Payload 3 Daily Flight Report

Date: 2022-07-12
Flight Campaign ID: P3C1
Airport, FBO ID, City: Boulder Municipal Airport (KBDU) - Boulder, CO
Aircraft: N70AR

Domain: 10 (Central Plains)
Sites Flown: ARIK (Arikaree River)
Days left in Domain: 15

Report Author: Matt
Lidar Operators: Matt
Flight Hours: 03:06
Spectrometer Operators: Nick
Hours until maintenance: 12.27
Pilots: Magnus, Justin
GPS Instruments: 03 -, AOP_KBDU
Ground Crew: John

Summary
The crew completed 9 lines and a cross strip at the ARIK site under green conditions. Cumulous clouds in the target area turned the conditions to yellow, forcing the crew to RTB.

Concerns
None

Comments
None

Daily Coverage

Estimated Cloud Cover Key

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

D10|ARIK

<table>
<thead>
<tr>
<th>Line #</th>
<th>1</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>19</th>
<th>20</th>
<th>21</th>
<th>22</th>
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<tbody>
<tr>
<td>Lidar</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
</tr>
<tr>
<td>Spectrometer</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Camera</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Cloud Cover</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total number of lines flown: 10
Flight Screenshots

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 |

- Flown: 63% (22/35)
- Green: 63% (22/35)
- Yellow: 0% (0/35)
- Red: 0% (0/35)

D10|CTWD_BOX ()

| 1 | 2 | 3 |

- Flown: 100% (3/3)
- Green: 100% (3/3)
- Yellow: 0% (0/3)
- Red: 0% (0/3)

D10|CTWD_LINES ()

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |

- Flown: 100% (21/21)
- Green: 100% (21/21)
- Yellow: 0% (0/21)
- Red: 0% (0/21)

D10|RMNP (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 |

- Flown: 0% (0/39)
- Green: 0% (0/39)
- Yellow: 0% (0/39)
- Red: 0% (0/39)
Weather Forecast

Joe’s, CO

<table>
<thead>
<tr>
<th></th>
<th>Wed 7/13</th>
<th>Thu 7/14</th>
<th>Fri 7/15</th>
<th>Sat 7/16</th>
<th>Sun 7/17</th>
<th>Mon 7/18</th>
<th>Tue 7/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloud</td>
<td>99%</td>
<td>101%</td>
<td>98%</td>
<td>93%</td>
<td>96%</td>
<td>101%</td>
<td>99%</td>
</tr>
<tr>
<td>Cover</td>
<td>65°F</td>
<td>67°F</td>
<td>65°F</td>
<td>63°F</td>
<td>67°F</td>
<td>69°F</td>
<td>67°F</td>
</tr>
<tr>
<td>Precip.</td>
<td>0 in</td>
<td>0 in</td>
<td>0.07 in</td>
<td>0.06 in</td>
<td>0 in</td>
<td>0 in</td>
<td>0 in</td>
</tr>
</tbody>
</table>

Allenspark, CO

<table>
<thead>
<tr>
<th></th>
<th>Wed 7/13</th>
<th>Thu 7/14</th>
<th>Fri 7/15</th>
<th>Sat 7/16</th>
<th>Sun 7/17</th>
<th>Mon 7/18</th>
<th>Tue 7/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloud</td>
<td>77%</td>
<td>73%</td>
<td>73%</td>
<td>73%</td>
<td>76%</td>
<td>78%</td>
<td>75%</td>
</tr>
<tr>
<td>Cover</td>
<td>59°F</td>
<td>55°F</td>
<td>55°F</td>
<td>54°F</td>
<td>57°F</td>
<td>56°F</td>
<td>56°F</td>
</tr>
<tr>
<td>Precip.</td>
<td>0.04 in</td>
<td>0.12 in</td>
<td>0.22 in</td>
<td>0.11 in</td>
<td>0 in</td>
<td>0.17 in</td>
<td>0.13 in</td>
</tr>
</tbody>
</table>

Flight Collection Plan for July 13th 2022

Flyority 1:
Collection Area: Rocky Mountain National Park (RMNP)
Flight plan name: D10_RMNP_R2_P1_v2_Q780
On-Station Time: 1530 UTC / 0930 L

Flyority 2:
Collection Area: Arikaree River (ARIK)
Flight plan name: D10_ARIK_A1_P2_v3_Q780
On-Station Time: 1510 UTC / 0910 L

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