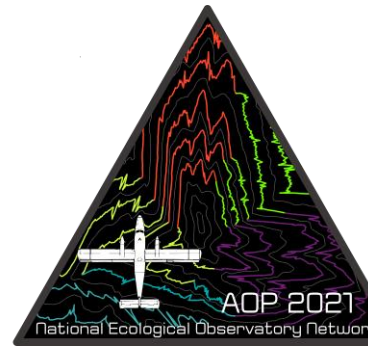




Payload 1 Daily Flight Report



Date: 2021-10-13
Flight Campaign ID: P1C2
Airport, FBO ID, City: Boulder Municipal Airport (KBDU) - Boulder, CO
Aircraft: N331AR

Domain: 00 (Training & Calibration)
Sites Flown: O10C (NIS Offset - Galaxy)
Days left in Domain: 05

Report Author: Elissa Barris
Lidar Operators: Elissa Barris

Flight Hours: W10D (00:30), H10D (00:27), D10C (00:30), O10C (00:19, 00:20, 00:22, 00:20, 00:22)

Spectrometer Operators: Mitch Haynes
Pilots: Stephen Brawders, Justin Eddington
Ground Crew: Abe Morrison

Hours until maintenance: 121.88
GPS Instruments: AOP_KBDU

Summary

Clear conditions this morning over Boulder allowed us to complete two calibration flight plans: the NEON Headquarters Lidar Validation Test and the Wiggle Timing Test. We also tested the eye-safety shutoff functionality of the Lidar on a custom test flight plan, and were pleased to find that the repaired system operated as expected. After the first flight, we then had remaining time in mostly clear conditions to complete the NIS Timing Offset.

Concerns

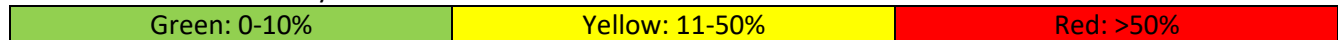
None.

Comments

None.

Daily Coverage

Estimated Cloud Cover Key

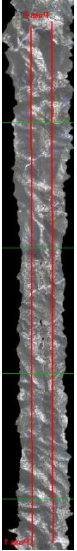


D00|O10C

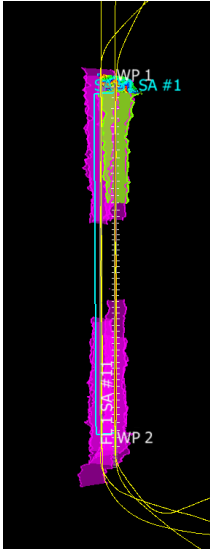
Line #	1	2
Lidar	✓	✓
Spectrometer	✓	✓
Camera	✓	✓
Cloud Cover		

Total number of lines flown: 2
Flight Screenshots

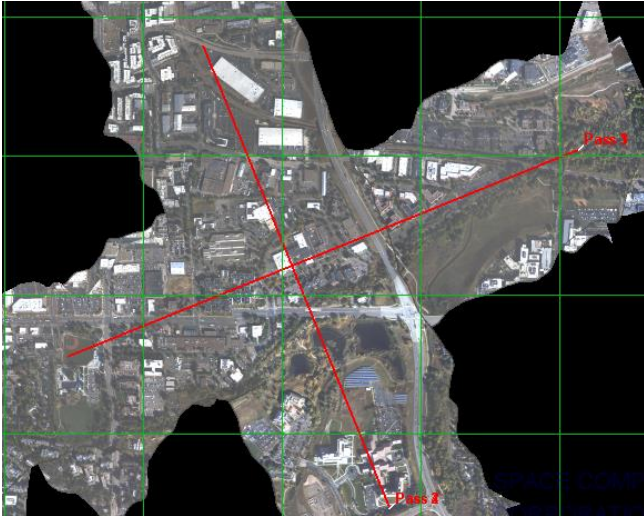
D10C_NIS



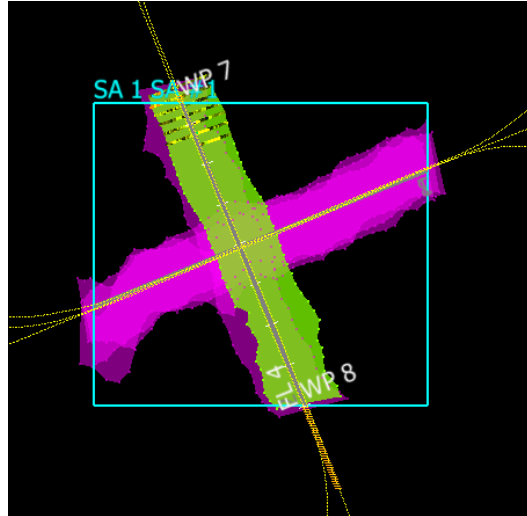
D10C_LiDAR



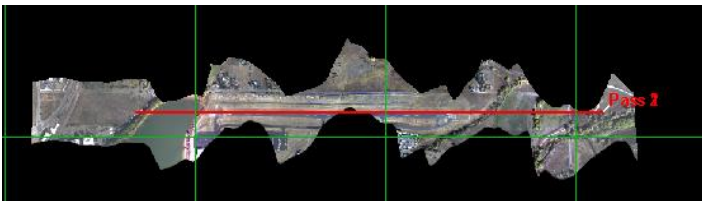
H10D_NIS



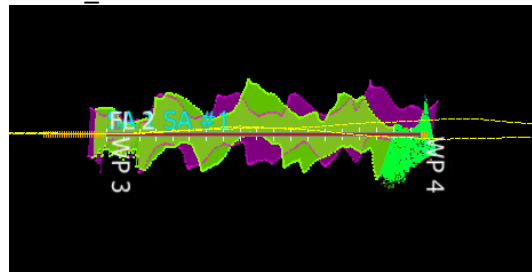
H10D_LiDAR



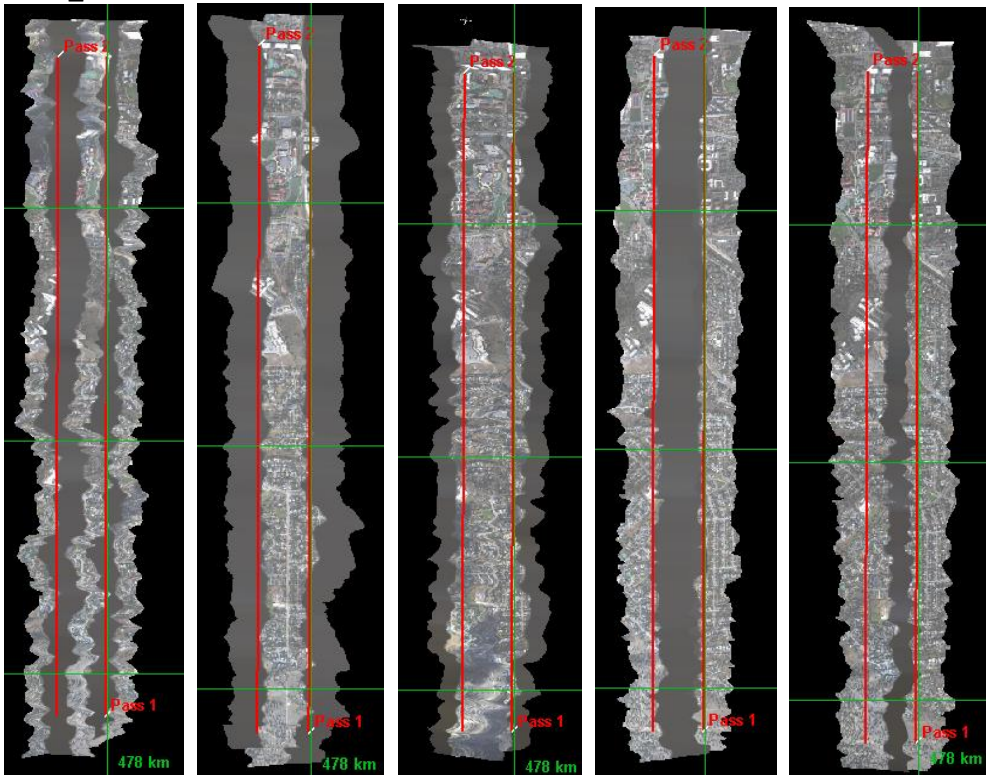
W10D_NIS



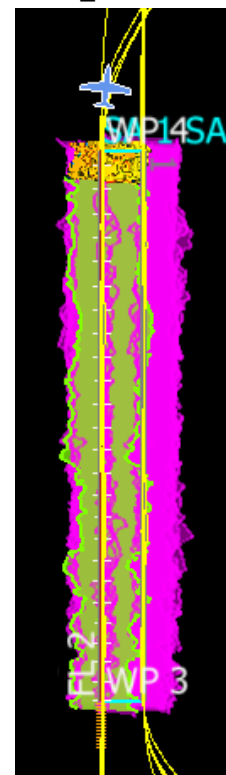
W10D_LiDAR



O10C_NIS



O10C_LiDAR



Cumulative Domain Coverage

D00 | 125-hr Inspection ()

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

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: 0% (0/20)
 Green: 0% (0/20)
 Yellow: 0% (0/20)
 Red: 0% (0/20)

D00 | BLKF (Black Forest Waveform Range Test - Galaxy)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21																			

Flown: 0% (0/21)
 Green: 0% (0/21)
 Yellow: 0% (0/21)
 Red: 0% (0/21)

D00|D10C ()

1	2
---	---

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

D00|H10D (NEON Headquarters Lidar Validation - Galaxy)

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

Flown: 100% (4/4)
Green: 100% (4/4)
Yellow: 0% (0/4)
Red: 0% (0/4)

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: 100% (37/37)
Green: 59% (22/37)
Yellow: 41% (15/37)
Red: 0% (0/37)

D00|O10C (NIS Offset - Galaxy)

1	2
---	---

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

D00|R10E (Table Mountain Radiometric Calibration - Galaxy)

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

Flown: 100% (5/5)
Green: 100% (5/5)
Yellow: 0% (0/5)
Red: 0% (0/5)

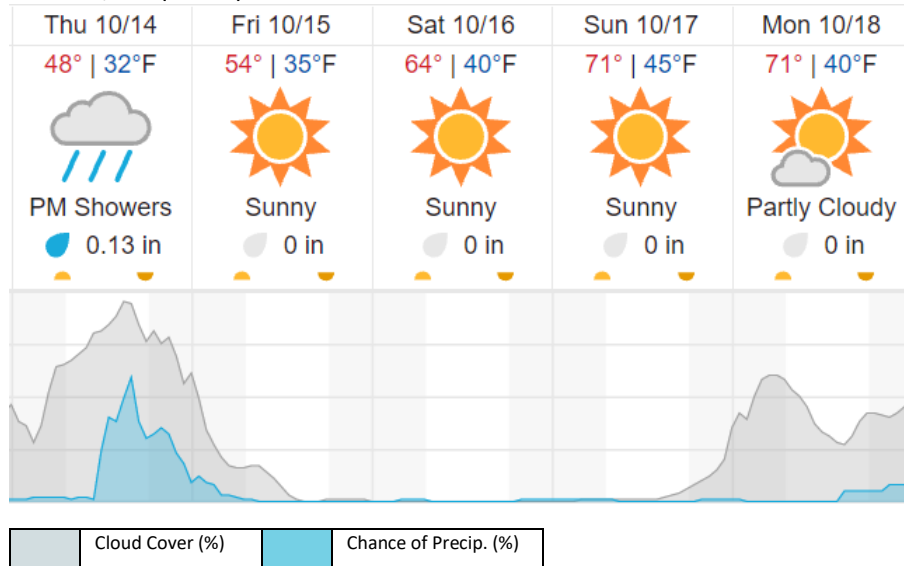
D00|W10D (Wiggle Timing Test - Galaxy)

1	2
---	---

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

Weather Forecast

Boulder, CO (KBDU)



source: wunderground.com

Flight Collection Plan for 14 October 2021

Flyority 1

Collection Area: Boresight Calibration – Greeley, CO

Flight Plan Name: D10_B10F_Boresight_Geocal_v8_PRM

On-station Time: 16:10 UTC / 10:10 L

Flyority 2

Collection Area: Black Forest Waveform Range Test Flight

Flight Plan Name: D10_BLKF_Black_Forest_v4_PRM

On-Station Time: Daylight – No solar angle restrictions.

Crew: Mitch (Lidar), Abe (NIS), Elissa (Ground)