



Payload 3 Daily Flight Report

Date: 2025-05-05

Flight Campaign ID: P3C1

Airport, FBO ID, City: Gainesville Regional Airport (KGNV) - Gainesville, FL

Aircraft: N821AR

Domain: 03 (Southeast)

Sites Flown: OSBS_P2 (Ordway-Swisher Biological Station Priority 2)

Days left in Domain: 16

Report Author: Mitch

Lidar Operators: Mitch

Flight Hours: 01:51

Spectrometer Operators: Cameron

Hours until maintenance: 101.85

Pilots: Justin, Jeff

GPS Instruments: AOP_OSBS, C-GNVL

Summary

The crew initially anticipated favorable conditions for a data collection over Ordway-Swisher (OSBS) this morning. However the presence of a persistent high strato-cirrus cloud layer over the area prevented any chance of a clear sky collect. The team mobilized to the airport and remained on standby, monitoring the skies in hopes that the cloud layer would dissipate prior to the development of cumulus clouds. When it became evident that clearing would not occur – and given the unfavorably wet outlook in the extended weather forecast – a strategic decision was made to utilize the marginally flyable conditions. The team proceeded to collect the lowest priority flight lines over OSBS, which are also the least likely to be reflight if better conditions present themselves.

Concerns

Upon startup, the DCC computer immediately started draining both UPS batteries. This behavior was observed earlier in the season on payload 2. After some initial troubleshooting, it was decided to postpone DCC startup till on survey power. No UPS issues occurred with lidar startup.

Comments

None

Daily Coverage

Estimated Cloud Cover Key

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

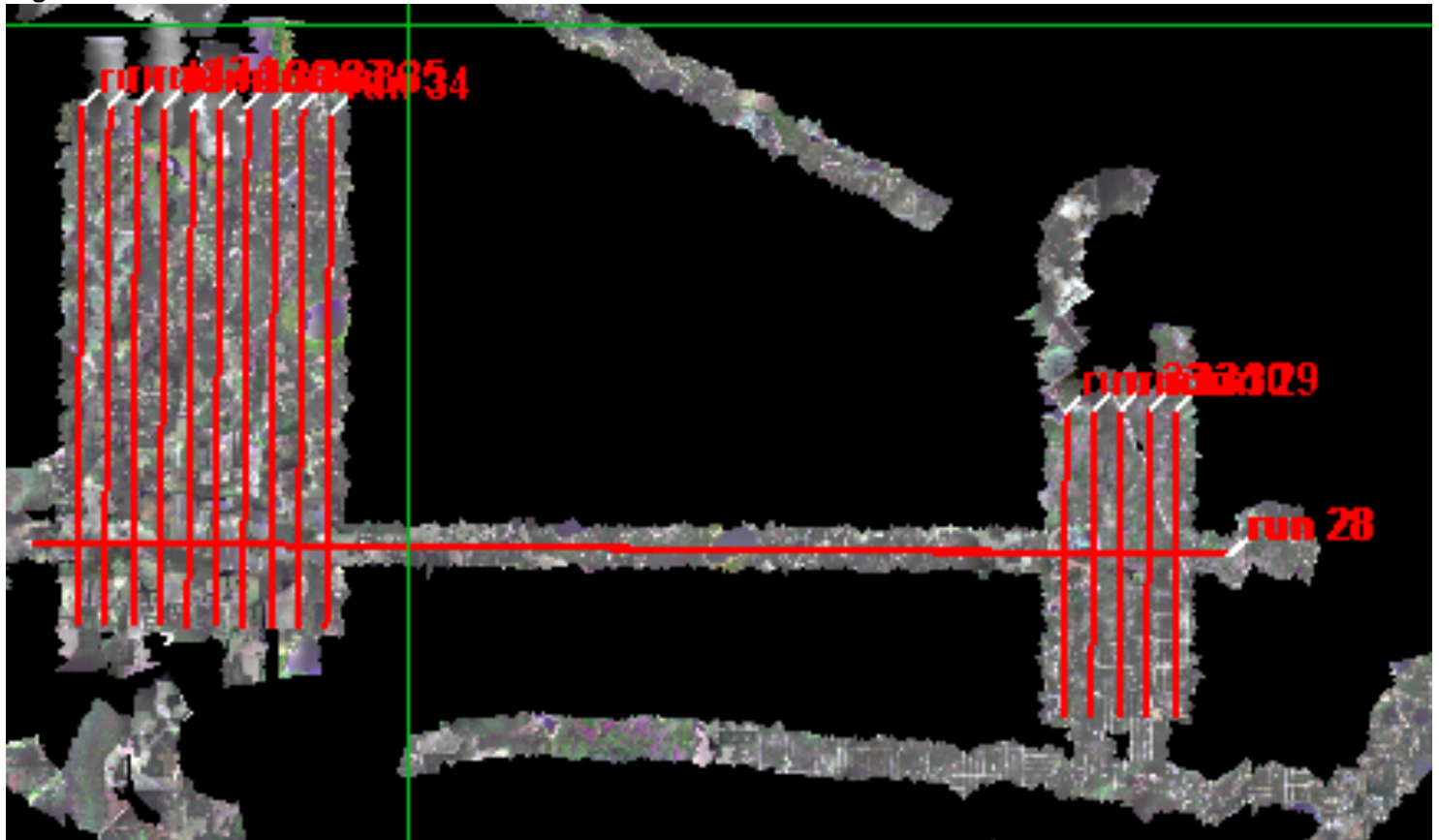
Solar Angle Less Than 40 degrees: (*)

D03|OSBS_P2

| Line # | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 |
|--------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Lidar | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Spectrometer | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Camera | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Cloud Cover | | | | | | | | | | | | | | | | |

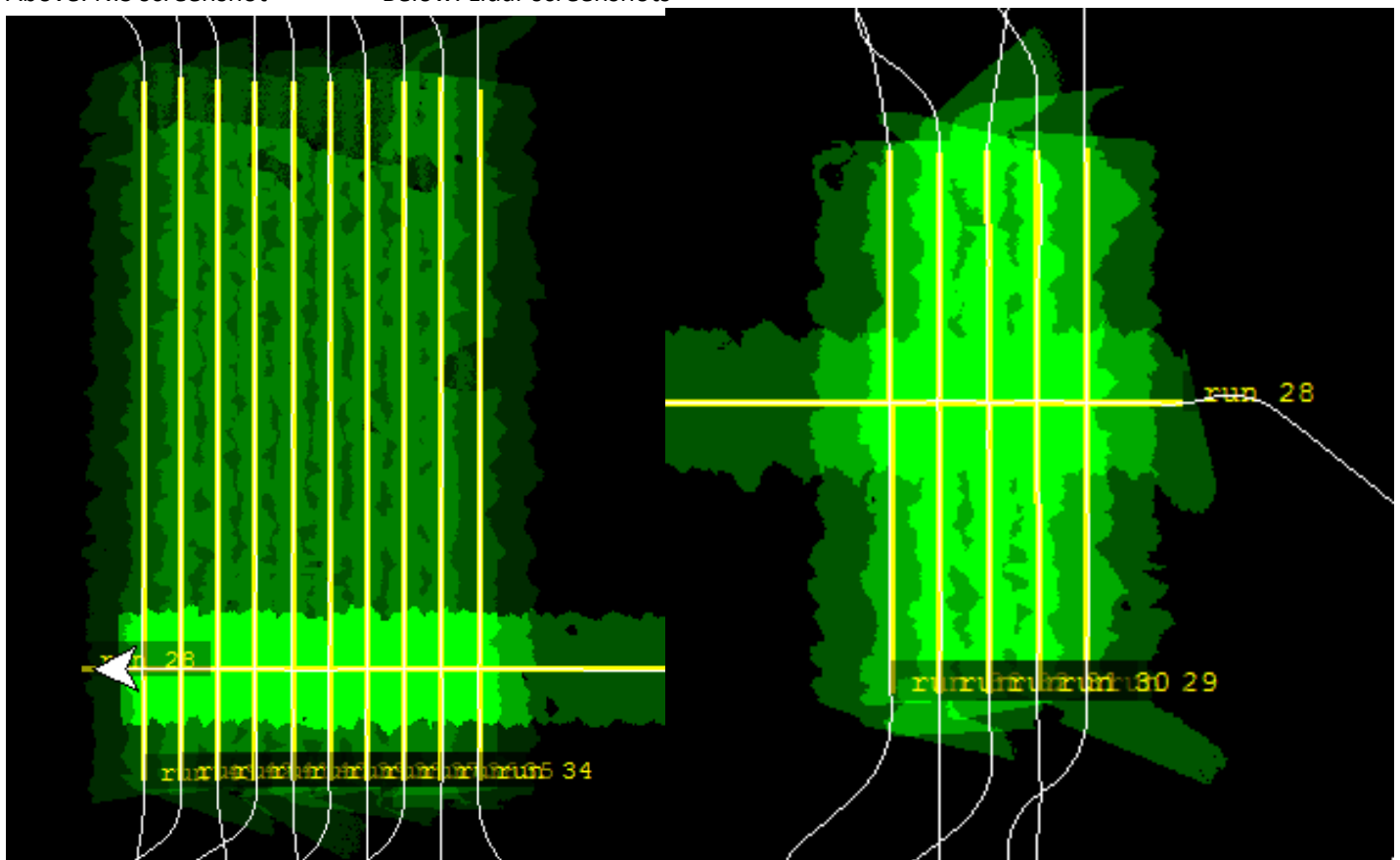
Total number of lines flown: 16

Flight Screenshots



Above: NIS screenshot

Below: Lidar screenshots



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: 0% (0/36)
Green: 0% (0/36)
Yellow: 0% (0/36)
Red: 0% (0/36)
* Flown within 35deg solar angle

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: 0% (0/27)
Green: 0% (0/27)
Yellow: 0% (0/27)
Red: 0% (0/27)
* Flown within 35deg solar angle

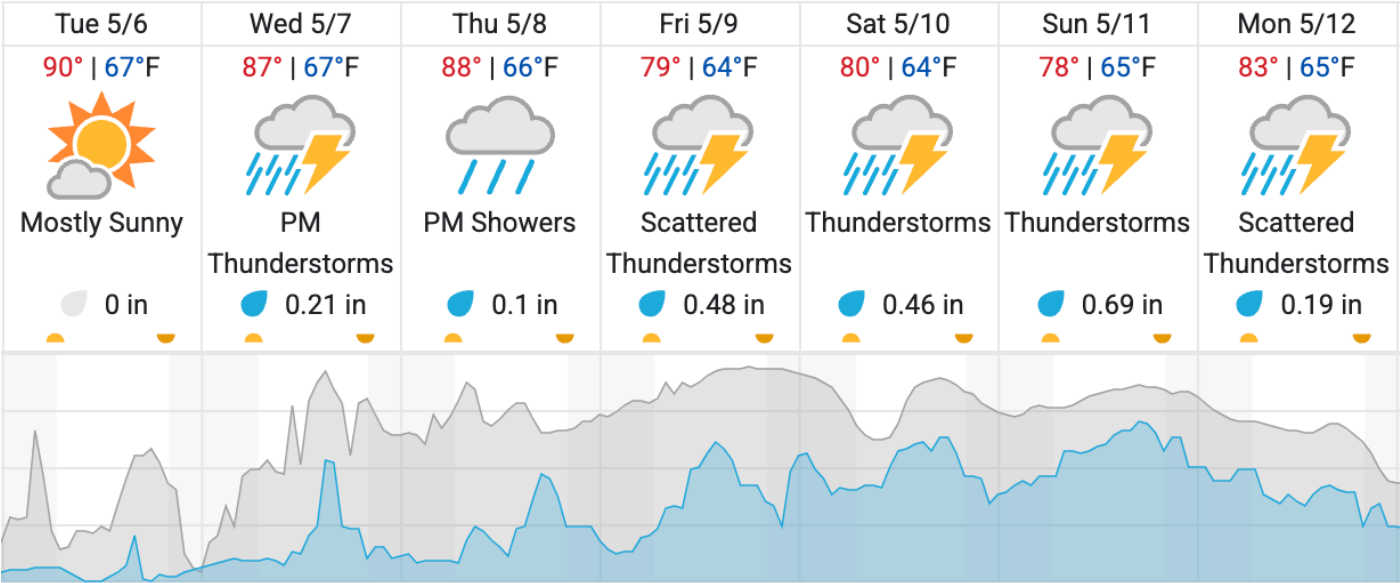
D03 | OSBS_P2 (Ordway-Swisher Biological Station Priority 2)

| | | | | | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|

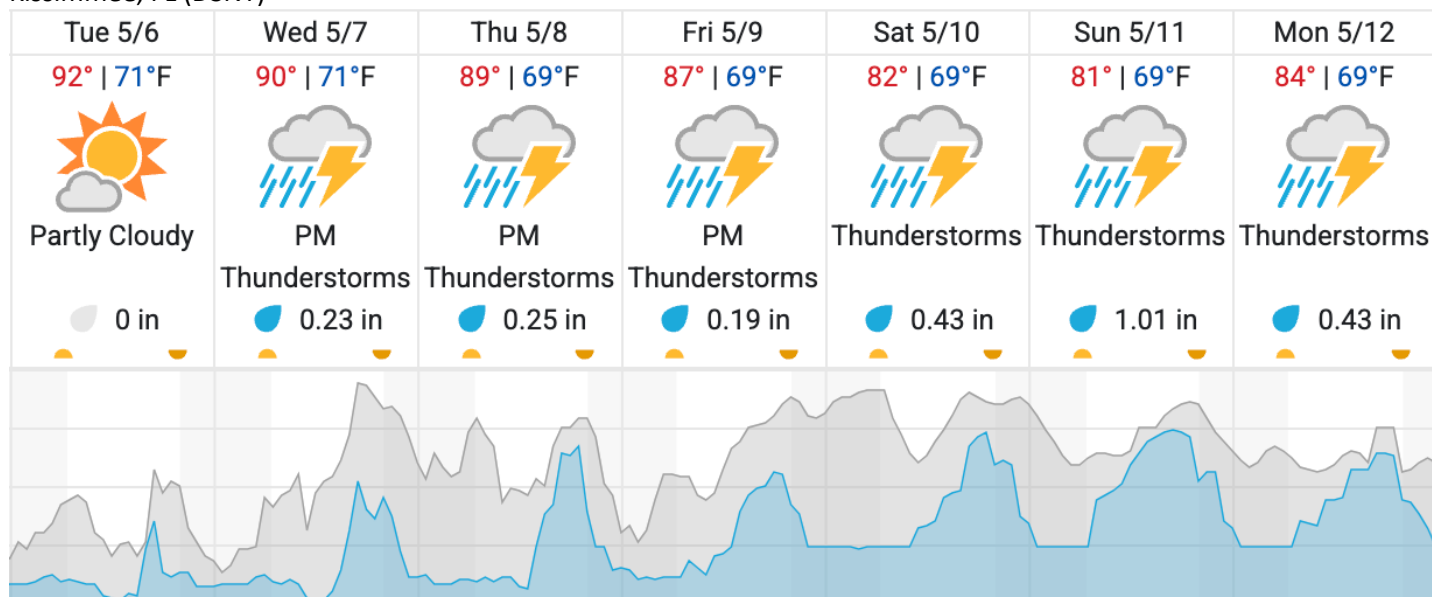
Flown: 100% (16/16)
Green: 0% (0/16)
Yellow: 0% (0/16)
Red: 100% (16/16)
* Flown within 35deg solar angle

Weather Forecast

Gainesville, FL (OSBS)



Kissimmee, FL (DSNY)



| | |
|-----------------|-----------------------|
| Cloud Cover (%) | Chance of Precip. (%) |
|-----------------|-----------------------|

source: wunderground.com

Flight Collection Plan for May 5, 2025

Flyority 1

Collection Area: Ordway-Swisher Biological Station (OSBS)

Flight Plan Name: D03_OSBS_C1_P1_v2_Q780

On-Station Time: 1400 UTC/ 1000 L

Flyority 2

Collection Area: Disney Wilderness Preserve (DSNY)

Flight Plan Name: D03_DSNY_R1_P1_v3_Q780

On-Station Time: 1400 UTC / 1000 L

Flyority 3 – Only if Green

Collection Area: Ordway-Swisher Biological Station (OSBS)

Flight Plan Name: D03_OSBS_C1_P2_v2_Q780_east

On-Station Time: 1400 UTC/ 1000 L

Flyority 4 – Only if Green

Collection Area: Ordway-Swisher Biological Station (OSBS)

Flight Plan Name: D03_OSBS_C1_P2_v2_Q780_west

On-Station Time: 1400 UTC/ 1000 L

Crew: Cam (Lidar), Mitch (NIS)