# Payload 2 Daily Flight Report

**Date**: 2020-07-20
**Flight Campaign ID**: P2C1
**Airport, FBO ID, City**: Boulder Municipal Airport (KBDU) - Boulder, CO

**Domain**: 13 (Southern Rockies & Colorado Plateau)
**Sites Flown**: NIWO (Niwot Ridge Mountain Research Station)
**Days left in Domain**: 22

**Report Author**: Ivana Vu
**Lidar Operators**: Ivana Vu
**Spectrometer Operators**: Robb Walker
**Pilots**: Chad Evans, Stephen Brawders
**Ground Crew**: Michael Wussow

**Flight Hours**: 03:13
**Hours until maintenance**: 39.52
**GPS Instruments**: 05 - NIWO, AOP_KBDU

**Summary**
Clear skies this morning allowed for data collection at NIWO until clouds started to develop in the early afternoon.

**Concerns**
None

**Comments**
- Priority airshed lines at NIWO completed
- Challenging mountain flying conditions caused sudden changes in altitude and ground speed throughout the flight – Scientist-on-Duty is aware

**Daily Coverage**
Estimated Cloud Cover Key

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

D13|NIWO

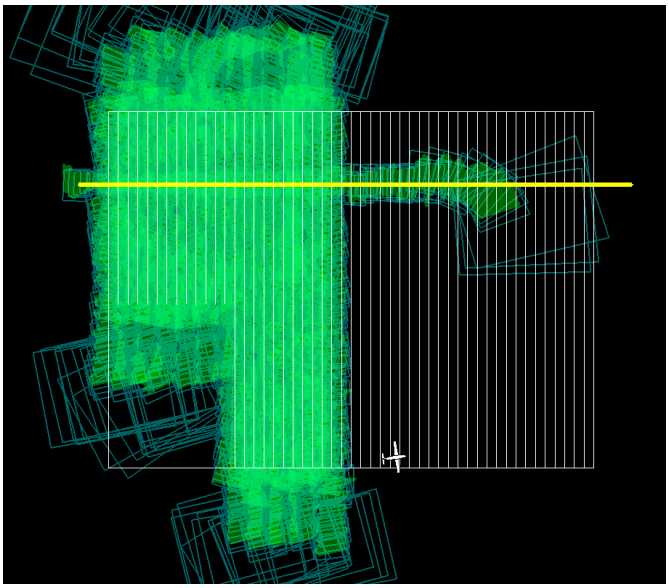
| Line # | 1 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lidar | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Spectrometer | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Camera | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Cloud Cover | | | | | | | | | | | | | | | | | | | | |

| Line # | 48 | 49 | 50 | 51 | 52 |
|---|---|---|---|---|---|
| Lidar | ✓ | ✓ | ✓ | ✓ | ✓ |
| Spectrometer | ✓ | ✓ | ✓ | ✓ | ✓ |
| Camera | ✓ | ✓ | ✓ | ✓ | ✓ |
| Cloud Cover | | | | | |

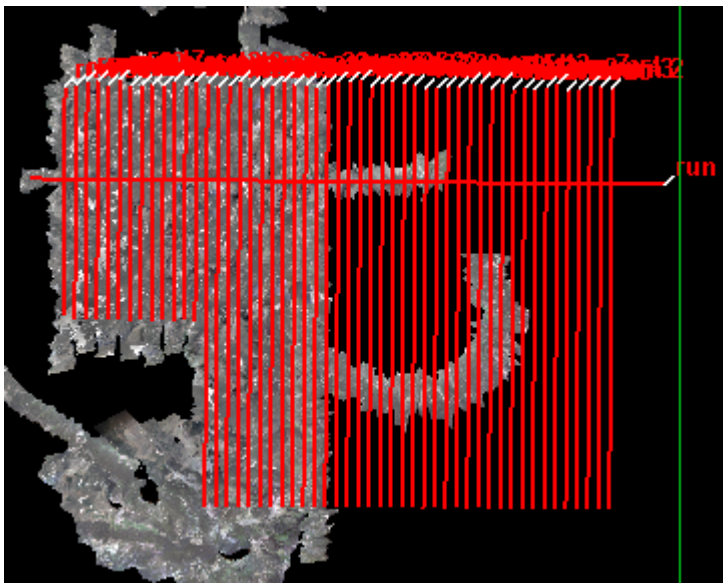
Total number of lines flown: 25

**Flight Screenshots**

Lidar

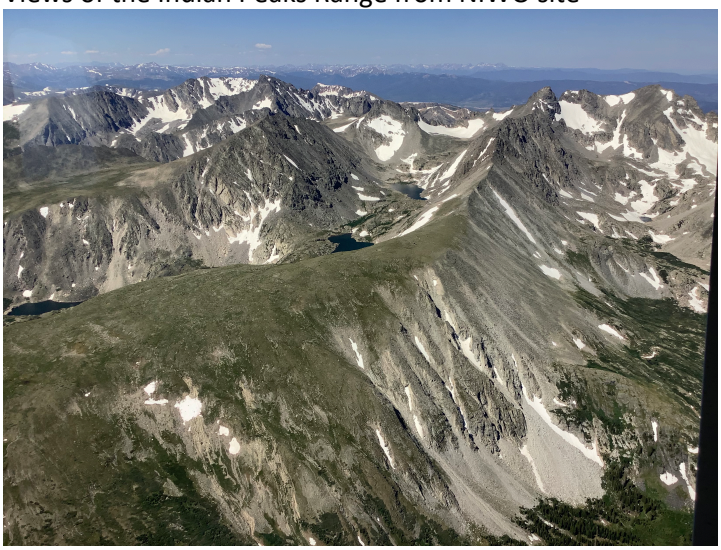


NIS




**Pictures**

Views of the Indian Peaks Range from NIWO site



**Cumulative Domain Coverage**

D13|NIWO (Niwot Ridge Mountain 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 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | | | | | | | | |

Flown: 48% (25/52)
Green: 48% (25/52)
Yellow: 0% (0/52)
Red: 0% (0/52)

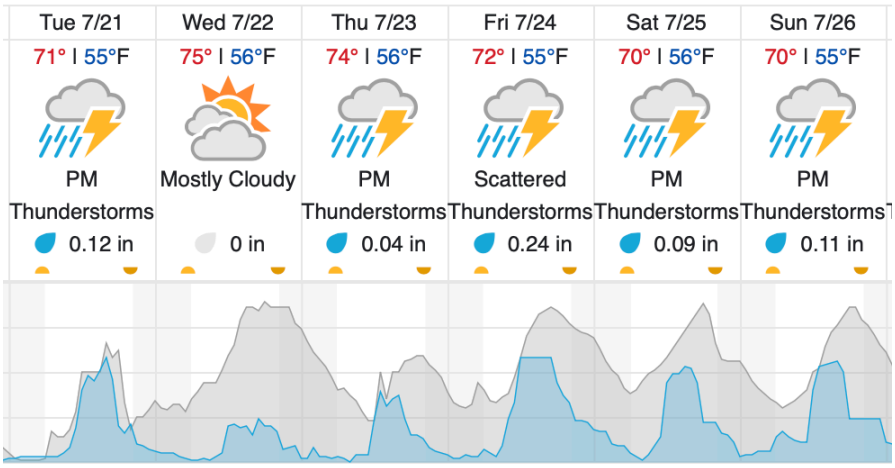
D13|WLOU (West St. Louis Creek )

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

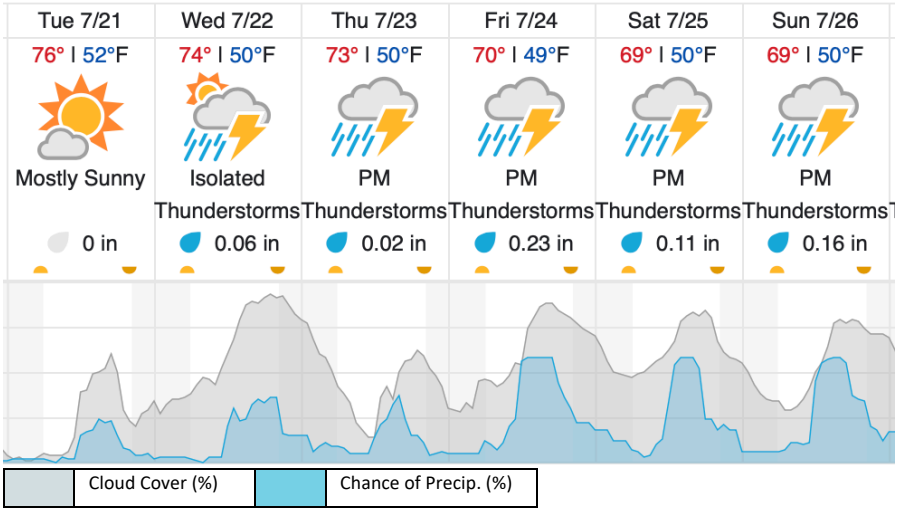
Flown: 0% (0/14)
Green: 0% (0/14)
Yellow: 0% (0/14)
Red: 0% (0/14)

**Weather Forecast**

Nederland, CO (NIWO)




Fraser, CO (WLOU)




**Flight Collection Plan for 21 July 2020**

**Flyority 1**

Collection Area: Niwot Ridge Mountain Research Station (NIWO), Lines 2-28

Flight Plan Name: D13_NIWO_C1_P1_v4.pln

On-station Time: 0940 – 1640 Local / 1540 – 2240 UTC

**Flyority 2**

Collection Area: West St Louis Creek (WLOU)

Flight Plan Name: D13_WLOU_A1_P1_v1.pln

On-station Time: 0940 – 1640 Local / 1540 – 2240 UTC

**Crew**: Mike (Lidar), John (NIS), Robb (Ground)

**Flight Collection Plan for 22 July 2020**

Flyority: Same as previous day

Crew: John (Lidar), Mike (NIS), Robb (Ground)

**Flight Collection Plan for 23 July 2020**

Flyority: Same as previous day

Crew: Mike (Lidar), John (NIS), Robb (Ground)