



## July 31, 2019 Payload 2 Daily Flight Report



**Date:** 2019-07-31

**Flight Campaign ID:** 2019\_P2C1

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

**Domain:** 19

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

**Days left in Domain:** 20

**Report Author:** Abe Morrison

**Flight Crew:** Abe Morrison, Robb Walker

**Flight Hours:** 02:27

**Ground/GPS:**

**Hours until maintenance:** 41.93

**Pilots:** Wesley Wyatt, Mark Solper

**Additional Personnel:**

**GPS Instruments:** C-FAI1, C-SUAF, UAF-PFR2

### Summary

The crew took advantage of higher clouds today and was able to collect 13 lines and a cross strip under red sky conditions at the BONA site. Unfortunately the flight was cut short when the spectrometer pressure reading suddenly jumped out of specs. The jump in pressure resolved itself after landing, and with coordination of HQ staff was determined to be a known fault with the pressure sensor. The NIS will be pumped down and the getter will be re-activated to prevent this from happening again.

### Concerns

- The Mars Rover software crashed at the beginning of the flight in the middle of the cross strip. The software was restarted and had no further problems.
- The NIS pressure unexpectedly jumped out of specs during the flight today. The jump in pressure resolved itself after landing and with coordination of HQ staff was determined to be a known fault with the pressure sensor. The NIS will be pumped down and the getter has been re-activated.

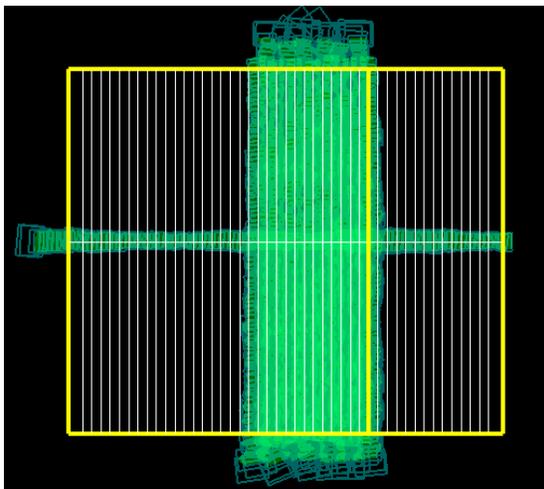
### Comments

- Lines 15-27 collected at BONA in red sky conditions.

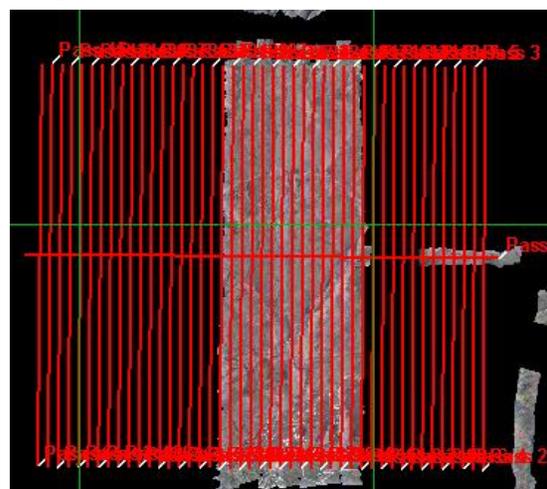
### Flight Screenshots

BONA

LIDAR



NIS



## Daily Coverage

D19 BONA	Line	SpecG	SpecY	SpecR	NIS	Lidar	Camera	Cumulative
	1				✓	✓	✓	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
Flown:	14							

## Cumulative Domain Coverage

### BONA

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: 30% (14/46)

Green: 0% (0/46)

Yellow: 0% (0/46)

Red: 30% (14/46)

### DEJU

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								

Flown: 0% (0/32)

Green: 0% (0/32)

Yellow: 0% (0/32)

Red: 0% (0/32)

### HEAL

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: 70% (23/33)

Green: 0% (0/33)

Yellow: 0% (0/33)

Red: 70% (23/33)

### N19A

1
---

Flown: 0% (0/1)

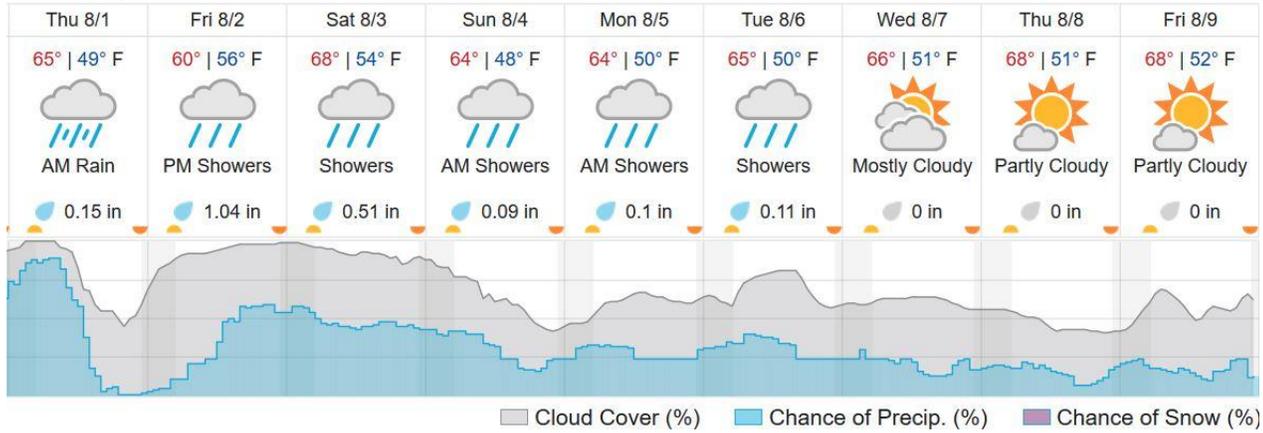
Green: 0% (0/1)

Yellow: 0% (0/1)

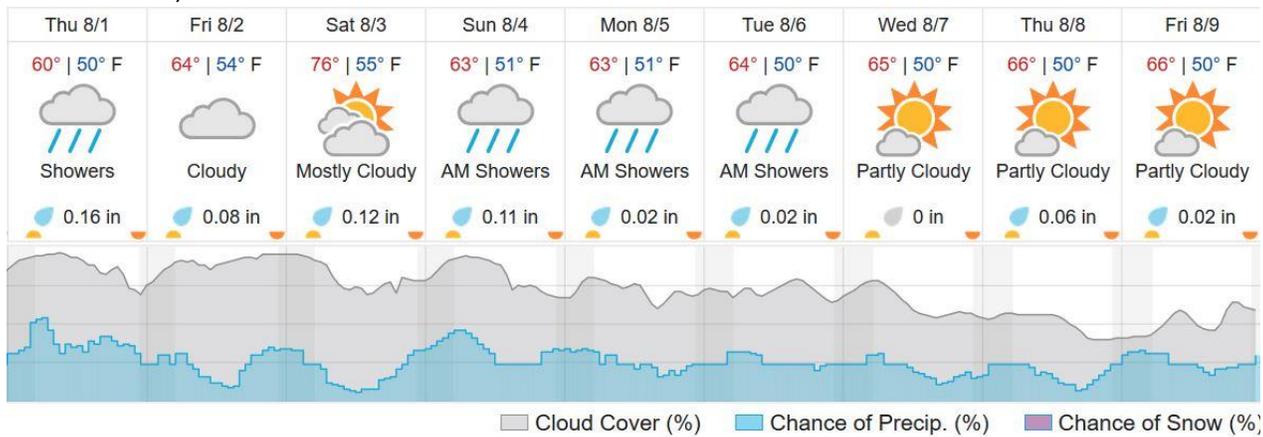
Red: 0% (0/1)

## Weather Forecast

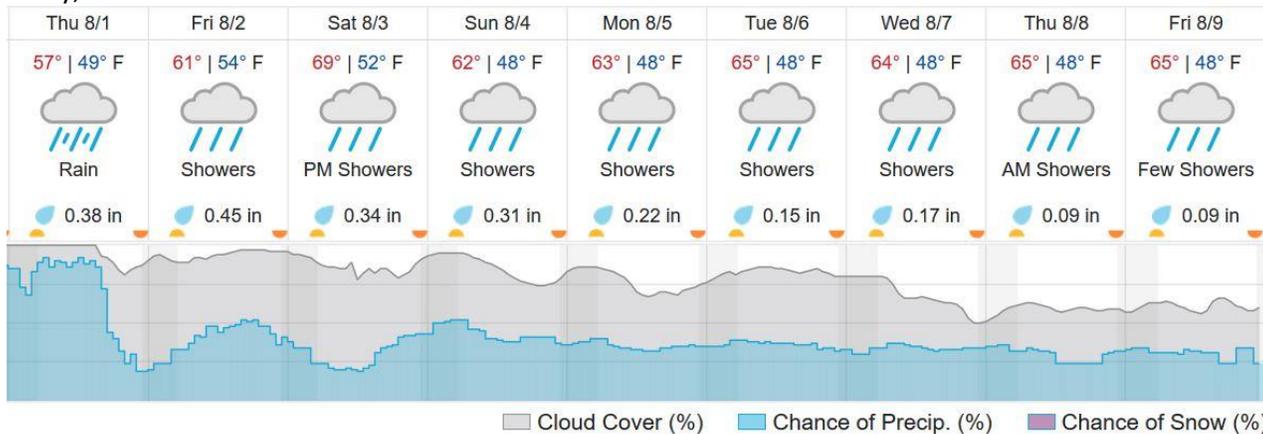
### Fairbanks, AK



### Delta Junction, AK



### Healy, AK



### **Flight Collection Plan for 1 August 2019**

#### **Flyority 1:**

Collection Area: Caribou Creek-Poker Flats Watershed (BONA)

Flight Plan Name: D19\_BONA\_C1\_P1\_730max\_v2.pln

On-station Time: 18:53 UTC / 10:53 L (35deg solar angle)

#### **Flyority 2:**

Collection Area: Delta Junction (DEJU)

Flight Plan Name: D19\_DEJU\_R1\_P1\_730max\_v3.pln

On-station Time: 18:41 UTC / 10:41 L (35deg solar angle)

#### **Flyority 3:**

Collection Area: Healy (HEAL) 1-11

Flight Plan Name: D19\_HEAL\_R3\_P1\_730max\_v1.pln

On-station Time: 18:53 UTC / 10:53 L (35deg solar angle)

#### **Flyority 4:**

Collection Area: Nominal Runway – D19

Flight Plan Name: D19\_N19A\_Nominal\_Runway\_Test\_v1.pln

On-station time: N/A

**Crew:** Robb Walker (Lidar), Abe Morrison (NIS)

### **Flight Collection Plan for 2 August 2019**

**Flyority 1-4:** Same as previously briefed

**Crew:** Abe Morrison (Lidar), Robb Walker (NIS)