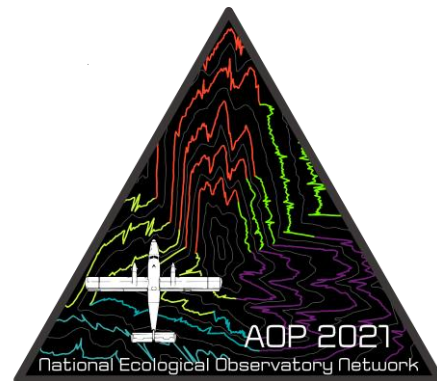




## Payload 3 Daily Flight Report



**Date:** 2021-08-27

**Flight Campaign ID:** P3C1

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

**Aircraft:** N615AR

**Domain:** 14 (Desert Southwest)

**Sites Flown:** JORN\_P1 (Jornada Priority 1), JORN\_P2 (Jornada Priority 2)

**Days left in Domain:** 12

**Report Author:** Elissa Barris

**Lidar Operators:** Elissa Barris

**Spectrometer Operators:** Abe Morrison

**Pilots:** Stephen Brawders, Vince Maarschalkerweerd

**Flight Hours:** 01:31:00, 03:02:00

**Hours until maintenance:** 40.83

**GPS Instruments:** 06 - KTUS, AOP\_JORN

### Summary

Another early start today! Although shorter than yesterday's, a green window at JORN allowed us to finish collection of the Priority 1 box and just start on Priority 2 before being pushed out by clouds.

### Concerns

- The MIDAS1 disk that failed yesterday in the Hotel Kit was tested in the plane this morning, and was unreadable there as well. Attempts to recover data from the disk failed.
- Disk Set 1 will be pulled from rotation; Disk Set 5 will be put back into rotation.
- Flight 2021082415\_P3C1 will have to be reflown. Lost data comprise 12 lines of the SRER P1 box and all of the SRER P2 box. The coverage report below has been updated to reflect this.

### Comments

- At KLRU Las Cruces, we stopped at an alternate FBO since equipment was damaged by the GPU we used yesterday. We had no issues with today's GPU.
- After flights, we ran diagnostics on the AXE with the lab and confirmed that it is functioning normally apart from the fried ammeters. We will be able to continue using it through the end of this flight season.

### Daily Coverage

Estimated Cloud Cover Key

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

D14|JORN\_P1

Line #	27	28	29	30	31	32	33	34
Lidar	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover								

Total number of lines flown: 8

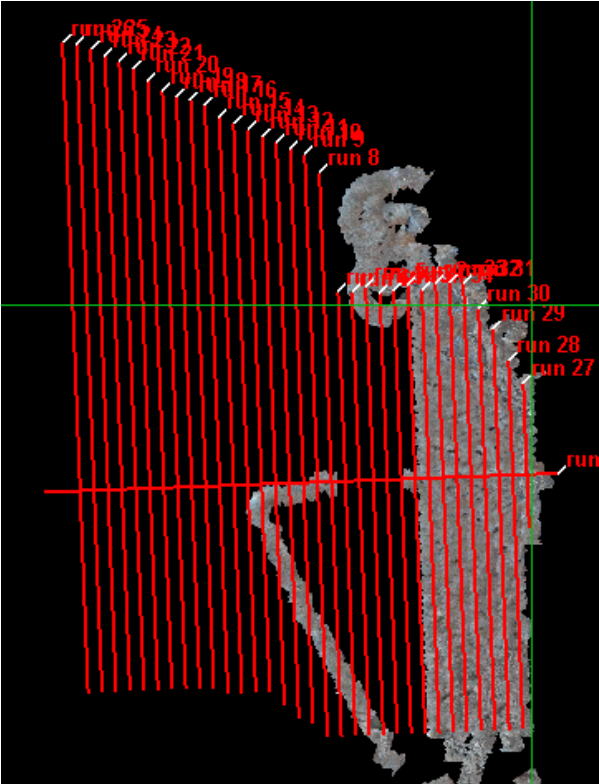
D14|JORN\_P2

Line #	36	37
Lidar	✓	✓
Spectrometer	✓	✓
Camera	✓	✓
Cloud Cover		

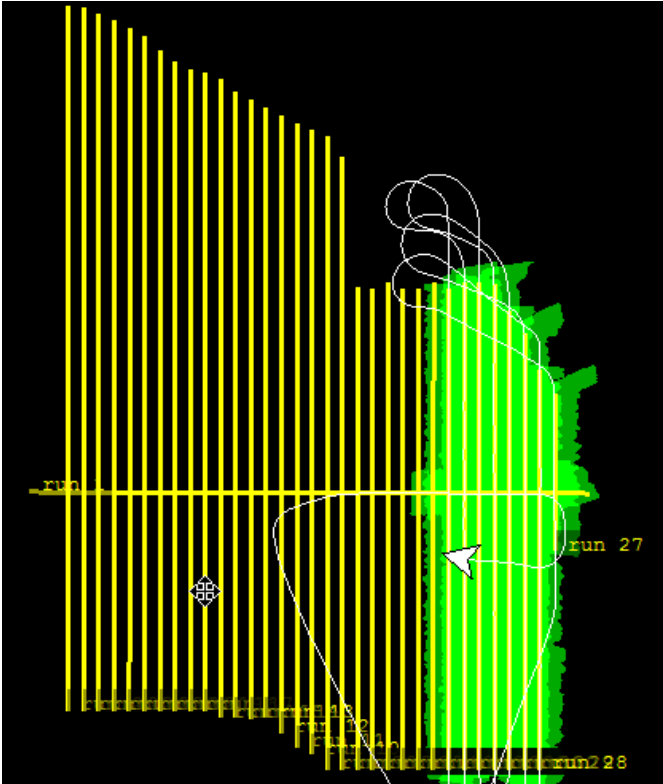
Total number of lines flown: 2

Flight Screenshots

NIS JORN\_P1



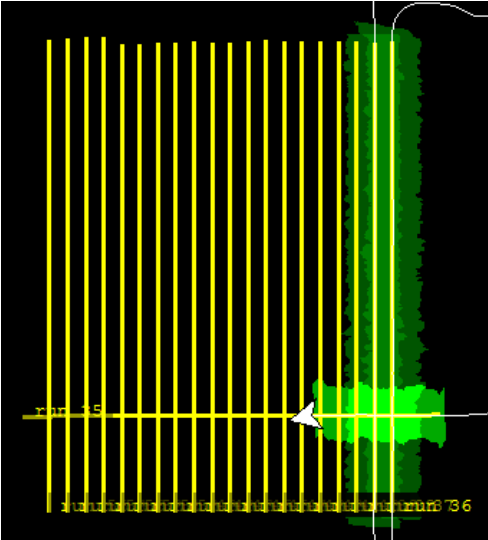
LiDAR JORN\_P1



NIS JORN\_P2



LiDAR JORN\_P2



Pictures



A crop duster treating mesquite below the Twin Otter at the Jornada Experimental Range (Elissa).

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	27	28	29	30	31	32	33	34						

Flown: 100% (34/34)  
Green: 100% (34/34)  
Yellow: 0% (0/34)  
Red: 0% (0/34)

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: 14% (3/21)  
Green: 10% (2/21)  
Yellow: 5% (1/21)  
Red: 0% (0/21)

D14|SRER\_P1 (Santa Rita Experimental Range 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: 100% (40/40)  
Green: 100% (40/40)  
Yellow: 0% (0/40)  
Red: 0% (0/40)

### D14|SRER\_P2 (Santa Rita Experimental Range Priority 2)

41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
61	62	63	64																

Flown: 100% (24/24)

Green: 100% (24/24)

Yellow: 0% (0/24)

Red: 0% (0/24)

### D14|SRER\_P3 (Santa Rita Experimental Range Priority 3)

65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
85	86	87	88	89	90														

Flown: 54% (14/26)

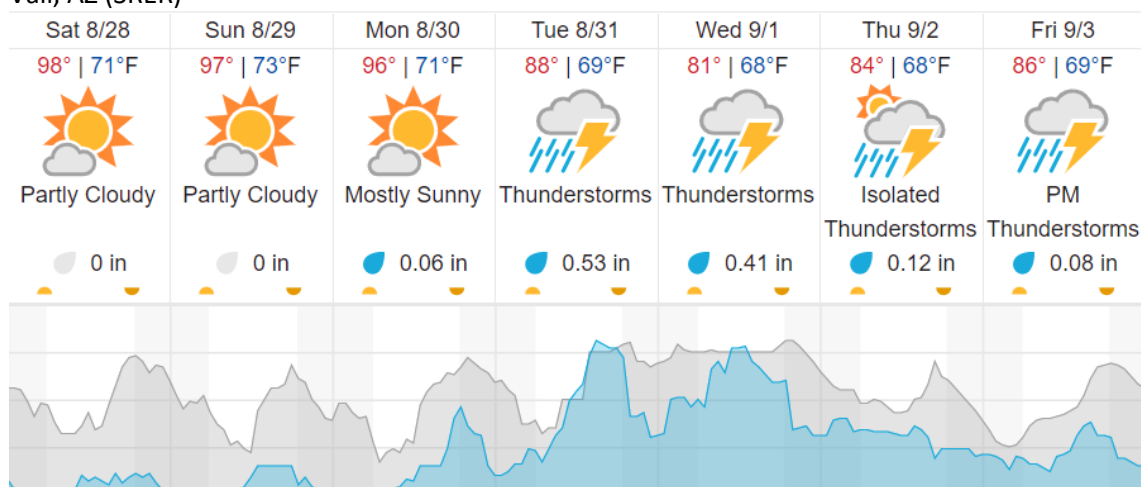
Green: 46% (12/26)

Yellow: 8% (2/26)

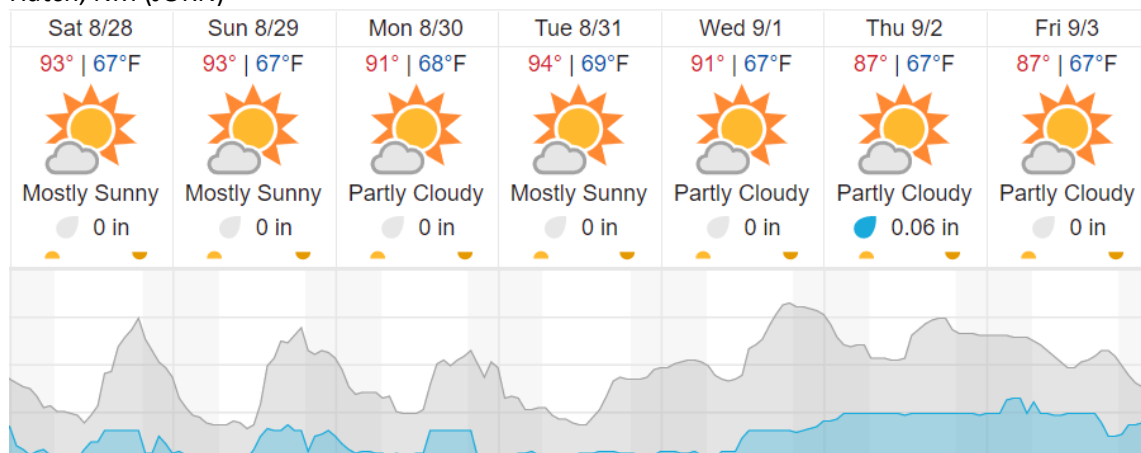
Red: 0% (0/26)

## Weather Forecast

### Vail, AZ (SRER)



### Hatch, NM (JORN)



	Cloud Cover (%)		Chance of Precip. (%)
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source: wunderground.com

## **Flight Collection Plan for 28 August 2021**

### **Flyority 1**

Collection Area: Santa Rita Experimental Range (SRER) – Priority 1 Box

Flight Plan Name: D14\_SRER\_C1\_P1\_v4\_Q780

On-station Time: 16:10 UTC / 09:10 L

### **Flyority 2**

Collection Area: Santa Rita Experimental Range (SRER) – Priority 2 Box

Flight Plan Name: D14\_SRER\_C1\_P2\_v5\_Q780

On-station Time: 16:10 UTC / 09:10 L

### **Flyority 3**

Collection Area: Santa Rita Experimental Range (SRER) – Priority 3 Box

Flight Plan Name: D14\_SRER\_C1\_P3\_v5\_Q780

On-station Time: 16:10 UTC / 09:10 L

### **Flyority 4**

Collection Area: Jornada (JORN) – Priority 1 Flight Box– Priority 2 Box

Flight Plan Name: D14\_JORN\_R1\_P2\_v4\_Q780

On-station Time: 16:00 UTC / 09:00 L

Crew: Abe and Elissa