



## Payload 2 Daily Flight Report



**Date:** 2025-07-13

**Flight Campaign ID:** P2C1

**Airport, FBO ID, City:** Deadhorse Airport (PASC) - Deadhorse, AK

**Aircraft:** N615AR

**Domain:** 18 (Tundra)

**Sites Flown:** OKSR (Oksrukuyik Creek )

**Days left in Domain:** 23

**Report Author:** Alyssa

**Lidar Operators:** Alyssa

**Spectrometer Operators:** Nick

**Pilots:** Manning, Vince

**Flight Hours:** 02:29

**Hours until maintenance:** 80.15

**GPS Instruments:** C-EDOC, U-TLK2

### Summary

Flew OKSR with the new Lidar disk configuration (USB 3.0 for RiAcquire, Intel SSD for camera), none of the previous problems occurred. There was a repeating pop-up in sensor handler of "invalid floating point operation", but that didn't seem to impact sampling.

### Concerns

See Pictures section for invalid floating point error.

### Comments

All disk sets updated with new config, Lidar checklist updated to match.

### Daily Coverage

Estimated Cloud Cover Key

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

Solar Angle Less Than 40 degrees: (\*)

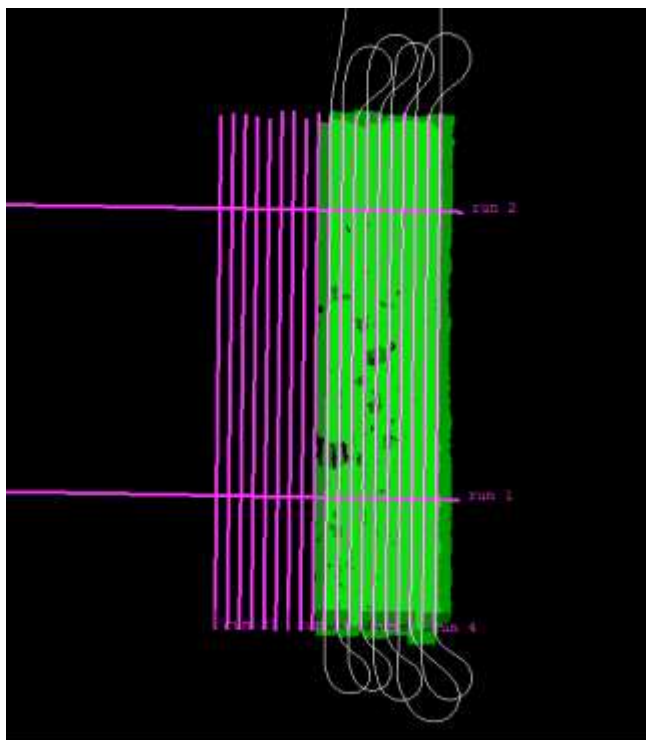
D18|OKSR

Line #	3	4	5	6	7	8	9	10	11	12
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover										

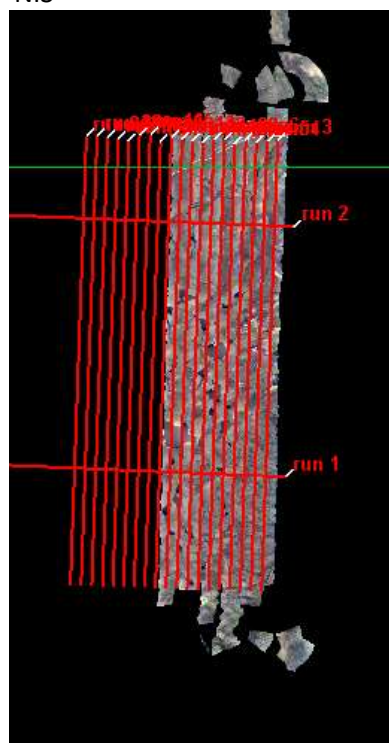
Total number of lines flown: 10

## Flight Screenshots

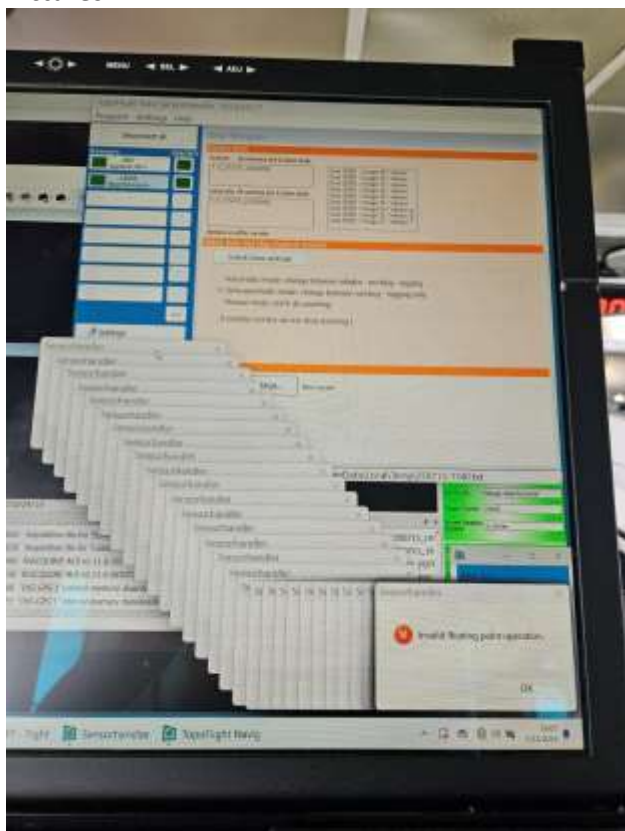
### Lidar



### NIS



## Pictures



← approx. 1,000,000 pop-ups

↓ very smoky day above OKSR



## Cumulative Domain Coverage

### D18|BARR\_P1 (Barrow Environmental Observatory 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					

Flown: 100% (35/35)

Green: 100% (35/35)

Yellow: 0% (0/35)

Red: 0% (0/35)

\* Flown within 35deg solar angle

### D18|BARR\_P2 (Barrow Environmental Observatory Priority 2)

36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
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Flown: 47% (7/15)

Green: 47% (7/15)

Yellow: 0% (0/15)

Red: 0% (0/15)

\* Flown within 35deg solar angle

### D18|BARR\_P3 ( )

51	52	53	54
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Flown: 0% (0/4)

Green: 0% (0/4)

Yellow: 0% (0/4)

Red: 0% (0/4)

\* Flown within 35deg solar angle

### D18|OKSR (Oksrukuyik Creek )

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21																			

Flown: 90% (19/21)

Green: 43% (9/21)

Yellow: 0% (0/21)

Red: 48% (10/21)

\* Flown within 35deg solar angle

### D18|TOOL (Toolik )

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									

Flown: 98% (50/51)

Green: 98% (50/51)

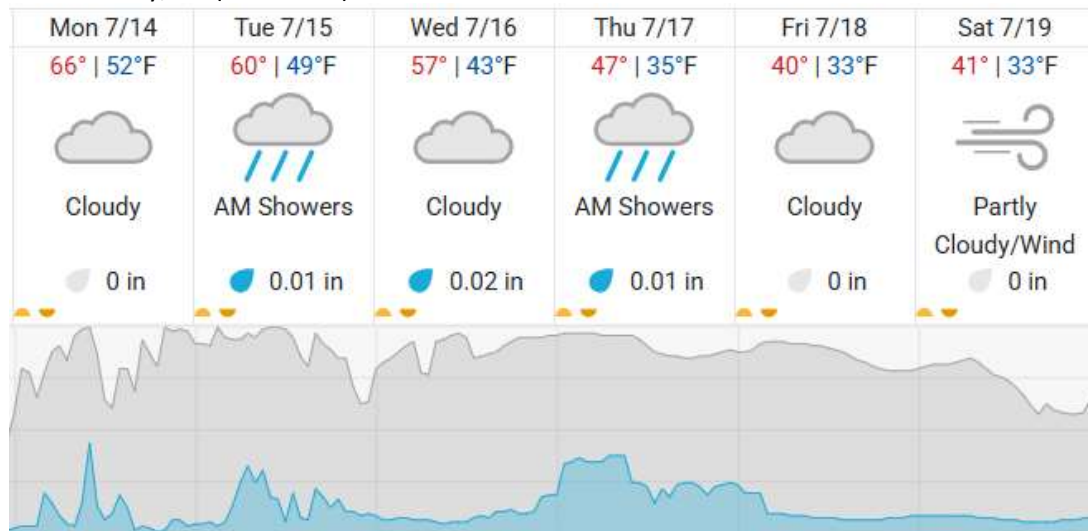
Yellow: 0% (0/51)

Red: 0% (0/51)

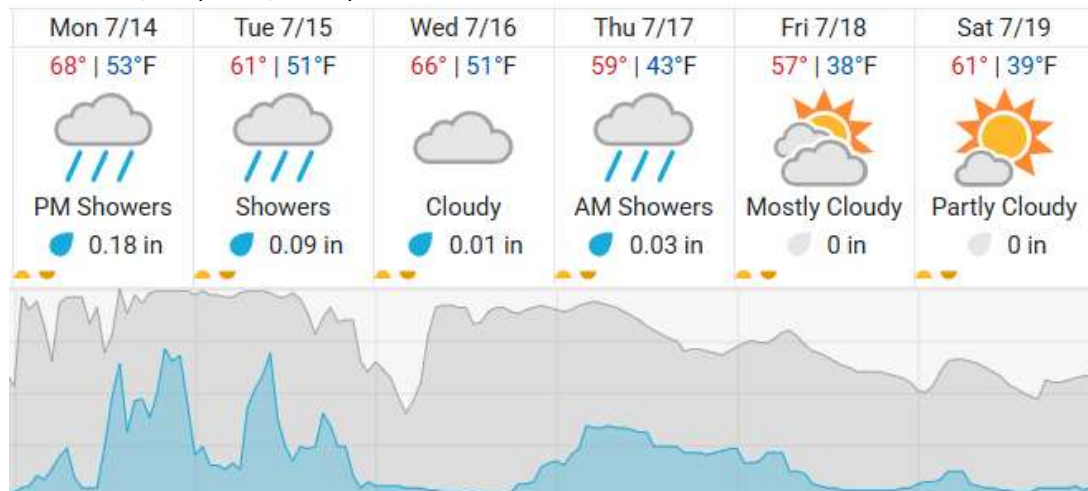
\* Flown within 35deg solar angle

## Weather Forecast

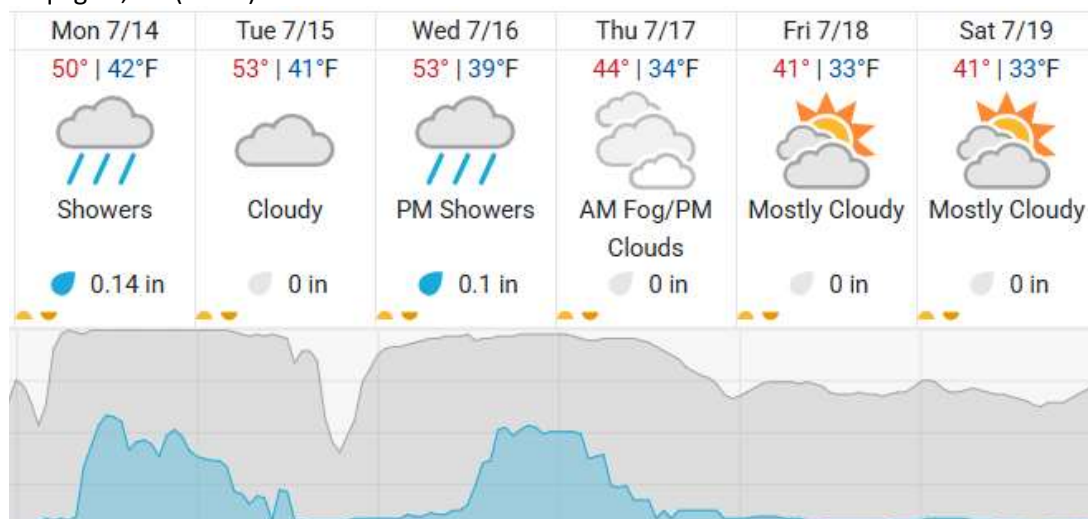
Prudhoe Bay, AK (FBO-PASC)



Toolik Lake, AK (TOOL, OKSR)



Utqiagvik, AK (BARR)



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

## **Flight Collection Plan for July 2025**

### **Flyority 1**

Collection Area: Barrow Environmental Observatory (BARR) - Priority 1 Flight Box (*once in peak greenness*)

Flight Plan Name: D18\_BARR\_R1\_P1\_P2\_P3\_v6\_VQ780

On-Station Time: (35 degrees): 1950 UTC / 1150 L

### **Flyority 2**

Collection Area: Barrow Environmental Observatory (BARR) - Priority 2 Flight Box

Flight Plan Name: D18\_BARR\_R1\_P2\_v5\_Q780.pln

On-Station Time: (35 degrees): 1950 UTC / 1150 L

### **Flyority 3**

Collection Area: Barrow Environmental Observatory (BARR) - Priority 3 Flight Box

Flight Plan Name: D18\_BARR\_R1\_P3\_v5\_Q780.pln

On-Station Time: (35 degrees): 1950 UTC / 1150 L

### **Flyority 4**

Collection Area: Oksrukuyik Creek (OKSR) - Lines 3-12, green conditions only

Flight Plan Name: D18\_OKSR\_A1\_P1\_v3\_VQ780

On-Station Time: (35 degrees): 1900 UTC / 1100 L

**Crew:** Nick (Lidar), Alyssa (NIS)