

March 31, 2018 Payload 3 Daily Flight Report



Date: 03-31-18

Flight Campaign ID: 2018 P3C1

Airport, FBO ID, City: Fresno International Airport (KFAT) – Fresno, CA

Domain: 17

Sites Flown: SJER (Training)

Days left in Domain: 4

Report Author: Michael Wussow

Flight Crew: Michael Wussow, Cam Chapman, Robb Walker GPS Instruments: 02 – FBO KFAT, U-P725

Ground/GPS Crew: Mitch Haynes Flight Hours: 1:29

Pilots: Stephen Brawders, Mike Francis

Additional Personnel: None

Hours until aircraft maintenance: 102.03

Summary

A flight was conducted over the San Joaquin Ecological Range for training purposes since high cirrus cloud conditions dominated the sky today.

Concerns

The MONSDW box was already unchecked when opening RiAcquire, but these files were still created during flight. The decimated LAS files were not placed on the D: drive this time, but in the C: drive.

Comments

- Robb completed his NIS certification with today's fight and Mike completed his Riegl lidar certification flight. Mike is now fully certified to operate Payload 3 and Robb will move onto Riegl training.
- Thank you Stephen for your service with us for the past few weeks, we look forward to your return. Also, we look forward to Ross Rice joining the crew tomorrow.

New Issues:

• 20180331 KML's for this flight had pass numbers that were ordered in reverse for SnapShot compared to RiAcquire and MarsRover and the flight plan summaries. Also the passes that SnapSHOT indicated showed up as in between passes shown on RiAcquire and MarsRover.

Ongoing Issues:

- Spectrometer 20180329 Pressure loss on the NIS, possibly due to a bad seal. Ian Crocker cut the strap holding the getter in hopes of reducing vibration from the PIM. Flight crew will monitor during transit. PL3 vacuum pump will be shipped to D17 if needed. 20180330 No significant pressure loss occurred during the transit to D17. 20180331 NIS chamber pressure is continuing to rise, based on the trend crew is requesting pump to be shipped to D17 to be used if necessary.
- RiAcquire 20180324 Received several 'INS-GPS 1' errors on RiAcquire that don't look familiar. Will investigate to see what these errors mean and why they're being received.

- Hotel Kit 3 20180324 SBET plots are failing to generate in QAQC. Extractions otherwise occurring properly.
- Database 20180324 Flight lines from Lidar logs not being placed in PDF logs, only CSV.

Ongoing Issues (continued):

- Lidar –20180321 Error message on RiAcquire. "LASER_HEARTBEAT_TIMEOUT_EXPIRED" and corresponding visible gaps in swath. 20180322 Error occurred again, believed to be related to lost connection with scanner. 20180323 Same error occured. 20180324 Error occurred on one line. 20180327 "LASER_HEARTBEAT_TIMEOUT_EXPIRED" and corresponding visible gaps in swath error occurred when RDP lost connection twice. 20180331 VNC connections for RiAcquire and SnapSHOT were used today and error did NOT occur
- Lidar 20180322 New Ethernet cable attached but same issues occurred. 2018032414 Several lost
 connections occurred for the Remote Desktop to both RiAcquire and Tracker snapSHOT, which
 effected the pilot display. Issue will continue to be monitored. 20180327 Tried tactic of unchecking
 production of MONSDW files to reduce network load, but RDP connection was lost twice during this
 flight. 20180331 VNC connections for RiAcquire and Snapshot used instead of RDP
- Spectrometer 20180319 Shutter on NIS not closed at request of the lab manager due to a known malfunction

Resolved Issues

None

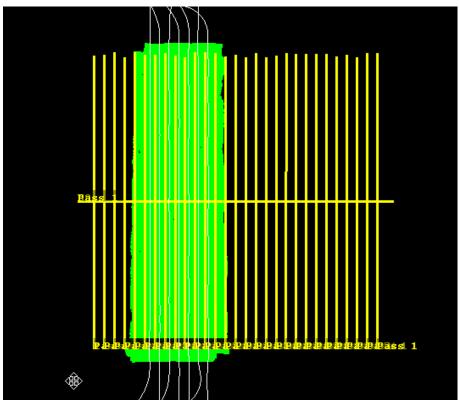
Pictures



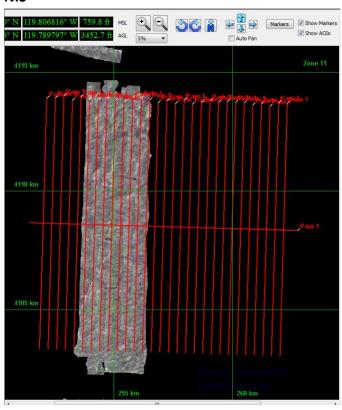
Looking southeast towards the Sierras and nearby Millerton Lake above the San Joaquin Ecological Range. Note the thick haze and the cirrus covered skies.

Screenshots

Lidar

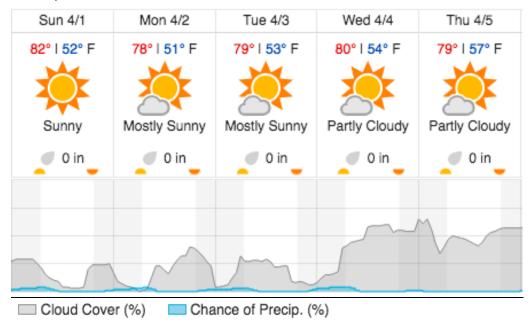


NIS



Weather Forecast

Fresno, CA



Flight Collection Plan for 01 April 2018

Flyority 1

Collection Area: San Joaquin Experimental Range Flight Plan Name: D17_SJER_C1_P1_v3_Q780 On Station Time: 1020 Local / 1720 UTC (40°)

Crew: Mitch (Lidar), Robb Walker (NIS), Cameron Chapman (Ground Re-cert), Michael Wussow (Ground

Certifier)