Date: 2024-05-29
Flight Campaign ID: P3C1
Airport, FBO ID, City: Bessemer Municipal Airport - Mitchell Field (KEKY) - Bessemer, AL
Aircraft: N821AR

Domain: 03 (Southeast)
Sites Flown: JERC_P1 (Jones Ecological Research Center Priority 1)
Days left in Domain: 4

Report Author: Mike
Lidar Operators: Mike
Flight Hours: 02:36
Spectrometer Operators: Elissa
Hours until maintenance: 57.10
Pilots: Justin, Jacob
GPS Instruments: 01 - JERC, 04 - KEKY

Summary
An attempt was made for the D03 JERC site today. Conditions and forecast were desirable for a green collect, however the previously dissapating cirrus changed course and developed over the site during the 1.2 hour transit to the site. The crew estimated the cloud coverage to be around 20% and increasing. Despite being better conditions than the previous JERC collect, we made the disappointing decision to abort the mission. D08 sites were also covered by cirrus, so no collections were made.

Concerns
Aircraft power continues to dip during prop feathering, causing the input voltage to drop below 24V. This caused the system to switch to UPS power for a brief moment during taxi. Crew is advised to continue to monitor and opt out of feathering if possible.

Comments
QA’s for flights 2024052113 DELA/TALL and 2024052615 LENO are being re-run.

Daily Coverage

<table>
<thead>
<tr>
<th>Estimated Cloud Cover Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green: 0-10%</td>
</tr>
</tbody>
</table>

Solar Angle Less Than 40 degrees

Line #
### Cumulative Domain Coverage

**D08 \| DELA (Dead Lake)**

| 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 |

- **Flown:** 100% (35/35)
- **Green:** 46% (16/35)
- **Yellow:** 43% (15/35)
- **Red:** 11% (4/35)

**D08 \| LENO (Lenoir Landing)**

| 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 |

- **Flown:** 100% (26/26)
- **Green:** 0% (0/26)
- **Yellow:** 0% (0/26)
- **Red:** 100% (26/26)

**D08 \| TALL (Talladega National Forest)**

| 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 |

- **Flown:** 100% (26/26)
- **Green:** 0% (0/26)
- **Yellow:** 38% (10/26)
- **Red:** 62% (16/26)

### Weather Forecast

**Demopolis, AL (DELA)**

<table>
<thead>
<tr>
<th>Thu 5/30</th>
<th>Fri 5/31</th>
<th>Sat 6/1</th>
<th>Sun 6/2</th>
<th>Mon 6/3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AM Showers</strong></td>
<td><strong>Mostly Sunny</strong></td>
<td><strong>Thunderstorms</strong></td>
<td><strong>Thunderstorms</strong></td>
<td><strong>Scattered Thunderstorms</strong></td>
</tr>
<tr>
<td>80°</td>
<td>65°F</td>
<td>86°</td>
<td>70°F</td>
<td>80°</td>
</tr>
</tbody>
</table>

- **0.09 in**
- **0 in**
- **0.9 in**
- **0.43 in**
- **0.11 in**
Flight Collection Plan for 30 May 2024

Flyority 1
Collection Area: Dead Lake (DELA) – Priority 1 Flight Box – if green
Flight Plan Name: D08_DELA_R1_P1_v2_Q780
On-Station Time: 1410 UTC/ 0910 L
Flyority 2
Collection Area: Talladega National Forest (TALL) – *if green*
Flight Plan Name: D08_TALL_C1_P1_v2.Q780
On-Station Time: 1410 UTC/ 0910 L

Flyority 3
Collection Area: Lenoir Landing (LENO) – *if green*
Flight Plan Name: D08_LENO_R2_P1_v2.Q780
On-Station Time: 1410 UTC/ 0910 L

Flyority 4
Collection Area: Dead Lake (DELA) – Priority 2 Flight Box – *if green*
Flight Plan Name: D08_DELA_R1_P2_v2.Q780
On-Station Time: 1410 UTC/ 0910 L

Flyority 5
Collection Area: Jones Ecological Research Center (JERC) P1 – *if green*
Flight Plan Name: D03_JERC_R2_P1_P2_v4_PRM.xml
On-Station Time: 1410 UTC/ 0910 L

**Crew:** Elissa (Lidar), Mike (NIS)