



May 12, 2018 Payload 3 Daily Flight Report



Date: 2018-05-12
Flight Campaign ID: 2018_P3C1
Airport, FBO ID, City: Asheville Regional Airport (KAVL) - Fletcher, NC

Domain: 00, 07
Sites Flown: ORNL (Oak Ridge National Laboratory), TRAIN (Training)
Days left in Domain: 35

Report Author: John Adler
Flight Crew: Ivana Vu, John Adler, Robb Walker
Ground/GPS: Robb Walker
Pilots: Mike Francis, Paul Muth
Additional Personnel: none
GPS Instruments: 09 - FBO_KAVL, C-TN16, TDOT-TN1A

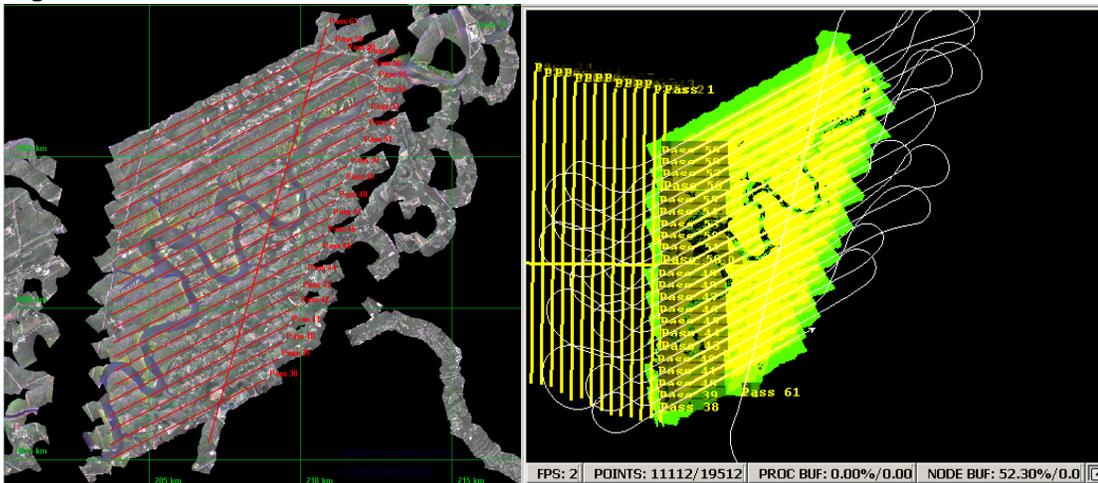
Flight Hours: 03:43
Hours until maintenance: 29.55

Summary: While the forecast was for clear conditions, arriving at ORNL proved to be cloudy then clearing slightly. John completed his second lidar training flight.

Concerns: None.

Comments: Keeping an eye on GPS 9, as it intermittently uploads its daily GPS summary.

Flight Screenshots:



Spectrometer

Lidar

Pictures:



Clouds and haze over ORNL.

Daily Coverage

| D07 ORNL | Line | SpecG | SpecY | SpecR | NIS | Lidar | Camera | Cumulative |
|----------|------|-------|-------|-------|-----|-------|--------|------------|
| | 38 | | | | ✓ | ✓ | × | NL |
| | 39 | | | | ✓ | ✓ | × | NL |
| | 40 | | | | ✓ | ✓ | × | NL |
| | 41 | | | | ✓ | ✓ | × | NL |
| | 42 | | | | ✓ | ✓ | × | NL |
| | 43 | | | | ✓ | ✓ | × | NL |
| | 44 | | | | ✓ | ✓ | × | NL |
| | 45 | | | | ✓ | ✓ | × | NL |
| | 46 | | | | ✓ | ✓ | × | NL |
| | 47 | | | | ✓ | ✓ | × | NL |
| | 48 | | | | ✓ | ✓ | × | NL |
| | 49 | | | | ✓ | ✓ | × | NL |
| | 50 | | | | ✓ | ✓ | × | NL |
| | 51 | | | | ✓ | ✓ | × | NL |
| | 52 | | | | ✓ | ✓ | × | NL |
| | 53 | | | | ✓ | ✓ | × | NL |
| | 54 | | | | ✓ | ✓ | × | NL |
| | 55 | | | | ✓ | ✓ | × | NL |
| | 56 | | | | ✓ | ✓ | × | NL |
| | 57 | | | | ✓ | ✓ | × | NL |
| | 58 | | | | ✓ | ✓ | × | NL |
| | 59 | | | | ✓ | ✓ | × | NL |
| | 61 | | | | ✓ | ✓ | × | NL |
| Flown: | 23 | | | | | | | |

Cumulative Domain Coverage

GRSM_P1

| | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|
| 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 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 101 | 102 | 103 | 104 | 105 | 106 | | | | | | | | | | | | | | |

Flown: 0% (0/106)

Green: 0% (0/106)

Yellow: 0% (0/106)

Red: 0% (0/106)

GRSM_P2

| | | | | | | | | | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 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 | | | | | | | | | | | | |

Flown: 0% (0/68)

Green: 0% (0/68)

Yellow: 0% (0/68)

Red: 0% (0/68)

MLBS

| | | | | | | | | | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 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)

ORNL

| | | | | | | | | | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 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 | | | | | | | | | | | | | | | | | | | |

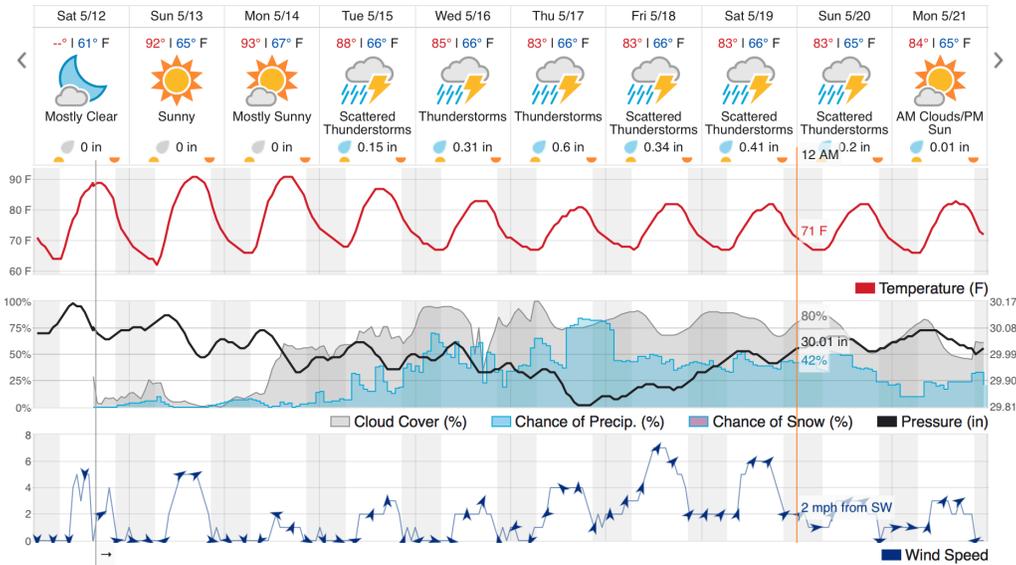
Flown: 62% (38/61)

Green: 25% (15/61)

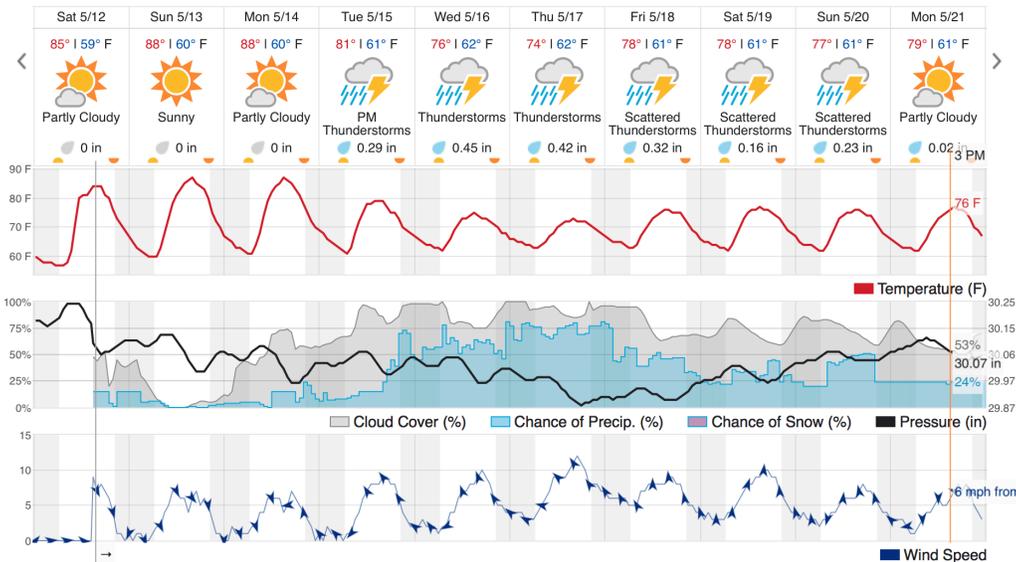
Yellow: 20% (12/61)

Red: 18% (11/61)

Weather Forecast:



Oak Ridge, TN



Asheville, NC

Flight Collection Plan for 13May 2018:

Flyority 1:

Collection Area: Oak Ridge National Laboratory (ORNL)

Flight Plan Name: D07_ORNL_C1_P1_v10_east_Q780 / D07_ORNL_C1_P1_v10_west_Q780

On-station Time: 1400 UTC / 1000 L

Flyority 2: Training Flight

Collection Area: Great Smoky Mountains National Park – Priority 2 Flight Box (GRSM_P2)

Flight Plan Name: D07_GRSM_R2_P2_v2_east_Q780 / D07_GRSM_R2_P2_v2_west_Q780

On-station Time: 1400 UTC / 1000 L

Crew: John Adler (Lidar), Ivana Vu (Certifier), Robb Walker (NIS/GPS)

Flight Collection Plan for 14 May 2018

Flyority: Same as previous day

Crew: John Adler (Lidar), Ivana Vu (Certifier), Robb Walker (NIS/GPS)

Starting 19 May 2018

Flyority 2:

Collection Area: Great Smoky Mountains National Park – Priority 1 Flight Box (GRSM_P1)

Flight Plan Name: D07_GRSM_R2_P1_v2_Q780

On-station Time: 1400 UTC / 1000 L

Flyority 3:

Collection Area: Great Smoky Mountains National Park – Priority 2 Flight Box (GRSM_P2)

Flight Plan Name: D07_GRSM_R2_P2_v2_east_Q780 / D07_GRSM_R2_P2_v2_west_Q780

On-station Time: 1400 UTC / 1000 L

Starting 25 May 2018

Flyority 1:

Collection Area: Mountain Lake Biological Station (MLBS)

Flight Plan Name: D07_MLBS_R1_P1_v6_Q780

On-station Time: 1340 UTC / 0940 L

On-Going Issues

| Fault: Database | Ticket: INC0013090 | Open Date: 4/2/2018 |
|---|---------------------------|----------------------------|
| Database crash during flight. Sometimes to both operators simultaneously, but also to both NIS and Lidar operator individually. This has been a re-occurring issue, but is only being added now. | | |
| 20180404 Database no longer crashes when minimizing and maximizing. | | |
| 20180410 Database experienced same network connection issues and crashed several times during both flights. Lidar Crystal Computer VNC was open on the DCC for training purposes. | | |
| 20180418 Database crashed in-flight, 2 times on NIS DCC computer and 3 times on Lidar Crystal computer. | | |
| 20180419 Database crashed on Lidar Crystal computer once on the ground during system startup and once in-flight on the NIS DCC computer. Andrew is investigating whether this is due to a networking issue. | | |
| 20180423 Database crashed on Lidar Crystal computer 4 times in-flight | | |
| 2018042413 Database crashed once on Lidar Crystal computer in-flight | | |
| 2018042716 Database crashed 2 times in-flight, simultaneously on the Lidar Crystal and NIS DCC computers | | |
| 2018042813 Database crashed once in-flight, simultaneously on the Lidar Crystal and NIS DCC computers | | |
| 2018042913 Database crashed on Lidar Crystal computer 3 times in-flight | | |
| 2018042918 Database crashed on Lidar Crystal 2 times and once on NIS DCC in-flight, at different times. | | |
| 2018043014 Database crashed on Lidar Crystal once and NIS DCC 4 times in-flight, at different times. Also crashed 3 times on both computers simultaneously. | | |
| 2018051212 Teldat power cable was replaced recently, however, database crashed 2 in-flight on Lidar Cyrstal computer | | |