**Payload 1 Daily Flight Report**

**Date:** 2022-10-05  
**Flight Campaign ID:** P1C1  
**Airport, FBO ID, City:** Asheville Regional Airport (KAVL) - Fletcher, NC, Roanoke-Blacksburg Regional (KROA) - Roanoke, VA  
**Aircraft:** N331AR

**Domain:** 07 (Appalachians & Cumberland Plateau)  
**Sites Flown:** MLBS (Mountain Lake Biological Station)  
**Days left in Domain:** 6

**Report Author:** Abe  
**Lidar Operators:** Abe  
**Spectrometer Operators:** Mitch  
**Pilots:** Justin, Terry

**Flight Hours:** 02:44:00, 01:11:00  
**Hours until maintenance:** 91.60  
**GPS Instruments:** 04 - FBO_KAVL, AOP_MLBS

**Summary**  
The crew was presented with a very nice day and took advantage of it by flying the remaining lines at MLBS. 10 lines and a cross strip were flown in 'green' sky conditions. This completes the MLBS flight box.

**Concerns**  
None

**Comments**  
-The crew had no issues with C-MIGITS on this flight.

**Daily Coverage**

<table>
<thead>
<tr>
<th>Estimated Cloud Cover Key</th>
<th>0-10%</th>
<th>11-50%</th>
<th>&gt;50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yellow</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Red</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

**D07|MLBS**

```
<table>
<thead>
<tr>
<th>Line #</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>29</th>
<th>30</th>
<th>31</th>
<th>32</th>
<th>33</th>
<th>34</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lidar</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<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>
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<tr>
<td>Camera</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Cloud Cover</td>
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<td>✓</td>
<td>✓</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
```

Total number of lines flown: 10
Flight Screenshots
MLBS
Lidar

Cumulative Domain Coverage

D07 | GRSM_P1 (Great Smoky Mountains 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 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |

Flown: 100% (69/69)
Green: 100% (69/69)
Yellow: 0% (0/69)
Red: 0% (0/69)

D07 | GRSM_P2 (Great Smoky Mountains National Park Priority 2 )

| 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 |

Flown: 0% (0/20)
Green: 0% (0/20)
Yellow: 0% (0/20)
Red: 0% (0/20)

D07 | MLBS (Mountain Lake Biological Station )

| 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 |

Flown: 100% (34/34)
Green: 100% (34/34)
Yellow: 0% (0/34)
Red: 0% (0/34)

D07 | N07A (D07 Nominal Runway )

| 1 |

Flown: 0% (0/1)
Green: 0% (0/1)
Yellow: 0% (0/1)
Red: 0% (0/1)
Weather Forecast
Gatlinburg, TN (GRSM)

<table>
<thead>
<tr>
<th></th>
<th>Thu 10/6</th>
<th>Fri 10/7</th>
<th>Sat 10/8</th>
<th>Sun 10/9</th>
<th>Mon 10/10</th>
<th>Tue 10/11</th>
<th>Wed 10/12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temp</td>
<td>75°</td>
<td>75°</td>
<td>64°</td>
<td>68°</td>
<td>72°</td>
<td>75°</td>
<td>76°</td>
</tr>
<tr>
<td></td>
<td>52°F</td>
<td>45°F</td>
<td>39°F</td>
<td>41°F</td>
<td>46°F</td>
<td>49°F</td>
<td>54°F</td>
</tr>
<tr>
<td>Cloud</td>
<td>Sunny</td>
<td>Mostly</td>
<td>Partly</td>
<td>Sunny</td>
<td>Sunny</td>
<td>Mostly</td>
<td>Partly</td>
</tr>
<tr>
<td>Cover</td>
<td>0 in</td>
<td>0 in</td>
<td>0 in</td>
<td>0 in</td>
<td>0 in</td>
<td>0 in</td>
<td>0 in</td>
</tr>
</tbody>
</table>

source: wunderground.com

Flight Collection Plan for 6 October 2022

Flyority 1
Collection Area: Great Smokey Mountains National Park (GRSM) – Priority 2 Flight Box – Variable Altitude Plan
Flight Plan Name: D07_GRSM_R1_P1_P2_v5_PRM_Var_Alt.xml
40° On-station Time: 15:20 UTC / 11:20L

Flyority 2
Collection Area: Nominal Runway – D07
Flight Plan Name: D07_N07A_Nominal_Runway_Test_v2_PRM.xml
40° On-station Time: N/A

Crew: Mitch (Lidar), Abe (NIS)