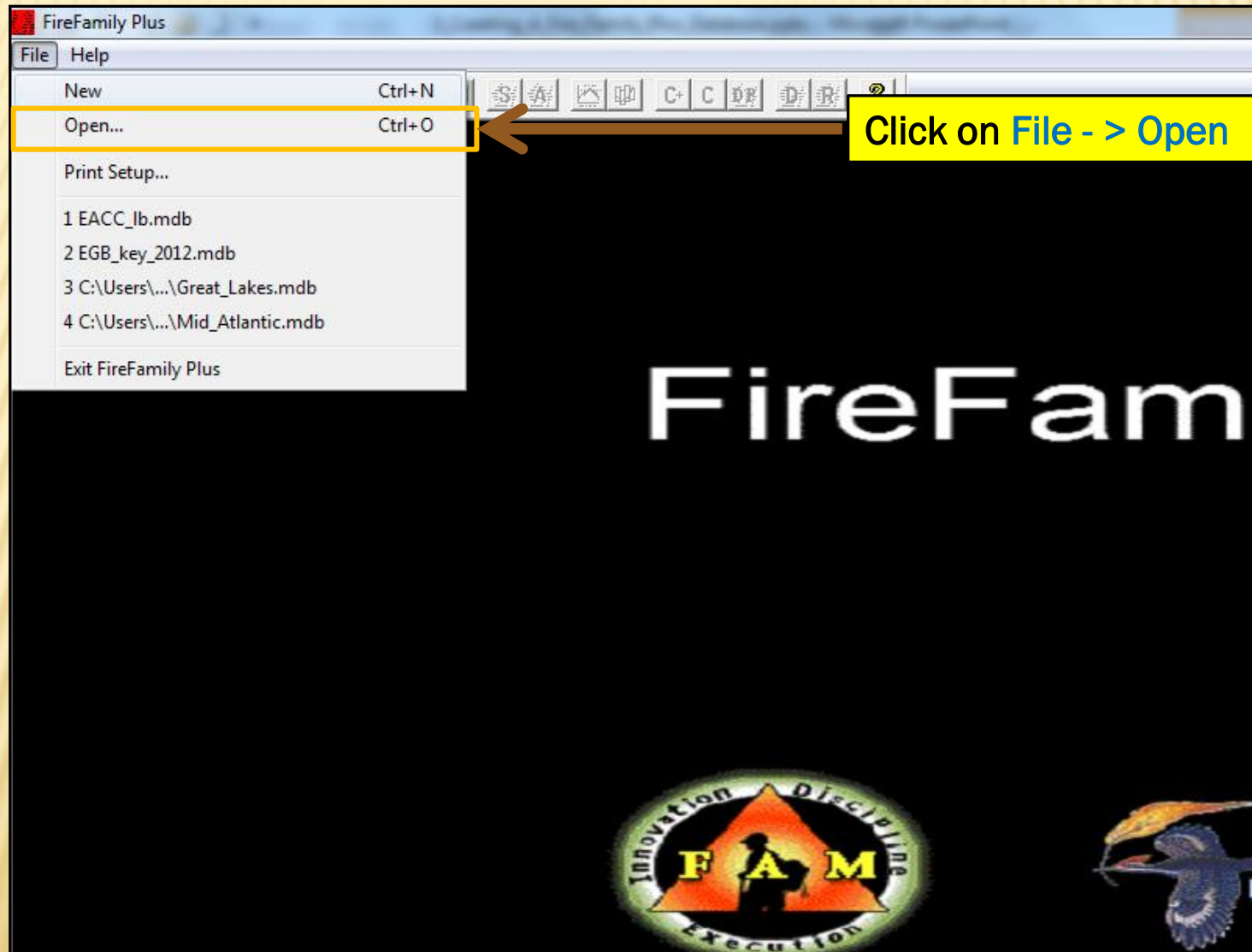
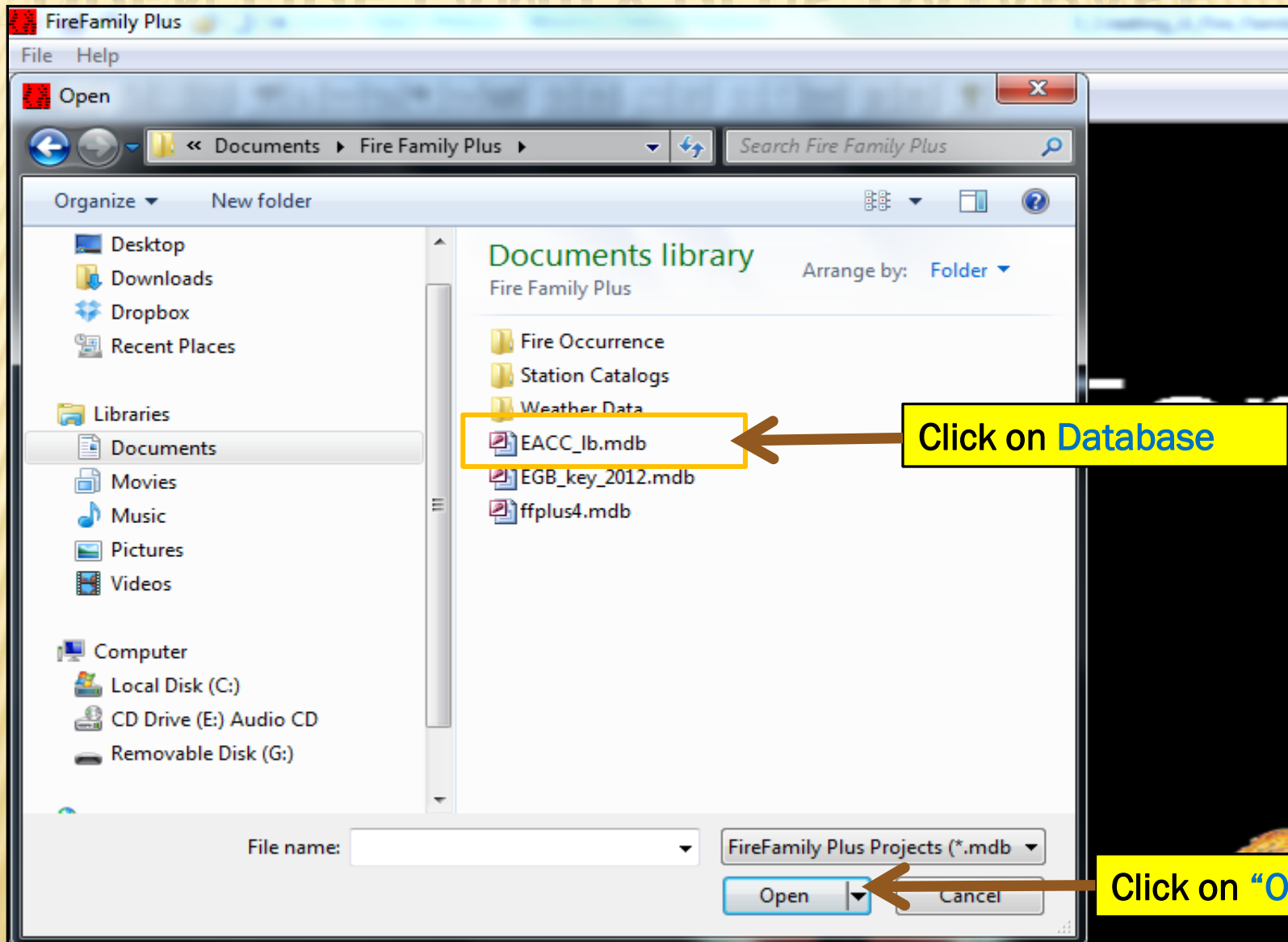


PRODUCING FIRE FAMILY PLUS GRAPHS



OPEN FIRE FAMILY PLUS DATABASE



SELECT A STATION OR SIG (SPECIAL INTEREST GROUP) IN THE WORKING SET

FireFamily Plus - EACC_Ib.mdb - Working Set

File Data Weather Fires Options Batch Window Help

Database Name: C:\Users\SMarien\Documents\Fire Family Plus\EACC_Ib

Description: Default Database Structure for FireFamily Plus

Active Working Set Definition

SIG/Station

235202 - MACKS CREEK

235202 - MACKS CREEK

236403 - SINKIN FTS

236501 - COUNCIL BLUFF

236601 - FARMINGTON

236901 - MT VERNON

236902 - MT VERNON

238502 - AVA FTS

238602 - AVA FTS

239004 - BIG SPRING

239102 - DONIPHAN FTS

240207 - WEST GLACIER

260110 - FOGY MOUNTAIN

Annual Filter (Time of Year)

Month Day

October 10

Fire Associations

StationID Name NFDRS Fuel Model Use 88 Mode Slope Class Climate Class

235202 MACKS CREEK G - Short-Needle (Heavy Dead) ☐ 1 2

Select Station or SIG

Click on "Open"

SELECT YEAR RANGE WHICH YOU WISH TO ANALYZE

FireFamily Plus - EACC_Ib.mdb - Working Set

File Data Weather Fires Options Batch Window Help

Database Name: C:\Users\SMarien\Documents\Fire Family Plus\EACC_Ib

Description: Default Database Structure for FireFamily Plus

Active Working Set Definition

SIG/Station: 235202 - MACKS CREEK

Data Years (1996 - 2013)

1996 thru 2012

☒ Enable Auxiliary Year Overlays

Analysis Period Length (Days): 3

SIG/Station Metadata:

StationID	Name	NFDRS Fuel M
235202	MACKS CREEK	G Short-Needle (H

Available Years in Database for Station or SIG

- Select Year Range Using Up and Down Arrows
- For the end year use the previous year. This ensures if new max or min indices are being set in the current year they will be highlighted.

Check "Enable Auxiliary Year Overlays" box

SELECT THE MONTH AND DATE RANGE WHICH YOU WISH TO ANALYZE

FireFamily Plus - EACC_lb.mdb - Working Set

File Data Weather Fires Options Batch Window Help

Database Name: C:\Users\SMarien\Documents\Fire Family Plus\EACC_lb

Description: Default Database Structure for FireFamily Plus

Active Working Set Definition

SIG/Station: 235202 - MACKS CREEK

Data Years (1996 - 2013): 1996 thru 2012

☒ Enable Auxiliary Year Overlays

Analysis Period Length (Days): 3

Annual Filter (Time of Year)

Month: June thru October

Day: 15 thru 10

Fire Associations

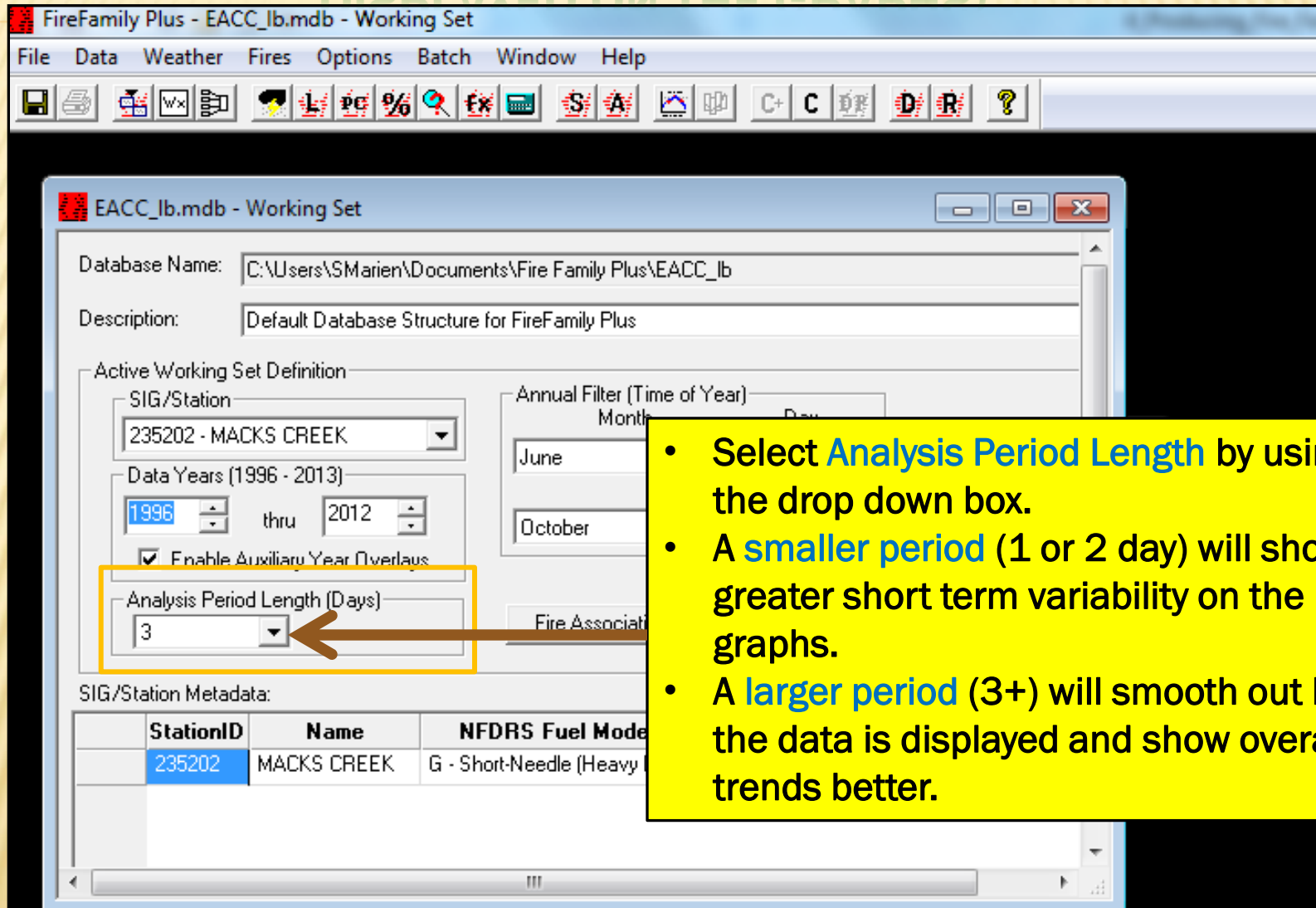
SIG/Station Metadata:

StationID	Name
235202	MACKS CREEK

- Select Month and Date range using the drop down and up and down arrows

Innovative Fire Management

SELECT THE ANALYSIS PERIOD LENGTH (HOW DATA IS DISPLAYED ON THE GRAPHS)



FireFamily Plus - EACC_Ib.mdb - Working Set

File Data Weather Fires Options Batch Window Help

Database Name: C:\Users\SMarien\Documents\Fire Family Plus\EACC_Ib

Description: Default Database Structure for FireFamily Plus

Active Working Set Definition

SIG/Station: 235202 - MACKS CREEK

Data Years (1996 - 2013): 1996 thru 2012

☒ Enable Auxiliary Year Overlays

Analysis Period Length (Days): 3

Annual Filter (Time of Year): June, October

SIG/Station Metadata:

StationID	Name	NFDRS Fuel Mode
235202	MACKS CREEK	G - Short-Needle (Heavy)

- Select **Analysis Period Length** by using the drop down box.
- A **smaller period** (1 or 2 day) will show greater short term variability on the graphs.
- A **larger period** (3+) will smooth out how the data is displayed and show overall trends better.



SELECT THE FIRE OCCURRENCE DATA TO BE ANALYZED

FireFamily Plus - EACC_Ib.mdb - Working Set

File Data Weather Fires Options Batch Window Help

Database Name: C:\Users\SMarien\Documents\Fire Family Plus\EACC_Ib

Description: Default Database Structure for FireFamily Plus

Active Working Set Definition

SIG/Station: 235202 - MACKS CREEK

Data Years (1996 - 2013): 1996 thru 2012

☒ Enable Auxiliary Year Overlays

Analysis Period Length (Days): 3

Annual Filter (Time of Year)

Month: June thru October

Day: 15 thru 10

Fire Associations

Click on "Fire Associations"

SIG/Station Metadata:

StationID	Name	NFDRS Fuel Model	Use 88 Mode	Slope Class	Climate Class
235202	MACKS CREEK	G - Short-Needle (Heavy Dead)	<input type="checkbox"/>	1	2

Innovative Fire Analysis Method

SELECT THE FIRE OCCURRENCE DATA TO BE ANALYZED

FireFamily Plus - EACC_Ib.mdb - Working Set

File Data Weather Fires Options Batch Window Help

EACC_Ib.mdb - Working Set

Database Name: C:\Users\SMarien\Documents\Fire Family Plus\EACC_Ib

Description: Default Database Structure for FireFamily Plus

Active Working Set Definition

SIG/Station: 235202 - MACKS CREEK

Data Years (1996 - 2013)

Annual Filter (Time of Year)

Month: June Day: 15

thru

Set Fire Associations for 235202

USFS | BIA | BLM | NPS | FWS

Region(s)	Unit(s)	Sub Unit(s)
01 Northern Region (R1)	02 Chequamegon NF	02 Fredericktown RD
02 Rocky Mountain Region (R2)	03 Chippewa NF	03 Houston RD
03 Southwest Region (R3)	04 Huron-Manistee NF	04 Poplar Bluff RD
04 Intermountain Region (R4)	05 Mark Twain NF	05 Potosi RD
05 Pacific Southwest Region (R5)	06 Nicolet NF	06 Rolla RD
06 Pacific Northwest Region (R6)	07 Ottawa NF	07 Salem RD
08 Southern Region (R8)	08 Shawnee NF	08 Cedar Creek RD
09 Eastern Region (R9)	09 Superior NF	21 Ava RD
10 Alaska Region (R10)	10 Hiawatha NF	22 Cassville RD
	12 Hoosier NF	23 Doniphan RD
	14 Wayne NF	25 Willow Springs RD

View Selections View Fires OK Cancel Apply

Click on Agency Region

Click on Forest, Park, Refuge, etc.

Click on, District(s) if available.

VIEW LISTING OF SELECTED FIRE OCCURRENCE DATA TO BE ANALYZED

FireFamily Plus - EACC_Ib.mdb - Working Set

File Data Weather Fires Options Batch Window Help

EACC_Ib.mdb - Working Set

Database Name: C:\Users\SMarien\Documents\Fire Family Plus\EACC_Ib

Description: Default Database Structure for FireFamily Plus

Active Working Set Definition

SIG/Station: 235202 - MACKS CREEK

Data Years (1996 - 2013): 1996 thru 2013

Annual Fire Statistics

Click on "View Fires"

Set Fire Associations for 235202

USFS | BIA | BLM | NPS | FWS

Region(s)	Unit(s)	Sub Unit(s)
01 Northern Region (R1)	02 Chequamegon NF	02 Fredericktown RD
02 Rocky Mountain Region (R2)	03 Chippewa NF	03 Houston RD
03 Southwest Region (R3)	04 Huron-Manistee NF	04 Poplar Bluff RD
04 Intermountain Region (R4)	05 Mark Twain NF	05 Potosi RD
05 Pacific Southwest Region (R5)	06 Nicolet NF	06 Rolla RD
06 Pacific Northwest Region (R6)	07 Ottawa NF	07 Salem RD
08 Southern Region (R8)	08 Shawnee NF	08 Cedar Creek RD
09 Eastern Region (R9)	09 Superior NF	21 Ava RD
10 Alaska Region (R10)	10 Hiawatha NF	22 Cassville RD
	12 Hoosier NF	23 Doniphan RD
	14 Wayne NF	25 Willow Springs RD

View Selections View Fires OK Cancel Apply

VIEW LISTING OF SELECTED FIRE OCCURRENCE DATA TO BE ANALYZED

FireFamily Plus - Fires

File Data Window Help

EACC_lb.mdb - Working Set

Database Name: C:\Users\SMarien\Documents\Fire Family Plus

Description: Default Database Structure for FireFamily Plus

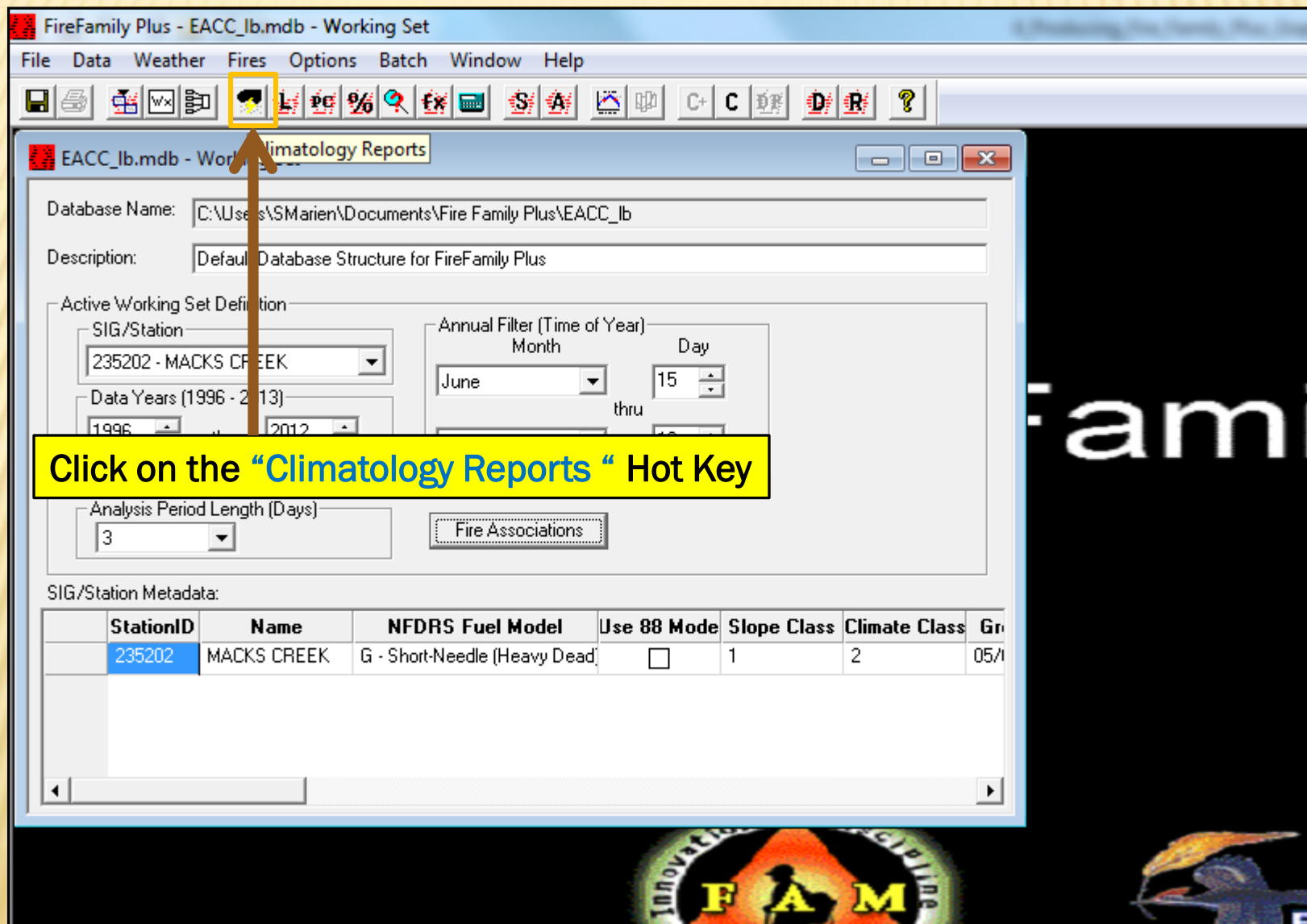
Fires

You can Sort Fires by date, size cause, etc. by right clicking on column and clicking "Ascending" or "Descending"

Close window when you are done viewing fires.

	Discovery	Acc	Size	Cause	Fire Name	Fire Num	Lat. (Deg)	(min)	(sec)	Lon. (Deg)	(min)	(sec)	Agency	Region	Unit
1	07/11/01	50.0				139	37	37	9	-91	8	0	USFS	09 Eastern Region (	05 Mark Tw
2	09/03/99	40.0				111	37	40	8	-91	0	8	USFS	09 Eastern Region (	05 Mark Tw
3	09/20/04	35.0	7 Arson	FIRST		157	36	44	43	-92	45				
4	09/08/99	10.0	7 Arson	GOODWATER FIRE		112	37	43	0	-91	5				
5	09/09/99	10.0	9 Miscellaneous	131 FIRE		113	37	27	3	-90	45				
6	07/26/97	7.0	7 Arson	CROSSING		114	36	54	42	-92	10				
7	07/29/99	6.0	9 Miscellaneous	RADIO		091	36	56	4	-92	54				
8	09/06/05	4.3	2 Equipment	HIGHWAY 60		181	36	36	54	-92	36				
9	07/14/99	4.0	9 Miscellaneous	SUMMER FIRE		102	37	41	5	-91	0	5	USFS	09 Eastern Region (	05 Mark Tw
10	08/30/99	4.0	7 Arson	TODLETT		116	36	49	7	-92	58	4	USFS	09 Eastern Region (	05 Mark Tw
11	08/15/96	3.0	7 Arson	HOOTCHIE KOOTCHIE		156	36	39	0	-93	42	30	USFS	09 Eastern Region (	05 Mark Tw
12	10/03/01	2.5	5 Debris Bur	D HIGHWAY		114	37	32	9	-90	45	9	USFS	09 Eastern Region (	05 Mark Tw
13	08/31/99	1.0	7 Arson	MARGE FIRE		103	37	51	6	-90	56	5	USFS	09 Eastern Region (	05 Mark Tw
14	10/10/00	0.7	9 Miscellaneous	ESCORT		167	37	42	7	-90	59	9	USFS	09 Eastern Region (	05 Mark Tw
15	09/04/00	0.5	7 Arson	ALBERT		102	36	46	3	-92	45	3	USFS	09 Eastern Region (	05 Mark Tw
16	09/09/98	0.3	7 Arson	COMBINE #1		096	36	54	30	-91	59	0	USFS	09 Eastern Region (	05 Mark Tw
17	06/29/03	0.2	7 Arson	HAY BALE		127	36	51	51	-93	0	33	USFS	09 Eastern Region (	05 Mark Tw

CLICK ON THE CLIMATOLOGY HOT KEY TO BEGIN RUNNING FIRE FAMILY PLUS GRAPHS



The screenshot shows the FireFamily Plus software interface. The main window is titled "FireFamily Plus - EACC_lb.mdb - Working Set". The menu bar includes File, Data, Weather, Fires, Options, Batch, Window, and Help. The toolbar contains various icons, including a "Climatology Reports" icon (a small icon with a sun and a bar chart) which is highlighted by a yellow callout box. The callout box contains the text: "Click on the 'Climatology Reports' Hot Key".

The "Climatology Reports" dialog box is open, showing the following fields:

- Database Name: C:\Users\SMarien\Documents\Fire Family Plus\EACC_lb
- Description: Default Database Structure for FireFamily Plus
- Active Working Set Definition:
 - SIG/Station: 235202 - MACKS CREEK
 - Data Years (1996 - 2013): 1996 thru 2012
 - Annual Filter (Time of Year):
 - Month: June
 - Day: 15
 - Analysis Period Length (Days): 3
 - Fire Associations: (button)
- SIG/Station Metadata:

StationID	Name	NFDRS Fuel Model	Use 88 Mode	Slope Class	Climate Class	Gr
235202	MACKS CREEK	G - Short-Needle (Heavy Dead)	<input type="checkbox"/>	1	2	05/

At the bottom of the screen, there is a logo for "Innovation in Fire Management" (FAM) and a small graphic of a bird.

SELECT THE VARIABLES TO BE DISPLAYED IN FF+ GRAPHS

FireFamily Plus - EACC_Ib Climatology Options

File Options Window Help

EACC_Ib.mdb - Working Set

Database Name: C:\Users\SMarien\Documents\Fire Family Plus\EACC_Ib

Description: Default Database Structure for FireFamily Plus

☒ EACC_Ib Climatology Options

Available Outputs:

Variable	Stats Table	Stats Graph	CP #1	CP #2	Daily Freqs	Data Count
Precipitation Amount	<input type="checkbox"/>	<input type="checkbox"/>	90	97	<input type="checkbox"/>	<input type="checkbox"/>
Precipitation Duration	<input type="checkbox"/>	<input type="checkbox"/>	90	97	<input type="checkbox"/>	<input type="checkbox"/>
Wind Speed	<input type="checkbox"/>	<input type="checkbox"/>	90	97	<input type="checkbox"/>	<input type="checkbox"/>
Spread Component	<input type="checkbox"/>	<input type="checkbox"/>	90	97	<input type="checkbox"/>	<input type="checkbox"/>
Energy Release Component	<input type="checkbox"/>	<input checked="" type="checkbox"/>	90	97	<input type="checkbox"/>	<input type="checkbox"/>
Burning Index	<input type="checkbox"/>	<input checked="" type="checkbox"/>	90	97	<input type="checkbox"/>	<input type="checkbox"/>
Keetch-Byram Drought Index	<input type="checkbox"/>	<input type="checkbox"/>	90	97	<input type="checkbox"/>	<input type="checkbox"/>
Ignition Component	<input type="checkbox"/>	<input type="checkbox"/>	90	97	<input type="checkbox"/>	<input type="checkbox"/>
1-Hour Fuel Moisture	<input type="checkbox"/>	<input type="checkbox"/>	10	3	<input type="checkbox"/>	<input type="checkbox"/>
10-Hour Fuel Moisture	<input type="checkbox"/>	<input type="checkbox"/>	10	3	<input type="checkbox"/>	<input type="checkbox"/>
100-Hour Fuel Moisture	<input type="checkbox"/>	<input type="checkbox"/>	10	3	<input type="checkbox"/>	<input type="checkbox"/>

Clear All Run

Selected Outputs:

1000-Hour Fuel Moisture - Summary Statistics Graph
Burning Index - Summary Statistics Graph
Energy Release Component - Summary Statistics Graph

Click on the variables which you wish display in FF+ Graphs under "Stats Graph"

Use scroll bar to view additional variables

Selections are displayed in "Selected Outputs" at bottom

CLICK ON “RUN” TO PRODUCE FF+ GRAPHS

FireFamily Plus - EACC_Ib Climatology Options

File Options Window Help

EACC_Ib.mdb - Working Set

Database Name: C:\Users\SMarien\Documents\Fire Family Plus\EACC_Ib

Description: Default Database Structure for FireFamily Plus

☒ EACC_Ib Climatology Options

Available Outputs:

Clear All Run

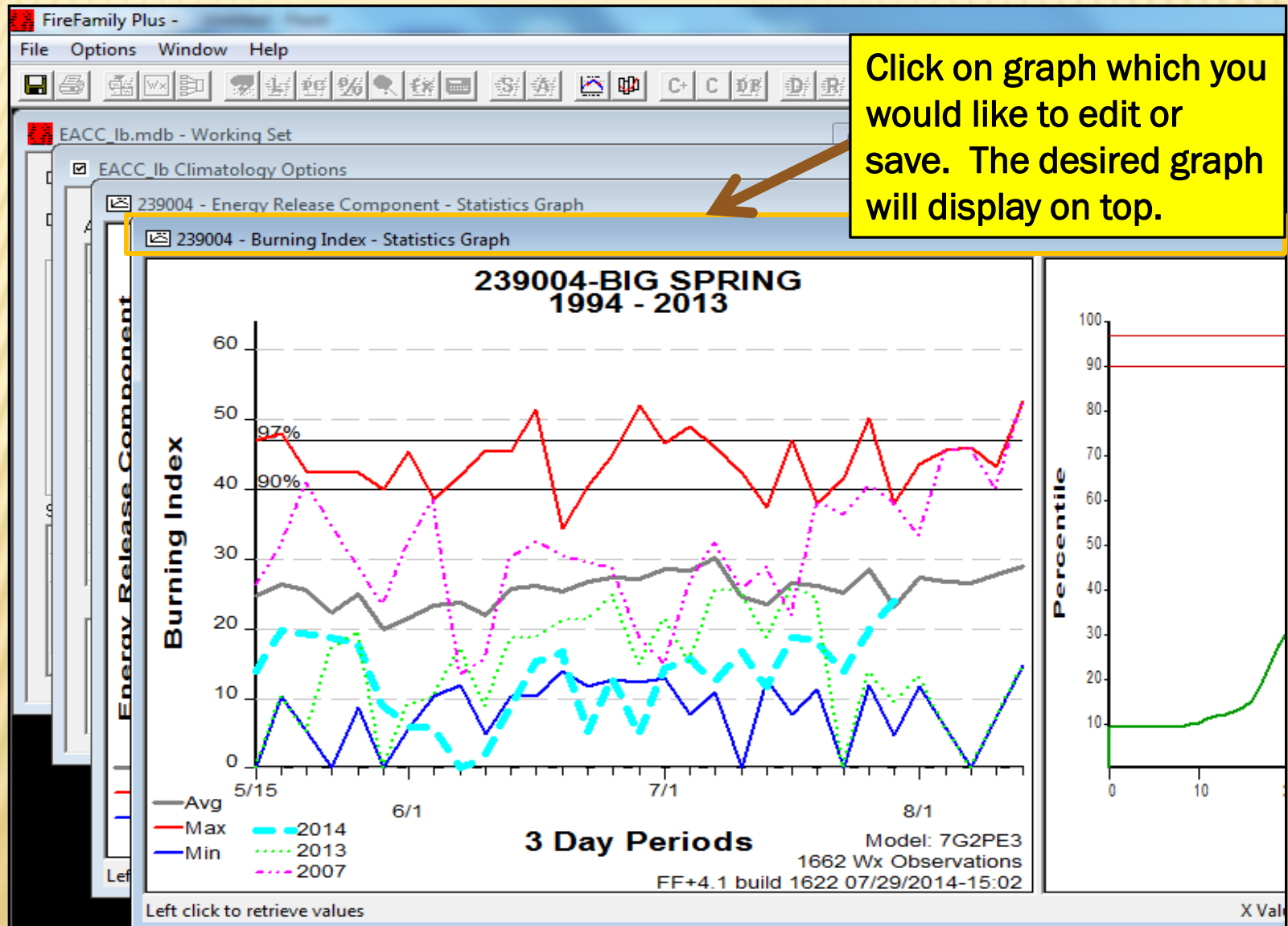
Variable	Stats Table	Stats Graph	CP #1	CP #2	Daily Freqs	Data Count
Precipitation Amount	<input type="checkbox"/>	<input type="checkbox"/>	90	97	<input type="checkbox"/>	<input type="checkbox"/>
Precipitation Duration	<input type="checkbox"/>	<input type="checkbox"/>	90	97	<input type="checkbox"/>	<input type="checkbox"/>
Wind Speed	<input type="checkbox"/>	<input type="checkbox"/>	90	97	<input type="checkbox"/>	<input type="checkbox"/>
Spread Component	<input type="checkbox"/>	<input type="checkbox"/>	90	97	<input type="checkbox"/>	<input type="checkbox"/>
Energy Release Component	<input type="checkbox"/>	<input checked="" type="checkbox"/>	90	97	<input type="checkbox"/>	<input type="checkbox"/>
Burning Index	<input type="checkbox"/>	<input checked="" type="checkbox"/>	90	97	<input type="checkbox"/>	<input type="checkbox"/>
Keetch-Byram Drought Index	<input type="checkbox"/>	<input type="checkbox"/>	90	97	<input type="checkbox"/>	<input type="checkbox"/>
Ignition Component	<input type="checkbox"/>	<input type="checkbox"/>	90	97	<input type="checkbox"/>	<input type="checkbox"/>
1-Hour Fuel Moisture	<input type="checkbox"/>	<input type="checkbox"/>	10	3	<input type="checkbox"/>	<input type="checkbox"/>
10-Hour Fuel Moisture	<input type="checkbox"/>	<input type="checkbox"/>	10	3	<input type="checkbox"/>	<input type="checkbox"/>
100-Hour Fuel Moisture	<input type="checkbox"/>	<input type="checkbox"/>	10	3	<input type="checkbox"/>	<input type="checkbox"/>

Selected Outputs:

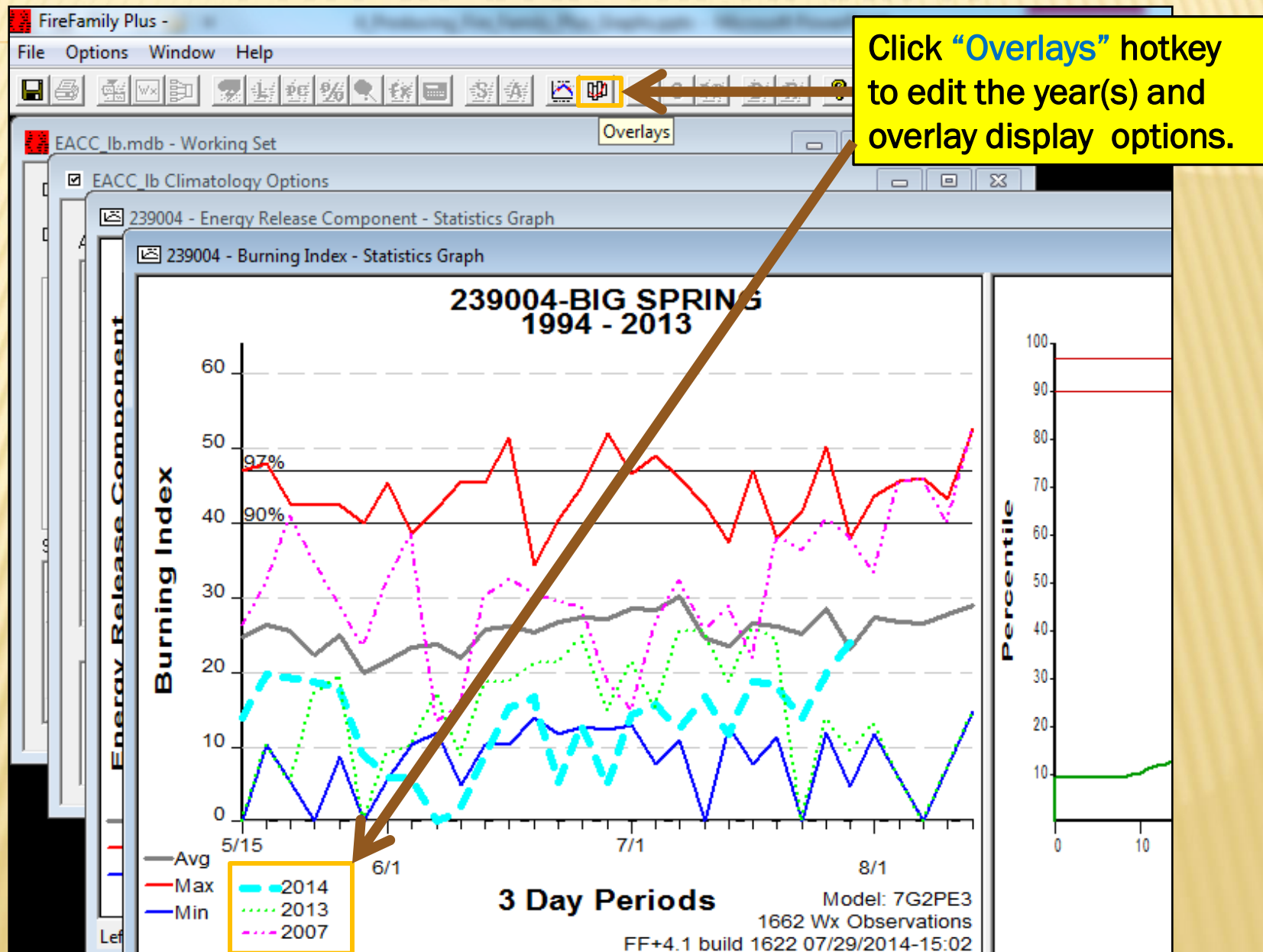
1000-Hour Fuel Moisture - Summary Statistics Graph
Burning Index - Summary Statistics Graph
Energy Release Component - Summary Statistics Graph

Click on “Run” to produce FF+ Graphs

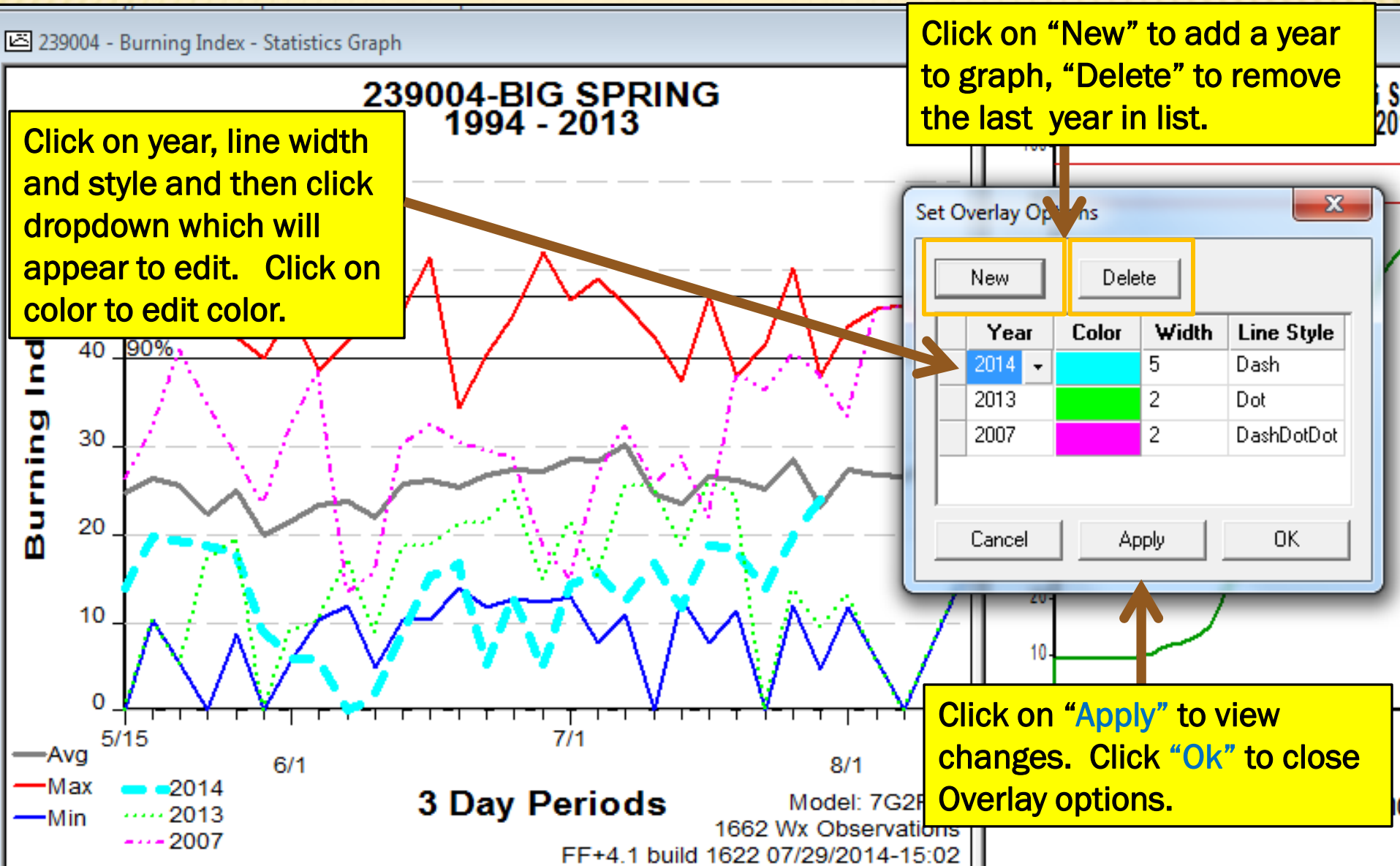
FF+ GRAPHS ARE DISPLAYED IN TILES



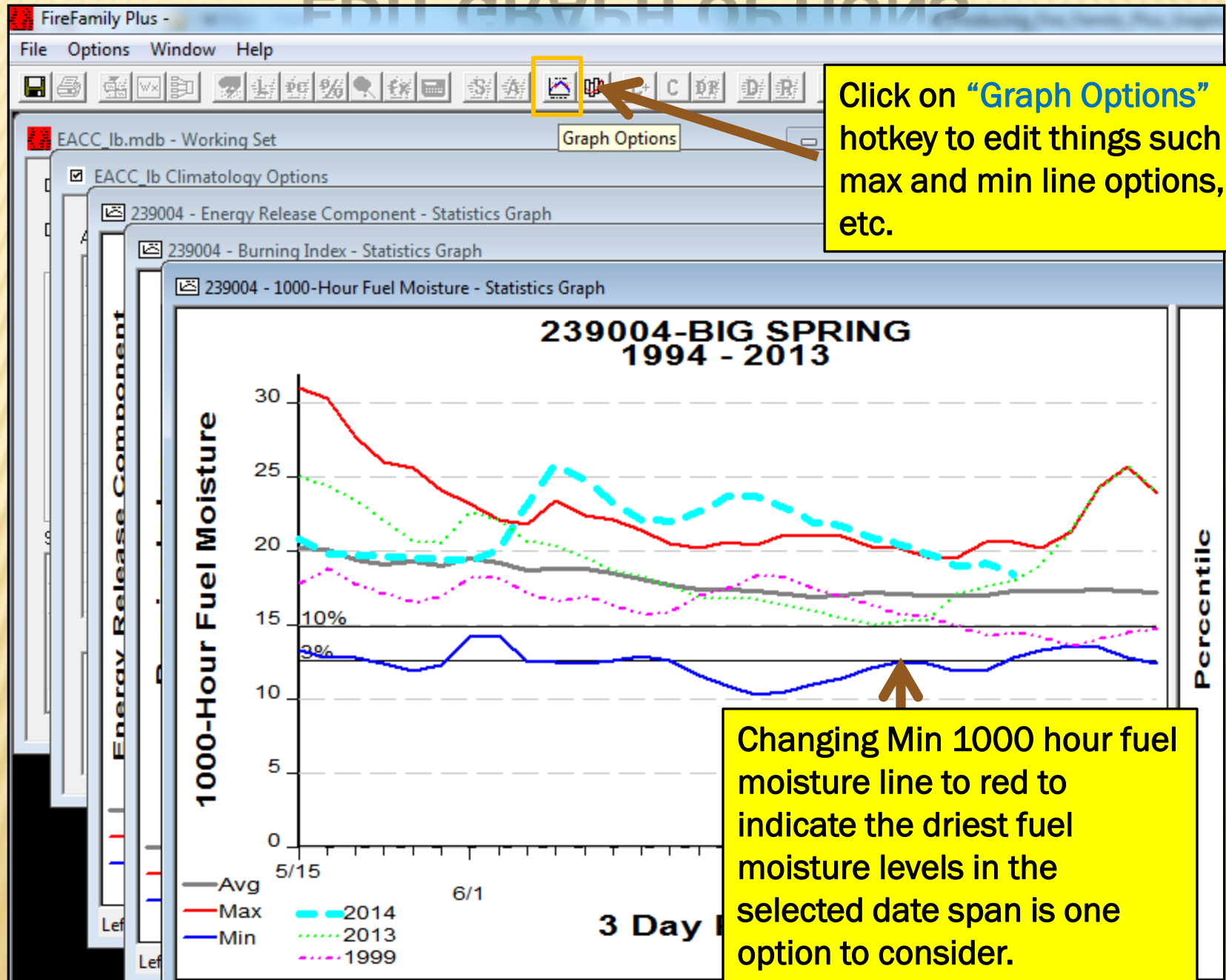
EDIT YEARS DISPLAYED



EDIT YEARS DISPLAYED



EDIT GRAPH OPTIONS



EDIT GRAPH OPTIONS

The screenshot shows the Firefamily Plus software interface. The main window displays a graph titled "202902-MO 1975 - 2013" showing "1000-Hour Fuel Moisture" on the y-axis (0 to 40) and time on the x-axis (7/15 to 8/1). The graph includes several data series: Average (grey line), Maximum (red line), Minimum (blue line), and historical data for 2014 (cyan dashed), 2013 (green dotted), and 2012 (magenta dash-dot). A "Graph Display Options" dialog box is open, showing the "Line At Average" tab. The dialog has tabs for "General", "Bar Graph", "Line At Average", and "Fires". The "Line At Average" tab is active, showing a table of line properties:

Line	Color	Width
Average	Grey	3
<input checked="" type="checkbox"/> Mins	Blue	2
<input checked="" type="checkbox"/> Maxs	Red	2
<input type="checkbox"/> CP 1	Orange	2
<input type="checkbox"/> CP 2	Pink	2

Annotations with arrows point to specific elements:

- A yellow box highlights the "Line At Average" tab in the dialog, with a callout: "Click on 'Line at Average' tab to edit things such as max and min line options, etc."
- A yellow box highlights the "Width" column in the table, specifically the value "2" for the "Mins" line, with a callout: "Choose line width by toggling up or down arrows."
- A yellow box highlights the "Color" column in the table, specifically the "Blue" color for the "Mins" line, with a callout: "Click on 'Color' to change blue min line to red. This will display the lowest fuel moisture in the selected date range."

Other interface elements include a menu bar (File, Options, Window, Help), a toolbar, and a status bar at the bottom showing "Model: 7G1PE3", "4 Wx Observations", "2 10/07/2014-15:51", and "Value: 32".

EDIT GRAPH COLOR OPTIONS

Click/highlight color of choice.

Click "OK" to confirm color choice for line display.

Graph Display Options

Fire Danger Project

General | Bar Graph

Line

Average

☒ Mins

☒ Maxs

☐ CP 1

☐ CP 2

Color

Basic colors:

Custom colors:

Define Custom Colors >>

OK Cancel

Set As Default

Close

Apply

Apply To All

percentile

70

60

50

40

10%

3%

2014

2013

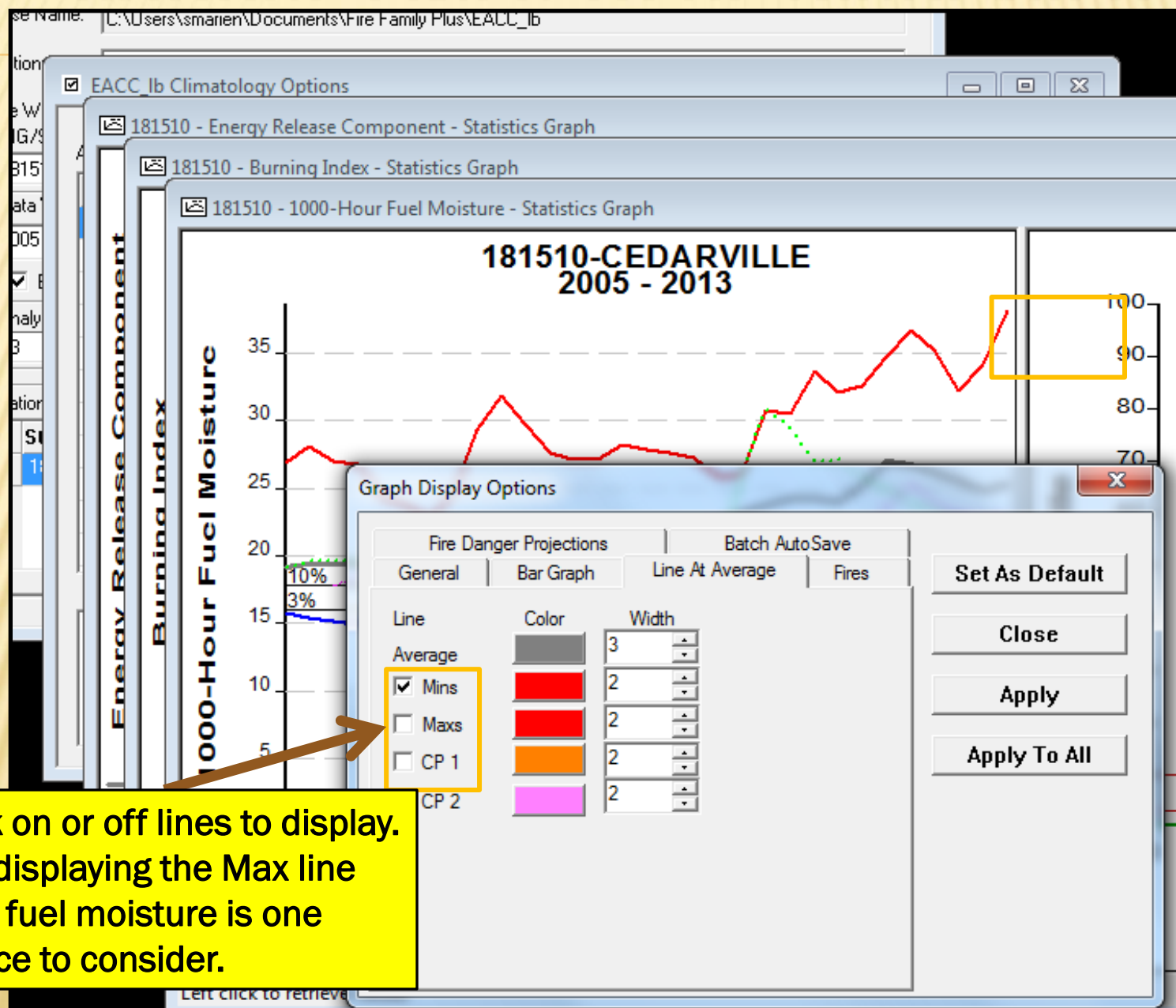
2012

retrieve values

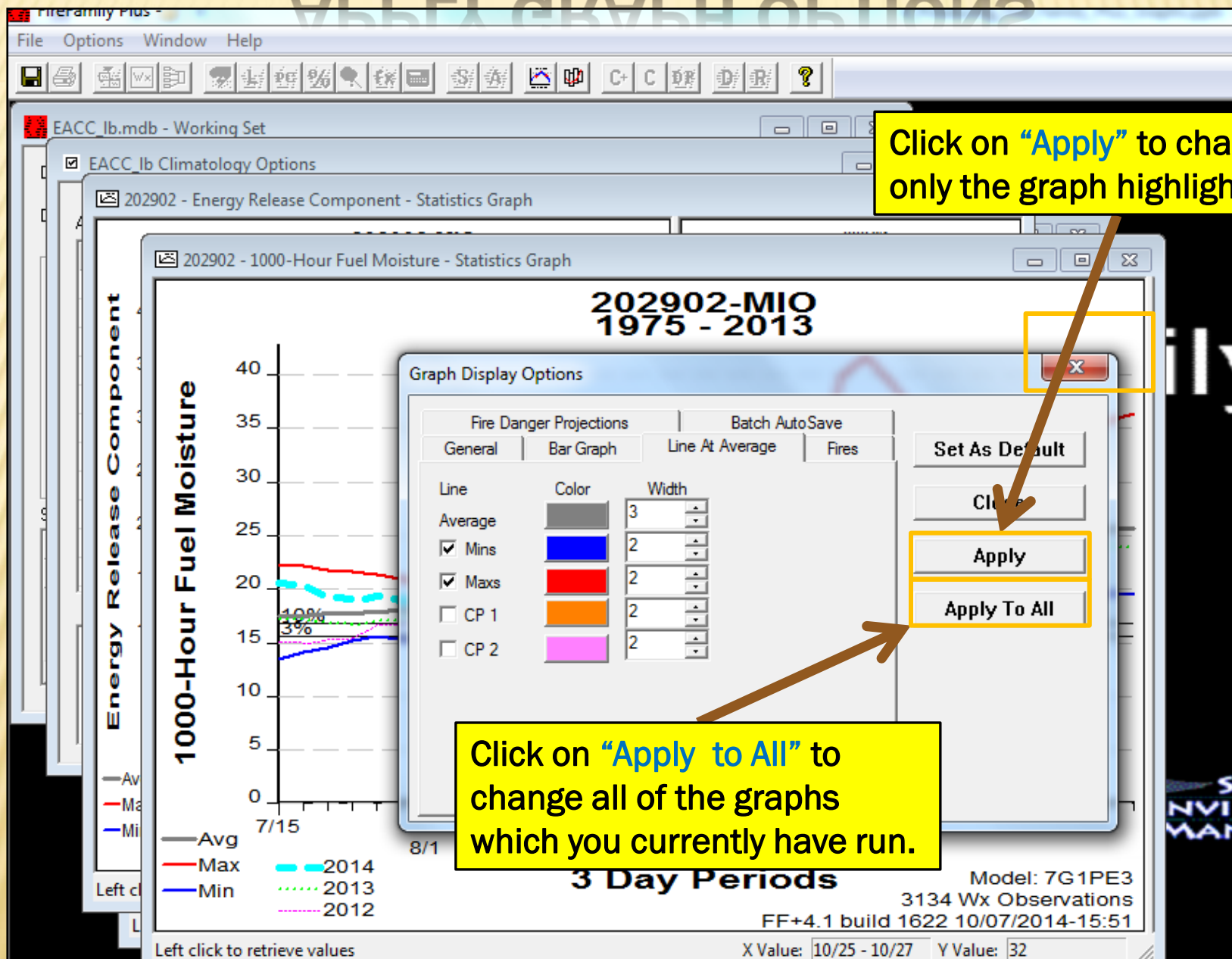
15

9/1

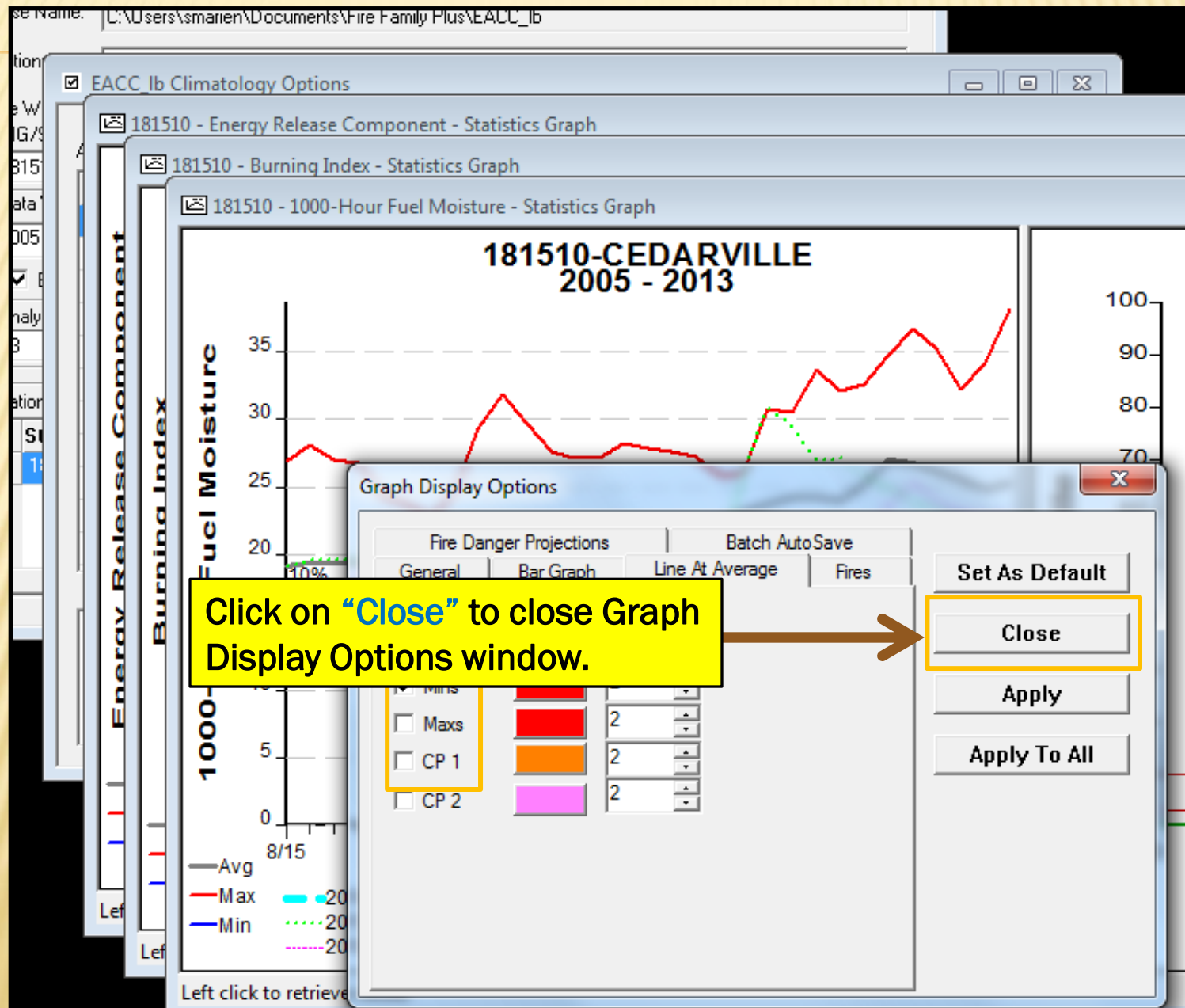
CHOOSE LINES TO BE DISPLAYED



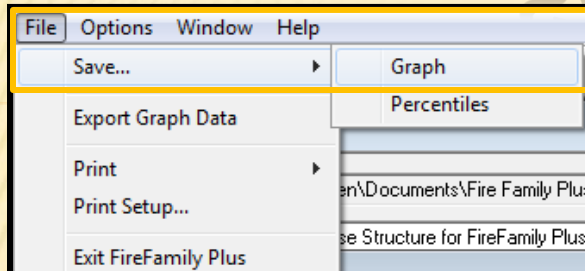
APPLY GRAPH OPTIONS



CLOSE GRAPH DISPLAY OPTIONS WINDOW

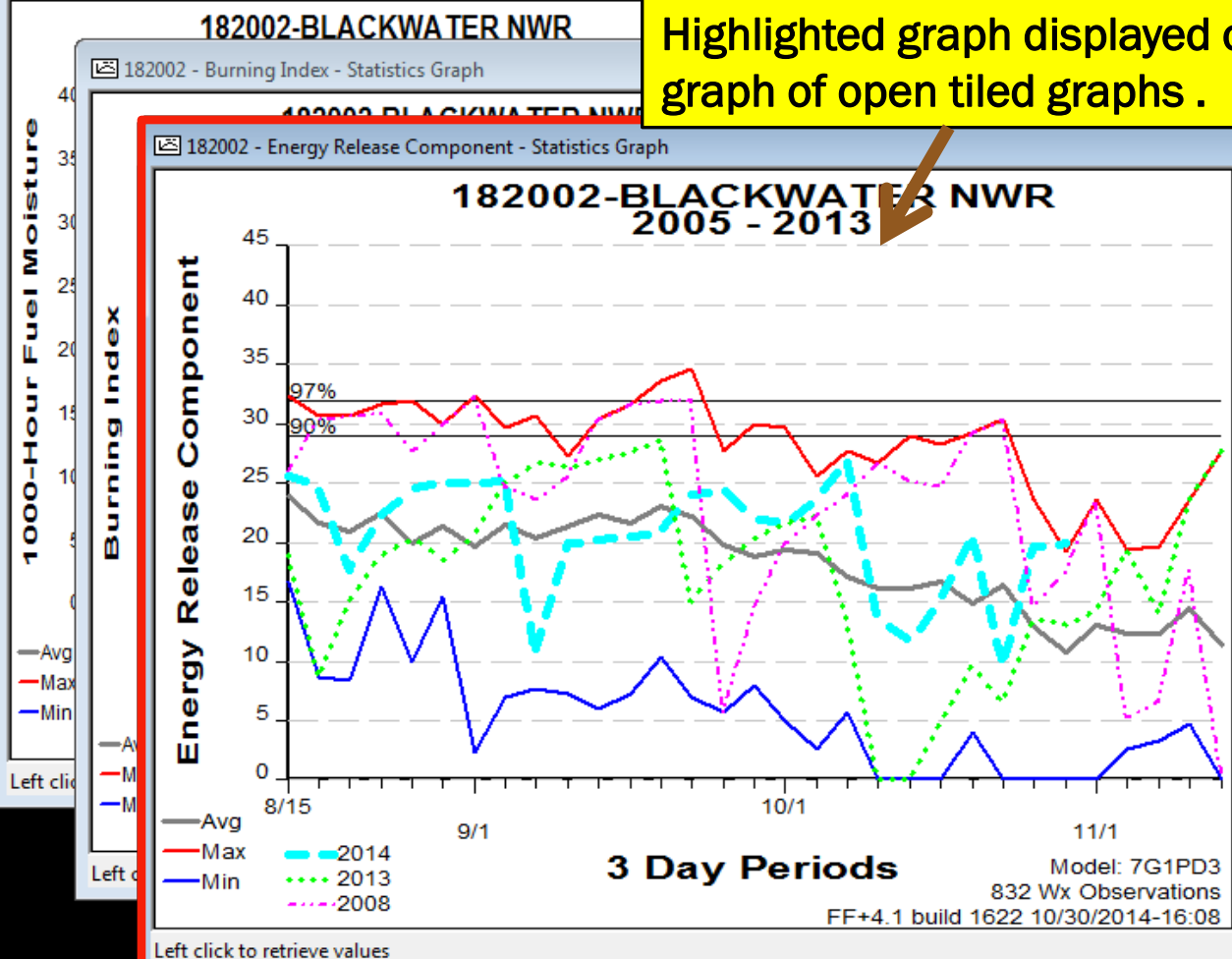


SAVE GRAPHS



Click on “File>Save>Graph” to save highlighted Statistics Graph as an image (Stats Graph displayed on the left).

Highlighted graph displayed on top graph of open tiled graphs .



SELECT IMAGE DIMENSION

002 - 1000-Hour Fuel Moisture - Statistics Graph

182002-BLACKWATER NWR

182002 - Burning Index - Statistics Graph

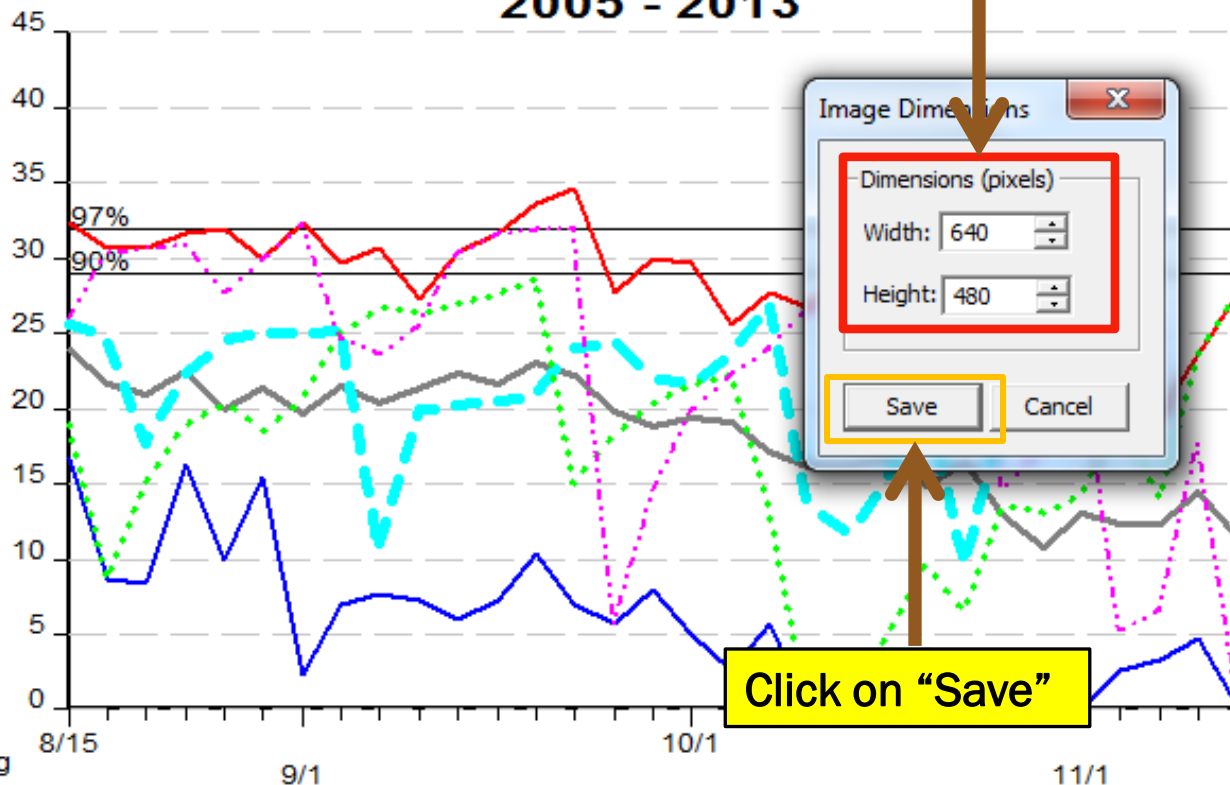
182002-BLACKWATER NWR

182002 - Energy Release Component - Statistics Graph

182002-BLACKWATER NWR
2005 - 2013

Burning Index

Energy Release Component



Select Image dimensions by using up or down arrows or leave 640x480 as default.

Image Dimensions

Dimensions (pixels)

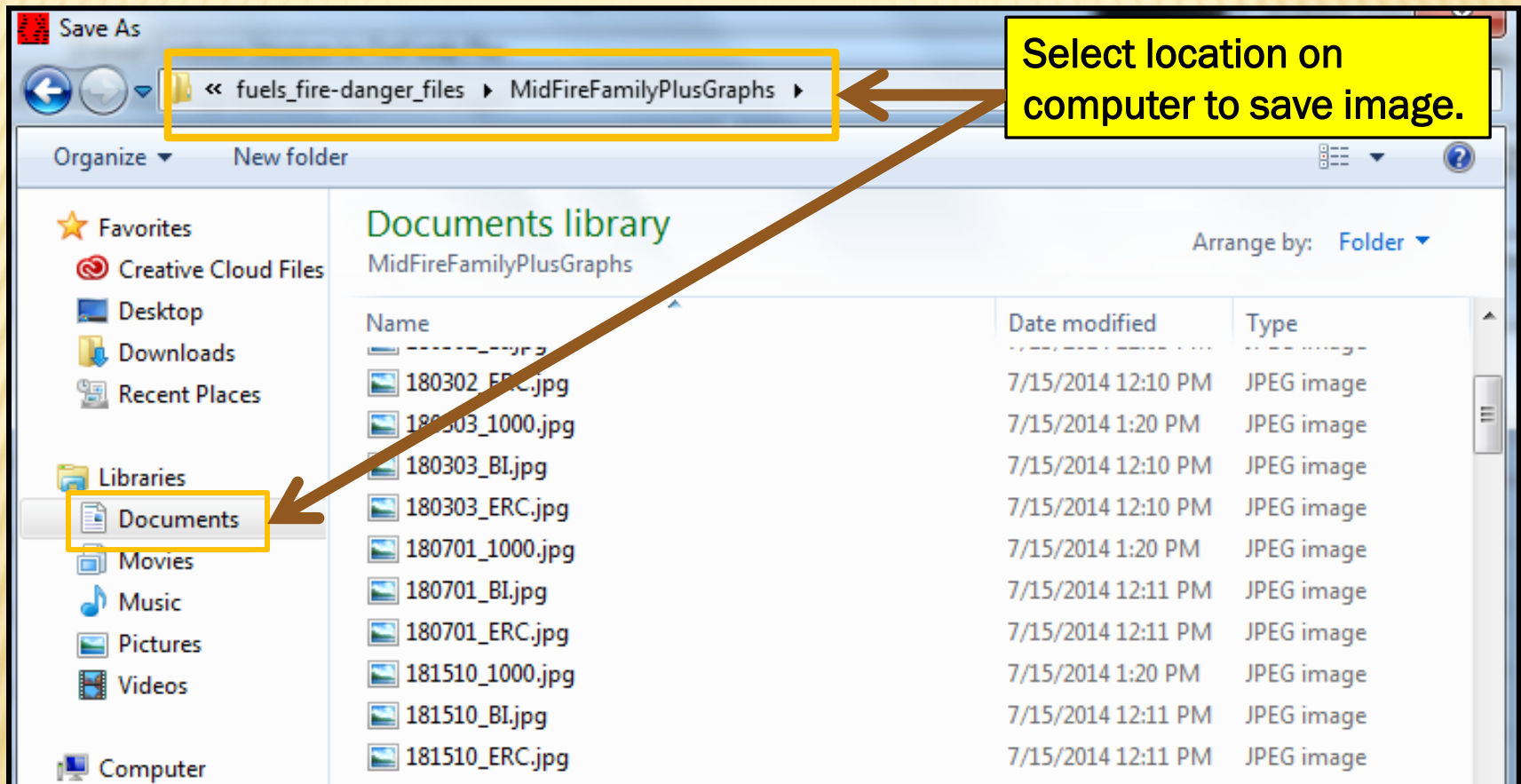
Width: 640

Height: 480

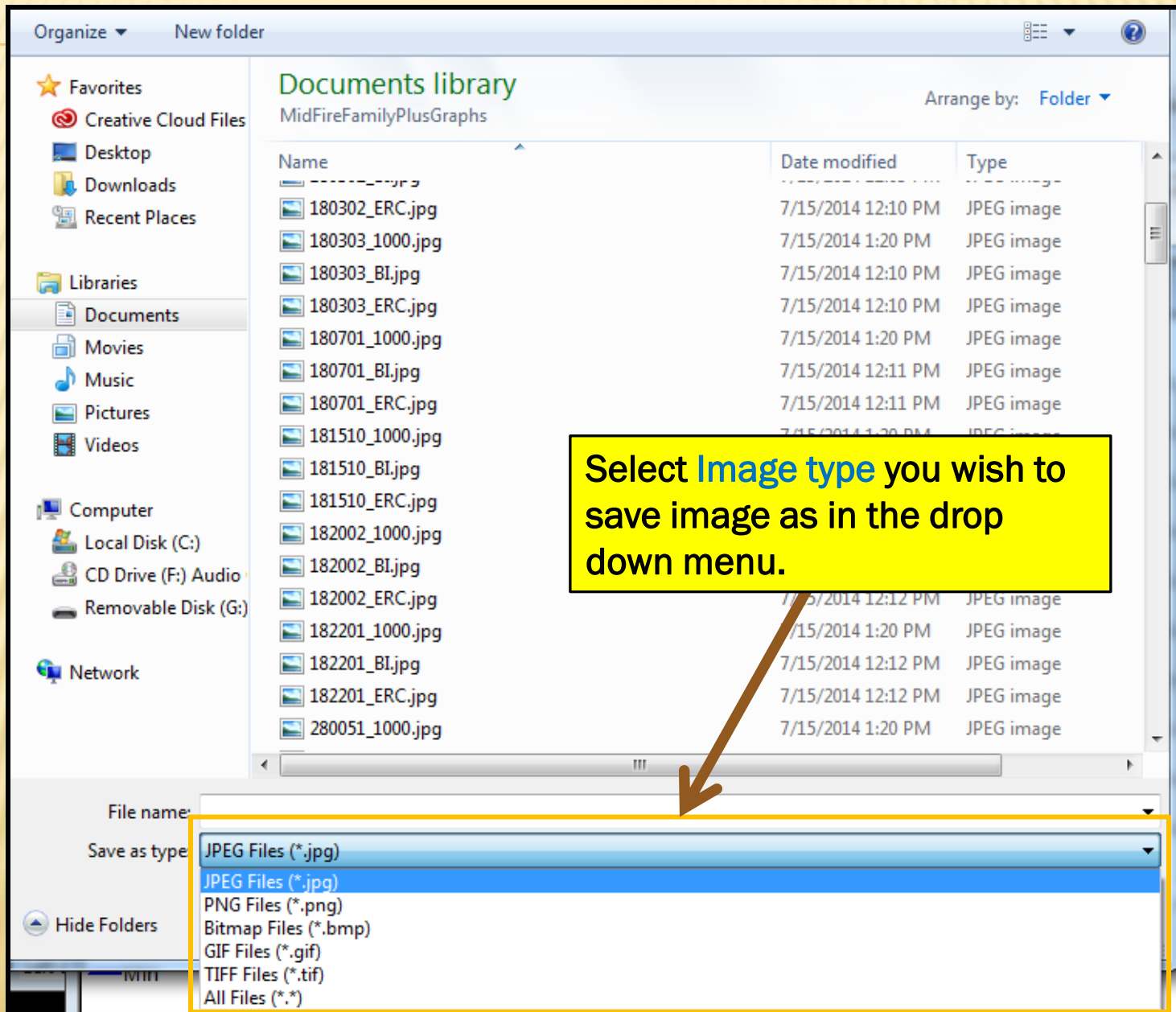
Save Cancel

Click on "Save"

SELECT LOCATION TO SAVE IMAGE



SELECT IMAGE TYPE TO SAVE IMAGE AS



TYPE IN IMAGE NAME OR OVERWRITE PREVIOUS IMAGE, THEN SAVE

