



Payload 3 Daily Flight Report



Date: 2024-09-13

Flight Campaign ID: P3C1

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

Aircraft: N821AR

Domain: 00 (Training & Calibration)

Sites Flown: R10C (Table Mountain Radiometric Calibration - Riegl)

Days left in Domain: 5

Report Author: Elissa

Lidar Operators: Elissa

Flight Hours: 00:46

Spectrometer Operators: Mitch

Hours until maintenance: 43.73

Pilots: Vince, Manning

GPS Instruments: AOP_KBDU

Summary

We hoped for green sky conditions for a Table Mountain radiometric flight this morning. However once airborne we determined it was actually yellow, due in part to scattered cumulus over the mountains, but mostly because of a continuous layer of smoke haze, which obscured visibility in all directions.

Concerns

None.

Comments

None.

Daily Coverage

Estimated Cloud Cover Key

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

Solar Angle Less Than 40 degrees

Line #

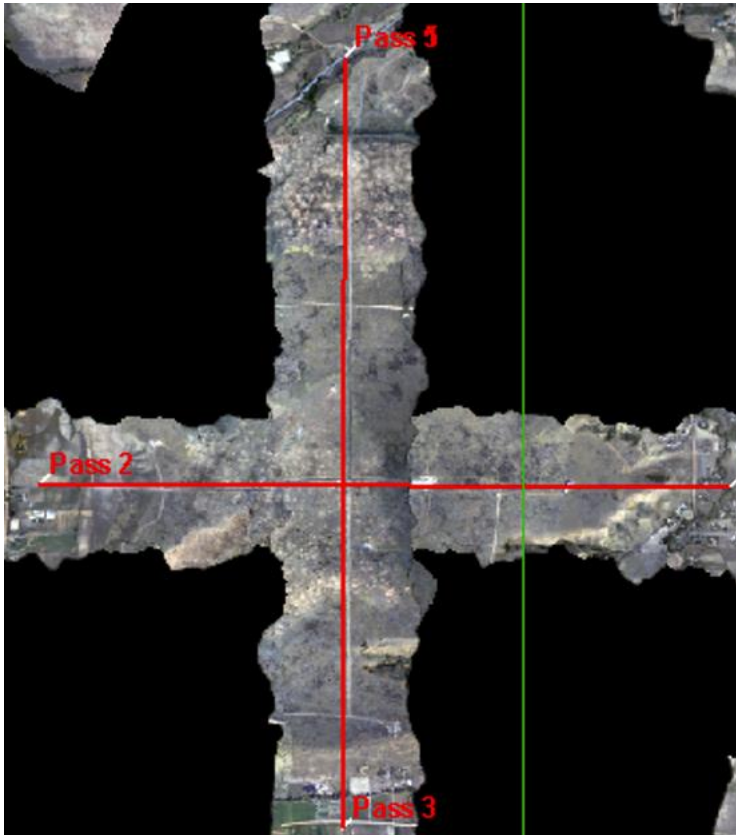
D00|R10C

Line #	1	2	3	4	5
Lidar	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓
Cloud Cover					

Total number of lines flown: 5

Flight Screenshots

NIS



Pictures



Haze due to wildfire smoke obscuring the view of the mountains.

Cumulative Domain Coverage

D00|B10E (Riegl Boresight 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: 100% (20/20)

Green: 0% (0/20)

Yellow: 100% (20/20)

Red: 0% (0/20)

D00|H10C (NEON Headquarters Lidar Test - Riegl)

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

Flown: 100% (4/4)

Green: 0% (0/4)

Yellow: 100% (4/4)

Red: 0% (0/4)

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: 36% (10/28)

Yellow: 50% (14/28)

Red: 0% (0/28)

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: 100% (5/5)

Green: 100% (5/5)

Yellow: 0% (0/5)

Red: 0% (0/5)

D00|W10C (Wiggle Timing Test - Riegl)

1	2
---	---

Flown: 100% (2/2)

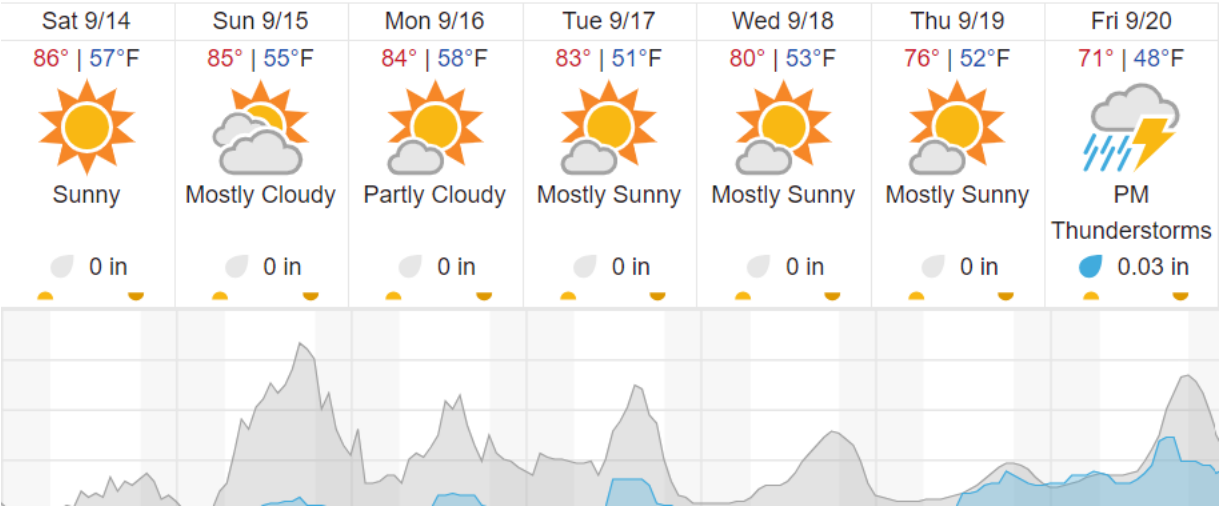
Green: 0% (0/2)

Yellow: 100% (2/2)

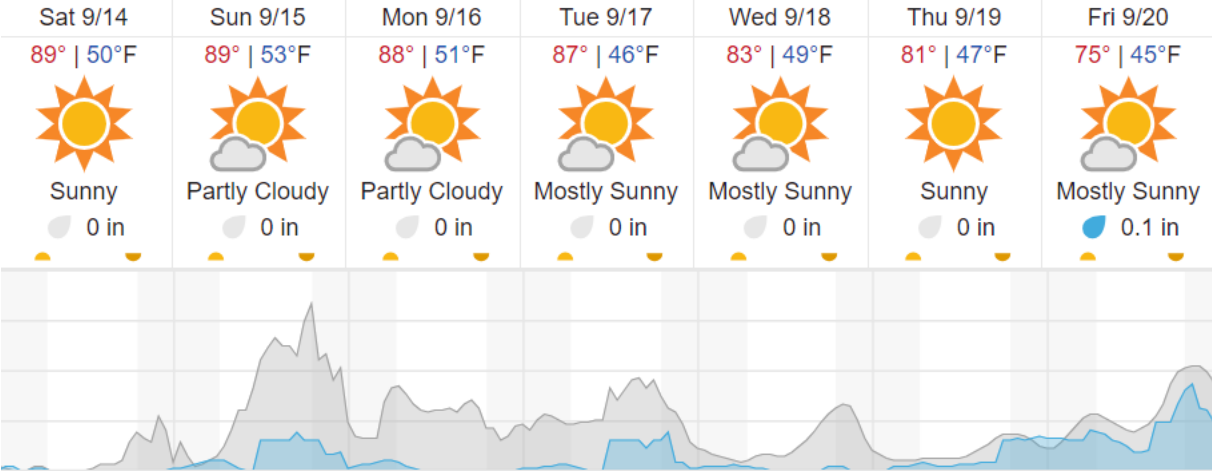
Red: 0% (0/2)

Weather Forecast

Boulder, CO (KBDU)



Greeley, CO (B10E)



source: wunderground.com

Flight Collection Plan for 14 September 2024

Flyority 1

Collection Area: Table Mountain Radiometric Calibration – *if green*
Flight Plan Name: D10_R10C_Rad_Cal_TBMT_v1_Q780
40° On-station Time: 1630 UTC / 1030 L | 45° 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 (RiAcquire name: D10_B10E_Boresight_Apx_Q780)
30° On-station Time: 1530 UTC / 0930 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

35° On-station Time: 1600 UTC / 1000 L

Flight Crew

Mitch (Lidar), Elissa (NIS)