



Payload 3 Daily Flight Report

Date: 2025-07-14

Flight Campaign ID: P3C1

Airport, FBO ID, City: Bozeman Yellowstone International Airport (KBZN) - Belgrade, MT

Aircraft: N821AR

Domain: 12 (Northern Rockies)

Sites Flown: YELL (Yellowstone Northern Range)

Days left in Domain: 7

Report Author: Cameron

Lidar Operators: Cameron

Flight Hours: 02:19

Spectrometer Operators: Mitch

Hours until maintenance: 122.68

Pilots: Justin, Troy

GPS Instruments: U-MAWY, U-P048, U-P720

Summary

Despite an initial forecast of clearing morning skies, conditions at the site were deemed suboptimal primarily due to a dense presence of haze and smoke. As the afternoon progressed, cumulus clouds began to develop, leading to further deterioration. The crew adapted by focusing on lower-priority lines, managing to collect 17 before conditions worsened.

Concerns

- POS wouldn't copy directly to the MIDAS 1 disk, instead we copied them to a thumb drive and manually copied them to the disk.
- Aircraft generators may be displaying issues powering the payload pre and post flight. We will continue to monitor

Comments

- None

Daily Coverage

Estimated Cloud Cover Key

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

Solar Angle Less Than 40 degrees: (*)

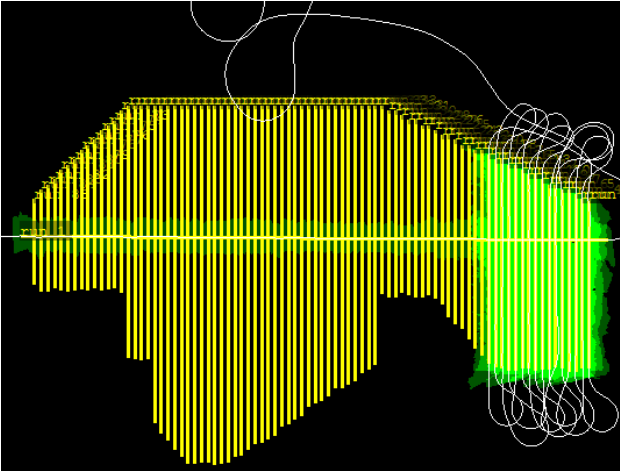
D12|YELL

| Line # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|--------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| Lidar | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Spectrometer | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Camera | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Cloud Cover | | | | | | | | | | | | | | | | | |

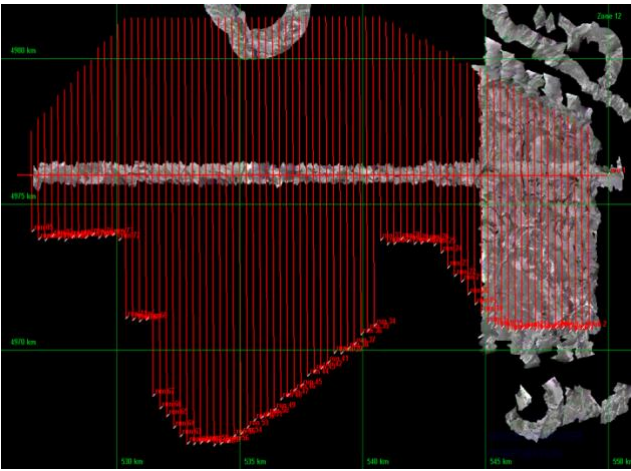
Total number of lines flown: 17

Flight Screenshots

Lidar



NIS



Pictures: In transit to YELL this morning.



Cumulative Domain Coverage

D12|YELL (Yellowstone Northern 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 | 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 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | | | | | | | | | | | | | | | |

Flown: 20% (17/85)

Green: 0% (0/85)

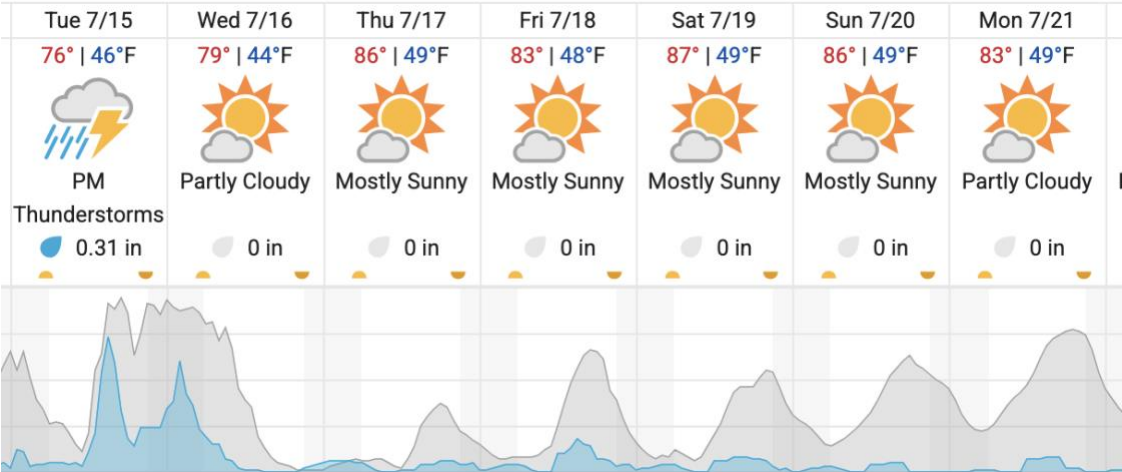
Yellow: 15% (13/85)

Red: 5% (4/85)

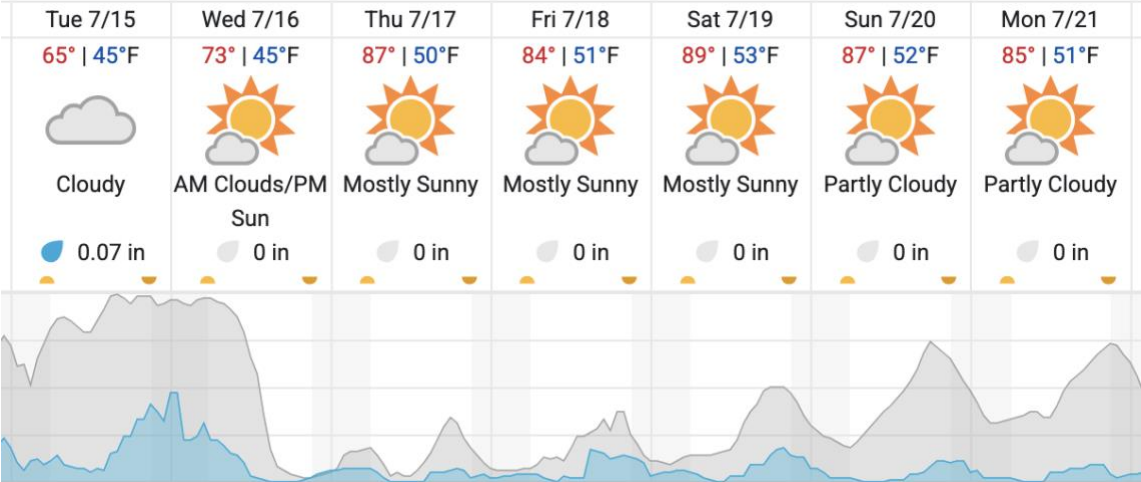
* Flown within 35deg solar angle

Weather Forecast

Gardiner, MT (YELL)



Bozeman, MT (FBO)



source: wunderground.com

Flight Collection Plan for July 15, 2025

Flyority 1

Collection Area: Yellowstone Northern Range (YELL)

Flight Plan Name: D12_YELL_C1_P1_v3_Q780

On-Station Time: 15:50 UTC/ 09:50 L

Crew: Mitch (Lidar), Cameron (NIS)