



Payload 2 Daily Flight Report



Date: 2026-05-20
Flight Campaign ID: P2C1
Airport, FBO ID, City: Asheville Regional Airport (KAVL) - Fletcher, NC
Aircraft: N821AR

Domain: 07 (Appalachians & Cumberland Plateau)
Sites Flown: None
Days left in Domain: 44

Report Author: Mitch
Lidar Operators: Mitch **Flight Hours:** 00:00
Spectrometer Operators: Cameron **Hours until maintenance:** 41.03
Pilots: Justin, Jonathon

Summary

High cirrus associated with the approaching frontal system prevented any opportunity for a green collect on Day 1 in D07. With the frontal system expected to bring an extended period of unfavorable weather, the crew considered conducting an early, non-green initial coverage of lower priority GRSM lines. However that possibility was ruled out after NPS webcams revealed low clouds were already settling into the flight area this morning.

Concerns

Abnormal chiller behavior continued to be observed today, with coolant temperatures remaining fixed near 49°C and cooling performance degrading during testing. After placing the payload in idle and shutting down the cryocoolers for troubleshooting, the chiller continued overheating. A power cycle of the UPS-1250 restored normal chiller operation, with temperatures rapidly dropping back below the 17°C set point. The payload was subsequently returned to cool mode. The team plans to continue monitoring the system and have adjusted telemetry alerts in order to help do so.

Comments

RAID 2026_P2C1_06 formatted.

Cumulative Domain Coverage

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)

* Flown within 35deg solar angle

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
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Flown: 0% (0/20)

Green: 0% (0/20)

Yellow: 0% (0/20)

Red: 0% (0/20)

* Flown within 35deg solar angle

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)

* Flown within 35deg solar angle

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: 0% (0/61)

Green: 0% (0/61)

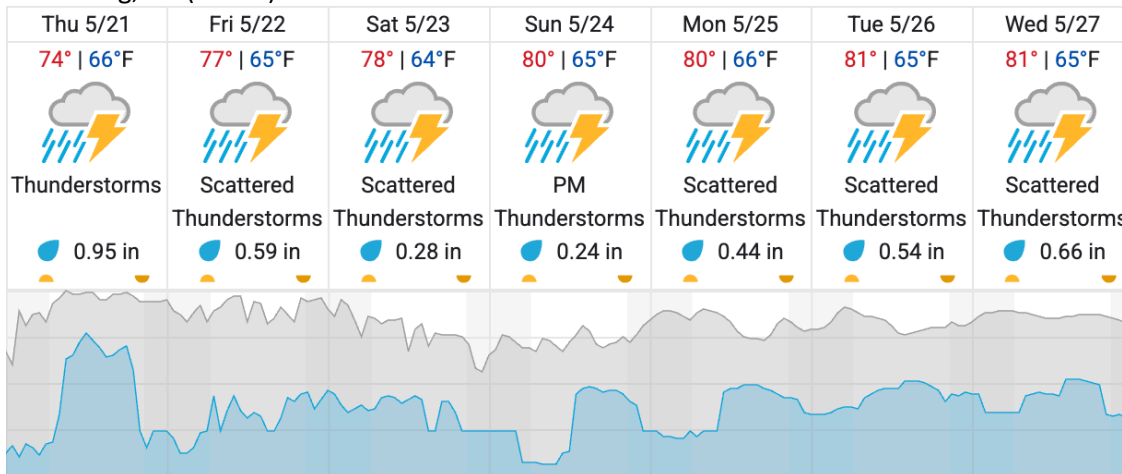
Yellow: 0% (0/61)

Red: 0% (0/61)

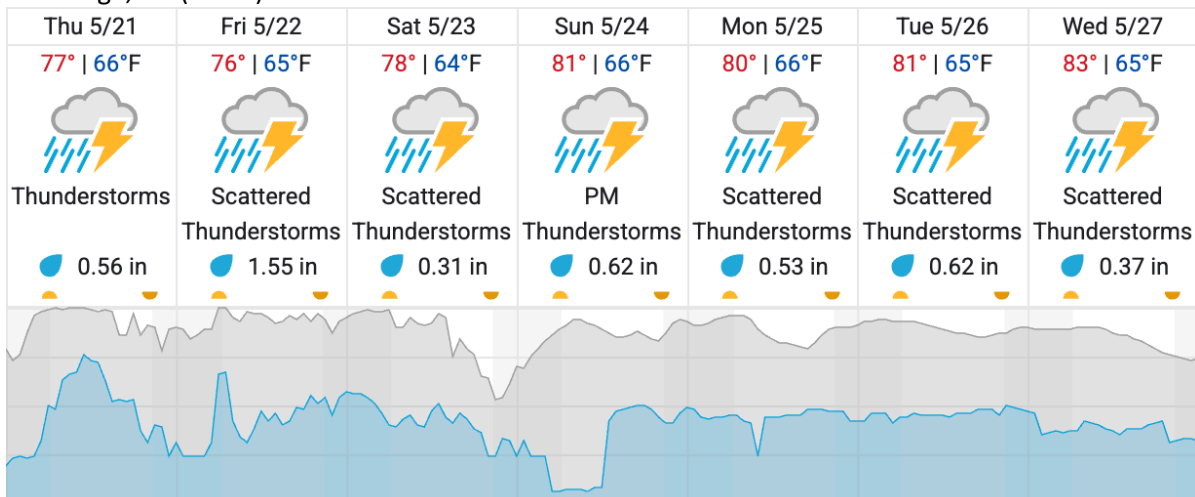
* Flown within 35deg solar angle

Weather Forecast

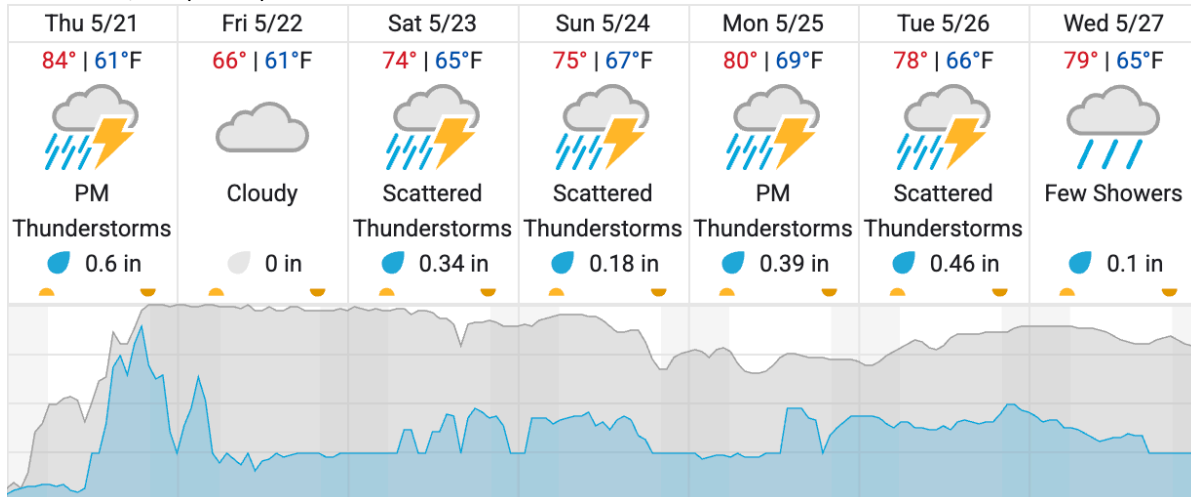
Gatlinburg, TN (GRSM)



Oak Ridge, TN (ORNL)



Pembroke, VA (MLBS)



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

Flight Collection Plan for May 21, 2026

Flyority 1

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

Flight Plan Name: D07_ D07_GRSM_R1_P1_v6_VarAlt_VQ780

40° On-station Time: 14:00 UTC /10:00L

Flyority 2

Collection Area: Oak Ridge National Laboratory (ORNL)

Flight Plan Name: D07_ORNL_C1_P1_v11_west_VQ780 (lines 1-37, 60) / D07_ORNL_C1_P1_v11_east_VQ780 (lines 38-59, 61)

40° On-station Time: 14:00 UTC / 10:00L

Flyority 3 – Not to attempt before 6/6

Collection Area: Mountain Lake Biological Station (MLBS)

Flight Plan Name: D07_MLBS_R1_P1_v8_VQ780

40° On-station Time: 13:50 UTC /09:50L

Flyority 4

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

Flight Plan Name: D07_ D07_GRSM_R1_P2_v6_VarAlt_VQ780

40° On-station Time: 14:00 UTC /10:00L

Crew: Cam (Lidar), Mitch (NIS)