Payload 1 Daily Flight Report

Date: 2021-10-08
Flight Campaign ID: P1C2
Airport, FBO ID, City: Tulsa International Airport (KTUL) - Tulsa, OK, Garden City Regional Airport (KGCK) - Garden City, KS, Boulder Municipal Airport (KBDU) - Boulder, CO
Aircraft: N331AR

Domain: 03 (Southeast)
Sites Flown: Transit
Days left in Domain: 0

Report Author: Elissa Barris
Lidar Operators: Elissa Barris
Ground Crew: Cameron Chapman
Pilots: Justin Eddington, Nick Koukoutsakis

Flight Hours: 01:52:00, 01:50:00
Hours until maintenance: 8.87

Summary
Today we were able to complete our return transit to Boulder in two smooth legs from Tulsa, Oklahoma. Upon arrival, we began pumping and cooling the spectrometer. The payload should be ready for calibration flights by Sunday afternoon or Monday morning.

Concerns
None.

Comments
The repaired digitizer was reinstalled back into the payload after its arrival in Boulder. Test flights will be incorporated into the post-season calibration period.

Pictures

View of downtown Tulsa after this morning’s departure from KTUL.
Final fuel stop at KGCK in Garden City, KS.

Weather Forecast

Boulder, CO (KBDU)

<table>
<thead>
<tr>
<th>Date</th>
<th>Cloud Cover (%)</th>
<th>Chance of Precip. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sat 10/9</td>
<td>Mostly Sunny</td>
<td>0 in</td>
</tr>
<tr>
<td>Sun 10/10</td>
<td>Mostly Sunny</td>
<td>0 in</td>
</tr>
<tr>
<td>Mon 10/11</td>
<td>Mostly Sunny</td>
<td>0 in</td>
</tr>
<tr>
<td>Tue 10/12</td>
<td>Showers</td>
<td>0.17 in</td>
</tr>
<tr>
<td>Wed 10/13</td>
<td>Partly Cloudy</td>
<td>0 in</td>
</tr>
<tr>
<td>Thu 10/14</td>
<td>Partly Cloudy</td>
<td>0 in</td>
</tr>
<tr>
<td>Fri 10/15</td>
<td>Mostly Sunny</td>
<td>0 in</td>
</tr>
</tbody>
</table>

source: wunderground.com

Flight Collection Plan for 9 October 2021

No flights scheduled; continue pumping and cooling the spectrometer.

Crew: Cameron (Lidar), Elissa (NIS), Abe (Ground)

Flight Collection Plan for 10 October 2021

Flyority 1
Collection Area: Boresight Calibration – Greeley, CO
Flight Plan Name: D10_B10F_Boresight_Geocal_v8_PRM
On-station Time: 16:10 UTC / 10:10 L
Flyority 2
Collection Area: Nominal Runway Survey Flight Plan
Name: D10_N10F_Nominal_Rnwy_v9_PRM
On-Station Time: Daylight – No solar angle restrictions.
Additional Considerations: Runway should not be wet.

Flyority 3
Collection Area: Wiggle Timing Test
Name: D10_W10D_Wiggle_Test_v5_PRM
On-Station Time: 17:40 UTC / 11:40 L

Flyority 4
Collection Area: NEON HQ Lidar Validation
Flight Plan Name: D10_H10D_HQ_Lidar_validation_v1_PRM
On-Station Time: Daylight – No solar angle restrictions.

Flyority 5
Collection Area: Table Mountain Radiometric Calibration
Flight Plan Name: D10_R10E_Radiometric_Cal_Table_Mtn_v1_PRM
On-Station Time: 17:40 UTC / 11:40 L

Flyority 6
Collection Area: Boulder Airport Radiometric Calibration
Flight Plan Name: D10_R10F_Radiometric_Cal_KBDU_v1_PRM
On-Station Time: 17:40 UTC / 11:40 L

Flyority 7
Collection Area: NIS Offset Flight
Flight Plan Name: D10_O10C_NIS_Offset_v2_PRM
On-Station Time: 16:50 UTC / 10:50 L

Flyority 8
Collection Area: Black Forest Waveform Range Test Flight
Flight Plan Name: D10_BLKF_Black_Forest_v4_PRM
On-Station Time: 17:30 UTC / 11:30 L

Flyority 9
Collection Area: Boulder City Eye Safety Test
Flight Plan Name: D10_D10C_Boulder_West_Eye_Safety_Test_PRM
On-Station Time: Daylight – No solar angle restrictions.

Crew: Elissa (Lidar), Abe (NIS), Cameron (Ground)