



## April 24, 2018 Payload 3 Daily Flight Report



**Date:** 2018-04-24

**Flight Campaign ID:** 2018\_P3C1

**Airport, FBO ID, City:** Wichita Falls Municipal Airport (KSPS) - Wichita Falls, TX

**Domain:** 11

**Sites Flown:** CLBJ (LBJ National Grassland), OAES (Klemme Range Research Station)

**Days left in Domain:** 1

**Report Author:** Ivana Vu

**Flight Crew:** Ivana Vu, Mitch Haynes

**Flight Hours:** 04:16, 02:42

**Ground/GPS:** Michael Wussow

**Hours until maintenance:** 60.30

**Pilots:** Mike Francis, Paul Muth

**Additional Personnel:** None

**GPS Instruments:** 03 - CLBJ/PRIN, 04 - OAES, 05 - FBO\_KSPS

### **Summary**

The entire CLBJ site was re-flown under green sky conditions. Eight out of 10 lines of the OAES Gap Fill flight plan was completed under red sky conditions before crew had to abort due to rain showers in the vicinity. The aircraft will be packed and prepared for the transit to D08 (Tuscaloosa, AL) tomorrow as rain is in the forecast and it is a scheduled no-fly day.

### **Concerns**

The camera will potentially be un-installed for repairs while in D08, pending confirmation that the lidar system can still function without it. Initial testing was conducted in-flight today but requires further investigation.

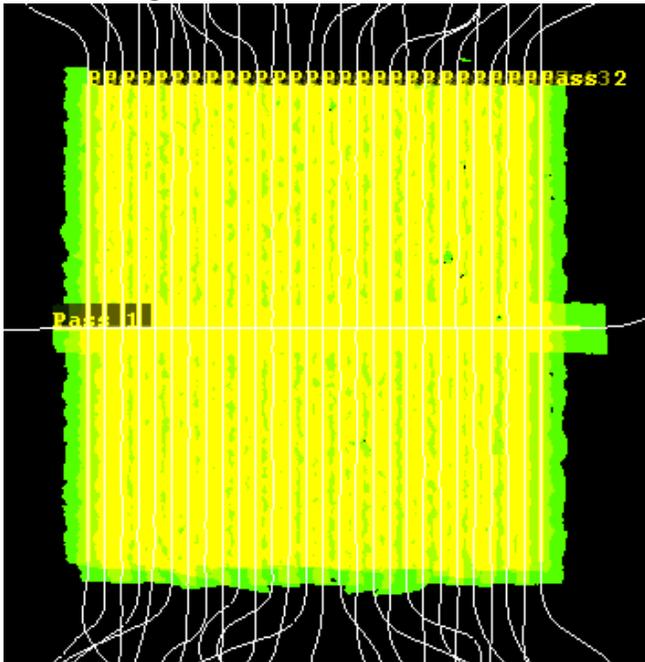
### **Comments**

- Collected CLBJ Lines 1-29 under green conditions this morning
- Collected OAES Gap Fill Lines 1-8 under red conditions this afternoon, lines 6-8 flown outside of 40-degree solar angle
- Riegl system functionality was tested with the camera disconnected during OAES Gap Fill flight
- Abe Morrison arrived in D08 and will begin deploying GPS base stations tomorrow
- Pilot Ross Rice arrived to replace Mike Francis
- Several issues were identified today pertaining to the Hotel Kit, Camera and Database – details will be communicated to necessary parties tomorrow

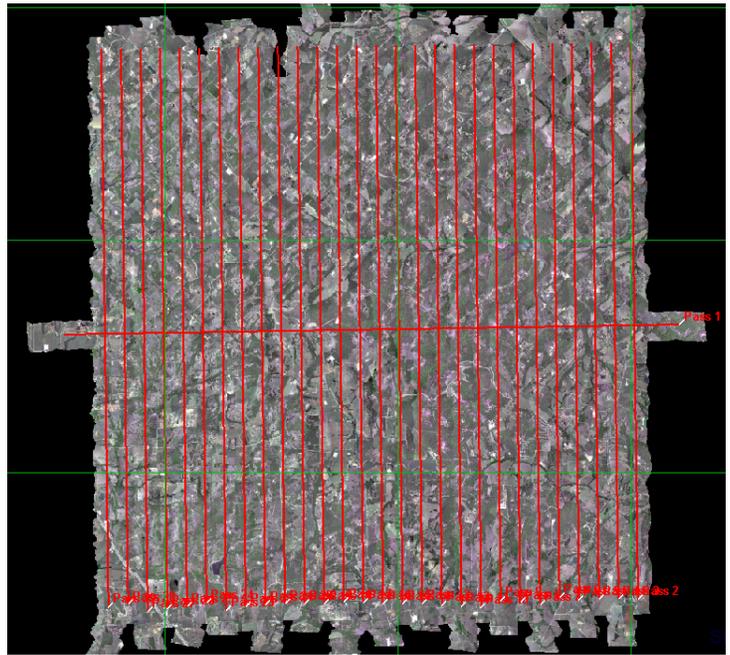
Flight Screenshots

CLBJ

Lidar coverage

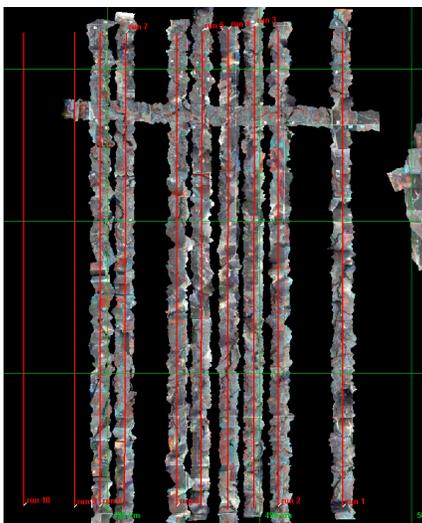


NIS coverage

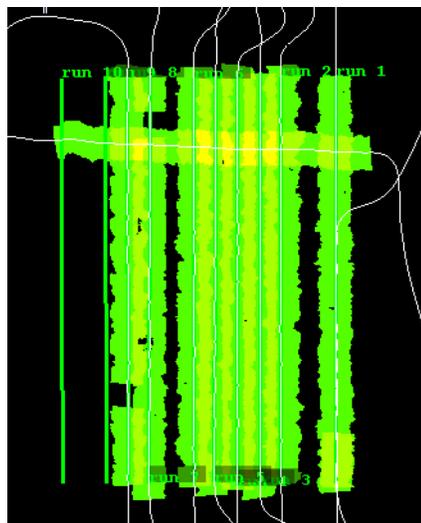


OAES Gap Fill

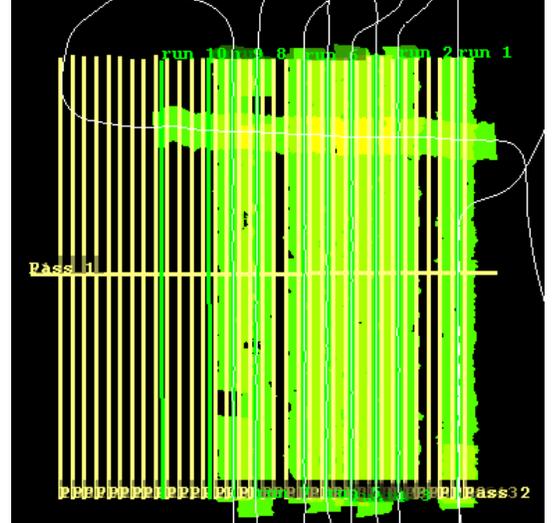
NIS Coverage



Lidar Coverage



Lidar Coverage with original OAES lines



## Pictures

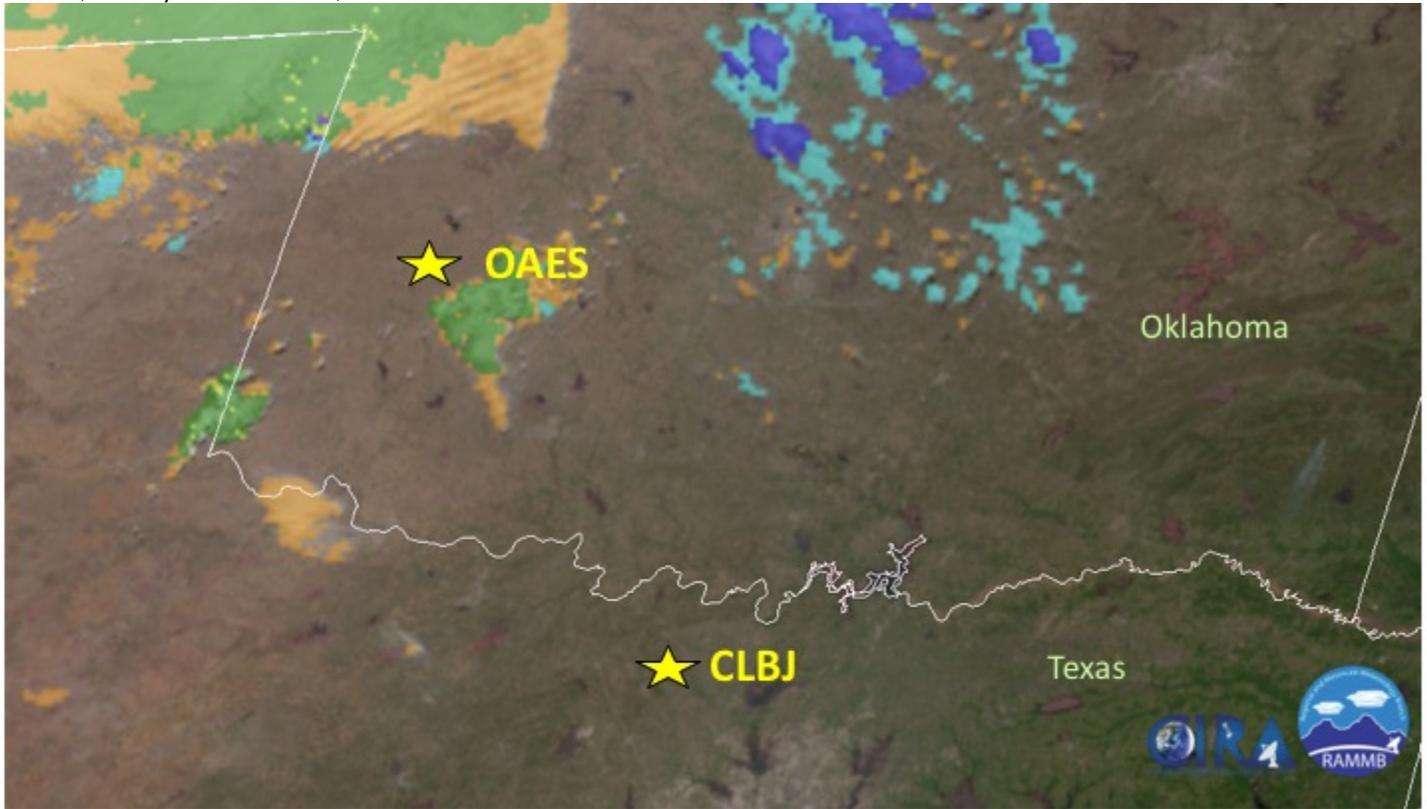
CLBJ site



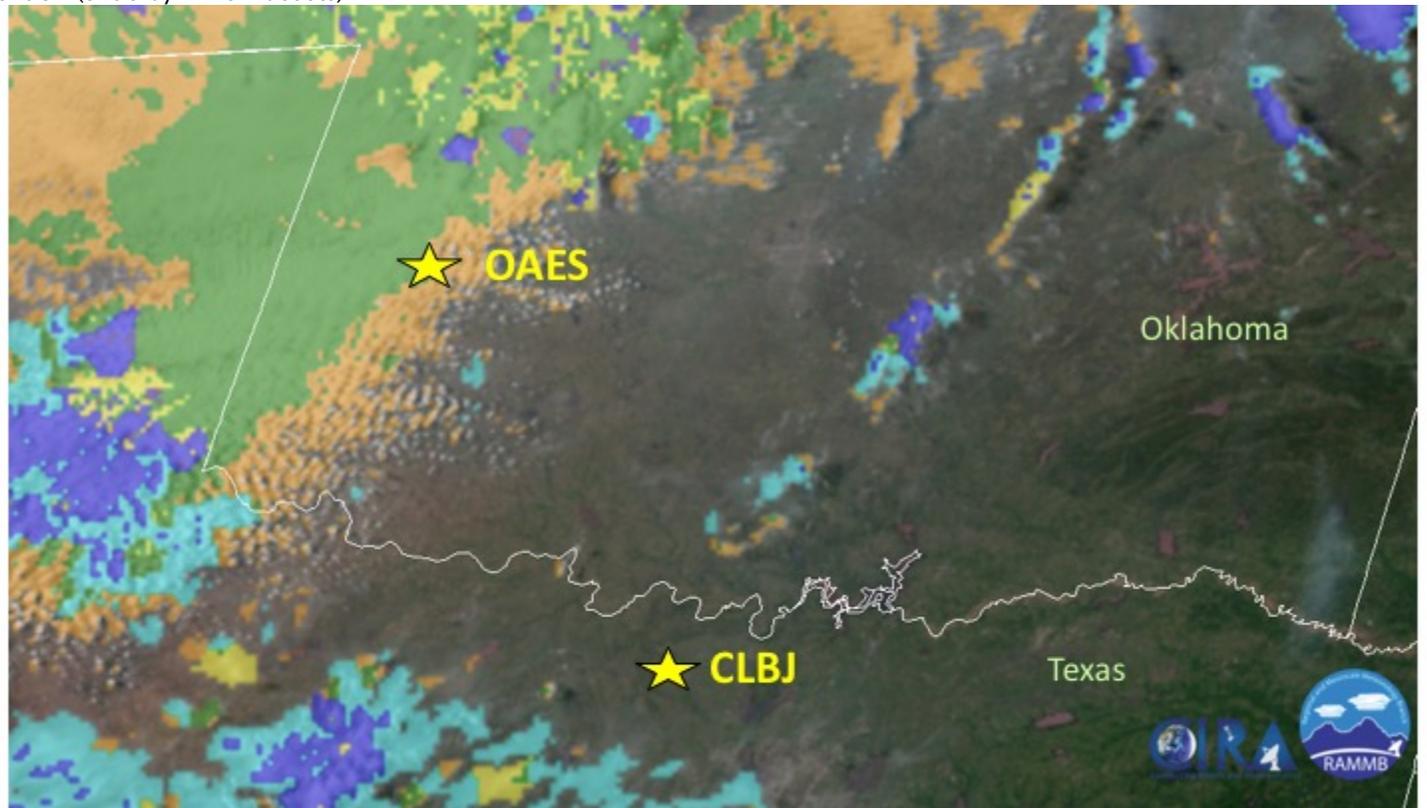
CLBJ tower and hut nestled in an oak-dominated forest



GOES East imagery with cloud mask showing cloud conditions during today's first flight at CLBJ. Source: CIRA RAMMB Slider. (Slide by Mike Wussow)



GOES East imagery with cloud mask showing cloud conditions during today's second flight at OAES. Source: CIRA RAMMB Slider. (Slide by Mike Wussow)



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
	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
Flown:	29							

D11 OAES	Line	SpecG	SpecY	SpecR	NIS	Lidar	Camera	Cumulative
	1				✓	✓	✓	NLC
	2				✓	✓	✓	NLC
	3				✓	✓	✓	NLC
	4				✓	✓	×	NL
	5				✓	✓	×	NL
	6				✓	✓	×	NL
	7				✓	✓	×	NL
	8				✓	✓	×	NL
	11				✓	✓	×	NL
Flown:	9							

## 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: 100% (29/29)

Green: 100% (29/29)

Yellow: 14% (4/29)

Red: 62% (18/29)

### 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: 100% (36/36)

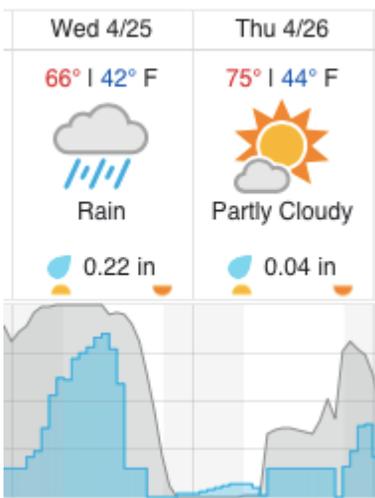
Green: 78% (28/36)

Yellow: 0% (0/36)

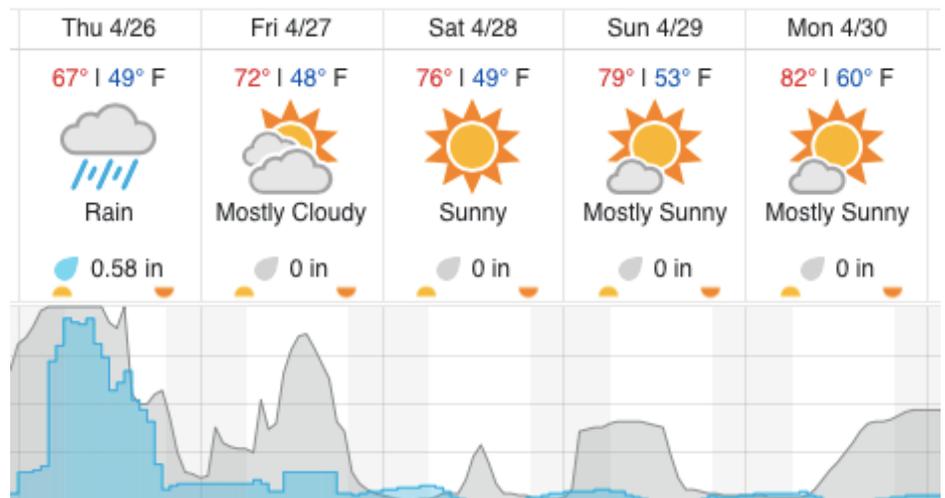
Red: 50% (18/36)

## Weather Forecast

### Wichita Falls, TX



### Tuscaloosa, AL



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

### Flight Collection Plan for 25 April 2018

Scheduled no-fly day

### Flight Collection Plan for 26 April 2018

Aircraft transits to D08 (Tuscaloosa, AL)