Date: 2020-08-18
Flight Campaign ID: P3C1
Airport, FBO ID, City: Rhinelander-Oneida County Airport (KRHI) - Rhinelander, WI

Domain: 05 (Great Lakes)
Sites Flown: CHEQ (Chequamegon-Nicolet National Forest)
Days left in Domain: 0

Report Author: Mitch Haynes
Lidar Operators: Mitch Haynes
Spectrometer Operators: Cameron Chapman
Pilots: Mike Francis, Lane Taylor
Ground Crew: Elissa Barris

Flight Hours: 02:02
Hours until maintenance: 40.45

Summary
The crew relaxed solar angles from 40° to 30° in order to take advantage of clearer morning skies in D05, finishing off CHEQ in green conditions. Lines 2-13 were flown before 40° solar, 14-17 after. Crew looked to green up lines at LIRO following completion of CHEQ, however cumulus clouds had already began forming at flight altitude. This concludes collections in D05. Crew will relocate back to Boulder, CO tomorrow to begin post-season calibration and engineering flights.

Concerns
- Pilot display has continued to have trouble booting up during the past few flights. Cycling power on the display itself seems to always fix the problem.
- No AXE power issues again today. Crew will try switching to the “bad” invertor during the transit home tomorrow to see if the issues can be replicated.

Comments
- HTK3 will be packed up as soon as today’s flight is finished extraction & QAQC. It will be made available again once relocation to Boulder is complete.
- RAID 2020_P3C1_06 with data from D05 will be shipped once back in Boulder
- Final GPS data from D05 won’t be uploaded to the ECS till tomorrow or Thursday.

Daily Coverage
Estimated Cloud Cover Key

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

D05 | CHEQ

<table>
<thead>
<tr>
<th>Line #</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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</tr>
<tr>
<td>Cloud Cover</td>
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</tr>
</tbody>
</table>

Total number of lines flown: 16
* = Flown before 40° solar angle
Flight Screenshots: NIS on the left, Lidar on the right

Pictures: View of the Chequamegon-Nicolet National Forest at the start of collect today
Final Cumulative Domain 05 Coverage

**D05|CHEQ (Chequamegon-Nicolet National Forest)**

- Flown: 100% (16/16)
- Green: 100% (16/16)
- Yellow: 0% (0/16)
- Red: 0% (0/16)

**D05|LIRO (Little Rock Lake)**

- Flown: 100% (7/7)
- Green: 0% (0/7)
- Yellow: 0% (0/7)
- Red: 100% (7/7)

**D05|STEI_TREE_P1 (Steigerwaldt Land Services and Treehaven Priority 1)**

- Flown: 100% (25/25)
- Green: 100% (25/25)
- Yellow: 0% (0/25)
- Red: 0% (0/25)

**D05|STEI_TREE_P2 (Steigerwaldt Land Services and Treehaven Priority 2)**

- Flown: 100% (18/18)
- Green: 0% (0/18)
- Yellow: 0% (0/18)
- Red: 100% (18/18)

**D05|UNDE (University of Notre Dame Environmental Research Center)**

- Flown: 100% (28/28)
- Green: 100% (28/28)
- Yellow: 0% (0/28)
- Red: 0% (0/28)

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**Weather Forecast**

**Rhinelander, WI**

<table>
<thead>
<tr>
<th>Wed 8/19</th>
<th>Thu 8/20</th>
<th>Fri 8/21</th>
<th>Sat 8/22</th>
<th>Sun 8/23</th>
<th>Mon 8/24</th>
</tr>
</thead>
<tbody>
<tr>
<td>80°</td>
<td>59°F</td>
<td>91°</td>
<td>63°F</td>
<td>90°</td>
<td>65°F</td>
</tr>
</tbody>
</table>

- **Partly Cloudy**

**Boulder, CO**

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>91°</td>
<td>63°F</td>
<td>90°</td>
<td>65°F</td>
<td>93°</td>
<td>63°F</td>
</tr>
</tbody>
</table>

- **Partly Cloudy**

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**Flight Collection Plan for 19 August 2020**

Transit from KRHI to KBJC

Crew: Mitch Haynes