



## Payload 3 Daily Flight Report



**Date:** 2026-09-12

**Flight Campaign ID:** P3C1

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

**Aircraft:** N537AR

**Domain:** 14 (Desert Southwest)

**Sites Flown:** SRER\_P1 (Santa Rita Experimental Range Priority 1)

**Days left in Domain:** 2

**Report Author:** Mitch

**Lidar Operators:** Mitch

**Flight Hours:** 01:18

**Spectrometer Operators:** John

**Hours until maintenance:** 86.82

**Pilots:** Jeff, Landon

**GPS Instruments:** AOP\_SRER, C-PIMA

### Summary

With limited collect windows remaining, the crew took to the air to finish off initial coverage over SRER. Lines 2-29 were collected under ready conditions.

### Concerns

NIS3 chamber pressure was reading close acceptable threshold, having appeared to risen overnight. However upon closer investigation, it was determined to be a faulty transducer reading. After resetting the transducer, the chamber pressure started reading much closer to what we would expect it be at.

### Comments

Unfortunately low clouds and building thunderstorms over Mt Wrightson prevent line 2 from being flown.

### Daily Coverage

Estimated Cloud Cover Key

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

Solar Angle Less Than 40 degrees: (\*)

D14|SRER\_P1

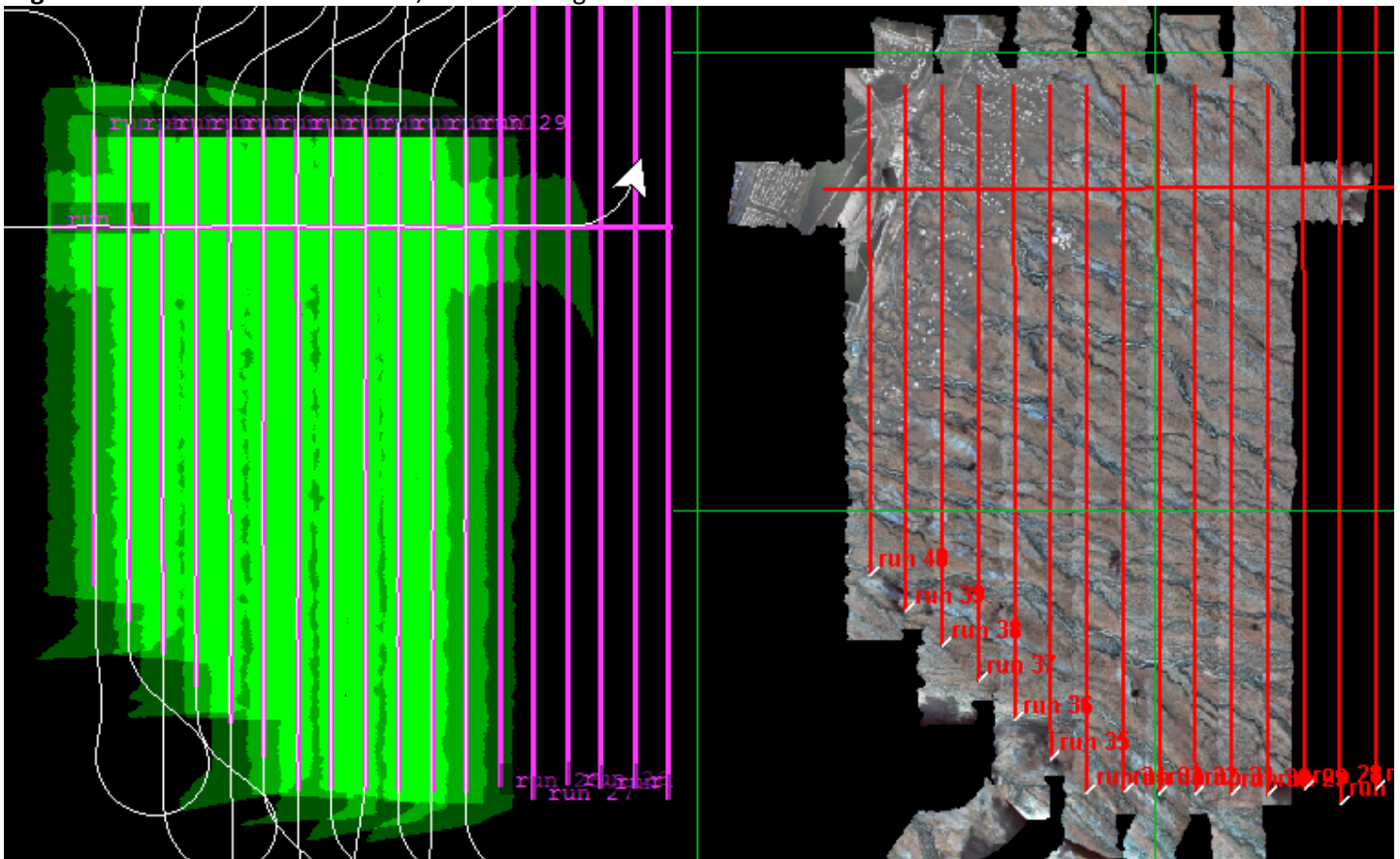
| Line #       | 1 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
|--------------|---|----|----|----|----|----|----|----|----|----|----|----|----|
| Lidar        | ✓ | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| Spectrometer | ✓ | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| Camera       | ✓ | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| Cloud Cover  |   |    |    |    |    |    |    |    |    |    |    |    |    |

Total number of lines flown: 13

**Pictures:** Less than ideal conditions over SRER today. Crew was barely able to squeak out a collect before thunderstorms started forming,



**Flight Screenshots:** Lidar on the left, NIS on the right.



## 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: 100% (26/26)

Green: 77% (20/26)

Yellow: 23% (6/26)

Red: 0% (0/26)

\* Flown within 35deg solar angle

### 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: 67% (14/21)

Red: 33% (7/21)

\* Flown within 35deg solar angle

### D14|SRER\_P1 (Santa Rita Experimental Range Priority 1) \*Lines 3-28 on Payload 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: 97% (38/39)

Green: 67% (26/39)

Yellow: 0% (0/39)

Red: 31% (12/39)

\* Flown within 35deg solar angle

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

|    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 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% (23/23)

Green: 0% (0/23)

Yellow: 0% (0/23)

Red: 100% (23/23)

\* Flown within 35deg solar angle

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

|    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 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: 100% (25/25)

Green: 0% (0/25)

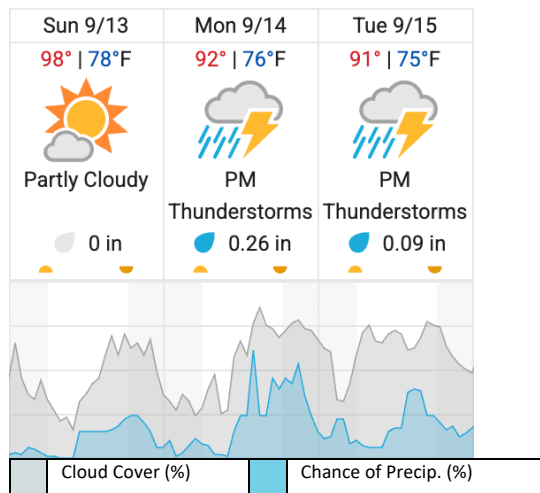
Yellow: 0% (0/25)

Red: 100% (25/25)

\* Flown within 35deg solar angle

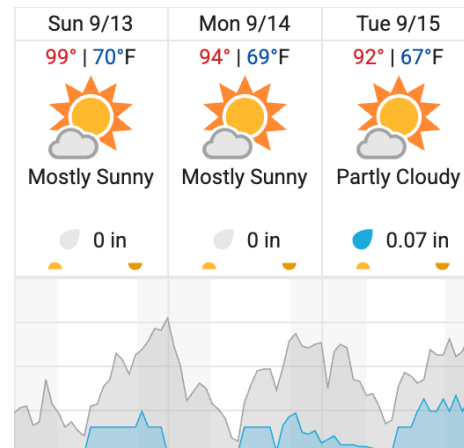
## Weather Forecast

Tucson AZ (SRER)



source: wunderground.com

Las Cruces NM (JORN)



## Flight Collection Plan for September 13, 2026

### Flyority 1

Site: Santa Rita Experimental Range (SRER) – Priority 1 Flight Box – *only if green*

Flight Plan Name: D14\_SRER\_C1\_P1\_P2\_P3\_v7\_PRM.xml

Solar Angle Time: 9:30L/16:30UTC

### Flyority 2

Site: Santa Rita Experimental Range (SRER) – Priority 2 Flight Box – *only if green*

Flight Plan Name: D14\_SRER\_C1\_P1\_P2\_P3\_v7\_PRM.xml

Solar Angle Time: 9:30L/16:30UTC

### Flyority 3

Site: Jornada (JORN) – Priority 1 Flight Box – *only if green*

Flight Plan Name: D14\_JORN\_C1\_P1\_P2\_v5\_PRM.xml

Solar Angle Time: 09:20L/16:20UTC

### Flyority 4

Site: Jornada (JORN) – Priority 2 Flight Box – *only if green*

Flight Plan Name: D14\_JORN\_C1\_P1\_P2\_v5\_PRM.xml

Solar Angle Time: 09:20L/16:20UTC

### Flyority 5

Site: Santa Rita Experimental Range (SRER) – Priority 3 Flight Box – *only if green*

Flight Plan Name: D14\_SRER\_C1\_P1\_P2\_P3\_v7\_PRM.xml

Solar Angle Time: 9:30L/16:30UTC

**Crew:** John (Lidar), Mitch (NIS)