

Payload 2 Daily Flight Report



Date: 2020-06-07

Flight Campaign ID: P2C1

Airport, FBO ID, City: Rocky Mountain Metropolitan Airport (KBJC) - Broomfield, CO

Domain: 00 (Training & Calibration)

Sites Flown: R10A (Table Mountain Radiometric Calibration), V10C (Boulder City South)

Days left in Domain: 4

Report Author: John Adler

Lidar Operators: John Adler, Ivana Vu **Flight Hours**: 01:15, 00:49

Spectrometer Operators: Ivana Vu, Robb Walker Hours until maintenance: 101.97

Pilots: Stephen Brawders, Will Matthews **GPS Instruments**: 06 - FBO_KBDU, 10 - NGN-KBDU, U-P041

Ground Crew: Ivana Vu

Summary

Today the crew completed the Radiometric Calibration flight over Table Mountain, both at 40° and 45° solar angles. This also completed Robb Walker's NIS re-certification flight. The priority was then shifted to completing John Adler's NIS and lidar re-certifications. All of Crew 2 has now completed their annual re-certifications.

A great AOP team effort today! Both Payloads completed coincident Table Mountain flights, with a hat's off to the Science team for coordinating and executing the ground tarps. And all of these systems worked 4.0 due to Lab's diligence!

Concerns

None

Comments

Tomorrow morning it is hoped to complete the NIS offset flight and the second portion of the camera auto-exposure test. The Crew 2 list for the rest of the week was modified.

Most of the integrated Service Now updates for AOP data collections are working; Monday during the FlightOps meeting the last few items to be fixed will be discussed.

Daily Coverage

Estimated Cloud Cover Key

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

D00|R10A

| | 4 | _ | _ | | _ |
|--------------|----------|----------|----------|----------|----------|
| Line # | 1 | 2 | 3 | 4 | 5 |
| Lidar | | | | | |
| Spectrometer | \ | \ | \ | \ | \ |
| Camera | \ | \ | \ | \ | \ |
| Cloud Cover | | | | | |

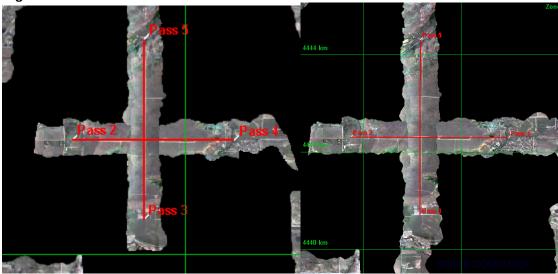
Total number of lines flown: 5

D00|V10C

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

Total number of lines flown: 4

Flight Screenshots



40° Sun Angle 45° Sun Angle

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: 70% (14/20) Red: 0% (0/20)

D00 | H10B (NEON Headquarters Lidar Test - modified cross-track)

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 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|

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

D00 | O10A (NIS Offset)

1 2

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

D00 | R10A (Table Mountain Radiometric Calibration)

1 2 3 4 5

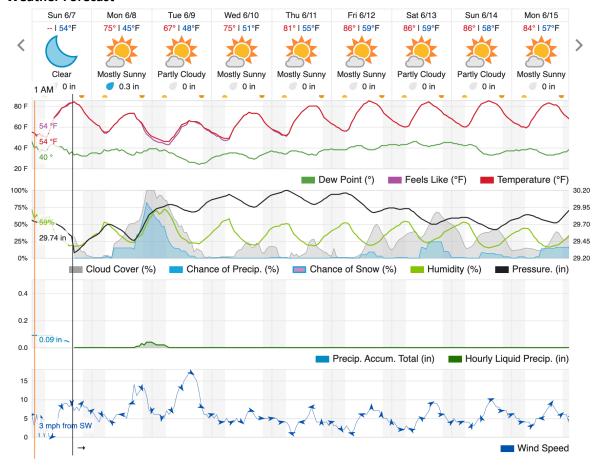
Flown: 100% (5/5) Green: 100% (5/5) Yellow: 0% (0/5) Red: 0% (0/5)

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



Flight Collection Plan for 08-09 June 2020

Flyority 1

Collection Area: NIS Offset Flight

Flight Plan Name: D10_O10A_NIS_Offset_v1.pln On-station Time: 0850 – 1730 Local / 1450 – 2300 UTC

Flyority 2

Collection Area: Boulder City Nominal – Auto-Exposure Testing

Flight Plan Name: D10_V10C_Boulder_City_v6.pln
On-station Time: 0850 – 1730 Local / 1450 – 2300 UTC

Lines Remaining: Section 2 – Lines 9-13, Section 4 – Lines 25-28, Section 5 – Lines 17-19

Crew

6/8: Ivana Vu (Lidar), Matt DeVoe (NIS)

6/9: Michael Wussow (Lidar), Matt DeVoe (NIS)