

Payload 1 Daily Flight Report



Date: 2022-10-24

Flight Campaign ID: P1C1

Airport, FBO ID, City: Rafeal Hernandez International Airport (TJBQ) - Aguadilla, Puerto Rico

Aircraft: N331AR

Domain: 04 (Atlantic Neotropical)

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

Days left in Domain: 19

Report Author: Abe

Lidar Operators: Abe **Flight Hours**: 02:56

Spectrometer Operators: Cameron **Hours until maintenance**: 67.97

Pilots: Justin , Brent **GPS Instruments**: 04 - FBO_TBJQ, C-PRGY, C-PRMI

Summary

Today the clouds started out fairly high, and the low cumulus only started to develop after solar angle. This situation allowed us to begin collecting at GUAN, but when the developing low clouds pushed us out we moved back to CUPE and then GUIL. We finished initial collections at both CUPE and GUIL. Today we completed 22 lines in "red" conditions.

Concerns

-The Ion pump control box started the "Arcing" issue again. We flew the 3 hour flight today with the box completely shut off. The NIS pressure during the flight stayed fairly stable. With guidance from HQ staff the box was left off for the time being.

Comments

-Elissa arrived late last night.

Daily Coverage

Estimated Cloud Cover Key

Estimated cloud cover key											
Green:	Yellow:	Red:									
0-10%	11-50%	>50%									

D04|GUAN

Line #	33	34
Lidar	✓	✓
Spectrometer	✓	√
Camera	✓	✓
Cloud Cover		

Total number of lines flown: 2

D04|CUPE

Line #	2	3	4	8	9	10
Lidar	\	\	√	\	\	\
Spectrometer	√	✓	✓	✓	√	✓
Camera	√	✓	✓	√	√	✓
Cloud Cover						

Total number of lines flown: 6

D04|GUIL

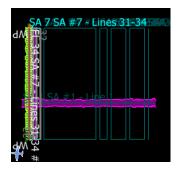
Line #	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	\	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	√	✓	✓	\	√
Camera	✓	✓	√	√	√	✓	√	✓	√	√	✓	√	√	√
Cloud Cover														

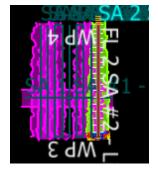
Total number of lines flown: 14

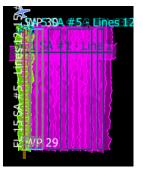
Flight Screenshots

GUAN CUPE GUIL

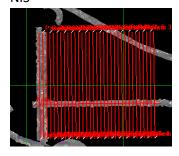
Lidar

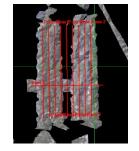


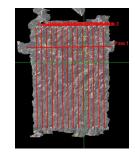




NIS







Cumulative Domain Coverage

D04 | CUPE (Rio Cupeyes)

1 2 3 4 5 6 7 8 9 10

Flown: 100% (10/10) Green: 0% (0/10) Yellow: 40% (4/10) Red: 60% (6/10)

D04 | GUAN (Guanica 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	27	28	29	30	31	32	33	34						

Flown: 53% (18/34) Green: 0% (0/34) Yellow: 44% (15/34) Red: 9% (3/34)

D04 | GUIL (Rio Guilarte)

Flown: 100% (15/15) Green: 0% (0/15) Yellow: 0% (0/15) Red: 100% (15/15)

D04 | LAJA (Lajas Experimental Station)

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

Flown: 0% (0/22) Green: 0% (0/22) Yellow: 0% (0/22) Red: 0% (0/22)

D04 | N04C (D04 Nominal Runway)

1 2

Flown: 0% (0/2) Green: 0% (0/2) Yellow: 0% (0/2) Red: 0% (0/2)

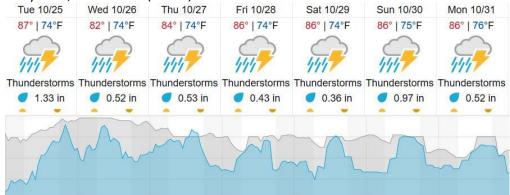
D04 | R04A ()

1 2 3 4 5

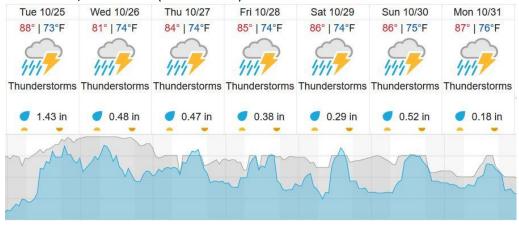
Flown: 100% (5/5) Green: 100% (5/5) Yellow: 0% (0/5) Red: 0% (0/5)

Weather Forecast

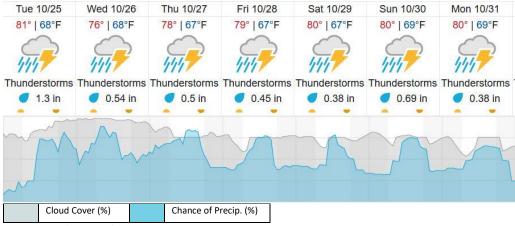
Guayanilla, Puerto Rico (GUAN)



San German, Puerto Rico (LAJA & CUPE)



Adjuntas Puerto Rico (GUIL)



source: wunderground.com

Flight Collection Plan for 25 October 2022

Flyority 1

Collection Area: Guanica Forest (GUAN)

Flight Plan Name: D04_GUAN_C1_P1_v1_PRM.xml

On-station Time: 1330 UTC / 0930 L

Flyority 2

Collection Area: Lajas Experimental Station (LAJA) Flight Plan Name: D04_LAJA_R1_P1_v6_PRM.xml

On-station Time: 1330 UTC / 0930 L

Flyority 3

Collection Area: Rio Cupeyes (CUPE)

Flight Plan Name: D04_CUPE_A1_P1_v1_PRM.xml

On-station Time: 1330 UTC / 0930 L

Flyority 4

Collection Area: Rio Guilarte (GUIL)

Flight Plan Name: D04_GUIL_A2_P1_v2_PRM.xml

On-station Time: 1330 UTC / 0930 L

Flyority 5

Collection Area: D04 Nominal Runway

Flight Plan Name: D04_N04C_Nominal_Runway_Test_v1_PRM.xml

On-station Time: NA

CREW: Lidar: Camerson NIS: Abraham Ground: Elissa