



Payload 1 Daily Flight Report



Date: 2026-06-12

Flight Campaign ID: P1C1

Airport, FBO ID, City: Bismarck Municipal Airport (KBIS) - Bismarck, ND

Aircraft: N537AR

Domain: 09 (Northern Plains)

Sites Flown: WOOD_DCFS (Woodworth and Dakota Coteau Field School)

Days left in Domain: 22

Report Author: Alyssa

Lidar Operators: Alyssa

Spectrometer Operators: John

Pilots: Manning, Troy

Flight Hours: 02:25

Hours until maintenance: 87.27

GPS Instruments: AOP_WOOD, S-NDBM

Summary

Green conditions deteriorated into red just in the time between leaving the hangar and arriving on station, so crew collected most of the low priority lines before hardware malfunction forced RTB.

Concerns

UPDU shut off without throwing any errors this time, suspected high voltage. Logs sent to the lab for troubleshooting.

Comments

Transducer received, to be installed when poor weather allows for warming of the payload.

Daily Coverage

Estimated Cloud Cover Key

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

Solar Angle Less Than 40 degrees: (*)

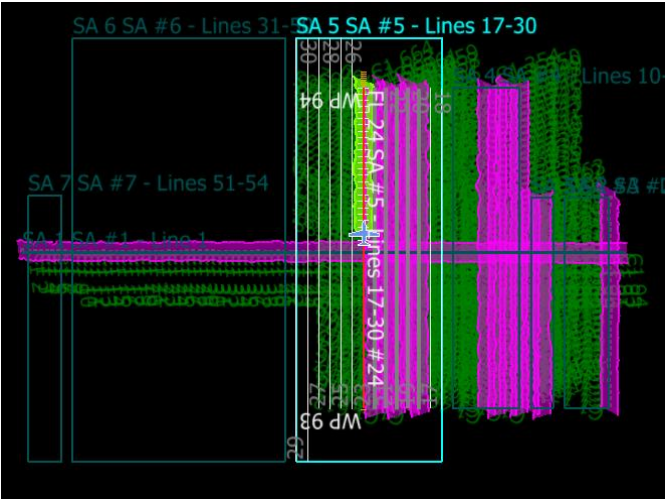
D09|WOOD_DCFS

Line #	2	8	9	10	11	12	13	19	20	21	22	23
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover												

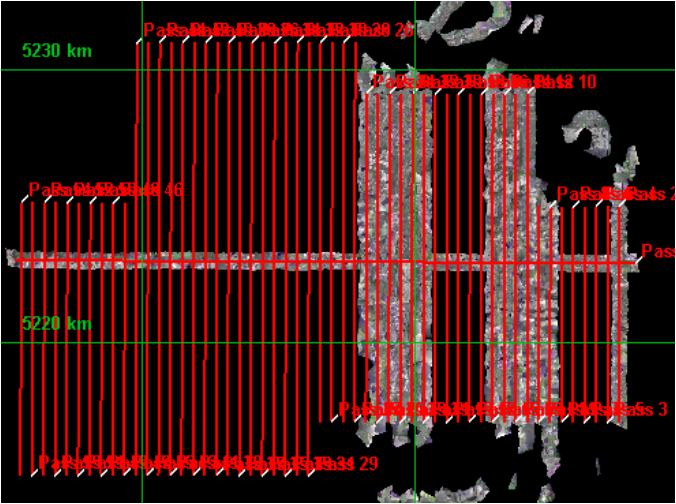
Total number of lines flown: 12

Flight Screenshots

Lidar



NIS



Pictures

Cloud cover varied wildly for duration of flight



Cumulative Domain Coverage

D09 | NOGP (Northern Great Plains)

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														

Flown: 0% (0/26)

Green: 0% (0/26)

Yellow: 0% (0/26)

Red: 0% (0/26)

* Flown within 35deg solar angle

D09|WOOD_DCFS (Woodworth and Dakota Coteau Field School)

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	38	39	40
41	42	43	44	45	46	47	48	49	50	51	52	53	54						

Flown: 24% (13/54)

Green: 0% (0/54)

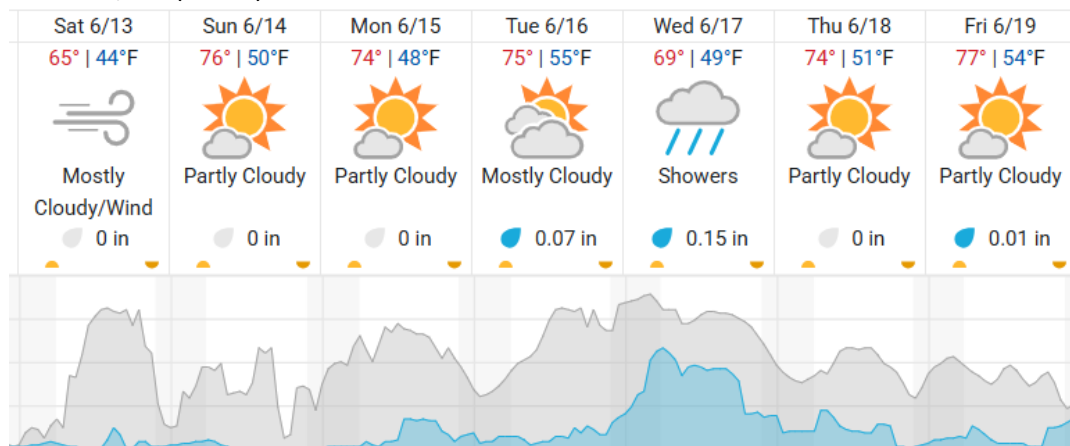
Yellow: 7% (4/54)

Red: 17% (9/54)

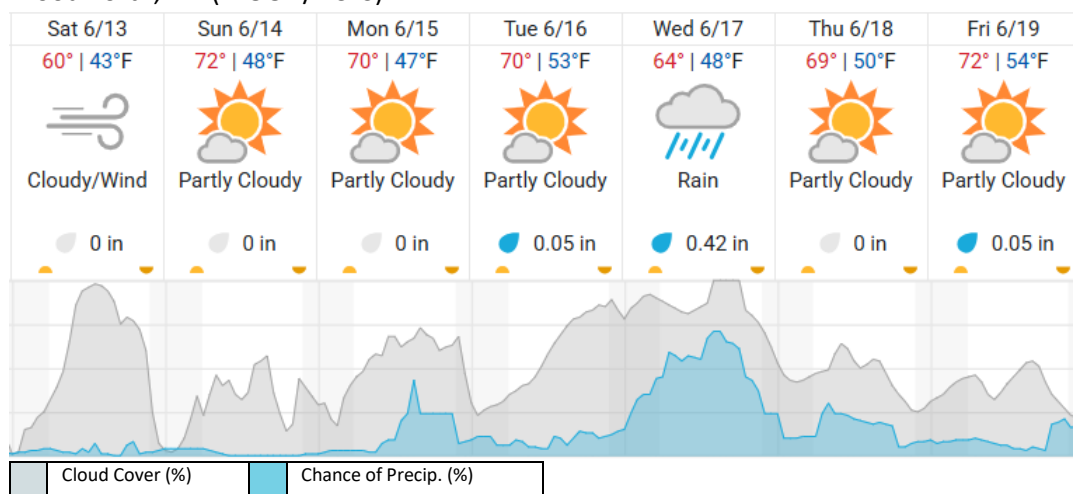
* Flown within 35deg solar angle

Weather Forecast

Bismarck, ND (NOGP)



Woodworth, ND (WOOD/DCFS)



source: wunderground.com

Flight Collection Plan for 13 June 2026

Crew: John (Lidar), Alyssa (NIS)

Flyority 1

Site: Northern Great Plains (NOGP)

Flight Plan Name: D09_NOGP_R2_P1_v4_PRM.xml

Solar Angle Time: 09:40L/14:40UTC

Flyority 2

Site: Woodworth (WOOD) – Dakota Coteau Field School (DCFS) *lines 3-4, 14-18, 24-54*

Flight Plan Name: D09_WOOD_DCFS_C1_P1_v6_PRM.xml

Solar Angle Time: 09:30L/14:30UTC