



Payload 2 Daily Flight Report



Date: 2026-05-29
Flight Campaign ID: P2C1
Airport, FBO ID, City: Asheville Regional Airport (KAVL) - Fletcher, NC
Aircraft: N821AR

Domain: 07 (Appalachians & Cumberland Plateau)
Sites Flown: ORNL (Oak Ridge National Laboratory)
Days left in Domain: 35

Report Author: Mike
Lidar Operators: Mike
Spectrometer Operators: Cameron
Pilots: Rusty, Justin
Flight Hours: 03:01
Hours until maintenance: 38.02
GPS Instruments: C-NCHE, TDOT-TN1A

Summary

Clouds lifted enough at Oak Ridge to allow for a collection of lower priority lines. Initially GRSM was showing only high clouds, but the area quickly filled up with cumulus. Instead, we transitioned to collect at ORNL. 19 lines were collected in red conditions.

Concerns

None

Comments

-Mike completed training flight 2 of 2 for the Riegl VQ-780 II-S

Daily Coverage

Estimated Cloud Cover Key

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

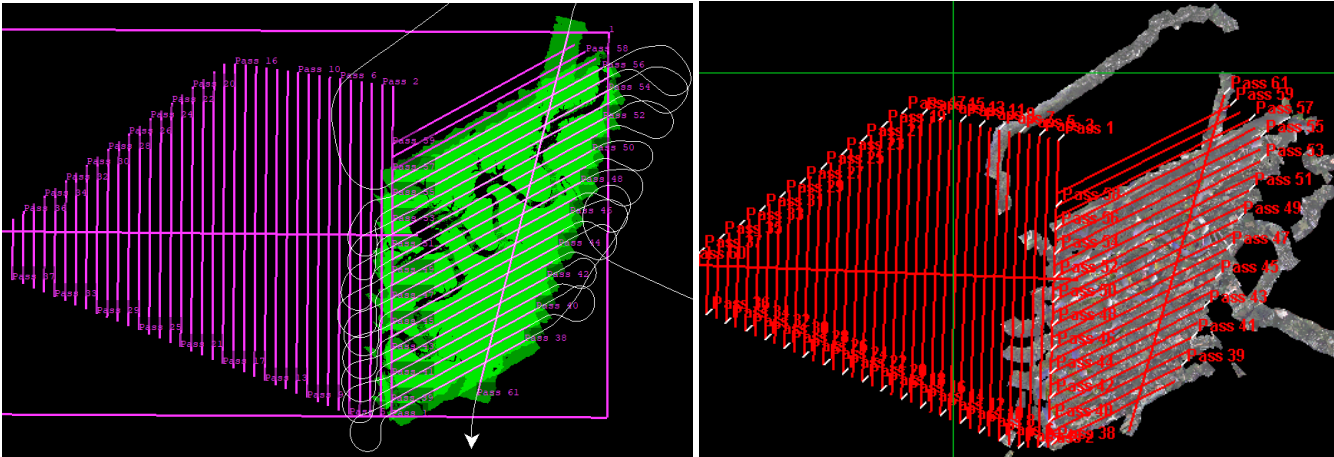
Solar Angle Less Than 40 degrees: (*)

D07|ORNL

Line #	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover																			

Total number of lines flown: 19

Flight Screenshots



Pictures



Cloudy but flyable day over Oak Ridge, TN.

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: 33% (20/61)

Green: 0% (0/61)

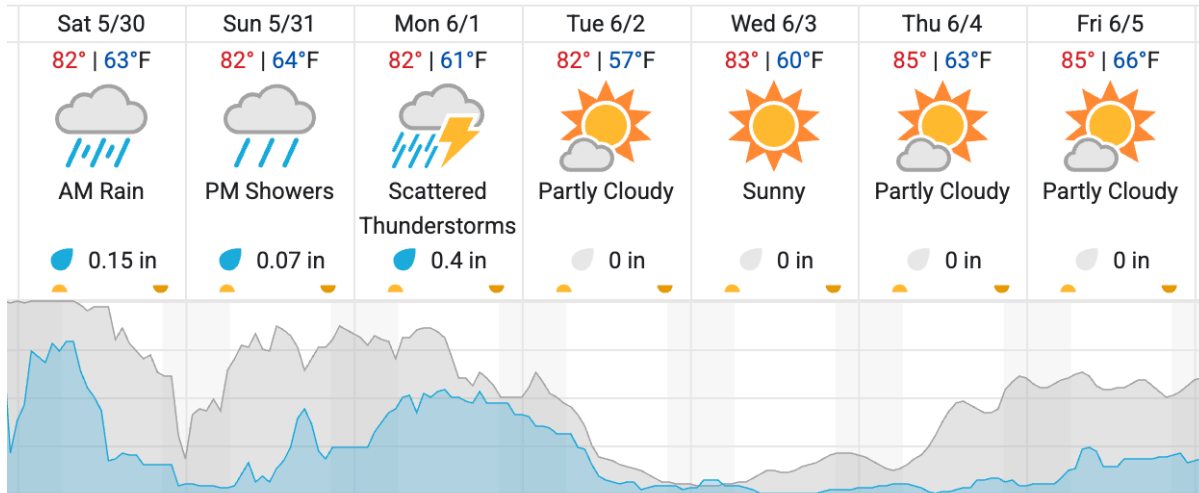
Yellow: 0% (0/61)

Red: 33% (20/61)

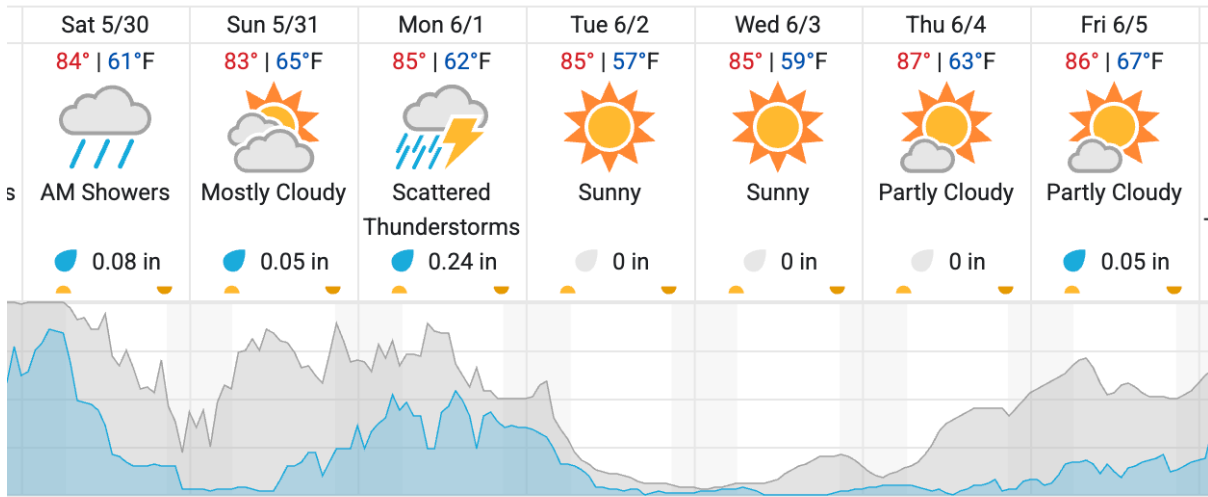
* Flown within 35deg solar angle

Weather Forecast

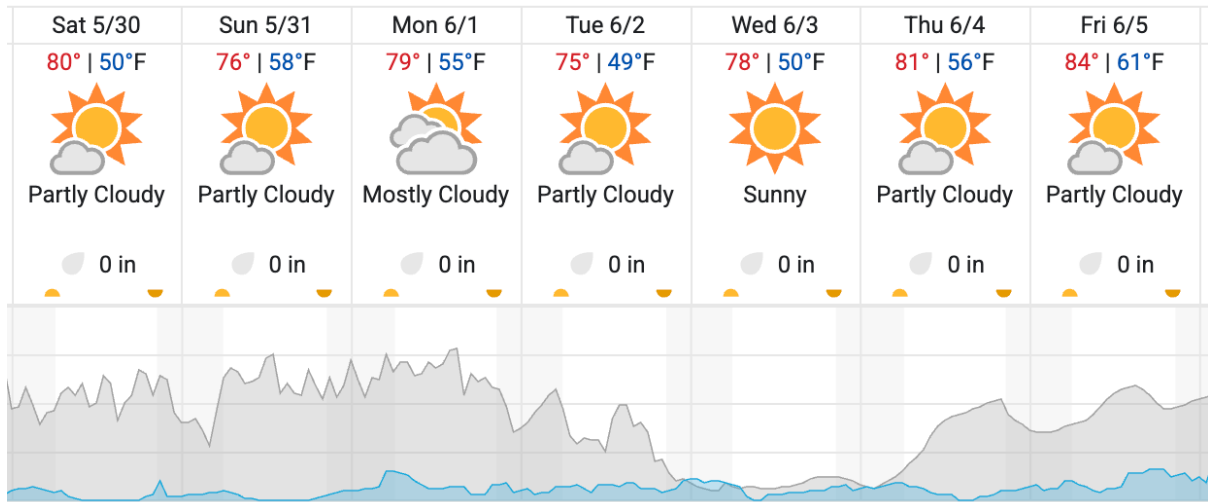
Gatlinburg, TN (GRSM)



Oak Ridge, TN (ORNL)



Pembroke, VA (MLBS)



source: wunderground.com

Flight Collection Plan for May 30, 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 38-56, only if green)

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: Mike (Lidar), Cameron (NIS)