

Payload 3 Daily Flight Report



Date: 2020-06-21 Flight Campaign ID: P3C1 Airport, FBO ID, City: Boulder Municipal Airport (KBDU) - Boulder, CO

Domain: 00 (Training & Calibration), 10 (Central Plains), 13 (Southern Rockies & Colorado Plateau) Sites Flown: H10C (NEON Headquarters Lidar Test - Riegl), N10D (Nominal Runway at KBDU - Riegl) Days left in Domain: 14

Report Author: Cameron Chapman Lidar Operators: Cameron Chapman Spectrometer Operators: Mitch Haynes Hours until maintenance: 97.83 Pilots: Justin Eddington, Lane Taylor Ground Crew: Elissa Barris

Flight Hours: 02:40 GPS Instruments: AOP KBDU

Summary

The crew took advantage of the less than optimal weather to conduct calibration re-flights. We completed the Nominal Runway and the Lidar HQ flight plans.

Concerns

- GPS 1 and 5 did not download data last night.
- GPS 1 is NOT accessible however GPS 5 IS accessible.
- CPER Hut appears to be back online however the AOP permanent GPS located at the hut is not accessible. -

Comments

Happy Father's Day!! -

Daily Coverage

Estimated Cloud Cover Key

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

D00|N10D

| Line # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Lidar | \checkmark |
| Spectrometer | \checkmark |
| Camera | \checkmark |
| Cloud Cover | | | | | | | | | | | | | | | | | | | | |

| Line # | 21 | 22 | 23 | 24 |
|--------------|--------------|--------------|--------------|--------------|
| Lidar | \checkmark | \checkmark | \checkmark | \checkmark |
| Spectrometer | \checkmark | \checkmark | \checkmark | \checkmark |
| Camera | \checkmark | \checkmark | \checkmark | \checkmark |
| Cloud Cover | | | | |
| | 11 | CI | | |

Total number of lines flown: 24

D00|H10C

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

Total number of lines flown: 4

Cumulative Domain Coverage

D10 ARIK (Arikaree River)

| 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 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | | | | | |
| Flown | | • | • | | | | | | | | | | | | - | | | | |
| Greer | | • | | | | | | | | | | | | | | | | | |
| Yellov | | | 35) | | | | | | | | | | | | | | | | |
| Red: | 20% (7 | 7/35) | | | | | | | | | | | | | | | | | |

D10 | CPER (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: 36% (10/28) Green: 0% (0/28) Yellow: 36% (10/28) Red: 0% (0/28)

D10 | RMNP_P1 (Rocky Mountain National Park Priority 1)

| 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 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | |

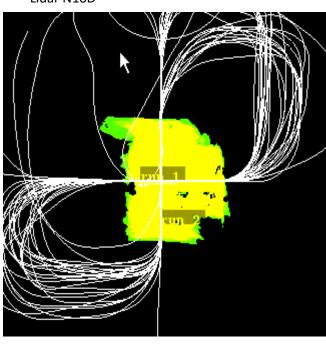
Flown: 0% (0/39) Green: 0% (0/39) Yellow: 0% (0/39) Red: 0% (0/39)

D10 RMNP_P2 (Rocky Mountain National Park Priority 2)

| - | | _ | | · / | | | | | | | / / | | | | | | | | |
|-------|----|----|----|-----|----|----|----|----|----|----|-----|----|----|----|----|----|----|----|----|
| 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 |
| 60 | 61 | 62 | 63 | 64 | | | | | | | | | | | | | | | |

Flown: 0% (0/25) Green: 0% (0/25) Yellow: 0% (0/25) Red: 0% (0/25)







NIS N10D

Flight Screenshots

Lidar N10D

Lidar H10C

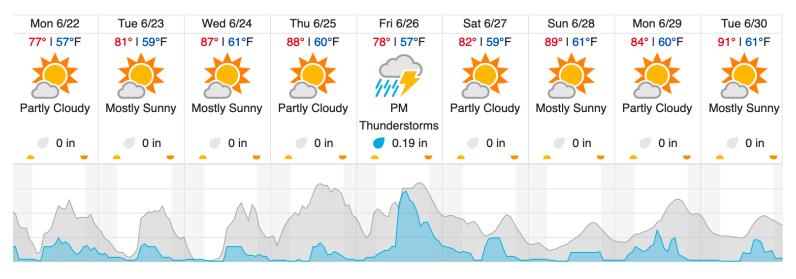
Pictures



Lenticular clouds forming over the front range

Weather Forecast

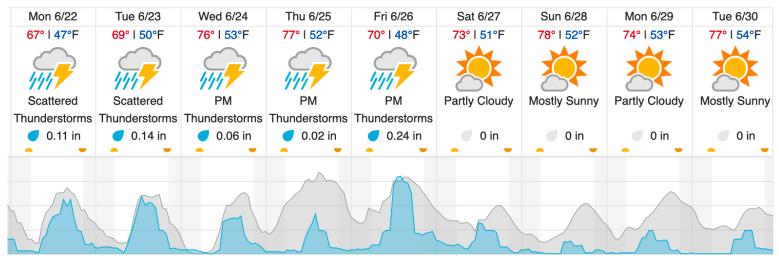
Boulder CO



Nunn CO (CPER)

| Mon 6/22 | Tue 6/23 | Wed 6/24 | Thu 6/25 | Fri 6/26 | Sat 6/27 | Sun 6/28 | Mon 6/29 | Tue 6/30 |
|---------------|--------------|--------------|---------------|--------------------------|---------------|--------------|---------------|--------------|
| 79° 53°F | 84° 54°F | 89° 56°F | 91° 58°F | 81° 54°F | 84° 55°F | 91° 57°F | 86° 58°F | 89° 58°F |
| | | | | 1111 | | | | |
| Partly Cloudy | Mostly Sunny | Mostly Sunny | Partly Cloudy | Isolated | Partly Cloudy | Mostly Sunny | Partly Cloudy | Mostly Sunny |
| 0 in | 0 in | 0 in | 0 in | Thunderstorms 0.06 in | 0 in | 0 in | 0 in | 0 in |
| • • | • • • • | • • • | • • • | | • • • | • • • | • • • | • • • |
| | | | | | | | | |

Estes Park CO (RMNP)



Moab UT (MOAB)

| Mon 6/22 | Tue 6/23 | Wed 6/24 | Thu 6/25 | Fri 6/26 | Sat 6/27 | Sun 6/28 | Mon 6/29 | Tue 6/30 |
|---------------|---------------|--------------|---------------|---------------|--------------|---------------|--------------|---------------|
| 97° 64°F | 99° 66°F | 100° 72°F | 99° 69°F | 92° 64°F | 95° 68°F | 97° 68°F | 95° 67°F | 94° 66°F |
| Sunny 0 in | Sunny 0 in | Mostly Sunny | Partly Cloudy | Partly Cloudy | Mostly Sunny | Sunny 0 in | Mostly Sunny | Sunny 0 in |
| • • | • • | • • | • • | - - | • • | • • | • • | • • |
| | | | | | | | | |
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Flight Collection Plan for 22 June 2020

Flyority 1 Collection Area: Central Plains Ecological Range (CPER) Flight Plan Name: D10_CPER_C1_P1_v6_Q780 On-Station Time: 15:20 UTC / 09:20L

Flyority 2 Collection Area: Rocky Mountain National Park (RMNP) Flight Plan Name: D10_RMNP_R2_P1_v2_Q780 On-Station Time: 15:20 UTC / 09:20L

Flyority 3 Collection Area: Moab (MOAB) – Moab, UT Flight Plan Name: D13_MOAB_R1_P1_v3_Q780 On-Station Time: 15:30 UTC / 09:30L

Flyority 4 Collection Area: Arikaree River (ARIK) – Arickaree, CO Flight Plan Name: D10_ARIK_A1_P2_v3_Q780 On-Station Time: 15:10 UTC / 09:10L

Flight Crew: Mitch Haynes (Lidar), Elissa Barris (NIS), Cameron Chapman (Ground)

Flight Collection Plan for 23 June 2020 Flyorities: Same as previous day

Flight Crew: Elissa Barris (Lidar), Cameron Chapman (NIS), Mitch Haynes (Ground)