Date: 2023-06-02
Flight Campaign ID: P1C1
Airport, FBO ID, City: Winchester Regional Airport (KOKV) - Winchester, VA, Roanoke-Blacksburg Regional (KROA) - Roanoke, VA
Aircraft: N331AR

Domain: 07 (Appalachians & Cumberland Plateau), 02 (Mid-Atlantic)
Sites Flown: MLBS (Mountain Lake Biological Station)
Days left in Domain: 19

Report Author: Cameron
Lidar Operators: Cameron
Flight Hours: 03:29:00, 01:13:00
Spectrometer Operators: Abe
Hours until maintenance: 30.10
Pilots: Justin, Will
GPS Instruments: 07 - FBO_KOKV, AOP_MLBS

Summary
The crew took advantage of the good weather and collected 21 priority lines over MLBS before cumulus clouds developed at altitude pushing the sky conditions outside of nominal conditions. The crew landed at Roanoke Blacksburg airport for fuel prior to returning to Winchester.

Concerns
- The NIS once again displayed the “Frame Grabber” error approximately 40 minutes into the transit to MLBS. The crew experimented with troubleshooting and discovered that cycling the FPIE switches on the NON-ECS resolved the issue without the need of completely restarting the NIS.

Comments
- D02/07a Hg lamp test completed after today’s flight.
- RAID 06 was shipped today.

Daily Coverage

Estimated Cloud Cover Key

<table>
<thead>
<tr>
<th>Green: 0-10%</th>
<th>Yellow: 11-50%</th>
<th>Red: &gt;50%</th>
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D07|MLBS

<table>
<thead>
<tr>
<th>Line #</th>
<th>14</th>
<th>15</th>
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<tr>
<th>Line #</th>
<th>34</th>
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</table>

 Line # 34
Flight Screenshots

Pictures

Above: A view of MLBS during today’s flight.
Below: A smoke layer was observed during today’s flight.
Cumulative Domain Coverage

D07 | MLBS (Mountain Lake Biological 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 |

Flown: 64% (21/33)
Green: 64% (21/33)
Yellow: 0% (0/33)
Red: 0% (0/33)

D02 | BLAN (Blandy Experimental Farm)

| 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 |

Flown: 0% (0/32)
Green: 0% (0/32)
Yellow: 0% (0/32)
Red: 0% (0/32)

D02 | N02B (D02 Nominal Runway)

| 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 |

Flown: 0% (0/1)
Green: 0% (0/1)
Yellow: 0% (0/1)
Red: 0% (0/1)

D02 | SCBI (Smithsonian Conservation Biology Institute)

| 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 |

Flown: 0% (0/31)
Green: 0% (0/31)
Yellow: 0% (0/31)
Red: 0% (0/31)
Flown: 0% (0/25)
Green: 0% (0/25)
Yellow: 0% (0/25)
Red: 0% (0/25)

**Weather Forecast**

**Pembroke, VA (MLBS)**

<table>
<thead>
<tr>
<th>Sat 6/3</th>
<th>Sun 6/4</th>
<th>Mon 6/5</th>
<th>Tue 6/6</th>
<th>Wed 6/7</th>
<th>Thu 6/8</th>
<th>Fri 6/9</th>
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</thead>
<tbody>
<tr>
<td>82°</td>
<td>58°F</td>
<td>74°</td>
<td>53°F</td>
<td>81°</td>
<td>56°F</td>
<td>77°</td>
</tr>
</tbody>
</table>

- **PM** Thunderstorms: 0.12 in
- **AM Clouds/PM Sun**: 0 in
- **Mostly Sunny**: 0 in
- **Partly Cloudy**: 0 in
- **Mostly Sunny**: 0 in
- **Mostly Sunny**: 0 in

**Winchester, VA (BLAN)**

<table>
<thead>
<tr>
<th>Sat 6/3</th>
<th>Sun 6/4</th>
<th>Mon 6/5</th>
<th>Tue 6/6</th>
<th>Wed 6/7</th>
<th>Thu 6/8</th>
<th>Fri 6/9</th>
</tr>
</thead>
<tbody>
<tr>
<td>81°</td>
<td>53°F</td>
<td>73°</td>
<td>48°F</td>
<td>81°</td>
<td>55°F</td>
<td>77°</td>
</tr>
</tbody>
</table>

- **PM Showers**: 0.22 in
- **Partly Cloudy**: 0 in
- **Partly Cloudy**: 0 in
- **Partly Cloudy**: 0 in
- **Mostly Sunny**: 0 in
- **Mostly Sunny**: 0 in
- **Mostly Sunny**: 0 in

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Flight Collection Plan for June 3, 2023

Flyority 1 (Lines 2-13)
Collection Area: Mountain Lake Biological Station (MLBS)
Flight Plan Name: D07_MLBS_R1_P1_v7_PRM.xml
On-Station Time: 1340 UTC/ 0940 L

Flyority 2
Collection Area: Smithsonian Conservation Biology Institute (SCBI)
Flight Plan Name: D02_SCBI_C1_P1_v2_PRM.xml
On-Station Time: 1330 UTC/ 0930 L

Flyority 3
Collection Area: Smithsonian Environmental Research Center (SERC)
Flight Plan Name: D02_SERC_R1_P1_v1_PRM.xml
On-Station Time: 1330 UTC/ 0930 L
Flyority 4
Collection Area: Blandy Experimental Farm (BLAN)
Flight Plan Name: D02_BLAN_R2_P1_v3_PRM.xml
On-Station Time: 1330 UTC/ 0930 L

Flyority 5
Collection Area: Nominal Runway – D02 - KOKV
Flight Plan Name: D02_N02B_Nominal_Runway_Test_v1_PRM.xml
On-Station Time: N/A

**Crew:** Abe (Lidar), Cam (NIS)