



Payload 1 Daily Flight Report



Date: 2024-08-27

Flight Campaign ID: P1C1

Airport, FBO ID, City: Nashua Airport at Boire Field (KASH) - Nashua, NH

Aircraft: N615AR

Domain: 01 (Northeast)

Sites Flown: HARV_P1 (Harvard Forest Priority 1)

Days left in Domain: 11

Report Author: Abe

Lidar Operators: Abe

Spectrometer Operators: John

Pilots: Will, Justin

Flight Hours: 02:52

Hours until maintenance: 60.07

GPS Instruments: 07 - KASH, AOP_HARV

Summary

Today was an interesting day... It started off with the tower cam at the HARV site showing completely clear sky, and with a forecast to match, the crew was excited to get some good data. The excitement was tamped down a bit by the intermittent power failure issue coming back up after our repairs from yesterday. No voltage bleed over was seen so the crew pressed on with the mission. On arrival at the site low cumulus had started to pop up along with some heavy haze. The decision was made to collect lower priority lines in the yellow/red conditions. However, on the first line the NIS had a positional error come up. This is the same error the happened on the previous flight. This was fixed with a full DCC reboot. 13 of HARVs very long lines were collected in yellow/red sky conditions before too many cumulus chased us out of the flight box. After the otter landed the system wasn't done throwing curve balls at the crew. During the normal shutdown procedure, the PosAV system had an error during the POS transfer making it appear as if the POS had been spontaneously deleted. However, after a full krystal/UPDU reboot connection was regained with the storage location and the POS was retrieved.

Concerns

- Intermittent power loss from AXE during start up.
- NIS positional error
- POSAV pos transfer error (this is the second known time this has happened this year)

Comments

- Mike arrives to join the crew today.

Daily Coverage

Estimated Cloud Cover Key

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

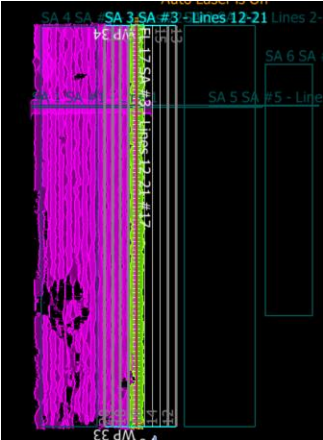
D01|HARV_P1

Line #	17	18	19	20	21	22	23	24	25	26	27	28	29
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover													

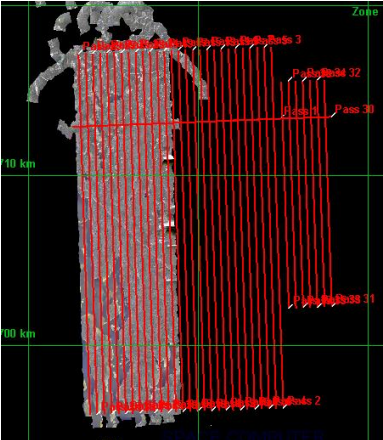
Total number of lines flown: 13

Flight Screenshots

Lidar



NIS



Cumulative Domain Coverage

D01|BART (Bartlett Experimental Forest)

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						

Flown: 0% (0/35)

Green: 0% (0/35)

Yellow: 0% (0/35)

Red: 0% (0/35)

D01|HARV_P1 (Harvard Forest 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	27	28	29												

Flown: 89% (25/28)

Green: 29% (8/28)

Yellow: 25% (7/28)

Red: 36% (10/28)

D01|HARV_P2 (Harvard Forest Priority 2)

31	32	33	34	35	36	37
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Flown: 100% (7/7)

Green: 0% (0/7)

Yellow: 100% (7/7)

Red: 0% (0/7)

D01 | HOPB (Hop Brook)

2	3	4	5	6	7	8	9	10
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Flown: 0% (0/9)
Green: 0% (0/9)
Yellow: 0% (0/9)
Red: 0% (0/9)

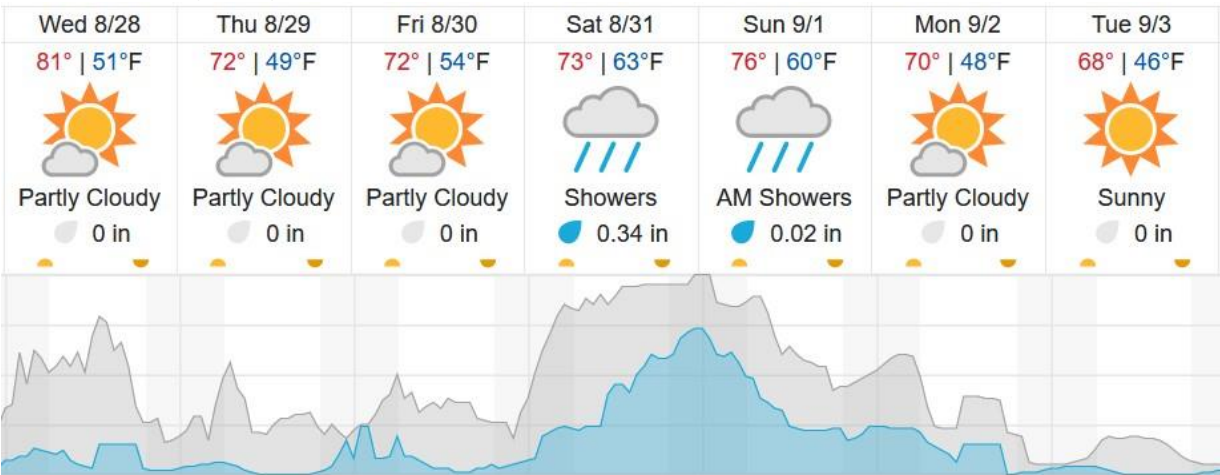
D01 | N01A (D01 Nominal Runway)

1	2
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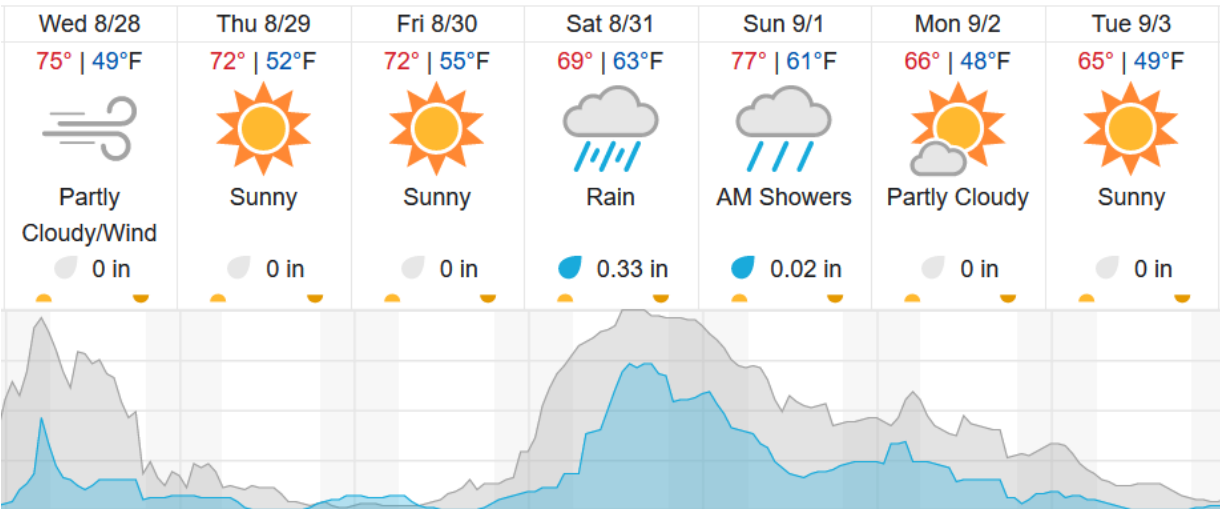
Flown: 100% (2/2)
Green: 0% (0/2)
Yellow: 100% (2/2)
Red: 0% (0/2)

Weather Forecast

Petersham, MA (HARV)



Bartlett, NH (BART)



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

Flight Collection Plan for 28 August 2024

Flyority 1:

Collection Area: Harvard Forest – Priority 1 (HARV_P1)

Flight Plan Name: D01_HARV_C1_P1__P2_v4_PRM.xml

On-station Time: 1350 UTC / 0950 L

Flyority 2:

Collection Area: Bartlett Experimental Forest (BART)

Flight Plan Name: D01_BART_R1_P1_v2_PRM.xml

On-station Time: 1350 UTC / 0950 L

Flyority 3:

Collection Area: Hop Brook (HOPB)

Flight Plan Name: D01_HOPB_A1_P1_v2_PRM.xml

On-station Time: 1350 UTC / 0950 L

Flyority 4: (*if green*)

Collection Area: Harvard Forest – Priority 2 (HARV_P2)

Flight Plan Name: D01_HARV_C1_P1_P2_v4_PRM.xml

On-station Time: 1350 UTC / 0950 L

Crew: John (Lidar), Mike (NIS), Abe (Ground)