Getting Started

Welcome to
IFT-DSS Version 0.3.0
IFT-DSS currently supports

- Prescribed burn planning for a point location and fuel consumption estimates
- Strategic planning spatial analysis

At any time, you can return to a previous screen by closing an active Run window.

For additional help on FlamMap and Consume, please refer to the help links within the IFT-DSS.

Follow these steps to get started
Step 1: Create a user account

Select **Create Account** in the Log In window
Step 1: Create a user account

Enter Test Code
Enter Test Code: testdrive
Having Trouble? Please contact IFT-DSS feedback

OK  Cancel

Enter “testdrive” and click OK

Click the link above to view the Getting Started Guide

Fill in the boxes to create an account
Step 2: Log in to the IFT-DSS

After you log in to the system, the Home page appears.

From here you can

• Manage projects
• View/edit your user profile
• View a list of other IFT-DSS users
• Log out of the system
Step 3: Create a new project

A project is an analysis with a specific objective (e.g., prescribed burn planning analysis or strategic planning analysis).

This Getting Started Guide will walk you through the steps for

• performing a prescribed burn planning analysis
• estimating natural fuel consumption
• performing a strategic planning analysis
Step 3: Create a new project

First, select **New** to create a new project.

Second, enter information about your project in the Project Details screen and click the **Save** button.

Third, check the new project’s **Select** box and click **Manage Runs** to open the Run List screen.
Step 4: Create a new run

Select **New** to open the Run Details screen.
Step 4: Create a new run

• Enter information about the run
• Select the analysis objective
• Choose the action graph

The action graph indicates the model(s) to be used for the analysis. The three action graph options for a non-spatial analysis in this version of IFT-DSS are

• **FlamMap SFB** (surface fire behavior) – runs FlamMap for a point location and five fuel models

• **FlamMap SFB all fuel models** – runs FlamMap SFB for a point location and 13 fuel models

• **Consume** – runs the natural consumption algorithm in Consume 3.0

Future versions of the IFT-DSS will contain more options (models) for modeling fire behavior.
Step 5: Input landscape and moisture values

When a run is saved, an action graph (top) and data input screen (bottom) appear. The action graph shows the process flow and inputs required by FlamMap to model SFB (i.e., settings, landscape, and moisture parameters). The color coding indicates where you are in the modeling process.

Landscape and moisture input screen for FlamMap SFB

Action Graph Legend
- Data storage
- Editable data
- Software module
- Data flow
- Run module to refresh output data
- Currently active data screen
- Previously visited input data screen
- Data screen not yet visited

Data input screen

Option to toggle Graph or Table view

Click On-Line Help for FlamMap information

Default data values
Step 6: Input wind speed and direction, and then run FlamMap

After the wind speed and direction values are entered, click the FlamMap SFB oval to execute the FlamMap model.
Step 7: View and export FlamMap output

- View FlamMap fire behavior outputs in tabular or graphical format
- New in this version of IFT-DSS is the ability to perform multiple runs and view the output in different windows
- When you are done, you can save your input data and FlamMap output data to a .csv file that can be viewed directly in Excel
The following screens will show you how to

• Use FlamMap SFB for all fuel models
• Run Consume 3.0 to estimate natural fuel consumption
Using FlamMap SFB for 13 fuel models

STEP 1: Return to the Run screen and begin a new run. In the Run Details window, select FlamMap SFB all fuel models. Click the Save button.

STEP 2: Enter landscape, moisture, and wind settings. Click the FlamMap SFB oval to run FlamMap.

STEP 3: View the FlamMap SFB output for the 13 fuel models in either graphical or tabular format. You can show different output data on the Y-Axis of the graph by clicking the drop-down menu.
Running Consume 3.0 to estimate fuel consumption

**STEP 1:**
Return to the Run screen and begin a new run. In the Run Details window, select Consume and click the Save button.

**STEP 2:**
Enter the following data into the Consume input screen
- fuel moisture
- type of fire
- acres burned
- fuel information
Click the Consume oval to run Consume 3.0.

**STEP 3:**
View the fuel consumption output from the Consume model.

Note that the Consume 3.0 natural consumption module is currently being accessed by the IFT-DSS via a web service call to the BlueSky Smoke Modeling Framework. Future versions of the IFT-DSS will include all Consume 3.0 modules as well as the FCCS and FEPS developed by the Fire and Environmental Research Applications (FERA) Team.
The following screens will show you how to use FlamMap SFB and Landscape (.LCP) data to perform a strategic analysis of fire hazard.

The objective of the strategic analysis is to quickly identify areas within a landscape that may warrant fuel treatment.
Performing a strategic analysis using landscape data

STEP 1:
Return to the Project screen and begin a new project. In the Project Details window, upload a landscape data file (.LCP) and name your dataset. First, browse to your landscape data file (.LCP) and click Open. Then browse to the landscape projection file (.PRJ) and click open. Now your landscape data are loaded into the system.

STEP 2:
Create a new run. Select Strategic Planning in the Objective drop-down menu and Spatial FlamMap SFB in the Action Graph menu. Finally, click Save.
Performing a strategic analysis using landscape data

STEP 3:
Enter wind direction and speed inputs. The action graph and data input screens (lower half of page) are dynamically linked. Click the **Wind**, **Landscape**, and **Moisture** boxes in the action graph to enter FlamMap input data.

Click the **FlamMap SFB** oval in the action graph to run the FlamMap model.
Performing a strategic analysis using landscape data

STEP 4:
Click on the Landscape box to upload or select the data you would like to use for the Run. The action graph and data input screens (lower half of page) are dynamically linked. Click the Wind, Landscape, and Moisture boxes in the action graph to enter FlamMap input data.

Click the FlamMap SFB oval in the action graph to run the FlamMap model.
Performing a strategic analysis using landscape data

STEP 5:
View your landscape input data in the map viewer window. The action graph and map viewer are dynamically linked. Click the Wind, Landscape, and Moisture boxes in the action graph to enter FlamMap input data.

Click the FlamMap SFB oval in the action graph to run the FlamMap model.
Performing a strategic analysis using landscape data

STEP 6:
Click on the Moisture box to enter moisture input data.

Click the FlamMap SFB oval in the action graph to run the FlamMap model.
Performing a strategic analysis using landscape data

STEP 7:
View the FlamMap SFB output data in the map viewer window.

You may export the input and output map layers to Google Earth (or another KML viewer) by clicking the **Export to KML** button.
Thank You for Visiting IFT-DSS!

Please send us your comments and feedback

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