



Payload 1 Daily Flight Report



Date: 2024-07-22

Flight Campaign ID: P1C1

Airport, FBO ID, City: Fairbanks International Airport (PAFA) - Fairbanks, AK

Aircraft: N615AR

Domain: 19 (Taiga)

Sites Flown: BONA (Caribou Creek and Poker Flats Watershed)

Days left in Domain: 8

Report Author: Mitch

Lidar Operators: Mitch

Flight Hours: 03:27

Spectrometer Operators: Abe

Hours until maintenance: 87.60

Pilots: Jeff, Will

GPS Instruments: C-FAI1, U-PFR2

Summary

The crew was able to take advantage of good weather and complete initial coverage over the BONA flight box. While there were minimal clouds overhead during today's flight, a thick haze/smoke layer prevented a possible green collect.

Concerns

- The waveform recorded froze up twice during today's flight and required restarts both times. Crew continued collecting without waveform data as restarts occurred.
- A replacement GPU for our malfunctioning hangar GPU will be sent ahead to Nashua in advance of D01 collects. We will use Alaska Aerofuel's GPU for the remainder of D19.

Comments

Mike departs Fairbanks this evening. Thanks for all the hard work, Mike!

Daily Coverage

Estimated Cloud Cover Key

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

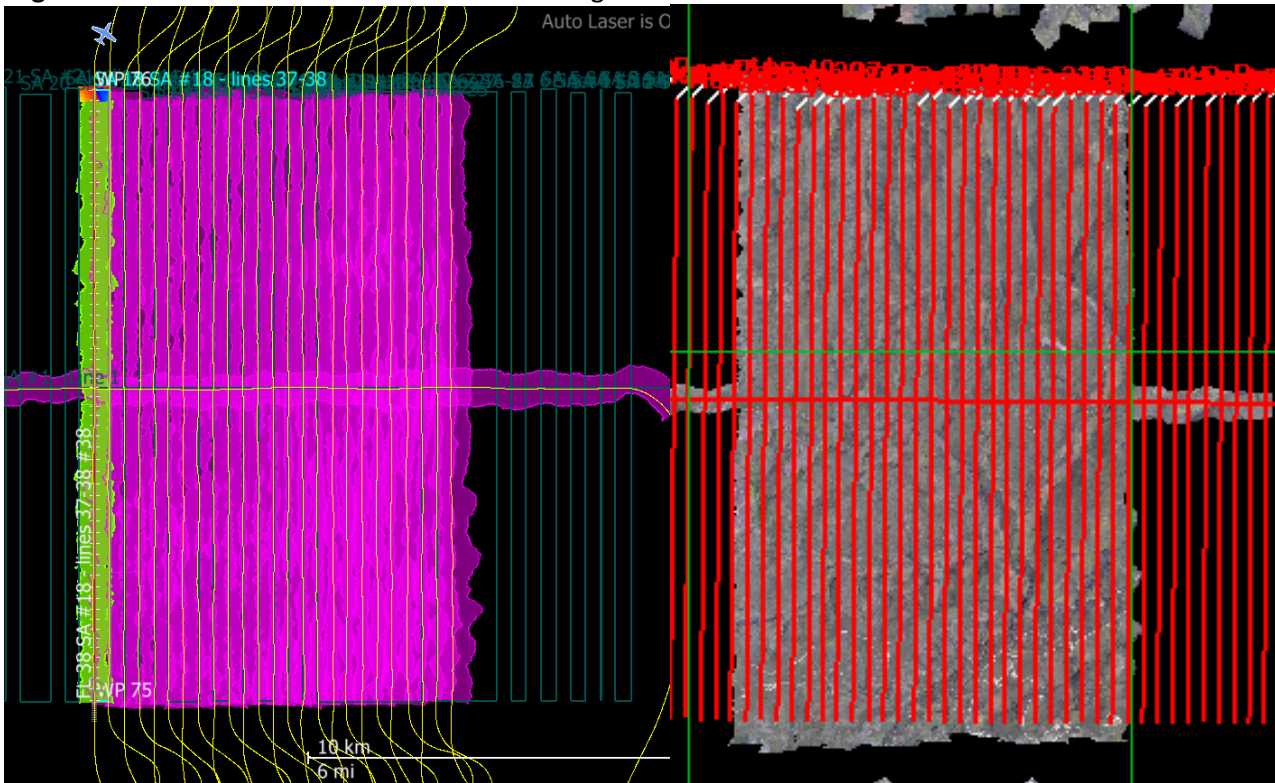
D19|BONA

Line #	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover																					

Line #	34	35	36	37	38
Lidar	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓
Cloud Cover					

Total number of lines flown: 25

Flight Screenshots: Lidar on the left. NIS on the right.



Pictures: Looking up the Caribou-Poker Creeks Watershed (BONA) within the Bonanza Creek LTER.



NEON Tower at BONA just barely visible in the lower central portion of the photo, on the valley floor.



Cumulative Domain Coverage

D19|BONA (Caribou Creek and Poker Flats Watershed)

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														

Flown: 100% (46/46)

Green: 0% (0/46)

Yellow: 76% (35/46)

Red: 24% (11/46)

D19|DEJU (Delta Junction)

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

Flown: 100% (21/21)

Green: 33% (7/21)

Yellow: 67% (14/21)

Red: 0% (0/21)

D19|HEAL (Healy)

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							

Flown: 100% (33/33)
 Green: 0% (0/33)
 Yellow: 15% (5/33)
 Red: 85% (28/33)

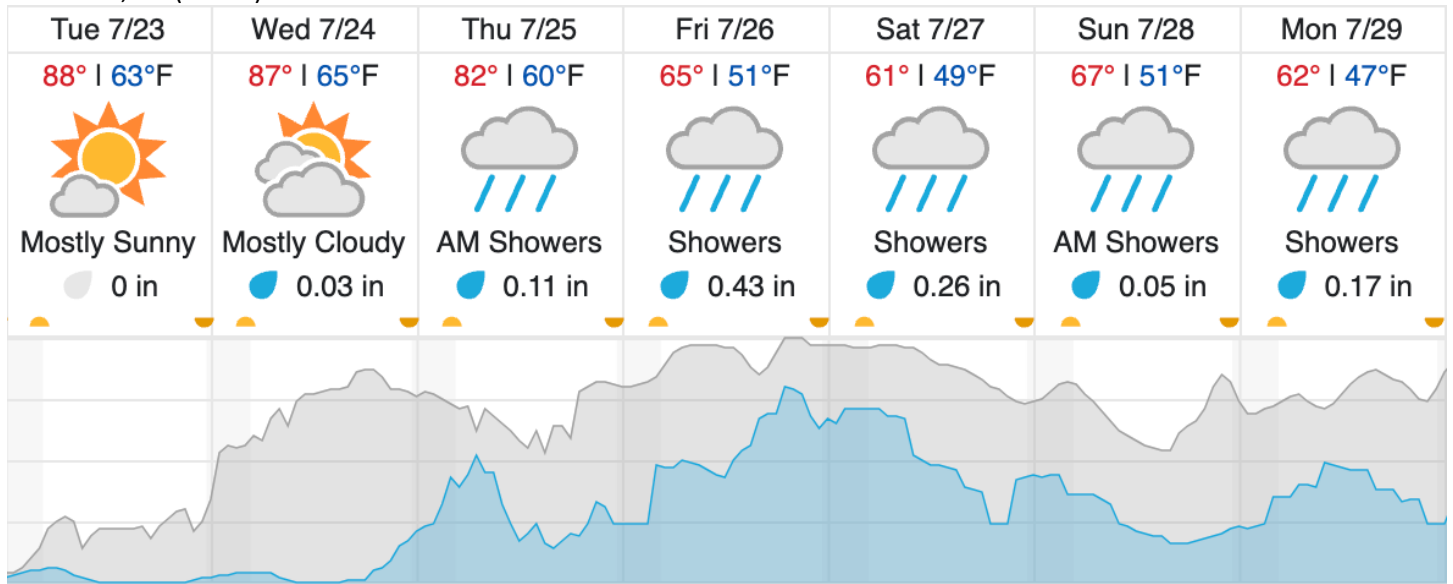
D19|N19A (D19 Nominal Runway)

1 2

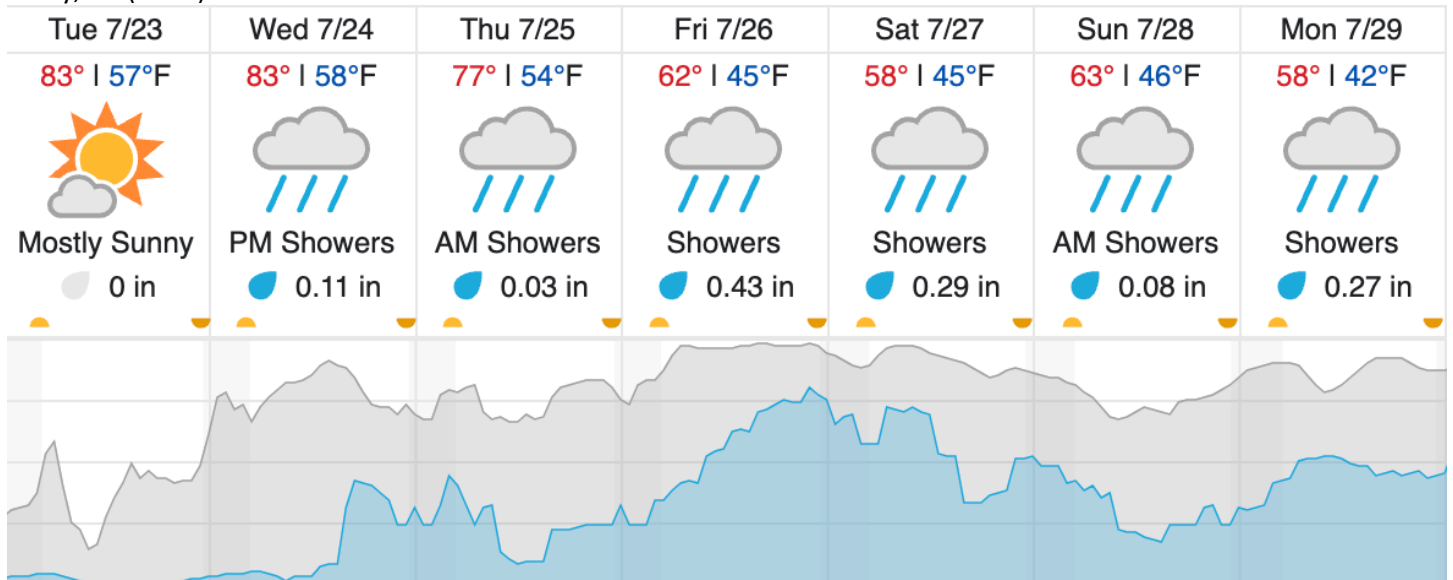
Flown: 100% (2/2)
 Green: 0% (0/2)
 Yellow: 100% (2/2)
 Red: 0% (0/2)

Weather Forecast

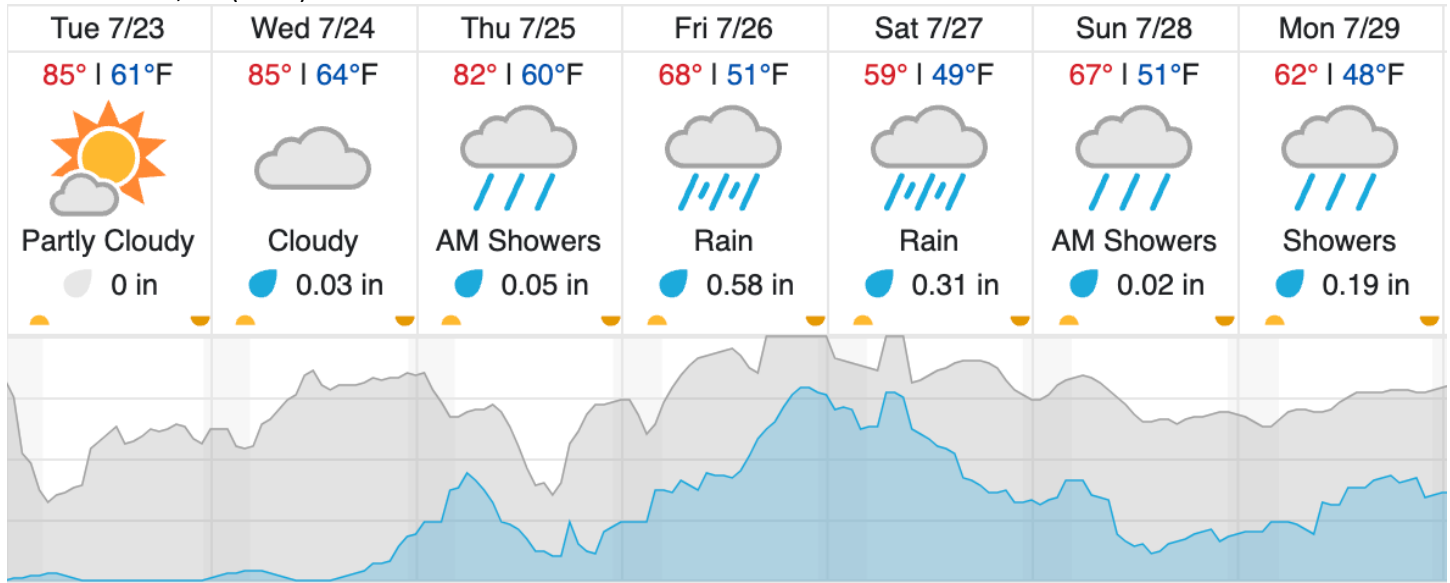
Fairbanks, AK (BONA)



Healy, AK (HEAL)



Delta Junction, AK (DEJU)



source: wunderground.com

Flight Collection Plan for 23 July 2024

Flyority 1

Collection Area: Caribou Creek – Poker Flats Watershed (BONA) *if green conditions present

Flight Plan Name: D19_BONA_C1_P1_v2_PRM.xml

On-Station Time: 10:50 L / 18:50 UTC

Flyority 2

Collection Area: Healy (HEAL) *if green conditions present

Flight Plan Name: D19_HEAL_R3_P1_v2_PRM.xml

On-Station Time: 10:50 L / 18:50 UTC

Flyority 3

Collection Area: Delta Junction (DEJU) – Priority Flight Box 1 *lines 9-10 if green conditions present

Flight Plan Name: D19_DEJU_R1_P1_P2_v6_PRM.xml

On-Station Time: 10:40 L / 18:40 UTC

Flyority 4

Collection Area: Delta Junction (DEJU) – Priority Flight Box 2 * if green conditions present

Flight Plan Name: D19_DEJU_R1_P1_P2_v6_PRM.xml

On-Station Time: 10:40 L / 18:40 UTC

Crew: Abe (Lidar), Mitch (NIS)