



## Payload 3 Daily Flight Report

**Date:** 2025-07-23

**Flight Campaign ID:** P3C1

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

**Aircraft:** N821AR

**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:** 11

**Report Author:** Cameron

**Lidar Operators:** Cameron

**Flight Hours:** 03:23

**Spectrometer Operators:** Mitch

**Hours until maintenance:** 107.08

**Pilots:** Justin, Troy

**GPS Instruments:** AOP\_WREF, S-ORHI

### Summary

This morning brought relatively clear skies to the Pacific Northwest; however, wildfire smoke in the region unfortunately settled over our sites, making optimal sky conditions unattainable. The crew adapted by focusing on lower-priority lines, collecting 23 P2 lines at WREF in yellow conditions.

### Concerns

- Outdated Flight plans for WREF caused a little confusion this morning, luckily John M was able to correct and upload new ones while the crew was airborne.
- The lidar unexpectedly shut off twice on a specific line, displaying an 'Old Altitude' error. We resolved this by increasing our altitude and re-flying the line, with no further issues.

### Comments

- Elissa arrives in D16 this evening!

### Daily Coverage

Estimated Cloud Cover Key

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

Solar Angle Less Than 40 degrees: (\*)

D16|WREF\_P2

Line #	1	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover																				

Line #	77	78	79
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Lidar	✓	✓	✓
Spectrometer	✓	✓	✓
Camera	✓	✓	✓
Cloud Cover			

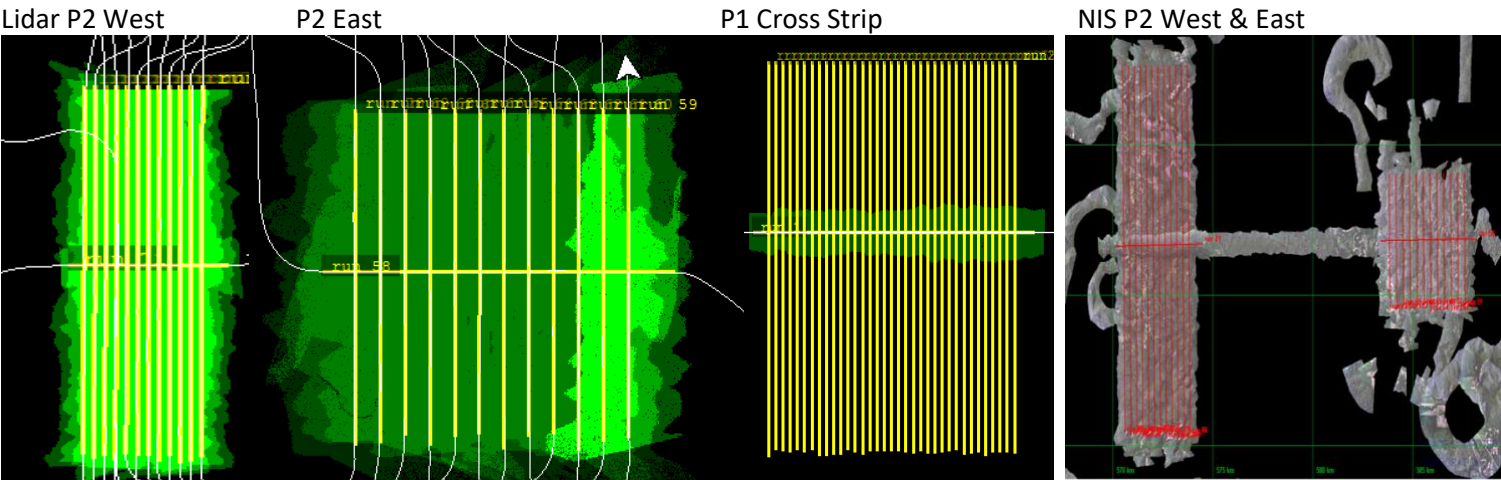
Total number of lines flown: 23

D16|WREF\_P1

Line #	1
Lidar	✓
Spectrometer	
Camera	✓
Cloud Cover	

Total number of lines flown: 1

Flight Screenshots



**Pictures:** Flying to WREF this morning the smoke / haze can be seen settling into the valleys.



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)  
\* Flown within 35deg solar angle

D16|MCRA (McRae Creek)

1	2	3	4	5	6	7	8	9
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Flown: 0% (0/9)  
Green: 0% (0/9)  
Yellow: 0% (0/9)  
Red: 0% (0/9)  
\* Flown within 35deg solar angle

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: 2% (1/57)  
Green: 0% (0/57)  
Yellow: 2% (1/57)  
Red: 0% (0/57)  
\* Flown within 35deg solar angle

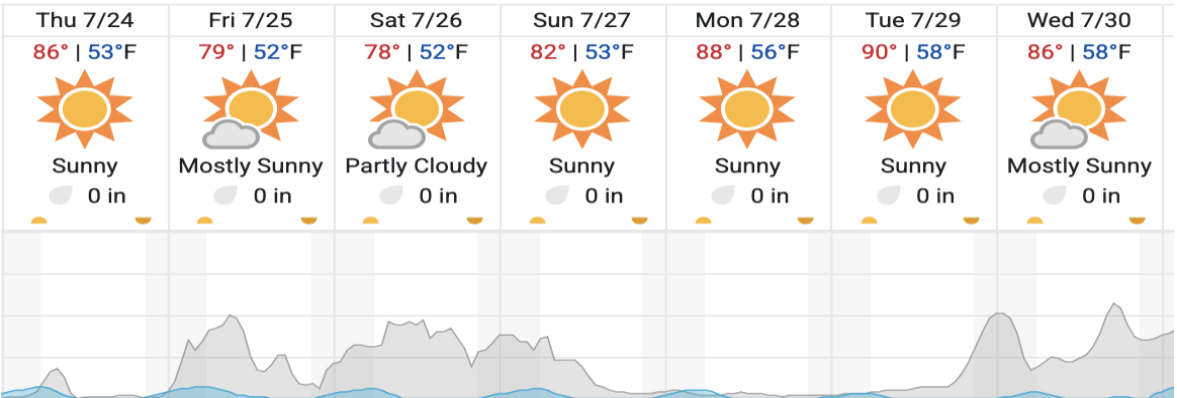
D16|WREF\_P2 (Wind River Experimental Forest Priority 2)

58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77
78	79																		

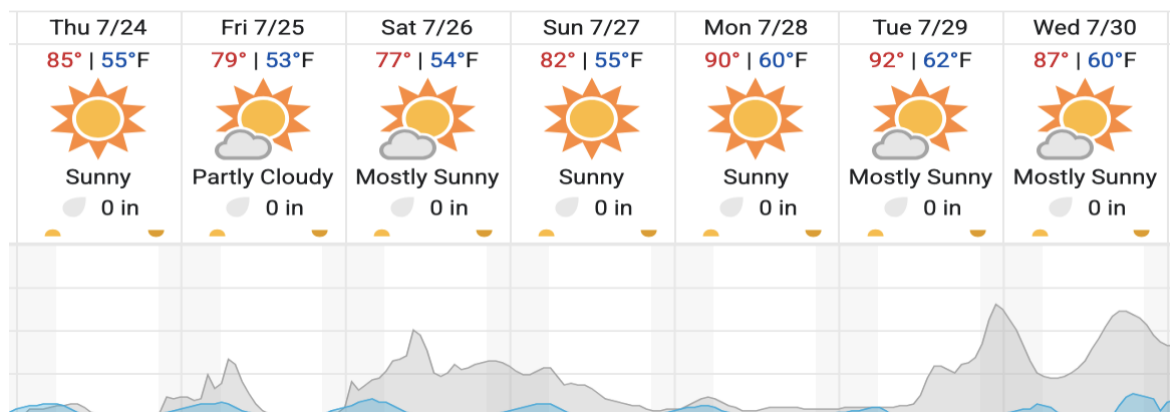
Flown: 100% (22/22)  
Green: 0% (0/22)  
Yellow: 100% (22/22)  
Red: 0% (0/22)  
\* Flown within 35deg solar angle

Weather Forecast

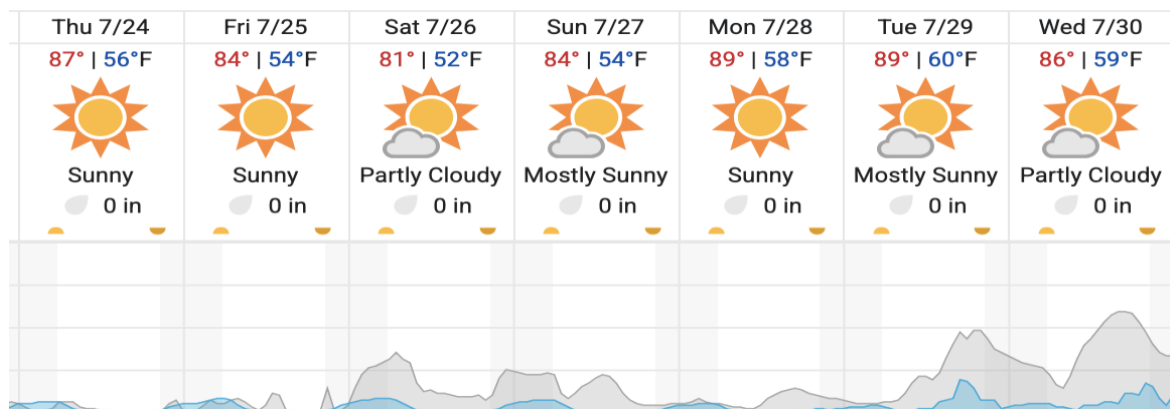
Hillsboro, OR (KHIO)



## Carson, WA (WREF, ABBY)



## McKenzie Bridge (MCRA)



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

## Flight Collection Plan for July 24, 2025

### Flyority 1

Collection Area: Wind River Experimental Forest (WREF) P1

Flight Plan Name: D16\_WREF\_C1\_P1\_v4\_Q780

On-Station Time: 1650 UTC / 0950 L

### Flyority 2

Collection Area: Abby Road (ABBY)

Flight Plan Name: D16\_ABBY\_R1\_P1\_v3\_Q780

On-Station Time: 1650 UTC / 0950 L

### Flyority 3

Collection Area: Wind River Experimental Forest (WREF) P2

Flight Plan Name: D16\_WREF\_C1\_P2\_v3\_Q780

On-Station Time: 1650 UTC / 0950 L

### Flyority 4

Collection Area: McRae Creek (MCRA)

Flight Plan Name: D16\_MCRA\_A2\_P1\_v1\_Q780

On-Station Time: 1650 UTC / 0950 L

**Crew:** Mitch (Lidar), Cam (NIS) Elissa (Ground)