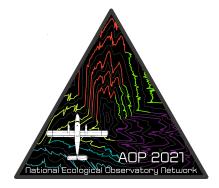


# Payload 1 Daily Flight Report



Date: 2021-07-23

Flight Campaign ID: P1C2

Airport, FBO ID, City: Portland-Hillsborough Airport (KHIO) - Hillsboro, OR

Aircraft: N331AR

**Domain**: 16 (Pacific Northwest)

**Sites Flown**: WREF\_P2 (Wind River Experimental Forest Priority 2)

Days left in Domain: 4

Report Author: Mitch Haynes

**Lidar Operators**: Mitch Haynes **Flight Hours**: 02:23

**Spectrometer Operators**: Abe Morrison **Hours until maintenance**: 88.43

Pilots: Justin Eddington, Nick Koukoutsakis GPS Instruments: 05 - FBO\_KHIO, AOP\_WREF

#### **Summary**

Frustrating day for the AOP crew in D16. Initially thought we had a chance at a clear sky, green collect, but a cirrus/haze layer decided to settle in over the region, keeping collections to yellow conditions. Decision was made to press forward with collecting the priority 2 portion of the Wind River flight box. 16 lines were collected before computer performance issues forced collection to end prematurely.

#### Concerns

- Kept receiving a "Failure Digitizer 1: CarvedWF Buffer Overflow!" error in FMSnav. Digitizer power was cycled but issue remained. Digitizer waveform display and disc storage level still looked normal. Optech has been contacted for further support on what this error means. This will be something to keep an eye out for in the waveform QA from today's flight.
- Crystal computer CPU performance has started "lagging" in recent flights, and eventually reached a point during
  today's flight where the system was deemed inoperable. Behavior included the pilot display cutting out and
  needing be restored, the FMSnav software freezing, and the cursor pointer not working. It's unclear if these all
  issues are related. Several steps were taken post-flight to check hardware connections and try new USB cables
  and ports. Further steps will be taken to make sure hardware drivers are up to date, but likely not before
  tomorrow's flight.

#### **Comments**

Between the new Survey Area flight plans and setting the ASSL from 5 to 10 seconds, we've haven't had any of
the issues experienced in our earlier flights with the laser not starting on time.

# **Daily Coverage**

**Estimated Cloud Cover Kev** 

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

### D16|WREF P2

Line #	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73
Lidar	✓	<b>√</b>	>	>	>	>	>	>	>	>	>	>	>	>	>	✓

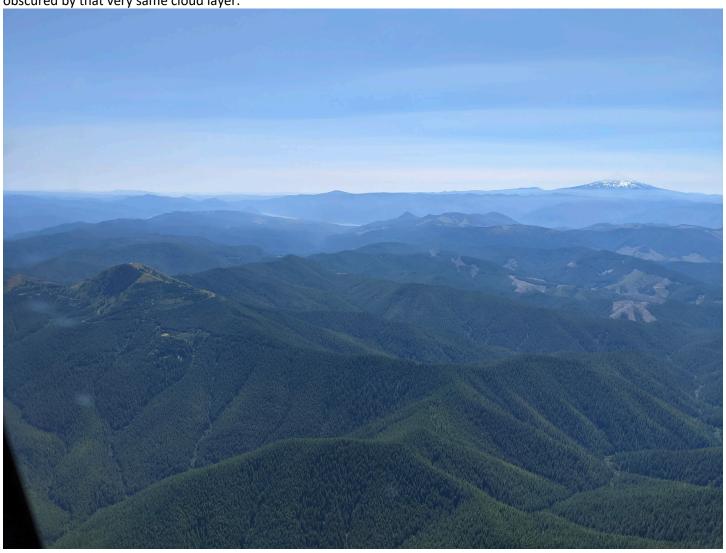
Spectrometer	<b>√</b>	✓	<b>√</b>	<b>\</b>	<b>√</b>	<b>✓</b>										
Camera	✓	✓	✓	<b>√</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	<b>✓</b>
Cloud Cover																

Total number of lines flown: 16



### **Pictures**

Very close to being clear, but a cirrus layer stood in our way. If you look closely, you can see the top of Mt Hood being obscured by that very same cloud layer.



# **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: 30% (13/44) Green: 30% (13/44) Yellow: 0% (0/44) Red: 0% (0/44)

# D16 | MCRA (McRae Creek)

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

Flown: 100% (9/9) Green: 100% (9/9) Yellow: 0% (0/9) Red: 0% (0/9)

D16 | N16A (D16 Nominal Runway)

1

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

D16 | WREF P1 (Wind River Experimental Forest Priority 1)

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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: 100% (57/57) Green: 100% (57/57) Yellow: 0% (0/57) Red: 0% (0/57)

D16 | WREF P2 (Wind River Experimental Forest Priority 2)

- 1		_	١.	-	_					_	• ,								
58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77
78	79	80	81	82															

Flown: 64% (16/25) Green: 0% (0/25) Yellow: 64% (16/25) Red: 0% (0/25)

### **Weather Forecast**

### Carson, WA

Jan J J 117 1				
Sat 7/24	Sun 7/25	Mon 7/26	Tue 7/27	Wed 7/28
93° I 61°F	89° I 59°F	90° I 62°F	86° I 62°F	88° I 63°F
Sunny	Sunny	Partly Cloudy	Partly Cloudy	Partly Cloudy
0 in	0 in	0 in	0 in	<b>0</b> in
_	•	•	_	
Cloud Cover (	(%) Chan	ce of Precip. (%)		

source: wunderground.com

# Flight Collection Plan for July 24 2021

Flyority 1

Collection Area: Abby Road (ABBY)

Flight Plan Name: D16\_ABBY\_R1\_P1\_v2\_PRM.xml

On-Station Time: 1650 UTC/ 0950 L

Flyority 2

Collection Area: Wind River Experimental Forest (WREF) - Priority 2 Flight Box

Flight Plan Name: D16\_WREF\_C1\_P1\_P2\_v3\_PRM.xml

On-Station Time: 1640 UTC/ 0940 L

Crew: Abe, Mitch