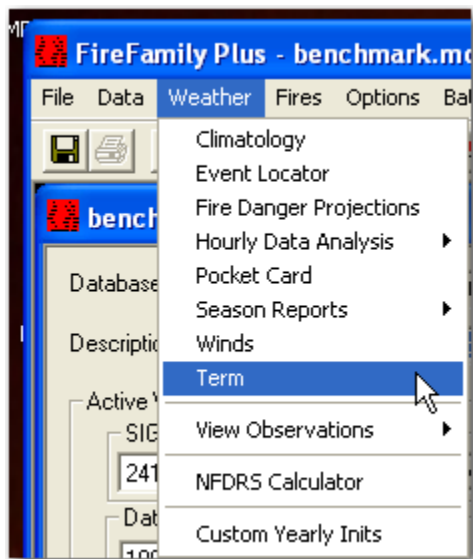


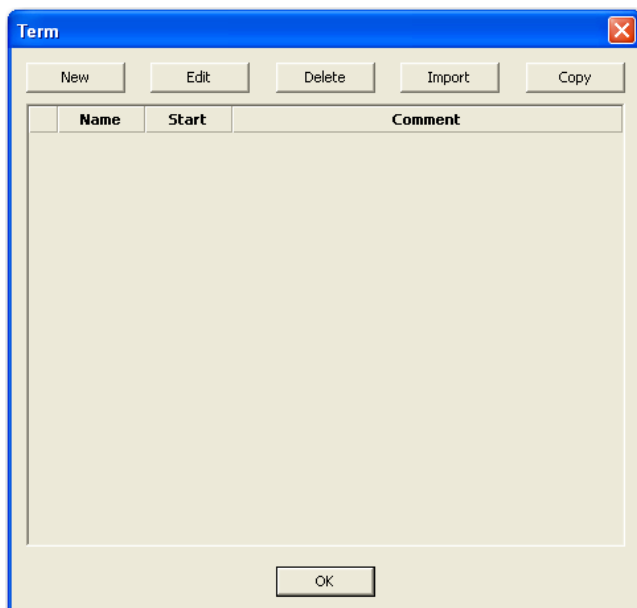
## FFP: Term Tech Tip

The Term function in FireFamilyPlus 4.1 (Beta) is derived from the old RERAP term module and is used to analyze season-ending dates. Once you have input historic season-ending events (Term events), the unique Weibull cumulative distribution curve is calculated for that particular fire environment and waiting times to season-ending events are determined.

To begin, from the **Weather** drop-down menu, select **Term**.



The following **Term** dialog box will open.



## Options:

- **New**

Click on **New** to create a new Term Event file.

The **Edit Term Data** dialog box opens as shown. The figure below shows the initial window where the dates are input for the Term run. The **Start Day** identifies a date representing the normal start of the fire season. The date selected applies to the entire Term file. Often, the Season Start Date ("**Start Day**") is selected on the basis of local knowledge. Use the drop-down list to select the **Start Day** you would like to use. The season start date has been set at June 15 in this example.

**Edit Term Data**

Name:  Start Day:

Comment:

Start Year:  End Year:

Year	Day	Comment
1987		
1988		
1989		
1990		
1991		
1992		
1993		
1994		
1995		
1996		
1997		
1998		
1999		
2000		
2001		
2002		
2003		
2004		
2005		
2006		
2007		

**Note:** The Start Day (month and day) entered must always be earlier than the date of any Term event added to the list.

Enter a meaningful term **Name** for the event file in the box provided and select both a **Start Year** and **End Year** appropriate to your analysis data. After you have selected these years, click **Apply** and the years are displayed in the columns as shown.

Use the **Comment** box to document your term event (fire-stopping or season-ending events) criterion. An example might be *“One-inch of rain over a five-day period. Date of fire-stopping event is the five-day period.”*

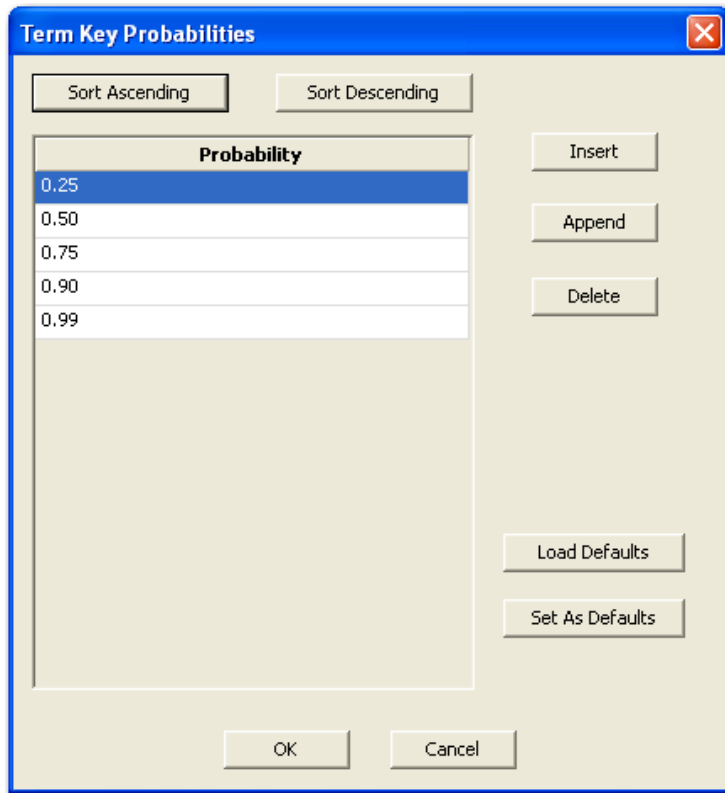
Use the drop-down selections to choose a day within each year. In this example, each date in the list represents a season-ending event.

**Note:** If you make an error, double-click on the date cell and press delete to start over.

The screenshot shows the 'Edit Term Data' window. At the top, there is a 'Name' field containing 'Joes Valley' and a 'Start Day' dropdown menu set to '06/15'. A 'Key Probabilities' button is located to the right. Below this is a large 'Comment' text area. Further down, 'Start Year' is set to 1999 and 'End Year' is set to 2007, with an 'Apply' button. The main area contains a table with columns for 'Year', 'Day', and 'Comment'. A calendar pop-up is visible over the 'Day' column for the year 1999, showing the month of September. The table lists dates from 1999 to 2007. At the bottom of the window are 'Save', 'Save & Run', and 'Close' buttons.

Year	Day	Comment
1999	09/14	
2000		
2001		
2002		
2003		
2004		
2005		
2006		
2007		

To change the Key Probabilities used in the analysis, click on the **Key Probabilities** button at the upper right corner of the screen to open the **Term Key Probabilities** dialog box shown below.

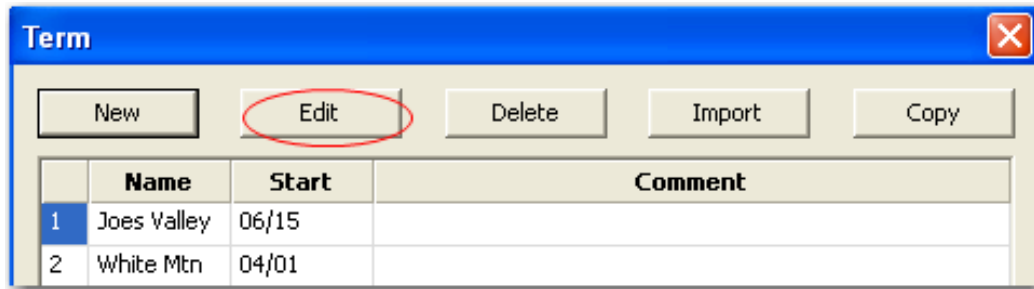


Using this dialog box you can sort on the probability value (Ascending or Descending), as well as insert, append, or delete key probability values. Click **Sort Ascending** to sort **Probability** in ascending order or **Sort Descending** to sort in a descending order. Click **Insert** to add any additional probabilities at the beginning of the list or within the list and use the **Append** button to add additional rows for new probability values of your choice. Click **OK** when finished with your new selections.

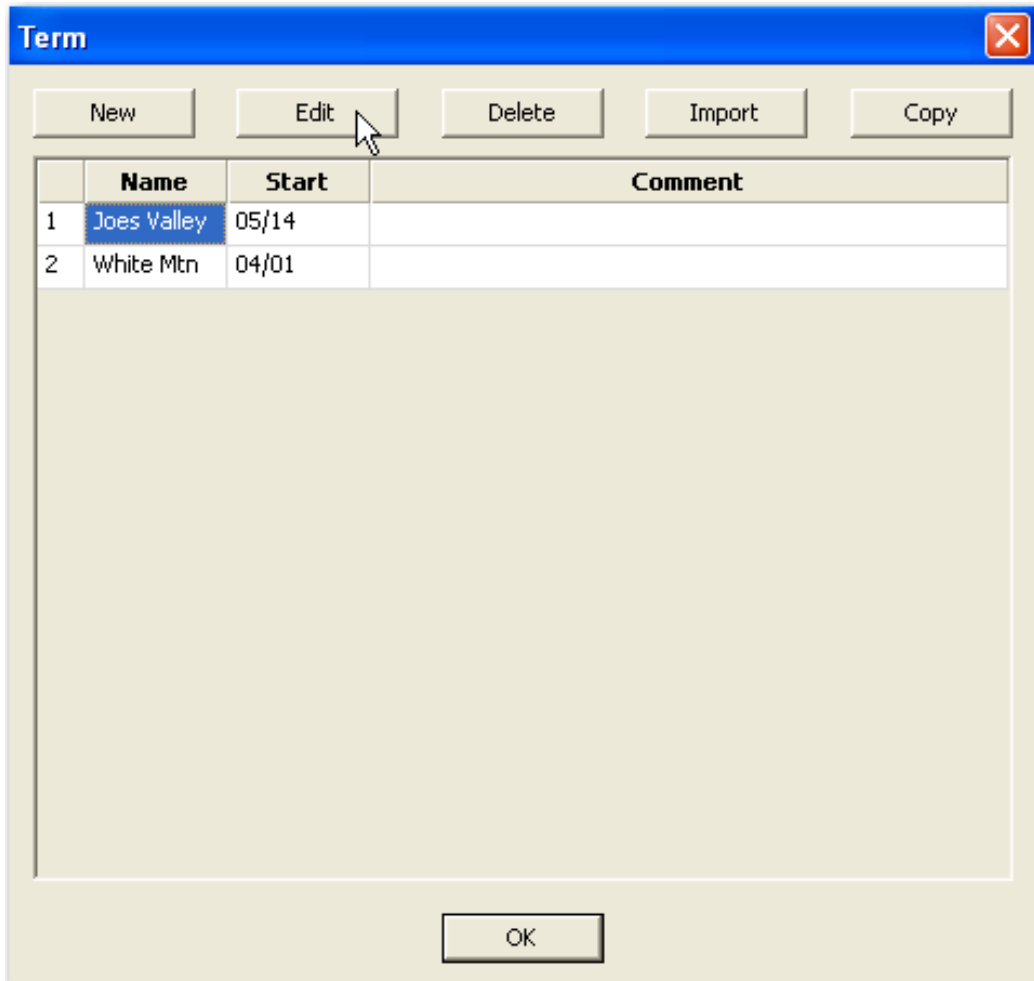
Default values are displayed in the **Term Key Probabilities** box above, but they can be altered. To select new values as your default values, click on **Set As Defaults -> OK**. To once again return to these original default values, click **Load Defaults -> OK**. Click **Cancel** to return to the **Edit Term Data** dialog box.

When you have finished filling out the **Edit Term Data** dialog box to your satisfaction, click **Save and Run** to generate your Term Report and Probability graph and save the file for subsequent use. Or, click **Save** to simply save the Term file you have just created for later use. Click **Close** to close the dialog box and return to the Working Set window without saving your file.

- **Edit**

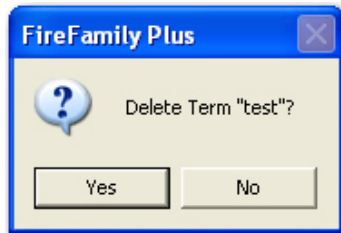


To open and edit an existing file shown in the list, highlight the Term file of your choice and click **Edit** to open the **Edit Term Data** dialog box. The file loads in the **Edit Term Data** dialog box allowing you to modify values such as Term Event dates or Start and End Year as described previously.



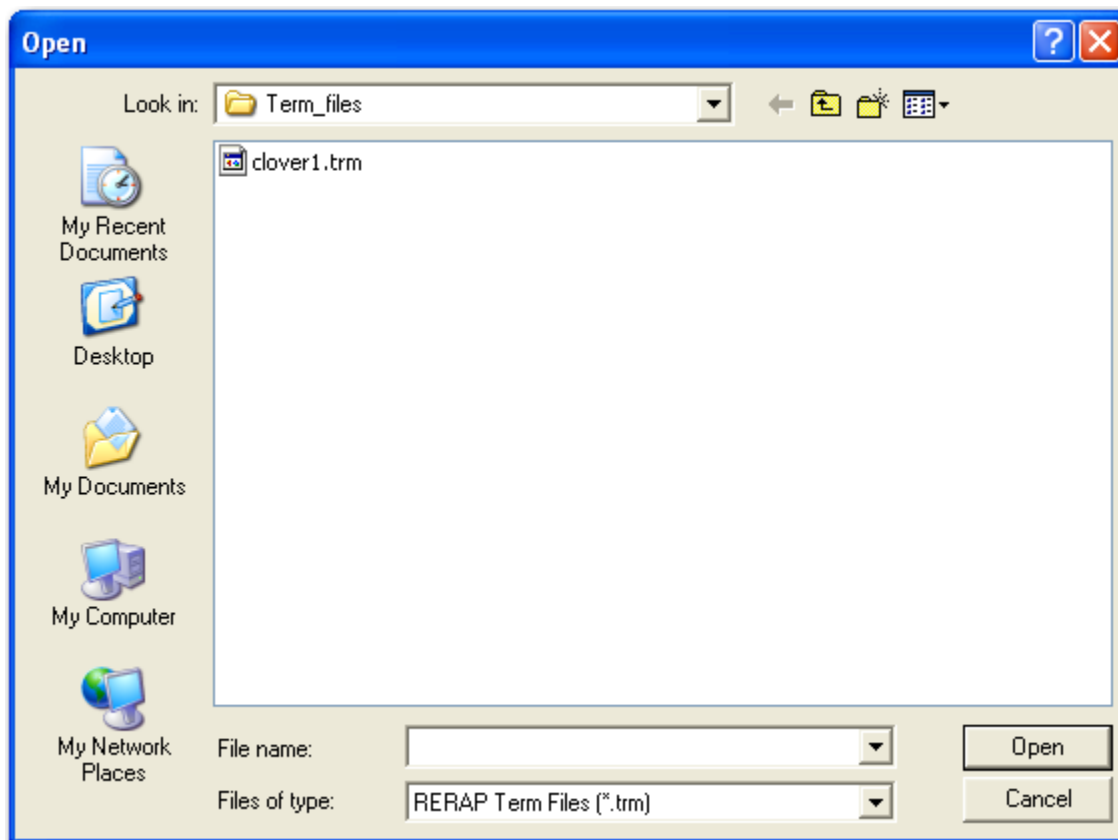
- **Delete**

To delete a Term file from the list, highlight the file of your choice and click on the **Delete** button. A box appears allowing you to verify this action. To continue click **Yes** and the file will be deleted.



- **Import**

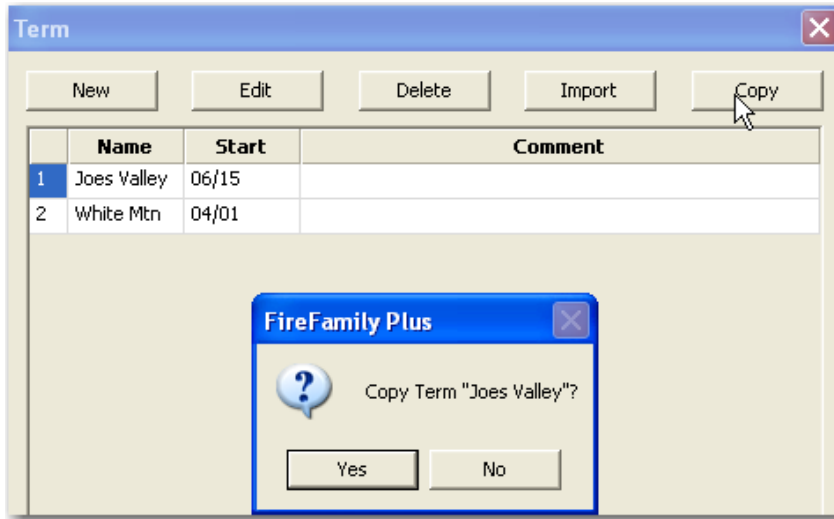
If you would like to import an existing term file (extension .trm), click **Import**. A box similar to the following will open. Navigate to the term file of your choice. From the available files, select the term file of your choice (.trm file) and click **Open**.



The imported file will appear in the **Edit Term Data** dialog box.

- Copy

To copy, highlight the file you would like to duplicate and click **Copy**.

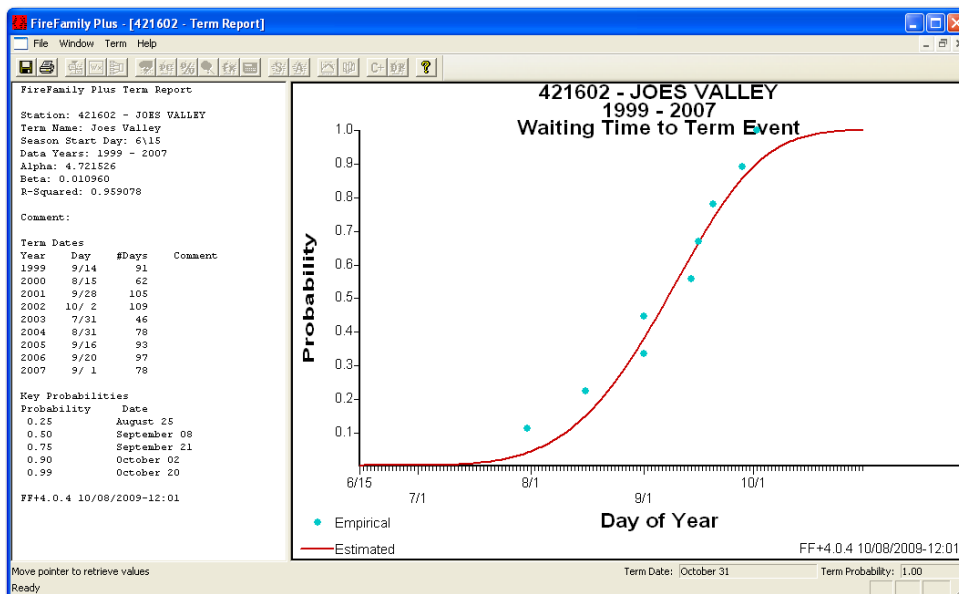


A box appears allowing you to verify this action. To continue click **Yes** and the file will be copied. Make edits or modifications as described earlier.

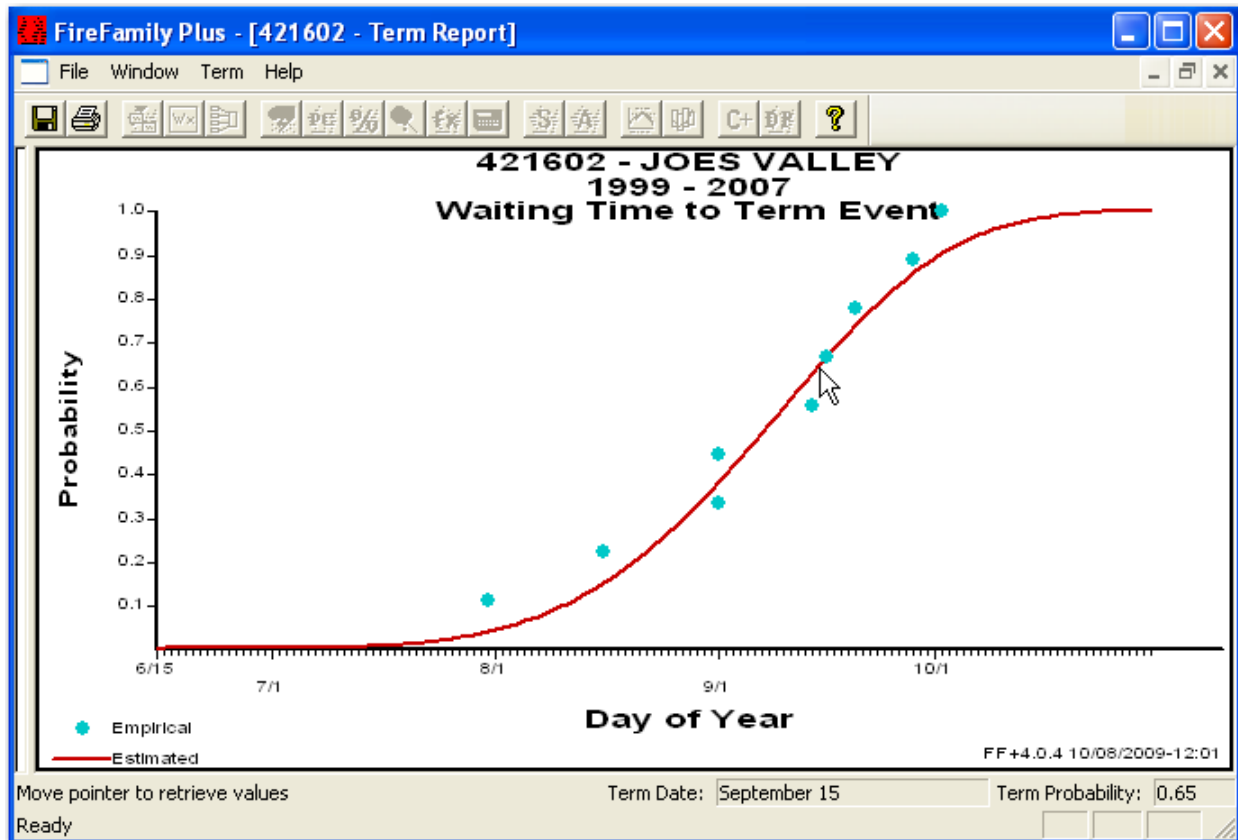
**Note:** Remember to change the name if desired before saving the new, duplicated term file.

## Output Discussion

Running **Term** plots *Waiting Time to Term Event* as shown.



To estimate the probability of a season-ending event occurring on or before a given date, read the value of the intersected Y-axis as shown below. In the following example, there is approximately a 65% chance of a season-ending event occurring by September 15<sup>th</sup>.



**Term** uses the default alpha and beta estimates. Alpha displays the calculated Alpha parameter of the Weibull waiting time distribution.

- The curve Alpha estimate must not be less than 1.

The Beta field displays the calculated Beta parameter of the Weibull waiting time distribution.

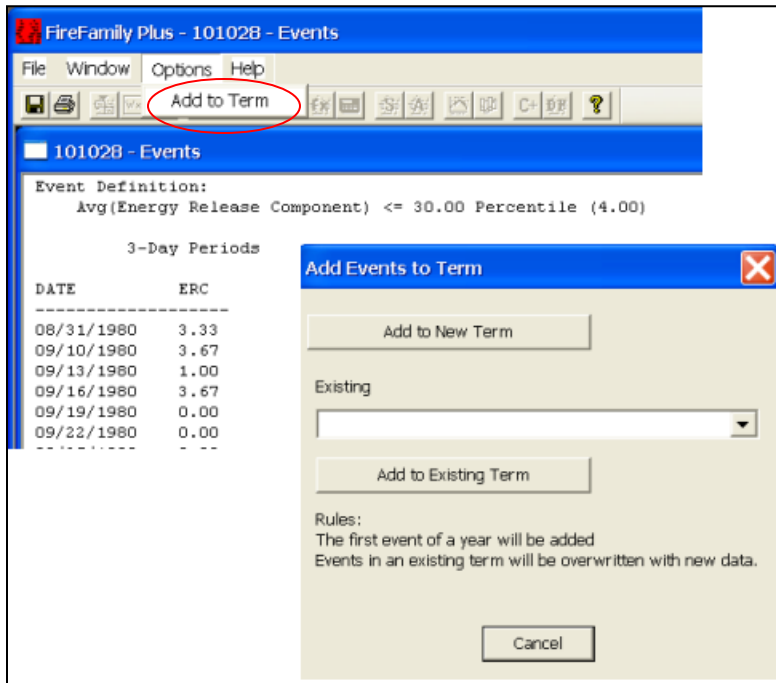
The R – Squared field helps evaluate the fit of the Weibull waiting time distribution against the Term Event Dates.

For example:

- R – Squared = 1 denotes a perfect fit.
- R – Squared = 0 denotes a lack of fit.

**Note:** If the curve doesn't fit to your empirical data after a few attempts, you may wish to reevaluate the Term event dates (seasoning-ending or fire-stopping event dates) you selected from FFP.

**Hint:** You can add dates from the **Event Locator** to initially populate a new or existing Term File by selecting **Options** from the menu while viewing the Events report. Click **Add to Term**.



The **Edit Term Data** dialog box will open, allowing you to edit and annotate your new Term File. The Event Definition is loaded into the Term **Comment** box.

