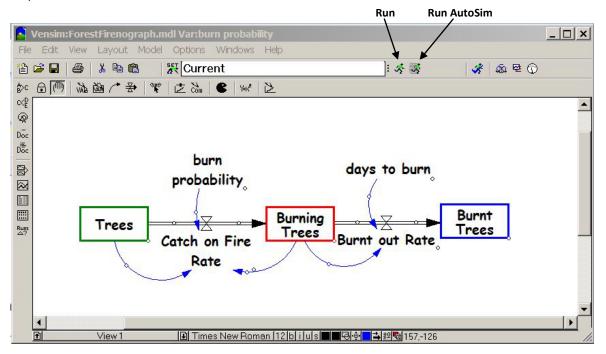
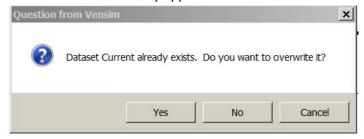
Forest Fire Inquiry

Part 1: Making Predictions

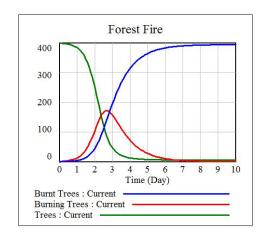
• Open ForestFire.mdl.



- Run the model.
 - O Click on the green running man (pop-up label says Run a Simulation) on the top gray bar. A dialogue box similar to the one below may appear. Click on Yes.



- Predict
 - 1. How would the graph change if we increased the burn probability?
 - 2. How would the graph change if we increased the days to burn?



Part 2: Experimenting with the model

- Run AutoSim (run the model in automatic simulation mode).
 - o Click on the green running man with the black bars (pop-up label says Automatically simulate on change). Mini-graphs will appear in the computed parts of the model. Moving the slider bars like the one shown below will allow you to change parameters.



- Experiment with burn probability
 - o Start by moving the slider bar on burn probability. It can be as small as 0 and as large as 0.05.
 - As you move the slider bar, all graphs will be re-drawn. The large graph's y-axis will re-scale after you release your mouse from the slider bar.
 - o To return the model to its original state, click on the **red stop sign** on the top bar and **run** the model (not run autosim). This will restore the graph and table to their original values.
 - o Questions to consider
 - 1. How does the forest fire change as the burn probability is changed?
 - 2. Do your neighbors get the same result you do when you all use the same burn probability?
 - 3. Is there any evidence of random numbers in this model?
- Experiment with days to burn by moving its slider.
 - Questions to consider
 - 4. How does the graph change when days to burn is increased?
 - 5. How does the number of days to burn change the behavior of the forest fire?