



GIS Tools for Wildland Fire & Fuels Planning using LANDFIRE Data

_____ Course Outline _____

Using Blackboard (approx. 10 minutes) – This introductory presentation explains how to navigate the Blackboard program.

Course Overview (approx. 15 minutes) – This course introductory presentation provides an overview of the course, including: the course objectives, an explanation of the course set-up and the various lessons contained within, details on each available tool, information on necessary background experience and computer requirements, and an outline of the steps for successful navigation through the course.

Course Fundamentals (approx. 2 hours) – This presentation will introduce and direct you to the two tutorials providing the necessary foundation for progressing on to the various tools lessons of this course.

Tools Lessons:

Fire Regime Condition Class Mapping Tool (FRCCMT) (approx. 4 hours):

Part 1: Introduction – In Part 1, you'll be given background on FRCC and an introduction to the FRCC Mapping Tool, including a tutorial.

Part 2: Tool Applications – In Part 2, you'll learn about various applications of the tool at different levels.

Part 3: Tool Implementation – In Part 3 you'll conduct a hands-on exercise in which you'll analyze input data for simulated land treatments and then run the tool for post-treatment results and interpretation.

Part 4: Quiz – Lastly you'll take a final quiz on what you've learned.

Tool Lessons in Development

Lessons are being developed and posted incrementally, and lessons for all tools listed below are scheduled to be available in 2009.

Fire Behavior Assessment Tool (FBAT) – This tool generates fire behavior characteristics that would potentially occur under user-specified environmental conditions. The tool generates the same outputs as the fire behavior application FlamMap; however, FBAT uses ESRI grids instead of the cumbersome ASCII grids of FlamMap and also allows users to query FlamMap outputs.

Area Change Tool (ACT) – The primary function of this tool is to facilitate the editing of ESRI grids. Tool outputs can be used to modify existing data or to characterize future conditions based on treatments.

First-order Fire Effects Model Mapping Tool (FOFEMMT) – This tool derives first-order fire effects that would potentially occur under user-specified environmental conditions. The tool generates the same outputs as the fire effects application FOFEM; however, the FOFEM Mapping Tool enhances the non-spatial FOFEM by integrating spatial data describing the fire environment and simplifying the analysis of heterogeneous landscapes or multiple planning units.

Multi-scale Resource Integration Tool (MRIT) – This tool is useful to planners (fuel, vegetation, wildlife, etc.) responsible for setting management priorities. The primary functions of this tool are to summarize, integrate, and classify spatial data at a reporting unit level for the purpose of identifying management priorities.