

Prometheus for UK scenarios: Step-by-Step guide

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1. Go to the Prometheus website: <http://firegrowthmodel.ca/downloads.html>
2. Download the Prometheus model (*setup_5_4_0_090112.exe*) and sample dataset (*Dogrib.zip*)
3. Run '*setup_5_4_0_090112.exe*'
4. Once Prometheus has been installed on your PC/laptop, run Prometheus (find it in the windows menu or by double-clicking on the Prometheus icon on your desktop)
5. Before moving on to working with UK scenarios, I strongly recommend that you go through the built-in "*Beginner's Tutorial*". To access the tutorial, click on "*Help*" and then "*Beginner's Tutorial*" from the drop-down menu. The tutorial will introduce you to how to get spatial data into Prometheus and how to create different weather and ignition scenarios (using a Canadian example). This tutorial should take 30-90 minutes depending on your IT skills.

Once familiar with the model interface, you can explore some of the UK fuel maps I have developed for use in Prometheus. Currently three fuel maps are available:

- Cartington Hill (*CartingtonHill_UKH.fgm*)
- Thrunton Woods (*Thrunton_UKH.fgm*)
- Linhope (*Linhope_UKH.fgm*)

The speed of the model is affected by the size of these files; therefore, if you are using a less powerful PC/laptop, start by using the ThruntonHill fuel map. For a more powerful PC/laptop, you can move onto using Thrunton Woods. The Linhope example is the largest model and will only run smoothly on the most modern PC/laptop (with at least 2 - 4 GB RAM).

6. Download the fuel maps from the KCL wildfire website:
<http://wildfire.geog.kcl.ac.uk/wordpress/knowledge-exchange-portal/>
7. Be sure to save the fuel maps to a suitable location on your PC/laptop, create a folder for your fire models (e.g. *My Documents\FireModelling*)
8. Load the Thrunton Hill fuel map into Prometheus (either double-click on the *ThruntonHill_UKH.fgm* file or click 'file' and then 'open...' from the drop-down menu in Prometheus and navigate to the folder containing the fire models, select *ThruntonHill_UKH* and click 'Open'.
9. This automatically loads the fuel map and elevation map. You should be presented with a view of both maps. This will also load some example weather stations with weather streams, along with some example ignitions.
10. At this stage you are welcome to run some of the existing scenarios or build your own scenarios using new ignitions and/or weather streams (go through the *Beginner's Tutorial* to learn how to do this).

The following steps deal with outputting information from Prometheus for viewing in Google Earth or a spreadsheet program (e.g. Excel). These may be useful for sharing with colleagues/land-owners/planners.

11. To export your predicted fire perimeters to view in *Google Earth*, wait until the end of one of your simulations, click '*Simulations*' and then click '*Export Fire Perimeter(s)...*' from the drop-down menu, click '*OK*', change the '*save as type*' to '*KML file*' from the drop-down menu, choose a location to save the Google Earth output, give your file a name and then click '*save*'.
12. To view fire statistics for each timestep (e.g. rate-of-spread, active fire perimeter, fire perimeter growth rate etc.), wait until the end of one of your simulations, click '*Scenario*', click '*Statistics...*' from the drop-down menu, and then click '*OK*'.