



## Payload 1 Daily Flight Report



**Date:** 2023-05-02

**Flight Campaign ID:** P1C1

**Airport, FBO ID, City:** Ocala International Airport (KOCF) - Ocala, FL, Tallahassee International Airport (KTLH) - Tallahassee, FL

**Aircraft:** N331AR

**Domain:** 03 (Southeast)

**Sites Flown:** JERC\_P1 (Jones Ecological Research Center Priority 1), JERC\_P2 (Jones Ecological Research Center Priority 2)

**Days left in Domain:** 09

**Report Author:** Cameron

**Lidar Operators:** Cameron

**Flight Hours:** 03:27:00, 00:52:00

**Spectrometer Operators:** Elissa

**Hours until maintenance:** 71.30

**Pilots:** Justin, Jeff

**GPS Instruments:** 03 - JERC, 07 - FBO\_KOCF

### **Summary**

The forecast called for cloudy skies in central and south Florida this morning, so the crew focused on our northern site JERC. We got an early start to maximize the solar angle since the transit to JERC from Ocala is over an hour each way. Upon arriving at the site, we were greeted by cloud free blue skies! Unfortunately, a seemingly prescribed burn was freshly lit and situated directly in our flight box. The fire and smoke intensified and covered most of our P1 box. We collected two priority lines before the smoke forced us to focus on lines upwind of the fire. We collected 12 total lines between P1 and P2 before landing for fuel in Tallahassee.

### **Concerns**

- We couldn't land for fuel at our usually FBO in Thomasville GA (KTVI), because they no longer have a GPU. When landing for fuel in Tallahassee, the GPU appeared to have adequate power however the 1250 UPS failed to charge so the system was put into safe mode.
- NIS errors upon initial startup - no GPS data, C-migits serial cable timeout. Issue resolved after reseating GPS cable and strain relieving serial cable.
- Lost waterfall on the way to the site after about an hour of flight - frame grabber error (sensor health and measured frame rate timeouts).
- Chiller front readout displaying 'tank low', however the fluid levels appear to be adequate. AOP lab has been notified.

### **Comments**

- Mitch arrives back in D03 tonight.

Daily Coverage

Estimated Cloud Cover Key

Green:	Yellow:	Red:
0-10%	11-50%	>50%

D03|JERC\_P1

Line #	6	22	23	24	25	26
Lidar	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓
Cloud Cover						

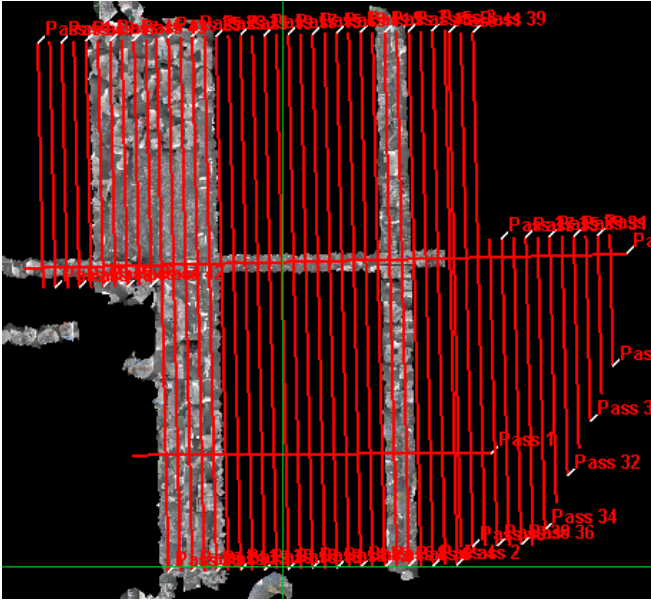
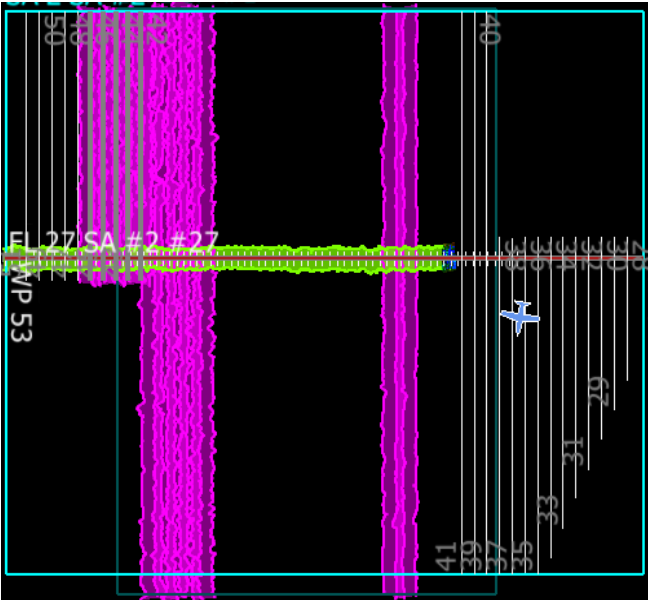
Total number of lines flown: 7

D03|JERC\_P2

Line #	42	43	44	45	46
Lidar	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓
Cloud Cover					

Total number of lines flown: 5

Flight Screenshots



## Pictures



Above: The burn upon arriving at JERC; Otherwise, a completely clear sky!  
Below: The burn 20 minutes after arriving at JERC. From the west side looking east.



## Cumulative Domain Coverage

### D03|DSNY (Disney Wilderness Preserve)

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	35	36				

Flown: 75% (27/36)

Green: 72% (26/36)

Yellow: 3% (1/36)

Red: 0% (0/36)

### D03|JERC\_P1 (Jones Ecological Research Center Priority 1)

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														

Flown: 23% (6/26)

Green: 23% (6/26)

Yellow: 0% (0/26)

Red: 0% (0/26)

### D03|JERC\_P2 (Jones Ecological Research Center Priority 2)

27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
47	48	49	50	51															

Flown: 24% (6/25)

Green: 24% (6/25)

Yellow: 0% (0/25)

Red: 0% (0/25)

### D03|N03B ()

1	2
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Flown: 100% (2/2)

Green: 0% (0/2)

Yellow: 100% (2/2)

Red: 0% (0/2)

### D03|OSBS\_P1 (Ordway-Swisher Biological Station Priority 1)

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													

Flown: 26% (7/27)

Green: 19% (5/27)

Yellow: 7% (2/27)

Red: 0% (0/27)

### D03|OSBS\_P2 (Ordway-Swisher Biological Station Priority 2)

28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
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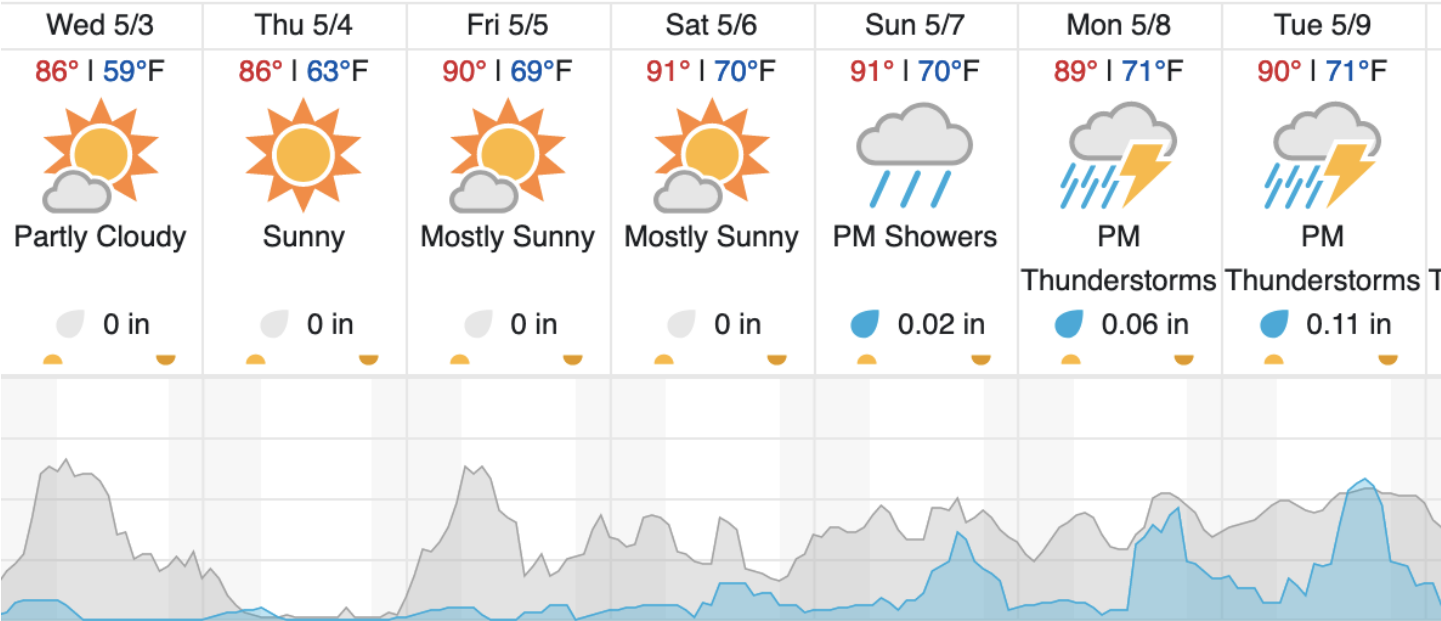
Flown: 100% (16/16)

Green: 0% (0/16)

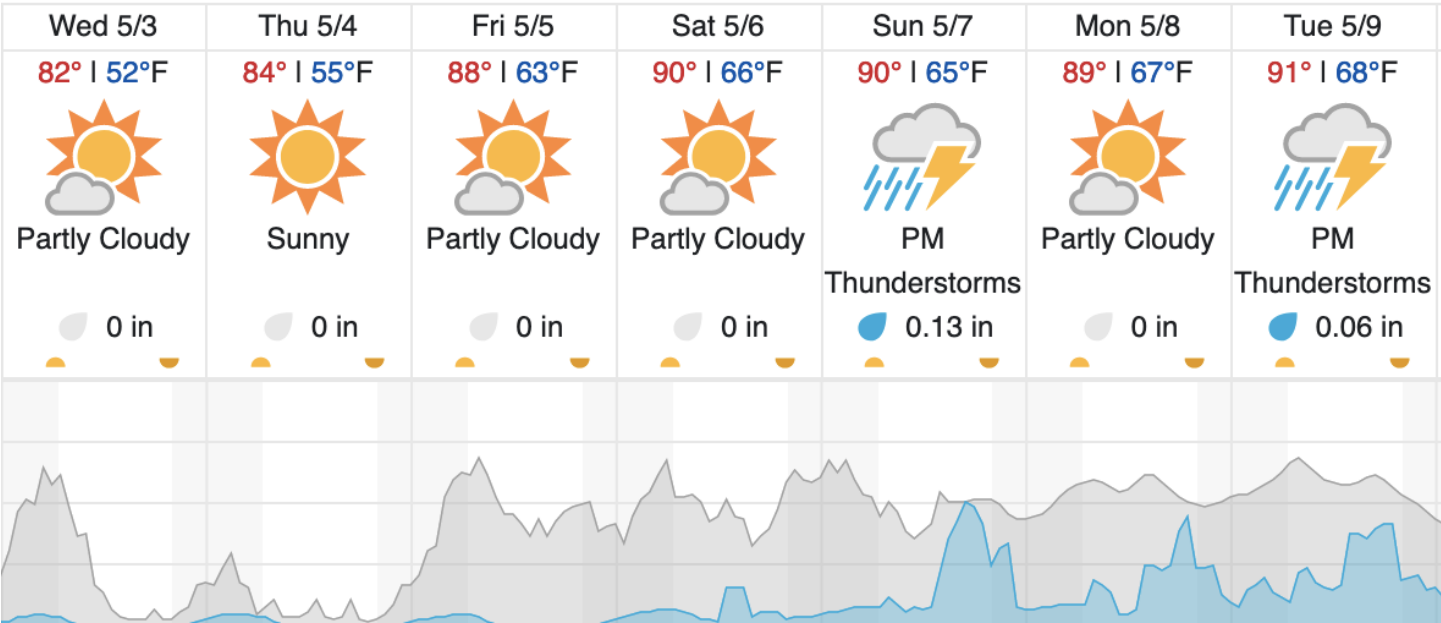
Yellow: 100% (16/16)

Red: 0% (0/16)

Weather Forecast  
Kissimmee, FL (DSNY)

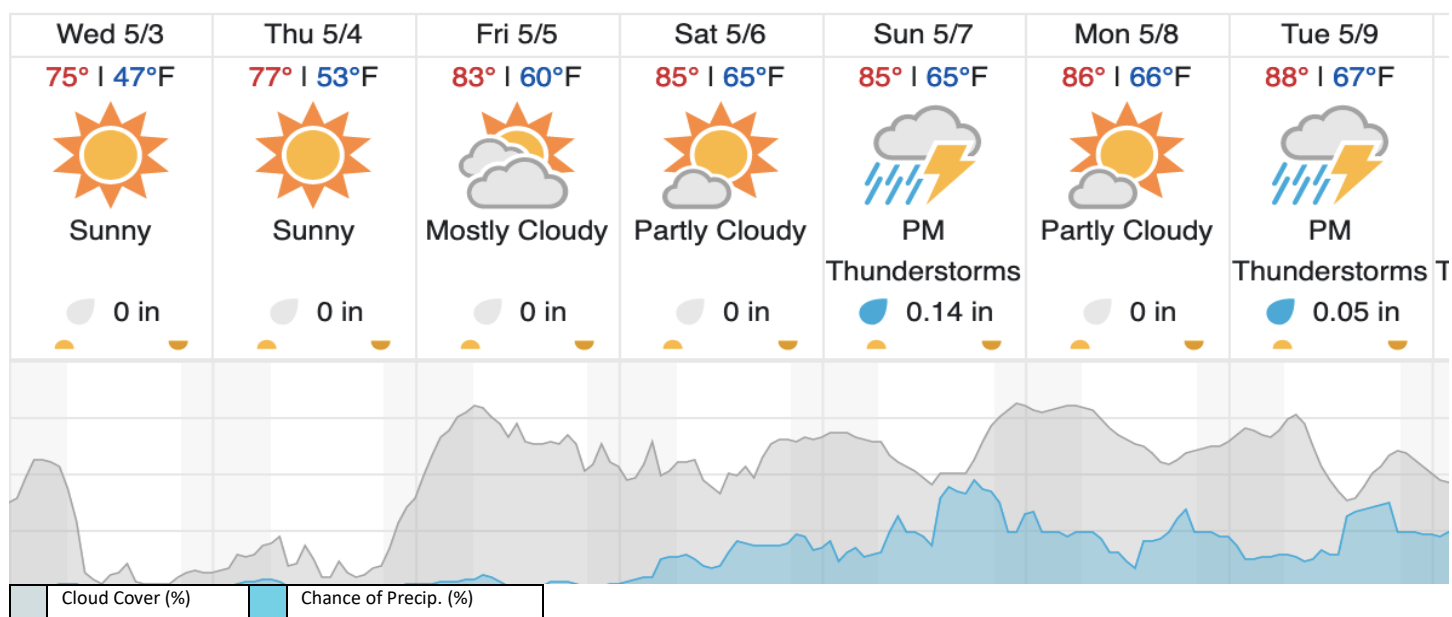


Gainesville, FL (OSBS)





Newton, GA (JERC)



source: wunderground.com

### Flight Collection Plan for May 03, 2023

#### Flyority 1 (*Lines 2 – 10*)

Collection Area: Disney Wilderness Preserve (DSNY)

Flight Plan Name: D03\_DSNY\_R1\_P1\_v3\_PRM.xml

On-Station Time: 1400 UTC/ 1000 L

#### Flyority 2 (*Lines 2 – 10, 16 – 27*)

Collection Area: Ordway-Swisher Biological Station (OSBS) P1

Flight Plan Name: D03\_OSBS\_C1\_P1\_P2\_v3\_PRM.xml

On-Station Time: 1410 UTC / 1010 L

#### Flyority 3 (*Lines 2-5, 7-21*)

Collection Area: Jones Ecological Research Center (JERC) P1

Flight Plan Name: D03\_JERC\_R2\_P1\_P2\_v4\_PRM.xml

On-Station Time: 1420 UTC/ 1020 L

#### Flyority 4 (*Only if green*)

Collection Area: Ordway-Swisher Biological Station (OSBS) P2

Flight Plan Name: D03\_OSBS\_C1\_P1\_P2\_v3\_PRM.xml

On-Station Time: 1410 UTC/ 1010 L

#### Flyority 5 (*Lines 28-41, 47-51*)

Collection Area: Jones Ecological Research Center (JERC) P2

Flight Plan Name: D03\_JERC\_R2\_P1\_P2\_v4\_PRM.xml

On-Station Time: 1420 UTC/ 1020 L

**Crew:** Elissa (Lidar), Mitch (NIS)