



## April 19, 2019 Payload 3 Daily Flight Report



**Date:** 2019-04-19

**Flight Campaign ID:** 2019\_P3C1

**Airport, FBO ID, City:** Boulder Municipal Airport (KBDU) - Boulder, CO

**Domain:** 00, 11

**Sites Flown:** CLBJ (LBJ National Grasslands), TRAIN (Training)

**Days left in Domain:** 13

**Report Author:** Ivana Vu

**Flight Crew:** Robb Walker, Elissa Barris, Ivana Vu

**Ground/GPS:** Robb Walker

**Pilots:** Chad Evans, Mark Solper

**Additional Personnel:** None

**GPS Instruments:** 03 - FBO\_KSPS, TXDOT-TXDC

**Flight Hours:** 03:15

**Hours until maintenance:** 103.25

### **Summary**

Weather forecasts and webcams showed promising conditions at CLBJ, however, cumulus clouds quickly formed after we arrived on station. Fifteen lines, including the priority airshed, were collected under mixed sky conditions.

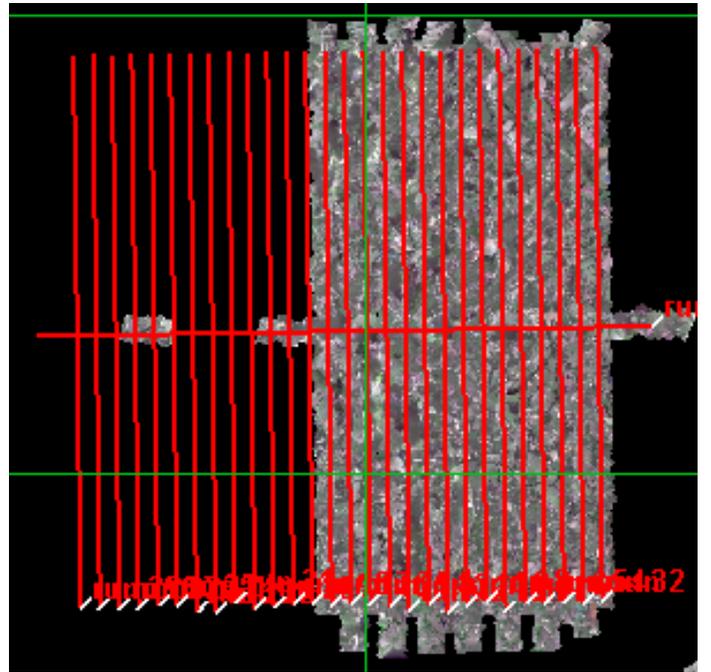
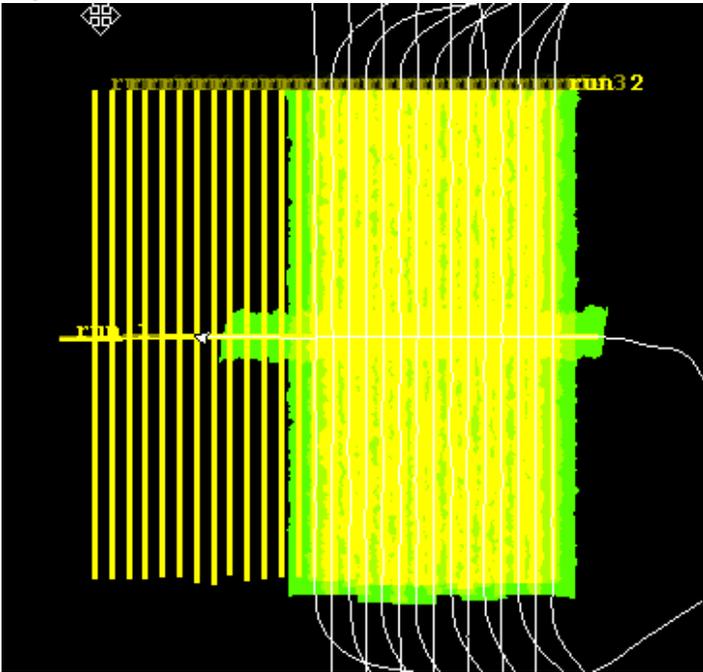
### **Concerns**

- FBO GPU malfunctioned during sensor startup and failed to deliver power after multiple re-starts – pilots were able to start engines and provide survey power before UPS batteries died. GPU was functioning properly again when we returned but crew will continue to closely monitor this as FBO staff were not able to troubleshoot or reproduce the problem.
- Aircraft engines have a higher fuel burn rate than past planes leased from TOIL, so 4-hour long collection flights will not be possible with N615AR.

### **Comments**

- Elissa completed her 1<sup>st</sup> Riegl observation flight.
- German DLR DESIS instrument (spectrometer) on the International Space Station is scheduled to acquire data over CLBJ today at 22:06 UTC. We will attempt to collect at this site again tomorrow.

## Flight Screenshots



## Pictures

Cumulus clouds and shadows at CLBJ site



### Daily Coverage

D11   CLBJ	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
Flown:	16							

### Cumulative Domain Coverage

#### CLBJ

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											

Flown: 55% (16/29)  
 Green: 14% (4/29)  
 Yellow: 17% (5/29)  
 Red: 24% (7/29)

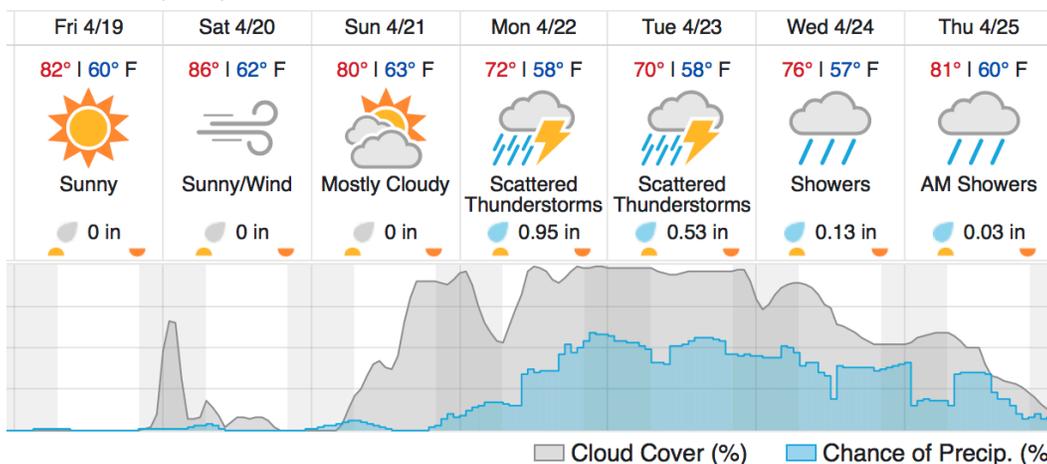
#### OAES

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				

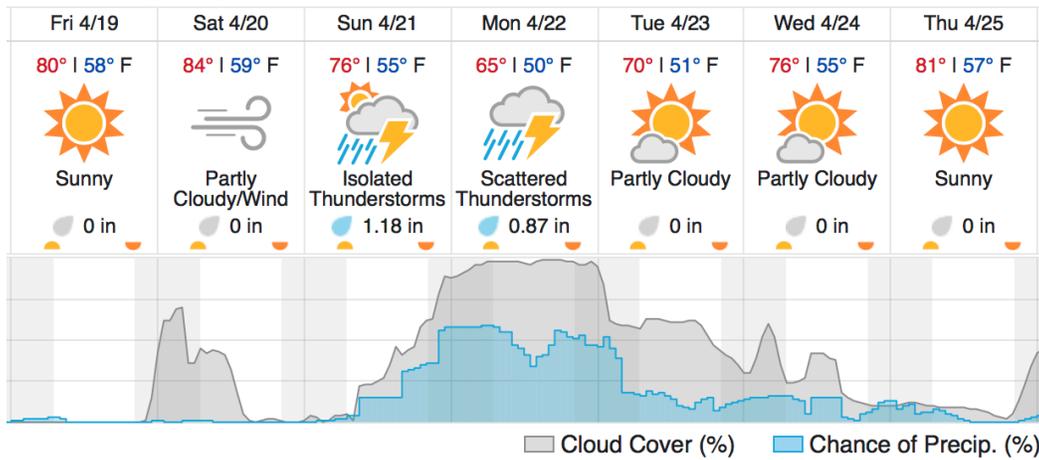
Flown: 0% (0/36)  
 Green: 0% (0/36)  
 Yellow: 0% (0/36)  
 Red: 0% (0/36)

### Weather Forecast

Bellevue, TX (CLBJ)



Clinton, OK (OEAS)



**Flight Collection Plan for 20 April 2019**

**Flyority 1**

Collection Area: LBJ Grasslands (CLBJ)

Flight Plan Name: D11\_CLBJ\_C1\_P1\_v3\_Q780

On-station Time: 1520 UTC / 1020 L

**Flyority 2**

Collection Area: Klemme Range Research Station (OAES)

Flight Plan Name: D11\_OAES\_R1\_P1\_v3\_Q780

On-station Time: 1530 UTC / 1030 L

**Crew:** Elissa Barris (Lidar), Ivana Vu (Trainer), Robb Walker (NIS/GPS)

**Flight Collection Plan for 21 April 2019**

**Flyority:** Same as previous day

**Crew:** Elissa Barris (Lidar), Ivana Vu (Trainer), Robb Walker (NIS/GPS)