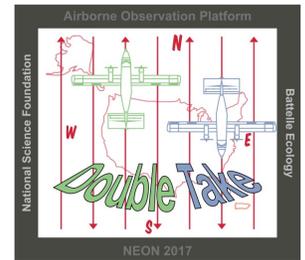




April 1, 2018 Payload 3 Daily Flight Report



Date: 04-01-18

Flight Campaign ID: 2018_P3C1

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

Domain: 17

Sites Flown: SJER

Days left in Domain: 2

Report Author: Mitch Haynes

Flight Crew: Mitch Haynes, Robb Walker, Cam Chapman

Ground/GPS Crew: Michael Wussow

Pilots: Mike Francis, Ross Rice

Additional Personnel: None

GPS Instruments: 02 – FBO_KFAT, U-P725

Flight Hours: 03:55

Hours until aircraft maintenance: 98.12

Summary

Clear skies over SJER allowed the crew to complete SJER in its entirety under green conditions with minimal payload errors or issues occurring.

Concerns

None

Comments

- Lines 1-30 of SJER were completed under green conditions
- Robb Walker completed his first Riegl lidar observation flight
- No Lost Connection Errors, INS-GPS 1 errors, or Laser Heartbeats errors occurred during today's 4-hour flight while using VNCs for RiAcquire and Tracker with external monitors also displaying
- Pending QAQC results of data collected from today's flight, crew will turn focus towards completion of Robb Walker's training and push the return transit to Boulder up to Wednesday, April 4th.
- Riegl Disk Set 2 is still having issues with MIDAS disks being recognized. Will again be removed from disk rotation

New Issues:

None

Ongoing Issues:

- Flight Plans - 20180331 KML's for SJER 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. 2018040117 Used 2017 kml for flight lines, still didn't match (expected).
- 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. 2018040117 NIS Chamber

continued to display strange symptoms of holding pressure steady in flight and continuing it's steady rise once back in the hangar. FltOps will continue to monitor and discuss the need to ship the vacuum pump in the morning.

- 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. 20180401 No INS-GPS1 Errors occurred
- 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.
- 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 occurred. 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. 20180401 No laser heartbeat errors occurred in 4 hour flight while using VNCs
- 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. 20180401 Used VNCs (with slight lag) and external displays, no lost connections occurred in 4 hour flight
- Spectrometer – 20180319 Shutter on NIS not closed at request of the lab manager due to a known malfunction

Resolved Issues

- None

Daily Coverage

D17 SJER	Line	SpecG	SpecY	SpecR	NIS	Lidar	Camera	Cumulative
	1							NLC
	2							NLC
	3							NLC
	4							NLC
	5							NLC
	6							NLC
	7							NLC
	8							NLC
	9							NLC
	10							NLC
	11							NLC
	12							NLC
	13							NLC
	14							NLC
	15							NLC

	16																			NLC
	17																			NLC
	18																			NLC
	19																			NLC
	20																			NLC
	21																			NLC
	22																			NLC
	23																			NLC
	24																			NLC
	25																			NLC
	26																			NLC
	27																			NLC
	28																			NLC
	29																			NLC
	30																			NLC
Completed:	(30/30)																			100.00%

Cumulative Domain Coverage

SJER

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											

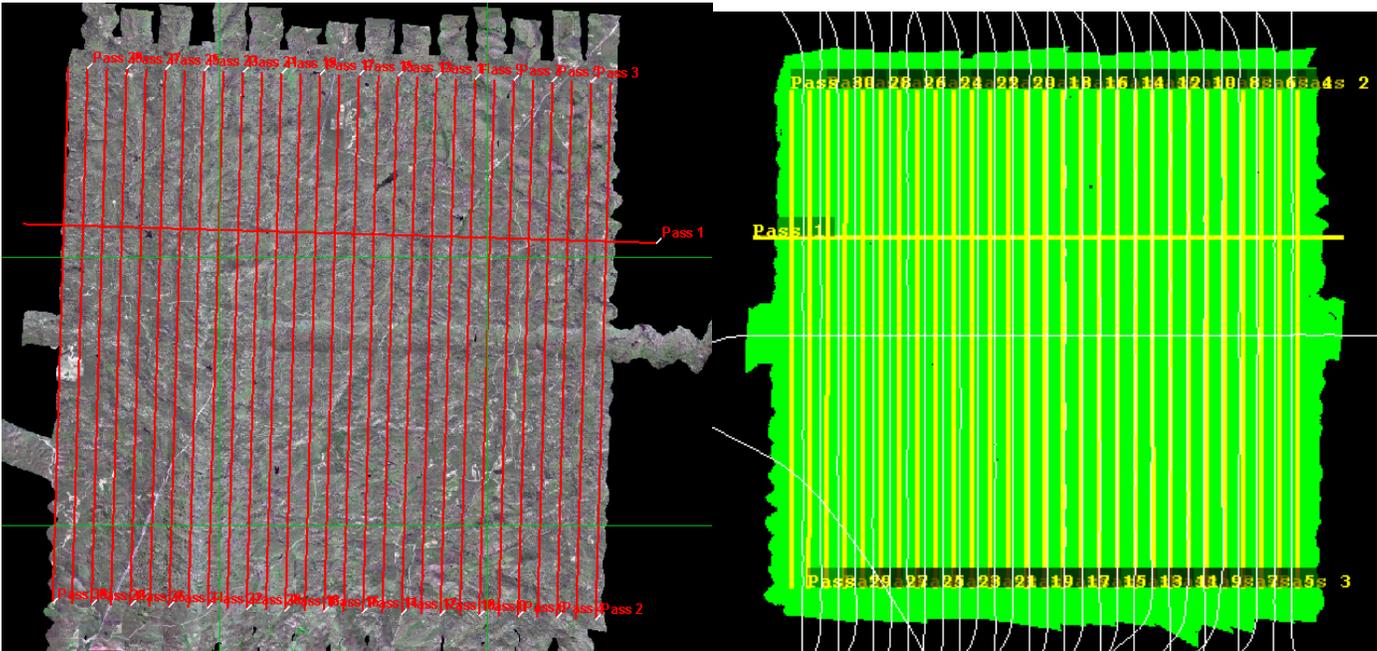
Flown: 100% (30/30)
 Green: 100% (30/30)
 Yellow: 0% (0/30)
 Red: 0% (0/30)

Pictures - San Joaquin Experimental Range



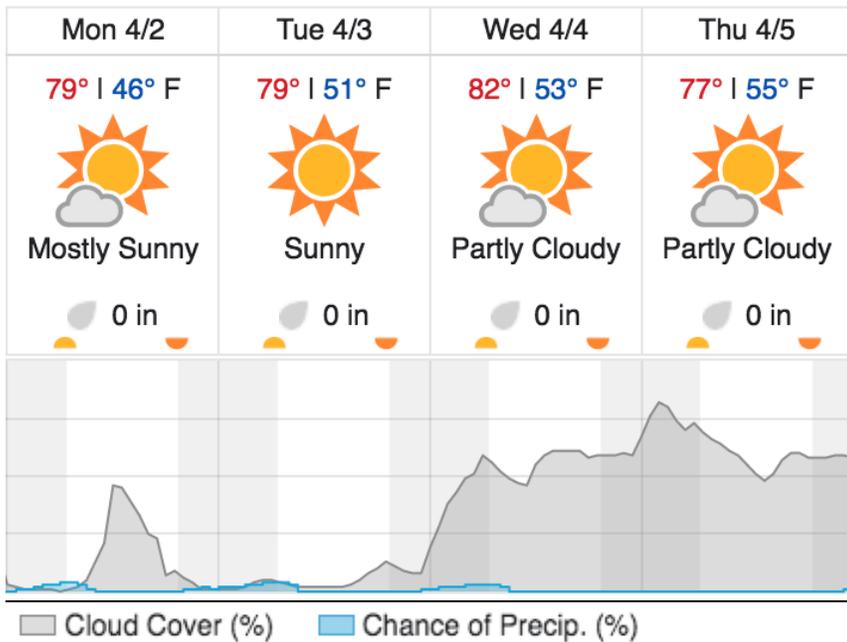


Screenshots



Weather Forecast

Fresno, CA



Flight Collection Plan for 02 April 2018

Flyority 1

Training

Collection Area: San Joaquin Experimental Range

Flight Plan Name: D17_SJER_C1_P1_v3_Q780

On Station Time: 1020 Local / 1720 UTC (40°)

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