Payload 1 Daily Flight Report

Date: 2023-06-25
Flight Campaign ID: P1C1
Airport, FBO ID, City: Portland-Hillsborough Airport (KHIO) - Hillsboro, OR
Aircraft: N331AR

Domain: 16 (Pacific Northwest)
Sites Flown: WREF_P1 (Wind River Experimental Forest Priority 1), WREF_P2 (Wind River Experimental Forest Priority 2)
Days left in Domain: 13

Report Author: Mike
Lidar Operators: Mike   **Flight Hours**: 03:31
Spectrometer Operators: Elissa   **Hours until maintenance**: 112.28
Pilots: Vince, Will   **GPS Instruments**: 07 - FBO_KHIO, AOP_WREF, U-P429

Summary
We woke up to sunny skies again today in the PNW and returned to chipping away at the collections in green conditions. The Priority 1 box - WREF was nearly completed, but an isolated cloud placed a large shadow in the remaining lines there. A few lines were collected at WREF P2 and an attempt was made at ABBY before turning back due to developing cumulus clouds.

Concerns
None

Comments
-Thanks to Andrew for taking a minute to help with yesterday's HK-1 display issues. A reprogramming of the graphics card and new display cable seem to have solved the issue.
-Vince is leaving today to be replaced by Jeff. Great flying Vince!

Daily Coverage

Estimated Cloud Cover Key

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

D16|WREF_P1

Line #	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover																				

Line #	22	40	41	42	43	52	53
Lidar	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓
Cloud Cover							

Total number of lines flown: 27
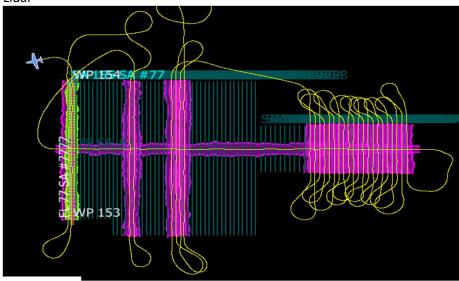
D16|WREF_P2

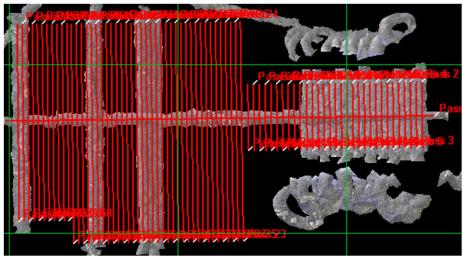| Line #	77	78
Lidar	✓	✓
Spectrometer	✓	✓
Camera	✓	✓
Cloud Cover		

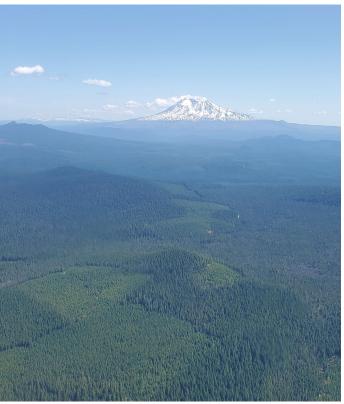Total number of lines flown: 2

Flight Screenshots
Lidar

NIS

Pictures

Mt. Adams with a few cumulus developing over the patchwork of logged and unlogged forest at WREF.

Cumulative Domain Coverage

D16|ABBY (Abby Road)

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																

Flown: 0% (0/44)
Green: 0% (0/44)
Yellow: 0% (0/44)
Red: 0% (0/44)

D16|MCRA (McRae Creek)

1	2	3	4	5	6	7	8	9

Flown: 0% (0/9)
Green: 0% (0/9)
Yellow: 0% (0/9)
Red: 0% (0/9)

D16|N16A (D16 Nominal Runway)

1

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

D16|WREF_P1 (Wind River Experimental Forest 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			

Flown: 93% (53/57)
Green: 93% (53/57)
Yellow: 0% (0/57)
Red: 0% (0/57)

D16|WREF_P2 (Wind River Experimental Forest Priority 2)

58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77
78																			
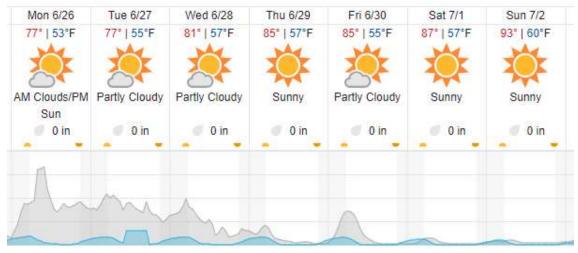
Flown: 10% (2/21)
Green: 10% (2/21)
Yellow: 0% (0/21)
Red: 0% (0/21)

Weather Forecast
Hillsboro, OR (KHIO)
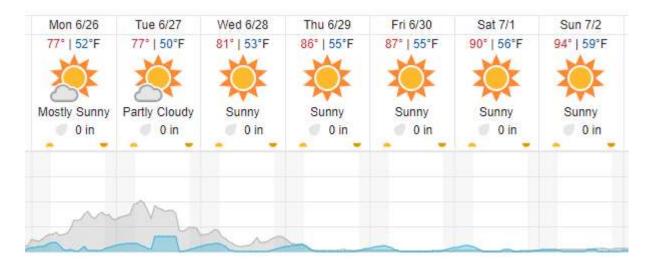
Carson, WA (WREF, ABBY)

McKenzie Bridge (MCRA)

Mon 6/26	Tue 6/27	Wed 6/28	Thu 6/29	Fri 6/30	Sat 7/1	Sun 7/2
77° | 52°F	77° | 50°F	81° | 53°F	86° | 55°F	87° | 55°F	90° | 56°F	94° | 59°F
Mostly Sunny	Partly Cloudy	Sunny	Sunny	Sunny	Sunny	Sunny
0 in	0 in	0 in	0 in	0 in	0 in	0 in

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

source: wunderground.com

Flight Collection Plan for 26 June 2023

Flyority 1
Collection Area: Wind River Experimental Forest (WREF) P1 (lines 54-57)
Flight Plan Name: D16_WREF_C1_P1_P2_v3_PRM.xml
On-Station Time: 1630 UTC / 0930 L

Flyority 2
Collection Area: Abby Road (ABBY)
Flight Plan Name: D16_ABBY_R2_P1_v2_PRM.xml
On-Station Time: 1630 UTC / 0930 L

Flyority 3
Collection Area: Wind River Experimental Forest (WREF) P2
Flight Plan Name: D16_WREF_C1_P1_P2_v3_PRM.xml
On-Station Time: 1630 UTC / 0930 L

Flyority 4
Collection Area: McRae Creek (MCRA)
Flight Plan Name: D16_MCRA_A2_P1_ v2_PRM.xml
On-Station Time: 1630 UTC / 0930 L

Crew: Elissa (Lidar), Mike (NIS)