**Payload 1 Daily Flight Report**

**Date:** 2022-09-02  
**Flight Campaign ID:** P1C1  
**Airport, FBO ID, City:** Tucson International Airport - Tucson, AZ  
**Aircraft:** N331AR

**Domain:** 14 (Desert Southwest)  
**Sites Flown:** None  
**Days left in Domain:** 9

**Report Author:** Elissa  
**Lidar Operators:** Elissa  
**Spectrometer Operators:** Abe  
**Flight Hours:** 00:00  
**Hours until maintenance:** 41.27  
**Pilots:** Vince, Steven

**Summary**

No flights were conducted today due to early cloud formation over both sites, and the promise of several likely cloud-free days coming up starting Sunday.

**Concerns**

The spectrometer backplate temperature is still reading high at 153K. The Lakeshore display is different than usual, and is highlighting the 153K value. Restarting the cooling system again did not solve the problem, and the lab will continue to investigate. In the meantime we are continuing with collections and hoping that data quality is not effected since the focal plan array thermocouple is still outputting expected values.

**Comments**

- The mercury lamp test was conducted today.
- We swapped in a replacement solar panel and observed that the battery immediately began to rapidly charge under the desert sun, strengthening our suspicions that the original solar panel had been substantially damaged in Deadhorse.
- QA ran to completion today for last Tuesday’s flight, catching us up on data extractions so far.
- Mitch departed the domain this morning. Thanks for the hard work helping to sort out data and GPS issues before leaving!
Cumulative Domain Coverage

Estimated Cloud Cover Key

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

D14|JORN_P1 (Jornada Priority 1)

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

D14|JORN_P2 (Jornada Priority 2)

Flown: 0% (0/21)
Green: 0% (0/21)
Yellow: 0% (0/21)
Red: 0% (0/21)

D14|N14A (D14 Nominal Runway)

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)

Flown: 100% (40/40)
Green: 98% (39/40)
Yellow: 2% (1/40)
Red: 0% (0/40)

D14|SRER_P2 (Santa Rita Experimental Range Priority 2)

Flown: 0% (0/24)
Green: 0% (0/24)
Yellow: 0% (0/24)
Red: 0% (0/24)

D14|SRER_P3 (Santa Rita Experimental Range Priority 3)

Flown: 0% (0/26)
Green: 0% (0/26)
Yellow: 0% (0/26)
Red: 0% (0/26)
Weather Forecast

Tucson, AZ (KTUS, SRER)

<table>
<thead>
<tr>
<th>Date</th>
<th>High</th>
<th>Low</th>
<th>High</th>
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<td>76°F</td>
<td>99°</td>
<td>74°F</td>
<td>102°</td>
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<td>74°F</td>
<td>94°</td>
<td>73°F</td>
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<tr>
<td>Thu 9/8</td>
<td>94°</td>
<td>73°F</td>
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<tr>
<td>Fri 9/9</td>
<td>88°</td>
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Cloud Cover (%) | Chance of Precip. (%)

source: wunderground.com

Hatch, NM (JORN)

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Cloud Cover (%) | Chance of Precip. (%)

source: wunderground.com
Flight Collection Plan for 3 September 2022

Flyority 1
Collection Area: Jornada (JORN) – Priority 1 Flight Box – Priority 1 Box
Flight Plan Name: D14_JORN_R1_P1_v5_PRM.xml
35° On-station Time: 15:40 UTC / 09:40 MDT / 8:40 MST

Flyority 2
Collection Area: Santa Rita Experimental Range (SRER) – Priority 2 Box
Flight Plan Name: D14_SRER_C1_P1_v6_PRM.xml
40° On-station Time: 16:20 UTC / 09:20 MST

Flyority 3
Collection Area: Santa Rita Experimental Range (SRER) – Priority 3 Box
Flight Plan Name: D14_SRER_C1_P1_v6_PRM.xml
40° On-station Time: 16:20 UTC / 09:20 MST

Flyority 4
Collection Area: Jornada (JORN) – Priority 2 Flight Box
Flight Plan Name: D14_JORN_R1_P1_v5_PRM.xml
35° On-station Time: 15:40 UTC / 09:40 MDT / 8:40 MST

Flyority 5
Collection Area: Nominal Runway – D14
Flight Plan Name: D14_N14A_Nominal_Runway_Test_v1_PRM
On-station Time: N/A

Crew: Elissa, Abe