

# NASA AIDS IN KANSAS FIRE RESPONSE



## Overview

NASA's Disasters Program helps local, state, and federal agencies prepare, respond, and recover from major disasters across the country, including wildfires. Using a combination of satellite imagery, airborne sensors, and geospatial tools, NASA provides critical information to guide search and rescue, damage assessments, and resource deployment when and where it's needed most.

The program's Disasters Response Coordination System (DRCS) activated in support of the Kansas Division of Emergency Management to address the large, uncontained wildfires impacting southwest Kansas. The fires consumed more than 100,000 acres. In collaboration with the Wildland Fires Program, the Disasters Program provided key insights to support public outreach conducted by Senator Moran's office.

In direct response to the Kansas Division of Emergency Management's request, DRCS delivered near-real-time fire perimeter updates, post-burn imagery, new fire-start analysis, and assessments of potentially affected infrastructure. Within one hour of receiving the request, DRCS provided the latest satellite imagery and updated fire perimeter data. The state reported successfully integrating these products into its GIS platforms to enhance situational awareness and inform response decision-making.

## Three Key Data Insights

- Multispectral Pre- and Post-Incident Imagery, used extensively to illustrate the burned areas and provide critical situational awareness for areas and to help identify new fire starts and prioritize the allocation of scarce resources.
- Burned Area Severity Mapping, highlighted areas most significantly impacted by fires.
- Commercial Satellite Data Acquisition (CSDA) Program Imagery, used to provide high resolution imagery of key areas of concern to pinpoint potential areas of infrastructure and building damage.

## Example Imagery Products



True color imagery from the Sentinel-2 satellite taken on May 16, 2026, showing burn scars in dark brown.



Burn severity map with darker colors displaying more severe burned areas derived from Sentinel-2 imagery on May 16, 2026.



True color imagery from Planet's SkySat showing burned area extent from May 17, 2026.