Randig Inputs File

The following switches are for use in Randig. Randig inputs file is built as an extension of the FlamMap inputs file. A valid FlamMap inputs file is required plus the following switches should be included in the inputs file.

MANDATORY Randig Switches:

Switch: **landscape:**
Usage:

landscape: Filename
Where Filename is the complete path and name of the desired landscape file to use. Landscape can be lcp or GeoTiff format

Example:
Landscape: C:\Randig\Data\landscape.tif

Switch: **NumFires**:
Usage:

NumFires: X
Where X is an integer representing the desired number of fires.

Example:
NumFires:5000

Switch: **Duration**:
Usage:

Duration: X
Where X is the simulation duration for each fire in minutes

Example:
Duration: 600

Switch: **Resolution**:
Usage:

Resolution: X
Where X is the desired resolution of calculations and output in meters.

Example:
Resolution: 60

Optional Randig Switches:

Switch: **SpotProbability**:
Usage:

SpotProbability: X
Where X is a floating point number from 0.0 to 1.0 representing the spotting probability from each node in the simulation. The default is zero.

Example:
SpotProbability: 0.01

Switch: **FireListFile**:
Usage:

FireListFile: Filename
Where Filename is the complete path and name of the fire list file to use. A fire list file is usually output from a previous Randig run using the same landscape. If a FireListFile is specified the NumFires: switch is ignored.
A fire list file is a comma separated values (CSV) file with the following:
FireNum, XStart, YStart, Acres
Where FireNum is the fire number, XStart is the X coordinate of the ignition, YStart is the Y coordinate of the ignition, and Acres is the size of the fire in acres. The XStart and YStart coordinates must be in the same coordinate system as the landscape file.

Example:
FireListFile: C:\Randig\Data\PreviousOutputs.txt

Switch: **OutputFirePerims:**
Usage:

OutputFirePerims: X
Where X is an boolean integer (0 or 1) directing Randig to create and store fire perimeters for output in a shape file.

Example:
OutputFirePerims: 1

Switch: **EmberOutputs**:
Usage:

EmberOutputs: X
Where X is a boolean integer (0 or 1) directing Randig to store ember information for output to CSV and/ or shape file. Output includes launch location, landing location, launch time and landing ignition time.

Example: EmberOutputs: 1

Switch: **TargetBurnProportion**:
Usage:

TargetBurnProportion: X
Where X is a floating point number (X > 0.0 and X <= 1.0) representing the target proportion of burnable cells. Once that proportion of burnable cells has burned during the run Randig will stop creating new fires and consider the simulation complete. This switch can be used to set a relatively high number for **NumFires** yet stop the simulation when the target burn proportion is reached.

Example:
TargetBurnProportion: 0.98

Switch: **MinimumNumberFires**:
Usage:

MinimumNumberFires: X

Where X is an integer representing the minimum number of fires to simulate. Only meaningful when TargetBurnProportion is set to 1. Ensures at least **MinimumNumberFires** is simulated even if the **TargetBurnProportion** has been reached.

Example:
MinimumNumberFires: 3000