**Date:** 2020-07-02  
**Flight Campaign ID:** P3C1  
**Airport, FBO ID, City:** Boulder Municipal Airport (KBDU) - Boulder, CO

**Domain:** 10 (Central Plains)  
**Sites Flown:** RMNP_P1 (Rocky Mountain National Park Priority 1)  
**Days left in Domain:** 3

**Report Author:** Cameron Chapman  
**Lidar Operators:** Cameron Chapman  
**Flight Hours:** 03:14  
**Spectrometer Operators:** Nick Marusich  
**Hours until maintenance:** 84.50  
**Pilots:** Micah Hoogeveen, Lane Taylor  
**GPS Instruments:** 03-RMNP, AOP_KBDU  
**Ground Crew:** Matt Devoe

**Summary**  
RMNP flight box was completed under mixed cloud conditions today. Clear morning skies and high wind speeds eventually gave way to building cumulus clouds and slightly lower wind.

**Concerns**
- The pilot display had severe connectivity issues shortly after takeoff. Multiple power cycles of the unit and a full reboot of the MIDAS eventually resolved the issue.
- Unusual Tracker VNC lag observed during the flight.
- High winds speeds cause the pilots to maintain a slightly higher speed on S-N flight lines

**Comments**
- The aircraft is scheduled to transit to D06 Monday.
- Equipment has been shipped to D06 and is scheduled to arrive Monday

**Daily Coverage**

**Estimated Cloud Cover Key**

<table>
<thead>
<tr>
<th>Green: 0-10%</th>
<th>Yellow: 11-50%</th>
<th>Red: &gt;50%</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>D10</th>
<th>RMNP_P1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line #</td>
<td>19</td>
</tr>
<tr>
<td>Lidar</td>
<td>✓</td>
</tr>
<tr>
<td>Spectrometer</td>
<td>✓</td>
</tr>
<tr>
<td>Camera</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Total number of lines flown: 16**
Flight Screenshots

RMNP LIDAR SWATH

RMNP NIS SWATH

Pictures
Clear morning skies with haze over RMNP 20200702
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 |

Flown: 97% (34/35)
Green: 31% (11/35)
Yellow: 46% (16/35)
Red: 20% (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 |

Flown: 100% (28/28)
Green: 100% (28/28)
Yellow: 0% (0/28)
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 |

Flown: 100% (39/39)
Green: 92% (36/39)
Yellow: 8% (3/39)
Red: 0% (0/39)

Weather Forecast

Boulder, CO

<table>
<thead>
<tr>
<th>Fri 7/3</th>
<th>Sat 7/4</th>
<th>Sun 7/5</th>
<th>Mon 7/6</th>
<th>Tue 7/7</th>
</tr>
</thead>
<tbody>
<tr>
<td>90°</td>
<td>62°F</td>
<td>88°</td>
<td>61°F</td>
<td>89°</td>
</tr>
</tbody>
</table>

Mostly Sunny | PM Thunderstorms | Mostly Sunny | Mostly Sunny | Mostly Sunny |

0 in | 0.07 in | 0 in | 0 in | 0 in |

MOAB, UT (MOAB)

<table>
<thead>
<tr>
<th>Fri 7/3</th>
<th>Sat 7/4</th>
<th>Sun 7/5</th>
<th>Mon 7/6</th>
</tr>
</thead>
<tbody>
<tr>
<td>94°</td>
<td>67°F</td>
<td>96°</td>
<td>68°F</td>
</tr>
</tbody>
</table>

Partly Cloudy | Partly Cloudy | Sunny | Sunny |

0 in | 0 in | 0 in | 0 in |
### Flight Collection Plan for 3 - 5 July 2020

**Flyority 1**

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

Flight Crew: Cameron Chapman (Lidar), Matthew DeVoe (NIS), Nicolas Marusich (Ground)

<table>
<thead>
<tr>
<th>Mon 7/6</th>
<th>Tue 7/7</th>
<th>Wed 7/8</th>
<th>Thu 7/9</th>
<th>Fri 7/10</th>
<th>Sat 7/11</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Partly Cloudy" /> 92°</td>
<td><img src="image" alt="Partly Cloudy" /> 91°</td>
<td><img src="image" alt="Mostly Sunny" /> 93°</td>
<td><img src="image" alt="Partly Cloudy" /> 96°</td>
<td><img src="image" alt="AM Thunderstorms" /> 94°</td>
<td><img src="image" alt="Sunny" /> 96°</td>
</tr>
</tbody>
</table>

- **Cloud Cover (%):**
  - Mon 7/6: 0.06 in
  - Tue 7/7: 0 in
  - Wed 7/8: 0 in
  - Thu 7/9: 0.11 in
  - Fri 7/10: 0.12 in
  - Sat 7/11: 0 in

- **Chance of Precip. (%):**
  - Mon 7/6: 0 in
  - Tue 7/7: 0 in
  - Wed 7/8: 0 in
  - Thu 7/9: 0 in
  - Fri 7/10: 0 in
  - Sat 7/11: 0 in