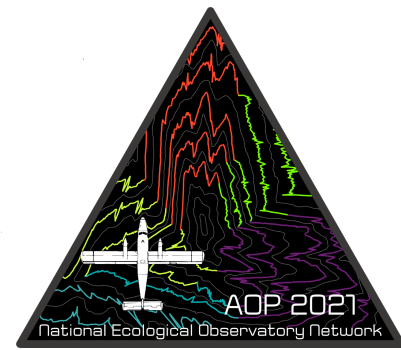




Payload 1 Daily Flight Report



**Date:** 2021-07-12

**Flight Campaign ID:** P1C2

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

**Aircraft:** N331AR

**Domain:** 17 (Pacific Southwest)

**Sites Flown:** N17A (D17 Nominal Runway), SOAP\_P1 (Soaproot Saddle Priority 1)

**Days left in Domain:** 3

**Report Author:** Mitch Haynes

**Lidar Operators:** Mitch Haynes

**Flight Hours:** 04:13

**Spectrometer Operators:** Abe Morrison

**Hours until maintenance:** 115.40

**Pilots:** Justin Eddington, Nick Koukoutsakis

**GPS Instruments:** 05 - FBO\_KFAT, U-MUSB

**Summary**

Heavy smoke and haze across the region but otherwise very few clouds. The crew focused attention onto the lower priority Soaproot Saddle flight box, collecting 28 lines under red conditions. 2 additional lines were collected over KFAT airport as part of our nominal runway.

**Concerns**

- A new wildfire, the River Fire, broke out in the area of Mariposa and Madera counties north of Fresno late yesterday afternoon. At the time of this report, the fire has burned 4000 acres and is only 5% contained. It is our expectation that air quality and thus data quality will be negatively impacted by the fire for the remainder of our time in D17.

**Comments**

- No eye safety shutoffs occurred during today's variable altitude lines.
- Cameron Chapman departed Fresno for some well-earned time off.

**Daily Coverage**

Estimated Cloud Cover Key

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

**D17|SOAP\_P1**

Line #	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover																				

Line #	29	30	31	32	33	34	35	36
Lidar	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓

Cloud Cover	■	■	■	■	■	■	■	■	■	■	■	■	■	■
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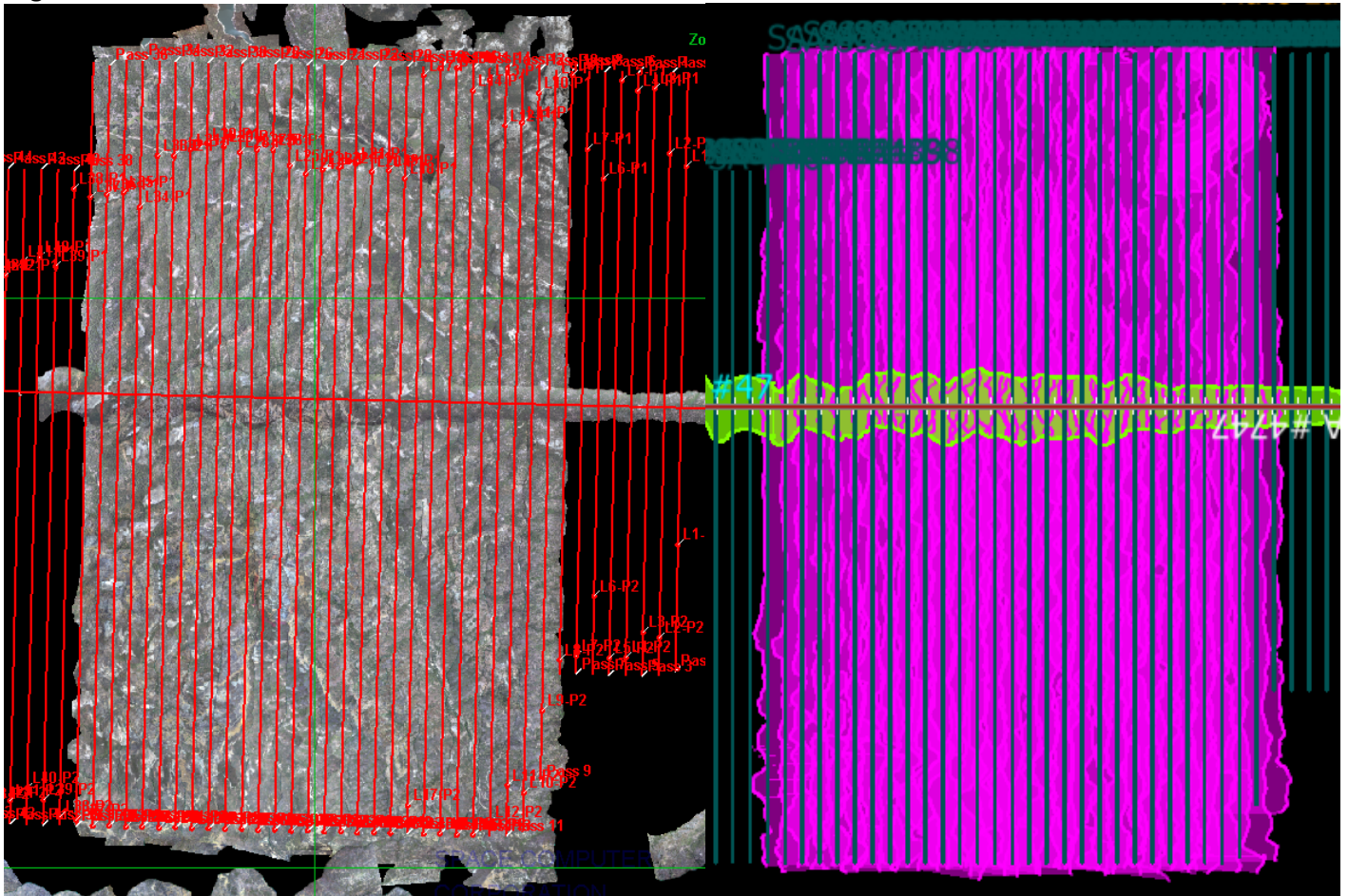
Total number of lines flown: 28

D17|N17A

Line #	1	2
Lidar	✓	✓
Spectrometer	✓	✓
Camera	✓	✓
Cloud Cover	■	■

Total number of lines flown: 2

Flight Screenshots



Below: N17A NIS on the left, N17A Lidar on the right.





**Top Picture:** A heavy layer of smoke present over SOAP today. **Below:** The townshed of SOAP and the recent burn scar.





## Cumulative Domain Coverage

D17|N17A (D17 Nominal Runway )

1

Flown: 100% (1/1)

Green: 0% (0/1)

Yellow: 0% (0/1)

Red: 100% (1/1)

D17|SOAP\_P1 (Soaproot Saddle 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	36	37	38	39	40
41	42	43	44	45	46	47													

Flown: 62% (29/47)

Green: 0% (0/47)

Yellow: 0% (0/47)

Red: 62% (29/47)

D17|TEAK\_P1 (Teakettle 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	36	37	38	39	40

Flown: 0% (0/40)

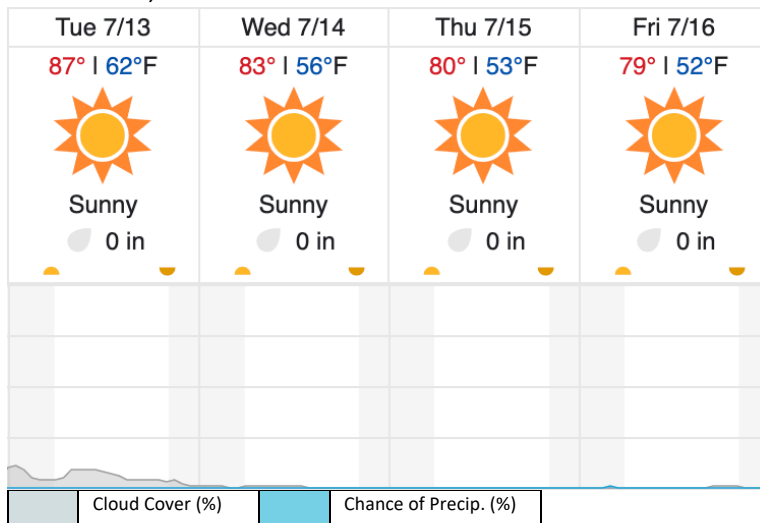
Green: 0% (0/40)

Yellow: 0% (0/40)

Red: 0% (0/40)

## Weather Forecast

Shaver Lake, CA



source: wunderground.com

## Flight Collection Plan for July 13 2021

Flyority 1

Collection Area: Soaproot Saddle (SOAP) – Variable Altitude Plan

Flight Plan Name: D17\_SOAP\_R1\_P1\_P2\_P3\_v7\_PRM\_Var\_Alt.xml

On-Station Time: 1620 – 2340 UTC / 0920 – 1640 L

Flyority 2

Collection Teakettle (TEAK) – Priority 1 Flight Box – Variable Altitude Plan

Flight Plan Name: D17\_TEAK\_R2\_P1\_P2\_P3\_v6\_PRM\_Var\_Alt.xml

On-Station Time: 1620 – 2340 UTC / 0920 – 1640 L

Crew: Abe, Mitch