Configuration file format for NFDRS4_cli

NFDRS4_cli configuration files are based off of Config4*, see http://www.config4star.org/ for complete documentation.

In short, a NFDRS4_Cli configuration file consists of lines containing variables and assigned values in quotes followed by a semicolon (;). Each variable can only appear once in a configuration file. A configuration file can contain comments, which are lines beginning with #.
Example:
#this is a comment

The variable names recognized and required by NFDRS4_cli are:

Variable: initFile
Variable Type: file path (required non-blank)

> **initFile** is the NDRS4 initialization file to be used in NFDRS4_cli.
> See separate documentation on NFDRS4 Initialization files.
>
> Example:
> initFile = “241513NFDRSInit.cfg”;

Variable: wxFile
Variable Type: file path (required non-blank)

> **wxFile** is the FW21 weather data file to be processed.
> See separate documentation on the FW21 file format.
>
> Example:
> wxFile: “241513.fw21”;

Variable: loadFromStateFile
Variable Type: file path (required, set to “”; to bypass loading of a NFDRSState)

> **loadFromStateFile** is a state file previously generated by NFDRS4_cli. Use of a state file can be used to initialize NFDRS4 to a specific date and time from which to begin processing wxFile data.
>
> Examples:
> #process from default NFDRS4 start state
> loadFromStateFile = “”;
> #process from a previously saved NFDRS4 state
> loadFromStateFile = “241513_State.nfdrs”;

Variable: saveToStateFile
Variable Type: (required, set to “”; to bypass saving of a NFDRSState)

> **saveToStateFile** is the binary file to which a complete NFDRS4 state can be saved. This allows for continued processing of NFDRS with a new FW21 which starts from the end date and time of a previously processed FW21 file.
>
> Examples:
> #do not save state upon completion
> saveToStateFile = “”;
> #save to a station specific state file upon completion for future use
> saveToStateFile = “241513_State.nfdrs”;

Variable: outputInterval
Variable Type: required, “0” or “1”

> **outputInterval** can be either 0 for hourly or 1 for once daily according to the obsHour indicated in the NFDRSInit configuration file
>
> Examples:
> #output results for every record
> outputInterval = "0";

Variable: allOutputsFile
Variable Type: required (set to “”; to bypass output of an all outputs file)

> A non blank **allOutputsFile** causes NFDRS4_cli to generate a csv file with date, complete FW21 weather, dead fuel moistures, live fuel moistures, and NFDRS indexes
>
> Example:
> allOutputsFile = “241513_all.csv”;

Variable: indexOutputFile
Variable Type: required (set to “”; to bypass output of an index outputs file)

> A non blank **indexOutputFile** causes NFDRS4_cli to generate a csv file with date and NFDRS indexes
>
> Example:
> indexOutputFile = “241513_indexes.csv”;

Variable: fuelMoisturesOutputFile

Variable Type: required (set to “”; to bypass output of a fuel moistures outputs file)

A non blank **fuelMoisturesOutputFile** causes NFDRS4_cli to generate a csv file with date, dead fuel moistures and live fuel moistures

Example:
fuelMoisturesOutputFile = “241513_Mx.csv”;

Variable: useStoredOutputs

Variable Type: required, set to non-zero to bypass Nelson,GSI, and KBDI calculations.

Designed for use with previously generated **allOutputsFile** output, by setting the previously run **allOutputsFile** as **wxFile**. When non-zero, the **wxFile** inputs file must contain fuel moisture, fuel temperature, GSI and KBDI fields from a previous NFDRS4_cli run.

Example:
useStoredOutputs = “1”

Sample NFDRS4_cli configuration file contents:

```
# Sample RunNFDRS configuration file
# required to initialize RunNFDRS program
# used by config2cpp.exe as follows:
# config2cpp -cfg RunNFDRSSample.txt -class RunNFDRSConfig
# NOTE short paths are used here, use of complete paths is recommended but not required
initFile = "CCaciaNFDRSInit.cfg";
# required as input for processing
#wxFile = "CCaccia_2011-2020.fw21";
wxFile = "Oristano_2010_FW21_New.csv";
#NFDRSState saving and loading capabilities (optional)
#loadFromState will load the state file and begin any calculations from the saved state
loadFromStateFile = "";
#saveToStateFile will save the state when calculation is complete to the indicated file
saveToStateFile = "newSavedState.nfdrs";
# output files (csv) can be designated, otherwise nothing is output
# if they exist, they are appended to by the program
# output files include a date/time and selected outputs
#csv header is only written to the output file if the file is being created
#all outputs available, includes fuel moistures and indexes
allOutputsFile = "CCaccia_2010-2020_output.csv";
#indexes only
indexOutputFile = "";
#fuel moistures
fuelMoisturesOutputFile = "";
#outputInterval 0 = hourly (each record), 1 = daily (at ObsHour from NFDRSInit file)
outputInterval = "0";
```