

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 Flight Hours: 03:41

Ground/GPS: Ivana Vu

Hours until maintenance: 93.03

Pilots: Micah Hoogeveen, Paul Muth

Additional Personnel:

GPS Instruments: 02 - FBO_KSDL, 09 - KTUS, AOP_SRER

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

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

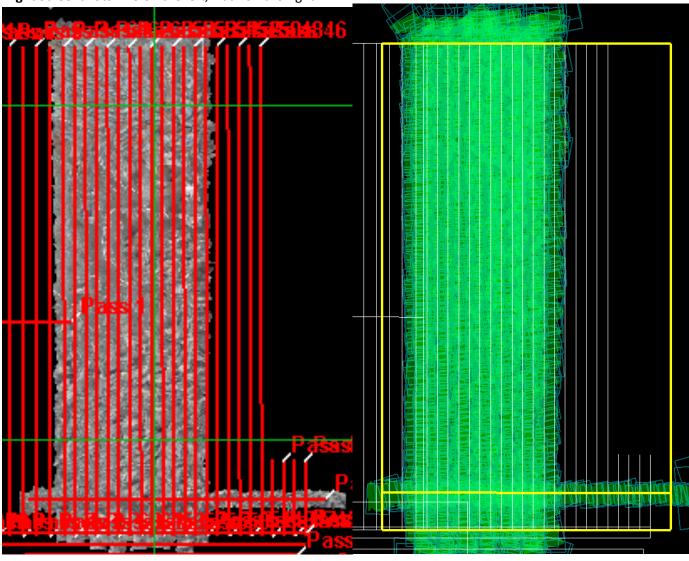
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Cumulative Domain Coverage																																
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Green: 91% (31/34)																																
Yellow: 9% (3/34)																																
	0% (0/3	34)																														
JORN 35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54													
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		(21/21	.)																													
кеа: N14/	0% (0/2 \	21)																														
NT-47	`																															
Flown	: 100%	(1/1)																														
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			Yellow: 0% (0/1)																													
Red: 0% (0/1) SRER_P1																																
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1 21 Flown Green Yellow	2 22 : 100% : 88% (3 (40/40) (35/40) (11/40)	24																													
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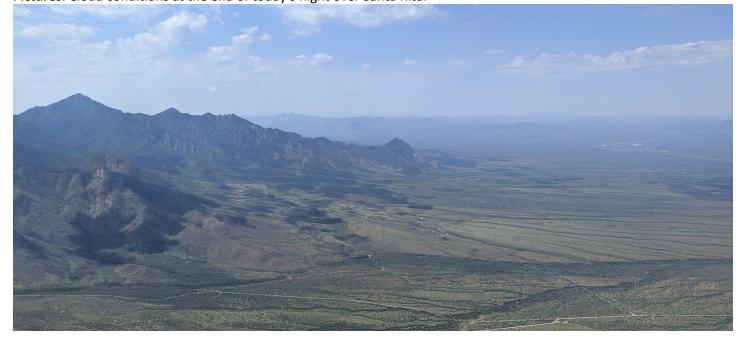
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21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50	51	52								

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

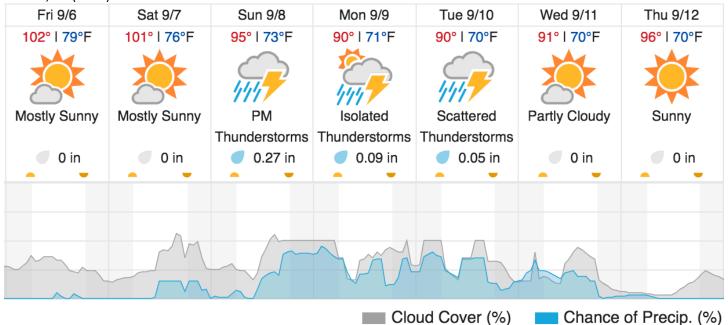


Pictures: Cloud conditions at the end of today's flight over Santa Rita.

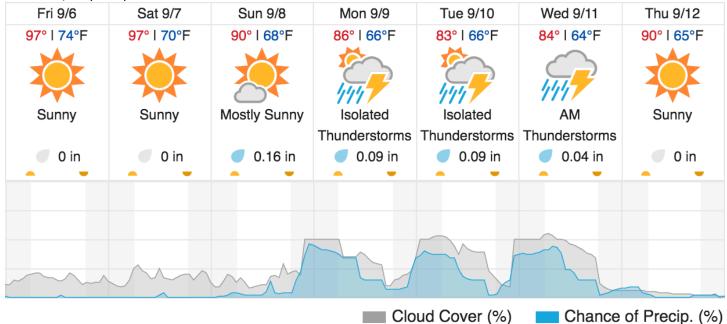


#### **Weather Forecast**

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-staton Time: 1620 – 2230 UTC / 0920 – 1530 MST

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