



September 5, 2019 Payload 2 Daily Flight Report



**Date:** 2019-09-05

**Flight Campaign ID:** 2019\_P2C1

**Airport, FBO ID, City:** Scottsdale Airport (KSDL) - Scottsdale, AZ

**Domain:** 14

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

**Days left in Domain:** 7

**Report Author:** Mitch Haynes

**Flight Crew:** Mitch Haynes, Cameron Chapman

**Ground/GPS:** Ivana Vu

**Pilots:** Micah Hoogeveen, Paul Muth

**Additional Personnel:**

**GPS Instruments:** 02 - FBO\_KSDL, 09 - KTUS, AOP\_SRER

**Flight Hours:** 03:41

**Hours until maintenance:** 93.03

**Summary**

Clear skies were viewed over SRER prior to take off, however a high strato-cirrus layer had moved into place during transit to site this morning. Crew was able to collect 14 lines of the Priority 2 box under Yellow conditions while dealing with gusty winds.

**Concerns**

- Payload AC carts are still struggling to keep up with the extreme temperatures.
- Spectrometer seems to be struggling to hold pressure. These may just be symptoms of a faulty pressure sensor gauge, but the crew attached the vacuum pump for a couple hours just to be safe.

**Comments**

- Camera computer performed flawlessly during today's flight.

**Daily Coverage**

D14 SRER_P2	Line	SpecG	SpecY	SpecR	NIS	Lidar	Camera	Cumulative
	41				✓	✓	✓	NLC
	52				✓	✓	✓	NLC
	53				✓	✓	✓	NLC
	54				✓	✓	✓	NLC
	55				✓	✓	✓	NLC
	56				✓	✓	✓	NLC
	57				✓	✓	✓	NLC
	58				✓	✓	✓	NLC
	59				✓	✓	✓	NLC
	60				✓	✓	✓	NLC
	61				✓	✓	✓	NLC
	62				✓	✓	✓	NLC
	63				✓	✓	✓	NLC
	64				✓	✓	✓	NLC

Flown:	14								
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**Cumulative Domain Coverage**

**JORN\_P1**

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: 91% (31/34)  
 Yellow: 9% (3/34)  
 Red: 0% (0/34)

**JORN\_P2**

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: 5% (1/21)  
 Yellow: 100% (21/21)  
 Red: 0% (0/21)

**N14A**

1
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Flown: 100% (1/1)  
 Green: 100% (1/1)  
 Yellow: 0% (0/1)  
 Red: 0% (0/1)

**SRER\_P1**

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: 88% (35/40)  
 Yellow: 28% (11/40)  
 Red: 0% (0/40)

**SRER\_P2**

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: 58% (14/24)  
 Green: 0% (0/24)  
 Yellow: 58% (14/24)  
 Red: 0% (0/24)

**SRER\_P3**

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														

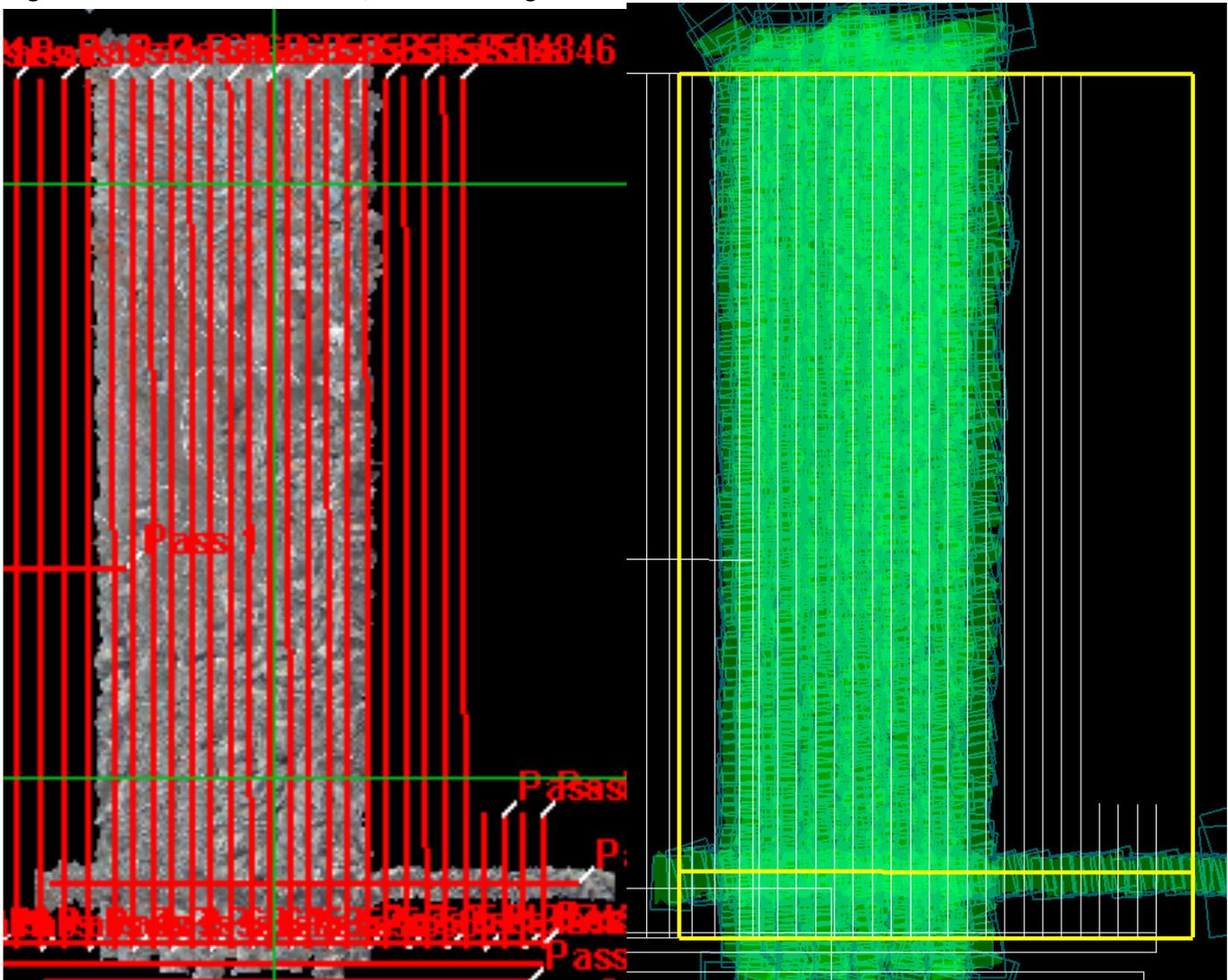
Flown: 38% (10/26)  
 Green: 38% (10/26)  
 Yellow: 0% (0/26)  
 Red: 0% (0/26)

**SYCA**

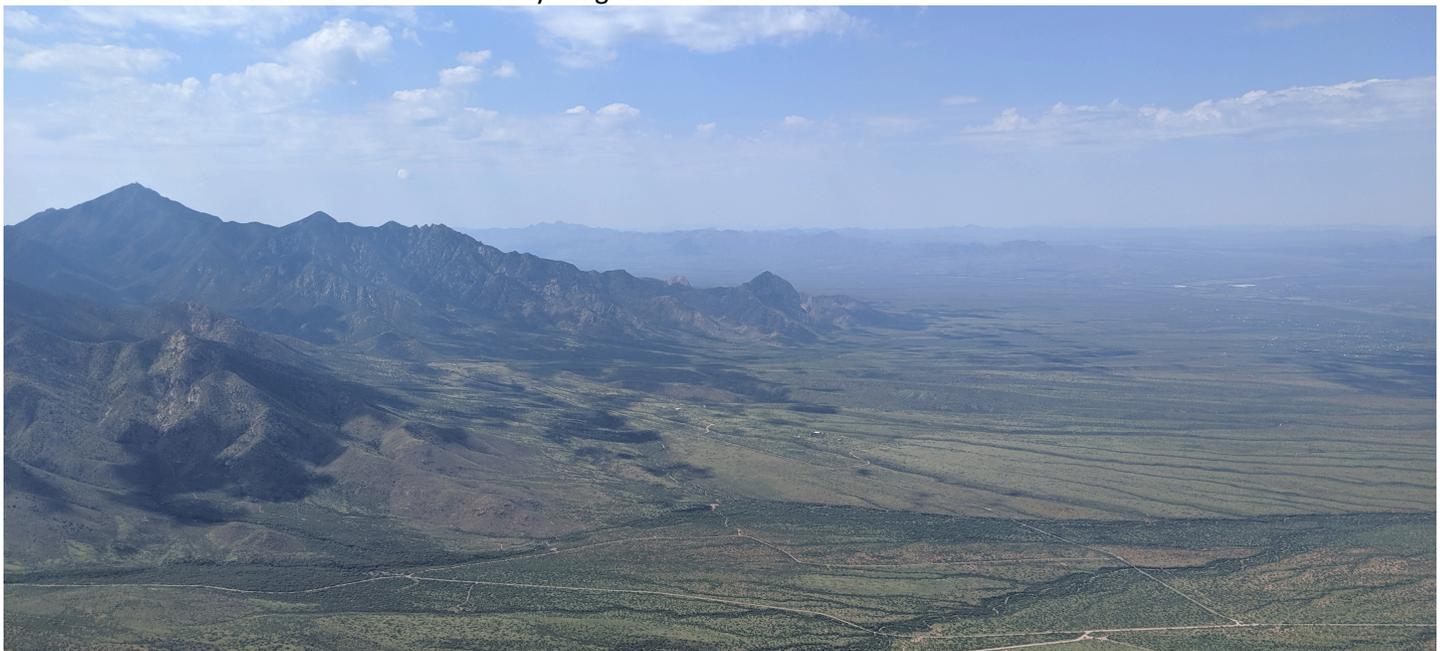
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50	51	52								

Flown: 0% (0/52)  
 Green: 0% (0/52)  
 Yellow: 0% (0/52)  
 Red: 0% (0/52)

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

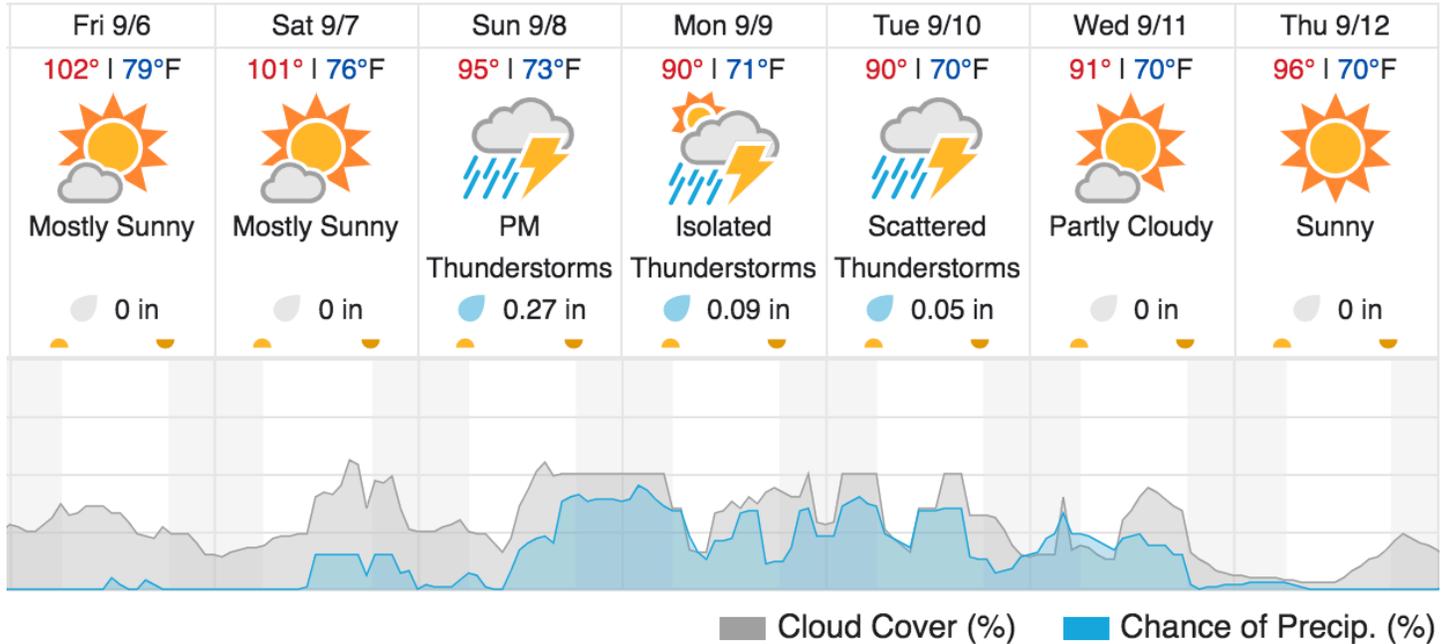


Pictures: Cloud conditions at the end of today's flight over Santa Rita.

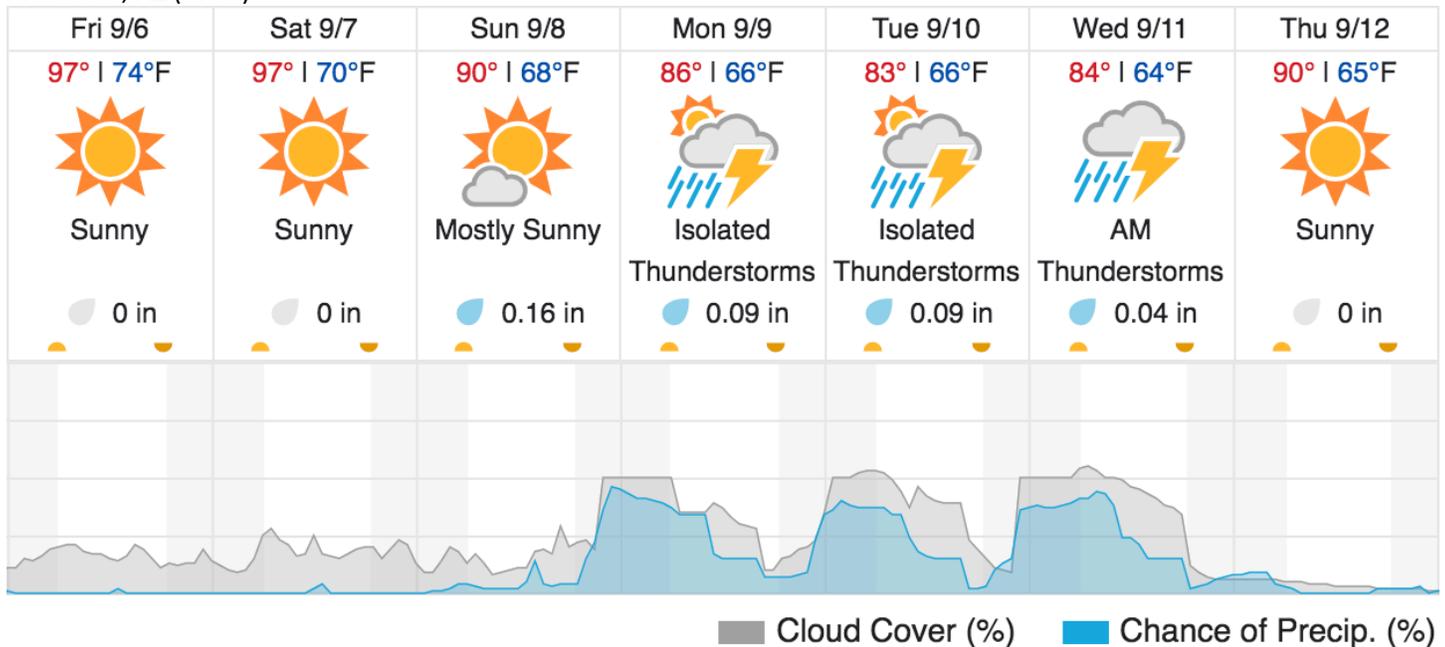


## Weather Forecast

Tucson, AZ (SRER)



Rio Verde, AZ (SYCA)



## Flight Collection Plan for 6 September 2019

### Flyority 1:

Collection Area: Santa Rita Experimental Range – Priority 1 Flight Box (SRER\_P1), Re-fly lines 30-35 if Green

Flight Plan Name: D14\_SRER\_C1\_P1\_P2\_P3\_v5.pln

On-station Time: 1620 – 2230 UTC / 0920 – 1530 MST

### Flyority 2:

Collection Area: Santa Rita Experimental Range – Priority 2 Flight Box (SRER\_P2)

Flight Plan Name: D14\_SRER\_C1\_P1\_P2\_P3\_v5.pln

On-station Time: 1620 – 2230 UTC / 0920 – 1530 MST

### Flyority 3:

Collection Area: Santa Rita Experimental Range – Priority 3 Flight Box (SRER\_P3)

Flight Plan Name: D14\_SRER\_C1\_P1\_P2\_P3\_v5.pln

On-station Time: 1620 – 2230 UTC / 0920 – 1530 MST

**Flyority 4:**

Collection Area: Sycamore Creek – Priority 1 Flight Box (SYCA)

Flight Plan Name: D14\_SYCA\_A1\_P1\_v5\_750\_max.pln

On-station Time: 1620 – 2230 UTC / 0920 – 1530 MST

**Crew:** Cameron Chapman (Lidar), Ivana Vu (NIS), Mitch Haynes (Ground/GPS)