Fighting Wildfires

Next Generation Fire System

On July 12, 2024, smoke began billowing from the soon-to-be-named Dinosaur Fire in Boulder, Colorado. Just 10 minutes after the smoke was first spotted, the Next Generation Fire System (NGFS) detected the fire using observations from a satellite orbiting the Earth, helping to pinpoint the fire's location as emergency operations and the local fire department began responding.

NGFS
Next Generation Fire System

The Next Generation Fire System merges AI and satellite observations to accurately detect fires early in their formation.Developed at NOAA's Cooperative Institute for Meteorological Studies, the NGFS assists emergency managers and first responders.

- Highly-accurate system that detects fires and provides real-time alerts to users via a web-based dashboard.

- Provides critical information on a fire's location, and movement, as well as its size and intensity.

- Assists emergency managers and first responders as they make decisions to deploy resources or order evacuations.

- Successfully demonstrated to National Weather Service incident meteorologists and state fire partners at the 2024 Fire Weather Testbed.

Innovative research and development at the Cooperative Institute for Meteorological Satellite Studies supports NOAA's mission to save lives and protect property