



## May 11, 2018 Payload 2 Daily Flight Report



**Date:** 2018-05-11

**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), LAJA (Lajas Experimental Station)

**Days left in Domain:** 14

**Report Author:** Mitch Haynes

**Flight Crew:** Mitch Haynes, Michael Wussow

**Flight Hours:** 03:43

**Ground/GPS:** Heather Rogers

**Hours until maintenance:** 86.83

**Pilots:** Wesley Wyatt, Stephen Brawders

**Additional Personnel:**

**GPS Instruments:** 01 - FBO\_TJIG, 02 - GUAN, C-PRGY, C-PRMI

### Summary

Crew spent the day avoiding cumulus cloud building activity in southwestern Puerto Rico and pop up rain showers in San Juan in route to collecting 21 total lines over the Priority 1 Guanica Forest and Priority 2 Lajas Experimental Station flight boxes.

### Concerns

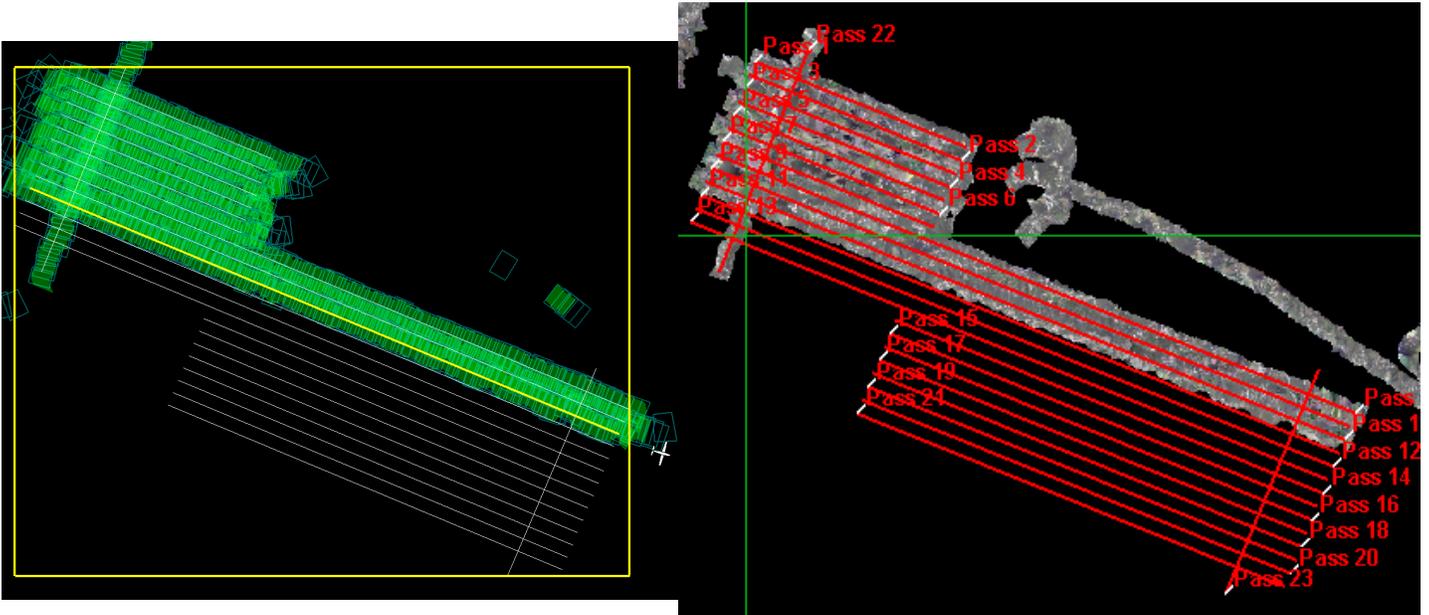
- Our narcoleptic pilot display continues to trouble our pilots (it seems to especially dislike Stephen) by intermittently cutting in and out. It's unclear whether re-seeding and power cycling the display does anything. A replacement display and cable will arrive next week to test and troubleshoot the issue.
- Briefly noticed a yellow streak in the spectrometer waterfall which may indicate a dead pixel. The streak was present for two lines but mysteriously disappeared after that. See screenshot below.
- Waveform extraction continues to cause troubles on the hotel kit. Several attempts at running yesterday's extraction have failed, with master coder Fernando's assistance being called upon once again.

### Comments

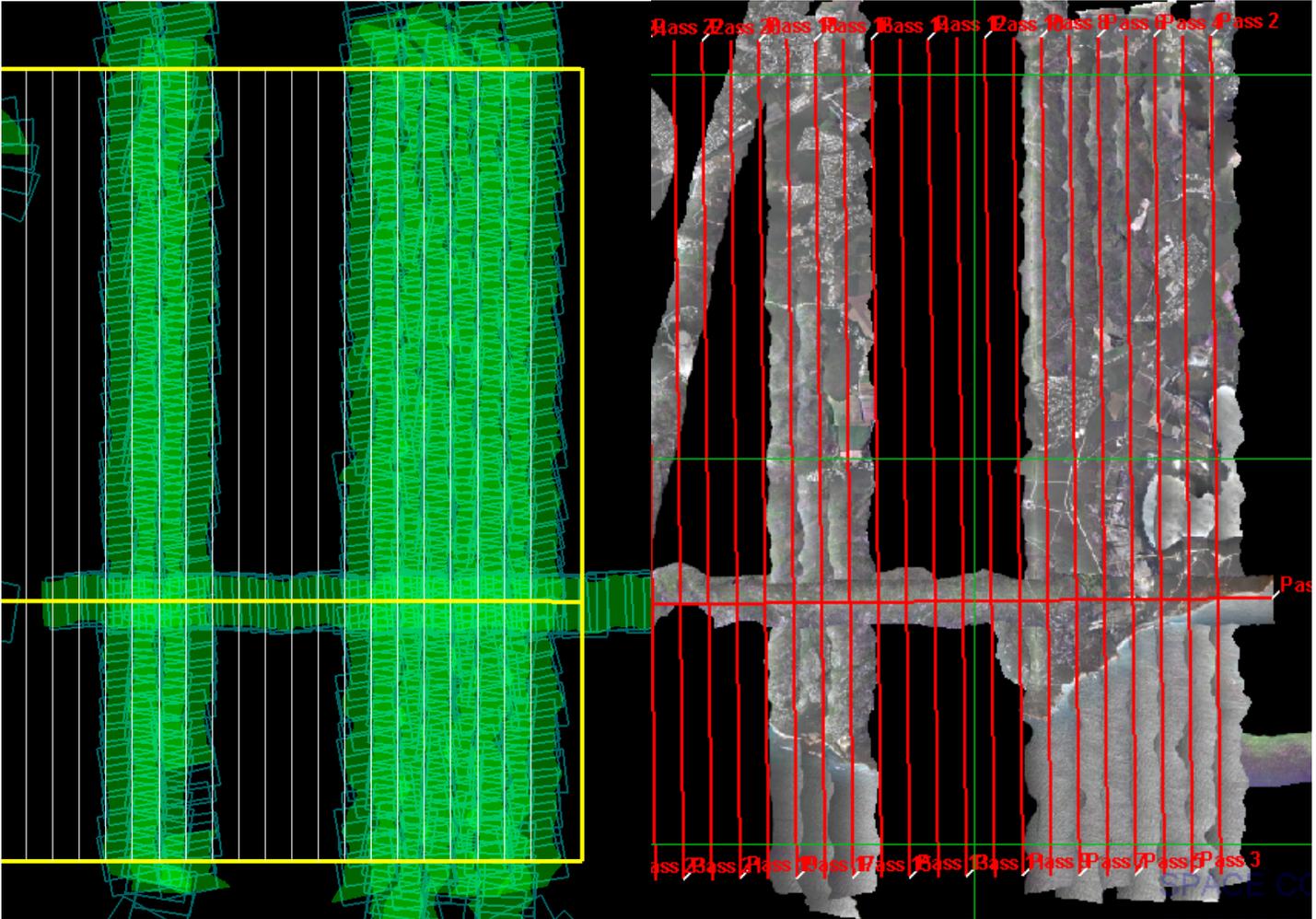
- Collected lines 1-8 & 15-17 at GUAN and lines 1-10 at LAJA all under non-green conditions.

**Flight Screenshots** Below: Hard to see, but a faint yellow streak was visible during two of today's flight lines.





Above: Lidar (left) and NIS (right) screenshots from over LAJA  
 Below: Lidar (left) and NIS (right) screenshots from over GUAN



## Pictures



Above: View of the Castillo de San Felipe del Morro within old San Juan

Below: The Guanica Dry Forest, our core NEON site in D04 and a UNESCO Biosphere Reserve





D04 LAJA	Line	SpecG	SpecY	SpecR	NIS	Lidar	Camera	Cumulative
	1				✓	✓	✓	NLC
	2				✓	✓	✓	NLC
	3				✓	✓	✓	NLC
	4				✓	✓	✓	NLC
	5				✓	✓	✓	NLC
	6				✓	✓	✓	NLC
	7				✓	✓	✓	NLC
	8				✓	✓	✓	NLC
	9				✓	✓	✓	NLC
	10				✓	✓	✓	NLC
	22				✓	✓	✓	NLC
Flown:	11							

### Cumulative Domain Coverage

#### GUAN

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						

Flown: 82% (28/34)

Green: 0% (0/34)

Yellow: 3% (1/34)

Red: 85% (29/34)

#### CUPE

1	2	3	4	5	6	7	8	9	10
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Flown: 0% (0/10)

Green: 0% (0/10)

Yellow: 0% (0/10)

Red: 0% (0/10)

#### GUIL

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
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Flown: 0% (0/15)

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	24	25	26	27	28	29	30										

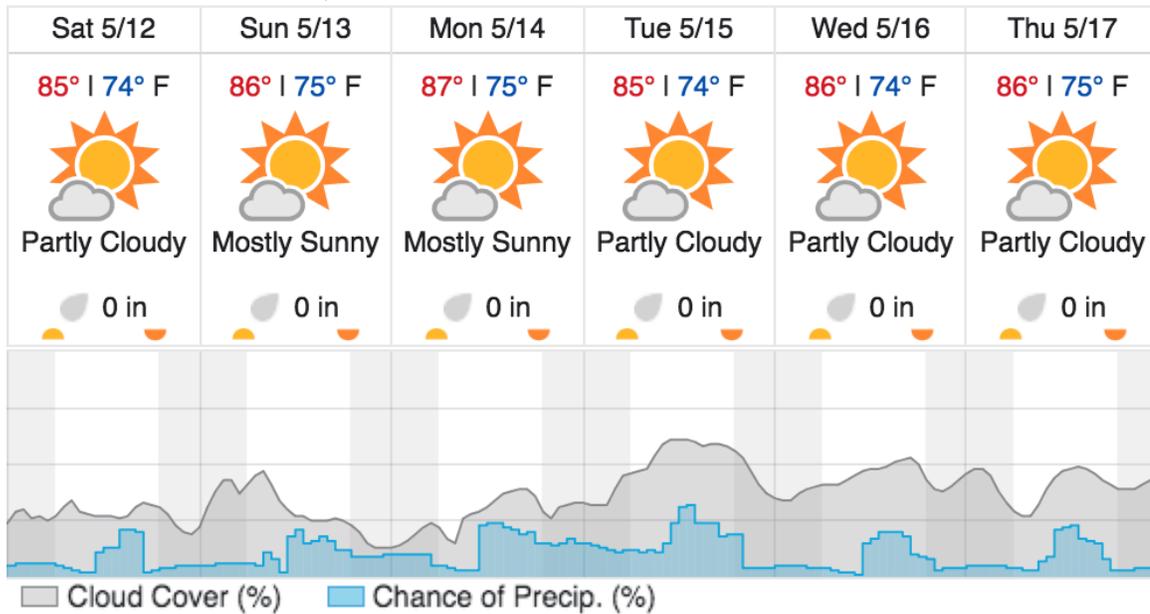
Flown: 37% (11/30)

Green: 0% (0/30)

Yellow: 37% (11/30)

Red: 0% (0/30)

**Weather Forecast** Guanica, Puerto Rico



**Flight Collection Plan for 12 May 2018**

**Flight Priority (Flyority) 1:**

Collection Area: Guanica Forest (GUAN)  
 Flight Plan Name: D04\_GUAN\_C1\_P1\_v1.pln  
 On-station Time: 1300 UTC / 0900 L  
 Lines 1-8, 15-34 complete under non-green

**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 1-10 complete under non-green

**Flyority 3:**

Collection Area: Rio Cupeyes (CUPE)  
 Flight Plan Name: D04\_CUPE\_A1\_P1\_v1.pln  
 On-station Time: 1300 UTC / 0900 L

**Flyority 4:**

Collection Area: Rio Guilarte (GUIL)  
 Flight Plan Name: D04\_GUIL\_A2\_P1\_v1.pln  
 On-station Time: 1300 UTC / 0900 L

**Crew:** Heather Rogers (Lidar), Mitch Haynes (NIS), Michael Wussow (Ground/GPS)

**On-Going Issues**

<b>Fault:</b> Displays	<b>Open Date:</b> 2018-05-10
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 unknicking cable on pilot display end. Pilto display end looking weak at kink. Will continue to monitor	
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 route issue is. Not sure if troubleshooting methods of reseeding the cable at both the display and the Lidar rack are actually doing anything.	
<b>Fault:</b> Spectrometer	<b>Open Date:</b> 2018-05-11
2018051112 - Notice what seemed to be dead pixel (yellow stripe) in the spectrometer waterfall (lines 5-6 over GUAN). Disappeared after those two lines.	