



Payload 1 Daily Flight Report



Date: 2022-04-21

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), R10E (Table Mountain Radiometric Calibration - Galaxy)

Days left in Domain: 11

Report Author: Michael

Lidar Operators: Michael

Spectrometer Operators: John

Pilots: Justin , Stephen

Adt'l Flight Crew: Abe

Flight Hours: 2:11, 0:33

Hours until maintenance: 118.50

GPS Instruments: AOP_KBDU, S-COGR

Ground Crew: Matt , Mitch

Summary

Lack of clouds and wind created very favorable conditions today. The Boresight was completed and the Radiometric was flown again as conditions were even better today than yesterday.

Concerns

None

Comments

-Mike completed Optech Galaxy recertification today

-Nominal Runway and NIS Offset calibration flights remain.

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																				

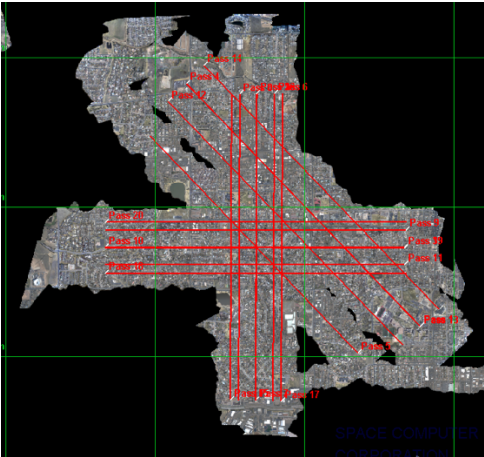
Total number of lines flown: 20

D00|R10E

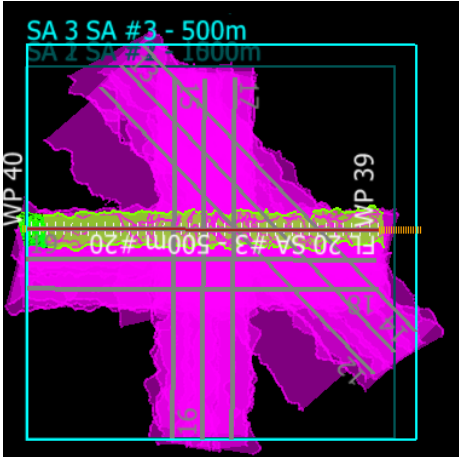
Line #	1	2	3	4	5
Lidar	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓
Cloud Cover					

Total number of lines flown: 5

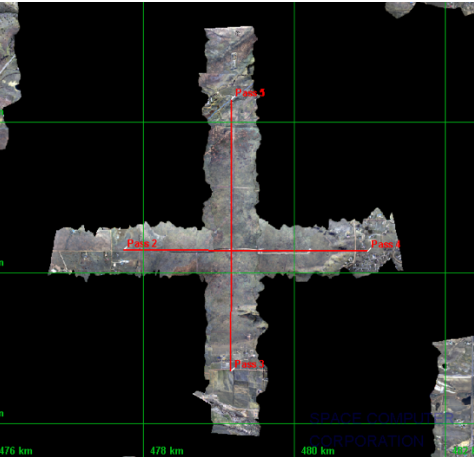
Flight Screenshots



NIS: B10F



Lidar: B10F



NIS: R10E

Pictures



Burn scar and slurry lines from yesterday’s grassfire on NE side of Table Mountain.

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
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Flown: 100% (20/20)
Green: 45% (9/20)
Yellow: 55% (11/20)
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
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Flown: 0% (0/2)
Green: 0% (0/2)
Yellow: 0% (0/2)
Red: 0% (0/2)

D00|H10D (NEON Headquarters Lidar Validation - Galaxy)

1	2	3	4
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Flown: 100% (4/4)
Green: 0% (0/4)
Yellow: 100% (4/4)
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: 8% (3/37)
Green: 0% (0/37)
Yellow: 0% (0/37)
Red: 8% (3/37)

D00|O10C (NIS Offset - Galaxy)

1	2
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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
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Flown: 100% (5/5)
Green: 100% (5/5)
Yellow: 0% (0/5)
Red: 0% (0/5)

D00|W10D (Wiggle Timing Test - Galaxy)

1 2

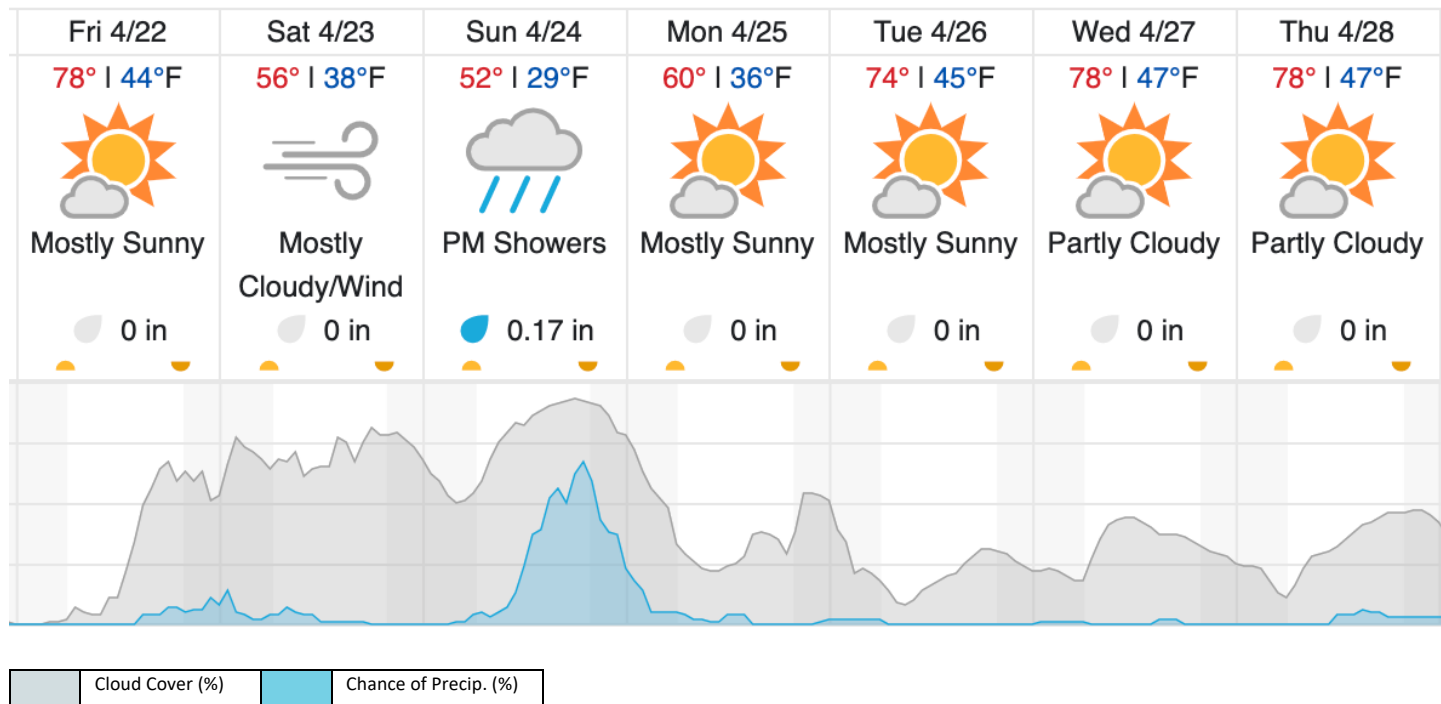
Flown: 100% (2/2)

Green: 0% (0/2)

Yellow: 100% (2/2)

Red: 0% (0/2)

Weather Forecast



source: wunderground.com

Flight Collection Plan for 22 April 2022

Mercury Lamp Collections for Payloads 1 and 3

Tour for CU Boulder Students

Flight Collection Plan for 23 April 2022

Flyority 1

Collection Area: Nominal Runway Survey Flight Plan

Name: D10_N10F_Nominal_Rnwy_v10_PRM.xml

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

Additional Considerations: Runway should not be wet or snow covered.

Flyority 2

Collection Area: NIS Offset Flight

Flight Plan Name: D10_O10C_NIS_Offset_v2_PRM.xml

35° On-station Time: 1530 UTC / 0930 L

Flight Crew:

TBD: Optech Galaxy recerts remaining: Elissa, John, Matt, Nick