

Payload 3 Daily Flight Report



Date: 2024-08-07

Flight Campaign ID: P3C1

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

Aircraft: N821AR

Domain: 10 (Central Plains)

Sites Flown: RMNP (Rocky Mountain National Park)

Days left in Domain: 19

Report Author: Elissa

Lidar Operators: Elissa Flight Hours: 01:50

Spectrometer Operators: Hours until maintenance: 96.43

Pilots: Vince, Manning **Ground Crew**: Matt

Summary

Lidar and camera data were collected for the remaining nine lines at RMNP that failed QA on the initial flight. Today's data appear to have passed the automated QA, completing the refly of RMNP. Sky conditions were 'red,' thus the NIS was not operated.

Concerns

Fresh deposits of fuel on the plane's belly pans indicate that there is still a leak somewhere. Fuel droplets, albeit in smaller amounts, can still be seen on the lidar and camera lenses following flights.

Comments

None.

Daily Coverage

Estimated Cloud Cover Kev

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

Solar Angle Less Than 40 degrees

Line#

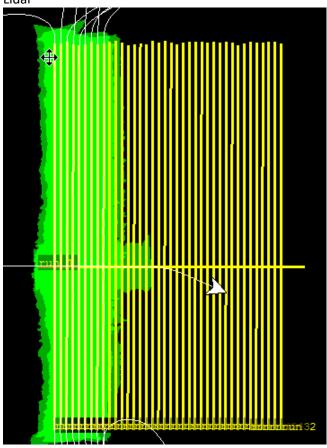
D10|RMNP

| Line # | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 |
|--------------|----------|----------|----------|----------|----------|----|----------|----------|----------|
| Lidar | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Spectrometer | | | | | | | | | |
| Camera | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Cloud Cover | | | | | | | | | |

Total number of lines flown: 9

Flight Screenshots





Cumulative Domain Coverage

D10 | ARIK (Arikaree River)

| 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: 0% (0/33) Green: 0% (0/33) Yellow: 0% (0/33) Red: 0% (0/33)

D10 | RMNP (Rocky Mountain National Park)

| 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: 97% (38/39) Green: 97% (38/39) Yellow: 0% (0/39) Red: 0% (0/39)

D10 | STER (Sterling Agricultural Site)

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|----------|------|------|----|---------|------|---------|------|---|----|----|----|----|----|----|----|----|----|----|----|
| 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 | | | | | | | | | | | | | | | |

Flown: 100% (25/25) Green: 100% (25/25) Yellow: 0% (0/25) Red: 0% (0/25)

D13 | NIWO (Niwot Ridge Mountain Research Station)

| 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 | 40 | 41 |
| 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | | | | | | | | | |

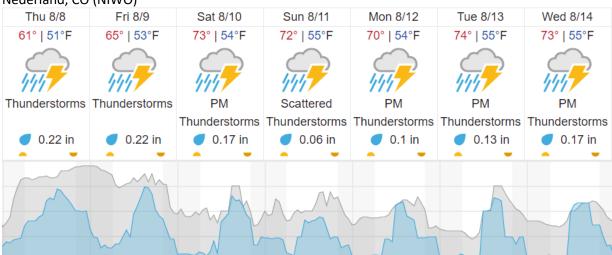
Flown: 100% (51/51) Green: 100% (51/51) Yellow: 0% (0/51) Red: 0% (0/51)

D13 | WLOU (West St. Louis Creek)

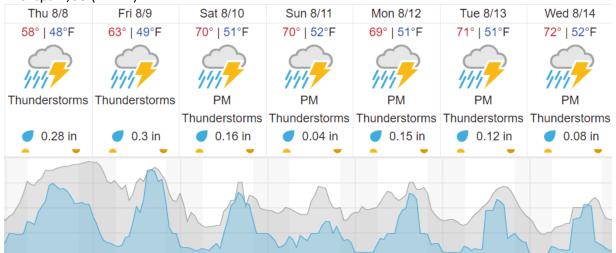
Flown: 92% (12/13) Green: 92% (12/13) Yellow: 0% (0/13) Red: 0% (0/13)

Weather Forecast

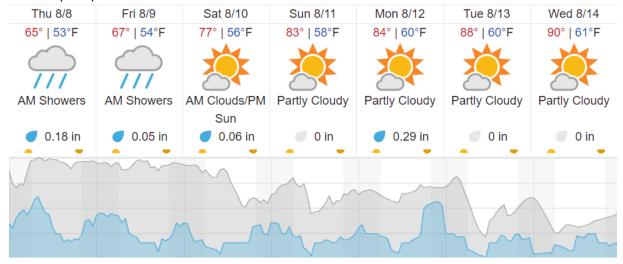
Nederland, CO (NIWO)



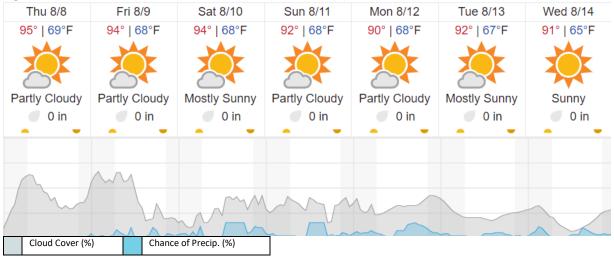
Allenspark,CO (RMNP)



Joes CO (ARIK)



Ogden UT (CTWD)



source: wunderground.com

Flight Collection Plan for 8 August 2024

Flyority 1

Collection Area: Arikaree River (ARIK) - Priority 1 & 2 Flight Box

Flight Plan Name: D10_ARIK_A1_P2_v3_Q780

On-station Time: 1520 UTC / 0920 L

Flyority 2

Collection Area: Northern Utah Priority 1 Flight Plan

Flight Plan Name: D15_CTWD_S1_P1_v1 On-station Time: 1520 UTC / 0920 L

Flyority 3

Collection Area: Northern Utah Priority 2 Flight Plan

Flight Plan Name: D15_CTWD_S1_P2_v1 On-station Time: 1520 UTC / 0920 L

Crew: Nick (Lidar), Matt (NIS), Elissa (Ground)