



# Arctic Boreal Vulnerability Experiment (ABOVE) 2023 ABOVE Airborne Flights

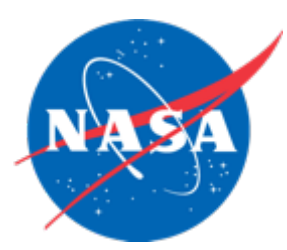
**16 July 2023 (DOY 197)  
Whitehorse and Kluane Lake, Yukon, Canada**

**Charles Miller, JPL, ABOVE Deputy Science Lead  
Peter Griffith, GSFC, ABOVE Project Manager**

**For Hank Margolis, Mike Falkowski, Bruce Tagg, Jack Kaye  
NASA HQ  
2023**

Photo: P. Griffith





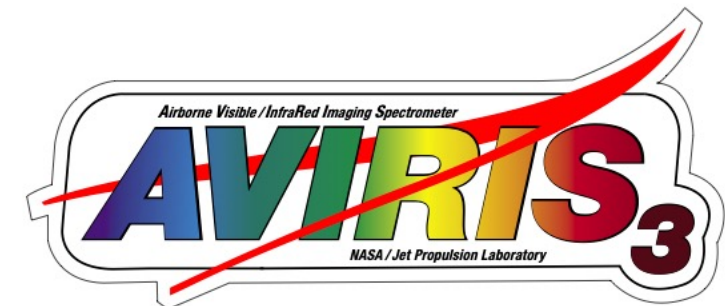
# 16 July 2023 (DOY 197)

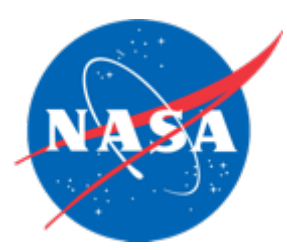
## Whitehorse & Kluane Lake, Yukon, Canada



### Daily Status:

- **AVIRIS-3 / Dynamic Aviation B-200 (N53W)**
- REPORT DATE: 16 July 2023
- Current Status of Aircraft: **GREEN**
- Current Status of AVIRIS: **GREEN**
- Current Deployment Location: Fairbanks AK (PAFA)
- Flight Crew: Kait King (Pilot), Robin Larsen (Pilot), Luis Rios (AVIRIS Operator), Mike Eastwood (AVIRIS Lead)
- Science Planning: R Pavlick, P Griffith
- Data Processing: J Chapman
- AVIRIS Lead: M Eastwood
- AVIRIS PI: R Green
- Science Lead: C Miller



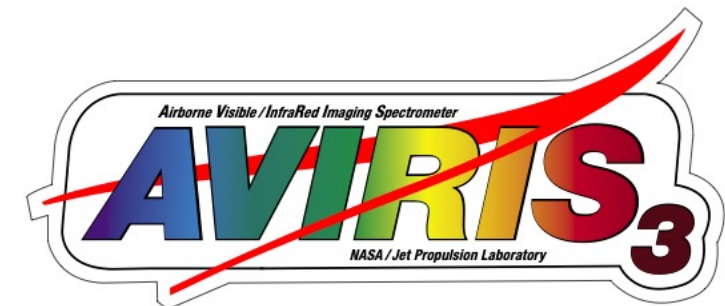


# 16 July 2023 (DOY 197) Whitehorse & Kluane Lake, Yukon, Canada



## Daily Summary:

- Depart Fairbanks 1100, Return Fairbanks 1630
- 5.5 Flight Hours
- Clear skies forecast for the region between Whitehorse and Kluane Lake
- Forecast came true!
- New lines acquired for the Townsend team, who are expected to arrive on site later this week
- Repeat of the 2019 lines along the road leading to Kluane, an area of interest for Sandra Yaacoub and the Canadian Forest Service





16 July 2023 (DOY 197)  
Whitehorse & Kluane Lake, Yukon, Canada



Photo: Luis Rios



Chasing rainbows on arrival, 14 July

Photo: Mike Eastwood

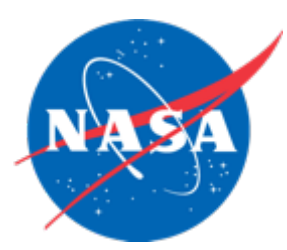


# 16 July 2023 (DOY 197) Whitehorse & Kluane Lake, Yukon, Canada

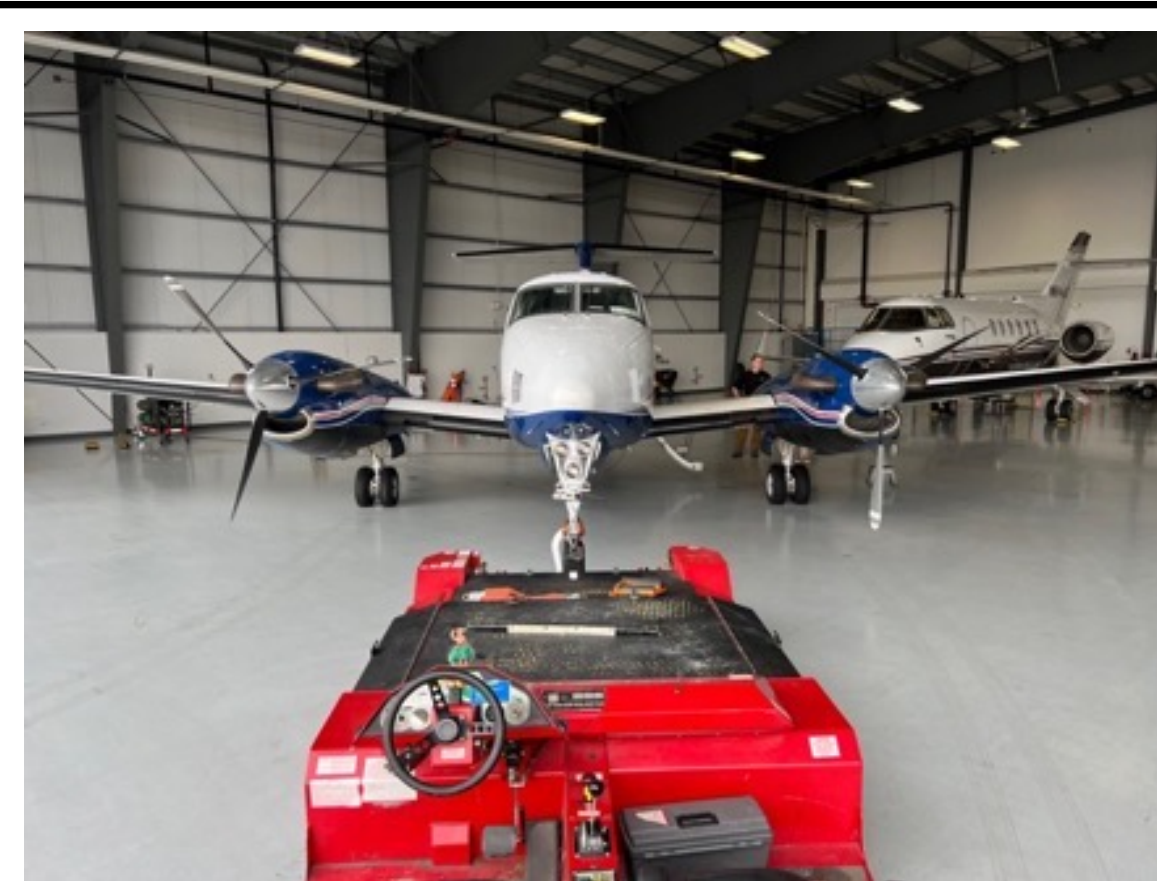


Left to right:  
Luis Rios (instrument operator)  
Robin Larsen (pilot)  
Kait King (pilot)  
Mike Eastwood (Instrument lead)





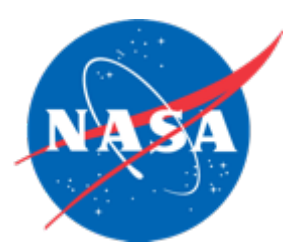
# 16 July 2023 (DOY 197) Whitehorse & Kluane Lake, Yukon, Canada



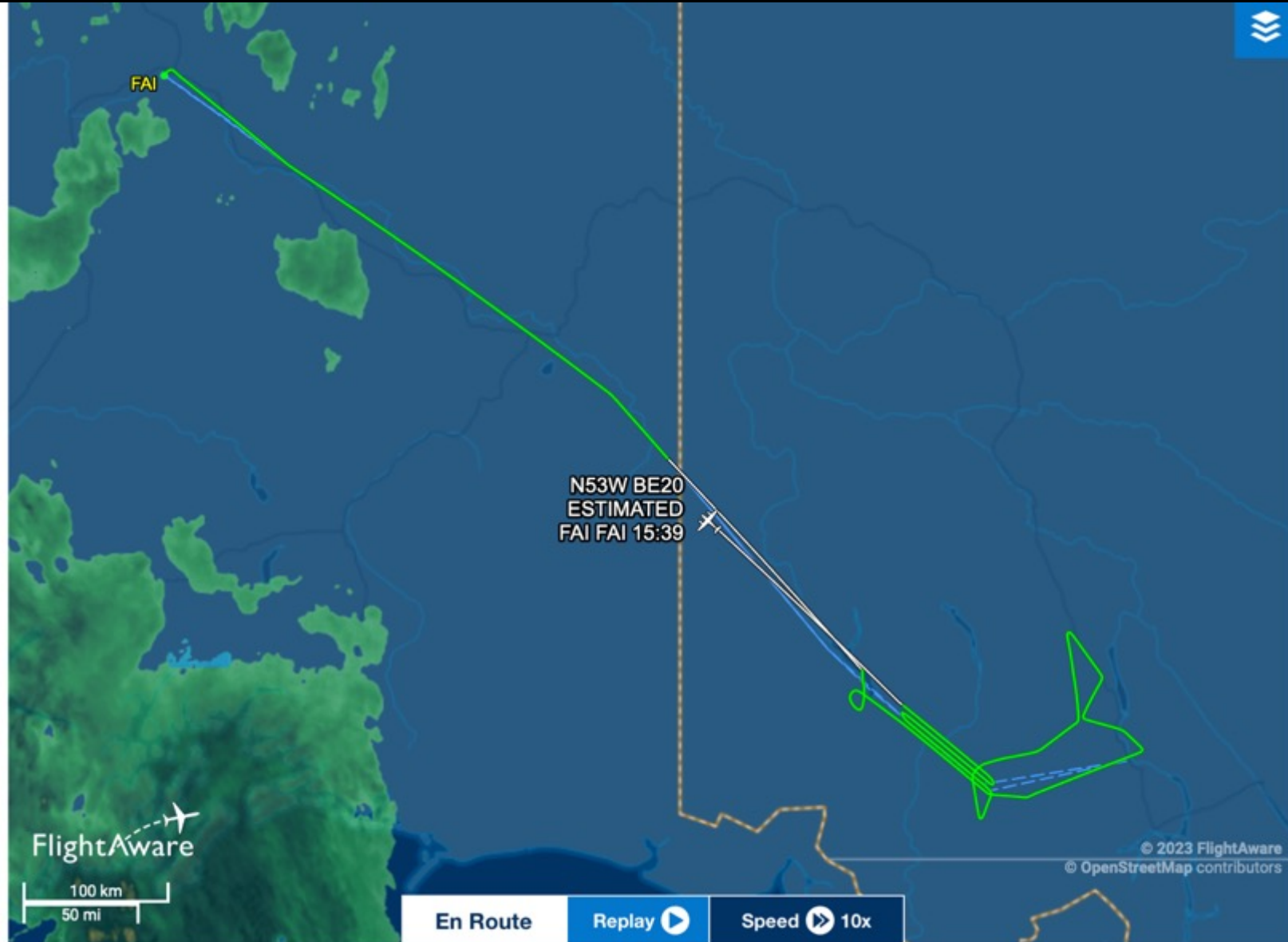
Preflight



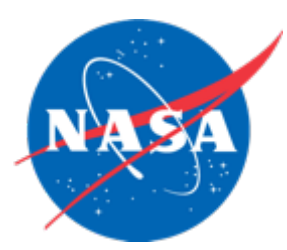
Photos: P. Griffith



# 16 July 2023 (DOY 197) Whitehorse & Kluane Lake, Yukon, Canada







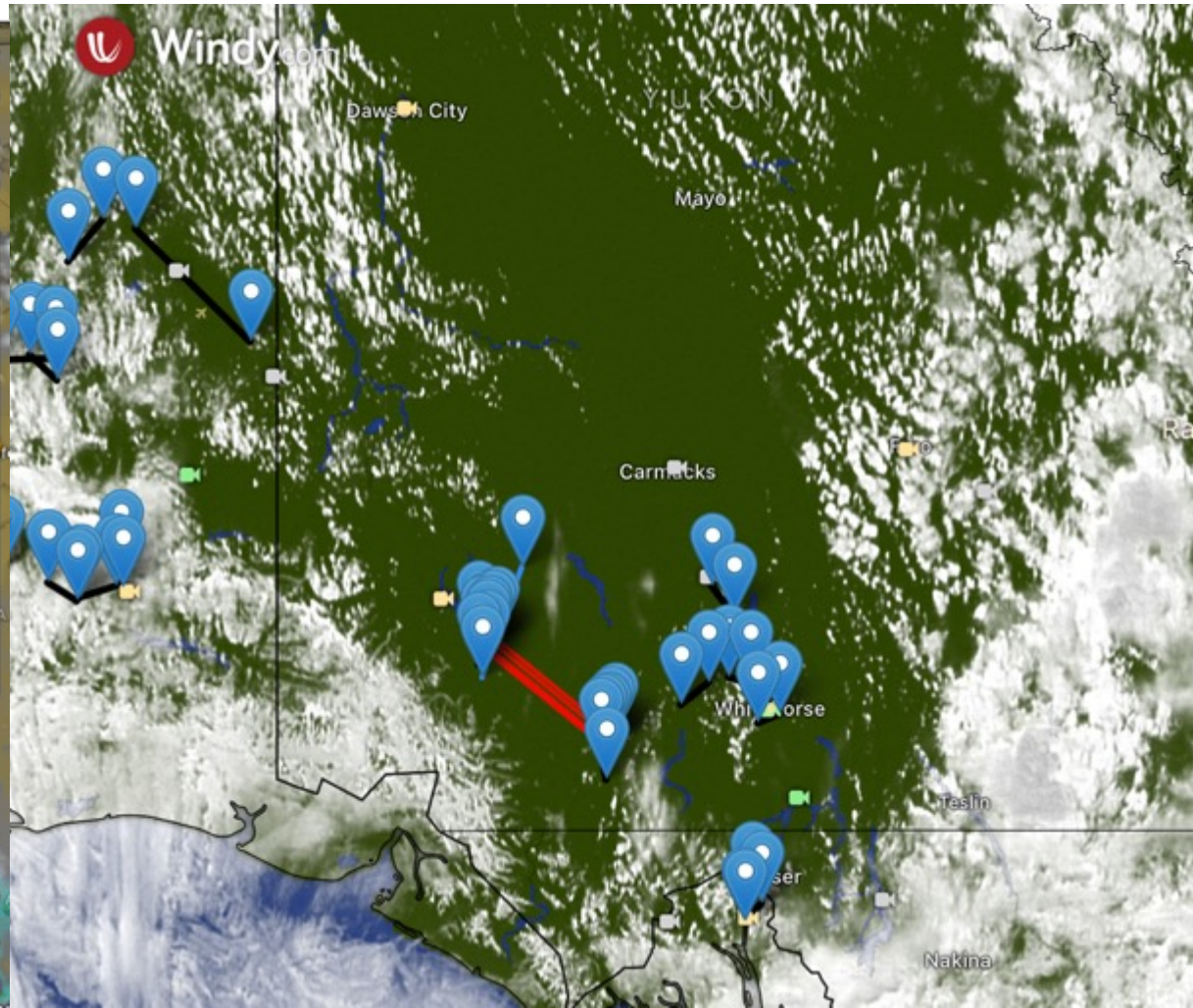
# 16 July 2023 (DOY 197) Whitehorse & Kluane Lake, Yukon, Canada



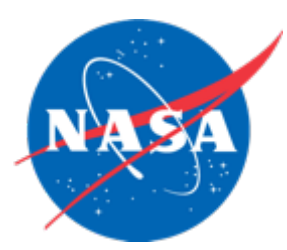
ECMWF forecast



GOES image with flight lines







# 16 July 2023 (DOY 197) Whitehorse & Kluane Lake, Yukon, Canada



## Burwash Wx Cameras

## Carmacks Wx Cameras

**Burwash (CYDB)** UTC:15:27 Local:08:27  
Operated by: NAV CANADA

METAR CYDB 161500Z 13005KT 25SM FEW060 FEW140 13/05 A2985 RMK CF1AC1 SLP121 DENSITY ALT 3200FT

SACNAZ CYDB 161500  
METAR CYDB 161500Z 13005KT 25SM FEW060 FEW140 13/05 A2985 RMK CF1AC1 SLP121 DENSITY ALT 3200FT

**CLEARDAY VISUAL REFERENCE**  
View North from the Burwash, YT Airport

100' Tree, 200' Tree, 300' Tree, 400' Tree

Wind Tower Less than 1/8 SM, Treeline 1/8 SM, Treeline Less than 1/8 SM

**Carmacks (CEX4)** UTC:15:27 Local:08:27  
Operated by: NAV CANADA

Weather Observation Not Available / Observation Météorologique Non Disponible

**CLEARDAY VISUAL REFERENCE**  
View West of approach area for Runway 09 at the Carmacks, YT Airport

100' Tree, 200' Tree, 300' Tree

Distant Mountain Range 1 SM 8800 ft MSL, Mountain 2 1/2 SM 2500 ft MSL, Mountain Ridge 1 1/8 SM 2100 ft MSL

Treeline 1/4 SM, Fuel Tanks Less than 1/8 SM, Treeline 1/2 SM

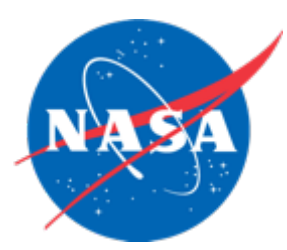
Show Camera Loop

Show Camera Loop

North (350°) East (100°) South (180°) West (270°)

SouthEast (130°) West (275°)

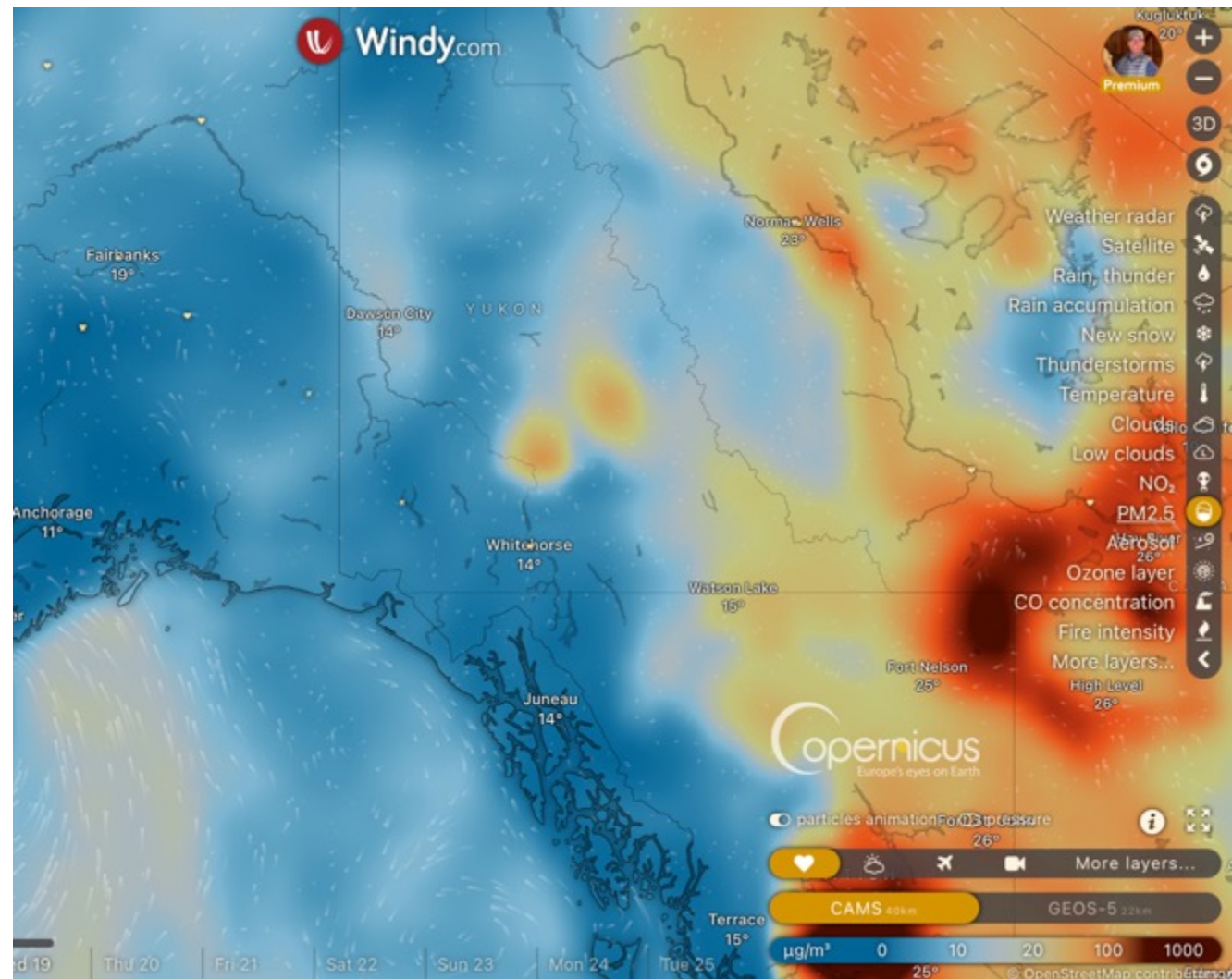
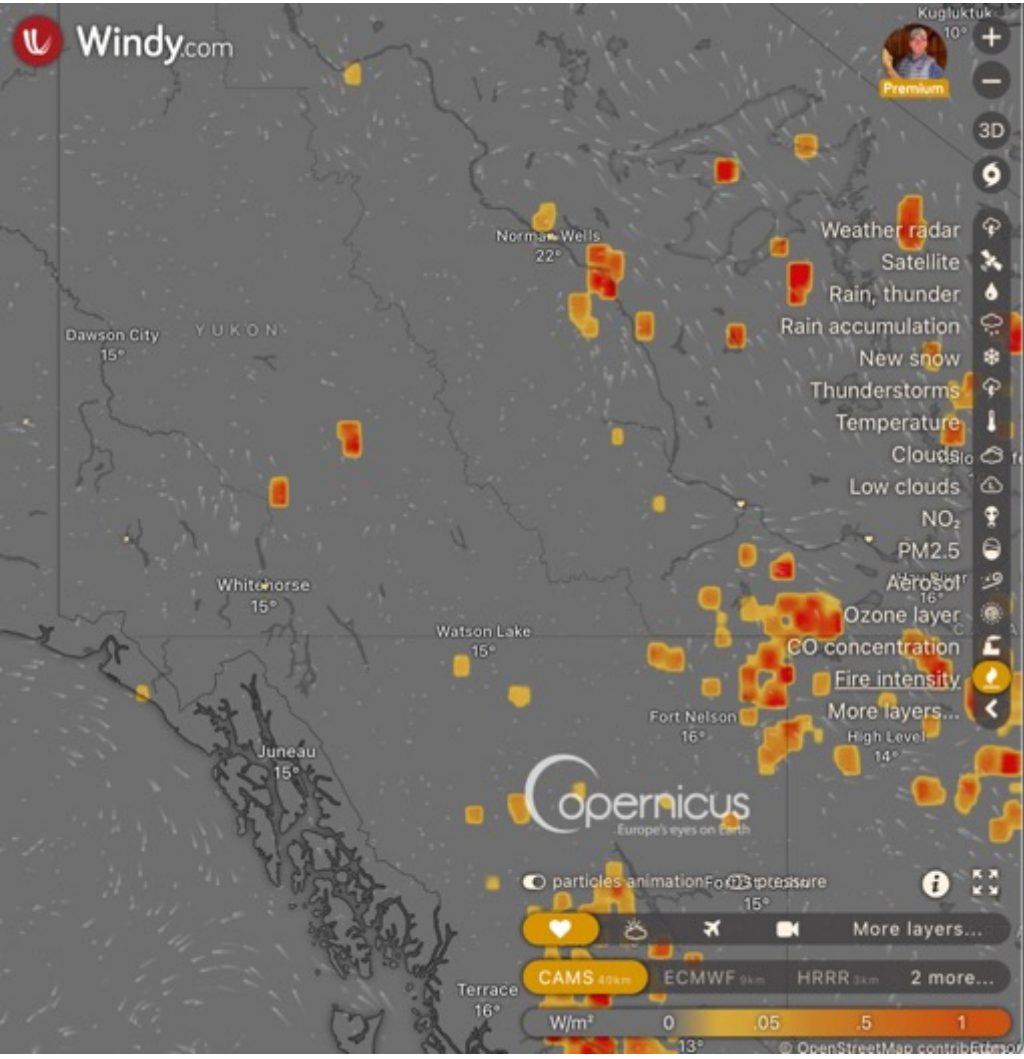




# 16 July 2023 (DOY 197) Whitehorse & Kluane Lake, Yukon, Canada



Active Fires (left) and PM 2.5 (right)







16 July 2023 (DOY 197)  
Whitehorse & Kluane Lake, Yukon, Canada



Quicklooks coming soon