

# 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.

IFTDSS 2.0 beta

Home Collaborate **Projects** Data Admin Logged in as Huang, ShihMing

Active Projects

Click to create a new project

Create New Project

Active Archived My Published All Published

Show 10 entries Search:

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

Filters: (all) (all) (all)

Showing 1 to 1 of 1 entries

First Previous 1 Next Last

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

IFTDSS 2.0 beta

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Admin

Logged in as Huang, ShihMing

Workshop

Create New Run

Project Summary

Information

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



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:

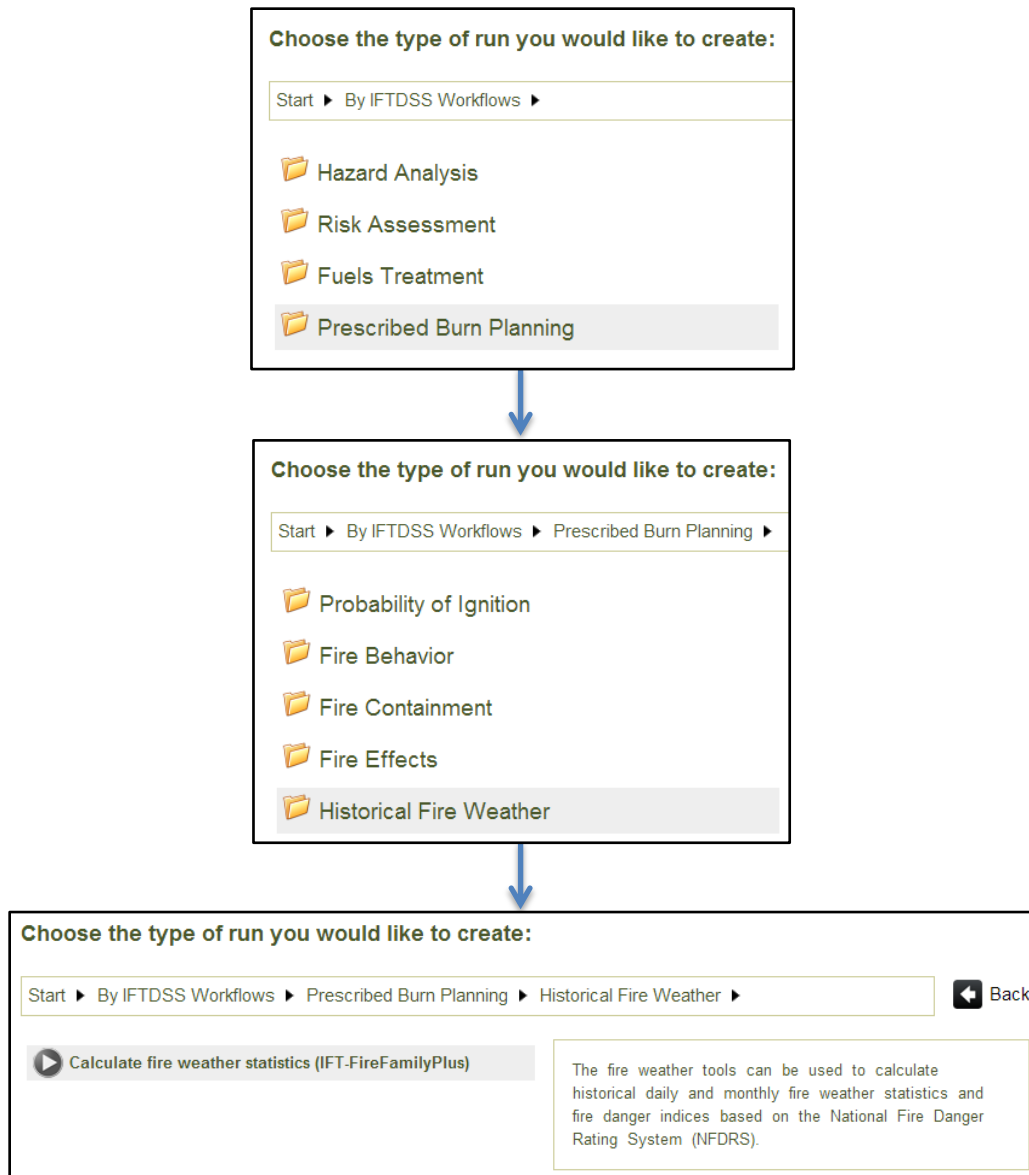
(all)

(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**.

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

Observation Site ..... Configure ..... Daily Climate

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

Select State/Territory  
California

Select Site Name  
SANTA ROSA

Edit Next >

- 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**.

Observation Site ..... Configure ..... Daily Climate

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

Data Start Year  
1980

Data End Year  
2010

Output Start Month  
April

Output Start Day  
15

Output End Month  
April

Output End Day  
30

< Back Next >

9. 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.

Observation Site    Configure    **Daily Climate**    Monthly Climate    Daily NFDRS Outputs    Monthly NFDRS

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

**Views**

**Table**

Graph

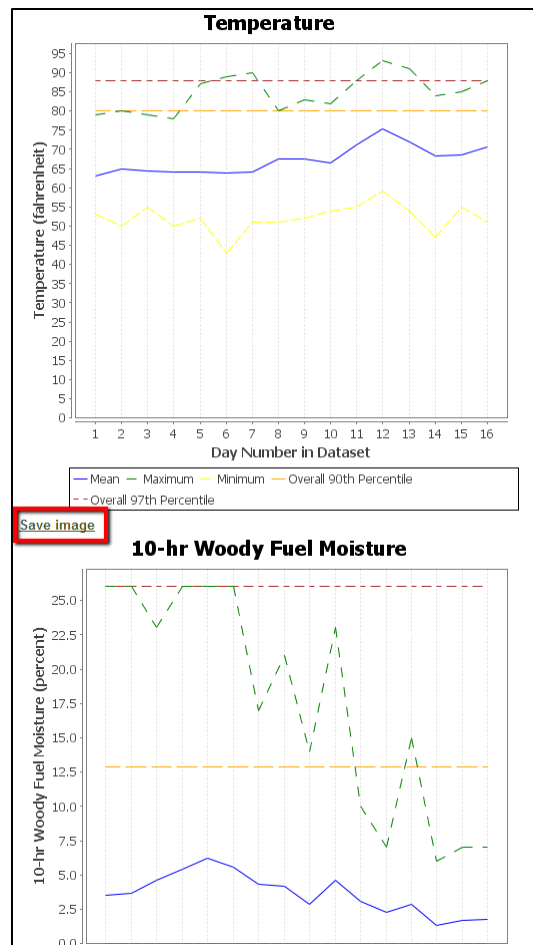
Results can be viewed as data tables or graphs

**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 12	Day 13	Day 14
Month		APR	APR	APR	APR	APR	APR	APR	APR	APR	APR	APR	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**.

The screenshot shows the 'Monthly Climate' page in the IFTDSS application. At the top, there is a navigation bar with buttons for 'Figure', 'Daily Climate', 'Monthly Climate' (which is highlighted with a yellow triangle), and 'Daily NFDRS'. Below this is a header for 'North Bay FW - Calculate fire weather statistics (IFT-FireFamilyPlus)'. The main content area is titled 'Views' and shows a table for 'Maximum Temperature'. The table has columns for 'Parameter', 'Unit', and 'Month 1'. The 'Month 1' column shows 'APR'. The table lists several parameters: 'Month' (15), 'Mean' (68), 'Standard Deviation' (9), 'Maximum' (74), and 'Minimum'. There are two red callout boxes: one pointing to the 'Graphs' button in the 'Views' section with the text 'Click to view graphs', and another pointing to the 'Export Table (CSV)' button at the bottom with the text 'Click to export table'.

Parameter	Unit	Month 1
Month		APR
		15
Mean	fahrenheit	68
Standard Deviation	fahrenheit	9
Maximum	fahrenheit	74
Minimum		

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**.

Observation 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

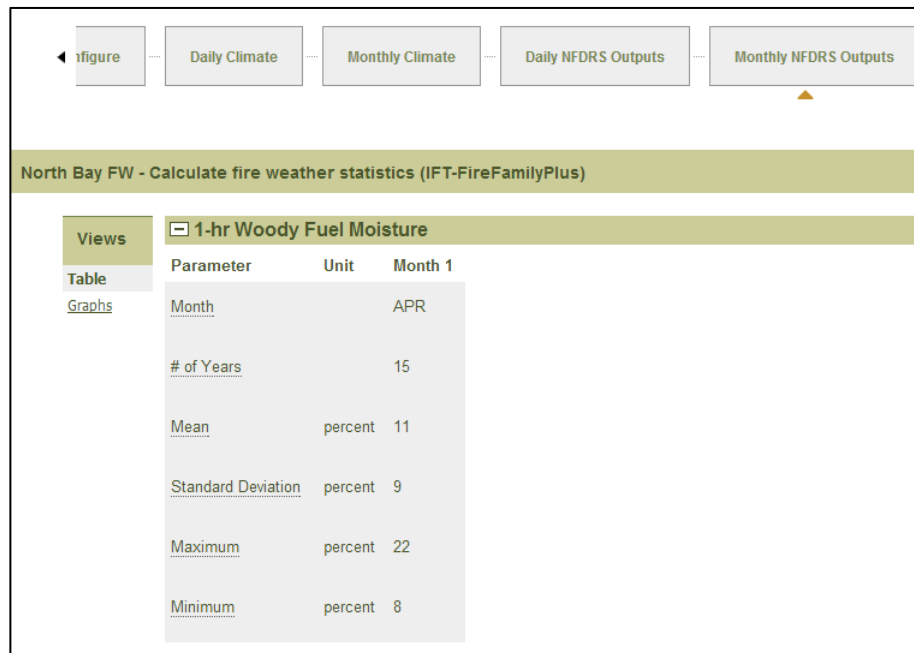
Parameter	Unit	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12
Month		APR	APR	APR	APR	APR	APR	APR	APR	APR	APR	APR	APR
Day		15	16	17	18	19	20	21	22	23	24	25	26
# of Years		7	7	7	7	7	7	7	7	7	7	7	7
Mean	percent	19	17	17	16	20	17	23	17	14	11	9	16
Standard Deviation	percent	13	13	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.