



Payload 3 Daily Flight Report



Date: 2020-06-07

Flight Campaign ID: P3C1

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

Domain: 00 (Training & Calibration)

Sites Flown: H10C (NEON Headquarters Lidar Test - Riegl), R10C (Table Mountain Radiometric Calibration - Riegl), O10B (NIS Offset - Riegl)

Days left in Domain: 22

Report Author: Cameron Chapman

Lidar Operators: Cameron Chapman

Spectrometer Operators: Elissa Barris

Pilots: Justin Eddington, Mike Francis

Ground Crew: Mitch Haynes

Flight Hours: 01:34, 00:48

Hours until maintenance: 115.08

GPS Instruments: 06 - FBO_KBDU

Summary

Clear skies in Boulder this morning allowed for the successful collection of the NEON Headquarters Lidar Test and two iterations of the Table Mountain Radiometric Calibration at 40 & 45 degree solar angles in conjunction with payload 2. Afternoon clouds and increasing winds caused an early end to the NIS offset flight.

Concerns

- POS exhibiting unusual behavior while static on the ground prior to takeoff.

Comments

- Flight database updated! Thanks Ivana and the Database working group!

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|R10C

Line #	1	2	3	4	5
Lidar					
Spectrometer	✓	✓	✓	✓	✓

Camera	✓	✓	✓	✓	✓
Cloud Cover					

Total number of lines flown: 5

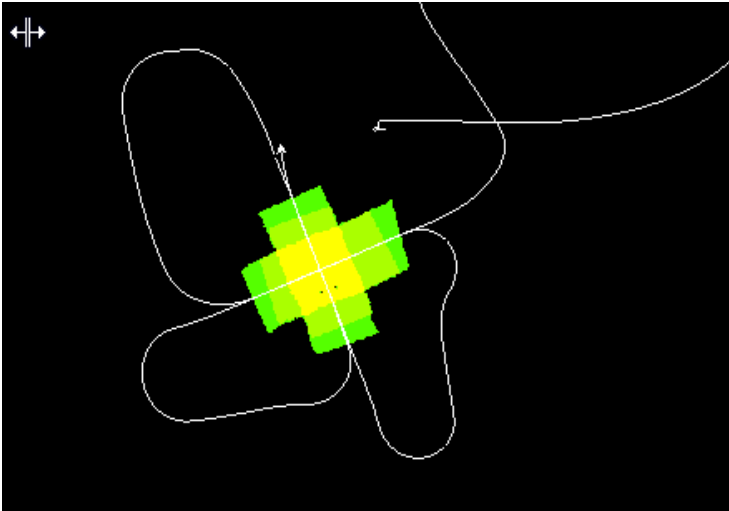
D00|O10B

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

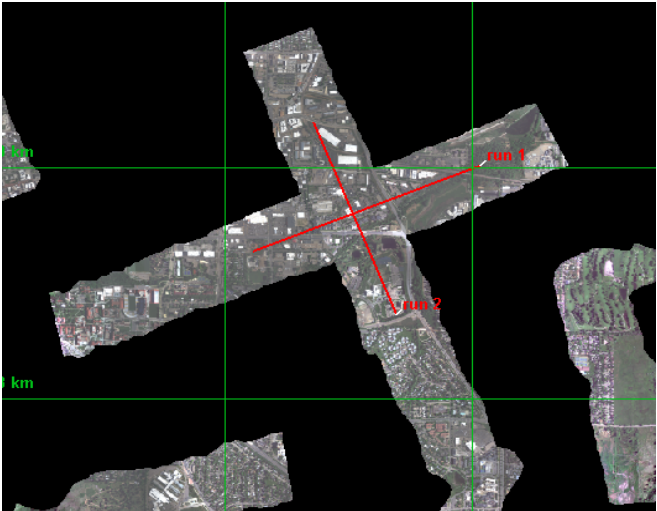
Total number of lines flown: 2

Flight Screenshots

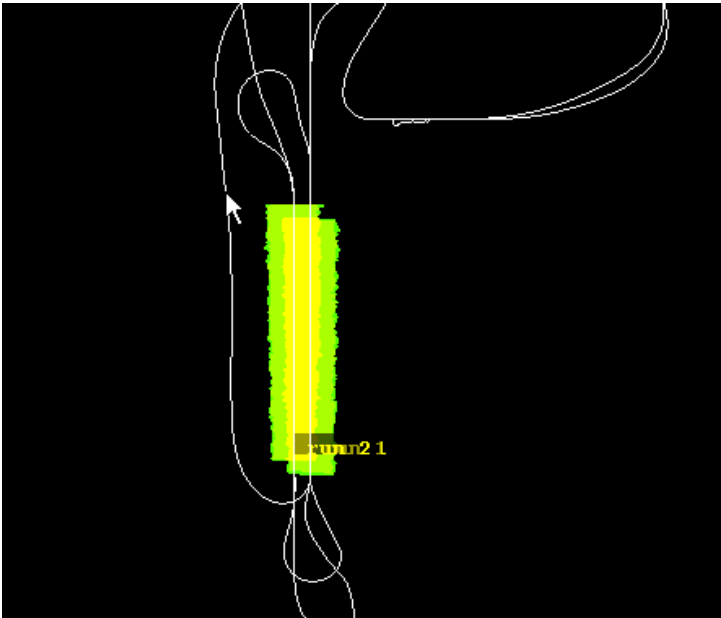
H10C Lidar



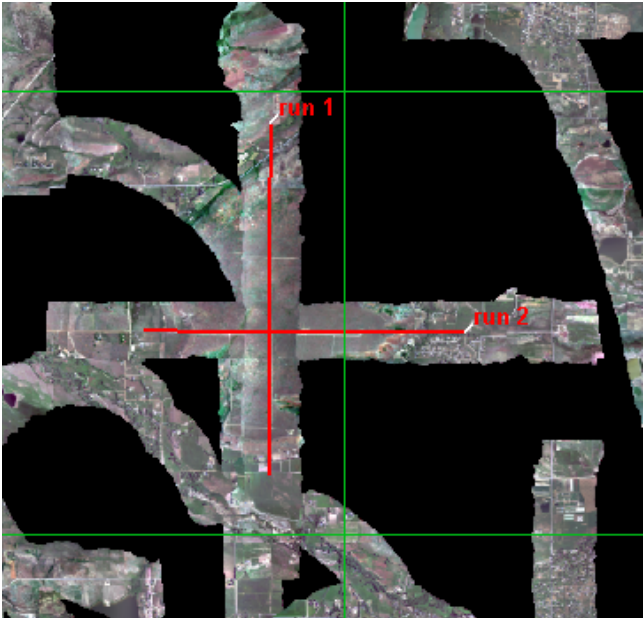
H10C NIS



O10B Lidar



R10C NIS



Pictures



Above: Clear skies over Table Mountain for R10C collection! (Photo by Cameron)

Below: Pilot Justin Eddington captures a photo of AOP's Payload 2 near the flatirons while flying R10C



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|H10C (NEON Headquarters Lidar Test - Riegl)

1	2
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Flown: 100% (2/2)

Green: 100% (2/2)

Yellow: 0% (0/2)

Red: 0% (0/2)

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: 62% (16/26)

Red: 38% (10/26)

D00|O10B (NIS Offset - Riegl)

1	2
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Flown: 100% (2/2)

Green: 0% (0/2)

Yellow: 100% (2/2)

Red: 0% (0/2)

D00|R10C (Table Mountain Radiometric Calibration - Riegl)

1	2	3	4	5
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Flown: 100% (5/5)

Green: 100% (5/5)

Yellow: 0% (0/5)

Red: 0% (0/5)

D00|W10C (Wiggle Timing Test - Riegl)

1	2
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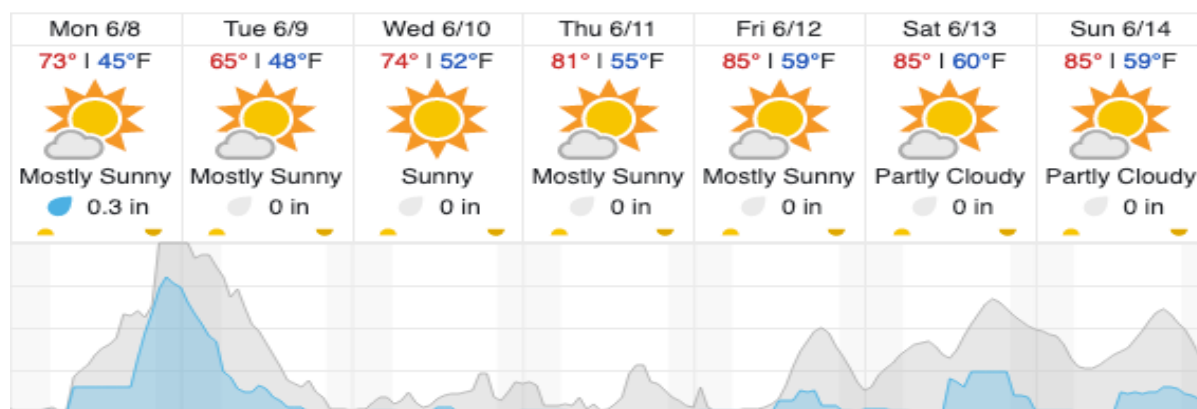
Flown: 100% (2/2)

Green: 0% (0/2)

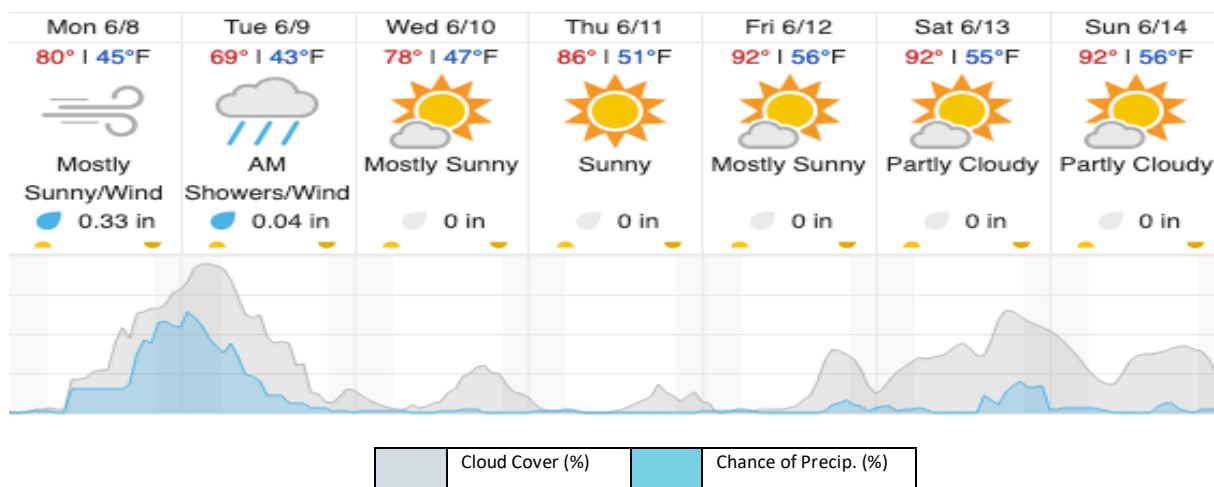
Yellow: 100% (2/2)

Red: 0% (0/2)

Weather Forecast (Boulder CO)



Greeley CO



Flight collection plans for 08 June 2020:

Flyority 1

Collection Area: Riegl Boresight Calibration – Greeley, CO

Flight Plan Name: D10_B10E_Boresight_1000m_Q780

On-Station Time: 14:50 UTC / 08:50L

Flyority 2

Collection Area: NIS Offset Flight

Flight Plan Name: D10_O10B_NIS_Offset_v2_Q780

On-Station Time: 14:50 UTC / 08:50L

Fright Crew:

Ground – Cameron

NIS – Mitch

Lidar - Elissa