



Payload 2 Daily Flight Report



Date: 2026-07-02
Flight Campaign ID: P2C1
Airport, FBO ID, City: Asheville Regional Airport (KAVL) - Fletcher, NC
Aircraft: N821AR

Domain: 07 (Appalachians & Cumberland Plateau)
Sites Flown: GRSM_P1 (Great Smoky Mountains National Park Priority 1)
Days left in Domain: 1

Report Author: Elissa
Lidar Operators: Elissa
Spectrometer Operators: Alyssa
Pilots: Justin, Jonathon

Flight Hours: 01:41
Hours until maintenance: 120.75
GPS Instruments: C-NCHE, NPS-GRSM

Summary

We took advantage of mostly clear skies over the Smoky Mountains this morning to reflly 10 lines of GRSM in green conditions. Cumulus began to form about an hour after solar angle, putting an end to our green-up opportunity.

Concerns

None.

Comments

None.

Daily Coverage

Estimated Cloud Cover Key

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

Solar Angle Less Than 40 degrees: (*)

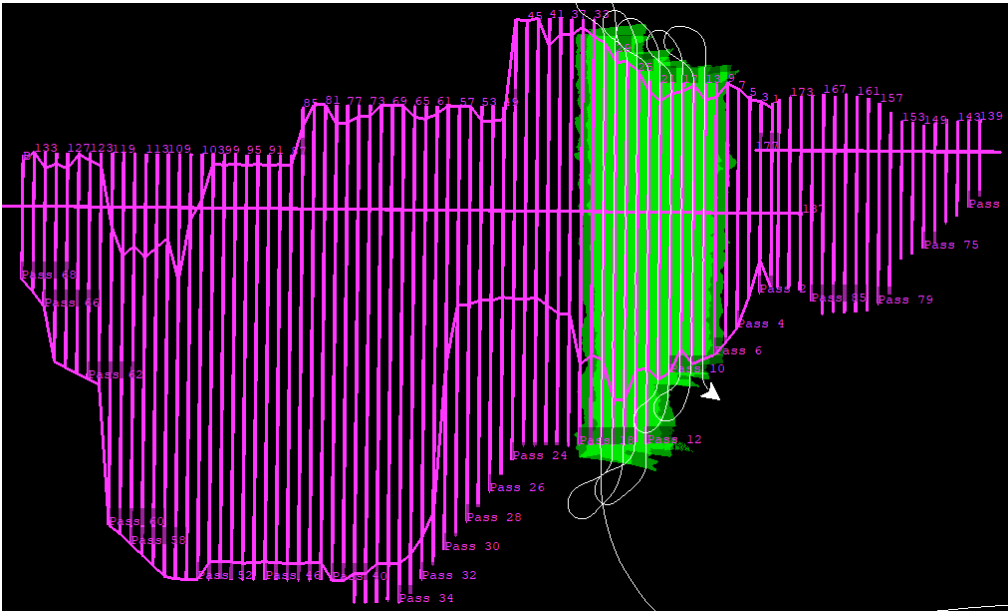
D07|GRSM_P1

Line #	7	8	9	10	11	12	13	14	15	16
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover										

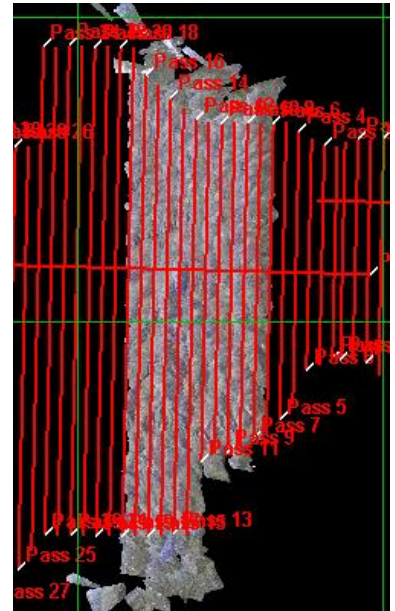
Total number of lines flown: 10

Flight Screenshots

Lidar



NIS



Pictures



About an hour of light haze/sparse cumulus allowed for some green-up this morning.

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: 100% (69/69)

Green: 77% (53/69)

Yellow: 14% (10/69)

Red: 9% (6/69)

* 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: 100% (20/20)

Green: 0% (0/20)

Yellow: 0% (0/20)

Red: 100% (20/20)

* 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: 100% (61/61)

Green: 28% (17/61)

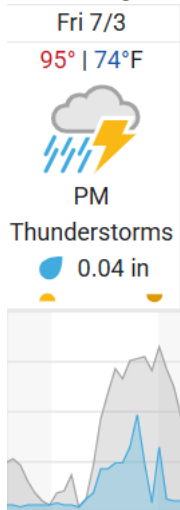
Yellow: 21% (13/61)

Red: 51% (31/61)

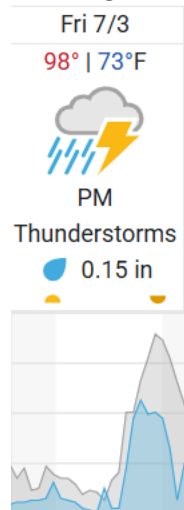
* Flown within 35deg solar angle

Weather Forecast

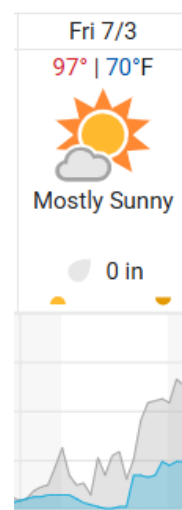
Gatlinburg, TN (GRSM)



Oak Ridge, TN (ORNL)



Pembroke, VA (MLBS)



source: wunderground.com

Flight Collection Plan for 3 July 2026

Flyority 1

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

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) – *only if green*

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

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

Flyority 3

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 – *only if green*

Flight Plan Name: D07_D07_GRSM_R1_P2_v6_VarAlt_VQ780

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

Crew: Alyssa (Lidar), Elissa (NIS)