

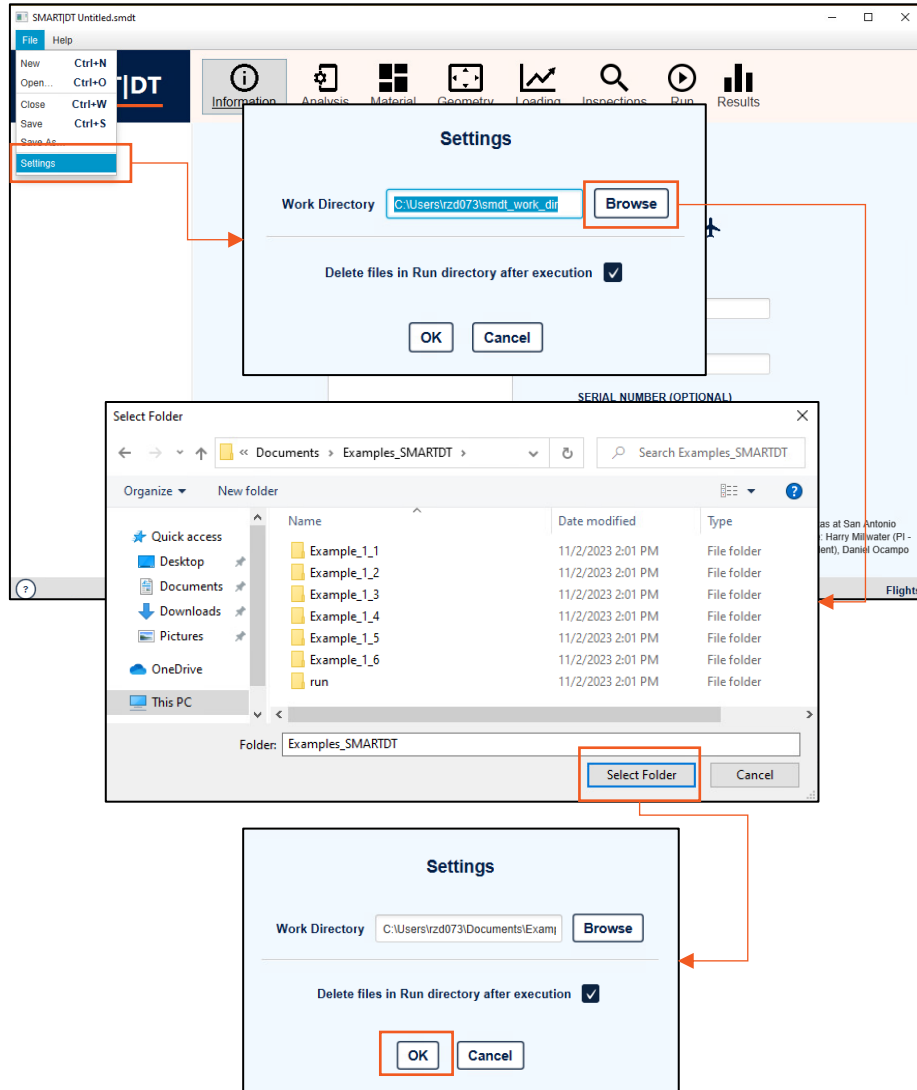
# File Management in SMART|DT

The next slides contain the steps required to set the working directory in SMART|DT, as well as opening and saving files in the GUI.

For a complete guide on the installation of the SMART|DT software, visit this link: <https://smartdtsoftware.wixsite.com/smart/copy-of-agenda>

# Windows Version

# Setting The Working Directory

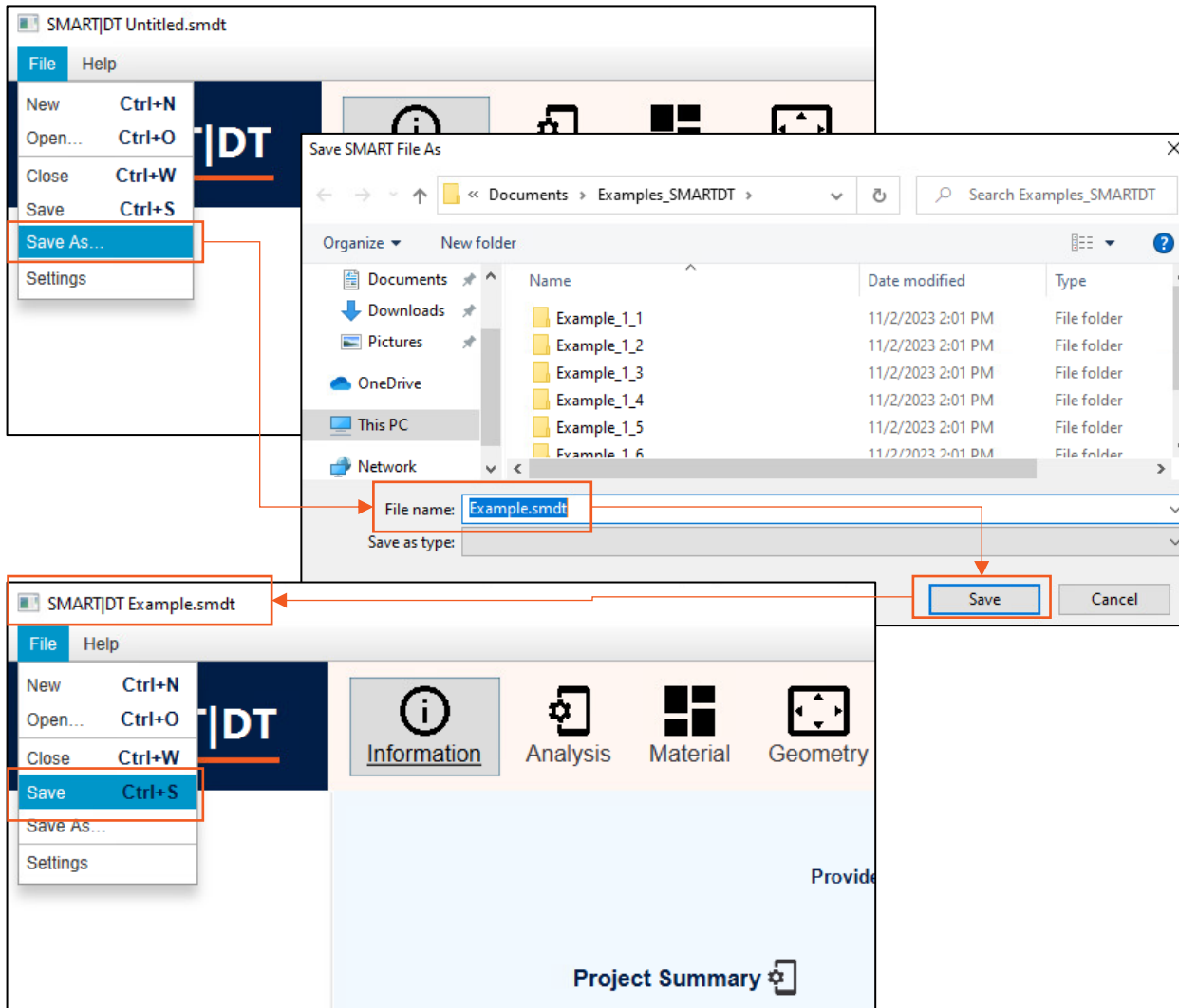


- Open the SMART|DT GUI. Click the **File** menu at the top left corner of the screen and select the **Settings** button. A pop-up window will appear.
- Click the **Browse** button and select the folder that will be used as the working directory. Click the **Select Folder** button to confirm the selection.
- The name of the selected folder should now be visible in the Settings pop-up window. Click the **OK** button to save the selection.

**Note:**

- 1) The **Working Directory** is the folder that SMART|DT will automatically use to open and save files generated during the run.
- 2) The location of this folder can be changed at anytime<sup>3</sup>.

# Saving a .smdt File

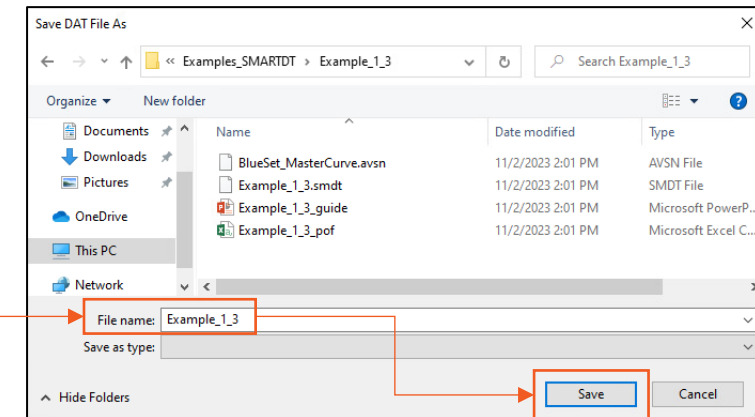
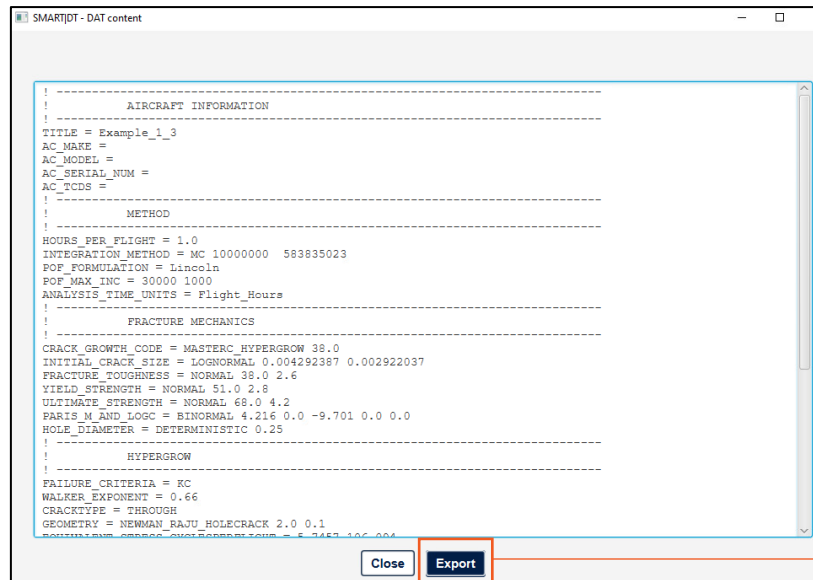
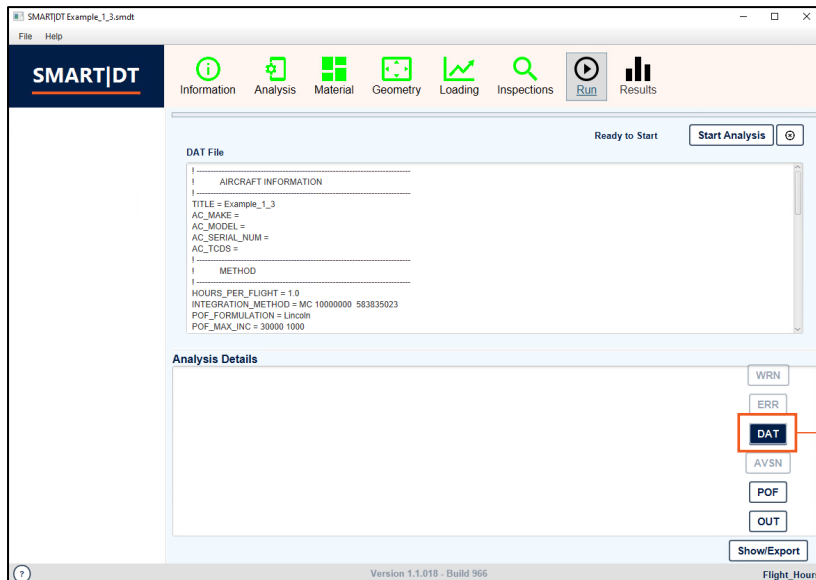


- Open the File menu and select the **Save As...** option.
- A pop-up window will appear and it will open at the Working Directory folder. Name the .smdt file and click the **Save** button.
- The file will have been successfully saved if the name at the top of the GUI changes to the one selected in the previous step.
- Continue to save your progress and/or the end results by opening the File menu and selecting the **Save** button.

# Saving a .smdt File (Cont.)

## Note:

- 1) A .smdt file that contains results will save both the files generated during the run in the **Run Pane** as well as the SFPOF plot from the **Results** pane.
- 2) All this information, as well as the inputs used for the run, will be contained within the .smdt file and will only become visible once the file is reopened in the GUI.
- 3) It is also possible to save the **Run Pane** files individually, such that opening the .smdt file is not required to view them. An example of this procedure is shown below:



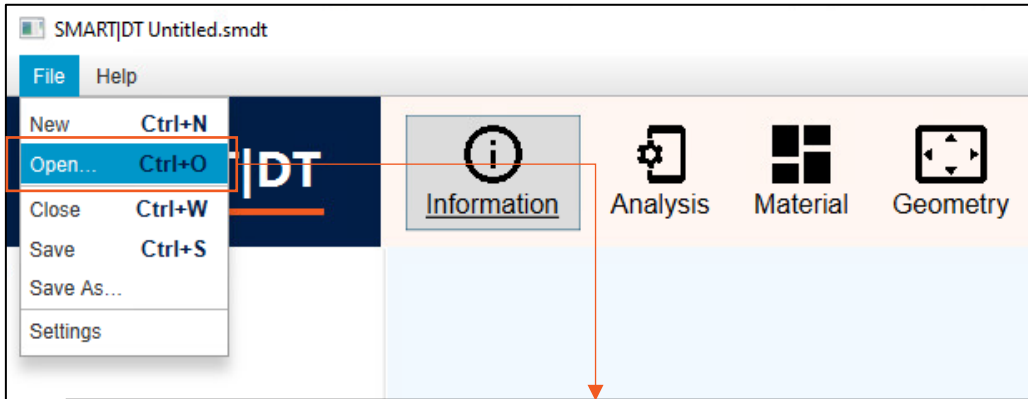
# Saving a .smdt File (Cont.)



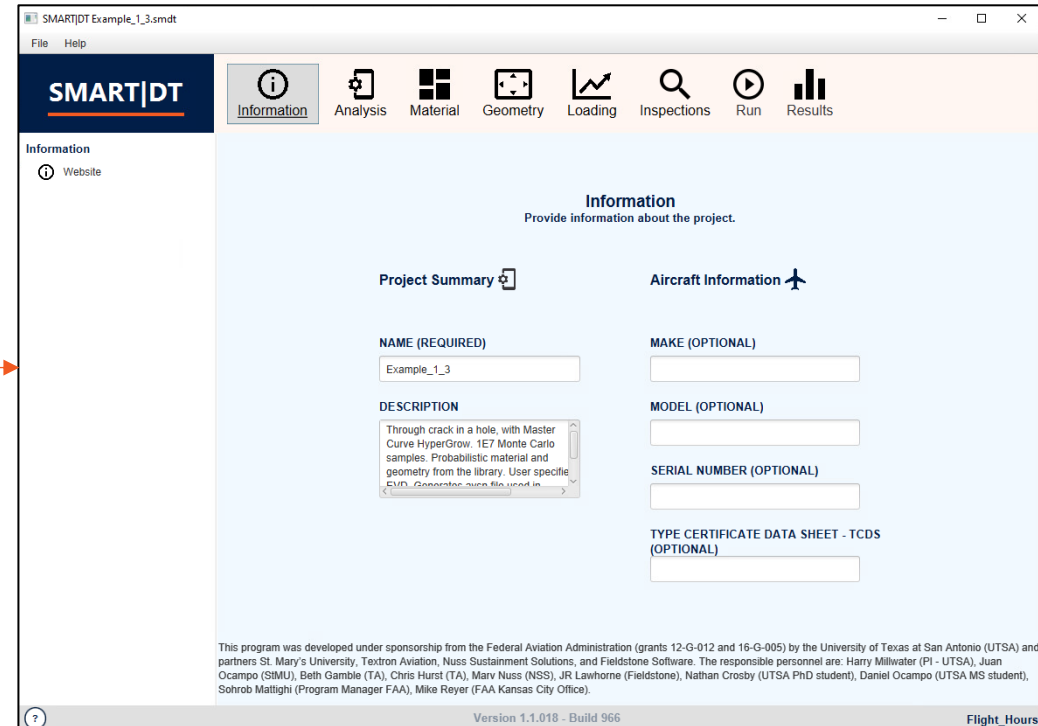
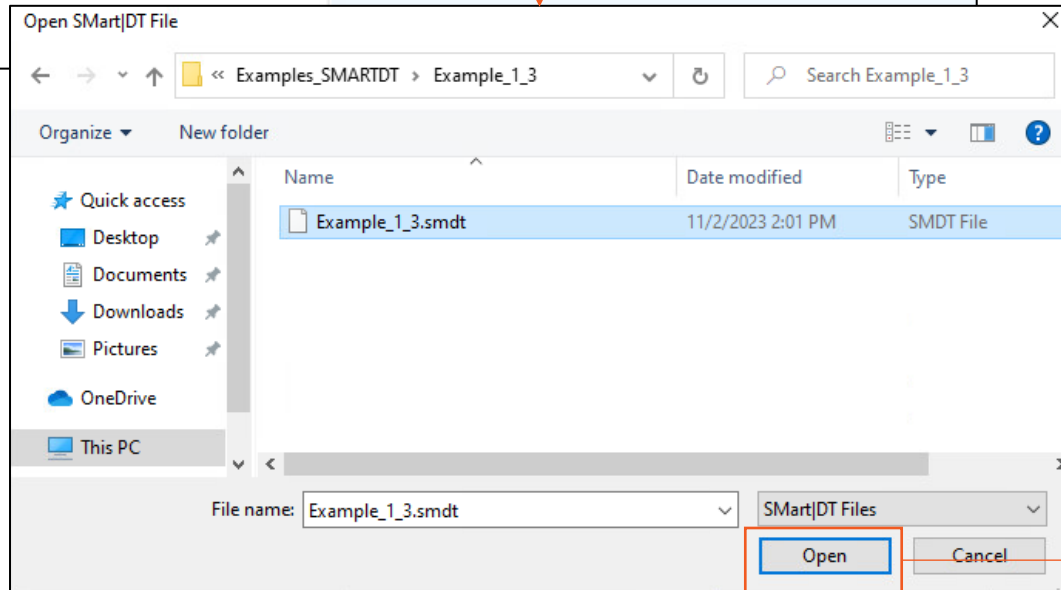
## Note:

- 4) Some examples in this set will prompt the user to load different types of files into the GUI: Master Curves (.avsn), beta tables (.csv) and tabular EIFS (.csv). All files required to perform a run **must** be located at the same folder where the .smdt file is saved.
- 5) It is advised to also save the **Run Pane** files in the same folder as the .smdt file.

# Opening a Saved .smdt File

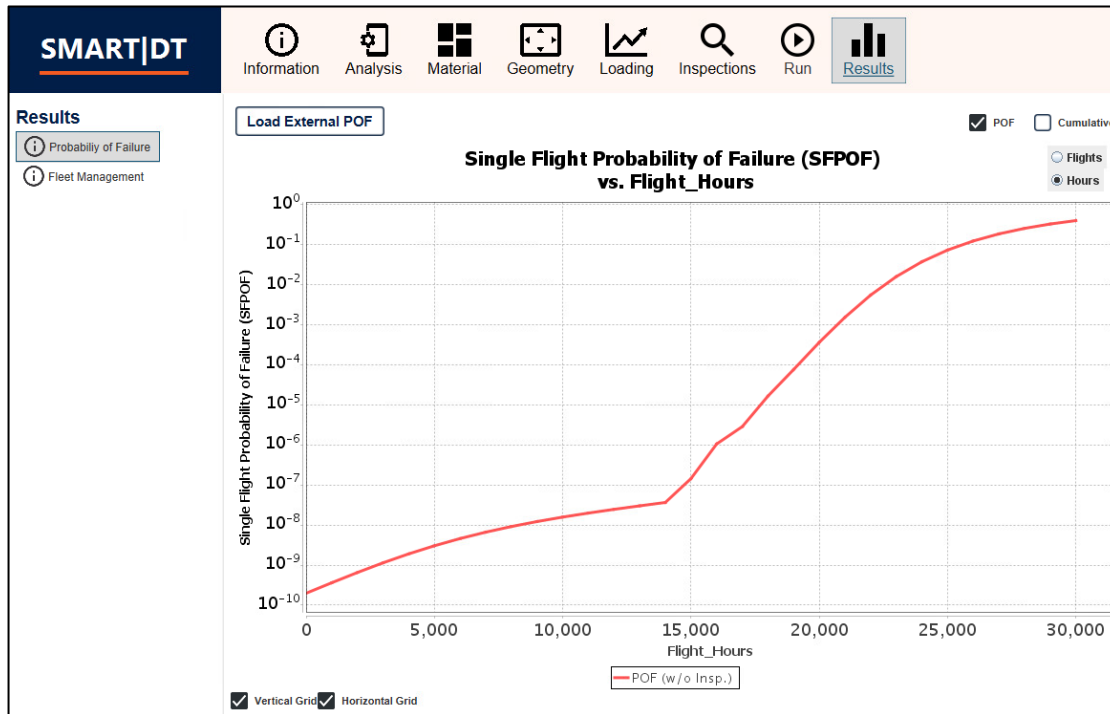


- Open the File menu and click the **Open** option. Browse and select the .smdt that you wish to open and click the **Open** button.



This program was developed under sponsorship from the Federal Aviation Administration (grants 12-G-012 and 16-G-005) by the University of Texas at San Antonio (UTSA) and partners St. Mary's University, Textron Aviation, Nuss Sustainment Solutions, and Fieldstone Software. The responsible personnel are: Harry Millwater (PI - UTSA), Juan Ocampo (SIMU), Beth Gamble (TA), Chris Hurst (TA), Marv Nuss (NSS), JR Lawhorne (Fieldstone), Nathan Crosby (UTSA PhD student), Daniel Ocampo (UTSA MS student), Sohrob Matlghi (Program Manager FAA), Mike Reyer (FAA Kansas City Office).

# Opening a Saved .smdt File (Cont.)



**SMART|DT** Information Analysis Material Geometry Loading Inspections Run Results

Ready to Start

DAT File

```

|-----|
| AIRCRAFT INFORMATION |
|-----|
| TITLE = Example_1_3  |
| AC_MAKE =            |
| AC_MODEL =           |
| AC_SERIAL_NUM =      |
| AC_TCDS =            |
|-----|
| METHOD                |
|-----|
| HOURS_PER_FLIGHT = 1.0 |
| INTEGRATION_METHOD = MC 10000000 583835023 |
| POF_FORMULATION = Lincoln |
| POF_MAX_INC = 30000 1000 |
|-----|

```

Analysis Details

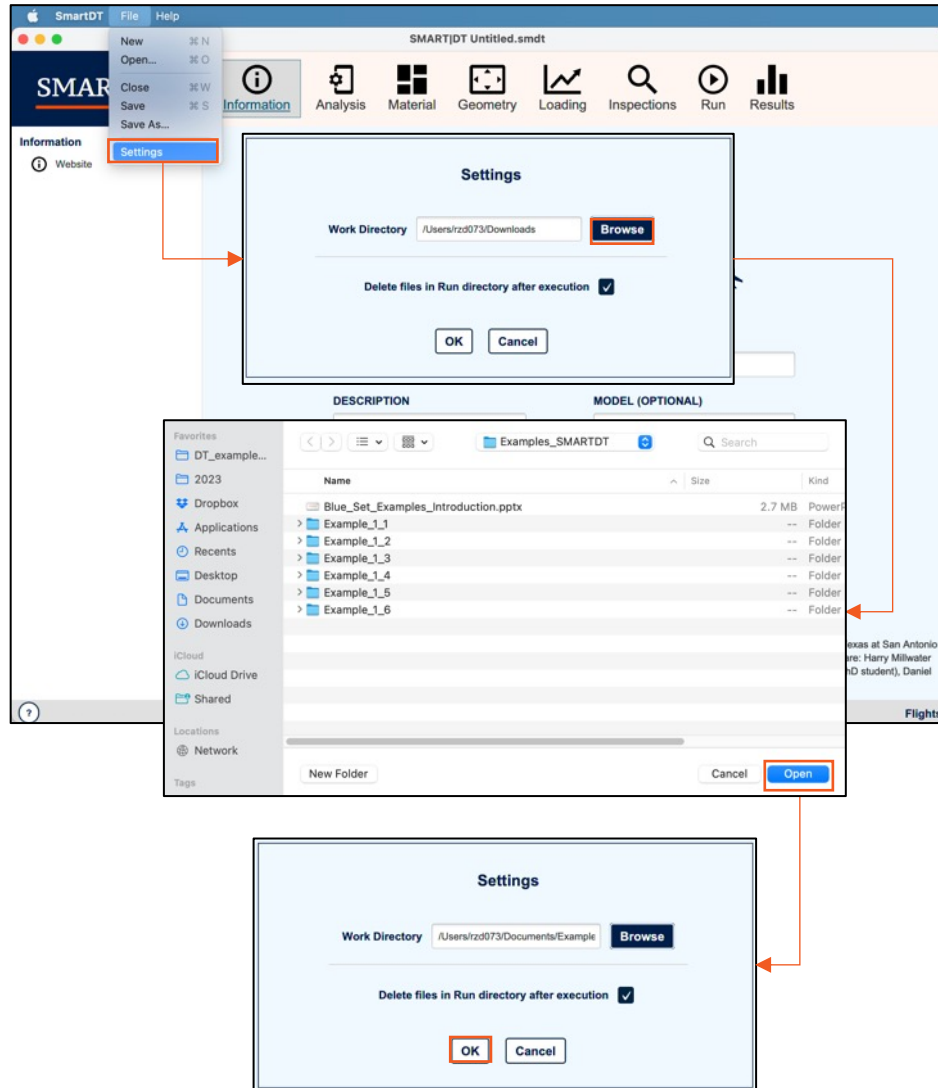
## Note:

1) If the .smdt contains results from a previous run, it is not necessary to re-run the file to view the results. It is possible to directly view them by clicking the **Results** pane, or by opening the available results files (DAT, POF, OUT) in the **Run** pane.



# MacOS Version (Intel version only)

# Setting The Working Directory

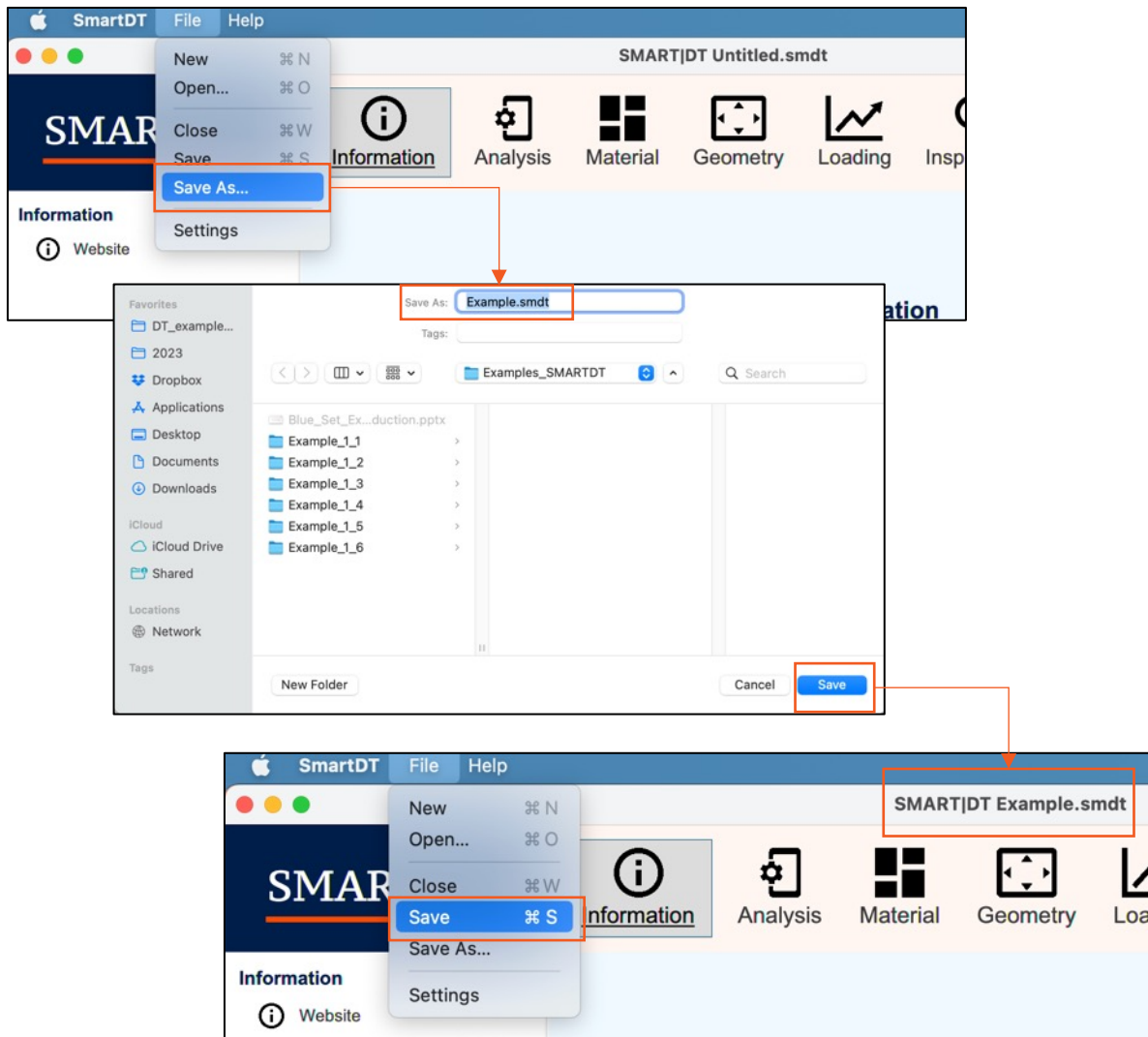


- Open the SMART|DT GUI. Click the **File** menu at the top left corner of the screen and select the **Settings** button. A pop-up window will appear.
- Click the **Browse** button and select the folder that will be used as the working directory. Click the **Open** button to confirm the selection.
- The name of the selected folder should now be visible in the Settings pop-up window. Click the **OK** button to save the selection.

## Note:

- 1) The **Working Directory** is the folder that SMART|DT will automatically use to open and save files generated during the run.
- 2) The location of this folder can be changed at anytime.

# Saving a .smdt File

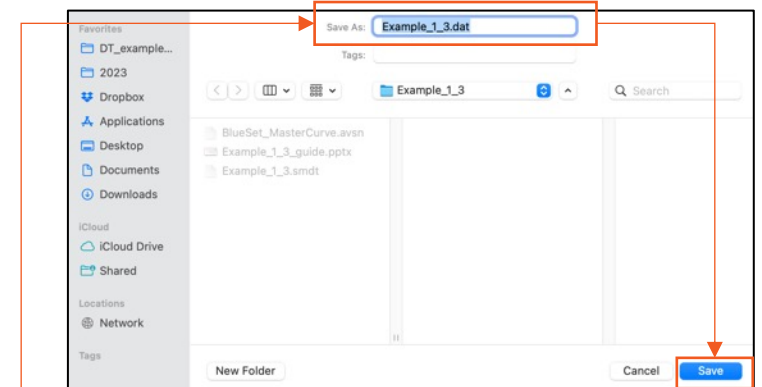
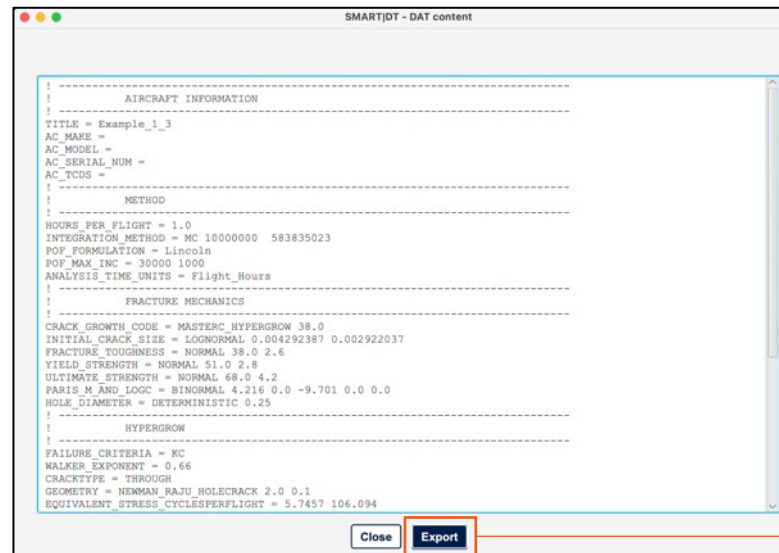
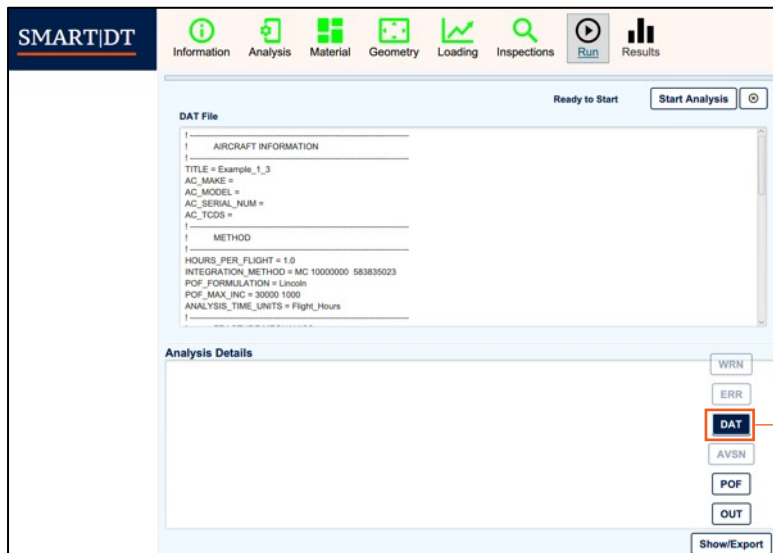


- Open the File menu and select the **Save As...** option.
- A pop-up window will appear and it will open at the Working Directory folder. Name the .smdt file and click the **Save** button.
- The file will have been successfully saved if the name at the top of the GUI changes to the one selected in the previous step.
- Continue to save your progress and/or the end results by opening the File menu and selecting the **Save** button.

# Saving a .smdt File (Cont.)

## Note:

- 1) A .smdt file that contains results will save both the files generated during the run in the **Run Pane** as well as the SFPOF plot from the **Results** pane.
- 2) All this information, as well as the inputs used for the run, will be contained within the .smdt file and will only become visible once the file is reopened in the GUI.
- 3) It is also possible to save the **Run Pane** files individually, such that opening the .smdt file is not required to view them. An example of this procedure is shown below:



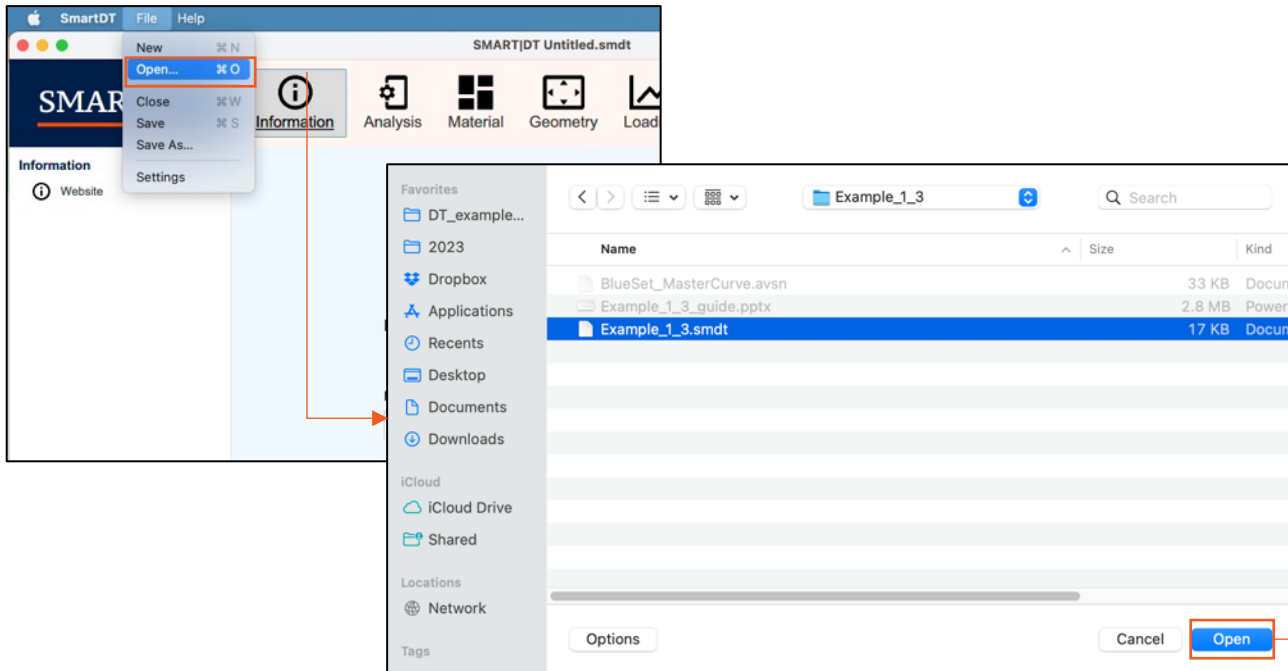
# Saving a .smdt File (Cont.)



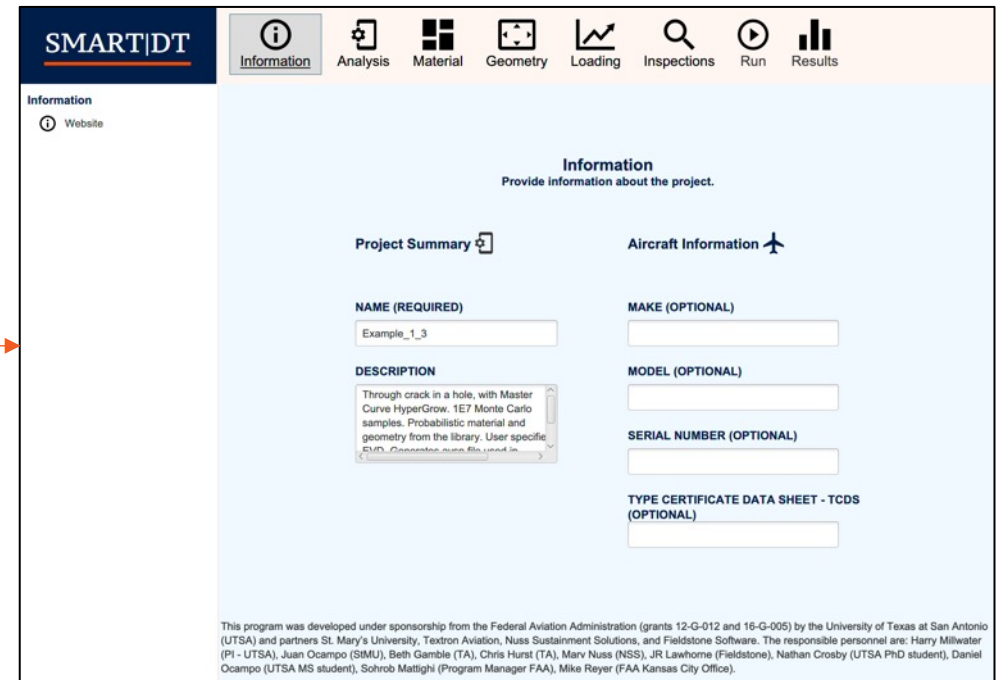
## Note:

- 4) Some examples in this set will prompt the user to load different types of files into the GUI: Master Curves (.avsn), beta tables (.csv) and tabular EIFS (.csv). All files required to perform a run **must** be located at the same folder where the .smdt file is saved.
- 5) It is advised to also save the **Run Pane** files in the same folder as the .smdt file.

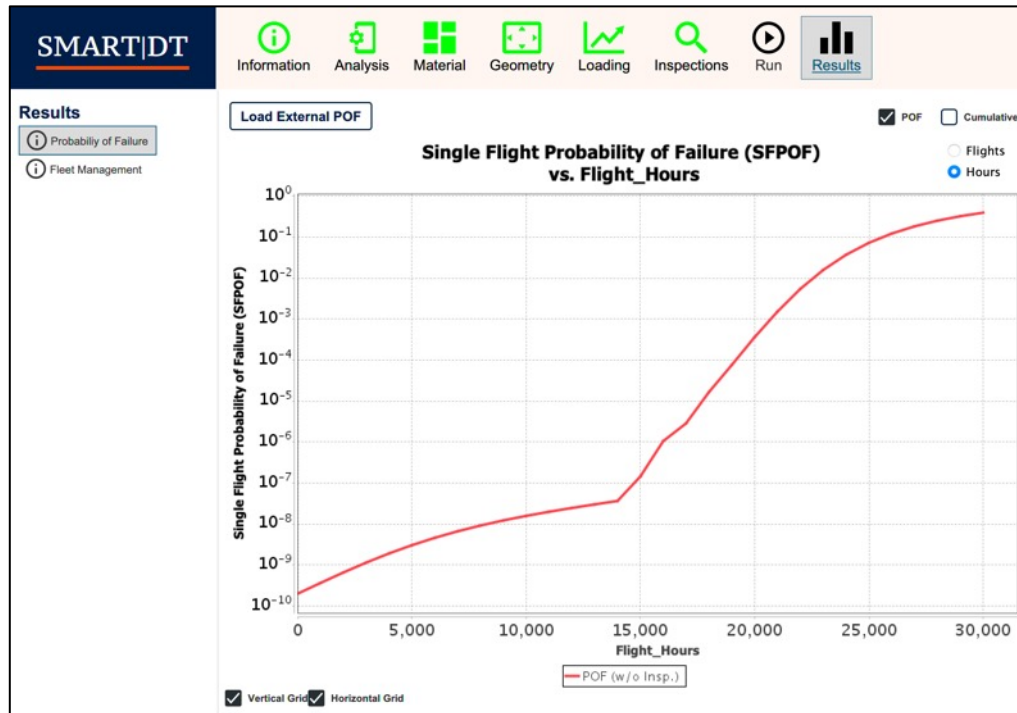
# Opening a Saved .smdt File



- Open the File menu and click the **Open** option. Browse and select the .smdt that you wish to open and click the **Open** button.



# Opening a Saved .smdt File (Cont.)



**Run**

Ready to Start Start Analysis

**DAT File**

```

AIRCRAFT INFORMATION
TITLE = Example_1_3
AC_MAKE =
AC_MODEL =
AC_SERIAL_NUM =
AC_TCDS =
METHOD
HOURS_PER_FLIGHT = 1.0
INTEGRATION_METHOD = MC 10000000 583835023
POF_FORMULATION = Lincoln
POF_MAX_INC = 30000 1000
ANALYSIS_TIME_UNITS = Flight_Hours
    
```

**Analysis Details**

WRN  
ERR  
DAT  
AVSN  
POF  
OUT  
Show/Export

## Note:

1) If the .smdt contains results from a previous run, it is not necessary to re-run the file to view the results. It is possible to directly view them by clicking the **Results** pane, or by opening the available results files (DAT, POF, OUT) in the **Run** pane.