



July 12, 2019 Payload 2 Daily Flight Report



Date: 2019-07-12

Flight Campaign ID: 2019_P2C1

Airport, FBO ID, City: Wiley Post-Will Rogers Memorial (PABR) - Barrow, AK

Domain: 18

Sites Flown: BARR_P1 (Barrow Environmental Observatory Priority 1), BARR_P2 (Barrow Environmental Observatory Priority 2), BARR_P3 (Barrow Environmental Observatory Priority 3)

Days left in Domain: 15

Report Author: Michael Wussow

Flight Crew: Michael Wussow, Matt Devoe

Ground/GPS: None

Pilots: Mark Solper, Stephen Brawders

GPS Instruments: C-BRW1

Flight Hours: 01:17, 03:55, 01:30

Hours until maintenance: 55.15

Summary

With great weather along the coast of the Arctic Ocean, the remaining 43 lines were collected at Barrow, completing coverage there. While conditions seemed to be as good as they get, there were a few very thin layers of cirrus and the conditions were conservatively deemed yellow, although nearly green.

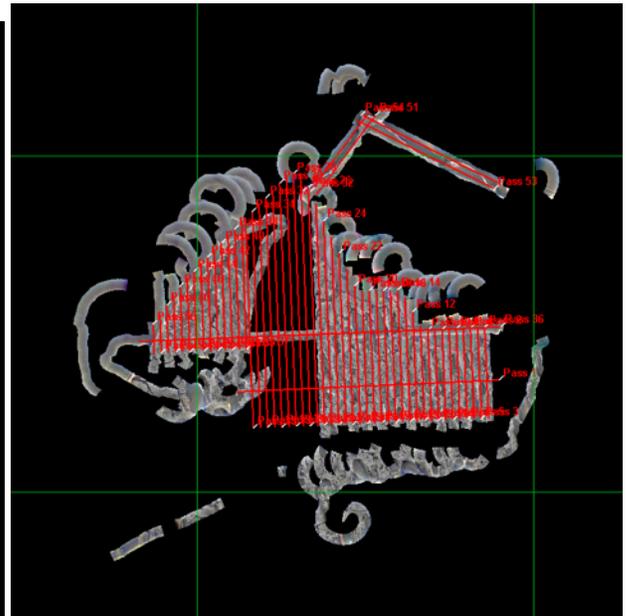
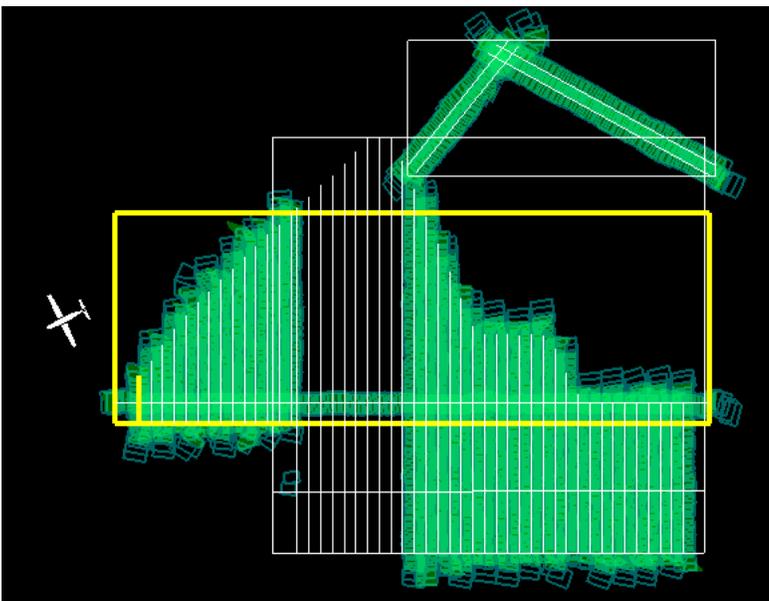
Concerns

NIS waterfall was exhibiting odd behavior during first in-air test. After restarting the DCC, there were more streaking lines in the waterfall than usual. After collecting lights, darks, lasers, and interim, the system seemed to right itself and was used for collection.

Comments

Hannah Gerrish of NEON, stationed in Barrow this summer, along with graduate and undergraduate students from UTEP were able to join us for a tour during a fuel stop in Barrow!

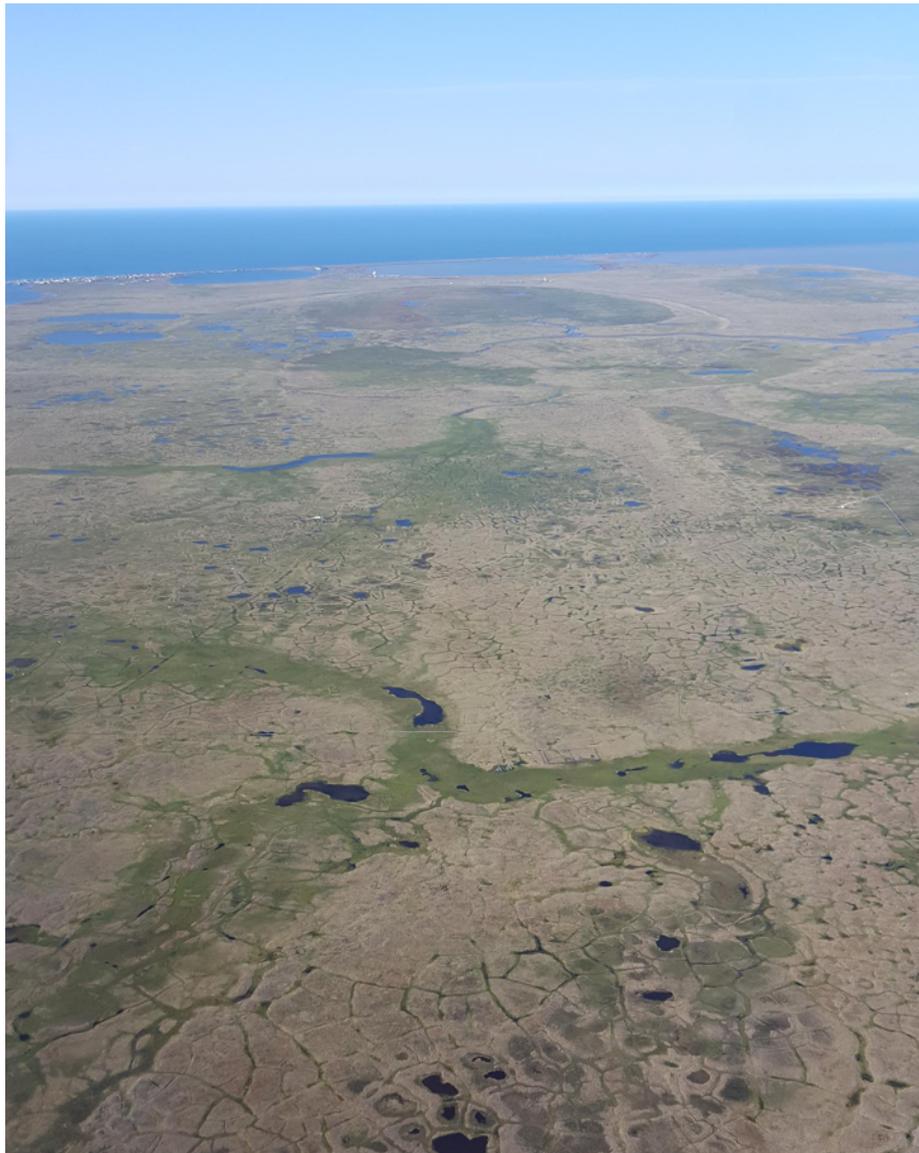
Flight Screenshots



Pictures



NEON staff and UTEP students visiting the Otter today



Barrow Environmental Observatory where NEON Tower is located (center left)

Daily Coverage

D18 BARR_P1	Line	SpecG	SpecY	SpecR	NIS	Lidar	Camera	Cumulative
	2				✓	✓	✓	NLC
	3				✓	✓	✓	NLC
	4				✓	✓	✓	NLC
	5				✓	✓	✓	NLC
	6				✓	✓	✓	NLC
	7				✓	✓	✓	NLC
	8				✓	✓	✓	NLC
	9				✓	✓	✓	NLC
	10				✓	✓	✓	NLC
	11				✓	✓	✓	NLC
	12				✓	✓	✓	NLC
	13				✓	✓	✓	NLC
	14				✓	✓	✓	NLC
	15				✓	✓	✓	NLC
	16				✓	✓	✓	NLC
	17				✓	✓	✓	NLC
	18				✓	✓	✓	NLC
	19				✓	✓	✓	NLC
	20				✓	✓	✓	NLC
	21				✓	✓	✓	NLC
	22				✓	✓	✓	NLC
	23				✓	✓	✓	NLC
	24				✓	✓	✓	NLC
	25				✓	✓	✓	NLC
Flown:	24							
D18 BARR_P2	Line	SpecG	SpecY	SpecR	NIS	Lidar	Camera	Cumulative
	36				✓	✓	✓	NLC
	37				✓	✓	✓	NLC
	38				✓	✓	✓	NLC
	39				✓	✓	✓	NLC
	40				✓	✓	✓	NLC
	41				✓	✓	✓	NLC
	42				✓	✓	✓	NLC
	43				✓	✓	✓	NLC
	44				✓	✓	✓	NLC
	45				✓	✓	✓	NLC
	46				✓	✓	✓	NLC
	47				✓	✓	✓	NLC
	48				✓	✓	✓	NLC
	49				✓	✓	✓	NLC
	50				✓	✓	✓	NLC
Flown:	15							
D18 BARR_P3	Line	SpecG	SpecY	SpecR	NIS	Lidar	Camera	Cumulative
	51				✓	✓	✓	NLC
	52				✓	✓	✓	NLC

	53				✓	✓	✓	NLC
	54				✓	✓	✓	NLC
Flown:	4							

Cumulative Domain Coverage

BARR_P1

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: 0% (0/35)
 Yellow: 100% (35/35)
 Red: 0% (0/35)

BARR_P2

36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
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Flown: 127% (19/15)
 Green: 0% (0/15)
 Yellow: 127% (19/15)
 Red: 0% (0/15)

BARR_P3

51	52	53	54
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Flown: 100% (4/4)
 Green: 0% (4/4)
 Yellow: 100% (4/4)
 Red: 0% (4/4)

N18A

1

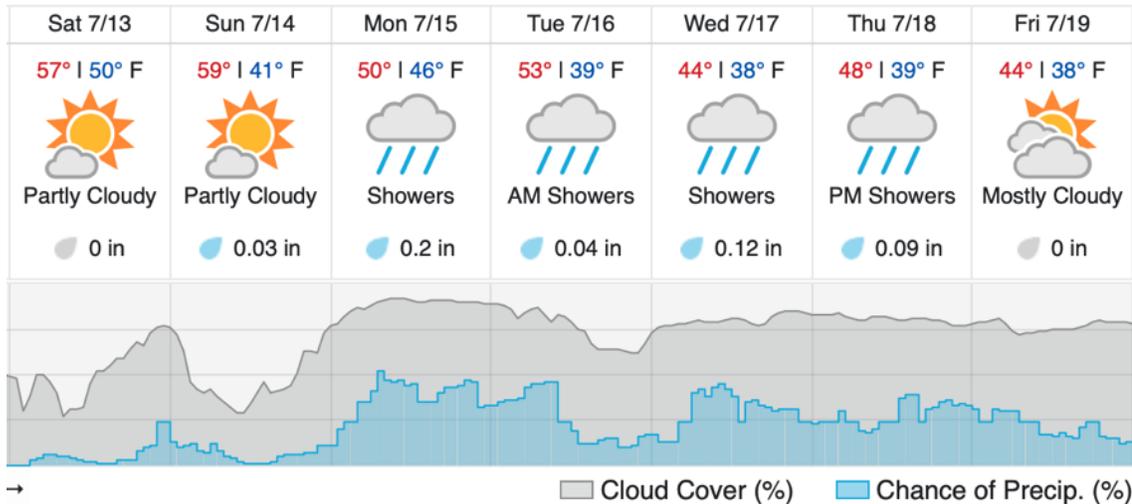
Flown: 0% (0/1)
 Green: 0% (0/1)
 Yellow: 0% (0/1)
 Red: 0% (0/1)

TOOL

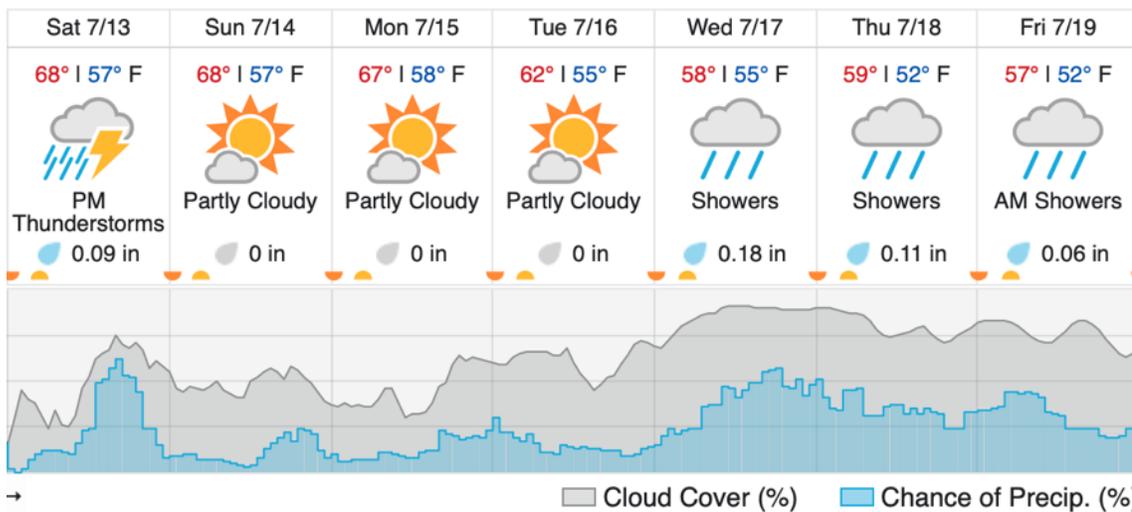
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48												

Flown: 90% (43/48)
 Green: 0% (0/48)
 Yellow: 23% (11/48)
 Red: 71% (34/48)

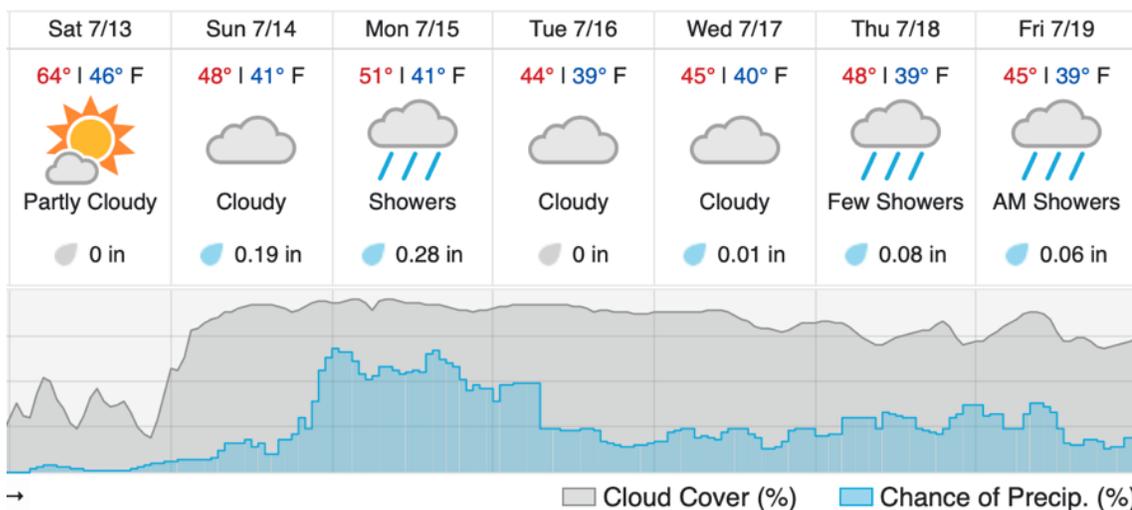
Weather Forecast Prudhoe Bay, AK (PASC)



Toolik Lake, AK (TOOL)



Utqiagvik, AK (BARR)



Flight Collection Plan for 13 July 2019

Flyority 1:

Collection Area: Toolik (TOOL)

Flight Plan Name: D18_TOOL_C1_P1_v1.pln

On-station Time: 1900 – 0110 UTC / 1040 – 1720 L (35° solar angle)

Flyority 2:

Collection Area: Barrow Environmental Observatory (BARR) - Priority 1 Flight Box

Flight Plan Name: D18_BARR_R1_P1_P2_P3_v4.pln

On-station Time: 1950 – 0110 UTC / 1130 – 1730 L (35° solar angle)

*Only if Green Conditions Exist

Flyority 3:

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

Flight Plan Name: D18_BARR_R1_P1_P2_P3_v4.pln

On-station time: 1950 – 0110 UTC / 1130 – 1730 L (35° solar angle)

*Only if Green Conditions Exist

Flyority 4

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

Flight Plan Name: D18_BARR_R1_P1_P2_P3_v4.pln

On-station time: 1950 – 0110 UTC / 1130 – 1730 L (35° solar angle)

*Only if Green Conditions Exist

Flyority 5

Collection Area: Nominal Runway – D18

Flight Plan Name: D18_N18A_Nominal_Runway_Test_v1.pln

On-station time: N/A

Crew: Matt DeVoe (Lidar), Michael Wussow (NIS)

Flight Collection Plan for 14 July 2019

Flyority 1-5: Same as previously briefed

Crew: Michael Wussow (Lidar), Matt DeVoe (NIS)