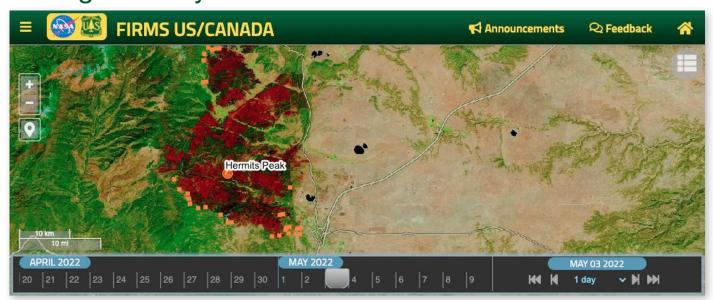






## **FIRMS US/CANADA** Fire Information for Resource Management System



FIRMS US/Canada showing burned area (in brick red) and active fires (in orange) at the Hermit's Peak fire in New Mexico on 3 May 2022. The underlying image is from European Union's Copernicus Sentinel-2 Adjusted Reflectance Harmonized Landsat Sentinel (HLS) using bands 12-8a-4 and active fires are from NASA's Terra Moderate Resolution Imaging Spectroradiometer (MODIS).

## Overview

NASA's Fire Information for Resource Management System (FIRMS) enables access to global near real-time (NRT) satellite imagery, active fire detections and other data from multiple satellites. **FIRMS US/Canada** combines **FIRMS** capabilities, value-added and regionally specific data products for North America as well as ongoing efforts by NASA and the USDA Forest Service to integrate new technologies and data enhancements.

## **Key features**

- · Continuously updated situational awareness on the location, extent and intensity of wildland fire activity.
- Enhanced interactive tools to visualize satellite imagery, active fire detections and other NASA science products relevant to wildfire management.
- Integration of US and Canadian fire geospatial data and incident reporting system.
- NRT satellite data with real-time availability for selected data sources coming in Summer 2022.
- · Customized maps for viewing and sharing.
- · Active fire detection data in multiple GIS formats and WMS, WMS-T and WFS web services.
- Extract and download satellite imagery for areas of interest.
- Automated detection alert system for user-defined areas of interest.





## FIRMS US/CANADA Fire Information for Resource Management System

Product	Sensor	Source	Spatial Resolution	Latency
Active Fire Detections	Terra MODIS	NASA LANCE	1km	< 3 hours
	Aqua MODIS		1km	< 3 hours
	Suomi NPP		375m	< 3 hours
	NOAA-20 VIIRS		375m	< 3 hours
True/False Color Composite Imagery	GOES 16 ABI	NASA GIBS	1km	40 minutes
	GOES 17 ABI		1km	40 minutes
	Terra MODIS		250m	< 3 hours
	Aqua MODIS		250m	< 3 hours
	Suomi NPP		250m	< 3 hours
	NOAA-20 VIIRS		250m	< 3 hours
	Landsat 8 & 9	NASA IMPACT / Harmonized Landsat Sentinel-2 (HLS) Project	30m	2-4 days
	Sentinel 2A & 2B		30m	2-4 days
Aerosol Index	Suomi NPP	NASA LANCE	~50km	< 3 hours
Aerosol Index PyroCumuluoNimbus			~50km	< 3 hours
Burned Area	Terra/Aqua MODIS	NASA	500m	~3 months

NASA science data products in FIRMS US/Canada are provided through current operational NASA data streams. Development and integration of additional satellite data products and lower latency products is ongoing.

Explore FIRMS US/Canada US/Canada Fire Map:

https://firms.modaps.eosdis.nasa.gov/usfs/map/

**About FIRMS:** 

https://earthdata.nasa.gov/firms

Frequently Asked Questions: https://earthdata.nasa.gov/faq/ firms-faq

**FIRMS Tutorial:** 

https://youtu.be/SSd7KnWN9CM



FIRMS US/Canada combines FIRMS capabilities, value-added and regionally specific data products for North America as well as ongoing efforts by NASA and the USDA Forest Service to integrate new technologies and data enhancements.