

# IFTDSS Workshop

## Handout 4: Calculate Fire Weather Statistics (IFT-FireFamilyPlus)

1. Go to <http://iftdss.sonomatech.com/> and log in.
2. Go to the Active Projects page by clicking on the **Projects** link.
3. Create a new project by clicking **Create New Project** or click on an existing project from the Active Projects list.

The screenshot displays the IFTDSS 2.0 beta web interface. The top navigation bar includes links for Home, Collaborate, **Projects**, Data, and Admin. The user is logged in as Huang, ShihMing. The main content area is titled 'Active Projects' and features a 'Help' link. Below the title, there are tabs for 'Active', 'Archived', 'My Published', and 'All Published'. A 'Show 10 entries' dropdown and a search field are also present. A table lists the active projects:

Project Name	# Runs	Author	Date Modified	Date Created	Actions
<u>Workshop</u>	1	Huang, ShihMing	01/15/2013	01/15/2013	

Below the table, there are filter dropdowns for '(all)' and pagination buttons: First, Previous, 1, Next, Last. The text 'Showing 1 to 1 of 1 entries' is displayed at the bottom left of the table area.

- From the Project Summary page, click on **Create New Run**.

**IFTDSS 2.0 beta**

Home Collaborate Projects Data Admin About Help Feedback Log Out

Logged in as Huang, ShihMing

## Workshop

**Create New Run**

### Project Summary

Help

**Information** Edit

Organization Name:

Project Start Date:

Project End Date:

Project Size:

Treatment Type:

Project Status: Planned

Description:

Date Modified: 01/15/2013

Date Created: 01/15/2013

**Area of Interest**

Resolution: 30.0m x 30.0m

Northeast corner:  
Latitude: 38.1515207°  
Longitude: -122.5333747°

Southwest corner:  
Latitude: 38.1034121°  
Longitude: -122.5980415°

Total Area:  
7,481.78 Acres  
30,277,800 m<sup>2</sup>

[Import Landscape data from LANDFIRE](#)

[Import Fuelbeds from LANDFIRE](#) [Upload Landscape Data Set](#)

Runs				
Run Name	Pathway	Date Modified	Date Created	Actions
Run_1	Manual treatment location (user-defined treatments...	01/15/2013	01/15/2013	

Filters: (all) (all) (all)

**Create New Run**

5. Select **Prescribed Burn Planning**, then select **Historical Fire Weather**, and finally select the **Calculate fire weather statistics (IFT-FireFamilyPlus)** pathway.



6. Give the run a unique name, then click **Next**.

7. On the Observation Site page, select the weather station in or closest to the area of interest. Click **Next**.

The screenshot shows a navigation bar at the top with three tabs: 'Observation Site', 'Configure', and 'Daily Climate'. The 'Observation Site' tab is active, indicated by a small orange triangle below it. Below the navigation bar is a green header bar with the text 'North Bay FW - Calculate fire weather statistics (IFT-FireFa...'. The main content area contains the following fields:

- 'Select State/Territory' dropdown menu with 'California' selected.
- 'Select Site Name' dropdown menu with 'SANTA ROSA' selected.
- 'Edit' button.
- 'Next >' button.

8. Configure the range of data for which the fire weather statistics will be calculated. On the Configure page, enter **Data Start Year**, **Data End Year**, **Output Start Month**, **Output Start Day**, **Output End Month**, and **Output End Day**. Click **Next**.

The screenshot shows the same navigation bar as the previous image, but the 'Configure' tab is now active, indicated by a small orange triangle below it. The green header bar remains the same. The main content area contains the following fields:

- 'Data Start Year' text input field with '1980' entered.
- 'Data End Year' text input field with '2010' entered.
- 'Output Start Month' dropdown menu with 'April' selected.
- 'Output Start Day' text input field with '15' entered.
- 'Output End Month' dropdown menu with 'April' selected.
- 'Output End Day' text input field with '30' entered.
- '< Back' button.
- 'Next >' button.

- Now, the daily climate statistics are displayed. Export a data table to a CSV file by clicking the **Export Table (CSV)** link below the table. View a graph of the results by clicking on the **Graph** link on the left side of the screen.

North Bay FW - Calculate fire weather statistics (IFT-FireFamilyPlus) Help ▾ Tools ▾

**Views**

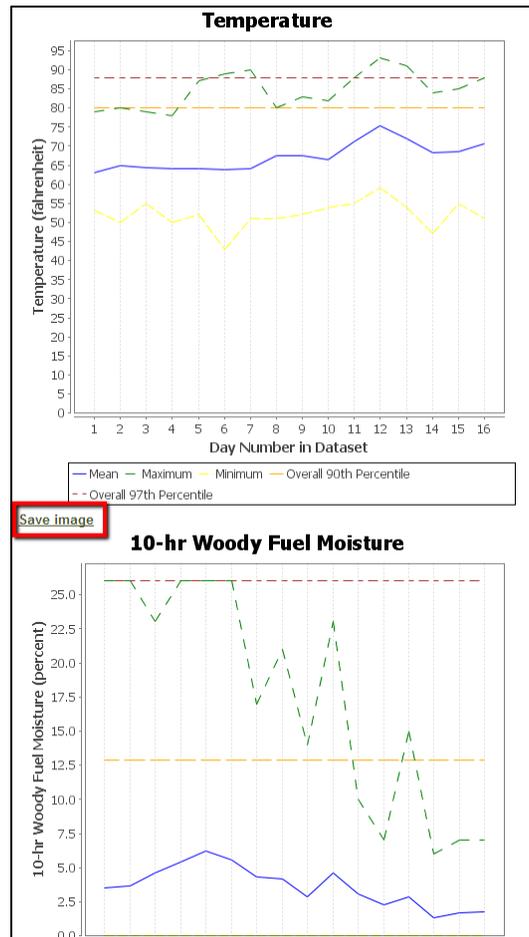
- Table
- Graph

**Maximum Temperature**

Parameter	Unit	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 1
Month		APR	APR	APR									
Day		15	16	17	18	19	20	21	22	23	24	25	26
Mean	fahrenheit	67	68	67	69	68	68	67	70	71	70	72	77
Standard Deviation	fahrenheit	6	9	8	7	9	9	9	9	8	8	10	9
Maximum	fahrenheit	79	81	80	79	87	90	93	91	83	83	88	93
Maximum Year		2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010
Minimum	fahrenheit	60	54	55	56	56	56	53	59	58	57	57	60
Minimum Year		2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010

Export Table (CSV)

10. Save a graph as a PNG file by clicking on **Save Image** below the graph.



11. Scroll down the screen to view results for maximum temperature, minimum temperature, temperature, 10-hr woody fuel moisture, wind direction, wind speed, maximum relative humidity, minimum relative humidity, relative humidity, precipitation amount, precipitation duration, solar radiation, herbaceous greenness factor, and shrub greenness factor. Click **Next** to view monthly climate statistics.

12. On the Monthly Climate page, you can view statistics of each of the parameters by month in table or graph mode, and you can export those statistics to CSV and PNG files. Click **Next**.

Navigation: < Figure ... Daily Climate ... Monthly Climate ... Daily NFDRS C

North Bay FW - Calculate fire weather statistics (IFT-FireFamilyPlus)

Views:  Maximum Temperature

Table  Graphs

Parameter	Unit	Month 1
Month		APR
Mean	fahrenheit	68
Standard Deviation	fahrenheit	9
Maximum	fahrenheit	74
Minimum		

Export Table (CSV)

13. Now, Daily NFDRS Outputs are shown. The NFDRS (National Fire Danger Rating System) parameters include 1-hr woody fuel moisture, 10-hr woody fuel moisture, 100-hr woody fuel moisture, 1000-hr woody fuel moisture, herbaceous fuel moisture, live woody fuel moisture, Keetch-Byram Drought Index (KBDI), rate of spread, ignition component, energy release component, flame length, fire intensity, and burning index. Again, statistics of each of the parameters can be viewed in table or graph mode, and can be exported to CSV and PNG files. Click **Next**.

◀ Location Site
Configure
Daily Climate
Monthly Climate
Daily NFDRS Outputs
Monthly NFDRS Outputs ▶

Run 1 - Calculate fire weather statistics (IFT-FireFamilyPlus)
Help ▾ Tools ▾

Views

Table

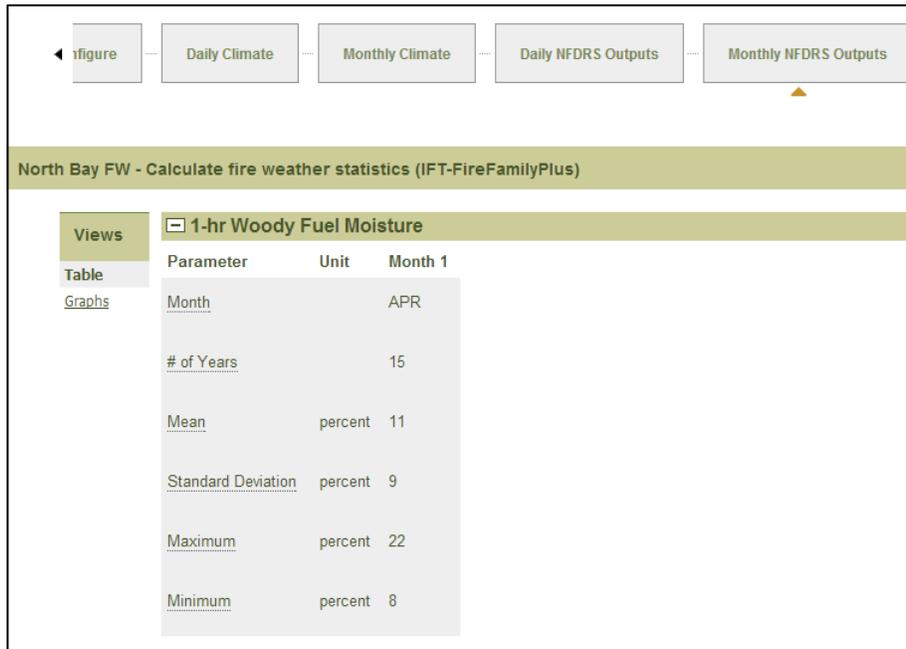
Graph

☐ 1-hr Woody Fuel Moisture

Parameter	Unit	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12
Month		APR	APR	APR									
Day		15	16	17	18	19	20	21	22	23	24	25	26
# of Years		7	7	7	7	7	7	7	7	7	7	7	7
Mean	percent	19	17	17	16	20	17	23	17	14	11	9	16
Standard Deviation	percent	13	13	8	13	14	12	13	13	12	7	5	14
Maximum	percent	35	35	28	35	35	35	35	35	35	24	18	35
Maximum Year		2010	2010	2009	2010	2010	2010	2010	2010	2010	2006	2005	2010
Minimum	percent	7	7	6	4	5	4	4	4	4	5	4	4
Minimum Year		2009	2007	2010	2009	2009	2009	2009	2009	2009	2009	2004	2010

[Export Table \(CSV\)](#)

14. Monthly NFDRS Outputs are displayed. Again, statistics of each of the parameters can be viewed in table or graph mode, and can be exported to CSV and PNG files.



15. Click **Finish** to end the run and go to the Run Summary page.