## **Spreading of Fire Black Box Test Plan**

Date: 19 September 2011

Document Author(s): Andrew Kofink, James Bruening

## Introduction

Provide a brief overview of your black box test plan. Describe how you would start your application.

Test ID	Description/Preconditions	Expected Results	Actual Results	
testGetState()	Returns the state of the Cell object	The sent state when the Cell was instantiated	Cell.EMPTY	
testSetState()	Sets the state of the Cell object	State should change to what we set it to	Cell.TREE	
testCopy()	Returns a copy of the Cell	A copied cell	Cell c	
testSpread()	Spreads fire based on 55% probability if the cell is a tree with fire around it. If the cell is on fire, burn out, and if the cell is empty, stay empty. Must copy all cells first so a chain effect does not occur.	Spreads within 5% margin of error of 55%; burns out if previously burning.	was between 50-60% when spreading, and on fire cells burnt out without intermediate spreading going on	
testGetGrid()	Returns the 2D array of Cell objects	Cell cells[][]	Cell cells[][]	
testDone()	Returns whether any trees are still burning	When burning, not done; when empty or tree, done.	When burning, not done; when empty or tree, done.	
testNextTimeStep()	Call spread on every cell in the forest	When made to tree, Cell possibly catches fire.	The tree cells spread, and the empty ones stay empty.	

## **Document Revision History**

Date	Author	Change Description
9/15/2011	Andrew, James	First revision
9/19/2011	Andrew, James	Iteration 1