

A photograph of an Arctic landscape. In the foreground, three reindeer with large, dark antlers are walking across a field of dry, brownish grass. The background features a range of blue mountains under a clear sky. The text is overlaid on the image.

Arctic Boreal Vulnerability Experiment (ABoVE) 2024 ABoVE L-band SAR Airborne Flights

**21 August 2024 (DOY 234)
Seward Peninsula**

**Charles Miller, Deputy Science Lead
Jet Propulsion Laboratory, California Institute of Technology
Peter Griffith, Elizabeth Hoy
Carbon Cycle & Ecosystems Office
and the ABoVE Science Team**

**For Ryan Pavlick, Kathy Hibbard, Laura Lorenzoni, Bruce Tagg, Jack Kaye
NASA HQ
2024**



21 August 2024/DOY 234

North Slope



Daily Summary:

- **C-20A (N802NA) L-band SAR ABoVE CAMPAIGN (CANADA / ALASKA)**
- REPORT DATE: 21 August 2024
- Current Status of Aircraft: **GREEN**
- Current Status of SAR: **GREEN**
- Current Status of PPA: **GREEN**
- Current Deployment Location: Fairbanks, AK (PAFA)
- Crew: Nelson, Phelps, Little, Reid, Miller, Hoy, Austerberry, Bachman-Okihiro, Hasson, Zavoico
- Science Coordinator: N Pinto
- Science Lead: C Miller
- Project Manager: Y Lou



21 August 2024/DOY 234

North Slope



Daily Summary:

- Fairbanks (PAFA) - Fairbanks (PAFA)
- Collected 9 of 9 data lines
- Flight Plan – Flight Plan 2127_v01
- Some fire smoke in the Coldfoot area, creeping over the eastern Brooks Range
- Dense cloud cover throughout flight
- Precipitation expected in the western North Slope, Brooks Range & Coldfoot areas; snow at higher elevations (see HRRR forecast on #7)
- Deadhorse (lines 7-8) and Toolik (lines 4-5) lines acquired in both/opposite directions to test retrieval algorithms



21 August 2024/DOY 234 North Slope





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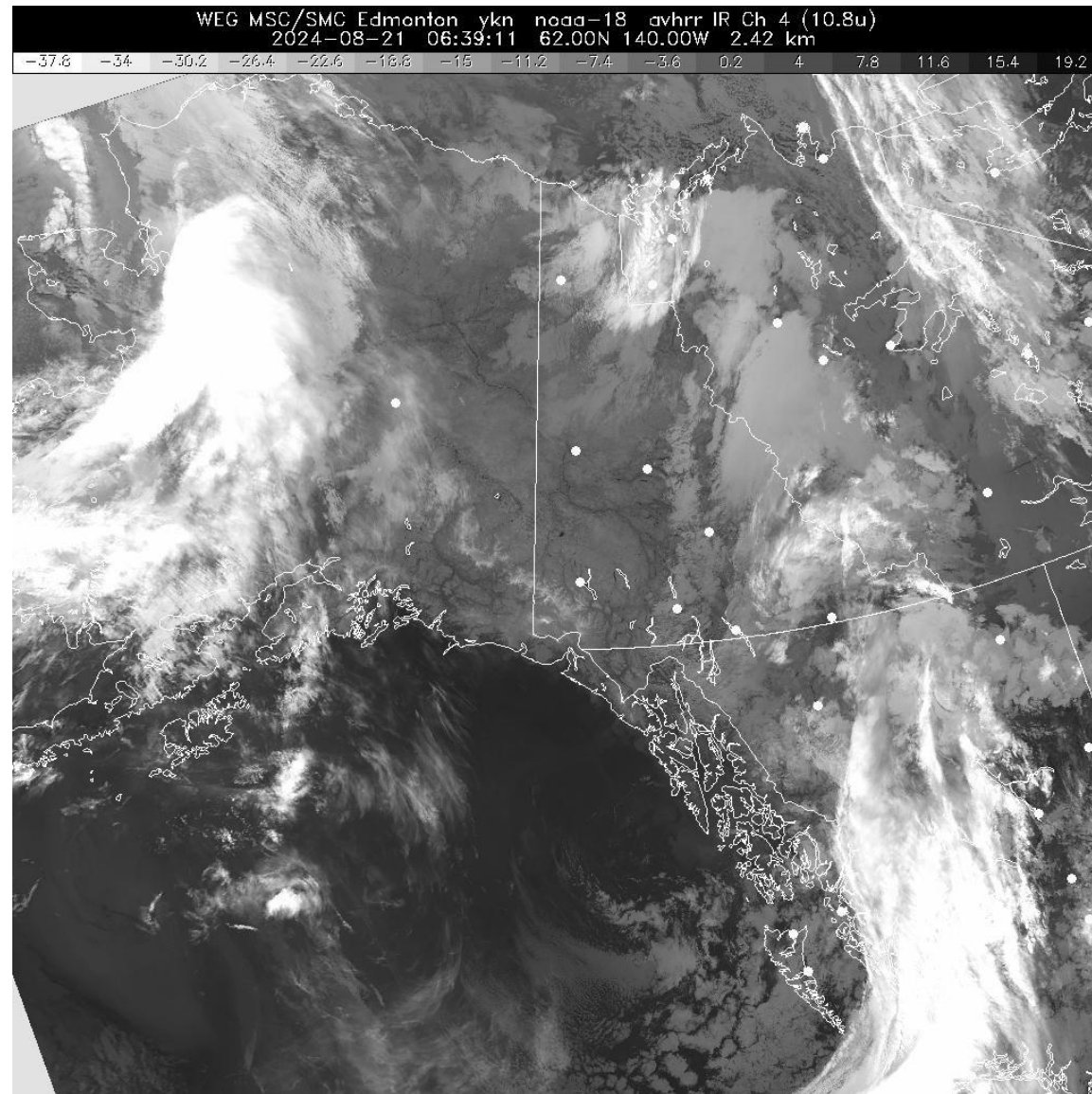
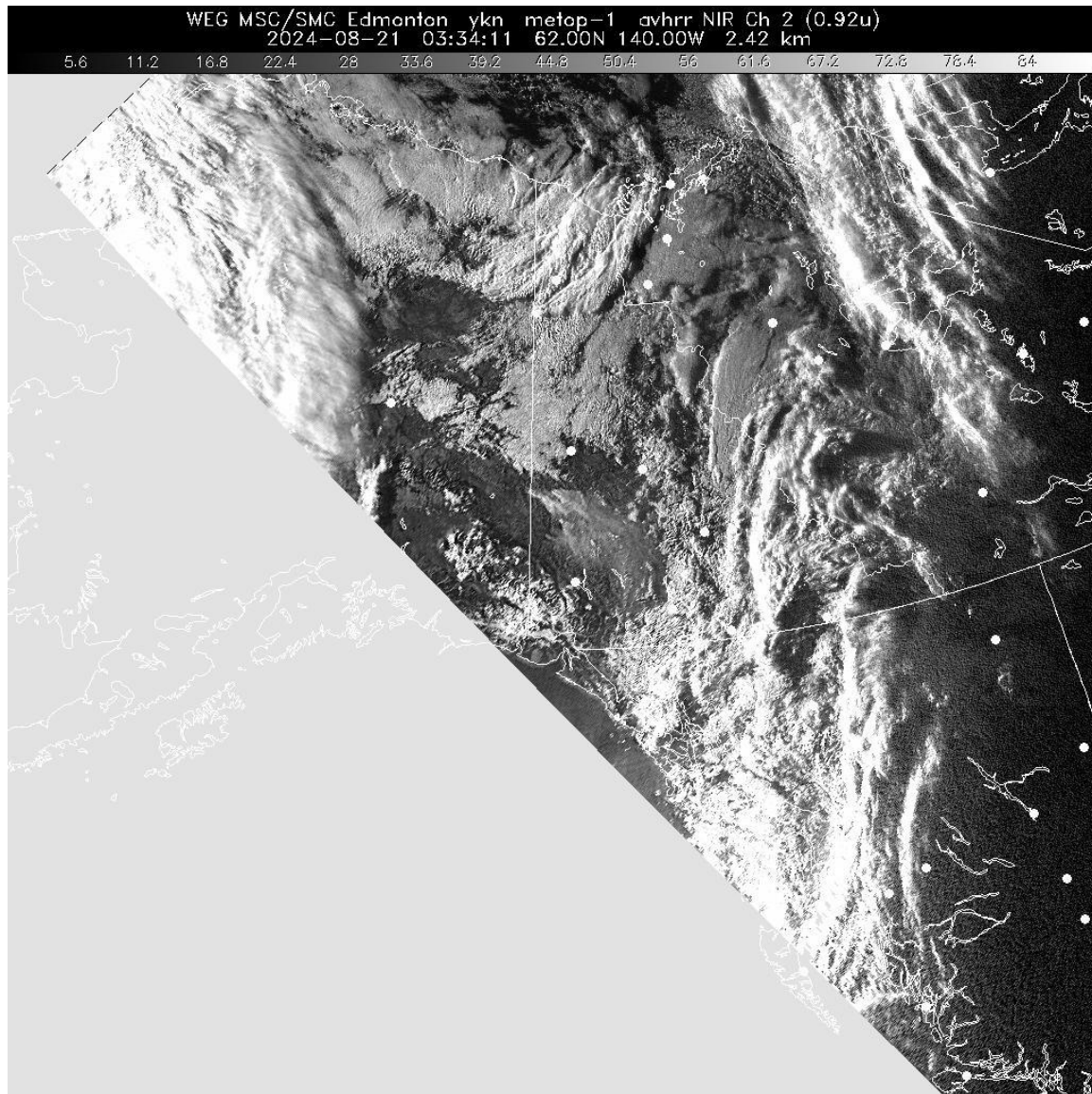
21 August 2024/DOY 234 North Slope





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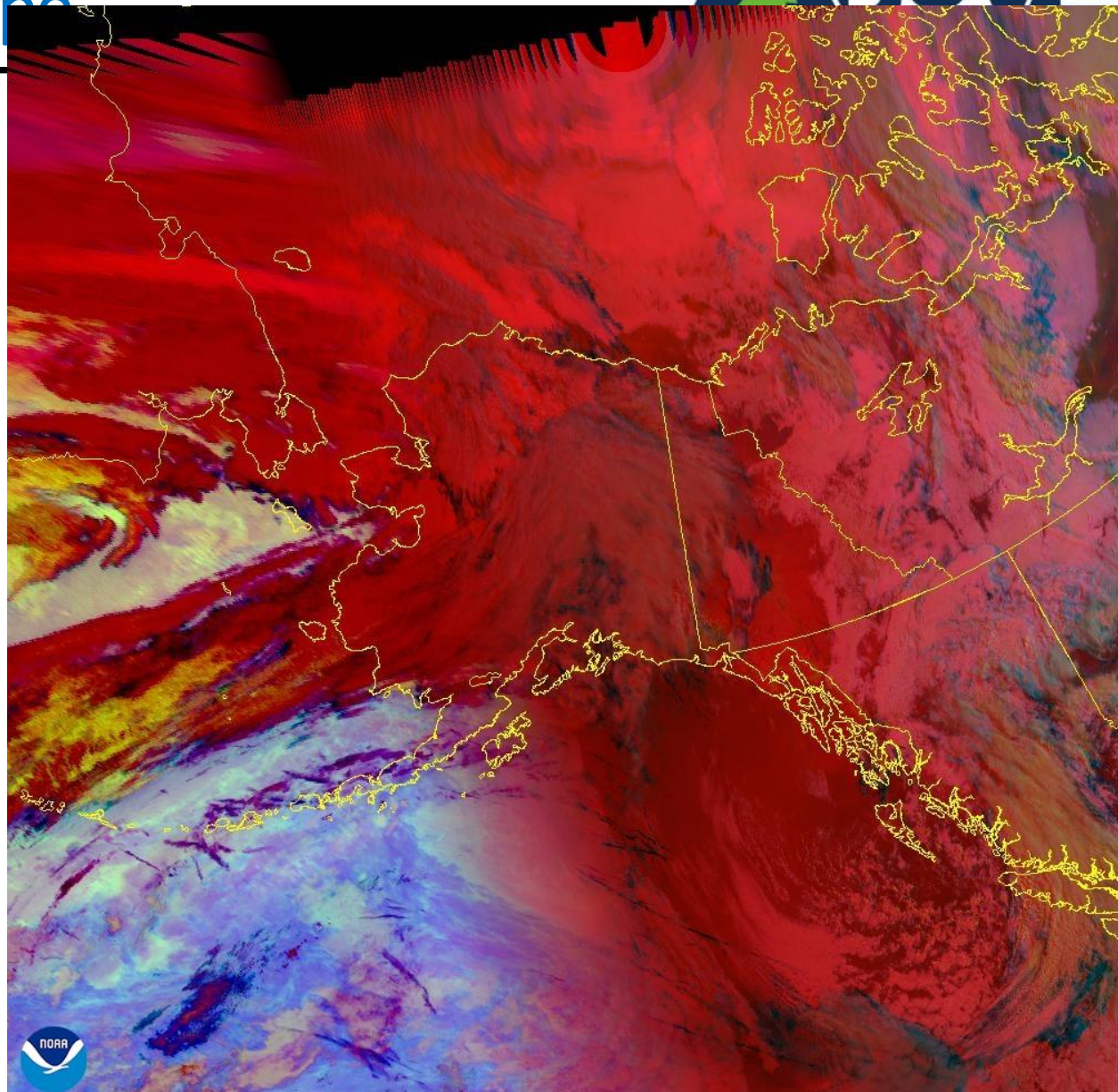
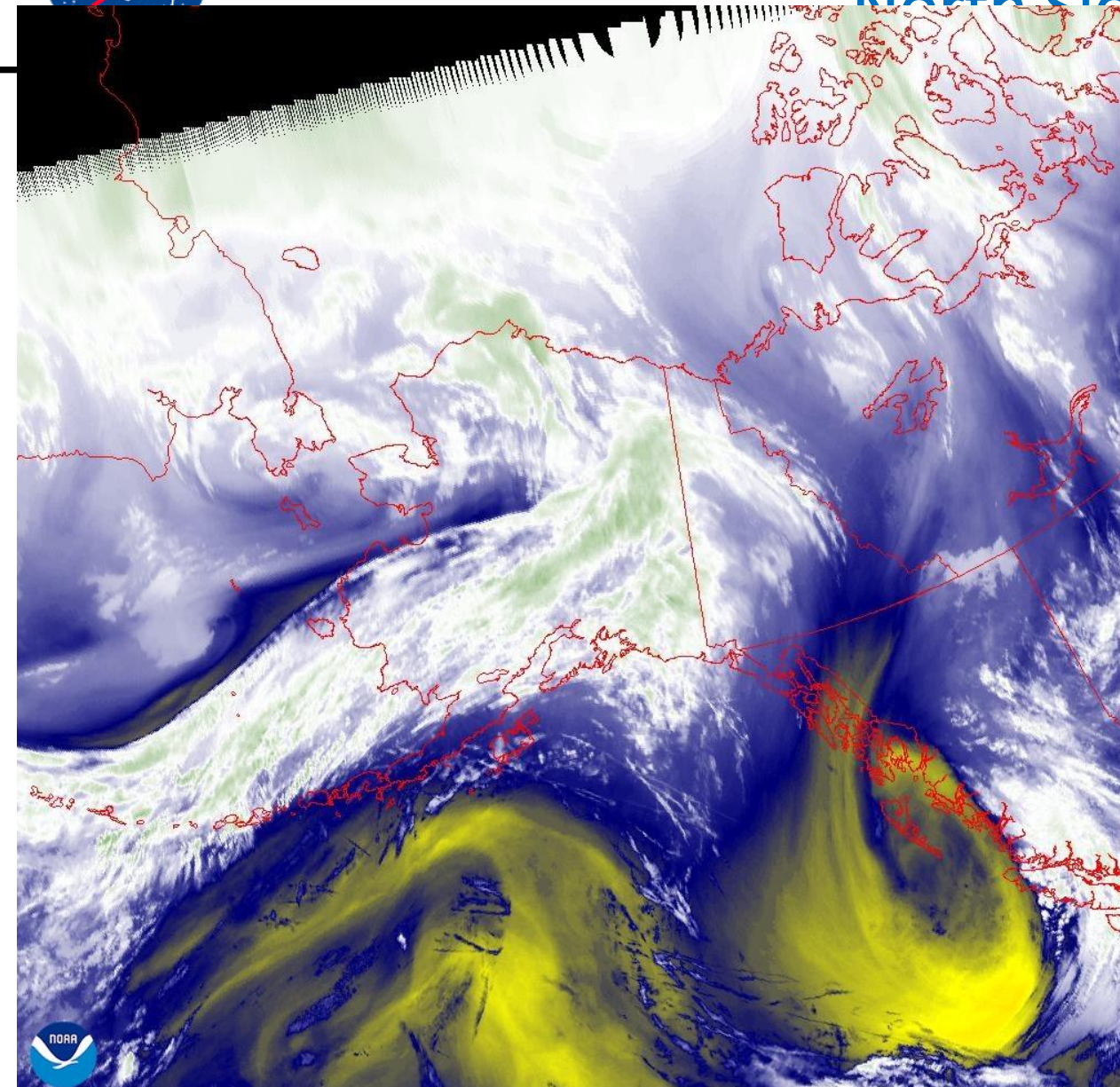
North Slope





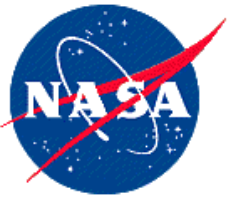
21 August 2024/DOY 234

North Slope

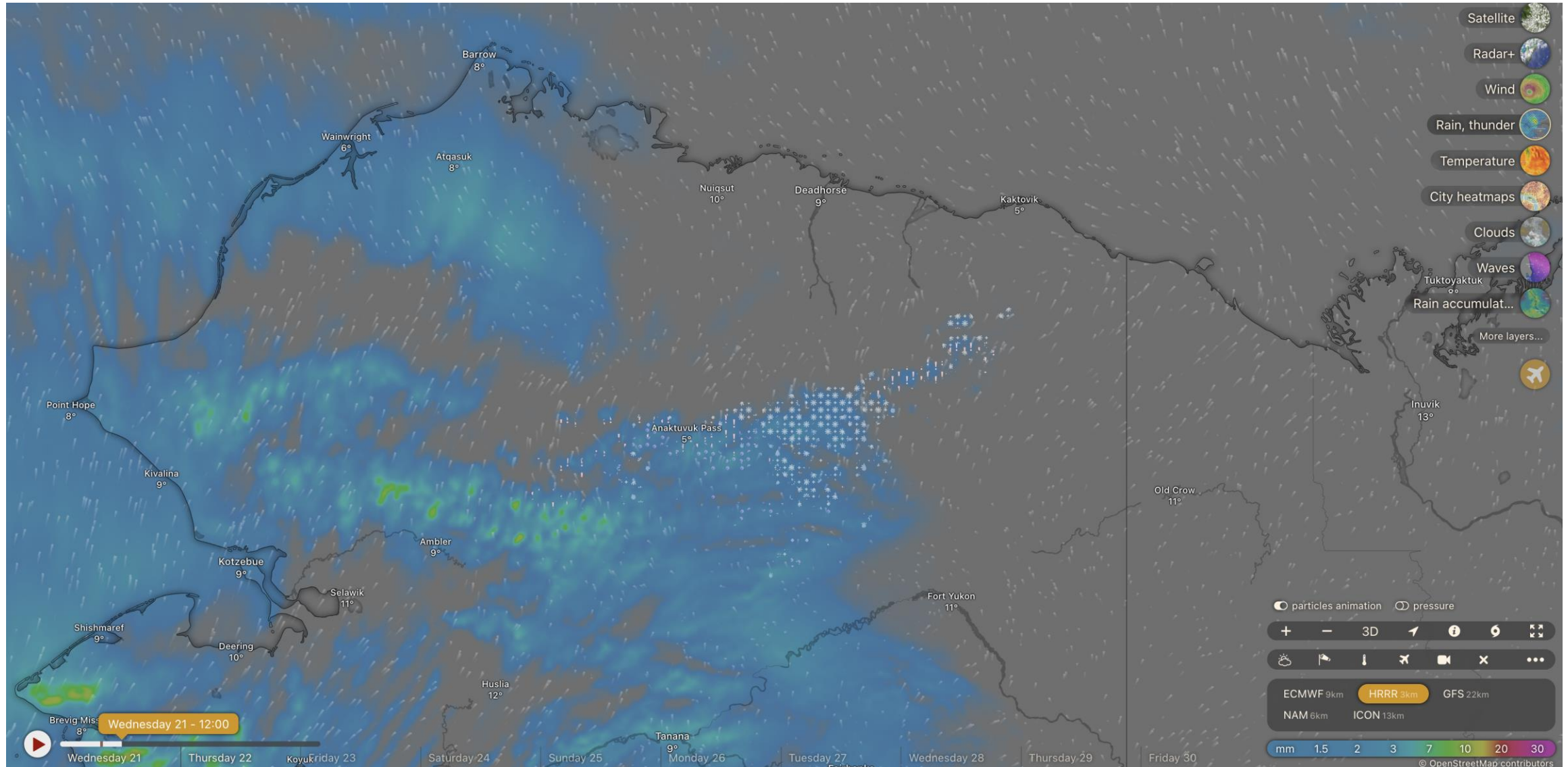


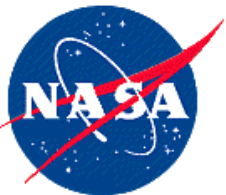
21 Aug 2024 18:00Z - NOAA/NESDIS/STAR - GOES-West - Band 10 - AK

21 Aug 2024 15:20Z - NOAA/NESDIS/STAR - GOES-West - DayNightCloudMicroCombo Composite - AK



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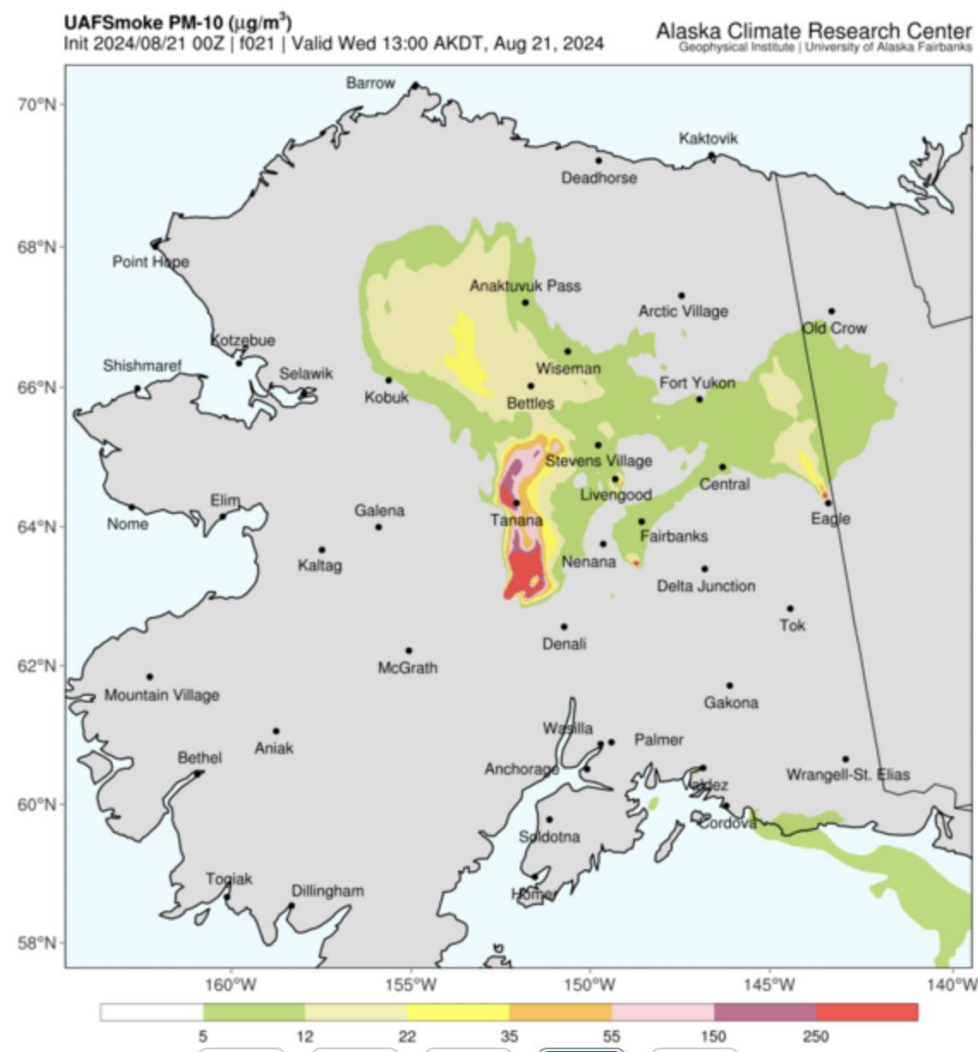
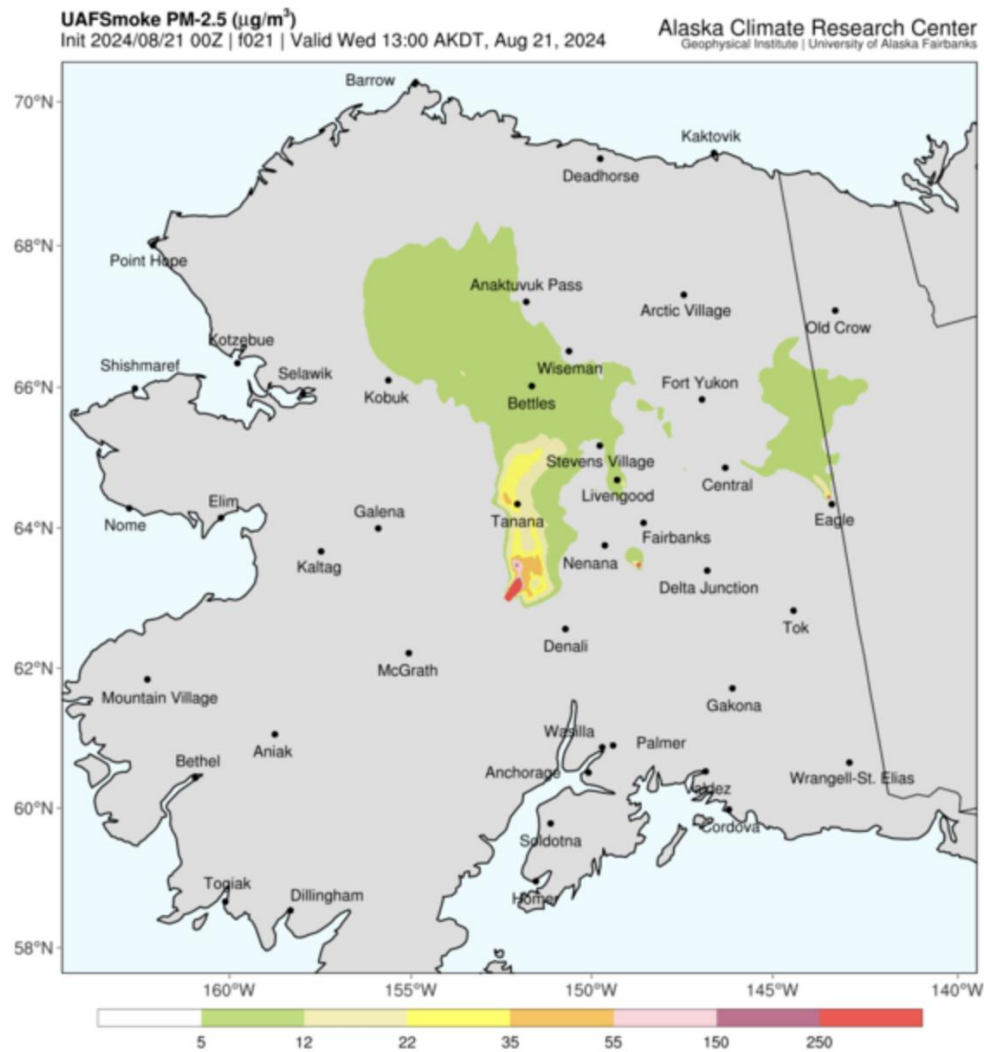


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PM-2.5: Particulate Matter (smoke particles 2.5 micrometers or less in diameter) near surface
(Loading slowly? [Click here](#) for a simpler animation.)

PM-10: Particulate Matter (smoke particles 10 micrometers or less in diameter) near surface level
(Loading slowly? [Click here](#) for a simpler animation.)





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Flight Plan Report: PLAN_2127_v01

https://uavsar.jpl.nasa.gov/cgi-bin/report.pl?planID=PLAN_2127_v01#summary

Data Acquisitions:

Line 1: ivotuk_03111

Line 2: atqasu_34509

Line 3: barrow_15018

Line 4: toolik_05300

Line 5: toolik_23315

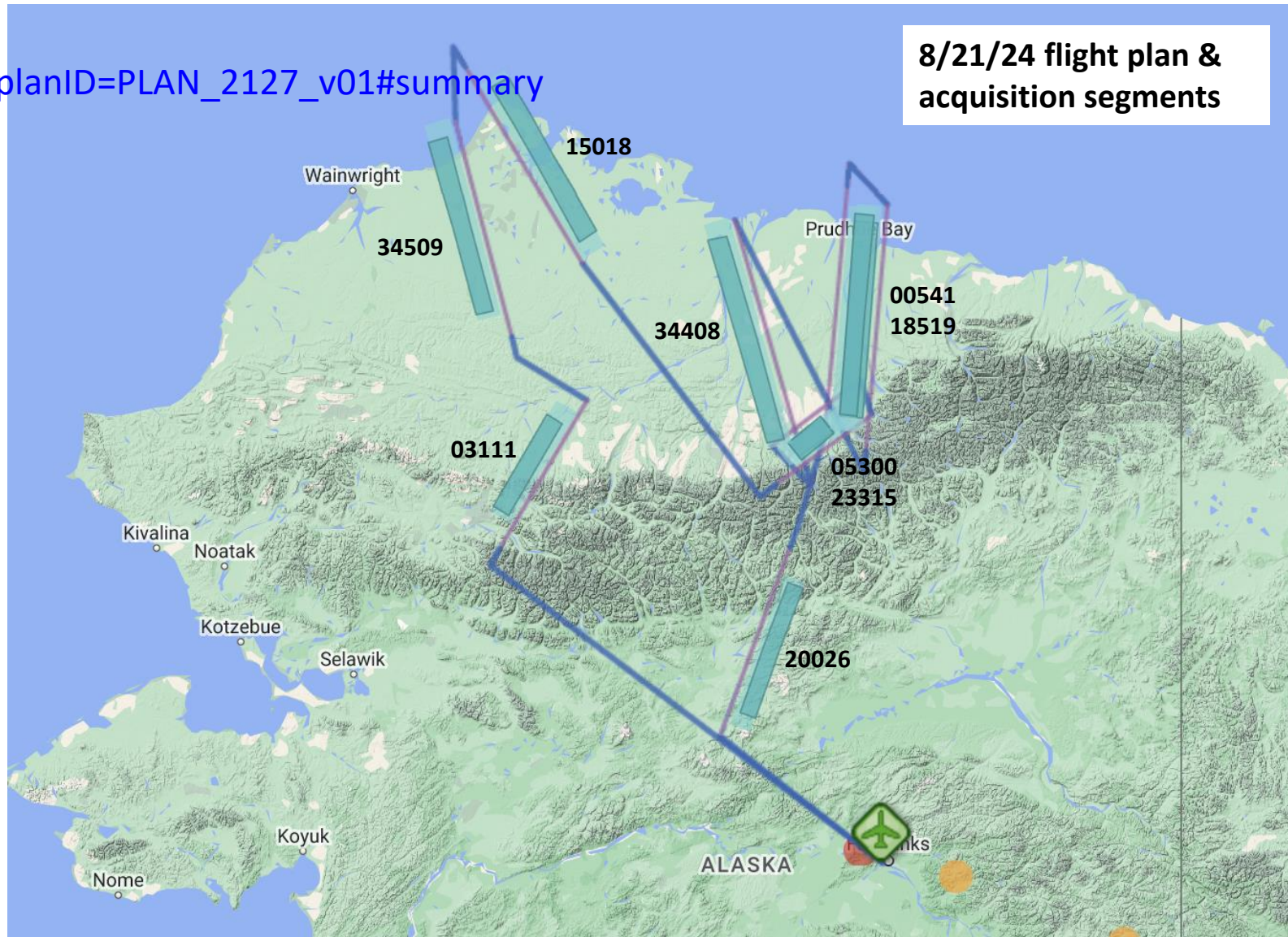
Line 6: anaktE_34408

Line 7: dhorse_00541

Line 8: dhorse_18519

Line 9: coldfo_20026

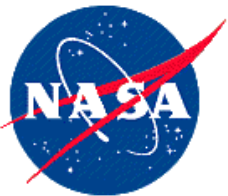
8/21/24 flight plan &
acquisition segments



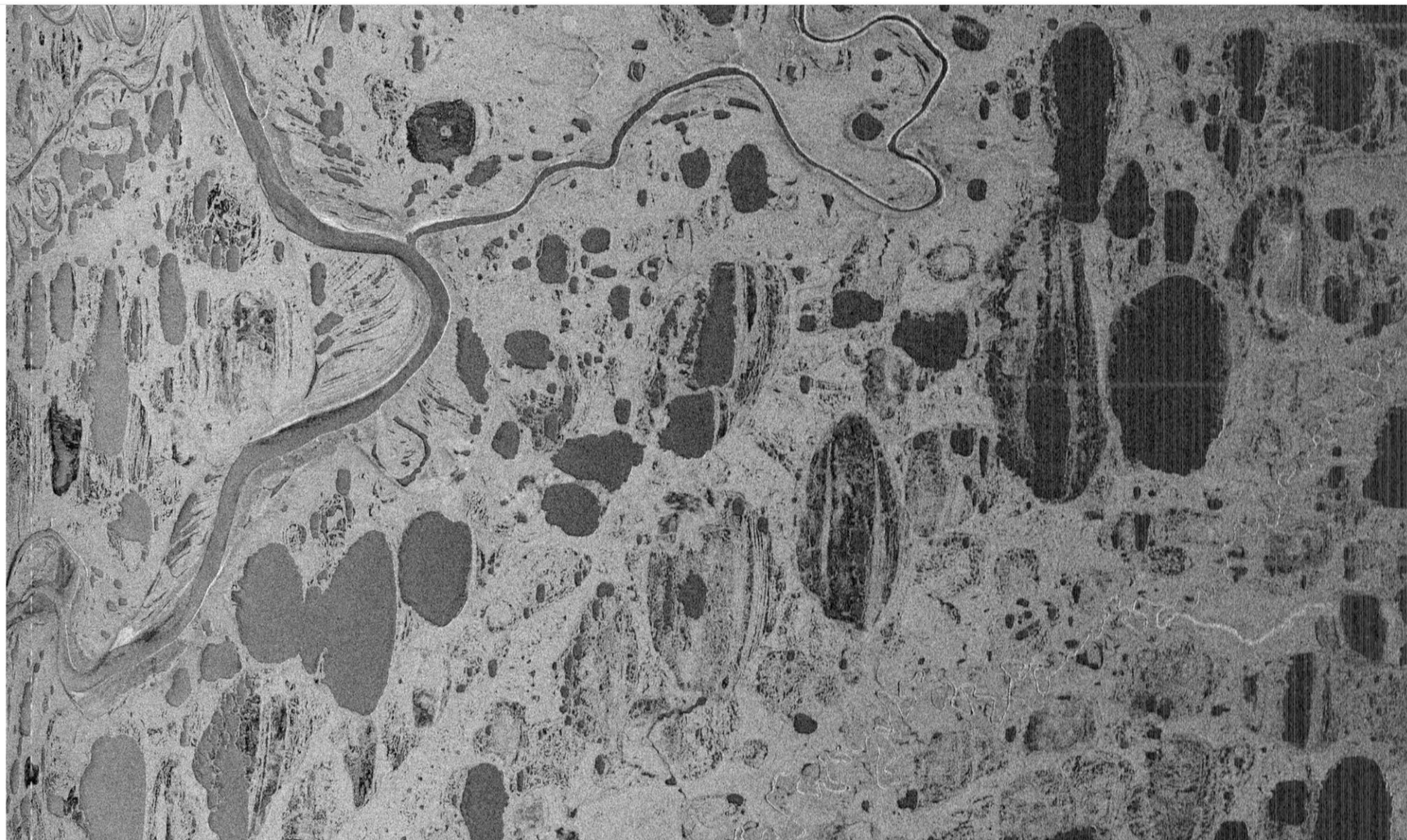


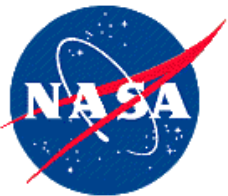
21 August 2024/DOY 234
North Slope





21 August 2024/DOY 234
North Slope





21 August 2024/DOY 234 North Slope

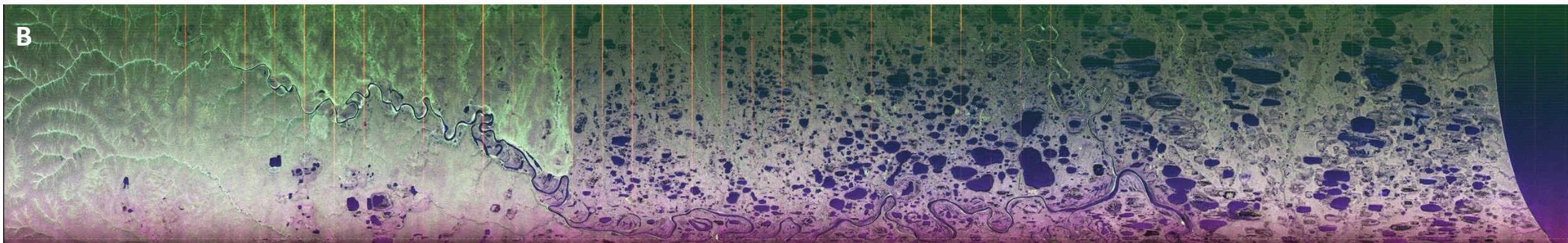
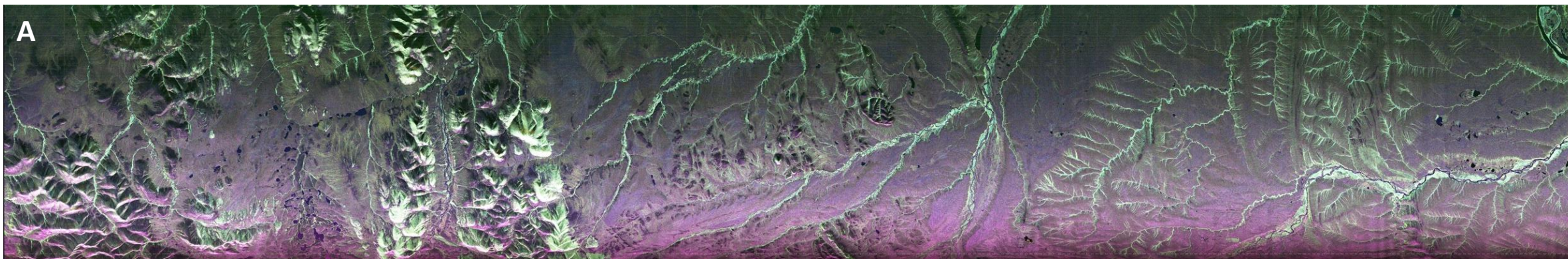


UAVSAR Quick-look products

A. Line 1: `ivotuk_03111`

B. Line 2: `atqasu_34509`

Brian Bachman, JPL





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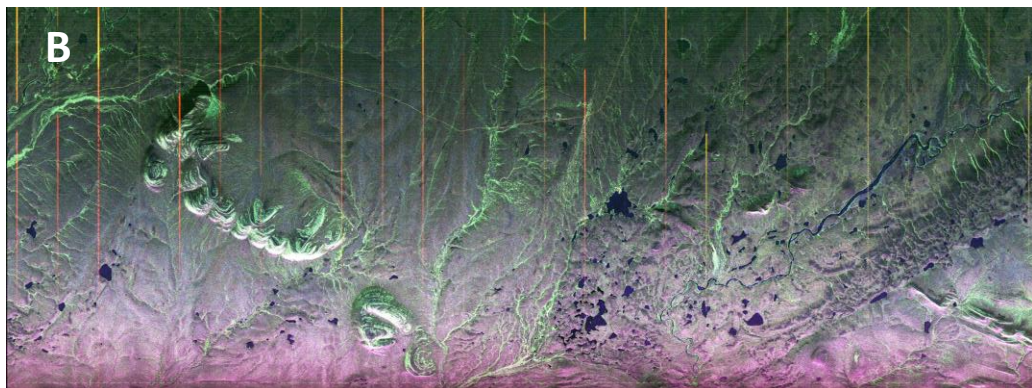
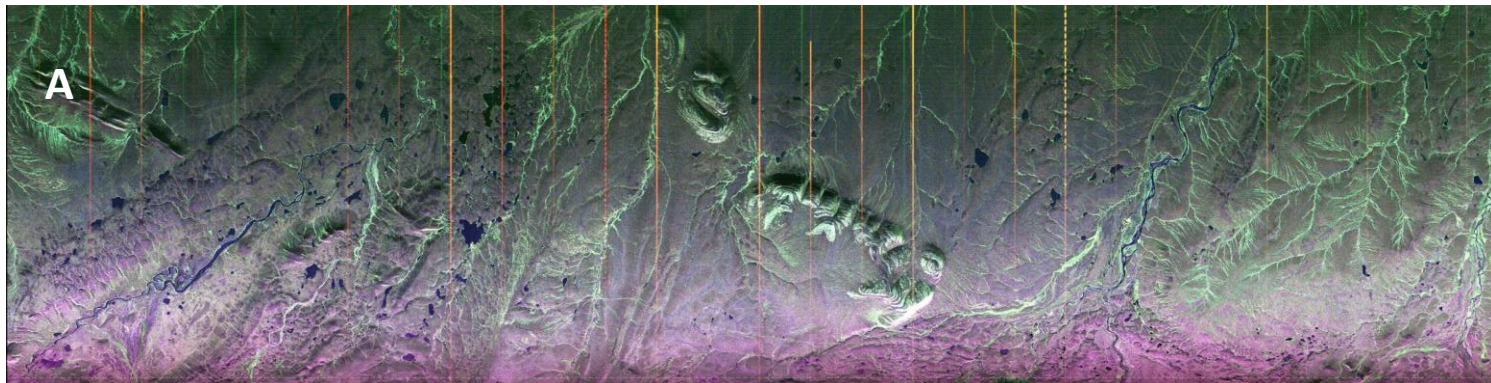


UAVSAR Quick-look products

A. Line 4: **toolik_05300**

B. Line 5: **toolik_23315**

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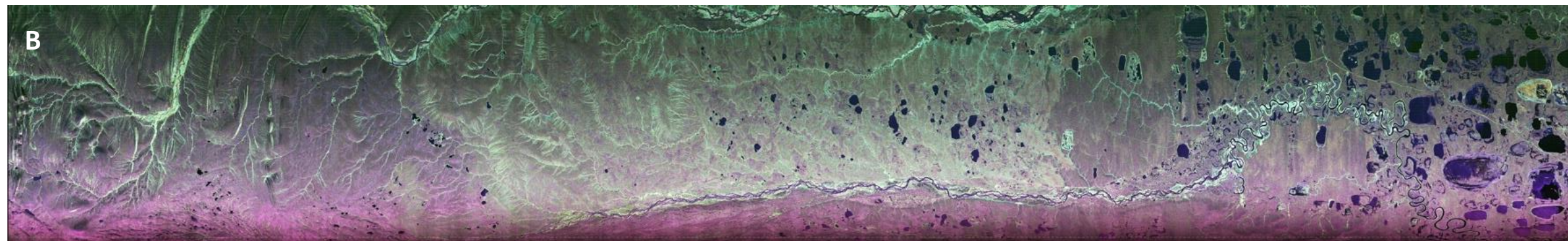
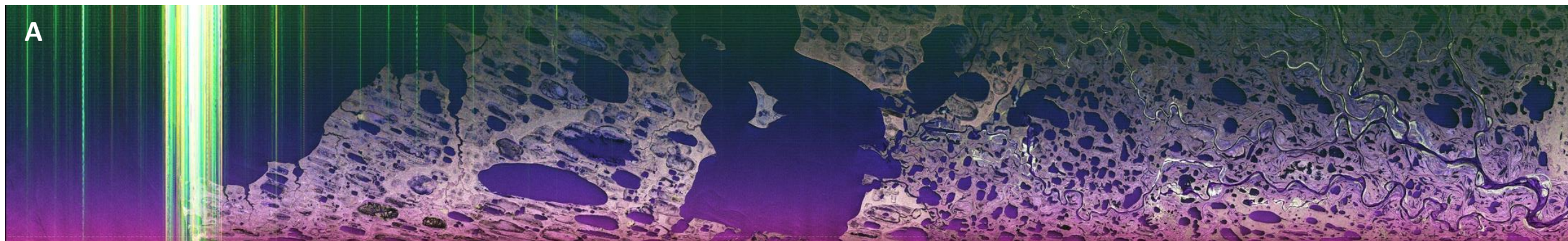


UAVSAR Quick-look products

A. Line 3: **barrow_15018**

B. Line 6: **anaktE_34408**

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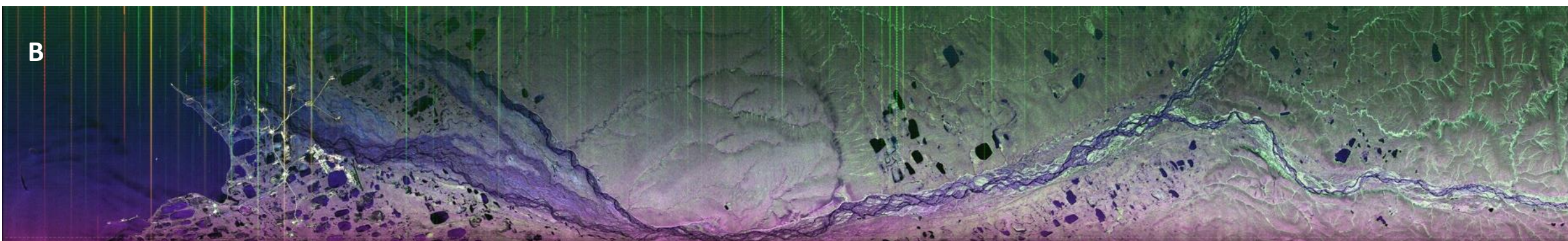
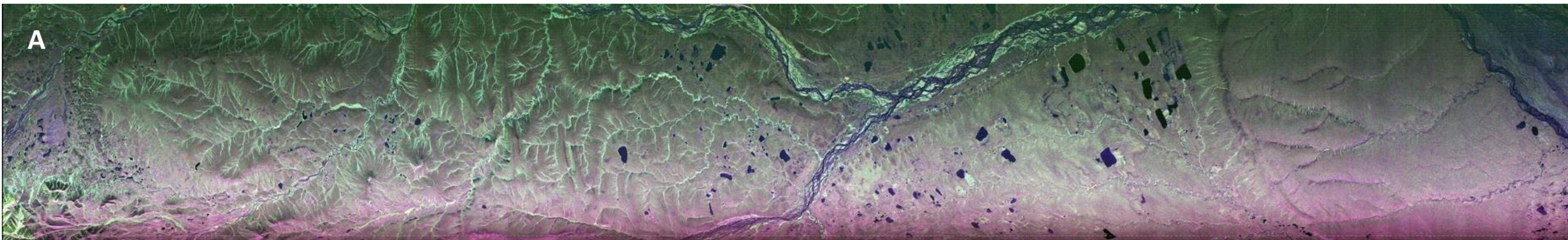


UAVSAR Quick-look products

A. Line 7: dhorse_00541

B. Line 8: dhorse_18519

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UAVSAR Quick-look products
A. Line 9: coldfo_20026

Brian Bachman, JPL





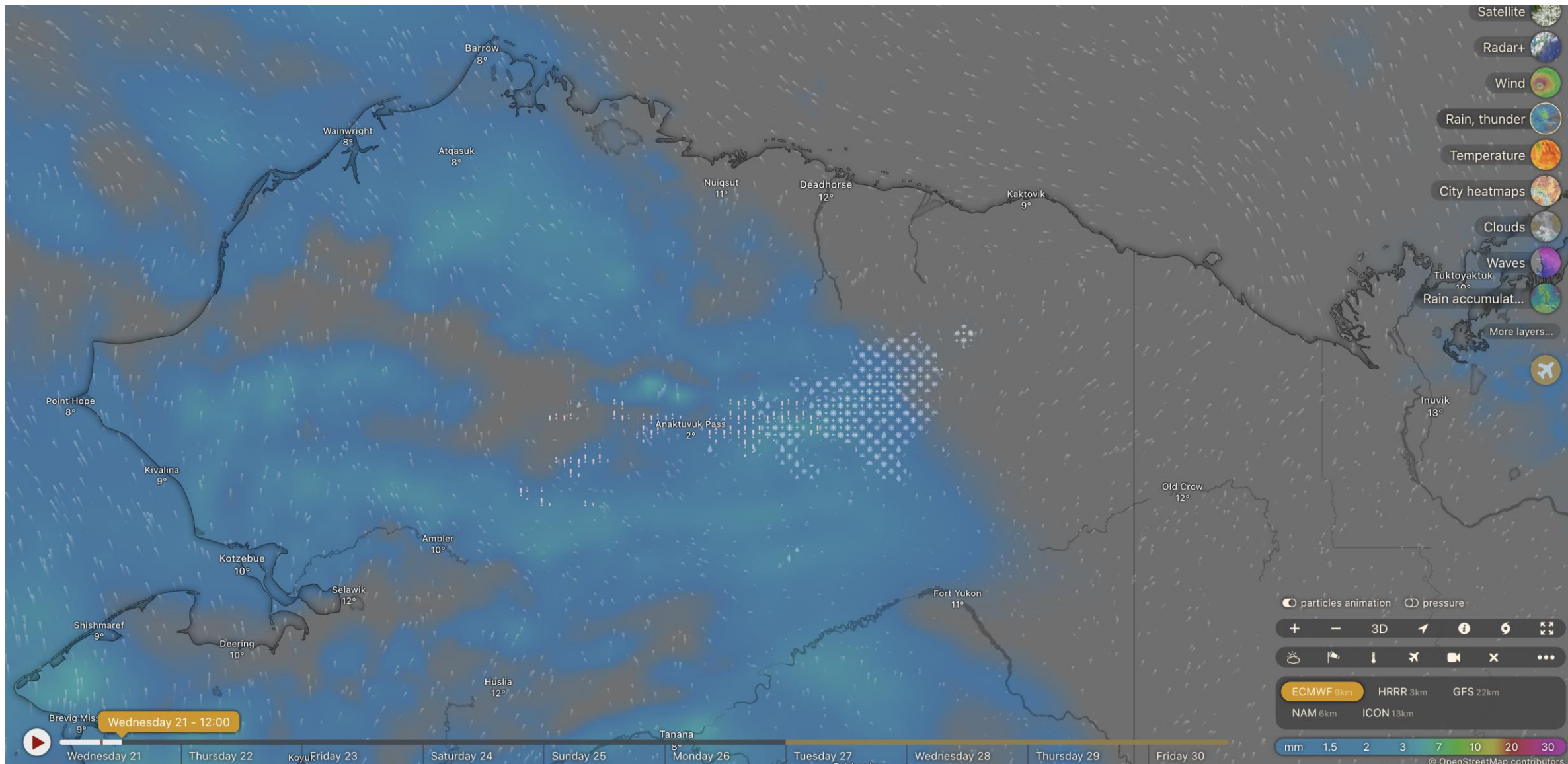
21 August 2024/DOY 234
North Slope

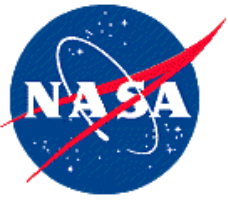


BACKUP



21 August 2024/DOY 234 North Slope





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Ambler (PAFM) UTC:16:06 Local:08:06

16:08 08/21/24 (UTC) 08:08 08/21/24 (AKDT)

CLEARDAY VISUAL REFERENCE

3350' MSL 9.0 SM
2200' MSL 8.0 SM
3100' MSL 17.0 SM
Airport building 1.0 SM
Site Elevation: 105' MSL

FAA advisory weather product

Show Camera Loop

North (3°)	SouthEast (125°)	South (180°)	West (250°)		
Weather Data	Weather Trends	PIREPs	RCO	Airport Info	NOTAMs (PilotWeb)



21 August 2024/DOY 234 North Slope



Wainwright (PAWI) UTC:16:07 Local:08:07

Wainwright (0) 12:04 08/21/24 (UTC) 08:07 08/21/24 (AKDT)

FAA advisory weather product

CLEARDAY VISUAL REFERENCE

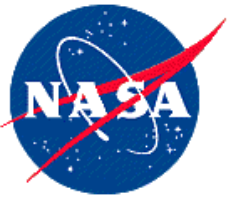
Runway < 1.0 SM

Site Elevation: 29' MSL

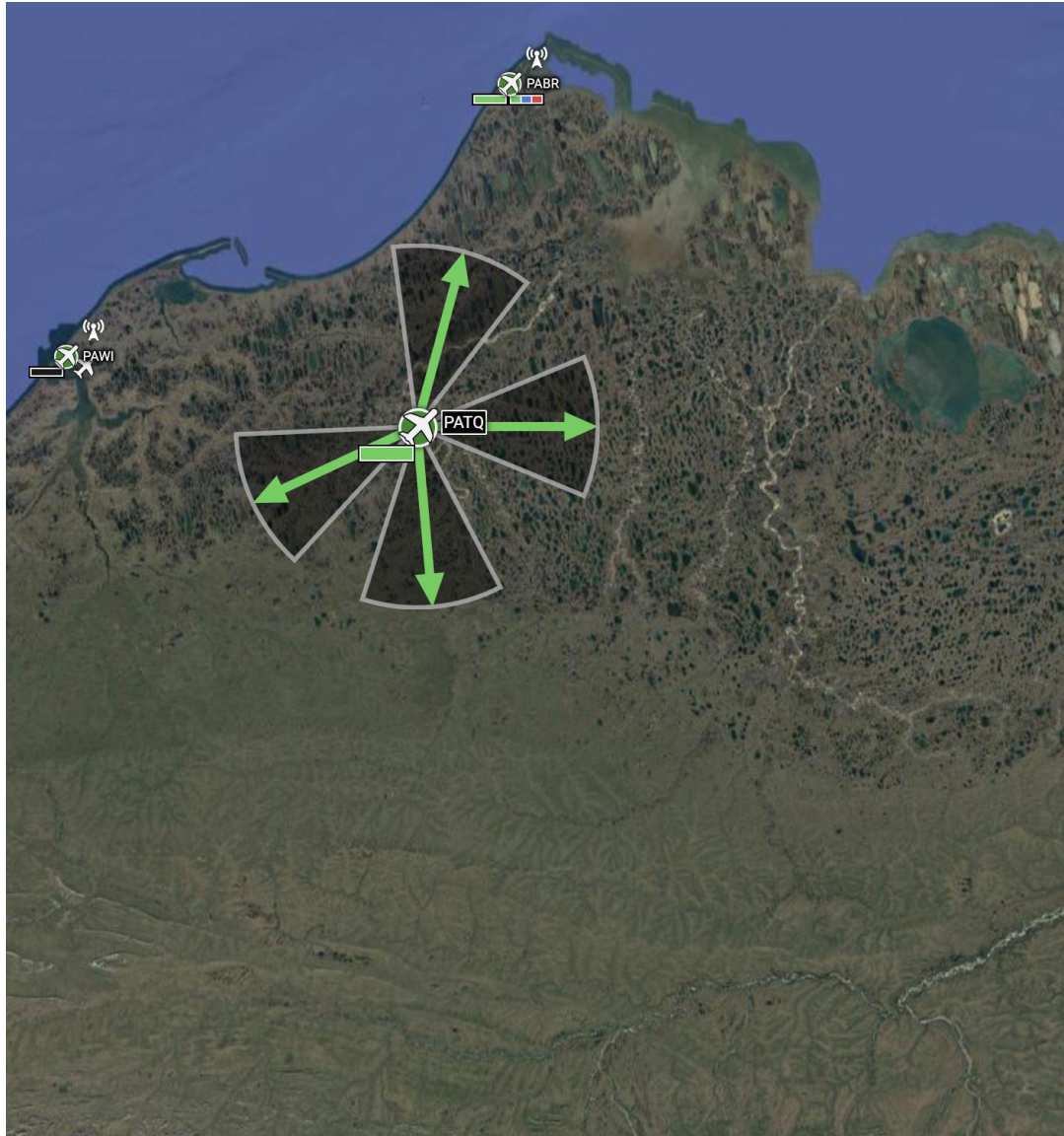
Show Camera Loop

East (70°)	SouthEast (115°)	South (185°)	SouthWest (230°)

Weather Data	Weather Trends	PIREPs	RCO	Airport Info	NOTAMs (PilotWeb)
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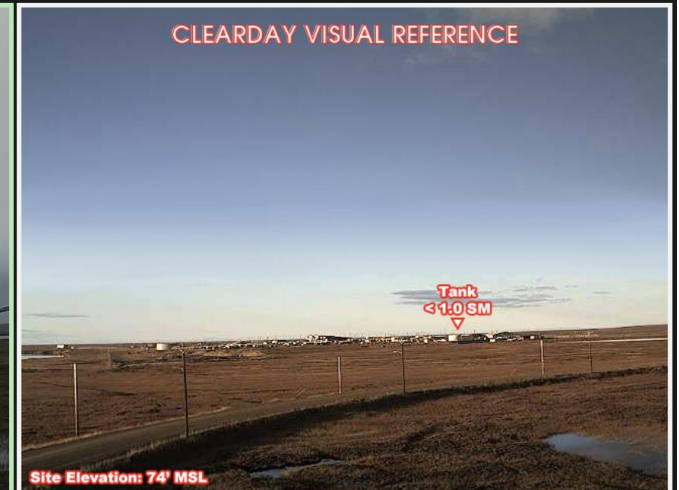


21 August 2024/DOY 234 North Slope

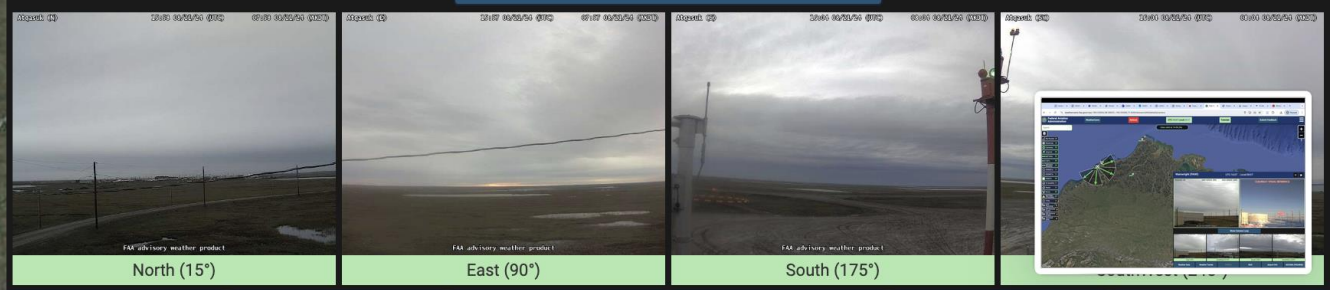


Atqasuk Burnell Meml (PATQ) UTC:16:07 Local:08:07

METAR PATQ 211556Z AUTO 14011KT 10SM -RA BKN055 OVC070 06/04 A2963 RMK AO2 RAB19 SLP037 P0000 T00610044 TSNO



Show Camera Loop



- Weather Data
- Weather Trends
- PIREPs
- RCO
- Airport Info
- NOTAMs (PilotWeb)



21 August 2024/DOY 234 North Slope



Wiley Post-Will Rogers Meml (PABR) UTC:16:07 Local:08:07

METAR PABR 211553Z 14009KT 10SM FEW120 06/04 A2964

Barrow (Utqiagvik) (NE) 16:04 08/21/24 (UTC) 08:04 08/21/24 (AKDT)

CLEARDAY VISUAL REFERENCE

Tank Less than 1.0 SM
Lagoon far shore Less than 1.0 SM

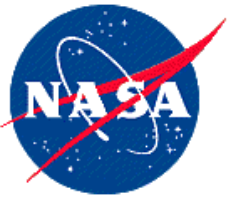
Site Elevation: 12' MSL

FAA advisory weather product

Show Camera Loop

NorthEast (36°) East (108°) South (185°)

Weather Data Weather Trends PIREPs RCO Airport Info NOTAMs (PilotWeb)



21 August 2024/DOY 234 North Slope



Nuiqsut (PAQT) UTC:16:07 Local:08:07

METAR PAQT 211553Z AUTO 12005KT 10SM CLR 07/04 A2977 RMK A02 SLP081 T00670039 TSNO \$

16:04 08/21/24 (UTC) 08:04 08/21/24 (AKDT)

CLEARDAY VISUAL REFERENCE

End of Runway <0.5 SM

Site Elevation: 61' MSL

FAA advisory weather product

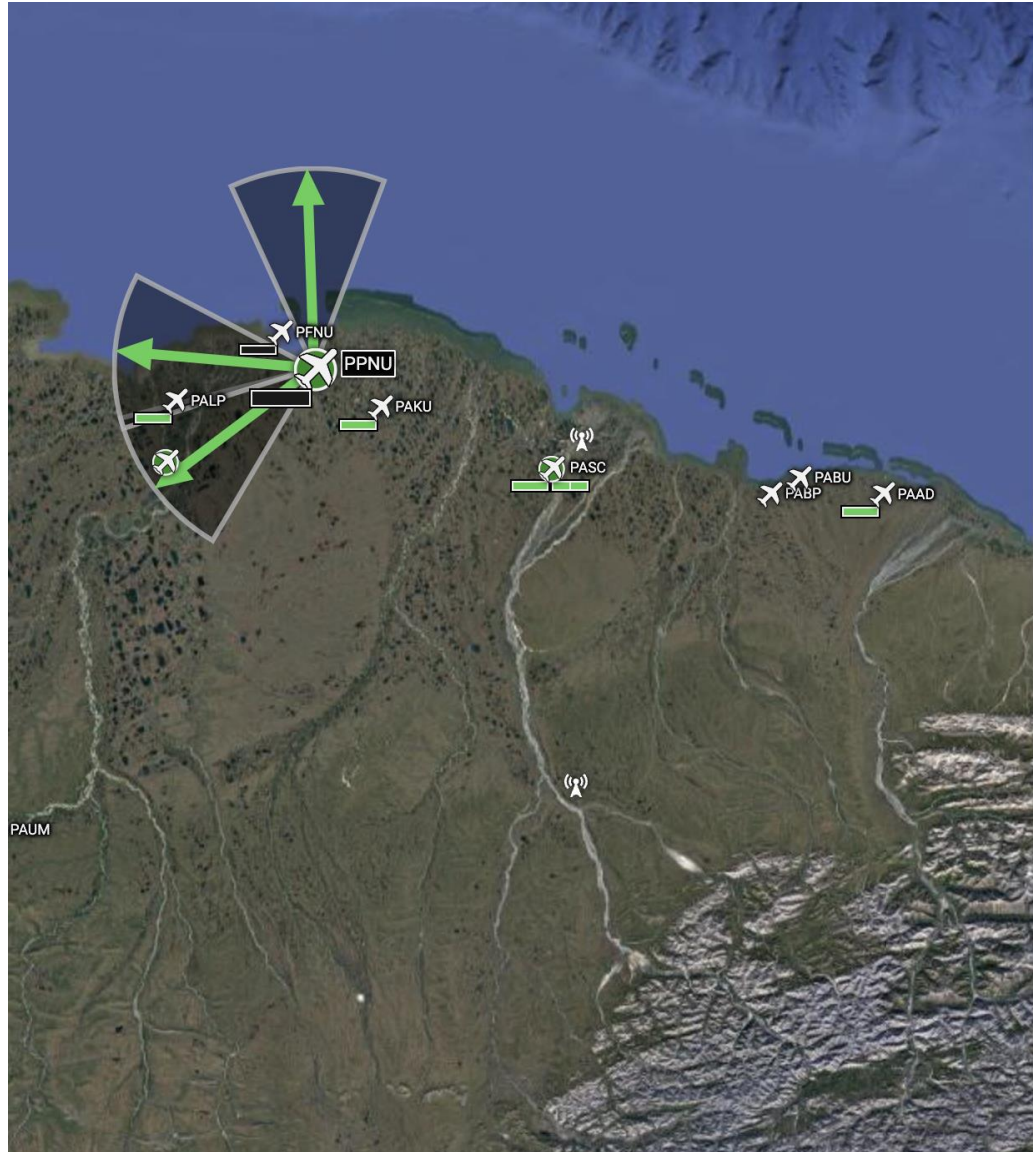
Show Camera Loop

East (100°)	South (165°)	SouthWest (230°)	NorthWest (305°)

Weather Data | Weather Trends | PIREPs | RCO | Airport Info | NOTAMs (PilotWeb)



21 August 2024/DOY 234 North Slope



Otp (PPNU) UTC:16:07 Local:08:07

North Slope (N) 16:04 08/21/24 (UTC) 08:04 08/21/24 (AKDT)

CLEARDAY VISUAL REFERENCE

Site Elevation: 40' MSL. No annotatable features

FAA advisory weather product

Show Camera Loop

North Slope (N) 16:04 08/21/24 (UTC) 08:04 08/21/24 (AKDT)

North Slope (SW) 16:07 08/21/24 (UTC) 08:07 08/21/24 (AKDT)

North Slope (N) 16:04 08/21/24 (UTC) 08:04 08/21/24 (AKDT)

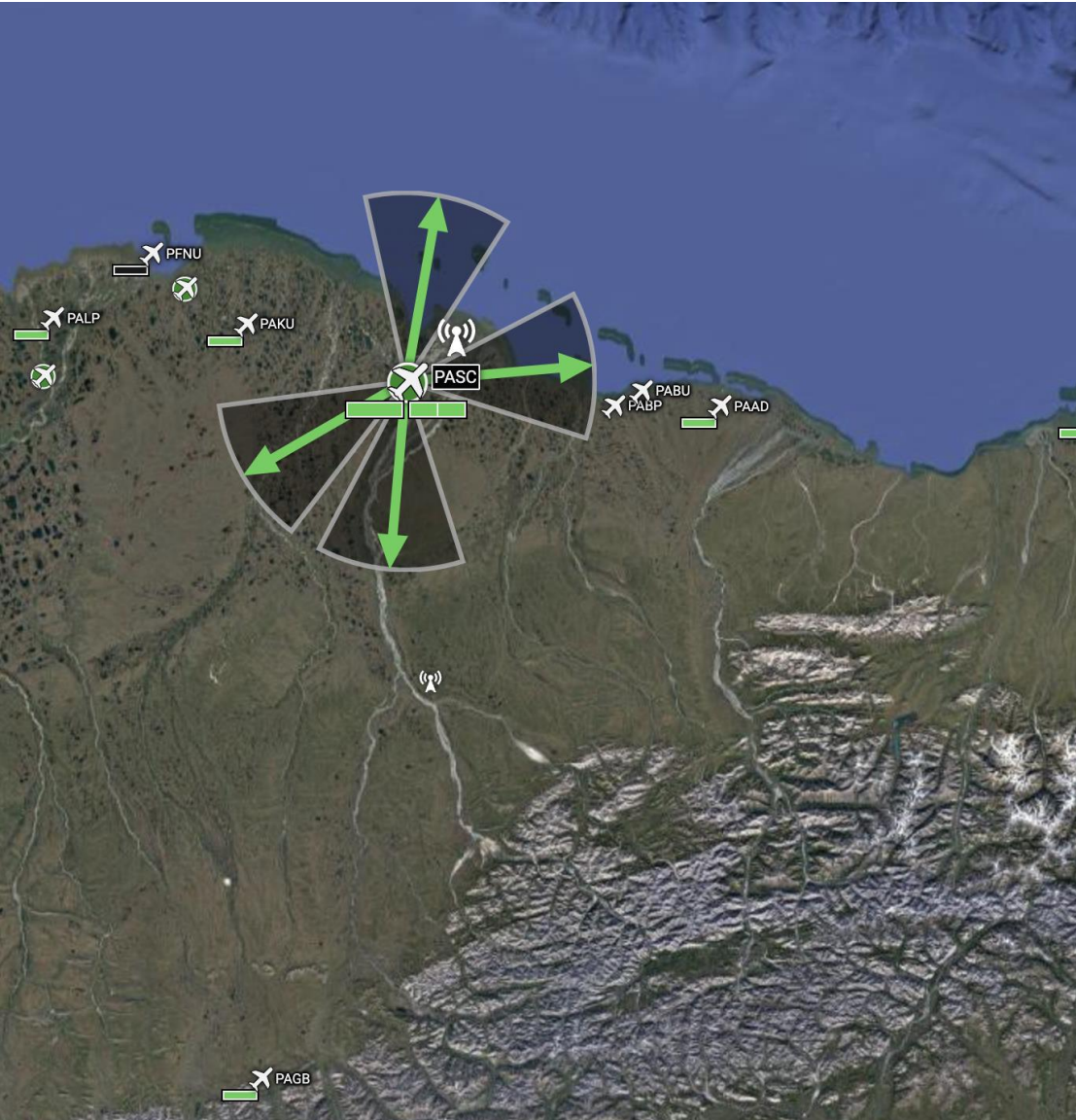
North (358°)

SouthWest (233°)

Weather Data Weather Trends PIREPs RCO Airport Info NOTAMs (PilotWeb)



21 August 2024/DOY 234 North Slope



Deadhorse (PASC) UTC:16:07 Local:08:07

METAR PASC 211553Z 13004KT 10SM CLR 04/02 A2978 RMK AO2 SLP086 T00440022 PNO

Deadhorse (N) 16:05 08/21/24 (UTC) 08:05 08/21/24 (AKDT)

CLEARDAY VISUAL REFERENCE

Across Lake 1.5 SM

Site Elevation: 53' MSL

FAA advisory weather product

Show Camera Loop

North (10°)	East (85°)	South (185°)	

Weather Data | Weather Trends | PIREPs | RCO | Airport Info | NOTAMs (PilotWeb)



21 August 2024/DOY 234 North Slope



Anaktuvuk Pass (PAKP) UTC:16:07 Local:08:07

METAR PAKP 211556Z AUTO 21012KT 10SM BKN060 OVC080 05/01 RMK AO2 RAB01E35 SLPNO P0000 T00500011 \$

Anaktuvuk Pass (NE) 16:04 08/21/24 (UTC) 08:04 08/21/24 (AKDT)

FAA advisory weather product

CLEARDAY VISUAL REFERENCE

5000' MSL
5.5 SM

4300' MSL
11.5 SM

Site Elevation: 2171' MSL

Show Camera Loop

NorthEast (35°)	SouthEast (150°)	South (195°)	SouthWest (240°)

Weather Data	Weather Trends	PIREPs	RCO	Airport Info	NOTAMs (PilotWeb)
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21 August 2024/DOY 234 North Slope



Coldfoot (PACX) UTC:16:07 Local:08:07

METAR PACX 211556Z AUTO 0000KT 10SM FEW044 OVC095 03/02 A2990 RMK AO2 SLP753 T00330022

ColdFoot (M) 16:04 08/21/24 (UTC) 08:04 08/21/24 (AKDT)

FAA advisory weather product

CLEARDAY VISUAL REFERENCE

4800' MSL 10.0 SM
4600' MSL 6.5 SM

Site Elevation: 1013' MSL

Show Camera Loop

North (18°) SouthWest (223°) West (270°)

Weather Data Weather Trends PIREPs RCO Airport Info NOTAMs (PilotWeb)