



## July 14, 2019 Payload 3 Daily Flight Report



**Date:** 2019-07-14

**Flight Campaign ID:** 2019\_P3C1

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

**Domain:** 16

**Sites Flown:** WREF\_P1 (Wind River Experimental Forest Priority 1), ABBY (Abby Road)

**Days left in Domain:** 2

**Report Author:** Ivana Vu

**Flight Crew:** Ivana Vu, Elissa Barris

**Flight Hours:** 01:18, 04:15, 01:35

**Ground/GPS:** Elissa Barris, Cameron Chapman

**Hours until maintenance:** 102.97

**Pilots:** Justin Eddington, Paul Nunemann

**Additional Personnel:** None

**GPS Instruments:** AOP\_ABBY, AOP\_WREF, 03 - FBO\_KHIO

### **Summary**

Flight crew collected forty-seven lines at WREF and ABBY under “yellow” sky conditions (10-50% cloud cover). Ten of these lines were collected outside of the 40-degree solar angle window.

### **Concerns**

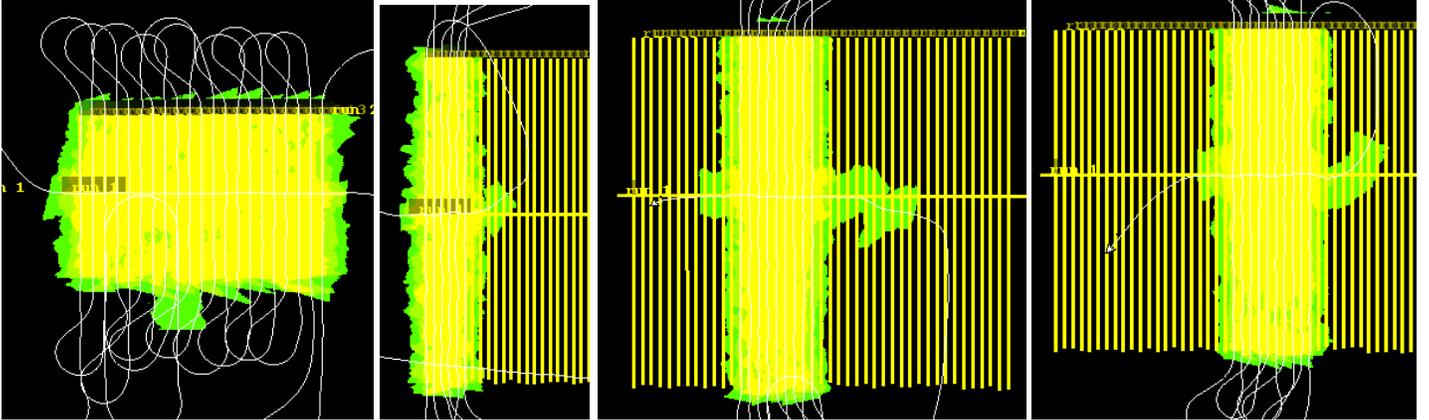
- During 1<sup>st</sup> flight, Riegl lidar failed to initialize even after MIDAS reboot – crew was forced to RTB in order to do a full system restart which seemed to resolve the issue
- Data extraction is backed up with only 1 disk set left to use

### **Comments**

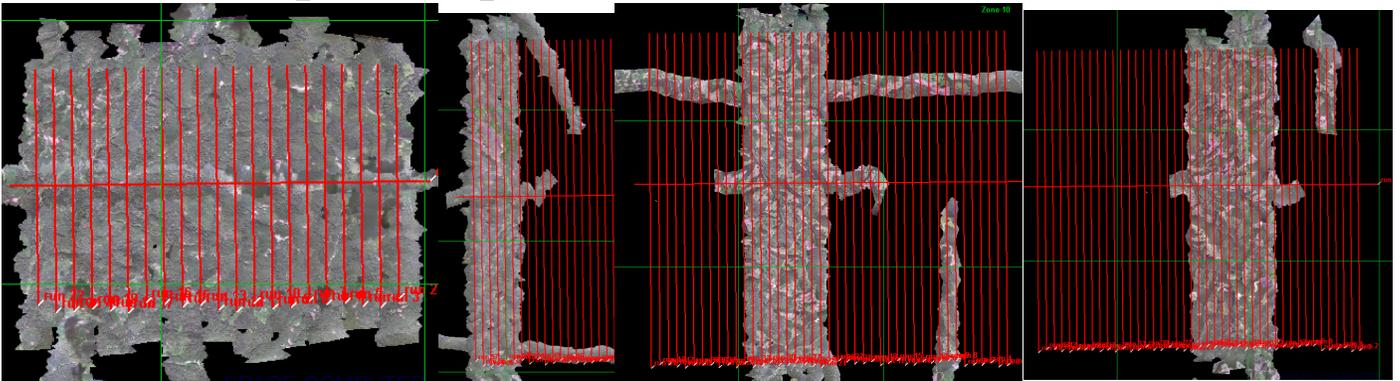
- Initial coverage is complete at WREF Priority 1 flight box and ABBY priority air-shed
- Cam arrived in Hillsboro ahead of the transit to D09 while Bridget, Alok and Samantha arrived in Vancouver to prep for upcoming fieldwork – welcome, everyone!

## Flight Screenshots

Lidar screenshots of WREF\_P1 East, WREF\_P1 West, ABBY, ABBY

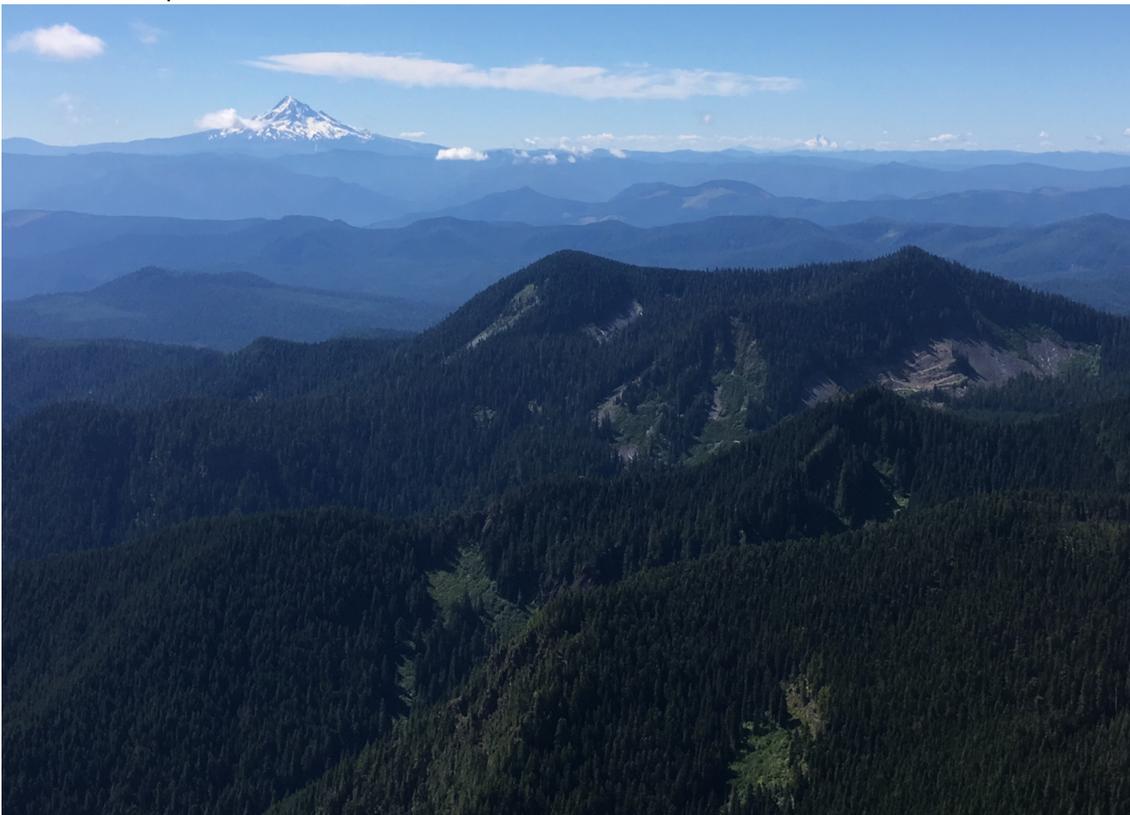


NIS screenshots of WREF\_P1 East, WREF\_P1 West, ABBY, ABBY



## Pictures

Wind River Experimental Forest site with Mount Hood in the distance



**Daily Coverage**

\*ABBY Lines 14-23 collected outside of 40-degree solar angle

D16 ABBY	Line	SpecG	SpecY	SpecR	NIS	Lidar	Camera	Cumulative
	1				✓	✓	✓	NLC
	14				✓	✓	✓	NLC
	15				✓	✓	✓	NLC
	16				✓	✓	✓	NLC
	17				✓	✓	✓	NLC
	18				✓	✓	✓	NLC
	19				✓	✓	✓	NLC
	20				✓	✓	✓	NLC
	21				✓	✓	✓	NLC
	22				✓	✓	✓	NLC
	23				✓	✓	✓	NLC
	24				✓	✓	✓	NLC
	25				✓	✓	✓	NLC
	26				✓	✓	✓	NLC
	27				✓	✓	✓	NLC
	28				✓	✓	✓	NLC
	29				✓	✓	✓	NLC
	30				✓	✓	✓	NLC
	31				✓	✓	✓	NLC
	32				✓	✓	✓	NLC
Flown:	21							
D16 WREF_P1	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
	11				✓	✓	✓	NLC
	12				✓	✓	✓	NLC
	13				✓	✓	✓	NLC
	14				✓	✓	✓	NLC
	15				✓	✓	✓	NLC
	16				✓	✓	✓	NLC
	17				✓	✓	✓	NLC
	18				✓	✓	✓	NLC
	19				✓	✓	✓	NLC
	20				✓	✓	✓	NLC
	21				✓	✓	✓	NLC
	22				✓	✓	✓	NLC
	52				✓	✓	✓	NLC
	53				✓	✓	✓	NLC
	54				✓	✓	✓	NLC

	55				✓	✓	✓	NLC
	56				✓	✓	✓	NLC
	57				✓	✓	✓	NLC
Flown:	28							

### Cumulative Domain Coverage

#### ABBY

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: 45% (20/44)

Green: 0% (0/44)

Yellow: 48% (21/44)

Red: 0% (0/44)

#### WREF\_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	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: 0% (0/57)

Yellow: 60% (34/57)

Red: 47% (27/57)

#### WREF\_P2

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	83														

Flown: 0% (0/26)

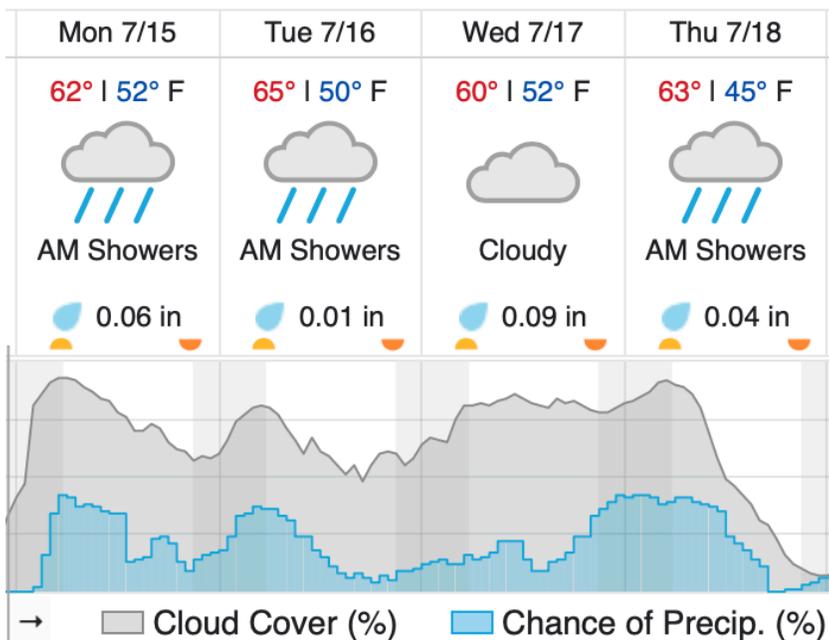
Green: 0% (0/26)

Yellow: 0% (0/26)

Red: 0% (0/26)

### Weather Forecast

Carson, WA



## **Flight Collection Plan for 15 July 2019**

### **Flyority 1:**

Collection Area: Wind River Experimental Forest (WREF) Priority 1, *if sky conditions are "green"*

Flight Plan Name: D16\_WREF\_C1\_P1\_v2\_east\_Q780

On-station Time: 1640 – 2350 UTC / 0940 – 1650 Local

### **Flyority 2:**

Collection Area: Abby Road (ABBY)

Flight Plan Name: D16\_ABBY\_R1\_P1\_v2\_Q780

On-station Time: 1640 – 2350 UTC / 0940 – 1650 Local

### **Flyority 3:**

Collection Wind River Experimental Forest (WREF) Priority 2

Flight Plan Name: D16\_WREF\_C1\_P2\_v2\_east\_Q780 / D16\_WREF\_C1\_P2\_v2\_west\_Q780

On-station Time: 1640 – 2350 UTC / 0940 – 1650 Local

**Crew:** Cameron Chapman (Lidar), Ivana Vu (NIS), Elissa Barris (Ground/GPS)