

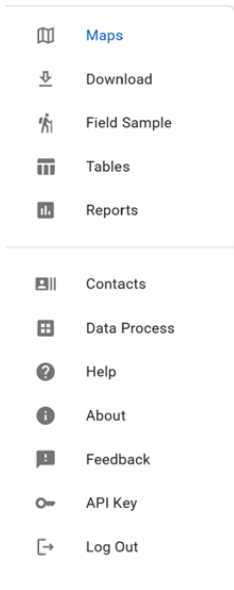
FEMS Weather Module

Fire Environment Mapping System (FEMS) is a map-based application that displays Weather, Fire Danger and Field Samples. Navigation is based on a series of buttons, check boxes and sliders:

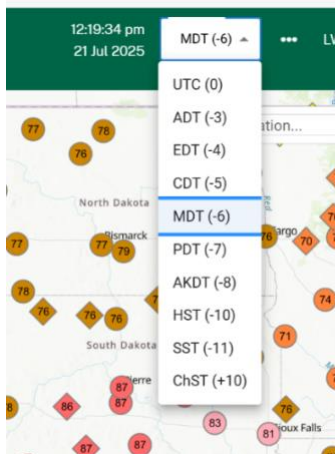
1. Click on the “Hamburger” icon in the upper right:



2. A list of menu options will appear; selections will vary with user roles:



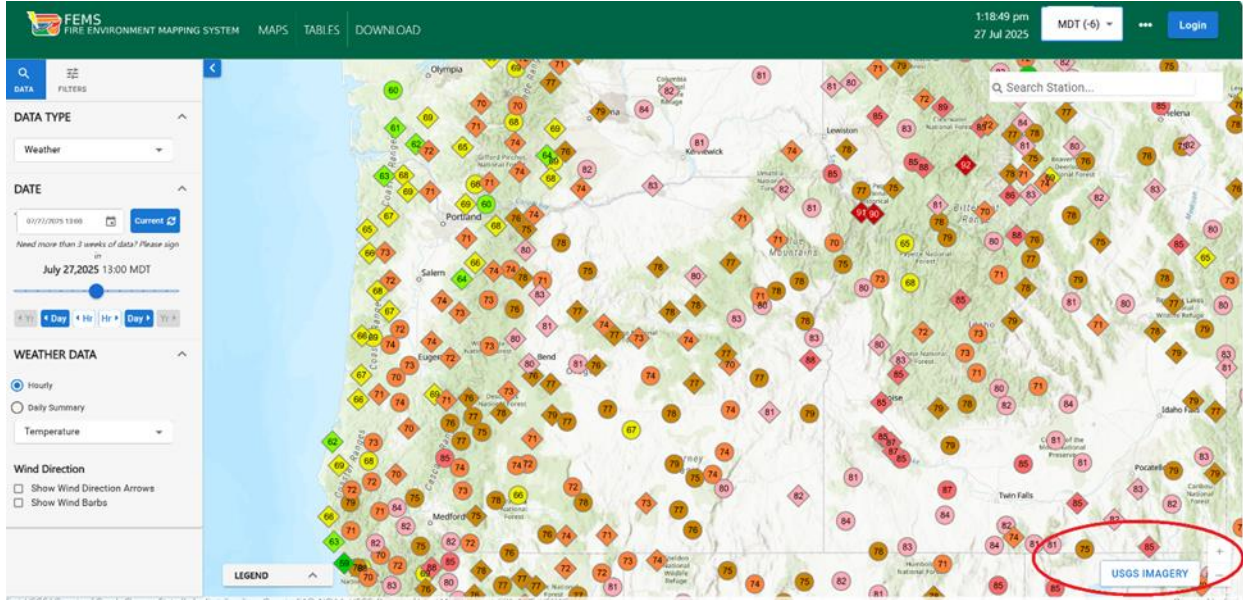
Data can be displayed in UTC or Standard Time:



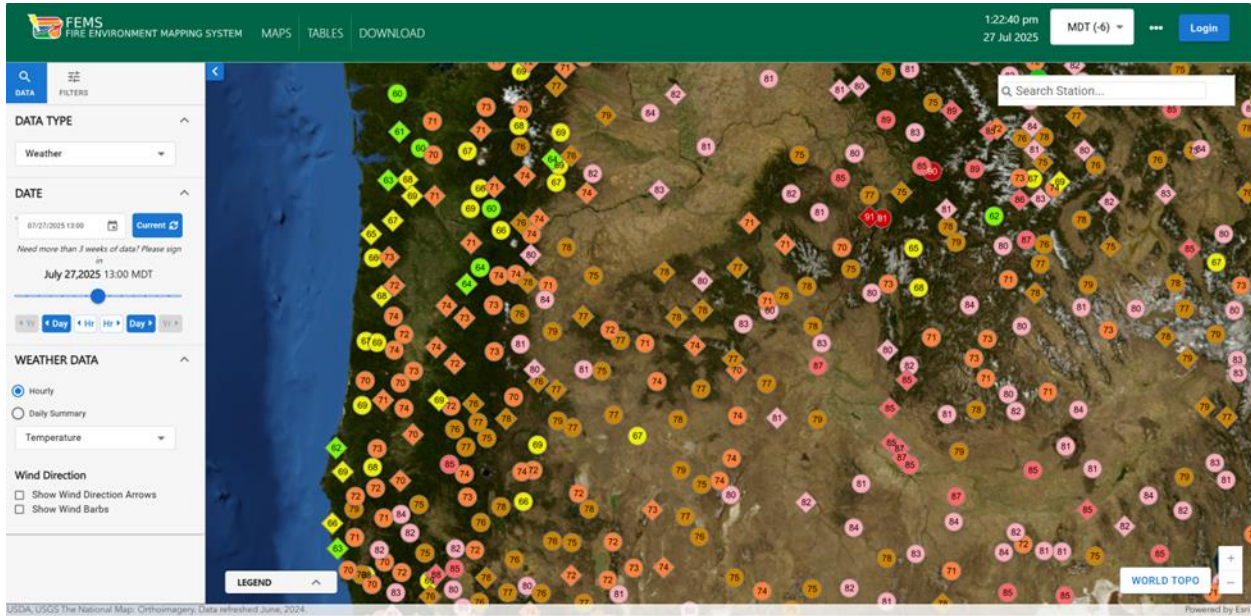
Map View

Two options are available for viewing the map.

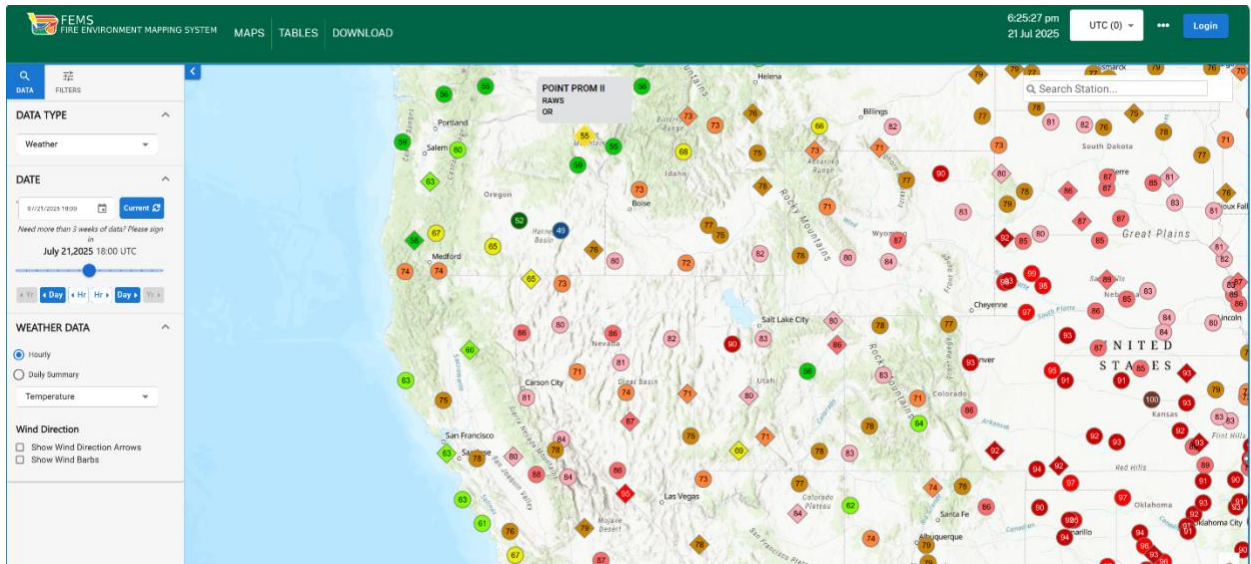
World Topo is the default.



Clicking on the “USGS IMAGERY” label will change the map.



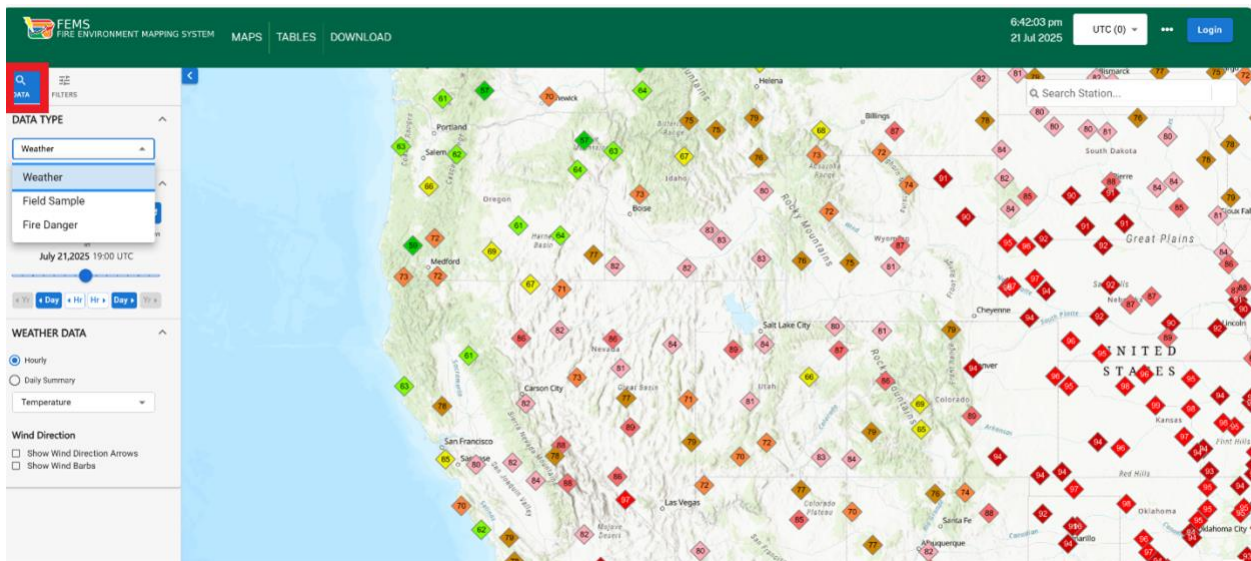
Selections on the left side will determine the map data displayed:



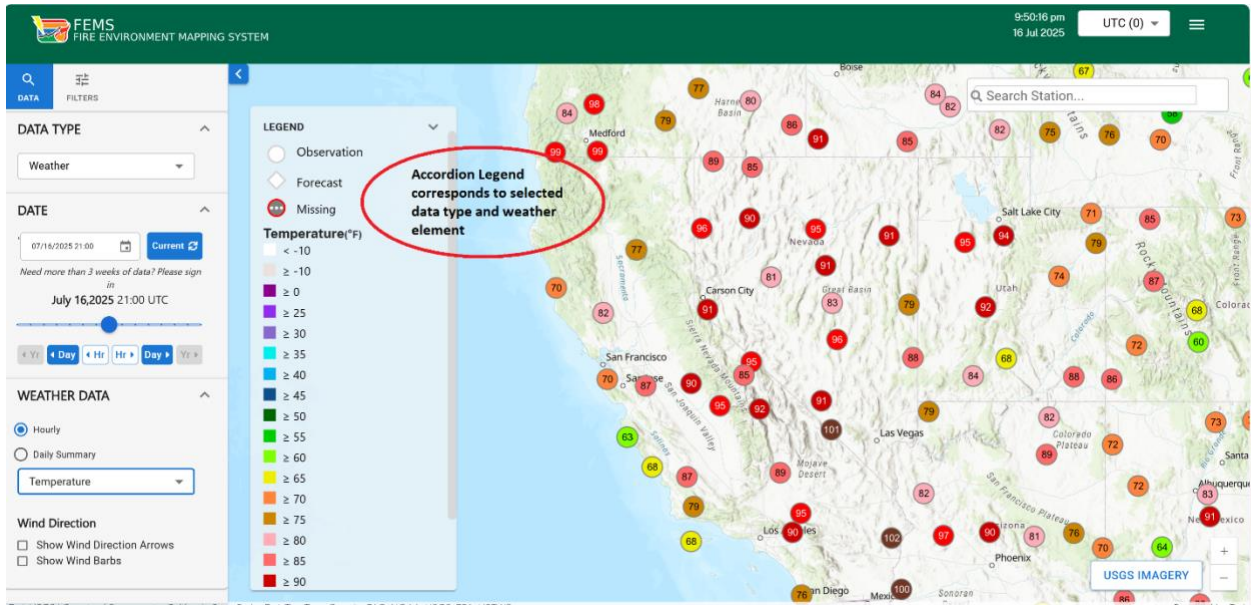
Zoom Capability, the map can be enlarged to locate the desired area or weather station.

Data Tab:

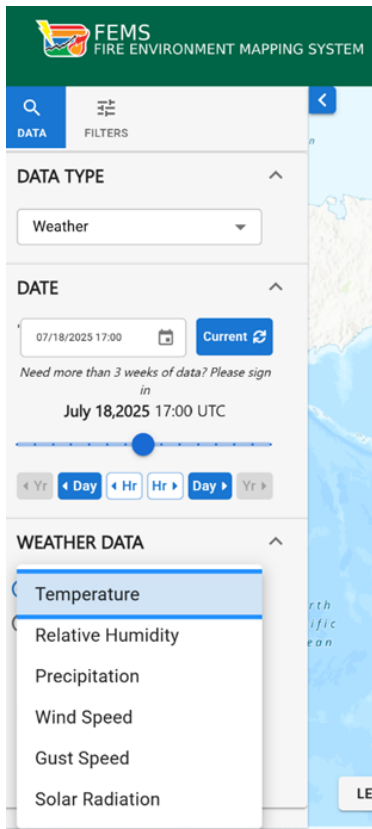
Under the “Data” tab, accordion menus and radial buttons will aid selections:



The Legend corresponds to the selected data type and element:



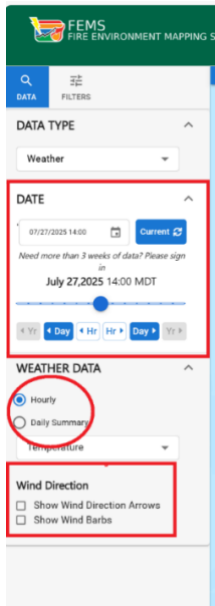
Available selections will depend on the data type selected. Here, “Weather” is the selected data type. The list of elements available for view on the map are located in the dropdown:



Weather is available hourly or daily.

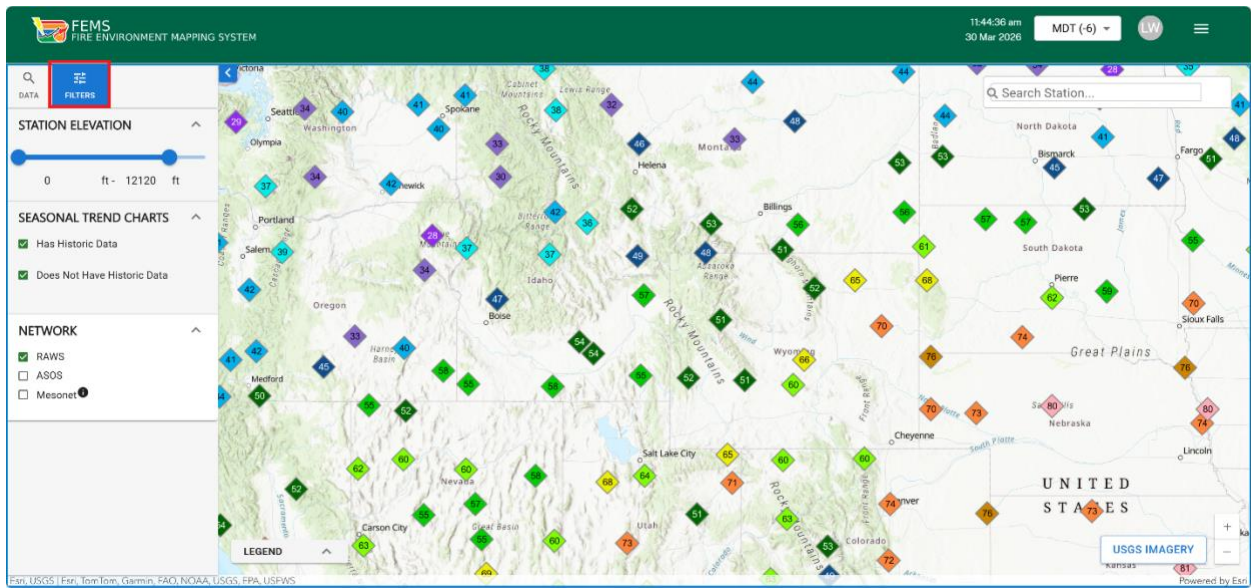
A specific date range can be requested. Public users will be able to view the previous 14 days of observations and seven days forecasts. Authorized users will have access to the full range of station data.

Options exist for viewing the wind directions, as either arrows or barbs.

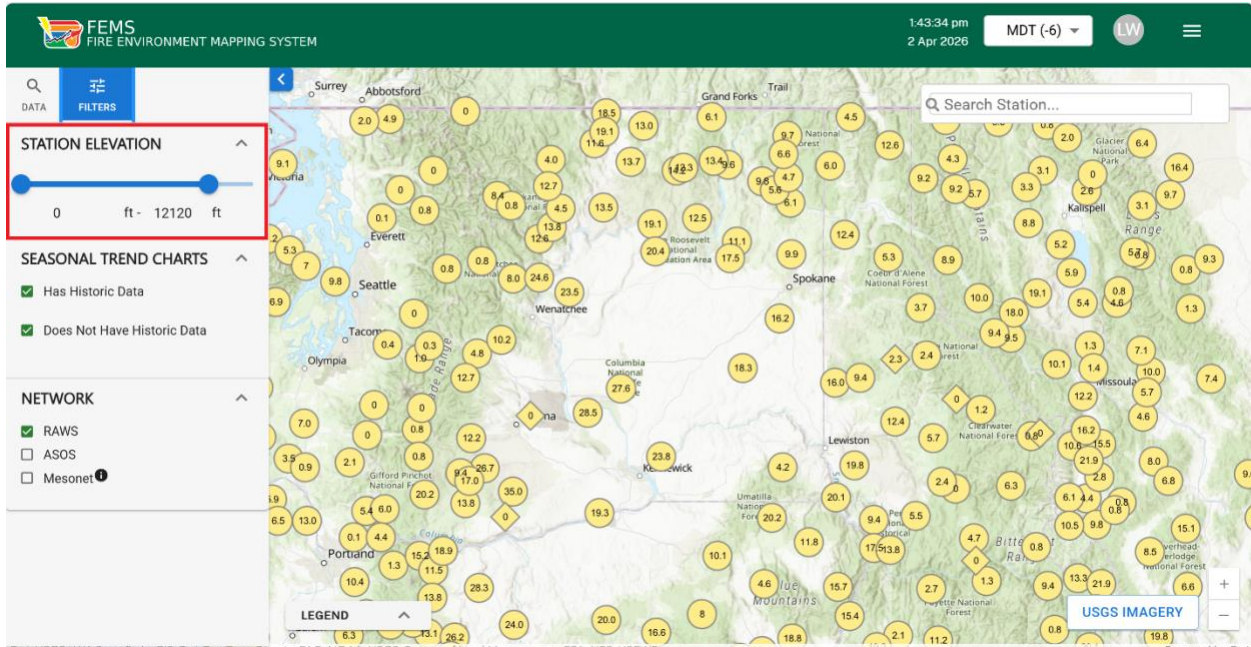


Filter Tab:

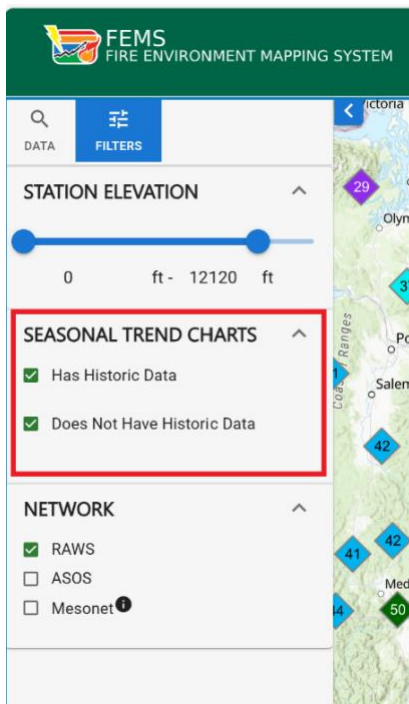
Under the “Filter” Tab there are several filter options to narrow the stations displayed.



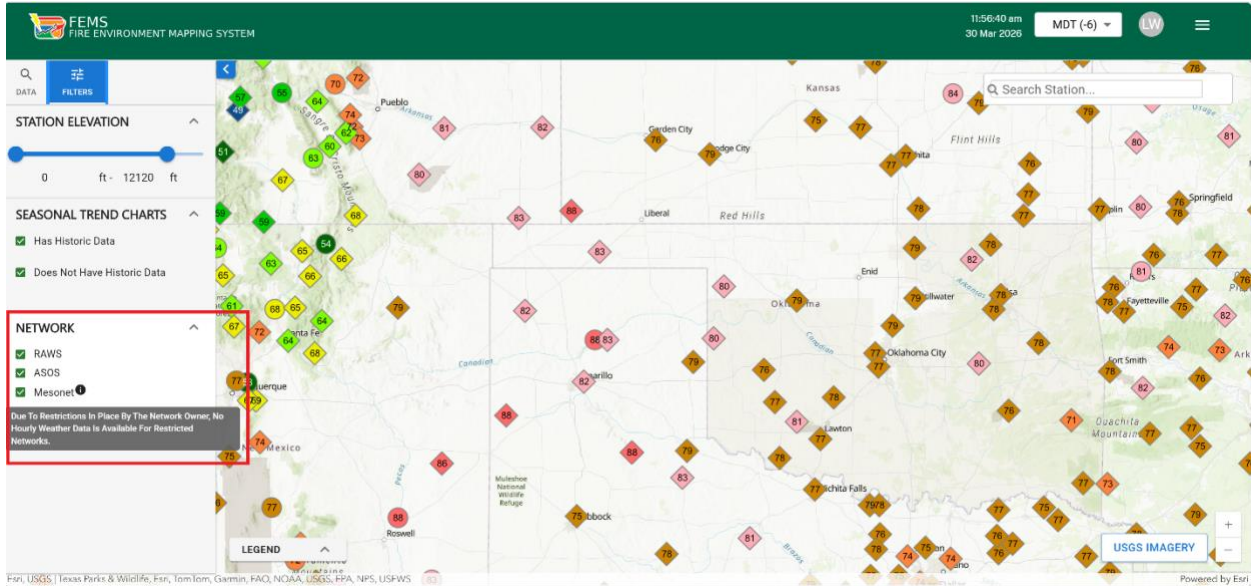
“Station Elevation” can be adjusted to only display stations at a desired elevation by adjusting the slider bar.



“Seasonal Trend Charts” check boxes filter out stations with or without historical data.



“Networks” check boxes will display only the selected networks.

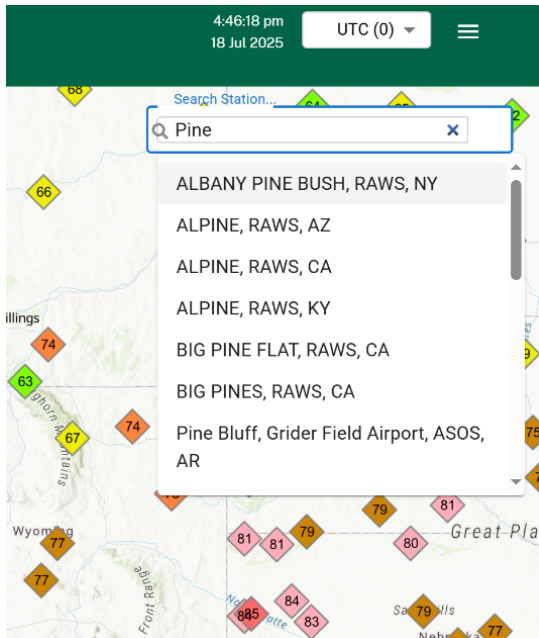


Restricted Mesonets

Important: Due to restrictions in place by the some of the network owners, no hourly weather data is available for Restricted Networks.

Dynamic Search:

The dynamic search function can be used to display the desired weather stations:



To display the weather data, click on the weather station icon. All weather elements will be displayed. The table format is the default display.

Solid lines indicate actual observations. Dotted lines delineate forecasted observations.

Weather data is available in expanded table format by clicking on the “Go To Table” link.

PINE CREEK, RAWLS, ID, 101222

STATION METADATA

EXPAND TO VIEW CHART

EXPAND TO VIEW OBSERVATION TABLE

Go To Table

DATE/HOUR	1-26/5:00	03-31-26/6:00	03-31-26/7:00	03-31-26/8:00
HR-MIN (LST)	19 MST	06:19 MST	07:19 MST	08:00 MST
TEMP (°F)	36	37	37	37
RH (%)	99	98	99	89
PRECIP (IN)	0.04	0.01	0.03	0.02
WS (MPH)	2	3	3	2
WD (°)	↖	↖	↑	↖
GS (MPH)	7	7	9	7
SR (W/m2)	0	0	5	25
SF	N	N	N	N

Chart and Station Metadata:

Options are available to view the data in chart form as well as the Station Metadata by clicking the down carrots.

PINE CREEK, RAWLS, ID

STATION METADATA

NETWORK	NETWORK ID	OWNER
RAWS	2	USFS
LATITUDE	LONGITUDE	ELEVATION
44.25028	-116.19861	5400
GRASS TYPE	ASPECT/SLOPE	AVG ANNUAL PRECIP
PERENNIAL	S/ 1: 0-25%	29.33

EXPAND TO VIEW CHART

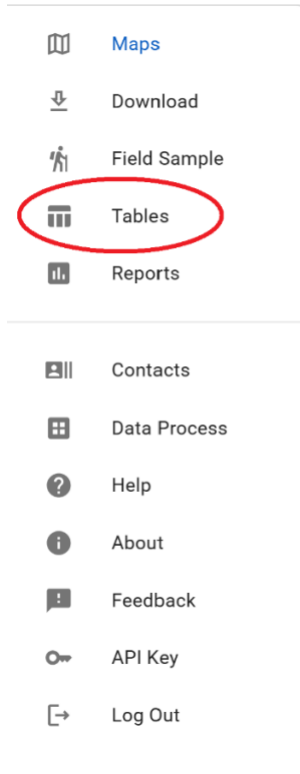
ELEMENT: Hourly Temperature & Relative Humidity

Temperature (°F) and Relative Humidity (%) chart showing actual observations (solid lines) and forecasts (dotted lines) from July 13 to July 19.

EXPAND TO VIEW OBSERVATION TABLE

Table View

Weather data and station information is available in table form by accessing the “Tables” option in the menu.

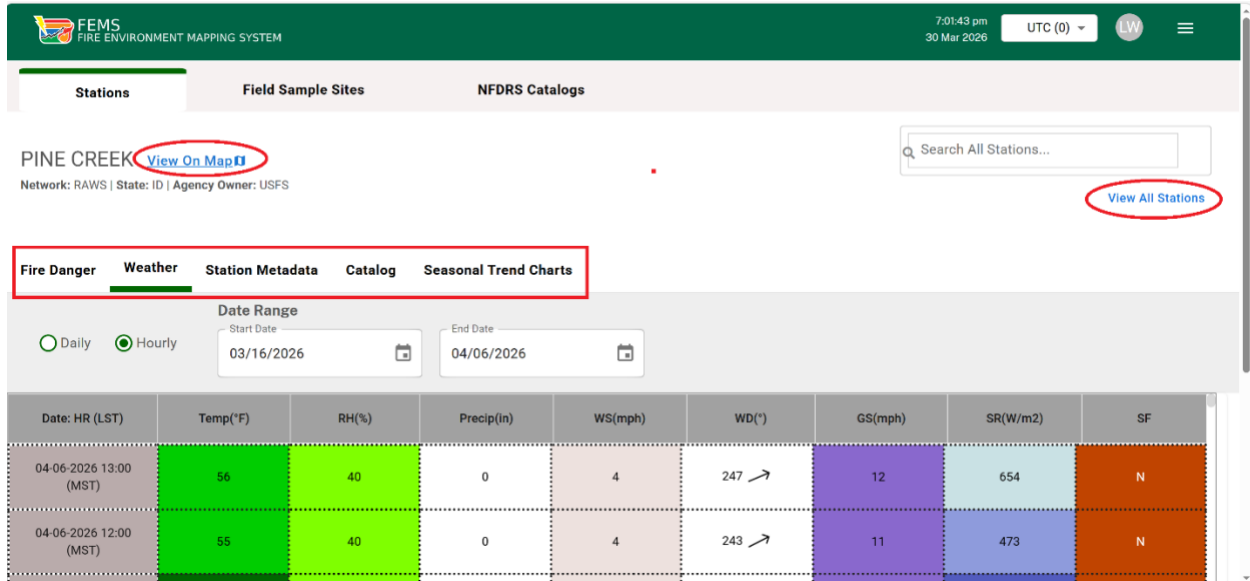


The “Stations” tab will open:

STATIONS	Field Sample Sites	NFDRS Catalogs		
<div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid red; padding: 5px;"> <p>Search Station</p> <input type="text" value="Search Station..."/> </div> <div style="border: 1px solid red; padding: 5px;"> <p>Network State Agency Owner</p> <p>All All All</p> </div> </div>				
STATION NAME ↑	STATION ID	NETWORK	STATE	AGENCY OWNER
10K	55522198	RAWS	NM	USFS
3 MILE	102004	RAWS	ID	USFS
7 MILE RIDGE	313302	RAWS	NC	S&PF
Aberdeen, Aberdeen Regional Airport	55522405	ASOS	SD	NWS
Abernathy 5ENE	55522971	Mesonet	TX	WestTX Mesonet
ABERNATHY MTN.	451209	RAWS	WA	S&PF
Abilene 3NE	55523687	Mesonet	TX	WestTX Mesonet

Click on the desired station or use the dynamic search view weather and station information.

Dynamic search and filters are available to isolate the desired weather station.



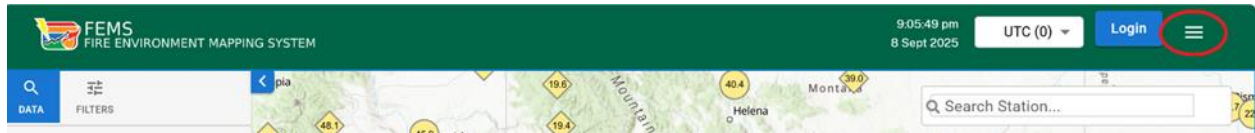
Links provide easy navigation to view the station on the map (“View on Map”) or return to the station list (“View All Stations”).

Additional tabs provide Station and Fire Danger information.

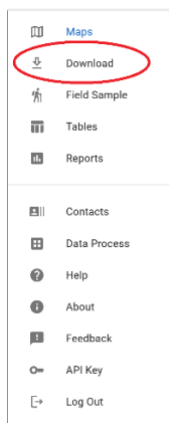
Data Download

Additional weather data is available as a Data Download.

1. Click on the “Hamburger” icon to open the Menu:



2. Select the “Download” option in the menu:



3. Select "Weather" as the Data Subject Area:

FEMS Data Download

Options to refine your download will appear as you make selections.
Changes to selections may impact your available options and selections.

Data Subject Area *Required*

Weather

- Weather
- Field Sample
- Site Metadata
- Fire Danger

Daily

Hourly

Data Format *Required*

Select a Data Format

Date Range *Required*

Start Date End Date

4. Select desired Data Set:

FEMS Data Download

Options to refine your download will appear as you make selections.
Changes to selections may impact your available options and selections.

Data Subject Area *Required*

Weather

Data Set *Required*

Select a Data Set

- Weather Observation
- Weather Forecast
- Weather Observation and Appended Forecast

Data Format *Required*

Select a Data Format

Date Range *Required*

Start Date End Date

5. If “Hourly” is selected, FW21 is available as a “Data Format”:

FEMS Data Download

Options to refine your download will appear as you make selections.
Changes to selections may impact your available options and selections.

Data Subject Area Required

Weather

Data Set Required

Weather Observation and Appended Forecast

Date Time Frequency Required

Daily

Hourly

Data Format Required

Select a Data Format

- CSV (UTC)
- FW21 (LST - Local Standard Time)
- ZIP (UTC)

6. Select the desired “Data Range”.
7. Select the desired Station or Stations.
- a. Hourly Weather data cannot be downloaded for Restricted Mesonet.

FEMS Data Download

Options to refine your download will appear as you make selections.
Changes to selections may impact your available options and selections.

Data Subject Area Required

Weather

Data Set Required

Weather Observation and Appended Forecast

Date Time Frequency Required

Daily

Hourly

Data Format Required

CSV (UTC)

Time is in UTC

Date Range Required

Start Date

End Date

Start Hour

End Hour

Forecast data may be incomplete on day seven.

[Previous 3 Days AND 7-Day Forecast](#)

Selected Station(s) Required

pine creek

• Up to 300 stations can be selected for requests that are greater than or equal to 20-year worth of data

These are your selected stations. Total stations selected: 1

Pine Creek, RAWLS, ID, 101222

[Clear All](#)

[Download Data](#) [Copy Data Link](#)

- 8. Data can be downloaded into a CSV file viewed in Excel or copied as a link for further analysis.
 - a. The Copy Data Link (CDL) replaces the WXML functionality in WIMS by generating an API.

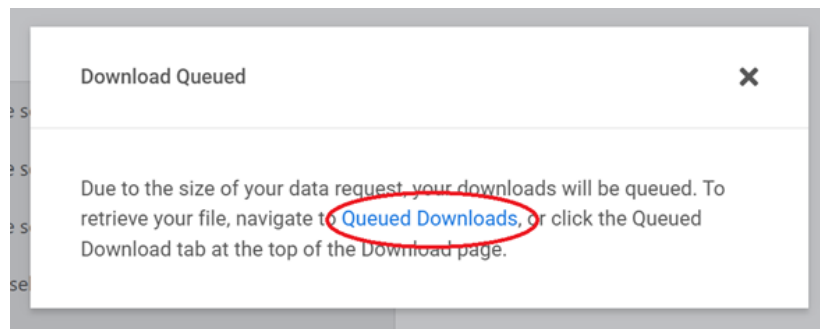
Additional selections will vary depending on the Data Subject Area.

Times displayed in Local Standard Time (LST) at the station site and are not currently adjusted for Daylight Savings Time.

Queued Download

Data sets too large for direct downloads will be available on the “Queued Download” tab.

- 1. The “Copy Data” link will not be available.
- 2. After selecting the “Download Data” button a popup will appear with a link to the “Queued Download” tab.



- 3. Access is also available by selecting the “Queued Download” tab directly.
- 4. The files will be listed with their progress.
 - a. When completed, click on the file name to download.

FILE	STATUS	PROGRESS	DATE REQUESTED (MDT) ↓	DATE COMPLETED (MDT)
WXOBS_102004,101905,...101108_2017-03-15T23:30:00.000Z_2026-04-06T23:29:59.000Z.CSV	COMPLETED	100%	03/30/2026 12:32	03/30/2026 12:36

- 5. Downloads will be available for 24 hours.

Zip Files

The option to Zip a download file is now available for all download formats.

Additional Resources:

Copy Data Link:

[TechTip Copy Data Link in FEMS.pdf](#)

Using Copy Data Link in Excel:

[TechTip- Using the Copy Data Link from FEMS in Excel.pdf](#)

Using FEMS Get Data Manipulation (URL):

[FEMS TechNote-2025-09-Get Data Manipulation.pdf](#)