



Payload 2 Daily Flight Report



Date: 2020-08-08

Flight Campaign ID: P2C1

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

Domain: 00 (Training, Engineering & Calibration)

Sites Flown: H10B (NEON Headquarters Lidar Test - modified cross-track), W10B (Wiggle Timing Test), N10C (Nominal Runway at KBDU - Optech)

Days left in Domain: 23

Report Author: Ivana Vu

Lidar Operators: Ivana Vu

Spectrometer Operators: Michael Wussow

Pilots: Justin Eddington, Stephen Brawders

Ground Crew: John Adler

Flight Hours: 01:41

Hours until maintenance: 26.75

GPS Instruments: AOP_KBDU

Summary

Clouds developed early this morning in Boulder, Greeley and Nunn, so crew completed calibration flights that do not have weather restrictions.

Concerns

None

Comments

Sentinel-2A satellite will pass over CPER tomorrow at around noon

Daily Coverage

Estimated Cloud Cover Key

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

D00|N10C

Line #	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover														

Total number of lines flown: 14

D00|W10B

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

Total number of lines flown: 2

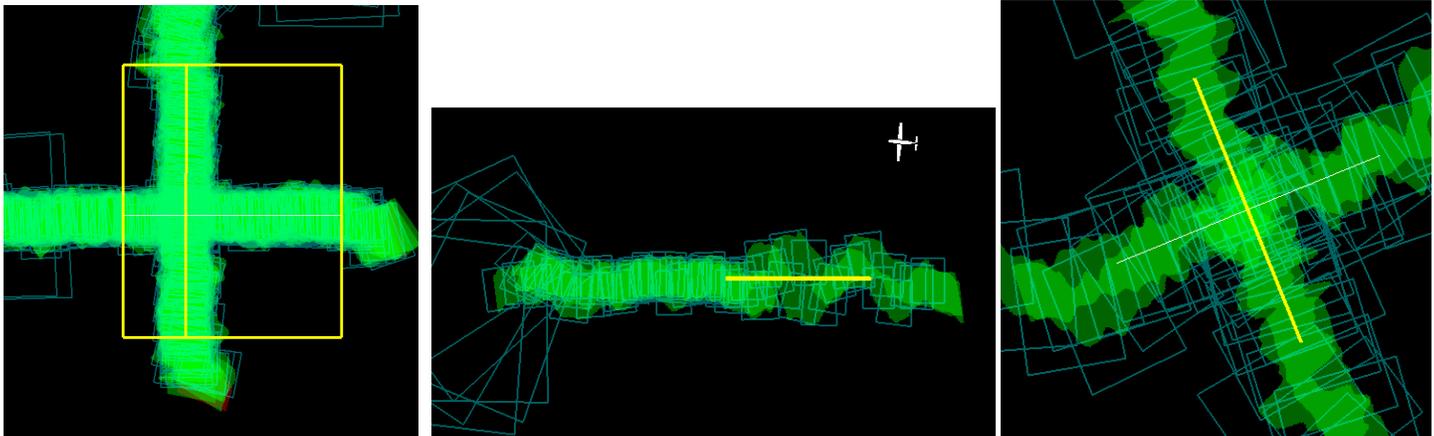
D00|H10B

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

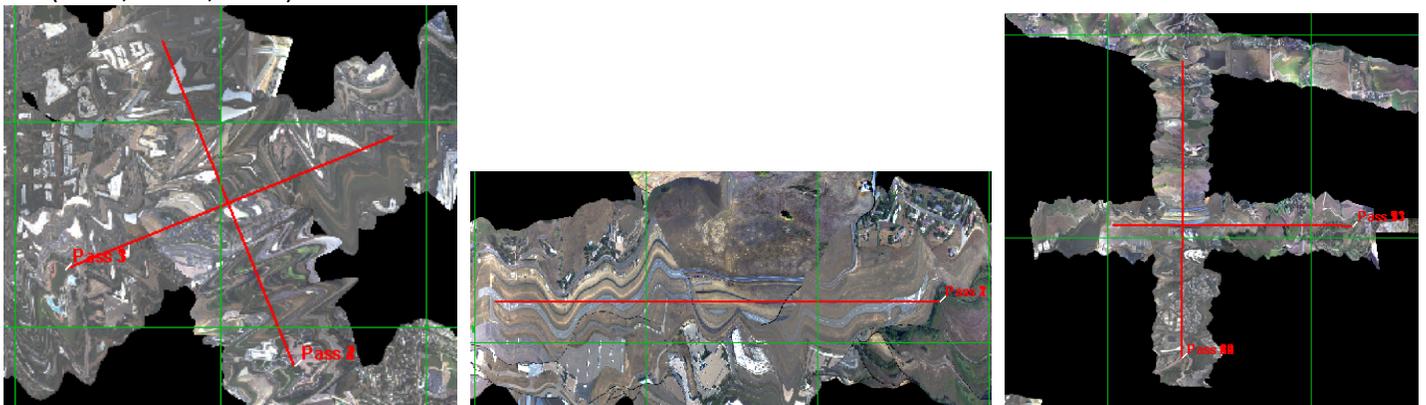
Total number of lines flown: 4

Flight Screenshots

Lidar (N10C, W10B, H10B)



NIS (N10C, W10B, H10B)



Cumulative Domain Coverage

D00|B10B (Complete Greeley Boresight Geocalibration - 1500m, 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: 100% (20/20)

Green: 0% (0/20)

Yellow: 70% (14/20)

Red: 30% (6/20)

D00|CPER (Satellite Overpass Coincident Collection - 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: 0% (0/28)

Green: 0% (0/28)

Yellow: 0% (0/28)

Red: 0% (0/28)

D00|F10A (D10 BRDF Flight - Central Plains Ecological Range)

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|H10B (NEON Headquarters Lidar Test - modified cross-track)

1	2	3	4
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Flown: 100% (4/4)
 Green: 50% (2/4)
 Yellow: 50% (2/4)
 Red: 0% (0/4)

D00|N10C (Nominal Runway at KBDU - Optech)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
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Flown: 100% (14/14)
 Green: 0% (0/14)
 Yellow: 0% (0/14)
 Red: 100% (14/14)

D00|O10A (NIS Offset)

1	2
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Flown: 100% (2/2)
 Green: 100% (2/2)
 Yellow: 0% (0/2)
 Red: 0% (0/2)

D00|R10A (Table Mountain Radiometric Calibration)

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)

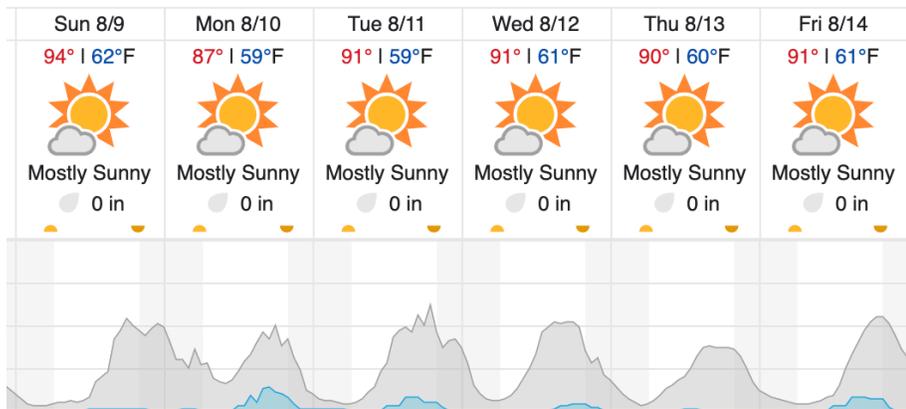
D00|W10B (Wiggle Timing Test)

1	2
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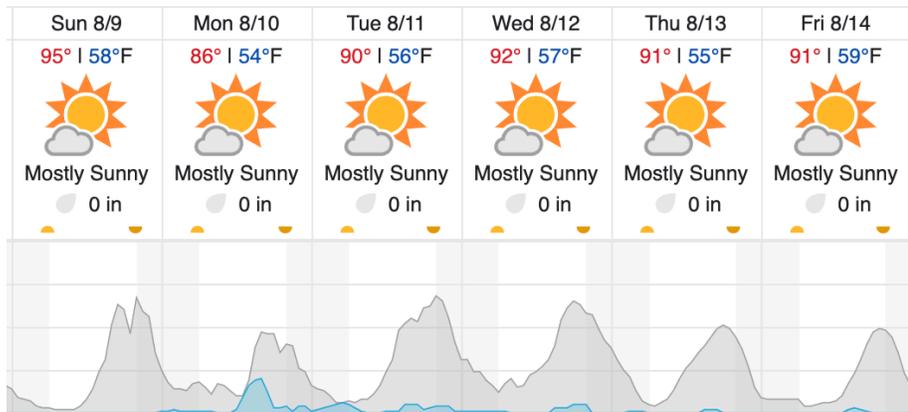
Flown: 100% (2/2)
 Green: 0% (0/2)
 Yellow: 0% (0/2)
 Red: 100% (2/2)

Weather Forecast

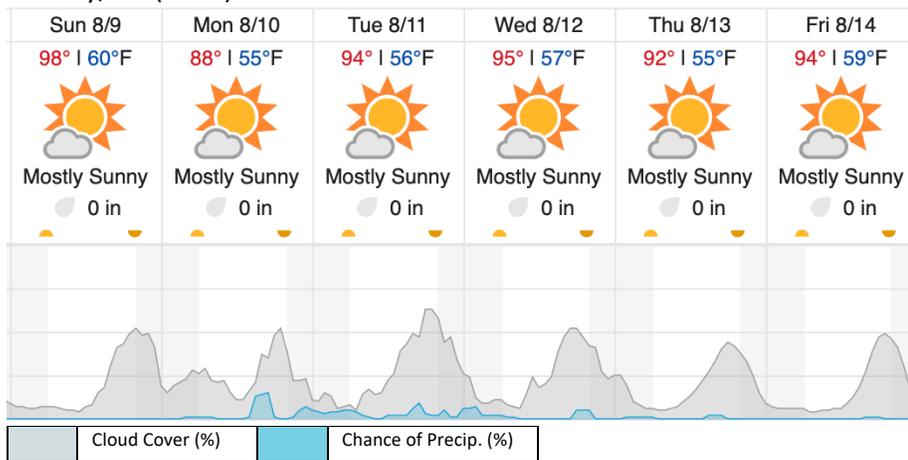
Boulder, CO



Nunn, CO (CPER)



Greeley, CO (B10B)



Flight Collection Plan for 09 August 2020

Flyority 1

Collection Area: Satellite Overpass Coincident Collection – Central Plains Ecological Range (only if conditions are “green”)
 Flight Plan Name: D10_CPER_C1_P1_v4.pln
 On-station Time: 0950 – 1620 Local / 1550 – 2220 UTC

Flyority 2

Collection Area: D10 BRDF Flight – Central Plains Ecological Range (only if conditions are “green”)
 Flight Plan Name: D10_F10A_BRDF_v1.pln
 On-station Time: 0950 – 1620 Local / 1550 – 2220 UTC

Flyority 3

Collection Area: Radiometric Calibration at Table Mountain
 Flight Plan Name: D10_R10A_Radiometric_Calibration_Table_Mountain_v1.pln
 On-station Time: 0950 – 1620 Local / 1550 – 2220 UTC

Flyority 4

Collection Area: Boresight Calibration – Geo-calibration at Greeley
 Flight Plan Name: D10_B10B_Greeley_Boresight_Geocalibration_Plan_v8.pln
 On-station Time: 0900 – 1710 Local / 1500 – 2310 UTC

Flyority 5

Collection Area: NIS Offset Flight
 Flight Plan Name: D10_O10A_NIS_Offset_v1.pln
 On-station Time: 0930 – 1650 Local / 1530 – 2250 UTC

Crew members: Mike (Lidar), Ivana (NIS), John (Ground); Tristan, Alok, Robb (Tarps)

Flight Collection Plan for 10 August 2020

Flyority: Same as previous day

Crew members: Ivana (Lidar), Mike (NIS), John (Ground); Tristan, Alok, Robb (Tarps)