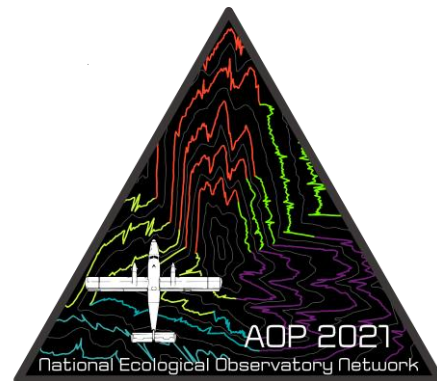




## Payload 3 Daily Flight Report



**Date:** 2021-08-25

**Flight Campaign ID:** P3C1

**Airport, FBO ID, City:** Tucson International Airport (KTUS) - Tucson, AZ

**Aircraft:** N615AR

**Domain:** 14 (Desert Southwest)

**Sites Flown:** SRER\_P2 (Santa Rita Experimental Range Priority 2), SRER\_P3 (Santa Rita Experimental Range Priority 3)

**Days left in Domain:** 14

**Report Author:** Elissa Barris

**Lidar Operators:** Elissa Barris

**Spectrometer Operators:** Abe Morrison

**Pilots:** Stephen Brawders, Vince Maarschalkerweerd

**Flight Hours:** 02:52

**Hours until maintenance:** 52.25

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

### Summary

We had green conditions this morning and were able to return to SRER and complete collection of the Priority 2 box. We also completed about half of the Priority 3 box before being pushed out by cumulus clouds over Mt Wrightson.

### Concerns

Issues with yesterday's data extraction are most likely linked to a faulty RAID. A new RAID was built for today's extraction, and data from the previous two flights in this domain will be manually copied to it.

### Comments

Today's flight was successfully coordinated with University of Arizona researchers conducting drone calibration flights and a ground camera survey at SRER.

### Daily Coverage

Estimated Cloud Cover Key

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

D14|SRER\_P2

Line #	42	43	44	45	46
Lidar	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓
Cloud Cover					

Total number of lines flown: 5

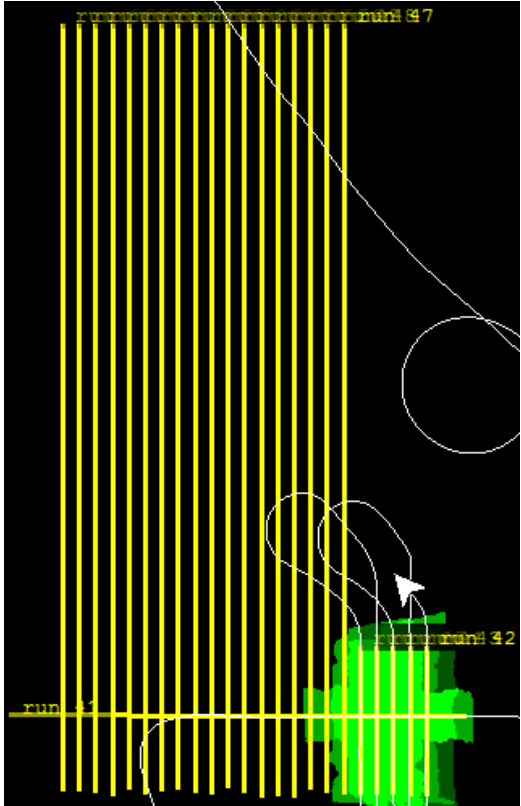
## D14|SRER\_P3

Line #	78	79	80	81	82	83	84	85	86	87	88	89	90
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover													

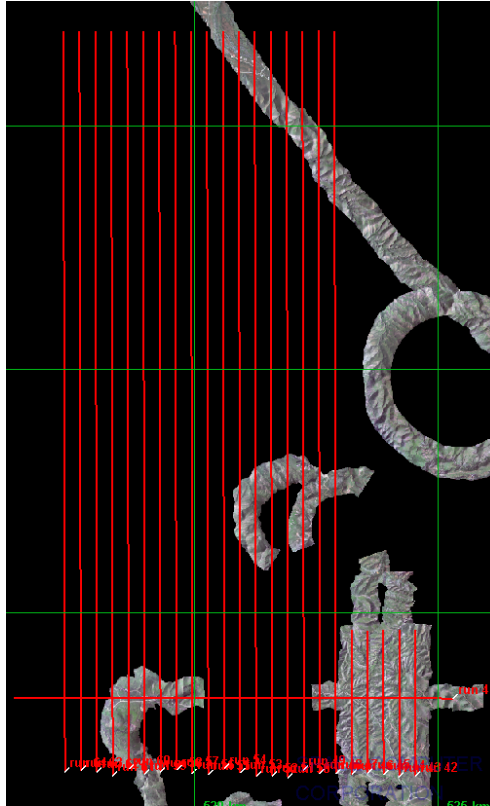
Total number of lines flown: 13

## Flight Screenshots

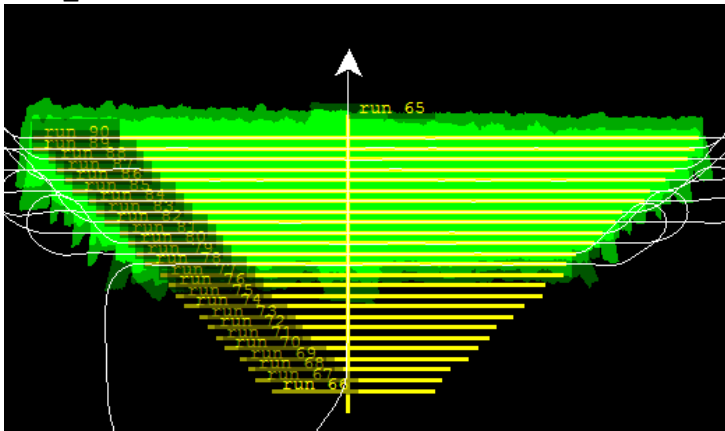
SRER\_P2 LiDAR



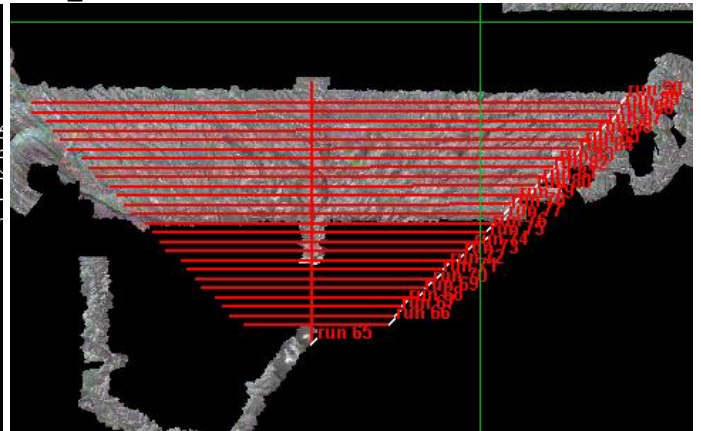
SRER\_P2 NIS



SRER\_P3 LiDAR



SRER\_P3 NIS



## Pictures



Mt Wrightson and the Fred Lawrence Whipple Observatory in the southern portion of the SRER flight box (Elissa Barris)



The Twin Otter passing overhead (UofA field crew)



Exceedingly green conditions at SRER this year (Abe Morrison)

## 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: 0% (0/26)

Green: 0% (0/26)

Yellow: 0% (0/26)

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: 0% (0/21)

Green: 0% (0/21)

Yellow: 0% (0/21)

Red: 0% (0/21)

### D14|N14A (D14 Nominal Runway )

1
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Flown: 0% (0/1)

Green: 0% (0/1)

Yellow: 0% (0/1)

Red: 0% (0/1)

### 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)

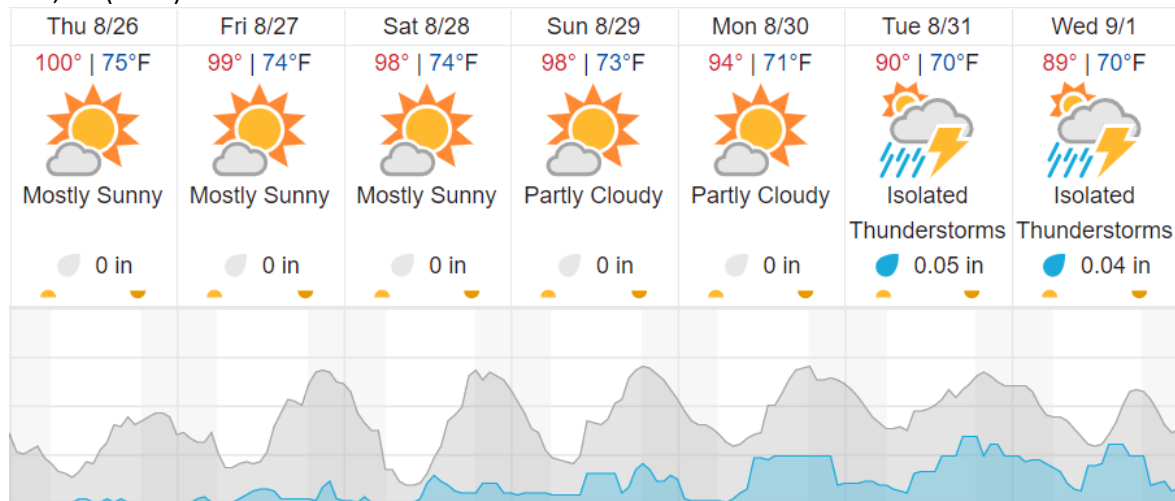
Green: 46% (12/26)

Yellow: 8% (2/26)

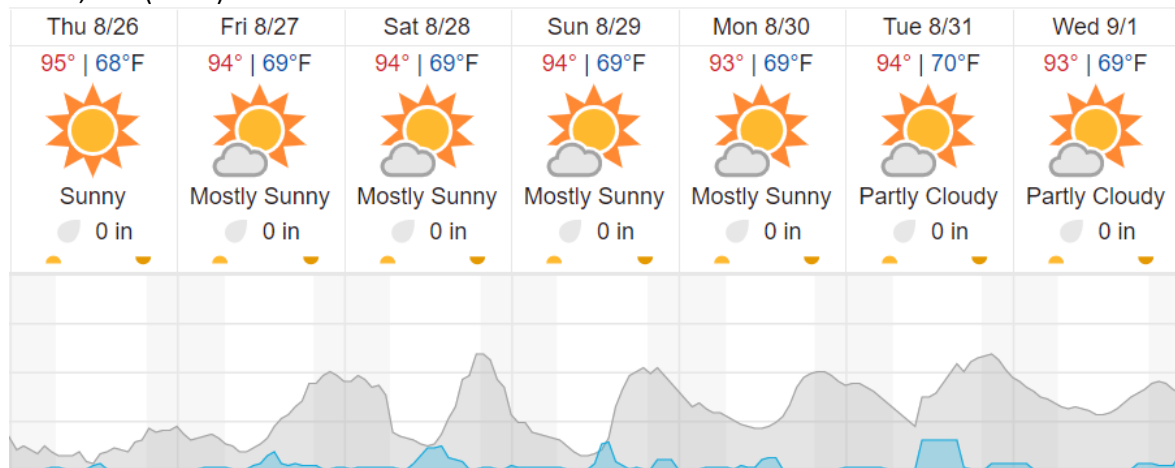
Red: 0% (0/26)

## Weather Forecast

### Vail, AZ (SRER)



### Hatch, NM (JORN)



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

## Flight Collection Plan for 26 August 2021

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

Flight Plan Name: D14\_JORN\_R1\_P1\_v4\_Q780

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

Flyority 3 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