



May 20, 2018 Payload 2 Daily Flight Report



Date: 2018-05-20

Flight Campaign ID: 2018_P2C1

Airport, FBO ID, City: Fernando Luis Ribas Dominicci Airport (TJIG) - San Juan, Puerto Rico

Domain: 04

Sites Flown: GUAN (Guanica Forest), CUPE (Rio Cupeyes)

Days left in Domain: 4

Report Author: John Adler

Flight Crew: John Adler, Mitch Haynes

Ground/GPS: Michael Wussow

Pilots: Stephen Brawders, Wesley Wyatt

Additional Personnel: none

GPS Instruments: 01 - FBO_TJIG, 02 - GUAN, C-PRGY, C-PRMI

Flight Hours: 02:07

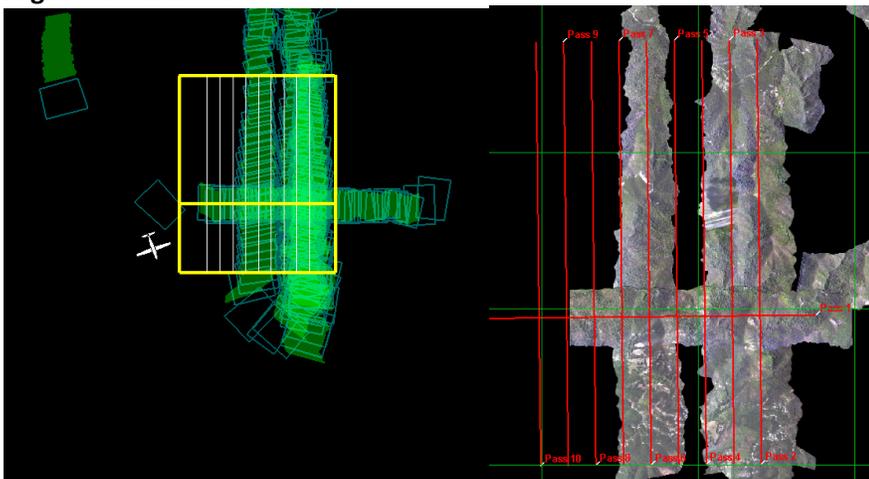
Hours until maintenance: 77.42

Summary: Today the crew attempted to fly GUIL, but the clouds were at or below our survey altitude. We then collected the miscellaneous lines left over at GUAN and CUPE which needed the lidar re-flown due to previous shutoffs.

Concerns: Lidar display (both pilot and ASO) of plane's flight path was badly delayed, causing trouble lining up on the flight line. See below. The camera had intermittent automatic turn-on, so manual triggering was required at the beginning of lines.

Comments: Charging the GPS 01 battery overnight. Tomorrow we will attempt for an early takeoff to get lidar data over GUIL.

Flight Screenshots:



CUPE: lidar

spectrometer

Green: 0% (0/15)
 Yellow: 0% (0/15)
 Red: 0% (0/15)

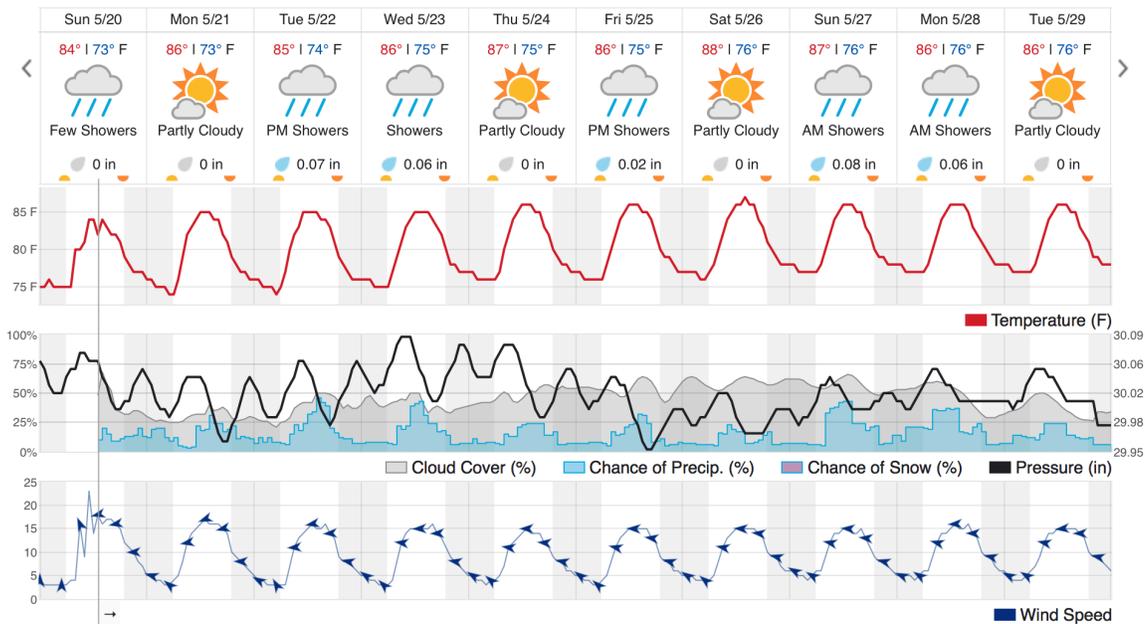
LAJA

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
21	22	23																		

Flown: 96% (22/23)
 Green: 0% (0/23)
 Yellow: 48% (11/23)
 Red: 61% (14/23)

Weather Forecast

San Juan:



Flight Collection Plan for 21 May 2018

Flyority 1:

Collection Area: Guanica Forest (GUAN)
 Flight Plan Name: D04_GUAN_C1_P1_v1.pln
 On-station Time: 1300 UTC / 0900 L
 Lines 1-34 if green conditions exist.

Flyority 2:

Collection Area: Lajas Experimental Station (LAJA)
 Flight Plan Name: D04_LAJA_R1_P1_v3.pln
 On-station Time: 1300 UTC / 0900 L
 Lines 1-23 if green conditions exist.

Flyority 3:

Collection Area: Rio Cupeyes (CUPE)
 Flight Plan Name: D04_CUPE_A1_P1_v1.pln
 On-station Time: 1300 UTC / 0900 L
 Lines 1-10 if green conditions exist.

Flyority 4:

Collection Area: Rio Guilarte (GUIL)
 Flight Plan Name: D04_GUIL_A2_P1_v1.pln

On-station Time: 1100 UTC / 0700 L

Crew: Michael Wussow (Lidar), John Adler (NIS), Mitch Haynes (Ground)

On-Going Issues

Fault: Displays	Open Date: 2018-05-10
<p>2018051012 - Pilot Display was flickering and losing signal for first line of flight. Loitered in air to try to resolve issue. Seems to be a cable issue. Pilot display working after adding more electrical tape to ALTM end, and unkinking cable on pilot display end. Pilot display end looking weak at kink. Will continue to monitor</p> <p>2018051112 - Pilot Display continued to be a nuisance, flickering on and off throughout the flight. Red power light remains on, so it's unclear what the root issue is. Not sure if troubleshooting methods of reseeding the cable at both the display and the Lidar rack are actually doing anything.</p> <p>2018051313 - PD error on ground before engine start. Tightened midpoint joint of cable plugs and in and out stopped. Did not solve problem when at site. Error occurred most frequently on the S-N lines at the beginning of the line with flickering, and then completely off by last third of line and would only come back on with re-seating the ALTM ended plug. Had to abort line because off course due to error. Occurred only twice on LAJA flight plan. When pilot display down for more than 10 secs re-seating would re-initialize and maintain for 50-10 minutes. Re-seated three times during flight.</p> <p>2018052012 - Had to swap out the display as the original display would not show images. In flight the display then had a significant lag, but after two reboots of ALTM Nav, it worked fine. Completed the mission.</p>	