



Payload 3 Daily Flight Report



Date: 2022-05-17

Flight Campaign ID: P3C1

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

Aircraft: N70AR

Domain: 07 (Appalachians & Cumberland Plateau)

Sites Flown: ORNL (Oak Ridge National Laboratory)

Days left in Domain: 18

Report Author: John

Lidar Operators: John

Flight Hours: 03:56

Spectrometer Operators: Mitch **Hours until maintenance:** 76.83

Pilots: Nick, Jeremy

GPS Instruments: 09 - FBO_KAVL, C-TN17, TDOT-TN1A

Summary

Clear skies began the day, with green conditions over the airshed lines. Later in the flight clouds began to appear, the crew continued the collection until we had to land at Knoxville for refueling.

Concerns

- HK3 had another failed/degraded RAID on boot up following today's flight. This is the 3rd failed RAID HK3 has had this flight season.
- MIDAS SSD was not recognized at conclusion of flight. POS data was copied over to a USB and then transferred back to the MIDAS disk on the hotel kit. This occurred on disk set #2, which is now the 3rd disk set that has occurred to.

Comments

- Mitch departs tomorrow, nice trouble-shooting!
- A few orange lidar POS shading events, but no loss in GPS or PDOP.
- The cabin display sensor is still not working after using the new troubleshooting procedures. We will look at it tomorrow.
- ORNL Tracker Flight Plan only contained west portion of flight lines upon loading during pre-flight. Crew was able to use older Tracker plan from 2018 which hadn't been modified since. The new flight plan containing both the east and west portion of lines is now updated and on Dropbox. Thanks for Cam and John for the effort this morning on this.
- Eaton ECS Port 6 and Power Cable were inspected following today's flight to see if that was any evidence of damage like that observed on P1 and P2. No damage was observed.
- The Airborne Bi-flow Extender was installed on the ground air conditioning system, we will see how it works on de-condensation.

Daily Coverage

Estimated Cloud Cover Key

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

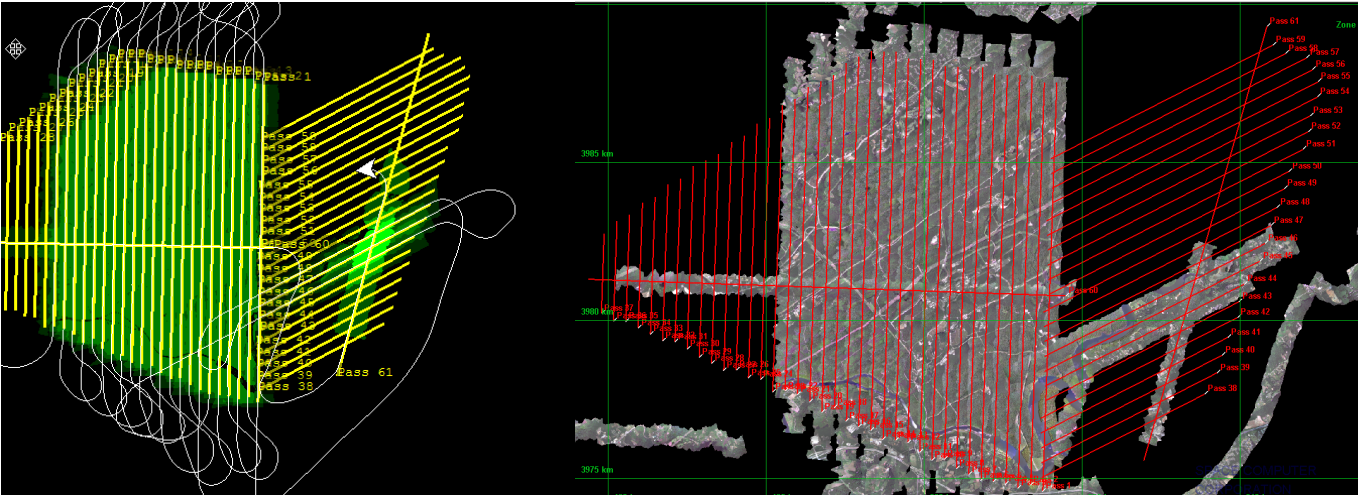
D07|ORNL

Line #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover																				

Line #	21	22	44	45	46
Lidar	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓
Cloud Cover					

Total number of lines flown: 25

Flight Screenshots



Cumulative Domain Coverage

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: 44% (27/61)

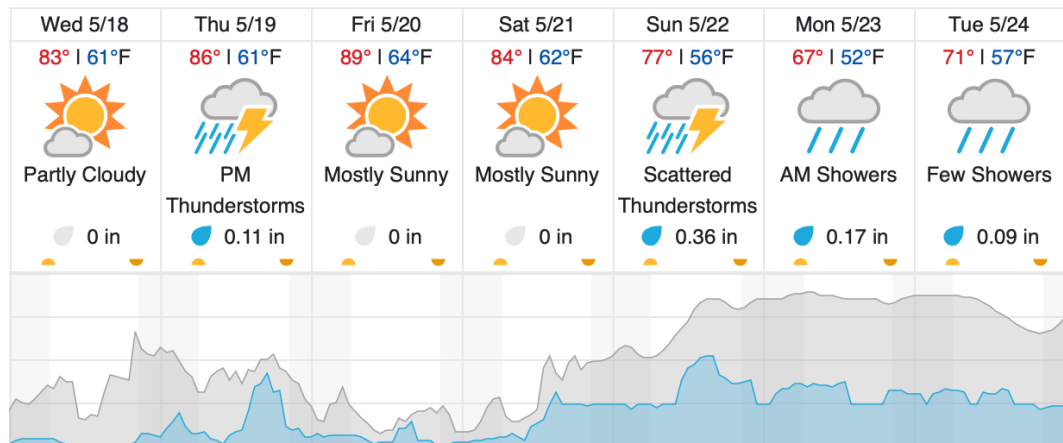
Green: 26% (16/61)

Yellow: 18% (11/61)

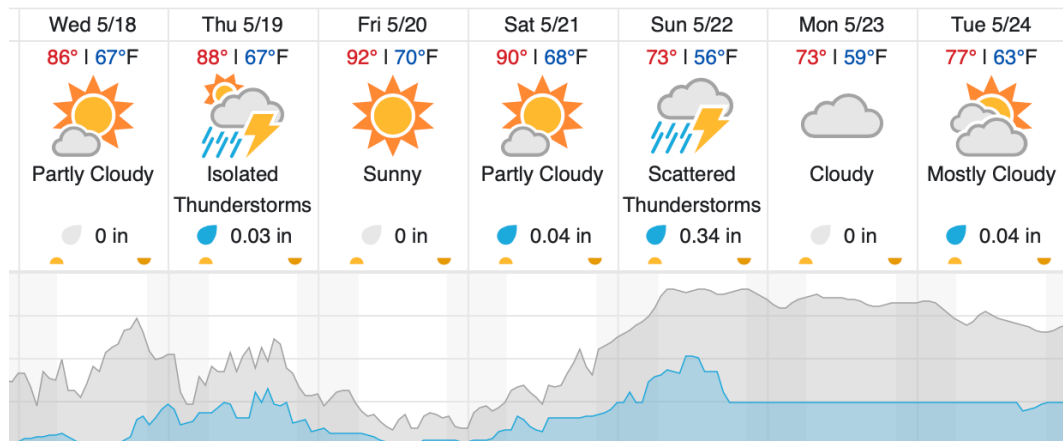
Red: 0% (0/61)

Weather Forecast

Asheville, NC



Oak Ridge, NC



	Cloud Cover (%)		Chance of Precip. (%)
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source: wunderground.com

Flight Collection Plan for 18 May 2021

Flyority 1

Collection Area: Oak Ridge National Laboratory (ORNL)

Flight Plan Name: D07_ORNL_C1_P1_v9_PRJ.xml

On-Station Time: 1400 UTC / 1000 L

Crew: Mike (Lidar), John (NIS)