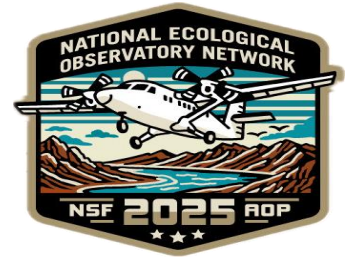




Payload 2 Daily Flight Report



Date: 2025-07-05

Flight Campaign ID: P2C1

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

Aircraft: N615AR

Domain: 18 (Tundra)

Sites Flown: TOOL (Toolik)

Days left in Domain: 31

Report Author: Elissa

Lidar Operators: Elissa

Spectrometer Operators: Alyssa

Pilots: Vince, Manning

Flight Hours: 04:23

Hours until maintenance: 87.17

GPS Instruments: C-EDOC, U-TLK2

Summary

The remaining 23 lines of the Toolik site were collected in green conditions. Camera was not operated.

Concerns

- Unable to format the camera disk from Disk Set 7. The inability to either complete or interrupt the formatting attempt forced an improper shutdown of the IX Controller. The camera disk from Disk Set 4 was used with no attempt made at formatting, but rather manual deletion of data.
- Erratic current and voltage readings and flashing LEDs occurred on the BSE during one of today's several reboots.
- Despite further verifying camera settings, reloading the previous RiAcquire project file, and attempting manual camera operation, the same camera communication error repeatedly occurred.

Comments

After today's flight a TeamViewer session was held with Travis from Riegl to investigate the camera issue. Primary suspect is the Samsung SSD drives which are known by Riegl to be prone to failure. The IX Controller computer itself could also be problematic, possibly resulting from bad shut downs related either to camera disk failed formatting or interruptions in power from the BSE. It was confirmed that at the moment the camera is not operational. Incoming crew to D18 will hand carry higher quality SSDs, and a spare IX Controller just in case. In the meantime collections will be continued without the camera.

Daily Coverage

Estimated Cloud Cover Key

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

Solar Angle Less Than 40 degrees: (*)

D18|TOOL

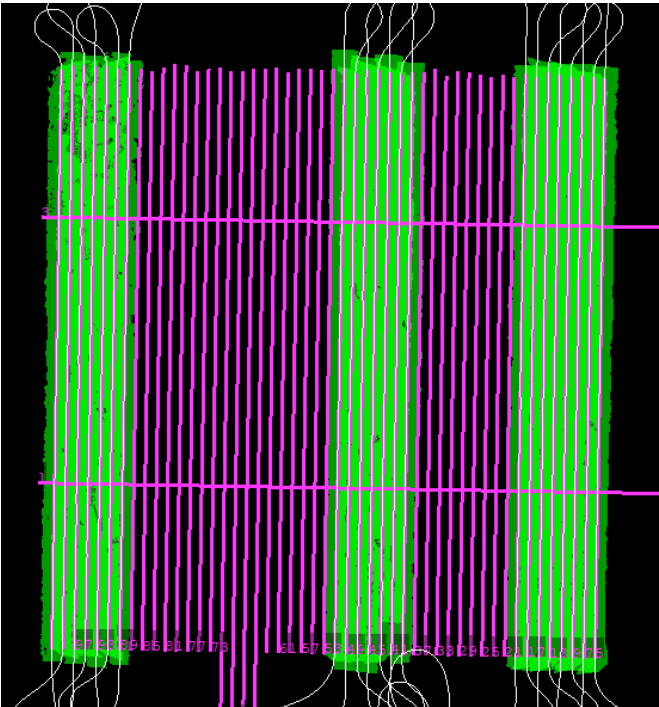
Line #	3	4	5	6	7	8	9	10	20	21	22	23	24	25	26	45	46	47	48	49
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera																				
Cloud Cover																				

Line #	50	51
Lidar	✓	✓
Spectrometer	✓	✓
Camera		
Cloud Cover		

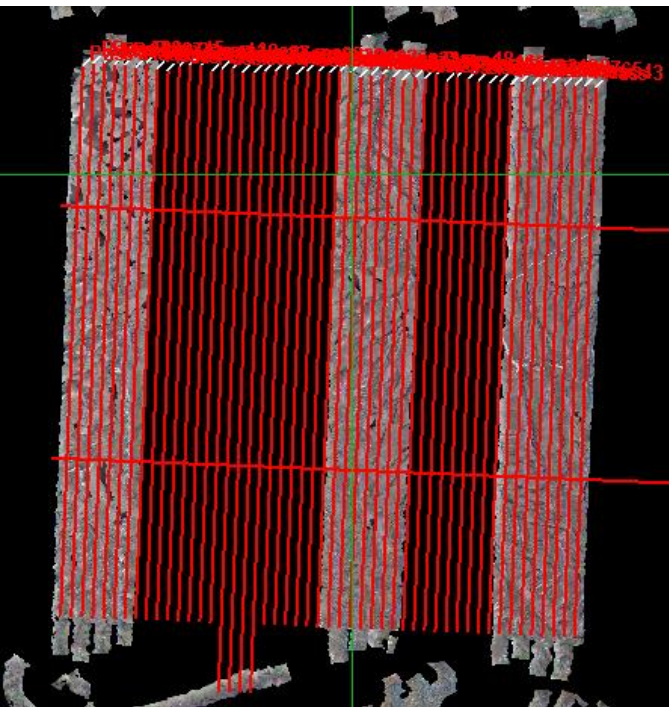
Total number of lines flown: 22

Flight Screenshots

Lidar



NIS



Pictures



Cumulus and light haze over the Brooks Range did not impinge on the site during our flight.

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: 0% (0/21)
Green: 0% (0/21)
Yellow: 0% (0/21)
Red: 0% (0/21)
* Flown within 35deg solar angle

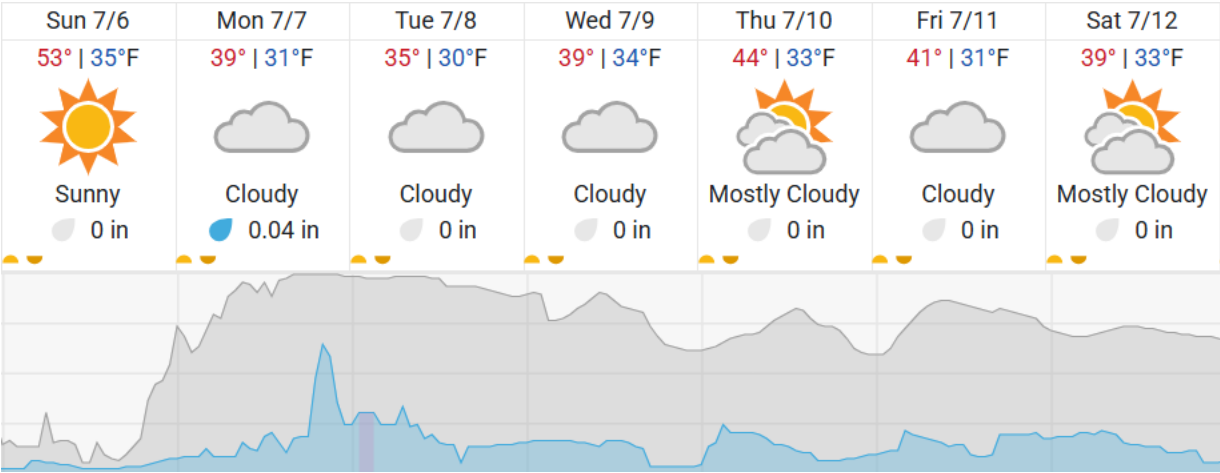
D18|TOOL (Toolik)

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									

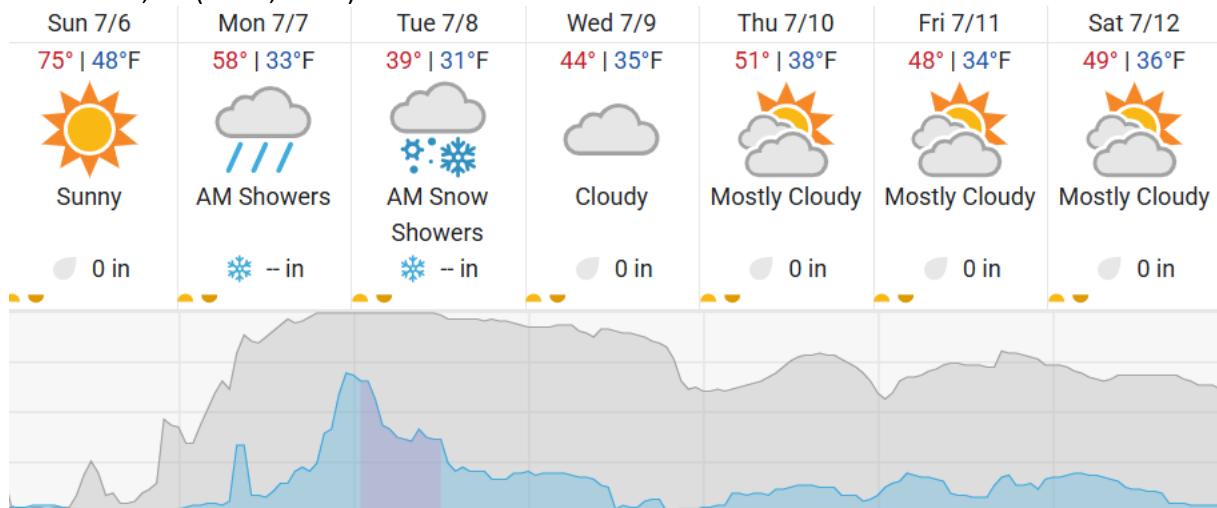
Flown: 98% (50/51)
Green: 75% (38/51)
Yellow: 16% (8/51)
Red: 8% (4/51)
* Flown within 35deg solar angle

Weather Forecast

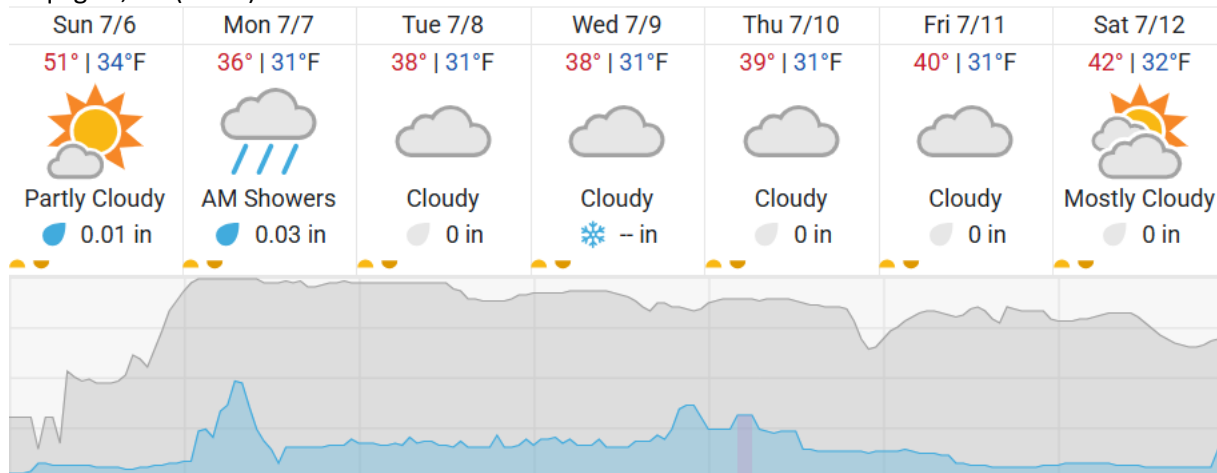
Prudhoe Bay, AK (FBO-PASC)



Toolik Lake, AK (TOOL, OKSR)



Utqiagvik, AK (BARR)



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

Flight Collection Plan for 6 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): 1930 UTC / 1130 L

Flyority 2

Collection Area: Toolik (TOOL) Lines 27, 34-44 (*only if green*)

Flight Plan Name: D18_TOOL_C1_P1_v4_VQ780

On-Station Time: (35 degrees): 1840 UTC / 1040 L

Flyority 3

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): 1930 UTC / 1130 L

Flyority 4

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): 1930 UTC / 1130 L

Flyority 5

Collection Area: Oksrukuyik Creek (OKSR)

Flight Plan Name: D18_OKSR_A1_P1_v3_VQ780

On-Station Time: (35 degrees): 1840 UTC / 1040 L

Crew: Alyssa (Lidar), Elissa (NIS)