



Payload 3 Daily Flight Report



Date: 2020-06-23

Flight Campaign ID: P3C1

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

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

Sites Flown: CPER (Central Plains Ecological Range)

Days left in Domain: 12

Report Author: Mitch Haynes

Lidar Operators: Mitch Haynes

Spectrometer Operators: Elissa Barris **Hours until maintenance:** 94.23

Pilots: Justin Eddington, Lane Taylor **GPS Instruments:** 01 - AOP_CPER, AOP_CPER, AOP_KBDU

Ground Crew: Cameron Chapman

Summary

Completed initial coverage over CPER with 18 lines being recorded under Green conditions. Crew will look to better up the final 9 lines if clear skies exist tomorrow morning.

Concerns

None

Comments

- CPER GPS data from today's flight will likely need to be manually downloaded later this week as auto-upload to ECS continues to fail despite the hut being online. Thanks to D10 staff who were on site this morning to verify the unit was logging.
- Super-efficient flying day from our pilots, with Justin Eddington averaging sub 2-minute turns (his fasted teardrop turn yet was recorded at 1:18, laser off to laser on).

Daily Coverage

D10|CPER

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	Yellow	Yellow	Green																	

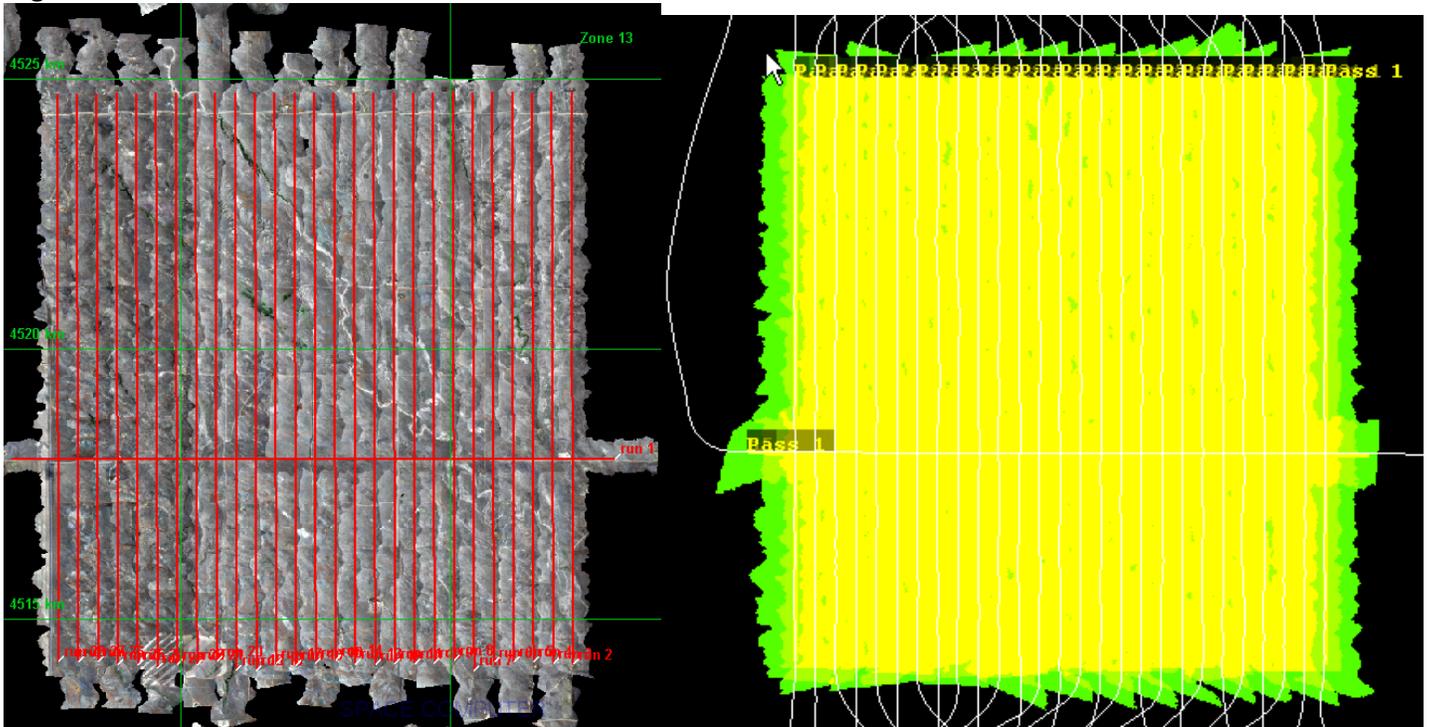
Line #	22	23	24	25	26	27	28
Lidar	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓
Cloud Cover	Yellow						

Estimated Cloud Cover Key

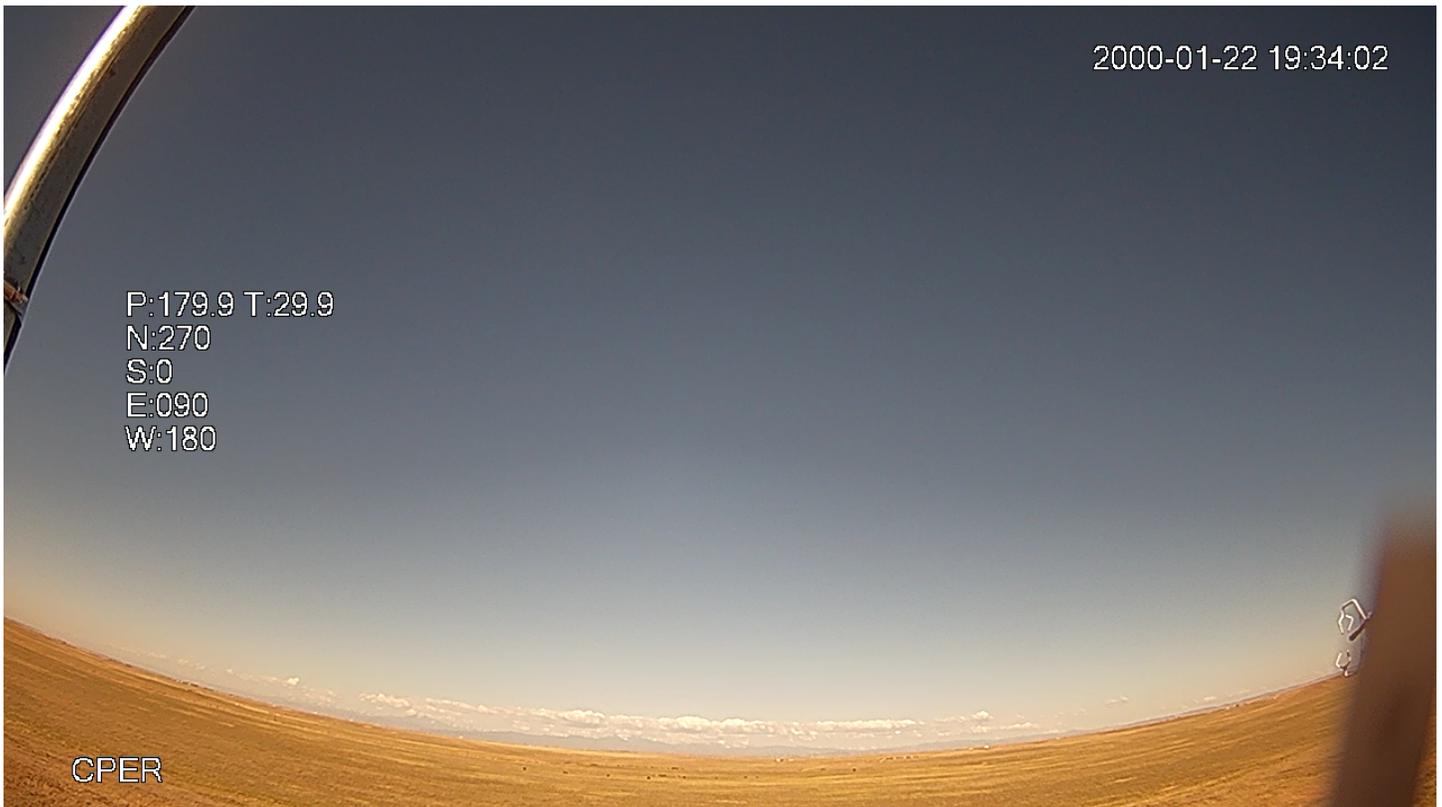
Green:	Yellow:	Red:
0-10%	11-50%	>50%

Total number of lines flown: 27

Flight Screenshots

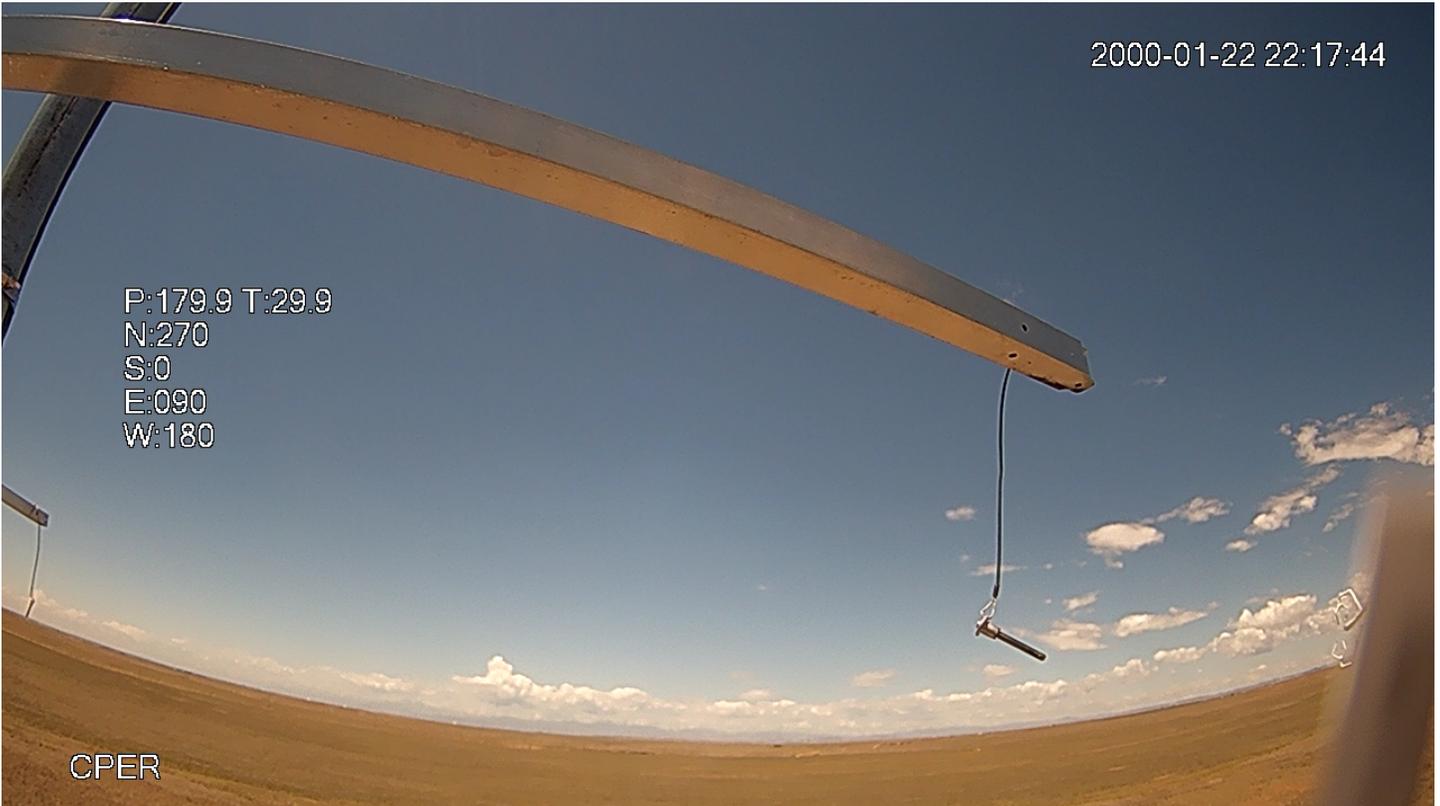


Pictures



Above: View from the CPER tower camera looking west towards cumulus clouds building over the mountains during the early portion of today's flight.

2000-01-22 22:17:44



P:179.9 T:29.9
 N:270
 S:0
 E:090
 W:180

CPER

Above: Cumulus clouds over the mountains gradually marched east throughout the flight, eventually pushing collect into yellow (10-50% sky coverage) conditions.

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: 97% (34/35)
 Green: 31% (11/35)
 Yellow: 46% (16/35)
 Red: 20% (7/35)

D10|CPER (Central Plains Ecological Range)

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												

Flown: 100% (28/28)
 Green: 64% (18/28)
 Yellow: 36% (10/28)
 Red: 0% (0/28)

D10|RMNP_P1 (Rocky Mountain National Park Priority 1)

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: 0% (0/39)
 Green: 0% (0/39)
 Yellow: 0% (0/39)
 Red: 0% (0/39)

D10|RMNP_P2 (Rocky Mountain National Park Priority 2)

40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
60	61	62	63	64															

Flown: 0% (0/25)
 Green: 0% (0/25)
 Yellow: 0% (0/25)
 Red: 0% (0/25)

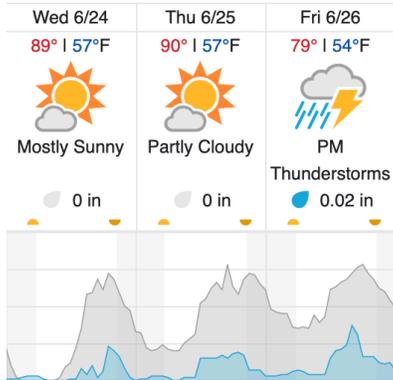
D13 | MOAB (Moab)

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											

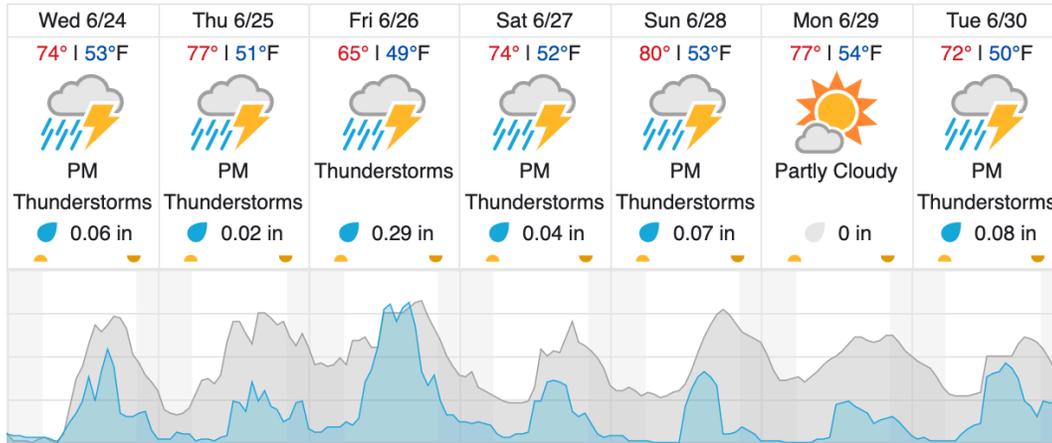
Flown: 0% (0/29)
 Green: 0% (0/29)
 Yellow: 0% (0/29)
 Red: 0% (0/29)

Weather Forecast

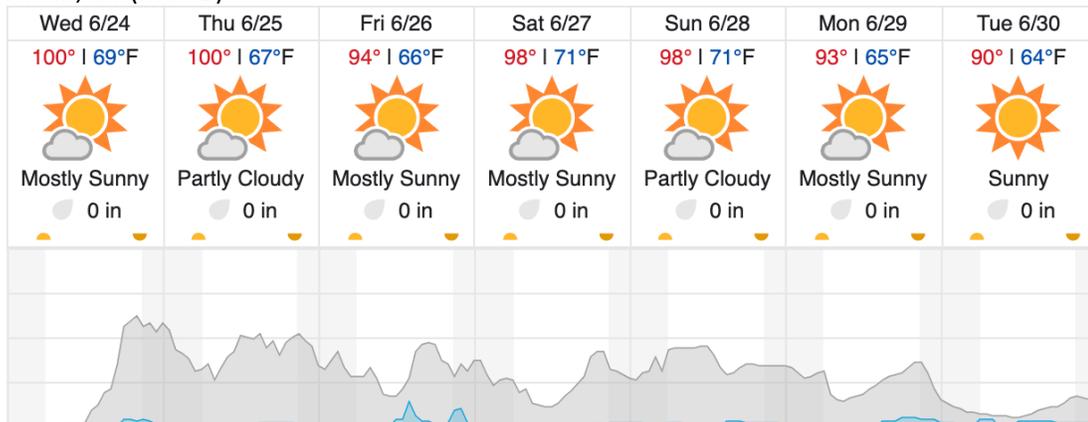
Nunn, CO (CPER)



Estes Park, CO (RMNP)



Moab, UT (MOAB)



	Cloud Cover (%)		Chance of Precip. (%)
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Flight Collection Plan for 24 June 2020

Flyority 1

Collection Area: Central Plains Ecological Range (CPER)

Flight Plan Name: D10_CPER_C1_P1_v6_Q780

On-Station Time: 15:20 UTC / 09:20L

Re-fly lines 2-3, 22-28 if Green

Flyority 2

Collection Area: Rocky Mountain National Park (RMNP)

Flight Plan Name: D10_RMNP_R2_P1_v2_Q780

On-Station Time: 15:20 UTC / 09:20L

Flyority 3

Collection Area: Moab (MOAB) – Moab, UT

Flight Plan Name: D13_MOAB_R1_P1_v3_Q780

On-Station Time: 15:30 UTC / 09:30L

Flight Crew: Elissa Barris (Lidar), Cameron Chapman (NIS), Mitch Haynes (Ground)

Flight Collection Plan for 25 June 2020

Flyorities: Same as previous day

Flight Crew: Cameron Chapman (Lidar), Mitch Haynes (NIS), Elissa Barris (Ground)