

### Payload 2 Daily Flight Report



Date: 2020-08-14

Flight Campaign ID: P2C1

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

**Domain**: 00 (Training & Calibration)

Sites Flown: R10A (Table Mountain Radiometric Calibration), W10B (Wiggle Timing Test)

Days left in Domain: 17

Report Author: John Adler

**Lidar Operators**: John Adler **Flight Hours**: 01:35

Spectrometer Operators: Robb Walker Hours until maintenance: 20.32

Pilots: Chad Evans, Stephen Brawders GPS Instruments: AOP\_KBDU, C-TMGO

Ground Crew: Ivana Vu

#### **Summary**

The new 150M pixel camera was installed in the morning, followed by the Wiggle Test flight to verify its functionality. This was followed by two sequences of the Table Mountain Radiometric Calibration flights with tarps. All systems worked well, but the smokey atmosphere will have effects on the images.

#### **Concerns**

None.

#### **Comments**

Nice job by Ian Crocker getting the new camera put in!

#### **Daily Coverage**

#### **Estimated Cloud Cover Key**

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

#### D00|W10B

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

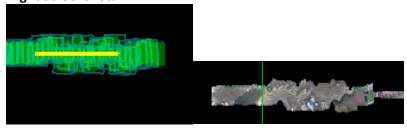
Total number of lines flown: 2

# D00|R10A

Line #	1	2	3	4	5
Lidar					
Spectrometer	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓
Cloud Cover					

Total number of lines flown: 10 (two sequences of 5)

# **Flight Screenshots**



Wiggle Test

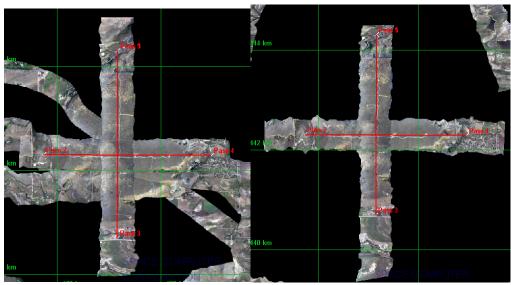


Table Mountain flights

# **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

Flown: 100% (20/20) Green: 0% (0/20) Yellow: 100% (20/20) Red: 0% (0/20)

### D00 | CPER (Satellite Overpass Coincident Collection - Central Plains Ecological Range)

1	1							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								-					- 0		0 - 1					
	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)

## <u>D00|H10B (NEON Headquarters Lidar Test - modified cross-track)</u>

# 1 2 3 4

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	2	4	5	6	7	8	g	10	11	12	13	14
_	_	_	-		0	,	0		10			10	

Flown: 100% (14/14) Green: 0% (0/14) Yellow: 0% (0/14) Red: 100% (14/14)

#### D00 | O10A (NIS Offset)

# 1 2 3 4 5

Flown: 100% (5/5) Green: 100% (5/5) Yellow: 0% (0/2) Red: 0% (0/2)

### D00 | R10A (Table Mountain Radiometric Calibration)

# 1 2 3 4 5

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

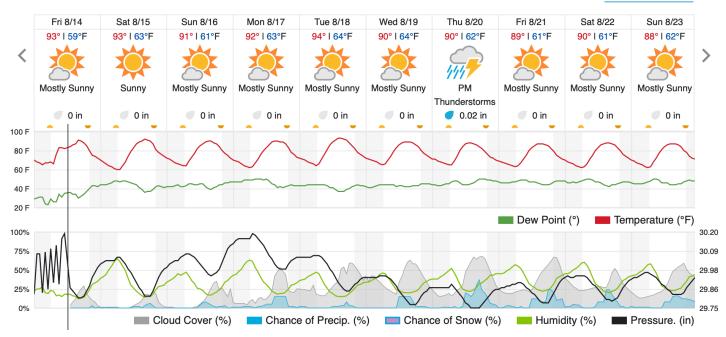
#### D00 | W10B (Wiggle Timing Test)

# 1 2

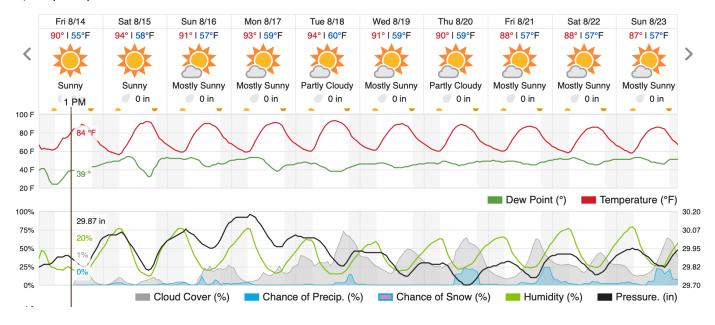
Flown: 100% (2/2) Green: 0% (0/2) Yellow: 0% (0/2) Red: 100% (2/2)

#### **Weather Forecast**

### Boulder, CO



#### Nunn, CO (CPER)



## Flight Collection Plan for 15 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: 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 3

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

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

### Flight Collection Plan for 16 August 2020

Flyority: Same as previous day

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