

Payload 3 Daily Flight Report



Date: 2023-04-29

Flight Campaign ID: P3C1

Airport, FBO ID, City: Salt Lake City International Airport (KSLC) - Salt Lake City, UT, South Valley Regional (KU42)

Aircraft: N934MU

Domain: 15 (Great Basin)

Sites Flown: ONAQ (Onaqui), REDB (Red Butte)

Days left in Domain: 5

Report Author: Mike

Lidar Operators: Mike Flight Hours: 03:29, 00:12, 02:15 Spectrometer Operators: Abe Hours until maintenance: 90.32

Pilots: Will, Jon GPS Instruments: C-ZLC1, U-P016, U-P088

Summary

The skies stayed clear all day for the flight crew today; although there were a couple of non-weather related wrenches encountered as well. Despite them, we were able to fly the remaining portion of ONAQ and REDB in green conditions.

Concerns

None

Comments

After completing ONAQ, the crew made a stop at KU42 – South Valley Regional for fuel, to try and avoid the time-consuming class Bravo airspace at Salt Lake International. Unfortunately, there was an issue with the diesel GPU we were provided, and no power was given. Fortunately, we had enough remaining fuel to reposition back to Salt Lake Int'l and were happy to see it was an KU42 GPU problem and not an AXE problem. Next, sometime during the repo flight and the start of collections at REDB, the pilot display got unplugged and could not reconnect with Tracker Snapshot. With solar angle time waning, rather than restart the systems in-air, the pilots offered to fly via KML lines on Foreflight. Given the unusually calm conditions at REDB and aptitude of the pilots, we agreed, and proceeded to fly the entire survey area with only three short lines extending into the 35° solar angle.

Daily Coverage

Estimated Cloud Cover Key

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

D15 ONAQ

Line #	2	3	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
Lidar	✓	√	✓	✓	✓	✓	✓	✓	√	✓	✓	✓	✓	\	√	✓	✓	√	\	✓
Spectrometer	✓	√	✓	✓	✓	✓	✓	✓	√	✓	✓	✓	✓	\	√	✓	✓	√	\	✓
Camera	√	√	√	✓	√	√	✓	√	✓	✓	√	√	✓	✓	√	√	√	✓	✓	√
Cloud Cover																				

Line #	38	39	40	41	42
Lidar	/	✓	✓	✓	/
Spectrometer	✓	✓	✓	✓	√
Camera	✓	✓	✓	✓	√
Cloud Cover					

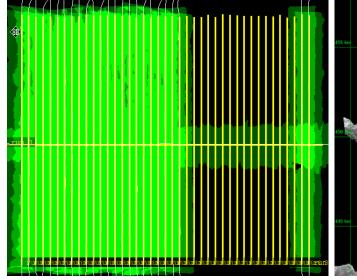
Total number of lines flown: 25

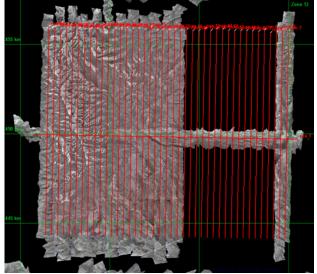
D15|REDB

Line #	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Lidar	\	√	√	\	√	√	√	√	✓	/	✓	✓	✓	\	✓	✓	✓	✓
Spectrometer	✓	✓	√	√	✓	✓	✓	✓	✓	√	✓	✓	✓	✓	✓	✓	✓	\
Camera	✓	✓	√	√	✓	✓	✓	✓	✓	√	✓	✓	✓	✓	✓	✓	✓	\
Cloud Cover																		

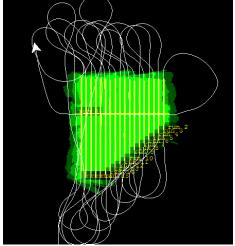
Total number of lines flown: 18

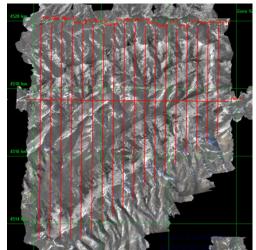
Flight Screenshots





ONAQ Lidar ONAQ NIS

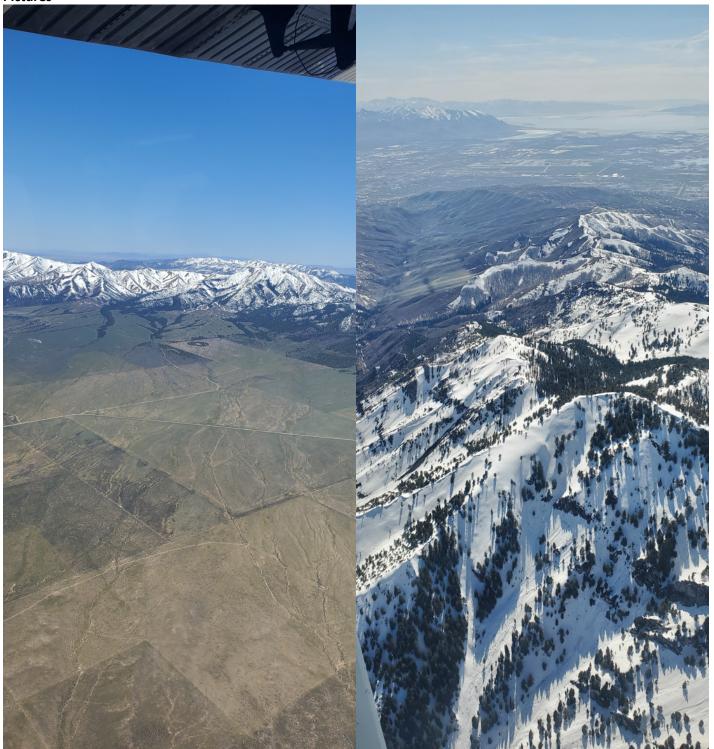




REDB Lidar

REDB NIS – snow cover can be seen in screenshot

Pictures



Left: ONAQ – Looking south from the site at the green developing.

Right: REDB – Looking west at the valley from the northern end of the site. The high elevation was still very snow covered due to a record snow year in the Wasatch.

Cumulative Domain Coverage

D15 | MOAB (Moab)

									11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29										

Flown: 100% (29/29) Green: 69% (20/29) Yellow: 28% (8/29) Red: 3% (1/29)

D15 ONAQ (Onaqui)

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																				20
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	41	42																		

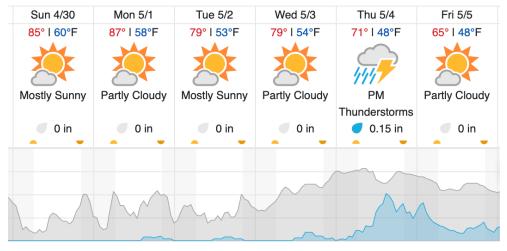
Flown: 100% (42/42) Green: 100% (42/42) Yellow: 0% (0/42) Red: 0% (0/42)

D15 | REDB (Red Butte)

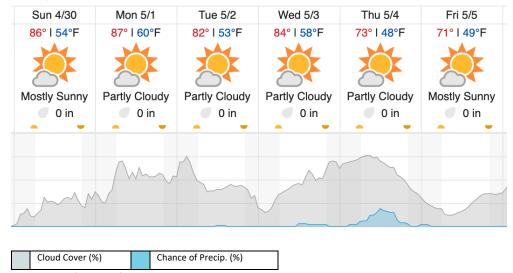
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Flown: 100% (19/19) Green: 100% (19/19) Yellow: 0% (0/19) Red: 0% (0/19)

Weather Forecast Salt Lake City, UT



Moab, UT



source: wunderground.com

Flight Collection Plan for April 30, 2023

Collection Area: Moab (MOAB) **Lines 2-9 if "green" conditions**

Flight Plan Name: 13_MOAB_R1_P1_v3_Q780

On-Station Time: 1600 UTC/ 1000 L

Crew: Abe (lidar), Mike (NIS)