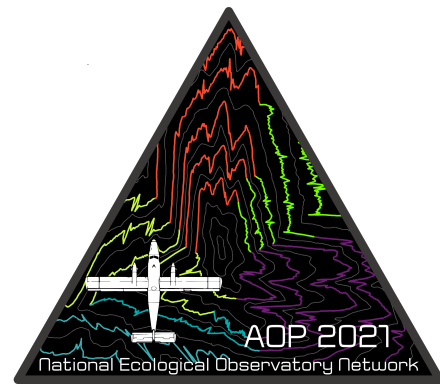




Payload 3 Daily Flight Report



Date: 2021-04-07

Flight Campaign ID: P3C1

Airport, FBO ID, City: Scottsdale Municipal Airport (KSDL) - Scottsdale, AZ

Aircraft: N615AR

Domain: 14 (Desert Southwest)

Sites Flown: SYCA (Sycamore Creek)

Days left in Domain: 4

Report Author: Ivana Vu

Lidar Operators: Ivana Vu

Spectrometer Operators: Mitch Haynes

Pilots: Mark Solper, Stephen Brawders

Flight Hours: 02:24

Hours until maintenance: 94.47

GPS Instruments: 02 - SYCA, 05 - FBO_KSDL

Summary

After a delayed start due to an instrumentation issue, we were able to collect 11 lines at Sycamore Creek in clear sky conditions until high cirrus clouds moved in over the site.

Concerns

NIS chamber pressure transducer reading jumped to 3e-1 torr during taxi to the runway and was discovered while transiting to the site. We reset the gauge in-flight with Ian’s help and the chamber pressure then read 1e-5 torr. Crew will monitor this until the plane is back in Boulder where we will have access to a vacuum pump and can do a proper reset at ambient temperature. The FPA temperature remained steady at 136K suggesting that the chamber pressure is still in spec for data collection.

Comments

- SYCA flight plan summary listed priority lines from last year. John created a new summary (v2) to show the correct and updated line numbers.
- Mitch, Ian and Andrew confirmed that LAS files were present before kicking off data extraction.

Daily Coverage

Estimated Cloud Cover Key

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

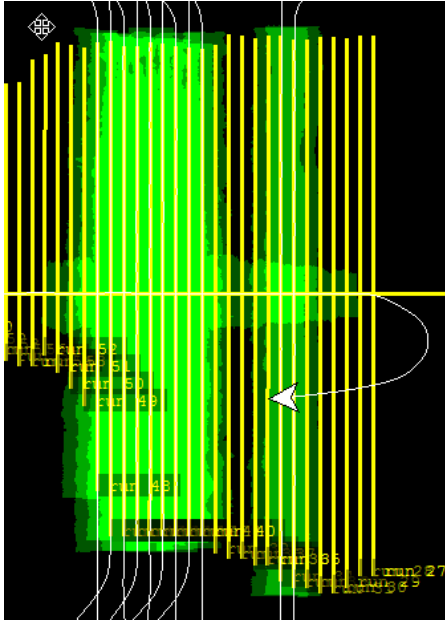
D14|SYCA

Line #	33	34	40	41	42	43	44	45	46	47	48
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover											

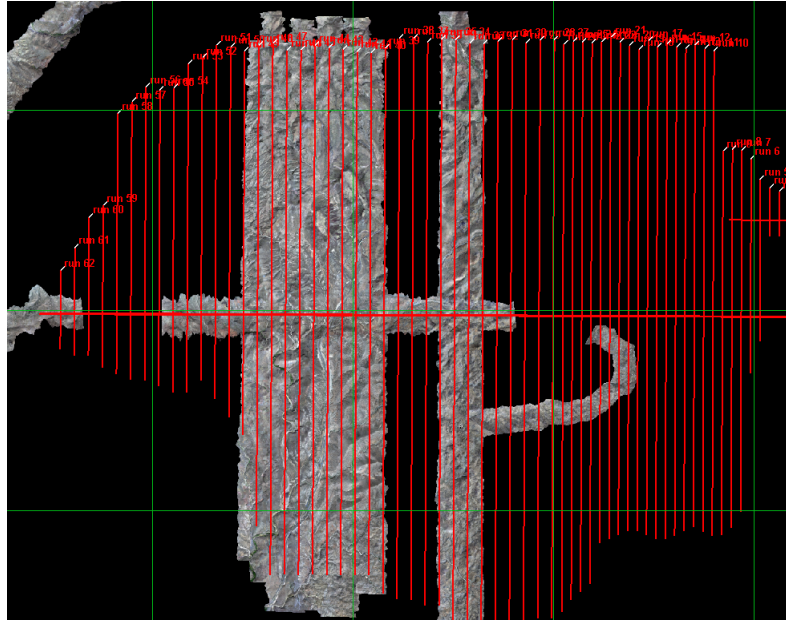
Total number of lines flown: 11

Flight Screenshots

Lidar



NIS



Pictures

Tonto National Forest



Sycamore Creek site



NEON hut & instrumentation (top right)



Cumulative Domain Coverage

D14|SYCA (Sycamore Creek)

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	49	50	51	52	53	54	55	56	57	58	59	60
61	62																		

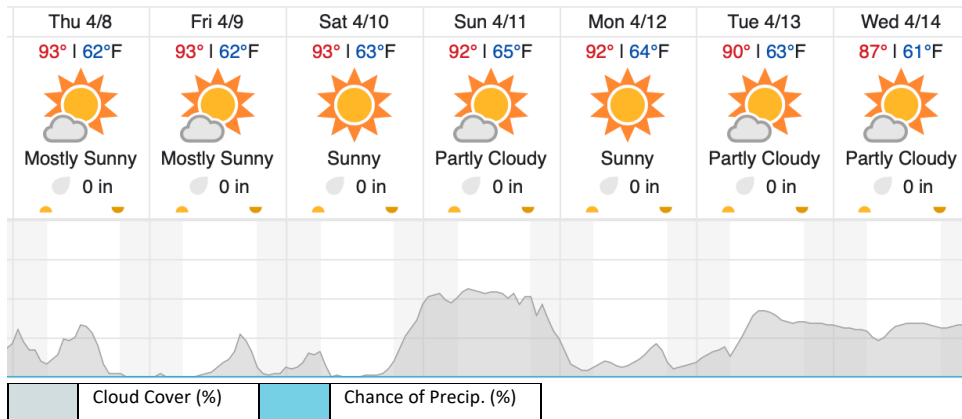
Flown: 19% (12/62)

Green: 18% (11/62)

Yellow: 2% (1/62)

Red: 0% (0/62)

Weather Forecast



source: wunderground.com

Flight Collection Plan for 07 April 2021

Flyority 1

Collection Area: Sycamore Creek (SYCA) - Lines 3-32, 35-39, 49-62

Flight Plan Name: D14_SYCA_A1_P1_v6L_Q780

On-station Time: 1630 UTC / 0930 L

Crew: Mitch & Ivana