



## Payload 2 Daily Flight Report



**Date:** 2020-08-07

**Flight Campaign ID:** P2C1

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

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

**Sites Flown:** NIWO (Niwot Ridge Mountain Research Station), WLOU (West St. Louis Creek)

**Days left in Domain:** 4

**Report Author:** Robb Walker

**Lidar Operators:** Robb Walker

**Flight Hours:** 03:06

**Spectrometer Operators:** Ivana Vu

**Hours until maintenance:** 28.43

**Pilots:** Justin Eddington, Stephen Brawders

**GPS Instruments:** 01 - WLOU, 05 - NIWO, AOP\_KBDU

**Ground Crew:** Michael Wussow

### Summary

Payload 2 crew woke to clear skies this morning, completing NEON science flights in D13 pending review of data. Focus will now shift to calibration and engineering test flights going forward.

### Concerns

None

### Comments

Digitizer was cycled several times before re-flight of WLOU lines, but unsuccessful in bringing waveform pulse visual online.

### Daily Coverage

Estimated Cloud Cover Key

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

D13|NIWO

Line #	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover														

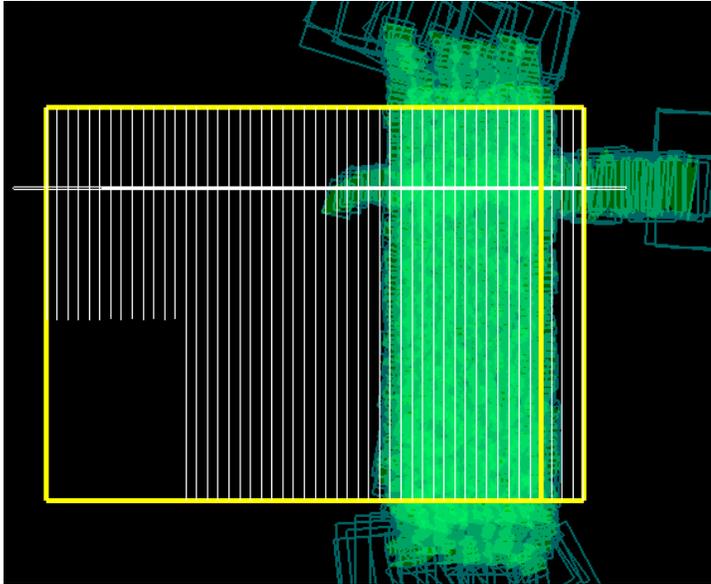
Total number of lines flown: 14

D13|WLOU

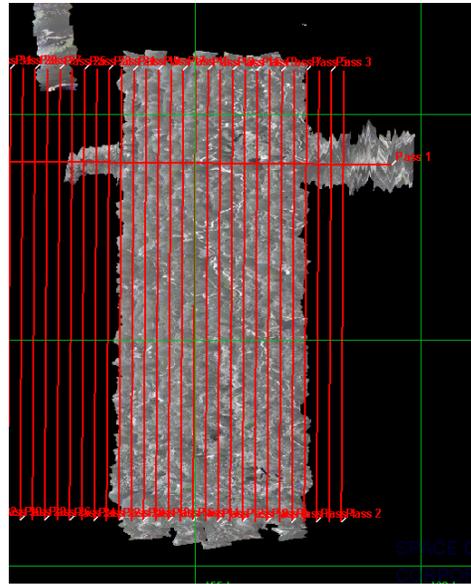
Line #	10	11	12	13	14
Lidar	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓
Cloud Cover					

Total number of lines flown: 5

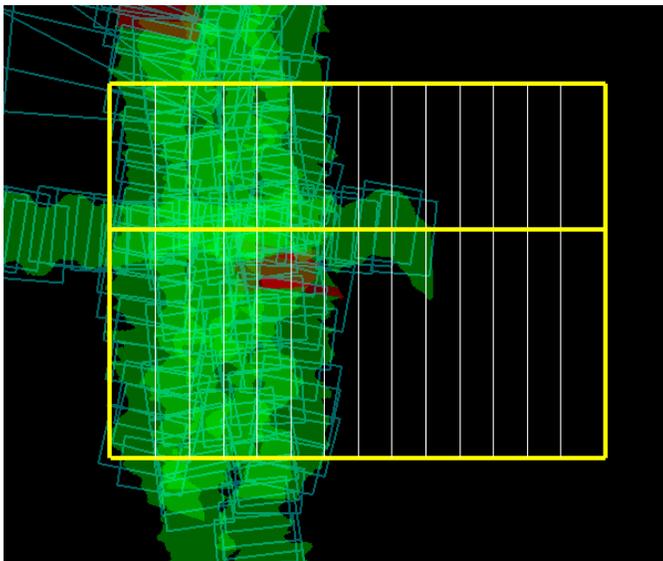
Flight Screenshots



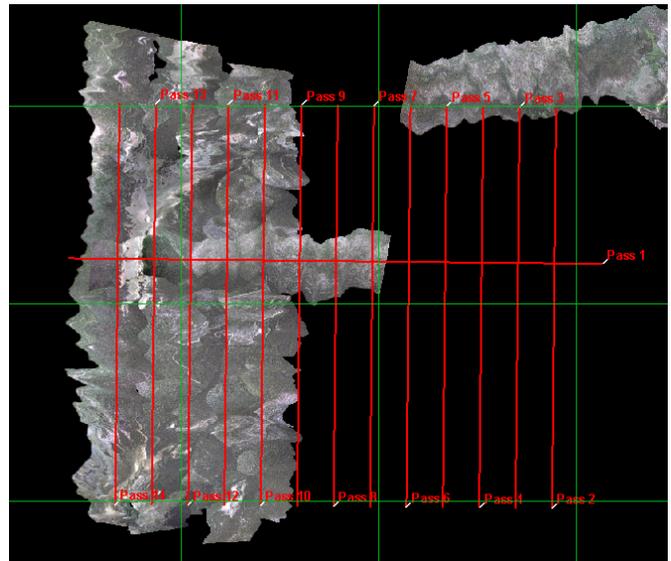
Lidar (NIWO)



NIS (NIWO)



Lidar (WLOU)



NIS (WLOU)

Cumulative Domain Coverage

D13|NIWO (Niwot Ridge Mountain Research Station)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
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21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50	51	52								

Flown: 100% (52/52)  
 Green: 100% (52/52)  
 Yellow: 0% (0/52)  
 Red: 0% (0/52)

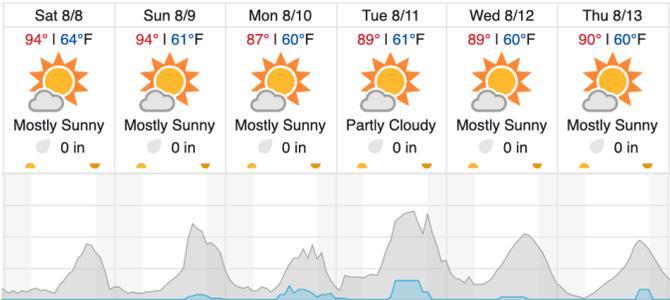
D13 | WLOU (West St. Louis Creek)

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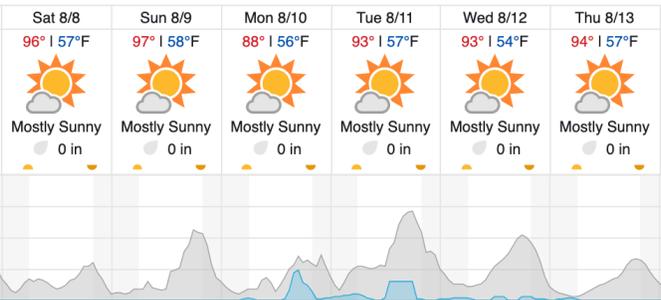
Flown: 100% (14/14)  
 Green: 100% (14/14)  
 Yellow: 0% (0/14)  
 Red: 0% (0/14)

**Weather Forecast**

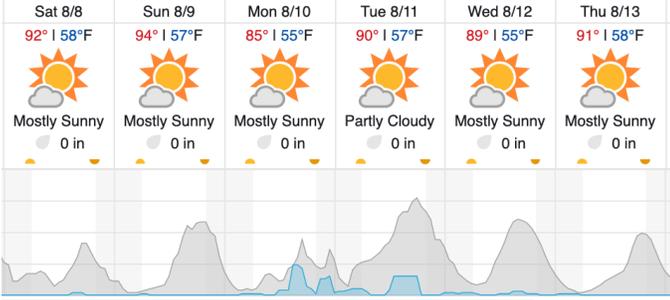
**Boulder, CO (Calibration)**



**Greeley, CO (Boresight)**



**Nunn, CO (CPR)**



Cloud Cover (%)	Chance of Precip. (%)
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**Flight Collection Plan for 08 August 2020**

**Flyority 1**

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 2**

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 3**

Collection Area: Nominal Runway  
 Flight Plan Name: D10\_N10C\_Nominal\_Runway\_Test\_v8.pln

**Flyority 4**

Collection Area: Wiggle Timing Test  
 Flight Plan Name: D10\_W10B\_Wiggle\_Test\_v6.pln

**Flyority 5**

Collection Area: NEON HQ LIDAR Validation

Flight Plan Name: D10\_H10B\_HQ\_LIDAR\_validation\_v1.pln

**Flyority 6**

Collection Area: NIS Offset Flight

Flight Plan Name: D10\_O10A\_NIS\_Offset\_v1.pln

On-station Time: 0930 – 1650 Local / 1530 – 2250 UTC

**Flyority 7**

Collection Area: Satellite Overpass Coincident Collection

Flight Plan Name: D10\_CPER\_C1\_P1\_v4.pln

On-station Time: 0950 – 1620 Local / 1550 – 2220 UTC

**Flyority 8**

Collection Area: D10 BRDF Flight – Central Plains Ecological Range

Flight Plan Name: D10\_F10A\_BRDF\_v1.pln

On-station Time: 0950 – 1620 Local / 1550 – 2220 UTC

Crew members: Ivana (Lidar), Mike (NIS), John (Ground); Dave and Robb (Tarps)

**Flight Collection Plan for 09 August 2020**

Flyority: Same as previous day

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