Best Practices Data File Management FlamMap6 June 2022

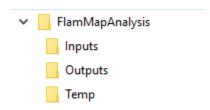


Data File Management

While this seems rather remedial it is an important topic. With FlamMap and multiple runs you can generate a lot of outputs and depending on your landscape size, data spatial resolution these can be many, many megabytes to GB in size! File management and organization is important.

Best Practices Include:

- 1. **DO NOT** create your project folders on your **Desktop**. Yes, it is the Easy Button! But it will create a long pathname (c:\users\cmchugh\documents\ for example) to your folder often including special characters like % signs that you do not see.
- 2. **DO NOT** create your project folder in **My Documents**. Same as above with creating your work area on your **Desktop**.
- 3. **DO NOT** use, access or acquire data across a Network. Always keep the program and data installed locally on your computer. Certainly, back up your data onto a network or other reliable storage area. But the program is not designed specifically to operate accessing data across a network.
- 4. Best Practice is to Keep pathnames and filenames short as possible with the following suggestions and considerations.
 - a. Follow old style DOS naming conventions
 - b. Don't use spaces, use underscores (_)
 - c. Don't include special characters such as @, #, \$, %, &, *, /, \
 - d. An Example Workspace might be: C:\WorkSpace\FlamMapAnalysis\ with several subfolders underneath it. For example:



Using WFDSS Files in FlamMap

If you use ignition files, barrier files, or other geospatial information from the WFDSS application (landscape files, ignition and barrier shapefiles) it is recommended to rename and shorten them prior to use in FlamMap. This is Especially important because these file names can be **EXTREMELY LONG** and include special characters at times.

FOR Example, this is an actual ignition shapefile name downloaded from WFDSS: Lion_Creek_Initial_3day_forecast_Ignition_start_8_13_081520_NTFB_Ignition_Albers.shp

You should change this to something much shorter, such as: LionCreek Igntion 08152020.shp

For more detailed information See the Document, "FlamMap6 Quick Guide Importing WFDSS Run Input" from the FlamMap Fire Lab Page for specific instructions on downloading files from WFDSS for use in FlamMap at: FlamMap6-Quick Guide Importing WFDSS Run input text files.pdf (firelab.org)

Using IFTDSS Files in FlamMap

The IFTDSS Help Center has specific examples on how to download, import and use IFTDSS generated landscapes and analysis into FlamMap.

In all cases the landscape file used in the respective analysis will need to be downloaded separately.

Current Help File content covers:

Importing Landscape Burn Probability (LBP):

https://iftdss.firenet.gov/firenetHelp/help/pageHelp/content/10-workspace/downloads/flmmpinputlbp.htm?Highlight=flammap

Importing Landscape Fire Behavior (LFB):

https://iftdss.firenet.gov/firenetHelp/help/pageHelp/content/10-workspace/downloads/flmmpinputlfb.htm?Highlight=flammap

Like IFTDSS LBP or LFB analyses, a Completed IFTDSS Minimum Travel Time Fire Spread (MTT) Outputs and an analysis landscape file for a completed analysis can also be downloaded and used in FlamMap.

See here to **Download IFTDSS MTT Outputs**

The downloaded zip file will include.

- MTT Inputs file (Filename.input) can be imported into FlamMap to initialize simulation Inputs and settings, fuel moistures, weather streams, conditioning periods
- Will include the ignition file and any barrier file used in the simulation
- Requires loading the ignition and barrier files as well as selecting required outputs.

Can I use an External Drive?

Yes, you can. However, it comes with some considerations

It is always safest to create a workspace on the largest drive on your computer and do all your work there. Make sure you have read/write access to these areas. Make sure this is also created outside of Desktop and My Documents area as previously mentioned.

- a. IF you can use an external hard drive as your workspace/work area. A word of caution here. If you use multiple external drives on the same computer and attach them in a different order the hard drive letter designations may change. THIS will impact your ability to open previously saved FlamMap projects as these ARE ALWAYS Drive and Path Specific.
- b. The **Windows Disk Management Utility** can be used to assign a persistent drive letter to your external drive. This requires an appropriate level of expertise and knowledge to do. **YOU SHOULD** work with your local IT specialist if you are unfamiliar, uncomfortable or **DO NOT** have the proper permissions. Much damage can be done if you are not careful!
- c. When assigning a Drive letter to an external drive consider using a drive letter between M and Z. This is because earlier drive letters may still get assigned to drives that don't always show up in File Explorer—like optical and removable card drives. M through Z are almost never used on most Windows systems. However, be sure to verify this with your local IT specialist. For example, the drive letter T is already in use for US Forest Service computers. It is critical NOT TO ASSIGN a drive letter that is already reserved or in use on your computer.

How to Share and Archive FlamMap Projects

NEVER just copy and paste your FlamMap Project file (e.g., FlamMap Analysis project file .fmp) within windows File Explorer from one location to another. ALL FlamMap project files (*.fmp) are Drive and Path Specific (e.g., C:\Workspec\FlamMapAnlysis), changing your FlamMap Project file from one location to another will break those paths.

Best Practice is to use FlamMap's **Archive** function to archive, backup and share your FlamMap projects. **IT IS the ONLY** method to ensure that all your settings, input data, and analysis run outputs will be stored and can be shared with the project. This feature is very useful for sending a project to someone else, transferring your work between computers, backing up your work, or archiving a completed project.

This will create an archive file with an .FZA file name extension. This file can be moved and easily shared with others. See the FlamMap Help for topics on FlamMap Projects and Archive File sections in the Help located under Using the Tree Pane > FlamMap Project and Reference Stuff > Archive File

Exceptions are:

- a. **Landscape Edit Rules**. Those are currently not saved with the FlamMap Archive file. The landscape edit rules can be saved as a separate file with a .xml extension.
- b. After extracting the Archive File, you will need to reselect any ignition or barrier files that were used in the original FlamMap Project since these are path specific. The shapefiles used in the project will be in the same location the File Archive were extracted to.