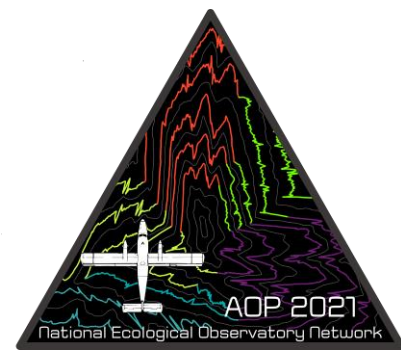




## Payload 1 Daily Flight Report



**Date:** 2021-05-23

**Flight Campaign ID:** P1C2

**Airport, FBO ID, City:** Asheville Regional Airport (KAVL) - Fletcher, NC

**Aircraft:** N331AR

**Domain:** 07 (Appalachians & Cumberland Plateau)

**Sites Flown:** None

**Days left in Domain:** 38

**Report Author:** Elissa Barris

**Lidar Operators:** Elissa Barris

**Spectrometer Operators:** Ivana Vu

**Pilots:** Justin Eddington, Will Mathews

**Flight Hours:** 01:01

**Hours until maintenance:** 79.37

**GPS Instruments:** 05-FBO\_KAVL, AOP\_GRSM

### Summary

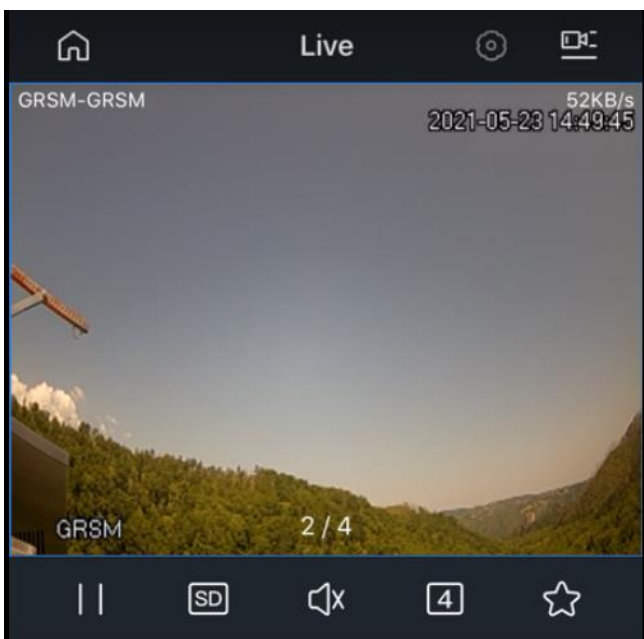
We flew this morning hoping to capture a brief window of green conditions at either GRSM or ORNL, but clouds moved in too quickly. Instead, we were able to run a test collection on disk set 5 in hopes of getting it back into circulation.

### Concerns

None

### Comments

- Disk Set 5 is in the Hotel Kit and can be made available for mission flights once the test data on it are verified.
- Due to the tower's location near the northern edge of the flight box, the GRSM camera suggested green conditions for much of the morning. However low-lying cumulus clouds along the ridge in the southern part of the flight box, slightly visible from the tower camera, impeded flying. For reference, these images were taken at approximately the same time:



## Cumulative Domain Coverage

### Estimated Cloud Cover Key

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

### D07|GRSM\_P1 (Great Smoky Mountains National Park 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 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 |    |    |    |    |    |    |    |    |    |    |    |

Flown: 0% (0/69)

Green: 0% (0/69)

Yellow: 0% (0/69)

Red: 0% (0/69)

### D07|GRSM\_P2 (Great Smoky Mountains National Park Priority 2)

|    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|

Flown: 0% (0/20)

Green: 0% (0/20)

Yellow: 0% (0/20)

Red: 0% (0/20)

### D07|MLBS (Mountain Lake Biological Station)

|    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|
| 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: 0% (0/34)

Green: 0% (0/34)

Yellow: 0% (0/34)

Red: 0% (0/34)

### D07|N07A (D07 Nominal Runway)

|   |
|---|
| 1 |
|---|

Flown: 0% (0/1)

Green: 0% (0/1)

Yellow: 0% (0/1)

Red: 0% (0/1)

### D07|ORNL (Oak Ridge National Laboratory)

|    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 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 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

Flown: 20% (12/61)

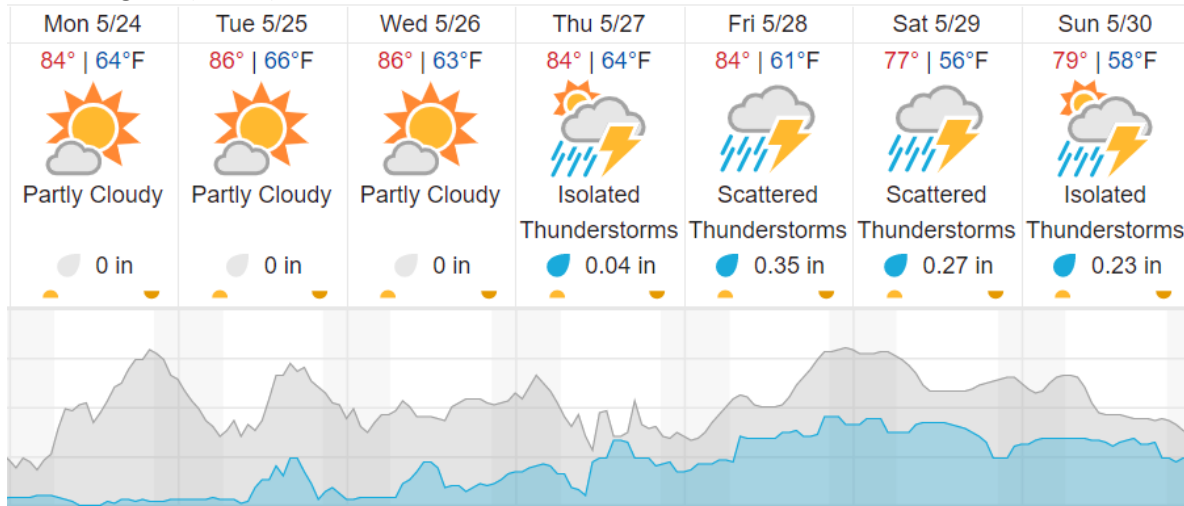
Green: 0% (0/61)

Yellow: 20% (12/61)

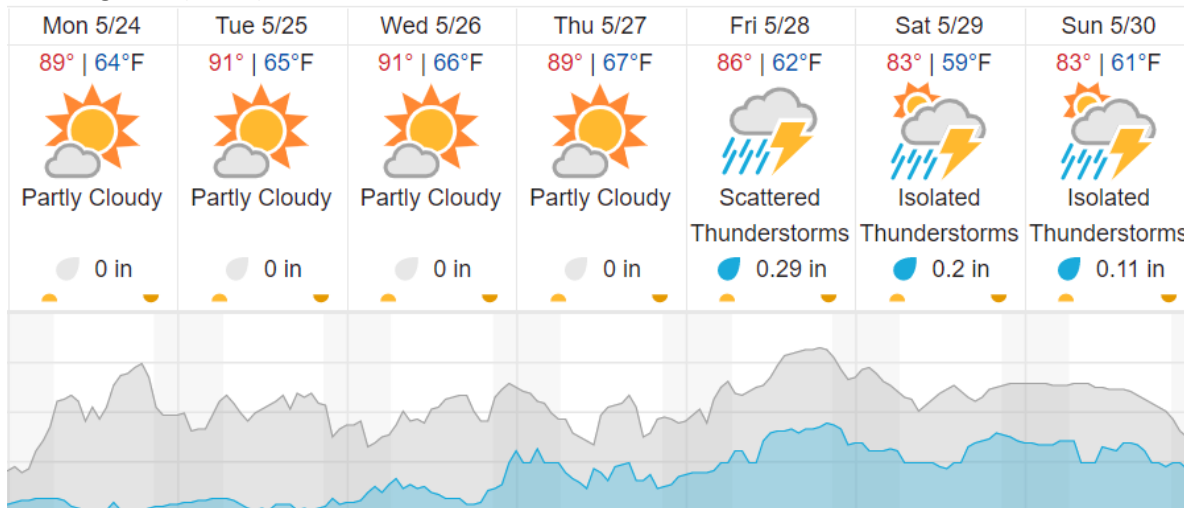
Red: 0% (0/61)

## Weather Forecast

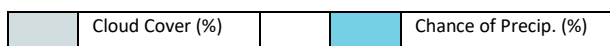
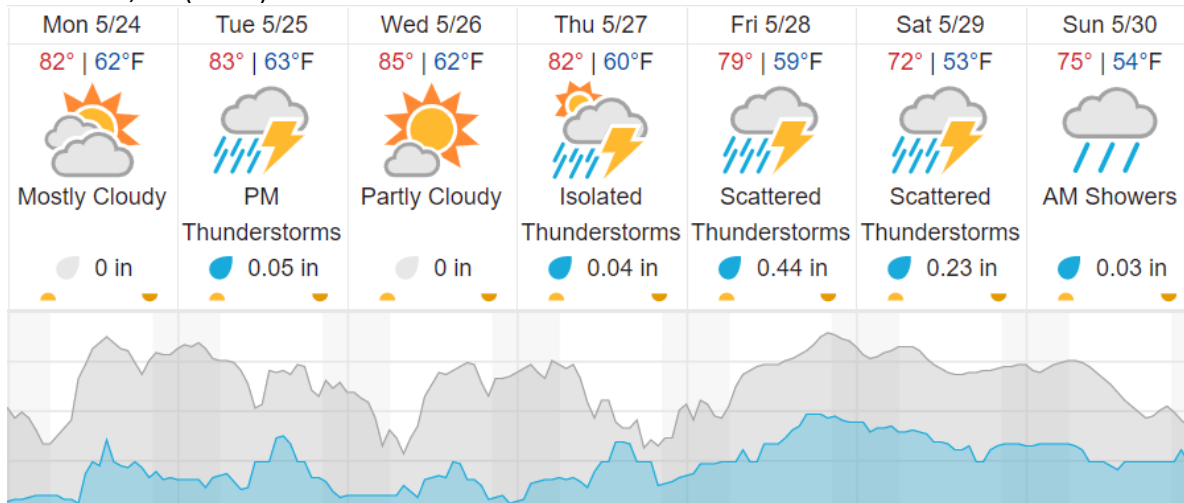
### Gatlinburg, TN (GRSM)



### Oak Ridge, TN (ORNL)



### Pembroke, VA (MLBS)



## **Flight Collection Plan for 24 May 2021**

### Flyority 1

Collection Area: Great Smoky Mountains National Park (GRSM) – Priority 1 Flight Box

Flight Plan Name: D07\_GRSM\_R1\_P1\_P2\_v5\_PRM\_Var\_Alt.xml

On-Station Time: 1400 – 2100 UTC / 1000 – 1700 L

### Flyority 2

Collection Area: Oak Ridge National Laboratory (ORNL)

Flight Plan Name: D07\_ORNL\_C1\_P1\_v9\_PRM.xml

On-Station Time: 1400 – 2100 UTC / 1000 – 1700 L

### Flyority 3

Collection Area: Great Smoky Mountains National Park (GRSM) – Priority 2 Flight Box

Flight Plan Name: D07\_GRSM\_R1\_P1\_P2\_v5\_PRM\_Var\_Alt.xml

On-Station Time: 1400 – 2100 UTC / 1000 – 1700 L

Crew: Elissa & Ivana