

Wildfire – Read Me First

This is a summary of the materials you have at your disposal for the wildfire project and some guidance on how to get started.

1. Read the overall competition instructions for an overview of the projects and the nature of the materials you will receive
2. A document summarizing the model framework, background information, modeling parameters, instructions for completing both the basic model and bonus modeling assignments. (Modeling California's Wildfires).
3. There is one reference document in the package and links to several other resources contained in the overview document. These explain the basic mathematics of the system and provide background information and data on the system you are modeling. After you look over the instructions, you should check these articles for a deeper understanding of the system you are modeling.
4. A starting code in PYTHON to guide you through what you need to do to complete the basic project. (Population_Dynamics_Revision.py). You will need to open this in a PYTHON notebook to work on it.

Before you start coding, make sure you fully understand the modeling assignment and the mathematics behind this simplified model of wildfires. The sample code has been divided into multiple cells dividing the definition of inputs and discrete sets of outputs. This should allow you to add and test portions of the code incrementally. For each portion, once you have inserted the additional code, you should have PYTHON evaluate the completed sections and debug any coding errors.

While part of your team is working on the code, others should read the references more thoroughly so that your team can answer the questions about how this model simplifies the real system. They can also begin to investigate some of the bonus questions so that you are prepared to add one or more of these once the basic model is complete.

Make sure your basic model and the associated report showing recommended sensitivity analyses and answers to the other basic question are complete before you launch into bonus additions to the model.