



June 17, 2019 Payload 2 Daily Flight Report



Date: 2019-06-17

Flight Campaign ID: 2019_P2C1

Airport, FBO ID, City: Fresno Yosemite International Airport (KFAT) - Fresno, CA

Domain: 17

Sites Flown: TEAK_P1 (Teakettle Priority 1), TEAK_P3 (Teakettle Priority 3)

Days left in Domain: 0

Report Author: Mitch Haynes

Flight Crew: Mitch Haynes, Elissa Barris

Flight Hours: 03:59

Ground/GPS: Abe Morrison

Hours until maintenance: 99.02

Pilots: Stephen Brawders, Mark Solper

Additional Personnel:

GPS Instruments: AOP_TEAK, 02 - FBO_KFAT, U-P311, U-P572

Summary

Last day of collects in D17; cumulus and stratus clouds to the north and east of Teakettle prevented green collections, however the remainder of the TEAK priority 1 flight box was collected in yellow conditions. As the flight progress, so did clouds, collected 13 lines of the TEAK priority 3 box under red conditions. This concludes NEON AOP Surveys in D17.

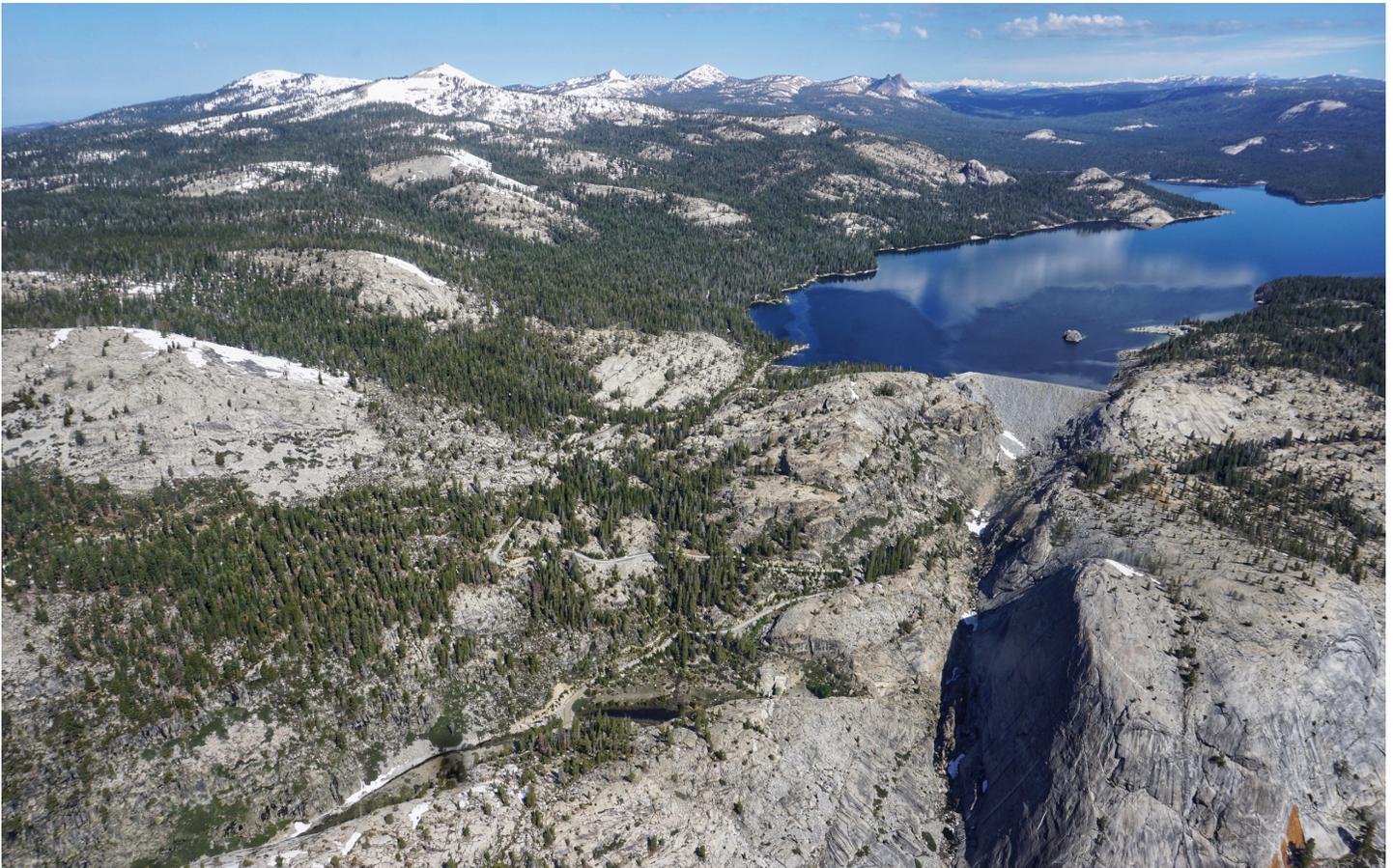
Concerns

- QAQC of yesterday's 2019061615 flight indicated a potential issue with the waveform to discrete data ratio. This disk set has been set aside and will be made available with the data on the hotel kit once it's set up in Fairbanks, likely Friday.
- PhaseOne camera stopped auto triggering while switching between TEAK_P1 and TEAK_P3. Timed triggering had to be started manually for the remainder of the flight. One line of the priority 3 flight box was flown without camera while troubleshooting.
- On a similar note, ALTM-NAV seemed to be operating "slowly" during today's flight; items such as PRFs and Eye Safety ranges had to be applied several times before they took effect. There didn't seem to be any impact to data (outside of potentially being related to the camera auto-triggering), so no restart of ALTM-NAV was conducted. As of right now, this is believed to be an isolated incident.

Comments

- The Otter will begin transiting to Alaska tomorrow in anticipation of NEON AOP Surveys in D18/19.
- In order to transit more efficiently and carry more fuel through Canada and Alaska, a pallet was loaded with items normally carried on the plane (including the hotel kit) to shipped separately to Fairbanks.
- Today's flight over TEAK (2019061715) will be extracted once the hotel kit is set up in Fairbanks, likely this Friday.
- Toil mechanics arrived in Fresno minutes after today's flight to begin work on the concerning fuel gauges and prop beta systems before tomorrow's transit. No transit delay is anticipated.
- Pilot Chad Evans departed yesterday and was replaced by Stephen Brawders.
- Should be noted that most of the TEAK_P3 flight box still had significant amounts of snow on the ground, same as the TEAK_P2 flight box yesterday.
- Ellisa Barris rotates out tomorrow. Abe Morrison flies to Fairbanks Wednesday in anticipation of the Otter's arrival.

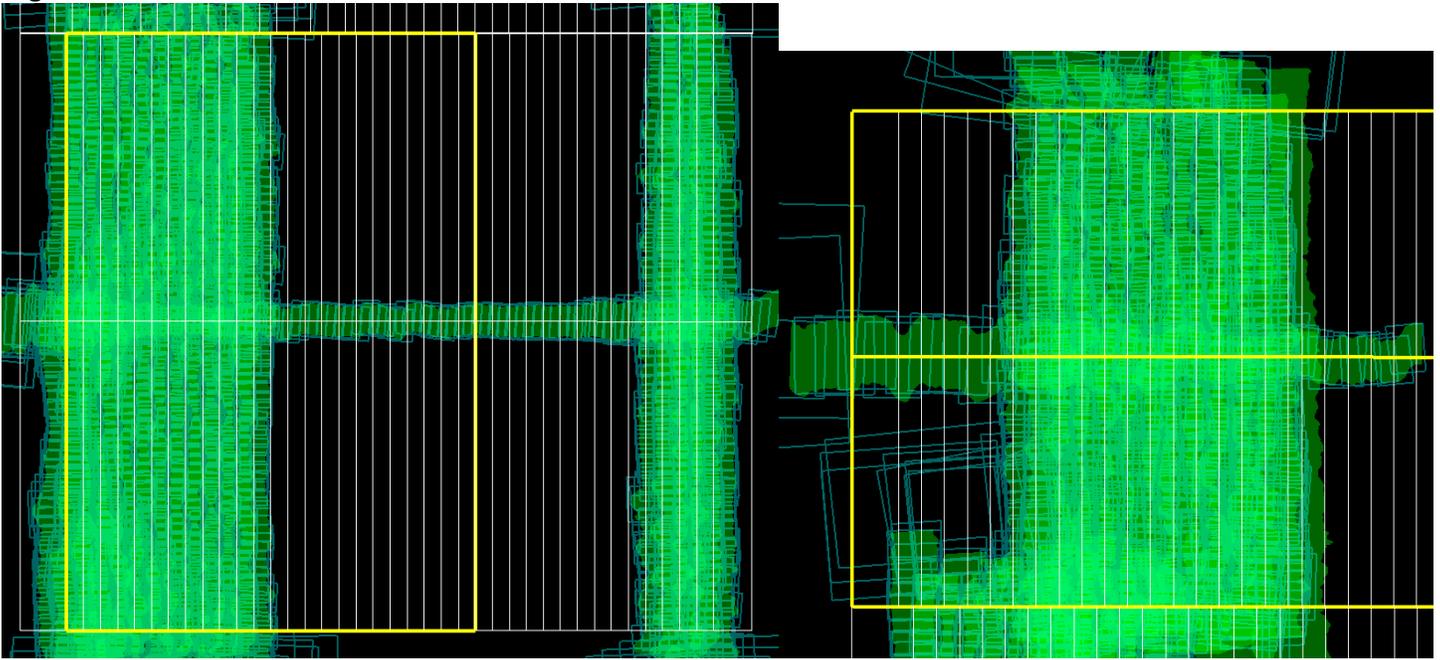
Pictures



Above: Dramatic cliffs surrounding Courtright Reservoir. Below: Heavy snow cover on Nelson Mountain and Eagle Peak, within the TEAK P2 and P3 flight boxes. Courtright visible behind them. Photos by Mitch Haynes.



Flight Screenshots

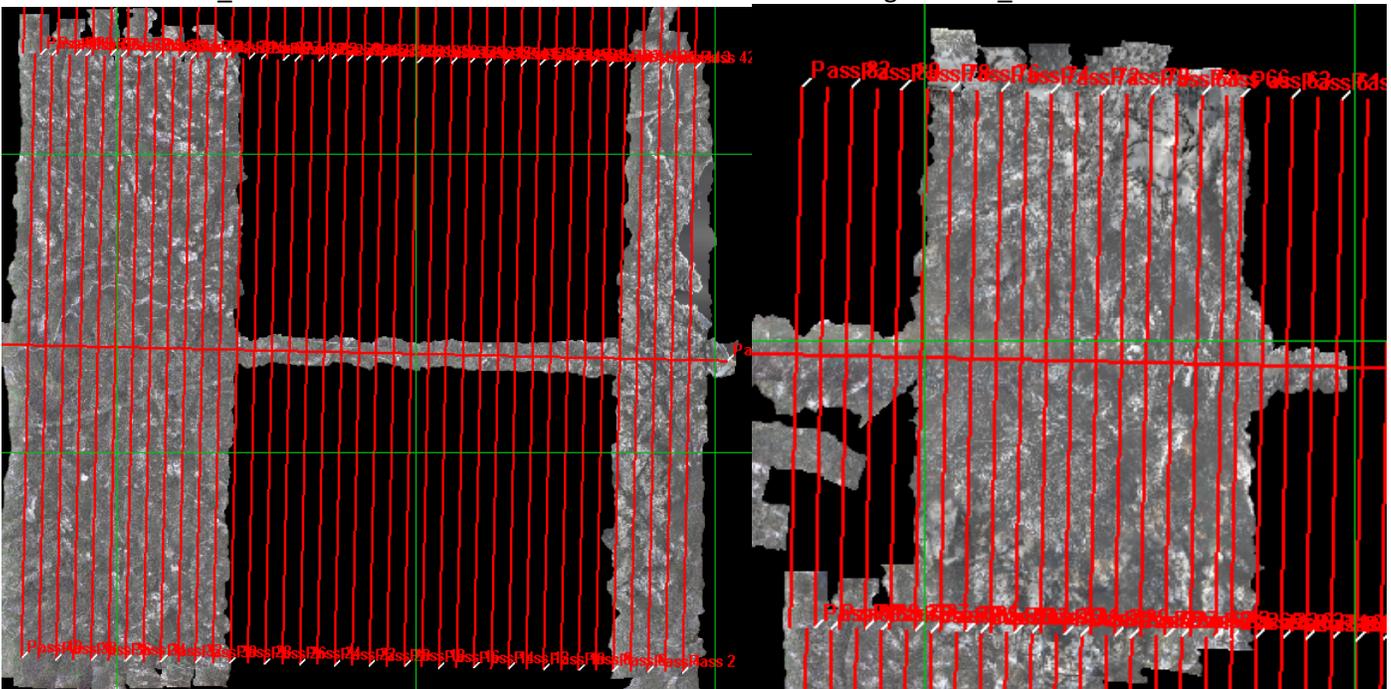


Top Left: TEAK_P1 lidar Screenshot

Bottom Left: TEAK_P1 NIS Screenshot

Top Right: TEAK_P3 lidar screenshot

Bottom Right: TEAK_P3 NIS Screenshot



Daily Coverage

D17 TEAK_P1	Line	SpecG	SpecY	SpecR	NIS	Lidar	Camera	Cumulative
	1				✓	✓	✓	NLC
	2				✓	✓	✓	NLC
	3				✓	✓	✓	NLC
	4				✓	✓	✓	NLC
	5				✓	✓	✓	NLC
	29				✓	✓	✓	NLC

	30				✓	✓	✓	NLC
	31				✓	✓	✓	NLC
	32				✓	✓	✓	NLC
	33				✓	✓	✓	NLC
	34				✓	✓	✓	NLC
	35				✓	✓	✓	NLC
	36				✓	✓	✓	NLC
	37				✓	✓	✓	NLC
	38				✓	✓	✓	NLC
	39				✓	✓	✓	NLC
	40				✓	✓	✓	NLC
Flown:	17							
D17 TEAK_P3	Line	SpecG	SpecY	SpecR	NIS	Lidar	Camera	Cumulative
	64				✓	✓	✓	NLC
	65				✓	✓	✗	NL
	66				✓	✓	✓	NLC
	67				✓	✓	✓	NLC
	68				✓	✓	✓	NLC
	69				✓	✓	✓	NLC
	70				✓	✓	✓	NLC
	71				✓	✓	✓	NLC
	72				✓	✓	✓	NLC
	73				✓	✓	✓	NLC
	74				✓	✓	✓	NLC
	75				✓	✓	✓	NLC
	76				✓	✓	✓	NLC
Flown:	13							

Cumulative Domain Coverage

TEAK_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	36	37	38	39	40

Flown: 100% (40/40)
 Green: 57% (23/40)
 Yellow: 45% (18/40)
 Red: 0% (0/40)

TEAK_P2

41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
61	62	63																	

Flown: 100% (23/23)
 Green: 0% (0/23)
 Yellow: 0% (0/23)
 Red: 100% (23/23)

TEAK_P3

64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82
----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Flown: 68% (13/19)
 Green: 0% (0/19)
 Yellow: 0% (0/19)

Red: 68% (13/19)

SOAP_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	36	37				

Flown: 100% (37/37)
 Green: 103% (38/37)
 Yellow: 30% (11/37)
 Red: 27% (10/37)

SOAP_P2

38	39	40	41	42	43	44	45	46	47
----	----	----	----	----	----	----	----	----	----

Flown: 100% (10/10)
 Green: 0% (0/10)
 Yellow: 100% (10/10)
 Red: 0% (0/10)

SOAP_P3

48	49	50	51	52	53	54	55	56	57	58	59
----	----	----	----	----	----	----	----	----	----	----	----

Flown: 100% (12/12)
 Green: 0% (0/12)
 Yellow: 0% (0/12)
 Red: 108% (13/12)

N17A

1

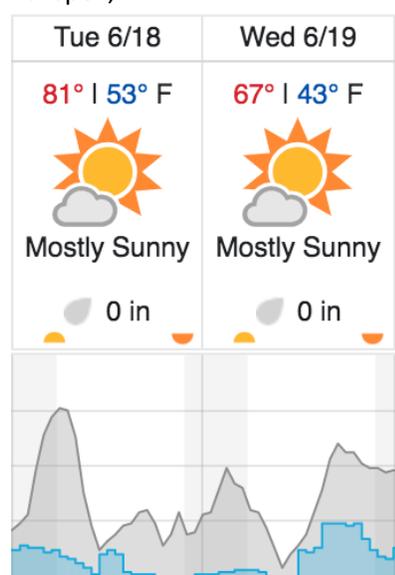
Flown: 100% (1/1)
 Green: 100% (1/1)
 Yellow: 0% (0/1)
 Red: 100% (1/1)

Weather Forecasts

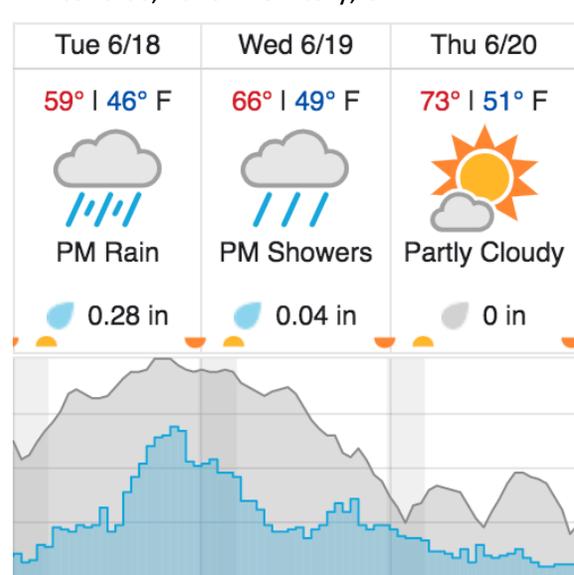
Fresno, CA



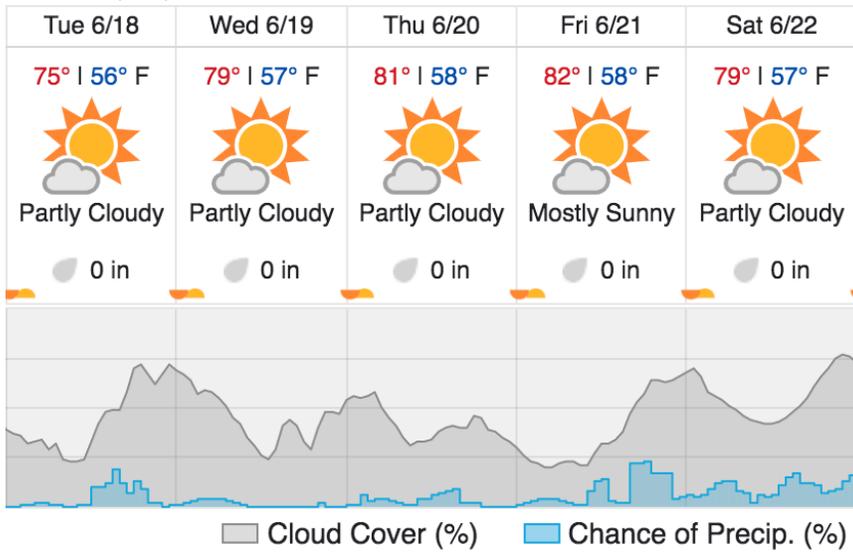
Kalispell, MT



Whitehorse, Yukon Territory, CA



Fairbanks, AK, USA



Flight Collection Plan for 18-20 June 2019

Transit to D19

Crew: Mitch Haynes