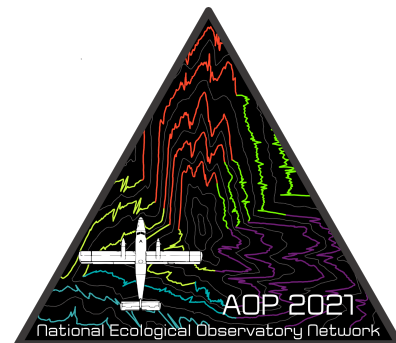




Payload 1 Daily Flight Report



Date: 2021-04-25

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: 3

Report Author: Mitch Haynes

Lidar Operators: Mitch Haynes

Spectrometer Operators: Elissa Barris

Pilots: Will Mathews, Justin Eddington

Ground Crew: John Adler

Flight Hours: 00:23, 00:23, 00:30, 00:25, 00:22

Hours until maintenance: 99.87

GPS Instruments: 05 - KBDU

Summary

Crew was able to take advantage of clear skies this morning and knock out the NIS Offset before rapidly building cumulus clouds got in the way.

Concerns

- Internal storage on the permanent AOP GPS station at KBDU filled up at some point during the day yesterday. A temporary GPS Unit (05) was set up prior to today's flight while old data from was being cleared off the unit.

Comments

- Ian has requested a second round of Black Forest collects to test the refurbished digitizer installed on Friday. This will be the last remaining calibration flight for P1.
- Science Collects over D13 site MOAB set to begin on Thursday, 4/29.
- SmartNet terms of service have shifted from a free to a paid service. Science is aware, and note that unless we opt for the paid service, GPS requirements for Black Forest for this second collect will need to be relaxed.

Daily Coverage

Estimated Cloud Cover Key

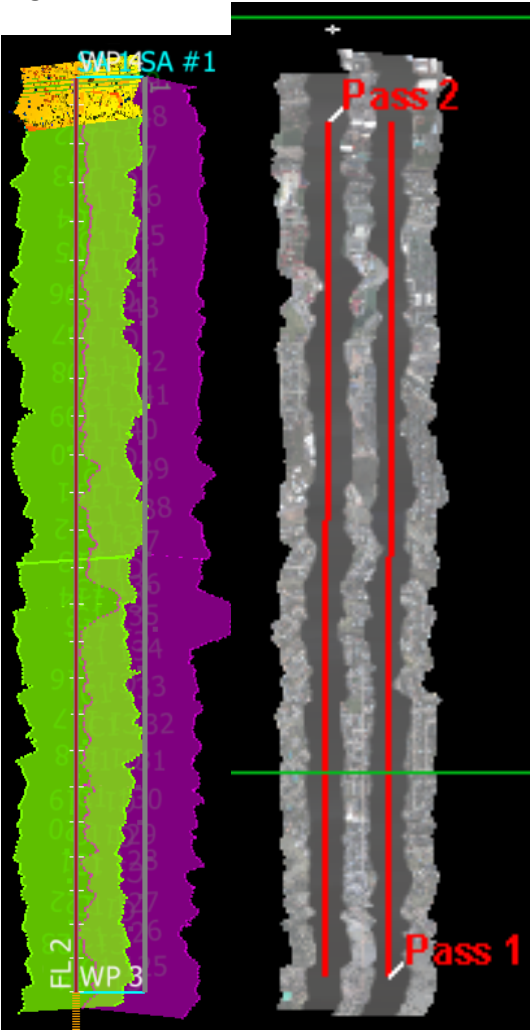
Green:	Yellow:	Red:
0-10%	11-50%	>50%

D00|O10C

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

Total number of lines flown: 10

Flight Screenshots



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: 100% (20/20)

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: 100% (21/21)

Green: 0% (0/21)

Yellow: 100% (21/21)

Red: 0% (0/21)

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					

Flown: 100% (35/35)

Green: 0% (0/35)

Yellow: 0% (0/35)

Red: 100% (35/35)

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|V10F (Boulder City Nominal - 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											

Flown: 38% (11/29)

Green: 14% (4/29)

Yellow: 0% (0/29)

Red: 24% (7/29)

D00|W10D (Wiggle Timing Test - Galaxy)

1 2

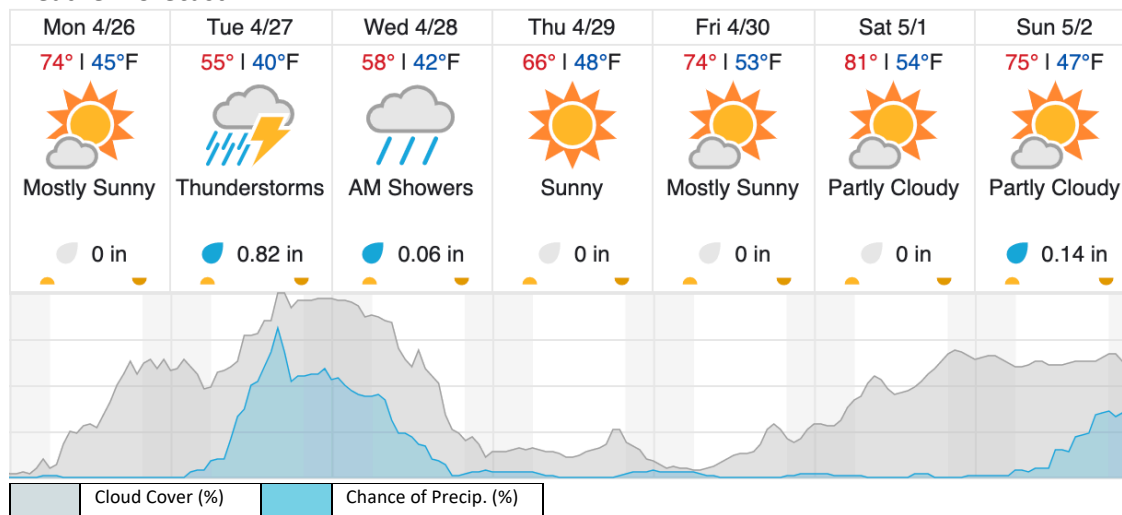
Flown: 100% (2/2)

Green: 100% (2/2)

Yellow: 0% (0/2)

Red: 0% (0/2)

Weather Forecast



source: wunderground.com

Flight Collection Plan for 26 April 2021

Flyority 1

Collection Area: Black Forest Waveform Range Test Flight

Flight Plan Name: D10_BLKF_Black_Forest_v3_PRM.xml

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

Additional Considerations: Snow on ground / trees okay.

Crew: Elissa (Lidar), Mike (NIS), Matt (Ground)