



Payload 1 Daily Flight Report



Date: 2022-08-03
Flight Campaign ID: P1C1
Airport, FBO ID, City: Deadhorse Airport (PASC) - Deadhorse, AK
Aircraft: N331AR

Domain: 18 (Tundra)
Sites Flown: TOOL (Toolik)
Days left in Domain: 19

Report Author: Cameron
Lidar Operators: Cameron **Flight Hours:** 04:48
Spectrometer Operators: Abe **Hours until maintenance:** 80.95
Pilots: Jeremy, Vince **GPS Instruments:** 04 - FBO_PASC, U-TLK2
Ground Crew: Mike

Summary

The crew took advantage of weather over the TOOL site and collected 22 lines in red sky conditions.

Concerns

- The trackball stopped working on the Lidar Crystal computer.
- The first waveform digitizer disk filled up. After changing to the spare disk, an overflow buffer occurred thereafter with that disk. The waveform data appeared to collect despite this error. Return pulses were observed coupled with an increase in disk usage.
- The flight plan for TOOL has a line numbering issue. The segments appear to be in reverse order causing a mismatch with the PDF.

Comments

- Cameron departs tomorrow.

Daily Coverage


Estimated Cloud Cover Key

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

D18|TOOL

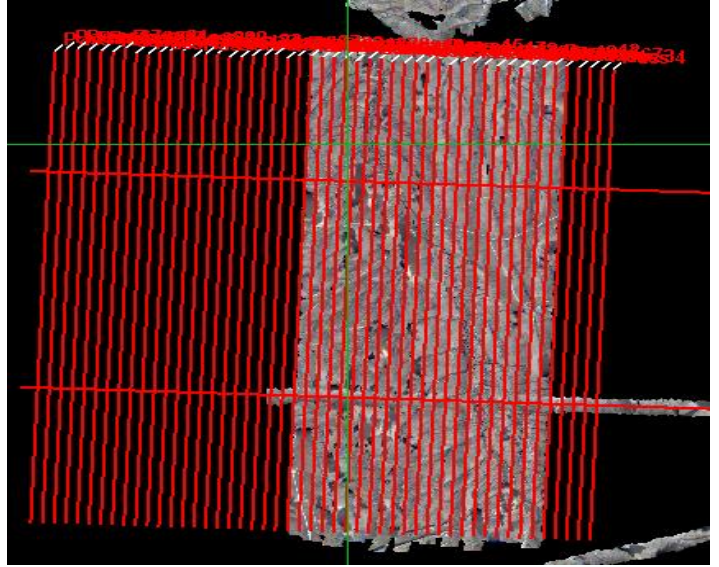
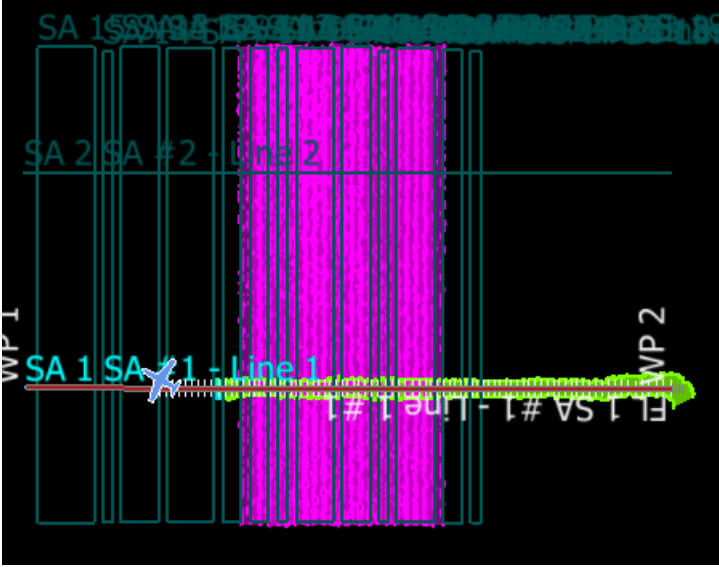
Line #	1	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover																				

Line #	27	28
Lidar	✓	✓
Spectrometer	✓	✓
Camera	✓	✓

Cloud Cover 

Total number of lines flown: 22

Flight Screenshots



Pictures



Left: Crew watched the clouds roll in over the Brooks Range.



Right: Crew spotted the TOOL tower from the air!



Top: Beautiful views over the TOOL site today! Minus all the clouds!
 Bottom: Coming in for a landing in Deadhorse



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: 0% (0/35)
 Green: 0% (0/35)
 Yellow: 0% (0/35)
 Red: 0% (0/35)

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: 0% (0/15)
 Green: 0% (0/15)
 Yellow: 0% (0/15)
 Red: 0% (0/15)

D18|BARR_P3 ()

54	55	56	57
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Flown: 0% (0/4)
 Green: 0% (0/4)
 Yellow: 0% (0/4)
 Red: 0% (0/4)

D18|N18A (D18 Nominal Runway)

1

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

D18|OKSR (Oksrukuyik Creek)

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

Flown: 0% (0/21)
 Green: 0% (0/21)
 Yellow: 0% (0/21)
 Red: 0% (0/21)

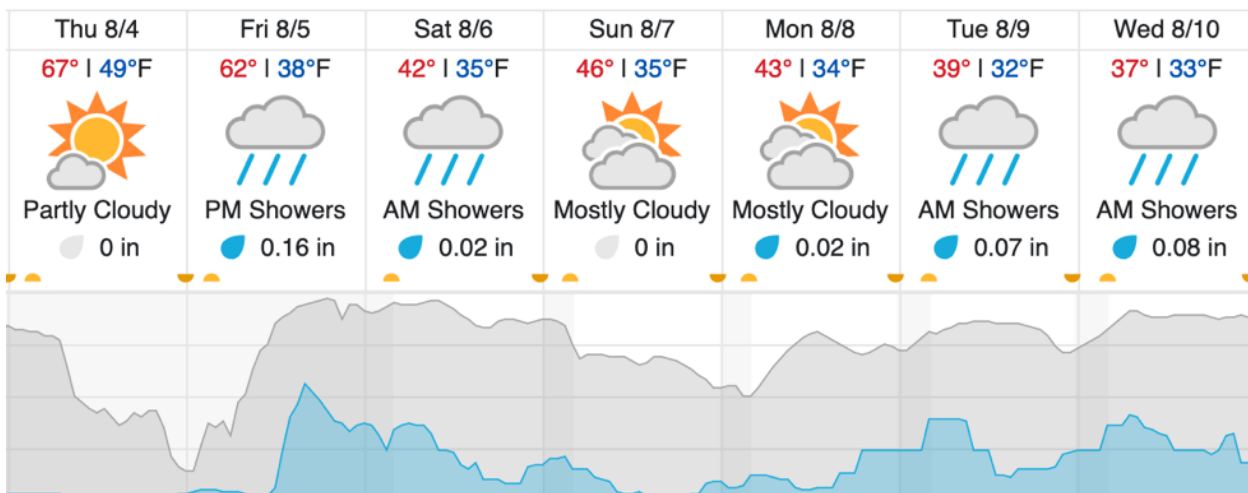
D18|TOOL (Toolik)

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												

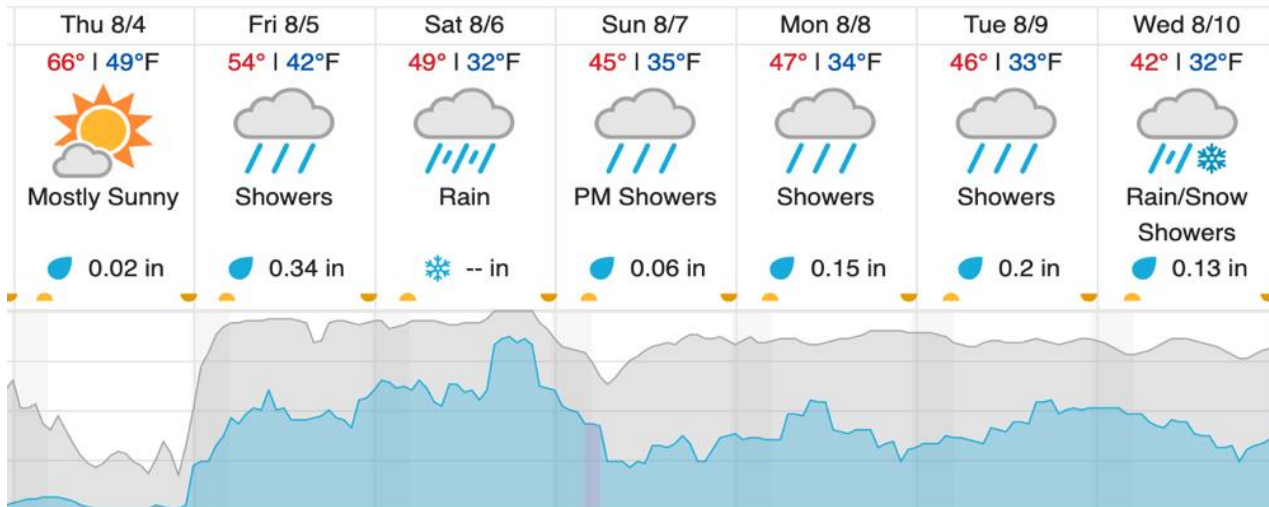
Flown: 46% (22/48)
 Green: 0% (0/48)
 Yellow: 0% (0/48)
 Red: 46% (22/48)

Weather Forecast

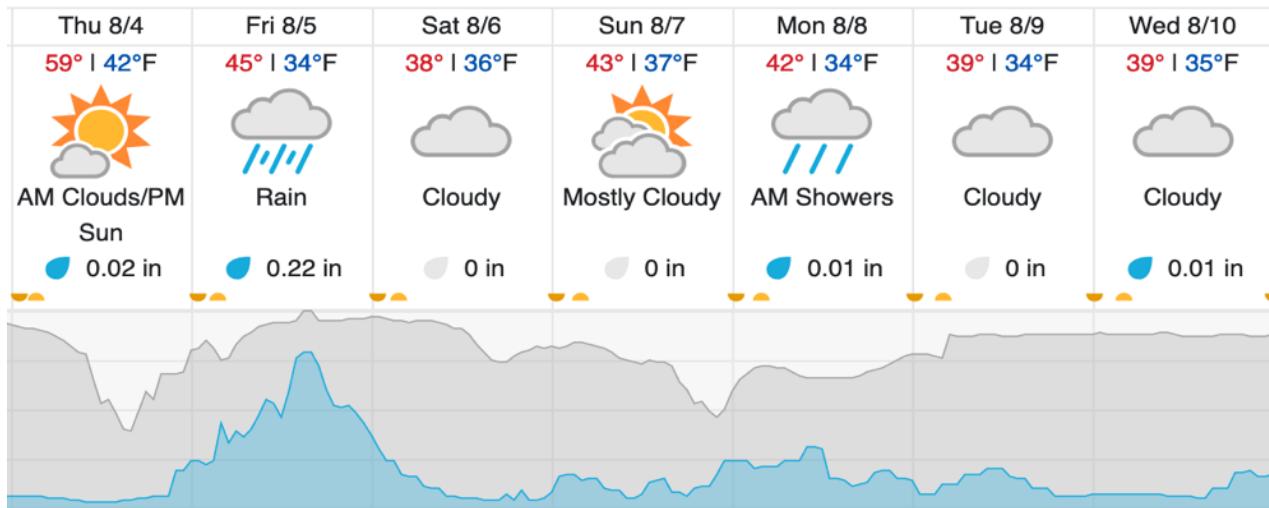
Deadhorse, AK (FBO)



Alyeska Pipeline PS-02 Station (TOOL)



Utqiagvik, AK (BARR)



source: wunderground.com

Flight Collection Plan for 4 August 2022

Flyority 1/2

Collection Area: Toolik Lake (TOOL)
 Flight Plan Name: D18_TOOL_C1_P1_v3_PRM.xml
 On-station Time: 1930 UTC / 1130 L (35deg)

Flyority 1/2

Collection Area: Barrow Environmental Observatory (BARR) – P1 Flight Box
 Flight Plan Name: D18_BARR_R1_P1_P2_P3_v5_PRM.xml
 On-station Time: 2030 UTC / 1230 L (35deg)

Flyority 3

Collection Area: Oksrukuyik Creek (OKSR)
 Flight Plan Name: D18_OKSR_A1_P1_v2_PRM
 On-station Time: 1930 UTC / 1130 L (35deg)

Flyority 4

Collection Area: Barrow Environmental Observatory (BARR) – P2 Flight Box

Flight Plan Name: D18_BARR_R1_P1_P2_P3_v5_PRM.xml

On-station Time: 2030 UTC / 1230 L (35deg)

Flyority 5

Collection Area: Barrow Environmental Observatory (BARR) – P3 Flight Box

Flight Plan Name: D18_BARR_R1_P1_P2_P3_v5_PRM.xml

On-station Time: 2030 UTC / 1230 L (35deg)

Flyority 6

Collection Area: Nominal Runway – D18

Flight Plan Name: D18_N18A_Nominal_Runway_Test_v1_PRM.xml

On-station Time: N/A

Crew: Abe (Lidar), Mike (NIS)