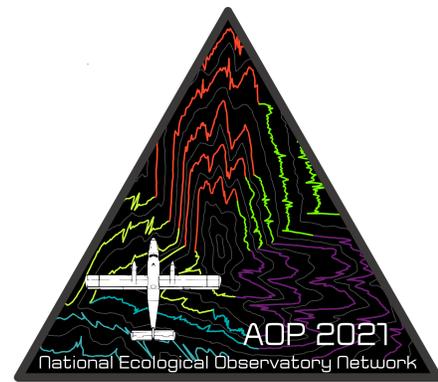




Payload 3 Daily Flight Report



Date: 2021-03-23

Flight Campaign ID: P3C1

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

Aircraft: N615AR

Domain: 00 (Training & Calibration)

Sites Flown: W10C (Wiggle Timing Test - Riegl)

Days left in Domain: 6

Report Author: Ivana Vu

Lidar Operators: Ivana Vu

Spectrometer Operators: John Adler

Pilots: Justin Eddington, Micah Hoogeveen

Adt'l Flight Crew: Matt Devoe

Flight Hours: 00:38

Hours until maintenance: 115.90

GPS Instruments: AOP_KBDU

Ground Crew: Robb Walker, Michael Wussow

Summary

Snow on the ground and building rooftops prevented calibration flights so we focused on training and recertification today. Promising forecasts quickly changed after system startup and the Wiggle Timing Test was the only flight plan we could attempt due to the low cloud deck over Boulder. Snow in the vicinity prevented additional afternoon flights.

Concerns

None

Comments

- John Musinsky created a new V10C flight plan (Rev B) and ground tests show that it resolved the line synchronization issue
- Recertifications completed today:
 - Lidar: Ivana
 - NIS: John
 - Ground: Mike, Robb
- Midas box and RiAcquire computer were booted this morning without any issue while the cabin temperature was 20 degrees Celsius
- Today's flight will be extracted only for training purposes

Daily Coverage

Estimated Cloud Cover Key

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

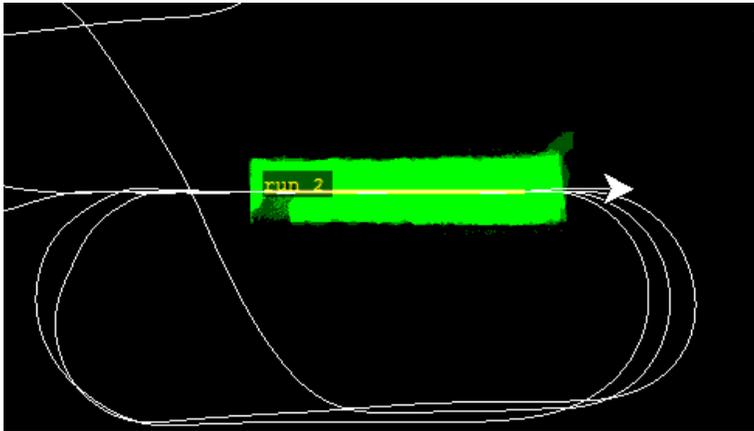
D00|W10C

| | |
|--------------|---|
| Line # | 1 |
| Lidar | ✓ |
| Spectrometer | ✓ |
| Camera | ✓ |
| Cloud Cover | |

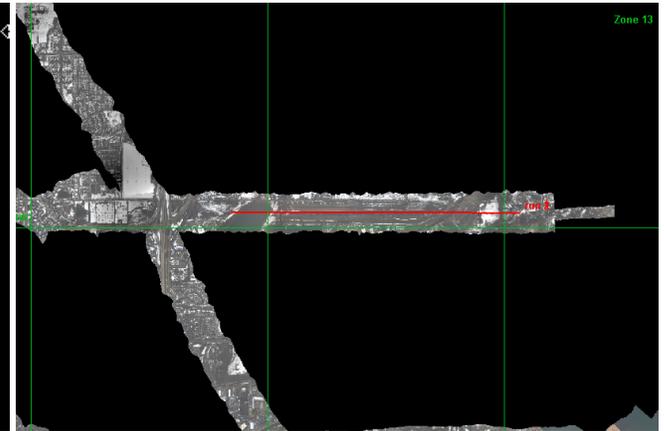
Total number of lines flown: 1 (4 passes)

Flight Screenshots

Lidar



NIS



Cumulative Domain Coverage

D00|B10E (Riegl Borelight Calibration - 1600m, 1000m, 500m)

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|

Flown: 0% (0/20)

Green: 0% (0/20)

Yellow: 0% (0/20)

Red: 0% (0/20)

D00|H10C (NEON Headquarters Lidar Test - Riegl)

| | | | |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
|---|---|---|---|

Flown: 100% (4/4)

Green: 0% (0/4)

Yellow: 0% (0/4)

Red: 100% (4/4)

D00|N10D (Nominal Runway at KBDU - Riegl)

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

Flown: 86% (24/28)

Green: 46% (13/28)

Yellow: 0% (0/28)

Red: 39% (11/28)

D00|O10B (NIS Offset - Riegl)

| | |
|---|---|
| 1 | 2 |
|---|---|

Flown: 0% (0/2)
 Green: 0% (0/2)
 Yellow: 0% (0/2)
 Red: 0% (0/2)

D00|R10C (Table Mountain Radiometric Calibration - Riegl)

| | | | | |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

Flown: 0% (0/5)
 Green: 0% (0/5)
 Yellow: 0% (0/5)
 Red: 0% (0/5)

D00|V10C (Boulder City South)

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

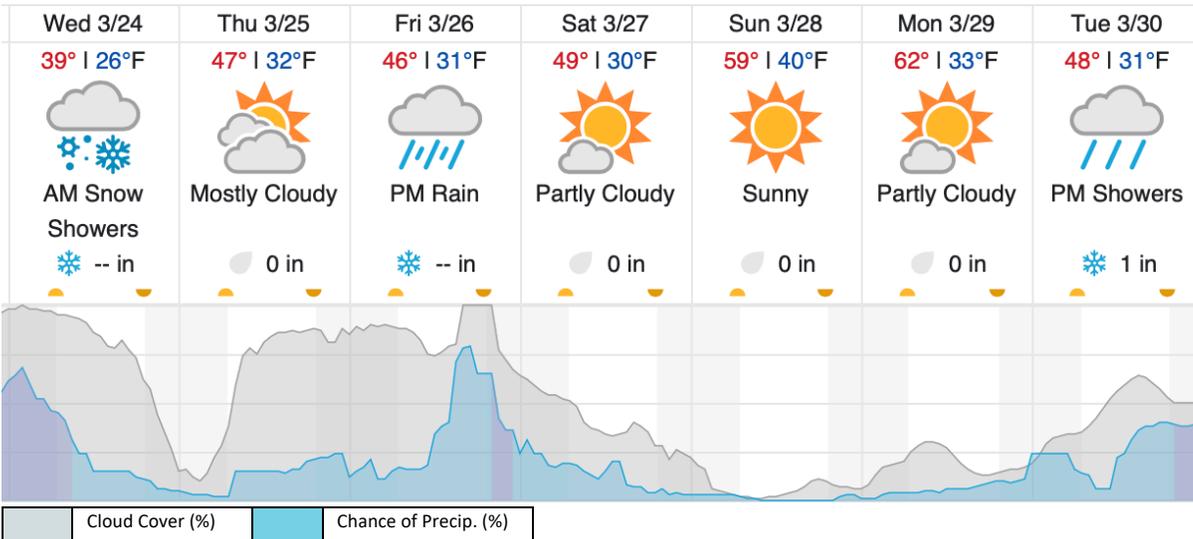
Flown: 10% (3/29)
 Green: 0% (0/29)
 Yellow: 0% (0/29)
 Red: 10% (3/29)

D00|W10C (Wiggle Timing Test - Riegl)

| | |
|---|---|
| 1 | 2 |
|---|---|

Flown: 100% (2/2)
 Green: 100% (2/2)
 Yellow: 0% (0/2)
 Red: 0% (0/2)

Weather Forecast



source: wunderground.com

Flight Collection Plan for 24 March 2021

Flyority 1

Collection Area: Table Mountain Radiometric Calibration – Boulder Airport

Flight Plan Name: D10_R10C_Rad_Cal_TBMT_v1_Q780

On-station Time: 1700 UTC / 1100 L

Additional Considerations: Ground should be dry.

Flyority 2

Collection Area: Boresight Calibration – Greeley, CO

Flight Plan Name: D10_B10E_Boresight_1600m_Q780

On-station Time: 1600 UTC / 1000 L

Additional Considerations: No recent snowfall, clear roofs required.

Flyority 3

Collection Area: NIS Offset Flight

Flight Plan Name: D10_O10B_NIS_Offset_v2_Q780

On-station Time: 1630 UTC / 1030 L

Flight Crew: Ivana, John, Matt, Mike, Robb