

Snow Albedo Evolution Campaign (SALVO): Chasing Watts & Water on the Arctic Tundra & Sea Ice

Pt. Barrow (Utqiagvik, AK): April – June 2022



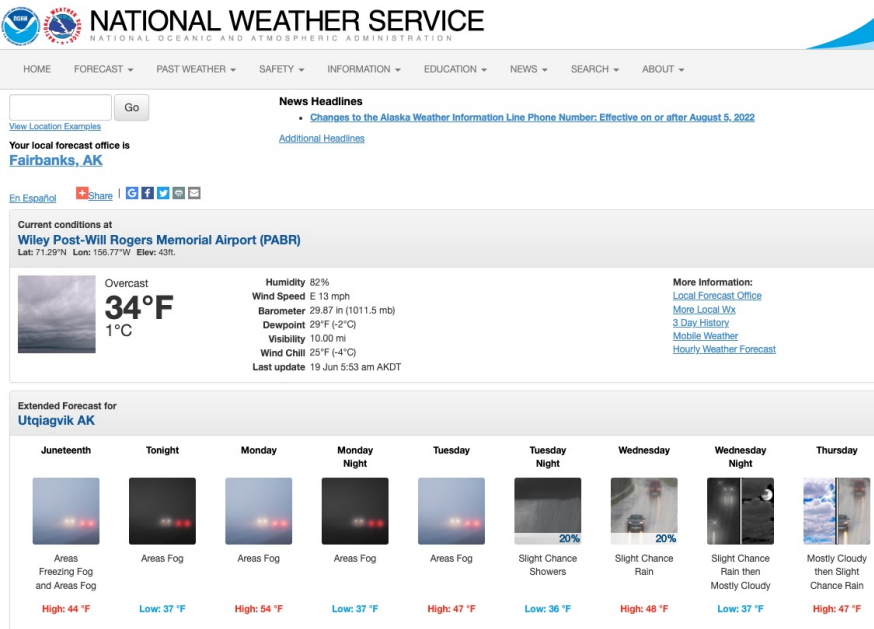


POLAR BEAR TRACKS

ASD FOR SPECTRAL ALBEDO



Snow Albedo Evolution Campaign (SALVO) – How to Navigate the Sea Ice



NATIONAL WEATHER SERVICE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

HOME FORECAST PAST WEATHER SAFETY INFORMATION EDUCATION NEWS SEARCH ABOUT

Go

News Headlines

- Changes to the Alaska Weather Information Line Phone Number, Effective on or after August 5, 2022

[Additional Headlines](#)

Your local forecast office is **Fairbanks, AK**

En Español Share |

Current conditions at **Wiley Post-Will Rogers Memorial Airport (PABR)**
Lat: 71.29°N Lon: 156.77°W Elev: 43ft.

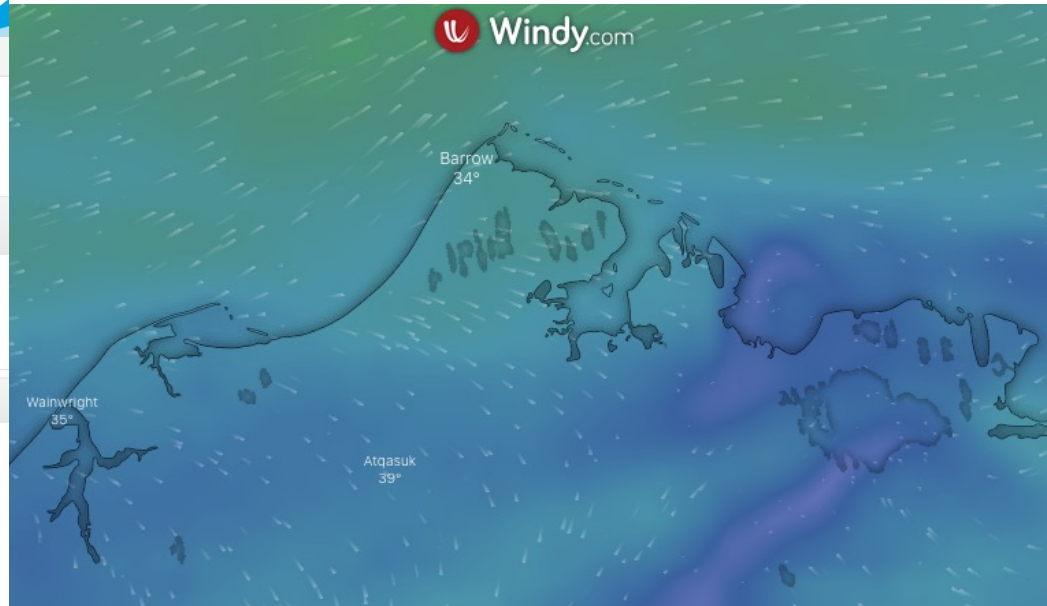
Overcast
34°F
1°C

Humidity 82%
Wind Speed E 13 mph
Barometer 29.87 in (1011.5 mb)
Dewpoint 29°F (-2°C)
Visibility 10.00 mi
Wind Chill 25°F (-4°C)
Last update 19 Jun 5:53 am AKDT

More Information:
[Local Forecast Office](#)
[More Local WX](#)
[3 Day History](#)
[Mobile Weather](#)
[Hourly Weather Forecast](#)

Extended Forecast for **Utqiagvik AK**

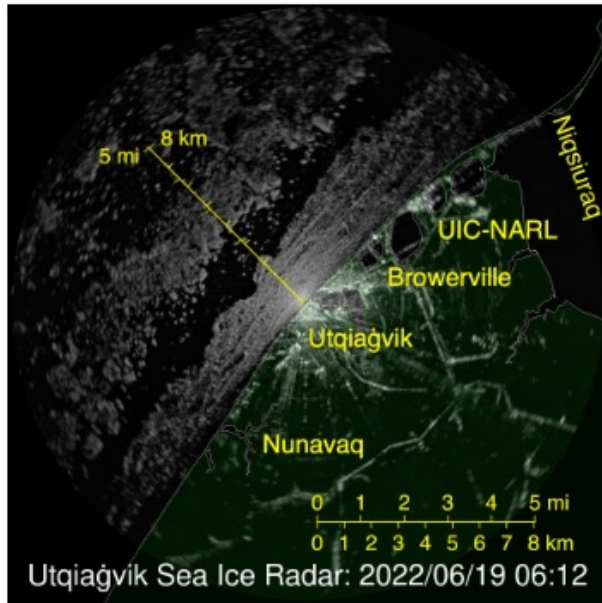
June 19th	Tonight	Monday	Monday Night	Tuesday	Tuesday Night	Wednesday	Wednesday Night	Thursday
High: 44 °F	Low: 37 °F	High: 54 °F	Low: 37 °F	High: 47 °F	Low: 36 °F	High: 48 °F	Low: 37 °F	High: 47 °F



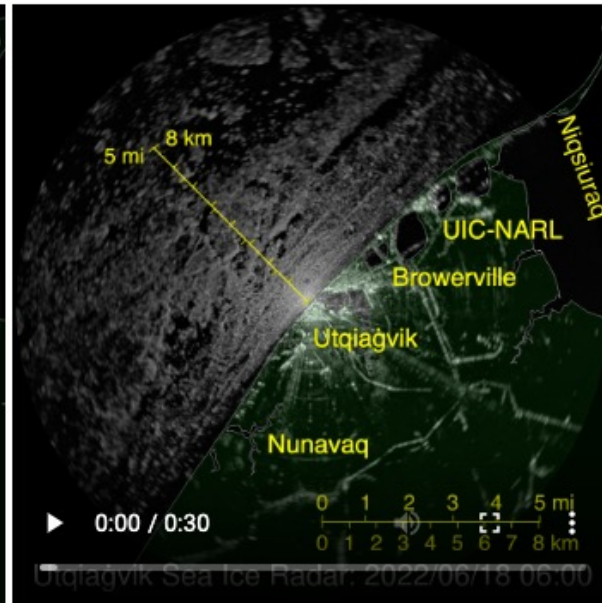
Snow Albedo Evolution Campaign (SALVO) – How to Navigate the Sea Ice

https://seaice.alaska.edu/gi/observatories/barrow_radar/

Current Radar Image



Radar animation for the last 24 hours



LEO Near Real-Time Imagery

<http://hippy.gina.alaska.edu/distro/nrt/>

← → ⚠ Not Secure | hippy.gina.alaska.edu/distro/nrt/

🏠 ☆ 📄 🗂

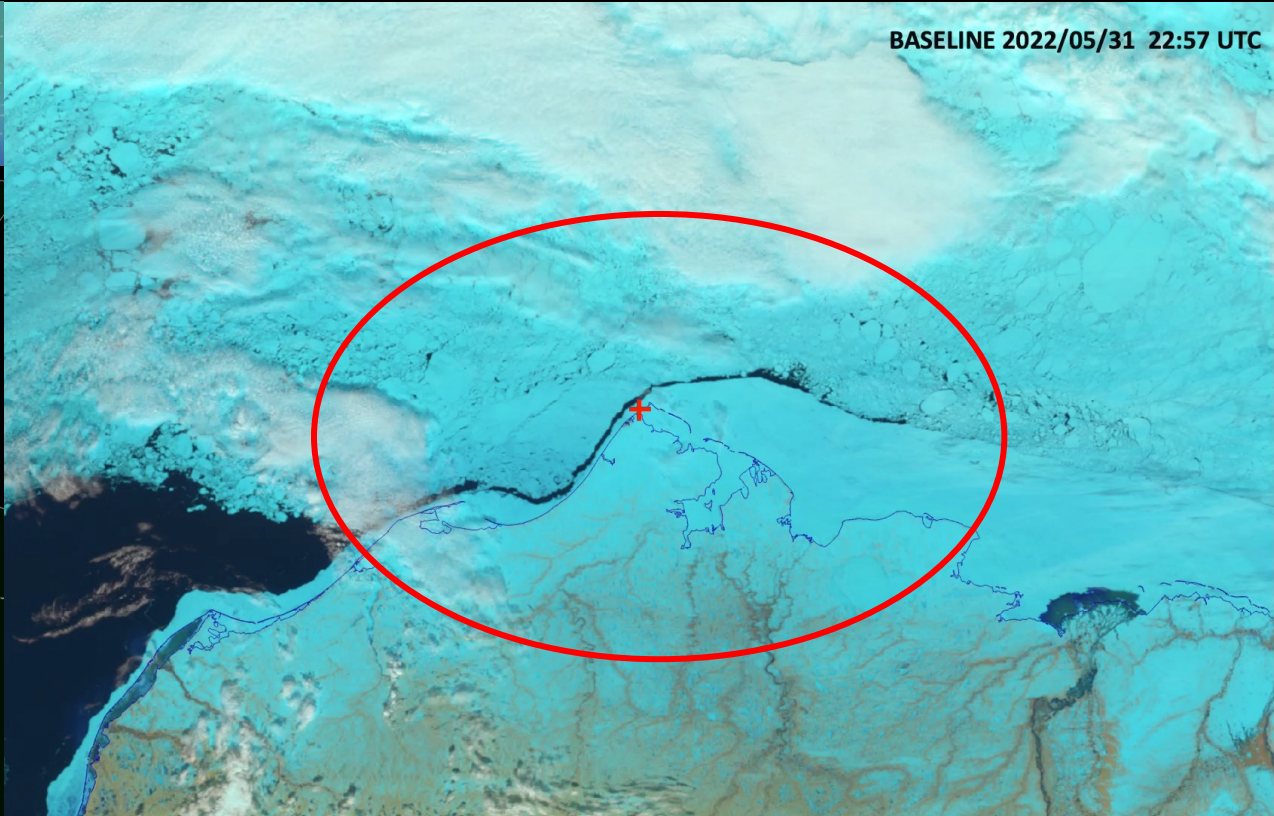
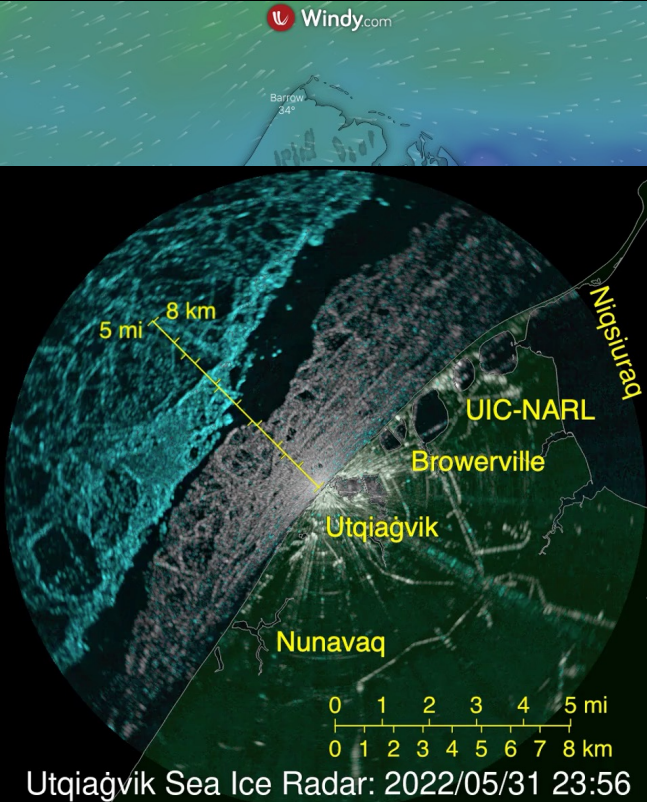


Recent NRT Scenes..

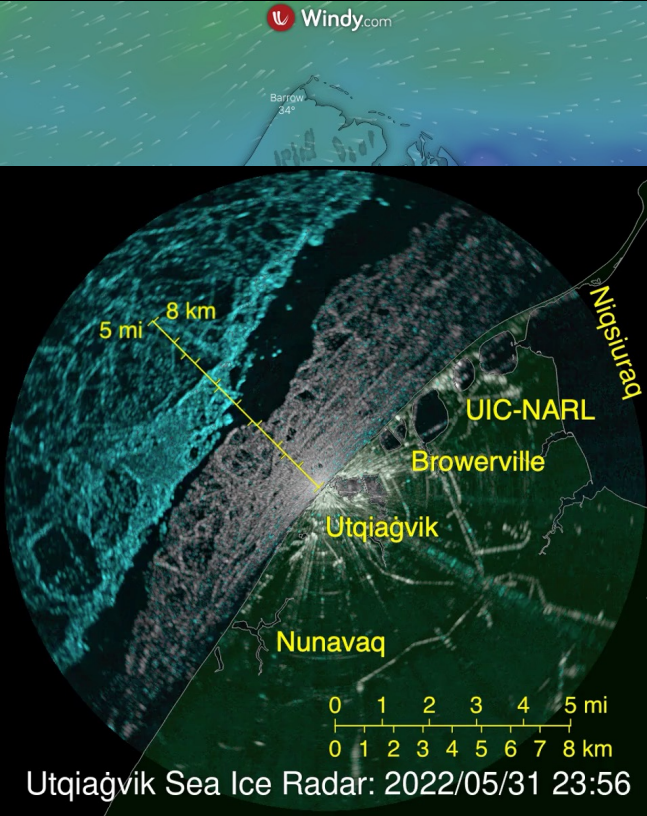
Generated at 2022/06/19 06:25 AKDT

<p>noaa20.20220619.1337</p> <p>Captured At: 2022/06/19 05:37 AKDT 2022/06/19 13:37 GMT</p> <p>Age: 48 minutes</p>						
<p>True Color Received at: UAF/GINA GeoTiff</p>	<p>Daynight band Received at: UAF/GINA GeoTiff</p>	<p>_DNB_adaptive Received at: UAF/GINA GeoTiff</p>	<p>VIIRS I05 Received at: UAF/GINA GeoTiff</p>	<p>DayLandCloud Received at: UAF/GINA GeoTiff</p>	<p>VIIRS Fire Temperature Received at: UAF/GINA GeoTiff</p>	
<p>noaa20.20220619.1335</p> <p>Captured At: 2022/06/19 05:35 AKDT 2022/06/19 13:35 GMT</p> <p>Age: 50 minutes</p>						
<p>True Color Received at: Gilmore GeoTiff</p>	<p>Daynight band Received at: Gilmore GeoTiff</p>	<p>_DNB_adaptive Received at: Gilmore GeoTiff</p>	<p>VIIRS I05 Received at: Gilmore GeoTiff</p>	<p>DayLandCloud Received at: Gilmore GeoTiff</p>	<p>VIIRS Fire Temperature Received at: Gilmore GeoTiff</p>	

Snow Albedo Evolution Campaign (SALVO) – How to Navigate the Sea Ice



Snow Albedo Evolution Campaign (SALVO) – How to Navigate the Sea Ice

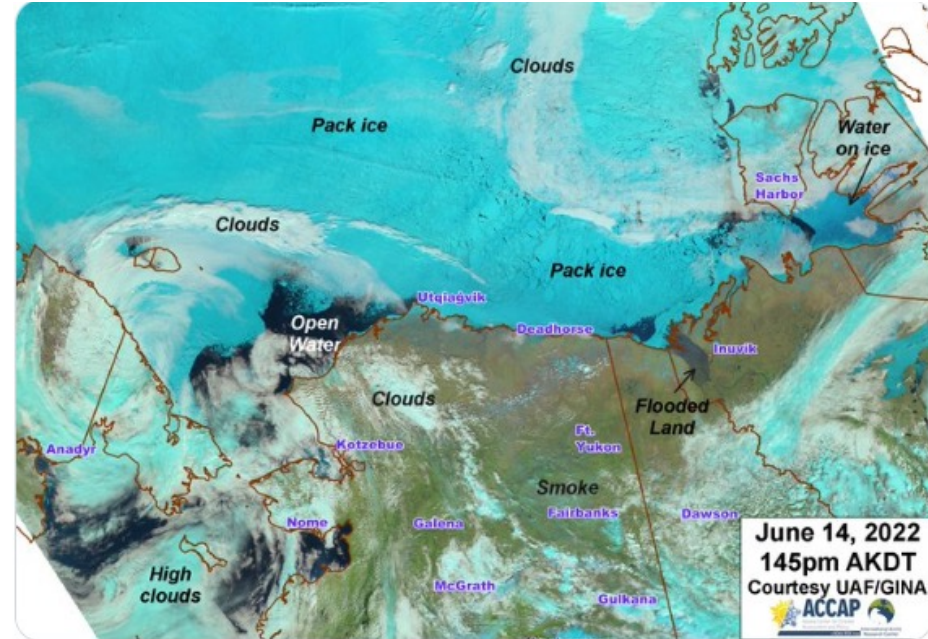


Snow Albedo Evolution Campaign (SALVO) – How to Plan Your Last Evening on the Ice



Rick Thoman
@AlaskaWx

False color satellite image eye candy from Tuesday afternoon. Lots of clear skies views of #seaice and developing open water in the Chukchi and Beaufort Seas. NOAA-20 VIIRS image courtesy @uafgina. #akwx #ntwx @Climatologist49



3:42 PM · Jun 14, 2022 · Twitter Web App



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June 14,
2022





A High-Latitude Proving Ground for CSPP LEO Software



Jen
Delamere

Jay
Cable

Carl
Dierking

Owen
Larson



Martin
Stuefer

Greg
Wirth

Hunter
Barndt

Grace
Veenstra

What is a NOAA/NESDIS Proving Ground?



What is a Proving Ground?

An effort to improve NOAA services through optimizing the use of satellite data along with other sources of data and information. The initiatives comprise a team of developers and users working together to improve an application in a testbed environment, providing assessments of utility from the users and feedback to the developers.

Why Have a Proving Ground in Alaska?

What don't we have for weather and geography?



Sea Ice



Avalanches



Volcanic Ash



River Ice & Floods



Forest Fires



Coastal Storms



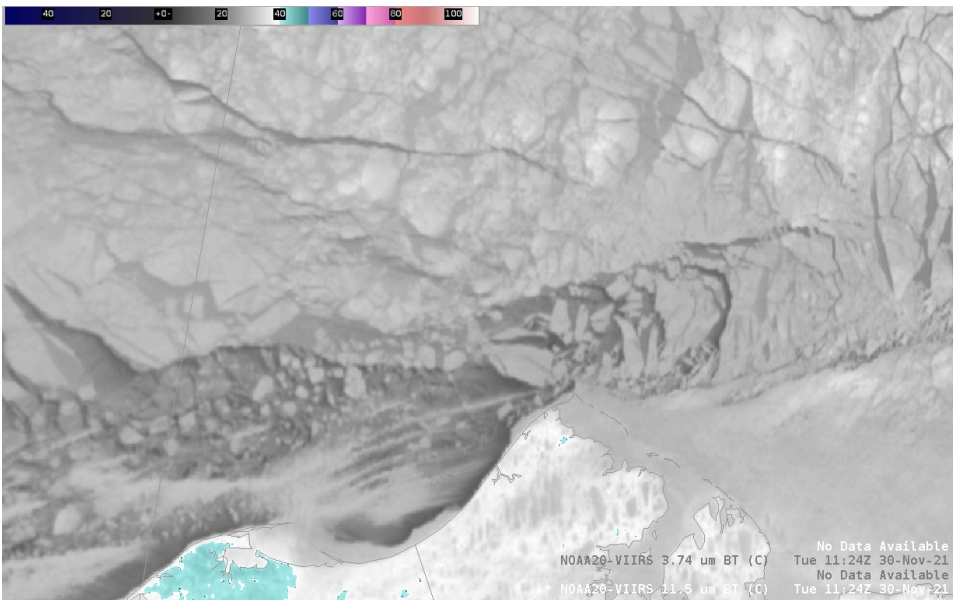
Smoke & Air Quality



Heavy Precip

Why Have a Proving Ground in Alaska? Lots of Agency Interest

VIIRS: Northern AK Sea Ice, 11/30/21



Federal Partners



[National Park Service](#)



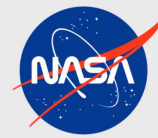
[Bureau of Land Management
Alaska Fire Service](#)



[NOAA - National Weather Service](#)



[NOAA - Joint Polar Satellite System](#)



[NASA](#)



[NASA - Short-term Prediction Research and Transition Center \(SPoRT\)](#)



[United States Geological Survey](#)



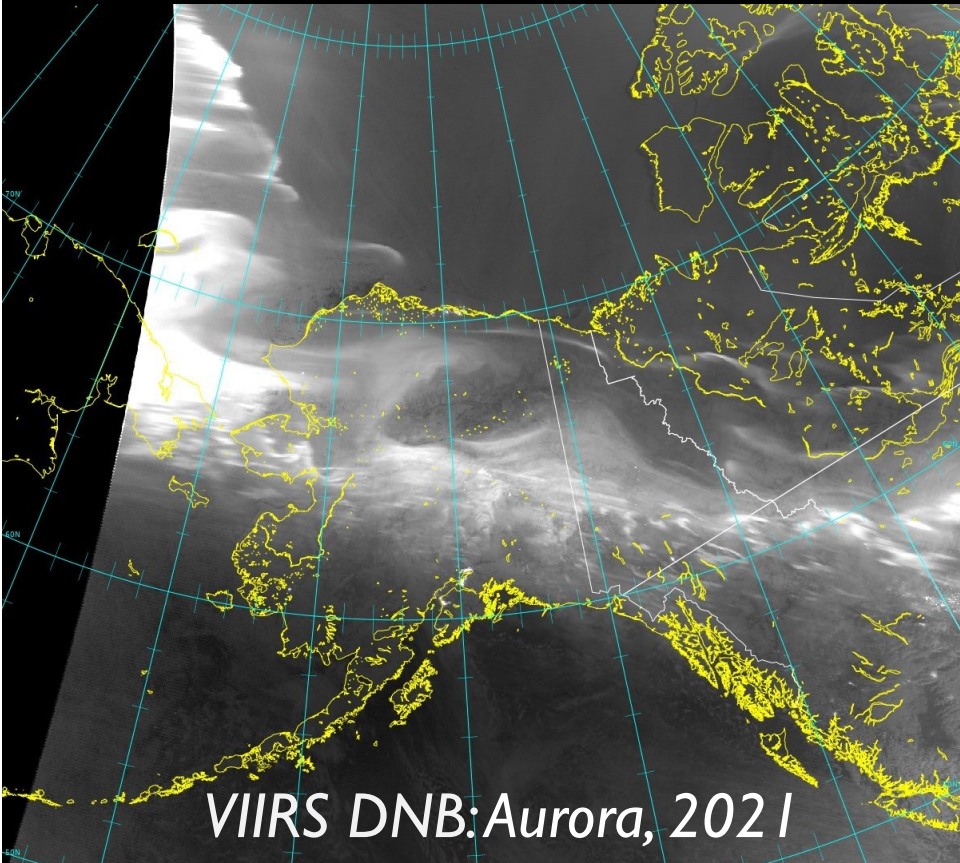
[United States Fish & Wildlife Service](#)



[Alaska EPSCoR](#)



Why Have a Proving Ground in Alaska? Lots of Academic Interest



Academic Partners



[Alaska Satellite Facility](#)



<https://www.gi.alaska.edu/>



[International Arctic Research Center](#)



[Scenarios Planning for Alaska + Arctic Planning](#)



[Alaska Center for UAS Integration](#)



[University of Alaska Anchorage](#)



[University of Alaska Fairbanks](#)



[Alaska Volcano Observatory](#)



[Alaska Fire Science Consortium](#)



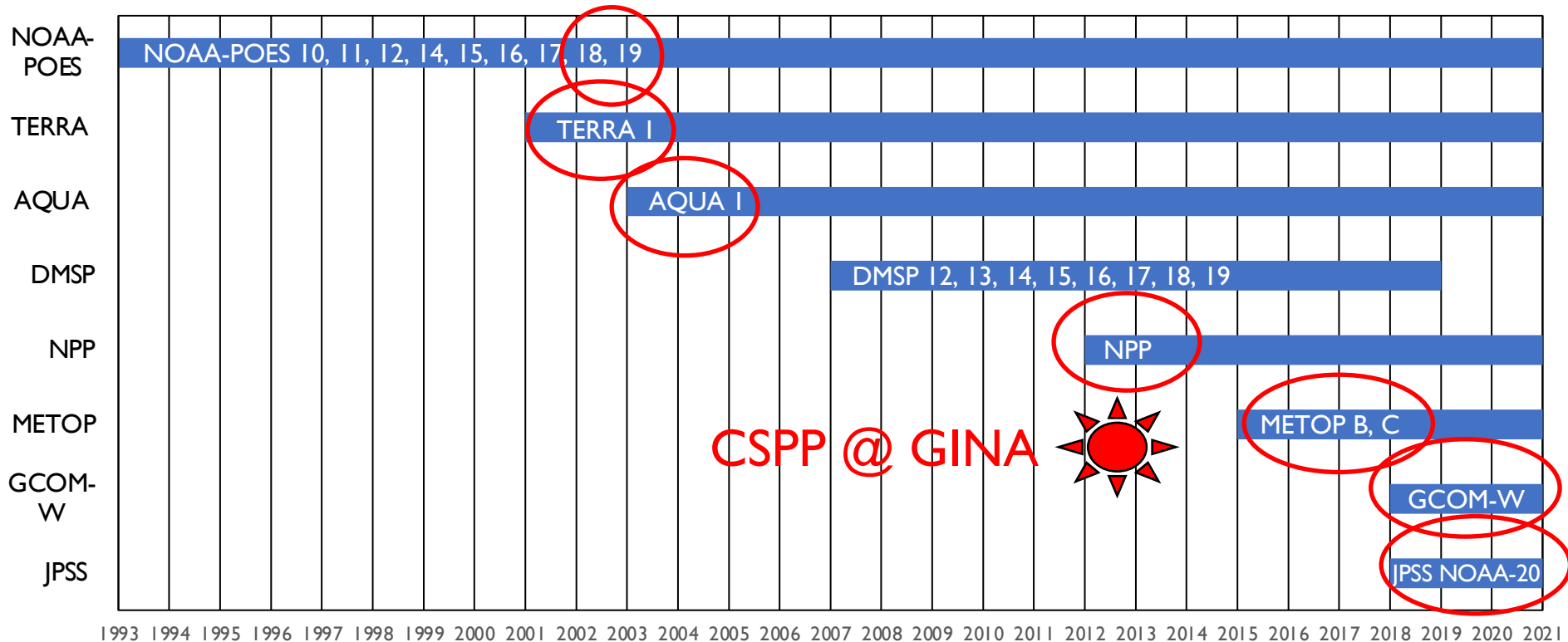
[Colorado State University - Cooperative Institute for Research in the Atmosphere](#)



[University of Wisconsin - Cooperative Institute for Meteorological Satellite Studies](#)

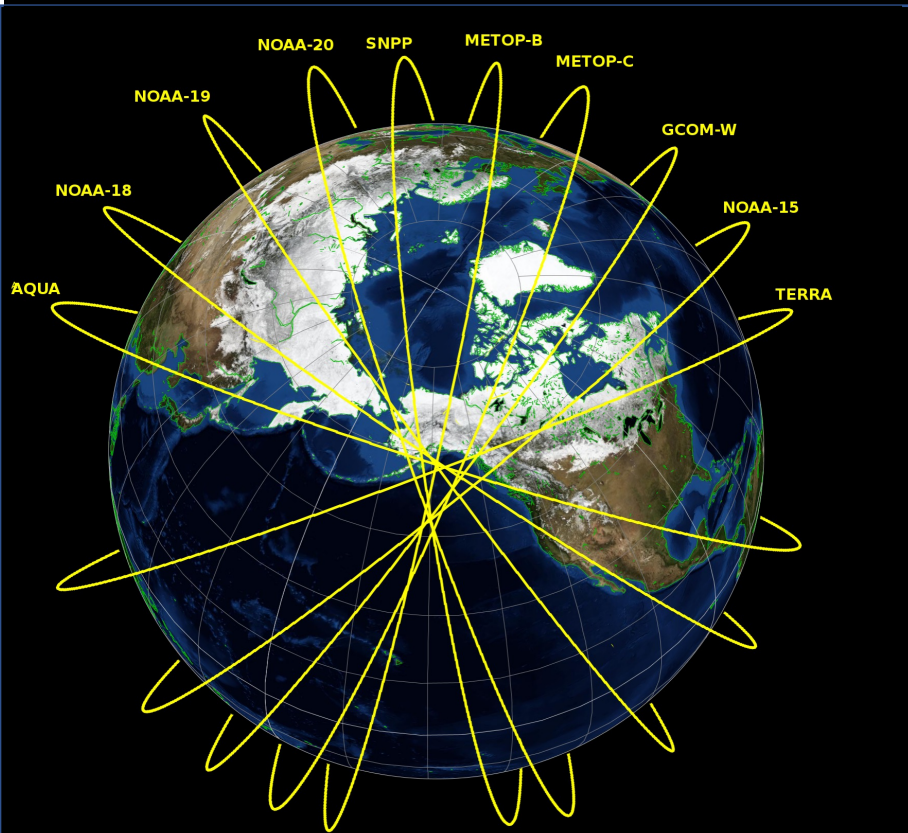
Why Have a Proving Ground in Alaska?

GINA DB Reception Over the Years



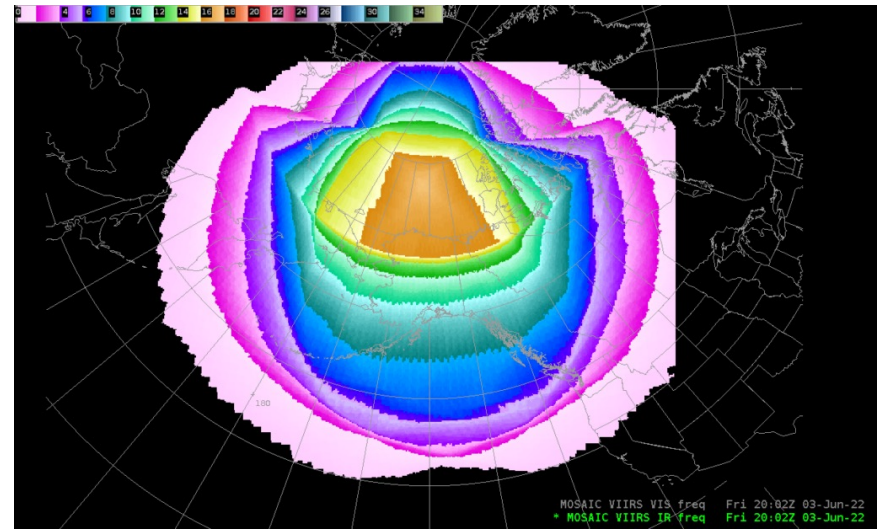
Why Have a Proving Ground in Alaska?

Lots of Pass Coverage with DB Antennas



VIIRS: Two satellite combination doubles coverage

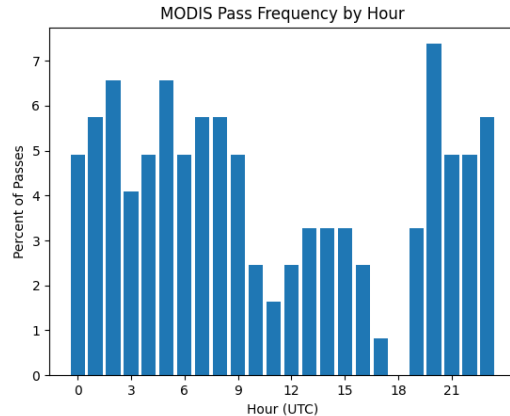
- Northern AK: ~18 passes/day
- Southern AK: 6-8 passes/day



Why Have a Proving Ground in Alaska?

Lots of Pass Coverage with LEO DB Antennas

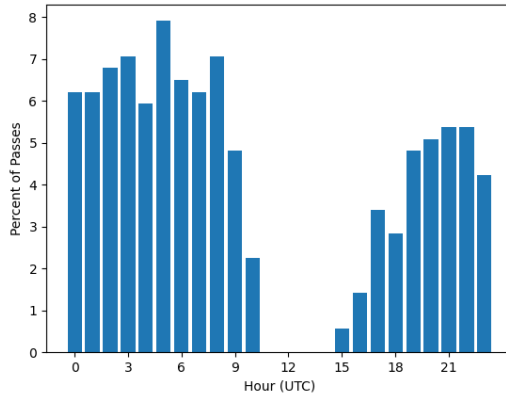
MODIS



VIIRS: Two satellite combination doubles coverage

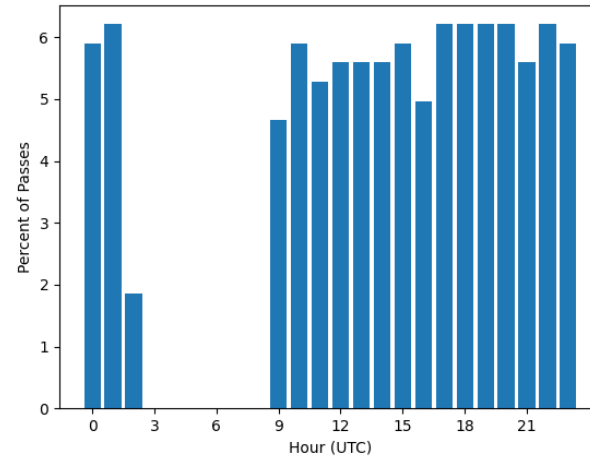
- Northern AK: ~18 passes/day
- Southern AK: 6-8 passes/day

AVHRR Pass Frequency by Hour



AVHRR

VIIRS Pass Frequency by Hour

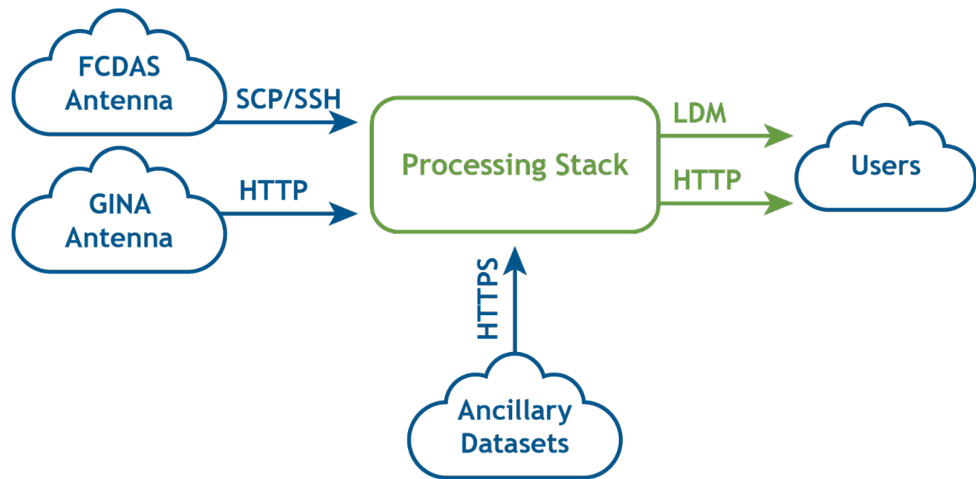


Why Have a Proving Ground in Alaska?

Keep customers close to the data...low latency



GINA's Near Real-Time Processing on
UAF campus:
A Dev System &
Production System Featuring CSPP





GINA: Suite of CSPP LEO Products



Products	SNPP NOAA-20	NOAA-18 NOAA-19	Metop-B Metop-C	Terra Aqua	GCOM- W	CSPP-LEO (DATE)
Calib & GeoLocation	VIIRS, CrIS, ATMS					SDR (2012)
Single-Channel Imagery & RGBs	VIIRS	AVHRR	AVHRR	MODIS		POLAR2GRID (2015)
Aerosol OD, Volcanic Ash	VIIRS					EDR (2012)
Soundings	CrIS, ATMS		IASI, AMSU/MHS			HEAP (2020) (NUCAPS - 2015)
Clouds	VIIRS	AVHRR	AVHRR	MODIS		CLAVR-x (2014)
Precipitation	ATMS	AMSU/MHS	AMSU/MHS		AMSR2	MiRS (2014) GAASP (2020)

<https://cimss.ssec.wisc.edu/cspp/>



GINA: Suite of CSPP LEO Products



Products	SNPP NOAA-20	NOAA-18 NOAA-19	Metop-B Metop-C	Terra Aqua	GCOM- W	CSPP-LEO
Ocean Winds					AMSR2	GAASP (2020)
Ocean SST	VIIRS			MODIS	AMSR2	ACSPO (2015)
Fire Detection	VIIRS					Active Fire (2013)
Flood Detection	VIIRS					George-Mason *

<https://cimss.ssec.wisc.edu/cspp/>

GINA NRT Dashboard

nrt-ops.gina.alaska.edu

Satellites

Times are approximate, not all passes will be captured

AQUA

Last pass [about 4 hours ago](#)

GCOM-W

Last pass [about 2 hours ago](#)

METOP-B

Last pass [about 1 hour ago](#)

METOP-C

Last pass [14 minutes ago](#)

NOAA15

NOAA18

Last pass [about 16 hours ago](#)

NOAA19

Last pass [32 minutes ago](#)

NOAA20

Last pass [21 minutes ago](#)

SNPP

Last pass [about 1 hour ago](#)

Recent Passes

Filter: **All** Important


tp2022170014527.METOP-C.dat.gz	14 minutes ago	Gilmore
<div><div style="width: 10%;">10%</div><div>Processing</div></div>		
▲ JPSS1.20220619.013807.dat.gz	21 minutes ago	Gilmore
<div><div style="width: 60%;">60% Finished</div><div>Processing</div></div>		
NOAA19.20220619.012724.hrpt.gz	32 minutes ago	Gilmore
<div><div style="width: 100%;">100% Finished</div></div>		
t1.22170.0125	34 minutes ago	Uafgina
<div><div style="width: 95%;">95% Finished</div><div>Canc</div></div>		
TERRA.20220619.012306.dat.gz	36 minutes ago	Gilmore
<div><div style="width: 95%;">95% Finished</div><div>Canc</div></div>		
tp2022170005328.METOP-B.dat.gz	about 1 hour ago	Gilmore
<div><div style="width: 95%;">95% Finished</div><div>Canc</div></div>		
npp.22170.0045	about 1 hour ago	Uafgina
<div><div style="width: 100%;">100% Finished</div></div>		
NPP.20220619.004316.dat.gz	about 1 hour ago	Gilmore
<div><div style="width: 100%;">100% Finished</div></div>		
GCOM-W1.20220619.001650.dat.gz	about 2 hours ago	Gilmore
<div><div style="width: 100%;">100% Finished</div></div>		
tp2022170001153.METOP-C.dat.gz	about 2 hours ago	Gilmore
<div><div style="width: 100%;">100% Finished</div></div>		
j1.22169.2352	about 2 hours ago	Uafgina
<div><div style="width: 100%;">100% Finished</div></div>		
▲ JPSS1.20220618.235146.dat.gz	about 2 hours ago	Gilmore
<div><div style="width: 97%;">97% Finished</div><div>Un</div></div>		

Activity Logs


Filter: **All** Important

▲ noaa20 - JPSS1.20220619.013807.dat.gz	9 minutes ago
Error processing > NOAA20NucapsSdrJob	
▲ noaa20 - JPSS1.20220618.235146.dat.gz	about 2 hours ago
Error processing > Noaa20NucapsLdmlnject	
▲ noaa20 - JPSS1.20220618.220947.dat.gz	about 3 hours ago
Error processing > Noaa20NucapsLdmlnject	
▲ terra - TERRA.20220618.220758.dat.gz	about 4 hours ago
Error processing > TerraSeadas	
▲ noaa20 - JPSS1.20220618.203008.dat.gz	about 5 hours ago
Error processing > NOAA20NucapsLdmlnject	
▲ noaa20 - JPSS1.20220618.185156.dat.gz	about 7 hours ago
Error processing > NOAA20NucapsLdmlnject	
▲ noaa20 - JPSS1.20220618.171355.dat.gz	about 8 hours ago
Error processing > NOAA20NucapsLdmlnject	
▲ snpp - NPP.20220618.162346.dat.gz	about 9 hours ago
Error processing > AtmsMirsJob	
▲ noaa20 - JPSS1.20220618.153439.dat.gz	about 10 hours ago
Error processing > NOAA20NucapsLdmlnject	
▲ noaa19 - NOAA19.20220618.152921.hrpt.gz	about 10 hours ago
Error processing > Noaa19MirsL2	
▲ gcom-w - GCOM-W1.20220618.143032.dat.gz	about 11 hours ago
Error processing > Amsr2Level2	
▲ noaa20 - JPSS1.20220618.135437.dat.gz	about 11 hours ago
Error processing > NOAA20NucapsLdmlnject	
▲ snpp - npp.22169.1305	about 12 hours ago
Error processing > SNPPVirnsFireJobToDrive	
▲ noaa20 - JPSS1.20220618.121413.dat.gz	about 13 hours ago

Incoming Pass on Sandy Dog (Orbital Antenna)



CPI
Communications
& Power Industries



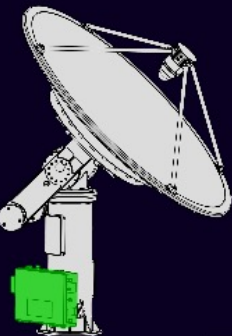
Orbital Systems

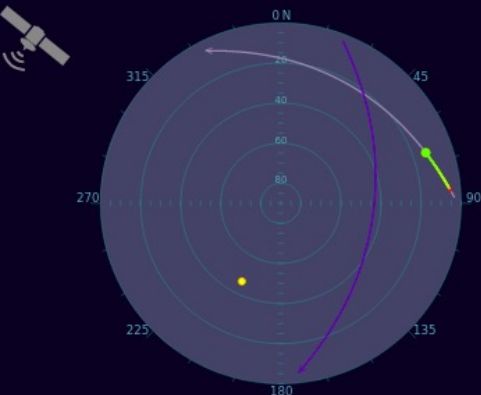
Site: UAF-Fairbanks
User:
UTC: 17 Jun 2022 19:12:31
Now: JPSS1 08:30
Next: METOP-C 14:11

Ground Station Controller


NOC
Processing
Scheduling
Image Data
Logs
Configure
Links
Logout

Azimuth: 070.76
Elevation: 13.41





Satellite	Start	End	MaxEJ	Setup	Tracking	Processing	Delivery
AQUA	06/17 18:30:37	18:34:11	13	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
METOP-B	06/17 18:34:11	18:45:56	24	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
NOAA 19	06/17 18:59:38	19:09:50	83	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
JPSS1	06/17 19:09:50	19:21:02	22	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
METOP-C	06/17 19:26:43	19:39:43	44	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TERRA	06/17 19:47:03	19:58:13	29	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NPP	06/17 19:58:18	20:10:29	30	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



JPSS1
Pedestal_1

EOS FES

Demods	Ingestors	RT-Processors	Processing	Delivery
LR Demod	LR Ingest	RT-Framer	is quicklook	FTP Push
HR Demod	HR Ingest	RTSTPS	meton 10	HTTPS Server
		Simulcast	check files	FTP Server
			check pass	

EOS FES also includes: TLEs, Software Daemons, Hardware

Storage: Raw, CCSDS, Level 0, PNG, Level 1

GINA NRT Pass on Dashboard

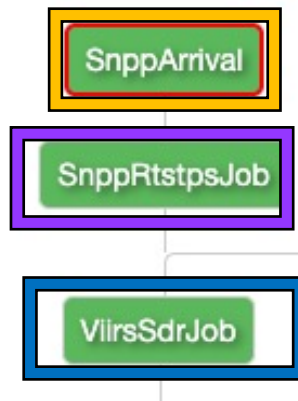
nrt-ops.gina.alaska.edu

Visible - easy to access, centralized monitoring of job status and statistics

Available - redundancy, failover and apply updates with minimal downtime

Scalable - ability to scale up and down processing and storage resource as needed

Tooling - needs to be able to run a wide variety of processing tools from different groups/vendors



~2014 LEO AWIPS Menu @ GINA & NWS

A screenshot of a software menu titled "Old-GINA-VIIRS". The menu is displayed in a light gray box with a dark border. It contains a list of options, each followed by a right-aligned separator consisting of two dashes and four dashes. The options are: "Day Night Band", "Fog 11um - 3.7um", "0.64um", "0.86um", "1.61um", "3.74um", "11.45um", "VIIRS APRFC River Flood Areal Extent", and "VIIRS APRFC River Ice Areal Extent".

Option	Separator
Day Night Band	--,----
Fog 11um - 3.7um	--,----
0.64um	--,----
0.86um	--,----
1.61um	--,----
3.74um	--,----
11.45um	--,----
VIIRS APRFC River Flood Areal Extent	--,----
VIIRS APRFC River Ice Areal Extent	--,----

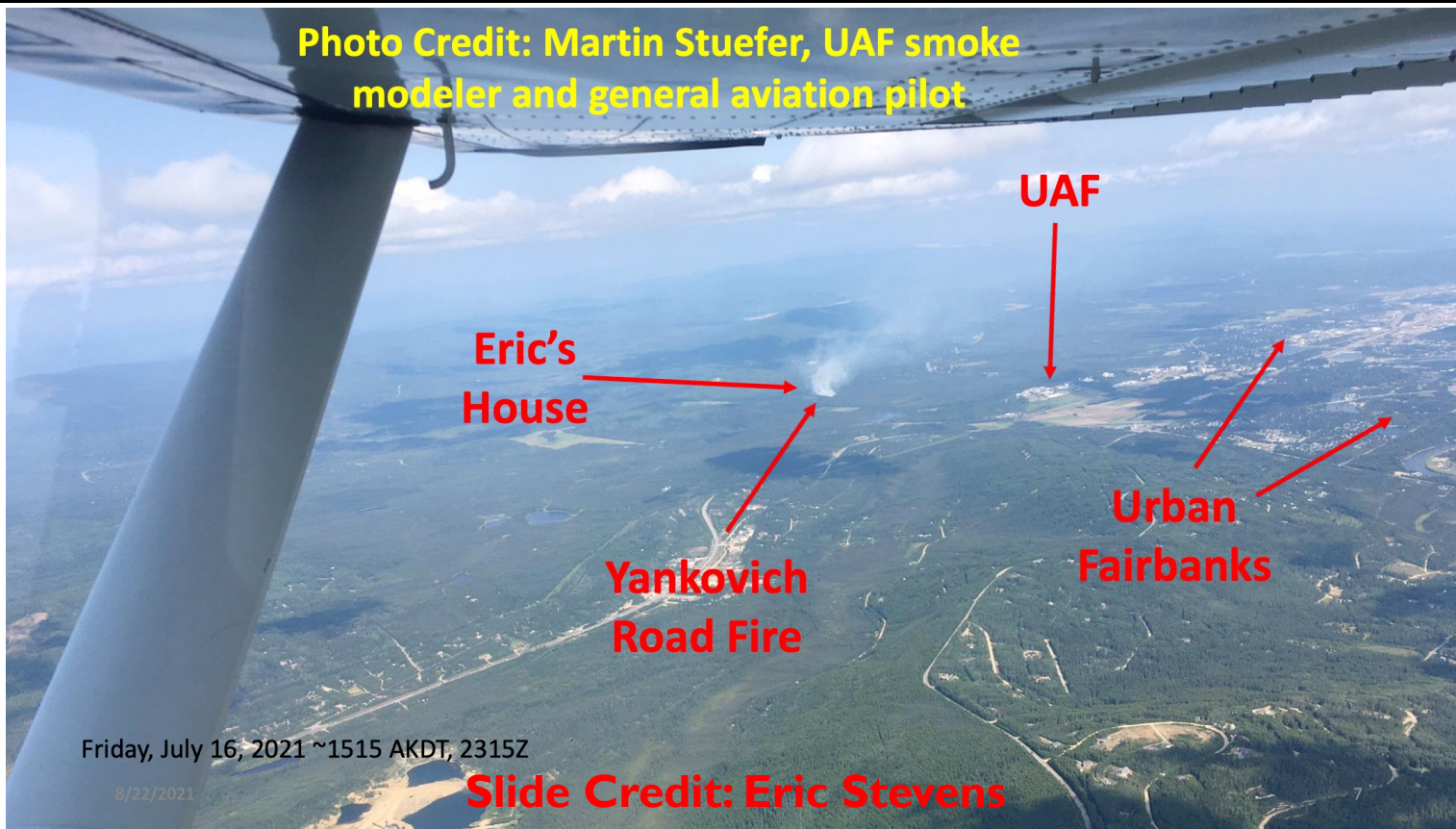
2022 LEO AWIPS Menu @ GINA & NWS

The screenshot displays the 2022 LEO AWIPS Menu interface, which is organized into several main categories:

- Satellite**: Includes GOES-East and GOES-West By Sector, Visible (0.64 μm), Shortwave Window IR (3.90 μm), Mid-level Water Vapor (6.93 μm), Clean Window IR (10.33 μm), and various derived products like Himawari and Global 5 Sat Composites.
- GINA Single Channel Products**: Lists products such as GINA-VIIRS, GINA-MODIS, GINA-AVHRR, Microwave Products, Microwave Pointset Products, and Mosaics.
- Microwave Products**: Features MIRS TPW, MIRS CLW, MIRS SWE, MIRS Rain Rate, MIRS SFR, MIRS Sea Ice, MIRS Snow Cover, MIRS 183 GHz, MIRS 23 GHz, AMSR2 Products (Ocean Surface Wind Speed, TPW, Rain Rate, Sea Ice Concentration, Snow Depth, CLW, SST, 36.5 GHz Vertical/Horizontal, 89 GHz Vertical/Horizontal), and MIRS Mosaics.
- Mosaics**: Contains Imagery Mosaics (Shortwave IR, Longwave Band, TimeDelta) and MIRS Mosaics (Rain Rate, TimeDelta, Snowfall Rate, TPW).
- Aviation Products**: Includes Channel Difference Products, GOES FLS Products, CIRA SnowCloud Discriminator, CLAVR-x Cloud Products, NASA LaRC Icing, AMSR2 CLW, MIRS CLW, Volcanic Ash Products, NASA Ash Index, Ash RGBs, SO2 Products, NASA SO2 Index, OMP5 SO2-TRM (DU), MODIS SO2 RGB, Dust and Aerosol Products, Dust RGB, OMP5 Aerosol Index, OMP5 Miscellaneous Products (Ozone), OMP5 Ozone (DU), and OMP5 UV Reflectance.
- RGB and Multispectral Composites**: Lists Channel Difference Products, DNB Radiance RGB, DayLandCloud RGB, TrueColor RGB, Day CloudPhase Distinction RGB, SnowCloud RGB, CIRA SnowCloud Discriminator, Day Snow Fog RGB, Cloud Type RGBs, FireTemperature RGB, DayLandCloudFire RGB, 24-Hr Microphysics RGB, Daytime Microphysics RGB, Nighttime Microphysics RGB, Ash RGB, Dust RGB, Marine and Sea Ice Products, Ocean Winds, AMSR2 Surface Wind Speed, SeaSpray RGB, SST, SST 7-day Composite (SPoRT), AMSR2 SST, ACSP0 SST, Mosaic ACSPO SST, Mosaic SST TimeDelta, Wave Heights, JASON Waveheight, Sea Ice, AMSR2 Sea Ice Concentration, MIRS Sea Ice Concentration, Mosaic Sea Ice Concentration, and Mosaic Sea Ice Concentration TimeDelta.
- Precip and Hydro Products**: Includes Precipitable Water, CIM5S MIMIC, CIRA Layered Precipitable Water - LPW, AMSR2 TPW, MIRS Total Precipitable Water, AMSR2 CLW, MIRS Cloud Liquid Water, Precip Rates (AMSR2 Rain Rate, MIRS Rain Rate, GPM Rain Rate (SPoRT), IMERG-Early Rain Rate, IMERG-Late Rain Rate, NESDIS QPE, MIRS Snowfall Rate, NESDIS Snowfall Rate (SPoRT)), On the Ground (VIIRS APRFC River Flood Areal Extent, VIIRS APRFC River Ice Areal Extent, VIIRS APRFC River Ice Concentration, AMSR2 Snow Depth, AMSR2 Snow Water Equivalent, MIRS Snow Water Equivalent, Snowmelt RGB, and MeteoFrance Snow RGB).

The interface also shows a status bar at the bottom with the following information: Frames: 12/12, Time: 19:32Z 17-Jun-22, 1158M of 1384M, and a map of Alaska with the text "Mosaic SST Fri 19:00Z 17-Jun-22".

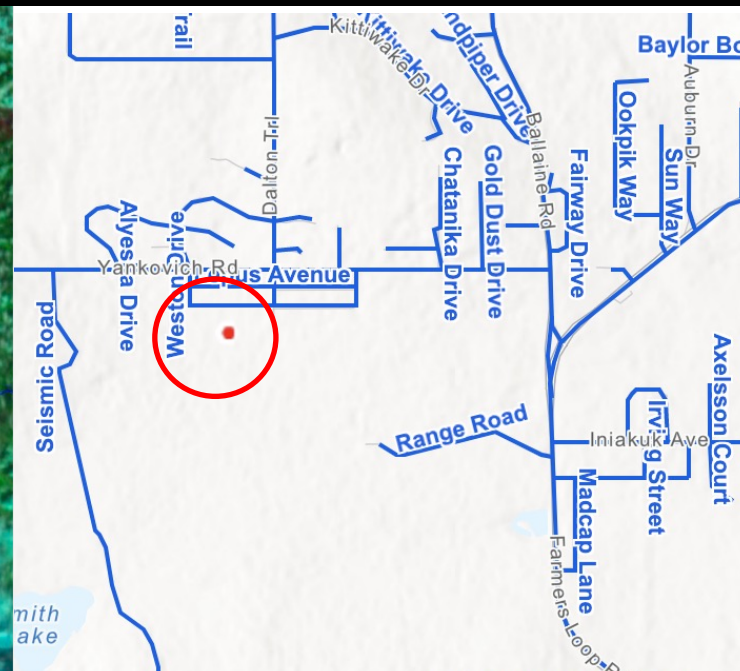
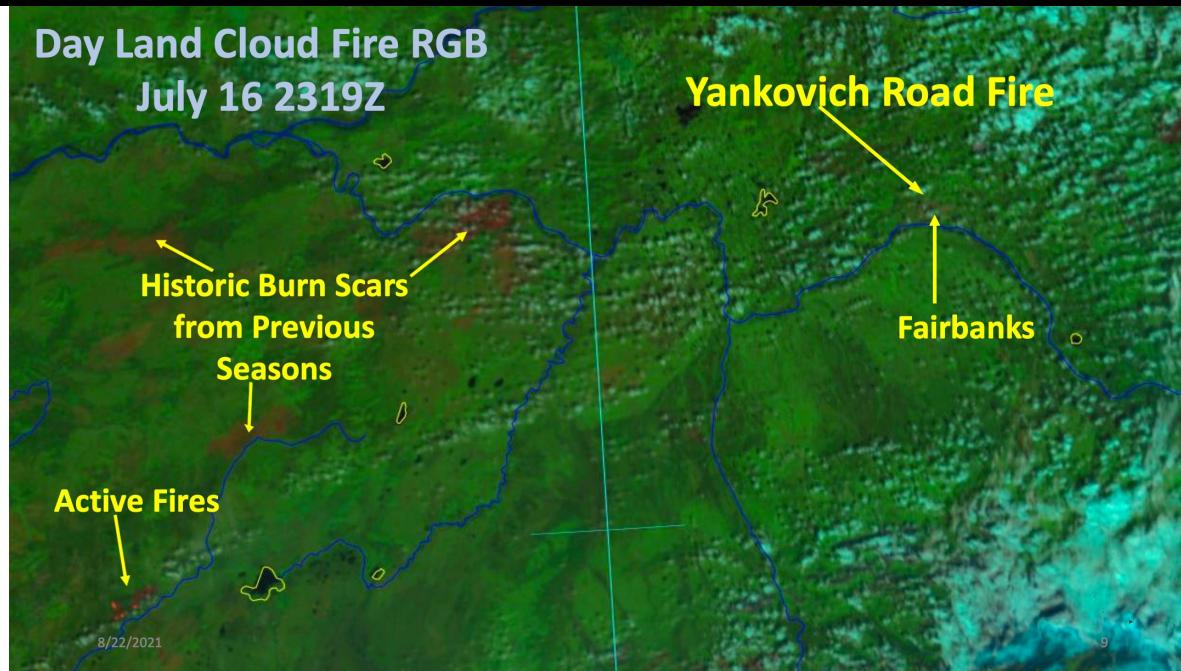
Fire at the Wildland Urban Interface: Yankovich Road Fire at UAF (July 16, 2021)



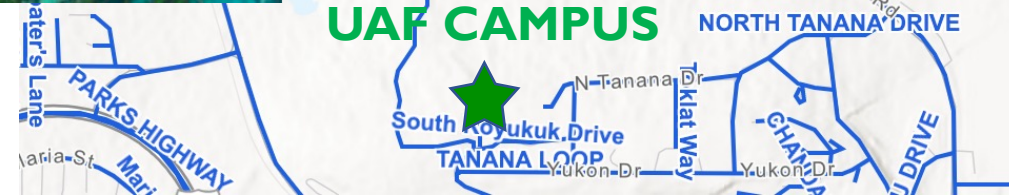
Fire at the Wildland Urban Interface: Yankovich Road Fire at UAF (July 16, 2021)



Fire at the Wildland Urban Interface (WUI): Yankovich Road Fire at UAF (July 16, 2021)



Credit: Eric Stevens
Meteorologist
AK Interagency Coordinate Center



When WUI Contains Smokejumpers & Muskoxen

<https://youtu.be/FPWgzQ2p9V8>



“Chasing Red Dots...”

<https://arcg.is/1aa8Lq>

Alaska Wildland Fire Information Map Series

Wildland Fires | Lightning | Fire Spotter | Reporting and Admin. | Fuels and Fire History

AK Wildland Fire Information

Alaska Wildland Fire Information Map Series

Go to Location or Fire

Map showing Alaska Wildland Fire Information. The map displays the state of Alaska with various fire locations marked by red dots. Key geographical features include the Fairbanks area, the Yukon River, and the Alaska Range. The map includes a search bar, navigation controls, and a scale bar.

Alaska Interagency Coordination Center Wildland

Last 24 Hours

New Fires

6

Last update: a few seconds ago

Today's Lightning

2,934

Alaska & Neighboring Territories

Summary dashboard for New Fires and Today's Lightning. It shows 6 new fires in the last 24 hours and 2,934 lightning strikes today. The dashboard includes a search bar and a refresh button.

308-Paddle

Daily Report From: 6/19/2022
Status: Unstaffed / Uncontained (U/U)
Summary: Fire was spotted using Geographic Information Network of Alaska fire heat points satellite. N9011N went and checked out the area and located a 5 acre fire. Fire behavior is 80% active running, torching and backing in black spruce, white spruce, and tundra. Weather over the fire had South West winds with speeds of 3-5. Fire is plotting in a limited management zone and will be monitored.
IRWIN ID: {1F634DB6-E0C6-49C9-9E1C-1B17C036E9A2}

Additional Information

Start 6/19/2022

Detailed report for fire 308-Paddle. The report includes the date, status, summary, and IRWIN ID. It also provides additional information such as the start date.

405-Whitefish Lake

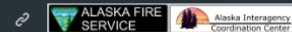
Daily Report From: 8/3/2021
Status: Unstaffed / Uncontained (U/U)
Summary: Dispatch recieved a report of a VIIRS heat signature approximately 47 miles southeast of Chalkyitsik. Agency aircraft N9011N flew detection over the fire and reported it to be 25 acres with running and torching in black spruce, white spruce, and tundra. The fire plots in a limited suppression area with no values at risk. The fire will continue to be monitored.

Detailed report for fire 405-Whitefish Lake. The report includes the date, status, summary, and a note about the VIIRS heat signature. It also mentions the agency aircraft N9011N and the fire's location relative to Chalkyitsik.

2022: CSPP VIIRS Active Fire in Production

June 18, 2022 Lime Complex

Alaska Wildland Fire Information Map Series

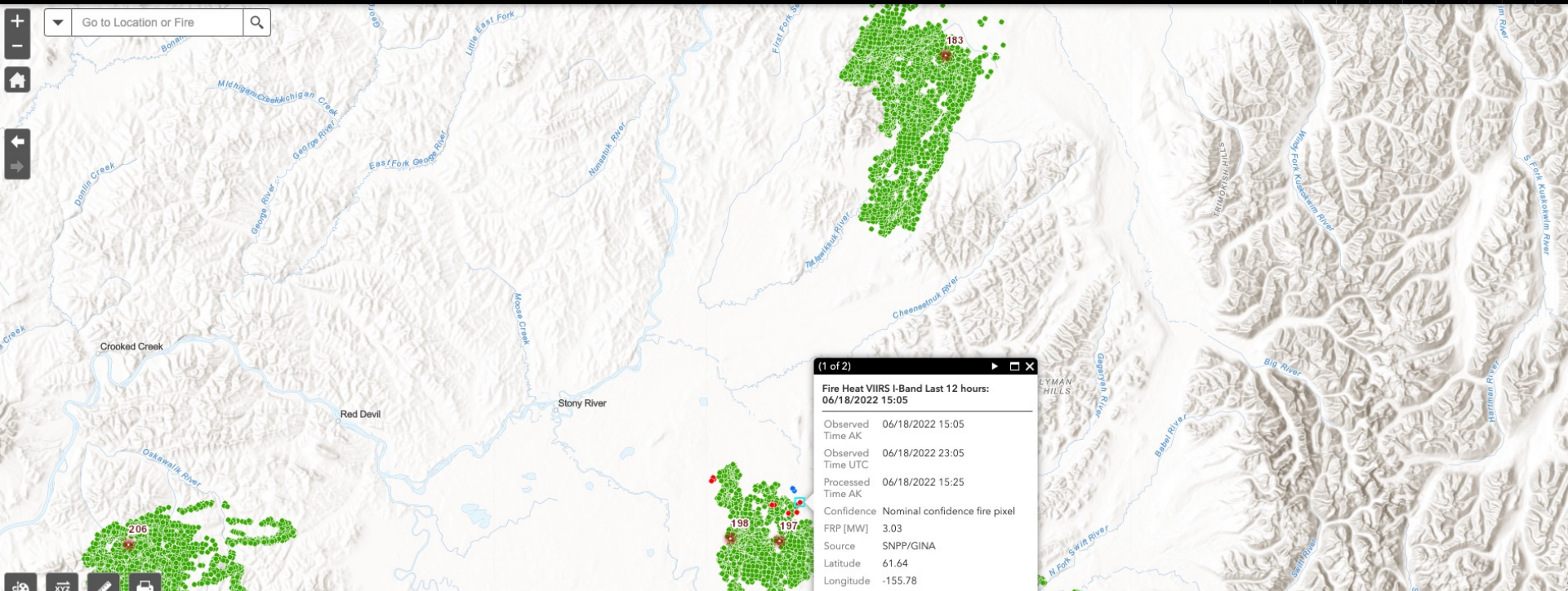


- Wildland Fires
- Lightning
- Fire Spotter
- Reporting and Admin.
- Fuels and Current Conditions
- Fire History

AK Wildland Fire Information

Alaska Wildland Fire Information Map Series

<https://arcg.is/1vGKmW>



(1 of 2)

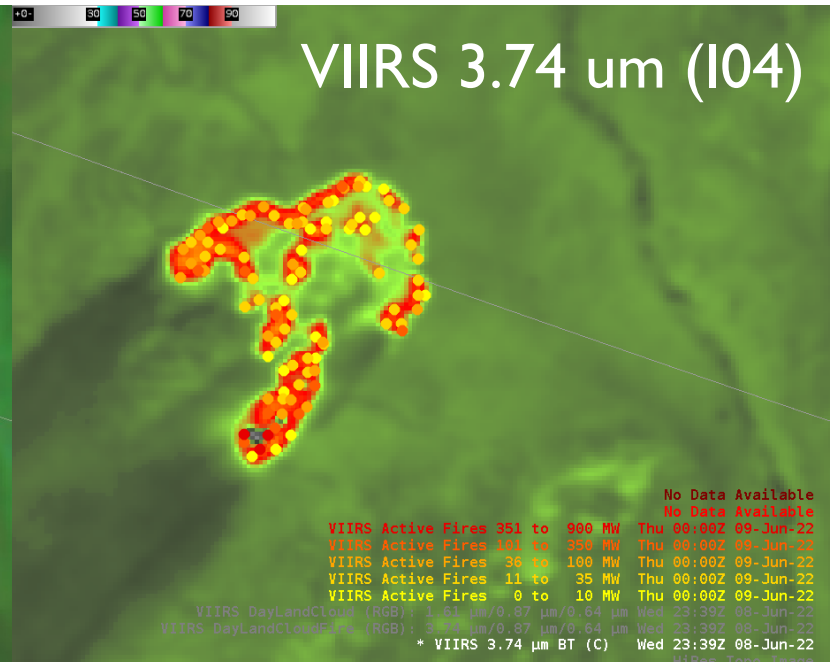
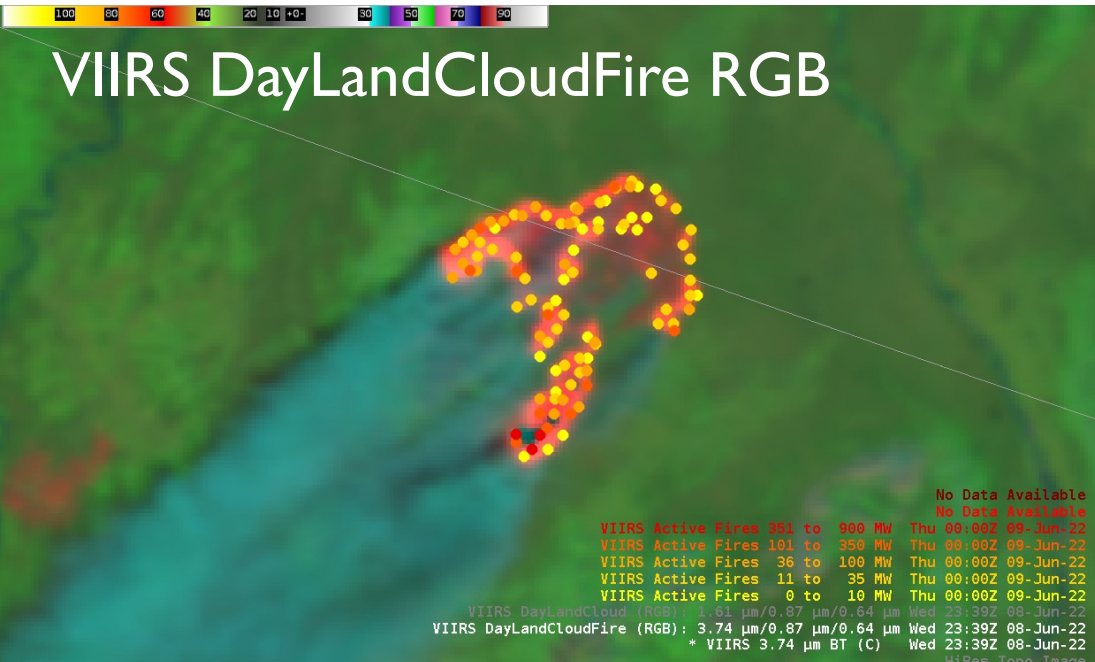
Fire Heat VIIRS I-Band Last 12 hours:
06/18/2022 15:05

Observed Time AK	06/18/2022 15:05
Observed Time UTC	06/18/2022 23:05
Processed Time AK	06/18/2022 15:25
Confidence	Nominal confidence fire pixel
FRP [MW]	3.03
Source	SNPP/GINA
Latitude	61.64
Longitude	-155.78

2022: VAF Product Available for AWIPS

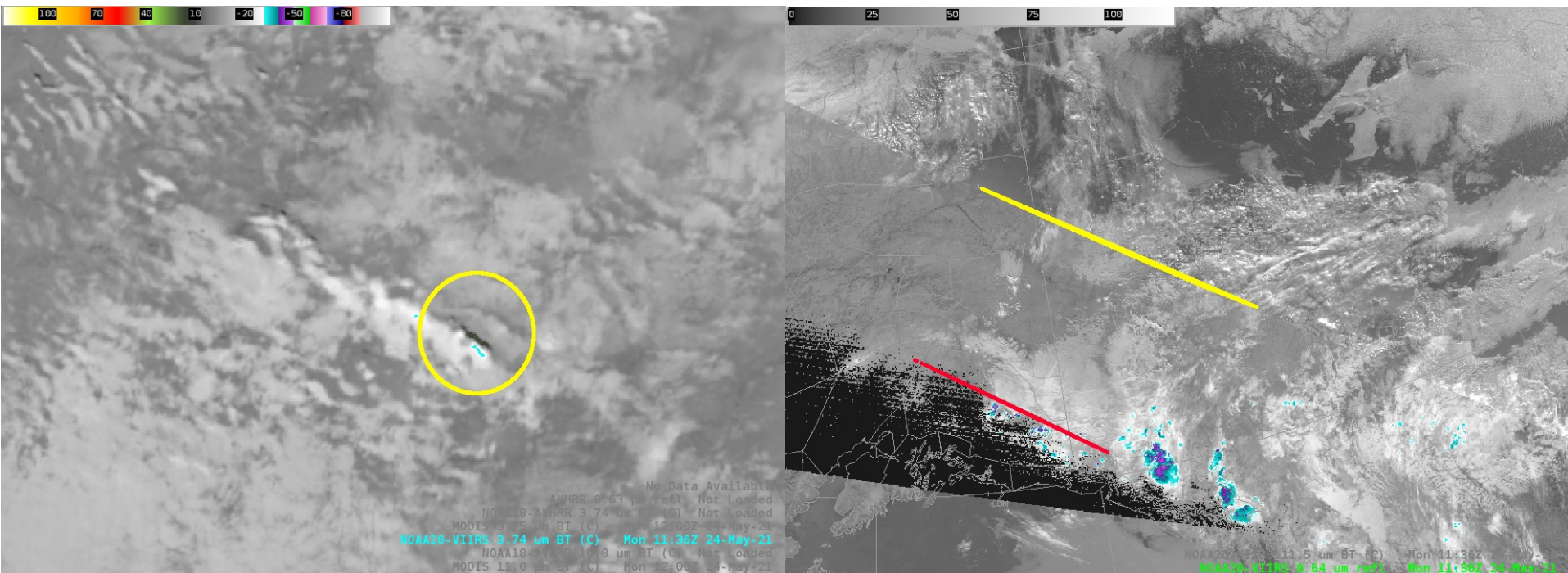
Tatlawiksuk Fire #183

June 9, 2022 near McGrath, AK (smoldering now at 131,000 acres)



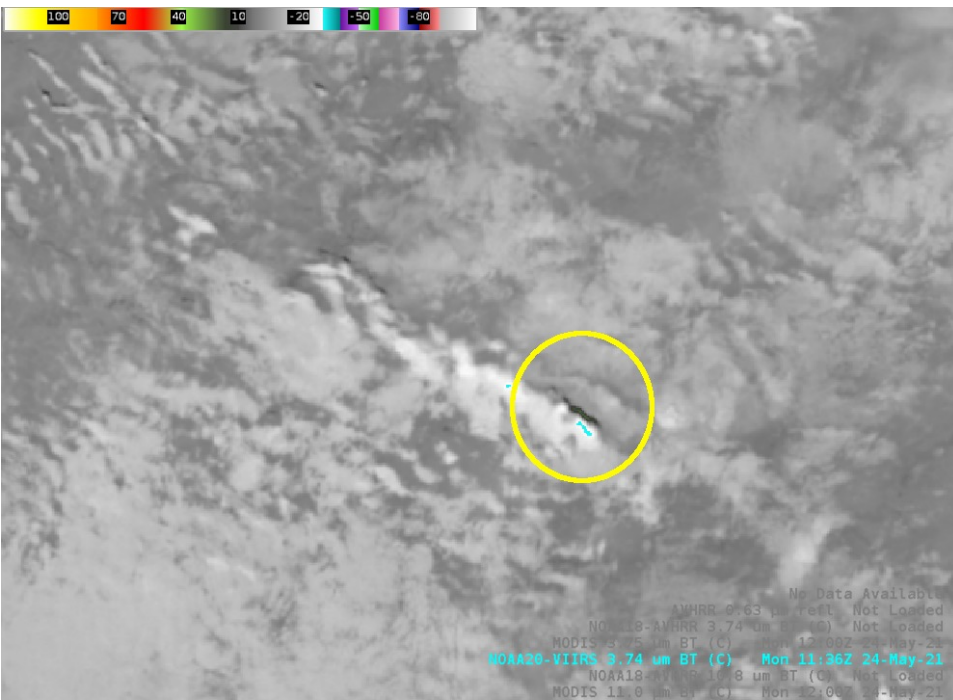
GINA Works with Algorithm Developers: Explaining the Unexpected

Canadian Yukon May 24, 2021
Seven Anomalous Fire Points

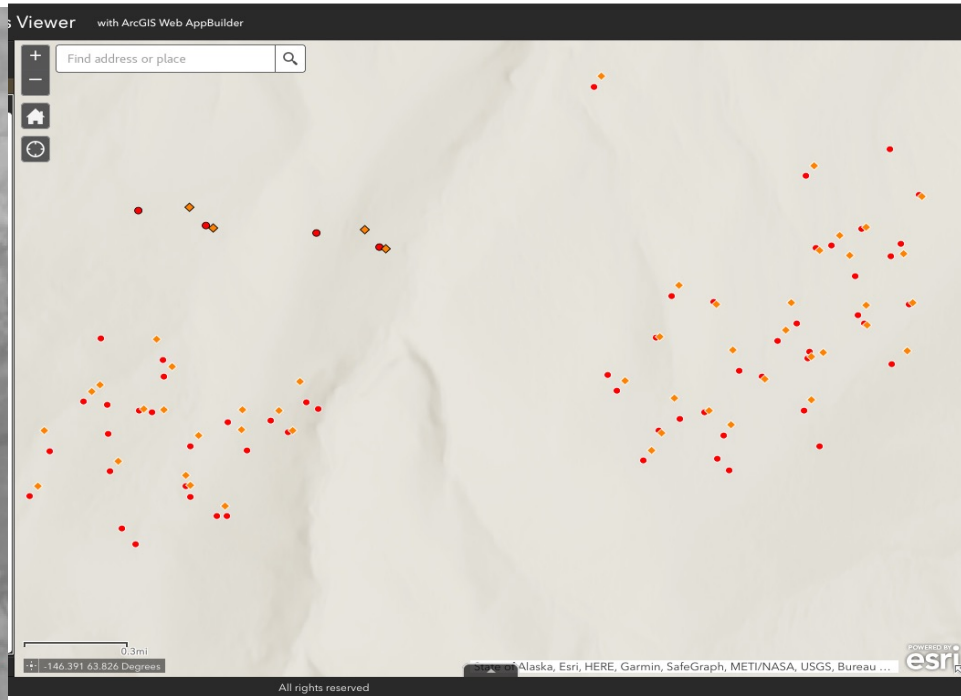


GINA Works with Algorithm Developers: Explaining the Unexpected

Canadian Yukon May 24, 2021
Seven Anomalous Fire Points



Geolocation Differences between
NOAA-CSPP VAF and NASA IPOPP



GINA Works with CSPP Developers: New Version of VAF in GINA Dev Ops

CSPP Release History

June 7, 2022 ([CSPP NOAA VIIRS Active Fire Software Version 2.0](#))

- New release of NOAA JPSS Active Fire software supporting the Visible Infrared Imaging Radiometer Suite (VIIRS) imager. The NOAA JPSS fire team at the NOAA NESDIS Center for Satellite Applications and Research (STAR) provided the software which has been adapted and tested for execution in a real-time direct broadcast environment. This version includes an updated VIIRS I-Band algorithm, and the inclusion of a Persistent Anomaly retrieval array in the NetCDF and .txt output files.

[Dashboard](#) / [NOAA20](#) / [JPSS1.20220619.151607.dat.gz](#) / Noaa20Arrival



2022: Give Talks & Develop Training Materials: gina.alaska.edu/training-resources/quick-guides-briefs



VIIRS Active Fires Algorithm Basics and Anomalous Detections

Carl Dierking, Jennifer Delamere, Jay Cable



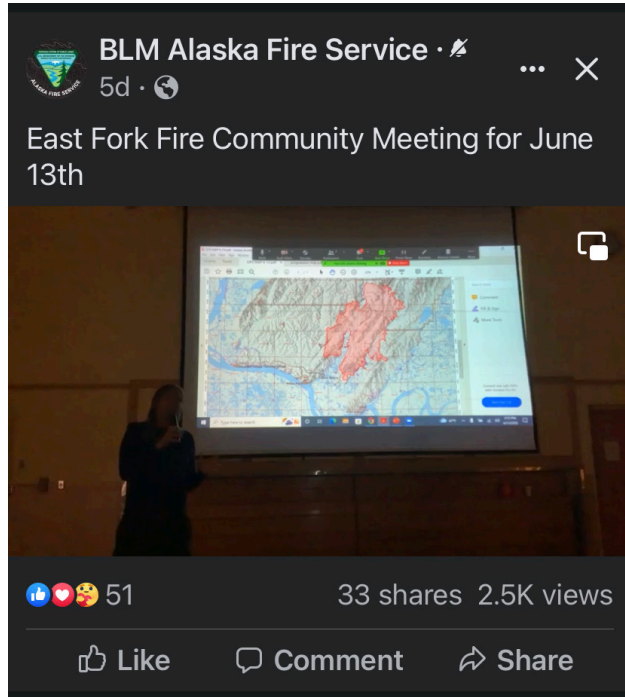
▶ 0:05 / 23:29



▶ ◻ ⋮

2022:VIIRS Product Recognition On The Web

Facebook
(K. Scholl, Operations Chief)



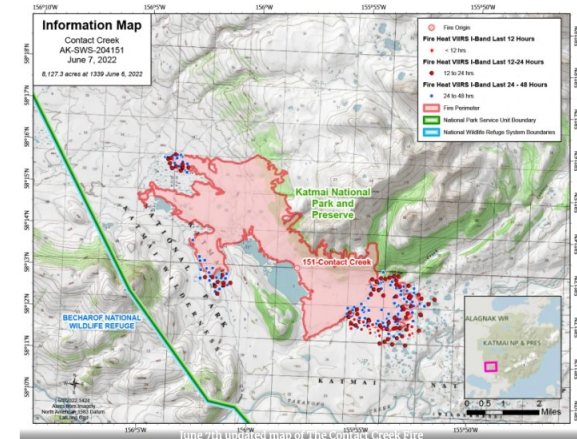
Alaska Wildland Fire Info
<https://akfireinfo.com/Alaska>

Contact Creek Fire (#151) now at 8,127 acres, hitting natural barriers

BY ALASKA DIVISION OF FORESTRY on JUNE 5, 2022

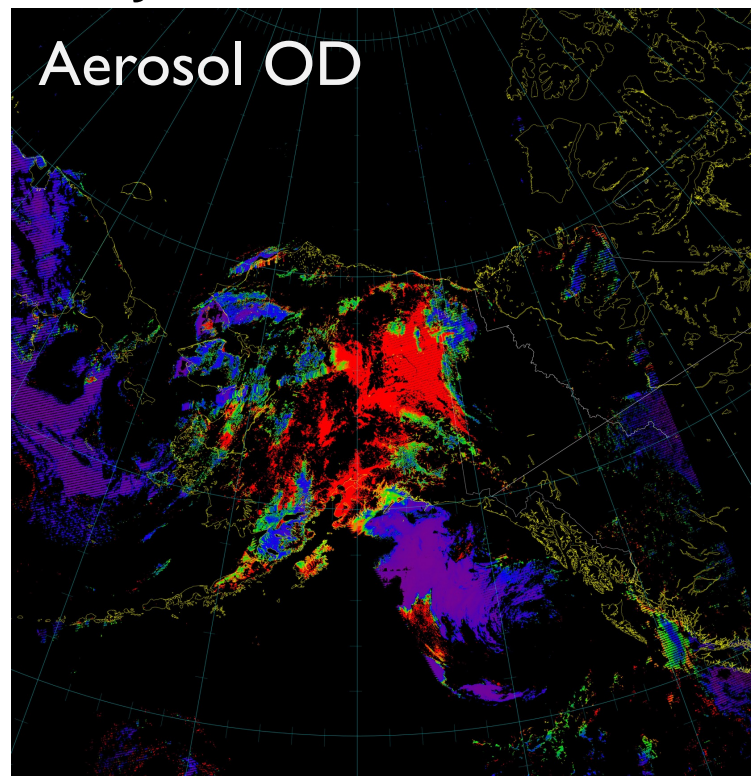
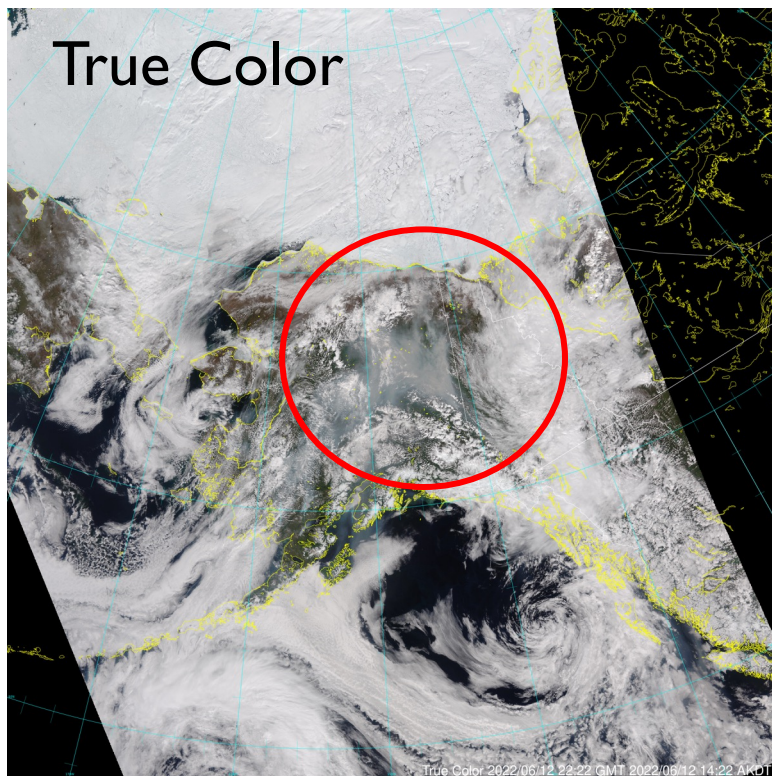
Update: June 7th, 8 pm

The Contact Creek Fire is at 8,127 acres as of June 6th at 1:39 pm. Most of the perimeter of the Contact Creek Fire has burned into natural barriers such as sparse fuels at higher elevations, lakes, and streams. Based on VIIRS Satellite heat detection points, sections of the northwestern and southern flanks remain active, as well as the eastern flank of the fire.



Air Quality from CSPP LEO EDRs: Assessing the Column Aerosol Optical Depth

VIIRS 22:22 UTC 12 Jun22



2022: A Year of Active Fire Effort Across the State of Alaska

"Yesterday June 18, the year-to-date number of acres burned by wildfires in Alaska reached 1,005,196. This is the earliest date for reaching a million acres since this statistic was first tracked in 1990."
- <https://akfireinfo.com>



2022 Alaska Wildland Fire Numbers

As of Saturday morning, June 18

- Number of wildfires: 276
- Acres burned statewide: 1,005,196
- New fires yesterday: 11
- Active fires: 102
- Staffed fires: 16
- Personnel assigned: 606
- Human-caused: 163
- Lightning/natural-caused: 70
- Undetermined causes: 41
- Unknown 2



Central Creek Airstrip Fire (#295) on Friday, June 18, 2022. DOF photo

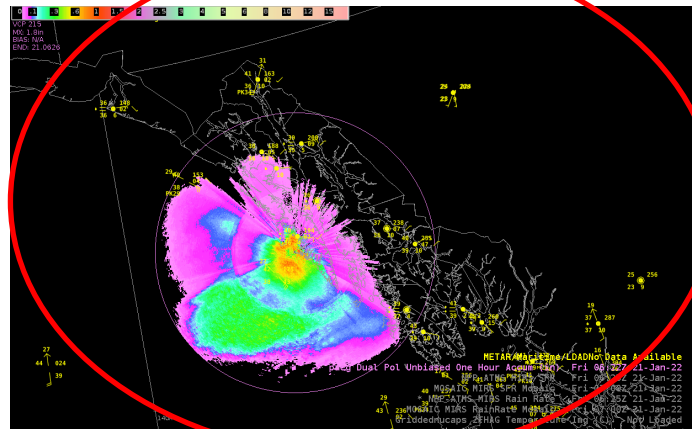
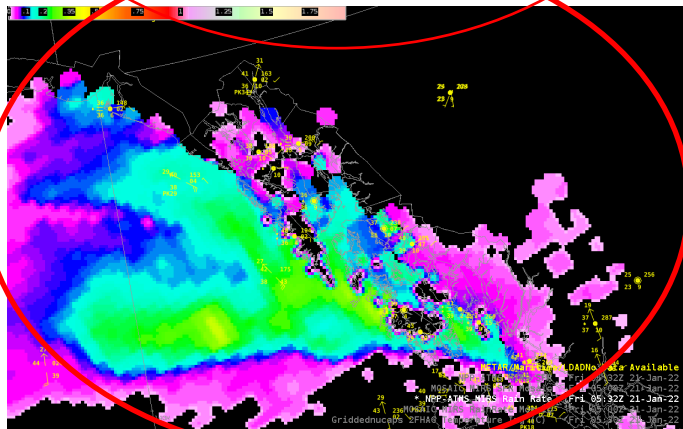
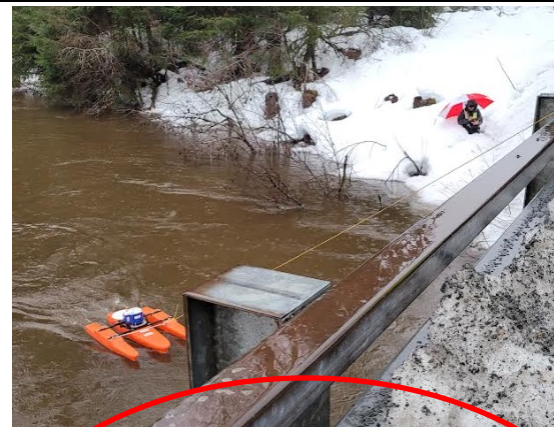
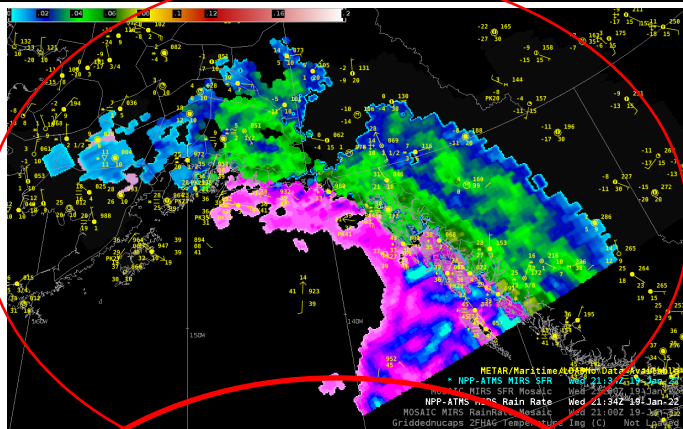
Atmospheric Rivers Do Floweth Over SE Alaska: And Direct-Broadcast Floats Along (Jan 2022)



Southeast Alaska 48Hr Precip Totals (inches)

Snettisham Powerhouse	8.11
Sawmill Creek	6.60
Juneau NWS Office	6.57
South Douglas Boat Harbor	6.43
Sitka	6.21
Yakutat CRN	5.38
Juneau	5.21
Bartlett Cove	4.90
Ted Stevens Lab (NOAA)	4.88
Taku River	4.84
Mendenhall River	4.80
Hoonah RAWs	4.73
Yakutat	3.94
Auke Bay	3.60
Silvis Powerhouse	3.28
Angoon	3.20
Eaglecrest Top	3.06
Gustavus CRN	2.95
Shelter Cove RAWs	2.65
Beaver Falls Powerhouse	2.30

valid as of Sat Jan 22nd 02:46 pm - NWS Juneau



Direct-Broadcast on Social Media: Fan Favorites

Facebook

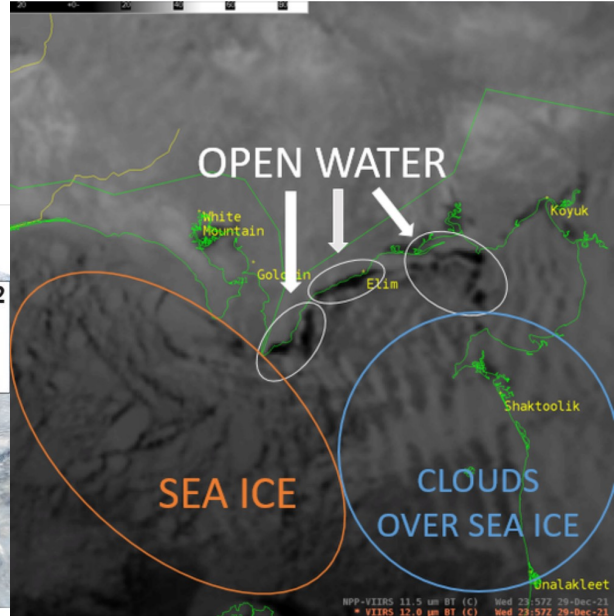
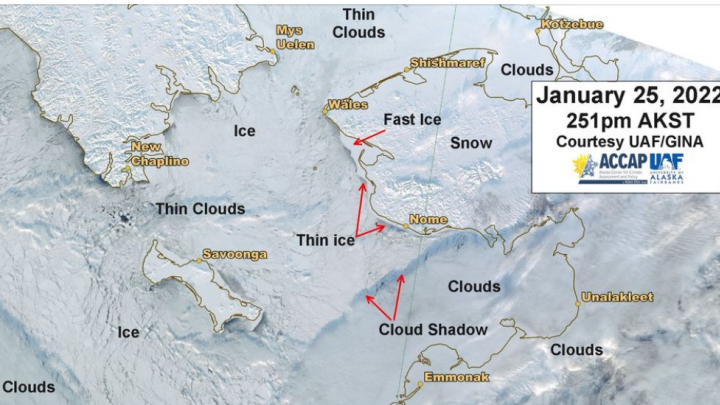


Rick Thoman

Admin · 21 hrs · 🌐



Mostly clear skies through the Bering Strait and around St. Lawrence Island Tuesday afternoon gives us our best view yet of sea ice in this region, at least as seen from 500 miles up. Gotta say, from the western science remote sensing perspective, sea ice is looking pretty robust for late January. But what do the experts (that's you) say? Most of Norton Sound is cloud covered in this image.



US National Weather Service Fairbanks Alaska

December 29, 2021 at 8:18 PM · 🌐



We've had some observations informing us of some pockets of open water in Norton Sound near Elim and surrounding areas. Satellite imagery can show us where those pockets are, as well as surrounding sea ice cover and clouds over the sea ice. #AKwx

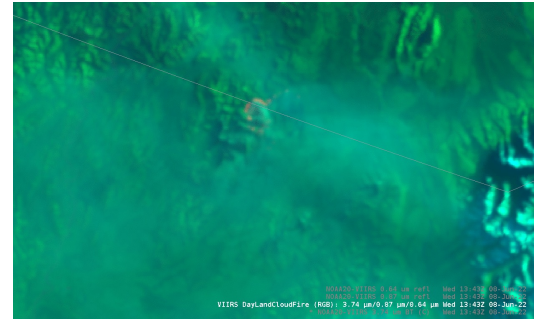
Twitter (@uafgina)



GINA
@uafgina



The Tatlawiksuk Fire, 41 miles south of McGrath, has been burning steadily since the recent lightning storms in Southwest Alaska last week. This VIIRS DayLandCloudFire gif shows the change of the fire perimeter (in bright red) from June 8th to June 9th. #akwx #AWIPS



👍👎🗨️ 19

3 Comments

👍👎🗨️ Dana Moudra and 171 others

17 Comments 32 Shares

<https://gina.alaska.edu>: Data & Training satellite@gina.alaska.edu: Reach Out

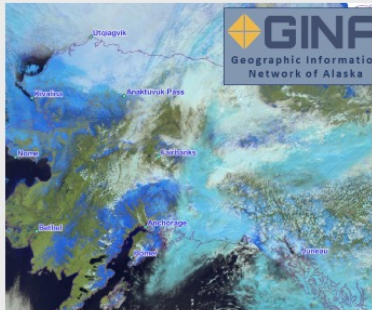


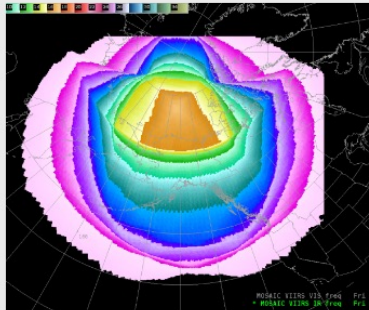
IMAGE SHOWCASE

May's Spring Snowmelt Across Alaska

May 18, 2022

It was declared green-up in Fairbanks on May 17, 2022 but there's still snow across Alaska. This RGB image taken on May 17 using VIIRS ...

[Read More →](#)



BLOG

VIIRS Pass Frequency

June 15, 2022

GINA collects satellite data around the clock from the satellites that pass over Alaska every day. This graphic shows the number of VIIRS infrared passes ...

[Read More →](#)



NEWS

VAWS Workshop on NOAA's Regional Climate Services

June 13, 2022

There's an upcoming webinar this Wednesday, June 15 at 1:00 PM AKDT! The speaker is Dr. Jessica Cherry, RCS Director ...

[Read More →](#)

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[@uafgina](https://twitter.com/uafgina)

**MONTHLY VAWS
WEBINARS**


<https://uaf-accap.org/events/about-accap-webinars/>

A Delamere on Denali: A Personal Thank You to NWS-Alaska, CIMSS, Rick Thoman, GINA Staff



JUNE 6TH

13:46 AK, 21:46 UTC



**HOG BUTTE
FIRE #185**