



Payload 3 Daily Flight Report



**Date:** 2020-07-05

**Flight Campaign ID:** P3C1

**Airport, FBO ID, City:** Boulder Municipal Airport (KBDU) - Boulder, CO, Grand Junction Regional Airport (KGJT) - Grand Junction, CO

**Domain:** 13 (Southern Rockies & Colorado Plateau)

**Sites Flown:** Transit (), MOAB (Moab )

**Days left in Domain:** 0

**Report Author:** Cameron Chapman

**Lidar Operators:** Cameron Chapman

**Spectrometer Operators:** Nick Marusich

**Pilots:** Micah Hoogeveen, Justin Eddington

**Ground Crew:** Cameron Chapman, Nick Marusich, Matt Devoe

**Flight Hours:** 01:15, 03:20, 01:29

**Hours until maintenance:** 78.43

**GPS Instruments:** C-MC01, C-MC04, U-P012

**Summary**

Clear morning skies allowed for ~80% of the MOAB flight box to be collected in “green” cloud conditions. Unfortunately the flight was cut short due to the deteriorating weather on route to Boulder. This concludes P3’s D10 / D13 flight collection. P2 is expected to arrive in a few weeks to resume D13 flight data collections.

**Concerns**

- None

**Comments**

- D06 flight support equipment is expected to arrive in Topeka tomorrow.
- Aircraft is on schedule to depart for D06 tomorrow.

**Daily Coverage**

Estimated Cloud Cover Key

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

D13 | MOAB

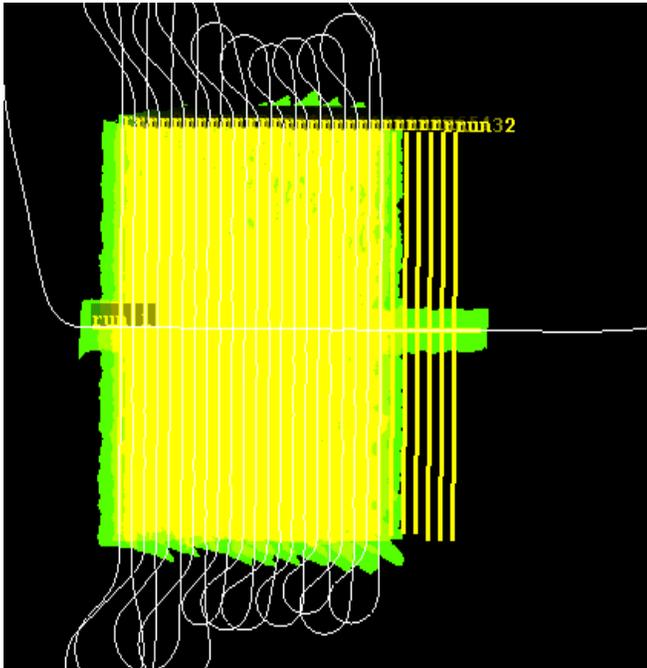
Line #	1	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
Lidar		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover																					

Line #	27	28	29
Lidar	✓	✓	✓
Spectrometer	✓	✓	✓
Camera	✓	✓	✓
Cloud Cover			

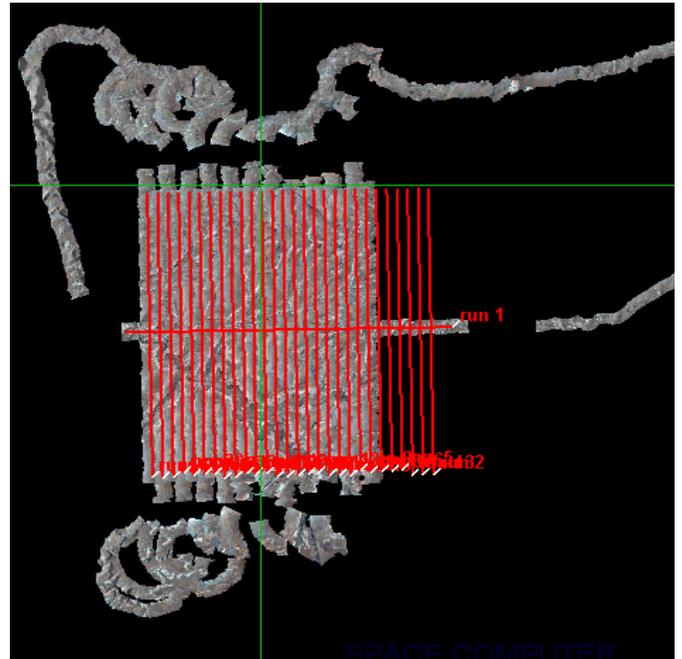
Total number of lines flown: 23

## Flight Screenshots

Lidar Swath MOAB



NIS Geo Paint MOAB



## Pictures



Above & Below: Passing through Vail and Winter Park on route to MOAB via Grand Junction.



Passing over some cool canyons near MOAB.



Storms closing in on the aircraft as we transitioned back to Boulder.

### Cumulative Domain Coverage

#### 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: 79% (23/29)

Green: 79% (23/29)

Yellow: 0% (0/29)

Red: 0% (0/29)

(Stock Photo)

#### 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: 100% (28/28)  
 Yellow: 0% (0/28)  
 Red: 0% (0/28)

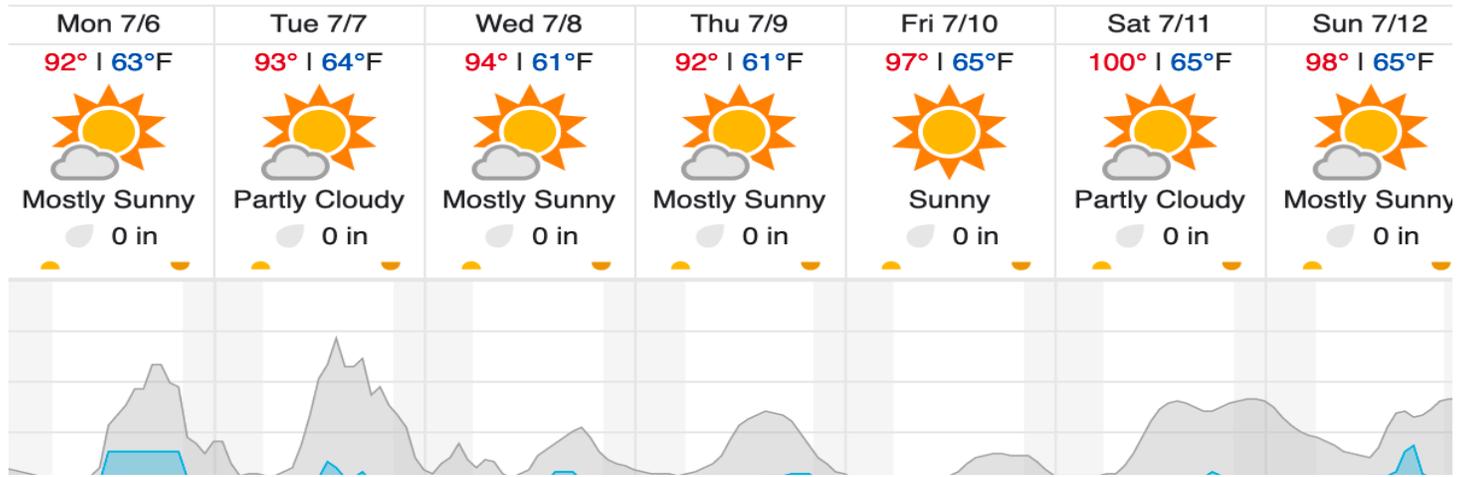
D10|RMNP\_P1 (Rocky Mountain National Park Priority 1)

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	

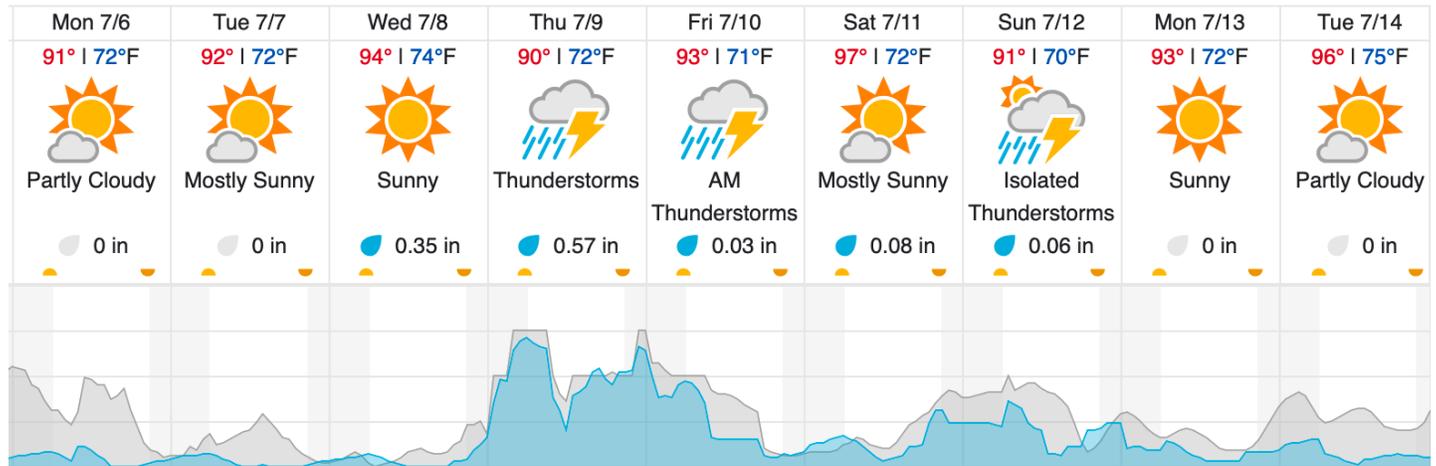
Flown: 100% (39/39)  
 Green: 92% (36/39)  
 Yellow: 8% (3/39)  
 Red: 0% (0/39)

**Weather Forecast**

Boulder, CO



Topeka, KS



**Flight Collection Plan for 6 July 2020**

Transit to D06

Flight Crew: Mitch Haynes , Elissa Barris