Yellow: 0% (0/35) Red: 0% (0/35)

#### D10 | RMNP (Rocky Mountain National Park)

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	26	27	28	29	30	31	32	33	34	35	36	37	38	39	

Flown: 28% (11/39) Green: 21% (8/39)

Yellow: 8% (3/39) Red: 0% (0/39)

D13 | NIWO (Niwot Ridge Mountain Research Station)

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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	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: 4% (2/52) Green: 0% (0/52) Yellow: 4% (2/52)

Red: 0% (0/52)

D13 | WLOU (West St. Louis Creek)

 1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14

 Flown:
 0% (0/14)

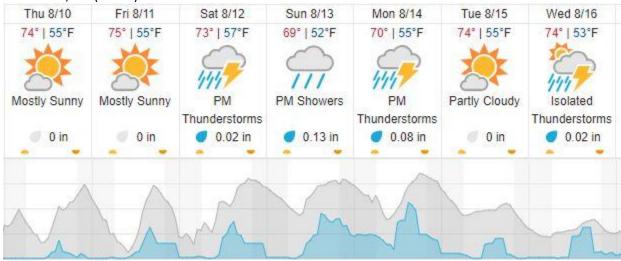
 Green:
 0% (0/14)

 Yellow:
 0% (0/14)

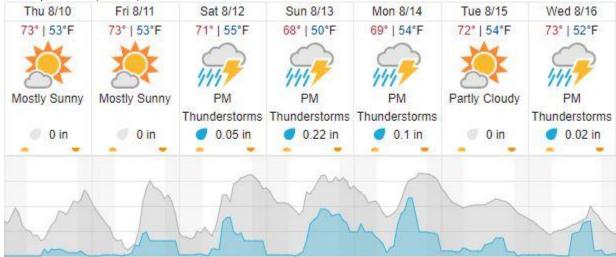
 Red:
 0% (0/14)

#### Weather Forecast

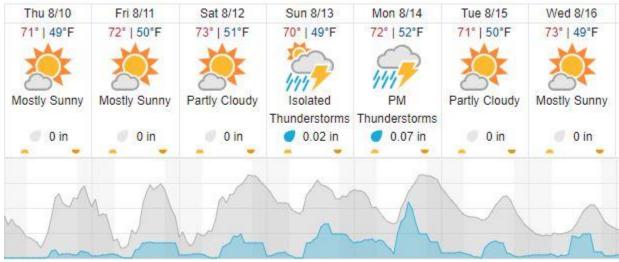
#### Nederland, CO (NIWO)



#### Allenspark, CO (RMNP)



#### Fraser, CO (WLOU)



#### Vernon, CO (ARIK)

Thu 8/10	Fri 8/11	Sat 8/12	Sun 8/13	Mon 8/14	Tue 8/15	Wed 8/16
92°   61°F	92°   60°F	90°   63°F	87°   55°F	84°   60°F	93°   64°F	92°   59°F
Mostly Sunny 0 in	Sunny 0 in	Partly Cloudy 0 in	Partly Cloudy 0 in	Partly Cloudy 0 in	Mostly Sunny 0 in	Mostly Sunny 0 in
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source: wunderground.com

# Flight Collection Plan for August 10<sup>th</sup> 2023 Flyority 1

Collection Area: Niwot Ridge Mountain Research Station (NIWO) Flight Plan Name: D13\_NIWO\_C1\_P1\_v5\_Q780 On-Station Time: 15:40 UTC / 09:40 L

# Flyority 2

Collection Area: Rocky Mountain National Park (RMNP) Flight Plan Name: D10\_RMNP\_R2\_P1\_v2\_Q780 On-Station Time: 15:40 UTC / 09:40 L

# Flyority 3

Collection Area: West St. Louis Creek (WLOU) Flight Plan Name: D13\_WLOU\_A1\_P1\_Q780 On-Station Time: 15:40 UTC / 09:40 L

# Flyority 4

Collection Area: Arikaree River (ARIK) Flight Plan Name: D10\_ARIK\_A1\_P2\_v3\_Q780 On-Station Time: 15:30 UTC / 09:30 L

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