

FireFamilyPlus Database Weather Data Import

I. Create the Database File in FireFamilyPlus

- Open FireFamilyPlus version 5
- Create a new database file in FireFamilyPlus (FFP): FFP → File → New
- Name the new database file.
- Save the new database file in a location where it can easily be found later. This step creates an empty database file for use in FFP.
- The user will now learn to populate the database with historical, hourly weather data for their planning area.

II. Weather Data

A. Station Catalog Information

Before hourly weather data can be imported into the FFP database, the user must first identify all of the Remote Automated Weather Stations (RAWS) that will be used for analysis in the planning area. Once the weather stations that are to be used in the analysis process have been identified, the user must then download the weather station catalog information for each RAWS from the internet and then import this information into FFP.

There are two ways the user can access and download station catalog files.

1. Station catalog files can be found on the National Fire and Aviation Management (FAMWEB) website: <https://fam.nwcg.gov/fam-web/>
2. Station catalog files can also be found on the Kansas City Fire Access Software (KCFAST) website: <https://fam.nwcg.gov/fam-web/kcfast/mnmenu.htm>

1. Downloading Station Catalog Information from FAMWEB:

- Open the FAMWEB website (<https://fam.nwcg.gov/fam-web/>)
- From the menu items on the left side of the home page select '*Wildland Fire Related Links*'
- Select 'Fire and Weather Data' and a new page will be displayed:

https://fam.nwcg.gov/fam-web/weatherfirecd/

FIRE & WEATHER DATA

Home
[State Data](#)
[Formats](#)
[KMZ](#)
[Zip Files](#)

Feb 13, 2019
 Weather station and observations data have been updated with 2018 data

June 23, 2018
 FWS Fire occurrence data has been updated with 2017 data. See [State Data](#).

March 12, 2018
 BIA, BLM, BOR, NPS, and FS Fire occurrence data has been updated with 2017 data. See [State Data](#).
 Updated **KMZ** files are now available for BIA, BOR, BLM, and NPS.

April 21, 2015
 California Fire occurrence data has been updated with 2011-2014 data.

FireFamily Plus 4 is officially released
 For more information visit by firemodels.org.
 FPL files will no longer be available for DOI agencies. Please call the Fire Applications Helpdesk for assistance (1-866-224-7677) should a special need arise.
 The intent of this site is to provide US Federal wildland fire managers with ready access to historical data which will allow them to concentrate on the execution of their jobs and not on how to obtain the necessary information resources.

Data Formats are available for printing from the [Formats](#) page.
 Please direct any feedback on the usefulness or usability of this site to: [weather_data](#).

- Click on 'State Data'
- Select the State and a new page will be displayed:

https://fam.nwcg.gov/fam-web/weatherfirecd/state_data.htm

Fire & Weather Data: Arizona

Home
[State Data](#)
[Formats](#)
[KMZ](#)
[Zip Files](#)

Select state:

Jump to data rows	Last Updated
Weather Files	13-Feb-2019
Fires - BIA	12-Mar-2018
Fires - BLM	12-Mar-2018
Fires - FS	12-Mar-2018
Fires - FWS	23-Jun-2018
Fires - NPS	12-Mar-2018

Weather Files

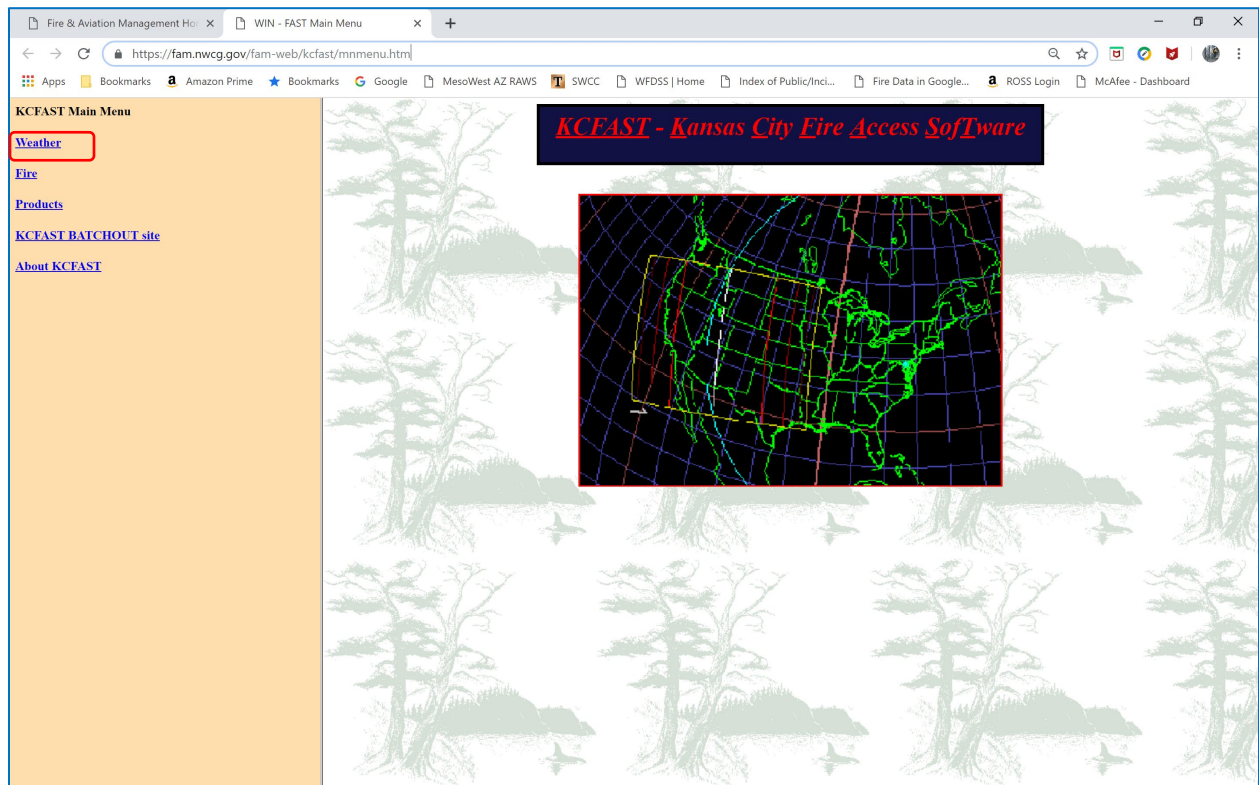
Station Number	Name	Station Type	Catalog	Weather FW9	Weather FW13	Years
021004		2	wlstinv1!021004.txt	wx021004.fw9	wx021004.fw13	1974-1977 1979-1992
021005	COLUMBINE	4	wlstinv1!021005.txt	wx021005.fw9	wx021005.fw13	1976-1984 1989-2018
021006		7	wlstinv1!021006.txt	wx021006.fw9	wx021006.fw13	1979-1986
021007	MULE SHOE	4	wlstinv1!021007.txt	wx021007.fw9	wx021007.fw13	1987-1995 1997-2018
021008	BLACK HILLS	4	wlstinv1!021008.txt	wx021008.fw9	wx021008.fw13	1988-2018
021009	DRY LAKE	4	wlstinv1!021009.txt	wx021009.fw9	wx021009.fw13	1950-1950 1997-2018
021010	NOON CREEK	4	wlstinv1!021010.txt	wx021010.fw9	wx021010.fw13	1993-2018
021099	CORONADO PORTABLE 2	3	wlstinv1!021099.txt	wx021099.fw9	wx021099.fw13	
021101		7	wlstinv1!021101.txt	wx021101.fw9	wx021101.fw13	1967-1969
021102		7	wlstinv1!021102.txt	wx021102.fw9	wx021102.fw13	1971-1974
021103		7	wlstinv1!021103.txt	wx021103.fw9	wx021103.fw13	1979-1981
021104	GUTHRIE	4	wlstinv1!021104.txt	wx021104.fw9	wx021104.fw13	1985-2018
021105	TRAIL CABIN	4	wlstinv1!021105.txt	wx021105.fw9	wx021105.fw13	1992-2018
021106	STRAYHORSE	4	wlstinv1!021106.txt	wx021106.fw9	wx021106.fw13	2002-2018

- The station catalog files can be selected for each RAWs in the 'Catalog' column.

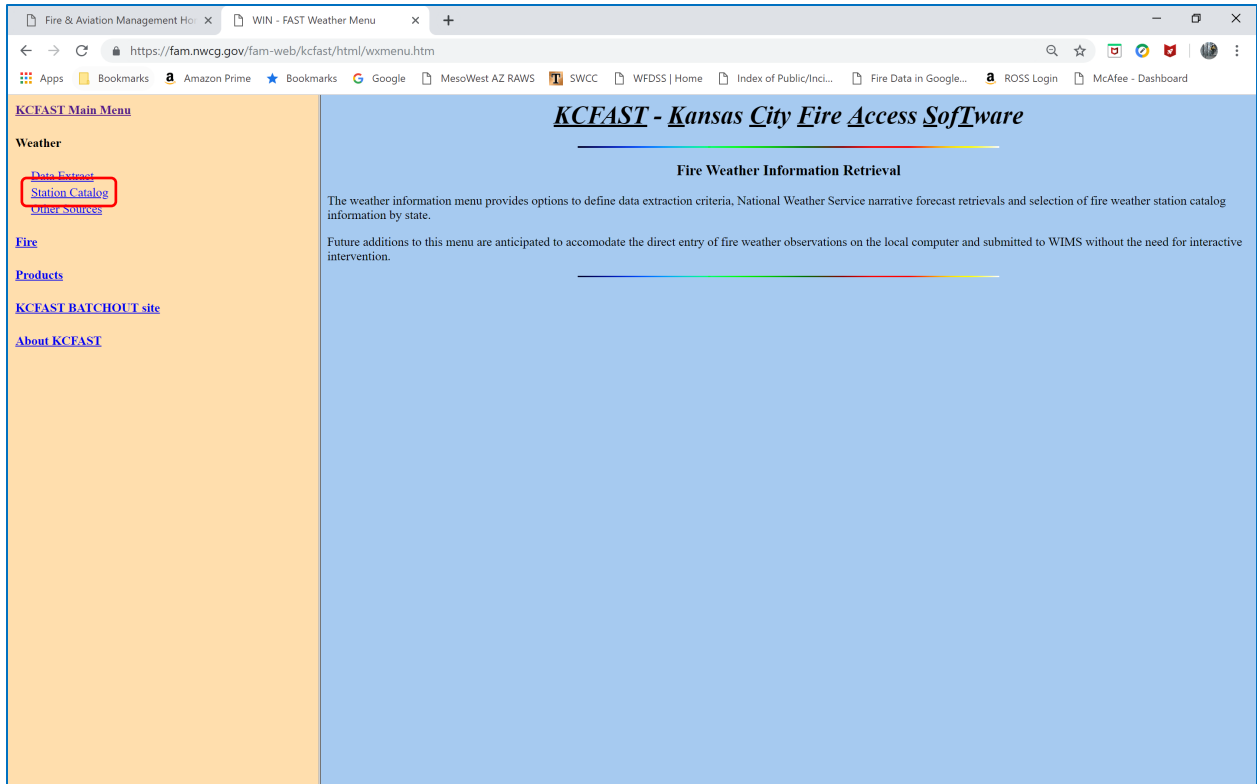
- Station catalog files can only be downloaded individually. Right-click on the station catalog file of interest and select the 'Save link as...' option. Download and save the file to a location on the computer where it can be located later. The user will need to upload the station catalog information into FFP for all of the RAWs the user is working with in their planning area.

2. Downloading Station Catalog Information from KCFAST

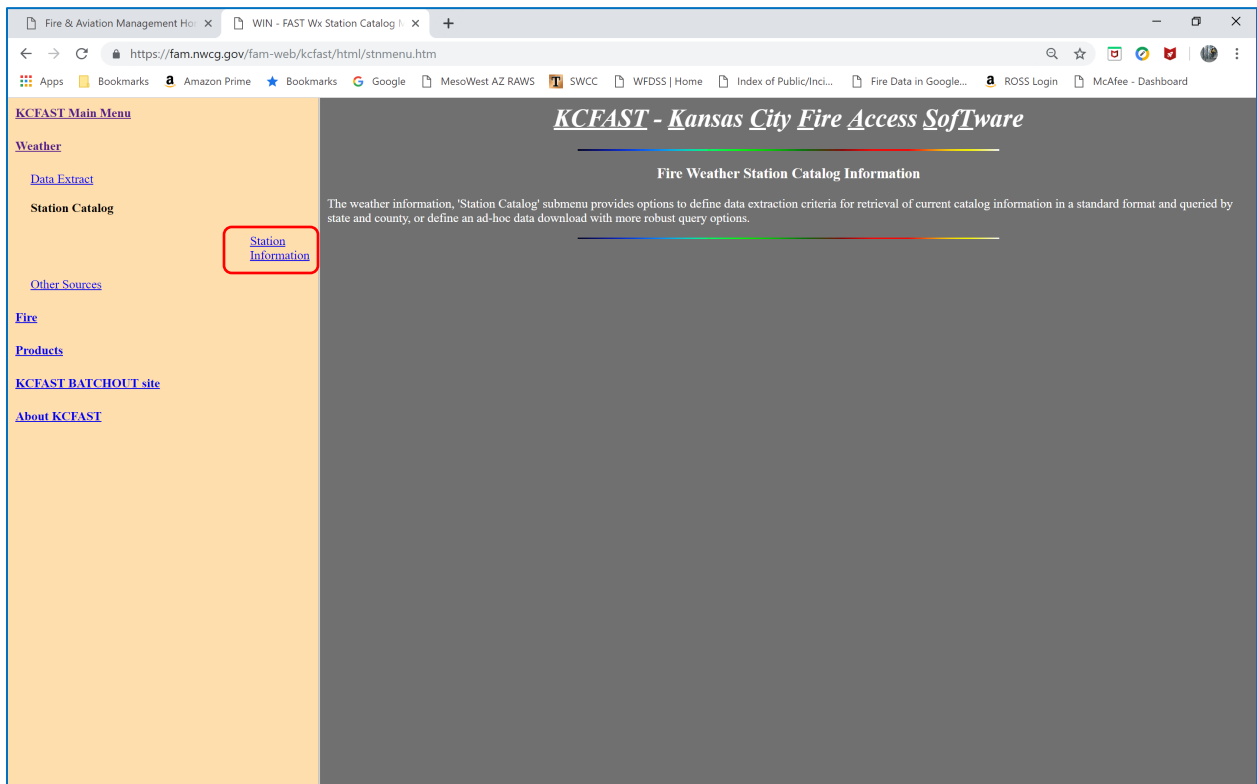
- Open the KCFAST website (<https://fam.nwcg.gov/fam-web/kcfast/mnmenu.htm>). Note: The KCFAST website can also be accessed through the FAMWEB website. The link is located with the menu items on the left side of the FAMWEB home page. The KCFAST home page will load.
- Select 'Weather' from the menu items on the left side of the home page.



- Select 'Station Catalog' from the menu items on the left side of the page. A new window will open.



- Select 'Station Information' from the menu items on the left side of the page and a new window will open.



- This window allows the user to select station information either 'BY STATE' or 'BY SINGLE STATION'. This exercise recommends selecting 'BY SINGLE STATION'.
- Select 'BY SINGLE STATION' and enter the Station ID number. This example is requesting station information for station 021007.
- Select 'Send file to FTP site'.
- When sending the station catalog file to FTP site, the user can indicate if they wish to receive an email notification when the report is available.
- Select 'Submit'. A new window will appear with a message confirming the information request.

The screenshot shows a web browser window with the URL <https://fam.nwcc.gov/fam-web/kcfast/html/ststmenu.htm>. The page title is "Weather Station Information".

Left Sidebar (KCEFAST Main Menu):

- Weather
 - Data Extract
 - Station Catalog
- Other Sources
- Fire
- Products
- KCEFAST BATCHOUT site
- About KCEFAST

Main Content Area:

Please select station information either "BY STATE" or "BY SINGLE STATION"; then enter the appropriate query criteria. Note that if your selection is "BY STATE", you must also choose the desired output format. If your selection is "BY SINGLE STATION", you do not need to select a state.

STATION INFORMATION

BY STATE BY SINGLE STATION

Desired Output:

- Formatted Report for State (Use "Formatted" option for FTP requests.)
 - By Forecast Zones
 - Fuel Models
 - Datafile Definition

State:

Station ID:

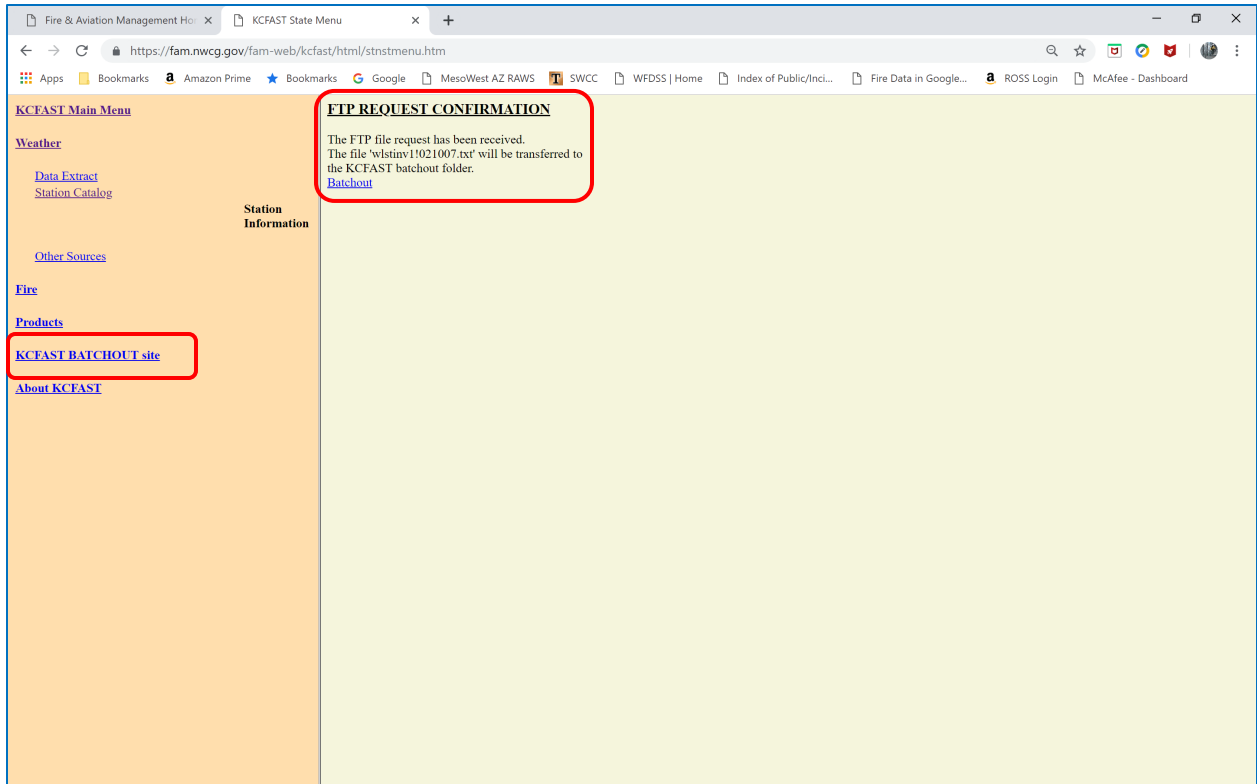
Output Destination:

Send file to browser Send file to FTP site

If sending file to FTP site, please indicate if you wish to receive an email notification when the report is available.

Send email Do not send email

- To access the station information from the FTP site, select 'KCEFAST BATCHOUT site' from the menu items on the left side of the screen or click on the 'Batchout' link in the confirmation message.



- The KCFAST batchout window lists results from all RAWs- and fire data-related information requests made through KCFAST. The requested station information is provided in a .txt file format and uses a specific naming convention. The user will need to scroll down through this extensive list to find their requested information.

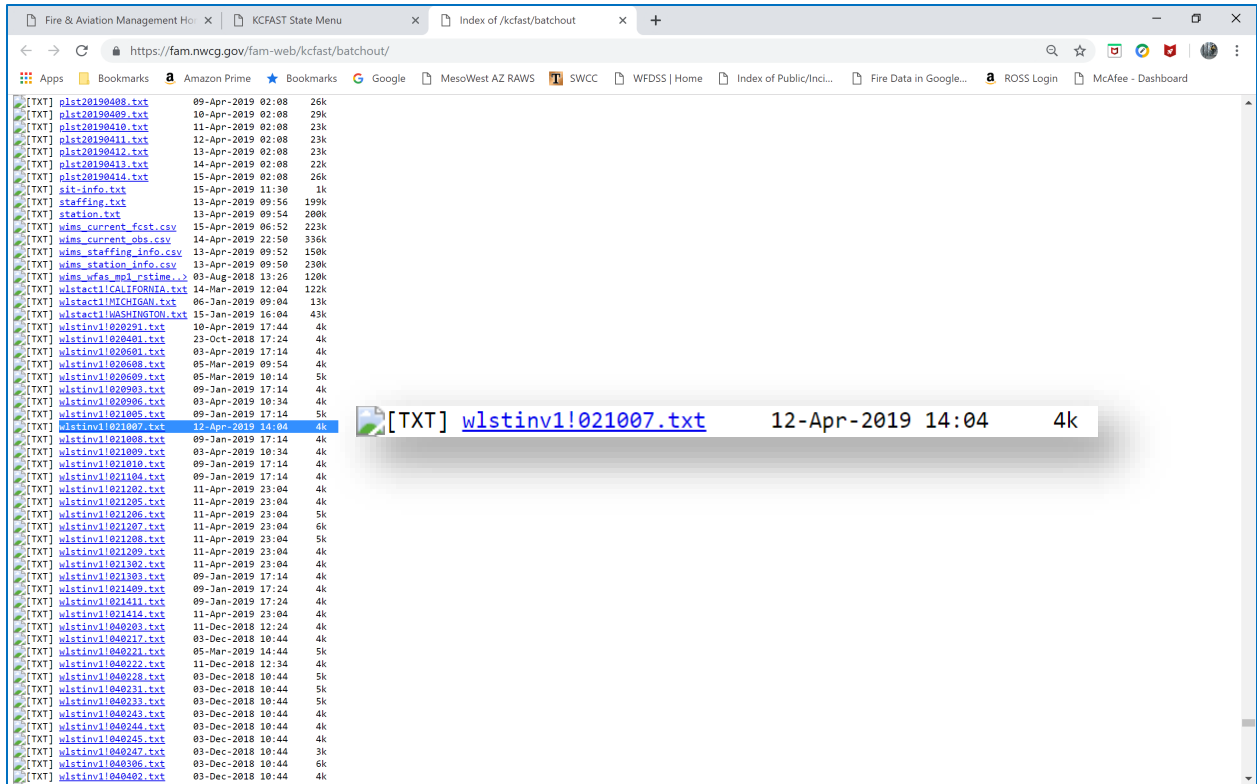
Fire & Aviation Management H... KCAFAST State Menu Index of /kcfast/batchout

https://fam.nwcg.gov/fam-web/kcfast/batchout/

Index of /kcfast/batchout

Name	Last modified	Size	Description
[DIR] Parent Directory	18-Nov-2015 23:15	-	
[DIR] NJCC/	14-Apr-2019 19:32	-	
[TXT] afigdt_buf	26-Apr-2011 23:19	1k	
[TXT] ca-monthly-obs-fu0	05-Apr-2019 03:17	0k	
[TXT] curfcst.txt	15-Apr-2019 06:56	185k	
[TXT] curobs.txt	14-Apr-2019 22:54	273k	
[TXT] giddx2018100815.txt	08-Oct-2018 18:12	21k	
[TXT] giddx2018100816.txt	08-Oct-2018 19:12	21k	
[TXT] giddx2018100817.txt	08-Oct-2018 20:12	21k	
[TXT] giddx2018100818.txt	08-Oct-2018 21:12	21k	
[TXT] giddx2018100819.txt	08-Oct-2018 22:12	24k	
[TXT] giddx2018100820.txt	08-Oct-2018 23:12	24k	
[TXT] giddx2018100821.txt	09-Oct-2018 00:12	24k	
[TXT] giddx2018100822.txt	09-Oct-2018 01:12	24k	
[TXT] giddx2018100823.txt	09-Oct-2018 02:12	28k	
[TXT] giddx2018100900.txt	09-Oct-2018 03:12	1k	
[TXT] giddx2018100901.txt	09-Oct-2018 04:12	1k	
[TXT] giddx2018100902.txt	09-Oct-2018 05:12	1k	
[TXT] giddx2018100903.txt	09-Oct-2018 06:12	1k	
[TXT] giddx2018100904.txt	09-Oct-2018 07:12	1k	
[TXT] giddx2018100905.txt	09-Oct-2018 08:12	1k	
[TXT] giddx2018100906.txt	09-Oct-2018 09:12	4k	
[TXT] giddx2018100907.txt	09-Oct-2018 10:12	4k	
[TXT] giddx2018100908.txt	09-Oct-2018 11:12	4k	
[TXT] giddx2018100909.txt	09-Oct-2018 12:12	8k	
[TXT] giddx2018100910.txt	09-Oct-2018 13:12	8k	
[TXT] giddx2018100911.txt	09-Oct-2018 14:12	8k	
[TXT] giddx2018100912.txt	09-Oct-2018 15:12	12k	
[TXT] giddx2018100913.txt	09-Oct-2018 16:12	13k	
[TXT] giddx2018100914.txt	09-Oct-2018 17:12	18k	
[TXT] giddx2018100915.txt	09-Oct-2018 18:12	19k	
[TXT] giddx2018100916.txt	09-Oct-2018 19:12	22k	
[TXT] giddx2018100917.txt	09-Oct-2018 20:12	23k	
[TXT] giddx2018100918.txt	09-Oct-2018 21:12	23k	
[TXT] giddx2018100919.txt	09-Oct-2018 22:12	23k	
[TXT] giddx2018100920.txt	09-Oct-2018 23:12	26k	
[TXT] giddx2018100921.txt	10-Oct-2018 00:12	27k	
[TXT] giddx2018100922.txt	10-Oct-2018 01:12	27k	
[TXT] giddx2018100923.txt	10-Oct-2018 02:12	30k	
[TXT] giddx2018100900.txt	10-Oct-2018 03:12	1k	
[TXT] giddx2018101001.txt	10-Oct-2018 04:12	1k	
[TXT] giddx2018101002.txt	10-Oct-2018 05:12	1k	
[TXT] giddx2018101003.txt	10-Oct-2018 06:12	1k	
[TXT] giddx2018101004.txt	10-Oct-2018 07:12	1k	
[TXT] giddx2018101005.txt	10-Oct-2018 08:12	1k	
[TXT] giddx2018101006.txt	10-Oct-2018 09:12	4k	
[TXT] giddx2018101007.txt	10-Oct-2018 10:12	4k	
[TXT] giddx2018101008.txt	10-Oct-2018 11:12	4k	

- This example requested station catalog information for RAWs 021007. The .txt file is labelled: wlstinv1!021007.txt
- The date, time, and file size are listed to the right of the filename.



- After the user has located the desired file in the list on the batchout site, right-click on the filename and select 'Save link as...'. Save the file to a location where it can be accessed later for import into FFP.
- Follow this process for downloading station catalog information for each RAWS station of interest.

B. Historical Weather Information

NFDRS2016 uses *hourly* weather data versus the legacy NFDRS model which utilizes daily weather data.

Weather data sources:

3. Climate, Ecosystem and Fire Applications (CEFA): <https://cefa.dri.edu/>

Historical weather data that can be retrieved through the CEFA website is *available for downloading through 2017*. Historical weather data *after 2017* can be obtained from the KCFast website. The process for using KCFast will be presented shortly.

CEFA allows the user to download hourly weather data in two ways:

- a) Download FW13 weather data files directly from the CEFA site: <https://cefa.dri.edu/> → Products → CEFA Data → NFDRS2016 RAWS (<https://cefa.dri.edu/raws/>)

← → ↻ https://cefa.dri.edu/raws/index.php

Apps Bookmarks Amazon Prime Bookmarks Google MesoWest AZ RAWS SWCC WFDSS | Home Index of Public/Incl... Fire Data in Google... ROSS Login

Program for Climate, Ecosystem and Fire Applications

Products CANSAC About CEFA Links

RAWS FW13

IMPORTANT NOTE REGARDING THESE FILES – PLEASE READ

During the course of preparing these FW13 files, data errors were discovered in a number of stations. In some cases, the data error disrupts the data formatting, which FF+ will struggle with. There are approximately 300 stations where known errors currently exist (there may still be other errors in the full dataset that we do not about until more detailed analyses are performed). We are continuing to attempt resolving the errors, but it is a manual process, and will take time with no current estimate of completion.

When a station ID is entered and the discovered errors resolved, the output file will become readily available for download. If the station is one in the list of known errors, a FW13 file will still be available, but note that it contains one or more known errors. A message will be displayed reminding of this. We are providing the files in both cases in an attempt to not hold up NFDRS16 regional analyses waiting for these files. It is strongly advised that the data files be examined in either case before analysis. It is at the analyst's discretion to determine how best to resolve the error. Please feel free to let us know of any discovered data errors (tim.brown@dri.edu).

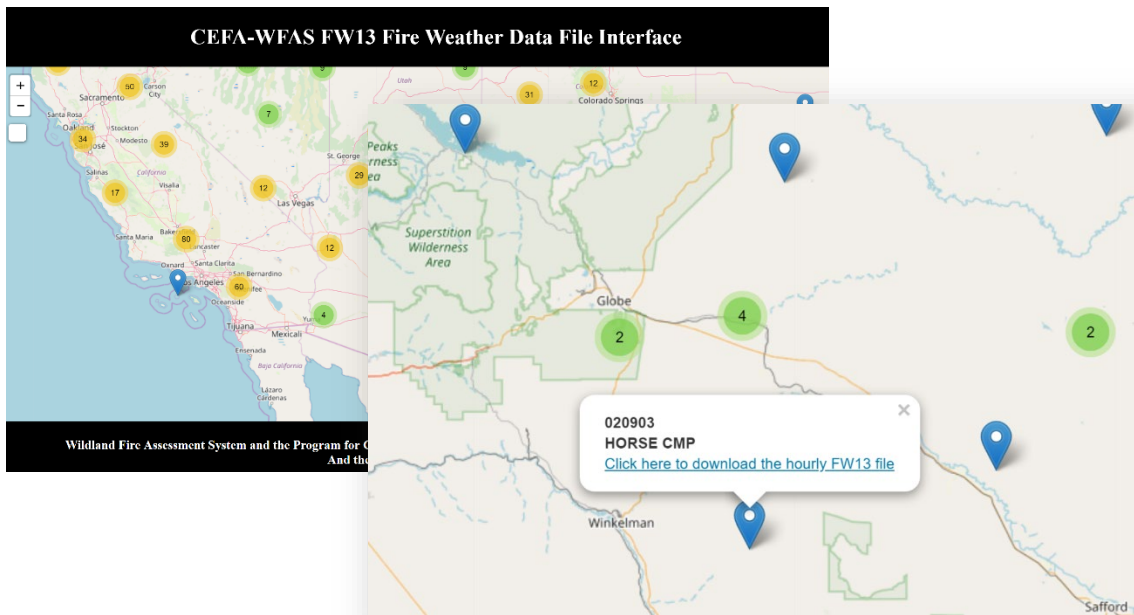
The Excel file contains two sheets – one listing stations with known errors resolved, the other a list of stations currently known to have a data issue. We will continue to update the files as best we can. Thank you for your patience.

RAWS List

Please enter NWSID:

[download "021007.fw13" in FW13 format ...](#)

- b) Enter the National Weather Service ID (NWSID) – RAWs ID number and click on 'locate FW13 file'
 - c) Click on 'download "xxxxxx.fw13" in FW13 format...'
1. Store the download file in a location where it can be located later. The user will upload this data into FFP after having collected the hourly data for all of the RAWs associated with the planning area.
- 4. CEFA-WFAS FW13 Fire Weather Data File Interface (interactive map website):**
<https://www.wfas.net/nfdrs2016/maps/>
- a) The interactive map allows the user to zoom into their state/planning area, select each RAWs, and download the hourly data.



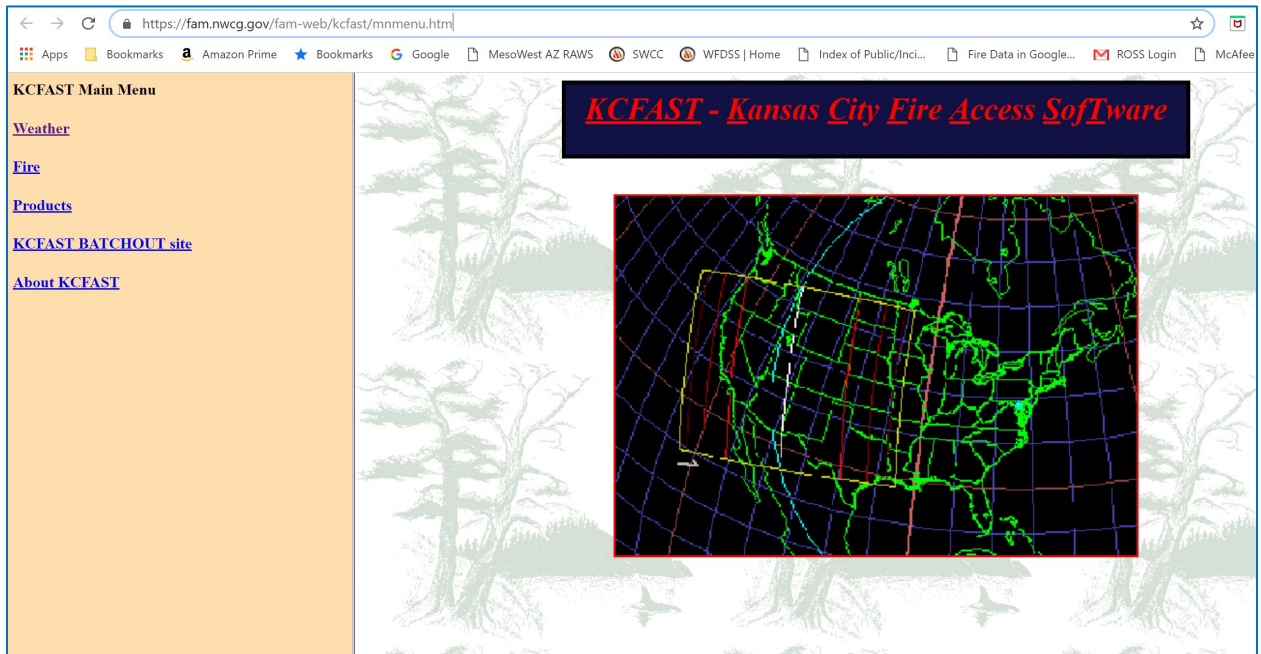
- b) Select a RAWS and follow the on-screen instructions to download the hourly fw13 data file. Save the file to a location where it can be found later. The user will upload this data into FFP after having collected the hourly data for all of the RAWS that are associated with the planning area.

5. KCFAST (Kansas City Fire Access Software)

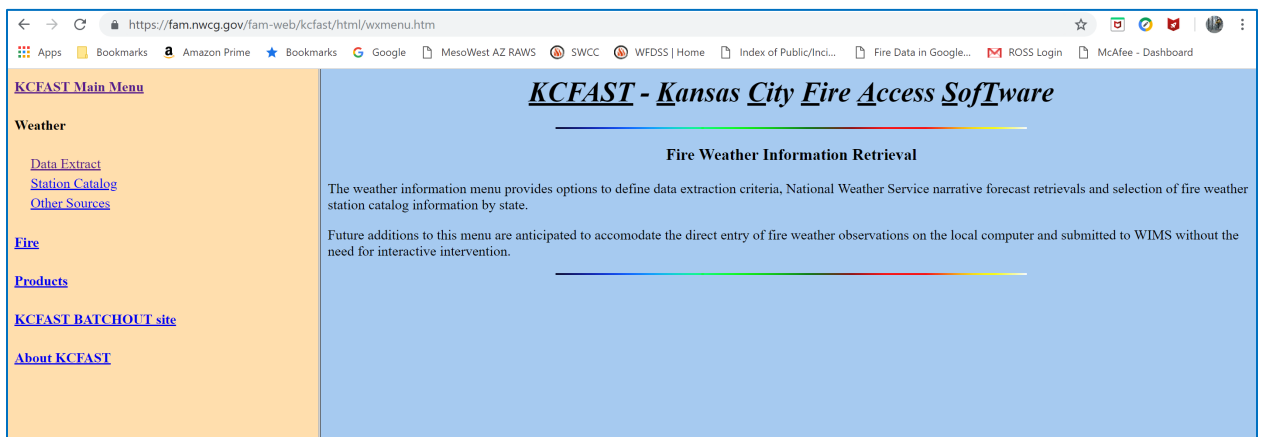
Historical hourly weather data beginning on January 1, 2018 to present can be downloaded through the KCFAST website: <https://fam.nwccg.gov/fam-web/kcfast/mnmenu.htm>

The KCFAST website can be accessed through FAMWEB (<https://fam.nwccg.gov/fam-web/>).

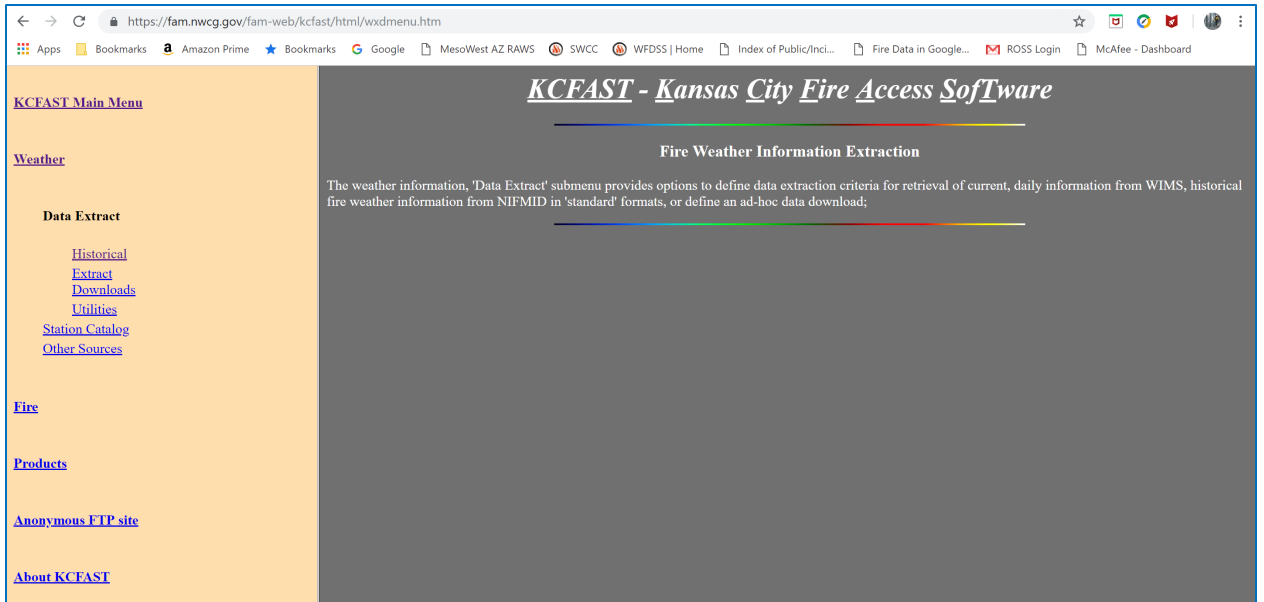
- From the menu items on the left side of the FAMWEB home page select 'KCFAST', a new page will be displayed:



- Select 'Weather' and a new page will be displayed:



- Select 'Data Extract', a new page will be displayed:



- Select 'Historical' and a new page will be displayed:



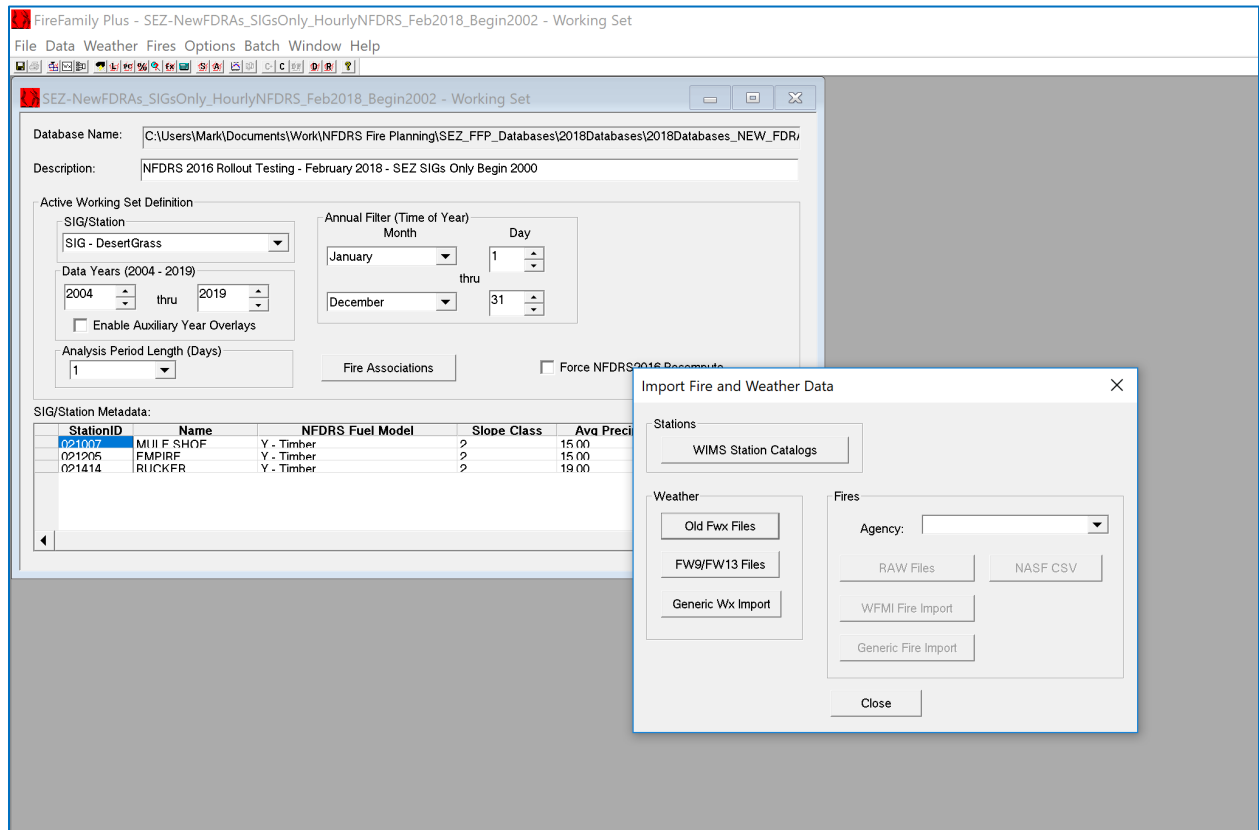
- Enter the applicable Station ID
- Enter the applicable Start and End Dates
- DO NOT FORGET to check the 'Hourly' radio button. The default is 'Daily'...
- Click on 'Run Extract'
- Save the download file to a location where it can be easily located. The user will upload this data into FFP after having collected the hourly data for all of the RAWs associated with the planning area.

C. Importing Historical Weather Information into FireFamilyPlus

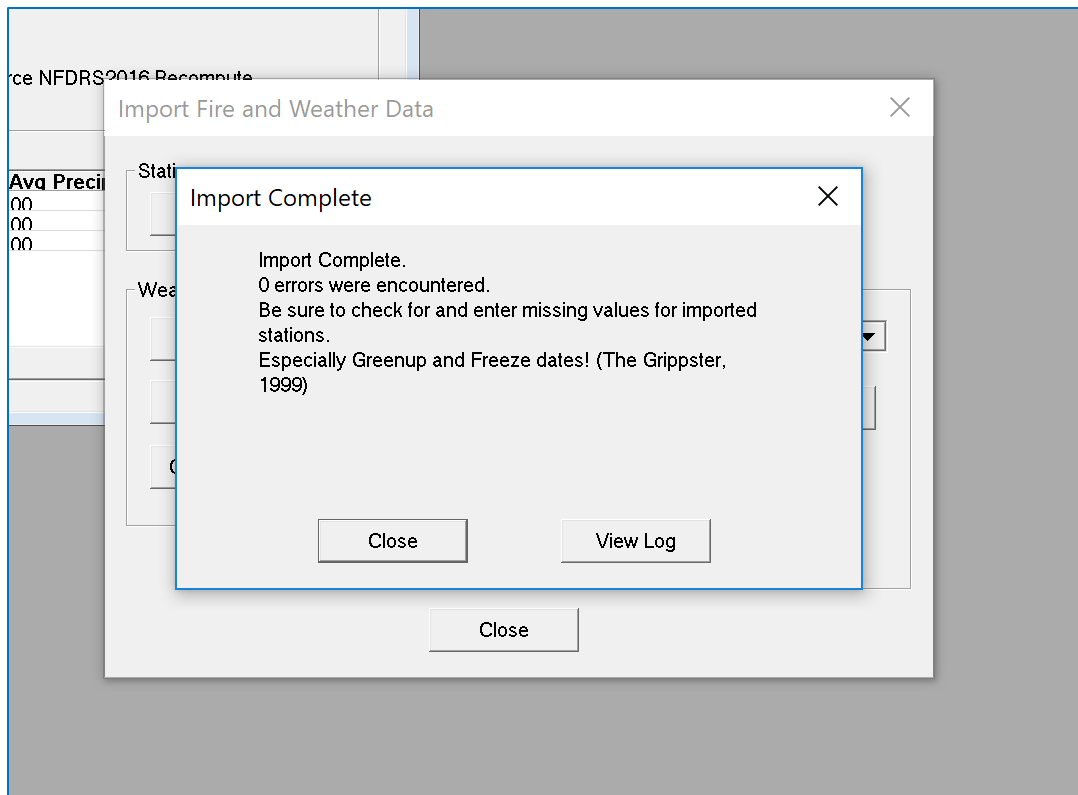
The user should have now downloaded the station catalog, and historical hourly weather data files (.fw13 format) for each RAWS to be used in the analysis process. The next step is to import this weather information into the FFP database.

1. Importing Station Catalog Information into FFP

- Open FFP, make sure to open the new FFP database that was created earlier, and select 'Data' from the menu items at the top of the page. Next, select 'Import...' and the 'Import Fire and Weather Data' window will appear on the screen:

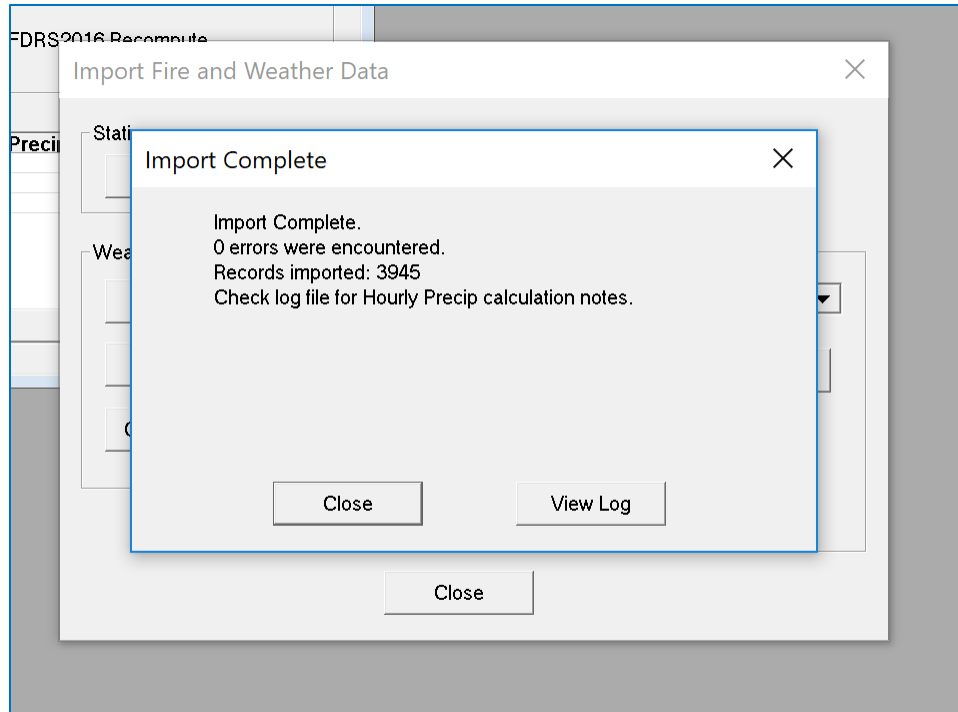


- Click on the 'WIMS Station Catalogs' button. Navigate to the location on the computer where the downloaded station catalog files have been stored. Each file will need to be imported individually. Double-click on a selected station catalog file (e.g. wlstinv11021007.txt) to import it into the FFP database. A new window will appear letting the user know that the file has finished importing:



2. Importing Historical Hourly Weather Data into FFP

- After importing all of the station catalog files, the FFP database is now ready to accept the hourly weather data for each RAWS.
- Navigate back to the 'Import Fire and Weather Data' window ('Data' → 'Import') and click on the 'FW9/FW13 Files' button.
- Navigate to the location on the computer where the downloaded hourly weather data files (e.g. .fw13 file format) have been stored. Each file for each RAWS will need to be imported individually. Double-click on a selected weather file to import it into the FFP database.
- A new window will appear that states: "*FireFamily Plus can overwrite existing records or disregard import data for existing records. Note: Existing data fields that are NULL will always be updated if import data is not NULL. Should existing records be overwritten?*" Click on the 'Yes' button. A new window will appear after the import is complete:



- Select 'Close' if no errors were encountered. If errors were noted, the user can select 'View Log' and the program will display any errors found.

Complete the process of importing station catalog and historical hourly weather files for each RAWS that will be considered for analysis in the planning area. Note: RAWS being considered for use in future analysis do not have to be physically located in the study area.