



Forest Service  
U.S. DEPARTMENT OF AGRICULTURE

# GTAC Update on NIROPS-related Activities

## 2021 NIROPS Closeout Meeting

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December 13, 2022



Hermits Peak, New Mexico

# Outline

- Website and Online Ordering Updates
- CDE KML
- NIROPS 2 KML Tool
- 2022 Aircraft 3 Support

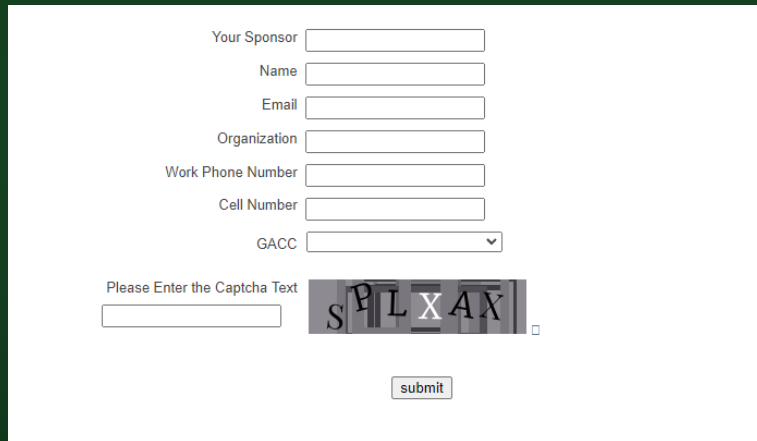


Clear Fire, AK

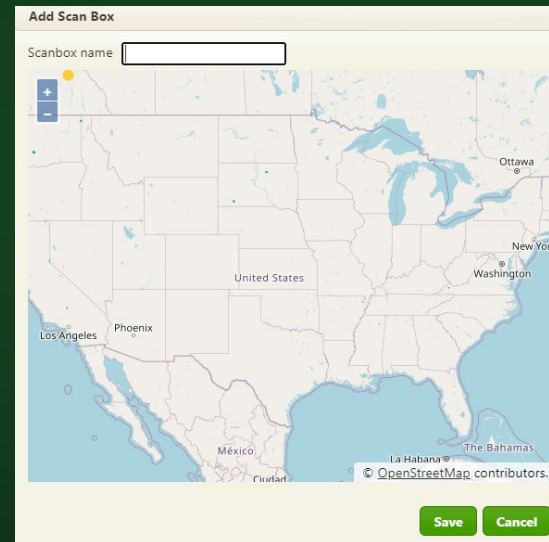
Clear Fire, Alaska

# Website/Online Ordering Updates

- Online ordering was very stable throughout 2022 season
  - 1(?) outage
- Security updates – CAPCHA for new accounts
- Added “Workflow for NIFS” Tab by year
- Mapboxes will be transitioning to Open Street Map
- Currently Website is undergoing a major overhaul
  - Transition to new PHP framework
  - Website should be up and running with full functionality by February



A registration form with the following fields: "Your Sponsor", "Name", "Email", "Organization", "Work Phone Number", "Cell Number", and a "GACC" dropdown menu. Below these is a CAPTCHA section with the text "Please Enter the Captcha Text" and a box containing the characters "SPLXAX". A "submit" button is at the bottom.

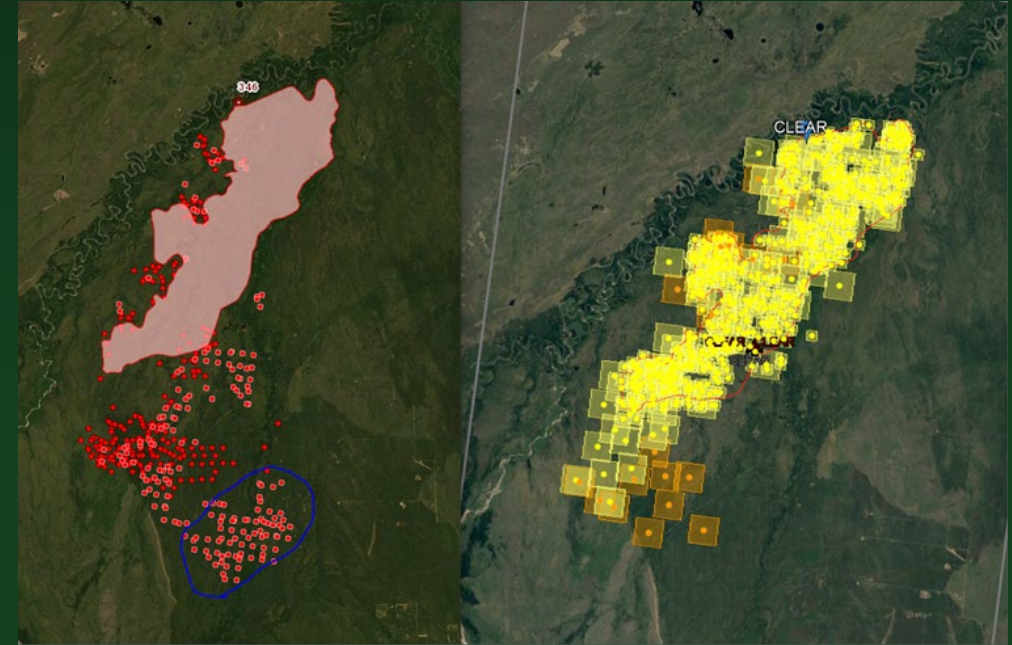


An interface titled "Add Scan Box" showing a map of the United States. At the top, there is a "Scanbox name" input field. On the left side of the map, there are zoom in (+) and zoom out (-) buttons. The map shows major cities like Los Angeles, Phoenix, Mexico, Ciudad, La Habana, The Bahamas, Washington, New York, and Ottawa. At the bottom right, there are "Save" and "Cancel" buttons. A copyright notice "© OpenStreetMap contributors." is visible at the bottom of the map area.



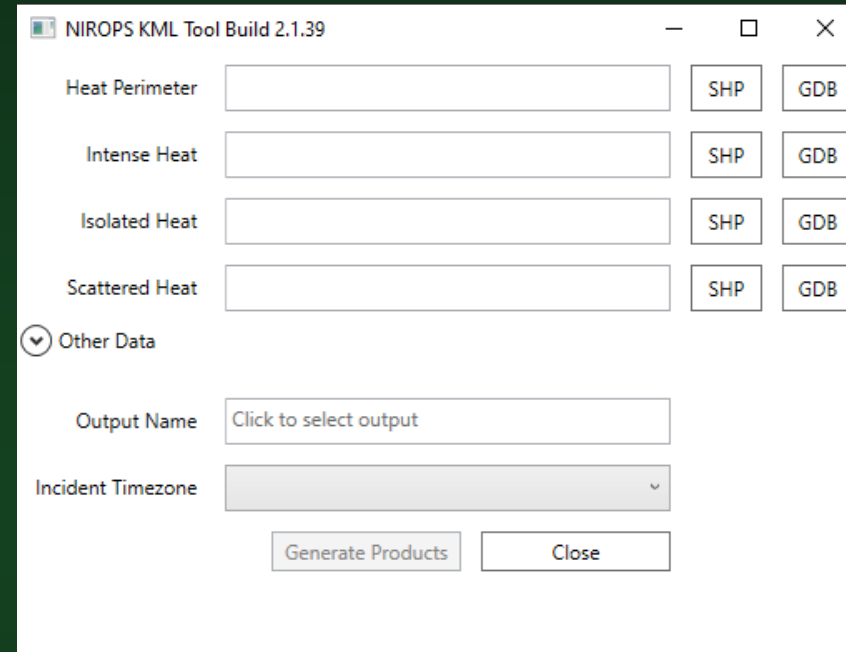
# CDE KML Updates

- Draw Display order fixed
  - Now (0-6hr, 6-12hr, 12-24hr)
- Various data-sourcing issues resolved
- MODIS Detects now pull from “new” FIRMS sources
  - Merged AK and lower 48 inputs
- Active Fire Perimeters Updated to pull directly from new NIFC Source
- Few outages for VIIRS detects due to sensor issues



# NIROPS 2 KML Tool

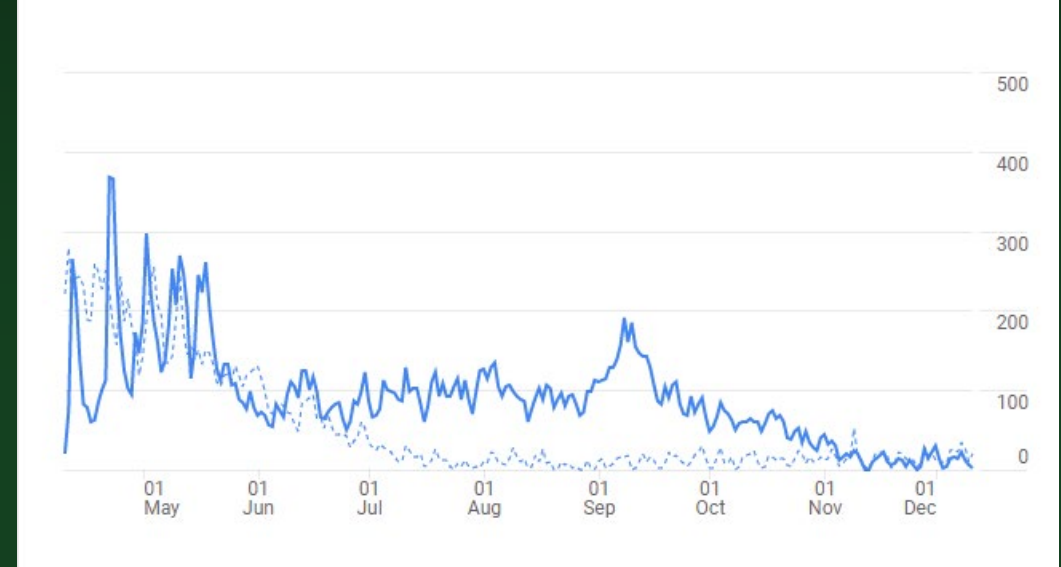
- Tool now ingests Geodatabases
- Will convert to Shapefiles
- Vertex limit for large files resolved
- Naming and Verbiage fixes
- Feedback appreciated!



The screenshot shows the NIROPS KML Tool Build 2.1.39 window. It features a title bar with standard window controls. The main interface includes four rows of input fields for 'Heat Perimeter', 'Intense Heat', 'Isolated Heat', and 'Scattered Heat'. Each row has two buttons: 'SHP' and 'GDB'. Below these is a collapsed section titled 'Other Data' with a downward arrow. This section contains an 'Output Name' field with the placeholder text 'Click to select output' and an 'Incident Timezone' dropdown menu. At the bottom of the window are two buttons: 'Generate Products' and 'Close'.

# NIROPS Website Statistics

- 35,616 visits to website
  - Down 6.38% vs 2021
- 11,833 unique visitors
  - Up 12.2% vs 2021
- Continued increase in usage of mobile devices
  - Tablets and mobile make up 25% of total visits
  - Up from 17% in 2021



Overall NIROPS Website Visitation 2022

# Aircraft 3 Support Summary

- **Busy (?) Season**
  - Early start in SW
  - Active Alaska Season
  - End-Product Contract Cessation
- **Support began on April 20**
  - Hermits Peak
- **Support Ended November 11**
  - Mosquito
- **418 taskings across 7 GACCs**
- **NGA and NCAC/USGS Analysts Rotated weekly**
  - Worked Simultaneously during busy periods (Alaska)

- Suiattle River
- White River
- Irving Peak
- Seven Bays
- Chillwack Complex
- NW Pasayten

- Mosquito

- Aspen
- Red
- Fairview
- Radford
- Rodgers
- Border 32
- Fairfield

- Lime Complex
- Clear
- Minto Lakes
- Bean Complex
- Middle Tanana Complex
- Slathtouka
- Minnkowhin
- Aghaluk Mountain
- Bitzshitini
- Door Mountain

- Fish
- Sugarloaf



- Chalk Mountain
- 1148 Fire
- Nelson Creek
- Honey Creek
- River Bottom 2
- Colony
- Smoke Rider
- Hermosa
- Big Sky
- Burns Creek
- Fountain Creek
- Gate 6
- TNT
- Pine Pond

- Hermits Peak
- McBride/Nogal Canyon
- Tunnel
- Crooks
- Cooks Peak
- Cerro Pelado
- San Rafael



# Aircraft 3 Support by GACC

Geographic Area	Number of Fires	Number of Requests	UTF-Weather	UTF – Other	Acres
NW	6	27	4	9	44,464
North Ops	1	46	1	1	76,786
South Ops	7	39	4	10	49,672
AK	9	151	53	40	1,107,954
SW	9	91	4	8	231,004
RM	2	4	1	1	6,780
SO	16	60	1	25	13869
<b>Total</b>	<b>50</b>	<b>418</b>	<b>68</b>	<b>94</b>	<b>1,530,529</b>

Acreage based on last mapped acreage for each incident.

# Aircraft 3 Support by Month

Month	# of Support days	# of Fires	GACCs Supported
April	24	8	1
May	11	5	1
June	5	4	1
July	31	16	2
August	15	14	2
September	26	11	3
October	16	1	1
November	2	1	1

# Extended Aircraft 3 Support

- Mosquito Fire (North Ops) – 39 Taskings
- Clear Fire (AK) – 26 taskings
- Bean Complex (AK) - 29 Taskings
- Hermits Peak/Calf Canyon (SW) – 25 Taskings



Mosquito



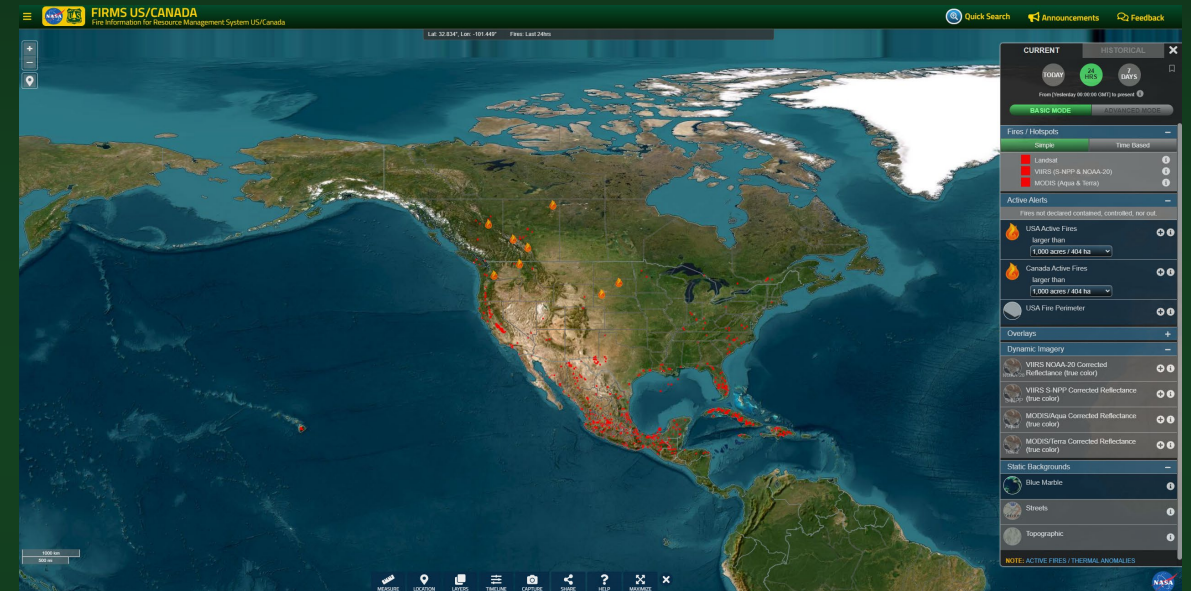
Clear



Hermits Peak

# FIRMS (Fire Information for Resource Management System)

- Replacement for Active Fire Maps (AFM) site
- Collaboration between USFS and NASA
- Enhanced capabilities for real-time satellite active fire detection data
- Active fire detections, satellite imagery and other relevant data for the US and Canada in an interactive
- Satellite imagery accessible from Global Imagery Browse Services (GIBS) and as custom subsets from Worldview Snapshots
- <https://firms.modaps.eosdis.nasa.gov/usfs/>



# GTAC Training Opportunities

- ArcMap is in End-of-life
- New NIFS Workflow
- “In-person” trainings only available to USFS
- Packaged training materials are hosted on FTP:  
“GTAC\_Pro\_Trainings”
- GTAC Training Homepage:
  - <https://usdagcc.sharepoint.com/sites/fs-gtactus/SitePages/Home%20Page.aspx>

## DESKTOP GIS

Course Type Name and Description

Geospatial Training and Awareness Course Catalog October 2022

### DESKTOP GIS



#### ArcGIS Pro – Quick Start in GIS

In this Quick Start in GIS students will learn the basics of GIS using ArcGIS Pro. This new version of our Quick Start in GIS utilized the newest GIS software from Esri, ArcGIS Pro. ArcGIS Pro is the eventual replacement for ArcMap and will be the recommended GIS software within the Forest Service beginning sometime in 2022. In this webinar students will watch two PowerPoint lectures about using and navigating ArcGIS Pro, followed by three exercises to hone their skills.



#### ArcGIS Pro – 3D Analyst

This course seeks to highlight the 3D capabilities and functions available in ArcGIS Pro. Students will learn how to navigate and display data within a local 3D scene. Students will also learn how to extrude 2D features into 3D features, configure illumination settings, utilize exploratory 3D analysis tools, and run geoprocessing tools from the 3D Analyst Toolbox.



#### ArcGIS Pro – Cartographic Tools

Participants will learn how to work with various cartographic related properties in ArcGIS Pro. The course covers how to adjust symbology, work with Layer (.lyrx) files, create labels and annotations, and how to produce a final map product. Objectives are to: (1) learn how to use the symbology pane within ArcGIS Pro; (2) become comfortable with the ArcGIS Pro Labeling tab; and (3) learn how to build a final map product in your ArcGIS Pro layout.



#### ArcGIS Pro – Editing

This class demonstrates editing environment in ArcGIS Pro. You will learn about editing attribute data, performing spatial edits, and creating new data (digitizing). The hands on exercises teach basic editing functionality. Students will be able to edit values from the table pane, edit values from the attributes dialog window, create a frequency table, prepare the edit environment, point edits, line edits, polygon edits, create a geodatabase, create a feature class, populate a feature class with records derived from digitizing, create and populate user defined attribute fields for a feature class, populate them with the calculate geometry function. The prerequisites for the class are the ArcPro for ArcMap Users course or basic ArcGIS Pro skills. Course requires that ArcPro 2.6 or higher be loaded on a local machine. Students should download the course data at least one day before the class.



#### ArcGIS Pro – Spatial Statistics

Participants will learn the basics of Spatial Statistics and ways in which you can explore spatial data using the Spatial Statistics toolset. This course covers measuring the distribution and relationship of spatial features and any significant patterns that may exist. Participants will also learn how to analyze patterns in spatial data and identify locations of statistically significant spatial clusters and/or dispersion.



#### ArcGIS Pro – Map Series

Participants will learn how to create and manage multiple map pages using Map Series within ArcGIS Pro. This course covers how to arrange the base map layout needed for Map Series, how to setup and manage Map Series, and how to export map pages in various formats. Included in the course is an optional lesson on how to create a Map Book product using a Python script.



#### ArcMap – Advance Editing

Participants will learn how to work with the Advanced Editing Toolbar in ArcMap; practice using geodatabase topology to find and fix errors; and automate editing through a vertical integration tool that aligns Forest Service data with existing reference data.



# Thank you!

Special shout out to NGA and USGS analysts.

Questions?

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