Payload 1 Daily Flight Report

Date: 2022-09-16
Flight Campaign ID: P1C1
Airport, FBO ID, City: Asheville Regional Airport (KAVL) - Fletcher, NC
Aircraft: N331AR

Domain: 07 (Appalachians & Cumberland Plateau)
Sites Flown: None
Days left in Domain: 25

Report Author: Mike
Lidar Operators: Mike  Flight Hours: 00:00
Spectrometer Operators: Cameron  Hours until maintenance: 114.97
Pilots: Magnus, Brent

Summary
No flights were conducted today. The eastern US continued to see smoke in the atmosphere from the NW US wildfires. Small cumulus clouds were present as well.

Concerns
- None

Comments
- The last of the D14 catch up flights is currently extracting.
- Team met virtually with Optech and the Lab today to update the Digitizer firmware and format new 2TB waveform disks.

Photos

Smoke from wildfires can be seen in the satellite imagery.
### 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 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 |

**Flown:** 0% (0/69)
**Green:** 0% (0/69)
**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:** 0% (0/34)
**Green:** 0% (0/34)
**Yellow:** 0% (0/34)
**Red:** 0% (0/34)

**D07|N07A (D07 Nominal Runway)**

<table>
<thead>
<tr>
<th>1</th>
</tr>
</thead>
</table>

**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>Mon 9/17</th>
<th>Mon 9/19</th>
<th>Tue 9/20</th>
<th>Wed 9/21</th>
<th>Thu 9/22</th>
<th>Fri 9/23</th>
</tr>
</thead>
<tbody>
<tr>
<td>83°</td>
<td>61°F</td>
<td>83°</td>
<td>61°F</td>
<td>86°</td>
<td>66°F</td>
</tr>
</tbody>
</table>

- **Sat 9/17:** Mostly Sunny 0 in
- **Sun 9/18:** Mostly Sunny 0 in
- **Mon 9/19:** Mostly Sunny 0.01 in
- **Tue 9/20:** Partly Cloudy 0 in
- **Wed 9/21:** Sunny 0 in
- **Thu 9/22:** Mostly Sunny 0 in
- **Fri 9/23:** Mostly Sunny 0 in
Pembroke, VA (MLBS)

<table>
<thead>
<tr>
<th>Date</th>
<th>Temperature</th>
<th>Cloud Cover</th>
<th>Chance of Precip.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sat 9/17</td>
<td>79°F / 54°F</td>
<td>Partly Cloudy</td>
<td>0 in</td>
</tr>
<tr>
<td>Sun 9/18</td>
<td>80°F / 56°F</td>
<td>Mostly Sunny</td>
<td>0 in</td>
</tr>
<tr>
<td>Mon 9/19</td>
<td>81°F / 61°F</td>
<td>Partly Cloudy</td>
<td>0 in</td>
</tr>
<tr>
<td>Tue 9/20</td>
<td>82°F / 58°F</td>
<td>Mostly Sunny</td>
<td>0 in</td>
</tr>
<tr>
<td>Wed 9/21</td>
<td>86°F / 62°F</td>
<td>Mostly Sunny</td>
<td>0 in</td>
</tr>
<tr>
<td>Thu 9/22</td>
<td>82°F / 54°F</td>
<td>Mostly Sunny</td>
<td>0 in</td>
</tr>
<tr>
<td>Fri 9/23</td>
<td>72°F / 46°F</td>
<td>Partly Cloudy</td>
<td>0 in</td>
</tr>
</tbody>
</table>

Source: wunderground.com

Flight Collection Plan for 17 September 2022

Flyority 1
Collection Area: Mountain Lake Biological Station (MLBS)
Flight Plan Name: D07_MLBS_R1_P1_v6_PRM.xml
40° On-station Time: 14:40 UTC / 10:40L

Flyority 2
Collection Area: Great Smokey Mountains National Park (GRSM) – Priority 1 Flight Box – Variable Altitude Plan
Flight Plan Name: D07_GRSM_R1_P1_P2_v5_PRM_Var_Alt.xml
40° On-station Time: 14:50 UTC / 10:50L

Flyority 3
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: 14:50 UTC / 10:50L

Flyority 4
Collection Area: Nominal Runway – D07
Flight Plan Name: D07_N07A_Nominal_Runway_Test_v2_PRM.xml
40° On-station Time: N/A

Crew: Cam (Lidar), Mike (NIS)