



Payload 1 Daily Flight Report



Date: 2022-09-04

Flight Campaign ID: P1C1

Airport, FBO ID, City: Tucson International Airport - Tucson, AZ, Las Cruces International Airport (KLRU) - Las Cruces, NM

Aircraft: N331AR

Domain: 14 (Desert Southwest)

Sites Flown: JORN_P1 (Jornada Priority 1), JORN_P2 (Jornada Priority 2)

Days left in Domain: 7

Report Author: Elissa

Lidar Operators: Elissa

Flight Hours: 01:45:00, 04:23:00, 01:22:00

Spectrometer Operators: Abe

Hours until maintenance: 33.77

Pilots: Magnus, Steven

GPS Instruments: 04 - FBO_KTUS, AOP-JORN

Summary

Despite some delays this morning, we arrived at JORN in time to collect 9 lines in green conditions in the Priority 1 box. After clouds formed we switched to the Priority 2 box and completed the collection in yellow conditions.

Concerns

After switching from ground to survey power (after refueling at KLRU in preparation for flying JORN), the UPS-1250 began draining and the AXE chiller switch LED was blinking intermittently. The cable to the chiller switch in the back of the AXE had to be swapped to the Invertor P1 port to restore reliably consistent power to the UPS-1250. This resulted in a delay and a narrowly averted NIS shutdown/restart.

Comments

None.

Daily Coverage

Estimated Cloud Cover Key

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

D14|JORN_P1

Line #	1	15	16	17	18	19	20	21	22	23
Lidar		✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera		✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover										

Total number of lines flown: 10

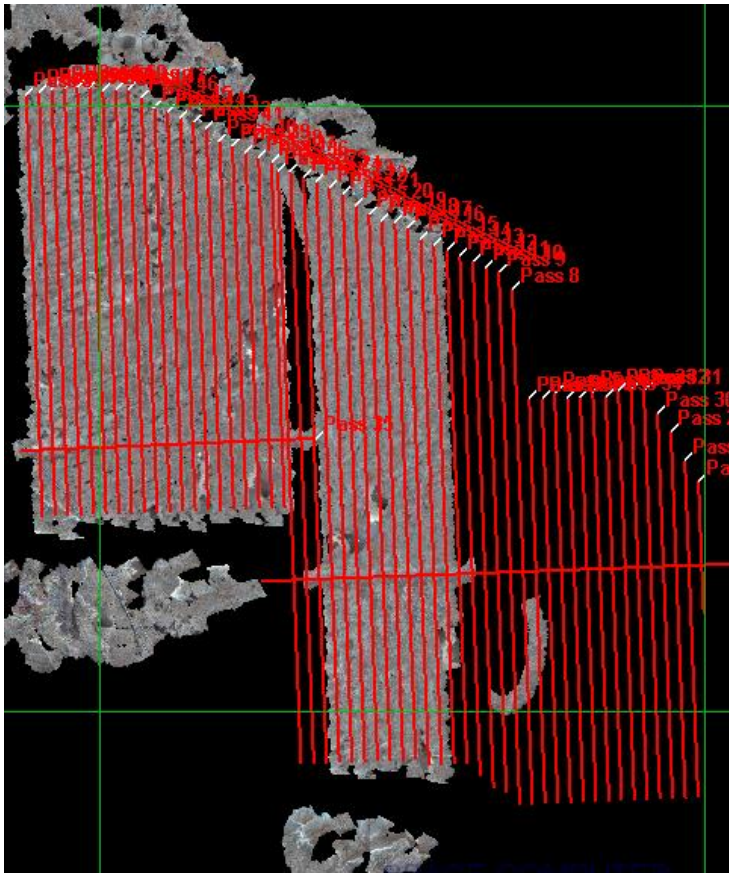
Line #	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	
Lidar		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover																					

Line #	55
Lidar	✓
Spectrometer	✓
Camera	✓
Cloud Cover	

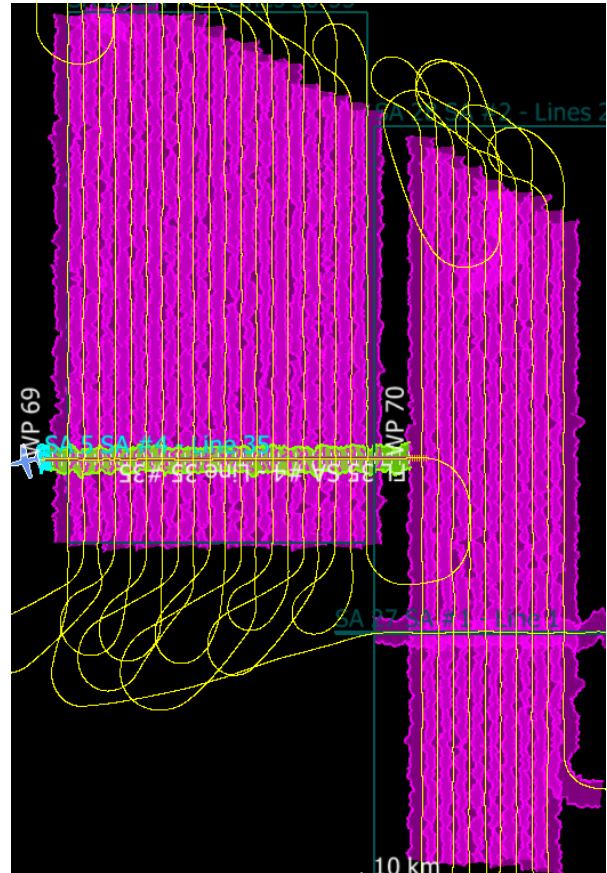
Total number of lines flown: 21

Flight Screenshots

NIS



LiDAR



Pictures



Clouds over KLRU (Las Cruces, NM) after flying JORN. Photo by Abe.

Cumulative Domain Coverage

D14|JORN_P1 (Jornada 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														

Flown: 38% (10/26)

Green: 35% (9/26)

Yellow: 4% (1/26)

Red: 0% (0/26)

D14|JORN_P2 (Jornada Priority 2)

35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
55																			

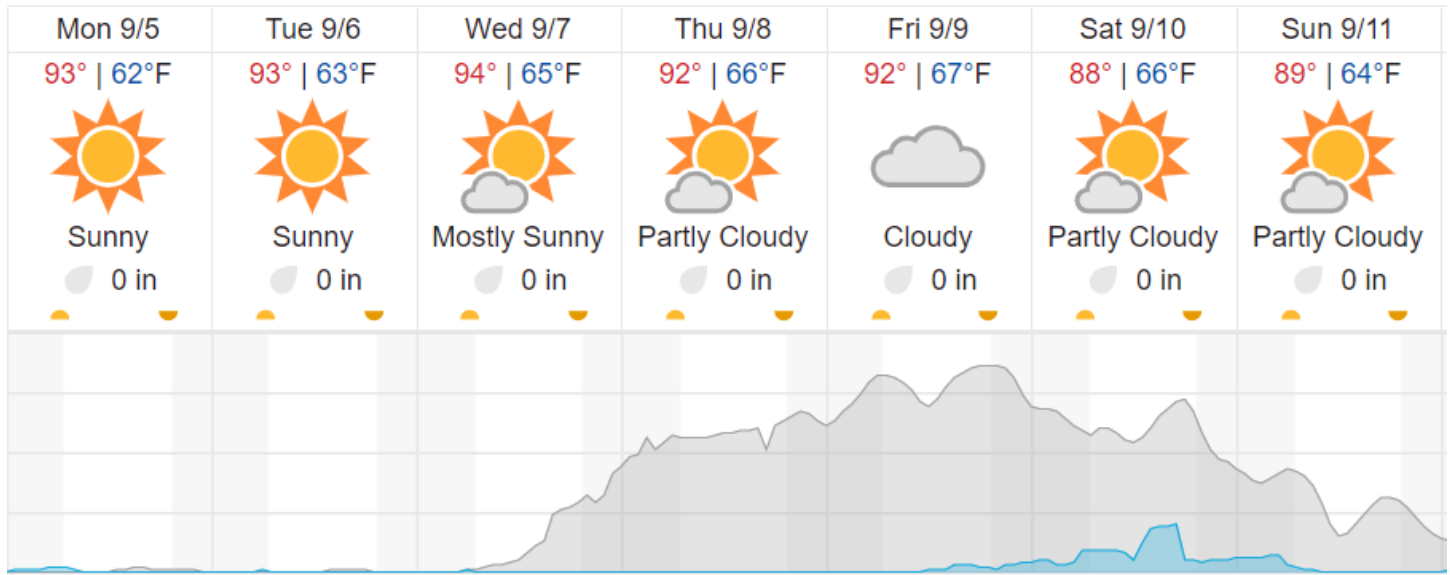
Flown: 100% (21/21)

Green: 0% (0/21)

Yellow: 100% (21/21)

Red: 0% (0/21)

Hatch, NM (JORN)



source: wunderground.com

Flight Collection Plan for 4 September 2022

Flyority 1

Collection Area: Jornada (JORN) – Priority 1 Flight Box– Priority 1 Box
Flight Plan Name: D14_JORN_R1_P1_v5_PRM.xml
35° On-station Time: 15:40 UTC / 09:40 MDT / 8:40 MST

Flyority 2

Collection Area: Santa Rita Experimental Range (SRER) – Priority 2 Box
Flight Plan Name: D14_SRER_C1_P1_v6_PRM.xml
40° On-station Time: 16:20 UTC / 09:20 MST

Flyority 3

Collection Area: Santa Rita Experimental Range (SRER) – Priority 3 Box
Flight Plan Name: D14_SRER_C1_P1_v6_PRM.xml
40° On-station Time: 16:20 UTC / 09:20 MST

Flyority 4 (if green)

Collection Area: Jornada (JORN) – Priority 2 Flight Box
Flight Plan Name: D14_JORN_R1_P1_v5_PRM.xml
35° On-station Time: 15:40 UTC / 09:40 MDT / 8:40 MST

Flyority 5

Collection Area: Nominal Runway – D14
Flight Plan Name: D14_N14A_Nominal_Runway_Test_v1_PRM
On-station Time: N/A

Crew: Elissa, Abe