



Payload 3 Daily Flight Report



Date: 2020-08-21

Flight Campaign ID: P3C1

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

Domain: 00 (Training & Calibration)

Sites Flown: Transit (KBJC -> KBDU), H10C (NEON Headquarters Lidar Test - Riegl), W10C (Wiggle Timing Test - Riegl)

Days left in Domain: 26

Report Author: Robb Walker

Lidar Operators: Robb Walker, Cameron Chapman **Flight Hours:** 00:11 + 01:08

Spectrometer Operators: Mitch Haynes **Hours until maintenance:** 33.47

Pilots: Mike Francis, Lane Taylor

GPS Instruments: AOP_KBDU

Ground Crew: Ivana Vu, John Adler

Summary

Payload 2 completed removal this morning and remaining crew has merged with Payload 3. Severe smoke prevented planned engineering flights at CPER and RMNP. ASOs took this time to complete crew recertification and less restrictive calibration flights.

Concerns

Hotel Kit 3 was resynching this afternoon and completed. Internal D: drive appeared to be in good condition, however it was not recognizing any external RAIDs inserted and was having issues rebooting. Andrew will help trouble shoot tomorrow. If problem can't be resolved crew will attempt to gain access to Hotel Kit 5 at headquarters or delay extractions until Monday.

Comments

-RAID 2020_P3C1_06 was shipped to data center this afternoon.

-Robb Walker completed Riegl recertification.

-Pilot swap will take place tomorrow after flights with Lane Taylor departing and Justin Eddington arriving.

Daily Coverage

Estimated Cloud Cover Key

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

D00|H10C

Line #	1	2	3	4
Lidar	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓
Camera	✓	✓	✓	✓
Cloud Cover				

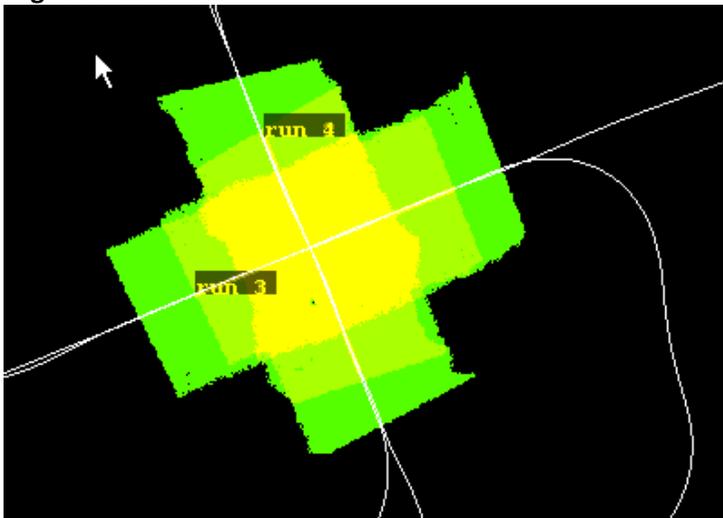
Total number of lines flown: 4

D00|W10C

Line #	1	2
Lidar	✓	✓
Spectrometer	✓	✓
Camera	✓	✓
Cloud Cover		

Total number of lines flown: 2

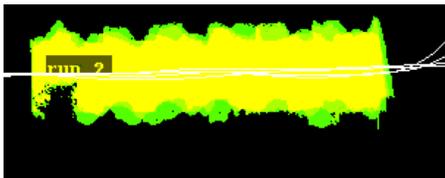
Flight Screenshots



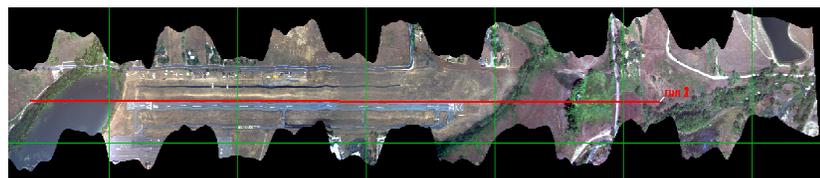
Lidar (H10C)



NIS (H10C)



Lidar (W10C)



NIS (W10C)

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

D00|CPER (Satellite Overpass Coincident Collection & 1000m Multiple Altitude Test Flight - CPER)

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: 0% (0/27)
 Green: 0% (0/27)
 Yellow: 0% (0/27)
 Red: 0% (0/27)

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

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

2	3	4	5	6	7	8	9	10	11	12	13
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Flown: 0% (0/12)
Green: 0% (0/12)
Yellow: 0% (0/12)
Red: 0% (0/12)

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

2	3	4	5	6	7	8	9	10	11	12	13
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Flown: 0% (0/12)
Green: 0% (0/12)
Yellow: 0% (0/12)
Red: 0% (0/12)

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

D00|R10C (Table Mountain Radiometric Calibration - Riegl)

1	2	3	4	5
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Flown: 0% (0/5)
Green: 0% (0/5)
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
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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)

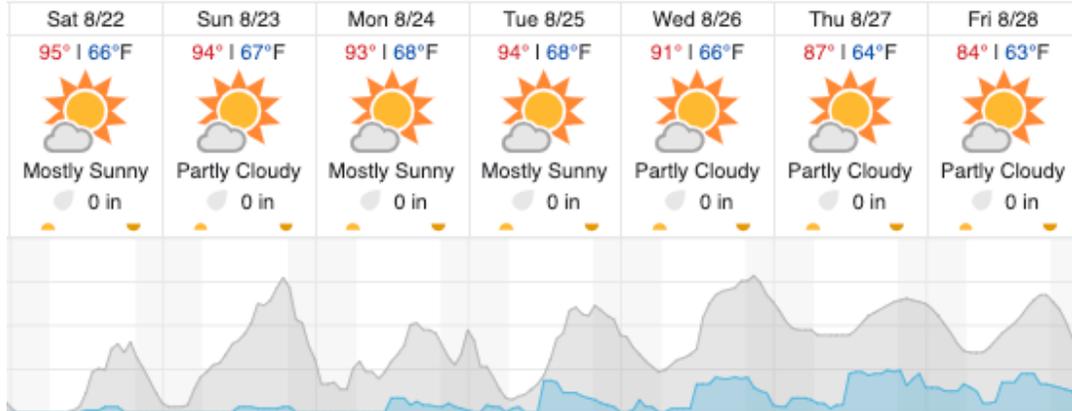
Green: 0% (0/2)

Yellow: 0% (0/2)

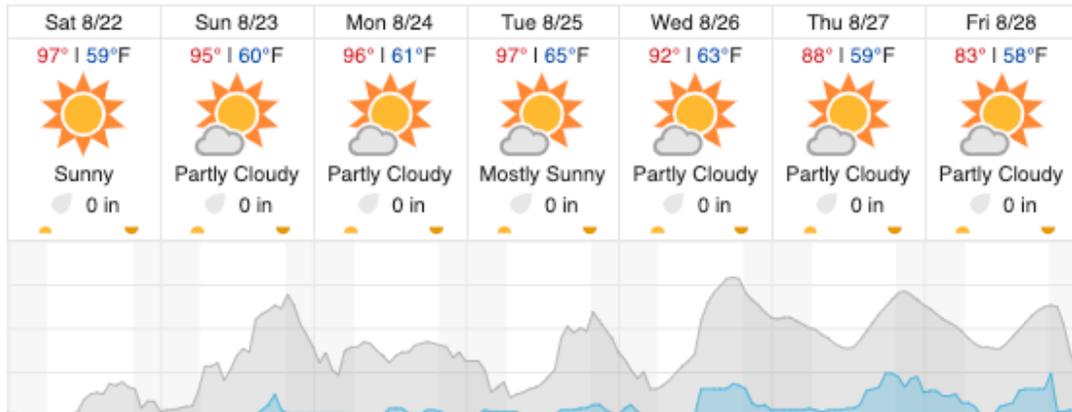
Red: 100% (2/2)

Weather Forecast

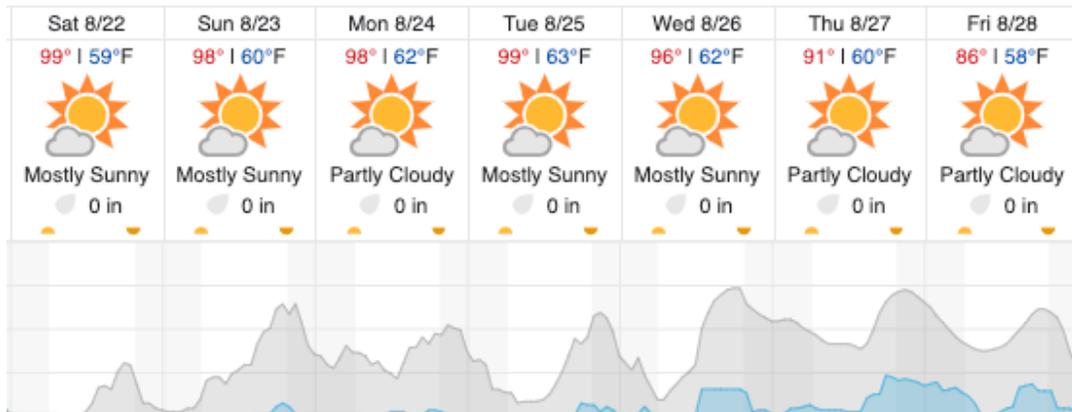
Boulder, CO



Nunn, CO



Greeley, CO



Cloud Cover (%)	Chance of Precip. (%)
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Flight Collection Plan for 22 August 2020

(Flight Order Priority subject to change)

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: Table Mountain Radiometric Calibration

Flight Plan Name: D10_R10C_Rad_Cal_TBMT_v1_Q780

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

Flyority 6

Collection Area: Riegl Boresight Calibration at Greeley

Flight Plan Name: D10_B10E_Boresight_1600m_Q780

On-station Time: 0900 – 1700 Local / 1500 – 2300 UTC

Flyority 7

Collection Area: Nominal Runway

Flight Plan Name: D10_N10D_Nominal_Runway_v8_Q780

Flyority 8

Collection Area: NIS Offset Flight

Flight Plan Name: D10_O10B_NIS_Offset_v2_Q780

On-station Time: 0930 – 1640 Local / 1530 – 2240 UTC

Crew: Mitch (trainer), Ivana Vu (Lidar), Robb Walker (NIS), John (Ground)

Flight Collection Plan for 23 August 2020

Flyority: Same as previous day

Crew: Cameron (trainer), John (Lidar), Ivana (NIS), Robb (Ground)