



Payload 1 Daily Flight Report



Date: 2022-05-09

Flight Campaign ID: P1C1

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

Aircraft: N331AR

Domain: 11 (Southern Plains)

Sites Flown: OAES (Klemme Range Research Station)

Days left in Domain: 1

Report Author: Elissa

Lidar Operators: Elissa

Flight Hours: 03:38

Spectrometer Operators: Cameron

Hours until maintenance: 93.50

Pilots: Justin, Magnus

Summary

Low cumulus once again precluded any collection at BLUE, as well as green collection of lines previously flown in yellow at PRIN. However, although it was very windy, it was clear up in Oklahoma, so we collected OAES priority lines and then some in green. We found no GPUs currently available in the area, including at FBOs we've used previously at KOJA and KCSM, so we had to limit our collection time and return all the way to KSPS.

Concerns

The NIS once again exhibited an "HSI timestamp error" after takeoff and had to be fully rebooted. This is the second flight in a row where this occurred.

We still are not able to access to the OAES tower camera.

Comments

The UPDU reached a maximum internal temperature of 48C, increasing rapidly while on the tarmac this morning and continuing to more slowly after takeoff. It never reached its shutoff point at 50C so the collection was completed without a hitch, although stopping and refueling for a second flight most likely would have presented problems.

Daily Coverage

Estimated Cloud Cover Key

| | | |
|--------|---------|------|
| Green: | Yellow: | Red: |
| 0-10% | 11-50% | >50% |

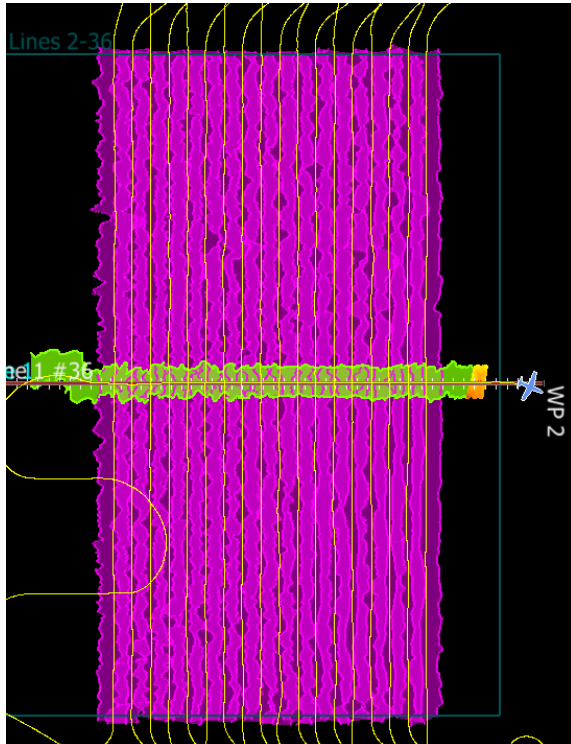
D11|OAES

| Line # | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
|--------------|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Lidar | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Spectrometer | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Camera | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Cloud Cover | | | | | | | | | | | | | | | | | | |

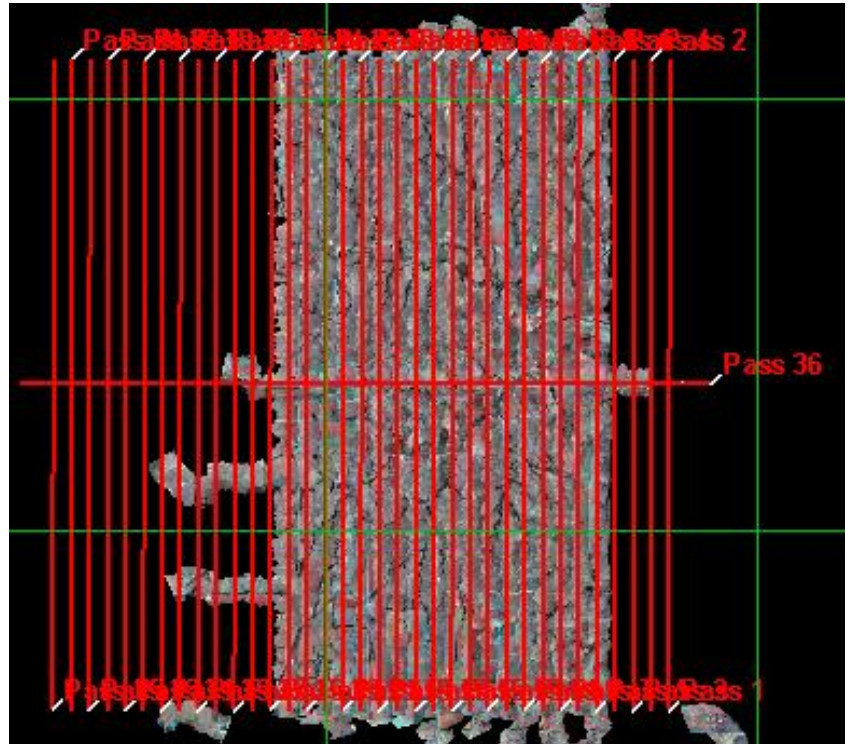
Total number of lines flown: 18

Flight Screenshots

LiDAR



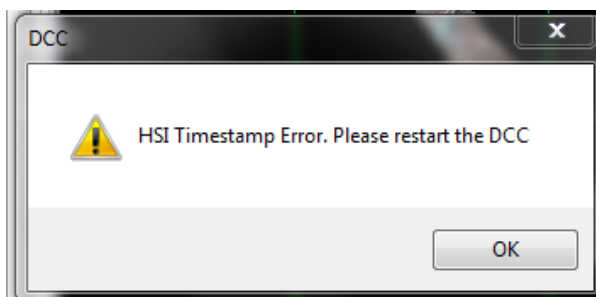
NIS



Pictures



Low cumulus at BLUE and CLBJ/PRIN today



NIS Timestamp Error



Phenocam image from the OAES Tower today

Cumulative Domain Coverage

D11 | BLUE (Blue River)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|

Flown: 0% (0/15)
Green: 0% (0/15)
Yellow: 0% (0/15)
Red: 0% (0/15)

D11 | CLBJ (LBJ National Grassland)

| | | | | | | | | | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 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: 0% (0/29)
Red: 0% (0/29)

D11 | N11A (D11 Nominal Runway)

| |
|---|
| 1 |
|---|

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

D11 | OAES (Klemme Range Research Station)

| | | | | | | | | | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 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: 53% (19/36)
Green: 53% (19/36)
Yellow: 0% (0/36)
Red: 0% (0/36)

D11 | PRIN (Pringle Creek)

| | | | | | | | | | | | | | | | | | | | |
|----|----|----|----|----|----|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
| 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 | | | | | | | | | | | | | | |

Flown: 100% (26/26)

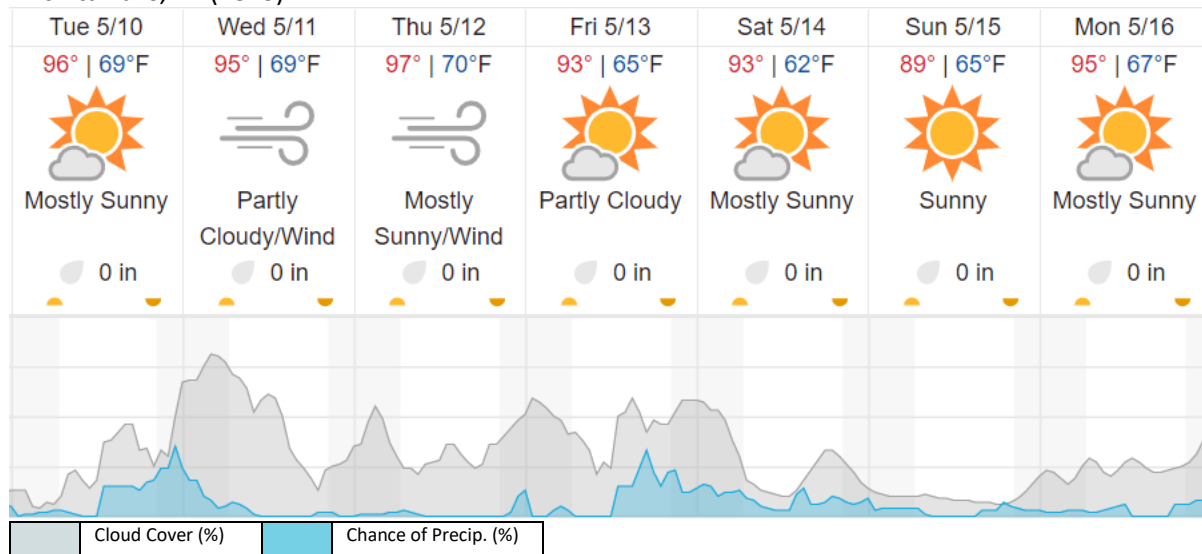
Green: 58% (15/26)

Yellow: 42% (11/26)

Red: 0% (0/26)

Weather Forecast

Wichita Falls, TX (KSPS)



source: wunderground.com

Flight Collection Plan for 10 May 2022

Flyority 1

Collection Area: Blue River (BLUE)

Flight Plan Name: D11_Blue_A2_P1_v3_PRM

On-station Time: 1500 UTC / 1000 L

Flyority 3

Collection Area: Pringle Creek (PRIN) *Lines 2-12 if Green*

Flight Plan Name: D11_PRIN_A1_P1_v4_PRM

On-station Time: 1500 UTC / 1000 L

Flyority 3

Collection Area: Klemme Range Research Station (OAES)

Flight Plan Name: D11_OAES_R1_P1_v3_PRM

On-station Time: 1450 UTC / 0950 L

Flyority 4

Collection Area: D11 Nominal Runway

Flight Plan Name: D11_N11A_Nominal_Runway_Test_v1_PRM

On-station Time: NA

Flight Crew:

Cam (Lidar), Elissa (NIS)