



Payload 1 Daily Flight Report



Date: 2024-05-30

Flight Campaign ID: P1C1

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

Aircraft: N615AR

Domain: 00 (Training & Calibration)

Sites Flown: R10F (Boulder Airport Radiometric Calibration - Galaxy)

Days left in Domain: 6

Report Author: Nick

Lidar Operators: Nick

Flight Hours: 01:14

Spectrometer Operators: Matt **Hours until maintenance:** 74.68

Pilots: Jeff, Manning

GPS Instruments: AOP_KBDU

Field Crew: Tristan, Brendan

Summary

The crew were teased clear skies this morning, but clouds built up during the radiometric at Boulder Airport. The radiometric was completed in fair weather conditions, but the sun was obscured for half the collection making calibration/verification not possible.

Concerns

The POS stopped logging during flight requiring the SBET to be generated manually. The Systems team will investigate further.

2 Frame grabber alerts came up during radiometric collections without issues and a single timestamp error following the Radiometric which required a restart.

Flight ID Folder duplicating when copying issue remains.

Telemetry alerts are not being sent.

Comments

Nick recertified on the OPTECH lidar.

Daily Coverage

Estimated Cloud Cover Key

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

Solar Angle Less Than 40 degrees

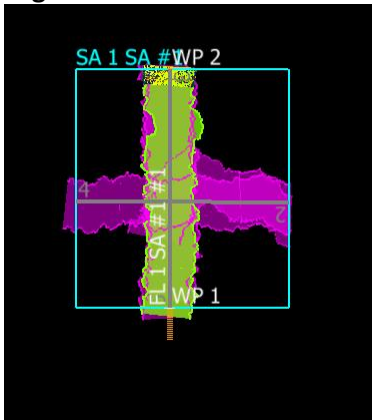
Line #

D00|R10F

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

Total number of lines flown: 5

Flight Screenshots



2024053016 Lidar screenshot

Pictures



Tristan and Brendan manning the tarps at the Boulder Municipal Airport.

Cumulative Domain Coverage

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|CPER (Central Plains Ecological Range)

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: 0% (0/28)
 Green: 0% (0/28)
 Yellow: 0% (0/28)
 Red: 0% (0/28)

D00|R10E (Table Mountain Radiometric Calibration - Galaxy)

1	2	3	4	5
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Flown: 0% (0/5)
 Green: 0% (0/5)
 Yellow: 0% (0/5)
 Red: 0% (0/5)

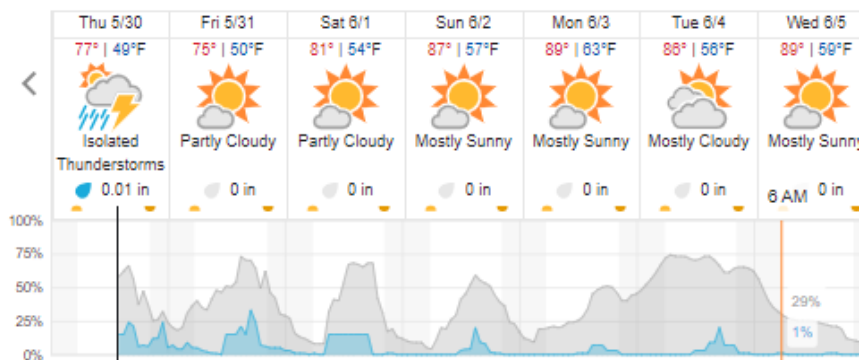
D00|R10F (Boulder Airport Radiometric Calibration - Galaxy)

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

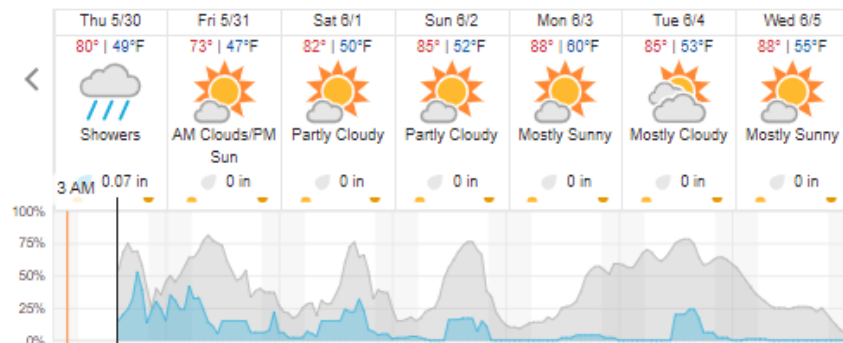
Flown: 100% (5/5)
 Green: 100% (5/5)
 Yellow: 0% (0/5)
 Red: 0% (0/5)

Weather Forecast

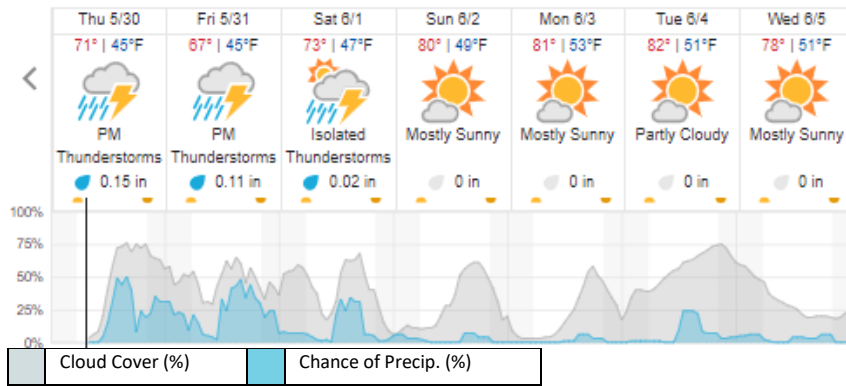
Boulder CO



Nunn CO



Air Force Academy CO



source: wunderground.com

Flight Collection Plan for 30 May 2024

Flyority 1

Collection Area: Table Mountain Radiometric Calibration

Flight Plan Name: D10_R10E_Radiometric_Cal_Table_Mtn_v2_PRM.xml

45° On-station Time: 15:50 UTC / 09:50 L

Additional Considerations: Ground should be dry.

Flyority 2

Collection Area: Central Plains Ecological Range

Flight Plan Name: D10_CPER_C1_P1_v7_PRM.xml

35° On-station Time: 14:50 UTC / 09:50 L

Flyority 3

Collection Area: Black Forest Waveform Range Test Flight

Flight Plan Name: D10_BLKF_Black_Forest_v5_PRM.xml

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

Flight Crew: Matt (Lidar), Nick (NIS)