



FIRE ENVIRONMENT MAPPING SYSTEM

FEMS 3.6 Release Notice

Date: March 25, 2026
Version: FEMS version 3.6

Description: The primary focus of the 3.6 Release is Weather Data Improvements, including an update for the historical Period of Record for RAWS stations. It also includes some fixes and change request items.

Maps

Weather

- Historic Weather data for RAWS stations is now available through 10/31/2025.
- Daily Weather data is now available for some of the restricted Mesonet stations.
- Changes were made to the calendar to limit the dates for Weather forecasts to seven days, which includes the current date.
- When viewing Weather chart data on the map pop-up, the chart no longer shrinks when hovering the mouse over the chart lines.
- Snow flags before 2023 are now available in the Daily Summary weather data.

Field Sample

- When a Category is selected on the Field Sample map, the Fuel drop-down list displays in alphabetical order.
- When viewing the Field Sample Chart data on the map pop-up, the chart now includes the Current Sample Value (black line), Historical Max Value (blue line), Historical Min Value (red line), and the Historical Average (green line).

Fire Danger

- Historic Fire Danger data for RAWS stations is now available through 10/31/2025.
- Hourly and Daily Fire Danger data is now available for some of the restricted Mesonet stations.
- Changes were made to the calendar to limit the dates for Fire Danger forecasts to seven days, which includes the current date.
- When viewing Fire Danger chart data on the map pop-up, the chart no longer shrinks when hovering the mouse over the chart lines.
- A Quality Flag now displays for Fire Danger observations and forecasts if there is missing data. A Quality flag indicates that the missing data is affecting the NFDRS data that is

available. Missing Observations display as a Square. Missing Forecasts display as a Triangle. The rules are as follows:

- If observations are missing for a station in a 24-hour period, the NFDRS Quality Flag is turned on and stays on for 24 hours. If there are no missing observations for the next 24 hours, the system will remove the Quality Flag and calculations proceed, as normal.
- If observations are missing for a station for 24 – 72 hours, the NFDRS flag stays on for 7 days. If there are no missing observations for 24 hours on the 7th day, then the system will remove the Quality Flag and calculations proceed, as normal.
- If observations are missing for a station more than 8 days, the NFDRS flag stays on for 30 days. If there are no missing observations for 24 hours on the 30th day, then the system will remove the Quality Flag and calculations proceed, as normal.
- The Fire Danger graph now starts at 0 on the Y axis.

Tables

Stations

- Daily Fire Danger Summaries are available for some of the restricted Mesonet stations.
- Weather is now a tab that is available on the Stations table page. When you select this tab, you can view Hourly or Daily weather data for a specified date range.
- Seasonal Trend charts now include the Station Name and Period of Record for each chart.

Downloads

- When the system detects that a download file is large (i.e., contains more than 100 stations, more than 10 stations and more than one year, or more than 20 years of data for more than one station), the system will now queue the file. If the data file is loaded into the queue, the user has 24 hours to download the file before it is removed from the queue.
- The option to Zip a download file is now available for all download formats.
- Downloaded Weather and Fire Danger data no longer include duplicates.
- Daily Weather data can now be downloaded for some restricted Mesonet stations.
- Hourly and Daily Fire Danger data can now be downloaded for some restricted Mesonet stations.
- Snow Flag data is now available prior to 2023 in the Weather Daily Summary.
- When selecting a station or a site for any of the downloads, the system will stay at the spot in the list where the station or site was selected. Previously, the system would move back to the top of the list after a station or site was selected.

Field Samples

- When adding a new group or editing an existing group, the Group Name can now include special characters.

- When adding a new sample, the Fuel Type drop-down list is now in alphabetical order.

About

- The FEMS Version now displays on the About page.

Data Process

Stations Recalculate

- FEMS Admin can now view the status of the NFDRS recalculation that is triggered for a station when there is a Fuel Model catalog change.

FEMS 3.6 may be accessed by both public (unauthenticated user) and government wildland fire personnel (authenticated users) alike.

Unauthenticated users can access FEMS without a login and access the full fuel moisture dataset. Authenticated users can access, enter, and edit data, and will be able to edit Group or Site information, according to their FEMS role.

Additional information is also available on the FEMS Webpage:

<https://www.wildfire.gov/application/fems>.

The FEMS URL is <https://fems.fs2c.usda.gov/>.

FEMS 3.6 has been tested on devices with the following specifications:

Operating System:

Windows 11 Enterprise

Version 10.0.22631 Build 22631

Intel(R) Core(TM) i5-12600HX, 2500 Mhz, 12 Core(s) 16 Logical Precision

64-bit operating system, x64-based processor

Browser specifications:

Chrome: Version 133.0.6943.127 (Official Build) (64-bit)

Microsoft Edge: Version 133.0.3065.69(Official build) (64-bit)