Payload 1 Daily Flight Report

Date: 2024-06-13  
Flight Campaign ID: P1C1  
Airport, FBO ID, City: Fresno Yosemite International Airport (KFAT) - Fresno, CA  
Aircraft: N615AR

Domain: 17 (Pacific Southwest)  
Sites Flown: N17A (D17 Nominal Runway), TEAK_P1 (Teakettle Priority 1)  
Days left in Domain: 2

Report Author: Abe  
Lidar Operators: Abe  
Flight Hours: 02:59  
Spectrometer Operators: Cameron  
Hours until maintenance: 44.68  
Pilots: Vince, Cody  
GPS Instruments: 05 - KFAT, AOP_TEAK

Summary
With yet another cloud free morning the crew went back to the TEAK site to finish coverage at that site. 18 lines were flown in mostly "green" sky conditions until the forecast clouds started popping up during the last few lines. Due to a glitch in the flight plan, line 38 could not be collected. However, there was enough overlap from the adjoining lines to provide coverage for this one-line gap. After the TEAK collection was finished the nominal runway flight plan was collected at the very busy KFAT airport. Nice work pilots!!

Concerns
The NIS FG/HSI TS error did occur directly after takeoff. After a complete reboot of the system, the crew noticed the low DN error was occurring. Another reboot of the system was able to correct all the issues. The system performed well throughout the days collection but did have another FG/HSI TS error on the way back to Fresno and before the nominal runway flight plan was collected. A reboot of the mars rover software and switches 5,6, and 7 fixed this error.

Comments
- Collections have been completed at D17b. The crew will focus on catching up with data extractions and preparations for the transit to Burbank on Sunday.  
- The problematically small 15TB “D:” drive on the P1 hotel kit computer was upgraded today to 30TB. Hopefully this will be enough space for us!

Daily Coverage
Estimated Cloud Cover Key

<table>
<thead>
<tr>
<th>Green: 0-10%</th>
<th>Yellow: 11-50%</th>
<th>Red: &gt;50%</th>
</tr>
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D17|TEAK_P1

<table>
<thead>
<tr>
<th>Line #</th>
<th>22</th>
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Cloud Cover

Total number of lines flown: 18
D17|N17A

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<tbody>
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<td>Camera</td>
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</tr>
<tr>
<td>Cloud Cover</td>
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</table>

Total number of lines flown: 2

### Flight Screenshots

#### Lidar

**TEAK**

![TEAK Flight Screenshot](image1.png)

**NIS**

![NIS Flight Screenshot](image2.png)

**N17A**

![N17A Flight Screenshot](image3.png)

![N17A Flight Screenshot](image4.png)
Cumulative Domain Coverage

D17|N17A (D17 Nominal Runway)

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

D17|SOAP_P1 (Soaproot Saddle Priority 1)

Flown: 100% (47/47)
Green: 100% (47/47)
Yellow: 0% (0/47)
Red: 0% (0/47)

D17|TEAK_P1 (Teakettle Priority 1)

Flown: 98% (39/40)
Green: 92% (37/40)
Yellow: 5% (2/40)
Red: 0% (0/40)

Weather Forecast

Fresno

Flight Collection Plan for June 14, 2024

No flights planned. Continue extracting collected data. Prep for Sunday transit.
Crew: Cam (Lidar), Abe (NIS)