



Payload 3 Daily Flight Report



Date: 2024-07-01

Flight Campaign ID: P3C1

Airport, FBO ID, City: Wausau Downtown Airport (KAUW) - Wausau, WI

Aircraft: N821AR

Domain: 05 (Great Lakes)

Sites Flown: LIRO (Little Rock Lake), UNDE (University of Notre Dame Environmental Research Center)

Days left in Domain: 14

Report Author: Mitch

Lidar Operators: Mitch

Flight Hours: 02:52

Spectrometer Operators: Elissa

Hours until maintenance: 28.45

Pilots: Shane, Jeff

GPS Instruments: 06 - FBO_KAUW, AOP_UNDE, WISCORS-MAWA

Summary

The flight crew mobilized on station early to better take advantage of the forecasted clear morning in northern Wisconsin. 2 lines were collected at UNDE under green conditions within the 35° solar angle, with an additional 5 more lines collected over the UNDE Tower Airshed within the 40° solar angle. LIRO, our lowest priority D05 flight box and thus least likely to be re-flown under green conditions, was then collected under non-green conditions.

Concerns

None

Comments

None

Daily Coverage

Estimated Cloud Cover Key

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

Solar Angle Less Than 40 degrees

Line #

D05|UNDE

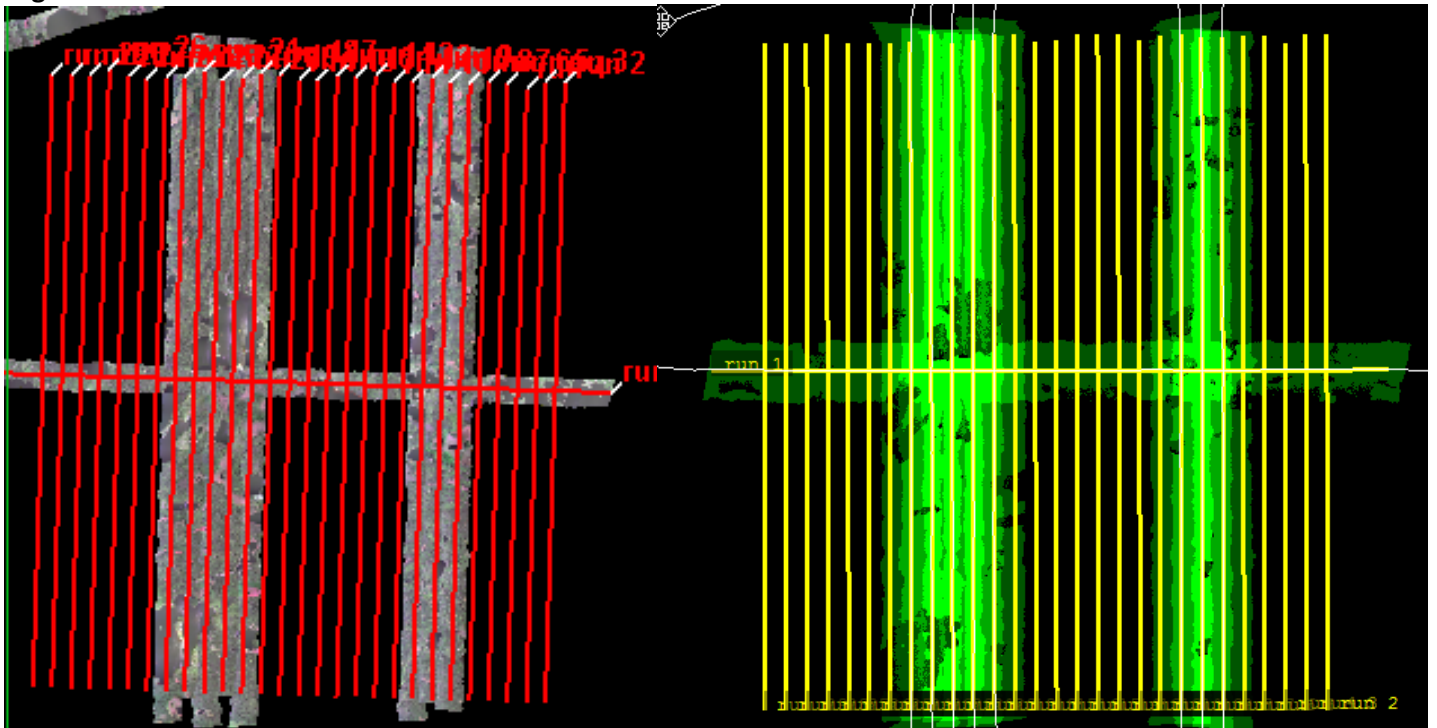
Line #	1	7	8	9	18	19	20	21	22
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover	Yellow	Yellow	Orange	Orange	Green	Green	Green	Green	Green

Total number of lines flown: 9

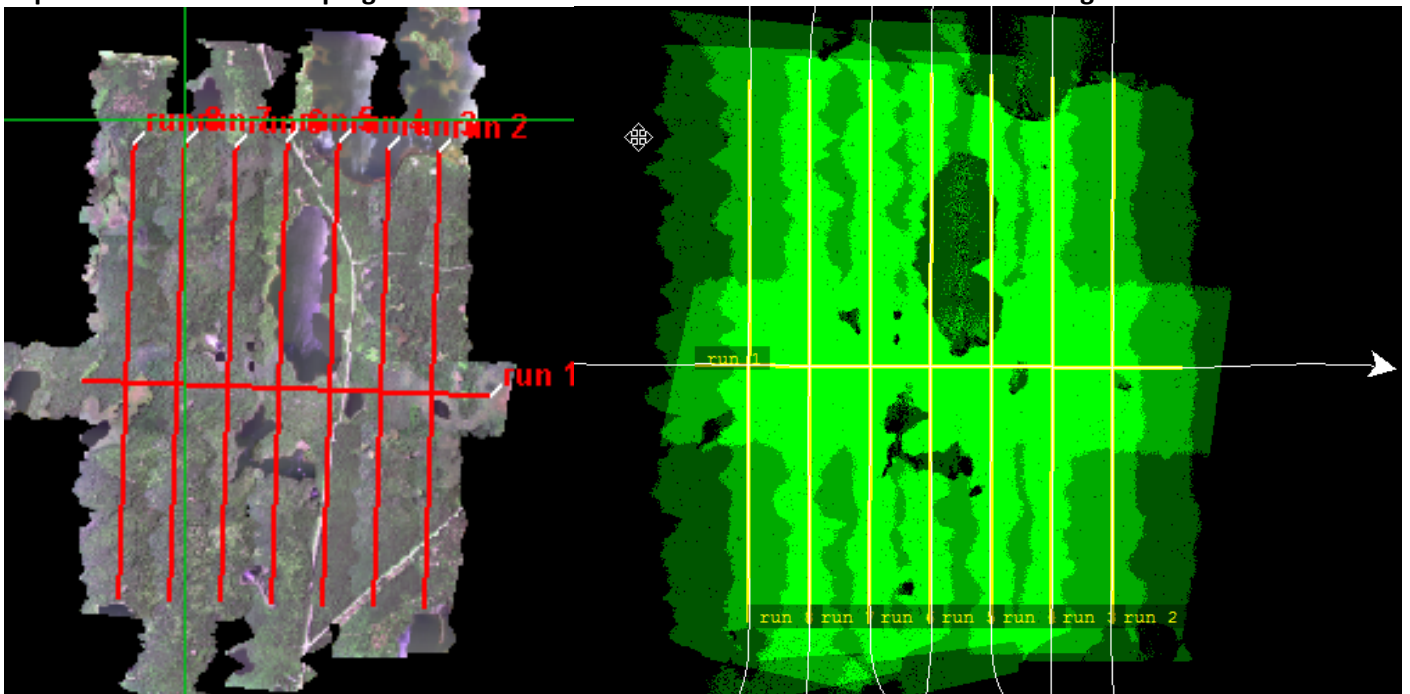
Line #	1	2	3	4	5	6	7	8
Lidar	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Red

Total number of lines flown: 8

Flight Screenshots



Top left: UNDE NIS Top right: UNDE Lidar Bottom left: LIRO NIS Bottom right: LIRO Lidar



Pictures



Above: The NEON Tower at UNDE in the lower center frame **Below:** NEON Aquatic buoy at LIRO



Cumulative Domain Coverage

D05 | CHEQ (Chequamegon-Nicolet National Forest)

2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
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Flown: 0% (0/16)

Green: 0% (0/16)

Yellow: 0% (0/16)

Red: 0% (0/16)

D05 | LIRO (Little Rock Lake)

2	3	4	5	6	7	8
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Flown: 100% (7/7)

Green: 0% (0/7)

Yellow: 71% (5/7)

Red: 29% (2/7)

D05 | STEI_TREE_P1 (Steigerwaldt Land Services and Treehaven Priority 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																

Flown: 0% (0/25)

Green: 0% (0/25)

Yellow: 0% (0/25)

Red: 0% (0/25)

D05 | STEI_TREE_P2 (Steigerwaldt Land Services and Treehaven Priority 2)

27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
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Flown: 100% (18/18)

Green: 0% (0/18)

Yellow: 61% (11/18)

Red: 39% (7/18)

D05 | UNDE (University of Notre Dame Environmental Research Center)

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													

Flown: 82% (23/28)

Green: 25% (7/28)

Yellow: 4% (1/28)

Red: 54% (15/28)

D05 | WABI (NEON Research Support Services - Wabikon Forest Dynamics Plot)

2	3	4	5	6	7
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Flown: 0% (0/6)

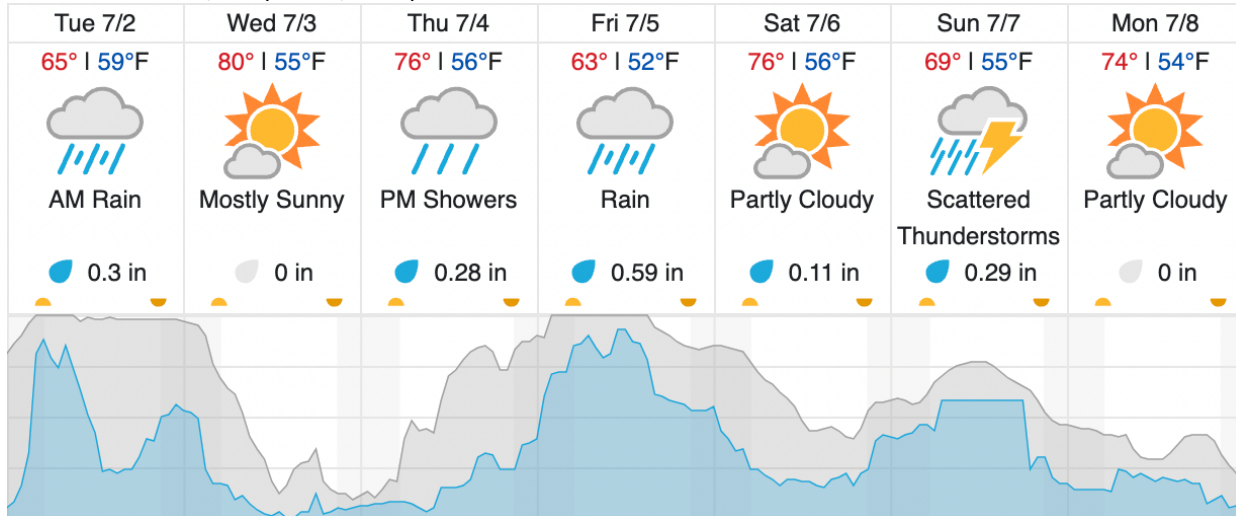
Green: 0% (0/6)

Yellow: 0% (0/6)

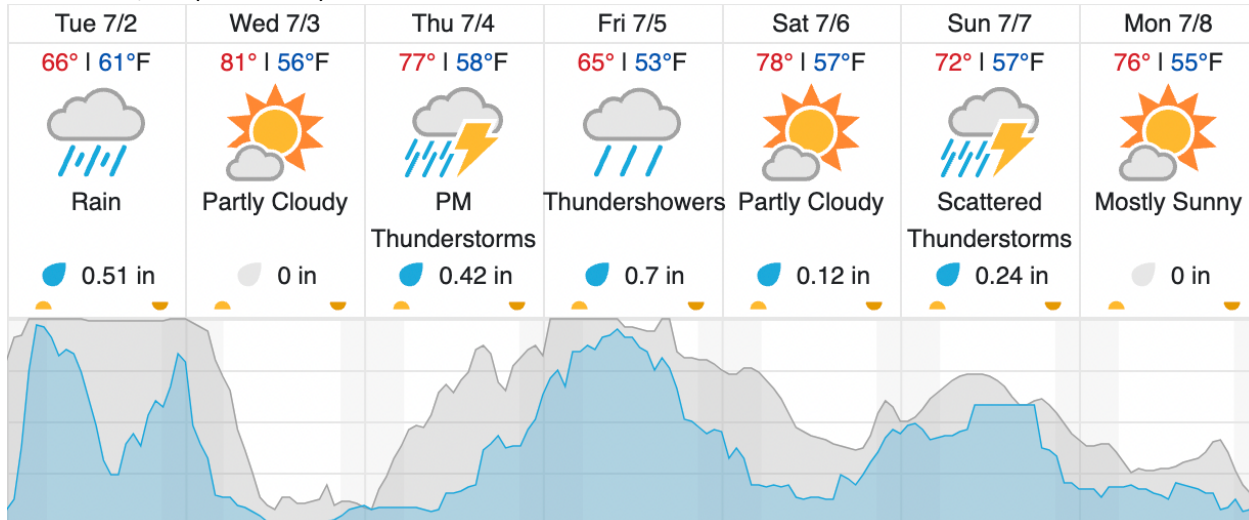
Red: 0% (0/6)

Weather Forecast

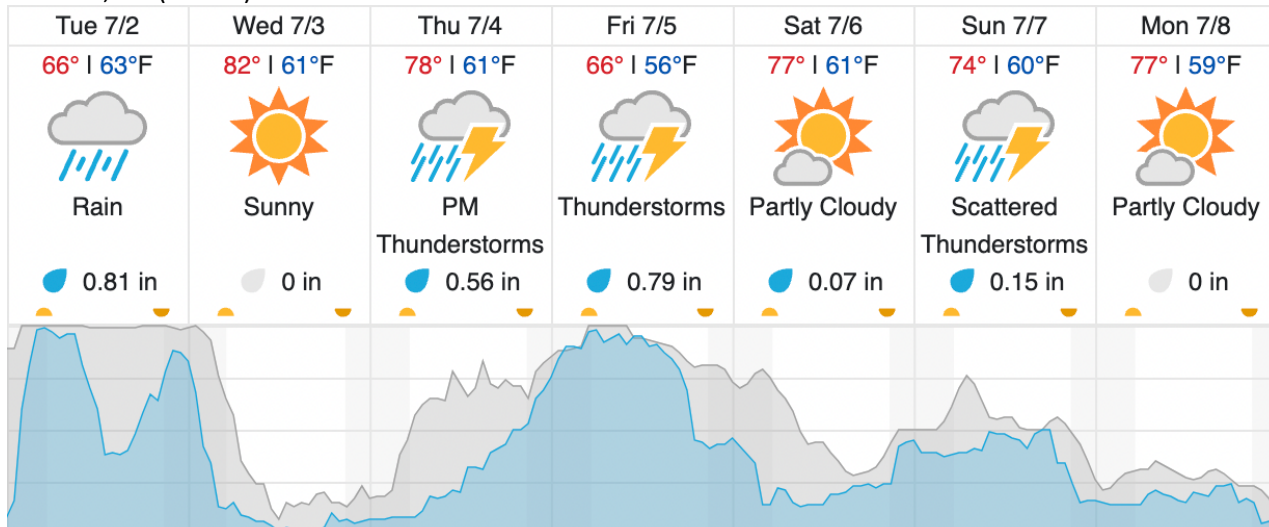
Boulder Junction, WI (UNDE, LIRO)



Tomahawk, WI (STEI-TREE)



Wausau, WI (KAUW)



Cloud Cover (%) Chance of Precip. (%)

source: wunderground.com

Flight Collection Plan for 2 July 2024

Flyority 1

Collection Area: UNDERC (UNDE), if Red/Yellow conditions, lines 1-9; if Green conditions all lines.

Flight Plan Name: D05_UNDE_C1_P1_v2_Q780

On-station Time: 1420 UTC / 0920 L

Flyority 2

Collection Area: Steigerwaldt Land Services - Treehaven (STEI-TREE), Priority 1 Flight Box

Flight Plan Name: D05_STEI_TREE_R1_P1_P2_v3_Q780

On-station Time: 1420 UTC / 0920 L

Flyority 3

Collection Area: Chequamegon-Nicolet National Forest (CHEQ)

Flight Plan Name: D05_CHEQ_R2_P1_v3_Q780

On-station Time: 1420 UTC / 0920 L

Flyority 4

Collection Area: Steigerwaldt Land Services - Treehaven (STEI-TREE), Priority 2 Flight Box, if Green

Flight Plan Name: D05_STEI_TREE_R1_P1_P2_v3_Q780

On-station Time: 1420 UTC / 0920 L

Flyority 5

Collection Area: Little Rock Lake (LIRO), if Green

Flight Plan Name: D05_LIRO_A1_P2_v2_Q780

On-station Time: 1420 UTC / 0920 L

Flyority 6

Collection Area: NRSS Wabikon Forest Dynamics Plot (WABI)

Flight Plan Name: D05_WABI_S1_P1_v2_Q780

On-station Time: 1420 UTC / 0920 L

Flight Crew: Mitch (Lidar), Elissa (NIS)