

Payload 3 Daily Flight Report



Date: 2020-09-01

Flight Campaign ID: P3C1

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

Domain: 00 (Training & Calibration) **Sites Flown**: O10B (NIS Offset - Riegl)

Days left in Domain:

Report Author: Mitch Haynes

Lidar Operators: Mitch Haynes **Flight Hours**: 00:22, 00:22, 00:21, 00:21

Spectrometer Operators: Robb Walker **Hours until maintenance**: 24.05 **Pilots**: Justin Eddington, Jeff Quintanilla **GPS Instruments**: AOP_KBDU

Ground Crew: Cameron Chapman

Summary

Clear skies and not too smoky sky coverage allowed the flight crew to complete the NIS Offset under green conditions

Concerns

None

Comments

• Crew discussed CPER Tarp flight with science this morning, but opted to hold off in hopes of more clear/less smokey conditions in the coming days.

Daily Coverage

Estimated Cloud Cover Key

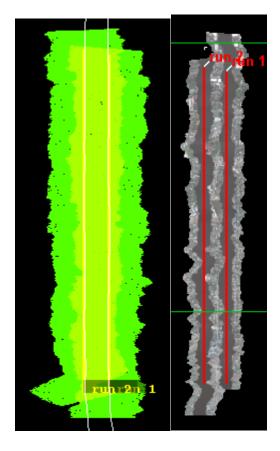
Green:	Yellow:	Red:
0-10%	11-50%	>50%

D00|O10B

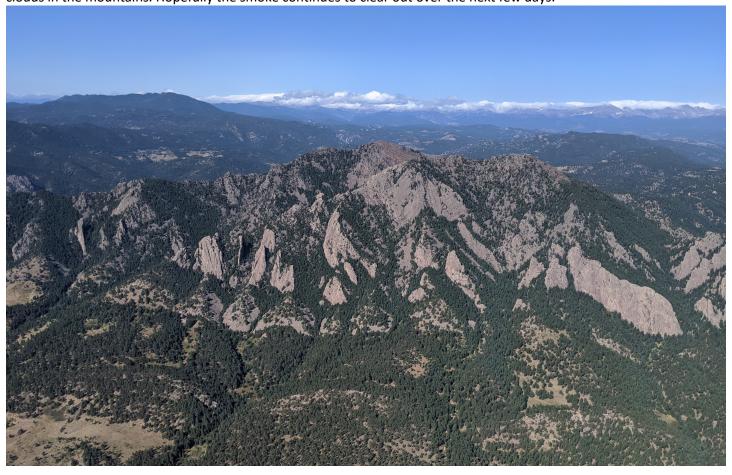
Line #	1	2	2	1	1	2	1	2	1	2
Lidar	/	\	\	/	\	/	\	\	/	/
Spectrometer	✓	√	√	✓	✓	✓	√	√	√	√
Camera	✓	√	√	✓	✓	✓	√	√	√	✓
Cloud Cover										

Total number of lines flown: 10

Flight Screenshots



Pictures: One of the more clear views of the FlatIrons P3 has had since returning to Boulder, outside of some low lying clouds in the mountains. Hopefully the smoke continues to clear out over the next few days.



Cumulative Domain Coverage D00 B10E (Riegl Boresight Calibration - 1600m, 1000m, 500m) 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 | 19 | 20 Flown: 100% (20/20) Green: 70% (14/20) Yellow: 30% (6/20) Red: 0% (0/20) D00 | CPER (Satellite Overpass Coincident Collection & 1000m Multiple Altitude Test Flight - CPER) 16 17 18 19 20 21 22 23 12 | 13 | 14 15

Flown: 0% (0/14) Green: 0% (0/14) Yellow: 0% (0/14) Red: 0% (0/14)

D00 | F10A (D10 BRDF Flight - CPER)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Flown: 0% (0/20) Green: 0% (0/20) Yellow: 0% (0/20) Red: 0% (0/20)

D00 | H10C (NEON Headquarters Lidar Test - Riegl)

1 2 3 4

Flown: 100% (4/4) Green: 0% (0/4) Yellow: 0% (0/4) Red: 100% (4/4)

D00 K10A (2000m Multiple Altitude Test Flight - CPER)

6 7 8 9 10 11

Flown: 0% (0/6) Green: 0% (0/6) Yellow: 0% (0/6) Red: 0% (0/6)

D00 K10B (2000m Multiple Altitude Test Flight - RMNP)

2 3 4 5 6 7

Flown: 0% (0/6) Green: 0% (0/6) Yellow: 0% (0/6) Red: 0% (0/6)

D00 | N10D (Nominal Runway at KBDU - Riegl)

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

Flown: 92% (24/26) Green: 0% (0/26) Yellow: 0% (0/26) Red: 92% (24/26)

D00 | O10B (NIS Offset - Riegl)

1 2

Flown: 100% (2/2) Green: 100% (2/2) Yellow: 0% (0/2) Red: 0% (0/2)

D00 | R10C (Table Mountain Radiometric Calibration - Riegl)

1 2 3 4 5

Flown: 100% (5/5) Green: 100% (5/5) Yellow: 0% (0/5) Red: 0% (0/5)

D00 RMNP (1000m Multiple Altitude Test Flight - RMNP)

2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

Flown: 0% (0/18) Green: 0% (0/18) Yellow: 0% (0/18) Red: 0% (0/18)

D00 | W10C (Wiggle Timing Test - Riegl)

1 2

Flown: 100% (2/2) Green: 0% (0/2) Yellow: 0% (0/2) Red: 100% (2/2)

Weather Forecast

Wed 9/2	Thu 9/3	Fri 9/4	Sat 9/5	Sun 9/6	Mon 9/7	Tue 9/8
88° I 57°F	84° I 58°	F 88° I 59°F	94° I 63°F	88° I 54°F	80° I 45°F	57° I 39°F
	20					
Sunny	Sunny	Sunny	Sunny	Mostly Sunny	Mostly Sunny	Partly Cloudy
0 in	0 ir		0 in	0 in	0.11 in	0 in
0 111	0 11		0 111	0 111	0.11 111	0 111
		~				
Cloud Cove	er (%)	Chance of Precip. (%)				

Flight Collection Plan for 02 September 2020

Flyority 1

Collection Area: Satellite Overpass Coincident Collection & 1000m Multiple Altitude Test Flight - CPER

Flight Plan Name: D10_CPER_C1_P1_v6_Q780

On-station Time: 1000 – 1600 Local / 1600 – 2200 UTC

Flyority 2

Collection Area: 2000m Multiple Altitude Flight - CPER Flight Plan Name: D10_K10A_Multiple_Alt_2000m_v1 On-station Time: 1000 – 1600 Local / 1600 – 2200 UTC

Flyority 3

Collection Area: 1000m Multiple Altitude Test Flight - RMNP

Flight Plan Name: D10_RMNP_R2_P1_v2_Q780

On-station Time: 1000 – 1610 Local / 1600 – 2210 UTC

Flyority 4

Collection Area: 2000m Multiple Altitude Flight - RMNP

Flight Plan Name: D10_K10B_Multiple_Alt_v2

On-station Time: 1000 – 1610 Local / 1600 – 2210 UTC

Flyority 5

Collection Area: NIS Offset Flight

Flight Plan Name: D10_O10B_NIS_Offset_v2_Q780 On-station Time: 0940 – 1640 Local / 1540 – 2240 UTC

Wednesday 9/2 Crew: Robb (Lidar), Cam (NIS), Mitch (Ground), Matt (GPS)

Thursday 9/3 Crew: Cam (Lidar), Mitch (NIS), Robb (Ground) Friday 9/4 Crew: Mitch (Lidar), Robb (NIS), Cam (Ground)