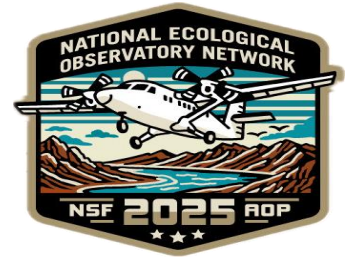




## Payload 2 Daily Flight Report



**Date:** 2025-06-11

**Flight Campaign ID:** P2C1

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

**Aircraft:** N615AR

**Domain:** 09 (Northern Plains)

**Sites Flown:** None

**Days left in Domain:** 15

**Report Author:** Elissa

**Lidar Operators:** Elissa

**Flight Hours:** 00:00

**Spectrometer Operators:** Alyssa

**Hours until maintenance:** 79.10

**Pilots:** Vince, Jacob

### Summary

NIS pumping and cooling was interrupted this morning when the plane needed to be moved out of the hangar to allow another aircraft to leave. During an attempt to resume pumping, air entered the chamber by an unknown avenue. Suspected sources of the leak include either the manifold, solenoid, or vacuum pump itself. Pumping was immediately resumed and will continue as the chamber warms to at least 250 Kelvin, to allow any water that may have entered to sublime or evaporate out.

### Concerns

NIS chamber event; to be tested with a mercury lamp collection and test flight when possible. Discussions for further diagnosing the problem are underway. A different vacuum pump will also be sent to D09 as a precaution.

### Comments

Aircraft engines were started today and the system was put on survey power for several minutes to double check functionality of the AXE repairs.

### Cumulative Domain Coverage

Estimated Cloud Cover Key

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

Solar Angle Less Than 40 degrees: (\*)

## 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: 0% (0/54)

Green: 0% (0/54)

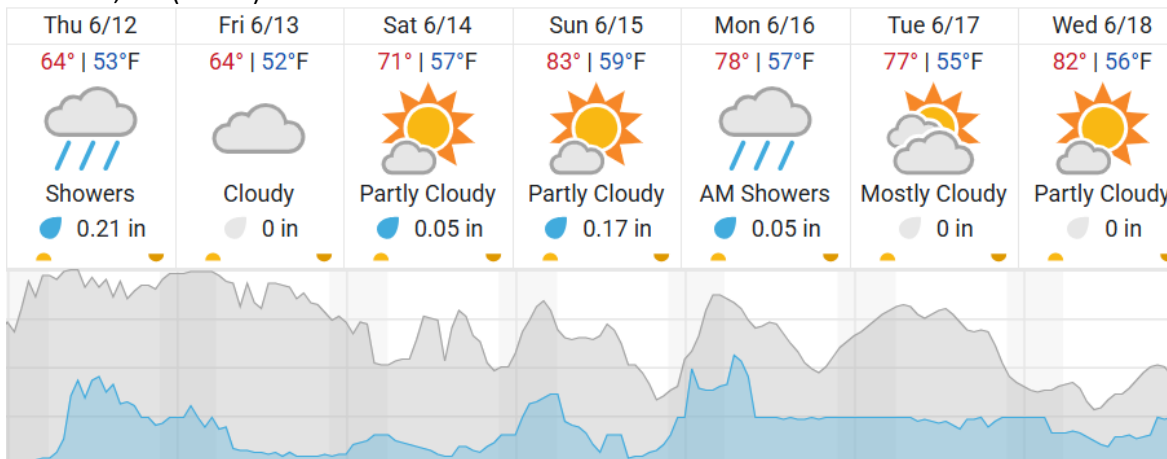
Yellow: 0% (0/54)

Red: 0% (0/54)

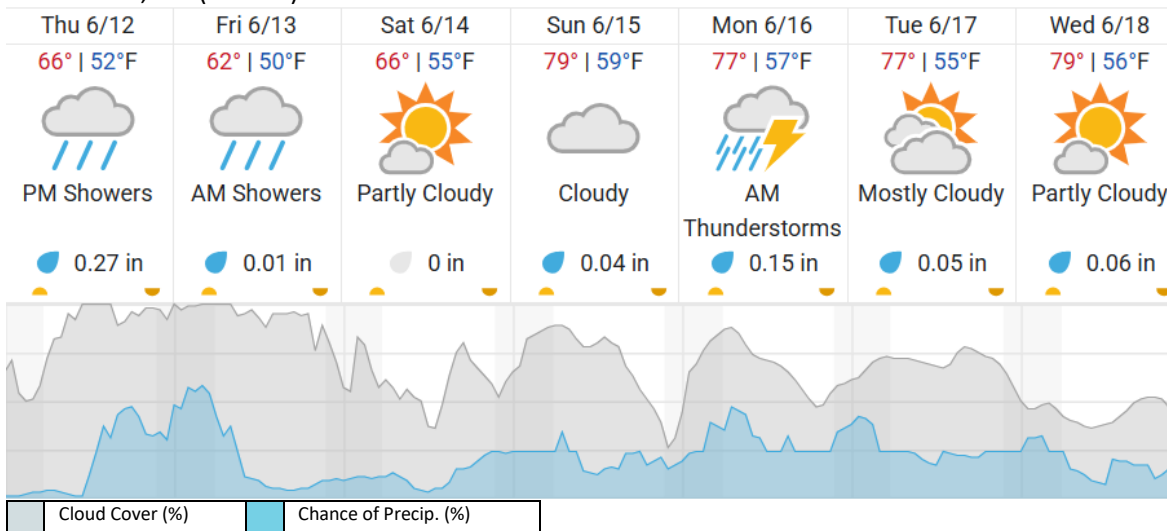
\* Flown within 35deg solar angle

## Weather Forecast

### Bismarck, ND (NOGP)



### Jamestown, ND (WOOD)



source: wunderground.com

## **Flight Collection Plan for 12 June 2025**

Continue pumping down the NIS chamber while warm.

## **Flight Collection Plan for 13 June 2025**

### **Flyority 1**

Northern Great Plains (NOGP)

Flight Plan Name: D09\_NOGP\_R2\_P1\_v3\_VQ780

On-Station Time: (35 degrees): 1440 UTC / 0940 L

### **Flyority 2**

Collection Area: Woodworth (WOOD) – Dakota Coteau Field School (DCFS)

Flight Plan Name: D09\_WOOD\_DCFS\_C1\_P1\_v5\_VQ780

On-Station Time: (35 degrees): 1430 UTC / 0930 L

### **Flyority 3**

Lidar training flight.

**Crew:** Elissa (Lidar), Alyssa (NIS)