



August 26, 2019 Payload 1 Daily Flight Report



Date: 2019-08-26

Flight Campaign ID: 2019_P1C1

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

Domain: 01

Sites Flown: HARV_P1 (Harvard Forest Priority 1), HARV_P3 (Harvard Forest Priority 3), HOPB (Hop Brook), N01A (D01 Nominal Runway)

Days left in Domain: 9 (2 if approval to depart early is granted)

Report Author: Elissa Barris

Flight Crew: Elissa Barris, Abe Morrison

Ground/GPS: Abe Morrison

Pilots: Justin Eddington, Wesley Wyatt

Additional Personnel: None

GPS Instruments: 05 - FBO_KASH, AOP_HARV

Flight Hours: 03:56

Hours until maintenance: 37.95

Summary

Green conditions this morning allowed us to return to Harvard Forest and complete collection of the HARV_P1 box. We also re-flew yellow lines in the HARV_P3 box, but worsening conditions east of the site prevented green collection of the easternmost line. We headed west to greener skies and collected all of the aquatic site, HOPB, in green. Finally, we completed the nominal runway flight just before landing.

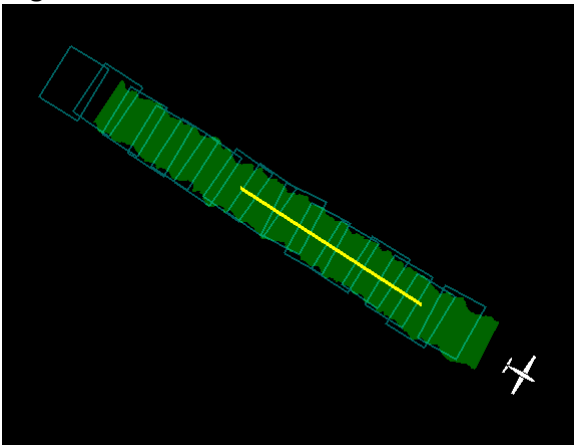
Concerns

Twice during today's flight the camera failed to trigger automatically. No pictures were taken for one line in HOPB before the software could be restarted to rectify the issue. On the second occurrence was during an air test; restarting the software, camera, and computer failed to solve the problem. Therefore the camera was set to manual mode for the last line (N01A), but then triggered automatically when collection was started.

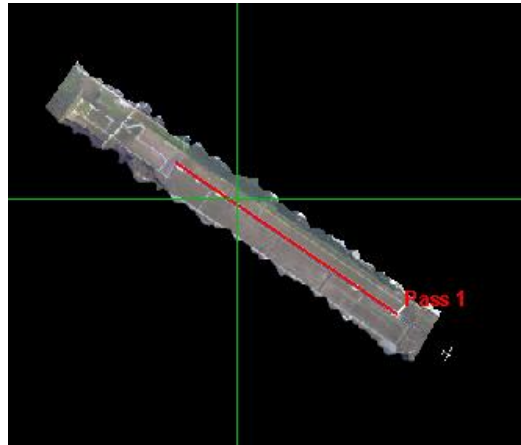
Comments

Pending approval, plans are being made to leave the domain a week early since collection is complete. A pilot change is scheduled for Wednesday, 8/28, so the transit is tentatively set for Thursday, 8/29.

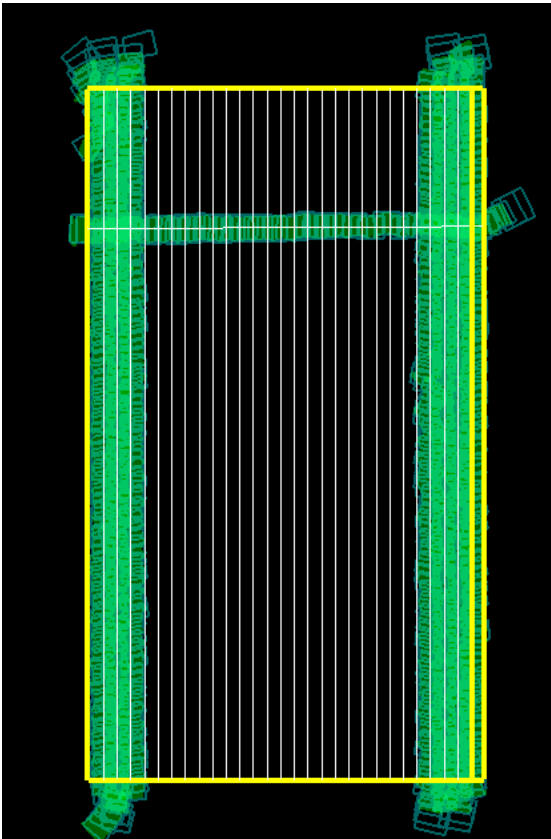
Flight Screenshots



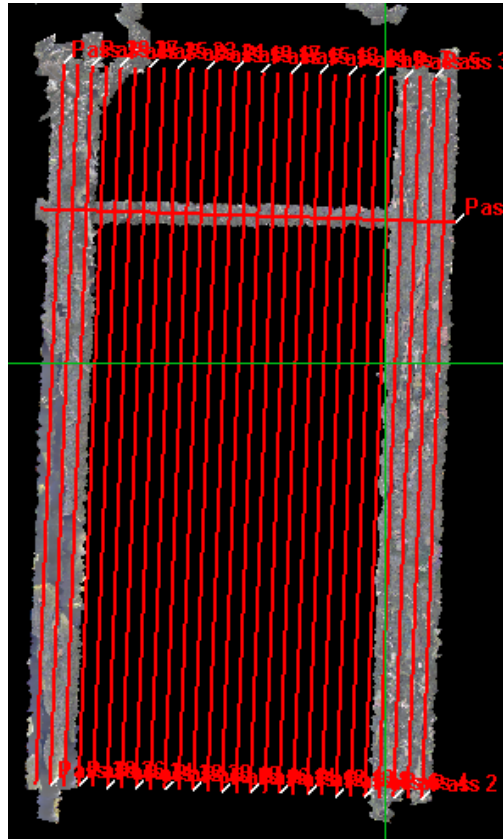
N01A Lidar



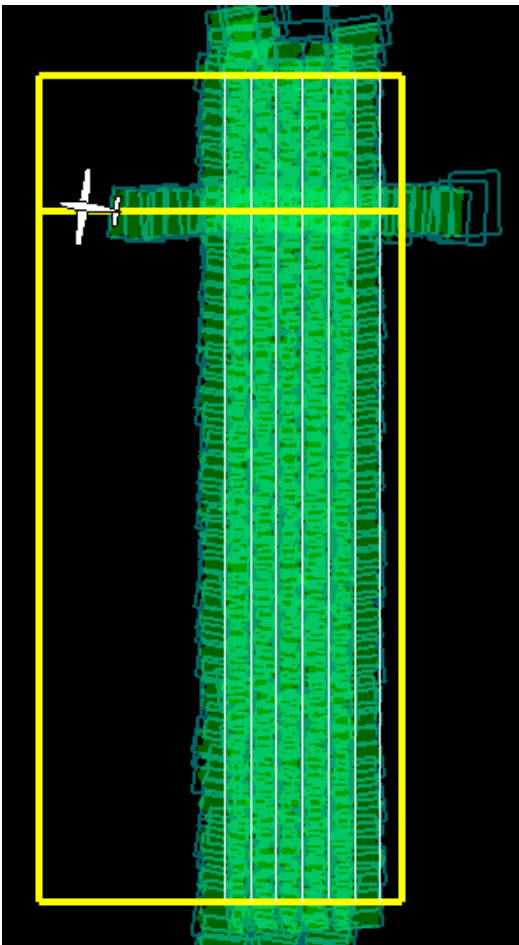
N01A NIS



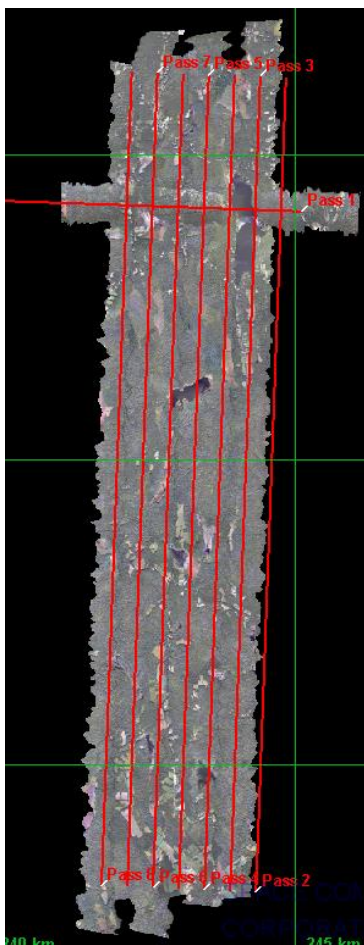
HARV_P1 Lidar



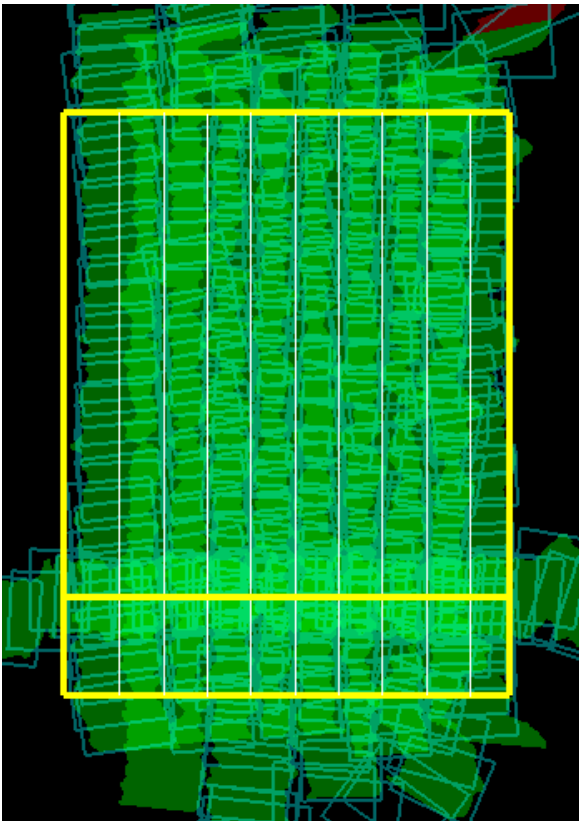
HARV_P1 NIS



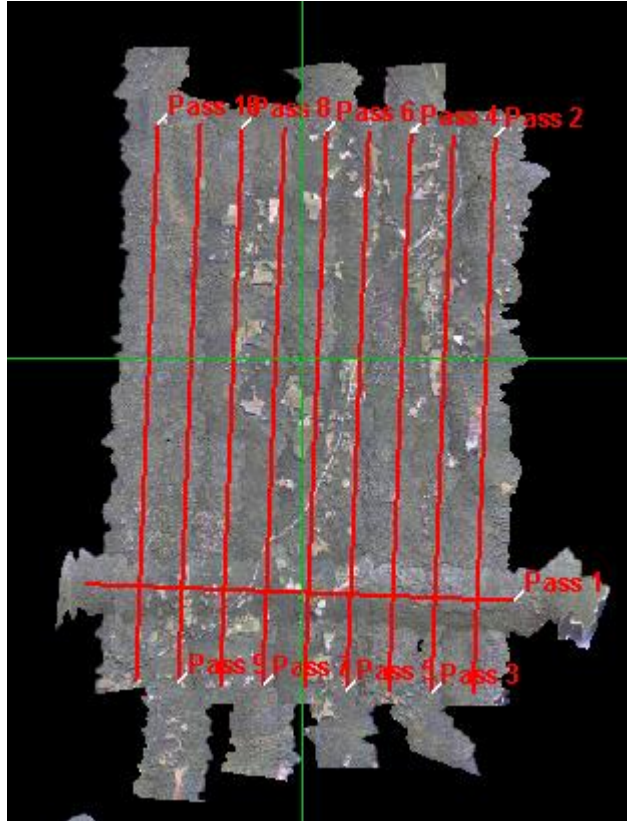
HARV_P3 Lidar



HARV_P3 NIS



HOPB Lidar



HOPB NIS

Pictures



Quabbin Reservoir in Harvard Forest site: one of the primary water supplies to Boston and surrounding cities.

Daily Coverage

D01 HARV_P1	Line	SpecG	SpecY	SpecR	NIS	Lidar	Camera	Cumulative
	1				✓	✓	✓	NLC
	2				✓	✓	✓	NLC
	3				✓	✓	✓	NLC
	4				✓	✓	✓	NLC
	5				✓	✓	✓	NLC
	27				✓	✓	✓	NLC
	28				✓	✓	✓	NLC
	29				✓	✓	✓	NLC
Flown:	8							
D01 HARV_P3	Line	SpecG	SpecY	SpecR	NIS	Lidar	Camera	Cumulative
	1				✓	✓	✓	NLC
	3				✓	✓	✓	NLC
	4				✓	✓	✓	NLC
	5				✓	✓	✓	NLC
	6				✓	✓	✓	NLC
	7				✓	✓	✓	NLC
	8				✓	✓	✓	NLC
Flown:	7							
D01 HARV_P3	Line	SpecG	SpecY	SpecR	NIS	Lidar	Camera	Cumulative
	1				✓	✓	✓	NLC
	2				✓	✓	✓	NLC
	3				✓	✓	✓	NLC
	4				✓	✓	✓	NLC
	5				✓	✓	✓	NLC
	6				✓	✓	✓	NLC
	7				✓	✓	✓	NLC
	8				✓	✓	✓	NLC
	9				✓	✓	✓	NLC
	10				✓	✓	✓	NLC
Flown:	10							
D01 N01A	Line	SpecG	SpecY	SpecR	NIS	Lidar	Camera	Cumulative
	1				✓	✓	✓	NLC
Flown:	1							

Cumulative Domain Coverage

BART

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					

Flown: 100% (36/36)

Green: 97% (35/36)

Yellow: 3% (1/36)

Red: 0% (0/36)

HARV_P1

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: 100% (29/29)

Green: 103% (30/29)

Yellow: 21% (6/29)

Red: 7% (2/29)

HARV_P3

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

Flown: 100% (8/8)
Green: 88% (7/8)
Yellow: 100% (8/8)
Red: 0% (0/8)

HOPB

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Flown: 100% (8/8)
Green: 88% (7/8)
Yellow: 100% (8/8)
Red: 0% (0/8)

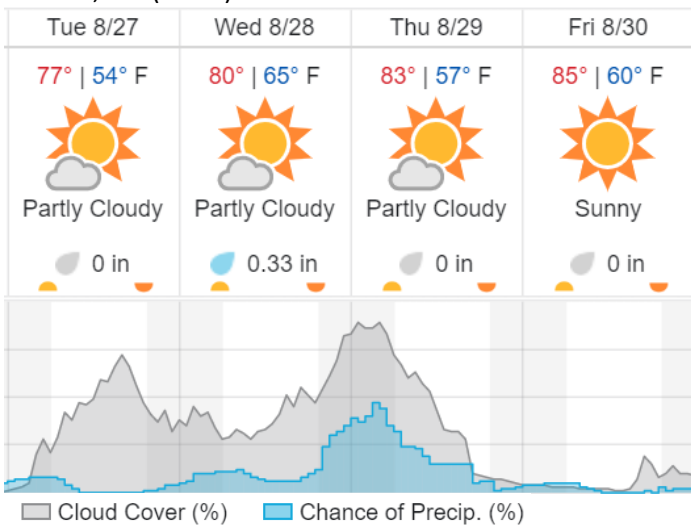
N01A

1

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

Weather Forecast

Nashua, NH (KASH)



Flight Collection Plan for 27 August 2019

Collection is complete in Domain 1; no flights planned.

We plan on completing data extraction and QA/QC, shipping a full RAID, and making preparations for a potential early transit back to Boulder. We may be hosting a small group from Domain 1 for a tour sometime tomorrow or Wednesday.