



Payload 1 Daily Flight Report



Date: 2023-03-23

Flight Campaign ID: P1C1

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

Aircraft: N331AR

Domain: 00 (Training & Calibration)

Sites Flown: B10F (Complete Greeley Boresight Geocalibration - 1500m, 1000m, 550m - Galaxy)

Days left in Domain: 7

Report Author: Mitch

Lidar Operators: Mitch

Spectrometer Operators: Cameron

Pilots: Vince, Justin

Ground Crew: Elissa, Matt

Flight Hours: 01:48

Hours until maintenance: 121.32

GPS Instruments: AOP_KBDU, U-CHLL

Summary

The crew waited around most of the morning for a heavy fog layer to burn off and allow for an afternoon flight to occur. Clouds cleared enough for the Boresight Geocalibration to be collected under mostly yellow conditions. Towards the end of the flight, some larger stratus clouds moved close enough to push conditions into red status, but a fairly even illumination of the box was still present.

Concerns

None

Comments

None

Daily Coverage

Estimated Cloud Cover Key

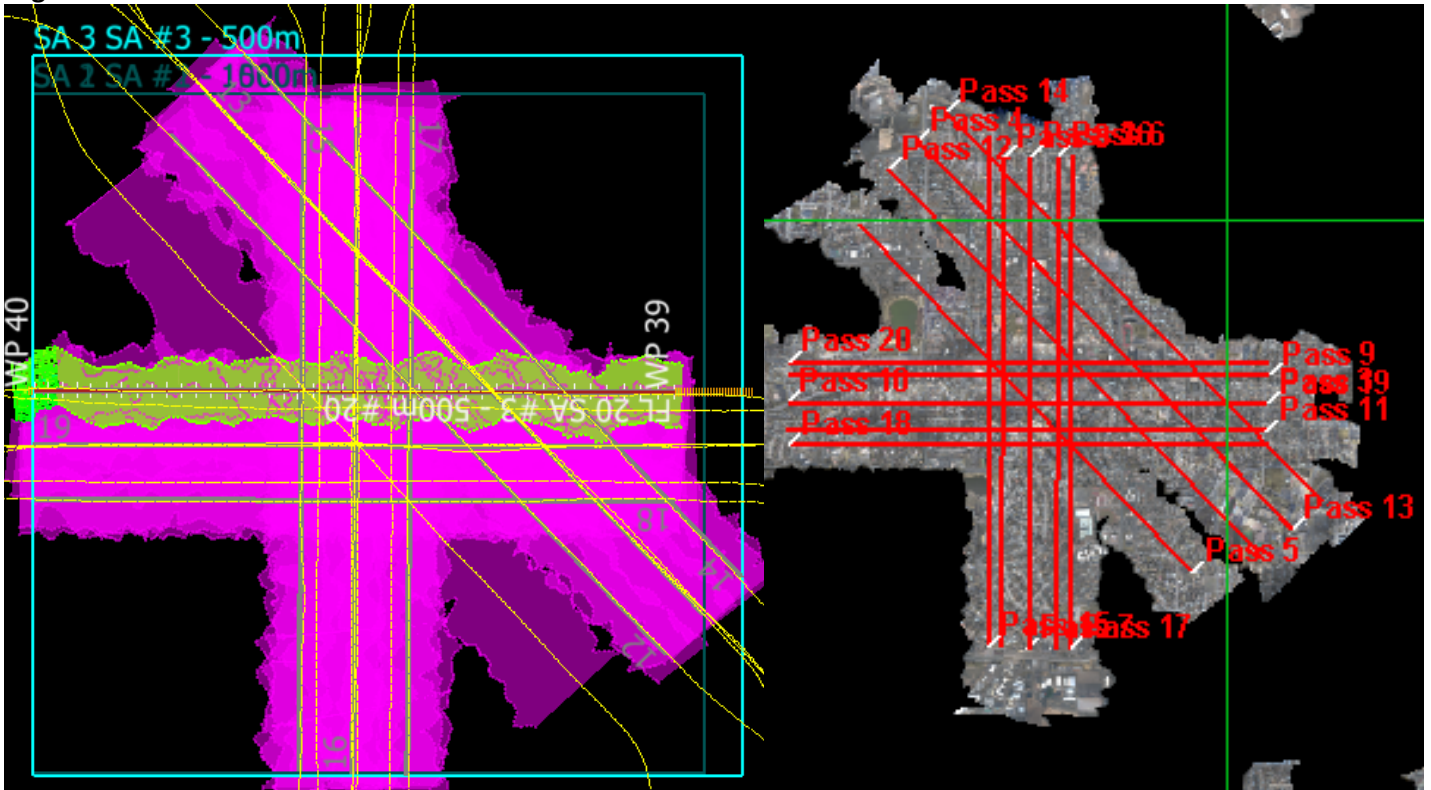
Green:	Yellow:	Red:
0-10%	11-50%	>50%

D00|B10F

Line #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover																				

Total number of lines flown: 20

Flight Screenshots



Above left: Lidar screenshot

Above right: NIS screenshot

Cumulative Domain Coverage

D00|B10F (Complete Greeley Boresight Geocalibration - 1500m, 1000m, 550m - Galaxy)

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: 70% (14/20)

Red: 30% (6/20)

D00|H10D (NEON Headquarters Lidar Validation - Galaxy)

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

Flown: 100% (4/4)

Green: 0% (0/4)

Yellow: 0% (0/4)

Red: 100% (4/4)

D00|N10F (Nominal Runway at KBDU - Galaxy)

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			

Flown: 0% (0/37)

Green: 0% (0/37)

Yellow: 0% (0/37)

Red: 0% (0/37)

D00|O10C (NIS Offset - Galaxy)

1	2
---	---

Flown: 0% (0/2)

Green: 0% (0/2)

Yellow: 0% (0/2)

Red: 0% (0/2)

D00|R10E (Table Mountain Radiometric Calibration - Galaxy)

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

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

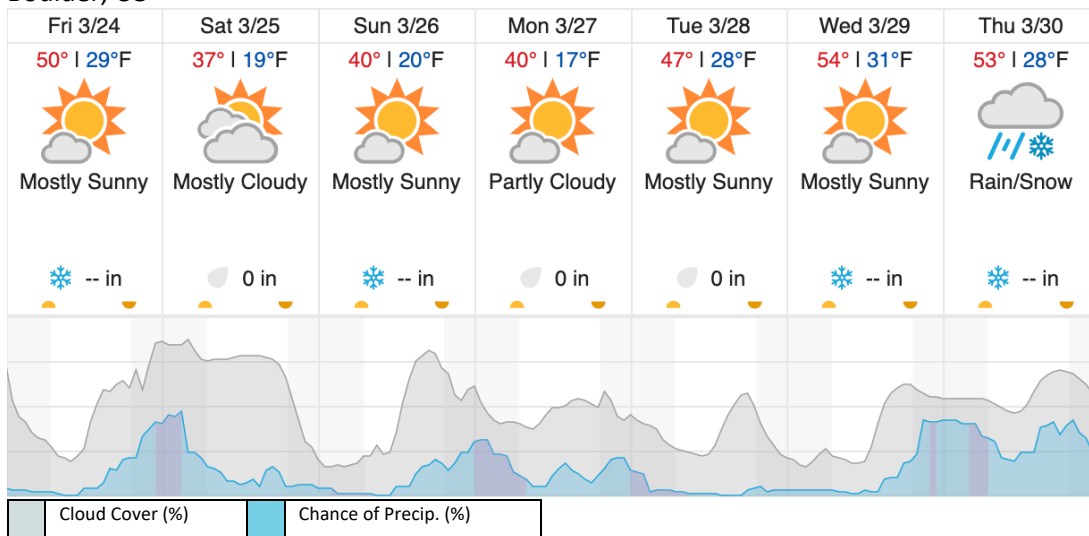
D00|W10D (Wiggle Timing Test - Galaxy)

1	2
---	---

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

Weather Forecast

Boulder, CO



source: wunderground.com

Flight Collection Plan for 24 March 2023

Flyority 1

Collection Area: Table Mountain Radiometric Calibration
Flight Plan Name: D10_R10E_Radiometric_Cal_Table_Mtn_v1_PRM.xml
45° On-station Time: 1740 UTC / 1140 L
Additional Considerations: Ground should be dry.

Flyority 2

Collection Area: Nominal Runway Survey Flight Plan
Name: D10_N10F_Nominal_Rnwy_v11_PRM.xml
On-Station Time: Daylight – No solar angle restrictions.
Additional Considerations: Runway should not be wet or snow covered.

Flyority 3

Collection Area: NIS Offset Flight
Flight Plan Name: D10_O10C_NIS_Offset_v2_PRM.xml
35° On-station Time: 1620 UTC / 1030 L

Flight Crew

Cam (Lidar), Elissa (NIS), Mitch (Ground)