



Payload 3 Daily Flight Report

Date: 2024-07-11

Flight Campaign ID: P3C1

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

Aircraft: N821AR

Domain: 05 (Great Lakes)

Sites Flown: STEI_TREE_P1 (Steigerwaldt Land Services and Treehaven Priority 1), UNDE (University of Notre Dame Environmental Research Center), WABI (NEON Research Support Services - Wabikon Forest Dynamics Plot)

Days left in Domain: 4

Report Author: Cameron

Lidar Operators: Cameron

Flight Hours: 02:27

Spectrometer Operators: Elissa

Hours until maintenance: 21.37

Pilots: Justin, Jacob

GPS Instruments: 06 - FBO_KAUW, AOP_UNDE, WISCORS_CRON

Summary

The crew completed initial coverage at UNDE this morning under “yellow” sky condition. The rapidly developing cumulus clouds did not allow a “green” up opportunity at any site. We also flew over the WABI site and collected 2 lines before clouds and shadows forced crew to abort data collection.

Concerns

- MIDAS 1 disk lost connection with the navigation computer at the end of the flight causing POS data to be manually transferred to the MIDAS 1 disk via USB drive.
- Lidar KVM keyboard loses connection intermittently. We suspect it’s a cabling issue.

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 #	2	3	4	5	6
Lidar	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓
Cloud Cover					

Total number of lines flown: 5

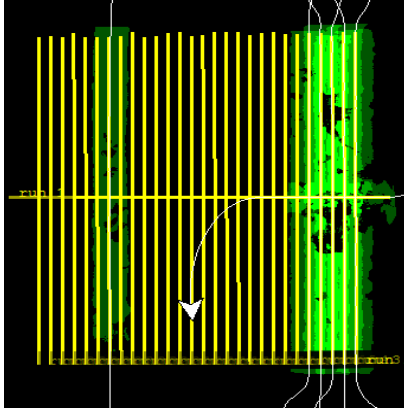
D05|WABI

Line #	1	2	3
Lidar		✓	✓
Spectrometer	✓	✓	✓
Camera		✓	✓
Cloud Cover	Yellow	Yellow	Red

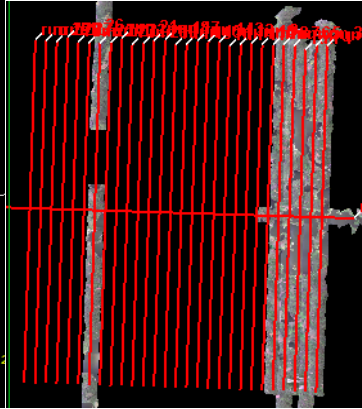
Total number of lines flown: 3

Flight Screenshots

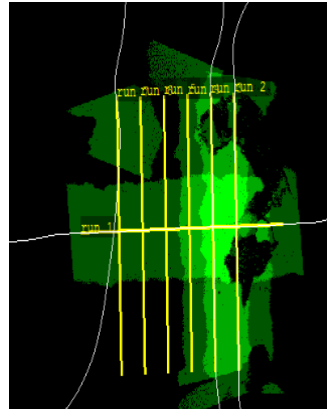
UNDE



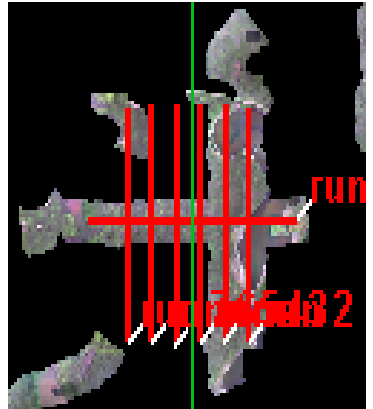
UNDE



WABI



WABI



Pictures

Low cumulus clouds developing over UNDE this morning.



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: 100% (16/16)

Green: 0% (0/16)

Yellow: 31% (5/16)

Red: 69% (11/16)

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: 44% (11/25)

Green: 44% (11/25)

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: 100% (28/28)

Green: 25% (7/28)

Yellow: 21% (6/28)

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: 33% (2/6)

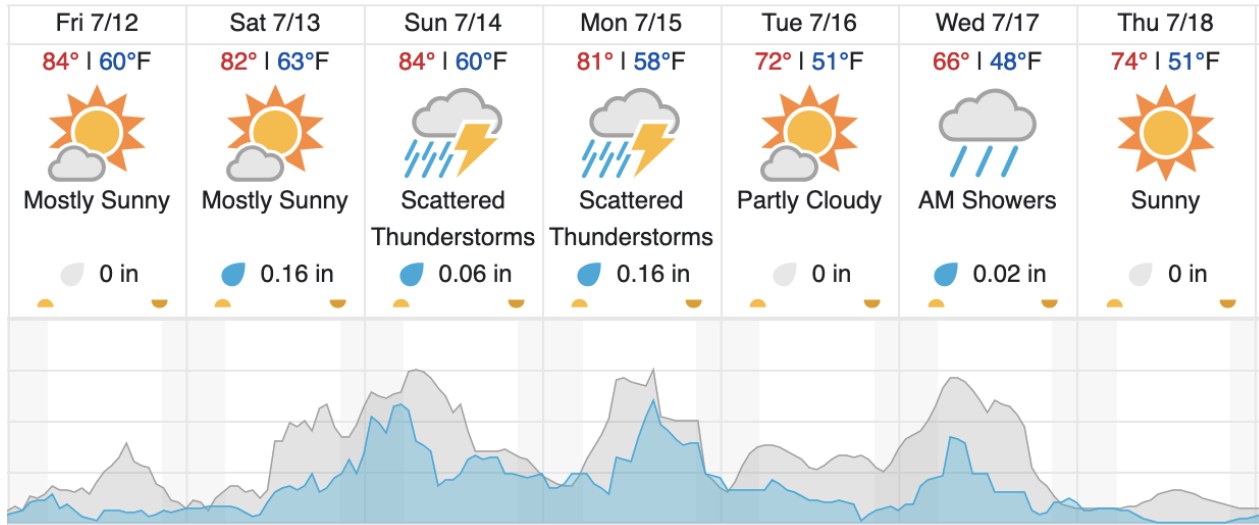
Green: 0% (0/6)

Yellow: 17% (1/6)

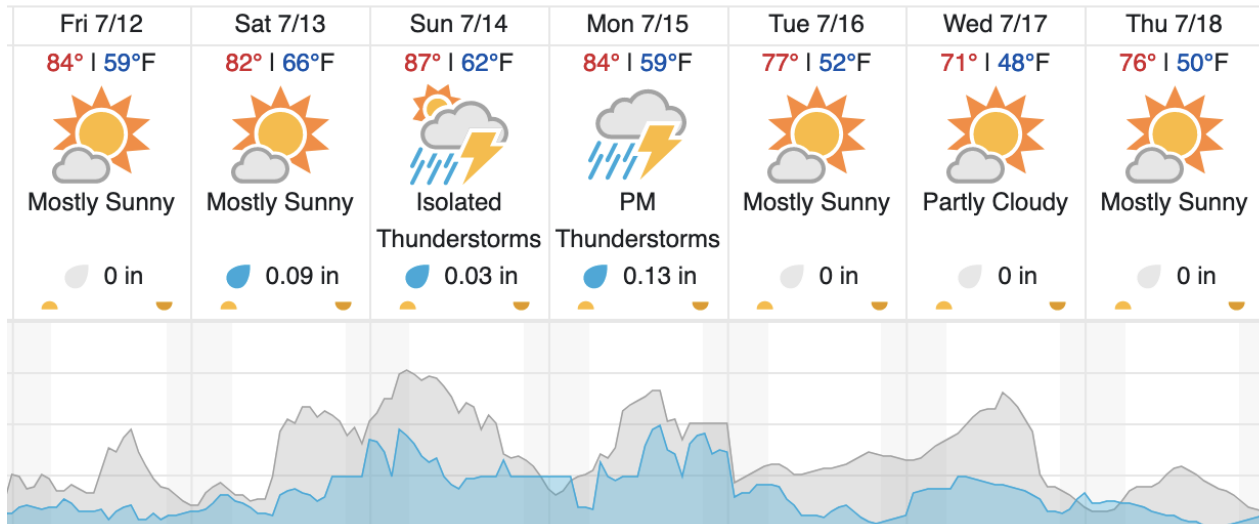
Red: 17% (1/6)

Weather Forecast

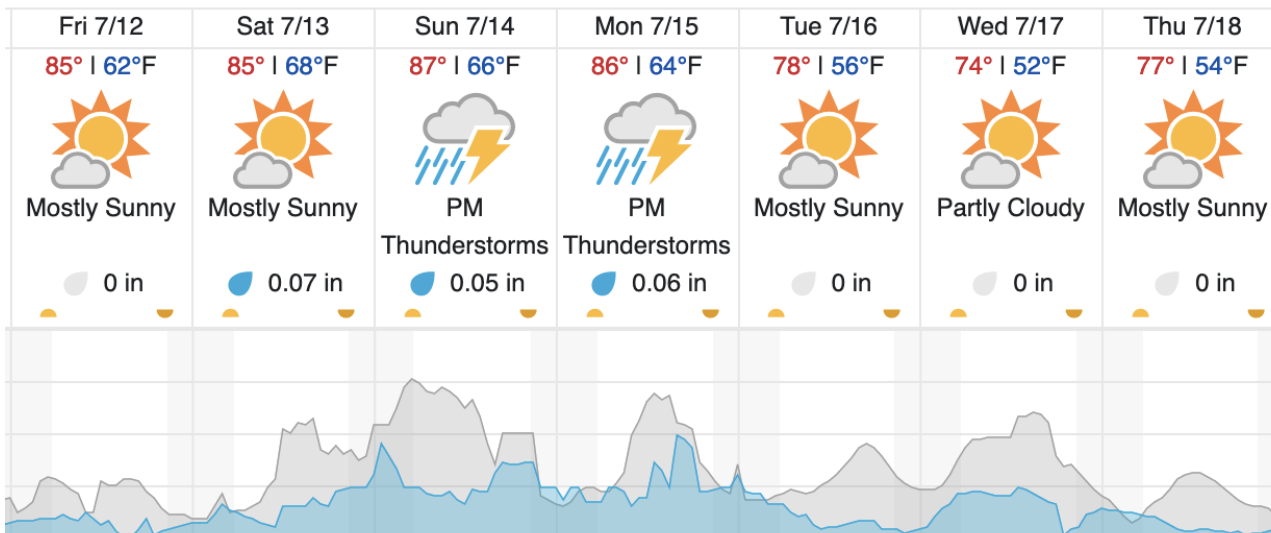
Boulder Junction, WI (UNDE)



Tomahawk, WI (STEI-TREE)



Wausau, WI (KAUW)



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

source: wunderground.com

Flight Collection Plan for 12 July 2024

Flyority 1

Collection Area: UNDERC (UNDE)- **if green lines 2-17, 23-29**

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- lines 1-15

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)- **if Green**

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: Elissa (Lidar), Cameron (NIS)