

Minimum Travel Time Input Files

Use of the Minimum Travel Time DLL is only supported through use of MTT input files.

MTT input files are an extension of the FlamMap Input files used with the FlamMap DLL. All switches are mandatory unless otherwise noted

The following switches have been added for MTT:

Switch: **MTT_RESOLUTION:**

Usage:

MTT_RESOLUTION: X

Where X = the resolution to run MTT

Outputs will be generated at grid resolution X

Switch: **MTT_SIM_TIME**

Usage:

MTT_SIM_TIME: X

Where X is the number of minutes to burn the fire

Set to 0 to burn the entire landscape

Example:

MTT_SIM_TIME: 700

Switch: **MTT_TRAVEL_PATH_INTERVAL**

Usage:

MTT_TRAVEL_PATH_INTERVAL: X

Where X is the distance (in landscape units) for travel path creation

Example:

MTT_TRAVEL_PATH_INTERVAL: 500

Switch: **MTT_SPOT_PROBABILITY**

Usage:

MTT_SPOT_PROBABILITY: X

Where X is the probability of a spot creating an ignition

Valid Range: 0.0 – 1.0

Example:

MTT_SPOT_PROBABILITY: 0.1

Switch: **MTT_SPOT_DELAY**

Usage:

MTT_SPOT_DELAY: X

Where X is the delay (in minutes) for a spot ignition to start burning

Valid Range: 0 – 60

Example:

MTT_SPOT_DELAY: 10

Switch: **MTT_IGNITION_FILE**

Usage:

MTT_IGNITION_FILE: Path

Where Path is the complete or relative path to the ignition shape file

Optionally, call SetIgnition() after loading the inputs file.

Example:

MTT_IGNITION_FILE: C:\ignitions.shp

Switch: **MTT_BARRIER_FILE**

Usage:

MTT_BARRIER_FILE: Path

Where Path is the complete or relative path to the barriers shape file

Optionally, call SetBarriers() after loading the inputs file.

Example:

MTT_BARRIER_FILE: C:\barriers.shp

Switch: **MTT_FILL_BARRIERS**

Usage:

MTT_FILL_BARRIERS: X

Where X is either 1 for true or 0 for false

Example:

MTT_FILL_BARRIERS: 1

Switch: **NodeSpreadNumLat**

Usage:

NodeSpreadNumLat: X

Where X is the number of columns MTT searches spread times

Switch is optional, default is 6

Example:

NodeSpreadNumLat: 6

Switch: **NodeSpreadNumVert**

Usage:

NodeSpreadNumVert: X

Where X is the number of rows MTT searches spread times

Switch is optional, default is 4

Example:

NodeSpreadNumVert: 4

Optional switches for TOM. If running TOM all switches are required.

Switch: **TREAT_RESOLUTION:**

Usage:

TREAT_RESOLUTION: X

Where X = the resolution to run TOM

Outputs will be generated at grid resolution X

Switch: **TREAT_IGNITION_FILE**

Usage: **TREAT_IGNITION_FILE**: Path

Where Path is the complete or relative path to the ignition shape file

Example:

TREAT_IGNITION_FILE: C:\TOMignitions.shp

Switch: **TREAT_IDEAL_LANDSCAPE**

Usage: **TREAT_IDEAL_LANDSCAPE**: Path

Where Path is the complete or relative path to the ideal landscape file

Example:

TREAT_IDEAL_LANDSCAPE: C:\IdealLandscape.lcp

Switch: **TREAT_ITERATIONS**:

Usage: **TREAT_ITERATIONS**: X

Where X is an integer representing the number of iterations per treatment level

Valid Range: 1 - 5

Generally little benefit if greater than 1

Switch: **TREAT_DIMENSION**:

Usage:

TREAT_DIMENSION: X

Where X = the distance in meters that TOM uses for treatment size and maximum distance a fire can travel before expecting a treatment unit

Switch: **TREAT_FRACTION**:

Usage:

TREAT_FRACTION: X

Where X is a floating point value representing the proportion of the landscape that can be treated.

Valid Range: 0.10 – 0.30

Switch: **TREAT_OPPORTUNITIES_ONLY**:

Usage:

TREAT_OPPORTUNITIES_ONLY: X

Where X is a Boolean flag indicating whether only treat opportunities layer should be generated. Acceptable values are either 0 or 1