



Payload 3 Daily Flight Report



Date: 2024-09-02

Flight Campaign ID: P3C1

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

Aircraft: N821AR

Domain: 14 (Desert Southwest)

Sites Flown: SRER_P1 (Santa Rita Experimental Range Priority 1)

Days left in Domain: 04

Report Author: Cameron

Lidar Operators: Cameron

Flight Hours: 01:49

Spectrometer Operators: Mitch

Hours until maintenance: 71.78

Pilots: Vince, Manning

GPS Instruments: 03 - KTUS, AOP_SRER

Summary

We took off this morning with conditions of light haze and clear skies. We initially started data collection on the Eastern side of the flight box near the airshed, however cumulus clouds and their associated shadows developed so we shifted focus to the Westside of the flight box. We were able to complete 15 flight lines before clouds pushed us outside of our nominal "Green" conditions.

Concerns

- MIDAS2 was displaying as MIDAS1. This usually occurs when the disk has been improperly loaded into the wrong disk bay on a previous flight. We will continue to monitor.
- GPS 3 is online and logging however it's not uploading to the GCS. We believe it may be an IP issue.

Comments

- None

Daily Coverage

Estimated Cloud Cover Key

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

Solar Angle Less Than 40 degrees

Line #

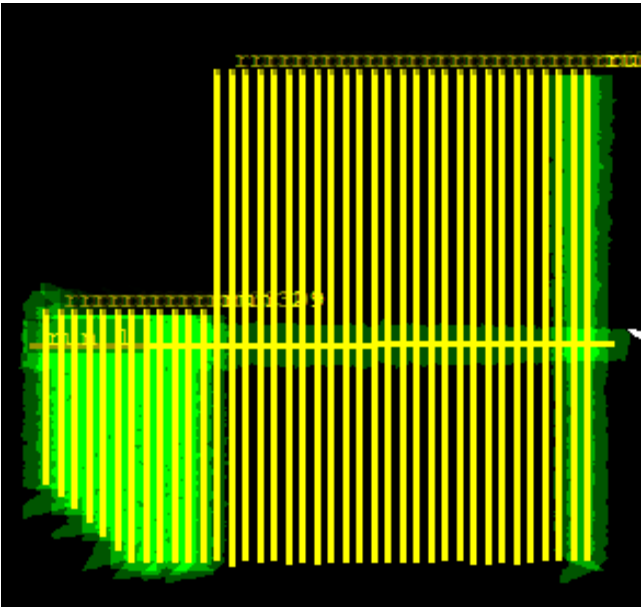
D14|SRER_P1

Line #	1	2	3	29	30	31	32	33	34	35	36	37	38	39	40
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover															

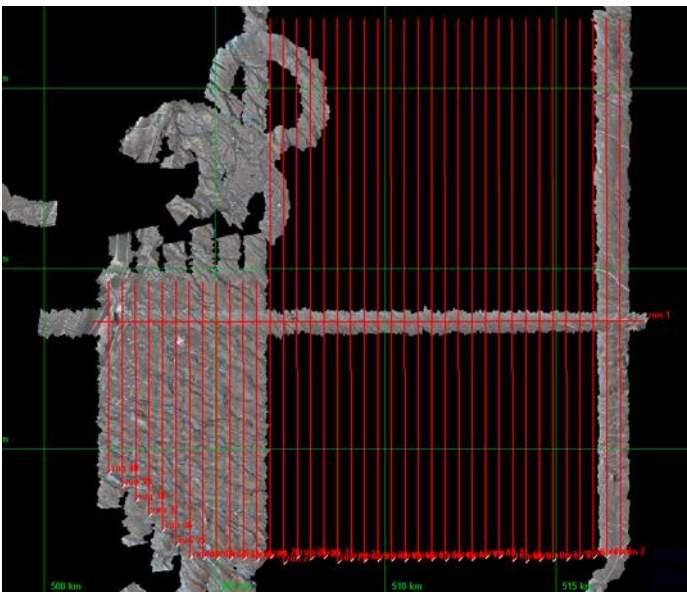
Total number of lines flown: 15

Flight Screenshots

Lidar Swath



NIS GeoPaint



Pictures: Flying over SRER this morning.



Cumulative Domain Coverage

D14|SRER_P1 (Santa Rita Experimental Range Priority 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: 36% (14/39)
Green: 36% (14/39)
Yellow: 0% (0/39)
Red: 0% (0/39)

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: 0% (0/23)
Green: 0% (0/23)
Yellow: 0% (0/23)
Red: 0% (0/23)

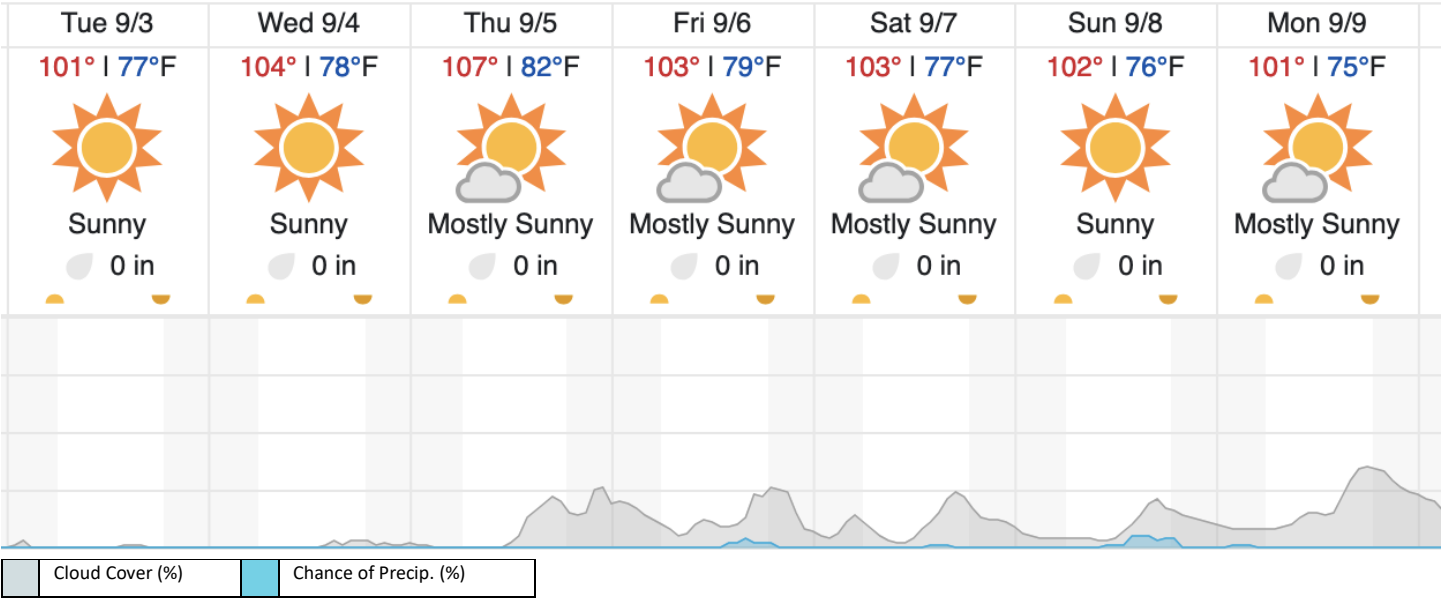
D14|SRER_P3 (Santa Rita Experimental Range Priority 3)

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: 0% (0/25)
Green: 0% (0/25)
Yellow: 0% (0/25)
Red: 0% (0/25)

Weather Forecast

Tucson, AZ



source: wunderground.com

Flight Collection Plan for 03 September 2024

Flyority 1 (Lines 4- 28)

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

Flight Plan Name: D14_SRER_C1_P1_v4_Q780

40° On-station Time: 16:20 UTC / 09:20 MST

Flyority 3

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

Flight Plan Name: D14_SRER_C1_P2_v5_Q780

40° On-station Time: 16:20 UTC / 09:20 MST

Flyority 4

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

Flight Plan Name: D14_SRER_C1_P3_v5_Q780

40° On-station Time: 16:20 UTC / 09:20 MST

Crew: Mitch (Lidar), Cam (NIS)